Grassy Mountain Cemented Rock Fill Characterization Report

Calico Resources USA Corp.

SRK Consulting (U.S.), Inc. ▪ 506800.040 ▪ October 2022

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Executive Summary

A geochemical characterization program was completed by SRK Consulting (U.S.), Inc (SRK) on behalf of Calico Resources USA Corp (Calico) to define the acid generation and metal leaching characteristics of cemented rock fill (CRF) for the Grassy Mountain Mining Site (the Project). The Project is located in Malheur County, Oregon, approximately 22 miles south-southwest of Vale.

During operations, cemented mine waste rock fill will be placed in the underground workings as backfill - a portion of which will be placed below the groundwater table. Sources of aggregate include borrow material (basalt) and waste rock; and binder material includes cement and fly ash. Based on material balance analyses, most of the aggregate for the CRF (~85%) will be basalt and waste rock will represent a relatively minor fraction (~15%).

Based on the results of the baseline geochemical characterization program completed by SRK (Baseline Geochemical Characterization Report – Grassy Mountain Project, Report Number 506800.020), the basalt borrow material is considered geochemically inert, with no acid-generating potential and a low potential to leach metals. However, most of the waste rock associated with the project has a potential to generate acid and leach metals. The use of cement as binder material in the CRF will increase the physical and chemical stability of the product and provides neutralization capacity. It will also reduce the contact of oxygen and water with the sulfide minerals, and thus lower the potential for metals mobility and acid generation.

The objective of this characterization program was to determine the acid generation and metal leaching characteristics of CRF. These data, evaluated in conjunction with other data from the site (e.g., groundwater chemistry and hydrogeological data), will provide a basis for risk assessment and evaluation of options for material management.

A total of 14 cylinders representative of CRF were generated using borrow material (basalt) and waste rock along with binder material comprising cement and fly ash. A series of tests were completed on the 14 cylinders to evaluate the acid generating and metal leaching potential of the CRF. Based on the results of these test, the following conclusions can be made:

- All CRF cylinders have significant buffering capacity due to the addition of the binders. Based on the test results the CRF is not expected to generate acid.
- Cementation of the waste rock results in overall lower metal releases under higher pH conditions; in comparison to HCTs of uncemented material.
- There are no appreciable differences in the results for the various binder types or percentages used to generate the cylinders:
  - Fly ash is comparable to cement
  - Additional binder does not change the results in terms of potential for acid generation and/or metal leaching.
- The concentrations of several constituents (i.e., arsenic, chloride, fluoride, mercury and sulfate) are lower in leachate than in the lixiviant, indicating the potential for attenuation within the CRF.
- Very low metal/sulfate release from the CRF, with the majority of constituents being below OGWQG. Exceptions include:
  - Barium: the sinter and binder samples showed barium leaching above OGWQG in the L:S ratio test.
  - Chromium: elevated above OGWQG in the L:S ratio test.

  - Mercury: leached at concentrations above the OGWQG from the basalt samples at the lowest L:S ratio (2:1).
  - Sulfate: leached at concentrations above the OGWQG from the basalt samples at the lowest L:S ratio (2:1).
  - Although these parameters are elevated above the OGWQG in the L:S ratio test, metal release is much lower in the diffusion test and concentrations are generally below the OGWQG. The exception to this is a single measurement of iron from the binder-only cylinders at the beginning of the test.
- Reduction in the mobility of soluble constituents in the CRF occurs for several reasons:
  - The hydraulic conductivity of the material is greatly diminished due to the solidification process.
  - The alkaline nature of the binder reduces solubility of most metals.
  - Some metals become less soluble due to inclusion into the mineral structure of calcium silicate hydrate gels within the cemented solids.
  - The mobility of most trace constituents in water contacting CRF will be controlled by diffusion rather than solubility reactions.

Based on the results of the CRF characterization program, the CRF containing basalt or waste rock does not show a significant potential to degrade groundwater, with most constituents leached at very low levels for all tests. Some constituents are leached above the OGWQG in the L:S ratio leach test. However, this test is done on a disaggregated sample and concentrations that may occur in groundwater flowing through the monolithic blocks of CRF will likely be much lower and more comparable to concentrations observed in the diffusion tests.

Based on this analysis, it is concluded that CRF presents a minimal risk to groundwater.

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1 Introduction

The following report has been prepared by SRK Consulting (U.S.), Inc (SRK) on behalf of Calico Resources USA Corp (Calico) to present the results of the geochemical characterization of cemented rock fill (CRF) for the Grassy Mountain Mining Site (the Project). The Project is located in Malheur County, Oregon, approximately 22 miles south-southwest of Vale.

This report provides the Bureau of Land Management (BLM) Malheur Field Office and the Oregon Technical Review Team (TRT) lead by the Oregon Department of Geology and Mineral Resources (DOGAMI) with the required data, results and conclusions of the geochemical characterization program, with regards to CRF. A work plan for this study was previously developed by SRK and approved by the BLM (SRK, 2021).

During operations, cemented mine waste rock fill will be placed in the underground workings as backfill - a portion of which will be placed below the groundwater table. Sources of aggregate include borrow material (basalt) and waste rock; and binder material includes cement and fly ash. Based on material balance analyses, most of the aggregate for the CRF (~85%) will be basalt and waste rock will represent a relatively minor fraction (~15%).

The objective of this characterization program was to determine the acid generation and metal leaching characteristics of CRF. These data, evaluated in conjunction with other data from the site (e.g., groundwater chemistry and hydrogeological data), will provide a basis for risk assessment and evaluation of options for material management.

SRK completed the baseline geochemical characterization study that was submitted in March 2022 (*Baseline Geochemical Characterization Report – Grassy Mountain Project, Report Number 506800.020*) to the BLM and TRT. Based on the results of the baseline geochemical characterization program, the basalt borrow material is considered geochemically inert, with no acid-generating potential and a low potential to leach metals. However, most of the waste rock associated with the project has a potential to generate acid and leach metals. The use of cement as binder material in the CRF will increase the physical and chemical stability of the product and provides neutralization capacity. It will also reduce the contact of oxygen and water with the sulfide minerals, and thus lower the potential for metals mobility and acid generation.

2 CRF Testing Program

2.1 Test Material

The materials included in the CRF geochemical characterization program include borrow material (basalt), waste rock and binder material, comprising cement and fly ash. For the tests, samples were generated using reject material from the baseline characterization program (SRK, 2022), including the main waste rock units (siltstone, sandstone, sinter) and representative basalt borrow material. Sample material was stored in plastic bags at the McClelland Laboratory warehouse in Sparks, Nevada, and has not been exposed to additional weathering.

Composite samples were generated for siltstone, sandstone, sinter and basalt. The number of sub-samples selected from the previous characterization for each composite are summarized in Table 2-1 below. The sub-samples for each composite were selected to represent the P25 (25^{th} percentile) to P90 (90^{th} percentile) of sulfide sulfur, arsenic and selenium content for each material type (thus the upper and lower end of the range were excluded). The composite samples representing each material type were generated using 2 kg from each sub-sample.

The potential for acid generation from the waste rock is shown by the average reported Net Acid Generation (NAG) test result in Table 2-1, reported in equivalent kg H_2SO_4 generated per ton of rock. Mudstone shows significantly higher potential for acid generation than the other waste rock material types, but all material types show some potential for acid generation. The Mudstone was not included in the CRF characterization program because this material is a small portion (<1%) of the overall waste rock and would not be used as aggregate for the CRF. This is also the case for the Mud/Clay and Breccia material types, which respectively comprise approximately 5% and <1% of the total waste rock. All of the basalt samples were classified as non-potentially acid generating with an average NAG pH of greater than 4.5.

Table 2-1: Samples Selected for CRF Characterization

Group	Material Type	Approximate Proportion of Ore + Waste Rock (%)	Number of Samples Selected for CRF Composite	Composite Weight (kg)	Average NAG (kg H_2SO_4 eq/t)
Waste Rock	Siltstone	54	7	14	8.73
	Sandstone	26	9	18	5.71
	Sinter	11	6	12	2.38
	Mud/Clay	5	--	--	4.52
	Breccia	<1	--	--	5.81
	Mudstone	<1	--	--	22.6
Borrow Material	Basalt Borrow	<1	6	12	<0.2

2.2 Testing Methodology

The objective of the test program is to evaluate the long-term environmental stability of the CRF and determine the viability of using potentially acid generating waste rock in the CRF. The following tests were conducted:

- Acid Base Accounting (ABA)
- Total / multi-element chemistry
- Mineralogy analysis, including X-ray diffraction, optical and SEM analysis
- Short term leach tests to assess the impact of flushing volumes on the released concentration of constituents. Only the solubility and release of constituents from the sample, measured as a function of liquid to solid (L:S) ratio (Method SR003.1 / EPA Method 1316) was performed. Testing for the solubility and release as a function of pH was not conducted (Method SR002.1 / EPA Method 1313). This test was not considered necessary based on the following existing data:
  - The CRF materials are net neutralizing, and not predicted to generate acid.
  - The diffusion and L:S ratio tests establish which constituents would leach at high pH levels.
  - The humidity cell testing established which metals would leach at lower pH levels from uncemented materials.
- Diffusion tests to evaluate the potential for solutes to be mobilized by the mechanism of diffusion from CRF.

These tests were conducted on test cylinders as summarized in Table 2-2, and are described in more detail in the following sections.

2.2.1 Generation of Test Cylinders

Test cylinders were generated using a mixture of waste rock and basalt to binder ratios. For each material type, three cylinders were generated with varying percentages of binder material: one cylinder containing 5% cement, one containing 7% cement and one containing 3% fly ash and 4% cement. Additionally, two cylinders were generated for binder material only to establish whether there are any metals released from the binder material itself. The size of the cylinders used was 3 x 6 inches. The cylinders were allowed to cure for 60 days before any testing.

Table 2-2: Formulations for Test Cylinders

Type	Cylinder	Rock Type (%)				Cement (%)	Fly ash (%)
		Basalt	Siltstone	Sandstone	Sinter		
Binder Only Cylinders	1	0	0	0	0	100	0
	2	0	0	0	0	0	100
Basalt Cylinders	3	95	0	0	0	5	0
	4	93	0	0	0	7	0
	5	93	0	0	0	4	3
Siltstone Cylinders	6	0	95	0	0	5	0
	7	0	93	0	0	7	0
	8	0	93	0	0	4	3
Sandstone Cylinders	9	0	0	95	0	5	0
	10	0	0	93	0	7	0
	11	0	0	93	0	4	3
Sinter Cylinders	12	0	0	0	95	5	0
	13	0	0	0	93	7	0
	14	0	0	0	93	4	3

The cement used in the test were sourced from a plant in Durkee, Oregon earmarked to supply cement to the Grassy Mountain Project. Fly ash used in this test were sourced from Boral Resources, which has been identified as the potential source of this material for the Project. Deionized water was used to generate the composite cylinder samples.

2.2.2 Multi-Element Chemistry

Multi-element analysis of the cylinder material was completed by ALS Minerals, Reno. These tests provide an upper limit of available metals for leaching from the samples. The analysis involved four-acid digestion followed by analysis by ICP-OES and ICP-MS for a full suite of metals and metalloids. This included determination of major elements (e.g., aluminum, calcium, magnesium, sodium, potassium, iron, sulfur) and trace elements (e.g., arsenic, antimony, mercury, zinc, copper, cadmium and lead).

The results were viewed in relation with non-mineralized rock (e.g., crustal abundance, composition ranges for specific lithologies and soils). The degree to which trace elements concentrations are elevated was determined, and elements that may present an environmental issue could be identified. The soluble or leachable proportions of these parameters were determined by combining the results from the multi-element analysis with those from leach tests.

A measure of enrichment of elements in whole rock samples is the Geochemical Abundance Index (GAI). The results of the multi-element analysis were viewed in relation with the Geochemical Abundance Index (GAI) (Förstner et al., 1993), which compares the concentration of an element in each sample to its average crustal abundance. GAI values are particularly useful in determining the relative enrichment of elements and may be used to identify elements enriched above average crustal concentrations. GAI values are calculated as follows:

$GAI = log^2 [C/(1.5*S)]$,

where C is the concentration of an element as determined from the multi-element assay and S is the average crustal abundance of the element of interest (Mason, 1966).

Materials were then assigned a GAI value between zero and six based on the degree of enrichment (Table 2-3) with a GAI value greater than three indicating significant enrichment.

Multi-element results are described in Section 3.1 and laboratory reports are provided in Appendix A.

Table 2-3: Interpretation of GAI values

GAI Value	Interpretation
0	< 3 times average crustal concentrations
1	3 to 6 times average crustal concentrations
2	6 to 12 times average crustal concentrations
3	12 to 24 times average crustal concentrations
4	24 to 48 times average crustal concentrations
5	48 to 96 times average crustal concentrations
6	>96 times average crustal concentrations

2.2.3 Mineralogy

Optical Microscopy, X-Ray Diffraction analysis and Scanning Electron Microscope analysis were used by Petrolab, UK to identify and quantify the bulk mineralogy and trace element mineral speciation in the samples. A summary of the mineralogy results is provided in Section 3.2 and the Petrolab mineralogy report is provided in Appendix A.

The submitted samples were examined using a Nikon SMZ-U stereoscopic microscope with fiber optic illuminator. Samples were sieved and prepared as 3 size fractions (+1mm, +500µm & -500µm). One thin section and polished chip were prepared from each submitted sample. The sections were examined by conventional transmitted and reflected light polarizing microscopy using a Nikon research polarizing microscope. Digital photomicrographs were taken using a high-resolution digital camera attached to the trinocular head of the microscope. Representative (riffle split) sub-samples were analyzed for whole rock XRD analysis. Qualitative mineralogical analysis using a scanning electron microscope was applied. Polished chips were carbon coated to a thickness of 30 nm. Each chip was analyzed using a ZEISS EVO MA 25 scanning electron microscope (SEM)1 fitted with two Bruker xFlash 6|60 X-ray detectors for energy-dispersive X-ray spectroscopy (EDX) analysis.

2.2.4 Acid Base Accounting

ABA provides an industry-recognized assessment of the acid generation potential (AGP) or acid neutralization potential (ANP) of rock materials. The ABA method used for the characterization of the Grassy Mountain CRF samples is the Nevada Modified Sobek ABA method. The Nevada Modified Sobek ABA method includes both laboratory analysis and empirical calculations based on AGP and ANP. An estimate of acid generation is made by assuming complete reaction between all minerals with AGP and all minerals with ANP (essentially dissolution of carbonate minerals and, to a very limited extent, silicate minerals as the latter have very slow reaction kinetics (Bowell, et al., 2000).

The balance between the acid generating mineral phases and acid neutralizing mineral phases is referred to as the net neutralization potential (NNP), which is equal to the difference between NP and AP. The NNP allows classification of the samples as potentially acid consuming or acid producing. A positive value of NNP indicates the sample neutralizes more acid than is produced during oxidation. A negative NNP value indicates there are more acid producing constituents than acid neutralizing constituents. Material that would be considered to have a high potential for acid neutralization produces a net neutralizing potential of greater than 20 kg $CaCO_3$ eq/ton.

ABA data are also described using the neutralization potential ratio, which is calculated by dividing the ANP by the AGP (i.e., ANP/AGP, also referred to as NPR). A material that would be considered to have a high potential for acid neutralization produces an NPR of greater than 3 and/or an NNP less than -20 kg $CaCO_3$ eq/ton.

The ABA results are presented in Section 3.4 and laboratory reports are provided in Appendix A.

2.2.5 Liquid:Solid (L:S) Ratio Leach Test

Batch leach tests were utilized in this study to assess the impact of flushing volumes on the release of constituents. The testing methods are based on the European leachate test for landfill disposal (Kosson et al., 2002). The method used during testing was SR003.1 - Solubility and Release as a Function of L:S Ratio, which is the equivalent to EPA method 1316. A pulverized sample was reacted with test lixiviant (groundwater from the site), and the resulting solution was analyzed. The reaction time during this test is a function of particle size. According to the method, the reaction time is approximately 48 hours for samples with a maximum particle size of 85% passing 2mm. The results of the L:S ratio leach test are described in Section 3.5 and laboratory reports are provided in Appendix C.

Method SR003.1 (EPA Method 1316) defines the rate of release as increasing amounts of water are added to a sample. This test was run at L:S ratios of 2:1, 5:1, 10:1, and 20:1. Lixiviant used for the test was groundwater sourced from a production well PW-1. The groundwater is representative of the groundwater that will flood the underground workings upon closure and come into contact with the CRF. The groundwater chemistry for PW-1 is summarized in Section 3. Test solutions were analyzed for the suite of analytes provided in Table 2-4. This is the same list of analytes used for leach tests conducted as part of the baseline characterization program in 2022, except for WAD cyanide and total cyanide that were not included in this test program.

An important limitation with this test is that the cylinder is disaggregated which will disturb the cement rind that provides chemical integrity and reduces metal leaching from the CRF. It also increases the surface area of solid exposed to the lixiviant, which increases leaching. Therefore, the leach results from this test are considered conservative (i.e., more constituent will leach from the crushed solids than from intact cemented rock fill).

Table 2-4: List of Analytes for Leach Tests

Parameter	Laboratory Method	Detection Limit	Reporting Limit	Fraction[1]
Alkalinity	SM 2320B	2 mg/L	20 mg/L	dissolved
Bicarbonate	SM 2320	2 mg/L	20 mg/L	dissolved
Carbonate	SM 2320	2 mg/L	20 mg/L	dissolved
Aluminum	EPA 200.7	0.03 mg/L	0.15 mg/L	dissolved
Antimony	EPA 200.8	0.0004 mg/L	0.002 mg/L	dissolved
Arsenic	EPA 200.8	0.0002 mg/L	0.001 mg/L	dissolved
Barium	EPA 200.7	0.003 mg/L	0.015 mg/L	dissolved
Beryllium	EPA 200.8	0.00005 mg/L	0.00025 mg/L	dissolved
Bismuth	EPA 200.7	0.04 mg/L	0.2 mg/L	dissolved
Boron	EPA 200.8	0.0005 mg/L	0.001 mg/L	dissolved
Cadmium	EPA 200.8	0.001 mg/L	0.0005 mg/L	dissolved
Calcium	EPA 200.7	0.2 mg/L	1 mg/L	dissolved
Chloride	EPA 300.0	0.5 mg/L	2.5 mg/L	dissolved
Chromium	EPA 200.8	0.0005 mg/L	0.002 mg/L	dissolved
Cobalt	EPA 200.8	0.00005 mg/L	0.00025 mg/L	dissolved
Conductivity	SM 2510B	1 umhos/cm	10 umhos/cm	dissolved
Copper	EPA 200.8	0.0005 mg/L	0.0025 mg/L	dissolved
Fluoride	EPA 300.0	0.1 mg/L	0.5 mg/L	dissolved
Gallium	EPA 200.7	0.1 mg/L	0.5 mg/L	dissolved
Hardness	SM 2340B	calc	calc	dissolved
Iron	EPA 200.7	0.02 mg/L	0.05 mg/L	dissolved
Lead	EPA 200.8	0.0001 mg/L	0.0005 mg/L	dissolved
Lithium	EPA 200.7	0.02 mg/L	0.1 mg/L	dissolved
Magnesium	EPA 200.7	0.2 mg/L	1 mg/L	dissolved
Manganese	EPA 200.8	0.0005 mg/L	0.0025 mg/L	dissolved
Mercury[2]	EPA 200.8	0.0001 mg/L	0.0001 mg/L	dissolved
Molybdenum	EPA 200.8	0.0005 mg/L	0.0025 mg/L	dissolved
Nickel	EPA 200.8	0.0006 mg/L	0.003 mg/L	dissolved
Nitrate+Nitrite as N	EPA 353.2	0.02 mg/L	0.1 mg/L	dissolved
pH (s.u.)	SM 4500-H B	0.1 C	0.1 C	dissolved
Phosphorus	EPA 365.1	0.01 mg/L	0.05 mg/L	dissolved
Potassium	EPA 200.7	0.3 mg/L	1.5 mg/L	dissolved
Scandium	EPA 200.7	0.1 mg/L	0.5 mg/L	dissolved
Selenium	EPA 200.8	0.0001 mg/L	0.00025 mg/L	dissolved
Silver	EPA 200.8	0.00005 mg/L	0.00025 mg/L	dissolved
Sodium	EPA 200.7	0.3 mg/L	1.5 mg/L	dissolved
Strontium	EPA 200.7	0.01 mg/L	0.05 mg/L	dissolved
Sulfate	EPA 300.0	0.5 mg/L	2.5 mg/L	dissolved
Thallium	EPA 200.8	0.0001 mg/L	0.0005 mg/L	dissolved
Tin	EPA 200.8	0.0004 mg/L	0.002 mg/L	dissolved
Titanium	EPA 200.7	0.005 mg/L	0.025 mg/L	dissolved
Total Dissolved Solids	SM 2540C	10 mg/L	20 mg/L	dissolved
Uranium	EPA 200.8	0.0001 mg/L	0.0005 mg/L	dissolved
Vanadium	EPA 200.8	0.0002 mg/L	0.001 mg/L	dissolved
Zinc	EPA 200.7	0.01 mg/L	0.05 mg/L	dissolved

Notes:
[1] The solutions were filtered with a 0.45 µm filter prior to analysis. Extract analyses are therefore considered dissolved concentrations.
[2] Samples were submitted for low level mercury using Method 1631E (low level) to obtain a detection limit of 0.2 ng/L and 0.5 ng/L.

2.2.6 Diffusion Tests

The addition of cement to the waste rock and basalt material reduces the mobility of soluble constituents through the solidification process. Also, most metals become less soluble due to formation of insoluble silicate, oxide and hydroxide phases, and by inclusion into the mineral structure of calcium silicate hydrate gels within the cemented solids. Under these conditions, diffusion is likely to be the primary long-term controlling mechanism for movement of solutes from the CRF. ASTM C-1308 is a diffusion testing method developed for cement-solidified radioactive wastes. This test can be used to evaluate the potential for diffusion of solutes from the CRF. Unlike the disaggregated samples used in L:S leach tests, diffusion tests were conducted on intact cylinders (Figure 2-1). The results of the diffusion test are described in Section 3.5 and laboratory reports are provided in Appendix D.

The test involves immersing the cemented cylinder in a sequential series of solutions for differing durations. The cylinders were immersed in the test lixiviant for differing durations with analysis after 2 hours, 4 hours, 8 hours, 24 hours and then every 24 hours for a total test duration of 261 hours and 14 analyses at 0, 3, 15, 21, 45, 69, 93, 117, 141, 189 and 261 hours. The recommended amount of lixiviant (in cm^3) is 10 times the surface area of the cylinder (e.g., $\pi DH + 2\pi r^2$) in cm^2.

Diffusion testing was done by Western Environmental Testing Laboratory (WETLAB) of Sparks, Nevada. As with the SR003.1 L:S leach test method, the lixiviant used for the test was groundwater sourced from production well PW-1. Test solutions were analyzed for the same suite of analytes included in the baseline geochemical characterization program.

Figure 2-1: Test Cylinder Generation

3 CRF Characterization Results

3.1 Multi-Element Chemistry

The multi-element results for key parameters related to acid rock drainage and metal leaching are summarized in Table 3-1 to Table 3-3, and are compared to average crustal concentrations using the Geochemical Abundance Index (GAI). The tests were conducted on crushed cylinder samples. The following conclusions can be made:

- Constituents that were elevated at least three times above crustal abundance vary by material type, as follows:
  - For both the binder-only samples, antimony, arsenic, calcium, cadmium, sulfur, and selenium were elevated at least three times above average crustal concentrations. For only the fly ash sample, molybdenum was elevated at least three times above crustal abundance.
  - For the three basalt samples, only antimony was elevated at least three times above crustal abundance.
  - For the sandstone, siltstone and sinter samples, antimony, arsenic, mercury, lithium, molybdenum, sulfur and selenium were elevated at least three times above crustal abundance.
  - In some of the siltstone samples, thallium was elevated three times above crustal abundance.
- Sulfate (likely ettringite, a sulfate/silicate mineral) in the binder contributes to the concentration of total sulfur in other samples.
- A graph of total sulfur versus arsenic is provided in Figure 3-1 and shows that the lowest arsenic concentrations are associated with the basalt samples and the binder samples. The arsenic concentrations for the cylinders comprised of waste rock are an order of magnitude higher than the basalt and binder samples. A similar trend is seen for mercury in Figure 3-2.
- A comparison of the total metals for the basalt cylinders to the waste rock cylinders shows that some total metals are higher in the basalt cylinders including cadmium, chromium, cobalt, copper, iron, magnesium, manganese, nickel, vanadium and zinc. Although concentrations of these constituents are higher in the basalt, none of these constituents are considered enriched (i.e., they are less than three times crustal abundance).

Table 3-1: Summary of Total Element Chemistry Results (mg/kg)

Parameters (mg/kg)	Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe
Average crustal abundance (Mason, 1966)	*0.07*	*81,300*	*2*	*425*	*36,300*	*0.2*	*25*	*100*	*55*	*50,000*
Binder Only, 100% Cement	0.17	15100	9.7	540	353000	1.08	6.7	42	35.9	19300
Binder Only, 100% Fly Ash	0.14	19600	9.7	550	334000	0.93	6.7	57	34	22100
Basalt, 5% Cement	0.1	76500	3.6	520	75600	0.24	34.7	220	72.8	62900
Basalt, 7% Cement	0.09	71900	3.6	470	78700	0.24	37	206	76.9	59800
Basalt, 4% Cement 3% Fly Ash	0.07	73400	3.3	500	78900	0.26	35.6	198	65.1	60500
Siltstone, 5% Cement	5.11	33700	190	710	22700	0.12	2.3	20	25	11800
Siltstone, 7% Cement	4.7	33300	179	730	29800	0.13	2.1	18	31.4	11200
Siltstone, 4% Cement 3% Fly Ash	5.35	33700	204	720	29300	0.17	2.5	17	41.1	11900
Sandstone, 5% Cement	4.89	35900	154	850	20600	0.09	1.7	125	29	7500
Sandstone, 7% Cement	4.61	36800	147	840	27800	0.1	1.5	101	17.1	7500
Sandstone, 4% Cement 3% Fly Ash	4.44	37600	159	840	26600	0.1	1.6	112	17.1	8200
Sinter, 5% Cement	3.07	10900	35.4	290	22400	0.08	1.7	222	17.8	4800
Sinter, 7% Cement	2.77	10800	35.6	290	28300	0.12	1.2	14	13.4	5500
Sinter, 4% Cement 3% Fly Ash	2.77	11600	38.9	320	27500	0.11	1.3	16	12.8	5800

	Indicates less than 3 times average crustal abundance
	Indicates between 3 and 6 times average crustal abundance
	Indicates between 6 and 12 times average crustal abundance
	Indicates greater than 12 times average crustal abundance

Table 3-2: Summary of Total Element Chemistry Results (mg/kg)

Parameters (mg/kg)	Hg	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb
Average crustal abundance (Mason, 1966)	*0.08*	*25,900*	*20*	*20,900*	*950*	*1.5*	*28,300*	*75*	*1,050*	*13*
Binder Only, 100% Cement	<0.005	2900	8.7	6500	361	3.19	1500	25.3	560	6.9
Binder Only, 100% Fly Ash	<0.005	4200	9.7	8600	340	4.74	1700	29.3	580	5.8
Basalt, 5% Cement	0.026	8400	26	40500	1100	0.67	13800	129	960	11.9
Basalt, 7% Cement	0.025	7400	27.1	39000	1040	0.7	12900	130	930	7.2
Basalt, 4% Cement 3% Fly Ash	0.02	8100	27.5	39100	1060	0.81	13200	130	930	7.7
Siltstone, 5% Cement	2.51	35200	126	800	72	10.1	2700	8.6	140	10.2
Siltstone, 7% Cement	2.38	34300	117	800	70	8.68	2800	6.3	150	9.9
Siltstone, 4% Cement 3% Fly Ash	2.51	34100	123	900	65	9.04	2900	6.9	140	9.9
Sandstone, 5% Cement	1.32	33600	109	700	64	18.1	5400	7.5	130	10.5
Sandstone, 7% Cement	1.36	32300	104	800	58	17.5	5200	6	140	9.8
Sandstone, 4% Cement 3% Fly Ash	1.25	32800	105	900	64	20.9	5200	6.2	150	10.1
Sinter, 5% Cement	0.879	9800	112	500	66	8.32	400	10.3	90	3.5
Sinter, 7% Cement	0.916	9500	108	600	71	7.39	400	8.4	90	3.8
Sinter, 4% Cement 3% Fly Ash	0.972	10600	111	700	74	8.68	400	11.6	100	3.8

	Indicates less than 3 times average crustal abundance
	Indicates between 3 and 6 times average crustal abundance
	Indicates between 6 and 12 times average crustal abundance
	Indicates greater than 12 times average crustal abundance

Table 3-3: Summary of Total Element Chemistry Results (mg/kg)

Parameters (mg/kg)	S (Total)	Sb	Sc	Se	Sn	Tl	U	V	W	Zn
Average crustal abundance (Mason, 1966)	*260*	*0.2*	*22*	*0.05*	*2*	*0.5*	*1.8*	*135*	*1.5*	*70*
Binder Only, 100% Cement	7800	4.68	4.3	2	1.2	0.03	1.2	46	1.7	116
Binder Only, 100% Fly Ash	7500	3.16	4.6	3	1.4	0.28	2.1	59	2	133
Basalt, 5% Cement	500	0.86	27.5	<1	1.2	0.2	1	193	1.4	97
Basalt, 7% Cement	600	0.77	28.7	<1	1.2	0.2	1	183	1.2	92
Basalt, 4% Cement 3% Fly Ash	600	0.76	28.4	<1	1.3	0.25	1.1	181	1.3	90
Siltstone, 5% Cement	6300	47	3.1	3	1.1	1.48	2	16	5	20
Siltstone, 7% Cement	5900	43.5	2.9	3	1.1	1.42	1.8	16	4.3	24
Siltstone, 4% Cement 3% Fly Ash	7000	47.3	3.1	4	1.1	1.55	1.9	17	4.7	27
Sandstone, 5% Cement	2600	22.2	1.9	2	0.8	0.85	1.2	15	4	18
Sandstone, 7% Cement	2900	21.4	1.8	3	0.9	0.78	1.1	15	3.4	17
Sandstone, 4% Cement 3% Fly Ash	3000	21.9	1.9	3	0.8	0.87	1.2	16	3.7	17
Sinter, 5% Cement	1400	41.7	0.7	2	0.5	0.57	0.6	12	8.4	16
Sinter, 7% Cement	1500	40.9	0.8	2	0.5	0.58	0.6	12	8	17
Sinter, 4% Cement 3% Fly Ash	1600	41.7	0.8	3	0.5	0.6	0.7	12	8.4	17

	Indicates less than 3 times average crustal abundance
	Indicates between 3 and 6 times average crustal abundance
	Indicates between 6 and 12 times average crustal abundance
	Indicates greater than 12 times average crustal abundance

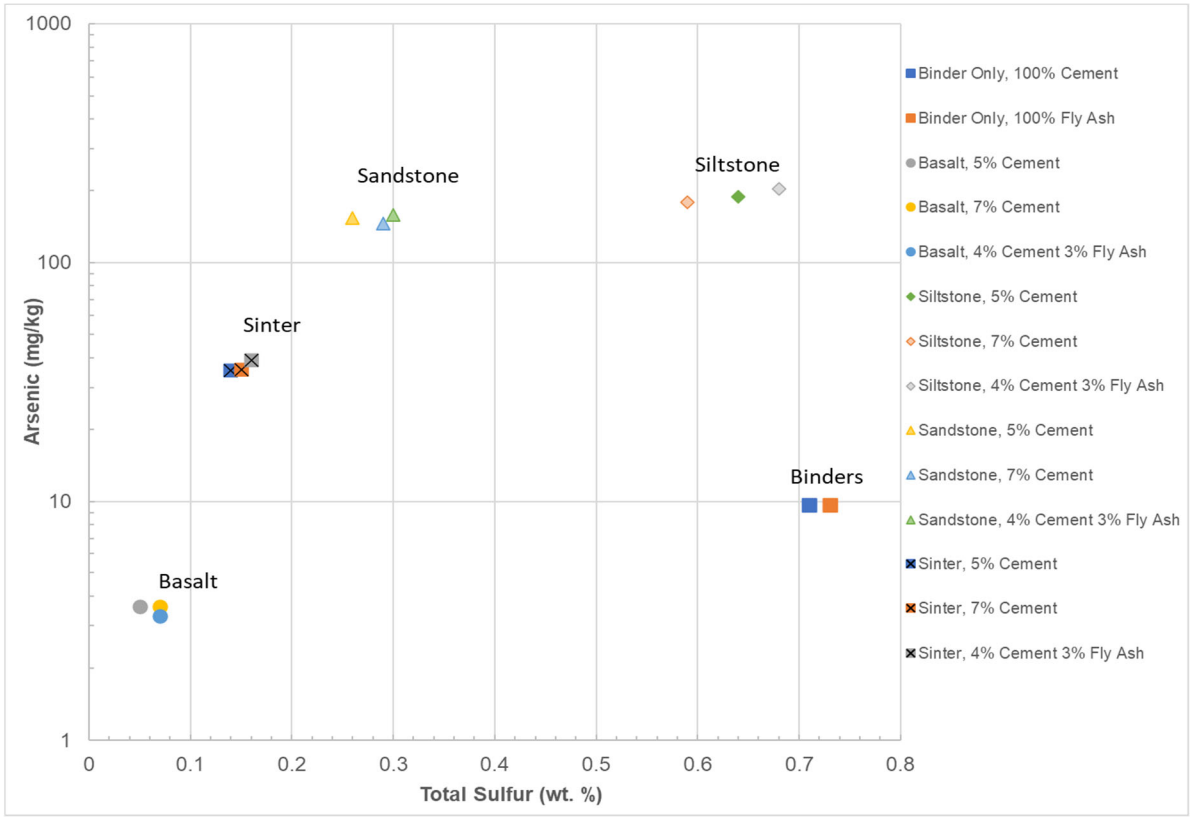

Figure 3-1: Total Sulfur vs Total Arsenic

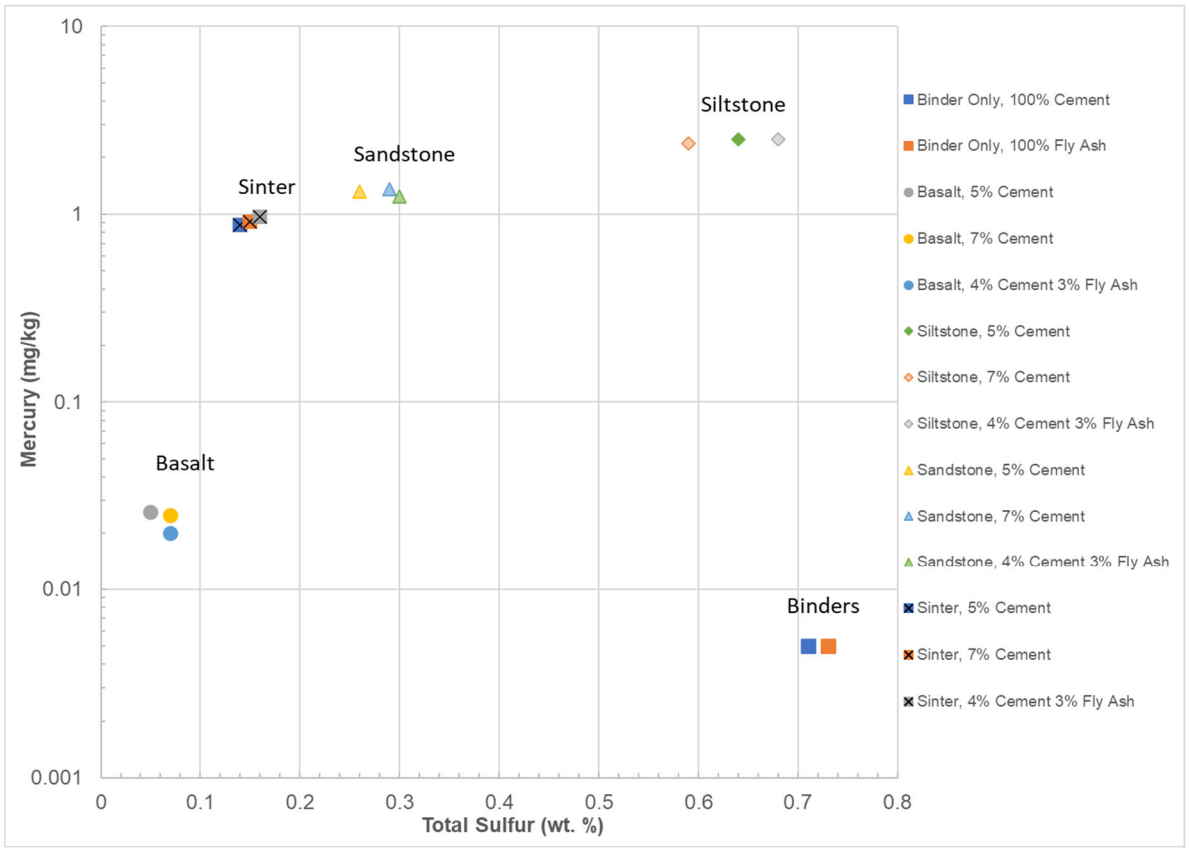

Figure 3-2: Total Sulfur vs Total Mercury

3.2 Mineralogy

The crushed rock samples were sent to Petrolab Ltd for the mineralogical analysis. The laboratory was requested to conduct a simplified petrographic investigation with ancillary SEM point and ID analysis, with particular reference to the presence of sulfides, carbonates as well as arsenic- and antimony-bearing minerals.

The mineralogical report is provided in Appendix B and the results are summarized below for each material type.

- Binder cement samples:
  - Mainly composed of clinker grains, including alite, belite and ferrite clusters
  - Additional components include portlandite, calcite and ettringite
  - SEM analysis detected only one instance of pyrite
  - Rare fragments of steel observed
- Binder fly ash samples:
  - Mainly composed of clinker grains, including alite, belite and ferrite, commonly in the form of clusters
  - Additional components including common fly ash, portlandite and calcite
  - Fly ash is predominantly siliceous
  - The fly ash represents CEM II/A-V type characterized by 80-94% cement clinker, with addition of 6-20% siliceous fly ash
  - SEM analysis did not detect any sulfides
  - Rare fragments of steel were observed
- Basalt samples:
  - Contain plagioclase feldspar, orthopyroxene, clinopyroxene, chlorite, clays and ilmenite
  - Goethite veins and other iron oxides including magnetite, hematite and titanomagnetite are occasionally observed
  - The SEM analysis did not detect any sulfide minerals
- Waste Rock Samples:
  - The sandstone and siltstone samples are silicified.
  - Fragments composed entirely of microcrystalline quartz are observed.
  - Occasionally, fragments containing feldspar grains show evidence of kaolinization.
  - Traces of coarser cubic, disseminated framboidal and vein pyrite are observed.
  - The sinter samples contain very rare fragments with disseminated pyrite or small agglomerations of framboidal pyrite.

3.3 Groundwater (Lixiviant) Chemistry

The lixiviant results for both the L:S ratio tests and diffusion tests are summarized in Table 3-4 and compared to chemistry for PW-1 from the monitoring program and the OGWQG. The results of this comparison indicate that arsenic is the only constituent above the Oregon groundwater quality guidelines (OGWQG) in the lixiviant samples. Constituents that were below laboratory detection limits in PW-1 monitoring samples (2013-2014) and the lixiviant samples include aluminum, antimony, beryllium, bismuth, cadmium, chromium, copper, gallium, lead, nickel, nitrate, scandium, silver, thallium, titanium and zinc. Mercury shows the greatest variability; however, mercury concentrations are low in all samples.

Table 3-4: Comparison of Lixiviant Chemistry to PW-1 and Oregon Groundwater Quality Guidelines

Analytes	Oregon GW Quality Guidelines	PW-1 Monitoring Results							L:S Ratio Test Lixiviant	Diffusion Test Lixiviant
		3/26/2013	6/17/2013	8/6/2013	11/21/2013	3/18/2014	6/25/2014	9/11/2014		
Alkalinity, Total	--	130	131	129	131	110	124	137	121	122
Aluminum	0.05	0.08	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.05	<0.005
Antimony	0.006	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Arsenic	0.01	0.0317	0.0309	0.0302	0.0315	0.0286	0.0313	0.0267	0.0489	0.037
Barium	2	0.029	0.033	0.029	0.03	0.025	0.029	0.03	0.0641	0.0075
Beryllium	0.004	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00008	<0.00008
Bismuth	--	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Boron	--	0.071	0.08	0.07	0.07	0.06	0.07	0.07	0.098	0.083
Cadmium	0.005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00005	<0.00005
Calcium	--	32.1	30.5	30.1	29.7	26.4	29.5	29.8	7.64	5.97
Chloride	250	8.48	8.83	8.96	8.13	8.22	8.18	7.89	7.43	5.42
Chromium	0.1	0.0006	0.0008	0.0006	0.0007	0.0006	0.0008	0.0006	<0.0005	<0.0005
Cobalt	--	0.00012	0.00008	0.00012	0.00013	0.00015	0.00013	0.00014	0.000066	0.00122
Copper	1.3	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0008	<0.0008
Fluoride	4	0.5	0.47	0.44	0.42	0.43	0.41	0.41	0.656	0.529
Gallium	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Iron	0.3	<0.02	<0.02	<0.02	0.02	0.04	0.02	0.06	<0.06	0.155
Lead	0.015	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00015	<0.0001
Lithium	--	0.06	0.07	0.07	0.07	0.058	0.067	0.066	0.0814	0.076
Magnesium	--	3.9	3.6	3.3	3.4	2.8	3.4	3.5	0.44	<0.2
Manganese	0.05	0.0018	0.0027	0.0019	0.0059	0.002	0.0015	0.002	0.00056	0.001
Mercury (ng/L)	2000	<1	0.3	<1	<0.2	<0.2	<0.2	<0.2	4.7	0.0001
Molybdenum	--	0.0044	0.0045	0.0046	0.0044	0.0044	0.0047	0.0045	0.00513	0.005
Nickel	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0004	<0.0004
Nitrate/Nitrite as N	10	0.6	0.62	0.58	0.65	0.71	0.62	0.62	<0.02	<0.02
pH (standard units)	--	8.3	8.4	8.3	8.3	8.2	8.4	8.2	8.5	8.6
Phosphorus	--	0.03	0.02	0.01	0.02	0.02	0.01	0.01	0.025	0.026

Analytes	Oregon GW Quality Guidelines	PW-1 Monitoring Results							L:S Ratio Test Lixiviant	Diffusion Test Lixiviant
		3/26/2013	6/17/2013	8/6/2013	11/21/2013	3/18/2014	6/25/2014	9/11/2014		
Potassium	--	6.6	6.2	5.9	6	5.1	5.9	5.9	2.42	2.01
Scandium	--	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.05
Selenium	0.05	0.0047	0.0048	0.0044	0.0046	0.0041	0.0044	0.0039	0.00064	0.00033
Silver	0.1	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.0001	<0.0001
Sodium	--	42.4	40	38.9	39.1	34.6	38.6	38.2	62.1	61.2
Strontium	--	0.12	0.13	0.12	0.12	0.109	0.12	0.12	0.0295	0.027
Sulfate	250	30.6	32.2	33.7	31.1	31.3	31.2	29.2	27.6	21.4
Thallium	--	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Tin	--	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.04	0.0154
Titanium	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TDS		240	270	264	270	250	250	260	182	194
Uranium	0.03	--	0.0023	0.0022	0.0024	0.0022	0.0027	0.0024	0.00036	<0.0001
Vanadium	--	0.0098	0.0102	0.0101	0.0102	0.0097	0.0113	0.0089	0.00169	0.00073
Zinc	5	0.02	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.006	<0.006

< denotes less than the laboratory detection limit.
All values in mg/L, except as noted otherwise.
Shaded values exceed the respective Oregon groundwater quality guideline.

3.4 Acid Generation Potential

3.4.1 Acid Base Accounting

The results of the ABA analysis are summarized in Table 3-5 below. Plots showing the acid generating characteristics of the CRF samples are provided in Figure 3-3 and Figure 3-4.

The following conclusions can be made from the ABA results:

- The basalt cylinders displayed a higher neutralization potential due to the absence of sulfides.
- As expected, the binders are highly neutralizing.
- All NNP values are greater than 20 kg $CaCO_3$ eq/t and NPR > 3 (i.e., non-acid generating).
- Lower NNP values were observed for waste rock cylinders where sulfide sulfur was present, however none of the waste rock cylinders are predicted to be potentially acid generating.

Table 3-5: Summary of Average ABA Results

Sample Name	Paste pH	Total Sulfur	Pyritic Sulfur	AGP[1]	ANP[2]	NNP	NPR
	s.u.	*(wt%)*	*(wt%)*	*(kg $CaCO_3$ eq/t)*			*Ratio*
Binder Only Cylinders 100% Cement	12.2	0.71	0.04	1.3	803.0	801.8	81.1
Binder Only Cylinders 100% Fly Ash	12.3	0.73	0.04	1.3	776.0	774.8	86.2
Basalt Cylinders 5% Cement	9.5	0.05	0.04	1.3	126.0	124.8	84.0
Basalt Cylinders 7% Cement	10.4	0.07	0.04	1.3	154.0	152.8	73.3
Basalt Cylinders 4% Cement 3% Fly Ash	10.2	0.07	0.04	1.3	147.0	145.8	66.8
Siltstone Cylinders 5% Cement	11.2	0.64	0.27	8.4	51.1	42.7	3.2
Siltstone Cylinders 7% Cement	11.7	0.59	0.26	8.1	66.9	58.8	4.8
Siltstone Cylinders 4% Cement 3% Fly Ash	12.1	0.68	0.30	9.4	62.0	52.6	3.9
Sandstone Cylinders 5% Cement	11.4	0.26	0.14	4.4	40.1	35.7	5.1
Sandstone Cylinders 7% Cement	11.7	0.29	0.12	3.8	63.2	59.5	8.0
Sandstone Cylinders 4% Cement 3% Fly Ash	11.6	0.30	0.12	3.8	90.0	86.3	11.0
Sinter Cylinders 5% Cement	11.9	0.14	0.06	1.9	53.5	51.6	15.7
Sinter Cylinders 7% Cement	11.9	0.15	0.06	1.9	64.5	62.6	15.7
Sinter Cylinders 4% Cement 3% Fly Ash	11.9	0.16	0.09	2.8	60.8	58.0	13.2

[1] AGP based on sulfide sulfur content (%$S^{=}$ x 31.25). AGP, ANP and NNP in units of tons $CaCO_3$ equivalents per 1,000 tons of solids.
[2] ANP determined by titration as per Nevada Modified Sobek ABA procedure with siderite correction. ANP reported in units of tons $CaCO_3$ equivalents per 1,000 tons of solids.

Figure 3-3: NNP vs NPR

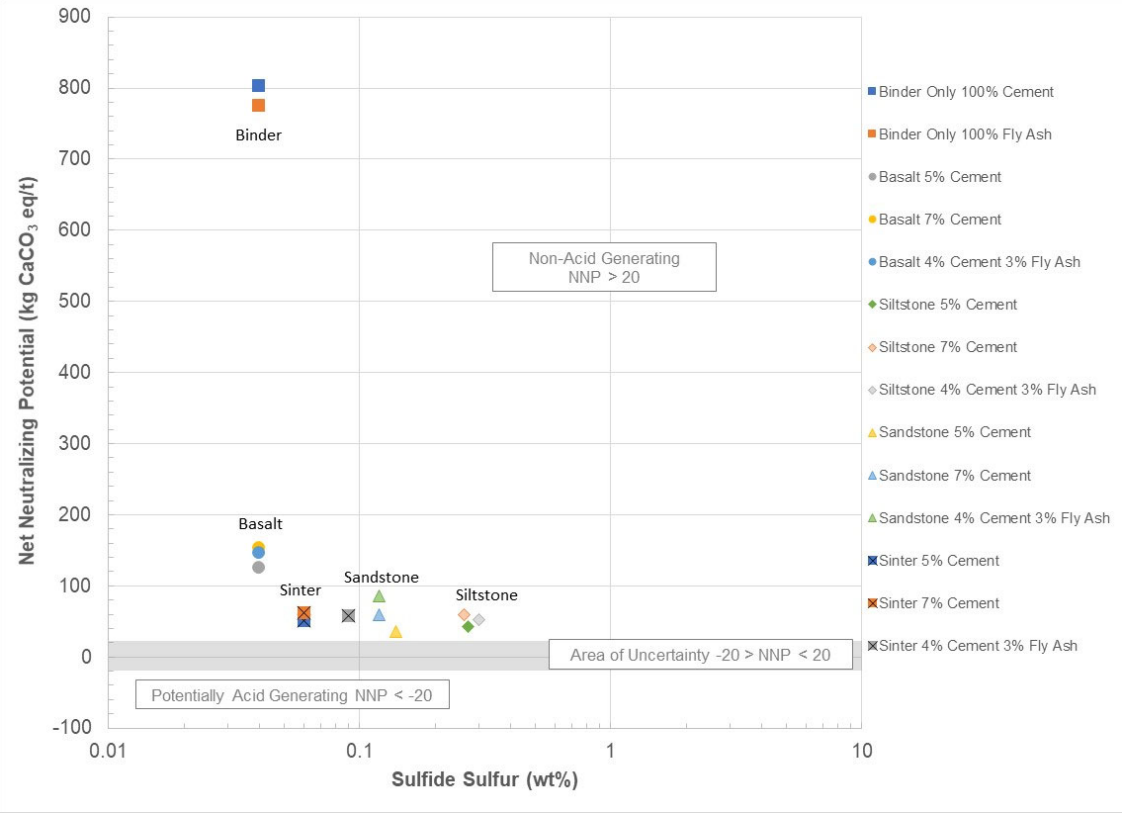

Figure 3-4: NNP vs Sulfide Sulfur

3.4.2 pH from Leach Tests

In both the L:S ratio and diffusion tests, the pH is alkaline (Figures 3-5 and 3-6). The buffering capacity provided by the binders results in higher pH conditions than in the HCTs of uncemented material from the baseline geochemical characterization study (Figure 3-7). In addition, the pH values from the CRF cylinders in the L:S ratio and diffusion tests are consistently higher than the lixiviant (groundwater) pH values. As expected, the highest pH values are observed for the binder-only samples. In the diffusion test, the pH of all samples except for the binders drops to pH 8.5 at 165 hours which has a significant influence on arsenic concentrations (Section 3.5.1).

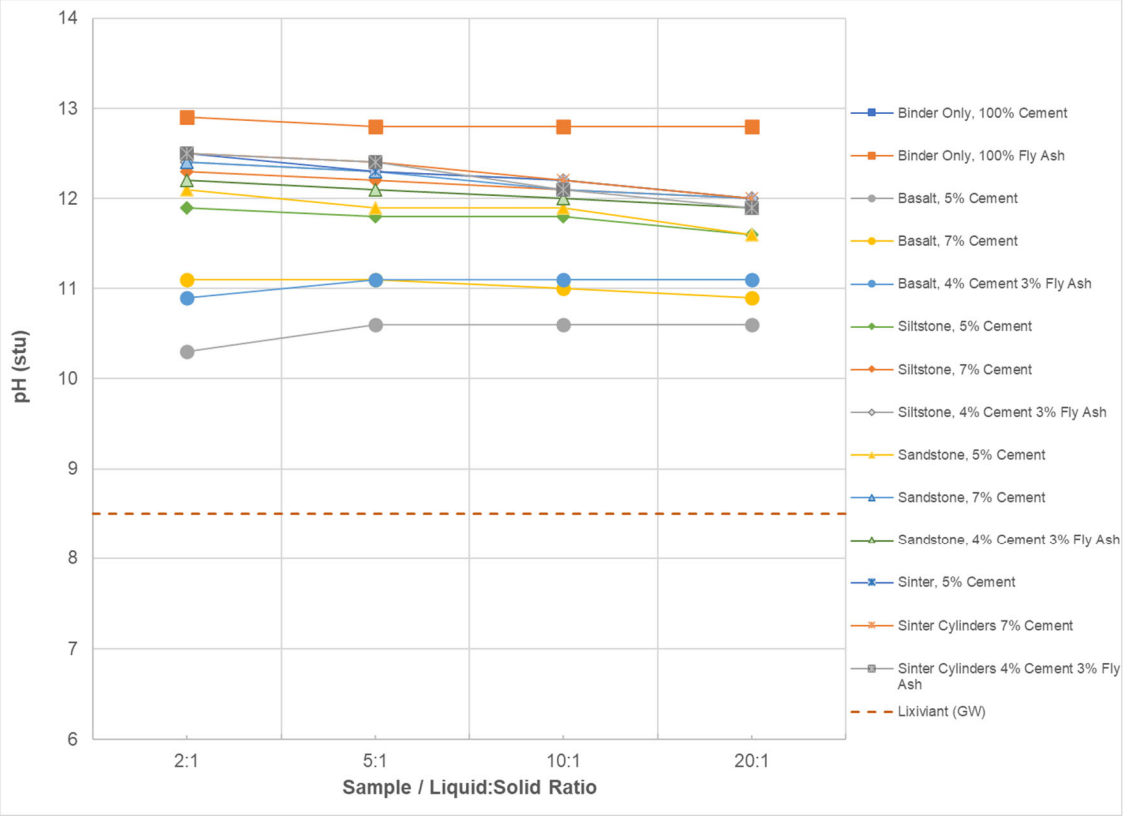

Figure 3-5: pH vs L:S Ratio

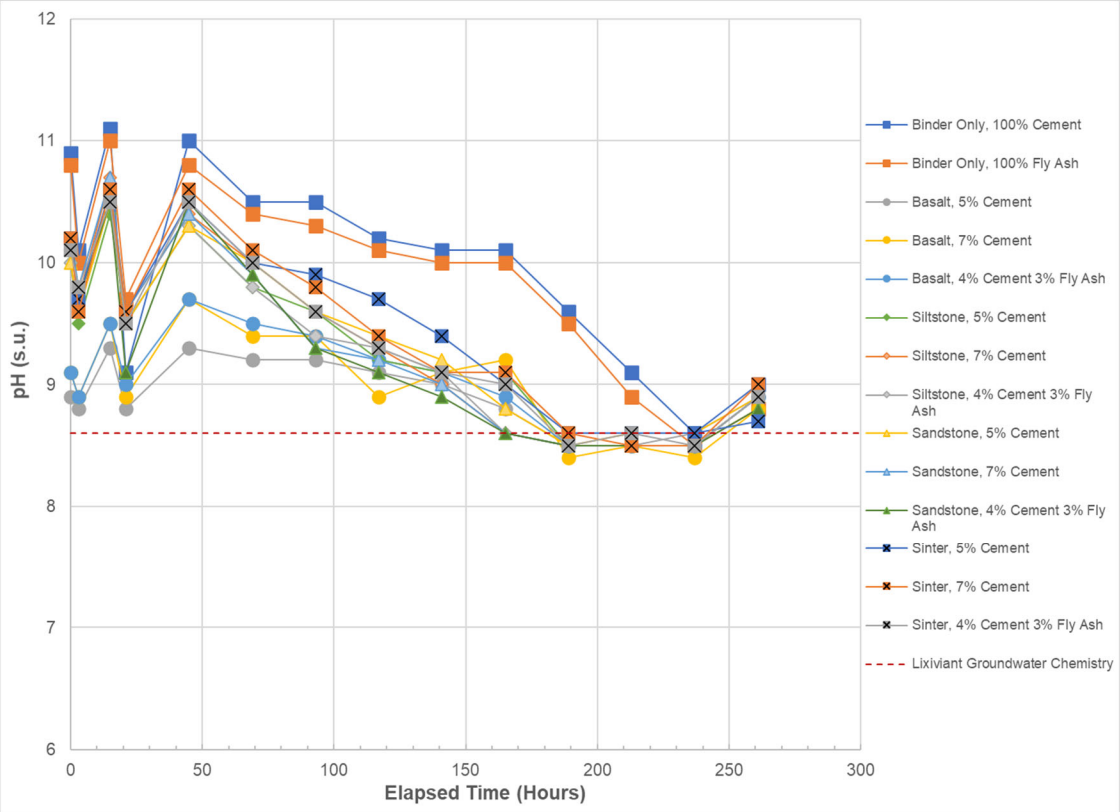

Figure 3-6: Diffusion Tests – pH

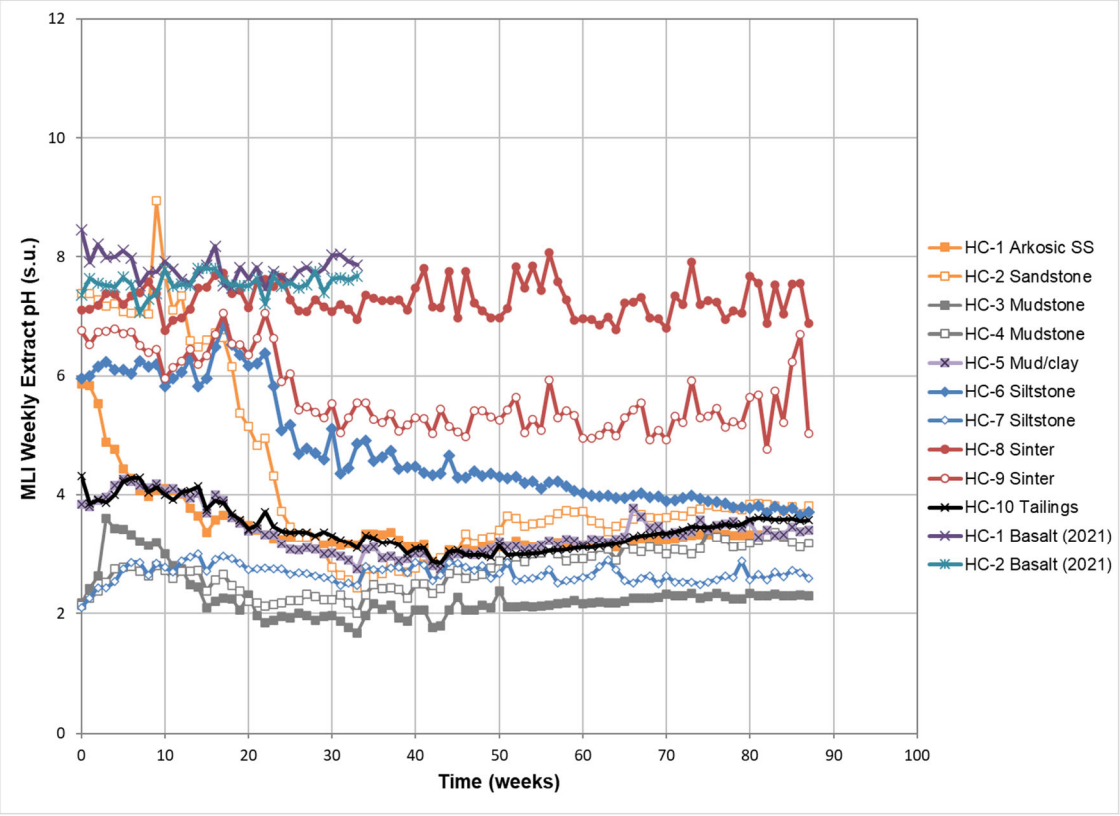

Figure 3-7: HCT – Uncemented, pH Results

3.5 Potential Metal Mobility

Metal leaching potential of uncemented waste rock and basalt was determined from kinetic tests (i.e., humidity cell tests) as part of the baseline geochemical characterization program (SRK, 2022). The waste rock HCTs were acid generating with a high potential for metal leaching and numerous constituents above OGWQG standards. The basalt samples maintained neutral conditions throughout the HCT program, and all measured parameters were below the OGWQG, except for arsenic in the first eight weeks for one of the two basalt tests.

The benefit of a CRF is that it increases the physical and chemical stability of the material, reduces oxygen and water contact to the sulfide minerals within the waste rock, and the binders add neutralization capacity. This results in a lower potential for metals mobility and acid generation from the CRF material.

The L:S ratio and diffusion tests were conducted to evaluate the potential for metal mobility from the CRF material. The results are summarized in Table 3-6 below and compared against the OGWQG and the lixiviant (groundwater) concentration. Most of the measurements from the L:S ratio test and diffusion test indicate a low potential for metal mobility from the CRF material with concentrations below the lixiviant concentrations and OGWQG.

Three main controls on metal leaching can be determined from the L:S ratio leach test as follows:

- Mass limited:
  - Certain components are highly soluble and most of the leaching occurs during the initial stages of the testing, when the soluble constituent mass of the sample is high.
  - However, as the volume of lixiviant contacting the solids increases and the soluble constituent mass in the solid phase reduces, the concentrations of these components in the eluate decreases.
- Solubility limited:
  - Leaching of certain components is inhibited when the ion product in the lixiviant exceeds the solubility constant of a solid phase mineral. Leaching occurs when the ion product is less than the solubility constant.
  - As the volume of lixiviant contacting the solids increases, dissolution of soluble constituents will continue until the dissolved concentration reaches saturation with respect to the solid phase minerals. When there has been sufficient lixiviant contacting the solids to dissolve all the soluble solid phase mineral, the concentration in the liquid phase wil begin to decrease with additional lixiviant.
- Diffusion limited:
  - Dissolution of soluble constituents occurs at constant rate due to the influence of diffusion through the solid phase on transport of soluble constituents into the lixiviant.
  - Concentrations in eluate remain relatively constant over time.

By comparing the results of the L:S ratio and diffusion tests, it it sometimes possible to infer the mechanism that controls chemical release of each constituent from the CRF into the liquid phase (e.g., groundwater). The general concepts are illustrated in Figure 3-8 below. Detailed results are provided in the following sections for key constituents including, but not limited to, those constituents for which there is an applicable OGWQG.

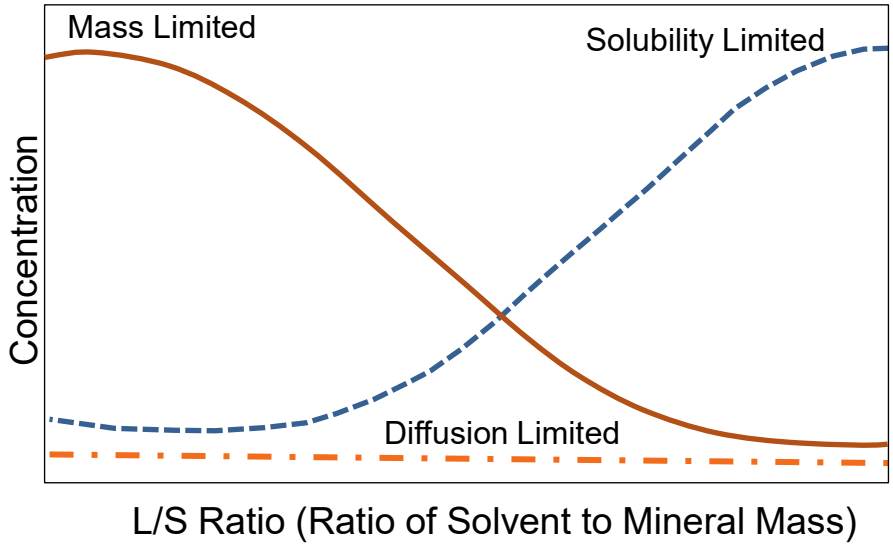

Figure 3-8: Conceptual Evaluation Summary

Table 3-6 : Comparison of L:S Ratio and Diffusion Test Results

Parameter	OGWQG (mg/L)	L:S Ratio Test		Diffusion Test	
		Above Lixiviant (GW) Concentration	Above OGWQG	Above Lixiviant (GW) Concentration	Above OGWQG
Antimony	--	Yes	--	Yes	--
Arsenic	0.05	No	No	No	No
Barium	1	Yes	Yes - sinter, binder	Yes	No
Cadmium	0.01	Yes	No	--	--
Calcium	--	Yes	--	Yes	--
Chloride	250	Variable	No	No - Beginning Yes - End	No
Chromium	0.05	Yes	Yes	Yes	No
Copper	1	Yes	No	--	--
Fluoride	4	Yes - basalt No - WR	No	No - Beginning Yes - End	No
Iron	0.3	Yes	No	Yes	Yes - initial flush from binder-only
Lead	0.05	Yes	No	Yes - initial flush from binder-only	No
Manganese	0.05	--	No	Variable	No
Mercury	0.002	Yes	Yes - basalt only at lowest L:S ratio	No	No
Selenium	0.01	Yes	No	Yes	No
Silver	0.05	Yes	No	--	--
Sulfate	250	Yes	Yes - basalt only at lowest L:S ratio	Yes - basalt No - WR beginning Yes - WR end	No
Zinc	5	--	No	--	--

3.5.1 Arsenic

The L:S ratio test shows arsenic is removed from solution for each L:S ratio (2:1, 5:1, 10:1 and 20:1), with arsenic concentrations for all samples below the lixiviant groundwater concentrations. For the basalt cylinder (5% cement), siltstone cylinder (5% cement) and sandstone cylinder (5% cement), arsenic concentrations increase slightly at a L:S ratio of 20:1. However, concentrations remain below the lixiviant concentration and the OGWQG value of 0.05 mg/L for all L:S ratios.

The diffusion test exhibits a constant low-level removal of arsenic from the lixiviant, with arsenic concentrations for most cylinders below the lixiviant groundwater concentrations. The exception to this is the basalt cylinder (5% cement) that shows arsenic concentrations slightly above the lixiviant groundwater concentration early in the test. However, for all cylinders, arsenic is below the OGWQG in the diffusion test. Arsenic concentrations are significantly lower from day 7 to 10 (189 to 237 elapsed hours) compared to the other results. Arsenic concentrations on day 11 (261 elapsed hours) for all samples increase and are comparable to earlier measurements. This significant decrease in arsenic for all cylinders is attributed to a decrease in pH that occurs during this timeframe. The relationship between arsenic and pH is shown in Figure 3-11.

Arsenic concentrations in both the L:S ratio test and the diffusion test are less than the concentrations in the lixiviant, indicating that attenuation is occurring through adsorption or possibly formation of calcium arsenate salts by reaction of the lime with groundwater. These results demonstrate there is little potential for arsenic leaching from the CRF to degrade groundwater.

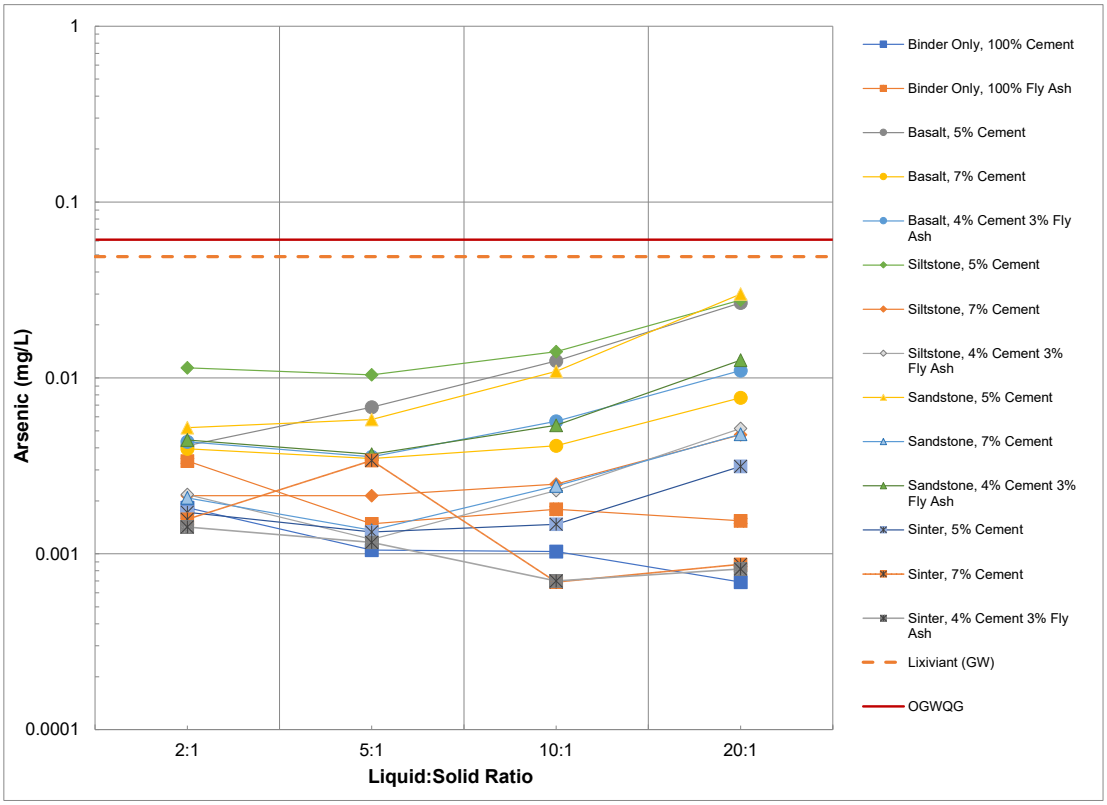

Figure 3-9: Arsenic Release from L:S Ratio Test

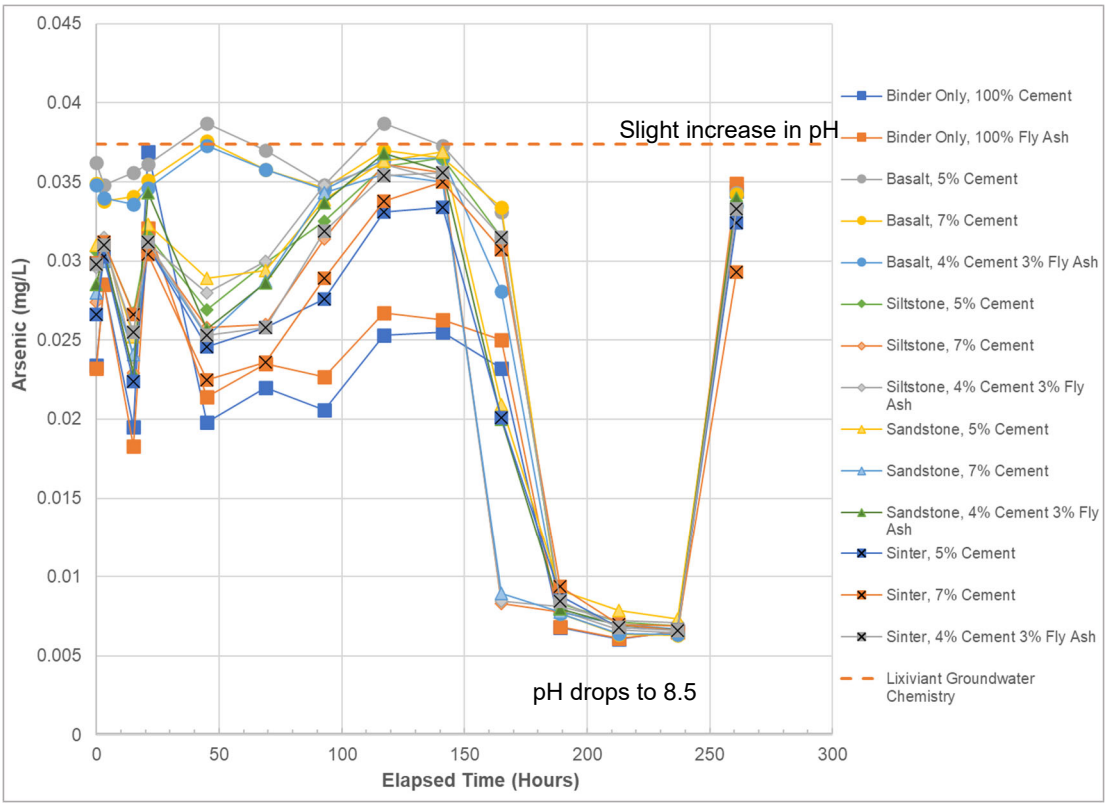

Figure 3-10: Arsenic Release from Diffusion Tests

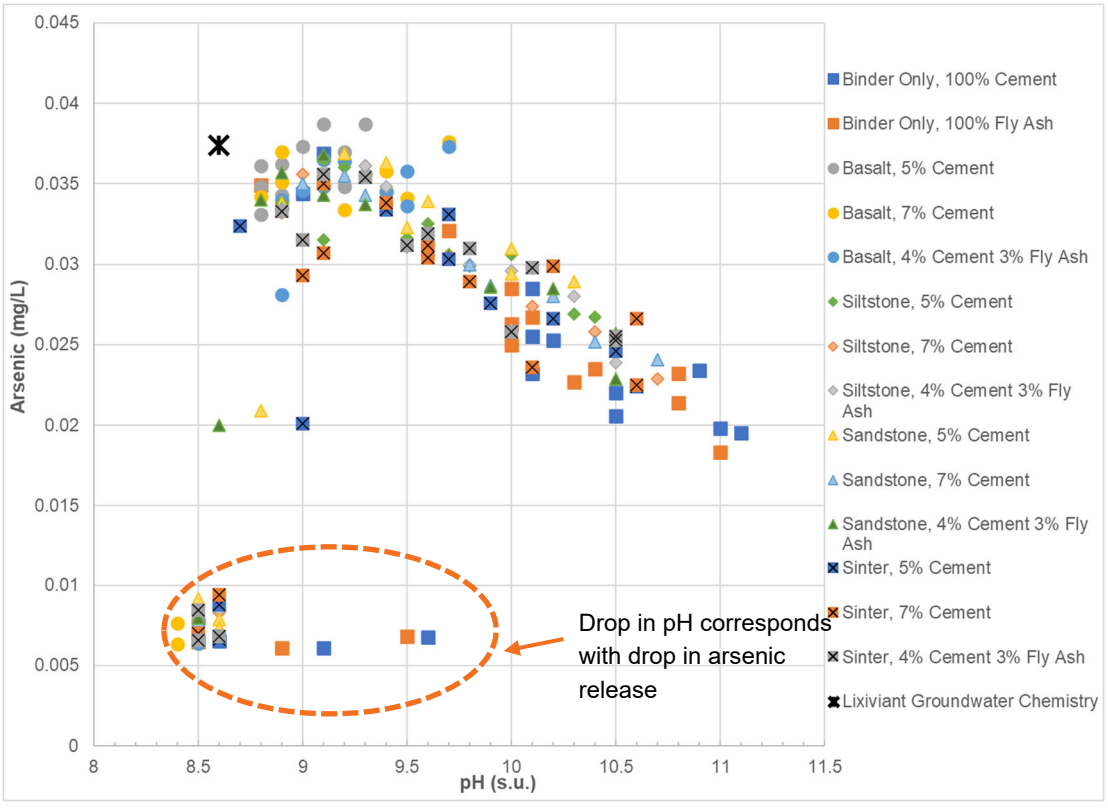

Figure 3-11: Diffusion Test – Arsenic vs pH

3.5.2 Antimony

The release of antimony from the CRF in most of the cylinders was similar for each L:S ratio (2:1, 5:1, 10:1 and 20:1). For most of the samples, antimony release increases slightly at a L:S ratio of 20:1, suggesting a solubility control for antimony. Antimony concentrations are greater than the lixiviant concentration at all L:S ratios and all cylinders, indicating some leaching of antimony from the CRF. There is no OGWQG for antimony.

For the diffusion test, the highest concentrations of antimony occur between 15 and 45 hours of elapsed time. Post 93 hours of elapsed time a long-term gentle decline in antimony concentration from the diffusion tests results indicate that diffusion dominates antimony release from the cylinders.

For the majority of the cylinders, the initial concentrations of antimony are above that of the lixiviant concentration and range between 0.0004 and 0.0011 mg/L. Near the end of the test, antimony is consistent with the groundwater concentration at 0.0004 mg/L which is the detection limit. The sinter cylinders show the lowest antimony release. However, all samples had antimony concentrations similar to groundwater in the final leachate time stage.

Based on the diffusion test results, groundwater that has contacted CRF will have antimony concentrations similar to background groundwater under long-term conditions.

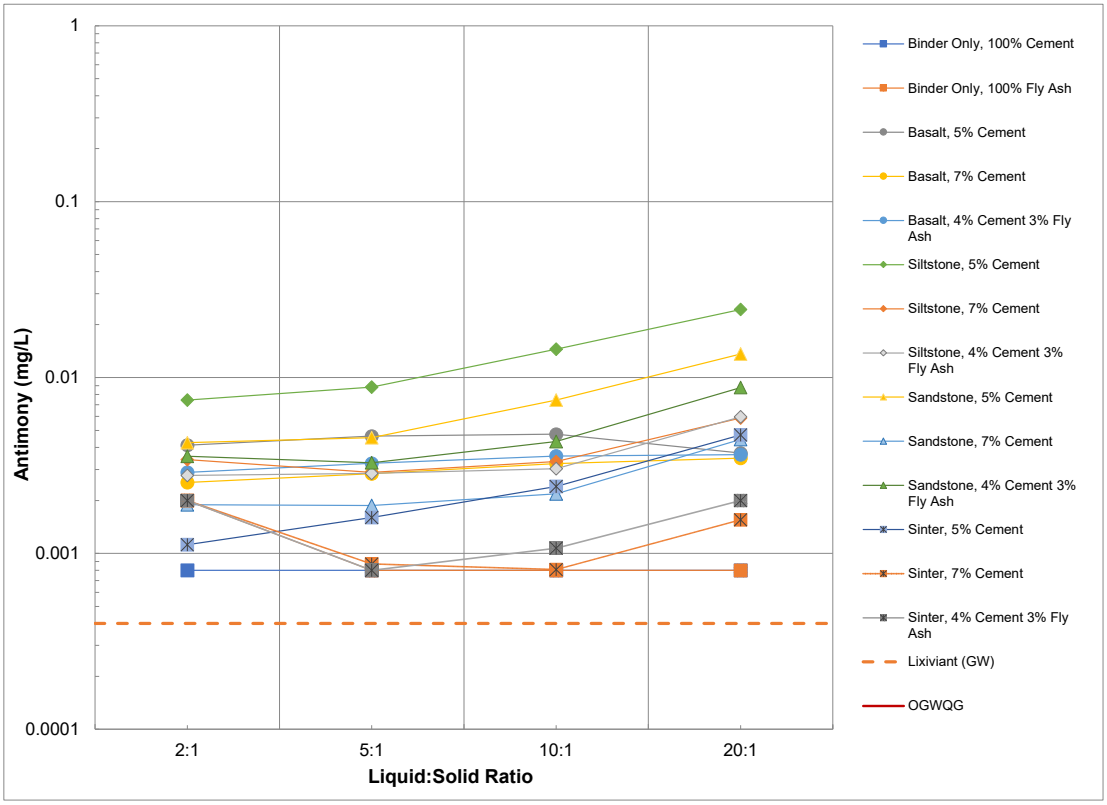

Figure 3-12: Antimony Release from L:S Ratio Test

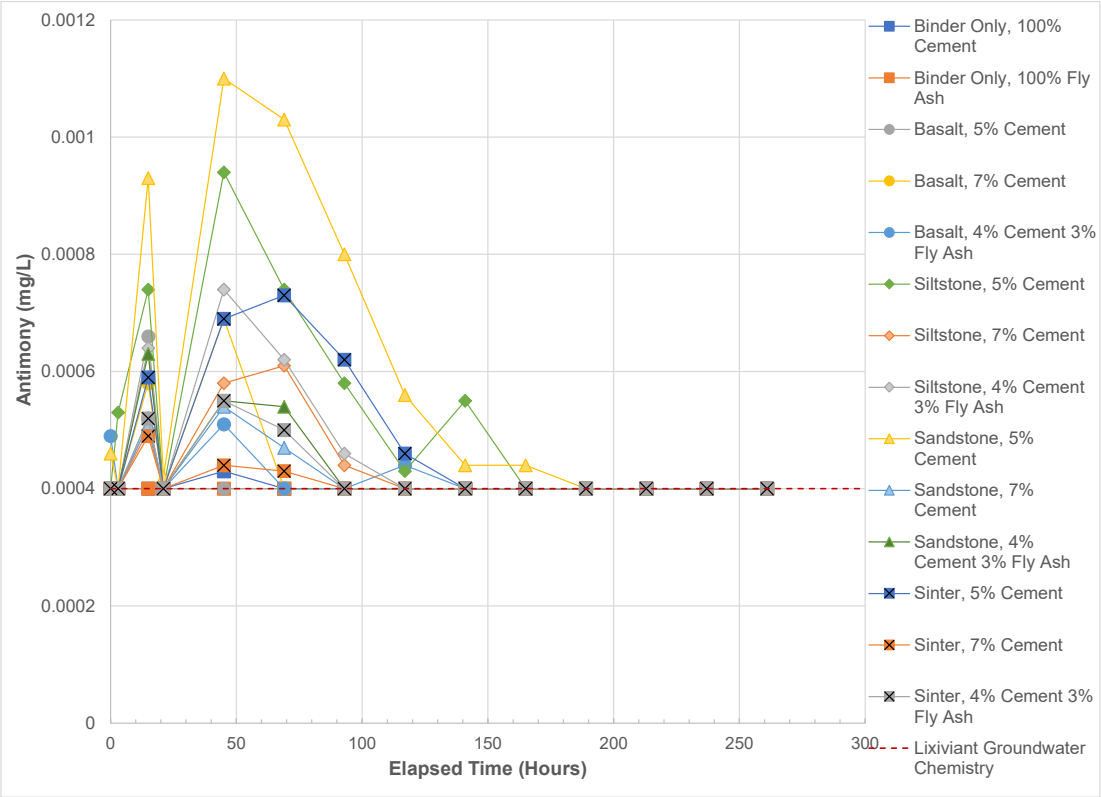

Figure 3-13: Antimony Release from Diffusion Test

3.5.3 Barium

In the L:S ratio test, barium shows mass-driven release, with decreasing concentrations as the L:S ratios increase for all cylinders. Barium was leached above the lixiviant concentrations for some cylinders but is generally below the OGWQG value of 1 mg/L. The exceptions to this include the basalt cylinders for the lowest L:S ratio (2:1) and the fly-ash-only cylinder. For the fly-ash-only cylinder, the release rate is high (above 1 mg/L) and consistent regardless of the L:S ratio. These elevated concentrations from the fly-ash-only cylinder, indicate this material is the source of barium leaching from the CRF samples. The basalt samples show the lowest barium release, with all but the 2:1 ratio below the lixiviant concentration.

For the diffusion test, the highest concentrations of barium occur at the beginning between 15 and 45 hours of elapsed time. Between 45 hours and 65 hours, concentrations decrease or remain about the same. Post 65 hours, barium concentrations increase slightly in response to a change in the pH conditions. For the last measurement, barium concentrations are comparable to the lixiviant concentrations. For all cylinders, barium concentrations were consistently several orders of magnitude below the OGWQG value of 1 mg/L throughout the diffusion test.

Although readily dissolved, typically barium concentrations are at least an order of magnitude below the OGWQG in the diffusion test and below the OGWQG in most of the cylinders for the L:S ratio test. Based on these results, barium concentrations in the flooded underground workings are anticipated to be comparable to background groundwater concentrations after the initial flushing of CRF.

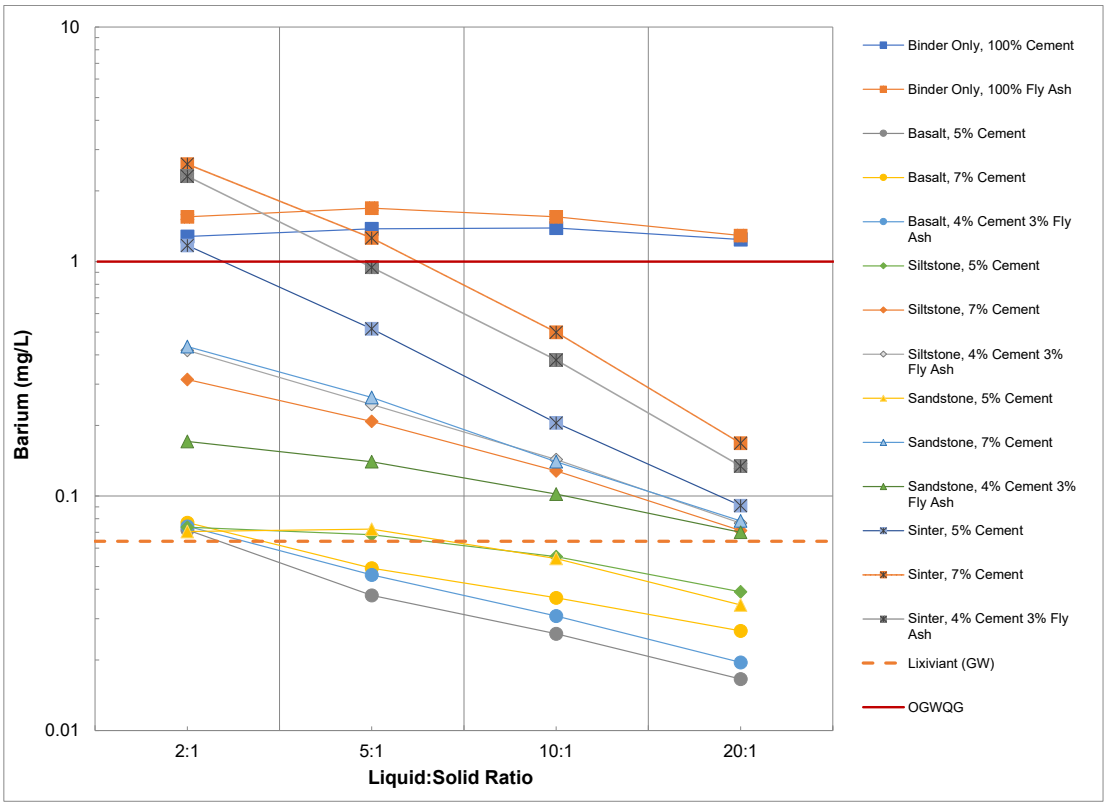

Figure 3-14: Barium Release from L:S Ratio Test

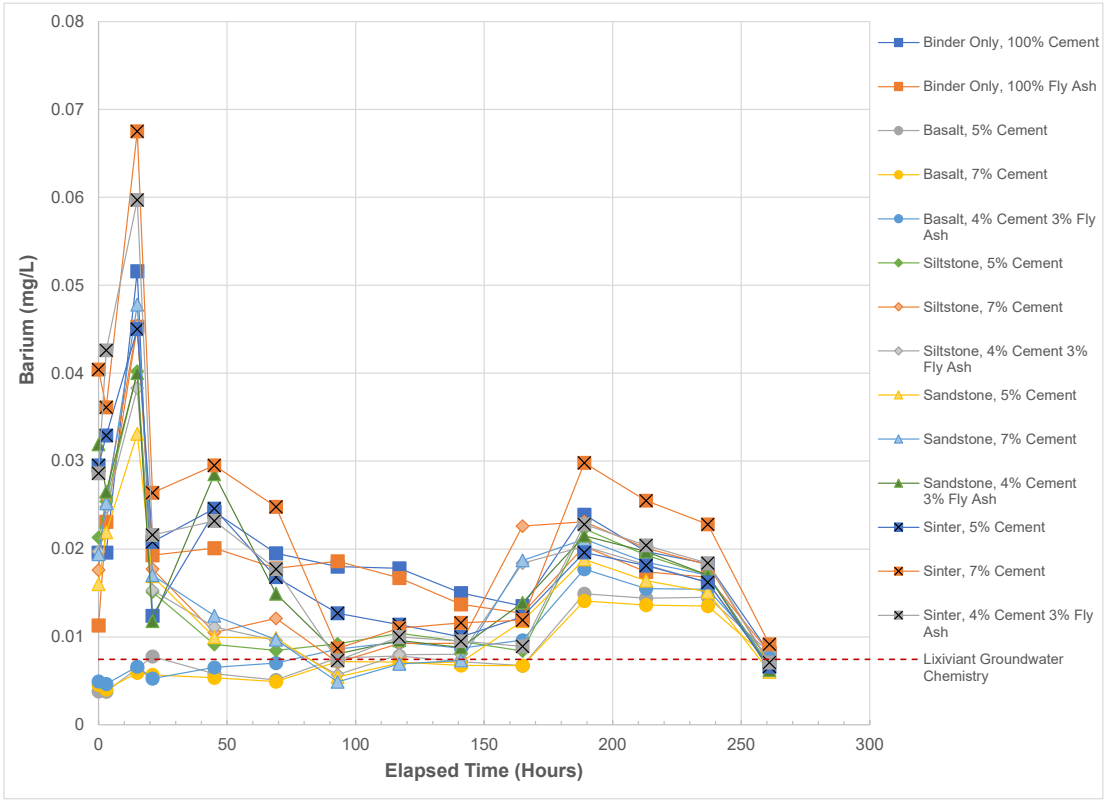

Figure 3-15: Barium Release from Diffusion Test

3.5.4 Cadmium

In the L:S ratio test, cadmium is leached from the CRF and decreases in concentration for higher L:S ratios, consistent with mass driven release. However, cadmium remains below the OGWQG for all cylinders at all L:S ratios indicating a low potential to degrade groundwater. Cadmium release is also low in the diffusion test with the majority of the measurements below laboratory detection and all measurements below the OGWQG of 0.01 mg/L.

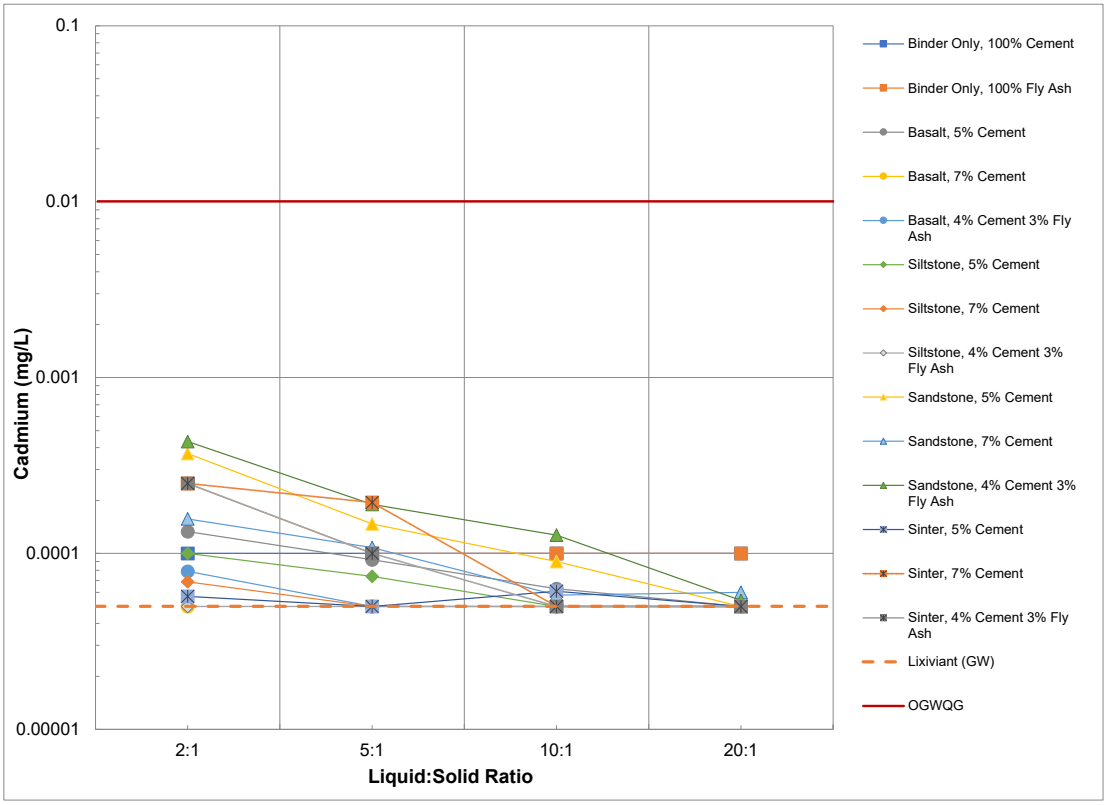

Figure 3-16: Cadmium Release from L:S Ratio Test

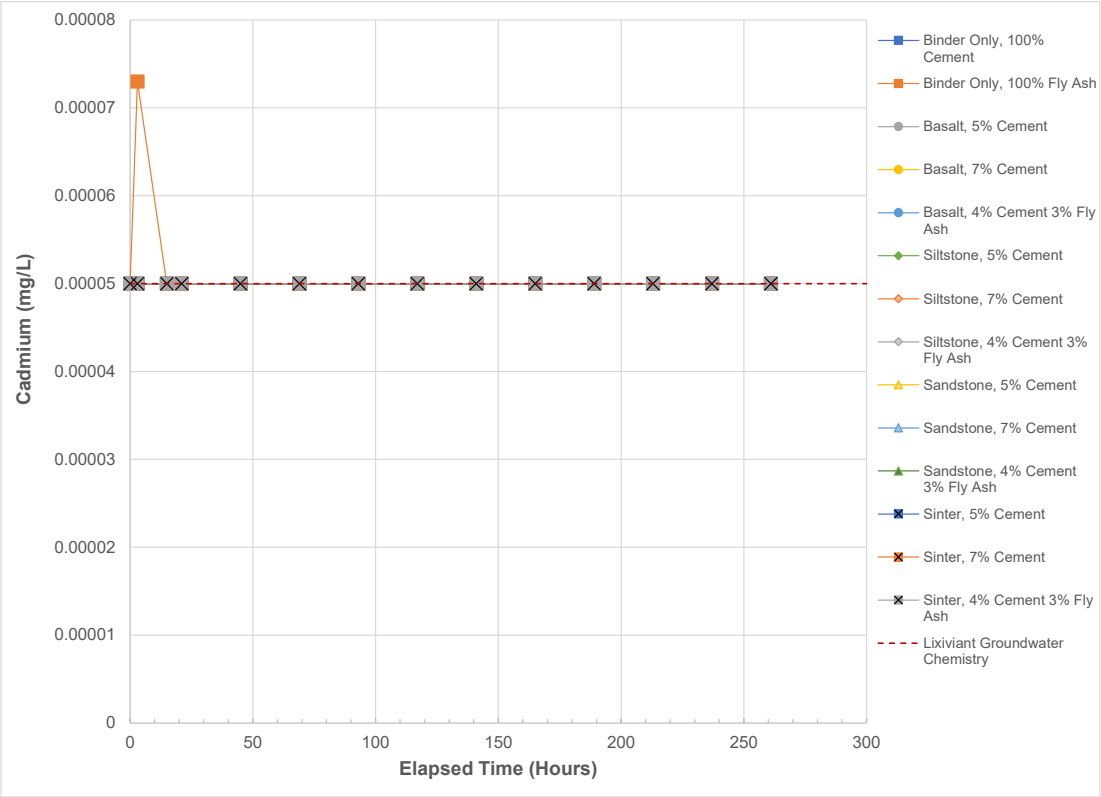

Figure 3-17: Cadmium Release from Diffusion Test

3.5.5 Calcium

Calcium is leached from all cylinders at concentrations greater than the lixiviant concentration. This relates to the elevated calcium concentrations in the fly ash and cement (Table 3-1). The control on calcium leaching varies for each of the material types. For the waste rock samples and basalt, the calcium is mass controlled (i.e., decreases in concentration at higher L:S ratios). For the binder-only cylinders (100% cement and 100% fly ash), leaching shows more of a solubility control where low leaching of calcium occurs in the low L:S ratios but leaching increases at higher L:S ratios. Calcium shows an initial flush in the diffusion test followed by a rapid decrease to concentrations below the lixiviant concentration. There is an increase in calcium concentrations after 150 hours that is related to a coincident decrease in pH during this timeframe. Calcium concentrations fall back to the lixiviant groundwater concentration after 261 hours to around 6 mg/L.

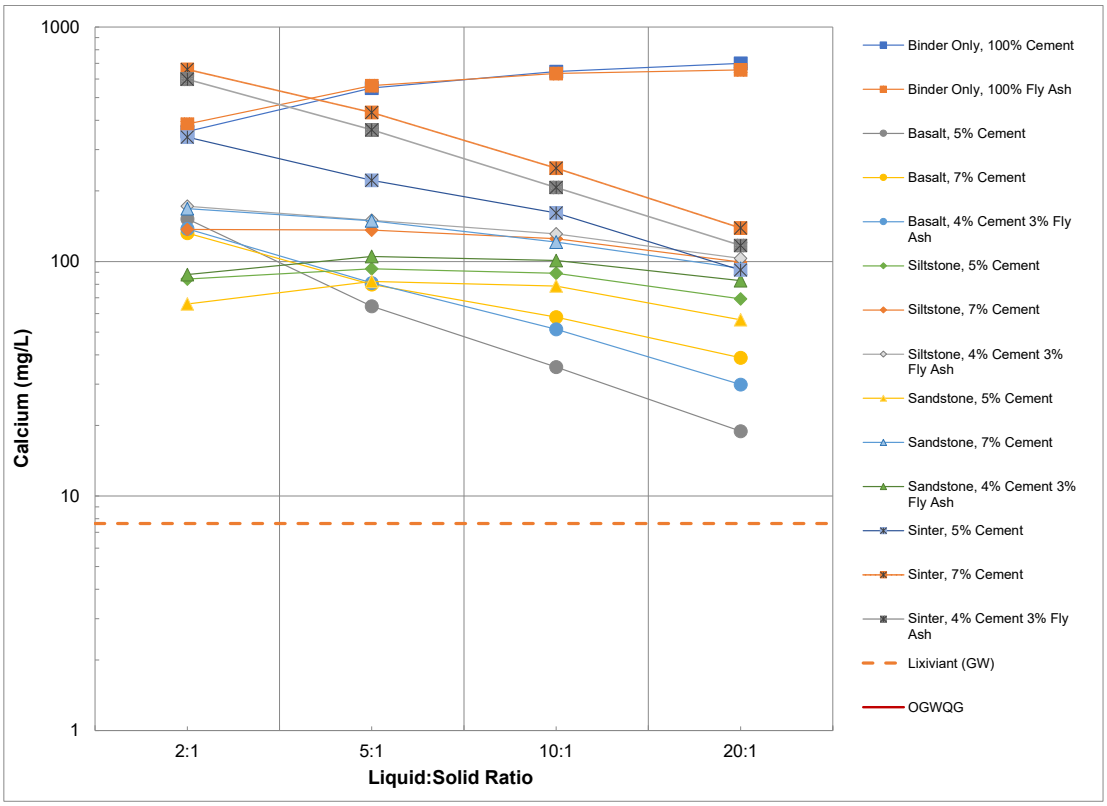

Figure 3-18: Calcium Release from L:S Ratio Test

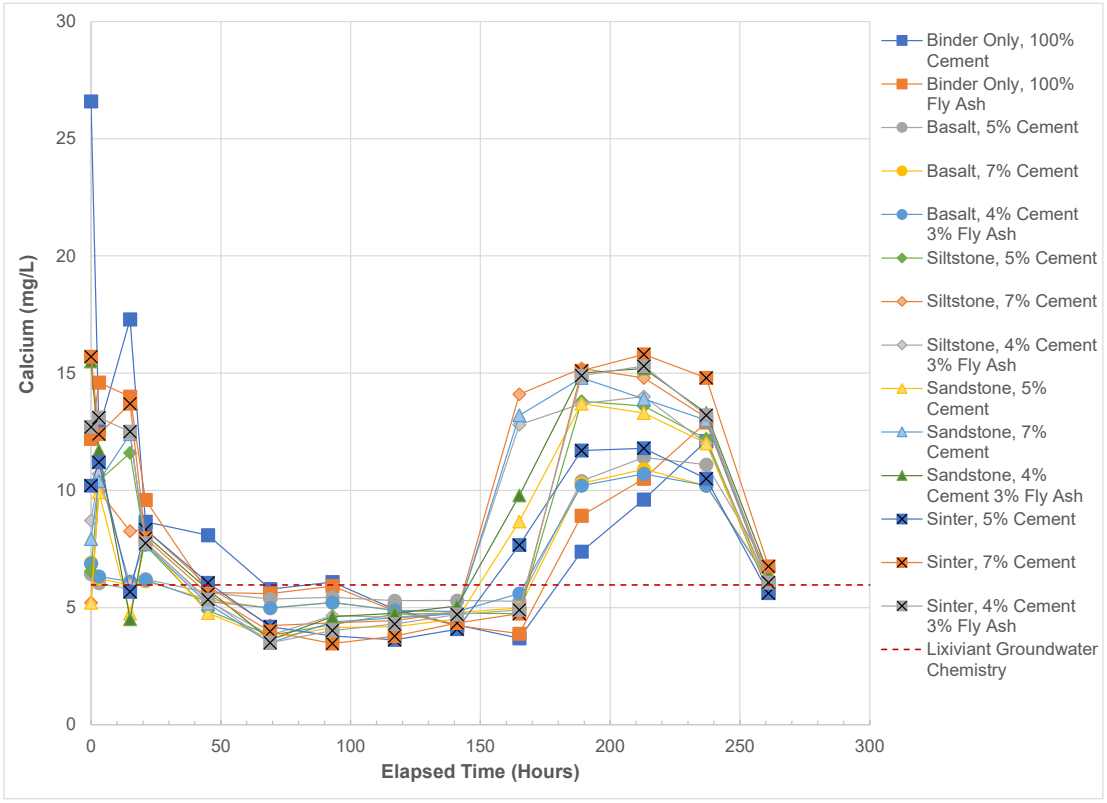

Figure 3-19: Calcium Release from Diffusion Test

3.5.6 Chloride

The release of chloride from the CRF in the majority of the cylinders remains relatively constant for each L:S ratio (2:1, 5:1, 10:1 and 20:1). Chloride concentrations in the leach tests are similar to the lixiviant concentration and are well below the OGWQG for chloride of 250 mg/L. Similar results are seen for the diffusion test, with chloride concentration at or near the lixiviant concentrations. The potential for chloride to be leached from the CRF at concentrations that could impact groundwater is negligible.

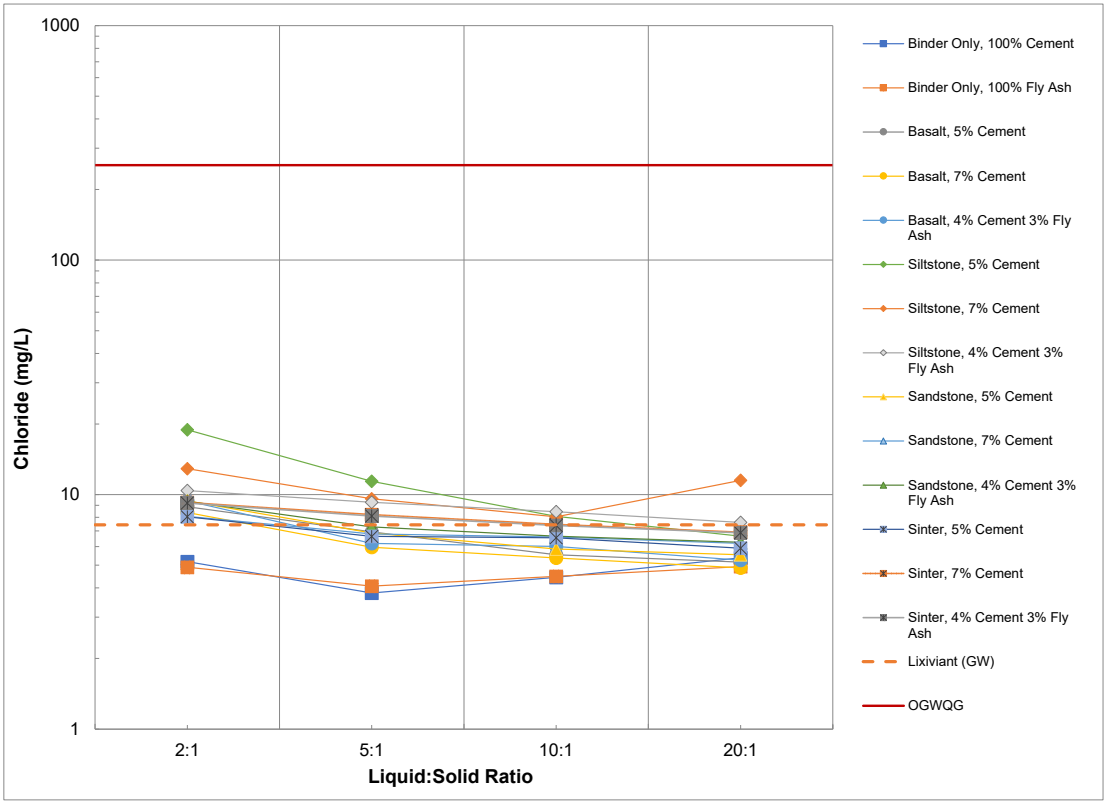

Figure 3-20: Chloride Release from L:S Ratio Test

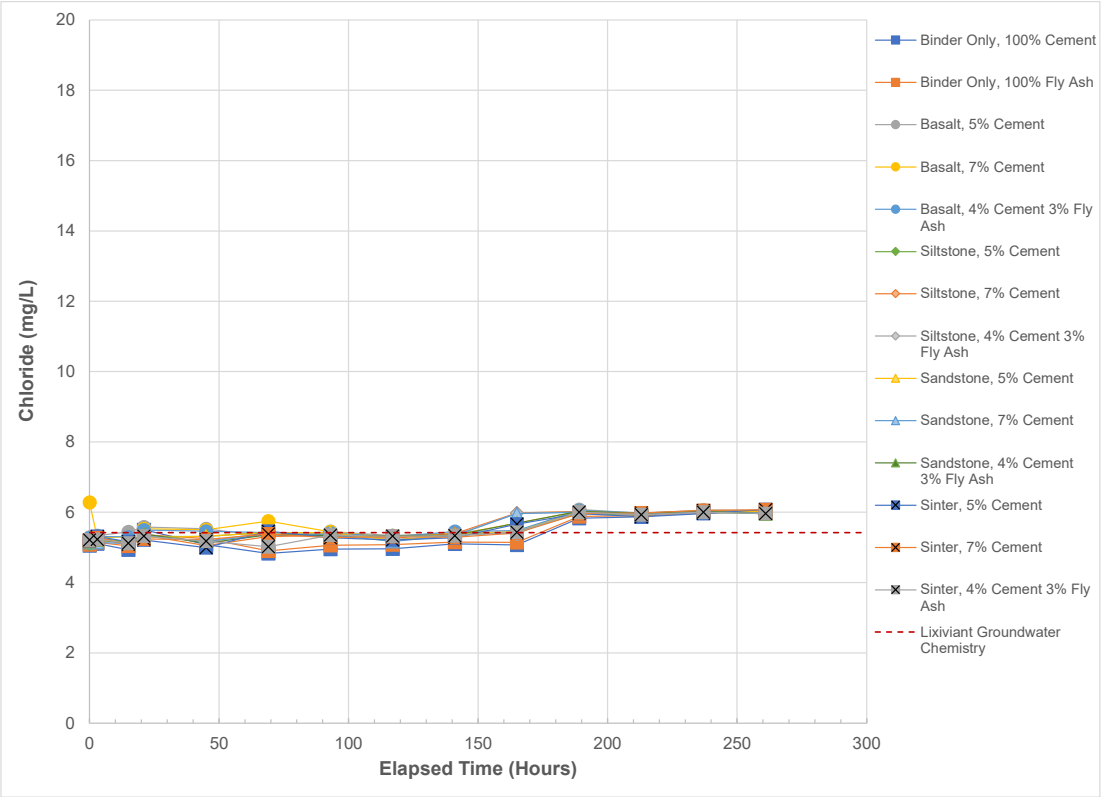

Figure 3-21: Chloride Release from Diffusion Test

3.5.7 Chromium

In the L:S ratio test, chromium generally shows mass driven release. Chromium decreases in concentration for higher L:S ratios until mass is removed. Chromium was leached above the lixiviant concentrations and OGWQG (0.05 mg/L) in the L:S ratio test but these results are applicable to disaggregated samples and do not reflect expected behavior of CRF placed underground.

In the diffusion test, chromium concentrations range from 0.0005 and 0.01 mg/L and are below the OGWQG of 0.05 mg/L. The higher chromium concentrations observed at the beginning of the test are typical of solubility driven release. After this initial release, the chromium concentrations in the CRF decline which suggests that diffusion dominates chromium release in the latter stages of the testwork. Near the end of the test, chromium is more consistently near the groundwater concentration between 0.0005 and 0.0028 mg/L.

Chromium was fairly soluble (mass-limited chemical release) in the L:S test; however, in the diffusion test, chromium concentrations are lower than seen in the L:S ratio test and decrease with time. Furthermore, the chromium concentrations in the diffusion test are consistently below the OGWQG. The diffusion test is more applicable to conditions that will occur when groundwater flows through the flooded underground. Based on the diffusion test results, groundwater that has contacted CRF will have chromium concentrations similar to background groundwater under long-term conditions.

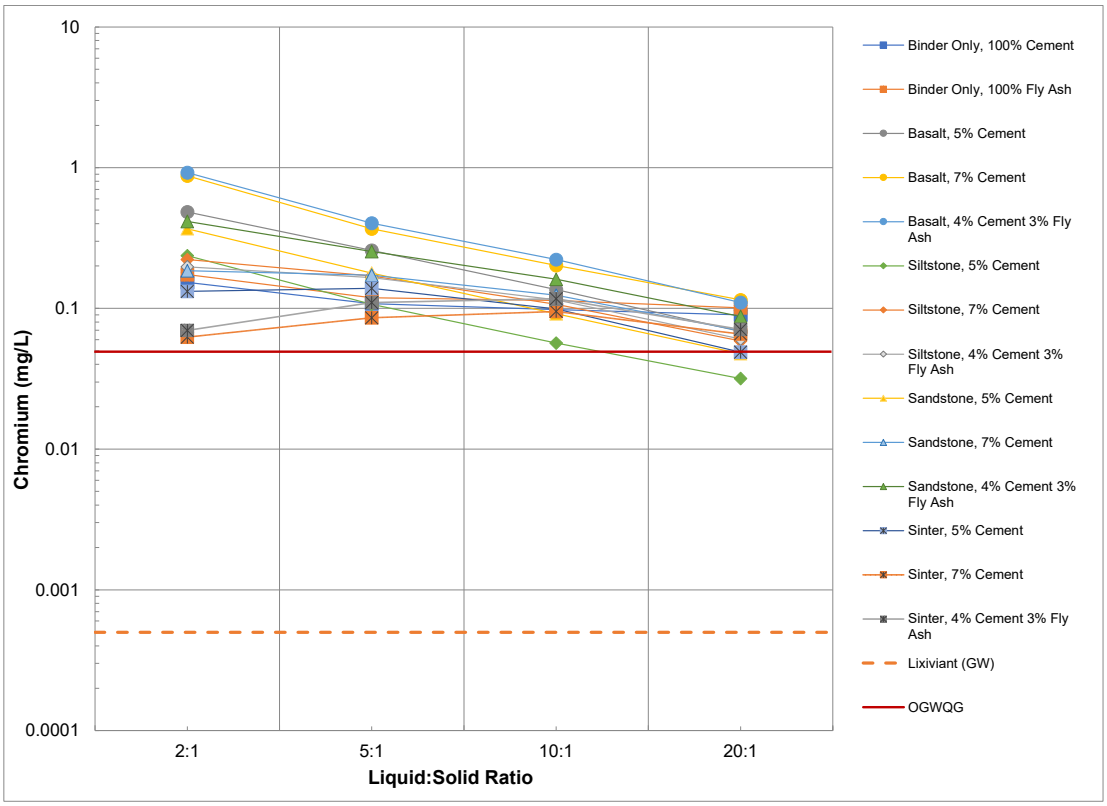

Figure 3-22: Chromium Release from L:S Ratio Test

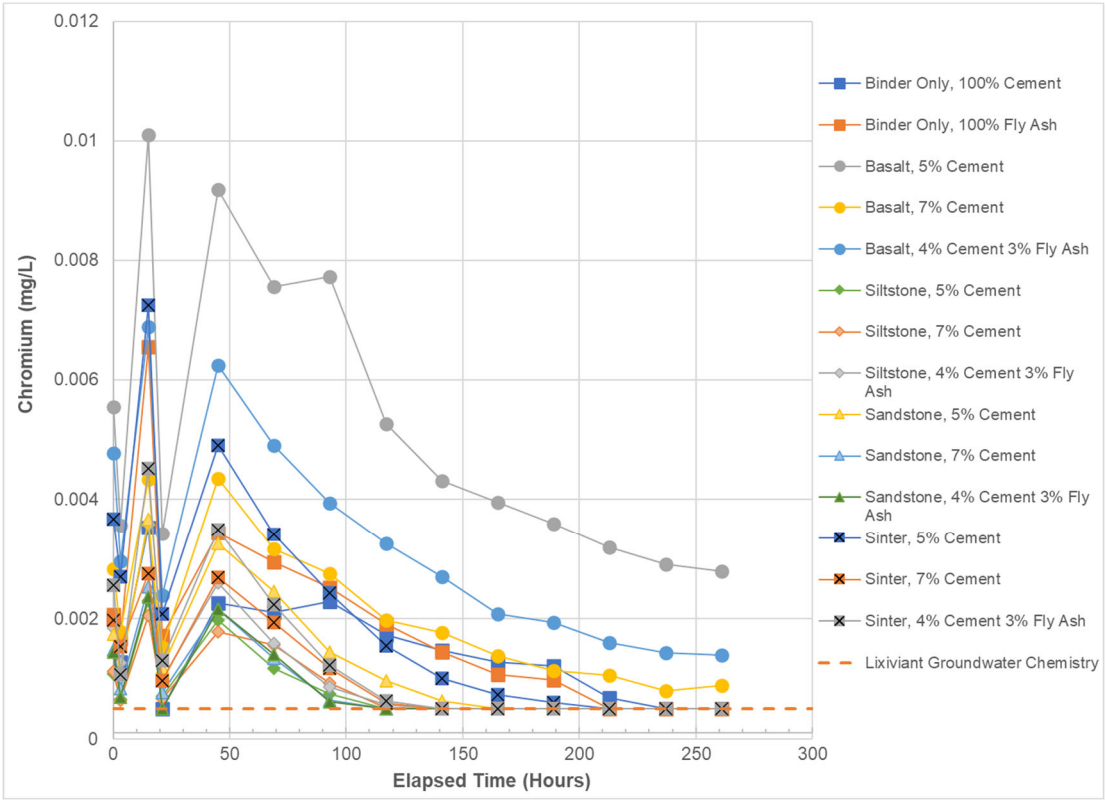

Figure 3-23: Chromium Release from Diffusion Test

3.5.8 Copper

In the L:S ratio test, copper concentrations decrease for higher L:S ratios, consistent with mass driven release. Copper is leached at concentrations above the lixiviant concentration but is below the OGWQG for all cylinders at all L:S ratios indicating a low potential to leach copper from the CRF at concentrations that will degrade groundwater. Copper release is also low in the diffusion test with all but a few of the measurements below laboratory detection and significantly below the OGWQG of 1 mg/L.

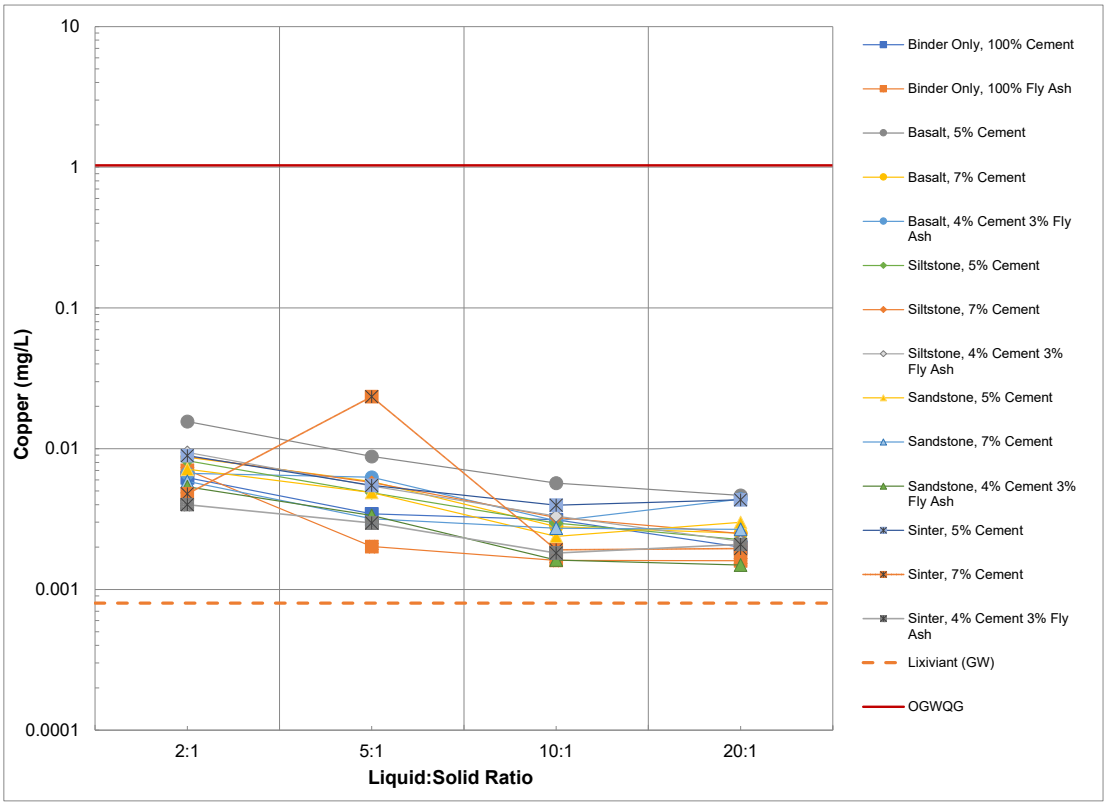

Figure 3-24: Copper Release from L:S Ratio Test

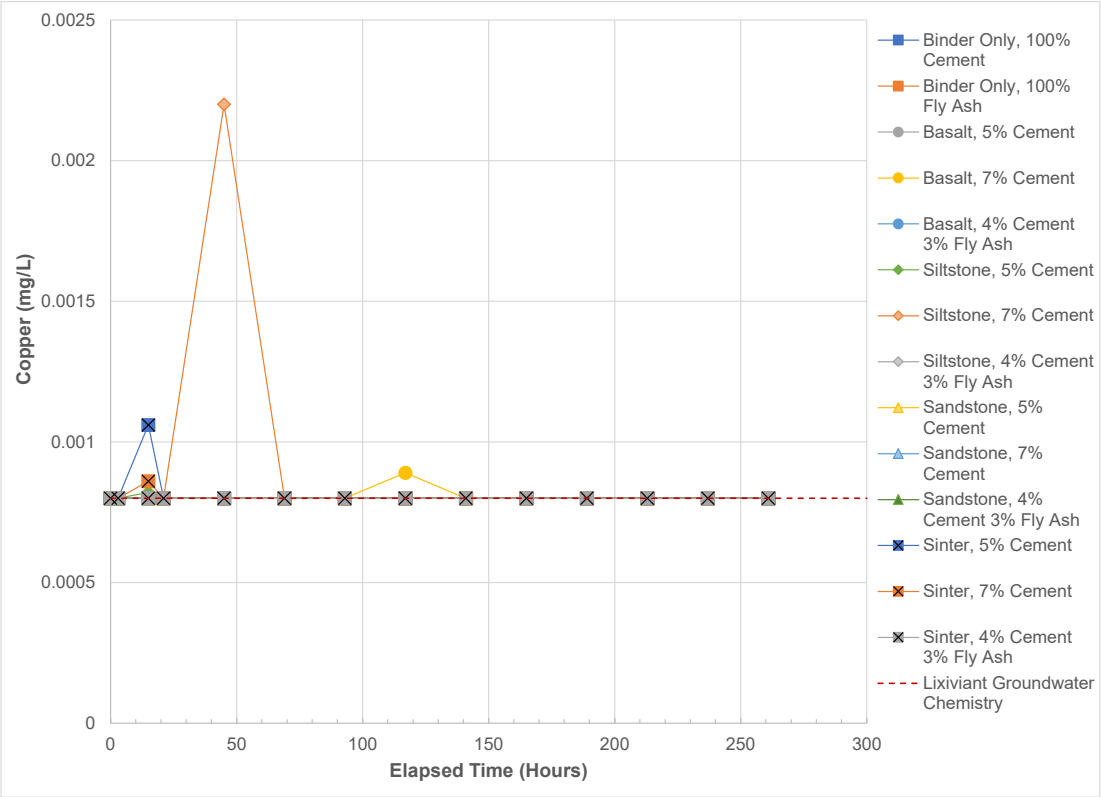

Figure 3-25: Copper Release from Diffusion Test

3.5.9 Fluoride

In the L:S ratio test, fluoride concentrations are relatively consistent for the various L:S ratios of 2:1, 5:1, 10:1 and 20:1. Fluoride concentrations in the leachates are less than the lixiviant concentration and below the OGWQG of 4 mg/L. The basalt samples show a different trend, with slightly increasing fluoride with higher L:S ratios and concentrations marginally above the lixiviant concentration.

Fluoride concentrations in the diffusion test show a narrower range with concentrations below or approaching the lixiviant concentration. At the end of the diffusion test, fluoride concentrations are slightly above the lixiviant concentration but remain below the OGWQG of 4 mg/L.

Based on the leaching tests, the potential for fluoride to be leached from the CRF at concentrations that would result in an increase in the groundwater concentrations is considered low. Furthermore, fluoride concentrations are leached from the CRF at concentrations well below the OGWQG in both the L:S ratio and diffusion tests, further demonstrating the low risk of fluoride impacts from the CRF.

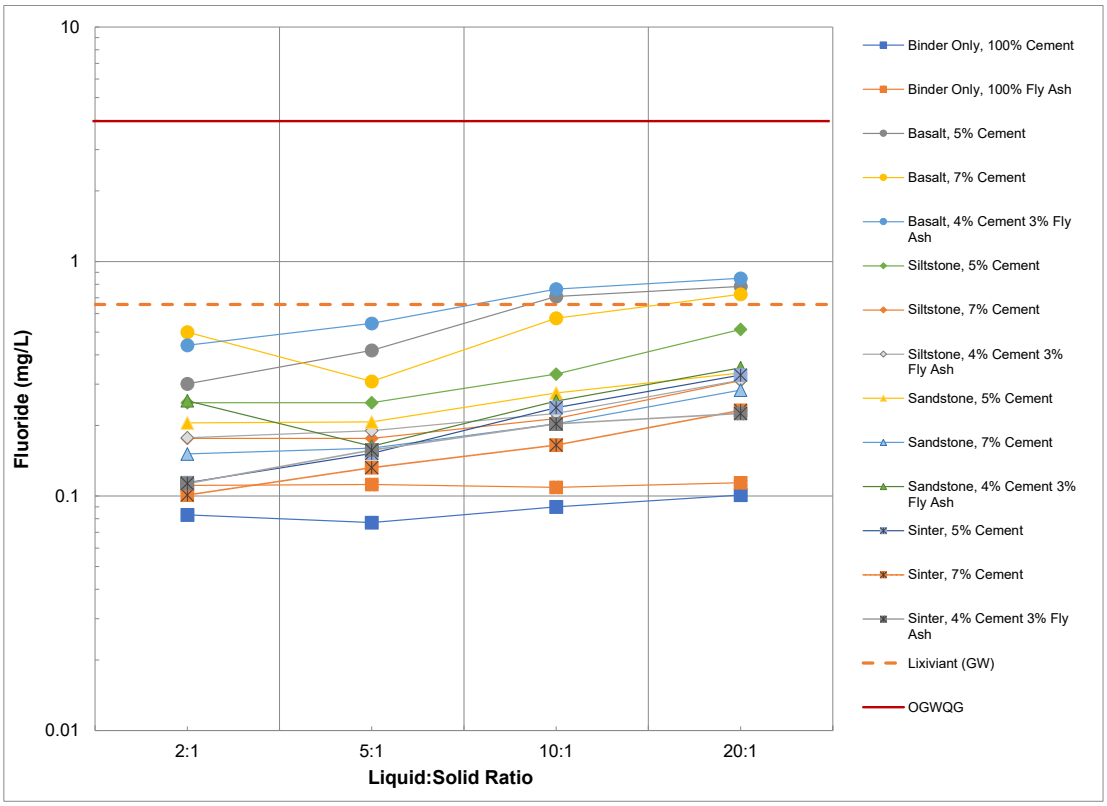

Figure 3-26: Fluoride Release from L:S Ratio Test

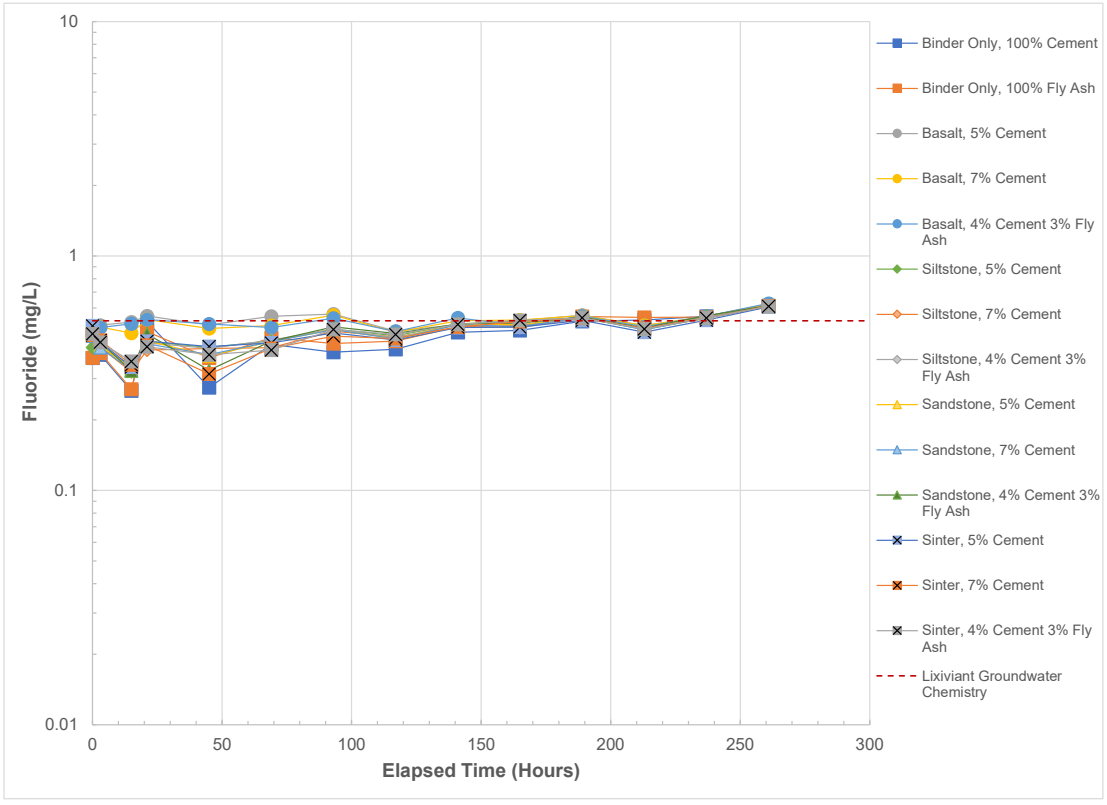

Figure 3-27: Fluoride Release from Diffusion Test

3.5.10 Iron

In the L:S ratio test, iron is leached from the CRF at concentrations above the lixiviant concentrations but lower than the OGWQG for iron of 0.3 mg/L. Iron concentrations decrease with increasing L:S ratios, suggesting mass driven release. These results indicate a low potential to leach iron from the CRF.

Iron release is also low in the diffusion test with all measurements below the OGWQG of 0.3 mg/L except for a single measurement of iron from the binder-only cylinders at the beginning of the test. Other than the initial iron released from the binder-only cylinders, iron is generally less than the lixiviant concentration. An increase in iron is seen in the middle of the test from 93 to 141 hours for all cylinders. During this timeframe, iron concentrations exceed the lixiviant concentration for a few cylinders. For all cylinders, iron concentrations decrease from 141 hours to the end of the test at concentrations well below the OGWQG and lixiviant concentrations. These results indicate there is a low potential to leach iron from the CRF.

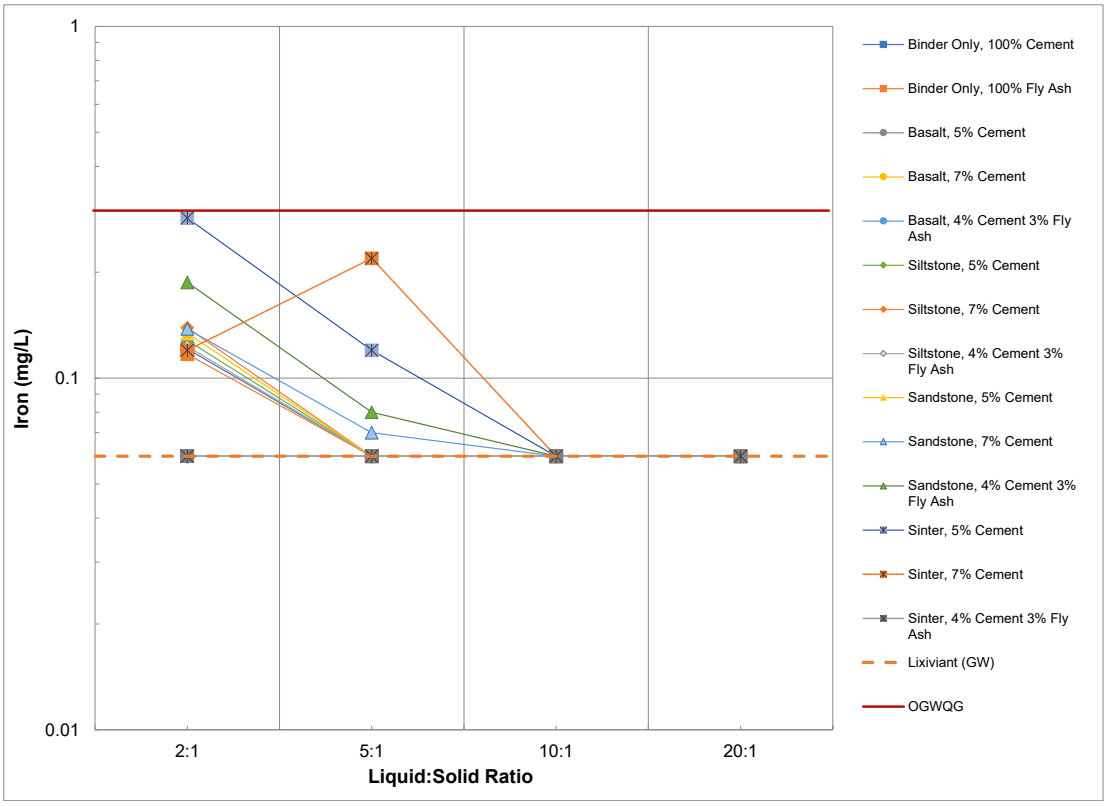

Figure 3-28: Iron Release from L:S Ratio Test

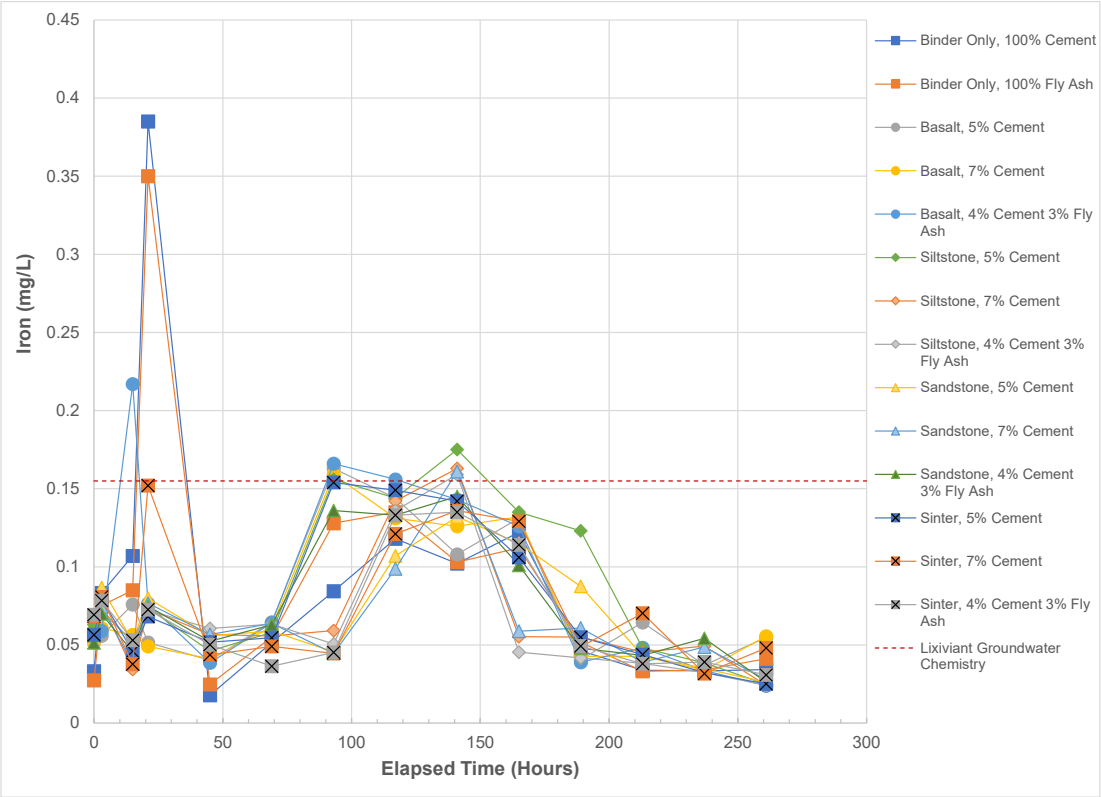

Figure 3-29: Iron Release from Diffusion Test

3.5.11 Lead

In the L:S ratio test, lead concentrations remain consistent over the range of L:S ratios, suggesting diffusion driven release. Lead is leached at concentrations above the lixiviant concentration but is below the OGWQG for all cylinders at all L:S ratios indicating a low potential to leach lead from the CRF.

Lead release is also very low in the diffusion test, with all but a few of the measurements below laboratory detection. During the first 21 hours, lead is leached from the binder-only cylinders; however, concentrations decrease to below laboratory detection after 21 hours for these two cylinders and never exceed the OGWQG of 0.05 mg/L. Lead is below laboratory detection for all other cylinders throughout the entire diffusion test. The source of lead in the binder-only cylinders may be the traces of steel that were observed in the mineralogical analysis.

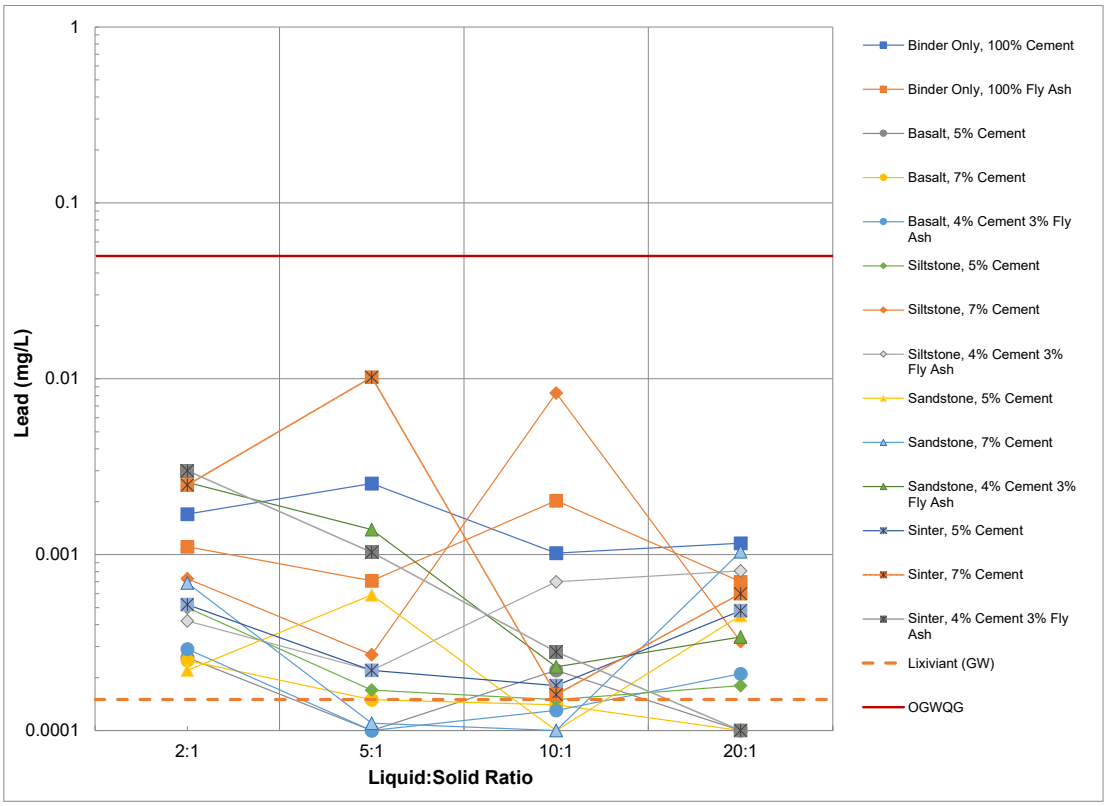

Figure 3-30: Lead Release from L:S Ratio Test

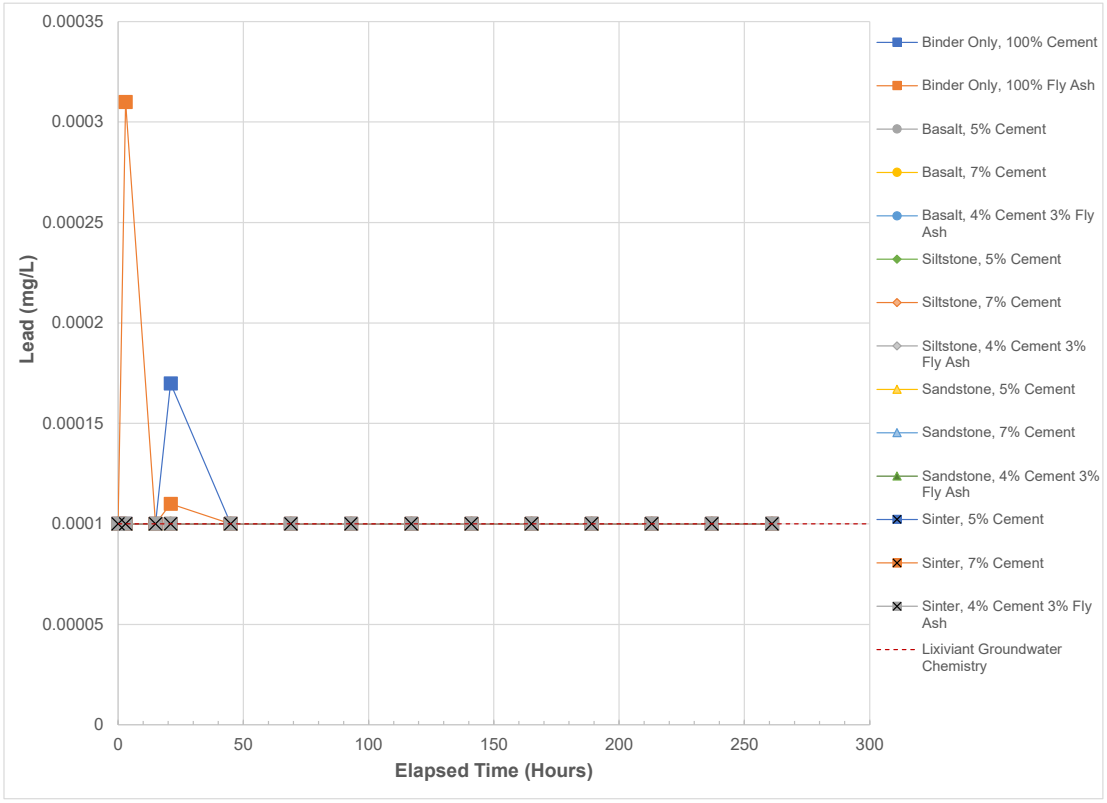

Figure 3-31: Lead Release from Diffusion Test

3.5.12 Manganese

Manganese concentrations in the L:S ratio test are very low and remain consistent over the range of L:S ratios, suggesting diffusion driven release. Only a few cylinders leached manganese at concentrations above the lixiviant concentration and all measurements are below the OGWQG. The results of the L:S ratio test indicate there is a low potential to leach manganese from the CRF.

Manganese release is variable throughout the diffusion test with some measurements above the lixiviant concentration. However, at the end of the test, manganese was below the lixiviant concentration for all but two cylinders including the fly-ash-only cylinder and the sinter (7% cement). Manganese is below the OGWQGC of 0.05 mg/L for all cylinders throughout the diffusion test and supports the results of the L:S ratio test that indicate manganese release from the CRF material is negligible.

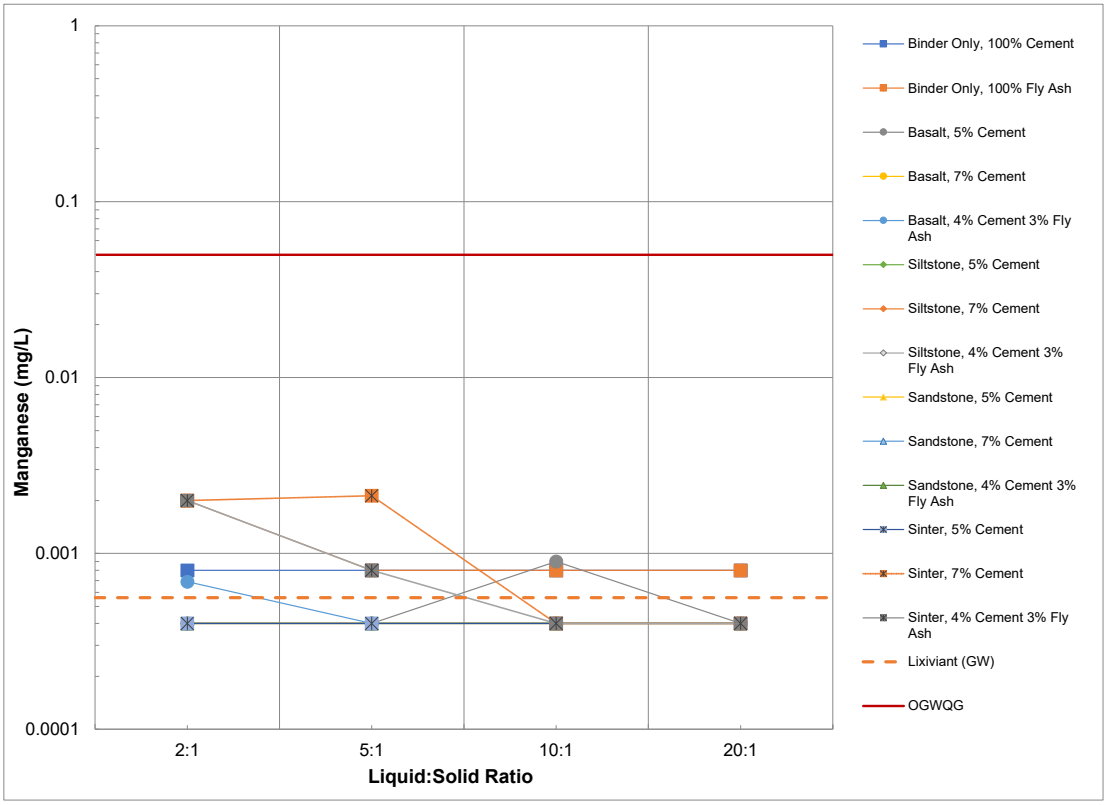

Figure 3-32: Manganese Release from L:S Ratio Test

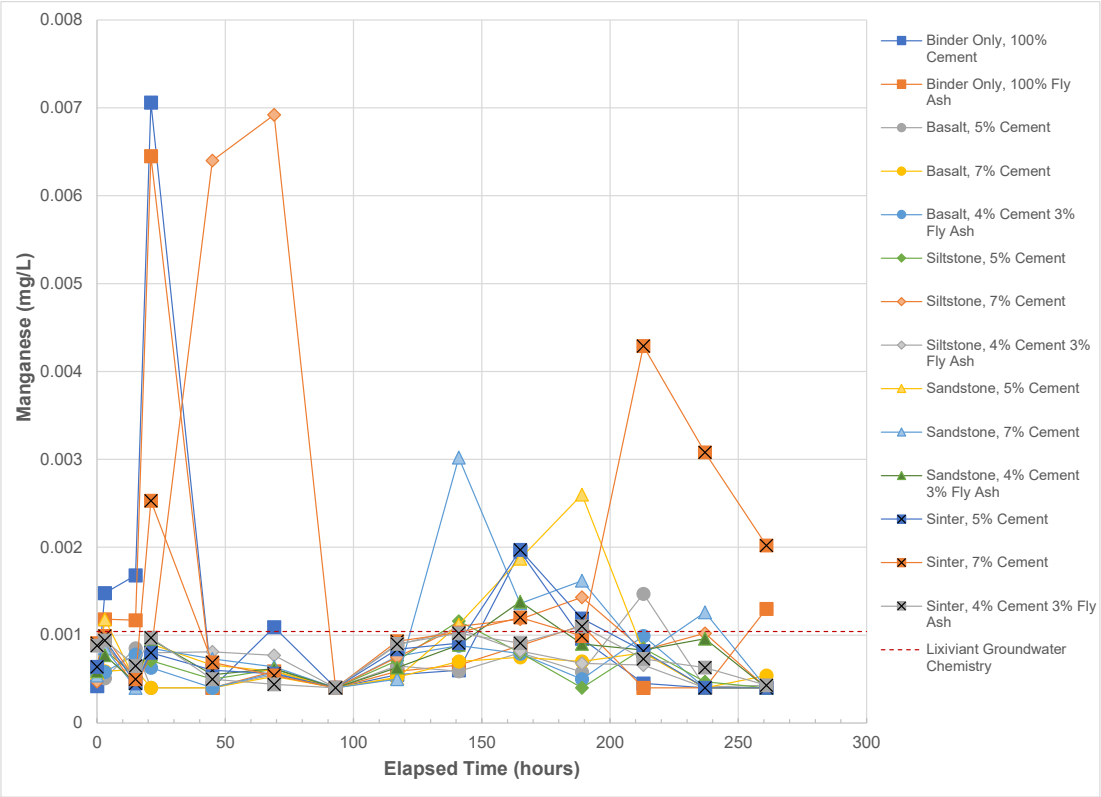

Figure 3-33: Manganese Release from Diffusion Test

3.5.13 Mercury

Mercury is leached from the disaggregated CRF at concentrations greater than the lixiviant concentration. The lowest mercury release is observed for the binder-only cylinders. Mercury concentrations generally decrease with increasing L:S ratios suggesting mercury release is mass driven. The highest mercury concentrations are observed for the basalt cylinders and one of the sinter cylinders (7% cement). At the lowest L:S ratio, mercury concentrations are above the OGWQG of 2,000 ng/L. However, the majority of mercury measurements are below the OGWQG.

In the diffusion test, the solubility of mercury is controlled between 0.3 and 45 ng/L at concentrations well below the OGWQG of 2,000 ng/L. The drastic oscillatory pattern is related to issues measuring mercury at such low levels. All measurements from the cylinders were below that of the lixiviant concentration of 142 ng/L, apart from single measurements from the sandstone cylinder (5% and 7% cement) that are slightly above the lixiviant concentration. These results suggest that mercury leaching from the CRF into groundwater is not likely to be a problem.

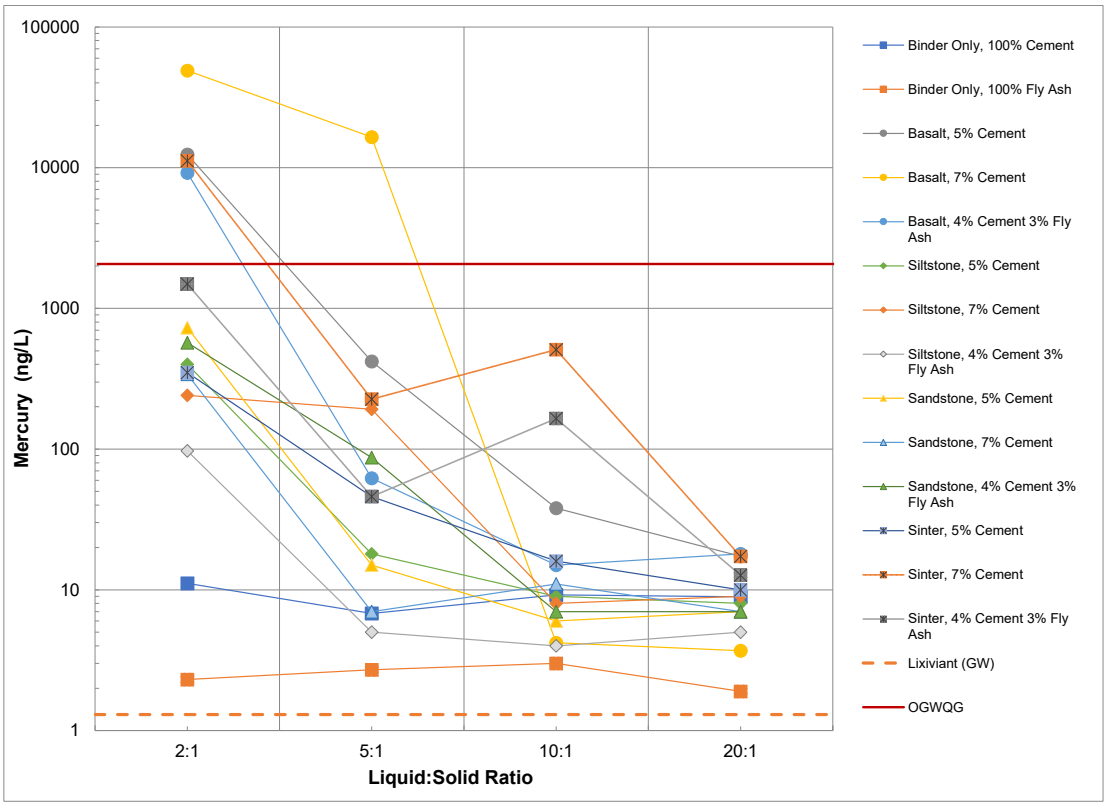

Figure 3-34: Mercury vs L:S Ratio

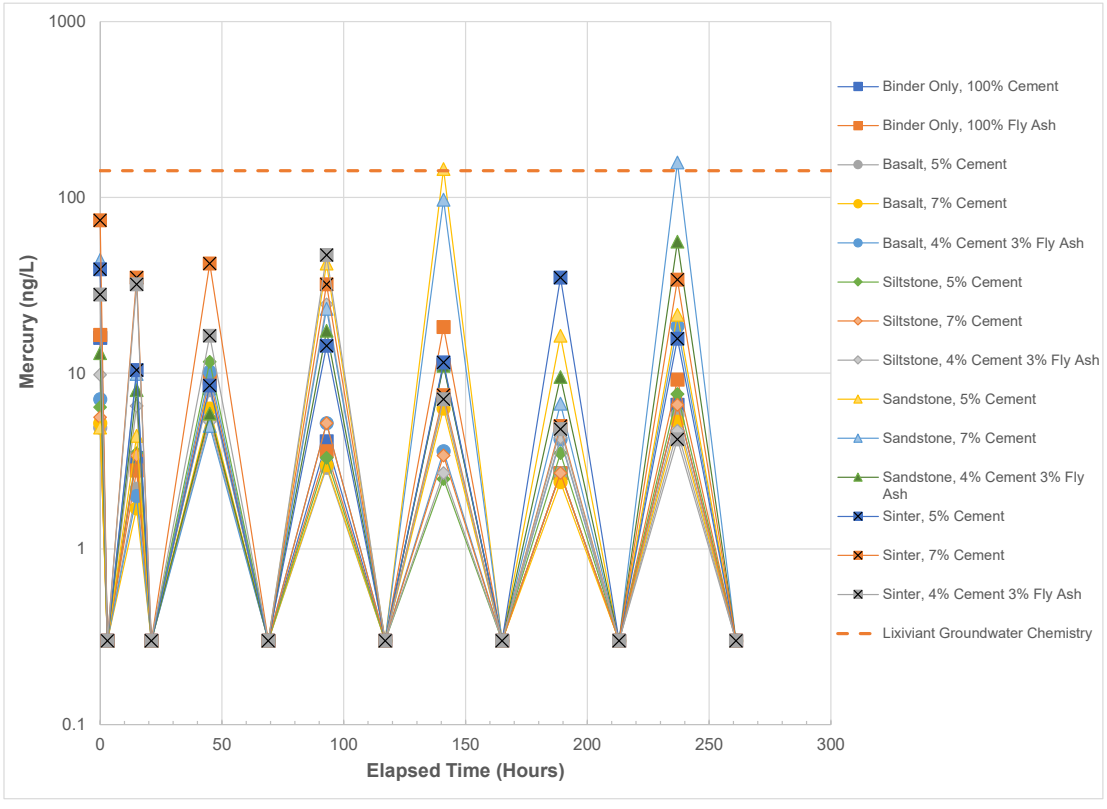

Figure 3-35: Diffusion Test - Mercury

3.5.14 Selenium

In the L:S ratio test, selenium concentrations decrease slightly with higher L:S ratios, suggesting mass driven release. Selenium was leached above the lixiviant concentrations in all cases but was below the OGWQG of 0.01 mg/L. The exceptions to this are a few cylinders with the highest selenium concentrations that are above the OGWQG for the lowest L:S ratio (2:1) including the sandstone (5% cement), sandstone (4% cement 3% fly ash) and siltstone (5% cement) cylinders.

In the diffusion test, the solubility of selenium is controlled at around 0.0003 and 0.0024 mg/L with higher concentrations seen during the first 21 hours of the test. The initial high release reflects a solubility control, possibly selenium as a trace element in a soluble form and then an oscillatory pattern observed in the cylinders later in the test typical of diffusion release. After this initial release, the selenium concentrations in the CRF decline which indicates that diffusion dominates selenium release later in the test.

In the diffusion test, selenium concentrations for all cylinders are above the lixiviant concentration for all but a couple measurements. However, selenium concentrations are significantly below the OGWQG of 0.01 mg/L) and are near the lixiviant concentrations at the end of the test.

The leach test results indicate that there is a low potential to leach selenium from the CRF at concentrations that could impact groundwater.

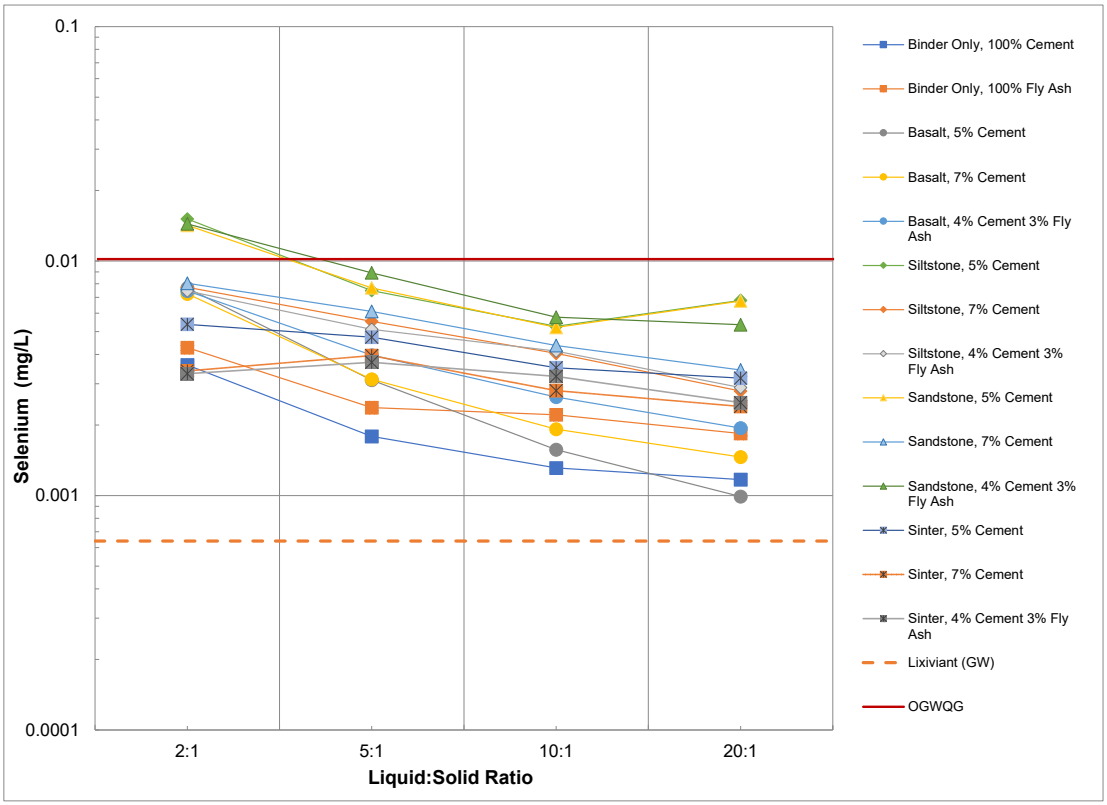

Figure 3-36: Selenium Release from L:S Ratio Test

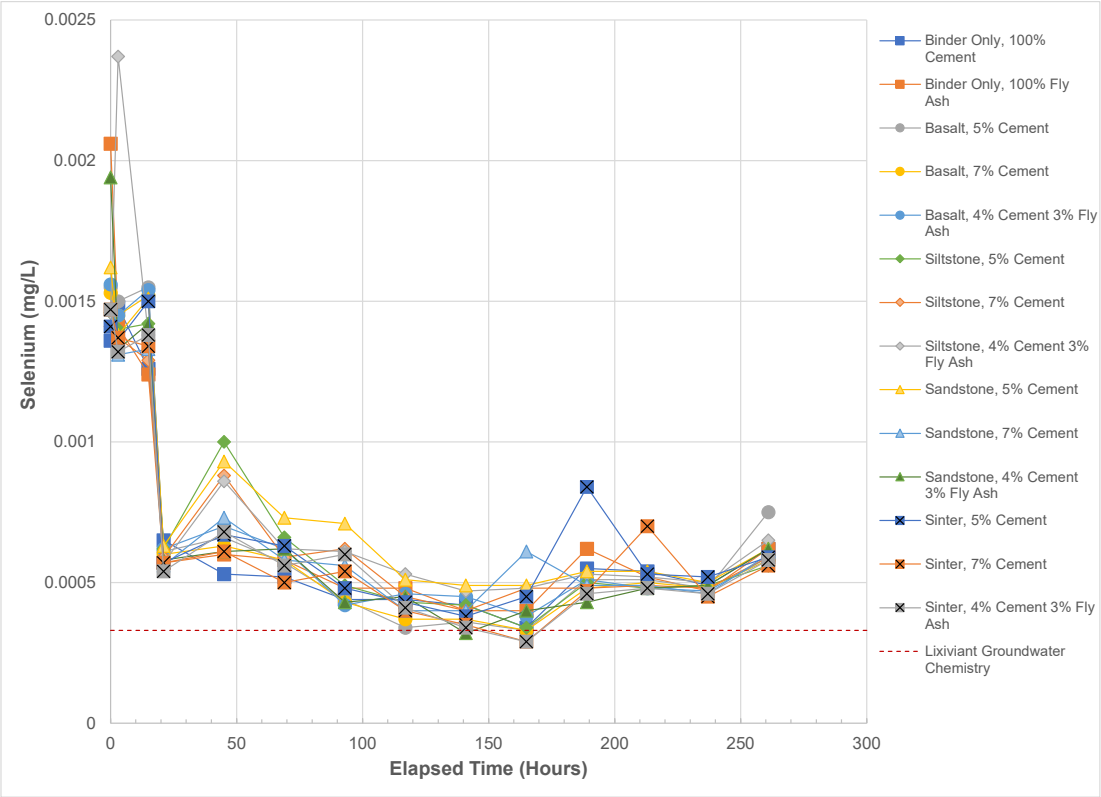

Figure 3-37: Selenium Release from Diffusion Test

3.5.15 Silver

In the L:S ratio test, silver concentrations decrease slightly with higher L:S ratios, suggesting mass driven release. This trend is most evident for the basalt cylinders. Silver concentrations are above the lixiviant concentration for all cylinders and measurements. However, silver concentrations are an order of magnitude below the OGWQG (0.05 mg/L) for all measurements indicating a low potential to leach silver from the CRF. This is confirmed by the diffusion test where all silver concentrations were below laboratory detection. These results indicate there is little to no leaching of silver from the CRF.

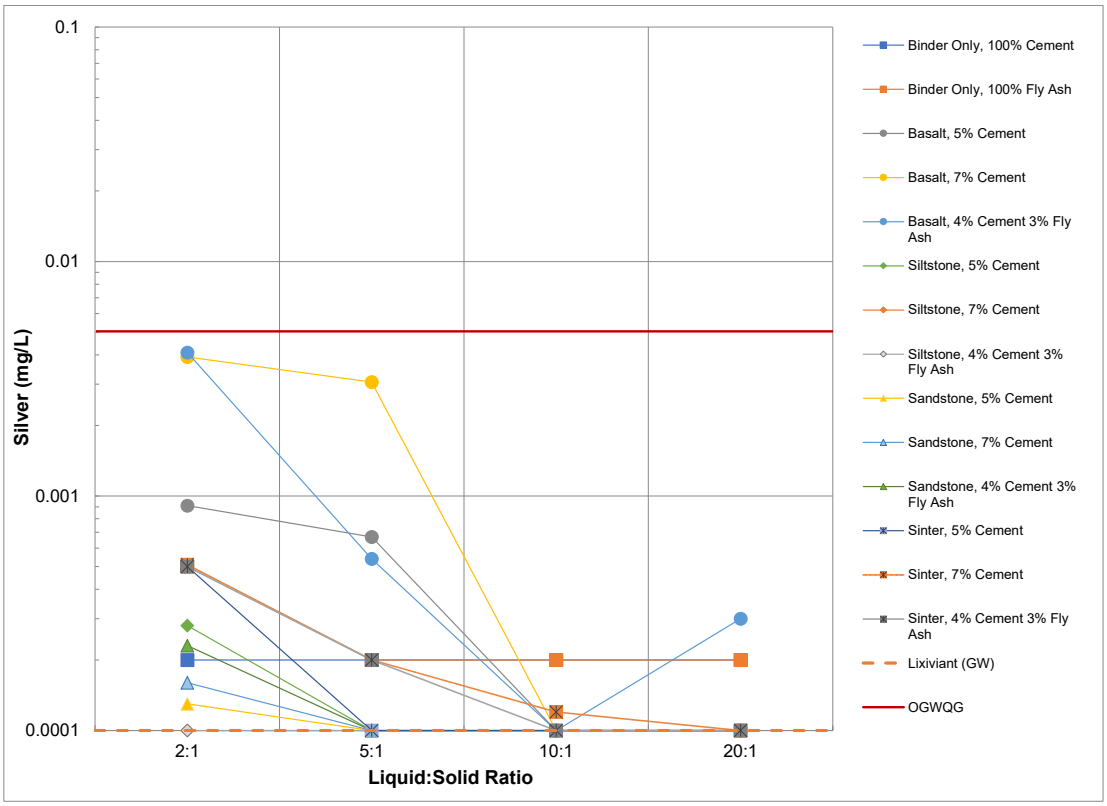

Figure 3-38: Silver Release from L:S Ratio Test

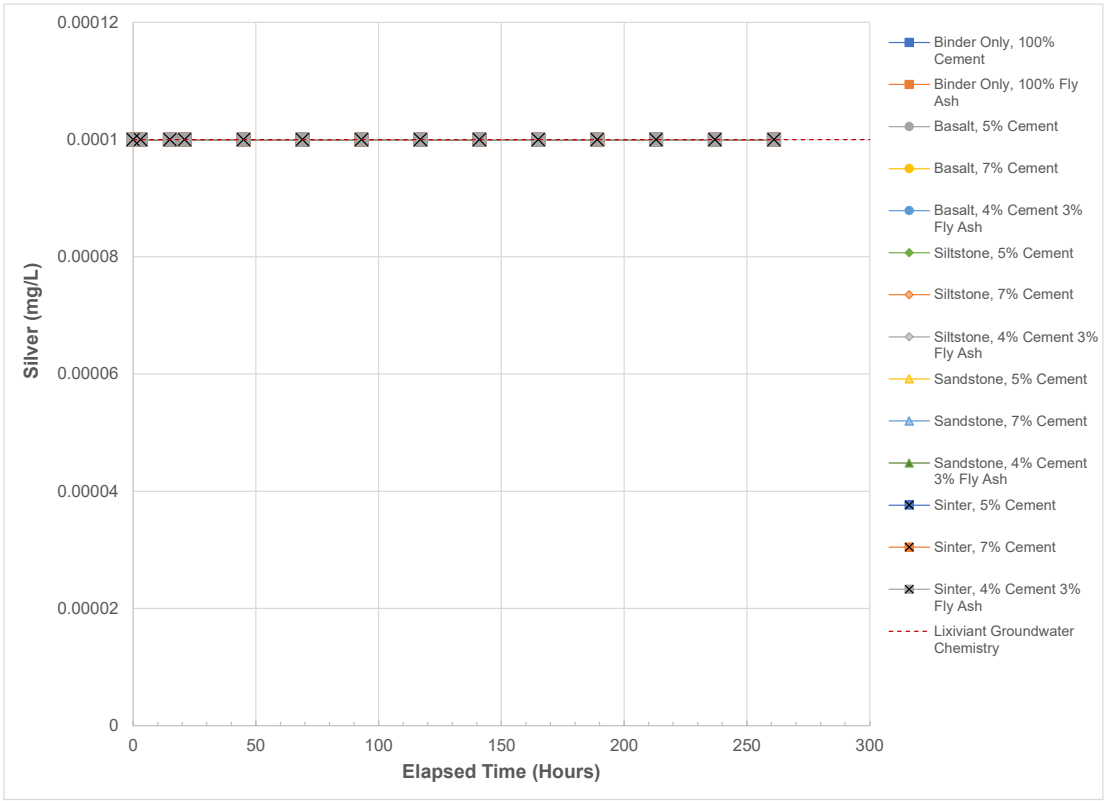

Figure 3-39: Silver Release from Diffusion Test

3.5.16 Sulfate

For the L:S ratio test, the control on sulfate leaching varies by material type. For the basalt cylinders, sulfate is mass controlled (i.e., decreases in concentration at higher L:S ratios). For the waste rock cylinders, leaching of sulfate shows more of a solubility control where low leaching occurs in the low L:S ratios but concentrations increase at higher L:S ratios. The binder-only cylinders show almost no variation in sulfate release over the range of L:S ratios, suggesting diffusion-controlled sulfate release for these materials.

Sulfate is generally leached at concentrations greater than the lixiviant concentration for all cylinders except for the sinter samples and the fly-ash-only cylinder. Sulfate concentrations converge for the higher L:S ratio results and are all above the lixiviant concentration at a L:S ratio of 20:1, except for the fly ash cylinder. Sulfate concentrations are below the OGWQG for all measurements except for the lowest L:S ratio results for the three basalt cylinders and one of the siltstone cylinders (5% cement).

Sulfate release is lower in the diffusion test with concentrations constrained between 17 and 25 mg/L. More variation in sulfate release is seen at the beginning of the diffusion test and concentrations coverage toward the end at concentrations above the lixiviant concentration between 20 and 25 mg/L. For all measurements throughout the diffusion test, sulfate concentrations are an order of magnitude below the OGWQG of 250 mg/L.

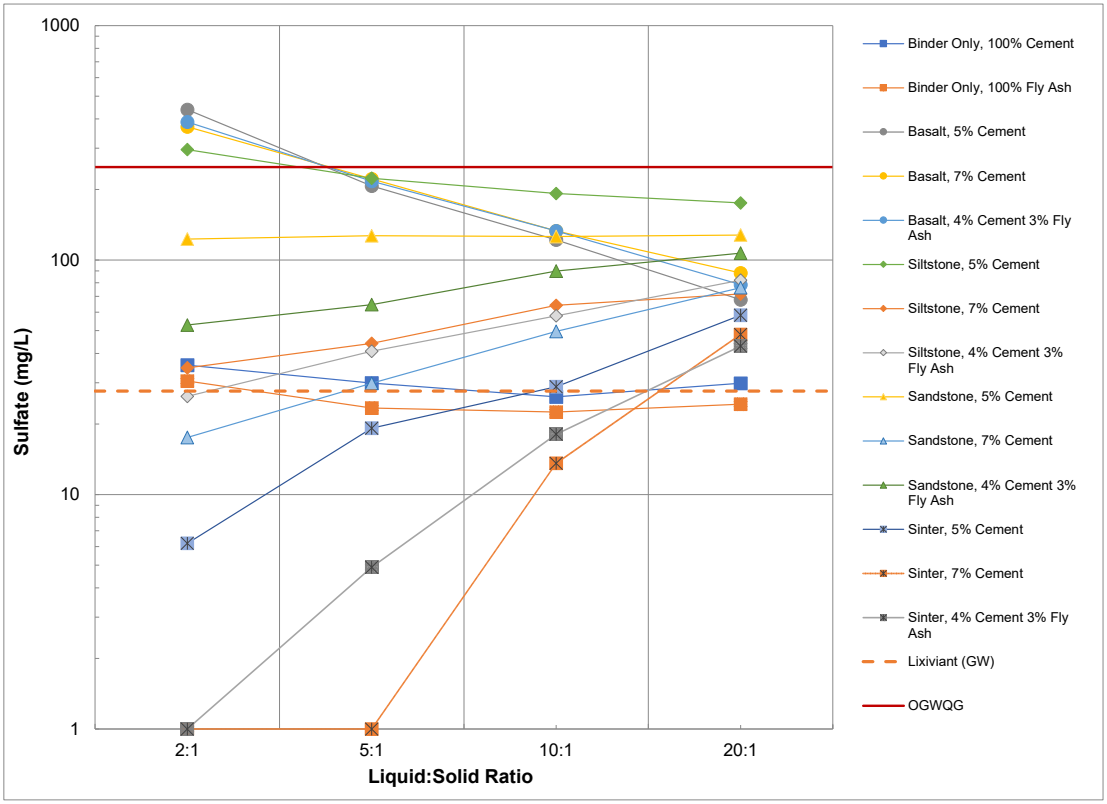

Figure 3-40: Sulfate Release from L:S Ratio Test

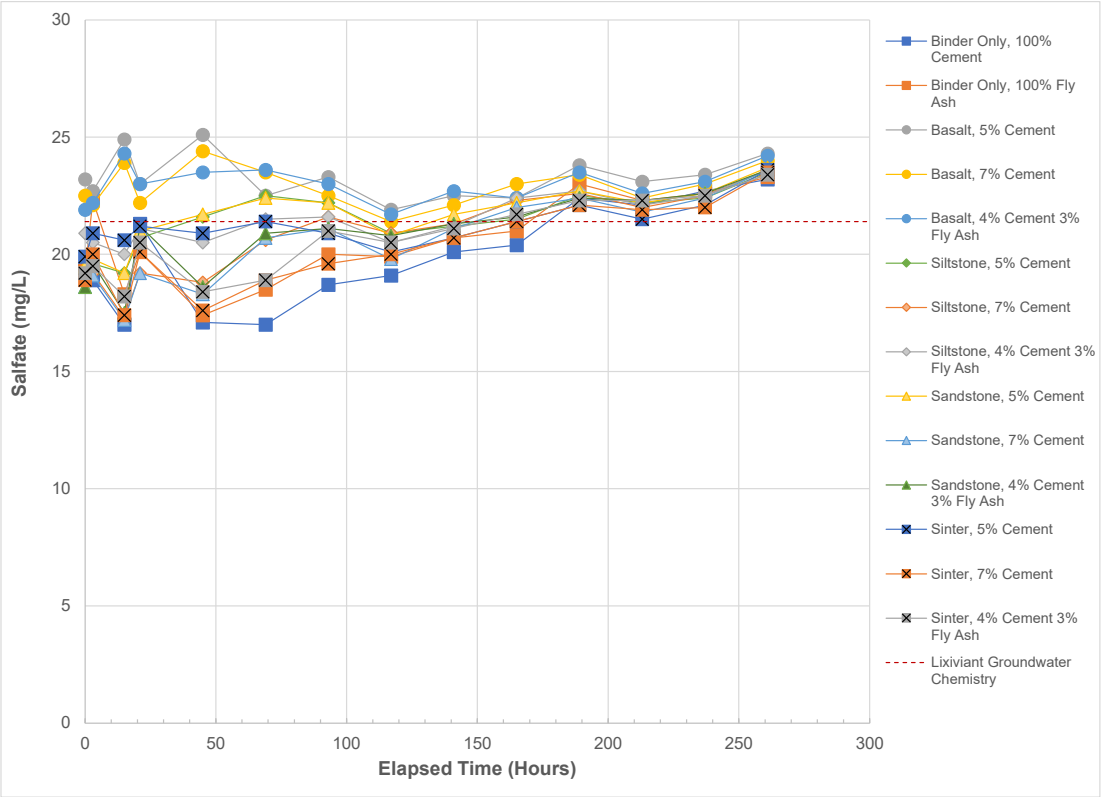

Figure 3-41: Sulfate Release from Diffusion Test

3.5.17 Zinc

In the L:S ratio test, zinc concentrations are generally below the lixiviant concentration (i.e., below laboratory detection of 0.006 mg/L) for all of the cylinders with the exception of the sinter (7% cement), sinter (4% cement, 3% fly ash), siltstone (4% cement, 3% fly ash) and the binder-only cylinders. For the sinter and siltstone cylinders, zinc concentrations are above the lixiviant concentration and decrease with higher L:S ratios, suggesting mass driven release. In all instances, zinc concentrations are several orders of magnitude below the OGWQG of 5 mg/L indicating a low potential to leach zinc from the CRF. This is confirmed by the diffusion test where all zinc concentrations were below laboratory detection. These results indicate there is no potential to leach zinc from the CRF.

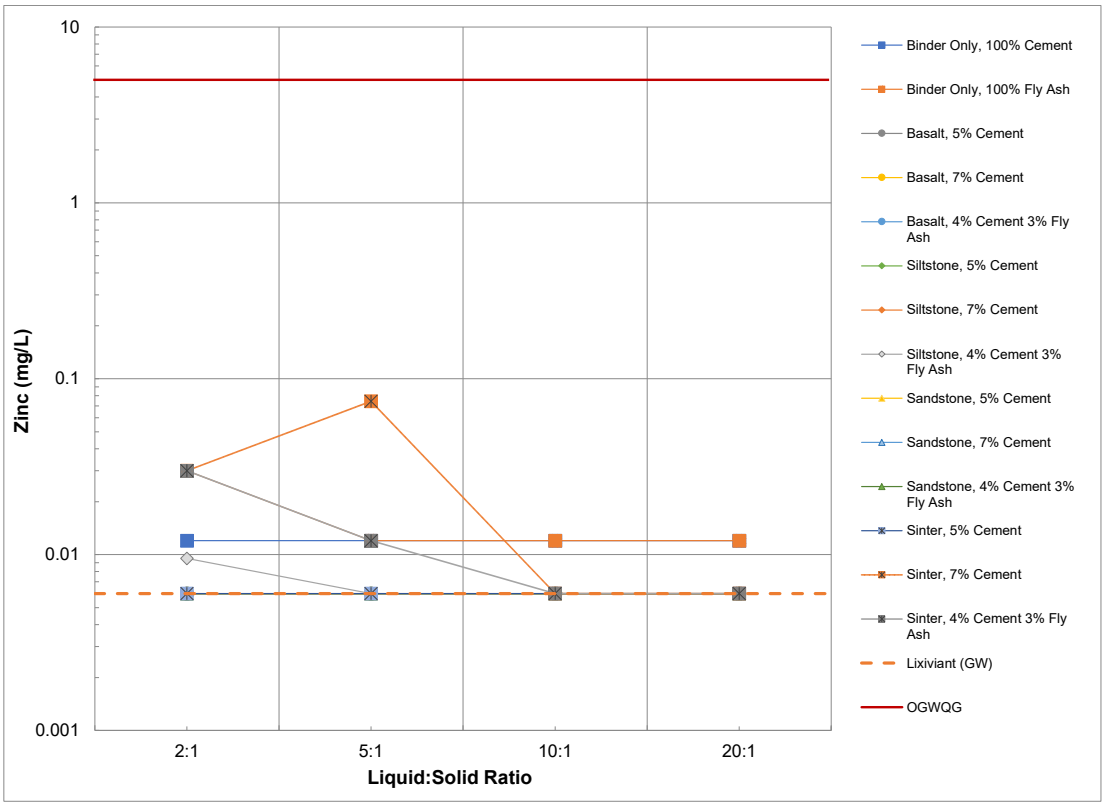

Figure 3-42: Zinc Release from L:S Ratio Test

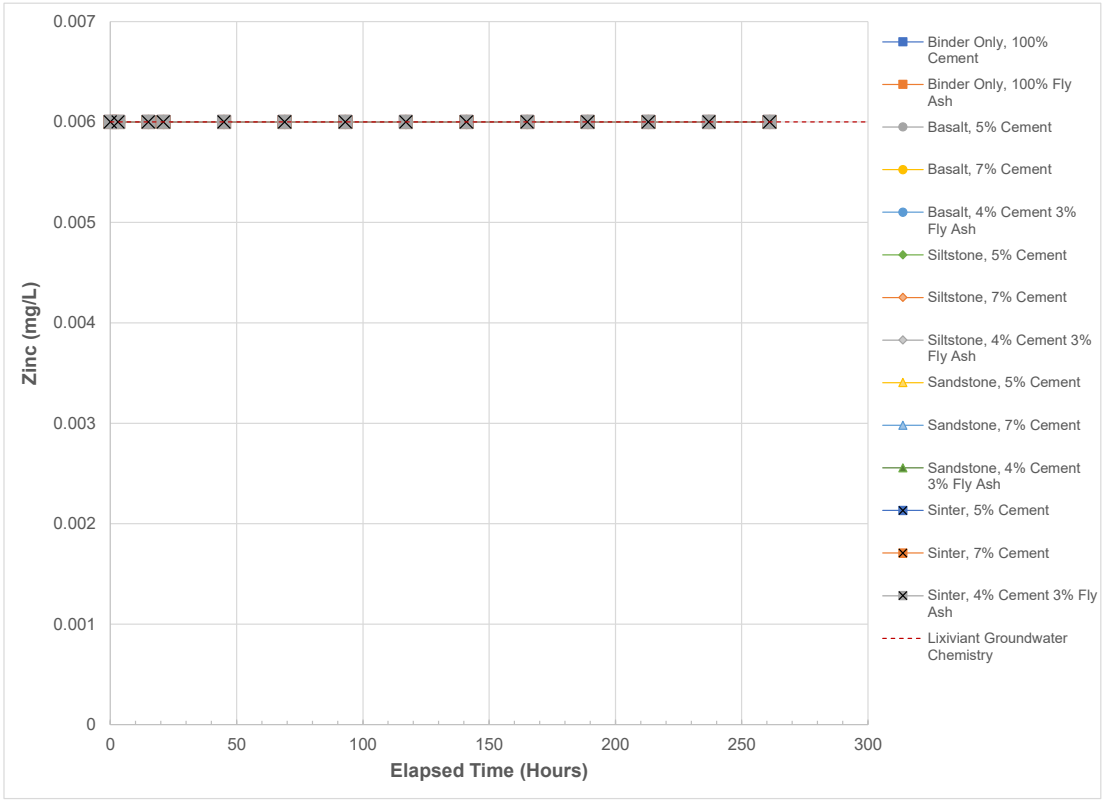

Figure 3-43: Zinc Release from Diffusion Test

4 Conclusions

A geochemical characterization program was completed to define the acid generation and metal leaching characteristics of CRF, which will be used in the mining operations at the Grassy Mountain Project. These data, evaluated in conjunction with other data from the site provides a basis for risk assessment and evaluation of options for material management.

A total of 14 cylinders representative of CRF were generated using borrow material (basalt) and waste rock along with binder material comprising cement and fly ash. Based on the baseline geochemical characterization report, the basalt borrow material is geochemically inert with a low potential to leach metals. However, most of the waste rock associated with the project has a potential to generate acid and leach metals. The use of cement as binder material in the CRF will increase the physical and chemical stability of the product. It will also reduce the contact of oxygen and water to the sulfide minerals, and thus lower the potential for metals mobility and acid generation. Finally, the use of binder increases the neutralization capacity of the CRF which reduces the potential for the waste rock aggregate to generate acid.

A series of tests were completed on the 14 cylinders to evaluate the acid generating and metal leaching potential of the CRF. Based on the results of these test, the following conclusions can be made:

- All CRF cylinders have significant buffering capacity due to the addition of the binders. Based on the test results the CRF is not expected to generate acid.
- Cementation of the waste rock results in overall lower metal releases under higher pH conditions; in comparison to HCTs of uncemented material.
- There are no appreciable differences in the results for the various binder types or percentages used to generate the cylinders:
  - Fly ash is comparable to cement
  - Additional binder does not change the results in terms of potential for acid generation and/or metal leaching.
- The concentrations of several constituents (i.e., arsenic, chloride, fluoride, mercury and sulfate) are lower in leachate than in the lixiviant, indicating the potential for attenuation within the CRF.
- Very low metal/sulfate release from the CRF, with the majority of constituents being below OGWQG. Exceptions include:
  - Barium: the sinter and binder samples showed barium leaching above OGWQG in the L:S ratio test.
  - Chromium: elevated above OGWQG in the L:S ratio test.
  - Mercury: leached at concentrations above the OGWQG from the basalt samples at the lowest L:S ratio (2:1).
  - Sulfate: leached at concentrations above the OGWQG from the basalt samples at the lowest L:S ratio (2:1).
  - Although these parameters are elevated above the OGWQG in the L:S ratio test, metal release is much lower in the diffusion test and concentrations are generally below the OGWQG. The exception to this is a single measurement of iron from the binder-only cylinders at the beginning of the test.

- Reduction in the mobility of soluble constituents in the CRF occurs for several reasons:
  - The hydraulic conductivity of the material is greatly diminished due to the solidification process.
  - The alkaline nature of the binder reduces solubility of most metals.
  - Some metals become less soluble due to inclusion into the mineral structure of calcium silicate hydrate gels within the cemented solids.
  - The mobility of most trace constituents in water contacting CRF will be controlled by diffusion rather than solubility reactions.

Based on the results of the CRF characterization program, the CRF containing basalt or waste rock does not show a significant potential to degrade groundwater, with most constituents leached at very low levels for all tests. Some constituents are leached above the OGWQG in the L:S ratio leach test. However, this test is done on a disaggregated sample and concentrations that may occur in groundwater flowing through the monolithic blocks of CRF will likely be much lower and more comparable to concentrations observed in the diffusion tests.

Based on this analysis, it is concluded that CRF presents a minimal risk to groundwater.

5 References

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Mason, B., 1966, Principles of Geochemistry, John Wiley and Sons, Inc., New York, p. 46-47.

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SRK, 2022. Baseline Geochemical Characterization Report, Grassy Mountain Project. Submitted March 2022.

Appendix A Laboratory Reports – ABA and Multi-Element

One Government Gulch - PO Box 929
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(208) 784-1258
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McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
BINDER-CEMENT	X1J0182-01	Solid	05-Oct-21 09:00	07-Oct-2021	
BINDER-FLY ASH	X1J0182-02	Solid	05-Oct-21 09:00	07-Oct-2021	
BASALT 5%	X1J0182-03	Solid	05-Oct-21 09:00	07-Oct-2021	
BASALT 7%	X1J0182-04	Solid	05-Oct-21 09:00	07-Oct-2021	
BASALT 4/3%	X1J0182-05	Solid	05-Oct-21 09:00	07-Oct-2021	
SILTSTONE 5%	X1J0182-06	Solid	05-Oct-21 09:00	07-Oct-2021	
SILTSTONE 7%	X1J0182-07	Solid	05-Oct-21 09:00	07-Oct-2021	
SILTSTONE 4/3%	X1J0182-08	Solid	05-Oct-21 09:00	07-Oct-2021	
SANDSTONE 5%	X1J0182-09	Solid	05-Oct-21 09:00	07-Oct-2021	
SANDSTONE 7%	X1J0182-10	Solid	05-Oct-21 09:00	07-Oct-2021	
SANDSTONE 4/3%	X1J0182-11	Solid	05-Oct-21 09:00	07-Oct-2021	
SINTER 5%	X1J0182-12	Solid	05-Oct-21 09:00	07-Oct-2021	
SINTER 7%	X1J0182-13	Solid	05-Oct-21 09:00	07-Oct-2021	
SINTER 4/3%	X1J0182-14	Solid	05-Oct-21 09:00	07-Oct-2021	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
Analyses were performed in accordance with SVL standard operating procedures and calibrations were performed and met SVL internal QC criteria.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.
This report shall not be reproduced except in full, without the written approval of SVL Analytical, Inc.

Case Narrative: X1J0182

SVL is not accredited for analysis in Oregon.

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **BINDER-CEMENT**
SVL Sample ID: **X1J0182-01 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	803	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.71	%	0.04	0.02		X143190	MEJ	10/20/21 14:27	
NV mod Sobek	**Hot Water Rinse Residue**	0.40	%	0.04	0.03		X143190	MEJ	11/03/21 19:24	
NV mod Sobek	HCl Rinse Residue	< 0.04	%	0.04	0.02		X143190	MEJ	11/04/21 09:56	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 21:52	
NV mod Sobek	**H2O Soluble Sulfate**	0.32	%	0.04	0.03		N/A		11/03/21 19:24	
NV mod Sobek	**Non-H2O Sulfate Sulfur**	0.40	%	0.04	0.03		N/A		11/04/21 09:56	
NV mod Sobek	Pyritic Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 09:56	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.32	%	0.04	0.03		N/A		11/04/21 09:56	
NV mod Sobek	**Calculated AGP**	9.9	TonneCaCO3/kTonne	1.2			N/A		11/04/21 09:56	
NV mod Sobek	**NNP**	793.0	TonneCaCO3/kTonne	1.2			N/A		11/04/21 09:56	
NV mod Sobek	**ANP/AGP**	81.4		1.2			N/A		11/04/21 09:56	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	12.2	pH Units				X143300	ESB	10/22/21 13:00	H1

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **BINDER-FLY ASH**
SVL Sample ID: **X1J0182-02 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	776	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.73	%	0.04	0.02		X143190	MEJ	10/20/21 14:36	
NV mod Sobek	**Hot Water Rinse Residue**	0.44	%	0.04	0.03		X143190	MEJ	11/03/21 19:33	
NV mod Sobek	HCl Rinse Residue	< 0.04	%	0.04	0.02		X143190	MEJ	11/04/21 10:05	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 22:02	
NV mod Sobek	**H2O Soluble Sulfate**	0.29	%	0.04	0.03		N/A		11/03/21 19:33	
NV mod Sobek	**Non-H2O Sulfate Sulfur**	0.44	%	0.04	0.03		N/A		11/04/21 10:05	
NV mod Sobek	Pyritic Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:05	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.29	%	0.04	0.03		N/A		11/04/21 10:05	
NV mod Sobek	**Calculated AGP**	9.0	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:05	
NV mod Sobek	**NNP**	767.0	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:05	
NV mod Sobek	**ANP/AGP**	86.1		1.2			N/A		11/04/21 10:05	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	12.3	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **BASALT 5%**
SVL Sample ID: **X1J0182-03 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	126	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.05	%	0.04	0.02		X143190	MEJ	10/20/21 14:44	
NV mod Sobek	**Hot Water Rinse Residue**	0.04	%	0.04	0.03		X143190	MEJ	11/03/21 19:42	
NV mod Sobek	HCl Rinse Residue	< 0.04	%	0.04	0.02		X143190	MEJ	11/04/21 10:08	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 22:11	
NV mod Sobek	**H2O Soluble Sulfate**	0.05	%	0.04	0.03		N/A		11/03/21 19:42	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:08	
NV mod Sobek	Pyritic Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:08	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.05	%	0.04	0.03		N/A		11/04/21 10:08	
NV mod Sobek	**Calculated AGP**	1.5	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:08	
NV mod Sobek	**NNP**	125.0	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:08	
NV mod Sobek	**ANP/AGP**	83.8		1.2			N/A		11/04/21 10:08	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	9.5	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **BASALT 7%**
SVL Sample ID: **X1J0182-04 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	154	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.07	%	0.04	0.02		X143190	MEJ	10/20/21 14:48	
NV mod Sobek	**Hot Water Rinse Residue**	0.04	%	0.04	0.03		X143190	MEJ	11/03/21 19:57	
NV mod Sobek	HCl Rinse Residue	< 0.04	%	0.04	0.02		X143190	MEJ	11/04/21 10:17	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 22:20	
NV mod Sobek	**H2O Soluble Sulfate**	0.07	%	0.04	0.03		N/A		11/03/21 19:57	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:17	
NV mod Sobek	Pyritic Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:17	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.07	%	0.04	0.03		N/A		11/04/21 10:17	
NV mod Sobek	**Calculated AGP**	2.1	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:17	
NV mod Sobek	**NNP**	152.0	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:17	
NV mod Sobek	**ANP/AGP**	72.4		1.2			N/A		11/04/21 10:17	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	10.4	pH Units				X143300	ESB	10/22/21 13:00	H1

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Sparks, NV 89431

Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **BASALT 4/3%**
SVL Sample ID: **X1J0182-05 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	147	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.07	%	0.04	0.02		X143190	MEJ	10/20/21 14:52	
NV mod Sobek	**Hot Water Rinse Residue**	0.04	%	0.04	0.03		X143190	MEJ	11/03/21 20:06	
NV mod Sobek	HCl Rinse Residue	< 0.04	%	0.04	0.02		X143190	MEJ	11/04/21 10:32	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 22:29	
NV mod Sobek	**H2O Soluble Sulfate**	0.07	%	0.04	0.03		N/A		11/03/21 20:06	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:32	
NV mod Sobek	Pyritic Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:32	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.07	%	0.04	0.03		N/A		11/04/21 10:32	
NV mod Sobek	**Calculated AGP**	2.2	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:32	
NV mod Sobek	**NNP**	145.0	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:32	
NV mod Sobek	**ANP/AGP**	67.5		1.2			N/A		11/04/21 10:32	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	10.2	pH Units				X143300	ESB	10/22/21 13:00	H1

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Project Manager

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Kellogg, ID 83837-0929
(208) 784-1258
www.svl.net

McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SILTSTONE 5%**
SVL Sample ID: **X1J0182-06 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	51.1	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.64	%	0.04	0.02		X143190	MEJ	10/20/21 15:07	
NV mod Sobek	**Hot Water Rinse Residue**	0.40	%	0.04	0.03		X143190	MEJ	11/03/21 20:16	
NV mod Sobek	**HCl Rinse Residue**	0.27	%	0.04	0.02		X143190	MEJ	11/04/21 10:41	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 22:38	
NV mod Sobek	**H2O Soluble Sulfate**	0.24	%	0.04	0.03		N/A		11/03/21 20:16	
NV mod Sobek	**Non-H2O Sulfate Sulfur**	0.14	%	0.04	0.03		N/A		11/04/21 10:41	
NV mod Sobek	**Pyritic Sulfur**	0.27	%	0.04	0.03		N/A		11/04/21 10:41	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.50	%	0.04	0.03		N/A		11/04/21 10:41	
NV mod Sobek	**Calculated AGP**	15.8	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:41	
NV mod Sobek	**NNP**	35.3	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:41	
NV mod Sobek	**ANP/AGP**	3.2		1.2			N/A		11/04/21 10:41	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.2	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SILTSTONE 7%**
SVL Sample ID: **X1J0182-07 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	66.9	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.59	%	0.04	0.02		X143190	MEJ	10/20/21 15:12	
NV mod Sobek	**Hot Water Rinse Residue**	0.40	%	0.04	0.03		X143190	MEJ	11/03/21 20:22	
NV mod Sobek	**HCl Rinse Residue**	0.26	%	0.04	0.02		X143190	MEJ	11/04/21 10:44	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 22:47	
NV mod Sobek	**H2O Soluble Sulfate**	0.19	%	0.04	0.03		N/A		11/03/21 20:22	
NV mod Sobek	**Non-H2O Sulfate Sulfur**	0.15	%	0.04	0.03		N/A		11/04/21 10:44	
NV mod Sobek	**Pyritic Sulfur**	0.26	%	0.04	0.03		N/A		11/04/21 10:44	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.44	%	0.04	0.03		N/A		11/04/21 10:44	
NV mod Sobek	**Calculated AGP**	13.9	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:44	
NV mod Sobek	**NNP**	53.0	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:44	
NV mod Sobek	**ANP/AGP**	4.8		1.2			N/A		11/04/21 10:44	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.7	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SILTSTONE 4/3%**
SVL Sample ID: **X1J0182-08 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	62.0	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.68	%	0.04	0.02		X143190	MEJ	10/20/21 15:17	
NV mod Sobek	**Hot Water Rinse Residue**	0.47	%	0.04	0.03		X143190	MEJ	11/03/21 20:29	
NV mod Sobek	**HCl Rinse Residue**	0.31	%	0.04	0.02		X143190	MEJ	11/04/21 10:47	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 23:02	
NV mod Sobek	**H2O Soluble Sulfate**	0.21	%	0.04	0.03		N/A		11/03/21 20:29	
NV mod Sobek	**Non-H2O Sulfate Sulfur**	0.16	%	0.04	0.03		N/A		11/04/21 10:47	
NV mod Sobek	**Pyritic Sulfur**	0.30	%	0.04	0.03		N/A		11/04/21 10:47	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.52	%	0.04	0.03		N/A		11/04/21 10:47	
NV mod Sobek	**Calculated AGP**	16.1	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:47	
NV mod Sobek	**NNP**	45.9	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:47	
NV mod Sobek	**ANP/AGP**	3.8		1.2			N/A		11/04/21 10:47	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	12.1	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SANDSTONE 5%**
SVL Sample ID: **X1J0182-09 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	40.1	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.26	%	0.04	0.02		X143190	MEJ	10/20/21 15:21	
NV mod Sobek	**Hot Water Rinse Residue**	0.15	%	0.04	0.03		X143190	MEJ	11/03/21 20:35	
NV mod Sobek	**HCl Rinse Residue**	0.14	%	0.04	0.02		X143190	MEJ	11/04/21 10:50	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 23:05	
NV mod Sobek	**H2O Soluble Sulfate**	0.12	%	0.04	0.03		N/A		11/03/21 20:35	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:50	
NV mod Sobek	**Pyritic Sulfur**	0.14	%	0.04	0.03		N/A		11/04/21 10:50	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.25	%	0.04	0.03		N/A		11/04/21 10:50	
NV mod Sobek	**Calculated AGP**	7.9	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:50	
NV mod Sobek	**NNP**	32.2	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:50	
NV mod Sobek	**ANP/AGP**	5.1		1.2			N/A		11/04/21 10:50	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.4	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SANDSTONE 7%**
SVL Sample ID: **X1J0182-10 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	63.2	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.29	%	0.04	0.02		X143190	MEJ	10/20/21 15:25	
NV mod Sobek	**Hot Water Rinse Residue**	0.15	%	0.04	0.03		X143190	MEJ	11/03/21 20:44	
NV mod Sobek	**HCl Rinse Residue**	0.12	%	0.04	0.02		X143190	MEJ	11/04/21 10:59	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 23:14	
NV mod Sobek	**H2O Soluble Sulfate**	0.14	%	0.04	0.03		N/A		11/03/21 20:44	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 10:59	
NV mod Sobek	**Pyritic Sulfur**	0.12	%	0.04	0.03		N/A		11/04/21 10:59	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.25	%	0.04	0.03		N/A		11/04/21 10:59	
NV mod Sobek	**Calculated AGP**	7.9	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:59	
NV mod Sobek	**NNP**	55.3	TonneCaCO3/kTonne	1.2			N/A		11/04/21 10:59	
NV mod Sobek	**ANP/AGP**	8.0		1.2			N/A		11/04/21 10:59	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.7	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SANDSTONE 4/3%**
SVL Sample ID: **X1J0182-11 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	90.0	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.30	%	0.04	0.02		X143190	MEJ	10/20/21 15:30	
NV mod Sobek	**Hot Water Rinse Residue**	0.16	%	0.04	0.03		X143190	MEJ	11/03/21 20:53	
NV mod Sobek	**HCl Rinse Residue**	0.12	%	0.04	0.02		X143190	MEJ	11/04/21 11:05	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 23:23	
NV mod Sobek	**H2O Soluble Sulfate**	0.14	%	0.04	0.03		N/A		11/03/21 20:53	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 11:05	
NV mod Sobek	**Pyritic Sulfur**	0.12	%	0.04	0.03		N/A		11/04/21 11:05	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.26	%	0.04	0.03		N/A		11/04/21 11:05	
NV mod Sobek	**Calculated AGP**	8.2	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:05	
NV mod Sobek	**NNP**	81.8	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:05	
NV mod Sobek	**ANP/AGP**	10.9		1.2			N/A		11/04/21 11:05	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.6	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SINTER 5%**
SVL Sample ID: **X1J0182-12 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	53.5	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.14	%	0.04	0.02		X143190	MEJ	10/20/21 15:34	
NV mod Sobek	**Hot Water Rinse Residue**	0.09	%	0.04	0.03		X143190	MEJ	11/03/21 21:02	
NV mod Sobek	**HCl Rinse Residue**	0.06	%	0.04	0.02		X143190	MEJ	11/04/21 11:12	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 23:32	
NV mod Sobek	**H2O Soluble Sulfate**	0.05	%	0.04	0.03		N/A		11/03/21 21:02	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 11:12	
NV mod Sobek	**Pyritic Sulfur**	0.06	%	0.04	0.03		N/A		11/04/21 11:12	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.11	%	0.04	0.03		N/A		11/04/21 11:12	
NV mod Sobek	**Calculated AGP**	3.4	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:12	
NV mod Sobek	**NNP**	50.1	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:12	
NV mod Sobek	**ANP/AGP**	15.7		1.2			N/A		11/04/21 11:12	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.9	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SINTER 7%**
SVL Sample ID: **X1J0182-13 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	64.5	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.15	%	0.04	0.02		X143190	MEJ	10/20/21 15:39	
NV mod Sobek	**Hot Water Rinse Residue**	0.08	%	0.04	0.03		X143190	MEJ	11/03/21 21:11	
NV mod Sobek	**HCl Rinse Residue**	0.06	%	0.04	0.02		X143190	MEJ	11/04/21 11:15	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 23:41	
NV mod Sobek	**H2O Soluble Sulfate**	0.08	%	0.04	0.03		N/A		11/03/21 21:11	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 11:15	
NV mod Sobek	**Pyritic Sulfur**	0.06	%	0.04	0.03		N/A		11/04/21 11:15	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.13	%	0.04	0.03		N/A		11/04/21 11:15	
NV mod Sobek	**Calculated AGP**	4.1	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:15	
NV mod Sobek	**NNP**	60.4	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:15	
NV mod Sobek	**ANP/AGP**	15.7		1.2			N/A		11/04/21 11:15	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.9	pH Units				X143300	ESB	10/22/21 13:00	H1

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Job No. 4664

Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Client Sample ID: **SINTER 4/3%**
SVL Sample ID: **X1J0182-14 (Solid)**

Sampled: 05-Oct-21 09:00
Received: 07-Oct-21
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ANP**	60.8	TonneCaCO3/kTonne	0.3			X143298	hb	10/25/21 13:00	
NV mod Sobek	**Total Sulfur**	0.16	%	0.04	0.02		X143190	MEJ	10/20/21 15:43	
NV mod Sobek	**Hot Water Rinse Residue**	0.10	%	0.04	0.03		X143190	MEJ	11/03/21 21:25	
NV mod Sobek	**HCl Rinse Residue**	0.09	%	0.04	0.02		X143190	MEJ	11/04/21 11:18	
NV mod Sobek	HNO3 Rinse Residue	< 0.04	%	0.04	0.03		X143190	MEJ	11/03/21 23:50	
NV mod Sobek	**H2O Soluble Sulfate**	0.06	%	0.04	0.03		N/A		11/03/21 21:25	
NV mod Sobek	Non-H2O Sulfate Sulfur	< 0.04	%	0.04	0.03		N/A		11/04/21 11:18	
NV mod Sobek	**Pyritic Sulfur**	0.09	%	0.04	0.03		N/A		11/04/21 11:18	
NV mod Sobek	**Potential Acid Generating Sulfur**	0.15	%	0.04	0.03		N/A		11/04/21 11:18	
NV mod Sobek	**Calculated AGP**	4.6	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:18	
NV mod Sobek	**NNP**	56.2	TonneCaCO3/kTonne	1.2			N/A		11/04/21 11:18	
NV mod Sobek	**ANP/AGP**	13.1		1.2			N/A		11/04/21 11:18	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH**	11.9	pH Units				X143300	ESB	10/22/21 13:00	H1

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Project Name: MLI Routine
Work Order: **X1J0182**
Reported: 08-Nov-21 17:06

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms								
Modified Sobek	ANP	TonneCaCO3/kTonne	<0.3		0.3	X143298	25-Oct-21	
NV mod Sobek	Total Sulfur	%	<0.04	0.02	0.04	X143190	20-Oct-21	
NV mod Sobek	Hot Water Rinse Residue	%	<0.04	0.03	0.04	X143190	03-Nov-21	
NV mod Sobek	HCl Rinse Residue	%	<0.04	0.02	0.04	X143190	04-Nov-21	
NV mod Sobek	HNO3 Rinse Residue	%	<0.04	0.03	0.04	X143190	03-Nov-21	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TonneCaCO3/kTonne	1020	1000	102	80 - 120	X143298	25-Oct-21	
NV mod Sobek	Total Sulfur	%	1.10	0.970	113	80 - 120	X143190	20-Oct-21	
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH	pH Units	6.7	7.09	94.8	93.7 - 106.3	X143300	22-Oct-21	H1

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch and Source ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TonneCaCO3/kTonne	130	129	0.9	20	X143298 - X1I0473-02	25-Oct-21	
NV mod Sobek	Total Sulfur	%	0.74	0.71	2.9	20	X143190 - X1J0182-01	20-Oct-21	
NV mod Sobek	Hot Water Rinse Residue	%	0.41	0.40	2.1	20	X143190 - X1J0182-01	03-Nov-21	
NV mod Sobek	HCl Rinse Residue	%	<0.04	<0.04	<RL	20	X143190 - X1J0182-01	04-Nov-21	
NV mod Sobek	HNO3 Rinse Residue	%	<0.04	<0.04	<RL	20	X143190 - X1J0182-01	03-Nov-21	
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH	pH Units	7.8	7.8	0.0	20	X143300 - X1J0047-01	22-Oct-21	H1

One Government Gulch - PO Box 929
Kellogg, ID 83837-0929
(208) 784-1258
www.svl.net

McClelland Laboratories Inc	**Project Name: MLI Routine**
1016 Greg Street	Work Order: **X1J0182**
Sparks, NV 89431	Reported: 08-Nov-21 17:06

Notes and Definitions

H1	Sample analysis performed past holding time.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
0.30R>S	% recovery not applicable; spike level is less than 30% of the sample concentration
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 15-NOV-2021
Account: EIM

CERTIFICATE RE21257338

Project: 4664

This report is for 14 samples of Pulp submitted to our lab in Reno, NV, USA on 24-SEP-2021.

The following have access to data associated with this certificate:

MICHELLE BIBLE	METTEST DATA RESULTS	LAURE JOHNSON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
SND-ALS	Send samples to internal laboratory
LOG-QC	QC Test on Received Samples
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Hg-MS42	Trace Hg by ICPMS	ICP-MS
ME-MS61	48 element four acid ICP-MS	

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519

This is the Final Report and supersedes any preliminary report with this certificate number.Results apply to samples as submitted.All pages of this report have been checked and approved for release.
***** See Appendix Page for comments regarding this certificate *****

Signature:
Saa Traxler, General Manager, North Vancouver

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SPARKS NV 89431

Finalized Date: 15-NOV-2021
Account: EIM

Project: 4664

CERTIFICATE OF ANALYSIS RE21257338

Sample Description	Method / Analyte / Units / LOD	WEI-21 Recvd Wt. kg 0.02	ME-MS61 Ag ppm 0.01	ME-MS61 Al % 0.01	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01
Binder- Cement Head		0.10	0.17	1.51	9.7	540	0.48	0.06	35.3	1.08	12.70	6.7	42	1.55	35.9	1.93
Binder-Fly Ash Head		0.21	0.14	1.96	9.7	550	0.54	0.08	33.4	0.93	15.90	6.7	57	1.73	34.0	2.21
Basalt 5% Head		0.21	0.10	7.65	3.6	520	0.99	0.08	7.56	0.24	40.3	34.7	220	2.16	72.8	6.29
Basalt 7% Head		0.37	0.09	7.19	3.6	470	1.07	0.09	7.87	0.24	37.3	37.0	206	1.89	76.9	5.98
Basalt 4/3% Head		0.35	0.07	7.34	3.3	500	1.04	0.10	7.89	0.26	37.5	35.6	198	2.01	65.1	6.05
Siltstone 5% Head		0.38	5.11	3.37	189.5	710	1.09	0.13	2.27	0.12	26.4	2.3	20	5.97	25.0	1.18
Siltstone 7% Head		0.40	4.70	3.33	179.0	730	1.08	0.12	2.98	0.13	23.4	2.1	18	5.74	31.4	1.12
Siltstone 4/3% Head		0.42	5.35	3.37	204	720	1.16	0.13	2.93	0.17	25.9	2.5	17	6.15	41.1	1.19
Sandstone 5% Head		0.32	4.89	3.59	154.0	850	0.93	0.09	2.06	0.09	19.35	1.7	125	4.41	29.0	0.75
Sandstone 7% Head		0.43	4.61	3.68	146.5	840	0.94	0.07	2.78	0.10	19.35	1.5	101	4.18	17.1	0.75
Sandstone 4/3% Head		0.37	4.44	3.76	159.0	840	0.96	0.09	2.66	0.10	19.20	1.6	112	4.34	17.1	0.82
Sinter 5% Head		0.34	3.07	1.09	35.4	290	0.87	0.05	2.24	0.08	5.16	1.7	222	4.15	17.8	0.48
Sinter 7% Head		0.34	2.77	1.08	35.6	290	0.87	0.04	2.83	0.12	5.40	1.2	14	4.06	13.4	0.55
Sinter 4/3%		0.35	2.77	1.16	38.9	320	0.81	0.04	2.75	0.11	5.87	1.3	16	4.08	12.8	0.58

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CERTIFICATE OF ANALYSIS RE21257338

Sample Description	Method Analyte Units LOD	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	Hg-MS42 Hg ppm 0.005	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
Binder- Cement Head		4.24	<0.05	1.1	<0.005	0.022	0.29	8.2	8.7	0.65	361	3.19	0.15	3.9	25.3	560
Binder-Fly Ash Head		5.22	<0.05	1.2	<0.005	0.024	0.42	9.2	9.7	0.86	340	4.74	0.17	4.7	29.3	580
Basalt 5% Head		16.10	0.06	3.2	0.026	0.065	0.84	19.2	26.0	4.05	1100	0.67	1.38	11.0	128.5	960
Basalt 7% Head		15.40	0.07	3.0	0.025	0.065	0.74	18.2	27.1	3.90	1040	0.70	1.29	12.1	130.0	930
Basalt 4/3% Head		15.70	0.05	3.2	0.020	0.058	0.81	18.8	27.5	3.91	1060	0.81	1.32	10.9	129.5	930
Siltstone 5% Head		7.44	0.13	1.7	2.51	0.021	3.52	13.8	126.0	0.08	72	10.10	0.27	11.0	8.6	140
Siltstone 7% Head		7.02	0.13	1.6	2.38	0.020	3.43	12.1	116.5	0.08	70	8.68	0.28	10.6	6.3	150
Siltstone 4/3% Head		7.42	0.15	1.8	2.51	0.022	3.41	13.0	122.5	0.09	65	9.04	0.29	10.8	6.9	140
Sandstone 5% Head		9.06	0.18	0.8	1.320	0.014	3.36	10.0	109.0	0.07	64	18.10	0.54	8.6	7.5	130
Sandstone 7% Head		8.44	0.21	0.8	1.355	0.009	3.23	10.1	104.0	0.08	58	17.50	0.52	8.0	6.0	140
Sandstone 4/3% Head		8.79	0.20	0.7	1.245	0.011	3.28	10.1	105.0	0.09	64	20.9	0.52	8.1	6.2	150
Sinter 5% Head		15.15	0.14	0.6	0.879	0.006	0.98	2.8	112.0	0.05	66	8.32	0.04	3.8	10.3	90
Sinter 7% Head		15.70	0.15	0.6	0.916	0.007	0.95	3.0	107.5	0.06	71	7.39	0.04	4.4	8.4	90
Sinter 4/3%		14.45	0.09	0.7	0.972	0.012	1.06	3.2	110.5	0.07	74	8.68	0.04	3.9	11.6	100

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CERTIFICATE OF ANALYSIS RE21257338

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOD	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
Binder- Cement Head		6.9	12.9	<0.002	0.78	4.68	4.3	2	1.2	310	0.24	<0.05	1.36	0.141	0.03	1.2
Binder-Fly Ash Head		5.8	19.9	0.011	0.75	3.16	4.6	3	1.4	315	0.31	<0.05	2.08	0.164	0.28	2.1
Basalt 5% Head		11.9	34.6	<0.002	0.05	0.86	27.5	<1	1.2	269	0.72	<0.05	4.43	0.652	0.20	1.0
Basalt 7% Head		7.2	32.7	<0.002	0.06	0.77	28.7	<1	1.2	253	0.97	<0.05	4.12	0.614	0.20	1.0
Basalt 4/3% Head		7.7	36.1	<0.002	0.06	0.76	28.4	<1	1.3	261	0.69	<0.05	4.36	0.619	0.25	1.1
Siltstone 5% Head		10.2	149.0	<0.002	0.63	47.0	3.1	3	1.1	144.0	0.72	<0.05	4.88	0.130	1.48	2.0
Siltstone 7% Head		9.9	140.5	<0.002	0.59	43.5	2.9	3	1.1	145.0	0.66	<0.05	4.55	0.131	1.42	1.8
Siltstone 4/3% Head		9.9	146.0	<0.002	0.70	47.3	3.1	4	1.1	147.5	0.70	<0.05	4.66	0.134	1.55	1.9
Sandstone 5% Head		10.5	126.0	<0.002	0.26	22.2	1.9	2	0.8	159.0	0.59	<0.05	4.47	0.080	0.85	1.2
Sandstone 7% Head		9.8	123.5	<0.002	0.29	21.4	1.8	3	0.9	163.5	0.50	<0.05	3.62	0.080	0.78	1.1
Sandstone 4/3% Head		10.1	127.0	<0.002	0.30	21.9	1.9	3	0.8	164.5	0.54	<0.05	3.90	0.079	0.87	1.2
Sinter 5% Head		3.5	42.0	<0.002	0.14	41.7	0.7	2	0.5	82.0	0.27	<0.05	1.11	0.045	0.57	0.6
Sinter 7% Head		3.8	42.6	<0.002	0.15	40.9	0.8	2	0.5	84.6	0.27	<0.05	1.10	0.045	0.58	0.6
Sinter 4/3%		3.8	45.2	<0.002	0.16	41.7	0.8	3	0.5	89.2	0.27	<0.05	1.25	0.050	0.60	0.7

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Project: 4664

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Sample Description	Method / Analyte / Units / LOD	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
Binder- Cement Head		46	1.7	12.2	116	45.4
Binder-Fly Ash Head		59	2.0	10.9	133	45.2
Basalt 5% Head		193	1.4	25.5	97	120.5
Basalt 7% Head		183	1.2	26.5	92	113.0
Basalt 4/3% Head		181	1.3	26.3	90	115.0
Siltstone 5% Head		16	5.0	9.3	20	60.6
Siltstone 7% Head		16	4.3	8.6	24	54.8
Siltstone 4/3% Head		17	4.7	9.2	27	58.1
Sandstone 5% Head		15	4.0	4.5	18	26.5
Sandstone 7% Head		15	3.4	4.7	17	25.9
Sandstone 4/3% Head		16	3.7	5.1	17	25.8
Sinter 5% Head		12	8.4	4.7	16	21.0
Sinter 7% Head		12	8.0	5.1	17	22.2
Sinter 4/3%		12	8.4	5.3	17	24.2

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Project: 4664

CERTIFICATE OF ANALYSIS RE21257338

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

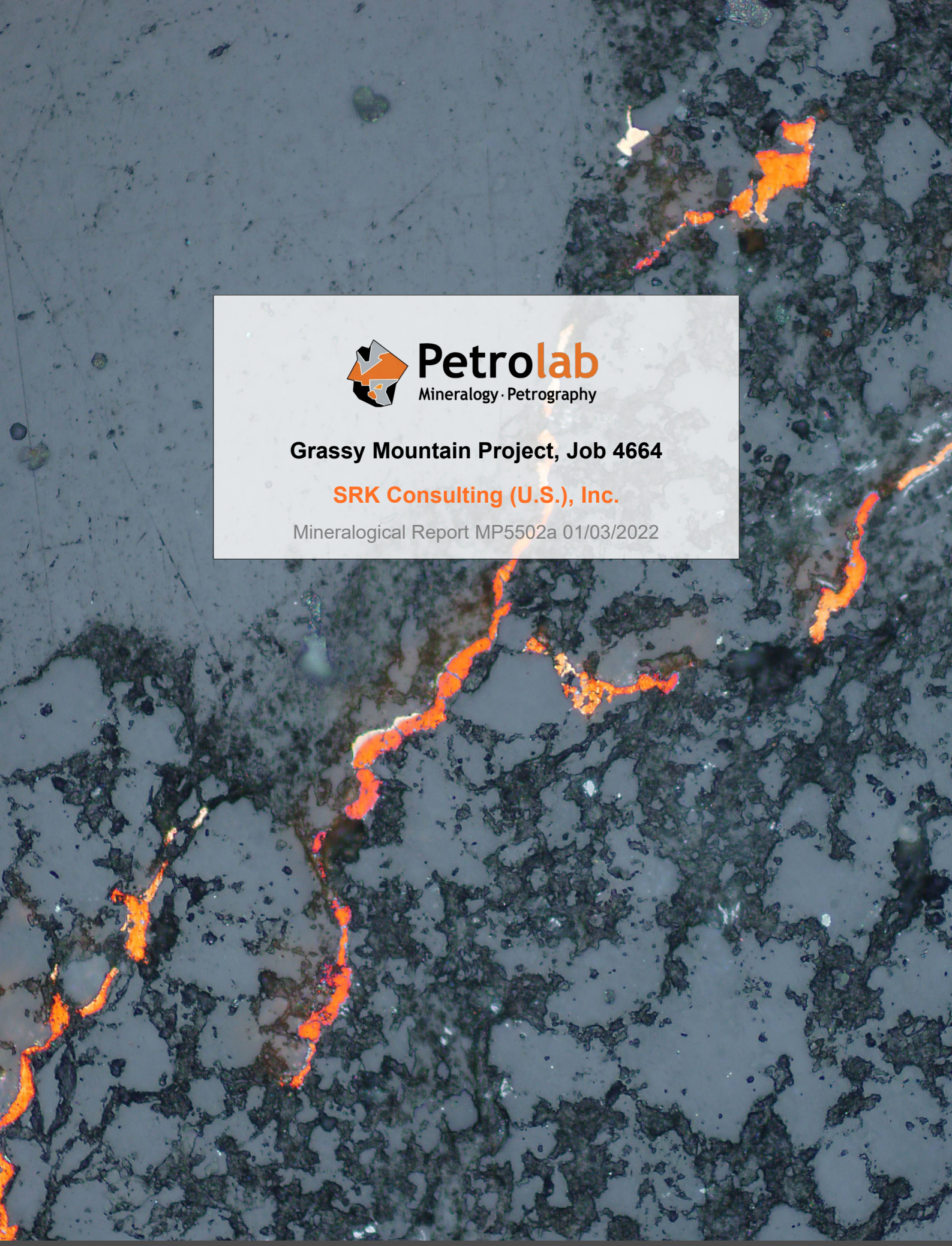
REEs may not be totally soluble in this method.
Applies to Method: ME-MS61

LABORATORY ADDRESSES

Processed at ALS Reno located at 4977 Energy Way, Reno, NV, USA.
Applies to Method: LOG-23 LOG-QC SND-ALS WEI-21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Applies to Method: Hg-MS42 ME-MS61

Appendix B Petrolab Mineralogy Report



Petrolab
Mineralogy · Petrography

Grassy Mountain Project, Job 4664

SRK Consulting (U.S.), Inc.

Mineralogical Report MP5502a 01/03/2022

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Petrolab document control			
Client	SRK Consulting (U.S.), Inc.		
Report title	Grassy Mountain Project, Job 4664		
Analysis required	Simplified petrography, manual SEM and XRD analyses on 14 samples.		
Client reference	4664	**Client contact**	Amy Prestia <aprestia@srk.com>
Report ID (issue date)	MP5502a 01/03/2022	**Version note**	Report Initial Issue
Prepared by	M Zając BSc MSc	**Checked by**	C Brough PhD CGeol J Fletcher BSc MSc

Limitations

This report relates only to those samples submitted and specimens examined and to any materials properly represented by those samples and specimens. This report is issued to the Client named above for the benefit of the Client for the purposes for which it was prepared. It does not confer or purport to confer on any third party any benefit or right pursuant to the Contracts (Rights of Third Parties) Act 1999.

Report key findings

This is a mineralogical report for SRK Consulting (U.S.), Inc. to investigate fourteen samples from Grassy Mountain Project, Oregon. It was reported that the samples will be evaluated to assess the geochemical stability of the cemented rock fill. Petrolab was requested to undertake a simplified petrographic investigation with ancillary SEM point and ID analysis with particular reference to the presence of sulfides, carbonates and As- and Sb-bearing minerals.

Samples Binder-Cement and Binder-Fly Ash represent original cement used to coat basalt, siltstone, sandstone and sinter rock fill material. The two samples represent uncarbonated cement binder composed of cement clinker grains and clusters including belite, alite and ferrite with grains of calcite and other components including portlandite, aluminate, CSH gel and rarely ettringite. According to EN 197-1 classification[1] of Portland cement types, this cement represents CEM I type characterised by 95-100% cement clinker, with no additional additives. The difference between the samples is primarily the addition of siliceous fly ash in the Binder-Fly Ash sample. According to EN 197-1 classification of Portland cement types, this cement represents CEM II/A-V type characterised by 80-94% cement clinker, with addition of 6-20% siliceous fly ash.

Samples Basalt 5%, Basalt 7% and Basalt 4/3% represent a mixture of crushed basalt rock fill and cemented basalt rock fill. These samples contain clinopyroxene rich, mostly unaltered basalt fragments that do not contain any sulfide minerals, volcanic rock fragments and silicified, previously clay cemented volcanic glass fragments and cement binder coated fragments from all previously mentioned rock types. The cement around the fragments is completely carbonated and partially leached and contains rare grains of calcite and iron oxides with secondary portlandite within the paste and voids.

Samples Siltstone 5%, Siltstone 7% and Siltstone 4/3% are composed of silicified siltstones with minor proportion of fragments composed entirely of microcrystalline quartz. The samples contain a mixture of fragments thinly coated with cement binder and fragments of rock that are not coated. Samples Sandstone 5%, Sandstone 7% and Sandstone 4/3% comprise a mixture of uncoated and thinly cement coated sandstone fragments. The samples contain silicified sandstone fragments with a minor proportion of fragments composed entirely of microcrystalline quartz. There is evidence of kaolinisation of alkali feldspar fragments in some sandstones. Samples Sinter 5%, Sinter 7% and Sinter 4/3% represent silica sinter. The samples are composed nearly entirely of microcrystalline quartz. Some fragments contain a thin cement coat around sinter fragments. The cement around the fragments in siltstone, sandstone and sinter samples is completely carbonated, partially leached and rarely contains grains of snowflake calcite and iron oxides with secondary portlandite. Portlandite was also observed to be formed around the edges of rock fragments in all the samples. The extent of carbonation, leaching and secondary portlandite formation suggests substantial reaction of the cement with water.

Optical petrography supported by manual SEM analysis confirmed the presence of primary sulfides (pyrite) and secondary hematite, jarosite and Ca-siderite in all samples

1 BS EN 197-1:2011 Cement, Part 1: Composition, specifications and conformity criteria for common cements.

expect for the Binder-Cement and Binder-Fly Ash samples. Pyrite was observed in the form of framboids and cubic crystals. Trace to minor amounts of As (0.16 – 11.92%) and Sb (0.22 – 0.55%) were observed in pyrite. For the basalt samples, iron oxides appear to be primary, while for siltstone, sandstone and sinter most iron oxides, predominantly hematite appears to be secondary and contains traces to minor amounts of S (0.13 – 18.85%) or/and trace As (0.06 – 2.01%). There was only one instance of magnetite observed, containing 0.37% S. Trace S and As were also observed in jarosite (0.13 – 1.21% As) and Ca-siderite (0.45 – 1.02%) S and 0.14% As. Concentrations of trace elements are likely forming through adsorption during leaching and oxidation. Whilst these may be partially stabilised within the iron oxides, sulfur was most likely derived from the oxidation of pre-existing sulfides (pyrite). This means that any further sulfide oxidation will likely be associated with the release of deleterious elements

Introduction

Scope

This is a mineralogical report for SRK Consulting (U.S.), Inc. to investigate fourteen samples from Grassy Mountain Project, Oregon. It was reported that the samples will be evaluated to assess the geochemical stability of the cemented rock fill. Petrolab was requested to undertake a simplified petrographic investigation with ancillary SEM point and ID analysis with particular reference to the presence of sulfides, carbonates and As- and Sb-bearing minerals.

This report relates only to the samples examined (and any materials properly represented by those samples). It presents the findings of a mineralogical investigation by optical microscopy on thin sections prepared from selected sub-samples, with special reference to sulfide and carbonate mineralisation. The results of supplementary XRD analysis are considered (results are reproduced in Appendix 1).

List of samples

Samples received			
Report no.	**Sample reference**	**Mass (g)**	**Type**
1	Binder - Cement	208.0	Crushed rock sample
2	Binder - Fly Ash	213.0	Crushed rock sample
3	Basalt 5%	205.0	Crushed rock sample
4	Basalt 7%	206.0	Crushed rock sample
5	Basalt 4/3%	207.0	Crushed rock sample
6	Siltstone 5%	200.0	Crushed rock sample
7	Siltstone 7%	201.0	Crushed rock sample
8	Siltstone 4/3%	201.0	Crushed rock sample
9	Sandstone 5%	199.0	Crushed rock sample
10	Sandstone 7%	197.0	Crushed rock sample
11	Sandstone 4/3%	203.0	Crushed rock sample
12	Sinter 5%	204.0	Crushed rock sample
13	Sinter 7%	144.0	Crushed rock sample
14	Sinter 4/3%	147.0	Crushed rock sample

Methods of investigation

The submitted samples were examined as received using a Nikon SMZ-U stereoscopic microscope with fibre optic illuminator. Samples were sieved and prepared as 3 size fractions (+1mm, +500µm & -500µm). One thin section and polished chip were prepared from each submitted sample. The sections were examined by conventional transmitted and reflected light polarising microscopy using a Nikon research polarising microscope. Digital photomicrographs were taken using a high resolution digital camera attached to the trinocular head of the microscope.

Representative (riffle split) sub-samples were analysed for whole rock XRD analysis. The results are considered in this report and reproduced in Appendix 1.

Qualitative mineralogical analysis using a scanning electron microscope was requested. Polished chips were carbon coated to a thickness of 30 nm. Each chip was analysed using a

ZEISS EVO MA 25 scanning electron microscope (SEM)[1] fitted with two Bruker xFlash 6|60 x-ray detectors for energy-dispersive X-ray spectroscopy (EDX) analysis.

1 SEM system located at Petrolab Ltd, Redruth, UK.

Sample description

The mineralogy of all fourteen submitted samples are summarised in Table 1. A simplified mineralogical description of each sample received (which includes annotated photomicrographs), based on a high-power microscopical examination of prepared thin and polished sections, follows Table 1.

Table 1. Summary table of mineral abundance[1].

Minerals		Sample details and relative mineral abundance[1]														Typical composition
		Binder – Cement	Binder – Fly Ash	Basalt 5%	Basalt 7%	Basalt 4/3%	Siltstone 5%	Siltstone 7%	Siltstone 4/3%	Sandstone 5%	Sandstone 7%	Sandstone 4/3%	Sinter 5%	Sinter 7%	Sinter 4/3%	
Sulfides	Pyrite	□	□				□	□	□	□	□	□	□	□	□	FeS_2
	Marcasite								□							FeS_2
Gangue minerals		**Binder – Cement**	**Binder – Fly Ash**	**Basalt 5%**	**Basalt 7%**	**Basalt 4/3%**	**Siltstone 5%**	**Siltstone 7%**	**Siltstone 4/3%**	**Sandstone 5%**	**Sandstone 7%**	**Sandstone 4/3%**	**Sinter 5%**	**Sinter 7%**	**Sinter 4/3%**	**Typical Composition**
Bulk silicate minerals	Quartz/ Microcrystalline quartz	⊡	□	⊡	⊡	⊡	■■	■■	■■	■■	■	■	■■	■■	■■	SiO_2
	Alkali feldspar			⊡	⊡	⊡	■	■	■	■	■	■	■	■	■	$KAlSi_3O_8$
	Plagioclase feldspar			■	■	■	⊡	⊡	⊡	⊡	⊡	⊡	□	⊡	⊡	$(Na,K)AlSi_3O_8$
	Pyroxene			■	■	■										$(Fe,Ca,Mg)Si_2O_6$
	Olivine			⊡	⊡	⊡										$(Mg,Fe)_2SiO_4$
	Amphibole			□	□		□	□	□	□	□	□	□	□	□	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$
Phyllosilicates	Montmorillonite/clays			■	■	■										$(Na,Ca)_{0.33}(Al,Mg)_2(Si_4O_{10})(OH)_2 \cdot nH_2O$
	Illite						□	□	□	⊡	⊡	⊡	□	□	□	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$
	Kaolinite			□	□	□	□	□	□	□	□	□	□	□	□	$Al_2Si_2O_5(OH)_4$
	Chlorite			⊡	■	■										$(Mg,Al,Fe^{++})_{12}(Si,Al)_8O_{20}(OH)_8$
	Muscovite	⊡	⊡	⊡	⊡	⊡	⊡	□	□	⊡	⊡	⊡	□	□	□	$KAl_2(Si_3Al)O_{10}(OH,F)_2$
	Biotite			□	□	□	□	□	□	□	□	□	□	□	□	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$
Carbonates	Calcite	■	■	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	$CaCO_3$
	Aragonite	■	■													$CaCO_3$
	Dolomite	□	□				□	□	□	□	□	□	□	□	□	$CaMg(CO_3)_2$
	Ca-siderite						□	□					□	□	□	$Ca(Fe,Mg)(CO_3)_2$
Iron Oxides	Hematite		□	□	□	□	□	□	□	□	□	□	□			Fe_2O_3
	Magnetite			□	□	□										Fe_3O_4
	Goethite			□	□	□	□	□	□	□	□	□		□	□	FeO(OH)
Cement Components	Portlandite	■	■				□	□	⊡	□	□	□	□	⊡	□	$Ca(OH)_2$
	Ferrite	■	■													$(Ca_2(Al,Fe)_2O_5)$
	Belite	⊡	⊡													$Ca_2(SiO)_4$
	Alite	⊡	⊡													$Ca_3(SiO)_5$
	CSH gel	⊡	⊡													$(CaO)_{1.7}(SiO_2)(H_2O)_{1.80}$
	Ettringite	⊡	⊡													$Ca_6Al_2(SO_4)_3(OH)_{12} \cdot 26(H_2O)$
	Fly Ash	□	⊡													$SiO_2+Al_2O_3+Fe_2O_3$
	Aluminate	□	□													$3CaO \cdot Al_2O_3$
	Gypsum	□	□													$CaSO_4 \cdot 2(H_2O)$
	Periclase	□	□													MgO
	Al-glass			□	□	□										$SiO_2+Al_2O_3+K_2O+CaO$
Accessory Phases	Baryte				□	□							□			$BaSO_4$
	Magnesite			□	□	□										$MgCO_3$
	Tourmaline (schorl)						□	□	□	□	□	□	□	□	□	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$
	Titanomagnetite			□	□	□					□					$Fe^{2+}(Fe^{3+},Ti)_2O_4$
	Rutile/Anatase			□	□	□	□	□	□	□	□	□	□	□	□	TiO_2
	Ilmenite			□	□	□										$FeTiO_3$
	Apatite			□	□	□	□	□	□	□	□	□	□	□	□	$Ca_5(PO_4)_3(OH,F,Cl)$
	Monazite								□			□				$(Ce,La,Nd,Th)PO_4$
	Zircon			□	□	□	□	□	□	□	□	□	□	□	□	$ZrSiO_4$
	Chromite					□										$Fe^{++}Cr_2O_4$
	Jarosite						□	□	□	□	□	□	□	□		$KFe^{+++}{}_3(SO_4)_2(OH)_6$
	Titanite						□	□		□	□				□	$CaTiSiO_5$
	Topaz							□	□	□	□	□	□	□	□	$Al_2SiO_4(F,OH)_2$

1 Relative phase abundance: ■■ major+ (>=50%) ■ major (>=10%), ⊡ minor (>=2<10%), □ trace (<2%).

Binder - Cement

Sample as received

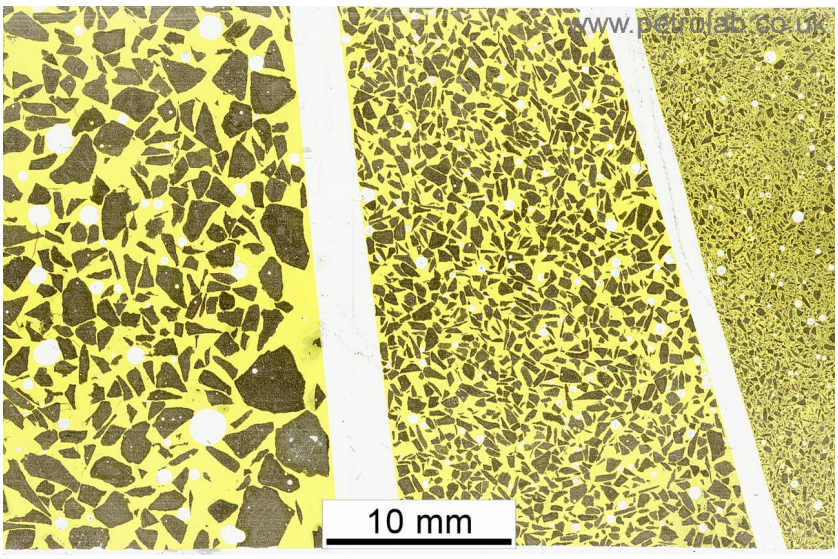
Sample Binder - Cement		
Petrolab ID	**Date received**	**Type · properties**
#32063	08/10/2021	Crushed cementitious sample · 208 g

A **Sample Binder - Cement**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

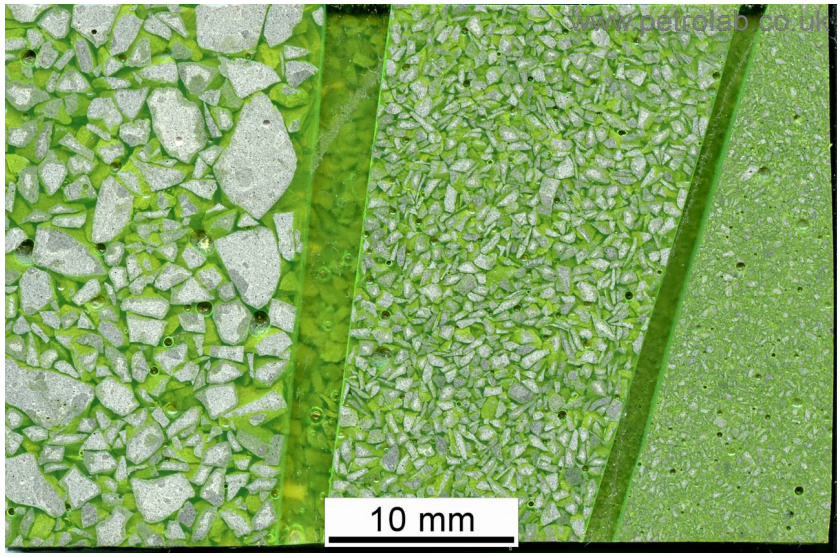
Section(s)



B **Sample Binder - Cement**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Binder - Cement**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Binder - Cement			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Calcite, cal	$CaCO_3$	2.70	23.6%
Aragonite, arg	$Ca(CO_3)$	2.93	18.9%
Portlandite, por	$Ca(OH)_2$	2.23	13.1%
Ferrite, C_4AF	$(Ca_2(Al,Fe)_2O_5)$	3.76	10.3%
Belite, C_2S	$Ca_2(SiO)_4$	3.28	9.8%
CSH Gel, C-S-H	$(CaO)_{1.7}(SiO_2)(H_2O)_{1.80}$	2.60	7.3%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	4.3%
Alite, C_3S	$Ca_3(SiO)_5$	3.02	4.1%
Ettringite, ett	$Ca_6Al_2(SO_4)_3(OH)_{12}•26(H_2O)$	1.77	2.7%
Quartz, qz	SiO_2	2.65	2.0%
Fly ash	$SiO_2+Al_2O_3+Fe_2O_3$	2.50	1.6%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	1.5%
Aluminate, C_3A	$3CaO·Al_2O_3$	3.06	0.5%
Gypsum, gp	$CaSO_4·2(H_2O)$	2.30	0.3%
Periclase, per	MgO	3.78	0.1%
Pyrite, py	FeS_2	5.01	tr

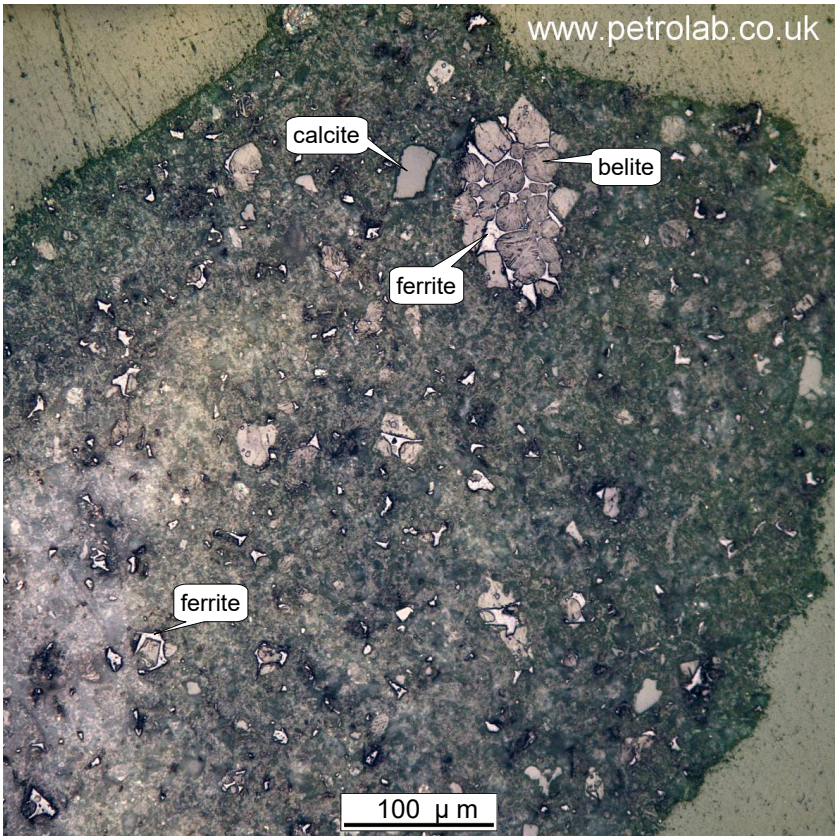
1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample summary

Sample Binder - Cement

- The sample is composed of crushed cement binder, typically used in concrete manufacture. The cement is composed of clinker grains, including alite, belite and ferrite, commonly in the form of clusters, with additional components including portlandite, calcite and ettringite. The paste is uncarbonated and has therefore not been affected by atmospheric carbonation. There is a noticeable higher proportion of belite in the paste. Overall clinker grains appear unaltered or only slightly hydrated. According to EN 197-1 classification of Portland cement types, this cement represents CEM I type characterised by 95-100% cement clinker, with no additional additives.
- SEM analysis detected only one instance of pyrite but did not detect any deleterious elements in this sample. Rare fragments of steel were observed.

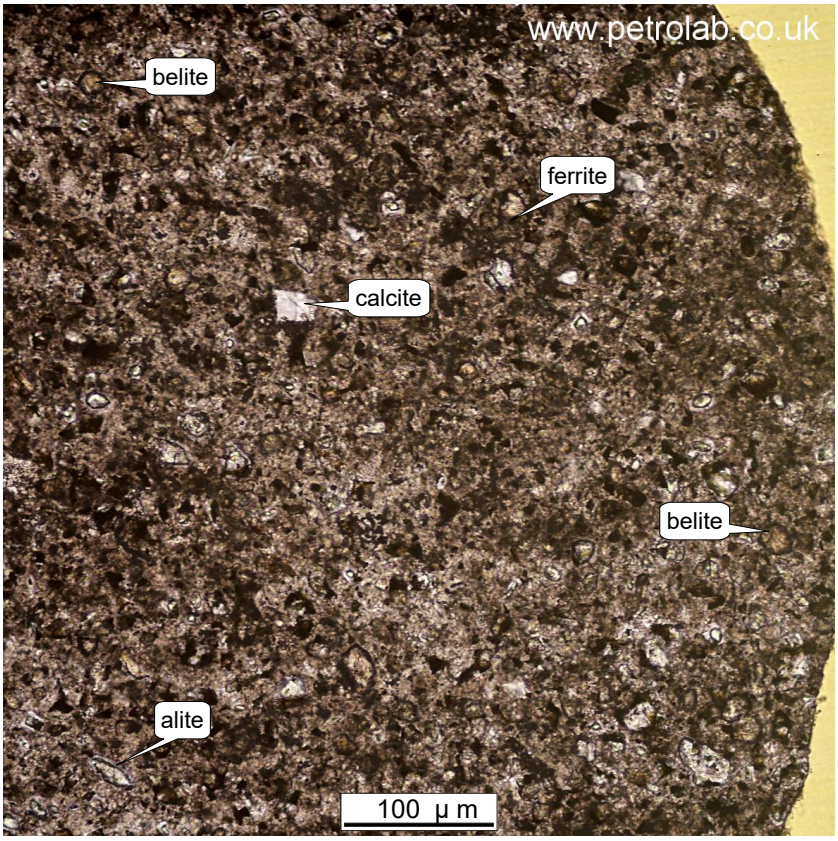
Photomicrographs



D **Sample Binder - Cement**

Photomicrograph of sample showing main constituents of cement, including common clinker grains (e.g. clusters of belite and ferrite).

Image D
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x200



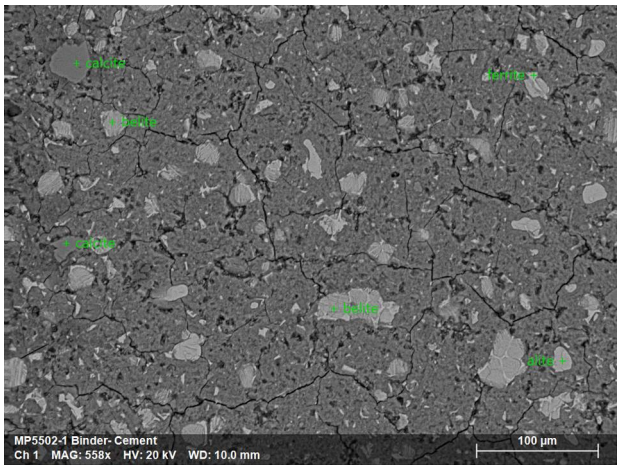
E **Sample Binder - Cement**

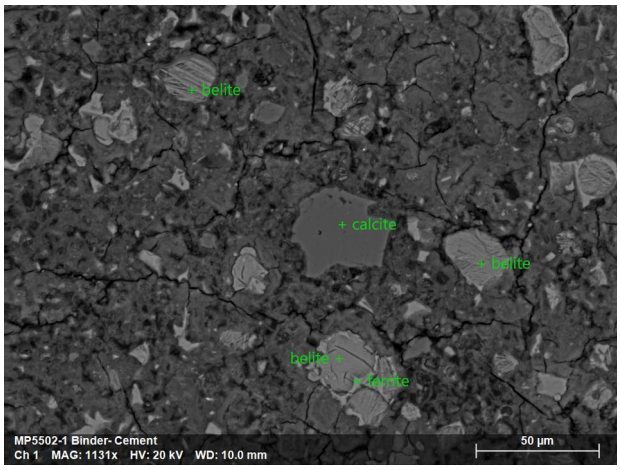
Photomicrograph showing image of typical cement composition, including common clinker grains and clusters (belite, alite, ferrite) and calcite crystals.

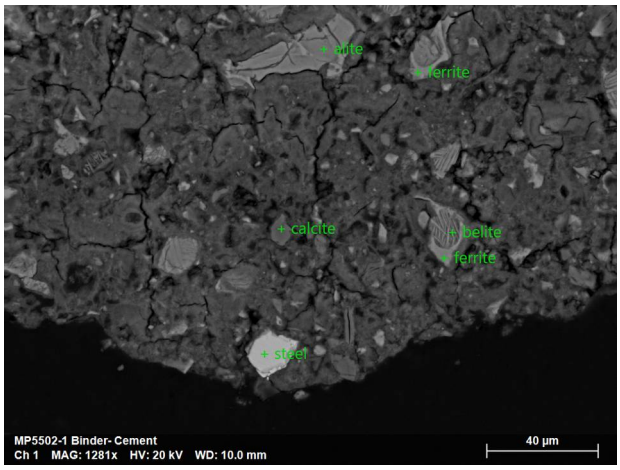
Image E
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x200

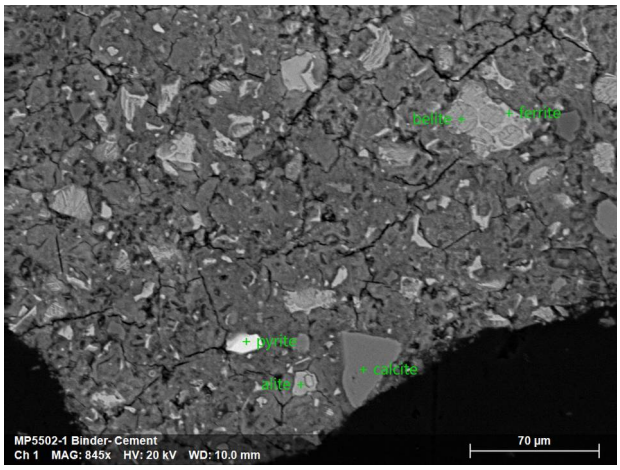
Manual SEM analysis

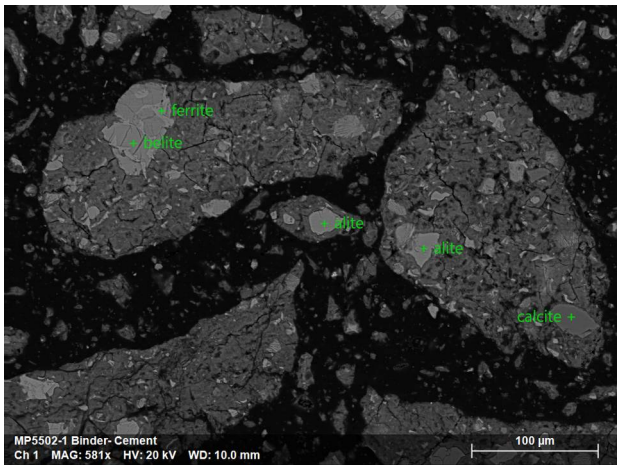
Table 2. BSE images of selected mineral phases for sample Binder - Cement

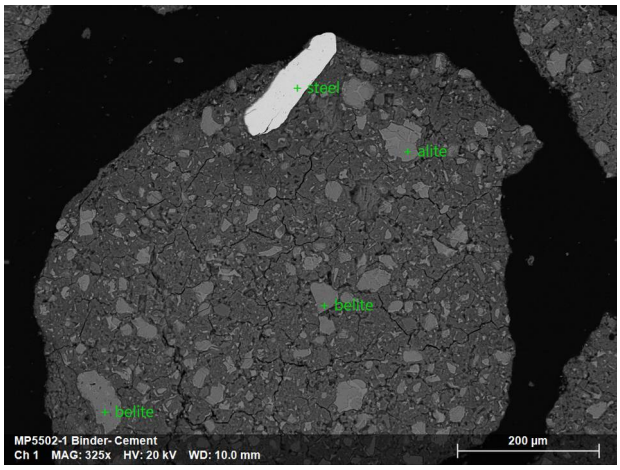










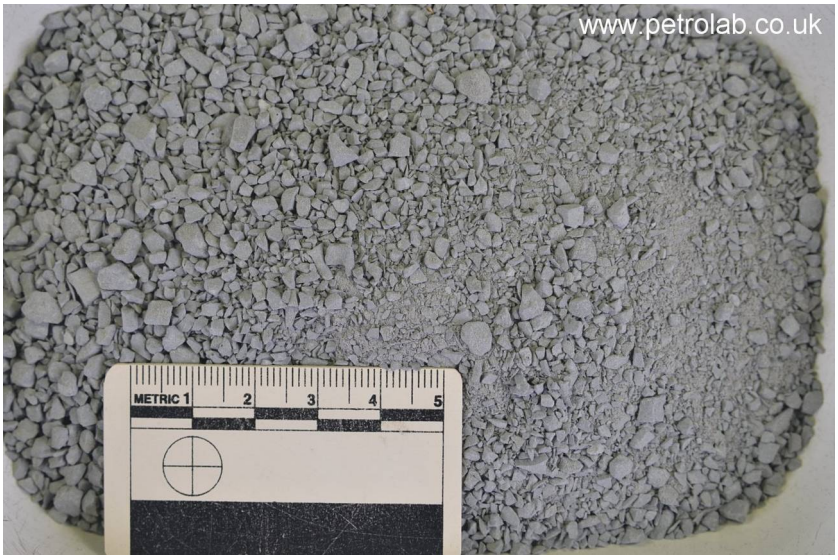


Higher magnification images showing main constituents of cement including calcite and clinker grains and clusters (top left and right); different clinker grains within cement paste with contamination of steel and pyrite (middle left and right); lower magnification images showing general shape of cement fragments and abundance of clinker grains (bottom left and right).

Binder - Fly Ash

Sample as received

Sample Binder - Fly Ash		
Petrolab ID	**Date received**	**Type · properties**
#32064	08/10/2021	Crushed cementitious sample · 213 g

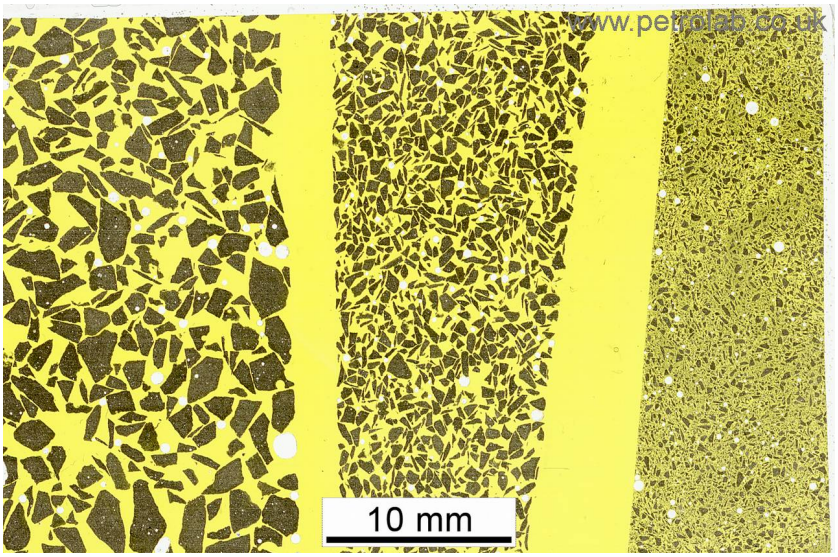


A **Sample Binder - Fly Ash**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

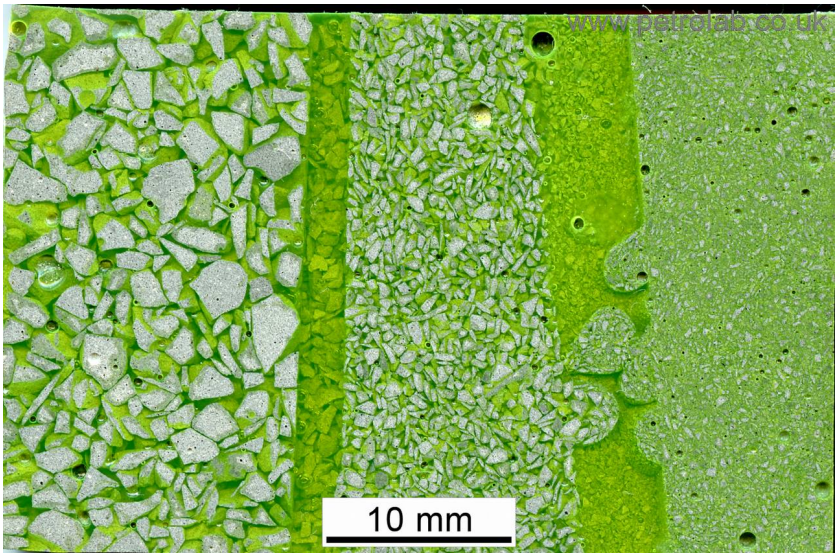
Section(s)



B **Sample Binder - Fly Ash**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Binder - Fly Ash**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Binder - Fly Ash			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Calcite, cal	$CaCO_3$	2.70	22.0%
Aragonite, arg	$Ca(CO_3)$	2.93	15.3%
Portlandite, por	$Ca(OH)_2$	2.23	13.7%
Ferrite, C_4AF	$(Ca_2(Al,Fe)_2O_5)$	3.76	11.7%
CSH Gel, C-S-H	$(CaO)_{1.7}(SiO_2)(H_2O)_{1.80}$	2.60	7.3%
Fly ash	$SiO_2+Al_2O_3+Fe_2O_3$	2.50	6.8%
Alite, C_3S	$Ca_3(SiO)_5$	3.02	6.7%
Belite, C_2S	$Ca_2(SiO)_4$	3.28	5.5%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	4.4%
Ettringite, ett	$Ca_6Al_2(SO_4)_3(OH)_{12}•26(H_2O)$	1.77	2.6%
Quartz, qz	SiO_2	2.64	1.9%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	1.5%
Periclase, per	MgO	3.78	0.5%
Gypsum, gp	$CaSO_4·2(H_2O)$	2.30	0.3%
Aluminate, C_3A	$3CaO·Al_2O_3$	3.06	0.1%
Hematite, hem	Fe_2O_3	5.3	tr

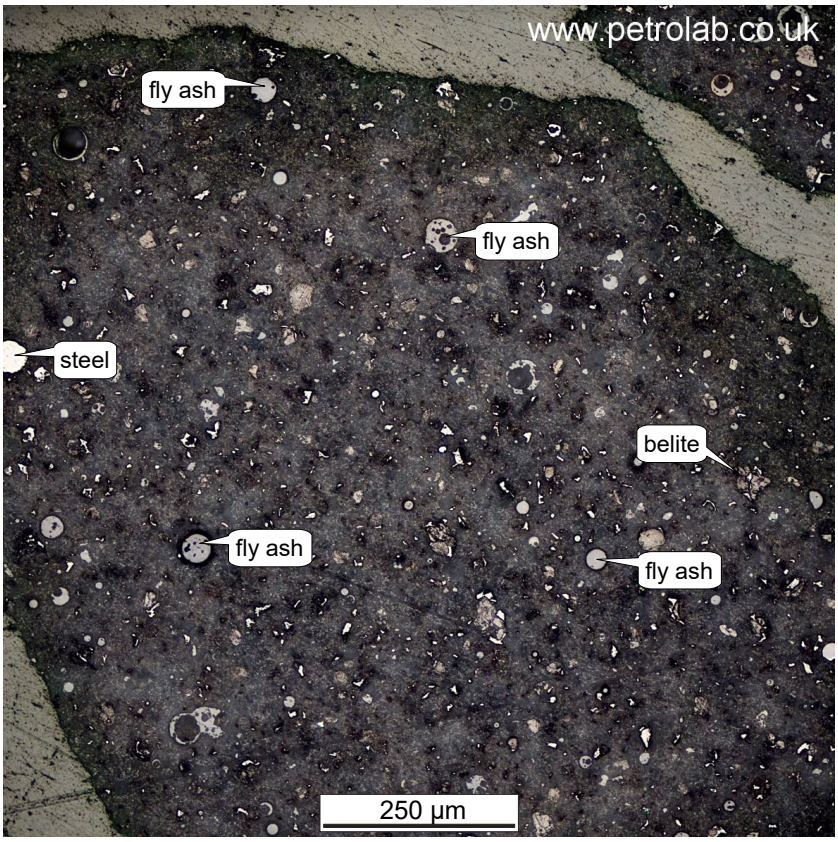
1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample summary

Sample Binder - Fly Ash

- The sample is composed of crushed cement binder, typically used in concrete manufacture. The cement is composed of clinker grains, including alite, belite and ferrite, commonly in the form of clusters with additional components including common fly ash, portlandite and calcite. The paste is uncarbonated and has therefore not been affected by atmospheric carbonation. There is a noticeably high proportion of belite in the paste. Overall clinker grains appear unaltered or only slightly hydrated. Fly ash appears to be predominantly siliceous. According to EN 197-1 classification of Portland cement types, this cement represents CEM II/A-V type characterised by 80-94% cement clinker, with addition of 6-20% siliceous fly ash.
- SEM analysis did not detect any sulphides or any deleterious elements in this sample. Rare fragments of steel were observed.

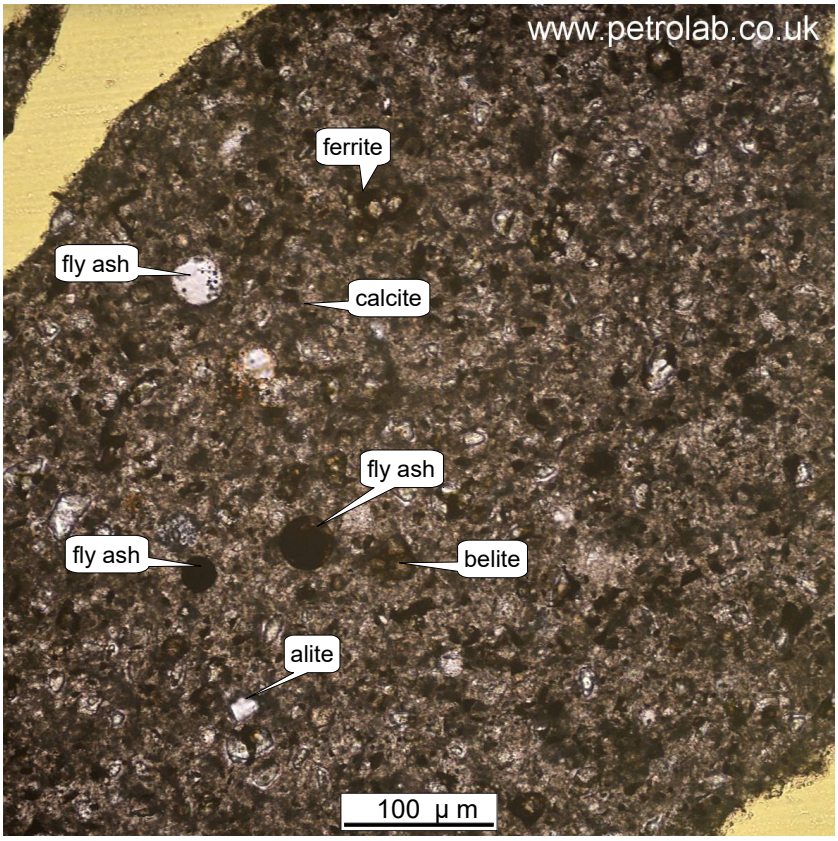
Photomicrographs



D **Sample Binder - Fly Ash**

Photomicrograph of sample showing main constituents of cement, including fine clinker grains and common fly ash. A rounded steel fragment is visible on the left side.

Image D
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100



E **Sample Binder - Fly Ash**

Photomicrograph showing higher magnification image with typical cement composition, including common clinker clusters (belite, alite, ferrite) and circular fly ash.

Image E

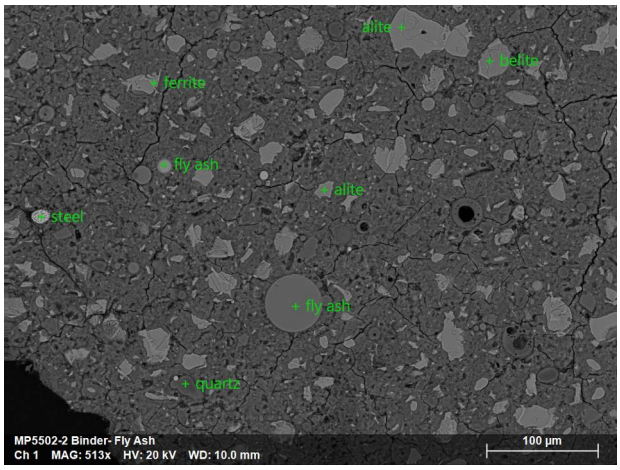
Nikon Microphot-FXA petrological microscope

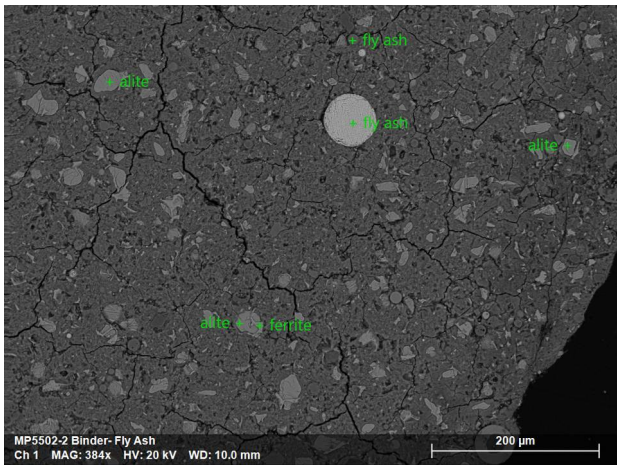
Plane polarised transmitted light

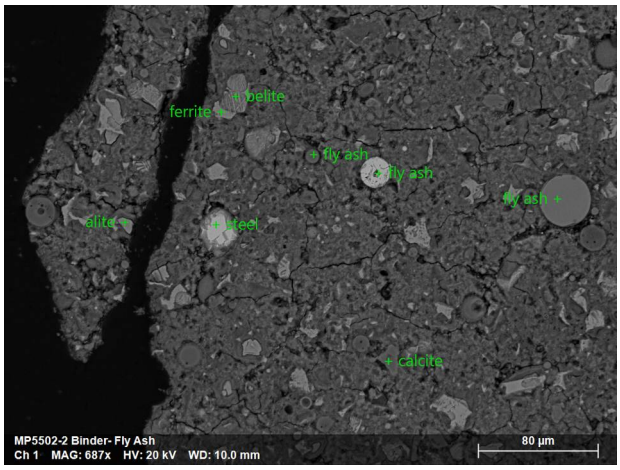
x200

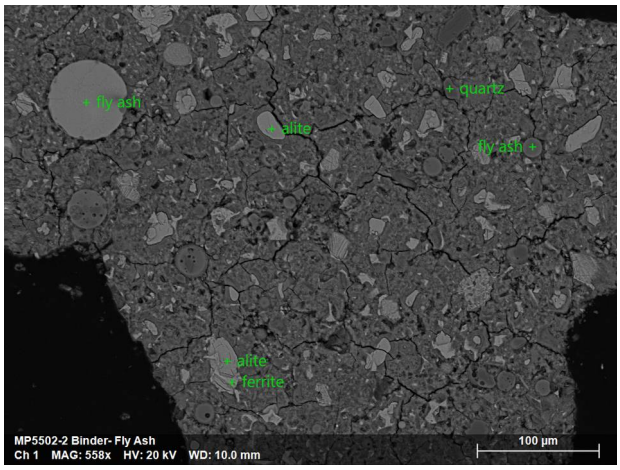
Manual SEM analysis

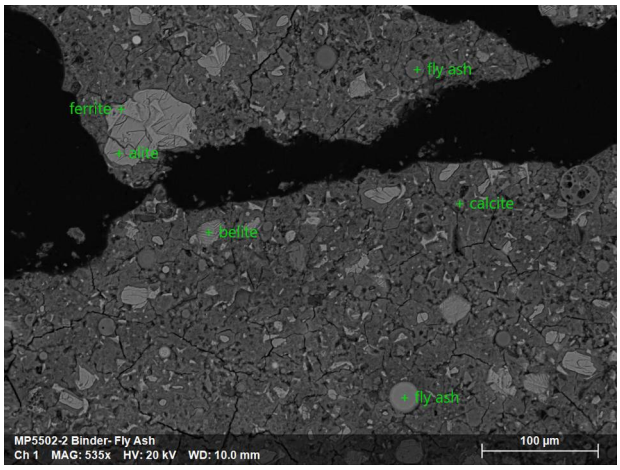
Table 3. BSE images of selected mineral phases for sample Binder - Fly Ash

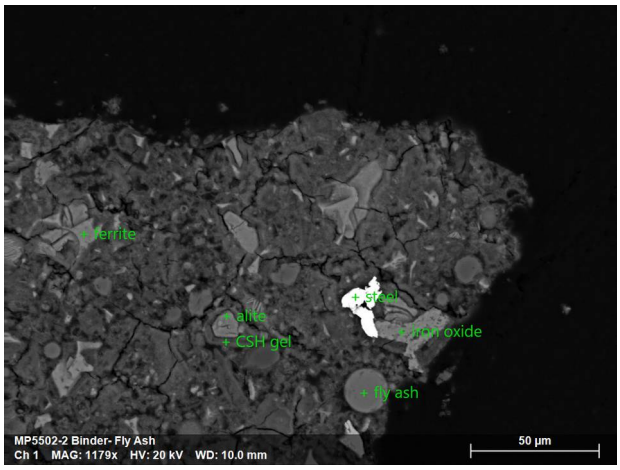












Higher magnification images showing main constituents of cement including fly ash, clinker grains and clusters (top left and right); different clinker grains and fly ash additive within cement paste (middle left and right); lower magnification image showing general shape of cement fragments (bottom left); higher magnification image containing fragment with oxidised steel fragment (bottom right).

Basalt 5%

Sample as received

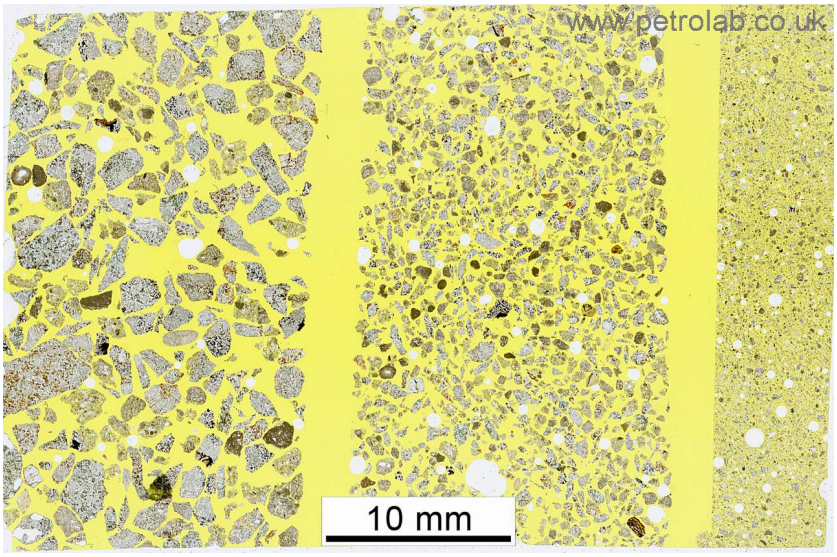
Sample Basalt 5%		
Petrolab ID	**Date received**	**Type · properties**
#32065	08/10/2021	Crushed rock sample · 205 g

A **Sample Basalt 5%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

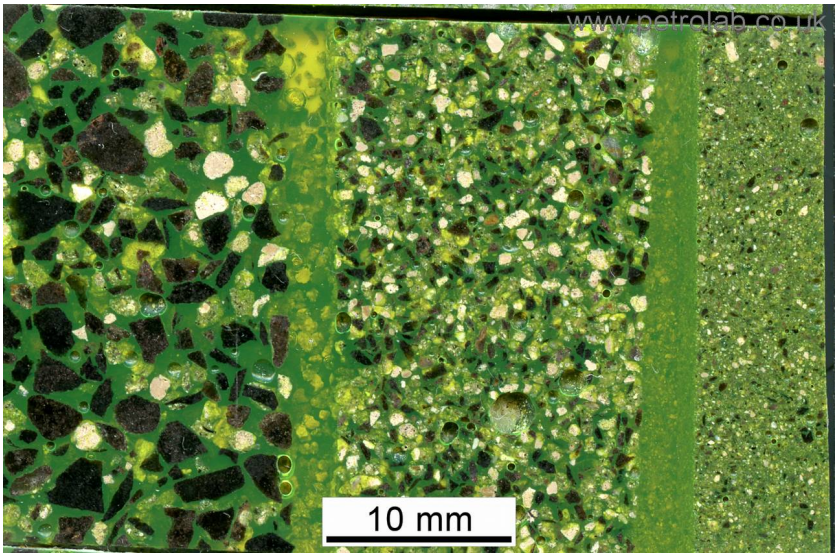
Section(s)



B **Sample Basalt 5%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Basalt 5%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Basalt 5%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Bytownite, byt	$(Ca,Na)(Si,Al)_4O_8$	2.71	32.9%
Diopside, di	$CaMgSi_2O_6$	3.40	11.0%
Montmorillonite, mnt	$(Na,Ca)_{0.33}(Al,Mg)_2(Si_4O_{10})(OH)_2 \cdot nH_2O$	2.50	14.0%
Chlorite, chl	$(Mg,Al,Fe^{++})_{12}(Si,Al)_8O_{20}(OH)_8$	2.65	9.7%
Calcite, cal	$CaCO_3$	2.70	5.3%
Quartz, qz	SiO_2	2.65	5.1%
Orthoclase, or	$KAlSi_3O_8$	2.56	5.0%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	4.9%
Albite, ab	$NaAlSi_3O_8$	2.62	3.1%
Olivine, ol	$(Mg,Fe)_2SiO_4$	3.32	2.6%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	2.4%
Magnesite, mgs	$MgCO_3$	3.00	1.2%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.0%
Enstatite, en	$Mg_2Si_2O_6$	3.20	0.5%
Zircon, zrn	$ZrSiO_4$	4.65	0.3%
Hematite, hem	Fe_2O_3	5.30	0.3%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.2%
Anatase, ant	TiO_2	2.40	0.2%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.1%
Goethite, gth	FeOOH	4.27	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

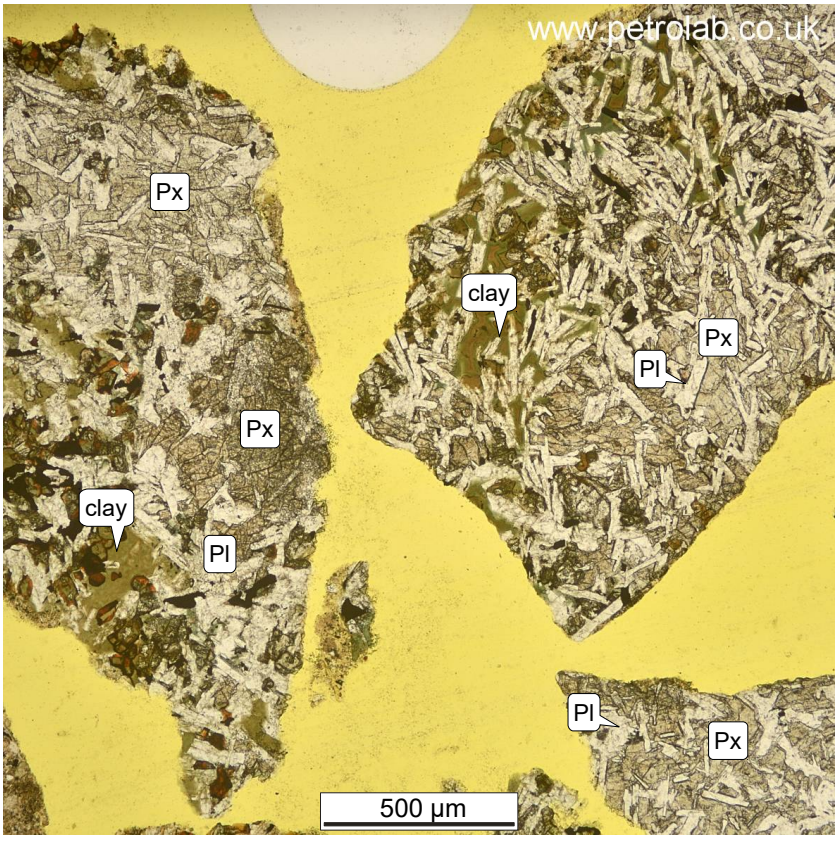
Sample Basalt 5%			
Rutile, rt	TiO_2	4.25	0.1%
Ferrosilite, fs	$(Fe^{++},Mg)_2Si_2O_6$	3.95	tr
Ilmenite, ilm	$Fe^{++}TiO_3$	4.72	tr
Magnetite, mag	$Fe^{++}Fe^{+++}{}_2O_4$	5.15	tr
Titanomagnetite, ti-mag	$Fe^{2+}(Fe^{3+},Ti)_2O_4$	5.15	tr
Augite, aug	$(Ca,Na)(Mg,Fe,Al,Ti)(Si,Al)_2O_6$	3.40	tr
Anorthoclase, ano	$(Na,K)AlSi_3O_8$	2.59	tr
Al-glass	$SiO_2+Al_2O_3+K_2O+CaO$		tr

Sample summary

Sample Basalt 5%

- The sample is composed of angular basalt fragments containing plagioclase feldspar, orthopyroxene, clinopyroxene, chlorite, clays and ilmenite and more rounded iron stained microcrystalline silica fragments and silicified volcanic glass and quartz fragments. Rare basalt fragments are cut by goethite veins. Other iron oxides including magnetite, hematite and titanomagnetite occur in trace amounts. Sporadic fragments of chloritised clay interlayered with calcite were observed. Some of the fragments are coated in carbonated cement, which is predominantly leached. There are also singular grains of quartz, plagioclase feldspar, volcanic glass and portlandite that are cemented by cement binder. The cement coating additionally contains rare grains of calcite and iron oxides. Secondary portlandite was observed within cement voids or around aggregate edges.
- SEM analysis did not detect any sulphide minerals in this sample. Iron oxides present in this sample did not contain any deleterious elements.

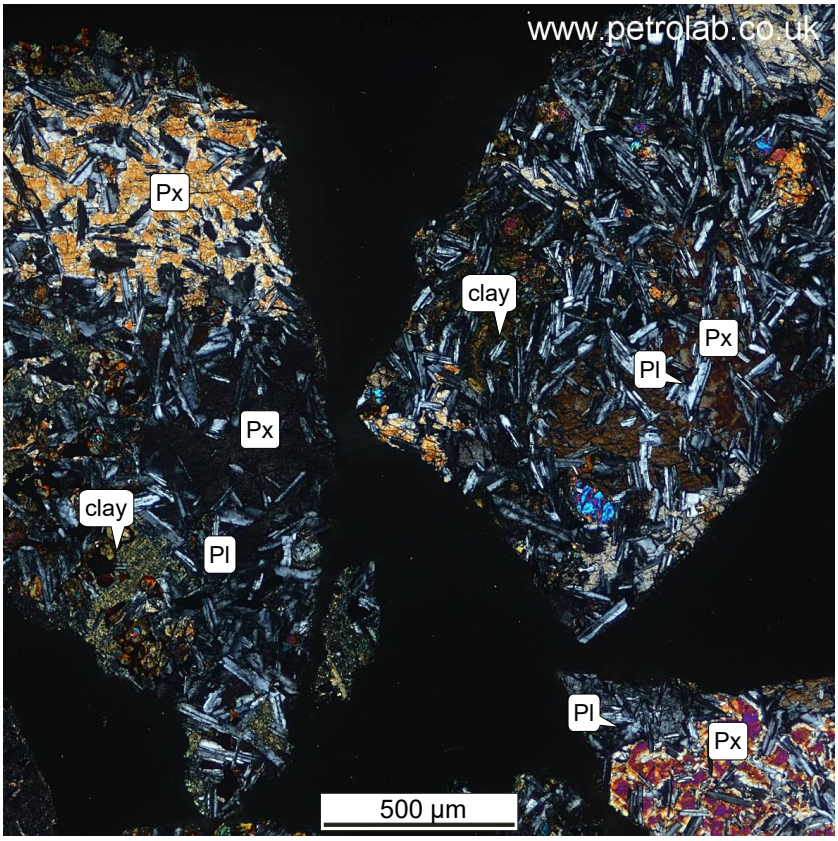
Photomicrographs



D **Sample Basalt 5%**

Photomicrograph of sample showing typical basalt fragments composed of tabular plagioclase feldspars, pyroxenes, clays and iron oxides.

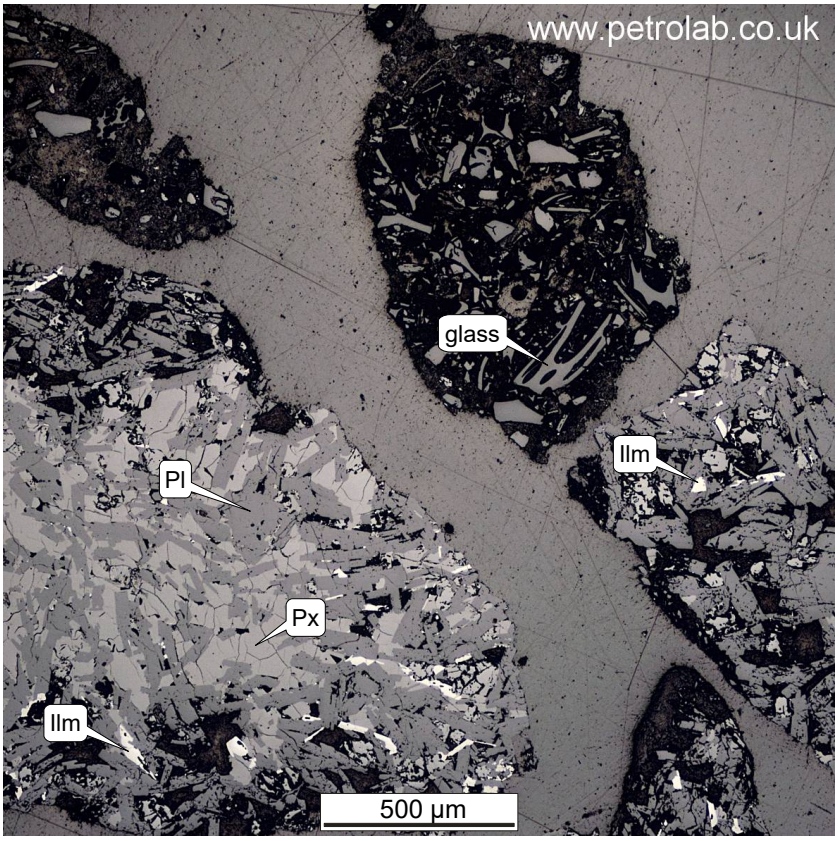
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



E **Sample Basalt 5%**

Photomicrograph of sample showing typical basalt fragments composed of tabular plagioclase feldspar, pyroxenes, clays and iron oxides.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



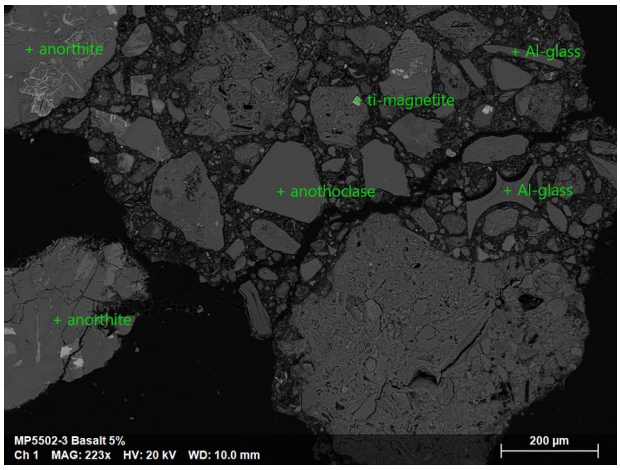
F **Sample Basalt 5%**

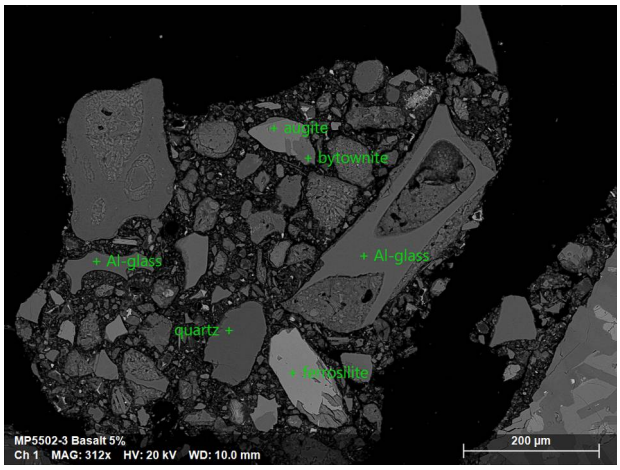
Photomicrograph showing basalt fragment with ilmenite in association with pyroxenes and fragments containing basalt fragments and volcanic glass bound by cement.

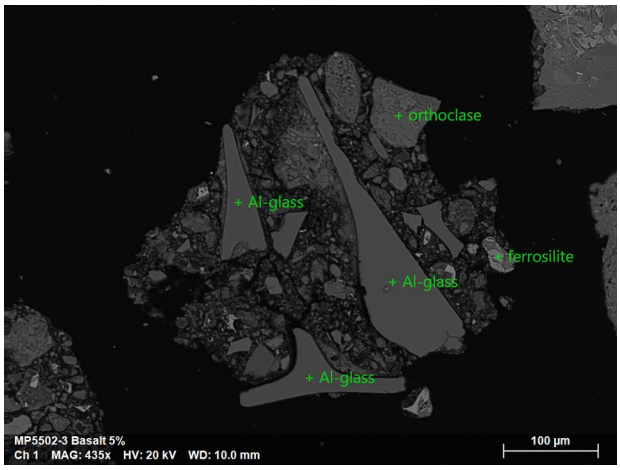
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x50

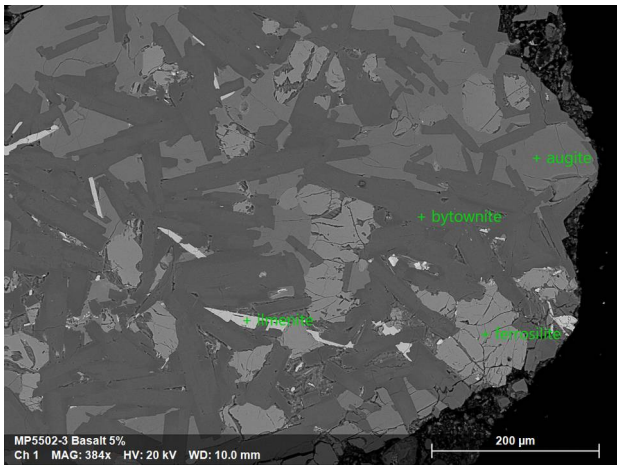
Manual SEM analysis

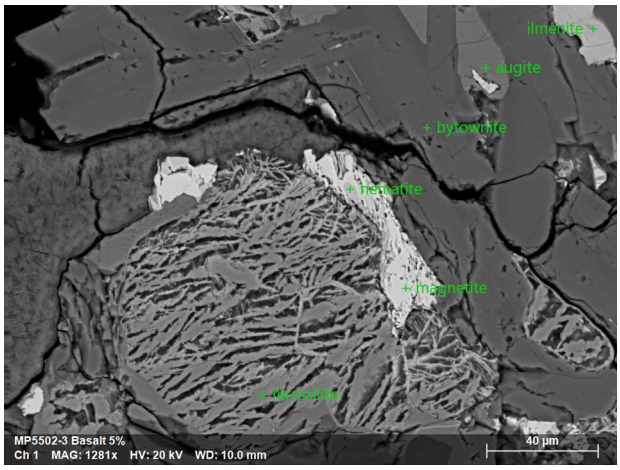
Table 4. BSE images of selected mineral phases for sample Basalt 5%

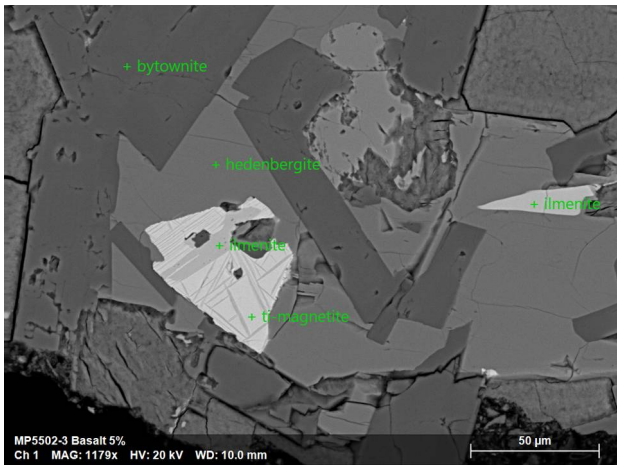












Images showing clay cemented loose grains of quartz, plagioclase feldspars, fragments of basalt and volcanic glass (top left, right and middle left); typical composition of a basalt fragment (middle right); higher magnification image showing basalt fragment with interstitial magnetite with inclusion of hematite (bottom left); ilmenite and titanomagnetite association within basalt fragment (bottom right).

Basalt 7%

Sample as received

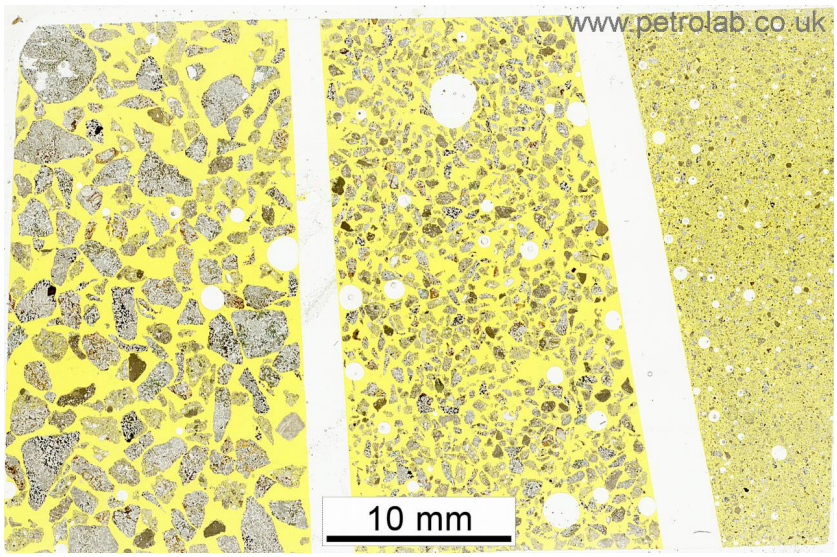
Sample Basalt 7%		
Petrolab ID	**Date received**	**Type · properties**
#32066	08/10/2021	Crushed rock sample · 206 g

A **Sample Basalt 7%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

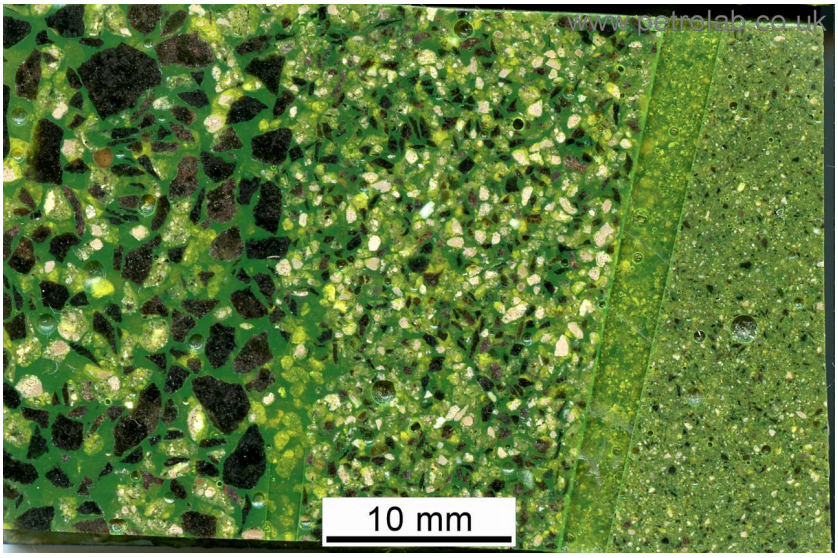
Section(s)



B **Sample Basalt 7%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Basalt 7%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Basalt 7%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Bytownite, byt	$(Ca,Na)(Si,Al)_4O_8$	2.71	31.8%
Diopside, di	$CaMgSi_2O_6$	3.40	12.1%
Chlorite, chl	$(Mg,Al,Fe^{++})_{12}(Si,Al)_8O_{20}(OH)_8$	2.65	10.2%
Montmorillonite, mnt	$(Na,Ca)_{0.33}(Al,Mg)_2(Si4O_{10})(OH)_2 \cdot nH_2O$	2.50	10.0%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	8.2%
Calcite, cal	$CaCO_3$	2.70	5.1%
Orthoclase, or	$KAlSi_3O_8$	2.56	4.8%
Quartz, qz	SiO_2	2.65	4.6%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	2.8%
Olivine, ol	$(Mg,Fe)_2SiO_4$	3.32	2.7%
Albite, ab	$NaAlSi_3O_8$	2.62	2.7%
Magnesite, mgs	$MgCO_3$	3.00	1.7%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.4%
Enstatite, en	$Mg_2Si_2O_6$	3.20	0.7%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.5%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.3%
Hematite, hem	Fe_2O_3	5.30	0.2%
Zircon, zrn	$ZrSiO_4$	4.65	0.1%
Goethite, gth	$FeOOH$	4.27	0.1%
Rutile, rt	TiO_2	4.25	0.1%
Anatase, ant	TiO_2	2.40	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample Basalt 7%			
Ferrosilite, fs	$(Fe^{++},Mg)_2Si_2O_6$	3.95	tr
Ilmenite, ilm	$Fe^{++}TiO_3$	4.72	tr
Magnetite, mag	$Fe^{++}Fe^{+++}{}_2O_4$	5.15	tr
Titanomagnetite, ti-mag	$Fe^{2+}(Fe^{3+},Ti)_2O_4$	5.15	tr
Augite, aug	$(Ca,Na)(Mg,Fe,Al,Ti)(Si,Al)_2O_6$	3.40	tr
Hedenbergite, hd	$CaFe^{++}Si_2O_6$	3.55	tr
Baryte, brt	$BaSO_4$	4.48	tr
Al-glass	$SiO_2+Al_2O_3+K_2O+CaO$		tr

Sample summary

Sample Basalt 7%

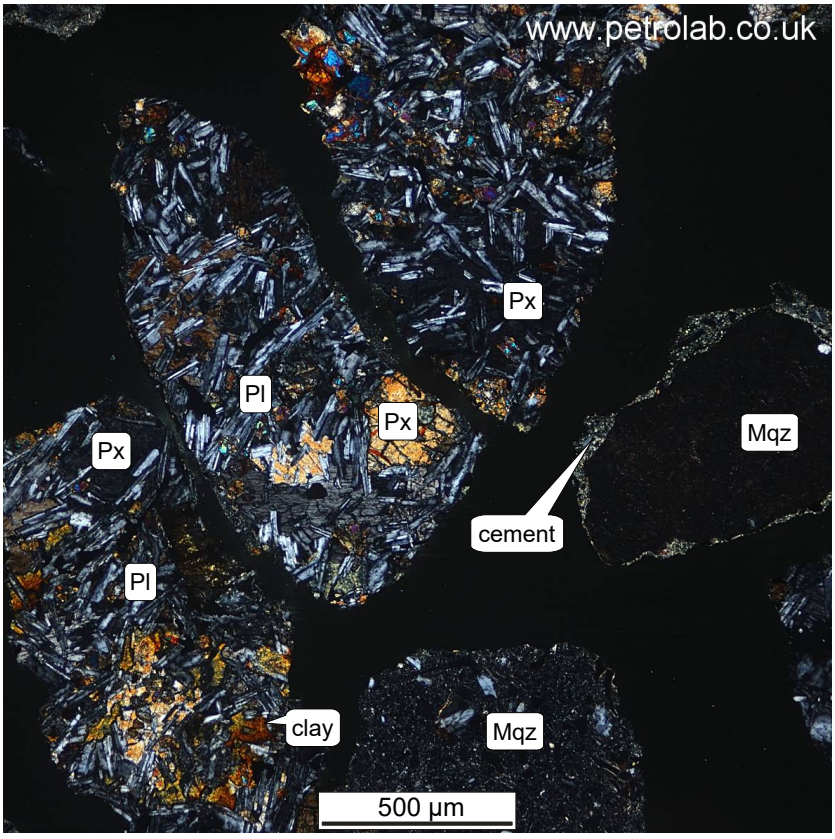
- The sample is composed of angular basalt fragments containing plagioclase feldspar, orthopyroxene, clinopyroxene, chlorite, clays and ilmenite and more rounded microcrystalline quartz fragments and clay cemented or silicified volcanic glass and quartz fragments. Rare basalt fragments are cut by goethite veins or contain iron oxide linings around some minerals. Some basalt fragments contain calcite crust. Other iron oxides including magnetite, hematite and titanomagnetite occur in trace amounts, only within basalt fragments. Sporadic fragments of clay interlayered with calcite were observed. Most basalt fragment are not coated in cement, on the contrary clay cemented volcanic glass fragments are commonly cement coated and usually create bigger agglomerations with other finer grains of plagioclase feldspar, quartz and calcite. The cement is carbonated and in many cases leached. It rarely occurs in the form of snow-flake calcite, containing recrystallised separated coarse calcite grains. The cement coating additionally contains rare grains of calcite and iron oxides. Secondary portlandite was observed within rare cement voids or around aggregate edges coated in cement.
- SEM analysis did not detect any sulphide minerals in this sample. Iron oxides present in this sample did not contain any deleterious elements.

Photomicrographs

D **Sample Basalt 7%**

Photomicrograph of sample showing typical basalt fragments composed of plagioclase feldspar, pyroxene and clays. There is also an example of a microcrystalline quartz fragment thinly coated in cement.

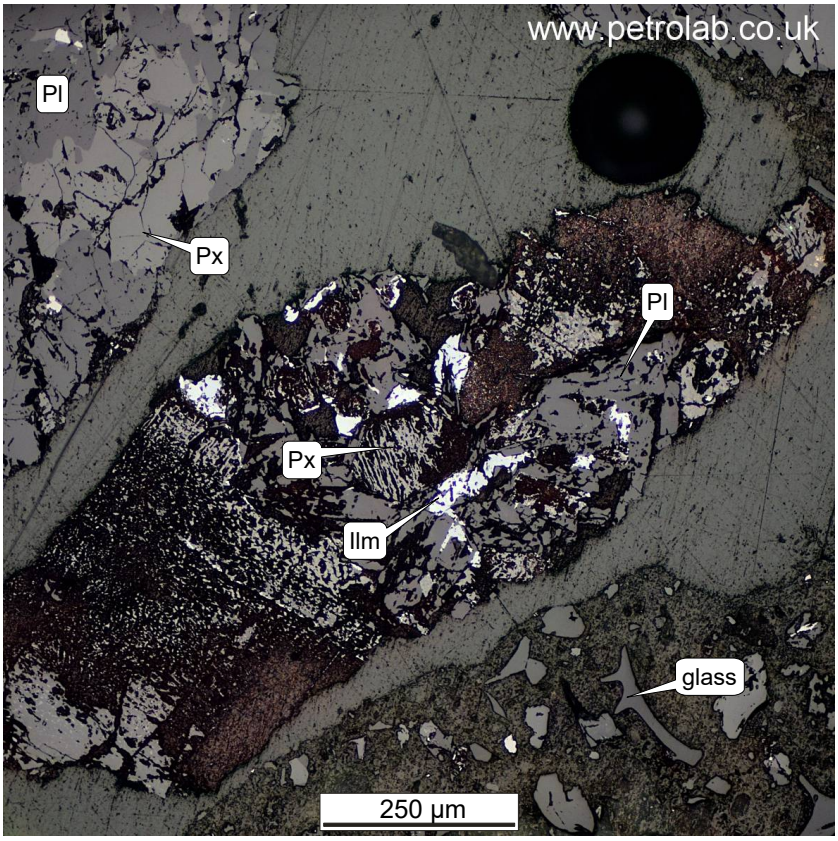
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



E **Sample Basalt 7%**

View of previous image in cross polarised light.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



F **Sample Basalt 7%**

Photomicrograph showing unaltered basalt fragment (left), partially altered basalt fragment with skeletal texture of pyroxene and associated ilmenite (middle) and clay cemented volcanic glass and quartz fragments (bottom right).

Image F

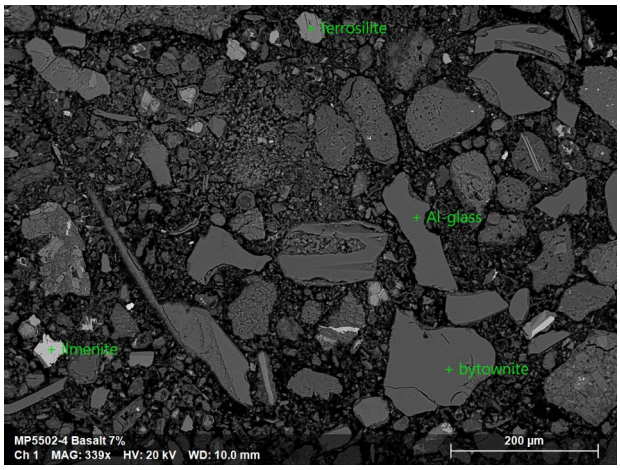
Nikon Microphot-FXA petrological microscope

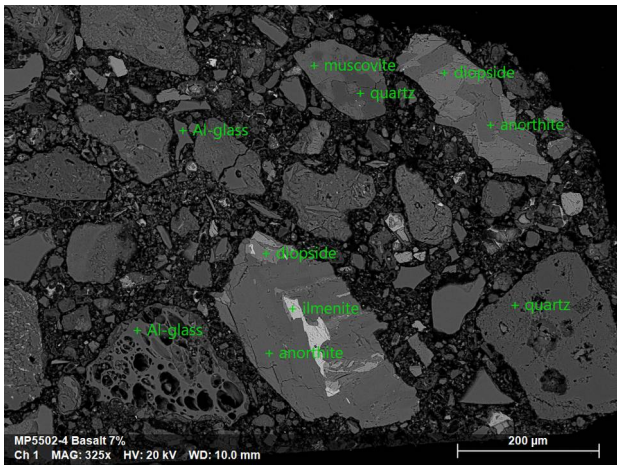
Plane polarised reflected light

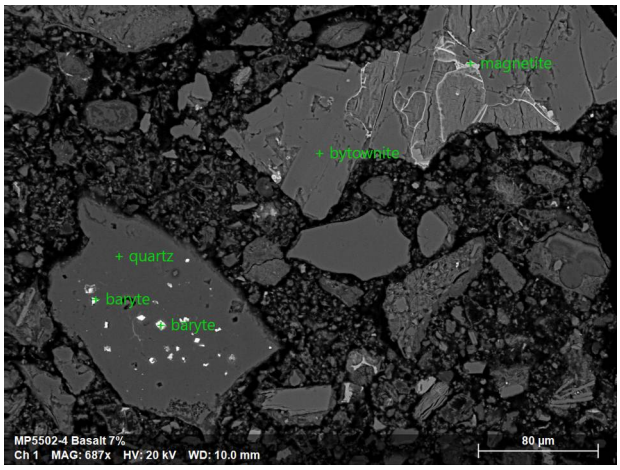
x100

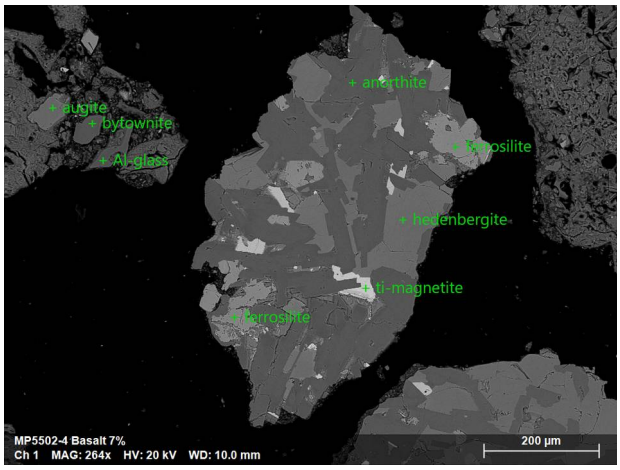
Manual SEM analysis

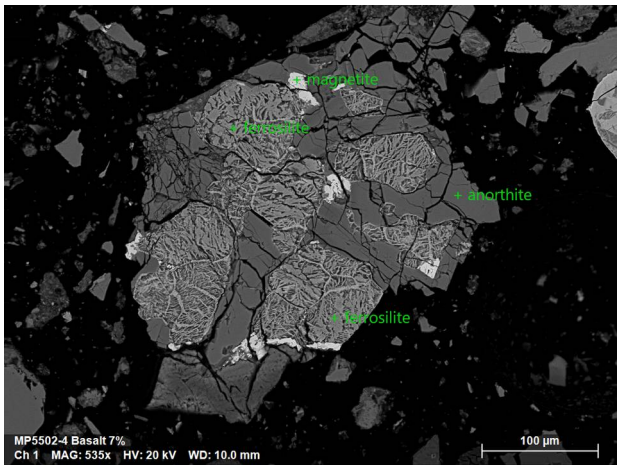
Table 5. BSE images of selected mineral phases for sample Basalt 7%

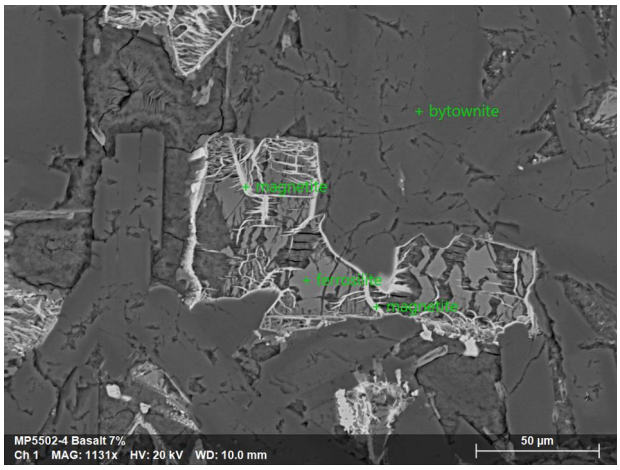












Images showing clay cemented loose grains of quartz, plagioclase feldspars, fragments of basalt and volcanic glass (top left and right); loosely cemented fragment of basalt and quartz with inclusions of baryte (middle left); typical basalt fragment composed of plagioclase feldspar, orthopyroxene, clinopyroxene and titanomagnetite (middle right); severely cracked basalt fragment with altered ferrosilite crystals in association with magnetite (bottom left); higher magnification image showing alteration of ferrosilite interstitial with bytownite with skeletal magnetite around its crystals (bottom right).

Basalt 4/3%

Sample as received

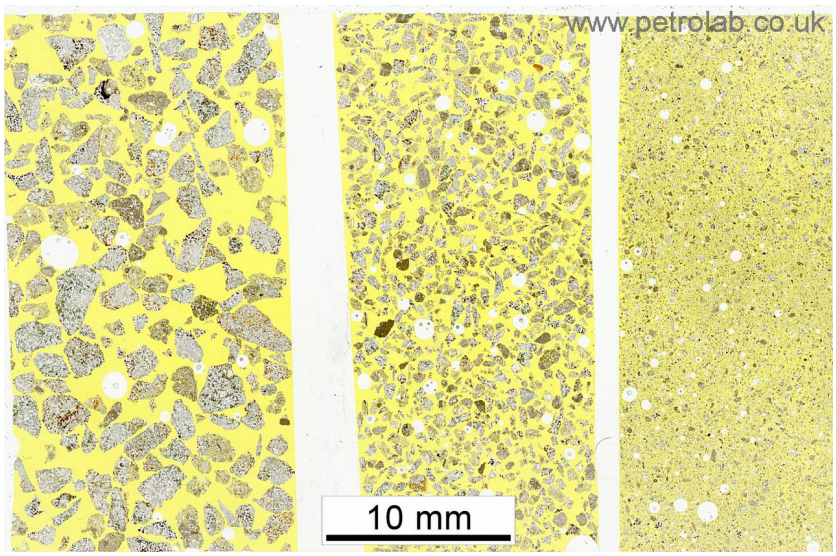
Sample Basalt 4/3%		
Petrolab ID	**Date received**	**Type · properties**
#32067	08/10/2021	Crushed rock sample · 207 g

A **Sample Basalt 4/3%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

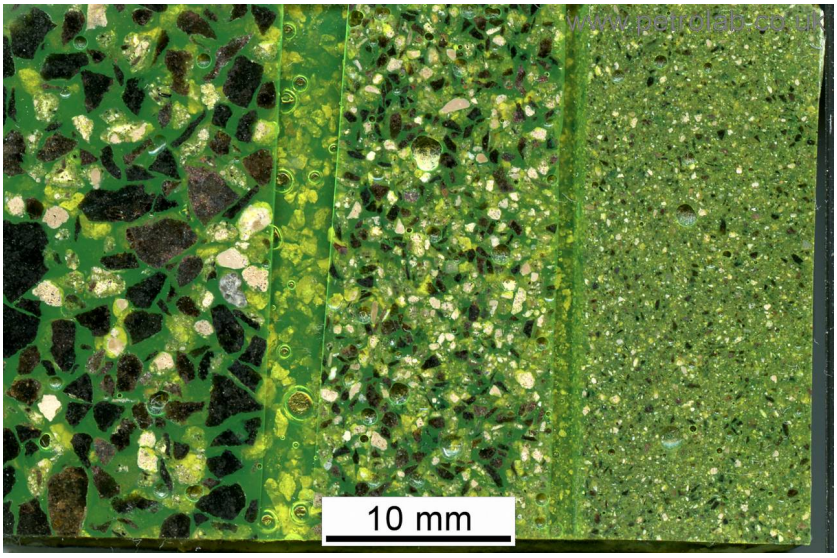
Section(s)



B **Sample Basalt 4/3%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Basalt 4/3%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Basalt 4/3%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Bytownite, byt	$(Ca,Na)(Si,Al)_4O_8$	2.71	33.1%
Diopside, di	$CaMgSi_2O_6$	3.40	12.2%
Chlorite, chl	$(Mg,Al,Fe^{++})_{12}(Si,Al)_8O_{20}(OH)_8$	2.65	10.7%
Montmorillonite, mnt	$(Na,Ca)_{0.33}(Al,Mg)_2(Si_4O_{10})(O_H)_2 \cdot nH_2O$	2.50	10.3%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	6.8%
Orthoclase, or	$KAlSi_3O_8$	2.56	5.1%
Calcite, cal	$CaCO_3$	2.70	4.8%
Quartz, qz	SiO_2	2.65	4.6%
Olivine, ol	$(Mg,Fe)_2SiO_4$	3.32	3.2%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	2.4%
Albite, ab	$NaAlSi_3O_8$	2.62	2.0%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.2%
Magnesite, mgs	$MgCO_3$	3.00	1.1%
Enstatite, en	$Mg_2Si_2O_6$	3.20	0.8%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.5%
Zircon, zrn	$ZrSiO_4$	4.65	0.4%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.3%
Hematite, hem	Fe_2O_3	5.30	0.2%
Anatase, ant	TiO_2	2.40	0.2%
Goethite, gth	FeOOH	4.27	0.1%
Rutile, rt	TiO_2	4.25	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample Basalt 4/3%			
Ferrosilite, fs	$(Fe^{++},Mg)_2Si_2O_6$	3.95	tr
Ilmenite, ilm	$Fe^{++}TiO_3$	4.72	tr
Magnetite, mag	$Fe^{++}Fe^{+++}{}_2O_4$	5.15	tr
Titanomagnetite, ti-mag	$Fe^{2+}(Fe^{3+},Ti)_2O_4$	5.15	tr
Hedenbergite, hd	$CaFe^{++}Si_2O_6$	3.55	tr
Baryte, brt	$BaSO_4$	4.48	tr
Andesine, ads	$(Na,Ca)(Si,Al)_4O_8$	2.67	tr
Chromite, chr	$Fe^{++}Cr_2O_4$	4.79	tr
Al-glass	$SiO_2+Al_2O_3+K_2O+CaO$		tr

Sample summary

Sample Basalt 4/3%

- The sample is composed of angular basalt fragments containing plagioclase feldspar, orthopyroxene, clinopyroxene, chlorite, clays and ilmenite and more rounded microcrystalline quartz fragments and silicified volcanic glass and quartz fragments. Rare basalt fragments are cut by calcite veins. Rare iron oxide including magnetite, hematite and titanomagnetite occur in trace amounts, only within basalt fragments. Sporadic fragments of clay interlayered with calcite were observed. Some basalt fragment are coated in cement, clay cemented volcanic glass fragments are commonly cement coated and usually create bigger agglomerations with other finer grains of plagioclase feldspar, quartz, calcite and smaller basalt fragments. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Secondary portlandite was observed within rare cement voids or around aggregate edges coated in cement.
- SEM analysis did not detect any sulphide minerals in this sample. Iron oxides present in this sample did not contain any deleterious elements.

Photomicrographs

D **Sample Basalt 4/3%**

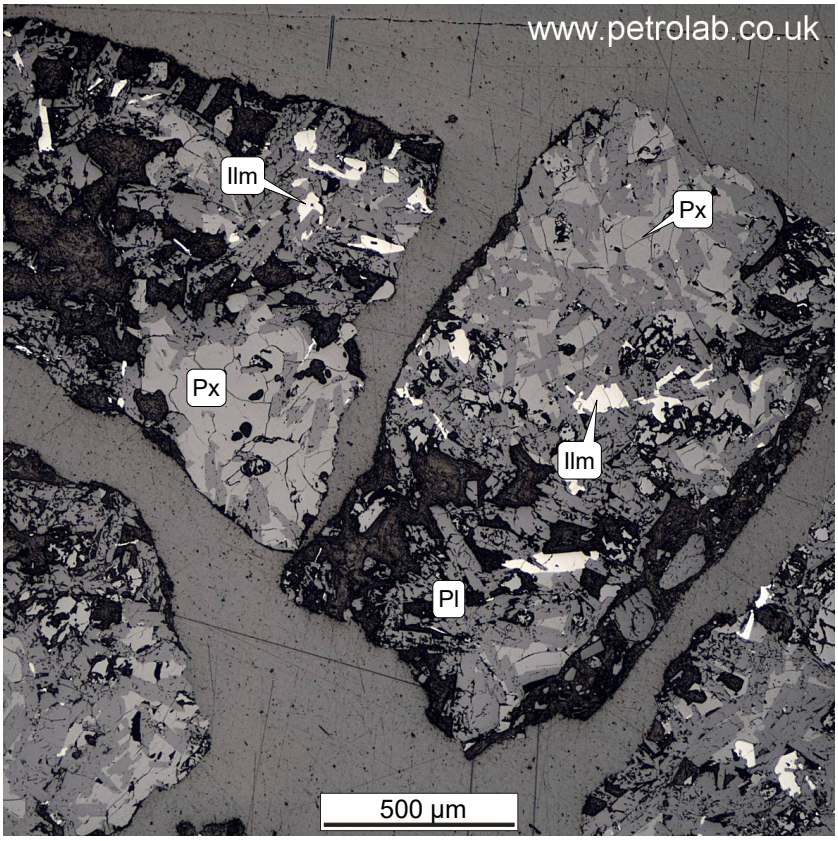
Photomicrograph of sample showing typical basalt fragments composed of plagioclase feldspar, pyroxene and clays, rarely coated with cement. There is also a fragment of cemented material containing volcanic glass, microcrystalline quartz and basalt grains hosted in carbonated cement paste.

Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50

E **Sample Basalt 4/3%**

View of previous image in cross polarised light.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



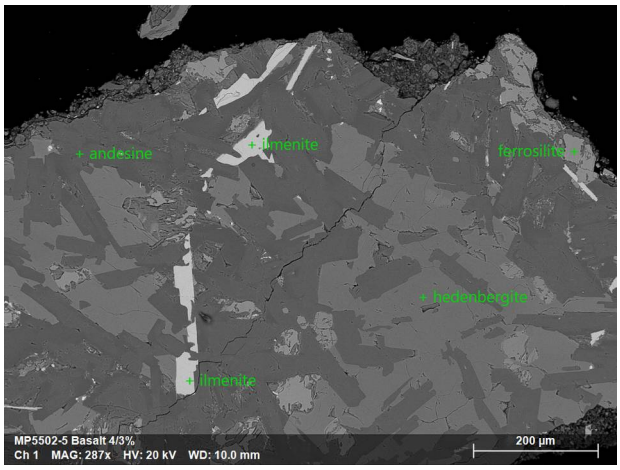
F **Sample Basalt 4/3%**

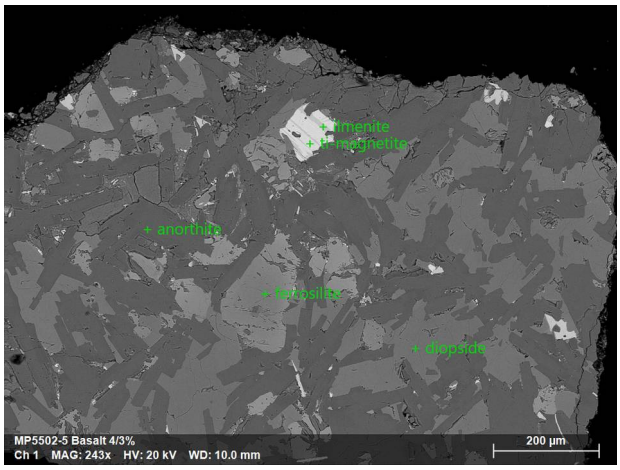
Photomicrograph showing ilmenite within typical basalt fragments.

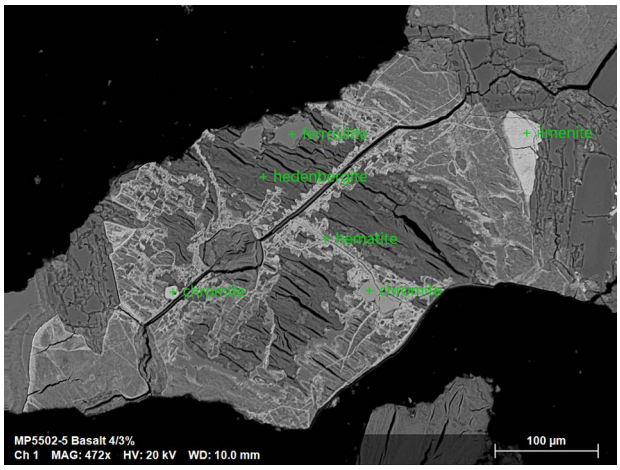
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x50

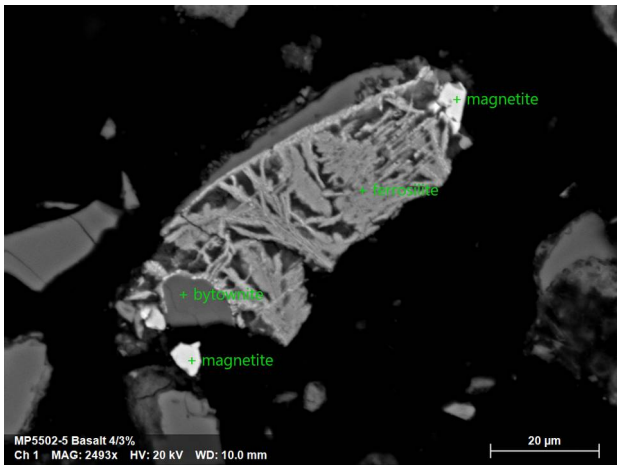
Manual SEM analysis

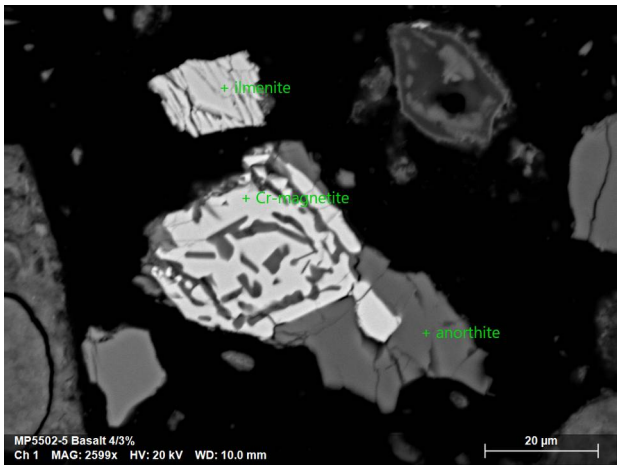
Table 6. BSE images of selected mineral phases for sample Basalt 4/3%

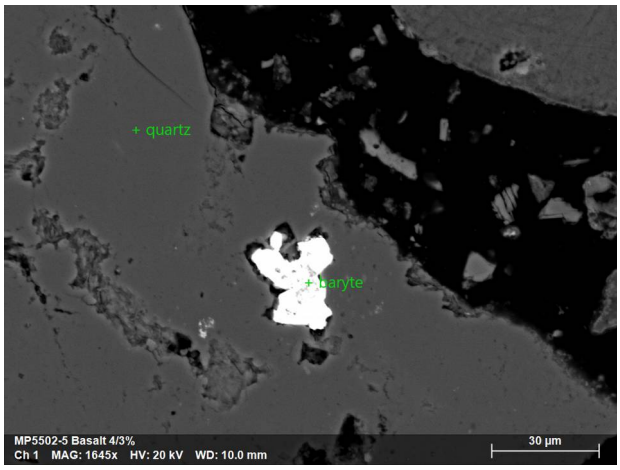












Images showing typical basalt fragment composed of orthopyroxene (ferrosilite), clinopyroxene (hedenbergite/diopside), plagioclase feldspar (andesine/anorthite) and ilmenite, sometimes with inclusions of ti-magnetite (top left and right); altered basalt fragment with hematite veins and rare instances of chromite (middle left); altered ferrosilite in association with magnetite (middle right); higher magnification image showing anorthite fragment with Cr-magnetite and liberated ilmenite (bottom left); quartz fragment containing inclusion of baryte (bottom right).

Siltstone 5%

Sample as received

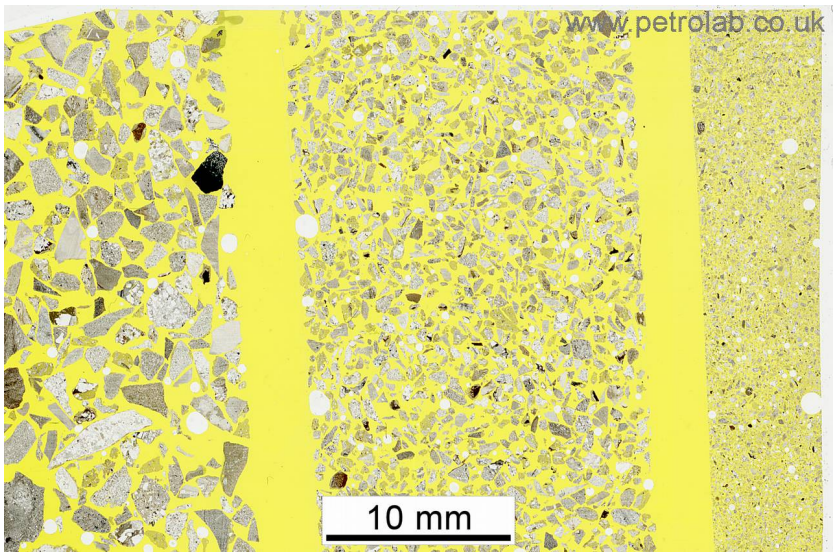
Sample Siltstone 5%		
Petrolab ID	**Date received**	**Type · properties**
#32068	08/10/2021	Crushed rock sample · 200 g

A **Sample Siltstone 5%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

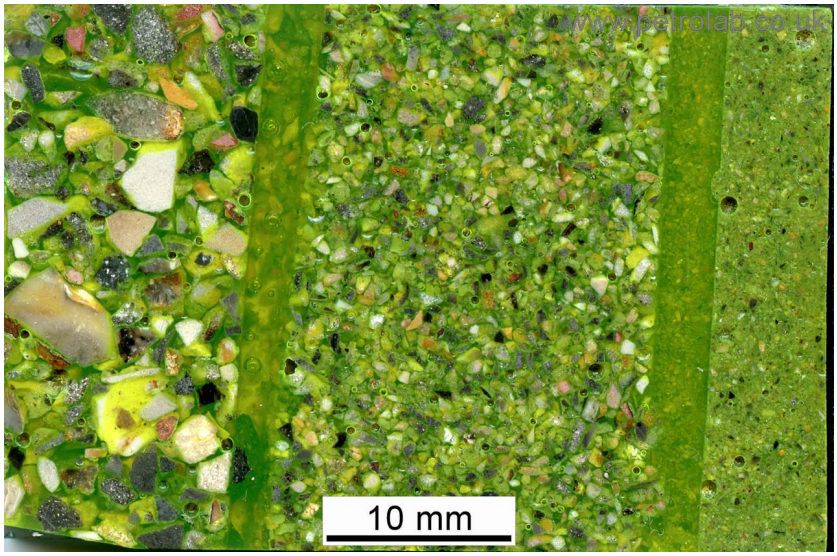
Section(s)



B **Sample Siltstone 5%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Siltstone 5%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Siltstone 5%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	55.0%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	28.7%
Orthoclase, or			
Calcite, cal	$CaCO_3$	2.70	4.9%
Albite, ab	$NaAlSi_3O_8$	2.62	3.7%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	2.0%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	1.5%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.0%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	0.8%
Portlandite, por	$Ca(OH)_2$	2.23	0.5%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.4%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.3%
Hematite, hem	Fe_2O_3	5.30	0.3%
Goethite, gth	FeOOH	4.27	0.3%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.2%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.1%
Anatase, ant	TiO_2	2.40	0.1%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.1%
Rutile, rt	TiO_2	4.25	tr

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample Siltstone 5%			
Pyrite, py	FeS_2	5.01	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Titanite, ttn	$CaTiSiO_5$	3.48	tr
Oligoclase, olg	$(Na,Ca)(Si,Al)_4O_8$	2.65	tr
Zircon, zrn	$ZrSiO_4$	4.65	tr
Ca-siderite, Ca-sd	$(Fe^{++},Ca)CO_3$	3.96	tr

Sample summary

Sample Siltstone 5%

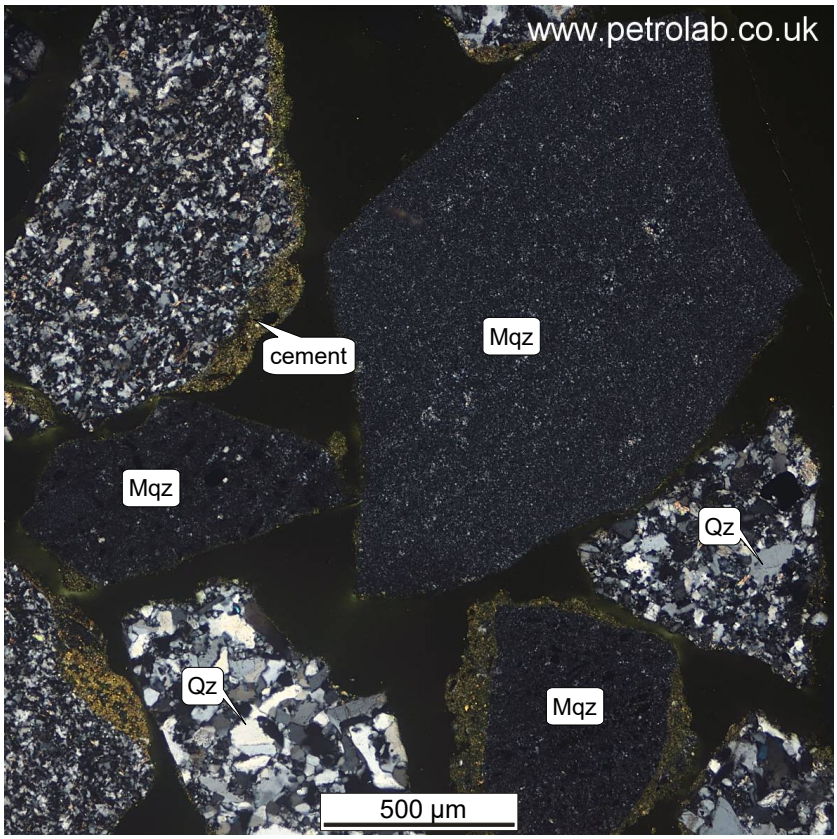
- The sample comprises angular silicified siltstone fragments, commonly coated with carbonated and leached cement paste. Rare fragments contain iron oxide crust. There are also sandstone fragments, vein quartz fragments and fragments composed entirely of microcrystalline quartz. Some of them are cross cut by quartz veins. Rare fragments contain coarser feldspar grains which appear predominantly altered. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Rare secondary portlandite was observed within cement voids or around aggregate edges coated in cement.
- Traces of coarser cubic and disseminated framboidal pyrite were observed in silicified fragments.
- SEM analysis detected some elevated (0.5 - 2.37%) As and (0.22 - 0.55%) Sb in pyrite, (0.13 - 1.21%) As in jarosite, (0.59 - 0.74%) S in Ca-siderite and (1.01 - 2.46%) S in hematite. The presence of S in hematite may indicate that these are secondary hematites that have partially adsorbed or fixed S from oxidising pyrite.

Photomicrographs

D **Sample Siltstone 5%**

Photomicrograph of sample showing typical fragments present in the sample including microcrystalline quartz and siltstone fragments, commonly coated with carbonated cement.

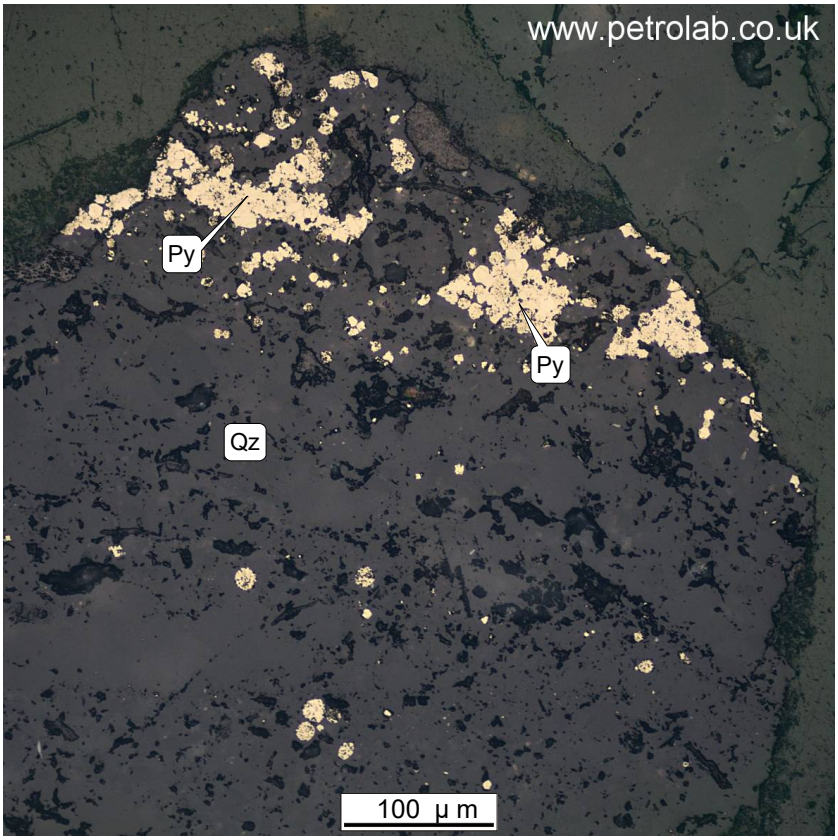
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



E **Sample Siltstone 5%**

Photomicrograph of sample showing typical fragments present in the sample including microcrystalline quartz and siltstone fragments, commonly coated with carbonated cement.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



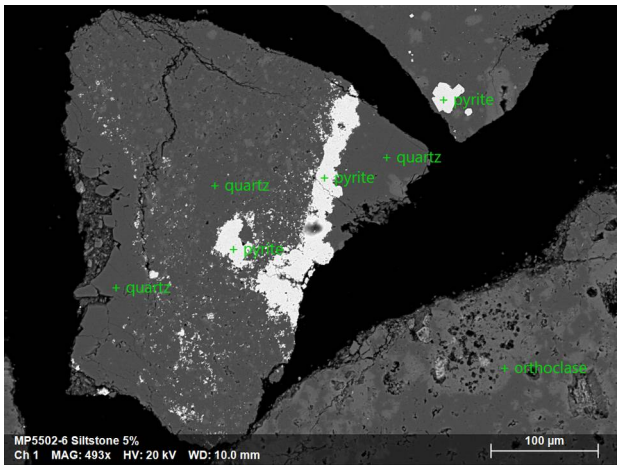
F **Sample Siltstone 5%**

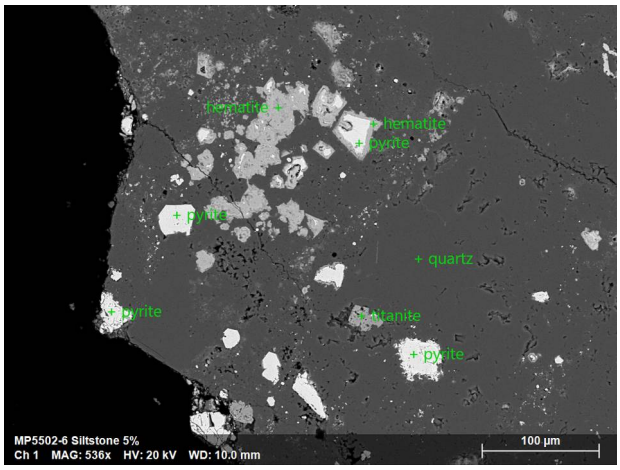
Photomicrograph showing locally common framboidal pyrite in a rock fragment, usually forming pyrite agglomerations.

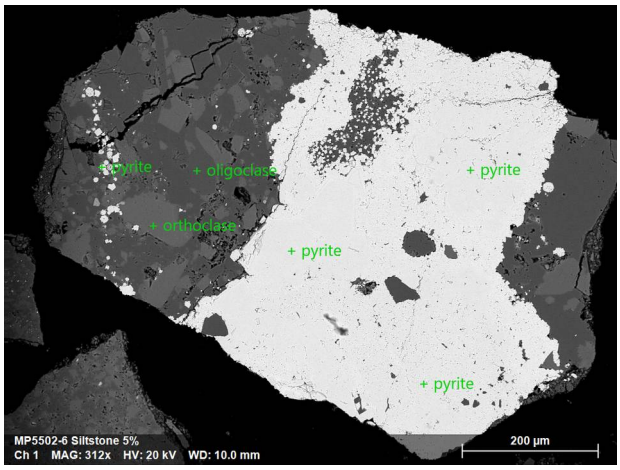
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x200

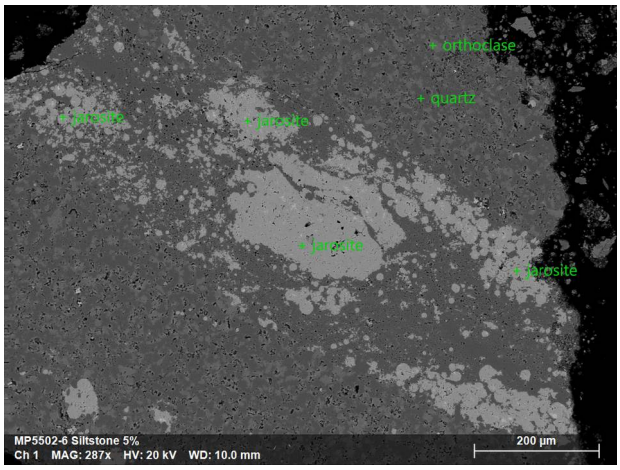
Manual SEM analysis

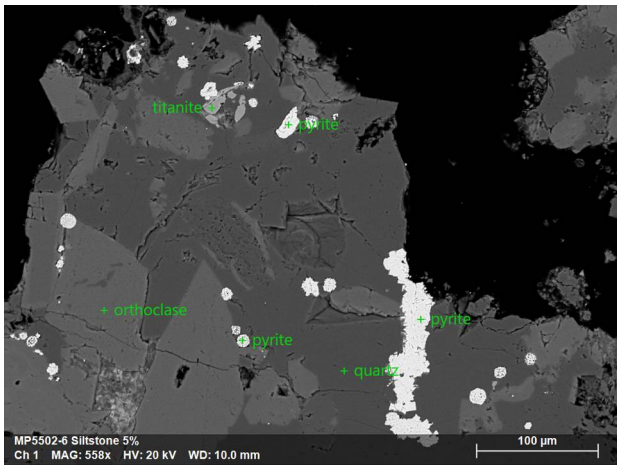
Table 7. BSE images of selected mineral phases for sample Siltstone 5%.

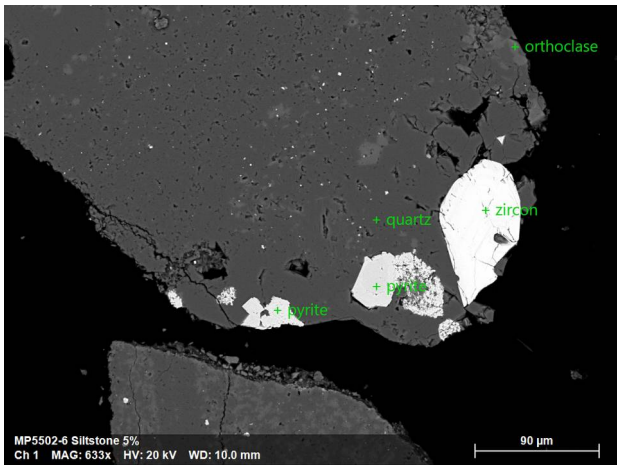












Images showing locked pyrite vein and disseminated pyrite crystals within a rock fragment (top left); unaltered and partially oxidised pyrite crystals in quartz rich fragment (top right); massive pyrite mineralisation and agglomeration of fine framboidal pyrite (middle left); jarosite replacement over earlier framboidal pyrite within silicified siltstone (middle right); cubic and framboidal pyrite in association with titanite within a rock fragment (bottom left); zircon and pyrite locked in a rock fragment (bottom right).

Siltstone 7%

Sample as received

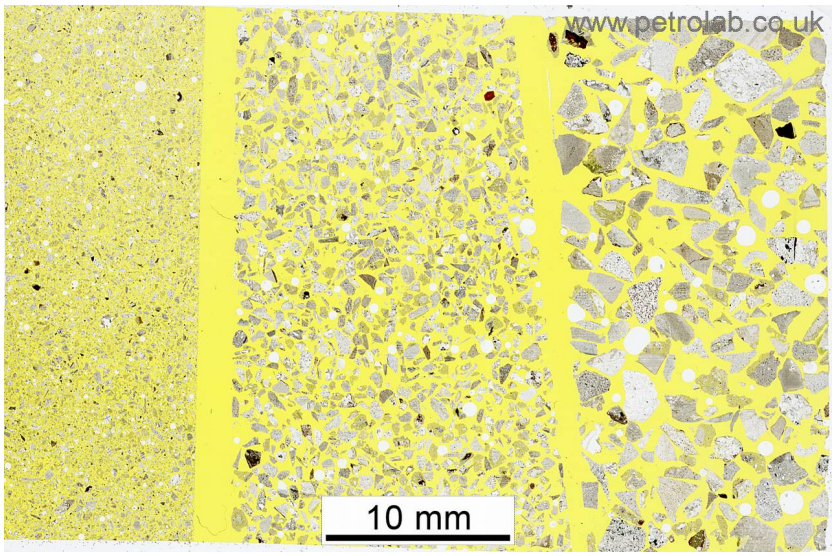
Sample Siltstone 7%		
Petrolab ID	**Date received**	**Type · properties**
#32069	08/10/2021	Crushed rock sample · 201g

A **Sample Siltstone 7%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

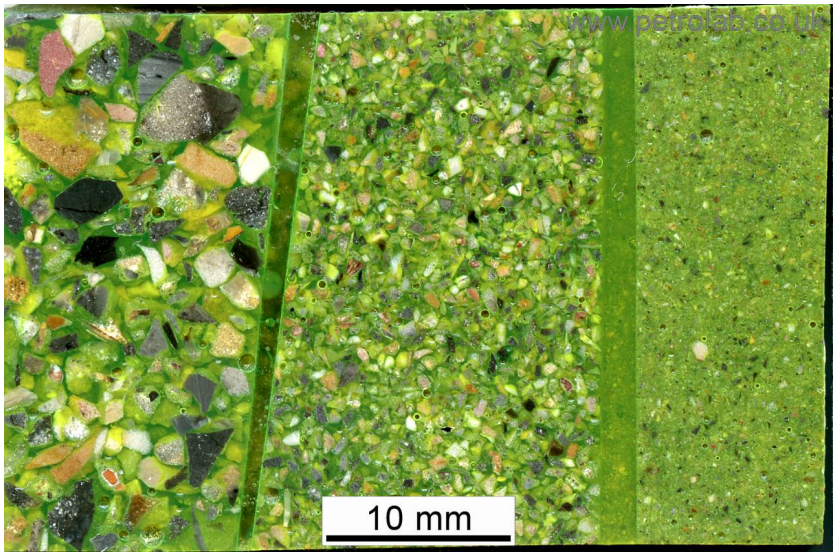
Section(s)



B **Sample Siltstone 7%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Siltstone 7%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Siltstone 7%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	50.9%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	28.3%
Orthoclase, or			
Calcite, cal	$CaCO_3$	2.70	7.4%
Albite, ab	$NaAlSi_3O_8$	2.62	3.5%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	1.8%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	1.6%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	1.6%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.2%
Portlandite, por	$Ca(OH)_2$	2.23	1.1%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.7%
Goethite, gth	$FeOOH$	4.27	0.4%
Hematite, hem	Fe_2O_3	5.30	0.3%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.3%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.2%
Anatase, ant	TiO_2	2.40	0.2%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.2%
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	0.1%
Rutile, rt	TiO_2	4.25	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

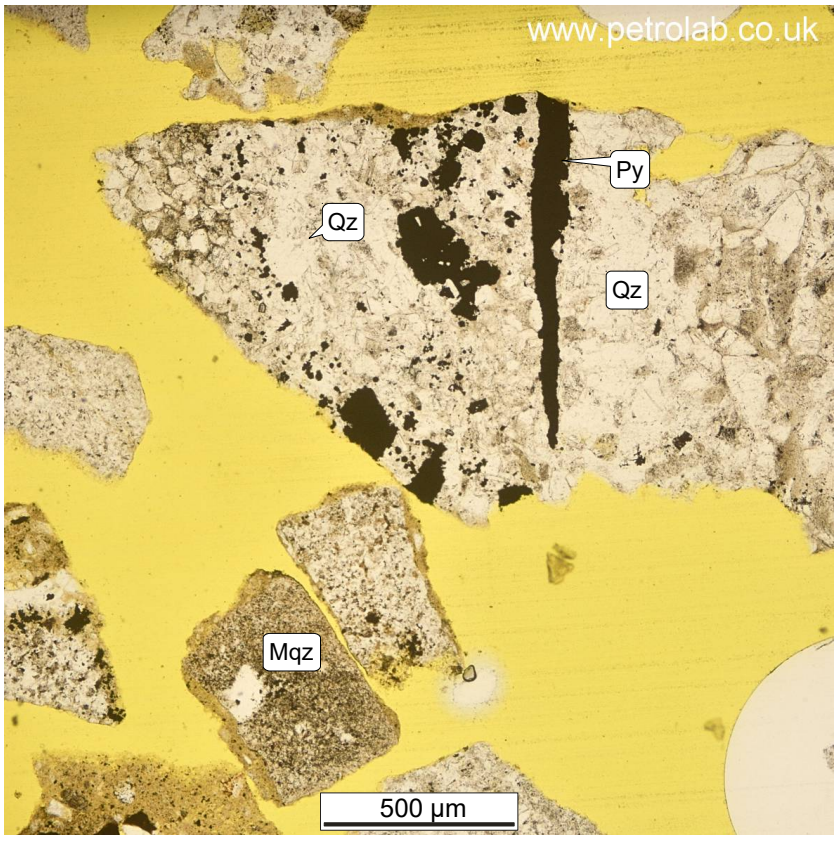
Sample Siltstone 7%			
Zircon, zrn	$ZrSiO_4$	4.65	0.1%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.1%
Pyrite, py	FeS_2	5.01	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Titanite, ttn	$CaTiSiO_5$	3.48	tr
Ca-siderite, Ca-sd	$(Fe^{++},Ca)CO_3$	3.96	tr

Sample summary

Sample Siltstone 7%

- The sample comprises angular silicified siltstone fragments, commonly thinly coated with carbonated and leached cement paste. Rare fragments contain iron oxide crust. There are also rare silicified sandstone fragments, vein quartz fragments and fragments composed entirely of microcrystalline quartz. Rare fragments contain coarser feldspar grains which appear pervasively kaolinised. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Rare secondary portlandite was observed around aggregate edges coated in cement.
- Traces of coarser cubic, disseminated framboidal and vein pyrite were observed in silicified fragments.
- SEM analysis detected some elevated (0.57 - 1.23%) As in pyrite and (0.34%) S in hematite. The presence of S in hematite may indicate that these are secondary hematites that have partially adsorbed or fixed S from oxidising pyrite.

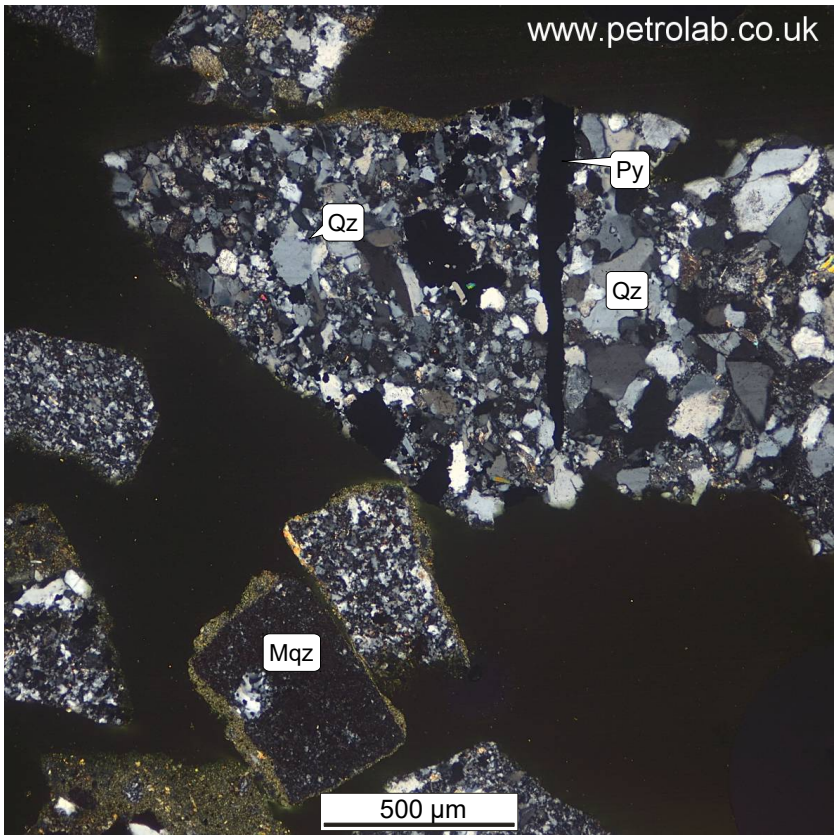
Photomicrographs



D **Sample Siltstone 7%**

Photomicrograph of sample showing typical fragments of mineralised sandstone and siltstone rock fragments, some coated with carbonated cement.

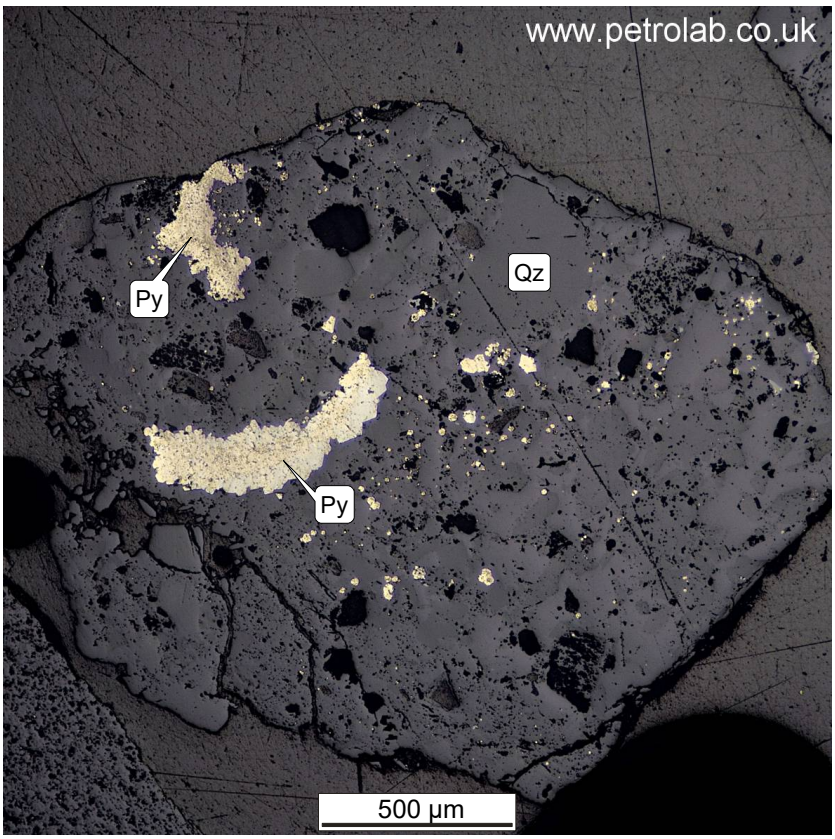
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



E **Sample Siltstone 7%**

Photomicrograph of sample showing typical fragments of mineralised sandstone and siltstone rock fragments, some coated with carbonated cement.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



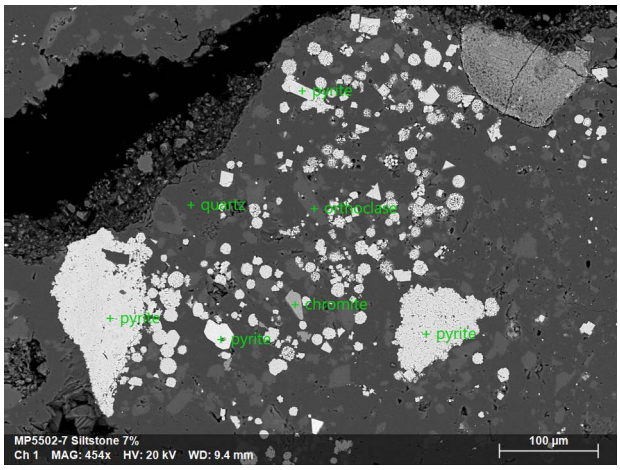
F **Sample Siltstone 7%**

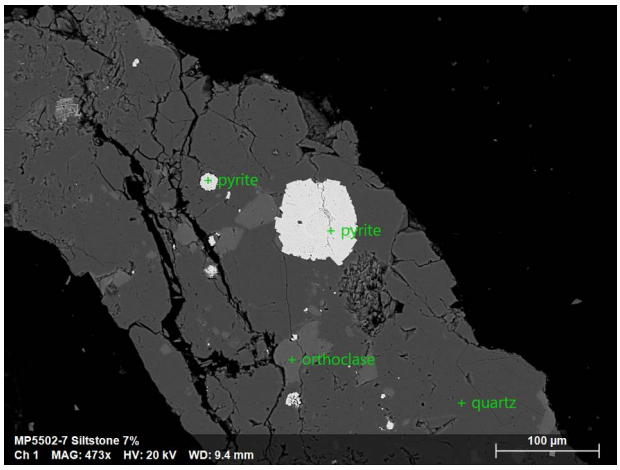
Photomicrograph showing clusters of pyrite, locked in a rock fragment.

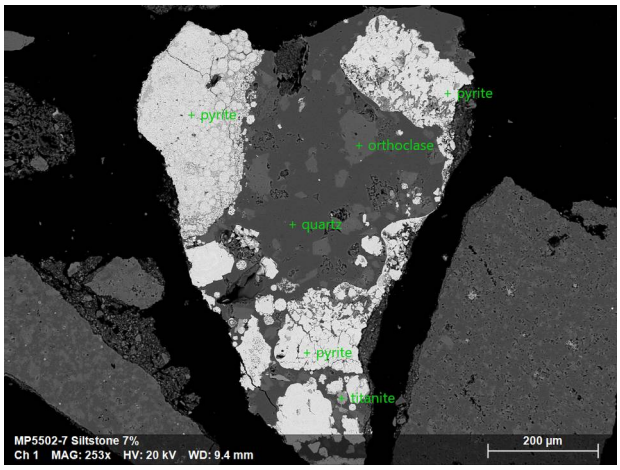
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x50

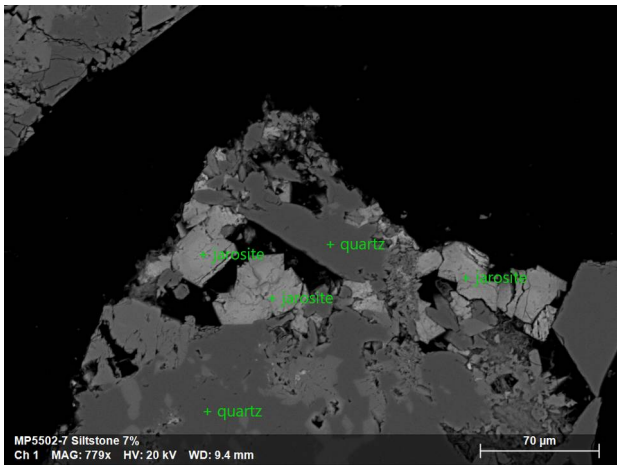
Manual SEM analysis

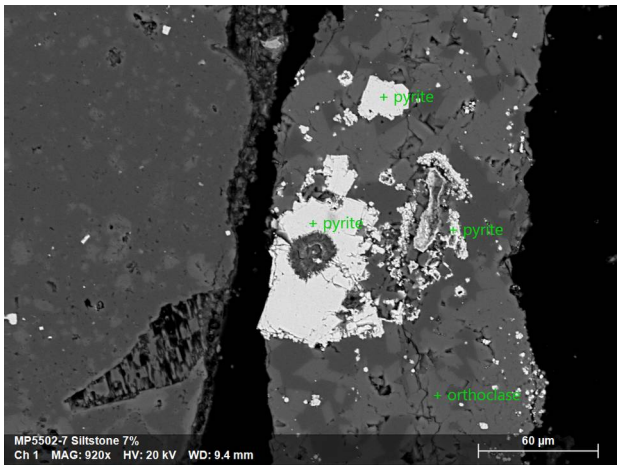
Table 8. BSE images of selected mineral phases for sample Siltstone 7%.

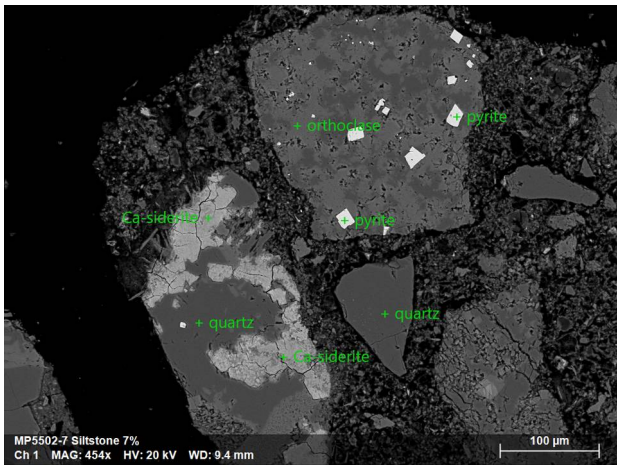












Images showing locked framboidal pyrite agglomerations and rare pyrite and chromite crystals (top left); cubic and framboidal pyrite agglomerations (top right); framboidal and cubic pyrite agglomerations and rare instances of titanite (middle left); jarosite crystals within silicified siltstone (middle right); cubic pyrite locked in a rock fragment (bottom left); fragments containing cubic pyrite and Ca-siderite, hosted in carbonated cement (bottom right).

Siltstone 4/3%

Sample as received

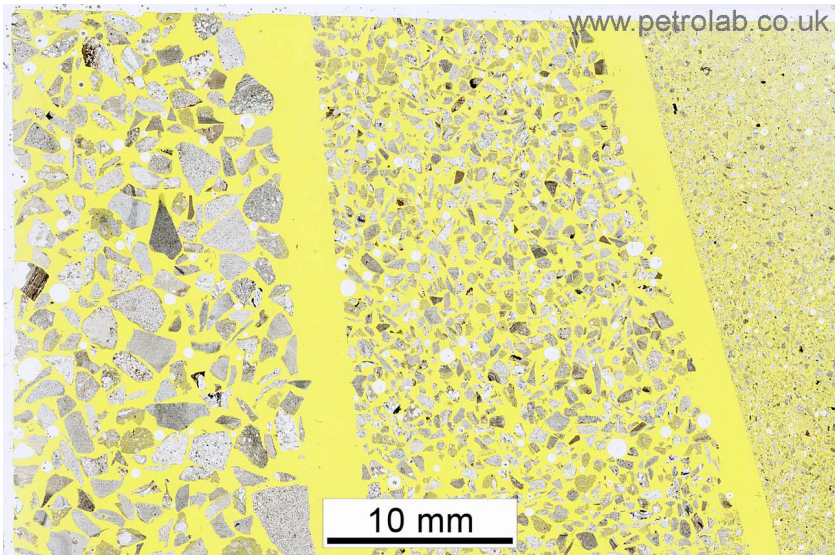
Sample Siltstone 4/3%		
Petrolab ID	**Date received**	**Type · properties**
#32070	08/10/2021	Crushed rock sample · 201 g

A **Sample Siltstone 4/3%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

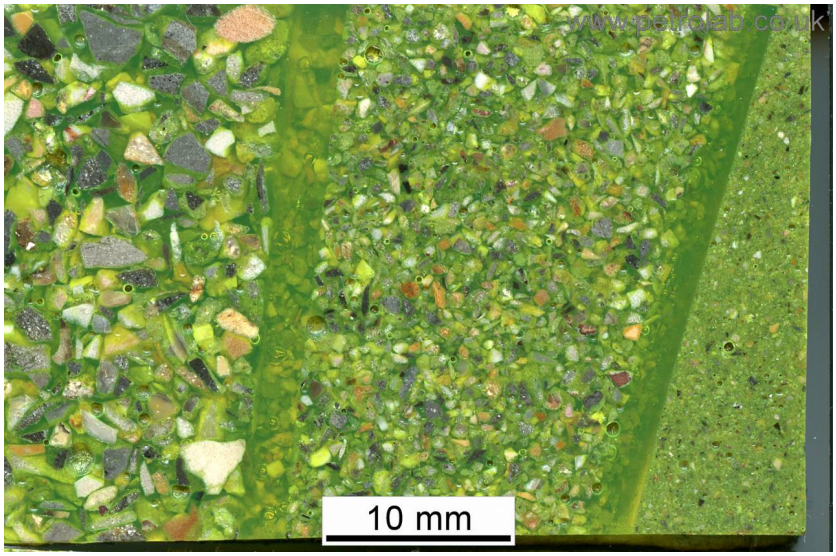
Section(s)



B **Sample Siltstone 4/3%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Siltstone 4/3%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Siltstone 4/3%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	51.6%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	27.7%
Orthoclase, or			
Calcite, cal	$CaCO_3$	2.70	7.1%
Albite, ab	$NaAlSi_3O_8$	2.62	3.5%
Portlandite, por	$Ca(OH)_2$	2.23	2.0%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)$	2.82	1.7%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.4%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	1.2%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	1.1%
Goethite, gth	$FeOOH$	4.27	0.5%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.5%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.3%
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	0.3%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.3%
Hematite, hem	Fe_2O_3	5.30	0.2%
Anatase, ant	TiO_2	2.40	0.2%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.1%
Rutile, rt	TiO_2	4.25	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

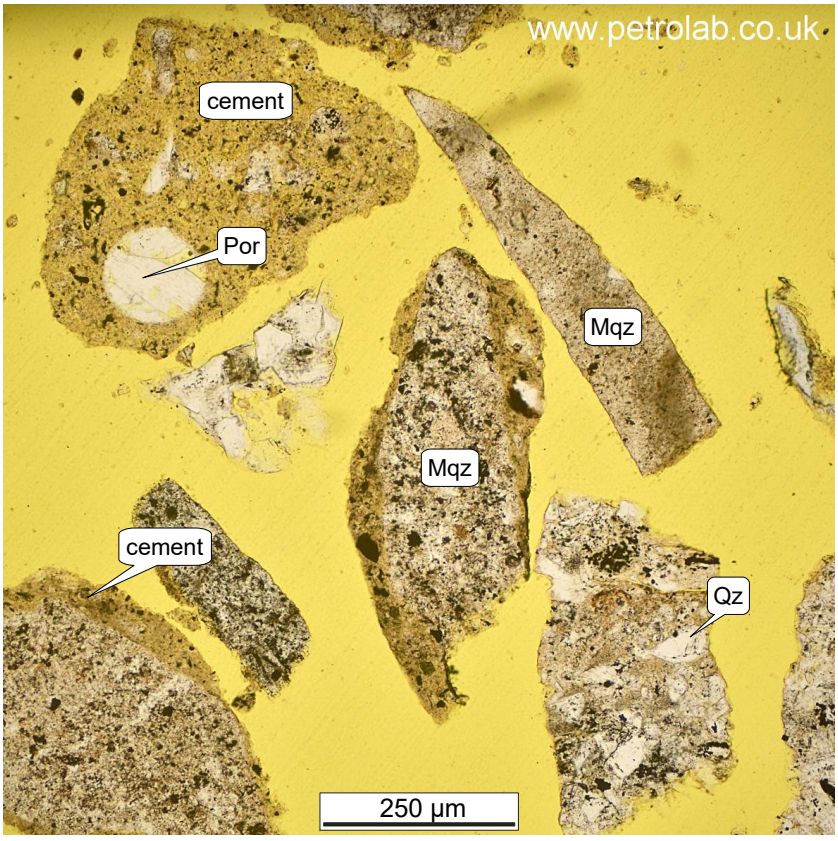
Sample Siltstone 4/3%			
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.1%
Zircon, zrn	$ZrSiO_4$	4.65	tr
Pyrite, py	FeS_2	5.01	tr
Marcasite, mrc	FeS_2	4.89	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Monazite, mnz	$(Ce,La,Nd,Th)PO_4$	5.15	tr

Sample summary

Sample Siltstone 4/3%

- The sample comprises angular silicified siltstone fragments, commonly thinly coated with carbonated and leached cement paste. Rare fragments contain iron oxide crust. Some fragments contain iron oxide/iron hydroxide replacement. There are also rare silicified sandstone fragments, vein quartz fragments and fragments composed entirely of microcrystalline quartz. Rare fragments containing feldspar grains show evidence of kaolinisation. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Rare secondary portlandite was observed within spherical voids and around aggregate edges coated in cement.
- Traces of coarser cubic and disseminated framboidal pyrite were observed in silicified fragments.
- SEM analysis detected some elevated (0.06 - 1.53%) As and (18.85%) S in hematite. The presence of S in hematite may indicate that these are secondary hematites that have partially adsorbed or fixed S from oxidising pyrite.

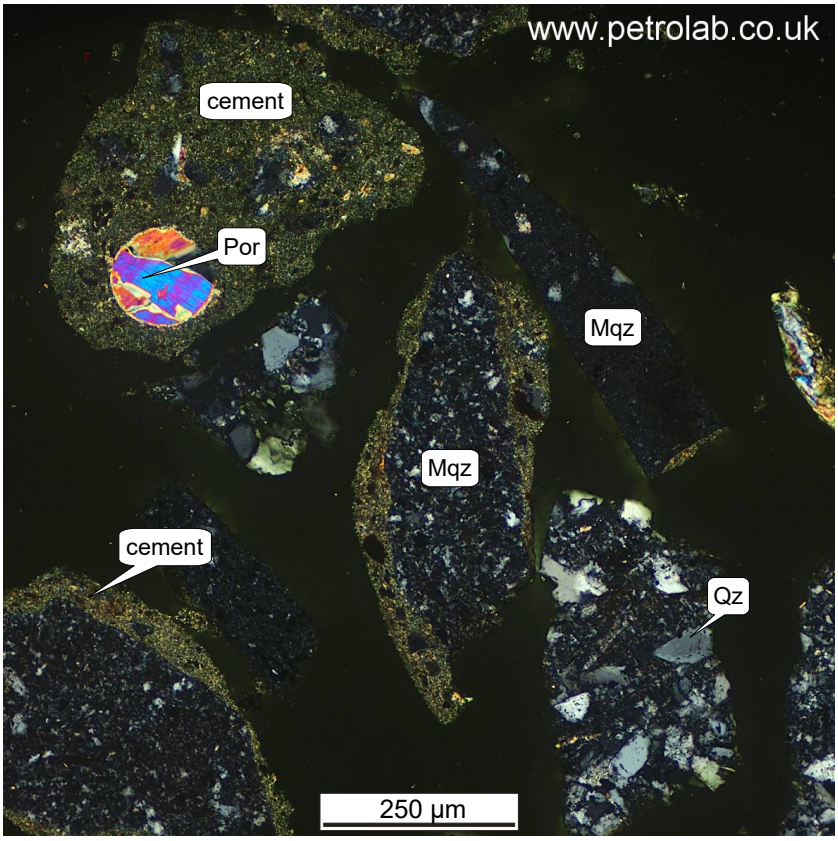
Photomicrographs



D **Sample Siltstone 4/3%**

Photomicrograph of sample showing typical fragments, commonly coated with cement, some containing secondary portlandite fill.

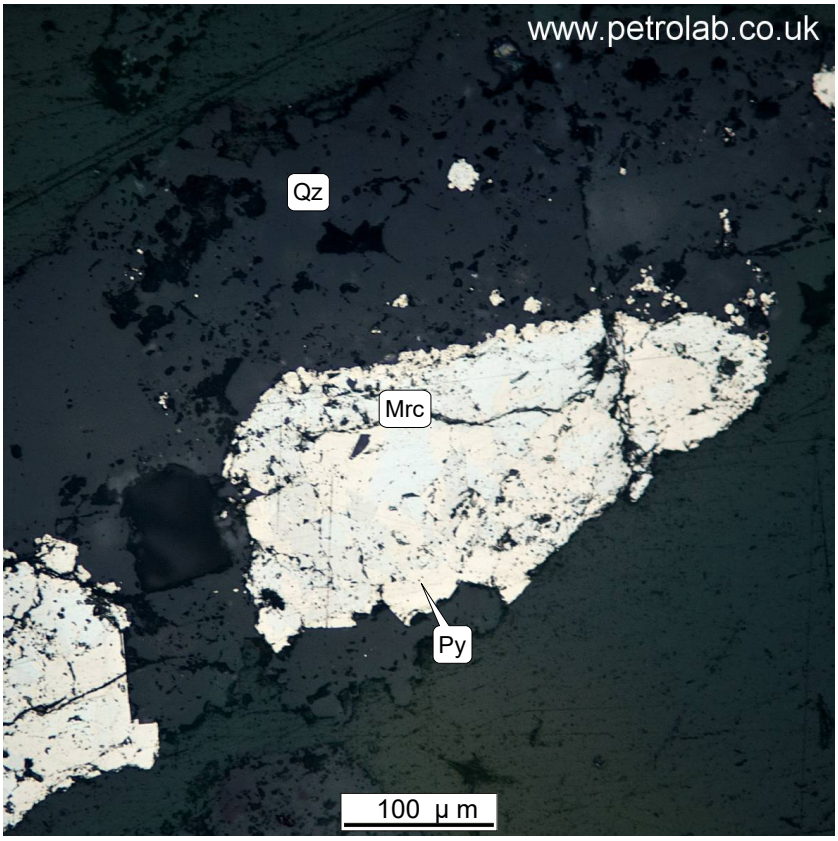
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x100



E **Sample Siltstone 4/3%**

Photomicrograph of sample showing typical fragments, commonly coated with cement, some containing secondary portlandite fill.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x100



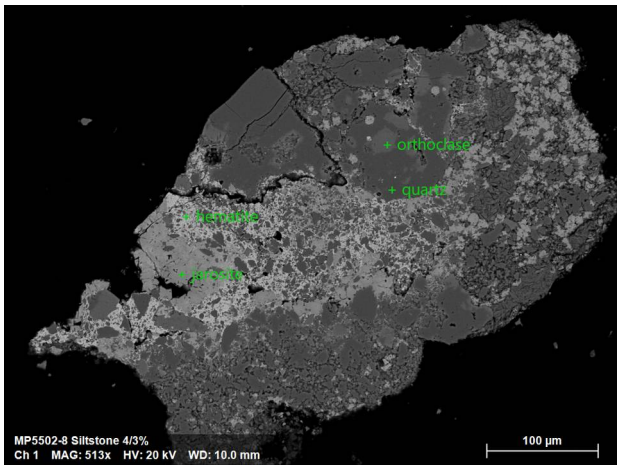
F **Sample Siltstone 4/3%**

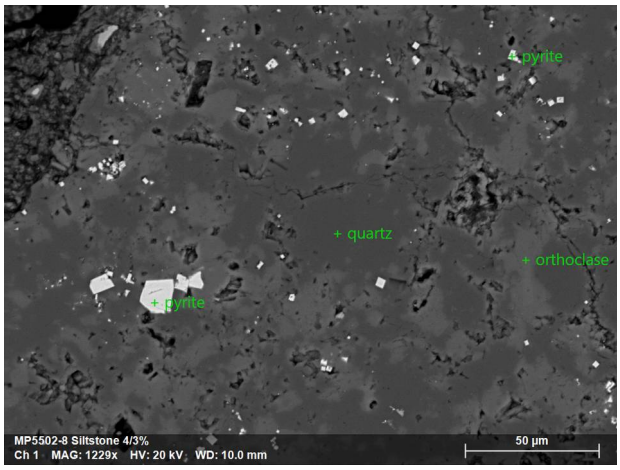
Photomicrograph showing locked pyrite-marcasite intergrown in a silicified rock fragment.

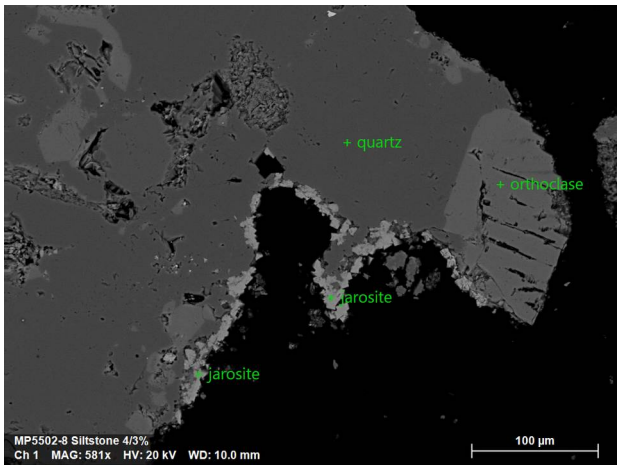
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x200

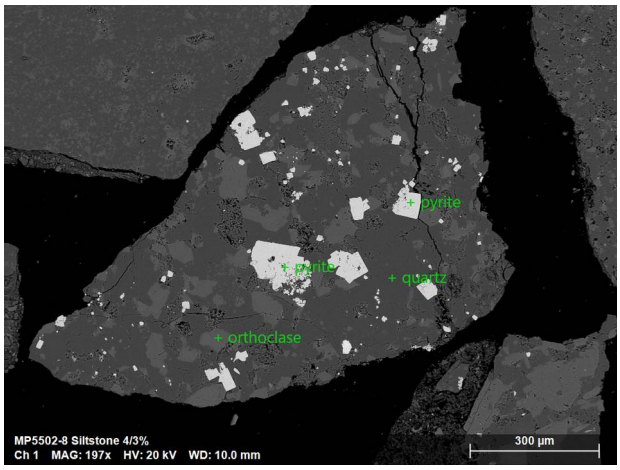
Manual SEM analysis

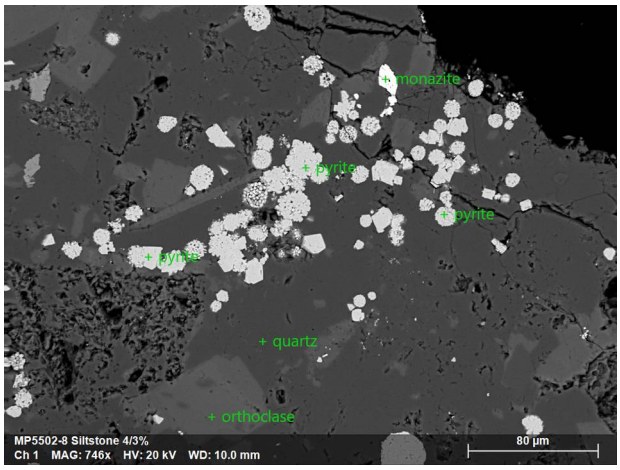
Table 9. BSE images of selected mineral phases for sample Siltstone 5%.

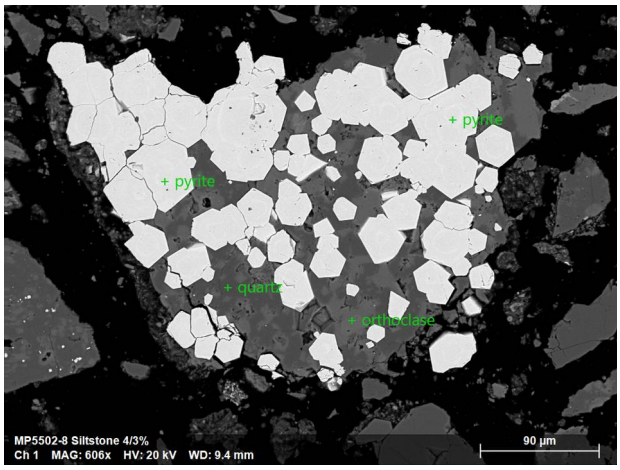












Images showing intergrown hematite and jarosite within silicified rock fragment (top left); disseminated pyrite locked in a rock fragment (top right); cubic jarosite crystals (possibly after pyrite), growing along the rim of a rock fragment (middle left); cubic pyrite crystals locked in a rock fragment (middle right); cubic and framboidal pyrite in association with monazite within a rock fragment (bottom left); euhedral pyrite in a rock fragment (bottom right).

Sandstone 5%

Sample as received

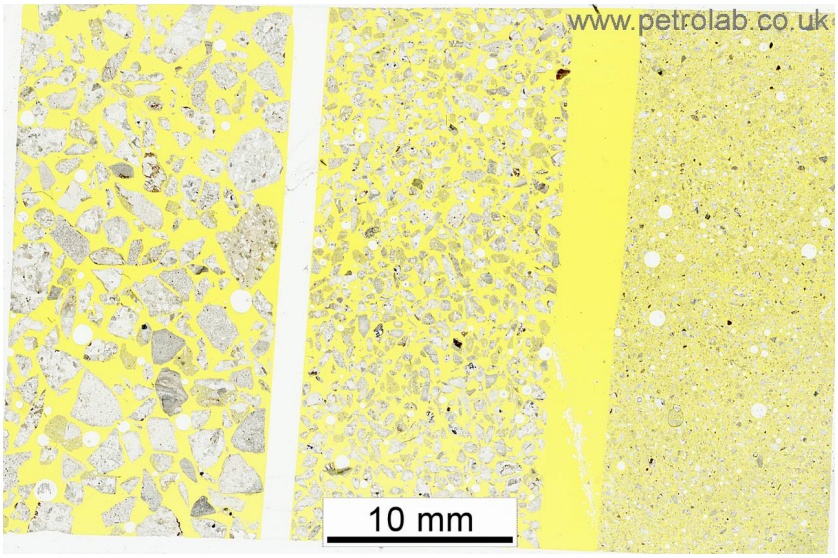
Sample Sandstone 5%		
Petrolab ID	**Date received**	**Type · properties**
#32071	08/10/2021	Crushed rock sample · 199g

A **Sample Sandstone 5%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

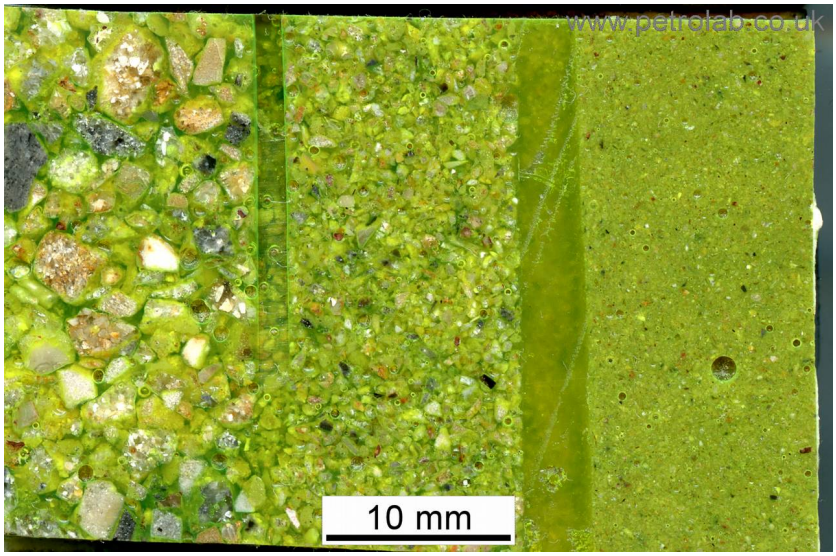
Section(s)



B **Sample Sandstone 5%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Sandstone 5%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Sandstone 5%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	50.0%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	29.3%
Orthoclase, or			
Albite, ab	$NaAlSi_3O_8$	2.62	6.5%
Calcite, cal	$CaCO_3$	2.70	4.6%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	3.5%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	2.4%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	1.7%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	1.4%
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	1.0%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	0.7%
Portlandite, por	$Ca(OH)_2$	2.23	0.5%
Goethite, gth	$FeOOH$	4.27	0.3%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.3%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.3%
Hematite, hem	Fe_2O_3	5.30	0.2%
Zircon, zrn	$ZrSiO_4$	4.65	0.2%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample Sandstone 5%			
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.1%
Rutile, rt	TiO_2	4.25	0.1%
Pyrite, py	FeS_2	5.01	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Titanite, ttn	$CaTiSiO_5$	3.48	tr

Sample summary

Sample Sandstone 5%

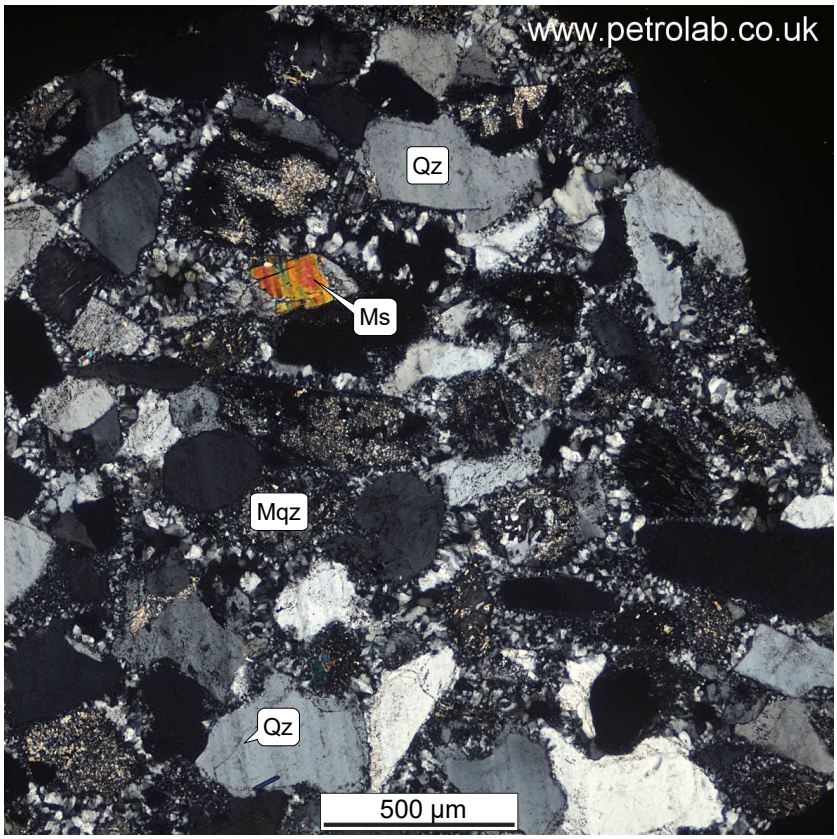
- The sample is composed of angular silicified sandstone fragments with microcrystalline silica replaced matrix containing quartz, slightly kaolinised alkali feldspar, plagioclase, muscovite and accessory phases. Fragments composed entirely of microcrystalline quartz are present. Only some sandstone fragments contain iron oxides or iron hydroxide veins. Rare coarse sandstone fragments are coated in cement. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Rare secondary portlandite was observed within spherical voids and around aggregate edges coated in cement.
- Trace cubic and framboidal pyrite was observed in some silicified sandstone fragments.
- SEM analysis detected some elevated (3.93 - 11.92%) As and (0.24 - 0.37%) Sb in pyrite, (0.89 - 2.01%) As and (0.13 - 0.57%) S in hematite. The presence of As and S in hematite may indicate that these are secondary hematites that have partially adsorbed or fixed S from oxidising pyrite.

Photomicrographs

D **Sample Sandstone 5%**

Photomicrograph of sample showing silicified sandstone fragment.

Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



E **Sample Sandstone 5%**

Photomicrograph of sample showing silicified sandstone fragment.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

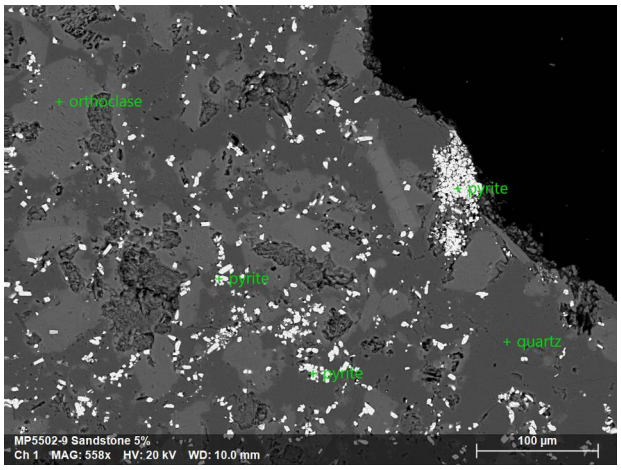
F **Sample Sandstone 5%**

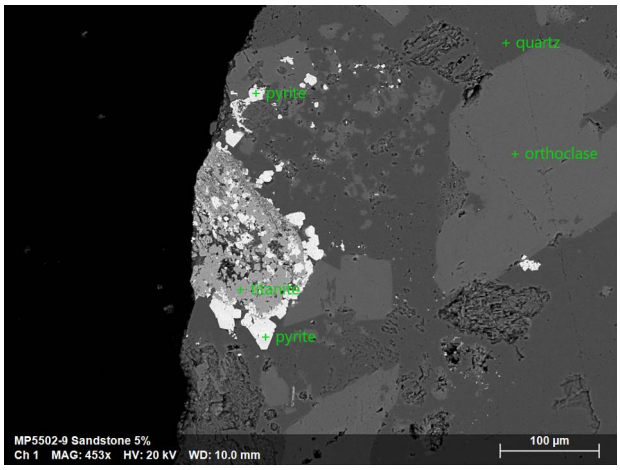
Photomicrograph showing pyrite in association with titanite.

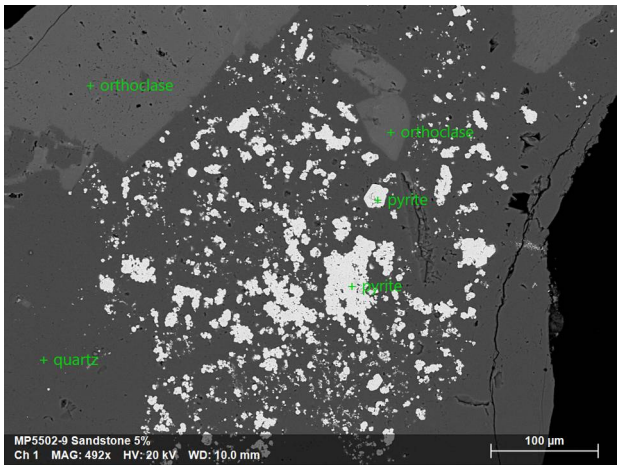
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x400

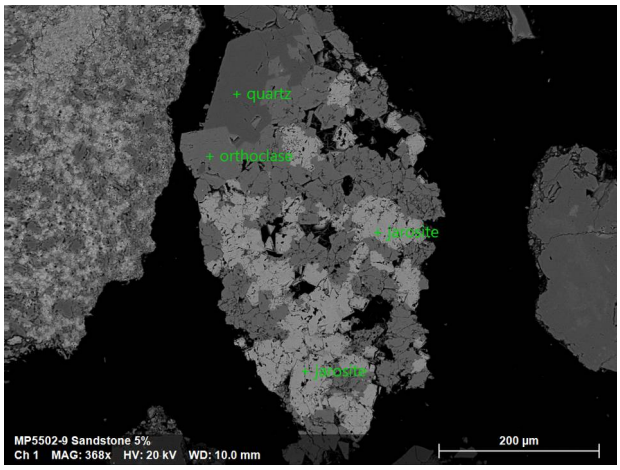
Manual SEM analysis

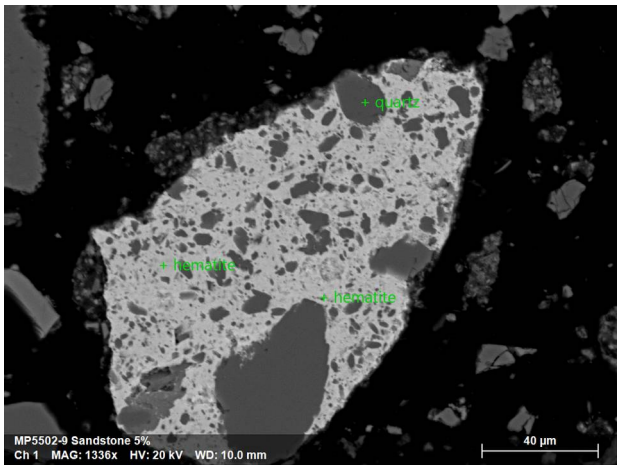
Table 10. BSE images of selected mineral phases for sample Sandstone 5%.

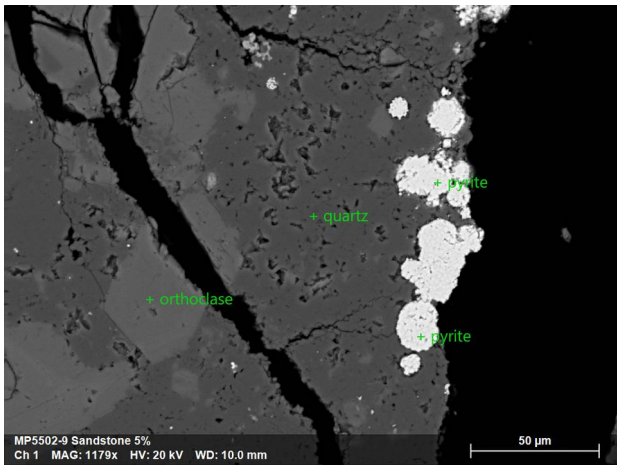












Images showing disseminated pyrite crystals in a rock fragment (top left); partially oxidised pyrite (top right); disseminated cubic pyrite crystals (middle left); jarosite intergrowths within orthoclase crystals (middle right); pervasively hematised sandstone fragment (bottom left); framboidal pyrite along the edge of a rock fragment (bottom right).

Sandstone 7%

Sample as received

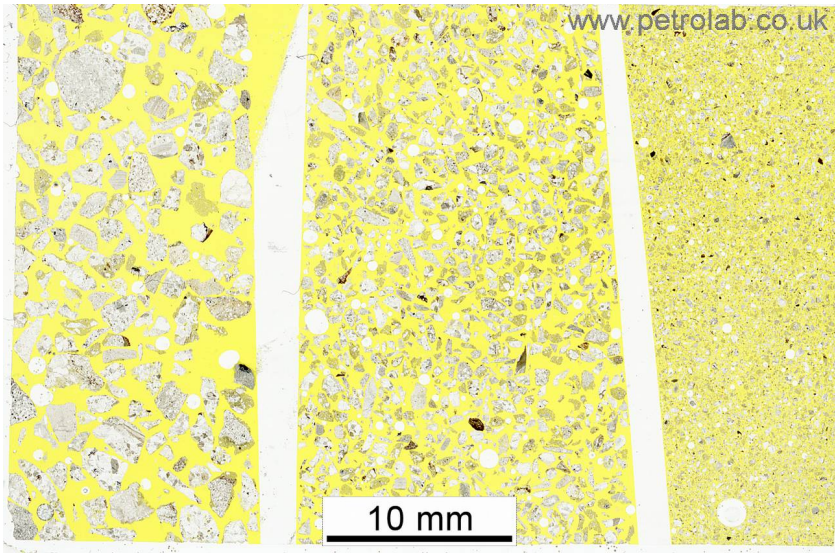
Sample Sandstone 7%		
Petrolab ID	**Date received**	**Type · properties**
#32072	08/10/2021	Crushed rock sample · 197 g

A **Sample Sandstone 7%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

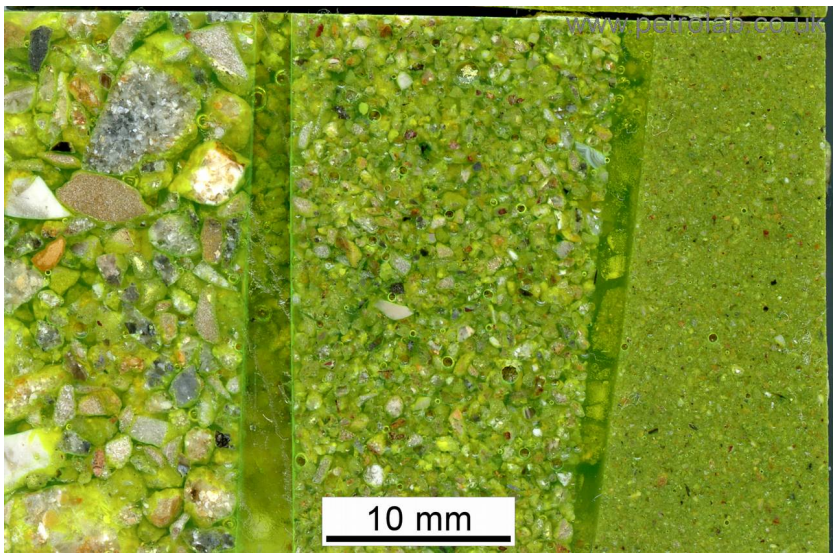
Section(s)



B **Sample Sandstone 7%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Sandstone 7%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Sandstone 7%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	47.2%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	27.2%
Orthoclase, or			
Calcite, cal	$CaCO_3$	2.70	6.4%
Albite, ab	$NaAlSi_3O_8$	2.62	5.4%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	2.9%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	2.7%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	2.2%
Portlandite, por	$Ca(OH)_2$	2.23	1.6%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	1.1%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.0%
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	0.9%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.4%
Goethite, gth	$FeOOH$	4.27	0.4%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.3%
Hematite, hem	Fe_2O_3	5.30	0.2%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.1%
Zircon, zrn	$ZrSiO_4$	4.65	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

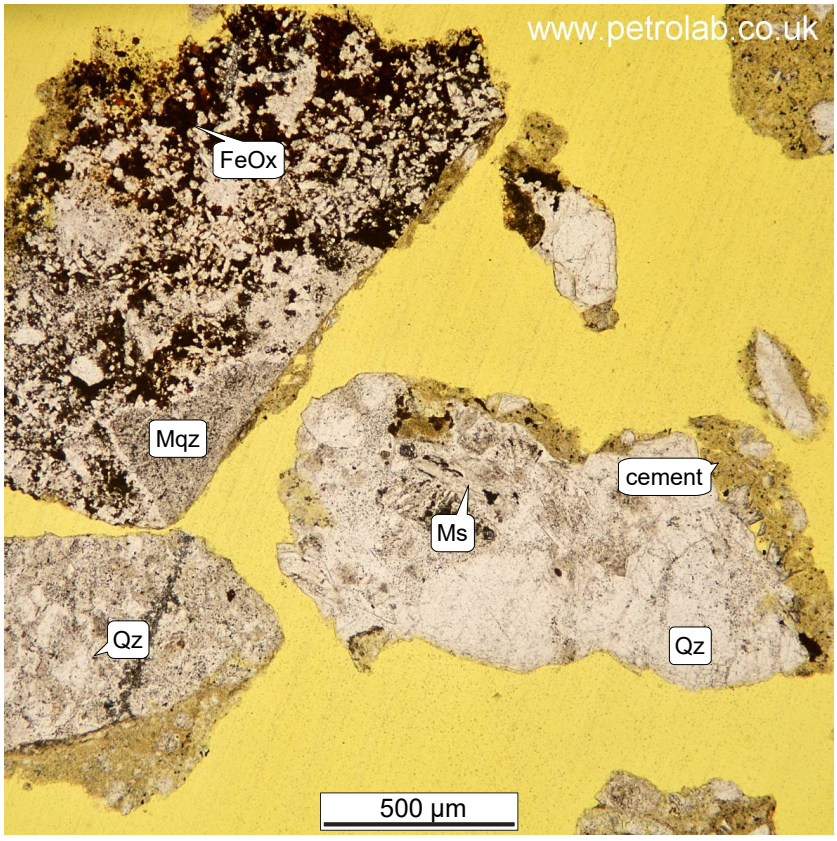
Sample Sandstone 7%			
Rutile, rt	TiO_2	4.25	0.1%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.1%
Pyrite, py	FeS_2	5.01	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Titanite, ttn	$CaTiSiO_5$	3.48	tr
Titanomagnetite, ti-mag	$Fe^{2+}(Fe^{3+},Ti)_2O_4$	5.15	tr

Sample summary

Sample Sandstone 7%

- The sample is composed of angular silicified sandstone fragments with microcrystalline silica replaced matrix containing quartz, slightly kaolinised alkali feldspar, plagioclase, muscovite and accessory phases. Fragments composed entirely of microcrystalline quartz are present. Only some sandstone fragments contain iron oxides or iron hydroxide veins. Rare coarse sandstone fragments are coated in cement. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Rare secondary portlandite was observed within spherical voids and around aggregate edges coated in cement.
- Trace cubic and framboidal pyrite was observed in some silicified sandstone fragments.
- SEM analysis detected some elevated (0.65%) As and (0.26%) Sb in pyrite, 1.17% As in jarosite, 0.39% S in magnetite and (0.59 - 0.73%) As and (0.42 - 0.55%) S in hematite. The presence of As and S in hematite and magnetite may indicate that these are secondary iron oxides that have partially adsorbed or fixed S from oxidising pyrite.

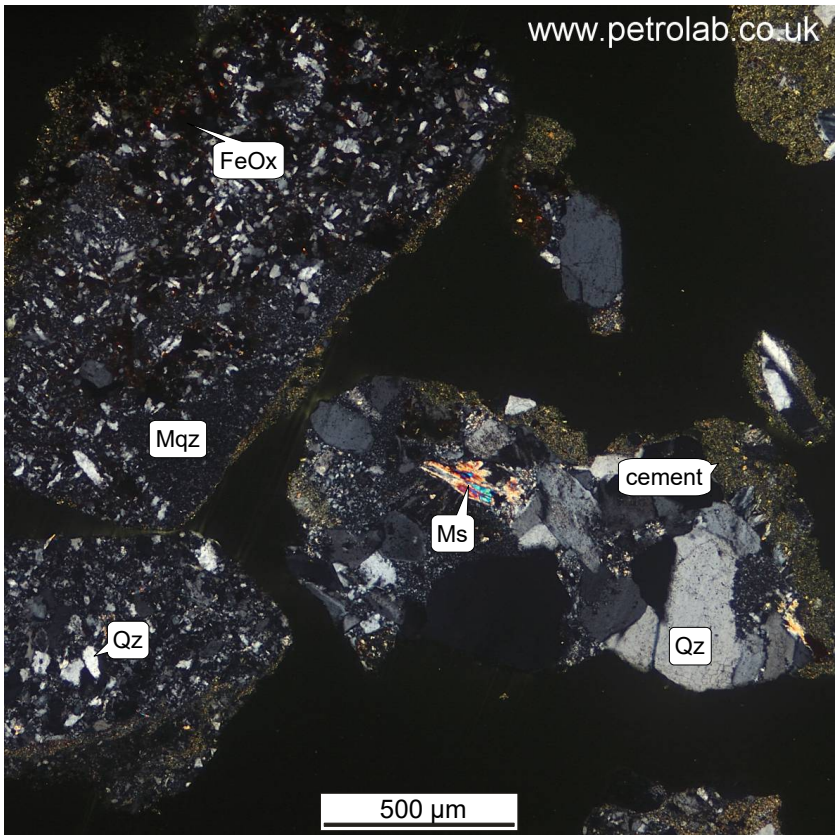
Photomicrographs



D **Sample Sandstone 7%**

Photomicrograph of sample showing sandstone fragment and hematised and silicified rock fragment. Some fragments are thinly coated with cement.

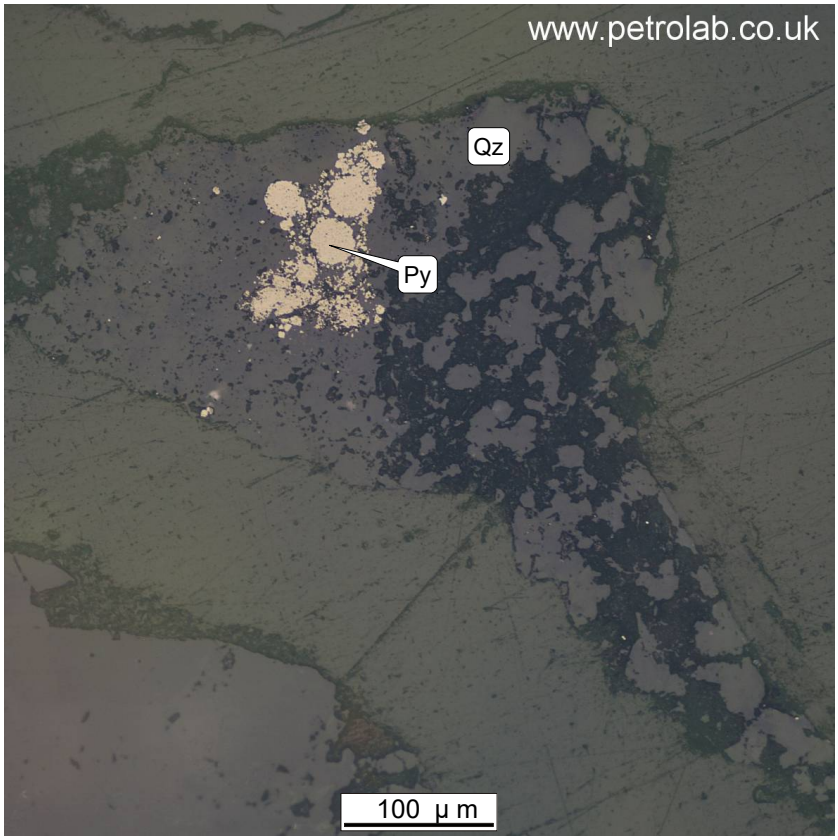
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



E **Sample Sandstone 7%**

View of previous image in cross polarised light.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



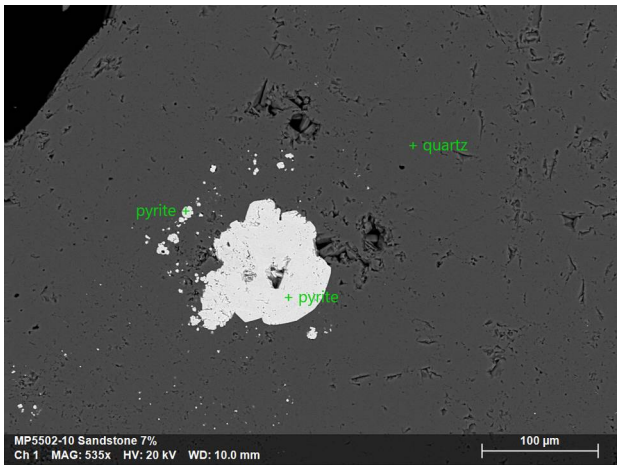
F **Sample Sandstone 7%**

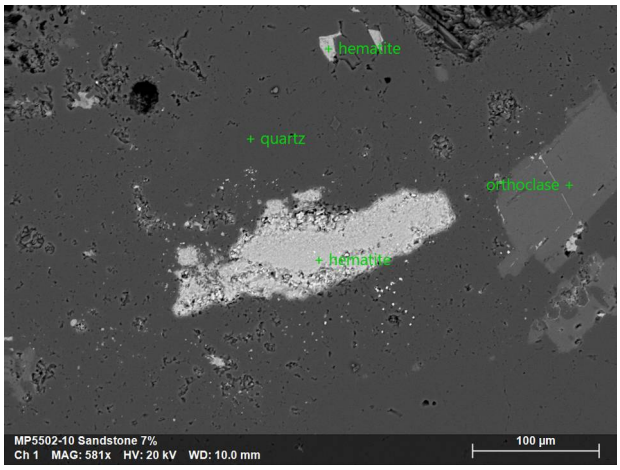
Photomicrograph showing framboidal pyrite locked in a sandstone fragment.

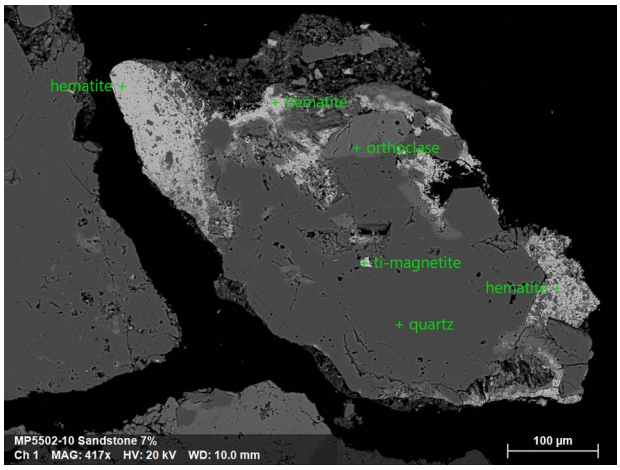
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x200

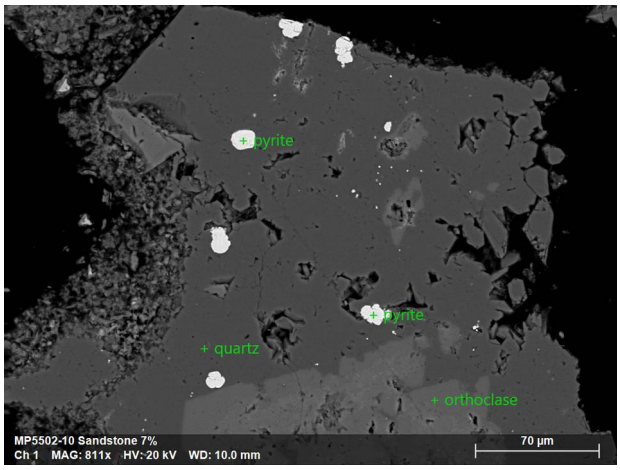
Manual SEM analysis

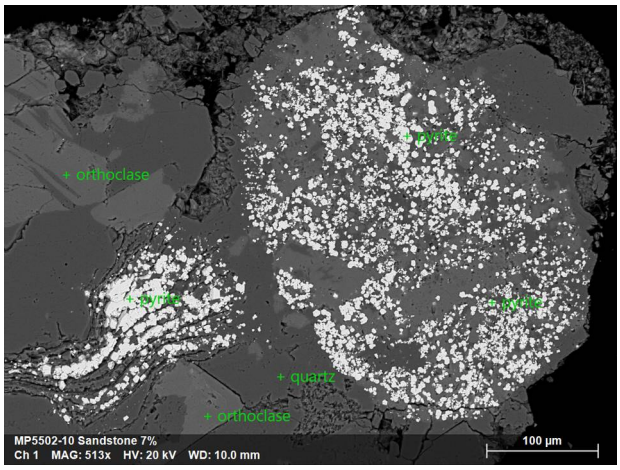
Table 11. BSE images of selected mineral phases for sample Siltstone 7%.

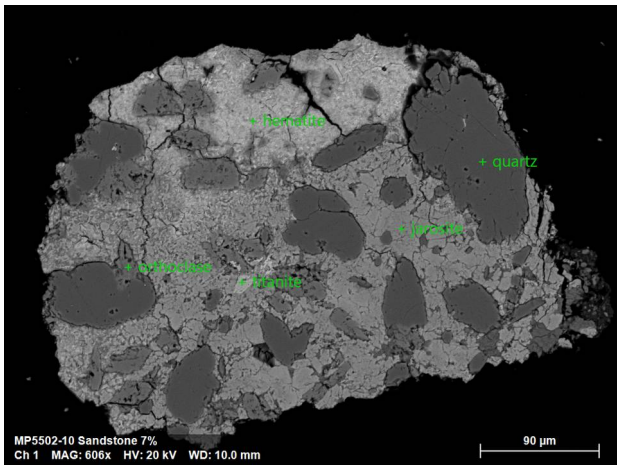












Images showing pyrite inclusion in a quartz fragment (top left); anhedral hematite after sulphides (top right); hematite crust and rare instance of titanomagnetite (middle left); framboidal pyrite in a rock fragment (middle right); abundant cubic and framboidal pyrite mixture within a rock fragment (bottom left); secondary replacement of hematite and jarosite with rare instance of titanite (bottom right).

Sandstone 4/3%

Sample as received

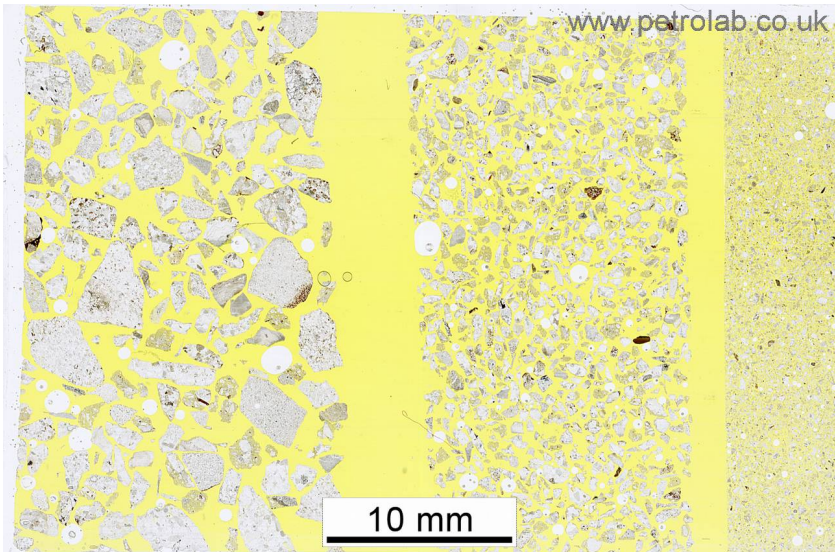
Sample Sandstone 4/3%		
Petrolab ID	**Date received**	**Type · properties**
#32073	08/10/2021	Crushed rock sample · 203 g

A **Sample Sandstone 4/3%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

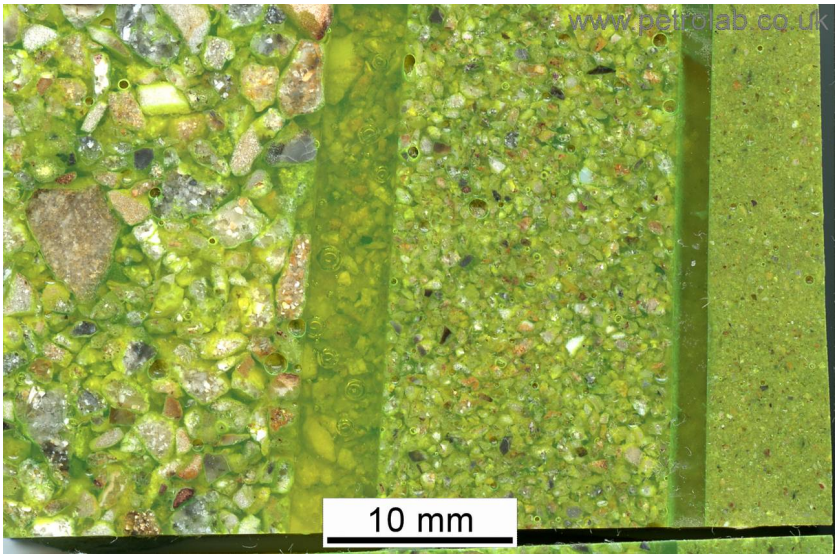
Section(s)



B **Sample Sandstone 4/3%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Sandstone 4/3%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Sandstone 4/3%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	45.5%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	28.1%
Orthoclase, or			
Albite, ab	$NaAlSi_3O_8$	2.62	6.3%
Calcite, cal	$CaCO_3$	2.70	6.0%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	4.2%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	2.6%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	2.2%
Portlandite, por	$Ca(OH)_2$	2.23	1.1%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.1%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	1.1%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.5%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.4%
Goethite, gth	FeOOH	4.27	0.3%
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	0.2%
Hematite, hem	Fe_2O_3	5.30	0.2%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.2%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.2%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample Sandstone 4/3%			
Rutile, rt	TiO_2	4.25	0.1%
Zircon, zrn	$ZrSiO_4$	4.65	0.0%
Pyrite, py	FeS_2	5.01	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Monazite, mnz	$(Ce,La,Nd,Th)PO_4$	5.15	tr

Sample summary

Sample Sandstone 4/3%

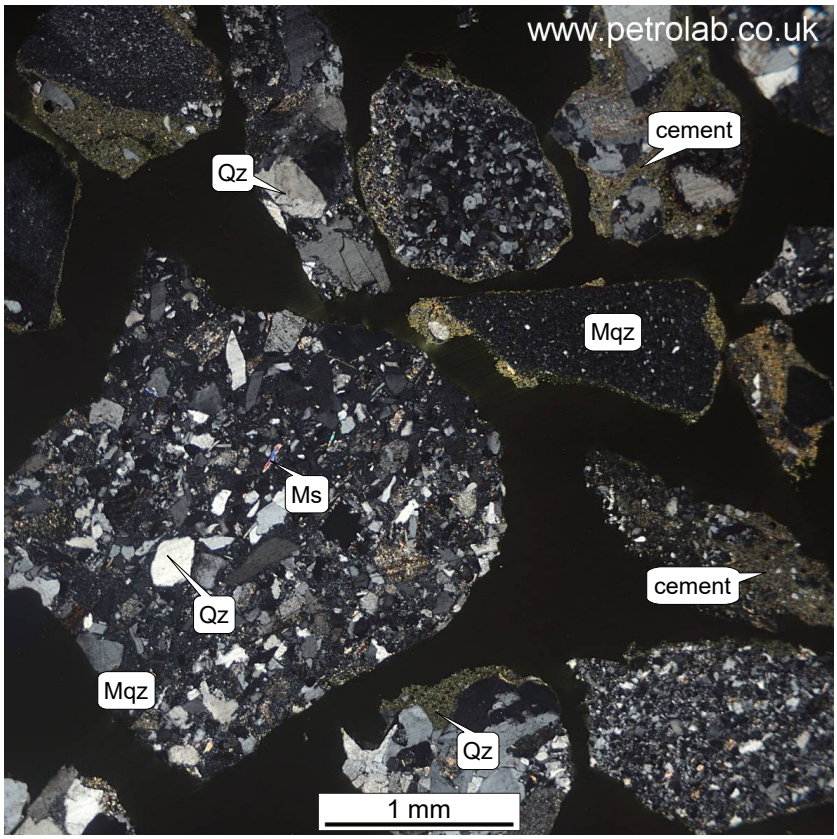
- The sample is composed of angular silicified sandstone fragments with microcrystalline silica replaced matrix containing quartz, slightly kaolinised alkali feldspar, plagioclase, muscovite and accessory phases. Fragments composed entirely of microcrystalline quartz are also present. Only some sandstone fragments contain iron oxides or iron hydroxide veins. Rare coarse sandstone fragments are coated in cement. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Rare secondary portlandite was observed within spherical voids and around aggregate edges coated in cement.
- Trace pyrite was observed in some silicified sandstone fragments.
- SEM analysis detected some elevated (0.16 - 2.05%) As and (0.29 - 0.56%) Sb in pyrite and 3.30% S and 1.36% As hosted in hematite. The presence of As and S in hematite may indicate that these are secondary hematites that have partially adsorbed or fixed S from oxidising pyrite.

Photomicrographs

D **Sample Sandstone 4/3%**

Photomicrograph of sample showing main phases composed of microcrystalline silica fragments. Some fragments are coated with cement.

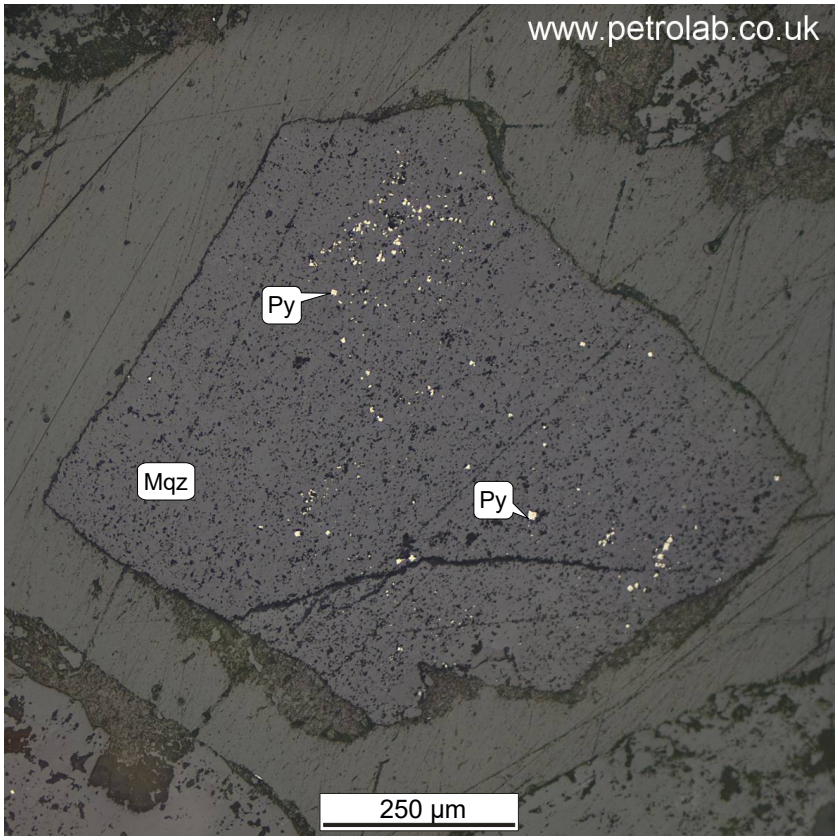
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x25



E **Sample Sandstone 4/3%**

Photomicrograph of sample showing sandstone and microcrystalline silica fragments, some thinly coated with cement.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x25



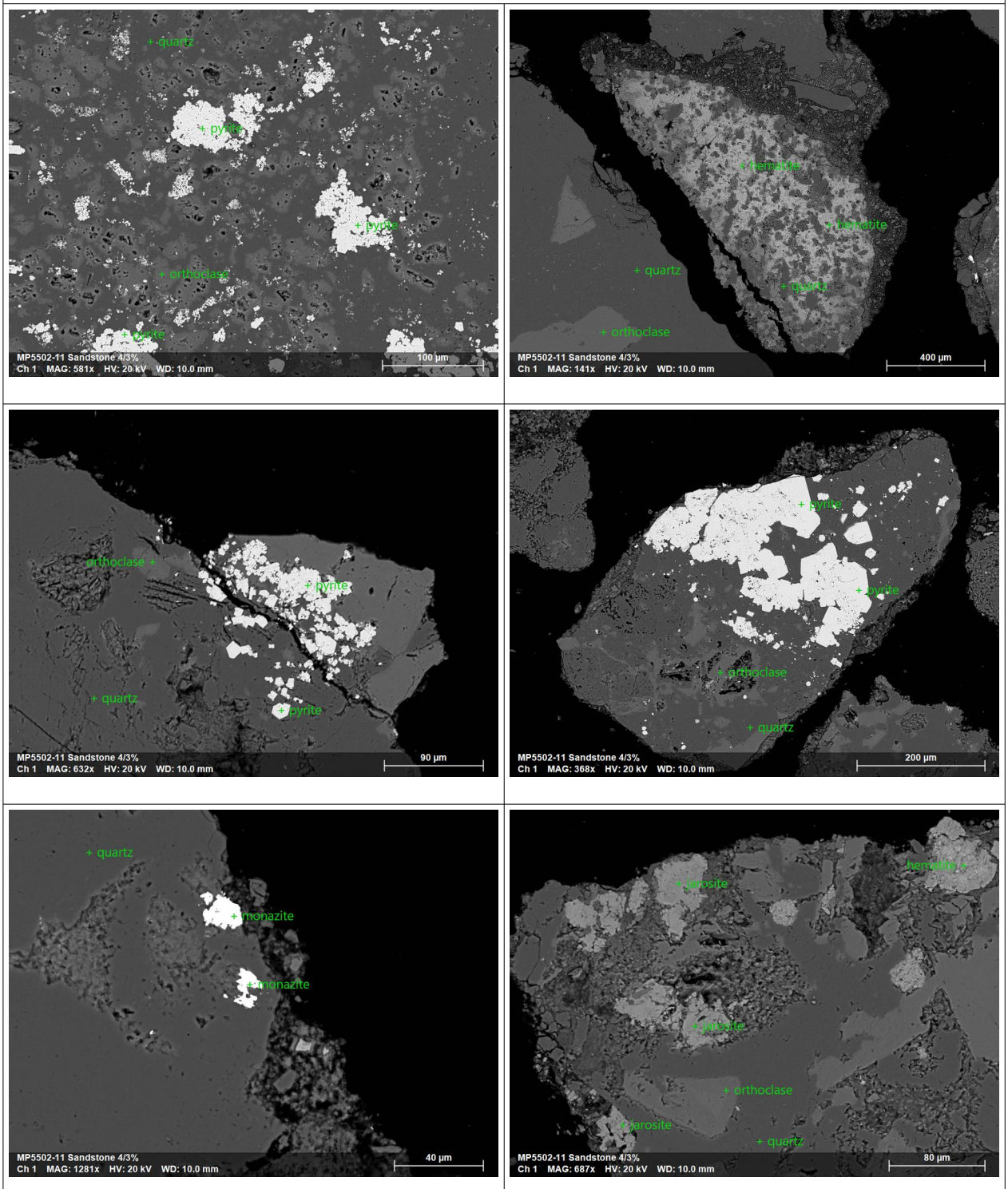
F **Sample Sandstone 4/3%**

Photomicrograph showing fine, disseminated pyrite in a silicified fragment.

Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

Manual SEM analysis

Table 12. BSE images of selected mineral phases for sample Sandstone 4/3%.



Images showing pyrite clusters within silicified rock fragment (top left); hematised rock fragment (top right); cubic and framboidal pyrite crystals (middle left); cubic pyrite crystals locked in a rock fragment (middle right); monazite inclusions in quartz (bottom left); patches of secondary hematite and jarosite (bottom right).

Sinter 5%

Sample as received

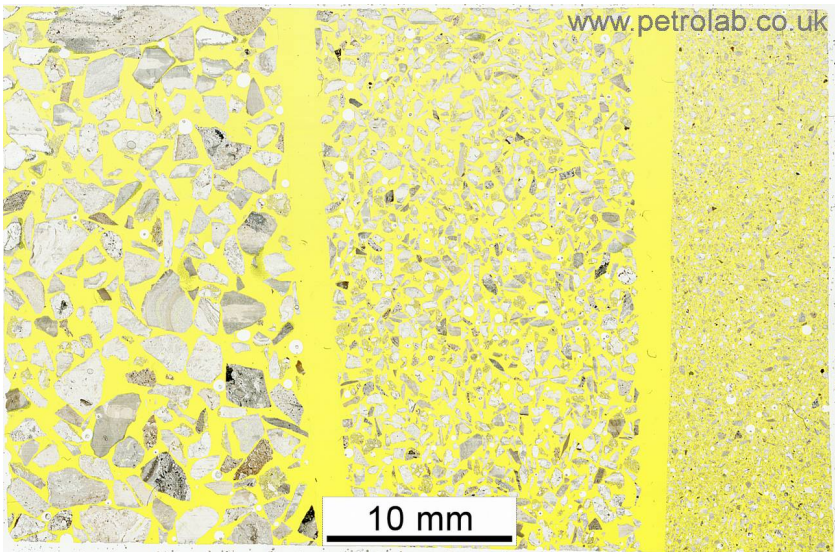
Sample Sinter 5%		
Petrolab ID	**Date received**	**Type · properties**
#32074	08/10/2021	Crushed rock sample · 204 g

A **Sample Sinter 5%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

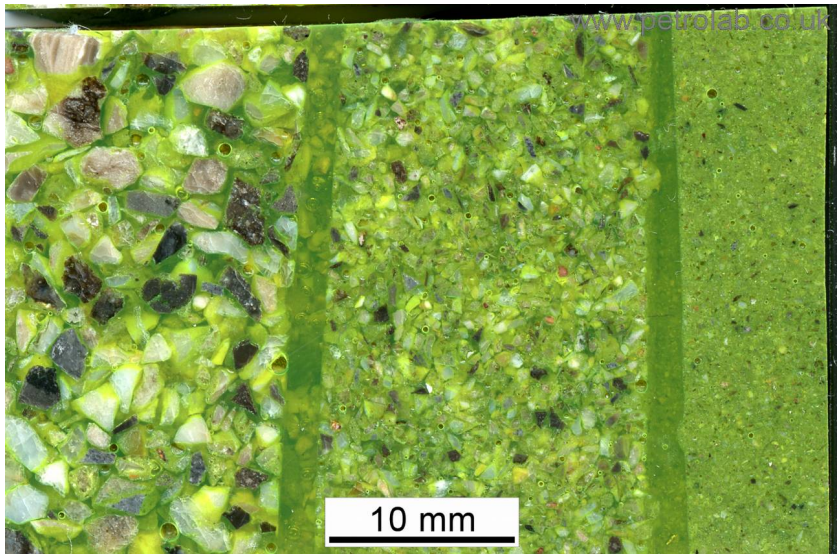
Section(s)



B **Sample Sinter 5%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Sinter 5%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Sinter 5%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	75.6%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	14.0%
Orthoclase, or			
Calcite, cal	$CaCO_3$	2.70	5.2%
Portlandite, por	$Ca(OH)_2$	2.23	1.0%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.9%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	0.8%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	0.4%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.4%
Albite, ab	$NaAlSi_3O_8$	2.62	0.4%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	0.3%
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	0.2%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	0.2%
Anatase, ant	TiO_2	2.40	0.1%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.1%
Zircon, zrn	$ZrSiO_4$	4.65	0.1%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.1%
Rutile, rt	TiO_2	4.25	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample Sinter 5%			
Hematite, hem	Fe_2O_3	5.30	0.1%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	tr
Pyrite, py	FeS_2	5.01	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Baryte, brt	$BaSO_4$	4.48	tr
Ca-siderite, Ca-sd	$(Fe^{++},Ca)CO_3$	3.96	tr

Sample summary

Sample Sinter 5%

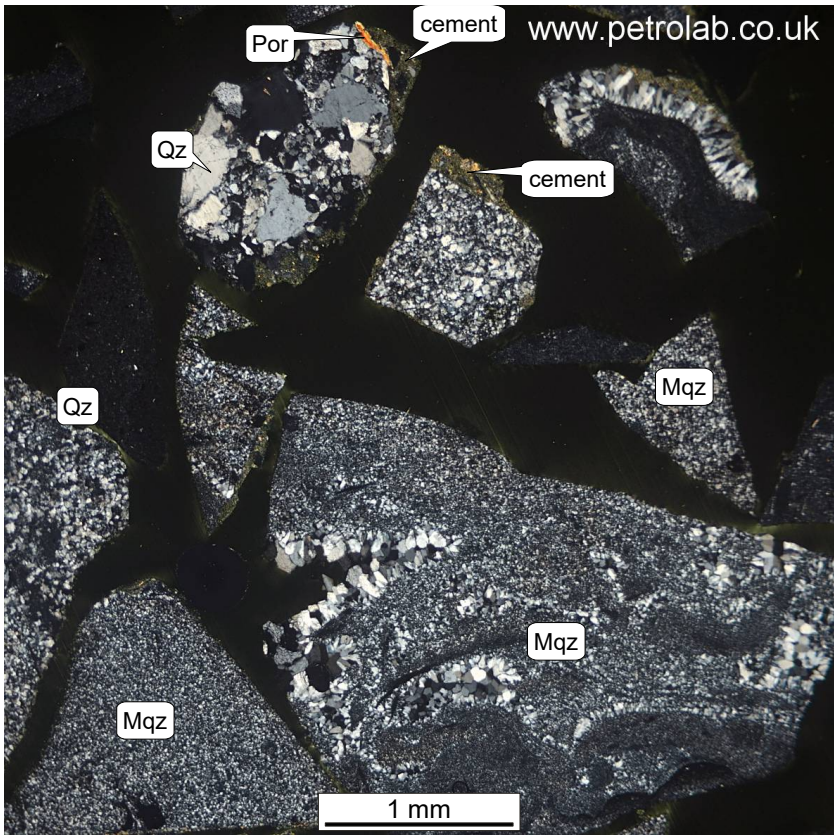
- The sample comprises angular rocks fragments composed of microcrystalline quartz, relicts of feldspar grains and accessory phases. There are rare instances of silicified sandstone fragments, iron oxide stained fragments, rare iron oxide crust on some fragments or disseminated iron oxide within rock fragments. Some fragments contain prismatic quartz crystals, formed in the rock vugs. Rare fragments contain disseminated pyrite or small agglomerations of framboidal pyrite. Many fragments, especially those in the finer fractions, are coated in partially leached and completely carbonated cement. Tabular portlandite crystals are usually observed within such cement coatings or around rock fragments. Spherical voids filled with coarse portlandite were also observed, usually within cement patches or liberated within finer grains. Rare iron oxide grains were observed to be locked within the cement paste.
- SEM analysis detected very rare instances of 0.54% S in hematite and 0.66% S in Ca-siderite. The presence of S in hematite and Ca-siderite may indicate that these are secondary minerals that have partially adsorbed or fixed S from oxidising pyrite.

Photomicrographs

D **Sample Sinter 5%**

Photomicrograph of sample showing main phases comprised of microcrystalline silica fragments. Some fragments are thinly coated with cement, which contain secondary portlandite growths.

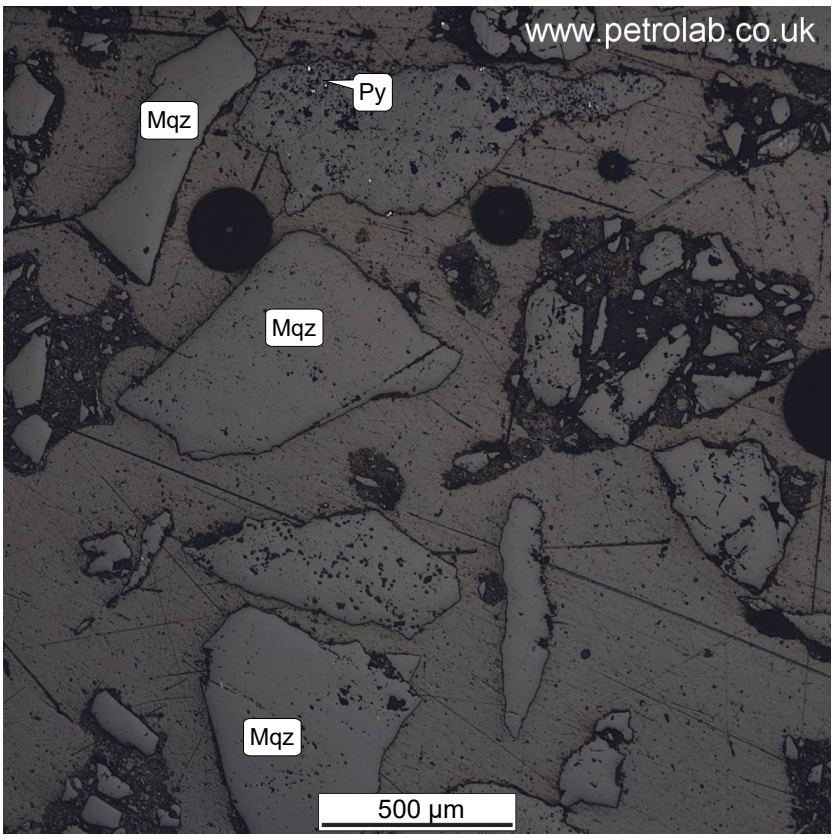
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x25



E **Sample Sinter 5%**

View of previous image in cross polarised light.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x25



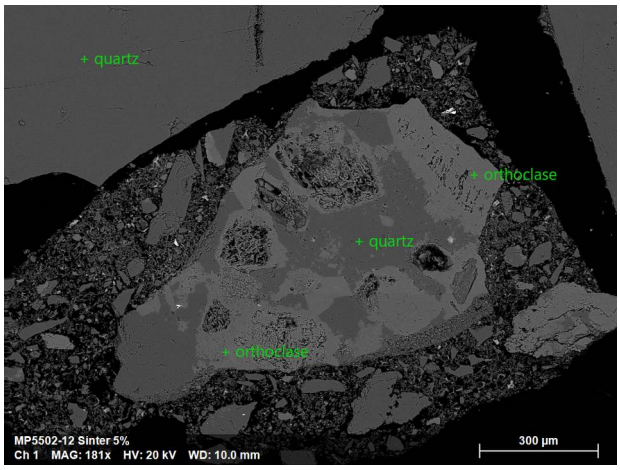
F **Sample Sinter 5%**

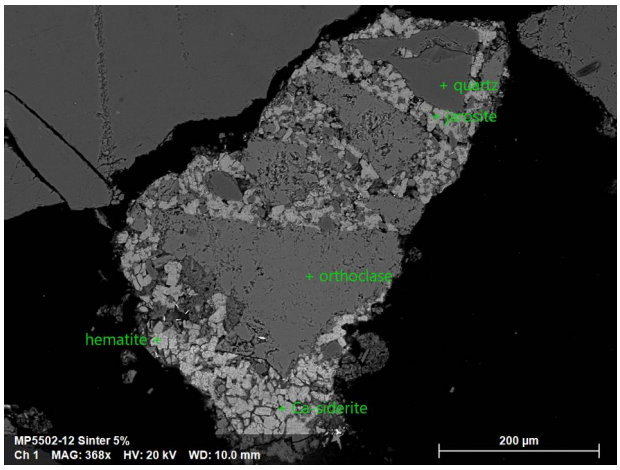
Photomicrograph of sample showing barren fragments, rarely containing fine, disseminated pyrite.

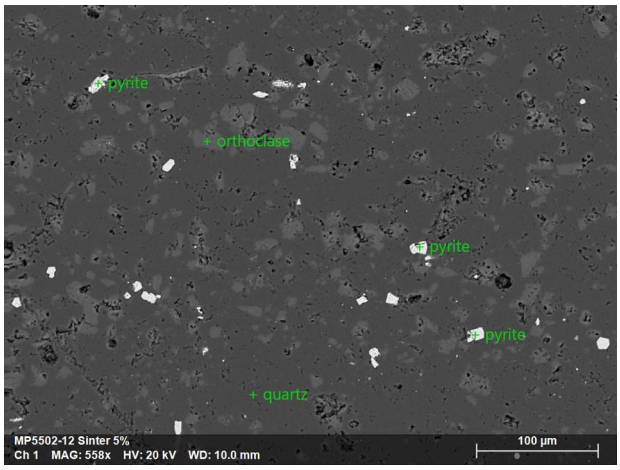
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x50

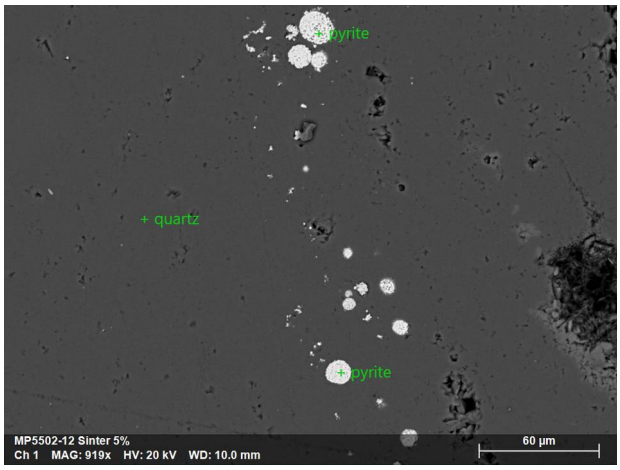
Manual SEM analysis

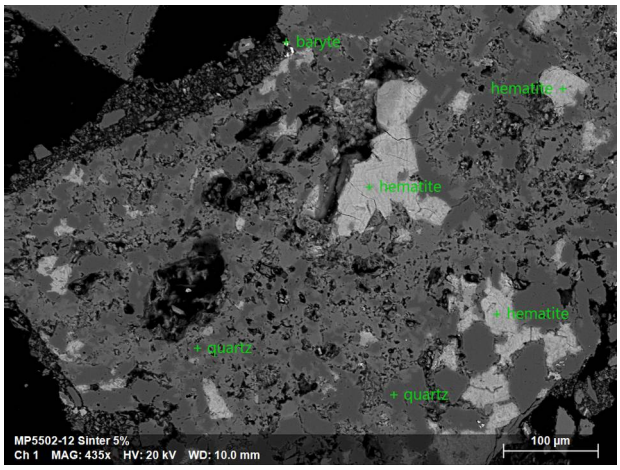
Table 13. BSE images of selected mineral phases for sample Sinter 5%.

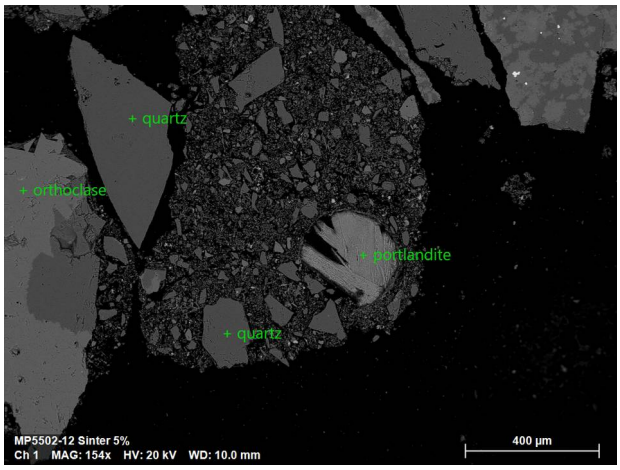












Images showing silicified fragment containing relict feldspar crystals surrounded by rock fragments and minerals bound together by carbonated cement (top left); coarser quartz and orthoclase grains surrounded by secondary hematite, jarosite and Ca-siderite growths (top right); disseminated pyrite in a rock fragment (middle left); framboids of pyrite locked in quartz fragment (middle right); quartz-hematite fragment containing rare baryte inclusions (bottom left); rock fragments cemented by cementitious paste with spherical void filled by portlandite crystals (bottom right).

Sinter 7%

Sample as received

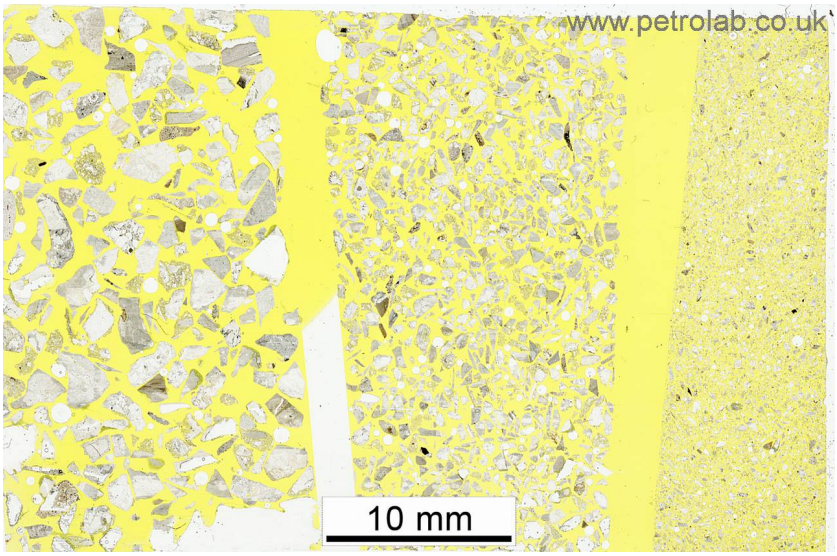
Sample Sinter 7%		
Petrolab ID	**Date received**	**Type · properties**
#32075	08/10/2021	Crushed rock sample · 144 g

A **Sample Sinter 7%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

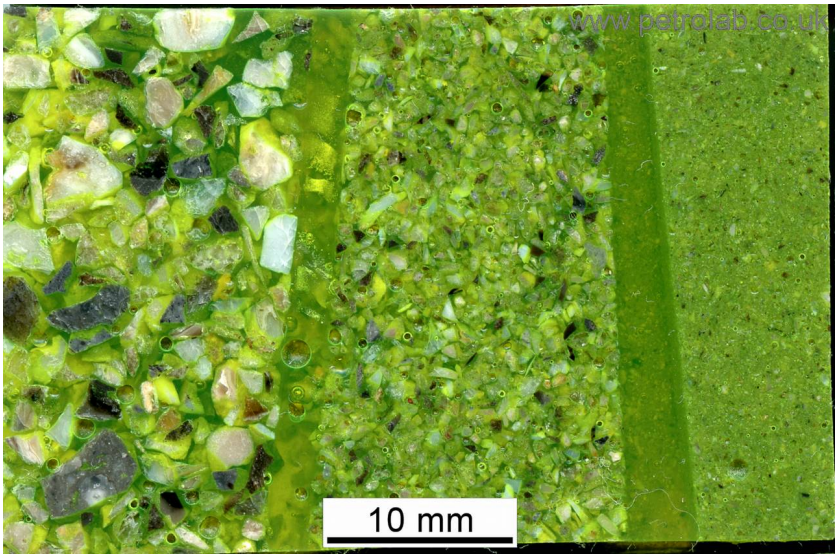
Section(s)



B **Sample Sinter 7%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Sinter 7%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Sinter 7%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	72.2%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	11.1%
Orthoclase, or			
Calcite, cal	$CaCO_3$	2.70	6.6%
Portlandite, por	$Ca(OH)_2$	2.23	2.4%
Anorthite, an	$CaAl_2Si_2O_8$	2.73	2.2%
Albite, ab	$NaAlSi_3O_8$	2.62	2.1%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	0.9%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	0.6%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.6%
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	0.4%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	0.2%
Goethite, gth	FeOOH	4.27	0.2%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	0.2%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.2%
Rutile, rt	TiO_2	4.25	0.1%
Zircon, zrn	$ZrSiO_4$	4.65	0.1%
Anatase, ant	TiO_2	2.40	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

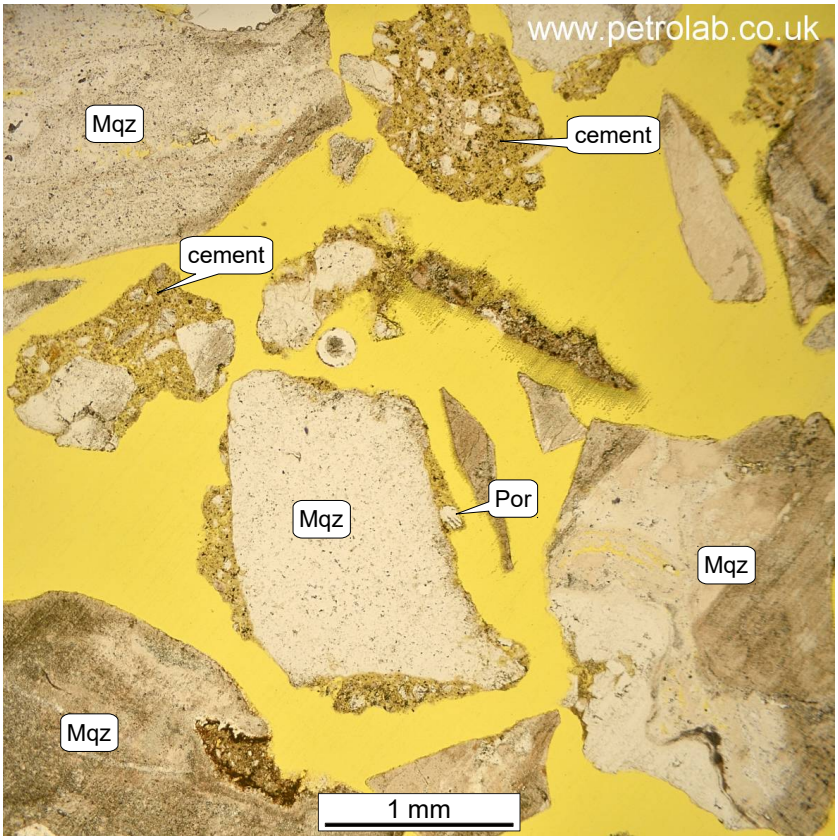
Sample Sinter 7%			
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.1%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.1%
Pyrite, py	FeS_2	5.01	tr
Jarosite, jrs	$KFe^{+++}{}_3(SO_4)_2(OH)_6$	3.09	tr
Ca-siderite, Ca-sd	$(Fe^{++},Ca)CO_3$	3.96	tr

Sample summary

Sample Sinter 7%

- The sample comprises rocks fragments composed of microcrystalline quartz, relicts of feldspar grains and accessory phases. There are rare instances of silicified sandstone fragments, iron oxide stained fragments or disseminated iron oxide within rock fragments. Some fragments contain acicular quartz crystals, formed in empty vugs. Some fragments contain rare disseminated pyrite or agglomerations of framboidal pyrite. Many fragments, especially in finer size fractions are coated in cement. The cement is carbonated and in many cases leached. The cement coating additionally contains rare grains of calcite and iron oxides. Secondary portlandite was observed within spherical voids and around aggregate edges coated in cement.
- SEM analysis detected very rare instances of 1.02% S in Ca-siderite. The presence of S in Ca-siderite may indicate that these are secondary minerals that have partially adsorbed or fixed S from oxidising pyrite.

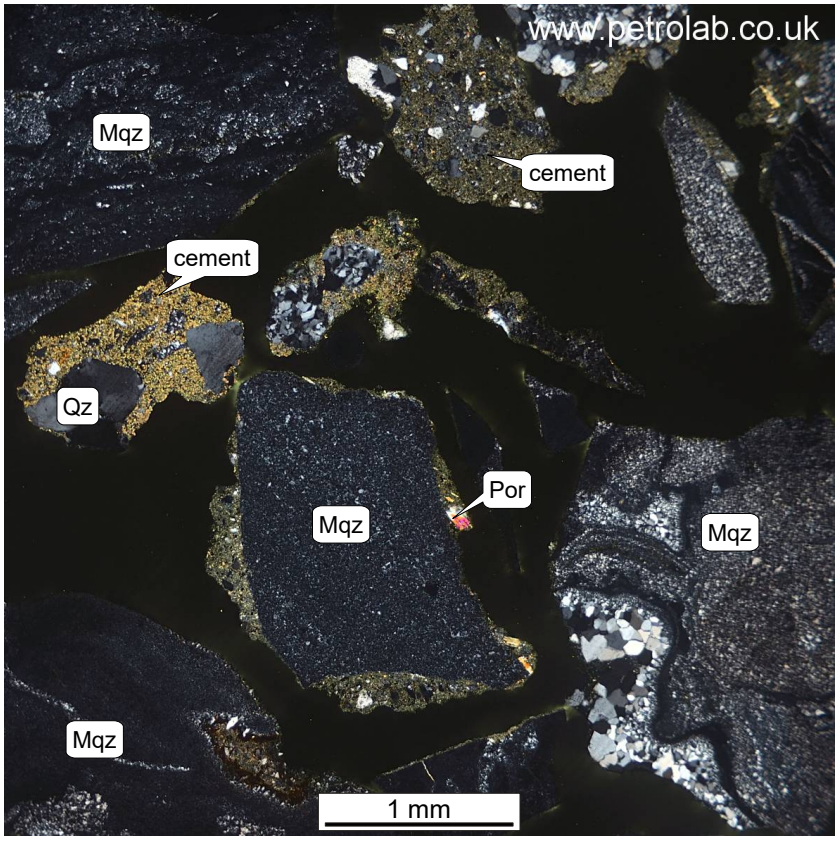
Photomicrographs



D **Sample Sinter 7%**

Photomicrograph of sample showing main phases comprised of microcrystalline silica fragments. Some fragments are thinly coated with cement, containing secondary portlandite.

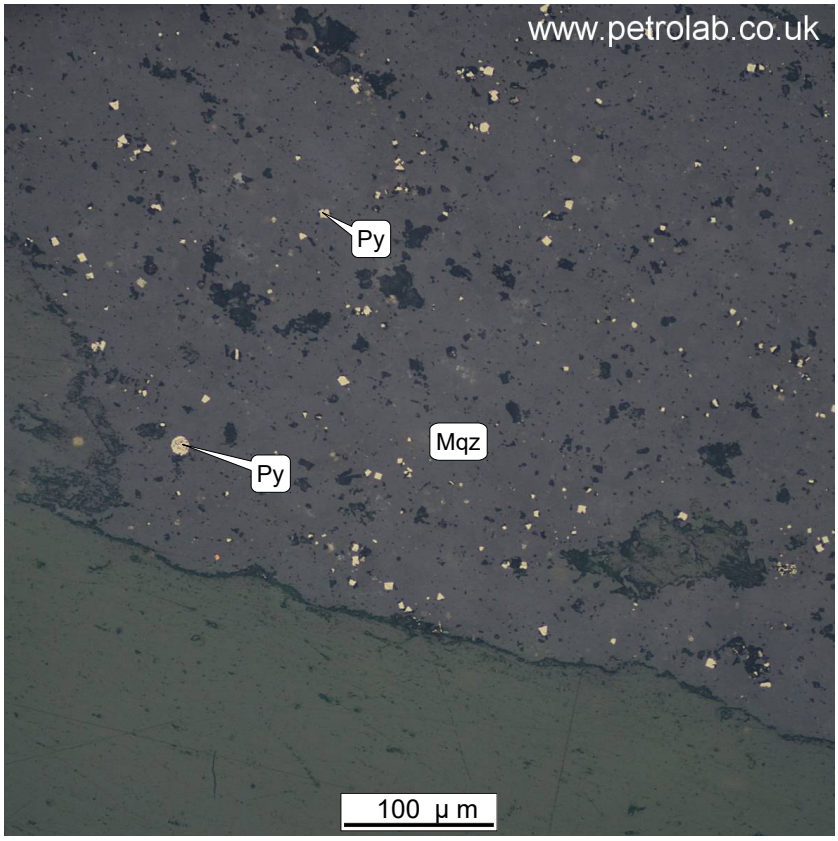
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x25



E **Sample Sinter 7%**

Photomicrograph of sample showing main phases comprised of microcrystalline silica fragments. Some fragments are thinly coated with cement, containing secondary portlandite.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x25



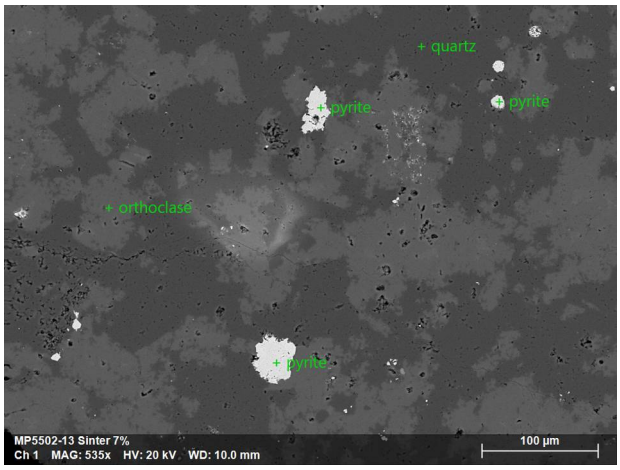
F **Sample Sinter 7%**

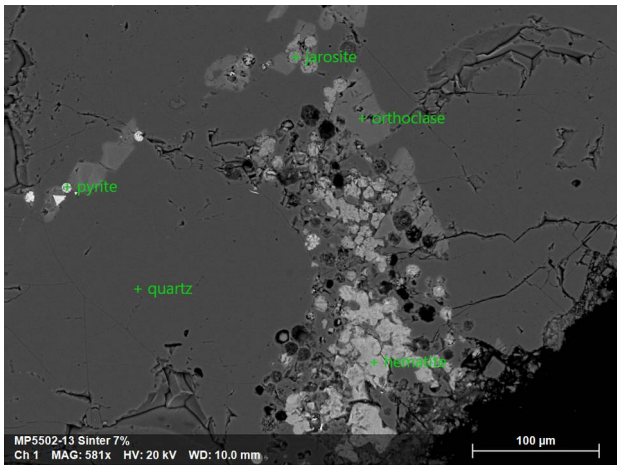
Photomicrograph showing fine disseminated pyrite and framboidal pyrite clusters.

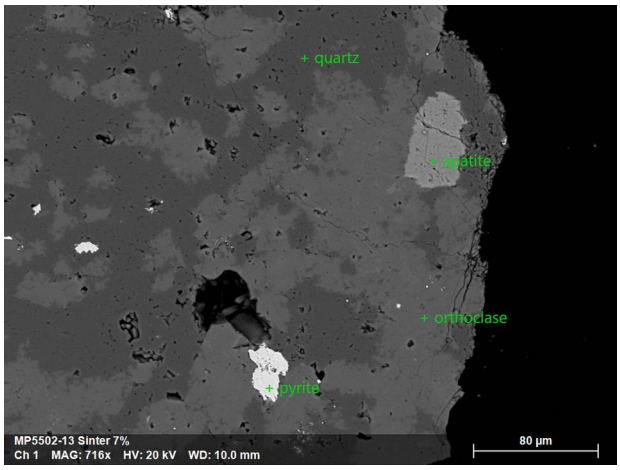
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x200

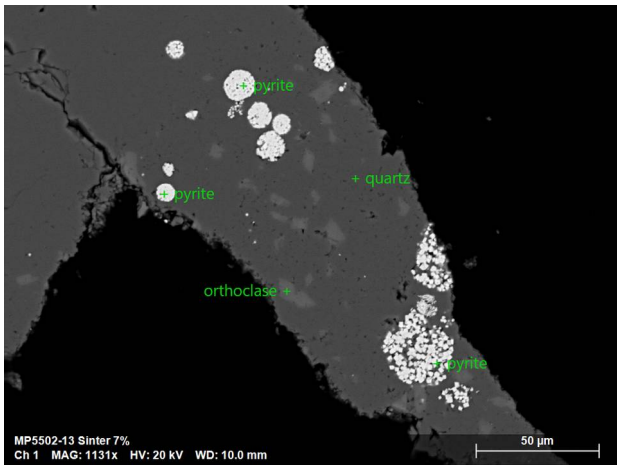
Manual SEM analysis

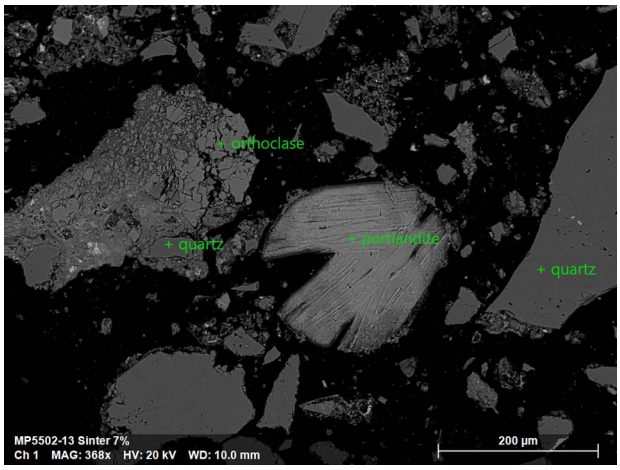
Table 14. BSE images of selected mineral phases for sample Sinter 7%.

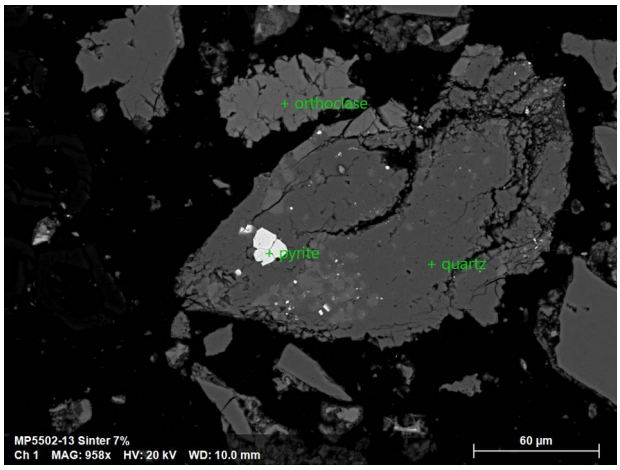












Images showing anhedral and framboidal pyrite within silicified rock fragment (top left); unaltered framboidal pyrite and agglomeration of spherical hematite and jarosite crystals (possibly after earlier framboidal pyrite) (top right); pyrite and apatite in a rock fragment (middle left); pyrite framboids locked in a rock fragment, some forming circular agglomerations (middle right); rock fragments in association with a void filled with coarse portlandite (bottom left); pyrite occurrence in a rock fragment (bottom right).

Sinter 4/3%

Sample as received

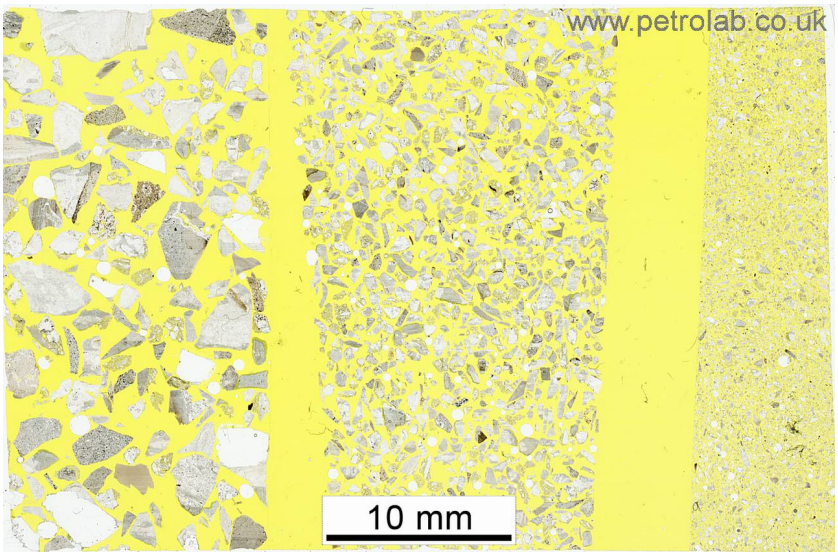
Sample Sinter 4/3%		
Petrolab ID	**Date received**	**Type · properties**
#32076	08/10/2021	Crushed rock sample · 147 g

A **Sample Sinter 4/3%**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

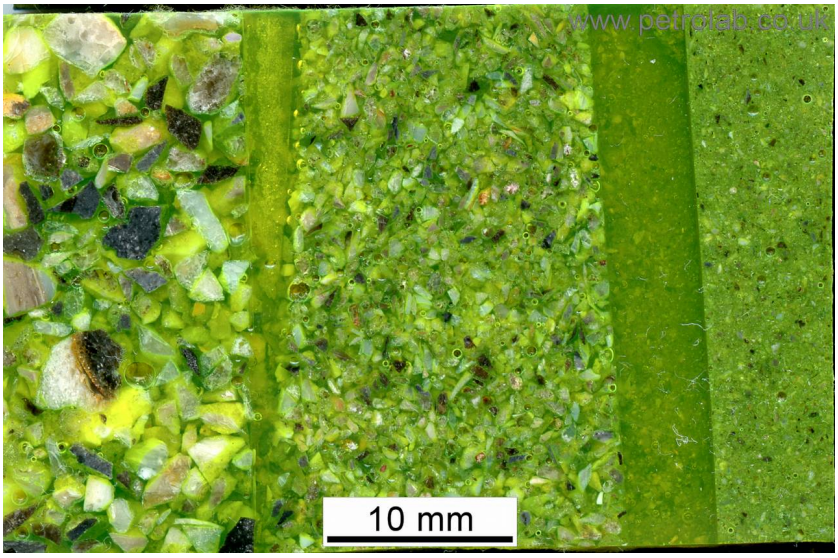
Section(s)



B **Sample Sinter 4/3%**

Low magnification view of sample thin section.

Image B
Nikon D7000 digital camera
Daylight balanced oblique light



C **Sample Sinter 4/3%**

Low magnification view of sample polished chip.

Image C
Epson scanner
White cold cathode light

Mineral abundance

Sample Sinter 4/3%			
Mineral / Phase	**General formula**	**s.g.**	**Wt%[1]**
Quartz, qz	SiO_2	2.65	68.0%
Microcrystalline quartz, mqz			
Microcline, mcc	$KAlSi_3O_8$	2.56	10.9%
Orthoclase, or			
Albite, ab	$NaAlSi_3O_8$	2.62	5.3%
Calcite, cal	$CaCO_3$	2.70	5.2%
Anorthite, an	$CaAl_2Si2O_8$	2.73	4.4%
Portlandite, por	$Ca(OH)_2$	2.23	1.5%
Kaolinite, kln	$Al_2Si_2O_5(OH)_4$	2.60	1.1%
Apatite, ap	$Ca_5(PO_4)_3F$	3.16	1.1%
Actinolite, act	$Ca_2(Mg,Fe^{++})_5Si_8O_{22}(OH)_2$	3.04	0.6%
Goethite, gth	FeOOH	4.27	0.4%
Tourmaline (schorl), tur	$NaFe^{++}{}_3Al_6(BO_3)_3Si_6O_{18}(OH)_4$	3.15	0.4%
Rutile, rt	TiO_2	4.25	0.3%
Illite, ilt	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$	2.75	0.2%
Biotite, bt	$K(Fe,Mg)_3(AlSi_3O_{10})(OH)_2$	3.09	0.2%
Muscovite, ms	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	2.82	0.2%
Zircon, zrn	$ZrSiO_4$	4.65	0.1%
Anatase, ant	TiO_2	2.40	0.1%

1 Wt% mineral abundance reported using results from XRD analysis undertaken by Petrolab Ltd. (2021). Minerals recorded as tr (trace) were observed during this petrographic analysis but had not been detected by XRD as they were present below the limit of detection.

Sample Sinter 4/3%			
Topaz, tpz	$Al_2SiO_4(F,OH)_2$	3.55	0.0%
Dolomite, dol	$CaMg(CO_3)_2$	2.84	0.0%
Pyrite, py	FeS_2	5.01	tr
Titanite, ttn	$CaTiSiO_5$	3.55	tr
Ca-siderite, Ca-sd	$(Fe^{++},Ca)CO_3$	3.96	tr

Sample summary

Sample Sinter 4/3%

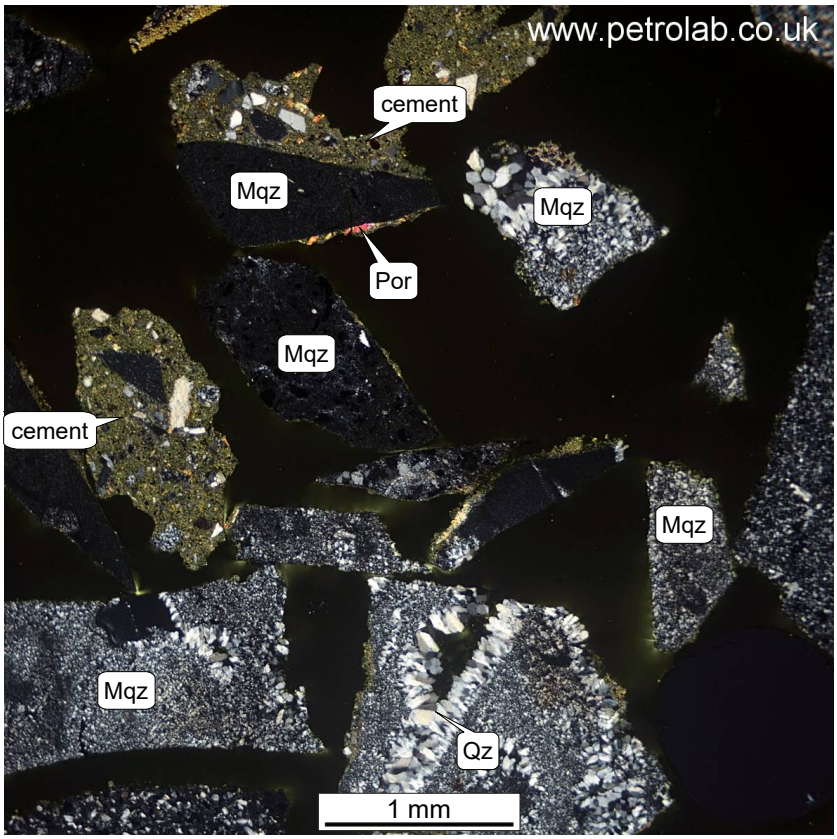
- The sample comprises rocks fragments composed of microcrystalline quartz, relicts of feldspar grains and accessory phases. There are rare instances of silicified sandstone fragments, rare iron oxide crust on some fragments or disseminated iron oxide within rock fragments. Some fragments contain acicular quartz crystals, formed in empty vugs. Some fragments contain rare disseminated pyrite or agglomerations of framboidal pyrite. Many fragments, especially in finer size fractions are thinly coated with cement. The cement is carbonated and in many cases leached. It occurs as fine grained paste, only rarely in the form of snow-flake calcite, which indicates minor recrystallisation. The cement coating additionally contains rare grains of calcite and iron oxides. Secondary portlandite was observed within spherical voids and around aggregate edges coated in cement.
- SEM analysis detected 1.18% As in pyrite, (0.45 - 0.71%) S and 0.14% As in Ca-siderite. The presence of S in Ca-siderite may indicate that these are secondary minerals that have partially adsorbed or fixed S from oxidising pyrite.

Photomicrographs

D **Sample Sinter 4/3%**

Photomicrograph of sample showing typical sinter fragments, some coated with cement with visible secondary portlandite.

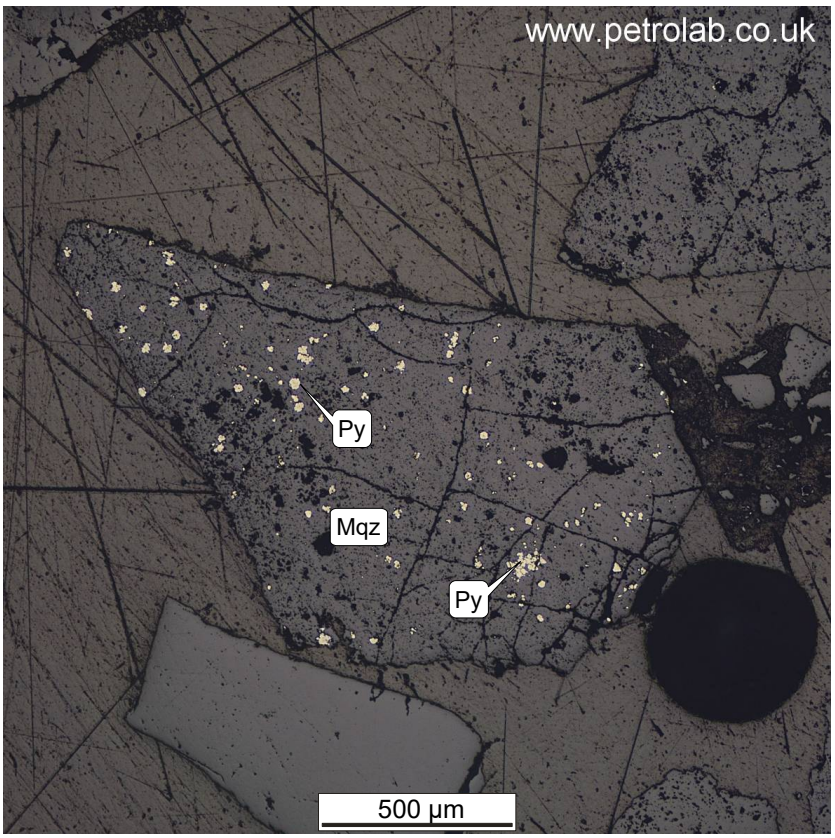
Image D
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x25



E **Sample Sinter 4/3%**

Photomicrograph of sample showing typical sinter fragments, some thinly coated with cement with visible secondary portlandite.

Image E
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x25



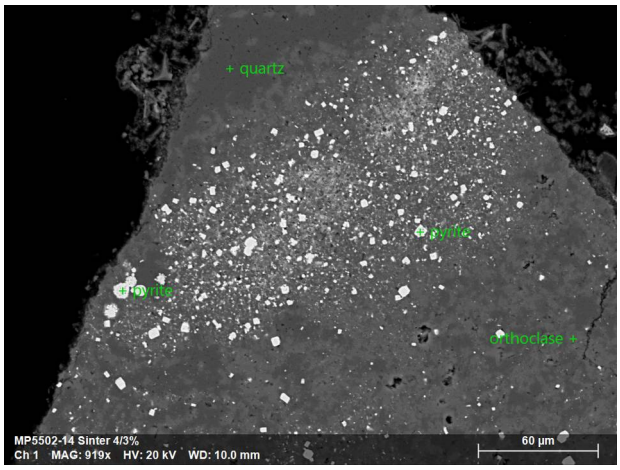
F **Sample Sinter 4/3%**

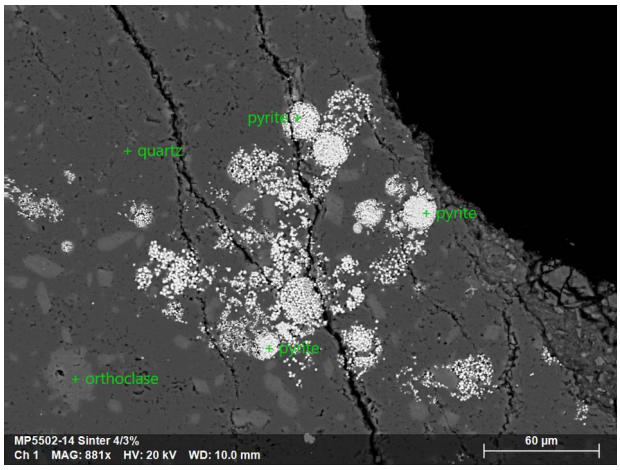
Photomicrograph showing clusters of pyrite, locked in a silicified rock fragment.

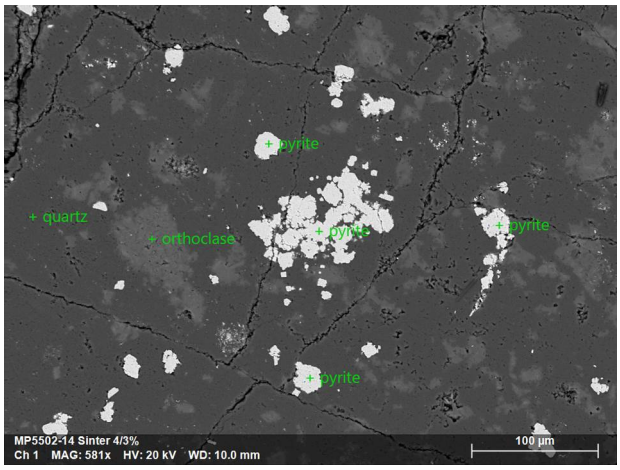
Image F
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x50

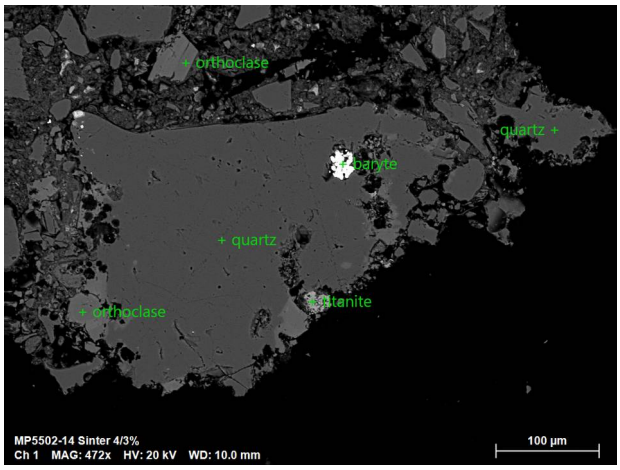
Manual SEM analysis

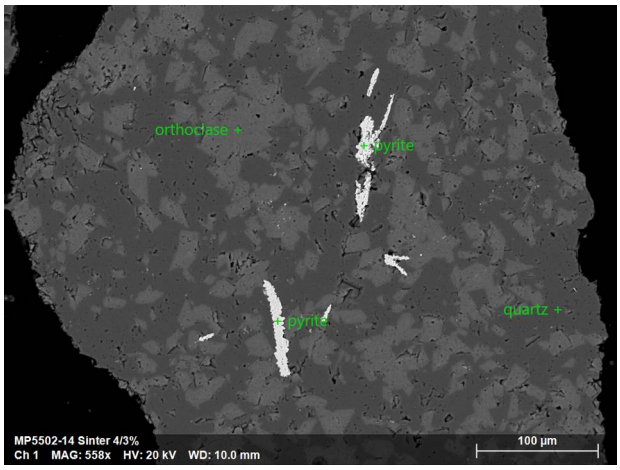
Table 15. BSE images of selected mineral phases for sample Sinter 4/3%.

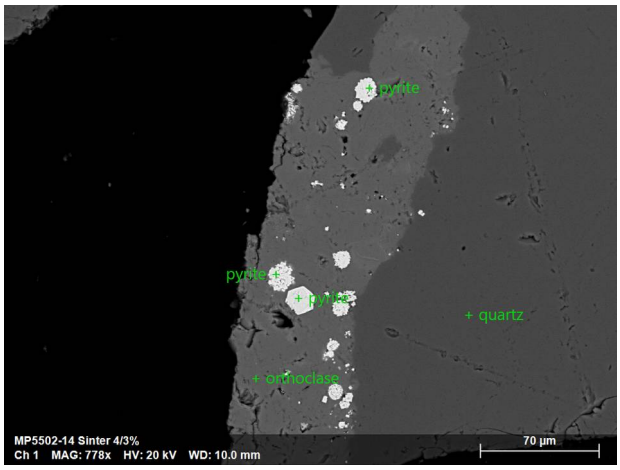












Images showing disseminated cubic and framboidal pyrite in silicified fragment (top left); pyrite framboids within a rock fragment (top right); anhedral pyrite locked in a rock fragment (middle left); baryte and titanite inclusions in quartz fragment (middle right); elongated pyrite crystals within quartz-feldspar fragment (bottom left); cubic and framboidal pyrite locked in orthoclase (bottom right).

Appendix 1 – X-ray diffraction analysis

Introduction and background

XRD analysis is chiefly undertaken to confirm the presence of clay minerals in suspected problematic lithologies, as clay minerals can be too fine to be readily identifiable by detailed thin section petrography. It can also used to identify the presence of pyrite.

Methods of investigation

The sample is first crushed using a REFLEX CRUSHER™ to approximately 2 mm. A representative split of this material is then 'micronised' using a FRITSCH Mortar Grinder PULVERISETTE 2 to obtain a homogenised sample and therefore more representative X-ray diffraction 'powder' pattern. The sample is milled until 100% passes the 45 µm screen. BRAGG 2D analysis mode is used to monitor the quality of sample preparation, providing 2D diffraction images in Bragg Brentano geometry that are used to visualize sample preparation issues like particle size or preferential orientation.

The sample is back-loaded into an aluminum sample holder, producing a randomly orientated surface for presentation to the x-ray beam. The prepared samples are analyzed using a Bruker D2 Phaser between 2° and 60° 2Θ (theta) with a step size of 0.05°/sec using x-ray radiation from a copper anode at 30kV, 10mA. The data is acquired in the Bruker DIFFRAC.SUITE software. Mineral identification, quantification and Rietveld refinement is conducted using BRUKER.TOPAS V6 software.

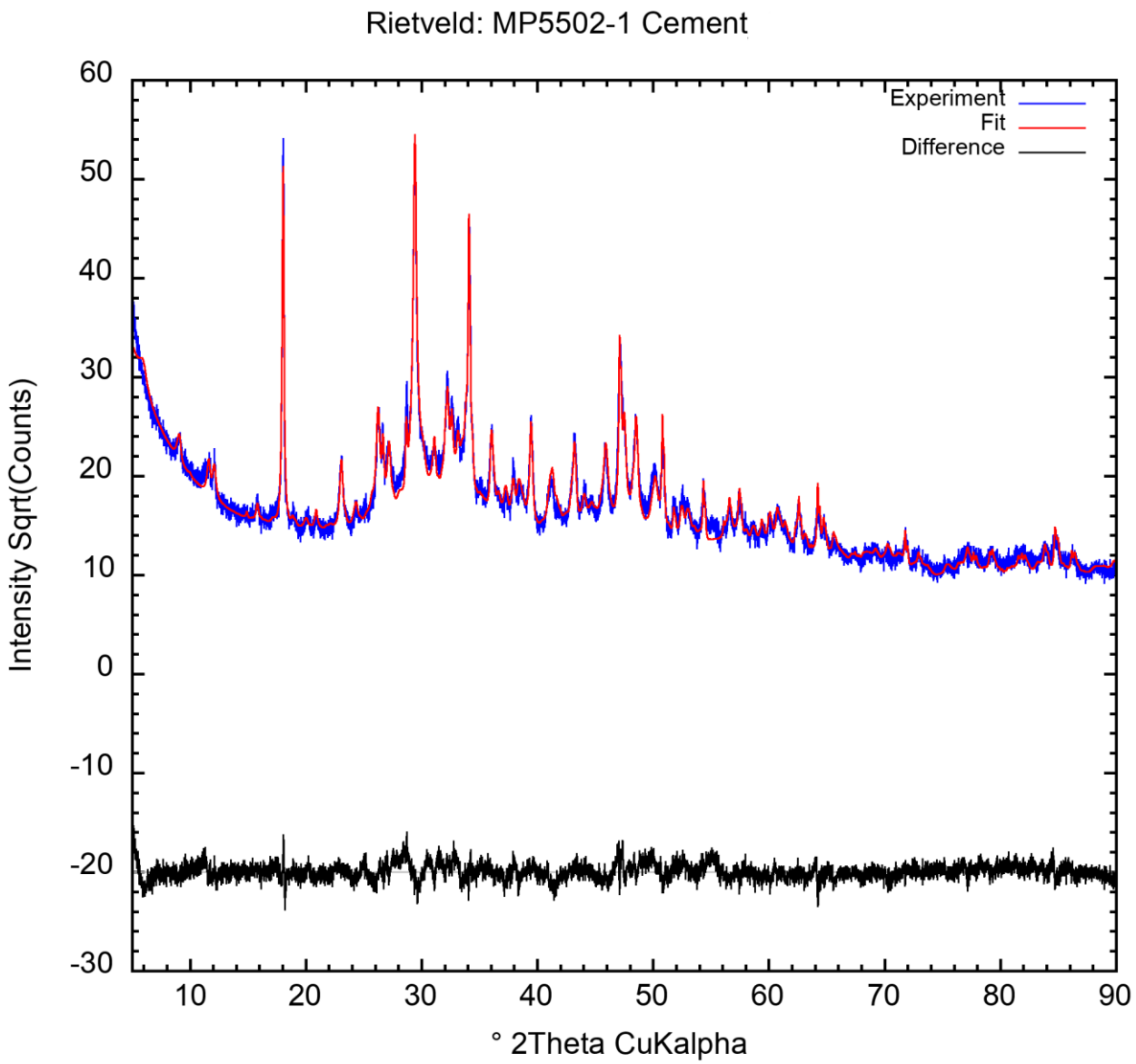
The accuracy of the method diminishes as the percentage of the mineral phase is reduced. The reliable detection limit of the XRD method is 0.5 – 2% depending on the mineral phase, and is affected by crystallinity.

Analysis results

The XRD analysis results are reproduced over page:

- Whole Rock

MP5502	Cement	Fly Ash	Basalt 5%	Basalt 7%	Basalt 4/3%	Siltstone 5%	Siltstone 7%	Siltstone 4/3%	Sandstone 5%	Sandstone 7%	Sandstone 4/3%	Sinter 5%	Sinter 7%	Sinter 4/3%
Phase	**Wt.-%**													
CSH-Gel	7.3	7.3												
Flyash	1.6	6.8												
Portlandite	13.1	13.7				0.5	1.1	2	0.5	1.6	1.1	1	2.4	1.5
Aragonite	18.9	15.3												
Ettringite	2.7	2.6												
Dolomite	1.5	1.5				0.1	0.1	0.1	0.1	0.1	0.2	0	0.1	0
C3S	4.1	6.7												
C4AF	10.3	11.7												
C2S	9.8	5.5												
C3A	0.5	0.1												
Gypsum	0.3	0.3												
Periclase	0.1	0.5												
Quartz	2	1.9	5.1	4.6	4.6	55	50.9	51.6	47	47.2	45.5	75.6	72.2	68
Albite			3.1	2.7	2	3.7	3.5	3.5	6.5	5.4	6.3	0.4	2.1	5.3
Orthoclase / Microcline			5	4.8	5.1	28.7	28.3	27.7	29.3	27.2	28.1	14	11.1	10.9
Biotite			0.1	0.5	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.1	0.2	0.2
Muscovite	4.3	4.4	2.4	2.8	2.4	2	1.8	1.7	2.4	2.2	2.6	0.4	0.2	0.2
Kaolinite			0.2	0.3	0.5	0.4	0.7	0.5	1.4	1.1	1.1	0.9	0.6	1.1
Zircon			0.3	0.1	0.4	0	0.1	0	0.2	0.1	0	0.1	0.1	0.1
Rutile			0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3
Anatase			0.2	0.1	0.2	0.1	0.2	0.2	0	0	0	0.1	0.1	0.1
Apatite			1	1.4	1.2	1	1.2	1.4	0.7	1	1.1	0.3	0.9	1.1
Chlorite			9.7	10.2	10.7									
Anorthite			4.9	8.2	6.8	1.5	1.6	1.1	1.7	2.7	2.2	0.8	2.2	4.4
Goethite			0.1	0.1	0.1	0.3	0.4	0.5	0.3	0.4	0.3	0	0.2	0.4
Hematite			0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0	0
Calcite	23.6	22	5.3	5.1	4.8	4.9	7.4	7.1	4.6	6.4	6	5.2	6.6	5.2
Bytownite			32.9	31.8	33.1									
Enstatite			0.5	0.7	0.8									
Diopside			11	12.1	12.2									
Forsterite			2.6	2.7	3.2									
Montmorillonite			14	10	10.3									
Magnesite			1.2	1.7	1.1									
Topaz						0	0.1	0.3	1	0.9	0.2	0.2	0.4	0
Schorl						0.3	0.2	0.3	0.3	0.3	0.5	0.1	0.1	0.4
Actinolite						0.1	0.2	0.1	0.1	0.1	0.2	0.4	0.6	0.6
Illite						0.8	1.6	1.2	3.5	2.9	4.2	0.2	0.2	0.2



MP5502-1 Cement

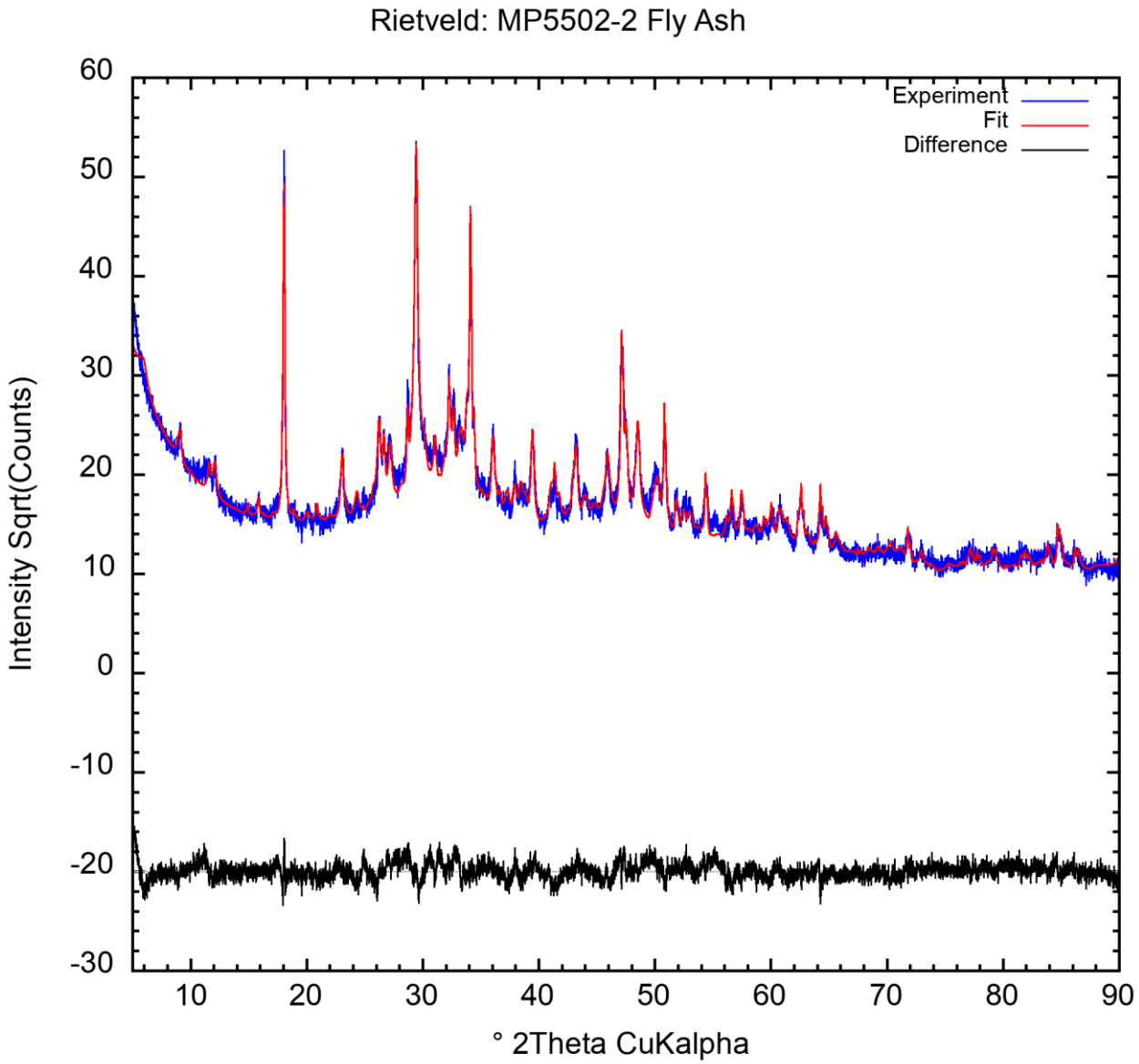
Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 9.35 Rexp: 5.6

Phase Wt.-%

CSH-Gel 7.2
Flyash_amorphous 1.6
Portlandite 13.1
Calcite 23.6
Aragonite 18.9
Ettringite 2.7
Dolomite 1.5
C3S_M3 4.1
C4AF 10.3
C2S_beta 9.8
C3A_cubic 0.5
Gypsum 0.3
Quartz 2.0
Periclase 0.1
Muscovite 4.3

Petrolab
Mineralogy · Petrography



MP5502-2 Fly Ash

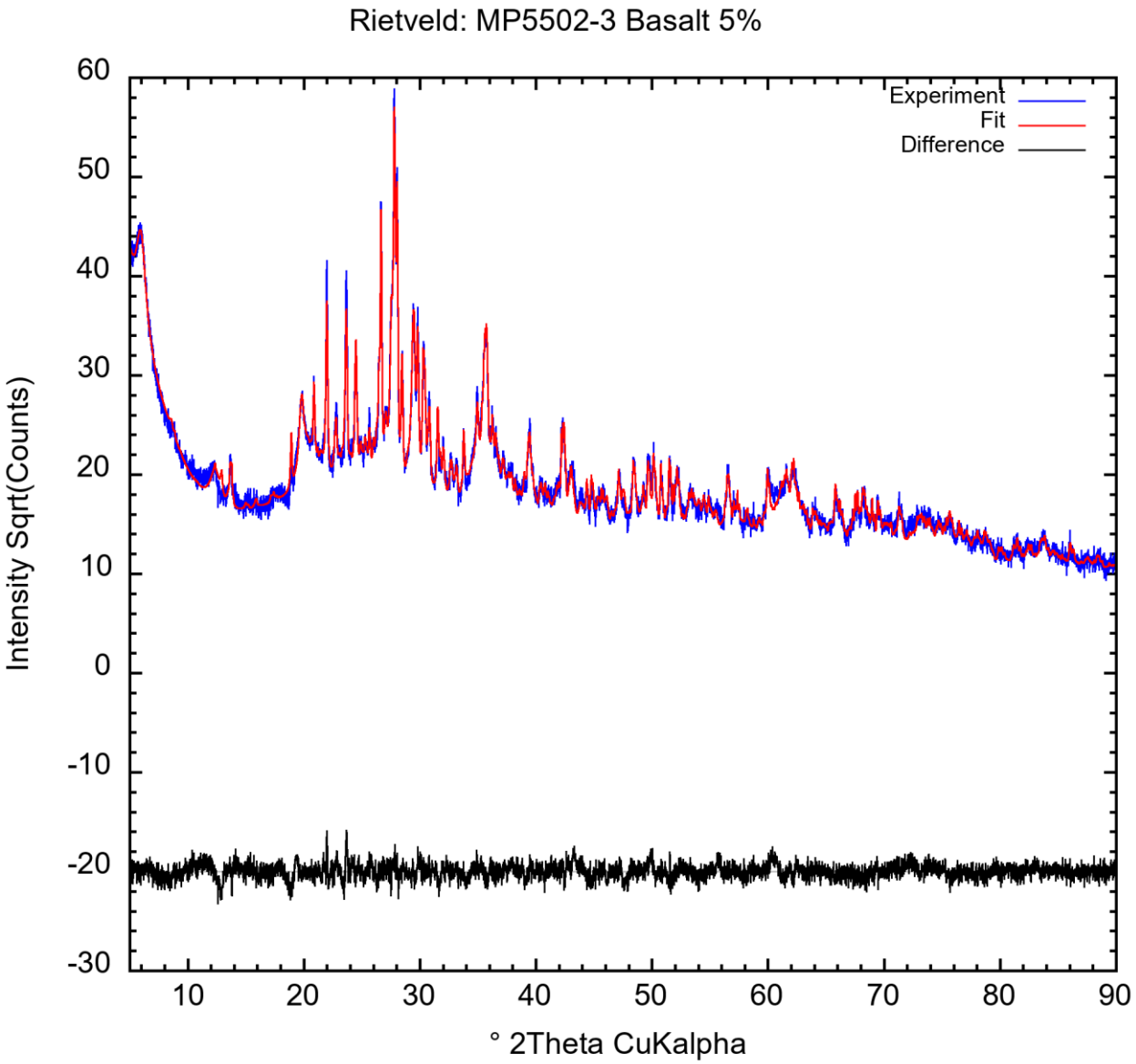
Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 9.46 Rexp: 5.57

Phase Wt.-%

CSH-Gel 7.3
Flyash_amorphous 6.8
Portlandite 13.7
Calcite 22.0
Aragonite 15.3
Ettringite 2.6
Dolomite 1.5
C3S_M3 6.7
C4AF 11.7
C2S_beta 5.5
C3A_cubic 0.1
Gypsum 0.3
Quartz 1.9
Periclase 0.5
Muscovite 4.4

Petrolab
Mineralogy · Petrography



MP5502-3 Basalt 5%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 7.33 Rexp: 4.92

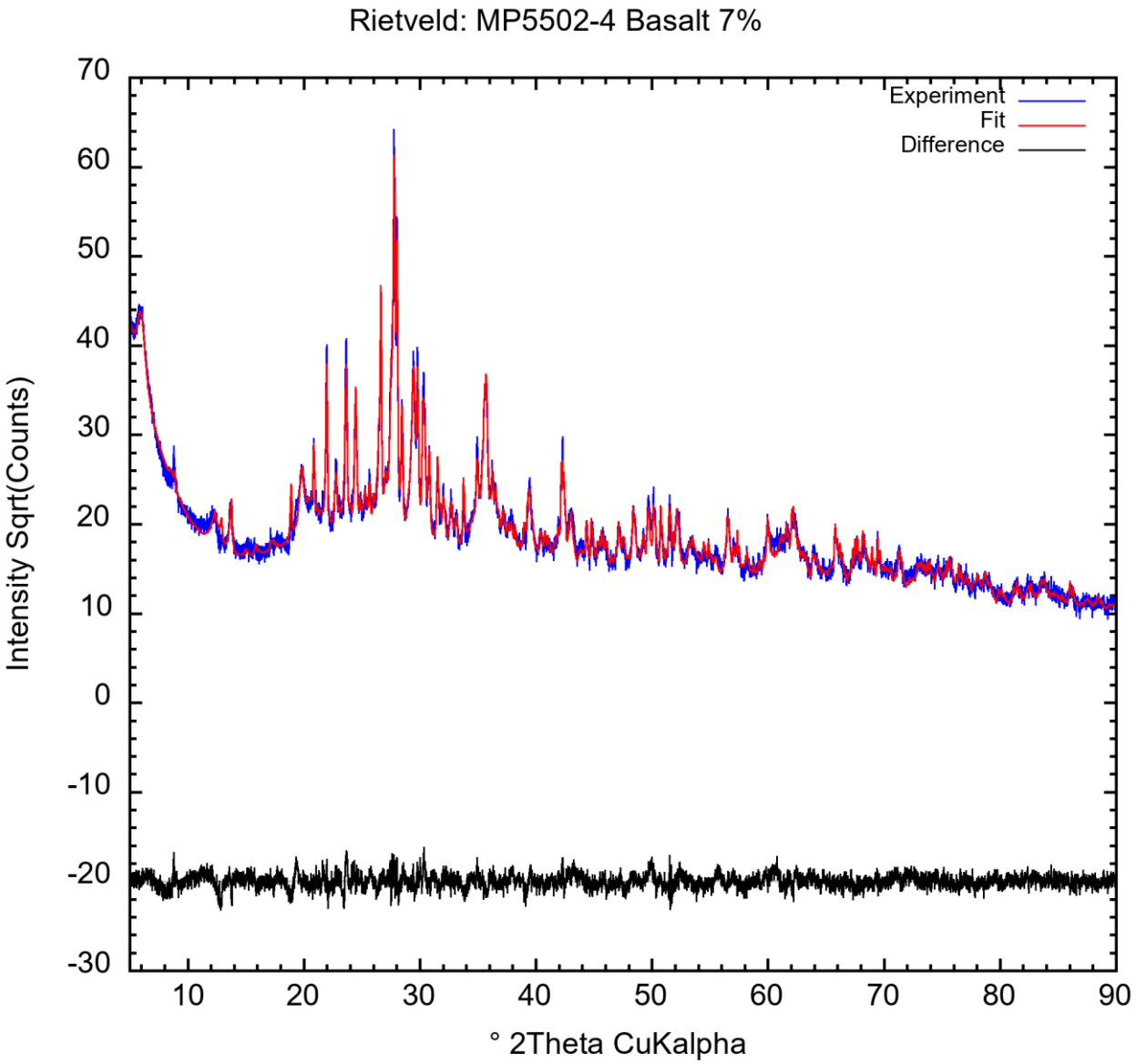
Phase Wt.-%

Quartz 5.0
Albite 3.1
Orthoclase 5.0
Biotite 0.1
Muscovite 2.4
Kaolinite 0.2
Zircon 0.3
Rutile 0.1
Anatase 0.2
Apatite-(CaF) 1.0
Chlorite IIb 9.7
Anorthite 4.9
Goethite 0.1
Hematite 0.3
Calcite 5.3
Bytownite 32.9
Enstatite 0.5
Diopside 11.0
Forsterite iron 2.6
Montmorillonite 14.0
Magnesite 1.2

Elemental composition Wt.-%:

AL 11.6
C 0.8
CA 9.3
FE 3.2
K 1.0
MG 3.0
NA 0.7
O 47.3
SI 22.4

Petrolab
Mineralogy · Petrography



MP5502-4 Basalt 7%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 7.9 Rexp: 4.92

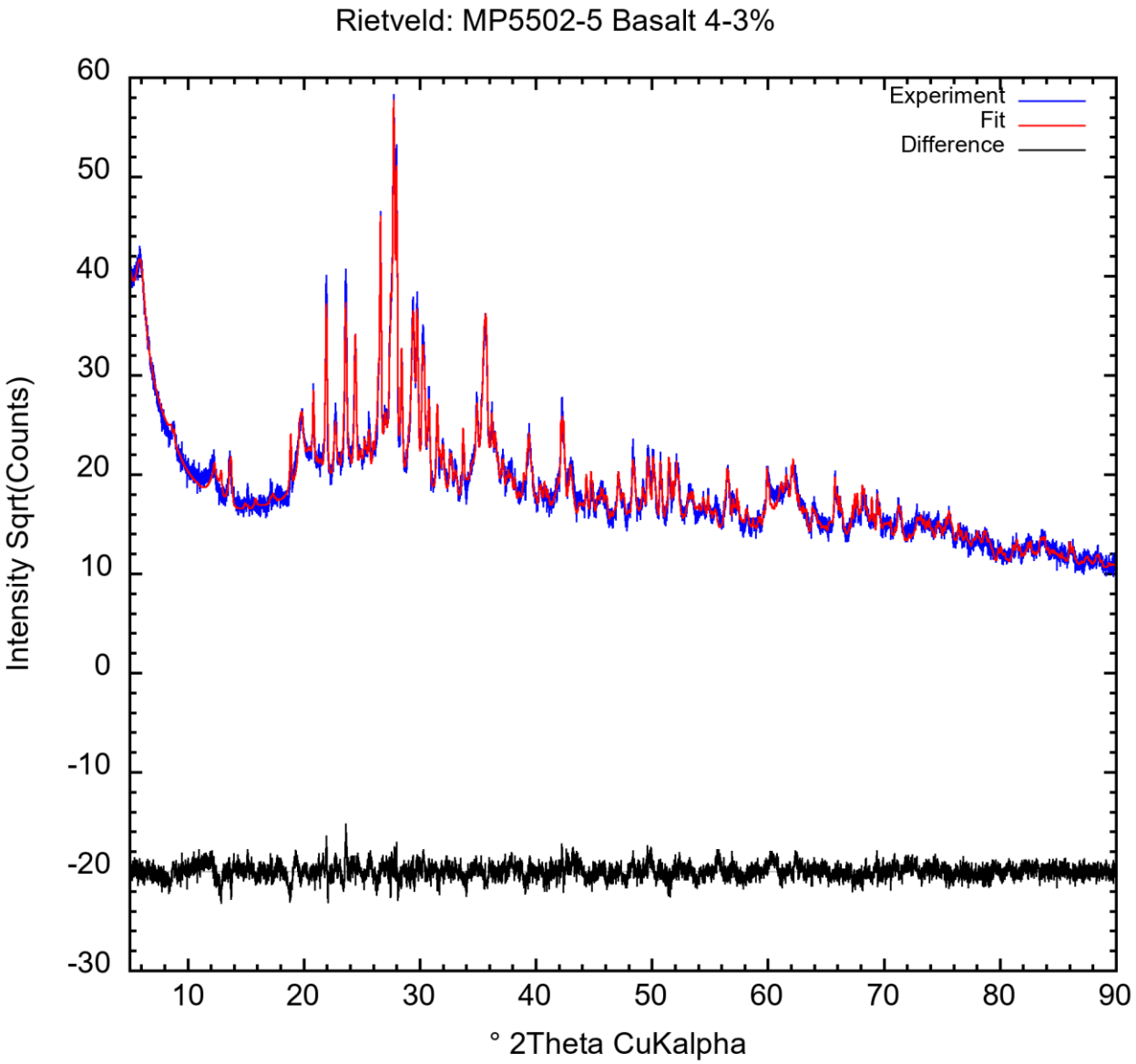
Phase Wt.-%

Quartz 4.6
Albite 2.7
Orthoclase 4.8
Biotite 0.4
Muscovite 2.8
Kaolinite 0.3
Zircon 0.1
Rutile 0.1
Anatase 0.1
Apatite-(CaF) 1.4
Chlorite IIb 10.2
Anorthite 8.2
Goethite 0.1
Hematite 0.2
Calcite 5.1
Bytownite 31.8
Enstatite 0.7
Diopside 12.1
Forsterite iron 2.7
Montmorillonite 10.0
Magnesite 1.7

Elemental composition Wt.-%:

AL 11.6
C 0.8
CA 10.0
FE 3.1
K 1.0
MG 3.4
NA 0.6
O 47.1
SI 21.7

Petrolab
Mineralogy · Petrography



MP5502-5 Basalt 4-3%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 7.67 Rexp: 4.98

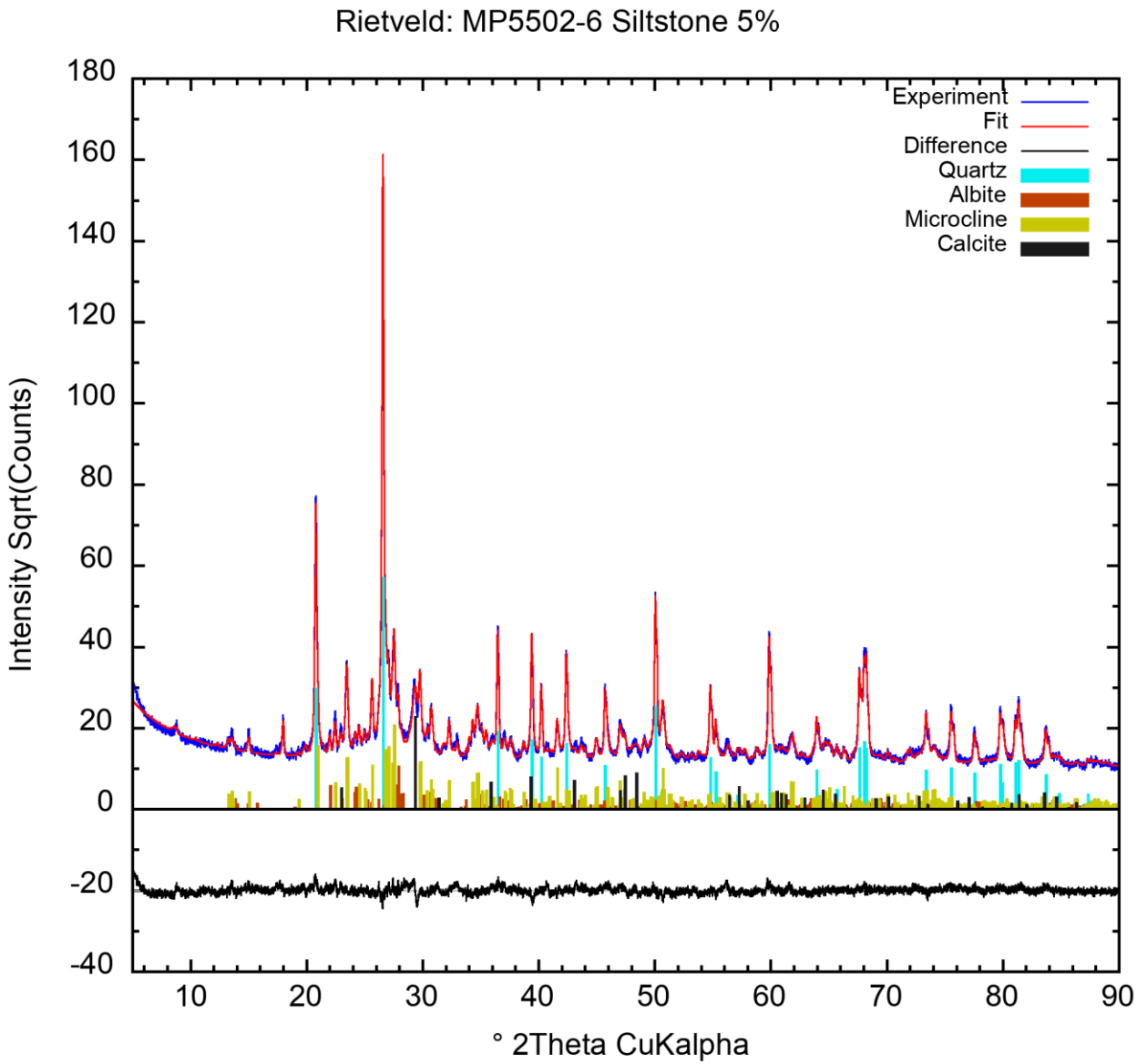
Phase Wt.-%

Quartz 4.6
Albite 2.0
Orthoclase 5.1
Biotite 0.3
Muscovite 2.4
Kaolinite 0.4
Zircon 0.4
Rutile 0.1
Anatase 0.2
Apatite-(CaF) 1.2
Chlorite IIb 10.7
Anorthite 6.8
Goethite 0.1
Hematite 0.2
Calcite 4.8
Bytownite 33.1
Enstatite 0.8
Diopside 12.2
Forsterite iron 3.2
Montmorillonite 10.3
Magnesite 1.1

Elemental composition Wt.-%:

AL 11.6
C 0.7
CA 9.8
FE 2.7
K 1.1
MG 3.4
NA 0.6
O 47.3
SI 22.0

Petrolab
Mineralogy · Petrography



MP5502-6 Siltstone 5%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 8.97 Rexp: 5.12

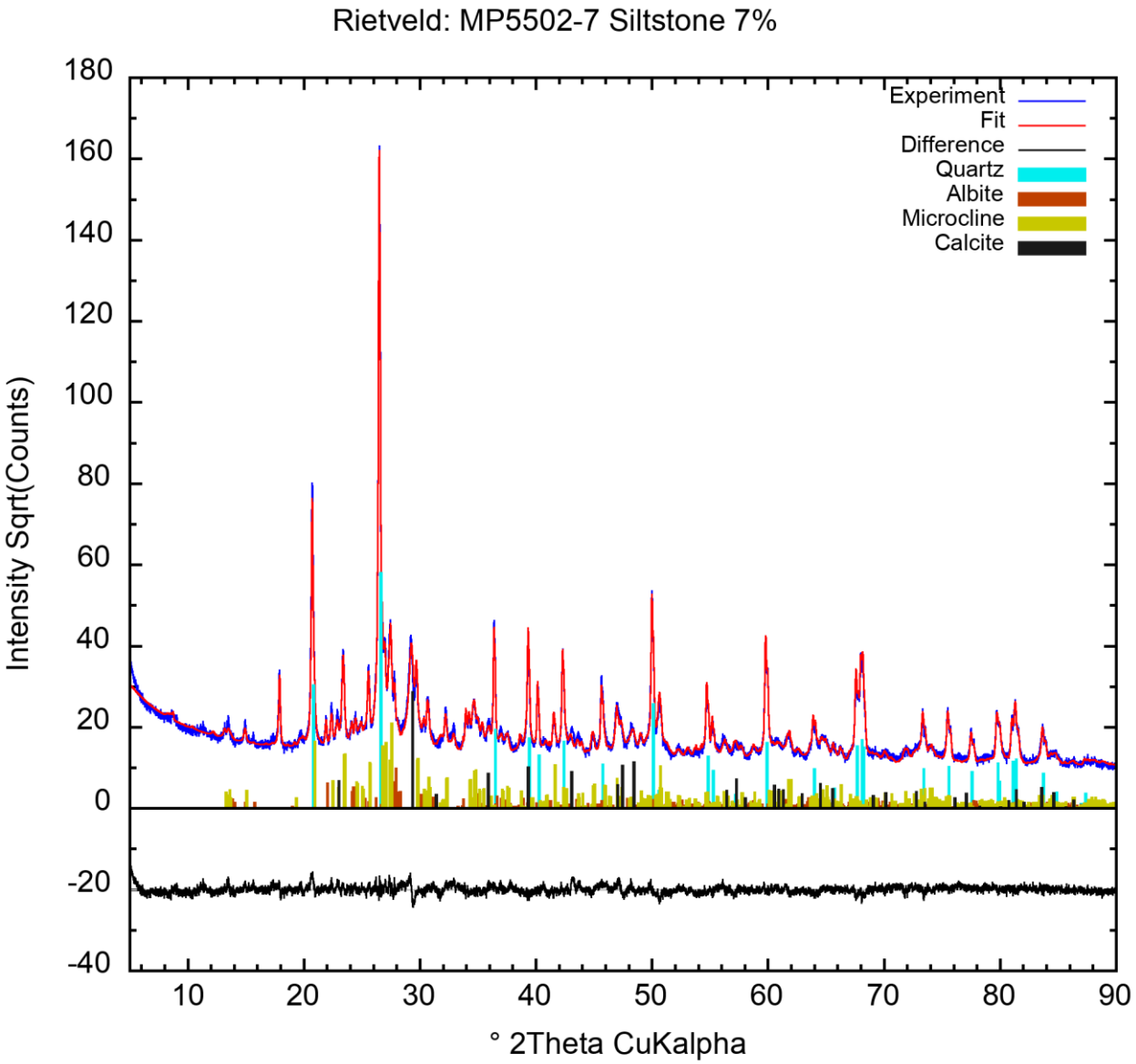
Phase Wt.-%

Quartz 55.0
Albite 3.7
Microcline 28.7
Biotite 0.2
Muscovite 2.0
Kaolinite 0.4
Topaz 0.0
Schorl 0.3
Zircon 0.0
Rutile 0.0
Anatase 0.1
Apatite-(CaF) 1.0
Anorthite 1.5
Actinolite 0.1
Goethite 0.2
Hematite 0.3
Calcite 4.9
Magnetite 0.0
Dolomite 0.1
Portlandite 0.5
Illite 0.8

Elemental composition Wt.-%:

AL 4.2
C 0.6
CA 2.9
K 4.3
O 50.1
SI 36.7

Petrolab
Mineralogy · Petrography



MP5502-7 Siltstone 7%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 8.86 Rexp: 4.78

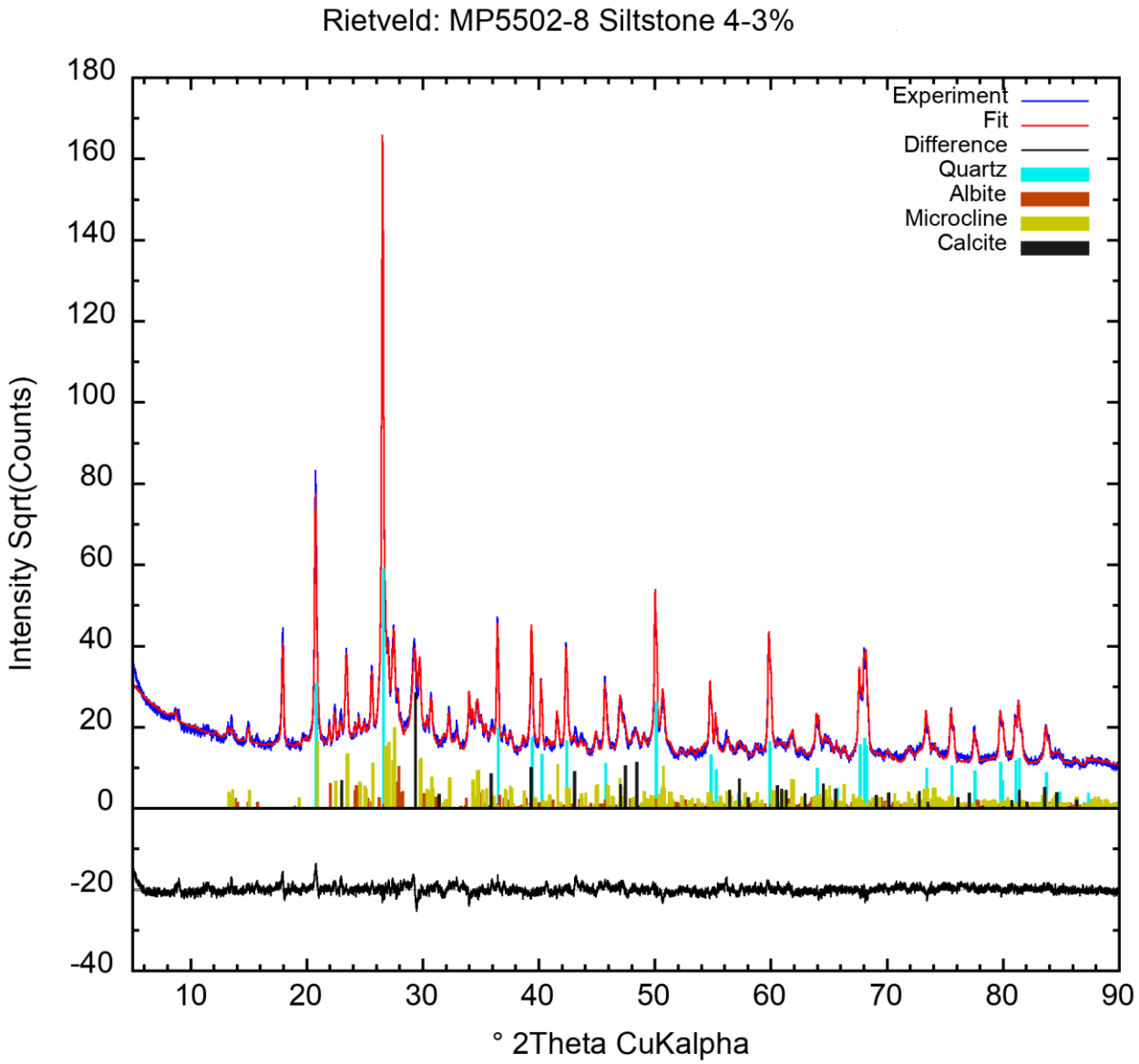
Phase Wt.-%

Quartz 50.9
Albite 3.5
Microcline 28.3
Biotite 0.3
Muscovite 1.8
Kaolinite 0.7
Topaz 0.1
Schorl 0.2
Zircon 0.1
Rutile 0.1
Anatase 0.2
Apatite-(CaF) 1.2
Anorthite 1.6
Actinolite 0.2
Goethite 0.4
Hematite 0.3
Calcite 7.4
Magnetite 0.0
Dolomite 0.1
Portlandite 1.1
Illite 1.6

Elemental composition Wt.-%:

AL 4.4
C 0.9
CA 4.3
FE 0.6
K 4.3
O 49.8
SI 34.8

Petrolab
Mineralogy · Petrography



MP5502-8 Siltstone 4-3%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 9.14 Rexp: 4.75

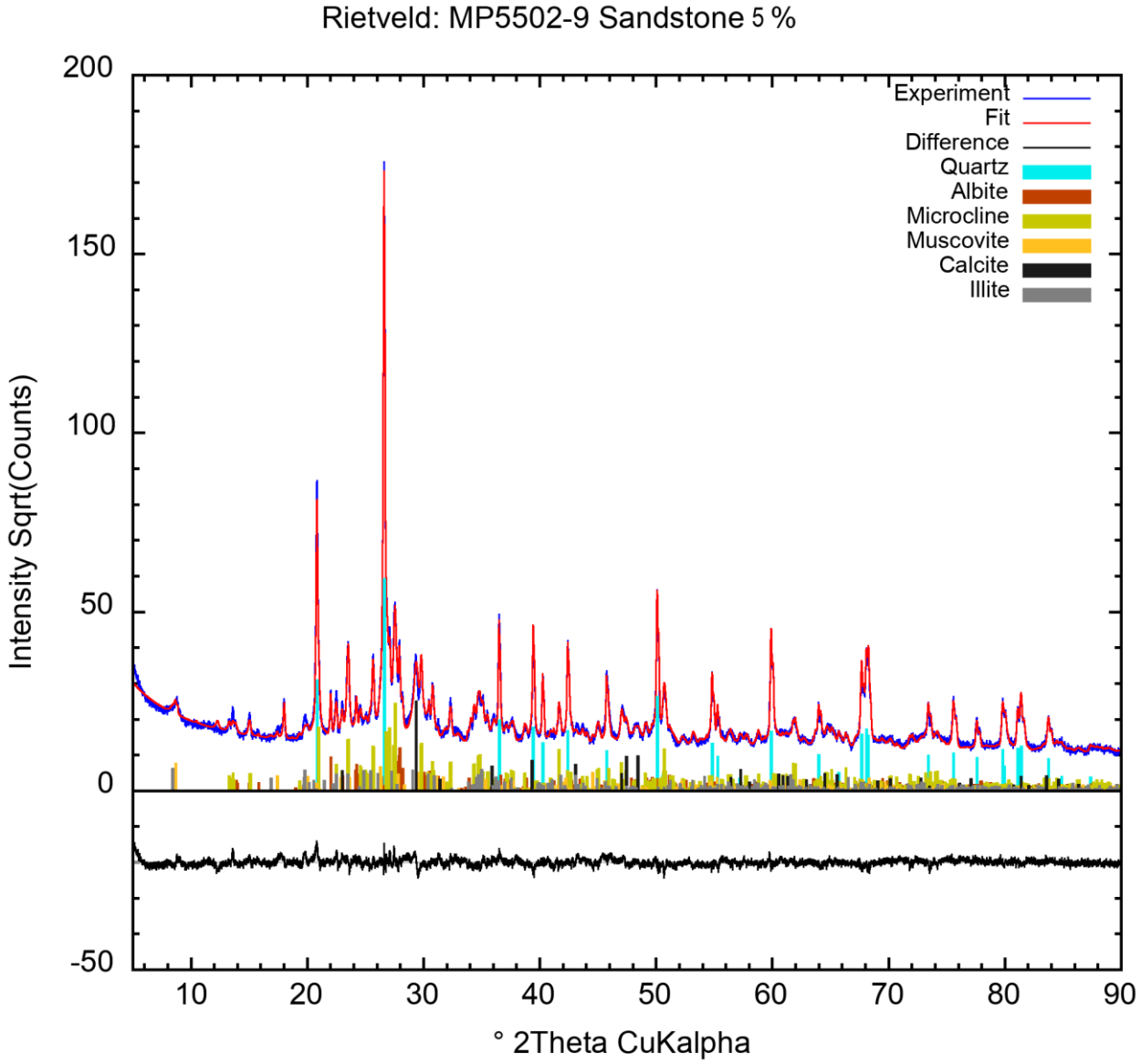
Phase Wt.-%

Quartz 51.6
Albite 3.5
Microcline 27.7
Biotite 0.3
Muscovite 1.7
Kaolinite 0.5
Topaz 0.3
Schorl 0.3
Zircon 0.0
Rutile 0.1
Anatase 0.2
Apatite-(CaF) 1.3
Anorthite 1.1
Actinolite 0.1
Goethite 0.5
Hematite 0.2
Calcite 7.1
Magnetite 0.0
Dolomite 0.1
Portlandite 2.0
Illite 1.2

Elemental composition Wt.-%:

AL 4.1
C 0.9
CA 4.6
FE 0.6
K 4.2
O 49.8
SI 34.8

Petrolab
Mineralogy · Petrography



MP5502-9 Sandstone 5%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 9.16 Rexp: 4.68

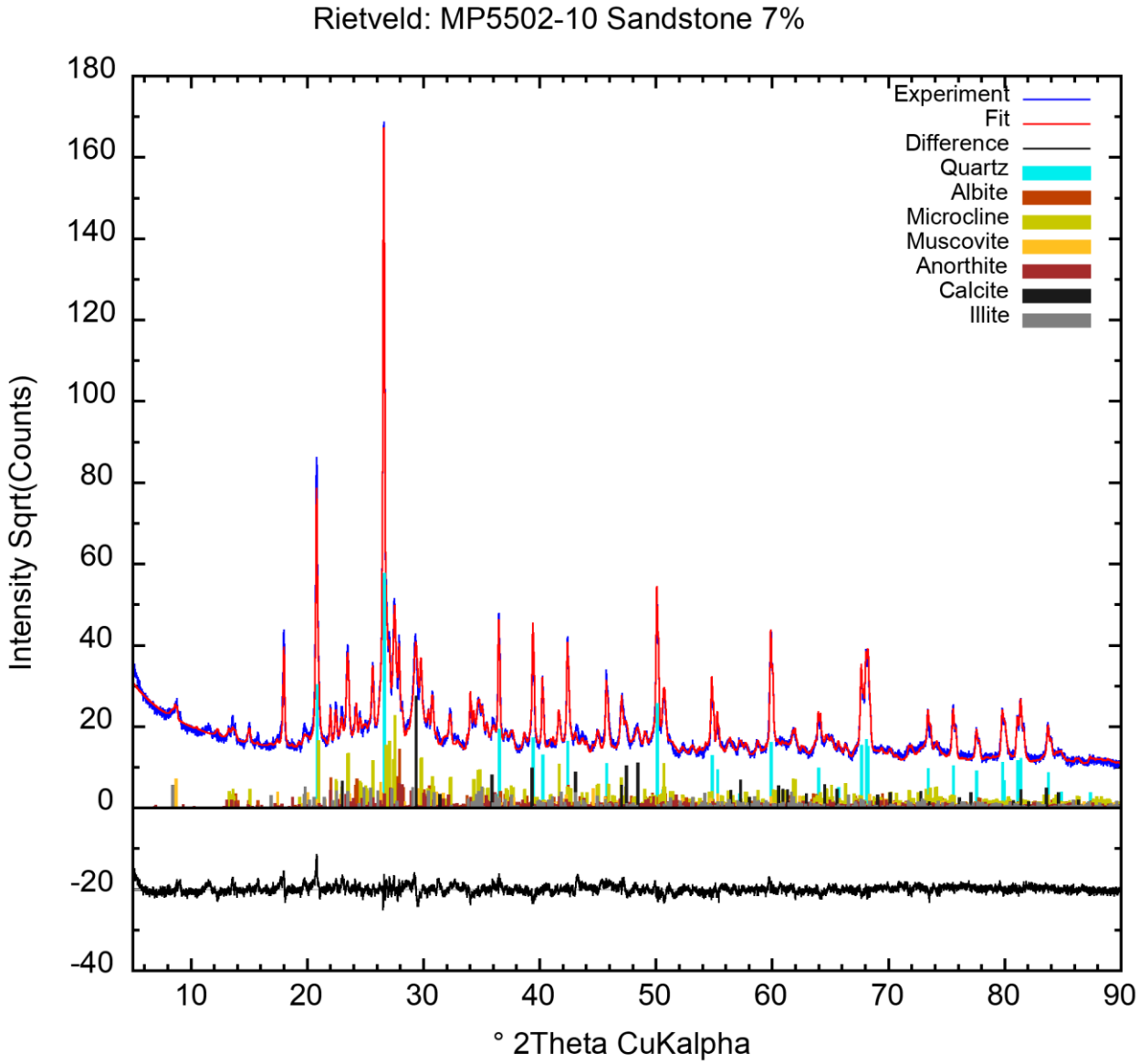
Phase Wt.-%

Quartz 47.0
Albite 6.5
Microcline 29.3
Biotite 0.3
Muscovite 2.4
Kaolinite 1.4
Topaz 1.0
Schorl 0.3
Zircon 0.2
Rutile 0.1
Anatase 0.0
Apatite-(CaF) 0.7
Anorthite 1.7
Actinolite 0.1
Goethite 0.3
Hematite 0.2
Calcite 4.6
Magnetite 0.0
Dolomite 0.1
Portlandite 0.5
Illite 3.5

Elemental composition Wt.-%:

AL 5.8
C 0.6
CA 2.6
K 4.7
NA 0.6
O 49.7
SI 35.1

Petrolab
Mineralogy · Petrography



MP5502-10 Sandstone 7%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 9.63 Rexp: 4.7

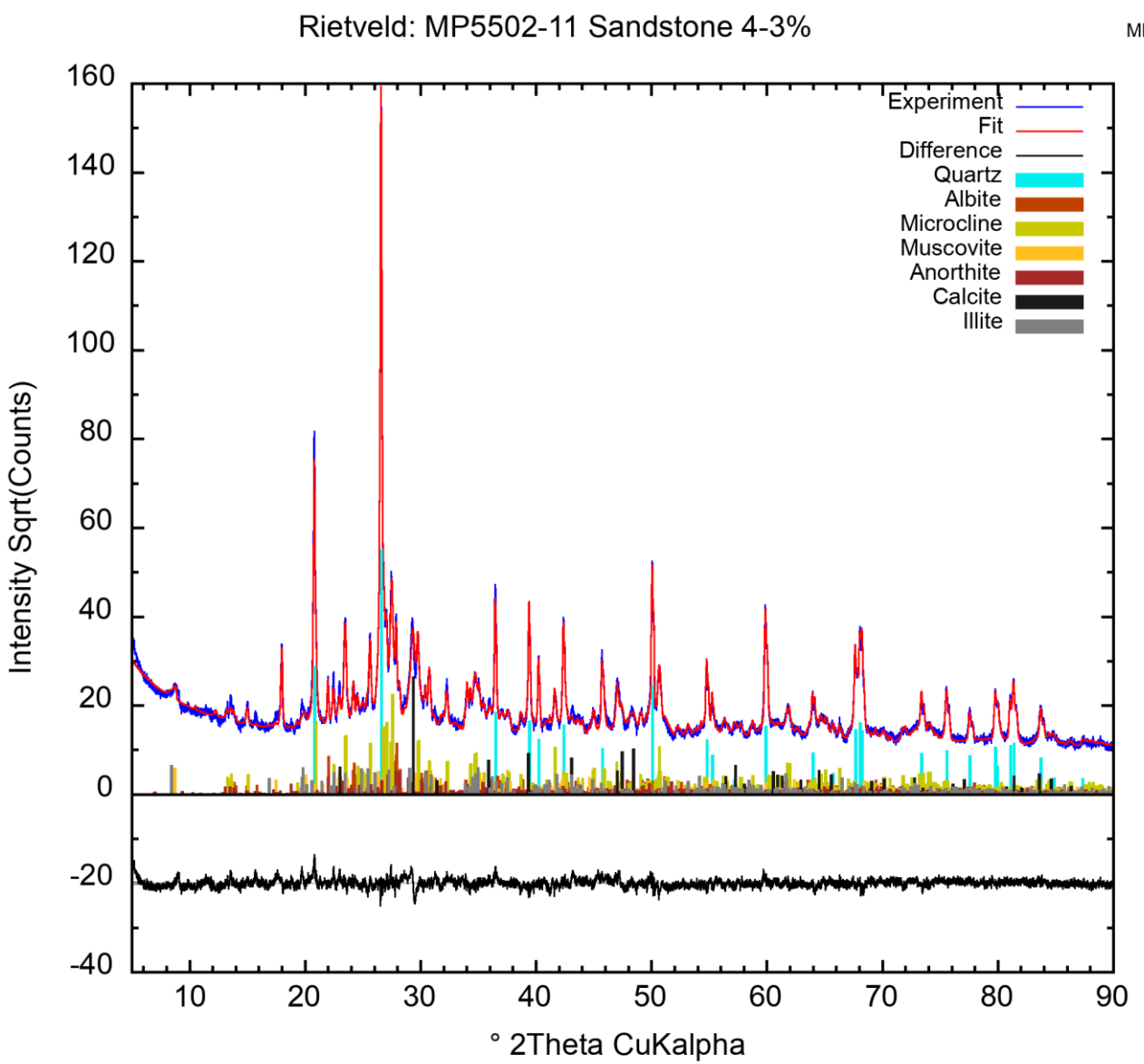
Phase Wt.-%

Quartz 47.2
Albite 5.4
Microcline 27.2
Biotite 0.4
Muscovite 2.2
Kaolinite 1.1
Topaz 0.9
Schorl 0.3
Zircon 0.1
Rutile 0.1
Anatase 0.0
Apatite-(CaF) 1.0
Anorthite 2.7
Actinolite 0.1
Goethite 0.4
Hematite 0.2
Calcite 6.4
Magnetite 0.0
Dolomite 0.1
Portlandite 1.6
Illite 2.9

Elemental composition Wt.-%:

AL 5.4
C 0.8
CA 4.2
K 4.3
O 49.7
SI 34.2

Petrolab
Mineralogy · Petrography



MP5502-11 Sandstone 4-3%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 9.04 Rexp: 4.79

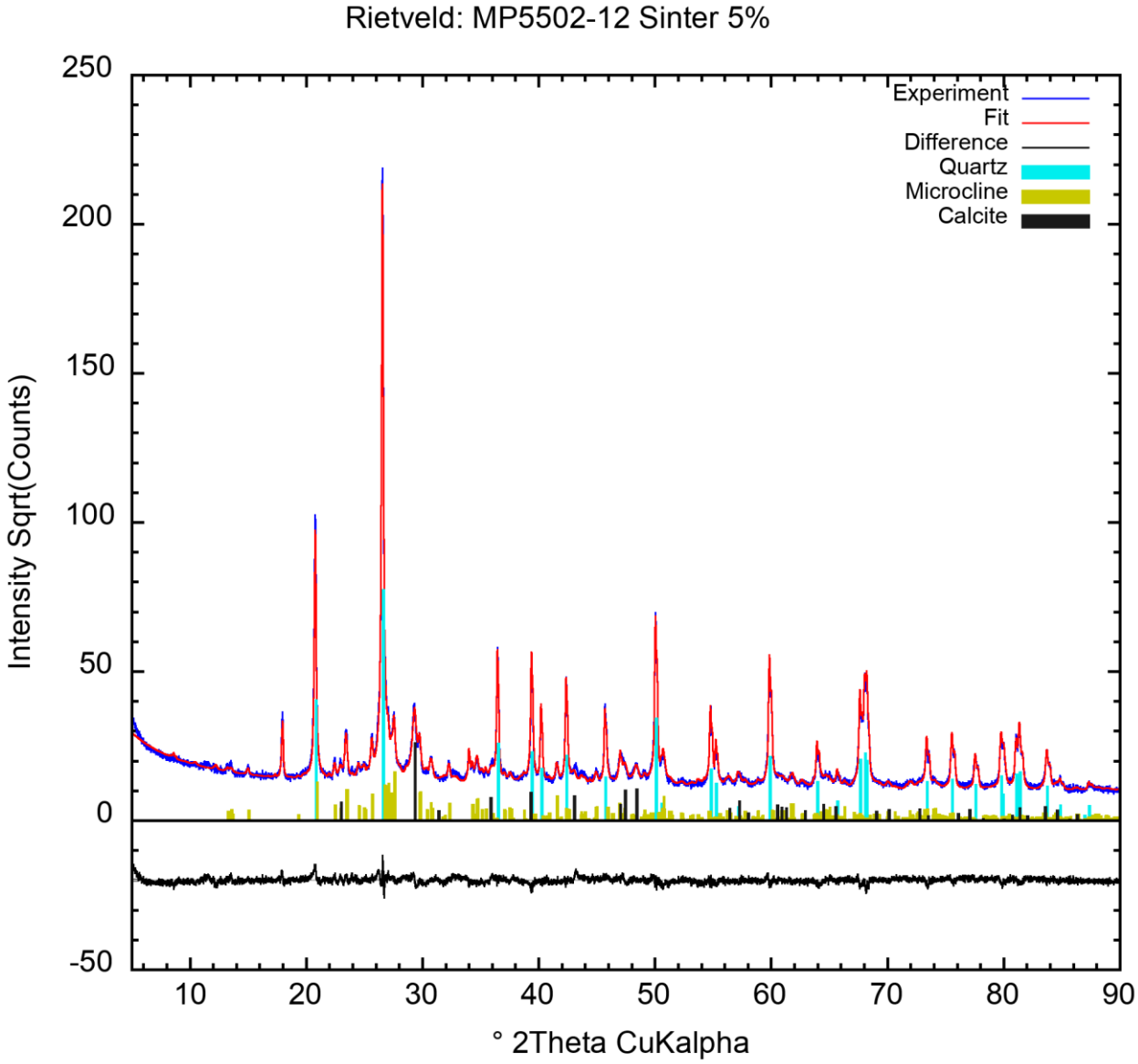
Phase Wt.-%

Quartz 45.5
Albite 6.3
Microcline 28.1
Biotite 0.4
Muscovite 2.5
Kaolinite 1.1
Topaz 0.2
Schorl 0.4
Zircon 0.0
Rutile 0.1
Anatase 0.0
Apatite-(CaF) 1.1
Anorthite 2.2
Actinolite 0.2
Goethite 0.3
Hematite 0.2
Calcite 5.9
Magnetite 0.0
Dolomite 0.2
Portlandite 1.1
Illite 4.2

Elemental composition Wt.-%:

AL 5.6
C 0.7
CA 3.8
K 4.6
NA 0.6
O 49.7
SI 34.1

Petrolab
Mineralogy · Petrography



MP5502-12 Sinter 5%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 8.76 Rexp: 4.59

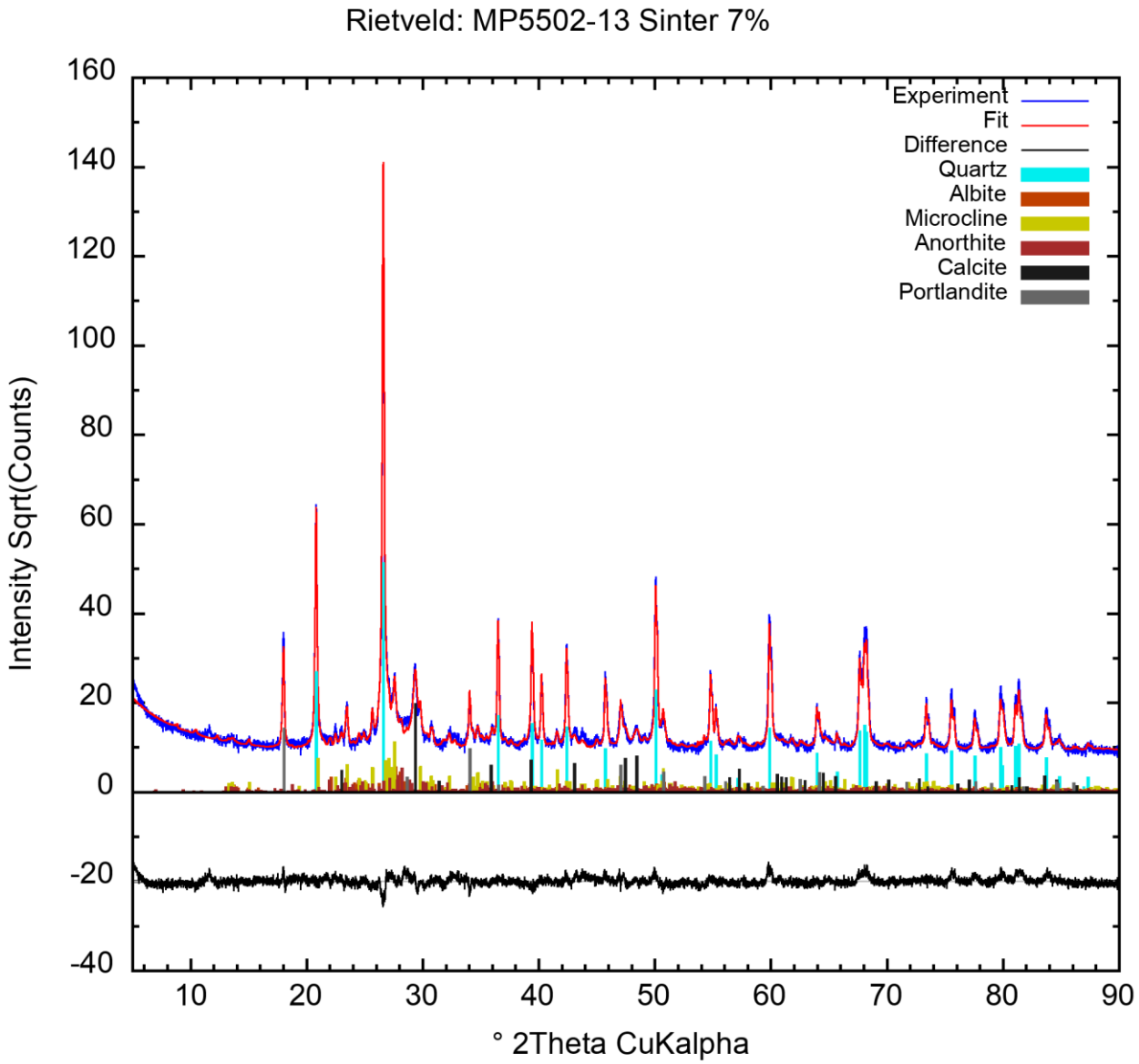
Phase Wt.-%

Quartz 75.6
Albite 0.4
Microcline 14.0
Biotite 0.1
Muscovite 0.4
Kaolinite 0.9
Topaz 0.2
Schorl 0.1
Zircon 0.1
Rutile 0.1
Anatase 0.1
Apatite-(CaF) 0.3
Anorthite 0.8
Actinolite 0.4
Goethite 0.0
Hematite 0.1
Calcite 5.2
Magnetite 0.0
Dolomite 0.0
Portlandite 1.0
Illite 0.2

Elemental composition Wt.-%:

AL 2.0
C 0.6
CA 2.9
K 2.0
O 51.6
SI 40.4

Petrolab
Mineralogy · Petrography



MP5502-13 Sinter 7%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 11.5 Rexp: 6.36

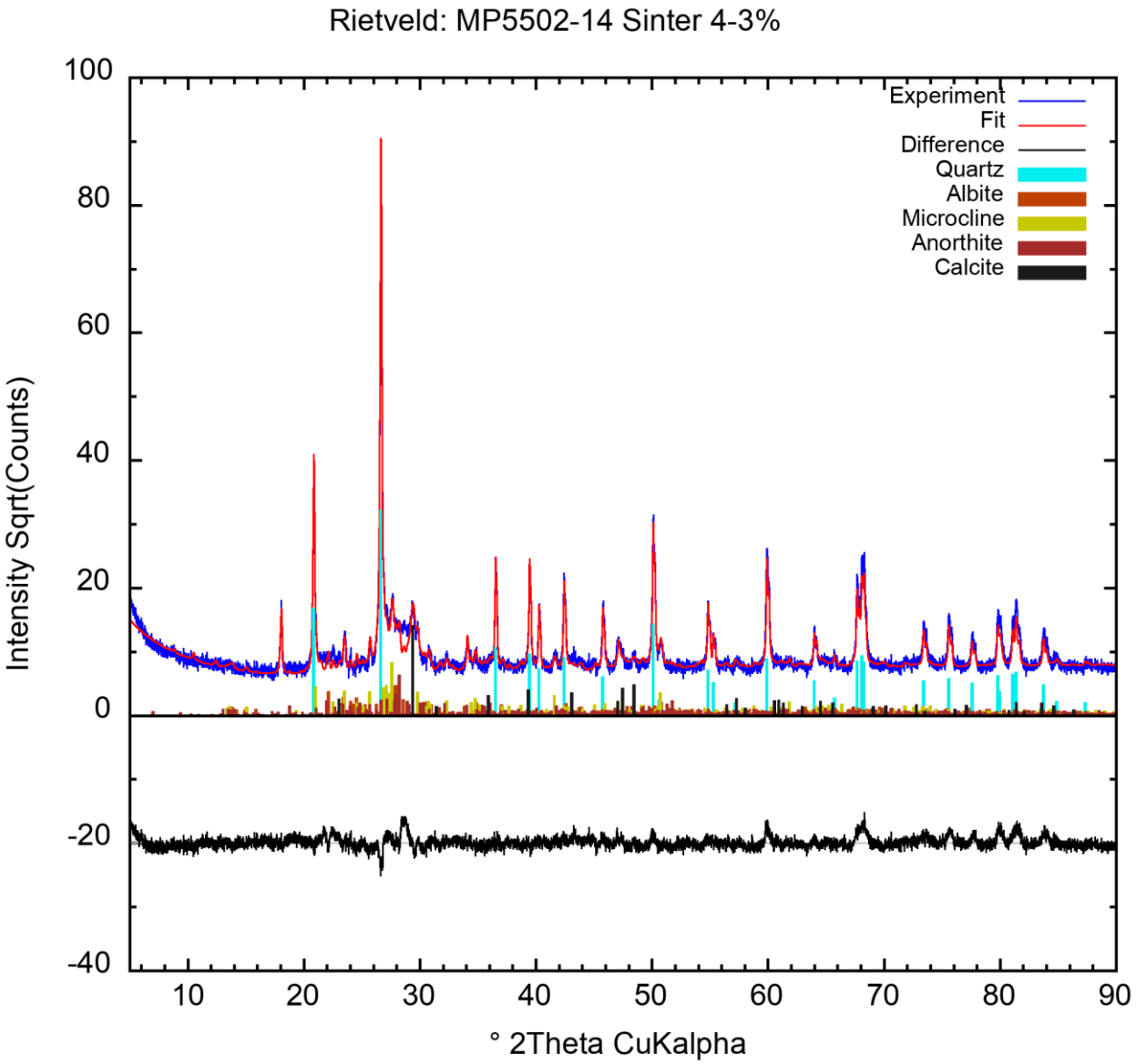
Phase Wt.-%

Quartz 72.2
Albite 2.1
Microcline 11.1
Biotite 0.2
Muscovite 0.2
Kaolinite 0.6
Topaz 0.4
Schorl 0.1
Zircon 0.1
Rutile 0.1
Anatase 0.1
Apatite-(CaF) 0.9
Anorthite 2.2
Actinolite 0.6
Goethite 0.2
Hematite 0.0
Calcite 6.6
Magnetite 0.0
Dolomite 0.1
Portlandite 2.4
Illite 0.2

Elemental composition Wt.-%:

AL 2.1
C 0.8
CA 4.6
K 1.6
O 51.3
SI 38.6

Petrolab
Mineralogy · Petrography



MP5502-14 Sinter 4-3%

Results Rietveld analysis
BRUKER TOPAS V6

Rwp: 16.1 Rexp: 9.27

Phase Wt.-%

Quartz 68.0
Albite 5.3
Microcline 10.9
Biotite 0.2
Muscovite 0.2
Kaolinite 1.1
Topaz 0.0
Schorl 0.4
Zircon 0.1
Rutile 0.3
Anatase 0.0
Apatite-(CaF) 1.1
Anorthite 4.4
Actinolite 0.6
Goethite 0.4
Hematite 0.0
Calcite 5.2
Magnetite 0.0
Dolomite 0.0
Portlandite 1.5
Illite 0.2

Elemental composition Wt.-%:

AL 2.9
C 0.6
CA 4.0
K 1.6
O 51.1
SI 38.2

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Appendix C Laboratory Reports – L:S Ratio Tests

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 02, 2021

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

Project ID:
ACZ Project ID: L69015

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 06, 2021. This project has been assigned to ACZ's project number, L69015. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L69015. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 02, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

S. Habermehl

Scott Habermehl has reviewed
and approved this report.

McClelland Laboratories, Inc.

November 02, 2021

Project ID:
ACZ Project ID: L69015

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 5 leachate samples from McClelland Laboratories, Inc. on October 6, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L69015. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

Any analyses not performed within EPA recommended holding times have been qualified with an "H" flag.

(H1) Samples put into Workgroup to run on day of hold, but workgroup was run overnight. Samples not run until past midnight on instrument.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 PW-1

ACZ Sample ID: ***L69015-01***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/08/21 13:19	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/12/21 20:15	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/17/21 12:50	scp
Arsenic, dissolved	M200.8 ICP-MS	1	0.0489		*	mg/L	0.0002	0.001	10/17/21 12:50	scp
Barium, dissolved	M200.7 ICP	1	0.0641		*	mg/L	0.007	0.035	10/12/21 20:15	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/17/21 12:50	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 21:20	jlw
Boron, dissolved	M200.7 ICP	1	0.098	B	*	mg/L	0.03	0.1	10/12/21 20:15	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/17/21 12:50	scp
Calcium, dissolved	M200.7 ICP	1	7.64		*	mg/L	0.1	0.5	10/12/21 20:15	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/17/21 12:50	scp
Cobalt, dissolved	M200.8 ICP-MS	1	0.000066	B	*	mg/L	0.00005	0.00025	10/17/21 12:50	scp
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/17/21 12:50	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/12/21 20:15	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/12/21 20:15	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	10/17/21 12:50	scp
Lithium, dissolved	M200.7 ICP	1	0.0814		*	mg/L	0.008	0.04	10/12/21 20:15	kja
Magnesium, dissolved	M200.7 ICP	1	0.44	B	*	mg/L	0.2	1	10/12/21 20:15	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00056	B	*	mg/L	0.0004	0.002	10/17/21 12:50	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	1.3			ng/L	0.3	1	10/18/21 10:56	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00513		*	mg/L	0.0002	0.0005	10/17/21 12:50	scp
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/17/21 12:50	scp
Potassium, dissolved	M200.7 ICP	1	2.42		*	mg/L	0.2	1	10/12/21 20:15	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/12/21 20:15	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00064		*	mg/L	0.0001	0.00025	10/19/21 20:00	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 12:50	scp
Sodium, dissolved	M200.7 ICP	1	62.1		*	mg/L	0.2	1	10/12/21 20:15	kja
Strontium, dissolved	M200.7 ICP	1	0.0295	B	*	mg/L	0.009	0.045	10/12/21 20:15	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 12:50	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/12/21 20:15	kja
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/12/21 20:15	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00036	B	*	mg/L	0.0001	0.0005	10/17/21 12:50	scp
Vanadium, dissolved	M200.8 ICP-MS	1	0.00169	B	*	mg/L	0.0005	0.002	10/17/21 12:50	scp
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/17/21 12:50	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 PW-1

ACZ Sample ID: ***L69015-01***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	110	H	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	11.8	BH	*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	<2	UH	*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	121	H	*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.5			%			11/02/21 0:00	calc
Sum of Anions			3.3			meq/L			11/02/21 0:00	calc
Sum of Cations			3.2			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	7.43		*	mg/L	0.5	2	10/15/21 11:19	md
Conductivity @25C	SM2510B	1	311		*	umhos/cm	1	10	10/20/21 0:46	eep
Fluoride	M300.0 - Ion Chromatography	1	0.656		*	mg/L	0.05	0.25	10/14/21 18:37	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		21			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/24/21 0:02	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	B	*	mg/L	0.01	0.05	10/19/21 11:36	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	206		*	mg/L	20	40	10/11/21 18:29	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	27.6		*	mg/L	1	5	10/15/21 9:36	wtc
TDS (calculated)	Calculation		182			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.13						11/02/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-1

ACZ Sample ID: ***L69015-02***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/08/21 13:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/12/21 20:18	kja
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:52	scp
Arsenic, dissolved	M200.8 ICP-MS	2	0.00183	B	*	mg/L	0.0004	0.002	10/19/21 20:05	bsu
Barium, dissolved	M200.7 ICP	1	1.28		*	mg/L	0.007	0.035	10/12/21 20:18	kja
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	10/17/21 12:52	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 21:23	jlw
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/12/21 20:18	kja
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 12:52	scp
Calcium, dissolved	M200.7 ICP	1	358		*	mg/L	0.1	0.5	10/12/21 20:18	kja
Chromium, dissolved	M200.8 ICP-MS	2	0.153		*	mg/L	0.001	0.004	10/17/21 12:52	scp
Cobalt, dissolved	M200.8 ICP-MS	2	0.0273		*	mg/L	0.0001	0.0005	10/17/21 12:52	scp
Copper, dissolved	M200.8 ICP-MS	2	0.00623		*	mg/L	0.0016	0.004	10/17/21 12:52	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/12/21 20:18	kja
Iron, dissolved	M200.7 ICP	1	0.121	B	*	mg/L	0.06	0.15	10/12/21 20:18	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00170		*	mg/L	0.0002	0.001	10/17/21 12:52	scp
Lithium, dissolved	M200.7 ICP	1	1.10		*	mg/L	0.008	0.04	10/12/21 20:18	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/12/21 20:18	kja
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:52	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	11.1			ng/L	0.3	1	10/18/21 11:01	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.0133		*	mg/L	0.0004	0.001	10/17/21 12:52	scp
Nickel, dissolved	M200.8 ICP-MS	2	0.00088	B	*	mg/L	0.0008	0.002	10/17/21 12:52	scp
Potassium, dissolved	M200.7 ICP	1	943		*	mg/L	0.2	1	10/12/21 20:18	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/12/21 20:18	kja
Selenium, dissolved	M200.8 ICP-MS	2	0.00360		*	mg/L	0.0002	0.0005	10/19/21 20:05	bsu
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:52	scp
Sodium, dissolved	M200.7 ICP	1	492		*	mg/L	0.2	1	10/12/21 20:18	kja
Strontium, dissolved	M200.7 ICP	1	4.01		*	mg/L	0.009	0.045	10/12/21 20:18	kja
Thallium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:52	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/12/21 20:18	kja
Titanium, dissolved	M200.7 ICP	1	0.0210	B	*	mg/L	0.005	0.025	10/12/21 20:18	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:52	scp
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	10/17/21 12:52	scp
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	10/17/21 12:52	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-1

ACZ Sample ID: ***L69015-02***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	354	H	*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	2890	H	*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	3240	H	*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.5			%			11/02/21 0:00	calc
Sum of Anions			66			meq/L			11/02/21 0:00	calc
Sum of Cations			64			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	5.17		*	mg/L	0.5	2	10/15/21 11:20	md
Conductivity @25C	SM2510B	1	15200		*	umhos/cm	1	10	10/20/21 1:12	eep
Fluoride	M300.0 - Ion Chromatography	1	0.083	B	*	mg/L	0.05	0.25	10/14/21 19:13	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		894			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.135		*	mg/L	0.02	0.1	10/24/21 0:03	pjb
pH (lab)	SM4500H+ B									
pH		1	12.9	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/19/21 11:37	mjj1
Residue, Filterable (TDS) @180C	SM2540C	2	3730		*	mg/L	40	80	10/11/21 18:31	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	35.6		*	mg/L	5	25	10/15/21 10:01	wtc
TDS (calculated)	Calculation		2540			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.47						11/02/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-2

ACZ Sample ID: ***L69015-03***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/08/21 13:29	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/12/21 20:34	kja
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:54	scp
Arsenic, dissolved	M200.8 ICP-MS	2	0.00105	B	*	mg/L	0.0004	0.002	10/19/21 20:07	bsu
Barium, dissolved	M200.7 ICP	1	1.38		*	mg/L	0.007	0.035	10/12/21 20:34	kja
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	10/17/21 12:54	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 21:26	jlw
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/12/21 20:34	kja
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 12:54	scp
Calcium, dissolved	M200.7 ICP	1	549		*	mg/L	0.1	0.5	10/12/21 20:34	kja
Chromium, dissolved	M200.8 ICP-MS	2	0.108		*	mg/L	0.001	0.004	10/17/21 12:54	scp
Cobalt, dissolved	M200.8 ICP-MS	2	0.0152		*	mg/L	0.0001	0.0005	10/17/21 12:54	scp
Copper, dissolved	M200.8 ICP-MS	2	0.00344	B	*	mg/L	0.0016	0.004	10/17/21 12:54	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/12/21 20:34	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/12/21 20:34	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00254		*	mg/L	0.0002	0.001	10/17/21 12:54	scp
Lithium, dissolved	M200.7 ICP	1	0.573		*	mg/L	0.008	0.04	10/12/21 20:34	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/12/21 20:34	kja
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:54	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.8			ng/L	0.3	1	10/18/21 11:05	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.00953		*	mg/L	0.0004	0.001	10/17/21 12:54	scp
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	10/17/21 12:54	scp
Potassium, dissolved	M200.7 ICP	1	418		*	mg/L	0.2	1	10/12/21 20:34	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/12/21 20:34	kja
Selenium, dissolved	M200.8 ICP-MS	2	0.00179		*	mg/L	0.0002	0.0005	10/19/21 20:07	bsu
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:54	scp
Sodium, dissolved	M200.7 ICP	1	255		*	mg/L	0.2	1	10/12/21 20:34	kja
Strontium, dissolved	M200.7 ICP	1	4.28		*	mg/L	0.009	0.045	10/12/21 20:34	kja
Thallium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:54	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/12/21 20:34	kja
Titanium, dissolved	M200.7 ICP	1	0.0179	B	*	mg/L	0.005	0.025	10/12/21 20:34	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:54	scp
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	10/17/21 12:54	scp
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	10/17/21 12:54	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-2

ACZ Sample ID: ***L69015-03***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/28/21 0:00	eep
Carbonate as CaCO3		1	82.4	H	*	mg/L	2	20	10/28/21 0:00	eep
Hydroxide as CaCO3		1	2270	H	*	mg/L	2	20	10/28/21 0:00	eep
Total Alkalinity		1	2350	H	*	mg/L	2	20	10/28/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.0			%			11/02/21 0:00	calc
Sum of Anions			48			meq/L			11/02/21 0:00	calc
Sum of Cations			50			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	3.81		*	mg/L	0.5	2	10/15/21 11:20	md
Conductivity @25C	SM2510B	1	10700		*	umhos/cm	1	10	10/20/21 1:39	eep
Fluoride	M300.0 - Ion Chromatography	1	0.077	B	*	mg/L	0.05	0.25	10/14/21 19:49	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1370			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.103		*	mg/L	0.02	0.1	10/24/21 0:06	pjb
pH (lab)	SM4500H+ B									
pH		1	12.8	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/19/21 11:38	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	2670		*	mg/L	20	40	10/11/21 18:33	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	29.9		*	mg/L	5	25	10/19/21 12:14	wtc
TDS (calculated)	Calculation		1700			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.57						11/02/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-3

ACZ Sample ID: ***L69015-04***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/08/21 13:34	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/12/21 20:38	kja
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:56	scp
Arsenic, dissolved	M200.8 ICP-MS	2	0.00103	B	*	mg/L	0.0004	0.002	10/19/21 20:08	bsu
Barium, dissolved	M200.7 ICP	1	1.39		*	mg/L	0.007	0.035	10/12/21 20:38	kja
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	10/17/21 12:56	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 21:37	jlw
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/12/21 20:38	kja
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 12:56	scp
Calcium, dissolved	M200.7 ICP	1	646		*	mg/L	0.1	0.5	10/12/21 20:38	kja
Chromium, dissolved	M200.8 ICP-MS	2	0.0983		*	mg/L	0.001	0.004	10/17/21 12:56	scp
Cobalt, dissolved	M200.8 ICP-MS	2	0.00933		*	mg/L	0.0001	0.0005	10/17/21 12:56	scp
Copper, dissolved	M200.8 ICP-MS	2	0.00313	B	*	mg/L	0.0016	0.004	10/17/21 12:56	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/12/21 20:38	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/12/21 20:38	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00102		*	mg/L	0.0002	0.001	10/17/21 12:56	scp
Lithium, dissolved	M200.7 ICP	1	0.356		*	mg/L	0.008	0.04	10/12/21 20:38	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/12/21 20:38	kja
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:56	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	9.2			ng/L	0.3	1	10/18/21 11:10	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.0104		*	mg/L	0.0004	0.001	10/17/21 12:56	scp
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	10/17/21 12:56	scp
Potassium, dissolved	M200.7 ICP	1	219		*	mg/L	0.2	1	10/12/21 20:38	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/12/21 20:38	kja
Selenium, dissolved	M200.8 ICP-MS	2	0.00131		*	mg/L	0.0002	0.0005	10/19/21 20:08	bsu
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:56	scp
Sodium, dissolved	M200.7 ICP	1	165		*	mg/L	0.2	1	10/12/21 20:38	kja
Strontium, dissolved	M200.7 ICP	1	3.33		*	mg/L	0.009	0.045	10/12/21 20:38	kja
Thallium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:56	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/12/21 20:38	kja
Titanium, dissolved	M200.7 ICP	1	0.0146	B	*	mg/L	0.005	0.025	10/12/21 20:38	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:56	scp
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	10/17/21 12:56	scp
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	10/17/21 12:56	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-3

ACZ Sample ID: ***L69015-04***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	86.1	H	*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	2020	H	*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	2110	H	*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.3			%			11/02/21 0:00	calc
Sum of Anions			43			meq/L			11/02/21 0:00	calc
Sum of Cations			45			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	4.44		*	mg/L	0.5	2	10/15/21 11:21	md
Conductivity @25C	SM2510B	1	9520		*	umhos/cm	1	10	10/20/21 2:04	eep
Fluoride	M300.0 - Ion Chromatography	1	0.090	B	*	mg/L	0.05	0.25	10/14/21 20:07	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1610			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.100		*	mg/L	0.02	0.1	10/24/21 0:08	pjb
pH (lab)	SM4500H+ B									
pH		1	12.7	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/19/21 11:39	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	2330		*	mg/L	20	40	10/11/21 18:35	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	26.1		*	mg/L	5	25	10/19/21 12:14	wtc
TDS (calculated)	Calculation		1460			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.60						11/02/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-4

ACZ Sample ID: ***L69015-05***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/08/21 13:40	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/12/21 20:41	kja
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:58	scp
Arsenic, dissolved	M200.8 ICP-MS	2	0.00069	B	*	mg/L	0.0004	0.002	10/19/21 20:10	bsu
Barium, dissolved	M200.7 ICP	1	1.24		*	mg/L	0.007	0.035	10/12/21 20:41	kja
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	10/17/21 12:58	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 21:40	jlw
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/12/21 20:41	kja
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 12:58	scp
Calcium, dissolved	M200.7 ICP	1	700		*	mg/L	0.1	0.5	10/12/21 20:41	kja
Chromium, dissolved	M200.8 ICP-MS	2	0.0899		*	mg/L	0.001	0.004	10/17/21 12:58	scp
Cobalt, dissolved	M200.8 ICP-MS	2	0.00619		*	mg/L	0.0001	0.0005	10/17/21 12:58	scp
Copper, dissolved	M200.8 ICP-MS	2	0.00200	B	*	mg/L	0.0016	0.004	10/17/21 12:58	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/12/21 20:41	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/12/21 20:41	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00116		*	mg/L	0.0002	0.001	10/17/21 12:58	scp
Lithium, dissolved	M200.7 ICP	1	0.254		*	mg/L	0.008	0.04	10/12/21 20:41	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/12/21 20:41	kja
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 12:58	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	8.9			ng/L	0.3	1	10/18/21 11:24	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.0116		*	mg/L	0.0004	0.001	10/17/21 12:58	scp
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	10/17/21 12:58	scp
Potassium, dissolved	M200.7 ICP	1	114		*	mg/L	0.2	1	10/12/21 20:41	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/12/21 20:41	kja
Selenium, dissolved	M200.8 ICP-MS	2	0.00117		*	mg/L	0.0002	0.0005	10/19/21 20:10	bsu
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:58	scp
Sodium, dissolved	M200.7 ICP	1	117		*	mg/L	0.2	1	10/12/21 20:41	kja
Strontium, dissolved	M200.7 ICP	1	2.13		*	mg/L	0.009	0.045	10/12/21 20:41	kja
Thallium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:58	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/12/21 20:41	kja
Titanium, dissolved	M200.7 ICP	1	0.0120	B	*	mg/L	0.005	0.025	10/12/21 20:41	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 12:58	scp
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	10/17/21 12:58	scp
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	10/17/21 12:58	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-4

ACZ Sample ID: ***L69015-05***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	83.1	H	*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	1900	H	*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	1990	H	*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.6			%			11/02/21 0:00	calc
Sum of Anions			40			meq/L			11/02/21 0:00	calc
Sum of Cations			43			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	5.37		*	mg/L	0.5	2	10/15/21 11:21	md
Conductivity @25C	SM2510B	1	8880		*	umhos/cm	1	10	10/20/21 2:29	eep
Fluoride	M300.0 - Ion Chromatography	1	0.101	B	*	mg/L	0.05	0.25	10/14/21 21:00	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1750			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.078	B	*	mg/L	0.02	0.1	10/24/21 0:09	pjb
pH (lab)	SM4500H+ B									
pH		1	12.7	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/19/21 11:40	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	2150		*	mg/L	20	40	10/11/21 18:37	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	29.8		*	mg/L	5	25	10/15/21 10:01	wtc
TDS (calculated)	Calculation		1340			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.60						11/02/21 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

MCCLELLANDLAB ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529842													
WG529842PBW1	PBW	10/19/21 22:18				5.8	mg/L		-20	20			
WG529842LCSW3	LCSW	10/19/21 22:37	WC211018-1	820.0001		801.1	mg/L	98	90	110			
L69016-03DUP	DUP	10/20/21 4:14			2150	2147.6	mg/L				0	20	
WG529842LCSW6	LCSW	10/20/21 4:32	WC211018-1	820.0001		798	mg/L	97	90	110			
WG529842PBW2	PBW	10/20/21 4:39				5.9	mg/L		-20	20			
WG529842LCSW9	LCSW	10/20/21 8:41	WC211018-1	820.0001		792.5	mg/L	97	90	110			
WG529842PBW3	PBW	10/20/21 8:48				4.9	mg/L		-20	20			
WG529842LCSW12	LCSW	10/20/21 12:35	WC211018-1	820.0001		821.3	mg/L	100	90	110			
WG529842PBW4	PBW	10/20/21 12:41				4.4	mg/L		-20	20			
WG529842LCSW15	LCSW	10/20/21 16:05	WC211018-1	820.0001		804	mg/L	98	90	110			
WG530127													
WG530127PBW	PBW	10/23/21 13:40				121.7	mg/L		-20	20			B7
WG530127LCSW1	LCSW	10/23/21 13:52	WC211023-10	32800		32534.7	mg/L	99	90	110			
L69204-03DUP	DUP	10/23/21 14:32			2720	2686.2	mg/L				1	20	
WG530127LCSW2	LCSW	10/23/21 14:42	WC211023-10	32800		31975.9	mg/L	97	90	110			
WG530515													
WG530515PBW	PBW	10/28/21 13:22				6	mg/L		-20	20			
WG530515LCSW1	LCSW	10/28/21 13:34	WC211023-11	8200		7806.5	mg/L	95	90	110			
L69016-02DUP	DUP	10/28/21 14:05			2640	2474.4	mg/L				6	20	
WG530515LCSW2	LCSW	10/28/21 14:17	WC211023-11	8200		7846.3	mg/L	96	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.969	mg/L	98	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.15	0.15			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	1.0008		1.01	mg/L	101	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	1.0008	U	1.072	mg/L	107	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	1.0008	U	1.088	mg/L	109	85	115	1	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.0201		.02017	mg/L	100	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00088	0.00088			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.01		.00993	mg/L	99	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.01	U	.00922	mg/L	92	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.01	U	.00937	mg/L	94	70	130	2	20	

MCCLELLANDLAB ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05148	mg/L	103	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00044	0.00044			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05005		.05001	mg/L	100	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05005	.00096	.05238	mg/L	103	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05005	.00096	.05178	mg/L	102	70	130	1	20	
WG529837													
WG529837ICV	ICV	10/19/21 19:45	MS211013-2	.05		.05159	mg/L	103	90	110			
WG529837ICB	ICB	10/19/21 19:47				U	mg/L		-0.00044	0.00044			
WG529837LFB	LFB	10/19/21 19:49	MS210927-3	.05005		.04938	mg/L	99	85	115			
L69007-02AS	AS	10/19/21 19:54	MS210927-3	.05005	.00119	.04747	mg/L	92	70	130			
L69007-02ASD	ASD	10/19/21 19:55	MS210927-3	.05005	.00119	.05196	mg/L	101	70	130	9	20	

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.9832	mg/L	99	95	105			
WG529233ICB	ICB	10/12/21 19:01				.0074	mg/L		-0.021	0.021			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	.5		.4905	mg/L	98	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	.5	1.28	1.73	mg/L	90	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	.5	1.28	1.731	mg/L	90	85	115	0	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05088	mg/L	102	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.000176	0.000176			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05005		.048447	mg/L	97	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05005	U	.04884	mg/L	98	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05005	U	.048801	mg/L	98	70	130	0	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529550													
WG529550ICV	ICV	10/18/21 20:57	II211014-1	2		2.002	mg/L	100	95	105			
WG529550ICB	ICB	10/18/21 21:03				U	mg/L		-0.12	0.12			
WG529550LFB	LFB	10/18/21 21:16	II210930-2	1		.998	mg/L	100	85	115			
L69015-03AS	AS	10/18/21 21:30	II210930-2	1	U	1.018	mg/L	102	85	115			
L69015-03ASD	ASD	10/18/21 21:33	II210930-2	1	U	1.049	mg/L	105	85	115	3	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.998	mg/L	100	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.09	0.09			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	.5005		.513	mg/L	102	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	.5005	U	.514	mg/L	103	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	.5005	U	.516	mg/L	103	85	115	0	20	

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ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.052696	mg/L	105	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00011	0.00011			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05005		.050822	mg/L	102	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05005	U	.051632	mg/L	103	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05005	U	.051215	mg/L	102	70	130	1	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	100		100.79	mg/L	101	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.3	0.3			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	67.98972		68.84	mg/L	101	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	67.98972	358	410.4	mg/L	77	85	115			M3
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	67.98972	358	407.5	mg/L	73	85	115	1	20	M3

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529535													
WG529535ICV	ICV	10/15/21 11:16	WI210503-1	54.89		51.34	mg/L	94	90	110			
WG529535ICB	ICB	10/15/21 11:16				.89	mg/L		-1.5	1.5			
WG529535LFB1	LFB	10/15/21 11:17	WI210908-11	29.97		27.82	mg/L	93	90	110			
L68948-03AS	AS	10/15/21 11:18	WI210908-11	2997	393	3290.99	mg/L	97	90	110			
L68948-04DUP	DUP	10/15/21 11:19			516	505.63	mg/L				2	20	
WG529535LFB2	LFB	10/15/21 11:32	WI210908-11	29.97		28.56	mg/L	95	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.0526	mg/L	105	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.0011	0.0011			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05		.04969	mg/L	99	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05	U	.0502	mg/L	100	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05	U	.04905	mg/L	98	70	130	2	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05303	mg/L	106	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00011	0.00011			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05005		.050144	mg/L	100	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05005	U	.051389	mg/L	103	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05005	U	.050711	mg/L	101	70	130	1	20	

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ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529842													
WG529842LCSW2	LCSW	10/19/21 22:24	PCN64228	1409		1501	umhos/cm	107	90	110			
L69016-03DUP	DUP	10/20/21 4:14			9640	9610	umhos/cm				0	20	
WG529842LCSW5	LCSW	10/20/21 4:21	PCN64228	1409		1513	umhos/cm	107	90	110			
WG529842LCSW8	LCSW	10/20/21 8:30	PCN64228	1409		1517	umhos/cm	108	90	110			
WG529842LCSW11	LCSW	10/20/21 12:22	PCN64228	1409		1517	umhos/cm	108	90	110			
WG529842LCSW14	LCSW	10/20/21 15:54	PCN64228	1409		1519	umhos/cm	108	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05469	mg/L	109	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00176	0.00176			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05		.05171	mg/L	103	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05	U	.05285	mg/L	106	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05	U	.05176	mg/L	104	70	130	2	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529226													
WG529226ICV	ICV	10/12/21 19:45	WI211011-8	4.004		4.212	mg/L	105	90	110			
WG529226ICB	ICB	10/12/21 20:03				U	mg/L		-0.05	0.05			
WG529456													
WG529456LFB1	LFB	10/14/21 17:43	WI210907-6	1.5		1.655	mg/L	110	90	110			
L69015-01DUP	DUP	10/14/21 18:55			.656	.648	mg/L				1	20	
L69015-02AS	AS	10/14/21 19:31	WI210907-6	1.5	.083	1.259	mg/L	78	90	110			M2

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		2.02	mg/L	101	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.3	0.3			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	.9822		1.03	mg/L	105	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	.9822	U	1.05	mg/L	107	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	.9822	U	1.06	mg/L	108	85	115	1	20	

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.933	mg/L	97	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.18	0.18			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	1.0001		.989	mg/L	99	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	1.0001	.121	1.09	mg/L	97	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	1.0001	.121	1.094	mg/L	97	85	115	0	20	

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ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05199	mg/L	104	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00022	0.00022			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05005		.05054	mg/L	101	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05005	U	.0512	mg/L	102	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05005	U	.05059	mg/L	101	70	130	1	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.9668	mg/L	98	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.024	0.024			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	.999		.9844	mg/L	99	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	.999	1.1	2.088	mg/L	99	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	.999	1.1	2.09	mg/L	99	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	100		96.81	mg/L	97	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.6	0.6			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	49.99828		47.91	mg/L	96	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	49.99828	U	45.57	mg/L	91	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	49.99828	U	46.32	mg/L	93	85	115	2	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05238	mg/L	105	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00088	0.00088			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.0499		.0503	mg/L	101	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.0499	.00185	.05265	mg/L	102	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.0499	.00185	.05185	mg/L	100	70	130	2	20	

MCCLELLANDLAB ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG529670													
WG529670CCV1	CCV	10/18/21 10:11	HG211011-4	10		10.8	ng/L	108	76.5	123.4			
WG529670CCB1	CCB	10/18/21 10:16				U	ng/L		-0.501	0.501			
WG529670PQV	PQV	10/18/21 10:21	HG211011-6	1		1	ng/L	100	70	130			
WG529670LFB	LFB	10/18/21 10:25	HG211011-5	2		1.87	ng/L	94	71	125			
L69015-04MS	MS	10/18/21 11:15	HG211011-5	2	9.2	11.3	ng/L	105	71	125			
L69015-04MSD	MSD	10/18/21 11:20	HG211011-5	2	9.2	11.4	ng/L	110	71	125	1	24	
WG529670CCV2	CCV	10/18/21 11:34	HG211011-4	10		10.1	ng/L	101	76.5	123.4			
WG529670CCB2	CCB	10/18/21 11:39				U	ng/L		-0.501	0.501			
WG529670CCV3	CCV	10/18/21 15:06	HG211011-4	10		11	ng/L	110	76.5	123.4			
WG529670CCB3	CCB	10/18/21 15:11				1.34	ng/L		-0.501	0.501			BB

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.01992		.02105	mg/L	106	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00044	0.00044			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05005		.05045	mg/L	101	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05005	.00301	.05225	mg/L	98	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05005	.00301	.05172	mg/L	97	70	130	1	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05281	mg/L	106	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00088	0.00088			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05		.04939	mg/L	99	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05	U	.05071	mg/L	101	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05	U	.0489	mg/L	98	70	130	4	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530131													
WG530131ICV	ICV	10/23/21 20:19	WI210904-1	2.4161		2.344	mg/L	97	90	110			
WG530131ICB	ICB	10/23/21 20:20				U	mg/L		-0.02	0.02			
WG530135													
WG530135LFB1	LFB	10/23/21 23:42	WI211001-5	2		2.003	mg/L	100	90	110			
L69001-01AS	AS	10/23/21 23:45	WI211001-5	2	U	2.065	mg/L	103	90	110			
L69001-02DUP	DUP	10/23/21 23:47			U	U	mg/L				0	20	RA
L69015-02AS	AS	10/24/21 0:04	WI211001-5	2	.135	2.17	mg/L	102	90	110			
L69015-03DUP	DUP	10/24/21 0:07			.103	.102	mg/L				1	20	RA
WG530135LFB2	LFB	10/24/21 0:23	WI211001-5	2		1.98	mg/L	99	90	110			

MCCLELLANDLAB ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530055													
WG530055LCSW1	LCSW	10/21/21 22:05	PCN62948	6		6.1	units	102	5.9	6.1			
L69062-01DUP	DUP	10/21/21 23:24			8.4	8.3	units				1	20	
WG530055LCSW4	LCSW	10/22/21 0:42	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW7	LCSW	10/22/21 4:30	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW10	LCSW	10/22/21 8:24	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW13	LCSW	10/22/21 13:06	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529764													
WG529764ICV	ICV	10/19/21 11:05	WI211018-4	.65228		.673	mg/L	103	90	110			
WG529764ICB	ICB	10/19/21 11:07				U	mg/L		-0.01	0.01			
WG528977LRB	LRB	10/19/21 11:09				U	mg/L		-0.01	0.01			
WG528977LFB	LFB	10/19/21 11:10	WI211001-2	.5		.498	mg/L	100	90	110			
L68953-04DUP	DUP	10/19/21 11:29			U	U	mg/L				0	20	RA
L68953-03LFM	LFM	10/19/21 11:42	WI211001-2	.5	U	.488	mg/L	98	90	110			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	20		19.96	mg/L	100	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.6	0.6			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	99.96008		99.2	mg/L	99	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	99.96008	943	999.8	mg/L	57	85	115			M3
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	99.96008	943	978.3	mg/L	35	85	115	2	20	M3

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529186													
WG529186PBW	PBW	10/11/21 18:00				U	mg/L		-20	20			
WG529186LCSW	LCSW	10/11/21 18:01	PCN64137	1000		970	mg/L	97	80	120			
L69016-03DUP	DUP	10/11/21 18:44			2420	2390	mg/L				1	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.931	mg/L	97	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.15	0.15			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	1.0017		.987	mg/L	99	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	1.0017	U	1.019	mg/L	102	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	1.0017	U	1.029	mg/L	103	85	115	1	20	

MCCLELLANDLAB ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529837													
WG529837ICV	ICV	10/19/21 19:45	MS211013-2	.05		.05151	mg/L	103	90	110			
WG529837ICB	ICB	10/19/21 19:47				U	mg/L		-0.00022	0.00022			
WG529837LFB	LFB	10/19/21 19:49	MS210927-3	.05		.04929	mg/L	99	85	115			
L69007-02AS	AS	10/19/21 19:54	MS210927-3	.05	U	.04922	mg/L	98	70	130			
L69007-02ASD	ASD	10/19/21 19:55	MS210927-3	.05	U	.05361	mg/L	107	70	130	9	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.02		.01991	mg/L	100	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00022	0.00022			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.01		.00944	mg/L	94	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.01	U	.00912	mg/L	91	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.01	U	.00884	mg/L	88	70	130	3	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	100		101.06	mg/L	101	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.6	0.6			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	100.007		99.38	mg/L	99	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	100.007	492	577.4	mg/L	85	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	100.007	492	568.4	mg/L	76	85	115	2	20	M3

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.9158	mg/L	96	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.027	0.027			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	.5005		.5199	mg/L	104	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	.5005	4.01	4.481	mg/L	94	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	.5005	4.01	4.416	mg/L	81	85	115	1	20	M3

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529531													
WG529531ICB	ICB	10/15/21 9:05				U	mg/L		-3	3			
WG529531ICV	ICV	10/15/21 9:05	WI211012-1	20.46		20.2	mg/L	99	90	110			
WG529531LFB	LFB	10/15/21 9:33	WI210105-3	10		9.4	mg/L	94	90	110			
L69025-08AS	AS	10/15/21 9:37	SO4TURB20X	10	66.2	219.4	mg/L	1532	90	110			M3
L69025-09DUP	DUP	10/15/21 9:37			38.6	36.5	mg/L				6	20	RA
WG529752													
WG529752ICB	ICB	10/19/21 10:14				U	mg/L		-3	3			
WG529752ICV	ICV	10/19/21 10:14	WI211012-1	20.46		19.1	mg/L	93	90	110			
WG529752LFB	LFB	10/19/21 11:16	WI210105-3	10		9.4	mg/L	94	90	110			
L69015-03AS	AS	10/19/21 12:14	SO4TURB5X	10	29.9	36	mg/L	61	90	110			M3
L69007-04DUP	DUP	10/19/21 12:32			593	595.6	mg/L				0	20	

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ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.05212	mg/L	104	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00022	0.00022			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05		.0492	mg/L	98	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05	U	.05046	mg/L	101	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05	U	.04947	mg/L	99	70	130	2	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.994	mg/L	100	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.12	0.12			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	1.002		1.016	mg/L	101	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	1.002	U	.995	mg/L	99	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	1.002	U	.993	mg/L	99	85	115	0	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529233													
WG529233ICV	ICV	10/12/21 18:55	II211001-1	2		1.9505	mg/L	98	95	105			
WG529233ICB	ICB	10/12/21 19:01				U	mg/L		-0.015	0.015			
WG529233LFB	LFB	10/12/21 19:13	II210930-2	1		1.004	mg/L	100	85	115			
L69015-02AS	AS	10/12/21 20:27	II210930-2	1	.021	1.023	mg/L	100	85	115			
L69015-02ASD	ASD	10/12/21 20:31	II210930-2	1	.021	1.03	mg/L	101	85	115	1	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.0507	mg/L	101	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.00022	0.00022			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05		.049	mg/L	98	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05	.00012	.05117	mg/L	102	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05	.00012	.05044	mg/L	101	70	130	1	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.04963	mg/L	99	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.0011	0.0011			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.05		.049	mg/L	98	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.05	U	.04977	mg/L	100	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.05	U	.0485	mg/L	97	70	130	3	20	

MCCLELLANDLAB

ACZ Project ID: ***L69015***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529639													
WG529639ICV	ICV	10/17/21 11:55	MS211013-2	.05		.0529	mg/L	106	90	110			
WG529639ICB	ICB	10/17/21 11:57				U	mg/L		-0.0132	0.0132			
WG529639LFB	LFB	10/17/21 11:59	MS210927-3	.050075		.0564	mg/L	113	85	115			
L69010-01AS	AS	10/17/21 12:37	MS210927-3	.050075	U	.0629	mg/L	126	70	130			
L69010-01ASD	ASD	10/17/21 12:39	MS210927-3	.050075	U	.0618	mg/L	123	70	130	2	20	

McClelland Laboratories, Inc. ACZ Project ID: ***L69015***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69015-01	WG529639	Beryllium, dissolved	M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
	WG529233	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529764	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529233	Potassium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529531	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529842	Total Alkalinity	SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.

McClelland Laboratories, Inc. ACZ Project ID: ***L69015***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69015-02	WG529233	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529764	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529233	Potassium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529531	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530127	Total Alkalinity	SM2320B - Titration	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
			SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.
L69015-03	WG529233	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529764	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529233	Potassium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529752	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530515	Total Alkalinity	SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.

McClelland Laboratories, Inc. ACZ Project ID: ***L69015***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69015-04	WG529233	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529764	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529233	Potassium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529752	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Total Alkalinity	SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.
L69015-05	WG529233	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529764	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529233	Potassium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Sodium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529531	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529842	Total Alkalinity	SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69015
Date Received: 10/06/2021 11:42
Received By:
Date Printed: 10/7/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
7203	2.8	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID:	L69015
Date Received:	10/06/2021 11:42
Received By:	
Date Printed:	10/7/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L69015

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina
Company: McClelland Laboratories
E-mail: mmedina@mettest.com
Address:
Telephone:

Copy of Report to:

Name:
Company:
E-mail: results@mettest.com
Telephone:

Invoice to:

Name:
Company:
E-mail: mliap@mettest.com
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [X] NO [ ]

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes [ ] No [ ]

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** State NV Zip code 89436 Time Zone PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? [ ]

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 PW-1	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-1	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-2	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-3	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-4	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
			10/6/21 11:42

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L69015 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/31/2021

Quote Number: GRASSY-LEACH

Matrix: Leachate Grassy Mountain Leachate

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digesti		$0.00
Metals Analysis			
Aluminum, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Barium, dissolved	M200.7 ICP	0.007 mg/L	$7.40
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$14.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$7.40
Boron, dissolved	M200.7 ICP	0.03 mg/L	$7.40
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$14.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Iron, dissolved	M200.7 ICP	0.06 mg/L	$7.40
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$7.40
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$41.20
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$7.40
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Tin, dissolved	M200.7 ICP	0.04 mg/L	$7.40

REPAD.09.06.05.01

S/ sh D/ 14 P/

Titanium, dissolved	M200.7 ICP	0.005 mg/L	$7.40
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$14.00
Misc.			
Electronic Data Deliverable			$0.00
Setup charge for ICPMS			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$9.80
Cation-Anion Balance	Calculation		$0.00
Chloride	SM4500Cl-E	0.5 mg/L	$9.00
Conductivity @25C	SM2510B	1 umhos/cm	$6.60
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$10.80
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$9.00
pH (lab)	SM4500H+ B	0.1 C	$6.60
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$19.00
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$11.60
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1 mg/L	$9.00
TDS (calculated)	Calculation	Calculation	$0.00
TDS (ratio - measured/calculated)	Calculation	Calculation	$0.00
		Cost/Sample:	**$481.60**

Leachates will be supplied from Gene McClelland's lab in Nevada. Pricing is based on standard TAT for waters of ~ three weeks and will vary with workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 02, 2021

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

Project ID:
ACZ Project ID: L69016

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 06, 2021. This project has been assigned to ACZ's project number, L69016. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L69016. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 02, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

S. Habermehl

Scott Habermehl has reviewed
and approved this report.

McClelland Laboratories, Inc.

November 02, 2021

Project ID:
ACZ Project ID: L69016

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 4 leachate samples from McClelland Laboratories, Inc. on October 6, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L69016. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

Any analyses not performed within EPA recommended holding times have been qualified with an "H" flag.

(H1) Samples put into Workgroup to run on day of hold, but workgroup was run overnight. Samples not run until past midnight on instrument.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-6

ACZ Sample ID: ***L69016-01***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion				*				10/11/21 12:36	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.062	B	*	mg/L	0.05	0.25	10/13/21 16:20	kja
Antimony, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.01	10/17/21 13:27	scp
Arsenic, dissolved	M200.8 ICP-MS	5	0.00337	B	*	mg/L	0.001	0.005	10/17/21 13:27	scp
Barium, dissolved	M200.7 ICP	1	1.55		*	mg/L	0.007	0.035	10/13/21 16:20	kja
Beryllium, dissolved	M200.8 ICP-MS	5	<0.0004	U	*	mg/L	0.0004	0.00125	10/17/21 13:27	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:20	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/13/21 16:20	kja
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	10/17/21 13:27	scp
Calcium, dissolved	M200.7 ICP	1	386		*	mg/L	0.1	0.5	10/13/21 16:20	kja
Chromium, dissolved	M200.8 ICP-MS	5	0.174		*	mg/L	0.0025	0.01	10/17/21 13:27	scp
Cobalt, dissolved	M200.8 ICP-MS	5	0.0233		*	mg/L	0.00025	0.00125	10/17/21 13:27	scp
Copper, dissolved	M200.8 ICP-MS	5	0.00705	B	*	mg/L	0.004	0.01	10/17/21 13:27	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/13/21 16:20	kja
Iron, dissolved	M200.7 ICP	1	0.117	B	*	mg/L	0.06	0.15	10/13/21 16:20	kja
Lead, dissolved	M200.8 ICP-MS	5	0.00111	B	*	mg/L	0.0005	0.0025	10/17/21 13:27	scp
Lithium, dissolved	M200.7 ICP	1	0.990		*	mg/L	0.008	0.04	10/13/21 16:20	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/13/21 16:20	kja
Manganese, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.01	10/17/21 13:27	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.3			ng/L	0.3	1	10/18/21 11:29	mfm
Molybdenum, dissolved	M200.8 ICP-MS	5	0.0220		*	mg/L	0.001	0.0025	10/17/21 13:27	scp
Nickel, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.005	10/17/21 13:27	scp
Potassium, dissolved	M200.7 ICP	5	1050		*	mg/L	1	5	10/18/21 16:06	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/13/21 16:20	kja
Selenium, dissolved	M200.8 ICP-MS	5	0.00427		*	mg/L	0.0005	0.00125	10/17/21 13:27	scp
Silver, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	10/17/21 13:27	scp
Sodium, dissolved	M200.7 ICP	1	465		*	mg/L	0.2	1	10/13/21 16:20	kja
Strontium, dissolved	M200.7 ICP	1	4.60		*	mg/L	0.009	0.045	10/13/21 16:20	kja
Thallium, dissolved	M200.8 ICP-MS	5	0.00050	B	*	mg/L	0.0005	0.0025	10/17/21 13:27	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:20	kja
Titanium, dissolved	M200.7 ICP	1	0.0130	B	*	mg/L	0.005	0.025	10/13/21 16:20	kja
Uranium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	10/17/21 13:27	scp
Vanadium, dissolved	M200.8 ICP-MS	5	<0.0025	U	*	mg/L	0.0025	0.01	10/17/21 13:27	scp
Zinc, dissolved	M200.8 ICP-MS	5	<0.03	U	*	mg/L	0.03	0.075	10/17/21 13:27	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-6

ACZ Sample ID: ***L69016-01***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	515	H	*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	2920	H	*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	3430	H	*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.2			%			11/02/21 0:00	calc
Sum of Anions			70			meq/L			11/02/21 0:00	calc
Sum of Cations			67			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	4.90		*	mg/L	0.5	2	10/15/21 11:23	md
Conductivity @25C	SM2510B	1	15500		*	umhos/cm	1	10	10/20/21 2:55	eep
Fluoride	M300.0 - Ion Chromatography	1	0.111	B	*	mg/L	0.05	0.25	10/14/21 21:18	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		964			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.142		*	mg/L	0.02	0.1	10/24/21 0:11	pjb
pH (lab)	SM4500H+ B									
pH		1	12.9	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	5	<0.05	U	*	mg/L	0.05	0.25	10/19/21 12:37	mjj1
Residue, Filterable (TDS) @180C	SM2540C	2	4120	H	*	mg/L	40	80	10/20/21 19:07	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	30.5		*	mg/L	5	25	10/19/21 14:45	wtc
TDS (calculated)	Calculation		2750			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.50						11/02/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-7

ACZ Sample ID: ***L69016-02***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion				*				10/11/21 12:43	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/13/21 16:23	kja
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 13:29	scp
Arsenic, dissolved	M200.8 ICP-MS	2	0.00148	B	*	mg/L	0.0004	0.002	10/17/21 13:29	scp
Barium, dissolved	M200.7 ICP	1	1.69		*	mg/L	0.007	0.035	10/13/21 16:23	kja
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	10/17/21 13:29	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:23	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/13/21 16:23	kja
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 13:29	scp
Calcium, dissolved	M200.7 ICP	1	562		*	mg/L	0.1	0.5	10/13/21 16:23	kja
Chromium, dissolved	M200.8 ICP-MS	2	0.119		*	mg/L	0.001	0.004	10/17/21 13:29	scp
Cobalt, dissolved	M200.8 ICP-MS	2	0.0123		*	mg/L	0.0001	0.0005	10/17/21 13:29	scp
Copper, dissolved	M200.8 ICP-MS	2	0.00202	B	*	mg/L	0.0016	0.004	10/17/21 13:29	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/13/21 16:23	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/13/21 16:23	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00071	B	*	mg/L	0.0002	0.001	10/17/21 13:29	scp
Lithium, dissolved	M200.7 ICP	1	0.516		*	mg/L	0.008	0.04	10/13/21 16:23	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/13/21 16:23	kja
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 13:29	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.7		*	ng/L	0.3	1	10/21/21 13:09	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.0146		*	mg/L	0.0004	0.001	10/17/21 13:29	scp
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	10/17/21 13:29	scp
Potassium, dissolved	M200.7 ICP	1	455		*	mg/L	0.2	1	10/13/21 16:23	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/13/21 16:23	kja
Selenium, dissolved	M200.8 ICP-MS	2	0.00237		*	mg/L	0.0002	0.0005	10/17/21 13:29	scp
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 13:29	scp
Sodium, dissolved	M200.7 ICP	1	235		*	mg/L	0.2	1	10/13/21 16:23	kja
Strontium, dissolved	M200.7 ICP	1	4.71		*	mg/L	0.009	0.045	10/13/21 16:23	kja
Thallium, dissolved	M200.8 ICP-MS	2	0.00060	B	*	mg/L	0.0002	0.001	10/17/21 13:29	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:23	kja
Titanium, dissolved	M200.7 ICP	1	0.0054	B	*	mg/L	0.005	0.025	10/13/21 16:23	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 13:29	scp
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	10/17/21 13:29	scp
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	10/17/21 13:29	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-7

ACZ Sample ID: ***L69016-02***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/28/21 0:00	eep
Carbonate as CaCO3		1	67.4	H	*	mg/L	2	20	10/28/21 0:00	eep
Hydroxide as CaCO3		1	2570	H	*	mg/L	2	20	10/28/21 0:00	eep
Total Alkalinity		1	2640	H	*	mg/L	2	20	10/28/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.9			%			11/02/21 0:00	calc
Sum of Anions			53			meq/L			11/02/21 0:00	calc
Sum of Cations			50			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	4.07		*	mg/L	0.5	2	10/15/21 11:24	md
Conductivity @25C	SM2510B	1	11100		*	umhos/cm	1	10	10/20/21 3:22	eep
Fluoride	M300.0 - Ion Chromatography	1	0.112	B	*	mg/L	0.05	0.25	10/14/21 21:36	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1400			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.087	B	*	mg/L	0.02	0.1	10/24/21 0:16	pjb
pH (lab)	SM4500H+ B									
pH		1	12.8	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	5	<0.05	U	*	mg/L	0.05	0.25	10/19/21 12:38	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	2800		*	mg/L	20	40	10/11/21 18:40	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	23.4	B	*	mg/L	5	25	10/19/21 12:16	wtc
TDS (calculated)	Calculation		1760			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.59						11/02/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-8

ACZ Sample ID: ***L69016-03***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion				*				10/11/21 12:50	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/13/21 16:27	kja
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 13:32	scp
Arsenic, dissolved	M200.8 ICP-MS	2	0.00179	B	*	mg/L	0.0004	0.002	10/17/21 13:32	scp
Barium, dissolved	M200.7 ICP	1	1.55		*	mg/L	0.007	0.035	10/13/21 16:27	kja
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	10/17/21 13:32	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:27	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/13/21 16:27	kja
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 13:32	scp
Calcium, dissolved	M200.7 ICP	1	633		*	mg/L	0.1	0.5	10/13/21 16:27	kja
Chromium, dissolved	M200.8 ICP-MS	2	0.114		*	mg/L	0.001	0.004	10/17/21 13:32	scp
Cobalt, dissolved	M200.8 ICP-MS	2	0.00803		*	mg/L	0.0001	0.0005	10/17/21 13:32	scp
Copper, dissolved	M200.8 ICP-MS	2	0.00161	B	*	mg/L	0.0016	0.004	10/17/21 13:32	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/13/21 16:27	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/13/21 16:27	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00203		*	mg/L	0.0002	0.001	10/17/21 13:32	scp
Lithium, dissolved	M200.7 ICP	1	0.315		*	mg/L	0.008	0.04	10/13/21 16:27	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/13/21 16:27	kja
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 13:32	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.0		*	ng/L	0.3	1	10/21/21 13:14	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.0148		*	mg/L	0.0004	0.001	10/17/21 13:32	scp
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	10/17/21 13:32	scp
Potassium, dissolved	M200.7 ICP	1	235		*	mg/L	0.2	1	10/13/21 16:27	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/13/21 16:27	kja
Selenium, dissolved	M200.8 ICP-MS	2	0.00221		*	mg/L	0.0002	0.0005	10/17/21 13:32	scp
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 13:32	scp
Sodium, dissolved	M200.7 ICP	1	151		*	mg/L	0.2	1	10/13/21 16:27	kja
Strontium, dissolved	M200.7 ICP	1	3.53		*	mg/L	0.009	0.045	10/13/21 16:27	kja
Thallium, dissolved	M200.8 ICP-MS	2	0.00063	B	*	mg/L	0.0002	0.001	10/17/21 13:32	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:27	kja
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/13/21 16:27	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 13:32	scp
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	10/17/21 13:32	scp
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	10/17/21 13:32	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-8

ACZ Sample ID: ***L69016-03***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	93.3	H	*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	2060	H	*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	2150	H	*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.1			%			11/02/21 0:00	calc
Sum of Anions			44			meq/L			11/02/21 0:00	calc
Sum of Cations			45			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	4.48		*	mg/L	0.5	2	10/15/21 11:24	md
Conductivity @25C	SM2510B	1	9640		*	umhos/cm	1	10	10/20/21 3:48	eep
Fluoride	M300.0 - Ion Chromatography	1	0.109	B	*	mg/L	0.05	0.25	10/14/21 21:54	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1580			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.062	B	*	mg/L	0.02	0.1	10/24/21 0:18	pjb
pH (lab)	SM4500H+ B									
pH		1	12.8	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	5	<0.05	U	*	mg/L	0.05	0.25	10/19/21 12:39	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	2420		*	mg/L	20	40	10/11/21 18:42	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	22.5	B	*	mg/L	5	25	10/19/21 12:16	wtc
TDS (calculated)	Calculation		1460			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.66						11/02/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-9

ACZ Sample ID: ***L69016-04***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion				*				10/11/21 13:03	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/13/21 16:37	kja
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 13:38	scp
Arsenic, dissolved	M200.8 ICP-MS	2	0.00154	B	*	mg/L	0.0004	0.002	10/17/21 13:38	scp
Barium, dissolved	M200.7 ICP	1	1.29		*	mg/L	0.007	0.035	10/13/21 16:37	kja
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	10/17/21 13:38	scp
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:37	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/13/21 16:37	kja
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	10/17/21 13:38	scp
Calcium, dissolved	M200.7 ICP	1	657		*	mg/L	0.1	0.5	10/13/21 16:37	kja
Chromium, dissolved	M200.8 ICP-MS	2	0.101		*	mg/L	0.001	0.004	10/17/21 13:38	scp
Cobalt, dissolved	M200.8 ICP-MS	2	0.00540		*	mg/L	0.0001	0.0005	10/17/21 13:38	scp
Copper, dissolved	M200.8 ICP-MS	2	<0.0016	U	*	mg/L	0.0016	0.004	10/17/21 13:38	scp
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/13/21 16:37	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/13/21 16:37	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00070	B	*	mg/L	0.0002	0.001	10/17/21 13:38	scp
Lithium, dissolved	M200.7 ICP	1	0.199		*	mg/L	0.008	0.04	10/13/21 16:37	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/13/21 16:37	kja
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	10/17/21 13:38	scp
Mercury, dissolved	M1631E, Atomic Fluorescence	1	1.9		*	ng/L	0.3	1	10/21/21 13:19	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.0139		*	mg/L	0.0004	0.001	10/17/21 13:38	scp
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	10/17/21 13:38	scp
Potassium, dissolved	M200.7 ICP	1	118		*	mg/L	0.2	1	10/13/21 16:37	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/13/21 16:37	kja
Selenium, dissolved	M200.8 ICP-MS	2	0.00184		*	mg/L	0.0002	0.0005	10/17/21 13:38	scp
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 13:38	scp
Sodium, dissolved	M200.7 ICP	1	106		*	mg/L	0.2	1	10/13/21 16:37	kja
Strontium, dissolved	M200.7 ICP	1	2.16		*	mg/L	0.009	0.045	10/13/21 16:37	kja
Thallium, dissolved	M200.8 ICP-MS	2	0.00047	B	*	mg/L	0.0002	0.001	10/17/21 13:38	scp
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/13/21 16:37	kja
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/13/21 16:37	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	10/17/21 13:38	scp
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	10/17/21 13:38	scp
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	10/17/21 13:38	scp

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-9

ACZ Sample ID: ***L69016-04***
Date Sampled: *10/05/21 10:00*
Date Received: *10/06/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	UH	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	78.7	H	*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	1880	H	*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	1950	H	*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.2			%			11/02/21 0:00	calc
Sum of Anions			40			meq/L			11/02/21 0:00	calc
Sum of Cations			41			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	4.94		*	mg/L	0.5	2	10/15/21 11:25	md
Conductivity @25C	SM2510B	1	8640		*	umhos/cm	1	10	10/20/21 5:04	eep
Fluoride	M300.0 - Ion Chromatography	1	0.114	B	*	mg/L	0.05	0.25	10/14/21 22:12	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1640			mg/L	0.2	5	11/02/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.044	B	*	mg/L	0.02	0.1	10/24/21 0:19	pjb
pH (lab)	SM4500H+ B									
pH		1	12.8	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	5	<0.05	U	*	mg/L	0.05	0.25	10/19/21 12:41	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	2020		*	mg/L	20	40	10/12/21 10:14	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	24.3	B	*	mg/L	5	25	10/19/21 14:45	wtc
TDS (calculated)	Calculation		1280			mg/L			11/02/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.58						11/02/21 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529842													
WG529842PBW1	PBW	10/19/21 22:18				5.8	mg/L		-20	20			
WG529842LCSW3	LCSW	10/19/21 22:37	WC211018-1	820.0001		801.1	mg/L	98	90	110			
L69016-03DUP	DUP	10/20/21 4:14			2150	2147.6	mg/L				0	20	
WG529842LCSW6	LCSW	10/20/21 4:32	WC211018-1	820.0001		798	mg/L	97	90	110			
WG529842PBW2	PBW	10/20/21 4:39				5.9	mg/L		-20	20			
L69056-01DUP	DUP	10/20/21 6:42			231	251	mg/L				8	20	
WG529842LCSW9	LCSW	10/20/21 8:41	WC211018-1	820.0001		792.5	mg/L	97	90	110			
WG529842PBW3	PBW	10/20/21 8:48				4.9	mg/L		-20	20			
WG529842LCSW12	LCSW	10/20/21 12:35	WC211018-1	820.0001		821.3	mg/L	100	90	110			
WG529842PBW4	PBW	10/20/21 12:41				4.4	mg/L		-20	20			
WG529842LCSW15	LCSW	10/20/21 16:05	WC211018-1	820.0001		804	mg/L	98	90	110			
WG530127													
WG530127PBW	PBW	10/23/21 13:40				121.7	mg/L		-20	20			B7
WG530127LCSW1	LCSW	10/23/21 13:52	WC211023-10	32800		32534.7	mg/L	99	90	110			
L69204-03DUP	DUP	10/23/21 14:32			2720	2686.2	mg/L				1	20	
WG530127LCSW2	LCSW	10/23/21 14:42	WC211023-10	32800		31975.9	mg/L	97	90	110			
WG530515													
WG530515PBW	PBW	10/28/21 13:22				6	mg/L		-20	20			
WG530515LCSW1	LCSW	10/28/21 13:34	WC211023-11	8200		7806.5	mg/L	95	90	110			
L69016-02DUP	DUP	10/28/21 14:05			2640	2474.4	mg/L				6	20	
WG530515LCSW2	LCSW	10/28/21 14:17	WC211023-11	8200		7846.3	mg/L	96	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.966	mg/L	98	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.15	0.15			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	1.0008		1.017	mg/L	102	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	1.0008	U	1.072	mg/L	107	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	1.0008	U	1.098	mg/L	110	85	115	2	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.0201		.02037	mg/L	101	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00088	0.00088			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.01		.01051	mg/L	105	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.02	U	.02294	mg/L	115	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.02	U	.02212	mg/L	111	70	130	4	20	

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ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05022	mg/L	100	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00044	0.00044			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05005		.04679	mg/L	93	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1001	.00179	.11366	mg/L	112	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1001	.00179	.10707	mg/L	105	70	130	6	20	

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		2.0128	mg/L	101	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.021	0.021			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	.5		.4934	mg/L	99	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	.5	1.55	1.973	mg/L	85	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	.5	1.55	1.949	mg/L	80	85	115	1	20	M3

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.051211	mg/L	102	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.000176	0.000176			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05005		.04599	mg/L	92	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1001	U	.097043	mg/L	97	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1001	U	.091756	mg/L	92	70	130	6	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.971	mg/L	99	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.12	0.12			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	1		.962	mg/L	96	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	1	U	1.023	mg/L	102	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	1	U	1.011	mg/L	101	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.985	mg/L	99	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.09	0.09			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	.5005		.504	mg/L	101	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	.5005	U	.505	mg/L	101	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	.5005	U	.495	mg/L	99	85	115	2	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.053192	mg/L	106	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00011	0.00011			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05005		.047595	mg/L	95	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1001	U	.105332	mg/L	105	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1001	U	.099883	mg/L	100	70	130	5	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	100		100.33	mg/L	100	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.3	0.3			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	67.98972		69.13	mg/L	102	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	67.98972	633	674.7	mg/L	61	85	115			M3
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	67.98972	633	669.2	mg/L	53	85	115	1	20	M3

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529535													
WG529535ICV	ICV	10/15/21 11:16	WI210503-1	54.89		51.34	mg/L	94	90	110			
WG529535ICB	ICB	10/15/21 11:16				.89	mg/L		-1.5	1.5			
WG529535LFB1	LFB	10/15/21 11:17	WI210908-11	29.97		27.82	mg/L	93	90	110			
L68948-03AS	AS	10/15/21 11:18	WI210908-11	2997	393	3290.99	mg/L	97	90	110			
L68948-04DUP	DUP	10/15/21 11:19			516	505.63	mg/L				2	20	
L69016-04AS	AS	10/15/21 11:25	WI210908-11	29.97	4.94	32.73	mg/L	93	90	110			
WG529535LFB2	LFB	10/15/21 11:32	WI210908-11	29.97		28.56	mg/L	95	90	110			
L69039-01DUP	DUP	10/15/21 11:56			215	207.74	mg/L				3	20	

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05128	mg/L	103	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.0011	0.0011			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05		.04603	mg/L	92	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1	.114	.22656	mg/L	113	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1	.114	.21325	mg/L	99	70	130	6	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.053433	mg/L	107	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00011	0.00011			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05005		.047512	mg/L	95	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1001	.00803	.120863	mg/L	113	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1001	.00803	.114325	mg/L	106	70	130	6	20	

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ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529842													
WG529842LCSW2	LCSW	10/19/21 22:24	PCN64228	1409		1501	umhos/cm	107	90	110			
L69016-03DUP	DUP	10/20/21 4:14			9640	9610	umhos/cm				0	20	
WG529842LCSW5	LCSW	10/20/21 4:21	PCN64228	1409		1513	umhos/cm	107	90	110			
L69056-01DUP	DUP	10/20/21 6:42			2410	2410	umhos/cm				0	20	
WG529842LCSW8	LCSW	10/20/21 8:30	PCN64228	1409		1517	umhos/cm	108	90	110			
WG529842LCSW11	LCSW	10/20/21 12:22	PCN64228	1409		1517	umhos/cm	108	90	110			
WG529842LCSW14	LCSW	10/20/21 15:54	PCN64228	1409		1519	umhos/cm	108	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05339	mg/L	107	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00176	0.00176			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05		.05141	mg/L	103	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1	.00161	.10232	mg/L	101	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1	.00161	.09639	mg/L	95	70	130	6	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529226													
WG529226ICV	ICV	10/12/21 19:45	WI211011-8	4.004		4.212	mg/L	105	90	110			
WG529226ICB	ICB	10/12/21 20:03				U	mg/L		-0.05	0.05			
WG529456													
WG529456LFB1	LFB	10/14/21 17:43	WI210907-6	1.5		1.655	mg/L	110	90	110			
L69015-01DUP	DUP	10/14/21 18:55			.656	.648	mg/L				1	20	
L69015-02AS	AS	10/14/21 19:31	WI210907-6	1.5	.083	1.259	mg/L	78	90	110			M2
L69016-04DUP	DUP	10/14/21 22:30			.114	.112	mg/L				2	20	RA
L69073-01AS	AS	10/14/21 23:06	WI210907-6	750	143	641.037	mg/L	66	90	110			M2

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		2.01	mg/L	101	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.3	0.3			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	.9822		1.02	mg/L	104	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	.9822	U	1.04	mg/L	106	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	.9822	U	1.05	mg/L	107	85	115	1	20	

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.969	mg/L	98	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.18	0.18			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	1.0001		.997	mg/L	100	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	1.0001	U	.987	mg/L	99	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	1.0001	U	.976	mg/L	98	85	115	1	20	

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ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05283	mg/L	106	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00022	0.00022			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05005		.04705	mg/L	94	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1001	.00203	.11122	mg/L	109	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1001	.00203	.10658	mg/L	104	70	130	4	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.9665	mg/L	98	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.024	0.024			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	.999		.9625	mg/L	96	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	.999	.315	1.297	mg/L	98	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	.999	.315	1.293	mg/L	98	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	100		96.24	mg/L	96	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.6	0.6			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	49.99828		48.28	mg/L	97	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	49.99828	U	46.7	mg/L	93	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	49.99828	U	47.44	mg/L	95	85	115	2	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05203	mg/L	104	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00088	0.00088			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.0499		.04683	mg/L	94	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.0998	U	.11107	mg/L	111	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.0998	U	.10514	mg/L	105	70	130	5	20	

MCCLELLANDLAB ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG529670													
WG529670CCV1	CCV	10/18/21 10:11	HG211011-4	10		10.8	ng/L	108	76.5	123.4			
WG529670CCB1	CCB	10/18/21 10:16				U	ng/L		-0.501	0.501			
WG529670PQV	PQV	10/18/21 10:21	HG211011-6	1		1	ng/L	100	70	130			
WG529670LFB	LFB	10/18/21 10:25	HG211011-5	2		1.87	ng/L	94	71	125			
L69015-04MS	MS	10/18/21 11:15	HG211011-5	2	9.2	11.3	ng/L	105	71	125			
L69015-04MSD	MSD	10/18/21 11:20	HG211011-5	2	9.2	11.4	ng/L	110	71	125	1	24	
WG529670CCV2	CCV	10/18/21 11:34	HG211011-4	10		10.1	ng/L	101	76.5	123.4			
WG529670CCB2	CCB	10/18/21 11:39				U	ng/L		-0.501	0.501			
WG529670CCV3	CCV	10/18/21 15:06	HG211011-4	10		11	ng/L	110	76.5	123.4			
WG529670CCB3	CCB	10/18/21 15:11				1.34	ng/L		-0.501	0.501			BB
WG530028													
WG530028CCV1	CCV	10/21/21 8:23	HG211011-4	10		10.7	ng/L	107	76.5	123.4			
WG530028CCB1	CCB	10/21/21 8:27				U	ng/L		-0.501	0.501			
WG530028PQV	PQV	10/21/21 9:04	HG211011-6	1		1.17	ng/L	117	70	130			
WG530028CCV2	CCV	10/21/21 10:43	HG211011-4	10		10.2	ng/L	102	76.5	123.4			
WG530028CCB2	CCB	10/21/21 10:48				U	ng/L		-0.501	0.501			
WG530028CCV3	CCV	10/21/21 12:24	HG211011-4	10		10.7	ng/L	107	76.5	123.4			
WG530028CCB3	CCB	10/21/21 12:28				U	ng/L		-0.501	0.501			
WG530028LFB	LFB	10/21/21 13:05	HG211011-5	2		2.34	ng/L	117	71	125			
L69098-03MS	MS	10/21/21 13:38	HG16315X	50	38	51	ng/L	130	71	125			M1 MH
L69098-03MSD	MSD	10/21/21 13:43	HG16315X	50	38	52	ng/L	140	71	125	2	24	M1 MH
WG530028CCV4	CCV	10/21/21 13:48	HG211011-4	10		9.96	ng/L	100	76.5	123.4			
WG530028CCB4	CCB	10/21/21 13:52				U	ng/L		-0.501	0.501			
WG530028CCV5	CCV	10/21/21 14:26	HG211011-4	10		10.6	ng/L	106	76.5	123.4			
WG530028CCB5	CCB	10/21/21 14:31				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.01992		.02122	mg/L	107	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00044	0.00044			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05005		.04733	mg/L	95	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1001	.0148	.13428	mg/L	119	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1001	.0148	.12542	mg/L	111	70	130	7	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05249	mg/L	105	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00088	0.00088			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05		.04682	mg/L	94	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1	U	.1029	mg/L	103	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1	U	.0988	mg/L	99	70	130	4	20	

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ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530131													
WG530131ICV	ICV	10/23/21 20:19	WI210904-1	2.4161		2.344	mg/L	97	90	110			
WG530131ICB	ICB	10/23/21 20:20				U	mg/L		-0.02	0.02			
WG530135													
WG530135LFB1	LFB	10/23/21 23:42	WI211001-5	2		2.003	mg/L	100	90	110			
L69015-02AS	AS	10/24/21 0:04	WI211001-5	2	.135	2.17	mg/L	102	90	110			
L69015-03DUP	DUP	10/24/21 0:07			.103	.102	mg/L				1	20	RA
WG530135LFB2	LFB	10/24/21 0:23	WI211001-5	2		1.98	mg/L	99	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530055													
WG530055LCSW1	LCSW	10/21/21 22:05	PCN62948	6		6.1	units	102	5.9	6.1			
L69062-01DUP	DUP	10/21/21 23:24			8.4	8.3	units				1	20	
WG530055LCSW4	LCSW	10/22/21 0:42	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW7	LCSW	10/22/21 4:30	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW10	LCSW	10/22/21 8:24	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW13	LCSW	10/22/21 13:06	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529792													
WG529792ICV	ICV	10/19/21 12:18	WI211018-4	.65228		.7	mg/L	107	90	110			
WG529792ICB	ICB	10/19/21 12:20				U	mg/L		-0.01	0.01			
WG529130LRB	LRB	10/19/21 12:21				U	mg/L		-0.01	0.01			
WG529130LFB	LFB	10/19/21 12:23	WI211001-2	.5		.501	mg/L	100	90	110			
L68955-01LFM	LFM	10/19/21 12:25	WI211001-2	.5	.014	.492	mg/L	96	90	110			
L69016-03LFM	LFM	10/19/21 12:40	5XPT	2.5	U	2.38	mg/L	95	90	110			
L69016-04DUP	DUP	10/19/21 12:42			U	U	mg/L				0	20	RA
L68990-04DUP	DUP	10/19/21 12:55			4.6	4.926	mg/L				7	20	

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	20		19.91	mg/L	100	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.6	0.6			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	99.96008		99	mg/L	99	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	99.96008	235	326.2	mg/L	91	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	99.96008	235	325.7	mg/L	91	85	115	0	20	
WG529678													
WG529678ICV	ICV	10/18/21 15:41	II211014-1	20		19.76	mg/L	99	95	105			
WG529678ICB	ICB	10/18/21 15:47				U	mg/L		-0.6	0.6			
WG529678LFB	LFB	10/18/21 16:00	II210930-2	99.96008		99.41	mg/L	99	85	115			
L69053-02AS	AS	10/18/21 16:16	II210930-2	99.96008	.72	101.7	mg/L	101	85	115			
L69053-02ASD	ASD	10/18/21 16:19	II210930-2	99.96008	.72	99.16	mg/L	98	85	115	3	20	

MCCLELLANDLAB ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529186													
WG529186PBW	PBW	10/11/21 18:00				U	mg/L		-20	20			
WG529186LCSW	LCSW	10/11/21 18:01	PCN64137	1000		970	mg/L	97	80	120			
L69016-03DUP	DUP	10/11/21 18:44			2420	2390	mg/L				1	10	
WG529208													
WG529208PBW	PBW	10/12/21 10:01				U	mg/L		-20	20			
WG529208LCSW	LCSW	10/12/21 10:04	PCN64137	1000		976	mg/L	98	80	120			
L69053-03DUP	DUP	10/12/21 10:42			1010	970	mg/L				4	10	
WG529968													
WG529968PBW	PBW	10/20/21 19:00				U	mg/L		-20	20			
WG529968LCSW	LCSW	10/20/21 19:02	PCN64121	1000		1004	mg/L	100	80	120			
L69154-03DUP	DUP	10/20/21 19:28			154	150	mg/L				3	10	RA

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.981	mg/L	99	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.15	0.15			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	1.0017		.989	mg/L	99	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	1.0017	U	1.007	mg/L	101	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	1.0017	U	.983	mg/L	98	85	115	2	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05163	mg/L	103	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00022	0.00022			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05		.04559	mg/L	91	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1	.00221	.1109	mg/L	109	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1	.00221	.10527	mg/L	103	70	130	5	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.02		.0202	mg/L	101	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00022	0.00022			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.01		.00987	mg/L	99	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.02	U	.01823	mg/L	91	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.02	U	.01771	mg/L	89	70	130	3	20	

MCCLELLANDLAB ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	100		99.64	mg/L	100	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.6	0.6			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	100.007		99.24	mg/L	99	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	100.007	151	244.7	mg/L	94	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	100.007	151	247.4	mg/L	96	85	115	1	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.9443	mg/L	97	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.027	0.027			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	.5005		.5283	mg/L	106	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	.5005	3.53	3.862	mg/L	66	85	115			M3
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	.5005	3.53	3.845	mg/L	63	85	115	0	20	M3

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529752													
WG529752ICB	ICB	10/19/21 10:14				U	mg/L		-3	3			
WG529752ICV	ICV	10/19/21 10:14	WI211012-1	20.46		19.1	mg/L	93	90	110			
WG529752LFB	LFB	10/19/21 11:16	WI210105-3	10		9.4	mg/L	94	90	110			
L69015-03AS	AS	10/19/21 12:14	SO4TURB5X	10	29.9	36	mg/L	61	90	110			M3
L69007-04DUP	DUP	10/19/21 12:32			593	595.6	mg/L				0	20	

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05326	mg/L	107	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00022	0.00022			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05		.04535	mg/L	91	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1	.00063	.10698	mg/L	106	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1	.00063	.10311	mg/L	102	70	130	4	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		2.023	mg/L	101	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.12	0.12			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	1.002		1.007	mg/L	100	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	1.002	U	.971	mg/L	97	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	1.002	U	.968	mg/L	97	85	115	0	20	

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ACZ Project ID: ***L69016***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529350													
WG529350ICV	ICV	10/13/21 15:54	II211001-1	2		1.9778	mg/L	99	95	105			
WG529350ICB	ICB	10/13/21 16:00				U	mg/L		-0.015	0.015			
WG529350LFB	LFB	10/13/21 16:13	II210930-2	1		.995	mg/L	100	85	115			
L69016-03AS	AS	10/13/21 16:30	II210930-2	1	U	.9934	mg/L	99	85	115			
L69016-03ASD	ASD	10/13/21 16:34	II210930-2	1	U	.9802	mg/L	98	85	115	1	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.05132	mg/L	103	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.00022	0.00022			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05		.04559	mg/L	91	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1	U	.11426	mg/L	114	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1	U	.1085	mg/L	109	70	130	5	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.04898	mg/L	98	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.0011	0.0011			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.05		.04615	mg/L	92	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.1	U	.12422	mg/L	124	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.1	U	.11666	mg/L	117	70	130	6	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529641													
WG529641ICV	ICV	10/17/21 13:21	MS211013-2	.05		.0519	mg/L	104	90	110			
WG529641ICB	ICB	10/17/21 13:23				U	mg/L		-0.0132	0.0132			
WG529641LFB	LFB	10/17/21 13:25	MS210927-3	.050075		.0567	mg/L	113	85	115			
L69016-03AS	AS	10/17/21 13:34	MS210927-3	.10015	U	.1177	mg/L	118	70	130			
L69016-03ASD	ASD	10/17/21 13:36	MS210927-3	.10015	U	.1106	mg/L	110	70	130	6	20	

McClelland Laboratories, Inc. ACZ Project ID: ***L69016***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69016-01	WG529350	Barium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529130	Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion	DJ	Sample dilution required due to insufficient sample.
	WG529968	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529350	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529752	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530127	Total Alkalinity	SM2320B - Titration	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 10X the concentration in the method blank.
			SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.
L69016-02	WG529350	Barium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529130	Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion	DJ	Sample dilution required due to insufficient sample.
	WG529350	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529752	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	D1	Sample required dilution due to matrix.
			D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530515	Total Alkalinity	SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.

McClelland Laboratories, Inc. ACZ Project ID: ***L69016***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69016-03	WG529350	Barium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529130	Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion	DJ	Sample dilution required due to insufficient sample.
	WG529792		M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529350	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529752	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	D1	Sample required dilution due to matrix.
			D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Total Alkalinity	SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.

ACZ Laboratories, Inc.
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Inorganic Extended Qualifier Report

McClelland Laboratories, Inc. ACZ Project ID: ***L69016***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69016-04	WG529350	Barium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529456	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530135	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529130	Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion	DJ	Sample dilution required due to insufficient sample.
	WG529792		M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529350	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529752	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	D1	Sample required dilution due to matrix.
			D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Total Alkalinity	SM2320B - Titration	H1	Sample prep or analysis performed past holding time. See case narrative.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69016
Date Received: 10/06/2021 11:43
Received By:
Date Printed: 10/7/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
6819	5.3	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID:	L69016
Date Received:	10/06/2021 11:43
Received By:	
Date Printed:	10/7/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L 69016

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina
Company: McClelland Laboratories
E-mail: mmedina@mettest.com
Address:
Telephone:

Copy of Report to:

Name:
Company:
E-mail: results@mettest.com
Telephone:

Invoice to:

Name:
Company:
E-mail: mliap@mettest.com
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [X] NO [ ]

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes [ ] No [ ]

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** **State** NV **Zip code** 89436 **Time Zone** PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? [ ]

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 B-6	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-7	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-8	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-9	10/5/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
			10/6/21 11:43

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L69016 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/31/2021

Quote Number: GRASSY-LEACH

Matrix: Leachate Grassy Mountain Leachate

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digesti		$0.00
Metals Analysis			
Aluminum, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Barium, dissolved	M200.7 ICP	0.007 mg/L	$7.40
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$14.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$7.40
Boron, dissolved	M200.7 ICP	0.03 mg/L	$7.40
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$14.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Iron, dissolved	M200.7 ICP	0.06 mg/L	$7.40
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$7.40
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$41.20
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$7.40
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Tin, dissolved	M200.7 ICP	0.04 mg/L	$7.40

Titanium, dissolved	M200.7 ICP	0.005 mg/L	$7.40
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$14.00
Misc.			
Electronic Data Deliverable			$0.00
Setup charge for ICPMS			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$9.80
Cation-Anion Balance	Calculation		$0.00
Chloride	SM4500Cl-E	0.5 mg/L	$9.00
Conductivity @25C	SM2510B	1 umhos/cm	$6.60
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$10.80
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$9.00
pH (lab)	SM4500H+ B	0.1 C	$6.60
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$19.00
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$11.60
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1 mg/L	$9.00
TDS (calculated)	Calculation	Calculation	$0.00
TDS (ratio - measured/calculated)	Calculation	Calculation	$0.00
		Cost/Sample:	**$481.60**

Leachates will be supplied from Gene McClelland's lab in Nevada. Pricing is based on standard TAT for waters of ~ three weeks and will vary with workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 05, 2021

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

Project ID:
ACZ Project ID: L69098

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 08, 2021. This project has been assigned to ACZ's project number, L69098. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L69098. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 05, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

S. Habermehl

Scott Habermehl has reviewed
and approved this report.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-11

ACZ Sample ID: ***L69098-01***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion				*				10/14/21 11:16	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/14/21 19:35	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00412		*	mg/L	0.0004	0.002	10/19/21 17:06	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00412		*	mg/L	0.0002	0.001	10/19/21 17:06	mfm
Barium, dissolved	M200.7 ICP	1	0.0717		*	mg/L	0.007	0.035	10/14/21 19:35	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:06	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:17	kja
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	10/14/21 19:35	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000133	B	*	mg/L	0.00005	0.00025	10/19/21 17:06	mfm
Calcium, dissolved	M200.7 ICP	1	152		*	mg/L	0.1	0.5	10/14/21 19:35	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.485		*	mg/L	0.0005	0.002	10/19/21 17:06	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00797		*	mg/L	0.00005	0.00025	10/19/21 17:06	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.0156		*	mg/L	0.0008	0.002	10/19/21 17:06	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 19:35	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 19:35	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00026	B	*	mg/L	0.0001	0.0005	10/19/21 17:06	mfm
Lithium, dissolved	M200.7 ICP	1	0.0118	B	*	mg/L	0.008	0.04	10/14/21 19:35	kja
Magnesium, dissolved	M200.7 ICP	1	0.46	B	*	mg/L	0.2	1	10/14/21 19:35	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/19/21 17:06	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	500	12400		*	ng/L	200	500	10/21/21 13:24	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0683		*	mg/L	0.0002	0.0005	10/19/21 17:06	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00211		*	mg/L	0.0004	0.001	10/19/21 17:06	mfm
Potassium, dissolved	M200.7 ICP	1	16.1		*	mg/L	0.2	1	10/14/21 19:35	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 19:35	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00767		*	mg/L	0.0001	0.00025	10/19/21 17:06	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00091		*	mg/L	0.0001	0.0005	10/22/21 12:00	mfm
Sodium, dissolved	M200.7 ICP	1	81.0		*	mg/L	0.2	1	10/14/21 19:35	kja
Strontium, dissolved	M200.7 ICP	1	0.415		*	mg/L	0.009	0.045	10/14/21 19:35	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00498		*	mg/L	0.0001	0.0005	10/19/21 17:06	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 19:35	kja
Titanium, dissolved	M200.7 ICP	1	0.0170	B	*	mg/L	0.005	0.025	10/14/21 19:35	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:06	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0899		*	mg/L	0.0005	0.002	10/19/21 17:06	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 12:00	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-11

ACZ Sample ID: ***L69098-01***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	53.3		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	12.8	B	*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	66.1		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.3			%			11/05/21 0:00	calc
Sum of Anions			11			meq/L			11/05/21 0:00	calc
Sum of Cations			12			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	8.87		*	mg/L	0.5	2	10/19/21 15:18	md
Conductivity @25C	SM2510B	1	1100		*	umhos/cm	1	10	10/20/21 7:45	eep
Fluoride	M300.0 - Ion Chromatography	5	0.301	B	*	mg/L	0.25	1.25	10/26/21 0:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		381			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	1.18		*	mg/L	0.02	0.1	10/30/21 2:05	pjb
pH (lab)	SM4500H+ B									
pH		1	10.3	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	5	<0.05	U	*	mg/L	0.05	0.25	10/25/21 14:20	mjj1
Residue, Filterable (TDS) @180C	SM2540C	5	920		*	mg/L	100	200	10/13/21 12:17	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	15	438		*	mg/L	15	75	10/21/21 11:58	wtc
TDS (calculated)	Calculation		731			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.26						11/05/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-12

ACZ Sample ID: ***L69098-02***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion				*				10/14/21 11:33	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/14/21 19:38	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00464		*	mg/L	0.0004	0.002	10/19/21 17:08	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00681		*	mg/L	0.0002	0.001	10/19/21 17:08	mfm
Barium, dissolved	M200.7 ICP	1	0.0377		*	mg/L	0.007	0.035	10/14/21 19:38	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:08	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:20	kja
Boron, dissolved	M200.7 ICP	1	0.093	B	*	mg/L	0.03	0.1	10/14/21 19:38	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000092	B	*	mg/L	0.00005	0.00025	10/19/21 17:08	mfm
Calcium, dissolved	M200.7 ICP	1	64.4		*	mg/L	0.1	0.5	10/14/21 19:38	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.259		*	mg/L	0.0005	0.002	10/19/21 17:08	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00321		*	mg/L	0.00005	0.00025	10/19/21 17:08	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00881		*	mg/L	0.0008	0.002	10/19/21 17:08	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 19:38	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 19:38	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:08	mfm
Lithium, dissolved	M200.7 ICP	1	0.0129	B	*	mg/L	0.008	0.04	10/14/21 19:38	kja
Magnesium, dissolved	M200.7 ICP	1	0.31	B	*	mg/L	0.2	1	10/14/21 19:38	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/19/21 17:08	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	50	420		*	ng/L	20	50	10/21/21 13:29	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0310		*	mg/L	0.0002	0.0005	10/19/21 17:08	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00092	B	*	mg/L	0.0004	0.001	10/19/21 17:08	mfm
Potassium, dissolved	M200.7 ICP	1	10.4		*	mg/L	0.2	1	10/14/21 19:38	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 19:38	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00311		*	mg/L	0.0001	0.00025	10/19/21 17:08	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00067		*	mg/L	0.0001	0.0005	10/22/21 12:02	mfm
Sodium, dissolved	M200.7 ICP	1	62.8		*	mg/L	0.2	1	10/14/21 19:38	kja
Strontium, dissolved	M200.7 ICP	1	0.182		*	mg/L	0.009	0.045	10/14/21 19:38	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00116		*	mg/L	0.0001	0.0005	10/19/21 17:08	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 19:38	kja
Titanium, dissolved	M200.7 ICP	1	0.0101	B	*	mg/L	0.005	0.025	10/14/21 19:38	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:08	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.111		*	mg/L	0.0005	0.002	10/19/21 17:08	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 12:02	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-12

ACZ Sample ID: ***L69098-02***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	47.3		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	48.6		*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	95.9		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.6			%			11/05/21 0:00	calc
Sum of Anions			6.5			meq/L			11/05/21 0:00	calc
Sum of Cations			6.3			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	6.94		*	mg/L	0.5	2	10/19/21 15:18	md
Conductivity @25C	SM2510B	1	656		*	umhos/cm	1	10	10/20/21 7:55	eep
Fluoride	M300.0 - Ion Chromatography	5	0.418	B	*	mg/L	0.25	1.25	10/26/21 0:33	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		162			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.345		*	mg/L	0.02	0.1	10/30/21 2:08	pjb
pH (lab)	SM4500H+ B									
pH		1	10.6	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	5	<0.05	U	*	mg/L	0.05	0.25	10/25/21 14:22	mjj1
Residue, Filterable (TDS) @180C	SM2540C	2	476		*	mg/L	40	80	10/13/21 12:21	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	10	207		*	mg/L	10	50	10/21/21 11:58	wtc
TDS (calculated)	Calculation		389			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.22						11/05/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-13

ACZ Sample ID: ***L69098-03***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/14/21 11:50	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/14/21 19:41	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00476		*	mg/L	0.0004	0.002	10/19/21 17:14	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0125		*	mg/L	0.0002	0.001	10/19/21 17:14	mfm
Barium, dissolved	M200.7 ICP	1	0.0259	B	*	mg/L	0.007	0.035	10/14/21 19:41	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:14	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:23	kja
Boron, dissolved	M200.7 ICP	1	0.102		*	mg/L	0.03	0.1	10/14/21 19:41	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000063	B	*	mg/L	0.00005	0.00025	10/19/21 17:14	mfm
Calcium, dissolved	M200.7 ICP	1	35.5		*	mg/L	0.1	0.5	10/14/21 19:41	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.136		*	mg/L	0.0005	0.002	10/19/21 17:14	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00178		*	mg/L	0.00005	0.00025	10/19/21 17:14	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00570		*	mg/L	0.0008	0.002	10/19/21 17:14	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 19:41	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 19:41	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00022	B	*	mg/L	0.0001	0.0005	10/19/21 17:14	mfm
Lithium, dissolved	M200.7 ICP	1	0.0179	B	*	mg/L	0.008	0.04	10/14/21 19:41	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/14/21 19:41	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00090	B	*	mg/L	0.0004	0.002	10/19/21 17:14	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	38		*	ng/L	2	5	10/21/21 13:33	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0179		*	mg/L	0.0002	0.0005	10/19/21 17:14	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00065	B	*	mg/L	0.0004	0.001	10/19/21 17:14	mfm
Potassium, dissolved	M200.7 ICP	1	7.58		*	mg/L	0.2	1	10/14/21 19:41	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 19:41	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00157		*	mg/L	0.0001	0.00025	10/19/21 17:14	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 12:07	mfm
Sodium, dissolved	M200.7 ICP	1	58.0		*	mg/L	0.2	1	10/14/21 19:41	kja
Strontium, dissolved	M200.7 ICP	1	0.104		*	mg/L	0.009	0.045	10/14/21 19:41	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:14	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 19:41	kja
Titanium, dissolved	M200.7 ICP	1	0.0065	B	*	mg/L	0.005	0.025	10/14/21 19:41	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:14	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0998		*	mg/L	0.0005	0.002	10/19/21 17:14	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 12:07	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-13

ACZ Sample ID: ***L69098-03***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	50.4		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	35.9		*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	86.3		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/05/21 0:00	calc
Sum of Anions			4.5			meq/L			11/05/21 0:00	calc
Sum of Cations			4.5			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	5.54		*	mg/L	0.5	2	10/19/21 15:20	md
Conductivity @25C	SM2510B	1	478		*	umhos/cm	1	10	10/20/21 8:05	eep
Fluoride	M300.0 - Ion Chromatography	2	0.710		*	mg/L	0.1	0.5	10/26/21 0:51	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		89			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.150		*	mg/L	0.02	0.1	10/30/21 2:10	pjb
pH (lab)	SM4500H+ B									
pH		1	10.6	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 14:24	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	370		*	mg/L	20	40	10/13/21 12:24	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	122		*	mg/L	5	25	10/21/21 11:55	wtc
TDS (calculated)	Calculation		266			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.39						11/05/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-14

ACZ Sample ID: ***L69098-04***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/14/21 11:58	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.25	10/14/21 19:44	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00372		*	mg/L	0.0004	0.002	10/19/21 17:21	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0267		*	mg/L	0.0002	0.001	10/19/21 17:21	mfm
Barium, dissolved	M200.7 ICP	1	0.0166	B	*	mg/L	0.007	0.035	10/14/21 19:44	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:21	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:26	kja
Boron, dissolved	M200.7 ICP	1	0.111		*	mg/L	0.03	0.1	10/14/21 19:44	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/19/21 17:21	mfm
Calcium, dissolved	M200.7 ICP	1	18.9		*	mg/L	0.1	0.5	10/14/21 19:44	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0686		*	mg/L	0.0005	0.002	10/19/21 17:21	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000952		*	mg/L	0.00005	0.00025	10/19/21 17:21	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00466		*	mg/L	0.0008	0.002	10/19/21 17:21	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 19:44	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 19:44	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:21	mfm
Lithium, dissolved	M200.7 ICP	1	0.0297	B	*	mg/L	0.008	0.04	10/14/21 19:44	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/14/21 19:44	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/19/21 17:21	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	17.3		*	ng/L	0.3	1	10/18/21 13:24	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0112		*	mg/L	0.0002	0.0005	10/19/21 17:21	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0004	0.001	10/19/21 17:21	mfm
Potassium, dissolved	M200.7 ICP	1	5.59		*	mg/L	0.2	1	10/14/21 19:44	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 19:44	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00099		*	mg/L	0.0001	0.00025	10/26/21 13:19	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 12:09	mfm
Sodium, dissolved	M200.7 ICP	1	56.5		*	mg/L	0.2	1	10/14/21 19:44	kja
Strontium, dissolved	M200.7 ICP	1	0.0588		*	mg/L	0.009	0.045	10/14/21 19:44	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:21	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 19:44	kja
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/14/21 19:44	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:21	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0732		*	mg/L	0.0005	0.002	10/19/21 17:21	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 12:09	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-14

ACZ Sample ID: ***L69098-04***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	54.9		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	40.9		*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	95.8		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.4			%			11/05/21 0:00	calc
Sum of Anions			3.5			meq/L			11/05/21 0:00	calc
Sum of Cations			3.6			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	5.16		*	mg/L	0.5	2	10/19/21 15:20	md
Conductivity @25C	SM2510B	1	383		*	umhos/cm	1	10	10/20/21 8:14	eep
Fluoride	M300.0 - Ion Chromatography	1	0.783		*	mg/L	0.05	0.25	10/26/21 1:08	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		47			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.086	B	*	mg/L	0.02	0.1	10/30/21 2:12	pjb
pH (lab)	SM4500H+ B									
pH		1	10.6	H	*	units	0.1	0.1	10/21/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	10/21/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 14:25	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	308		*	mg/L	20	40	10/13/21 12:28	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	67.7		*	mg/L	5	25	10/21/21 11:57	wtc
TDS (calculated)	Calculation		195			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.58						11/05/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-16

ACZ Sample ID: ***L69098-05***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/14/21 12:07	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.286		*	mg/L	0.05	0.25	10/14/21 19:47	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00253		*	mg/L	0.0004	0.002	10/19/21 17:23	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00395		*	mg/L	0.0002	0.001	10/19/21 17:23	mfm
Barium, dissolved	M200.7 ICP	1	0.0770		*	mg/L	0.007	0.035	10/14/21 19:47	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:23	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:30	kja
Boron, dissolved	M200.7 ICP	1	0.075	B	*	mg/L	0.03	0.1	10/14/21 19:47	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/19/21 17:23	mfm
Calcium, dissolved	M200.7 ICP	1	132		*	mg/L	0.1	0.5	10/14/21 19:47	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.874		*	mg/L	0.0005	0.002	10/19/21 17:23	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.0137		*	mg/L	0.00005	0.00025	10/19/21 17:23	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00871		*	mg/L	0.0008	0.002	10/19/21 17:23	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 19:47	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 19:47	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/19/21 17:23	mfm
Lithium, dissolved	M200.7 ICP	1	0.0102	B	*	mg/L	0.008	0.04	10/14/21 19:47	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	10/14/21 19:47	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/19/21 17:23	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5000	49000			ng/L	2000	5000	10/25/21 11:50	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0789		*	mg/L	0.0002	0.0005	10/19/21 17:23	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00069	B	*	mg/L	0.0004	0.001	10/19/21 17:23	mfm
Potassium, dissolved	M200.7 ICP	1	18.9		*	mg/L	0.2	1	10/14/21 19:47	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 19:47	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00725		*	mg/L	0.0001	0.00025	10/22/21 12:11	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00392		*	mg/L	0.0001	0.0005	10/22/21 12:11	mfm
Sodium, dissolved	M200.7 ICP	1	90.1		*	mg/L	0.2	1	10/14/21 19:47	kja
Strontium, dissolved	M200.7 ICP	1	0.388		*	mg/L	0.009	0.045	10/14/21 19:47	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00415		*	mg/L	0.0001	0.0005	10/19/21 17:23	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 19:47	kja
Titanium, dissolved	M200.7 ICP	1	0.0154	B	*	mg/L	0.005	0.025	10/14/21 19:47	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:23	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0727		*	mg/L	0.0005	0.002	10/19/21 17:23	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 12:11	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-16

ACZ Sample ID: ***L69098-05***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	44.3		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	78.1		*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/05/21 0:00	calc
Sum of Anions			11			meq/L			11/05/21 0:00	calc
Sum of Cations			11			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	8.38		*	mg/L	0.5	2	10/19/21 15:21	md
Conductivity @25C	SM2510B	1	1130		*	umhos/cm	1	10	10/20/21 8:59	eep
Fluoride	M300.0 - Ion Chromatography	10	<0.5	U	*	mg/L	0.5	2.5	10/26/21 2:02	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		331			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.634		*	mg/L	0.02	0.1	10/30/21 2:13	pjb
pH (lab)	SM4500H+ B									
pH		1	11.1	H	*	units	0.1	0.1	10/20/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	10/20/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.015	B	*	mg/L	0.01	0.05	10/25/21 14:26	mjj1
Residue, Filterable (TDS) @180C	SM2540C	5	730		*	mg/L	100	200	10/13/21 12:31	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	15	370		*	mg/L	15	75	10/21/21 11:58	wtc
TDS (calculated)	Calculation		660			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.11						11/05/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-17

ACZ Sample ID: ***L69098-06***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/14/21 12:15	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.312		*	mg/L	0.05	0.25	10/14/21 20:02	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00284		*	mg/L	0.0004	0.002	10/19/21 17:25	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00348		*	mg/L	0.0002	0.001	10/19/21 17:25	mfm
Barium, dissolved	M200.7 ICP	1	0.0493		*	mg/L	0.007	0.035	10/14/21 20:02	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:25	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:39	kja
Boron, dissolved	M200.7 ICP	1	0.091	B	*	mg/L	0.03	0.1	10/14/21 20:02	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/19/21 17:25	mfm
Calcium, dissolved	M200.7 ICP	1	79.8		*	mg/L	0.1	0.5	10/14/21 20:02	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.368		*	mg/L	0.0005	0.002	10/19/21 17:25	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00657		*	mg/L	0.00005	0.00025	10/19/21 17:25	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00585		*	mg/L	0.0008	0.002	10/19/21 17:25	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 20:02	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 20:02	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	10/19/21 17:25	mfm
Lithium, dissolved	M200.7 ICP	1	0.0137	B	*	mg/L	0.008	0.04	10/14/21 20:02	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/14/21 20:02	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/19/21 17:25	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	2000	16500			ng/L	600	2000	10/25/21 11:55	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0349		*	mg/L	0.0002	0.0005	10/19/21 17:25	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00043	B	*	mg/L	0.0004	0.001	10/19/21 17:25	mfm
Potassium, dissolved	M200.7 ICP	1	13.5		*	mg/L	0.2	1	10/14/21 20:02	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 20:02	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00313		*	mg/L	0.0001	0.00025	10/22/21 12:12	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00306		*	mg/L	0.0001	0.0005	10/22/21 12:12	mfm
Sodium, dissolved	M200.7 ICP	1	69.9		*	mg/L	0.2	1	10/14/21 20:02	kja
Strontium, dissolved	M200.7 ICP	1	0.233		*	mg/L	0.009	0.045	10/14/21 20:02	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00182		*	mg/L	0.0001	0.0005	10/19/21 17:25	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 20:02	kja
Titanium, dissolved	M200.7 ICP	1	0.0123	B	*	mg/L	0.005	0.025	10/14/21 20:02	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:25	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0866		*	mg/L	0.0005	0.002	10/19/21 17:25	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 12:12	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-17

ACZ Sample ID: ***L69098-06***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	45.6		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	56.4		*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	102		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.2			%			11/05/21 0:00	calc
Sum of Anions			6.9			meq/L			11/05/21 0:00	calc
Sum of Cations			7.5			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	5.97		*	mg/L	0.5	2	10/19/21 15:21	md
Conductivity @25C	SM2510B	1	763		*	umhos/cm	1	10	10/20/21 9:09	eep
Fluoride	M300.0 - Ion Chromatography	5	0.308	B	*	mg/L	0.25	1.25	10/26/21 3:14	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		199			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.279		*	mg/L	0.02	0.1	10/30/21 2:19	pjb
pH (lab)	SM4500H+ B									
pH		1	11.1	H	*	units	0.1	0.1	10/20/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	10/20/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 14:27	mjj1
Residue, Filterable (TDS) @180C	SM2540C	2	536		*	mg/L	40	80	10/13/21 12:35	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	10	222		*	mg/L	10	50	10/21/21 12:12	wtc
TDS (calculated)	Calculation		429			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.25						11/05/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-18

ACZ Sample ID: ***L69098-07***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/14/21 12:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.302		*	mg/L	0.05	0.25	10/14/21 20:06	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00324		*	mg/L	0.0004	0.002	10/19/21 17:27	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00411		*	mg/L	0.0002	0.001	10/19/21 17:27	mfm
Barium, dissolved	M200.7 ICP	1	0.0368		*	mg/L	0.007	0.035	10/14/21 20:06	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:27	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:42	kja
Boron, dissolved	M200.7 ICP	1	0.102		*	mg/L	0.03	0.1	10/14/21 20:06	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/19/21 17:27	mfm
Calcium, dissolved	M200.7 ICP	1	58.0		*	mg/L	0.1	0.5	10/14/21 20:06	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.202		*	mg/L	0.0005	0.002	10/19/21 17:27	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00377		*	mg/L	0.00005	0.00025	10/19/21 17:27	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00279		*	mg/L	0.0008	0.002	10/19/21 17:27	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 20:06	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 20:06	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	10/19/21 17:27	mfm
Lithium, dissolved	M200.7 ICP	1	0.0183	B	*	mg/L	0.008	0.04	10/14/21 20:06	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/14/21 20:06	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/19/21 17:27	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.2		*	ng/L	0.3	1	10/21/21 14:17	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0204		*	mg/L	0.0002	0.0005	10/19/21 17:27	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/19/21 17:27	mfm
Potassium, dissolved	M200.7 ICP	1	10.5		*	mg/L	0.2	1	10/14/21 20:06	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 20:06	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00192		*	mg/L	0.0001	0.00025	10/26/21 13:21	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 12:14	mfm
Sodium, dissolved	M200.7 ICP	1	64.3		*	mg/L	0.2	1	10/14/21 20:06	kja
Strontium, dissolved	M200.7 ICP	1	0.165		*	mg/L	0.009	0.045	10/14/21 20:06	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:27	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 20:06	kja
Titanium, dissolved	M200.7 ICP	1	0.0096	B	*	mg/L	0.005	0.025	10/14/21 20:06	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:27	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0900		*	mg/L	0.0005	0.002	10/19/21 17:27	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/19/21 17:27	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-18

ACZ Sample ID: ***L69098-07***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	45.3		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	61.1		*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	106		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			8.1			%			11/05/21 0:00	calc
Sum of Anions			5.1			meq/L			11/05/21 0:00	calc
Sum of Cations			6.0			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	5.36		*	mg/L	0.5	2	10/19/21 15:22	md
Conductivity @25C	SM2510B	1	610		*	umhos/cm	1	10	10/20/21 9:19	eep
Fluoride	M300.0 - Ion Chromatography	2	0.573		*	mg/L	0.1	0.5	10/26/21 3:32	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		145			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.141		*	mg/L	0.02	0.1	10/30/21 2:20	pjb
pH (lab)	SM4500H+ B									
pH		1	11.0	H	*	units	0.1	0.1	10/20/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	10/20/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 14:30	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	416		*	mg/L	20	40	10/13/21 12:38	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	133		*	mg/L	5	25	10/21/21 11:57	wtc
TDS (calculated)	Calculation		310			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.34						11/05/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-19

ACZ Sample ID: ***L69098-08***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/14/21 12:32	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.251		*	mg/L	0.05	0.25	10/14/21 20:09	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00348		*	mg/L	0.0004	0.002	10/19/21 17:30	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00771		*	mg/L	0.0002	0.001	10/19/21 17:30	mfm
Barium, dissolved	M200.7 ICP	1	0.0266	B	*	mg/L	0.007	0.035	10/14/21 20:09	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/19/21 17:30	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 18:52	kja
Boron, dissolved	M200.7 ICP	1	0.106		*	mg/L	0.03	0.1	10/14/21 20:09	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/19/21 17:30	mfm
Calcium, dissolved	M200.7 ICP	1	38.9		*	mg/L	0.1	0.5	10/14/21 20:09	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.115		*	mg/L	0.0005	0.002	10/19/21 17:30	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00212		*	mg/L	0.00005	0.00025	10/19/21 17:30	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00251		*	mg/L	0.0008	0.002	10/19/21 17:30	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/14/21 20:09	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/14/21 20:09	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:30	mfm
Lithium, dissolved	M200.7 ICP	1	0.0279	B	*	mg/L	0.008	0.04	10/14/21 20:09	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/14/21 20:09	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/19/21 17:30	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.7		*	ng/L	0.3	1	10/21/21 14:21	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0135		*	mg/L	0.0002	0.0005	10/19/21 17:30	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/19/21 17:30	mfm
Potassium, dissolved	M200.7 ICP	1	8.19		*	mg/L	0.2	1	10/14/21 20:09	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/14/21 20:09	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00146		*	mg/L	0.0001	0.00025	10/26/21 13:23	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 12:16	mfm
Sodium, dissolved	M200.7 ICP	1	61.1		*	mg/L	0.2	1	10/14/21 20:09	kja
Strontium, dissolved	M200.7 ICP	1	0.111		*	mg/L	0.009	0.045	10/14/21 20:09	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:30	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/14/21 20:09	kja
Titanium, dissolved	M200.7 ICP	1	0.0070	B	*	mg/L	0.005	0.025	10/14/21 20:09	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/19/21 17:30	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0809		*	mg/L	0.0005	0.002	10/19/21 17:30	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/19/21 17:30	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-19

ACZ Sample ID: ***L69098-08***
Date Sampled: *10/07/21 10:00*
Date Received: *10/08/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/20/21 0:00	eep
Carbonate as CaCO3		1	46.8		*	mg/L	2	20	10/20/21 0:00	eep
Hydroxide as CaCO3		1	55.1		*	mg/L	2	20	10/20/21 0:00	eep
Total Alkalinity		1	102		*	mg/L	2	20	10/20/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			8.9			%			11/05/21 0:00	calc
Sum of Anions			4.1			meq/L			11/05/21 0:00	calc
Sum of Cations			4.9			meq/L			11/05/21 0:00	calc
Chloride	SM4500Cl-E	1	4.87		*	mg/L	0.5	2	10/19/21 15:23	md
Conductivity @25C	SM2510B	1	481		*	umhos/cm	1	10	10/20/21 9:30	eep
Fluoride	M300.0 - Ion Chromatography	1	0.725		*	mg/L	0.05	0.25	10/26/21 3:50	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		97			mg/L	0.2	5	11/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.081	B	*	mg/L	0.02	0.1	10/30/21 2:21	pjb
pH (lab)	SM4500H+ B									
pH		1	10.9	H	*	units	0.1	0.1	10/20/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	10/20/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 14:31	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	352		*	mg/L	20	40	10/13/21 12:41	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	88.1		*	mg/L	5	25	10/21/21 11:57	wtc
TDS (calculated)	Calculation		240			mg/L			11/05/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.47						11/05/21 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

MCCLELLANDLAB ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529842													
WG529842PBW1	PBW	10/19/21 22:18				5.8	mg/L		-20	20			
WG529842LCSW3	LCSW	10/19/21 22:37	WC211018-1	820.0001		801.1	mg/L	98	90	110			
WG529842LCSW6	LCSW	10/20/21 4:32	WC211018-1	820.0001		798	mg/L	97	90	110			
WG529842PBW2	PBW	10/20/21 4:39				5.9	mg/L		-20	20			
L69098-04DUP	DUP	10/20/21 8:23			95.8	102.5	mg/L				7	20	
WG529842LCSW9	LCSW	10/20/21 8:41	WC211018-1	820.0001		792.5	mg/L	97	90	110			
WG529842PBW3	PBW	10/20/21 8:48				4.9	mg/L		-20	20			
L69122-01DUP	DUP	10/20/21 10:28			914	904.4	mg/L				1	20	
WG529842LCSW12	LCSW	10/20/21 12:35	WC211018-1	820.0001		821.3	mg/L	100	90	110			
WG529842PBW4	PBW	10/20/21 12:41				4.4	mg/L		-20	20			
WG529842LCSW15	LCSW	10/20/21 16:05	WC211018-1	820.0001		804	mg/L	98	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		1.974	mg/L	99	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.15	0.15			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	1.0008		1.012	mg/L	101	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	1.0008	.286	1.304	mg/L	102	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	1.0008	.286	1.31	mg/L	102	85	115	0	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.0201		.02041	mg/L	102	90	110			
WG529831ICB	ICB	10/19/21 16:53				.00042	mg/L		-0.00088	0.00088			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.01		.01027	mg/L	103	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.01	.00464	.01493	mg/L	103	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.01	.00464	.01529	mg/L	107	70	130	2	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.01	U	.01289	mg/L	129	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.01	U	.013	mg/L	130	70	130	1	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05136	mg/L	103	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00044	0.00044			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05005		.05016	mg/L	100	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05005	.00681	.05659	mg/L	99	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05005	.00681	.05918	mg/L	105	70	130	4	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05005	U	.0559	mg/L	112	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05005	U	.05712	mg/L	114	70	130	2	20	

MCCLELLANDLAB ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		1.9835	mg/L	99	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.021	0.021			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	.5		.4903	mg/L	98	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	.5	.077	.5664	mg/L	98	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	.5	.077	.5713	mg/L	99	85	115	1	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.053092	mg/L	106	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.000176	0.000176			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05005		.051062	mg/L	102	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05005	U	.048026	mg/L	96	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05005	U	.048793	mg/L	97	70	130	2	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05005	U	.061156	mg/L	122	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05005	U	.063797	mg/L	127	70	130	4	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529680													
WG529680ICV	ICV	10/18/21 17:54	II211014-1	2		1.973	mg/L	99	95	105			
WG529680ICB	ICB	10/18/21 18:00				U	mg/L		-0.12	0.12			
WG529680LFB	LFB	10/18/21 18:13	II210930-2	1		1.003	mg/L	100	85	115			
L69098-05AS	AS	10/18/21 18:33	II210930-2	1	U	1.016	mg/L	102	85	115			
L69098-05ASD	ASD	10/18/21 18:36	II210930-2	1	U	1.01	mg/L	101	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		2.018	mg/L	101	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.09	0.09			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	.5005		.521	mg/L	104	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	.5005	.075	.591	mg/L	103	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	.5005	.075	.595	mg/L	104	85	115	1	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.054082	mg/L	108	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00011	0.00011			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05005		.051939	mg/L	104	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05005	.000092	.05223	mg/L	104	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05005	.000092	.053967	mg/L	108	70	130	3	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05005	U	.059115	mg/L	118	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05005	U	.058337	mg/L	117	70	130	1	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	100		99.69	mg/L	100	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.3	0.3			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	67.98972		69.27	mg/L	102	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	67.98972	132	191.4	mg/L	87	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	67.98972	132	191.8	mg/L	88	85	115	0	20	

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529813													
WG529813ICV	ICV	10/19/21 15:12	WI210503-1	54.89		55.18	mg/L	101	90	110			
WG529813ICB	ICB	10/19/21 15:13				U	mg/L		-1.5	1.5			
WG529813LFB1	LFB	10/19/21 15:13	WI210908-11	29.97		30.19	mg/L	101	90	110			
L69097-01AS	AS	10/19/21 15:15	WI210908-11	29.97	16.1	45.97	mg/L	100	90	110			
L69097-02DUP	DUP	10/19/21 15:16			19.6	19.88	mg/L				1	20	
L69098-06AS	AS	10/19/21 15:22	WI210908-11	29.97	5.97	38.2	mg/L	108	90	110			
L69098-07DUP	DUP	10/19/21 15:23			5.36	5.72	mg/L				6	20	
WG529813LFB2	LFB	10/19/21 15:29	WI210908-11	29.97		28.56	mg/L	95	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05148	mg/L	103	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.0011	0.0011			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05		.04903	mg/L	98	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05	.259	.29261	mg/L	67	70	130			M3
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05	.259	.30347	mg/L	89	70	130	4	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05	.00062	.04673	mg/L	92	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05	.00062	.04518	mg/L	89	70	130	3	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.054443	mg/L	109	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00011	0.00011			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05005		.051507	mg/L	103	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05005	.00321	.052518	mg/L	99	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05005	.00321	.053819	mg/L	101	70	130	2	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05005	.00168	.047564	mg/L	92	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05005	.00168	.044929	mg/L	86	70	130	6	20	

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ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529842													
WG529842LCSW2	LCSW	10/19/21 22:24	PCN64228	1409		1501	umhos/cm	107	90	110			
WG529842LCSW5	LCSW	10/20/21 4:21	PCN64228	1409		1513	umhos/cm	107	90	110			
L69098-04DUP	DUP	10/20/21 8:23			383	383	umhos/cm				0	20	
WG529842LCSW8	LCSW	10/20/21 8:30	PCN64228	1409		1517	umhos/cm	108	90	110			
L69122-01DUP	DUP	10/20/21 10:28			11200	11190	umhos/cm				0	20	
WG529842LCSW11	LCSW	10/20/21 12:22	PCN64228	1409		1517	umhos/cm	108	90	110			
WG529842LCSW14	LCSW	10/20/21 15:54	PCN64228	1409		1519	umhos/cm	108	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05188	mg/L	104	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00176	0.00176			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05		.04982	mg/L	100	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05	.00881	.05349	mg/L	89	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05	.00881	.05593	mg/L	94	70	130	4	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05	U	.04072	mg/L	81	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05	U	.03975	mg/L	80	70	130	2	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG530011													
WG530011LFB1	LFB	10/25/21 16:47	WI210907-6	1.5		1.457	mg/L	97	90	110			
L69073-10DUP	DUP	10/25/21 21:33			U	U	mg/L				0	20	RA
L69073-11AS	AS	10/25/21 22:09	WI210907-6	1500	U	1480.891	mg/L	99	90	110			
L69098-04DUP	DUP	10/26/21 1:26			.783	.788	mg/L				1	20	
WG530011LFB2	LFB	10/26/21 1:44	WI210907-6	1.5		1.424	mg/L	95	90	110			
L69098-05AS	AS	10/26/21 2:20	WI210907-6	15	U	13.677	mg/L	91	90	110			

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		2.06	mg/L	103	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.3	0.3			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	.9822		1.05	mg/L	107	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	.9822	U	1.06	mg/L	108	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	.9822	U	1.09	mg/L	111	85	115	3	20	

MCCLELLANDLAB ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		1.979	mg/L	99	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.18	0.18			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	1.0001		1.009	mg/L	101	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	1.0001	U	1.028	mg/L	103	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	1.0001	U	1.039	mg/L	104	85	115	1	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05334	mg/L	107	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00022	0.00022			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05005		.05194	mg/L	104	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05005	U	.0525	mg/L	105	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05005	U	.05438	mg/L	109	70	130	4	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05005	U	.05	mg/L	100	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05005	U	.04863	mg/L	97	70	130	3	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		1.9805	mg/L	99	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.024	0.024			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	.999		.9765	mg/L	98	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	.999	.0102	1.001	mg/L	99	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	.999	.0102	1.008	mg/L	100	85	115	1	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	100		96.39	mg/L	96	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.6	0.6			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	49.99828		48.43	mg/L	97	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	49.99828	.24	48.03	mg/L	96	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	49.99828	.24	48.03	mg/L	96	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05339	mg/L	107	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00088	0.00088			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.0499		.05122	mg/L	103	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.0499	U	.05141	mg/L	103	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.0499	U	.05205	mg/L	104	70	130	1	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.0499	.212	.25329	mg/L	83	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.0499	.212	.23665	mg/L	49	70	130	7	20	M3

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ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG529670													
WG529670CCV1	CCV	10/18/21 10:11	HG211011-4	10		10.8	ng/L	108	76.5	123.4			
WG529670CCB1	CCB	10/18/21 10:16				U	ng/L		-0.501	0.501			
WG529670PQV	PQV	10/18/21 10:21	HG211011-6	1		1	ng/L	100	70	130			
WG529670LFB	LFB	10/18/21 10:25	HG211011-5	2		1.87	ng/L	94	71	125			
WG529670CCV2	CCV	10/18/21 11:34	HG211011-4	10		10.1	ng/L	101	76.5	123.4			
WG529670CCB2	CCB	10/18/21 11:39				U	ng/L		-0.501	0.501			
L69098-05MS	MS	10/18/21 14:07	HG211011-5	4	5580	8220	ng/L	132000	71	125			M3 MH
L69098-05MSD	MSD	10/18/21 14:30	HG211011-5	4	5580	8180	ng/L	130000	71	125	0	24	M3 MH
WG529670CCV3	CCV	10/18/21 15:06	HG211011-4	10		11	ng/L	110	76.5	123.4			
WG529670CCB3	CCB	10/18/21 15:11				1.34	ng/L		-0.501	0.501			BB
WG530028													
WG530028CCV1	CCV	10/21/21 8:23	HG211011-4	10		10.7	ng/L	107	76.5	123.4			
WG530028CCB1	CCB	10/21/21 8:27				U	ng/L		-0.501	0.501			
WG530028PQV	PQV	10/21/21 9:04	HG211011-6	1		1.17	ng/L	117	70	130			
WG530028CCV2	CCV	10/21/21 10:43	HG211011-4	10		10.2	ng/L	102	76.5	123.4			
WG530028CCB2	CCB	10/21/21 10:48				U	ng/L		-0.501	0.501			
WG530028CCV3	CCV	10/21/21 12:24	HG211011-4	10		10.7	ng/L	107	76.5	123.4			
WG530028CCB3	CCB	10/21/21 12:28				U	ng/L		-0.501	0.501			
WG530028LFB	LFB	10/21/21 13:05	HG211011-5	2		2.34	ng/L	117	71	125			
L69098-03MS	MS	10/21/21 13:38	HG16315X	50	38	51	ng/L	130	71	125			M1 MH
L69098-03MSD	MSD	10/21/21 13:43	HG16315X	50	38	52	ng/L	140	71	125	2	24	M1 MH
WG530028CCV4	CCV	10/21/21 13:48	HG211011-4	10		9.96	ng/L	100	76.5	123.4			
WG530028CCB4	CCB	10/21/21 13:52				U	ng/L		-0.501	0.501			
WG530028CCV5	CCV	10/21/21 14:26	HG211011-4	10		10.6	ng/L	106	76.5	123.4			
WG530028CCB5	CCB	10/21/21 14:31				U	ng/L		-0.501	0.501			
WG530200													
WG530200CCV1	CCV	10/25/21 11:30	HG211011-4	10		10.3	ng/L	103	76.5	123.4			
WG530200CCB1	CCB	10/25/21 11:34				U	ng/L		-0.501	0.501			
WG530200PQV	PQV	10/25/21 11:39	HG211011-6	1		.83	ng/L	83	70	130			
WG530200LFB1	LFB	10/25/21 11:46	HG211011-5	2		1.96	ng/L	98	71	125			
WG530200CCV2	CCV	10/25/21 12:28	HG211011-4	10		9.56	ng/L	96	76.5	123.4			
WG530200CCB2	CCB	10/25/21 12:33				U	ng/L		-0.501	0.501			
L69162-02MS	MS	10/25/21 13:10	HG163110X	200	62	83.5	ng/L	108	71	125			
L69162-02MSD	MSD	10/25/21 13:15	HG163110X	200	62	82.1	ng/L	101	71	125	2	24	
WG530200CCV3	CCV	10/25/21 13:42	HG211011-4	10		9.88	ng/L	99	76.5	123.4			
WG530200CCB3	CCB	10/25/21 13:47				U	ng/L		-0.501	0.501			
WG530200LFB2	LFB	10/25/21 14:22	HG211011-5	2		1.94	ng/L	97	71	125			
WG530200CCV4	CCV	10/25/21 14:41	HG211011-4	10		9.7	ng/L	97	76.5	123.4			
WG530200CCB4	CCB	10/25/21 14:45				U	ng/L		-0.501	0.501			
WG530200CCV5	CCV	10/25/21 15:14	HG211011-4	10		9.79	ng/L	98	76.5	123.4			
WG530200CCB5	CCB	10/25/21 15:19				U	ng/L		-0.501	0.501			

MCCLELLANDLAB ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.01992		.02091	mg/L	105	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00044	0.00044			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05005		.05015	mg/L	100	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05005	.031	.07871	mg/L	95	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05005	.031	.08101	mg/L	100	70	130	3	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05005	.0357	.09771	mg/L	124	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05005	.0357	.0991	mg/L	127	70	130	1	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05246	mg/L	105	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00088	0.00088			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05		.04879	mg/L	98	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05	.00092	.04588	mg/L	90	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05	.00092	.04792	mg/L	94	70	130	4	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05	.00077	.04173	mg/L	82	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05	.00077	.0398	mg/L	78	70	130	5	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530633													
WG530633ICV	ICV	10/29/21 23:41	WI210904-1	2.4161		2.343	mg/L	97	90	110			
WG530633ICB	ICB	10/29/21 23:42				U	mg/L		-0.02	0.02			
WG530638													
WG530638LFB1	LFB	10/30/21 1:45	WI211001-5	2		2.022	mg/L	101	90	110			
L69098-01AS	AS	10/30/21 2:07	WI211001-5	2	1.18	3.302	mg/L	106	90	110			
L69098-02DUP	DUP	10/30/21 2:09			.345	.344	mg/L				0	20	
WG530638LFB2	LFB	10/30/21 2:25	WI211001-5	2		1.998	mg/L	100	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529842													
WG529842LCSW1	LCSW	10/19/21 22:23	PCN62948	6		6.1	units	102	5.9	6.1			
WG529842LCSW7	LCSW	10/20/21 8:28	PCN62948	6		6.1	units	102	5.9	6.1			
L69122-01DUP	DUP	10/20/21 10:28			7.9	8	units				1	20	
WG529842LCSW10	LCSW	10/20/21 12:20	PCN62948	6		6.1	units	102	5.9	6.1			
WG529842LCSW13	LCSW	10/20/21 15:52	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055													
WG530055LCSW1	LCSW	10/21/21 22:05	PCN62948	6		6.1	units	102	5.9	6.1			
L69154-02DUP	DUP	10/22/21 0:37			7.9	7.9	units				0	20	
WG530055LCSW4	LCSW	10/22/21 0:42	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW7	LCSW	10/22/21 4:30	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW10	LCSW	10/22/21 8:24	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW13	LCSW	10/22/21 13:06	PCN62948	6		6.1	units	102	5.9	6.1			

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ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529833													
WG529833ICV	ICV	10/25/21 14:14	WI210831-6	.65228		.7	mg/L	107	90	110			
WG529833ICB	ICB	10/25/21 14:16				U	mg/L		-0.01	0.01			
WG529410LRB	LRB	10/25/21 14:17				U	mg/L		-0.01	0.01			
WG529410LFB	LFB	10/25/21 14:18	WI211001-2	.5		.497	mg/L	99	90	110			
L69098-01LFM	LFM	10/25/21 14:21	5XPHOS	2.5	U	2.565	mg/L	103	90	110			
L69098-02DUP	DUP	10/25/21 14:23			U	U	mg/L				0	20	RA
WG529833ICV1	ICV	11/01/21 16:01	WI210831-6	.65228		.686	mg/L	105	90	110			
WG529833ICB1	ICB	11/01/21 16:03				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	20		19.72	mg/L	99	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.6	0.6			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	99.96008		98.96	mg/L	99	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	99.96008	18.9	118.1	mg/L	99	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	99.96008	18.9	118.8	mg/L	100	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529347													
WG529347PBW	PBW	10/13/21 12:11				U	mg/L		-20	20			
WG529347LCSW	LCSW	10/13/21 12:14	PCN64137	1000		924	mg/L	92	80	120			
L69118-01DUP	DUP	10/13/21 12:52			344	332	mg/L				4	10	RA

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		1.959	mg/L	98	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.15	0.15			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	1.0017		.996	mg/L	99	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	1.0017	U	1.004	mg/L	100	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	1.0017	U	1.021	mg/L	102	85	115	2	20	

MCCLELLANDLAB ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05096	mg/L	102	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00022	0.00022			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05		.05027	mg/L	101	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05	.00311	.05462	mg/L	103	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05	.00311	.05563	mg/L	105	70	130	2	20	
WG530090													
WG530090ICV	ICV	10/22/21 11:37	MS211013-2	.05		.05267	mg/L	105	90	110			
WG530090ICB	ICB	10/22/21 11:39				U	mg/L		-0.00022	0.00022			
WG530090LFB	LFB	10/22/21 11:45	MS210927-3	.05		.05092	mg/L	102	85	115			
L68955-01AS	AS	10/22/21 11:54	MS210927-3	.05	.00109	.05392	mg/L	106	70	130			
L68955-01ASD	ASD	10/22/21 11:56	MS210927-3	.05	.00109	.0545	mg/L	107	70	130	1	20	
L69124-02AS	AS	10/22/21 12:23	MS210927-3	.1	U	.10061	mg/L	101	70	130			
L69124-02ASD	ASD	10/22/21 12:29	MS210927-3	.1	U	.09484	mg/L	95	70	130	6	20	
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05421	mg/L	108	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00022	0.00022			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05		.0511	mg/L	102	85	115			
L69162-01AS	AS	10/26/21 13:26	MS210927-3	.05	.00748	.06103	mg/L	107	70	130			
L69162-01ASD	ASD	10/26/21 13:28	MS210927-3	.05	.00748	.05784	mg/L	101	70	130	5	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530090													
WG530090ICV	ICV	10/22/21 11:37	MS211013-2	.02		.02029	mg/L	101	90	110			
WG530090ICB	ICB	10/22/21 11:39				U	mg/L		-0.00022	0.00022			
WG530090LFB	LFB	10/22/21 11:45	MS210927-3	.01		.01055	mg/L	106	85	115			
L68955-01AS	AS	10/22/21 11:54	MS210927-3	.01	U	.01019	mg/L	102	70	130			
L68955-01ASD	ASD	10/22/21 11:56	MS210927-3	.01	U	.0096	mg/L	96	70	130	6	20	
L69124-02AS	AS	10/22/21 12:23	MS210927-3	.02	U	.01624	mg/L	81	70	130			
L69124-02ASD	ASD	10/22/21 12:29	MS210927-3	.02	U	.01191	mg/L	60	70	130	31	20	M2 RF ZA

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	100		99.22	mg/L	99	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.6	0.6			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	100.007		98.95	mg/L	99	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	100.007	90.1	185.1	mg/L	95	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	100.007	90.1	185.1	mg/L	95	85	115	0	20	

MCCLELLANDLAB ACZ Project ID: ***L69098***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		1.9265	mg/L	96	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.027	0.027			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	.5005		.5301	mg/L	106	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	.5005	.388	.9033	mg/L	103	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	.5005	.388	.9111	mg/L	105	85	115	1	20	

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529929													
WG529929ICB	ICB	10/21/21 9:14				U	mg/L		-3	3			
WG529929ICV	ICV	10/21/21 9:14	WI211012-1	20.46		19	mg/L	93	90	110			
WG529929LFB	LFB	10/21/21 11:28	WI210105-3	10		9.4	mg/L	94	90	110			
L69264-01AS	AS	10/21/21 11:32	WI210105-3	10	10.5	20.1	mg/L	96	90	110			
L69267-01DUP	DUP	10/21/21 12:01			238	242.4	mg/L				2	20	
L69072-01DUP	DUP	10/21/21 12:12			8160	8667.8	mg/L				6	20	
L69072-02AS	AS	10/21/21 12:13	SO4TURB	10	1790	1751.2	mg/L	-388	90	110			M3

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05368	mg/L	107	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00022	0.00022			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05		.05042	mg/L	101	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05	.00116	.05242	mg/L	103	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05	.00116	.05382	mg/L	105	70	130	3	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05	U	.04629	mg/L	93	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05	U	.04569	mg/L	91	70	130	1	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		2.016	mg/L	101	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.12	0.12			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	1.002		1.018	mg/L	102	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	1.002	U	1.019	mg/L	102	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	1.002	U	1.012	mg/L	101	85	115	1	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529455													
WG529455ICV	ICV	10/14/21 18:23	II211001-1	2		1.9572	mg/L	98	95	105			
WG529455ICB	ICB	10/14/21 18:29				U	mg/L		-0.015	0.015			
WG529455LFB	LFB	10/14/21 18:41	II210930-2	1		.9986	mg/L	100	85	115			
L69098-05AS	AS	10/14/21 19:56	II210930-2	1	.0154	1.006	mg/L	99	85	115			
L69098-05ASD	ASD	10/14/21 19:59	II210930-2	1	.0154	1.008	mg/L	99	85	115	0	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.05177	mg/L	104	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.00022	0.00022			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05		.0504	mg/L	101	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05	U	.05538	mg/L	111	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05	U	.05798	mg/L	116	70	130	5	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05	.00103	.04926	mg/L	96	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05	.00103	.04632	mg/L	91	70	130	6	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.04982	mg/L	100	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.0011	0.0011			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.05		.04832	mg/L	97	85	115			
L69098-02AS	AS	10/19/21 17:10	MS210927-3	.05	.111	.15096	mg/L	80	70	130			
L69098-02ASD	ASD	10/19/21 17:12	MS210927-3	.05	.111	.15653	mg/L	91	70	130	4	20	
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.05	U	.04952	mg/L	99	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.05	U	.04867	mg/L	97	70	130	2	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529831													
WG529831ICV	ICV	10/19/21 16:50	MS211013-2	.05		.0529	mg/L	106	90	110			
WG529831ICB	ICB	10/19/21 16:53				U	mg/L		-0.0132	0.0132			
WG529831LFB	LFB	10/19/21 16:55	MS210927-3	.050075		.055	mg/L	110	85	115			
L69124-04AS	AS	10/19/21 17:49	MS210927-3	.050075	.0137	.0674	mg/L	107	70	130			
L69124-04ASD	ASD	10/19/21 17:51	MS210927-3	.050075	.0137	.0675	mg/L	107	70	130	0	20	
WG530090													
WG530090ICV	ICV	10/22/21 11:37	MS211013-2	.05		.0508	mg/L	102	90	110			
WG530090ICB	ICB	10/22/21 11:39				U	mg/L		-0.0132	0.0132			
WG530090LFB	LFB	10/22/21 11:45	MS210927-3	.050075		.0541	mg/L	108	85	115			
L68955-01AS	AS	10/22/21 11:54	MS210927-3	.050075	.0458	.096	mg/L	100	70	130			
L68955-01ASD	ASD	10/22/21 11:56	MS210927-3	.050075	.0458	.0956	mg/L	99	70	130	0	20	
L69124-02AS	AS	10/22/21 12:23	MS210927-3	.10015	3.9	4.0506	mg/L	150	70	130			M3
L69124-02ASD	ASD	10/22/21 12:29	MS210927-3	.10015	3.9	3.949	mg/L	49	70	130	3	20	M3

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-01	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529831	Chromium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG530011	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529842	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529410	Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion	DJ	Sample dilution required due to insufficient sample.
	WG529833		M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

McClelland Laboratories, Inc. ACZ Project ID: ***L69098***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-02	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529831	Chromium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG530011	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529842	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529410	Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion	DJ	Sample dilution required due to insufficient sample.
	WG529833		M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-03	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529831	Chromium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG530011	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529842	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529833	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-04	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529831	Chromium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
		Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529670	Mercury, dissolved	M1631E, Atomic Fluorescence	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
			M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529833	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-05	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529831	Chromium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG530011	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG529842	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529842	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG529833	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530090	Selenium, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-06	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529831	Chromium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG530011	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG529842	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529842	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG529833	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530090	Selenium, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
		Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	RF	Relative Percent Difference (RPD) for Ag in spiked samples exceeded limit. In the absence of HCl, precipitation of Ag may occur at different rates.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG530090	Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-07	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
		Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529831	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529842	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG529833	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530090	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	RF	Relative Percent Difference (RPD) for Ag in spiked samples exceeded limit. In the absence of HCl, precipitation of Ag may occur at different rates.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69098-08	WG529842	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529813	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG529842	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
		Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529831	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530028	Mercury, dissolved	M1631E, Atomic Fluorescence	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG530638	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG529842	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG529833	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529347	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530090	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	RF	Relative Percent Difference (RPD) for Ag in spiked samples exceeded limit. In the absence of HCl, precipitation of Ag may occur at different rates.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG529929	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG529842	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69098
Date Received: 10/08/2021 10:31
Received By:
Date Printed: 10/11/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
6757	8.7	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID:	L69098
Date Received:	10/08/2021 10:31
Received By:	
Date Printed:	10/11/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L69098

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina	Address:
Company: McClelland Laboratories	
E-mail: mmedina@mettest.com	Telephone:

Copy of Report to:

Name:	E-mail: results@mettest.com
Company:	Telephone:

Invoice to:

Name:	Address:
Company:	
E-mail: mliap@mettest.com	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ☒ NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ☐

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** **State** NV **Zip code** 89436 **Time Zone** PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 B-11	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-12	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-13	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-14	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-16	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-17	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-18	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-19	10/7/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
		10/8/21	1031

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L69098 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: GRASSY-LEACH

Matrix: Leachate Grassy Mountain Leachate

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digesti		$0.00
Metals Analysis			
Aluminum, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Barium, dissolved	M200.7 ICP	0.007 mg/L	$7.40
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$14.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$7.40
Boron, dissolved	M200.7 ICP	0.03 mg/L	$7.40
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$14.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Iron, dissolved	M200.7 ICP	0.06 mg/L	$7.40
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$7.40
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$41.20
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$7.40
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Tin, dissolved	M200.7 ICP	0.04 mg/L	$7.40

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S/ sh D/ 14 P/

Titanium, dissolved	M200.7 ICP	0.005 mg/L	$7.40
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$14.00
Misc.			
Electronic Data Deliverable			$0.00
Setup charge for ICPMS			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$9.80
Cation-Anion Balance	Calculation		$0.00
Chloride	SM4500Cl-E	0.5 mg/L	$9.00
Conductivity @25C	SM2510B	1 umhos/cm	$6.60
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$10.80
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$9.00
pH (lab)	SM4500H+ B	0.1 C	$6.60
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$19.00
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$11.60
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1 mg/L	$9.00
TDS (calculated)	Calculation	Calculation	$0.00
TDS (ratio - measured/calculated)	Calculation	Calculation	$0.00
		Cost/Sample:	**$481.60**

Leachates will be supplied from Gene McClelland's lab in Nevada. Pricing is based on standard TAT for waters of ~ three weeks and will vary with workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 04, 2021

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

Project ID:
ACZ Project ID: L69162

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 12, 2021. This project has been assigned to ACZ's project number, L69162. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L69162. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 04, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

S. Habermehl

Scott Habermehl has reviewed
and approved this report.

McClelland Laboratories, Inc.

November 04, 2021

Project ID:
ACZ Project ID: L69162

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 8 leachate samples from McClelland Laboratories, Inc. on October 12, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L69162. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

1. (N1) /TOTAL DISSOLVED SOLIDS

The beaker of the Dup sample was chipped during the weighing process. Another duplicate in the batch was used to assess precision. Method required duplicate frequency was not met.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-21

ACZ Sample ID: ***L69162-01***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 14:54	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.150	B	*	mg/L	0.05	0.25	10/18/21 2:11	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00289		*	mg/L	0.0004	0.002	10/22/21 14:59	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00434		*	mg/L	0.0002	0.001	10/22/21 14:59	mfm
Barium, dissolved	M200.7 ICP	1	0.0743		*	mg/L	0.007	0.035	10/18/21 2:11	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 14:59	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:02	kja
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	10/18/21 2:11	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000079	B	*	mg/L	0.00005	0.00025	10/22/21 14:59	mfm
Calcium, dissolved	M200.7 ICP	1	138		*	mg/L	0.1	0.5	10/18/21 2:11	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.922		*	mg/L	0.0005	0.002	10/22/21 14:59	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.0177		*	mg/L	0.00005	0.00025	10/22/21 14:59	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00668		*	mg/L	0.0008	0.002	10/22/21 14:59	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:11	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/18/21 2:11	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00029	B	*	mg/L	0.0001	0.0005	10/22/21 14:59	mfm
Lithium, dissolved	M200.7 ICP	1	0.0089	B	*	mg/L	0.008	0.04	10/18/21 2:11	kja
Magnesium, dissolved	M200.7 ICP	1	0.26	B	*	mg/L	0.2	1	10/18/21 2:11	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00069	B	*	mg/L	0.0004	0.002	10/22/21 14:59	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1000	9200			ng/L	300	1000	10/25/21 15:05	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.1000		*	mg/L	0.0002	0.0005	10/22/21 14:59	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00069	B	*	mg/L	0.0004	0.001	10/22/21 14:59	mfm
Potassium, dissolved	M200.7 ICP	1	18.6		*	mg/L	0.2	1	10/18/21 2:11	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:11	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00745		*	mg/L	0.0001	0.00025	10/22/21 14:59	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00409		*	mg/L	0.0001	0.0005	10/26/21 13:25	mfm
Sodium, dissolved	M200.7 ICP	1	85.9		*	mg/L	0.2	1	10/18/21 2:11	kja
Strontium, dissolved	M200.7 ICP	1	0.405		*	mg/L	0.009	0.045	10/18/21 2:11	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00095		*	mg/L	0.0001	0.0005	10/22/21 14:59	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:11	kja
Titanium, dissolved	M200.7 ICP	1	0.0137	B	*	mg/L	0.005	0.025	10/18/21 2:11	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 14:59	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0872		*	mg/L	0.0005	0.002	10/22/21 14:59	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 14:59	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-21

ACZ Sample ID: ***L69162-01***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	65.4		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	39.3		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	105		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/03/21 0:00	calc
Sum of Anions			11			meq/L			11/03/21 0:00	calc
Sum of Cations			11			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	9.41		*	mg/L	0.5	2	10/21/21 11:32	md
Conductivity @25C	SM2510B	1	1100		*	umhos/cm	1	10	10/22/21 2:29	eep
Fluoride	M300.0 - Ion Chromatography	5	0.440	B	*	mg/L	0.25	1.25	10/27/21 16:53	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		346			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	1.13		*	mg/L	0.02	0.1	10/30/21 21:34	pjb
pH (lab)	SM4500H+ B									
pH		1	10.9	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.015	B	*	mg/L	0.01	0.05	10/22/21 13:37	wtc
Residue, Filterable (TDS) @180C	SM2540C	5	740		*	mg/L	100	200	10/15/21 12:50	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	15	388		*	mg/L	15	75	10/22/21 12:19	wtc
TDS (calculated)	Calculation		687			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.08						11/03/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-22

ACZ Sample ID: ***L69162-02***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 15:00	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.185	B	*	mg/L	0.05	0.25	10/18/21 2:14	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00325		*	mg/L	0.0004	0.002	10/22/21 15:02	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00356		*	mg/L	0.0002	0.001	10/22/21 15:02	mfm
Barium, dissolved	M200.7 ICP	1	0.0461		*	mg/L	0.007	0.035	10/18/21 2:14	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 15:02	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:05	kja
Boron, dissolved	M200.7 ICP	1	0.106		*	mg/L	0.03	0.1	10/18/21 2:14	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/22/21 15:02	mfm
Calcium, dissolved	M200.7 ICP	1	81.1		*	mg/L	0.1	0.5	10/18/21 2:14	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.404		*	mg/L	0.0005	0.002	10/22/21 15:02	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00805		*	mg/L	0.00005	0.00025	10/22/21 15:02	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00627		*	mg/L	0.0008	0.002	10/22/21 15:02	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:14	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/18/21 2:14	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:02	mfm
Lithium, dissolved	M200.7 ICP	1	0.0096	B	*	mg/L	0.008	0.04	10/18/21 2:14	kja
Magnesium, dissolved	M200.7 ICP	1	0.23	B	*	mg/L	0.2	1	10/18/21 2:14	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/22/21 15:02	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	62			ng/L	3	10	10/25/21 13:05	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0432		*	mg/L	0.0002	0.0005	10/22/21 15:02	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/22/21 15:02	mfm
Potassium, dissolved	M200.7 ICP	1	13.3		*	mg/L	0.2	1	10/18/21 2:14	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:14	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00397		*	mg/L	0.0001	0.00025	10/22/21 15:02	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.0005	10/26/21 13:30	mfm
Sodium, dissolved	M200.7 ICP	1	69.3		*	mg/L	0.2	1	10/18/21 2:14	kja
Strontium, dissolved	M200.7 ICP	1	0.237		*	mg/L	0.009	0.045	10/18/21 2:14	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00034	B	*	mg/L	0.0001	0.0005	10/22/21 15:02	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:14	kja
Titanium, dissolved	M200.7 ICP	1	0.0096	B	*	mg/L	0.005	0.025	10/18/21 2:14	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:02	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0998		*	mg/L	0.0005	0.002	10/22/21 15:02	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 15:02	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-22

ACZ Sample ID: ***L69162-02***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	47.0		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	59.0		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	106		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.2			%			11/03/21 0:00	calc
Sum of Anions			6.9			meq/L			11/03/21 0:00	calc
Sum of Cations			7.5			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	6.20		*	mg/L	0.5	2	10/21/21 11:33	md
Conductivity @25C	SM2510B	1	784		*	umhos/cm	1	10	10/22/21 2:49	eep
Fluoride	M300.0 - Ion Chromatography	5	0.544	B	*	mg/L	0.25	1.25	10/21/21 18:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		203			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.287		*	mg/L	0.02	0.1	10/30/21 21:35	pjb
pH (lab)	SM4500H+ B									
pH		1	11.1	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	10/22/21 13:38	wtc
Residue, Filterable (TDS) @180C	SM2540C	1	536		*	mg/L	20	40	10/15/21 12:54	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	15	217		*	mg/L	15	75	10/22/21 12:19	wtc
TDS (calculated)	Calculation		426			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.26						11/03/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-23

ACZ Sample ID: ***L69162-03***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 15:06	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.175	B	*	mg/L	0.05	0.25	10/18/21 2:17	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00358		*	mg/L	0.0004	0.002	10/22/21 15:04	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00567		*	mg/L	0.0002	0.001	10/22/21 15:04	mfm
Barium, dissolved	M200.7 ICP	1	0.0308	B	*	mg/L	0.007	0.035	10/18/21 2:17	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 15:04	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:08	kja
Boron, dissolved	M200.7 ICP	1	0.109		*	mg/L	0.03	0.1	10/18/21 2:17	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/22/21 15:04	mfm
Calcium, dissolved	M200.7 ICP	1	51.4		*	mg/L	0.1	0.5	10/18/21 2:17	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.222		*	mg/L	0.0005	0.002	10/22/21 15:04	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00447		*	mg/L	0.00005	0.00025	10/22/21 15:04	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00307		*	mg/L	0.0008	0.002	10/22/21 15:04	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:17	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/18/21 2:17	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	10/22/21 15:04	mfm
Lithium, dissolved	M200.7 ICP	1	0.0151	B	*	mg/L	0.008	0.04	10/18/21 2:17	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/18/21 2:17	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/22/21 15:04	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	15			ng/L	3	10	10/25/21 13:20	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0245		*	mg/L	0.0002	0.0005	10/22/21 15:04	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/22/21 15:04	mfm
Potassium, dissolved	M200.7 ICP	1	9.67		*	mg/L	0.2	1	10/18/21 2:17	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:17	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00263		*	mg/L	0.0001	0.00025	10/22/21 15:04	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:32	mfm
Sodium, dissolved	M200.7 ICP	1	61.5		*	mg/L	0.2	1	10/18/21 2:17	kja
Strontium, dissolved	M200.7 ICP	1	0.149		*	mg/L	0.009	0.045	10/18/21 2:17	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:04	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:17	kja
Titanium, dissolved	M200.7 ICP	1	0.0068	B	*	mg/L	0.005	0.025	10/18/21 2:17	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:04	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.101		*	mg/L	0.0005	0.002	10/22/21 15:04	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 15:04	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-23

ACZ Sample ID: ***L69162-03***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	64.0		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	58.1		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.8			%			11/03/21 0:00	calc
Sum of Anions			5.4			meq/L			11/03/21 0:00	calc
Sum of Cations			5.6			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	6.01		*	mg/L	0.5	2	10/21/21 11:34	md
Conductivity @25C	SM2510B	1	622		*	umhos/cm	1	10	10/22/21 2:59	eep
Fluoride	M300.0 - Ion Chromatography	2	0.763		*	mg/L	0.1	0.5	10/27/21 17:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		128			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.124		*	mg/L	0.02	0.1	10/30/21 21:38	pjb
pH (lab)	SM4500H+ B									
pH		1	11.1	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.047	B	*	mg/L	0.01	0.05	10/22/21 15:15	wtc
Residue, Filterable (TDS) @180C	SM2540C	1	416		*	mg/L	20	40	10/15/21 12:58	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	133		*	mg/L	5	25	10/22/21 12:15	wtc
TDS (calculated)	Calculation		311			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.34						11/03/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-24

ACZ Sample ID: ***L69162-04***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 15:12	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.152	B	*	mg/L	0.05	0.25	10/18/21 2:20	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00364		*	mg/L	0.0004	0.002	10/22/21 15:06	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0110		*	mg/L	0.0002	0.001	10/22/21 15:06	mfm
Barium, dissolved	M200.7 ICP	1	0.0195	B	*	mg/L	0.007	0.035	10/18/21 2:20	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 15:06	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:11	kja
Boron, dissolved	M200.7 ICP	1	0.109		*	mg/L	0.03	0.1	10/18/21 2:20	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/22/21 15:06	mfm
Calcium, dissolved	M200.7 ICP	1	29.9		*	mg/L	0.1	0.5	10/18/21 2:20	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.110		*	mg/L	0.0005	0.002	10/22/21 15:06	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00284		*	mg/L	0.00005	0.00025	10/22/21 15:06	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00439		*	mg/L	0.0008	0.002	10/22/21 15:06	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:20	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/18/21 2:20	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00021	B	*	mg/L	0.0001	0.0005	10/22/21 15:06	mfm
Lithium, dissolved	M200.7 ICP	1	0.0265	B	*	mg/L	0.008	0.04	10/18/21 2:20	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/18/21 2:20	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/22/21 15:06	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	18			ng/L	3	10	10/25/21 13:25	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0150		*	mg/L	0.0002	0.0005	10/22/21 15:06	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/22/21 15:06	mfm
Potassium, dissolved	M200.7 ICP	1	7.15		*	mg/L	0.2	1	10/18/21 2:20	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:20	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00194		*	mg/L	0.0001	0.00025	10/22/21 15:06	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00030	B	*	mg/L	0.0001	0.0005	10/26/21 13:37	mfm
Sodium, dissolved	M200.7 ICP	1	59.7		*	mg/L	0.2	1	10/18/21 2:20	kja
Strontium, dissolved	M200.7 ICP	1	0.0878		*	mg/L	0.009	0.045	10/18/21 2:20	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/22/21 15:06	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:20	kja
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/18/21 2:20	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:06	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0809		*	mg/L	0.0005	0.002	10/22/21 15:06	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 15:06	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-24

ACZ Sample ID: ***L69162-04***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	56.5		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	67.0		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/03/21 0:00	calc
Sum of Anions			4.3			meq/L			11/03/21 0:00	calc
Sum of Cations			4.3			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	5.25		*	mg/L	0.5	2	10/21/21 11:34	md
Conductivity @25C	SM2510B	1	493		*	umhos/cm	1	10	10/22/21 3:09	eep
Fluoride	M300.0 - Ion Chromatography	1	0.848		*	mg/L	0.05	0.25	10/27/21 17:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		75			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.063	B	*	mg/L	0.02	0.1	10/30/21 21:40	pjb
pH (lab)	SM4500H+ B									
pH		1	11.1	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	10/22/21 15:16	wtc
Residue, Filterable (TDS) @180C	SM2540C	1	330		*	mg/L	20	40	10/15/21 13:02	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	78.4		*	mg/L	5	25	10/22/21 12:15	wtc
TDS (calculated)	Calculation		227			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.45						11/03/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-26

ACZ Sample ID: ***L69162-05***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 15:18	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.672		*	mg/L	0.05	0.25	10/18/21 2:30	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00745		*	mg/L	0.0004	0.002	10/22/21 15:08	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0114		*	mg/L	0.0002	0.001	10/22/21 15:08	mfm
Barium, dissolved	M200.7 ICP	1	0.0736		*	mg/L	0.007	0.035	10/18/21 2:30	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 15:08	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:21	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/18/21 2:30	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000100	B	*	mg/L	0.00005	0.00025	10/22/21 15:08	mfm
Calcium, dissolved	M200.7 ICP	1	84.1		*	mg/L	0.1	0.5	10/18/21 2:30	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.237		*	mg/L	0.0005	0.002	10/22/21 15:08	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00399		*	mg/L	0.00005	0.00025	10/22/21 15:08	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00822		*	mg/L	0.0008	0.002	10/22/21 15:08	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:30	kja
Iron, dissolved	M200.7 ICP	1	0.128	B	*	mg/L	0.06	0.15	10/18/21 2:30	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0001	0.0005	10/22/21 15:08	mfm
Lithium, dissolved	M200.7 ICP	1	0.0911		*	mg/L	0.008	0.04	10/18/21 2:30	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/18/21 2:30	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/22/21 15:08	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	100	400			ng/L	30	100	10/25/21 15:09	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	1.03		*	mg/L	0.0002	0.0005	10/22/21 15:08	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0004	0.001	10/22/21 15:08	mfm
Potassium, dissolved	M200.7 ICP	1	156		*	mg/L	0.2	1	10/18/21 2:30	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:30	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.0151		*	mg/L	0.0001	0.00025	10/22/21 15:08	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00028	B	*	mg/L	0.0001	0.0005	10/26/21 13:39	mfm
Sodium, dissolved	M200.7 ICP	1	85.1		*	mg/L	0.2	1	10/18/21 2:30	kja
Strontium, dissolved	M200.7 ICP	1	0.281		*	mg/L	0.009	0.045	10/18/21 2:30	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00120		*	mg/L	0.0001	0.0005	10/22/21 15:08	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:30	kja
Titanium, dissolved	M200.7 ICP	1	0.0098	B	*	mg/L	0.005	0.025	10/18/21 2:30	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:08	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00848		*	mg/L	0.0005	0.002	10/22/21 15:08	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 15:08	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-26

ACZ Sample ID: ***L69162-05***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	69.4		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	178		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	247		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/03/21 0:00	calc
Sum of Anions			12			meq/L			11/03/21 0:00	calc
Sum of Cations			12			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	18.9		*	mg/L	0.5	2	10/21/21 11:35	md
Conductivity @25C	SM2510B	1	1770		*	umhos/cm	1	10	10/22/21 3:21	eep
Fluoride	M300.0 - Ion Chromatography	5	<0.25	U	*	mg/L	0.25	1.25	10/27/21 18:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		210			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.788		*	mg/L	0.02	0.1	10/30/21 21:42	pjb
pH (lab)	SM4500H+ B									
pH		1	11.9	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/22/21 15:17	wtc
Residue, Filterable (TDS) @180C	SM2540C	2	832		*	mg/L	40	80	10/15/21 13:06	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	15	296		*	mg/L	15	75	10/22/21 12:19	wtc
TDS (calculated)	Calculation		713			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.17						11/03/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-27

ACZ Sample ID: ***L69162-06***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 15:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.789		*	mg/L	0.05	0.25	10/18/21 2:33	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00882		*	mg/L	0.0004	0.002	10/22/21 15:11	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0104		*	mg/L	0.0002	0.001	10/22/21 15:11	mfm
Barium, dissolved	M200.7 ICP	1	0.0684		*	mg/L	0.007	0.035	10/18/21 2:33	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 15:11	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:31	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/18/21 2:33	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000074	B	*	mg/L	0.00005	0.00025	10/22/21 15:11	mfm
Calcium, dissolved	M200.7 ICP	1	93.1		*	mg/L	0.1	0.5	10/18/21 2:33	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.107		*	mg/L	0.0005	0.002	10/22/21 15:11	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00228		*	mg/L	0.00005	0.00025	10/22/21 15:11	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00487		*	mg/L	0.0008	0.002	10/22/21 15:11	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:33	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/18/21 2:33	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/22/21 15:11	mfm
Lithium, dissolved	M200.7 ICP	1	0.0829		*	mg/L	0.008	0.04	10/18/21 2:33	kja
Magnesium, dissolved	M200.7 ICP	1	0.23	B	*	mg/L	0.2	1	10/18/21 2:33	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/22/21 15:11	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	18			ng/L	3	10	10/25/21 13:37	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.453		*	mg/L	0.0002	0.0005	10/22/21 15:11	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.001	10/22/21 15:11	mfm
Potassium, dissolved	M200.7 ICP	1	75.8		*	mg/L	0.2	1	10/18/21 2:33	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:33	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00748		*	mg/L	0.0001	0.00025	10/22/21 15:11	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:41	mfm
Sodium, dissolved	M200.7 ICP	1	71.5		*	mg/L	0.2	1	10/18/21 2:33	kja
Strontium, dissolved	M200.7 ICP	1	0.251		*	mg/L	0.009	0.045	10/18/21 2:33	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00065		*	mg/L	0.0001	0.0005	10/22/21 15:11	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:33	kja
Titanium, dissolved	M200.7 ICP	1	0.0107	B	*	mg/L	0.005	0.025	10/18/21 2:33	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:11	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00771		*	mg/L	0.0005	0.002	10/22/21 15:11	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 15:11	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-27

ACZ Sample ID: ***L69162-06***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	66.5		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	156		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	223		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.1			%			11/03/21 0:00	calc
Sum of Anions			9.5			meq/L			11/03/21 0:00	calc
Sum of Cations			9.9			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	11.4		*	mg/L	0.5	2	10/21/21 11:35	md
Conductivity @25C	SM2510B	1	1330		*	umhos/cm	1	10	10/22/21 3:33	eep
Fluoride	M300.0 - Ion Chromatography	5	<0.25	U	*	mg/L	0.25	1.25	10/21/21 20:21	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		233			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.258		*	mg/L	0.02	0.1	10/30/21 21:43	pjb
pH (lab)	SM4500H+ B									
pH		1	11.8	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.2		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	B	*	mg/L	0.01	0.05	10/22/21 15:18	wtc
Residue, Filterable (TDS) @180C	SM2540C	1	644	H	*	mg/L	20	40	10/22/21 12:56	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	15	223		*	mg/L	15	75	10/22/21 12:19	wtc
TDS (calculated)	Calculation		542			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.19						11/03/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-28

ACZ Sample ID: ***L69162-07***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 15:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.03		*	mg/L	0.05	0.25	10/18/21 2:36	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.0145		*	mg/L	0.0004	0.002	10/22/21 15:17	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0141		*	mg/L	0.0002	0.001	10/22/21 15:17	mfm
Barium, dissolved	M200.7 ICP	1	0.0552		*	mg/L	0.007	0.035	10/18/21 2:36	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 15:17	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:34	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/18/21 2:36	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/22/21 15:17	mfm
Calcium, dissolved	M200.7 ICP	1	89.0		*	mg/L	0.1	0.5	10/18/21 2:36	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0567		*	mg/L	0.0005	0.002	10/22/21 15:17	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00171		*	mg/L	0.00005	0.00025	10/22/21 15:17	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00296		*	mg/L	0.0008	0.002	10/22/21 15:17	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:36	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/18/21 2:36	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	10/22/21 15:17	mfm
Lithium, dissolved	M200.7 ICP	1	0.0786		*	mg/L	0.008	0.04	10/18/21 2:36	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/18/21 2:36	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/22/21 15:17	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	9	B	*	ng/L	3	10	10/25/21 13:52	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.240		*	mg/L	0.0002	0.0005	10/22/21 15:17	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/22/21 15:17	mfm
Potassium, dissolved	M200.7 ICP	1	41.2		*	mg/L	0.2	1	10/18/21 2:36	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:36	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00527		*	mg/L	0.0001	0.00025	10/22/21 15:17	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:43	mfm
Sodium, dissolved	M200.7 ICP	1	64.4		*	mg/L	0.2	1	10/18/21 2:36	kja
Strontium, dissolved	M200.7 ICP	1	0.193		*	mg/L	0.009	0.045	10/18/21 2:36	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00052		*	mg/L	0.0001	0.0005	10/22/21 15:17	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:36	kja
Titanium, dissolved	M200.7 ICP	1	0.0100	B	*	mg/L	0.005	0.025	10/18/21 2:36	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:17	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00931		*	mg/L	0.0005	0.002	10/22/21 15:17	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 15:17	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-28

ACZ Sample ID: ***L69162-07***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	48.5		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	125		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	173		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.3			%			11/03/21 0:00	calc
Sum of Anions			7.8			meq/L			11/03/21 0:00	calc
Sum of Cations			8.5			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	8.07		*	mg/L	0.5	2	10/21/21 11:37	md
Conductivity @25C	SM2510B	1	1160		*	umhos/cm	1	10	10/22/21 3:43	eep
Fluoride	M300.0 - Ion Chromatography	5	0.331	B	*	mg/L	0.25	1.25	10/21/21 21:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		222			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.127		*	mg/L	0.02	0.1	10/30/21 21:49	pjb
pH (lab)	SM4500H+ B									
pH		1	11.8	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.2		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.030	B	*	mg/L	0.01	0.05	10/22/21 15:19	wtc
Residue, Filterable (TDS) @180C	SM2540C	1	554		*	mg/L	20	40	10/15/21 13:19	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	192		*	mg/L	5	25	10/22/21 12:03	wtc
TDS (calculated)	Calculation		447			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.24						11/03/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-29

ACZ Sample ID: ***L69162-08***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/15/21 15:36	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.29		*	mg/L	0.05	0.25	10/18/21 2:45	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.0244		*	mg/L	0.0004	0.002	10/22/21 15:20	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0277		*	mg/L	0.0002	0.001	10/22/21 15:20	mfm
Barium, dissolved	M200.7 ICP	1	0.0390		*	mg/L	0.007	0.035	10/18/21 2:45	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/22/21 15:20	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 19:37	kja
Boron, dissolved	M200.7 ICP	1	0.057	B	*	mg/L	0.03	0.1	10/18/21 2:45	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/22/21 15:20	mfm
Calcium, dissolved	M200.7 ICP	1	69.3		*	mg/L	0.1	0.5	10/18/21 2:45	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0317		*	mg/L	0.0005	0.002	10/22/21 15:20	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00135		*	mg/L	0.00005	0.00025	10/22/21 15:20	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00226		*	mg/L	0.0008	0.002	10/22/21 15:20	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/18/21 2:45	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/18/21 2:45	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/22/21 15:20	mfm
Lithium, dissolved	M200.7 ICP	1	0.0779		*	mg/L	0.008	0.04	10/18/21 2:45	kja
Magnesium, dissolved	M200.7 ICP	1	0.21	B	*	mg/L	0.2	1	10/18/21 2:45	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/22/21 15:20	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	8	B	*	ng/L	3	10	10/25/21 13:58	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.126		*	mg/L	0.0002	0.0005	10/22/21 15:20	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/22/21 15:20	mfm
Potassium, dissolved	M200.7 ICP	1	22.8		*	mg/L	0.2	1	10/18/21 2:45	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/18/21 2:45	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00680		*	mg/L	0.0001	0.00025	10/22/21 15:20	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:44	mfm
Sodium, dissolved	M200.7 ICP	1	62.3		*	mg/L	0.2	1	10/18/21 2:45	kja
Strontium, dissolved	M200.7 ICP	1	0.127		*	mg/L	0.009	0.045	10/18/21 2:45	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00029	B	*	mg/L	0.0001	0.0005	10/22/21 15:20	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/18/21 2:45	kja
Titanium, dissolved	M200.7 ICP	1	0.0084	B	*	mg/L	0.005	0.025	10/18/21 2:45	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/22/21 15:20	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0110		*	mg/L	0.0005	0.002	10/22/21 15:20	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/22/21 15:20	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-29

ACZ Sample ID: ***L69162-08***
Date Sampled: *10/11/21 10:00*
Date Received: *10/12/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/22/21 0:00	eep
Carbonate as CaCO3		1	65.3		*	mg/L	2	20	10/22/21 0:00	eep
Hydroxide as CaCO3		1	82.2		*	mg/L	2	20	10/22/21 0:00	eep
Total Alkalinity		1	147		*	mg/L	2	20	10/22/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.4			%			11/03/21 0:00	calc
Sum of Anions			6.8			meq/L			11/03/21 0:00	calc
Sum of Cations			7			meq/L			11/03/21 0:00	calc
Chloride	SM4500Cl-E	1	6.65		*	mg/L	0.5	2	10/21/21 11:37	md
Conductivity @25C	SM2510B	1	903		*	umhos/cm	1	10	10/22/21 3:53	eep
Fluoride	M300.0 - Ion Chromatography	2	0.513		*	mg/L	0.1	0.5	10/27/21 18:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		174			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.041	B	*	mg/L	0.02	0.1	10/30/21 21:50	pjb
pH (lab)	SM4500H+ B									
pH		1	11.6	H	*	units	0.1	0.1	10/22/21 0:00	eep
pH measured at		1	21.2		*	C	0.1	0.1	10/22/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/22/21 15:20	wtc
Residue, Filterable (TDS) @180C	SM2540C	1	454		*	mg/L	20	40	10/15/21 13:23	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	175		*	mg/L	5	25	10/27/21 9:21	wtc
TDS (calculated)	Calculation		391			mg/L			11/03/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.16						11/03/21 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

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ACZ Project ID: ***L69162***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530055													
WG530055PBW1	PBW	10/21/21 22:00				5	mg/L		-20	20			
WG530055LCSW3	LCSW	10/21/21 22:19	WC211018-1	820.0001		803.2	mg/L	98	90	110			
WG530055LCSW6	LCSW	10/22/21 0:57	WC211018-1	820.0001		814.7	mg/L	99	90	110			
WG530055PBW2	PBW	10/22/21 1:03				4.9	mg/L		-20	20			
L69162-01DUP	DUP	10/22/21 2:39			105	118.5	mg/L				12	20	
L69163-03DUP	DUP	10/22/21 4:25			130	132.7	mg/L				2	20	
WG530055LCSW9	LCSW	10/22/21 4:44	WC211018-1	820.0001		814	mg/L	99	90	110			
WG530055PBW3	PBW	10/22/21 4:51				4.8	mg/L		-20	20			
WG530055LCSW12	LCSW	10/22/21 8:39	WC211018-1	820.0001		819.1	mg/L	100	90	110			
WG530055PBW4	PBW	10/22/21 8:45				4.9	mg/L		-20	20			
WG530055LCSW15	LCSW	10/22/21 13:21	WC211018-1	820.0001		823.9	mg/L	100	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.958	mg/L	98	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.15	0.15			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	1.0008		1.007	mg/L	101	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	1.0008	.152	1.119	mg/L	97	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	1.0008	.152	1.119	mg/L	97	85	115	0	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.0201		.02035	mg/L	101	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00088	0.00088			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.01		.01072	mg/L	107	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.01	U	.0109	mg/L	109	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.01	U	.01124	mg/L	112	70	130	3	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.01	.00882	.0197	mg/L	109	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.01	.00882	.02056	mg/L	117	70	130	4	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05321	mg/L	106	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00044	0.00044			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05005		.05251	mg/L	105	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05005	.00058	.05556	mg/L	110	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05005	.00058	.0561	mg/L	111	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05005	.0104	.06479	mg/L	109	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05005	.0104	.0655	mg/L	110	70	130	1	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.9888	mg/L	99	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.021	0.021			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	.5		.5112	mg/L	102	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	.5	.0195	.521	mg/L	100	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	.5	.0195	.5185	mg/L	100	85	115	0	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.053586	mg/L	107	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.000176	0.000176			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05005		.053675	mg/L	107	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05005	U	.054111	mg/L	108	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05005	U	.054489	mg/L	109	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05005	U	.054168	mg/L	108	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05005	U	.055342	mg/L	111	70	130	2	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529680													
WG529680ICV	ICV	10/18/21 17:54	II211014-1	2		1.973	mg/L	99	95	105			
WG529680ICB	ICB	10/18/21 18:00				U	mg/L		-0.12	0.12			
WG529680LFB	LFB	10/18/21 18:13	II210930-2	1		1.003	mg/L	100	85	115			
L69162-04AS	AS	10/18/21 19:15	II210930-2	1	U	1.026	mg/L	103	85	115			
L69162-04ASD	ASD	10/18/21 19:18	II210930-2	1	U	1.033	mg/L	103	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.969	mg/L	98	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.09	0.09			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	.5005		.526	mg/L	105	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	.5005	.109	.616	mg/L	101	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	.5005	.109	.62	mg/L	102	85	115	1	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.053678	mg/L	107	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00011	0.00011			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05005		.052721	mg/L	105	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05005	U	.056944	mg/L	114	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05005	U	.058246	mg/L	116	70	130	2	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05005	.000074	.057652	mg/L	115	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05005	.000074	.059577	mg/L	119	70	130	3	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	100		98.06	mg/L	98	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.3	0.3			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	67.98972		67.65	mg/L	100	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	67.98972	29.9	93.32	mg/L	93	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	67.98972	29.9	92.88	mg/L	93	85	115	0	20	

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530009													
WG530009ICV	ICV	10/21/21 11:29	WI210503-1	54.89		54.52	mg/L	99	90	110			
WG530009ICB	ICB	10/21/21 11:30				U	mg/L		-1.5	1.5			
WG530009LFB1	LFB	10/21/21 11:30	WI210908-11	29.97		29.79	mg/L	99	90	110			
L69162-01DUP	DUP	10/21/21 11:33			9.41	10	mg/L				6	20	
WG530009LFB2	LFB	10/21/21 11:46	WI210908-11	29.97		28.78	mg/L	96	90	110			
L69133-03AS	AS	10/21/21 12:09	5XCL	30	150	168.15	mg/L	61	90	110			M2

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05397	mg/L	108	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.0011	0.0011			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05		.05116	mg/L	102	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05	U	.05057	mg/L	101	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05	U	.05092	mg/L	102	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05	.107	.15601	mg/L	98	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05	.107	.15651	mg/L	99	70	130	0	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.054584	mg/L	109	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00011	0.00011			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05005		.052727	mg/L	105	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05005	.000202	.052455	mg/L	104	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05005	.000202	.052867	mg/L	105	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05005	.00228	.060115	mg/L	116	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05005	.00228	.062746	mg/L	121	70	130	4	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530055													
WG530055LCSW2	LCSW	10/21/21 22:06	PCN64228	1409		1472	umhos/cm	104	90	110			
WG530055LCSW5	LCSW	10/22/21 0:44	PCN64228	1409		1469	umhos/cm	104	90	110			
L69162-01DUP	DUP	10/22/21 2:39			1100	1113	umhos/cm				1	20	
L69163-03DUP	DUP	10/22/21 4:25			1510	1530	umhos/cm				1	20	
WG530055LCSW8	LCSW	10/22/21 4:31	PCN64228	1409		1467	umhos/cm	104	90	110			
WG530055LCSW11	LCSW	10/22/21 8:26	PCN64228	1409		1460	umhos/cm	104	90	110			
WG530055LCSW14	LCSW	10/22/21 13:08	PCN64228	1409		1455	umhos/cm	103	90	110			

MCCLELLANDLAB ACZ Project ID: ***L69162***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.0531	mg/L	106	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00176	0.00176			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05		.05104	mg/L	102	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05	U	.05069	mg/L	101	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05	U	.05053	mg/L	101	70	130	0	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05	.00487	.05201	mg/L	94	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05	.00487	.05236	mg/L	95	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529788													
WG529788ICV	ICV	10/18/21 18:24	WI211011-8	4.004		4.191	mg/L	105	90	110			
WG529788ICB	ICB	10/18/21 18:41				U	mg/L		-0.05	0.05			
WG530013													
WG530013LFB	LFB	10/21/21 17:58	WI210907-6	1.5		1.53	mg/L	102	90	110			
L69162-02AS	AS	10/21/21 19:10	WI210907-6	7.5	.544	8.898	mg/L	111	90	110			M1
L69162-01DUP	DUP	10/27/21 17:10			.44	.433	mg/L				2	20	RA

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		2.01	mg/L	101	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.3	0.3			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	.9822		1.07	mg/L	109	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	.9822	U	1.02	mg/L	104	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	.9822	U	1.04	mg/L	106	85	115	2	20	

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.955	mg/L	98	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.18	0.18			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	1.0001		1.019	mg/L	102	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	1.0001	U	.997	mg/L	100	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	1.0001	U	.99	mg/L	99	85	115	1	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05411	mg/L	108	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00022	0.00022			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05005		.0537	mg/L	107	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05005	U	.05538	mg/L	111	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05005	U	.05597	mg/L	112	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05005	.00017	.05688	mg/L	113	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05005	.00017	.05787	mg/L	115	70	130	2	20	

MCCLELLANDLAB ACZ Project ID: ***L69162***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.9705	mg/L	99	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.024	0.024			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	.999		1.001	mg/L	100	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	.999	.0265	1.018	mg/L	99	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	.999	.0265	1.014	mg/L	99	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	100		94.94	mg/L	95	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.6	0.6			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	49.99828		47.24	mg/L	94	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	49.99828	U	45.46	mg/L	91	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	49.99828	U	45.31	mg/L	91	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.0543	mg/L	109	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00088	0.00088			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.0499		.05433	mg/L	109	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.0499	.384	.43627	mg/L	105	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.0499	.384	.43816	mg/L	109	70	130	0	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.0499	U	.05474	mg/L	110	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.0499	U	.05474	mg/L	110	70	130	0	20	

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG530200													
WG530200CCV1	CCV	10/25/21 11:30	HG211011-4	10		10.3	ng/L	103	76.5	123.4			
WG530200CCB1	CCB	10/25/21 11:34				U	ng/L		-0.501	0.501			
WG530200PQV	PQV	10/25/21 11:39	HG211011-6	1		.83	ng/L	83	70	130			
WG530200LFB1	LFB	10/25/21 11:46	HG211011-5	2		1.96	ng/L	98	71	125			
WG530200CCV2	CCV	10/25/21 12:28	HG211011-4	10		9.56	ng/L	96	76.5	123.4			
WG530200CCB2	CCB	10/25/21 12:33				U	ng/L		-0.501	0.501			
L69162-02MS	MS	10/25/21 13:10	HG163110X	200	62	83.5	ng/L	108	71	125			
L69162-02MSD	MSD	10/25/21 13:15	HG163110X	200	62	82.1	ng/L	101	71	125	2	24	
WG530200CCV3	CCV	10/25/21 13:42	HG211011-4	10		9.88	ng/L	99	76.5	123.4			
WG530200CCB3	CCB	10/25/21 13:47				U	ng/L		-0.501	0.501			
WG530200LFB2	LFB	10/25/21 14:22	HG211011-5	2		1.94	ng/L	97	71	125			
WG530200CCV4	CCV	10/25/21 14:41	HG211011-4	10		9.7	ng/L	97	76.5	123.4			
WG530200CCB4	CCB	10/25/21 14:45				U	ng/L		-0.501	0.501			
WG530200CCV5	CCV	10/25/21 15:14	HG211011-4	10		9.79	ng/L	98	76.5	123.4			
WG530200CCB5	CCB	10/25/21 15:19				U	ng/L		-0.501	0.501			

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.01992		.02067	mg/L	104	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00044	0.00044			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05005		.05118	mg/L	102	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05005	.00606	.05896	mg/L	106	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05005	.00606	.05954	mg/L	107	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05005	.453	.49679	mg/L	87	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05005	.453	.51526	mg/L	124	70	130	4	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05372	mg/L	107	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00088	0.00088			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05		.05057	mg/L	101	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05	U	.04903	mg/L	98	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05	U	.04918	mg/L	98	70	130	0	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05	.0005	.0474	mg/L	94	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05	.0005	.04815	mg/L	95	70	130	2	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530650													
WG530650ICV	ICV	10/30/21 20:11	WI210904-1	2.4161		2.349	mg/L	97	90	110			
WG530650ICB	ICB	10/30/21 20:12				U	mg/L		-0.02	0.02			
WG530652													
WG530652LFB	LFB	10/30/21 21:14	WI211001-5	2		2.011	mg/L	101	90	110			
L69153-01AS	AS	10/30/21 21:17	WI211001-5	2	1.01	3.032	mg/L	101	90	110			
L69153-02DUP	DUP	10/30/21 21:20			U	U	mg/L				0	20	RA
L69162-02AS	AS	10/30/21 21:37	WI211001-5	2	.287	2.268	mg/L	99	90	110			
L69162-03DUP	DUP	10/30/21 21:39			.124	.133	mg/L				7	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530055													
WG530055LCSW1	LCSW	10/21/21 22:05	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW4	LCSW	10/22/21 0:42	PCN62948	6		6.1	units	102	5.9	6.1			
L69162-01DUP	DUP	10/22/21 2:39			10.9	11	units				1	20	
L69163-03DUP	DUP	10/22/21 4:25			7.9	7.9	units				0	20	
WG530055LCSW7	LCSW	10/22/21 4:30	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW10	LCSW	10/22/21 8:24	PCN62948	6		6.1	units	102	5.9	6.1			
WG530055LCSW13	LCSW	10/22/21 13:06	PCN62948	6		6.1	units	102	5.9	6.1			

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530045													
WG530045ICV1	ICV	10/22/21 13:10	WI211018-4	.65228		.689	mg/L	106	90	110			
WG530045ICB1	ICB	10/22/21 13:13				U	mg/L		-0.01	0.01			
WG529537LRB	LRB	10/22/21 13:14				U	mg/L		-0.01	0.01			
WG529537LFB	LFB	10/22/21 13:15	WI211015-3	.5		.487	mg/L	97	90	110			
L68896-01LFM	LFM	10/22/21 13:33	WI211015-3	.5	U	.481	mg/L	96	90	110			
L68896-02DUP	DUP	10/22/21 13:36			U	U	mg/L				0	20	RA
WG530045ICV2	ICV	10/22/21 15:11	WI211018-4	.65228		.693	mg/L	106	90	110			
WG530045ICB2	ICB	10/22/21 15:13				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	20		19.55	mg/L	98	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.6	0.6			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	99.96008		97.35	mg/L	97	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	99.96008	7.15	99.97	mg/L	93	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	99.96008	7.15	99.33	mg/L	92	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529568													
WG529568PBW	PBW	10/15/21 12:26				U	mg/L		-20	20			
WG529568LCSW	LCSW	10/15/21 12:30	PCN64128	1000		984	mg/L	98	80	120			
L69236-03DUP	DUP	10/15/21 13:59			1780	1818	mg/L				2	10	
WG530101													
WG530101PBW	PBW	10/22/21 12:45				U	mg/L		-20	20			
WG530101LCSW	LCSW	10/22/21 12:46	PCN64127	1000		996	mg/L	100	80	120			
L69369-01DUP	DUP	10/22/21 13:08			202	208	mg/L				3	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.965	mg/L	98	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.15	0.15			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	1.0017		.991	mg/L	99	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	1.0017	U	.979	mg/L	98	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	1.0017	U	.977	mg/L	98	85	115	0	20	

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ACZ Project ID: ***L69162***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05299	mg/L	106	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00022	0.00022			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05		.05118	mg/L	102	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05	U	.05542	mg/L	111	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05	U	.0558	mg/L	112	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05	.00748	.06046	mg/L	106	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05	.00748	.0601	mg/L	105	70	130	1	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.02		.02058	mg/L	103	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00022	0.00022			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.01		.00962	mg/L	96	85	115			
L69162-01AS	AS	10/26/21 13:26	MS210927-3	.01	.00409	.01204	mg/L	80	70	130			
L69162-01ASD	ASD	10/26/21 13:28	MS210927-3	.01	.00409	.01243	mg/L	83	70	130	3	20	
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.01	U	.00729	mg/L	73	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.01	U	.00615	mg/L	62	70	130	17	20	M2 ZA

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	100		98.75	mg/L	99	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.6	0.6			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	100.007		97.86	mg/L	98	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	100.007	59.7	149.5	mg/L	90	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	100.007	59.7	147.8	mg/L	88	85	115	1	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.9238	mg/L	96	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.027	0.027			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	.5005		.5226	mg/L	104	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	.5005	.0878	.5874	mg/L	100	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	.5005	.0878	.5831	mg/L	99	85	115	1	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530071													
WG530071ICB	ICB	10/22/21 9:03				2.3	mg/L		-3	3			
WG530071ICV	ICV	10/22/21 9:03	WI211012-1	20.46		19.3	mg/L	94	90	110			
WG530071LFB	LFB	10/22/21 11:52	WI210105-3	10		9.3	mg/L	93	90	110			
L69162-07DUP	DUP	10/22/21 12:05			192	199.9	mg/L				4	20	
L69162-06AS	AS	10/22/21 12:19	SO4TURB15X	10.0000005	223	228.9	mg/L	59	90	110			M3
WG530072													
WG530072ICB	ICB	10/27/21 8:35				U	mg/L		-3	3			
WG530072ICV	ICV	10/27/21 8:35	WI211012-1	20.46		19.3	mg/L	94	90	110			
WG530072LFB	LFB	10/27/21 9:13	WI210105-3	10		9.8	mg/L	98	90	110			
L67718-10DUP	DUP	10/27/21 9:13			U	U	mg/L				0	20	RA
L67719-10AS	AS	10/27/21 9:29	SO4TURB25X	10	539	547.4	mg/L	84	90	110			M3

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05497	mg/L	110	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00022	0.00022			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05		.05218	mg/L	104	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05	U	.05246	mg/L	105	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05	U	.05343	mg/L	107	70	130	2	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05	.00065	.05431	mg/L	107	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05	.00065	.05528	mg/L	109	70	130	2	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.984	mg/L	99	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.12	0.12			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	1.002		.991	mg/L	99	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	1.002	U	.99	mg/L	99	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	1.002	U	1.004	mg/L	100	85	115	1	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529655													
WG529655ICV	ICV	10/18/21 1:50	II211014-1	2		1.947	mg/L	97	95	105			
WG529655ICB	ICB	10/18/21 1:55				U	mg/L		-0.015	0.015			
WG529655LFB	LFB	10/18/21 2:08	II210930-2	1		1.021	mg/L	102	85	115			
L69162-04AS	AS	10/18/21 2:23	II210930-2	1	U	1.013	mg/L	101	85	115			
L69162-04ASD	ASD	10/18/21 2:27	II210930-2	1	U	1.013	mg/L	101	85	115	0	20	

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ACZ Project ID: ***L69162***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05334	mg/L	107	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.00022	0.00022			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05		.05198	mg/L	104	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05	.0012	.05825	mg/L	114	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05	.0012	.05868	mg/L	115	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05	U	.05839	mg/L	117	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05	U	.05911	mg/L	118	70	130	1	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.05113	mg/L	102	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.0011	0.0011			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.05		.05038	mg/L	101	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.05	U	.0509	mg/L	102	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.05	U	.05115	mg/L	102	70	130	0	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.05	.00771	.05895	mg/L	102	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.05	.00771	.05938	mg/L	103	70	130	1	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530108													
WG530108ICV	ICV	10/22/21 14:12	MS211013-2	.05		.0527	mg/L	105	90	110			
WG530108ICB	ICB	10/22/21 14:14				U	mg/L		-0.0132	0.0132			
WG530108LFB	LFB	10/22/21 14:17	MS210927-3	.050075		.0562	mg/L	112	85	115			
L69008-04AS	AS	10/22/21 14:41	MS210927-3	.050075	U	.0627	mg/L	125	70	130			
L69008-04ASD	ASD	10/22/21 14:44	MS210927-3	.050075	U	.0633	mg/L	126	70	130	1	20	
L69162-06AS	AS	10/22/21 15:13	MS210927-3	.050075	U	.0611	mg/L	122	70	130			
L69162-06ASD	ASD	10/22/21 15:15	MS210927-3	.050075	U	.0613	mg/L	122	70	130	0	20	

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Extended Qualifier Report

McClelland Laboratories, Inc.

ACZ Project ID: ***L69162***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69162-01	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529568	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG530071	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69162-02	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529568	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG530071	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

McClelland Laboratories, Inc. ACZ Project ID: ***L69162***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69162-03	WG530108	Beryllium, dissolved	M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529568	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG530071	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69162-04	WG530108	Beryllium, dissolved	M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529568	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG530071	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

McClelland Laboratories, Inc. ACZ Project ID: ***L69162***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69162-05	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529568	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG530071	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69162-06	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530101	Residue, Filterable (TDS) @180C	SM2540C	H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
	WG530071	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

McClelland Laboratories, Inc. ACZ Project ID: ***L69162***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69162-07	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530200	Mercury, dissolved	M1631E, Atomic Fluorescence	D1	Sample required dilution due to matrix.
			M1631E, Atomic Fluorescence	DJ	Sample dilution required due to insufficient sample.
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG530071	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69162-08	WG530009	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530013	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530200	Mercury, dissolved	M1631E, Atomic Fluorescence	D1	Sample required dilution due to matrix.
			M1631E, Atomic Fluorescence	DJ	Sample dilution required due to insufficient sample.
	WG530108	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG530652	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530045	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG530072	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69162
Date Received: 10/12/2021 10:50
Received By:
Date Printed: 10/13/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
6218	5.5	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID:	L69162
Date Received:	10/12/2021 10:50
Received By:	
Date Printed:	10/13/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

26 x 16 x 19

43 lbs

ACZ Laboratories, Inc. L69162

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina
Company: McClelland Laboratories
E-mail: mmedina@mettest.com
Address:
Telephone:

Copy of Report to:

Name:
Company:
E-mail: results@mettest.com
Telephone:

Invoice to:

Name:
Company:
E-mail: mliap@mettest.com
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [X] NO [ ]

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes [ ] No [ ]

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** **State** NV **Zip code** 89436 **Time Zone** PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? [ ]

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 B-21	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-22	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-23	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-24	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-26	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-27	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-28	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-29	10/11/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	10/11/21 12:30	[signature]	10/12/21 10:50

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L69162 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/31/2021

Quote Number: GRASSY-LEACH

Matrix: Leachate Grassy Mountain Leachate

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digesti		$0.00
Metals Analysis			
Aluminum, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Barium, dissolved	M200.7 ICP	0.007 mg/L	$7.40
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$14.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$7.40
Boron, dissolved	M200.7 ICP	0.03 mg/L	$7.40
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$14.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Iron, dissolved	M200.7 ICP	0.06 mg/L	$7.40
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$7.40
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$41.20
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$7.40
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Tin, dissolved	M200.7 ICP	0.04 mg/L	$7.40

REPAD.09.06.05.01

S/ sh D/ 14 P/

Titanium, dissolved	M200.7 ICP	0.005 mg/L	$7.40
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$14.00
Misc.			
Electronic Data Deliverable			$0.00
Setup charge for ICPMS			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$9.80
Cation-Anion Balance	Calculation		$0.00
Chloride	SM4500Cl-E	0.5 mg/L	$9.00
Conductivity @25C	SM2510B	1 umhos/cm	$6.60
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$10.80
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$9.00
pH (lab)	SM4500H+ B	0.1 C	$6.60
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$19.00
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$11.60
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1 mg/L	$9.00
TDS (calculated)	Calculation	Calculation	$0.00
TDS (ratio - measured/calculated)	Calculation	Calculation	$0.00
		Cost/Sample:	**$481.60**

Leachates will be supplied from Gene McClelland's lab in Nevada. Pricing is based on standard TAT for waters of ~ three weeks and will vary with workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: GRASSY-LEACH

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 11, 2021

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

Project ID:
ACZ Project ID: L69190

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 13, 2021. This project has been assigned to ACZ's project number, L69190. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L69190. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 11, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

S. Habermehl

Scott Habermehl has reviewed
and approved this report.

McClelland Laboratories, Inc.

November 11, 2021

Project ID:
ACZ Project ID: L69190

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 8 leachate samples from McClelland Laboratories, Inc. on October 13, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L69190. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

Any analyses not performed within EPA recommended holding times have been qualified with an "H" flag.

(H1) Samples originally run within hold time, beakers were chipped during the weighing process and were rerun past hold.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-31

ACZ Sample ID: ***L69190-01***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 14:29	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.434		*	mg/L	0.05	0.25	10/19/21 17:14	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00341		*	mg/L	0.0004	0.002	10/26/21 13:46	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00214		*	mg/L	0.0002	0.001	10/26/21 13:46	mfm
Barium, dissolved	M200.7 ICP	1	0.314		*	mg/L	0.007	0.035	10/19/21 17:14	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 13:46	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:14	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:14	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000069	B	*	mg/L	0.00005	0.00025	11/01/21 21:19	bsu
Calcium, dissolved	M200.7 ICP	1	137		*	mg/L	0.1	0.5	10/19/21 17:14	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.222		*	mg/L	0.0005	0.002	10/26/21 13:46	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00267		*	mg/L	0.00005	0.00025	10/26/21 13:46	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00882		*	mg/L	0.0008	0.002	10/26/21 13:46	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:14	kja
Iron, dissolved	M200.7 ICP	1	0.139	B	*	mg/L	0.06	0.15	10/19/21 17:14	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00073		*	mg/L	0.0001	0.0005	10/26/21 13:46	mfm
Lithium, dissolved	M200.7 ICP	1	0.0983		*	mg/L	0.008	0.04	10/19/21 17:14	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:14	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 13:46	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	241			ng/L	3	10	10/25/21 14:02	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.480		*	mg/L	0.0002	0.0005	10/26/21 13:46	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0004	0.001	10/26/21 13:46	mfm
Potassium, dissolved	M200.7 ICP	1	176		*	mg/L	0.2	1	10/19/21 17:14	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:14	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00773		*	mg/L	0.0001	0.00025	10/26/21 13:46	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:46	mfm
Sodium, dissolved	M200.7 ICP	1	96.8		*	mg/L	0.2	1	10/19/21 17:14	kja
Strontium, dissolved	M200.7 ICP	1	0.818		*	mg/L	0.009	0.045	10/19/21 17:14	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00203		*	mg/L	0.0001	0.0005	11/01/21 21:19	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:14	kja
Titanium, dissolved	M200.7 ICP	1	0.0098	B	*	mg/L	0.005	0.025	10/19/21 17:14	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:46	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00067	B	*	mg/L	0.0005	0.002	10/26/21 13:46	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/26/21 13:46	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-31

ACZ Sample ID: ***L69190-01***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	85.1		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	561		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	646		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			6.7			%			11/11/21 0:00	calc
Sum of Anions			14.0			meq/L			11/11/21 0:00	calc
Sum of Cations			16			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	12.9		*	mg/L	0.5	2	10/26/21 13:27	md
Conductivity @25C	SM2510B	1	3150		*	umhos/cm	1	10	10/23/21 5:02	eep
Fluoride	M300.0 - Ion Chromatography	1	0.176	B	*	mg/L	0.05	0.25	11/09/21 22:48	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		342			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.782		*	mg/L	0.02	0.1	10/30/21 23:37	pjb
pH (lab)	SM4500H+ B									
pH		1	12.3	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	10/25/21 0:35	syw
Residue, Filterable (TDS) @180C	SM2540C	2	876		*	mg/L	40	80	10/18/21 16:45	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	34.7			mg/L	1	5	10/24/21 20:38	syw
TDS (calculated)	Calculation		605			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.45						11/11/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-32

ACZ Sample ID: ***L69190-02***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 14:43	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.434		*	mg/L	0.05	0.25	10/19/21 17:17	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00289		*	mg/L	0.0004	0.002	10/26/21 13:48	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00214		*	mg/L	0.0002	0.001	10/26/21 13:48	mfm
Barium, dissolved	M200.7 ICP	1	0.208		*	mg/L	0.007	0.035	10/19/21 17:17	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 13:48	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:17	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:17	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/01/21 21:20	bsu
Calcium, dissolved	M200.7 ICP	1	136		*	mg/L	0.1	0.5	10/19/21 17:17	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.170		*	mg/L	0.0005	0.002	10/26/21 13:48	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00167		*	mg/L	0.00005	0.00025	10/26/21 13:48	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00576		*	mg/L	0.0008	0.002	10/26/21 13:48	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:17	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/19/21 17:17	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00027	B	*	mg/L	0.0001	0.0005	10/26/21 13:48	mfm
Lithium, dissolved	M200.7 ICP	1	0.0782		*	mg/L	0.008	0.04	10/19/21 17:17	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:17	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 13:48	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	192			ng/L	3	10	10/25/21 14:07	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.291		*	mg/L	0.0002	0.0005	10/26/21 13:48	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/26/21 13:48	mfm
Potassium, dissolved	M200.7 ICP	1	78.6		*	mg/L	0.2	1	10/19/21 17:17	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:17	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00553		*	mg/L	0.0001	0.00025	10/26/21 13:48	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:48	mfm
Sodium, dissolved	M200.7 ICP	1	74.6		*	mg/L	0.2	1	10/19/21 17:17	kja
Strontium, dissolved	M200.7 ICP	1	0.556		*	mg/L	0.009	0.045	10/19/21 17:17	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00128		*	mg/L	0.0001	0.0005	11/01/21 21:20	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:17	kja
Titanium, dissolved	M200.7 ICP	1	0.0099	B	*	mg/L	0.005	0.025	10/19/21 17:17	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:48	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00068	B	*	mg/L	0.0005	0.002	10/26/21 13:48	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/26/21 13:48	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-32

ACZ Sample ID: ***L69190-02***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	69.2		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	409		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	479		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.3			%			11/11/21 0:00	calc
Sum of Anions			11			meq/L			11/11/21 0:00	calc
Sum of Cations			12			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	9.59		*	mg/L	0.5	2	10/26/21 13:28	md
Conductivity @25C	SM2510B	1	2370		*	umhos/cm	1	10	10/23/21 5:16	eep
Fluoride	M300.0 - Ion Chromatography	1	0.176	B	*	mg/L	0.05	0.25	11/09/21 23:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		340			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.247		*	mg/L	0.02	0.1	10/30/21 23:38	pjb
pH (lab)	SM4500H+ B									
pH		1	12.2	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 0:36	syw
Residue, Filterable (TDS) @180C	SM2540C	2	664		*	mg/L	40	80	10/18/21 16:48	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	44.1			mg/L	5	25	10/24/21 20:46	syw
TDS (calculated)	Calculation		455			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.46						11/11/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-33

ACZ Sample ID: ***L69190-03***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 14:57	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.534		*	mg/L	0.05	0.25	10/19/21 17:20	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00333		*	mg/L	0.0004	0.002	10/26/21 13:54	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00249		*	mg/L	0.0002	0.001	10/26/21 13:54	mfm
Barium, dissolved	M200.7 ICP	1	0.128		*	mg/L	0.007	0.035	10/19/21 17:20	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 13:54	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:20	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:20	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/01/21 21:25	bsu
Calcium, dissolved	M200.7 ICP	1	125		*	mg/L	0.1	0.5	10/19/21 17:20	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.107		*	mg/L	0.0005	0.002	10/26/21 13:54	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00117		*	mg/L	0.00005	0.00025	10/26/21 13:54	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00324		*	mg/L	0.0008	0.002	10/26/21 13:54	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:20	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/19/21 17:20	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00829		*	mg/L	0.0001	0.0005	10/26/21 13:54	mfm
Lithium, dissolved	M200.7 ICP	1	0.0708		*	mg/L	0.008	0.04	10/19/21 17:20	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:20	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 13:54	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	8	B	*	ng/L	3	10	10/25/21 14:12	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.161		*	mg/L	0.0002	0.0005	10/26/21 13:54	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/26/21 13:54	mfm
Potassium, dissolved	M200.7 ICP	1	40.8		*	mg/L	0.2	1	10/19/21 17:20	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:20	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00404		*	mg/L	0.0001	0.00025	10/26/21 13:54	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:54	mfm
Sodium, dissolved	M200.7 ICP	1	67.2		*	mg/L	0.2	1	10/19/21 17:20	kja
Strontium, dissolved	M200.7 ICP	1	0.340		*	mg/L	0.009	0.045	10/19/21 17:20	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00074		*	mg/L	0.0001	0.0005	11/01/21 21:25	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:20	kja
Titanium, dissolved	M200.7 ICP	1	0.0093	B	*	mg/L	0.005	0.025	10/19/21 17:20	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:54	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00141	B	*	mg/L	0.0005	0.002	10/26/21 13:54	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/26/21 13:54	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-33

ACZ Sample ID: ***L69190-03***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	60.6		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	295		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	356		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			7.0			%			11/11/21 0:00	calc
Sum of Anions			8.7			meq/L			11/11/21 0:00	calc
Sum of Cations			10			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	8.05		*	mg/L	0.5	2	10/26/21 13:28	md
Conductivity @25C	SM2510B	1	1820		*	umhos/cm	1	10	10/23/21 5:29	eep
Fluoride	M300.0 - Ion Chromatography	1	0.214	B	*	mg/L	0.05	0.25	11/09/21 23:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		312			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.095	B	*	mg/L	0.02	0.1	10/30/21 23:40	pjb
pH (lab)	SM4500H+ B									
pH		1	12.1	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 0:38	syw
Residue, Filterable (TDS) @180C	SM2540C	1	588	H	*	mg/L	20	40	10/22/21 12:58	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	64.1			mg/L	5	25	10/24/21 20:50	syw
TDS (calculated)	Calculation		393			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.50						11/11/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-34

ACZ Sample ID: ***L69190-04***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 15:10	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.785		*	mg/L	0.05	0.25	10/19/21 17:23	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00589		*	mg/L	0.0004	0.002	10/26/21 13:59	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00475		*	mg/L	0.0002	0.001	10/26/21 13:59	mfm
Barium, dissolved	M200.7 ICP	1	0.0713		*	mg/L	0.007	0.035	10/19/21 17:23	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 13:59	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:23	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:23	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/01/21 21:30	bsu
Calcium, dissolved	M200.7 ICP	1	99.5		*	mg/L	0.1	0.5	10/19/21 17:23	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0587		*	mg/L	0.0005	0.002	10/26/21 13:59	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000870		*	mg/L	0.00005	0.00025	10/26/21 13:59	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00249		*	mg/L	0.0008	0.002	10/26/21 13:59	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:23	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/19/21 17:23	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00032	B	*	mg/L	0.0001	0.0005	10/26/21 13:59	mfm
Lithium, dissolved	M200.7 ICP	1	0.0680		*	mg/L	0.008	0.04	10/19/21 17:23	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:23	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 13:59	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	9	B	*	ng/L	3	10	10/25/21 14:17	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0817		*	mg/L	0.0002	0.0005	10/26/21 13:59	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/26/21 13:59	mfm
Potassium, dissolved	M200.7 ICP	1	21.7		*	mg/L	0.2	1	10/19/21 17:23	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:23	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00279		*	mg/L	0.0001	0.00025	10/26/21 13:59	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:59	mfm
Sodium, dissolved	M200.7 ICP	1	63.4		*	mg/L	0.2	1	10/19/21 17:23	kja
Strontium, dissolved	M200.7 ICP	1	0.172		*	mg/L	0.009	0.045	10/19/21 17:23	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00044	B	*	mg/L	0.0001	0.0005	11/01/21 21:30	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:23	kja
Titanium, dissolved	M200.7 ICP	1	0.0076	B	*	mg/L	0.005	0.025	10/19/21 17:23	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 13:59	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00402		*	mg/L	0.0005	0.002	10/26/21 13:59	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/26/21 13:59	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-34

ACZ Sample ID: ***L69190-04***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	61.3		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	223		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	285		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			5.7			%			11/11/21 0:00	calc
Sum of Anions			7.5			meq/L			11/11/21 0:00	calc
Sum of Cations			8.4			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	11.5		*	mg/L	0.5	2	10/26/21 13:29	md
Conductivity @25C	SM2510B	1	1370		*	umhos/cm	1	10	10/23/21 5:43	eep
Fluoride	M300.0 - Ion Chromatography	1	0.310	H	*	mg/L	0.05	0.25	11/10/21 0:35	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		248			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.048	B		mg/L	0.02	0.1	10/30/21 23:41	pjb
pH (lab)	SM4500H+ B									
pH		1	12.0	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 0:39	syw
Residue, Filterable (TDS) @180C	SM2540C	1	468		*	mg/L	20	40	10/18/21 16:54	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	71.6			mg/L	5	25	10/24/21 20:50	syw
TDS (calculated)	Calculation		344			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.36						11/11/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-36

ACZ Sample ID: ***L69190-05***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 15:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.327		*	mg/L	0.05	0.25	10/19/21 17:26	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00277		*	mg/L	0.0004	0.002	10/26/21 14:01	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00217		*	mg/L	0.0002	0.001	10/26/21 14:01	mfm
Barium, dissolved	M200.7 ICP	1	0.418		*	mg/L	0.007	0.035	10/19/21 17:26	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 14:01	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:26	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:26	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/01/21 21:32	bsu
Calcium, dissolved	M200.7 ICP	1	172		*	mg/L	0.1	0.5	10/19/21 17:26	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.197		*	mg/L	0.0005	0.002	10/26/21 14:01	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00230		*	mg/L	0.00005	0.00025	10/26/21 14:01	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00941		*	mg/L	0.0008	0.002	10/26/21 14:01	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:26	kja
Iron, dissolved	M200.7 ICP	1	0.123	B	*	mg/L	0.06	0.15	10/19/21 17:26	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00042	B	*	mg/L	0.0001	0.0005	10/26/21 14:01	mfm
Lithium, dissolved	M200.7 ICP	1	0.103		*	mg/L	0.008	0.04	10/19/21 17:26	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:26	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 14:01	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	97			ng/L	3	10	10/25/21 14:26	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.419		*	mg/L	0.0002	0.0005	10/26/21 14:01	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0004	0.001	10/26/21 14:01	mfm
Potassium, dissolved	M200.7 ICP	1	175		*	mg/L	0.2	1	10/19/21 17:26	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:26	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00745		*	mg/L	0.0001	0.00025	10/26/21 14:01	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:01	mfm
Sodium, dissolved	M200.7 ICP	1	96.6		*	mg/L	0.2	1	10/19/21 17:26	kja
Strontium, dissolved	M200.7 ICP	1	1.01		*	mg/L	0.009	0.045	10/19/21 17:26	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00154		*	mg/L	0.0001	0.0005	11/01/21 21:32	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:26	kja
Titanium, dissolved	M200.7 ICP	1	0.0109	B	*	mg/L	0.005	0.025	10/19/21 17:26	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:01	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/26/21 14:01	mfm
Zinc, dissolved	M200.8 ICP-MS	1	0.0095	B	*	mg/L	0.006	0.015	10/26/21 14:01	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-36

ACZ Sample ID: ***L69190-05***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	91.5		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	636		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	727		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			9.1			%			11/11/21 0:00	calc
Sum of Anions			15			meq/L			11/11/21 0:00	calc
Sum of Cations			18			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	10.4		*	mg/L	0.5	2	10/26/21 13:29	md
Conductivity @25C	SM2510B	1	3560		*	umhos/cm	1	10	10/23/21 5:58	eep
Fluoride	M300.0 - Ion Chromatography	1	0.177	BH	*	mg/L	0.05	0.25	11/10/21 0:53	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		429			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.722			mg/L	0.02	0.1	10/30/21 23:44	pjb
pH (lab)	SM4500H+ B									
pH		1	12.4	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/26/21 14:20	syw
Residue, Filterable (TDS) @180C	SM2540C	2	948		*	mg/L	40	80	10/18/21 16:57	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	26.2		*	mg/L	1	5	11/02/21 10:11	syw
TDS (calculated)	Calculation		645			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.47						11/11/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-37

ACZ Sample ID: ***L69190-06***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 15:38	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.400		*	mg/L	0.05	0.25	10/19/21 17:29	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00285		*	mg/L	0.0004	0.002	10/26/21 14:03	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00121		*	mg/L	0.0002	0.001	10/26/21 14:03	mfm
Barium, dissolved	M200.7 ICP	1	0.246		*	mg/L	0.007	0.035	10/19/21 17:29	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 14:03	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:29	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:29	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/01/21 21:33	bsu
Calcium, dissolved	M200.7 ICP	1	150		*	mg/L	0.1	0.5	10/19/21 17:29	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.166		*	mg/L	0.0005	0.002	10/26/21 14:03	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00146		*	mg/L	0.00005	0.00025	10/26/21 14:03	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00544		*	mg/L	0.0008	0.002	10/26/21 14:03	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:29	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/19/21 17:29	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00022	B	*	mg/L	0.0001	0.0005	10/26/21 14:03	mfm
Lithium, dissolved	M200.7 ICP	1	0.0815		*	mg/L	0.008	0.04	10/19/21 17:29	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:29	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 14:03	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	5	B	*	ng/L	3	10	10/25/21 14:50	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.279		*	mg/L	0.0002	0.0005	10/26/21 14:03	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/26/21 14:03	mfm
Potassium, dissolved	M200.7 ICP	1	78.0		*	mg/L	0.2	1	10/19/21 17:29	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:29	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00511		*	mg/L	0.0001	0.00025	10/26/21 14:03	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:03	mfm
Sodium, dissolved	M200.7 ICP	1	74.7		*	mg/L	0.2	1	10/19/21 17:29	kja
Strontium, dissolved	M200.7 ICP	1	0.618		*	mg/L	0.009	0.045	10/19/21 17:29	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00145		*	mg/L	0.0001	0.0005	11/01/21 21:33	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:29	kja
Titanium, dissolved	M200.7 ICP	1	0.0104	B	*	mg/L	0.005	0.025	10/19/21 17:29	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:03	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0005	0.002	10/26/21 14:03	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/26/21 14:03	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-37

ACZ Sample ID: ***L69190-06***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	70.3		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	470		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	540		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.0			%			11/11/21 0:00	calc
Sum of Anions			12			meq/L			11/11/21 0:00	calc
Sum of Cations			13			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	9.27		*	mg/L	0.5	2	10/26/21 13:30	md
Conductivity @25C	SM2510B	1	2560		*	umhos/cm	1	10	10/23/21 6:14	eep
Fluoride	M300.0 - Ion Chromatography	1	0.190	BH	*	mg/L	0.05	0.25	11/10/21 1:11	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		375			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.286			mg/L	0.02	0.1	10/30/21 23:46	pjb
pH (lab)	SM4500H+ B									
pH		1	12.3	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	10/26/21 14:21	syw
Residue, Filterable (TDS) @180C	SM2540C	1	700		*	mg/L	20	40	10/19/21 11:14	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	40.8		*	mg/L	5	25	11/02/21 10:36	syw
TDS (calculated)	Calculation		476			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.47						11/11/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-38

ACZ Sample ID: ***L69190-07***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 15:52	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.509		*	mg/L	0.05	0.25	10/19/21 17:32	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00303		*	mg/L	0.0004	0.002	10/26/21 14:04	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00229		*	mg/L	0.0002	0.001	10/26/21 14:04	mfm
Barium, dissolved	M200.7 ICP	1	0.143		*	mg/L	0.007	0.035	10/19/21 17:32	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 14:04	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:32	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:32	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/01/21 21:35	bsu
Calcium, dissolved	M200.7 ICP	1	131		*	mg/L	0.1	0.5	10/19/21 17:32	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.115		*	mg/L	0.0005	0.002	10/26/21 14:04	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00106		*	mg/L	0.00005	0.00025	10/26/21 14:04	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00332		*	mg/L	0.0008	0.002	10/26/21 14:04	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:32	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/19/21 17:32	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00070		*	mg/L	0.0001	0.0005	10/26/21 14:04	mfm
Lithium, dissolved	M200.7 ICP	1	0.0746		*	mg/L	0.008	0.04	10/19/21 17:32	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:32	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 14:04	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	4	B	*	ng/L	3	10	10/25/21 14:55	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.168		*	mg/L	0.0002	0.0005	10/26/21 14:04	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/26/21 14:04	mfm
Potassium, dissolved	M200.7 ICP	1	41.8		*	mg/L	0.2	1	10/19/21 17:32	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:32	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00413		*	mg/L	0.0001	0.00025	10/26/21 14:04	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:04	mfm
Sodium, dissolved	M200.7 ICP	1	67.7		*	mg/L	0.2	1	10/19/21 17:32	kja
Strontium, dissolved	M200.7 ICP	1	0.368		*	mg/L	0.009	0.045	10/19/21 17:32	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00090		*	mg/L	0.0001	0.0005	11/01/21 21:35	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:32	kja
Titanium, dissolved	M200.7 ICP	1	0.0093	B	*	mg/L	0.005	0.025	10/19/21 17:32	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:04	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00135	B	*	mg/L	0.0005	0.002	10/26/21 14:04	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/26/21 14:04	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-38

ACZ Sample ID: ***L69190-07***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	60.2		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	333		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	393		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			8.4			%			11/11/21 0:00	calc
Sum of Anions			9.3			meq/L			11/11/21 0:00	calc
Sum of Cations			11			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	8.45		*	mg/L	0.5	2	10/26/21 13:32	md
Conductivity @25C	SM2510B	1	1990		*	umhos/cm	1	10	10/23/21 6:28	eep
Fluoride	M300.0 - Ion Chromatography	1	0.225	BH	*	mg/L	0.05	0.25	11/10/21 1:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		327			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.225			mg/L	0.02	0.1	10/30/21 23:47	pjb
pH (lab)	SM4500H+ B									
pH		1	12.2	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/26/21 14:22	syw
Residue, Filterable (TDS) @180C	SM2540C	2	540		*	mg/L	40	80	10/19/21 11:16	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	57.9		*	mg/L	5	25	11/02/21 10:37	syw
TDS (calculated)	Calculation		401			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.35						11/11/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-39

ACZ Sample ID: ***L69190-08***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/18/21 16:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.817		*	mg/L	0.05	0.25	10/19/21 17:48	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00597		*	mg/L	0.0004	0.002	10/26/21 14:06	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00516		*	mg/L	0.0002	0.001	10/26/21 14:06	mfm
Barium, dissolved	M200.7 ICP	1	0.0766		*	mg/L	0.007	0.035	10/19/21 17:48	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/26/21 14:06	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:48	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/19/21 17:48	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/01/21 21:37	bsu
Calcium, dissolved	M200.7 ICP	1	103		*	mg/L	0.1	0.5	10/19/21 17:48	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0606		*	mg/L	0.0005	0.002	10/26/21 14:06	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000784		*	mg/L	0.00005	0.00025	10/26/21 14:06	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00220		*	mg/L	0.0008	0.002	10/26/21 14:06	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/19/21 17:48	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/19/21 17:48	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00081		*	mg/L	0.0001	0.0005	10/26/21 14:06	mfm
Lithium, dissolved	M200.7 ICP	1	0.0699		*	mg/L	0.008	0.04	10/19/21 17:48	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/19/21 17:48	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/26/21 14:06	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	5	B	*	ng/L	3	10	10/25/21 15:00	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0832		*	mg/L	0.0002	0.0005	10/26/21 14:06	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/26/21 14:06	mfm
Potassium, dissolved	M200.7 ICP	1	22.7		*	mg/L	0.2	1	10/19/21 17:48	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/19/21 17:48	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00289		*	mg/L	0.0001	0.00025	10/26/21 14:06	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:06	mfm
Sodium, dissolved	M200.7 ICP	1	64.3		*	mg/L	0.2	1	10/19/21 17:48	kja
Strontium, dissolved	M200.7 ICP	1	0.198		*	mg/L	0.009	0.045	10/19/21 17:48	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00048	B	*	mg/L	0.0001	0.0005	11/01/21 21:37	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/19/21 17:48	kja
Titanium, dissolved	M200.7 ICP	1	0.0080	B	*	mg/L	0.005	0.025	10/19/21 17:48	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/26/21 14:06	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00406		*	mg/L	0.0005	0.002	10/26/21 14:06	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/26/21 14:06	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-39

ACZ Sample ID: ***L69190-08***
Date Sampled: *10/12/21 10:00*
Date Received: *10/13/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/23/21 0:00	eep
Carbonate as CaCO3		1	49.9		*	mg/L	2	20	10/23/21 0:00	eep
Hydroxide as CaCO3		1	197		*	mg/L	2	20	10/23/21 0:00	eep
Total Alkalinity		1	246		*	mg/L	2	20	10/23/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			11.5			%			11/11/21 0:00	calc
Sum of Anions			6.9			meq/L			11/11/21 0:00	calc
Sum of Cations			8.7			meq/L			11/11/21 0:00	calc
Chloride	SM4500Cl-E	1	7.62		*	mg/L	0.5	2	10/26/21 13:32	md
Conductivity @25C	SM2510B	1	1330		*	umhos/cm	1	10	10/23/21 6:40	eep
Fluoride	M300.0 - Ion Chromatography	1	0.312	H	*	mg/L	0.05	0.25	11/10/21 1:47	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		257			mg/L	0.2	5	11/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.119			mg/L	0.02	0.1	10/30/21 23:49	pjb
pH (lab)	SM4500H+ B									
pH		1	12.0	H	*	units	0.1	0.1	10/23/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	10/23/21 0:00	eep
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/26/21 14:23	syw
Residue, Filterable (TDS) @180C	SM2540C	1	484		*	mg/L	20	40	10/19/21 11:19	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	82.1		*	mg/L	5	25	11/02/21 10:37	syw
TDS (calculated)	Calculation		344			mg/L			11/11/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.41						11/11/21 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530117													
WG530117PBW1	PBW	10/22/21 22:06				5.9	mg/L		-20	20			
WG530117PBW2	PBW	10/23/21 1:10				3.2	mg/L		-20	20			
WG530117PBW3	PBW	10/23/21 3:55				5.2	mg/L		-20	20			
L69179-05DUP	DUP	10/23/21 4:45			350	352	mg/L				1	20	
L69193-05DUP	DUP	10/23/21 7:36			2.1	U	mg/L				200	20	RA
WG530117PBW4	PBW	10/23/21 8:02				5	mg/L		-20	20			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		1.978	mg/L	99	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.15	0.15			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	1.0008		1.01	mg/L	101	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	1.0008	.509	1.535	mg/L	103	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	1.0008	.509	1.555	mg/L	105	85	115	1	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.0201		.02042	mg/L	102	90	110			
WG530303ICB	ICB	10/26/21 13:14				.00042	mg/L		-0.00088	0.00088			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.01		.00903	mg/L	90	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.01	.00289	.01076	mg/L	79	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.01	.00289	.01055	mg/L	77	70	130	2	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05267	mg/L	105	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00044	0.00044			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05005		.05064	mg/L	101	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05005	.00214	.05269	mg/L	101	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05005	.00214	.05157	mg/L	99	70	130	2	20	

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		2.0385	mg/L	102	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.021	0.021			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	.5		.5105	mg/L	102	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	.5	.143	.6498	mg/L	101	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	.5	.143	.6559	mg/L	103	85	115	1	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.055039	mg/L	110	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.000176	0.000176			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05005		.051941	mg/L	104	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05005	U	.055538	mg/L	111	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05005	U	.055269	mg/L	110	70	130	0	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		1.954	mg/L	98	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.12	0.12			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	1		.995	mg/L	100	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	1	U	.96	mg/L	96	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	1	U	.977	mg/L	98	85	115	2	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		2.029	mg/L	101	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.09	0.09			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	.5005		.516	mg/L	103	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	.5005	U	.506	mg/L	101	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	.5005	U	.515	mg/L	103	85	115	2	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530760													
WG530760ICV	ICV	11/01/21 21:01	MS211013-2	.05		.051272	mg/L	103	90	110			
WG530760ICB	ICB	11/01/21 21:02				U	mg/L		-0.00011	0.00011			
WG530760LFB	LFB	11/01/21 21:04	MS210927-3	.05005		.048381	mg/L	97	85	115			
L69190-02AS	AS	11/01/21 21:22	MS210927-3	.05005	U	.045211	mg/L	90	70	130			
L69190-02ASD	ASD	11/01/21 21:24	MS210927-3	.05005	U	.048644	mg/L	97	70	130	7	20	
L69339-03AS	AS	11/01/21 21:45	MS210927-3	.05005	U	.048599	mg/L	97	70	130			
L69339-03ASD	ASD	11/01/21 21:50	MS210927-3	.05005	U	.047847	mg/L	96	70	130	2	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	100		100.85	mg/L	101	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.3	0.3			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	67.98972		70.12	mg/L	103	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	67.98972	131	190.7	mg/L	88	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	67.98972	131	192.6	mg/L	91	85	115	1	20	

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ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530286													
WG530286ICV	ICV	10/26/21 13:24	WI210503-1	54.89		54.3	mg/L	99	90	110			
WG530286ICB	ICB	10/26/21 13:25				1.03	mg/L		-1.5	1.5			
WG530286LFB1	LFB	10/26/21 13:25	WI210908-11	29.97		29.15	mg/L	97	90	110			
L69181-03AS	AS	10/26/21 13:26	WI210908-11	2997	3110	6176.99	mg/L	102	90	110			
L69190-01DUP	DUP	10/26/21 13:27			12.9	12.23	mg/L				5	20	
WG530286LFB2	LFB	10/26/21 13:40	WI210908-11	29.97		29.45	mg/L	98	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.055	mg/L	110	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.0011	0.0011			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05		.05148	mg/L	103	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05	.17	.21735	mg/L	95	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05	.17	.21511	mg/L	90	70	130	1	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.055197	mg/L	110	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00011	0.00011			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05005		.050989	mg/L	102	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05005	.00167	.048691	mg/L	94	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05005	.00167	.048911	mg/L	94	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530117													
WG530117LCSW2	LCSW	10/22/21 22:12	PCN64228	1409		1487	umhos/cm	106	90	110			
WG530117LCSW5	LCSW	10/23/21 0:51	PCN64228	1409		1485	umhos/cm	105	90	110			
WG530117LCSW8	LCSW	10/23/21 3:36	PCN64228	1409		1480	umhos/cm	105	90	110			
L69179-05DUP	DUP	10/23/21 4:45			1440	1450	umhos/cm				1	20	
L69193-05DUP	DUP	10/23/21 7:36			1140	1147	umhos/cm				1	20	
WG530117LCSW11	LCSW	10/23/21 7:43	PCN64228	1409		1479	umhos/cm	105	90	110			
WG530117LCSW14	LCSW	10/23/21 10:35	PCN64228	1409		1464	umhos/cm	104	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05518	mg/L	110	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00176	0.00176			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05		.05182	mg/L	104	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05	.00576	.05989	mg/L	108	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05	.00576	.05872	mg/L	106	70	130	2	20	

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ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG531312													
WG531312LFB1	LFB	11/09/21 17:43	WI210907-6	1.5		1.483	mg/L	99	90	110			
L69046-02DUP	DUP	11/09/21 22:30			.125	.105	mg/L				17	20	RA
L69190-01AS	AS	11/09/21 23:05	WI210907-6	1.5	.176	1.535	mg/L	91	90	110			
WG531312LFB2	LFB	11/10/21 2:23	WI210907-6	1.5		1.456	mg/L	97	90	110			

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		2.02	mg/L	101	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.3	0.3			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	.9822		1.02	mg/L	104	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	.9822	U	1.04	mg/L	106	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	.9822	U	1.04	mg/L	106	85	115	0	20	

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		1.965	mg/L	98	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.18	0.18			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	1.0001		1.009	mg/L	101	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	1.0001	U	1.027	mg/L	103	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	1.0001	U	1.045	mg/L	104	85	115	2	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05406	mg/L	108	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00022	0.00022			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05005		.05079	mg/L	101	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05005	.00027	.05334	mg/L	106	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05005	.00027	.05218	mg/L	104	70	130	2	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		2.0403	mg/L	102	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.024	0.024			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	.999		1.003	mg/L	100	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	.999	.0746	1.068	mg/L	99	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	.999	.0746	1.083	mg/L	101	85	115	1	20	

MCCLELLANDLAB ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	100		97.32	mg/L	97	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.6	0.6			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	49.99828		48.4	mg/L	97	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	49.99828	U	47.51	mg/L	95	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	49.99828	U	48.19	mg/L	96	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05432	mg/L	109	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00088	0.00088			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.0499		.05153	mg/L	103	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.0499	U	.05189	mg/L	104	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.0499	U	.05129	mg/L	103	70	130	1	20	

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG530200													
WG530200CCV1	CCV	10/25/21 11:30	HG211011-4	10		10.3	ng/L	103	76.5	123.4			
WG530200CCB1	CCB	10/25/21 11:34				U	ng/L		-0.501	0.501			
WG530200PQV	PQV	10/25/21 11:39	HG211011-6	1		.83	ng/L	83	70	130			
WG530200LFB1	LFB	10/25/21 11:46	HG211011-5	2		1.96	ng/L	98	71	125			
L69188-10MS	MS	10/25/21 12:05	HG211011-5	2	1.5	3.43	ng/L	97	71	125			
L69188-10MSD	MSD	10/25/21 12:09	HG211011-5	2	1.5	3.29	ng/L	90	71	125	4	24	
WG530200CCV2	CCV	10/25/21 12:28	HG211011-4	10		9.56	ng/L	96	76.5	123.4			
WG530200CCB2	CCB	10/25/21 12:33				U	ng/L		-0.501	0.501			
WG530200CCV3	CCV	10/25/21 13:42	HG211011-4	10		9.88	ng/L	99	76.5	123.4			
WG530200CCB3	CCB	10/25/21 13:47				U	ng/L		-0.501	0.501			
WG530200LFB2	LFB	10/25/21 14:22	HG211011-5	2		1.94	ng/L	97	71	125			
L69190-05MS	MS	10/25/21 14:31	HG163110X	200	97	116	ng/L	95	71	125			
L69190-05MSD	MSD	10/25/21 14:36	HG163110X	200	97	119	ng/L	110	71	125	3	24	
WG530200CCV4	CCV	10/25/21 14:41	HG211011-4	10		9.7	ng/L	97	76.5	123.4			
WG530200CCB4	CCB	10/25/21 14:45				U	ng/L		-0.501	0.501			
WG530200CCV5	CCV	10/25/21 15:14	HG211011-4	10		9.79	ng/L	98	76.5	123.4			
WG530200CCB5	CCB	10/25/21 15:19				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.01992		.02166	mg/L	109	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00044	0.00044			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05005		.05098	mg/L	102	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05005	.291	.34483	mg/L	108	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05005	.291	.34735	mg/L	113	70	130	1	20	

MCCLELLANDLAB ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05489	mg/L	110	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00088	0.00088			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05		.05087	mg/L	102	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05	U	.05502	mg/L	110	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05	U	.05382	mg/L	108	70	130	2	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530650													
WG530650ICV	ICV	10/30/21 20:11	WI210904-1	2.4161		2.349	mg/L	97	90	110			
WG530650ICB	ICB	10/30/21 20:12				U	mg/L		-0.02	0.02			
WG530654													
WG530654LFB1	LFB	10/30/21 23:20	WI211001-5	2		2.049	mg/L	102	90	110			
L69046-01AS	AS	10/30/21 23:23	WI211001-5	2	U	2.106	mg/L	105	90	110			
L69046-02DUP	DUP	10/30/21 23:25			U	U	mg/L				0	20	RA
L69190-04AS	AS	10/30/21 23:42	WI211001-5	2	.048	2.126	mg/L	104	90	110			
L69190-05DUP	DUP	10/30/21 23:45			.722	.721	mg/L				0	20	
WG530654LFB2	LFB	10/31/21 0:01	WI211001-5	2		2.028	mg/L	101	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530117													
WG530117LCSW1	LCSW	10/22/21 22:10	PCN62948	6		6.1	units	102	5.9	6.1			
WG530117LCSW4	LCSW	10/23/21 0:49	PCN62948	6		6.1	units	102	5.9	6.1			
WG530117LCSW7	LCSW	10/23/21 3:34	PCN62948	6		6.1	units	102	5.9	6.1			
L69179-05DUP	DUP	10/23/21 4:45			8.4	8.4	units				0	20	
L69193-05DUP	DUP	10/23/21 7:36			4.9	5	units				2	20	
WG530117LCSW10	LCSW	10/23/21 7:41	PCN62948	6		6.1	units	102	5.9	6.1			
WG530117LCSW13	LCSW	10/23/21 10:33	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530155													
WG530155ICV	ICV	10/24/21 22:17	WI211018-4	.65228		.685	mg/L	105	90	110			
WG530155ICB	ICB	10/24/21 22:19				U	mg/L		-0.01	0.01			
WG530157													
WG529691LRB	LRB	10/25/21 0:29				U	mg/L		-0.01	0.01			
WG529691LFB	LFB	10/25/21 0:30	WI211015-3	.5		.485	mg/L	97	90	110			
WG530157ICV	ICV	10/25/21 10:50	WI211018-4	.65228		.682	mg/L	105	90	110			
WG530157ICB	ICB	10/25/21 10:52				U	mg/L		-0.01	0.01			
L69182-01LFM	LFM	10/25/21 10:55	WI211015-3	.5	2.9	3.43	mg/L	106	90	110			
L69189-01DUP	DUP	10/25/21 11:00			115	113.58	mg/L				1	20	
WG530157ICV1	ICV	10/26/21 14:16	WI211018-4	.65228		.686	mg/L	105	90	110			
WG530157ICB1	ICB	10/26/21 14:19				U	mg/L		-0.01	0.01			

MCCLELLANDLAB ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	20		20.05	mg/L	100	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.6	0.6			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	99.96008		101.1	mg/L	101	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	99.96008	41.8	140.8	mg/L	99	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	99.96008	41.8	142.5	mg/L	101	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529733													
WG529733PBW	PBW	10/18/21 15:51				U	mg/L		-20	20			
WG529733LCSW	LCSW	10/18/21 15:54	PCN64122	1000		974	mg/L	97	80	120			
L69190-05DUP	DUP	10/18/21 17:00			948	940	mg/L				1	10	
WG529789													
WG529789PBW	PBW	10/19/21 11:09				U	mg/L		-20	20			
WG529789LCSW	LCSW	10/19/21 11:11	PCN64122	1000		978	mg/L	98	80	120			
L69193-02DUP	DUP	10/19/21 11:35			2540	2528	mg/L				0	10	
WG530101													
WG530101PBW	PBW	10/22/21 12:45				U	mg/L		-20	20			
WG530101LCSW	LCSW	10/22/21 12:46	PCN64127	1000		996	mg/L	100	80	120			
L69369-01DUP	DUP	10/22/21 13:08			202	208	mg/L				3	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		2.013	mg/L	101	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.15	0.15			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	1.0017		1.026	mg/L	102	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	1.0017	U	1.008	mg/L	101	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	1.0017	U	1.028	mg/L	103	85	115	2	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05421	mg/L	108	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00022	0.00022			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05		.0511	mg/L	102	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05	.00553	.05801	mg/L	105	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05	.00553	.05804	mg/L	105	70	130	0	20	

MCCLELLANDLAB ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.02		.02058	mg/L	103	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00022	0.00022			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.01		.00962	mg/L	96	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.01	U	.00729	mg/L	73	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.01	U	.00615	mg/L	62	70	130	17	20	M2 ZA

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	100		101.65	mg/L	102	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.6	0.6			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	100.007		102	mg/L	102	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	100.007	67.7	164.6	mg/L	97	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	100.007	67.7	168.2	mg/L	100	85	115	2	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		1.968	mg/L	98	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.027	0.027			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	.5005		.5373	mg/L	107	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	.5005	.368	.891	mg/L	104	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	.5005	.368	.9013	mg/L	107	85	115	1	20	

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530153													
WG530153ICB	ICB	10/24/21 18:28				U	mg/L		-3	3			
WG530153ICV	ICV	10/24/21 18:28	WI211012-1	20.46		19.1	mg/L	93	90	110			
WG530153LFB	LFB	10/24/21 20:35	WI210105-3	10		9.6	mg/L	96	90	110			
L69190-03DUP	DUP	10/24/21 20:50			64.1	62.8	mg/L				2	20	
L69190-04AS	AS	10/24/21 20:50	SO4TURB5X	10	71.6	81	mg/L	94	90	110			
WG530736													
WG530736ICB	ICB	11/02/21 10:03				U	mg/L		-3	3			
WG530736ICV	ICV	11/02/21 10:03	WI211027-1	20.46		18.6	mg/L	91	90	110			
WG530736LFB	LFB	11/02/21 10:11	WI210105-3	10		9	mg/L	90	90	110			
L69190-05DUP	DUP	11/02/21 10:11			26.2	25.9	mg/L				1	20	
L69190-06AS	AS	11/02/21 10:37	SO4TURB5X	10	40.8	44.6	mg/L	38	90	110			M3

MCCLELLANDLAB ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530760													
WG530760ICV	ICV	11/01/21 21:01	MS211013-2	.05		.05319	mg/L	106	90	110			
WG530760ICB	ICB	11/01/21 21:02				U	mg/L		-0.00022	0.00022			
WG530760LFB	LFB	11/01/21 21:04	MS210927-3	.05		.05097	mg/L	102	85	115			
L69190-02AS	AS	11/01/21 21:22	MS210927-3	.05	.00128	.04985	mg/L	97	70	130			
L69190-02ASD	ASD	11/01/21 21:24	MS210927-3	.05	.00128	.05401	mg/L	105	70	130	8	20	
L69339-03AS	AS	11/01/21 21:45	MS210927-3	.05	U	.05385	mg/L	108	70	130			
L69339-03ASD	ASD	11/01/21 21:50	MS210927-3	.05	U	.05478	mg/L	110	70	130	2	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		1.994	mg/L	100	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.12	0.12			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	1.002		.968	mg/L	97	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	1.002	U	.933	mg/L	93	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	1.002	U	.948	mg/L	95	85	115	2	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529808													
WG529808ICV	ICV	10/19/21 16:10	II211014-1	2		1.995	mg/L	100	95	105			
WG529808ICB	ICB	10/19/21 16:15				U	mg/L		-0.015	0.015			
WG529808LFB	LFB	10/19/21 16:28	II211018-2	1		1.031	mg/L	103	85	115			
L69190-07AS	AS	10/19/21 17:42	II211018-2	1	.0093	1.005	mg/L	100	85	115			
L69190-07ASD	ASD	10/19/21 17:45	II211018-2	1	.0093	1.02	mg/L	101	85	115	1	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05342	mg/L	107	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.00022	0.00022			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05		.04983	mg/L	100	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05	U	.05375	mg/L	108	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05	U	.05404	mg/L	108	70	130	1	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.05103	mg/L	102	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.0011	0.0011			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.05		.04898	mg/L	98	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.05	.00068	.04993	mg/L	99	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.05	.00068	.04949	mg/L	98	70	130	1	20	

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ACZ Project ID: ***L69190***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530303													
WG530303ICV	ICV	10/26/21 13:12	MS211013-2	.05		.0547	mg/L	109	90	110			
WG530303ICB	ICB	10/26/21 13:14				U	mg/L		-0.0132	0.0132			
WG530303LFB	LFB	10/26/21 13:15	MS210927-3	.050075		.0555	mg/L	111	85	115			
L69190-02AS	AS	10/26/21 13:50	MS210927-3	.050075	U	.0499	mg/L	100	70	130			
L69190-02ASD	ASD	10/26/21 13:52	MS210927-3	.050075	U	.0495	mg/L	99	70	130	1	20	

McClelland Laboratories, Inc. ACZ Project ID: ***L69190***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69190-01	WG531312	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530654	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L69190-02	WG531312	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530654	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L69190-03	WG531312	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530200	Mercury, dissolved	M1631E, Atomic Fluorescence	D1	Sample required dilution due to matrix.
			M1631E, Atomic Fluorescence	DJ	Sample dilution required due to insufficient sample.
	WG530654	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530101	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L69190-04	WG531312	Fluoride	M300.0 - Ion Chromatography	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530200	Mercury, dissolved	M1631E, Atomic Fluorescence	D1	Sample required dilution due to matrix.
			M1631E, Atomic Fluorescence	DJ	Sample dilution required due to insufficient sample.
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.

McClelland Laboratories, Inc. ACZ Project ID: ***L69190***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69190-05	WG531312	Fluoride	M300.0 - Ion Chromatography	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG530736	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69190-06	WG531312	Fluoride	M300.0 - Ion Chromatography	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530200	Mercury, dissolved	M1631E, Atomic Fluorescence	D1	Sample required dilution due to matrix.
			M1631E, Atomic Fluorescence	DJ	Sample dilution required due to insufficient sample.
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG530736	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69190-07	WG531312	Fluoride	M300.0 - Ion Chromatography	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530200	Mercury, dissolved	M1631E, Atomic Fluorescence	D1	Sample required dilution due to matrix.
			M1631E, Atomic Fluorescence	DJ	Sample dilution required due to insufficient sample.
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG530736	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530117	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Extended Qualifier Report

McClelland Laboratories, Inc.

ACZ Project ID: ***L69190***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69190-08	WG531312	Fluoride	M300.0 - Ion Chromatography	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530200	Mercury, dissolved	M1631E, Atomic Fluorescence	D1	Sample required dilution due to matrix.
			M1631E, Atomic Fluorescence	DJ	Sample dilution required due to insufficient sample.
	WG530303	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG530736	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530117	Total Alkalinity	SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69190
Date Received: 10/13/2021 10:48
Received By:
Date Printed: 10/14/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
6781	3	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID:	L69190
Date Received:	10/13/2021 10:48
Received By:	
Date Printed:	10/14/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L 69190

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina	Address:
Company: McClelland Laboratories	
E-mail: mmedina@mettest.com	Telephone:

Copy of Report to:

Name:	E-mail: results@mettest.com
Company:	Telephone:

Invoice to:

Name:	Address:
Company:	
E-mail: mliap@mettest.com	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [X] NO [ ]

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes [ ] No [ ]

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** **State** NV **Zip code** 89436 **Time Zone** PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? [ ]

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 B-31	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-32	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-33	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-34	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-36	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-37	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-38	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-39	10/12/21:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
			10/13/21 10:48

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/31/2021

Quote Number: GRASSY-LEACH

Matrix: Leachate Grassy Mountain Leachate

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digesti		$0.00
Metals Analysis			
Aluminum, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Barium, dissolved	M200.7 ICP	0.007 mg/L	$7.40
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$14.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$7.40
Boron, dissolved	M200.7 ICP	0.03 mg/L	$7.40
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$14.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Iron, dissolved	M200.7 ICP	0.06 mg/L	$7.40
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$7.40
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$41.20
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$7.40
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Tin, dissolved	M200.7 ICP	0.04 mg/L	$7.40

REPAD.09.06.05.01 S/ sh D/ 14 P/

Titanium, dissolved	M200.7 ICP	0.005 mg/L	$7.40
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$14.00
Misc.			
Electronic Data Deliverable			$0.00
Setup charge for ICPMS			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$9.80
Cation-Anion Balance	Calculation		$0.00
Chloride	SM4500Cl-E	0.5 mg/L	$9.00
Conductivity @25C	SM2510B	1 umhos/cm	$6.60
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$10.80
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$9.00
pH (lab)	SM4500H+ B	0.1 C	$6.60
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$19.00
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$11.60
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1 mg/L	$9.00
TDS (calculated)	Calculation	Calculation	$0.00
TDS (ratio - measured/calculated)	Calculation	Calculation	$0.00
		Cost/Sample:	**$481.60**

Leachates will be supplied from Gene McClelland's lab in Nevada. Pricing is based on standard TAT for waters of ~ three weeks and will vary with workload.

Quote Number: GRASSY-LEACH

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 16, 2021

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

Project ID:
ACZ Project ID: L69352

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 19, 2021. This project has been assigned to ACZ's project number, L69352. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L69352. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 16, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

S. Habermehl

Scott Habermehl has reviewed
and approved this report.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-41

ACZ Sample ID: ***L69352-01***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:07	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.999		*	mg/L	0.05	0.25	10/21/21 19:12	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00426		*	mg/L	0.0004	0.002	11/02/21 12:49	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00521		*	mg/L	0.0002	0.001	11/02/21 12:49	bsu
Barium, dissolved	M200.7 ICP	1	0.0706		*	mg/L	0.007	0.035	10/21/21 19:12	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 12:49	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:12	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/21/21 19:12	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000370		*	mg/L	0.00005	0.00025	11/02/21 12:49	bsu
Calcium, dissolved	M200.7 ICP	1	65.9		*	mg/L	0.1	0.5	10/21/21 19:12	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.368		*	mg/L	0.0005	0.002	11/02/21 12:49	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00363		*	mg/L	0.00005	0.00025	11/02/21 12:49	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00715		*	mg/L	0.0008	0.002	11/02/21 12:49	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:12	kja
Iron, dissolved	M200.7 ICP	1	0.134	B	*	mg/L	0.06	0.15	10/21/21 19:12	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00022	B	*	mg/L	0.0001	0.0005	11/02/21 12:49	bsu
Lithium, dissolved	M200.7 ICP	1	0.0717		*	mg/L	0.008	0.04	10/21/21 19:12	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/21/21 19:12	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 12:49	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	50	730			ng/L	20	50	10/28/21 17:42	scp
Molybdenum, dissolved	M200.8 ICP-MS	20	2.68		*	mg/L	0.004	0.01	11/02/21 13:18	bsu
Nickel, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.001	11/02/21 12:49	bsu
Potassium, dissolved	M200.7 ICP	1	142		*	mg/L	0.2	1	10/21/21 19:12	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:12	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.0142		*	mg/L	0.0001	0.00025	11/02/21 12:49	bsu
Silver, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	11/02/21 12:49	bsu
Sodium, dissolved	M200.7 ICP	1	86.6		*	mg/L	0.2	1	10/21/21 19:12	kja
Strontium, dissolved	M200.7 ICP	1	0.298		*	mg/L	0.009	0.045	10/21/21 19:12	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00080		*	mg/L	0.0001	0.0005	11/02/21 12:49	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:12	kja
Titanium, dissolved	M200.7 ICP	1	0.0109	B	*	mg/L	0.005	0.025	10/21/21 19:12	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:49	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00381		*	mg/L	0.0005	0.002	11/02/21 12:49	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 12:49	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-41

ACZ Sample ID: ***L69352-01***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/26/21 0:00	jck
Carbonate as CaCO3		1	81.4		*	mg/L	2	20	10/26/21 0:00	jck
Hydroxide as CaCO3		1	291		*	mg/L	2	20	10/26/21 0:00	jck
Total Alkalinity		1	372		*	mg/L	2	20	10/26/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.8			%			11/16/21 0:00	calc
Sum of Anions			10			meq/L			11/16/21 0:00	calc
Sum of Cations			11			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	9.41		*	mg/L	0.5	2	11/05/21 12:37	md
Conductivity @25C	SM2510B	1	2070		*	umhos/cm	1	10	10/26/21 23:56	jck
Fluoride	M300.0 - Ion Chromatography	2	0.205	B	*	mg/L	0.1	0.5	11/10/21 19:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		165			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.669		*	mg/L	0.02	0.1	11/06/21 1:09	pjb
pH (lab)	SM4500H+ B									
pH		1	12.1	H	*	units	0.1	0.1	10/26/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/26/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	10/25/21 11:56	syw
Residue, Filterable (TDS) @180C	SM2540C	10	660		*	mg/L	200	400	10/21/21 14:36	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	123		*	mg/L	5	25	11/04/21 11:23	wtc
TDS (calculated)	Calculation		527			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.25						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-42

ACZ Sample ID: ***L69352-02***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:14	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.02		*	mg/L	0.05	0.25	10/21/21 19:15	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00455		*	mg/L	0.0004	0.002	11/02/21 12:51	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00579		*	mg/L	0.0002	0.001	11/02/21 12:51	bsu
Barium, dissolved	M200.7 ICP	1	0.0722		*	mg/L	0.007	0.035	10/21/21 19:15	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 12:51	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:15	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/21/21 19:15	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000147	B	*	mg/L	0.00005	0.00025	11/02/21 12:51	bsu
Calcium, dissolved	M200.7 ICP	1	82.3		*	mg/L	0.1	0.5	10/21/21 19:15	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.178		*	mg/L	0.0005	0.002	11/02/21 12:51	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00226		*	mg/L	0.00005	0.00025	11/02/21 12:51	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00488		*	mg/L	0.0008	0.002	11/02/21 12:51	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:15	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/21/21 19:15	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00059		*	mg/L	0.0001	0.0005	11/02/21 12:51	bsu
Lithium, dissolved	M200.7 ICP	1	0.0745		*	mg/L	0.008	0.04	10/21/21 19:15	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/21/21 19:15	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 12:51	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	15			ng/L	2	5	10/28/21 15:23	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	1.18		*	mg/L	0.0002	0.0005	11/02/21 12:51	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/02/21 12:51	bsu
Potassium, dissolved	M200.7 ICP	1	71.3		*	mg/L	0.2	1	10/21/21 19:15	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:15	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00768		*	mg/L	0.0001	0.00025	11/02/21 12:51	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:51	bsu
Sodium, dissolved	M200.7 ICP	1	71.9		*	mg/L	0.2	1	10/21/21 19:15	kja
Strontium, dissolved	M200.7 ICP	1	0.284		*	mg/L	0.009	0.045	10/21/21 19:15	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.0005	11/02/21 12:51	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:15	kja
Titanium, dissolved	M200.7 ICP	1	0.0126	B	*	mg/L	0.005	0.025	10/21/21 19:15	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:51	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00428		*	mg/L	0.0005	0.002	11/02/21 12:51	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 12:51	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-42

ACZ Sample ID: ***L69352-02***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/27/21 0:00	jck
Carbonate as CaCO3		1	63.2		*	mg/L	2	20	10/27/21 0:00	jck
Hydroxide as CaCO3		1	221		*	mg/L	2	20	10/27/21 0:00	jck
Total Alkalinity		1	284		*	mg/L	2	20	10/27/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.9			%			11/16/21 0:00	calc
Sum of Anions			8.6			meq/L			11/16/21 0:00	calc
Sum of Cations			9.3			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.86		*	mg/L	0.5	2	11/05/21 12:39	md
Conductivity @25C	SM2510B	1	1590		*	umhos/cm	1	10	10/27/21 0:09	jck
Fluoride	M300.0 - Ion Chromatography	2	0.207	B	*	mg/L	0.1	0.5	11/10/21 20:12	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		206			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.280		*	mg/L	0.02	0.1	11/06/21 1:10	pjb
pH (lab)	SM4500H+ B									
pH		1	11.9	H	*	units	0.1	0.1	10/27/21 0:00	jck
pH measured at		1	22.6		*	C	0.1	0.1	10/27/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 11:57	syw
Residue, Filterable (TDS) @180C	SM2540C	1	570		*	mg/L	20	40	10/21/21 14:40	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	127		*	mg/L	5	25	11/04/21 11:23	wtc
TDS (calculated)	Calculation		436			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.31						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-43

ACZ Sample ID: ***L69352-03***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:22	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.27		*	mg/L	0.05	0.25	10/21/21 19:18	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00744		*	mg/L	0.0004	0.002	11/02/21 12:52	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0109		*	mg/L	0.0002	0.001	11/02/21 12:52	bsu
Barium, dissolved	M200.7 ICP	1	0.0542		*	mg/L	0.007	0.035	10/21/21 19:18	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 12:52	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:18	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/21/21 19:18	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000090	B	*	mg/L	0.00005	0.00025	11/02/21 12:52	bsu
Calcium, dissolved	M200.7 ICP	1	78.6		*	mg/L	0.1	0.5	10/21/21 19:18	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0916		*	mg/L	0.0005	0.002	11/02/21 12:52	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00169		*	mg/L	0.00005	0.00025	11/02/21 12:52	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00238		*	mg/L	0.0008	0.002	11/02/21 12:52	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:18	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/21/21 19:18	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:52	bsu
Lithium, dissolved	M200.7 ICP	1	0.0743		*	mg/L	0.008	0.04	10/21/21 19:18	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/21/21 19:18	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 12:52	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	6			ng/L	2	5	10/28/21 15:28	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.563		*	mg/L	0.0002	0.0005	11/02/21 12:52	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/02/21 12:52	bsu
Potassium, dissolved	M200.7 ICP	1	38.4		*	mg/L	0.2	1	10/21/21 19:18	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:18	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00521		*	mg/L	0.0001	0.00025	11/02/21 12:52	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:52	bsu
Sodium, dissolved	M200.7 ICP	1	65.9		*	mg/L	0.2	1	10/21/21 19:18	kja
Strontium, dissolved	M200.7 ICP	1	0.193		*	mg/L	0.009	0.045	10/21/21 19:18	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00029	B	*	mg/L	0.0001	0.0005	11/02/21 12:52	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:18	kja
Titanium, dissolved	M200.7 ICP	1	0.0123	B	*	mg/L	0.005	0.025	10/21/21 19:18	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:52	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00680		*	mg/L	0.0005	0.002	11/02/21 12:52	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 12:52	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-43

ACZ Sample ID: ***L69352-03***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/27/21 0:00	jck
Carbonate as CaCO3		1	56.2		*	mg/L	2	20	10/27/21 0:00	jck
Hydroxide as CaCO3		1	197		*	mg/L	2	20	10/27/21 0:00	jck
Total Alkalinity		1	253		*	mg/L	2	20	10/27/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.6			%			11/16/21 0:00	calc
Sum of Anions			7.9			meq/L			11/16/21 0:00	calc
Sum of Cations			8			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	5.86		*	mg/L	0.5	2	11/05/21 12:40	md
Conductivity @25C	SM2510B	1	1290		*	umhos/cm	1	10	10/27/21 0:22	jck
Fluoride	M300.0 - Ion Chromatography	2	0.275	B	*	mg/L	0.1	0.5	11/10/21 20:32	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		196			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.142		*	mg/L	0.02	0.1	11/06/21 1:12	pjb
pH (lab)	SM4500H+ B									
pH		1	11.9	H	*	units	0.1	0.1	10/27/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/27/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 11:58	syw
Residue, Filterable (TDS) @180C	SM2540C	1	496		*	mg/L	20	40	10/21/21 14:42	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	126		*	mg/L	5	25	11/04/21 14:48	wtc
TDS (calculated)	Calculation		384			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.29						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-44

ACZ Sample ID: ***L69352-04***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:29	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.40		*	mg/L	0.05	0.25	10/21/21 19:21	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.0136		*	mg/L	0.0004	0.002	11/02/21 12:54	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0300		*	mg/L	0.0002	0.001	11/02/21 12:54	bsu
Barium, dissolved	M200.7 ICP	1	0.0343	B	*	mg/L	0.007	0.035	10/21/21 19:21	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 12:54	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:21	kja
Boron, dissolved	M200.7 ICP	1	0.070	B	*	mg/L	0.03	0.1	10/21/21 19:21	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/02/21 12:54	bsu
Calcium, dissolved	M200.7 ICP	1	56.4		*	mg/L	0.1	0.5	10/21/21 19:21	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0476		*	mg/L	0.0005	0.002	11/02/21 12:54	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00155		*	mg/L	0.00005	0.00025	11/02/21 12:54	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00299		*	mg/L	0.0008	0.002	11/02/21 12:54	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:21	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/21/21 19:21	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00045	B	*	mg/L	0.0001	0.0005	11/02/21 12:54	bsu
Lithium, dissolved	M200.7 ICP	1	0.0736		*	mg/L	0.008	0.04	10/21/21 19:21	kja
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	10/21/21 19:21	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 12:54	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	7			ng/L	2	5	10/28/21 15:42	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.284		*	mg/L	0.0002	0.0005	11/02/21 12:54	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/02/21 12:54	bsu
Potassium, dissolved	M200.7 ICP	1	19.7		*	mg/L	0.2	1	10/21/21 19:21	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:21	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00675		*	mg/L	0.0001	0.00025	11/02/21 12:54	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:54	bsu
Sodium, dissolved	M200.7 ICP	1	61.5		*	mg/L	0.2	1	10/21/21 19:21	kja
Strontium, dissolved	M200.7 ICP	1	0.123		*	mg/L	0.009	0.045	10/21/21 19:21	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00021	B	*	mg/L	0.0001	0.0005	11/02/21 12:54	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:21	kja
Titanium, dissolved	M200.7 ICP	1	0.0097	B	*	mg/L	0.005	0.025	10/21/21 19:21	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:54	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00988		*	mg/L	0.0005	0.002	11/02/21 12:54	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 12:54	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-44

ACZ Sample ID: ***L69352-04***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/27/21 0:00	jck
Carbonate as CaCO3		1	52.1		*	mg/L	2	20	10/27/21 0:00	jck
Hydroxide as CaCO3		1	94.2		*	mg/L	2	20	10/27/21 0:00	jck
Total Alkalinity		1	146		*	mg/L	2	20	10/27/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.3			%			11/16/21 0:00	calc
Sum of Anions			5.8			meq/L			11/16/21 0:00	calc
Sum of Cations			6.2			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	5.54		*	mg/L	0.5	2	11/05/21 12:40	md
Conductivity @25C	SM2510B	1	874		*	umhos/cm	1	10	10/27/21 0:33	jck
Fluoride	M300.0 - Ion Chromatography	2	0.335	B	*	mg/L	0.1	0.5	11/12/21 16:27	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		142			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.102			mg/L	0.02	0.1	11/06/21 1:14	pjb
pH (lab)	SM4500H+ B									
pH		1	11.6	H	*	units	0.1	0.1	10/27/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/27/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 12:01	syw
Residue, Filterable (TDS) @180C	SM2540C	1	402		*	mg/L	20	40	10/21/21 14:44	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	128		*	mg/L	5	25	11/04/21 14:48	wtc
TDS (calculated)	Calculation		321			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.25						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-46

ACZ Sample ID: ***L69352-05***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:37	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.549		*	mg/L	0.05	0.25	10/21/21 19:24	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00189	B	*	mg/L	0.0004	0.002	11/02/21 12:56	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00208		*	mg/L	0.0002	0.001	11/02/21 12:56	bsu
Barium, dissolved	M200.7 ICP	1	0.434		*	mg/L	0.007	0.035	10/21/21 19:24	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 12:56	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:25	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/21/21 19:24	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000157	B	*	mg/L	0.00005	0.00025	11/02/21 12:56	bsu
Calcium, dissolved	M200.7 ICP	1	168		*	mg/L	0.1	0.5	10/21/21 19:24	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.185		*	mg/L	0.0005	0.002	11/02/21 12:56	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00338		*	mg/L	0.00005	0.00025	11/02/21 12:56	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00586		*	mg/L	0.0008	0.002	11/02/21 12:56	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:25	kja
Iron, dissolved	M200.7 ICP	1	0.138	B	*	mg/L	0.06	0.15	10/21/21 19:24	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00069		*	mg/L	0.0001	0.0005	11/02/21 12:56	bsu
Lithium, dissolved	M200.7 ICP	1	0.0956		*	mg/L	0.008	0.04	10/21/21 19:24	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/21/21 19:24	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 12:56	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	50	340			ng/L	20	50	10/28/21 17:47	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	1.30		*	mg/L	0.0002	0.0005	11/02/21 12:56	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/02/21 12:56	bsu
Potassium, dissolved	M200.7 ICP	1	192		*	mg/L	0.2	1	10/21/21 19:24	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:24	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00804		*	mg/L	0.0001	0.00025	11/02/21 12:56	bsu
Silver, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	11/02/21 12:56	bsu
Sodium, dissolved	M200.7 ICP	1	104		*	mg/L	0.2	1	10/21/21 19:24	kja
Strontium, dissolved	M200.7 ICP	1	1.12		*	mg/L	0.009	0.045	10/21/21 19:24	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00140		*	mg/L	0.0001	0.0005	11/02/21 12:56	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:24	kja
Titanium, dissolved	M200.7 ICP	1	0.0174	B	*	mg/L	0.005	0.025	10/21/21 19:24	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:56	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	11/02/21 12:56	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 12:56	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-46

ACZ Sample ID: ***L69352-05***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/27/21 0:00	jck
Carbonate as CaCO3		1	95.8		*	mg/L	2	20	10/27/21 0:00	jck
Hydroxide as CaCO3		1	740		*	mg/L	2	20	10/27/21 0:00	jck
Total Alkalinity		1	836		*	mg/L	2	20	10/27/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.9			%			11/16/21 0:00	calc
Sum of Anions			17			meq/L			11/16/21 0:00	calc
Sum of Cations			18			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	8.08		*	mg/L	0.5	2	11/05/21 12:41	md
Conductivity @25C	SM2510B	1	4010		*	umhos/cm	1	10	10/27/21 1:17	jck
Fluoride	M300.0 - Ion Chromatography	1	0.151	B	*	mg/L	0.05	0.25	11/12/21 16:45	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		419			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.626			mg/L	0.02	0.1	11/06/21 1:17	pjb
pH (lab)	SM4500H+ B									
pH		1	12.4	H	*	units	0.1	0.1	10/27/21 0:00	jck
pH measured at		1	22.2		*	C	0.1	0.1	10/27/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	10/25/21 12:02	syw
Residue, Filterable (TDS) @180C	SM2540C	5	1030		*	mg/L	100	200	10/21/21 14:46	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	17.5		*	mg/L	1	5	11/04/21 14:17	wtc
TDS (calculated)	Calculation		675			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.53						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-47

ACZ Sample ID: ***L69352-06***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:44	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.678		*	mg/L	0.05	0.25	10/21/21 19:27	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00187	B	*	mg/L	0.0004	0.002	11/02/21 12:57	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00136		*	mg/L	0.0002	0.001	11/02/21 12:57	bsu
Barium, dissolved	M200.7 ICP	1	0.263		*	mg/L	0.007	0.035	10/21/21 19:27	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 12:57	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:28	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/21/21 19:27	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000108	B	*	mg/L	0.00005	0.00025	11/02/21 12:57	bsu
Calcium, dissolved	M200.7 ICP	1	149		*	mg/L	0.1	0.5	10/21/21 19:27	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.172		*	mg/L	0.0005	0.002	11/02/21 12:57	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00228		*	mg/L	0.00005	0.00025	11/02/21 12:57	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00318		*	mg/L	0.0008	0.002	11/02/21 12:57	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:28	kja
Iron, dissolved	M200.7 ICP	1	0.070	B	*	mg/L	0.06	0.15	10/21/21 19:27	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	11/02/21 12:57	bsu
Lithium, dissolved	M200.7 ICP	1	0.0849		*	mg/L	0.008	0.04	10/21/21 19:27	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/21/21 19:27	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 12:57	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	7			ng/L	2	5	10/28/21 16:03	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.892		*	mg/L	0.0002	0.0005	11/02/21 12:57	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/02/21 12:57	bsu
Potassium, dissolved	M200.7 ICP	1	89.1		*	mg/L	0.2	1	10/21/21 19:27	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:27	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00610		*	mg/L	0.0001	0.00025	11/02/21 12:57	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:57	bsu
Sodium, dissolved	M200.7 ICP	1	79.4		*	mg/L	0.2	1	10/21/21 19:27	kja
Strontium, dissolved	M200.7 ICP	1	0.709		*	mg/L	0.009	0.045	10/21/21 19:27	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00085		*	mg/L	0.0001	0.0005	11/02/21 12:57	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:27	kja
Titanium, dissolved	M200.7 ICP	1	0.0171	B	*	mg/L	0.005	0.025	10/21/21 19:27	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:57	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	11/02/21 12:57	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 12:57	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-47

ACZ Sample ID: ***L69352-06***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/27/21 0:00	jck
Carbonate as CaCO3		1	55.4		*	mg/L	2	20	10/27/21 0:00	jck
Hydroxide as CaCO3		1	540		*	mg/L	2	20	10/27/21 0:00	jck
Total Alkalinity		1	595		*	mg/L	2	20	10/27/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/16/21 0:00	calc
Sum of Anions			13			meq/L			11/16/21 0:00	calc
Sum of Cations			13			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.80		*	mg/L	0.5	2	11/05/21 12:41	md
Conductivity @25C	SM2510B	1	2820		*	umhos/cm	1	10	10/27/21 1:32	jck
Fluoride	M300.0 - Ion Chromatography	1	0.160	B	*	mg/L	0.05	0.25	11/12/21 17:03	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		372			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.228			mg/L	0.02	0.1	11/06/21 1:24	pjb
pH (lab)	SM4500H+ B									
pH		1	12.3	H	*	units	0.1	0.1	10/27/21 0:00	jck
pH measured at		1	22.3		*	C	0.1	0.1	10/27/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.028	B	*	mg/L	0.01	0.05	10/25/21 12:03	syw
Residue, Filterable (TDS) @180C	SM2540C	1	744		*	mg/L	20	40	10/21/21 14:48	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	29.8		*	mg/L	1	5	11/04/21 14:17	wtc
TDS (calculated)	Calculation		481			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.55						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-48

ACZ Sample ID: ***L69352-07***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:52	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.785		*	mg/L	0.05	0.25	10/21/21 19:42	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00218		*	mg/L	0.0004	0.002	11/02/21 12:59	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00243		*	mg/L	0.0002	0.001	11/02/21 12:59	bsu
Barium, dissolved	M200.7 ICP	1	0.140		*	mg/L	0.007	0.035	10/21/21 19:42	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 12:59	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:37	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/21/21 19:42	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000058	B	*	mg/L	0.00005	0.00025	11/02/21 12:59	bsu
Calcium, dissolved	M200.7 ICP	1	121		*	mg/L	0.1	0.5	10/21/21 19:42	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.124		*	mg/L	0.0005	0.002	11/02/21 12:59	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00161		*	mg/L	0.00005	0.00025	11/02/21 12:59	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00272		*	mg/L	0.0008	0.002	11/02/21 12:59	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:37	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/21/21 19:42	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:59	bsu
Lithium, dissolved	M200.7 ICP	1	0.0764		*	mg/L	0.008	0.04	10/21/21 19:42	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/21/21 19:42	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 12:59	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	11			ng/L	2	5	10/28/21 16:08	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.551		*	mg/L	0.0002	0.0005	11/02/21 12:59	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/02/21 12:59	bsu
Potassium, dissolved	M200.7 ICP	1	45.1		*	mg/L	0.2	1	10/21/21 19:42	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:42	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00436		*	mg/L	0.0001	0.00025	11/02/21 12:59	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:59	bsu
Sodium, dissolved	M200.7 ICP	1	67.0		*	mg/L	0.2	1	10/21/21 19:42	kja
Strontium, dissolved	M200.7 ICP	1	0.398		*	mg/L	0.009	0.045	10/21/21 19:42	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00045	B	*	mg/L	0.0001	0.0005	11/02/21 12:59	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:42	kja
Titanium, dissolved	M200.7 ICP	1	0.0153	B	*	mg/L	0.005	0.025	10/21/21 19:42	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 12:59	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00096	B	*	mg/L	0.0005	0.002	11/02/21 12:59	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 12:59	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-48

ACZ Sample ID: ***L69352-07***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/27/21 0:00	jck
Carbonate as CaCO3		1	60.1		*	mg/L	2	20	10/27/21 0:00	jck
Hydroxide as CaCO3		1	341		*	mg/L	2	20	10/27/21 0:00	jck
Total Alkalinity		1	401		*	mg/L	2	20	10/27/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.6			%			11/16/21 0:00	calc
Sum of Anions			9.3			meq/L			11/16/21 0:00	calc
Sum of Cations			10			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.60		*	mg/L	0.5	2	11/05/21 12:42	md
Conductivity @25C	SM2510B	1	2040		*	umhos/cm	1	10	10/27/21 1:46	jck
Fluoride	M300.0 - Ion Chromatography	1	0.203	B	*	mg/L	0.05	0.25	11/11/21 8:49	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		302			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.124			mg/L	0.02	0.1	11/06/21 1:25	pjb
pH (lab)	SM4500H+ B									
pH		1	12.1	H	*	units	0.1	0.1	10/27/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/27/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 12:21	syw
Residue, Filterable (TDS) @180C	SM2540C	1	586		*	mg/L	20	40	10/21/21 14:50	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	49.6		*	mg/L	5	25	11/04/21 14:50	wtc
TDS (calculated)	Calculation		385			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.52						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-49

ACZ Sample ID: ***L69352-08***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/22/21 14:59	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.05		*	mg/L	0.05	0.25	10/21/21 19:45	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00445		*	mg/L	0.0004	0.002	11/02/21 13:04	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00479		*	mg/L	0.0002	0.001	11/02/21 13:04	bsu
Barium, dissolved	M200.7 ICP	1	0.0783		*	mg/L	0.007	0.035	10/21/21 19:45	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/02/21 13:04	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/25/21 10:46	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/21/21 19:45	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000060	B	*	mg/L	0.00005	0.00025	11/02/21 13:04	bsu
Calcium, dissolved	M200.7 ICP	1	93.5		*	mg/L	0.1	0.5	10/21/21 19:45	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0694		*	mg/L	0.0005	0.002	11/02/21 13:04	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.00125		*	mg/L	0.00005	0.00025	11/02/21 13:04	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00267		*	mg/L	0.0008	0.002	11/02/21 13:04	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/25/21 10:46	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/21/21 19:45	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00104		*	mg/L	0.0001	0.0005	11/02/21 13:04	bsu
Lithium, dissolved	M200.7 ICP	1	0.0770		*	mg/L	0.008	0.04	10/21/21 19:45	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/21/21 19:45	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/02/21 13:04	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	7			ng/L	2	5	10/28/21 16:22	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.282		*	mg/L	0.0002	0.0005	11/02/21 13:04	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/02/21 13:04	bsu
Potassium, dissolved	M200.7 ICP	1	24.5		*	mg/L	0.2	1	10/21/21 19:45	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/21/21 19:45	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00343		*	mg/L	0.0001	0.00025	11/02/21 13:04	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 13:04	bsu
Sodium, dissolved	M200.7 ICP	1	64.1		*	mg/L	0.2	1	10/21/21 19:45	kja
Strontium, dissolved	M200.7 ICP	1	0.223		*	mg/L	0.009	0.045	10/21/21 19:45	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00027	B	*	mg/L	0.0001	0.0005	11/02/21 13:04	bsu
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/21/21 19:45	kja
Titanium, dissolved	M200.7 ICP	1	0.0134	B	*	mg/L	0.005	0.025	10/21/21 19:45	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/02/21 13:04	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00348		*	mg/L	0.0005	0.002	11/02/21 13:04	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/02/21 13:04	bsu

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-49

ACZ Sample ID: ***L69352-08***
Date Sampled: *10/18/21 10:00*
Date Received: *10/19/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/27/21 0:00	jck
Carbonate as CaCO3		1	56.3		*	mg/L	2	20	10/27/21 0:00	jck
Hydroxide as CaCO3		1	216		*	mg/L	2	20	10/27/21 0:00	jck
Total Alkalinity		1	272		*	mg/L	2	20	10/27/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			7.1			%			11/16/21 0:00	calc
Sum of Anions			7.2			meq/L			11/16/21 0:00	calc
Sum of Cations			8.3			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.19		*	mg/L	0.5	2	11/05/21 12:42	md
Conductivity @25C	SM2510B	1	1410		*	umhos/cm	1	10	10/27/21 1:58	jck
Fluoride	M300.0 - Ion Chromatography	1	0.283		*	mg/L	0.05	0.25	11/11/21 9:24	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		233			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.085	B		mg/L	0.02	0.1	11/06/21 1:26	pjb
pH (lab)	SM4500H+ B									
pH		1	12.0	H	*	units	0.1	0.1	10/27/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/27/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/25/21 12:05	syw
Residue, Filterable (TDS) @180C	SM2540C	1	486		*	mg/L	20	40	10/21/21 14:52	emk
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	76.3		*	mg/L	5	25	11/04/21 14:50	wtc
TDS (calculated)	Calculation		337			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.44						11/16/21 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

MCCLELLANDLAB ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530341													
WG530341PBW1	PBW	10/26/21 20:45				3.4	mg/L		-20	20			
WG530341LCSW3	LCSW	10/26/21 21:04	WC211018-1	820.0001		802.2	mg/L	98	90	110			
L69348-06DUP	DUP	10/26/21 23:43			228	228.1	mg/L				0	20	
WG530341LCSW6	LCSW	10/27/21 0:52	WC211018-1	820.0001		791.5	mg/L	97	90	110			
WG530341PBW2	PBW	10/27/21 0:59				2.1	mg/L		-20	20			
L69379-03DUP	DUP	10/27/21 3:08			99.5	99.8	mg/L				0	20	
WG530341LCSW9	LCSW	10/27/21 5:13	WC211018-1	820.0001		793.4	mg/L	97	90	110			
WG530341PBW3	PBW	10/27/21 5:21				2.2	mg/L		-20	20			
WG530341LCSW12	LCSW	10/27/21 9:12	WC211018-1	820.0001		800.4	mg/L	98	90	110			
WG530341PBW4	PBW	10/27/21 9:20				2.8	mg/L		-20	20			
WG530341LCSW15	LCSW	10/27/21 12:28	WC211018-1	820.0001		800.9	mg/L	98	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		1.995	mg/L	100	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.15	0.15			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	1.0008		1.011	mg/L	101	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	1.0008	.678	1.695	mg/L	102	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	1.0008	.678	1.629	mg/L	95	85	115	4	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.0201		.0197	mg/L	98	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00088	0.00088			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.01		.00866	mg/L	87	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.1	U	.09609	mg/L	96	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.1	U	.09771	mg/L	98	70	130	2	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.01	U	.00858	mg/L	86	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.01	U	.00902	mg/L	90	70	130	5	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.0515	mg/L	103	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00044	0.00044			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05005		.04571	mg/L	91	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5005	U	.52733	mg/L	105	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5005	U	.50761	mg/L	101	70	130	4	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05005	U	.04751	mg/L	95	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05005	U	.05037	mg/L	101	70	130	6	20	

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ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		2.0152	mg/L	101	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.021	0.021			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	.5		.4978	mg/L	100	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	.5	.263	.7527	mg/L	98	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	.5	.263	.7306	mg/L	94	85	115	3	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.051081	mg/L	102	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.000176	0.000176			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05005		.044673	mg/L	89	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5005	U	.44949	mg/L	90	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5005	U	.448311	mg/L	90	70	130	0	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05005	U	.050302	mg/L	101	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05005	U	.055059	mg/L	110	70	130	9	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530148													
WG530148ICV	ICV	10/25/21 9:51	II211014-1	2		1.976	mg/L	99	95	105			
WG530148ICB	ICB	10/25/21 9:57				U	mg/L		-0.12	0.12			
WG530148LFB	LFB	10/25/21 10:09	II211018-2	1		1.089	mg/L	109	85	115			
L69352-06AS	AS	10/25/21 10:31	II211018-2	1	U	1.139	mg/L	114	85	115			
L69352-06ASD	ASD	10/25/21 10:34	II211018-2	1	U	1.104	mg/L	110	85	115	3	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		2.014	mg/L	101	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.09	0.09			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	.5005		.51	mg/L	102	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	.5005	U	.525	mg/L	105	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	.5005	U	.503	mg/L	100	85	115	4	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.051683	mg/L	103	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00011	0.00011			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05005		.045035	mg/L	90	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5005	U	.508986	mg/L	102	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5005	U	.499852	mg/L	100	70	130	2	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05005	.000168	.046839	mg/L	93	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05005	.000168	.048401	mg/L	96	70	130	3	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	100		99.07	mg/L	99	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.3	0.3			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	67.98972		67.48	mg/L	99	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	67.98972	149	205.3	mg/L	83	85	115			M2
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	67.98972	149	199.9	mg/L	75	85	115	3	20	M2

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG531037													
WG531037ICV	ICV	11/05/21 12:20	WI210503-1	54.89		53.43	mg/L	97	90	110			
WG531037ICB	ICB	11/05/21 12:20				U	mg/L		-1.5	1.5			
WG531037LFB1	LFB	11/05/21 12:21	WI210908-11	29.97		29.33	mg/L	98	90	110			
WG531037LFB2	LFB	11/05/21 12:36	WI210908-11	29.97		29.72	mg/L	99	90	110			
L69351-03AS	AS	11/05/21 12:37	WI210908-11	29.97	71.6	95.95	mg/L	81	90	110			M2
L69352-01DUP	DUP	11/05/21 12:38			9.41	9.13	mg/L				3	20	

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05222	mg/L	104	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.0011	0.0011			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05		.04576	mg/L	92	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5	U	.5206	mg/L	104	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5	U	.49752	mg/L	100	70	130	5	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05	U	.04709	mg/L	94	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05	U	.04964	mg/L	99	70	130	5	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.052128	mg/L	104	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00011	0.00011			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05005		.047532	mg/L	95	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5005	.0031	.527243	mg/L	105	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5005	.0031	.524931	mg/L	104	70	130	0	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05005	.0143	.063938	mg/L	99	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05005	.0143	.063604	mg/L	99	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530341													
WG530341LCSW2	LCSW	10/26/21 20:51	PCN64228	1409		1484	umhos/cm	105	90	110			
L69348-06DUP	DUP	10/26/21 23:43			670	668	umhos/cm				0	20	
WG530341LCSW5	LCSW	10/27/21 0:40	PCN64228	1409		1471	umhos/cm	104	90	110			
L69379-03DUP	DUP	10/27/21 3:08			258	260	umhos/cm				1	20	
WG530341LCSW8	LCSW	10/27/21 5:02	PCN64228	1409		1469	umhos/cm	104	90	110			
WG530341LCSW11	LCSW	10/27/21 9:00	PCN64228	1409		1464	umhos/cm	104	90	110			
WG530341LCSW14	LCSW	10/27/21 12:16	PCN64228	1409		1456	umhos/cm	103	90	110			

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ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05427	mg/L	109	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00176	0.00176			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05		.04688	mg/L	94	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5	U	.50818	mg/L	102	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5	U	.48972	mg/L	98	70	130	4	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05	.00189	.04737	mg/L	91	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05	.00189	.05024	mg/L	97	70	130	6	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG531412													
WG531412LFB1	LFB	11/10/21 16:36	WI210907-6	1.5		1.415	mg/L	94	90	110			
L69220-06DUP	DUP	11/10/21 17:13			.609	.631	mg/L				4	20	RA
L69345-01AS	AS	11/10/21 17:53	WI210907-6	3	.251	3.151	mg/L	97	90	110			
L69352-07AS	AS	11/11/21 9:06	WI210907-6	1.5	.203	1.545	mg/L	89	90	110			M2
WG531412LFB2	LFB	11/11/21 12:23	WI210907-6	1.5		1.4	mg/L	93	90	110			
L69352-06DUP	DUP	11/12/21 17:21			.16	.162	mg/L				1	20	RA

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530148													
WG530148ICV	ICV	10/25/21 9:51	II211014-1	2		2.07	mg/L	104	95	105			
WG530148ICB	ICB	10/25/21 9:57				U	mg/L		-0.3	0.3			
WG530148LFB	LFB	10/25/21 10:09	II211018-2	.9822		1.16	mg/L	118	85	115			LA
L69352-06AS	AS	10/25/21 10:31	II211018-2	.9822	U	1.23	mg/L	125	85	115			M1
L69352-06ASD	ASD	10/25/21 10:34	II211018-2	.9822	U	1.2	mg/L	122	85	115	2	20	M1

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		1.972	mg/L	99	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.18	0.18			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	1.0001		1.003	mg/L	100	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	1.0001	.07	1.088	mg/L	102	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	1.0001	.07	1.052	mg/L	98	85	115	3	20	

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ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05286	mg/L	106	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00022	0.00022			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05005		.0476	mg/L	95	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5005	U	.54067	mg/L	108	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5005	U	.52563	mg/L	105	70	130	3	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05005	U	.05015	mg/L	100	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05005	U	.05332	mg/L	107	70	130	6	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		2.0093	mg/L	100	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.024	0.024			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	.999		.9799	mg/L	98	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	.999	.0849	1.091	mg/L	101	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	.999	.0849	1.051	mg/L	97	85	115	4	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	100		95.61	mg/L	96	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.6	0.6			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	49.99828		46.61	mg/L	93	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	49.99828	U	47.87	mg/L	96	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	49.99828	U	46.32	mg/L	93	85	115	3	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05276	mg/L	106	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00088	0.00088			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.0499		.04754	mg/L	95	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.499	2.25	2.74907	mg/L	100	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.499	2.25	2.72734	mg/L	96	70	130	1	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.0499	.827	.87911	mg/L	104	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.0499	.827	.86485	mg/L	76	70	130	2	20	

MCCLELLANDLAB ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG530531													
WG530531CCV2	CCV	10/28/21 10:08	HG211011-4	10		9.43	ng/L	94	76.5	123.4			
WG530531CCB1	CCB	10/28/21 10:13				U	ng/L		-0.501	0.501			
WG530531PQV	PQV	10/28/21 10:18	HG211011-6	1		.76	ng/L	76	70	130			
WG530531CCV3	CCV	10/28/21 14:54	HG211011-4	10		9.33	ng/L	93	76.5	123.4			
WG530531CCB2	CCB	10/28/21 14:59				U	ng/L		-0.501	0.501			
WG530531LFB	LFB	10/28/21 15:03	HG211011-5	2		1.96	ng/L	98	71	125			
L69352-03MS	MS	10/28/21 15:32	HG16315X	50	6	15	ng/L	90	71	125			
L69352-03MSD	MSD	10/28/21 15:37	HG16315X	50	6	15.25	ng/L	93	71	125	2	24	
WG530531CCV4	CCV	10/28/21 16:12	HG211011-4	10		9.4	ng/L	94	76.5	123.4			
WG530531CCB3	CCB	10/28/21 16:17				U	ng/L		-0.501	0.501			
WG530531CCV5	CCV	10/28/21 17:32	HG211011-4	10		9.53	ng/L	95	76.5	123.4			
WG530531CCB4	CCB	10/28/21 17:37				U	ng/L		-0.501	0.501			
WG530531CCV6	CCV	10/28/21 17:56	HG211011-4	10		9.57	ng/L	96	76.5	123.4			
WG530531CCB5	CCB	10/28/21 18:01				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.01992		.02095	mg/L	105	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00044	0.00044			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05005		.04712	mg/L	94	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5005	.00333	.55764	mg/L	111	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5005	.00333	.54605	mg/L	108	70	130	2	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05005	.00188	.05234	mg/L	101	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05005	.00188	.0542	mg/L	105	70	130	3	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05189	mg/L	104	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00088	0.00088			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05		.0447	mg/L	89	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5	U	.48906	mg/L	98	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5	U	.4676	mg/L	94	70	130	4	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05	.128	.17193	mg/L	88	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05	.128	.17637	mg/L	97	70	130	3	20	

MCCLELLANDLAB ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG531147													
WG531147ICV	ICV	11/05/21 21:50	WI210904-1	2.4161		2.335	mg/L	97	90	110			
WG531147ICB	ICB	11/05/21 21:51				U	mg/L		-0.02	0.02			
WG531152													
WG531152LFB1	LFB	11/06/21 0:33	WI211001-5	2		1.978	mg/L	99	90	110			
L69345-03AS	AS	11/06/21 0:55	WI211001-5	2	.598	2.675	mg/L	104	90	110			
L69348-01DUP	DUP	11/06/21 0:57			U	U	mg/L				0	20	RA
WG531152LFB2	LFB	11/06/21 1:13	WI211001-5	2		1.967	mg/L	98	90	110			
L69352-04AS	AS	11/06/21 1:15	WI211001-5	2	.102	2.181	mg/L	104	90	110			
L69352-05DUP	DUP	11/06/21 1:18			.626	.627	mg/L				0	20	

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530341													
WG530341LCSW1	LCSW	10/26/21 20:50	PCN62948	6		6.1	units	102	5.9	6.1			
L69348-06DUP	DUP	10/26/21 23:43			8.2	8.1	units				1	20	
WG530341LCSW4	LCSW	10/27/21 0:38	PCN62948	6		6.1	units	102	5.9	6.1			
L69379-03DUP	DUP	10/27/21 3:08			8.3	8.2	units				1	20	
WG530341LCSW7	LCSW	10/27/21 5:00	PCN62948	6		6.1	units	102	5.9	6.1			
WG530341LCSW10	LCSW	10/27/21 8:59	PCN62948	6		6.1	units	102	5.9	6.1			
WG530341LCSW13	LCSW	10/27/21 12:14	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530210													
WG530210ICV	ICV	10/25/21 11:45	WI211018-4	.65228		.689	mg/L	106	90	110			
WG530210ICB	ICB	10/25/21 11:47				U	mg/L		-0.01	0.01			
WG530103LRB	LRB	10/25/21 11:48				U	mg/L		-0.01	0.01			
WG530103LFB	LFB	10/25/21 11:49	WI211015-3	.5		.49	mg/L	98	90	110			
L69345-01LFM	LFM	10/25/21 11:51	WI211015-3	.5	U	.495	mg/L	99	90	110			
L69345-02DUP	DUP	10/25/21 11:53			U	U	mg/L				0	20	RA
L69352-08LFM	LFM	10/25/21 12:06	WI211015-3	.5	U	.487	mg/L	97	90	110			
L69356-01DUP	DUP	10/25/21 12:09			.389	.422	mg/L				8	20	
WG530210ICV1	ICV	10/25/21 12:59	WI211018-4	.65228		.698	mg/L	107	90	110			
WG530210ICB1	ICB	10/25/21 13:01				U	mg/L		-0.01	0.01			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	20		19.76	mg/L	99	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.6	0.6			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	99.96008		97.27	mg/L	97	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	99.96008	89.1	184.4	mg/L	95	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	99.96008	89.1	179.3	mg/L	90	85	115	3	20	

MCCLELLANDLAB ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530037													
WG530037PBW	PBW	10/21/21 14:15				U	mg/L		-20	20			
WG530037LCSW	LCSW	10/21/21 14:16	PCN64121	1000		984	mg/L	98	80	120			
L69352-01DUP	DUP	10/21/21 14:38			660	620	mg/L				6	10	RA
L69358-03DUP	DUP	10/21/21 14:59			1860	1860	mg/L				0	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		1.969	mg/L	98	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.15	0.15			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	1.0017		1.016	mg/L	101	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	1.0017	U	1.049	mg/L	105	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	1.0017	U	.99	mg/L	99	85	115	6	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05088	mg/L	102	90	110			
WG530795ICB	ICB	11/02/21 12:26				.00011	mg/L		-0.00022	0.00022			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05		.04442	mg/L	89	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5	.00818	.54262	mg/L	107	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5	.00818	.54085	mg/L	107	70	130	0	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05	.00043	.05273	mg/L	105	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05	.00043	.05512	mg/L	109	70	130	4	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.02		.02055	mg/L	103	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00022	0.00022			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.01		.00914	mg/L	91	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.1	U	.07807	mg/L	78	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.1	U	.08596	mg/L	86	70	130	10	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.01	U	.00874	mg/L	87	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.01	U	.00918	mg/L	92	70	130	5	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	100		99.84	mg/L	100	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.6	0.6			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	100.007		98.15	mg/L	98	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	100.007	79.4	174.4	mg/L	95	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	100.007	79.4	168.3	mg/L	89	85	115	4	20	

MCCLELLANDLAB ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		1.9438	mg/L	97	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.027	0.027			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	.5005		.5277	mg/L	105	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	.5005	.709	1.205	mg/L	99	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	.5005	.709	1.166	mg/L	91	85	115	3	20	

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG531014													
WG531014ICB	ICB	11/04/21 8:17				U	mg/L		-3	3			
WG531014ICV	ICV	11/04/21 8:17	WI211027-1	20.46		18.7	mg/L	91	90	110			
WG531014LFB	LFB	11/04/21 10:41	WI210105-3	10		9.7	mg/L	97	90	110			
L69352-01AS	AS	11/04/21 11:23	SO4TURB5X	10	123	127.2	mg/L	42	90	110			M3
L69352-02DUP	DUP	11/04/21 11:23			127	128.1	mg/L				1	20	
WG531016													
WG531016ICB	ICB	11/04/21 8:17				U	mg/L		-3	3			
WG531016ICV	ICV	11/04/21 8:17	WI211027-1	20.46		18.7	mg/L	91	90	110			
WG531016LFB	LFB	11/04/21 14:17	WI210105-3	10		9.5	mg/L	95	90	110			
L69352-03DUP	DUP	11/04/21 14:48			126	124.7	mg/L				1	20	
L69352-04AS	AS	11/04/21 14:50	SO4TURB5X	10	128	142.3	mg/L	143	90	110			M3

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05477	mg/L	110	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00022	0.00022			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05		.04868	mg/L	97	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5	U	.54091	mg/L	108	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5	U	.53716	mg/L	107	70	130	1	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05	U	.05085	mg/L	102	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05	U	.05391	mg/L	108	70	130	6	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		1.995	mg/L	100	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.12	0.12			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	1.002		.985	mg/L	98	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	1.002	U	.999	mg/L	100	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	1.002	U	.959	mg/L	96	85	115	4	20	

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ACZ Project ID: ***L69352***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530018													
WG530018ICV	ICV	10/21/21 18:05	II211014-1	2		1.9695	mg/L	98	95	105			
WG530018ICB	ICB	10/21/21 18:11				U	mg/L		-0.015	0.015			
WG530018LFB	LFB	10/21/21 18:24	II211018-2	1		1.004	mg/L	100	85	115			
L69352-06AS	AS	10/21/21 19:30	II211018-2	1	.0171	1.029	mg/L	101	85	115			
L69352-06ASD	ASD	10/21/21 19:39	II211018-2	1	.0171	.9944	mg/L	98	85	115	3	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.05249	mg/L	105	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.00022	0.00022			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05		.04737	mg/L	95	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5	.0613	.61934	mg/L	112	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5	.0613	.60457	mg/L	109	70	130	2	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05	.00527	.05659	mg/L	103	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05	.00527	.05991	mg/L	109	70	130	6	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.04968	mg/L	99	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.0011	0.0011			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.05		.0448	mg/L	90	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.5	U	.52709	mg/L	105	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.5	U	.49858	mg/L	100	70	130	6	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.05	U	.04767	mg/L	95	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.05	U	.05017	mg/L	100	70	130	5	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530795													
WG530795ICV	ICV	11/02/21 12:25	MS211013-2	.05		.0506	mg/L	101	90	110			
WG530795ICB	ICB	11/02/21 12:26				U	mg/L		-0.0132	0.0132			
WG530795LFB	LFB	11/02/21 12:28	MS210927-3	.050075		.0486	mg/L	97	85	115			
L69159-02AS	AS	11/02/21 12:38	MS210927-3	.50075	U	.5386	mg/L	108	70	130			
L69159-02ASD	ASD	11/02/21 12:39	MS210927-3	.50075	U	.5242	mg/L	105	70	130	3	20	
L69356-03AS	AS	11/02/21 13:10	MS210927-3	.050075	.0249	.0721	mg/L	94	70	130			
L69356-03ASD	ASD	11/02/21 13:12	MS210927-3	.050075	.0249	.0733	mg/L	97	70	130	2	20	

McClelland Laboratories, Inc. ACZ Project ID: ***L69352***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69352-01	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531152	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530210	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530037	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531014	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69352-02	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531152	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530210	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531014	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

McClelland Laboratories, Inc. ACZ Project ID: ***L69352***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69352-03	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531152	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530210	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531016	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69352-04	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530210	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531016	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69352-05	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530210	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531016	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

McClelland Laboratories, Inc. ACZ Project ID: ***L69352***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69352-06	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530210	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531016	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69352-07	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG530210	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531016	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L69352-08	WG530795	Beryllium, dissolved	M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG530018	Calcium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531037	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531412	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530148	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG531016	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69352
Date Received: 10/19/2021 11:43
Received By:
Date Printed: 10/20/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?		X	

L69352-01 Container B2467558 (RAW): There is limited supply in this container.

L69352-02 Container B2467564 (RAW): There is limited supply in this container.

L69352-03 Container B2467569 (RAW): There is limited supply in this container.

L69352-04 Container B2467574 (RAW): There is limited supply in this container.

L69352-05 Container B2467579 (RAW): There is limited supply in this container.

L69352-06 Container B2467584 (RAW): There is limited supply in this container.

L69352-07 Container B2467589 (RAW): There is limited supply in this container.

L69352-08 Container B2467594 (RAW): There is limited supply in this container.

13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69352
Date Received: 10/19/2021 11:43
Received By:
Date Printed: 10/20/2021

18) Were all samples received within hold time? | | X | |

Some parameters were received past hold time.

NA indicates Not Applicable

Chain of Custody Related Remarks

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
7204	5.5	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L69352

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina
Company: McClelland Laboratories
E-mail: mmedina@mettest.com
Address:
Telephone:

Copy of Report to:

Name:
Company:
E-mail: results@mettest.com
Telephone:

Invoice to:

Name:
Company:
E-mail: mliap@mettest.com
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ☒ NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ☐

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** **State** NV **Zip code** 89436 **Time Zone** PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 B-41	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-42	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-43	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-44	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-46	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-47	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-48	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-49	10/18/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
			10/19/21 11:43

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L69352 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/31/2021

Quote Number: GRASSY-LEACH

Matrix: Leachate Grassy Mountain Leachate

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digesti		$0.00
Metals Analysis			
Aluminum, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Barium, dissolved	M200.7 ICP	0.007 mg/L	$7.40
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$14.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$7.40
Boron, dissolved	M200.7 ICP	0.03 mg/L	$7.40
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$14.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Iron, dissolved	M200.7 ICP	0.06 mg/L	$7.40
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$7.40
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$41.20
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$7.40
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Tin, dissolved	M200.7 ICP	0.04 mg/L	$7.40

REPAD.09.06.05.01 S/ sh D/ 14 P/

Titanium, dissolved	M200.7 ICP	0.005 mg/L	$7.40
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$14.00
Misc.			
Electronic Data Deliverable			$0.00
Setup charge for ICPMS			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$9.80
Cation-Anion Balance	Calculation		$0.00
Chloride	SM4500Cl-E	0.5 mg/L	$9.00
Conductivity @25C	SM2510B	1 umhos/cm	$6.60
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$10.80
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$9.00
pH (lab)	SM4500H+ B	0.1 C	$6.60
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$19.00
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$11.60
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1 mg/L	$9.00
TDS (calculated)	Calculation	Calculation	$0.00
TDS (ratio - measured/calculated)	Calculation	Calculation	$0.00
		Cost/Sample:	**$481.60**

Leachates will be supplied from Gene McClelland's lab in Nevada. Pricing is based on standard TAT for waters of ~ three weeks and will vary with workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: GRASSY-LEACH

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 16, 2021

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

Project ID:
ACZ Project ID: L69426

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 21, 2021. This project has been assigned to ACZ's project number, L69426. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L69426. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 16, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

S. Habermehl

Scott Habermehl has reviewed
and approved this report.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-51

ACZ Sample ID: ***L69426-01***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 11:37	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	0.914		*	mg/L	0.1	0.5	10/31/21 19:48	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00357		*	mg/L	0.0004	0.002	11/03/21 14:06	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00443		*	mg/L	0.0002	0.001	11/03/21 14:06	mfm
Barium, dissolved	M200.7 ICP	2	0.171		*	mg/L	0.014	0.07	10/31/21 19:48	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:06	mfm
Bismuth, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	11/02/21 19:16	kja
Boron, dissolved	M200.7 ICP	2	<0.06	U	*	mg/L	0.06	0.2	10/31/21 19:48	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000432		*	mg/L	0.00005	0.00025	11/03/21 14:06	mfm
Calcium, dissolved	M200.7 ICP	2	87.9		*	mg/L	0.2	1	10/31/21 19:48	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.415		*	mg/L	0.0005	0.002	11/03/21 14:06	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00450		*	mg/L	0.00005	0.00025	11/03/21 14:06	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00537		*	mg/L	0.0008	0.002	11/03/21 14:06	mfm
Gallium, dissolved	M200.7 ICP	2	<0.2	U	*	mg/L	0.2	1	10/31/21 19:48	kja
Iron, dissolved	M200.7 ICP	2	0.187	B	*	mg/L	0.12	0.3	10/31/21 19:48	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00258		*	mg/L	0.0001	0.0005	11/03/21 14:06	mfm
Lithium, dissolved	M200.7 ICP	2	0.0990		*	mg/L	0.016	0.08	10/31/21 19:48	kja
Magnesium, dissolved	M200.7 ICP	2	<0.4	U	*	mg/L	0.4	2	10/31/21 19:48	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:06	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	50	570			ng/L	20	50	10/28/21 17:51	scp
Molybdenum, dissolved	M200.8 ICP-MS	20	2.40		*	mg/L	0.004	0.01	11/09/21 17:09	bsu
Nickel, dissolved	M200.8 ICP-MS	1	0.00041	B	*	mg/L	0.0004	0.001	11/03/21 14:06	mfm
Potassium, dissolved	M200.7 ICP	2	186		*	mg/L	0.4	2	10/31/21 19:48	kja
Scandium, dissolved	M200.7 ICP	2	<0.1	U	*	mg/L	0.1	0.4	10/31/21 19:48	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.0144		*	mg/L	0.0001	0.00025	11/03/21 14:06	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00023	B	*	mg/L	0.0001	0.0005	11/03/21 14:06	mfm
Sodium, dissolved	M200.7 ICP	2	94.8		*	mg/L	0.4	2	10/31/21 19:48	kja
Strontium, dissolved	M200.7 ICP	2	0.560		*	mg/L	0.018	0.09	10/31/21 19:48	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00116		*	mg/L	0.0001	0.0005	11/03/21 14:06	mfm
Tin, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	10/31/21 19:48	kja
Titanium, dissolved	M200.7 ICP	2	0.0218	B	*	mg/L	0.01	0.05	10/31/21 19:48	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	11/03/21 14:06	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00155	B	*	mg/L	0.0005	0.002	11/03/21 14:06	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:06	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-51

ACZ Sample ID: ***L69426-01***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	97.6		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	504		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	602		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.7			%			11/16/21 0:00	calc
Sum of Anions			13			meq/L			11/16/21 0:00	calc
Sum of Cations			14			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	9.36		*	mg/L	0.5	2	11/10/21 10:21	md
Conductivity @25C	SM2510B	1	3040		*	umhos/cm	1	10	10/29/21 22:15	jck
Fluoride	M300.0 - Ion Chromatography	1	0.255		*	mg/L	0.05	0.25	11/11/21 12:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		219			mg/L	0.5	10	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.842		*	mg/L	0.02	0.1	11/06/21 22:33	pjb
pH (lab)	SM4500H+ B									
pH		1	12.2	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.3		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	11/06/21 1:57	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	918		*	mg/L	20	40	10/27/21 9:24	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	52.8			mg/L	5	25	11/09/21 12:15	syw
TDS (calculated)	Calculation		577			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.59						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-52

ACZ Sample ID: ***L69426-02***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 11:56	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.890		*	mg/L	0.05	0.25	10/31/21 19:51	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00328		*	mg/L	0.0004	0.002	11/03/21 14:08	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00368		*	mg/L	0.0002	0.001	11/03/21 14:08	mfm
Barium, dissolved	M200.7 ICP	1	0.140		*	mg/L	0.007	0.035	10/31/21 19:51	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:08	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	11/02/21 19:20	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/31/21 19:51	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000190	B	*	mg/L	0.00005	0.00025	11/03/21 14:08	mfm
Calcium, dissolved	M200.7 ICP	1	105		*	mg/L	0.1	0.5	10/31/21 19:51	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.254		*	mg/L	0.0005	0.002	11/03/21 14:08	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00249		*	mg/L	0.00005	0.00025	11/03/21 14:08	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00335		*	mg/L	0.0008	0.002	11/03/21 14:08	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/31/21 19:51	kja
Iron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.06	0.15	10/31/21 19:51	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00139		*	mg/L	0.0001	0.0005	11/03/21 14:08	mfm
Lithium, dissolved	M200.7 ICP	1	0.0875		*	mg/L	0.008	0.04	10/31/21 19:51	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/31/21 19:51	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:08	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	87			ng/L	2	5	10/28/21 16:41	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	1.35		*	mg/L	0.0002	0.0005	11/03/21 14:08	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/03/21 14:08	mfm
Potassium, dissolved	M200.7 ICP	1	93.4		*	mg/L	0.2	1	10/31/21 19:51	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/31/21 19:51	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00890		*	mg/L	0.0001	0.00025	11/03/21 14:08	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:08	mfm
Sodium, dissolved	M200.7 ICP	1	77.6		*	mg/L	0.2	1	10/31/21 19:51	kja
Strontium, dissolved	M200.7 ICP	1	0.472		*	mg/L	0.009	0.045	10/31/21 19:51	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.0005	11/03/21 14:08	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/31/21 19:51	kja
Titanium, dissolved	M200.7 ICP	1	0.0167	B	*	mg/L	0.005	0.025	10/31/21 19:51	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:08	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00203		*	mg/L	0.0005	0.002	11/03/21 14:08	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:08	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-52

ACZ Sample ID: ***L69426-02***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	66.0		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	351		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	417		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			5.3			%			11/16/21 0:00	calc
Sum of Anions			9.9			meq/L			11/16/21 0:00	calc
Sum of Cations			11			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	7.28		*	mg/L	0.5	2	11/10/21 10:23	md
Conductivity @25C	SM2510B	1	2190		*	umhos/cm	1	10	10/29/21 22:28	jck
Fluoride	M300.0 - Ion Chromatography	2	0.163	B	*	mg/L	0.1	0.5	11/11/21 13:17	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		262			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.265		*	mg/L	0.02	0.1	11/06/21 22:34	pjb
pH (lab)	SM4500H+ B									
pH		1	12.1	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	11/06/21 1:59	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	630		*	mg/L	20	40	10/27/21 9:27	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	64.6			mg/L	5	25	11/09/21 12:16	syw
TDS (calculated)	Calculation		449			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.40						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-53

ACZ Sample ID: ***L69426-03***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 12:15	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.999		*	mg/L	0.05	0.25	10/31/21 19:54	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00433		*	mg/L	0.0004	0.002	11/03/21 14:09	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00537		*	mg/L	0.0002	0.001	11/03/21 14:09	mfm
Barium, dissolved	M200.7 ICP	1	0.102		*	mg/L	0.007	0.035	10/31/21 19:54	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:09	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	11/02/21 19:23	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/31/21 19:54	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000127	B	*	mg/L	0.00005	0.00025	11/03/21 14:09	mfm
Calcium, dissolved	M200.7 ICP	1	101		*	mg/L	0.1	0.5	10/31/21 19:54	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.161		*	mg/L	0.0005	0.002	11/03/21 14:09	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00173		*	mg/L	0.00005	0.00025	11/03/21 14:09	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00162	B	*	mg/L	0.0008	0.002	11/03/21 14:09	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/31/21 19:54	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/31/21 19:54	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00023	B	*	mg/L	0.0001	0.0005	11/03/21 14:09	mfm
Lithium, dissolved	M200.7 ICP	1	0.0861		*	mg/L	0.008	0.04	10/31/21 19:54	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/31/21 19:54	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:09	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	7			ng/L	2	5	10/28/21 16:46	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.766		*	mg/L	0.0002	0.0005	11/03/21 14:09	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/03/21 14:09	mfm
Potassium, dissolved	M200.7 ICP	1	50.8		*	mg/L	0.2	1	10/31/21 19:54	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/31/21 19:54	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00576		*	mg/L	0.0001	0.00025	11/03/21 14:09	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:09	mfm
Sodium, dissolved	M200.7 ICP	1	69.2		*	mg/L	0.2	1	10/31/21 19:54	kja
Strontium, dissolved	M200.7 ICP	1	0.330		*	mg/L	0.009	0.045	10/31/21 19:54	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00051		*	mg/L	0.0001	0.0005	11/03/21 14:09	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/31/21 19:54	kja
Titanium, dissolved	M200.7 ICP	1	0.0164	B	*	mg/L	0.005	0.025	10/31/21 19:54	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:09	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00363		*	mg/L	0.0005	0.002	11/03/21 14:09	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:09	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-53

ACZ Sample ID: ***L69426-03***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	55.8		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	266		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	322		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			5.6			%			11/16/21 0:00	calc
Sum of Anions			8.5			meq/L			11/16/21 0:00	calc
Sum of Cations			9.5			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.65		*	mg/L	0.5	2	11/10/21 10:23	md
Conductivity @25C	SM2510B	1	1740		*	umhos/cm	1	10	10/29/21 22:42	jck
Fluoride	M300.0 - Ion Chromatography	1	0.254		*	mg/L	0.05	0.25	11/11/21 14:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		252			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.169		*	mg/L	0.02	0.1	11/06/21 22:35	pjb
pH (lab)	SM4500H+ B									
pH		1	12.0	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	11/06/21 2:02	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	542		*	mg/L	20	40	10/27/21 9:29	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	89.7			mg/L	5	25	11/09/21 12:16	syw
TDS (calculated)	Calculation		398			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.36						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-54

ACZ Sample ID: ***L69426-04***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 12:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.32		*	mg/L	0.05	0.25	10/31/21 19:57	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00876		*	mg/L	0.0004	0.002	11/03/21 14:11	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0126		*	mg/L	0.0002	0.001	11/03/21 14:11	mfm
Barium, dissolved	M200.7 ICP	1	0.0701		*	mg/L	0.007	0.035	10/31/21 19:57	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:11	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	11/02/21 19:26	kja
Boron, dissolved	M200.7 ICP	1	0.040	B	*	mg/L	0.03	0.1	10/31/21 19:57	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000054	B	*	mg/L	0.00005	0.00025	11/03/21 14:11	mfm
Calcium, dissolved	M200.7 ICP	1	82.9		*	mg/L	0.1	0.5	10/31/21 19:57	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0877		*	mg/L	0.0005	0.002	11/03/21 14:11	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00148		*	mg/L	0.00005	0.00025	11/03/21 14:11	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00149	B	*	mg/L	0.0008	0.002	11/03/21 14:11	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/31/21 19:57	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/31/21 19:57	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00034	B	*	mg/L	0.0001	0.0005	11/03/21 14:11	mfm
Lithium, dissolved	M200.7 ICP	1	0.0859		*	mg/L	0.008	0.04	10/31/21 19:57	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/31/21 19:57	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:11	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	7			ng/L	2	5	10/28/21 16:51	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.403		*	mg/L	0.0002	0.0005	11/03/21 14:11	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/03/21 14:11	mfm
Potassium, dissolved	M200.7 ICP	1	27.9		*	mg/L	0.2	1	10/31/21 19:57	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/31/21 19:57	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00535		*	mg/L	0.0001	0.00025	11/03/21 14:11	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:11	mfm
Sodium, dissolved	M200.7 ICP	1	65.6		*	mg/L	0.2	1	10/31/21 19:57	kja
Strontium, dissolved	M200.7 ICP	1	0.209		*	mg/L	0.009	0.045	10/31/21 19:57	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00034	B	*	mg/L	0.0001	0.0005	11/03/21 14:11	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/31/21 19:57	kja
Titanium, dissolved	M200.7 ICP	1	0.0151	B	*	mg/L	0.005	0.025	10/31/21 19:57	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:11	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00747		*	mg/L	0.0005	0.002	11/03/21 14:11	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:11	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-54

ACZ Sample ID: ***L69426-04***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	51.9		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	189		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	241		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.9			%			11/16/21 0:00	calc
Sum of Anions			7.3			meq/L			11/16/21 0:00	calc
Sum of Cations			7.9			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.26		*	mg/L	0.5	2	11/10/21 10:24	md
Conductivity @25C	SM2510B	1	1260		*	umhos/cm	1	10	10/29/21 22:55	jck
Fluoride	M300.0 - Ion Chromatography	1	0.352		*	mg/L	0.05	0.25	11/11/21 14:47	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		207			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.073	B	*	mg/L	0.02	0.1	11/06/21 22:41	pjb
pH (lab)	SM4500H+ B									
pH		1	11.9	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.6		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	11/06/21 2:03	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	458		*	mg/L	20	40	10/27/21 9:40	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	107			mg/L	5	25	11/09/21 12:16	syw
TDS (calculated)	Calculation		355			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.29						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-56

ACZ Sample ID: ***L69426-05***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 12:33	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	0.410	B	*	mg/L	0.1	0.5	10/31/21 20:00	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00112	B	*	mg/L	0.0004	0.002	11/03/21 14:13	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00172		*	mg/L	0.0002	0.001	11/03/21 14:13	mfm
Barium, dissolved	M200.7 ICP	2	1.17		*	mg/L	0.014	0.07	10/31/21 20:00	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:13	mfm
Bismuth, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	11/02/21 19:29	kja
Boron, dissolved	M200.7 ICP	2	<0.06	U	*	mg/L	0.06	0.2	10/31/21 20:00	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000057	B	*	mg/L	0.00005	0.00025	11/03/21 14:13	mfm
Calcium, dissolved	M200.7 ICP	2	339		*	mg/L	0.2	1	10/31/21 20:00	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.132		*	mg/L	0.0005	0.002	11/03/21 14:13	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00600		*	mg/L	0.00005	0.00025	11/03/21 14:13	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00892		*	mg/L	0.0008	0.002	11/03/21 14:13	mfm
Gallium, dissolved	M200.7 ICP	2	<0.2	U	*	mg/L	0.2	1	10/31/21 20:00	kja
Iron, dissolved	M200.7 ICP	2	0.285	B	*	mg/L	0.12	0.3	10/31/21 20:00	kja
Lead, dissolved	M200.8 ICP-MS	2	0.00052	B	*	mg/L	0.0002	0.001	11/09/21 17:10	bsu
Lithium, dissolved	M200.7 ICP	2	0.162		*	mg/L	0.016	0.08	10/31/21 20:00	kja
Magnesium, dissolved	M200.7 ICP	2	<0.4	U	*	mg/L	0.4	2	10/31/21 20:00	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:13	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	50	350			ng/L	20	50	10/28/21 17:03	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.293		*	mg/L	0.0002	0.0005	11/03/21 14:13	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00056	B	*	mg/L	0.0004	0.001	11/03/21 14:13	mfm
Potassium, dissolved	M200.7 ICP	2	90.3		*	mg/L	0.4	2	10/31/21 20:00	kja
Scandium, dissolved	M200.7 ICP	2	<0.1	U	*	mg/L	0.1	0.4	10/31/21 20:00	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00537		*	mg/L	0.0001	0.00025	11/03/21 14:13	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0001	0.0005	11/03/21 14:13	mfm
Sodium, dissolved	M200.7 ICP	2	86.9		*	mg/L	0.4	2	10/31/21 20:00	kja
Strontium, dissolved	M200.7 ICP	2	1.81		*	mg/L	0.018	0.09	10/31/21 20:00	kja
Thallium, dissolved	M200.8 ICP-MS	2	0.00127		*	mg/L	0.0002	0.001	11/09/21 17:10	bsu
Tin, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	10/31/21 20:00	kja
Titanium, dissolved	M200.7 ICP	2	0.0398	B	*	mg/L	0.01	0.05	10/31/21 20:00	kja
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	11/09/21 17:10	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	11/03/21 14:13	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:13	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-56

ACZ Sample ID: ***L69426-05***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	87.6		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	971		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	1060		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.2			%			11/16/21 0:00	calc
Sum of Anions			22			meq/L			11/16/21 0:00	calc
Sum of Cations			23			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	8.05		*	mg/L	0.5	2	11/10/21 10:24	md
Conductivity @25C	SM2510B	1	4960		*	umhos/cm	1	10	10/29/21 23:12	jck
Fluoride	M300.0 - Ion Chromatography	1	0.114	B	*	mg/L	0.05	0.25	11/11/21 15:05	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		846			mg/L	0.5	10	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.835		*	mg/L	0.02	0.1	11/06/21 22:42	pjb
pH (lab)	SM4500H+ B									
pH		1	12.5	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.7		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.013	B	*	mg/L	0.01	0.05	11/06/21 2:04	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	1220		*	mg/L	20	40	10/27/21 9:42	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	6.2			mg/L	1	5	11/09/21 11:58	syw
TDS (calculated)	Calculation		751			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.62						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-57

ACZ Sample ID: ***L69426-06***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 12:43	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	0.615		*	mg/L	0.1	0.5	10/31/21 20:03	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00160	B	*	mg/L	0.0004	0.002	11/03/21 14:15	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00133		*	mg/L	0.0002	0.001	11/03/21 14:15	mfm
Barium, dissolved	M200.7 ICP	2	0.516		*	mg/L	0.014	0.07	10/31/21 20:03	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:15	mfm
Bismuth, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	11/02/21 19:33	kja
Boron, dissolved	M200.7 ICP	2	<0.06	U	*	mg/L	0.06	0.2	10/31/21 20:03	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/03/21 14:15	mfm
Calcium, dissolved	M200.7 ICP	2	222		*	mg/L	0.2	1	10/31/21 20:03	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.139		*	mg/L	0.0005	0.002	11/03/21 14:15	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00321		*	mg/L	0.00005	0.00025	11/03/21 14:15	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00549		*	mg/L	0.0008	0.002	11/03/21 14:15	mfm
Gallium, dissolved	M200.7 ICP	2	<0.2	U	*	mg/L	0.2	1	10/31/21 20:03	kja
Iron, dissolved	M200.7 ICP	2	<0.12	U	*	mg/L	0.12	0.3	10/31/21 20:03	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00022	B	*	mg/L	0.0001	0.0005	11/03/21 14:15	mfm
Lithium, dissolved	M200.7 ICP	2	0.124		*	mg/L	0.016	0.08	10/31/21 20:03	kja
Magnesium, dissolved	M200.7 ICP	2	<0.4	U	*	mg/L	0.4	2	10/31/21 20:03	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:15	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	46			ng/L	2	5	10/28/21 17:18	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.234		*	mg/L	0.0002	0.0005	11/03/21 14:15	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/03/21 14:15	mfm
Potassium, dissolved	M200.7 ICP	2	38.4		*	mg/L	0.4	2	10/31/21 20:03	kja
Scandium, dissolved	M200.7 ICP	2	<0.1	U	*	mg/L	0.1	0.4	10/31/21 20:03	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00473		*	mg/L	0.0001	0.00025	11/03/21 14:15	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:15	mfm
Sodium, dissolved	M200.7 ICP	2	71.6		*	mg/L	0.4	2	10/31/21 20:03	kja
Strontium, dissolved	M200.7 ICP	2	0.841		*	mg/L	0.018	0.09	10/31/21 20:03	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00073		*	mg/L	0.0001	0.0005	11/03/21 14:15	mfm
Tin, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	10/31/21 20:03	kja
Titanium, dissolved	M200.7 ICP	2	0.0344	B	*	mg/L	0.01	0.05	10/31/21 20:03	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:15	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	11/03/21 14:15	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:15	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-57

ACZ Sample ID: ***L69426-06***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	72.6		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	611		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	683		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.4			%			11/16/21 0:00	calc
Sum of Anions			14			meq/L			11/16/21 0:00	calc
Sum of Cations			15			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.63		*	mg/L	0.5	2	11/10/21 10:25	md
Conductivity @25C	SM2510B	1	3220		*	umhos/cm	1	10	10/29/21 23:29	jck
Fluoride	M300.0 - Ion Chromatography	1	0.152	B	*	mg/L	0.05	0.25	11/11/21 15:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		554			mg/L	0.5	10	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.335		*	mg/L	0.02	0.1	11/06/21 22:43	pjb
pH (lab)	SM4500H+ B									
pH		1	12.3	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.4		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	11/06/21 2:05	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	772		*	mg/L	20	40	10/27/21 9:44	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	19.2			mg/L	1	5	11/09/21 11:58	syw
TDS (calculated)	Calculation		507			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.52						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-58

ACZ Sample ID: ***L69426-07***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 12:52	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.907		*	mg/L	0.05	0.25	10/31/21 20:06	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00240		*	mg/L	0.0004	0.002	11/03/21 14:24	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00147		*	mg/L	0.0002	0.001	11/03/21 14:24	mfm
Barium, dissolved	M200.7 ICP	1	0.205		*	mg/L	0.007	0.035	10/31/21 20:06	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:24	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	11/02/21 19:36	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/31/21 20:06	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000061	B	*	mg/L	0.00005	0.00025	11/03/21 14:24	mfm
Calcium, dissolved	M200.7 ICP	1	161		*	mg/L	0.1	0.5	10/31/21 20:06	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0992		*	mg/L	0.0005	0.002	11/03/21 14:24	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00220		*	mg/L	0.00005	0.00025	11/03/21 14:24	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00397		*	mg/L	0.0008	0.002	11/03/21 14:24	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/31/21 20:06	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/31/21 20:06	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	11/03/21 14:24	mfm
Lithium, dissolved	M200.7 ICP	1	0.0963		*	mg/L	0.008	0.04	10/31/21 20:06	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/31/21 20:06	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:24	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	16			ng/L	2	5	10/28/21 17:23	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.137		*	mg/L	0.0002	0.0005	11/03/21 14:24	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/03/21 14:24	mfm
Potassium, dissolved	M200.7 ICP	1	20.1		*	mg/L	0.2	1	10/31/21 20:06	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/31/21 20:06	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00351		*	mg/L	0.0001	0.00025	11/03/21 14:24	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:24	mfm
Sodium, dissolved	M200.7 ICP	1	64.9		*	mg/L	0.2	1	10/31/21 20:06	kja
Strontium, dissolved	M200.7 ICP	1	0.308		*	mg/L	0.009	0.045	10/31/21 20:06	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00051		*	mg/L	0.0001	0.0005	11/03/21 14:24	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/31/21 20:06	kja
Titanium, dissolved	M200.7 ICP	1	0.0194	B	*	mg/L	0.005	0.025	10/31/21 20:06	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:24	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00113	B	*	mg/L	0.0005	0.002	11/03/21 14:24	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:24	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-58

ACZ Sample ID: ***L69426-07***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	60.3		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	408		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	469		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			9.1			%			11/16/21 0:00	calc
Sum of Anions			10			meq/L			11/16/21 0:00	calc
Sum of Cations			12			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	6.55		*	mg/L	0.5	2	11/10/21 10:25	md
Conductivity @25C	SM2510B	1	2300		*	umhos/cm	1	10	10/29/21 23:43	jck
Fluoride	M300.0 - Ion Chromatography	1	0.238	B	*	mg/L	0.05	0.25	11/11/21 15:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		402			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.216		*	mg/L	0.02	0.1	11/06/21 22:45	pjb
pH (lab)	SM4500H+ B									
pH		1	12.2	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.3		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	11/06/21 2:08	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	610		*	mg/L	20	40	10/27/21 9:46	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	28.8			mg/L	5	25	11/09/21 12:15	syw
TDS (calculated)	Calculation		388			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.57						11/16/21 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-59

ACZ Sample ID: ***L69426-08***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								10/27/21 13:02	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.818		*	mg/L	0.05	0.25	10/31/21 20:22	kja
Antimony, dissolved	M200.8 ICP-MS	1	0.00471		*	mg/L	0.0004	0.002	11/03/21 14:26	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00314		*	mg/L	0.0002	0.001	11/03/21 14:26	mfm
Barium, dissolved	M200.7 ICP	1	0.0909		*	mg/L	0.007	0.035	10/31/21 20:22	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	11/03/21 14:26	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	11/02/21 19:52	kja
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	10/31/21 20:22	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	11/03/21 14:26	mfm
Calcium, dissolved	M200.7 ICP	1	92.0		*	mg/L	0.1	0.5	10/31/21 20:22	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0489		*	mg/L	0.0005	0.002	11/03/21 14:26	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00146		*	mg/L	0.00005	0.00025	11/03/21 14:26	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00433		*	mg/L	0.0008	0.002	11/03/21 14:26	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/31/21 20:22	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	10/31/21 20:22	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00048	B	*	mg/L	0.0001	0.0005	11/03/21 14:26	mfm
Lithium, dissolved	M200.7 ICP	1	0.0914		*	mg/L	0.008	0.04	10/31/21 20:22	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/31/21 20:22	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	11/03/21 14:26	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	10			ng/L	2	5	10/28/21 17:27	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0688		*	mg/L	0.0002	0.0005	11/03/21 14:26	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	11/03/21 14:26	mfm
Potassium, dissolved	M200.7 ICP	1	11.2		*	mg/L	0.2	1	10/31/21 20:22	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/31/21 20:22	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00317		*	mg/L	0.0001	0.00025	11/03/21 14:26	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:26	mfm
Sodium, dissolved	M200.7 ICP	1	63.1		*	mg/L	0.2	1	10/31/21 20:22	kja
Strontium, dissolved	M200.7 ICP	1	0.172		*	mg/L	0.009	0.045	10/31/21 20:22	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00029	B	*	mg/L	0.0001	0.0005	11/03/21 14:26	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/31/21 20:22	kja
Titanium, dissolved	M200.7 ICP	1	0.0158	B	*	mg/L	0.005	0.025	10/31/21 20:22	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	11/03/21 14:26	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00608		*	mg/L	0.0005	0.002	11/03/21 14:26	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	11/03/21 14:26	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-59

ACZ Sample ID: ***L69426-08***
Date Sampled: *10/20/21 10:00*
Date Received: *10/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	10/29/21 0:00	jck
Carbonate as CaCO3		1	55.7		*	mg/L	2	20	10/29/21 0:00	jck
Hydroxide as CaCO3		1	224		*	mg/L	2	20	10/29/21 0:00	jck
Total Alkalinity		1	280		*	mg/L	2	20	10/29/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			5.4			%			11/16/21 0:00	calc
Sum of Anions			7.0			meq/L			11/16/21 0:00	calc
Sum of Cations			7.8			meq/L			11/16/21 0:00	calc
Chloride	SM4500Cl-E	1	5.91		*	mg/L	0.5	2	11/10/21 10:26	md
Conductivity @25C	SM2510B	1	1300		*	umhos/cm	1	10	10/29/21 23:57	jck
Fluoride	M300.0 - Ion Chromatography	1	0.328		*	mg/L	0.05	0.25	11/11/21 15:58	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		230			mg/L	0.2	5	11/16/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.183		*	mg/L	0.02	0.1	11/06/21 22:46	pjb
pH (lab)	SM4500H+ B									
pH		1	12.0	H	*	units	0.1	0.1	10/29/21 0:00	jck
pH measured at		1	22.3		*	C	0.1	0.1	10/29/21 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	11/06/21 2:09	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	432		*	mg/L	20	40	10/27/21 9:48	mlh
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	58.2		*	mg/L	5	25	11/09/21 21:31	syw
TDS (calculated)	Calculation		303			mg/L			11/16/21 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.43						11/16/21 0:00	calc

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

MCCLELLANDLAB ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530631													
WG530631PBW1	PBW	10/29/21 19:39				U	mg/L		-20	20			
WG530631LCSW3	LCSW	10/29/21 19:57	WC211028-8	820.0001		784.9	mg/L	96	90	110			
WG530631LCSW6	LCSW	10/29/21 21:32	WC211028-8	820.0001		805.7	mg/L	98	90	110			
WG530631PBW2	PBW	10/29/21 21:39				U	mg/L		-20	20			
L69420-01DUP	DUP	10/29/21 21:58			246	250.1	mg/L				2	20	
WG530631LCSW9	LCSW	10/30/21 2:14	WC211028-8	820.0001		792.3	mg/L	97	90	110			
WG530631PBW3	PBW	10/30/21 2:21				U	mg/L		-20	20			
WG530631LCSW12	LCSW	10/30/21 6:05	WC211028-8	820.0001		795.1	mg/L	97	90	110			
WG530631PBW4	PBW	10/30/21 6:13				U	mg/L		-20	20			
WG530631LCSW15	LCSW	10/30/21 10:00	WC211028-8	820.0001		816.9	mg/L	100	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.982	mg/L	99	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.15	0.15			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	1.0008		1.049	mg/L	105	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	1.0008	.907	1.91	mg/L	100	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	1.0008	.907	1.909	mg/L	100	85	115	0	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.0201		.01986	mg/L	99	90	110			
WG530929ICB	ICB	11/03/21 13:39				.00046	mg/L		-0.00088	0.00088			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.01		.00958	mg/L	96	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.01	U	.00848	mg/L	85	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.01	U	.00839	mg/L	84	70	130	1	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.01	.0016	.01005	mg/L	85	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.01	.0016	.01045	mg/L	89	70	130	4	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05023	mg/L	100	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00044	0.00044			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05005		.0509	mg/L	102	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05005	.00026	.05495	mg/L	109	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05005	.00026	.05312	mg/L	106	70	130	3	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05005	.00133	.05806	mg/L	113	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05005	.00133	.05742	mg/L	112	70	130	1	20	

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ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.9678	mg/L	98	95	105			
WG530666ICB	ICB	10/31/21 19:29				.0112	mg/L		-0.021	0.021			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	.5		.4963	mg/L	99	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	.5	.205	.6983	mg/L	99	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	.5	.205	.7005	mg/L	99	85	115	0	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.0515	mg/L	103	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.000176	0.000176			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05005		.050668	mg/L	101	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05005	U	.052434	mg/L	105	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05005	U	.050757	mg/L	101	70	130	3	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05005	U	.05837	mg/L	117	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05005	U	.058652	mg/L	117	70	130	0	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530705													
WG530705ICV	ICV	11/02/21 18:54	II211014-1	2		1.983	mg/L	99	95	105			
WG530705ICB	ICB	11/02/21 19:00				U	mg/L		-0.12	0.12			
WG530705LFB	LFB	11/02/21 19:13	II211024-2	1		1.024	mg/L	102	85	115			
L69426-07AS	AS	11/02/21 19:39	II211024-2	1	U	1.053	mg/L	105	85	115			
L69426-07ASD	ASD	11/02/21 19:42	II211024-2	1	U	1.056	mg/L	106	85	115	0	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		2.073	mg/L	104	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.09	0.09			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	.5005		.538	mg/L	107	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	.5005	U	.547	mg/L	109	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	.5005	U	.547	mg/L	109	85	115	0	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.052124	mg/L	104	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00011	0.00011			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05005		.051395	mg/L	103	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05005	.000278	.053844	mg/L	107	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05005	.000278	.052613	mg/L	105	70	130	2	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05005	U	.052743	mg/L	105	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05005	U	.053509	mg/L	107	70	130	1	20	

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ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	100		99.5	mg/L	100	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.3	0.3			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	67.98972		69.23	mg/L	102	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	67.98972	161	224.6	mg/L	94	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	67.98972	161	225.9	mg/L	95	85	115	1	20	

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG531374													
WG531374ICV	ICV	11/10/21 10:03	WI210503-1	54.89		54.09	mg/L	99	90	110			
WG531374ICB	ICB	11/10/21 10:04				U	mg/L		-1.5	1.5			
WG531374LFB1	LFB	11/10/21 10:04	WI210908-11	29.97		29.63	mg/L	99	90	110			
WG531374LFB2	LFB	11/10/21 10:20	WI210908-11	29.97		28.98	mg/L	97	90	110			
L69425-04AS	AS	11/10/21 10:20	WI210908-11	29.97	3.46	33.58	mg/L	101	90	110			
L69426-01DUP	DUP	11/10/21 10:21			9.36	9.27	mg/L				1	20	

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05177	mg/L	104	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.0011	0.0011			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05		.05061	mg/L	101	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05	.00072	.05257	mg/L	104	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05	.00072	.05009	mg/L	99	70	130	5	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05	.139	.19606	mg/L	114	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05	.139	.19367	mg/L	109	70	130	1	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.053517	mg/L	107	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00011	0.00011			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05005		.051555	mg/L	103	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05005	.00007	.052435	mg/L	105	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05005	.00007	.050825	mg/L	101	70	130	3	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05005	.00321	.060177	mg/L	114	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05005	.00321	.061005	mg/L	115	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530631													
WG530631LCSW2	LCSW	10/29/21 19:45	PCN64228	1409		1498	umhos/cm	106	90	110			
WG530631LCSW5	LCSW	10/29/21 21:18	PCN64228	1409		1486	umhos/cm	105	90	110			
L69420-01DUP	DUP	10/29/21 21:58			3220	3220	umhos/cm				0	20	
WG530631LCSW8	LCSW	10/30/21 2:02	PCN64228	1409		1484	umhos/cm	105	90	110			
WG530631LCSW11	LCSW	10/30/21 5:53	PCN64228	1409		1481	umhos/cm	105	90	110			
WG530631LCSW14	LCSW	10/30/21 9:46	PCN64228	1409		1472	umhos/cm	104	90	110			

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ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05216	mg/L	104	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00176	0.00176			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05		.05124	mg/L	102	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05	U	.0505	mg/L	101	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05	U	.04825	mg/L	97	70	130	5	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05	.00549	.05582	mg/L	101	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05	.00549	.05508	mg/L	99	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG531412													
WG531412LFB1	LFB	11/10/21 16:36	WI210907-6	1.5		1.415	mg/L	94	90	110			
WG531412LFB2	LFB	11/11/21 12:23	WI210907-6	1.5		1.4	mg/L	93	90	110			
L69426-01DUP	DUP	11/11/21 12:59			.255	.247	mg/L				3	20	RA
L69426-02AS	AS	11/11/21 14:11	WI210907-6	3	.163	2.895	mg/L	91	90	110			

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.99	mg/L	100	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.3	0.3			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	.9822		1.03	mg/L	105	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	.9822	U	1.05	mg/L	107	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	.9822	U	1.02	mg/L	104	85	115	3	20	

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.953	mg/L	98	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.18	0.18			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	1.0001		1.013	mg/L	101	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	1.0001	U	1.023	mg/L	102	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	1.0001	U	1.03	mg/L	103	85	115	1	20	

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ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05201	mg/L	104	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00022	0.00022			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05005		.05189	mg/L	104	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05005	.00093	.05335	mg/L	105	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05005	.00093	.05249	mg/L	103	70	130	2	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05005	.00022	.05446	mg/L	108	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05005	.00022	.05627	mg/L	112	70	130	3	20	
WG531296													
WG531296ICV	ICV	11/09/21 16:59	MS211013-2	.05		.05134	mg/L	103	90	110			
WG531296ICB	ICB	11/09/21 17:01				U	mg/L		-0.00022	0.00022			
WG531296LFB	LFB	11/09/21 17:02	MS210927-3	.05005		.04788	mg/L	96	85	115			
L69490-01AS	AS	11/09/21 17:24	MS210927-3	.05005	U	.05191	mg/L	104	70	130			
L69490-01ASD	ASD	11/09/21 17:25	MS210927-3	.05005	U	.05189	mg/L	104	70	130	0	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.9555	mg/L	98	95	105			
WG530666ICB	ICB	10/31/21 19:29				.0131	mg/L		-0.024	0.024			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	.999		.966	mg/L	97	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	.999	.0963	1.075	mg/L	98	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	.999	.0963	1.08	mg/L	98	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	100		96.28	mg/L	96	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.6	0.6			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	49.99828		48.22	mg/L	96	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	49.99828	U	48.28	mg/L	97	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	49.99828	U	48.71	mg/L	97	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05271	mg/L	105	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00088	0.00088			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.0499		.05135	mg/L	103	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.0499	.00063	.05384	mg/L	107	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.0499	.00063	.0526	mg/L	104	70	130	2	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.0499	U	.05757	mg/L	115	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.0499	U	.05799	mg/L	116	70	130	1	20	

MCCLELLANDLAB ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG530531													
WG530531CCV2	CCV	10/28/21 10:08	HG211011-4	10		9.43	ng/L	94	76.5	123.4			
WG530531CCB1	CCB	10/28/21 10:13				U	ng/L		-0.501	0.501			
WG530531PQV	PQV	10/28/21 10:18	HG211011-6	1		.76	ng/L	76	70	130			
WG530531CCV3	CCV	10/28/21 14:54	HG211011-4	10		9.33	ng/L	93	76.5	123.4			
WG530531CCB2	CCB	10/28/21 14:59				U	ng/L		-0.501	0.501			
WG530531LFB	LFB	10/28/21 15:03	HG211011-5	2		1.96	ng/L	98	71	125			
L69352-03MS	MS	10/28/21 15:32	HG16315X	50	6	15	ng/L	90	71	125			
L69352-03MSD	MSD	10/28/21 15:37	HG16315X	50	6	15.25	ng/L	93	71	125	2	24	
WG530531CCV4	CCV	10/28/21 16:12	HG211011-4	10		9.4	ng/L	94	76.5	123.4			
WG530531CCB3	CCB	10/28/21 16:17				U	ng/L		-0.501	0.501			
L69426-05MS	MS	10/28/21 17:08	HG163150X	5000	350	439.5	ng/L	90	71	125			
L69426-05MSD	MSD	10/28/21 17:13	HG163150X	5000	350	449.5	ng/L	100	71	125	2	24	
WG530531CCV5	CCV	10/28/21 17:32	HG211011-4	10		9.53	ng/L	95	76.5	123.4			
WG530531CCB4	CCB	10/28/21 17:37				U	ng/L		-0.501	0.501			
WG530531CCV6	CCV	10/28/21 17:56	HG211011-4	10		9.57	ng/L	96	76.5	123.4			
WG530531CCB5	CCB	10/28/21 18:01				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.01992		.0209	mg/L	105	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00044	0.00044			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05005		.05121	mg/L	102	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05005	.00116	.05299	mg/L	104	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05005	.00116	.0519	mg/L	101	70	130	2	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05005	.234	.28828	mg/L	108	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05005	.234	.28833	mg/L	109	70	130	0	20	
WG531296													
WG531296ICV	ICV	11/09/21 16:59	MS211013-2	.01992		.02057	mg/L	103	90	110			
WG531296ICB	ICB	11/09/21 17:01				U	mg/L		-0.00044	0.00044			
WG531296LFB	LFB	11/09/21 17:02	MS210927-3	.05005		.04647	mg/L	93	85	115			
L69490-01AS	AS	11/09/21 17:24	MS210927-3	.05005	.00114	.05162	mg/L	101	70	130			
L69490-01ASD	ASD	11/09/21 17:25	MS210927-3	.05005	.00114	.05085	mg/L	99	70	130	2	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05197	mg/L	104	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00088	0.00088			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05		.0506	mg/L	101	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05	U	.049	mg/L	98	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05	U	.04751	mg/L	95	70	130	3	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05	U	.05151	mg/L	103	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05	U	.05114	mg/L	102	70	130	1	20	

MCCLELLANDLAB ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG531161													
WG531161ICV	ICV	11/06/21 19:46	WI210904-1	2.4161		2.334	mg/L	97	90	110			
WG531161ICB	ICB	11/06/21 19:48				U	mg/L		-0.02	0.02			
WG531165													
WG531165LFB1	LFB	11/06/21 22:07	WI211001-5	2		1.991	mg/L	100	90	110			
L69425-03AS	AS	11/06/21 22:29	WI211001-5	2	.127	2.165	mg/L	102	90	110			
L69425-04DUP	DUP	11/06/21 22:32			.05	.055	mg/L				10	20	RA
WG531165LFB2	LFB	11/06/21 22:47	WI211001-5	2		1.965	mg/L	98	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530631													
WG530631LCSW1	LCSW	10/29/21 19:43	PCN62948	6		6.1	units	102	5.9	6.1			
WG530631LCSW4	LCSW	10/29/21 21:16	PCN62948	6		6.1	units	102	5.9	6.1			
L69420-01DUP	DUP	10/29/21 21:58			8.4	8.4	units				0	20	
WG530631LCSW7	LCSW	10/30/21 2:00	PCN62948	6		6.1	units	102	5.9	6.1			
WG530631LCSW10	LCSW	10/30/21 5:51	PCN62948	6		6.1	units	102	5.9	6.1			
WG530631LCSW13	LCSW	10/30/21 9:44	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG531151													
WG531151ICV	ICV	11/06/21 0:21	WI211015-6	.65228		.691	mg/L	106	90	110			
WG531151ICB	ICB	11/06/21 0:23				U	mg/L		-0.01	0.01			
WG531154													
WG530389LRB	LRB	11/06/21 1:55				U	mg/L		-0.01	0.01			
WG530389LFB	LFB	11/06/21 1:56	WI211015-3	.5		.479	mg/L	96	90	110			
L69426-01LFM	LFM	11/06/21 1:58	WI211015-3	.5	.011	.494	mg/L	97	90	110			
L69426-02DUP	DUP	11/06/21 2:00			U	U	mg/L				0	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	20		19.75	mg/L	99	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.6	0.6			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	99.96008		99.32	mg/L	99	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	99.96008	20.1	121.3	mg/L	101	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	99.96008	20.1	121.9	mg/L	102	85	115	0	20	

MCCLELLANDLAB ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530352													
WG530352PBW	PBW	10/27/21 8:42				U	mg/L		-20	20			
WG530352LCSW	LCSW	10/27/21 8:44	PCN64127	1000		1000	mg/L	100	80	120			
L69427-02DUP	DUP	10/27/21 9:36			348	364	mg/L				4	10	
WG530353													
WG530353PBW	PBW	10/27/21 9:37				U	mg/L		-20	20			
WG530353LCSW	LCSW	10/27/21 9:38	PCN64127	1000		980	mg/L	98	80	120			
L69436-12DUP	DUP	10/27/21 10:00			826	828	mg/L				0	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.943	mg/L	97	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.15	0.15			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	1.0017		.988	mg/L	99	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	1.0017	U	.997	mg/L	100	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	1.0017	U	1.003	mg/L	100	85	115	1	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05085	mg/L	102	90	110			
WG530929ICB	ICB	11/03/21 13:39				.00015	mg/L		-0.00022	0.00022			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05		.05126	mg/L	103	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05	.0016	.05821	mg/L	113	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05	.0016	.0562	mg/L	109	70	130	4	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05	.00473	.05824	mg/L	107	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05	.00473	.0584	mg/L	107	70	130	0	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.02		.02011	mg/L	101	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00022	0.00022			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.01		.0096	mg/L	96	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.01	U	.00872	mg/L	87	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.01	U	.0083	mg/L	83	70	130	5	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.01	U	.00865	mg/L	87	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.01	U	.00822	mg/L	82	70	130	5	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	100		99.58	mg/L	100	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.6	0.6			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	100.007		99.81	mg/L	100	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	100.007	64.9	164.6	mg/L	100	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	100.007	64.9	166.3	mg/L	101	85	115	1	20	

MCCLELLANDLAB ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.918	mg/L	96	95	105			
WG530666ICB	ICB	10/31/21 19:29				.0106	mg/L		-0.027	0.027			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	.5005		.5346	mg/L	107	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	.5005	.308	.8363	mg/L	106	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	.5005	.308	.8394	mg/L	106	85	115	0	20	

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG531263													
WG531263ICB	ICB	11/09/21 11:46				U	mg/L		-3	3			
WG531263ICV	ICV	11/09/21 11:46	WI211027-1	20.46		18.9	mg/L	92	90	110			
WG531263LFB	LFB	11/09/21 11:55	WI210105-3	10		9.6	mg/L	96	90	110			
L69426-06DUP	DUP	11/09/21 11:58			19.2	19.3	mg/L				1	20	
L69426-07AS	AS	11/09/21 12:15	SO4TURB5X	10	28.8	38.3	mg/L	95	90	110			
WG531265													
WG531265ICB	ICB	11/09/21 18:26				U	mg/L		-3	3			
WG531265ICV	ICV	11/09/21 18:27	WI211027-1	20.46		18.8	mg/L	92	90	110			
WG531265LFB	LFB	11/09/21 21:23	WI210105-3	10		9.9	mg/L	99	90	110			
L69426-08DUP	DUP	11/09/21 21:31			58.2	56.6	mg/L				3	20	
L69427-01AS	AS	11/09/21 21:42	SO4TURB10X	10	246	260	mg/L	140	90	110			M3

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05272	mg/L	105	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00022	0.00022			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05		.05021	mg/L	100	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05	U	.05227	mg/L	105	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05	U	.0521	mg/L	104	70	130	0	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05	.00073	.05564	mg/L	110	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05	.00073	.05618	mg/L	111	70	130	1	20	
WG531296													
WG531296ICV	ICV	11/09/21 16:59	MS211013-2	.05		.05276	mg/L	106	90	110			
WG531296ICB	ICB	11/09/21 17:01				U	mg/L		-0.00022	0.00022			
WG531296LFB	LFB	11/09/21 17:02	MS210927-3	.05		.04759	mg/L	95	85	115			
L69490-01AS	AS	11/09/21 17:24	MS210927-3	.05	U	.05281	mg/L	106	70	130			
L69490-01ASD	ASD	11/09/21 17:25	MS210927-3	.05	U	.05155	mg/L	103	70	130	2	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.982	mg/L	99	95	105			
WG530666ICB	ICB	10/31/21 19:29				U	mg/L		-0.12	0.12			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	1.002		.984	mg/L	98	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	1.002	U	.986	mg/L	98	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	1.002	U	.991	mg/L	99	85	115	1	20	

MCCLELLANDLAB ACZ Project ID: ***L69426***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530666													
WG530666ICV	ICV	10/31/21 19:23	II211014-1	2		1.9255	mg/L	96	95	105			
WG530666ICB	ICB	10/31/21 19:29				.0071	mg/L		-0.015	0.015			
WG530666LFB	LFB	10/31/21 19:42	II211024-2	1		.9891	mg/L	99	85	115			
L69426-07AS	AS	10/31/21 20:09	II211024-2	1	.0194	1.007	mg/L	99	85	115			
L69426-07ASD	ASD	10/31/21 20:19	II211024-2	1	.0194	1.014	mg/L	99	85	115	1	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.05116	mg/L	102	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.00022	0.00022			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05		.05119	mg/L	102	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05	.00553	.05967	mg/L	108	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05	.00553	.0588	mg/L	107	70	130	1	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05	U	.05577	mg/L	112	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05	U	.05762	mg/L	115	70	130	3	20	
WG531296													
WG531296ICV	ICV	11/09/21 16:59	MS211013-2	.05		.05249	mg/L	105	90	110			
WG531296ICB	ICB	11/09/21 17:01				U	mg/L		-0.00022	0.00022			
WG531296LFB	LFB	11/09/21 17:02	MS210927-3	.05		.04715	mg/L	94	85	115			
L69490-01AS	AS	11/09/21 17:24	MS210927-3	.05	.00357	.05544	mg/L	104	70	130			
L69490-01ASD	ASD	11/09/21 17:25	MS210927-3	.05	.00357	.05539	mg/L	104	70	130	0	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.04864	mg/L	97	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.0011	0.0011			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.05		.04902	mg/L	98	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.05	.0006	.05227	mg/L	103	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.05	.0006	.04979	mg/L	98	70	130	5	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.05	U	.05781	mg/L	116	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.05	U	.05774	mg/L	115	70	130	0	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530929													
WG530929ICV	ICV	11/03/21 13:37	MS211013-2	.05		.0521	mg/L	104	90	110			
WG530929ICB	ICB	11/03/21 13:39				U	mg/L		-0.0132	0.0132			
WG530929LFB	LFB	11/03/21 13:40	MS210927-3	.050075		.0548	mg/L	109	85	115			
L69242-01AS	AS	11/03/21 13:49	MS210927-3	.050075	.359	.415	mg/L	112	70	130			
L69242-01ASD	ASD	11/03/21 13:51	MS210927-3	.050075	.359	.4056	mg/L	93	70	130	2	20	
L69426-06AS	AS	11/03/21 14:17	MS210927-3	.050075	U	.0568	mg/L	113	70	130			
L69426-06ASD	ASD	11/03/21 14:18	MS210927-3	.050075	U	.0576	mg/L	115	70	130	1	20	

McClelland Laboratories, Inc. ACZ Project ID: ***L69426***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69426-01	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L69426-02	WG531412	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530929	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L69426-03	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530929	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L69426-04	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530929	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L69426-05	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530929	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

McClelland Laboratories, Inc. ACZ Project ID: ***L69426***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L69426-06	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530929	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L69426-07	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530929	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L69426-08	WG531412	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530929	Molybdenum, dissolved	M200.8 ICP-MS	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG531165	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531154	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG531265	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69426
Date Received: 10/21/2021 10:53
Received By:
Date Printed: 10/22/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?		X	

L69426-01 Container B2468831 (RAW): There is limited supply in this container.

L69426-01 Container B2468832 (WHITE): There is limited supply in this container.

13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?		X	

Some parameters were received past hold time.

NA indicates Not Applicable

Chain of Custody Related Remarks

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
7205	3.6	<=6.0	15	N/A

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L69426
Date Received: 10/21/2021 10:53
Received By:
Date Printed: 10/22/2021

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L69426

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina
Company: McClelland Laboratories
E-mail: mmedina@mettest.com
Address:
Telephone:

Copy of Report to:

Name:
Company:
E-mail: results@mettest.com
Telephone:

Invoice to:

Name:
Company:
E-mail: mliap@mettest.com
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ☒ NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ☐

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** State NV Zip code 89436 Time Zone PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 B-51	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-52	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-53	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-54	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-56	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-57	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-58	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
4664 B-59	10/20/21:10:00 am	WW	5	☒	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐	☐	☐	☐

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
		10/21/21	10:53

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L69426 Chain of Custod

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/31/2021

Quote Number: GRASSY-LEACH

Matrix: Leachate Grassy Mountain Leachate

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digesti		$0.00
Metals Analysis			
Aluminum, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Barium, dissolved	M200.7 ICP	0.007 mg/L	$7.40
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$14.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$7.40
Boron, dissolved	M200.7 ICP	0.03 mg/L	$7.40
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$14.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$14.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$7.40
Iron, dissolved	M200.7 ICP	0.06 mg/L	$7.40
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$7.40
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$41.20
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$14.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$14.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$7.40
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$7.40
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$7.40
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Tin, dissolved	M200.7 ICP	0.04 mg/L	$7.40

REPAD.09.06.05.01

S/ sh D/ 14 P/

Titanium, dissolved	M200.7 ICP	0.005 mg/L	$7.40
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$14.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$14.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$14.00
Misc.			
Electronic Data Deliverable			$0.00
Setup charge for ICPMS			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$9.80
Cation-Anion Balance	Calculation		$0.00
Chloride	SM4500Cl-E	0.5 mg/L	$9.00
Conductivity @25C	SM2510B	1 umhos/cm	$6.60
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$10.80
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$9.00
pH (lab)	SM4500H+ B	0.1 C	$6.60
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$19.00
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$11.60
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1 mg/L	$9.00
TDS (calculated)	Calculation	Calculation	$0.00
TDS (ratio - measured/calculated)	Calculation	Calculation	$0.00
		Cost/Sample:	**$481.60**

Leachates will be supplied from Gene McClelland's lab in Nevada. Pricing is based on standard TAT for waters of ~ three weeks and will vary with workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

May 09, 2022

Report to:
Mike Medina
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 89431

cc: ReportsCC-Always Use

Bill to:
mliap@mettest.com
McClelland Laboratories, Inc.
1016 Greg Street
Sparks, NV 71307

Project ID:
ACZ Project ID: L71307

Mike Medina:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on February 08, 2022. This project has been assigned to ACZ's project number, L71307. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L71307. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after June 08, 2022. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Mark McNeal has reviewed
and approved this report.

McClelland Laboratories, Inc.

May 09, 2022

Project ID:
ACZ Project ID: L71307

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 8 leachate samples from McClelland Laboratories, Inc. on February 8, 2022. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L71307. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

1. This project has been revised due to retested analytes (Cu, Pb, Mn, Zn) per client request.

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-61

ACZ Sample ID: ***L71307-01***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 15:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	2	<0.1	U	*	mg/L	0.1	0.5	02/17/22 20:49	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.01	02/10/22 17:51	mfm
Arsenic, dissolved	M200.8 ICP-MS	5	0.00157	B	*	mg/L	0.001	0.005	02/10/22 17:51	mfm
Barium, dissolved	M200.7 ICP	2	2.60		*	mg/L	0.014	0.07	02/17/22 20:49	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	5	<0.0004	U	*	mg/L	0.0004	0.00125	02/10/22 17:51	mfm
Bismuth, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	02/17/22 20:49	wtc/aeh
Boron, dissolved	M200.7 ICP	2	<0.06	U	*	mg/L	0.06	0.2	02/17/22 20:49	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	02/10/22 17:51	mfm
Calcium, dissolved	M200.7 ICP	2	659		*	mg/L	0.2	1	02/17/22 20:49	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	5	0.0626		*	mg/L	0.0025	0.01	02/10/22 17:51	mfm
Cobalt, dissolved	M200.8 ICP-MS	5	0.00704		*	mg/L	0.00025	0.00125	02/10/22 17:51	mfm
Copper, dissolved	M200.8 ICP-MS	5	0.00478	B	*	mg/L	0.004	0.01	02/10/22 17:51	mfm
Gallium, dissolved	M200.7 ICP	2	<0.2	U	*	mg/L	0.2	1	02/17/22 20:49	wtc/aeh
Iron, dissolved	M200.7 ICP	2	<0.12	U	*	mg/L	0.12	0.3	02/17/22 20:49	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	5	0.00249	B	*	mg/L	0.0005	0.0025	02/10/22 17:51	mfm
Lithium, dissolved	M200.7 ICP	2	0.175		*	mg/L	0.016	0.08	02/17/22 20:49	wtc/aeh
Magnesium, dissolved	M200.7 ICP	2	<0.4	U	*	mg/L	0.4	2	02/17/22 20:49	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.01	02/10/22 17:51	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	500	11200		*	ng/L	200	500	02/17/22 11:25	mfm
Molybdenum, dissolved	M200.8 ICP-MS	5	0.122		*	mg/L	0.001	0.0025	02/10/22 17:51	mfm
Nickel, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.005	02/10/22 17:51	mfm
Potassium, dissolved	M200.7 ICP	2	109		*	mg/L	0.4	2	02/17/22 20:49	wtc/aeh
Scandium, dissolved	M200.7 ICP	2	<0.1	U	*	mg/L	0.1	0.4	02/17/22 20:49	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	5	0.00340		*	mg/L	0.0005	0.00125	02/10/22 17:51	mfm
Silver, dissolved	M200.8 ICP-MS	5	0.00051	B	*	mg/L	0.0005	0.0025	02/10/22 17:51	mfm
Sodium, dissolved	M200.7 ICP	2	97.4		*	mg/L	0.4	2	02/17/22 20:49	wtc/aeh
Strontium, dissolved	M200.7 ICP	2	3.26		*	mg/L	0.018	0.09	02/17/22 20:49	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	5	0.00108	B	*	mg/L	0.0005	0.0025	02/10/22 17:51	mfm
Tin, dissolved	M200.7 ICP	2	<0.08	U	*	mg/L	0.08	0.4	02/17/22 20:49	wtc/aeh
Titanium, dissolved	M200.7 ICP	2	0.0476	B	*	mg/L	0.01	0.05	02/18/22 19:15	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	02/10/22 17:51	mfm
Vanadium, dissolved	M200.8 ICP-MS	5	<0.0025	U	*	mg/L	0.0025	0.01	02/10/22 17:51	mfm
Zinc, dissolved	M200.8 ICP-MS	5	<0.03	U	*	mg/L	0.03	0.075	02/10/22 17:51	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-61

ACZ Sample ID: ***L71307-01***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	02/10/22 0:00	jck
Carbonate as CaCO3		1	101		*	mg/L	2	20	02/10/22 0:00	jck
Hydroxide as CaCO3		1	1760		*	mg/L	2	20	02/10/22 0:00	jck
Total Alkalinity		1	1860		*	mg/L	2	20	02/10/22 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.6			%			05/09/22 0:00	calc
Sum of Anions			38			meq/L			05/09/22 0:00	calc
Sum of Cations			40			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	9.25		*	mg/L	0.5	2	02/11/22 18:57	mjj1
Conductivity @25C	SM2510B	1	7810		*	umhos/cm	1	10	02/10/22 4:15	jck
Fluoride	M300.0 - Ion Chromatography	1	0.101	B	*	mg/L	0.05	0.25	02/21/22 23:33	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1650			mg/L	0.5	10	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.920			mg/L	0.02	0.1	02/17/22 2:06	pjb
pH (lab)	SM4500H+ B									
pH		1	12.5	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	21.7		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:34	bls
Residue, Filterable (TDS) @180C	SM2540C	2	2060		*	mg/L	40	80	02/09/22 15:03	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	<1	U	*	mg/L	1	5	02/16/22 11:19	mjj1
TDS (calculated)	Calculation		1240			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.66						05/09/22 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-62

ACZ Sample ID: ***L71307-02***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 15:38	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.274		*	mg/L	0.05	0.25	02/17/22 20:52	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	2	0.00087	B	*	mg/L	0.0008	0.004	02/10/22 17:53	mfm
Arsenic, dissolved	M200.8 ICP-MS	2	0.00339		*	mg/L	0.0004	0.002	02/10/22 17:53	mfm
Barium, dissolved	M200.7 ICP	1	1.26		*	mg/L	0.007	0.035	02/17/22 20:52	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	02/10/22 17:53	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 20:52	wtc/aeh
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	02/17/22 20:52	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	2	0.000195	B	*	mg/L	0.0001	0.0005	02/10/22 17:53	mfm
Calcium, dissolved	M200.7 ICP	1	432		*	mg/L	0.1	0.5	02/17/22 20:52	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	2	0.0856		*	mg/L	0.001	0.004	02/10/22 17:53	mfm
Cobalt, dissolved	M200.8 ICP-MS	2	0.00396		*	mg/L	0.0001	0.0005	02/10/22 17:53	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.0234		*	mg/L	0.0008	0.002	05/03/22 15:34	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	02/17/22 20:52	wtc/aeh
Iron, dissolved	M200.7 ICP	1	0.219		*	mg/L	0.06	0.15	02/17/22 20:52	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	1	0.0102		*	mg/L	0.0001	0.0005	05/02/22 14:50	mfm
Lithium, dissolved	M200.7 ICP	1	0.120		*	mg/L	0.008	0.04	02/17/22 20:52	wtc/aeh
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	02/17/22 20:52	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	1	0.00213		*	mg/L	0.0004	0.002	05/02/22 14:50	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	20	226			ng/L	6	20	02/17/22 10:12	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.130		*	mg/L	0.0004	0.001	02/10/22 17:53	mfm
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	02/10/22 17:53	mfm
Potassium, dissolved	M200.7 ICP	1	48.3		*	mg/L	0.2	1	02/17/22 20:52	wtc/aeh
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	02/17/22 20:52	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	2	0.00395		*	mg/L	0.0002	0.0005	02/10/22 17:53	mfm
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	02/10/22 17:53	mfm
Sodium, dissolved	M200.7 ICP	1	75.6		*	mg/L	0.2	1	02/17/22 20:52	wtc/aeh
Strontium, dissolved	M200.7 ICP	1	1.49		*	mg/L	0.009	0.045	02/17/22 20:52	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	2	0.00119		*	mg/L	0.0002	0.001	02/10/22 17:53	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 20:52	wtc/aeh
Titanium, dissolved	M200.7 ICP	1	0.0237	B	*	mg/L	0.005	0.025	02/18/22 19:19	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	02/10/22 17:53	mfm
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	02/10/22 17:53	mfm
Zinc, dissolved	M200.8 ICP-MS	1	0.0744		*	mg/L	0.006	0.015	05/02/22 14:50	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-62

ACZ Sample ID: ***L71307-02***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	02/10/22 0:00	jck
Carbonate as CaCO3		1	75.9		*	mg/L	2	20	02/10/22 0:00	jck
Hydroxide as CaCO3		1	1140		*	mg/L	2	20	02/10/22 0:00	jck
Total Alkalinity		1	1210		*	mg/L	2	20	02/10/22 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.0			%			05/09/22 0:00	calc
Sum of Anions			25			meq/L			05/09/22 0:00	calc
Sum of Cations			26			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	8.21		*	mg/L	0.5	2	02/11/22 18:57	mjj1
Conductivity @25C	SM2510B	1	5120		*	umhos/cm	1	10	02/10/22 4:35	jck
Fluoride	M300.0 - Ion Chromatography	1	0.132	B	*	mg/L	0.05	0.25	02/21/22 23:50	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1080			mg/L	0.2	5	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.322			mg/L	0.02	0.1	02/17/22 2:07	pjb
pH (lab)	SM4500H+ B									
pH		1	12.4	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	22.0		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:36	bls
Residue, Filterable (TDS) @180C	SM2540C	1	1310		*	mg/L	20	40	02/09/22 15:06	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	<1	U		mg/L	1	5	02/11/22 13:36	mjj1
TDS (calculated)	Calculation		806			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.63						05/09/22 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-63

ACZ Sample ID: ***L71307-03***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 15:45	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.389		*	mg/L	0.05	0.25	02/17/22 20:55	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	1	0.00081	B	*	mg/L	0.0004	0.002	02/10/22 17:54	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00069	B	*	mg/L	0.0002	0.001	02/10/22 17:54	mfm
Barium, dissolved	M200.7 ICP	1	0.499		*	mg/L	0.007	0.035	02/17/22 20:55	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	02/10/22 17:54	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 20:55	wtc/aeh
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	02/17/22 20:55	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	02/10/22 17:54	mfm
Calcium, dissolved	M200.7 ICP	1	250		*	mg/L	0.1	0.5	02/17/22 20:55	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	1	0.0950		*	mg/L	0.0005	0.002	02/10/22 17:54	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00242		*	mg/L	0.00005	0.00025	02/10/22 17:54	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00191	B	*	mg/L	0.0008	0.002	02/10/22 17:54	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	02/17/22 20:55	wtc/aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	02/17/22 20:55	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	02/10/22 17:54	mfm
Lithium, dissolved	M200.7 ICP	1	0.0984		*	mg/L	0.008	0.04	02/17/22 20:55	wtc/aeh
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	02/17/22 20:55	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	02/10/22 17:54	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	50	510			ng/L	20	50	02/17/22 10:17	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.114		*	mg/L	0.0002	0.0005	02/10/22 17:54	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	02/10/22 17:54	mfm
Potassium, dissolved	M200.7 ICP	1	25.6		*	mg/L	0.2	1	02/17/22 20:55	wtc/aeh
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	02/17/22 20:55	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	1	0.00280		*	mg/L	0.0001	0.00025	02/10/22 17:54	mfm
Silver, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	02/10/22 17:54	mfm
Sodium, dissolved	M200.7 ICP	1	67.7		*	mg/L	0.2	1	02/17/22 20:55	wtc/aeh
Strontium, dissolved	M200.7 ICP	1	0.717		*	mg/L	0.009	0.045	02/17/22 20:55	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.0005	02/10/22 17:54	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 20:55	wtc/aeh
Titanium, dissolved	M200.7 ICP	1	0.0234	B	*	mg/L	0.005	0.025	02/18/22 19:23	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 17:54	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	02/10/22 17:54	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	02/10/22 17:54	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-63

ACZ Sample ID: ***L71307-03***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	02/10/22 0:00	jck
Carbonate as CaCO3		1	69.4		*	mg/L	2	20	02/10/22 0:00	jck
Hydroxide as CaCO3		1	623		*	mg/L	2	20	02/10/22 0:00	jck
Total Alkalinity		1	693		*	mg/L	2	20	02/10/22 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			6.7			%			05/09/22 0:00	calc
Sum of Anions			14			meq/L			05/09/22 0:00	calc
Sum of Cations			16			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	7.47		*	mg/L	0.5	2	02/11/22 18:57	mjj1
Conductivity @25C	SM2510B	1	2940		*	umhos/cm	1	10	02/10/22 4:50	jck
Fluoride	M300.0 - Ion Chromatography	1	0.165	B	*	mg/L	0.05	0.25	02/22/22 0:08	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		624			mg/L	0.2	5	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.164			mg/L	0.02	0.1	02/17/22 2:08	pjb
pH (lab)	SM4500H+ B									
pH		1	12.2	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	21.4		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:37	bls
Residue, Filterable (TDS) @180C	SM2540C	1	826		*	mg/L	20	40	02/09/22 15:08	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	13.6			mg/L	1	5	02/11/22 13:36	mjj1
TDS (calculated)	Calculation		513			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.61						05/09/22 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-64

ACZ Sample ID: ***L71307-04***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 15:52	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.572		*	mg/L	0.05	0.25	02/17/22 20:58	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	1	0.00155	B	*	mg/L	0.0004	0.002	02/10/22 17:56	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00087	B	*	mg/L	0.0002	0.001	02/10/22 17:56	mfm
Barium, dissolved	M200.7 ICP	1	0.168		*	mg/L	0.007	0.035	02/17/22 20:58	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	02/10/22 17:56	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 20:58	wtc/aeh
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	02/17/22 20:58	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	02/10/22 17:56	mfm
Calcium, dissolved	M200.7 ICP	1	139		*	mg/L	0.1	0.5	02/17/22 20:58	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	1	0.0657		*	mg/L	0.0005	0.002	02/10/22 17:56	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00140		*	mg/L	0.00005	0.00025	02/10/22 17:56	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00195	B	*	mg/L	0.0008	0.002	02/10/22 17:56	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	02/17/22 20:58	wtc/aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	02/17/22 20:58	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	1	0.00060		*	mg/L	0.0001	0.0005	02/10/22 17:56	mfm
Lithium, dissolved	M200.7 ICP	1	0.0862		*	mg/L	0.008	0.04	02/17/22 20:58	wtc/aeh
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	02/17/22 20:58	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	02/10/22 17:56	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	17.3			ng/L	0.3	1	02/16/22 15:00	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0651		*	mg/L	0.0002	0.0005	02/10/22 17:56	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	02/10/22 17:56	mfm
Potassium, dissolved	M200.7 ICP	1	13.3		*	mg/L	0.2	1	02/17/22 20:58	wtc/aeh
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	02/17/22 20:58	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	1	0.00240		*	mg/L	0.0001	0.00025	02/10/22 17:56	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 17:56	mfm
Sodium, dissolved	M200.7 ICP	1	63.5		*	mg/L	0.2	1	02/17/22 20:58	wtc/aeh
Strontium, dissolved	M200.7 ICP	1	0.284		*	mg/L	0.009	0.045	02/17/22 20:58	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	1	0.00032	B	*	mg/L	0.0001	0.0005	02/10/22 17:56	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 20:58	wtc/aeh
Titanium, dissolved	M200.7 ICP	1	0.0208	B	*	mg/L	0.005	0.025	02/18/22 19:26	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 17:56	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00125	B	*	mg/L	0.0005	0.002	02/10/22 17:56	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	02/10/22 17:56	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-64

ACZ Sample ID: ***L71307-04***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<3	UH	*	mg/L	3	20	02/22/22 0:00	eep
Carbonate as CaCO3		1	52.5	H	*	mg/L	3	20	02/22/22 0:00	eep
Hydroxide as CaCO3		1	341	H	*	mg/L	3	20	02/22/22 0:00	eep
Total Alkalinity		1	394	H	*	mg/L	3	20	02/22/22 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.7			%			05/09/22 0:00	calc
Sum of Anions			9.1			meq/L			05/09/22 0:00	calc
Sum of Cations			10			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	6.91		*	mg/L	0.5	2	02/11/22 18:57	mjj1
Conductivity @25C	SM2510B	1	1650		*	umhos/cm	1	10	02/10/22 5:05	jck
Fluoride	M300.0 - Ion Chromatography	1	0.232	B	*	mg/L	0.05	0.25	02/22/22 0:44	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		347			mg/L	0.2	5	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.110			mg/L	0.02	0.1	02/17/22 2:14	pjb
pH (lab)	SM4500H+ B									
pH		1	12.0	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	21.2		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:41	bls
Residue, Filterable (TDS) @180C	SM2540C	1	536		*	mg/L	20	40	02/09/22 15:14	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	48.1			mg/L	5	25	02/11/22 14:08	mjj1
TDS (calculated)	Calculation		361			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.48						05/09/22 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-66

ACZ Sample ID: ***L71307-05***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 15:59	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.252		*	mg/L	0.05	0.25	02/17/22 21:01	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.01	02/10/22 17:58	mfm
Arsenic, dissolved	M200.8 ICP-MS	5	0.00142	B	*	mg/L	0.001	0.005	02/10/22 17:58	mfm
Barium, dissolved	M200.7 ICP	1	2.31		*	mg/L	0.007	0.035	02/17/22 21:01	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	5	<0.0004	U	*	mg/L	0.0004	0.00125	02/10/22 17:58	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:01	wtc/aeh
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	02/17/22 21:01	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	5	<0.00025	U	*	mg/L	0.00025	0.00125	02/10/22 17:58	mfm
Calcium, dissolved	M200.7 ICP	1	598		*	mg/L	0.1	0.5	02/17/22 21:01	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	5	0.0698		*	mg/L	0.0025	0.01	02/10/22 17:58	mfm
Cobalt, dissolved	M200.8 ICP-MS	5	0.00584		*	mg/L	0.00025	0.00125	02/10/22 17:58	mfm
Copper, dissolved	M200.8 ICP-MS	5	<0.004	U	*	mg/L	0.004	0.01	02/10/22 17:58	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	02/17/22 21:01	wtc/aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	02/17/22 21:01	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	5	0.00300		*	mg/L	0.0005	0.0025	02/10/22 17:58	mfm
Lithium, dissolved	M200.7 ICP	1	0.163		*	mg/L	0.008	0.04	02/17/22 21:01	wtc/aeh
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	02/17/22 21:01	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.01	02/10/22 17:58	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	200	1490			ng/L	60	200	02/18/22 11:05	mfm
Molybdenum, dissolved	M200.8 ICP-MS	5	0.152		*	mg/L	0.001	0.0025	02/10/22 17:58	mfm
Nickel, dissolved	M200.8 ICP-MS	5	<0.002	U	*	mg/L	0.002	0.005	02/10/22 17:58	mfm
Potassium, dissolved	M200.7 ICP	1	114		*	mg/L	0.2	1	02/17/22 21:01	wtc/aeh
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	02/17/22 21:01	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	5	0.00331		*	mg/L	0.0005	0.00125	02/10/22 17:58	mfm
Silver, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	02/10/22 17:58	mfm
Sodium, dissolved	M200.7 ICP	1	95.1		*	mg/L	0.2	1	02/17/22 21:01	wtc/aeh
Strontium, dissolved	M200.7 ICP	1	3.02		*	mg/L	0.009	0.045	02/17/22 21:01	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	5	0.00124	B	*	mg/L	0.0005	0.0025	02/10/22 17:58	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:01	wtc/aeh
Titanium, dissolved	M200.7 ICP	1	0.0113	B	*	mg/L	0.005	0.025	02/18/22 19:30	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	5	<0.0005	U	*	mg/L	0.0005	0.0025	02/10/22 17:58	mfm
Vanadium, dissolved	M200.8 ICP-MS	5	<0.0025	U	*	mg/L	0.0025	0.01	02/10/22 17:58	mfm
Zinc, dissolved	M200.8 ICP-MS	5	<0.03	U	*	mg/L	0.03	0.075	02/10/22 17:58	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-66

ACZ Sample ID: ***L71307-05***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	02/10/22 0:00	jck
Carbonate as CaCO3		1	94.5		*	mg/L	2	20	02/10/22 0:00	jck
Hydroxide as CaCO3		1	1630		*	mg/L	2	20	02/10/22 0:00	jck
Total Alkalinity		1	1730		*	mg/L	2	20	02/10/22 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			2.8			%			05/09/22 0:00	calc
Sum of Anions			35			meq/L			05/09/22 0:00	calc
Sum of Cations			37			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	9.21		*	mg/L	0.5	2	02/11/22 18:57	mjj1
Conductivity @25C	SM2510B	1	7310		*	umhos/cm	1	10	02/10/22 5:27	jck
Fluoride	M300.0 - Ion Chromatography	1	0.113	B	*	mg/L	0.05	0.25	02/22/22 1:56	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		1490			mg/L	0.2	5	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	1.02			mg/L	0.02	0.1	02/17/22 2:15	pjb
pH (lab)	SM4500H+ B									
pH		1	12.5	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	21.4		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:42	bls
Residue, Filterable (TDS) @180C	SM2540C	2	1910		*	mg/L	40	80	02/09/22 15:16	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	<1	U	*	mg/L	1	5	02/16/22 11:19	mjj1
TDS (calculated)	Calculation		1150			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.66						05/09/22 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-67

ACZ Sample ID: ***L71307-06***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 16:06	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.215	B	*	mg/L	0.05	0.25	02/17/22 21:11	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	02/10/22 18:00	mfm
Arsenic, dissolved	M200.8 ICP-MS	2	0.00116	B	*	mg/L	0.0004	0.002	02/10/22 18:00	mfm
Barium, dissolved	M200.7 ICP	1	0.945		*	mg/L	0.007	0.035	02/17/22 21:11	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	2	<0.00016	U	*	mg/L	0.00016	0.0005	02/10/22 18:00	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:11	wtc/aeh
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	02/17/22 21:11	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	2	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 18:00	mfm
Calcium, dissolved	M200.7 ICP	1	364		*	mg/L	0.1	0.5	02/17/22 21:11	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	2	0.110		*	mg/L	0.001	0.004	02/10/22 18:00	mfm
Cobalt, dissolved	M200.8 ICP-MS	2	0.00329		*	mg/L	0.0001	0.0005	02/10/22 18:00	mfm
Copper, dissolved	M200.8 ICP-MS	2	0.00297	B	*	mg/L	0.0016	0.004	02/10/22 18:00	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	02/17/22 21:11	wtc/aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	02/17/22 21:11	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	2	0.00103		*	mg/L	0.0002	0.001	02/10/22 18:00	mfm
Lithium, dissolved	M200.7 ICP	1	0.116		*	mg/L	0.008	0.04	02/17/22 21:11	wtc/aeh
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	02/17/22 21:11	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.004	02/10/22 18:00	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	46			ng/L	2	5	02/17/22 10:31	mfm
Molybdenum, dissolved	M200.8 ICP-MS	2	0.177		*	mg/L	0.0004	0.001	02/10/22 18:00	mfm
Nickel, dissolved	M200.8 ICP-MS	2	<0.0008	U	*	mg/L	0.0008	0.002	02/10/22 18:00	mfm
Potassium, dissolved	M200.7 ICP	1	49.0		*	mg/L	0.2	1	02/17/22 21:11	wtc/aeh
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	02/17/22 21:11	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	2	0.00370		*	mg/L	0.0002	0.0005	02/10/22 18:00	mfm
Silver, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	02/10/22 18:00	mfm
Sodium, dissolved	M200.7 ICP	1	75.0		*	mg/L	0.2	1	02/17/22 21:11	wtc/aeh
Strontium, dissolved	M200.7 ICP	1	1.32		*	mg/L	0.009	0.045	02/17/22 21:11	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	2	0.00082	B	*	mg/L	0.0002	0.001	02/10/22 18:00	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:11	wtc/aeh
Titanium, dissolved	M200.7 ICP	1	0.0222	B	*	mg/L	0.005	0.025	02/18/22 19:41	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	2	<0.0002	U	*	mg/L	0.0002	0.001	02/10/22 18:00	mfm
Vanadium, dissolved	M200.8 ICP-MS	2	<0.001	U	*	mg/L	0.001	0.004	02/10/22 18:00	mfm
Zinc, dissolved	M200.8 ICP-MS	2	<0.012	U	*	mg/L	0.012	0.03	02/10/22 18:00	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-67

ACZ Sample ID: ***L71307-06***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	02/10/22 0:00	jck
Carbonate as CaCO3		1	78.4		*	mg/L	2	20	02/10/22 0:00	jck
Hydroxide as CaCO3		1	909		*	mg/L	2	20	02/10/22 0:00	jck
Total Alkalinity		1	988		*	mg/L	2	20	02/10/22 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			7.0			%			05/09/22 0:00	calc
Sum of Anions			20			meq/L			05/09/22 0:00	calc
Sum of Cations			23			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	8.11		*	mg/L	0.5	2	02/11/22 18:58	mjj1
Conductivity @25C	SM2510B	1	4330		*	umhos/cm	1	10	02/10/22 5:46	jck
Fluoride	M300.0 - Ion Chromatography	1	0.157	B	*	mg/L	0.05	0.25	02/22/22 2:14	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		909			mg/L	0.2	5	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.393			mg/L	0.02	0.1	02/17/22 2:17	pjb
pH (lab)	SM4500H+ B									
pH		1	12.4	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	21.7		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:43	bls
Residue, Filterable (TDS) @180C	SM2540C	1	1140		*	mg/L	20	40	02/09/22 15:19	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	4.9	B		mg/L	1	5	02/11/22 13:38	mjj1
TDS (calculated)	Calculation		704			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.62						05/09/22 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-68

ACZ Sample ID: ***L71307-07***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 16:14	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.478		*	mg/L	0.05	0.25	02/17/22 21:14	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	1	0.00107	B	*	mg/L	0.0004	0.002	02/10/22 18:02	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00070	B	*	mg/L	0.0002	0.001	02/10/22 18:02	mfm
Barium, dissolved	M200.7 ICP	1	0.380		*	mg/L	0.007	0.035	02/17/22 21:14	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	02/10/22 18:02	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:14	wtc/aeh
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	02/17/22 21:14	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	02/10/22 18:02	mfm
Calcium, dissolved	M200.7 ICP	1	207		*	mg/L	0.1	0.5	02/17/22 21:14	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	1	0.117		*	mg/L	0.0005	0.002	02/10/22 18:02	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00205		*	mg/L	0.00005	0.00025	02/10/22 18:02	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00181	B	*	mg/L	0.0008	0.002	02/10/22 18:02	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	02/17/22 21:14	wtc/aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	02/17/22 21:14	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	1	0.00028	B	*	mg/L	0.0001	0.0005	02/10/22 18:02	mfm
Lithium, dissolved	M200.7 ICP	1	0.0968		*	mg/L	0.008	0.04	02/17/22 21:14	wtc/aeh
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	02/17/22 21:14	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	02/10/22 18:02	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	20	165			ng/L	6	20	02/17/22 10:36	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.140		*	mg/L	0.0002	0.0005	02/10/22 18:02	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	02/10/22 18:02	mfm
Potassium, dissolved	M200.7 ICP	1	25.7		*	mg/L	0.2	1	02/17/22 21:14	wtc/aeh
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	02/17/22 21:14	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	1	0.00322		*	mg/L	0.0001	0.00025	02/10/22 18:02	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 18:02	mfm
Sodium, dissolved	M200.7 ICP	1	67.6		*	mg/L	0.2	1	02/17/22 21:14	wtc/aeh
Strontium, dissolved	M200.7 ICP	1	0.611		*	mg/L	0.009	0.045	02/17/22 21:14	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	1	0.00059		*	mg/L	0.0001	0.0005	02/10/22 18:02	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:14	wtc/aeh
Titanium, dissolved	M200.7 ICP	1	0.0231	B	*	mg/L	0.005	0.025	02/18/22 19:44	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 18:02	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	02/10/22 18:02	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	02/10/22 18:02	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-68

ACZ Sample ID: ***L71307-07***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<3	UH	*	mg/L	3	20	02/22/22 0:00	eep
Carbonate as CaCO3		1	154	H	*	mg/L	3	20	02/22/22 0:00	eep
Hydroxide as CaCO3		1	459	H	*	mg/L	3	20	02/22/22 0:00	eep
Total Alkalinity		1	612	H	*	mg/L	3	20	02/22/22 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.7			%			05/09/22 0:00	calc
Sum of Anions			13			meq/L			05/09/22 0:00	calc
Sum of Cations			14			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	7.39		*	mg/L	0.5	2	02/11/22 18:58	mjj1
Conductivity @25C	SM2510B	1	2270		*	umhos/cm	1	10	02/10/22 5:59	jck
Fluoride	M300.0 - Ion Chromatography	1	0.203	B	*	mg/L	0.05	0.25	02/22/22 2:32	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		517			mg/L	0.2	5	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.221			mg/L	0.02	0.1	02/17/22 2:18	pjb
pH (lab)	SM4500H+ B									
pH		1	12.1	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	21.6		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:44	bls
Residue, Filterable (TDS) @180C	SM2540C	1	718		*	mg/L	20	40	02/09/22 15:21	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	18.1		*	mg/L	1	5	02/11/22 13:38	mjj1
TDS (calculated)	Calculation		498			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.44						05/09/22 0:00	calc

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-69

ACZ Sample ID: ***L71307-08***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								02/09/22 16:21	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.606		*	mg/L	0.05	0.25	02/17/22 21:17	wtc/aeh
Antimony, dissolved	M200.8 ICP-MS	1	0.00200		*	mg/L	0.0004	0.002	02/10/22 18:04	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00082	B	*	mg/L	0.0002	0.001	02/10/22 18:04	mfm
Barium, dissolved	M200.7 ICP	1	0.134		*	mg/L	0.007	0.035	02/17/22 21:17	wtc/aeh
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	02/10/22 18:04	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:17	wtc/aeh
Boron, dissolved	M200.7 ICP	1	<0.03	U	*	mg/L	0.03	0.1	02/17/22 21:17	wtc/aeh
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	02/10/22 18:04	mfm
Calcium, dissolved	M200.7 ICP	1	117		*	mg/L	0.1	0.5	02/17/22 21:17	wtc/aeh
Chromium, dissolved	M200.8 ICP-MS	1	0.0709		*	mg/L	0.0005	0.002	02/10/22 18:04	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00119		*	mg/L	0.00005	0.00025	02/10/22 18:04	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00209		*	mg/L	0.0008	0.002	02/10/22 18:04	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	02/17/22 21:17	wtc/aeh
Iron, dissolved	M200.7 ICP	1	<0.06	U	*	mg/L	0.06	0.15	02/17/22 21:17	wtc/aeh
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 18:04	mfm
Lithium, dissolved	M200.7 ICP	1	0.0857		*	mg/L	0.008	0.04	02/17/22 21:17	wtc/aeh
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	02/17/22 21:17	wtc/aeh
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	02/10/22 18:04	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	12.7			ng/L	0.3	1	02/16/22 15:42	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0762		*	mg/L	0.0002	0.0005	02/10/22 18:04	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	02/10/22 18:04	mfm
Potassium, dissolved	M200.7 ICP	1	13.6		*	mg/L	0.2	1	02/17/22 21:17	wtc/aeh
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	02/17/22 21:17	wtc/aeh
Selenium, dissolved	M200.8 ICP-MS	1	0.00249		*	mg/L	0.0001	0.00025	02/10/22 18:04	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 18:04	mfm
Sodium, dissolved	M200.7 ICP	1	62.8		*	mg/L	0.2	1	02/17/22 21:17	wtc/aeh
Strontium, dissolved	M200.7 ICP	1	0.247		*	mg/L	0.009	0.045	02/17/22 21:17	wtc/aeh
Thallium, dissolved	M200.8 ICP-MS	1	0.00035	B	*	mg/L	0.0001	0.0005	02/10/22 18:04	mfm
Tin, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	02/17/22 21:17	wtc/aeh
Titanium, dissolved	M200.7 ICP	1	0.0194	B	*	mg/L	0.005	0.025	02/18/22 19:48	wtc/aeh
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	02/10/22 18:04	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00207		*	mg/L	0.0005	0.002	02/10/22 18:04	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	02/10/22 18:04	mfm

McClelland Laboratories, Inc.
Project ID:
Sample ID: 4664 B-69

ACZ Sample ID: ***L71307-08***
Date Sampled: *02/07/22 10:00*
Date Received: *02/08/22*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<3	UH	*	mg/L	3	20	02/22/22 0:00	eep
Carbonate as CaCO3		1	109	H	*	mg/L	3	20	02/22/22 0:00	eep
Hydroxide as CaCO3		1	253	H	*	mg/L	3	20	02/22/22 0:00	eep
Total Alkalinity		1	362	H	*	mg/L	3	20	02/22/22 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.4			%			05/09/22 0:00	calc
Sum of Anions			8.4			meq/L			05/09/22 0:00	calc
Sum of Cations			9.0			meq/L			05/09/22 0:00	calc
Chloride	SM4500Cl-E	1	6.88		*	mg/L	0.5	2	02/11/22 18:58	mjj1
Conductivity @25C	SM2510B	1	1300		*	umhos/cm	1	10	02/10/22 6:12	jck
Fluoride	M300.0 - Ion Chromatography	1	0.225	B	*	mg/L	0.05	0.25	02/21/22 20:07	mad
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		292			mg/L	0.2	5	05/09/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.142			mg/L	0.02	0.1	02/17/22 2:19	pjb
pH (lab)	SM4500H+ B									
pH		1	11.9	H	*	units	0.1	0.1	02/10/22 0:00	jck
pH measured at		1	21.1		*	C	0.1	0.1	02/10/22 0:00	jck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	02/11/22 11:45	bls
Residue, Filterable (TDS) @180C	SM2540C	1	492		*	mg/L	20	40	02/09/22 15:24	jck
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	43.0		*	mg/L	5	25	02/11/22 14:09	mjj1
TDS (calculated)	Calculation		353			mg/L			05/09/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.39						05/09/22 0:00	calc

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Reference

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536447													
WG536447PBW1	PBW	02/09/22 18:45				13.3	mg/L		-20	20			
WG536447LCSW3	LCSW	02/09/22 19:04	WC220202-3	820.0001		796.6	mg/L	97	90	110			
WG536447LCSW6	LCSW	02/09/22 21:50	WC220202-3	820.0001		800	mg/L	98	90	110			
WG536447PBW2	PBW	02/09/22 21:57				5.8	mg/L		-20	20			
WG536447LCSW9	LCSW	02/10/22 0:40	WC220202-3	820.0001		801.2	mg/L	98	90	110			
WG536447PBW3	PBW	02/10/22 0:47				4.3	mg/L		-20	20			
WG536447LCSW12	LCSW	02/10/22 3:33	WC220202-3	820.0001		797.6	mg/L	97	90	110			
WG536447PBW4	PBW	02/10/22 3:40				7.1	mg/L		-20	20			
L71312-01DUP	DUP	02/10/22 6:32			364	348.1	mg/L				4	20	
WG536447LCSW15	LCSW	02/10/22 8:47	WC220202-3	820.0001		806.7	mg/L	98	90	110			
WG537151													
WG537151PBW	PBW	02/22/22 13:02				2	mg/L		-20	20			
WG537151LCSW	LCSW	02/22/22 13:18	WC220202-3	820.0001		773.7	mg/L	94	90	110			
L71307-04DUP	DUP	02/22/22 13:51			394	395.9	mg/L				0	20	
L71307-08DUP	DUP	02/22/22 14:41			362	359.6	mg/L				1	20	

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		1.98	mg/L	99	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.15	0.15			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	1.0008		1.035	mg/L	103	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	1.0008	.606	1.618	mg/L	101	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	1.0008	.606	1.616	mg/L	101	85	115	0	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.0201		.02021	mg/L	101	90	110			
WG536529ICB	ICB	02/10/22 17:23				.00061	mg/L		-0.00088	0.00088			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.01		.00962	mg/L	96	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.01	U	.00968	mg/L	97	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.01	U	.00962	mg/L	96	70	130	1	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05135	mg/L	103	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00044	0.00044			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05005		.05129	mg/L	102	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05005	.00051	.05639	mg/L	112	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05005	.00051	.0552	mg/L	109	70	130	2	20	

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ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		2.0022	mg/L	100	95	105			
WG536880ICB	ICB	02/17/22 19:44				.0076	mg/L		-0.021	0.021			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	.5		.5043	mg/L	101	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	.5	.134	.6344	mg/L	100	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	.5	.134	.6323	mg/L	100	85	115	0	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.052673	mg/L	105	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.000176	0.000176			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05005		.051789	mg/L	103	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05005	U	.055151	mg/L	110	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05005	U	.05531	mg/L	111	70	130	0	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		1.931	mg/L	97	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.12	0.12			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	1		.999	mg/L	100	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	1	U	1.043	mg/L	104	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	1	U	1.026	mg/L	103	85	115	2	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		2.027	mg/L	101	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.09	0.09			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	.5005		.534	mg/L	107	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	.5005	U	.556	mg/L	111	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	.5005	U	.551	mg/L	110	85	115	1	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.051561	mg/L	103	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00011	0.00011			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05005		.050559	mg/L	101	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05005	U	.053137	mg/L	106	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05005	U	.053091	mg/L	106	70	130	0	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	100		100.25	mg/L	100	95	105			
WG536880ICB	ICB	02/17/22 19:44				.22	mg/L		-0.3	0.3			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	67.99026		64.94	mg/L	96	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	67.99026	117	177.5	mg/L	89	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	67.99026	117	177.6	mg/L	89	85	115	0	20	

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536597													
WG536597ICB	ICB	02/11/22 18:31				U	mg/L		-1.5	1.5			
WG536597ICV	ICV	02/11/22 18:31	WI210503-1	54.89		57.96	mg/L	106	90	110			
WG536597LFB1	LFB	02/11/22 18:47	WI210908-11	29.97		31.86	mg/L	106	90	110			
WG536597LFB2	LFB	02/11/22 18:56	WI210908-11	29.97		31.31	mg/L	104	90	110			
L71305-03AS	AS	02/11/22 18:57	WI210908-11	29.97	1.02	32.82	mg/L	106	90	110			
L71307-01DUP	DUP	02/11/22 18:57			9.25	9.24	mg/L				0	20	

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05224	mg/L	104	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.0011	0.0011			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05		.05048	mg/L	101	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05	U	.05048	mg/L	101	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05	U	.04953	mg/L	99	70	130	2	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.053724	mg/L	107	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00011	0.00011			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05005		.05178	mg/L	103	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05005	.000428	.052168	mg/L	103	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05005	.000428	.052323	mg/L	104	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536447													
WG536447LCSW2	LCSW	02/09/22 18:52	PCN65017	1408		1445	umhos/cm	103	90	110			
WG536447LCSW5	LCSW	02/09/22 21:37	PCN65017	1408		1435	umhos/cm	102	90	110			
WG536447LCSW8	LCSW	02/10/22 0:27	PCN65017	1408		1425	umhos/cm	101	90	110			
WG536447LCSW11	LCSW	02/10/22 3:20	PCN65017	1408		1419	umhos/cm	101	90	110			
L71312-01DUP	DUP	02/10/22 6:32			3930	3930	umhos/cm				0	20	
WG536447LCSW14	LCSW	02/10/22 8:34	PCN65017	1408		1414	umhos/cm	100	90	110			

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ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05439	mg/L	109	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00176	0.00176			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05		.05233	mg/L	105	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05	.0142	.06438	mg/L	100	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05	.0142	.06377	mg/L	99	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536286													
WG536286ICV	ICV	02/04/22 22:11	WI220207-4	4.016		4.05	mg/L	101	90	110			
WG536286ICB	ICB	02/04/22 22:29				U	mg/L		-0.05	0.05			
WG536963													
WG536963ICV	ICV	02/18/22 1:51	WI220224-3	4.016		4.296	mg/L	107	90	110			
WG536963ICB	ICB	02/18/22 2:09				U	mg/L		-0.05	0.05			
WG536963LFB1	LFB	02/19/22 21:09	WI211112-6	1.5		1.46	mg/L	97	90	110			
L71262-01DUP	DUP	02/19/22 21:45			U	U	mg/L				0	20	RA
L71262-02AS	AS	02/19/22 22:21	WI211112-6	30	U	32.837	mg/L	109	90	110			
WG536963LFB2	LFB	02/20/22 5:49	WI211112-6	1.5		1.486	mg/L	99	90	110			
WG536938													
WG536938LFB1	LFB	02/18/22 18:16	WI211112-6	1.5		1.391	mg/L	93	90	110			
L71242-01DUP	DUP	02/18/22 23:20			7.05	7.107	mg/L				1	20	
L71242-02AS	AS	02/18/22 23:56	WI211112-6	30	U	27.896	mg/L	93	90	110			
WG536938LFB2	LFB	02/19/22 2:55	WI211112-6	1.5		1.521	mg/L	101	90	110			
L71307-03DUP	DUP	02/22/22 0:26			.165	.174	mg/L				5	20	RA
L71307-04AS	AS	02/22/22 1:02	WI211112-6	1.5	.232	1.546	mg/L	88	90	110			M2

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		1.95	mg/L	98	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.3	0.3			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	.9822		1.04	mg/L	106	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	.9822	U	1.06	mg/L	108	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	.9822	U	1.06	mg/L	108	85	115	0	20	

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		1.978	mg/L	99	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.18	0.18			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	1.0001		1.04	mg/L	104	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	1.0001	U	1.039	mg/L	104	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	1.0001	U	1.042	mg/L	104	85	115	0	20	

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ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05336	mg/L	107	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00022	0.00022			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05005		.05323	mg/L	106	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05005	.00014	.05491	mg/L	109	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05005	.00014	.05588	mg/L	111	70	130	2	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		1.9902	mg/L	100	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.024	0.024			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	.999		.9814	mg/L	98	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	.999	.0857	1.073	mg/L	99	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	.999	.0857	1.07	mg/L	99	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	100		95.73	mg/L	96	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.6	0.6			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	49.99828		49	mg/L	98	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	49.99828	U	48.99	mg/L	98	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	49.99828	U	48.96	mg/L	98	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05358	mg/L	107	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00088	0.00088			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.0498		.05217	mg/L	105	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.0498	.00822	.05921	mg/L	102	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.0498	.00822	.05929	mg/L	103	70	130	0	20	

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ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG535257													
WG535257ICV	ICV	01/20/22 12:25	HG220111-4	10		10.4	ng/L	104	79	121			
WG535257ICB	ICB	01/20/22 12:29				U	ng/L		-0.501	0.501			
WG536774													
WG536774CCV1	CCV	02/16/22 10:58	HG220111-4	10		11.4	ng/L	114	76.5	123.4			
WG536774CCB1	CCB	02/16/22 11:03				U	ng/L		-0.501	0.501			
WG536774PQV	PQV	02/16/22 11:08	HG220111-6	1		1.21	ng/L	121	70	130			
WG536774LFB	LFB	02/16/22 11:13	HG220111-5	2		2.37	ng/L	119	71	125			
WG536774CCV2	CCV	02/16/22 15:28	HG220111-4	10		11.8	ng/L	118	76.5	123.4			
WG536774CCB2	CCB	02/16/22 15:32				U	ng/L		-0.501	0.501			
WG536774CCV3	CCV	02/16/22 16:30	HG220111-4	10		11.3	ng/L	113	76.5	123.4			
WG536774CCB3	CCB	02/16/22 16:35				U	ng/L		-0.501	0.501			
WG536774CCV4	CCV	02/16/22 16:54	HG220111-4	10		10.8	ng/L	108	76.5	123.4			
WG536774CCB4	CCB	02/16/22 16:58				U	ng/L		-0.501	0.501			
WG536774CCV5	CCV	02/17/22 8:45	HG220111-4	10		10.9	ng/L	109	76.5	123.4			
WG536774CCB5	CCB	02/17/22 8:50				U	ng/L		-0.501	0.501			
WG536774PQV1	PQV	02/17/22 8:54	HG220111-6	1		1.06	ng/L	106	70	130			
WG536774LFB	LFB	02/17/22 8:59	HG220111-5	2		2.11	ng/L	106	71	125			
L71307-03MS	MS	02/17/22 10:21	HG163150X	5000	510	600	ng/L	90	71	125			
L71307-03MSD	MSD	02/17/22 10:26	HG163150X	5000	510	615	ng/L	105	71	125	2	24	
WG536774CCV6	CCV	02/17/22 10:41	HG220111-4	10		10.7	ng/L	107	76.5	123.4			
WG536774CCB6	CCB	02/17/22 10:45				U	ng/L		-0.501	0.501			
WG536774CCV7	CCV	02/17/22 10:55	HG220111-4	10		11.1	ng/L	111	76.5	123.4			
WG536774CCB7	CCB	02/17/22 11:00				U	ng/L		-0.501	0.501			
WG536774CCV8	CCV	02/17/22 11:30	HG220111-4	10		11.2	ng/L	112	76.5	123.4			
WG536774CCB8	CCB	02/17/22 11:35				U	ng/L		-0.501	0.501			
WG536939													
WG536939CCV	CCV	02/18/22 9:56	HG220111-4	10		10.4	ng/L	104	76.5	123.4			
WG536939CCB	CCB	02/18/22 10:01				U	ng/L		-0.501	0.501			
WG536939PQV	PQV	02/18/22 10:06	HG220111-6	1		1.1	ng/L	110	70	130			
WG536939LFB	LFB	02/18/22 10:11	HG220111-5	2		2.11	ng/L	106	71	125			
L71307-05MS	MS	02/18/22 11:10	HG1631200X	80000	1490	1978	ng/L	122	71	125			
L71307-05MSD	MSD	02/18/22 11:15	HG1631200X	80000	1490	1964	ng/L	119	71	125	1	24	
WG536939CCV1	CCV	02/18/22 11:20	HG220111-4	10		10.3	ng/L	103	76.5	123.4			
WG536939CCB1	CCB	02/18/22 11:24				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.02		.02075	mg/L	104	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00044	0.00044			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05005		.05189	mg/L	104	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05005	.00106	.0568	mg/L	111	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05005	.00106	.05666	mg/L	111	70	130	0	20	

MCCLELLANDLAB ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05307	mg/L	106	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00088	0.00088			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05		.05123	mg/L	102	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05	.0017	.05124	mg/L	99	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05	.0017	.05048	mg/L	98	70	130	1	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536827													
WG536827ICV	ICV	02/16/22 22:24	WI211205-1	2.4161		2.228	mg/L	92	90	110			
WG536827ICB	ICB	02/16/22 22:25				U	mg/L		-0.02	0.02			
WG536830													
WG536830LFB	LFB	02/17/22 1:40	WI211001-5	2		2.112	mg/L	106	90	110			
L71293-06AS	AS	02/17/22 2:02	WI211001-5	2	.162	2.154	mg/L	100	90	110			
L71295-03DUP	DUP	02/17/22 2:23			17.5	17.513	mg/L				0	20	

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536447													
WG536447LCSW1	LCSW	02/09/22 18:50	PCN64057	6		6.1	units	102	5.9	6.1			
WG536447LCSW4	LCSW	02/09/22 21:35	PCN64057	6		6.1	units	102	5.9	6.1			
WG536447LCSW7	LCSW	02/10/22 0:25	PCN64057	6		6.1	units	102	5.9	6.1			
WG536447LCSW10	LCSW	02/10/22 3:18	PCN64057	6		6.1	units	102	5.9	6.1			
L71312-01DUP	DUP	02/10/22 6:32			8.3	8.2	units				1	20	
WG536447LCSW13	LCSW	02/10/22 8:33	PCN64057	6		6.1	units	102	5.9	6.1			

Phosphorus, total M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536563													
WG536563ICV	ICV	02/11/22 10:32	WI220204-1	.65228		.647	mg/L		90	110			
WG536563ICB	ICB	02/11/22 10:34				U	mg/L		-0.01	0.01			
WG536483													
WG536425LRB	LRB	02/11/22 11:14				U	mg/L		-0.01	0.01			
L71307-01DUP	DUP	02/11/22 11:35			U	U	mg/L				0	20	RA
WG536425LFB	LFB	02/11/22 11:46	WI220207-2	.5		.499	mg/L	100	90	110			
L71295-03LFM	LFM	02/11/22 12:14	WI220207-2	.5	5.07	5.853	mg/L	157	90	110			M1

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	20		19.85	mg/L	99	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.6	0.6			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	99.95169		100.6	mg/L	101	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	99.95169	13.6	115	mg/L	101	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	99.95169	13.6	115.3	mg/L	102	85	115	0	20	

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ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536432													
WG536432PBW	PBW	02/09/22 14:40				U	mg/L		-20	20			
WG536432LCSW	LCSW	02/09/22 14:42	PCN64730	1000		992	mg/L	99	80	120			
L71307-03DUP	DUP	02/09/22 15:11			826	828	mg/L				0	10	
L71339-01DUP	DUP	02/09/22 15:40			230	230	mg/L				0	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		1.982	mg/L	99	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.15	0.15			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	1.0017		1.016	mg/L	101	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	1.0017	U	1.022	mg/L	102	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	1.0017	U	1.028	mg/L	103	85	115	1	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05252	mg/L	105	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00022	0.00022			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05		.05133	mg/L	103	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05	.0002	.05684	mg/L	113	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05	.0002	.05641	mg/L	112	70	130	1	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.02		.02089	mg/L	104	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00022	0.00022			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.01		.00999	mg/L	100	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.01	U	.00894	mg/L	89	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.01	U	.00919	mg/L	92	70	130	3	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	100		99.36	mg/L	99	95	105			
WG536880ICB	ICB	02/17/22 19:44				.2	mg/L		-0.6	0.6			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	100.0039		101.1	mg/L	101	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	100.0039	62.8	162.1	mg/L	99	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	100.0039	62.8	162.4	mg/L	100	85	115	0	20	

MCCLELLANDLAB ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		1.967	mg/L	98	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.027	0.027			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	.5005		.545	mg/L	109	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	.5005	.247	.7863	mg/L	108	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	.5005	.247	.7883	mg/L	108	85	115	0	20	

Sulfate D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536565													
WG536565ICB	ICB	02/11/22 10:04				U	mg/L		-3	3			
WG536565ICV	ICV	02/11/22 10:04	WI220131-4	20.46		19.8	mg/L	97	90	110			
WG536565LFB	LFB	02/11/22 13:36	WI211230-5	9.95		9.9	mg/L	99	90	110			
L71303-01DUP	DUP	02/11/22 14:07			113	112.3	mg/L				1	20	
L71305-01AS	AS	02/11/22 14:07	SO4TURB5X	10	111	121.7	mg/L	107	90	110			
L71307-08DUP	DUP	02/11/22 14:09			43	41.9	mg/L				3	20	RA
L71308-01AS	AS	02/11/22 14:13	SO4TURB20X	10	233	240.6	mg/L	76	90	110			M3
WG536746													
WG536746ICB	ICB	02/16/22 10:30				U	mg/L		-3	3			
WG536746ICV	ICV	02/16/22 10:30	WI220215-6	20.46		19.5	mg/L	95	90	110			
WG536746LFB	LFB	02/16/22 11:17	WI211230-5	9.95		9.6	mg/L	96	90	110			
L66026-37DUP	DUP	02/16/22 11:17			U	U	mg/L				0	20	RA
L66027-37AS	AS	02/16/22 11:17	WI211230-5	9.95	6.3	17	mg/L	108	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05364	mg/L	107	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00022	0.00022			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05		.05129	mg/L	103	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05	U	.0537	mg/L	107	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05	U	.05457	mg/L	109	70	130	2	20	

Tin, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536880													
WG536880ICV	ICV	02/17/22 19:39	II220215-3	2		2.02	mg/L	101	95	105			
WG536880ICB	ICB	02/17/22 19:44				U	mg/L		-0.12	0.12			
WG536880LFB	LFB	02/17/22 19:57	II220215-2	1.002		1.005	mg/L	100	85	115			
L71307-08AS	AS	02/17/22 21:20	II220215-2	1.002	U	1.028	mg/L	103	85	115			
L71307-08ASD	ASD	02/17/22 21:23	II220215-2	1.002	U	1.026	mg/L	102	85	115	0	20	

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ACZ Project ID: ***L71307***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536984													
WG536984ICV	ICV	02/18/22 18:38	II220215-3	2		1.9035	mg/L	95	95	105			
WG536984ICB	ICB	02/18/22 18:44				.0091	mg/L		-0.015	0.015			
WG536984LFB	LFB	02/18/22 18:58	II220215-2	1.002		.9894	mg/L	99	85	115			
L51661-146AS	AS	02/18/22 19:04	II220215-2	1.002	.0112	.9889	mg/L	98	85	115			
L51661-146ASD	ASD	02/18/22 19:07	II220215-2	1.002	.0112	1.006	mg/L	99	85	115	2	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05258	mg/L	105	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.00022	0.00022			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05		.05176	mg/L	104	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05	.00011	.05494	mg/L	110	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05	.00011	.05585	mg/L	111	70	130	2	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.05134	mg/L	103	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.0011	0.0011			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.05005		.05026	mg/L	100	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.05005	U	.05254	mg/L	105	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.05005	U	.05187	mg/L	104	70	130	1	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG536529													
WG536529ICV	ICV	02/10/22 17:21	MS220125-1	.05		.0525	mg/L	105	90	110			
WG536529ICB	ICB	02/10/22 17:23				U	mg/L		-0.0132	0.0132			
WG536529LFB	LFB	02/10/22 17:25	MS220126-3	.050075		.0517	mg/L	103	85	115			
L71270-01AS	AS	02/10/22 17:41	MS220126-3	.050075	.06	.1095	mg/L	99	70	130			
L71270-01ASD	ASD	02/10/22 17:47	MS220126-3	.050075	.06	.1104	mg/L	101	70	130	1	20	

McClelland Laboratories, Inc. ACZ Project ID: ***L71307***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L71307-01	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536746	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L71307-02	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L71307-03	WG536938	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L71307-04	WG536938	Fluoride	M300.0 - Ion Chromatography	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG537151	Total Alkalinity	SM2320B - Titration	C4	Confirmatory analysis was past holding time.
L71307-05	WG536938	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536746	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L71307-06	WG536938	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

McClelland Laboratories, Inc. ACZ Project ID: ***L71307***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L71307-07	WG536938	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536565	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG537151	Total Alkalinity	SM2320B - Titration	C5	Confirmatory analysis was past holding time. Original result not confirmed.
L71307-08	WG536963	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536483	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG536565	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG537151	Total Alkalinity	SM2320B - Titration	C5	Confirmatory analysis was past holding time. Original result not confirmed.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.7 ICP
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.7 ICP
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.7 ICP
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.7 ICP
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	SM4500Cl-E
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)
Residue, Filterable (TDS) @180C	SM2540C
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID: L71307
Date Received: 02/08/2022 11:09
Received By:
Date Printed: 2/9/2022

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
7205	3.3	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

McClelland Laboratories, Inc.

ACZ Project ID:	L71307
Date Received:	02/08/2022 11:09
Received By:	
Date Printed:	2/9/2022

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L71307

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Mike Medina
Company: McClelland Laboratories
E-mail: mmedina@mettest.com
Address:
Telephone:

Copy of Report to:

Name:
Company:
E-mail: results@mettest.com
Telephone:

Invoice to:

Name:
Company:
E-mail: mliap@mettest.com
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [X] NO [ ]

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes [ ] No [ ]

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: _____ **Sampler's Site Information** State NV Zip code 89436 Time Zone PT

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: GRASSY-LEACH
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? [ ]

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	see attached							
4664 B-61	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-62	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-63	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-64	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-66	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-67	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-68	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
4664 B-69	2/7/22:10:00 am	WW	5	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
				[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	10:00 am 2/7/22	[signature]	2/8/22 1109

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L71307 Chain of Custod

Appendix D Laboratory Reports – Diffusion Test

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 06, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68415

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 11, 2021. This project has been assigned to ACZ's project number, L68415. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68415. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 05, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-001

ACZ Sample ID: ***L68415-01***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 12:37	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0163		*	mg/L	0.005	0.015	09/29/21 18:34	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:34	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0234		*	mg/L	0.0002	0.001	09/29/21 18:34	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0196		*	mg/L	0.0005	0.0025	09/29/21 18:34	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:34	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 18:27	jlw
Boron, dissolved	M200.7 ICP	1	0.073	B	*	mg/L	0.03	0.1	09/23/21 18:27	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:34	mfm
Calcium, dissolved	M200.7 ICP	1	26.6		*	mg/L	0.1	0.5	09/23/21 18:27	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00200		*	mg/L	0.0005	0.002	09/29/21 18:34	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000130	B	*	mg/L	0.00005	0.00025	09/29/21 18:34	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:34	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 18:27	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0332		*	mg/L	0.007	0.02	09/29/21 18:34	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:34	mfm
Lithium, dissolved	M200.7 ICP	1	0.0726		*	mg/L	0.008	0.04	09/23/21 18:27	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 18:27	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00042	B	*	mg/L	0.0004	0.002	09/29/21 18:34	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	15.9		*	ng/L	0.3	1	09/16/21 17:04	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00463		*	mg/L	0.0002	0.0005	09/29/21 18:34	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:34	mfm
Potassium, dissolved	M200.7 ICP	1	10.7		*	mg/L	0.2	1	09/23/21 18:27	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 18:27	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00136		*	mg/L	0.0001	0.00025	09/29/21 18:34	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:34	mfm
Sodium, dissolved	M200.7 ICP	1	65.0		*	mg/L	0.2	1	09/23/21 18:27	jlw
Strontium, dissolved	M200.7 ICP	1	0.0515		*	mg/L	0.009	0.045	09/23/21 18:27	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:34	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0149		*	mg/L	0.0008	0.0025	09/29/21 18:34	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 11:28	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:34	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00199	B	*	mg/L	0.0005	0.002	09/29/21 18:34	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:34	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-001

ACZ Sample ID: ***L68415-01***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	103		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	40.2		*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	143		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.05		*	mg/L	0.4	2	09/17/21 2:28	krh
Conductivity @25C	SM2510B	1	383		*	umhos/cm	1	10	09/17/21 21:18	eep
Fluoride	M300.0 - Ion Chromatography	1	0.367		*	mg/L	0.05	0.25	09/17/21 2:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		66			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.039	B	*	mg/L	0.02	0.1	09/25/21 1:54	pjb
pH (lab)	SM4500H+ B									
pH		1	10.9	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	09/18/21 0:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	202		*	mg/L	20	40	09/13/21 15:00	emk
Sulfate	M300.0 - Ion Chromatography	1	19.4		*	mg/L	0.4	2	09/17/21 2:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-002

ACZ Sample ID: ***L68415-02***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 12:46	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0084	B	*	mg/L	0.005	0.015	09/29/21 18:36	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:36	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0232		*	mg/L	0.0002	0.001	09/29/21 18:36	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0113		*	mg/L	0.0005	0.0025	09/29/21 18:36	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:36	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 18:30	jlw
Boron, dissolved	M200.7 ICP	1	0.071	B	*	mg/L	0.03	0.1	09/23/21 18:30	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:36	mfm
Calcium, dissolved	M200.7 ICP	1	12.2		*	mg/L	0.1	0.5	09/23/21 18:30	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00207		*	mg/L	0.0005	0.002	09/29/21 18:36	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000065	B	*	mg/L	0.00005	0.00025	09/29/21 18:36	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:36	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 18:30	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0273		*	mg/L	0.007	0.02	09/29/21 18:36	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:36	mfm
Lithium, dissolved	M200.7 ICP	1	0.0714		*	mg/L	0.008	0.04	09/23/21 18:30	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 18:30	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0004	0.002	09/29/21 18:36	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	16.5		*	ng/L	0.3	1	09/16/21 17:09	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00457		*	mg/L	0.0002	0.0005	09/29/21 18:36	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:36	mfm
Potassium, dissolved	M200.7 ICP	1	8.61		*	mg/L	0.2	1	09/23/21 18:30	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 18:30	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00206		*	mg/L	0.0001	0.00025	09/29/21 18:36	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:36	mfm
Sodium, dissolved	M200.7 ICP	1	63.6		*	mg/L	0.2	1	09/23/21 18:30	jlw
Strontium, dissolved	M200.7 ICP	1	0.0284	B	*	mg/L	0.009	0.045	09/23/21 18:30	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:36	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0180		*	mg/L	0.0008	0.0025	09/29/21 18:36	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 11:32	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:36	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00192	B	*	mg/L	0.0005	0.002	09/29/21 18:36	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:36	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-002

ACZ Sample ID: ***L68415-02***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	107		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	18.7	B	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.08		*	mg/L	0.4	2	09/17/21 2:46	krh
Conductivity @25C	SM2510B	1	361		*	umhos/cm	1	10	09/17/21 21:28	eep
Fluoride	M300.0 - Ion Chromatography	1	0.368		*	mg/L	0.05	0.25	09/17/21 2:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		31			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.031	B	*	mg/L	0.02	0.1	09/25/21 1:59	pjb
pH (lab)	SM4500H+ B									
pH		1	10.8	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/18/21 0:32	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/13/21 15:02	emk
Sulfate	M300.0 - Ion Chromatography	1	19.3		*	mg/L	0.4	2	09/17/21 2:46	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-003

ACZ Sample ID: ***L68415-03***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 12:55	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0288		*	mg/L	0.005	0.015	09/29/21 18:38	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:38	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0362		*	mg/L	0.0002	0.001	09/29/21 18:38	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00380		*	mg/L	0.0005	0.0025	09/29/21 18:38	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:38	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 18:33	jlw
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	09/23/21 18:33	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:38	mfm
Calcium, dissolved	M200.7 ICP	1	6.43		*	mg/L	0.1	0.5	09/23/21 18:33	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00555		*	mg/L	0.0005	0.002	09/29/21 18:38	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:38	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:38	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 18:33	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0546		*	mg/L	0.007	0.02	09/29/21 18:38	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:38	mfm
Lithium, dissolved	M200.7 ICP	1	0.0670		*	mg/L	0.008	0.04	09/23/21 18:33	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 18:33	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.002	09/29/21 18:38	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.9		*	ng/L	0.3	1	09/16/21 17:14	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00506		*	mg/L	0.0002	0.0005	09/29/21 18:38	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:38	mfm
Potassium, dissolved	M200.7 ICP	1	2.44		*	mg/L	0.2	1	09/23/21 18:33	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 18:33	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00155		*	mg/L	0.0001	0.00025	09/29/21 18:38	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:38	mfm
Sodium, dissolved	M200.7 ICP	1	61.4		*	mg/L	0.2	1	09/23/21 18:33	jlw
Strontium, dissolved	M200.7 ICP	1	0.0221	B	*	mg/L	0.009	0.045	09/23/21 18:33	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:38	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0134		*	mg/L	0.0008	0.0025	09/29/21 18:38	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 11:35	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/29/21 18:38	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00301		*	mg/L	0.0005	0.002	09/29/21 18:38	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:38	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-003

ACZ Sample ID: ***L68415-03***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	100.0		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	20.7		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.29		*	mg/L	0.4	2	09/17/21 3:04	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/17/21 21:37	eep
Fluoride	M300.0 - Ion Chromatography	1	0.474		*	mg/L	0.05	0.25	09/17/21 3:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 2:01	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.021	B	*	mg/L	0.01	0.05	09/18/21 0:33	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	182		*	mg/L	20	40	09/13/21 15:04	emk
Sulfate	M300.0 - Ion Chromatography	1	23.2		*	mg/L	0.4	2	09/17/21 3:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-004

ACZ Sample ID: ***L68415-04***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 13:04	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0429		*	mg/L	0.005	0.015	09/29/21 18:40	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:40	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0349		*	mg/L	0.0002	0.001	09/29/21 18:40	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00453		*	mg/L	0.0005	0.0025	09/29/21 18:40	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:40	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 18:43	jlw
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	09/23/21 18:43	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:40	mfm
Calcium, dissolved	M200.7 ICP	1	6.91		*	mg/L	0.1	0.5	09/23/21 18:43	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00283		*	mg/L	0.0005	0.002	09/29/21 18:40	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000052	B	*	mg/L	0.00005	0.00025	09/29/21 18:40	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:40	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 18:43	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0597		*	mg/L	0.007	0.02	09/29/21 18:40	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:40	mfm
Lithium, dissolved	M200.7 ICP	1	0.0684		*	mg/L	0.008	0.04	09/23/21 18:43	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 18:43	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0004	0.002	09/29/21 18:40	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.2		*	ng/L	0.3	1	09/16/21 17:18	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00490		*	mg/L	0.0002	0.0005	09/29/21 18:40	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:40	mfm
Potassium, dissolved	M200.7 ICP	1	2.56		*	mg/L	0.2	1	09/23/21 18:43	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 18:43	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00153		*	mg/L	0.0001	0.00025	09/29/21 18:40	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:40	mfm
Sodium, dissolved	M200.7 ICP	1	62.7		*	mg/L	0.2	1	09/23/21 18:43	jlw
Strontium, dissolved	M200.7 ICP	1	0.0237	B	*	mg/L	0.009	0.045	09/23/21 18:43	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:40	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0129		*	mg/L	0.0008	0.0025	09/29/21 18:40	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 11:44	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/29/21 18:40	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00261		*	mg/L	0.0005	0.002	09/29/21 18:40	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:40	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-004

ACZ Sample ID: ***L68415-04***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.5		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	24.6		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.28		*	mg/L	0.4	2	09/17/21 3:22	krh
Conductivity @25C	SM2510B	1	305		*	umhos/cm	1	10	09/17/21 21:46	eep
Fluoride	M300.0 - Ion Chromatography	1	0.467		*	mg/L	0.05	0.25	09/17/21 3:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.055	B	*	mg/L	0.02	0.1	09/25/21 2:02	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.021	B	*	mg/L	0.01	0.05	09/18/21 0:34	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/13/21 15:06	emk
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	09/17/21 3:22	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-005

ACZ Sample ID: ***L68415-05***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 13:12	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0416		*	mg/L	0.005	0.015	09/29/21 18:45	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00049	B	*	mg/L	0.0004	0.002	09/29/21 18:45	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0348		*	mg/L	0.0002	0.001	09/29/21 18:45	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00492		*	mg/L	0.0005	0.0025	09/29/21 18:45	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:45	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 18:46	jlw
Boron, dissolved	M200.7 ICP	1	0.077	B	*	mg/L	0.03	0.1	09/23/21 18:46	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:45	mfm
Calcium, dissolved	M200.7 ICP	1	6.87		*	mg/L	0.1	0.5	09/23/21 18:46	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00478		*	mg/L	0.0005	0.002	09/29/21 18:45	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:45	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:45	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 18:46	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0585		*	mg/L	0.007	0.02	09/29/21 18:45	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:45	mfm
Lithium, dissolved	M200.7 ICP	1	0.0676		*	mg/L	0.008	0.04	09/23/21 18:46	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 18:46	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00057	B	*	mg/L	0.0004	0.002	09/29/21 18:45	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	7.1		*	ng/L	0.3	1	09/16/21 17:23	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00529		*	mg/L	0.0002	0.0005	09/29/21 18:45	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:45	mfm
Potassium, dissolved	M200.7 ICP	1	2.44		*	mg/L	0.2	1	09/23/21 18:46	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 18:46	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00156		*	mg/L	0.0001	0.00025	09/29/21 18:45	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:45	mfm
Sodium, dissolved	M200.7 ICP	1	61.3		*	mg/L	0.2	1	09/23/21 18:46	jlw
Strontium, dissolved	M200.7 ICP	1	0.0236	B	*	mg/L	0.009	0.045	09/23/21 18:46	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:45	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0109		*	mg/L	0.0008	0.0025	09/29/21 18:45	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 11:48	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	09/29/21 18:45	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00257		*	mg/L	0.0005	0.002	09/29/21 18:45	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:45	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-005

ACZ Sample ID: ***L68415-05***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	100.0		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	25.6		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.27		*	mg/L	0.4	2	09/17/21 3:39	krh
Conductivity @25C	SM2510B	1	302		*	umhos/cm	1	10	09/17/21 21:55	eep
Fluoride	M300.0 - Ion Chromatography	1	0.461		*	mg/L	0.05	0.25	09/17/21 3:39	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 2:03	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.023	B	*	mg/L	0.01	0.05	09/18/21 0:36	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	202		*	mg/L	20	40	09/13/21 15:10	emk
Sulfate	M300.0 - Ion Chromatography	1	21.9		*	mg/L	0.4	2	09/17/21 3:39	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-006

ACZ Sample ID: ***L68415-06***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 13:21	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0180		*	mg/L	0.005	0.015	09/29/21 18:47	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:47	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0306		*	mg/L	0.0002	0.001	09/29/21 18:47	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0213		*	mg/L	0.0005	0.0025	09/29/21 18:47	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:47	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 18:56	jlw
Boron, dissolved	M200.7 ICP	1	0.073	B	*	mg/L	0.03	0.1	09/23/21 18:56	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:47	mfm
Calcium, dissolved	M200.7 ICP	1	6.55		*	mg/L	0.1	0.5	09/23/21 18:56	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00108	B	*	mg/L	0.0005	0.002	09/29/21 18:47	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000055	B	*	mg/L	0.00005	0.00025	09/29/21 18:47	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:47	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 18:56	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0631		*	mg/L	0.007	0.02	09/29/21 18:47	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:47	mfm
Lithium, dissolved	M200.7 ICP	1	0.0679		*	mg/L	0.008	0.04	09/23/21 18:56	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 18:56	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0004	0.002	09/29/21 18:47	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.4		*	ng/L	0.3	1	09/16/21 17:28	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00730		*	mg/L	0.0002	0.0005	09/29/21 18:47	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:47	mfm
Potassium, dissolved	M200.7 ICP	1	6.26		*	mg/L	0.2	1	09/23/21 18:56	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 18:56	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00146		*	mg/L	0.0001	0.00025	09/29/21 18:47	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:47	mfm
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/23/21 18:56	jlw
Strontium, dissolved	M200.7 ICP	1	0.0432	B	*	mg/L	0.009	0.045	09/23/21 18:56	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:47	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0102		*	mg/L	0.0008	0.0025	09/29/21 18:47	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 11:51	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 18:47	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00218		*	mg/L	0.0005	0.002	09/29/21 18:47	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:47	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-006

ACZ Sample ID: ***L68415-06***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	40.3		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	79.1		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.09		*	mg/L	0.4	2	09/17/21 3:57	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/17/21 22:05	eep
Fluoride	M300.0 - Ion Chromatography	1	0.407		*	mg/L	0.05	0.25	09/17/21 3:57	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.033	B	*	mg/L	0.02	0.1	09/25/21 2:04	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/18/21 0:37	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	200		*	mg/L	20	40	09/13/21 15:12	emk
Sulfate	M300.0 - Ion Chromatography	1	19.2		*	mg/L	0.4	2	09/17/21 3:57	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-007

ACZ Sample ID: ***L68415-07***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 13:39	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0142	B	*	mg/L	0.005	0.015	09/29/21 18:49	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:49	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0274		*	mg/L	0.0002	0.001	09/29/21 18:49	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0176		*	mg/L	0.0005	0.0025	09/29/21 18:49	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:49	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 18:59	jlw
Boron, dissolved	M200.7 ICP	1	0.075	B	*	mg/L	0.03	0.1	09/23/21 18:59	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:49	mfm
Calcium, dissolved	M200.7 ICP	1	5.21		*	mg/L	0.1	0.5	09/23/21 18:59	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00112	B	*	mg/L	0.0005	0.002	09/29/21 18:49	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000056	B	*	mg/L	0.00005	0.00025	09/29/21 18:49	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:49	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 18:59	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0512		*	mg/L	0.007	0.02	09/29/21 18:49	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:49	mfm
Lithium, dissolved	M200.7 ICP	1	0.0681		*	mg/L	0.008	0.04	09/23/21 18:59	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 18:59	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00047	B	*	mg/L	0.0004	0.002	09/29/21 18:49	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.6		*	ng/L	0.3	1	09/16/21 17:38	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00614		*	mg/L	0.0002	0.0005	09/29/21 18:49	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:49	mfm
Potassium, dissolved	M200.7 ICP	1	5.14		*	mg/L	0.2	1	09/23/21 18:59	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 18:59	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00141		*	mg/L	0.0001	0.00025	09/29/21 18:49	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:49	mfm
Sodium, dissolved	M200.7 ICP	1	62.3		*	mg/L	0.2	1	09/23/21 18:59	jlw
Strontium, dissolved	M200.7 ICP	1	0.0383	B	*	mg/L	0.009	0.045	09/23/21 18:59	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:49	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0132		*	mg/L	0.0008	0.0025	09/29/21 18:49	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 11:54	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 18:49	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00197	B	*	mg/L	0.0005	0.002	09/29/21 18:49	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:49	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-007

ACZ Sample ID: ***L68415-07***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	29.5		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	90.2		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.20		*	mg/L	0.4	2	09/21/21 18:29	krh
Conductivity @25C	SM2510B	1	306		*	umhos/cm	1	10	09/17/21 22:15	eep
Fluoride	M300.0 - Ion Chromatography	1	0.456		*	mg/L	0.05	0.25	09/21/21 18:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13.0			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.034	B	*	mg/L	0.02	0.1	09/25/21 2:07	pjb
pH (lab)	SM4500H+ B									
pH		1	10.1	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.010	B	*	mg/L	0.01	0.05	09/18/21 0:39	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	176		*	mg/L	20	40	09/13/21 15:14	emk
Sulfate	M300.0 - Ion Chromatography	1	19.0		*	mg/L	0.4	2	09/21/21 18:29	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-008

ACZ Sample ID: ***L68415-08***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 13:57	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0154		*	mg/L	0.005	0.015	09/29/21 18:54	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:54	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0296		*	mg/L	0.0002	0.001	09/29/21 18:54	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0197		*	mg/L	0.0005	0.0025	09/29/21 18:54	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:54	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 19:03	jlw
Boron, dissolved	M200.7 ICP	1	0.072	B	*	mg/L	0.03	0.1	09/23/21 19:03	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:54	mfm
Calcium, dissolved	M200.7 ICP	1	8.71		*	mg/L	0.1	0.5	09/23/21 19:03	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00185	B	*	mg/L	0.0005	0.002	09/29/21 18:54	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000101	B	*	mg/L	0.00005	0.00025	09/29/21 18:54	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:54	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 19:03	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0565		*	mg/L	0.007	0.02	09/29/21 18:54	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:54	mfm
Lithium, dissolved	M200.7 ICP	1	0.0687		*	mg/L	0.008	0.04	09/23/21 19:03	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 19:03	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	09/29/21 18:54	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	9.8		*	ng/L	0.3	1	09/16/21 17:42	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00673		*	mg/L	0.0002	0.0005	09/29/21 18:54	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:54	mfm
Potassium, dissolved	M200.7 ICP	1	5.41		*	mg/L	0.2	1	09/23/21 19:03	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 19:03	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00146		*	mg/L	0.0001	0.00025	09/29/21 18:54	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:54	mfm
Sodium, dissolved	M200.7 ICP	1	62.7		*	mg/L	0.2	1	09/23/21 19:03	jlw
Strontium, dissolved	M200.7 ICP	1	0.0433	B	*	mg/L	0.009	0.045	09/23/21 19:03	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:54	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0104		*	mg/L	0.0008	0.0025	09/29/21 18:54	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 12:04	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/29/21 18:54	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00204		*	mg/L	0.0005	0.002	09/29/21 18:54	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:54	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-008

ACZ Sample ID: ***L68415-08***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	35.4		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	82.6		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.22		*	mg/L	0.4	2	09/21/21 18:47	krh
Conductivity @25C	SM2510B	1	307		*	umhos/cm	1	10	09/17/21 22:24	eep
Fluoride	M300.0 - Ion Chromatography	1	0.460		*	mg/L	0.05	0.25	09/21/21 18:47	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		22			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.033	B	*	mg/L	0.02	0.1	09/25/21 2:09	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/18/21 0:41	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/13/21 15:16	emk
Sulfate	M300.0 - Ion Chromatography	1	20.9		*	mg/L	0.4	2	09/21/21 18:47	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-009

ACZ Sample ID: ***L68415-09***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 14:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0190		*	mg/L	0.005	0.015	09/29/21 18:56	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00046	B	*	mg/L	0.0004	0.002	09/29/21 18:56	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0310		*	mg/L	0.0002	0.001	09/29/21 18:56	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0160		*	mg/L	0.0005	0.0025	09/29/21 18:56	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:56	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 19:06	jlw
Boron, dissolved	M200.7 ICP	1	0.074	B	*	mg/L	0.03	0.1	09/23/21 19:06	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:56	mfm
Calcium, dissolved	M200.7 ICP	1	5.20		*	mg/L	0.1	0.5	09/23/21 19:06	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00174	B	*	mg/L	0.0005	0.002	09/29/21 18:56	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000059	B	*	mg/L	0.00005	0.00025	09/29/21 18:56	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:56	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 19:06	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0537		*	mg/L	0.007	0.02	09/29/21 18:56	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:56	mfm
Lithium, dissolved	M200.7 ICP	1	0.0692		*	mg/L	0.008	0.04	09/23/21 19:06	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 19:06	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00057	B	*	mg/L	0.0004	0.002	09/29/21 18:56	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.9		*	ng/L	0.3	1	09/16/21 17:47	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0175		*	mg/L	0.0002	0.0005	09/29/21 18:56	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:56	mfm
Potassium, dissolved	M200.7 ICP	1	7.26		*	mg/L	0.2	1	09/23/21 19:06	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 19:06	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00162		*	mg/L	0.0001	0.00025	09/29/21 18:56	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:56	mfm
Sodium, dissolved	M200.7 ICP	1	62.6		*	mg/L	0.2	1	09/23/21 19:06	jlw
Strontium, dissolved	M200.7 ICP	1	0.0388	B	*	mg/L	0.009	0.045	09/23/21 19:06	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:56	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0107		*	mg/L	0.0008	0.0025	09/29/21 18:56	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 12:07	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/29/21 18:56	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00218		*	mg/L	0.0005	0.002	09/29/21 18:56	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:56	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-009

ACZ Sample ID: ***L68415-09***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	40.0		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	83.3		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.21		*	mg/L	0.4	2	09/21/21 19:05	krh
Conductivity @25C	SM2510B	1	313		*	umhos/cm	1	10	09/17/21 22:33	eep
Fluoride	M300.0 - Ion Chromatography	1	0.463		*	mg/L	0.05	0.25	09/21/21 19:05	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13.0			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.029	B	*	mg/L	0.02	0.1	09/25/21 2:16	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.010	B	*	mg/L	0.01	0.05	09/18/21 0:43	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/13/21 15:18	emk
Sulfate	M300.0 - Ion Chromatography	1	19.5		*	mg/L	0.4	2	09/21/21 19:05	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-010

ACZ Sample ID: ***L68415-10***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 14:14	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0176		*	mg/L	0.005	0.015	09/29/21 18:58	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 18:58	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0280		*	mg/L	0.0002	0.001	09/29/21 18:58	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0194		*	mg/L	0.0005	0.0025	09/29/21 18:58	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 18:58	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 19:09	jlw
Boron, dissolved	M200.7 ICP	1	0.070	B	*	mg/L	0.03	0.1	09/23/21 19:09	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 18:58	mfm
Calcium, dissolved	M200.7 ICP	1	7.92		*	mg/L	0.1	0.5	09/23/21 19:09	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00148	B	*	mg/L	0.0005	0.002	09/29/21 18:58	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000066	B	*	mg/L	0.00005	0.00025	09/29/21 18:58	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 18:58	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 19:09	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0561		*	mg/L	0.007	0.02	09/29/21 18:58	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:58	mfm
Lithium, dissolved	M200.7 ICP	1	0.0676		*	mg/L	0.008	0.04	09/23/21 19:09	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 19:09	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00054	B	*	mg/L	0.0004	0.002	09/29/21 18:58	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	44			ng/L	2	5	09/21/21 13:31	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0117		*	mg/L	0.0002	0.0005	09/29/21 18:58	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 18:58	mfm
Potassium, dissolved	M200.7 ICP	1	7.92		*	mg/L	0.2	1	09/23/21 19:09	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 19:09	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00147		*	mg/L	0.0001	0.00025	09/29/21 18:58	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:58	mfm
Sodium, dissolved	M200.7 ICP	1	62.2		*	mg/L	0.2	1	09/23/21 19:09	jlw
Strontium, dissolved	M200.7 ICP	1	0.0447	B	*	mg/L	0.009	0.045	09/23/21 19:09	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 18:58	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00835		*	mg/L	0.0008	0.0025	09/29/21 18:58	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 12:10	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/29/21 18:58	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00195	B	*	mg/L	0.0005	0.002	09/29/21 18:58	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 18:58	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-010

ACZ Sample ID: ***L68415-10***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	23.4		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	100.0		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.14		*	mg/L	0.4	2	09/21/21 19:23	krh
Conductivity @25C	SM2510B	1	321		*	umhos/cm	1	10	09/17/21 22:53	eep
Fluoride	M300.0 - Ion Chromatography	1	0.456		*	mg/L	0.05	0.25	09/21/21 19:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		20			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.026	B	*	mg/L	0.02	0.1	09/25/21 2:17	pjb
pH (lab)	SM4500H+ B									
pH		1	10.2	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/18/21 0:46	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	176		*	mg/L	20	40	09/13/21 15:20	emk
Sulfate	M300.0 - Ion Chromatography	1	18.6		*	mg/L	0.4	2	09/21/21 19:23	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-011

ACZ Sample ID: ***L68415-11***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 14:23	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0162		*	mg/L	0.005	0.015	09/29/21 19:00	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 19:00	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0285		*	mg/L	0.0002	0.001	09/29/21 19:00	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0319		*	mg/L	0.0005	0.0025	09/29/21 19:00	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 19:00	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 19:12	jlw
Boron, dissolved	M200.7 ICP	1	0.072	B	*	mg/L	0.03	0.1	09/23/21 19:12	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 19:00	mfm
Calcium, dissolved	M200.7 ICP	1	15.5		*	mg/L	0.1	0.5	09/23/21 19:12	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00144	B	*	mg/L	0.0005	0.002	09/29/21 19:00	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000063	B	*	mg/L	0.00005	0.00025	09/29/21 19:00	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 19:00	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 19:12	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0514		*	mg/L	0.007	0.02	09/29/21 19:00	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:00	mfm
Lithium, dissolved	M200.7 ICP	1	0.0665		*	mg/L	0.008	0.04	09/23/21 19:12	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 19:12	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	09/29/21 19:00	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	13.0		*	ng/L	0.3	1	09/16/21 18:13	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0154		*	mg/L	0.0002	0.0005	09/29/21 19:00	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 19:00	mfm
Potassium, dissolved	M200.7 ICP	1	8.31		*	mg/L	0.2	1	09/23/21 19:12	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 19:12	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00194		*	mg/L	0.0001	0.00025	09/29/21 19:00	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:00	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/23/21 19:12	jlw
Strontium, dissolved	M200.7 ICP	1	0.0654		*	mg/L	0.009	0.045	09/23/21 19:12	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:00	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00818		*	mg/L	0.0008	0.0025	09/29/21 19:00	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 12:14	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 19:00	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00192	B	*	mg/L	0.0005	0.002	09/29/21 19:00	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 19:00	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-011

ACZ Sample ID: ***L68415-11***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	25.2		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	101		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.16		*	mg/L	0.4	2	09/21/21 20:17	krh
Conductivity @25C	SM2510B	1	323		*	umhos/cm	1	10	09/17/21 23:03	eep
Fluoride	M300.0 - Ion Chromatography	1	0.474		*	mg/L	0.05	0.25	09/21/21 20:17	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		39			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.031	B	*	mg/L	0.02	0.1	09/25/21 2:18	pjb
pH (lab)	SM4500H+ B									
pH		1	10.2	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/18/21 0:47	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/13/21 15:22	emk
Sulfate	M300.0 - Ion Chromatography	1	18.6		*	mg/L	0.4	2	09/21/21 20:17	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-012

ACZ Sample ID: ***L68415-12***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 14:32	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0338		*	mg/L	0.005	0.015	09/29/21 19:02	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 19:02	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0266		*	mg/L	0.0002	0.001	09/29/21 19:02	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0295		*	mg/L	0.0005	0.0025	09/29/21 19:02	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 19:02	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 19:16	jlw
Boron, dissolved	M200.7 ICP	1	0.069	B	*	mg/L	0.03	0.1	09/23/21 19:16	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 19:02	mfm
Calcium, dissolved	M200.7 ICP	1	10.2		*	mg/L	0.1	0.5	09/23/21 19:16	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00367		*	mg/L	0.0005	0.002	09/29/21 19:02	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000122	B	*	mg/L	0.00005	0.00025	09/29/21 19:02	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 19:02	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 19:16	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0564		*	mg/L	0.007	0.02	09/29/21 19:02	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:02	mfm
Lithium, dissolved	M200.7 ICP	1	0.0688		*	mg/L	0.008	0.04	09/23/21 19:16	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 19:16	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00064	B	*	mg/L	0.0004	0.002	09/29/21 19:02	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	39			ng/L	2	5	09/21/21 13:36	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00788		*	mg/L	0.0002	0.0005	09/29/21 19:02	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 19:02	mfm
Potassium, dissolved	M200.7 ICP	1	5.90		*	mg/L	0.2	1	09/23/21 19:16	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 19:16	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00141		*	mg/L	0.0001	0.00025	09/29/21 19:02	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:02	mfm
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/23/21 19:16	jlw
Strontium, dissolved	M200.7 ICP	1	0.0610		*	mg/L	0.009	0.045	09/23/21 19:16	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:02	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00992		*	mg/L	0.0008	0.0025	09/29/21 19:02	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 12:17	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00010	B	*	mg/L	0.0001	0.0005	09/29/21 19:02	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00198	B	*	mg/L	0.0005	0.002	09/29/21 19:02	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 19:02	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-012

ACZ Sample ID: ***L68415-12***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	20.9		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	98.4		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.19		*	mg/L	0.4	2	09/21/21 20:35	krh
Conductivity @25C	SM2510B	1	317		*	umhos/cm	1	10	09/17/21 23:13	eep
Fluoride	M300.0 - Ion Chromatography	1	0.503		*	mg/L	0.05	0.25	09/21/21 20:35	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		26			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.050	B	*	mg/L	0.02	0.1	09/25/21 2:20	pjb
pH (lab)	SM4500H+ B									
pH		1	10.2	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/18/21 0:48	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/13/21 15:24	emk
Sulfate	M300.0 - Ion Chromatography	1	19.9		*	mg/L	0.4	2	09/21/21 20:35	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-013

ACZ Sample ID: ***L68415-13***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 14:41	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0213		*	mg/L	0.005	0.015	09/29/21 19:03	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 19:03	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0299		*	mg/L	0.0002	0.001	09/29/21 19:03	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0404		*	mg/L	0.0005	0.0025	09/29/21 19:03	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 19:03	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 19:19	jlw
Boron, dissolved	M200.7 ICP	1	0.070	B	*	mg/L	0.03	0.1	09/23/21 19:19	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 19:03	mfm
Calcium, dissolved	M200.7 ICP	1	15.7		*	mg/L	0.1	0.5	09/23/21 19:19	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00197	B	*	mg/L	0.0005	0.002	09/29/21 19:03	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000125	B	*	mg/L	0.00005	0.00025	09/29/21 19:03	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 19:03	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 19:19	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0684		*	mg/L	0.007	0.02	09/29/21 19:03	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:03	mfm
Lithium, dissolved	M200.7 ICP	1	0.0709		*	mg/L	0.008	0.04	09/23/21 19:19	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 19:19	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0004	0.002	09/29/21 19:03	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	74			ng/L	3	10	09/21/21 13:40	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00582		*	mg/L	0.0002	0.0005	09/29/21 19:03	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 19:03	mfm
Potassium, dissolved	M200.7 ICP	1	8.56		*	mg/L	0.2	1	09/23/21 19:19	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 19:19	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00147		*	mg/L	0.0001	0.00025	09/29/21 19:03	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:03	mfm
Sodium, dissolved	M200.7 ICP	1	63.1		*	mg/L	0.2	1	09/23/21 19:19	jlw
Strontium, dissolved	M200.7 ICP	1	0.0729		*	mg/L	0.009	0.045	09/23/21 19:19	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:03	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00549		*	mg/L	0.0008	0.0025	09/29/21 19:03	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 12:20	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 19:03	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00205		*	mg/L	0.0005	0.002	09/29/21 19:03	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 19:03	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-013

ACZ Sample ID: ***L68415-13***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	21.0		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	103		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.20		*	mg/L	0.4	2	09/21/21 20:52	krh
Conductivity @25C	SM2510B	1	331		*	umhos/cm	1	10	09/17/21 23:22	eep
Fluoride	M300.0 - Ion Chromatography	1	0.460		*	mg/L	0.05	0.25	09/21/21 20:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		39			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.033	B	*	mg/L	0.02	0.1	09/25/21 2:21	pjb
pH (lab)	SM4500H+ B									
pH		1	10.2	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.014	B	*	mg/L	0.01	0.05	09/18/21 0:49	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/13/21 15:25	emk
Sulfate	M300.0 - Ion Chromatography	1	18.9		*	mg/L	0.4	2	09/21/21 20:52	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-004

ACZ Sample ID: ***L68415-14***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/15/21 14:50	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0243		*	mg/L	0.005	0.015	09/29/21 19:05	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 19:05	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0298		*	mg/L	0.0002	0.001	09/29/21 19:05	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0286		*	mg/L	0.0005	0.0025	09/29/21 19:05	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 19:05	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 19:35	jlw
Boron, dissolved	M200.7 ICP	1	0.073	B	*	mg/L	0.03	0.1	09/23/21 19:35	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 19:05	mfm
Calcium, dissolved	M200.7 ICP	1	12.7		*	mg/L	0.1	0.5	09/23/21 19:35	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00256		*	mg/L	0.0005	0.002	09/29/21 19:05	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000089	B	*	mg/L	0.00005	0.00025	09/29/21 19:05	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 19:05	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 19:35	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0693		*	mg/L	0.007	0.02	09/29/21 19:05	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:05	mfm
Lithium, dissolved	M200.7 ICP	1	0.0699		*	mg/L	0.008	0.04	09/23/21 19:35	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 19:35	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00088	B	*	mg/L	0.0004	0.002	09/29/21 19:05	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	28			ng/L	2	5	09/21/21 13:45	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00601		*	mg/L	0.0002	0.0005	09/29/21 19:05	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 19:05	mfm
Potassium, dissolved	M200.7 ICP	1	5.70		*	mg/L	0.2	1	09/23/21 19:35	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 19:35	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00147		*	mg/L	0.0001	0.00025	09/29/21 19:05	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:05	mfm
Sodium, dissolved	M200.7 ICP	1	62.6		*	mg/L	0.2	1	09/23/21 19:35	jlw
Strontium, dissolved	M200.7 ICP	1	0.0578		*	mg/L	0.009	0.045	09/23/21 19:35	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 19:05	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00548		*	mg/L	0.0008	0.0025	09/29/21 19:05	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 12:30	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 19:05	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00199	B	*	mg/L	0.0005	0.002	09/29/21 19:05	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 19:05	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090195-004

ACZ Sample ID: ***L68415-14***
Date Sampled: *09/07/21 15:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	30.0		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	89.9		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.21		*	mg/L	0.4	2	09/21/21 21:10	krh
Conductivity @25C	SM2510B	1	310		*	umhos/cm	1	10	09/17/21 23:31	eep
Fluoride	M300.0 - Ion Chromatography	1	0.465		*	mg/L	0.05	0.25	09/21/21 21:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		32			mg/L	0.2	5	10/06/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.031	B	*	mg/L	0.02	0.1	09/25/21 2:22	pjb
pH (lab)	SM4500H+ B									
pH		1	10.1	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	09/18/21 0:51	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	170		*	mg/L	20	40	09/13/21 15:27	emk
Sulfate	M300.0 - Ion Chromatography	1	19.2		*	mg/L	0.4	2	09/21/21 21:10	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486PBW1	PBW	09/17/21 14:43				6.3	mg/L		-20	20			
WG527486LCSW3	LCSW	09/17/21 15:01	WC210908-1	820.0001		804.3	mg/L	98	90	110			
WG527486LCSW6	LCSW	09/17/21 17:34	WC210908-1	820.0001		809.3	mg/L	99	90	110			
WG527486PBW2	PBW	09/17/21 17:40				4.1	mg/L		-20	20			
WG527486LCSW9	LCSW	09/17/21 20:51	WC210908-1	820.0001		797.9	mg/L	97	90	110			
WG527486PBW3	PBW	09/17/21 20:57				2.4	mg/L		-20	20			
L68415-09DUP	DUP	09/17/21 22:43			123	138.6	mg/L				12	20	
L68416-05DUP	DUP	09/18/21 0:29			121	121.5	mg/L				0	20	
WG527486LCSW12	LCSW	09/18/21 0:46	WC210917-2	820.0001		807.2	mg/L	98	90	110			
WG527486PBW4	PBW	09/18/21 0:52				2.6	mg/L		-20	20			
WG527486LCSW15	LCSW	09/18/21 4:58	WC210917-2	820.0001		810.9	mg/L	99	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.1		.1053	mg/L	105	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.011	0.011			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.050065		.0522	mg/L	104	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.050065	.0429	.0931	mg/L	100	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.050065	.0429	.0935	mg/L	101	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.050065	U	.0554	mg/L	111	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.050065	U	.0501	mg/L	100	70	130	10	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.0201		.02019	mg/L	100	90	110			
WG528340ICB	ICB	09/29/21 18:31				.00051	mg/L		-0.00088	0.00088			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.01		.00929	mg/L	93	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.01	U	.0082	mg/L	82	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.01	U	.00873	mg/L	87	70	130	6	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.01	U	.00844	mg/L	84	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.01	U	.00813	mg/L	81	70	130	4	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05068	mg/L	101	90	110			
WG528340ICB	ICB	09/29/21 18:31				.00032	mg/L		-0.00044	0.00044			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05005		.05334	mg/L	107	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05005	.0349	.08825	mg/L	107	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05005	.0349	.08981	mg/L	110	70	130	2	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05005	U	.05533	mg/L	111	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05005	U	.05048	mg/L	101	70	130	9	20	

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ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05123	mg/L	102	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.0011	0.0011			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.049985		.05093	mg/L	102	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.049985	.00453	.05543	mg/L	102	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.049985	.00453	.05562	mg/L	102	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.049985	.0137	.06502	mg/L	103	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.049985	.0137	.06145	mg/L	96	70	130	6	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.051884	mg/L	104	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.000176	0.000176			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05005		.052305	mg/L	105	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05005	U	.049049	mg/L	98	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05005	U	.049523	mg/L	99	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05005	U	.05639	mg/L	113	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05005	U	.051885	mg/L	104	70	130	8	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	2		1.969	mg/L	98	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.12	0.12			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	1		.984	mg/L	98	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	1	U	1.004	mg/L	100	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	1	U	1.008	mg/L	101	85	115	0	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	1	U	1.002	mg/L	100	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	1	U	1.007	mg/L	101	85	115	0	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	2		1.983	mg/L	99	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.09	0.09			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	.5005		.504	mg/L	101	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	.5005	.08	.59	mg/L	102	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	.5005	.08	.595	mg/L	103	85	115	1	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	.5005	.07	.572	mg/L	100	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	.5005	.07	.582	mg/L	102	85	115	2	20	

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.052161	mg/L	104	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00011	0.00011			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05005		.052365	mg/L	105	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05005	U	.053699	mg/L	107	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05005	U	.053931	mg/L	108	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05005	.00018	.054942	mg/L	109	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05005	.00018	.050644	mg/L	101	70	130	8	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	100		99.42	mg/L	99	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.3	0.3			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	67.98972		68.9	mg/L	101	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	67.98972	6.43	73.9	mg/L	99	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	67.98972	6.43	74.27	mg/L	100	85	115	0	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	67.98972	15.7	82.05	mg/L	98	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	67.98972	15.7	82.29	mg/L	98	85	115	0	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	19.96		19.83	mg/L	99	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG526455													
WG526455ICV	ICV	09/07/21 21:29	WI210907-3	19.96		19.82	mg/L	99	90	110			
WG526455ICB	ICB	09/07/21 21:47				U	mg/L		-0.4	0.4			
WG527392													
WG527392LFB	LFB	09/16/21 19:36	WI210907-6	30		28.93	mg/L	96	90	110			
L68414-11DUP	DUP	09/17/21 0:22			5.13	5.05	mg/L				2	20	
L68414-12AS	AS	09/17/21 0:58	WI210907-6	30	5.16	34.78	mg/L	99	90	110			
WG527658													
WG527658LFB1	LFB	09/21/21 16:59	WI210907-6	30		29.63	mg/L	99	90	110			
L68407-01AS	AS	09/21/21 18:11	WI210907-6	1500	U	1526.69	mg/L	102	90	110			
WG527658LFB2	LFB	09/22/21 1:39	WI210907-6	30		29.62	mg/L	99	90	110			
L68391-01DUP	DUP	09/23/21 16:00			23.2	23.37	mg/L				1	20	

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ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05268	mg/L	105	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.0011	0.0011			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05		.05267	mg/L	105	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05	.00283	.05083	mg/L	96	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05	.00283	.05267	mg/L	100	70	130	4	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05	U	.05333	mg/L	107	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05	U	.0481	mg/L	96	70	130	10	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.053188	mg/L	106	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00011	0.00011			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05005		.052718	mg/L	105	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05005	.000052	.048627	mg/L	97	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05005	.000052	.049122	mg/L	98	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05005	U	.052778	mg/L	105	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05005	U	.048164	mg/L	96	70	130	9	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486LCSW2	LCSW	09/17/21 14:49	PCN63140	1408		1409	umhos/cm	100	90	110			
WG527486LCSW5	LCSW	09/17/21 17:21	PCN63140	1408		1403	umhos/cm	100	90	110			
WG527486LCSW8	LCSW	09/17/21 20:40	PCN63140	1408		1398	umhos/cm	99	90	110			
L68415-09DUP	DUP	09/17/21 22:43			313	313	umhos/cm				0	20	
L68416-05DUP	DUP	09/18/21 0:29			299	300	umhos/cm				0	20	
WG527486LCSW11	LCSW	09/18/21 0:35	PCN63140	1408		1397	umhos/cm	99	90	110			
WG527486LCSW14	LCSW	09/18/21 4:47	PCN63140	1408		1394	umhos/cm	99	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05025	mg/L	101	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00176	0.00176			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05		.05143	mg/L	103	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05	U	.04707	mg/L	94	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05	U	.04769	mg/L	95	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05	.0148	.0708	mg/L	112	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05	.0148	.06169	mg/L	94	70	130	14	20	

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	4.004		4.04	mg/L	101	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.05	0.05			
WG526455													
WG526455ICV	ICV	09/07/21 21:29	WI210907-3	4.004		4.209	mg/L	105	90	110			
WG526455ICB	ICB	09/07/21 21:47				U	mg/L		-0.05	0.05			
WG527392													
WG527392LFB	LFB	09/16/21 19:36	WI210907-6	1.5		1.391	mg/L	93	90	110			
L68414-11DUP	DUP	09/17/21 0:22			.323	.326	mg/L				1	20	RA
L68414-12AS	AS	09/17/21 0:58	WI210907-6	1.5	.336	1.705	mg/L	91	90	110			
WG527658													
WG527658LFB1	LFB	09/21/21 16:59	WI210907-6	1.5		1.498	mg/L	100	90	110			
L68407-01AS	AS	09/21/21 18:11	WI210907-6	75	39.3	139.926	mg/L	134	90	110			M1
WG527658LFB2	LFB	09/22/21 1:39	WI210907-6	1.5		1.495	mg/L	100	90	110			
L68391-01DUP	DUP	09/23/21 16:00			.172	.174	mg/L				1	20	RA

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	2		2.02	mg/L	101	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.3	0.3			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	.9822		1	mg/L	102	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	.9822	U	1.04	mg/L	106	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	.9822	U	1.03	mg/L	105	85	115	1	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	.9822	U	1.01	mg/L	103	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	.9822	U	1.03	mg/L	105	85	115	2	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.10016		.1012	mg/L	101	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.0154	0.0154			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.0501		.0512	mg/L	102	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.0501	.0597	.1075	mg/L	95	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.0501	.0597	.1091	mg/L	99	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.0501	U	.0557	mg/L	111	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.0501	U	.0494	mg/L	99	70	130	12	20	

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05193	mg/L	104	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00022	0.00022			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05005		.0521	mg/L	104	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05005	U	.052	mg/L	104	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05005	U	.05218	mg/L	104	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05005	.0043	.0568	mg/L	105	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05005	.0043	.05215	mg/L	96	70	130	9	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	2		1.969	mg/L	98	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.024	0.024			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	.999		.9639	mg/L	96	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	.999	.067	1.046	mg/L	98	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	.999	.067	1.056	mg/L	99	85	115	1	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	.999	.0709	1.057	mg/L	99	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	.999	.0709	1.059	mg/L	99	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	100		95.89	mg/L	96	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.6	0.6			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	49.99828		48.44	mg/L	97	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	49.99828	U	47.85	mg/L	96	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	49.99828	U	48.12	mg/L	96	85	115	1	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	49.99828	U	47.1	mg/L	94	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	49.99828	U	47.11	mg/L	94	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05256	mg/L	105	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00088	0.00088			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.0499		.05267	mg/L	106	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.0499	.00062	.04974	mg/L	98	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.0499	.00062	.04999	mg/L	99	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.0499	.00122	.05585	mg/L	109	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.0499	.00122	.04991	mg/L	98	70	130	11	20	

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG527394													
WG527394CCV1	CCV	09/16/21 13:47	HG210709-4	10		9.51	ng/L	95	76.5	123.4			
WG527394CCB1	CCB	09/16/21 13:51				U	ng/L		-0.501	0.501			
WG527394PQV	PQV	09/16/21 14:55	HG210709-6	1		.99	ng/L	99	70	130			
WG527394LFB1	LFB	09/16/21 15:00	HG210709-5	2		1.9	ng/L	95	71	125			
WG527394CCV2	CCV	09/16/21 15:57	HG210709-4	10		9.74	ng/L	97	76.5	123.4			
WG527394CCB2	CCB	09/16/21 16:02				U	ng/L		-0.501	0.501			
L68414-14MS	MS	09/16/21 16:45	HG210709-5	2	30.9	34.6	ng/L	185	71	125			M3
L68414-14MSD	MSD	09/16/21 16:50	HG210709-5	2	30.9	33.2	ng/L	115	71	125	4	24	
WG527394CCV3	CCV	09/16/21 16:55	HG210709-4	10		9.63	ng/L	96	76.5	123.4			
WG527394CCB3	CCB	09/16/21 16:59				U	ng/L		-0.501	0.501			
WG527394LFB2	LFB	09/16/21 17:33	HG210709-5	2		1.97	ng/L	99	71	125			
WG527394CCV4	CCV	09/16/21 17:52	HG210709-4	10		9.56	ng/L	96	76.5	123.4			
WG527394CCB4	CCB	09/16/21 17:57				U	ng/L		-0.501	0.501			
L68415-12MS	MS	09/16/21 18:26	HG210709-5	2	40	41.4	ng/L	70	71	125			M3
L68415-12MSD	MSD	09/16/21 18:37	HG210709-5	2	40	42	ng/L	100	71	125	1	24	
WG527394CCV5	CCV	09/16/21 19:01	HG210709-4	10		9.87	ng/L	99	76.5	123.4			
WG527394CCB5	CCB	09/16/21 19:06				U	ng/L		-0.501	0.501			
WG527672													
WG527672CCV	CCV	09/21/21 12:22	HG210709-4	10		9.37	ng/L	94	76.5	123.4			
WG527672CCB	CCB	09/21/21 12:27				U	ng/L		-0.501	0.501			
WG527672PQV	PQV	09/21/21 13:02	HG210709-6	1		1.11	ng/L	111	70	130			
WG527672LFB	LFB	09/21/21 13:07	HG210709-5	2		1.96	ng/L	98	71	125			
L68414-14MS	MS	09/21/21 13:21	HG16315X	50	32	40.55	ng/L	86	71	125			
L68414-14MSD	MSD	09/21/21 13:26	HG16315X	50	32	42.05	ng/L	101	71	125	4	24	
WG527672CCV1	CCV	09/21/21 13:50	HG210709-4	10		9.28	ng/L	93	76.5	123.4			
WG527672CCB1	CCB	09/21/21 13:55				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.01992		.02024	mg/L	102	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00044	0.00044			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05005		.05032	mg/L	101	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05005	.0049	.05323	mg/L	97	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05005	.0049	.05403	mg/L	98	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05005	U	.04927	mg/L	98	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05005	U	.04477	mg/L	89	70	130	10	20	

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05155	mg/L	103	90	110			
WG528340ICB	ICB	09/29/21 18:31				.00063	mg/L		-0.00088	0.00088			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05		.0516	mg/L	103	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05	U	.04761	mg/L	95	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05	U	.04784	mg/L	96	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05	U	.05245	mg/L	105	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05	U	.04671	mg/L	93	70	130	12	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527991													
WG527991ICV	ICV	09/24/21 23:07	WI210904-1	2.4161		2.365	mg/L	98	90	110			
WG527991ICB	ICB	09/24/21 23:08				U	mg/L		-0.02	0.02			
WG527996													
WG527996LFB1	LFB	09/25/21 1:26	WI210331-13	2		1.957	mg/L	98	90	110			
L68414-11AS	AS	09/25/21 1:48	WI210331-13	2	.035	2.114	mg/L	104	90	110			
L68414-12DUP	DUP	09/25/21 1:50			.05	.039	mg/L				25	20	RA
WG527996LFB2	LFB	09/25/21 2:06	WI210331-13	2		1.944	mg/L	97	90	110			
L68415-07AS	AS	09/25/21 2:08	WI210331-13	2	.034	2.088	mg/L	103	90	110			
L68415-08DUP	DUP	09/25/21 2:11			.033	.033	mg/L				0	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486LCSW1	LCSW	09/17/21 14:47	PCN62948	6		6	units	100	5.9	6.1			
WG527486LCSW4	LCSW	09/17/21 17:19	PCN62948	6		6.1	units	102	5.9	6.1			
WG527486LCSW7	LCSW	09/17/21 20:38	PCN62948	6		6.1	units	102	5.9	6.1			
L68415-09DUP	DUP	09/17/21 22:43			10	10	units				0	20	
L68416-05DUP	DUP	09/18/21 0:29			8.9	8.9	units				0	20	
WG527486LCSW10	LCSW	09/18/21 0:33	PCN62948	6		6.1	units	102	5.9	6.1			
WG527486LCSW13	LCSW	09/18/21 4:45	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527493													
WG527493ICV	ICV	09/17/21 23:26	WI210831-4	.6523		.687	mg/L	105	90	110			
WG527493ICB	ICB	09/17/21 23:28				U	mg/L		-0.01	0.01			
WG527496													
WG527216LRB	LRB	09/18/21 0:18				U	mg/L		-0.01	0.01			
WG527216LFB	LFB	09/18/21 0:20	PT2X	1		.937	mg/L	94	90	110			
L68386-02DUP	DUP	09/18/21 0:24			.066	.054	mg/L				20	20	RA
L68415-06DUP	DUP	09/18/21 0:38			U	.012	mg/L				200	20	RA
L68415-07LFM	LFM	09/18/21 0:40	PT2X	1	.01	.955	mg/L	95	90	110			
L68386-01LFM	LFM	09/18/21 0:53	PT2X	1	.227	1.11	mg/L	88	90	110			M2

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	20		19.75	mg/L	99	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.6	0.6			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	99.96008		99.21	mg/L	99	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	99.96008	2.44	100.8	mg/L	98	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	99.96008	2.44	100.9	mg/L	98	85	115	0	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	99.96008	8.56	106.1	mg/L	98	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	99.96008	8.56	106.6	mg/L	98	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527073													
WG527073PBW	PBW	09/13/21 14:45				U	mg/L		-20	20			
WG527073LCSW	LCSW	09/13/21 14:46	PCN64130	1000		988	mg/L	99	80	120			
L68415-04DUP	DUP	09/13/21 15:08			198	200	mg/L				1	10	RA
L68415-14DUP	DUP	09/13/21 15:29			170	178	mg/L				5	10	RA

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	2		1.989	mg/L	99	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.15	0.15			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	1.0017		1.02	mg/L	102	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	1.0017	U	1.02	mg/L	102	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	1.0017	U	1.023	mg/L	102	85	115	0	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	1.0017	U	1.011	mg/L	101	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	1.0017	U	1.014	mg/L	101	85	115	0	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05116	mg/L	102	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00022	0.00022			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05		.05219	mg/L	104	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05	.00153	.05638	mg/L	110	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05	.00153	.05697	mg/L	111	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05	U	.05723	mg/L	114	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05	U	.05167	mg/L	103	70	130	10	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.02		.02061	mg/L	103	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00022	0.00022			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.01		.00993	mg/L	99	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.01	U	.00935	mg/L	94	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.01	U	.0093	mg/L	93	70	130	1	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.01	U	.01021	mg/L	102	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.01	U	.0099	mg/L	99	70	130	3	20	

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	100		99.39	mg/L	99	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.6	0.6			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	100.007		99.65	mg/L	100	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	100.007	61.4	158	mg/L	97	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	100.007	61.4	158.3	mg/L	97	85	115	0	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	100.007	63.1	158.9	mg/L	96	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	100.007	63.1	159.3	mg/L	96	85	115	0	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527884													
WG527884ICV	ICV	09/23/21 17:58	II210916-1	2		1.954	mg/L	98	95	105			
WG527884ICB	ICB	09/23/21 18:04				U	mg/L		-0.027	0.027			
WG527884LFB	LFB	09/23/21 18:17	II210910-2	.5005		.5346	mg/L	107	85	115			
L68415-03AS	AS	09/23/21 18:37	II210910-2	.5005	.0221	.5544	mg/L	106	85	115			
L68415-03ASD	ASD	09/23/21 18:40	II210910-2	.5005	.0221	.5544	mg/L	106	85	115	0	20	
L68415-13AS	AS	09/23/21 19:22	II210910-2	.5005	.0729	.6016	mg/L	106	85	115			
L68415-13ASD	ASD	09/23/21 19:25	II210910-2	.5005	.0729	.6051	mg/L	106	85	115	1	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	51.15		49.54	mg/L	97	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG526455													
WG526455ICV	ICV	09/07/21 21:29	WI210907-3	51.15		50.98	mg/L	100	90	110			
WG526455ICB	ICB	09/07/21 21:47				U	mg/L		-0.4	0.4			
WG527392													
WG527392LFB	LFB	09/16/21 19:36	WI210907-6	30		28.33	mg/L	94	90	110			
L68414-11DUP	DUP	09/17/21 0:22			17.5	17.46	mg/L				0	20	
L68414-12AS	AS	09/17/21 0:58	WI210907-6	30	20.6	49.1	mg/L	95	90	110			
WG527658													
WG527658LFB1	LFB	09/21/21 16:59	WI210907-6	30		28.93	mg/L	96	90	110			
WG527658LFB2	LFB	09/22/21 1:39	WI210907-6	30		28.59	mg/L	95	90	110			
L68391-01DUP	DUP	09/23/21 16:00			76.8	77.47	mg/L				1	20	
L68407-01AS	AS	09/23/21 16:36	WI210907-6	3000	4060	6878.42	mg/L	94	90	110			

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05404	mg/L	108	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00022	0.00022			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05		.05214	mg/L	104	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05	U	.05312	mg/L	106	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05	U	.05304	mg/L	106	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05	U	.05268	mg/L	105	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05	U	.04797	mg/L	96	70	130	9	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.0501		.04774	mg/L	95	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00176	0.00176			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05005		.05019	mg/L	100	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05005	.0129	.05951	mg/L	93	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05005	.0129	.06113	mg/L	96	70	130	3	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05005	U	.04889	mg/L	98	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05005	U	.04526	mg/L	90	70	130	8	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527944													
WG527944ICV	ICV	09/28/21 11:06	II210916-1	2		2.0122	mg/L	101	95	105			
WG527944ICB	ICB	09/28/21 11:12				U	mg/L		-0.015	0.015			
WG527944LFB	LFB	09/28/21 11:25	II210910-2	1		1.011	mg/L	101	85	115			
L68415-03AS	AS	09/28/21 11:38	II210910-2	1	U	1.006	mg/L	101	85	115			
L68415-03ASD	ASD	09/28/21 11:41	II210910-2	1	U	1.008	mg/L	101	85	115	0	20	
L68415-13AS	AS	09/28/21 12:23	II210910-2	1	U	1.01	mg/L	101	85	115			
L68415-13ASD	ASD	09/28/21 12:27	II210910-2	1	U	1.014	mg/L	101	85	115	0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.05251	mg/L	105	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.00022	0.00022			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05		.052	mg/L	104	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05	.00015	.05493	mg/L	110	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05	.00015	.055	mg/L	110	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05	U	.05221	mg/L	104	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05	U	.04801	mg/L	96	70	130	8	20	

WETLAB

ACZ Project ID: ***L68415***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.04969	mg/L	99	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.0011	0.0011			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.05		.05217	mg/L	104	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.05	.00261	.05341	mg/L	102	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.05	.00261	.05334	mg/L	101	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.05	U	.05203	mg/L	104	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.05	U	.04697	mg/L	94	70	130	10	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528340													
WG528340ICV	ICV	09/29/21 18:29	MS210727-2	.05		.0487	mg/L	97	90	110			
WG528340ICB	ICB	09/29/21 18:31				U	mg/L		-0.0132	0.0132			
WG528340LFB	LFB	09/29/21 18:33	MS210927-3	.050075		.0548	mg/L	109	85	115			
L68415-04AS	AS	09/29/21 18:42	MS210927-3	.050075	U	.0569	mg/L	114	70	130			
L68415-04ASD	ASD	09/29/21 18:44	MS210927-3	.050075	U	.057	mg/L	114	70	130	0	20	
L68638-01AS	AS	09/29/21 19:11	MS210927-3	.050075	.0552	.1161	mg/L	122	70	130			
L68638-01ASD	ASD	09/29/21 19:16	MS210927-3	.050075	.0552	.1075	mg/L	104	70	130	8	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68415***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-01	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68415***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-02	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68415***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-03	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68415***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-04	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68415***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-05	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-06	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-07	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-08	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-09	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-10	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-11	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-12	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-13	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68415-14	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527658	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527658	Fluoride	M300.0 - Ion Chromatography	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527496	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527073	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527658	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68415
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]		X	

L68415-01 Container B2450292 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-02 Container B2450298 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-03 Container B2450304 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-04 Container B2450310 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-05 Container B2450316 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-06 Container B2450322 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-07 Container B2450328 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-08 Container B2450334 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-09 Container B2450340 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

Western Environmental Testing Laboratory

ACZ Project ID: L68415
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

L68415-10 Container B2450346 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-11 Container B2450352 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-12 Container B2450358 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-13 Container B2450364 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68415-14 Container B2450370 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?		X	

L68415-01 : A white and yellow container not received and a new container created from the raw .

L68415-02 : A white and yellow container not received and a new container created from the raw .

L68415-03 : A white and yellow container not received and a new container created from the raw .

L68415-04 : A white and yellow container not received and a new container created from the raw .

L68415-05 : A white and yellow container not received and a new container created from the raw .

L68415-06 : A white and yellow container not received and a new container created from the raw .

L68415-07 : A white and yellow container not received and a new container created from the raw .

L68415-08 : A white and yellow container not received and a new container created from the raw .

L68415-09 : A white and yellow container not received and a new container created from the raw .

L68415-10 : A white and yellow container not received and a new container created from the raw .

L68415-11 : A white and yellow container not received and a new container created from the raw .

L68415-12 : A white and yellow container not received and a new

Western Environmental Testing Laboratory

ACZ Project ID: L68415
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

container created from the raw .

L68415-13 : A white and yellow container not received and a new container created from the raw .

L68415-14 : A white and yellow container not received and a new container created from the raw .

16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35898	10.8	<=6.0	15	N/A
NA35902	10.2	<=6.0	15	N/A
NA35897	13.9	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68415

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST

***Sampler's Signature:** [signature]

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D) 1631
21090195-001	9/7/2021 15:00	OT	4	✓	✓
21090195-002				✓	✓
21090195-003				✓	✓
21090195-004				✓	✓
21090195-005				✓	✓
21090195-006				✓	✓
21090195-007				✓	✓
21090195-008				✓	✓
21090195-009				✓	✓
21090195-010				✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Leachate / Diffusion Project

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	9.8.21	[signature]	9.8.21
	9.9.21		9.9.21
		[signature]	9/9/21 10:5

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68415 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (D) 1631							
21090195-011	9/7/2021 15:00	OT	4	✓	✓							
21090195-012	↓	↓	↓	✓	✓							
21090195-013	↓	↓	↓	✓	✓							
21090195-014	↓	↓	↓	✓	✓							
				✓								
				✓								
				✓								
				✓								
				✓								
				✓								

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 11, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68416

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 11, 2021. This project has been assigned to ACZ's project number, L68416. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68416. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 10, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-001

ACZ Sample ID: ***L68416-01***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 11:12	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0108	B	*	mg/L	0.005	0.015	09/30/21 12:25	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:25	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0285		*	mg/L	0.0002	0.001	09/30/21 12:25	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0196		*	mg/L	0.0005	0.0025	09/30/21 12:25	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:25	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:18	kja
Boron, dissolved	M200.7 ICP	1	0.066	B	*	mg/L	0.03	0.1	09/23/21 20:18	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:25	mfm
Calcium, dissolved	M200.7 ICP	1	12.6		*	mg/L	0.1	0.5	09/23/21 20:18	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00128	B	*	mg/L	0.0005	0.002	09/30/21 12:25	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000078	B	*	mg/L	0.00005	0.00025	09/30/21 12:25	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:25	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:18	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0833		*	mg/L	0.007	0.02	09/30/21 12:25	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:25	mfm
Lithium, dissolved	M200.7 ICP	1	0.0694		*	mg/L	0.008	0.04	09/23/21 20:18	kja
Magnesium, dissolved	M200.7 ICP	1	0.33	B	*	mg/L	0.2	1	09/27/21 22:07	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00148	B	*	mg/L	0.0004	0.002	09/30/21 12:25	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 14:54	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00467		*	mg/L	0.0002	0.0005	09/30/21 12:25	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:25	mfm
Potassium, dissolved	M200.7 ICP	1	5.50		*	mg/L	0.2	1	09/23/21 20:18	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:18	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00148		*	mg/L	0.0001	0.00025	09/30/21 12:25	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:25	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/23/21 20:18	kja
Strontium, dissolved	M200.7 ICP	1	0.0369	B	*	mg/L	0.009	0.045	09/23/21 20:18	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:25	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0789		*	mg/L	0.0008	0.0025	09/30/21 12:25	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:15	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:25	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00191	B	*	mg/L	0.0005	0.002	09/30/21 12:25	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:25	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-001

ACZ Sample ID: ***L68416-01***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	29.1		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	91.1		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.11		*	mg/L	0.4	2	09/23/21 1:34	krh
Conductivity @25C	SM2510B	1	312		*	umhos/cm	1	10	09/17/21 23:42	eep
Fluoride	M300.0 - Ion Chromatography	1	0.379		*	mg/L	0.05	0.25	09/23/21 1:34	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		33			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.029	B	*	mg/L	0.02	0.1	09/25/21 21:08	pjb
pH (lab)	SM4500H+ B									
pH		1	10.1	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/21/21 23:11	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/13/21 16:19	anc
Sulfate	M300.0 - Ion Chromatography	1	18.9		*	mg/L	0.4	2	09/23/21 1:34	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-002

ACZ Sample ID: ***L68416-02***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 11:21	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0089	B	*	mg/L	0.005	0.015	09/30/21 12:27	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:27	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0285		*	mg/L	0.0002	0.001	09/30/21 12:27	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0231		*	mg/L	0.0005	0.0025	09/30/21 12:27	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:27	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:22	kja
Boron, dissolved	M200.7 ICP	1	0.066	B	*	mg/L	0.03	0.1	09/23/21 20:22	kja
Cadmium, dissolved	M200.8 ICP-MS	1	0.000073	B	*	mg/L	0.00005	0.00025	09/30/21 12:27	mfm
Calcium, dissolved	M200.7 ICP	1	14.6		*	mg/L	0.1	0.5	09/23/21 20:22	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00166	B	*	mg/L	0.0005	0.002	09/30/21 12:27	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000124	B	*	mg/L	0.00005	0.00025	09/30/21 12:27	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:27	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:22	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0752		*	mg/L	0.007	0.02	09/30/21 12:27	mfm
Lead, dissolved	M200.8 ICP-MS	1	0.00031	B	*	mg/L	0.0001	0.0005	09/30/21 12:27	mfm
Lithium, dissolved	M200.7 ICP	1	0.0677		*	mg/L	0.008	0.04	09/23/21 20:22	kja
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	09/27/21 22:11	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00118	B	*	mg/L	0.0004	0.002	09/30/21 12:27	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 14:55	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00493		*	mg/L	0.0002	0.0005	09/30/21 12:27	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:27	mfm
Potassium, dissolved	M200.7 ICP	1	4.48		*	mg/L	0.2	1	09/23/21 20:22	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:22	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00141		*	mg/L	0.0001	0.00025	09/30/21 12:27	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:27	mfm
Sodium, dissolved	M200.7 ICP	1	61.0		*	mg/L	0.2	1	09/23/21 20:22	kja
Strontium, dissolved	M200.7 ICP	1	0.0368	B	*	mg/L	0.009	0.045	09/23/21 20:22	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:27	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0127		*	mg/L	0.0008	0.0025	09/30/21 12:27	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:18	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	09/30/21 12:27	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00188	B	*	mg/L	0.0005	0.002	09/30/21 12:27	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:27	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-002

ACZ Sample ID: ***L68416-02***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	35.7		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	79.2		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.14		*	mg/L	0.4	2	09/23/21 2:10	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/17/21 23:52	eep
Fluoride	M300.0 - Ion Chromatography	1	0.386		*	mg/L	0.05	0.25	09/23/21 2:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		38			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.039	B	*	mg/L	0.02	0.1	09/25/21 21:10	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/21/21 23:12	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/13/21 16:22	anc
Sulfate	M300.0 - Ion Chromatography	1	22.3		*	mg/L	0.4	2	09/23/21 2:10	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-003

ACZ Sample ID: ***L68416-03***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 11:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0187		*	mg/L	0.005	0.015	09/30/21 12:29	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:29	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0348		*	mg/L	0.0002	0.001	09/30/21 12:29	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00377		*	mg/L	0.0005	0.0025	09/30/21 12:29	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:29	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:25	kja
Boron, dissolved	M200.7 ICP	1	0.075	B	*	mg/L	0.03	0.1	09/23/21 20:25	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:29	mfm
Calcium, dissolved	M200.7 ICP	1	6.04		*	mg/L	0.1	0.5	09/23/21 20:25	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00356		*	mg/L	0.0005	0.002	09/30/21 12:29	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:29	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:29	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:25	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0560		*	mg/L	0.007	0.02	09/30/21 12:29	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:29	mfm
Lithium, dissolved	M200.7 ICP	1	0.0668		*	mg/L	0.008	0.04	09/23/21 20:25	kja
Magnesium, dissolved	M200.7 ICP	1	0.27	B	*	mg/L	0.2	1	09/27/21 22:13	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0004	0.002	09/30/21 12:29	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 14:55	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00517		*	mg/L	0.0002	0.0005	09/30/21 12:29	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:29	mfm
Potassium, dissolved	M200.7 ICP	1	2.36		*	mg/L	0.2	1	09/23/21 20:25	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:25	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00150		*	mg/L	0.0001	0.00025	09/30/21 12:29	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:29	mfm
Sodium, dissolved	M200.7 ICP	1	60.5		*	mg/L	0.2	1	09/23/21 20:25	kja
Strontium, dissolved	M200.7 ICP	1	0.0197	B	*	mg/L	0.009	0.045	09/23/21 20:25	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:29	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00911		*	mg/L	0.0008	0.0025	09/30/21 12:29	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:28	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:29	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00306		*	mg/L	0.0005	0.002	09/30/21 12:29	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:29	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-003

ACZ Sample ID: ***L68416-03***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	104		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	16.7	B	*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.33		*	mg/L	0.4	2	09/23/21 2:45	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/18/21 0:01	eep
Fluoride	M300.0 - Ion Chromatography	1	0.507		*	mg/L	0.05	0.25	09/23/21 2:45	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:13	pjb
pH (lab)	SM4500H+ B									
pH		1	8.8	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/21/21 23:13	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/13/21 16:25	anc
Sulfate	M300.0 - Ion Chromatography	1	22.7		*	mg/L	0.4	2	09/23/21 2:45	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-004

ACZ Sample ID: ***L68416-04***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 11:39	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0384		*	mg/L	0.005	0.015	09/30/21 12:31	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:31	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0338		*	mg/L	0.0002	0.001	09/30/21 12:31	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00402		*	mg/L	0.0005	0.0025	09/30/21 12:31	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:31	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:28	kja
Boron, dissolved	M200.7 ICP	1	0.071	B	*	mg/L	0.03	0.1	09/23/21 20:28	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:31	mfm
Calcium, dissolved	M200.7 ICP	1	6.24		*	mg/L	0.1	0.5	09/23/21 20:28	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00178	B	*	mg/L	0.0005	0.002	09/30/21 12:31	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:31	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:31	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:28	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0608		*	mg/L	0.007	0.02	09/30/21 12:31	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:31	mfm
Lithium, dissolved	M200.7 ICP	1	0.0674		*	mg/L	0.008	0.04	09/23/21 20:28	kja
Magnesium, dissolved	M200.7 ICP	1	0.28	B	*	mg/L	0.2	1	09/27/21 22:17	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	09/30/21 12:31	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 14:56	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00507		*	mg/L	0.0002	0.0005	09/30/21 12:31	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:31	mfm
Potassium, dissolved	M200.7 ICP	1	2.45		*	mg/L	0.2	1	09/23/21 20:28	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:28	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00145		*	mg/L	0.0001	0.00025	09/30/21 12:31	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:31	mfm
Sodium, dissolved	M200.7 ICP	1	61.3		*	mg/L	0.2	1	09/23/21 20:28	kja
Strontium, dissolved	M200.7 ICP	1	0.0208	B	*	mg/L	0.009	0.045	09/23/21 20:28	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:31	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00951		*	mg/L	0.0008	0.0025	09/30/21 12:31	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:31	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:31	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00289		*	mg/L	0.0005	0.002	09/30/21 12:31	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:31	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-004

ACZ Sample ID: ***L68416-04***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	117		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	21.0		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	138		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.27		*	mg/L	0.4	2	09/23/21 3:03	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/18/21 0:11	eep
Fluoride	M300.0 - Ion Chromatography	1	0.497		*	mg/L	0.05	0.25	09/23/21 3:03	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:14	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/21/21 23:15	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/13/21 16:28	anc
Sulfate	M300.0 - Ion Chromatography	1	22.1		*	mg/L	0.4	2	09/23/21 3:03	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-005

ACZ Sample ID: ***L68416-05***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 11:48	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0458		*	mg/L	0.005	0.015	09/30/21 12:33	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:33	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0340		*	mg/L	0.0002	0.001	09/30/21 12:33	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00464		*	mg/L	0.0005	0.0025	09/30/21 12:33	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:33	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:31	kja
Boron, dissolved	M200.7 ICP	1	0.075	B	*	mg/L	0.03	0.1	09/23/21 20:31	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:33	mfm
Calcium, dissolved	M200.7 ICP	1	6.33		*	mg/L	0.1	0.5	09/23/21 20:31	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00295		*	mg/L	0.0005	0.002	09/30/21 12:33	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:33	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:33	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:31	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0589		*	mg/L	0.007	0.02	09/30/21 12:33	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:33	mfm
Lithium, dissolved	M200.7 ICP	1	0.0680		*	mg/L	0.008	0.04	09/23/21 20:31	kja
Magnesium, dissolved	M200.7 ICP	1	0.27	B	*	mg/L	0.2	1	09/27/21 22:20	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00058	B	*	mg/L	0.0004	0.002	09/30/21 12:33	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 14:57	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00523		*	mg/L	0.0002	0.0005	09/30/21 12:33	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:33	mfm
Potassium, dissolved	M200.7 ICP	1	2.42		*	mg/L	0.2	1	09/23/21 20:31	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:31	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00145		*	mg/L	0.0001	0.00025	09/30/21 12:33	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:33	mfm
Sodium, dissolved	M200.7 ICP	1	61.1		*	mg/L	0.2	1	09/23/21 20:31	kja
Strontium, dissolved	M200.7 ICP	1	0.0207	B	*	mg/L	0.009	0.045	09/23/21 20:31	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:33	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00996		*	mg/L	0.0008	0.0025	09/30/21 12:33	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:34	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:33	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00288		*	mg/L	0.0005	0.002	09/30/21 12:33	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:33	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-005

ACZ Sample ID: ***L68416-05***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	101		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	20.9		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.31		*	mg/L	0.4	2	09/23/21 3:21	krh
Conductivity @25C	SM2510B	1	299		*	umhos/cm	1	10	09/18/21 0:20	eep
Fluoride	M300.0 - Ion Chromatography	1	0.495		*	mg/L	0.05	0.25	09/23/21 3:21	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:15	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/21/21 23:18	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/13/21 16:31	anc
Sulfate	M300.0 - Ion Chromatography	1	22.2		*	mg/L	0.4	2	09/23/21 3:21	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-006

ACZ Sample ID: ***L68416-06***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 11:56	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0283		*	mg/L	0.005	0.015	09/30/21 12:40	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00053	B	*	mg/L	0.0004	0.002	09/30/21 12:40	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0311		*	mg/L	0.0002	0.001	09/30/21 12:40	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0254		*	mg/L	0.0005	0.0025	09/30/21 12:40	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:40	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:34	kja
Boron, dissolved	M200.7 ICP	1	0.067	B	*	mg/L	0.03	0.1	09/23/21 20:34	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:40	mfm
Calcium, dissolved	M200.7 ICP	1	10.4		*	mg/L	0.1	0.5	09/23/21 20:34	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00066	B	*	mg/L	0.0005	0.002	09/30/21 12:40	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000057	B	*	mg/L	0.00005	0.00025	09/30/21 12:40	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:40	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:34	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0723		*	mg/L	0.007	0.02	09/30/21 12:40	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:40	mfm
Lithium, dissolved	M200.7 ICP	1	0.0674		*	mg/L	0.008	0.04	09/23/21 20:34	kja
Magnesium, dissolved	M200.7 ICP	1	0.26	B	*	mg/L	0.2	1	09/27/21 22:23	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00083	B	*	mg/L	0.0004	0.002	09/30/21 12:40	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 14:58	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00688		*	mg/L	0.0002	0.0005	09/30/21 12:40	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:40	mfm
Potassium, dissolved	M200.7 ICP	1	4.18		*	mg/L	0.2	1	09/23/21 20:34	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:34	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00140		*	mg/L	0.0001	0.00025	09/30/21 12:40	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:40	mfm
Sodium, dissolved	M200.7 ICP	1	61.3		*	mg/L	0.2	1	09/23/21 20:34	kja
Strontium, dissolved	M200.7 ICP	1	0.0414	B	*	mg/L	0.009	0.045	09/23/21 20:34	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:40	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0102		*	mg/L	0.0008	0.0025	09/30/21 12:40	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:37	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:40	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00191	B	*	mg/L	0.0005	0.002	09/30/21 12:40	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:40	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-006

ACZ Sample ID: ***L68416-06***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	85.1		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	47.1		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	132		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.26		*	mg/L	0.4	2	09/23/21 3:39	krh
Conductivity @25C	SM2510B	1	294		*	umhos/cm	1	10	09/18/21 1:04	eep
Fluoride	M300.0 - Ion Chromatography	1	0.407		*	mg/L	0.05	0.25	09/23/21 3:39	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		27.0			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:21	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/21/21 23:19	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/13/21 16:35	anc
Sulfate	M300.0 - Ion Chromatography	1	19.6		*	mg/L	0.4	2	09/23/21 3:39	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-007

ACZ Sample ID: ***L68416-07***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 12:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0191		*	mg/L	0.005	0.015	09/30/21 12:42	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:42	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0306		*	mg/L	0.0002	0.001	09/30/21 12:42	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0259		*	mg/L	0.0005	0.0025	09/30/21 12:42	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:42	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:43	kja
Boron, dissolved	M200.7 ICP	1	0.071	B	*	mg/L	0.03	0.1	09/23/21 20:43	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:42	mfm
Calcium, dissolved	M200.7 ICP	1	9.96		*	mg/L	0.1	0.5	09/23/21 20:43	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00065	B	*	mg/L	0.0005	0.002	09/30/21 12:42	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000062	B	*	mg/L	0.00005	0.00025	09/30/21 12:42	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:42	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:43	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0770		*	mg/L	0.007	0.02	09/30/21 12:42	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:42	mfm
Lithium, dissolved	M200.7 ICP	1	0.0680		*	mg/L	0.008	0.04	09/23/21 20:43	kja
Magnesium, dissolved	M200.7 ICP	1	0.35	B	*	mg/L	0.2	1	09/27/21 22:32	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00092	B	*	mg/L	0.0004	0.002	09/30/21 12:42	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 14:59	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00567		*	mg/L	0.0002	0.0005	09/30/21 12:42	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:42	mfm
Potassium, dissolved	M200.7 ICP	1	3.59		*	mg/L	0.2	1	09/23/21 20:43	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:43	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00137		*	mg/L	0.0001	0.00025	09/30/21 12:42	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:42	mfm
Sodium, dissolved	M200.7 ICP	1	61.5		*	mg/L	0.2	1	09/23/21 20:43	kja
Strontium, dissolved	M200.7 ICP	1	0.0417	B	*	mg/L	0.009	0.045	09/23/21 20:43	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:42	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00991		*	mg/L	0.0008	0.0025	09/30/21 12:42	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:41	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:42	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00189	B	*	mg/L	0.0005	0.002	09/30/21 12:42	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:42	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-007

ACZ Sample ID: ***L68416-07***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	59.4		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	56.5		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.28		*	mg/L	0.4	2	09/23/21 4:33	krh
Conductivity @25C	SM2510B	1	294		*	umhos/cm	1	10	09/18/21 1:13	eep
Fluoride	M300.0 - Ion Chromatography	1	0.407		*	mg/L	0.05	0.25	09/23/21 4:33	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		26			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.029	B	*	mg/L	0.02	0.1	09/25/21 21:22	pjb
pH (lab)	SM4500H+ B									
pH		1	9.7	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/21/21 23:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	180		*	mg/L	20	40	09/13/21 16:38	anc
Sulfate	M300.0 - Ion Chromatography	1	19.2		*	mg/L	0.4	2	09/23/21 4:33	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-008

ACZ Sample ID: ***L68416-08***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 12:14	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0194		*	mg/L	0.005	0.015	09/30/21 12:48	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:48	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0315		*	mg/L	0.0002	0.001	09/30/21 12:48	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0248		*	mg/L	0.0005	0.0025	09/30/21 12:48	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:48	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:52	kja
Boron, dissolved	M200.7 ICP	1	0.068	B	*	mg/L	0.03	0.1	09/23/21 20:52	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:48	mfm
Calcium, dissolved	M200.7 ICP	1	10.7		*	mg/L	0.1	0.5	09/23/21 20:52	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00127	B	*	mg/L	0.0005	0.002	09/30/21 12:48	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000069	B	*	mg/L	0.00005	0.00025	09/30/21 12:48	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:48	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:52	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0714		*	mg/L	0.007	0.02	09/30/21 12:48	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:48	mfm
Lithium, dissolved	M200.7 ICP	1	0.0672		*	mg/L	0.008	0.04	09/23/21 20:52	kja
Magnesium, dissolved	M200.7 ICP	1	0.29	B	*	mg/L	0.2	1	09/27/21 22:41	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00089	B	*	mg/L	0.0004	0.002	09/30/21 12:48	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 15:00	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00618		*	mg/L	0.0002	0.0005	09/30/21 12:48	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:48	mfm
Potassium, dissolved	M200.7 ICP	1	3.83		*	mg/L	0.2	1	09/23/21 20:52	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:52	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00237		*	mg/L	0.0001	0.00025	09/30/21 12:48	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/06/21 20:45	bsu
Sodium, dissolved	M200.7 ICP	1	61.2		*	mg/L	0.2	1	09/23/21 20:52	kja
Strontium, dissolved	M200.7 ICP	1	0.0412	B	*	mg/L	0.009	0.045	09/23/21 20:52	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:48	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0102		*	mg/L	0.0008	0.0025	09/30/21 12:48	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:50	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	09/30/21 12:48	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00197	B	*	mg/L	0.0005	0.002	09/30/21 12:48	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:48	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-008

ACZ Sample ID: ***L68416-08***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	62.2		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	54.1		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.20		*	mg/L	0.4	2	09/23/21 4:51	krh
Conductivity @25C	SM2510B	1	296		*	umhos/cm	1	10	09/18/21 1:22	eep
Fluoride	M300.0 - Ion Chromatography	1	0.414		*	mg/L	0.05	0.25	09/23/21 4:51	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		28			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:23	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/21/21 23:21	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/13/21 16:41	anc
Sulfate	M300.0 - Ion Chromatography	1	20.5		*	mg/L	0.4	2	09/23/21 4:51	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-009

ACZ Sample ID: ***L68416-09***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 12:23	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0255		*	mg/L	0.005	0.015	09/30/21 12:51	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:51	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0311		*	mg/L	0.0002	0.001	09/30/21 12:51	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0219		*	mg/L	0.0005	0.0025	09/30/21 12:51	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:51	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:55	kja
Boron, dissolved	M200.7 ICP	1	0.068	B	*	mg/L	0.03	0.1	09/23/21 20:55	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:51	mfm
Calcium, dissolved	M200.7 ICP	1	9.92		*	mg/L	0.1	0.5	09/23/21 20:55	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00112	B	*	mg/L	0.0005	0.002	09/30/21 12:51	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000057	B	*	mg/L	0.00005	0.00025	09/30/21 12:51	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:51	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:55	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0867		*	mg/L	0.007	0.02	09/30/21 12:51	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:51	mfm
Lithium, dissolved	M200.7 ICP	1	0.0689		*	mg/L	0.008	0.04	09/23/21 20:55	kja
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	09/27/21 22:44	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00118	B	*	mg/L	0.0004	0.002	09/30/21 12:51	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 15:01	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0129		*	mg/L	0.0002	0.0005	09/30/21 12:51	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:51	mfm
Potassium, dissolved	M200.7 ICP	1	4.86		*	mg/L	0.2	1	09/23/21 20:55	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:55	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00138		*	mg/L	0.0001	0.00025	09/30/21 12:51	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/06/21 20:47	bsu
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/23/21 20:55	kja
Strontium, dissolved	M200.7 ICP	1	0.0413	B	*	mg/L	0.009	0.045	09/23/21 20:55	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:51	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0115		*	mg/L	0.0008	0.0025	09/30/21 12:51	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:54	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:51	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00192	B	*	mg/L	0.0005	0.002	09/30/21 12:51	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:51	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-009

ACZ Sample ID: ***L68416-09***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	68.2		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	52.4		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.19		*	mg/L	0.4	2	09/23/21 5:09	krh
Conductivity @25C	SM2510B	1	298		*	umhos/cm	1	10	09/18/21 1:31	eep
Fluoride	M300.0 - Ion Chromatography	1	0.414		*	mg/L	0.05	0.25	09/23/21 5:09	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		26			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:24	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/21/21 23:22	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/13/21 16:44	anc
Sulfate	M300.0 - Ion Chromatography	1	19.8		*	mg/L	0.4	2	09/23/21 5:09	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-010

ACZ Sample ID: ***L68416-10***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 12:40	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0203		*	mg/L	0.005	0.015	09/30/21 12:53	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:53	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0300		*	mg/L	0.0002	0.001	09/30/21 12:53	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0252		*	mg/L	0.0005	0.0025	09/30/21 12:53	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:53	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:59	kja
Boron, dissolved	M200.7 ICP	1	0.068	B	*	mg/L	0.03	0.1	09/23/21 20:59	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:53	mfm
Calcium, dissolved	M200.7 ICP	1	10.4		*	mg/L	0.1	0.5	09/23/21 20:59	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00084	B	*	mg/L	0.0005	0.002	09/30/21 12:53	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000053	B	*	mg/L	0.00005	0.00025	09/30/21 12:53	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:53	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:59	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0743		*	mg/L	0.007	0.02	09/30/21 12:53	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:53	mfm
Lithium, dissolved	M200.7 ICP	1	0.0687		*	mg/L	0.008	0.04	09/23/21 20:59	kja
Magnesium, dissolved	M200.7 ICP	1	0.29	B	*	mg/L	0.2	1	09/27/21 22:47	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00085	B	*	mg/L	0.0004	0.002	09/30/21 12:53	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 15:04	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00867		*	mg/L	0.0002	0.0005	09/30/21 12:53	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:53	mfm
Potassium, dissolved	M200.7 ICP	1	4.95		*	mg/L	0.2	1	09/23/21 20:59	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:59	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00131		*	mg/L	0.0001	0.00025	09/30/21 12:53	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/06/21 20:52	bsu
Sodium, dissolved	M200.7 ICP	1	61.7		*	mg/L	0.2	1	09/23/21 20:59	kja
Strontium, dissolved	M200.7 ICP	1	0.0451		*	mg/L	0.009	0.045	09/23/21 20:59	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:53	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00837		*	mg/L	0.0008	0.0025	09/30/21 12:53	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 16:57	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:53	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00187	B	*	mg/L	0.0005	0.002	09/30/21 12:53	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:53	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-010

ACZ Sample ID: ***L68416-10***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	56.7		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	64.0		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.14		*	mg/L	0.4	2	09/23/21 5:27	krh
Conductivity @25C	SM2510B	1	301		*	umhos/cm	1	10	09/18/21 1:41	eep
Fluoride	M300.0 - Ion Chromatography	1	0.406		*	mg/L	0.05	0.25	09/23/21 5:27	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		27			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.023	B	*	mg/L	0.02	0.1	09/25/21 21:26	pjb
pH (lab)	SM4500H+ B									
pH		1	9.8	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.010	B	*	mg/L	0.01	0.05	09/21/21 23:25	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	182		*	mg/L	20	40	09/13/21 16:47	anc
Sulfate	M300.0 - Ion Chromatography	1	19.1		*	mg/L	0.4	2	09/23/21 5:27	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-011

ACZ Sample ID: ***L68416-11***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 12:58	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0243		*	mg/L	0.005	0.015	09/30/21 12:55	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:55	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0306		*	mg/L	0.0002	0.001	09/30/21 12:55	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0265		*	mg/L	0.0005	0.0025	09/30/21 12:55	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:55	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:02	kja
Boron, dissolved	M200.7 ICP	1	0.067	B	*	mg/L	0.03	0.1	09/23/21 21:02	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:55	mfm
Calcium, dissolved	M200.7 ICP	1	11.7		*	mg/L	0.1	0.5	09/23/21 21:02	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00070	B	*	mg/L	0.0005	0.002	09/30/21 12:55	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000052	B	*	mg/L	0.00005	0.00025	09/30/21 12:55	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:55	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:02	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0699		*	mg/L	0.007	0.02	09/30/21 12:55	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:55	mfm
Lithium, dissolved	M200.7 ICP	1	0.0690		*	mg/L	0.008	0.04	09/23/21 21:02	kja
Magnesium, dissolved	M200.7 ICP	1	0.26	B	*	mg/L	0.2	1	09/27/21 22:50	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00077	B	*	mg/L	0.0004	0.002	09/30/21 12:55	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 15:05	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00986		*	mg/L	0.0002	0.0005	09/30/21 12:55	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:55	mfm
Potassium, dissolved	M200.7 ICP	1	4.75		*	mg/L	0.2	1	09/23/21 21:02	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:02	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00133		*	mg/L	0.0001	0.00025	09/30/21 12:55	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/06/21 20:54	bsu
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/23/21 21:02	kja
Strontium, dissolved	M200.7 ICP	1	0.0491		*	mg/L	0.009	0.045	09/23/21 21:02	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:55	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00829		*	mg/L	0.0008	0.0025	09/30/21 12:55	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 17:00	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	09/30/21 12:55	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00188	B	*	mg/L	0.0005	0.002	09/30/21 12:55	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:55	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-011

ACZ Sample ID: ***L68416-11***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	64.5		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	58.4		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.21		*	mg/L	0.4	2	09/24/21 2:28	krh
Conductivity @25C	SM2510B	1	302		*	umhos/cm	1	10	09/18/21 1:50	eep
Fluoride	M300.0 - Ion Chromatography	1	0.430		*	mg/L	0.05	0.25	09/24/21 2:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		30			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.023	B	*	mg/L	0.02	0.1	09/25/21 21:27	pjb
pH (lab)	SM4500H+ B									
pH		1	9.7	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.013	B	*	mg/L	0.01	0.05	09/21/21 23:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/13/21 16:50	anc
Sulfate	M300.0 - Ion Chromatography	1	19.6		*	mg/L	0.4	2	09/24/21 2:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-012

ACZ Sample ID: ***L68416-12***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 13:07	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0271		*	mg/L	0.005	0.015	09/30/21 12:57	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:57	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0303		*	mg/L	0.0002	0.001	09/30/21 12:57	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0329		*	mg/L	0.0005	0.0025	09/30/21 12:57	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:57	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:05	kja
Boron, dissolved	M200.7 ICP	1	0.066	B	*	mg/L	0.03	0.1	09/23/21 21:05	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:57	mfm
Calcium, dissolved	M200.7 ICP	1	11.2		*	mg/L	0.1	0.5	09/23/21 21:05	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00270		*	mg/L	0.0005	0.002	09/30/21 12:57	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000097	B	*	mg/L	0.00005	0.00025	09/30/21 12:57	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:57	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:05	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0792		*	mg/L	0.007	0.02	09/30/21 12:57	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:57	mfm
Lithium, dissolved	M200.7 ICP	1	0.0696		*	mg/L	0.008	0.04	09/23/21 21:05	kja
Magnesium, dissolved	M200.7 ICP	1	0.27	B	*	mg/L	0.2	1	09/27/21 22:53	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00095	B	*	mg/L	0.0004	0.002	09/30/21 12:57	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 15:08	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00711		*	mg/L	0.0002	0.0005	09/30/21 12:57	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:57	mfm
Potassium, dissolved	M200.7 ICP	1	4.38		*	mg/L	0.2	1	09/23/21 21:05	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:05	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00136		*	mg/L	0.0001	0.00025	09/30/21 12:57	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/06/21 20:55	bsu
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/23/21 21:05	kja
Strontium, dissolved	M200.7 ICP	1	0.0500		*	mg/L	0.009	0.045	09/23/21 21:05	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:57	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0113		*	mg/L	0.0008	0.0025	09/30/21 12:57	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 17:03	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 12:57	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00193	B	*	mg/L	0.0005	0.002	09/30/21 12:57	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:57	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-012

ACZ Sample ID: ***L68416-12***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	57.1		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	61.4		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.31		*	mg/L	0.4	2	09/24/21 3:03	krh
Conductivity @25C	SM2510B	1	302		*	umhos/cm	1	10	09/18/21 2:00	eep
Fluoride	M300.0 - Ion Chromatography	1	0.429		*	mg/L	0.05	0.25	09/24/21 3:03	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		29			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:29	pjb
pH (lab)	SM4500H+ B									
pH		1	9.7	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	09/21/21 23:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/13/21 16:53	anc
Sulfate	M300.0 - Ion Chromatography	1	20.9		*	mg/L	0.4	2	09/24/21 3:03	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-013

ACZ Sample ID: ***L68416-13***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 13:16	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0174		*	mg/L	0.005	0.015	09/30/21 12:59	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 12:59	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0312		*	mg/L	0.0002	0.001	09/30/21 12:59	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0361		*	mg/L	0.0005	0.0025	09/30/21 12:59	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 12:59	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:08	kja
Boron, dissolved	M200.7 ICP	1	0.070	B	*	mg/L	0.03	0.1	09/23/21 21:08	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 12:59	mfm
Calcium, dissolved	M200.7 ICP	1	12.4		*	mg/L	0.1	0.5	09/23/21 21:08	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00154	B	*	mg/L	0.0005	0.002	09/30/21 12:59	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000099	B	*	mg/L	0.00005	0.00025	09/30/21 12:59	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 12:59	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:08	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0807		*	mg/L	0.007	0.02	09/30/21 12:59	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:59	mfm
Lithium, dissolved	M200.7 ICP	1	0.0690		*	mg/L	0.008	0.04	09/23/21 21:08	kja
Magnesium, dissolved	M200.7 ICP	1	0.26	B	*	mg/L	0.2	1	09/27/21 22:56	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00099	B	*	mg/L	0.0004	0.002	09/30/21 12:59	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 15:09	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00572		*	mg/L	0.0002	0.0005	09/30/21 12:59	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 12:59	mfm
Potassium, dissolved	M200.7 ICP	1	4.26		*	mg/L	0.2	1	09/23/21 21:08	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:08	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00137		*	mg/L	0.0001	0.00025	09/30/21 12:59	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/06/21 21:00	bsu
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/23/21 21:08	kja
Strontium, dissolved	M200.7 ICP	1	0.0545		*	mg/L	0.009	0.045	09/23/21 21:08	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 12:59	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00741		*	mg/L	0.0008	0.0025	09/30/21 12:59	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 17:07	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	09/30/21 12:59	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00195	B	*	mg/L	0.0005	0.002	09/30/21 12:59	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 12:59	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-013

ACZ Sample ID: ***L68416-13***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	68.7		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	53.6		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.27		*	mg/L	0.4	2	09/24/21 3:39	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/18/21 2:10	eep
Fluoride	M300.0 - Ion Chromatography	1	0.437		*	mg/L	0.05	0.25	09/24/21 3:39	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		32.0			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:32	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.013	B	*	mg/L	0.01	0.05	09/21/21 23:32	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	182		*	mg/L	20	40	09/13/21 16:56	anc
Sulfate	M300.0 - Ion Chromatography	1	20.0		*	mg/L	0.4	2	09/24/21 3:39	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-014

ACZ Sample ID: ***L68416-14***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 13:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0164		*	mg/L	0.005	0.015	09/30/21 13:01	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 13:01	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0310		*	mg/L	0.0002	0.001	09/30/21 13:01	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0426		*	mg/L	0.0005	0.0025	09/30/21 13:01	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 13:01	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:11	kja
Boron, dissolved	M200.7 ICP	1	0.068	B	*	mg/L	0.03	0.1	09/23/21 21:11	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 13:01	mfm
Calcium, dissolved	M200.7 ICP	1	13.1		*	mg/L	0.1	0.5	09/23/21 21:11	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00107	B	*	mg/L	0.0005	0.002	09/30/21 13:01	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000087	B	*	mg/L	0.00005	0.00025	09/30/21 13:01	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 13:01	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:11	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0784		*	mg/L	0.007	0.02	09/30/21 13:01	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 13:01	mfm
Lithium, dissolved	M200.7 ICP	1	0.0696		*	mg/L	0.008	0.04	09/23/21 21:11	kja
Magnesium, dissolved	M200.7 ICP	1	0.27	B	*	mg/L	0.2	1	09/27/21 22:59	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00094	B	*	mg/L	0.0004	0.002	09/30/21 13:01	mfm
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/16/21 15:10	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00528		*	mg/L	0.0002	0.0005	09/30/21 13:01	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 13:01	mfm
Potassium, dissolved	M200.7 ICP	1	5.09		*	mg/L	0.2	1	09/23/21 21:11	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:11	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00132		*	mg/L	0.0001	0.00025	09/30/21 13:01	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/06/21 21:02	bsu
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/23/21 21:11	kja
Strontium, dissolved	M200.7 ICP	1	0.0619		*	mg/L	0.009	0.045	09/23/21 21:11	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 13:01	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00719		*	mg/L	0.0008	0.0025	09/30/21 13:01	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 17:16	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 13:01	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00190	B	*	mg/L	0.0005	0.002	09/30/21 13:01	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 13:01	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090196-014

ACZ Sample ID: ***L68416-14***
Date Sampled: *09/07/21 18:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	59.6		*	mg/L	2	20	09/18/21 0:00	eep
Carbonate as CaCO3		1	63.8		*	mg/L	2	20	09/18/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/18/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/18/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.23		*	mg/L	0.4	2	09/24/21 3:57	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/18/21 2:20	eep
Fluoride	M300.0 - Ion Chromatography	1	0.428		*	mg/L	0.05	0.25	09/24/21 3:57	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		34			mg/L	0.2	5	10/11/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 21:37	pjb
pH (lab)	SM4500H+ B									
pH		1	9.8	H	*	units	0.1	0.1	09/18/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/18/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	B	*	mg/L	0.01	0.05	09/21/21 23:33	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/13/21 17:00	anc
Sulfate	M300.0 - Ion Chromatography	1	19.5		*	mg/L	0.4	2	09/24/21 3:57	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486PBW1	PBW	09/17/21 14:43				6.3	mg/L		-20	20			
WG527486LCSW3	LCSW	09/17/21 15:01	WC210908-1	820.0001		804.3	mg/L	98	90	110			
WG527486LCSW6	LCSW	09/17/21 17:34	WC210908-1	820.0001		809.3	mg/L	99	90	110			
WG527486PBW2	PBW	09/17/21 17:40				4.1	mg/L		-20	20			
WG527486LCSW9	LCSW	09/17/21 20:51	WC210908-1	820.0001		797.9	mg/L	97	90	110			
WG527486PBW3	PBW	09/17/21 20:57				2.4	mg/L		-20	20			
L68416-05DUP	DUP	09/18/21 0:29			121	121.5	mg/L				0	20	
WG527486LCSW12	LCSW	09/18/21 0:46	WC210917-2	820.0001		807.2	mg/L	98	90	110			
WG527486PBW4	PBW	09/18/21 0:52				2.6	mg/L		-20	20			
L68430-01DUP	DUP	09/18/21 2:32			4.1	10.1	mg/L				85	20	RA
WG527486LCSW15	LCSW	09/18/21 4:58	WC210917-2	820.0001		810.9	mg/L	99	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.1		.1026	mg/L	103	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.011	0.011			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.050065		.048	mg/L	96	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.050065	.0458	.0966	mg/L	101	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.050065	.0458	.0963	mg/L	101	70	130	0	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.050065	U	.0505	mg/L	101	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.050065	U	.05	mg/L	100	70	130	1	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.0201		.01935	mg/L	96	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00088	0.00088			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.01		.00916	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.01	U	.00996	mg/L	100	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.01	U	.01008	mg/L	101	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.01	U	.01042	mg/L	104	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.01	U	.01072	mg/L	107	70	130	3	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.052	mg/L	104	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00044	0.00044			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05005		.04628	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05005	.034	.08419	mg/L	100	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05005	.034	.08301	mg/L	98	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05005	.0019	.04965	mg/L	95	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05005	.0019	.0499	mg/L	96	70	130	1	20	

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05077	mg/L	102	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.0011	0.0011			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.049985		.04605	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.049985	.00464	.05491	mg/L	101	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.049985	.00464	.05445	mg/L	100	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.049985	.0705	.11818	mg/L	95	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.049985	.0705	.11609	mg/L	91	70	130	2	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.051505	mg/L	103	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.000176	0.000176			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05005		.048034	mg/L	96	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05005	U	.045358	mg/L	91	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05005	U	.044735	mg/L	89	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05005	U	.047395	mg/L	95	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05005	U	.047151	mg/L	94	70	130	1	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	2		1.966	mg/L	98	95	105			
WG527887ICB	ICB	09/23/21 20:03				U	mg/L		-0.12	0.12			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	1		.965	mg/L	97	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	1	U	.987	mg/L	99	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	1	U	.973	mg/L	97	85	115	1	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	1	U	.964	mg/L	96	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	1	U	1.003	mg/L	100	85	115	4	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	2		1.992	mg/L	100	95	105			
WG527887ICB	ICB	09/23/21 20:03				U	mg/L		-0.09	0.09			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	.5005		.498	mg/L	100	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	.5005	.067	.568	mg/L	100	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	.5005	.067	.573	mg/L	101	85	115	1	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	.5005	U	.531	mg/L	106	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	.5005	U	.552	mg/L	110	85	115	4	20	

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.050884	mg/L	102	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00011	0.00011			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05005		.046036	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05005	U	.052743	mg/L	105	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05005	U	.051961	mg/L	104	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05005	U	.050248	mg/L	100	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05005	U	.050218	mg/L	100	70	130	0	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	100		97.74	mg/L	98	95	105			
WG527887ICB	ICB	09/23/21 20:03				.32	mg/L		-0.3	0.3			BB
WG527887LFB	LFB	09/23/21 20:15	II210910-2	67.98972		66.79	mg/L	98	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	67.98972	10.4	78.16	mg/L	100	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	67.98972	10.4	77.93	mg/L	99	85	115	0	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	67.98972	4.45	72.15	mg/L	100	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	67.98972	4.45	72.84	mg/L	101	85	115	1	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	19.96		19.83	mg/L	99	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG527771													
WG527771LFB	LFB	09/23/21 1:16	WI210907-6	30		29.1	mg/L	97	90	110			
L68416-01DUP	DUP	09/23/21 1:52			5.11	5.16	mg/L				1	20	
L68416-02AS	AS	09/23/21 2:27	WI210907-6	30	5.14	34.83	mg/L	99	90	110			
L68416-11DUP	DUP	09/24/21 2:45			5.21	5.22	mg/L				0	20	
L68416-12AS	AS	09/24/21 3:21	WI210907-6	30	5.31	35.04	mg/L	99	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05198	mg/L	104	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.0011	0.0011			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05		.04604	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05	.00295	.04735	mg/L	89	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05	.00295	.04718	mg/L	88	70	130	0	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05	U	.04392	mg/L	88	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05	U	.04317	mg/L	86	70	130	2	20	

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.053089	mg/L	106	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00011	0.00011			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05005		.047945	mg/L	96	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05005	U	.050026	mg/L	100	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05005	U	.049065	mg/L	98	70	130	2	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05005	.000207	.047605	mg/L	95	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05005	.000207	.047514	mg/L	95	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486LCSW2	LCSW	09/17/21 14:49	PCN63140	1408		1409	umhos/cm	100	90	110			
WG527486LCSW5	LCSW	09/17/21 17:21	PCN63140	1408		1403	umhos/cm	100	90	110			
WG527486LCSW8	LCSW	09/17/21 20:40	PCN63140	1408		1398	umhos/cm	99	90	110			
L68416-05DUP	DUP	09/18/21 0:29			299	300	umhos/cm				0	20	
WG527486LCSW11	LCSW	09/18/21 0:35	PCN63140	1408		1397	umhos/cm	99	90	110			
L68430-01DUP	DUP	09/18/21 2:32			1660	1656	umhos/cm				0	20	
WG527486LCSW14	LCSW	09/18/21 4:47	PCN63140	1408		1394	umhos/cm	99	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05099	mg/L	102	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00176	0.00176			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05		.0454	mg/L	91	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05	U	.04305	mg/L	86	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05	U	.04269	mg/L	85	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05	U	.03862	mg/L	77	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05	U	.03819	mg/L	76	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	4.004		4.04	mg/L	101	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.05	0.05			
WG527771													
WG527771LFB	LFB	09/23/21 1:16	WI210907-6	1.5		1.394	mg/L	93	90	110			
L68416-01DUP	DUP	09/23/21 1:52			.379	.379	mg/L				0	20	RA
L68416-02AS	AS	09/23/21 2:27	WI210907-6	1.5	.386	1.8	mg/L	94	90	110			
L68416-11DUP	DUP	09/24/21 2:45			.43	.43	mg/L				0	20	RA
L68416-12AS	AS	09/24/21 3:21	WI210907-6	1.5	.429	1.862	mg/L	96	90	110			

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	2		1.99	mg/L	100	95	105			
WG527887ICB	ICB	09/23/21 20:03				U	mg/L		-0.3	0.3			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	.9822		1.02	mg/L	104	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	.9822	U	.97	mg/L	99	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	.9822	U	1.05	mg/L	107	85	115	8	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	.9822	U	1.02	mg/L	104	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	.9822	U	1.07	mg/L	109	85	115	5	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.10016		.1001	mg/L	100	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.0154	0.0154			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.0501		.0453	mg/L	90	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.0501	.0589	.1039	mg/L	90	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.0501	.0589	.1022	mg/L	86	70	130	2	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.0501	U	.0451	mg/L	90	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.0501	U	.0446	mg/L	89	70	130	1	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.0518	mg/L	104	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00022	0.00022			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05005		.04691	mg/L	94	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05005	U	.05257	mg/L	105	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05005	U	.05	mg/L	100	70	130	5	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05005	U	.0498	mg/L	100	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05005	U	.04926	mg/L	98	70	130	1	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	2		1.9522	mg/L	98	95	105			
WG527887ICB	ICB	09/23/21 20:03				U	mg/L		-0.024	0.024			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	.999		.9438	mg/L	94	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	.999	.0674	1.013	mg/L	95	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	.999	.0674	1.018	mg/L	95	85	115	0	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	.999	U	.946	mg/L	95	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	.999	U	.9621	mg/L	96	85	115	2	20	

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528063													
WG528063ICV	ICV	09/27/21 21:46	II210916-1	100		96.87	mg/L	97	95	105			
WG528063ICB	ICB	09/27/21 21:52				U	mg/L		-0.6	0.6			
WG528063LFB	LFB	09/27/21 22:05	II210910-2	49.99828		49.19	mg/L	98	85	115			
L68416-06AS	AS	09/27/21 22:26	II210910-2	49.99828	.26	49.34	mg/L	98	85	115			
L68416-06ASD	ASD	09/27/21 22:29	II210910-2	49.99828	.26	49.99	mg/L	99	85	115	1	20	
L68527-01AS	AS	09/27/21 23:08	II210910-2	49.99828	2.52	52.18	mg/L	99	85	115			
L68527-01ASD	ASD	09/27/21 23:17	II210910-2	49.99828	2.52	52.36	mg/L	100	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05152	mg/L	103	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00088	0.00088			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.0499		.04759	mg/L	95	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.0499	.00058	.05017	mg/L	99	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.0499	.00058	.04943	mg/L	98	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.0499	.00402	.05145	mg/L	95	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.0499	.00402	.05095	mg/L	94	70	130	1	20	

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527320													
WG527320ICV	ICV	09/16/21 11:59	HG210913-3	.00501		.00513	mg/L	102	95	105			
WG527320ICB	ICB	09/16/21 12:00				U	mg/L		-0.0002	0.0002			
WG527335													
WG527335LRB	LRB	09/16/21 14:42				U	mg/L		-0.00044	0.00044			
WG527335LFB	LFB	09/16/21 14:43	HG210913-6	.002002		.00184	mg/L	92	85	115			
L68329-01LFM	LFM	09/16/21 14:46	HG210913-6	.002002	U	.00177	mg/L	88	85	115			
L68329-01LFMD	LFMD	09/16/21 14:47	HG210913-6	.002002	U	.00181	mg/L	90	85	115	2	20	
L68416-11LFM	LFM	09/16/21 15:06	HG210913-6	.002002	U	.00183	mg/L	91	85	115			
L68416-11LFMD	LFMD	09/16/21 15:07	HG210913-6	.002002	U	.00176	mg/L	88	85	115	4	20	

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.01992		.01947	mg/L	98	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00044	0.00044			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05005		.04574	mg/L	91	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05005	.00523	.05541	mg/L	100	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05005	.00523	.05495	mg/L	99	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05005	.00265	.05467	mg/L	104	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05005	.00265	.0549	mg/L	104	70	130	0	20	

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05157	mg/L	103	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00088	0.00088			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05		.04596	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05	U	.04366	mg/L	87	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05	U	.04336	mg/L	87	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05	.00046	.04037	mg/L	80	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05	.00046	.03925	mg/L	78	70	130	3	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528008													
WG528008ICV	ICV	09/25/21 21:01	WI210904-1	2.4161		2.404	mg/L	99	90	110			
WG528008ICB	ICB	09/25/21 21:03				U	mg/L		-0.02	0.02			
WG528008LFB	LFB	09/25/21 21:07	WI210331-13	2		1.895	mg/L	95	90	110			
L68416-01AS	AS	09/25/21 21:09	WI210331-13	2	.029	1.92	mg/L	95	90	110			
L68416-02DUP	DUP	09/25/21 21:12			.039	.039	mg/L				0	20	RA
L68416-11AS	AS	09/25/21 21:28	WI210331-13	2	.023	2.032	mg/L	100	90	110			
L68416-12DUP	DUP	09/25/21 21:31			U	U	mg/L				0	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486LCSW1	LCSW	09/17/21 14:47	PCN62948	6		6	units	100	5.9	6.1			
WG527486LCSW4	LCSW	09/17/21 17:19	PCN62948	6		6.1	units	102	5.9	6.1			
WG527486LCSW7	LCSW	09/17/21 20:38	PCN62948	6		6.1	units	102	5.9	6.1			
L68416-05DUP	DUP	09/18/21 0:29			8.9	8.9	units				0	20	
WG527486LCSW10	LCSW	09/18/21 0:33	PCN62948	6		6.1	units	102	5.9	6.1			
L68430-01DUP	DUP	09/18/21 2:32			7.3	7.2	units				1	20	
WG527486LCSW13	LCSW	09/18/21 4:45	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527717													
WG527717ICV	ICV	09/21/21 22:08	WI210831-4	.6523		.684	mg/L	105	90	110			
WG527717ICB	ICB	09/21/21 22:10				U	mg/L		-0.01	0.01			
WG527719													
WG527459LRB	LRB	09/21/21 23:04				U	mg/L		-0.01	0.01			
WG527459LFB	LFB	09/21/21 23:05	WI210907-2	.5		.495	mg/L	99	90	110			
L68414-13LFM	LFM	09/21/21 23:08	WI210907-2	.5	U	.495	mg/L	99	90	110			
L68414-14DUP	DUP	09/21/21 23:10			U	U	mg/L				0	20	RA
L68416-09LFM	LFM	09/21/21 23:24	WI210907-2	.5	.012	.495	mg/L	97	90	110			
L68416-10DUP	DUP	09/21/21 23:26			.01	.011	mg/L				10	20	RA

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	20		19.37	mg/L	97	95	105			
WG527887ICB	ICB	09/23/21 20:03				U	mg/L		-0.6	0.6			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	99.96008		95.61	mg/L	96	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	99.96008	4.18	101.4	mg/L	97	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	99.96008	4.18	101.3	mg/L	97	85	115	0	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	99.96008	8.06	104.2	mg/L	96	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	99.96008	8.06	105.7	mg/L	98	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527082													
WG527082PBW	PBW	09/13/21 15:48				U	mg/L		-20	20			
WG527082LCSW	LCSW	09/13/21 15:51	PCN64130	1000		980	mg/L	98	80	120			
L68329-01DUP	DUP	09/13/21 16:06			348	358	mg/L				3	10	
L68339-01DUP	DUP	09/13/21 16:16			136	142	mg/L				4	10	RA

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	2		1.99	mg/L	100	95	105			
WG527887ICB	ICB	09/23/21 20:03				U	mg/L		-0.15	0.15			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	1.0017		1.004	mg/L	100	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	1.0017	U	.992	mg/L	99	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	1.0017	U	1.011	mg/L	101	85	115	2	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	1.0017	U	1.009	mg/L	101	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	1.0017	U	1.044	mg/L	104	85	115	3	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05039	mg/L	101	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00022	0.00022			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05		.04679	mg/L	94	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05	.00145	.05144	mg/L	100	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05	.00145	.05038	mg/L	98	70	130	2	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05	.00093	.04723	mg/L	93	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05	.00093	.04582	mg/L	90	70	130	3	20	

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ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.02		.02054	mg/L	103	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00022	0.00022			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.01		.00967	mg/L	97	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.01	U	.00905	mg/L	91	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.01	U	.00894	mg/L	89	70	130	1	20	
WG528860													
WG528860ICV	ICV	10/06/21 20:41	MS211001-2	.02		.01799	mg/L	90	90	110			
WG528860ICB	ICB	10/06/21 20:42				U	mg/L		-0.00022	0.00022			
WG528860LFB	LFB	10/06/21 20:44	MS210927-3	.01		.00883	mg/L	88	85	115			
L68416-09AS	AS	10/06/21 20:49	MS210927-3	.01	U	.00821	mg/L	82	70	130			
L68416-09ASD	ASD	10/06/21 20:50	MS210927-3	.01	U	.0076	mg/L	76	70	130	8	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	100		98.09	mg/L	98	95	105			
WG527887ICB	ICB	09/23/21 20:03				.36	mg/L		-0.6	0.6			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	100.007		96.24	mg/L	96	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	100.007	61.3	155.3	mg/L	94	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	100.007	61.3	155.7	mg/L	94	85	115	0	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	100.007	17.3	112.6	mg/L	95	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	100.007	17.3	114	mg/L	97	85	115	1	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527887													
WG527887ICV	ICV	09/23/21 19:57	II210916-1	2		1.9305	mg/L	97	95	105			
WG527887ICB	ICB	09/23/21 20:03				U	mg/L		-0.027	0.027			
WG527887LFB	LFB	09/23/21 20:15	II210910-2	.5005		.5156	mg/L	103	85	115			
L68416-06AS	AS	09/23/21 20:37	II210910-2	.5005	.0414	.5647	mg/L	105	85	115			
L68416-06ASD	ASD	09/23/21 20:40	II210910-2	.5005	.0414	.5652	mg/L	105	85	115	0	20	
L68527-01AS	AS	09/23/21 21:20	II210910-2	.5005	.0351	.5534	mg/L	104	85	115			
L68527-01ASD	ASD	09/23/21 21:29	II210910-2	.5005	.0351	.5622	mg/L	105	85	115	2	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	51.15		49.54	mg/L	97	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG527771													
WG527771LFB	LFB	09/23/21 1:16	WI210907-6	30		28.37	mg/L	95	90	110			
L68416-01DUP	DUP	09/23/21 1:52			18.9	18.93	mg/L				0	20	
L68416-02AS	AS	09/23/21 2:27	WI210907-6	30	22.3	50.85	mg/L	95	90	110			
L68416-11DUP	DUP	09/24/21 2:45			19.6	19.58	mg/L				0	20	
L68416-12AS	AS	09/24/21 3:21	WI210907-6	30	20.9	49.62	mg/L	96	90	110			

WETLAB

ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05235	mg/L	105	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00022	0.00022			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05		.04591	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05	U	.04933	mg/L	99	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05	U	.0481	mg/L	96	70	130	3	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05	U	.04812	mg/L	96	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05	U	.04673	mg/L	93	70	130	3	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.0501		.04721	mg/L	94	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00176	0.00176			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05005		.04469	mg/L	89	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05005	.00996	.05936	mg/L	99	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05005	.00996	.05854	mg/L	97	70	130	1	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05005	U	.04778	mg/L	95	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05005	U	.04844	mg/L	97	70	130	1	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528174													
WG528174ICV	ICV	09/28/21 15:52	II210916-1	2		1.999	mg/L	100	95	105			
WG528174ICB	ICB	09/28/21 15:59				U	mg/L		-0.015	0.015			
WG528174LFB	LFB	09/28/21 16:12	II210910-2	1		1.022	mg/L	102	85	115			
L68416-02AS	AS	09/28/21 16:21	II210910-2	1	U	1.009	mg/L	101	85	115			
L68416-02ASD	ASD	09/28/21 16:24	II210910-2	1	U	1.014	mg/L	101	85	115	0	20	
L68416-13AS	AS	09/28/21 17:10	II210910-2	1	U	1.018	mg/L	102	85	115			
L68416-13ASD	ASD	09/28/21 17:13	II210910-2	1	U	1.02	mg/L	102	85	115	0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.05068	mg/L	101	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.00022	0.00022			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05		.04575	mg/L	92	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05	.00012	.05411	mg/L	108	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05	.00012	.05249	mg/L	105	70	130	3	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05	.00748	.05929	mg/L	104	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05	.00748	.05831	mg/L	102	70	130	2	20	

WETLAB

ACZ Project ID: ***L68416***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.04842	mg/L	97	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.0011	0.0011			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.05		.04429	mg/L	89	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.05	.00288	.04885	mg/L	92	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.05	.00288	.04811	mg/L	90	70	130	2	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.05	.0016	.04683	mg/L	90	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.05	.0016	.04658	mg/L	90	70	130	1	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528394													
WG528394ICV	ICV	09/30/21 12:18	MS210727-2	.05		.0488	mg/L	98	90	110			
WG528394ICB	ICB	09/30/21 12:20				U	mg/L		-0.0132	0.0132			
WG528394LFB	LFB	09/30/21 12:22	MS210927-3	.050075		.0503	mg/L	100	85	115			
L68416-05AS	AS	09/30/21 12:35	MS210927-3	.050075	U	.0574	mg/L	115	70	130			
L68416-05ASD	ASD	09/30/21 12:38	MS210927-3	.050075	U	.0564	mg/L	113	70	130	2	20	
L68662-03AS	AS	09/30/21 13:19	MS210927-3	.050075	.0094	.0601	mg/L	101	70	130			
L68662-03ASD	ASD	09/30/21 13:21	MS210927-3	.050075	.0094	.0602	mg/L	101	70	130	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68416***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-01	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68416-02	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-03	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68416-04	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-05	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-06	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-07	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-08	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Western Environmental Testing Laboratory ACZ Project ID: ***L68416***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-09	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Western Environmental Testing Laboratory ACZ Project ID: ***L68416***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-10	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Western Environmental Testing Laboratory ACZ Project ID: ***L68416***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-11	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Western Environmental Testing Laboratory ACZ Project ID: ***L68416***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-12	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Western Environmental Testing Laboratory ACZ Project ID: ***L68416***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-13	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Western Environmental Testing Laboratory ACZ Project ID: ***L68416***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68416-14	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527887	Calcium, dissolved	M200.7 ICP	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG527486	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527771	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527771	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528008	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527082	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527771	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
			SM2320B - Titration	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Mercury, dissolved	M245.1 CVAA
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography

Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68416
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]		X	

L68416-01 Container B2450383 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-02 Container B2450388 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-03 Container B2450393 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-04 Container B2450398 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-05 Container B2450403 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-06 Container B2450408 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-07 Container B2450413 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-08 Container B2450418 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-09 Container B2450423 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

Western Environmental Testing Laboratory

ACZ Project ID: L68416
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

L68416-10 Container B2450428 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-11 Container B2450433 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-12 Container B2450438 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-13 Container B2450443 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68416-14 Container B2450448 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?		X	

L68416-01 : A white and yellow container not received and a new container created from the raw .

L68416-02 : A white and yellow container not received and a new container created from the raw .

L68416-03 : A white and yellow container not received and a new container created from the raw .

L68416-04 : A white and yellow container not received and a new container created from the raw .

L68416-05 : A white and yellow container not received and a new container created from the raw .

L68416-06 : A white and yellow container not received and a new container created from the raw .

L68416-07 : A white and yellow container not received and a new container created from the raw .

L68416-08 : A white and yellow container not received and a new container created from the raw .

L68416-09 : A white and yellow container not received and a new container created from the raw .

L68416-10 : A white and yellow container not received and a new container created from the raw .

L68416-11 : A white and yellow container not received and a new container created from the raw .

L68416-12 : A white and yellow container not received and a new

Western Environmental Testing Laboratory

ACZ Project ID: L68416
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

container created from the raw .

L68416-13 : A white and yellow container not received and a new container created from the raw .

L68416-14 : A white and yellow container not received and a new container created from the raw .

16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35900	15.7	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68416

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST
***Sampler's Signature:**
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	HgCl 245.1							
21090196-001	9/7/2021 18:00	OT	4	✓	✓							
21090196-002				✓	✓							
21090196-003				✓	✓							
21090196-004				✓	✓							
21090196-005				✓	✓							
21090196-006				✓	✓							
21090196-007				✓	✓							
21090196-008				✓	✓							
21090196-009				✓	✓							
21090196-010				✓	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9.8.21	FedEx	9.8.21
	9.9.21		9.9.21
			9/10/21 10:59

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68416 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (D) 245.1							
21090196-011	9/7/2021 18:00	OT	4	✓	✓							
21090196-012	〃	〃	〃	✓	✓							
21090196-013	〃	〃	〃	✓	✓							
21090196-014	〃	〃	〃	✓	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
[redacted]	[redacted]	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 12, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68414

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 11, 2021. This project has been assigned to ACZ's project number, L68414. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68414. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 11, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-001

ACZ Sample ID: ***L68414-01***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:07	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0550		*	mg/L	0.005	0.015	09/29/21 13:29	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 13:29	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0195		*	mg/L	0.0002	0.001	09/29/21 13:29	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0516		*	mg/L	0.0005	0.0025	09/29/21 13:29	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:29	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:04	kja
Boron, dissolved	M200.7 ICP	1	0.059	B	*	mg/L	0.03	0.1	09/23/21 16:04	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:29	mfm
Calcium, dissolved	M200.7 ICP	1	17.3		*	mg/L	0.1	0.5	09/23/21 16:04	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00352		*	mg/L	0.0005	0.002	09/29/21 13:29	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000117	B	*	mg/L	0.00005	0.00025	09/29/21 13:29	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:29	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/27/21 23:28	kja
Iron, dissolved	M200.8 ICP-MS	1	0.107		*	mg/L	0.007	0.02	09/29/21 13:29	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:29	mfm
Lithium, dissolved	M200.7 ICP	1	0.0754		*	mg/L	0.008	0.04	09/23/21 16:04	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/27/21 23:28	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00168	B	*	mg/L	0.0004	0.002	09/29/21 13:29	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.3			ng/L	0.3	1	09/16/21 15:19	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00458		*	mg/L	0.0002	0.0005	09/29/21 13:29	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:29	mfm
Potassium, dissolved	M200.7 ICP	1	8.82		*	mg/L	0.2	1	09/23/21 16:04	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:04	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00126		*	mg/L	0.0001	0.00025	09/29/21 13:29	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:29	mfm
Sodium, dissolved	M200.7 ICP	1	64.2		*	mg/L	0.2	1	09/23/21 16:04	kja
Strontium, dissolved	M200.7 ICP	1	0.0676		*	mg/L	0.009	0.045	09/23/21 16:04	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:29	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0197		*	mg/L	0.0008	0.0025	09/29/21 13:29	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:21	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:29	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00176	B	*	mg/L	0.0005	0.002	09/29/21 13:29	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:29	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-001

ACZ Sample ID: ***L68414-01***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	84.8		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	40.7		*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	4.93		*	mg/L	0.4	2	09/16/21 19:54	krh
Conductivity @25C	SM2510B	1	400		*	umhos/cm	1	10	09/17/21 18:16	eep
Fluoride	M300.0 - Ion Chromatography	1	0.266		*	mg/L	0.05	0.25	09/16/21 19:54	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		43			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.023	B	*	mg/L	0.02	0.1	09/25/21 1:27	pjb
pH (lab)	SM4500H+ B									
pH		1	11.1	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	20.4		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:40	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/14/21 8:06	anc
Sulfate	M300.0 - Ion Chromatography	1	17.0		*	mg/L	0.4	2	09/16/21 19:54	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-002

ACZ Sample ID: ***L68414-02***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:12	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0508		*	mg/L	0.005	0.015	09/29/21 13:31	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 13:31	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0183		*	mg/L	0.0002	0.001	09/29/21 13:31	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0453		*	mg/L	0.0005	0.0025	09/29/21 13:31	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:31	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:08	kja
Boron, dissolved	M200.7 ICP	1	0.064	B	*	mg/L	0.03	0.1	09/23/21 16:08	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:31	mfm
Calcium, dissolved	M200.7 ICP	1	14.0		*	mg/L	0.1	0.5	09/23/21 16:08	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00655		*	mg/L	0.0005	0.002	09/29/21 13:31	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000066	B	*	mg/L	0.00005	0.00025	09/29/21 13:31	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:31	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/27/21 23:31	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0851		*	mg/L	0.007	0.02	09/29/21 13:31	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:31	mfm
Lithium, dissolved	M200.7 ICP	1	0.0725		*	mg/L	0.008	0.04	09/23/21 16:08	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/27/21 23:31	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00117	B	*	mg/L	0.0004	0.002	09/29/21 13:31	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.8			ng/L	0.3	1	09/16/21 15:24	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00504		*	mg/L	0.0002	0.0005	09/29/21 13:31	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:31	mfm
Potassium, dissolved	M200.7 ICP	1	7.47		*	mg/L	0.2	1	09/23/21 16:08	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:08	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00124		*	mg/L	0.0001	0.00025	09/29/21 13:31	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:31	mfm
Sodium, dissolved	M200.7 ICP	1	63.0		*	mg/L	0.2	1	09/23/21 16:08	kja
Strontium, dissolved	M200.7 ICP	1	0.0634		*	mg/L	0.009	0.045	09/23/21 16:08	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:31	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0171		*	mg/L	0.0008	0.0025	09/29/21 13:31	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:24	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:31	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00183	B	*	mg/L	0.0005	0.002	09/29/21 13:31	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:31	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-002

ACZ Sample ID: ***L68414-02***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	87.0		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	36.8		*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.04		*	mg/L	0.4	2	09/16/21 20:29	krh
Conductivity @25C	SM2510B	1	378		*	umhos/cm	1	10	09/17/21 18:26	eep
Fluoride	M300.0 - Ion Chromatography	1	0.270		*	mg/L	0.05	0.25	09/16/21 20:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		35.0			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.022	B	*	mg/L	0.02	0.1	09/25/21 1:30	pjb
pH (lab)	SM4500H+ B									
pH		1	11.0	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.1		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:41	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/14/21 8:10	anc
Sulfate	M300.0 - Ion Chromatography	1	18.3		*	mg/L	0.4	2	09/16/21 20:29	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-003

ACZ Sample ID: ***L68414-03***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:18	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0345		*	mg/L	0.005	0.015	09/29/21 13:38	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00066	B	*	mg/L	0.0004	0.002	09/29/21 13:38	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0356		*	mg/L	0.0002	0.001	09/29/21 13:38	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00640		*	mg/L	0.0005	0.0025	09/29/21 13:38	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:38	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:11	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	09/23/21 16:11	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:38	mfm
Calcium, dissolved	M200.7 ICP	1	5.78		*	mg/L	0.1	0.5	09/23/21 16:11	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.0101		*	mg/L	0.0005	0.002	09/29/21 13:38	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:38	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:38	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/27/21 23:34	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0759		*	mg/L	0.007	0.02	09/29/21 13:38	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:38	mfm
Lithium, dissolved	M200.7 ICP	1	0.0656		*	mg/L	0.008	0.04	09/23/21 16:11	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/27/21 23:34	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00085	B	*	mg/L	0.0004	0.002	09/29/21 13:38	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.2			ng/L	0.3	1	09/16/21 15:29	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00632		*	mg/L	0.0002	0.0005	09/29/21 13:38	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:38	mfm
Potassium, dissolved	M200.7 ICP	1	2.87		*	mg/L	0.2	1	09/23/21 16:11	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:11	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00155		*	mg/L	0.0001	0.00025	09/29/21 13:38	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:38	mfm
Sodium, dissolved	M200.7 ICP	1	60.8		*	mg/L	0.2	1	09/23/21 16:11	kja
Strontium, dissolved	M200.7 ICP	1	0.0215	B	*	mg/L	0.009	0.045	09/23/21 16:11	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:38	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0156		*	mg/L	0.0008	0.0025	09/29/21 13:38	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:27	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/29/21 13:38	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00557		*	mg/L	0.0005	0.002	09/29/21 13:38	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:38	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-003

ACZ Sample ID: ***L68414-03***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	81.6		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	36.0		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.44		*	mg/L	0.4	2	09/16/21 21:05	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/17/21 18:35	eep
Fluoride	M300.0 - Ion Chromatography	1	0.522		*	mg/L	0.05	0.25	09/16/21 21:05	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 1:32	pjb
pH (lab)	SM4500H+ B									
pH		1	9.3	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	20.9		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	09/16/21 10:42	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/14/21 8:14	anc
Sulfate	M300.0 - Ion Chromatography	1	24.9		*	mg/L	0.4	2	09/16/21 21:05	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-004

ACZ Sample ID: ***L68414-04***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:29	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0835		*	mg/L	0.005	0.015	09/29/21 13:40	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00058	B	*	mg/L	0.0004	0.002	09/29/21 13:40	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0341		*	mg/L	0.0002	0.001	09/29/21 13:40	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00591		*	mg/L	0.0005	0.0025	09/29/21 13:40	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:40	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:14	kja
Boron, dissolved	M200.7 ICP	1	0.074	B	*	mg/L	0.03	0.1	09/23/21 16:14	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:40	mfm
Calcium, dissolved	M200.7 ICP	1	5.96		*	mg/L	0.1	0.5	09/23/21 16:14	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00434		*	mg/L	0.0005	0.002	09/29/21 13:40	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:40	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:40	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/27/21 23:37	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0564		*	mg/L	0.007	0.02	09/29/21 13:40	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:40	mfm
Lithium, dissolved	M200.7 ICP	1	0.0675		*	mg/L	0.008	0.04	09/23/21 16:14	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/27/21 23:37	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00061	B	*	mg/L	0.0004	0.002	09/29/21 13:40	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	1.7			ng/L	0.3	1	09/16/21 15:43	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00566		*	mg/L	0.0002	0.0005	09/29/21 13:40	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:40	mfm
Potassium, dissolved	M200.7 ICP	1	3.16		*	mg/L	0.2	1	09/23/21 16:14	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:14	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00152		*	mg/L	0.0001	0.00025	09/29/21 13:40	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:40	mfm
Sodium, dissolved	M200.7 ICP	1	74.6		*	mg/L	0.2	1	09/23/21 16:14	kja
Strontium, dissolved	M200.7 ICP	1	0.0223	B	*	mg/L	0.009	0.045	09/23/21 16:14	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:40	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0124		*	mg/L	0.0008	0.0025	09/29/21 13:40	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:30	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	09/29/21 13:40	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00535		*	mg/L	0.0005	0.002	09/29/21 13:40	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:40	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-004

ACZ Sample ID: ***L68414-04***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	68.3		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	52.7		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.30		*	mg/L	0.4	2	09/16/21 21:23	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/17/21 18:54	eep
Fluoride	M300.0 - Ion Chromatography	1	0.469		*	mg/L	0.05	0.25	09/16/21 21:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 1:34	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.2		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/16/21 10:44	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	204		*	mg/L	20	40	09/14/21 8:19	anc
Sulfate	M300.0 - Ion Chromatography	1	23.9		*	mg/L	0.4	2	09/16/21 21:23	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-005

ACZ Sample ID: ***L68414-05***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:40	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.113		*	mg/L	0.005	0.015	09/29/21 13:42	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00052	B	*	mg/L	0.0004	0.002	09/29/21 13:42	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0336		*	mg/L	0.0002	0.001	09/29/21 13:42	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00662		*	mg/L	0.0005	0.0025	09/29/21 13:42	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:42	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:17	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/23/21 16:17	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:42	mfm
Calcium, dissolved	M200.7 ICP	1	6.11		*	mg/L	0.1	0.5	09/23/21 16:17	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00689		*	mg/L	0.0005	0.002	09/29/21 13:42	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:42	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:42	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/27/21 23:41	kja
Iron, dissolved	M200.8 ICP-MS	2	0.217		*	mg/L	0.014	0.04	10/08/21 15:10	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:42	mfm
Lithium, dissolved	M200.7 ICP	1	0.0683		*	mg/L	0.008	0.04	09/23/21 16:17	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/27/21 23:41	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00078	B	*	mg/L	0.0004	0.002	09/29/21 13:42	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.0			ng/L	0.3	1	09/16/21 15:48	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00591		*	mg/L	0.0002	0.0005	09/29/21 13:42	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:42	mfm
Potassium, dissolved	M200.7 ICP	1	3.03		*	mg/L	0.2	1	09/23/21 16:17	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:17	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00154		*	mg/L	0.0001	0.00025	09/29/21 13:42	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:42	mfm
Sodium, dissolved	M200.7 ICP	1	62.7		*	mg/L	0.2	1	09/23/21 16:17	kja
Strontium, dissolved	M200.7 ICP	1	0.0236	B	*	mg/L	0.009	0.045	09/23/21 16:17	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:42	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0114		*	mg/L	0.0008	0.0025	09/29/21 13:42	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:34	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	09/29/21 13:42	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00571		*	mg/L	0.0005	0.002	09/29/21 13:42	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:42	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-005

ACZ Sample ID: ***L68414-05***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	69.9		*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	50.1		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.30		*	mg/L	0.4	2	09/16/21 21:41	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/17/21 19:03	eep
Fluoride	M300.0 - Ion Chromatography	1	0.513		*	mg/L	0.05	0.25	09/16/21 21:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	09/25/21 1:35	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.015	B	*	mg/L	0.01	0.05	09/16/21 10:46	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	200		*	mg/L	20	40	09/14/21 8:23	anc
Sulfate	M300.0 - Ion Chromatography	1	24.3		*	mg/L	0.4	2	09/16/21 21:41	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-006

ACZ Sample ID: ***L68414-06***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:46	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.149		*	mg/L	0.005	0.015	09/29/21 13:48	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00074	B	*	mg/L	0.0004	0.002	09/29/21 13:48	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0267		*	mg/L	0.0002	0.001	09/29/21 13:48	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0402		*	mg/L	0.0005	0.0025	09/29/21 13:48	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:48	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:26	kja
Boron, dissolved	M200.7 ICP	1	0.068	B	*	mg/L	0.03	0.1	09/23/21 16:26	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:48	mfm
Calcium, dissolved	M200.7 ICP	1	11.6		*	mg/L	0.1	0.5	09/23/21 16:26	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00230		*	mg/L	0.0005	0.002	09/29/21 13:48	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000076	B	*	mg/L	0.00005	0.00025	09/29/21 13:48	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00082	B	*	mg/L	0.0008	0.002	09/29/21 13:48	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/27/21 23:50	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0517		*	mg/L	0.007	0.02	09/29/21 13:48	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:48	mfm
Lithium, dissolved	M200.7 ICP	1	0.0720		*	mg/L	0.008	0.04	09/23/21 16:26	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/27/21 23:50	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00053	B	*	mg/L	0.0004	0.002	09/29/21 13:48	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.5			ng/L	0.3	1	09/16/21 15:52	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0102		*	mg/L	0.0002	0.0005	09/29/21 13:48	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00068	B	*	mg/L	0.0004	0.001	09/29/21 13:48	mfm
Potassium, dissolved	M200.7 ICP	1	6.27		*	mg/L	0.2	1	09/23/21 16:26	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:26	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00142		*	mg/L	0.0001	0.00025	09/29/21 13:48	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:48	mfm
Sodium, dissolved	M200.7 ICP	1	63.7		*	mg/L	0.2	1	09/23/21 16:26	kja
Strontium, dissolved	M200.7 ICP	1	0.0553		*	mg/L	0.009	0.045	09/23/21 16:26	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:48	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0125		*	mg/L	0.0008	0.0025	09/29/21 13:48	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:43	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 13:48	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00219		*	mg/L	0.0005	0.002	09/29/21 13:48	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:48	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-006

ACZ Sample ID: ***L68414-06***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	9.1	B	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	110		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.16		*	mg/L	0.4	2	09/16/21 21:59	krh
Conductivity @25C	SM2510B	1	316		*	umhos/cm	1	10	09/17/21 19:13	eep
Fluoride	M300.0 - Ion Chromatography	1	0.339		*	mg/L	0.05	0.25	09/16/21 21:59	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		29.0			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.024	B	*	mg/L	0.02	0.1	09/25/21 1:36	pjb
pH (lab)	SM4500H+ B									
pH		1	10.4	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:47	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	182		*	mg/L	20	40	09/14/21 8:27	anc
Sulfate	M300.0 - Ion Chromatography	1	19.2		*	mg/L	0.4	2	09/16/21 21:59	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-007

ACZ Sample ID: ***L68414-07***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:52	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.112		*	mg/L	0.005	0.015	09/29/21 13:51	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.002	09/29/21 13:51	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0229		*	mg/L	0.0002	0.001	09/29/21 13:51	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0454		*	mg/L	0.0005	0.0025	09/29/21 13:51	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:51	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:29	kja
Boron, dissolved	M200.7 ICP	1	0.062	B	*	mg/L	0.03	0.1	09/23/21 16:29	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:51	mfm
Calcium, dissolved	M200.7 ICP	1	8.26		*	mg/L	0.1	0.5	09/23/21 16:29	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00205		*	mg/L	0.0005	0.002	09/29/21 13:51	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000113	B	*	mg/L	0.00005	0.00025	09/29/21 13:51	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:51	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/27/21 23:54	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0342	B	*	mg/L	0.014	0.04	10/08/21 15:12	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:51	mfm
Lithium, dissolved	M200.7 ICP	1	0.0705		*	mg/L	0.008	0.04	09/23/21 16:29	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/27/21 23:54	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 13:51	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.4			ng/L	0.3	1	09/16/21 16:07	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00743		*	mg/L	0.0002	0.0005	09/29/21 13:51	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:51	mfm
Potassium, dissolved	M200.7 ICP	1	5.20		*	mg/L	0.2	1	09/23/21 16:29	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:29	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00129		*	mg/L	0.0001	0.00025	09/29/21 13:51	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:51	mfm
Sodium, dissolved	M200.7 ICP	1	63.1		*	mg/L	0.2	1	09/23/21 16:29	kja
Strontium, dissolved	M200.7 ICP	1	0.0559		*	mg/L	0.009	0.045	09/23/21 16:29	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:51	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0112		*	mg/L	0.0008	0.0025	09/29/21 13:51	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:47	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/29/21 13:51	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00179	B	*	mg/L	0.0005	0.002	09/29/21 13:51	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:51	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-007

ACZ Sample ID: ***L68414-07***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	107		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	13.3	B	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.09		*	mg/L	0.4	2	09/16/21 22:53	krh
Conductivity @25C	SM2510B	1	334		*	umhos/cm	1	10	09/17/21 19:23	eep
Fluoride	M300.0 - Ion Chromatography	1	0.321		*	mg/L	0.05	0.25	09/16/21 22:53	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		21			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.030	B	*	mg/L	0.02	0.1	09/25/21 1:37	pjb
pH (lab)	SM4500H+ B									
pH		1	10.7	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.1		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:51	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/14/21 8:31	anc
Sulfate	M300.0 - Ion Chromatography	1	17.3		*	mg/L	0.4	2	09/16/21 22:53	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-008

ACZ Sample ID: ***L68414-08***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 12:57	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.104		*	mg/L	0.005	0.015	09/29/21 13:53	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00064	B	*	mg/L	0.0004	0.002	09/29/21 13:53	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0239		*	mg/L	0.0002	0.001	09/29/21 13:53	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0383		*	mg/L	0.0005	0.0025	09/29/21 13:53	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:53	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:38	kja
Boron, dissolved	M200.7 ICP	1	0.069	B	*	mg/L	0.03	0.1	09/23/21 16:38	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:53	mfm
Calcium, dissolved	M200.7 ICP	1	5.98		*	mg/L	0.1	0.5	09/23/21 16:38	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00358		*	mg/L	0.0005	0.002	09/29/21 13:53	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000077	B	*	mg/L	0.00005	0.00025	09/29/21 13:53	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:53	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/28/21 0:03	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0523		*	mg/L	0.014	0.04	10/04/21 16:19	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:53	mfm
Lithium, dissolved	M200.7 ICP	1	0.0715		*	mg/L	0.008	0.04	09/23/21 16:38	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/28/21 0:03	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00052	B	*	mg/L	0.0004	0.002	09/29/21 13:53	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.5			ng/L	0.3	1	09/16/21 16:12	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00867		*	mg/L	0.0002	0.0005	09/29/21 13:53	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:53	mfm
Potassium, dissolved	M200.7 ICP	1	5.71		*	mg/L	0.2	1	09/23/21 16:38	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:38	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00138		*	mg/L	0.0001	0.00025	09/29/21 13:53	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:53	mfm
Sodium, dissolved	M200.7 ICP	1	63.1		*	mg/L	0.2	1	09/23/21 16:38	kja
Strontium, dissolved	M200.7 ICP	1	0.0538		*	mg/L	0.009	0.045	09/23/21 16:38	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:53	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0124		*	mg/L	0.0008	0.0025	09/29/21 13:53	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 14:56	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:53	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00200		*	mg/L	0.0005	0.002	09/29/21 13:53	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:53	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-008

ACZ Sample ID: ***L68414-08***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	117		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.11		*	mg/L	0.4	2	09/16/21 23:11	krh
Conductivity @25C	SM2510B	1	325		*	umhos/cm	1	10	09/17/21 19:33	eep
Fluoride	M300.0 - Ion Chromatography	1	0.340		*	mg/L	0.05	0.25	09/16/21 23:11	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.032	B	*	mg/L	0.02	0.1	09/25/21 1:43	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:52	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/14/21 8:35	anc
Sulfate	M300.0 - Ion Chromatography	1	20.0		*	mg/L	0.4	2	09/16/21 23:11	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-009

ACZ Sample ID: ***L68414-09***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 13:03	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.135		*	mg/L	0.005	0.015	09/29/21 13:55	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00093	B	*	mg/L	0.0004	0.002	09/29/21 13:55	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0252		*	mg/L	0.0002	0.001	09/29/21 13:55	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0331		*	mg/L	0.0005	0.0025	09/29/21 13:55	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:55	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:41	kja
Boron, dissolved	M200.7 ICP	1	0.068	B	*	mg/L	0.03	0.1	09/23/21 16:41	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:55	mfm
Calcium, dissolved	M200.7 ICP	1	4.74		*	mg/L	0.1	0.5	09/23/21 16:41	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00367		*	mg/L	0.0005	0.002	09/29/21 13:55	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000078	B	*	mg/L	0.00005	0.00025	09/29/21 13:55	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:55	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/28/21 0:07	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0520		*	mg/L	0.014	0.04	10/04/21 16:21	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:55	mfm
Lithium, dissolved	M200.7 ICP	1	0.0707		*	mg/L	0.008	0.04	09/23/21 16:41	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/28/21 0:07	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00048	B	*	mg/L	0.0004	0.002	09/29/21 13:55	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.4			ng/L	0.3	1	09/16/21 16:16	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0289		*	mg/L	0.0002	0.0005	09/29/21 13:55	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:55	mfm
Potassium, dissolved	M200.7 ICP	1	8.22		*	mg/L	0.2	1	09/23/21 16:41	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:41	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00151		*	mg/L	0.0001	0.00025	09/29/21 13:55	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:55	mfm
Sodium, dissolved	M200.7 ICP	1	63.3		*	mg/L	0.2	1	09/23/21 16:41	kja
Strontium, dissolved	M200.7 ICP	1	0.0494		*	mg/L	0.009	0.045	09/23/21 16:41	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:55	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0130		*	mg/L	0.0008	0.0025	09/29/21 13:55	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 15:00	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:55	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00196	B	*	mg/L	0.0005	0.002	09/29/21 13:55	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:55	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-009

ACZ Sample ID: ***L68414-09***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	124		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.15		*	mg/L	0.4	2	09/16/21 23:29	krh
Conductivity @25C	SM2510B	1	331		*	umhos/cm	1	10	09/17/21 19:42	eep
Fluoride	M300.0 - Ion Chromatography	1	0.331		*	mg/L	0.05	0.25	09/16/21 23:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.032	B	*	mg/L	0.02	0.1	09/25/21 1:44	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.1		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:53	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/14/21 8:39	anc
Sulfate	M300.0 - Ion Chromatography	1	19.2		*	mg/L	0.4	2	09/16/21 23:29	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0010

ACZ Sample ID: ***L68414-10***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 13:08	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.106		*	mg/L	0.005	0.015	09/29/21 13:57	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0004	0.002	09/29/21 13:57	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0241		*	mg/L	0.0002	0.001	09/29/21 13:57	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0478		*	mg/L	0.0005	0.0025	09/29/21 13:57	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:57	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:44	kja
Boron, dissolved	M200.7 ICP	1	0.061	B	*	mg/L	0.03	0.1	09/23/21 16:44	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:57	mfm
Calcium, dissolved	M200.7 ICP	1	12.4		*	mg/L	0.1	0.5	09/23/21 16:44	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00253		*	mg/L	0.0005	0.002	09/29/21 13:57	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000085	B	*	mg/L	0.00005	0.00025	09/29/21 13:57	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:57	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/28/21 0:10	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0377	B	*	mg/L	0.014	0.04	10/04/21 16:23	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:57	mfm
Lithium, dissolved	M200.7 ICP	1	0.0706		*	mg/L	0.008	0.04	09/23/21 16:44	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/28/21 0:10	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/29/21 13:57	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	9.9			ng/L	0.3	1	09/16/21 16:21	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0161		*	mg/L	0.0002	0.0005	09/29/21 13:57	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:57	mfm
Potassium, dissolved	M200.7 ICP	1	7.82		*	mg/L	0.2	1	09/23/21 16:44	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:44	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00133		*	mg/L	0.0001	0.00025	09/29/21 13:57	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:57	mfm
Sodium, dissolved	M200.7 ICP	1	63.5		*	mg/L	0.2	1	09/23/21 16:44	kja
Strontium, dissolved	M200.7 ICP	1	0.0635		*	mg/L	0.009	0.045	09/23/21 16:44	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:57	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0103		*	mg/L	0.0008	0.0025	09/29/21 13:57	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 15:03	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00010	B	*	mg/L	0.0001	0.0005	09/29/21 13:57	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00185	B	*	mg/L	0.0005	0.002	09/29/21 13:57	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:57	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0010

ACZ Sample ID: ***L68414-10***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	117		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	9.6	B	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	127		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.11		*	mg/L	0.4	2	09/16/21 23:47	krh
Conductivity @25C	SM2510B	1	342		*	umhos/cm	1	10	09/17/21 19:52	eep
Fluoride	M300.0 - Ion Chromatography	1	0.326		*	mg/L	0.05	0.25	09/16/21 23:47	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		31.0			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.030	B	*	mg/L	0.02	0.1	09/25/21 1:45	pjb
pH (lab)	SM4500H+ B									
pH		1	10.7	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	20.9		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:54	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/14/21 8:48	anc
Sulfate	M300.0 - Ion Chromatography	1	17.2		*	mg/L	0.4	2	09/16/21 23:47	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0011

ACZ Sample ID: ***L68414-11***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 13:14	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.140		*	mg/L	0.005	0.015	09/29/21 13:59	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00063	B	*	mg/L	0.0004	0.002	09/29/21 13:59	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0229		*	mg/L	0.0002	0.001	09/29/21 13:59	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0400		*	mg/L	0.0005	0.0025	09/29/21 13:59	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 13:59	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:47	kja
Boron, dissolved	M200.7 ICP	1	0.067	B	*	mg/L	0.03	0.1	09/23/21 16:47	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 13:59	mfm
Calcium, dissolved	M200.7 ICP	1	4.50		*	mg/L	0.1	0.5	09/23/21 16:47	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00236		*	mg/L	0.0005	0.002	09/29/21 13:59	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000051	B	*	mg/L	0.00005	0.00025	09/29/21 13:59	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 13:59	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/28/21 0:13	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0453		*	mg/L	0.014	0.04	10/04/21 16:25	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:59	mfm
Lithium, dissolved	M200.7 ICP	1	0.0703		*	mg/L	0.008	0.04	09/23/21 16:47	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/28/21 0:13	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00046	B	*	mg/L	0.0004	0.002	09/29/21 13:59	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	8.0		*	ng/L	0.3	1	09/16/21 16:26	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0196		*	mg/L	0.0002	0.0005	09/29/21 13:59	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 13:59	mfm
Potassium, dissolved	M200.7 ICP	1	7.86		*	mg/L	0.2	1	09/23/21 16:47	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:47	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00142		*	mg/L	0.0001	0.00025	09/29/21 13:59	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:59	mfm
Sodium, dissolved	M200.7 ICP	1	63.0		*	mg/L	0.2	1	09/23/21 16:47	kja
Strontium, dissolved	M200.7 ICP	1	0.0628		*	mg/L	0.009	0.045	09/23/21 16:47	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 13:59	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0115		*	mg/L	0.0008	0.0025	09/29/21 13:59	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 15:06	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 13:59	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00187	B	*	mg/L	0.0005	0.002	09/29/21 13:59	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 13:59	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0011

ACZ Sample ID: ***L68414-11***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	126		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	128		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.13		*	mg/L	0.4	2	09/17/21 0:04	krh
Conductivity @25C	SM2510B	1	334		*	umhos/cm	1	10	09/17/21 20:02	eep
Fluoride	M300.0 - Ion Chromatography	1	0.323		*	mg/L	0.05	0.25	09/17/21 0:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.035	B	*	mg/L	0.02	0.1	09/25/21 1:46	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:55	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/14/21 8:52	anc
Sulfate	M300.0 - Ion Chromatography	1	17.5		*	mg/L	0.4	2	09/17/21 0:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0012

ACZ Sample ID: ***L68414-12***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/14/21 13:20	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.124		*	mg/L	0.005	0.015	09/29/21 14:01	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	09/29/21 14:01	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0224		*	mg/L	0.0002	0.001	09/29/21 14:01	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0450		*	mg/L	0.0005	0.0025	09/29/21 14:01	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 14:01	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:51	kja
Boron, dissolved	M200.7 ICP	1	0.067	B	*	mg/L	0.03	0.1	09/23/21 16:51	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 14:01	mfm
Calcium, dissolved	M200.7 ICP	1	5.67		*	mg/L	0.1	0.5	09/23/21 16:51	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00725		*	mg/L	0.0005	0.002	09/29/21 14:01	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000153	B	*	mg/L	0.00005	0.00025	09/29/21 14:01	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00106	B	*	mg/L	0.0008	0.002	09/29/21 14:01	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/28/21 0:16	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0460		*	mg/L	0.014	0.04	10/04/21 16:30	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:01	mfm
Lithium, dissolved	M200.7 ICP	1	0.0728		*	mg/L	0.008	0.04	09/23/21 16:51	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/28/21 0:16	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00045	B	*	mg/L	0.0004	0.002	09/29/21 14:01	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	10.4		*	ng/L	0.3	1	09/16/21 16:31	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0112		*	mg/L	0.0002	0.0005	09/29/21 14:01	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 14:01	mfm
Potassium, dissolved	M200.7 ICP	1	7.06		*	mg/L	0.2	1	09/23/21 16:51	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:51	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00150		*	mg/L	0.0001	0.00025	09/29/21 14:01	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:01	mfm
Sodium, dissolved	M200.7 ICP	1	64.4		*	mg/L	0.2	1	09/23/21 16:51	kja
Strontium, dissolved	M200.7 ICP	1	0.0641		*	mg/L	0.009	0.045	09/23/21 16:51	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:01	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0164		*	mg/L	0.0008	0.0025	09/29/21 14:01	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 15:09	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:01	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00194	B	*	mg/L	0.0005	0.002	09/29/21 14:01	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 14:01	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0012

ACZ Sample ID: ***L68414-12***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	12.6	B	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	126		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	138		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.16		*	mg/L	0.4	2	09/17/21 0:40	krh
Conductivity @25C	SM2510B	1	336		*	umhos/cm	1	10	09/17/21 20:13	eep
Fluoride	M300.0 - Ion Chromatography	1	0.336		*	mg/L	0.05	0.25	09/17/21 0:40	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.050	B	*	mg/L	0.02	0.1	09/25/21 1:49	pjb
pH (lab)	SM4500H+ B									
pH		1	10.6	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/16/21 10:56	mjj21
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/14/21 8:56	anc
Sulfate	M300.0 - Ion Chromatography	1	20.6		*	mg/L	0.4	2	09/17/21 0:40	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0013

ACZ Sample ID: ***L68414-13***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 10:37	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0755		*	mg/L	0.005	0.015	09/29/21 14:03	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00049	B	*	mg/L	0.0004	0.002	09/29/21 14:03	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0266		*	mg/L	0.0002	0.001	09/29/21 14:03	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0675		*	mg/L	0.0005	0.0025	09/29/21 14:03	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 14:03	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:54	kja
Boron, dissolved	M200.7 ICP	1	0.070	B	*	mg/L	0.03	0.1	09/23/21 16:54	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 14:03	mfm
Calcium, dissolved	M200.7 ICP	1	13.7		*	mg/L	0.1	0.5	09/23/21 16:54	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00275		*	mg/L	0.0005	0.002	09/29/21 14:03	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000146	B	*	mg/L	0.00005	0.00025	09/29/21 14:03	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00086	B	*	mg/L	0.0008	0.002	09/29/21 14:03	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/28/21 0:20	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0377	B	*	mg/L	0.014	0.04	10/04/21 16:32	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:03	mfm
Lithium, dissolved	M200.7 ICP	1	0.0745		*	mg/L	0.008	0.04	09/23/21 16:54	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/28/21 0:20	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.002	09/29/21 14:03	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	35			ng/L	2	5	09/21/21 13:12	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00653		*	mg/L	0.0002	0.0005	09/29/21 14:03	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 14:03	mfm
Potassium, dissolved	M200.7 ICP	1	7.14		*	mg/L	0.2	1	09/23/21 16:54	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:54	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00134		*	mg/L	0.0001	0.00025	09/29/21 14:03	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:03	mfm
Sodium, dissolved	M200.7 ICP	1	64.6		*	mg/L	0.2	1	09/23/21 16:54	kja
Strontium, dissolved	M200.7 ICP	1	0.0817		*	mg/L	0.009	0.045	09/23/21 16:54	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:03	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0278		*	mg/L	0.0008	0.0025	09/29/21 14:03	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 15:13	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 14:03	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00195	B	*	mg/L	0.0005	0.002	09/29/21 14:03	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 14:03	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0013

ACZ Sample ID: ***L68414-13***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	125		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.08		*	mg/L	0.4	2	09/17/21 1:16	krh
Conductivity @25C	SM2510B	1	338		*	umhos/cm	1	10	09/17/21 20:23	eep
Fluoride	M300.0 - Ion Chromatography	1	0.343		*	mg/L	0.05	0.25	09/17/21 1:16	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		34			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.036	B	*	mg/L	0.02	0.1	09/25/21 1:51	pjb
pH (lab)	SM4500H+ B									
pH		1	10.6	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/21/21 23:06	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	178		*	mg/L	20	40	09/14/21 9:00	anc
Sulfate	M300.0 - Ion Chromatography	1	17.4		*	mg/L	0.4	2	09/17/21 1:16	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0014

ACZ Sample ID: ***L68414-14***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/17/21 10:55	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0887		*	mg/L	0.005	0.015	09/29/21 14:06	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00052	B	*	mg/L	0.0004	0.002	09/29/21 14:06	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0255		*	mg/L	0.0002	0.001	09/29/21 14:06	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0597		*	mg/L	0.0005	0.0025	09/29/21 14:06	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/29/21 14:06	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 16:57	kja
Boron, dissolved	M200.7 ICP	1	0.065	B	*	mg/L	0.03	0.1	09/23/21 16:57	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/29/21 14:06	mfm
Calcium, dissolved	M200.7 ICP	1	12.5		*	mg/L	0.1	0.5	09/23/21 16:57	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00452		*	mg/L	0.0005	0.002	09/29/21 14:06	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000172	B	*	mg/L	0.00005	0.00025	09/29/21 14:06	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/29/21 14:06	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/28/21 0:23	kja
Iron, dissolved	M200.8 ICP-MS	2	0.0530		*	mg/L	0.014	0.04	10/04/21 16:34	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:06	mfm
Lithium, dissolved	M200.7 ICP	1	0.0732		*	mg/L	0.008	0.04	09/23/21 16:57	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/28/21 0:23	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00065	B	*	mg/L	0.0004	0.002	09/29/21 14:06	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	32			ng/L	2	5	09/21/21 13:16	mfm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00753		*	mg/L	0.0002	0.0005	09/29/21 14:06	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/29/21 14:06	mfm
Potassium, dissolved	M200.7 ICP	1	7.86		*	mg/L	0.2	1	09/23/21 16:57	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 16:57	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00138		*	mg/L	0.0001	0.00025	09/29/21 14:06	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:06	mfm
Sodium, dissolved	M200.7 ICP	1	64.9		*	mg/L	0.2	1	09/23/21 16:57	kja
Strontium, dissolved	M200.7 ICP	1	0.0730		*	mg/L	0.009	0.045	09/23/21 16:57	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/29/21 14:06	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0283		*	mg/L	0.0008	0.0025	09/29/21 14:06	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/28/21 15:22	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/29/21 14:06	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00201		*	mg/L	0.0005	0.002	09/29/21 14:06	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/29/21 14:06	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090199-0014

ACZ Sample ID: ***L68414-14***
Date Sampled: *09/08/21 06:00*
Date Received: *09/11/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	3.8	B	*	mg/L	2	20	09/17/21 0:00	eep
Carbonate as CaCO3		1	120		*	mg/L	2	20	09/17/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/17/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/17/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.12		*	mg/L	0.4	2	09/17/21 1:34	krh
Conductivity @25C	SM2510B	1	324		*	umhos/cm	1	10	09/17/21 21:08	eep
Fluoride	M300.0 - Ion Chromatography	1	0.355		*	mg/L	0.05	0.25	09/17/21 1:34	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		31			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.036	B	*	mg/L	0.02	0.1	09/25/21 1:53	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/17/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/17/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/21/21 23:09	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/14/21 9:04	anc
Sulfate	M300.0 - Ion Chromatography	1	18.2		*	mg/L	0.4	2	09/17/21 1:34	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486PBW1	PBW	09/17/21 14:43				6.3	mg/L		-20	20			
WG527486LCSW3	LCSW	09/17/21 15:01	WC210908-1	820.0001		804.3	mg/L	98	90	110			
WG527486LCSW6	LCSW	09/17/21 17:34	WC210908-1	820.0001		809.3	mg/L	99	90	110			
WG527486PBW2	PBW	09/17/21 17:40				4.1	mg/L		-20	20			
L68414-03DUP	DUP	09/17/21 18:45			118	131.8	mg/L				11	20	
L68414-13DUP	DUP	09/17/21 20:33			126	125	mg/L				1	20	
WG527486LCSW9	LCSW	09/17/21 20:51	WC210908-1	820.0001		797.9	mg/L	97	90	110			
WG527486PBW3	PBW	09/17/21 20:57				2.4	mg/L		-20	20			
L68415-09DUP	DUP	09/17/21 22:43			123	138.6	mg/L				12	20	
WG527486LCSW12	LCSW	09/18/21 0:46	WC210917-2	820.0001		807.2	mg/L	98	90	110			
WG527486PBW4	PBW	09/18/21 0:52				2.6	mg/L		-20	20			
WG527486LCSW15	LCSW	09/18/21 4:58	WC210917-2	820.0001		810.9	mg/L	99	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.1		.1008	mg/L	101	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.011	0.011			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.050065		.0545	mg/L	109	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.050065	.0508	.1101	mg/L	118	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.050065	.0508	.109	mg/L	116	70	130	1	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.050065	.085	.1644	mg/L	159	70	130			M1
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.050065	.085	.1626	mg/L	155	70	130	1	20	M1

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.0201		.01867	mg/L	93	90	110			
WG528296ICB	ICB	09/29/21 13:20				.00041	mg/L		-0.00088	0.00088			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.01		.01035	mg/L	104	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.01	U	.01152	mg/L	115	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.01	U	.0116	mg/L	116	70	130	1	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.01	U	.01095	mg/L	110	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.01	U	.01102	mg/L	110	70	130	1	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.05185	mg/L	104	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00044	0.00044			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05005		.0561	mg/L	112	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05005	.0183	.07665	mg/L	117	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05005	.0183	.07673	mg/L	117	70	130	0	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05005	.00045	.05637	mg/L	112	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05005	.00045	.05537	mg/L	110	70	130	2	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.04916	mg/L	98	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.0011	0.0011			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.049985		.0521	mg/L	104	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.049985	.0453	.10297	mg/L	115	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.049985	.0453	.10263	mg/L	115	70	130	0	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.049985	.077	.13206	mg/L	110	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.049985	.077	.13166	mg/L	109	70	130	0	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.051403	mg/L	103	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.000176	0.000176			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05005		.055533	mg/L	111	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05005	U	.057648	mg/L	115	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05005	U	.05639	mg/L	113	70	130	2	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05005	U	.056582	mg/L	113	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05005	U	.056019	mg/L	112	70	130	1	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	2		1.921	mg/L	96	95	105			
WG527756ICB	ICB	09/23/21 15:49				U	mg/L		-0.12	0.12			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	1		.972	mg/L	97	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	1	U	.99	mg/L	99	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	1	U	.989	mg/L	99	85	115	0	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	1	U	1.019	mg/L	102	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	1	U	1.009	mg/L	101	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	2		1.965	mg/L	98	95	105			
WG527756ICB	ICB	09/23/21 15:49				U	mg/L		-0.09	0.09			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	.5005		.5	mg/L	100	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	.5005	.081	.586	mg/L	101	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	.5005	.081	.585	mg/L	101	85	115	0	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	.5005	U	.503	mg/L	100	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	.5005	U	.484	mg/L	97	85	115	4	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.050139	mg/L	100	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00011	0.00011			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05005		.053684	mg/L	107	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05005	U	.063253	mg/L	126	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05005	U	.06207	mg/L	124	70	130	2	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05005	.000053	.057542	mg/L	115	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05005	.000053	.057224	mg/L	114	70	130	1	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	100		97.45	mg/L	97	95	105			
WG527756ICB	ICB	09/23/21 15:49				.25	mg/L		-0.3	0.3			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	67.98972		67.7	mg/L	100	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	67.98972	6.11	74.78	mg/L	101	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	67.98972	6.11	75.89	mg/L	103	85	115	1	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	67.98972	120	183.8	mg/L	94	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	67.98972	120	183.7	mg/L	94	85	115	0	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	19.96		19.83	mg/L	99	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG527392													
WG527392LFB	LFB	09/16/21 19:36	WI210907-6	30		28.93	mg/L	96	90	110			
L68414-01DUP	DUP	09/16/21 20:12			4.93	4.93	mg/L				0	20	
L68414-02AS	AS	09/16/21 20:47	WI210907-6	30	5.04	34.21	mg/L	97	90	110			
L68414-11DUP	DUP	09/17/21 0:22			5.13	5.05	mg/L				2	20	
L68414-12AS	AS	09/17/21 0:58	WI210907-6	30	5.16	34.78	mg/L	99	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.05276	mg/L	106	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.0011	0.0011			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05		.05541	mg/L	111	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05	.00655	.06096	mg/L	109	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05	.00655	.0608	mg/L	109	70	130	0	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05	.0005	.05363	mg/L	106	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05	.0005	.05325	mg/L	106	70	130	1	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.051195	mg/L	102	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00011	0.00011			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05005		.054244	mg/L	108	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05005	.000066	.05818	mg/L	116	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05005	.000066	.056102	mg/L	112	70	130	4	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05005	.000212	.056844	mg/L	113	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05005	.000212	.055959	mg/L	111	70	130	2	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486LCSW2	LCSW	09/17/21 14:49	PCN63140	1408		1409	umhos/cm	100	90	110			
WG527486LCSW5	LCSW	09/17/21 17:21	PCN63140	1408		1403	umhos/cm	100	90	110			
L68414-03DUP	DUP	09/17/21 18:45			297	294	umhos/cm				1	20	
L68414-13DUP	DUP	09/17/21 20:33			338	338	umhos/cm				0	20	
WG527486LCSW8	LCSW	09/17/21 20:40	PCN63140	1408		1398	umhos/cm	99	90	110			
L68415-09DUP	DUP	09/17/21 22:43			313	313	umhos/cm				0	20	
WG527486LCSW11	LCSW	09/18/21 0:35	PCN63140	1408		1397	umhos/cm	99	90	110			
WG527486LCSW14	LCSW	09/18/21 4:47	PCN63140	1408		1394	umhos/cm	99	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.05242	mg/L	105	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00176	0.00176			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05		.05475	mg/L	110	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05	U	.05165	mg/L	103	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05	U	.05151	mg/L	103	70	130	0	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05	.00151	.04881	mg/L	95	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05	.00151	.04813	mg/L	93	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	4.004		4.04	mg/L	101	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.05	0.05			
WG527392													
WG527392LFB	LFB	09/16/21 19:36	WI210907-6	1.5		1.391	mg/L	93	90	110			
L68414-01DUP	DUP	09/16/21 20:12			.266	.257	mg/L				3	20	RA
L68414-02AS	AS	09/16/21 20:47	WI210907-6	1.5	.27	1.668	mg/L	93	90	110			
L68414-11DUP	DUP	09/17/21 0:22			.323	.326	mg/L				1	20	RA
L68414-12AS	AS	09/17/21 0:58	WI210907-6	1.5	.336	1.705	mg/L	91	90	110			

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528066													
WG528066ICV	ICV	09/27/21 23:05	II210916-1	2		2.03	mg/L	102	95	105			
WG528066ICB	ICB	09/27/21 23:11				U	mg/L		-0.3	0.3			
WG528066LFB	LFB	09/27/21 23:25	II210910-2	.9822		1	mg/L	102	85	115			
L68414-05AS	AS	09/27/21 23:44	II210910-2	.9822	U	1.05	mg/L	107	85	115			
L68414-05ASD	ASD	09/27/21 23:47	II210910-2	.9822	U	1.01	mg/L	103	85	115	4	20	
L68603-01AS	AS	09/28/21 0:29	II210910-2	.9822	U	1.03	mg/L	105	85	115			
L68603-01ASD	ASD	09/28/21 0:32	II210910-2	.9822	U	1.06	mg/L	108	85	115	3	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.10016		.0996	mg/L	99	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.0154	0.0154			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.0501		.0539	mg/L	108	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.0501	.0851	.1405	mg/L	111	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.0501	.0851	.1293	mg/L	88	70	130	8	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.0501	.23	.2768	mg/L	93	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.0501	.23	.2747	mg/L	89	70	130	1	20	
WG528614													
WG528614ICV	ICV	10/04/21 15:58	MS211001-2	.10016		.1096	mg/L	109	90	110			
WG528614ICB	ICB	10/04/21 16:00				U	mg/L		-0.0154	0.0154			
WG528614LFB	LFB	10/04/21 16:09	MS210927-3	.0501		.0543	mg/L	108	85	115			
L68414-07AS	AS	10/04/21 16:16	MS210927-3	.1002	.0559	.1485	mg/L	92	70	130			
L68414-07ASD	ASD	10/04/21 16:18	MS210927-3	.1002	.0559	.1439	mg/L	88	70	130	3	20	
WG529003													
WG529003ICV	ICV	10/08/21 14:59	MS211001-2	.10016		.1022	mg/L	102	90	110			
WG529003ICB	ICB	10/08/21 15:00				U	mg/L		-0.0154	0.0154			
WG529003LFB	LFB	10/08/21 15:09	MS210927-3	.0501		.0577	mg/L	115	85	115			
L68414-07AS	AS	10/08/21 15:13	MS210927-3	.1002	.0342	.1489	mg/L	114	70	130			
L68414-07ASD	ASD	10/08/21 15:15	MS210927-3	.1002	.0342	.148	mg/L	114	70	130	1	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.04937	mg/L	99	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00022	0.00022			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05005		.05332	mg/L	107	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05005	U	.06027	mg/L	120	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05005	U	.05942	mg/L	119	70	130	1	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05005	.00051	.0596	mg/L	118	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05005	.00051	.05897	mg/L	117	70	130	1	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	2		1.9495	mg/L	97	95	105			
WG527756ICB	ICB	09/23/21 15:49				U	mg/L		-0.024	0.024			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	.999		.9715	mg/L	97	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	.999	.0683	1.044	mg/L	98	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	.999	.0683	1.056	mg/L	99	85	115	1	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	.999	.0082	1.004	mg/L	100	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	.999	.0082	1.001	mg/L	99	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528066													
WG528066ICV	ICV	09/27/21 23:05	II210916-1	100		97.02	mg/L	97	95	105			
WG528066ICB	ICB	09/27/21 23:11				U	mg/L		-0.6	0.6			
WG528066LFB	LFB	09/27/21 23:25	II210910-2	49.99828		48.52	mg/L	97	85	115			
L68414-05AS	AS	09/27/21 23:44	II210910-2	49.99828	U	48.5	mg/L	97	85	115			
L68414-05ASD	ASD	09/27/21 23:47	II210910-2	49.99828	U	48.8	mg/L	98	85	115	1	20	
L68603-01AS	AS	09/28/21 0:29	II210910-2	49.99828	8.55	56.93	mg/L	97	85	115			
L68603-01ASD	ASD	09/28/21 0:32	II210910-2	49.99828	8.55	57.31	mg/L	98	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.05046	mg/L	101	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00088	0.00088			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.0499		.05374	mg/L	108	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.0499	.00117	.05944	mg/L	117	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.0499	.00117	.058	mg/L	114	70	130	2	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.0499	.0655	.12238	mg/L	114	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.0499	.0655	.12123	mg/L	112	70	130	1	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG527394													
WG527394CCV1	CCV	09/16/21 13:47	HG210709-4	10		9.51	ng/L	95	76.5	123.4			
WG527394CCB1	CCB	09/16/21 13:51				U	ng/L		-0.501	0.501			
WG527394PQV	PQV	09/16/21 14:55	HG210709-6	1		.99	ng/L	99	70	130			
WG527394LFB1	LFB	09/16/21 15:00	HG210709-5	2		1.9	ng/L	95	71	125			
L68414-03MS	MS	09/16/21 15:33	HG210709-5	2	2.2	4.35	ng/L	108	71	125			
L68414-03MSD	MSD	09/16/21 15:38	HG210709-5	2	2.2	4.25	ng/L	103	71	125	2	24	
WG527394CCV2	CCV	09/16/21 15:57	HG210709-4	10		9.74	ng/L	97	76.5	123.4			
WG527394CCB2	CCB	09/16/21 16:02				U	ng/L		-0.501	0.501			
L68414-14MS	MS	09/16/21 16:45	HG210709-5	2	30.9	34.6	ng/L	185	71	125			M3
L68414-14MSD	MSD	09/16/21 16:50	HG210709-5	2	30.9	33.2	ng/L	115	71	125	4	24	
WG527394CCV3	CCV	09/16/21 16:55	HG210709-4	10		9.63	ng/L	96	76.5	123.4			
WG527394CCB3	CCB	09/16/21 16:59				U	ng/L		-0.501	0.501			
WG527394LFB2	LFB	09/16/21 17:33	HG210709-5	2		1.97	ng/L	99	71	125			
WG527394CCV4	CCV	09/16/21 17:52	HG210709-4	10		9.56	ng/L	96	76.5	123.4			
WG527394CCB4	CCB	09/16/21 17:57				U	ng/L		-0.501	0.501			
WG527394CCV5	CCV	09/16/21 19:01	HG210709-4	10		9.87	ng/L	99	76.5	123.4			
WG527394CCB5	CCB	09/16/21 19:06				U	ng/L		-0.501	0.501			
WG527672													
WG527672CCV	CCV	09/21/21 12:22	HG210709-4	10		9.37	ng/L	94	76.5	123.4			
WG527672CCB	CCB	09/21/21 12:27				U	ng/L		-0.501	0.501			
WG527672PQV	PQV	09/21/21 13:02	HG210709-6	1		1.11	ng/L	111	70	130			
WG527672LFB	LFB	09/21/21 13:07	HG210709-5	2		1.96	ng/L	98	71	125			
L68414-14MS	MS	09/21/21 13:21	HG16315X	50	32	40.55	ng/L	86	71	125			
L68414-14MSD	MSD	09/21/21 13:26	HG16315X	50	32	42.05	ng/L	101	71	125	4	24	
WG527672CCV1	CCV	09/21/21 13:50	HG210709-4	10		9.28	ng/L	93	76.5	123.4			
WG527672CCB1	CCB	09/21/21 13:55				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.01992		.01918	mg/L	96	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00044	0.00044			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05005		.05153	mg/L	103	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05005	.00504	.06292	mg/L	116	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05005	.00504	.06226	mg/L	114	70	130	1	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05005	.0006	.05641	mg/L	112	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05005	.0006	.05648	mg/L	112	70	130	0	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.05224	mg/L	104	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00088	0.00088			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05		.05374	mg/L	107	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05	U	.05122	mg/L	102	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05	U	.0517	mg/L	103	70	130	1	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05	.00123	.04962	mg/L	97	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05	.00123	.04871	mg/L	95	70	130	2	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527991													
WG527991ICV	ICV	09/24/21 23:07	WI210904-1	2.4161		2.365	mg/L	98	90	110			
WG527991ICB	ICB	09/24/21 23:08				U	mg/L		-0.02	0.02			
WG527996													
WG527996LFB1	LFB	09/25/21 1:26	WI210331-13	2		1.957	mg/L	98	90	110			
L68414-01AS	AS	09/25/21 1:29	WI210331-13	2	.023	2.099	mg/L	104	90	110			
L68414-02DUP	DUP	09/25/21 1:31			.022	.022	mg/L				0	20	RA
L68414-11AS	AS	09/25/21 1:48	WI210331-13	2	.035	2.114	mg/L	104	90	110			
L68414-12DUP	DUP	09/25/21 1:50			.05	.039	mg/L				25	20	RA
WG527996LFB2	LFB	09/25/21 2:06	WI210331-13	2		1.944	mg/L	97	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527486													
WG527486LCSW1	LCSW	09/17/21 14:47	PCN62948	6		6	units	100	5.9	6.1			
WG527486LCSW4	LCSW	09/17/21 17:19	PCN62948	6		6.1	units	102	5.9	6.1			
L68414-03DUP	DUP	09/17/21 18:45			9.3	9.3	units				0	20	
L68414-13DUP	DUP	09/17/21 20:33			10.6	10.5	units				1	20	
WG527486LCSW7	LCSW	09/17/21 20:38	PCN62948	6		6.1	units	102	5.9	6.1			
L68415-09DUP	DUP	09/17/21 22:43			10	10	units				0	20	
WG527486LCSW10	LCSW	09/18/21 0:33	PCN62948	6		6.1	units	102	5.9	6.1			
WG527486LCSW13	LCSW	09/18/21 4:45	PCN62948	6		6.1	units	102	5.9	6.1			

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527337													
WG527337ICV	ICV	09/16/21 9:53	WI210831-6	.65228		.662	mg/L	101	90	110			
WG527337ICB	ICB	09/16/21 9:56				U	mg/L		-0.01	0.01			
WG527340													
WG527106LRB	LRB	09/16/21 10:24				U	mg/L		-0.01	0.01			
WG527106LFB	LFB	09/16/21 10:26	WI210907-7	1		.902	mg/L	90	90	110			
L68414-03LFM	LFM	09/16/21 10:43	WI210907-7	1	.017	.923	mg/L	91	90	110			
L68414-04DUP	DUP	09/16/21 10:45			.016	.014	mg/L				13	20	RA
L68346-01LFM	LFM	09/16/21 11:22	WI210907-7	1	1.42	2.413	mg/L	99	90	110			
L68346-02DUP	DUP	09/16/21 11:25			2.18	2.256	mg/L				3	20	
WG527717													
WG527717ICV	ICV	09/21/21 22:08	WI210831-4	.6523		.684	mg/L	105	90	110			
WG527717ICB	ICB	09/21/21 22:10				U	mg/L		-0.01	0.01			
WG527719													
WG527459LRB	LRB	09/21/21 23:04				U	mg/L		-0.01	0.01			
WG527459LFB	LFB	09/21/21 23:05	WI210907-2	.5		.495	mg/L	99	90	110			
L68414-13LFM	LFM	09/21/21 23:08	WI210907-2	.5	U	.495	mg/L	99	90	110			
L68414-14DUP	DUP	09/21/21 23:10			U	U	mg/L				0	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	20		19.36	mg/L	97	95	105			
WG527756ICB	ICB	09/23/21 15:49				U	mg/L		-0.6	0.6			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	99.96008		97.77	mg/L	98	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	99.96008	3.03	102.1	mg/L	99	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	99.96008	3.03	104.5	mg/L	102	85	115	2	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	99.96008	3.46	104.3	mg/L	101	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	99.96008	3.46	104.3	mg/L	101	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527096													
WG527096PBW	PBW	09/14/21 7:54				U	mg/L		-20	20			
WG527096LCSW	LCSW	09/14/21 7:58	PCN64130	1000		976	mg/L	98	80	120			
L68414-09DUP	DUP	09/14/21 8:44			188	182	mg/L				3	10	RA
L68426-05DUP	DUP	09/14/21 9:29			964	964	mg/L				0	10	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	2		1.965	mg/L	98	95	105			
WG527756ICB	ICB	09/23/21 15:49				U	mg/L		-0.15	0.15			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	1.0017		1.008	mg/L	101	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	1.0017	U	1.014	mg/L	101	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	1.0017	U	1.021	mg/L	102	85	115	1	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	1.0017	U	1.018	mg/L	102	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	1.0017	U	1.023	mg/L	102	85	115	0	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.04851	mg/L	97	90	110			
WG528296ICB	ICB	09/29/21 13:20				.00021	mg/L		-0.00022	0.00022			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05		.05341	mg/L	107	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05	.00124	.06068	mg/L	119	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05	.00124	.05984	mg/L	117	70	130	1	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05	U	.05884	mg/L	118	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05	U	.05801	mg/L	116	70	130	1	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.02		.01946	mg/L	97	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00022	0.00022			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.01		.01064	mg/L	106	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.01	U	.01002	mg/L	100	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.01	U	.0097	mg/L	97	70	130	3	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.01	U	.00962	mg/L	96	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.01	U	.00956	mg/L	96	70	130	1	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	100		98.24	mg/L	98	95	105			
WG527756ICB	ICB	09/23/21 15:49				.3	mg/L		-0.6	0.6			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	100.007		98.47	mg/L	98	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	100.007	62.7	158.4	mg/L	96	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	100.007	62.7	160.8	mg/L	98	85	115	2	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	100.007	3.49	104.3	mg/L	101	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	100.007	3.49	104.5	mg/L	101	85	115	0	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527756													
WG527756ICV	ICV	09/23/21 15:43	II210916-1	2		1.9112	mg/L	96	95	105			
WG527756ICB	ICB	09/23/21 15:49				U	mg/L		-0.027	0.027			
WG527756LFB	LFB	09/23/21 16:01	II210910-2	.5005		.5244	mg/L	105	85	115			
L68414-05AS	AS	09/23/21 16:20	II210910-2	.5005	.0236	.5566	mg/L	106	85	115			
L68414-05ASD	ASD	09/23/21 16:23	II210910-2	.5005	.0236	.5672	mg/L	109	85	115	2	20	
L68603-01AS	AS	09/23/21 17:21	II210910-2	.5005	.2	.7307	mg/L	106	85	115			
L68603-01ASD	ASD	09/23/21 17:24	II210910-2	.5005	.2	.7293	mg/L	106	85	115	0	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523874													
WG523874ICV	ICV	07/22/21 20:38	WI210719-3	51.15		49.54	mg/L	97	90	110			
WG523874ICB	ICB	07/22/21 20:56				U	mg/L		-0.4	0.4			
WG527392													
WG527392LFB	LFB	09/16/21 19:36	WI210907-6	30		28.33	mg/L	94	90	110			
L68414-01DUP	DUP	09/16/21 20:12			17	17.01	mg/L				0	20	
L68414-02AS	AS	09/16/21 20:47	WI210907-6	30	18.3	46.49	mg/L	94	90	110			
L68414-11DUP	DUP	09/17/21 0:22			17.5	17.46	mg/L				0	20	
L68414-12AS	AS	09/17/21 0:58	WI210907-6	30	20.6	49.1	mg/L	95	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.04959	mg/L	99	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00022	0.00022			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05		.05276	mg/L	106	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05	U	.0574	mg/L	115	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05	U	.05638	mg/L	113	70	130	2	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05	U	.05758	mg/L	115	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05	U	.05611	mg/L	112	70	130	3	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.0501		.04554	mg/L	91	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00176	0.00176			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05005		.05264	mg/L	105	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05005	.0171	.07389	mg/L	113	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05005	.0171	.07197	mg/L	110	70	130	3	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05005	U	.05337	mg/L	107	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05005	U	.05299	mg/L	106	70	130	1	20	

WETLAB

ACZ Project ID: ***L68414***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528150													
WG528150ICV	ICV	09/28/21 13:58	II210916-1	2		2.0053	mg/L	100	95	105			
WG528150ICB	ICB	09/28/21 14:05				U	mg/L		-0.015	0.015			
WG528150LFB	LFB	09/28/21 14:18	II210910-2	1		1.018	mg/L	102	85	115			
L68414-05AS	AS	09/28/21 14:37	II210910-2	1	U	1.018	mg/L	102	85	115			
L68414-05ASD	ASD	09/28/21 14:40	II210910-2	1	U	1.018	mg/L	102	85	115	0	20	
L68414-13AS	AS	09/28/21 15:16	II210910-2	1	U	1.019	mg/L	102	85	115			
L68414-13ASD	ASD	09/28/21 15:19	II210910-2	1	U	1.022	mg/L	102	85	115	0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.04873	mg/L	97	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.00022	0.00022			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05		.05277	mg/L	106	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05	U	.06417	mg/L	128	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05	U	.06277	mg/L	126	70	130	2	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05	.00025	.06468	mg/L	129	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05	.00025	.06351	mg/L	127	70	130	2	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.04975	mg/L	100	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.0011	0.0011			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.05		.0549	mg/L	110	85	115			
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.05	.00183	.05679	mg/L	110	70	130			
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.05	.00183	.05705	mg/L	110	70	130	0	20	
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.05	.00135	.05505	mg/L	107	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.05	.00135	.05486	mg/L	107	70	130	0	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528296													
WG528296ICV	ICV	09/29/21 13:18	MS210727-2	.05		.0491	mg/L	98	90	110			
WG528296ICB	ICB	09/29/21 13:20				U	mg/L		-0.0132	0.0132			
WG528296LFB	LFB	09/29/21 13:23	MS210927-3	.050075		.0591	mg/L	118	85	115			LA
L68414-02AS	AS	09/29/21 13:33	MS210927-3	.050075	U	.0693	mg/L	138	70	130			M1
L68414-02ASD	ASD	09/29/21 13:35	MS210927-3	.050075	U	.0671	mg/L	134	70	130	3	20	M1
L68608-01AS	AS	09/29/21 14:14	MS210927-3	.050075	.0531	.1114	mg/L	116	70	130			
L68608-01ASD	ASD	09/29/21 14:16	MS210927-3	.050075	.0531	.1113	mg/L	116	70	130	0	20	

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-01	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-02	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-03	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-04	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-05	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-06	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-07	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529003	Iron, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
			M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-08	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-09	WG528296	Aluminum, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68414***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-10	WG528296	Aluminum, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528614	Iron, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68414***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-11	WG528296	Aluminum, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68414***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-12	WG528296	Aluminum, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527394	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527340	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68414***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-13	WG528296	Aluminum, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528614	Iron, dissolved	M200.8 ICP-MS	D5	Sample required dilution. Sample matrix causing internal standards to recover outside method limits.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68414***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68414-14	WG528296	Aluminum, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG527486	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527392	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527392	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527996	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527486	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527719	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527096	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG527392	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527486	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528296	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68414
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]		X	

L68414-01 Container B2450201 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-02 Container B2450207 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-03 Container B2450213 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-04 Container B2450219 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-05 Container B2450225 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-06 Container B2450231 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-07 Container B2450237 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-08 Container B2450243 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-09 Container B2450249 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

Western Environmental Testing Laboratory

ACZ Project ID: L68414
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

L68414-10 Container B2450255 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-11 Container B2450261 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-12 Container B2450267 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68414-13 Container B2450273 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?		X	

L68414-01 : A white and yellow container not received and a new container created from the raw .

L68414-02 : A white and yellow container not received and a new container created from the raw .

L68414-03 : A white and yellow container not received and a new container created from the raw .

L68414-04 : A white and yellow container not received and a new container created from the raw .

L68414-05 : A white and yellow container not received and a new container created from the raw .

L68414-06 : A white and yellow container not received and a new container created from the raw .

L68414-07 : A white and yellow container not received and a new container created from the raw .

L68414-08 : A white and yellow container not received and a new container created from the raw .

L68414-09 : A white and yellow container not received and a new container created from the raw .

L68414-10 : A white and yellow container not received and a new container created from the raw .

L68414-11 : A white and yellow container not received and a new container created from the raw .

L68414-12 : A white and yellow container not received and a new container created from the raw .

L68414-13 : A white and yellow container not received and a new container created from the raw .

Western Environmental Testing Laboratory

ACZ Project ID: L68414
Date Received: 09/11/2021 11:00
Received By:
Date Printed: 9/13/2021

L68414-14 : A white and yellow container not received and a new container created from the raw .

16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35901	15.8	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68414

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D) 1631							
21090199-001	9/8/2021 06:00	OT	4	✓	✓							
21090199-002	"	"	"	✓	✓							
21090199-003	"	"	"	✓	✓							
21090199-004	"	"	"	✓	✓							
21090199-005	"	"	"	✓	✓							
21090199-006	"	"	"	✓	✓							
21090199-007	"	"	"	✓	✓							
21090199-008	"	"	"	✓	✓							
21090199-009	"	"	"	✓	✓							
21090199-010	"	"	"	✓	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Leachate / Diffusion Project

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9.9.21		9.9.21
			9/11/21 10:59

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68414 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	1631
21090199-011	9/8/2021 06:00	OT	4	✓	✓
21090199-012	"	"	"	✓	✓
21090199-013	"	"	"	✓	✓
21090199-014	"	"	"	✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			
Wet Chemistry			$0.00
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 05, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68533

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 15, 2021. This project has been assigned to ACZ's project number, L68533. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68533. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 04, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory

October 05, 2021

Project ID:
ACZ Project ID: L68533

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 14 leachate samples from Western Environmental Testing Laboratory on September 15, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68533. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for parameters flagged with an "H1" or an "HE", received too close to the hold time.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-001

ACZ Sample ID: ***L68533-01***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 12:06	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0926		*	mg/L	0.005	0.015	09/30/21 19:33	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:33	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0369		*	mg/L	0.0002	0.001	09/30/21 19:33	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0124		*	mg/L	0.0005	0.0025	09/30/21 19:33	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:33	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 19:33	kja
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	09/26/21 19:33	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:33	bsu
Calcium, dissolved	M200.7 ICP	1	8.66		*	mg/L	0.1	0.5	09/26/21 19:33	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	09/30/21 19:33	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000081	B	*	mg/L	0.00005	0.00025	09/30/21 19:33	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:33	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 19:33	kja
Iron, dissolved	M200.8 ICP-MS	1	0.385		*	mg/L	0.007	0.02	09/30/21 19:33	bsu
Lead, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	09/30/21 19:33	bsu
Lithium, dissolved	M200.7 ICP	1	0.0754		*	mg/L	0.008	0.04	09/26/21 19:33	kja
Magnesium, dissolved	M200.7 ICP	1	0.29	B	*	mg/L	0.2	1	09/26/21 19:33	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00706		*	mg/L	0.0004	0.002	09/30/21 19:33	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:27	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00490		*	mg/L	0.0002	0.0005	09/30/21 19:33	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:33	bsu
Potassium, dissolved	M200.7 ICP	1	3.07		*	mg/L	0.2	1	09/26/21 19:33	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 19:33	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00065		*	mg/L	0.0001	0.00025	09/30/21 19:33	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:33	bsu
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/26/21 19:33	kja
Strontium, dissolved	M200.7 ICP	1	0.0318	B	*	mg/L	0.009	0.045	09/26/21 19:33	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:33	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0934		*	mg/L	0.0008	0.0025	09/30/21 19:33	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 14:57	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	09/30/21 19:33	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00156	B	*	mg/L	0.0005	0.002	09/30/21 19:33	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:33	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-001

ACZ Sample ID: ***L68533-01***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	100.0		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	25.1		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	125		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.50		*	mg/L	0.4	2	09/28/21 7:50	krh
Conductivity @25C	SM2510B	1	305		*	umhos/cm	1	10	09/21/21 12:57	eep
Fluoride	M300.0 - Ion Chromatography	1	0.525		*	mg/L	0.05	0.25	09/28/21 7:50	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		23			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/01/21 0:44	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.1		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	B	*	mg/L	0.01	0.05	09/24/21 23:56	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	224	H	*	mg/L	20	40	09/23/21 11:57	scd
Sulfate	M300.0 - Ion Chromatography	1	21.3		*	mg/L	0.4	2	09/28/21 7:50	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-002

ACZ Sample ID: ***L68533-02***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 12:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0817		*	mg/L	0.005	0.015	09/30/21 19:35	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:35	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0321		*	mg/L	0.0002	0.001	09/30/21 19:35	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0193		*	mg/L	0.0005	0.0025	09/30/21 19:35	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:35	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 19:36	kja
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	09/26/21 19:36	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:35	bsu
Calcium, dissolved	M200.7 ICP	1	9.59		*	mg/L	0.1	0.5	09/26/21 19:36	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00172	B	*	mg/L	0.0005	0.002	09/30/21 19:35	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000066	B	*	mg/L	0.00005	0.00025	09/30/21 19:35	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:35	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 19:36	kja
Iron, dissolved	M200.8 ICP-MS	1	0.350		*	mg/L	0.007	0.02	09/30/21 19:35	bsu
Lead, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/30/21 19:35	bsu
Lithium, dissolved	M200.7 ICP	1	0.0754		*	mg/L	0.008	0.04	09/26/21 19:36	kja
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	09/26/21 19:36	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00645		*	mg/L	0.0004	0.002	09/30/21 19:35	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:28	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00466		*	mg/L	0.0002	0.0005	09/30/21 19:35	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:35	bsu
Potassium, dissolved	M200.7 ICP	1	4.19		*	mg/L	0.2	1	09/26/21 19:36	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 19:36	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00057		*	mg/L	0.0001	0.00025	09/30/21 19:35	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:35	bsu
Sodium, dissolved	M200.7 ICP	1	61.7		*	mg/L	0.2	1	09/26/21 19:36	kja
Strontium, dissolved	M200.7 ICP	1	0.0368	B	*	mg/L	0.009	0.045	09/26/21 19:36	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:35	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0128		*	mg/L	0.0008	0.0025	09/30/21 19:35	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:00	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 19:35	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00154	B	*	mg/L	0.0005	0.002	09/30/21 19:35	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:35	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-002

ACZ Sample ID: ***L68533-02***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	57.0		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	59.3		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.36		*	mg/L	0.4	2	09/28/21 8:08	krh
Conductivity @25C	SM2510B	1	295		*	umhos/cm	1	10	09/21/21 13:06	eep
Fluoride	M300.0 - Ion Chromatography	1	0.475		*	mg/L	0.05	0.25	09/28/21 8:08	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		25.0			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.022	B	*	mg/L	0.02	0.1	10/01/21 0:45	pjb
pH (lab)	SM4500H+ B									
pH		1	9.7	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.019	B	*	mg/L	0.01	0.05	09/24/21 23:58	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	206	H	*	mg/L	20	40	09/23/21 11:59	scd
Sulfate	M300.0 - Ion Chromatography	1	20.1		*	mg/L	0.4	2	09/28/21 8:08	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-003

ACZ Sample ID: ***L68533-03***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 12:54	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0115	B	*	mg/L	0.005	0.015	09/30/21 19:36	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:36	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0361		*	mg/L	0.0002	0.001	09/30/21 19:36	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00778		*	mg/L	0.0005	0.0025	09/30/21 19:36	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:36	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 19:39	kja
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	09/26/21 19:39	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:36	bsu
Calcium, dissolved	M200.7 ICP	1	6.21		*	mg/L	0.1	0.5	09/26/21 19:39	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00342		*	mg/L	0.0005	0.002	09/30/21 19:36	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:36	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:36	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 19:39	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0515		*	mg/L	0.007	0.02	09/30/21 19:36	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:36	bsu
Lithium, dissolved	M200.7 ICP	1	0.0721		*	mg/L	0.008	0.04	09/26/21 19:39	kja
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	09/26/21 19:39	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:36	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:31	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00527		*	mg/L	0.0002	0.0005	09/30/21 19:36	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:36	bsu
Potassium, dissolved	M200.7 ICP	1	2.42		*	mg/L	0.2	1	09/26/21 19:39	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 19:39	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00061		*	mg/L	0.0001	0.00025	09/30/21 19:36	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:36	bsu
Sodium, dissolved	M200.7 ICP	1	60.1		*	mg/L	0.2	1	09/26/21 19:39	kja
Strontium, dissolved	M200.7 ICP	1	0.0255	B	*	mg/L	0.009	0.045	09/26/21 19:39	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:36	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0112		*	mg/L	0.0008	0.0025	09/30/21 19:36	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:04	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	09/30/21 19:36	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00242		*	mg/L	0.0005	0.002	09/30/21 19:36	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:36	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-003

ACZ Sample ID: ***L68533-03***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	103		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	17.0	B	*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.58		*	mg/L	0.4	2	09/28/21 8:26	krh
Conductivity @25C	SM2510B	1	301		*	umhos/cm	1	10	09/21/21 13:16	eep
Fluoride	M300.0 - Ion Chromatography	1	0.555		*	mg/L	0.05	0.25	09/28/21 8:26	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/01/21 0:47	pjb
pH (lab)	SM4500H+ B									
pH		1	8.8	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.021	B	*	mg/L	0.01	0.05	09/25/21 0:00	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	220	H	*	mg/L	20	40	09/23/21 12:01	scd
Sulfate	M300.0 - Ion Chromatography	1	23.0		*	mg/L	0.4	2	09/28/21 8:26	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-004

ACZ Sample ID: ***L68533-04***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 13:06	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0252		*	mg/L	0.005	0.015	09/30/21 19:38	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:38	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0351		*	mg/L	0.0002	0.001	09/30/21 19:38	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00568		*	mg/L	0.0005	0.0025	09/30/21 19:38	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:38	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 19:43	kja
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	09/26/21 19:43	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:38	bsu
Calcium, dissolved	M200.7 ICP	1	6.12		*	mg/L	0.1	0.5	09/26/21 19:43	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00152	B	*	mg/L	0.0005	0.002	09/30/21 19:38	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:38	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:38	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 19:43	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0491		*	mg/L	0.007	0.02	09/30/21 19:38	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:38	bsu
Lithium, dissolved	M200.7 ICP	1	0.0731		*	mg/L	0.008	0.04	09/26/21 19:43	kja
Magnesium, dissolved	M200.7 ICP	1	0.23	B	*	mg/L	0.2	1	09/26/21 19:43	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:38	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:32	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00507		*	mg/L	0.0002	0.0005	09/30/21 19:38	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:38	bsu
Potassium, dissolved	M200.7 ICP	1	2.51		*	mg/L	0.2	1	09/26/21 19:43	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 19:43	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00060		*	mg/L	0.0001	0.00025	09/30/21 19:38	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:38	bsu
Sodium, dissolved	M200.7 ICP	1	60.5		*	mg/L	0.2	1	09/26/21 19:43	kja
Strontium, dissolved	M200.7 ICP	1	0.0250	B	*	mg/L	0.009	0.045	09/26/21 19:43	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:38	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0123		*	mg/L	0.0008	0.0025	09/30/21 19:38	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:07	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 19:38	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00251		*	mg/L	0.0005	0.002	09/30/21 19:38	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:38	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-004

ACZ Sample ID: ***L68533-04***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.6		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	20.2		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.53		*	mg/L	0.4	2	09/28/21 15:49	krh
Conductivity @25C	SM2510B	1	299		*	umhos/cm	1	10	09/21/21 13:25	eep
Fluoride	M300.0 - Ion Chromatography	1	0.535		*	mg/L	0.05	0.25	09/28/21 15:49	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/01/21 0:48	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.019	B	*	mg/L	0.01	0.05	09/25/21 0:02	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	214	H	*	mg/L	20	40	09/23/21 12:04	scd
Sulfate	M300.0 - Ion Chromatography	1	22.2		*	mg/L	0.4	2	09/28/21 15:49	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-005

ACZ Sample ID: ***L68533-05***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 13:18	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0347		*	mg/L	0.005	0.015	09/30/21 19:40	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:40	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0346		*	mg/L	0.0002	0.001	09/30/21 19:40	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00525		*	mg/L	0.0005	0.0025	09/30/21 19:40	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:40	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 19:52	kja
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	09/26/21 19:52	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:40	bsu
Calcium, dissolved	M200.7 ICP	1	6.18		*	mg/L	0.1	0.5	09/26/21 19:52	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00239		*	mg/L	0.0005	0.002	09/30/21 19:40	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:40	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:40	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 19:52	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0764		*	mg/L	0.007	0.02	09/30/21 19:40	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:40	bsu
Lithium, dissolved	M200.7 ICP	1	0.0725		*	mg/L	0.008	0.04	09/26/21 19:52	kja
Magnesium, dissolved	M200.7 ICP	1	0.27	B	*	mg/L	0.2	1	09/26/21 19:52	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00063	B	*	mg/L	0.0004	0.002	09/30/21 19:40	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:33	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00521		*	mg/L	0.0002	0.0005	09/30/21 19:40	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:40	bsu
Potassium, dissolved	M200.7 ICP	1	2.50		*	mg/L	0.2	1	09/26/21 19:52	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 19:52	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	09/30/21 19:40	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:40	bsu
Sodium, dissolved	M200.7 ICP	1	60.7		*	mg/L	0.2	1	09/26/21 19:52	kja
Strontium, dissolved	M200.7 ICP	1	0.0253	B	*	mg/L	0.009	0.045	09/26/21 19:52	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:40	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0118		*	mg/L	0.0008	0.0025	09/30/21 19:40	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:10	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 19:40	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00280		*	mg/L	0.0005	0.002	09/30/21 19:40	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:40	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-005

ACZ Sample ID: ***L68533-05***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	97.9		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	22.0		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.49		*	mg/L	0.4	2	09/28/21 16:24	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/21/21 13:44	eep
Fluoride	M300.0 - Ion Chromatography	1	0.535		*	mg/L	0.05	0.25	09/28/21 16:24	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/01/21 0:49	pjb
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.0		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.019	B	*	mg/L	0.01	0.05	09/25/21 0:03	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	212	H	*	mg/L	20	40	09/23/21 12:06	scd
Sulfate	M300.0 - Ion Chromatography	1	23.0		*	mg/L	0.4	2	09/28/21 16:24	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-006

ACZ Sample ID: ***L68533-06***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 13:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0565		*	mg/L	0.005	0.015	09/30/21 19:48	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:48	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0316		*	mg/L	0.0002	0.001	09/30/21 19:48	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0151		*	mg/L	0.0005	0.0025	09/30/21 19:48	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:48	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 19:55	kja
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	09/26/21 19:55	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:48	bsu
Calcium, dissolved	M200.7 ICP	1	7.66		*	mg/L	0.1	0.5	09/26/21 19:55	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00071	B	*	mg/L	0.0005	0.002	09/30/21 19:48	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:48	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:48	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 19:55	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0736		*	mg/L	0.007	0.02	09/30/21 19:48	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:48	bsu
Lithium, dissolved	M200.7 ICP	1	0.0739		*	mg/L	0.008	0.04	09/26/21 19:55	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/26/21 19:55	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00071	B	*	mg/L	0.0004	0.002	09/30/21 19:48	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:34	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00637		*	mg/L	0.0002	0.0005	09/30/21 19:48	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:48	bsu
Potassium, dissolved	M200.7 ICP	1	3.73		*	mg/L	0.2	1	09/26/21 19:55	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 19:55	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	09/30/21 19:48	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:48	bsu
Sodium, dissolved	M200.7 ICP	1	61.1		*	mg/L	0.2	1	09/26/21 19:55	kja
Strontium, dissolved	M200.7 ICP	1	0.0368	B	*	mg/L	0.009	0.045	09/26/21 19:55	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:48	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0111		*	mg/L	0.0008	0.0025	09/30/21 19:48	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:13	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 19:48	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00140	B	*	mg/L	0.0005	0.002	09/30/21 19:48	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:48	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-006

ACZ Sample ID: ***L68533-06***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	74.6		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	41.9		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.31		*	mg/L	0.4	2	09/28/21 17:00	krh
Conductivity @25C	SM2510B	1	295		*	umhos/cm	1	10	09/21/21 13:54	eep
Fluoride	M300.0 - Ion Chromatography	1	0.432		*	mg/L	0.05	0.25	09/28/21 17:00	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		20			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.023	B	*	mg/L	0.02	0.1	10/01/21 0:55	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.3		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	09/25/21 0:04	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	206	H	*	mg/L	20	40	09/23/21 12:09	scd
Sulfate	M300.0 - Ion Chromatography	1	20.7		*	mg/L	0.4	2	09/28/21 17:00	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-007

ACZ Sample ID: ***L68533-07***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 13:42	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0402		*	mg/L	0.005	0.015	09/30/21 19:49	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:49	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0310		*	mg/L	0.0002	0.001	09/30/21 19:49	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0177		*	mg/L	0.0005	0.0025	09/30/21 19:49	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:49	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:04	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/26/21 20:04	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:49	bsu
Calcium, dissolved	M200.7 ICP	1	8.34		*	mg/L	0.1	0.5	09/26/21 20:04	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00067	B	*	mg/L	0.0005	0.002	09/30/21 19:49	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:49	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:49	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:04	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0729		*	mg/L	0.007	0.02	09/30/21 19:49	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:49	bsu
Lithium, dissolved	M200.7 ICP	1	0.0753		*	mg/L	0.008	0.04	09/26/21 20:04	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/26/21 20:04	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00079	B	*	mg/L	0.0004	0.002	09/30/21 19:49	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:35	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00545		*	mg/L	0.0002	0.0005	09/30/21 19:49	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:49	bsu
Potassium, dissolved	M200.7 ICP	1	3.31		*	mg/L	0.2	1	09/26/21 20:04	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:04	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00059		*	mg/L	0.0001	0.00025	09/30/21 19:49	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:49	bsu
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/26/21 20:04	kja
Strontium, dissolved	M200.7 ICP	1	0.0378	B	*	mg/L	0.009	0.045	09/26/21 20:04	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:49	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00866		*	mg/L	0.0008	0.0025	09/30/21 19:49	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:28	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 19:49	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00134	B	*	mg/L	0.0005	0.002	09/30/21 19:49	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:49	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-007

ACZ Sample ID: ***L68533-07***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	67.0		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	49.9		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	117		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.35		*	mg/L	0.4	2	09/28/21 17:18	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/21/21 14:04	eep
Fluoride	M300.0 - Ion Chromatography	1	0.397		*	mg/L	0.05	0.25	09/28/21 17:18	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		22			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.031	B	*	mg/L	0.02	0.1	10/01/21 0:56	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.015	B	*	mg/L	0.01	0.05	09/25/21 0:07	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198	H	*	mg/L	20	40	09/23/21 12:11	scd
Sulfate	M300.0 - Ion Chromatography	1	19.2		*	mg/L	0.4	2	09/28/21 17:18	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-008

ACZ Sample ID: ***L68533-08***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 13:54	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0396		*	mg/L	0.005	0.015	09/30/21 19:51	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:51	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0311		*	mg/L	0.0002	0.001	09/30/21 19:51	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0153		*	mg/L	0.0005	0.0025	09/30/21 19:51	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:51	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:07	kja
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	09/26/21 20:07	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:51	bsu
Calcium, dissolved	M200.7 ICP	1	7.80		*	mg/L	0.1	0.5	09/26/21 20:07	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00100	B	*	mg/L	0.0005	0.002	09/30/21 19:51	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:51	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:51	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:07	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0724		*	mg/L	0.007	0.02	09/30/21 19:51	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:51	bsu
Lithium, dissolved	M200.7 ICP	1	0.0755		*	mg/L	0.008	0.04	09/26/21 20:07	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/26/21 20:07	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0004	0.002	09/30/21 19:51	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:36	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00584		*	mg/L	0.0002	0.0005	09/30/21 19:51	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:51	bsu
Potassium, dissolved	M200.7 ICP	1	3.50		*	mg/L	0.2	1	09/26/21 20:07	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:07	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00057		*	mg/L	0.0001	0.00025	09/30/21 19:51	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:51	bsu
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/26/21 20:07	kja
Strontium, dissolved	M200.7 ICP	1	0.0369	B	*	mg/L	0.009	0.045	09/26/21 20:07	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:51	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00973		*	mg/L	0.0008	0.0025	09/30/21 19:51	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:31	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	09/30/21 19:51	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00140	B	*	mg/L	0.0005	0.002	09/30/21 19:51	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:51	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-008

ACZ Sample ID: ***L68533-08***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	74.1		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	42.1		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.32		*	mg/L	0.4	2	09/28/21 17:36	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/21/21 14:14	eep
Fluoride	M300.0 - Ion Chromatography	1	0.426		*	mg/L	0.05	0.25	09/28/21 17:36	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		21			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.030	B	*	mg/L	0.02	0.1	10/01/21 0:57	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.0		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/25/21 0:08	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	200	H	*	mg/L	20	40	09/23/21 12:13	scd
Sulfate	M300.0 - Ion Chromatography	1	21.1		*	mg/L	0.4	2	09/28/21 17:36	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-009

ACZ Sample ID: ***L68533-09***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 14:06	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0487		*	mg/L	0.005	0.015	09/30/21 19:53	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00042	B	*	mg/L	0.0004	0.002	09/30/21 19:53	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0323		*	mg/L	0.0002	0.001	09/30/21 19:53	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0169		*	mg/L	0.0005	0.0025	09/30/21 19:53	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:53	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:10	kja
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	09/26/21 20:10	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:53	bsu
Calcium, dissolved	M200.7 ICP	1	7.83		*	mg/L	0.1	0.5	09/26/21 20:10	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00119	B	*	mg/L	0.0005	0.002	09/30/21 19:53	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:53	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:53	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:10	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0799		*	mg/L	0.007	0.02	09/30/21 19:53	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:53	bsu
Lithium, dissolved	M200.7 ICP	1	0.0742		*	mg/L	0.008	0.04	09/26/21 20:10	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/26/21 20:10	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00090	B	*	mg/L	0.0004	0.002	09/30/21 19:53	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/23/21 8:21	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0127		*	mg/L	0.0002	0.0005	09/30/21 19:53	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:53	bsu
Potassium, dissolved	M200.7 ICP	1	4.64		*	mg/L	0.2	1	09/26/21 20:10	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:10	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00063		*	mg/L	0.0001	0.00025	09/30/21 19:53	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:53	bsu
Sodium, dissolved	M200.7 ICP	1	61.2		*	mg/L	0.2	1	09/26/21 20:10	kja
Strontium, dissolved	M200.7 ICP	1	0.0378	B	*	mg/L	0.009	0.045	09/26/21 20:10	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:53	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0143		*	mg/L	0.0008	0.0025	09/30/21 19:53	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:34	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 19:53	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00138	B	*	mg/L	0.0005	0.002	09/30/21 19:53	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:53	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-009

ACZ Sample ID: ***L68533-09***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	77.2		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	42.1		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.27		*	mg/L	0.4	2	09/28/21 17:54	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/21/21 14:24	eep
Fluoride	M300.0 - Ion Chromatography	1	0.435		*	mg/L	0.05	0.25	09/28/21 17:54	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		21			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.024	B	*	mg/L	0.02	0.1	10/01/21 0:59	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.018	B	*	mg/L	0.01	0.05	09/25/21 0:10	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	210	H	*	mg/L	20	40	09/23/21 12:16	scd
Sulfate	M300.0 - Ion Chromatography	1	21.0		*	mg/L	0.4	2	09/28/21 17:54	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-010

ACZ Sample ID: ***L68533-10***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 14:18	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0383		*	mg/L	0.005	0.015	09/30/21 19:54	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:54	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0309		*	mg/L	0.0002	0.001	09/30/21 19:54	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0170		*	mg/L	0.0005	0.0025	09/30/21 19:54	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:54	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:13	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/26/21 20:13	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:54	bsu
Calcium, dissolved	M200.7 ICP	1	7.69		*	mg/L	0.1	0.5	09/26/21 20:13	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00077	B	*	mg/L	0.0005	0.002	09/30/21 19:54	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:54	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:54	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:13	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0766		*	mg/L	0.007	0.02	09/30/21 19:54	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:54	bsu
Lithium, dissolved	M200.7 ICP	1	0.0753		*	mg/L	0.008	0.04	09/26/21 20:13	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/26/21 20:13	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00085	B	*	mg/L	0.0004	0.002	09/30/21 19:54	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/23/21 8:22	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00819		*	mg/L	0.0002	0.0005	09/30/21 19:54	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:54	bsu
Potassium, dissolved	M200.7 ICP	1	4.27		*	mg/L	0.2	1	09/26/21 20:13	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:13	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00056		*	mg/L	0.0001	0.00025	09/30/21 19:54	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:54	bsu
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/26/21 20:13	kja
Strontium, dissolved	M200.7 ICP	1	0.0391	B	*	mg/L	0.009	0.045	09/26/21 20:13	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:54	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00893		*	mg/L	0.0008	0.0025	09/30/21 19:54	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:37	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	09/30/21 19:54	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00134	B	*	mg/L	0.0005	0.002	09/30/21 19:54	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:54	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-010

ACZ Sample ID: ***L68533-10***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	43.4		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	90.8		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	134		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.34		*	mg/L	0.4	2	09/28/21 18:48	krh
Conductivity @25C	SM2510B	1	298		*	umhos/cm	1	10	09/21/21 14:33	eep
Fluoride	M300.0 - Ion Chromatography	1	0.422		*	mg/L	0.05	0.25	09/28/21 18:48	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		20			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.029	B	*	mg/L	0.02	0.1	10/01/21 1:01	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.018	B	*	mg/L	0.01	0.05	09/25/21 0:11	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	204	H	*	mg/L	20	40	09/23/21 12:20	scd
Sulfate	M300.0 - Ion Chromatography	1	19.2		*	mg/L	0.4	2	09/28/21 18:48	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-011

ACZ Sample ID: ***L68533-11***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 14:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0202		*	mg/L	0.005	0.015	09/30/21 19:56	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:56	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0343		*	mg/L	0.0002	0.001	09/30/21 19:56	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0118		*	mg/L	0.0005	0.0025	09/30/21 19:56	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:56	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:16	kja
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	09/26/21 20:16	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:56	bsu
Calcium, dissolved	M200.7 ICP	1	8.10		*	mg/L	0.1	0.5	09/26/21 20:16	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	09/30/21 19:56	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:56	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:56	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:16	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0748		*	mg/L	0.007	0.02	09/30/21 19:56	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:56	bsu
Lithium, dissolved	M200.7 ICP	1	0.0753		*	mg/L	0.008	0.04	09/26/21 20:16	kja
Magnesium, dissolved	M200.7 ICP	1	0.28	B	*	mg/L	0.2	1	09/26/21 20:16	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00095	B	*	mg/L	0.0004	0.002	09/30/21 19:56	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/23/21 8:23	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00673		*	mg/L	0.0002	0.0005	09/30/21 19:56	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:56	bsu
Potassium, dissolved	M200.7 ICP	1	3.06		*	mg/L	0.2	1	09/26/21 20:16	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:16	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00058		*	mg/L	0.0001	0.00025	09/30/21 19:56	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:56	bsu
Sodium, dissolved	M200.7 ICP	1	61.7		*	mg/L	0.2	1	09/26/21 20:16	kja
Strontium, dissolved	M200.7 ICP	1	0.0347	B	*	mg/L	0.009	0.045	09/26/21 20:16	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:56	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0110		*	mg/L	0.0008	0.0025	09/30/21 19:56	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:41	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	09/30/21 19:56	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00140	B	*	mg/L	0.0005	0.002	09/30/21 19:56	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:56	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-011

ACZ Sample ID: ***L68533-11***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.7		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	27.9		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	128		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.38		*	mg/L	0.4	2	09/28/21 19:06	krh
Conductivity @25C	SM2510B	1	309		*	umhos/cm	1	10	09/21/21 14:43	eep
Fluoride	M300.0 - Ion Chromatography	1	0.465		*	mg/L	0.05	0.25	09/28/21 19:06	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		21			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/01/21 1:04	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.022	B	*	mg/L	0.01	0.05	09/25/21 0:12	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	216	H	*	mg/L	20	40	09/23/21 12:23	scd
Sulfate	M300.0 - Ion Chromatography	1	21.2		*	mg/L	0.4	2	09/28/21 19:06	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-012

ACZ Sample ID: ***L68533-12***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 14:54	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0388		*	mg/L	0.005	0.015	09/30/21 19:58	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:58	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0309		*	mg/L	0.0002	0.001	09/30/21 19:58	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0208		*	mg/L	0.0005	0.0025	09/30/21 19:58	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:58	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:19	kja
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	09/26/21 20:19	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:58	bsu
Calcium, dissolved	M200.7 ICP	1	8.33		*	mg/L	0.1	0.5	09/26/21 20:19	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00208		*	mg/L	0.0005	0.002	09/30/21 19:58	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000065	B	*	mg/L	0.00005	0.00025	09/30/21 19:58	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:58	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:19	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0682		*	mg/L	0.007	0.02	09/30/21 19:58	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:58	bsu
Lithium, dissolved	M200.7 ICP	1	0.0757		*	mg/L	0.008	0.04	09/26/21 20:19	kja
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	09/26/21 20:19	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0004	0.002	09/30/21 19:58	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/23/21 8:23	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00665		*	mg/L	0.0002	0.0005	09/30/21 19:58	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:58	bsu
Potassium, dissolved	M200.7 ICP	1	4.12		*	mg/L	0.2	1	09/26/21 20:19	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:19	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00057		*	mg/L	0.0001	0.00025	09/30/21 19:58	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:58	bsu
Sodium, dissolved	M200.7 ICP	1	62.2		*	mg/L	0.2	1	09/26/21 20:19	kja
Strontium, dissolved	M200.7 ICP	1	0.0441	B	*	mg/L	0.009	0.045	09/26/21 20:19	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:58	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.01000		*	mg/L	0.0008	0.0025	09/30/21 19:58	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:44	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	09/30/21 19:58	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00136	B	*	mg/L	0.0005	0.002	09/30/21 19:58	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:58	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-012

ACZ Sample ID: ***L68533-12***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	69.3		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	47.4		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	117		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.21		*	mg/L	0.4	2	09/28/21 19:24	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/21/21 14:52	eep
Fluoride	M300.0 - Ion Chromatography	1	0.433		*	mg/L	0.05	0.25	09/28/21 19:24	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		22			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.034	B	*	mg/L	0.02	0.1	10/01/21 1:05	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	09/25/21 0:14	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	204	H	*	mg/L	20	40	09/23/21 12:25	scd
Sulfate	M300.0 - Ion Chromatography	1	21.2		*	mg/L	0.4	2	09/28/21 19:24	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-013

ACZ Sample ID: ***L68533-13***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:18	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0356		*	mg/L	0.005	0.015	09/30/21 19:59	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 19:59	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0304		*	mg/L	0.0002	0.001	09/30/21 19:59	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0264		*	mg/L	0.0005	0.0025	09/30/21 19:59	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 19:59	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:23	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/26/21 20:23	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 19:59	bsu
Calcium, dissolved	M200.7 ICP	1	7.96		*	mg/L	0.1	0.5	09/26/21 20:23	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00097	B	*	mg/L	0.0005	0.002	09/30/21 19:59	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000072	B	*	mg/L	0.00005	0.00025	09/30/21 19:59	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 19:59	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:23	kja
Iron, dissolved	M200.8 ICP-MS	1	0.152		*	mg/L	0.007	0.02	09/30/21 19:59	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:59	bsu
Lithium, dissolved	M200.7 ICP	1	0.0759		*	mg/L	0.008	0.04	09/26/21 20:23	kja
Magnesium, dissolved	M200.7 ICP	1	0.22	B	*	mg/L	0.2	1	09/26/21 20:23	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00253		*	mg/L	0.0004	0.002	09/30/21 19:59	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/23/21 8:24	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00533		*	mg/L	0.0002	0.0005	09/30/21 19:59	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 19:59	bsu
Potassium, dissolved	M200.7 ICP	1	4.18		*	mg/L	0.2	1	09/26/21 20:23	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:23	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00057		*	mg/L	0.0001	0.00025	09/30/21 19:59	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:59	bsu
Sodium, dissolved	M200.7 ICP	1	62.0		*	mg/L	0.2	1	09/26/21 20:23	kja
Strontium, dissolved	M200.7 ICP	1	0.0470		*	mg/L	0.009	0.045	09/26/21 20:23	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 19:59	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00721		*	mg/L	0.0008	0.0025	09/30/21 19:59	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:47	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	09/30/21 19:59	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00135	B	*	mg/L	0.0005	0.002	09/30/21 19:59	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 19:59	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-013

ACZ Sample ID: ***L68533-13***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	68.8		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	49.0		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.24		*	mg/L	0.4	2	09/28/21 19:41	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/21/21 15:02	eep
Fluoride	M300.0 - Ion Chromatography	1	0.416		*	mg/L	0.05	0.25	09/28/21 19:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		21			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.033	B	*	mg/L	0.02	0.1	10/01/21 1:06	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	09/25/21 0:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	202	H	*	mg/L	20	40	09/23/21 12:28	scd
Sulfate	M300.0 - Ion Chromatography	1	20.1		*	mg/L	0.4	2	09/28/21 19:41	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-014

ACZ Sample ID: ***L68533-14***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0305		*	mg/L	0.005	0.015	09/30/21 20:01	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 20:01	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0312		*	mg/L	0.0002	0.001	09/30/21 20:01	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0216		*	mg/L	0.0005	0.0025	09/30/21 20:01	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 20:01	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 20:26	kja
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	09/26/21 20:26	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 20:01	bsu
Calcium, dissolved	M200.7 ICP	1	7.75		*	mg/L	0.1	0.5	09/26/21 20:26	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00130	B	*	mg/L	0.0005	0.002	09/30/21 20:01	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000068	B	*	mg/L	0.00005	0.00025	09/30/21 20:01	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 20:01	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 20:26	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0726		*	mg/L	0.007	0.02	09/30/21 20:01	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 20:01	bsu
Lithium, dissolved	M200.7 ICP	1	0.0759		*	mg/L	0.008	0.04	09/26/21 20:26	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/26/21 20:26	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00097	B	*	mg/L	0.0004	0.002	09/30/21 20:01	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/23/21 8:25	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00545		*	mg/L	0.0002	0.0005	09/30/21 20:01	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 20:01	bsu
Potassium, dissolved	M200.7 ICP	1	4.55		*	mg/L	0.2	1	09/26/21 20:26	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 20:26	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.00025	09/30/21 20:01	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 20:01	bsu
Sodium, dissolved	M200.7 ICP	1	62.4		*	mg/L	0.2	1	09/26/21 20:26	kja
Strontium, dissolved	M200.7 ICP	1	0.0431	B	*	mg/L	0.009	0.045	09/26/21 20:26	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 20:01	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00685		*	mg/L	0.0008	0.0025	09/30/21 20:01	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:50	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 20:01	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00140	B	*	mg/L	0.0005	0.002	09/30/21 20:01	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 20:01	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090200-014

ACZ Sample ID: ***L68533-14***
Date Sampled: *09/08/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	73.8		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	44.9		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.32		*	mg/L	0.4	2	09/28/21 19:59	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/21/21 15:12	eep
Fluoride	M300.0 - Ion Chromatography	1	0.410		*	mg/L	0.05	0.25	09/28/21 19:59	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		20			mg/L	0.2	5	10/05/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.034	B	*	mg/L	0.02	0.1	10/01/21 1:12	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.018	B	*	mg/L	0.01	0.05	09/25/21 0:18	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	206	H	*	mg/L	20	40	09/23/21 12:30	scd
Sulfate	M300.0 - Ion Chromatography	1	20.5		*	mg/L	0.4	2	09/28/21 19:59	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527612													
WG527612PBW1	PBW	09/20/21 20:36				7.4	mg/L		-20	20			
WG527612LCSW3	LCSW	09/20/21 20:54	WC210917-2	820.0001		775	mg/L	95	90	110			
WG527612LCSW6	LCSW	09/21/21 0:45	WC210917-2	820.0001		813.6	mg/L	99	90	110			
WG527612PBW2	PBW	09/21/21 0:52				U	mg/L		-20	20			
WG527612LCSW9	LCSW	09/21/21 4:27	WC210917-2	820.0001		801.6	mg/L	98	90	110			
WG527612PBW3	PBW	09/21/21 4:35				U	mg/L		-20	20			
WG527612LCSW12	LCSW	09/21/21 11:46	WC210917-2	820.0001		819.6	mg/L	100	90	110			
WG527612PBW4	PBW	09/21/21 11:53				U	mg/L		-20	20			
L68533-04DUP	DUP	09/21/21 13:34			120	120.3	mg/L				0	20	
L68533-14DUP	DUP	09/21/21 15:22			119	119	mg/L				0	20	
WG527612LCSW15	LCSW	09/21/21 15:41	WC210917-2	820.0001		828.1	mg/L	101	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.1		.1003	mg/L	100	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.011	0.011			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.050065		.0563	mg/L	112	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.050065	.0347	.0864	mg/L	103	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.050065	.0347	.0868	mg/L	104	70	130	0	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.050065	.0179	.0721	mg/L	108	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.050065	.0179	.0717	mg/L	107	70	130	1	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.0201		.01856	mg/L	92	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00088	0.00088			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.01		.01024	mg/L	102	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.01	U	.00904	mg/L	90	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.01	U	.00943	mg/L	94	70	130	4	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.01	U	.00867	mg/L	87	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.01	U	.00888	mg/L	89	70	130	2	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05189	mg/L	104	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00044	0.00044			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05005		.0538	mg/L	107	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05005	.0346	.08626	mg/L	103	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05005	.0346	.0865	mg/L	104	70	130	0	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05005	U	.04909	mg/L	98	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05005	U	.04906	mg/L	98	70	130	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05024	mg/L	100	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.0011	0.0011			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.049985		.05366	mg/L	107	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.049985	.00525	.0562	mg/L	102	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.049985	.00525	.05854	mg/L	107	70	130	4	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.049985	.0743	.12269	mg/L	97	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.049985	.0743	.12375	mg/L	99	70	130	1	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.050458	mg/L	101	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.000176	0.000176			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05005		.053155	mg/L	106	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05005	U	.05288	mg/L	106	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05005	U	.053988	mg/L	108	70	130	2	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05005	U	.055707	mg/L	111	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05005	U	.055059	mg/L	110	70	130	1	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		1.969	mg/L	98	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.12	0.12			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	1		.975	mg/L	98	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	1	U	.983	mg/L	98	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	1	U	.962	mg/L	96	85	115	2	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	1	U	.975	mg/L	98	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	1	U	.997	mg/L	100	85	115	2	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		2.011	mg/L	101	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.09	0.09			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.5005		.521	mg/L	104	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.5005	.086	.608	mg/L	104	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.5005	.086	.604	mg/L	103	85	115	1	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	.5005	U	.531	mg/L	106	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	.5005	U	.538	mg/L	107	85	115	1	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.049721	mg/L	99	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00011	0.00011			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05005		.053038	mg/L	106	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05005	U	.050883	mg/L	102	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05005	U	.052738	mg/L	105	70	130	4	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05005	U	.051296	mg/L	102	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05005	U	.051303	mg/L	103	70	130	0	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	100		99.61	mg/L	100	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.3	0.3			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	67.98972		69.03	mg/L	102	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	67.98972	6.12	74.85	mg/L	101	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	67.98972	6.12	75.18	mg/L	102	85	115	0	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	67.98972	103	168	mg/L	96	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	67.98972	103	168	mg/L	96	85	115	0	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528109LFB1	LFB	09/27/21 19:53	WI210907-6	30		29.53	mg/L	98	90	110			
WG528109LFB2	LFB	09/28/21 4:33	WI210907-6	30		29.6	mg/L	99	90	110			
L68513-13DUP	DUP	09/28/21 5:09			5.38	5.37	mg/L				0	20	
L68513-14AS	AS	09/29/21 17:06	WI210907-6	30	5.02	33.67	mg/L	96	90	110			
WG528158													
WG528158LFB1	LFB	09/28/21 15:31	WI210907-6	30		27.83	mg/L	93	90	110			
L68533-04DUP	DUP	09/28/21 16:06			5.53	5.57	mg/L				1	20	
L68533-05AS	AS	09/28/21 16:42	WI210907-6	30	5.49	33.46	mg/L	93	90	110			
L68533-14DUP	DUP	09/28/21 20:17			5.32	5.06	mg/L				5	20	
L68534-01AS	AS	09/28/21 20:53	WI210907-6	30	5.08	34.3	mg/L	97	90	110			
WG528158LFB2	LFB	09/29/21 0:10	WI210907-6	30		29.56	mg/L	99	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05143	mg/L	103	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.0011	0.0011			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05		.05304	mg/L	106	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05	.00239	.05184	mg/L	99	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05	.00239	.05235	mg/L	100	70	130	1	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05	U	.05011	mg/L	100	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05	U	.04985	mg/L	100	70	130	1	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.052431	mg/L	105	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00011	0.00011			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05005		.057282	mg/L	114	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05005	U	.055114	mg/L	110	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05005	U	.055908	mg/L	112	70	130	1	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05005	U	.054579	mg/L	109	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05005	U	.053581	mg/L	107	70	130	2	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527612													
WG527612LCSW2	LCSW	09/20/21 20:43	PCN63140	1408		1408	umhos/cm	100	90	110			
WG527612LCSW5	LCSW	09/21/21 0:32	PCN63140	1408		1400	umhos/cm	99	90	110			
WG527612LCSW8	LCSW	09/21/21 4:16	PCN63140	1408		1393	umhos/cm	99	90	110			
WG527612LCSW11	LCSW	09/21/21 11:33	PCN63140	1408		1392	umhos/cm	99	90	110			
L68533-04DUP	DUP	09/21/21 13:34			299	301	umhos/cm				1	20	
L68533-14DUP	DUP	09/21/21 15:22			297	299	umhos/cm				1	20	
WG527612LCSW14	LCSW	09/21/21 15:28	PCN63140	1408		1386	umhos/cm	98	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05314	mg/L	106	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00176	0.00176			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05		.05395	mg/L	108	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05	U	.05008	mg/L	100	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05	U	.05075	mg/L	102	70	130	1	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05	U	.05092	mg/L	102	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05	U	.05059	mg/L	101	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528109LFB1	LFB	09/27/21 19:53	WI210907-6	1.5		1.473	mg/L	98	90	110			
WG528109LFB2	LFB	09/28/21 4:33	WI210907-6	1.5		1.433	mg/L	96	90	110			
L68513-13DUP	DUP	09/28/21 5:09			.403	.401	mg/L				0	20	RA
L68513-14AS	AS	09/29/21 17:06	WI210907-6	1.5	.397	1.789	mg/L	93	90	110			
WG528158													
WG528158LFB1	LFB	09/28/21 15:31	WI210907-6	1.5		1.379	mg/L	92	90	110			
L68533-04DUP	DUP	09/28/21 16:06			.535	.51	mg/L				5	20	
L68533-05AS	AS	09/28/21 16:42	WI210907-6	1.5	.535	1.976	mg/L	96	90	110			
L68533-14DUP	DUP	09/28/21 20:17			.41	.434	mg/L				6	20	RA
L68534-01AS	AS	09/28/21 20:53	WI210907-6	1.5	.275	1.702	mg/L	95	90	110			
WG528158LFB2	LFB	09/29/21 0:10	WI210907-6	1.5		1.401	mg/L	93	90	110			

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		2.03	mg/L	102	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.3	0.3			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.9822		.98	mg/L	100	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.9822	U	1.05	mg/L	107	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.9822	U	1.03	mg/L	105	85	115	2	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	.9822	U	1.05	mg/L	107	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	.9822	U	1.09	mg/L	111	85	115	4	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.10016		.1013	mg/L	101	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.0154	0.0154			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.0501		.0564	mg/L	113	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.0501	.0764	.1252	mg/L	97	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.0501	.0764	.1254	mg/L	98	70	130	0	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.0501	.0152	.0681	mg/L	106	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.0501	.0152	.0652	mg/L	100	70	130	4	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05244	mg/L	105	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00022	0.00022			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05005		.05649	mg/L	113	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05005	U	.05526	mg/L	110	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05005	U	.05544	mg/L	111	70	130	0	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05005	U	.05487	mg/L	110	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05005	U	.05376	mg/L	107	70	130	2	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		1.9818	mg/L	99	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.024	0.024			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.999		.9619	mg/L	96	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.999	.0731	1.035	mg/L	96	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.999	.0731	1.033	mg/L	96	85	115	0	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	.999	U	.9924	mg/L	99	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	.999	U	.9928	mg/L	99	85	115	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	100		96.2	mg/L	96	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.6	0.6			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	49.99828		48.6	mg/L	97	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	49.99828	.23	48.67	mg/L	97	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	49.99828	.23	49.1	mg/L	98	85	115	1	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	49.99828	11.9	59.83	mg/L	96	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	49.99828	11.9	60.03	mg/L	96	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05265	mg/L	105	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00088	0.00088			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.0499		.0547	mg/L	110	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.0499	.00063	.05506	mg/L	109	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.0499	.00063	.05495	mg/L	109	70	130	0	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.0499	.00118	.05524	mg/L	108	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.0499	.00118	.05411	mg/L	106	70	130	2	20	

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527686													
WG527686ICV	ICV	09/22/21 13:18	HG210913-3	.00501		.00509	mg/L	102	95	105			
WG527686ICB	ICB	09/22/21 13:19				U	mg/L		-0.0002	0.0002			
WG527786													
WG527786LRB	LRB	09/22/21 15:21				U	mg/L		-0.00044	0.00044			
WG527786LFB	LFB	09/22/21 15:22	HG210913-6	.002002		.00183	mg/L	91	85	115			
L68513-12LFM	LFM	09/22/21 15:23	HG210913-6	.002002	U	.00191	mg/L	95	85	115			
L68513-12LFMD	LFMD	09/22/21 15:24	HG210913-6	.002002	U	.00203	mg/L	101	85	115	6	20	
L68533-08LFM	LFM	09/22/21 15:37	HG210913-6	.002002	U	.00187	mg/L	93	85	115			
L68533-08LFMD	LFMD	09/22/21 15:38	HG210913-6	.002002	U	.00185	mg/L	92	85	115	1	20	
WG527789													
WG527789ICV	ICV	09/23/21 8:07	HG210913-3	.00501		.00513	mg/L	102	95	105			
WG527789ICB	ICB	09/23/21 8:08				U	mg/L		-0.0002	0.0002			
WG527789LRB	LRB	09/23/21 8:10				U	mg/L		-0.00044	0.00044			
WG527789LFB	LFB	09/23/21 8:11	HG210913-6	.002002		.00184	mg/L	92	85	115			
L68524-01LFM	LFM	09/23/21 8:13	HG210913-6	.002002	U	.00182	mg/L	91	85	115			
L68524-01LFMD	LFMD	09/23/21 8:14	HG210913-6	.002002	U	.00181	mg/L	90	85	115	1	20	
L68533-14LFM	LFM	09/23/21 8:26	HG210913-6	.002002	U	.00187	mg/L	93	85	115			
L68533-14LFMD	LFMD	09/23/21 8:27	HG210913-6	.002002	U	.00188	mg/L	94	85	115	1	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.01992		.02046	mg/L	103	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00044	0.00044			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05005		.05435	mg/L	109	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05005	.00521	.05728	mg/L	104	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05005	.00521	.05968	mg/L	109	70	130	4	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05005	U	.0521	mg/L	104	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05005	U	.05179	mg/L	103	70	130	1	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05198	mg/L	104	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00088	0.00088			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05		.05319	mg/L	106	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05	U	.04855	mg/L	97	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05	U	.04887	mg/L	98	70	130	1	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05	U	.04924	mg/L	98	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05	U	.04891	mg/L	98	70	130	1	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528443													
WG528443ICV	ICV	09/30/21 23:07	WI210904-1	2.4161		2.374	mg/L	98	90	110			
WG528443ICB	ICB	09/30/21 23:08				U	mg/L		-0.02	0.02			
WG528445													
WG528445LFB	LFB	10/01/21 0:38	WI210331-13	2		1.972	mg/L	99	90	110			
L68510-01AS	AS	10/01/21 0:40	WI210331-13	2	U	2.01	mg/L	101	90	110			
L68511-01DUP	DUP	10/01/21 0:43			.106	.105	mg/L				1	20	RA
L68533-09AS	AS	10/01/21 1:00	WI210331-13	2	.024	2.055	mg/L	102	90	110			
L68533-10DUP	DUP	10/01/21 1:02			.029	.031	mg/L				7	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527612													
WG527612LCSW1	LCSW	09/20/21 20:41	PCN62948	6		6.1	units	102	5.9	6.1			
WG527612LCSW4	LCSW	09/21/21 0:30	PCN62948	6		6.1	units	102	5.9	6.1			
WG527612LCSW7	LCSW	09/21/21 4:14	PCN62948	6		6.1	units	102	5.9	6.1			
WG527612LCSW10	LCSW	09/21/21 11:31	PCN62948	6		6.1	units	102	5.9	6.1			
L68533-04DUP	DUP	09/21/21 13:34			8.9	9	units				1	20	
L68533-14DUP	DUP	09/21/21 15:22			9.5	9.5	units				0	20	
WG527612LCSW13	LCSW	09/21/21 15:27	PCN62948	6		6.1	units	102	5.9	6.1			

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527989													
WG527989ICV	ICV	09/24/21 21:25	WI210831-4	.6523		.687	mg/L	105	90	110			
WG527989ICB	ICB	09/24/21 21:27				U	mg/L		-0.01	0.01			
WG527993													
WG527723LRB	LRB	09/24/21 23:54				U	mg/L		-0.01	0.01			
WG527723LFB	LFB	09/24/21 23:55	WI210921-12	.5		.522	mg/L	104	90	110			
L68533-01LFM	LFM	09/24/21 23:57	WI210921-12	.5	.025	.533	mg/L	102	90	110			
L68533-02DUP	DUP	09/24/21 23:59			.019	.019	mg/L				0	20	RA
L68533-11LFM	LFM	09/25/21 0:13	WI210921-12	.5	.022	.538	mg/L	103	90	110			
L68533-12DUP	DUP	09/25/21 0:15			.017	.018	mg/L				6	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	20		19.76	mg/L	99	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.6	0.6			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	99.96008		99.28	mg/L	99	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	99.96008	2.51	101.5	mg/L	99	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	99.96008	2.51	101.8	mg/L	99	85	115	0	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	99.96008	.33	101.5	mg/L	101	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	99.96008	.33	101.3	mg/L	101	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527885													
WG527885PBW	PBW	09/23/21 11:50				U	mg/L		-20	20			
WG527885LCSW	LCSW	09/23/21 11:52	PCN64134	1000		1022	mg/L	102	80	120			
L68533-09DUP	DUP	09/23/21 12:18			210	214	mg/L				2	10	
L68639-03DUP	DUP	09/23/21 12:44			360	362	mg/L				1	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		2.02	mg/L	101	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.15	0.15			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	1.0017		1.034	mg/L	103	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	1.0017	U	1.052	mg/L	105	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	1.0017	U	1.033	mg/L	103	85	115	2	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	1.0017	U	1.055	mg/L	105	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	1.0017	U	1.062	mg/L	106	85	115	1	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05001	mg/L	100	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00022	0.00022			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05		.05245	mg/L	105	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05	.00062	.04966	mg/L	98	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05	.00062	.04985	mg/L	98	70	130	0	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05	U	.0503	mg/L	101	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05	U	.04871	mg/L	97	70	130	3	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.02		.01914	mg/L	96	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00022	0.00022			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.01		.01015	mg/L	102	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.01	U	.0077	mg/L	77	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.01	U	.00772	mg/L	77	70	130	0	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.01	U	.00956	mg/L	96	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.01	U	.00977	mg/L	98	70	130	2	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	100		100.31	mg/L	100	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.6	0.6			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	100.007		99.85	mg/L	100	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	100.007	60.5	157.5	mg/L	97	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	100.007	60.5	157.7	mg/L	97	85	115	0	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	100.007	3.7	104.9	mg/L	101	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	100.007	3.7	104.8	mg/L	101	85	115	0	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		1.9435	mg/L	97	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.027	0.027			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.5005		.5332	mg/L	107	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.5005	.025	.5546	mg/L	106	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.5005	.025	.5548	mg/L	106	85	115	0	20	
L68613-02AS	AS	09/26/21 20:47	II210910-2	.5005	.376	.9019	mg/L	105	85	115			
L68613-02ASD	ASD	09/26/21 20:50	II210910-2	.5005	.376	.8994	mg/L	105	85	115	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528109LFB1	LFB	09/27/21 19:53	WI210907-6	30		29.06	mg/L	97	90	110			
WG528109LFB2	LFB	09/28/21 4:33	WI210907-6	30		28.52	mg/L	95	90	110			
L68513-13DUP	DUP	09/28/21 5:09			18.9	18.87	mg/L				0	20	
L68513-14AS	AS	09/29/21 17:06	WI210907-6	30	18.9	46.94	mg/L	93	90	110			
WG528158													
WG528158LFB1	LFB	09/28/21 15:31	WI210907-6	30		28.35	mg/L	95	90	110			
L68533-04DUP	DUP	09/28/21 16:06			22.2	21.35	mg/L				4	20	
L68533-05AS	AS	09/28/21 16:42	WI210907-6	30	23	51.41	mg/L	95	90	110			
L68533-14DUP	DUP	09/28/21 20:17			20.5	20.58	mg/L				0	20	
L68534-01AS	AS	09/28/21 20:53	WI210907-6	30	17.1	45.47	mg/L	95	90	110			
WG528158LFB2	LFB	09/29/21 0:10	WI210907-6	30		27.3	mg/L	91	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05231	mg/L	105	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00022	0.00022			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05		.05353	mg/L	107	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05	U	.05467	mg/L	109	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05	U	.05206	mg/L	104	70	130	5	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05	U	.05232	mg/L	105	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05	U	.05058	mg/L	101	70	130	3	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.0501		.04544	mg/L	91	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00176	0.00176			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05005		.05298	mg/L	106	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05005	.0118	.06004	mg/L	96	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05005	.0118	.06168	mg/L	100	70	130	3	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05005	U	.04927	mg/L	98	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05005	U	.04928	mg/L	98	70	130	0	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528242													
WG528242ICV	ICV	09/30/21 14:33	II210916-1	2		1.9795	mg/L	99	95	105			
WG528242ICB	ICB	09/30/21 14:39				U	mg/L		-0.015	0.015			
WG528242LFB	LFB	09/30/21 14:51	II210910-2	1		1.027	mg/L	103	85	115			
L68533-06AS	AS	09/30/21 15:16	II210910-2	1	U	1.029	mg/L	103	85	115			
L68533-06ASD	ASD	09/30/21 15:19	II210910-2	1	U	1.04	mg/L	104	85	115	1	20	
L68533-14AS	AS	09/30/21 15:53	II210910-2	1	U	1.027	mg/L	103	85	115			
L68533-14ASD	ASD	09/30/21 15:56	II210910-2	1	U	1.013	mg/L	101	85	115	1	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.05166	mg/L	103	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.00022	0.00022			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05		.05387	mg/L	108	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05	.00015	.05438	mg/L	108	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05	.00015	.05562	mg/L	111	70	130	2	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05	U	.05281	mg/L	106	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05	U	.05202	mg/L	104	70	130	2	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.04931	mg/L	99	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.0011	0.0011			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.05		.05349	mg/L	107	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.05	.0028	.05388	mg/L	102	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.05	.0028	.05452	mg/L	103	70	130	1	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.05	U	.05098	mg/L	102	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.05	U	.05101	mg/L	102	70	130	0	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528422													
WG528422ICV	ICV	09/30/21 19:28	MS210727-2	.05		.0498	mg/L	100	90	110			
WG528422ICB	ICB	09/30/21 19:30				U	mg/L		-0.0132	0.0132			
WG528422LFB	LFB	09/30/21 19:31	MS210927-3	.050075		.0577	mg/L	115	85	115			
L68533-05AS	AS	09/30/21 19:41	MS210927-3	.050075	U	.0524	mg/L	105	70	130			
L68533-05ASD	ASD	09/30/21 19:43	MS210927-3	.050075	U	.0529	mg/L	106	70	130	1	20	
L68670-01AS	AS	09/30/21 20:08	MS210927-3	.050075	.0068	.0613	mg/L	109	70	130			
L68670-01ASD	ASD	09/30/21 20:09	MS210927-3	.050075	.0068	.0598	mg/L	106	70	130	2	20	

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-01	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-02	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-03	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-04	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-05	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-06	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-07	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-08	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527786	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-09	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527789	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-10	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527789	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-11	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527789	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-12	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527789	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-13	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527789	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Western Environmental Testing Laboratory ACZ Project ID: ***L68533***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68533-14	WG528422	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528422	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528422	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527789	Mercury, dissolved	M245.1 CVAA	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528422	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528445	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527993	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527885	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	HE	Analysis performed past holding time. Method holding time is less than or equal to 7 days and sample was received with less than half of the holding time remaining (refer to item C5 of ACZ's Terms & Conditions).
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528422	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG528422	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528422	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Mercury, dissolved	M245.1 CVAA
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography

Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68533
Date Received: 09/15/2021 11:24
Received By:
Date Printed: 9/17/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]		X	

L68533-01 Container B2452501 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-01 Container B2452503 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-02 Container B2452507 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-02 Container B2452508 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-03 Container B2452512 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-03 Container B2452513 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-04 Container B2452517 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-04 Container B2452518 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-05 Container B2452526 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-05 Container B2452527 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-06 Container B2452531 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-06 Container B2452532 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-07 Container B2452536 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-07 Container B2452537 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-08 Container B2452541 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-08 Container B2452542 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-09 Container B2452546 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-09 Container B2452547 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-10 Container B2452551 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-10 Container B2452552 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-11 Container B2452556 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-11 Container B2452557 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-12 Container B2452561 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-12 Container B2452562 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-13 Container B2452566 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-13 Container B2452567 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-14 Container B2452571 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68533-14 Container B2452572 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68533
Date Received: 09/15/2021 11:24
Received By:
Date Printed: 9/17/2021

12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?		X	

L68533-01 : A white and green container not received and a new container created from the raw .

L68533-02 : A white and green container not received and a new container created from the raw .

L68533-03 : A white and green container not received and a new container created from the raw .

L68533-04 : A white and green container not received and a new container created from the raw .

L68533-05 : A white and green container not received and a new container created from the raw .

L68533-06 : A white and green container not received and a new container created from the raw .

L68533-07 : A white and green container not received and a new container created from the raw .

L68533-08 : A white and green container not received and a new container created from the raw .

L68533-09 : A white and green container not received and a new container created from the raw .

L68533-10 : A white and green container not received and a new container created from the raw .

L68533-11 : A white and green container not received and a new container created from the raw .

L68533-12 : A white and green container not received and a new container created from the raw .

L68533-13 : A white and green container not received and a new container created from the raw .

L68533-14 : A white and green container not received and a new container created from the raw .

16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68533
Date Received: 09/15/2021 11:24
Received By:
Date Printed: 9/17/2021

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35943	11	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive Steamboat Springs, CO 80487 (970) 879-6590 | L68533

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally misbehaving the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION — ANALYSES REQUESTED (attach list or use quote number)

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	
21090200-001	9/8/2021 13:00	OT	3	✓	✓
21090200-002				✓	✓
21090200-003				✓	✓
21090200-004				✓	✓
21090200-005				✓	✓
21090200-006				✓	✓
21090200-007				✓	✓
21090200-008				✓	✓
21090200-009				✓	✓
21090200-010	"	"	"	✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
			9/9/21 11:24

Quattrax ID: 1984 Revision #: 2 White - Return with sample Yellow - Retain for your records.

L68533 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive Steamboat Springs, CO 80487 (970) 879-6590 | L68533

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	
21090200-011	9/8/2021 13:00	OT	4	✓	
21090200-012				✓	
21090200-013				✓	
21090200-014	"	"	"	✓	

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
			9/8/21 11:24

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 12, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68534

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 16, 2021. This project has been assigned to ACZ's project number, L68534. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68534. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 11, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-001

ACZ Sample ID: ***L68534-01***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 12:56	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0689		*	mg/L	0.005	0.015	10/05/21 18:28	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00043	B	*	mg/L	0.0004	0.002	10/05/21 18:28	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0198		*	mg/L	0.0002	0.001	10/05/21 18:28	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0242		*	mg/L	0.0005	0.0025	10/05/21 18:28	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:28	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:10	kja
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	09/28/21 21:10	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:28	mfm
Calcium, dissolved	M200.7 ICP	1	8.09		*	mg/L	0.1	0.5	09/28/21 21:10	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00226		*	mg/L	0.0005	0.002	10/05/21 18:28	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000071	B	*	mg/L	0.00005	0.00025	10/05/21 18:28	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:28	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:34	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0179	B	*	mg/L	0.007	0.02	10/05/21 18:28	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:28	mfm
Lithium, dissolved	M200.7 ICP	1	0.0843		*	mg/L	0.008	0.04	09/28/21 21:10	kja
Magnesium, dissolved	M200.7 ICP	1	0.31	B	*	mg/L	0.2	1	09/28/21 21:10	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 18:28	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	8.2		*	ng/L	0.3	1	09/23/21 10:39	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00407		*	mg/L	0.0002	0.0005	10/05/21 18:28	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:28	mfm
Potassium, dissolved	M200.7 ICP	1	10.1		*	mg/L	0.2	1	09/28/21 21:10	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:10	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00053		*	mg/L	0.0001	0.00025	10/08/21 15:18	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:28	mfm
Sodium, dissolved	M200.7 ICP	1	63.9		*	mg/L	0.2	1	09/28/21 21:10	kja
Strontium, dissolved	M200.7 ICP	1	0.0520		*	mg/L	0.009	0.045	09/28/21 21:10	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:28	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0104		*	mg/L	0.0008	0.0025	10/05/21 18:28	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:20	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/05/21 18:28	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00181	B	*	mg/L	0.0005	0.002	10/05/21 18:28	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:28	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-001

ACZ Sample ID: ***L68534-01***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	94.0		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	35.6		*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	130		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.08		*	mg/L	0.4	2	09/28/21 20:35	krh
Conductivity @25C	SM2510B	1	391		*	umhos/cm	1	10	09/22/21 0:18	eep
Fluoride	M300.0 - Ion Chromatography	1	0.275		*	mg/L	0.05	0.25	09/28/21 20:35	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		22			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.049	B	*	mg/L	0.02	0.1	10/02/21 22:28	pjb
pH (lab)	SM4500H+ B									
pH		1	11.0	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 22:22	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	202		*	mg/L	20	40	09/16/21 16:43	emk
Sulfate	M300.0 - Ion Chromatography	1	17.1		*	mg/L	0.4	2	09/28/21 20:35	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-002

ACZ Sample ID: ***L68534-02***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 13:09	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0503		*	mg/L	0.005	0.015	10/05/21 18:30	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 18:30	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0214		*	mg/L	0.0002	0.001	10/05/21 18:30	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0201		*	mg/L	0.0005	0.0025	10/05/21 18:30	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:30	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:14	kja
Boron, dissolved	M200.7 ICP	1	0.096	B	*	mg/L	0.03	0.1	09/28/21 21:14	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:30	mfm
Calcium, dissolved	M200.7 ICP	1	5.65		*	mg/L	0.1	0.5	09/28/21 21:14	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00343		*	mg/L	0.0005	0.002	10/05/21 18:30	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:30	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:30	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:37	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0247		*	mg/L	0.007	0.02	10/05/21 18:30	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:30	mfm
Lithium, dissolved	M200.7 ICP	1	0.0803		*	mg/L	0.008	0.04	09/28/21 21:14	kja
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	09/28/21 21:14	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 18:30	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	9.3		*	ng/L	0.3	1	09/23/21 10:43	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00432		*	mg/L	0.0002	0.0005	10/05/21 18:30	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:30	mfm
Potassium, dissolved	M200.7 ICP	1	7.33		*	mg/L	0.2	1	09/28/21 21:14	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:14	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00060		*	mg/L	0.0001	0.00025	10/08/21 15:20	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:30	mfm
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/28/21 21:14	kja
Strontium, dissolved	M200.7 ICP	1	0.0421	B	*	mg/L	0.009	0.045	09/28/21 21:14	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:30	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0255		*	mg/L	0.0008	0.0025	10/05/21 18:30	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:23	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:30	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00256		*	mg/L	0.0005	0.002	10/05/21 18:30	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:30	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-002

ACZ Sample ID: ***L68534-02***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	103		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	20.0		*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.25		*	mg/L	0.4	2	09/28/21 21:11	krh
Conductivity @25C	SM2510B	1	353		*	umhos/cm	1	10	09/22/21 0:28	eep
Fluoride	M300.0 - Ion Chromatography	1	0.367		*	mg/L	0.05	0.25	09/28/21 21:11	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.047	B	*	mg/L	0.02	0.1	10/02/21 22:31	pjb
pH (lab)	SM4500H+ B									
pH		1	10.8	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 22:25	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	204		*	mg/L	20	40	09/16/21 16:45	emk
Sulfate	M300.0 - Ion Chromatography	1	17.4		*	mg/L	0.4	2	09/28/21 21:11	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-003

ACZ Sample ID: ***L68534-03***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 13:22	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0175		*	mg/L	0.005	0.015	10/05/21 18:32	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 18:32	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0387		*	mg/L	0.0002	0.001	10/05/21 18:32	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00581		*	mg/L	0.0005	0.0025	10/05/21 18:32	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:32	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:17	kja
Boron, dissolved	M200.7 ICP	1	0.106		*	mg/L	0.03	0.1	09/28/21 21:17	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:32	mfm
Calcium, dissolved	M200.7 ICP	1	5.64		*	mg/L	0.1	0.5	09/28/21 21:17	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00919		*	mg/L	0.0005	0.002	10/05/21 18:32	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:32	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:32	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:41	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0402		*	mg/L	0.007	0.02	10/05/21 18:32	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:32	mfm
Lithium, dissolved	M200.7 ICP	1	0.0729		*	mg/L	0.008	0.04	09/28/21 21:17	kja
Magnesium, dissolved	M200.7 ICP	1	0.29	B	*	mg/L	0.2	1	09/28/21 21:17	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 18:32	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	8.0		*	ng/L	0.3	1	09/23/21 10:58	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00553		*	mg/L	0.0002	0.0005	10/05/21 18:32	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:32	mfm
Potassium, dissolved	M200.7 ICP	1	2.96		*	mg/L	0.2	1	09/28/21 21:17	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:17	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00066		*	mg/L	0.0001	0.00025	10/08/21 15:21	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:32	mfm
Sodium, dissolved	M200.7 ICP	1	59.9		*	mg/L	0.2	1	09/28/21 21:17	kja
Strontium, dissolved	M200.7 ICP	1	0.0286	B	*	mg/L	0.009	0.045	09/28/21 21:17	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:32	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0327		*	mg/L	0.0008	0.0025	10/05/21 18:32	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:26	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	10/05/21 18:32	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00443		*	mg/L	0.0005	0.002	10/05/21 18:32	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:32	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-003

ACZ Sample ID: ***L68534-03***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	78.2		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	36.5		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.53		*	mg/L	0.4	2	09/28/21 21:29	krh
Conductivity @25C	SM2510B	1	295		*	umhos/cm	1	10	09/22/21 0:38	eep
Fluoride	M300.0 - Ion Chromatography	1	0.508		*	mg/L	0.05	0.25	09/28/21 21:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 22:33	pjb
pH (lab)	SM4500H+ B									
pH		1	9.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	09/24/21 22:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	200		*	mg/L	20	40	09/16/21 16:47	emk
Sulfate	M300.0 - Ion Chromatography	1	25.1		*	mg/L	0.4	2	09/28/21 21:29	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-004

ACZ Sample ID: ***L68534-04***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 13:35	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0525		*	mg/L	0.005	0.015	10/05/21 18:38	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00069	B	*	mg/L	0.0004	0.002	10/05/21 18:38	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0376		*	mg/L	0.0002	0.001	10/05/21 18:38	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00535		*	mg/L	0.0005	0.0025	10/05/21 18:38	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:38	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:20	kja
Boron, dissolved	M200.7 ICP	1	0.101		*	mg/L	0.03	0.1	09/28/21 21:20	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:38	mfm
Calcium, dissolved	M200.7 ICP	1	5.35		*	mg/L	0.1	0.5	09/28/21 21:20	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00435		*	mg/L	0.0005	0.002	10/05/21 18:38	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:38	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:38	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:44	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0411		*	mg/L	0.007	0.02	10/05/21 18:38	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:38	mfm
Lithium, dissolved	M200.7 ICP	1	0.0741		*	mg/L	0.008	0.04	09/28/21 21:20	kja
Magnesium, dissolved	M200.7 ICP	1	0.28	B	*	mg/L	0.2	1	09/28/21 21:20	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 18:38	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.3		*	ng/L	0.3	1	09/23/21 11:03	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00538		*	mg/L	0.0002	0.0005	10/05/21 18:38	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:38	mfm
Potassium, dissolved	M200.7 ICP	1	3.24		*	mg/L	0.2	1	09/28/21 21:20	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:20	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00063		*	mg/L	0.0001	0.00025	10/08/21 15:23	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:38	mfm
Sodium, dissolved	M200.7 ICP	1	60.5		*	mg/L	0.2	1	09/28/21 21:20	kja
Strontium, dissolved	M200.7 ICP	1	0.0277	B	*	mg/L	0.009	0.045	09/28/21 21:20	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:38	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0351		*	mg/L	0.0008	0.0025	10/05/21 18:38	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:29	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	10/05/21 18:38	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00503		*	mg/L	0.0005	0.002	10/05/21 18:38	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:38	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-004

ACZ Sample ID: ***L68534-04***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	74.5		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	56.2		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	131		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.50		*	mg/L	0.4	2	09/28/21 22:23	krh
Conductivity @25C	SM2510B	1	297		*	umhos/cm	1	10	09/22/21 0:49	eep
Fluoride	M300.0 - Ion Chromatography	1	0.491		*	mg/L	0.05	0.25	09/28/21 22:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.043	B	*	mg/L	0.02	0.1	10/02/21 22:35	pjb
pH (lab)	SM4500H+ B									
pH		1	9.7	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.022	B	*	mg/L	0.01	0.05	09/24/21 22:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/16/21 16:49	emk
Sulfate	M300.0 - Ion Chromatography	1	24.4		*	mg/L	0.4	2	09/28/21 22:23	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-005

ACZ Sample ID: ***L68534-05***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 13:48	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0606		*	mg/L	0.005	0.015	10/05/21 18:40	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0004	0.002	10/05/21 18:40	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0373		*	mg/L	0.0002	0.001	10/05/21 18:40	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00652		*	mg/L	0.0005	0.0025	10/05/21 18:40	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:40	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:23	kja
Boron, dissolved	M200.7 ICP	1	0.103		*	mg/L	0.03	0.1	09/28/21 21:23	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:40	mfm
Calcium, dissolved	M200.7 ICP	1	5.25		*	mg/L	0.1	0.5	09/28/21 21:23	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00624		*	mg/L	0.0005	0.002	10/05/21 18:40	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:40	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:40	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:47	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0385		*	mg/L	0.007	0.02	10/05/21 18:40	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:40	mfm
Lithium, dissolved	M200.7 ICP	1	0.0744		*	mg/L	0.008	0.04	09/28/21 21:23	kja
Magnesium, dissolved	M200.7 ICP	1	0.26	B	*	mg/L	0.2	1	09/28/21 21:23	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 18:40	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	10.2		*	ng/L	0.3	1	09/23/21 11:07	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00547		*	mg/L	0.0002	0.0005	10/05/21 18:40	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:40	mfm
Potassium, dissolved	M200.7 ICP	1	3.05		*	mg/L	0.2	1	09/28/21 21:23	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:23	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00070		*	mg/L	0.0001	0.00025	10/08/21 15:28	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:40	mfm
Sodium, dissolved	M200.7 ICP	1	59.7		*	mg/L	0.2	1	09/28/21 21:23	kja
Strontium, dissolved	M200.7 ICP	1	0.0280	B	*	mg/L	0.009	0.045	09/28/21 21:23	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:40	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0279		*	mg/L	0.0008	0.0025	10/05/21 18:40	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:32	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	10/05/21 18:40	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00549		*	mg/L	0.0005	0.002	10/05/21 18:40	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:40	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-005

ACZ Sample ID: ***L68534-05***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	56.3		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	57.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	114		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.46		*	mg/L	0.4	2	09/28/21 22:41	krh
Conductivity @25C	SM2510B	1	296		*	umhos/cm	1	10	09/22/21 0:58	eep
Fluoride	M300.0 - Ion Chromatography	1	0.512		*	mg/L	0.05	0.25	09/28/21 22:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.048	B	*	mg/L	0.02	0.1	10/02/21 22:36	pjb
pH (lab)	SM4500H+ B									
pH		1	9.7	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/24/21 22:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/16/21 16:51	emk
Sulfate	M300.0 - Ion Chromatography	1	23.5		*	mg/L	0.4	2	09/28/21 22:41	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-006

ACZ Sample ID: ***L68534-06***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 14:01	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.163		*	mg/L	0.005	0.015	10/05/21 18:42	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00094	B	*	mg/L	0.0004	0.002	10/05/21 18:42	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0269		*	mg/L	0.0002	0.001	10/05/21 18:42	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00913		*	mg/L	0.0005	0.0025	10/05/21 18:42	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:42	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:26	kja
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	09/28/21 21:26	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:42	mfm
Calcium, dissolved	M200.7 ICP	1	4.87		*	mg/L	0.1	0.5	09/28/21 21:26	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00198	B	*	mg/L	0.0005	0.002	10/05/21 18:42	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:42	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:42	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:50	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0461		*	mg/L	0.007	0.02	10/05/21 18:42	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:42	mfm
Lithium, dissolved	M200.7 ICP	1	0.0770		*	mg/L	0.008	0.04	09/28/21 21:26	kja
Magnesium, dissolved	M200.7 ICP	1	0.23	B	*	mg/L	0.2	1	09/28/21 21:26	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.002	10/05/21 18:42	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	11.6		*	ng/L	0.3	1	09/23/21 11:12	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00890		*	mg/L	0.0002	0.0005	10/05/21 18:42	mfm
Nickel, dissolved	M200.8 ICP-MS	1	0.00078	B	*	mg/L	0.0004	0.001	10/05/21 18:42	mfm
Potassium, dissolved	M200.7 ICP	1	5.86		*	mg/L	0.2	1	09/28/21 21:26	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:26	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00100		*	mg/L	0.0001	0.00025	10/08/21 15:30	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:42	mfm
Sodium, dissolved	M200.7 ICP	1	61.4		*	mg/L	0.2	1	09/28/21 21:26	kja
Strontium, dissolved	M200.7 ICP	1	0.0391	B	*	mg/L	0.009	0.045	09/28/21 21:26	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:42	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0117		*	mg/L	0.0008	0.0025	10/05/21 18:42	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:35	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/05/21 18:42	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00179	B	*	mg/L	0.0005	0.002	10/05/21 18:42	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:42	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-006

ACZ Sample ID: ***L68534-06***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	16.1	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	101		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.31		*	mg/L	0.4	2	09/28/21 22:59	krh
Conductivity @25C	SM2510B	1	315		*	umhos/cm	1	10	09/22/21 1:08	eep
Fluoride	M300.0 - Ion Chromatography	1	0.407		*	mg/L	0.05	0.25	09/28/21 22:59	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.042	B	*	mg/L	0.02	0.1	10/02/21 22:37	pjb
pH (lab)	SM4500H+ B									
pH		1	10.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/24/21 22:30	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	182		*	mg/L	20	40	09/16/21 16:55	emk
Sulfate	M300.0 - Ion Chromatography	1	21.6		*	mg/L	0.4	2	09/28/21 22:59	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-007

ACZ Sample ID: ***L68534-07***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 14:27	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.111		*	mg/L	0.005	0.015	10/05/21 18:44	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00058	B	*	mg/L	0.0004	0.002	10/05/21 18:44	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0258		*	mg/L	0.0002	0.001	10/05/21 18:44	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0105		*	mg/L	0.0005	0.0025	10/05/21 18:44	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:44	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:29	kja
Boron, dissolved	M200.7 ICP	1	0.091	B	*	mg/L	0.03	0.1	09/28/21 21:29	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:44	mfm
Calcium, dissolved	M200.7 ICP	1	5.92		*	mg/L	0.1	0.5	09/28/21 21:29	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00178	B	*	mg/L	0.0005	0.002	10/05/21 18:44	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000123	B	*	mg/L	0.00005	0.00025	10/05/21 18:44	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.00220		*	mg/L	0.0008	0.002	10/05/21 18:44	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:54	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0567		*	mg/L	0.007	0.02	10/05/21 18:44	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:44	mfm
Lithium, dissolved	M200.7 ICP	1	0.0753		*	mg/L	0.008	0.04	09/28/21 21:29	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/28/21 21:29	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00640		*	mg/L	0.0004	0.002	10/05/21 18:44	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.6		*	ng/L	0.3	1	09/23/21 11:26	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00662		*	mg/L	0.0002	0.0005	10/05/21 18:44	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:44	mfm
Potassium, dissolved	M200.7 ICP	1	4.69		*	mg/L	0.2	1	09/28/21 21:29	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:29	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00088		*	mg/L	0.0001	0.00025	10/08/21 15:31	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:44	mfm
Sodium, dissolved	M200.7 ICP	1	61.0		*	mg/L	0.2	1	09/28/21 21:29	kja
Strontium, dissolved	M200.7 ICP	1	0.0402	B	*	mg/L	0.009	0.045	09/28/21 21:29	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:44	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00958		*	mg/L	0.0008	0.0025	10/05/21 18:44	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:38	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/05/21 18:44	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00160	B	*	mg/L	0.0005	0.002	10/05/21 18:44	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:44	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-007

ACZ Sample ID: ***L68534-07***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	6.8	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	109		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.05		*	mg/L	0.4	2	09/28/21 23:16	krh
Conductivity @25C	SM2510B	1	313		*	umhos/cm	1	10	09/22/21 1:19	eep
Fluoride	M300.0 - Ion Chromatography	1	0.403		*	mg/L	0.05	0.25	09/28/21 23:16	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.044	B	*	mg/L	0.02	0.1	10/02/21 22:39	pjb
pH (lab)	SM4500H+ B									
pH		1	10.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.010	B	*	mg/L	0.01	0.05	09/24/21 22:32	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/16/21 16:57	emk
Sulfate	M300.0 - Ion Chromatography	1	18.8		*	mg/L	0.4	2	09/28/21 23:16	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-008

ACZ Sample ID: ***L68534-08***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 14:53	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.107		*	mg/L	0.005	0.015	10/05/21 18:50	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00074	B	*	mg/L	0.0004	0.002	10/05/21 18:50	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0280		*	mg/L	0.0002	0.001	10/05/21 18:50	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0111		*	mg/L	0.0005	0.0025	10/05/21 18:50	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:50	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:32	kja
Boron, dissolved	M200.7 ICP	1	0.098	B	*	mg/L	0.03	0.1	09/28/21 21:32	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:50	mfm
Calcium, dissolved	M200.7 ICP	1	5.28		*	mg/L	0.1	0.5	09/28/21 21:32	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00259		*	mg/L	0.0005	0.002	10/05/21 18:50	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:50	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:50	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 16:57	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0605		*	mg/L	0.007	0.02	10/05/21 18:50	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:50	mfm
Lithium, dissolved	M200.7 ICP	1	0.0773		*	mg/L	0.008	0.04	09/28/21 21:32	kja
Magnesium, dissolved	M200.7 ICP	1	0.22	B	*	mg/L	0.2	1	09/28/21 21:32	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00081	B	*	mg/L	0.0004	0.002	10/08/21 15:33	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.3		*	ng/L	0.3	1	09/23/21 11:31	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00715		*	mg/L	0.0002	0.0005	10/05/21 18:50	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:50	mfm
Potassium, dissolved	M200.7 ICP	1	5.69		*	mg/L	0.2	1	09/28/21 21:32	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:32	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00086		*	mg/L	0.0001	0.00025	10/08/21 15:33	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:50	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/28/21 21:32	kja
Strontium, dissolved	M200.7 ICP	1	0.0409	B	*	mg/L	0.009	0.045	09/28/21 21:32	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:50	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00997		*	mg/L	0.0008	0.0025	10/05/21 18:50	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:41	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/05/21 18:50	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00185	B	*	mg/L	0.0005	0.002	10/05/21 18:50	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:50	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-008

ACZ Sample ID: ***L68534-08***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	14.2	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	102		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.18		*	mg/L	0.4	2	09/28/21 23:34	krh
Conductivity @25C	SM2510B	1	312		*	umhos/cm	1	10	09/22/21 1:29	eep
Fluoride	M300.0 - Ion Chromatography	1	0.404		*	mg/L	0.05	0.25	09/28/21 23:34	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.045	B	*	mg/L	0.02	0.1	10/02/21 22:44	pjb
pH (lab)	SM4500H+ B									
pH		1	10.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	09/24/21 22:35	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/16/21 16:59	emk
Sulfate	M300.0 - Ion Chromatography	1	20.5		*	mg/L	0.4	2	09/28/21 23:34	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-009

ACZ Sample ID: ***L68534-09***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 15:06	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.143		*	mg/L	0.005	0.015	10/05/21 18:52	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00110	B	*	mg/L	0.0004	0.002	10/05/21 18:52	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0289		*	mg/L	0.0002	0.001	10/05/21 18:52	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00995		*	mg/L	0.0005	0.0025	10/05/21 18:52	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:52	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:35	kja
Boron, dissolved	M200.7 ICP	1	0.094	B	*	mg/L	0.03	0.1	09/28/21 21:35	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:52	mfm
Calcium, dissolved	M200.7 ICP	1	4.77		*	mg/L	0.1	0.5	09/28/21 21:35	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00325		*	mg/L	0.0005	0.002	10/05/21 18:52	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:52	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:52	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 17:00	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0559		*	mg/L	0.007	0.02	10/05/21 18:52	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:52	mfm
Lithium, dissolved	M200.7 ICP	1	0.0762		*	mg/L	0.008	0.04	09/28/21 21:35	kja
Magnesium, dissolved	M200.7 ICP	1	0.23	B	*	mg/L	0.2	1	09/28/21 21:35	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00066	B	*	mg/L	0.0004	0.002	10/08/21 15:34	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.9		*	ng/L	0.3	1	09/23/21 11:36	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0230		*	mg/L	0.0002	0.0005	10/05/21 18:52	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:52	mfm
Potassium, dissolved	M200.7 ICP	1	8.18		*	mg/L	0.2	1	09/28/21 21:35	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:35	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00093		*	mg/L	0.0001	0.00025	10/08/21 15:34	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:52	mfm
Sodium, dissolved	M200.7 ICP	1	61.7		*	mg/L	0.2	1	09/28/21 21:35	kja
Strontium, dissolved	M200.7 ICP	1	0.0390	B	*	mg/L	0.009	0.045	09/28/21 21:35	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:52	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00943		*	mg/L	0.0008	0.0025	10/05/21 18:52	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:44	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/05/21 18:52	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00173	B	*	mg/L	0.0005	0.002	10/05/21 18:52	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:52	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-009

ACZ Sample ID: ***L68534-09***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	18.1	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	103		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.32		*	mg/L	0.4	2	09/28/21 23:52	krh
Conductivity @25C	SM2510B	1	325		*	umhos/cm	1	10	09/22/21 1:50	eep
Fluoride	M300.0 - Ion Chromatography	1	0.375		*	mg/L	0.05	0.25	09/28/21 23:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.046	B	*	mg/L	0.02	0.1	10/02/21 22:45	pjb
pH (lab)	SM4500H+ B									
pH		1	10.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.013	B	*	mg/L	0.01	0.05	09/24/21 22:36	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/16/21 17:01	emk
Sulfate	M300.0 - Ion Chromatography	1	21.7		*	mg/L	0.4	2	09/28/21 23:52	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-010

ACZ Sample ID: ***L68534-10***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 15:19	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.108		*	mg/L	0.005	0.015	10/05/21 18:54	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00054	B	*	mg/L	0.0004	0.002	10/05/21 18:54	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0252		*	mg/L	0.0002	0.001	10/05/21 18:54	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0124		*	mg/L	0.0005	0.0025	10/05/21 18:54	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:54	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:51	kja
Boron, dissolved	M200.7 ICP	1	0.096	B	*	mg/L	0.03	0.1	09/28/21 21:51	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:54	mfm
Calcium, dissolved	M200.7 ICP	1	5.16		*	mg/L	0.1	0.5	09/28/21 21:51	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00216		*	mg/L	0.0005	0.002	10/05/21 18:54	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:54	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:54	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 17:16	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0567		*	mg/L	0.007	0.02	10/05/21 18:54	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:54	mfm
Lithium, dissolved	M200.7 ICP	1	0.0772		*	mg/L	0.008	0.04	09/28/21 21:51	kja
Magnesium, dissolved	M200.7 ICP	1	0.24	B	*	mg/L	0.2	1	09/28/21 21:51	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00073	B	*	mg/L	0.0004	0.002	10/08/21 15:39	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.0		*	ng/L	0.3	1	09/23/21 11:41	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0129		*	mg/L	0.0002	0.0005	10/05/21 18:54	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:54	mfm
Potassium, dissolved	M200.7 ICP	1	7.22		*	mg/L	0.2	1	09/28/21 21:51	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:51	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00073		*	mg/L	0.0001	0.00025	10/08/21 15:39	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:54	mfm
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/28/21 21:51	kja
Strontium, dissolved	M200.7 ICP	1	0.0436	B	*	mg/L	0.009	0.045	09/28/21 21:51	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:54	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0105		*	mg/L	0.0008	0.0025	10/05/21 18:54	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 17:59	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00010	B	*	mg/L	0.0001	0.0005	10/05/21 18:54	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00153	B	*	mg/L	0.0005	0.002	10/05/21 18:54	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:54	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-010

ACZ Sample ID: ***L68534-10***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	8.1	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	113		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.17		*	mg/L	0.4	2	09/29/21 0:28	krh
Conductivity @25C	SM2510B	1	329		*	umhos/cm	1	10	09/22/21 2:00	eep
Fluoride	M300.0 - Ion Chromatography	1	0.380		*	mg/L	0.05	0.25	09/29/21 0:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.037	B	*	mg/L	0.02	0.1	10/02/21 22:47	pjb
pH (lab)	SM4500H+ B									
pH		1	10.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.010	B	*	mg/L	0.01	0.05	09/24/21 22:39	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/16/21 17:03	emk
Sulfate	M300.0 - Ion Chromatography	1	18.3		*	mg/L	0.4	2	09/29/21 0:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-011

ACZ Sample ID: ***L68534-11***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 15:32	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.143		*	mg/L	0.005	0.015	10/05/21 18:56	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.002	10/05/21 18:56	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0257		*	mg/L	0.0002	0.001	10/05/21 18:56	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0285		*	mg/L	0.0005	0.0025	10/05/21 18:56	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:56	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:54	kja
Boron, dissolved	M200.7 ICP	1	0.092	B	*	mg/L	0.03	0.1	09/28/21 21:54	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:56	mfm
Calcium, dissolved	M200.7 ICP	1	5.77		*	mg/L	0.1	0.5	09/28/21 21:54	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00216		*	mg/L	0.0005	0.002	10/05/21 18:56	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:56	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:56	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 17:19	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0524		*	mg/L	0.007	0.02	10/05/21 18:56	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:56	mfm
Lithium, dissolved	M200.7 ICP	1	0.0790		*	mg/L	0.008	0.04	09/28/21 21:54	kja
Magnesium, dissolved	M200.7 ICP	1	0.31	B	*	mg/L	0.2	1	09/28/21 21:54	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.002	10/08/21 15:41	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.9		*	ng/L	0.3	1	09/23/21 11:46	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0162		*	mg/L	0.0002	0.0005	10/05/21 18:56	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:56	mfm
Potassium, dissolved	M200.7 ICP	1	8.00		*	mg/L	0.2	1	09/28/21 21:54	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:54	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00061		*	mg/L	0.0001	0.00025	10/08/21 15:41	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:56	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/28/21 21:54	kja
Strontium, dissolved	M200.7 ICP	1	0.0574		*	mg/L	0.009	0.045	09/28/21 21:54	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00010	B	*	mg/L	0.0001	0.0005	10/05/21 18:56	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0120		*	mg/L	0.0008	0.0025	10/05/21 18:56	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 18:02	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/05/21 18:56	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00130	B	*	mg/L	0.0005	0.002	10/05/21 18:56	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:56	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-011

ACZ Sample ID: ***L68534-11***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	3.6	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	119		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.12		*	mg/L	0.4	2	09/29/21 1:04	krh
Conductivity @25C	SM2510B	1	329		*	umhos/cm	1	10	09/22/21 2:10	eep
Fluoride	M300.0 - Ion Chromatography	1	0.325		*	mg/L	0.05	0.25	09/29/21 1:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.041	B	*	mg/L	0.02	0.1	10/02/21 22:48	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.010	B	*	mg/L	0.01	0.05	09/24/21 22:40	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	192		*	mg/L	20	40	09/16/21 17:05	emk
Sulfate	M300.0 - Ion Chromatography	1	18.6		*	mg/L	0.4	2	09/29/21 1:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-012

ACZ Sample ID: ***L68534-12***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 15:45	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.127		*	mg/L	0.005	0.015	10/05/21 18:58	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00069	B	*	mg/L	0.0004	0.002	10/05/21 18:58	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0246		*	mg/L	0.0002	0.001	10/05/21 18:58	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0246		*	mg/L	0.0005	0.0025	10/05/21 18:58	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 18:58	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/28/21 21:57	kja
Boron, dissolved	M200.7 ICP	1	0.095	B	*	mg/L	0.03	0.1	09/28/21 21:57	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 18:58	mfm
Calcium, dissolved	M200.7 ICP	1	6.06		*	mg/L	0.1	0.5	09/28/21 21:57	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00490		*	mg/L	0.0005	0.002	10/05/21 18:58	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000088	B	*	mg/L	0.00005	0.00025	10/05/21 18:58	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 18:58	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 17:23	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0518		*	mg/L	0.007	0.02	10/05/21 18:58	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:58	mfm
Lithium, dissolved	M200.7 ICP	1	0.0795		*	mg/L	0.008	0.04	09/28/21 21:57	kja
Magnesium, dissolved	M200.7 ICP	1	0.28	B	*	mg/L	0.2	1	09/28/21 21:57	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00060	B	*	mg/L	0.0004	0.002	10/08/21 15:42	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	8.5		*	ng/L	0.3	1	09/23/21 11:50	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00845		*	mg/L	0.0002	0.0005	10/05/21 18:58	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 18:58	mfm
Potassium, dissolved	M200.7 ICP	1	6.51		*	mg/L	0.2	1	09/28/21 21:57	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/28/21 21:57	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00067		*	mg/L	0.0001	0.00025	10/08/21 15:42	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:58	mfm
Sodium, dissolved	M200.7 ICP	1	61.0		*	mg/L	0.2	1	09/28/21 21:57	kja
Strontium, dissolved	M200.7 ICP	1	0.0557		*	mg/L	0.009	0.045	09/28/21 21:57	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 18:58	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0125		*	mg/L	0.0008	0.0025	10/05/21 18:58	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 18:05	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/05/21 18:58	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00150	B	*	mg/L	0.0005	0.002	10/05/21 18:58	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 18:58	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-012

ACZ Sample ID: ***L68534-12***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	3.4	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	115		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	4.99		*	mg/L	0.4	2	09/29/21 2:16	krh
Conductivity @25C	SM2510B	1	322		*	umhos/cm	1	10	09/22/21 2:21	eep
Fluoride	M300.0 - Ion Chromatography	1	0.411		*	mg/L	0.05	0.25	09/29/21 2:16	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.045	B	*	mg/L	0.02	0.1	10/02/21 22:51	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 22:42	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	196		*	mg/L	20	40	09/16/21 17:07	emk
Sulfate	M300.0 - Ion Chromatography	1	20.9		*	mg/L	0.4	2	09/29/21 2:16	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-013

ACZ Sample ID: ***L68534-13***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 15:58	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0975		*	mg/L	0.005	0.015	10/05/21 19:00	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00044	B	*	mg/L	0.0004	0.002	10/05/21 19:00	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0225		*	mg/L	0.0002	0.001	10/05/21 19:00	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0295		*	mg/L	0.0005	0.0025	10/05/21 19:00	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 19:00	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/04/21 13:43	kja
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/03/21 13:25	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 19:00	mfm
Calcium, dissolved	M200.7 ICP	1	5.58		*	mg/L	0.1	0.5	10/03/21 13:25	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00268		*	mg/L	0.0005	0.002	10/05/21 19:00	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000065	B	*	mg/L	0.00005	0.00025	10/05/21 19:00	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 19:00	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 13:43	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0436		*	mg/L	0.007	0.02	10/05/21 19:00	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:00	mfm
Lithium, dissolved	M200.7 ICP	1	0.0817		*	mg/L	0.008	0.04	10/03/21 13:25	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/03/21 13:25	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00069	B	*	mg/L	0.0004	0.002	10/08/21 15:47	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	42		*	ng/L	2	5	09/23/21 13:07	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00588		*	mg/L	0.0002	0.0005	10/05/21 19:00	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 19:00	mfm
Potassium, dissolved	M200.7 ICP	1	6.89		*	mg/L	0.2	1	10/03/21 13:25	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 13:25	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00061		*	mg/L	0.0001	0.00025	10/08/21 15:47	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:00	mfm
Sodium, dissolved	M200.7 ICP	1	65.9		*	mg/L	0.2	1	10/03/21 13:25	kja
Strontium, dissolved	M200.7 ICP	1	0.0578		*	mg/L	0.009	0.045	10/03/21 13:25	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:00	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00692		*	mg/L	0.0008	0.0025	10/05/21 19:00	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 13:25	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/05/21 19:00	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00129	B	*	mg/L	0.0005	0.002	10/05/21 19:00	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 19:00	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-013

ACZ Sample ID: ***L68534-13***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	7.4	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	131		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	139		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.22		*	mg/L	0.4	2	09/29/21 2:34	krh
Conductivity @25C	SM2510B	1	337		*	umhos/cm	1	10	09/22/21 2:32	eep
Fluoride	M300.0 - Ion Chromatography	1	0.314		*	mg/L	0.05	0.25	09/29/21 2:34	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.048	B	*	mg/L	0.02	0.1	10/02/21 22:53	pjb
pH (lab)	SM4500H+ B									
pH		1	10.6	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 22:43	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/16/21 17:09	emk
Sulfate	M300.0 - Ion Chromatography	1	17.6		*	mg/L	0.4	2	09/29/21 2:34	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-014

ACZ Sample ID: ***L68534-14***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 16:11	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0894		*	mg/L	0.005	0.015	10/05/21 19:02	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.002	10/05/21 19:02	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0253		*	mg/L	0.0002	0.001	10/05/21 19:02	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0232		*	mg/L	0.0005	0.0025	10/05/21 19:02	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 19:02	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/04/21 13:46	kja
Boron, dissolved	M200.7 ICP	1	0.093	B	*	mg/L	0.03	0.1	10/03/21 13:28	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 19:02	mfm
Calcium, dissolved	M200.7 ICP	1	5.34		*	mg/L	0.1	0.5	10/03/21 13:28	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00348		*	mg/L	0.0005	0.002	10/05/21 19:02	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000077	B	*	mg/L	0.00005	0.00025	10/05/21 19:02	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 19:02	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 13:46	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0502		*	mg/L	0.007	0.02	10/05/21 19:02	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:02	mfm
Lithium, dissolved	M200.7 ICP	1	0.0800		*	mg/L	0.008	0.04	10/03/21 13:28	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/03/21 13:28	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.002	10/08/21 15:49	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	16.3		*	ng/L	0.3	1	09/23/21 12:23	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00619		*	mg/L	0.0002	0.0005	10/05/21 19:02	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 19:02	mfm
Potassium, dissolved	M200.7 ICP	1	8.57		*	mg/L	0.2	1	10/03/21 13:28	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 13:28	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00068		*	mg/L	0.0001	0.00025	10/08/21 15:49	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:02	mfm
Sodium, dissolved	M200.7 ICP	1	66.9		*	mg/L	0.2	1	10/03/21 13:28	kja
Strontium, dissolved	M200.7 ICP	1	0.0518		*	mg/L	0.009	0.045	10/03/21 13:28	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:02	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00698		*	mg/L	0.0008	0.0025	10/05/21 19:02	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 13:28	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/05/21 19:02	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00157	B	*	mg/L	0.0005	0.002	10/05/21 19:02	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 19:02	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-014

ACZ Sample ID: ***L68534-14***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	3.9	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	121		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	125		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.18		*	mg/L	0.4	2	09/29/21 19:30	krh
Conductivity @25C	SM2510B	1	332		*	umhos/cm	1	10	09/22/21 2:42	eep
Fluoride	M300.0 - Ion Chromatography	1	0.379		*	mg/L	0.05	0.25	09/29/21 19:30	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.044	B	*	mg/L	0.02	0.1	10/02/21 22:54	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/24/21 22:44	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	226		*	mg/L	20	40	09/16/21 17:10	emk
Sulfate	M300.0 - Ion Chromatography	1	18.4		*	mg/L	0.4	2	09/29/21 19:30	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-015

ACZ Sample ID: ***L68534-15***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/21/21 16:24	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0658		*	mg/L	0.005	0.015	10/05/21 19:04	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/05/21 19:04	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0199		*	mg/L	0.0002	0.001	10/05/21 19:04	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0228		*	mg/L	0.0005	0.0025	10/05/21 19:04	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/05/21 19:04	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/04/21 14:02	kja
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/03/21 13:43	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 19:04	mfm
Calcium, dissolved	M200.7 ICP	1	7.53		*	mg/L	0.1	0.5	10/03/21 13:43	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00228		*	mg/L	0.0005	0.002	10/05/21 19:04	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/05/21 19:04	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/05/21 19:04	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/04/21 14:02	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0270		*	mg/L	0.007	0.02	10/05/21 19:04	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:04	mfm
Lithium, dissolved	M200.7 ICP	1	0.0855		*	mg/L	0.008	0.04	10/03/21 13:43	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/03/21 13:43	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00067	B	*	mg/L	0.0004	0.002	10/08/21 15:51	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	8.2		*	ng/L	0.3	1	09/23/21 12:37	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00384		*	mg/L	0.0002	0.0005	10/05/21 19:04	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/05/21 19:04	mfm
Potassium, dissolved	M200.7 ICP	1	10.8		*	mg/L	0.2	1	10/03/21 13:43	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 13:43	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00050		*	mg/L	0.0001	0.00025	10/08/21 15:51	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:04	mfm
Sodium, dissolved	M200.7 ICP	1	68.1		*	mg/L	0.2	1	10/03/21 13:43	kja
Strontium, dissolved	M200.7 ICP	1	0.0474		*	mg/L	0.009	0.045	10/03/21 13:43	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:04	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.00980		*	mg/L	0.0008	0.0025	10/05/21 19:04	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 13:43	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/05/21 19:04	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00182	B	*	mg/L	0.0005	0.002	10/05/21 19:04	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/05/21 19:04	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090322-015

ACZ Sample ID: ***L68534-15***
Date Sampled: *09/09/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	98.3		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	32.0		*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	130		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	4.92		*	mg/L	0.4	2	09/29/21 20:05	krh
Conductivity @25C	SM2510B	1	388		*	umhos/cm	1	10	09/22/21 2:53	eep
Fluoride	M300.0 - Ion Chromatography	1	0.303		*	mg/L	0.05	0.25	09/29/21 20:05	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		19			mg/L	0.2	5	10/12/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.050	B	*	mg/L	0.02	0.1	10/02/21 22:56	pjb
pH (lab)	SM4500H+ B									
pH		1	11.0	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 22:45	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	196		*	mg/L	20	40	09/16/21 17:12	emk
Sulfate	M300.0 - Ion Chromatography	1	16.2		*	mg/L	0.4	2	09/29/21 20:05	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716PBW1	PBW	09/21/21 20:18				13.4	mg/L		-20	20			
WG527716LCSW3	LCSW	09/21/21 20:36	WC210917-2	820.0001		792.2	mg/L	97	90	110			
WG527716LCSW6	LCSW	09/21/21 23:46	WC210917-2	820.0001		815.6	mg/L	99	90	110			
WG527716PBW2	PBW	09/21/21 23:54				U	mg/L		-20	20			
L68534-08DUP	DUP	09/22/21 1:39			116	116.5	mg/L				0	20	
L68559-03DUP	DUP	09/22/21 3:32			117	116.2	mg/L				1	20	
WG527716LCSW9	LCSW	09/22/21 3:52	WC210917-2	820.0001		818	mg/L	100	90	110			
WG527716PBW3	PBW	09/22/21 3:59				U	mg/L		-20	20			
WG527716LCSW12	LCSW	09/22/21 7:58	WC210917-2	820.0001		820.9	mg/L	100	90	110			
WG527716PBW4	PBW	09/22/21 8:05				U	mg/L		-20	20			
WG527716LCSW15	LCSW	09/22/21 12:00	WC210917-2	820.0001		808.6	mg/L	99	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.1		.1007	mg/L	101	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.011	0.011			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.050065		.0512	mg/L	102	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.050065	.0175	.0656	mg/L	96	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.050065	.0175	.0664	mg/L	98	70	130	1	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.050065	39.6	39.8127	mg/L	425	70	130			M3
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.050065	39.6	37.734	mg/L	-3727	70	130	5	20	M3

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.0201		.01949	mg/L	97	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00088	0.00088			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.01		.00981	mg/L	98	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.01	U	.01028	mg/L	103	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.01	U	.01053	mg/L	105	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.01	U	.00828	mg/L	83	70	130			
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.01	U	.00865	mg/L	87	70	130	4	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.04982	mg/L	100	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00044	0.00044			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05005		.04935	mg/L	99	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05005	.0387	.08907	mg/L	101	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05005	.0387	.09046	mg/L	103	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05005	.00727	.01583	mg/L	17	70	130			M2
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05005	.00727	.01624	mg/L	18	70	130	3	20	M2

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ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.04968	mg/L	99	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.0011	0.0011			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.049985		.04913	mg/L	98	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.049985	.00581	.05511	mg/L	99	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.049985	.00581	.05558	mg/L	100	70	130	1	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.049985	.0144	.05852	mg/L	88	70	130			
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.049985	.0144	.06011	mg/L	91	70	130	3	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.050195	mg/L	100	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.000176	0.000176			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05005		.050337	mg/L	101	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05005	U	.042417	mg/L	85	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05005	U	.042871	mg/L	86	70	130	1	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05005	.035	.042911	mg/L	16	70	130			M2
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05005	.035	.043416	mg/L	17	70	130	1	20	M2

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	2		1.961	mg/L	98	95	105			
WG528202ICB	ICB	09/28/21 20:17				U	mg/L		-0.12	0.12			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	1		.988	mg/L	99	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	1	U	.989	mg/L	99	85	115			
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	1	U	1.01	mg/L	101	85	115	2	20	
L68534-09AS	AS	09/28/21 21:45	II210910-2	1	U	1.045	mg/L	105	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	1	U	1.03	mg/L	103	85	115	1	20	
WG528541													
WG528541ICV	ICV	10/04/21 13:01	II211001-1	2		1.997	mg/L	100	95	105			
WG528541ICB	ICB	10/04/21 13:07				U	mg/L		-0.12	0.12			
WG528541LFB	LFB	10/04/21 13:20	II210930-2	1		.986	mg/L	99	85	115			
L68534-14AS	AS	10/04/21 13:49	II210930-2	1	U	1.017	mg/L	102	85	115			
L68534-14ASD	ASD	10/04/21 13:59	II210930-2	1	U	.995	mg/L	100	85	115	2	20	

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ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	2		1.998	mg/L	100	95	105			
WG528202ICB	ICB	09/28/21 20:17				U	mg/L		-0.09	0.09			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	.5005		.523	mg/L	104	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	.5005	.181	.651	mg/L	94	85	115			
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	.5005	.181	.676	mg/L	99	85	115	4	20	
L68534-09AS	AS	09/28/21 21:45	II210910-2	.5005	.094	.599	mg/L	101	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	.5005	.094	.607	mg/L	102	85	115	1	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	2		2.022	mg/L	101	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.09	0.09			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	.5005		.537	mg/L	107	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	.5005	.093	.614	mg/L	104	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	.5005	.093	.63	mg/L	107	85	115	3	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.050698	mg/L	101	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00011	0.00011			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05005		.050053	mg/L	100	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05005	U	.053059	mg/L	106	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05005	U	.052664	mg/L	105	70	130	1	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05005	1.6	1.592031	mg/L	-16	70	130			M3
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05005	1.6	1.590126	mg/L	-20	70	130	0	20	M3

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	100		99.34	mg/L	99	95	105			
WG528202ICB	ICB	09/28/21 20:17				.21	mg/L		-0.3	0.3			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	67.98972		68.32	mg/L	100	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	67.98972	163	220.2	mg/L	84	85	115			MA
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	67.98972	163	224	mg/L	90	85	115	2	20	
L68534-09AS	AS	09/28/21 21:45	II210910-2	67.98972	4.77	76.46	mg/L	105	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	67.98972	4.77	76.86	mg/L	106	85	115	1	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	100		99.42	mg/L	99	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.3	0.3			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	67.98972		71.35	mg/L	105	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	67.98972	5.34	77.52	mg/L	106	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	67.98972	5.34	77.42	mg/L	106	85	115	0	20	

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528158													
WG528158LFB1	LFB	09/28/21 15:31	WI210907-6	30		27.83	mg/L	93	90	110			
L68533-14DUP	DUP	09/28/21 20:17			5.32	5.06	mg/L				5	20	
L68534-01AS	AS	09/28/21 20:53	WI210907-6	30	5.08	34.3	mg/L	97	90	110			
WG528158LFB2	LFB	09/29/21 0:10	WI210907-6	30		29.56	mg/L	99	90	110			
L68534-10DUP	DUP	09/29/21 0:46			5.17	4.93	mg/L				5	20	
L68534-11AS	AS	09/29/21 1:58	WI210907-6	30	5.12	34.83	mg/L	99	90	110			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	30		29.31	mg/L	98	90	110			
L68534-14DUP	DUP	09/29/21 19:48			5.18	5.19	mg/L				0	20	
L68534-15AS	AS	09/29/21 20:23	WI210907-6	30	4.92	34.28	mg/L	98	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.04952	mg/L	99	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.0011	0.0011			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05		.04795	mg/L	96	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05	.00919	.05487	mg/L	91	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05	.00919	.05609	mg/L	94	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05	.0047	.01234	mg/L	15	70	130			M2
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05	.0047	.01262	mg/L	16	70	130	2	20	M2

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.052672	mg/L	105	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00011	0.00011			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05005		.050964	mg/L	102	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05005	U	.047728	mg/L	95	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05005	U	.04783	mg/L	96	70	130	0	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05005	3.76	3.702472	mg/L	-115	70	130			M3
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05005	3.76	3.351938	mg/L	-815	70	130	10	20	M3

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW2	LCSW	09/21/21 20:25	PCN63140	1408		1414	umhos/cm	100	90	110			
WG527716LCSW5	LCSW	09/21/21 23:34	PCN63140	1408		1406	umhos/cm	100	90	110			
L68534-08DUP	DUP	09/22/21 1:39			312	314	umhos/cm				1	20	
L68559-03DUP	DUP	09/22/21 3:32			296	294	umhos/cm				1	20	
WG527716LCSW8	LCSW	09/22/21 3:39	PCN63140	1408		1402	umhos/cm	100	90	110			
WG527716LCSW11	LCSW	09/22/21 7:44	PCN63140	1408		1397	umhos/cm	99	90	110			
WG527716LCSW14	LCSW	09/22/21 11:49	PCN63140	1408		1390	umhos/cm	99	90	110			

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.04937	mg/L	99	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00176	0.00176			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05		.04823	mg/L	96	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05	U	.04559	mg/L	91	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05	U	.04659	mg/L	93	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05	30.8	33.29878	mg/L	4998	70	130			M3
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05	30.8	33.98382	mg/L	6368	70	130	2	20	M3

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528158													
WG528158LFB1	LFB	09/28/21 15:31	WI210907-6	1.5		1.379	mg/L	92	90	110			
L68533-14DUP	DUP	09/28/21 20:17			.41	.434	mg/L				6	20	RA
L68534-01AS	AS	09/28/21 20:53	WI210907-6	1.5	.275	1.702	mg/L	95	90	110			
WG528158LFB2	LFB	09/29/21 0:10	WI210907-6	1.5		1.401	mg/L	93	90	110			
L68534-10DUP	DUP	09/29/21 0:46			.38	.396	mg/L				4	20	RA
L68534-11AS	AS	09/29/21 1:58	WI210907-6	1.5	.325	1.84	mg/L	101	90	110			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	1.5		1.467	mg/L	98	90	110			
L68534-14DUP	DUP	09/29/21 19:48			.379	.358	mg/L				6	20	RA
L68534-15AS	AS	09/29/21 20:23	WI210907-6	1.5	.303	1.74	mg/L	96	90	110			

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528541													
WG528541ICV	ICV	10/04/21 13:01	II211001-1	2		2.03	mg/L	102	95	105			
WG528541ICB	ICB	10/04/21 13:07				U	mg/L		-0.3	0.3			
WG528541LFB	LFB	10/04/21 13:20	II210930-2	.9822		1.01	mg/L	103	85	115			
L68534-14AS	AS	10/04/21 13:49	II210930-2	.9822	U	1	mg/L	102	85	115			
L68534-14ASD	ASD	10/04/21 13:59	II210930-2	.9822	U	1.01	mg/L	103	85	115	1	20	
WG528573													
WG528573ICV	ICV	10/04/21 16:12	II211001-1	2		2.01	mg/L	101	95	105			
WG528573ICB	ICB	10/04/21 16:18				U	mg/L		-0.3	0.3			
WG528573LFB	LFB	10/04/21 16:31	II210930-2	.9822		1.08	mg/L	110	85	115			
L68534-09AS	AS	10/04/21 17:10	II210930-2	.9822	U	1.16	mg/L	118	85	115			MA
L68534-09ASD	ASD	10/04/21 17:13	II210930-2	.9822	U	1.13	mg/L	115	85	115	3	20	
L68631-04AS	AS	10/04/21 17:49	II210930-2	.9822	U	.94	mg/L	96	85	115			
L68631-04ASD	ASD	10/04/21 17:52	II210930-2	.9822	U	.94	mg/L	96	85	115	0	20	

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.10016		.0981	mg/L	98	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.0154	0.0154			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.0501		.0458	mg/L	91	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.0501	.0402	.086	mg/L	91	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.0501	.0402	.0852	mg/L	90	70	130	1	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.0501	1.89	1.9135	mg/L	47	70	130			M3
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.0501	1.89	1.8964	mg/L	13	70	130	1	20	M3

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.0506	mg/L	101	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00022	0.00022			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05005		.05024	mg/L	100	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05005	U	.05079	mg/L	101	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05005	U	.05078	mg/L	101	70	130	0	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05005	.0099	.06495	mg/L	110	70	130			
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05005	.0099	.06474	mg/L	110	70	130	0	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	2		1.9595	mg/L	98	95	105			
WG528202ICB	ICB	09/28/21 20:17				.009	mg/L		-0.024	0.024			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	.999		.9756	mg/L	98	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	.999	.0649	1.037	mg/L	97	85	115			
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	.999	.0649	1.025	mg/L	96	85	115	1	20	
L68534-09AS	AS	09/28/21 21:45	II210910-2	.999	.0762	1.028	mg/L	95	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	.999	.0762	1.03	mg/L	95	85	115	0	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	2		1.954	mg/L	98	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.024	0.024			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	.999		.9999	mg/L	100	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	.999	.08	1.064	mg/L	98	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	.999	.08	1.072	mg/L	99	85	115	1	20	

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	100		95.61	mg/L	96	95	105			
WG528202ICB	ICB	09/28/21 20:17				.26	mg/L		-0.6	0.6			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	49.99828		47.3	mg/L	95	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	49.99828	108	149.8	mg/L	84	85	115			MA
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	49.99828	108	152.4	mg/L	89	85	115	2	20	
L68534-09AS	AS	09/28/21 21:45	II210910-2	49.99828	.23	49.9	mg/L	99	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	49.99828	.23	50.16	mg/L	100	85	115	1	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	100		96.05	mg/L	96	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.6	0.6			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	49.99828		49.95	mg/L	100	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	49.99828	U	50.93	mg/L	102	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	49.99828	U	50.89	mg/L	102	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.05142	mg/L	103	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00088	0.00088			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.0499		.05035	mg/L	101	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.0499	U	.04749	mg/L	95	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.0499	U	.04818	mg/L	97	70	130	1	20	
WG529003													
WG529003ICV	ICV	10/08/21 14:59	MS211001-2	.05		.05153	mg/L	103	90	110			
WG529003ICB	ICB	10/08/21 15:00				U	mg/L		-0.00088	0.00088			
WG529003LFB	LFB	10/08/21 15:09	MS210927-3	.0499		.05376	mg/L	108	85	115			
L68414-07AS	AS	10/08/21 15:13	MS210927-3	.0998	U	.10888	mg/L	109	70	130			
L68414-07ASD	ASD	10/08/21 15:15	MS210927-3	.0998	U	.11262	mg/L	113	70	130	3	20	
L68534-09AS	AS	10/08/21 15:36	MS210927-3	.0499	.00066	.05249	mg/L	104	70	130			
L68534-09ASD	ASD	10/08/21 15:38	MS210927-3	.0499	.00066	.054	mg/L	107	70	130	3	20	

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG527736													
WG527736CCV1	CCV	09/23/21 10:20	HG210709-4	10		9.89	ng/L	99	76.5	123.4			
WG527736CCB1	CCB	09/23/21 10:24				U	ng/L		-0.501	0.501			
WG527736PQV	PQV	09/23/21 10:29	HG210709-6	1		1.12	ng/L	112	70	130			
WG527736LFB	LFB	09/23/21 10:34	HG210709-5	2		2.17	ng/L	109	71	125			
L68534-02MS	MS	09/23/21 10:48	HG210709-5	2	9.3	11.4	ng/L	105	71	125			
L68534-02MSD	MSD	09/23/21 10:53	HG210709-5	2	9.3	12	ng/L	135	71	125	5	24	M3
WG527736CCV2	CCV	09/23/21 11:17	HG210709-4	10		10.5	ng/L	105	76.5	123.4			
WG527736CCB2	CCB	09/23/21 11:22				U	ng/L		-0.501	0.501			
WG527736CCV3	CCV	09/23/21 12:27	HG210709-4	10		9.61	ng/L	96	76.5	123.4			
WG527736CCB3	CCB	09/23/21 12:32				U	ng/L		-0.501	0.501			
L68534-13MS	MS	09/23/21 13:12	HG16315X	50	42	56.5	ng/L	145	71	125			M3 MH
L68534-13MSD	MSD	09/23/21 13:16	HG16315X	50	42	57	ng/L	150	71	125	1	24	M3 MH
WG527736CCV4	CCV	09/23/21 13:21	HG210709-4	10		9.98	ng/L	100	76.5	123.4			
WG527736CCB4	CCB	09/23/21 13:26				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.01992		.01909	mg/L	96	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00044	0.00044			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05005		.04914	mg/L	98	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05005	.00553	.05772	mg/L	104	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05005	.00553	.05682	mg/L	102	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05005	.00076	.05151	mg/L	101	70	130			
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05005	.00076	.05187	mg/L	102	70	130	1	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.04963	mg/L	99	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00088	0.00088			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05		.04775	mg/L	96	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05	U	.04536	mg/L	91	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05	U	.04632	mg/L	93	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05	.675	.74113	mg/L	132	70	130			M3
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05	.675	.75299	mg/L	156	70	130	2	20	M3

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528526													
WG528526ICV	ICV	10/02/21 21:12	WI210904-1	2.4161		2.375	mg/L	98	90	110			
WG528526ICB	ICB	10/02/21 21:13				U	mg/L		-0.02	0.02			
WG528527													
WG528527LFB1	LFB	10/02/21 22:27	WI211001-5	2		2.083	mg/L	104	90	110			
L68534-01AS	AS	10/02/21 22:30	WI211001-5	2	.049	2.224	mg/L	109	90	110			
L68534-02DUP	DUP	10/02/21 22:32			.047	.047	mg/L				0	20	RA
L68534-11AS	AS	10/02/21 22:49	WI211001-5	2	.041	2.141	mg/L	105	90	110			
L68534-12DUP	DUP	10/02/21 22:52			.045	.044	mg/L				2	20	RA
WG528527LFB2	LFB	10/02/21 23:08	WI211001-5	2		2.05	mg/L	103	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW1	LCSW	09/21/21 20:23	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW4	LCSW	09/21/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
L68534-08DUP	DUP	09/22/21 1:39			10.3	10.3	units				0	20	
L68559-03DUP	DUP	09/22/21 3:32			9.1	9	units				1	20	
WG527716LCSW7	LCSW	09/22/21 3:37	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW10	LCSW	09/22/21 7:43	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW13	LCSW	09/22/21 11:47	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527989													
WG527989ICV	ICV	09/24/21 21:25	WI210831-4	.6523		.687	mg/L	105	90	110			
WG527989ICB	ICB	09/24/21 21:27				U	mg/L		-0.01	0.01			
WG527990													
WG527649LRB	LRB	09/24/21 22:12				U	mg/L		-0.01	0.01			
WG527649LFB	LFB	09/24/21 22:13	WI210921-12	.5		.5	mg/L	100	90	110			
L68527-01LFM	LFM	09/24/21 22:15	WI210921-12	.5	.075	.579	mg/L	101	90	110			
L68527-02DUP	DUP	09/24/21 22:17			.047	.046	mg/L				2	20	RA
L68534-06LFM	LFM	09/24/21 22:31	WI210921-12	.5	.012	.501	mg/L	98	90	110			
L68534-07DUP	DUP	09/24/21 22:33			.01	.01	mg/L				0	20	RA

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	20		19.65	mg/L	98	95	105			
WG528202ICB	ICB	09/28/21 20:17				U	mg/L		-0.6	0.6			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	99.96008		97.87	mg/L	98	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	99.96008	5.09	104.5	mg/L	99	85	115			
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	99.96008	5.09	104.3	mg/L	99	85	115	0	20	
L68534-09AS	AS	09/28/21 21:45	II210910-2	99.96008	8.18	107	mg/L	99	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	99.96008	8.18	107.7	mg/L	100	85	115	1	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	20		19.72	mg/L	99	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.6	0.6			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	99.96008		103.1	mg/L	103	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	99.96008	8.57	113.6	mg/L	105	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	99.96008	8.57	112.8	mg/L	104	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527418													
WG527418PBW	PBW	09/16/21 16:30				U	mg/L		-20	20			
WG527418LCSW	LCSW	09/16/21 16:31	PCN64119	1000		978	mg/L	98	80	120			
L68534-05DUP	DUP	09/16/21 16:53			198	202	mg/L				2	10	RA
L68534-15DUP	DUP	09/16/21 17:14			196	208	mg/L				6	10	RA

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	2		1.925	mg/L	96	95	105			
WG528202ICB	ICB	09/28/21 20:17				U	mg/L		-0.15	0.15			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	1.0017		.98	mg/L	98	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	1.0017	U	.948	mg/L	95	85	115			
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	1.0017	U	1.032	mg/L	103	85	115	8	20	
L68534-09AS	AS	09/28/21 21:45	II210910-2	1.0017	U	1.016	mg/L	101	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	1.0017	U	1.03	mg/L	103	85	115	1	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	2		1.987	mg/L	99	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.15	0.15			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	1.0017		1.065	mg/L	106	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	1.0017	U	1.056	mg/L	105	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	1.0017	U	1.066	mg/L	106	85	115	1	20	

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529003													
WG529003ICV	ICV	10/08/21 14:59	MS211001-2	.05		.05008	mg/L	100	90	110			
WG529003ICB	ICB	10/08/21 15:00				U	mg/L		-0.00022	0.00022			
WG529003LFB	LFB	10/08/21 15:09	MS210927-3	.05		.05241	mg/L	105	85	115			
L68414-07AS	AS	10/08/21 15:13	MS210927-3	.1	.00121	.10993	mg/L	109	70	130			
L68414-07ASD	ASD	10/08/21 15:15	MS210927-3	.1	.00121	.11159	mg/L	110	70	130	1	20	
L68534-09AS	AS	10/08/21 15:36	MS210927-3	.05	.00093	.05107	mg/L	100	70	130			
L68534-09ASD	ASD	10/08/21 15:38	MS210927-3	.05	.00093	.05248	mg/L	103	70	130	3	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.02		.01829	mg/L	91	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00022	0.00022			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.01		.00906	mg/L	91	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.01	U	.00879	mg/L	88	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.01	U	.00847	mg/L	85	70	130	4	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.01	.0006	.00741	mg/L	68	70	130			M2 ZA
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.01	.0006	.00758	mg/L	70	70	130	2	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	100		99.42	mg/L	99	95	105			
WG528202ICB	ICB	09/28/21 20:17				.21	mg/L		-0.6	0.6			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	100.007		99.05	mg/L	99	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	100.007	215	297.9	mg/L	83	85	115			M2
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	100.007	215	298.9	mg/L	84	85	115	0	20	M2
L68534-09AS	AS	09/28/21 21:45	II210910-2	100.007	61.7	157.9	mg/L	96	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	100.007	61.7	158.8	mg/L	97	85	115	1	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	100		100.16	mg/L	100	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.6	0.6			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	100.007		103.7	mg/L	104	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	100.007	66.9	167.4	mg/L	100	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	100.007	66.9	167.1	mg/L	100	85	115	0	20	

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528202													
WG528202ICV	ICV	09/28/21 20:11	II210916-1	2		1.9235	mg/L	96	95	105			
WG528202ICB	ICB	09/28/21 20:17				.0115	mg/L		-0.027	0.027			
WG528202LFB	LFB	09/28/21 20:30	II210910-2	.5005		.5301	mg/L	106	85	115			
L68526-01AS	AS	09/28/21 20:42	II210910-2	.5005	2.47	2.821	mg/L	70	85	115			M3
L68526-01ASD	ASD	09/28/21 20:45	II210910-2	.5005	2.47	2.833	mg/L	73	85	115	0	20	M3
L68534-09AS	AS	09/28/21 21:45	II210910-2	.5005	.039	.5676	mg/L	106	85	115			
L68534-09ASD	ASD	09/28/21 21:48	II210910-2	.5005	.039	.5704	mg/L	106	85	115	0	20	
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	2		1.944	mg/L	97	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.027	0.027			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	.5005		.5559	mg/L	111	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	.5005	.0518	.6125	mg/L	112	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	.5005	.0518	.61	mg/L	112	85	115	0	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528158													
WG528158LFB1	LFB	09/28/21 15:31	WI210907-6	30		28.35	mg/L	95	90	110			
L68533-14DUP	DUP	09/28/21 20:17			20.5	20.58	mg/L				0	20	
L68534-01AS	AS	09/28/21 20:53	WI210907-6	30	17.1	45.47	mg/L	95	90	110			
WG528158LFB2	LFB	09/29/21 0:10	WI210907-6	30		27.3	mg/L	91	90	110			
L68534-10DUP	DUP	09/29/21 0:46			18.3	18.59	mg/L				2	20	
L68534-11AS	AS	09/29/21 1:58	WI210907-6	30	18.6	46.73	mg/L	94	90	110			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	30		28.72	mg/L	96	90	110			
L68534-14DUP	DUP	09/29/21 19:48			18.4	18.38	mg/L				0	20	
L68534-15AS	AS	09/29/21 20:23	WI210907-6	30	16.2	44.87	mg/L	96	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.05042	mg/L	101	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00022	0.00022			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05		.04874	mg/L	97	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05	U	.04839	mg/L	97	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05	U	.04869	mg/L	97	70	130	1	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05	.00034	.05674	mg/L	113	70	130			
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05	.00034	.057	mg/L	113	70	130	0	20	

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.05065	mg/L	101	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00176	0.00176			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05005		.04873	mg/L	97	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05005	.0327	.08312	mg/L	101	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05005	.0327	.083	mg/L	100	70	130	0	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05005	U	.04246	mg/L	85	70	130			
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05005	U	.04375	mg/L	87	70	130	3	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528280													
WG528280ICV	ICV	10/03/21 12:46	II211001-1	2		1.979	mg/L	99	95	105			
WG528280ICB	ICB	10/03/21 12:52				U	mg/L		-0.015	0.015			
WG528280LFB	LFB	10/03/21 13:04	II210910-2	1		1.048	mg/L	105	85	115			
L68534-14AS	AS	10/03/21 13:31	II210930-2	1	U	1.043	mg/L	104	85	115			
L68534-14ASD	ASD	10/03/21 13:40	II210910-2	1	U	1.05	mg/L	105	85	115	1	20	
WG528271													
WG528271ICV	ICV	10/03/21 16:59	II211001-1	2		1.9942	mg/L	100	95	105			
WG528271ICB	ICB	10/03/21 17:05				U	mg/L		-0.015	0.015			
WG528271LFB	LFB	10/03/21 17:17	II210910-2	1		1.07	mg/L	107	85	115			
L68534-09AS	AS	10/03/21 17:53	II210910-2	1	U	1.096	mg/L	110	85	115			
L68534-09ASD	ASD	10/03/21 17:56	II210910-2	1	U	1.077	mg/L	108	85	115	2	20	
L68670-02AS	AS	10/03/21 18:36	II210910-2	1	U	1.087	mg/L	109	85	115			
L68670-02ASD	ASD	10/03/21 18:39	II210910-2	1	U	1.089	mg/L	109	85	115	0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.0504	mg/L	101	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.00022	0.00022			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05		.04969	mg/L	99	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05	.00016	.05254	mg/L	105	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05	.00016	.05246	mg/L	105	70	130	0	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05	.517	.5658	mg/L	98	70	130			
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05	.517	.55915	mg/L	84	70	130	1	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.04589	mg/L	92	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.0011	0.0011			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.05		.04631	mg/L	93	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.05	.00443	.0507	mg/L	93	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.05	.00443	.0517	mg/L	95	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.05	U	.00787	mg/L	16	70	130			M2
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.05	U	.00804	mg/L	16	70	130	2	20	M2

WETLAB

ACZ Project ID: ***L68534***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528733													
WG528733ICV	ICV	10/05/21 18:22	MS211001-2	.05		.0487	mg/L	97	90	110			
WG528733ICB	ICB	10/05/21 18:24				U	mg/L		-0.0132	0.0132			
WG528733LFB	LFB	10/05/21 18:26	MS210927-3	.050075		.0539	mg/L	108	85	115			
L68534-03AS	AS	10/05/21 18:34	MS210927-3	.050075	U	.0545	mg/L	109	70	130			
L68534-03ASD	ASD	10/05/21 18:36	MS210927-3	.050075	U	.0555	mg/L	111	70	130	2	20	
L68766-04AS	AS	10/05/21 19:18	MS210927-3	.050075	105	102.9087	mg/L	-4176	70	130			M3
L68766-04ASD	ASD	10/05/21 19:20	MS210927-3	.050075	105	93.717	mg/L	-22532	70	130	9	20	M3

Western Environmental Testing Laboratory ACZ Project ID: ***L68534***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-01	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528202	Calcium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528202	Magnesium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528733	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528202	Sodium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-02	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528202	Calcium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528202	Magnesium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528733	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528202	Sodium, dissolved	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-03	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-04	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-05	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-06	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-07	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-08	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-09	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-10	WG528733	Aluminum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528573	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-11	WG528733	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-12	WG528733	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528271	Titanium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-13	WG528733	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528541	Bismuth, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528158	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528158	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528541	Gallium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528158	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-14	WG528733	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528541	Bismuth, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528541	Gallium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Western Environmental Testing Laboratory ACZ Project ID: ***L68534***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68534-15	WG528733	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Antimony, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Arsenic, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Barium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Beryllium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528541	Bismuth, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Cadmium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Chromium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Cobalt, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528733	Copper, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528541	Gallium, dissolved	M200.7 ICP	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Lead, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG529003	Manganese, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation.

Western Environmental Testing Laboratory ACZ Project ID: ***L68534***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					Additional preservation performed by the laboratory.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG528733	Molybdenum, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Nickel, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527990	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527418	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529003	Selenium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528733	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528733	Thallium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Tin, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528733	Uranium, dissolved	M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Vanadium, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68534
Date Received: 09/16/2021 11:19
Received By:
Date Printed: 9/17/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]		X	

L68534-01 Container B2452576 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-01 Container B2452578 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-02 Container B2452583 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-02 Container B2452584 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-03 Container B2452589 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-03 Container B2452590 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-04 Container B2452595 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-04 Container B2452596 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-05 Container B2452601 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-05 Container B2452602 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-06 Container B2452607 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-06 Container B2452608 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-07 Container B2452613 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-07 Container B2452614 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-08 Container B2452619 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-08 Container B2452620 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-09 Container B2452625 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-09 Container B2452626 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-10 Container B2452631 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-10 Container B2452632 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-11 Container B2452637 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-11 Container B2452638 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-12 Container B2452643 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-12 Container B2452644 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-13 Container B2452649 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-13 Container B2452650 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-14 Container B2452655 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-14 Container B2452656 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

Western Environmental Testing Laboratory

ACZ Project ID: L68534
Date Received: 09/16/2021 11:19
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L68534-15 Container B2452661 (GREEN): Added 4 mls nitric acid to the sub-sample to adjust the pH to the appropriate range.

L68534-15 Container B2452662 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?		X	

L68534-01 : A white, yellow container not received and a new container created from the raw .

L68534-02 : A white, yellow container not received and a new container created from the raw .

L68534-03 : A white, yellow container not received and a new container created from the raw .

L68534-04 : A white, yellow container not received and a new container created from the raw .

L68534-05 : A white, yellow container not received and a new container created from the raw .

L68534-06 : A white, yellow container not received and a new container created from the raw .

L68534-07 : A white, yellow container not received and a new container created from the raw .

L68534-08 : A white, yellow container not received and a new container created from the raw .

L68534-09 : A white, yellow container not received and a new container created from the raw .

L68534-10 : A white, yellow container not received and a new container created from the raw .

L68534-11 : A white, yellow container not received and a new container created from the raw .

L68534-12 : A white, yellow container not received and a new container created from the raw .

L68534-13 : A white, yellow container not received and a new container created from the raw .

L68534-14 : A white, yellow container not received and a new container created from the raw .

L68534-15 : A white, yellow container not received and a new container created from the raw .

16) Is there an Hg-1631 trip blank present?		X	

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68534
Date Received: 09/16/2021 11:19
Received By:
Date Printed: 9/17/2021

17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35960	11.6	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive Steamboat Springs, CO 80487 (970) 879-6590 | L68534

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D) 1631E						
21090322-001	9/9/2021 13:00	OT	4	✓	✓						
21090322-002	"	"	"	✓	✓						
21090322-003	"	"	"	✓	✓						
21090322-004	"	"	"	✓	✓						
21090322-005	"	"	"	✓	✓						
21090322-006	"	"	"	✓	✓						
21090322-007	"	"	"	✓	✓						
21090322-008	"	"	"	✓	✓						
21090322-009	"	"	"	✓	✓						
21090322-010	"	"	"	✓	✓						

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
CR	11:00 AM		9/16/21 11:15

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68534 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68534

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (1631E)
21090322-011	9/9/2021 13:00	OT	4	✓	✓
21090322-012	"	"	"	✓	✓
21090322-013	"	"	"	✓	✓
21090322-014	"	"	"	✓	✓
21090322-015	"	"	"	✓	✓
				✓	
				✓	
				✓	
				✓	
				✓	

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
CR	11:00AM		9/16/21 1115

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 04, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68513

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 15, 2021. This project has been assigned to ACZ's project number, L68513. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68513. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 03, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-001

ACZ Sample ID: ***L68513-01***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 12:08	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0551		*	mg/L	0.005	0.015	09/30/21 18:21	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 18:21	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0220		*	mg/L	0.0002	0.001	09/30/21 18:21	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0195		*	mg/L	0.0005	0.0025	09/30/21 18:21	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:21	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:34	jlw
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	09/23/21 20:34	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:21	bsu
Calcium, dissolved	M200.7 ICP	1	5.79		*	mg/L	0.1	0.5	09/23/21 20:34	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00211		*	mg/L	0.0005	0.002	09/30/21 18:21	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:21	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:21	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:34	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0515		*	mg/L	0.007	0.02	09/30/21 18:21	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:21	bsu
Lithium, dissolved	M200.7 ICP	1	0.0794		*	mg/L	0.008	0.04	09/23/21 20:34	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 20:34	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00109	B	*	mg/L	0.0004	0.002	09/30/21 18:21	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:22	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00427		*	mg/L	0.0002	0.0005	09/30/21 18:21	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:21	bsu
Potassium, dissolved	M200.7 ICP	1	8.14		*	mg/L	0.2	1	09/23/21 20:34	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:34	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00052		*	mg/L	0.0001	0.00025	09/30/21 18:21	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:21	bsu
Sodium, dissolved	M200.7 ICP	1	63.2		*	mg/L	0.2	1	09/23/21 20:34	jlw
Strontium, dissolved	M200.7 ICP	1	0.0362	B	*	mg/L	0.009	0.045	09/23/21 20:34	jlw
Thallium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	09/30/21 18:21	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0153		*	mg/L	0.0008	0.0025	09/30/21 18:21	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:06	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00010	B	*	mg/L	0.0001	0.0005	09/30/21 18:21	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00289		*	mg/L	0.0005	0.002	09/30/21 18:21	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:21	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-001

ACZ Sample ID: ***L68513-01***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	122		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	2.4	B	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	4.83		*	mg/L	0.4	2	09/28/21 15:31	krh
Conductivity @25C	SM2510B	1	334		*	umhos/cm	1	10	09/21/21 5:39	eep
Fluoride	M300.0 - Ion Chromatography	1	0.419		*	mg/L	0.05	0.25	09/28/21 15:31	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 5:50	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.031	B	*	mg/L	0.02	0.1	09/25/21 22:26	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 1:37	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	204		*	mg/L	20	40	09/15/21 20:40	eep
Sulfate	M300.0 - Ion Chromatography	1	17.0		*	mg/L	0.4	2	09/28/21 15:31	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-002

ACZ Sample ID: ***L68513-02***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 12:37	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0459		*	mg/L	0.005	0.015	09/30/21 18:23	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 18:23	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0235		*	mg/L	0.0002	0.001	09/30/21 18:23	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0178		*	mg/L	0.0005	0.0025	09/30/21 18:23	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:23	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:37	jlw
Boron, dissolved	M200.7 ICP	1	0.092	B	*	mg/L	0.03	0.1	09/23/21 20:37	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:23	bsu
Calcium, dissolved	M200.7 ICP	1	5.60		*	mg/L	0.1	0.5	09/23/21 20:37	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00294		*	mg/L	0.0005	0.002	09/30/21 18:23	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:23	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:23	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:37	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0551		*	mg/L	0.007	0.02	09/30/21 18:23	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:23	bsu
Lithium, dissolved	M200.7 ICP	1	0.0785		*	mg/L	0.008	0.04	09/23/21 20:37	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 20:37	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	09/30/21 18:23	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:23	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00468		*	mg/L	0.0002	0.0005	09/30/21 18:23	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:23	bsu
Potassium, dissolved	M200.7 ICP	1	6.80		*	mg/L	0.2	1	09/23/21 20:37	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:37	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00058		*	mg/L	0.0001	0.00025	09/30/21 18:23	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:23	bsu
Sodium, dissolved	M200.7 ICP	1	62.9		*	mg/L	0.2	1	09/23/21 20:37	jlw
Strontium, dissolved	M200.7 ICP	1	0.0328	B	*	mg/L	0.009	0.045	09/23/21 20:37	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:23	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0158		*	mg/L	0.0008	0.0025	09/30/21 18:23	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:09	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00010	B	*	mg/L	0.0001	0.0005	09/30/21 18:23	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00393		*	mg/L	0.0005	0.002	09/30/21 18:23	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:23	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-002

ACZ Sample ID: ***L68513-02***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	4.9	B	*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	115		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	4.90		*	mg/L	0.4	2	09/28/21 16:07	krh
Conductivity @25C	SM2510B	1	318		*	umhos/cm	1	10	09/21/21 5:49	eep
Fluoride	M300.0 - Ion Chromatography	1	0.448		*	mg/L	0.05	0.25	09/28/21 16:07	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14.0			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 5:52	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.031	B	*	mg/L	0.02	0.1	09/25/21 22:27	pjb
pH (lab)	SM4500H+ B									
pH		1	10.4	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/24/21 1:42	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/15/21 20:42	eep
Sulfate	M300.0 - Ion Chromatography	1	18.5		*	mg/L	0.4	2	09/28/21 16:07	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-003

ACZ Sample ID: ***L68513-03***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 13:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0208		*	mg/L	0.005	0.015	09/30/21 18:24	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 18:24	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0370		*	mg/L	0.0002	0.001	09/30/21 18:24	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00510		*	mg/L	0.0005	0.0025	09/30/21 18:24	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:24	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:40	jlw
Boron, dissolved	M200.7 ICP	1	0.096	B	*	mg/L	0.03	0.1	09/23/21 20:40	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:24	bsu
Calcium, dissolved	M200.7 ICP	1	5.37		*	mg/L	0.1	0.5	09/23/21 20:40	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00756		*	mg/L	0.0005	0.002	09/30/21 18:24	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:24	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:24	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:40	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0646		*	mg/L	0.007	0.02	09/30/21 18:24	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:24	bsu
Lithium, dissolved	M200.7 ICP	1	0.0705		*	mg/L	0.008	0.04	09/23/21 20:40	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 20:40	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.002	09/30/21 18:24	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:24	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00548		*	mg/L	0.0002	0.0005	09/30/21 18:24	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:24	bsu
Potassium, dissolved	M200.7 ICP	1	2.69		*	mg/L	0.2	1	09/23/21 20:40	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:40	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00057		*	mg/L	0.0001	0.00025	09/30/21 18:24	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:24	bsu
Sodium, dissolved	M200.7 ICP	1	59.9		*	mg/L	0.2	1	09/23/21 20:40	jlw
Strontium, dissolved	M200.7 ICP	1	0.0219	B	*	mg/L	0.009	0.045	09/23/21 20:40	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:24	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0173		*	mg/L	0.0008	0.0025	09/30/21 18:24	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:12	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	09/30/21 18:24	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00378		*	mg/L	0.0005	0.002	09/30/21 18:24	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:24	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-003

ACZ Sample ID: ***L68513-03***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	85.7		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	28.9		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.30		*	mg/L	0.4	2	09/28/21 16:43	krh
Conductivity @25C	SM2510B	1	290		*	umhos/cm	1	10	09/21/21 5:59	eep
Fluoride	M300.0 - Ion Chromatography	1	0.553		*	mg/L	0.05	0.25	09/28/21 16:43	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 5:54	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.025	B	*	mg/L	0.02	0.1	09/25/21 22:28	pjb
pH (lab)	SM4500H+ B									
pH		1	9.2	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/24/21 1:44	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	196		*	mg/L	20	40	09/15/21 20:43	eep
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	09/28/21 16:43	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-004

ACZ Sample ID: ***L68513-04***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 13:19	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0399		*	mg/L	0.005	0.015	09/30/21 18:26	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 18:26	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0358		*	mg/L	0.0002	0.001	09/30/21 18:26	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00491		*	mg/L	0.0005	0.0025	09/30/21 18:26	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:26	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:43	jlw
Boron, dissolved	M200.7 ICP	1	0.096	B	*	mg/L	0.03	0.1	09/23/21 20:43	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:26	bsu
Calcium, dissolved	M200.7 ICP	1	4.98		*	mg/L	0.1	0.5	09/23/21 20:43	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00316		*	mg/L	0.0005	0.002	09/30/21 18:26	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:26	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:26	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:43	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0615		*	mg/L	0.007	0.02	09/30/21 18:26	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:26	bsu
Lithium, dissolved	M200.7 ICP	1	0.0717		*	mg/L	0.008	0.04	09/23/21 20:43	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 20:43	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00053	B	*	mg/L	0.0004	0.002	09/30/21 18:26	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:38	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00530		*	mg/L	0.0002	0.0005	09/30/21 18:26	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:26	bsu
Potassium, dissolved	M200.7 ICP	1	2.91		*	mg/L	0.2	1	09/23/21 20:43	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:43	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00058		*	mg/L	0.0001	0.00025	09/30/21 18:26	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:26	bsu
Sodium, dissolved	M200.7 ICP	1	60.5		*	mg/L	0.2	1	09/23/21 20:43	jlw
Strontium, dissolved	M200.7 ICP	1	0.0211	B	*	mg/L	0.009	0.045	09/23/21 20:43	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:26	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0181		*	mg/L	0.0008	0.0025	09/30/21 18:26	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:15	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	09/30/21 18:26	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00386		*	mg/L	0.0005	0.002	09/30/21 18:26	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:26	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-004

ACZ Sample ID: ***L68513-04***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	72.5		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	42.6		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.75		*	mg/L	0.4	2	09/28/21 0:04	krh
Conductivity @25C	SM2510B	1	292		*	umhos/cm	1	10	09/21/21 6:09	eep
Fluoride	M300.0 - Ion Chromatography	1	0.505		*	mg/L	0.05	0.25	09/28/21 0:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 5:56	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.027	B	*	mg/L	0.02	0.1	09/25/21 22:34	pjb
pH (lab)	SM4500H+ B									
pH		1	9.4	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.018	B	*	mg/L	0.01	0.05	09/24/21 1:45	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/15/21 20:44	eep
Sulfate	M300.0 - Ion Chromatography	1	23.5		*	mg/L	0.4	2	09/28/21 0:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-005

ACZ Sample ID: ***L68513-05***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 13:34	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0491		*	mg/L	0.005	0.015	09/30/21 18:28	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	09/30/21 18:28	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0358		*	mg/L	0.0002	0.001	09/30/21 18:28	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00704		*	mg/L	0.0005	0.0025	09/30/21 18:28	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:28	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:53	jlw
Boron, dissolved	M200.7 ICP	1	0.099	B	*	mg/L	0.03	0.1	09/23/21 20:53	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:28	bsu
Calcium, dissolved	M200.7 ICP	1	4.98		*	mg/L	0.1	0.5	09/23/21 20:53	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00490		*	mg/L	0.0005	0.002	09/30/21 18:28	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:28	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:28	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:53	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0641		*	mg/L	0.007	0.02	09/30/21 18:28	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:28	bsu
Lithium, dissolved	M200.7 ICP	1	0.0726		*	mg/L	0.008	0.04	09/23/21 20:53	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 20:53	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00057	B	*	mg/L	0.0004	0.002	09/30/21 18:28	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:39	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00546		*	mg/L	0.0002	0.0005	09/30/21 18:28	bsu
Nickel, dissolved	M200.8 ICP-MS	1	0.00093	B	*	mg/L	0.0004	0.001	09/30/21 18:28	bsu
Potassium, dissolved	M200.7 ICP	1	2.93		*	mg/L	0.2	1	09/23/21 20:53	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:53	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	09/30/21 18:28	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:28	bsu
Sodium, dissolved	M200.7 ICP	1	61.1		*	mg/L	0.2	1	09/23/21 20:53	jlw
Strontium, dissolved	M200.7 ICP	1	0.0218	B	*	mg/L	0.009	0.045	09/23/21 20:53	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:28	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0147		*	mg/L	0.0008	0.0025	09/30/21 18:28	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:24	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	09/30/21 18:28	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00452		*	mg/L	0.0005	0.002	09/30/21 18:28	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:28	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-005

ACZ Sample ID: ***L68513-05***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	70.1		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	44.2		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	114		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.42		*	mg/L	0.4	2	09/28/21 0:40	krh
Conductivity @25C	SM2510B	1	293		*	umhos/cm	1	10	09/21/21 6:19	eep
Fluoride	M300.0 - Ion Chromatography	1	0.495		*	mg/L	0.05	0.25	09/28/21 0:40	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 5:58	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.029	B	*	mg/L	0.02	0.1	09/25/21 22:35	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.016	B	*	mg/L	0.01	0.05	09/24/21 1:46	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/15/21 20:46	eep
Sulfate	M300.0 - Ion Chromatography	1	23.6		*	mg/L	0.4	2	09/28/21 0:40	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-006

ACZ Sample ID: ***L68513-06***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 13:48	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.117		*	mg/L	0.005	0.015	09/30/21 18:29	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00074	B	*	mg/L	0.0004	0.002	09/30/21 18:29	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0299		*	mg/L	0.0002	0.001	09/30/21 18:29	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00845		*	mg/L	0.0005	0.0025	09/30/21 18:29	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:29	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 20:56	jlw
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	09/23/21 20:56	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:29	bsu
Calcium, dissolved	M200.7 ICP	1	3.81		*	mg/L	0.1	0.5	09/23/21 20:56	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00118	B	*	mg/L	0.0005	0.002	09/30/21 18:29	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:29	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:29	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 20:56	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0579		*	mg/L	0.007	0.02	09/30/21 18:29	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:29	bsu
Lithium, dissolved	M200.7 ICP	1	0.0755		*	mg/L	0.008	0.04	09/23/21 20:56	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 20:56	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00061	B	*	mg/L	0.0004	0.002	09/30/21 18:29	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:40	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00723		*	mg/L	0.0002	0.0005	09/30/21 18:29	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:29	bsu
Potassium, dissolved	M200.7 ICP	1	4.88		*	mg/L	0.2	1	09/23/21 20:56	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 20:56	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00066		*	mg/L	0.0001	0.00025	09/30/21 18:29	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:29	bsu
Sodium, dissolved	M200.7 ICP	1	60.6		*	mg/L	0.2	1	09/23/21 20:56	jlw
Strontium, dissolved	M200.7 ICP	1	0.0295	B	*	mg/L	0.009	0.045	09/23/21 20:56	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:29	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0136		*	mg/L	0.0008	0.0025	09/30/21 18:29	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:27	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 18:29	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00150	B	*	mg/L	0.0005	0.002	09/30/21 18:29	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:29	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-006

ACZ Sample ID: ***L68513-06***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	28.1		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	105		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	133		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.43		*	mg/L	0.4	2	09/28/21 1:16	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/21/21 6:38	eep
Fluoride	M300.0 - Ion Chromatography	1	0.435		*	mg/L	0.05	0.25	09/28/21 1:16	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.5			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:01	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.045	B	*	mg/L	0.02	0.1	09/25/21 22:36	pjb
pH (lab)	SM4500H+ B									
pH		1	9.8	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/24/21 1:48	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/15/21 20:47	eep
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	09/28/21 1:16	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-007

ACZ Sample ID: ***L68513-07***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 14:02	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.104		*	mg/L	0.005	0.015	09/30/21 18:37	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00061	B	*	mg/L	0.0004	0.002	09/30/21 18:37	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0260		*	mg/L	0.0002	0.001	09/30/21 18:37	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0121		*	mg/L	0.0005	0.0025	09/30/21 18:37	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:37	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:00	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	09/23/21 21:00	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:37	bsu
Calcium, dissolved	M200.7 ICP	1	4.23		*	mg/L	0.1	0.5	09/23/21 21:00	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00156	B	*	mg/L	0.0005	0.002	09/30/21 18:37	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:37	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:37	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:00	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0557		*	mg/L	0.007	0.02	09/30/21 18:37	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:37	bsu
Lithium, dissolved	M200.7 ICP	1	0.0757		*	mg/L	0.008	0.04	09/23/21 21:00	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 21:00	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00692		*	mg/L	0.0004	0.002	09/30/21 18:37	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:41	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00630		*	mg/L	0.0002	0.0005	09/30/21 18:37	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:37	bsu
Potassium, dissolved	M200.7 ICP	1	4.20		*	mg/L	0.2	1	09/23/21 21:00	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:00	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00059		*	mg/L	0.0001	0.00025	09/30/21 18:37	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:37	bsu
Sodium, dissolved	M200.7 ICP	1	61.0		*	mg/L	0.2	1	09/23/21 21:00	jlw
Strontium, dissolved	M200.7 ICP	1	0.0324	B	*	mg/L	0.009	0.045	09/23/21 21:00	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:37	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0129		*	mg/L	0.0008	0.0025	09/30/21 18:37	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:30	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 18:37	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00143	B	*	mg/L	0.0005	0.002	09/30/21 18:37	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:37	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-007

ACZ Sample ID: ***L68513-07***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	33.7		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	81.7		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.31		*	mg/L	0.4	2	09/28/21 1:52	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/21/21 6:48	eep
Fluoride	M300.0 - Ion Chromatography	1	0.406		*	mg/L	0.05	0.25	09/28/21 1:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:03	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.043	B	*	mg/L	0.02	0.1	09/25/21 22:38	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	09/24/21 1:49	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	192		*	mg/L	20	40	09/15/21 20:48	eep
Sulfate	M300.0 - Ion Chromatography	1	20.6		*	mg/L	0.4	2	09/28/21 1:52	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-008

ACZ Sample ID: ***L68513-08***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 14:17	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0852		*	mg/L	0.005	0.015	09/30/21 18:39	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0004	0.002	09/30/21 18:39	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0300		*	mg/L	0.0002	0.001	09/30/21 18:39	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00957		*	mg/L	0.0005	0.0025	09/30/21 18:39	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:39	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:09	jlw
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	09/23/21 21:09	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:39	bsu
Calcium, dissolved	M200.7 ICP	1	3.82		*	mg/L	0.1	0.5	09/23/21 21:09	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00159	B	*	mg/L	0.0005	0.002	09/30/21 18:39	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:39	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:39	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:09	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0633		*	mg/L	0.007	0.02	09/30/21 18:39	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:39	bsu
Lithium, dissolved	M200.7 ICP	1	0.0768		*	mg/L	0.008	0.04	09/23/21 21:09	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 21:09	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00077	B	*	mg/L	0.0004	0.002	09/30/21 18:39	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:41	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00621		*	mg/L	0.0002	0.0005	09/30/21 18:39	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:39	bsu
Potassium, dissolved	M200.7 ICP	1	4.79		*	mg/L	0.2	1	09/23/21 21:09	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:09	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	09/30/21 18:39	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:39	bsu
Sodium, dissolved	M200.7 ICP	1	61.1		*	mg/L	0.2	1	09/23/21 21:09	jlw
Strontium, dissolved	M200.7 ICP	1	0.0301	B	*	mg/L	0.009	0.045	09/23/21 21:09	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:39	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0134		*	mg/L	0.0008	0.0025	09/30/21 18:39	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:40	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	09/30/21 18:39	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00160	B	*	mg/L	0.0005	0.002	09/30/21 18:39	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:39	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-008

ACZ Sample ID: ***L68513-08***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	52.7		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	66.5		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.42		*	mg/L	0.4	2	09/28/21 3:03	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/21/21 6:58	eep
Fluoride	M300.0 - Ion Chromatography	1	0.437		*	mg/L	0.05	0.25	09/28/21 3:03	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.5			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:05	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.035	B	*	mg/L	0.02	0.1	09/25/21 22:39	pjb
pH (lab)	SM4500H+ B									
pH		1	9.8	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/24/21 1:50	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	196		*	mg/L	20	40	09/15/21 20:49	eep
Sulfate	M300.0 - Ion Chromatography	1	21.5		*	mg/L	0.4	2	09/28/21 3:03	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-009

ACZ Sample ID: ***L68513-09***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 14:31	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.135		*	mg/L	0.005	0.015	09/30/21 18:40	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00103	B	*	mg/L	0.0004	0.002	09/30/21 18:40	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0294		*	mg/L	0.0002	0.001	09/30/21 18:40	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00986		*	mg/L	0.0005	0.0025	09/30/21 18:40	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:40	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:13	jlw
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	09/23/21 21:13	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:40	bsu
Calcium, dissolved	M200.7 ICP	1	3.69		*	mg/L	0.1	0.5	09/23/21 21:13	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00245		*	mg/L	0.0005	0.002	09/30/21 18:40	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:40	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:40	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:13	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0588		*	mg/L	0.007	0.02	09/30/21 18:40	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:40	bsu
Lithium, dissolved	M200.7 ICP	1	0.0763		*	mg/L	0.008	0.04	09/23/21 21:13	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 21:13	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	09/30/21 18:40	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:42	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0181		*	mg/L	0.0002	0.0005	09/30/21 18:40	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:40	bsu
Potassium, dissolved	M200.7 ICP	1	7.03		*	mg/L	0.2	1	09/23/21 21:13	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:13	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00073		*	mg/L	0.0001	0.00025	09/30/21 18:40	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:40	bsu
Sodium, dissolved	M200.7 ICP	1	61.4		*	mg/L	0.2	1	09/23/21 21:13	jlw
Strontium, dissolved	M200.7 ICP	1	0.0307	B	*	mg/L	0.009	0.045	09/23/21 21:13	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:40	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0139		*	mg/L	0.0008	0.0025	09/30/21 18:40	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:43	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 18:40	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00159	B	*	mg/L	0.0005	0.002	09/30/21 18:40	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:40	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-009

ACZ Sample ID: ***L68513-09***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	41.5		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	78.6		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.42		*	mg/L	0.4	2	09/28/21 3:21	krh
Conductivity @25C	SM2510B	1	314		*	umhos/cm	1	10	09/21/21 7:08	eep
Fluoride	M300.0 - Ion Chromatography	1	0.431		*	mg/L	0.05	0.25	09/28/21 3:21	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.2			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:07	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.029	B	*	mg/L	0.02	0.1	09/25/21 22:41	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	09/24/21 1:51	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/16/21 14:14	emk
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	09/28/21 3:21	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-010

ACZ Sample ID: ***L68513-10***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 14:45	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0841		*	mg/L	0.005	0.015	09/30/21 18:42	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00047	B	*	mg/L	0.0004	0.002	09/30/21 18:42	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0287		*	mg/L	0.0002	0.001	09/30/21 18:42	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00968		*	mg/L	0.0005	0.0025	09/30/21 18:42	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:42	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:16	jlw
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	09/23/21 21:16	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:42	bsu
Calcium, dissolved	M200.7 ICP	1	3.49		*	mg/L	0.1	0.5	09/23/21 21:16	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00134	B	*	mg/L	0.0005	0.002	09/30/21 18:42	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:42	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:42	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:16	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0638		*	mg/L	0.007	0.02	09/30/21 18:42	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:42	bsu
Lithium, dissolved	M200.7 ICP	1	0.0760		*	mg/L	0.008	0.04	09/23/21 21:16	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 21:16	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00064	B	*	mg/L	0.0004	0.002	09/30/21 18:42	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:43	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00975		*	mg/L	0.0002	0.0005	09/30/21 18:42	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:42	bsu
Potassium, dissolved	M200.7 ICP	1	5.43		*	mg/L	0.2	1	09/23/21 21:16	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:16	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00058		*	mg/L	0.0001	0.00025	09/30/21 18:42	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:42	bsu
Sodium, dissolved	M200.7 ICP	1	61.3		*	mg/L	0.2	1	09/23/21 21:16	jlw
Strontium, dissolved	M200.7 ICP	1	0.0317	B	*	mg/L	0.009	0.045	09/23/21 21:16	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:42	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0150		*	mg/L	0.0008	0.0025	09/30/21 18:42	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:46	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 18:42	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00145	B	*	mg/L	0.0005	0.002	09/30/21 18:42	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:42	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-010

ACZ Sample ID: ***L68513-10***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	49.1		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	71.7		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.37		*	mg/L	0.4	2	09/28/21 3:39	krh
Conductivity @25C	SM2510B	1	306		*	umhos/cm	1	10	09/21/21 7:18	eep
Fluoride	M300.0 - Ion Chromatography	1	0.431		*	mg/L	0.05	0.25	09/28/21 3:39	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		8.7			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:09	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.030	B	*	mg/L	0.02	0.1	09/25/21 22:44	pjb
pH (lab)	SM4500H+ B									
pH		1	9.9	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	09/24/21 1:52	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/16/21 14:16	emk
Sulfate	M300.0 - Ion Chromatography	1	20.7		*	mg/L	0.4	2	09/28/21 3:39	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-011

ACZ Sample ID: ***L68513-11***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 14:59	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0958		*	mg/L	0.005	0.015	09/30/21 18:44	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00054	B	*	mg/L	0.0004	0.002	09/30/21 18:44	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0286		*	mg/L	0.0002	0.001	09/30/21 18:44	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0149		*	mg/L	0.0005	0.0025	09/30/21 18:44	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:44	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:19	jlw
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	09/23/21 21:19	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:44	bsu
Calcium, dissolved	M200.7 ICP	1	3.62		*	mg/L	0.1	0.5	09/23/21 21:19	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00141	B	*	mg/L	0.0005	0.002	09/30/21 18:44	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:44	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:44	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:19	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0628		*	mg/L	0.007	0.02	09/30/21 18:44	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:44	bsu
Lithium, dissolved	M200.7 ICP	1	0.0766		*	mg/L	0.008	0.04	09/23/21 21:19	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 21:19	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0004	0.002	09/30/21 18:44	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 14:46	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0112		*	mg/L	0.0002	0.0005	09/30/21 18:44	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:44	bsu
Potassium, dissolved	M200.7 ICP	1	5.68		*	mg/L	0.2	1	09/23/21 21:19	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:19	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	09/30/21 18:44	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:44	bsu
Sodium, dissolved	M200.7 ICP	1	61.4		*	mg/L	0.2	1	09/23/21 21:19	jlw
Strontium, dissolved	M200.7 ICP	1	0.0330	B	*	mg/L	0.009	0.045	09/23/21 21:19	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:44	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0119		*	mg/L	0.0008	0.0025	09/30/21 18:44	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:49	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	09/30/21 18:44	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00142	B	*	mg/L	0.0005	0.002	09/30/21 18:44	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:44	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-011

ACZ Sample ID: ***L68513-11***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	96.5		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	32.6		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	129		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.36		*	mg/L	0.4	2	09/28/21 3:57	krh
Conductivity @25C	SM2510B	1	308		*	umhos/cm	1	10	09/21/21 10:39	eep
Fluoride	M300.0 - Ion Chromatography	1	0.433		*	mg/L	0.05	0.25	09/28/21 3:57	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.0			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:12	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.030	B	*	mg/L	0.02	0.1	09/25/21 22:51	pjb
pH (lab)	SM4500H+ B									
pH		1	9.9	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	09/24/21 1:56	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/16/21 14:18	emk
Sulfate	M300.0 - Ion Chromatography	1	20.9		*	mg/L	0.4	2	09/28/21 3:57	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-012

ACZ Sample ID: ***L68513-12***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 15:28	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.125		*	mg/L	0.005	0.015	09/30/21 18:45	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00073	B	*	mg/L	0.0004	0.002	09/30/21 18:45	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0258		*	mg/L	0.0002	0.001	09/30/21 18:45	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0168		*	mg/L	0.0005	0.0025	09/30/21 18:45	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:45	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:22	jlw
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	09/23/21 21:22	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:45	bsu
Calcium, dissolved	M200.7 ICP	1	4.18		*	mg/L	0.1	0.5	09/23/21 21:22	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00341		*	mg/L	0.0005	0.002	09/30/21 18:45	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000062	B	*	mg/L	0.00005	0.00025	09/30/21 18:45	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:45	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:22	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0546		*	mg/L	0.007	0.02	09/30/21 18:45	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:45	bsu
Lithium, dissolved	M200.7 ICP	1	0.0783		*	mg/L	0.008	0.04	09/23/21 21:22	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 21:22	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00056	B	*	mg/L	0.0004	0.002	09/30/21 18:45	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:22	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00750		*	mg/L	0.0002	0.0005	09/30/21 18:45	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:45	bsu
Potassium, dissolved	M200.7 ICP	1	5.54		*	mg/L	0.2	1	09/23/21 21:22	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:22	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00063		*	mg/L	0.0001	0.00025	09/30/21 18:45	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:45	bsu
Sodium, dissolved	M200.7 ICP	1	62.3		*	mg/L	0.2	1	09/23/21 21:22	jlw
Strontium, dissolved	M200.7 ICP	1	0.0399	B	*	mg/L	0.009	0.045	09/23/21 21:22	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:45	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0166		*	mg/L	0.0008	0.0025	09/30/21 18:45	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:52	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/30/21 18:45	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00163	B	*	mg/L	0.0005	0.002	09/30/21 18:45	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:45	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-012

ACZ Sample ID: ***L68513-12***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	35.8		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	84.5		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.46		*	mg/L	0.4	2	09/28/21 4:15	krh
Conductivity @25C	SM2510B	1	312		*	umhos/cm	1	10	09/21/21 10:50	eep
Fluoride	M300.0 - Ion Chromatography	1	0.426		*	mg/L	0.05	0.25	09/28/21 4:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		10			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:14	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.033	B	*	mg/L	0.02	0.1	09/25/21 22:52	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 1:58	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/16/21 14:20	emk
Sulfate	M300.0 - Ion Chromatography	1	21.4		*	mg/L	0.4	2	09/28/21 4:15	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-013

ACZ Sample ID: ***L68513-13***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 15:57	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0984		*	mg/L	0.005	0.015	09/30/21 18:47	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00043	B	*	mg/L	0.0004	0.002	09/30/21 18:47	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0236		*	mg/L	0.0002	0.001	09/30/21 18:47	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0248		*	mg/L	0.0005	0.0025	09/30/21 18:47	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:47	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/23/21 21:26	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	09/23/21 21:26	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:47	bsu
Calcium, dissolved	M200.7 ICP	1	3.98		*	mg/L	0.1	0.5	09/23/21 21:26	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00193	B	*	mg/L	0.0005	0.002	09/30/21 18:47	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000060	B	*	mg/L	0.00005	0.00025	09/30/21 18:47	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:47	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/23/21 21:26	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0491		*	mg/L	0.007	0.02	09/30/21 18:47	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:47	bsu
Lithium, dissolved	M200.7 ICP	1	0.0774		*	mg/L	0.008	0.04	09/23/21 21:26	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/23/21 21:26	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00054	B	*	mg/L	0.0004	0.002	09/30/21 18:47	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:25	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00564		*	mg/L	0.0002	0.0005	09/30/21 18:47	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:47	bsu
Potassium, dissolved	M200.7 ICP	1	5.37		*	mg/L	0.2	1	09/23/21 21:26	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/23/21 21:26	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00050		*	mg/L	0.0001	0.00025	09/30/21 18:47	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:47	bsu
Sodium, dissolved	M200.7 ICP	1	61.7		*	mg/L	0.2	1	09/23/21 21:26	jlw
Strontium, dissolved	M200.7 ICP	1	0.0460		*	mg/L	0.009	0.045	09/23/21 21:26	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:47	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.149		*	mg/L	0.0008	0.0025	09/30/21 18:47	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 13:55	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/30/21 18:47	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00130	B	*	mg/L	0.0005	0.002	09/30/21 18:47	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:47	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-013

ACZ Sample ID: ***L68513-13***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	28.5		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	93.1		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.38		*	mg/L	0.4	2	09/28/21 4:51	krh
Conductivity @25C	SM2510B	1	313		*	umhos/cm	1	10	09/21/21 11:00	eep
Fluoride	M300.0 - Ion Chromatography	1	0.403		*	mg/L	0.05	0.25	09/28/21 4:51	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.9			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:16	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.029	B	*	mg/L	0.02	0.1	09/25/21 22:53	pjb
pH (lab)	SM4500H+ B									
pH		1	10.1	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	09/24/21 2:00	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/16/21 14:22	emk
Sulfate	M300.0 - Ion Chromatography	1	18.9		*	mg/L	0.4	2	09/28/21 4:51	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-014

ACZ Sample ID: ***L68513-14***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/20/21 16:11	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0844		*	mg/L	0.005	0.015	09/30/21 18:49	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.002	09/30/21 18:49	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0258		*	mg/L	0.0002	0.001	09/30/21 18:49	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0177		*	mg/L	0.0005	0.0025	09/30/21 18:49	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	09/30/21 18:49	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/26/21 19:30	kja
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	09/26/21 19:30	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	09/30/21 18:49	bsu
Calcium, dissolved	M200.7 ICP	1	3.50		*	mg/L	0.1	0.5	09/26/21 19:30	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00223		*	mg/L	0.0005	0.002	09/30/21 18:49	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000052	B	*	mg/L	0.00005	0.00025	09/30/21 18:49	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	09/30/21 18:49	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/26/21 19:30	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0364		*	mg/L	0.007	0.02	09/30/21 18:49	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:49	bsu
Lithium, dissolved	M200.7 ICP	1	0.0771		*	mg/L	0.008	0.04	09/26/21 19:30	kja
Magnesium, dissolved	M200.7 ICP	1	0.22	B	*	mg/L	0.2	1	09/26/21 19:30	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00044	B	*	mg/L	0.0004	0.002	09/30/21 18:49	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/22/21 15:26	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00582		*	mg/L	0.0002	0.0005	09/30/21 18:49	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	09/30/21 18:49	bsu
Potassium, dissolved	M200.7 ICP	1	6.57		*	mg/L	0.2	1	09/26/21 19:30	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/26/21 19:30	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00056		*	mg/L	0.0001	0.00025	09/30/21 18:49	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:49	bsu
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/26/21 19:30	kja
Strontium, dissolved	M200.7 ICP	1	0.0391	B	*	mg/L	0.009	0.045	09/26/21 19:30	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	09/30/21 18:49	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0134		*	mg/L	0.0008	0.0025	09/30/21 18:49	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 14:54	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	09/30/21 18:49	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00153	B	*	mg/L	0.0005	0.002	09/30/21 18:49	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	09/30/21 18:49	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090376-014

ACZ Sample ID: ***L68513-14***
Date Sampled: *09/10/21 13:00*
Date Received: *09/15/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	42.3		*	mg/L	2	20	09/21/21 0:00	eep
Carbonate as CaCO3		1	81.6		*	mg/L	2	20	09/21/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/21/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/21/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.02		*	mg/L	0.4	2	09/29/21 16:48	krh
Conductivity @25C	SM2510B	1	314		*	umhos/cm	1	10	09/21/21 11:09	eep
Fluoride	M300.0 - Ion Chromatography	1	0.397		*	mg/L	0.05	0.25	09/29/21 16:48	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.7			mg/L	0.2	5	10/04/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/23/21 6:18	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.031	B	*	mg/L	0.02	0.1	09/25/21 22:54	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/21/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/21/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.013	B	*	mg/L	0.01	0.05	09/24/21 2:01	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	182		*	mg/L	20	40	09/16/21 14:24	emk
Sulfate	M300.0 - Ion Chromatography	1	18.9		*	mg/L	0.4	2	09/29/21 16:48	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527612													
WG527612PBW1	PBW	09/20/21 20:36				7.4	mg/L		-20	20			
WG527612LCSW3	LCSW	09/20/21 20:54	WC210917-2	820.0001		775	mg/L	95	90	110			
WG527612LCSW6	LCSW	09/21/21 0:45	WC210917-2	820.0001		813.6	mg/L	99	90	110			
WG527612PBW2	PBW	09/21/21 0:52				U	mg/L		-20	20			
WG527612LCSW9	LCSW	09/21/21 4:27	WC210917-2	820.0001		801.6	mg/L	98	90	110			
WG527612PBW3	PBW	09/21/21 4:35				U	mg/L		-20	20			
L68513-05DUP	DUP	09/21/21 6:28			114	114.3	mg/L				0	20	
L68527-01DUP	DUP	09/21/21 11:27			25.1	24	mg/L				4	20	
WG527612LCSW12	LCSW	09/21/21 11:46	WC210917-2	820.0001		819.6	mg/L	100	90	110			
WG527612PBW4	PBW	09/21/21 11:53				U	mg/L		-20	20			
WG527612LCSW15	LCSW	09/21/21 15:41	WC210917-2	820.0001		828.1	mg/L	101	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.1		.1089	mg/L	109	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.011	0.011			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.050065		.0568	mg/L	113	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.050065	.117	.1749	mg/L	116	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.050065	.117	.1724	mg/L	111	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.050065	.0223	.0779	mg/L	111	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.050065	.0223	.0741	mg/L	103	70	130	5	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.0201		.0193	mg/L	96	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00088	0.00088			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.01		.01039	mg/L	104	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.01	.00074	.00984	mg/L	91	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.01	.00074	.01	mg/L	93	70	130	2	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.01	U	.0093	mg/L	93	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.01	U	.00942	mg/L	94	70	130	1	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05228	mg/L	105	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00044	0.00044			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05005		.05396	mg/L	108	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05005	.0299	.08237	mg/L	105	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05005	.0299	.0832	mg/L	106	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05005	U	.05309	mg/L	106	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05005	U	.05288	mg/L	106	70	130	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05327	mg/L	107	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.0011	0.0011			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.049985		.05549	mg/L	111	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.049985	.00845	.06201	mg/L	107	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.049985	.00845	.06302	mg/L	109	70	130	2	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.049985	.0329	.08711	mg/L	108	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.049985	.0329	.08765	mg/L	110	70	130	1	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.051691	mg/L	103	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.000176	0.000176			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05005		.056606	mg/L	113	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05005	U	.057986	mg/L	116	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05005	U	.056875	mg/L	114	70	130	2	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05005	U	.052327	mg/L	105	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05005	U	.050532	mg/L	101	70	130	3	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	2		1.934	mg/L	97	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.12	0.12			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	1		1.003	mg/L	100	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	1	U	.985	mg/L	99	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	1	U	.988	mg/L	99	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	1	U	.995	mg/L	100	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	1	U	.995	mg/L	100	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		1.969	mg/L	98	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.12	0.12			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	1		.975	mg/L	98	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	1	U	.983	mg/L	98	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	1	U	.962	mg/L	96	85	115	2	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	2		1.943	mg/L	97	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.09	0.09			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	.5005		.499	mg/L	100	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	.5005	.096	.582	mg/L	97	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	.5005	.096	.591	mg/L	99	85	115	2	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	.5005	.087	.567	mg/L	96	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	.5005	.087	.564	mg/L	95	85	115	1	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		2.011	mg/L	101	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.09	0.09			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.5005		.521	mg/L	104	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.5005	.086	.608	mg/L	104	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.5005	.086	.604	mg/L	103	85	115	1	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.052269	mg/L	105	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00011	0.00011			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05005		.054421	mg/L	109	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05005	U	.052851	mg/L	106	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05005	U	.05413	mg/L	108	70	130	2	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05005	.0979	.151388	mg/L	107	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05005	.0979	.152088	mg/L	108	70	130	0	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	100		99.09	mg/L	99	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.3	0.3			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	67.98972		69.68	mg/L	102	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	67.98972	4.98	73.24	mg/L	100	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	67.98972	4.98	72.95	mg/L	100	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	67.98972	3.98	72.86	mg/L	101	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	67.98972	3.98	73.13	mg/L	102	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	100		99.61	mg/L	100	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.3	0.3			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	67.98972		69.03	mg/L	102	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	67.98972	6.12	74.85	mg/L	101	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	67.98972	6.12	75.18	mg/L	102	85	115	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG526455													
WG526455ICV	ICV	09/07/21 21:29	WI210907-3	19.96		19.82	mg/L	99	90	110			
WG526455ICB	ICB	09/07/21 21:47				U	mg/L		-0.4	0.4			
WG527976													
WG527976LFB	LFB	09/24/21 16:42	WI210907-6	30		29.88	mg/L	100	90	110			
L68513-01DUP	DUP	09/28/21 15:49			4.83	4.84	mg/L				0	20	
L68513-02AS	AS	09/28/21 16:25	WI210907-6	30	4.9	34.96	mg/L	100	90	110			
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528109LFB1	LFB	09/27/21 19:53	WI210907-6	30		29.53	mg/L	98	90	110			
L68513-04DUP	DUP	09/28/21 0:22			5.75	5.76	mg/L				0	20	
L68513-05AS	AS	09/28/21 0:58	WI210907-6	30	5.42	35.21	mg/L	99	90	110			
L68513-06DUP	DUP	09/28/21 1:34			5.43	5.46	mg/L				1	20	
L68513-07AS	AS	09/28/21 2:45	WI210907-6	30	5.31	35.18	mg/L	100	90	110			
WG528109LFB2	LFB	09/28/21 4:33	WI210907-6	30		29.6	mg/L	99	90	110			
L68513-13DUP	DUP	09/28/21 5:09			5.38	5.37	mg/L				0	20	
L68513-14AS	AS	09/29/21 17:06	WI210907-6	30	5.02	33.67	mg/L	96	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05274	mg/L	105	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.0011	0.0011			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05		.0539	mg/L	108	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05	.00118	.05232	mg/L	102	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05	.00118	.05287	mg/L	103	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05	U	.05213	mg/L	104	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05	U	.05145	mg/L	103	70	130	1	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.053687	mg/L	107	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00011	0.00011			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05005		.05403	mg/L	108	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05005	U	.054902	mg/L	110	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05005	U	.054223	mg/L	108	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05005	.119	.1699	mg/L	102	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05005	.119	.165497	mg/L	93	70	130	3	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527612													
WG527612LCSW2	LCSW	09/20/21 20:43	PCN63140	1408		1408	umhos/cm	100	90	110			
WG527612LCSW5	LCSW	09/21/21 0:32	PCN63140	1408		1400	umhos/cm	99	90	110			
WG527612LCSW8	LCSW	09/21/21 4:16	PCN63140	1408		1393	umhos/cm	99	90	110			
L68513-05DUP	DUP	09/21/21 6:28			293	293	umhos/cm				0	20	
L68527-01DUP	DUP	09/21/21 11:27			159	159	umhos/cm				0	20	
WG527612LCSW11	LCSW	09/21/21 11:33	PCN63140	1408		1392	umhos/cm	99	90	110			
WG527612LCSW14	LCSW	09/21/21 15:28	PCN63140	1408		1386	umhos/cm	98	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05304	mg/L	106	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00176	0.00176			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05		.0538	mg/L	108	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05	U	.0502	mg/L	100	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05	U	.05068	mg/L	101	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05	.00722	.05694	mg/L	99	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05	.00722	.05676	mg/L	99	70	130	0	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG526455													
WG526455ICV	ICV	09/07/21 21:29	WI210907-3	4.004		4.209	mg/L	105	90	110			
WG526455ICB	ICB	09/07/21 21:47				U	mg/L		-0.05	0.05			
WG527976													
WG527976LFB	LFB	09/24/21 16:42	WI210907-6	1.5		1.498	mg/L	100	90	110			
L68513-01DUP	DUP	09/28/21 15:49			.419	.419	mg/L				0	20	RA
L68513-02AS	AS	09/28/21 16:25	WI210907-6	1.5	.448	1.905	mg/L	97	90	110			
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528109LFB1	LFB	09/27/21 19:53	WI210907-6	1.5		1.473	mg/L	98	90	110			
L68513-04DUP	DUP	09/28/21 0:22			.505	.505	mg/L				0	20	
L68513-05AS	AS	09/28/21 0:58	WI210907-6	1.5	.495	1.921	mg/L	95	90	110			
L68513-06DUP	DUP	09/28/21 1:34			.435	.435	mg/L				0	20	RA
L68513-07AS	AS	09/28/21 2:45	WI210907-6	1.5	.406	1.84	mg/L	96	90	110			
WG528109LFB2	LFB	09/28/21 4:33	WI210907-6	1.5		1.433	mg/L	96	90	110			
L68513-13DUP	DUP	09/28/21 5:09			.403	.401	mg/L				0	20	RA
L68513-14AS	AS	09/29/21 17:06	WI210907-6	1.5	.397	1.789	mg/L	93	90	110			

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	2		1.93	mg/L	97	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.3	0.3			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	.9822		1.02	mg/L	104	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	.9822	U	.96	mg/L	98	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	.9822	U	.98	mg/L	100	85	115	2	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	.9822	U	.99	mg/L	101	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	.9822	U	.99	mg/L	101	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		2.03	mg/L	102	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.3	0.3			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.9822		.98	mg/L	100	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.9822	U	1.05	mg/L	107	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.9822	U	1.03	mg/L	105	85	115	2	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.10016		.1017	mg/L	102	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.0154	0.0154			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.0501		.055	mg/L	110	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.0501	.0579	.1043	mg/L	93	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.0501	.0579	.1084	mg/L	101	70	130	4	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.0501	1.37	1.4029	mg/L	66	70	130			M3
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.0501	1.37	1.3683	mg/L	-3	70	130	2	20	M3

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05481	mg/L	110	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00022	0.00022			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05005		.0561	mg/L	112	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05005	U	.05538	mg/L	111	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05005	U	.05596	mg/L	112	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05005	U	.05556	mg/L	111	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05005	U	.05595	mg/L	112	70	130	1	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	2		1.9295	mg/L	96	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.024	0.024			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	.999		.9546	mg/L	96	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	.999	.0717	1.026	mg/L	96	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	.999	.0717	1.029	mg/L	96	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	.999	.0774	1.028	mg/L	95	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	.999	.0774	1.031	mg/L	95	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		1.9818	mg/L	99	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.024	0.024			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.999		.9619	mg/L	96	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.999	.0731	1.035	mg/L	96	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.999	.0731	1.033	mg/L	96	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	100		95.19	mg/L	95	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.6	0.6			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	49.99828		48.47	mg/L	97	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	49.99828	U	48.04	mg/L	96	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	49.99828	U	47.86	mg/L	96	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	49.99828	U	48.26	mg/L	97	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	49.99828	U	48.32	mg/L	97	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	100		96.2	mg/L	96	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.6	0.6			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	49.99828		48.6	mg/L	97	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	49.99828	.23	48.67	mg/L	97	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	49.99828	.23	49.1	mg/L	98	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05389	mg/L	108	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00088	0.00088			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.0499		.05446	mg/L	109	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.0499	.00061	.05412	mg/L	107	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.0499	.00061	.05366	mg/L	106	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.0499	8.54	8.52949	mg/L	-21	70	130			M3
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.0499	8.54	8.43024	mg/L	-220	70	130	1	20	M3

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527686													
WG527686ICV	ICV	09/22/21 13:18	HG210913-3	.00501		.00509	mg/L	102	95	105			
WG527686ICB	ICB	09/22/21 13:19				U	mg/L		-0.0002	0.0002			
WG527683													
WG527683LRB	LRB	09/22/21 13:57				U	mg/L		-0.00044	0.00044			
WG527683LFB	LFB	09/22/21 13:58	HG210913-6	.002002		.0019	mg/L	95	85	115			
L68496-03LFM	LFM	09/22/21 14:18	HG210913-6	.002002	U	.00178	mg/L	89	85	115			
L68496-03LFMD	LFMD	09/22/21 14:19	HG210913-6	.002002	U	.00178	mg/L	89	85	115	0	20	
WG527684													
WG527684LRB	LRB	09/22/21 14:36				U	mg/L		-0.00044	0.00044			
WG527684LFB	LFB	09/22/21 14:37	HG210913-6	.002002		.0018	mg/L	90	85	115			
L68521-02LFM	LFM	09/22/21 14:48	HG210913-6	.002002	U	.00178	mg/L	89	85	115			
L68521-02LFMD	LFMD	09/22/21 14:49	HG210913-6	.002002	U	.00174	mg/L	87	85	115	2	20	
WG527786													
WG527786LRB	LRB	09/22/21 15:21				U	mg/L		-0.00044	0.00044			
WG527786LFB	LFB	09/22/21 15:22	HG210913-6	.002002		.00183	mg/L	91	85	115			
L68513-12LFM	LFM	09/22/21 15:23	HG210913-6	.002002	U	.00191	mg/L	95	85	115			
L68513-12LFMD	LFMD	09/22/21 15:24	HG210913-6	.002002	U	.00203	mg/L	101	85	115	6	20	

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.01992		.02079	mg/L	104	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00044	0.00044			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05005		.05502	mg/L	110	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05005	.00723	.06076	mg/L	107	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05005	.00723	.06108	mg/L	108	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05005	U	.05432	mg/L	109	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05005	U	.0546	mg/L	109	70	130	1	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05215	mg/L	104	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00088	0.00088			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05		.05307	mg/L	106	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05	U	.04889	mg/L	98	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05	U	.04953	mg/L	99	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05	.657	.69404	mg/L	74	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05	.657	.71828	mg/L	123	70	130	3	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528008													
WG528008ICV	ICV	09/25/21 21:01	WI210904-1	2.4161		2.404	mg/L	99	90	110			
WG528008ICB	ICB	09/25/21 21:03				U	mg/L		-0.02	0.02			
WG528010													
WG528010LFB1	LFB	09/25/21 22:00	WI210331-13	2		1.958	mg/L	98	90	110			
L68502-03AS	AS	09/25/21 22:22	WI210331-13	2	.058	2.088	mg/L	102	90	110			
L68502-04DUP	DUP	09/25/21 22:25			.078	.078	mg/L				0	20	RA
WG528010LFB2	LFB	09/25/21 22:40	WI210331-13	2		2.015	mg/L	101	90	110			
L68513-09AS	AS	09/25/21 22:43	WI210331-13	2	.029	2.075	mg/L	102	90	110			
L68513-10DUP	DUP	09/25/21 22:45			.03	.028	mg/L				7	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527612													
WG527612LCSW1	LCSW	09/20/21 20:41	PCN62948	6		6.1	units	102	5.9	6.1			
WG527612LCSW4	LCSW	09/21/21 0:30	PCN62948	6		6.1	units	102	5.9	6.1			
WG527612LCSW7	LCSW	09/21/21 4:14	PCN62948	6		6.1	units	102	5.9	6.1			
L68513-05DUP	DUP	09/21/21 6:28			9.5	9.5	units				0	20	
L68527-01DUP	DUP	09/21/21 11:27			7.7	7.6	units				1	20	
WG527612LCSW10	LCSW	09/21/21 11:31	PCN62948	6		6.1	units	102	5.9	6.1			
WG527612LCSW13	LCSW	09/21/21 15:27	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527924													
WG527924ICV	ICV	09/24/21 0:19	WI210831-4	.6523		.68	mg/L	104	90	110			
WG527924ICB	ICB	09/24/21 0:21				U	mg/L		-0.01	0.01			
WG527926													
WG527216LRB	LRB	09/24/21 1:28				U	mg/L		-0.01	0.01			
WG527216LFB	LFB	09/24/21 1:29	PT2X	1		.962	mg/L	96	90	110			
WG527531LRB	LRB	09/24/21 1:35				U	mg/L		-0.01	0.01			
WG527531LFB	LFB	09/24/21 1:36	WI210907-2	.5		.502	mg/L	100	90	110			
L68513-01LFM	LFM	09/24/21 1:39	WI210907-2	.5	U	.497	mg/L	99	90	110			
L68513-02DUP	DUP	09/24/21 1:43			.012	U	mg/L				200	20	RA
L68513-11LFM	LFM	09/24/21 1:57	WI210907-2	.5	.011	.511	mg/L	100	90	110			
L68513-12DUP	DUP	09/24/21 1:59			U	U	mg/L				0	20	RA

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	20		19.64	mg/L	98	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.6	0.6			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	99.96008		99.29	mg/L	99	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	99.96008	2.91	101.7	mg/L	99	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	99.96008	2.91	101.5	mg/L	99	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	99.96008	5.37	104.7	mg/L	99	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	99.96008	5.37	104.7	mg/L	99	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	20		19.76	mg/L	99	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.6	0.6			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	99.96008		99.28	mg/L	99	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	99.96008	2.51	101.5	mg/L	99	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	99.96008	2.51	101.8	mg/L	99	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527308													
WG527308PBW	PBW	09/15/21 20:20				U	mg/L		-20	20			
WG527308LCSW	LCSW	09/15/21 20:21	PCN64120	1000		976	mg/L	98	80	120			
L63929-34DUP	DUP	09/15/21 20:34			U	U	mg/L				0	10	RA
WG527386													
WG527386PBW	PBW	09/16/21 13:45				U	mg/L		-20	20			
WG527386LCSW	LCSW	09/16/21 13:46	PCN64119	1000		980	mg/L	98	80	120			
L68528-02DUP	DUP	09/16/21 14:29			466	470	mg/L				1	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	2		1.954	mg/L	98	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.15	0.15			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	1.0017		1.002	mg/L	100	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	1.0017	U	.999	mg/L	100	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	1.0017	U	.997	mg/L	100	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	1.0017	U	.997	mg/L	100	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	1.0017	U	1.009	mg/L	101	85	115	1	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		2.02	mg/L	101	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.15	0.15			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	1.0017		1.034	mg/L	103	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	1.0017	U	1.052	mg/L	105	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	1.0017	U	1.033	mg/L	103	85	115	2	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.04952	mg/L	99	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00022	0.00022			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05		.05065	mg/L	101	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05	.00066	.04809	mg/L	95	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05	.00066	.05045	mg/L	100	70	130	5	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05	.00522	.05846	mg/L	106	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05	.00522	.05695	mg/L	103	70	130	3	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.02		.02039	mg/L	102	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00022	0.00022			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.01		.0106	mg/L	106	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.01	U	.00792	mg/L	79	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.01	U	.00704	mg/L	70	70	130	12	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.01	U	.00984	mg/L	98	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.01	U	.00991	mg/L	99	70	130	1	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	100		98.86	mg/L	99	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.6	0.6			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	100.007		99.33	mg/L	99	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	100.007	60.5	156.9	mg/L	96	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	100.007	60.5	156.5	mg/L	96	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	100.007	61.7	158.4	mg/L	97	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	100.007	61.7	158.1	mg/L	96	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	100		100.31	mg/L	100	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.6	0.6			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	100.007		99.85	mg/L	100	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	100.007	60.5	157.5	mg/L	97	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	100.007	60.5	157.7	mg/L	97	85	115	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527903													
WG527903ICV	ICV	09/23/21 20:11	II210916-1	2		1.9208	mg/L	96	95	105			
WG527903ICB	ICB	09/23/21 20:17				U	mg/L		-0.027	0.027			
WG527903LFB	LFB	09/23/21 20:30	II210910-2	.5005		.5294	mg/L	106	85	115			
L68513-04AS	AS	09/23/21 20:47	II210910-2	.5005	.0211	.5461	mg/L	105	85	115			
L68513-04ASD	ASD	09/23/21 20:50	II210910-2	.5005	.0211	.5444	mg/L	105	85	115	0	20	
L68513-13AS	AS	09/23/21 21:29	II210910-2	.5005	.046	.5746	mg/L	106	85	115			
L68513-13ASD	ASD	09/23/21 21:32	II210910-2	.5005	.046	.5756	mg/L	106	85	115	0	20	
WG528021													
WG528021ICV	ICV	09/26/21 19:09	II210916-1	2		1.9435	mg/L	97	95	105			
WG528021ICB	ICB	09/26/21 19:15				U	mg/L		-0.027	0.027			
WG528021LFB	LFB	09/26/21 19:27	II210910-2	.5005		.5332	mg/L	107	85	115			
L68533-04AS	AS	09/26/21 19:46	II210910-2	.5005	.025	.5546	mg/L	106	85	115			
L68533-04ASD	ASD	09/26/21 19:49	II210910-2	.5005	.025	.5548	mg/L	106	85	115	0	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG526455													
WG526455ICV	ICV	09/07/21 21:29	WI210907-3	51.15		50.98	mg/L	100	90	110			
WG526455ICB	ICB	09/07/21 21:47				U	mg/L		-0.4	0.4			
WG527976													
WG527976LFB	LFB	09/24/21 16:42	WI210907-6	30		29.83	mg/L	99	90	110			
L68513-01DUP	DUP	09/28/21 15:49			17	17.06	mg/L				0	20	
L68513-02AS	AS	09/28/21 16:25	WI210907-6	30	18.5	47.54	mg/L	97	90	110			
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528109LFB1	LFB	09/27/21 19:53	WI210907-6	30		29.06	mg/L	97	90	110			
L68513-04DUP	DUP	09/28/21 0:22			23.5	23.53	mg/L				0	20	
L68513-05AS	AS	09/28/21 0:58	WI210907-6	30	23.6	52.53	mg/L	96	90	110			
L68513-06DUP	DUP	09/28/21 1:34			22.5	22.57	mg/L				0	20	
L68513-07AS	AS	09/28/21 2:45	WI210907-6	30	20.6	49.68	mg/L	97	90	110			
WG528109LFB2	LFB	09/28/21 4:33	WI210907-6	30		28.52	mg/L	95	90	110			
L68513-13DUP	DUP	09/28/21 5:09			18.9	18.87	mg/L				0	20	
L68513-14AS	AS	09/29/21 17:06	WI210907-6	30	18.9	46.94	mg/L	93	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.0543	mg/L	109	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00022	0.00022			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05		.05442	mg/L	109	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05	U	.05349	mg/L	107	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05	U	.05485	mg/L	110	70	130	3	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05	U	.05527	mg/L	111	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05	U	.05517	mg/L	110	70	130	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.0501		.04617	mg/L	92	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00176	0.00176			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05005		.05319	mg/L	106	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05005	.0136	.06326	mg/L	99	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05005	.0136	.06385	mg/L	100	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05005	U	.05071	mg/L	101	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05005	U	.05115	mg/L	102	70	130	1	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527945													
WG527945ICV	ICV	09/30/21 12:44	II210916-1	2		1.992	mg/L	100	95	105			
WG527945ICB	ICB	09/30/21 12:50				U	mg/L		-0.015	0.015			
WG527945LFB	LFB	09/30/21 13:03	II210910-2	1		1.018	mg/L	102	85	115			
L68513-04AS	AS	09/30/21 13:18	II210910-2	1	U	1.037	mg/L	104	85	115			
L68513-04ASD	ASD	09/30/21 13:21	II210910-2	1	U	1.041	mg/L	104	85	115	0	20	
L68513-13AS	AS	09/30/21 13:58	II210910-2	1	U	1.035	mg/L	104	85	115			
L68513-13ASD	ASD	09/30/21 14:01	II210910-2	1	U	1.041	mg/L	104	85	115	1	20	
WG528242													
WG528242ICV	ICV	09/30/21 14:33	II210916-1	2		1.9795	mg/L	99	95	105			
WG528242ICB	ICB	09/30/21 14:39				U	mg/L		-0.015	0.015			
WG528242LFB	LFB	09/30/21 14:51	II210910-2	1		1.027	mg/L	103	85	115			
L68533-06AS	AS	09/30/21 15:16	II210910-2	1	U	1.029	mg/L	103	85	115			
L68533-06ASD	ASD	09/30/21 15:19	II210910-2	1	U	1.04	mg/L	104	85	115	1	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.05254	mg/L	105	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.00022	0.00022			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05		.05394	mg/L	108	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05	.00012	.0536	mg/L	107	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05	.00012	.05485	mg/L	109	70	130	2	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05	U	.05399	mg/L	108	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05	U	.05385	mg/L	108	70	130	0	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.0485	mg/L	97	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.0011	0.0011			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.05		.0524	mg/L	105	85	115			
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.05	.0015	.05231	mg/L	102	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.05	.0015	.05261	mg/L	102	70	130	1	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.05	U	.05164	mg/L	103	70	130			
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.05	U	.05113	mg/L	102	70	130	1	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528408													
WG528408ICV	ICV	09/30/21 18:16	MS210727-2	.05		.0525	mg/L	105	90	110			
WG528408ICB	ICB	09/30/21 18:18				U	mg/L		-0.0132	0.0132			
WG528408LFB	LFB	09/30/21 18:19	MS210927-3	.050075		.0594	mg/L	119	85	115			LA
L68513-06AS	AS	09/30/21 18:31	MS210927-3	.050075	U	.0586	mg/L	117	70	130			
L68513-06ASD	ASD	09/30/21 18:36	MS210927-3	.050075	U	.0586	mg/L	117	70	130	0	20	
L68729-02AS	AS	09/30/21 18:57	MS210927-3	.050075	22.4	22.1525	mg/L	-494	70	130			M3
L68729-02ASD	ASD	09/30/21 18:58	MS210927-3	.050075	22.4	22.0368	mg/L	-725	70	130	1	20	M3

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-01	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527976	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527976	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527976	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-02	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527976	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527976	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527976	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-03	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527976	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG527976	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527976	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-04	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68513-05	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-06	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68513-07	WG528109	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-08	WG528109	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527308	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68513-09	WG528109	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68513-10	WG528109	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-11	WG528109	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68513-12	WG528109	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-13	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527386	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68513***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68513-14	WG527612	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528109	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528109	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Iron, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528010	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527612	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527926	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527386	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528109	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527612	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528408	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Mercury, dissolved	M245.1 CVAA
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography

Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68513
Date Received: 09/15/2021 11:24
Received By:
Date Printed: 9/16/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]		X	

L68513-01 Container B2451893 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-02 Container B2451899 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-03 Container B2451904 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-04 Container B2451909 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-05 Container B2451914 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-06 Container B2451919 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-07 Container B2451924 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-08 Container B2451929 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-09 Container B2451934 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

Western Environmental Testing Laboratory

ACZ Project ID: L68513
Date Received: 09/15/2021 11:24
Received By:
Date Printed: 9/16/2021

L68513-10 Container B2451939 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-11 Container B2451944 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-12 Container B2451949 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-13 Container B2451954 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68513-14 Container B2451959 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?		X	

L68513-01 : A white and yellow container not received and a new container created from the raw .

L68513-02 : A white and yellow container not received and a new container created from the raw .

L68513-03 : A white and yellow container not received and a new container created from the raw .

L68513-04 : A white and yellow container not received and a new container created from the raw .

L68513-05 : A white and yellow container not received and a new container created from the raw .

L68513-06 : A white and yellow container not received and a new container created from the raw .

L68513-07 : A white and yellow container not received and a new container created from the raw .

L68513-08 : A white and yellow container not received and a new container created from the raw .

L68513-09 : A white and yellow container not received and a new container created from the raw .

L68513-10 : A white and yellow container not received and a new container created from the raw .

L68513-11 : A white and yellow container not received and a new container created from the raw .

L68513-12 : A white and yellow container not received and a new

Western Environmental Testing Laboratory

ACZ Project ID: L68513
Date Received: 09/15/2021 11:24
Received By:
Date Printed: 9/16/2021

container created from the raw .

L68513-13 : A white and yellow container not received and a new container created from the raw .

L68513-14 : A white and yellow container not received and a new container created from the raw .

16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35944	11.6	<=6.0	15	N/A
NA35943	11	<=6.0	15	N/A
NA35929	5.8	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68513

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(LL) 245.1						
21090376-001	9/10/2021 13:00	OT	43	✓	✓						
21090376-002				✓	✓						
21090376-003				✓	✓						
21090376-004				✓	✓						
21090376-005				✓	✓						
21090376-006				✓	✓						
21090376-007				✓	✓						
21090376-008				✓	✓						
21090376-009				✓	✓						
21090376-010			9	✓	✓						

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
CR	11:00AM		9/15/21 11:00

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68513 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68513

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (1) 245.1
21090376-011	9/10/2021 13:00	OT	3	✓	✓
21090376-012	"	"	"	✓	✓
21090376-013	"	"	"	✓	✓
21090376-014	"	"	"	✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
CR	11:00AM	[signature]	9/15/21 11:24

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
[redacted]	[redacted]	[redacted]	[redacted]
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

COPY

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 13, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68609

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 20, 2021. This project has been assigned to ACZ's project number, L68609. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68609. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 12, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-001

ACZ Sample ID: ***L68609-01***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 11:25	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0507		*	mg/L	0.005	0.015	10/08/21 19:34	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:34	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0206		*	mg/L	0.0002	0.001	10/08/21 19:34	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0180		*	mg/L	0.0005	0.0025	10/08/21 19:34	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:34	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:22	kja
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/03/21 19:42	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:34	bsu
Calcium, dissolved	M200.7 ICP	1	6.09		*	mg/L	0.1	0.5	10/03/21 19:42	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00229		*	mg/L	0.0005	0.002	10/08/21 19:34	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:34	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:34	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:22	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0844		*	mg/L	0.007	0.02	10/08/21 19:34	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:34	bsu
Lithium, dissolved	M200.7 ICP	1	0.0869		*	mg/L	0.008	0.04	10/03/21 19:42	kja
Magnesium, dissolved	M200.7 ICP	1	0.32	B	*	mg/L	0.2	1	10/03/21 19:42	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:34	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.1		*	ng/L	0.3	1	09/23/21 12:42	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00455		*	mg/L	0.0002	0.0005	10/08/21 19:34	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:34	bsu
Potassium, dissolved	M200.7 ICP	1	8.63		*	mg/L	0.2	1	10/03/21 19:42	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 19:42	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00044		*	mg/L	0.0001	0.00025	10/08/21 19:34	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:34	bsu
Sodium, dissolved	M200.7 ICP	1	66.9		*	mg/L	0.2	1	10/03/21 19:42	kja
Strontium, dissolved	M200.7 ICP	1	0.0384	B	*	mg/L	0.009	0.045	10/03/21 19:42	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/08/21 19:34	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0192		*	mg/L	0.0008	0.0025	10/08/21 19:34	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 19:42	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:34	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00375		*	mg/L	0.0005	0.002	10/08/21 19:34	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:34	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-001

ACZ Sample ID: ***L68609-01***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	126		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	127		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	4.95		*	mg/L	0.4	2	09/30/21 2:40	krh
Conductivity @25C	SM2510B	1	343		*	umhos/cm	1	10	09/22/21 6:10	eep
Fluoride	M300.0 - Ion Chromatography	1	0.389		*	mg/L	0.05	0.25	09/30/21 2:40	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:43	pjb
pH (lab)	SM4500H+ B									
pH		1	10.5	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	10/01/21 13:54	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	200	H	*	mg/L	20	40	09/23/21 14:27	anc
Sulfate	M300.0 - Ion Chromatography	1	18.7		*	mg/L	0.4	2	09/30/21 2:40	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-002

ACZ Sample ID: ***L68609-02***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 11:41	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0398		*	mg/L	0.005	0.015	10/08/21 19:36	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:36	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0227		*	mg/L	0.0002	0.001	10/08/21 19:36	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0186		*	mg/L	0.0005	0.0025	10/08/21 19:36	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:36	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:25	kja
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/03/21 19:45	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:36	bsu
Calcium, dissolved	M200.7 ICP	1	5.92		*	mg/L	0.1	0.5	10/03/21 19:45	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00252		*	mg/L	0.0005	0.002	10/08/21 19:36	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:36	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:36	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:25	kja
Iron, dissolved	M200.8 ICP-MS	1	0.128		*	mg/L	0.007	0.02	10/08/21 19:36	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:36	bsu
Lithium, dissolved	M200.7 ICP	1	0.0837		*	mg/L	0.008	0.04	10/03/21 19:45	kja
Magnesium, dissolved	M200.7 ICP	1	0.32	B	*	mg/L	0.2	1	10/03/21 19:45	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:36	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.6		*	ng/L	0.3	1	09/23/21 12:46	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00494		*	mg/L	0.0002	0.0005	10/08/21 19:36	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:36	bsu
Potassium, dissolved	M200.7 ICP	1	6.70		*	mg/L	0.2	1	10/03/21 19:45	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 19:45	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/08/21 19:36	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:36	bsu
Sodium, dissolved	M200.7 ICP	1	65.3		*	mg/L	0.2	1	10/03/21 19:45	kja
Strontium, dissolved	M200.7 ICP	1	0.0359	B	*	mg/L	0.009	0.045	10/03/21 19:45	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:36	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0145		*	mg/L	0.0008	0.0025	10/08/21 19:36	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 19:45	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:36	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00443		*	mg/L	0.0005	0.002	10/08/21 19:36	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:36	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-002

ACZ Sample ID: ***L68609-02***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	12.6	B	*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	112		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.06		*	mg/L	0.4	2	09/30/21 2:57	krh
Conductivity @25C	SM2510B	1	331		*	umhos/cm	1	10	09/22/21 6:20	eep
Fluoride	M300.0 - Ion Chromatography	1	0.423		*	mg/L	0.05	0.25	09/30/21 2:57	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:46	pjb
pH (lab)	SM4500H+ B									
pH		1	10.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.015	B	*	mg/L	0.01	0.05	10/01/21 13:56	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	208	H	*	mg/L	20	40	09/23/21 14:31	anc
Sulfate	M300.0 - Ion Chromatography	1	20.0		*	mg/L	0.4	2	09/30/21 2:57	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-003

ACZ Sample ID: ***L68609-03***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 11:57	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0191		*	mg/L	0.005	0.015	10/08/21 19:37	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:37	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0348		*	mg/L	0.0002	0.001	10/08/21 19:37	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00761		*	mg/L	0.0005	0.0025	10/08/21 19:37	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:37	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:28	kja
Boron, dissolved	M200.7 ICP	1	0.096	B	*	mg/L	0.03	0.1	10/03/21 19:48	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:37	bsu
Calcium, dissolved	M200.7 ICP	1	5.44		*	mg/L	0.1	0.5	10/03/21 19:48	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00773		*	mg/L	0.0005	0.002	10/08/21 19:37	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:37	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:37	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:28	kja
Iron, dissolved	M200.8 ICP-MS	1	0.163		*	mg/L	0.007	0.02	10/08/21 19:37	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:37	bsu
Lithium, dissolved	M200.7 ICP	1	0.0770		*	mg/L	0.008	0.04	10/03/21 19:48	kja
Magnesium, dissolved	M200.7 ICP	1	0.30	B	*	mg/L	0.2	1	10/03/21 19:48	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:37	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.9		*	ng/L	0.3	1	09/23/21 12:51	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00573		*	mg/L	0.0002	0.0005	10/08/21 19:37	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:37	bsu
Potassium, dissolved	M200.7 ICP	1	3.14		*	mg/L	0.2	1	10/03/21 19:48	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 19:48	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00044		*	mg/L	0.0001	0.00025	10/08/21 19:37	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:37	bsu
Sodium, dissolved	M200.7 ICP	1	63.9		*	mg/L	0.2	1	10/03/21 19:48	kja
Strontium, dissolved	M200.7 ICP	1	0.0243	B	*	mg/L	0.009	0.045	10/03/21 19:48	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:37	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00955		*	mg/L	0.0008	0.0025	10/08/21 19:37	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 19:48	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:37	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00334		*	mg/L	0.0005	0.002	10/08/21 19:37	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:37	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-003

ACZ Sample ID: ***L68609-03***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	85.8		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	29.2		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.45		*	mg/L	0.4	2	09/30/21 3:15	krh
Conductivity @25C	SM2510B	1	296		*	umhos/cm	1	10	09/22/21 6:29	eep
Fluoride	M300.0 - Ion Chromatography	1	0.565		*	mg/L	0.05	0.25	09/30/21 3:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:48	pjb
pH (lab)	SM4500H+ B									
pH		1	9.2	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.022	B	*	mg/L	0.01	0.05	10/01/21 13:58	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	204	H	*	mg/L	20	40	09/23/21 14:35	anc
Sulfate	M300.0 - Ion Chromatography	1	23.3		*	mg/L	0.4	2	09/30/21 3:15	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-004

ACZ Sample ID: ***L68609-04***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 12:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0325		*	mg/L	0.005	0.015	10/08/21 19:39	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:39	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0346		*	mg/L	0.0002	0.001	10/08/21 19:39	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00719		*	mg/L	0.0005	0.0025	10/08/21 19:39	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:39	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:32	kja
Boron, dissolved	M200.7 ICP	1	0.091	B	*	mg/L	0.03	0.1	10/03/21 19:57	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:39	bsu
Calcium, dissolved	M200.7 ICP	1	5.21		*	mg/L	0.1	0.5	10/03/21 19:57	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00275		*	mg/L	0.0005	0.002	10/08/21 19:39	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:39	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:39	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:32	kja
Iron, dissolved	M200.8 ICP-MS	1	0.159		*	mg/L	0.007	0.02	10/08/21 19:39	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:39	bsu
Lithium, dissolved	M200.7 ICP	1	0.0812		*	mg/L	0.008	0.04	10/03/21 19:57	kja
Magnesium, dissolved	M200.7 ICP	1	0.31	B	*	mg/L	0.2	1	10/03/21 19:57	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:39	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.0		*	ng/L	0.3	1	09/23/21 12:56	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00532		*	mg/L	0.0002	0.0005	10/08/21 19:39	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:39	bsu
Potassium, dissolved	M200.7 ICP	1	3.26		*	mg/L	0.2	1	10/03/21 19:57	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 19:57	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00043		*	mg/L	0.0001	0.00025	10/08/21 19:39	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:39	bsu
Sodium, dissolved	M200.7 ICP	1	66.2		*	mg/L	0.2	1	10/03/21 19:57	kja
Strontium, dissolved	M200.7 ICP	1	0.0244	B	*	mg/L	0.009	0.045	10/03/21 19:57	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:39	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0119		*	mg/L	0.0008	0.0025	10/08/21 19:39	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 19:57	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:39	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00297		*	mg/L	0.0005	0.002	10/08/21 19:39	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:39	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-004

ACZ Sample ID: ***L68609-04***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	80.0		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	36.0		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.44		*	mg/L	0.4	2	09/30/21 3:33	krh
Conductivity @25C	SM2510B	1	298		*	umhos/cm	1	10	09/22/21 6:38	eep
Fluoride	M300.0 - Ion Chromatography	1	0.559		*	mg/L	0.05	0.25	09/30/21 3:33	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:49	pjb
pH (lab)	SM4500H+ B									
pH		1	9.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.020	B	*	mg/L	0.01	0.05	10/01/21 14:00	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	194	H	*	mg/L	20	40	09/23/21 14:39	anc
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	09/30/21 3:33	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-005

ACZ Sample ID: ***L68609-05***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 12:13	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0339		*	mg/L	0.005	0.015	10/08/21 19:44	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:44	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0345		*	mg/L	0.0002	0.001	10/08/21 19:44	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00862		*	mg/L	0.0005	0.0025	10/08/21 19:44	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:44	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:41	kja
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	10/03/21 20:00	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:44	bsu
Calcium, dissolved	M200.7 ICP	1	5.22		*	mg/L	0.1	0.5	10/03/21 20:00	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00393		*	mg/L	0.0005	0.002	10/08/21 19:44	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:44	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:44	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:41	kja
Iron, dissolved	M200.8 ICP-MS	1	0.166		*	mg/L	0.007	0.02	10/08/21 19:44	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:44	bsu
Lithium, dissolved	M200.7 ICP	1	0.0797		*	mg/L	0.008	0.04	10/03/21 20:00	kja
Magnesium, dissolved	M200.7 ICP	1	0.31	B	*	mg/L	0.2	1	10/03/21 20:00	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:44	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.2		*	ng/L	0.3	1	09/23/21 13:01	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00554		*	mg/L	0.0002	0.0005	10/08/21 19:44	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:44	bsu
Potassium, dissolved	M200.7 ICP	1	3.13		*	mg/L	0.2	1	10/03/21 20:00	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:00	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00042		*	mg/L	0.0001	0.00025	10/08/21 19:44	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:44	bsu
Sodium, dissolved	M200.7 ICP	1	64.7		*	mg/L	0.2	1	10/03/21 20:00	kja
Strontium, dissolved	M200.7 ICP	1	0.0242	B	*	mg/L	0.009	0.045	10/03/21 20:00	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:44	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0101		*	mg/L	0.0008	0.0025	10/08/21 19:44	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:00	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:44	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00326		*	mg/L	0.0005	0.002	10/08/21 19:44	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:44	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-005

ACZ Sample ID: ***L68609-05***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	80.7		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	34.8		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.41		*	mg/L	0.4	2	09/30/21 15:43	krh
Conductivity @25C	SM2510B	1	296		*	umhos/cm	1	10	09/22/21 6:48	eep
Fluoride	M300.0 - Ion Chromatography	1	0.542		*	mg/L	0.05	0.25	09/30/21 15:43	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		14			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:51	pjb
pH (lab)	SM4500H+ B									
pH		1	9.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.021	B	*	mg/L	0.01	0.05	10/01/21 14:01	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	202	H	*	mg/L	20	40	09/23/21 14:43	anc
Sulfate	M300.0 - Ion Chromatography	1	23.0		*	mg/L	0.4	2	09/30/21 15:43	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-006

ACZ Sample ID: ***L68609-06***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 12:21	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0820		*	mg/L	0.005	0.015	10/08/21 19:49	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00058	B	*	mg/L	0.0004	0.002	10/08/21 19:49	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0325		*	mg/L	0.0002	0.001	10/08/21 19:49	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00920		*	mg/L	0.0005	0.0025	10/08/21 19:49	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:49	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:44	kja
Boron, dissolved	M200.7 ICP	1	0.092	B	*	mg/L	0.03	0.1	10/03/21 20:03	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:49	bsu
Calcium, dissolved	M200.7 ICP	1	4.27		*	mg/L	0.1	0.5	10/03/21 20:03	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00075	B	*	mg/L	0.0005	0.002	10/08/21 19:49	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:49	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:49	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:44	kja
Iron, dissolved	M200.8 ICP-MS	1	0.156		*	mg/L	0.007	0.02	10/08/21 19:49	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:49	bsu
Lithium, dissolved	M200.7 ICP	1	0.0848		*	mg/L	0.008	0.04	10/03/21 20:03	kja
Magnesium, dissolved	M200.7 ICP	1	0.35	B	*	mg/L	0.2	1	10/03/21 20:03	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:49	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.3			ng/L	0.3	1	09/30/21 14:08	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00656		*	mg/L	0.0002	0.0005	10/08/21 19:49	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:49	bsu
Potassium, dissolved	M200.7 ICP	1	5.29		*	mg/L	0.2	1	10/03/21 20:03	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:03	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/08/21 19:49	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:49	bsu
Sodium, dissolved	M200.7 ICP	1	66.3		*	mg/L	0.2	1	10/03/21 20:03	kja
Strontium, dissolved	M200.7 ICP	1	0.0302	B	*	mg/L	0.009	0.045	10/03/21 20:03	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:49	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0106		*	mg/L	0.0008	0.0025	10/08/21 19:49	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:03	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:49	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00109	B	*	mg/L	0.0005	0.002	10/08/21 19:49	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:49	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-006

ACZ Sample ID: ***L68609-06***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	87.1		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	47.2		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	134		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.30		*	mg/L	0.4	2	09/30/21 16:18	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/22/21 7:00	eep
Fluoride	M300.0 - Ion Chromatography	1	0.488		*	mg/L	0.05	0.25	09/30/21 16:18	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:52	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	10/01/21 14:02	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	188	H	*	mg/L	20	40	09/23/21 14:47	anc
Sulfate	M300.0 - Ion Chromatography	1	22.2		*	mg/L	0.4	2	09/30/21 16:18	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-007

ACZ Sample ID: ***L68609-07***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 12:29	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0460		*	mg/L	0.005	0.015	10/08/21 19:51	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00044	B	*	mg/L	0.0004	0.002	10/08/21 19:51	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0314		*	mg/L	0.0002	0.001	10/08/21 19:51	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00709		*	mg/L	0.0005	0.0025	10/08/21 19:51	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:51	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:47	kja
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/03/21 20:06	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:51	bsu
Calcium, dissolved	M200.7 ICP	1	4.35		*	mg/L	0.1	0.5	10/03/21 20:06	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00093	B	*	mg/L	0.0005	0.002	10/08/21 19:51	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:51	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:51	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:47	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0591		*	mg/L	0.007	0.02	10/08/21 19:51	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:51	bsu
Lithium, dissolved	M200.7 ICP	1	0.0840		*	mg/L	0.008	0.04	10/03/21 20:06	kja
Magnesium, dissolved	M200.7 ICP	1	0.39	B	*	mg/L	0.2	1	10/03/21 20:06	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:51	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.2			ng/L	0.3	1	09/30/21 14:22	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00575		*	mg/L	0.0002	0.0005	10/08/21 19:51	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:51	bsu
Potassium, dissolved	M200.7 ICP	1	4.02		*	mg/L	0.2	1	10/03/21 20:06	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:06	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	10/08/21 19:51	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:51	bsu
Sodium, dissolved	M200.7 ICP	1	64.8		*	mg/L	0.2	1	10/03/21 20:06	kja
Strontium, dissolved	M200.7 ICP	1	0.0280	B	*	mg/L	0.009	0.045	10/03/21 20:06	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:51	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0124		*	mg/L	0.0008	0.0025	10/08/21 19:51	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:06	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/08/21 19:51	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00158	B	*	mg/L	0.0005	0.002	10/08/21 19:51	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:51	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-007

ACZ Sample ID: ***L68609-07***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	63.3		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	53.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	117		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.33		*	mg/L	0.4	2	09/30/21 16:54	krh
Conductivity @25C	SM2510B	1	299		*	umhos/cm	1	10	09/22/21 7:10	eep
Fluoride	M300.0 - Ion Chromatography	1	0.478		*	mg/L	0.05	0.25	09/30/21 16:54	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:53	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	10/01/21 14:05	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	200	H	*	mg/L	20	40	09/23/21 14:54	anc
Sulfate	M300.0 - Ion Chromatography	1	21.6		*	mg/L	0.4	2	09/30/21 16:54	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-008

ACZ Sample ID: ***L68609-08***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 12:37	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0360		*	mg/L	0.005	0.015	10/08/21 19:52	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00046	B	*	mg/L	0.0004	0.002	10/08/21 19:52	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0348		*	mg/L	0.0002	0.001	10/08/21 19:52	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00570		*	mg/L	0.0005	0.0025	10/08/21 19:52	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:52	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:56	kja
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	10/03/21 20:09	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:52	bsu
Calcium, dissolved	M200.7 ICP	1	4.65		*	mg/L	0.1	0.5	10/03/21 20:09	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00086	B	*	mg/L	0.0005	0.002	10/08/21 19:52	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:52	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:52	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:56	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0506		*	mg/L	0.007	0.02	10/08/21 19:52	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:52	bsu
Lithium, dissolved	M200.7 ICP	1	0.0831		*	mg/L	0.008	0.04	10/03/21 20:09	kja
Magnesium, dissolved	M200.7 ICP	1	0.40	B	*	mg/L	0.2	1	10/03/21 20:09	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:52	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	24.6			ng/L	0.3	1	09/30/21 14:27	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00559		*	mg/L	0.0002	0.0005	10/08/21 19:52	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:52	bsu
Potassium, dissolved	M200.7 ICP	1	4.70		*	mg/L	0.2	1	10/03/21 20:09	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:09	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00061		*	mg/L	0.0001	0.00025	10/08/21 19:52	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:52	bsu
Sodium, dissolved	M200.7 ICP	1	64.1		*	mg/L	0.2	1	10/03/21 20:09	kja
Strontium, dissolved	M200.7 ICP	1	0.0257	B	*	mg/L	0.009	0.045	10/03/21 20:09	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:52	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0350		*	mg/L	0.0008	0.0025	10/08/21 19:52	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:09	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	10/08/21 19:52	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00175	B	*	mg/L	0.0005	0.002	10/08/21 19:52	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:52	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-008

ACZ Sample ID: ***L68609-08***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	76.6		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	42.6		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.39		*	mg/L	0.4	2	09/30/21 17:12	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/22/21 7:19	eep
Fluoride	M300.0 - Ion Chromatography	1	0.488		*	mg/L	0.05	0.25	09/30/21 17:12	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 2:59	pjb
pH (lab)	SM4500H+ B									
pH		1	9.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.011	B	*	mg/L	0.01	0.05	10/01/21 14:06	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	202	H	*	mg/L	20	40	09/23/21 14:58	anc
Sulfate	M300.0 - Ion Chromatography	1	21.6		*	mg/L	0.4	2	09/30/21 17:12	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-009

ACZ Sample ID: ***L68609-09***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 12:45	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0605		*	mg/L	0.005	0.015	10/08/21 19:54	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0004	0.002	10/08/21 19:54	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0339		*	mg/L	0.0002	0.001	10/08/21 19:54	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00544		*	mg/L	0.0005	0.0025	10/08/21 19:54	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:54	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 1:59	kja
Boron, dissolved	M200.7 ICP	1	0.092	B	*	mg/L	0.03	0.1	10/03/21 20:12	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:54	bsu
Calcium, dissolved	M200.7 ICP	1	4.15		*	mg/L	0.1	0.5	10/03/21 20:12	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00144	B	*	mg/L	0.0005	0.002	10/08/21 19:54	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:54	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:54	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 1:59	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0456		*	mg/L	0.007	0.02	10/08/21 19:54	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:54	bsu
Lithium, dissolved	M200.7 ICP	1	0.0867		*	mg/L	0.008	0.04	10/03/21 20:12	kja
Magnesium, dissolved	M200.7 ICP	1	0.39	B	*	mg/L	0.2	1	10/03/21 20:12	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:54	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	42			ng/L	2	5	09/30/21 19:25	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0126		*	mg/L	0.0002	0.0005	10/08/21 19:54	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:54	bsu
Potassium, dissolved	M200.7 ICP	1	6.42		*	mg/L	0.2	1	10/03/21 20:12	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:12	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00071		*	mg/L	0.0001	0.00025	10/08/21 19:54	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:54	bsu
Sodium, dissolved	M200.7 ICP	1	66.2		*	mg/L	0.2	1	10/03/21 20:12	kja
Strontium, dissolved	M200.7 ICP	1	0.0258	B	*	mg/L	0.009	0.045	10/03/21 20:12	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:54	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0538		*	mg/L	0.0008	0.0025	10/08/21 19:54	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:12	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	10/08/21 19:54	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00178	B	*	mg/L	0.0005	0.002	10/08/21 19:54	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:54	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-009

ACZ Sample ID: ***L68609-09***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	65.3		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	53.5		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.42		*	mg/L	0.4	2	09/30/21 17:30	krh
Conductivity @25C	SM2510B	1	308		*	umhos/cm	1	10	09/22/21 7:29	eep
Fluoride	M300.0 - Ion Chromatography	1	0.486		*	mg/L	0.05	0.25	09/30/21 17:30	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12.0			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 3:00	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.3		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	10/01/21 14:07	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	210	H	*	mg/L	20	40	09/23/21 15:02	anc
Sulfate	M300.0 - Ion Chromatography	1	22.2		*	mg/L	0.4	2	09/30/21 17:30	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-010

ACZ Sample ID: ***L68609-10***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 12:53	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0279		*	mg/L	0.005	0.015	10/08/21 19:56	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:56	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0343		*	mg/L	0.0002	0.001	10/08/21 19:56	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00488		*	mg/L	0.0005	0.0025	10/08/21 19:56	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:56	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 2:02	kja
Boron, dissolved	M200.7 ICP	1	0.089	B	*	mg/L	0.03	0.1	10/03/21 20:15	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:56	bsu
Calcium, dissolved	M200.7 ICP	1	4.39		*	mg/L	0.1	0.5	10/03/21 20:15	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00065	B	*	mg/L	0.0005	0.002	10/08/21 19:56	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:56	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:56	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 2:02	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0446		*	mg/L	0.007	0.02	10/08/21 19:56	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:56	bsu
Lithium, dissolved	M200.7 ICP	1	0.0830		*	mg/L	0.008	0.04	10/03/21 20:15	kja
Magnesium, dissolved	M200.7 ICP	1	0.42	B	*	mg/L	0.2	1	10/03/21 20:15	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:56	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	23.2			ng/L	0.3	1	09/30/21 14:53	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00715		*	mg/L	0.0002	0.0005	10/08/21 19:56	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:56	bsu
Potassium, dissolved	M200.7 ICP	1	4.99		*	mg/L	0.2	1	10/03/21 20:15	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:15	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00056		*	mg/L	0.0001	0.00025	10/08/21 19:56	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:56	bsu
Sodium, dissolved	M200.7 ICP	1	64.0		*	mg/L	0.2	1	10/03/21 20:15	kja
Strontium, dissolved	M200.7 ICP	1	0.0255	B	*	mg/L	0.009	0.045	10/03/21 20:15	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:56	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0553		*	mg/L	0.0008	0.0025	10/08/21 19:56	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:15	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00014	B	*	mg/L	0.0001	0.0005	10/08/21 19:56	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00170	B	*	mg/L	0.0005	0.002	10/08/21 19:56	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:56	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-010

ACZ Sample ID: ***L68609-10***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	83.6		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	31.6		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.36		*	mg/L	0.4	2	09/30/21 17:48	krh
Conductivity @25C	SM2510B	1	302		*	umhos/cm	1	10	09/22/21 8:14	eep
Fluoride	M300.0 - Ion Chromatography	1	0.485		*	mg/L	0.05	0.25	09/30/21 17:48	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 3:01	pjb
pH (lab)	SM4500H+ B									
pH		1	9.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/01/21 14:08	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	208	H	*	mg/L	20	40	09/23/21 15:06	anc
Sulfate	M300.0 - Ion Chromatography	1	21.1		*	mg/L	0.4	2	09/30/21 17:48	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-011

ACZ Sample ID: ***L68609-11***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 13:01	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0374		*	mg/L	0.005	0.015	10/08/21 19:57	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:57	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0337		*	mg/L	0.0002	0.001	10/08/21 19:57	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00806		*	mg/L	0.0005	0.0025	10/08/21 19:57	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:57	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 2:05	kja
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	10/03/21 20:18	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:57	bsu
Calcium, dissolved	M200.7 ICP	1	4.61		*	mg/L	0.1	0.5	10/03/21 20:18	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0005	0.002	10/08/21 19:57	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:57	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:57	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 11:36	kja
Iron, dissolved	M200.8 ICP-MS	1	0.136		*	mg/L	0.007	0.02	10/08/21 19:57	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:57	bsu
Lithium, dissolved	M200.7 ICP	1	0.0823		*	mg/L	0.008	0.04	10/03/21 20:18	kja
Magnesium, dissolved	M200.7 ICP	1	0.36	B	*	mg/L	0.2	1	10/03/21 20:18	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:57	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	17.4			ng/L	0.3	1	09/30/21 14:57	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00773		*	mg/L	0.0002	0.0005	10/08/21 19:57	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:57	bsu
Potassium, dissolved	M200.7 ICP	1	4.98		*	mg/L	0.2	1	10/03/21 20:18	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:18	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00043		*	mg/L	0.0001	0.00025	10/08/21 19:57	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:57	bsu
Sodium, dissolved	M200.7 ICP	1	64.8		*	mg/L	0.2	1	10/03/21 20:18	kja
Strontium, dissolved	M200.7 ICP	1	0.0278	B	*	mg/L	0.009	0.045	10/03/21 20:18	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:57	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0147		*	mg/L	0.0008	0.0025	10/08/21 19:57	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:18	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:57	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00101	B	*	mg/L	0.0005	0.002	10/08/21 19:57	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:57	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-011

ACZ Sample ID: ***L68609-11***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	85.5		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	34.2		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.34		*	mg/L	0.4	2	09/30/21 18:42	krh
Conductivity @25C	SM2510B	1	305		*	umhos/cm	1	10	09/22/21 8:24	eep
Fluoride	M300.0 - Ion Chromatography	1	0.498		*	mg/L	0.05	0.25	09/30/21 18:42	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13.0			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 3:03	pjb
pH (lab)	SM4500H+ B									
pH		1	9.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.019	B	*	mg/L	0.01	0.05	10/01/21 14:09	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	190	H	*	mg/L	20	40	09/23/21 15:10	anc
Sulfate	M300.0 - Ion Chromatography	1	21.1		*	mg/L	0.4	2	09/30/21 18:42	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-012

ACZ Sample ID: ***L68609-12***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 13:17	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0982		*	mg/L	0.005	0.015	10/08/21 19:59	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00062	B	*	mg/L	0.0004	0.002	10/08/21 19:59	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0276		*	mg/L	0.0002	0.001	10/08/21 19:59	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0127		*	mg/L	0.0005	0.0025	10/08/21 19:59	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 19:59	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 2:08	kja
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/03/21 20:22	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:59	bsu
Calcium, dissolved	M200.7 ICP	1	3.79		*	mg/L	0.1	0.5	10/03/21 20:22	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00242		*	mg/L	0.0005	0.002	10/08/21 19:59	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 19:59	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 19:59	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 2:08	kja
Iron, dissolved	M200.8 ICP-MS	1	0.154		*	mg/L	0.007	0.02	10/08/21 19:59	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:59	bsu
Lithium, dissolved	M200.7 ICP	1	0.0859		*	mg/L	0.008	0.04	10/03/21 20:22	kja
Magnesium, dissolved	M200.7 ICP	1	0.34	B	*	mg/L	0.2	1	10/03/21 20:22	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 19:59	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	14.3			ng/L	0.3	1	09/30/21 15:02	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00693		*	mg/L	0.0002	0.0005	10/08/21 19:59	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 19:59	bsu
Potassium, dissolved	M200.7 ICP	1	5.32		*	mg/L	0.2	1	10/03/21 20:22	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:22	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/08/21 19:59	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:59	bsu
Sodium, dissolved	M200.7 ICP	1	66.6		*	mg/L	0.2	1	10/03/21 20:22	kja
Strontium, dissolved	M200.7 ICP	1	0.0346	B	*	mg/L	0.009	0.045	10/03/21 20:22	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:59	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0105		*	mg/L	0.0008	0.0025	10/08/21 19:59	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:22	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 19:59	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00130	B	*	mg/L	0.0005	0.002	10/08/21 19:59	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 19:59	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-012

ACZ Sample ID: ***L68609-12***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	49.6		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	69.1		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.27		*	mg/L	0.4	2	09/30/21 19:00	krh
Conductivity @25C	SM2510B	1	308		*	umhos/cm	1	10	09/22/21 8:34	eep
Fluoride	M300.0 - Ion Chromatography	1	0.470		*	mg/L	0.05	0.25	09/30/21 19:00	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 3:05	pjb
pH (lab)	SM4500H+ B									
pH		1	9.9	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	10/01/21 14:11	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	196	H	*	mg/L	20	40	09/23/21 15:14	anc
Sulfate	M300.0 - Ion Chromatography	1	20.9		*	mg/L	0.4	2	09/30/21 19:00	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-013

ACZ Sample ID: ***L68609-13***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 13:33	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0442		*	mg/L	0.005	0.015	10/08/21 20:01	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 20:01	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0289		*	mg/L	0.0002	0.001	10/08/21 20:01	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00868		*	mg/L	0.0005	0.0025	10/08/21 20:01	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 20:01	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 2:11	kja
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/03/21 20:25	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 20:01	bsu
Calcium, dissolved	M200.7 ICP	1	3.47		*	mg/L	0.1	0.5	10/03/21 20:25	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00118	B	*	mg/L	0.0005	0.002	10/08/21 20:01	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 20:01	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 20:01	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 2:11	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0446		*	mg/L	0.007	0.02	10/08/21 20:01	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 20:01	bsu
Lithium, dissolved	M200.7 ICP	1	0.0873		*	mg/L	0.008	0.04	10/03/21 20:25	kja
Magnesium, dissolved	M200.7 ICP	1	0.37	B	*	mg/L	0.2	1	10/03/21 20:25	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 20:01	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	32			ng/L	2	5	09/30/21 19:30	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00506		*	mg/L	0.0002	0.0005	10/08/21 20:01	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 20:01	bsu
Potassium, dissolved	M200.7 ICP	1	5.02		*	mg/L	0.2	1	10/03/21 20:25	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:25	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.00025	10/08/21 20:01	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 20:01	bsu
Sodium, dissolved	M200.7 ICP	1	66.1		*	mg/L	0.2	1	10/03/21 20:25	kja
Strontium, dissolved	M200.7 ICP	1	0.0321	B	*	mg/L	0.009	0.045	10/03/21 20:25	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 20:01	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0219		*	mg/L	0.0008	0.0025	10/08/21 20:01	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:25	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/08/21 20:01	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00166	B	*	mg/L	0.0005	0.002	10/08/21 20:01	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 20:01	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-013

ACZ Sample ID: ***L68609-13***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	53.1		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	66.2		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.27		*	mg/L	0.4	2	09/30/21 19:18	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/22/21 8:44	eep
Fluoride	M300.0 - Ion Chromatography	1	0.455		*	mg/L	0.05	0.25	09/30/21 19:18	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		10			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.027	B	*	mg/L	0.02	0.1	10/08/21 3:08	pjb
pH (lab)	SM4500H+ B									
pH		1	9.8	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	U	*	mg/L	0.01	0.05	10/01/21 14:14	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	194	H	*	mg/L	20	40	09/23/21 15:18	anc
Sulfate	M300.0 - Ion Chromatography	1	19.6		*	mg/L	0.4	2	09/30/21 19:18	krh

Arizona license number: AZ0102

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-014

ACZ Sample ID: ***L68609-14***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 13:41	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0327		*	mg/L	0.005	0.015	10/08/21 20:02	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 20:02	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0319		*	mg/L	0.0002	0.001	10/08/21 20:02	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00731		*	mg/L	0.0005	0.0025	10/08/21 20:02	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 20:02	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 2:20	kja
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	10/03/21 20:40	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 20:02	bsu
Calcium, dissolved	M200.7 ICP	1	4.02		*	mg/L	0.1	0.5	10/03/21 20:40	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00123	B	*	mg/L	0.0005	0.002	10/08/21 20:02	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 20:02	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 20:02	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 2:20	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0452		*	mg/L	0.007	0.02	10/08/21 20:02	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 20:02	bsu
Lithium, dissolved	M200.7 ICP	1	0.0880		*	mg/L	0.008	0.04	10/03/21 20:40	kja
Magnesium, dissolved	M200.7 ICP	1	0.40	B	*	mg/L	0.2	1	10/03/21 20:40	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 20:02	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	47			ng/L	2	5	09/30/21 19:35	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00539		*	mg/L	0.0002	0.0005	10/08/21 20:02	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 20:02	bsu
Potassium, dissolved	M200.7 ICP	1	5.95		*	mg/L	0.2	1	10/03/21 20:40	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/03/21 20:40	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00060		*	mg/L	0.0001	0.00025	10/08/21 20:02	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 20:02	bsu
Sodium, dissolved	M200.7 ICP	1	66.8		*	mg/L	0.2	1	10/03/21 20:40	kja
Strontium, dissolved	M200.7 ICP	1	0.0282	B	*	mg/L	0.009	0.045	10/03/21 20:40	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 20:02	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0129		*	mg/L	0.0008	0.0025	10/08/21 20:02	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/03/21 20:40	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00013	B	*	mg/L	0.0001	0.0005	10/08/21 20:02	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00184	B	*	mg/L	0.0005	0.002	10/08/21 20:02	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 20:02	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090393-014

ACZ Sample ID: ***L68609-14***
Date Sampled: *09/11/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	67.9		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	52.8		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.35		*	mg/L	0.4	2	09/30/21 19:36	krh
Conductivity @25C	SM2510B	1	307		*	umhos/cm	1	10	09/22/21 8:53	eep
Fluoride	M300.0 - Ion Chromatography	1	0.486		*	mg/L	0.05	0.25	09/30/21 19:36	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/13/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/08/21 3:09	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.012	B	*	mg/L	0.01	0.05	10/01/21 14:15	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	204	H	*	mg/L	20	40	09/23/21 15:22	anc
Sulfate	M300.0 - Ion Chromatography	1	21.0		*	mg/L	0.4	2	09/30/21 19:36	krh

Arizona license number: AZ0102

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716PBW1	PBW	09/21/21 20:18				13.4	mg/L		-20	20			
WG527716LCSW3	LCSW	09/21/21 20:36	WC210917-2	820.0001		792.2	mg/L	97	90	110			
WG527716LCSW6	LCSW	09/21/21 23:46	WC210917-2	820.0001		815.6	mg/L	99	90	110			
WG527716PBW2	PBW	09/21/21 23:54				U	mg/L		-20	20			
WG527716LCSW9	LCSW	09/22/21 3:52	WC210917-2	820.0001		818	mg/L	100	90	110			
WG527716PBW3	PBW	09/22/21 3:59				U	mg/L		-20	20			
L68609-09DUP	DUP	09/22/21 7:38			119	118.9	mg/L				0	20	
WG527716LCSW12	LCSW	09/22/21 7:58	WC210917-2	820.0001		820.9	mg/L	100	90	110			
WG527716PBW4	PBW	09/22/21 8:05				U	mg/L		-20	20			
L68610-05DUP	DUP	09/22/21 9:55			117	117.4	mg/L				0	20	
WG527716LCSW15	LCSW	09/22/21 12:00	WC210917-2	820.0001		808.6	mg/L	99	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.1		.1045	mg/L	105	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.011	0.011			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.050065		.0546	mg/L	109	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.050065	.0325	.088	mg/L	111	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.050065	.0325	.0873	mg/L	109	70	130	1	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.050065	U	.0558	mg/L	111	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.050065	U	.0553	mg/L	110	70	130	1	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.0201		.01916	mg/L	95	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00088	0.00088			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.01		.0102	mg/L	102	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.01	U	.00924	mg/L	92	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.01	U	.00924	mg/L	92	70	130	0	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.01	U	.0089	mg/L	89	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.01	U	.00901	mg/L	90	70	130	1	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.0509	mg/L	102	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00044	0.00044			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05005		.05339	mg/L	107	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05005	.0346	.08744	mg/L	106	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05005	.0346	.0893	mg/L	109	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05005	U	.05275	mg/L	105	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05005	U	.0536	mg/L	107	70	130	2	20	

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05435	mg/L	109	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.0011	0.0011			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.049985		.05616	mg/L	112	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.049985	.00719	.06057	mg/L	107	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.049985	.00719	.06187	mg/L	109	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.049985	.0135	.06769	mg/L	108	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.049985	.0135	.06676	mg/L	107	70	130	1	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.050183	mg/L	100	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.000176	0.000176			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05005		.051362	mg/L	103	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05005	U	.050121	mg/L	100	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05005	U	.051701	mg/L	103	70	130	3	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05005	U	.056709	mg/L	113	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05005	U	.057821	mg/L	116	70	130	2	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528571													
WG528571ICV	ICV	10/05/21 1:01	II211001-1	2		1.942	mg/L	97	95	105			
WG528571ICB	ICB	10/05/21 1:07				U	mg/L		-0.12	0.12			
WG528571LFB	LFB	10/05/21 1:20	II210930-2	1		1.075	mg/L	108	85	115			
L68609-04AS	AS	10/05/21 1:35	II210930-2	1	U	.99	mg/L	99	85	115			
L68609-04ASD	ASD	10/05/21 1:38	II210930-2	1	U	.995	mg/L	100	85	115	1	20	
L68609-13AS	AS	10/05/21 2:14	II210930-2	1	U	1.091	mg/L	109	85	115			
L68609-13ASD	ASD	10/05/21 2:17	II210930-2	1	U	1.1	mg/L	110	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	2		2.012	mg/L	101	95	105			
WG528409ICB	ICB	10/03/21 19:09				U	mg/L		-0.09	0.09			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	.5005		.543	mg/L	108	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	.5005	.732	1.263	mg/L	106	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	.5005	.732	1.273	mg/L	108	85	115	1	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	.5005	.087	.619	mg/L	106	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	.5005	.087	.632	mg/L	109	85	115	2	20	

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.052736	mg/L	105	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00011	0.00011			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05005		.054204	mg/L	108	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05005	U	.052046	mg/L	104	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05005	U	.05374	mg/L	107	70	130	3	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05005	U	.052616	mg/L	105	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05005	U	.052384	mg/L	105	70	130	0	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	100		99.77	mg/L	100	95	105			
WG528409ICB	ICB	10/03/21 19:09				.15	mg/L		-0.3	0.3			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	67.98972		72.66	mg/L	107	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	67.98972	1.67	75.8	mg/L	109	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	67.98972	1.67	78.93	mg/L	114	85	115	4	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	67.98972	3.47	77.15	mg/L	108	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	67.98972	3.47	79.4	mg/L	112	85	115	3	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	30		29.31	mg/L	98	90	110			
L68559-09DUP	DUP	09/29/21 23:58			5.2	5.2	mg/L				0	20	
L68559-10AS	AS	09/30/21 0:34	WI210907-6	30	5.17	35.04	mg/L	100	90	110			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	30		29.7	mg/L	99	90	110			
L68609-05DUP	DUP	09/30/21 16:01			5.41	5.41	mg/L				0	20	
L68609-06AS	AS	09/30/21 16:36	WI210907-6	30	5.3	35.14	mg/L	99	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	30		29.9	mg/L	100	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05094	mg/L	102	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.0011	0.0011			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05		.05288	mg/L	106	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05	.00275	.05361	mg/L	102	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05	.00275	.05447	mg/L	103	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05	U	.05089	mg/L	102	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05	U	.05197	mg/L	104	70	130	2	20	

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.054504	mg/L	109	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00011	0.00011			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05005		.055224	mg/L	110	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05005	U	.053132	mg/L	106	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05005	U	.054209	mg/L	108	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05005	.000103	.053084	mg/L	106	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05005	.000103	.052873	mg/L	105	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW2	LCSW	09/21/21 20:25	PCN63140	1408		1414	umhos/cm	100	90	110			
WG527716LCSW5	LCSW	09/21/21 23:34	PCN63140	1408		1406	umhos/cm	100	90	110			
WG527716LCSW8	LCSW	09/22/21 3:39	PCN63140	1408		1402	umhos/cm	100	90	110			
L68609-09DUP	DUP	09/22/21 7:38			308	308	umhos/cm				0	20	
WG527716LCSW11	LCSW	09/22/21 7:44	PCN63140	1408		1397	umhos/cm	99	90	110			
L68610-05DUP	DUP	09/22/21 9:55			300	301	umhos/cm				0	20	
WG527716LCSW14	LCSW	09/22/21 11:49	PCN63140	1408		1390	umhos/cm	99	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05285	mg/L	106	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00176	0.00176			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05		.05414	mg/L	108	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05	U	.05247	mg/L	105	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05	U	.05348	mg/L	107	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05	U	.05185	mg/L	104	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05	U	.05249	mg/L	105	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	1.5		1.467	mg/L	98	90	110			
L68559-09DUP	DUP	09/29/21 23:58			.443	.443	mg/L				0	20	RA
L68559-10AS	AS	09/30/21 0:34	WI210907-6	1.5	.443	1.857	mg/L	94	90	110			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	1.5		1.46	mg/L	97	90	110			
L68609-05DUP	DUP	09/30/21 16:01			.542	.541	mg/L				0	20	
L68609-06AS	AS	09/30/21 16:36	WI210907-6	1.5	.488	1.952	mg/L	98	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	1.5		1.432	mg/L	95	90	110			

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528571													
WG528571ICV	ICV	10/05/21 1:01	II211001-1	2		1.98	mg/L	99	95	105			
WG528571ICB	ICB	10/05/21 1:07				U	mg/L		-0.3	0.3			
WG528571LFB	LFB	10/05/21 1:20	II210930-2	.9822		1.27	mg/L	129	85	115			LA
L68609-04AS	AS	10/05/21 1:35	II210930-2	.9822	U	1.03	mg/L	105	85	115			
L68609-04ASD	ASD	10/05/21 1:38	II210930-2	.9822	U	1.06	mg/L	108	85	115	3	20	
L68609-13AS	AS	10/05/21 2:14	II210930-2	.9822	U	1.13	mg/L	115	85	115			
L68609-13ASD	ASD	10/05/21 2:17	II210930-2	.9822	U	1.15	mg/L	117	85	115	2	20	MA
WG528645													
WG528645ICV	ICV	10/05/21 10:55	II211001-1	2		1.99	mg/L	100	95	105			
WG528645ICB	ICB	10/05/21 11:01				U	mg/L		-0.3	0.3			
WG528645LFB	LFB	10/05/21 11:14	II210930-2	.9822		.99	mg/L	101	85	115			
L51661-126AS	AS	10/05/21 11:27	II210930-2	.9822	U	.99	mg/L	101	85	115			
L51661-126ASD	ASD	10/05/21 11:30	II210930-2	.9822	U	.99	mg/L	101	85	115	0	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.10016		.0987	mg/L	99	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.0154	0.0154			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.0501		.0547	mg/L	109	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.0501	.159	.2087	mg/L	99	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.0501	.159	.2171	mg/L	116	70	130	4	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.0501	.0278	.081	mg/L	106	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.0501	.0278	.083	mg/L	110	70	130	2	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05155	mg/L	103	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00022	0.00022			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05005		.05439	mg/L	109	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05005	U	.0539	mg/L	108	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05005	U	.05523	mg/L	110	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05005	U	.05361	mg/L	107	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05005	U	.05239	mg/L	105	70	130	2	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	2		2.0128	mg/L	101	95	105			
WG528409ICB	ICB	10/03/21 19:09				U	mg/L		-0.024	0.024			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	.999		1.052	mg/L	105	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	.999	.0511	1.109	mg/L	106	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	.999	.0511	1.113	mg/L	106	85	115	0	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	.999	.0873	1.143	mg/L	106	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	.999	.0873	1.151	mg/L	106	85	115	1	20	

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	100		95.74	mg/L	96	95	105			
WG528409ICB	ICB	10/03/21 19:09				.26	mg/L		-0.6	0.6			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	49.99828		49.93	mg/L	100	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	49.99828	U	51.54	mg/L	103	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	49.99828	U	53.04	mg/L	106	85	115	3	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	49.99828	.37	51.09	mg/L	101	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	49.99828	.37	52.97	mg/L	105	85	115	4	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.0525	mg/L	105	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00088	0.00088			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.0499		.05277	mg/L	106	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.0499	U	.05234	mg/L	105	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.0499	U	.05219	mg/L	105	70	130	0	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.0499	.00745	.05974	mg/L	105	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.0499	.00745	.05835	mg/L	102	70	130	2	20	

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG527736													
WG527736CCV1	CCV	09/23/21 10:20	HG210709-4	10		9.89	ng/L	99	76.5	123.4			
WG527736CCB1	CCB	09/23/21 10:24				U	ng/L		-0.501	0.501			
WG527736PQV	PQV	09/23/21 10:29	HG210709-6	1		1.12	ng/L	112	70	130			
WG527736LFB	LFB	09/23/21 10:34	HG210709-5	2		2.17	ng/L	109	71	125			
WG527736CCV2	CCV	09/23/21 11:17	HG210709-4	10		10.5	ng/L	105	76.5	123.4			
WG527736CCB2	CCB	09/23/21 11:22				U	ng/L		-0.501	0.501			
WG527736CCV3	CCV	09/23/21 12:27	HG210709-4	10		9.61	ng/L	96	76.5	123.4			
WG527736CCB3	CCB	09/23/21 12:32				U	ng/L		-0.501	0.501			
L68534-13MS	MS	09/23/21 13:12	HG16315X	50	42	56.5	ng/L	145	71	125			M3 MH
L68534-13MSD	MSD	09/23/21 13:16	HG16315X	50	42	57	ng/L	150	71	125	1	24	M3 MH
WG527736CCV4	CCV	09/23/21 13:21	HG210709-4	10		9.98	ng/L	100	76.5	123.4			
WG527736CCB4	CCB	09/23/21 13:26				U	ng/L		-0.501	0.501			
WG528396													
WG528396CCV1	CCV	09/30/21 11:36	HG210709-4	10		8.83	ng/L	88	76.5	123.4			
WG528396CCB1	CCB	09/30/21 11:41				U	ng/L		-0.501	0.501			
WG528396PQV	PQV	09/30/21 11:46	HG210709-6	1		.86	ng/L	86	70	130			
WG528396CCV2	CCV	09/30/21 12:42	HG210709-4	10		9.44	ng/L	94	76.5	123.4			
WG528396CCB2	CCB	09/30/21 12:47				U	ng/L		-0.501	0.501			
WG528396CCV3	CCV	09/30/21 13:39	HG210709-4	10		9	ng/L	90	76.5	123.4			
WG528396CCB3	CCB	09/30/21 13:44				U	ng/L		-0.501	0.501			
WG528396LFB1	LFB	09/30/21 14:03	HG210709-5	2		1.95	ng/L	98	71	125			
L68609-06MS	MS	09/30/21 14:13	HG210709-5	2	3.3	5.27	ng/L	99	71	125			
L68609-06MSD	MSD	09/30/21 14:17	HG210709-5	2	3.3	5.21	ng/L	96	71	125	1	24	
WG528396CCV4	CCV	09/30/21 14:43	HG210709-4	10		9.38	ng/L	94	76.5	123.4			
WG528396CCB4	CCB	09/30/21 14:48				U	ng/L		-0.501	0.501			
WG528396CCV5	CCV	09/30/21 15:58	HG210709-4	10		9.62	ng/L	96	76.5	123.4			
WG528396CCB5	CCB	09/30/21 16:03				U	ng/L		-0.501	0.501			
WG528396LFB2	LFB	09/30/21 16:50	HG210709-5	2		2.19	ng/L	110	71	125			
WG528396CCV6	CCV	09/30/21 16:59	HG210709-4	10		9.87	ng/L	99	76.5	123.4			
WG528396CCB6	CCB	09/30/21 17:04				U	ng/L		-0.501	0.501			
WG528396CCV7	CCV	09/30/21 18:07	HG210709-4	10		9.86	ng/L	99	76.5	123.4			
WG528396CCB7	CCB	09/30/21 18:12				U	ng/L		-0.501	0.501			
WG528396CCV8	CCV	09/30/21 19:11	HG210709-4	10		9.72	ng/L	97	76.5	123.4			
WG528396CCB8	CCB	09/30/21 19:16				U	ng/L		-0.501	0.501			
WG528396CCV9	CCV	09/30/21 19:54	HG210709-4	10		9.57	ng/L	96	76.5	123.4			
WG528396CCB9	CCB	09/30/21 19:59				U	ng/L		-0.501	0.501			

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ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.01992		.02072	mg/L	104	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00044	0.00044			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05005		.05512	mg/L	110	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05005	.00532	.05751	mg/L	104	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05005	.00532	.05888	mg/L	107	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05005	.00064	.054	mg/L	107	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05005	.00064	.05348	mg/L	106	70	130	1	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05177	mg/L	104	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00088	0.00088			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05		.06524	mg/L	130	85	115			LA
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05	U	.05087	mg/L	102	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05	U	.05198	mg/L	104	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05	.00166	.05139	mg/L	99	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05	.00166	.05194	mg/L	101	70	130	1	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528965													
WG528965ICV	ICV	10/08/21 0:20	WI210904-1	2.4161		2.36	mg/L	98	90	110			
WG528965ICB	ICB	10/08/21 0:22				U	mg/L		-0.02	0.02			
WG528970													
WG528970LFB1	LFB	10/08/21 2:42	WI211001-5	2		2.015	mg/L	101	90	110			
L68609-01AS	AS	10/08/21 2:44	WI211001-5	2	U	2.05	mg/L	103	90	110			
L68609-02DUP	DUP	10/08/21 2:47			U	U	mg/L				0	20	RA
L68609-11AS	AS	10/08/21 3:04	WI211001-5	2	U	2.056	mg/L	103	90	110			
L68609-12DUP	DUP	10/08/21 3:07			U	U	mg/L				0	20	RA
WG528970LFB2	LFB	10/08/21 3:22	WI211001-5	2		2.02	mg/L	101	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW1	LCSW	09/21/21 20:23	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW4	LCSW	09/21/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW7	LCSW	09/22/21 3:37	PCN62948	6		6.1	units	102	5.9	6.1			
L68609-09DUP	DUP	09/22/21 7:38			9.6	9.6	units				0	20	
WG527716LCSW10	LCSW	09/22/21 7:43	PCN62948	6		6.1	units	102	5.9	6.1			
L68610-05DUP	DUP	09/22/21 9:55			9.1	9.1	units				0	20	
WG527716LCSW13	LCSW	09/22/21 11:47	PCN62948	6		6.1	units	102	5.9	6.1			

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528468													
WG528468ICV	ICV	10/01/21 13:49	WI210831-6	.65228		.683	mg/L	105	90	110			
WG528468ICB	ICB	10/01/21 13:51				U	mg/L		-0.01	0.01			
WG528165LRB	LRB	10/01/21 13:52				U	mg/L		-0.01	0.01			
WG528165LFB	LFB	10/01/21 13:53	PT2X	1		.919	mg/L	92	90	110			
L68609-01LFM	LFM	10/01/21 13:55	PT2X	1	.012	.904	mg/L	89	90	110			M2
L68609-02DUP	DUP	10/01/21 13:57			.015	.012	mg/L				22	20	RA
L68609-11LFM	LFM	10/01/21 14:10	PT2X	1	.019	.914	mg/L	90	90	110			
L68609-12DUP	DUP	10/01/21 14:13			.017	.016	mg/L				6	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	20		19.83	mg/L	99	95	105			
WG528409ICB	ICB	10/03/21 19:09				U	mg/L		-0.6	0.6			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	99.96008		104.4	mg/L	104	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	99.96008	.88	106.7	mg/L	106	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	99.96008	.88	108.5	mg/L	108	85	115	2	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	99.96008	5.02	108.4	mg/L	103	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	99.96008	5.02	114.2	mg/L	109	85	115	5	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527899													
WG527899PBW	PBW	09/23/21 14:00				U	mg/L		-20	20			
WG527899LCSW	LCSW	09/23/21 14:03	PCN64132	1000		980	mg/L	98	80	120			
L68609-06DUP	DUP	09/23/21 14:50			188	196	mg/L				4	10	RA
L68614-01DUP	DUP	09/23/21 15:30			2910	2896	mg/L				0	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	2		1.997	mg/L	100	95	105			
WG528409ICB	ICB	10/03/21 19:09				U	mg/L		-0.15	0.15			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	1.0017		1.081	mg/L	108	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	1.0017	U	1.097	mg/L	110	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	1.0017	U	1.116	mg/L	111	85	115	2	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	1.0017	U	1.108	mg/L	111	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	1.0017	U	1.13	mg/L	113	85	115	2	20	

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05078	mg/L	102	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00022	0.00022			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05		.05182	mg/L	104	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05	.00043	.05247	mg/L	104	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05	.00043	.05419	mg/L	108	70	130	3	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05	.00016	.05333	mg/L	106	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05	.00016	.05463	mg/L	109	70	130	2	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.02		.01961	mg/L	98	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00022	0.00022			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.01		.01026	mg/L	103	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.01	U	.0056	mg/L	56	70	130			M2 ZA
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.01	U	.00638	mg/L	64	70	130	13	20	M2 ZA
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.01	U	.00982	mg/L	98	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.01	U	.00986	mg/L	99	70	130	0	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	100		99.54	mg/L	100	95	105			
WG528409ICB	ICB	10/03/21 19:09				U	mg/L		-0.6	0.6			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	100.007		104.9	mg/L	105	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	100.007	88.7	190.3	mg/L	102	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	100.007	88.7	192.9	mg/L	104	85	115	1	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	100.007	66.1	164.7	mg/L	99	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	100.007	66.1	173.2	mg/L	107	85	115	5	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	2		1.9642	mg/L	98	95	105			
WG528409ICB	ICB	10/03/21 19:09				U	mg/L		-0.027	0.027			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	.5005		.5685	mg/L	114	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	.5005	.0279	.6052	mg/L	115	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	.5005	.0279	.6142	mg/L	117	85	115	1	20	MA
L68609-13AS	AS	10/03/21 20:34	II210910-2	.5005	.0321	.5943	mg/L	112	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	.5005	.0321	.6223	mg/L	118	85	115	5	20	MA

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	30		28.72	mg/L	96	90	110			
L68559-09DUP	DUP	09/29/21 23:58			20.8	20.85	mg/L				0	20	
L68559-10AS	AS	09/30/21 0:34	WI210907-6	30	19.8	48.81	mg/L	97	90	110			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	30		29.26	mg/L	98	90	110			
L68609-05DUP	DUP	09/30/21 16:01			23	22.96	mg/L				0	20	
L68609-06AS	AS	09/30/21 16:36	WI210907-6	30	22.2	50.71	mg/L	95	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	30		28.83	mg/L	96	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05255	mg/L	105	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00022	0.00022			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05		.05382	mg/L	108	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05	U	.05323	mg/L	106	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05	U	.05417	mg/L	108	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05	U	.05261	mg/L	105	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05	U	.05251	mg/L	105	70	130	0	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.05244	mg/L	105	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00176	0.00176			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05005		.05459	mg/L	109	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05005	.0119	.06167	mg/L	99	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05005	.0119	.0622	mg/L	100	70	130	1	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05005	U	.05131	mg/L	103	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05005	U	.05182	mg/L	104	70	130	1	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528409													
WG528409ICV	ICV	10/03/21 19:03	II211001-1	2		2.0155	mg/L	101	95	105			
WG528409ICB	ICB	10/03/21 19:09				U	mg/L		-0.015	0.015			
WG528409LFB	LFB	10/03/21 19:21	II210910-2	1		1.081	mg/L	108	85	115			
L68581-01AS	AS	10/03/21 19:36	II210910-2	1	U	1.098	mg/L	110	85	115			
L68581-01ASD	ASD	10/03/21 19:39	II210910-2	1	U	1.118	mg/L	112	85	115	2	20	
L68609-13AS	AS	10/03/21 20:34	II210910-2	1	U	1.099	mg/L	110	85	115			
L68609-13ASD	ASD	10/03/21 20:37	II210910-2	1	U	1.096	mg/L	110	85	115	0	20	

WETLAB

ACZ Project ID: ***L68609***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.0516	mg/L	103	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.00022	0.00022			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05		.05304	mg/L	106	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05	U	.05405	mg/L	108	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05	U	.05427	mg/L	109	70	130	0	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05	.00057	.0528	mg/L	104	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05	.00057	.05371	mg/L	106	70	130	2	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.04918	mg/L	98	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.0011	0.0011			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.05		.05331	mg/L	107	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.05	.00297	.05534	mg/L	105	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.05	.00297	.05643	mg/L	107	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.05	U	.05179	mg/L	104	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.05	U	.05271	mg/L	105	70	130	2	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529045													
WG529045ICV	ICV	10/08/21 19:29	MS211001-2	.05		.049	mg/L	98	90	110			
WG529045ICB	ICB	10/08/21 19:31				U	mg/L		-0.0132	0.0132			
WG529045LFB	LFB	10/08/21 19:32	MS210927-3	.050075		.0567	mg/L	113	85	115			
L68609-04AS	AS	10/08/21 19:41	MS210927-3	.050075	U	.0574	mg/L	115	70	130			
L68609-04ASD	ASD	10/08/21 19:42	MS210927-3	.050075	U	.0587	mg/L	117	70	130	2	20	
L68794-01AS	AS	10/08/21 20:09	MS210927-3	.050075	U	.057	mg/L	114	70	130			
L68794-01ASD	ASD	10/08/21 20:11	MS210927-3	.050075	U	.0569	mg/L	114	70	130	0	20	

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-01	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-02	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-03	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-04	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-05	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG527736	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M1631E, Atomic Fluorescence	MH	For Method 1631E, matrix spike and matrix spike duplicate are outside method limits, sample should not be reported for compliance purposes. Client may request re-analysis on a dilution.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-06	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-07	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-08	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-09	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-10	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529045	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-11	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-12	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-13	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68609-14	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528571	Gallium, dissolved	M200.7 ICP	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529045	Nickel, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
	WG528970	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528468	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527899	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528409	Strontium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Metals Analysis

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.	
Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS

Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68609
Date Received: 09/20/2021 12:14
Received By:
Date Printed: 9/21/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	X		

A change was made in the sample ID on #10 was crossed out and rewritten section prior to ACZ custody.

A change was made in the sample ID on #10 was crossed out and rewritten section prior to ACZ custody.

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Western Environmental Testing Laboratory

ACZ Project ID: L68609
Date Received: 09/20/2021 12:14
Received By:
Date Printed: 9/21/2021

rewritten section prior to ACZ custody.

A change was made in the sample ID on #10 was crossed out and rewritten section prior to ACZ custody.

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A change was made in the sample ID on #10 was crossed out and rewritten section prior to ACZ custody.

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?		X	

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68609
Date Received: 09/20/2021 12:14
Received By:
Date Printed: 9/21/2021

Some parameters were received past hold time.

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35982	16.8	<=6.0	15	N/A
NA35980	15.5	<=6.0	15	N/A
NA35981	16.5	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68609

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(LD) 1631						
21090393-001	9/11/2021 13:00	OT	4	✓	✓						
21090393-002				✓	✓						
21090393-003				✓	✓						
21090393-004				✓	✓						
21090393-005				✓	✓						
21090393-006				✓	✓						
21090393-007				✓	✓						
21090393-008				✓	✓						
21090393-009				✓	✓						
21090393-~~001~~ DUP	″	″	″	✓	✓						

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/16 1:00		
		9/20/21	12:19

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68609 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68609

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (D) 1631
21090393-011	9/11/2021 13:00	OT	4	✓	✓
21090393-012	"	"	"	✓	✓
21090393-013	"	"	"	✓	✓
21090393-014	"	"	"	✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/16 9:00		9/20/21 10:19

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 08, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68559

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 16, 2021. This project has been assigned to ACZ's project number, L68559. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68559. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 07, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-001

ACZ Sample ID: ***L68559-01***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 11:36	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0339		*	mg/L	0.005	0.015	10/07/21 13:00	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 14:42	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0253		*	mg/L	0.0002	0.001	10/04/21 14:42	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0178		*	mg/L	0.0005	0.0025	10/04/21 14:42	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:00	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 17:45	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	09/29/21 17:45	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:00	bsu
Calcium, dissolved	M200.7 ICP	1	4.92		*	mg/L	0.1	0.5	09/29/21 17:45	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00173	B	*	mg/L	0.0005	0.002	10/04/21 14:42	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:00	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 14:42	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 17:45	kja
Iron, dissolved	M200.8 ICP-MS	1	0.118		*	mg/L	0.007	0.02	10/04/21 14:42	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:00	bsu
Lithium, dissolved	M200.7 ICP	1	0.0762		*	mg/L	0.008	0.04	09/29/21 17:45	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 17:45	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.002	10/07/21 13:00	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/24/21 13:14	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00482		*	mg/L	0.0002	0.0005	10/04/21 14:42	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 14:42	mfm
Potassium, dissolved	M200.7 ICP	1	6.28		*	mg/L	0.2	1	09/29/21 17:45	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 17:45	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00044		*	mg/L	0.0001	0.00025	10/04/21 14:42	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 14:42	mfm
Sodium, dissolved	M200.7 ICP	1	63.4		*	mg/L	0.2	1	09/29/21 17:45	kja
Strontium, dissolved	M200.7 ICP	1	0.0341	B	*	mg/L	0.009	0.045	09/29/21 17:45	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:00	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0116		*	mg/L	0.0008	0.0025	10/07/21 13:00	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 17:45	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:00	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00351		*	mg/L	0.0005	0.002	10/04/21 14:42	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 14:42	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-001

ACZ Sample ID: ***L68559-01***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	20.3		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	106		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	127		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	4.96		*	mg/L	0.4	2	09/29/21 20:41	krh
Conductivity @25C	SM2510B	1	327		*	umhos/cm	1	10	09/22/21 3:03	eep
Fluoride	M300.0 - Ion Chromatography	1	0.400		*	mg/L	0.05	0.25	09/29/21 20:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:40	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:01	pjb
pH (lab)	SM4500H+ B									
pH		1	10.2	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.020	B	*	mg/L	0.01	0.05	09/25/21 0:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/17/21 13:34	emk
Sulfate	M300.0 - Ion Chromatography	1	19.1		*	mg/L	0.4	2	09/29/21 20:41	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-002

ACZ Sample ID: ***L68559-02***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 11:58	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0287		*	mg/L	0.005	0.015	10/07/21 13:02	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 14:44	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0267		*	mg/L	0.0002	0.001	10/04/21 14:44	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0167		*	mg/L	0.0005	0.0025	10/04/21 14:44	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:02	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 17:49	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/29/21 17:49	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:02	bsu
Calcium, dissolved	M200.7 ICP	1	4.86		*	mg/L	0.1	0.5	09/29/21 17:49	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00191	B	*	mg/L	0.0005	0.002	10/04/21 14:44	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:02	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 14:44	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 17:49	kja
Iron, dissolved	M200.8 ICP-MS	1	0.135		*	mg/L	0.007	0.02	10/04/21 14:44	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:02	bsu
Lithium, dissolved	M200.7 ICP	1	0.0754		*	mg/L	0.008	0.04	09/29/21 17:49	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 17:49	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	10/07/21 13:02	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/24/21 13:15	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00505		*	mg/L	0.0002	0.0005	10/04/21 14:44	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 14:44	mfm
Potassium, dissolved	M200.7 ICP	1	5.43		*	mg/L	0.2	1	09/29/21 17:49	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 17:49	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/04/21 14:44	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 14:44	mfm
Sodium, dissolved	M200.7 ICP	1	62.9		*	mg/L	0.2	1	09/29/21 17:49	kja
Strontium, dissolved	M200.7 ICP	1	0.0312	B	*	mg/L	0.009	0.045	09/29/21 17:49	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:02	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0113		*	mg/L	0.0008	0.0025	10/07/21 13:02	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 17:49	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:02	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00442		*	mg/L	0.0005	0.002	10/04/21 14:44	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 14:44	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-002

ACZ Sample ID: ***L68559-02***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	27.7		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	95.8		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.08		*	mg/L	0.4	2	09/29/21 20:59	krh
Conductivity @25C	SM2510B	1	318		*	umhos/cm	1	10	09/22/21 3:13	eep
Fluoride	M300.0 - Ion Chromatography	1	0.433		*	mg/L	0.05	0.25	09/29/21 20:59	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:42	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:03	pjb
pH (lab)	SM4500H+ B									
pH		1	10.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.019	B	*	mg/L	0.01	0.05	09/25/21 0:31	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	192		*	mg/L	20	40	09/17/21 13:36	emk
Sulfate	M300.0 - Ion Chromatography	1	19.9		*	mg/L	0.4	2	09/29/21 20:59	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-003

ACZ Sample ID: ***L68559-03***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 12:20	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0137	B	*	mg/L	0.005	0.015	10/07/21 13:04	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 14:46	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0387		*	mg/L	0.0002	0.001	10/04/21 14:46	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00782		*	mg/L	0.0005	0.0025	10/04/21 14:46	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:04	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 17:52	kja
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	09/29/21 17:52	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:04	bsu
Calcium, dissolved	M200.7 ICP	1	5.29		*	mg/L	0.1	0.5	09/29/21 17:52	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00526		*	mg/L	0.0005	0.002	10/04/21 14:46	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:04	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 14:46	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 17:52	kja
Iron, dissolved	M200.8 ICP-MS	1	0.144		*	mg/L	0.007	0.02	10/04/21 14:46	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:04	bsu
Lithium, dissolved	M200.7 ICP	1	0.0681		*	mg/L	0.008	0.04	09/29/21 17:52	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 17:52	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00065	B	*	mg/L	0.0004	0.002	10/07/21 13:04	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/24/21 13:18	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00543		*	mg/L	0.0002	0.0005	10/04/21 14:46	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 14:46	mfm
Potassium, dissolved	M200.7 ICP	1	2.63		*	mg/L	0.2	1	09/29/21 17:52	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 17:52	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00034		*	mg/L	0.0001	0.00025	10/04/21 14:46	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 14:46	mfm
Sodium, dissolved	M200.7 ICP	1	61.2		*	mg/L	0.2	1	09/29/21 17:52	kja
Strontium, dissolved	M200.7 ICP	1	0.0230	B	*	mg/L	0.009	0.045	09/29/21 17:52	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:04	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0532		*	mg/L	0.0008	0.0025	10/07/21 13:04	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 17:52	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:04	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00262		*	mg/L	0.0005	0.002	10/04/21 14:46	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 14:46	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-003

ACZ Sample ID: ***L68559-03***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	95.4		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	21.5		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	117		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.33		*	mg/L	0.4	2	09/29/21 21:17	krh
Conductivity @25C	SM2510B	1	296		*	umhos/cm	1	10	09/22/21 3:23	eep
Fluoride	M300.0 - Ion Chromatography	1	0.478		*	mg/L	0.05	0.25	09/29/21 21:17	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:44	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:04	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.030	B	*	mg/L	0.01	0.05	09/25/21 0:34	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/17/21 13:38	emk
Sulfate	M300.0 - Ion Chromatography	1	21.9		*	mg/L	0.4	2	09/29/21 21:17	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-004

ACZ Sample ID: ***L68559-04***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 12:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0237		*	mg/L	0.005	0.015	10/07/21 13:05	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 14:48	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0370		*	mg/L	0.0002	0.001	10/04/21 14:48	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00715		*	mg/L	0.0005	0.0025	10/04/21 14:48	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:05	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 17:55	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/29/21 17:55	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:05	bsu
Calcium, dissolved	M200.7 ICP	1	4.89		*	mg/L	0.1	0.5	09/29/21 17:55	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00197	B	*	mg/L	0.0005	0.002	10/04/21 14:48	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:05	bsu
Copper, dissolved	M200.8 ICP-MS	1	0.00089	B	*	mg/L	0.0008	0.002	10/04/21 14:48	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 17:55	kja
Iron, dissolved	M200.8 ICP-MS	1	0.131		*	mg/L	0.007	0.02	10/04/21 14:48	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:05	bsu
Lithium, dissolved	M200.7 ICP	1	0.0701		*	mg/L	0.008	0.04	09/29/21 17:55	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 17:55	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00052	B	*	mg/L	0.0004	0.002	10/07/21 13:05	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:27	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00518		*	mg/L	0.0002	0.0005	10/04/21 14:48	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 14:48	mfm
Potassium, dissolved	M200.7 ICP	1	2.72		*	mg/L	0.2	1	09/29/21 17:55	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 17:55	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00037		*	mg/L	0.0001	0.00025	10/04/21 14:48	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 14:48	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/29/21 17:55	kja
Strontium, dissolved	M200.7 ICP	1	0.0223	B	*	mg/L	0.009	0.045	09/29/21 17:55	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:05	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0250		*	mg/L	0.0008	0.0025	10/07/21 13:05	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 17:55	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:05	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00235		*	mg/L	0.0005	0.002	10/04/21 14:48	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 14:48	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-004

ACZ Sample ID: ***L68559-04***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	95.3		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	17.4	B	*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	113		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.29		*	mg/L	0.4	2	09/29/21 21:35	krh
Conductivity @25C	SM2510B	1	293		*	umhos/cm	1	10	09/22/21 4:09	eep
Fluoride	M300.0 - Ion Chromatography	1	0.473		*	mg/L	0.05	0.25	09/29/21 21:35	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:46	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:05	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	B	*	mg/L	0.01	0.05	09/25/21 0:35	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/17/21 13:40	emk
Sulfate	M300.0 - Ion Chromatography	1	21.4		*	mg/L	0.4	2	09/29/21 21:35	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-005

ACZ Sample ID: ***L68559-05***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 12:41	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0276		*	mg/L	0.005	0.015	10/07/21 13:07	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00044	B	*	mg/L	0.0004	0.002	10/04/21 14:53	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0364		*	mg/L	0.0002	0.001	10/04/21 14:53	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00940		*	mg/L	0.0005	0.0025	10/04/21 14:53	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:07	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 17:58	kja
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	09/29/21 17:58	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:07	bsu
Calcium, dissolved	M200.7 ICP	1	4.88		*	mg/L	0.1	0.5	09/29/21 17:58	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00325		*	mg/L	0.0005	0.002	10/04/21 14:53	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:07	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 14:53	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 17:58	kja
Iron, dissolved	M200.8 ICP-MS	1	0.156		*	mg/L	0.007	0.02	10/04/21 14:53	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:07	bsu
Lithium, dissolved	M200.7 ICP	1	0.0699		*	mg/L	0.008	0.04	09/29/21 17:58	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 17:58	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00076	B	*	mg/L	0.0004	0.002	10/07/21 13:07	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:28	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00573		*	mg/L	0.0002	0.0005	10/04/21 14:53	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 14:53	mfm
Potassium, dissolved	M200.7 ICP	1	2.71		*	mg/L	0.2	1	09/29/21 17:58	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 17:58	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00046		*	mg/L	0.0001	0.00025	10/04/21 14:53	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 14:53	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/29/21 17:58	kja
Strontium, dissolved	M200.7 ICP	1	0.0225	B	*	mg/L	0.009	0.045	09/29/21 17:58	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:07	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0285		*	mg/L	0.0008	0.0025	10/07/21 13:07	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 17:58	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:07	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00276		*	mg/L	0.0005	0.002	10/04/21 14:53	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 14:53	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-005

ACZ Sample ID: ***L68559-05***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	89.4		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	25.5		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	115		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.30		*	mg/L	0.4	2	09/29/21 22:29	krh
Conductivity @25C	SM2510B	1	293		*	umhos/cm	1	10	09/22/21 4:19	eep
Fluoride	M300.0 - Ion Chromatography	1	0.476		*	mg/L	0.05	0.25	09/29/21 22:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:48	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:06	pjb
pH (lab)	SM4500H+ B									
pH		1	9.2	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	B	*	mg/L	0.01	0.05	09/25/21 0:36	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/17/21 13:42	emk
Sulfate	M300.0 - Ion Chromatography	1	21.7		*	mg/L	0.4	2	09/29/21 22:29	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-006

ACZ Sample ID: ***L68559-06***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 12:52	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0490		*	mg/L	0.005	0.015	10/07/21 13:09	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00043	B	*	mg/L	0.0004	0.002	10/04/21 14:55	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0360		*	mg/L	0.0002	0.001	10/04/21 14:55	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0104		*	mg/L	0.0005	0.0025	10/04/21 14:55	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:09	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:08	kja
Boron, dissolved	M200.7 ICP	1	0.076	B	*	mg/L	0.03	0.1	09/29/21 18:08	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:09	bsu
Calcium, dissolved	M200.7 ICP	1	4.72		*	mg/L	0.1	0.5	09/29/21 18:08	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/04/21 14:55	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:09	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 14:55	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:08	kja
Iron, dissolved	M200.8 ICP-MS	1	0.144		*	mg/L	0.007	0.02	10/04/21 14:55	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:09	bsu
Lithium, dissolved	M200.7 ICP	1	0.0739		*	mg/L	0.008	0.04	09/29/21 18:08	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:08	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00071	B	*	mg/L	0.0004	0.002	10/07/21 13:09	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:29	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00590		*	mg/L	0.0002	0.0005	10/04/21 14:55	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 14:55	mfm
Potassium, dissolved	M200.7 ICP	1	4.15		*	mg/L	0.2	1	09/29/21 18:08	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:08	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00043		*	mg/L	0.0001	0.00025	10/04/21 14:55	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 14:55	mfm
Sodium, dissolved	M200.7 ICP	1	62.5		*	mg/L	0.2	1	09/29/21 18:08	kja
Strontium, dissolved	M200.7 ICP	1	0.0282	B	*	mg/L	0.009	0.045	09/29/21 18:08	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:09	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0513		*	mg/L	0.0008	0.0025	10/07/21 13:09	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:08	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:09	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00092	B	*	mg/L	0.0005	0.002	10/04/21 14:55	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 14:55	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-006

ACZ Sample ID: ***L68559-06***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	92.1		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	28.1		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.30		*	mg/L	0.4	2	09/29/21 22:47	krh
Conductivity @25C	SM2510B	1	299		*	umhos/cm	1	10	09/22/21 4:29	eep
Fluoride	M300.0 - Ion Chromatography	1	0.457		*	mg/L	0.05	0.25	09/29/21 22:47	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:50	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:09	pjb
pH (lab)	SM4500H+ B									
pH		1	9.2	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.026	B	*	mg/L	0.01	0.05	09/25/21 0:37	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/17/21 13:44	emk
Sulfate	M300.0 - Ion Chromatography	1	20.9		*	mg/L	0.4	2	09/29/21 22:47	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-007

ACZ Sample ID: ***L68559-07***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 13:03	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0355		*	mg/L	0.005	0.015	10/07/21 13:10	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 14:57	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0361		*	mg/L	0.0002	0.001	10/04/21 14:57	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00924		*	mg/L	0.0005	0.0025	10/04/21 14:57	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:10	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:11	kja
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	09/29/21 18:11	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:10	bsu
Calcium, dissolved	M200.7 ICP	1	4.45		*	mg/L	0.1	0.5	09/29/21 18:11	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00052	B	*	mg/L	0.0005	0.002	10/04/21 14:57	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:10	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 14:57	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:11	kja
Iron, dissolved	M200.8 ICP-MS	1	0.142		*	mg/L	0.007	0.02	10/04/21 14:57	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:10	bsu
Lithium, dissolved	M200.7 ICP	1	0.0743		*	mg/L	0.008	0.04	09/29/21 18:11	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:11	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00075	B	*	mg/L	0.0004	0.002	10/07/21 13:10	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:30	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00555		*	mg/L	0.0002	0.0005	10/04/21 14:57	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 14:57	mfm
Potassium, dissolved	M200.7 ICP	1	3.43		*	mg/L	0.2	1	09/29/21 18:11	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:11	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00045		*	mg/L	0.0001	0.00025	10/04/21 14:57	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 14:57	mfm
Sodium, dissolved	M200.7 ICP	1	62.1		*	mg/L	0.2	1	09/29/21 18:11	kja
Strontium, dissolved	M200.7 ICP	1	0.0273	B	*	mg/L	0.009	0.045	09/29/21 18:11	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:10	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0106		*	mg/L	0.0008	0.0025	10/07/21 13:10	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:11	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:10	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00102	B	*	mg/L	0.0005	0.002	10/04/21 14:57	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 14:57	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-007

ACZ Sample ID: ***L68559-07***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	86.9		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	30.8		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.26		*	mg/L	0.4	2	09/29/21 23:05	krh
Conductivity @25C	SM2510B	1	295		*	umhos/cm	1	10	09/22/21 4:39	eep
Fluoride	M300.0 - Ion Chromatography	1	0.451		*	mg/L	0.05	0.25	09/29/21 23:05	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:52	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:11	pjb
pH (lab)	SM4500H+ B									
pH		1	9.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	B	*	mg/L	0.01	0.05	09/25/21 0:40	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/17/21 13:46	emk
Sulfate	M300.0 - Ion Chromatography	1	20.9		*	mg/L	0.4	2	09/29/21 23:05	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-008

ACZ Sample ID: ***L68559-08***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 13:14	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0350		*	mg/L	0.005	0.015	10/07/21 13:15	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 15:02	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0361		*	mg/L	0.0002	0.001	10/04/21 15:02	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00797		*	mg/L	0.0005	0.0025	10/04/21 15:02	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:15	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:21	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	09/29/21 18:21	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:15	bsu
Calcium, dissolved	M200.7 ICP	1	4.59		*	mg/L	0.1	0.5	09/29/21 18:21	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00057	B	*	mg/L	0.0005	0.002	10/04/21 15:02	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:15	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 15:02	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:21	kja
Iron, dissolved	M200.8 ICP-MS	1	0.136		*	mg/L	0.007	0.02	10/04/21 15:02	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:15	bsu
Lithium, dissolved	M200.7 ICP	1	0.0739		*	mg/L	0.008	0.04	09/29/21 18:21	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:21	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00089	B	*	mg/L	0.0004	0.002	10/07/21 13:15	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:33	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00547		*	mg/L	0.0002	0.0005	10/04/21 15:02	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 15:02	mfm
Potassium, dissolved	M200.7 ICP	1	4.16		*	mg/L	0.2	1	09/29/21 18:21	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:21	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00053		*	mg/L	0.0001	0.00025	10/04/21 15:02	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 15:02	mfm
Sodium, dissolved	M200.7 ICP	1	62.3		*	mg/L	0.2	1	09/29/21 18:21	kja
Strontium, dissolved	M200.7 ICP	1	0.0264	B	*	mg/L	0.009	0.045	09/29/21 18:21	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:15	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0120		*	mg/L	0.0008	0.0025	10/07/21 13:15	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:21	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:15	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00105	B	*	mg/L	0.0005	0.002	10/04/21 15:02	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 15:02	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-008

ACZ Sample ID: ***L68559-08***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	90.0		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	29.6		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.22		*	mg/L	0.4	2	09/29/21 23:22	krh
Conductivity @25C	SM2510B	1	299		*	umhos/cm	1	10	09/22/21 4:49	eep
Fluoride	M300.0 - Ion Chromatography	1	0.448		*	mg/L	0.05	0.25	09/29/21 23:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:54	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:18	pjb
pH (lab)	SM4500H+ B									
pH		1	9.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	B	*	mg/L	0.01	0.05	09/25/21 0:42	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/17/21 13:48	emk
Sulfate	M300.0 - Ion Chromatography	1	20.5		*	mg/L	0.4	2	09/29/21 23:22	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-009

ACZ Sample ID: ***L68559-09***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 13:25	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0536		*	mg/L	0.005	0.015	10/07/21 13:20	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00056	B	*	mg/L	0.0004	0.002	10/04/21 15:04	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0363		*	mg/L	0.0002	0.001	10/04/21 15:04	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00703		*	mg/L	0.0005	0.0025	10/04/21 15:04	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:20	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:25	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	09/29/21 18:25	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:20	bsu
Calcium, dissolved	M200.7 ICP	1	4.18		*	mg/L	0.1	0.5	09/29/21 18:25	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00097	B	*	mg/L	0.0005	0.002	10/04/21 15:04	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:20	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 15:04	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:25	kja
Iron, dissolved	M200.8 ICP-MS	1	0.107		*	mg/L	0.007	0.02	10/04/21 15:04	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:20	bsu
Lithium, dissolved	M200.7 ICP	1	0.0748		*	mg/L	0.008	0.04	09/29/21 18:25	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:25	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0004	0.002	10/07/21 13:20	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:36	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00964		*	mg/L	0.0002	0.0005	10/04/21 15:04	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 15:04	mfm
Potassium, dissolved	M200.7 ICP	1	5.49		*	mg/L	0.2	1	09/29/21 18:25	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:25	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00051		*	mg/L	0.0001	0.00025	10/04/21 15:04	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 15:04	mfm
Sodium, dissolved	M200.7 ICP	1	62.5		*	mg/L	0.2	1	09/29/21 18:25	kja
Strontium, dissolved	M200.7 ICP	1	0.0256	B	*	mg/L	0.009	0.045	09/29/21 18:25	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:20	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0177		*	mg/L	0.0008	0.0025	10/07/21 13:20	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:25	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:20	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00109	B	*	mg/L	0.0005	0.002	10/04/21 15:04	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 15:04	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-009

ACZ Sample ID: ***L68559-09***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	83.5		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	36.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.20		*	mg/L	0.4	2	09/29/21 23:40	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/22/21 4:59	eep
Fluoride	M300.0 - Ion Chromatography	1	0.443		*	mg/L	0.05	0.25	09/29/21 23:40	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		10			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:56	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:20	pjb
pH (lab)	SM4500H+ B									
pH		1	9.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	B	*	mg/L	0.01	0.05	09/25/21 0:43	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/17/21 13:50	emk
Sulfate	M300.0 - Ion Chromatography	1	20.8		*	mg/L	0.4	2	09/29/21 23:40	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-010

ACZ Sample ID: ***L68559-10***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 13:36	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0265		*	mg/L	0.005	0.015	10/07/21 13:22	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 15:06	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0355		*	mg/L	0.0002	0.001	10/04/21 15:06	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00693		*	mg/L	0.0005	0.0025	10/04/21 15:06	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:22	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:28	kja
Boron, dissolved	M200.7 ICP	1	0.079	B	*	mg/L	0.03	0.1	09/29/21 18:28	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:22	bsu
Calcium, dissolved	M200.7 ICP	1	4.56		*	mg/L	0.1	0.5	09/29/21 18:28	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/04/21 15:06	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:22	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 15:06	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:28	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0987		*	mg/L	0.007	0.02	10/04/21 15:06	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:22	bsu
Lithium, dissolved	M200.7 ICP	1	0.0742		*	mg/L	0.008	0.04	09/29/21 18:28	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:28	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.002	10/07/21 13:22	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:37	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00625		*	mg/L	0.0002	0.0005	10/04/21 15:06	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 15:06	mfm
Potassium, dissolved	M200.7 ICP	1	4.20		*	mg/L	0.2	1	09/29/21 18:28	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:28	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00040		*	mg/L	0.0001	0.00025	10/04/21 15:06	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 15:06	mfm
Sodium, dissolved	M200.7 ICP	1	62.1		*	mg/L	0.2	1	09/29/21 18:28	kja
Strontium, dissolved	M200.7 ICP	1	0.0273	B	*	mg/L	0.009	0.045	09/29/21 18:28	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:22	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0165		*	mg/L	0.0008	0.0025	10/07/21 13:22	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:28	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:22	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0005	0.002	10/04/21 15:06	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 15:06	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-010

ACZ Sample ID: ***L68559-10***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	91.4		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	28.2		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.17		*	mg/L	0.4	2	09/30/21 0:16	krh
Conductivity @25C	SM2510B	1	296		*	umhos/cm	1	10	09/22/21 5:09	eep
Fluoride	M300.0 - Ion Chromatography	1	0.443		*	mg/L	0.05	0.25	09/30/21 0:16	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 7:58	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:21	pjb
pH (lab)	SM4500H+ B									
pH		1	9.2	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.026	B	*	mg/L	0.01	0.05	09/25/21 0:44	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/17/21 13:52	emk
Sulfate	M300.0 - Ion Chromatography	1	19.8		*	mg/L	0.4	2	09/30/21 0:16	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-011

ACZ Sample ID: ***L68559-11***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 13:46	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0237		*	mg/L	0.005	0.015	10/07/21 13:23	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 15:08	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0368		*	mg/L	0.0002	0.001	10/04/21 15:08	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00960		*	mg/L	0.0005	0.0025	10/04/21 15:08	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:23	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:31	kja
Boron, dissolved	M200.7 ICP	1	0.076	B	*	mg/L	0.03	0.1	09/29/21 18:31	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:23	bsu
Calcium, dissolved	M200.7 ICP	1	4.76		*	mg/L	0.1	0.5	09/29/21 18:31	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/04/21 15:08	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:23	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 15:08	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:31	kja
Iron, dissolved	M200.8 ICP-MS	1	0.133		*	mg/L	0.007	0.02	10/04/21 15:08	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:23	bsu
Lithium, dissolved	M200.7 ICP	1	0.0740		*	mg/L	0.008	0.04	09/29/21 18:31	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:31	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00063	B	*	mg/L	0.0004	0.002	10/07/21 13:23	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:38	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00632		*	mg/L	0.0002	0.0005	10/04/21 15:08	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 15:08	mfm
Potassium, dissolved	M200.7 ICP	1	4.27		*	mg/L	0.2	1	09/29/21 18:31	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:31	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00045		*	mg/L	0.0001	0.00025	10/04/21 15:08	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 15:08	mfm
Sodium, dissolved	M200.7 ICP	1	62.3		*	mg/L	0.2	1	09/29/21 18:31	kja
Strontium, dissolved	M200.7 ICP	1	0.0279	B	*	mg/L	0.009	0.045	09/29/21 18:31	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:23	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0128		*	mg/L	0.0008	0.0025	10/07/21 13:23	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:31	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:23	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00085	B	*	mg/L	0.0005	0.002	10/04/21 15:08	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 15:08	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-011

ACZ Sample ID: ***L68559-11***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	114		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	23.5		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	137		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.34		*	mg/L	0.4	2	09/30/21 0:52	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/22/21 5:20	eep
Fluoride	M300.0 - Ion Chromatography	1	0.467		*	mg/L	0.05	0.25	09/30/21 0:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 8:00	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:22	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.028	B	*	mg/L	0.01	0.05	09/25/21 0:45	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/17/21 13:54	emk
Sulfate	M300.0 - Ion Chromatography	1	20.8		*	mg/L	0.4	2	09/30/21 0:52	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-012

ACZ Sample ID: ***L68559-12***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 14:08	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0712		*	mg/L	0.005	0.015	10/07/21 13:25	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00046	B	*	mg/L	0.0004	0.002	10/04/21 15:10	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0331		*	mg/L	0.0002	0.001	10/04/21 15:10	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0114		*	mg/L	0.0005	0.0025	10/04/21 15:10	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:25	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:34	kja
Boron, dissolved	M200.7 ICP	1	0.077	B	*	mg/L	0.03	0.1	09/29/21 18:34	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:25	bsu
Calcium, dissolved	M200.7 ICP	1	3.62		*	mg/L	0.1	0.5	09/29/21 18:34	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00155	B	*	mg/L	0.0005	0.002	10/04/21 15:10	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:25	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 15:10	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:34	kja
Iron, dissolved	M200.8 ICP-MS	1	0.149		*	mg/L	0.007	0.02	10/04/21 15:10	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:25	bsu
Lithium, dissolved	M200.7 ICP	1	0.0743		*	mg/L	0.008	0.04	09/29/21 18:34	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:34	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00084	B	*	mg/L	0.0004	0.002	10/07/21 13:25	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:39	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00595		*	mg/L	0.0002	0.0005	10/04/21 15:10	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 15:10	mfm
Potassium, dissolved	M200.7 ICP	1	4.39		*	mg/L	0.2	1	09/29/21 18:34	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:34	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00043		*	mg/L	0.0001	0.00025	10/04/21 15:10	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 15:10	mfm
Sodium, dissolved	M200.7 ICP	1	61.7		*	mg/L	0.2	1	09/29/21 18:34	kja
Strontium, dissolved	M200.7 ICP	1	0.0288	B	*	mg/L	0.009	0.045	09/29/21 18:34	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:25	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0168		*	mg/L	0.0008	0.0025	10/07/21 13:25	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:34	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:25	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00116	B	*	mg/L	0.0005	0.002	10/04/21 15:10	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 15:10	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-012

ACZ Sample ID: ***L68559-12***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	65.5		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	53.6		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.21		*	mg/L	0.4	2	09/30/21 1:10	krh
Conductivity @25C	SM2510B	1	301		*	umhos/cm	1	10	09/22/21 5:30	eep
Fluoride	M300.0 - Ion Chromatography	1	0.438		*	mg/L	0.05	0.25	09/30/21 1:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.0			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 8:02	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:24	pjb
pH (lab)	SM4500H+ B									
pH		1	9.7	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	09/25/21 0:47	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/17/21 13:55	emk
Sulfate	M300.0 - Ion Chromatography	1	20.1		*	mg/L	0.4	2	09/30/21 1:10	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-013

ACZ Sample ID: ***L68559-13***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 14:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0347		*	mg/L	0.005	0.015	10/07/21 13:27	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 15:11	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0338		*	mg/L	0.0002	0.001	10/04/21 15:11	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0110		*	mg/L	0.0005	0.0025	10/04/21 15:11	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:27	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:38	kja
Boron, dissolved	M200.7 ICP	1	0.074	B	*	mg/L	0.03	0.1	09/29/21 18:38	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:27	bsu
Calcium, dissolved	M200.7 ICP	1	3.78		*	mg/L	0.1	0.5	09/29/21 18:38	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00060	B	*	mg/L	0.0005	0.002	10/04/21 15:11	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:27	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 15:11	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:38	kja
Iron, dissolved	M200.8 ICP-MS	1	0.121		*	mg/L	0.007	0.02	10/04/21 15:11	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:27	bsu
Lithium, dissolved	M200.7 ICP	1	0.0748		*	mg/L	0.008	0.04	09/29/21 18:38	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:38	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00093	B	*	mg/L	0.0004	0.002	10/07/21 13:27	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:40	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00503		*	mg/L	0.0002	0.0005	10/04/21 15:11	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 15:11	mfm
Potassium, dissolved	M200.7 ICP	1	3.97		*	mg/L	0.2	1	09/29/21 18:38	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:38	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00040		*	mg/L	0.0001	0.00025	10/04/21 15:11	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 15:11	mfm
Sodium, dissolved	M200.7 ICP	1	62.1		*	mg/L	0.2	1	09/29/21 18:38	kja
Strontium, dissolved	M200.7 ICP	1	0.0305	B	*	mg/L	0.009	0.045	09/29/21 18:38	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:27	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00984		*	mg/L	0.0008	0.0025	10/07/21 13:27	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:38	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:27	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00096	B	*	mg/L	0.0005	0.002	10/04/21 15:11	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 15:11	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-013

ACZ Sample ID: ***L68559-13***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	81.6		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	38.1		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.31		*	mg/L	0.4	2	09/30/21 2:04	krh
Conductivity @25C	SM2510B	1	298		*	umhos/cm	1	10	09/22/21 5:40	eep
Fluoride	M300.0 - Ion Chromatography	1	0.445		*	mg/L	0.05	0.25	09/30/21 2:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.4			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 8:04	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:25	pjb
pH (lab)	SM4500H+ B									
pH		1	9.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	09/25/21 0:50	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	188		*	mg/L	20	40	09/17/21 13:57	emk
Sulfate	M300.0 - Ion Chromatography	1	20.0		*	mg/L	0.4	2	09/30/21 2:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-014

ACZ Sample ID: ***L68559-14***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/23/21 14:41	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0258		*	mg/L	0.005	0.015	10/07/21 13:28	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/04/21 15:13	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0354		*	mg/L	0.0002	0.001	10/04/21 15:13	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.01000		*	mg/L	0.0005	0.0025	10/04/21 15:13	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/07/21 13:28	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/29/21 18:41	kja
Boron, dissolved	M200.7 ICP	1	0.076	B	*	mg/L	0.03	0.1	09/29/21 18:41	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:28	bsu
Calcium, dissolved	M200.7 ICP	1	4.30		*	mg/L	0.1	0.5	09/29/21 18:41	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00064	B	*	mg/L	0.0005	0.002	10/04/21 15:13	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/07/21 13:28	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/04/21 15:13	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/29/21 18:41	kja
Iron, dissolved	M200.8 ICP-MS	1	0.133		*	mg/L	0.007	0.02	10/04/21 15:13	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:28	bsu
Lithium, dissolved	M200.7 ICP	1	0.0743		*	mg/L	0.008	0.04	09/29/21 18:41	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/29/21 18:41	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00090	B	*	mg/L	0.0004	0.002	10/07/21 13:28	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:41	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00523		*	mg/L	0.0002	0.0005	10/04/21 15:13	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/04/21 15:13	mfm
Potassium, dissolved	M200.7 ICP	1	4.60		*	mg/L	0.2	1	09/29/21 18:41	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/29/21 18:41	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00041		*	mg/L	0.0001	0.00025	10/04/21 15:13	mfm
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/04/21 15:13	mfm
Sodium, dissolved	M200.7 ICP	1	61.4		*	mg/L	0.2	1	09/29/21 18:41	kja
Strontium, dissolved	M200.7 ICP	1	0.0280	B	*	mg/L	0.009	0.045	09/29/21 18:41	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:28	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00831		*	mg/L	0.0008	0.0025	10/07/21 13:28	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/29/21 18:41	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/07/21 13:28	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00100	B	*	mg/L	0.0005	0.002	10/04/21 15:13	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/04/21 15:13	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090396-014

ACZ Sample ID: ***L68559-14***
Date Sampled: *09/12/21 13:00*
Date Received: *09/16/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	88.8		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	32.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.32		*	mg/L	0.4	2	09/30/21 2:22	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/22/21 5:59	eep
Fluoride	M300.0 - Ion Chromatography	1	0.463		*	mg/L	0.05	0.25	09/30/21 2:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/08/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							09/24/21 8:06	mlh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/02/21 23:26	pjb
pH (lab)	SM4500H+ B									
pH		1	9.3	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.4		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	09/25/21 0:51	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	186		*	mg/L	20	40	09/17/21 13:59	emk
Sulfate	M300.0 - Ion Chromatography	1	20.5		*	mg/L	0.4	2	09/30/21 2:22	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

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ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716PBW1	PBW	09/21/21 20:18				13.4	mg/L		-20	20			
WG527716LCSW3	LCSW	09/21/21 20:36	WC210917-2	820.0001		792.2	mg/L	97	90	110			
WG527716LCSW6	LCSW	09/21/21 23:46	WC210917-2	820.0001		815.6	mg/L	99	90	110			
WG527716PBW2	PBW	09/21/21 23:54				U	mg/L		-20	20			
L68559-03DUP	DUP	09/22/21 3:32			117	116.2	mg/L				1	20	
WG527716LCSW9	LCSW	09/22/21 3:52	WC210917-2	820.0001		818	mg/L	100	90	110			
WG527716PBW3	PBW	09/22/21 3:59				U	mg/L		-20	20			
L68559-13DUP	DUP	09/22/21 5:50			120	120	mg/L				0	20	
L68609-09DUP	DUP	09/22/21 7:38			119	118.9	mg/L				0	20	
WG527716LCSW12	LCSW	09/22/21 7:58	WC210917-2	820.0001		820.9	mg/L	100	90	110			
WG527716PBW4	PBW	09/22/21 8:05				U	mg/L		-20	20			
WG527716LCSW15	LCSW	09/22/21 12:00	WC210917-2	820.0001		808.6	mg/L	99	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.1		.104	mg/L	104	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.011	0.011			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.050065		.0576	mg/L	115	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.050065	.035	.089	mg/L	108	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.050065	.035	.0878	mg/L	105	70	130	1	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.050065	.0235	.0756	mg/L	104	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.050065	.0235	.075	mg/L	103	70	130	1	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.0201		.02003	mg/L	100	90	110			
WG528597ICB	ICB	10/04/21 14:38				.0006	mg/L		-0.00088	0.00088			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.01		.00961	mg/L	96	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.01	U	.0085	mg/L	85	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.01	U	.0084	mg/L	84	70	130	1	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.01	U	.00841	mg/L	84	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.01	U	.00869	mg/L	87	70	130	3	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.05136	mg/L	103	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.00044	0.00044			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.05005		.05284	mg/L	106	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.05005	.037	.09188	mg/L	110	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.05005	.037	.09171	mg/L	109	70	130	0	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.05005	U	.05429	mg/L	108	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.05005	U	.05055	mg/L	101	70	130	7	20	

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ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.05516	mg/L	110	90	110			
WG528597ICB	ICB	10/04/21 14:38				.00073	mg/L		-0.0011	0.0011			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.049985		.05417	mg/L	108	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.049985	.00715	.06282	mg/L	111	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.049985	.00715	.06238	mg/L	110	70	130	1	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.049985	.07	.12432	mg/L	109	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.049985	.07	.12145	mg/L	103	70	130	2	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.050726	mg/L	101	90	110			
WG528815ICB	ICB	10/07/21 12:57				.00008	mg/L		-0.000176	0.000176			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.05005		.051473	mg/L	103	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.05005	U	.046504	mg/L	93	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.05005	U	.047025	mg/L	94	70	130	1	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.05005	U	.049461	mg/L	99	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.05005	U	.050266	mg/L	100	70	130	2	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	2		1.992	mg/L	100	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.12	0.12			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	1		.994	mg/L	99	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	1	U	1.013	mg/L	101	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	1	U	1.009	mg/L	101	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	1	U	.991	mg/L	99	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	1	U	1.002	mg/L	100	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	2		1.99	mg/L	100	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.09	0.09			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	.5005		.502	mg/L	100	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	.5005	.082	.597	mg/L	103	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	.5005	.082	.596	mg/L	103	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	.5005	U	.517	mg/L	103	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	.5005	U	.525	mg/L	105	85	115	2	20	

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ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.052247	mg/L	104	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.00011	0.00011			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.05005		.051447	mg/L	103	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.05005	U	.050654	mg/L	101	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.05005	U	.050698	mg/L	101	70	130	0	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.05005	.000081	.048124	mg/L	96	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.05005	.000081	.048361	mg/L	96	70	130	0	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	100		100.43	mg/L	100	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.3	0.3			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	67.98972		69.89	mg/L	103	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	67.98972	4.88	74.54	mg/L	102	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	67.98972	4.88	74.51	mg/L	102	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	67.98972	49.9	117.1	mg/L	99	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	67.98972	49.9	117.5	mg/L	99	85	115	0	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	30		29.31	mg/L	98	90	110			
L68534-14DUP	DUP	09/29/21 19:48			5.18	5.19	mg/L				0	20	
L68534-15AS	AS	09/29/21 20:23	WI210907-6	30	4.92	34.28	mg/L	98	90	110			
L68559-09DUP	DUP	09/29/21 23:58			5.2	5.2	mg/L				0	20	
L68559-10AS	AS	09/30/21 0:34	WI210907-6	30	5.17	35.04	mg/L	100	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.05197	mg/L	104	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.0011	0.0011			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.05		.05238	mg/L	105	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.05	.00197	.05331	mg/L	103	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.05	.00197	.05298	mg/L	102	70	130	1	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.05	U	.0514	mg/L	103	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.05	U	.04785	mg/L	96	70	130	7	20	

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ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.053813	mg/L	108	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.00011	0.00011			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.05005		.052897	mg/L	106	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.05005	U	.051358	mg/L	103	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.05005	U	.052075	mg/L	104	70	130	1	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.05005	.0192	.068767	mg/L	99	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.05005	.0192	.068266	mg/L	98	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW2	LCSW	09/21/21 20:25	PCN63140	1408		1414	umhos/cm	100	90	110			
WG527716LCSW5	LCSW	09/21/21 23:34	PCN63140	1408		1406	umhos/cm	100	90	110			
L68559-03DUP	DUP	09/22/21 3:32			296	294	umhos/cm				1	20	
WG527716LCSW8	LCSW	09/22/21 3:39	PCN63140	1408		1402	umhos/cm	100	90	110			
L68559-13DUP	DUP	09/22/21 5:50			298	300	umhos/cm				1	20	
L68609-09DUP	DUP	09/22/21 7:38			308	308	umhos/cm				0	20	
WG527716LCSW11	LCSW	09/22/21 7:44	PCN63140	1408		1397	umhos/cm	99	90	110			
WG527716LCSW14	LCSW	09/22/21 11:49	PCN63140	1408		1390	umhos/cm	99	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.05438	mg/L	109	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.00176	0.00176			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.05		.05403	mg/L	108	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.05	.00089	.05176	mg/L	102	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.05	.00089	.05161	mg/L	101	70	130	0	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.05	.00167	.05042	mg/L	98	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.05	.00167	.04663	mg/L	90	70	130	8	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	1.5		1.467	mg/L	98	90	110			
L68534-14DUP	DUP	09/29/21 19:48			.379	.358	mg/L				6	20	RA
L68534-15AS	AS	09/29/21 20:23	WI210907-6	1.5	.303	1.74	mg/L	96	90	110			
L68559-09DUP	DUP	09/29/21 23:58			.443	.443	mg/L				0	20	RA
L68559-10AS	AS	09/30/21 0:34	WI210907-6	1.5	.443	1.857	mg/L	94	90	110			

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ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	2		2.04	mg/L	102	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.3	0.3			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	.9822		1	mg/L	102	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	.9822	U	1.03	mg/L	105	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	.9822	U	1.02	mg/L	104	85	115	1	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	.9822	U	1.01	mg/L	103	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	.9822	U	1.01	mg/L	103	85	115	0	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.10016		.1045	mg/L	104	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.0154	0.0154			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.0501		.0553	mg/L	110	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.0501	.131	.177	mg/L	92	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.0501	.131	.1719	mg/L	82	70	130	3	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.0501	U	.0561	mg/L	112	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.0501	U	.0539	mg/L	108	70	130	4	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.05164	mg/L	103	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.00022	0.00022			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.05005		.05301	mg/L	106	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.05005	U	.05192	mg/L	104	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.05005	U	.05236	mg/L	105	70	130	1	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.05005	U	.05279	mg/L	105	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.05005	U	.05296	mg/L	106	70	130	0	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	2		1.9788	mg/L	99	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.024	0.024			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	.999		.985	mg/L	99	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	.999	.0699	1.042	mg/L	97	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	.999	.0699	1.042	mg/L	97	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	.999	U	.9774	mg/L	98	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	.999	U	.986	mg/L	99	85	115	1	20	

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ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	100		96.88	mg/L	97	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.6	0.6			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	49.99828		49.07	mg/L	98	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	49.99828	U	48.93	mg/L	98	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	49.99828	U	49.21	mg/L	98	85	115	1	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	49.99828	22.6	70.54	mg/L	96	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	49.99828	22.6	70.86	mg/L	97	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.05303	mg/L	106	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.00088	0.00088			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.0499		.05309	mg/L	106	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.0499	.00089	.0516	mg/L	102	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.0499	.00089	.05131	mg/L	101	70	130	1	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.0499	5.71	5.70714	mg/L	-6	70	130			M3
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.0499	5.71	5.74194	mg/L	64	70	130	1	20	M3

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527934													
WG527934ICV1	ICV	09/24/21 12:44	HG210913-3	.00501		.00516	mg/L	103	90	110			
WG527934ICB	ICB	09/24/21 12:45				U	mg/L		-0.0006	0.0006			
WG527936													
WG527936LRB	LRB	09/24/21 13:07				U	mg/L		-0.00044	0.00044			
WG527936LFB	LFB	09/24/21 13:08	HG210913-6	.002002		.00181	mg/L	90	85	115			
L68526-04LFM	LFM	09/24/21 13:10	HG210913-6	.002002	U	.00185	mg/L	92	85	115			
L68526-04LFMD	LFMD	09/24/21 13:11	HG210913-6	.002002	U	.00179	mg/L	89	85	115	3	20	
WG528034													
WG528034ICV	ICV	09/27/21 12:30	HG210927-3	.00501		.00508	mg/L	101	95	105			
WG528034ICB	ICB	09/27/21 12:31				U	mg/L		-0.0002	0.0002			
WG528033													
WG528033LRB	LRB	09/27/21 13:26				U	mg/L		-0.00044	0.00044			
WG528033LFB	LFB	09/27/21 13:26	HG210927-6	.002002		.00193	mg/L	96	85	115			
L68559-07LFM	LFM	09/27/21 13:31	HG210927-6	.002002	U	.00193	mg/L	96	85	115			
L68559-07LFMD	LFMD	09/27/21 13:32	HG210927-6	.002002	U	.00193	mg/L	96	85	115	0	20	
L68625-01LFM	LFM	09/27/21 13:48	HG210927-6	.002002	U	.0019	mg/L	95	85	115			
L68625-01LFMD	LFMD	09/27/21 13:49	HG210927-6	.002002	U	.00196	mg/L	98	85	115	3	20	

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ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.01992		.02098	mg/L	105	90	110			
WG528597ICB	ICB	10/04/21 14:38				.00035	mg/L		-0.00044	0.00044			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.05005		.05232	mg/L	105	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.05005	.00518	.05709	mg/L	104	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.05005	.00518	.05686	mg/L	103	70	130	0	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.05005	.00021	.05145	mg/L	102	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.05005	.00021	.04821	mg/L	96	70	130	7	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.05341	mg/L	107	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.00088	0.00088			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.05		.05278	mg/L	106	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.05	U	.05036	mg/L	101	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.05	U	.05006	mg/L	100	70	130	1	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.05	.106	.1542	mg/L	96	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.05	.106	.15172	mg/L	91	70	130	2	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528526													
WG528526ICV	ICV	10/02/21 21:12	WI210904-1	2.4161		2.375	mg/L	98	90	110			
WG528526ICB	ICB	10/02/21 21:13				U	mg/L		-0.02	0.02			
WG528527													
WG528527LFB1	LFB	10/02/21 22:27	WI211001-5	2		2.083	mg/L	104	90	110			
L68534-11AS	AS	10/02/21 22:49	WI211001-5	2	.041	2.141	mg/L	105	90	110			
L68534-12DUP	DUP	10/02/21 22:52			.045	.044	mg/L				2	20	RA
WG528527LFB2	LFB	10/02/21 23:08	WI211001-5	2		2.05	mg/L	103	90	110			
L68559-06AS	AS	10/02/21 23:10	WI211001-5	2	U	2.085	mg/L	104	90	110			
L68559-07DUP	DUP	10/02/21 23:13			U	U	mg/L				0	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW1	LCSW	09/21/21 20:23	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW4	LCSW	09/21/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
L68559-03DUP	DUP	09/22/21 3:32			9.1	9	units				1	20	
WG527716LCSW7	LCSW	09/22/21 3:37	PCN62948	6		6.1	units	102	5.9	6.1			
L68559-13DUP	DUP	09/22/21 5:50			9.4	9.4	units				0	20	
L68609-09DUP	DUP	09/22/21 7:38			9.6	9.6	units				0	20	
WG527716LCSW10	LCSW	09/22/21 7:43	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW13	LCSW	09/22/21 11:47	PCN62948	6		6.1	units	102	5.9	6.1			

WETLAB

ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527989													
WG527989ICV	ICV	09/24/21 21:25	WI210831-4	.6523		.687	mg/L	105	90	110			
WG527989ICB	ICB	09/24/21 21:27				U	mg/L		-0.01	0.01			
WG527995													
WG527856LRB	LRB	09/25/21 0:27				U	mg/L		-0.01	0.01			
WG527856LFB	LFB	09/25/21 0:28	PT2X	1		.974	mg/L	97	90	110			
L68559-01LFM	LFM	09/25/21 0:30	PT2X	1	.02	.973	mg/L	95	90	110			
L68559-02DUP	DUP	09/25/21 0:33			.019	.021	mg/L				10	20	RA
L68559-11LFM	LFM	09/25/21 0:46	PT2X	1	.028	.989	mg/L	96	90	110			
L68559-12DUP	DUP	09/25/21 0:48			.024	.024	mg/L				0	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	20		19.91	mg/L	100	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.6	0.6			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	99.96008		100.4	mg/L	100	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	99.96008	2.71	102.8	mg/L	100	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	99.96008	2.71	102.7	mg/L	100	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	99.96008	.92	101.9	mg/L	101	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	99.96008	.92	101.8	mg/L	101	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527471													
WG527471PBW	PBW	09/17/21 13:15				U	mg/L		-20	20			
WG527471LCSW	LCSW	09/17/21 13:16	PCN64119	1000		976	mg/L	98	80	120			
L68448-01DUP	DUP	09/17/21 13:22			184	196	mg/L				6	10	RA
L68455-02DUP	DUP	09/17/21 13:32			1180	1194	mg/L				1	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	2		1.991	mg/L	100	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.15	0.15			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	1.0017		1.025	mg/L	102	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	1.0017	U	1.022	mg/L	102	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	1.0017	U	1.017	mg/L	102	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	1.0017	U	1.017	mg/L	102	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	1.0017	U	1.021	mg/L	102	85	115	0	20	

WETLAB

ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.05258	mg/L	105	90	110			
WG528597ICB	ICB	10/04/21 14:38				.00016	mg/L		-0.00022	0.00022			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.05		.05293	mg/L	106	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.05	.00037	.05763	mg/L	115	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.05	.00037	.05522	mg/L	110	70	130	4	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.05	.00373	.06059	mg/L	114	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.05	.00373	.05754	mg/L	108	70	130	5	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.02		.01909	mg/L	95	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.00022	0.00022			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.01		.00953	mg/L	95	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.01	U	.00733	mg/L	73	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.01	U	.00715	mg/L	72	70	130	2	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.01	U	.00866	mg/L	87	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.01	U	.00869	mg/L	87	70	130	0	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	100		99.93	mg/L	100	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.6	0.6			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	100.007		100.8	mg/L	101	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	100.007	61.6	159.6	mg/L	98	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	100.007	61.6	158.9	mg/L	97	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	100.007	2.74	104.2	mg/L	101	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	100.007	2.74	103.8	mg/L	101	85	115	0	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	2		1.958	mg/L	98	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.027	0.027			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	.5005		.5398	mg/L	108	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	.5005	.0225	.5592	mg/L	107	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	.5005	.0225	.5605	mg/L	107	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	.5005	.147	.683	mg/L	107	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	.5005	.147	.6812	mg/L	107	85	115	0	20	

WETLAB

ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528263													
WG528263LFB	LFB	09/29/21 19:12	WI210907-6	30		28.72	mg/L	96	90	110			
L68534-14DUP	DUP	09/29/21 19:48			18.4	18.38	mg/L				0	20	
L68534-15AS	AS	09/29/21 20:23	WI210907-6	30	16.2	44.87	mg/L	96	90	110			
L68559-09DUP	DUP	09/29/21 23:58			20.8	20.85	mg/L				0	20	
L68559-10AS	AS	09/30/21 0:34	WI210907-6	30	19.8	48.81	mg/L	97	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.05341	mg/L	107	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.00022	0.00022			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.05		.05268	mg/L	105	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.05	U	.05153	mg/L	103	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.05	U	.05268	mg/L	105	70	130	2	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.05	U	.05419	mg/L	108	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.05	U	.05325	mg/L	107	70	130	2	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.05122	mg/L	102	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.00176	0.00176			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.05005		.0513	mg/L	102	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.05005	.012	.06001	mg/L	96	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.05005	.012	.06057	mg/L	97	70	130	1	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.05005	U	.04847	mg/L	97	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.05005	U	.04936	mg/L	99	70	130	2	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528282													
WG528282ICV	ICV	09/29/21 17:23	II210916-1	2		2.0098	mg/L	100	95	105			
WG528282ICB	ICB	09/29/21 17:29				U	mg/L		-0.015	0.015			
WG528282LFB	LFB	09/29/21 17:42	II210910-2	1		1.024	mg/L	102	85	115			
L68559-05AS	AS	09/29/21 18:02	II210910-2	1	U	1.022	mg/L	102	85	115			
L68559-05ASD	ASD	09/29/21 18:05	II210910-2	1	U	1.023	mg/L	102	85	115	0	20	
L68703-02AS	AS	09/29/21 18:51	II210910-2	1	.0058	1.012	mg/L	101	85	115			
L68703-02ASD	ASD	09/29/21 19:01	II210910-2	1	.0058	1.023	mg/L	102	85	115	1	20	

WETLAB

ACZ Project ID: ***L68559***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528815													
WG528815ICV	ICV	10/07/21 12:56	MS211001-2	.05		.0508	mg/L	102	90	110			
WG528815ICB	ICB	10/07/21 12:57				U	mg/L		-0.00022	0.00022			
WG528815LFB	LFB	10/07/21 12:59	MS210927-3	.05		.05145	mg/L	103	85	115			
L68559-08AS	AS	10/07/21 13:17	MS210927-3	.05	U	.05139	mg/L	103	70	130			
L68559-08ASD	ASD	10/07/21 13:18	MS210927-3	.05	U	.05281	mg/L	106	70	130	3	20	
L68756-01AS	AS	10/07/21 13:40	MS210927-3	.05	.00048	.05497	mg/L	109	70	130			
L68756-01ASD	ASD	10/07/21 13:41	MS210927-3	.05	.00048	.05546	mg/L	110	70	130	1	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.05043	mg/L	101	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.0011	0.0011			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.05		.0529	mg/L	106	85	115			
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.05	.00235	.05538	mg/L	106	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.05	.00235	.05515	mg/L	106	70	130	0	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.05	U	.05255	mg/L	105	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.05	U	.04905	mg/L	98	70	130	7	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528597													
WG528597ICV	ICV	10/04/21 14:37	MS211001-2	.05		.0535	mg/L	107	90	110			
WG528597ICB	ICB	10/04/21 14:38				U	mg/L		-0.0132	0.0132			
WG528597LFB	LFB	10/04/21 14:40	MS210927-3	.050075		.0585	mg/L	117	85	115			LA
L68559-04AS	AS	10/04/21 14:49	MS210927-3	.050075	U	.061	mg/L	122	70	130			
L68559-04ASD	ASD	10/04/21 14:51	MS210927-3	.050075	U	.0613	mg/L	122	70	130	0	20	
L68911-01AS	AS	10/04/21 15:17	MS210927-3	.050075	.136	.1894	mg/L	107	70	130			
L68911-01ASD	ASD	10/04/21 15:19	MS210927-3	.050075	.136	.1855	mg/L	99	70	130	2	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-01	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-02	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-03	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-04	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-05	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68559-06	WG528263	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68559-07	WG528263	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-08	WG528263	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68559-09	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-10	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].
L68559-11	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528815	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-12	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528815	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-13	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528815	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Western Environmental Testing Laboratory ACZ Project ID: ***L68559***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68559-14	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528263	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528263	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528815	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528527	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527995	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527471	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528263	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528597	Zinc, dissolved	M200.8 ICP-MS	LA	Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [< MDL].

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Mercury, dissolved	M245.1 CVAA
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography

Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68559
Date Received: 09/16/2021 11:23
Received By:
Date Printed: 9/20/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]		X	

L68559-01 Container B2452993 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-02 Container B2452999 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-03 Container B2453005 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-04 Container B2453011 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-05 Container B2453017 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-06 Container B2453023 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-07 Container B2453029 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-08 Container B2453035 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-09 Container B2453041 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

Western Environmental Testing Laboratory

ACZ Project ID: L68559
Date Received: 09/16/2021 11:23
Received By:
Date Printed: 9/20/2021

L68559-10 Container B2453047 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-11 Container B2453053 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-12 Container B2453059 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-13 Container B2453065 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

L68559-14 Container B2453071 (YELLOW): Added 1 mls sulfuric acid to the sub-sample to adjust the pH to the appropriate range.

12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?		X	

L68559-01 : A white and green container not received and a new container created from the raw .

L68559-02 : A white and green container not received and a new container created from the raw .

L68559-03 : A white and green container not received and a new container created from the raw .

L68559-04 : A white and green container not received and a new container created from the raw .

L68559-05 : A white and green container not received and a new container created from the raw .

L68559-06 : A white and green container not received and a new container created from the raw .

L68559-07 : A white and green container not received and a new container created from the raw .

L68559-08 : A white and green container not received and a new container created from the raw .

L68559-09 : A white and green container not received and a new container created from the raw .

L68559-10 : A white and green container not received and a new container created from the raw .

L68559-11 : A white and green container not received and a new container created from the raw .

L68559-12 : A white and green container not received and a new

Western Environmental Testing Laboratory

ACZ Project ID: L68559
Date Received: 09/16/2021 11:23
Received By:
Date Printed: 9/20/2021

container created from the raw .

L68559-13 : A white and green container not received and a new container created from the raw .

L68559-14 : A white and green container not received and a new container created from the raw .

16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35966	10.8	<=6.0	15	N/A
NA35961	2.8	<=6.0	15	N/A
NA35965	17.6	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68559

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	HGID 245.1						
21090396-001	9/12/2021 13:00	OT	3	✓	✓						
21090396-002	"	"	"	✓	✓						
21090396-003	"	"	"	✓	✓						
21090396-004	"	"	"	✓	✓						
21090396-005	"	"	"	✓	✓						
21090396-006	"	"	"	✓	✓						
21090396-007	"	"	"	✓	✓						
21090396-008	"	"	"	✓	✓						
21090396-009	"	"	"	✓	✓						
21090396-010	"	"	"	✓	✓						

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	9/14/21	[signature] 9/16/21	11:23

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68559 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68559

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D) 245.1						
21090396-011	9/12/2021 13:00	OT	3	✓	✓						
21090396-012	〃	〃	〃	✓	✓						
21090396-013	〃	〃	〃	✓	✓						
21090396-014	〃	〃	〃	✓	✓						

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/14/21		9/16/21 11:23

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
[redacted]	[redacted]	[redacted]	[redacted]
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 19, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68610

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 20, 2021. This project has been assigned to ACZ's project number, L68610. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68610. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 18, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory

October 19, 2021

Project ID:
ACZ Project ID: L68610

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 15 leachate samples from Western Environmental Testing Laboratory on September 20, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68610. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for nitrate/nitrite flagged with an "H1". Due to maintenance and troubleshooting, samples were run ~24hrs from hold expiration.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-001

ACZ Sample ID: ***L68610-01***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 14:42	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0317		*	mg/L	0.005	0.015	10/08/21 14:25	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:25	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0255		*	mg/L	0.0002	0.001	10/08/21 14:25	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0150		*	mg/L	0.0005	0.0025	10/08/21 14:25	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:25	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:02	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/30/21 15:02	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:25	mfm
Calcium, dissolved	M200.7 ICP	1	4.26		*	mg/L	0.1	0.5	09/30/21 15:02	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00147	B	*	mg/L	0.0005	0.002	10/08/21 14:25	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:25	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:25	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:02	kja
Iron, dissolved	M200.8 ICP-MS	1	0.102		*	mg/L	0.007	0.02	10/08/21 14:25	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:25	mfm
Lithium, dissolved	M200.7 ICP	1	0.0778		*	mg/L	0.008	0.04	09/30/21 15:02	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:02	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00060	B	*	mg/L	0.0004	0.002	10/08/21 14:25	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	11.2			ng/L	0.3	1	09/30/21 15:30	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00510		*	mg/L	0.0002	0.0005	10/08/21 14:25	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:25	mfm
Potassium, dissolved	M200.7 ICP	1	5.75		*	mg/L	0.2	1	09/30/21 15:02	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:02	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00042		*	mg/L	0.0001	0.00025	10/12/21 17:13	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:25	mfm
Sodium, dissolved	M200.7 ICP	1	62.4		*	mg/L	0.2	1	09/30/21 15:02	kja
Strontium, dissolved	M200.7 ICP	1	0.0337	B	*	mg/L	0.009	0.045	09/30/21 15:02	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:25	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0160		*	mg/L	0.0008	0.0025	10/08/21 14:25	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:02	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:25	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00348		*	mg/L	0.0005	0.002	10/08/21 14:25	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:25	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-001

ACZ Sample ID: ***L68610-01***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	31.6		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	93.1		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	125		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.10		*	mg/L	0.4	2	09/30/21 19:53	krh
Conductivity @25C	SM2510B	1	320		*	umhos/cm	1	10	09/22/21 9:03	eep
Fluoride	M300.0 - Ion Chromatography	1	0.472		*	mg/L	0.05	0.25	09/30/21 19:53	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:27	wtc
pH (lab)	SM4500H+ B									
pH		1	10.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.5		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	09/24/21 23:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/20/21 19:09	jck
Sulfate	M300.0 - Ion Chromatography	1	20.1		*	mg/L	0.4	2	09/30/21 19:53	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-002

ACZ Sample ID: ***L68610-02***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 14:51	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0297		*	mg/L	0.005	0.015	10/08/21 14:27	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:27	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0263		*	mg/L	0.0002	0.001	10/08/21 14:27	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0137		*	mg/L	0.0005	0.0025	10/08/21 14:27	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:27	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:06	kja
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	09/30/21 15:06	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:27	mfm
Calcium, dissolved	M200.7 ICP	1	4.23		*	mg/L	0.1	0.5	09/30/21 15:06	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00145	B	*	mg/L	0.0005	0.002	10/08/21 14:27	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:27	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:27	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:06	kja
Iron, dissolved	M200.8 ICP-MS	1	0.103		*	mg/L	0.007	0.02	10/08/21 14:27	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:27	mfm
Lithium, dissolved	M200.7 ICP	1	0.0769		*	mg/L	0.008	0.04	09/30/21 15:06	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:06	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00066	B	*	mg/L	0.0004	0.002	10/08/21 14:27	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	18.3		*	ng/L	0.3	1	09/30/21 15:34	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00519		*	mg/L	0.0002	0.0005	10/08/21 14:27	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:27	mfm
Potassium, dissolved	M200.7 ICP	1	5.09		*	mg/L	0.2	1	09/30/21 15:06	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:06	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00040		*	mg/L	0.0001	0.00025	10/12/21 17:15	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:27	mfm
Sodium, dissolved	M200.7 ICP	1	61.4		*	mg/L	0.2	1	09/30/21 15:06	kja
Strontium, dissolved	M200.7 ICP	1	0.0315	B	*	mg/L	0.009	0.045	09/30/21 15:06	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:27	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0514		*	mg/L	0.0008	0.0025	10/08/21 14:27	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:06	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:27	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00398		*	mg/L	0.0005	0.002	10/08/21 14:27	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:27	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-002

ACZ Sample ID: ***L68610-02***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	37.7		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	85.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.15		*	mg/L	0.4	2	09/30/21 20:29	krh
Conductivity @25C	SM2510B	1	318		*	umhos/cm	1	10	09/22/21 9:14	eep
Fluoride	M300.0 - Ion Chromatography	1	0.499		*	mg/L	0.05	0.25	09/30/21 20:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:30	wtc
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.017	B	*	mg/L	0.01	0.05	09/24/21 23:21	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/20/21 19:12	jck
Sulfate	M300.0 - Ion Chromatography	1	20.7		*	mg/L	0.4	2	09/30/21 20:29	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-003

ACZ Sample ID: ***L68610-03***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:01	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0123	B	*	mg/L	0.005	0.015	10/08/21 14:29	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:29	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0373		*	mg/L	0.0002	0.001	10/08/21 14:29	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00716		*	mg/L	0.0005	0.0025	10/08/21 14:29	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:29	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:10	kja
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	09/30/21 15:10	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:29	mfm
Calcium, dissolved	M200.7 ICP	1	5.30		*	mg/L	0.1	0.5	09/30/21 15:10	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00431		*	mg/L	0.0005	0.002	10/08/21 14:29	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:29	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:29	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:10	kja
Iron, dissolved	M200.8 ICP-MS	1	0.108		*	mg/L	0.007	0.02	10/08/21 14:29	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:29	mfm
Lithium, dissolved	M200.7 ICP	1	0.0722		*	mg/L	0.008	0.04	09/30/21 15:10	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:10	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0004	0.002	10/08/21 14:29	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.9		*	ng/L	0.3	1	09/30/21 15:49	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00562		*	mg/L	0.0002	0.0005	10/08/21 14:29	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:29	mfm
Potassium, dissolved	M200.7 ICP	1	2.47		*	mg/L	0.2	1	09/30/21 15:10	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:10	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00036		*	mg/L	0.0001	0.00025	10/12/21 17:16	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:29	mfm
Sodium, dissolved	M200.7 ICP	1	60.8		*	mg/L	0.2	1	09/30/21 15:10	kja
Strontium, dissolved	M200.7 ICP	1	0.0258	B	*	mg/L	0.009	0.045	09/30/21 15:10	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:29	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0535		*	mg/L	0.0008	0.0025	10/08/21 14:29	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:10	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:29	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00222		*	mg/L	0.0005	0.002	10/08/21 14:29	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:29	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-003

ACZ Sample ID: ***L68610-03***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.6		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	19.2	B	*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.40		*	mg/L	0.4	2	09/30/21 21:05	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/22/21 9:23	eep
Fluoride	M300.0 - Ion Chromatography	1	0.510		*	mg/L	0.05	0.25	09/30/21 21:05	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:32	wtc
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.026	B	*	mg/L	0.01	0.05	09/24/21 23:22	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	192		*	mg/L	20	40	09/20/21 19:14	jck
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	09/30/21 21:05	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-004

ACZ Sample ID: ***L68610-04***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:10	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0211		*	mg/L	0.005	0.015	10/08/21 14:31	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:31	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0365		*	mg/L	0.0002	0.001	10/08/21 14:31	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00675		*	mg/L	0.0005	0.0025	10/08/21 14:31	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:31	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:13	kja
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	09/30/21 15:13	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:31	mfm
Calcium, dissolved	M200.7 ICP	1	4.79		*	mg/L	0.1	0.5	09/30/21 15:13	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00177	B	*	mg/L	0.0005	0.002	10/08/21 14:31	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:31	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:31	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:13	kja
Iron, dissolved	M200.8 ICP-MS	1	0.126		*	mg/L	0.007	0.02	10/08/21 14:31	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:31	mfm
Lithium, dissolved	M200.7 ICP	1	0.0728		*	mg/L	0.008	0.04	09/30/21 15:13	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:13	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00070	B	*	mg/L	0.0004	0.002	10/08/21 14:31	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.3		*	ng/L	0.3	1	09/30/21 15:54	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00546		*	mg/L	0.0002	0.0005	10/08/21 14:31	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:31	mfm
Potassium, dissolved	M200.7 ICP	1	2.60		*	mg/L	0.2	1	09/30/21 15:13	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:13	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00037		*	mg/L	0.0001	0.00025	10/12/21 17:18	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:31	mfm
Sodium, dissolved	M200.7 ICP	1	61.0		*	mg/L	0.2	1	09/30/21 15:13	kja
Strontium, dissolved	M200.7 ICP	1	0.0248	B	*	mg/L	0.009	0.045	09/30/21 15:13	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:31	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0544		*	mg/L	0.0008	0.0025	10/08/21 14:31	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:13	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:31	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00210		*	mg/L	0.0005	0.002	10/08/21 14:31	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:31	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-004

ACZ Sample ID: ***L68610-04***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	117		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	21.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	139		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.40		*	mg/L	0.4	2	09/30/21 21:23	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/22/21 9:35	eep
Fluoride	M300.0 - Ion Chromatography	1	0.529		*	mg/L	0.05	0.25	09/30/21 21:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12.0			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:33	wtc
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	B	*	mg/L	0.01	0.05	09/24/21 23:23	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	170		*	mg/L	20	40	09/20/21 19:16	jck
Sulfate	M300.0 - Ion Chromatography	1	22.1		*	mg/L	0.4	2	09/30/21 21:23	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-005

ACZ Sample ID: ***L68610-05***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:20	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0231		*	mg/L	0.005	0.015	10/08/21 14:33	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:33	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0365		*	mg/L	0.0002	0.001	10/08/21 14:33	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00872		*	mg/L	0.0005	0.0025	10/08/21 14:33	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:33	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:23	kja
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	09/30/21 15:23	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:33	mfm
Calcium, dissolved	M200.7 ICP	1	4.83		*	mg/L	0.1	0.5	09/30/21 15:23	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00270		*	mg/L	0.0005	0.002	10/08/21 14:33	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:33	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:33	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:23	kja
Iron, dissolved	M200.8 ICP-MS	1	0.143		*	mg/L	0.007	0.02	10/08/21 14:33	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:33	mfm
Lithium, dissolved	M200.7 ICP	1	0.0729		*	mg/L	0.008	0.04	09/30/21 15:23	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:23	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00088	B	*	mg/L	0.0004	0.002	10/08/21 14:33	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.6		*	ng/L	0.3	1	09/30/21 16:10	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00546		*	mg/L	0.0002	0.0005	10/08/21 14:33	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:33	mfm
Potassium, dissolved	M200.7 ICP	1	2.59		*	mg/L	0.2	1	09/30/21 15:23	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:23	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00045		*	mg/L	0.0001	0.00025	10/12/21 17:19	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:33	mfm
Sodium, dissolved	M200.7 ICP	1	60.6		*	mg/L	0.2	1	09/30/21 15:23	kja
Strontium, dissolved	M200.7 ICP	1	0.0250	B	*	mg/L	0.009	0.045	09/30/21 15:23	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:33	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0166		*	mg/L	0.0008	0.0025	10/08/21 14:33	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:23	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:33	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00242		*	mg/L	0.0005	0.002	10/08/21 14:33	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:33	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-005

ACZ Sample ID: ***L68610-05***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	94.6		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	22.7		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	117		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.45		*	mg/L	0.4	2	09/30/21 22:17	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/22/21 9:45	eep
Fluoride	M300.0 - Ion Chromatography	1	0.544		*	mg/L	0.05	0.25	09/30/21 22:17	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:35	wtc
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.0		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	09/24/21 23:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	196		*	mg/L	20	40	09/20/21 19:19	jck
Sulfate	M300.0 - Ion Chromatography	1	22.7		*	mg/L	0.4	2	09/30/21 22:17	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-006

ACZ Sample ID: ***L68610-06***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0388		*	mg/L	0.005	0.015	10/08/21 14:39	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00055	B	*	mg/L	0.0004	0.002	10/08/21 14:39	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0365		*	mg/L	0.0002	0.001	10/08/21 14:39	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00948		*	mg/L	0.0005	0.0025	10/08/21 14:39	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:39	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:26	kja
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	09/30/21 15:26	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:39	mfm
Calcium, dissolved	M200.7 ICP	1	4.76		*	mg/L	0.1	0.5	09/30/21 15:26	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 14:39	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:39	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:39	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:26	kja
Iron, dissolved	M200.8 ICP-MS	1	0.175		*	mg/L	0.007	0.02	10/08/21 14:39	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:39	mfm
Lithium, dissolved	M200.7 ICP	1	0.0766		*	mg/L	0.008	0.04	09/30/21 15:26	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:26	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00116	B	*	mg/L	0.0004	0.002	10/08/21 14:39	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.5		*	ng/L	0.3	1	09/30/21 16:14	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00604		*	mg/L	0.0002	0.0005	10/08/21 14:39	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:39	mfm
Potassium, dissolved	M200.7 ICP	1	3.86		*	mg/L	0.2	1	09/30/21 15:26	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:26	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00042		*	mg/L	0.0001	0.00025	10/12/21 17:21	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:39	mfm
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/30/21 15:26	kja
Strontium, dissolved	M200.7 ICP	1	0.0292	B	*	mg/L	0.009	0.045	09/30/21 15:26	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:39	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0178		*	mg/L	0.0008	0.0025	10/08/21 14:39	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:26	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:39	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00087	B	*	mg/L	0.0005	0.002	10/08/21 14:39	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:39	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-006

ACZ Sample ID: ***L68610-06***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	96.7		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	23.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.34		*	mg/L	0.4	2	09/30/21 22:35	krh
Conductivity @25C	SM2510B	1	302		*	umhos/cm	1	10	09/22/21 10:05	eep
Fluoride	M300.0 - Ion Chromatography	1	0.512		*	mg/L	0.05	0.25	09/30/21 22:35	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:40	wtc
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	B	*	mg/L	0.01	0.05	09/24/21 23:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	174		*	mg/L	20	40	09/20/21 19:21	jck
Sulfate	M300.0 - Ion Chromatography	1	21.2		*	mg/L	0.4	2	09/30/21 22:35	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-007

ACZ Sample ID: ***L68610-07***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:39	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0243		*	mg/L	0.005	0.015	10/08/21 14:41	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:41	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0356		*	mg/L	0.0002	0.001	10/08/21 14:41	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00926		*	mg/L	0.0005	0.0025	10/08/21 14:41	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:41	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:29	kja
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	09/30/21 15:29	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:41	mfm
Calcium, dissolved	M200.7 ICP	1	4.82		*	mg/L	0.1	0.5	09/30/21 15:29	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 14:41	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:41	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:41	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:29	kja
Iron, dissolved	M200.8 ICP-MS	1	0.163		*	mg/L	0.007	0.02	10/08/21 14:41	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:41	mfm
Lithium, dissolved	M200.7 ICP	1	0.0771		*	mg/L	0.008	0.04	09/30/21 15:29	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:29	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00110	B	*	mg/L	0.0004	0.002	10/08/21 14:41	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.4		*	ng/L	0.3	1	09/30/21 16:19	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00555		*	mg/L	0.0002	0.0005	10/08/21 14:41	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:41	mfm
Potassium, dissolved	M200.7 ICP	1	3.22		*	mg/L	0.2	1	09/30/21 15:29	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:29	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00040		*	mg/L	0.0001	0.00025	10/12/21 17:23	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:41	mfm
Sodium, dissolved	M200.7 ICP	1	62.2		*	mg/L	0.2	1	09/30/21 15:29	kja
Strontium, dissolved	M200.7 ICP	1	0.0300	B	*	mg/L	0.009	0.045	09/30/21 15:29	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:41	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0139		*	mg/L	0.0008	0.0025	10/08/21 14:41	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:29	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:41	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00087	B	*	mg/L	0.0005	0.002	10/08/21 14:41	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:41	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-007

ACZ Sample ID: ***L68610-07***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	101		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	19.7	B	*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.39		*	mg/L	0.4	2	09/30/21 22:53	krh
Conductivity @25C	SM2510B	1	301		*	umhos/cm	1	10	09/22/21 10:15	eep
Fluoride	M300.0 - Ion Chromatography	1	0.496		*	mg/L	0.05	0.25	09/30/21 22:53	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12.0			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.024	BH	*	mg/L	0.02	0.1	10/12/21 23:41	wtc
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	09/24/21 23:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/20/21 19:24	jck
Sulfate	M300.0 - Ion Chromatography	1	21.3		*	mg/L	0.4	2	09/30/21 22:53	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-008

ACZ Sample ID: ***L68610-08***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:49	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0301		*	mg/L	0.005	0.015	10/08/21 14:47	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:47	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0351		*	mg/L	0.0002	0.001	10/08/21 14:47	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00801		*	mg/L	0.0005	0.0025	10/08/21 14:47	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:47	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:39	kja
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	09/30/21 15:39	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:47	mfm
Calcium, dissolved	M200.7 ICP	1	4.80		*	mg/L	0.1	0.5	09/30/21 15:39	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 14:47	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:47	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:47	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:39	kja
Iron, dissolved	M200.8 ICP-MS	1	0.159		*	mg/L	0.007	0.02	10/08/21 14:47	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:47	mfm
Lithium, dissolved	M200.7 ICP	1	0.0757		*	mg/L	0.008	0.04	09/30/21 15:39	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:39	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00107	B	*	mg/L	0.0004	0.002	10/08/21 14:47	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.7		*	ng/L	0.3	1	09/30/21 16:24	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00554		*	mg/L	0.0002	0.0005	10/08/21 14:47	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:47	mfm
Potassium, dissolved	M200.7 ICP	1	3.77		*	mg/L	0.2	1	09/30/21 15:39	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:39	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00047		*	mg/L	0.0001	0.00025	10/12/21 17:28	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:47	mfm
Sodium, dissolved	M200.7 ICP	1	61.7		*	mg/L	0.2	1	09/30/21 15:39	kja
Strontium, dissolved	M200.7 ICP	1	0.0289	B	*	mg/L	0.009	0.045	09/30/21 15:39	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:47	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0144		*	mg/L	0.0008	0.0025	10/08/21 14:47	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:39	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:47	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0005	0.002	10/08/21 14:47	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:47	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-008

ACZ Sample ID: ***L68610-08***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	98.2		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	22.8		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.35		*	mg/L	0.4	2	09/30/21 23:11	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/22/21 10:25	eep
Fluoride	M300.0 - Ion Chromatography	1	0.509		*	mg/L	0.05	0.25	09/30/21 23:11	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12.0			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:43	wtc
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	09/24/21 23:30	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	172		*	mg/L	20	40	09/20/21 19:26	jck
Sulfate	M300.0 - Ion Chromatography	1	21.2		*	mg/L	0.4	2	09/30/21 23:11	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-009

ACZ Sample ID: ***L68610-09***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 15:58	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0421		*	mg/L	0.005	0.015	10/08/21 14:49	mfm
Antimony, dissolved	M200.8 ICP-MS	1	0.00044	B	*	mg/L	0.0004	0.002	10/08/21 14:49	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0369		*	mg/L	0.0002	0.001	10/08/21 14:49	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00714		*	mg/L	0.0005	0.0025	10/08/21 14:49	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:49	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:42	kja
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	09/30/21 15:42	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:49	mfm
Calcium, dissolved	M200.7 ICP	1	4.51		*	mg/L	0.1	0.5	09/30/21 15:42	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00063	B	*	mg/L	0.0005	0.002	10/08/21 14:49	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:49	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:49	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:42	kja
Iron, dissolved	M200.8 ICP-MS	1	0.132		*	mg/L	0.007	0.02	10/08/21 14:49	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:49	mfm
Lithium, dissolved	M200.7 ICP	1	0.0762		*	mg/L	0.008	0.04	09/30/21 15:42	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:42	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00112	B	*	mg/L	0.0004	0.002	10/08/21 14:49	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	145		*	ng/L	3	10	09/30/21 19:40	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00849		*	mg/L	0.0002	0.0005	10/08/21 14:49	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:49	mfm
Potassium, dissolved	M200.7 ICP	1	4.83		*	mg/L	0.2	1	09/30/21 15:42	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:42	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/12/21 17:29	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:49	mfm
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/30/21 15:42	kja
Strontium, dissolved	M200.7 ICP	1	0.0281	B	*	mg/L	0.009	0.045	09/30/21 15:42	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:49	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0148		*	mg/L	0.0008	0.0025	10/08/21 14:49	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:42	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:49	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00093	B	*	mg/L	0.0005	0.002	10/08/21 14:49	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:49	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-009

ACZ Sample ID: ***L68610-09***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	96.1		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	26.4		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.36		*	mg/L	0.4	2	09/30/21 23:28	krh
Conductivity @25C	SM2510B	1	308		*	umhos/cm	1	10	09/22/21 10:35	eep
Fluoride	M300.0 - Ion Chromatography	1	0.514		*	mg/L	0.05	0.25	09/30/21 23:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:44	wtc
pH (lab)	SM4500H+ B									
pH		1	9.2	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.029	B	*	mg/L	0.01	0.05	09/24/21 23:31	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	184		*	mg/L	20	40	09/20/21 19:28	jck
Sulfate	M300.0 - Ion Chromatography	1	21.7		*	mg/L	0.4	2	09/30/21 23:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-010

ACZ Sample ID: ***L68610-10***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 16:17	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0229		*	mg/L	0.005	0.015	10/08/21 14:51	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:51	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0350		*	mg/L	0.0002	0.001	10/08/21 14:51	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00732		*	mg/L	0.0005	0.0025	10/08/21 14:51	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:51	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:45	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/30/21 15:45	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:51	mfm
Calcium, dissolved	M200.7 ICP	1	4.74		*	mg/L	0.1	0.5	09/30/21 15:45	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 14:51	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:51	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:51	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:45	kja
Iron, dissolved	M200.8 ICP-MS	1	0.161		*	mg/L	0.007	0.02	10/08/21 14:51	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:51	mfm
Lithium, dissolved	M200.7 ICP	1	0.0750		*	mg/L	0.008	0.04	09/30/21 15:45	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:45	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00302		*	mg/L	0.0004	0.002	10/08/21 14:51	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	5	97		*	ng/L	2	5	09/30/21 19:44	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00605		*	mg/L	0.0002	0.0005	10/08/21 14:51	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:51	mfm
Potassium, dissolved	M200.7 ICP	1	3.87		*	mg/L	0.2	1	09/30/21 15:45	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:45	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00040		*	mg/L	0.0001	0.00025	10/12/21 17:34	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:51	mfm
Sodium, dissolved	M200.7 ICP	1	61.5		*	mg/L	0.2	1	09/30/21 15:45	kja
Strontium, dissolved	M200.7 ICP	1	0.0298	B	*	mg/L	0.009	0.045	09/30/21 15:45	kja
Thallium, dissolved	M200.8 ICP-MS	1	0.00030	B	*	mg/L	0.0001	0.0005	10/08/21 14:51	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0187		*	mg/L	0.0008	0.0025	10/08/21 14:51	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:45	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:51	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00081	B	*	mg/L	0.0005	0.002	10/08/21 14:51	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:51	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-010

ACZ Sample ID: ***L68610-10***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	101		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	21.4		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.34		*	mg/L	0.4	2	09/30/21 23:46	krh
Conductivity @25C	SM2510B	1	307		*	umhos/cm	1	10	09/22/21 10:44	eep
Fluoride	M300.0 - Ion Chromatography	1	0.509		*	mg/L	0.05	0.25	09/30/21 23:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:45	wtc
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.023	B	*	mg/L	0.01	0.05	09/24/21 23:33	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	178		*	mg/L	20	40	09/20/21 19:31	jck
Sulfate	M300.0 - Ion Chromatography	1	21.1		*	mg/L	0.4	2	09/30/21 23:46	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-011

ACZ Sample ID: ***L68610-11***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 16:36	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0156		*	mg/L	0.005	0.015	10/08/21 14:53	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:53	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0357		*	mg/L	0.0002	0.001	10/08/21 14:53	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00879		*	mg/L	0.0005	0.0025	10/08/21 14:53	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:53	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:49	kja
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	09/30/21 15:49	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:53	mfm
Calcium, dissolved	M200.7 ICP	1	5.06		*	mg/L	0.1	0.5	09/30/21 15:49	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 14:53	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000254		*	mg/L	0.00005	0.00025	10/08/21 14:53	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:53	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:49	kja
Iron, dissolved	M200.8 ICP-MS	1	0.145		*	mg/L	0.007	0.02	10/08/21 14:53	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:53	mfm
Lithium, dissolved	M200.7 ICP	1	0.0759		*	mg/L	0.008	0.04	09/30/21 15:49	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:49	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00089	B	*	mg/L	0.0004	0.002	10/08/21 14:53	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	11.0		*	ng/L	0.3	1	09/30/21 16:45	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00592		*	mg/L	0.0002	0.0005	10/08/21 14:53	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:53	mfm
Potassium, dissolved	M200.7 ICP	1	3.74		*	mg/L	0.2	1	09/30/21 15:49	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:49	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00032		*	mg/L	0.0001	0.00025	10/12/21 18:01	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:53	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/30/21 15:49	kja
Strontium, dissolved	M200.7 ICP	1	0.0293	B	*	mg/L	0.009	0.045	09/30/21 15:49	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:53	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0159		*	mg/L	0.0008	0.0025	10/08/21 14:53	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:49	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:53	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00078	B	*	mg/L	0.0005	0.002	10/08/21 14:53	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:53	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-011

ACZ Sample ID: ***L68610-11***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	106		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	16.5	B	*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.35		*	mg/L	0.4	2	10/01/21 0:22	krh
Conductivity @25C	SM2510B	1	306		*	umhos/cm	1	10	09/22/21 10:54	eep
Fluoride	M300.0 - Ion Chromatography	1	0.512		*	mg/L	0.05	0.25	10/01/21 0:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:46	wtc
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	B	*	mg/L	0.01	0.05	09/24/21 23:36	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	174		*	mg/L	20	40	09/20/21 19:33	jck
Sulfate	M300.0 - Ion Chromatography	1	21.3		*	mg/L	0.4	2	10/01/21 0:22	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-012

ACZ Sample ID: ***L68610-12***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 16:46	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0490		*	mg/L	0.005	0.015	10/08/21 14:55	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:55	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0334		*	mg/L	0.0002	0.001	10/08/21 14:55	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.01000		*	mg/L	0.0005	0.0025	10/08/21 14:55	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:55	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:52	kja
Boron, dissolved	M200.7 ICP	1	0.079	B	*	mg/L	0.03	0.1	09/30/21 15:52	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:55	mfm
Calcium, dissolved	M200.7 ICP	1	4.08		*	mg/L	0.1	0.5	09/30/21 15:52	kja
Chromium, dissolved	M200.8 ICP-MS	1	0.00101	B	*	mg/L	0.0005	0.002	10/08/21 14:55	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000072	B	*	mg/L	0.00005	0.00025	10/08/21 14:55	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:55	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:52	kja
Iron, dissolved	M200.8 ICP-MS	1	0.142		*	mg/L	0.007	0.02	10/08/21 14:55	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:55	mfm
Lithium, dissolved	M200.7 ICP	1	0.0762		*	mg/L	0.008	0.04	09/30/21 15:52	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:52	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0004	0.002	10/08/21 14:55	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	11.5			ng/L	0.3	1	09/30/21 16:54	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00595		*	mg/L	0.0002	0.0005	10/08/21 14:55	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:55	mfm
Potassium, dissolved	M200.7 ICP	1	3.85		*	mg/L	0.2	1	09/30/21 15:52	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:52	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00038		*	mg/L	0.0001	0.00025	10/12/21 17:37	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:55	mfm
Sodium, dissolved	M200.7 ICP	1	61.6		*	mg/L	0.2	1	09/30/21 15:52	kja
Strontium, dissolved	M200.7 ICP	1	0.0302	B	*	mg/L	0.009	0.045	09/30/21 15:52	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:55	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0205		*	mg/L	0.0008	0.0025	10/08/21 14:55	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:52	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:55	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00101	B	*	mg/L	0.0005	0.002	10/08/21 14:55	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:55	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-012

ACZ Sample ID: ***L68610-12***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	84.2		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	35.9		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.27		*	mg/L	0.4	2	10/01/21 0:58	krh
Conductivity @25C	SM2510B	1	302		*	umhos/cm	1	10	09/22/21 11:04	eep
Fluoride	M300.0 - Ion Chromatography	1	0.495		*	mg/L	0.05	0.25	10/01/21 0:58	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		10			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:48	wtc
pH (lab)	SM4500H+ B									
pH		1	9.4	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.022	B	*	mg/L	0.01	0.05	09/24/21 23:37	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	178		*	mg/L	20	40	09/20/21 19:35	jck
Sulfate	M300.0 - Ion Chromatography	1	20.7		*	mg/L	0.4	2	10/01/21 0:58	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-013

ACZ Sample ID: ***L68610-13***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 16:56	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0245		*	mg/L	0.005	0.015	10/08/21 14:56	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:56	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0350		*	mg/L	0.0002	0.001	10/08/21 14:56	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.0116		*	mg/L	0.0005	0.0025	10/08/21 14:56	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:56	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 15:56	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	09/30/21 15:56	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:56	mfm
Calcium, dissolved	M200.7 ICP	1	4.34		*	mg/L	0.1	0.5	09/30/21 15:56	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 14:56	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:56	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:56	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 15:56	kja
Iron, dissolved	M200.8 ICP-MS	1	0.136		*	mg/L	0.007	0.02	10/08/21 14:56	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:56	mfm
Lithium, dissolved	M200.7 ICP	1	0.0767		*	mg/L	0.008	0.04	09/30/21 15:56	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 15:56	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00103	B	*	mg/L	0.0004	0.002	10/08/21 14:56	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	7.5			ng/L	0.3	1	09/30/21 17:18	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00530		*	mg/L	0.0002	0.0005	10/08/21 14:56	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:56	mfm
Potassium, dissolved	M200.7 ICP	1	3.62		*	mg/L	0.2	1	09/30/21 15:56	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 15:56	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00035		*	mg/L	0.0001	0.00025	10/12/21 17:39	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:56	mfm
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	09/30/21 15:56	kja
Strontium, dissolved	M200.7 ICP	1	0.0323	B	*	mg/L	0.009	0.045	09/30/21 15:56	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:56	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0122		*	mg/L	0.0008	0.0025	10/08/21 14:56	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 15:56	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:56	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00085	B	*	mg/L	0.0005	0.002	10/08/21 14:56	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:56	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-013

ACZ Sample ID: ***L68610-13***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	113		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	24.6		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	137		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.29		*	mg/L	0.4	2	10/01/21 2:10	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/22/21 11:16	eep
Fluoride	M300.0 - Ion Chromatography	1	0.498		*	mg/L	0.05	0.25	10/01/21 2:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		11			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:49	wtc
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.023	B	*	mg/L	0.01	0.05	09/24/21 23:40	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190		*	mg/L	20	40	09/20/21 19:38	jck
Sulfate	M300.0 - Ion Chromatography	1	20.7		*	mg/L	0.4	2	10/01/21 2:10	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-014

ACZ Sample ID: ***L68610-14***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 17:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0199		*	mg/L	0.005	0.015	10/08/21 14:58	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 14:58	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0356		*	mg/L	0.0002	0.001	10/08/21 14:58	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00952		*	mg/L	0.0005	0.0025	10/08/21 14:58	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 14:58	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 16:00	kja
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	09/30/21 16:00	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 14:58	mfm
Calcium, dissolved	M200.7 ICP	1	4.70		*	mg/L	0.1	0.5	09/30/21 16:00	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 14:58	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.000149	B	*	mg/L	0.00005	0.00025	10/08/21 14:58	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 14:58	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 16:00	kja
Iron, dissolved	M200.8 ICP-MS	1	0.135		*	mg/L	0.007	0.02	10/08/21 14:58	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:58	mfm
Lithium, dissolved	M200.7 ICP	1	0.0760		*	mg/L	0.008	0.04	09/30/21 16:00	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 16:00	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00102	B	*	mg/L	0.0004	0.002	10/08/21 14:58	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	1	7.1			ng/L	0.3	1	09/30/21 17:23	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00544		*	mg/L	0.0002	0.0005	10/08/21 14:58	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 14:58	mfm
Potassium, dissolved	M200.7 ICP	1	4.22		*	mg/L	0.2	1	09/30/21 16:00	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 16:00	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00034		*	mg/L	0.0001	0.00025	10/12/21 17:41	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:58	mfm
Sodium, dissolved	M200.7 ICP	1	61.9		*	mg/L	0.2	1	09/30/21 16:00	kja
Strontium, dissolved	M200.7 ICP	1	0.0300	B	*	mg/L	0.009	0.045	09/30/21 16:00	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:58	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0118		*	mg/L	0.0008	0.0025	10/08/21 14:58	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 16:00	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 14:58	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0005	0.002	10/08/21 14:58	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 14:58	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-014

ACZ Sample ID: ***L68610-14***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	100.0		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	21.8		*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.33		*	mg/L	0.4	2	10/01/21 2:28	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/22/21 11:25	eep
Fluoride	M300.0 - Ion Chromatography	1	0.511		*	mg/L	0.05	0.25	10/01/21 2:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.024	BH	*	mg/L	0.02	0.1	10/12/21 23:50	wtc
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.023	B	*	mg/L	0.01	0.05	09/24/21 23:41	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	182		*	mg/L	20	40	09/20/21 19:40	jck
Sulfate	M300.0 - Ion Chromatography	1	21.1		*	mg/L	0.4	2	10/01/21 2:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-015

ACZ Sample ID: ***L68610-15***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/22/21 17:15	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	<0.005	U	*	mg/L	0.005	0.015	10/08/21 15:00	mfm
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/08/21 15:00	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0374		*	mg/L	0.0002	0.001	10/08/21 15:00	mfm
Barium, dissolved	M200.8 ICP-MS	1	0.00746		*	mg/L	0.0005	0.0025	10/08/21 15:00	mfm
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/08/21 15:00	mfm
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	09/30/21 16:03	kja
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	09/30/21 16:03	kja
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/08/21 15:00	mfm
Calcium, dissolved	M200.7 ICP	1	5.97		*	mg/L	0.1	0.5	09/30/21 16:03	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/08/21 15:00	mfm
Cobalt, dissolved	M200.8 ICP-MS	1	0.00122		*	mg/L	0.00005	0.00025	10/08/21 15:00	mfm
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/08/21 15:00	mfm
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	09/30/21 16:03	kja
Iron, dissolved	M200.8 ICP-MS	1	0.155		*	mg/L	0.007	0.02	10/08/21 15:00	mfm
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 15:00	mfm
Lithium, dissolved	M200.7 ICP	1	0.0756		*	mg/L	0.008	0.04	09/30/21 16:03	kja
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	09/30/21 16:03	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00104	B	*	mg/L	0.0004	0.002	10/08/21 15:00	mfm
Mercury, dissolved	M1631E, Atomic Fluorescence	10	142			ng/L	3	10	09/30/21 19:49	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00528		*	mg/L	0.0002	0.0005	10/08/21 15:00	mfm
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/08/21 15:00	mfm
Potassium, dissolved	M200.7 ICP	1	2.01		*	mg/L	0.2	1	09/30/21 16:03	kja
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	09/30/21 16:03	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.00033		*	mg/L	0.0001	0.00025	10/12/21 17:42	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 15:00	mfm
Sodium, dissolved	M200.7 ICP	1	61.2		*	mg/L	0.2	1	09/30/21 16:03	kja
Strontium, dissolved	M200.7 ICP	1	0.0271	B	*	mg/L	0.009	0.045	09/30/21 16:03	kja
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 15:00	mfm
Tin, dissolved	M200.8 ICP-MS	1	0.0154		*	mg/L	0.0008	0.0025	10/08/21 15:00	mfm
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	09/30/21 16:03	kja
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/08/21 15:00	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.00073	B	*	mg/L	0.0005	0.002	10/08/21 15:00	mfm
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/08/21 15:00	mfm

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090398-015

ACZ Sample ID: ***L68610-15***
Date Sampled: *09/13/21 13:00*
Date Received: *09/20/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	111		*	mg/L	2	20	09/22/21 0:00	eep
Carbonate as CaCO3		1	10.4	B	*	mg/L	2	20	09/22/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/22/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/22/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.42		*	mg/L	0.4	2	10/01/21 2:46	krh
Conductivity @25C	SM2510B	1	301		*	umhos/cm	1	10	09/22/21 11:34	eep
Fluoride	M300.0 - Ion Chromatography	1	0.529		*	mg/L	0.05	0.25	10/01/21 2:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/12/21 23:51	wtc
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/22/21 0:00	eep
pH measured at		1	21.8		*	C	0.1	0.1	09/22/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.026	B	*	mg/L	0.01	0.05	09/24/21 23:42	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/20/21 19:43	jck
Sulfate	M300.0 - Ion Chromatography	1	21.4		*	mg/L	0.4	2	10/01/21 2:46	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

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ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716PBW1	PBW	09/21/21 20:18				13.4	mg/L		-20	20			
WG527716LCSW3	LCSW	09/21/21 20:36	WC210917-2	820.0001		792.2	mg/L	97	90	110			
WG527716LCSW6	LCSW	09/21/21 23:46	WC210917-2	820.0001		815.6	mg/L	99	90	110			
WG527716PBW2	PBW	09/21/21 23:54				U	mg/L		-20	20			
WG527716LCSW9	LCSW	09/22/21 3:52	WC210917-2	820.0001		818	mg/L	100	90	110			
WG527716PBW3	PBW	09/22/21 3:59				U	mg/L		-20	20			
WG527716LCSW12	LCSW	09/22/21 7:58	WC210917-2	820.0001		820.9	mg/L	100	90	110			
WG527716PBW4	PBW	09/22/21 8:05				U	mg/L		-20	20			
L68610-05DUP	DUP	09/22/21 9:55			117	117.4	mg/L				0	20	
L68610-15DUP	DUP	09/22/21 11:43			122	121	mg/L				1	20	
WG527716LCSW15	LCSW	09/22/21 12:00	WC210917-2	820.0001		808.6	mg/L	99	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.1		.1077	mg/L	108	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.011	0.011			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.050065		.0556	mg/L	111	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.050065	.0231	.0745	mg/L	103	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.050065	.0231	.0767	mg/L	107	70	130	3	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.050065	.0384	.0889	mg/L	101	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.050065	.0384	.0899	mg/L	103	70	130	1	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.0201		.01914	mg/L	95	90	110			
WG529022ICB	ICB	10/08/21 14:21				.00041	mg/L		-0.00088	0.00088			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.01		.00995	mg/L	100	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.01	U	.00981	mg/L	98	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.01	U	.01009	mg/L	101	70	130	3	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.01	U	.00994	mg/L	99	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.01	U	.0102	mg/L	102	70	130	3	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.0512	mg/L	102	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00044	0.00044			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05005		.05327	mg/L	106	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05005	.0365	.09037	mg/L	108	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05005	.0365	.09041	mg/L	108	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05005	.00121	.05518	mg/L	108	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05005	.00121	.0555	mg/L	108	70	130	1	20	

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ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05167	mg/L	103	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.0011	0.0011			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.049985		.05188	mg/L	104	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.049985	.00872	.06035	mg/L	103	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.049985	.00872	.06063	mg/L	104	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.049985	.0235	.07355	mg/L	100	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.049985	.0235	.0749	mg/L	103	70	130	2	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.053254	mg/L	107	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.000176	0.000176			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05005		.05343	mg/L	107	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05005	U	.049801	mg/L	100	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05005	U	.049789	mg/L	99	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05005	.000413	.051687	mg/L	102	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05005	.000413	.051601	mg/L	102	70	130	0	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	2		1.988	mg/L	99	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.12	0.12			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	1		.982	mg/L	98	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	1	U	.977	mg/L	98	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	1	U	.986	mg/L	99	85	115	1	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	1	U	1.009	mg/L	101	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	1	U	.996	mg/L	100	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	2		2.014	mg/L	101	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.09	0.09			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	.5005		.505	mg/L	101	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	.5005	.082	.589	mg/L	101	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	.5005	.082	.585	mg/L	100	85	115	1	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	.5005	.082	.584	mg/L	100	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	.5005	.082	.583	mg/L	100	85	115	0	20	

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ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.053255	mg/L	107	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00011	0.00011			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05005		.053306	mg/L	107	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05005	U	.054751	mg/L	109	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05005	U	.055341	mg/L	111	70	130	1	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05005	.0248	.077906	mg/L	106	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05005	.0248	.078937	mg/L	108	70	130	1	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	100		99.78	mg/L	100	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.3	0.3			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	67.98972		69.58	mg/L	102	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	67.98972	4.79	72.42	mg/L	99	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	67.98972	4.79	73.6	mg/L	101	85	115	2	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	67.98972	57.9	123.3	mg/L	96	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	67.98972	57.9	124.4	mg/L	98	85	115	1	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	30		29.7	mg/L	99	90	110			
L68610-01DUP	DUP	09/30/21 20:11			5.1	5.08	mg/L				0	20	
L68610-02AS	AS	09/30/21 20:47	WI210907-6	30	5.15	35.04	mg/L	100	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	30		29.9	mg/L	100	90	110			
L68610-11DUP	DUP	10/01/21 0:40			5.35	5.34	mg/L				0	20	
L68610-12AS	AS	10/01/21 1:52	WI210907-6	30	5.27	35.32	mg/L	100	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05261	mg/L	105	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.0011	0.0011			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05		.05317	mg/L	106	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05	.0027	.05379	mg/L	102	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05	.0027	.05367	mg/L	102	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05	U	.05129	mg/L	103	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05	U	.05134	mg/L	103	70	130	0	20	

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ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.054802	mg/L	110	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00011	0.00011			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05005		.054493	mg/L	109	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05005	U	.051863	mg/L	104	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05005	U	.052198	mg/L	104	70	130	1	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05005	.0055	.056748	mg/L	102	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05005	.0055	.056847	mg/L	103	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW2	LCSW	09/21/21 20:25	PCN63140	1408		1414	umhos/cm	100	90	110			
WG527716LCSW5	LCSW	09/21/21 23:34	PCN63140	1408		1406	umhos/cm	100	90	110			
WG527716LCSW8	LCSW	09/22/21 3:39	PCN63140	1408		1402	umhos/cm	100	90	110			
WG527716LCSW11	LCSW	09/22/21 7:44	PCN63140	1408		1397	umhos/cm	99	90	110			
L68610-05DUP	DUP	09/22/21 9:55			300	301	umhos/cm				0	20	
L68610-15DUP	DUP	09/22/21 11:43			301	304	umhos/cm				1	20	
WG527716LCSW14	LCSW	09/22/21 11:49	PCN63140	1408		1390	umhos/cm	99	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05202	mg/L	104	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00176	0.00176			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05		.05291	mg/L	106	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05	U	.04993	mg/L	100	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05	U	.04975	mg/L	100	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05	.0055	.05493	mg/L	99	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05	.0055	.05487	mg/L	99	70	130	0	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	1.5		1.46	mg/L	97	90	110			
L68610-01DUP	DUP	09/30/21 20:11			.472	.473	mg/L				0	20	RA
L68610-02AS	AS	09/30/21 20:47	WI210907-6	1.5	.499	1.966	mg/L	98	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	1.5		1.432	mg/L	95	90	110			
L68610-11DUP	DUP	10/01/21 0:40			.512	.512	mg/L				0	20	
L68610-12AS	AS	10/01/21 1:52	WI210907-6	1.5	.495	1.976	mg/L	99	90	110			

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ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	2		1.99	mg/L	100	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.3	0.3			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	.9822		1.02	mg/L	104	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	.9822	U	1.01	mg/L	103	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	.9822	U	1.01	mg/L	103	85	115	0	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	.9822	U	1.01	mg/L	103	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	.9822	U	1.03	mg/L	105	85	115	2	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.10016		.106	mg/L	106	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.0154	0.0154			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.0501		.0526	mg/L	105	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.0501	.143	.1907	mg/L	95	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.0501	.143	.1953	mg/L	104	70	130	2	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.0501	.0217	.0727	mg/L	102	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.0501	.0217	.0726	mg/L	102	70	130	0	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05344	mg/L	107	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00022	0.00022			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05005		.05412	mg/L	108	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05005	U	.05392	mg/L	108	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05005	U	.054	mg/L	108	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05005	.0519	.10344	mg/L	103	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05005	.0519	.10422	mg/L	105	70	130	1	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	2		1.9625	mg/L	98	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.024	0.024			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	.999		.9794	mg/L	98	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	.999	.0728	1.031	mg/L	96	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	.999	.0728	1.033	mg/L	96	85	115	0	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	.999	.031	1.007	mg/L	98	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	.999	.031	1.023	mg/L	99	85	115	2	20	

WETLAB

ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	100		95.98	mg/L	96	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.6	0.6			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	49.99828		48.65	mg/L	97	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	49.99828	U	47.6	mg/L	95	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	49.99828	U	48.42	mg/L	97	85	115	2	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	49.99828	23.3	70.02	mg/L	93	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	49.99828	23.3	70.7	mg/L	95	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05395	mg/L	108	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00088	0.00088			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.0499		.05395	mg/L	108	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.0499	.00088	.05193	mg/L	102	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.0499	.00088	.05256	mg/L	104	70	130	1	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.0499	3.13	3.11903	mg/L	-22	70	130			M3
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.0499	3.13	3.15111	mg/L	42	70	130	1	20	M3

WETLAB

ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG528396													
WG528396CCV1	CCV	09/30/21 11:36	HG210709-4	10		8.83	ng/L	88	76.5	123.4			
WG528396CCB1	CCB	09/30/21 11:41				U	ng/L		-0.501	0.501			
WG528396PQV	PQV	09/30/21 11:46	HG210709-6	1		.86	ng/L	86	70	130			
WG528396CCV2	CCV	09/30/21 12:42	HG210709-4	10		9.44	ng/L	94	76.5	123.4			
WG528396CCB2	CCB	09/30/21 12:47				U	ng/L		-0.501	0.501			
WG528396CCV3	CCV	09/30/21 13:39	HG210709-4	10		9	ng/L	90	76.5	123.4			
WG528396CCB3	CCB	09/30/21 13:44				U	ng/L		-0.501	0.501			
WG528396LFB1	LFB	09/30/21 14:03	HG210709-5	2		1.95	ng/L	98	71	125			
L68609-06MS	MS	09/30/21 14:13	HG210709-5	2	3.3	5.27	ng/L	99	71	125			
L68609-06MSD	MSD	09/30/21 14:17	HG210709-5	2	3.3	5.21	ng/L	96	71	125	1	24	
WG528396CCV4	CCV	09/30/21 14:43	HG210709-4	10		9.38	ng/L	94	76.5	123.4			
WG528396CCB4	CCB	09/30/21 14:48				U	ng/L		-0.501	0.501			
L68610-02MS	MS	09/30/21 15:39	HG210709-5	2	18.3	20.2	ng/L	95	71	125			
L68610-02MSD	MSD	09/30/21 15:44	HG210709-5	2	18.3	19.4	ng/L	55	71	125	4	24	M3
WG528396CCV5	CCV	09/30/21 15:58	HG210709-4	10		9.62	ng/L	96	76.5	123.4			
WG528396CCB5	CCB	09/30/21 16:03				U	ng/L		-0.501	0.501			
WG528396LFB2	LFB	09/30/21 16:50	HG210709-5	2		2.19	ng/L	110	71	125			
WG528396CCV6	CCV	09/30/21 16:59	HG210709-4	10		9.87	ng/L	99	76.5	123.4			
WG528396CCB6	CCB	09/30/21 17:04				U	ng/L		-0.501	0.501			
L68610-12MS	MS	09/30/21 17:09	HG210709-5	2	11.5	13.5	ng/L	100	71	125			
L68610-12MSD	MSD	09/30/21 17:13	HG210709-5	2	11.5	13.6	ng/L	105	71	125	1	24	
WG528396CCV7	CCV	09/30/21 18:07	HG210709-4	10		9.86	ng/L	99	76.5	123.4			
WG528396CCB7	CCB	09/30/21 18:12				U	ng/L		-0.501	0.501			
WG528396CCV8	CCV	09/30/21 19:11	HG210709-4	10		9.72	ng/L	97	76.5	123.4			
WG528396CCB8	CCB	09/30/21 19:16				U	ng/L		-0.501	0.501			
WG528396CCV9	CCV	09/30/21 19:54	HG210709-4	10		9.57	ng/L	96	76.5	123.4			
WG528396CCB9	CCB	09/30/21 19:59				U	ng/L		-0.501	0.501			

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.01992		.0203	mg/L	102	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00044	0.00044			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05005		.0513	mg/L	102	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05005	.00546	.05886	mg/L	107	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05005	.00546	.05936	mg/L	108	70	130	1	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05005	.00023	.05063	mg/L	101	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05005	.00023	.05089	mg/L	101	70	130	1	20	

WETLAB

ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05229	mg/L	105	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00088	0.00088			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05		.05293	mg/L	106	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05	U	.04993	mg/L	100	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05	U	.04993	mg/L	100	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05	.00243	.05201	mg/L	99	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05	.00243	.05243	mg/L	100	70	130	1	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529071													
WG529071ICV	ICV	10/12/21 23:21	WI210904-1	2.4161		2.248	mg/L	93	90	110			
WG529071ICB	ICB	10/12/21 23:22				U	mg/L		-0.02	0.02			
WG529071LFB	LFB	10/12/21 23:26	WI211001-5	2		1.968	mg/L	98	90	110			
L68610-01DUP	DUP	10/12/21 23:28			U	U	mg/L				0	20	RA
L68610-02AS	AS	10/12/21 23:31	WI211001-5	2	U	1.967	mg/L	98	90	110			
L68633-13AS	AS	10/13/21 0:02	WI211001-5	2	U	2.029	mg/L	101	90	110			
L68633-14DUP	DUP	10/13/21 0:04			U	U	mg/L				0	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527716													
WG527716LCSW1	LCSW	09/21/21 20:23	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW4	LCSW	09/21/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW7	LCSW	09/22/21 3:37	PCN62948	6		6.1	units	102	5.9	6.1			
WG527716LCSW10	LCSW	09/22/21 7:43	PCN62948	6		6.1	units	102	5.9	6.1			
L68610-05DUP	DUP	09/22/21 9:55			9.1	9.1	units				0	20	
L68610-15DUP	DUP	09/22/21 11:43			8.6	8.6	units				0	20	
WG527716LCSW13	LCSW	09/22/21 11:47	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527989													
WG527989ICV	ICV	09/24/21 21:25	WI210831-4	.6523		.687	mg/L	105	90	110			
WG527989ICB	ICB	09/24/21 21:27				U	mg/L		-0.01	0.01			
WG527992													
WG527722LRB	LRB	09/24/21 23:13				U	mg/L		-0.01	0.01			
WG527722LFB	LFB	09/24/21 23:14	WI210921-12	.5		.525	mg/L	105	90	110			
L68528-01LFM	LFM	09/24/21 23:16	WI210921-12	.5	.022	.537	mg/L	103	90	110			
L68528-02DUP	DUP	09/24/21 23:19			U	U	mg/L				0	20	RA
L68610-09LFM	LFM	09/24/21 23:32	WI210921-12	.5	.029	.539	mg/L	102	90	110			
L68610-10DUP	DUP	09/24/21 23:35			.023	.024	mg/L				4	20	RA

WETLAB

ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	20		19.84	mg/L	99	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.6	0.6			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	99.96008		99.89	mg/L	100	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	99.96008	2.6	100.6	mg/L	98	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	99.96008	2.6	102	mg/L	99	85	115	1	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	99.96008	2.29	102	mg/L	100	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	99.96008	2.29	103.3	mg/L	101	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527613													
WG527613PBW	PBW	09/20/21 19:05				U	mg/L		-20	20			
WG527613LCSW	LCSW	09/20/21 19:07	PCN64119	1000		992	mg/L	99	80	120			
L68612-01DUP	DUP	09/20/21 19:47			430	426	mg/L				1	10	
L68612-05DUP	DUP	09/20/21 19:59			566	562	mg/L				1	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	2		1.968	mg/L	98	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.15	0.15			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	1.0017		1.011	mg/L	101	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	1.0017	U	.936	mg/L	93	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	1.0017	U	1.01	mg/L	101	85	115	8	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	1.0017	U	1	mg/L	100	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	1.0017	U	1.02	mg/L	102	85	115	2	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529236													
WG529236ICV	ICV	10/12/21 17:08	MS211001-2	.05		.0507	mg/L	101	90	110			
WG529236ICB	ICB	10/12/21 17:10				U	mg/L		-0.00022	0.00022			
WG529236LFB	LFB	10/12/21 17:11	MS210927-3	.05		.04971	mg/L	99	85	115			
L68610-09AS	AS	10/12/21 17:31	MS210927-3	.05	.00049	.0552	mg/L	109	70	130			
L68610-09ASD	ASD	10/12/21 17:32	MS210927-3	.05	.00049	.05561	mg/L	110	70	130	1	20	
L68766-05AS	AS	10/12/21 17:54	MS210927-3	.05	U	.05285	mg/L	106	70	130			
L68766-05ASD	ASD	10/12/21 17:55	MS210927-3	.05	U	.05354	mg/L	107	70	130	1	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.02		.01992	mg/L	100	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00022	0.00022			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.01		.0101	mg/L	101	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.01	U	.00745	mg/L	75	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.01	U	.00854	mg/L	85	70	130	14	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.01	U	.00777	mg/L	78	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.01	U	.00853	mg/L	85	70	130	9	20	

WETLAB

ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	100		100.33	mg/L	100	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.6	0.6			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	100.007		100.7	mg/L	101	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	100.007	61	157.9	mg/L	97	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	100.007	61	159.2	mg/L	98	85	115	1	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	100.007	38.4	137.5	mg/L	99	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	100.007	38.4	138.8	mg/L	100	85	115	1	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	2		1.9378	mg/L	97	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.027	0.027			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	.5005		.5321	mg/L	106	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	.5005	.0248	.5454	mg/L	104	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	.5005	.0248	.5545	mg/L	106	85	115	2	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	.5005	1.41	1.868	mg/L	92	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	.5005	1.41	1.889	mg/L	96	85	115	1	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	30		29.26	mg/L	98	90	110			
L68610-01DUP	DUP	09/30/21 20:11			20.1	20.1	mg/L				0	20	
L68610-02AS	AS	09/30/21 20:47	WI210907-6	30	20.7	49.82	mg/L	97	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	30		28.83	mg/L	96	90	110			
L68610-11DUP	DUP	10/01/21 0:40			21.3	21.1	mg/L				1	20	
L68610-12AS	AS	10/01/21 1:52	WI210907-6	30	20.7	49.6	mg/L	96	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05391	mg/L	108	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00022	0.00022			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05		.05282	mg/L	106	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05	U	.05177	mg/L	104	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05	U	.05151	mg/L	103	70	130	1	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05	.00054	.05112	mg/L	101	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05	.00054	.05245	mg/L	104	70	130	3	20	

WETLAB

ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05145	mg/L	103	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00176	0.00176			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05005		.05124	mg/L	102	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05005	.0166	.06529	mg/L	97	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05005	.0166	.0674	mg/L	101	70	130	3	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05005	U	.0498	mg/L	100	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05005	U	.05082	mg/L	102	70	130	2	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528411													
WG528411ICV	ICV	09/30/21 14:37	II210916-1	2		1.9912	mg/L	100	95	105			
WG528411ICB	ICB	09/30/21 14:45				U	mg/L		-0.015	0.015			
WG528411LFB	LFB	09/30/21 14:59	II210910-2	1		1.017	mg/L	102	85	115			
L68610-04AS	AS	09/30/21 15:16	II210910-2	1	U	1.001	mg/L	100	85	115			
L68610-04ASD	ASD	09/30/21 15:19	II210910-2	1	U	1.011	mg/L	101	85	115	1	20	
L68667-01AS	AS	09/30/21 16:10	II210910-2	1	.0086	1.013	mg/L	100	85	115			
L68667-01ASD	ASD	09/30/21 16:20	II210910-2	1	.0086	1.03	mg/L	102	85	115	2	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.05233	mg/L	105	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.00022	0.00022			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05		.05242	mg/L	105	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05	U	.0545	mg/L	109	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05	U	.05447	mg/L	109	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05	.00011	.05378	mg/L	107	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05	.00011	.0542	mg/L	108	70	130	1	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.04927	mg/L	99	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.0011	0.0011			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.05		.05229	mg/L	105	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.05	.00242	.05423	mg/L	104	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.05	.00242	.05414	mg/L	103	70	130	0	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.05	U	.05167	mg/L	103	70	130			
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.05	U	.05166	mg/L	103	70	130	0	20	

WETLAB

ACZ Project ID: ***L68610***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529022													
WG529022ICV	ICV	10/08/21 14:19	MS211001-2	.05		.0512	mg/L	102	90	110			
WG529022ICB	ICB	10/08/21 14:21				U	mg/L		-0.0132	0.0132			
WG529022LFB	LFB	10/08/21 14:23	MS210927-3	.050075		.0575	mg/L	115	85	115			
L68610-05AS	AS	10/08/21 14:35	MS210927-3	.050075	U	.0541	mg/L	108	70	130			
L68610-05ASD	ASD	10/08/21 14:37	MS210927-3	.050075	U	.0536	mg/L	107	70	130	1	20	
L68784-01AS	AS	10/08/21 15:10	MS210927-3	.050075	6.78	6.6533	mg/L	-253	70	130			M3
L68784-01ASD	ASD	10/08/21 15:12	MS210927-3	.050075	6.78	6.6505	mg/L	-259	70	130	0	20	M3

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-01	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68610-02	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-03	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-04	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-05	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-06	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-07	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-08	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-09	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-10	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
			M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-11	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528396	Mercury, dissolved	M1631E, Atomic Fluorescence	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-12	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-13	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-14	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68610***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68610-15	WG527716	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528382	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528382	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527716	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG527992	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527613	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG528382	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG527716	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529022	Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68610
Date Received: 09/20/2021 12:19
Received By:
Date Printed: 9/21/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?		X	

The client ID's were entered per the information present on the sample containers for samples 1.

The client ID's were entered per the information present on the sample containers for samples 1.

7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35984	18.2	<=6.0	15	N/A
NA35983	17.6	<=6.0	15	N/A
NA35985	18.1	<=6.0	15	Yes

Was ice present in the shipment container(s)?

REPAD LPII 2012-03

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68610
Date Received: 09/20/2021 12:19
Received By:
Date Printed: 9/21/2021

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68610

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST
***Sampler's Signature:** *I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D) 1631
21090398-001	9/13/2021 13:00	OT	4	✓	✓
21090398-002				✓	
21090398-003				✓	
21090398-004				✓	
21090398-005				✓	
21090398-006				✓	
21090398-007				✓	
21090398-008				✓	
21090398-009				✓	
21090398-010				✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/14 1:00		9/14/21 12:15

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68610 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (D) 1631
21090398-011	9/13/2021 13:00	OT	4	✓	✓
21090398-012	〃	〃	〃	✓	〃
21090398-013	〃	〃	〃	✓	〃
21090398-014	〃	〃	〃	✓	✓
21090398-015	〃	〃	〃		
entered per containers JJ 9/20/21					

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/16 1:00		

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

November 03, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68633

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 21, 2021. This project has been assigned to ACZ's project number, L68633. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68633. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 03, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory

November 03, 2021

Project ID:

ACZ Project ID: L68633

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 14 leachate samples from Western Environmental Testing Laboratory on September 21, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68633. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for dissolved phosphorus requiring re-analysis after the hold time expired and nitrate/nitrite analyzed 24 past the hold time due to instrument problems.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-001

ACZ Sample ID: ***L68633-01***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 13:37	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0373		*	mg/L	0.005	0.015	10/09/21 19:13	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:13	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0232		*	mg/L	0.0002	0.001	10/09/21 19:13	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0135		*	mg/L	0.0005	0.0025	10/09/21 19:13	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:13	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:10	jlw
Boron, dissolved	M200.7 ICP	1	0.089	B	*	mg/L	0.03	0.1	10/05/21 17:10	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:13	bsu
Calcium, dissolved	M200.7 ICP	1	3.69		*	mg/L	0.1	0.5	10/05/21 17:10	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00128	B	*	mg/L	0.0005	0.002	10/09/21 19:13	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:13	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:13	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:10	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.122		*	mg/L	0.007	0.02	10/09/21 19:13	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:13	bsu
Lithium, dissolved	M200.7 ICP	1	0.0785		*	mg/L	0.008	0.04	10/05/21 17:10	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/05/21 17:10	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00195	B	*	mg/L	0.0004	0.002	10/09/21 19:13	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 12:34	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00480		*	mg/L	0.0002	0.0005	10/09/21 19:13	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:13	bsu
Potassium, dissolved	M200.7 ICP	1	5.67		*	mg/L	0.2	1	10/05/21 17:10	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:10	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00034		*	mg/L	0.0001	0.00025	10/09/21 19:13	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:13	bsu
Sodium, dissolved	M200.7 ICP	1	62.6		*	mg/L	0.2	1	10/05/21 17:10	jlw
Strontium, dissolved	M200.7 ICP	1	0.0349	B	*	mg/L	0.009	0.045	10/05/21 17:10	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:13	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0158		*	mg/L	0.0008	0.0025	10/09/21 19:13	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:10	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:13	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00298		*	mg/L	0.0005	0.002	10/09/21 19:13	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:13	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-001

ACZ Sample ID: ***L68633-01***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	37.3		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	81.3		*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	119		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.07		*	mg/L	0.4	2	10/01/21 3:03	krh
Conductivity @25C	SM2510B	1	315		*	umhos/cm	1	10	09/25/21 1:13	emk
Fluoride	M300.0 - Ion Chromatography	1	0.481		*	mg/L	0.05	0.25	10/01/21 3:03	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.2			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/13/21 3:19	pjb
pH (lab)	SM4500H+ B									
pH		1	10.1	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.6		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.022	BH	*	mg/L	0.01	0.05	11/03/21 10:35	syw
Residue, Filterable (TDS) @180C	SM2540C	1	208		*	mg/L	20	40	09/21/21 15:20	jck
Sulfate	M300.0 - Ion Chromatography	1	20.4		*	mg/L	0.4	2	10/01/21 3:03	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-002

ACZ Sample ID: ***L68633-02***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 13:52	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0299		*	mg/L	0.005	0.015	10/09/21 19:15	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:15	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0250		*	mg/L	0.0002	0.001	10/09/21 19:15	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0127		*	mg/L	0.0005	0.0025	10/09/21 19:15	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:15	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:13	jlw
Boron, dissolved	M200.7 ICP	1	0.091	B	*	mg/L	0.03	0.1	10/05/21 17:13	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:15	bsu
Calcium, dissolved	M200.7 ICP	1	3.89		*	mg/L	0.1	0.5	10/05/21 17:13	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00107	B	*	mg/L	0.0005	0.002	10/09/21 19:15	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:15	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:15	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:13	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.112		*	mg/L	0.007	0.02	10/09/21 19:15	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:15	bsu
Lithium, dissolved	M200.7 ICP	1	0.0768		*	mg/L	0.008	0.04	10/05/21 17:13	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/05/21 17:13	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00088	B	*	mg/L	0.0004	0.002	10/09/21 19:15	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 12:35	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00489		*	mg/L	0.0002	0.0005	10/09/21 19:15	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:15	bsu
Potassium, dissolved	M200.7 ICP	1	4.82		*	mg/L	0.2	1	10/05/21 17:13	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:13	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00040		*	mg/L	0.0001	0.00025	10/09/21 19:15	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:15	bsu
Sodium, dissolved	M200.7 ICP	1	61.8		*	mg/L	0.2	1	10/05/21 17:13	jlw
Strontium, dissolved	M200.7 ICP	1	0.0330	B	*	mg/L	0.009	0.045	10/05/21 17:13	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:15	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0154		*	mg/L	0.0008	0.0025	10/09/21 19:15	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:13	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:15	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00292		*	mg/L	0.0005	0.002	10/09/21 19:15	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:15	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-002

ACZ Sample ID: ***L68633-02***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	41.7		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	77.6		*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	119		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.14		*	mg/L	0.4	2	10/01/21 3:21	krh
Conductivity @25C	SM2510B	1	311		*	umhos/cm	1	10	09/25/21 1:24	emk
Fluoride	M300.0 - Ion Chromatography	1	0.505		*	mg/L	0.05	0.25	10/01/21 3:21	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		9.7			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/13/21 3:20	pjb
pH (lab)	SM4500H+ B									
pH		1	10.0	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.7		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.021	BH	*	mg/L	0.01	0.05	11/01/21 17:56	syw
Residue, Filterable (TDS) @180C	SM2540C	1	200		*	mg/L	20	40	09/21/21 15:23	jck
Sulfate	M300.0 - Ion Chromatography	1	21.0		*	mg/L	0.4	2	10/01/21 3:21	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-003

ACZ Sample ID: ***L68633-03***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:06	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0156		*	mg/L	0.005	0.015	10/09/21 19:17	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:17	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0331		*	mg/L	0.0002	0.001	10/09/21 19:17	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00672		*	mg/L	0.0005	0.0025	10/09/21 19:17	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:17	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:17	jlw
Boron, dissolved	M200.7 ICP	1	0.091	B	*	mg/L	0.03	0.1	10/05/21 17:17	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:17	bsu
Calcium, dissolved	M200.7 ICP	1	5.27		*	mg/L	0.1	0.5	10/05/21 17:17	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00395		*	mg/L	0.0005	0.002	10/09/21 19:17	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:17	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:17	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:17	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.131		*	mg/L	0.007	0.02	10/09/21 19:17	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:17	bsu
Lithium, dissolved	M200.7 ICP	1	0.0733		*	mg/L	0.008	0.04	10/05/21 17:17	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/05/21 17:17	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0004	0.002	10/09/21 19:17	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 12:36	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00516		*	mg/L	0.0002	0.0005	10/09/21 19:17	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:17	bsu
Potassium, dissolved	M200.7 ICP	1	2.88		*	mg/L	0.2	1	10/05/21 17:17	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:17	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00033		*	mg/L	0.0001	0.00025	10/09/21 19:17	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:17	bsu
Sodium, dissolved	M200.7 ICP	1	61.2		*	mg/L	0.2	1	10/05/21 17:17	jlw
Strontium, dissolved	M200.7 ICP	1	0.0280	B	*	mg/L	0.009	0.045	10/05/21 17:17	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:17	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0422		*	mg/L	0.0008	0.0025	10/09/21 19:17	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:17	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:17	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00182	B	*	mg/L	0.0005	0.002	10/09/21 19:17	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:17	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-003

ACZ Sample ID: ***L68633-03***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	101		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	12.2	B	*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	113		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.39		*	mg/L	0.4	2	10/01/21 3:39	krh
Conductivity @25C	SM2510B	1	293		*	umhos/cm	1	10	09/25/21 2:10	emk
Fluoride	M300.0 - Ion Chromatography	1	0.530		*	mg/L	0.05	0.25	10/01/21 3:39	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/13/21 3:23	pjb
pH (lab)	SM4500H+ B									
pH		1	8.8	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.4		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	BH	*	mg/L	0.01	0.05	11/01/21 17:58	syw
Residue, Filterable (TDS) @180C	SM2540C	1	200		*	mg/L	20	40	09/21/21 15:26	jck
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/01/21 3:39	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-004

ACZ Sample ID: ***L68633-04***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:13	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0189		*	mg/L	0.005	0.015	10/09/21 19:19	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:19	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0334		*	mg/L	0.0002	0.001	10/09/21 19:19	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00673		*	mg/L	0.0005	0.0025	10/09/21 19:19	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:19	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:26	jlw
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	10/05/21 17:26	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:19	bsu
Calcium, dissolved	M200.7 ICP	1	4.98		*	mg/L	0.1	0.5	10/05/21 17:26	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00138	B	*	mg/L	0.0005	0.002	10/09/21 19:19	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:19	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:19	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:26	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.132		*	mg/L	0.007	0.02	10/09/21 19:19	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:19	bsu
Lithium, dissolved	M200.7 ICP	1	0.0754		*	mg/L	0.008	0.04	10/05/21 17:26	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/05/21 17:26	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00075	B	*	mg/L	0.0004	0.002	10/09/21 19:19	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 12:39	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00521		*	mg/L	0.0002	0.0005	10/09/21 19:19	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:19	bsu
Potassium, dissolved	M200.7 ICP	1	2.66		*	mg/L	0.2	1	10/05/21 17:26	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:26	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00033		*	mg/L	0.0001	0.00025	10/09/21 19:19	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:19	bsu
Sodium, dissolved	M200.7 ICP	1	62.0		*	mg/L	0.2	1	10/05/21 17:26	jlw
Strontium, dissolved	M200.7 ICP	1	0.0280	B	*	mg/L	0.009	0.045	10/05/21 17:26	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:19	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0459		*	mg/L	0.0008	0.0025	10/09/21 19:19	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:26	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:19	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00143	B	*	mg/L	0.0005	0.002	10/09/21 19:19	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:19	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-004

ACZ Sample ID: ***L68633-04***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	104		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	31.1		*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	135		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.45		*	mg/L	0.4	2	10/01/21 3:57	krh
Conductivity @25C	SM2510B	1	331		*	umhos/cm	1	10	09/25/21 2:19	emk
Fluoride	M300.0 - Ion Chromatography	1	0.533		*	mg/L	0.05	0.25	10/01/21 3:57	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/13/21 3:26	pjb
pH (lab)	SM4500H+ B									
pH		1	9.2	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.5		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.030	BH	*	mg/L	0.01	0.05	11/01/21 17:59	syw
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	09/21/21 15:28	jck
Sulfate	M300.0 - Ion Chromatography	1	23.0		*	mg/L	0.4	2	10/01/21 3:57	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-005

ACZ Sample ID: ***L68633-05***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:21	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0179		*	mg/L	0.005	0.015	10/09/21 19:20	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:20	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0281		*	mg/L	0.0002	0.001	10/09/21 19:20	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00962		*	mg/L	0.0005	0.0025	10/09/21 19:20	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:20	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:30	jlw
Boron, dissolved	M200.7 ICP	1	0.092	B	*	mg/L	0.03	0.1	10/05/21 17:30	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:20	bsu
Calcium, dissolved	M200.7 ICP	1	5.60		*	mg/L	0.1	0.5	10/05/21 17:30	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00208		*	mg/L	0.0005	0.002	10/09/21 19:20	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:20	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:20	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:30	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.126		*	mg/L	0.007	0.02	10/09/21 19:20	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:20	bsu
Lithium, dissolved	M200.7 ICP	1	0.0745		*	mg/L	0.008	0.04	10/05/21 17:30	jlw
Magnesium, dissolved	M200.7 ICP	1	0.25	B	*	mg/L	0.2	1	10/05/21 17:30	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00079	B	*	mg/L	0.0004	0.002	10/09/21 19:20	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 12:40	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00507		*	mg/L	0.0002	0.0005	10/09/21 19:20	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:20	bsu
Potassium, dissolved	M200.7 ICP	1	2.74		*	mg/L	0.2	1	10/05/21 17:30	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:30	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00038		*	mg/L	0.0001	0.00025	10/09/21 19:20	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:20	bsu
Sodium, dissolved	M200.7 ICP	1	61.3		*	mg/L	0.2	1	10/05/21 17:30	jlw
Strontium, dissolved	M200.7 ICP	1	0.0301	B	*	mg/L	0.009	0.045	10/05/21 17:30	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:20	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0139		*	mg/L	0.0008	0.0025	10/09/21 19:20	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:30	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:20	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00166	B	*	mg/L	0.0005	0.002	10/09/21 19:20	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:20	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-005

ACZ Sample ID: ***L68633-05***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.2		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	17.5	B	*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	117		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.48		*	mg/L	0.4	2	10/01/21 4:15	krh
Conductivity @25C	SM2510B	1	296		*	umhos/cm	1	10	09/25/21 2:29	emk
Fluoride	M300.0 - Ion Chromatography	1	0.506		*	mg/L	0.05	0.25	10/01/21 4:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		15.0			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.085	BH	*	mg/L	0.02	0.1	10/13/21 3:27	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.5		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.030	BH	*	mg/L	0.01	0.05	11/01/21 18:00	syw
Residue, Filterable (TDS) @180C	SM2540C	1	198		*	mg/L	20	40	09/21/21 15:34	jck
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/01/21 4:15	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-006

ACZ Sample ID: ***L68633-06***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:28	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0315		*	mg/L	0.005	0.015	10/09/21 19:22	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:22	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0315		*	mg/L	0.0002	0.001	10/09/21 19:22	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00839		*	mg/L	0.0005	0.0025	10/09/21 19:22	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:22	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:33	jlw
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	10/05/21 17:33	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:22	bsu
Calcium, dissolved	M200.7 ICP	1	4.74		*	mg/L	0.1	0.5	10/05/21 17:33	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:22	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:22	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:22	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:33	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.135		*	mg/L	0.007	0.02	10/09/21 19:22	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:22	bsu
Lithium, dissolved	M200.7 ICP	1	0.0744		*	mg/L	0.008	0.04	10/05/21 17:33	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/05/21 17:33	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0004	0.002	10/09/21 19:22	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 12:58	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00516		*	mg/L	0.0002	0.0005	10/09/21 19:22	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:22	bsu
Potassium, dissolved	M200.7 ICP	1	3.65		*	mg/L	0.2	1	10/05/21 17:33	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:33	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00034		*	mg/L	0.0001	0.00025	10/09/21 19:22	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:22	bsu
Sodium, dissolved	M200.7 ICP	1	60.2		*	mg/L	0.2	1	10/05/21 17:33	jlw
Strontium, dissolved	M200.7 ICP	1	0.0302	B	*	mg/L	0.009	0.045	10/05/21 17:33	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:22	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0147		*	mg/L	0.0008	0.0025	10/09/21 19:22	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:33	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:22	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0005	0.002	10/09/21 19:22	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:22	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-006

ACZ Sample ID: ***L68633-06***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	97.6		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	21.9		*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	119		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.43		*	mg/L	0.4	2	10/05/21 17:10	krh
Conductivity @25C	SM2510B	1	300		*	umhos/cm	1	10	09/25/21 2:39	emk
Fluoride	M300.0 - Ion Chromatography	1	0.529		*	mg/L	0.05	0.25	10/05/21 17:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/13/21 3:28	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.6		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	BH	*	mg/L	0.01	0.05	11/01/21 18:01	syw
Residue, Filterable (TDS) @180C	SM2540C	1	196		*	mg/L	20	40	09/21/21 15:36	jck
Sulfate	M300.0 - Ion Chromatography	1	21.5		*	mg/L	0.4	2	10/05/21 17:10	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-007

ACZ Sample ID: ***L68633-07***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:35	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0115	B	*	mg/L	0.005	0.015	10/09/21 19:27	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:27	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00832		*	mg/L	0.0002	0.001	10/09/21 19:27	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0226		*	mg/L	0.0005	0.0025	10/09/21 19:27	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:27	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:43	jlw
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/05/21 17:43	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:27	bsu
Calcium, dissolved	M200.7 ICP	1	14.1		*	mg/L	0.1	0.5	10/05/21 17:43	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:27	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:27	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:27	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:43	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0553		*	mg/L	0.007	0.02	10/09/21 19:27	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:27	bsu
Lithium, dissolved	M200.7 ICP	1	0.0760		*	mg/L	0.008	0.04	10/05/21 17:43	jlw
Magnesium, dissolved	M200.7 ICP	1	0.79	B	*	mg/L	0.2	1	10/05/21 17:43	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00118	B	*	mg/L	0.0004	0.002	10/09/21 19:27	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 12:59	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00456		*	mg/L	0.0002	0.0005	10/09/21 19:27	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:27	bsu
Potassium, dissolved	M200.7 ICP	1	3.95		*	mg/L	0.2	1	10/05/21 17:43	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:43	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/09/21 19:27	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:27	bsu
Sodium, dissolved	M200.7 ICP	1	58.4		*	mg/L	0.2	1	10/05/21 17:43	jlw
Strontium, dissolved	M200.7 ICP	1	0.0574		*	mg/L	0.009	0.045	10/05/21 17:43	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:27	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00461		*	mg/L	0.0008	0.0025	10/09/21 19:27	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:43	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/09/21 19:27	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:27	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:27	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-007

ACZ Sample ID: ***L68633-07***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	124		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	10.8	B	*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	135		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/05/21 17:28	krh
Conductivity @25C	SM2510B	1	332		*	umhos/cm	1	10	09/25/21 2:49	emk
Fluoride	M300.0 - Ion Chromatography	1	0.498		*	mg/L	0.05	0.25	10/05/21 17:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		39			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.632	H	*	mg/L	0.02	0.1	10/13/21 3:33	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.6		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.049	BH	*	mg/L	0.01	0.05	11/01/21 18:04	syw
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	09/21/21 15:39	jck
Sulfate	M300.0 - Ion Chromatography	1	22.3		*	mg/L	0.4	2	10/05/21 17:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-008

ACZ Sample ID: ***L68633-08***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:43	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0148	B	*	mg/L	0.005	0.015	10/09/21 19:29	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:29	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00845		*	mg/L	0.0002	0.001	10/09/21 19:29	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0184		*	mg/L	0.0005	0.0025	10/09/21 19:29	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:29	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:46	jlw
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	10/05/21 17:46	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:29	bsu
Calcium, dissolved	M200.7 ICP	1	12.8		*	mg/L	0.1	0.5	10/05/21 17:46	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:29	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:29	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:29	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:46	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0454		*	mg/L	0.007	0.02	10/09/21 19:29	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:29	bsu
Lithium, dissolved	M200.7 ICP	1	0.0749		*	mg/L	0.008	0.04	10/05/21 17:46	jlw
Magnesium, dissolved	M200.7 ICP	1	0.76	B	*	mg/L	0.2	1	10/05/21 17:46	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00082	B	*	mg/L	0.0004	0.002	10/09/21 19:29	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:00	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00469		*	mg/L	0.0002	0.0005	10/09/21 19:29	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:29	bsu
Potassium, dissolved	M200.7 ICP	1	4.49		*	mg/L	0.2	1	10/05/21 17:46	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:46	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/09/21 19:29	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:29	bsu
Sodium, dissolved	M200.7 ICP	1	58.3		*	mg/L	0.2	1	10/05/21 17:46	jlw
Strontium, dissolved	M200.7 ICP	1	0.0549		*	mg/L	0.009	0.045	10/05/21 17:46	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:29	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00567		*	mg/L	0.0008	0.0025	10/09/21 19:29	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:46	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/09/21 19:29	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:29	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:29	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-008

ACZ Sample ID: ***L68633-08***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	138		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	10.6	B	*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	148		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.97		*	mg/L	0.4	2	10/05/21 17:46	krh
Conductivity @25C	SM2510B	1	327		*	umhos/cm	1	10	09/25/21 3:00	emk
Fluoride	M300.0 - Ion Chromatography	1	0.494		*	mg/L	0.05	0.25	10/05/21 17:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		35			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.612	H	*	mg/L	0.02	0.1	10/13/21 3:35	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.8		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.051	H	*	mg/L	0.01	0.05	11/01/21 18:06	syw
Residue, Filterable (TDS) @180C	SM2540C	1	218		*	mg/L	20	40	09/21/21 15:41	jck
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/05/21 17:46	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-009

ACZ Sample ID: ***L68633-09***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:50	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0266		*	mg/L	0.005	0.015	10/09/21 19:34	bsu
Antimony, dissolved	M200.8 ICP-MS	1	0.00044	B	*	mg/L	0.0004	0.002	10/09/21 19:34	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0209		*	mg/L	0.0002	0.001	10/09/21 19:34	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0118		*	mg/L	0.0005	0.0025	10/09/21 19:34	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:34	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:49	jlw
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/05/21 17:49	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:34	bsu
Calcium, dissolved	M200.7 ICP	1	8.67		*	mg/L	0.1	0.5	10/05/21 17:49	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:34	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:34	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:34	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:49	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.115		*	mg/L	0.007	0.02	10/09/21 19:34	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:34	bsu
Lithium, dissolved	M200.7 ICP	1	0.0759		*	mg/L	0.008	0.04	10/05/21 17:49	jlw
Magnesium, dissolved	M200.7 ICP	1	0.45	B	*	mg/L	0.2	1	10/05/21 17:49	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00187	B	*	mg/L	0.0004	0.002	10/09/21 19:34	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:01	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00715		*	mg/L	0.0002	0.0005	10/09/21 19:34	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:34	bsu
Potassium, dissolved	M200.7 ICP	1	5.12		*	mg/L	0.2	1	10/05/21 17:49	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:49	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/09/21 19:34	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:34	bsu
Sodium, dissolved	M200.7 ICP	1	59.9		*	mg/L	0.2	1	10/05/21 17:49	jlw
Strontium, dissolved	M200.7 ICP	1	0.0425	B	*	mg/L	0.009	0.045	10/05/21 17:49	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:34	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0139		*	mg/L	0.0008	0.0025	10/09/21 19:34	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:49	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/09/21 19:34	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:34	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:34	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-009

ACZ Sample ID: ***L68633-09***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	111		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	15.3	B	*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	126		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.69		*	mg/L	0.4	2	10/05/21 18:04	krh
Conductivity @25C	SM2510B	1	313		*	umhos/cm	1	10	09/25/21 3:09	emk
Fluoride	M300.0 - Ion Chromatography	1	0.509		*	mg/L	0.05	0.25	10/05/21 18:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		24			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.268	H	*	mg/L	0.02	0.1	10/13/21 3:36	pjb
pH (lab)	SM4500H+ B									
pH		1	8.8	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.6		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.038	BH	*	mg/L	0.01	0.05	11/01/21 18:07	syw
Residue, Filterable (TDS) @180C	SM2540C	1	208		*	mg/L	20	40	09/21/21 15:44	jck
Sulfate	M300.0 - Ion Chromatography	1	22.2		*	mg/L	0.4	2	10/05/21 18:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-010

ACZ Sample ID: ***L68633-10***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 14:57	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0118	B	*	mg/L	0.005	0.015	10/09/21 19:35	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:35	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00893		*	mg/L	0.0002	0.001	10/09/21 19:35	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0187		*	mg/L	0.0005	0.0025	10/09/21 19:35	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:35	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:52	jlw
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	10/05/21 17:52	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:35	bsu
Calcium, dissolved	M200.7 ICP	1	13.2		*	mg/L	0.1	0.5	10/05/21 17:52	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:35	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:35	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:35	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:52	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0588		*	mg/L	0.007	0.02	10/09/21 19:35	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:35	bsu
Lithium, dissolved	M200.7 ICP	1	0.0759		*	mg/L	0.008	0.04	10/05/21 17:52	jlw
Magnesium, dissolved	M200.7 ICP	1	0.76	B	*	mg/L	0.2	1	10/05/21 17:52	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00136	B	*	mg/L	0.0004	0.002	10/09/21 19:35	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:01	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00508		*	mg/L	0.0002	0.0005	10/09/21 19:35	bsu
Nickel, dissolved	M200.8 ICP-MS	1	0.00058	B	*	mg/L	0.0004	0.001	10/09/21 19:35	bsu
Potassium, dissolved	M200.7 ICP	1	4.49		*	mg/L	0.2	1	10/05/21 17:52	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:52	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00061		*	mg/L	0.0001	0.00025	10/09/21 19:35	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:35	bsu
Sodium, dissolved	M200.7 ICP	1	58.1		*	mg/L	0.2	1	10/05/21 17:52	jlw
Strontium, dissolved	M200.7 ICP	1	0.0581		*	mg/L	0.009	0.045	10/05/21 17:52	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:35	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00689		*	mg/L	0.0008	0.0025	10/09/21 19:35	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:52	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/09/21 19:35	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:35	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:35	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-010

ACZ Sample ID: ***L68633-10***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	124		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	10.5	B	*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	134		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.96		*	mg/L	0.4	2	10/05/21 18:22	krh
Conductivity @25C	SM2510B	1	329		*	umhos/cm	1	10	09/25/21 3:18	emk
Fluoride	M300.0 - Ion Chromatography	1	0.500		*	mg/L	0.05	0.25	10/05/21 18:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		36			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.581		*	mg/L	0.02	0.1	10/12/21 23:57	wtc
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.6		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.047	BH	*	mg/L	0.01	0.05	11/01/21 18:08	syw
Residue, Filterable (TDS) @180C	SM2540C	1	222		*	mg/L	20	40	09/21/21 15:47	jck
Sulfate	M300.0 - Ion Chromatography	1	22.0		*	mg/L	0.4	2	10/05/21 18:22	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-011

ACZ Sample ID: ***L68633-11***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 15:04	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0089	B	*	mg/L	0.005	0.015	10/09/21 19:37	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:37	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0200		*	mg/L	0.0002	0.001	10/09/21 19:37	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0139		*	mg/L	0.0005	0.0025	10/09/21 19:37	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:37	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:56	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/05/21 17:56	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:37	bsu
Calcium, dissolved	M200.7 ICP	1	9.78		*	mg/L	0.1	0.5	10/05/21 17:56	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:37	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:37	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:37	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:56	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.101		*	mg/L	0.007	0.02	10/09/21 19:37	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:37	bsu
Lithium, dissolved	M200.7 ICP	1	0.0755		*	mg/L	0.008	0.04	10/05/21 17:56	jlw
Magnesium, dissolved	M200.7 ICP	1	0.49	B	*	mg/L	0.2	1	10/05/21 17:56	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00138	B	*	mg/L	0.0004	0.002	10/09/21 19:37	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:02	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00528		*	mg/L	0.0002	0.0005	10/09/21 19:37	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:37	bsu
Potassium, dissolved	M200.7 ICP	1	4.00		*	mg/L	0.2	1	10/05/21 17:56	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:56	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00040		*	mg/L	0.0001	0.00025	10/09/21 19:37	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:37	bsu
Sodium, dissolved	M200.7 ICP	1	59.7		*	mg/L	0.2	1	10/05/21 17:56	jlw
Strontium, dissolved	M200.7 ICP	1	0.0433	B	*	mg/L	0.009	0.045	10/05/21 17:56	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:37	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0123		*	mg/L	0.0008	0.0025	10/09/21 19:37	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:56	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00011	B	*	mg/L	0.0001	0.0005	10/09/21 19:37	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:37	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:37	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-011

ACZ Sample ID: ***L68633-11***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	118		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	10.4	B	*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	128		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.69		*	mg/L	0.4	2	10/05/21 18:40	krh
Conductivity @25C	SM2510B	1	314		*	umhos/cm	1	10	09/25/21 3:28	emk
Fluoride	M300.0 - Ion Chromatography	1	0.517		*	mg/L	0.05	0.25	10/05/21 18:40	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		26			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.277		*	mg/L	0.02	0.1	10/12/21 23:58	wtc
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.4		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.041	BH	*	mg/L	0.01	0.05	11/01/21 18:09	syw
Residue, Filterable (TDS) @180C	SM2540C	1	212		*	mg/L	20	40	09/21/21 15:49	jck
Sulfate	M300.0 - Ion Chromatography	1	21.6		*	mg/L	0.4	2	10/05/21 18:40	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-012

ACZ Sample ID: ***L68633-12***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 15:19	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0309		*	mg/L	0.005	0.015	10/09/21 19:39	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:39	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0201		*	mg/L	0.0002	0.001	10/09/21 19:39	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0123		*	mg/L	0.0005	0.0025	10/09/21 19:39	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:39	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 17:59	jlw
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/05/21 17:59	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:39	bsu
Calcium, dissolved	M200.7 ICP	1	7.67		*	mg/L	0.1	0.5	10/05/21 17:59	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00074	B	*	mg/L	0.0005	0.002	10/09/21 19:39	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:39	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:39	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 17:59	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.106		*	mg/L	0.007	0.02	10/09/21 19:39	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:39	bsu
Lithium, dissolved	M200.7 ICP	1	0.0764		*	mg/L	0.008	0.04	10/05/21 17:59	jlw
Magnesium, dissolved	M200.7 ICP	1	0.43	B	*	mg/L	0.2	1	10/05/21 17:59	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00197	B	*	mg/L	0.0004	0.002	10/09/21 19:39	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:03	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00519		*	mg/L	0.0002	0.0005	10/09/21 19:39	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:39	bsu
Potassium, dissolved	M200.7 ICP	1	4.15		*	mg/L	0.2	1	10/05/21 17:59	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 17:59	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00045		*	mg/L	0.0001	0.00025	10/09/21 19:39	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:39	bsu
Sodium, dissolved	M200.7 ICP	1	59.9		*	mg/L	0.2	1	10/05/21 17:59	jlw
Strontium, dissolved	M200.7 ICP	1	0.0405	B	*	mg/L	0.009	0.045	10/05/21 17:59	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:39	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0138		*	mg/L	0.0008	0.0025	10/09/21 19:39	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 17:59	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00012	B	*	mg/L	0.0001	0.0005	10/09/21 19:39	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00053	B	*	mg/L	0.0005	0.002	10/09/21 19:39	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:39	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-012

ACZ Sample ID: ***L68633-12***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	102		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	21.2		*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	123		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.66		*	mg/L	0.4	2	10/05/21 19:36	krh
Conductivity @25C	SM2510B	1	306		*	umhos/cm	1	10	09/25/21 3:37	emk
Fluoride	M300.0 - Ion Chromatography	1	0.497		*	mg/L	0.05	0.25	10/05/21 19:36	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		21			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.261		*	mg/L	0.02	0.1	10/12/21 23:59	wtc
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.3		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.037	BH	*	mg/L	0.01	0.05	11/01/21 18:11	syw
Residue, Filterable (TDS) @180C	SM2540C	1	206		*	mg/L	20	40	09/21/21 15:52	jck
Sulfate	M300.0 - Ion Chromatography	1	21.4		*	mg/L	0.4	2	10/05/21 19:36	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-013

ACZ Sample ID: ***L68633-13***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 15:34	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0218		*	mg/L	0.005	0.015	10/09/21 19:41	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:41	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0307		*	mg/L	0.0002	0.001	10/09/21 19:41	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0119		*	mg/L	0.0005	0.0025	10/09/21 19:41	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:41	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 18:02	jlw
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	10/05/21 18:02	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:41	bsu
Calcium, dissolved	M200.7 ICP	1	4.74		*	mg/L	0.1	0.5	10/05/21 18:02	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:41	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:41	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:41	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 18:02	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.129		*	mg/L	0.007	0.02	10/09/21 19:41	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:41	bsu
Lithium, dissolved	M200.7 ICP	1	0.0769		*	mg/L	0.008	0.04	10/05/21 18:02	jlw
Magnesium, dissolved	M200.7 ICP	1	0.20	B	*	mg/L	0.2	1	10/05/21 18:02	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00120	B	*	mg/L	0.0004	0.002	10/09/21 19:41	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:04	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00505		*	mg/L	0.0002	0.0005	10/09/21 19:41	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:41	bsu
Potassium, dissolved	M200.7 ICP	1	3.41		*	mg/L	0.2	1	10/05/21 18:02	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 18:02	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00029		*	mg/L	0.0001	0.00025	10/09/21 19:41	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:41	bsu
Sodium, dissolved	M200.7 ICP	1	61.0		*	mg/L	0.2	1	10/05/21 18:02	jlw
Strontium, dissolved	M200.7 ICP	1	0.0343	B	*	mg/L	0.009	0.045	10/05/21 18:02	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:41	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0179		*	mg/L	0.0008	0.0025	10/09/21 19:41	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 18:02	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:41	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:41	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:41	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-013

ACZ Sample ID: ***L68633-13***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	96.8		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	23.4		*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	120		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.41		*	mg/L	0.4	2	10/05/21 19:53	krh
Conductivity @25C	SM2510B	1	298		*	umhos/cm	1	10	09/25/21 3:56	emk
Fluoride	M300.0 - Ion Chromatography	1	0.525		*	mg/L	0.05	0.25	10/05/21 19:53	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		13			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/13/21 0:00	wtc
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.4		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	BH	*	mg/L	0.01	0.05	11/01/21 18:13	syw
Residue, Filterable (TDS) @180C	SM2540C	1	200		*	mg/L	20	40	09/21/21 15:54	jck
Sulfate	M300.0 - Ion Chromatography	1	21.4		*	mg/L	0.4	2	10/05/21 19:53	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-014

ACZ Sample ID: ***L68633-14***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								11/01/21 15:41	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0166		*	mg/L	0.005	0.015	10/09/21 19:42	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/09/21 19:42	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0315		*	mg/L	0.0002	0.001	10/09/21 19:42	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00891		*	mg/L	0.0005	0.0025	10/09/21 19:42	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/09/21 19:42	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 18:05	jlw
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	10/05/21 18:05	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:42	bsu
Calcium, dissolved	M200.7 ICP	1	4.90		*	mg/L	0.1	0.5	10/05/21 18:05	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/09/21 19:42	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/09/21 19:42	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/09/21 19:42	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/05/21 18:05	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.114		*	mg/L	0.007	0.02	10/09/21 19:42	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:42	bsu
Lithium, dissolved	M200.7 ICP	1	0.0764		*	mg/L	0.008	0.04	10/05/21 18:05	jlw
Magnesium, dissolved	M200.7 ICP	1	<0.2	U	*	mg/L	0.2	1	10/05/21 18:05	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0004	0.002	10/09/21 19:42	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/27/21 13:05	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00506		*	mg/L	0.0002	0.0005	10/09/21 19:42	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/09/21 19:42	bsu
Potassium, dissolved	M200.7 ICP	1	3.91		*	mg/L	0.2	1	10/05/21 18:05	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 18:05	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00029		*	mg/L	0.0001	0.00025	10/09/21 19:42	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:42	bsu
Sodium, dissolved	M200.7 ICP	1	61.2		*	mg/L	0.2	1	10/05/21 18:05	jlw
Strontium, dissolved	M200.7 ICP	1	0.0316	B	*	mg/L	0.009	0.045	10/05/21 18:05	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:42	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0366		*	mg/L	0.0008	0.0025	10/09/21 19:42	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 18:05	jlw
Uranium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/09/21 19:42	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00051	B	*	mg/L	0.0005	0.002	10/09/21 19:42	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/09/21 19:42	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090453-014

ACZ Sample ID: ***L68633-14***
Date Sampled: *09/14/21 13:00*
Date Received: *09/21/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	100.0		*	mg/L	2	20	09/25/21 0:00	emk
Carbonate as CaCO3		1	21.0		*	mg/L	2	20	09/25/21 0:00	emk
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/25/21 0:00	emk
Total Alkalinity		1	121		*	mg/L	2	20	09/25/21 0:00	emk
Chloride	M300.0 - Ion Chromatography	1	5.43		*	mg/L	0.4	2	10/05/21 20:11	krh
Conductivity @25C	SM2510B	1	303		*	umhos/cm	1	10	09/25/21 4:06	emk
Fluoride	M300.0 - Ion Chromatography	1	0.531		*	mg/L	0.05	0.25	10/05/21 20:11	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		12			mg/L	0.2	5	11/03/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/13/21 0:03	wtc
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/25/21 0:00	emk
pH measured at		1	22.3		*	C	0.1	0.1	09/25/21 0:00	emk
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.023	BH	*	mg/L	0.01	0.05	11/01/21 18:14	syw
Residue, Filterable (TDS) @180C	SM2540C	1	194		*	mg/L	20	40	09/21/21 15:57	jck
Sulfate	M300.0 - Ion Chromatography	1	21.7		*	mg/L	0.4	2	10/05/21 20:11	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527981													
WG527981PBW1	PBW	09/24/21 18:11				U	mg/L		-20	20			
WG527981LCSW3	LCSW	09/24/21 18:30	WC210917-2	820.0001		805.8	mg/L	98	90	110			
WG527981LCSW6	LCSW	09/24/21 21:59	WC210917-2	820.0001		807.2	mg/L	98	90	110			
WG527981PBW2	PBW	09/24/21 22:07				U	mg/L		-20	20			
L68633-02DUP	DUP	09/25/21 1:34			119	120	mg/L				1	20	
WG527981LCSW9	LCSW	09/25/21 1:53	WC210917-2	820.0001		812.9	mg/L	99	90	110			
WG527981PBW3	PBW	09/25/21 2:01				U	mg/L		-20	20			
L68633-12DUP	DUP	09/25/21 3:46			123	123.5	mg/L				0	20	
L68648-03DUP	DUP	09/25/21 5:26			121	121.2	mg/L				0	20	
WG527981LCSW12	LCSW	09/25/21 5:46	WC210917-2	820.0001		814.7	mg/L	99	90	110			
WG527981PBW4	PBW	09/25/21 5:53				U	mg/L		-20	20			
WG527981LCSW15	LCSW	09/25/21 9:18	WC210917-2	820.0001		821.1	mg/L	100	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.1		.104	mg/L	104	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.011	0.011			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.050065		.054	mg/L	108	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.050065	.0148	.069	mg/L	108	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.050065	.0148	.0691	mg/L	108	70	130	0	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.050065	.0174	.0748	mg/L	115	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.050065	.0174	.0722	mg/L	109	70	130	4	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.0201		.01898	mg/L	94	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00088	0.00088			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.01		.00945	mg/L	95	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.01	U	.00849	mg/L	85	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.01	U	.0085	mg/L	85	70	130	0	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.01	U	.00847	mg/L	85	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.01	U	.00852	mg/L	85	70	130	1	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05074	mg/L	101	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00044	0.00044			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05005		.05021	mg/L	100	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05005	.00845	.05818	mg/L	99	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05005	.00845	.05766	mg/L	98	70	130	1	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05005	.00038	.05176	mg/L	103	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05005	.00038	.05048	mg/L	100	70	130	3	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05113	mg/L	102	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.0011	0.0011			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.049985		.04983	mg/L	100	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.049985	.0184	.06894	mg/L	101	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.049985	.0184	.06835	mg/L	100	70	130	1	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.049985	.0536	.10682	mg/L	106	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.049985	.0536	.104	mg/L	101	70	130	3	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.050414	mg/L	101	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.000176	0.000176			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05005		.049145	mg/L	98	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05005	U	.050668	mg/L	101	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05005	U	.049472	mg/L	99	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05005	U	.055616	mg/L	111	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05005	U	.053727	mg/L	107	70	130	3	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	2		1.982	mg/L	99	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.12	0.12			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	1		1.016	mg/L	102	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	1	U	1.013	mg/L	101	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	1	U	1.002	mg/L	100	85	115	1	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	1	U	1.017	mg/L	102	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	1	U	1.022	mg/L	102	85	115	0	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	2		1.992	mg/L	100	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.09	0.09			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	.5005		.515	mg/L	103	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	.5005	.091	.597	mg/L	101	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	.5005	.091	.599	mg/L	101	85	115	0	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	.5005	.084	.596	mg/L	102	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	.5005	.084	.605	mg/L	104	85	115	1	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.051218	mg/L	102	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00011	0.00011			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05005		.049529	mg/L	99	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05005	U	.051124	mg/L	102	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05005	U	.050473	mg/L	101	70	130	1	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05005	U	.052665	mg/L	105	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05005	U	.050503	mg/L	101	70	130	4	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	100		99.59	mg/L	100	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.3	0.3			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	67.98972		70.54	mg/L	104	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	67.98972	5.27	73.56	mg/L	100	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	67.98972	5.27	74.41	mg/L	102	85	115	1	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	67.98972	4.9	74.77	mg/L	103	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	67.98972	4.9	74.36	mg/L	102	85	115	1	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	30		29.7	mg/L	99	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	30		29.9	mg/L	100	90	110			
L68610-11DUP	DUP	10/01/21 0:40			5.35	5.34	mg/L				0	20	
L68610-12AS	AS	10/01/21 1:52	WI210907-6	30	5.27	35.32	mg/L	100	90	110			
WG528665													
WG528665LFB1	LFB	10/05/21 16:15	WI210907-6	30		29.65	mg/L	99	90	110			
L68667-02AS	AS	10/05/21 21:23	WI210907-6	600	20.2	622.05	mg/L	100	90	110			
WG528665LFB2	LFB	10/06/21 0:58	WI210907-6	30		29.65	mg/L	99	90	110			
L68667-01DUP	DUP	10/06/21 19:38			12.7	12.7	mg/L				0	20	
L68667-03DUP	DUP	10/06/21 20:14			23.6	23.49	mg/L				0	20	RA
L68667-04AS	AS	10/06/21 20:50	WI210907-6	150	135	285.28	mg/L	100	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05116	mg/L	102	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.0011	0.0011			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05		.05015	mg/L	100	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05	U	.04911	mg/L	98	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05	U	.04836	mg/L	97	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05	U	.05048	mg/L	101	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05	U	.05009	mg/L	100	70	130	1	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.052726	mg/L	105	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00011	0.00011			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05005		.050701	mg/L	101	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05005	U	.052231	mg/L	104	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05005	U	.051192	mg/L	102	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05005	.000067	.052061	mg/L	104	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05005	.000067	.05136	mg/L	102	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527981													
WG527981LCSW2	LCSW	09/24/21 18:17	PCN63140	1408		1409	umhos/cm	100	90	110			
WG527981LCSW5	LCSW	09/24/21 21:47	PCN63140	1408		1398	umhos/cm	99	90	110			
L68633-02DUP	DUP	09/25/21 1:34			311	311	umhos/cm				0	20	
WG527981LCSW8	LCSW	09/25/21 1:40	PCN63140	1408		1394	umhos/cm	99	90	110			
L68633-12DUP	DUP	09/25/21 3:46			306	307	umhos/cm				0	20	
L68648-03DUP	DUP	09/25/21 5:26			472	471	umhos/cm				0	20	
WG527981LCSW11	LCSW	09/25/21 5:33	PCN63140	1408		1391	umhos/cm	99	90	110			
WG527981LCSW14	LCSW	09/25/21 9:05	PCN63140	1408		1382	umhos/cm	98	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05227	mg/L	105	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00176	0.00176			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05		.05045	mg/L	101	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05	U	.04828	mg/L	97	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05	U	.0479	mg/L	96	70	130	1	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05	.00327	.05393	mg/L	101	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05	.00327	.05057	mg/L	95	70	130	6	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	1.5		1.46	mg/L	97	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	1.5		1.432	mg/L	95	90	110			
L68610-11DUP	DUP	10/01/21 0:40			.512	.512	mg/L				0	20	
L68610-12AS	AS	10/01/21 1:52	WI210907-6	1.5	.495	1.976	mg/L	99	90	110			
WG528665													
WG528665LFB1	LFB	10/05/21 16:15	WI210907-6	1.5		1.495	mg/L	100	90	110			
L68667-02AS	AS	10/05/21 21:23	WI210907-6	30	U	29.328	mg/L	98	90	110			
WG528665LFB2	LFB	10/06/21 0:58	WI210907-6	1.5		1.458	mg/L	97	90	110			
L68667-01DUP	DUP	10/06/21 19:38			.3	.299	mg/L				0	20	RA
L68667-03DUP	DUP	10/06/21 20:14			U	U	mg/L				0	20	RA
L68667-04AS	AS	10/06/21 20:50	WI210907-6	7.5	2.1	9.514	mg/L	99	90	110			

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	2		2.01	mg/L	101	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.3	0.3			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	.9822		1.01	mg/L	103	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	.9822	U	1.02	mg/L	104	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	.9822	U	1.02	mg/L	104	85	115	0	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	.9822	U	1.02	mg/L	104	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	.9822	U	1.02	mg/L	104	85	115	0	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.10016		.1028	mg/L	103	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.0154	0.0154			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.0501		.0527	mg/L	105	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.0501	.0454	.0932	mg/L	95	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.0501	.0454	.0931	mg/L	95	70	130	0	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.0501	.0135	.067	mg/L	107	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.0501	.0135	.0652	mg/L	103	70	130	3	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05151	mg/L	103	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00022	0.00022			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05005		.05174	mg/L	103	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05005	U	.05296	mg/L	106	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05005	U	.05206	mg/L	104	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05005	U	.05527	mg/L	110	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05005	U	.05162	mg/L	103	70	130	7	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	2		1.9785	mg/L	99	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.024	0.024			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	.999		.9764	mg/L	98	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	.999	.0733	1.043	mg/L	97	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	.999	.0733	1.05	mg/L	98	85	115	1	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	.999	.0764	1.058	mg/L	98	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	.999	.0764	1.058	mg/L	98	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	100		96.14	mg/L	96	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.6	0.6			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	49.99828		49.51	mg/L	99	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	49.99828	U	48.19	mg/L	96	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	49.99828	U	48.73	mg/L	97	85	115	1	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	49.99828	U	49.18	mg/L	98	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	49.99828	U	49.12	mg/L	98	85	115	0	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05198	mg/L	104	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00088	0.00088			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.0499		.04966	mg/L	100	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.0499	.00082	.05269	mg/L	104	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.0499	.00082	.05159	mg/L	102	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.0499	.00285	.05546	mg/L	105	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.0499	.00285	.05439	mg/L	103	70	130	2	20	

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528034													
WG528034ICV	ICV	09/27/21 12:30	HG210927-3	.00501		.00508	mg/L	101	95	105			
WG528034ICB	ICB	09/27/21 12:31				U	mg/L		-0.0002	0.0002			
WG528034LRB	LRB	09/27/21 12:32				U	mg/L		-0.00044	0.00044			
WG528034LFB	LFB	09/27/21 12:33	HG210927-6	.002002		.00201	mg/L	100	85	115			
L68633-03LFM	LFM	09/27/21 12:37	HG210927-6	.002002	U	.00216	mg/L	108	85	115			
L68633-03LFMD	LFMD	09/27/21 12:38	HG210927-6	.002002	U	.00212	mg/L	106	85	115	2	20	
L68720-01LFM	LFM	09/27/21 13:12	HG210927-6	.002002	U	.00202	mg/L	101	85	115			
L68720-01LFMD	LFMD	09/27/21 13:13	HG210927-6	.002002	U	.002	mg/L	100	85	115	1	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.01992		.02022	mg/L	102	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00044	0.00044			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05005		.05017	mg/L	100	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05005	.00469	.05579	mg/L	102	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05005	.00469	.05579	mg/L	102	70	130	0	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05005	.00068	.05374	mg/L	106	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05005	.00068	.05186	mg/L	102	70	130	4	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05039	mg/L	101	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00088	0.00088			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05		.04906	mg/L	98	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05	U	.04664	mg/L	93	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05	U	.04577	mg/L	92	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05	U	.04878	mg/L	98	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05	U	.04765	mg/L	95	70	130	2	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529071													
WG529071ICV	ICV	10/12/21 23:21	WI210904-1	2.4161		2.248	mg/L	93	90	110			
WG529071ICB	ICB	10/12/21 23:22				U	mg/L		-0.02	0.02			
WG529071LFB	LFB	10/12/21 23:26	WI211001-5	2		1.968	mg/L	98	90	110			
L68633-13AS	AS	10/13/21 0:02	WI211001-5	2	U	2.029	mg/L	101	90	110			
L68633-14DUP	DUP	10/13/21 0:04			U	U	mg/L				0	20	RA
WG529278													
WG529278ICV	ICV	10/13/21 1:15	WI210904-1	2.4161		2.327	mg/L	96	90	110			
WG529278ICB	ICB	10/13/21 1:16				U	mg/L		-0.02	0.02			
WG529281													
WG529281LFB	LFB	10/13/21 3:00	WI211001-5	2		1.985	mg/L	99	90	110			
L63922-37AS	AS	10/13/21 3:03	WI211001-5	2	U	2.019	mg/L	101	90	110			
L63923-37DUP	DUP	10/13/21 3:05			U	U	mg/L				0	20	RA
L68633-02AS	AS	10/13/21 3:22	WI211001-5	2	U	2.036	mg/L	102	90	110			
L68633-03DUP	DUP	10/13/21 3:24			U	U	mg/L				0	20	RA

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527981													
WG527981LCSW1	LCSW	09/24/21 18:15	PCN62948	6		6.1	units	102	5.9	6.1			
WG527981LCSW4	LCSW	09/24/21 21:45	PCN62948	6		6.1	units	102	5.9	6.1			
L68633-02DUP	DUP	09/25/21 1:34			10	10	units				0	20	
WG527981LCSW7	LCSW	09/25/21 1:39	PCN62948	6		6.1	units	102	5.9	6.1			
L68633-12DUP	DUP	09/25/21 3:46			9	9	units				0	20	
L68648-03DUP	DUP	09/25/21 5:26			8.5	8.5	units				0	20	
WG527981LCSW10	LCSW	09/25/21 5:31	PCN62948	6		6.1	units	102	5.9	6.1			
WG527981LCSW13	LCSW	09/25/21 9:03	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530761													
WG530761ICV	ICV	11/01/21 17:48	WI211018-4	.65228		.672	mg/L	103	90	110			
WG530761ICB	ICB	11/01/21 17:50				U	mg/L		-0.01	0.01			
WG530724LRB	LRB	11/01/21 17:51				U	mg/L		-0.01	0.01			
WG530724LFB	LFB	11/01/21 17:52	WI211030-2	.5		.498	mg/L	100	90	110			
L68633-02DUP	DUP	11/01/21 17:57			.021	.021	mg/L				0	20	RA
L68633-11LFM	LFM	11/01/21 18:10	WI211030-2	.5	.041	.522	mg/L	96	90	110			
L68633-12DUP	DUP	11/01/21 18:12			.037	.039	mg/L				5	20	RA
WG530761ICV1	ICV	11/03/21 10:32	WI211018-4	.65228		.696	mg/L	107	90	110			
WG530761ICB1	ICB	11/03/21 10:34				U	mg/L		-0.01	0.01			
L68633-01LFM	LFM	11/03/21 10:36	WI211030-2	.5	.022	.498	mg/L	95	90	110			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	20		19.82	mg/L	99	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.6	0.6			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	99.96008		101.2	mg/L	101	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	99.96008	2.88	101.7	mg/L	99	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	99.96008	2.88	102.4	mg/L	100	85	115	1	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	99.96008	3.91	104.4	mg/L	101	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	99.96008	3.91	104.1	mg/L	100	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527695													
WG527695PBW	PBW	09/21/21 15:00				U	mg/L		-20	20			
WG527695LCSW	LCSW	09/21/21 15:02	PCN64134	1000		996	mg/L	100	80	120			
L68633-04DUP	DUP	09/21/21 15:31			220	208	mg/L				6	10	
L68633-14DUP	DUP	09/21/21 16:00			194	198	mg/L				2	10	RA

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	2		1.98	mg/L	99	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.15	0.15			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	1.0017		1.016	mg/L	101	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	1.0017	U	1.015	mg/L	101	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	1.0017	U	1.017	mg/L	102	85	115	0	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	1.0017	U	1.019	mg/L	102	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	1.0017	U	1.021	mg/L	102	85	115	0	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05091	mg/L	102	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00022	0.00022			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05		.04888	mg/L	98	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05	.00048	.04995	mg/L	99	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05	.00048	.04878	mg/L	97	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05	U	.05191	mg/L	104	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05	U	.05109	mg/L	102	70	130	2	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.02		.01947	mg/L	97	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00022	0.00022			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.01		.00974	mg/L	97	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.01	U	.00735	mg/L	74	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.01	U	.00673	mg/L	67	70	130	9	20	M2 ZA
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.01	U	.00947	mg/L	95	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.01	U	.00926	mg/L	93	70	130	2	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	100		99.96	mg/L	100	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.6	0.6			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	100.007		102.2	mg/L	102	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	100.007	61.2	160	mg/L	99	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	100.007	61.2	160.4	mg/L	99	85	115	0	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	100.007	61.2	160.9	mg/L	100	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	100.007	61.2	160.5	mg/L	99	85	115	0	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	2		1.9435	mg/L	97	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.027	0.027			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	.5005		.5481	mg/L	110	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	.5005	.028	.5607	mg/L	106	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	.5005	.028	.564	mg/L	107	85	115	1	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	.5005	.0316	.5716	mg/L	108	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	.5005	.0316	.5686	mg/L	107	85	115	1	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528382													
WG528382LFB1	LFB	09/30/21 15:25	WI210907-6	30		29.26	mg/L	98	90	110			
WG528382LFB2	LFB	10/01/21 0:04	WI210907-6	30		28.83	mg/L	96	90	110			
L68610-11DUP	DUP	10/01/21 0:40			21.3	21.1	mg/L				1	20	
L68610-12AS	AS	10/01/21 1:52	WI210907-6	30	20.7	49.6	mg/L	96	90	110			
WG528665													
WG528665LFB1	LFB	10/05/21 16:15	WI210907-6	30		29.61	mg/L	99	90	110			
L68667-02AS	AS	10/05/21 21:23	WI210907-6	600	671	1236.59	mg/L	94	90	110			
WG528665LFB2	LFB	10/06/21 0:58	WI210907-6	30		29.04	mg/L	97	90	110			
L68667-01DUP	DUP	10/06/21 19:38			138	138.02	mg/L				0	20	
L68667-03DUP	DUP	10/06/21 20:14			888	888.33	mg/L				0	20	
L68667-04AS	AS	10/06/21 20:50	WI210907-6	150	106	254.67	mg/L	99	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05184	mg/L	104	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00022	0.00022			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05		.04977	mg/L	100	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05	U	.05231	mg/L	105	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05	U	.05103	mg/L	102	70	130	2	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05	U	.05462	mg/L	109	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05	U	.05097	mg/L	102	70	130	7	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05071	mg/L	101	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00176	0.00176			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05005		.04974	mg/L	99	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05005	.00567	.05392	mg/L	96	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05005	.00567	.05382	mg/L	96	70	130	0	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05005	U	.05097	mg/L	102	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05005	U	.04924	mg/L	98	70	130	3	20	

WETLAB

ACZ Project ID: ***L68633***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528670													
WG528670ICV	ICV	10/05/21 16:45	II211001-1	2		1.993	mg/L	100	95	105			
WG528670ICB	ICB	10/05/21 16:51				U	mg/L		-0.015	0.015			
WG528670LFB	LFB	10/05/21 17:04	II210930-2	1		1.012	mg/L	101	85	115			
L68633-03AS	AS	10/05/21 17:20	II210930-2	1	U	1.013	mg/L	101	85	115			
L68633-03ASD	ASD	10/05/21 17:23	II210930-2	1	U	1.02	mg/L	102	85	115	1	20	
L68633-14AS	AS	10/05/21 18:09	II210930-2	1	U	1.023	mg/L	102	85	115			
L68633-14ASD	ASD	10/05/21 18:12	II210930-2	1	U	1.022	mg/L	102	85	115	0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.05086	mg/L	102	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.00022	0.00022			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05		.0501	mg/L	100	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05	.00017	.05179	mg/L	103	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05	.00017	.05113	mg/L	102	70	130	1	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05	.0002	.05305	mg/L	106	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05	.0002	.05051	mg/L	101	70	130	5	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.04795	mg/L	96	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.0011	0.0011			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.05		.04922	mg/L	98	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.05	U	.04953	mg/L	99	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.05	U	.04892	mg/L	98	70	130	1	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.05	U	.05123	mg/L	102	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.05	U	.05003	mg/L	100	70	130	2	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529064													
WG529064ICV	ICV	10/09/21 19:07	MS211001-2	.05		.0504	mg/L	101	90	110			
WG529064ICB	ICB	10/09/21 19:08				U	mg/L		-0.0132	0.0132			
WG529064LFB	LFB	10/09/21 19:10	MS210927-3	.050075		.0548	mg/L	109	85	115			
L68633-08AS	AS	10/09/21 19:30	MS210927-3	.050075	U	.057	mg/L	114	70	130			
L68633-08ASD	ASD	10/09/21 19:32	MS210927-3	.050075	U	.0565	mg/L	113	70	130	1	20	
L68810-02AS	AS	10/09/21 19:54	MS210927-3	.050075	U	.0586	mg/L	117	70	130			
L68810-02ASD	ASD	10/09/21 19:56	MS210927-3	.050075	U	.0575	mg/L	115	70	130	2	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68633***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68633-01	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L68633-02	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L68633-03	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L68633-04	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68633-05	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L68633-06	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68633-07	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L68633-08	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68633-09	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529281	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529064	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
L68633-10	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68633-11	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68633-12	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68633-13	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68633-14	WG528665	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529071	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530761	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527695	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Mercury, dissolved	M245.1 CVAA
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography

Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68633
Date Received: 09/21/2021 11:58
Received By:
Date Printed: 9/22/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA35999	-0.6	<=6.0	15	N/A
NA35998	1	<=6.0	15	N/A
NA35997	1.5	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID:	L68633
Date Received:	09/21/2021 11:58
Received By:	
Date Printed:	9/22/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

L68633

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119, Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED (attach list or use quote number)

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(LD) 245.1
21090453-001	9/14/2021 13:00	OT	3	✓	✓
21090453-002	"	"	"	✓	✓
21090453-003	"	"	"	✓	✓
21090453-004	"	"	"	✓	✓
21090453-005	"	"	"	✓	✓
21090453-006	"	"	"	✓	✓
21090453-007	"	"	"	✓	✓
21090453-008	"	"	"	✓	✓
21090453-009	"	"	"	✓	✓
21090453-010	"	"	"	✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
[signature]	9/20 1:00	[signature]	9/21/21 11:59

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68633 Chain of Custod

9/21/21 L68633

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (D) 245.1						
21090453-011	9/14/2021 13:00	OT	3	✓	✓						
21090453-012	↓	↓	↓	✓	✓						
21090453-013				✓	✓						
21090453-014	✓	✓	✓	✓	✓						

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Kim Jamil	9/20 1w	9/21/21	11:59

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
[redacted]	[redacted]	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

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Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 19, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68736

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 23, 2021. This project has been assigned to ACZ's project number, L68736. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68736. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 18, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory

October 19, 2021

Project ID:
ACZ Project ID: L68736

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 14 leachate samples from Western Environmental Testing Laboratory on September 23, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68736. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding time except for nitrate/nitrite flagged with an "H1". Due to maintenance and troubleshooting, samples were run ~24hrs from hold expiration. TDS samples (H3) were received past the hold time of 7 days.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further explanation not provided by the Extended Qualifier Report:

1. TDS (N1) - Oven range is 80 C to 91 C. Over the weekend, the oven had a minor high temperature out of range. When the oven temperature was checked on Monday 9/27/21, the max temp read at 93.4 C. The workgroup was removed from the oven on 9/27/21 when the oven was back in range. The workgroup was examined and there was no splattering of samples.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-001

ACZ Sample ID: ***L68736-01***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:15	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0220		*	mg/L	0.005	0.015	10/13/21 19:08	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:08	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00677		*	mg/L	0.0002	0.001	10/13/21 19:08	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0239		*	mg/L	0.0005	0.0025	10/13/21 19:08	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:08	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:25	jlw
Boron, dissolved	M200.7 ICP	1	0.063	B	*	mg/L	0.03	0.1	10/05/21 19:25	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:08	bsu
Calcium, dissolved	M200.7 ICP	1	7.39		*	mg/L	0.1	0.5	10/05/21 19:25	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00121	B	*	mg/L	0.0005	0.002	10/13/21 19:08	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000057	B	*	mg/L	0.00005	0.00025	10/13/21 19:08	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:08	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 0:28	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0463		*	mg/L	0.007	0.02	10/13/21 19:08	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:08	bsu
Lithium, dissolved	M200.7 ICP	1	0.0708		*	mg/L	0.008	0.04	10/05/21 19:25	jlw
Magnesium, dissolved	M200.7 ICP	1	0.75	B	*	mg/L	0.2	1	10/05/21 19:25	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00096	B	*	mg/L	0.0004	0.002	10/13/21 19:08	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.7			ng/L	0.3	1	09/30/21 17:42	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00473		*	mg/L	0.0002	0.0005	10/13/21 19:08	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:08	bsu
Potassium, dissolved	M200.7 ICP	1	6.27		*	mg/L	0.2	1	10/05/21 19:25	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:25	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00055		*	mg/L	0.0001	0.00025	10/13/21 19:08	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:08	bsu
Sodium, dissolved	M200.7 ICP	1	59.9		*	mg/L	0.2	1	10/05/21 19:25	jlw
Strontium, dissolved	M200.7 ICP	1	0.0369	B	*	mg/L	0.009	0.045	10/05/21 19:25	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:08	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0148		*	mg/L	0.0008	0.0025	10/13/21 19:08	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:25	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	10/13/21 19:08	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00246		*	mg/L	0.0005	0.002	10/13/21 19:08	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:08	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-001

ACZ Sample ID: ***L68736-01***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	67.4		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	50.4		*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	118		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.83		*	mg/L	0.4	2	10/05/21 16:35	krh
Conductivity @25C	SM2510B	1	311		*	umhos/cm	1	10	09/29/21 0:26	eep
Fluoride	M300.0 - Ion Chromatography	1	0.526		*	mg/L	0.05	0.25	10/05/21 16:35	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		22			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.646	H	*	mg/L	0.02	0.1	10/14/21 2:17	pjb
pH (lab)	SM4500H+ B									
pH		1	9.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.043	B	*	mg/L	0.01	0.05	10/03/21 1:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	216	H	*	mg/L	20	40	09/24/21 10:35	scd
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/05/21 16:35	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-002

ACZ Sample ID: ***L68736-02***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:20	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0184		*	mg/L	0.005	0.015	10/13/21 19:09	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:09	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00682		*	mg/L	0.0002	0.001	10/13/21 19:09	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0203		*	mg/L	0.0005	0.0025	10/13/21 19:09	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:09	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:28	jlw
Boron, dissolved	M200.7 ICP	1	0.073	B	*	mg/L	0.03	0.1	10/05/21 19:28	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:09	bsu
Calcium, dissolved	M200.7 ICP	1	8.92		*	mg/L	0.1	0.5	10/05/21 19:28	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00098	B	*	mg/L	0.0005	0.002	10/13/21 19:09	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:09	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:09	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 0:31	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0517		*	mg/L	0.007	0.02	10/13/21 19:09	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:09	bsu
Lithium, dissolved	M200.7 ICP	1	0.0718		*	mg/L	0.008	0.04	10/05/21 19:28	jlw
Magnesium, dissolved	M200.7 ICP	1	0.77	B	*	mg/L	0.2	1	10/05/21 19:28	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00111	B	*	mg/L	0.0004	0.002	10/13/21 19:09	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.7			ng/L	0.3	1	09/30/21 17:47	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00482		*	mg/L	0.0002	0.0005	10/13/21 19:09	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:09	bsu
Potassium, dissolved	M200.7 ICP	1	5.60		*	mg/L	0.2	1	10/05/21 19:28	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:28	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	10/13/21 19:09	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:09	bsu
Sodium, dissolved	M200.7 ICP	1	60.4		*	mg/L	0.2	1	10/05/21 19:28	jlw
Strontium, dissolved	M200.7 ICP	1	0.0371	B	*	mg/L	0.009	0.045	10/05/21 19:28	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:09	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0149		*	mg/L	0.0008	0.0025	10/13/21 19:09	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:28	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00015	B	*	mg/L	0.0001	0.0005	10/13/21 19:09	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00234		*	mg/L	0.0005	0.002	10/13/21 19:09	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:09	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-002

ACZ Sample ID: ***L68736-02***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	91.4		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	45.9		*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	137		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.88		*	mg/L	0.4	2	10/05/21 17:11	krh
Conductivity @25C	SM2510B	1	313		*	umhos/cm	1	10	09/29/21 0:38	eep
Fluoride	M300.0 - Ion Chromatography	1	0.552		*	mg/L	0.05	0.25	10/05/21 17:11	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		25			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.645	H	*	mg/L	0.02	0.1	10/14/21 2:20	pjb
pH (lab)	SM4500H+ B									
pH		1	9.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.044	B	*	mg/L	0.01	0.05	10/03/21 1:21	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	218	H	*	mg/L	20	40	09/24/21 10:38	scd
Sulfate	M300.0 - Ion Chromatography	1	23.0		*	mg/L	0.4	2	10/05/21 17:11	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-003

ACZ Sample ID: ***L68736-03***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:25	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0079	B	*	mg/L	0.005	0.015	10/13/21 19:11	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:11	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00786		*	mg/L	0.0002	0.001	10/13/21 19:11	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0149		*	mg/L	0.0005	0.0025	10/13/21 19:11	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:11	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:31	jlw
Boron, dissolved	M200.7 ICP	1	0.074	B	*	mg/L	0.03	0.1	10/05/21 19:31	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:11	bsu
Calcium, dissolved	M200.7 ICP	1	10.4		*	mg/L	0.1	0.5	10/05/21 19:31	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00359		*	mg/L	0.0005	0.002	10/13/21 19:11	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:11	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:11	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 0:34	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0405		*	mg/L	0.007	0.02	10/13/21 19:11	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:11	bsu
Lithium, dissolved	M200.7 ICP	1	0.0677		*	mg/L	0.008	0.04	10/05/21 19:31	jlw
Magnesium, dissolved	M200.7 ICP	1	0.70	B	*	mg/L	0.2	1	10/05/21 19:31	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00058	B	*	mg/L	0.0004	0.002	10/13/21 19:11	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.7			ng/L	0.3	1	09/30/21 17:52	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00501		*	mg/L	0.0002	0.0005	10/13/21 19:11	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:11	bsu
Potassium, dissolved	M200.7 ICP	1	3.54		*	mg/L	0.2	1	10/05/21 19:31	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:31	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00051		*	mg/L	0.0001	0.00025	10/13/21 19:11	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:11	bsu
Sodium, dissolved	M200.7 ICP	1	60.4		*	mg/L	0.2	1	10/05/21 19:31	jlw
Strontium, dissolved	M200.7 ICP	1	0.0364	B	*	mg/L	0.009	0.045	10/05/21 19:31	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:11	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00974		*	mg/L	0.0008	0.0025	10/13/21 19:11	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:31	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00020	B	*	mg/L	0.0001	0.0005	10/13/21 19:11	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00110	B	*	mg/L	0.0005	0.002	10/13/21 19:11	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:11	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-003

ACZ Sample ID: ***L68736-03***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	117		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.08		*	mg/L	0.4	2	10/05/21 17:47	krh
Conductivity @25C	SM2510B	1	316		*	umhos/cm	1	10	09/29/21 0:47	eep
Fluoride	M300.0 - Ion Chromatography	1	0.559		*	mg/L	0.05	0.25	10/05/21 17:47	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		29			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.671	H	*	mg/L	0.02	0.1	10/14/21 2:22	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.058		*	mg/L	0.01	0.05	10/03/21 1:22	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	198	H	*	mg/L	20	40	10/05/21 13:33	emk
Sulfate	M300.0 - Ion Chromatography	1	23.8		*	mg/L	0.4	2	10/05/21 17:47	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-004

ACZ Sample ID: ***L68736-04***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:30	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0081	B	*	mg/L	0.005	0.015	10/13/21 19:13	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:13	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00765		*	mg/L	0.0002	0.001	10/13/21 19:13	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0141		*	mg/L	0.0005	0.0025	10/13/21 19:13	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:13	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:34	jlw
Boron, dissolved	M200.7 ICP	1	0.064	B	*	mg/L	0.03	0.1	10/05/21 19:34	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:13	bsu
Calcium, dissolved	M200.7 ICP	1	10.3		*	mg/L	0.1	0.5	10/05/21 19:34	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00114	B	*	mg/L	0.0005	0.002	10/13/21 19:13	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:13	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:13	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 0:37	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0427		*	mg/L	0.007	0.02	10/13/21 19:13	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:13	bsu
Lithium, dissolved	M200.7 ICP	1	0.0691		*	mg/L	0.008	0.04	10/05/21 19:34	jlw
Magnesium, dissolved	M200.7 ICP	1	0.74	B	*	mg/L	0.2	1	10/05/21 19:34	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00070	B	*	mg/L	0.0004	0.002	10/13/21 19:13	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.4			ng/L	0.3	1	09/30/21 17:57	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00482		*	mg/L	0.0002	0.0005	10/13/21 19:13	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:13	bsu
Potassium, dissolved	M200.7 ICP	1	3.59		*	mg/L	0.2	1	10/05/21 19:34	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:34	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/13/21 19:13	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:13	bsu
Sodium, dissolved	M200.7 ICP	1	60.7		*	mg/L	0.2	1	10/05/21 19:34	jlw
Strontium, dissolved	M200.7 ICP	1	0.0359	B	*	mg/L	0.009	0.045	10/05/21 19:34	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:13	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0111		*	mg/L	0.0008	0.0025	10/13/21 19:13	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:34	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/13/21 19:13	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00061	B	*	mg/L	0.0005	0.002	10/13/21 19:13	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:13	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-004

ACZ Sample ID: ***L68736-04***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	119		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	5.3	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.04		*	mg/L	0.4	2	10/05/21 18:05	krh
Conductivity @25C	SM2510B	1	313		*	umhos/cm	1	10	09/29/21 0:56	eep
Fluoride	M300.0 - Ion Chromatography	1	0.556		*	mg/L	0.05	0.25	10/05/21 18:05	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		29			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.667	H	*	mg/L	0.02	0.1	10/14/21 2:24	pjb
pH (lab)	SM4500H+ B									
pH		1	8.4	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.1		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.056		*	mg/L	0.01	0.05	10/03/21 1:25	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	204	H	*	mg/L	20	40	10/05/21 13:35	emk
Sulfate	M300.0 - Ion Chromatography	1	23.4		*	mg/L	0.4	2	10/05/21 18:05	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-005

ACZ Sample ID: ***L68736-05***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:35	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0099	B	*	mg/L	0.005	0.015	10/13/21 19:14	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:14	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00766		*	mg/L	0.0002	0.001	10/13/21 19:14	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0177		*	mg/L	0.0005	0.0025	10/13/21 19:14	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:14	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:43	jlw
Boron, dissolved	M200.7 ICP	1	0.065	B	*	mg/L	0.03	0.1	10/05/21 19:43	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:14	bsu
Calcium, dissolved	M200.7 ICP	1	10.2		*	mg/L	0.1	0.5	10/05/21 19:43	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00193	B	*	mg/L	0.0005	0.002	10/13/21 19:14	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:14	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:14	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 0:46	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0389		*	mg/L	0.007	0.02	10/13/21 19:14	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:14	bsu
Lithium, dissolved	M200.7 ICP	1	0.0678		*	mg/L	0.008	0.04	10/05/21 19:43	jlw
Magnesium, dissolved	M200.7 ICP	1	0.71	B	*	mg/L	0.2	1	10/05/21 19:43	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0004	0.002	10/13/21 19:14	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.2			ng/L	0.3	1	09/30/21 18:01	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00480		*	mg/L	0.0002	0.0005	10/13/21 19:14	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:14	bsu
Potassium, dissolved	M200.7 ICP	1	3.63		*	mg/L	0.2	1	10/05/21 19:43	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:43	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00051		*	mg/L	0.0001	0.00025	10/13/21 19:14	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:14	bsu
Sodium, dissolved	M200.7 ICP	1	60.0		*	mg/L	0.2	1	10/05/21 19:43	jlw
Strontium, dissolved	M200.7 ICP	1	0.0363	B	*	mg/L	0.009	0.045	10/05/21 19:43	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:14	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00755		*	mg/L	0.0008	0.0025	10/13/21 19:14	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:43	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/13/21 19:14	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00092	B	*	mg/L	0.0005	0.002	10/13/21 19:14	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:14	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-005

ACZ Sample ID: ***L68736-05***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	116		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	7.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.05		*	mg/L	0.4	2	10/05/21 18:23	krh
Conductivity @25C	SM2510B	1	314		*	umhos/cm	1	10	09/29/21 1:06	eep
Fluoride	M300.0 - Ion Chromatography	1	0.554		*	mg/L	0.05	0.25	10/05/21 18:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		28			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.672	H	*	mg/L	0.02	0.1	10/14/21 2:25	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.055		*	mg/L	0.01	0.05	10/03/21 1:26	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	196	H	*	mg/L	20	40	10/05/21 13:37	emk
Sulfate	M300.0 - Ion Chromatography	1	23.5		*	mg/L	0.4	2	10/05/21 18:23	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-006

ACZ Sample ID: ***L68736-06***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:41	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0161		*	mg/L	0.005	0.015	10/13/21 19:16	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:16	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00830		*	mg/L	0.0002	0.001	10/13/21 19:16	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0223		*	mg/L	0.0005	0.0025	10/13/21 19:16	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:16	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:46	jlw
Boron, dissolved	M200.7 ICP	1	0.058	B	*	mg/L	0.03	0.1	10/05/21 19:46	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:16	bsu
Calcium, dissolved	M200.7 ICP	1	13.8		*	mg/L	0.1	0.5	10/05/21 19:46	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:16	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:16	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:16	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 0:49	kja
Iron, dissolved	M200.8 ICP-MS	1	0.123		*	mg/L	0.007	0.02	10/13/21 19:16	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:16	bsu
Lithium, dissolved	M200.7 ICP	1	0.0703		*	mg/L	0.008	0.04	10/05/21 19:46	jlw
Magnesium, dissolved	M200.7 ICP	1	0.86	B	*	mg/L	0.2	1	10/05/21 19:46	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:16	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	3.5			ng/L	0.3	1	09/30/21 18:17	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00487		*	mg/L	0.0002	0.0005	10/13/21 19:16	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:16	bsu
Potassium, dissolved	M200.7 ICP	1	4.53		*	mg/L	0.2	1	10/05/21 19:46	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:46	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00050		*	mg/L	0.0001	0.00025	10/13/21 19:16	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:16	bsu
Sodium, dissolved	M200.7 ICP	1	59.5		*	mg/L	0.2	1	10/05/21 19:46	jlw
Strontium, dissolved	M200.7 ICP	1	0.0443	B	*	mg/L	0.009	0.045	10/05/21 19:46	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:16	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00756		*	mg/L	0.0008	0.0025	10/13/21 19:16	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:46	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/13/21 19:16	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:16	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:16	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-006

ACZ Sample ID: ***L68736-06***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	125		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	7.5	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	132		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.96		*	mg/L	0.4	2	10/05/21 18:41	krh
Conductivity @25C	SM2510B	1	329		*	umhos/cm	1	10	09/29/21 1:15	eep
Fluoride	M300.0 - Ion Chromatography	1	0.544		*	mg/L	0.05	0.25	10/05/21 18:41	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		38.0			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.660	H	*	mg/L	0.02	0.1	10/14/21 2:26	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.059		*	mg/L	0.01	0.05	10/03/21 1:28	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	236	H	*	mg/L	20	40	10/05/21 13:39	emk
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	10/05/21 18:41	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-007

ACZ Sample ID: ***L68736-07***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:46	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0082	B	*	mg/L	0.005	0.015	10/13/21 19:24	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:24	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00778		*	mg/L	0.0002	0.001	10/13/21 19:24	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0231		*	mg/L	0.0005	0.0025	10/13/21 19:24	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:24	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:49	jlw
Boron, dissolved	M200.7 ICP	1	0.064	B	*	mg/L	0.03	0.1	10/05/21 19:49	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:24	bsu
Calcium, dissolved	M200.7 ICP	1	15.2		*	mg/L	0.1	0.5	10/05/21 19:49	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:24	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000056	B	*	mg/L	0.00005	0.00025	10/13/21 19:24	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:24	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 0:52	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0550		*	mg/L	0.007	0.02	10/13/21 19:24	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:24	bsu
Lithium, dissolved	M200.7 ICP	1	0.0690		*	mg/L	0.008	0.04	10/05/21 19:49	jlw
Magnesium, dissolved	M200.7 ICP	1	0.91	B	*	mg/L	0.2	1	10/05/21 19:49	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00143	B	*	mg/L	0.0004	0.002	10/13/21 19:24	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	2.7			ng/L	0.3	1	09/30/21 18:21	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00476		*	mg/L	0.0002	0.0005	10/13/21 19:24	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:24	bsu
Potassium, dissolved	M200.7 ICP	1	3.98		*	mg/L	0.2	1	10/05/21 19:49	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:49	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/13/21 19:24	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:24	bsu
Sodium, dissolved	M200.7 ICP	1	58.9		*	mg/L	0.2	1	10/05/21 19:49	jlw
Strontium, dissolved	M200.7 ICP	1	0.0449	B	*	mg/L	0.009	0.045	10/05/21 19:49	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:24	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00752		*	mg/L	0.0008	0.0025	10/13/21 19:24	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:49	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/13/21 19:24	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:24	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:24	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-007

ACZ Sample ID: ***L68736-07***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	128		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.0	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	136		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.02		*	mg/L	0.4	2	10/05/21 19:34	krh
Conductivity @25C	SM2510B	1	336		*	umhos/cm	1	10	09/29/21 1:25	eep
Fluoride	M300.0 - Ion Chromatography	1	0.548		*	mg/L	0.05	0.25	10/05/21 19:34	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		42			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.689	H	*	mg/L	0.02	0.1	10/14/21 2:27	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.062		*	mg/L	0.01	0.05	10/03/21 1:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	236	H	*	mg/L	20	40	10/05/21 13:41	emk
Sulfate	M300.0 - Ion Chromatography	1	22.6		*	mg/L	0.4	2	10/05/21 19:34	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-008

ACZ Sample ID: ***L68736-08***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 15:51	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0125	B	*	mg/L	0.005	0.015	10/13/21 19:26	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:26	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00811		*	mg/L	0.0002	0.001	10/13/21 19:26	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0203		*	mg/L	0.0005	0.0025	10/13/21 19:26	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:26	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 19:58	jlw
Boron, dissolved	M200.7 ICP	1	0.064	B	*	mg/L	0.03	0.1	10/05/21 19:58	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:26	bsu
Calcium, dissolved	M200.7 ICP	1	13.7		*	mg/L	0.1	0.5	10/05/21 19:58	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:26	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000053	B	*	mg/L	0.00005	0.00025	10/13/21 19:26	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:26	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 1:01	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0417		*	mg/L	0.007	0.02	10/13/21 19:26	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:26	bsu
Lithium, dissolved	M200.7 ICP	1	0.0685		*	mg/L	0.008	0.04	10/05/21 19:58	jlw
Magnesium, dissolved	M200.7 ICP	1	0.89	B	*	mg/L	0.2	1	10/05/21 19:58	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00068	B	*	mg/L	0.0004	0.002	10/13/21 19:26	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.3			ng/L	0.3	1	09/30/21 18:36	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00510		*	mg/L	0.0002	0.0005	10/13/21 19:26	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:26	bsu
Potassium, dissolved	M200.7 ICP	1	4.63		*	mg/L	0.2	1	10/05/21 19:58	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 19:58	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00053		*	mg/L	0.0001	0.00025	10/13/21 19:26	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:26	bsu
Sodium, dissolved	M200.7 ICP	1	59.4		*	mg/L	0.2	1	10/05/21 19:58	jlw
Strontium, dissolved	M200.7 ICP	1	0.0433	B	*	mg/L	0.009	0.045	10/05/21 19:58	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:26	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00909		*	mg/L	0.0008	0.0025	10/13/21 19:26	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 19:58	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/13/21 19:26	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:26	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:26	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-008

ACZ Sample ID: ***L68736-08***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	124		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.5	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	133		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.00		*	mg/L	0.4	2	10/05/21 19:52	krh
Conductivity @25C	SM2510B	1	334		*	umhos/cm	1	10	09/29/21 1:43	eep
Fluoride	M300.0 - Ion Chromatography	1	0.541		*	mg/L	0.05	0.25	10/05/21 19:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		38			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.693	H	*	mg/L	0.02	0.1	10/14/21 2:33	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	2	0.063	B	*	mg/L	0.02	0.1	10/03/21 1:49	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	204	H	*	mg/L	20	40	10/05/21 13:43	emk
Sulfate	M300.0 - Ion Chromatography	1	22.7		*	mg/L	0.4	2	10/05/21 19:52	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-009

ACZ Sample ID: ***L68736-09***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 16:01	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0181		*	mg/L	0.005	0.015	10/13/21 19:27	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:27	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00915		*	mg/L	0.0002	0.001	10/13/21 19:27	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0188		*	mg/L	0.0005	0.0025	10/13/21 19:27	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:27	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 20:02	jlw
Boron, dissolved	M200.7 ICP	1	0.067	B	*	mg/L	0.03	0.1	10/05/21 20:02	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:27	bsu
Calcium, dissolved	M200.7 ICP	1	13.7		*	mg/L	0.1	0.5	10/05/21 20:02	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:27	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000052	B	*	mg/L	0.00005	0.00025	10/13/21 19:27	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:27	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 1:04	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0875		*	mg/L	0.007	0.02	10/13/21 19:27	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:27	bsu
Lithium, dissolved	M200.7 ICP	1	0.0709		*	mg/L	0.008	0.04	10/05/21 20:02	jlw
Magnesium, dissolved	M200.7 ICP	1	0.87	B	*	mg/L	0.2	1	10/05/21 20:02	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00260		*	mg/L	0.0004	0.002	10/13/21 19:27	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	16.3			ng/L	0.3	1	09/30/21 18:41	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00672		*	mg/L	0.0002	0.0005	10/13/21 19:27	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:27	bsu
Potassium, dissolved	M200.7 ICP	1	5.54		*	mg/L	0.2	1	10/05/21 20:02	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 20:02	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.00025	10/13/21 19:27	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:27	bsu
Sodium, dissolved	M200.7 ICP	1	60.1		*	mg/L	0.2	1	10/05/21 20:02	jlw
Strontium, dissolved	M200.7 ICP	1	0.0441	B	*	mg/L	0.009	0.045	10/05/21 20:02	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:27	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0493		*	mg/L	0.0008	0.0025	10/13/21 19:27	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 20:02	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/13/21 19:27	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:27	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:27	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-009

ACZ Sample ID: ***L68736-09***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	125		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	135		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.02		*	mg/L	0.4	2	10/05/21 20:10	krh
Conductivity @25C	SM2510B	1	339		*	umhos/cm	1	10	09/29/21 1:53	eep
Fluoride	M300.0 - Ion Chromatography	1	0.543		*	mg/L	0.05	0.25	10/05/21 20:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		38			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.639	H	*	mg/L	0.02	0.1	10/14/21 2:34	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.051		*	mg/L	0.01	0.05	10/03/21 1:32	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	206	H	*	mg/L	20	40	10/05/21 13:45	emk
Sulfate	M300.0 - Ion Chromatography	1	22.7		*	mg/L	0.4	2	10/05/21 20:10	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-010

ACZ Sample ID: ***L68736-10***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 16:11	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0100	B	*	mg/L	0.005	0.015	10/13/21 19:29	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:29	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00778		*	mg/L	0.0002	0.001	10/13/21 19:29	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0211		*	mg/L	0.0005	0.0025	10/13/21 19:29	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:29	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 20:05	jlw
Boron, dissolved	M200.7 ICP	1	0.066	B	*	mg/L	0.03	0.1	10/05/21 20:05	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:29	bsu
Calcium, dissolved	M200.7 ICP	1	14.8		*	mg/L	0.1	0.5	10/05/21 20:05	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:29	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000166	B	*	mg/L	0.00005	0.00025	10/13/21 19:29	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:29	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 1:07	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0609		*	mg/L	0.007	0.02	10/13/21 19:29	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:29	bsu
Lithium, dissolved	M200.7 ICP	1	0.0701		*	mg/L	0.008	0.04	10/05/21 20:05	jlw
Magnesium, dissolved	M200.7 ICP	1	0.93	B	*	mg/L	0.2	1	10/05/21 20:05	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00162	B	*	mg/L	0.0004	0.002	10/13/21 19:29	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.7			ng/L	0.3	1	09/30/21 18:45	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00521		*	mg/L	0.0002	0.0005	10/13/21 19:29	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:29	bsu
Potassium, dissolved	M200.7 ICP	1	4.64		*	mg/L	0.2	1	10/05/21 20:05	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 20:05	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/13/21 19:29	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:29	bsu
Sodium, dissolved	M200.7 ICP	1	59.9		*	mg/L	0.2	1	10/05/21 20:05	jlw
Strontium, dissolved	M200.7 ICP	1	0.0471		*	mg/L	0.009	0.045	10/05/21 20:05	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:29	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0173		*	mg/L	0.0008	0.0025	10/13/21 19:29	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 20:05	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/13/21 19:29	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:29	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:29	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-010

ACZ Sample ID: ***L68736-10***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	143		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	151		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.00		*	mg/L	0.4	2	10/05/21 20:28	krh
Conductivity @25C	SM2510B	1	338		*	umhos/cm	1	10	09/29/21 2:04	eep
Fluoride	M300.0 - Ion Chromatography	1	0.545		*	mg/L	0.05	0.25	10/05/21 20:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		41			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.696	H	*	mg/L	0.02	0.1	10/14/21 2:35	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.056		*	mg/L	0.01	0.05	10/03/21 1:34	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	234	H	*	mg/L	20	40	10/05/21 13:47	emk
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/05/21 20:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-011

ACZ Sample ID: ***L68736-11***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 16:16	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0059	B	*	mg/L	0.005	0.015	10/13/21 19:31	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:31	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00796		*	mg/L	0.0002	0.001	10/13/21 19:31	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0215		*	mg/L	0.0005	0.0025	10/13/21 19:31	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:31	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 20:08	jlw
Boron, dissolved	M200.7 ICP	1	0.065	B	*	mg/L	0.03	0.1	10/05/21 20:08	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:31	bsu
Calcium, dissolved	M200.7 ICP	1	15.0		*	mg/L	0.1	0.5	10/05/21 20:08	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:31	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000050	B	*	mg/L	0.00005	0.00025	10/13/21 19:31	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:31	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 1:10	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0478		*	mg/L	0.007	0.02	10/13/21 19:31	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:31	bsu
Lithium, dissolved	M200.7 ICP	1	0.0674		*	mg/L	0.008	0.04	10/05/21 20:08	jlw
Magnesium, dissolved	M200.7 ICP	1	0.91	B	*	mg/L	0.2	1	10/05/21 20:08	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00090	B	*	mg/L	0.0004	0.002	10/13/21 19:31	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	9.5			ng/L	0.3	1	09/30/21 18:50	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00515		*	mg/L	0.0002	0.0005	10/13/21 19:31	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:31	bsu
Potassium, dissolved	M200.7 ICP	1	4.48		*	mg/L	0.2	1	10/05/21 20:08	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 20:08	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00043		*	mg/L	0.0001	0.00025	10/13/21 19:31	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:31	bsu
Sodium, dissolved	M200.7 ICP	1	59.0		*	mg/L	0.2	1	10/05/21 20:08	jlw
Strontium, dissolved	M200.7 ICP	1	0.0458		*	mg/L	0.009	0.045	10/05/21 20:08	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:31	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0485		*	mg/L	0.0008	0.0025	10/13/21 19:31	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 20:08	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/13/21 19:31	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:31	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:31	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-011

ACZ Sample ID: ***L68736-11***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	129		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	7.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	136		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.02		*	mg/L	0.4	2	10/05/21 20:46	krh
Conductivity @25C	SM2510B	1	337		*	umhos/cm	1	10	09/29/21 2:13	eep
Fluoride	M300.0 - Ion Chromatography	1	0.549		*	mg/L	0.05	0.25	10/05/21 20:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		41			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.601	H	*	mg/L	0.02	0.1	10/14/21 2:37	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.055		*	mg/L	0.01	0.05	10/03/21 1:36	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	204	H	*	mg/L	20	40	10/05/21 13:49	emk
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/05/21 20:46	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-012

ACZ Sample ID: ***L68736-12***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion				*				09/28/21 16:21	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0247		*	mg/L	0.005	0.015	10/13/21 19:33	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:33	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00879		*	mg/L	0.0002	0.001	10/13/21 19:33	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0196		*	mg/L	0.0005	0.0025	10/13/21 19:33	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:33	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 20:11	jlw
Boron, dissolved	M200.7 ICP	1	0.060	B	*	mg/L	0.03	0.1	10/05/21 20:11	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:33	bsu
Calcium, dissolved	M200.7 ICP	1	11.7		*	mg/L	0.1	0.5	10/05/21 20:11	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00061	B	*	mg/L	0.0005	0.002	10/13/21 19:33	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000058	B	*	mg/L	0.00005	0.00025	10/13/21 19:33	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:33	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 1:13	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0550		*	mg/L	0.007	0.02	10/13/21 19:33	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:33	bsu
Lithium, dissolved	M200.7 ICP	1	0.0698		*	mg/L	0.008	0.04	10/05/21 20:11	jlw
Magnesium, dissolved	M200.7 ICP	1	0.79	B	*	mg/L	0.2	1	10/05/21 20:11	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00119	B	*	mg/L	0.0004	0.002	10/13/21 19:33	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	35		*	ng/L	2	5	10/07/21 9:56	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00506		*	mg/L	0.0002	0.0005	10/13/21 19:33	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:33	bsu
Potassium, dissolved	M200.7 ICP	1	4.44		*	mg/L	0.2	1	10/05/21 20:11	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 20:11	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00084		*	mg/L	0.0001	0.00025	10/13/21 19:33	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:33	bsu
Sodium, dissolved	M200.7 ICP	1	58.7		*	mg/L	0.2	1	10/05/21 20:11	jlw
Strontium, dissolved	M200.7 ICP	1	0.0416	B	*	mg/L	0.009	0.045	10/05/21 20:11	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:33	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0544		*	mg/L	0.0008	0.0025	10/13/21 19:33	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 20:11	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/13/21 19:33	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:33	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:33	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-012

ACZ Sample ID: ***L68736-12***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	118		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	128		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.96		*	mg/L	0.4	2	10/05/21 21:22	krh
Conductivity @25C	SM2510B	1	321		*	umhos/cm	1	10	09/29/21 2:23	eep
Fluoride	M300.0 - Ion Chromatography	1	0.531		*	mg/L	0.05	0.25	10/05/21 21:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		33			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.568	H	*	mg/L	0.02	0.1	10/14/21 2:39	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.052		*	mg/L	0.01	0.05	10/03/21 1:39	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	214	H	*	mg/L	20	40	10/05/21 13:51	emk
Sulfate	M300.0 - Ion Chromatography	1	22.1		*	mg/L	0.4	2	10/05/21 21:22	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-013

ACZ Sample ID: ***L68736-13***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 16:26	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0117	B	*	mg/L	0.005	0.015	10/13/21 19:34	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:34	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00939		*	mg/L	0.0002	0.001	10/13/21 19:34	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0298		*	mg/L	0.0005	0.0025	10/13/21 19:34	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:34	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 20:14	jlw
Boron, dissolved	M200.7 ICP	1	0.065	B	*	mg/L	0.03	0.1	10/05/21 20:14	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:34	bsu
Calcium, dissolved	M200.7 ICP	1	15.1		*	mg/L	0.1	0.5	10/05/21 20:14	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:34	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000052	B	*	mg/L	0.00005	0.00025	10/13/21 19:34	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:34	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 1:16	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0488		*	mg/L	0.007	0.02	10/13/21 19:34	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:34	bsu
Lithium, dissolved	M200.7 ICP	1	0.0706		*	mg/L	0.008	0.04	10/05/21 20:14	jlw
Magnesium, dissolved	M200.7 ICP	1	0.87	B	*	mg/L	0.2	1	10/05/21 20:14	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00099	B	*	mg/L	0.0004	0.002	10/13/21 19:34	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.0			ng/L	0.3	1	09/30/21 19:06	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00469		*	mg/L	0.0002	0.0005	10/13/21 19:34	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:34	bsu
Potassium, dissolved	M200.7 ICP	1	4.27		*	mg/L	0.2	1	10/05/21 20:14	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 20:14	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00047		*	mg/L	0.0001	0.00025	10/13/21 19:34	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:34	bsu
Sodium, dissolved	M200.7 ICP	1	60.0		*	mg/L	0.2	1	10/05/21 20:14	jlw
Strontium, dissolved	M200.7 ICP	1	0.0509		*	mg/L	0.009	0.045	10/05/21 20:14	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:34	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00681		*	mg/L	0.0008	0.0025	10/13/21 19:34	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 20:14	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	10/13/21 19:34	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:34	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:34	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-013

ACZ Sample ID: ***L68736-13***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	126		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.7	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	136		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.96		*	mg/L	0.4	2	10/05/21 21:58	krh
Conductivity @25C	SM2510B	1	334		*	umhos/cm	1	10	09/29/21 2:32	eep
Fluoride	M300.0 - Ion Chromatography	1	0.543		*	mg/L	0.05	0.25	10/05/21 21:58	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		41			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.583	H	*	mg/L	0.02	0.1	10/14/21 2:42	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.054		*	mg/L	0.01	0.05	10/03/21 1:40	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	190	H	*	mg/L	20	40	10/05/21 13:55	emk
Sulfate	M300.0 - Ion Chromatography	1	22.1		*	mg/L	0.4	2	10/05/21 21:58	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-014

ACZ Sample ID: ***L68736-14***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/28/21 16:31	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0083	B	*	mg/L	0.005	0.015	10/13/21 19:36	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/13/21 19:36	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00845		*	mg/L	0.0002	0.001	10/13/21 19:36	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0228		*	mg/L	0.0005	0.0025	10/13/21 19:36	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/13/21 19:36	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/05/21 20:17	jlw
Boron, dissolved	M200.7 ICP	1	0.067	B	*	mg/L	0.03	0.1	10/05/21 20:17	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/13/21 19:36	bsu
Calcium, dissolved	M200.7 ICP	1	14.9		*	mg/L	0.1	0.5	10/05/21 20:17	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:36	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000054	B	*	mg/L	0.00005	0.00025	10/13/21 19:36	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/13/21 19:36	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/07/21 1:19	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0493		*	mg/L	0.007	0.02	10/13/21 19:36	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:36	bsu
Lithium, dissolved	M200.7 ICP	1	0.0703		*	mg/L	0.008	0.04	10/05/21 20:17	jlw
Magnesium, dissolved	M200.7 ICP	1	0.87	B	*	mg/L	0.2	1	10/05/21 20:17	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00110	B	*	mg/L	0.0004	0.002	10/13/21 19:36	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.8			ng/L	0.3	1	09/30/21 19:21	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00466		*	mg/L	0.0002	0.0005	10/13/21 19:36	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/13/21 19:36	bsu
Potassium, dissolved	M200.7 ICP	1	4.81		*	mg/L	0.2	1	10/05/21 20:17	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/05/21 20:17	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00046		*	mg/L	0.0001	0.00025	10/13/21 19:36	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:36	bsu
Sodium, dissolved	M200.7 ICP	1	60.3		*	mg/L	0.2	1	10/05/21 20:17	jlw
Strontium, dissolved	M200.7 ICP	1	0.0465		*	mg/L	0.009	0.045	10/05/21 20:17	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/13/21 19:36	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00745		*	mg/L	0.0008	0.0025	10/13/21 19:36	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/05/21 20:17	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/13/21 19:36	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/13/21 19:36	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/13/21 19:36	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090516-014

ACZ Sample ID: ***L68736-14***
Date Sampled: *09/15/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	127		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	135		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.00		*	mg/L	0.4	2	10/05/21 22:16	krh
Conductivity @25C	SM2510B	1	336		*	umhos/cm	1	10	09/29/21 2:42	eep
Fluoride	M300.0 - Ion Chromatography	1	0.544		*	mg/L	0.05	0.25	10/05/21 22:16	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		41			mg/L	0.2	5	10/19/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.630	H	*	mg/L	0.02	0.1	10/14/21 2:43	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.070		*	mg/L	0.01	0.05	10/03/21 1:41	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	206	H	*	mg/L	20	40	10/05/21 13:57	emk
Sulfate	M300.0 - Ion Chromatography	1	22.3		*	mg/L	0.4	2	10/05/21 22:16	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211PBW1	PBW	09/28/21 20:24				23.2	mg/L		-20	20			B4 BF
WG528211LCSW3	LCSW	09/28/21 20:42	WC210917-2	820.0001		795	mg/L	97	90	110			
WG528211LCSW6	LCSW	09/28/21 23:45	WC210917-2	820.0001		794.7	mg/L	97	90	110			
WG528211PBW2	PBW	09/28/21 23:53				U	mg/L		-20	20			
L68736-07DUP	DUP	09/29/21 1:34			136	136	mg/L				0	20	
L68739-03DUP	DUP	09/29/21 3:19			122	122	mg/L				0	20	
WG528211LCSW9	LCSW	09/29/21 3:39	WC210917-2	820.0001		811.5	mg/L	99	90	110			
WG528211PBW3	PBW	09/29/21 3:46				U	mg/L		-20	20			
WG528211LCSW12	LCSW	09/29/21 7:35	WC210917-2	820.0001		813.2	mg/L	99	90	110			
WG528211PBW4	PBW	09/29/21 7:42				U	mg/L		-20	20			
WG528211LCSW15	LCSW	09/29/21 11:31	WC210917-2	820.0001		821.6	mg/L	100	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.1		.1015	mg/L	102	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.011	0.011			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.050065		.0521	mg/L	104	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.050065	.0161	.0711	mg/L	110	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.050065	.0161	.0732	mg/L	114	70	130	3	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.050065	.0065	.06	mg/L	107	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.050065	.0065	.0588	mg/L	104	70	130	2	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.0201		.02093	mg/L	104	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00088	0.00088			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.01		.00981	mg/L	98	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.01	U	.00954	mg/L	95	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.01	U	.00973	mg/L	97	70	130	2	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.01	.00051	.01013	mg/L	96	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.01	.00051	.01002	mg/L	95	70	130	1	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05036	mg/L	101	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00044	0.00044			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05005		.0472	mg/L	94	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05005	.0083	.06112	mg/L	106	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05005	.0083	.06114	mg/L	106	70	130	0	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05005	.00232	.05572	mg/L	107	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05005	.00232	.05495	mg/L	105	70	130	1	20	

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ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05177	mg/L	104	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.0011	0.0011			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.049985		.04885	mg/L	98	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.049985	.0223	.077	mg/L	109	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.049985	.0223	.07817	mg/L	112	70	130	2	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.049985	.0766	.13145	mg/L	110	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.049985	.0766	.12981	mg/L	106	70	130	1	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.050858	mg/L	102	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.000176	0.000176			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05005		.047505	mg/L	95	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05005	U	.05243	mg/L	105	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05005	U	.053751	mg/L	107	70	130	2	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05005	U	.049439	mg/L	99	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05005	U	.049044	mg/L	98	70	130	1	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	2		1.965	mg/L	98	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.12	0.12			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	1		.994	mg/L	99	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	1	U	.995	mg/L	100	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	1	U	.988	mg/L	99	85	115	1	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	1	U	.974	mg/L	97	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	1	U	.984	mg/L	98	85	115	1	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	2		2.017	mg/L	101	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.09	0.09			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	.5005		.52	mg/L	104	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	.5005	.064	.589	mg/L	105	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	.5005	.064	.589	mg/L	105	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	.5005	.131	.64	mg/L	102	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	.5005	.131	.644	mg/L	102	85	115	1	20	

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ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.051081	mg/L	102	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00011	0.00011			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05005		.048032	mg/L	96	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05005	U	.053726	mg/L	107	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05005	U	.054233	mg/L	108	70	130	1	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05005	U	.051142	mg/L	102	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05005	U	.050413	mg/L	101	70	130	1	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	100		99.86	mg/L	100	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.3	0.3			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	67.98972		70.6	mg/L	104	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	67.98972	10.3	80.31	mg/L	103	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	67.98972	10.3	80.11	mg/L	103	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	67.98972	3.04	72.56	mg/L	102	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	67.98972	3.04	73.69	mg/L	104	85	115	2	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	19.96		19.85	mg/L	99	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.4	0.4			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	30		30.34	mg/L	101	90	110			
L68736-01DUP	DUP	10/05/21 16:53			5.83	5.81	mg/L				0	20	
L68736-02AS	AS	10/05/21 17:29	WI210907-6	30	5.88	35.61	mg/L	99	90	110			
L68736-11DUP	DUP	10/05/21 21:04			6.02	6.03	mg/L				0	20	
L68736-12AS	AS	10/05/21 21:40	WI210907-6	30	5.96	35.91	mg/L	100	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	30		30.19	mg/L	101	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05017	mg/L	100	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.0011	0.0011			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05		.04694	mg/L	94	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05	U	.05081	mg/L	102	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05	U	.05038	mg/L	101	70	130	1	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05	U	.04949	mg/L	99	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05	U	.04931	mg/L	99	70	130	0	20	

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.052054	mg/L	104	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00011	0.00011			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05005		.048647	mg/L	97	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05005	U	.053992	mg/L	108	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05005	U	.054741	mg/L	109	70	130	1	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05005	.00146	.053137	mg/L	103	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05005	.00146	.0532	mg/L	103	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW2	LCSW	09/28/21 20:30	PCN63140	1408		1445	umhos/cm	103	90	110			
WG528211LCSW5	LCSW	09/28/21 23:34	PCN63140	1408		1439	umhos/cm	102	90	110			
L68736-07DUP	DUP	09/29/21 1:34			336	338	umhos/cm				1	20	
L68739-03DUP	DUP	09/29/21 3:19			318	318	umhos/cm				0	20	
WG528211LCSW8	LCSW	09/29/21 3:26	PCN63140	1408		1432	umhos/cm	102	90	110			
WG528211LCSW11	LCSW	09/29/21 7:22	PCN63140	1408		1431	umhos/cm	102	90	110			
WG528211LCSW14	LCSW	09/29/21 11:09	PCN63140	1408		1427	umhos/cm	101	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05201	mg/L	104	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00176	0.00176			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05		.04788	mg/L	96	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05	U	.0515	mg/L	103	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05	U	.05077	mg/L	102	70	130	1	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05	.0198	.06776	mg/L	96	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05	.0198	.06661	mg/L	94	70	130	2	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	4.004		4.177	mg/L	104	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.05	0.05			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	1.5		1.55	mg/L	103	90	110			
L68736-01DUP	DUP	10/05/21 16:53			.526	.527	mg/L				0	20	
L68736-02AS	AS	10/05/21 17:29	WI210907-6	1.5	.552	2.057	mg/L	100	90	110			
L68736-11DUP	DUP	10/05/21 21:04			.549	.55	mg/L				0	20	
L68736-12AS	AS	10/05/21 21:40	WI210907-6	1.5	.531	2.06	mg/L	102	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	1.5		1.522	mg/L	101	90	110			

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ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528789													
WG528789ICV	ICV	10/07/21 0:06	II211001-1	2		1.94	mg/L	97	95	105			
WG528789ICB	ICB	10/07/21 0:12				U	mg/L		-0.3	0.3			
WG528789LFB	LFB	10/07/21 0:25	II210930-2	.9822		.98	mg/L	100	85	115			
L68736-04AS	AS	10/07/21 0:40	II210930-2	.9822	U	1.18	mg/L	120	85	115			MA
L68736-04ASD	ASD	10/07/21 0:43	II210930-2	.9822	U	1.05	mg/L	107	85	115	12	20	
L68736-14AS	AS	10/07/21 1:22	II210930-2	.9822	U	.81	mg/L	82	85	115			MA
L68736-14ASD	ASD	10/07/21 1:25	II210930-2	.9822	U	.99	mg/L	101	85	115	20	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.10016		.0974	mg/L	97	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.0154	0.0154			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.0501		.0491	mg/L	98	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.0501	.123	.1731	mg/L	100	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.0501	.123	.1701	mg/L	94	70	130	2	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.0501	U	.0534	mg/L	107	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.0501	U	.0529	mg/L	106	70	130	1	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05122	mg/L	102	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00022	0.00022			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05005		.04906	mg/L	98	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05005	U	.05592	mg/L	112	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05005	U	.05761	mg/L	115	70	130	3	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05005	U	.05511	mg/L	110	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05005	U	.05465	mg/L	109	70	130	1	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	2		2.0002	mg/L	100	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.024	0.024			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	.999		.9781	mg/L	98	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	.999	.0691	1.064	mg/L	100	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	.999	.0691	1.067	mg/L	100	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	.999	U	.9979	mg/L	100	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	.999	U	1.012	mg/L	101	85	115	1	20	

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	100		96.32	mg/L	96	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.6	0.6			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	49.99828		49.2	mg/L	98	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	49.99828	.74	49.77	mg/L	98	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	49.99828	.74	49.35	mg/L	97	85	115	1	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	49.99828	.84	49.11	mg/L	97	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	49.99828	.84	49.78	mg/L	98	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05088	mg/L	102	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00088	0.00088			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.0499		.04862	mg/L	97	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.0499	U	.05276	mg/L	106	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.0499	U	.05296	mg/L	106	70	130	0	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.0499	.309	.35774	mg/L	98	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.0499	.309	.34977	mg/L	82	70	130	2	20	

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG528396													
WG528396CCV1	CCV	09/30/21 11:36	HG210709-4	10		8.83	ng/L	88	76.5	123.4			
WG528396CCB1	CCB	09/30/21 11:41				U	ng/L		-0.501	0.501			
WG528396PQV	PQV	09/30/21 11:46	HG210709-6	1		.86	ng/L	86	70	130			
WG528396CCV2	CCV	09/30/21 12:42	HG210709-4	10		9.44	ng/L	94	76.5	123.4			
WG528396CCB2	CCB	09/30/21 12:47				U	ng/L		-0.501	0.501			
WG528396CCV3	CCV	09/30/21 13:39	HG210709-4	10		9	ng/L	90	76.5	123.4			
WG528396CCB3	CCB	09/30/21 13:44				U	ng/L		-0.501	0.501			
WG528396LFB1	LFB	09/30/21 14:03	HG210709-5	2		1.95	ng/L	98	71	125			
WG528396CCV4	CCV	09/30/21 14:43	HG210709-4	10		9.38	ng/L	94	76.5	123.4			
WG528396CCB4	CCB	09/30/21 14:48				U	ng/L		-0.501	0.501			
WG528396CCV5	CCV	09/30/21 15:58	HG210709-4	10		9.62	ng/L	96	76.5	123.4			
WG528396CCB5	CCB	09/30/21 16:03				U	ng/L		-0.501	0.501			
WG528396LFB2	LFB	09/30/21 16:50	HG210709-5	2		2.19	ng/L	110	71	125			
WG528396CCV6	CCV	09/30/21 16:59	HG210709-4	10		9.87	ng/L	99	76.5	123.4			
WG528396CCB6	CCB	09/30/21 17:04				U	ng/L		-0.501	0.501			
L68610-12MS	MS	09/30/21 17:09	HG210709-5	2	11.5	13.5	ng/L	100	71	125			
L68610-12MSD	MSD	09/30/21 17:13	HG210709-5	2	11.5	13.6	ng/L	105	71	125	1	24	
WG528396CCV7	CCV	09/30/21 18:07	HG210709-4	10		9.86	ng/L	99	76.5	123.4			
WG528396CCB7	CCB	09/30/21 18:12				U	ng/L		-0.501	0.501			
L68736-07MS	MS	09/30/21 18:26	HG210709-5	2	2.7	4.48	ng/L	89	71	125			
L68736-07MSD	MSD	09/30/21 18:31	HG210709-5	2	2.7	4.64	ng/L	97	71	125	4	24	
WG528396CCV8	CCV	09/30/21 19:11	HG210709-4	10		9.72	ng/L	97	76.5	123.4			
WG528396CCB8	CCB	09/30/21 19:16				U	ng/L		-0.501	0.501			
WG528396CCV9	CCV	09/30/21 19:54	HG210709-4	10		9.57	ng/L	96	76.5	123.4			
WG528396CCB9	CCB	09/30/21 19:59				U	ng/L		-0.501	0.501			
WG528825													
WG528825CCV1	CCV	10/07/21 9:37	HG210709-4	10		10	ng/L	100	76.5	123.4			
WG528825CCB1	CCB	10/07/21 9:42				U	ng/L		-0.501	0.501			
WG528825PQV	PQV	10/07/21 9:47	HG210709-6	1		.88	ng/L	88	70	130			
WG528825LFB	LFB	10/07/21 9:52	HG210709-5	2		1.88	ng/L	94	71	125			
L68736-12MS	MS	10/07/21 10:01	HG16315X	50	35	46.4	ng/L	114	71	125			
L68736-12MSD	MSD	10/07/21 10:06	HG16315X	50	35	48.75	ng/L	138	71	125	5	24	MA
WG528825CCV2	CCV	10/07/21 10:39	HG210709-4	10		10.5	ng/L	105	76.5	123.4			
WG528825CCB2	CCB	10/07/21 10:44				U	ng/L		-0.501	0.501			
WG528825CCV3	CCV	10/07/21 12:14	HG210709-4	10		10.5	ng/L	105	76.5	123.4			
WG528825CCB3	CCB	10/07/21 12:18				U	ng/L		-0.501	0.501			
WG528825CCV4	CCV	10/07/21 13:13	HG210709-4	10		9.98	ng/L	100	76.5	123.4			
WG528825CCB4	CCB	10/07/21 13:18				U	ng/L		-0.501	0.501			

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ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.01992		.02074	mg/L	104	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00044	0.00044			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05005		.04938	mg/L	99	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05005	.00487	.05838	mg/L	107	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05005	.00487	.05846	mg/L	107	70	130	0	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05005	.0266	.081	mg/L	109	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05005	.0266	.07955	mg/L	106	70	130	2	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05044	mg/L	101	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00088	0.00088			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05		.04662	mg/L	93	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05	U	.0497	mg/L	99	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05	U	.04928	mg/L	99	70	130	1	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05	.00302	.0497	mg/L	93	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05	.00302	.04923	mg/L	92	70	130	1	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529396													
WG529396ICV	ICV	10/13/21 22:51	WI210904-1	2.4161		2.226	mg/L	92	90	110			
WG529396ICB	ICB	10/13/21 22:52				U	mg/L		-0.02	0.02			
WG529402													
WG529402LFB1	LFB	10/14/21 2:16	WI211001-5	2		2.089	mg/L	104	90	110			
L68736-01AS	AS	10/14/21 2:18	WI211001-5	2	.646	2.682	mg/L	102	90	110			
L68736-02DUP	DUP	10/14/21 2:21			.645	.648	mg/L				0	20	
L68736-11AS	AS	10/14/21 2:38	WI211001-5	2	.601	2.785	mg/L	109	90	110			
L68736-12DUP	DUP	10/14/21 2:40			.568	.569	mg/L				0	20	
WG529402LFB2	LFB	10/14/21 2:56	WI211001-5	2		2.11	mg/L	106	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW1	LCSW	09/28/21 20:28	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW4	LCSW	09/28/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
L68736-07DUP	DUP	09/29/21 1:34			8.5	8.5	units				0	20	
L68739-03DUP	DUP	09/29/21 3:19			8.5	8.5	units				0	20	
WG528211LCSW7	LCSW	09/29/21 3:24	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW10	LCSW	09/29/21 7:20	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW13	LCSW	09/29/21 11:08	PCN62948	6		6.1	units	102	5.9	6.1			

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528528													
WG528528ICV	ICV	10/02/21 23:38	WI210831-4	.6523		.677	mg/L	104	90	110			
WG528528ICB	ICB	10/02/21 23:40				U	mg/L		-0.01	0.01			
WG528530													
WG528201LRB	LRB	10/03/21 1:11				U	mg/L		-0.01	0.01			
WG528201LFB	LFB	10/03/21 1:13	PT2X	1		.937	mg/L	94	90	110			
L68720-01LFM	LFM	10/03/21 1:15	PT2X	1	.052	.977	mg/L	93	90	110			
L68720-02DUP	DUP	10/03/21 1:17			.077	.076	mg/L				1	20	RA
L68736-09DUP	DUP	10/03/21 1:33			.051	.053	mg/L				4	20	RA
L68736-08LFM	LFM	10/03/21 1:51	PT2X	1	.063	1.005	mg/L	94	90	110			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	20		19.78	mg/L	99	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.6	0.6			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	99.96008		101.8	mg/L	102	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	99.96008	3.59	104.7	mg/L	101	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	99.96008	3.59	104.9	mg/L	101	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	99.96008	.5	101.1	mg/L	101	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	99.96008	.5	102.7	mg/L	102	85	115	2	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527955													
WG527955PBW	PBW	09/24/21 10:20				U	mg/L		-20	20			
WG527955LCSW	LCSW	09/24/21 10:22	PCN64132	1000		998	mg/L	100	80	120			
L68739-04DUP	DUP	09/24/21 10:51			206	218	mg/L				6	10	
WG528691													
WG528691PBW	PBW	10/05/21 13:30				U	mg/L		-20	20			
WG528691LCSW	LCSW	10/05/21 13:31	PCN64138	1000		980	mg/L	98	80	120			
L68736-12DUP	DUP	10/05/21 13:53			214	204	mg/L				5	10	
L68942-04DUP	DUP	10/05/21 14:14			336	340	mg/L				1	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	2		1.991	mg/L	100	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.15	0.15			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	1.0017		1.013	mg/L	101	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	1.0017	U	1.023	mg/L	102	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	1.0017	U	1.024	mg/L	102	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	1.0017	U	1.017	mg/L	102	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	1.0017	U	1.034	mg/L	103	85	115	2	20	

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.04785	mg/L	96	90	110			
WG529383ICB	ICB	10/13/21 19:04				.0001	mg/L		-0.00022	0.00022			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05		.04485	mg/L	90	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05	.0005	.05176	mg/L	103	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05	.0005	.0513	mg/L	102	70	130	1	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05	.00024	.05224	mg/L	104	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05	.00024	.05125	mg/L	102	70	130	2	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.02		.01999	mg/L	100	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00022	0.00022			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.01		.00951	mg/L	95	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.01	U	.00818	mg/L	82	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.01	U	.00741	mg/L	74	70	130	10	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.01	U	.00792	mg/L	79	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.01	U	.00634	mg/L	63	70	130	22	20	M2 RF ZA

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	100		99.74	mg/L	100	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.6	0.6			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	100.007		101.8	mg/L	102	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	100.007	60.7	159.5	mg/L	99	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	100.007	60.7	160.1	mg/L	99	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	100.007	104	198.4	mg/L	94	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	100.007	104	200.9	mg/L	97	85	115	1	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	2		1.9588	mg/L	98	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.027	0.027			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	.5005		.5447	mg/L	109	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	.5005	.0359	.5878	mg/L	110	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	.5005	.0359	.5905	mg/L	111	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	.5005	.0918	.6351	mg/L	109	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	.5005	.0918	.6464	mg/L	111	85	115	2	20	

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	51.15		50.79	mg/L	99	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.4	0.4			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	30		30.46	mg/L	102	90	110			
L68736-01DUP	DUP	10/05/21 16:53			22.4	22.4	mg/L				0	20	
L68736-02AS	AS	10/05/21 17:29	WI210907-6	30	23	52.79	mg/L	99	90	110			
L68736-11DUP	DUP	10/05/21 21:04			22.4	22.45	mg/L				0	20	
L68736-12AS	AS	10/05/21 21:40	WI210907-6	30	22.1	51.66	mg/L	99	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	30		29.97	mg/L	100	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05178	mg/L	104	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00022	0.00022			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05		.0475	mg/L	95	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05	U	.05375	mg/L	108	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05	U	.05643	mg/L	113	70	130	5	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05	U	.0542	mg/L	108	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05	U	.05396	mg/L	108	70	130	0	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05306	mg/L	106	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00176	0.00176			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05005		.04913	mg/L	98	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05005	.00756	.0583	mg/L	101	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05005	.00756	.05961	mg/L	104	70	130	2	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05005	U	.05305	mg/L	106	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05005	U	.05252	mg/L	105	70	130	1	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528678													
WG528678ICV	ICV	10/05/21 19:04	II211001-1	2		2.0132	mg/L	101	95	105			
WG528678ICB	ICB	10/05/21 19:10				U	mg/L		-0.015	0.015			
WG528678LFB	LFB	10/05/21 19:23	II210930-2	1		1.024	mg/L	102	85	115			
L68736-04AS	AS	10/05/21 19:37	II210930-2	1	U	1.033	mg/L	103	85	115			
L68736-04ASD	ASD	10/05/21 19:40	II210930-2	1	U	1.032	mg/L	103	85	115	0	20	
L68837-04AS	AS	10/05/21 20:38	II210930-2	1	U	1.02	mg/L	102	85	115			
L68837-04ASD	ASD	10/05/21 20:41	II210930-2	1	U	1.045	mg/L	105	85	115	2	20	

WETLAB

ACZ Project ID: ***L68736***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.05099	mg/L	102	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.00022	0.00022			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05		.04753	mg/L	95	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05	.00017	.05517	mg/L	110	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05	.00017	.05607	mg/L	112	70	130	2	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05	.0354	.09003	mg/L	109	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05	.0354	.09043	mg/L	110	70	130	0	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.04825	mg/L	97	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.0011	0.0011			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.05		.04686	mg/L	94	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.05	U	.05198	mg/L	104	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.05	U	.05189	mg/L	104	70	130	0	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.05	.0027	.05471	mg/L	104	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.05	.0027	.0543	mg/L	103	70	130	1	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529383													
WG529383ICV	ICV	10/13/21 19:03	MS211013-2	.05		.0494	mg/L	99	90	110			
WG529383ICB	ICB	10/13/21 19:04				U	mg/L		-0.0132	0.0132			
WG529383LFB	LFB	10/13/21 19:06	MS210927-3	.050075		.0534	mg/L	107	85	115			
L68736-06AS	AS	10/13/21 19:18	MS210927-3	.050075	U	.0593	mg/L	118	70	130			
L68736-06ASD	ASD	10/13/21 19:23	MS210927-3	.050075	U	.0597	mg/L	119	70	130	1	20	
L68758-02AS	AS	10/13/21 19:44	MS210927-3	.050075	U	.0573	mg/L	114	70	130			
L68758-02ASD	ASD	10/13/21 19:46	MS210927-3	.050075	U	.0575	mg/L	115	70	130	0	20	

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-01	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	N1	See Case Narrative.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68736-02	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	N1	See Case Narrative.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-03	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68736-04	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-05	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68736-06	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-07	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68736-08	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-09	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
L68736-10	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68736***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-11	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529383	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	RF	Relative Percent Difference (RPD) for Ag in spiked samples exceeded limit. In the absence of HCl, precipitation of Ag may occur at different rates.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68736***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-12	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528201	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG528530		M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529383	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	RF	Relative Percent Difference (RPD) for Ag in spiked samples exceeded limit. In the absence of HCl, precipitation of Ag may occur at different rates.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68736***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-13	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529383	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	RF	Relative Percent Difference (RPD) for Ag in spiked samples exceeded limit. In the absence of HCl, precipitation of Ag may occur at different rates.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Western Environmental Testing Laboratory ACZ Project ID: ***L68736***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68736-14	WG528211	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG528674	Chloride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG528674	Fluoride	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528789	Gallium, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG528211	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG529402	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	H1	Sample prep or analysis performed past holding time. See case narrative.
			M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG528211	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG528530	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	Q6	Sample was received above recommended temperature.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528691	Residue, Filterable (TDS) @180C	SM2540C	H3	Sample was received and analyzed past holding time.
			SM2540C	Q6	Sample was received above recommended temperature.
	WG529383	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	RF	Relative Percent Difference (RPD) for Ag in spiked samples exceeded limit. In the absence of HCl, precipitation of Ag may occur at different rates.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG528674	Sulfate	M300.0 - Ion Chromatography	Q6	Sample was received above recommended temperature.
	WG528211	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68736
Date Received: 09/23/2021 10:13
Received By:
Date Printed: 9/24/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	X		

A change was made in the samples 5- 10 were crossed out an rewritten section prior to ACZ custody.

A change was made in the samples 5- 10 were crossed out an rewritten section prior to ACZ custody.

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ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68736
Date Received: 09/23/2021 10:13
Received By:
Date Printed: 9/24/2021

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?		X	

Some parameters were received past hold time.

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA36018	6.7	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive Steamboat Springs, CO 80487 (970) 879-6590 | L68736

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D)1631						
21090516-001	9/15/2021 13:00	OT	4	✓							
21090516-002				✓							
21090516-003				✓							
21090516-004				✓							
~~21090519-005~~ 21090516-005				✓							
~~21090519~~-006 -006				✓							
~~21090519~~-007 -007				✓							
~~21090519~~-008 -008				✓							
~~21090519~~-009 -009				✓							
~~21090519~~-010 -010				✓							

NR

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/21/21 16:00		9/23/21 10:14

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68736 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68736

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(1)1631							
21090516-011	9/15/2021 13:00	OT	4	✓								
21090516-012	↓	↓	↓	✓	↓							
21090516-013	↓	↓	↓	✓	↓							
21090516-014	↓	↓	↓	✓	↓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/21/21 16:00		

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 26, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68740

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 23, 2021. This project has been assigned to ACZ's project number, L68740. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68740. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 25, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 28, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68739

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 23, 2021. This project has been assigned to ACZ's project number, L68739. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68739. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 27, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory

October 28, 2021

Project ID:
ACZ Project ID: L68739

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 14 leachate samples from Western Environmental Testing Laboratory on September 23, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68739. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for dissolved phosphorus values flagged with an "H1". Samples were prepped prior to hold but were misplaced in cooler resulting in analysis being performed past hold.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further explanation not provided by the Extended Qualifier Report:

1. TDS (N1) - Oven range is 80 C to 91 C. Over the weekend, the oven had a minor high temperature out of range. When the oven temperature was checked on Monday 9/27/21, the max temp read at 93.4 C. The workgroup was removed from the oven on 9/27/21 when the oven was back in range. The workgroup was examined and there was no splattering of samples.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-001

ACZ Sample ID: ***L68739-01***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 9:26	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	<0.005	U	*	mg/L	0.005	0.015	10/14/21 19:01	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:01	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00653		*	mg/L	0.0002	0.001	10/14/21 19:01	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0183		*	mg/L	0.0005	0.0025	10/14/21 19:01	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:01	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:14	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	10/06/21 22:35	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:01	bsu
Calcium, dissolved	M200.7 ICP	1	12.1		*	mg/L	0.1	0.5	10/06/21 22:35	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:01	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:01	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:01	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:19	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0334		*	mg/L	0.007	0.02	10/14/21 19:01	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:01	bsu
Lithium, dissolved	M200.7 ICP	1	0.0738		*	mg/L	0.008	0.04	10/06/21 22:35	jlw
Magnesium, dissolved	M200.7 ICP	1	0.97	B	*	mg/L	0.2	1	10/10/21 20:19	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:01	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.6		*	ng/L	0.3	1	10/07/21 10:11	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00435		*	mg/L	0.0002	0.0005	10/14/21 19:01	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:01	bsu
Potassium, dissolved	M200.7 ICP	1	4.51		*	mg/L	0.2	1	10/06/21 22:35	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 22:35	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/14/21 19:01	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:01	bsu
Sodium, dissolved	M200.7 ICP	1	59.0		*	mg/L	0.2	1	10/06/21 22:35	jlw
Strontium, dissolved	M200.7 ICP	1	0.0488		*	mg/L	0.009	0.045	10/06/21 22:35	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:01	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00966		*	mg/L	0.0008	0.0025	10/14/21 19:01	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 22:35	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/14/21 19:01	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00074	B	*	mg/L	0.0005	0.002	10/14/21 19:01	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:01	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-001

ACZ Sample ID: ***L68739-01***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.2	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	129		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.04		*	mg/L	0.4	2	10/05/21 23:09	krh
Conductivity @25C	SM2510B	1	327		*	umhos/cm	1	10	09/29/21 2:51	eep
Fluoride	M300.0 - Ion Chromatography	1	0.553		*	mg/L	0.05	0.25	10/05/21 23:09	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		34			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.673			mg/L	0.02	0.1	10/15/21 3:00	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.061	H	*	mg/L	0.01	0.05	10/24/21 19:31	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/24/21 10:40	scd
Sulfate	M300.0 - Ion Chromatography	1	22.7		*	mg/L	0.4	2	10/05/21 23:09	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-002

ACZ Sample ID: ***L68739-02***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 9:43	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	<0.005	U	*	mg/L	0.005	0.015	10/14/21 19:03	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:03	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00649		*	mg/L	0.0002	0.001	10/14/21 19:03	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0168		*	mg/L	0.0005	0.0025	10/14/21 19:03	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:03	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:17	kja
Boron, dissolved	M200.7 ICP	1	0.077	B	*	mg/L	0.03	0.1	10/06/21 22:38	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:03	bsu
Calcium, dissolved	M200.7 ICP	1	12.9		*	mg/L	0.1	0.5	10/06/21 22:38	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:03	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:03	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:03	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:22	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0340		*	mg/L	0.007	0.02	10/14/21 19:03	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:03	bsu
Lithium, dissolved	M200.7 ICP	1	0.0743		*	mg/L	0.008	0.04	10/06/21 22:38	jlw
Magnesium, dissolved	M200.7 ICP	1	0.90	B	*	mg/L	0.2	1	10/10/21 20:22	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:03	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	9.2		*	ng/L	0.3	1	10/07/21 10:15	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00436		*	mg/L	0.0002	0.0005	10/14/21 19:03	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:03	bsu
Potassium, dissolved	M200.7 ICP	1	4.35		*	mg/L	0.2	1	10/06/21 22:38	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 22:38	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00047		*	mg/L	0.0001	0.00025	10/14/21 19:03	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:03	bsu
Sodium, dissolved	M200.7 ICP	1	58.7		*	mg/L	0.2	1	10/06/21 22:38	jlw
Strontium, dissolved	M200.7 ICP	1	0.0485		*	mg/L	0.009	0.045	10/06/21 22:38	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:03	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00962		*	mg/L	0.0008	0.0025	10/14/21 19:03	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 22:38	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 19:03	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:03	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:03	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-002

ACZ Sample ID: ***L68739-02***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.4	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	130		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.00		*	mg/L	0.4	2	10/05/21 23:27	krh
Conductivity @25C	SM2510B	1	328		*	umhos/cm	1	10	09/29/21 3:01	eep
Fluoride	M300.0 - Ion Chromatography	1	0.549		*	mg/L	0.05	0.25	10/05/21 23:27	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		36			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.662			mg/L	0.02	0.1	10/15/21 3:28	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	<0.01	UH	*	mg/L	0.01	0.05	10/24/21 19:33	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	224		*	mg/L	20	40	09/24/21 10:43	scd
Sulfate	M300.0 - Ion Chromatography	1	22.6		*	mg/L	0.4	2	10/05/21 23:27	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-003

ACZ Sample ID: ***L68739-03***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 10:00	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0066	B	*	mg/L	0.005	0.015	10/14/21 19:05	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:05	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00643		*	mg/L	0.0002	0.001	10/14/21 19:05	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0145		*	mg/L	0.0005	0.0025	10/14/21 19:05	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:05	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:20	kja
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	10/06/21 22:47	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:05	bsu
Calcium, dissolved	M200.7 ICP	1	11.1		*	mg/L	0.1	0.5	10/06/21 22:47	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00291		*	mg/L	0.0005	0.002	10/14/21 19:05	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:05	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:05	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:31	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0371		*	mg/L	0.007	0.02	10/14/21 19:05	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:05	bsu
Lithium, dissolved	M200.7 ICP	1	0.0701		*	mg/L	0.008	0.04	10/06/21 22:47	jlw
Magnesium, dissolved	M200.7 ICP	1	0.77	B	*	mg/L	0.2	1	10/10/21 20:31	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00041	B	*	mg/L	0.0004	0.002	10/14/21 19:05	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.8		*	ng/L	0.3	1	10/07/21 10:20	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00478		*	mg/L	0.0002	0.0005	10/14/21 19:05	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:05	bsu
Potassium, dissolved	M200.7 ICP	1	3.53		*	mg/L	0.2	1	10/06/21 22:47	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 22:47	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/14/21 19:05	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:05	bsu
Sodium, dissolved	M200.7 ICP	1	59.3		*	mg/L	0.2	1	10/06/21 22:47	jlw
Strontium, dissolved	M200.7 ICP	1	0.0477		*	mg/L	0.009	0.045	10/06/21 22:47	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:05	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00998		*	mg/L	0.0008	0.0025	10/14/21 19:05	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 22:47	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/14/21 19:05	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00126	B	*	mg/L	0.0005	0.002	10/14/21 19:05	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:05	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-003

ACZ Sample ID: ***L68739-03***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	114		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	7.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.06		*	mg/L	0.4	2	10/05/21 23:45	krh
Conductivity @25C	SM2510B	1	318		*	umhos/cm	1	10	09/29/21 3:10	eep
Fluoride	M300.0 - Ion Chromatography	1	0.554		*	mg/L	0.05	0.25	10/05/21 23:45	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		31			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.658			mg/L	0.02	0.1	10/15/21 3:35	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.055	H	*	mg/L	0.01	0.05	10/24/21 19:35	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	09/24/21 10:46	scd
Sulfate	M300.0 - Ion Chromatography	1	23.4		*	mg/L	0.4	2	10/05/21 23:45	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-004

ACZ Sample ID: ***L68739-04***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 10:09	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0064	B	*	mg/L	0.005	0.015	10/14/21 19:09	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:09	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00632		*	mg/L	0.0002	0.001	10/14/21 19:09	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0135		*	mg/L	0.0005	0.0025	10/14/21 19:09	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:09	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:23	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	10/06/21 22:56	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:09	bsu
Calcium, dissolved	M200.7 ICP	1	10.2		*	mg/L	0.1	0.5	10/06/21 22:56	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0005	0.002	10/14/21 19:09	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:09	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:09	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:41	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0338		*	mg/L	0.007	0.02	10/14/21 19:09	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:09	bsu
Lithium, dissolved	M200.7 ICP	1	0.0719		*	mg/L	0.008	0.04	10/06/21 22:56	jlw
Magnesium, dissolved	M200.7 ICP	1	0.74	B	*	mg/L	0.2	1	10/10/21 20:41	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:09	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	5.3		*	ng/L	0.3	1	10/07/21 10:25	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00453		*	mg/L	0.0002	0.0005	10/14/21 19:09	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:09	bsu
Potassium, dissolved	M200.7 ICP	1	3.36		*	mg/L	0.2	1	10/06/21 22:56	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 22:56	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/14/21 19:09	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:09	bsu
Sodium, dissolved	M200.7 ICP	1	57.9		*	mg/L	0.2	1	10/06/21 22:56	jlw
Strontium, dissolved	M200.7 ICP	1	0.0455		*	mg/L	0.009	0.045	10/06/21 22:56	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:09	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0104		*	mg/L	0.0008	0.0025	10/14/21 19:09	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 22:56	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/14/21 19:09	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00086	B	*	mg/L	0.0005	0.002	10/14/21 19:09	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:09	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-004

ACZ Sample ID: ***L68739-04***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	116		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	3.9	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.04		*	mg/L	0.4	2	10/06/21 0:03	krh
Conductivity @25C	SM2510B	1	314		*	umhos/cm	1	10	09/29/21 3:55	eep
Fluoride	M300.0 - Ion Chromatography	1	0.551		*	mg/L	0.05	0.25	10/06/21 0:03	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		29			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.651			mg/L	0.02	0.1	10/15/21 3:36	pjb
pH (lab)	SM4500H+ B									
pH		1	8.4	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.052	H	*	mg/L	0.01	0.05	10/24/21 19:36	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	206		*	mg/L	20	40	09/24/21 10:48	scd
Sulfate	M300.0 - Ion Chromatography	1	23.0		*	mg/L	0.4	2	10/06/21 0:03	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-005

ACZ Sample ID: ***L68739-05***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 10:17	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0079	B	*	mg/L	0.005	0.015	10/14/21 19:11	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:11	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00636		*	mg/L	0.0002	0.001	10/14/21 19:11	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0154		*	mg/L	0.0005	0.0025	10/14/21 19:11	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:11	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:26	kja
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	10/06/21 22:59	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:11	bsu
Calcium, dissolved	M200.7 ICP	1	10.2		*	mg/L	0.1	0.5	10/06/21 22:59	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00143	B	*	mg/L	0.0005	0.002	10/14/21 19:11	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:11	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:11	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:44	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0336		*	mg/L	0.007	0.02	10/14/21 19:11	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:11	bsu
Lithium, dissolved	M200.7 ICP	1	0.0710		*	mg/L	0.008	0.04	10/06/21 22:59	jlw
Magnesium, dissolved	M200.7 ICP	1	0.71	B	*	mg/L	0.2	1	10/10/21 20:44	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:11	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	18.5		*	ng/L	0.3	1	10/07/21 10:30	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00474		*	mg/L	0.0002	0.0005	10/14/21 19:11	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:11	bsu
Potassium, dissolved	M200.7 ICP	1	3.40		*	mg/L	0.2	1	10/06/21 22:59	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 22:59	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00047		*	mg/L	0.0001	0.00025	10/14/21 19:11	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:11	bsu
Sodium, dissolved	M200.7 ICP	1	58.5		*	mg/L	0.2	1	10/06/21 22:59	jlw
Strontium, dissolved	M200.7 ICP	1	0.0446	B	*	mg/L	0.009	0.045	10/06/21 22:59	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:11	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0112		*	mg/L	0.0008	0.0025	10/14/21 19:11	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 22:59	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/14/21 19:11	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00109	B	*	mg/L	0.0005	0.002	10/14/21 19:11	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:11	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-005

ACZ Sample ID: ***L68739-05***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	113		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	6.4	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.03		*	mg/L	0.4	2	10/06/21 0:21	krh
Conductivity @25C	SM2510B	1	311		*	umhos/cm	1	10	09/29/21 4:05	eep
Fluoride	M300.0 - Ion Chromatography	1	0.553		*	mg/L	0.05	0.25	10/06/21 0:21	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		28			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.663			mg/L	0.02	0.1	10/15/21 3:09	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.053	H	*	mg/L	0.01	0.05	10/24/21 19:37	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	212		*	mg/L	20	40	09/24/21 10:54	scd
Sulfate	M300.0 - Ion Chromatography	1	23.1		*	mg/L	0.4	2	10/06/21 0:21	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-006

ACZ Sample ID: ***L68739-06***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 10:26	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0133	B	*	mg/L	0.005	0.015	10/14/21 19:16	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:16	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00687		*	mg/L	0.0002	0.001	10/14/21 19:16	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0170		*	mg/L	0.0005	0.0025	10/14/21 19:16	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:16	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:29	kja
Boron, dissolved	M200.7 ICP	1	0.079	B	*	mg/L	0.03	0.1	10/06/21 23:02	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:16	bsu
Calcium, dissolved	M200.7 ICP	1	12.2		*	mg/L	0.1	0.5	10/06/21 23:02	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:16	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000053	B	*	mg/L	0.00005	0.00025	10/14/21 19:16	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:16	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:47	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0386		*	mg/L	0.007	0.02	10/14/21 19:16	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:16	bsu
Lithium, dissolved	M200.7 ICP	1	0.0726		*	mg/L	0.008	0.04	10/06/21 23:02	jlw
Magnesium, dissolved	M200.7 ICP	1	0.86	B	*	mg/L	0.2	1	10/10/21 20:47	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00047	B	*	mg/L	0.0004	0.002	10/14/21 19:16	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	7.6		*	ng/L	0.3	1	10/07/21 10:34	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00475		*	mg/L	0.0002	0.0005	10/14/21 19:16	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:16	bsu
Potassium, dissolved	M200.7 ICP	1	4.38		*	mg/L	0.2	1	10/06/21 23:02	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:02	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/14/21 19:16	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:16	bsu
Sodium, dissolved	M200.7 ICP	1	58.9		*	mg/L	0.2	1	10/06/21 23:02	jlw
Strontium, dissolved	M200.7 ICP	1	0.0489		*	mg/L	0.009	0.045	10/06/21 23:02	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:16	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00969		*	mg/L	0.0008	0.0025	10/14/21 19:16	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:02	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/14/21 19:16	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:16	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:16	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-006

ACZ Sample ID: ***L68739-06***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	118		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.3	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/06/21 0:39	krh
Conductivity @25C	SM2510B	1	323		*	umhos/cm	1	10	09/29/21 4:14	eep
Fluoride	M300.0 - Ion Chromatography	1	0.542		*	mg/L	0.05	0.25	10/06/21 0:39	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		34.0			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.658			mg/L	0.02	0.1	10/15/21 3:10	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.056	H	*	mg/L	0.01	0.05	10/24/21 19:38	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	218		*	mg/L	20	40	09/24/21 10:56	scd
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/06/21 0:39	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-007

ACZ Sample ID: ***L68739-07***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 10:34	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0112	B	*	mg/L	0.005	0.015	10/14/21 19:18	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:18	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00689		*	mg/L	0.0002	0.001	10/14/21 19:18	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0182		*	mg/L	0.0005	0.0025	10/14/21 19:18	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:18	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:32	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	10/06/21 23:05	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:18	bsu
Calcium, dissolved	M200.7 ICP	1	13.1		*	mg/L	0.1	0.5	10/06/21 23:05	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:18	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:18	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:18	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:50	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0493		*	mg/L	0.007	0.02	10/14/21 19:18	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:18	bsu
Lithium, dissolved	M200.7 ICP	1	0.0711		*	mg/L	0.008	0.04	10/06/21 23:05	jlw
Magnesium, dissolved	M200.7 ICP	1	0.88	B	*	mg/L	0.2	1	10/10/21 20:50	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00102	B	*	mg/L	0.0004	0.002	10/14/21 19:18	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	6.6		*	ng/L	0.3	1	10/07/21 10:49	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00453		*	mg/L	0.0002	0.0005	10/14/21 19:18	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:18	bsu
Potassium, dissolved	M200.7 ICP	1	3.73		*	mg/L	0.2	1	10/06/21 23:05	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:05	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/14/21 19:18	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:18	bsu
Sodium, dissolved	M200.7 ICP	1	57.3		*	mg/L	0.2	1	10/06/21 23:05	jlw
Strontium, dissolved	M200.7 ICP	1	0.0490		*	mg/L	0.009	0.045	10/06/21 23:05	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:18	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0102		*	mg/L	0.0008	0.0025	10/14/21 19:18	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:05	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 19:18	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:18	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:18	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-007

ACZ Sample ID: ***L68739-07***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	130		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/06/21 1:15	krh
Conductivity @25C	SM2510B	1	329		*	umhos/cm	1	10	09/29/21 4:24	eep
Fluoride	M300.0 - Ion Chromatography	1	0.544		*	mg/L	0.05	0.25	10/06/21 1:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		36			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.653			mg/L	0.02	0.1	10/15/21 3:11	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.056	H	*	mg/L	0.01	0.05	10/24/21 19:42	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	226		*	mg/L	20	40	09/24/21 10:59	scd
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	10/06/21 1:15	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-008

ACZ Sample ID: ***L68739-08***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 10:43	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0103	B	*	mg/L	0.005	0.015	10/14/21 19:19	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:19	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00709		*	mg/L	0.0002	0.001	10/14/21 19:19	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0162		*	mg/L	0.0005	0.0025	10/14/21 19:19	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:19	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:35	kja
Boron, dissolved	M200.7 ICP	1	0.069	B	*	mg/L	0.03	0.1	10/06/21 23:08	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:19	bsu
Calcium, dissolved	M200.7 ICP	1	12.0		*	mg/L	0.1	0.5	10/06/21 23:08	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:19	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:19	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:19	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:53	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0323		*	mg/L	0.007	0.02	10/14/21 19:19	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:19	bsu
Lithium, dissolved	M200.7 ICP	1	0.0715		*	mg/L	0.008	0.04	10/06/21 23:08	jlw
Magnesium, dissolved	M200.7 ICP	1	0.85	B	*	mg/L	0.2	1	10/10/21 20:53	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:19	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.7		*	ng/L	0.3	1	10/07/21 10:54	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00470		*	mg/L	0.0002	0.0005	10/14/21 19:19	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:19	bsu
Potassium, dissolved	M200.7 ICP	1	4.14		*	mg/L	0.2	1	10/06/21 23:08	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:08	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00050		*	mg/L	0.0001	0.00025	10/14/21 19:19	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:19	bsu
Sodium, dissolved	M200.7 ICP	1	57.5		*	mg/L	0.2	1	10/06/21 23:08	jlw
Strontium, dissolved	M200.7 ICP	1	0.0468		*	mg/L	0.009	0.045	10/06/21 23:08	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:19	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0111		*	mg/L	0.0008	0.0025	10/14/21 19:19	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:08	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 19:19	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:19	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:19	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-008

ACZ Sample ID: ***L68739-08***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	134		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.2	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	143		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.97		*	mg/L	0.4	2	10/06/21 1:51	krh
Conductivity @25C	SM2510B	1	328		*	umhos/cm	1	10	09/29/21 4:35	eep
Fluoride	M300.0 - Ion Chromatography	1	0.542		*	mg/L	0.05	0.25	10/06/21 1:51	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		34			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.635			mg/L	0.02	0.1	10/15/21 3:17	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.054	H	*	mg/L	0.01	0.05	10/24/21 19:43	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	224		*	mg/L	20	40	09/24/21 11:01	scd
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	10/06/21 1:51	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-009

ACZ Sample ID: ***L68739-09***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 10:51	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0181		*	mg/L	0.005	0.015	10/14/21 19:21	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:21	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00733		*	mg/L	0.0002	0.001	10/14/21 19:21	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0151		*	mg/L	0.0005	0.0025	10/14/21 19:21	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:21	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:50	kja
Boron, dissolved	M200.7 ICP	1	0.077	B	*	mg/L	0.03	0.1	10/06/21 23:11	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:21	bsu
Calcium, dissolved	M200.7 ICP	1	12.0		*	mg/L	0.1	0.5	10/06/21 23:11	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:21	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:21	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:21	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:56	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0348		*	mg/L	0.007	0.02	10/14/21 19:21	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:21	bsu
Lithium, dissolved	M200.7 ICP	1	0.0733		*	mg/L	0.008	0.04	10/06/21 23:11	jlw
Magnesium, dissolved	M200.7 ICP	1	0.83	B	*	mg/L	0.2	1	10/10/21 20:56	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:21	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	21.5		*	ng/L	0.3	1	10/07/21 10:58	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00577		*	mg/L	0.0002	0.0005	10/14/21 19:21	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:21	bsu
Potassium, dissolved	M200.7 ICP	1	4.93		*	mg/L	0.2	1	10/06/21 23:11	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:11	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00050		*	mg/L	0.0001	0.00025	10/14/21 19:21	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:21	bsu
Sodium, dissolved	M200.7 ICP	1	58.3		*	mg/L	0.2	1	10/06/21 23:11	jlw
Strontium, dissolved	M200.7 ICP	1	0.0473		*	mg/L	0.009	0.045	10/06/21 23:11	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:21	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0133		*	mg/L	0.0008	0.0025	10/14/21 19:21	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:11	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 19:21	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:21	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:21	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-009

ACZ Sample ID: ***L68739-09***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	119		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	129		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.03		*	mg/L	0.4	2	10/06/21 3:02	krh
Conductivity @25C	SM2510B	1	332		*	umhos/cm	1	10	09/29/21 4:45	eep
Fluoride	M300.0 - Ion Chromatography	1	0.545		*	mg/L	0.05	0.25	10/06/21 3:02	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		33			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.648			mg/L	0.02	0.1	10/15/21 3:18	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.0		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.053	H	*	mg/L	0.01	0.05	10/24/21 19:44	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	218		*	mg/L	20	40	09/24/21 11:04	scd
Sulfate	M300.0 - Ion Chromatography	1	22.6		*	mg/L	0.4	2	10/06/21 3:02	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-010

ACZ Sample ID: ***L68739-10***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 11:00	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0093	B	*	mg/L	0.005	0.015	10/14/21 19:23	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:23	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00672		*	mg/L	0.0002	0.001	10/14/21 19:23	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0170		*	mg/L	0.0005	0.0025	10/14/21 19:23	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:23	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:53	kja
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	10/06/21 23:14	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	0.000050	B	*	mg/L	0.00005	0.00025	10/14/21 19:23	bsu
Calcium, dissolved	M200.7 ICP	1	13.0		*	mg/L	0.1	0.5	10/06/21 23:14	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:23	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000072	B	*	mg/L	0.00005	0.00025	10/14/21 19:23	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:23	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 20:59	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0487		*	mg/L	0.007	0.02	10/14/21 19:23	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:23	bsu
Lithium, dissolved	M200.7 ICP	1	0.0747		*	mg/L	0.008	0.04	10/06/21 23:14	jlw
Magnesium, dissolved	M200.7 ICP	1	0.86	B	*	mg/L	0.2	1	10/10/21 20:59	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00126	B	*	mg/L	0.0004	0.002	10/14/21 19:23	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	10	158		*	ng/L	3	10	10/07/21 12:23	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00477		*	mg/L	0.0002	0.0005	10/14/21 19:23	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:23	bsu
Potassium, dissolved	M200.7 ICP	1	4.31		*	mg/L	0.2	1	10/06/21 23:14	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:14	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00046		*	mg/L	0.0001	0.00025	10/14/21 19:23	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:23	bsu
Sodium, dissolved	M200.7 ICP	1	59.3		*	mg/L	0.2	1	10/06/21 23:14	jlw
Strontium, dissolved	M200.7 ICP	1	0.0505		*	mg/L	0.009	0.045	10/06/21 23:14	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:23	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0120		*	mg/L	0.0008	0.0025	10/14/21 19:23	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:14	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/14/21 19:23	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:23	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:23	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-010

ACZ Sample ID: ***L68739-10***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	121		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	130		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.01		*	mg/L	0.4	2	10/06/21 3:20	krh
Conductivity @25C	SM2510B	1	332		*	umhos/cm	1	10	09/29/21 4:54	eep
Fluoride	M300.0 - Ion Chromatography	1	0.545		*	mg/L	0.05	0.25	10/06/21 3:20	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		36.0			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.662			mg/L	0.02	0.1	10/15/21 3:19	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.054	H	*	mg/L	0.01	0.05	10/24/21 19:45	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	224		*	mg/L	20	40	09/24/21 11:07	scd
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/06/21 3:20	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-011

ACZ Sample ID: ***L68739-11***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 11:08	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	<0.005	U	*	mg/L	0.005	0.015	10/14/21 19:24	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:24	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00667		*	mg/L	0.0002	0.001	10/14/21 19:24	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0170		*	mg/L	0.0005	0.0025	10/14/21 19:24	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:24	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 13:57	kja
Boron, dissolved	M200.7 ICP	1	0.077	B	*	mg/L	0.03	0.1	10/06/21 23:17	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:24	bsu
Calcium, dissolved	M200.7 ICP	1	13.3		*	mg/L	0.1	0.5	10/06/21 23:17	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:24	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:24	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:24	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 21:02	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0542		*	mg/L	0.007	0.02	10/14/21 19:24	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:24	bsu
Lithium, dissolved	M200.7 ICP	1	0.0745		*	mg/L	0.008	0.04	10/06/21 23:17	jlw
Magnesium, dissolved	M200.7 ICP	1	0.89	B	*	mg/L	0.2	1	10/10/21 21:02	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00096	B	*	mg/L	0.0004	0.002	10/14/21 19:24	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	10	56		*	ng/L	3	10	10/07/21 12:28	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00477		*	mg/L	0.0002	0.0005	10/14/21 19:24	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:24	bsu
Potassium, dissolved	M200.7 ICP	1	4.20		*	mg/L	0.2	1	10/06/21 23:17	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:17	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/14/21 19:24	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:24	bsu
Sodium, dissolved	M200.7 ICP	1	59.5		*	mg/L	0.2	1	10/06/21 23:17	jlw
Strontium, dissolved	M200.7 ICP	1	0.0510		*	mg/L	0.009	0.045	10/06/21 23:17	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:24	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00946		*	mg/L	0.0008	0.0025	10/14/21 19:24	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:17	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 19:24	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:24	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:24	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-011

ACZ Sample ID: ***L68739-11***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.5	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	130		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.03		*	mg/L	0.4	2	10/06/21 3:38	krh
Conductivity @25C	SM2510B	1	332		*	umhos/cm	1	10	09/29/21 5:03	eep
Fluoride	M300.0 - Ion Chromatography	1	0.556		*	mg/L	0.05	0.25	10/06/21 3:38	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		37			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.665			mg/L	0.02	0.1	10/15/21 3:20	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.057	H	*	mg/L	0.01	0.05	10/24/21 19:46	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	222		*	mg/L	20	40	09/24/21 11:09	scd
Sulfate	M300.0 - Ion Chromatography	1	22.6		*	mg/L	0.4	2	10/06/21 3:38	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-012

ACZ Sample ID: ***L68739-12***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 11:25	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0149	B	*	mg/L	0.005	0.015	10/14/21 19:29	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:29	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00663		*	mg/L	0.0002	0.001	10/14/21 19:29	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0162		*	mg/L	0.0005	0.0025	10/14/21 19:29	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:29	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 14:00	kja
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	10/06/21 23:20	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:29	bsu
Calcium, dissolved	M200.7 ICP	1	10.5		*	mg/L	0.1	0.5	10/06/21 23:20	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:29	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000056	B	*	mg/L	0.00005	0.00025	10/14/21 19:29	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:29	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 21:05	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0323		*	mg/L	0.007	0.02	10/14/21 19:29	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:29	bsu
Lithium, dissolved	M200.7 ICP	1	0.0724		*	mg/L	0.008	0.04	10/06/21 23:20	jlw
Magnesium, dissolved	M200.7 ICP	1	0.80	B	*	mg/L	0.2	1	10/10/21 21:05	kja
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:29	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	15.7		*	ng/L	0.3	1	10/07/21 11:55	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00477		*	mg/L	0.0002	0.0005	10/14/21 19:29	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:29	bsu
Potassium, dissolved	M200.7 ICP	1	4.04		*	mg/L	0.2	1	10/06/21 23:20	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:20	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00052		*	mg/L	0.0001	0.00025	10/14/21 19:29	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:29	bsu
Sodium, dissolved	M200.7 ICP	1	57.6		*	mg/L	0.2	1	10/06/21 23:20	jlw
Strontium, dissolved	M200.7 ICP	1	0.0469		*	mg/L	0.009	0.045	10/06/21 23:20	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:29	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0117		*	mg/L	0.0008	0.0025	10/14/21 19:29	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:20	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/14/21 19:29	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00050	B	*	mg/L	0.0005	0.002	10/14/21 19:29	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:29	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-012

ACZ Sample ID: ***L68739-12***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	113		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	11.2	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.96		*	mg/L	0.4	2	10/06/21 3:56	krh
Conductivity @25C	SM2510B	1	319		*	umhos/cm	1	10	09/29/21 5:12	eep
Fluoride	M300.0 - Ion Chromatography	1	0.532		*	mg/L	0.05	0.25	10/06/21 3:56	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		30			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.642			mg/L	0.02	0.1	10/15/21 3:23	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.065	H	*	mg/L	0.01	0.05	10/24/21 19:48	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/24/21 11:12	scd
Sulfate	M300.0 - Ion Chromatography	1	22.1		*	mg/L	0.4	2	10/06/21 3:56	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-013

ACZ Sample ID: ***L68739-13***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 11:42	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0073	B	*	mg/L	0.005	0.015	10/14/21 19:31	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:31	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00658		*	mg/L	0.0002	0.001	10/14/21 19:31	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0228		*	mg/L	0.0005	0.0025	10/14/21 19:31	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:31	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 14:03	kja
Boron, dissolved	M200.7 ICP	1	0.078	B	*	mg/L	0.03	0.1	10/06/21 23:23	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:31	bsu
Calcium, dissolved	M200.7 ICP	1	14.8		*	mg/L	0.1	0.5	10/06/21 23:23	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:31	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000060	B	*	mg/L	0.00005	0.00025	10/14/21 19:31	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:31	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 21:08	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0317		*	mg/L	0.007	0.02	10/14/21 19:31	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:31	bsu
Lithium, dissolved	M200.7 ICP	1	0.0741		*	mg/L	0.008	0.04	10/06/21 23:23	jlw
Magnesium, dissolved	M200.7 ICP	1	0.89	B	*	mg/L	0.2	1	10/10/21 21:08	kja
Manganese, dissolved	M200.8 ICP-MS	2	0.00308	B	*	mg/L	0.0008	0.004	10/15/21 15:29	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	5	34		*	ng/L	2	5	10/07/21 12:44	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00450		*	mg/L	0.0002	0.0005	10/14/21 19:31	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:31	bsu
Potassium, dissolved	M200.7 ICP	1	4.01		*	mg/L	0.2	1	10/06/21 23:23	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:23	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00045		*	mg/L	0.0001	0.00025	10/14/21 19:31	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:31	bsu
Sodium, dissolved	M200.7 ICP	1	58.4		*	mg/L	0.2	1	10/06/21 23:23	jlw
Strontium, dissolved	M200.7 ICP	1	0.0555		*	mg/L	0.009	0.045	10/06/21 23:23	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:31	bsu
Tin, dissolved	M200.8 ICP-MS	2	0.248		*	mg/L	0.0016	0.005	10/15/21 15:29	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:23	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 19:31	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:31	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:31	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-013

ACZ Sample ID: ***L68739-13***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	126		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.4	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	135		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.05		*	mg/L	0.4	2	10/06/21 4:14	krh
Conductivity @25C	SM2510B	1	335		*	umhos/cm	1	10	09/29/21 5:22	eep
Fluoride	M300.0 - Ion Chromatography	1	0.544		*	mg/L	0.05	0.25	10/06/21 4:14	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		41			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.445			mg/L	0.02	0.1	10/15/21 3:25	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.032	BH	*	mg/L	0.01	0.05	10/24/21 19:50	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	228		*	mg/L	20	40	09/24/21 11:14	scd
Sulfate	M300.0 - Ion Chromatography	1	22.0		*	mg/L	0.4	2	10/06/21 4:14	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-014

ACZ Sample ID: ***L68739-14***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								09/29/21 11:50	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0114	B	*	mg/L	0.005	0.015	10/14/21 19:33	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 19:33	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00658		*	mg/L	0.0002	0.001	10/14/21 19:33	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0184		*	mg/L	0.0005	0.0025	10/14/21 19:33	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 19:33	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 14:06	kja
Boron, dissolved	M200.7 ICP	1	0.079	B	*	mg/L	0.03	0.1	10/06/21 23:39	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 19:33	bsu
Calcium, dissolved	M200.7 ICP	1	13.2		*	mg/L	0.1	0.5	10/06/21 23:39	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:33	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000057	B	*	mg/L	0.00005	0.00025	10/14/21 19:33	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 19:33	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/10/21 21:24	kja
Iron, dissolved	M200.8 ICP-MS	1	0.0390		*	mg/L	0.007	0.02	10/14/21 19:33	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:33	bsu
Lithium, dissolved	M200.7 ICP	1	0.0730		*	mg/L	0.008	0.04	10/06/21 23:39	jlw
Magnesium, dissolved	M200.7 ICP	1	0.93	B	*	mg/L	0.2	1	10/10/21 21:24	kja
Manganese, dissolved	M200.8 ICP-MS	1	0.00063	B	*	mg/L	0.0004	0.002	10/15/21 15:33	bsu
Mercury, dissolved	M1631E, Atomic Fluorescence	1	4.2		*	ng/L	0.3	1	10/07/21 12:09	scp
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00456		*	mg/L	0.0002	0.0005	10/14/21 19:33	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 19:33	bsu
Potassium, dissolved	M200.7 ICP	1	4.29		*	mg/L	0.2	1	10/06/21 23:39	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 23:39	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00046		*	mg/L	0.0001	0.00025	10/14/21 19:33	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:33	bsu
Sodium, dissolved	M200.7 ICP	1	58.2		*	mg/L	0.2	1	10/06/21 23:39	jlw
Strontium, dissolved	M200.7 ICP	1	0.0506		*	mg/L	0.009	0.045	10/06/21 23:39	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 19:33	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0104		*	mg/L	0.0008	0.0025	10/14/21 19:33	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 23:39	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 19:33	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 19:33	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 19:33	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090518-014

ACZ Sample ID: ***L68739-14***
Date Sampled: *09/17/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.9	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	131		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.00		*	mg/L	0.4	2	10/06/21 4:32	krh
Conductivity @25C	SM2510B	1	332		*	umhos/cm	1	10	09/29/21 5:40	eep
Fluoride	M300.0 - Ion Chromatography	1	0.543		*	mg/L	0.05	0.25	10/06/21 4:32	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		37			mg/L	0.2	5	10/28/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.654			mg/L	0.02	0.1	10/15/21 3:27	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.054	H	*	mg/L	0.01	0.05	10/24/21 19:51	mjj1
Residue, Filterable (TDS) @180C	SM2540C	1	224		*	mg/L	20	40	09/24/21 11:17	scd
Sulfate	M300.0 - Ion Chromatography	1	22.5		*	mg/L	0.4	2	10/06/21 4:32	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211PBW1	PBW	09/28/21 20:24				23.2	mg/L		-20	20			B4 BF
WG528211LCSW3	LCSW	09/28/21 20:42	WC210917-2	820.0001		795	mg/L	97	90	110			
WG528211LCSW6	LCSW	09/28/21 23:45	WC210917-2	820.0001		794.7	mg/L	97	90	110			
WG528211PBW2	PBW	09/28/21 23:53				U	mg/L		-20	20			
L68739-03DUP	DUP	09/29/21 3:19			122	122	mg/L				0	20	
WG528211LCSW9	LCSW	09/29/21 3:39	WC210917-2	820.0001		811.5	mg/L	99	90	110			
WG528211PBW3	PBW	09/29/21 3:46				U	mg/L		-20	20			
L68739-13DUP	DUP	09/29/21 5:31			135	134.1	mg/L				1	20	
L68740-09DUP	DUP	09/29/21 7:15			133	132.9	mg/L				0	20	
WG528211LCSW12	LCSW	09/29/21 7:35	WC210917-2	820.0001		813.2	mg/L	99	90	110			
WG528211PBW4	PBW	09/29/21 7:42				U	mg/L		-20	20			
WG528211LCSW15	LCSW	09/29/21 11:31	WC210917-2	820.0001		821.6	mg/L	100	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.1		.1043	mg/L	104	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.011	0.011			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.050065		.0494	mg/L	99	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.050065	.0079	.0623	mg/L	109	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.050065	.0079	.061	mg/L	106	70	130	2	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.050065	130	129.9757	mg/L	-49	70	130			M3
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.050065	130	130.5158	mg/L	1030	70	130	0	20	M3

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.0201		.02113	mg/L	105	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00088	0.00088			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.01		.00967	mg/L	97	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.01	U	.00892	mg/L	89	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.01	U	.00893	mg/L	89	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.01	U	.00819	mg/L	82	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.01	U	.00846	mg/L	85	70	130	3	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05097	mg/L	102	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00044	0.00044			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05005		.04632	mg/L	93	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05005	.00636	.05469	mg/L	97	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05005	.00636	.05518	mg/L	98	70	130	1	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05005	.0044	.04573	mg/L	83	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05005	.0044	.04624	mg/L	84	70	130	1	20	

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05214	mg/L	104	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.0011	0.0011			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.049985		.04723	mg/L	94	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.049985	.0154	.06641	mg/L	102	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.049985	.0154	.06639	mg/L	102	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.049985	.0148	.06299	mg/L	96	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.049985	.0148	.06409	mg/L	99	70	130	2	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.051075	mg/L	102	90	110			
WG529457ICB	ICB	10/14/21 18:51				.000087	mg/L		-0.000176	0.000176			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05005		.046088	mg/L	92	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05005	U	.046106	mg/L	92	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05005	U	.046852	mg/L	94	70	130	2	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05005	.0143	.05615	mg/L	84	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05005	.0143	.05803	mg/L	87	70	130	3	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529131													
WG529131ICV	ICV	10/11/21 12:52	II211001-1	2		1.915	mg/L	96	95	105			
WG529131ICB	ICB	10/11/21 12:58				U	mg/L		-0.12	0.12			
WG529131LFB	LFB	10/11/21 13:10	II210930-2	1		.962	mg/L	96	85	115			
L68739-08AS	AS	10/11/21 13:38	II210930-2	1	U	.959	mg/L	96	85	115			
L68739-08ASD	ASD	10/11/21 13:47	II210930-2	1	U	.965	mg/L	97	85	115	1	20	
L68854-02AS	AS	10/11/21 14:27	II210930-2	1	U	.969	mg/L	97	85	115			
L68854-02ASD	ASD	10/11/21 14:30	II210930-2	1	U	.975	mg/L	98	85	115	1	20	
WG529131LFB	LFB	10/11/21 14:39	II210930-2	1		.962	mg/L	96	85	115			

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	2		1.974	mg/L	99	95	105			
WG528695ICB	ICB	10/06/21 22:07				U	mg/L		-0.09	0.09			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	.5005		.519	mg/L	104	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	.5005	.077	.612	mg/L	107	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	.5005	.077	.615	mg/L	107	85	115	0	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	.5005	.078	.613	mg/L	107	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	.5005	.078	.584	mg/L	101	85	115	5	20	

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ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.050975	mg/L	102	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00011	0.00011			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05005		.046515	mg/L	93	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05005	U	.050083	mg/L	100	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05005	U	.049955	mg/L	100	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05005	.00762	.051612	mg/L	88	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05005	.00762	.053145	mg/L	91	70	130	3	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	100		98	mg/L	98	95	105			
WG528695ICB	ICB	10/06/21 22:07				.1	mg/L		-0.3	0.3			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	67.98972		70.05	mg/L	103	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	67.98972	12.9	84.4	mg/L	105	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	67.98972	12.9	84.67	mg/L	106	85	115	0	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	67.98972	14.8	85.23	mg/L	104	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	67.98972	14.8	84.21	mg/L	102	85	115	1	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	19.96		19.85	mg/L	99	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.4	0.4			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	30		30.34	mg/L	101	90	110			
L68736-11DUP	DUP	10/05/21 21:04			6.02	6.03	mg/L				0	20	
L68736-12AS	AS	10/05/21 21:40	WI210907-6	30	5.96	35.91	mg/L	100	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	30		30.19	mg/L	101	90	110			
L68739-07DUP	DUP	10/06/21 1:33			5.98	5.99	mg/L				0	20	
L68739-08AS	AS	10/06/21 2:44	WI210907-6	30	5.97	35.86	mg/L	100	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05075	mg/L	102	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.0011	0.0011			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05		.04585	mg/L	92	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05	.00143	.04746	mg/L	92	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05	.00143	.04821	mg/L	94	70	130	2	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05	.00244	.03972	mg/L	75	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05	.00244	.04058	mg/L	76	70	130	2	20	

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ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05308	mg/L	106	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00011	0.00011			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05005		.048328	mg/L	97	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05005	U	.050681	mg/L	101	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05005	U	.050503	mg/L	101	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05005	.171	.21702	mg/L	92	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05005	.171	.219612	mg/L	97	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW2	LCSW	09/28/21 20:30	PCN63140	1408		1445	umhos/cm	103	90	110			
WG528211LCSW5	LCSW	09/28/21 23:34	PCN63140	1408		1439	umhos/cm	102	90	110			
L68739-03DUP	DUP	09/29/21 3:19			318	318	umhos/cm				0	20	
WG528211LCSW8	LCSW	09/29/21 3:26	PCN63140	1408		1432	umhos/cm	102	90	110			
L68739-13DUP	DUP	09/29/21 5:31			335	336	umhos/cm				0	20	
L68740-09DUP	DUP	09/29/21 7:15			337	338	umhos/cm				0	20	
WG528211LCSW11	LCSW	09/29/21 7:22	PCN63140	1408		1431	umhos/cm	102	90	110			
WG528211LCSW14	LCSW	09/29/21 11:09	PCN63140	1408		1427	umhos/cm	101	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05254	mg/L	105	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00176	0.00176			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05		.04675	mg/L	94	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05	U	.0473	mg/L	95	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05	U	.04741	mg/L	95	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05	.0103	.04415	mg/L	68	70	130			M2
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05	.0103	.04454	mg/L	68	70	130	1	20	M2

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	4.004		4.177	mg/L	104	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.05	0.05			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	1.5		1.55	mg/L	103	90	110			
L68736-11DUP	DUP	10/05/21 21:04			.549	.55	mg/L				0	20	
L68736-12AS	AS	10/05/21 21:40	WI210907-6	1.5	.531	2.06	mg/L	102	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	1.5		1.522	mg/L	101	90	110			
L68739-07DUP	DUP	10/06/21 1:33			.544	.545	mg/L				0	20	
L68739-08AS	AS	10/06/21 2:44	WI210907-6	1.5	.542	2.069	mg/L	102	90	110			

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528894													
WG528894ICV	ICV	10/10/21 19:45	II211001-1	2		2.03	mg/L	102	95	105			
WG528894ICB	ICB	10/10/21 19:51				U	mg/L		-0.3	0.3			
WG528894LFB	LFB	10/10/21 20:04	II211012-1	1.9644		2.12	mg/L	108	85	115			
L68739-02AS	AS	10/10/21 20:25	II210930-2	.9822	U	1.07	mg/L	109	85	115			
L68739-02ASD	ASD	10/10/21 20:28	II210930-2	.9822	U	1.05	mg/L	107	85	115	2	20	
L68739-13AS	AS	10/10/21 21:18	II210930-2	.9822	U	1.09	mg/L	111	85	115			
L68739-13ASD	ASD	10/10/21 21:21	II210930-2	.9822	U	1.08	mg/L	110	85	115	1	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.10016		.103	mg/L	103	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.0154	0.0154			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.0501		.048	mg/L	96	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.0501	.0336	.0885	mg/L	110	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.0501	.0336	.0819	mg/L	96	70	130	8	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.0501	1.13	1.1951	mg/L	130	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.0501	1.13	1.1808	mg/L	101	70	130	1	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05289	mg/L	106	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00022	0.00022			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05005		.04925	mg/L	98	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05005	U	.05311	mg/L	106	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05005	U	.0519	mg/L	104	70	130	2	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05005	.00257	.05447	mg/L	104	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05005	.00257	.05502	mg/L	105	70	130	1	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	2		1.945	mg/L	97	95	105			
WG528695ICB	ICB	10/06/21 22:07				U	mg/L		-0.024	0.024			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	.999		.9948	mg/L	100	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	.999	.0743	1.068	mg/L	99	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	.999	.0743	1.066	mg/L	99	85	115	0	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	.999	.0741	1.03	mg/L	96	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	.999	.0741	1.033	mg/L	96	85	115	0	20	

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528894													
WG528894ICV	ICV	10/10/21 19:45	II211001-1	100		95.95	mg/L	96	95	105			
WG528894ICB	ICB	10/10/21 19:51				U	mg/L		-0.6	0.6			
WG528894LFB	LFB	10/10/21 20:04	II211012-1	49.99828		51.96	mg/L	104	85	115			
L68739-02AS	AS	10/10/21 20:25	II210930-2	49.99828	.9	54.05	mg/L	106	85	115			
L68739-02ASD	ASD	10/10/21 20:28	II210930-2	49.99828	.9	53.69	mg/L	106	85	115	1	20	
L68739-13AS	AS	10/10/21 21:18	II210930-2	49.99828	.89	54.28	mg/L	107	85	115			
L68739-13ASD	ASD	10/10/21 21:21	II210930-2	49.99828	.89	53.43	mg/L	105	85	115	2	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05095	mg/L	102	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00088	0.00088			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.0499		.04801	mg/L	96	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.0499	U	.04958	mg/L	99	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.0499	U	.05058	mg/L	101	70	130	2	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.0499	36.6	36.17547	mg/L	-851	70	130			M3
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.0499	36.6	36.07691	mg/L	-1048	70	130	0	20	M3
WG529580													
WG529580ICV	ICV	10/15/21 15:16	MS211013-2	.05		.05208	mg/L	104	90	110			
WG529580ICB	ICB	10/15/21 15:17				U	mg/L		-0.00088	0.00088			
WG529580LFB	LFB	10/15/21 15:19	MS210927-3	.0499		.05458	mg/L	109	85	115			
L68739-13AS	AS	10/15/21 15:30	MS210927-3	.0998	.00308	.11043	mg/L	108	70	130			
L68739-13ASD	ASD	10/15/21 15:32	MS210927-3	.0998	.00308	.11205	mg/L	109	70	130	1	20	

Mercury, dissolved M1631E, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523056													
WG523056ICV1	ICV	07/13/21 11:31	HG210709-4	10		10.2	ng/L	102	79	121			
WG523056ICB1	ICB	07/13/21 11:36				U	ng/L		-0.501	0.501			
WG528825													
WG528825CCV1	CCV	10/07/21 9:37	HG210709-4	10		10	ng/L	100	76.5	123.4			
WG528825CCB1	CCB	10/07/21 9:42				U	ng/L		-0.501	0.501			
WG528825PQV	PQV	10/07/21 9:47	HG210709-6	1		.88	ng/L	88	70	130			
WG528825LFB	LFB	10/07/21 9:52	HG210709-5	2		1.88	ng/L	94	71	125			
L68736-12MS	MS	10/07/21 10:01	HG16315X	50	35	46.4	ng/L	114	71	125			
L68736-12MSD	MSD	10/07/21 10:06	HG16315X	50	35	48.75	ng/L	138	71	125	5	24	MA
WG528825CCV2	CCV	10/07/21 10:39	HG210709-4	10		10.5	ng/L	105	76.5	123.4			
WG528825CCB2	CCB	10/07/21 10:44				U	ng/L		-0.501	0.501			
WG528825CCV3	CCV	10/07/21 12:14	HG210709-4	10		10.5	ng/L	105	76.5	123.4			
WG528825CCB3	CCB	10/07/21 12:18				U	ng/L		-0.501	0.501			
L68739-11MS	MS	10/07/21 12:35	HG163110X	200	56	69.3	ng/L	67	71	125			MA
L68739-11MSD	MSD	10/07/21 12:39	HG163110X	200	56	73.9	ng/L	90	71	125	6	24	
WG528825CCV4	CCV	10/07/21 13:13	HG210709-4	10		9.98	ng/L	100	76.5	123.4			
WG528825CCB4	CCB	10/07/21 13:18				U	ng/L		-0.501	0.501			

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.01992		.02054	mg/L	103	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00044	0.00044			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05005		.04763	mg/L	95	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05005	.00474	.05555	mg/L	102	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05005	.00474	.05543	mg/L	101	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05005	U	.05063	mg/L	101	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05005	U	.05211	mg/L	104	70	130	3	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.0513	mg/L	103	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00088	0.00088			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05		.04595	mg/L	92	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05	U	.04561	mg/L	91	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05	U	.04602	mg/L	92	70	130	1	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05	.135	.17037	mg/L	71	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05	.135	.17008	mg/L	70	70	130	0	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529516													
WG529516ICV	ICV	10/14/21 22:34	WI210904-1	2.4161		2.376	mg/L	98	90	110			
WG529516ICB	ICB	10/14/21 22:36				U	mg/L		-0.02	0.02			
WG529523													
WG529523LFB	LFB	10/15/21 2:59	WI211001-5	2		2.001	mg/L	100	90	110			
L68739-01AS	AS	10/15/21 3:02	WI211001-5	2	.673	2.721	mg/L	102	90	110			
L68739-11AS	AS	10/15/21 3:22	WI211001-5	2	.665	2.646	mg/L	99	90	110			
L68739-12DUP	DUP	10/15/21 3:24			.642	.642	mg/L				0	20	
L68739-02DUP	DUP	10/15/21 3:33			.662	.658	mg/L				1	20	

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW1	LCSW	09/28/21 20:28	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW4	LCSW	09/28/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
L68739-03DUP	DUP	09/29/21 3:19			8.5	8.5	units				0	20	
WG528211LCSW7	LCSW	09/29/21 3:24	PCN62948	6		6.1	units	102	5.9	6.1			
L68739-13DUP	DUP	09/29/21 5:31			8.5	8.5	units				0	20	
L68740-09DUP	DUP	09/29/21 7:15			8.6	8.6	units				0	20	
WG528211LCSW10	LCSW	09/29/21 7:20	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW13	LCSW	09/29/21 11:08	PCN62948	6		6.1	units	102	5.9	6.1			

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529815													
WG529815ICV	ICV	10/24/21 19:25	WI210831-6	.65228		.673	mg/L	103	90	110			
WG529815ICB	ICB	10/24/21 19:27				U	mg/L		-0.01	0.01			
WG528249LRB	LRB	10/24/21 19:29				U	mg/L		-0.01	0.01			
WG528249LFB	LFB	10/24/21 19:30	WI210921-12	.5		.47	mg/L	94	90	110			
L68739-01LFM	LFM	10/24/21 19:32	WI210921-12	.5	.061	.537	mg/L	95	90	110			
L68739-02DUP	DUP	10/24/21 19:34			U	.056	mg/L				200	20	RA
L68739-11LFM	LFM	10/24/21 19:47	WI210921-12	.5	.057	.532	mg/L	95	90	110			
L68739-12DUP	DUP	10/24/21 19:49			.065	.063	mg/L				3	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	20		19.41	mg/L	97	95	105			
WG528695ICB	ICB	10/06/21 22:07				U	mg/L		-0.6	0.6			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	99.96008		100.8	mg/L	101	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	99.96008	4.35	106.5	mg/L	102	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	99.96008	4.35	106.6	mg/L	102	85	115	0	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	99.96008	4.01	105.1	mg/L	101	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	99.96008	4.01	103.7	mg/L	100	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527955													
WG527955PBW	PBW	09/24/21 10:20				U	mg/L		-20	20			
WG527955LCSW	LCSW	09/24/21 10:22	PCN64132	1000		998	mg/L	100	80	120			
L68739-04DUP	DUP	09/24/21 10:51			206	218	mg/L				6	10	
L68739-14DUP	DUP	09/24/21 11:20			224	218	mg/L				3	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	2		1.934	mg/L	97	95	105			
WG528695ICB	ICB	10/06/21 22:07				U	mg/L		-0.15	0.15			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	1.0017		1.036	mg/L	103	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	1.0017	U	1.039	mg/L	104	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	1.0017	U	1.034	mg/L	103	85	115	0	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	1.0017	U	1.005	mg/L	100	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	1.0017	U	.999	mg/L	100	85	115	1	20	

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.0506	mg/L	101	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00022	0.00022			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05		.04517	mg/L	90	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05	.00047	.04988	mg/L	99	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05	.00047	.04786	mg/L	95	70	130	4	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05	.00299	.05096	mg/L	96	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05	.00299	.05182	mg/L	98	70	130	2	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.02		.01947	mg/L	97	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00022	0.00022			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.01		.00965	mg/L	97	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.01	U	.00714	mg/L	71	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.01	U	.00696	mg/L	70	70	130	3	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.01	.00055	.00893	mg/L	84	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.01	.00055	.00924	mg/L	87	70	130	3	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	100		98.6	mg/L	99	95	105			
WG528695ICB	ICB	10/06/21 22:07				U	mg/L		-0.6	0.6			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	100.007		101.5	mg/L	101	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	100.007	58.7	158.8	mg/L	100	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	100.007	58.7	159.3	mg/L	101	85	115	0	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	100.007	58.4	150.7	mg/L	92	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	100.007	58.4	152.4	mg/L	94	85	115	1	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	2		1.9215	mg/L	96	95	105			
WG528695ICB	ICB	10/06/21 22:07				U	mg/L		-0.027	0.027			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	.5005		.5449	mg/L	109	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	.5005	.0485	.5965	mg/L	109	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	.5005	.0485	.5955	mg/L	109	85	115	0	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	.5005	.0555	.5909	mg/L	107	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	.5005	.0555	.5878	mg/L	106	85	115	1	20	

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	51.15		50.79	mg/L	99	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.4	0.4			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	30		30.46	mg/L	102	90	110			
L68736-11DUP	DUP	10/05/21 21:04			22.4	22.45	mg/L				0	20	
L68736-12AS	AS	10/05/21 21:40	WI210907-6	30	22.1	51.66	mg/L	99	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	30		29.97	mg/L	100	90	110			
L68739-07DUP	DUP	10/06/21 1:33			22.5	22.45	mg/L				0	20	
L68739-08AS	AS	10/06/21 2:44	WI210907-6	30	22.5	52.11	mg/L	99	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05242	mg/L	105	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00022	0.00022			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05		.0478	mg/L	96	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05	U	.05116	mg/L	102	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05	U	.05111	mg/L	102	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05	.00203	.05404	mg/L	104	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05	.00203	.05462	mg/L	105	70	130	1	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05264	mg/L	105	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00176	0.00176			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05005		.04714	mg/L	94	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05005	.0112	.05937	mg/L	96	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05005	.0112	.05944	mg/L	96	70	130	0	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05005	.00247	.04681	mg/L	89	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05005	.00247	.04811	mg/L	91	70	130	3	20	
WG529580													
WG529580ICV	ICV	10/15/21 15:16	MS211013-2	.05		.04998	mg/L	100	90	110			
WG529580ICB	ICB	10/15/21 15:17				U	mg/L		-0.00176	0.00176			
WG529580LFB	LFB	10/15/21 15:19	MS210927-3	.05005		.05353	mg/L	107	85	115			
L68739-13AS	AS	10/15/21 15:30	MS210927-3	.1001	.248	.35236	mg/L	104	70	130			
L68739-13ASD	ASD	10/15/21 15:32	MS210927-3	.1001	.248	.35637	mg/L	108	70	130	1	20	

WETLAB

ACZ Project ID: ***L68739***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528695													
WG528695ICV	ICV	10/06/21 22:02	II211001-1	2		1.9592	mg/L	98	95	105			
WG528695ICB	ICB	10/06/21 22:07				U	mg/L		-0.015	0.015			
WG528695LFB	LFB	10/06/21 22:20	II210930-2	1		1.028	mg/L	103	85	115			
L68739-02AS	AS	10/06/21 22:41	II210930-2	1	U	1.046	mg/L	105	85	115			
L68739-02ASD	ASD	10/06/21 22:44	II210930-2	1	U	1.055	mg/L	106	85	115	1	20	
L68739-13AS	AS	10/06/21 23:32	II210930-2	1	U	1.009	mg/L	101	85	115			
L68739-13ASD	ASD	10/06/21 23:35	II210930-2	1	U	1.011	mg/L	101	85	115	0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.05252	mg/L	105	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.00022	0.00022			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05		.04938	mg/L	99	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05	.00019	.05292	mg/L	105	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05	.00019	.05201	mg/L	104	70	130	2	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05	.677	.70666	mg/L	59	70	130			M3
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05	.677	.70634	mg/L	59	70	130	0	20	M3

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.04783	mg/L	96	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.0011	0.0011			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.05		.0454	mg/L	91	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.05	.00109	.04828	mg/L	94	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.05	.00109	.04871	mg/L	95	70	130	1	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.05	.00424	.04365	mg/L	79	70	130			
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.05	.00424	.04438	mg/L	80	70	130	2	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529457													
WG529457ICV	ICV	10/14/21 18:50	MS211013-2	.05		.0505	mg/L	101	90	110			
WG529457ICB	ICB	10/14/21 18:51				U	mg/L		-0.0132	0.0132			
WG529457LFB	LFB	10/14/21 18:53	MS210927-3	.050075		.0511	mg/L	102	85	115			
L68739-05AS	AS	10/14/21 19:13	MS210927-3	.050075	U	.0557	mg/L	111	70	130			
L68739-05ASD	ASD	10/14/21 19:14	MS210927-3	.050075	U	.0561	mg/L	112	70	130	1	20	
L68800-01AS	AS	10/14/21 19:36	MS210927-3	.050075	.841	.8579	mg/L	34	70	130			M3
L68800-01ASD	ASD	10/14/21 19:37	MS210927-3	.050075	.841	.8797	mg/L	77	70	130	3	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68739***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68739-01	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68739-02	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68739-03	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68739-04	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68739-05	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68739-06	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.

Western Environmental Testing Laboratory ACZ Project ID: ***L68739***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68739-07	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68739-08	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68739***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68739-09	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68739-10	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68739***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68739-11	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68739-12	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Manganese, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [< MDL].
			M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68739***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68739-13	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG529580	Manganese, dissolved	M200.8 ICP-MS	D1	Sample required dilution due to matrix.
			M200.8 ICP-MS	D2	Sample required dilution. Target analyte exceeded calibration range.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68739-14	WG529457	Aluminum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Copper, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528825	Mercury, dissolved	M1631E, Atomic Fluorescence	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG529815	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	H1	Sample prep or analysis performed past holding time. See case narrative.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527955	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG529457	Uranium, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
		Zinc, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography
Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68739
Date Received: 09/23/2021 12:18
Received By:
Date Printed: 9/24/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?		X	
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA36033	0.4	<=6.0	15	N/A
NA36031	-0.6	<=6.0	15	N/A
NA36032	1.4	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID:	L68739
Date Received:	09/23/2021 12:18
Received By:	
Date Printed:	9/24/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68739

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material?

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D)1631							
21090518-001	9/17/2021 13:00	OT	4	✓	✓							
21090518-002				✓	✓							
21090518-003				✓	✓							
21090518-004				✓	✓							
21090518-005				✓	✓							
21090518-006				✓	✓							
21090518-007				✓	✓							
21090518-008				✓	✓							
21090518-009				✓	✓							
21090518-010				✓	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Kimi Lee	9/22 1:00		9/23/21 12:19

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68739 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68739

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: reporting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name: Accounting	Address: 475 E Greg St, Suite 119
Company: Western Environmental Testing Laboratory	Sparks, NV 89431
E-mail: accounting@wetlaboratory.com	Telephone: (775)355-0202

Copy of Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	1631							
21090518-011	9/17/2021 13:00	OT	4	✓	✓							
21090518-012	"	"	"	✓	✓							
21090518-013	"	"	"	✓	✓							
21090518-014	"	"	"	✓	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Kim Jane	9/22 1:w	[illegible] 9/23/21	12:19

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Mercury, dissolved	M1631E, Atomic Fluorescence	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-001

ACZ Sample ID: ***L68740-01***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 13:27	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0121	B	*	mg/L	0.005	0.015	10/14/21 14:29	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:29	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00608		*	mg/L	0.0002	0.001	10/14/21 14:29	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0197		*	mg/L	0.0005	0.0025	10/14/21 14:29	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:29	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 9:58	jlw
Boron, dissolved	M200.7 ICP	1	0.090	B	*	mg/L	0.03	0.1	10/06/21 9:58	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:29	bsu
Calcium, dissolved	M200.7 ICP	1	9.61		*	mg/L	0.1	0.5	10/06/21 9:58	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00068	B	*	mg/L	0.0005	0.002	10/14/21 14:29	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000054	B	*	mg/L	0.00005	0.00025	10/14/21 14:29	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:29	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 9:58	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0338		*	mg/L	0.007	0.02	10/14/21 14:29	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:29	bsu
Lithium, dissolved	M200.7 ICP	1	0.0786		*	mg/L	0.008	0.04	10/06/21 9:58	jlw
Magnesium, dissolved	M200.7 ICP	1	0.74	B	*	mg/L	0.2	1	10/06/21 9:58	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00045	B	*	mg/L	0.0004	0.002	10/14/21 14:29	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:20	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00442		*	mg/L	0.0002	0.0005	10/14/21 14:29	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:29	bsu
Potassium, dissolved	M200.7 ICP	1	5.67		*	mg/L	0.2	1	10/06/21 9:58	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 9:58	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.00025	10/14/21 14:29	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:29	bsu
Sodium, dissolved	M200.7 ICP	1	61.1		*	mg/L	0.2	1	10/06/21 9:58	jlw
Strontium, dissolved	M200.7 ICP	1	0.0463		*	mg/L	0.009	0.045	10/06/21 9:58	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:29	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0105		*	mg/L	0.0008	0.0025	10/14/21 14:29	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 17:34	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	10/14/21 14:29	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00157	B	*	mg/L	0.0005	0.002	10/14/21 14:29	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:29	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-001

ACZ Sample ID: ***L68740-01***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	96.7		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	26.1		*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	123		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.87		*	mg/L	0.4	2	10/06/21 4:50	krh
Conductivity @25C	SM2510B	1	320		*	umhos/cm	1	10	09/29/21 5:50	eep
Fluoride	M300.0 - Ion Chromatography	1	0.533		*	mg/L	0.05	0.25	10/06/21 4:50	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		27.0			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.674			mg/L	0.02	0.1	10/14/21 2:44	pjb
pH (lab)	SM4500H+ B									
pH		1	9.1	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.047	B	*	mg/L	0.01	0.05	10/13/21 12:08	syw
Residue, Filterable (TDS) @180C	SM2540C	1	218		*	mg/L	20	40	09/23/21 18:45	jck
Sulfate	M300.0 - Ion Chromatography	1	22.1		*	mg/L	0.4	2	10/06/21 4:50	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-002

ACZ Sample ID: ***L68740-02***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 13:38	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0106	B	*	mg/L	0.005	0.015	10/14/21 14:31	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:31	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00610		*	mg/L	0.0002	0.001	10/14/21 14:31	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0174		*	mg/L	0.0005	0.0025	10/14/21 14:31	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:31	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:01	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/06/21 10:01	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:31	bsu
Calcium, dissolved	M200.7 ICP	1	10.5		*	mg/L	0.1	0.5	10/06/21 10:01	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:31	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:31	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:31	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:01	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0331		*	mg/L	0.007	0.02	10/14/21 14:31	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:31	bsu
Lithium, dissolved	M200.7 ICP	1	0.0771		*	mg/L	0.008	0.04	10/06/21 10:01	jlw
Magnesium, dissolved	M200.7 ICP	1	0.75	B	*	mg/L	0.2	1	10/06/21 10:01	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:31	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:21	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00445		*	mg/L	0.0002	0.0005	10/14/21 14:31	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:31	bsu
Potassium, dissolved	M200.7 ICP	1	5.28		*	mg/L	0.2	1	10/06/21 10:01	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:01	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00052		*	mg/L	0.0001	0.00025	10/14/21 14:31	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:31	bsu
Sodium, dissolved	M200.7 ICP	1	60.7		*	mg/L	0.2	1	10/06/21 10:01	jlw
Strontium, dissolved	M200.7 ICP	1	0.0464		*	mg/L	0.009	0.045	10/06/21 10:01	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:31	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00957		*	mg/L	0.0008	0.0025	10/14/21 14:31	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 17:38	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	10/14/21 14:31	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00125	B	*	mg/L	0.0005	0.002	10/14/21 14:31	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:31	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-002

ACZ Sample ID: ***L68740-02***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	19.5	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	139		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.90		*	mg/L	0.4	2	10/06/21 5:08	krh
Conductivity @25C	SM2510B	1	323		*	umhos/cm	1	10	09/29/21 6:00	eep
Fluoride	M300.0 - Ion Chromatography	1	0.547		*	mg/L	0.05	0.25	10/06/21 5:08	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		29			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.687			mg/L	0.02	0.1	10/14/21 2:50	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.055		*	mg/L	0.01	0.05	10/13/21 12:11	syw
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/23/21 18:48	jck
Sulfate	M300.0 - Ion Chromatography	1	22.3		*	mg/L	0.4	2	10/06/21 5:08	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-003

ACZ Sample ID: ***L68740-03***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 13:49	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0067	B	*	mg/L	0.005	0.015	10/14/21 14:35	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:35	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00664		*	mg/L	0.0002	0.001	10/14/21 14:35	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0144		*	mg/L	0.0005	0.0025	10/14/21 14:35	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:35	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:04	jlw
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/06/21 10:04	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:35	bsu
Calcium, dissolved	M200.7 ICP	1	11.4		*	mg/L	0.1	0.5	10/06/21 10:04	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00319		*	mg/L	0.0005	0.002	10/14/21 14:35	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000051	B	*	mg/L	0.00005	0.00025	10/14/21 14:35	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:35	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:04	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0645		*	mg/L	0.007	0.02	10/14/21 14:35	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:35	bsu
Lithium, dissolved	M200.7 ICP	1	0.0731		*	mg/L	0.008	0.04	10/06/21 10:04	jlw
Magnesium, dissolved	M200.7 ICP	1	0.62	B	*	mg/L	0.2	1	10/06/21 10:04	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00147	B	*	mg/L	0.0004	0.002	10/14/21 14:35	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:22	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00470		*	mg/L	0.0002	0.0005	10/14/21 14:35	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:35	bsu
Potassium, dissolved	M200.7 ICP	1	3.53		*	mg/L	0.2	1	10/06/21 10:04	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:04	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00051		*	mg/L	0.0001	0.00025	10/14/21 14:35	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:35	bsu
Sodium, dissolved	M200.7 ICP	1	60.0		*	mg/L	0.2	1	10/06/21 10:04	jlw
Strontium, dissolved	M200.7 ICP	1	0.0492		*	mg/L	0.009	0.045	10/06/21 10:04	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:35	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0114		*	mg/L	0.0008	0.0025	10/14/21 14:35	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 17:41	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00021	B	*	mg/L	0.0001	0.0005	10/14/21 14:35	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00120	B	*	mg/L	0.0005	0.002	10/14/21 14:35	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:35	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-003

ACZ Sample ID: ***L68740-03***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	115		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	124		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.97		*	mg/L	0.4	2	10/07/21 18:11	krh
Conductivity @25C	SM2510B	1	324		*	umhos/cm	1	10	09/29/21 6:09	eep
Fluoride	M300.0 - Ion Chromatography	1	0.505		*	mg/L	0.05	0.25	10/07/21 18:11	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		31.0			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.694			mg/L	0.02	0.1	10/14/21 2:51	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.1		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.054		*	mg/L	0.01	0.05	10/13/21 12:13	syw
Residue, Filterable (TDS) @180C	SM2540C	1	224		*	mg/L	20	40	09/23/21 18:51	jck
Sulfate	M300.0 - Ion Chromatography	1	23.1		*	mg/L	0.4	2	10/07/21 18:11	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-004

ACZ Sample ID: ***L68740-04***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 13:54	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0071	B	*	mg/L	0.005	0.015	10/14/21 14:37	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:37	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00638		*	mg/L	0.0002	0.001	10/14/21 14:37	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0136		*	mg/L	0.0005	0.0025	10/14/21 14:37	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:37	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:14	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/06/21 10:14	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:37	bsu
Calcium, dissolved	M200.7 ICP	1	10.9		*	mg/L	0.1	0.5	10/06/21 10:14	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00106	B	*	mg/L	0.0005	0.002	10/14/21 14:37	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000059	B	*	mg/L	0.00005	0.00025	10/14/21 14:37	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:37	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:14	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0427		*	mg/L	0.007	0.02	10/14/21 14:37	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:37	bsu
Lithium, dissolved	M200.7 ICP	1	0.0750		*	mg/L	0.008	0.04	10/06/21 10:14	jlw
Magnesium, dissolved	M200.7 ICP	1	0.66	B	*	mg/L	0.2	1	10/06/21 10:14	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0004	0.002	10/14/21 14:37	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:23	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00451		*	mg/L	0.0002	0.0005	10/14/21 14:37	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:37	bsu
Potassium, dissolved	M200.7 ICP	1	3.58		*	mg/L	0.2	1	10/06/21 10:14	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:14	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00050		*	mg/L	0.0001	0.00025	10/14/21 14:37	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:37	bsu
Sodium, dissolved	M200.7 ICP	1	59.9		*	mg/L	0.2	1	10/06/21 10:14	jlw
Strontium, dissolved	M200.7 ICP	1	0.0481		*	mg/L	0.009	0.045	10/06/21 10:14	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:37	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00952		*	mg/L	0.0008	0.0025	10/14/21 14:37	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 17:51	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00020	B	*	mg/L	0.0001	0.0005	10/14/21 14:37	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00088	B	*	mg/L	0.0005	0.002	10/14/21 14:37	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:37	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-004

ACZ Sample ID: ***L68740-04***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	115		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	7.3	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.97		*	mg/L	0.4	2	10/07/21 19:23	krh
Conductivity @25C	SM2510B	1	319		*	umhos/cm	1	10	09/29/21 6:18	eep
Fluoride	M300.0 - Ion Chromatography	1	0.506		*	mg/L	0.05	0.25	10/07/21 19:23	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		30			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.697			mg/L	0.02	0.1	10/14/21 2:52	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.0		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.052		*	mg/L	0.01	0.05	10/13/21 12:14	syw
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	09/23/21 18:53	jck
Sulfate	M300.0 - Ion Chromatography	1	22.4		*	mg/L	0.4	2	10/07/21 19:23	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-005

ACZ Sample ID: ***L68740-05***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:00	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0078	B	*	mg/L	0.005	0.015	10/14/21 14:39	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:39	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00642		*	mg/L	0.0002	0.001	10/14/21 14:39	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0155		*	mg/L	0.0005	0.0025	10/14/21 14:39	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:39	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:17	jlw
Boron, dissolved	M200.7 ICP	1	0.089	B	*	mg/L	0.03	0.1	10/06/21 10:17	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:39	bsu
Calcium, dissolved	M200.7 ICP	1	10.7		*	mg/L	0.1	0.5	10/06/21 10:17	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00160	B	*	mg/L	0.0005	0.002	10/14/21 14:39	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:39	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:39	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:17	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0482		*	mg/L	0.007	0.02	10/14/21 14:39	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:39	bsu
Lithium, dissolved	M200.7 ICP	1	0.0744		*	mg/L	0.008	0.04	10/06/21 10:17	jlw
Magnesium, dissolved	M200.7 ICP	1	0.65	B	*	mg/L	0.2	1	10/06/21 10:17	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00099	B	*	mg/L	0.0004	0.002	10/14/21 14:39	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:24	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00443		*	mg/L	0.0002	0.0005	10/14/21 14:39	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:39	bsu
Potassium, dissolved	M200.7 ICP	1	3.49		*	mg/L	0.2	1	10/06/21 10:17	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:17	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/14/21 14:39	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:39	bsu
Sodium, dissolved	M200.7 ICP	1	59.6		*	mg/L	0.2	1	10/06/21 10:17	jlw
Strontium, dissolved	M200.7 ICP	1	0.0461		*	mg/L	0.009	0.045	10/06/21 10:17	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:39	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00879		*	mg/L	0.0008	0.0025	10/14/21 14:39	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 17:54	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 14:39	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00102	B	*	mg/L	0.0005	0.002	10/14/21 14:39	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:39	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-005

ACZ Sample ID: ***L68740-05***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	114		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	7.0	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/07/21 19:59	krh
Conductivity @25C	SM2510B	1	318		*	umhos/cm	1	10	09/29/21 6:28	eep
Fluoride	M300.0 - Ion Chromatography	1	0.499		*	mg/L	0.05	0.25	10/07/21 19:59	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		29			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.704			mg/L	0.02	0.1	10/14/21 2:54	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.095		*	mg/L	0.01	0.05	10/13/21 12:15	syw
Residue, Filterable (TDS) @180C	SM2540C	1	218		*	mg/L	20	40	09/23/21 18:59	jck
Sulfate	M300.0 - Ion Chromatography	1	22.6		*	mg/L	0.4	2	10/07/21 19:59	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-006

ACZ Sample ID: ***L68740-06***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0136	B	*	mg/L	0.005	0.015	10/14/21 14:40	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:40	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00713		*	mg/L	0.0002	0.001	10/14/21 14:40	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0193		*	mg/L	0.0005	0.0025	10/14/21 14:40	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:40	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:21	jlw
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	10/06/21 10:21	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:40	bsu
Calcium, dissolved	M200.7 ICP	1	13.6		*	mg/L	0.1	0.5	10/06/21 10:21	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:40	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:40	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:40	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:21	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0480		*	mg/L	0.007	0.02	10/14/21 14:40	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:40	bsu
Lithium, dissolved	M200.7 ICP	1	0.0738		*	mg/L	0.008	0.04	10/06/21 10:21	jlw
Magnesium, dissolved	M200.7 ICP	1	0.78	B	*	mg/L	0.2	1	10/06/21 10:21	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00085	B	*	mg/L	0.0004	0.002	10/14/21 14:40	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:25	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00464		*	mg/L	0.0002	0.0005	10/14/21 14:40	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:40	bsu
Potassium, dissolved	M200.7 ICP	1	4.55		*	mg/L	0.2	1	10/06/21 10:21	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:21	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/14/21 14:40	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:40	bsu
Sodium, dissolved	M200.7 ICP	1	58.8		*	mg/L	0.2	1	10/06/21 10:21	jlw
Strontium, dissolved	M200.7 ICP	1	0.0513		*	mg/L	0.009	0.045	10/06/21 10:21	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:40	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00849		*	mg/L	0.0008	0.0025	10/14/21 14:40	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 17:57	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00016	B	*	mg/L	0.0001	0.0005	10/14/21 14:40	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:40	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:40	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-006

ACZ Sample ID: ***L68740-06***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.3	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	131		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.92		*	mg/L	0.4	2	10/07/21 20:17	krh
Conductivity @25C	SM2510B	1	332		*	umhos/cm	1	10	09/29/21 6:37	eep
Fluoride	M300.0 - Ion Chromatography	1	0.486		*	mg/L	0.05	0.25	10/07/21 20:17	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		37			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.691			mg/L	0.02	0.1	10/14/21 2:55	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.054		*	mg/L	0.01	0.05	10/13/21 12:16	syw
Residue, Filterable (TDS) @180C	SM2540C	1	226		*	mg/L	20	40	09/23/21 19:01	jck
Sulfate	M300.0 - Ion Chromatography	1	22.2		*	mg/L	0.4	2	10/07/21 20:17	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-007

ACZ Sample ID: ***L68740-07***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:10	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0075	B	*	mg/L	0.005	0.015	10/14/21 14:42	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:42	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00700		*	mg/L	0.0002	0.001	10/14/21 14:42	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0201		*	mg/L	0.0005	0.0025	10/14/21 14:42	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:42	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:24	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/06/21 10:24	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:42	bsu
Calcium, dissolved	M200.7 ICP	1	14.8		*	mg/L	0.1	0.5	10/06/21 10:24	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:42	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:42	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:42	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:24	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0453		*	mg/L	0.007	0.02	10/14/21 14:42	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:42	bsu
Lithium, dissolved	M200.7 ICP	1	0.0742		*	mg/L	0.008	0.04	10/06/21 10:24	jlw
Magnesium, dissolved	M200.7 ICP	1	0.81	B	*	mg/L	0.2	1	10/06/21 10:24	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00083	B	*	mg/L	0.0004	0.002	10/14/21 14:42	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:26	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00440		*	mg/L	0.0002	0.0005	10/14/21 14:42	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:42	bsu
Potassium, dissolved	M200.7 ICP	1	3.88		*	mg/L	0.2	1	10/06/21 10:24	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:24	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/14/21 14:42	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:42	bsu
Sodium, dissolved	M200.7 ICP	1	58.3		*	mg/L	0.2	1	10/06/21 10:24	jlw
Strontium, dissolved	M200.7 ICP	1	0.0519		*	mg/L	0.009	0.045	10/06/21 10:24	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:42	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00787		*	mg/L	0.0008	0.0025	10/14/21 14:42	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:00	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/14/21 14:42	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:42	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:42	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-007

ACZ Sample ID: ***L68740-07***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	124		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.7	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	133		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.92		*	mg/L	0.4	2	10/07/21 20:34	krh
Conductivity @25C	SM2510B	1	334		*	umhos/cm	1	10	09/29/21 6:47	eep
Fluoride	M300.0 - Ion Chromatography	1	0.489		*	mg/L	0.05	0.25	10/07/21 20:34	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		40			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.694			mg/L	0.02	0.1	10/14/21 2:57	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.8		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.099		*	mg/L	0.01	0.05	10/13/21 13:13	syw
Residue, Filterable (TDS) @180C	SM2540C	1	212		*	mg/L	20	40	09/23/21 19:04	jck
Sulfate	M300.0 - Ion Chromatography	1	22.0		*	mg/L	0.4	2	10/07/21 20:34	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-008

ACZ Sample ID: ***L68740-08***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:16	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0100	B	*	mg/L	0.005	0.015	10/14/21 14:44	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:44	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00721		*	mg/L	0.0002	0.001	10/14/21 14:44	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0182		*	mg/L	0.0005	0.0025	10/14/21 14:44	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:44	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:34	jlw
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	10/06/21 10:34	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:44	bsu
Calcium, dissolved	M200.7 ICP	1	14.0		*	mg/L	0.1	0.5	10/06/21 10:34	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:44	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:44	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:44	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:34	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0382		*	mg/L	0.007	0.02	10/14/21 14:44	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:44	bsu
Lithium, dissolved	M200.7 ICP	1	0.0733		*	mg/L	0.008	0.04	10/06/21 10:34	jlw
Magnesium, dissolved	M200.7 ICP	1	0.78	B	*	mg/L	0.2	1	10/06/21 10:34	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00066	B	*	mg/L	0.0004	0.002	10/14/21 14:44	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:31	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00456		*	mg/L	0.0002	0.0005	10/14/21 14:44	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:44	bsu
Potassium, dissolved	M200.7 ICP	1	4.29		*	mg/L	0.2	1	10/06/21 10:34	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:34	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00052		*	mg/L	0.0001	0.00025	10/14/21 14:44	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:44	bsu
Sodium, dissolved	M200.7 ICP	1	58.1		*	mg/L	0.2	1	10/06/21 10:34	jlw
Strontium, dissolved	M200.7 ICP	1	0.0512		*	mg/L	0.009	0.045	10/06/21 10:34	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:44	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00775		*	mg/L	0.0008	0.0025	10/14/21 14:44	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:10	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/14/21 14:44	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:44	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:44	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-008

ACZ Sample ID: ***L68740-08***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	123		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.6	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	132		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.93		*	mg/L	0.4	2	10/07/21 21:10	krh
Conductivity @25C	SM2510B	1	334		*	umhos/cm	1	10	09/29/21 6:56	eep
Fluoride	M300.0 - Ion Chromatography	1	0.492		*	mg/L	0.05	0.25	10/07/21 21:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		38			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.688			mg/L	0.02	0.1	10/14/21 3:00	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	22.9		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.058		*	mg/L	0.01	0.05	10/13/21 13:14	syw
Residue, Filterable (TDS) @180C	SM2540C	1	224		*	mg/L	20	40	09/23/21 19:06	jck
Sulfate	M300.0 - Ion Chromatography	1	22.1		*	mg/L	0.4	2	10/07/21 21:10	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-009

ACZ Sample ID: ***L68740-09***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:21	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0157		*	mg/L	0.005	0.015	10/14/21 14:48	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:48	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00787		*	mg/L	0.0002	0.001	10/14/21 14:48	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0164		*	mg/L	0.0005	0.0025	10/14/21 14:48	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:48	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:37	jlw
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/06/21 10:37	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:48	bsu
Calcium, dissolved	M200.7 ICP	1	13.3		*	mg/L	0.1	0.5	10/06/21 10:37	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:48	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000061	B	*	mg/L	0.00005	0.00025	10/14/21 14:48	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:48	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:37	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0432		*	mg/L	0.007	0.02	10/14/21 14:48	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:48	bsu
Lithium, dissolved	M200.7 ICP	1	0.0749		*	mg/L	0.008	0.04	10/06/21 10:37	jlw
Magnesium, dissolved	M200.7 ICP	1	0.74	B	*	mg/L	0.2	1	10/06/21 10:37	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00081	B	*	mg/L	0.0004	0.002	10/14/21 14:48	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:32	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00603		*	mg/L	0.0002	0.0005	10/14/21 14:48	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:48	bsu
Potassium, dissolved	M200.7 ICP	1	5.35		*	mg/L	0.2	1	10/06/21 10:37	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:37	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00054		*	mg/L	0.0001	0.00025	10/14/21 14:48	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:48	bsu
Sodium, dissolved	M200.7 ICP	1	58.8		*	mg/L	0.2	1	10/06/21 10:37	jlw
Strontium, dissolved	M200.7 ICP	1	0.0503		*	mg/L	0.009	0.045	10/06/21 10:37	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:48	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0114		*	mg/L	0.0008	0.0025	10/14/21 14:48	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:13	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00019	B	*	mg/L	0.0001	0.0005	10/14/21 14:48	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:48	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:48	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-009

ACZ Sample ID: ***L68740-09***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	123		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	10.0	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	133		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.95		*	mg/L	0.4	2	10/07/21 21:46	krh
Conductivity @25C	SM2510B	1	337		*	umhos/cm	1	10	09/29/21 7:06	eep
Fluoride	M300.0 - Ion Chromatography	1	0.489		*	mg/L	0.05	0.25	10/07/21 21:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		36			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.697			mg/L	0.02	0.1	10/14/21 3:07	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.0		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.057		*	mg/L	0.01	0.05	10/13/21 13:16	syw
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	09/23/21 19:09	jck
Sulfate	M300.0 - Ion Chromatography	1	22.2		*	mg/L	0.4	2	10/07/21 21:46	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-010

ACZ Sample ID: ***L68740-10***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:26	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0104	B	*	mg/L	0.005	0.015	10/14/21 14:50	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:50	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00698		*	mg/L	0.0002	0.001	10/14/21 14:50	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0185		*	mg/L	0.0005	0.0025	10/14/21 14:50	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:50	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:40	jlw
Boron, dissolved	M200.7 ICP	1	0.086	B	*	mg/L	0.03	0.1	10/06/21 10:40	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:50	bsu
Calcium, dissolved	M200.7 ICP	1	13.9		*	mg/L	0.1	0.5	10/06/21 10:40	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:50	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:50	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:50	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:40	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0389		*	mg/L	0.007	0.02	10/14/21 14:50	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:50	bsu
Lithium, dissolved	M200.7 ICP	1	0.0760		*	mg/L	0.008	0.04	10/06/21 10:40	jlw
Magnesium, dissolved	M200.7 ICP	1	0.80	B	*	mg/L	0.2	1	10/06/21 10:40	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00078	B	*	mg/L	0.0004	0.002	10/14/21 14:50	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:32	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00484		*	mg/L	0.0002	0.0005	10/14/21 14:50	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:50	bsu
Potassium, dissolved	M200.7 ICP	1	4.69		*	mg/L	0.2	1	10/06/21 10:40	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:40	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00049		*	mg/L	0.0001	0.00025	10/14/21 14:50	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:50	bsu
Sodium, dissolved	M200.7 ICP	1	59.2		*	mg/L	0.2	1	10/06/21 10:40	jlw
Strontium, dissolved	M200.7 ICP	1	0.0533		*	mg/L	0.009	0.045	10/06/21 10:40	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:50	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00950		*	mg/L	0.0008	0.0025	10/14/21 14:50	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:17	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/14/21 14:50	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:50	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:50	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-010

ACZ Sample ID: ***L68740-10***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	124		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	6.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	131		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.94		*	mg/L	0.4	2	10/07/21 22:04	krh
Conductivity @25C	SM2510B	1	333		*	umhos/cm	1	10	09/29/21 7:52	eep
Fluoride	M300.0 - Ion Chromatography	1	0.484		*	mg/L	0.05	0.25	10/07/21 22:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		38.0			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.698			mg/L	0.02	0.1	10/14/21 3:08	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.054		*	mg/L	0.01	0.05	10/13/21 13:17	syw
Residue, Filterable (TDS) @180C	SM2540C	1	226		*	mg/L	20	40	09/23/21 19:12	jck
Sulfate	M300.0 - Ion Chromatography	1	21.8		*	mg/L	0.4	2	10/07/21 22:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-011

ACZ Sample ID: ***L68740-11***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:32	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	<0.005	U	*	mg/L	0.005	0.015	10/14/21 14:52	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:52	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00695		*	mg/L	0.0002	0.001	10/14/21 14:52	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0197		*	mg/L	0.0005	0.0025	10/14/21 14:52	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:52	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:43	jlw
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	10/06/21 10:43	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:52	bsu
Calcium, dissolved	M200.7 ICP	1	15.2		*	mg/L	0.1	0.5	10/06/21 10:43	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:52	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:52	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:52	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:43	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0434		*	mg/L	0.007	0.02	10/14/21 14:52	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:52	bsu
Lithium, dissolved	M200.7 ICP	1	0.0757		*	mg/L	0.008	0.04	10/06/21 10:43	jlw
Magnesium, dissolved	M200.7 ICP	1	0.83	B	*	mg/L	0.2	1	10/06/21 10:43	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00083	B	*	mg/L	0.0004	0.002	10/14/21 14:52	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:33	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00474		*	mg/L	0.0002	0.0005	10/14/21 14:52	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:52	bsu
Potassium, dissolved	M200.7 ICP	1	4.37		*	mg/L	0.2	1	10/06/21 10:43	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:43	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/14/21 14:52	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:52	bsu
Sodium, dissolved	M200.7 ICP	1	59.8		*	mg/L	0.2	1	10/06/21 10:43	jlw
Strontium, dissolved	M200.7 ICP	1	0.0556		*	mg/L	0.009	0.045	10/06/21 10:43	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:52	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00961		*	mg/L	0.0008	0.0025	10/14/21 14:52	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:20	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/14/21 14:52	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:52	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:52	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-011

ACZ Sample ID: ***L68740-11***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	127		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	7.6	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	135		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.97		*	mg/L	0.4	2	10/07/21 22:58	krh
Conductivity @25C	SM2510B	1	341		*	umhos/cm	1	10	09/29/21 8:01	eep
Fluoride	M300.0 - Ion Chromatography	1	0.493		*	mg/L	0.05	0.25	10/07/21 22:58	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		41			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.707			mg/L	0.02	0.1	10/14/21 3:09	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.070		*	mg/L	0.01	0.05	10/13/21 13:18	syw
Residue, Filterable (TDS) @180C	SM2540C	1	224		*	mg/L	20	40	09/23/21 19:14	jck
Sulfate	M300.0 - Ion Chromatography	1	22.3		*	mg/L	0.4	2	10/07/21 22:58	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-012

ACZ Sample ID: ***L68740-12***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:43	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0169		*	mg/L	0.005	0.015	10/14/21 14:53	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:53	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00680		*	mg/L	0.0002	0.001	10/14/21 14:53	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0181		*	mg/L	0.0005	0.0025	10/14/21 14:53	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:53	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:47	jlw
Boron, dissolved	M200.7 ICP	1	0.083	B	*	mg/L	0.03	0.1	10/06/21 10:47	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:53	bsu
Calcium, dissolved	M200.7 ICP	1	11.8		*	mg/L	0.1	0.5	10/06/21 10:47	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:53	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000053	B	*	mg/L	0.00005	0.00025	10/14/21 14:53	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:53	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:47	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0439		*	mg/L	0.007	0.02	10/14/21 14:53	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:53	bsu
Lithium, dissolved	M200.7 ICP	1	0.0756		*	mg/L	0.008	0.04	10/06/21 10:47	jlw
Magnesium, dissolved	M200.7 ICP	1	0.72	B	*	mg/L	0.2	1	10/06/21 10:47	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00082	B	*	mg/L	0.0004	0.002	10/14/21 14:53	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:34	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00475		*	mg/L	0.0002	0.0005	10/14/21 14:53	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:53	bsu
Potassium, dissolved	M200.7 ICP	1	4.35		*	mg/L	0.2	1	10/06/21 10:47	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:47	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00053		*	mg/L	0.0001	0.00025	10/14/21 14:53	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:53	bsu
Sodium, dissolved	M200.7 ICP	1	59.0		*	mg/L	0.2	1	10/06/21 10:47	jlw
Strontium, dissolved	M200.7 ICP	1	0.0509		*	mg/L	0.009	0.045	10/06/21 10:47	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:53	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0120		*	mg/L	0.0008	0.0025	10/14/21 14:53	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:23	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00017	B	*	mg/L	0.0001	0.0005	10/14/21 14:53	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:53	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:53	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-012

ACZ Sample ID: ***L68740-12***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	116		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	10.4	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	126		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.87		*	mg/L	0.4	2	10/07/21 23:16	krh
Conductivity @25C	SM2510B	1	325		*	umhos/cm	1	10	09/29/21 8:10	eep
Fluoride	M300.0 - Ion Chromatography	1	0.473		*	mg/L	0.05	0.25	10/07/21 23:16	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		32			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.674			mg/L	0.02	0.1	10/14/21 3:10	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.1		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.061		*	mg/L	0.01	0.05	10/13/21 13:20	syw
Residue, Filterable (TDS) @180C	SM2540C	1	218		*	mg/L	20	40	09/23/21 19:17	jck
Sulfate	M300.0 - Ion Chromatography	1	21.5		*	mg/L	0.4	2	10/07/21 23:16	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-013

ACZ Sample ID: ***L68740-13***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:53	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0091	B	*	mg/L	0.005	0.015	10/14/21 14:58	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 14:58	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00699		*	mg/L	0.0002	0.001	10/14/21 14:58	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0255		*	mg/L	0.0005	0.0025	10/14/21 14:58	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 14:58	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:50	jlw
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	10/06/21 10:50	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 14:58	bsu
Calcium, dissolved	M200.7 ICP	1	15.8		*	mg/L	0.1	0.5	10/06/21 10:50	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:58	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000073	B	*	mg/L	0.00005	0.00025	10/14/21 14:58	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 14:58	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:50	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0703		*	mg/L	0.007	0.02	10/14/21 14:58	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:58	bsu
Lithium, dissolved	M200.7 ICP	1	0.0761		*	mg/L	0.008	0.04	10/06/21 10:50	jlw
Magnesium, dissolved	M200.7 ICP	1	0.84	B	*	mg/L	0.2	1	10/06/21 10:50	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00429		*	mg/L	0.0004	0.002	10/14/21 14:58	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:35	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00435		*	mg/L	0.0002	0.0005	10/14/21 14:58	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 14:58	bsu
Potassium, dissolved	M200.7 ICP	1	4.19		*	mg/L	0.2	1	10/06/21 10:50	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:50	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00070		*	mg/L	0.0001	0.00025	10/14/21 14:58	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:58	bsu
Sodium, dissolved	M200.7 ICP	1	59.7		*	mg/L	0.2	1	10/06/21 10:50	jlw
Strontium, dissolved	M200.7 ICP	1	0.0583		*	mg/L	0.009	0.045	10/06/21 10:50	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 14:58	bsu
Tin, dissolved	M200.8 ICP-MS	2	0.260		*	mg/L	0.0016	0.005	10/15/21 15:35	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:26	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 14:58	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 14:58	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 14:58	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-013

ACZ Sample ID: ***L68740-13***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	127		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	8.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	136		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/07/21 23:34	krh
Conductivity @25C	SM2510B	1	340		*	umhos/cm	1	10	09/29/21 8:20	eep
Fluoride	M300.0 - Ion Chromatography	1	0.492		*	mg/L	0.05	0.25	10/07/21 23:34	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		43			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.465			mg/L	0.02	0.1	10/14/21 3:12	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.0		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.039	B	*	mg/L	0.01	0.05	10/13/21 13:22	syw
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	09/23/21 19:19	jck
Sulfate	M300.0 - Ion Chromatography	1	21.9		*	mg/L	0.4	2	10/07/21 23:34	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-014

ACZ Sample ID: ***L68740-14***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/01/21 14:59	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0068	B	*	mg/L	0.005	0.015	10/14/21 15:00	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 15:00	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00680		*	mg/L	0.0002	0.001	10/14/21 15:00	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0204		*	mg/L	0.0005	0.0025	10/14/21 15:00	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 15:00	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/06/21 10:53	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/06/21 10:53	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 15:00	bsu
Calcium, dissolved	M200.7 ICP	1	15.3		*	mg/L	0.1	0.5	10/06/21 10:53	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 15:00	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	0.000056	B	*	mg/L	0.00005	0.00025	10/14/21 15:00	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 15:00	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/06/21 10:53	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0380		*	mg/L	0.007	0.02	10/14/21 15:00	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 15:00	bsu
Lithium, dissolved	M200.7 ICP	1	0.0770		*	mg/L	0.008	0.04	10/06/21 10:53	jlw
Magnesium, dissolved	M200.7 ICP	1	0.82	B	*	mg/L	0.2	1	10/06/21 10:53	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00073	B	*	mg/L	0.0004	0.002	10/14/21 15:00	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/29/21 13:36	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00447		*	mg/L	0.0002	0.0005	10/14/21 15:00	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 15:00	bsu
Potassium, dissolved	M200.7 ICP	1	4.63		*	mg/L	0.2	1	10/06/21 10:53	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/06/21 10:53	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00048		*	mg/L	0.0001	0.00025	10/14/21 15:00	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 15:00	bsu
Sodium, dissolved	M200.7 ICP	1	60.0		*	mg/L	0.2	1	10/06/21 10:53	jlw
Strontium, dissolved	M200.7 ICP	1	0.0545		*	mg/L	0.009	0.045	10/06/21 10:53	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 15:00	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.0105		*	mg/L	0.0008	0.0025	10/14/21 15:00	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/06/21 18:30	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00018	B	*	mg/L	0.0001	0.0005	10/14/21 15:00	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 15:00	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 15:00	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 210090517-014

ACZ Sample ID: ***L68740-14***
Date Sampled: *09/16/21 13:00*
Date Received: *09/23/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	141		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	9.5	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	151		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.93		*	mg/L	0.4	2	10/07/21 23:52	krh
Conductivity @25C	SM2510B	1	341		*	umhos/cm	1	10	09/29/21 8:31	eep
Fluoride	M300.0 - Ion Chromatography	1	0.488		*	mg/L	0.05	0.25	10/07/21 23:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		42			mg/L	0.2	5	10/26/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.698			mg/L	0.02	0.1	10/14/21 3:13	pjb
pH (lab)	SM4500H+ B									
pH		1	8.6	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.057		*	mg/L	0.01	0.05	10/13/21 13:23	syw
Residue, Filterable (TDS) @180C	SM2540C	1	226		*	mg/L	20	40	09/23/21 19:22	jck
Sulfate	M300.0 - Ion Chromatography	1	22.3		*	mg/L	0.4	2	10/07/21 23:52	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211PBW1	PBW	09/28/21 20:24				23.2	mg/L		-20	20			B4 BF
WG528211LCSW3	LCSW	09/28/21 20:42	WC210917-2	820.0001		795	mg/L	97	90	110			
WG528211LCSW6	LCSW	09/28/21 23:45	WC210917-2	820.0001		794.7	mg/L	97	90	110			
WG528211PBW2	PBW	09/28/21 23:53				U	mg/L		-20	20			
WG528211LCSW9	LCSW	09/29/21 3:39	WC210917-2	820.0001		811.5	mg/L	99	90	110			
WG528211PBW3	PBW	09/29/21 3:46				U	mg/L		-20	20			
L68740-09DUP	DUP	09/29/21 7:15			133	132.9	mg/L				0	20	
WG528211LCSW12	LCSW	09/29/21 7:35	WC210917-2	820.0001		813.2	mg/L	99	90	110			
WG528211PBW4	PBW	09/29/21 7:42				U	mg/L		-20	20			
L68785-04DUP	DUP	09/29/21 9:21			116	116.6	mg/L				1	20	
WG528211LCSW15	LCSW	09/29/21 11:31	WC210917-2	820.0001		821.6	mg/L	100	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.1		.1047	mg/L	105	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.011	0.011			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.050065		.0503	mg/L	100	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.050065	.0106	.0598	mg/L	98	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.050065	.0106	.0646	mg/L	108	70	130	8	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.050065	.0169	.0651	mg/L	96	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.050065	.0169	.0649	mg/L	96	70	130	0	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.0201		.02138	mg/L	106	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00088	0.00088			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.01		.00976	mg/L	98	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.01	U	.00772	mg/L	77	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.01	U	.00867	mg/L	87	70	130	12	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.01	U	.00845	mg/L	85	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.01	U	.00915	mg/L	92	70	130	8	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05052	mg/L	101	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00044	0.00044			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05005		.04555	mg/L	91	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05005	.0061	.05056	mg/L	89	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05005	.0061	.05524	mg/L	98	70	130	9	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05005	.0068	.05504	mg/L	96	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05005	.0068	.05524	mg/L	97	70	130	0	20	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05343	mg/L	107	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.0011	0.0011			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.049985		.04787	mg/L	96	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.049985	.0174	.06377	mg/L	93	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.049985	.0174	.06831	mg/L	102	70	130	7	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.049985	.0181	.06664	mg/L	97	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.049985	.0181	.07083	mg/L	105	70	130	6	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.049925	mg/L	100	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.000176	0.000176			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05005		.048252	mg/L	96	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05005	U	.044194	mg/L	88	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05005	U	.049052	mg/L	98	70	130	10	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05005	U	.049862	mg/L	100	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05005	U	.050537	mg/L	101	70	130	1	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	2		1.989	mg/L	99	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.12	0.12			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	1		1.055	mg/L	106	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	1	U	1.031	mg/L	103	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	1	U	1.087	mg/L	109	85	115	5	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	1	U	1.078	mg/L	108	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	1	U	1.095	mg/L	110	85	115	2	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	2		1.995	mg/L	100	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.09	0.09			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	.5005		.531	mg/L	106	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	.5005	.086	.605	mg/L	104	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	.5005	.086	.616	mg/L	106	85	115	2	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	.5005	.049	.591	mg/L	108	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	.5005	.049	.59	mg/L	108	85	115	0	20	

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ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.051735	mg/L	103	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00011	0.00011			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05005		.046652	mg/L	93	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05005	U	.045309	mg/L	91	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05005	U	.0502	mg/L	100	70	130	10	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05005	U	.048113	mg/L	96	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05005	U	.051447	mg/L	103	70	130	7	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	100		101.43	mg/L	101	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.3	0.3			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	67.98972		72.95	mg/L	107	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	67.98972	11.4	82.62	mg/L	105	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	67.98972	11.4	83.74	mg/L	106	85	115	1	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	67.98972	313	372.4	mg/L	87	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	67.98972	313	366.1	mg/L	78	85	115	2	20	M3

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	19.96		19.83	mg/L	99	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	19.96		19.85	mg/L	99	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.4	0.4			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	30		30.34	mg/L	101	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	30		30.19	mg/L	101	90	110			
L68739-07DUP	DUP	10/06/21 1:33			5.98	5.99	mg/L				0	20	
L68739-08AS	AS	10/06/21 2:44	WI210907-6	30	5.97	35.86	mg/L	100	90	110			
WG528909													
WG528909LFB1	LFB	10/07/21 16:06	WI210907-6	30		29.6	mg/L	99	90	110			
L68740-03DUP	DUP	10/07/21 18:29			5.97	5.96	mg/L				0	20	
L68740-04AS	AS	10/07/21 19:41	WI210907-6	30	5.97	35.91	mg/L	100	90	110			
L68740-07DUP	DUP	10/07/21 20:52			5.92	5.94	mg/L				0	20	
L68740-08AS	AS	10/07/21 21:28	WI210907-6	30	5.93	35.84	mg/L	100	90	110			
WG528909LFB2	LFB	10/08/21 0:45	WI210907-6	30		29.66	mg/L	99	90	110			

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ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.04993	mg/L	100	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.0011	0.0011			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05		.04523	mg/L	90	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05	U	.04244	mg/L	85	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05	U	.04743	mg/L	95	70	130	11	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05	U	.04625	mg/L	93	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05	U	.04701	mg/L	94	70	130	2	20	

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.052041	mg/L	104	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00011	0.00011			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05005		.048369	mg/L	97	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05005	U	.045564	mg/L	91	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05005	U	.051514	mg/L	103	70	130	12	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05005	.000053	.050537	mg/L	101	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05005	.000053	.049207	mg/L	98	70	130	3	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW2	LCSW	09/28/21 20:30	PCN63140	1408		1445	umhos/cm	103	90	110			
WG528211LCSW5	LCSW	09/28/21 23:34	PCN63140	1408		1439	umhos/cm	102	90	110			
WG528211LCSW8	LCSW	09/29/21 3:26	PCN63140	1408		1432	umhos/cm	102	90	110			
L68740-09DUP	DUP	09/29/21 7:15			337	338	umhos/cm				0	20	
WG528211LCSW11	LCSW	09/29/21 7:22	PCN63140	1408		1431	umhos/cm	102	90	110			
L68785-04DUP	DUP	09/29/21 9:21			304	303	umhos/cm				0	20	
WG528211LCSW14	LCSW	09/29/21 11:09	PCN63140	1408		1427	umhos/cm	101	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05249	mg/L	105	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00176	0.00176			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05		.04613	mg/L	92	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05	U	.04324	mg/L	86	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05	U	.04846	mg/L	97	70	130	11	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05	U	.04676	mg/L	94	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05	U	.04737	mg/L	95	70	130	1	20	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	4.004		4.082	mg/L	102	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.05	0.05			
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	4.004		4.177	mg/L	104	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.05	0.05			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	1.5		1.55	mg/L	103	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	1.5		1.522	mg/L	101	90	110			
L68739-07DUP	DUP	10/06/21 1:33			.544	.545	mg/L				0	20	
L68739-08AS	AS	10/06/21 2:44	WI210907-6	1.5	.542	2.069	mg/L	102	90	110			
WG528909													
WG528909LFB1	LFB	10/07/21 16:06	WI210907-6	1.5		1.457	mg/L	97	90	110			
L68740-03DUP	DUP	10/07/21 18:29			.505	.499	mg/L				1	20	
L68740-04AS	AS	10/07/21 19:41	WI210907-6	1.5	.506	1.981	mg/L	98	90	110			
L68740-07DUP	DUP	10/07/21 20:52			.489	.49	mg/L				0	20	RA
L68740-08AS	AS	10/07/21 21:28	WI210907-6	1.5	.492	1.978	mg/L	99	90	110			
WG528909LFB2	LFB	10/08/21 0:45	WI210907-6	1.5		1.424	mg/L	95	90	110			

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	2		2.04	mg/L	102	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.3	0.3			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	.9822		1.07	mg/L	109	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	.9822	U	1.05	mg/L	107	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	.9822	U	1.08	mg/L	110	85	115	3	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	.9822	U	1.12	mg/L	114	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	.9822	U	1.09	mg/L	111	85	115	3	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.10016		.102	mg/L	102	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.0154	0.0154			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.0501		.05	mg/L	100	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.0501	.0331	.0784	mg/L	90	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.0501	.0331	.0806	mg/L	95	70	130	3	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.0501	.0439	.0916	mg/L	95	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.0501	.0439	.0921	mg/L	96	70	130	1	20	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05105	mg/L	102	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00022	0.00022			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05005		.04675	mg/L	93	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05005	U	.04767	mg/L	95	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05005	U	.05187	mg/L	104	70	130	8	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05005	U	.05	mg/L	100	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05005	U	.05123	mg/L	102	70	130	2	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	2		2.0013	mg/L	100	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.024	0.024			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	.999		1.056	mg/L	106	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	.999	.0731	1.096	mg/L	102	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	.999	.0731	1.106	mg/L	103	85	115	1	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	.999	.0779	1.135	mg/L	106	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	.999	.0779	1.132	mg/L	106	85	115	0	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	100		97.42	mg/L	97	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.6	0.6			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	49.99828		50.84	mg/L	102	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	49.99828	.62	50.93	mg/L	101	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	49.99828	.62	51.69	mg/L	102	85	115	1	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	49.99828	20	71.01	mg/L	102	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	49.99828	20	70	mg/L	100	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05041	mg/L	101	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00088	0.00088			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.0499		.04754	mg/L	95	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.0499	U	.04607	mg/L	92	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.0499	U	.05024	mg/L	101	70	130	9	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.0499	.00082	.05004	mg/L	99	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.0499	.00082	.04981	mg/L	98	70	130	0	20	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528226													
WG528226ICV	ICV	09/29/21 9:54	HG210927-3	.00501		.00507	mg/L	101	95	105			
WG528226ICB	ICB	09/29/21 9:55				U	mg/L		-0.0002	0.0002			
WG528238													
WG528238LRB	LRB	09/29/21 13:09				U	mg/L		-0.00044	0.00044			
WG528238LFB	LFB	09/29/21 13:10	HG210927-6	.002002		.00192	mg/L	96	85	115			
L68667-05LFM	LFM	09/29/21 13:13	HG210927-6	.002002	U	.00191	mg/L	95	85	115			
L68667-05LFMD	LFMD	09/29/21 13:14	HG210927-6	.002002	U	.00188	mg/L	94	85	115	2	20	
L68740-07LFM	LFM	09/29/21 13:27	HG210927-6	.002002	U	.00193	mg/L	96	85	115			
L68740-07LFMD	LFMD	09/29/21 13:28	HG210927-6	.002002	U	.00191	mg/L	95	85	115	1	20	

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.01992		.0207	mg/L	104	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00044	0.00044			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05005		.04826	mg/L	96	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05005	.00445	.05061	mg/L	92	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05005	.00445	.0552	mg/L	101	70	130	9	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05005	.00475	.05319	mg/L	97	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05005	.00475	.05638	mg/L	103	70	130	6	20	

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05082	mg/L	102	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00088	0.00088			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05		.0448	mg/L	90	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05	U	.04146	mg/L	83	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05	U	.04628	mg/L	93	70	130	11	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05	U	.04468	mg/L	89	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05	U	.04553	mg/L	91	70	130	2	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529396													
WG529396ICV	ICV	10/13/21 22:51	WI210904-1	2.4161		2.226	mg/L	92	90	110			
WG529396ICB	ICB	10/13/21 22:52				U	mg/L		-0.02	0.02			
WG529402													
WG529402LFB1	LFB	10/14/21 2:16	WI211001-5	2		2.089	mg/L	104	90	110			
L68736-11AS	AS	10/14/21 2:38	WI211001-5	2	.601	2.785	mg/L	109	90	110			
L68736-12DUP	DUP	10/14/21 2:40			.568	.569	mg/L				0	20	
WG529402LFB2	LFB	10/14/21 2:56	WI211001-5	2		2.11	mg/L	106	90	110			
L68740-07AS	AS	10/14/21 2:59	WI211001-5	2	.694	2.794	mg/L	105	90	110			
L68740-08DUP	DUP	10/14/21 3:01			.688	.691	mg/L				0	20	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW1	LCSW	09/28/21 20:28	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW4	LCSW	09/28/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW7	LCSW	09/29/21 3:24	PCN62948	6		6.1	units	102	5.9	6.1			
L68740-09DUP	DUP	09/29/21 7:15			8.6	8.6	units				0	20	
WG528211LCSW10	LCSW	09/29/21 7:20	PCN62948	6		6.1	units	102	5.9	6.1			
L68785-04DUP	DUP	09/29/21 9:21			8.8	8.8	units				0	20	
WG528211LCSW13	LCSW	09/29/21 11:08	PCN62948	6		6.1	units	102	5.9	6.1			

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529336													
WG529336ICV	ICV	10/13/21 12:03	WI210831-6	.65228		.676	mg/L	104	90	110			
WG529336ICB	ICB	10/13/21 12:05				U	mg/L		-0.01	0.01			
WG528405LRB	LRB	10/13/21 12:06				U	mg/L		-0.01	0.01			
WG528405LFB	LFB	10/13/21 12:07	WI210921-12	.5		.493	mg/L	99	90	110			
L68740-01LFM	LFM	10/13/21 12:10	WI210921-12	.5	.047	.546	mg/L	100	90	110			
L68740-02DUP	DUP	10/13/21 12:12			.055	.053	mg/L				4	20	RA
WG529336ICV1	ICV	10/13/21 13:10	WI210831-6	.65228		.667	mg/L	102	90	110			
WG529336ICB1	ICB	10/13/21 13:12				U	mg/L		-0.01	0.01			
L68740-11LFM	LFM	10/13/21 13:19	WI210921-12	.5	.07	.575	mg/L	101	90	110			
L68740-12DUP	DUP	10/13/21 13:21			.061	.059	mg/L				3	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	20		20.09	mg/L	100	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.6	0.6			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	99.96008		104.8	mg/L	105	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	99.96008	3.53	106.5	mg/L	103	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	99.96008	3.53	108.1	mg/L	105	85	115	1	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	99.96008	11.5	119.9	mg/L	108	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	99.96008	11.5	118.6	mg/L	107	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527919													
WG527919PBW	PBW	09/23/21 18:25				U	mg/L		-20	20			
WG527919LCSW	LCSW	09/23/21 18:27	PCN64132	1000		1006	mg/L	101	80	120			
L68740-04DUP	DUP	09/23/21 18:56			220	214	mg/L				3	10	
L68740-14DUP	DUP	09/23/21 19:25			226	228	mg/L				1	10	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	2		2.005	mg/L	100	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.15	0.15			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	1.0017		1.055	mg/L	105	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	1.0017	U	1.041	mg/L	104	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	1.0017	U	1.053	mg/L	105	85	115	1	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	1.0017	U	1.055	mg/L	105	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	1.0017	U	1.054	mg/L	105	85	115	0	20	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05087	mg/L	102	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00022	0.00022			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05		.045	mg/L	90	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05	.00052	.04589	mg/L	91	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05	.00052	.04863	mg/L	96	70	130	6	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05	.00053	.0483	mg/L	96	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05	.00053	.04953	mg/L	98	70	130	3	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.02		.02014	mg/L	101	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00022	0.00022			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.01		.00994	mg/L	99	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.01	U	.00746	mg/L	75	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.01	U	.00816	mg/L	82	70	130	9	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.01	U	.00787	mg/L	79	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.01	U	.00824	mg/L	82	70	130	5	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	100		100.6	mg/L	101	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.6	0.6			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	100.007		103.9	mg/L	104	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	100.007	60	158.7	mg/L	99	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	100.007	60	161.1	mg/L	101	85	115	2	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	100.007	59.9	163.1	mg/L	103	85	115			
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	100.007	59.9	162.2	mg/L	102	85	115	1	20	

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ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528696													
WG528696ICV	ICV	10/06/21 9:35	II211001-1	2		1.9718	mg/L	99	95	105			
WG528696ICB	ICB	10/06/21 9:42				U	mg/L		-0.027	0.027			
WG528696LFB	LFB	10/06/21 9:55	II210930-2	.5005		.5621	mg/L	112	85	115			
L68740-03AS	AS	10/06/21 10:08	II210930-2	.5005	.0492	.5989	mg/L	110	85	115			
L68740-03ASD	ASD	10/06/21 10:11	II210930-2	.5005	.0492	.6093	mg/L	112	85	115	2	20	
L68862-06AS	AS	10/06/21 11:03	II210930-2	.5005	3.93	4.332	mg/L	80	85	115			M3
L68862-06ASD	ASD	10/06/21 11:13	II210930-2	.5005	3.93	4.297	mg/L	73	85	115	1	20	M3

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528109													
WG528109ICV	ICV	09/24/21 18:47	WI210924-2	51.15		48.67	mg/L	95	90	110			
WG528109ICB	ICB	09/24/21 19:05				U	mg/L		-0.4	0.4			
WG528605													
WG528605ICV	ICV	10/02/21 6:15	WI211001-7	51.15		50.79	mg/L	99	90	110			
WG528605ICB	ICB	10/02/21 6:33				U	mg/L		-0.4	0.4			
WG528674													
WG528674LFB1	LFB	10/05/21 16:17	WI210907-6	30		30.46	mg/L	102	90	110			
WG528674LFB2	LFB	10/06/21 0:57	WI210907-6	30		29.97	mg/L	100	90	110			
L68739-07DUP	DUP	10/06/21 1:33			22.5	22.45	mg/L				0	20	
L68739-08AS	AS	10/06/21 2:44	WI210907-6	30	22.5	52.11	mg/L	99	90	110			
WG528909													
WG528909LFB1	LFB	10/07/21 16:06	WI210907-6	30		29.07	mg/L	97	90	110			
L68740-03DUP	DUP	10/07/21 18:29			23.1	23.04	mg/L				0	20	
L68740-04AS	AS	10/07/21 19:41	WI210907-6	30	22.4	51.27	mg/L	96	90	110			
L68740-07DUP	DUP	10/07/21 20:52			22	22.26	mg/L				1	20	
L68740-08AS	AS	10/07/21 21:28	WI210907-6	30	22.1	50.9	mg/L	96	90	110			
WG528909LFB2	LFB	10/08/21 0:45	WI210907-6	30		28.48	mg/L	95	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05262	mg/L	105	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00022	0.00022			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05		.0469	mg/L	94	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05	U	.04767	mg/L	95	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05	U	.05194	mg/L	104	70	130	9	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05	U	.05034	mg/L	101	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05	U	.05177	mg/L	104	70	130	3	20	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.05369	mg/L	107	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00176	0.00176			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05005		.04733	mg/L	95	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05005	.00957	.05326	mg/L	87	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05005	.00957	.05843	mg/L	98	70	130	9	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05005	.012	.05758	mg/L	91	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05005	.012	.06143	mg/L	99	70	130	6	20	
WG529580													
WG529580ICV	ICV	10/15/21 15:16	MS211013-2	.05		.04998	mg/L	100	90	110			
WG529580ICB	ICB	10/15/21 15:17				U	mg/L		-0.00176	0.00176			
WG529580LFB	LFB	10/15/21 15:19	MS210927-3	.05005		.05353	mg/L	107	85	115			
L68739-13AS	AS	10/15/21 15:30	MS210927-3	.1001	.248	.35236	mg/L	104	70	130			
L68739-13ASD	ASD	10/15/21 15:32	MS210927-3	.1001	.248	.35637	mg/L	108	70	130	1	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528813													
WG528813ICV	ICV	10/06/21 17:12	II211001-1	2		2.014	mg/L	101	95	105			
WG528813ICB	ICB	10/06/21 17:18				U	mg/L		-0.015	0.015			
WG528813LFB	LFB	10/06/21 17:31	II210930-2	1		1.027	mg/L	103	85	115			
L68740-03AS	AS	10/06/21 17:44	II210930-2	1	U	1.033	mg/L	103	85	115			
L68740-03ASD	ASD	10/06/21 17:47	II210930-2	1	U	1.035	mg/L	104	85	115	0	20	
L68866-03AS	AS	10/06/21 18:56	II210930-2	1	U	1.052	mg/L	105	85	115			
L68866-03ASD	ASD	10/06/21 18:59	II210930-2	1	U	.9971	mg/L	100	85	115	5	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.04914	mg/L	98	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.00022	0.00022			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05		.04666	mg/L	93	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05	.00016	.04728	mg/L	94	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05	.00016	.05201	mg/L	104	70	130	10	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05	.00017	.05012	mg/L	100	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05	.00017	.05124	mg/L	102	70	130	2	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.04754	mg/L	95	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.0011	0.0011			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.05		.04501	mg/L	90	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.05	.00125	.04474	mg/L	87	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.05	.00125	.04968	mg/L	97	70	130	10	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.05	U	.04725	mg/L	95	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.05	U	.04801	mg/L	96	70	130	2	20	

WETLAB

ACZ Project ID: ***L68740***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529474													
WG529474ICV	ICV	10/14/21 14:14	MS211013-2	.05		.0497	mg/L	99	90	110			
WG529474ICB1	ICB	10/14/21 14:21				U	mg/L		-0.0132	0.0132			
WG529474LFB	LFB	10/14/21 14:24	MS210927-3	.050075		.0515	mg/L	103	85	115			
L68740-02AS	AS	10/14/21 14:32	MS210927-3	.050075	U	.051	mg/L	102	70	130			
L68740-02ASD	ASD	10/14/21 14:34	MS210927-3	.050075	U	.0565	mg/L	113	70	130	10	20	
L68740-12AS	AS	10/14/21 14:55	MS210927-3	.050075	U	.0562	mg/L	112	70	130			
L68740-12ASD	ASD	10/14/21 14:57	MS210927-3	.050075	U	.0561	mg/L	112	70	130	0	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68740***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68740-01	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-02	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-03	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-04	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-05	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-06	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-07	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-08	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-09	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-10	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68740-11	WG528696	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528696	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Western Environmental Testing Laboratory ACZ Project ID: ***L68740***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68740-12	WG528696	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528696	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68740-13	WG528696	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528696	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L68740-14	WG528696	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG528909	Fluoride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529336	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG528696	Strontium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Mercury, dissolved	M245.1 CVAA
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography

Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68740
Date Received: 09/23/2021 10:15
Received By:
Date Printed: 9/24/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA36021	1.5	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68740
Date Received: 09/23/2021 10:15
Received By:
Date Printed: 9/24/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68740

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST

***Sampler's Signature:** _____

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (DI) 245.1
21090517-001	9/16/2021 13:00	OT	3	✓	✓
21090517-002	"	"	"	✓	✓
21090517-003	"	"	"	✓	✓
21090517-004	"	"	"	✓	✓
21090517-005	"	"	"	✓	✓
21090517-006	"	"	"	✓	✓
21090517-007	"	"	"	✓	✓
21090517-008	"	"	"	✓	✓
21090517-009	"	"	"	✓	✓
21090517-010	"	"	"	✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/17/21 12:00		9/20/2021 10:15

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68740 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68740

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** State NV Zip code 89431 Time Zone PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(D) 245.1
21090517-011	9/16/2021 13:00	OT	3	✓	✓
21090517-012	"	"	"	✓	✓
21090517-013	"	"	"	✓	✓
21090517-014	"	"	"	✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
	9/17/21 12:00		
		9/23/21	10:15

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
[redacted]	[redacted]	0.3 ng/L	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.

Quote Number: LEACHATE

CONTRACT DETAILS
Pricing includes shipment of all standard sample containers and related paperwork by UPS Ground Service. Please allow three to five days for delivery when ordering containers. Please notify your Project Manager prior to sending any samples with special requests such as electronic data deliverables or special reporting requirements. Additional charges may apply for non-standard requests including special sample containers and express shipping.

This quotation is valid for six months from the bid date unless specified otherwise in the bid. All bids must be signed and returned to ACZ before the project is received. The authorized signature represents acceptance of the pricing as well as the general terms and conditions of ACZ Laboratories, Inc. which may be downloaded from our web site at https://acz.com/wp-content/uploads/2020/05/ACZ_Terms_Conditions.pdf. Please note that MDLs in this quote are not static and my change due to sample matrix or samples with high TDS.

All orders are subject to a minimum charge of $150.00. Samples may incur a $11.00/sample disposal fee for any samples deemed to be hazardous.

ACZ Representative (Authorized signature and date) _____

Client Representative (Authorized signature and date) _____

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Report

October 22, 2021

Report to:
Mckenna Oh
Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119

Sparks, NV 89431

Bill to:
Accounts Payable
Western Environmental Testing Laboratory
475 Greg Street
#119
Sparks, NV 89431

Project ID:
ACZ Project ID: L68785

Mckenna Oh:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 24, 2021. This project has been assigned to ACZ's project number, L68785. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68785. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after November 21, 2021. If the samples are determined to be hazardous, additional charges apply for disposal (typically $11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Sue Webber has reviewed and approved this report.

Western Environmental Testing Laboratory

October 22, 2021

Project ID:
ACZ Project ID: L68785

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 14 leachate samples from Western Environmental Testing Laboratory on September 24, 2021. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L68785. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times except for parameters flagged with an "HC" requiring re-analysis after the hold time had expired.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further explanation not provided by the Extended Qualifier Report:

1. TDS (N1) - Oven range is 80 C to 91 C. Over the weekend, the oven had a minor high temperature out of range. When the oven temperature was checked on Monday 9/27/21, the max temp read at 93.4 C. The workgroup was removed from the oven on 9/27/21 when the oven was back in range. The workgroup was examined and there was no splattering of samples.

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-001

ACZ Sample ID: ***L68785-01***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 11:34	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0092	B	*	mg/L	0.005	0.015	10/14/21 20:07	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:07	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0344		*	mg/L	0.0002	0.001	10/14/21 20:07	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00815		*	mg/L	0.0005	0.0025	10/14/21 20:07	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:07	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:21	jlw
Boron, dissolved	M200.7 ICP	1	0.091	B	*	mg/L	0.03	0.1	10/11/21 19:21	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:07	bsu
Calcium, dissolved	M200.7 ICP	1	5.64		*	mg/L	0.1	0.5	10/11/21 19:21	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:07	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:07	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:07	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:21	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0343		*	mg/L	0.007	0.02	10/14/21 20:07	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:07	bsu
Lithium, dissolved	M200.7 ICP	1	0.0832		*	mg/L	0.008	0.04	10/11/21 19:21	jlw
Magnesium, dissolved	M200.7 ICP	1	0.50	B	*	mg/L	0.2	1	10/11/21 19:21	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:07	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:28	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00447		*	mg/L	0.0002	0.0005	10/14/21 20:07	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:07	bsu
Potassium, dissolved	M200.7 ICP	1	4.21		*	mg/L	0.2	1	10/11/21 19:21	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:21	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	10/14/21 20:07	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:07	bsu
Sodium, dissolved	M200.7 ICP	1	60.6		*	mg/L	0.2	1	10/11/21 19:21	jlw
Strontium, dissolved	M200.7 ICP	1	0.0244	B	*	mg/L	0.009	0.045	10/11/21 19:21	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:07	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00992		*	mg/L	0.0008	0.0025	10/14/21 20:07	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:21	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00027	B	*	mg/L	0.0001	0.0005	10/14/21 20:07	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00126	B	*	mg/L	0.0005	0.002	10/14/21 20:07	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:07	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-001

ACZ Sample ID: ***L68785-01***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	101		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	20.1		*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	121		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.99		*	mg/L	0.4	2	10/13/21 17:53	krh
Conductivity @25C	SM2510B	1	313		*	umhos/cm	1	10	09/29/21 8:46	eep
Fluoride	M300.0 - Ion Chromatography	1	0.612		*	mg/L	0.05	0.25	10/13/21 17:53	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:00	pjb
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.2		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	BH	*	mg/L	0.01	0.05	10/21/21 22:05	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	218		*	mg/L	20	40	09/24/21 16:30	emk
Sulfate	M300.0 - Ion Chromatography	1	23.2		*	mg/L	0.4	2	10/13/21 17:53	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-002

ACZ Sample ID: ***L68785-02***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 11:49	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0107	B	*	mg/L	0.005	0.015	10/14/21 20:08	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:08	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0349		*	mg/L	0.0002	0.001	10/14/21 20:08	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00822		*	mg/L	0.0005	0.0025	10/14/21 20:08	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:08	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:24	jlw
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	10/11/21 19:24	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:08	bsu
Calcium, dissolved	M200.7 ICP	1	6.02		*	mg/L	0.1	0.5	10/11/21 19:24	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:08	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:08	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:08	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:24	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0412		*	mg/L	0.007	0.02	10/14/21 20:08	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:08	bsu
Lithium, dissolved	M200.7 ICP	1	0.0828		*	mg/L	0.008	0.04	10/11/21 19:24	jlw
Magnesium, dissolved	M200.7 ICP	1	0.47	B	*	mg/L	0.2	1	10/11/21 19:24	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00130	B	*	mg/L	0.0004	0.002	10/14/21 20:08	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:29	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00443		*	mg/L	0.0002	0.0005	10/14/21 20:08	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:08	bsu
Potassium, dissolved	M200.7 ICP	1	3.77		*	mg/L	0.2	1	10/11/21 19:24	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:24	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	10/14/21 20:08	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:08	bsu
Sodium, dissolved	M200.7 ICP	1	60.4		*	mg/L	0.2	1	10/11/21 19:24	jlw
Strontium, dissolved	M200.7 ICP	1	0.0251	B	*	mg/L	0.009	0.045	10/11/21 19:24	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:08	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00610		*	mg/L	0.0008	0.0025	10/14/21 20:08	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:24	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00028	B	*	mg/L	0.0001	0.0005	10/14/21 20:08	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00091	B	*	mg/L	0.0005	0.002	10/14/21 20:08	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:08	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-002

ACZ Sample ID: ***L68785-02***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	104		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	15.6	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/13/21 18:29	krh
Conductivity @25C	SM2510B	1	308		*	umhos/cm	1	10	09/29/21 8:55	eep
Fluoride	M300.0 - Ion Chromatography	1	0.614		*	mg/L	0.05	0.25	10/13/21 18:29	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17.0			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:01	pjb
pH (lab)	SM4500H+ B									
pH		1	8.8	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.3		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	BH	*	mg/L	0.01	0.05	10/21/21 22:07	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/24/21 16:32	emk
Sulfate	M300.0 - Ion Chromatography	1	23.3		*	mg/L	0.4	2	10/13/21 18:29	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-003

ACZ Sample ID: ***L68785-03***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:05	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0209		*	mg/L	0.005	0.015	10/14/21 20:10	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:10	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0343		*	mg/L	0.0002	0.001	10/14/21 20:10	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00824		*	mg/L	0.0005	0.0025	10/14/21 20:10	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:10	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:27	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/11/21 19:27	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:10	bsu
Calcium, dissolved	M200.7 ICP	1	6.64		*	mg/L	0.1	0.5	10/11/21 19:27	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00279		*	mg/L	0.0005	0.002	10/14/21 20:10	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:10	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:10	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:27	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0547		*	mg/L	0.007	0.02	10/14/21 20:10	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:10	bsu
Lithium, dissolved	M200.7 ICP	1	0.0797		*	mg/L	0.008	0.04	10/11/21 19:27	jlw
Magnesium, dissolved	M200.7 ICP	1	0.37	B	*	mg/L	0.2	1	10/11/21 19:27	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00043	B	*	mg/L	0.0004	0.002	10/14/21 20:10	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:30	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00466		*	mg/L	0.0002	0.0005	10/14/21 20:10	bsu
Nickel, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0004	0.001	10/14/21 20:10	bsu
Potassium, dissolved	M200.7 ICP	1	2.82		*	mg/L	0.2	1	10/11/21 19:27	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:27	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00075		*	mg/L	0.0001	0.00025	10/14/21 20:10	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:10	bsu
Sodium, dissolved	M200.7 ICP	1	58.1		*	mg/L	0.2	1	10/11/21 19:27	jlw
Strontium, dissolved	M200.7 ICP	1	0.0268	B	*	mg/L	0.009	0.045	10/11/21 19:27	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:10	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00609		*	mg/L	0.0008	0.0025	10/14/21 20:10	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:27	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00026	B	*	mg/L	0.0001	0.0005	10/14/21 20:10	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00183	B	*	mg/L	0.0005	0.002	10/14/21 20:10	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:10	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-003

ACZ Sample ID: ***L68785-03***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.9		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	16.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.05		*	mg/L	0.4	2	10/13/21 19:04	krh
Conductivity @25C	SM2510B	1	301		*	umhos/cm	1	10	09/29/21 9:04	eep
Fluoride	M300.0 - Ion Chromatography	1	0.624		*	mg/L	0.05	0.25	10/13/21 19:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		18			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:02	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.3		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.024	BH	*	mg/L	0.01	0.05	10/21/21 22:09	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	216		*	mg/L	20	40	09/24/21 16:34	emk
Sulfate	M300.0 - Ion Chromatography	1	24.3		*	mg/L	0.4	2	10/13/21 19:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-004

ACZ Sample ID: ***L68785-04***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:13	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0221		*	mg/L	0.005	0.015	10/14/21 20:12	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:12	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0342		*	mg/L	0.0002	0.001	10/14/21 20:12	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00742		*	mg/L	0.0005	0.0025	10/14/21 20:12	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:12	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:37	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/11/21 19:37	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:12	bsu
Calcium, dissolved	M200.7 ICP	1	6.20		*	mg/L	0.1	0.5	10/11/21 19:37	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00089	B	*	mg/L	0.0005	0.002	10/14/21 20:12	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:12	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:12	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:37	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0556		*	mg/L	0.007	0.02	10/14/21 20:12	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:12	bsu
Lithium, dissolved	M200.7 ICP	1	0.0801		*	mg/L	0.008	0.04	10/11/21 19:37	jlw
Magnesium, dissolved	M200.7 ICP	1	0.41	B	*	mg/L	0.2	1	10/11/21 19:37	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00054	B	*	mg/L	0.0004	0.002	10/14/21 20:12	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:31	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00452		*	mg/L	0.0002	0.0005	10/14/21 20:12	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:12	bsu
Potassium, dissolved	M200.7 ICP	1	2.81		*	mg/L	0.2	1	10/11/21 19:37	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:37	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00058		*	mg/L	0.0001	0.00025	10/14/21 20:12	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:12	bsu
Sodium, dissolved	M200.7 ICP	1	58.7		*	mg/L	0.2	1	10/11/21 19:37	jlw
Strontium, dissolved	M200.7 ICP	1	0.0261	B	*	mg/L	0.009	0.045	10/11/21 19:37	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:12	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00655		*	mg/L	0.0008	0.0025	10/14/21 20:12	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:37	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:12	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00138	B	*	mg/L	0.0005	0.002	10/14/21 20:12	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:12	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-004

ACZ Sample ID: ***L68785-04***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	101		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	15.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.03		*	mg/L	0.4	2	10/13/21 19:22	krh
Conductivity @25C	SM2510B	1	304		*	umhos/cm	1	10	09/29/21 9:12	eep
Fluoride	M300.0 - Ion Chromatography	1	0.623		*	mg/L	0.05	0.25	10/13/21 19:22	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:07	pjb
pH (lab)	SM4500H+ B									
pH		1	8.8	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.023	BH	*	mg/L	0.01	0.05	10/21/21 22:10	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	210		*	mg/L	20	40	09/24/21 16:36	emk
Sulfate	M300.0 - Ion Chromatography	1	24.0		*	mg/L	0.4	2	10/13/21 19:22	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-005

ACZ Sample ID: ***L68785-05***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:20	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0121	B	*	mg/L	0.005	0.015	10/14/21 20:13	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:13	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0335		*	mg/L	0.0002	0.001	10/14/21 20:13	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00759		*	mg/L	0.0005	0.0025	10/14/21 20:13	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:13	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:40	jlw
Boron, dissolved	M200.7 ICP	1	0.085	B	*	mg/L	0.03	0.1	10/11/21 19:40	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:13	bsu
Calcium, dissolved	M200.7 ICP	1	6.12		*	mg/L	0.1	0.5	10/11/21 19:40	jlw
Chromium, dissolved	M200.8 ICP-MS	1	0.00140	B	*	mg/L	0.0005	0.002	10/14/21 20:13	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:13	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:13	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:40	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0239		*	mg/L	0.007	0.02	10/14/21 20:13	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:13	bsu
Lithium, dissolved	M200.7 ICP	1	0.0789		*	mg/L	0.008	0.04	10/11/21 19:40	jlw
Magnesium, dissolved	M200.7 ICP	1	0.37	B	*	mg/L	0.2	1	10/11/21 19:40	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:13	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:32	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00451		*	mg/L	0.0002	0.0005	10/14/21 20:13	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:13	bsu
Potassium, dissolved	M200.7 ICP	1	2.81		*	mg/L	0.2	1	10/11/21 19:40	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:40	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00059		*	mg/L	0.0001	0.00025	10/14/21 20:13	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:13	bsu
Sodium, dissolved	M200.7 ICP	1	58.7		*	mg/L	0.2	1	10/11/21 19:40	jlw
Strontium, dissolved	M200.7 ICP	1	0.0257	B	*	mg/L	0.009	0.045	10/11/21 19:40	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:13	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00632		*	mg/L	0.0008	0.0025	10/14/21 20:13	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:40	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:13	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00152	B	*	mg/L	0.0005	0.002	10/14/21 20:13	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:13	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-005

ACZ Sample ID: ***L68785-05***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.1		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	17.1	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	116		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.04		*	mg/L	0.4	2	10/13/21 19:40	krh
Conductivity @25C	SM2510B	1	302		*	umhos/cm	1	10	09/29/21 9:30	eep
Fluoride	M300.0 - Ion Chromatography	1	0.627		*	mg/L	0.05	0.25	10/13/21 19:40	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:09	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	BH	*	mg/L	0.01	0.05	10/21/21 22:12	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	210		*	mg/L	20	40	09/24/21 16:40	emk
Sulfate	M300.0 - Ion Chromatography	1	24.2		*	mg/L	0.4	2	10/13/21 19:40	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-006

ACZ Sample ID: ***L68785-06***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:28	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0157		*	mg/L	0.005	0.015	10/14/21 20:15	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:15	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0338		*	mg/L	0.0002	0.001	10/14/21 20:15	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00675		*	mg/L	0.0005	0.0025	10/14/21 20:15	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:15	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:44	jlw
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	10/11/21 19:44	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:15	bsu
Calcium, dissolved	M200.7 ICP	1	5.88		*	mg/L	0.1	0.5	10/11/21 19:44	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:15	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:15	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:15	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:44	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0248		*	mg/L	0.007	0.02	10/14/21 20:15	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:15	bsu
Lithium, dissolved	M200.7 ICP	1	0.0799		*	mg/L	0.008	0.04	10/11/21 19:44	jlw
Magnesium, dissolved	M200.7 ICP	1	0.43	B	*	mg/L	0.2	1	10/11/21 19:44	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:15	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:33	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00465		*	mg/L	0.0002	0.0005	10/14/21 20:15	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:15	bsu
Potassium, dissolved	M200.7 ICP	1	3.49		*	mg/L	0.2	1	10/11/21 19:44	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:44	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00056		*	mg/L	0.0001	0.00025	10/14/21 20:15	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:15	bsu
Sodium, dissolved	M200.7 ICP	1	58.7		*	mg/L	0.2	1	10/11/21 19:44	jlw
Strontium, dissolved	M200.7 ICP	1	0.0256	B	*	mg/L	0.009	0.045	10/11/21 19:44	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:15	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00551		*	mg/L	0.0008	0.0025	10/14/21 20:15	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:44	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00026	B	*	mg/L	0.0001	0.0005	10/14/21 20:15	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00076	B	*	mg/L	0.0005	0.002	10/14/21 20:15	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:15	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-006

ACZ Sample ID: ***L68785-06***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	101		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	17.7	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/13/21 19:58	krh
Conductivity @25C	SM2510B	1	307		*	umhos/cm	1	10	09/29/21 9:39	eep
Fluoride	M300.0 - Ion Chromatography	1	0.611		*	mg/L	0.05	0.25	10/13/21 19:58	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:10	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.025	BH	*	mg/L	0.01	0.05	10/21/21 22:13	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	216		*	mg/L	20	40	09/24/21 16:42	emk
Sulfate	M300.0 - Ion Chromatography	1	23.5		*	mg/L	0.4	2	10/13/21 19:58	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-007

ACZ Sample ID: ***L68785-07***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:36	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0130	B	*	mg/L	0.005	0.015	10/14/21 20:17	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:17	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0332		*	mg/L	0.0002	0.001	10/14/21 20:17	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00696		*	mg/L	0.0005	0.0025	10/14/21 20:17	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:17	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:47	jlw
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	10/11/21 19:47	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:17	bsu
Calcium, dissolved	M200.7 ICP	1	6.20		*	mg/L	0.1	0.5	10/11/21 19:47	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:17	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:17	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:17	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:47	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0241		*	mg/L	0.007	0.02	10/14/21 20:17	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:17	bsu
Lithium, dissolved	M200.7 ICP	1	0.0808		*	mg/L	0.008	0.04	10/11/21 19:47	jlw
Magnesium, dissolved	M200.7 ICP	1	0.43	B	*	mg/L	0.2	1	10/11/21 19:47	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:17	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:34	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00443		*	mg/L	0.0002	0.0005	10/14/21 20:17	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:17	bsu
Potassium, dissolved	M200.7 ICP	1	3.15		*	mg/L	0.2	1	10/11/21 19:47	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:47	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00059		*	mg/L	0.0001	0.00025	10/14/21 20:17	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:17	bsu
Sodium, dissolved	M200.7 ICP	1	59.2		*	mg/L	0.2	1	10/11/21 19:47	jlw
Strontium, dissolved	M200.7 ICP	1	0.0252	B	*	mg/L	0.009	0.045	10/11/21 19:47	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:17	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00457		*	mg/L	0.0008	0.0025	10/14/21 20:17	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:47	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:17	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00076	B	*	mg/L	0.0005	0.002	10/14/21 20:17	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:17	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-007

ACZ Sample ID: ***L68785-07***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	103		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	16.4	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.03		*	mg/L	0.4	2	10/13/21 20:52	krh
Conductivity @25C	SM2510B	1	309		*	umhos/cm	1	10	09/29/21 9:48	eep
Fluoride	M300.0 - Ion Chromatography	1	0.612		*	mg/L	0.05	0.25	10/13/21 20:52	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:11	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	BH	*	mg/L	0.01	0.05	10/21/21 22:16	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/24/21 16:44	emk
Sulfate	M300.0 - Ion Chromatography	1	23.6		*	mg/L	0.4	2	10/13/21 20:52	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-008

ACZ Sample ID: ***L68785-08***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:44	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0148	B	*	mg/L	0.005	0.015	10/14/21 20:22	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:22	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0333		*	mg/L	0.0002	0.001	10/14/21 20:22	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00663		*	mg/L	0.0005	0.0025	10/14/21 20:22	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:22	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 19:57	jlw
Boron, dissolved	M200.7 ICP	1	0.082	B	*	mg/L	0.03	0.1	10/11/21 19:57	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:22	bsu
Calcium, dissolved	M200.7 ICP	1	5.98		*	mg/L	0.1	0.5	10/11/21 19:57	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:22	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:22	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:22	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 19:57	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0241		*	mg/L	0.007	0.02	10/14/21 20:22	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:22	bsu
Lithium, dissolved	M200.7 ICP	1	0.0808		*	mg/L	0.008	0.04	10/11/21 19:57	jlw
Magnesium, dissolved	M200.7 ICP	1	0.42	B	*	mg/L	0.2	1	10/11/21 19:57	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:22	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:35	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00464		*	mg/L	0.0002	0.0005	10/14/21 20:22	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:22	bsu
Potassium, dissolved	M200.7 ICP	1	3.41		*	mg/L	0.2	1	10/11/21 19:57	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 19:57	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00065		*	mg/L	0.0001	0.00025	10/14/21 20:22	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:22	bsu
Sodium, dissolved	M200.7 ICP	1	59.1		*	mg/L	0.2	1	10/11/21 19:57	jlw
Strontium, dissolved	M200.7 ICP	1	0.0254	B	*	mg/L	0.009	0.045	10/11/21 19:57	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:22	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00520		*	mg/L	0.0008	0.0025	10/14/21 20:22	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 19:57	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00026	B	*	mg/L	0.0001	0.0005	10/14/21 20:22	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00083	B	*	mg/L	0.0005	0.002	10/14/21 20:22	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:22	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-008

ACZ Sample ID: ***L68785-08***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	102		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	17.3	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.00		*	mg/L	0.4	2	10/13/21 21:10	krh
Conductivity @25C	SM2510B	1	306		*	umhos/cm	1	10	09/29/21 9:57	eep
Fluoride	M300.0 - Ion Chromatography	1	0.609		*	mg/L	0.05	0.25	10/13/21 21:10	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	10/16/21 22:14	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	BH	*	mg/L	0.01	0.05	10/21/21 22:17	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	216		*	mg/L	20	40	09/24/21 16:46	emk
Sulfate	M300.0 - Ion Chromatography	1	23.6		*	mg/L	0.4	2	10/13/21 21:10	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-009

ACZ Sample ID: ***L68785-09***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:51	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0182		*	mg/L	0.005	0.015	10/14/21 20:23	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:23	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0338		*	mg/L	0.0002	0.001	10/14/21 20:23	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00602		*	mg/L	0.0005	0.0025	10/14/21 20:23	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:23	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 20:00	jlw
Boron, dissolved	M200.7 ICP	1	0.081	B	*	mg/L	0.03	0.1	10/11/21 20:00	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:23	bsu
Calcium, dissolved	M200.7 ICP	1	5.76		*	mg/L	0.1	0.5	10/11/21 20:00	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:23	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:23	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:23	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 20:00	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0261		*	mg/L	0.007	0.02	10/14/21 20:23	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:23	bsu
Lithium, dissolved	M200.7 ICP	1	0.0805		*	mg/L	0.008	0.04	10/11/21 20:00	jlw
Magnesium, dissolved	M200.7 ICP	1	0.44	B	*	mg/L	0.2	1	10/11/21 20:00	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:23	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:36	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00559		*	mg/L	0.0002	0.0005	10/14/21 20:23	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:23	bsu
Potassium, dissolved	M200.7 ICP	1	4.07		*	mg/L	0.2	1	10/11/21 20:00	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 20:00	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	10/14/21 20:23	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:23	bsu
Sodium, dissolved	M200.7 ICP	1	59.0		*	mg/L	0.2	1	10/11/21 20:00	jlw
Strontium, dissolved	M200.7 ICP	1	0.0247	B	*	mg/L	0.009	0.045	10/11/21 20:00	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:23	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00696		*	mg/L	0.0008	0.0025	10/14/21 20:23	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 20:00	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:23	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00086	B	*	mg/L	0.0005	0.002	10/14/21 20:23	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:23	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-009

ACZ Sample ID: ***L68785-09***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	118		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	18.2	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	136		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.01		*	mg/L	0.4	2	10/13/21 21:28	krh
Conductivity @25C	SM2510B	1	311		*	umhos/cm	1	10	09/29/21 10:08	eep
Fluoride	M300.0 - Ion Chromatography	1	0.612		*	mg/L	0.05	0.25	10/13/21 21:28	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.021	B	*	mg/L	0.02	0.1	10/16/21 22:16	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.4		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.030	BH	*	mg/L	0.01	0.05	10/21/21 22:18	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	222		*	mg/L	20	40	09/24/21 16:48	emk
Sulfate	M300.0 - Ion Chromatography	1	23.7		*	mg/L	0.4	2	10/13/21 21:28	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-010

ACZ Sample ID: ***L68785-10***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 12:59	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0144	B	*	mg/L	0.005	0.015	10/14/21 20:25	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:25	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0335		*	mg/L	0.0002	0.001	10/14/21 20:25	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00656		*	mg/L	0.0005	0.0025	10/14/21 20:25	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:25	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 20:03	jlw
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	10/11/21 20:03	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:25	bsu
Calcium, dissolved	M200.7 ICP	1	6.03		*	mg/L	0.1	0.5	10/11/21 20:03	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:25	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:25	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:25	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 20:03	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0277		*	mg/L	0.007	0.02	10/14/21 20:25	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:25	bsu
Lithium, dissolved	M200.7 ICP	1	0.0817		*	mg/L	0.008	0.04	10/11/21 20:03	jlw
Magnesium, dissolved	M200.7 ICP	1	0.44	B	*	mg/L	0.2	1	10/11/21 20:03	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:25	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:38	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00469		*	mg/L	0.0002	0.0005	10/14/21 20:25	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:25	bsu
Potassium, dissolved	M200.7 ICP	1	3.58		*	mg/L	0.2	1	10/11/21 20:03	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 20:03	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00060		*	mg/L	0.0001	0.00025	10/14/21 20:25	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:25	bsu
Sodium, dissolved	M200.7 ICP	1	60.1		*	mg/L	0.2	1	10/11/21 20:03	jlw
Strontium, dissolved	M200.7 ICP	1	0.0256	B	*	mg/L	0.009	0.045	10/11/21 20:03	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:25	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00597		*	mg/L	0.0008	0.0025	10/14/21 20:25	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 20:03	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:25	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00078	B	*	mg/L	0.0005	0.002	10/14/21 20:25	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:25	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-010

ACZ Sample ID: ***L68785-10***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	103		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	17.0	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.98		*	mg/L	0.4	2	10/13/21 21:46	krh
Conductivity @25C	SM2510B	1	310		*	umhos/cm	1	10	09/29/21 10:17	eep
Fluoride	M300.0 - Ion Chromatography	1	0.614		*	mg/L	0.05	0.25	10/13/21 21:46	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.026	B	*	mg/L	0.02	0.1	10/16/21 22:17	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	BH	*	mg/L	0.01	0.05	10/21/21 22:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/24/21 16:50	emk
Sulfate	M300.0 - Ion Chromatography	1	23.6		*	mg/L	0.4	2	10/13/21 21:46	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-011

ACZ Sample ID: ***L68785-11***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 13:07	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0110	B	*	mg/L	0.005	0.015	10/14/21 20:30	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:30	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0340		*	mg/L	0.0002	0.001	10/14/21 20:30	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00623		*	mg/L	0.0005	0.0025	10/14/21 20:30	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:30	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 20:06	jlw
Boron, dissolved	M200.7 ICP	1	0.088	B	*	mg/L	0.03	0.1	10/11/21 20:06	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:30	bsu
Calcium, dissolved	M200.7 ICP	1	6.45		*	mg/L	0.1	0.5	10/11/21 20:06	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:30	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:30	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:30	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 20:06	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0262		*	mg/L	0.007	0.02	10/14/21 20:30	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:30	bsu
Lithium, dissolved	M200.7 ICP	1	0.0821		*	mg/L	0.008	0.04	10/11/21 20:06	jlw
Magnesium, dissolved	M200.7 ICP	1	0.44	B	*	mg/L	0.2	1	10/11/21 20:06	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:30	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:39	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00472		*	mg/L	0.0002	0.0005	10/14/21 20:30	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:30	bsu
Potassium, dissolved	M200.7 ICP	1	3.54		*	mg/L	0.2	1	10/11/21 20:06	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 20:06	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00062		*	mg/L	0.0001	0.00025	10/14/21 20:30	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:30	bsu
Sodium, dissolved	M200.7 ICP	1	60.2		*	mg/L	0.2	1	10/11/21 20:06	jlw
Strontium, dissolved	M200.7 ICP	1	0.0262	B	*	mg/L	0.009	0.045	10/11/21 20:06	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:30	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00612		*	mg/L	0.0008	0.0025	10/14/21 20:30	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 20:06	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:30	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00076	B	*	mg/L	0.0005	0.002	10/14/21 20:30	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:30	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-011

ACZ Sample ID: ***L68785-11***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	105		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	14.9	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	120		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.95		*	mg/L	0.4	2	10/13/21 22:04	krh
Conductivity @25C	SM2510B	1	309		*	umhos/cm	1	10	09/29/21 10:26	eep
Fluoride	M300.0 - Ion Chromatography	1	0.615		*	mg/L	0.05	0.25	10/13/21 22:04	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		18			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.035	B	*	mg/L	0.02	0.1	10/16/21 22:19	pjb
pH (lab)	SM4500H+ B									
pH		1	8.8	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.7		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.026	BH	*	mg/L	0.01	0.05	10/21/21 22:21	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	210		*	mg/L	20	40	09/24/21 16:52	emk
Sulfate	M300.0 - Ion Chromatography	1	23.6		*	mg/L	0.4	2	10/13/21 22:04	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-012

ACZ Sample ID: ***L68785-12***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 13:22	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0179		*	mg/L	0.005	0.015	10/14/21 20:32	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:32	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0324		*	mg/L	0.0002	0.001	10/14/21 20:32	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00662		*	mg/L	0.0005	0.0025	10/14/21 20:32	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:32	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 20:10	jlw
Boron, dissolved	M200.7 ICP	1	0.087	B	*	mg/L	0.03	0.1	10/11/21 20:10	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:32	bsu
Calcium, dissolved	M200.7 ICP	1	5.61		*	mg/L	0.1	0.5	10/11/21 20:10	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:32	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:32	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:32	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 20:10	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0251		*	mg/L	0.007	0.02	10/14/21 20:32	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:32	bsu
Lithium, dissolved	M200.7 ICP	1	0.0818		*	mg/L	0.008	0.04	10/11/21 20:10	jlw
Magnesium, dissolved	M200.7 ICP	1	0.45	B	*	mg/L	0.2	1	10/11/21 20:10	jlw
Manganese, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:32	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:42	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00467		*	mg/L	0.0002	0.0005	10/14/21 20:32	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:32	bsu
Potassium, dissolved	M200.7 ICP	1	3.31		*	mg/L	0.2	1	10/11/21 20:10	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 20:10	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00059		*	mg/L	0.0001	0.00025	10/14/21 20:32	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:32	bsu
Sodium, dissolved	M200.7 ICP	1	59.3		*	mg/L	0.2	1	10/11/21 20:10	jlw
Strontium, dissolved	M200.7 ICP	1	0.0274	B	*	mg/L	0.009	0.045	10/11/21 20:10	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:32	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00777		*	mg/L	0.0008	0.0025	10/14/21 20:32	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 20:10	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:32	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00080	B	*	mg/L	0.0005	0.002	10/14/21 20:32	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:32	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-012

ACZ Sample ID: ***L68785-12***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	109		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	12.2	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	122		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.08		*	mg/L	0.4	2	10/13/21 22:39	krh
Conductivity @25C	SM2510B	1	311		*	umhos/cm	1	10	09/29/21 10:35	eep
Fluoride	M300.0 - Ion Chromatography	1	0.606		*	mg/L	0.05	0.25	10/13/21 22:39	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		16			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.030	BH	*	mg/L	0.02	0.1	10/21/21 0:25	pjb
pH (lab)	SM4500H+ B									
pH		1	8.7	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	BH	*	mg/L	0.01	0.05	10/21/21 22:23	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	212		*	mg/L	20	40	09/24/21 16:54	emk
Sulfate	M300.0 - Ion Chromatography	1	23.6		*	mg/L	0.4	2	10/13/21 22:39	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-013

ACZ Sample ID: ***L68785-13***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 13:38	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0138	B	*	mg/L	0.005	0.015	10/14/21 20:33	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:33	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0293		*	mg/L	0.0002	0.001	10/14/21 20:33	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00917		*	mg/L	0.0005	0.0025	10/14/21 20:33	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:33	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 20:13	jlw
Boron, dissolved	M200.7 ICP	1	0.084	B	*	mg/L	0.03	0.1	10/11/21 20:13	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:33	bsu
Calcium, dissolved	M200.7 ICP	1	6.76		*	mg/L	0.1	0.5	10/11/21 20:13	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:33	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:33	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:33	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 20:13	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0481		*	mg/L	0.007	0.02	10/14/21 20:33	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:33	bsu
Lithium, dissolved	M200.7 ICP	1	0.0816		*	mg/L	0.008	0.04	10/11/21 20:13	jlw
Magnesium, dissolved	M200.7 ICP	1	0.49	B	*	mg/L	0.2	1	10/11/21 20:13	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00202		*	mg/L	0.0004	0.002	10/14/21 20:33	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:43	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00439		*	mg/L	0.0002	0.0005	10/14/21 20:33	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:33	bsu
Potassium, dissolved	M200.7 ICP	1	3.38		*	mg/L	0.2	1	10/11/21 20:13	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 20:13	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00056		*	mg/L	0.0001	0.00025	10/14/21 20:33	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:33	bsu
Sodium, dissolved	M200.7 ICP	1	58.9		*	mg/L	0.2	1	10/11/21 20:13	jlw
Strontium, dissolved	M200.7 ICP	1	0.0292	B	*	mg/L	0.009	0.045	10/11/21 20:13	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:33	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.171		*	mg/L	0.0008	0.0025	10/14/21 20:33	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 20:13	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00024	B	*	mg/L	0.0001	0.0005	10/14/21 20:33	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00059	B	*	mg/L	0.0005	0.002	10/14/21 20:33	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:33	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-013

ACZ Sample ID: ***L68785-13***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	99.0		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	19.8	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	6.07		*	mg/L	0.4	2	10/13/21 23:15	krh
Conductivity @25C	SM2510B	1	307		*	umhos/cm	1	10	09/29/21 10:45	eep
Fluoride	M300.0 - Ion Chromatography	1	0.611		*	mg/L	0.05	0.25	10/13/21 23:15	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		19			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/21/21 0:28	pjb
pH (lab)	SM4500H+ B									
pH		1	9.0	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.015	BH	*	mg/L	0.01	0.05	10/21/21 22:25	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	214		*	mg/L	20	40	09/24/21 16:55	emk
Sulfate	M300.0 - Ion Chromatography	1	23.5		*	mg/L	0.4	2	10/13/21 23:15	krh

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-014

ACZ Sample ID: ***L68785-14***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestion								10/05/21 13:45	bls

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.8 ICP-MS	1	0.0119	B	*	mg/L	0.005	0.015	10/14/21 20:35	bsu
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.002	10/14/21 20:35	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.0333		*	mg/L	0.0002	0.001	10/14/21 20:35	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.00707		*	mg/L	0.0005	0.0025	10/14/21 20:35	bsu
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	10/14/21 20:35	bsu
Bismuth, dissolved	M200.7 ICP	1	<0.04	U	*	mg/L	0.04	0.2	10/11/21 20:16	jlw
Boron, dissolved	M200.7 ICP	1	0.080	B	*	mg/L	0.03	0.1	10/11/21 20:16	jlw
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:35	bsu
Calcium, dissolved	M200.7 ICP	1	6.07		*	mg/L	0.1	0.5	10/11/21 20:16	jlw
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U	*	mg/L	0.0005	0.002	10/14/21 20:35	bsu
Cobalt, dissolved	M200.8 ICP-MS	1	<0.00005	U	*	mg/L	0.00005	0.00025	10/14/21 20:35	bsu
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U	*	mg/L	0.0008	0.002	10/14/21 20:35	bsu
Gallium, dissolved	M200.7 ICP	1	<0.1	U	*	mg/L	0.1	0.5	10/11/21 20:16	jlw
Iron, dissolved	M200.8 ICP-MS	1	0.0308		*	mg/L	0.007	0.02	10/14/21 20:35	bsu
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:35	bsu
Lithium, dissolved	M200.7 ICP	1	0.0812		*	mg/L	0.008	0.04	10/11/21 20:16	jlw
Magnesium, dissolved	M200.7 ICP	1	0.44	B	*	mg/L	0.2	1	10/11/21 20:16	jlw
Manganese, dissolved	M200.8 ICP-MS	1	0.00043	B	*	mg/L	0.0004	0.002	10/14/21 20:35	bsu
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	09/30/21 14:44	mlh
Molybdenum, dissolved	M200.8 ICP-MS	1	0.00454		*	mg/L	0.0002	0.0005	10/14/21 20:35	bsu
Nickel, dissolved	M200.8 ICP-MS	1	<0.0004	U	*	mg/L	0.0004	0.001	10/14/21 20:35	bsu
Potassium, dissolved	M200.7 ICP	1	3.51		*	mg/L	0.2	1	10/11/21 20:16	jlw
Scandium, dissolved	M200.7 ICP	1	<0.05	U	*	mg/L	0.05	0.2	10/11/21 20:16	jlw
Selenium, dissolved	M200.8 ICP-MS	1	0.00058		*	mg/L	0.0001	0.00025	10/14/21 20:35	bsu
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:35	bsu
Sodium, dissolved	M200.7 ICP	1	59.3		*	mg/L	0.2	1	10/11/21 20:16	jlw
Strontium, dissolved	M200.7 ICP	1	0.0260	B	*	mg/L	0.009	0.045	10/11/21 20:16	jlw
Thallium, dissolved	M200.8 ICP-MS	1	<0.0001	U	*	mg/L	0.0001	0.0005	10/14/21 20:35	bsu
Tin, dissolved	M200.8 ICP-MS	1	0.00778		*	mg/L	0.0008	0.0025	10/14/21 20:35	bsu
Titanium, dissolved	M200.7 ICP	1	<0.005	U	*	mg/L	0.005	0.025	10/11/21 20:16	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.00025	B	*	mg/L	0.0001	0.0005	10/14/21 20:35	bsu
Vanadium, dissolved	M200.8 ICP-MS	1	0.00082	B	*	mg/L	0.0005	0.002	10/14/21 20:35	bsu
Zinc, dissolved	M200.8 ICP-MS	1	<0.006	U	*	mg/L	0.006	0.015	10/14/21 20:35	bsu

Western Environmental Testing Laboratory
Project ID:
Sample ID: 21090519-014

ACZ Sample ID: ***L68785-14***
Date Sampled: *09/18/21 13:00*
Date Received: *09/24/21*
Sample Matrix: *Leachate*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	103		*	mg/L	2	20	09/29/21 0:00	eep
Carbonate as CaCO3		1	16.0	B	*	mg/L	2	20	09/29/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	09/29/21 0:00	eep
Total Alkalinity		1	119		*	mg/L	2	20	09/29/21 0:00	eep
Chloride	M300.0 - Ion Chromatography	1	5.96		*	mg/L	0.4	2	10/13/21 23:33	krh
Conductivity @25C	SM2510B	1	307		*	umhos/cm	1	10	09/29/21 10:54	eep
Fluoride	M300.0 - Ion Chromatography	1	0.610		*	mg/L	0.05	0.25	10/13/21 23:33	krh
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		17.0			mg/L	0.2	5	10/22/21 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	UH	*	mg/L	0.02	0.1	10/21/21 0:30	pjb
pH (lab)	SM4500H+ B									
pH		1	8.9	H	*	units	0.1	0.1	09/29/21 0:00	eep
pH measured at		1	23.5		*	C	0.1	0.1	09/29/21 0:00	eep
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	1	0.027	BH	*	mg/L	0.01	0.05	10/21/21 22:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	220		*	mg/L	20	40	09/24/21 16:57	emk
Sulfate	M300.0 - Ion Chromatography	1	23.4		*	mg/L	0.4	2	10/13/21 23:33	krh

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
ICB	Initial Calibration Blank	*MS*	Matrix Spike
ICV	Initial Calibration Verification standard	*MSD*	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	*PBS*	Prep Blank - Soil
LCSS	Laboratory Control Sample - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211PBW1	PBW	09/28/21 20:24				23.2	mg/L		-20	20			B4 BF
WG528211LCSW3	LCSW	09/28/21 20:42	WC210917-2	820.0001		795	mg/L	97	90	110			
WG528211LCSW6	LCSW	09/28/21 23:45	WC210917-2	820.0001		794.7	mg/L	97	90	110			
WG528211PBW2	PBW	09/28/21 23:53				U	mg/L		-20	20			
WG528211LCSW9	LCSW	09/29/21 3:39	WC210917-2	820.0001		811.5	mg/L	99	90	110			
WG528211PBW3	PBW	09/29/21 3:46				U	mg/L		-20	20			
WG528211LCSW12	LCSW	09/29/21 7:35	WC210917-2	820.0001		813.2	mg/L	99	90	110			
WG528211PBW4	PBW	09/29/21 7:42				U	mg/L		-20	20			
L68785-04DUP	DUP	09/29/21 9:21			116	116.6	mg/L				1	20	
L68785-14DUP	DUP	09/29/21 11:03			119	119.1	mg/L				0	20	
WG528211LCSW15	LCSW	09/29/21 11:31	WC210917-2	820.0001		821.6	mg/L	100	90	110			

Aluminum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.1		.1003	mg/L	100	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.011	0.011			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.050065		.0519	mg/L	104	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.050065	.0144	.0637	mg/L	98	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.050065	.0144	.0628	mg/L	97	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.050065	.0067	.0557	mg/L	98	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.050065	.0067	.0594	mg/L	105	70	130	6	20	

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.0201		.02158	mg/L	107	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00088	0.00088			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.01		.00921	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.01	U	.00836	mg/L	84	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.01	U	.00863	mg/L	86	70	130	3	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.01	U	.00888	mg/L	89	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.01	U	.00911	mg/L	91	70	130	3	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05113	mg/L	102	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00044	0.00044			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05005		.04674	mg/L	93	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05005	.0335	.08102	mg/L	95	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05005	.0335	.08149	mg/L	96	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05005	.00074	.04866	mg/L	96	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05005	.00074	.04988	mg/L	98	70	130	2	20	

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ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05316	mg/L	106	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.0011	0.0011			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.049985		.04683	mg/L	94	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.049985	.00656	.05542	mg/L	98	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.049985	.00656	.05582	mg/L	99	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.049985	.0175	.06592	mg/L	97	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.049985	.0175	.06766	mg/L	100	70	130	3	20	

Beryllium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.050083	mg/L	100	90	110			
WG529497ICB	ICB	10/14/21 20:03				.000089	mg/L		-0.000176	0.000176			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05005		.044937	mg/L	90	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05005	U	.045328	mg/L	91	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05005	U	.045476	mg/L	91	70	130	0	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05005	U	.046081	mg/L	92	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05005	U	.047629	mg/L	95	70	130	3	20	

Bismuth, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	2		1.956	mg/L	98	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.12	0.12			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	1		1.014	mg/L	101	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	1	U	1.008	mg/L	101	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	1	U	1.009	mg/L	101	85	115	0	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	1	U	.965	mg/L	97	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	1	U	1.016	mg/L	102	85	115	5	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	2		1.997	mg/L	100	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.09	0.09			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	.5005		.506	mg/L	101	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	.5005	.087	.596	mg/L	102	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	.5005	.087	.605	mg/L	103	85	115	1	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	.5005	U	.531	mg/L	106	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	.5005	U	.534	mg/L	107	85	115	1	20	

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.051342	mg/L	103	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00011	0.00011			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05005		.04501	mg/L	90	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05005	U	.046509	mg/L	93	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05005	U	.047064	mg/L	94	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05005	U	.045111	mg/L	90	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05005	U	.046959	mg/L	94	70	130	4	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	100		99.73	mg/L	100	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.3	0.3			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	67.98972		69.47	mg/L	102	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	67.98972	6.64	75.04	mg/L	101	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	67.98972	6.64	75.39	mg/L	101	85	115	0	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	67.98972	27.9	95.89	mg/L	100	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	67.98972	27.9	97.13	mg/L	102	85	115	1	20	

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529226													
WG529226ICV	ICV	10/12/21 19:45	WI211011-8	19.96		20.22	mg/L	101	90	110			
WG529226ICB	ICB	10/12/21 20:03				U	mg/L		-0.4	0.4			
WG529226LFB1	LFB	10/13/21 17:35	WI210907-6	30		31.45	mg/L	105	90	110			
L68785-01DUP	DUP	10/13/21 18:11			5.99	6.01	mg/L				0	20	
L68785-02AS	AS	10/13/21 18:46	WI210907-6	30	5.98	37.76	mg/L	106	90	110			
L68785-11DUP	DUP	10/13/21 22:21			5.95	5.97	mg/L				0	20	
L68785-12AS	AS	10/13/21 22:57	WI210907-6	30	6.08	37.66	mg/L	105	90	110			
WG529226LFB2	LFB	10/14/21 2:14	WI210907-6	30		32.04	mg/L	107	90	110			

Chromium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05093	mg/L	102	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.0011	0.0011			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05		.04618	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05	U	.04661	mg/L	93	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05	U	.04683	mg/L	94	70	130	0	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05	U	.04603	mg/L	92	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05	U	.0473	mg/L	95	70	130	3	20	

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.052565	mg/L	105	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00011	0.00011			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05005		.046974	mg/L	94	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05005	U	.048295	mg/L	96	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05005	U	.047815	mg/L	96	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05005	.000258	.048087	mg/L	96	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05005	.000258	.049984	mg/L	99	70	130	4	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW2	LCSW	09/28/21 20:30	PCN63140	1408		1445	umhos/cm	103	90	110			
WG528211LCSW5	LCSW	09/28/21 23:34	PCN63140	1408		1439	umhos/cm	102	90	110			
WG528211LCSW8	LCSW	09/29/21 3:26	PCN63140	1408		1432	umhos/cm	102	90	110			
WG528211LCSW11	LCSW	09/29/21 7:22	PCN63140	1408		1431	umhos/cm	102	90	110			
L68785-04DUP	DUP	09/29/21 9:21			304	303	umhos/cm				0	20	
L68785-14DUP	DUP	09/29/21 11:03			307	306	umhos/cm				0	20	
WG528211LCSW14	LCSW	09/29/21 11:09	PCN63140	1408		1427	umhos/cm	101	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05185	mg/L	104	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00176	0.00176			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05		.04633	mg/L	93	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05	U	.0465	mg/L	93	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05	U	.04675	mg/L	94	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05	.00436	.04968	mg/L	91	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05	.00436	.0508	mg/L	93	70	130	2	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529226													
WG529226ICV	ICV	10/12/21 19:45	WI211011-8	4.004		4.212	mg/L	105	90	110			
WG529226ICB	ICB	10/12/21 20:03				U	mg/L		-0.05	0.05			
WG529226LFB1	LFB	10/13/21 17:35	WI210907-6	1.5		1.595	mg/L	106	90	110			
L68785-01DUP	DUP	10/13/21 18:11			.612	.612	mg/L				0	20	
L68785-02AS	AS	10/13/21 18:46	WI210907-6	1.5	.614	2.225	mg/L	107	90	110			
L68785-11DUP	DUP	10/13/21 22:21			.615	.616	mg/L				0	20	
L68785-12AS	AS	10/13/21 22:57	WI210907-6	1.5	.606	2.222	mg/L	108	90	110			
WG529226LFB2	LFB	10/14/21 2:14	WI210907-6	1.5		1.612	mg/L	107	90	110			

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Gallium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	2		2.02	mg/L	101	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.3	0.3			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	.9822		1.05	mg/L	107	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	.9822	U	1.06	mg/L	108	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	.9822	U	.99	mg/L	101	85	115	7	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	.9822	U	1.02	mg/L	104	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	.9822	U	1.09	mg/L	111	85	115	7	20	

Iron, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.10016		.1008	mg/L	101	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.0154	0.0154			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.0501		.0529	mg/L	106	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.0501	.0277	.0754	mg/L	95	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.0501	.0277	.0753	mg/L	95	70	130	0	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.0501	.0381	.0837	mg/L	91	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.0501	.0381	.0852	mg/L	94	70	130	2	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05261	mg/L	105	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00022	0.00022			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05005		.04695	mg/L	94	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05005	U	.04917	mg/L	98	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05005	U	.05113	mg/L	102	70	130	4	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05005	.00025	.04891	mg/L	97	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05005	.00025	.05166	mg/L	103	70	130	5	20	

Lithium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	2		1.9835	mg/L	99	95	105			
WG529142ICB	ICB	10/11/21 19:05				.0082	mg/L		-0.024	0.024			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	.999		.9892	mg/L	99	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	.999	.0797	1.053	mg/L	97	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	.999	.0797	1.046	mg/L	97	85	115	1	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	.999	.0145	.9556	mg/L	94	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	.999	.0145	.9891	mg/L	98	85	115	3	20	

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	100		96.19	mg/L	96	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.6	0.6			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	49.99828		48.66	mg/L	97	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	49.99828	.37	48.41	mg/L	96	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	49.99828	.37	48.55	mg/L	96	85	115	0	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	49.99828	8.32	56.2	mg/L	96	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	49.99828	8.32	56.91	mg/L	97	85	115	1	20	

Manganese, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05133	mg/L	103	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00088	0.00088			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.0499		.04591	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.0499	U	.04758	mg/L	95	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.0499	U	.0475	mg/L	95	70	130	0	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.0499	.00209	.04936	mg/L	95	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.0499	.00209	.05077	mg/L	98	70	130	3	20	

Mercury, dissolved M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528379													
WG528379ICV	ICV	09/30/21 13:38	HG210927-3	.00501		.00511	mg/L	102	90	110			
WG528379ICB	ICB	09/30/21 13:39				U	mg/L		-0.0006	0.0006			
WG528381													
WG528381LRB	LRB	09/30/21 14:17				U	mg/L		-0.00044	0.00044			
WG528381LFB	LFB	09/30/21 14:18	HG210927-6	.002002		.00194	mg/L	97	85	115			
L68701-02LFM	LFM	09/30/21 14:22	HG210927-6	.002002	U	.00196	mg/L	98	85	115			
L68701-02LFMD	LFMD	09/30/21 14:23	HG210927-6	.002002	U	.00189	mg/L	94	85	115	4	20	
L68785-11LFM	LFM	09/30/21 14:40	HG210927-6	.002002	U	.00193	mg/L	96	85	115			
L68785-11LFMD	LFMD	09/30/21 14:41	HG210927-6	.002002	U	.00192	mg/L	96	85	115	1	20	

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.01992		.0208	mg/L	104	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00044	0.00044			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05005		.04674	mg/L	93	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05005	.00469	.05245	mg/L	95	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05005	.00469	.05297	mg/L	96	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05005	.0019	.04973	mg/L	96	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05005	.0019	.05086	mg/L	98	70	130	2	20	

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nickel, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05184	mg/L	104	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00088	0.00088			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05		.0461	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05	U	.04553	mg/L	91	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05	U	.04597	mg/L	92	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05	.00152	.04587	mg/L	89	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05	.00152	.0471	mg/L	91	70	130	3	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529630													
WG529630ICV	ICV	10/16/21 20:58	WI210904-1	2.4161		2.334	mg/L	97	90	110			
WG529630ICB	ICB	10/16/21 21:00				U	mg/L		-0.02	0.02			
WG529632													
WG529632LFB	LFB	10/16/21 21:51	WI211001-5	2		2.076	mg/L	104	90	110			
L68700-01AS	AS	10/16/21 21:53	WI211001-5	2	U	2.102	mg/L	105	90	110			
L68757-02DUP	DUP	10/16/21 21:56			U	U	mg/L				0	20	RA
L68785-07AS	AS	10/16/21 22:12	WI211001-5	2	U	2.119	mg/L	106	90	110			
L68785-08DUP	DUP	10/16/21 22:15			U	U	mg/L				0	20	RA
WG529972													
WG529972ICV	ICV	10/20/21 22:24	WI210904-1	2.4161		2.352	mg/L	97	90	110			
WG529972ICB	ICB	10/20/21 22:25				U	mg/L		-0.02	0.02			
WG529976													
WG529976LFB	LFB	10/21/21 0:24	WI211001-5	2		1.993	mg/L	100	90	110			
L68785-12AS	AS	10/21/21 0:26	WI211001-5	2	.03	2.14	mg/L	106	90	110			
L68785-13DUP	DUP	10/21/21 0:29			U	U	mg/L				0	20	RA

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG528211													
WG528211LCSW1	LCSW	09/28/21 20:28	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW4	LCSW	09/28/21 23:32	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW7	LCSW	09/29/21 3:24	PCN62948	6		6.1	units	102	5.9	6.1			
WG528211LCSW10	LCSW	09/29/21 7:20	PCN62948	6		6.1	units	102	5.9	6.1			
L68785-04DUP	DUP	09/29/21 9:21			8.8	8.8	units				0	20	
L68785-14DUP	DUP	09/29/21 11:03			8.9	8.8	units				1	20	
WG528211LCSW13	LCSW	09/29/21 11:08	PCN62948	6		6.1	units	102	5.9	6.1			

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Phosphorus, dissolved M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530056													
WG530056ICV	ICV	10/21/21 21:31	WI211015-6	.65228		.672	mg/L	103	90	110			
WG530056ICB	ICB	10/21/21 21:34				U	mg/L		-0.01	0.01			
WG530057													
WG528608LRB	LRB	10/21/21 22:02				U	mg/L		-0.01	0.01			
WG528608LFB	LFB	10/21/21 22:03	WI211001-2	.5		.48	mg/L	96	90	110			
L68785-01DUP	DUP	10/21/21 22:06			.024	.024	mg/L				0	20	RA
L68785-02LFM	LFM	10/21/21 22:08	WI211001-2	.5	.024	.501	mg/L	95	90	110			
L68785-11LFM	LFM	10/21/21 22:22	WI211001-2	.5	.026	.501	mg/L	95	90	110			
L68785-12DUP	DUP	10/21/21 22:24			.027	.026	mg/L				4	20	RA

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	20		19.19	mg/L	96	95	105			
WG529142ICB	ICB	10/11/21 19:05				.31	mg/L		-0.6	0.6			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	99.96008		100	mg/L	100	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	99.96008	2.82	101.6	mg/L	99	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	99.96008	2.82	101.6	mg/L	99	85	115	0	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	99.96008	1.19	100.6	mg/L	99	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	99.96008	1.19	101.3	mg/L	100	85	115	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG527983													
WG527983PBW	PBW	09/24/21 16:15				U	mg/L		-20	20			
WG527983LCSW	LCSW	09/24/21 16:16	PCN64132	1000		1004	mg/L	100	80	120			
L68785-04DUP	DUP	09/24/21 16:38			210	214	mg/L				2	10	
L68785-14DUP	DUP	09/24/21 16:59			220	218	mg/L				1	10	

Scandium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	2		1.989	mg/L	99	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.15	0.15			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	1.0017		.987	mg/L	99	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	1.0017	U	.986	mg/L	98	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	1.0017	U	.978	mg/L	98	85	115	1	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	1.0017	U	.981	mg/L	98	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	1.0017	U	.984	mg/L	98	85	115	0	20	

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05007	mg/L	100	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00022	0.00022			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05		.04619	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05	.0006	.04839	mg/L	96	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05	.0006	.04838	mg/L	96	70	130	0	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05	.0003	.04779	mg/L	95	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05	.0003	.04909	mg/L	98	70	130	3	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.02		.02016	mg/L	101	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00022	0.00022			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.01		.00918	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.01	U	.00814	mg/L	81	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.01	U	.0075	mg/L	75	70	130	8	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.01	U	.00871	mg/L	87	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.01	U	.0086	mg/L	86	70	130	1	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	100		99.7	mg/L	100	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.6	0.6			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	100.007		100.4	mg/L	100	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	100.007	58.1	155.5	mg/L	97	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	100.007	58.1	155.7	mg/L	98	85	115	0	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	100.007	3.8	103.9	mg/L	100	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	100.007	3.8	104.6	mg/L	101	85	115	1	20	

Strontium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	2		1.95	mg/L	98	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.027	0.027			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	.5005		.5387	mg/L	108	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	.5005	.0268	.5588	mg/L	106	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	.5005	.0268	.5564	mg/L	106	85	115	0	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	.5005	.148	.6767	mg/L	106	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	.5005	.148	.6796	mg/L	106	85	115	0	20	

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529226													
WG529226ICV	ICV	10/12/21 19:45	WI211011-8	51.15		51.47	mg/L	101	90	110			
WG529226ICB	ICB	10/12/21 20:03				U	mg/L		-0.4	0.4			
WG529226LFB1	LFB	10/13/21 17:35	WI210907-6	30		31.6	mg/L	105	90	110			
L68785-01DUP	DUP	10/13/21 18:11			23.2	23.37	mg/L				1	20	
L68785-02AS	AS	10/13/21 18:46	WI210907-6	30	23.3	54.6	mg/L	104	90	110			
L68785-11DUP	DUP	10/13/21 22:21			23.6	23.63	mg/L				0	20	
L68785-12AS	AS	10/13/21 22:57	WI210907-6	30	23.6	54.69	mg/L	104	90	110			
WG529226LFB2	LFB	10/14/21 2:14	WI210907-6	30		32.74	mg/L	109	90	110			

Thallium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05333	mg/L	107	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00022	0.00022			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05		.04642	mg/L	93	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05	U	.04913	mg/L	98	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05	U	.0498	mg/L	100	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05	U	.04861	mg/L	97	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05	U	.05179	mg/L	104	70	130	6	20	

Tin, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05366	mg/L	107	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00176	0.00176			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05005		.04619	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05005	.00597	.05204	mg/L	92	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05005	.00597	.05347	mg/L	95	70	130	3	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05005	U	.04661	mg/L	93	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05005	U	.04841	mg/L	97	70	130	4	20	

Titanium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529142													
WG529142ICV	ICV	10/11/21 18:59	II211001-1	2		1.972	mg/L	99	95	105			
WG529142ICB	ICB	10/11/21 19:05				U	mg/L		-0.015	0.015			
WG529142LFB	LFB	10/11/21 19:18	II210930-2	1		1.03	mg/L	103	85	115			
L68785-03AS	AS	10/11/21 19:31	II210930-2	1	U	1.021	mg/L	102	85	115			
L68785-03ASD	ASD	10/11/21 19:34	II210930-2	1	U	1.015	mg/L	102	85	115	1	20	
L68906-01AS	AS	10/11/21 20:26	II210930-2	1	.0098	.9806	mg/L	97	85	115			
L68906-01ASD	ASD	10/11/21 20:35	II210930-2	1	.0098	1.017	mg/L	101	85	115	4	20	

WETLAB

ACZ Project ID: ***L68785***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.05205	mg/L	104	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.00022	0.00022			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05		.04579	mg/L	92	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05	.00025	.04892	mg/L	97	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05	.00025	.05048	mg/L	100	70	130	3	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05	U	.04776	mg/L	96	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05	U	.05131	mg/L	103	70	130	7	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.04829	mg/L	97	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.0011	0.0011			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.05		.04526	mg/L	91	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.05	.00078	.04839	mg/L	95	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.05	.00078	.04797	mg/L	94	70	130	1	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.05	U	.04631	mg/L	93	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.05	U	.04762	mg/L	95	70	130	3	20	

Zinc, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529497													
WG529497ICV	ICV	10/14/21 20:02	MS211013-2	.05		.0506	mg/L	101	90	110			
WG529497ICB	ICB	10/14/21 20:03				U	mg/L		-0.0132	0.0132			
WG529497LFB	LFB	10/14/21 20:05	MS210927-3	.050075		.0523	mg/L	104	85	115			
L68785-10AS	AS	10/14/21 20:27	MS210927-3	.050075	U	.0535	mg/L	107	70	130			
L68785-10ASD	ASD	10/14/21 20:28	MS210927-3	.050075	U	.0535	mg/L	107	70	130	0	20	
L68924-01AS	AS	10/14/21 20:43	MS210927-3	.050075	.0477	.0982	mg/L	101	70	130			
L68924-01ASD	ASD	10/14/21 20:45	MS210927-3	.050075	.0477	.1001	mg/L	105	70	130	2	20	

Western Environmental Testing Laboratory ACZ Project ID: ***L68785***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68785-01	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-02	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-03	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-04	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-05	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-06	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.

Western Environmental Testing Laboratory ACZ Project ID: ***L68785***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68785-07	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-08	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-09	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-10	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-11	WG529632	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68785-12	WG529976	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-13	WG529976	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
L68785-14	WG529976	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M353.2 - H2SO4 preserved	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG530057	Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG527983	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.

Metals Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Aluminum, dissolved	M200.8 ICP-MS
Antimony, dissolved	M200.8 ICP-MS
Arsenic, dissolved	M200.8 ICP-MS
Barium, dissolved	M200.8 ICP-MS
Beryllium, dissolved	M200.8 ICP-MS
Bismuth, dissolved	M200.7 ICP
Boron, dissolved	M200.7 ICP
Cadmium, dissolved	M200.8 ICP-MS
Calcium, dissolved	M200.7 ICP
Chromium, dissolved	M200.8 ICP-MS
Cobalt, dissolved	M200.8 ICP-MS
Copper, dissolved	M200.8 ICP-MS
Gallium, dissolved	M200.7 ICP
Iron, dissolved	M200.8 ICP-MS
Lead, dissolved	M200.8 ICP-MS
Lithium, dissolved	M200.7 ICP
Magnesium, dissolved	M200.7 ICP
Manganese, dissolved	M200.8 ICP-MS
Mercury, dissolved	M245.1 CVAA
Molybdenum, dissolved	M200.8 ICP-MS
Nickel, dissolved	M200.8 ICP-MS
Potassium, dissolved	M200.7 ICP
Scandium, dissolved	M200.7 ICP
Selenium, dissolved	M200.8 ICP-MS
Silver, dissolved	M200.8 ICP-MS
Sodium, dissolved	M200.7 ICP
Strontium, dissolved	M200.7 ICP
Thallium, dissolved	M200.8 ICP-MS
Tin, dissolved	M200.8 ICP-MS
Titanium, dissolved	M200.7 ICP
Uranium, dissolved	M200.8 ICP-MS
Vanadium, dissolved	M200.8 ICP-MS
Zinc, dissolved	M200.8 ICP-MS

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Bicarbonate as CaCO3	SM2320B - Titration
Carbonate as CaCO3	SM2320B - Titration
Chloride	M300.0 - Ion Chromatography
Conductivity @25C	SM2510B
Fluoride	M300.0 - Ion Chromatography
Hydroxide as CaCO3	SM2320B - Titration
pH	SM4500H+ B
pH measured at	SM4500H+ B
Residue, Filterable (TDS) @180C	SM2540C
Sulfate	M300.0 - Ion Chromatography

Total Alkalinity	SM2320B - Titration

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68785
Date Received: 09/24/2021 11:35
Received By:
Date Printed: 9/27/2021

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?		X	

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
NA36047	3.2	<=6.0	15	N/A
NA36046	0.3	<=6.0	15	N/A
NA36048	0.5	<=6.0	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Sample Receipt

Western Environmental Testing Laboratory

ACZ Project ID: L68785
Date Received: 09/24/2021 11:35
Received By:
Date Printed: 9/27/2021

[1] The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68785

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST
***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg (D) 245.1
21090519-001	9/18/2021 13:00	OT	3	✓	✓
21090519-002				✓	✓
21090519-003				✓	✓
21090519-004				✓	✓
21090519-005				✓	✓
21090519-006				✓	✓
21090519-007				✓	✓
21090519-008				✓	✓
21090519-009				✓	✓
21090519-010				✓	✓

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Kim Uline	9/23 1:00	[illegible] 9/24/21	1130

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L68785 Chain of Custod

ACZ LABORATORIES | Accredited Environmental Testing | 2773 Downhill Drive, Steamboat Springs, CO 80487, (970) 879-6590 | L68785

CHAIN of CUSTODY

Report to:

Name: Mckenna Oh
Company: Western Environmental Testing Laboratory
E-mail: reporting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Accounting
Company: Western Environmental Testing Laboratory
E-mail: accounting@wetlaboratory.com
Address: 475 E Greg St, Suite 119
Sparks, NV 89431
Telephone: (775)355-0202

Copy of Invoice to:

Name:
Company:
E-mail:
Address:
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ✓ NO
If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ✓
If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Mckenna Oh **Sampler's Site Information** **State** NV **Zip code** 89431 **Time Zone** PST

***Sampler's Signature:** _____
*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #: LEACHATE
PO#:
Reporting state for compliance testing:
Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Please see attached	Hg(O) 245.1							
21090519-011	9/18/2021 13:00	OT	3	✓	✓							
21090519-012	"	"	"	✓	✓							
21090519-013	"	"	"	✓	✓							
21090519-014	"	"	"	✓	✓							

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Diffusion Project / Leachate

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
Kim C	9/20 2:00	[signature]	9/24/21 1130

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Analytical Quote

8/20/2021

Quote Number: LEACHATE

Matrix: Leachate 155-160 Leachate Samples

Parameter	Method	Detection Limit	Cost/Sample
Diskette/QC Summary			
Quality Control Summary			$0.00
Inorganic Prep			
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid Digestic		$0.00
Metals Analysis			
Dissolved Metals by ICP			$85.00
Dissolved Metals by ICP-MS			$85.00
Aluminum, dissolved	M200.8 ICP-MS	0.005 mg/L	$0.00
Antimony, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Arsenic, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Barium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Beryllium, dissolved	M200.8 ICP-MS	0.00008 mg/L	$0.00
Bismuth, dissolved	M200.7 ICP	0.04 mg/L	$0.00
Boron, dissolved	M200.8 ICP-MS	0.001 mg/L	$0.00
Cadmium, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Calcium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Chromium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Cobalt, dissolved	M200.8 ICP-MS	0.00005 mg/L	$0.00
Copper, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Gallium, dissolved	M200.7 ICP	0.1 mg/L	$0.00
Iron, dissolved	M200.8 ICP-MS	0.007 mg/L	$0.00
Lead, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Lithium, dissolved	M200.7 ICP	0.008 mg/L	$0.00
Magnesium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Manganese, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
[redacted]	[redacted]	[redacted]	$46.25
Molybdenum, dissolved	M200.8 ICP-MS	0.0002 mg/L	$0.00
Nickel, dissolved	M200.8 ICP-MS	0.0004 mg/L	$0.00
Potassium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Scandium, dissolved	M200.7 ICP	0.05 mg/L	$0.00
Selenium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Silver, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Sodium, dissolved	M200.7 ICP	0.2 mg/L	$0.00
Strontium, dissolved	M200.7 ICP	0.009 mg/L	$0.00
Thallium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Tin, dissolved	M200.8 ICP-MS	0.0008 mg/L	$0.00
Titanium, dissolved	M200.7 ICP	0.005 mg/L	$0.00
Uranium, dissolved	M200.8 ICP-MS	0.0001 mg/L	$0.00
Vanadium, dissolved	M200.8 ICP-MS	0.0005 mg/L	$0.00
Zinc, dissolved	M200.8 ICP-MS	0.006 mg/L	$0.00

Misc.			
Electronic Data Deliverable			$0.00
Wet Chemistry			
Alkalinity as CaCO3	SM2320B - Titration	2 mg/L	$11.00
Chloride	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
Conductivity @25C	SM2510B	1 umhos/cm	$7.50
Fluoride	M300.0 - Ion Chromatography	0.05 mg/L	$12.00
Hardness as CaCO3 (dissolved)	SM2340B - Calculation	Calculation	$0.00
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	0.02 mg/L	$10.00
pH (lab)	SM4500H+ B	0.1 C	$7.50
Phosphorus, dissolved	M365.1 - Auto Ascorbic Acid (digest)	0.01 mg/L	$21.50
Residue, Filterable (TDS) @180C	SM2540C	20 mg/L	$13.00
Sulfate	M300.0 - Ion Chromatography	0.4 mg/L	$12.00
		Cost/Sample:	**$322.75**

ACZ assigns a Project Manager to all of our clients. Your Project Manager is Susan Webber. Susan will serve as your main point of contact for all bottle orders, report statuses, questions on your data and changes to your account, and can be reached at suew@acz.com or 970-879-6590 ext 110. Turnaround times are estimates and may fluctuate due to seasonal workload.