

May 02, 2022

Report to:

Kara Haas
South32
2210 E Ft. Lowell Rd.
Tucson, AZ 85719

Bill to:

Accounts Payable
South32
2210 E Fort Lowell Road
Tucson, AZ 85719

cc: Chim Xiao, Keltie Hicks, Brandon Marchand

Project ID: 4542257445

ACZ Project ID: L72311

Kara Haas:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 01, 2022. This project has been assigned to ACZ's project number, L72311. 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 L72311. 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 April 21, 2024. 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.



Arizona Minerals Inc.

May 02, 2022

Project ID: 4542257445

ACZ Project ID: L72311

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 5 groundwater samples from Arizona Minerals Inc. on April 1, 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 L72311. 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. (DE) L72311-05/SELENIUM

Sample diluted per PM instructions for Se interference.

Arizona Minerals Inc.

Project ID: 4542257445
Sample ID: MW-9-20220330

ACZ Sample ID: **L72311-03**
Date Sampled: 03/30/22 10:30
Date Received: 04/01/22
Sample Matrix: Groundwater

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								04/07/22 12:06	bls
Total Hot Plate Digestion	M200.2 ICP-MS								04/14/22 11:35	mfm
Total Hot Plate Digestion	M200.2 ICP								04/15/22 16:40	keh/ae h

Arizona Minerals Inc.

Project ID: 4542257445
 Sample ID: MW-9-20220330

ACZ Sample ID: **L72311-03**
 Date Sampled: 03/30/22 10:30
 Date Received: 04/01/22
 Sample Matrix: Groundwater

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	04/20/22 0:06	wtc
Aluminum, total	M200.7 ICP	1	1.27		*	mg/L	0.05	0.25	04/16/22 19:37	wtc
Antimony, dissolved	M200.8 ICP-MS	1	0.00365			mg/L	0.0004	0.002	04/15/22 12:11	mfm
Antimony, total	M200.8 ICP-MS	1	0.00336			mg/L	0.0004	0.002	04/18/22 11:00	kja
Arsenic, dissolved	M200.8 ICP-MS	1	0.00775			mg/L	0.0002	0.001	04/15/22 12:11	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00930			mg/L	0.0002	0.001	04/18/22 11:00	kja
Barium, dissolved	M200.7 ICP	1	0.0271	B		mg/L	0.007	0.035	04/20/22 0:06	wtc
Barium, total	M200.7 ICP	1	0.0479			mg/L	0.007	0.035	04/16/22 19:37	wtc
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	04/15/22 12:11	mfm
Beryllium, total	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	04/18/22 11:00	kja
Boron, dissolved	M200.7 ICP	1	0.128			mg/L	0.03	0.1	04/20/22 0:06	wtc
Boron, total	M200.7 ICP	1	0.143			mg/L	0.03	0.1	04/16/22 19:37	wtc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	04/15/22 12:11	mfm
Cadmium, total	M200.8 ICP-MS	1	0.000251			mg/L	0.00005	0.00025	04/18/22 11:00	kja
Calcium, dissolved	M200.7 ICP	1	31.2			mg/L	0.1	0.5	04/20/22 0:06	wtc
Calcium, total	M200.7 ICP	1	31.0			mg/L	0.1	0.5	04/16/22 19:37	wtc
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	04/15/22 12:11	mfm
Chromium, total	M200.8 ICP-MS	1	0.00105	B		mg/L	0.0005	0.002	04/18/22 11:00	kja
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	04/20/22 0:06	wtc
Cobalt, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	04/16/22 19:37	wtc
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U		mg/L	0.0008	0.002	04/15/22 12:11	mfm
Copper, total	M200.8 ICP-MS	1	0.00258			mg/L	0.0008	0.002	04/18/22 11:00	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	04/20/22 0:06	wtc
Iron, total	M200.7 ICP	1	0.845			mg/L	0.06	0.15	04/16/22 19:37	wtc
Lead, dissolved	M200.8 ICP-MS	1	0.00094			mg/L	0.0001	0.0005	04/15/22 12:11	mfm
Lead, total	M200.8 ICP-MS	1	0.0105			mg/L	0.0001	0.0005	04/18/22 11:00	kja
Magnesium, dissolved	M200.7 ICP	1	1.00	B		mg/L	0.2	1	04/20/22 0:06	wtc
Magnesium, total	M200.7 ICP	1	1.01			mg/L	0.2	1	04/19/22 14:08	aeH
Manganese, dissolved	M200.7 ICP	1	0.436			mg/L	0.01	0.05	04/20/22 0:06	wtc
Manganese, total	M200.7 ICP	1	0.486			mg/L	0.01	0.05	04/19/22 14:08	aeH
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	04/13/22 12:19	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	04/13/22 12:55	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	04/20/22 0:06	wtc
Nickel, total	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	04/16/22 19:37	wtc
Potassium, dissolved	M200.7 ICP	1	0.90	B		mg/L	0.2	1	04/20/22 0:06	wtc
Potassium, total	M200.7 ICP	1	1.23			mg/L	0.2	1	04/16/22 19:37	wtc
Selenium, dissolved	M200.8 ICP-MS	1	0.00033			mg/L	0.0001	0.00025	04/15/22 12:11	mfm
Selenium, total	M200.8 ICP-MS	1	0.00031			mg/L	0.0001	0.00025	04/18/22 11:00	kja
Silica, dissolved	M200.7 ICP	1	19.3			mg/L	0.2	1	04/20/22 0:06	wtc
Silica, total	M200.7 ICP	1	23.4		*	mg/L	0.2	1	04/16/22 19:37	wtc
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/15/22 12:11	mfm
Silver, total	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	04/18/22 11:00	kja
Sodium, dissolved	M200.7 ICP	1	75.5			mg/L	0.2	1	04/20/22 0:06	wtc

Arizona Minerals Inc.

Project ID: 4542257445
 Sample ID: MW-9-20220330

ACZ Sample ID: **L72311-03**
 Date Sampled: 03/30/22 10:30
 Date Received: 04/01/22
 Sample Matrix: Groundwater

Sodium, total	M200.7 ICP	1	74.9		mg/L	0.2	1	04/16/22 19:37	wtc
Thallium, dissolved	M200.8 ICP-MS	1	0.00016	B	mg/L	0.0001	0.0005	04/15/22 12:11	mfm
Thallium, total	M200.8 ICP-MS	1	0.00018	B	mg/L	0.0001	0.0005	04/18/22 11:00	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.00655		mg/L	0.0001	0.0005	04/15/22 12:11	mfm
Uranium, total	M200.8 ICP-MS	1	0.00701		mg/L	0.0001	0.0005	04/18/22 11:00	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U	mg/L	0.02	0.05	04/20/22 0:06	wtc
Zinc, total	M200.7 ICP	1	<0.02	U	mg/L	0.02	0.05	04/16/22 19:37	wtc

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	04/08/22 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	04/08/22 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	04/08/22 0:00	eep
Total Alkalinity		1	67.9		*	mg/L	2	20	04/08/22 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			1.0			%			05/02/22 0:00	calc
Sum of Anions			4.9			meq/L			05/02/22 0:00	calc
Sum of Cations			5.0			meq/L			05/02/22 0:00	calc
Chloride	SM4500Cl-E	1	4.40		*	mg/L	0.5	2	04/18/22 12:12	bls
Conductivity @25C	SM2510B	1	520		*	umhos/cm	1	10	04/05/22 7:49	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	04/07/22 14:02	bls
Fluoride	SM4500F-C	1	0.28	B	*	mg/L	0.15	0.35	04/19/22 17:00	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		82.0			mg/L	0.2	5	05/02/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	<0.02	U	*	mg/L	0.02	0.1	04/16/22 21:54	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	<0.05	U	*	mg/L	0.05	0.2	04/25/22 12:50	mjj1
pH (lab)	SM4500H+ B									
pH		1	8.2	H	*	units	0.1	0.1	04/05/22 0:00	jck
pH measured at		1	23.4		*	C	0.1	0.1	04/05/22 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	342		*	mg/L	20	40	04/04/22 13:12	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	20	163		*	mg/L	20	100	04/21/22 11:26	mjj1
TDS (calculated)	Calculation		343			mg/L			05/02/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		1.00						05/02/22 0:00	calc

Arizona license number: AZ0102

Report Header Explanations

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

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	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: **L72311**

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
WG539907													
WG539907PBW1	PBW	04/07/22 20:09				18.3	mg/L		-20	20			
WG539907LCSW3	LCSW	04/07/22 20:29	WC220328-1	820.0001		829.2	mg/L	101	90	110			
WG539907LCSW6	LCSW	04/07/22 23:02	WC220328-1	820.0001		828.1	mg/L	101	90	110			
WG539907PBW2	PBW	04/07/22 23:08				3.7	mg/L		-20	20			
WG539907LCSW9	LCSW	04/08/22 1:35	WC220328-1	820.0001		830.8	mg/L	101	90	110			
WG539907PBW3	PBW	04/08/22 1:41				4	mg/L		-20	20			
WG539907LCSW12	LCSW	04/08/22 4:29	WC220328-1	820.0001		816.2	mg/L	100	90	110			
WG539907PBW4	PBW	04/08/22 4:35				4.2	mg/L		-20	20			
L72311-03DUP	DUP	04/08/22 6:06			67.9	66.5	mg/L				2	20	
L72380-01DUP	DUP	04/08/22 7:39			142	134.7	mg/L				5	20	
WG539907LCSW15	LCSW	04/08/22 7:58	WC220328-1	820.0001		786.5	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
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2		1.909	mg/L	95	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.15	0.15			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	1.0008		.974	mg/L	97	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	1.0008	U	.986	mg/L	99	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	1.0008	U	.982	mg/L	98	85	115	0	20	

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	2		1.978	mg/L	99	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.15	0.15			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.11	0.11			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	1.0008		1.043	mg/L	104	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	1.0008	1.27	2.66	mg/L	139	70	130			M1
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	1.0008	1.27	2.586	mg/L	131	70	130	3	20	M1

Antimony, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.0201		.02119	mg/L	105	90	110			
WG540418ICB	ICB	04/15/22 11:58				.0005	mg/L		-0.00088	0.00088			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.01		.00898	mg/L	90	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.01	U	.00784	mg/L	78	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.01	U	.0081	mg/L	81	70	130	3	20	

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ACZ Project ID: **L72311**

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.

Antimony, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.0201		.02017	mg/L	100	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0012	0.0012			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00088	0.00088			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.01		.01062	mg/L	106	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.01	.00313	.01371	mg/L	106	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.01	.00313	.01368	mg/L	106	70	130	0	20	

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.05072	mg/L	101	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00044	0.00044			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05005		.04712	mg/L	94	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05005	.00158	.0512	mg/L	99	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05005	.00158	.05052	mg/L	98	70	130	1	20	

Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.05155	mg/L	103	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0006	0.0006			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00044	0.00044			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05005		.05122	mg/L	102	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05005	.0278	.0799	mg/L	104	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05005	.0278	.07886	mg/L	102	70	130	1	20	

Barium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2		1.9538	mg/L	98	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.021	0.021			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	.5		.4788	mg/L	96	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	.5	.0391	.522	mg/L	97	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	.5	.0391	.5195	mg/L	96	85	115	0	20	

Barium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	2		1.9425	mg/L	97	95	105			
WG540460ICB	ICB	04/16/22 19:11				.0077	mg/L		-0.021	0.021			
WG540438LRB	LRB	04/16/22 19:24				.0073	mg/L		-0.0154	0.0154			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	.5		.4899	mg/L	98	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	.5	.0479	.532	mg/L	97	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	.5	.0479	.5205	mg/L	95	70	130	2	20	

AZMINING

ACZ Project ID: **L72311**

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
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.053454	mg/L	107	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.000176	0.000176			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05005		.048653	mg/L	97	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05005	U	.045459	mg/L	91	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05005	U	.0448	mg/L	90	70	130	1	20	

Beryllium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.050314	mg/L	101	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.00024	0.00024			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.000176	0.000176			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05005		.049957	mg/L	100	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05005	U	.043444	mg/L	87	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05005	U	.042825	mg/L	86	70	130	1	20	

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2		2.004	mg/L	100	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.09	0.09			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	.5005		.509	mg/L	102	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	.5005	.05	.568	mg/L	103	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	.5005	.05	.566	mg/L	103	85	115	0	20	

Boron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	2		1.991	mg/L	100	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.09	0.09			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.066	0.066			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	.5005		.518	mg/L	103	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	.5005	.143	.639	mg/L	99	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	.5005	.143	.625	mg/L	96	70	130	2	20	

Cadmium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.054739	mg/L	109	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00011	0.00011			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05005		.049604	mg/L	99	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05005	U	.052078	mg/L	104	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05005	U	.050402	mg/L	101	70	130	3	20	

AZMINING

ACZ Project ID: **L72311**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.051704	mg/L	103	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.00015	0.00015			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00011	0.00011			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05005		.05079	mg/L	101	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05005	.000069	.049927	mg/L	100	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05005	.000069	.049581	mg/L	99	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
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	100		98.31	mg/L	98	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.3	0.3			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	67.9908		66.63	mg/L	98	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	67.9908	102	165.7	mg/L	94	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	67.9908	102	165	mg/L	93	85	115	0	20	

Calcium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	100		96.08	mg/L	96	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.3	0.3			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.22	0.22			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	67.9908		66.49	mg/L	98	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	67.9908	31	97.4	mg/L	98	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	67.9908	31	94.92	mg/L	94	70	130	3	20	

Chloride

SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540494													
WG540494ICV	ICV	04/18/22 12:09	WI210503-1	54.89		56.36	mg/L	103	90	110			
WG540494ICB	ICB	04/18/22 12:09				.62	mg/L		-1.5	1.5			
WG540494LFB1	LFB	04/18/22 12:10	WI220328-1	29.97		30.78	mg/L	103	90	110			
L72311-01AS	AS	04/18/22 12:11	WI220328-1	29.97	6.68	37.45	mg/L	103	90	110			
L72311-02DUP	DUP	04/18/22 12:12			4.62	4.79	mg/L				4	20	RA
WG540494LFB2	LFB	04/18/22 12:25	WI220328-1	29.97		31.06	mg/L	104	90	110			

Chromium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.05294	mg/L	106	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.0011	0.0011			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05		.04804	mg/L	96	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05	U	.04817	mg/L	96	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05	U	.04705	mg/L	94	70	130	2	20	

AZMINING

ACZ Project ID: **L72311**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.0515	mg/L	103	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0015	0.0015			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.0011	0.0011			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05		.05042	mg/L	101	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05	.0137	.06414	mg/L	101	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05	.0137	.0629	mg/L	98	70	130	2	20	

Cobalt, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2.01		1.941	mg/L	97	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.06	0.06			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	.5005		.472	mg/L	94	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	.5005	U	.47	mg/L	94	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	.5005	U	.472	mg/L	94	85	115	0	20	

Cobalt, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	2.01		1.929	mg/L	96	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.06	0.06			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.044	0.044			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	.5005		.484	mg/L	97	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	.5005	U	.478	mg/L	96	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	.5005	U	.461	mg/L	92	70	130	4	20	

Conductivity @25C

SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG539620													
WG539620LCSW2	LCSW	04/04/22 19:47	PCN65231	1409		1404	umhos/cm	100	90	110			
WG539620LCSW5	LCSW	04/04/22 23:14	PCN65231	1409		1400	umhos/cm	99	90	110			
WG539620LCSW8	LCSW	04/05/22 2:30	PCN65231	1409		1391	umhos/cm	99	90	110			
WG539620LCSW11	LCSW	04/05/22 6:02	PCN65231	1409		1386	umhos/cm	98	90	110			
L72311-03DUP	DUP	04/05/22 7:57			520	517	umhos/cm				1	20	
L72329-02DUP	DUP	04/05/22 9:31			388	389	umhos/cm				0	20	
WG539620LCSW14	LCSW	04/05/22 9:37	PCN65231	1409		1384	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
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.05328	mg/L	107	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00176	0.00176			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05		.04691	mg/L	94	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05	U	.04243	mg/L	85	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05	U	.0417	mg/L	83	70	130	2	20	

AZMINING

ACZ Project ID: **L72311**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.05329	mg/L	107	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0024	0.0024			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00176	0.00176			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05		.05034	mg/L	101	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05	.00682	.05573	mg/L	98	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05	.00682	.05464	mg/L	96	70	130	2	20	

Cyanide, total

M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG539842													
WG539842ICV	ICV	04/07/22 11:15	WI220401-3	.3003		.2973	mg/L	99	90	110			
WG539842ICB	ICB	04/07/22 11:16				U	mg/L		-0.003	0.003			
WG539883													
WG539827LRB	LRB	04/07/22 13:40				U	mg/L		-0.003	0.003			
WG539827LFB	LFB	04/07/22 13:41	WI220331-2	.2		.2078	mg/L	104	90	110			
L72311-03LFM	LFM	04/07/22 14:02	WI220331-2	.2	U	.2018	mg/L	101	90	110			
L72311-04DUP	DUP	04/07/22 14:04			U	U	mg/L				0	20	RA

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540557													
WG540557ICV	ICV	04/19/22 10:44	WC220413-1	2.008		1.96	mg/L	98	90	110			
WG540557ICB	ICB	04/19/22 10:50				U	mg/L		-0.3	0.3			
WG540606													
WG540606ICV	ICV	04/19/22 16:26	WC220413-1	2.008		1.94	mg/L	97	90	110			
WG540606ICB	ICB	04/19/22 16:31				U	mg/L		-0.3	0.3			
WG540606LFB1	LFB	04/19/22 16:40	WC220104-2	5.02		4.88	mg/L	97	90	110			
L72311-01AS	AS	04/19/22 16:48	WC220104-2	5.02	.36	4.93	mg/L	91	90	110			
L72311-01ASD	ASD	04/19/22 16:52	WC220104-2	5.02	.36	5	mg/L	92	90	110	1	20	
WG540606LFB2	LFB	04/19/22 18:46	WC220104-2	5.02		5.07	mg/L	101	90	110			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2		1.906	mg/L	95	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.18	0.18			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	1.0013		.948	mg/L	95	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	1.0013	U	.946	mg/L	94	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	1.0013	U	.942	mg/L	94	85	115	0	20	

AZMINING

ACZ Project ID: **L72311**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	2		1.972	mg/L	99	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.18	0.18			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.132	0.132			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	1.0013		.996	mg/L	99	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	1.0013	.845	1.833	mg/L	99	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	1.0013	.845	1.773	mg/L	93	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
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.05418	mg/L	108	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00022	0.00022			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.0501		.04838	mg/L	97	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.0501	U	.04841	mg/L	97	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.0501	U	.0478	mg/L	95	70	130	1	20	

Lead, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.05084	mg/L	102	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0003	0.0003			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00022	0.00022			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.0501		.05006	mg/L	100	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.0501	.00572	.05686	mg/L	102	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.0501	.00572	.05541	mg/L	99	70	130	3	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	100		94.63	mg/L	95	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.6	0.6			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	49.99922		46.66	mg/L	93	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	49.99922	20.4	66.76	mg/L	93	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	49.99922	20.4	66.36	mg/L	92	85	115	1	20	

Magnesium, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540526													
WG540526ICV	ICV	04/19/22 13:36	II220408-5	100		96.79	mg/L	97	95	105			
WG540526ICB	ICB	04/19/22 13:42				U	mg/L		-0.6	0.6			
WG540438LRB	LRB	04/19/22 13:55				U	mg/L		-0.44	0.44			
WG540438LFB	LFB	04/19/22 13:58	II220414-3	49.99922		47.86	mg/L	96	85	115			
L72311-03LFM	LFM	04/19/22 14:11	II220414-3	49.99922	1.01	49.86	mg/L	98	70	130			
L72311-03LFMD	LFMD	04/19/22 14:14	II220414-3	49.99922	1.01	50.49	mg/L	99	70	130	1	20	

AZMINING

ACZ Project ID: **L72311**

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.

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2		1.906	mg/L	95	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.03	0.03			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	.499		.48	mg/L	96	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	.499	U	.481	mg/L	96	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	.499	U	.478	mg/L	96	85	115	1	20	

Manganese, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540526													
WG540526ICV	ICV	04/19/22 13:36	II220408-5	2		1.947	mg/L	97	95	105			
WG540526ICB	ICB	04/19/22 13:42				U	mg/L		-0.03	0.03			
WG540438LRB	LRB	04/19/22 13:55				U	mg/L		-0.022	0.022			
WG540438LFB	LFB	04/19/22 13:58	II220414-3	.499		.492	mg/L	99	85	115			
L72311-03LFM	LFM	04/19/22 14:11	II220414-3	.499	.486	.99	mg/L	101	70	130			
L72311-03LFMD	LFMD	04/19/22 14:14	II220414-3	.499	.486	1.007	mg/L	104	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
WG540007													
WG540007ICV	ICV	04/13/22 11:38	HG220411-3	.005005		.0051	mg/L	102	90	110			
WG540007ICB	ICB	04/13/22 11:39				U	mg/L		-0.0006	0.0006			
WG540139													
WG540139LRB	LRB	04/13/22 12:08				U	mg/L		-0.00044	0.00044			
WG540139LFB	LFB	04/13/22 12:09	HG220411-6	.002002		.00199	mg/L	99	85	115			
L72311-01LFM	LFM	04/13/22 12:14	HG220411-6	.002002	U	.00197	mg/L	98	85	115			
L72311-01LFMD	LFMD	04/13/22 12:15	HG220411-6	.002002	U	.00219	mg/L	109	85	115	11	20	

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540007													
WG540007ICV	ICV	04/13/22 11:38	HG220411-3	.005005		.0051	mg/L	102	90	110			
WG540007ICB	ICB	04/13/22 11:39				U	mg/L		-0.0006	0.0006			
WG540140													
WG540140LRB	LRB	04/13/22 12:49				U	mg/L		-0.00044	0.00044			
WG540140LFB	LFB	04/13/22 12:50	HG220411-6	.002002		.00216	mg/L	108	85	115			
L72311-01LFM	LFM	04/13/22 12:52	HG220411-6	.002002	U	.00203	mg/L	101	85	115			
L72311-01LFMD	LFMD	04/13/22 12:53	HG220411-6	.002002	U	.00202	mg/L	101	85	115	0	20	

Nickel, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2		1.929	mg/L	96	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.024	0.024			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	.5005		.4773	mg/L	95	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	.5005	U	.4761	mg/L	95	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	.5005	U	.4747	mg/L	95	85	115	0	20	

AZMINING

ACZ Project ID: **L72311**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	2		1.8962	mg/L	95	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.024	0.024			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.0176	0.0176			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	.5005		.4883	mg/L	98	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	.5005	U	.4814	mg/L	96	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	.5005	U	.4665	mg/L	93	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
WG540456													
WG540456ICV	ICV	04/16/22 20:28	WI220301-7	2.4161		2.378	mg/L	98	90	110			
WG540456ICB	ICB	04/16/22 20:29				U	mg/L		-0.02	0.02			
WG540464													
WG540464LFB	LFB	04/16/22 21:48	WI220401-10	2		2.011	mg/L	101	90	110			
L72311-01AS	AS	04/16/22 21:51	WI220401-10	2	1.53	3.474	mg/L	97	90	110			
L72311-02DUP	DUP	04/16/22 21:53			1.24	1.234	mg/L				0	20	

Nitrogen, ammonia M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540876													
WG540876ICV	ICV	04/25/22 12:12	WI220420-2	12.024		11.52	mg/L	96	90	110			
WG540876ICB	ICB	04/25/22 12:14				U	mg/L		-0.05	0.05			
WG540876LFB	LFB	04/25/22 12:43	WI220420-3	10		9.911	mg/L	99	90	110			
L72311-01AS	AS	04/25/22 12:46	WI220420-3	10	U	9.846	mg/L	98	90	110			
L72311-02DUP	DUP	04/25/22 12:49			U	U	mg/L				0	20	RA
WG540876ICV1	ICV	04/25/22 15:05	WI220420-2	12.024		11.654	mg/L	97	90	110			
WG540876ICB1	ICB	04/25/22 15:07				U	mg/L		-0.05	0.05			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG539620													
WG539620LCSW1	LCSW	04/04/22 19:46	PCN64057	6		6.1	units	102	5.9	6.1			
WG539620LCSW4	LCSW	04/04/22 23:12	PCN64057	6		6.1	units	102	5.9	6.1			
WG539620LCSW7	LCSW	04/05/22 2:28	PCN64057	6		6.1	units	102	5.9	6.1			
WG539620LCSW10	LCSW	04/05/22 6:00	PCN64057	6		6.1	units	102	5.9	6.1			
L72311-03DUP	DUP	04/05/22 7:57			8.2	8.2	units				0	20	
L72329-02DUP	DUP	04/05/22 9:31			8.1	8	units				1	20	
WG539620LCSW13	LCSW	04/05/22 9:36	PCN64057	6		6.1	units	102	5.9	6.1			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	20		19.42	mg/L	97	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.6	0.6			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	99.96218		95.55	mg/L	96	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	99.96218	1.33	98.16	mg/L	97	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	99.96218	1.33	97.61	mg/L	96	85	115	1	20	

AZMINING

ACZ Project ID: **L72311**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	20		19.21	mg/L	96	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.6	0.6			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.44	0.44			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	99.96218		96.04	mg/L	96	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	99.96218	1.23	97.19	mg/L	96	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	99.96218	1.23	94.43	mg/L	93	70	130	3	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG539581													
WG539581PBW	PBW	04/04/22 12:20				U	mg/L		-20	20			
WG539581LCSW	LCSW	04/04/22 12:22	PCN65067	1000		970	mg/L	97	80	120			
L72311-05DUP	DUP	04/04/22 13:20			206	208	mg/L				1	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.05065	mg/L	101	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00022	0.00022			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05		.0468	mg/L	94	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05	.00072	.05247	mg/L	104	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05	.00072	.05197	mg/L	103	70	130	1	20	
WG540684													
WG540684ICV	ICV	04/20/22 16:50	MS220418-2	.05		.05073	mg/L	101	90	110			
WG540684ICB	ICB	04/20/22 16:52				U	mg/L		-0.00022	0.00022			
WG540684LFB	LFB	04/20/22 16:54	MS220401-2	.05		.04542	mg/L	91	85	115			
L72447-02AS	AS	04/20/22 17:12	MS220401-2	.05	.00014	.05351	mg/L	107	70	130			
L72447-02ASD	ASD	04/20/22 17:14	MS220401-2	.05	.00014	.05265	mg/L	105	70	130	2	20	

Selenium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.05053	mg/L	101	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0003	0.0003			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00022	0.00022			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05		.04938	mg/L	99	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05	U	.04654	mg/L	93	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05	U	.04653	mg/L	93	70	130	0	20	
WG540765													
WG540765ICV	ICV	04/22/22 12:20	MS220418-2	.05		.05098	mg/L	102	90	110			
WG540765ICB	ICB	04/22/22 12:22				.00011	mg/L		-0.0003	0.0003			
WG540631LRB	LRB	04/22/22 12:24				U	mg/L		-0.00022	0.00022			
WG540631LFB	LFB	04/22/22 12:26	MS220401-2	.05		.05033	mg/L	101	85	115			
L72488-01LFM	LFM	04/22/22 12:42	MS220401-2	.05	.00054	.05236	mg/L	104	70	130			
L72488-01LFMD	LFMD	04/22/22 12:44	MS220401-2	.05	.00054	.05234	mg/L	104	70	130	0	20	

AZMINING

ACZ Project ID: **L72311**

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.

Silica, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	42.8		42.46	mg/L	99	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.6	0.6			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	21.404		21.17	mg/L	99	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	21.404	26.6	47.2	mg/L	96	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	21.404	26.6	46.84	mg/L	95	85	115	1	20	

Silica, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	42.8		40.96	mg/L	96	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.6	0.6			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.44	0.44			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	21.404		20.79	mg/L	97	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	21.404	23.4	37.62	mg/L	66	70	130			M2
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	21.404	23.4	38.22	mg/L	69	70	130	2	20	M2

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.02		.02179	mg/L	109	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00022	0.00022			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.01		.00972	mg/L	97	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.01	U	.00932	mg/L	93	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.01	U	.00914	mg/L	91	70	130	2	20	

Silver, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.02		.02087	mg/L	104	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0003	0.0003			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00022	0.00022			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.01		.0101	mg/L	101	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.01	U	.00955	mg/L	96	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.01	U	.00957	mg/L	96	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
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	100		98.41	mg/L	98	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.6	0.6			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	100.0282		96.67	mg/L	97	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	100.0282	16.8	114.2	mg/L	97	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	100.0282	16.8	113.4	mg/L	97	85	115	1	20	

AZMINING

ACZ Project ID: **L72311**

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, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	100		95.99	mg/L	96	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.6	0.6			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.44	0.44			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	100.0282		95.72	mg/L	96	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	100.0282	74.9	167.2	mg/L	92	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	100.0282	74.9	164	mg/L	89	70	130	2	20	

Sulfate

D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540537													
WG540537ICB	ICB	04/19/22 8:58				U	mg/L		-3	3			
WG540537ICV	ICV	04/19/22 8:58	WI220415-4	20.46		19.6	mg/L	96	90	110			
WG540537LFB	LFB	04/19/22 11:46	WI220415-3	9.95		10.1	mg/L	102	90	110			
L66019-46DUP	DUP	04/19/22 11:48			19.3	19.2	mg/L				1	20	
L66020-46AS	AS	04/19/22 11:48	WI220415-3	9.95	1.2	10.6	mg/L	94	90	110			
WG540642													
WG540642ICB	ICB	04/21/22 10:48				U	mg/L		-3	3			
WG540642ICV	ICV	04/21/22 10:48	WI220415-4	20.46		19.7	mg/L	96	90	110			
WG540642LFB	LFB	04/21/22 10:56	WI220415-3	9.95		9.8	mg/L	98	90	110			
L72479-01DUP	DUP	04/21/22 11:36			1600	1626.7	mg/L				2	20	
L72488-01AS	AS	04/21/22 11:36	SO4TURB25X	10	489	508.8	mg/L	198	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
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.05444	mg/L	109	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00022	0.00022			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05		.04832	mg/L	97	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05	U	.04714	mg/L	94	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05	U	.04696	mg/L	94	70	130	0	20	

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.05247	mg/L	105	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0003	0.0003			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00022	0.00022			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05		.05035	mg/L	101	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05	.00012	.0516	mg/L	103	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05	.00012	.05107	mg/L	102	70	130	1	20	

AZMINING

ACZ Project ID: **L72311**

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
WG540418													
WG540418ICV	ICV	04/15/22 11:57	MS220401-7	.05		.05384	mg/L	108	90	110			
WG540418ICB	ICB	04/15/22 11:58				U	mg/L		-0.00022	0.00022			
WG540418LFB	LFB	04/15/22 12:00	MS220401-2	.05		.04814	mg/L	96	85	115			
L72311-02AS	AS	04/15/22 12:08	MS220401-2	.05	.00244	.05018	mg/L	95	70	130			
L72311-02ASD	ASD	04/15/22 12:10	MS220401-2	.05	.00244	.04975	mg/L	95	70	130	1	20	

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540441													
WG540441ICV	ICV	04/18/22 10:50	MS220401-7	.05		.05152	mg/L	103	90	110			
WG540441ICB	ICB	04/18/22 10:51				U	mg/L		-0.0003	0.0003			
WG540322LRB	LRB	04/18/22 10:53				U	mg/L		-0.00022	0.00022			
WG540322LFB	LFB	04/18/22 10:55	MS220401-2	.05		.05029	mg/L	101	85	115			
L72311-04LFM	LFM	04/18/22 11:04	MS220401-2	.05	.0017	.05456	mg/L	106	70	130			
L72311-04LFMD	LFMD	04/18/22 11:06	MS220401-2	.05	.0017	.05376	mg/L	104	70	130	1	20	

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540591													
WG540591ICV	ICV	04/19/22 23:31	II220401-2	2		1.89	mg/L	95	95	105			
WG540591ICB	ICB	04/19/22 23:37				U	mg/L		-0.06	0.06			
WG540591LFB	LFB	04/19/22 23:50	II220414-3	.50045		.486	mg/L	97	85	115			
L72311-01AS	AS	04/19/22 23:57	II220414-3	.50045	U	.493	mg/L	99	85	115			
L72311-01ASD	ASD	04/20/22 0:00	II220414-3	.50045	U	.486	mg/L	97	85	115	1	20	

Zinc, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG540460													
WG540460ICV	ICV	04/16/22 19:04	II220408-5	2		1.9	mg/L	95	95	105			
WG540460ICB	ICB	04/16/22 19:11				U	mg/L		-0.06	0.06			
WG540438LRB	LRB	04/16/22 19:24				U	mg/L		-0.044	0.044			
WG540438LFB	LFB	04/16/22 19:27	II220414-3	.50045		.507	mg/L	101	85	115			
L72311-03LFM	LFM	04/16/22 19:40	II220414-3	.50045	U	.513	mg/L	103	70	130			
L72311-03LFMD	LFMD	04/16/22 19:43	II220414-3	.50045	U	.494	mg/L	99	70	130	4	20	

Arizona Minerals Inc.

ACZ Project ID: **L72311**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L72311-01	WG540460	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG539907	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540494	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG539883	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG540606	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG539907	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540464	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG540876	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	Q6	Sample was received above recommended temperature.
			M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG539581	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG540460	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG540642	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.
	WG539907	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Arizona Minerals Inc.

ACZ Project ID: **L72311**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L72311-02	WG540460	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG539907	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540494	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG539883	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG540606	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG539907	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540464	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG540876	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	Q6	Sample was received above recommended temperature.
			M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG539581	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG540460	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG540642	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.
WG539907	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.	

Arizona Minerals Inc.

ACZ Project ID: **L72311**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L72311-03	WG540460	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG539907	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540494	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG539883	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG540606	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG539907	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540464	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG540876	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	Q6	Sample was received above recommended temperature.
			M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG539581	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG540460	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG540642	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.
	WG539907	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

Arizona Minerals Inc.

ACZ Project ID: **L72311**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L72311-04	WG540460	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG539907	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540494	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG539883	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG540606	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG539907	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540464	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG540876	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	Q6	Sample was received above recommended temperature.
			M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG539581	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG540460	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG540642	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.
	WG539907	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540631	Total Hot Plate Digestion	M200.2 ICP-MS	DJ	Sample dilution required due to insufficient sample.

Arizona Minerals Inc.

ACZ Project ID: **L72311**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L72311-05	WG540460	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG539907	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540494	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
			SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG539883	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG540606	Fluoride	SM4500F-C	Q6	Sample was received above recommended temperature.
	WG539907	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG540464	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	Q6	Sample was received above recommended temperature.
	WG540876	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	Q6	Sample was received above recommended temperature.
			M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG539620	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG539581	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG540684	Selenium, dissolved	M200.8 ICP-MS	DE	Sample required dilution. See Case Narrative.
	WG540460	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG540537	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
WG539907	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.	

Arizona Minerals Inc.

ACZ Project ID: **L72311**

No certification qualifiers associated with this analysis

Arizona Minerals Inc.
 4542257445

ACZ Project ID: L72311
 Date Received: 04/01/2022 11:14
 Received By:
 Date Printed: 4/4/2022

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?
5204	6.4	<=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.

Arizona Minerals Inc.
4542257445

ACZ Project ID: L72311
Date Received: 04/01/2022 11:14
Received By:
Date Printed: 4/4/2022

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).



Accredited Environmental Testing
 2773 Downhill Drive
 Steamboat Springs, CO 80487
 (970) 879-6590

L72311

CHAIN of CUSTODY

Report to:

Name: Kara Haas	Address: 749 Harshaw Road
Company: AMI/South32	Patagonia, AZ 85624
E-mail: Kara.Haas@south32.net	Telephone: 505.947.1738

Copy of Report to:

Name: Nick Connell	E-mail: nconnell@newfields.com
Company: NewFields	Telephone: 406.549.8270

Invoice to:

Name: Kara Haas	Address: 749 Harshaw Road
Company: AMI/South32	Patagonia, AZ 85624
E-mail: kara.haas@south32.net	Telephone: 505.947.1738

Copy of Invoice to:

Name: South32	Address: NA
Company: AMI/South32	Telephone: NA
E-mail: sscinvoices@south32.net	

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

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: Marc Taylor Sampler's Site Information State AZ Zip code 85624 Time Zone MST

*Sampler's Signature: *MZ* *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 #:	PO#:	Reporting state for compliance testing:	Check box if samples include NRC licensed material?	SAMPLE IDENTIFICATION	DATE: TIME	Matrix	# of Containers	GW BASELINE									
GW BASELINE	4542257445	AZ	<input type="checkbox"/>	TW-618224-20220330	3/30/2022 08:08		6	<input checked="" type="checkbox"/>									
				TW21-01-20220330	3/30/2022 08:55		6	<input checked="" type="checkbox"/>									
				MW-9-20220330	3/30/2022 10:30		6	<input checked="" type="checkbox"/>									
				MW-8D-20220330	3/30/2022 11:58		6	<input checked="" type="checkbox"/>									
				BW-1-20220330	3/30/2022 13:20		6	<input checked="" type="checkbox"/>									
							6	<input checked="" type="checkbox"/>									
							6	<input checked="" type="checkbox"/>									
							6	<input checked="" type="checkbox"/>									
							6	<input checked="" type="checkbox"/>									
							6	<input checked="" type="checkbox"/>									

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
<i>MZ</i>	3-31-22 07:00	<i>JL</i>	4/1/22 11:04

L72311 Chain of Custody

July 11, 2022

Report to:

Kara Haas
South32
2210 E Ft. Lowell Rd.
Tucson, AZ 85719

Bill to:

Accounts Payable
South32
2210 E Fort Lowell Road
Tucson, AZ 85719

cc: Nick Connell

Project ID: 4542257445

ACZ Project ID: L73934

Kara Haas:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 16, 2022. This project has been assigned to ACZ's project number, L73934. 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 L73934. 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 30, 2024. 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.



Scott Habermehl has reviewed
and approved this report.



South32Project ID: 4542257445
Sample ID: MW-9-20220614ACZ Sample ID: **L73934-01**
Date Sampled: 06/14/22 11:10
Date Received: 06/16/22
Sample Matrix: Groundwater

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								06/30/22 22:57	gkk
Total Hot Plate Digestion	M200.2 ICP-MS								06/29/22 10:20	mfm
Total Hot Plate Digestion	M200.2 ICP								07/05/22 18:11	aeH

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Project ID: 4542257445
 Sample ID: MW-9-20220614

ACZ Sample ID: **L73934-01**
 Date Sampled: 06/14/22 11:10
 Date Received: 06/16/22
 Sample Matrix: Groundwater

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	07/08/22 17:31	keh1
Aluminum, total	M200.7 ICP	1	0.171	B	*	mg/L	0.05	0.25	07/08/22 5:03	wtc
Antimony, dissolved	M200.8 ICP-MS	1	0.00543			mg/L	0.0004	0.002	06/30/22 17:36	mfm
Antimony, total	M200.8 ICP-MS	1	0.00502			mg/L	0.0004	0.002	06/30/22 11:39	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00662			mg/L	0.0002	0.001	06/30/22 17:36	mfm
Arsenic, total	M200.8 ICP-MS	1	0.00710			mg/L	0.0002	0.001	06/30/22 11:39	mfm
Barium, dissolved	M200.7 ICP	1	0.0259	B		mg/L	0.009	0.035	07/08/22 17:31	keh1
Barium, total	M200.7 ICP	1	0.0290	B		mg/L	0.009	0.035	07/08/22 5:03	wtc
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	06/30/22 17:36	mfm
Beryllium, total	M200.8 ICP-MS	1	<0.00008	U	*	mg/L	0.00008	0.00025	06/30/22 11:39	mfm
Boron, dissolved	M200.7 ICP	1	0.132			mg/L	0.03	0.1	07/08/22 17:31	keh1
Boron, total	M200.7 ICP	1	0.131			mg/L	0.03	0.1	07/08/22 5:03	wtc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	06/30/22 17:36	mfm
Cadmium, total	M200.8 ICP-MS	1	0.000091	B		mg/L	0.00005	0.00025	06/30/22 11:39	mfm
Calcium, dissolved	M200.7 ICP	1	32.8			mg/L	0.1	0.5	07/08/22 17:31	keh1
Calcium, total	M200.7 ICP	1	33.9			mg/L	0.1	0.5	07/08/22 5:03	wtc
Chromium, dissolved	M200.8 ICP-MS	1	0.00087	B		mg/L	0.0005	0.002	06/30/22 17:36	mfm
Chromium, total	M200.8 ICP-MS	1	0.00117	B		mg/L	0.0005	0.002	06/30/22 11:39	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/08/22 17:31	keh1
Cobalt, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/08/22 5:03	wtc
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U		mg/L	0.0008	0.002	06/30/22 17:36	mfm
Copper, total	M200.8 ICP-MS	1	0.00095	B		mg/L	0.0008	0.002	06/30/22 11:39	mfm
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/08/22 17:31	keh1
Iron, total	M200.7 ICP	1	0.169			mg/L	0.06	0.15	07/08/22 5:03	wtc
Lead, dissolved	M200.8 ICP-MS	1	0.00012	B		mg/L	0.0001	0.0005	06/30/22 17:36	mfm
Lead, total	M200.8 ICP-MS	1	0.00422			mg/L	0.0001	0.0005	06/30/22 11:39	mfm
Magnesium, dissolved	M200.7 ICP	1	0.82	B		mg/L	0.2	1	07/08/22 17:31	keh1
Magnesium, total	M200.7 ICP	1	0.84	B		mg/L	0.2	1	07/08/22 5:03	wtc
Manganese, dissolved	M200.7 ICP	1	0.037	B		mg/L	0.01	0.05	07/08/22 17:31	keh1
Manganese, total	M200.7 ICP	1	0.138			mg/L	0.01	0.05	07/08/22 5:03	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/22/22 14:07	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	06/22/22 13:41	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/08/22 17:31	keh1
Nickel, total	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/08/22 5:03	wtc
Potassium, dissolved	M200.7 ICP	1	0.94	B		mg/L	0.2	1	07/08/22 17:31	keh1
Potassium, total	M200.7 ICP	1	0.79	B		mg/L	0.2	1	07/08/22 14:28	wtc
Selenium, dissolved	M200.8 ICP-MS	1	0.00037			mg/L	0.0001	0.00025	06/30/22 17:36	mfm
Selenium, total	M200.8 ICP-MS	1	0.00034			mg/L	0.0001	0.00025	06/30/22 11:39	mfm
Silica, dissolved	M200.7 ICP	1	19.7			mg/L	0.2	1	07/08/22 17:31	keh1
Silica, total	M200.7 ICP	1	20.2		*	mg/L	0.2	1	07/08/22 5:03	wtc
Silver, dissolved	M200.8 ICP-MS	1	0.00010	B		mg/L	0.0001	0.0005	06/30/22 17:36	mfm
Silver, total	M200.8 ICP-MS	1	0.0147			mg/L	0.0001	0.0005	06/30/22 11:39	mfm
Sodium, dissolved	M200.7 ICP	1	75.7			mg/L	0.2	1	07/08/22 17:31	keh1

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Sample ID: MW-9-20220614

ACZ Sample ID: **L73934-01**
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Date Received: 06/16/22
Sample Matrix: Groundwater

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Sodium, total	M200.7 ICP	1	78.4			mg/L	0.2	1	07/08/22 5:03	wtc
Thallium, dissolved	M200.8 ICP-MS	1	0.00018	B		mg/L	0.0001	0.0005	06/30/22 17:36	mfm
Thallium, total	M200.8 ICP-MS	1	0.00018	B		mg/L	0.0001	0.0005	06/30/22 11:39	mfm
Uranium, dissolved	M200.8 ICP-MS	1	0.00479			mg/L	0.0001	0.0005	06/30/22 17:36	mfm
Uranium, total	M200.8 ICP-MS	1	0.00444			mg/L	0.0001	0.0005	06/30/22 11:39	mfm
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/08/22 17:31	keh1
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/08/22 5:03	wtc

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	71.5			mg/L	2	20	06/24/22 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	06/24/22 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	06/24/22 0:00	emk
Total Alkalinity		1	71.5			mg/L	2	20	06/24/22 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.9			%			07/11/22 0:00	calc
Sum of Anions			5.3			meq/L			07/11/22 0:00	calc
Sum of Cations			5.1			meq/L			07/11/22 0:00	calc
Chloride	SM4500Cl-E	1	4.09		*	mg/L	0.5	2	07/05/22 12:46	bls
Conductivity @25C	SM2510B	1	536			umhos/cm	1	10	06/24/22 20:30	emk
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	UH	*	mg/L	0.003	0.01	07/02/22 12:50	bls
Fluoride	SM4500F-C	1	0.31	B		mg/L	0.15	0.35	07/01/22 21:52	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		85			mg/L	0.2	5	07/11/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.034	B	*	mg/L	0.02	0.1	07/09/22 21:28	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	<0.05	U	*	mg/L	0.05	0.2	07/05/22 13:51	mjj1
pH (lab)	SM4500H+ B									
pH		1	7.6	H		units	0.1	0.1	07/06/22 0:00	emk
pH measured at		1	22.6			C	0.1	0.1	07/06/22 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	1	350			mg/L	20	40	06/20/22 10:55	pcj
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	178		*	mg/L	5	25	07/05/22 14:10	mjj1
TDS (calculated)	Calculation		361			mg/L			07/11/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.97						07/11/22 0:00	calc

Arizona license number: AZ0102

Report Header Explanations

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

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	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: **L73934**

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
WG545145													
WG545145PBW1	PBW	06/24/22 18:02				4.8	mg/L		-20	20			
WG545145LCSW3	LCSW	06/24/22 18:18	WC220624-1	820.0001		750.3	mg/L	91	90	110			
L73936-04DUP	DUP	06/24/22 21:23			512	515.4	mg/L				1	20	
WG545145LCSW6	LCSW	06/24/22 21:41	WC220624-1	820.0001		779.1	mg/L	95	90	110			
WG545145PBW2	PBW	06/24/22 21:47				5.2	mg/L		-20	20			
WG545145LCSW9	LCSW	06/25/22 0:09	WC220624-1	820.0001		757.4	mg/L	92	90	110			
WG545145PBW3	PBW	06/25/22 0:16				7.1	mg/L		-20	20			
WG545145LCSW12	LCSW	06/25/22 3:29	WC220624-1	820.0001		762	mg/L	93	90	110			
WG545145PBW4	PBW	06/25/22 3:35				8	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
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2		1.952	mg/L	98	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.15	0.15			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	1.0008		.986	mg/L	99	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	1.0008	U	.975	mg/L	97	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	1.0008	U	.984	mg/L	98	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2		1.952	mg/L	98	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.15	0.15			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	1.0008		1	mg/L	100	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	1.0008	U	.996	mg/L	100	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	1.0008	U	1.008	mg/L	101	85	115	1	20	

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2		1.969	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.15	0.15			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.11	0.11			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	1.0008		1.007	mg/L	101	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	1.0008	1.27	2.94	mg/L	167	70	130			M1
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	1.0008	1.27	2.913	mg/L	164	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
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.0201		.01937	mg/L	96	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00088	0.00088			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.01		.00978	mg/L	98	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.01	U	.00971	mg/L	97	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.01	U	.00993	mg/L	99	70	130	2	20	

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ACZ Project ID: **L73934**

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.

Antimony, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.0201		.01898	mg/L	94	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0012	0.0012			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00088	0.00088			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.01		.00957	mg/L	96	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.01	U	.0099	mg/L	99	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.01	U	.01007	mg/L	101	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
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.0504	mg/L	101	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00044	0.00044			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05005		.05291	mg/L	106	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05005	.00033	.05403	mg/L	107	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05005	.00033	.05401	mg/L	107	70	130	0	20	

Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.04966	mg/L	99	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0006	0.0006			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00044	0.00044			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05005		.0459	mg/L	92	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05005	U	.04812	mg/L	96	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05005	U	.04959	mg/L	99	70	130	3	20	

Barium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2		2.0013	mg/L	100	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.027	0.027			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	.502		.4964	mg/L	99	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	.502	.0259	.5137	mg/L	97	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	.502	.0259	.5172	mg/L	98	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2		1.992	mg/L	100	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.027	0.027			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	.502		.4986	mg/L	99	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	.502	U	.4905	mg/L	98	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	.502	U	.4937	mg/L	98	85	115	1	20	

AZMINING

ACZ Project ID: **L73934**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2		1.958	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.027	0.027			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.0198	0.0198			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	.502		.4983	mg/L	99	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	.502	.0289	.5272	mg/L	99	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	.502	.0289	.5328	mg/L	100	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
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.052473	mg/L	105	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.000176	0.000176			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05005		.052612	mg/L	105	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05005	U	.050345	mg/L	101	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05005	U	.050528	mg/L	101	70	130	0	20	

Beryllium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.04965	mg/L	99	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.00024	0.00024			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.000176	0.000176			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05005		.045556	mg/L	91	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05005	U	.02631	mg/L	53	70	130			M2
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05005	U	.026594	mg/L	53	70	130	1	20	M2

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2		2.053	mg/L	103	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.09	0.09			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	.5005		.525	mg/L	105	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	.5005	.132	.662	mg/L	106	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	.5005	.132	.667	mg/L	107	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2		2.04	mg/L	102	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.09	0.09			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	.5005		.523	mg/L	104	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	.5005	U	.517	mg/L	103	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	.5005	U	.526	mg/L	105	85	115	2	20	

AZMINING

ACZ Project ID: **L73934**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2		1.967	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.09	0.09			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.066	0.066			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	.5005		.501	mg/L	100	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	.5005	.04	.537	mg/L	99	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	.5005	.04	.547	mg/L	101	70	130	2	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.051975	mg/L	104	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00011	0.00011			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05005		.05174	mg/L	103	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05005	.000235	.056964	mg/L	113	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05005	.000235	.056026	mg/L	111	70	130	2	20	

Cadmium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05086	mg/L	102	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.00015	0.00015			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00011	0.00011			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05005		.045474	mg/L	91	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05005	.000797	.048005	mg/L	94	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05005	.000797	.048566	mg/L	95	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
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	100		99.7	mg/L	100	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.3	0.3			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	67.98862		68.02	mg/L	100	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	67.98862	32.8	98.6	mg/L	97	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	67.98862	32.8	99.02	mg/L	97	85	115	0	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	100		99.34	mg/L	99	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.3	0.3			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	67.98862		68.33	mg/L	101	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	67.98862	3.41	67.96	mg/L	95	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	67.98862	3.41	68.56	mg/L	96	85	115	1	20	

AZMINING

ACZ Project ID: **L73934**

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, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	100		99.04	mg/L	99	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.3	0.3			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.22	0.22			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	67.98862		69.76	mg/L	103	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	67.98862	25.8	94.91	mg/L	102	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	67.98862	25.8	95.31	mg/L	102	70	130	0	20	

Chloride

SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545687													
WG545687ICV	ICV	07/05/22 12:42	WI220502-12	54.945		57.89	mg/L	105	90	110			
WG545687ICB	ICB	07/05/22 12:43				.78	mg/L		-1.5	1.5			
WG545687LFB1	LFB	07/05/22 12:44	WI220328-1	29.97		31.7	mg/L	106	90	110			
L73932-01AS	AS	07/05/22 12:45	WI220328-1	29.97	9.04	41.55	mg/L	108	90	110			
L73933-01DUP	DUP	07/05/22 12:46			4.52	4.25	mg/L				6	20	RA
L73934-02AS	AS	07/05/22 12:47	WI220328-1	29.97	31.5	62.46	mg/L	103	90	110			
L73934-03DUP	DUP	07/05/22 12:48			29.7	29.25	mg/L				2	20	

Chromium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05156	mg/L	103	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.0011	0.0011			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.0501		.05218	mg/L	104	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.0501	U	.05168	mg/L	103	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.0501	U	.05061	mg/L	101	70	130	2	20	

Chromium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05128	mg/L	103	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0015	0.0015			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.0011	0.0011			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.0501		.04573	mg/L	91	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.0501	U	.05023	mg/L	100	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.0501	U	.05041	mg/L	101	70	130	0	20	

AZMINING

ACZ Project ID: **L73934**

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 M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2.01		1.973	mg/L	98	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.06	0.06			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	.5005		.489	mg/L	98	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	.5005	U	.486	mg/L	97	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	.5005	U	.488	mg/L	98	85	115	0	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2.01		1.954	mg/L	97	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.06	0.06			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	.5005		.49	mg/L	98	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	.5005	U	.472	mg/L	94	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	.5005	U	.474	mg/L	95	85	115	0	20	

Cobalt, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2.01		1.977	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.06	0.06			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.044	0.044			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	.5005		.499	mg/L	100	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	.5005	U	.499	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	.5005	U	.498	mg/L	100	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545145													
WG545145LCSW2	LCSW	06/24/22 18:07	PCN65454	1409		1440	umhos/cm	102	90	110			
L73936-04DUP	DUP	06/24/22 21:23			1240	1245	umhos/cm				0	20	
WG545145LCSW5	LCSW	06/24/22 21:29	PCN65454	1409		1432	umhos/cm	102	90	110			
WG545145LCSW8	LCSW	06/24/22 23:58	PCN65454	1409		1430	umhos/cm	101	90	110			
WG545145LCSW11	LCSW	06/25/22 3:18	PCN65454	1409		1417	umhos/cm	101	90	110			
WG545145LCSW14	LCSW	06/25/22 7:47	PCN65454	1409		1412	umhos/cm	100	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05409	mg/L	108	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00176	0.00176			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05362	mg/L	107	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	.00504	.05448	mg/L	99	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	.00504	.05405	mg/L	98	70	130	1	20	

AZMINING

ACZ Project ID: **L73934**

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 M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2.01		1.973	mg/L	98	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.06	0.06			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	.5005		.489	mg/L	98	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	.5005	U	.486	mg/L	97	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	.5005	U	.488	mg/L	98	85	115	0	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2.01		1.954	mg/L	97	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.06	0.06			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	.5005		.49	mg/L	98	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	.5005	U	.472	mg/L	94	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	.5005	U	.474	mg/L	95	85	115	0	20	

Cobalt, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2.01		1.977	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.06	0.06			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.044	0.044			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	.5005		.499	mg/L	100	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	.5005	U	.499	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	.5005	U	.498	mg/L	100	70	130	0	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545145													
WG545145LCSW2	LCSW	06/24/22 18:07	PCN65454	1409		1440	umhos/cm	102	90	110			
L73936-04DUP	DUP	06/24/22 21:23			1240	1245	umhos/cm				0	20	
WG545145LCSW5	LCSW	06/24/22 21:29	PCN65454	1409		1432	umhos/cm	102	90	110			
WG545145LCSW8	LCSW	06/24/22 23:58	PCN65454	1409		1430	umhos/cm	101	90	110			
WG545145LCSW11	LCSW	06/25/22 3:18	PCN65454	1409		1417	umhos/cm	101	90	110			
WG545145LCSW14	LCSW	06/25/22 7:47	PCN65454	1409		1412	umhos/cm	100	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05409	mg/L	108	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00176	0.00176			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05362	mg/L	107	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	.00504	.05448	mg/L	99	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	.00504	.05405	mg/L	98	70	130	1	20	

AZMINING

ACZ Project ID: **L73934**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.0505	mg/L	101	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0024	0.0024			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00176	0.00176			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04431	mg/L	89	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	U	.04547	mg/L	91	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	U	.04627	mg/L	93	70	130	2	20	

Cyanide, total

M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545636													
WG545636ICV	ICV	07/02/22 12:41	WI220623-6	.3003		.2805	mg/L	93	90	110			
WG545636ICB	ICB	07/02/22 12:42				U	mg/L		-0.003	0.003			
WG545552LRB	LRB	07/02/22 12:43				U	mg/L		-0.003	0.003			
WG545552LFB	LFB	07/02/22 12:44	WI220629-3	.2		.217	mg/L	109	90	110			
L73934-01DUP	DUP	07/02/22 12:51			U	U	mg/L				0	20	RA
L73934-02LFM	LFM	07/02/22 12:54	WI220629-3	.2	U	.2178	mg/L	109	90	110			

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545579													
WG545579ICV	ICV	07/01/22 11:34	WC220627-1	2.008		1.96	mg/L	98	90	110			
WG545579ICB	ICB	07/01/22 11:41				U	mg/L		-0.3	0.3			
WG545610													
WG545610ICV	ICV	07/01/22 19:28	WC220627-1	2.008		2.05	mg/L	102	90	110			
WG545610ICB	ICB	07/01/22 19:36				U	mg/L		-0.3	0.3			
WG545610LFB1	LFB	07/01/22 19:44	WC220606-1	5.02		5.12	mg/L	102	90	110			
L73933-01AS	AS	07/01/22 21:37	WC220606-1	5.02	1.81	6.55	mg/L	94	90	110			
L73933-01ASD	ASD	07/01/22 21:44	WC220606-1	5.02	1.81	6.55	mg/L	94	90	110	0	20	
WG545610LFB2	LFB	07/01/22 23:01	WC220606-1	5.02		5.1	mg/L	102	90	110			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2		2.022	mg/L	101	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.18	0.18			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	1.0013		1.006	mg/L	100	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	1.0013	U	1.002	mg/L	100	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	1.0013	U	.998	mg/L	100	85	115	0	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2		2.022	mg/L	101	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.18	0.18			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	1.0013		1.011	mg/L	101	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	1.0013	U	.984	mg/L	98	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	1.0013	U	.99	mg/L	99	85	115	1	20	

AZMINING

ACZ Project ID: **L73934**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2		1.94	mg/L	97	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.18	0.18			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.132	0.132			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	1.0013		1.023	mg/L	102	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	1.0013	1.5	2.506	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	1.0013	1.5	2.55	mg/L	105	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
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05179	mg/L	104	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.0501		.05208	mg/L	104	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.0501	.00023	.05677	mg/L	113	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.0501	.00023	.05611	mg/L	112	70	130	1	20	

Lead, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.0514	mg/L	103	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.0501		.04578	mg/L	91	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.0501	.00016	.04912	mg/L	98	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.0501	.00016	.05007	mg/L	100	70	130	2	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	100		96.15	mg/L	96	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	49.99809		47.22	mg/L	94	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	49.99809	.82	47.57	mg/L	94	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	49.99809	.82	47.93	mg/L	94	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	100		95.81	mg/L	96	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	49.99809		47.41	mg/L	95	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	49.99809	.58	45.51	mg/L	90	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	49.99809	.58	45.94	mg/L	91	85	115	1	20	

AZMINING

ACZ Project ID: **L73934**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	11220621-2	100		95.88	mg/L	96	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 4:48	11220628-3	49.99809		49.21	mg/L	98	85	115			
L74083-11LFM	LFM	07/08/22 5:25	11220628-3	49.99809	13.2	61.55	mg/L	97	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	11220628-3	49.99809	13.2	61.79	mg/L	97	70	130	0	20	

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	11220624-2	2		1.964	mg/L	98	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.03	0.03			
WG546057LFB	LFB	07/08/22 16:07	11220628-3	.499		.494	mg/L	99	85	115			
L73934-01AS	AS	07/08/22 17:34	11220628-3	.499	.037	.523	mg/L	97	85	115			
L73934-01ASD	ASD	07/08/22 17:37	11220628-3	.499	.037	.526	mg/L	98	85	115	1	20	

WG546062

WG546062ICV	ICV	07/08/22 20:09	11220624-2	2		1.958	mg/L	98	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.03	0.03			
WG546062LFB	LFB	07/08/22 20:28	11220628-3	.499		.493	mg/L	99	85	115			
L74093-02AS	AS	07/08/22 21:54	11220628-3	.499	U	.477	mg/L	96	85	115			
L74093-02ASD	ASD	07/08/22 21:58	11220628-3	.499	U	.48	mg/L	96	85	115	1	20	

Manganese, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	11220621-2	2		1.932	mg/L	97	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.03	0.03			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.022	0.022			
WG545745LFB	LFB	07/08/22 4:48	11220628-3	.499		.5	mg/L	100	85	115			
L74083-11LFM	LFM	07/08/22 5:25	11220628-3	.499	.056	.553	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	11220628-3	.499	.056	.557	mg/L	100	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
WG544804													
WG544804ICV	ICV	06/22/22 8:29	HG220620-3	.005005		.00496	mg/L	99	95	105			
WG544804ICB	ICB	06/22/22 8:30				U	mg/L		-0.0002	0.0002			
WG544892													
WG544892LRB	LRB	06/22/22 14:01				U	mg/L		-0.00044	0.00044			
WG544892LFB	LFB	06/22/22 14:02	HG220620-6	.002002		.00197	mg/L	98	85	115			
L73932-01LFM	LFM	06/22/22 14:04	HG220620-6	.002002	U	.00195	mg/L	97	85	115			
L73932-01LFMD	LFMD	06/22/22 14:05	HG220620-6	.002002	U	.002	mg/L	100	85	115	3	20	

AZMINING

ACZ Project ID: **L73934**

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, total M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG544804													
WG544804ICV	ICV	06/22/22 8:29	HG220620-3	.005005		.00496	mg/L	99	95	105			
WG544804ICB	ICB	06/22/22 8:30				U	mg/L		-0.0002	0.0002			
WG544837													
WG544837LRB	LRB	06/22/22 13:26				U	mg/L		-0.00044	0.00044			
WG544837LFB	LFB	06/22/22 13:27	HG220620-6	.002002		.00189	mg/L	94	85	115			
L73934-01LFM	LFM	06/22/22 13:42	HG220620-6	.002002	U	.00189	mg/L	94	85	115			
L73934-01LFMD	LFMD	06/22/22 13:43	HG220620-6	.002002	U	.00199	mg/L	99	85	115	5	20	

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2		1.965	mg/L	98	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.024	0.024			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	.502		.505	mg/L	101	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	.502	U	.5019	mg/L	100	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	.502	U	.5062	mg/L	101	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2		1.9475	mg/L	97	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.024	0.024			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	.502		.5075	mg/L	101	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	.502	U	.4804	mg/L	96	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	.502	U	.4794	mg/L	95	85	115	0	20	

Nickel, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2		1.954	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.024	0.024			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.0176	0.0176			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	.502		.5102	mg/L	102	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	.502	U	.5067	mg/L	101	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	.502	U	.5127	mg/L	102	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
WG546094													
WG546094ICV	ICV	07/09/22 20:59	WI220602-3	2.4161		2.381	mg/L	99	90	110			
WG546094ICB	ICB	07/09/22 21:01				U	mg/L		-0.02	0.02			
WG546094LFB	LFB	07/09/22 21:05	WI220630-7	2		1.998	mg/L	100	90	110			
L73933-01AS	AS	07/09/22 21:27	WI220630-7	2	U	2.04	mg/L	102	90	110			
L73934-01DUP	DUP	07/09/22 21:29				.034	.033	mg/L			3	20	RA

AZMINING

ACZ Project ID: **L73934**

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.

Nitrogen, ammonia

M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545662													
WG545662ICV	ICV	07/05/22 12:15	WI220611-1	12.024		11.828	mg/L	98	90	110			
WG545662ICB	ICB	07/05/22 12:16				U	mg/L		-0.05	0.05			
WG545708													
WG545708LFB1	LFB	07/05/22 13:40	WI220420-3	10		10.428	mg/L	104	90	110			
L73930-01AS	AS	07/05/22 13:43	WI220420-3	10	U	10.638	mg/L	106	90	110			
L73931-01DUP	DUP	07/05/22 13:46			U	U	mg/L				0	20	RA
WG545708LFB2	LFB	07/05/22 14:23	WI220420-3	10		10.547	mg/L	105	90	110			

pH (lab)

SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545844													
WG545844LCSW1	LCSW	07/06/22 19:08	PCN64057	6		6	units	100	5.9	6.1			
WG545844LCSW4	LCSW	07/06/22 22:05	PCN64057	6		6	units	100	5.9	6.1			
L73934-02DUP	DUP	07/06/22 23:36			11.6	11.7	units				1	20	
L74201-06DUP	DUP	07/07/22 1:32			8.1	8.1	units				0	20	
WG545844LCSW7	LCSW	07/07/22 1:36	PCN64057	6		6	units	100	5.9	6.1			
WG545844LCSW10	LCSW	07/07/22 5:48	PCN64057	6		6	units	100	5.9	6.1			
WG545844LCSW13	LCSW	07/07/22 9:16	PCN64057	6		6	units	100	5.9	6.1			

Potassium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	20		19.77	mg/L	99	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	99.95798		96.31	mg/L	96	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	99.95798	.94	95.29	mg/L	94	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	99.95798	.94	95.87	mg/L	95	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	20		19.74	mg/L	99	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	99.95798		97.2	mg/L	97	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	99.95798	.57	95.36	mg/L	95	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	99.95798	.57	96.13	mg/L	96	85	115	1	20	

Potassium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546048													
WG546048ICV	ICV	07/08/22 13:50	II220621-2	20		20.02	mg/L	100	95	105			
WG546048ICB	ICB	07/08/22 13:56				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 14:09				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 14:12	II220628-3	99.95798		99.97	mg/L	100	85	115			
L74083-11LFM	LFM	07/08/22 14:50	II220628-3	99.95798	1.68	102.1	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 14:53	II220628-3	99.95798	1.68	101.5	mg/L	100	70	130	1	20	

AZMINING

ACZ Project ID: **L73934**

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
WG544709													
WG544709PBW	PBW	06/20/22 10:00				U	mg/L		-20	20			
WG544709LCSW	LCSW	06/20/22 10:03	PCN65849	1000		980	mg/L	98	80	120			
L73982-03DUP	DUP	06/20/22 11:15			552	556	mg/L				1	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05196	mg/L	104	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05255	mg/L	105	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	.00017	.05658	mg/L	113	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	.00017	.056	mg/L	112	70	130	1	20	

Selenium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05107	mg/L	102	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04588	mg/L	92	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	.00041	.0481	mg/L	95	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	.00041	.04947	mg/L	98	70	130	3	20	

Silica, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	I1220624-2	42.8		43.67	mg/L	102	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	I1220628-3	21.404		22.09	mg/L	103	85	115			
L73934-01AS	AS	07/08/22 17:34	I1220628-3	21.404	19.7	41.74	mg/L	103	85	115			
L73934-01ASD	ASD	07/08/22 17:37	I1220628-3	21.404	19.7	41.75	mg/L	103	85	115	0	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	I1220624-2	42.8		43.49	mg/L	102	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	I1220628-3	21.404		22.21	mg/L	104	85	115			
L74093-02AS	AS	07/08/22 21:54	I1220628-3	21.404	6.8	28.69	mg/L	102	85	115			
L74093-02ASD	ASD	07/08/22 21:58	I1220628-3	21.404	6.8	28.67	mg/L	102	85	115	0	20	

Silica, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	I1220621-2	42.8		43.07	mg/L	101	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 4:48	I1220628-3	21.404		22.23	mg/L	104	85	115			
L74083-11LFM	LFM	07/08/22 5:25	I1220628-3	21.404	11.5	25.64	mg/L	66	70	130			M2
L74083-11LFMD	LFMD	07/08/22 5:28	I1220628-3	21.404	11.5	32.56	mg/L	98	70	130	24	20	RS

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ACZ Project ID: **L73934**

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
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.02		.02081	mg/L	104	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.01		.01035	mg/L	104	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.01	U	.00978	mg/L	98	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.01	U	.0097	mg/L	97	70	130	1	20	

Silver, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.02		.01995	mg/L	100	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.01		.00903	mg/L	90	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.01	U	.00887	mg/L	89	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.01	U	.0089	mg/L	89	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
WG546057													
WG546057ICV	ICV	07/08/22 15:48	I1220624-2	100		99.83	mg/L	100	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	I1220628-3	100.0023		97.26	mg/L	97	85	115			
L73934-01AS	AS	07/08/22 17:34	I1220628-3	100.0023	75.7	168.6	mg/L	93	85	115			
L73934-01ASD	ASD	07/08/22 17:37	I1220628-3	100.0023	75.7	169.9	mg/L	94	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	I1220624-2	100		99.19	mg/L	99	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	I1220628-3	100.0023		98.13	mg/L	98	85	115			
L74093-02AS	AS	07/08/22 21:54	I1220628-3	100.0023	1.29	95.53	mg/L	94	85	115			
L74093-02ASD	ASD	07/08/22 21:58	I1220628-3	100.0023	1.29	96.24	mg/L	95	85	115	1	20	

Sodium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	I1220621-2	100		98.25	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 4:48	I1220628-3	100.0023		99.4	mg/L	99	85	115			
L74083-11LFM	LFM	07/08/22 5:25	I1220628-3	100.0023	20.2	118.6	mg/L	98	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	I1220628-3	100.0023	20.2	119.5	mg/L	99	70	130	1	20	

AZMINING

ACZ Project ID: **L73934**

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
WG545658													
WG545658ICB	ICB	07/05/22 11:59				U	mg/L		-3	3			
WG545658ICV	ICV	07/05/22 11:59	WI220705-4	19.54		19.7	mg/L	101	90	110			
WG545658LFB1	LFB	07/05/22 13:22	WI220415-3	9.95		10	mg/L	101	90	110			
WG545658LFB2	LFB	07/05/22 13:26	WI220415-3	9.95		10.6	mg/L	107	90	110			
L73932-01DUP	DUP	07/05/22 14:08			223	225.3	mg/L				1	20	RA
L73933-01AS	AS	07/05/22 14:08	SO4TURB25X	10	296	306.4	mg/L	104	90	110			

Thallium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05371	mg/L	107	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05308	mg/L	106	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	U	.05626	mg/L	113	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	U	.05672	mg/L	113	70	130	1	20	

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05263	mg/L	105	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04627	mg/L	93	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	U	.05057	mg/L	101	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	U	.05142	mg/L	103	70	130	2	20	

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.0527	mg/L	105	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05199	mg/L	104	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	.00225	.06241	mg/L	120	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	.00225	.06214	mg/L	120	70	130	0	20	

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05224	mg/L	104	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04607	mg/L	92	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	.00155	.05428	mg/L	105	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	.00155	.05558	mg/L	108	70	130	2	20	

AZMINING

ACZ Project ID: **L73934**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.0505	mg/L	101	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0024	0.0024			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00176	0.00176			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04431	mg/L	89	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	U	.04547	mg/L	91	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	U	.04627	mg/L	93	70	130	2	20	

Cyanide, total

M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545636													
WG545636ICV	ICV	07/02/22 12:41	WI220623-6	.3003		.2805	mg/L	93	90	110			
WG545636ICB	ICB	07/02/22 12:42				U	mg/L		-0.003	0.003			
WG545552LRB	LRB	07/02/22 12:43				U	mg/L		-0.003	0.003			
WG545552LFB	LFB	07/02/22 12:44	WI220629-3	.2		.217	mg/L	109	90	110			
L73934-01DUP	DUP	07/02/22 12:51			U	U	mg/L				0	20	RA
L73934-02LFM	LFM	07/02/22 12:54	WI220629-3	.2	U	.2178	mg/L	109	90	110			

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545579													
WG545579ICV	ICV	07/01/22 11:34	WC220627-1	2.008		1.96	mg/L	98	90	110			
WG545579ICB	ICB	07/01/22 11:41				U	mg/L		-0.3	0.3			
WG545610													
WG545610ICV	ICV	07/01/22 19:28	WC220627-1	2.008		2.05	mg/L	102	90	110			
WG545610ICB	ICB	07/01/22 19:36				U	mg/L		-0.3	0.3			
WG545610LFB1	LFB	07/01/22 19:44	WC220606-1	5.02		5.12	mg/L	102	90	110			
L73933-01AS	AS	07/01/22 21:37	WC220606-1	5.02	1.81	6.55	mg/L	94	90	110			
L73933-01ASD	ASD	07/01/22 21:44	WC220606-1	5.02	1.81	6.55	mg/L	94	90	110	0	20	
WG545610LFB2	LFB	07/01/22 23:01	WC220606-1	5.02		5.1	mg/L	102	90	110			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2		2.022	mg/L	101	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.18	0.18			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	1.0013		1.006	mg/L	100	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	1.0013	U	1.002	mg/L	100	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	1.0013	U	.998	mg/L	100	85	115	0	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2		2.022	mg/L	101	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.18	0.18			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	1.0013		1.011	mg/L	101	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	1.0013	U	.984	mg/L	98	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	1.0013	U	.99	mg/L	99	85	115	1	20	

AZMINING

ACZ Project ID: **L73934**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2		1.94	mg/L	97	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.18	0.18			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.132	0.132			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	1.0013		1.023	mg/L	102	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	1.0013	1.5	2.506	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	1.0013	1.5	2.55	mg/L	105	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
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05179	mg/L	104	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.0501		.05208	mg/L	104	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.0501	.00023	.05677	mg/L	113	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.0501	.00023	.05611	mg/L	112	70	130	1	20	

Lead, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.0514	mg/L	103	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.0501		.04578	mg/L	91	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.0501	.00016	.04912	mg/L	98	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.0501	.00016	.05007	mg/L	100	70	130	2	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	100		96.15	mg/L	96	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	49.99809		47.22	mg/L	94	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	49.99809	.82	47.57	mg/L	94	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	49.99809	.82	47.93	mg/L	94	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	100		95.81	mg/L	96	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	49.99809		47.41	mg/L	95	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	49.99809	.58	45.51	mg/L	90	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	49.99809	.58	45.94	mg/L	91	85	115	1	20	

AZMINING

ACZ Project ID: **L73934**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	11220621-2	100		95.88	mg/L	96	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 4:48	11220628-3	49.99809		49.21	mg/L	98	85	115			
L74083-11LFM	LFM	07/08/22 5:25	11220628-3	49.99809	13.2	61.55	mg/L	97	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	11220628-3	49.99809	13.2	61.79	mg/L	97	70	130	0	20	

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	11220624-2	2		1.964	mg/L	98	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.03	0.03			
WG546057LFB	LFB	07/08/22 16:07	11220628-3	.499		.494	mg/L	99	85	115			
L73934-01AS	AS	07/08/22 17:34	11220628-3	.499	.037	.523	mg/L	97	85	115			
L73934-01ASD	ASD	07/08/22 17:37	11220628-3	.499	.037	.526	mg/L	98	85	115	1	20	

WG546062

WG546062ICV	ICV	07/08/22 20:09	11220624-2	2		1.958	mg/L	98	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.03	0.03			
WG546062LFB	LFB	07/08/22 20:28	11220628-3	.499		.493	mg/L	99	85	115			
L74093-02AS	AS	07/08/22 21:54	11220628-3	.499	U	.477	mg/L	96	85	115			
L74093-02ASD	ASD	07/08/22 21:58	11220628-3	.499	U	.48	mg/L	96	85	115	1	20	

Manganese, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	11220621-2	2		1.932	mg/L	97	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.03	0.03			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.022	0.022			
WG545745LFB	LFB	07/08/22 4:48	11220628-3	.499		.5	mg/L	100	85	115			
L74083-11LFM	LFM	07/08/22 5:25	11220628-3	.499	.056	.553	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	11220628-3	.499	.056	.557	mg/L	100	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
WG544804													
WG544804ICV	ICV	06/22/22 8:29	HG220620-3	.005005		.00496	mg/L	99	95	105			
WG544804ICB	ICB	06/22/22 8:30				U	mg/L		-0.0002	0.0002			
WG544892													
WG544892LRB	LRB	06/22/22 14:01				U	mg/L		-0.00044	0.00044			
WG544892LFB	LFB	06/22/22 14:02	HG220620-6	.002002		.00197	mg/L	98	85	115			
L73932-01LFM	LFM	06/22/22 14:04	HG220620-6	.002002	U	.00195	mg/L	97	85	115			
L73932-01LFMD	LFMD	06/22/22 14:05	HG220620-6	.002002	U	.002	mg/L	100	85	115	3	20	

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ACZ Project ID: **L73934**

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, total M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG544804													
WG544804ICV	ICV	06/22/22 8:29	HG220620-3	.005005		.00496	mg/L	99	95	105			
WG544804ICB	ICB	06/22/22 8:30				U	mg/L		-0.0002	0.0002			
WG544837													
WG544837LRB	LRB	06/22/22 13:26				U	mg/L		-0.00044	0.00044			
WG544837LFB	LFB	06/22/22 13:27	HG220620-6	.002002		.00189	mg/L	94	85	115			
L73934-01LFM	LFM	06/22/22 13:42	HG220620-6	.002002	U	.00189	mg/L	94	85	115			
L73934-01LFMD	LFMD	06/22/22 13:43	HG220620-6	.002002	U	.00199	mg/L	99	85	115	5	20	

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	2		1.965	mg/L	98	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.024	0.024			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	.502		.505	mg/L	101	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	.502	U	.5019	mg/L	100	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	.502	U	.5062	mg/L	101	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	2		1.9475	mg/L	97	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.024	0.024			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	.502		.5075	mg/L	101	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	.502	U	.4804	mg/L	96	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	.502	U	.4794	mg/L	95	85	115	0	20	

Nickel, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	II220621-2	2		1.954	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.024	0.024			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.0176	0.0176			
WG545745LFB	LFB	07/08/22 4:48	II220628-3	.502		.5102	mg/L	102	85	115			
L74083-11LFM	LFM	07/08/22 5:25	II220628-3	.502	U	.5067	mg/L	101	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	II220628-3	.502	U	.5127	mg/L	102	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
WG546094													
WG546094ICV	ICV	07/09/22 20:59	WI220602-3	2.4161		2.381	mg/L	99	90	110			
WG546094ICB	ICB	07/09/22 21:01				U	mg/L		-0.02	0.02			
WG546094LFB	LFB	07/09/22 21:05	WI220630-7	2		1.998	mg/L	100	90	110			
L73933-01AS	AS	07/09/22 21:27	WI220630-7	2	U	2.04	mg/L	102	90	110			
L73934-01DUP	DUP	07/09/22 21:29				.034	.033	mg/L			3	20	RA

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ACZ Project ID: **L73934**

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.

Nitrogen, ammonia

M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545662													
WG545662ICV	ICV	07/05/22 12:15	WI220611-1	12.024		11.828	mg/L	98	90	110			
WG545662ICB	ICB	07/05/22 12:16				U	mg/L		-0.05	0.05			
WG545708													
WG545708LFB1	LFB	07/05/22 13:40	WI220420-3	10		10.428	mg/L	104	90	110			
L73930-01AS	AS	07/05/22 13:43	WI220420-3	10	U	10.638	mg/L	106	90	110			
L73931-01DUP	DUP	07/05/22 13:46			U	U	mg/L				0	20	RA
WG545708LFB2	LFB	07/05/22 14:23	WI220420-3	10		10.547	mg/L	105	90	110			

pH (lab)

SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545844													
WG545844LCSW1	LCSW	07/06/22 19:08	PCN64057	6		6	units	100	5.9	6.1			
WG545844LCSW4	LCSW	07/06/22 22:05	PCN64057	6		6	units	100	5.9	6.1			
L73934-02DUP	DUP	07/06/22 23:36			11.6	11.7	units				1	20	
L74201-06DUP	DUP	07/07/22 1:32			8.1	8.1	units				0	20	
WG545844LCSW7	LCSW	07/07/22 1:36	PCN64057	6		6	units	100	5.9	6.1			
WG545844LCSW10	LCSW	07/07/22 5:48	PCN64057	6		6	units	100	5.9	6.1			
WG545844LCSW13	LCSW	07/07/22 9:16	PCN64057	6		6	units	100	5.9	6.1			

Potassium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	II220624-2	20		19.77	mg/L	99	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	II220628-3	99.95798		96.31	mg/L	96	85	115			
L73934-01AS	AS	07/08/22 17:34	II220628-3	99.95798	.94	95.29	mg/L	94	85	115			
L73934-01ASD	ASD	07/08/22 17:37	II220628-3	99.95798	.94	95.87	mg/L	95	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	II220624-2	20		19.74	mg/L	99	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	II220628-3	99.95798		97.2	mg/L	97	85	115			
L74093-02AS	AS	07/08/22 21:54	II220628-3	99.95798	.57	95.36	mg/L	95	85	115			
L74093-02ASD	ASD	07/08/22 21:58	II220628-3	99.95798	.57	96.13	mg/L	96	85	115	1	20	

Potassium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546048													
WG546048ICV	ICV	07/08/22 13:50	II220621-2	20		20.02	mg/L	100	95	105			
WG546048ICB	ICB	07/08/22 13:56				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 14:09				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 14:12	II220628-3	99.95798		99.97	mg/L	100	85	115			
L74083-11LFM	LFM	07/08/22 14:50	II220628-3	99.95798	1.68	102.1	mg/L	100	70	130			
L74083-11LFMD	LFMD	07/08/22 14:53	II220628-3	99.95798	1.68	101.5	mg/L	100	70	130	1	20	

AZMINING

ACZ Project ID: **L73934**

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
WG544709													
WG544709PBW	PBW	06/20/22 10:00				U	mg/L		-20	20			
WG544709LCSW	LCSW	06/20/22 10:03	PCN65849	1000		980	mg/L	98	80	120			
L73982-03DUP	DUP	06/20/22 11:15			552	556	mg/L				1	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05196	mg/L	104	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05255	mg/L	105	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	.00017	.05658	mg/L	113	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	.00017	.056	mg/L	112	70	130	1	20	

Selenium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05107	mg/L	102	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04588	mg/L	92	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	.00041	.0481	mg/L	95	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	.00041	.04947	mg/L	98	70	130	3	20	

Silica, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	I1220624-2	42.8		43.67	mg/L	102	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	I1220628-3	21.404		22.09	mg/L	103	85	115			
L73934-01AS	AS	07/08/22 17:34	I1220628-3	21.404	19.7	41.74	mg/L	103	85	115			
L73934-01ASD	ASD	07/08/22 17:37	I1220628-3	21.404	19.7	41.75	mg/L	103	85	115	0	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	I1220624-2	42.8		43.49	mg/L	102	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	I1220628-3	21.404		22.21	mg/L	104	85	115			
L74093-02AS	AS	07/08/22 21:54	I1220628-3	21.404	6.8	28.69	mg/L	102	85	115			
L74093-02ASD	ASD	07/08/22 21:58	I1220628-3	21.404	6.8	28.67	mg/L	102	85	115	0	20	

Silica, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	I1220621-2	42.8		43.07	mg/L	101	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 4:48	I1220628-3	21.404		22.23	mg/L	104	85	115			
L74083-11LFM	LFM	07/08/22 5:25	I1220628-3	21.404	11.5	25.64	mg/L	66	70	130			M2
L74083-11LFMD	LFMD	07/08/22 5:28	I1220628-3	21.404	11.5	32.56	mg/L	98	70	130	24	20	RS

AZMINING

ACZ Project ID: **L73934**

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
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.02		.02081	mg/L	104	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.01		.01035	mg/L	104	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.01	U	.00978	mg/L	98	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.01	U	.0097	mg/L	97	70	130	1	20	

Silver, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.02		.01995	mg/L	100	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.01		.00903	mg/L	90	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.01	U	.00887	mg/L	89	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.01	U	.0089	mg/L	89	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
WG546057													
WG546057ICV	ICV	07/08/22 15:48	I1220624-2	100		99.83	mg/L	100	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.6	0.6			
WG546057LFB	LFB	07/08/22 16:07	I1220628-3	100.0023		97.26	mg/L	97	85	115			
L73934-01AS	AS	07/08/22 17:34	I1220628-3	100.0023	75.7	168.6	mg/L	93	85	115			
L73934-01ASD	ASD	07/08/22 17:37	I1220628-3	100.0023	75.7	169.9	mg/L	94	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	I1220624-2	100		99.19	mg/L	99	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.6	0.6			
WG546062LFB	LFB	07/08/22 20:28	I1220628-3	100.0023		98.13	mg/L	98	85	115			
L74093-02AS	AS	07/08/22 21:54	I1220628-3	100.0023	1.29	95.53	mg/L	94	85	115			
L74093-02ASD	ASD	07/08/22 21:58	I1220628-3	100.0023	1.29	96.24	mg/L	95	85	115	1	20	

Sodium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	I1220621-2	100		98.25	mg/L	98	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.6	0.6			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.44	0.44			
WG545745LFB	LFB	07/08/22 4:48	I1220628-3	100.0023		99.4	mg/L	99	85	115			
L74083-11LFM	LFM	07/08/22 5:25	I1220628-3	100.0023	20.2	118.6	mg/L	98	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	I1220628-3	100.0023	20.2	119.5	mg/L	99	70	130	1	20	

AZMINING

ACZ Project ID: **L73934**

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
WG545658													
WG545658ICB	ICB	07/05/22 11:59				U	mg/L		-3	3			
WG545658ICV	ICV	07/05/22 11:59	WI220705-4	19.54		19.7	mg/L	101	90	110			
WG545658LFB1	LFB	07/05/22 13:22	WI220415-3	9.95		10	mg/L	101	90	110			
WG545658LFB2	LFB	07/05/22 13:26	WI220415-3	9.95		10.6	mg/L	107	90	110			
L73932-01DUP	DUP	07/05/22 14:08			223	225.3	mg/L				1	20	RA
L73933-01AS	AS	07/05/22 14:08	SO4TURB25X	10	296	306.4	mg/L	104	90	110			

Thallium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.05371	mg/L	107	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05308	mg/L	106	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	U	.05626	mg/L	113	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	U	.05672	mg/L	113	70	130	1	20	

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05263	mg/L	105	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04627	mg/L	93	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	U	.05057	mg/L	101	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	U	.05142	mg/L	103	70	130	2	20	

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545544													
WG545544ICV	ICV	06/30/22 17:15	MS220502-1	.05		.0527	mg/L	105	90	110			
WG545544ICB	ICB	06/30/22 17:18				U	mg/L		-0.00022	0.00022			
WG545544LFB	LFB	06/30/22 17:20	MS220627-2	.05		.05199	mg/L	104	85	115			
L73933-01AS	AS	06/30/22 17:32	MS220627-2	.05	.00225	.06241	mg/L	120	70	130			
L73933-01ASD	ASD	06/30/22 17:34	MS220627-2	.05	.00225	.06214	mg/L	120	70	130	0	20	

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545495													
WG545495ICV	ICV	06/30/22 11:19	MS220502-1	.05		.05224	mg/L	104	90	110			
WG545495ICB	ICB	06/30/22 11:21				U	mg/L		-0.0003	0.0003			
WG545358LRB	LRB	06/30/22 11:22				U	mg/L		-0.00022	0.00022			
WG545358LFB	LFB	06/30/22 11:24	MS220627-2	.05		.04607	mg/L	92	85	115			
L73932-01LFM	LFM	06/30/22 11:34	MS220627-2	.05	.00155	.05428	mg/L	105	70	130			
L73932-01LFMD	LFMD	06/30/22 11:36	MS220627-2	.05	.00155	.05558	mg/L	108	70	130	2	20	

AZMINING

ACZ Project ID: **L73934**

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

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546057													
WG546057ICV	ICV	07/08/22 15:48	11220624-2	2		2	mg/L	100	95	105			
WG546057ICB	ICB	07/08/22 15:54				U	mg/L		-0.06	0.06			
WG546057LFB	LFB	07/08/22 16:07	11220628-3	.50045		.515	mg/L	103	85	115			
L73934-01AS	AS	07/08/22 17:34	11220628-3	.50045	U	.516	mg/L	103	85	115			
L73934-01ASD	ASD	07/08/22 17:37	11220628-3	.50045	U	.52	mg/L	104	85	115	1	20	
WG546062													
WG546062ICV	ICV	07/08/22 20:09	11220624-2	2		1.984	mg/L	99	95	105			
WG546062ICB	ICB	07/08/22 20:15				U	mg/L		-0.06	0.06			
WG546062LFB	LFB	07/08/22 20:28	11220628-3	.50045		.52	mg/L	104	85	115			
L74093-02AS	AS	07/08/22 21:54	11220628-3	.50045	U	.503	mg/L	101	85	115			
L74093-02ASD	ASD	07/08/22 21:58	11220628-3	.50045	U	.508	mg/L	102	85	115	1	20	

Zinc, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG545880													
WG545880ICV	ICV	07/08/22 4:27	11220621-2	2		1.918	mg/L	96	95	105			
WG545880ICB	ICB	07/08/22 4:32				U	mg/L		-0.06	0.06			
WG545745LRB	LRB	07/08/22 4:45				U	mg/L		-0.044	0.044			
WG545745LFB	LFB	07/08/22 4:48	11220628-3	.50045		.52	mg/L	104	85	115			
L74083-11LFM	LFM	07/08/22 5:25	11220628-3	.50045	U	.523	mg/L	105	70	130			
L74083-11LFMD	LFMD	07/08/22 5:28	11220628-3	.50045	U	.519	mg/L	104	70	130	1	20	

South32

ACZ Project ID: **L73934**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L73934-01	WG545880	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG545495	Beryllium, total	M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
			M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG545687	Chloride	SM4500CI-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545636	Cyanide, total	M335.4 - Colorimetric w/ distillation	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG546094	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).
	WG545708	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545880	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
M200.7 ICP			ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.	
WG545658	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).	

South32

ACZ Project ID: **L73934**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L73934-02	WG545880	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG545495	Beryllium, total	M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
			M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG545687	Chloride	SM4500CI-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545636	Cyanide, total	M335.4 - Colorimetric w/ distillation	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG546094	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).
	WG545708	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545880	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
M200.7 ICP			ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.	
WG545658	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).	

South32

ACZ Project ID: **L73934**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L73934-03	WG545880	Aluminum, total	M200.7 ICP	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG545495	Beryllium, total	M200.8 ICP-MS	IA	Internal standard recovery exceeded the acceptance limits. Concentration of associated target analyte(s) in the sample is < MDL.
			M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG545636	Cyanide, total	M335.4 - Colorimetric w/ distillation	HC	Initial analysis within holding time. Reanalysis was past holding time, which was required due to a QC failure during the initial analysis.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG546094	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).
	WG545708	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545880	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
WG545658	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).	

South32

ACZ Project ID: **L73934**



No certification qualifiers associated with this analysis

South32
 4542257445

ACZ Project ID: L73934
 Date Received: 06/16/2022 11:46
 Received By:
 Date Printed: 6/20/2022

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?
7225	-0.2	<=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.

South32
4542257445

ACZ Project ID: L73934
Date Received: 06/16/2022 11:46
Received By:
Date Printed: 6/20/2022

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).



Accredited Environmental Testing

2773 Downhill Drive
Steamboat Springs, CO 80487
(970) 879-6590

L73934

CHAIN of CUSTODY

Report to:

Name: Kara Haas
Company: AMI/South32
E-mail: Kara.Haas@south32.net

Address: 749 Harshaw Road
Patagonia, AZ 85624
Telephone: 505.947.1738

Copy of Report to:

Name: Nick Connell
Company: NewFields

E-mail: nconnell@newfields.com
Telephone: 406.549.8270

Invoice to:

Name: Kara Haas
Company: AMI/South32
E-mail: kara.haas@south32.net

Address: 749 Harshaw Road
Patagonia, AZ 85624
Telephone: 505.947.1738

Copy of Invoice to:

Name: South32
Company: AMI/South32
E-mail: sscinvoices@south32.net

Address: NA
Telephone: NA

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

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: Marc Taylor Sampler's Site Information State AZ Zip code 85624 Time Zone MST

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

Quote #:	PO#:	Reporting state for compliance testing:	Check box if samples include NRC licensed material?	SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	GW BASELINE										
GW BASELINE	4542257445	AZ	<input type="checkbox"/>	MW-9-20220614	6/14/2022 11:10		6	<input checked="" type="checkbox"/>										
				MW19-11-20220614	6/14/2022 13:05		6	<input checked="" type="checkbox"/>										
				AW-1-20220614	6/14/2022 15:15		6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										
							6	<input checked="" type="checkbox"/>										

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]	6-15-22 0700	[Signature]	6/16/22 13:39

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L73934 Chain of Custody

October 13, 2022

Report to:

Kara Haas
South32
749 Harshaw Rd
Patagonia, AZ 85624

Bill to:

Accounts Payable
South32
2210 E Fort Lowell Road
Tucson, AZ 85719

cc: Nick Connell, Matt Owens

Project ID: 4542257445

ACZ Project ID: L75885

Kara Haas:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 15, 2022. This project has been assigned to ACZ's project number, L75885. 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 L75885. 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 October 02, 2024. 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.



South32Project ID: 4542257445
Sample ID: MW-9-20220914ACZ Sample ID: **L75885-01**
Date Sampled: 09/14/22 11:30
Date Received: 09/15/22
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								09/23/22 9:45	mrd
Total Hot Plate Digestion	M200.2 ICP-MS								09/28/22 16:40	mfm
Total Hot Plate Digestion	M200.2 ICP								09/29/22 15:24	aeH

South32

Project ID: 4542257445
 Sample ID: MW-9-20220914

ACZ Sample ID: **L75885-01**
 Date Sampled: 09/14/22 11:30
 Date Received: 09/15/22
 Sample Matrix: Groundwater

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	10/04/22 17:54	wtc
Aluminum, total	M200.7 ICP	1	0.113	B		mg/L	0.05	0.25	10/01/22 18:44	wtc
Antimony, dissolved	M200.8 ICP-MS	1	0.00501			mg/L	0.0004	0.002	09/28/22 9:07	gjil/scp
Antimony, total	M200.8 ICP-MS	1	0.00483			mg/L	0.0004	0.002	10/03/22 21:12	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00652			mg/L	0.0002	0.001	09/28/22 9:07	gjil/scp
Arsenic, total	M200.8 ICP-MS	1	0.00610			mg/L	0.0002	0.001	10/03/22 21:12	mfm
Barium, dissolved	M200.7 ICP	1	0.0293	B		mg/L	0.009	0.035	10/04/22 17:54	wtc
Barium, total	M200.7 ICP	1	0.0268	B		mg/L	0.009	0.035	10/01/22 18:44	wtc
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	09/28/22 9:07	gjil/scp
Beryllium, total	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/03/22 21:12	mfm
Boron, dissolved	M200.7 ICP	1	0.145			mg/L	0.03	0.1	10/04/22 17:54	wtc
Boron, total	M200.7 ICP	1	0.120			mg/L	0.03	0.1	10/01/22 18:44	wtc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	09/28/22 9:07	gjil/scp
Cadmium, total	M200.8 ICP-MS	1	0.000083	B		mg/L	0.00005	0.00025	10/06/22 11:19	mfm
Calcium, dissolved	M200.7 ICP	1	34.6			mg/L	0.1	0.5	10/04/22 17:54	wtc
Calcium, total	M200.7 ICP	1	34.5			mg/L	0.1	0.5	10/01/22 18:44	wtc
Chromium, dissolved	M200.8 ICP-MS	1	0.00109	B		mg/L	0.0005	0.002	09/28/22 9:07	gjil/scp
Chromium, total	M200.8 ICP-MS	1	0.00127	B		mg/L	0.0005	0.002	10/03/22 21:12	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/04/22 17:54	wtc
Cobalt, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/01/22 18:44	wtc
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U		mg/L	0.0008	0.002	09/28/22 9:07	gjil/scp
Copper, total	M200.8 ICP-MS	1	0.00128	B		mg/L	0.0008	0.002	10/03/22 21:12	mfm
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/04/22 17:54	wtc
Iron, total	M200.7 ICP	1	0.129	B		mg/L	0.06	0.15	10/01/22 18:44	wtc
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	09/28/22 9:07	gjil/scp
Lead, total	M200.8 ICP-MS	1	0.00531		*	mg/L	0.0001	0.0005	10/03/22 21:12	mfm
Magnesium, dissolved	M200.7 ICP	1	0.61	B		mg/L	0.2	1	10/04/22 17:54	wtc
Magnesium, total	M200.7 ICP	1	0.89	B		mg/L	0.2	1	10/01/22 18:44	wtc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/04/22 17:54	wtc
Manganese, total	M200.7 ICP	1	0.089			mg/L	0.01	0.05	10/01/22 18:44	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	09/29/22 14:15	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	09/29/22 11:30	mlh
Nickel, dissolved	M200.7 ICP	1	0.0097	B		mg/L	0.008	0.04	10/04/22 17:54	wtc
Nickel, total	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/01/22 18:44	wtc
Potassium, dissolved	M200.7 ICP	1	0.99	B		mg/L	0.2	1	10/04/22 17:54	wtc
Potassium, total	M200.7 ICP	1	1.05			mg/L	0.2	1	10/01/22 18:44	wtc
Selenium, dissolved	M200.8 ICP-MS	1	0.00030			mg/L	0.0001	0.00025	09/29/22 18:21	kja
Selenium, total	M200.8 ICP-MS	1	0.00036			mg/L	0.0001	0.00025	10/03/22 21:12	mfm
Silica, dissolved	M200.7 ICP	1	20.2			mg/L	0.2	1	10/04/22 17:54	wtc
Silica, total	M200.7 ICP	1	19.7		*	mg/L	0.2	1	10/01/22 18:44	wtc
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	09/28/22 9:07	gjil/scp
Silver, total	M200.8 ICP-MS	1	0.00082			mg/L	0.0001	0.0005	10/03/22 21:12	mfm
Sodium, dissolved	M200.7 ICP	1	78.2			mg/L	0.2	1	10/04/22 17:54	wtc

South32

Project ID: 4542257445
 Sample ID: MW-9-20220914

ACZ Sample ID: **L75885-01**
 Date Sampled: 09/14/22 11:30
 Date Received: 09/15/22
 Sample Matrix: Groundwater

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Sodium, total	M200.7 ICP	1	77.0			mg/L	0.2	1	10/01/22 18:44	wtc
Thallium, dissolved	M200.8 ICP-MS	1	0.00020	B		mg/L	0.0001	0.0005	09/28/22 9:07	gjll/scp
Thallium, total	M200.8 ICP-MS	1	0.00021	B		mg/L	0.0001	0.0005	10/03/22 21:12	mfm
Uranium, dissolved	M200.8 ICP-MS	1	0.00557			mg/L	0.0001	0.0005	09/28/22 9:07	gjll/scp
Uranium, total	M200.8 ICP-MS	1	0.00531			mg/L	0.0001	0.0005	10/03/22 21:12	mfm
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/04/22 17:54	wtc
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/01/22 18:44	wtc

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	09/23/22 0:00	jck
Carbonate as CaCO3		1	<2	U		mg/L	2	20	09/23/22 0:00	jck
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	09/23/22 0:00	jck
Total Alkalinity		1	74.6		*	mg/L	2	20	09/23/22 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-0.9			%			10/13/22 0:00	calc
Sum of Anions			5.4			meq/L			10/13/22 0:00	calc
Sum of Cations			5.3			meq/L			10/13/22 0:00	calc
Chloride	SM4500Cl-E	1	3.97		*	mg/L	1	2	09/20/22 12:33	mrd
Conductivity @25C	SM2510B	1	547			umhos/cm	1	10	09/23/22 23:37	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	09/25/22 18:58	gkk
Fluoride	SM4500F-C	1	0.22	B		mg/L	0.15	0.35	10/11/22 14:27	emk
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		89			mg/L	0.2	5	10/13/22 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.081	B	*	mg/L	0.02	0.1	10/01/22 0:45	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	<0.05	U	*	mg/L	0.05	0.2	09/22/22 14:37	bls
pH (lab)	SM4500H+ B									
pH		1	6.9	H		units	0.1	0.1	09/23/22 0:00	jck
pH measured at		1	21.9			C	0.1	0.1	09/23/22 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	354			mg/L	20	40	09/21/22 12:04	mrbr
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	178		*	mg/L	5	25	10/04/22 10:02	gkk
TDS (calculated)	Calculation		368			mg/L			10/13/22 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.96						10/13/22 0:00	calc

Arizona license number: AZ0102

Report Header Explanations

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

QC Sample Types

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

AZMINING

ACZ Project ID: **L75885**

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
WG551278													
WG551278PBW1	PBW	09/23/22 18:50				6.8	mg/L		-20	20			
WG551278LCSW3	LCSW	09/23/22 19:10	WC220916-1	820.0001		766.5	mg/L	93	90	110			
WG551278LCSW6	LCSW	09/23/22 23:15	WC220916-1	820.0001		772.9	mg/L	94	90	110			
WG551278PBW2	PBW	09/23/22 23:23				8.7	mg/L		-20	20			
L75894-04DUP	DUP	09/24/22 0:52			U	U	mg/L				0	20	RA
WG551278LCSW9	LCSW	09/24/22 3:04	WC220916-1	820.0001		760.1	mg/L	93	90	110			
WG551278PBW3	PBW	09/24/22 3:12				10.7	mg/L		-20	20			
WG551278LCSW12	LCSW	09/24/22 6:35	WC220916-1	820.0001		763.3	mg/L	93	90	110			
WG551278PBW4	PBW	09/24/22 6:42				8.6	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
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2		1.995	mg/L	100	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.15	0.15			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	1.0008		1.019	mg/L	102	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	1.0008	U	1.014	mg/L	101	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	1.0008	U	1.041	mg/L	104	85	115	3	20	

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	2		2.011	mg/L	101	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.15	0.15			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.11	0.11			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	1.0008		1.026	mg/L	103	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	1.0008	U	1.068	mg/L	107	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	1.0008	U	1.077	mg/L	108	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
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.0201		.01811	mg/L	90	90	110			
WG551489ICB	ICB	09/28/22 8:35				.00057	mg/L		-0.00088	0.00088			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.01		.00894	mg/L	89	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.01	U	.00896	mg/L	90	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.01	U	.00936	mg/L	94	70	130	4	20	

Antimony, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.0201		.01949	mg/L	97	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0012	0.0012			
WG551574LRB	LRB	10/03/22 20:41				U	mg/L		-0.00088	0.00088			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.01		.01035	mg/L	104	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.02002	U	.02144	mg/L	107	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.02002	U	.02107	mg/L	105	70	130	2	20	

AZMINING

ACZ Project ID: **L75885**

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
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.04741	mg/L	95	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.00044	0.00044			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.05005		.04419	mg/L	88	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.05005	U	.04944	mg/L	99	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.05005	U	.04896	mg/L	98	70	130	1	20	

Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.04643	mg/L	93	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0006	0.0006			
WG551574LRB	LRB	10/03/22 20:41				U	mg/L		-0.00044	0.00044			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.05005		.04953	mg/L	99	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1002	.00426	.09918	mg/L	95	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1002	.00426	.09684	mg/L	92	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
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2		1.9855	mg/L	99	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.027	0.027			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	.502		.501	mg/L	100	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	.502	.0293	.484	mg/L	91	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	.502	.0293	.574	mg/L	109	85	115	17	20	

Barium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	2		1.9795	mg/L	99	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.027	0.027			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.0198	0.0198			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	.502		.4967	mg/L	99	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	.502	.0672	.5577	mg/L	98	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	.502	.0672	.5624	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
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.04897	mg/L	98	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.000176	0.000176			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.05005		.046601	mg/L	93	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.05005	U	.052499	mg/L	105	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.05005	U	.0517	mg/L	103	70	130	2	20	

AZMINING

ACZ Project ID: **L75885**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.047252	mg/L	95	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.00024	0.00024			
WG551574LRB	LRB	10/03/22 20:41				.000148	mg/L		-0.000176	0.000176			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.05005		.048758	mg/L	97	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1001	U	.090744	mg/L	91	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1001	U	.089413	mg/L	89	70	130	1	20	

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2		2.056	mg/L	103	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.09	0.09			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	.5005		.53	mg/L	106	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	.5005	.145	.61	mg/L	93	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	.5005	.145	.708	mg/L	112	85	115	15	20	

Boron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	2.17		2.195	mg/L	101	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.09	0.09			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.066	0.066			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	.5005		.495	mg/L	99	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	.5005	U	.485	mg/L	97	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	.5005	U	.493	mg/L	99	70	130	2	20	

Cadmium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.047278	mg/L	95	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.00011	0.00011			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.05005		.043662	mg/L	87	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.05005	U	.050445	mg/L	101	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.05005	U	.050289	mg/L	100	70	130	0	20	

Cadmium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG552125													
WG552125ICV	ICV	10/06/22 10:36	MS220930-3	.05		.04796	mg/L	96	90	110			
WG552125ICB	ICB	10/06/22 10:37				U	mg/L		-0.00015	0.00015			
WG551574LRB	LRB	10/06/22 10:41				U	mg/L		-0.00011	0.00011			
WG551574LFB	LFB	10/06/22 10:43	MS220822-2	.05005		.044263	mg/L	88	85	115			
L75916-01LFM	LFM	10/06/22 11:29	MS2XW	.1001	U	.087384	mg/L	87	70	130			
L75916-01LFMD	LFMD	10/06/22 11:30	MS2XW	.1001	U	.087438	mg/L	87	70	130	0	20	

AZMINING

ACZ Project ID: **L75885**

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
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	100		100.12	mg/L	100	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.3	0.3			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	67.98862		68.59	mg/L	101	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	67.98862	34.6	100.5	mg/L	97	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	67.98862	34.6	103.8	mg/L	102	85	115	3	20	

Calcium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	100		98.08	mg/L	98	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.3	0.3			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.22	0.22			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	67.98862		68.74	mg/L	101	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	67.98862	46.5	114.3	mg/L	100	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	67.98862	46.5	115	mg/L	101	70	130	1	20	

Chloride

SM4500CI-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG550893													
WG550893ICV	ICV	09/20/22 12:12	WI220502-12	54.945		55.72	mg/L	101	90	110			
WG550893ICB	ICB	09/20/22 12:13				U	mg/L		-3	3			
WG550893LFB1	LFB	09/20/22 12:13	WI220328-1	29.97		29.65	mg/L	99	90	110			
WG550893LFB2	LFB	09/20/22 12:28	WI220328-1	29.97		29.49	mg/L	98	90	110			
L75880-01AS	AS	09/20/22 12:29	WI220328-1	29.97	4.29	33.96	mg/L	99	90	110			
L75881-01DUP	DUP	09/20/22 12:30			4.81	4.75	mg/L				1	20	RA

Chromium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.04767	mg/L	95	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.0011	0.0011			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.0501		.04338	mg/L	87	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.0501	U	.04627	mg/L	92	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.0501	U	.0456	mg/L	91	70	130	1	20	

Chromium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.04801	mg/L	96	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0015	0.0015			
WG551574LRB	LRB	10/03/22 20:41				U	mg/L		-0.0011	0.0011			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.0501		.0481	mg/L	96	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1001	U	.09492	mg/L	95	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1001	U	.09223	mg/L	92	70	130	3	20	

AZMINING

ACZ Project ID: **L75885**

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 M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2.006		2.009	mg/L	100	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.06	0.06			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	.5005		.499	mg/L	100	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	.5005	U	.453	mg/L	91	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	.5005	U	.539	mg/L	108	85	115	17	20	

Cobalt, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	2.006		1.992	mg/L	99	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.06	0.06			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.044	0.044			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	.5005		.495	mg/L	99	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	.5005	U	.488	mg/L	98	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	.5005	U	.497	mg/L	99	70	130	2	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551278													
WG551278LCSW2	LCSW	09/23/22 18:56	PCN623318	1409		1459	umhos/cm	104	90	110			
WG551278LCSW5	LCSW	09/23/22 23:01	PCN623318	1409		1434	umhos/cm	102	90	110			
L75894-04DUP	DUP	09/24/22 0:52			35400	35500	umhos/cm				0	20	
WG551278LCSW8	LCSW	09/24/22 2:52	PCN623318	1409		1420	umhos/cm	101	90	110			
WG551278LCSW11	LCSW	09/24/22 6:22	PCN623318	1409		1418	umhos/cm	101	90	110			
WG551278LCSW14	LCSW	09/24/22 9:48	PCN623318	1409		1374	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
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.04892	mg/L	98	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.00176	0.00176			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.05		.04331	mg/L	87	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.05	U	.04646	mg/L	93	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.05	U	.04576	mg/L	92	70	130	2	20	

Copper, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.048	mg/L	96	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0024	0.0024			
WG551574LRB	LRB	10/03/22 20:41				U	mg/L		-0.00176	0.00176			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.05		.0468	mg/L	94	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1002	U	.08541	mg/L	85	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1002	U	.08321	mg/L	83	70	130	3	20	

AZMINING

ACZ Project ID: **L75885**

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.

Cyanide, total M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551311													
WG551311ICV	ICV	09/25/22 18:17	WI220912-5	.3003		.2899	mg/L	97	90	110			
WG551311ICB	ICB	09/25/22 18:18				U	mg/L		-0.003	0.003			
WG551312													
WG551105LRB	LRB	09/25/22 18:51				U	mg/L		-0.003	0.003			
WG551105LFB	LFB	09/25/22 18:52	WI220909-2	.2		.226	mg/L	113	90	110			LA
L75881-01DUP	DUP	09/25/22 18:54			U	U	mg/L				0	20	RA
L75882-01LFM	LFM	09/25/22 18:55	WI220909-2	.2	U	.2175	mg/L	109	90	110			

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG552439													
WG552439ICV	ICV	10/11/22 10:37	WC221006-4	2.008		2	mg/L	100	90	110			
WG552439ICB	ICB	10/11/22 10:45				U	mg/L		-0.3	0.3			
WG552439LFB1	LFB	10/11/22 10:59	WC221011-2	5.02		4.9	mg/L	98	90	110			
L75776-02AS	AS	10/11/22 12:56	WC221011-2	5.02	.74	5.95	mg/L	104	90	110			
L75776-02ASD	ASD	10/11/22 13:04	WC221011-2	5.02	.74	5.84	mg/L	102	90	110	2	20	
WG552439LFB2	LFB	10/11/22 14:43	WC221011-2	5.02		5.12	mg/L	102	90	110			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2		1.995	mg/L	100	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.18	0.18			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	1.0013		.998	mg/L	100	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	1.0013	U	.895	mg/L	89	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	1.0013	U	1.079	mg/L	108	85	115	19	20	

Iron, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	2		1.93	mg/L	97	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.18	0.18			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.132	0.132			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	1.0013		.986	mg/L	98	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	1.0013	.207	1.153	mg/L	94	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	1.0013	.207	1.16	mg/L	95	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
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.0477	mg/L	95	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.00022	0.00022			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.0501		.04387	mg/L	88	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.0501	U	.04758	mg/L	95	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.0501	U	.04734	mg/L	94	70	130	1	20	

AZMINING

ACZ Project ID: **L75885**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.04848	mg/L	97	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0003	0.0003			
WG551574LRB	LRB	10/03/22 20:41				.00037	mg/L		-0.00022	0.00022			B7 BF
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.0501		.0479	mg/L	96	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1001	U	.09849	mg/L	98	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1001	U	.09695	mg/L	97	70	130	2	20	

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	100		96.93	mg/L	97	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.6	0.6			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	49.99809		48.88	mg/L	98	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	49.99809	.61	49.16	mg/L	97	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	49.99809	.61	50.97	mg/L	101	85	115	4	20	

Magnesium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	100		97.14	mg/L	97	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.6	0.6			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.44	0.44			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	49.99809		50.27	mg/L	101	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	49.99809	7.91	57.34	mg/L	99	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	49.99809	7.91	57.89	mg/L	100	70	130	1	20	

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2		1.942	mg/L	97	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.03	0.03			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	.499		.502	mg/L	101	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	.499	U	.46	mg/L	92	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	.499	U	.553	mg/L	111	85	115	18	20	

Manganese, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	2		1.95	mg/L	98	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.03	0.03			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.022	0.022			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	.499		.504	mg/L	101	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	.499	.014	.514	mg/L	100	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	.499	.014	.518	mg/L	101	70	130	1	20	

AZMINING

ACZ Project ID: **L75885**

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
WG551488													
WG551488ICV1	ICV	09/29/22 9:50	HG220913-9	.005005		.00494	mg/L	99	95	105			
WG551488ICB	ICB	09/29/22 9:51				U	mg/L		-0.0002	0.0002			
WG551607													
WG551607LRB	LRB	09/29/22 14:12				U	mg/L		-0.00044	0.00044			
WG551607LFB	LFB	09/29/22 14:13	HG220913-12	.002002		.00205	mg/L	102	85	115			
L75916-01LFM	LFM	09/29/22 14:23	HG220913-12	.002002	U	.00206	mg/L	103	85	115			
L75916-01LFMD	LFMD	09/29/22 14:24	HG220913-12	.002002	U	.00211	mg/L	105	85	115	2	20	

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551488													
WG551488ICV1	ICV	09/29/22 9:50	HG220913-9	.005005		.00494	mg/L	99	95	105			
WG551488ICB	ICB	09/29/22 9:51				U	mg/L		-0.0002	0.0002			
WG551539													
WG551539LRB	LRB	09/29/22 11:27				U	mg/L		-0.00044	0.00044			
WG551539LFB	LFB	09/29/22 11:28	HG220913-12	.002002		.00195	mg/L	97	85	115			
L75916-01LFM	LFM	09/29/22 11:38	HG220913-12	.002002	U	.00199	mg/L	99	85	115			
L75916-01LFMD	LFMD	09/29/22 11:38	HG220913-12	.002002	U	.00198	mg/L	99	85	115	1	20	

Nickel, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2		1.999	mg/L	100	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.024	0.024			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	.502		.5157	mg/L	103	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	.502	.0097	.4633	mg/L	90	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	.502	.0097	.5598	mg/L	110	85	115	19	20	

Nickel, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	2		1.9548	mg/L	98	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.024	0.024			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.0176	0.0176			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	.502		.4984	mg/L	99	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	.502	U	.4987	mg/L	99	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	.502	U	.5069	mg/L	101	70	130	2	20	

AZMINING

ACZ Project ID: **L75885**

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
WG551782													
WG551782ICV	ICV	09/30/22 22:21	WI220903-1	2.416		2.384	mg/L	99	90	110			
WG551782ICB	ICB	09/30/22 22:23				U	mg/L		-0.02	0.02			
WG551785													
WG551785LFB	LFB	10/01/22 0:27	WI220826-7	2		2.058	mg/L	103	90	110			
L75878-01AS	AS	10/01/22 0:30	WI220826-7	2	U	2.041	mg/L	102	90	110			
L75878-02DUP	DUP	10/01/22 0:32			U	U	mg/L				0	20	RA

Nitrogen, ammonia

M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551114													
WG551114ICV	ICV	09/22/22 9:04	WI220702-3	12.024		12.829	mg/L	107	90	110			
WG551114ICB	ICB	09/22/22 9:05				U	mg/L		-0.05	0.05			
WG551131													
WG551131LFB1	LFB	09/22/22 14:19	WI220420-3	10		10.422	mg/L	104	90	110			
L75878-01AS	AS	09/22/22 14:22	WI220420-3	10	U	10.392	mg/L	104	90	110			
WG551131LFB2	LFB	09/22/22 15:02	WI220420-3	10		10.433	mg/L	104	90	110			
L75878-02DUP	DUP	09/22/22 15:36			U	.128	mg/L				200	20	RA

pH (lab)

SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551278													
WG551278LCSW1	LCSW	09/23/22 18:54	PCN65296	6		6	units	100	5.9	6.1			
WG551278LCSW4	LCSW	09/23/22 23:00	PCN65296	6		6	units	100	5.9	6.1			
L75894-04DUP	DUP	09/24/22 0:52			3.1	3.1	units				0	20	
WG551278LCSW7	LCSW	09/24/22 2:50	PCN65296	6		6	units	100	5.9	6.1			
WG551278LCSW10	LCSW	09/24/22 6:20	PCN65296	6		6	units	100	5.9	6.1			
WG551278LCSW13	LCSW	09/24/22 9:46	PCN65296	6		6	units	100	5.9	6.1			

Potassium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	20		19.62	mg/L	98	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.6	0.6			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	99.95798		98.66	mg/L	99	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	99.95798	.99	98.71	mg/L	98	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	99.95798	.99	102.9	mg/L	102	85	115	4	20	

Potassium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	20		19.31	mg/L	97	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.6	0.6			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.44	0.44			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	99.95798		98.96	mg/L	99	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	99.95798	1.58	99.32	mg/L	98	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	99.95798	1.58	100.5	mg/L	99	70	130	1	20	

AZMINING

ACZ Project ID: **L75885**

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
WG551016													
WG551016PBW	PBW	09/21/22 11:15				U	mg/L		-20	20			
WG551016LCSW	LCSW	09/21/22 11:17	PCN623297	1000		962	mg/L	96	80	120			
L75943-01DUP	DUP	09/21/22 12:15			320	322	mg/L				1	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551646													
WG551646ICV	ICV	09/29/22 18:06	MS220701-3	.05		.05029	mg/L	101	90	110			
WG551646ICB	ICB	09/29/22 18:08				.0002	mg/L		-0.00022	0.00022			
WG551646LFB	LFB	09/29/22 18:10	MS220822-2	.05		.0511	mg/L	102	85	115			
L75916-01AS	AS	09/29/22 18:34	MS220822-2	.05	.001	.05302	mg/L	104	70	130			
L75916-01ASD	ASD	09/29/22 18:36	MS220822-2	.05	.001	.05289	mg/L	104	70	130	0	20	

Selenium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.04927	mg/L	99	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0003	0.0003			
WG551574LRB	LRB	10/03/22 20:41				U	mg/L		-0.00022	0.00022			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.05		.05108	mg/L	102	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1003	.00112	.10301	mg/L	102	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1003	.00112	.09654	mg/L	95	70	130	6	20	

Silica, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	42.8		42.75	mg/L	100	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.6	0.6			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	21.404		22.07	mg/L	103	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	21.404	20.2	39.26	mg/L	89	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	21.404	20.2	43.52	mg/L	109	85	115	10	20	

Silica, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	42.8		42.45	mg/L	99	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.6	0.6			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.44	0.44			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	21.404		21.77	mg/L	102	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	21.404	5	23.13	mg/L	85	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	21.404	5	17.68	mg/L	59	70	130	27	20	M2 RS

AZMINING

ACZ Project ID: **L75885**

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
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.02		.01897	mg/L	95	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.00022	0.00022			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.01		.00878	mg/L	88	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.01	U	.00967	mg/L	97	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.01	U	.00965	mg/L	97	70	130	0	20	

Silver, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.02		.01914	mg/L	96	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0003	0.0003			
WG551574LRB	LRB	10/03/22 20:41				U	mg/L		-0.00022	0.00022			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.01		.00964	mg/L	96	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.02	U	.01846	mg/L	92	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.02	U	.01828	mg/L	91	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
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	100		99.16	mg/L	99	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.6	0.6			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	100.0023		98.1	mg/L	98	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	100.0023	78.2	169.5	mg/L	91	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	100.0023	78.2	175	mg/L	97	85	115	3	20	

Sodium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	II220909-1	100		96.48	mg/L	96	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.6	0.6			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.44	0.44			
WG551614LFB	LFB	10/01/22 17:55	II220915-2	100.0023		97.55	mg/L	98	85	115			
L76122-09LFM	LFM	10/01/22 19:05	II220915-2	100.0023	2.09	98.06	mg/L	96	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	II220915-2	100.0023	2.09	99.2	mg/L	97	70	130	1	20	

Sulfate

D516-02/-07/-11 - TURBIDIMETRIC

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551890													
WG551890ICB	ICB	10/04/22 8:54				U	mg/L		-3	3			
WG551890ICV	ICV	10/04/22 8:54	WI220930-2	19.54		19.5	mg/L	100	90	110			
WG551890LFB	LFB	10/04/22 9:32	WI220830-3	10		9.8	mg/L	98	90	110			
L75885-01AS	AS	10/04/22 10:02	SO4TURB5X	10	178	184.5	mg/L	65	90	110			M3
L75884-01DUP	DUP	10/04/22 11:35			347	348	mg/L				0	20	

AZMINING

ACZ Project ID: **L75885**

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
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.04831	mg/L	97	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.00022	0.00022			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.05		.04462	mg/L	89	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.05	U	.04879	mg/L	98	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.05	U	.04792	mg/L	96	70	130	2	20	

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.04972	mg/L	99	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0003	0.0003			
WG551574LRB	LRB	10/03/22 20:41				.00017	mg/L		-0.00022	0.00022			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.05		.04848	mg/L	97	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1002	U	.10143	mg/L	101	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1002	U	.10047	mg/L	100	70	130	1	20	

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551489													
WG551489ICV	ICV	09/28/22 8:32	MS220701-3	.05		.04848	mg/L	97	90	110			
WG551489ICB	ICB	09/28/22 8:35				U	mg/L		-0.00022	0.00022			
WG551489LFB	LFB	09/28/22 8:37	MS220822-2	.05		.04455	mg/L	89	85	115			
L75878-01AS	AS	09/28/22 8:42	MS220822-2	.05	U	.04823	mg/L	96	70	130			
L75878-01ASD	ASD	09/28/22 8:44	MS220822-2	.05	U	.04772	mg/L	95	70	130	1	20	

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551878													
WG551878ICV	ICV	10/03/22 20:37	MS220930-3	.05		.0493	mg/L	99	90	110			
WG551878ICB	ICB	10/03/22 20:39				U	mg/L		-0.0003	0.0003			
WG551574LRB	LRB	10/03/22 20:41				.00014	mg/L		-0.00022	0.00022			
WG551574LFB	LFB	10/03/22 20:43	MS220822-2	.05		.04858	mg/L	97	85	115			
L75916-01LFM	LFM	10/03/22 21:27	MS2XW	.1	.00447	.10946	mg/L	105	70	130			
L75916-01LFMD	LFMD	10/03/22 21:29	MS2XW	.1	.00447	.10722	mg/L	103	70	130	2	20	

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551949													
WG551949ICV	ICV	10/04/22 16:21	II220927-1	2		1.932	mg/L	97	95	105			
WG551949ICB	ICB	10/04/22 16:27				U	mg/L		-0.06	0.06			
WG551949LFB	LFB	10/04/22 16:40	II220915-2	.50045		.512	mg/L	102	85	115			
L75885-01AS	AS	10/04/22 17:57	II220915-2	.50045	U	.512	mg/L	102	85	115			
L75885-01ASD	ASD	10/04/22 18:00	II220915-2	.50045	U	.533	mg/L	107	85	115	4	20	

AZMINING

ACZ Project ID: **L75885**

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, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG551791													
WG551791ICV	ICV	10/01/22 17:33	11220909-1	2		1.921	mg/L	96	95	105			
WG551791ICB	ICB	10/01/22 17:39				U	mg/L		-0.06	0.06			
WG551614LRB	LRB	10/01/22 17:52				U	mg/L		-0.044	0.044			
WG551614LFB	LFB	10/01/22 17:55	11220915-2	.50045		.517	mg/L	103	85	115			
L76122-09LFM	LFM	10/01/22 19:05	11220915-2	.50045	U	.512	mg/L	102	70	130			
L76122-09LFMD	LFMD	10/01/22 19:08	11220915-2	.50045	U	.524	mg/L	105	70	130	2	20	

South32

ACZ Project ID: **L75885**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L75885-01	WG550893	Chloride	SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG551312	Cyanide, total	M335.4 - Colorimetric w/	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].
			M335.4 - Colorimetric w/	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG551878	Lead, total	M200.8 ICP-MS	B7	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is $>$ 10X the concentration in the method blank.
	WG551785	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).
	WG551131	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG551791	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG551890	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.
	WG551278	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).

South32

ACZ Project ID: **L75885**

No certification qualifiers associated with this analysis

South32
 4542257445

ACZ Project ID: L75885
 Date Received: 09/15/2022 11:08
 Received By:
 Date Printed: 9/16/2022

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? A change was made in the Sample ID: Date:Time section prior to ACZ custody. A change was made in the Sample ID: Date:Time section prior to ACZ custody.	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?
6756	0.1	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

South32
4542257445

ACZ Project ID: L75885
Date Received: 09/15/2022 11:08
Received By:
Date Printed: 9/16/2022

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).



Accredited Environmental Testing
2773 Downhill Drive
Steamboat Springs, CO 80487
(970) 879-6590

L75885

CHAIN of CUSTODY

Report to:

Name: Kara Haas
Company: AMI/South32
E-mail: Kara.Haas@south32.net

Address: 749 Harshaw Road
Patagonia, AZ 85624
Telephone: 505.947.1738

Copy of Report to:

Name: Nick Connell
Company: NewFields

E-mail: nconnell@newfields.com
Telephone: 847.528.9776

Invoice to:

Name: Kara Haas
Company: AMI/South32
E-mail: kara.haas@south32.net

Address: 749 Harshaw Road
Patagonia, AZ 85624
Telephone: 505.947.1738

Copy of Invoice to:

Name: South32
Company: AMI/South32
E-mail: sscinvoices@south32.net

Address: NA
Telephone: NA

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: Marc Taylor Sampler's Site Information State AZ Zip code 85624 Time Zone MST

*Sampler's Signature: *Marc Taylor* 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

ANALYSES REQUESTED: (see list on separate report)

Quote #: GW BASELINE
PO#: 4542257445
Reporting state for compliance testing: AZ
Check box if samples include NRC licensed material?

SAMPLE IDENTIFICATION	DATE TIME	Matrix	# of Containers	GW BASELINE										
MW-9-20220914	9/18/2022 11:30	GW	6	<input checked="" type="checkbox"/>										
	14													

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
<i>Marc Taylor</i>	9-14-22 1345	<i>[Signature]</i>	9/15/22 11:08



January 13, 2023

Report to:
Kara Haas
South32
749 Harshaw Rd
Patagonia, AZ 85624

Bill to:
Accounts Payable
South32
2210 E Fort Lowell Road
Tucson, AZ 85719

cc: Nick Connell

Project ID: 4542257445
ACZ Project ID: L77624

Kara Haas:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on December 09, 2022. This project has been assigned to ACZ's project number, L77624. 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 L77624. 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.

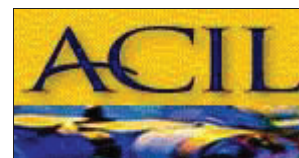
This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 02, 2025. 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

Mark McNeal has reviewed
and approved this report.



South32Project ID: 4542257445
Sample ID: MW-9-20221207ACZ Sample ID: **L77624-07**
Date Sampled: 12/07/22 13:15
Date Received: 12/09/22
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								12/14/22 9:45	wgm
Total Hot Plate Digestion	M200.2 ICP								12/21/22 14:03	aeH
Total Hot Plate Digestion	M200.2 ICP-MS								12/21/22 10:40	gil

South32

Project ID: 4542257445
 Sample ID: MW-9-20221207

ACZ Sample ID: **L77624-07**
 Date Sampled: 12/07/22 13:15
 Date Received: 12/09/22
 Sample Matrix: Groundwater

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	12/26/22 19:19	gjl/scp
Aluminum, total	M200.8 ICP-MS	1	0.126		*	mg/L	0.005	0.015	12/22/22 11:49	gjl/scp
Antimony, dissolved	M200.8 ICP-MS	1	0.00448			mg/L	0.0004	0.002	12/26/22 19:19	gjl/scp
Antimony, total	M200.8 ICP-MS	1	0.00499			mg/L	0.0004	0.002	12/22/22 11:49	gjl/scp
Arsenic, dissolved	M200.8 ICP-MS	1	0.00679			mg/L	0.0002	0.001	12/26/22 19:19	gjl/scp
Arsenic, total	M200.8 ICP-MS	1	0.00695			mg/L	0.0002	0.001	12/26/22 12:25	gjl/scp
Barium, dissolved	M200.7 ICP	1	0.0282	B		mg/L	0.009	0.035	01/12/23 0:31	aeH
Barium, total	M200.7 ICP	1	0.0375			mg/L	0.009	0.035	12/30/22 6:42	wtc
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	12/26/22 19:19	gjl/scp
Beryllium, total	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	12/22/22 11:49	gjl/scp
Boron, dissolved	M200.7 ICP	1	0.137			mg/L	0.03	0.1	01/12/23 0:31	aeH
Boron, total	M200.7 ICP	1	0.150			mg/L	0.03	0.1	12/30/22 6:42	wtc
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	12/26/22 19:19	gjl/scp
Cadmium, total	M200.8 ICP-MS	1	0.000103	B		mg/L	0.00005	0.00025	12/26/22 12:25	gjl/scp
Calcium, dissolved	M200.7 ICP	1	34.0			mg/L	0.1	0.5	01/12/23 0:31	aeH
Calcium, total	M200.7 ICP	1	34.2			mg/L	0.1	0.5	12/30/22 6:42	wtc
Chromium, dissolved	M200.8 ICP-MS	1	0.00140	B		mg/L	0.0005	0.002	01/03/23 19:18	kja
Chromium, total	M200.8 ICP-MS	1	0.00192	B		mg/L	0.0005	0.002	12/26/22 12:25	gjl/scp
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	01/12/23 0:31	aeH
Cobalt, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	12/30/22 6:42	wtc
Copper, dissolved	M200.8 ICP-MS	1	<0.0008	U		mg/L	0.0008	0.002	01/03/23 19:18	kja
Copper, total	M200.8 ICP-MS	1	0.00274			mg/L	0.0008	0.002	12/26/22 12:25	gjl/scp
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	01/12/23 0:31	aeH
Iron, total	M200.7 ICP	1	0.319			mg/L	0.06	0.15	12/30/22 6:42	wtc
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	12/26/22 19:19	gjl/scp
Lead, total	M200.8 ICP-MS	1	0.00883			mg/L	0.0001	0.0005	12/26/22 12:25	gjl/scp
Magnesium, dissolved	M200.7 ICP	1	0.85	B		mg/L	0.2	1	01/12/23 0:31	aeH
Magnesium, total	M200.7 ICP	1	0.76	B		mg/L	0.2	1	12/30/22 6:42	wtc
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	01/12/23 0:31	aeH
Manganese, total	M200.7 ICP	1	0.118			mg/L	0.01	0.05	12/30/22 6:42	wtc
Mercury, dissolved	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	12/15/22 14:43	mlh
Mercury, total	M245.1 CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	12/20/22 13:45	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	01/12/23 0:31	aeH
Nickel, total	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	01/04/23 22:28	wtc
Potassium, dissolved	M200.7 ICP	1	0.93	B		mg/L	0.2	1	01/12/23 0:31	aeH
Potassium, total	M200.7 ICP	1	1.04			mg/L	0.2	1	12/30/22 6:42	wtc
Selenium, dissolved	M200.8 ICP-MS	1	0.00050			mg/L	0.0001	0.00025	12/26/22 19:19	gjl/scp
Selenium, total	M200.8 ICP-MS	1	0.00038			mg/L	0.0001	0.00025	12/22/22 11:49	gjl/scp
Silica, dissolved	M200.7 ICP	1	21.1			mg/L	0.2	1	01/12/23 0:31	aeH
Silica, total	M200.7 ICP	1	20.6		*	mg/L	0.2	1	12/30/22 6:42	wtc
Silver, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	01/03/23 19:18	kja
Silver, total	M200.8 ICP-MS	1	0.00218			mg/L	0.0001	0.0005	12/26/22 12:25	gjl/scp
Sodium, dissolved	M200.7 ICP	1	78.0			mg/L	0.2	1	01/12/23 0:31	aeH

South32

Project ID: 4542257445
 Sample ID: MW-9-20221207

ACZ Sample ID: **L77624-07**
 Date Sampled: 12/07/22 13:15
 Date Received: 12/09/22
 Sample Matrix: Groundwater

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Sodium, total	M200.7 ICP	1	77.8			mg/L	0.2	1	12/30/22 6:42	wtc
Thallium, dissolved	M200.8 ICP-MS	1	0.00019	B		mg/L	0.0001	0.0005	12/26/22 19:19	gjl/scp
Thallium, total	M200.8 ICP-MS	1	0.00026	B		mg/L	0.0001	0.0005	12/26/22 12:25	gjl/scp
Uranium, dissolved	M200.8 ICP-MS	1	0.00567			mg/L	0.0001	0.0005	12/26/22 19:19	gjl/scp
Uranium, total	M200.8 ICP-MS	1	0.00652			mg/L	0.0001	0.0005	12/26/22 12:25	gjl/scp
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	01/12/23 0:31	aeH
Zinc, total	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	12/30/22 6:42	wtc

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	74.9			mg/L	2	20	12/16/22 0:00	emk
Carbonate as CaCO3		1	<2	U		mg/L	2	20	12/16/22 0:00	emk
Hydroxide as CaCO3		1	<2	U		mg/L	2	20	12/16/22 0:00	emk
Total Alkalinity		1	74.9		*	mg/L	2	20	12/16/22 0:00	emk
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-1.0			%			01/13/23 0:00	calc
Sum of Anions			5.3			meq/L			01/13/23 0:00	calc
Sum of Cations			5.2			meq/L			01/13/23 0:00	calc
Chloride	SM4500Cl-E	1	3.98			mg/L	1	2	12/29/22 9:41	mrD
Conductivity @25C	SM2510B	1	555			umhos/cm	1	10	12/16/22 7:28	emk
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	12/15/22 17:19	gkk
Fluoride	SM4500F-C	1	0.21	B		mg/L	0.15	0.35	12/30/22 18:23	jck
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		88			mg/L	0.2	5	01/13/23 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.124			mg/L	0.02	0.1	12/30/22 2:00	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	<0.05	U	*	mg/L	0.05	0.2	12/21/22 10:26	bls
pH (lab)	SM4500H+ B									
pH		1	7.3	H		units	0.1	0.1	12/16/22 0:00	emk
pH measured at		1	21.6			C	0.1	0.1	12/16/22 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	1	362			mg/L	20	40	12/14/22 12:49	anc
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	5	175			mg/L	5	25	12/29/22 18:34	gkk
TDS (calculated)	Calculation		365			mg/L			01/13/23 0:00	calc
TDS (ratio - measured/calculated)	Calculation		0.99						01/13/23 0:00	calc

Arizona license number: AZ0102

Report Header Explanations

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

QC Sample Types

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

AZMINING

ACZ Project ID: **L77624**

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
WG556818													
WG556818PBW1	PBW	12/15/22 19:41				U	mg/L		-20	20			
WG556818LCSW3	LCSW	12/15/22 20:02	WC221202-1	820.0001		801.8	mg/L	98	90	110			
WG556818LCSW6	LCSW	12/15/22 22:36	WC221202-1	820.0001		802.1	mg/L	98	90	110			
WG556818PBW2	PBW	12/15/22 22:45				6.9	mg/L		-20	20			
WG556818LCSW9	LCSW	12/16/22 1:27	WC221202-1	820.0001		807.2	mg/L	98	90	110			
WG556818PBW3	PBW	12/16/22 1:36				6.7	mg/L		-20	20			
WG556818LCSW12	LCSW	12/16/22 5:01	WC221202-1	820.0001		815.9	mg/L	99	90	110			
WG556818PBW4	PBW	12/16/22 5:10				7.1	mg/L		-20	20			
L77624-03DUP	DUP	12/16/22 6:48			190	189.2	mg/L				0	20	
L77643-01DUP	DUP	12/16/22 8:29			U	2.1	mg/L				200	20	RA
WG556818LCSW15	LCSW	12/16/22 8:50	WC221202-1	820.0001		806.5	mg/L	98	90	110			
WG556818PBW5	PBW	12/16/22 8:58				7.5	mg/L		-20	20			
WG556818LCSW18	LCSW	12/16/22 10:50	WC221202-1	820.0001		824.2	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
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.1		.1058	mg/L	106	90	110			
WG557317ICB	ICB	12/26/22 18:13				U	mg/L		-0.011	0.011			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.050065		.0529	mg/L	106	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.050065	U	.0506	mg/L	101	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.050065	U	.0499	mg/L	100	70	130	1	20	

AZMINING

ACZ Project ID: **L77624**

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.

Aluminum, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.1		.1001	mg/L	100	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.015	0.015			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.011	0.011			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.050065		.052	mg/L	104	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.050065	U	.0413	mg/L	82	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.050065	U	.0426	mg/L	85	70	130	3	20	
WG557214													
WG557214ICV	ICV	12/22/22 11:07	MS220930-3	.1		.1017	mg/L	102	90	110			
WG557214ICB	ICB	12/22/22 11:10				U	mg/L		-0.015	0.015			
WG557120LRB	LRB	12/22/22 11:12				U	mg/L		-0.011	0.011			
WG557120LFB	LFB	12/22/22 11:14	MS221207-2	.050065		.0489	mg/L	98	85	115			
L77624-07LFM	LFM	12/22/22 11:51	MS221207-2	.050065	.126	.2158	mg/L	179	70	130			M1
L77624-07LFMD	LFMD	12/22/22 11:53	MS221207-2	.050065	.126	.225	mg/L	198	70	130	4	20	M1
WG557247													
WG557247ICV	ICV	12/22/22 19:15	MS220930-3	.1		.1024	mg/L	102	90	110			
WG557247ICB	ICB	12/22/22 19:17				U	mg/L		-0.015	0.015			
WG557016LRB	LRB	12/22/22 19:20				U	mg/L		-0.011	0.011			
WG557016LFB	LFB	12/22/22 19:22	MS221207-2	.050065		.0536	mg/L	107	85	115			
L77624-01LFM	LFM	12/22/22 19:26	MS221207-2	.050065	U	.0509	mg/L	102	70	130			
L77624-01LFMD	LFMD	12/22/22 19:29	MS221207-2	.050065	U	.0518	mg/L	103	70	130	2	20	
WG557017LRB	LRB	12/22/22 20:08				U	mg/L		-0.011	0.011			
WG557017LFB	LFB	12/22/22 20:15	MS221207-2	.050065		.0504	mg/L	101	85	115			

Antimony, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.0201		.01869	mg/L	93	90	110			
WG557317ICB	ICB	12/26/22 18:13				.00061	mg/L		-0.00088	0.00088			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.01		.00904	mg/L	90	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.01	U	.00869	mg/L	87	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.01	U	.00898	mg/L	90	70	130	3	20	

AZMINING

ACZ Project ID: **L77624**

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.

Antimony, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.0201		.01814	mg/L	90	90	110			
WG557104ICB	ICB	12/21/22 9:45				.00042	mg/L		-0.0012	0.0012			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00088	0.00088			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.01		.01035	mg/L	104	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.01	U	.0103	mg/L	103	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.01	U	.01047	mg/L	105	70	130	2	20	
WG557214													
WG557214ICV	ICV	12/22/22 11:07	MS220930-3	.0201		.01829	mg/L	91	90	110			
WG557214ICB	ICB	12/22/22 11:10				.00043	mg/L		-0.0012	0.0012			
WG557120LRB	LRB	12/22/22 11:12				U	mg/L		-0.00088	0.00088			
WG557120LFB	LFB	12/22/22 11:14	MS221207-2	.01		.00991	mg/L	99	85	115			
L77624-07LFM	LFM	12/22/22 11:51	MS221207-2	.01	.00499	.01491	mg/L	99	70	130			
L77624-07LFMD	LFMD	12/22/22 11:53	MS221207-2	.01	.00499	.01645	mg/L	115	70	130	10	20	

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.05		.05093	mg/L	102	90	110			
WG557317ICB	ICB	12/26/22 18:13				.00033	mg/L		-0.00044	0.00044			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.0501		.04813	mg/L	96	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.0501	.00162	.05294	mg/L	102	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.0501	.00162	.05235	mg/L	101	70	130	1	20	

Arsenic, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.04921	mg/L	98	90	110			
WG557104ICB	ICB	12/21/22 9:45				.00032	mg/L		-0.0006	0.0006			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00044	0.00044			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.0501		.04983	mg/L	99	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.0501	.00211	.05047	mg/L	97	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.0501	.00211	.05066	mg/L	97	70	130	0	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.04637	mg/L	93	90	110			
WG557298ICB	ICB	12/26/22 12:02				.00029	mg/L		-0.0006	0.0006			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.00044	0.00044			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.0501		.04824	mg/L	96	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.0501	.00695	.05397	mg/L	94	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.0501	.00695	.05361	mg/L	93	70	130	1	20	

AZMINING

ACZ Project ID: **L77624**

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
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	2		2.0438	mg/L	102	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.027	0.027			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	.502		.517	mg/L	103	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	.502	.0393	.5441	mg/L	101	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	.502	.0393	.5426	mg/L	100	85	115	0	20	

Barium, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	2		1.958	mg/L	98	95	105			
WG557259ICB	ICB	12/30/22 5:44				.0096	mg/L		-0.027	0.027			
WG557129LRB	LRB	12/30/22 5:57				.009	mg/L		-0.0198	0.0198			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	.502		.5094	mg/L	101	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	.502	.0212	.5383	mg/L	103	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	.502	.0212	.5226	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
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.05		.053603	mg/L	107	90	110			
WG557317ICB	ICB	12/26/22 18:13				U	mg/L		-0.000176	0.000176			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.05005		.049133	mg/L	98	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.05005	U	.051	mg/L	102	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.05005	U	.050499	mg/L	101	70	130	1	20	

AZMINING

ACZ Project ID: **L77624**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.048217	mg/L	96	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.00024	0.00024			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.000176	0.000176			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.05005		.048605	mg/L	97	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.05005	U	.039504	mg/L	79	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.05005	U	.039571	mg/L	79	70	130	0	20	
WG557214													
WG557214ICV	ICV	12/22/22 11:07	MS220930-3	.05		.050449	mg/L	101	90	110			
WG557214ICB	ICB	12/22/22 11:10				U	mg/L		-0.00024	0.00024			
WG557120LRB	LRB	12/22/22 11:12				U	mg/L		-0.000176	0.000176			
WG557120LFB	LFB	12/22/22 11:14	MS221207-2	.05005		.049046	mg/L	98	85	115			
L77624-07LFM	LFM	12/22/22 11:51	MS221207-2	.05005	U	.04238	mg/L	85	70	130			
L77624-07LFMD	LFMD	12/22/22 11:53	MS221207-2	.05005	U	.044895	mg/L	90	70	130	6	20	
WG557247													
WG557247ICV	ICV	12/22/22 19:15	MS220930-3	.05		.052115	mg/L	104	90	110			
WG557247ICB	ICB	12/22/22 19:17				U	mg/L		-0.00024	0.00024			
WG557016LRB	LRB	12/22/22 19:20				U	mg/L		-0.000176	0.000176			
WG557016LFB	LFB	12/22/22 19:22	MS221207-2	.05005		.051571	mg/L	103	85	115			
L77624-01LFM	LFM	12/22/22 19:26	MS221207-2	.05005	U	.041335	mg/L	83	70	130			
L77624-01LFMD	LFMD	12/22/22 19:29	MS221207-2	.05005	U	.041489	mg/L	83	70	130	0	20	
WG557017LRB	LRB	12/22/22 20:08				U	mg/L		-0.000176	0.000176			
WG557017LFB	LFB	12/22/22 20:15	MS221207-2	.05005		.050962	mg/L	102	85	115			
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.049425	mg/L	99	90	110			
WG557298ICB	ICB	12/26/22 12:02				.000091	mg/L		-0.00024	0.00024			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.000176	0.000176			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.05005		.050669	mg/L	101	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.05005	U	.047116	mg/L	94	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.05005	U	.047506	mg/L	95	70	130	1	20	

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	2		2.096	mg/L	105	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.09	0.09			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	.5005		.539	mg/L	108	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	.5005	.036	.565	mg/L	106	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	.5005	.036	.568	mg/L	106	85	115	1	20	

AZMINING

ACZ Project ID: **L77624**

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, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	2		1.999	mg/L	100	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.09	0.09			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.066	0.066			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	.5005		.535	mg/L	107	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	.5005	.087	.612	mg/L	105	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	.5005	.087	.594	mg/L	101	70	130	3	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.05		.054147	mg/L	108	90	110			
WG557317ICB	ICB	12/26/22 18:13				U	mg/L		-0.00011	0.00011			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.05005		.050206	mg/L	100	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.05005	U	.055667	mg/L	111	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.05005	U	.054036	mg/L	108	70	130	3	20	

Cadmium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.050069	mg/L	100	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.00015	0.00015			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00011	0.00011			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.05005		.050598	mg/L	101	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.05005	U	.048523	mg/L	97	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.05005	U	.04983	mg/L	100	70	130	3	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.050528	mg/L	101	90	110			
WG557298ICB	ICB	12/26/22 12:02				U	mg/L		-0.00015	0.00015			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.00011	0.00011			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.05005		.050335	mg/L	101	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.05005	.000103	.050478	mg/L	101	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.05005	.000103	.051417	mg/L	103	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
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	100		99.73	mg/L	100	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.3	0.3			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	67.99353		70.36	mg/L	103	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	67.99353	144	207.6	mg/L	94	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	67.99353	144	209.1	mg/L	96	85	115	1	20	

AZMINING

ACZ Project ID: **L77624**

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, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	100		96.35	mg/L	96	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.3	0.3			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.22	0.22			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	67.99353		69.25	mg/L	102	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	67.99353	97.1	171.4	mg/L	109	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	67.99353	97.1	167.8	mg/L	104	70	130	2	20	

Chloride

SM4500CI-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557489													
WG557489ICV	ICV	12/29/22 9:26	WI220502-12	54.945		54.46	mg/L	99	90	110			
WG557489ICB	ICB	12/29/22 9:26				U	mg/L		-3	3			
WG557489LFB1	LFB	12/29/22 9:27	WI221025-9	30.03		29.6	mg/L	99	90	110			
L77623-03AS	AS	12/29/22 9:35	WI221025-9	30.03	U	29.27	mg/L	97	90	110			
L77623-04DUP	DUP	12/29/22 9:36			11.7	11.71	mg/L				0	20	
WG557489LFB2	LFB	12/29/22 9:42	WI221025-9	30.03		29.39	mg/L	98	90	110			
L77624-08AS	AS	12/29/22 9:42	WI221025-9	30.03	5.11	35.19	mg/L	100	90	110			
L77626-01DUP	DUP	12/29/22 9:43			44.2	44.86	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
WG557334													
WG557334ICV	ICV	12/27/22 12:13	MS220930-3	.05		.05455	mg/L	109	90	110			
WG557334ICB	ICB	12/27/22 12:15				U	mg/L		-0.0011	0.0011			
WG557334LFB	LFB	12/27/22 12:17	MS221207-2	.0501		.05089	mg/L	102	85	115			
L77624-02AS	AS	12/27/22 13:02	MS221207-2	.0501	U	.05974	mg/L	119	70	130			
L77624-02ASD	ASD	12/27/22 13:04	MS221207-2	.0501	U	.05863	mg/L	117	70	130	2	20	
WG557688													
WG557688ICV	ICV	01/03/23 18:53	MS221228-3	.05		.04489	mg/L	90	90	110			
WG557688ICB	ICB	01/03/23 18:55				U	mg/L		-0.0011	0.0011			
WG557688LFB	LFB	01/03/23 18:56	MS221228-8	.0501		.04917	mg/L	98	85	115			
L77518-01AS	AS	01/03/23 19:00	MS221228-8	5.01	U	4.9081	mg/L	98	70	130			
L77518-01ASD	ASD	01/03/23 19:02	MS221228-8	5.01	U	5.01293	mg/L	100	70	130	2	20	

AZMINING

ACZ Project ID: **L77624**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.04934	mg/L	99	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.0015	0.0015			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.0011	0.0011			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.0501		.04951	mg/L	99	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.0501	.00097	.0503	mg/L	98	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.0501	.00097	.05118	mg/L	100	70	130	2	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.05031	mg/L	101	90	110			
WG557298ICB	ICB	12/26/22 12:02				U	mg/L		-0.0015	0.0015			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.0011	0.0011			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.0501		.05135	mg/L	102	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.0501	.00192	.05294	mg/L	102	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.0501	.00192	.05228	mg/L	101	70	130	1	20	

Cobalt, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	2.006		1.97	mg/L	98	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.06	0.06			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	.5005		.512	mg/L	102	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	.5005	U	.494	mg/L	99	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	.5005	U	.496	mg/L	99	85	115	0	20	

Cobalt, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	2.006		1.933	mg/L	96	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.06	0.06			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.044	0.044			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	.5005		.514	mg/L	103	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	.5005	U	.517	mg/L	103	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	.5005	U	.504	mg/L	101	70	130	3	20	

Conductivity @25C

SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG556818													
WG556818LCSW2	LCSW	12/15/22 19:47	PCN623869	1410		1397	umhos/cm	99	90	110			
WG556818LCSW5	LCSW	12/15/22 22:21	PCN623869	1410		1388	umhos/cm	98	90	110			
WG556818LCSW8	LCSW	12/16/22 1:12	PCN623869	1410		1384	umhos/cm	98	90	110			
WG556818LCSW11	LCSW	12/16/22 4:46	PCN623869	1410		1377	umhos/cm	98	90	110			
L77624-03DUP	DUP	12/16/22 6:48			756	756	umhos/cm				0	20	
L77643-01DUP	DUP	12/16/22 8:29			854	854	umhos/cm				0	20	
WG556818LCSW14	LCSW	12/16/22 8:36	PCN623869	1410		1375	umhos/cm	98	90	110			
WG556818LCSW17	LCSW	12/16/22 10:35	PCN623869	1410		1365	umhos/cm	97	90	110			

AZMINING

ACZ Project ID: **L77624**

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
WG557688													
WG557688ICV	ICV	01/03/23 18:53	MS221228-3	.05		.04699	mg/L	94	90	110			
WG557688ICB	ICB	01/03/23 18:55				U	mg/L		-0.00176	0.00176			
WG557688LFB	LFB	01/03/23 18:56	MS221228-8	.05		.04945	mg/L	99	85	115			
L77518-01AS	AS	01/03/23 19:00	MS221228-8	5	.69	5.68095	mg/L	100	70	130			
L77518-01ASD	ASD	01/03/23 19:02	MS221228-8	5	.69	5.72719	mg/L	101	70	130	1	20	

Copper, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.05106	mg/L	102	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.0024	0.0024			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00176	0.00176			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.05		.05015	mg/L	100	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.05	U	.04615	mg/L	92	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.05	U	.04707	mg/L	94	70	130	2	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.05155	mg/L	103	90	110			
WG557298ICB	ICB	12/26/22 12:02				U	mg/L		-0.0024	0.0024			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.00176	0.00176			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.05		.04965	mg/L	99	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.05	.00274	.0501	mg/L	95	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.05	.00274	.04987	mg/L	94	70	130	0	20	

Cyanide, total

M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG556634													
WG556634ICV	ICV	12/13/22 15:51	WI221212-2	.3003		.2911	mg/L	97	90	110			
WG556634ICB	ICB	12/13/22 15:52				U	mg/L		-0.003	0.003			
WG556534LRB	LRB	12/13/22 15:53				U	mg/L		-0.003	0.003			
WG556534LFB	LFB	12/13/22 15:53	WI221130-4	.2		.1999	mg/L	100	90	110			
L77624-01DUP	DUP	12/13/22 16:11			U	U	mg/L				0	20	RA
L77624-03LFM	LFM	12/13/22 16:28	WI221130-4	.2	U	.2024	mg/L	101	90	110			
WG556822													
WG556822ICV	ICV	12/15/22 15:34	WI221215-11	.3003		.289	mg/L	96	90	110			
WG556822ICB	ICB	12/15/22 15:35				U	mg/L		-0.003	0.003			
WG556836													
WG556674LRB	LRB	12/15/22 17:13				U	mg/L		-0.003	0.003			
WG556674LFB	LFB	12/15/22 17:14	WI221130-4	.2		.212	mg/L	106	90	110			
L77624-06DUP	DUP	12/15/22 17:18			U	U	mg/L				0	20	RA
L77641-01LFM	LFM	12/15/22 17:24	WI221130-4	.2	U	.2201	mg/L	110	90	110			

AZMINING

ACZ Project ID: **L77624**

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

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557576													
WG557576ICV	ICV	12/30/22 15:50	WC221228-1	2.008		2.17	mg/L	108	90	110			
WG557576ICB	ICB	12/30/22 15:57				U	mg/L		-0.3	0.3			
WG557576LFB	LFB	12/30/22 16:07	WC221227-7	5.02		5.21	mg/L	104	90	110			
L76094-06AS	AS	12/30/22 16:16	WC221227-7	5.02	.49	5.48	mg/L	99	90	110			
L76094-06ASD	ASD	12/30/22 16:21	WC221227-7	5.02	.49	5.52	mg/L	100	90	110	1	20	
L77624-02AS	AS	12/30/22 17:35	WC221227-7	5.02	.3	5.38	mg/L	101	90	110			
L77624-02ASD	ASD	12/30/22 17:39	WC221227-7	5.02	.3	5.33	mg/L	100	90	110	1	20	
WG557643													
WG557643ICV	ICV	01/03/23 11:41	WC221228-1	2.008		2	mg/L	100	90	110			
WG557643ICB	ICB	01/03/23 11:48				U	mg/L		-0.3	0.3			
WG557643LFB	LFB	01/03/23 11:57	WC221227-7	5.02		4.84	mg/L	96	90	110			
L77595-01AS	AS	01/03/23 12:17	WC221227-7	5.02	.28	5.09	mg/L	96	90	110			
L77595-01ASD	ASD	01/03/23 12:21	WC221227-7	5.02	.28	5.19	mg/L	98	90	110	2	20	

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	2		2.041	mg/L	102	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.18	0.18			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	1.004		1.043	mg/L	104	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	1.004	U	1.027	mg/L	102	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	1.004	U	1.014	mg/L	101	85	115	1	20	

Iron, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	2		1.92	mg/L	96	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.18	0.18			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.132	0.132			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	1.0013		1.012	mg/L	101	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	1.0013	.932	1.986	mg/L	105	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	1.0013	.932	1.938	mg/L	100	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
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.05		.05063	mg/L	101	90	110			
WG557317ICB	ICB	12/26/22 18:13				U	mg/L		-0.00022	0.00022			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.0501		.04729	mg/L	94	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.0501	U	.0509	mg/L	102	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.0501	U	.05013	mg/L	100	70	130	2	20	

AZMINING

ACZ Project ID: **L77624**

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, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.04979	mg/L	100	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.0003	0.0003			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00022	0.00022			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.0501		.04808	mg/L	96	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.0501	.00013	.04648	mg/L	93	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.0501	.00013	.04713	mg/L	94	70	130	1	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.0489	mg/L	98	90	110			
WG557298ICB	ICB	12/26/22 12:02				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.0501		.04842	mg/L	97	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.0501	.00883	.06003	mg/L	102	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.0501	.00883	.05767	mg/L	97	70	130	4	20	
WG557428													
WG557428ICV	ICV	12/29/22 16:41	MS220930-3	.05		.05013	mg/L	100	90	110			
WG557428ICB	ICB	12/29/22 16:44				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/29/22 16:46				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/29/22 16:48	MS221207-2	.0501		.05022	mg/L	100	85	115			
L77624-07LFM	LFM	12/29/22 16:53	MS221207-2	.0501	.00871	.05908	mg/L	101	70	130			
L77624-07LFMD	LFMD	12/29/22 16:55	MS221207-2	.0501	.00871	.05857	mg/L	100	70	130	1	20	

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	100		98.82	mg/L	99	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.6	0.6			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	49.99676		51.07	mg/L	102	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	49.99676	29.6	78.82	mg/L	98	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	49.99676	29.6	79.27	mg/L	99	85	115	1	20	

Magnesium, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	100		96.74	mg/L	97	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.6	0.6			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.44	0.44			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	49.99676		51.27	mg/L	103	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	49.99676	19.7	72.47	mg/L	106	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	49.99676	19.7	71.35	mg/L	103	70	130	2	20	

AZMINING

ACZ Project ID: **L77624**

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.

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	2		2.022	mg/L	101	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.03	0.03			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	.499		.515	mg/L	103	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	.499	U	.502	mg/L	101	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	.499	U	.498	mg/L	100	85	115	1	20	

Manganese, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	2		1.892	mg/L	95	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.03	0.03			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.022	0.022			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	.499		.517	mg/L	104	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	.499	.023	.543	mg/L	104	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	.499	.023	.53	mg/L	102	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
WG556702													
WG556702ICV	ICV	12/15/22 11:42	HG221212-3	.005005		.00522	mg/L	104	95	105			
WG556702ICB	ICB	12/15/22 11:42				U	mg/L		-0.0002	0.0002			
WG556774													
WG556774LRB	LRB	12/15/22 14:17				U	mg/L		-0.00044	0.00044			
WG556774LFB	LFB	12/15/22 14:18	HG221212-6	.002002		.00195	mg/L	97	85	115			
L77624-03LFM	LFM	12/15/22 14:38	HG221212-6	.002002	U	.00206	mg/L	103	85	115			
L77624-03LFMD	LFMD	12/15/22 14:39	HG221212-6	.002002	U	.00205	mg/L	102	85	115	0	20	
WG557045													
WG557045ICV1	ICV	12/21/22 13:34	HG221212-3	.005005		.00523	mg/L	104	95	105			
WG557045ICB	ICB	12/21/22 13:34				U	mg/L		-0.0002	0.0002			
WG557049													
WG557049LRB	LRB	12/21/22 14:43				U	mg/L		-0.00044	0.00044			
WG557049LFB	LFB	12/21/22 14:44	HG221212-6	.002002		.00208	mg/L	104	85	115			
L77689-05LFM	LFM	12/21/22 14:47	HG221212-6	.002002	U	.00193	mg/L	96	85	115			
L77689-05LFMD	LFMD	12/21/22 14:48	HG221212-6	.002002	U	.00188	mg/L	94	85	115	3	20	

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG556963													
WG556963ICV1	ICV	12/20/22 12:57	HG221212-3	.005005		.00507	mg/L	101	95	105			
WG556963ICB	ICB	12/20/22 12:57				U	mg/L		-0.0002	0.0002			
WG556965													
WG556965LRB	LRB	12/20/22 13:33				U	mg/L		-0.00044	0.00044			
WG556965LFB	LFB	12/20/22 13:34	HG221212-6	.002002		.00176	mg/L	88	85	115			
L77624-03LFM	LFM	12/20/22 13:38	HG221212-6	.002002	U	.00165	mg/L	82	85	115			MA
L77624-03LFMD	LFMD	12/20/22 13:39	HG221212-6	.002002	U	.0017	mg/L	85	85	115	3	20	

AZMINING

ACZ Project ID: **L77624**

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

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	2		1.958	mg/L	98	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.024	0.024			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	.502		.5219	mg/L	104	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	.502	U	.4986	mg/L	99	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	.502	U	.4991	mg/L	99	85	115	0	20	

Nickel, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557681													
WG557681ICV	ICV	01/04/23 21:34	II230103-1	2		1.9525	mg/L	98	95	105			
WG557681ICB	ICB	01/04/23 21:40				U	mg/L		-0.024	0.024			
WG557129LRB	LRB	01/04/23 21:52				U	mg/L		-0.0176	0.0176			
WG557129LFB	LFB	01/04/23 21:55	II221202-2	.502		.5071	mg/L	101	85	115			
L77624-02LFM	LFM	01/04/23 22:04	II221202-2	.502	U	.5018	mg/L	100	70	130			
L77624-02LFMD	LFMD	01/04/23 22:07	II221202-2	.502	U	.4955	mg/L	99	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
WG557544													
WG557544ICV	ICV	12/29/22 23:27	WI221206-7	2.416		2.363	mg/L	98	90	110			
WG557544ICB	ICB	12/29/22 23:28				U	mg/L		-0.02	0.02			
WG557547													
WG557547LFB	LFB	12/30/22 1:34	WI220826-7	2		2.062	mg/L	103	90	110			
L77621-01AS	AS	12/30/22 1:37	WI220826-7	2		.589	2.684	mg/L	105	90	110		
L77621-02DUP	DUP	12/30/22 1:39				.486	.513	mg/L			5	20	
L77624-05AS	AS	12/30/22 1:56	WI220826-7	2		1.37	3.448	mg/L	104	90	110		
L77624-06DUP	DUP	12/30/22 1:59				.879	.876	mg/L			0	20	

Nitrogen, ammonia

M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557117													
WG557117ICV	ICV	12/21/22 9:34	WI221101-5	12.036		12.53	mg/L	104	90	110			
WG557117ICB	ICB	12/21/22 9:36				U	mg/L		-0.05	0.05			
WG557117LFB1	LFB	12/21/22 9:37	WI220420-3	10		10.244	mg/L	102	90	110			
L77621-05AS	AS	12/21/22 10:01	WI220420-3	10	U	10.335	mg/L	103	90	110			
L77621-06DUP	DUP	12/21/22 10:04				U	U	mg/L			0	20	RA
WG557117LFB2	LFB	12/21/22 10:20	WI220420-3	10		10.537	mg/L	105	90	110			
L77626-01AS	AS	12/21/22 10:33	WI220420-3	10	U	10.429	mg/L	104	90	110			
L77626-02DUP	DUP	12/21/22 10:36				U	U	mg/L			0	20	RA

AZMINING

ACZ Project ID: **L77624**

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
WG556818													
WG556818LCSW1	LCSW	12/15/22 19:45	PCN65296	6		6	units	100	5.9	6.1			
WG556818LCSW4	LCSW	12/15/22 22:19	PCN65296	6		6	units	100	5.9	6.1			
WG556818LCSW7	LCSW	12/16/22 1:10	PCN65296	6		6	units	100	5.9	6.1			
WG556818LCSW10	LCSW	12/16/22 4:44	PCN65296	6		6	units	100	5.9	6.1			
L77624-03DUP	DUP	12/16/22 6:48			7.8	7.8	units				0	20	
L77643-01DUP	DUP	12/16/22 8:29			5.7	5.6	units				2	20	
WG556818LCSW13	LCSW	12/16/22 8:34	PCN65296	6		6	units	100	5.9	6.1			
WG556818LCSW16	LCSW	12/16/22 10:33	PCN65296	6		6	units	100	5.9	6.1			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	20		20.15	mg/L	101	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.6	0.6			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	99.95798		102.2	mg/L	102	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	99.95798	1.56	104.2	mg/L	103	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	99.95798	1.56	105.2	mg/L	104	85	115	1	20	

Potassium, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	20		19.43	mg/L	97	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.6	0.6			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.44	0.44			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	99.95798		99.58	mg/L	100	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	99.95798	1.11	104.3	mg/L	103	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	99.95798	1.11	101.8	mg/L	101	70	130	2	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG556706													
WG556706PBW	PBW	12/14/22 11:55				U	mg/L		-20	20			
WG556706LCSW	LCSW	12/14/22 11:57	PCN623495	1000		976	mg/L	98	80	120			
L77624-08DUP	DUP	12/14/22 12:55			362	364	mg/L				1	10	

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.05		.05247	mg/L	105	90	110			
WG557317ICB	ICB	12/26/22 18:13				.00017	mg/L		-0.00022	0.00022			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.05005		.04751	mg/L	95	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.05005	.0007	.05809	mg/L	115	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.05005	.0007	.05682	mg/L	112	70	130	2	20	

AZMINING

ACZ Project ID: **L77624**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.0496	mg/L	99	90	110			
WG557104ICB	ICB	12/21/22 9:45				.00016	mg/L		-0.0003	0.0003			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00022	0.00022			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.05005		.04836	mg/L	97	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.05005	.0007	.04897	mg/L	96	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.05005	.0007	.0501	mg/L	99	70	130	2	20	
WG557214													
WG557214ICV	ICV	12/22/22 11:07	MS220930-3	.05		.05135	mg/L	103	90	110			
WG557214ICB	ICB	12/22/22 11:10				.0001	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/22/22 11:12				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/22/22 11:14	MS221207-2	.05005		.04832	mg/L	97	85	115			
L77624-07LFM	LFM	12/22/22 11:51	MS221207-2	.05005	.00038	.04622	mg/L	92	70	130			
L77624-07LFMD	LFMD	12/22/22 11:53	MS221207-2	.05005	.00038	.0487	mg/L	97	70	130	5	20	

Silica, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	42.8		44.09	mg/L	103	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.6	0.6			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	21.428		23.09	mg/L	108	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	21.428	29	50.69	mg/L	101	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	21.428	29	50.63	mg/L	101	85	115	0	20	

Silica, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	42.8		41.82	mg/L	98	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.6	0.6			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.44	0.44			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	21.404		22.19	mg/L	104	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	21.404	26.4	47.05	mg/L	96	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	21.404	26.4	29.46	mg/L	14	70	130	46	20	M2 RS

Silver, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557688													
WG557688ICV	ICV	01/03/23 18:53	MS221228-3	.02		.02043	mg/L	102	90	110			
WG557688ICB	ICB	01/03/23 18:55				U	mg/L		-0.00022	0.00022			
WG557688LFB	LFB	01/03/23 18:56	MS221228-8	.01001		.00957	mg/L	96	85	115			
L77518-01AS	AS	01/03/23 19:00	MS221228-8	1.001	U	.95941	mg/L	96	70	130			
L77518-01ASD	ASD	01/03/23 19:02	MS221228-8	1.001	U	.9505	mg/L	95	70	130	1	20	

AZMINING

ACZ Project ID: **L77624**

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, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.02		.02047	mg/L	102	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.0003	0.0003			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00022	0.00022			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.01		.01097	mg/L	110	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.01	U	.01017	mg/L	102	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.01	U	.01048	mg/L	105	70	130	3	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.02		.02197	mg/L	110	90	110			
WG557298ICB	ICB	12/26/22 12:02				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.01		.01143	mg/L	114	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.01	.00218	.01327	mg/L	111	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.01	.00218	.01346	mg/L	113	70	130	1	20	
WG557428													
WG557428ICV	ICV	12/29/22 16:41	MS220930-3	.02		.01932	mg/L	97	90	110			
WG557428ICB	ICB	12/29/22 16:44				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/29/22 16:46				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/29/22 16:48	MS221207-2	.01		.01054	mg/L	105	85	115			
L77624-07LFM	LFM	12/29/22 16:53	MS221207-2	.01	.00184	.01149	mg/L	97	70	130			
L77624-07LFMD	LFMD	12/29/22 16:55	MS221207-2	.01	.00184	.01131	mg/L	95	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
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	100		99.51	mg/L	100	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.6	0.6			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	100.0023		100.7	mg/L	101	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	100.0023	12.3	113.4	mg/L	101	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	100.0023	12.3	114.3	mg/L	102	85	115	1	20	

Sodium, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	100		96.18	mg/L	96	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.6	0.6			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.44	0.44			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	100.0023		99.01	mg/L	99	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	100.0023	21.3	124.7	mg/L	103	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	100.0023	21.3	121.8	mg/L	100	70	130	2	20	

AZMINING

ACZ Project ID: **L77624**

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
WG557510													
WG557510ICB	ICB	12/29/22 9:43				U	mg/L		-3	3			
WG557510ICV	ICV	12/29/22 9:43	WI221216-8	19.54		19.8	mg/L	101	90	110			
WG557510LFB	LFB	12/29/22 18:14	WI220830-3	10		9.7	mg/L	97	90	110			
L77623-05AS	AS	12/29/22 18:33	WI220830-3	10	23.4	33.4	mg/L	100	90	110			
L77623-04DUP	DUP	12/29/22 18:54			795	813.5	mg/L				2	20	
WG557543													
WG557543ICB	ICB	12/29/22 9:43				U	mg/L		-3	3			
WG557543ICV	ICV	12/29/22 9:43	WI221216-8	19.54		19.8	mg/L	101	90	110			
WG557543LFB	LFB	12/29/22 19:16	WI220830-3	10		9.7	mg/L	97	90	110			
L76098-13DUP	DUP	12/29/22 19:18			U	U	mg/L				0	20	RA
L76222-13AS	AS	12/29/22 21:09	SO4TURB3X	9.99	3.2	10.9	mg/L	77	90	110			D1 M2

Thallium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.05		.05229	mg/L	105	90	110			
WG557317ICB	ICB	12/26/22 18:13				U	mg/L		-0.00022	0.00022			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.05		.04887	mg/L	98	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.05	U	.05311	mg/L	106	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.05	U	.05136	mg/L	103	70	130	3	20	

Thallium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.05128	mg/L	103	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.0003	0.0003			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00022	0.00022			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.05		.04857	mg/L	97	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.05	U	.04687	mg/L	94	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.05	U	.04833	mg/L	97	70	130	3	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.05092	mg/L	102	90	110			
WG557298ICB	ICB	12/26/22 12:02				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.05		.04969	mg/L	99	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.05	.00026	.0531	mg/L	106	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.05	.00026	.05195	mg/L	103	70	130	2	20	
WG557428													
WG557428ICV	ICV	12/29/22 16:41	MS220930-3	.05		.05066	mg/L	101	90	110			
WG557428ICB	ICB	12/29/22 16:44				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/29/22 16:46				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/29/22 16:48	MS221207-2	.05		.05015	mg/L	100	85	115			
L77624-07LFM	LFM	12/29/22 16:53	MS221207-2	.05	.00028	.05116	mg/L	102	70	130			
L77624-07LFMD	LFMD	12/29/22 16:55	MS221207-2	.05	.00028	.05101	mg/L	101	70	130	0	20	

AZMINING

ACZ Project ID: **L77624**

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
WG557317													
WG557317ICV	ICV	12/26/22 18:11	MS220930-3	.05		.05198	mg/L	104	90	110			
WG557317ICB	ICB	12/26/22 18:13				U	mg/L		-0.00022	0.00022			
WG557317LFB	LFB	12/26/22 18:16	MS221207-2	.05		.04623	mg/L	92	85	115			
L77624-02AS	AS	12/26/22 19:00	MS221207-2	.05	.00636	.05999	mg/L	107	70	130			
L77624-02ASD	ASD	12/26/22 19:03	MS221207-2	.05	.00636	.05832	mg/L	104	70	130	3	20	

Uranium, total

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557104													
WG557104ICV	ICV	12/21/22 9:42	MS220930-3	.05		.04994	mg/L	100	90	110			
WG557104ICB	ICB	12/21/22 9:45				U	mg/L		-0.0003	0.0003			
WG557016LRB	LRB	12/21/22 9:47				U	mg/L		-0.00022	0.00022			
WG557016LFB	LFB	12/21/22 9:49	MS221207-2	.05		.04844	mg/L	97	85	115			
L77624-01LFM	LFM	12/21/22 9:54	MS221207-2	.05	.0102	.05936	mg/L	98	70	130			
L77624-01LFMD	LFMD	12/21/22 9:56	MS221207-2	.05	.0102	.06053	mg/L	101	70	130	2	20	
WG557298													
WG557298ICV	ICV	12/26/22 12:00	MS220930-3	.05		.04921	mg/L	98	90	110			
WG557298ICB	ICB	12/26/22 12:02				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/26/22 12:05				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/26/22 12:07	MS221207-2	.05		.04968	mg/L	99	85	115			
L77624-07LFM	LFM	12/26/22 12:32	MS221207-2	.05	.00652	.06102	mg/L	109	70	130			
L77624-07LFMD	LFMD	12/26/22 12:35	MS221207-2	.05	.00652	.05794	mg/L	103	70	130	5	20	
WG557428													
WG557428ICV	ICV	12/29/22 16:41	MS220930-3	.05		.05084	mg/L	102	90	110			
WG557428ICB	ICB	12/29/22 16:44				U	mg/L		-0.0003	0.0003			
WG557120LRB	LRB	12/29/22 16:46				U	mg/L		-0.00022	0.00022			
WG557120LFB	LFB	12/29/22 16:48	MS221207-2	.05		.05092	mg/L	102	85	115			
L77624-07LFM	LFM	12/29/22 16:53	MS221207-2	.05	.0065	.06105	mg/L	109	70	130			
L77624-07LFMD	LFMD	12/29/22 16:55	MS221207-2	.05	.0065	.06058	mg/L	108	70	130	1	20	

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG558270													
WG558270ICV	ICV	01/11/23 23:43	II230106-2	2		2.026	mg/L	101	95	105			
WG558270ICB	ICB	01/11/23 23:49				U	mg/L		-0.06	0.06			
WG558270LFB	LFB	01/12/23 0:02	II230103-5	.50045		.559	mg/L	112	85	115			
L77624-05AS	AS	01/12/23 0:22	II230103-5	.50045	U	.571	mg/L	114	85	115			
L77624-05ASD	ASD	01/12/23 0:25	II230103-5	.50045	U	.561	mg/L	112	85	115	2	20	

AZMINING

ACZ Project ID: **L77624**

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, total

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG557259													
WG557259ICV	ICV	12/30/22 5:38	II221130-3	2		1.933	mg/L	97	95	105			
WG557259ICB	ICB	12/30/22 5:44				U	mg/L		-0.06	0.06			
WG557129LRB	LRB	12/30/22 5:57				U	mg/L		-0.044	0.044			
WG557129LFB	LFB	12/30/22 6:00	II221202-2	.50045		.532	mg/L	106	85	115			
L77624-02LFM	LFM	12/30/22 6:16	II221202-2	.50045	.028	.564	mg/L	107	70	130			
L77624-02LFMD	LFMD	12/30/22 6:19	II221202-2	.50045	.028	.552	mg/L	105	70	130	2	20	

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ACZ Project ID: **L77624**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L77624-01	WG556634	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
M200.7 ICP			RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.	
M200.7 ICP			ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.	
L77624-02	WG557334	Chromium, dissolved	M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG556634	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
M200.7 ICP			RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.	
M200.7 ICP			ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.	
L77624-03	WG557334	Chromium, dissolved	M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [< MDL].
	WG556634	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
M200.7 ICP			RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.	
M200.7 ICP			ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.	

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ACZ Project ID: **L77624**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L77624-04	WG557334	Chromium, dissolved	M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [$<$ MDL].
	WG556836	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
M200.7 ICP			ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.	
WG556818	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).	
L77624-05	WG557334	Chromium, dissolved	M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [$<$ MDL].
	WG556836	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
M200.7 ICP			ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.	
WG556818	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).	

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ACZ Project ID: **L77624**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L77624-06	WG557334	Chromium, dissolved	M200.8 ICP-MS	VC	CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [$<$ MDL].
	WG556836	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG556818	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).
L77624-07	WG557214	Aluminum, total	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG556836	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG556818	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).

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ACZ Project ID: **L77624**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L77624-08	WG557214	Aluminum, total	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG556836	Cyanide, total	M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG556965	Mercury, total	M245.1 CVAA	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG557117	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG557259	Silica, total	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	RS	RPD of matrix spikes for total or total recoverable silica is outside acceptance limits. Acceptable precision for other metals indicates silica RPD failure may be attributed to digestion-triggered silica polymerization and precipitation.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG557543	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M2	Matrix spike recovery was low, 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).
	WG556818	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).

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ACZ Project ID: **L77624**

No certification qualifiers associated with this analysis

South32
 4542257445

ACZ Project ID: L77624
 Date Received: 12/09/2022 12:37
 Received By:
 Date Printed: 12/12/2022

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?
6774	-0.2	<=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.

South32
4542257445

ACZ Project ID: L77624
Date Received: 12/09/2022 12:37
Received By:
Date Printed: 12/12/2022

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).



Accredited
Environmental
Testing

2773 Downhill Drive
Steamboat Springs, CO 80487
(970) 879-6590

L77624

CHAIN of CUSTODY

Report to:

Name: Kara Haas	Address: 749 Harshaw Road
Company: AMI/South32	Patagonia, AZ 85624
E-mail: Kara.Haas@south32.net	Telephone: 505.947.1738

Copy of Report to:

Name: Nick Connell	E-mail: nconnell@newfields.com
Company: NewFields	Telephone: 847.528.9776

Invoice to:

Name: Kara Haas	Address: 749 Harshaw Road
Company: AMI/South32	Patagonia, AZ 85624
E-mail: kara.haas@south32.net	Telephone: 505.947.1738

Copy of Invoice to:

Name: South32	Address: NA
Company: AMI/South32	
E-mail: sscinvoices@south32.net	Telephone: NA

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: Marc Taylor Sampler's Site Information State AZ Zip code 85624 Time Zone MST

*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 ANALYSES REQUESTED (initial, test or use quote number)

Quote #: GW BASELINE			# of Containers	GW BASELINE																	
PO#: 4542257445																					
Reporting state for compliance testing: AZ																					
Check box if samples include NRC licensed material? <input type="checkbox"/>																					
SAMPLE IDENTIFICATION		DATE: TIME	Matrix																		
TW-603365-20221207		12/7/2022 08:40	GW	6	<input checked="" type="checkbox"/>																
TW-618224-20221207		12/7/2022 09:30	GW	6	<input checked="" type="checkbox"/>																
TW-624224-20221207		12/7/2022 10:25	GW	6	<input checked="" type="checkbox"/>																
TW21-01-20221207		12/7/2022 11:00	GW	6	<input checked="" type="checkbox"/>																
TW-624225-20221207		12/7/2022 11:25	GW	6	<input checked="" type="checkbox"/>																
TW-542020-20221207		12/7/2022 12:10	GW	6	<input checked="" type="checkbox"/>																
MW-9-20221207		12/7/2022 13:15	GW	6	<input checked="" type="checkbox"/>																
TW-597785-20221207		12/7/2022 14:05	GW	6	<input checked="" type="checkbox"/>																
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
<i>[Signature]</i>	12/8/22 08:22	<i>[Signature]</i>	12/9/22 12:37

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L77624 Chain of Custod

