

August 31, 2018

## Report to:

Kent Applegate  
Rio Algom Mining Company  
P.O. Box 218  
Grants, NM 87020

## Bill to:

Accounts Payable  
Rio Algom Mining Company  
P.O. Box 218  
Grants, NM 87020

cc: Michaela Gorospe, Clark Short

Project ID: 4506946843

ACZ Project ID: L46299

## Kent Applegate:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on August 16, 2018. This project has been assigned to ACZ's project number, L46299. 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 L46299. 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 September 30, 2018. 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.



**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 32-02 R

ACZ Sample ID: **L46299-01**

Date Sampled: 08/13/18 16:53

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	538			mg/L	0.5	3	08/29/18 15:23	dcm
Magnesium, dissolved	M200.7 ICP	5	715			mg/L	1	5	08/29/18 15:23	dcm
Potassium, dissolved	M200.7 ICP	5	11			mg/L	1	5	08/29/18 15:23	dcm
Sodium, dissolved	M200.7 ICP	5	758			mg/L	1	5	08/29/18 15:23	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	694		*	mg/L	5	20	08/27/18 12:04	mss2
Conductivity @25C	SM2510B	1	8450			umhos/cm	1	10	08/28/18 21:02	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	4	6.15		*	mg/L	0.08	0.4	08/25/18 2:11	pjb
Residue, Filterable (TDS) @180C	SM2540C	5	8110			mg/L	50	100	08/17/18 14:13	oah
Sulfate	D516-02/-07 - Turbidimetric	200	4510		*	mg/L	200	1000	08/30/18 11:27	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: AW-1

ACZ Sample ID: **L46299-02**

Date Sampled: 08/13/18 16:16

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	635			mg/L	0.5	3	08/29/18 15:27	dcm
Magnesium, dissolved	M200.7 ICP	5	603			mg/L	1	5	08/29/18 15:27	dcm
Potassium, dissolved	M200.7 ICP	5	8			mg/L	1	5	08/29/18 15:27	dcm
Sodium, dissolved	M200.7 ICP	5	640			mg/L	1	5	08/29/18 15:27	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	733		*	mg/L	5	20	08/27/18 12:04	mss2
Conductivity @25C	SM2510B	1	7830			umhos/cm	1	10	08/28/18 21:04	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	3	4.66		*	mg/L	0.06	0.3	08/25/18 2:12	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	7310			mg/L	20	40	08/17/18 14:16	oah
Sulfate	D516-02/-07 - Turbidimetric	200	4340		*	mg/L	200	1000	08/30/18 11:28	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 30-04 R

ACZ Sample ID: **L46299-03**

Date Sampled: 08/13/18 15:34

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	539			mg/L	0.5	3	08/29/18 15:30	dcm
Magnesium, dissolved	M200.7 ICP	5	419			mg/L	1	5	08/29/18 15:30	dcm
Potassium, dissolved	M200.7 ICP	5	9			mg/L	1	5	08/29/18 15:30	dcm
Sodium, dissolved	M200.7 ICP	5	523			mg/L	1	5	08/29/18 15:30	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	641		*	mg/L	5	20	08/27/18 11:49	mss2
Conductivity @25C	SM2510B	1	6360			umhos/cm	1	10	08/28/18 21:06	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	5	7.9		*	mg/L	0.1	0.5	08/25/18 2:13	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5510			mg/L	20	40	08/17/18 14:18	oah
Sulfate	D516-02/-07 - Turbidimetric	100	3350		*	mg/L	100	500	08/30/18 11:28	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 30-48

ACZ Sample ID: **L46299-04**

Date Sampled: 08/13/18 14:51

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	632			mg/L	0.5	3	08/29/18 15:33	dcm
Magnesium, dissolved	M200.7 ICP	5	79			mg/L	1	5	08/29/18 15:33	dcm
Potassium, dissolved	M200.7 ICP	5	5			mg/L	1	5	08/29/18 15:33	dcm
Sodium, dissolved	M200.7 ICP	5	85			mg/L	1	5	08/29/18 15:33	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	649		*	mg/L	5	20	08/27/18 11:49	mss2
Conductivity @25C	SM2510B	1	4900			umhos/cm	1	10	08/28/18 21:08	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1		U	*	mg/L	0.02	0.1	08/25/18 1:21	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4300			mg/L	20	40	08/20/18 17:03	nmc
Sulfate	D516-02/-07 - Turbidimetric	100	2490		*	mg/L	100	500	08/30/18 11:28	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 30-47

ACZ Sample ID: **L46299-05**

Date Sampled: 08/13/18 13:22

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	2	384			mg/L	0.2	1	08/29/18 15:36	dcm
Magnesium, dissolved	M200.7 ICP	2	168			mg/L	0.4	2	08/29/18 15:36	dcm
Potassium, dissolved	M200.7 ICP	2	7.6			mg/L	0.4	2	08/29/18 15:36	dcm
Sodium, dissolved	M200.7 ICP	2	245			mg/L	0.4	2	08/29/18 15:36	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	743		*	mg/L	5	20	08/27/18 11:55	mss2
Conductivity @25C	SM2510B	1	4790			umhos/cm	1	10	08/28/18 21:10	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.03	B	*	mg/L	0.02	0.1	08/25/18 1:23	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	3940			mg/L	20	40	08/17/18 14:26	oah
Sulfate	D516-02/-07 - Turbidimetric	20	407		*	mg/L	20	100	08/30/18 11:27	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 31-71

ACZ Sample ID: **L46299-06**

Date Sampled: 08/13/18 12:41

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	529			mg/L	0.5	3	08/29/18 15:40	dcm
Magnesium, dissolved	M200.7 ICP	5	258			mg/L	1	5	08/29/18 15:40	dcm
Potassium, dissolved	M200.7 ICP	5	2	B		mg/L	1	5	08/29/18 15:40	dcm
Sodium, dissolved	M200.7 ICP	5	364			mg/L	1	5	08/29/18 15:40	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	551		*	mg/L	5	20	08/27/18 11:55	mss2
Conductivity @25C	SM2510B	1	5030			umhos/cm	1	10	08/28/18 21:12	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.07	B	*	mg/L	0.02	0.1	08/25/18 1:24	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4270			mg/L	20	40	08/20/18 17:06	nmc
Sulfate	D516-02/-07 - Turbidimetric	100	2180		*	mg/L	100	500	08/30/18 11:39	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 31-05 R

ACZ Sample ID: **L46299-07**

Date Sampled: 08/13/18 11:57

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	521			mg/L	0.5	3	08/29/18 15:43	dcm
Magnesium, dissolved	M200.7 ICP	5	587			mg/L	1	5	08/29/18 15:43	dcm
Potassium, dissolved	M200.7 ICP	5	20			mg/L	1	5	08/29/18 15:43	dcm
Sodium, dissolved	M200.7 ICP	5	429			mg/L	1	5	08/29/18 15:43	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	577		*	mg/L	5	20	08/27/18 11:55	mss2
Conductivity @25C	SM2510B	1	7070			umhos/cm	1	10	08/28/18 21:14	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.98		*	mg/L	0.02	0.1	08/25/18 1:25	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	6240			mg/L	20	40	08/17/18 14:31	oah
Sulfate	D516-02/-07 - Turbidimetric	120	3220		*	mg/L	120	600	08/30/18 12:16	mss2



**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 31-70 R

ACZ Sample ID: **L46299-08**

Date Sampled: 08/13/18 11:11

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	617			mg/L	0.5	3	08/29/18 15:46	dcm
Magnesium, dissolved	M200.7 ICP	5	376			mg/L	1	5	08/29/18 15:46	dcm
Potassium, dissolved	M200.7 ICP	5	12			mg/L	1	5	08/29/18 15:46	dcm
Sodium, dissolved	M200.7 ICP	5	629			mg/L	1	5	08/29/18 15:46	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	50	860		*	mg/L	30	100	08/27/18 12:06	mss2
Conductivity @25C	SM2510B	1	7150			umhos/cm	1	10	08/28/18 21:16	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	20	50.1		*	mg/L	0.4	2	08/25/18 1:26	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5840	H	*	mg/L	20	40	08/24/18 13:30	oah
Sulfate	D516-02/-07 - Turbidimetric	120	2280		*	mg/L	120	600	08/30/18 12:16	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: AW-2

ACZ Sample ID: **L46299-09**

Date Sampled: 08/14/18 10:41

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	662			mg/L	0.5	3	08/29/18 15:49	dcm
Magnesium, dissolved	M200.7 ICP	5	202			mg/L	1	5	08/29/18 15:49	dcm
Potassium, dissolved	M200.7 ICP	5	6			mg/L	1	5	08/29/18 15:49	dcm
Sodium, dissolved	M200.7 ICP	5	651			mg/L	1	5	08/29/18 15:49	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	401		*	mg/L	5	20	08/27/18 11:57	mss2
Conductivity @25C	SM2510B	1	5970			umhos/cm	1	10	08/28/18 21:18	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	5	4.7			mg/L	0.1	0.5	08/25/18 1:29	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5580			mg/L	20	40	08/17/18 14:37	oah
Sulfate	D516-02/-07 - Turbidimetric	120	2610		*	mg/L	120	600	08/30/18 12:16	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 32-51

ACZ Sample ID: **L46299-10**

Date Sampled: 08/14/18 11:43

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	503			mg/L	0.5	3	08/29/18 15:53	dcm
Magnesium, dissolved	M200.7 ICP	5	299			mg/L	1	5	08/29/18 15:53	dcm
Potassium, dissolved	M200.7 ICP	5	3	B		mg/L	1	5	08/29/18 15:53	dcm
Sodium, dissolved	M200.7 ICP	5	461			mg/L	1	5	08/29/18 15:53	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	456		*	mg/L	5	20	08/27/18 11:57	mss2
Conductivity @25C	SM2510B	1	5370		*	umhos/cm	1	10	08/28/18 21:28	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	3	4.92			mg/L	0.06	0.3	08/25/18 1:31	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	4880			mg/L	20	40	08/17/18 14:39	oah
Sulfate	D516-02/-07 - Turbidimetric	120	2530		*	mg/L	120	600	08/30/18 12:16	mss2

**Rio Algom Mining Company**

Project ID: 4506946843

Sample ID: 32-50 TRB-R

ACZ Sample ID: **L46299-11**

Date Sampled: 08/14/18 12:31

Date Received: 08/16/18

Sample Matrix: Groundwater

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M200.7 ICP	5	510			mg/L	0.5	3	08/29/18 16:02	dcm
Magnesium, dissolved	M200.7 ICP	5	418			mg/L	1	5	08/29/18 16:02	dcm
Potassium, dissolved	M200.7 ICP	5	5			mg/L	1	5	08/29/18 16:02	dcm
Sodium, dissolved	M200.7 ICP	5	627			mg/L	1	5	08/29/18 16:02	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chloride	SM4500Cl-E	10	586		*	mg/L	5	20	08/27/18 11:57	mss2
Conductivity @25C	SM2510B	1	6570			umhos/cm	1	10	08/28/18 21:39	enb
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	3.62			mg/L	0.02	0.1	08/25/18 2:03	pjb
Residue, Filterable (TDS) @180C	SM2540C	2	5880			mg/L	20	40	08/17/18 14:42	oah
Sulfate	D516-02/-07 - Turbidimetric	120	2840		*	mg/L	120	600	08/30/18 12:16	mss2


**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:

<http://www.acz.com/public/extquallist.pdf>

**Rio Algom Mining Company**

ACZ Project ID: **L46299**

NOTE: If the Rec% column is null, the high/low 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
<b>WG455094</b>													
WG455094ICV	ICV	08/29/18 14:25	II180824-2	100		98.77	mg/L	99	95	105			
WG455094ICB	ICB	08/29/18 14:31				U	mg/L		-0.3	0.3			
WG455094LFB	LFB	08/29/18 14:44	II180827-2	68.16145		66.89	mg/L	98	85	115			
L46279-05AS	AS	08/29/18 15:01	II180827-2	68.16145	60.8	123.9	mg/L	93	85	115			
L46279-05ASD	ASD	08/29/18 15:04	II180827-2	68.16145	60.8	123.2	mg/L	92	85	115	1	20	
L46335-04AS	AS	08/29/18 16:09	II180827-2	68.16145	6.5	73.3	mg/L	98	85	115			
L46335-04ASD	ASD	08/29/18 16:12	II180827-2	68.16145	6.5	72.85	mg/L	97	85	115	1	20	

**Chloride**

SM4500CI-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG454949</b>													
WG454949ICB	ICB	08/27/18 8:15				U	mg/L		-1.5	1.5			
WG454949ICV	ICV	08/27/18 8:15	WI180530-1	54.89		55.53	mg/L	101	90	110			
WG454949LFB2	LFB	08/27/18 11:39	WI171229-5	30.03		32.44	mg/L	108	90	110			
WG454949LFB1	LFB	08/27/18 11:41	WI171229-5	30.03		31.57	mg/L	105	90	110			
L46154-01DUP	DUP	08/27/18 11:47			23.9	23.04	mg/L				4	20	
L46293-01AS	AS	08/27/18 11:47	WI171229-5	30.03	2.5	36.02	mg/L	112	90	110			M1
L46299-03DUP	DUP	08/27/18 11:49			641	640.4	mg/L				0	20	
L46299-04AS	AS	08/27/18 11:55	10XCL	30	649	682.4	mg/L	111	90	110			M3

**Conductivity @25C**

SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG455060</b>													
WG455060LCSW2	LCSW	08/28/18 15:20	PCN56415	1410		1380	umhos/cm	98	90	110			
WG455060LCSW5	LCSW	08/28/18 17:54	PCN56415	1410		1370	umhos/cm	97	90	110			
WG455060LCSW8	LCSW	08/28/18 20:06	PCN56415	1410		1360	umhos/cm	96	90	110			
L46299-10DUP	DUP	08/28/18 21:37			5370	5390	umhos/cm				0	20	
WG455060LCSW11	LCSW	08/28/18 22:09	PCN56415	1410		1270	umhos/cm	90	90	110			
L46335-05DUP	DUP	08/28/18 23:18			128	129	umhos/cm				1	20	
WG455060LCSW14	LCSW	08/29/18 1:06	PCN56415	1410		1350	umhos/cm	96	90	110			

**Magnesium, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG455094</b>													
WG455094ICV	ICV	08/29/18 14:25	II180824-2	100		100.1	mg/L	100	95	105			
WG455094ICB	ICB	08/29/18 14:31				U	mg/L		-0.6	0.6			
WG455094LFB	LFB	08/29/18 14:44	II180827-2	50.2933		46.47	mg/L	92	85	115			
L46279-05AS	AS	08/29/18 15:01	II180827-2	50.2933	36.9	81.44	mg/L	89	85	115			
L46279-05ASD	ASD	08/29/18 15:04	II180827-2	50.2933	36.9	81.29	mg/L	88	85	115	0	20	
L46335-04AS	AS	08/29/18 16:09	II180827-2	50.2933	1.5	48.14	mg/L	93	85	115			
L46335-04ASD	ASD	08/29/18 16:12	II180827-2	50.2933	1.5	47.83	mg/L	92	85	115	1	20	

**Rio Algom Mining Company**

ACZ Project ID: **L46299**

NOTE: If the Rec% column is null, the high/low 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
<b>WG454895</b>													
WG454895ICV	ICV	08/24/18 21:26	WI180602-1	2.416		2.388	mg/L	99	90	110			
WG454895ICB	ICB	08/24/18 21:27				U	mg/L		-0.02	0.02			
<b>WG454900</b>													
WG454900LFB1	LFB	08/25/18 0:11	WI180703-7	2		2	mg/L	100	90	110			
L46289-10AS	AS	08/25/18 0:33	WI180703-7	2	.08	2.136	mg/L	103	90	110			
L46289-11DUP	DUP	08/25/18 0:35			U	.025	mg/L				200	20	RA
WG454900LFB2	LFB	08/25/18 1:28	WI180703-7	2		1.881	mg/L	94	90	110			
L46299-09AS	AS	08/25/18 1:30	WI180703-7	10	4.7	14.79	mg/L	101	90	110			
L46299-10DUP	DUP	08/25/18 1:33			4.92	4.9	mg/L				0	20	

**Potassium, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG455094</b>													
WG455094ICV	ICV	08/29/18 14:25	II180824-2	20		19.88	mg/L	99	95	105			
WG455094ICB	ICB	08/29/18 14:31				U	mg/L		-0.6	0.6			
WG455094LFB	LFB	08/29/18 14:44	II180827-2	101.3833		97.42	mg/L	96	85	115			
L46279-05AS	AS	08/29/18 15:01	II180827-2	101.3833	2	99.92	mg/L	97	85	115			
L46279-05ASD	ASD	08/29/18 15:04	II180827-2	101.3833	2	98.65	mg/L	95	85	115	1	20	
L46335-04AS	AS	08/29/18 16:09	II180827-2	101.3833	.7	99.78	mg/L	98	85	115			
L46335-04ASD	ASD	08/29/18 16:12	II180827-2	101.3833	.7	98.85	mg/L	97	85	115	1	20	

**Residue, Filterable (TDS) @180C**

SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG454306</b>													
WG454306PBW	PBW	08/17/18 13:50				U	mg/L		-20	20			
WG454306LCSW	LCSW	08/17/18 13:52	PCN56357	260		268	mg/L	103	80	120			
L46299-03DUP	DUP	08/17/18 14:21			5510	5660	mg/L				3	10	
L46312-02DUP	DUP	08/17/18 14:50			1300	1320	mg/L				2	10	
<b>WG454449</b>													
WG454449PBW	PBW	08/20/18 16:09				U	mg/L		-20	20			
WG454449LCSW	LCSW	08/20/18 16:11	PCN56357	260		254	mg/L	98	80	120			
L46299-06DUP	DUP	08/20/18 17:09			4270	4270	mg/L				0	10	
<b>WG454882</b>													
WG454882PBW	PBW	08/24/18 13:25				U	mg/L		-20	20			
WG454882LCSW	LCSW	08/24/18 13:27	PCN56355	260		272	mg/L	105	80	120			
L46489-09DUP	DUP	08/24/18 13:56			192	260	mg/L				30	10	RA

Rio Algom Mining Company

ACZ Project ID: **L46299**

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

**Sodium, dissolved**

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG455094</b>													
WG455094ICV	ICV	08/29/18 14:25	II180824-2	100		99.89	mg/L	100	95	105			
WG455094ICB	ICB	08/29/18 14:31				U	mg/L		-0.6	0.6			
WG455094LFB	LFB	08/29/18 14:44	II180827-2	100.8796		98.21	mg/L	97	85	115			
L46279-05AS	AS	08/29/18 15:01	II180827-2	100.8796	12.5	110.1	mg/L	97	85	115			
L46279-05ASD	ASD	08/29/18 15:04	II180827-2	100.8796	12.5	109.9	mg/L	97	85	115	0	20	
L46335-04AS	AS	08/29/18 16:09	II180827-2	100.8796	3	101.5	mg/L	98	85	115			
L46335-04ASD	ASD	08/29/18 16:12	II180827-2	100.8796	3	100.5	mg/L	97	85	115	1	20	

**Sulfate**

D516-02/-07 - Turbidimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG455267</b>													
WG455267ICB	ICB	08/30/18 8:13				U	mg/L		-3	3			
WG455267ICV	ICV	08/30/18 8:13	W1180827-2	20		18.6	mg/L	93	90	110			
L46298-02DUP	DUP	08/30/18 10:43			U	U	mg/L				0	20	RA
L46298-03AS	AS	08/30/18 10:43	SO4TURB20X	10	U	194	mg/L	1940	90	110			M3
WG455267LFB	LFB	08/30/18 11:33	W1180726-1	10		10.3	mg/L	103	90	110			
<b>WG455268</b>													
WG455268ICB	ICB	08/30/18 8:13				U	mg/L		-3	3			
WG455268ICV	ICV	08/30/18 8:13	W1180827-2	20		18.6	mg/L	93	90	110			
WG455268LFB	LFB	08/30/18 11:51	W1180726-1	10		9.2	mg/L	92	90	110			
L46165-01DUP	DUP	08/30/18 12:05			2480	2430	mg/L				2	20	RA
L46165-02AS	AS	08/30/18 12:08	SO4TURB5X	10	190	185	mg/L	-50	90	110			M3
L46312-02AS	AS	08/30/18 12:09	SO4TURB50X	10	787	757	mg/L	-300	90	110			M3
L46312-01DUP	DUP	08/30/18 12:45			U	U	mg/L				0	20	RA



Rio Algom Mining Company

ACZ Project ID: **L46299**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
<b>L46299-01</b>	WG454949	Chloride	SM4500CI-E	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG454900	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).
	WG455267	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-02</b>	WG454949	Chloride	SM4500CI-E	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.
	WG454900	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).
	WG455267	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-03</b>	WG454949	Chloride	SM4500CI-E	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.
	WG454900	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).
	WG455267	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-04</b>	WG454949	Chloride	SM4500CI-E	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.
	WG454900	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).
	WG455267	Sulfate	D516-02/-07 - 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 - 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).

Rio Algom Mining Company

ACZ Project ID: **L46299**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
<b>L46299-05</b>	WG454949	Chloride	SM4500Cl-E	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.
	WG454900	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).
	WG455267	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-06</b>	WG454949	Chloride	SM4500Cl-E	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.
	WG454900	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).
	WG455267	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-07</b>	WG454949	Chloride	SM4500Cl-E	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.
	WG454900	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).
	WG455268	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-08</b>	WG454949	Chloride	SM4500Cl-E	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.
	WG454900	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).
	WG454882	Residue, Filterable (TDS) @180C	SM2540C	H1	Sample prep or analysis performed past holding time. See case narrative.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG455268	Sulfate	D516-02/-07 - 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 - 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).

Rio Algom Mining Company

ACZ Project ID: **L46299**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
<b>L46299-09</b>	WG454949	Chloride	SM4500CI-E	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.
	WG455268	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-10</b>	WG454949	Chloride	SM4500CI-E	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.
	WG455060	Conductivity @25C	SM2510B	ZW	Method deviation. The sample was centrifuged prior to analysis due to high solid content.
	WG455268	Sulfate	D516-02/-07 - 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 - 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).
<b>L46299-11</b>	WG454949	Chloride	SM4500CI-E	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.
	WG455268	Sulfate	D516-02/-07 - 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 - 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).

Rio Algom Mining Company

ACZ Project ID: **L46299**

No certification qualifiers associated with this analysis

Rio Algom Mining Company  
4506946843

ACZ Project ID: L46299  
Date Received: 08/16/2018 11:18  
Received By:  
Date Printed: 8/16/2018

#### Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Is the Chain of Custody form or other directive shipping papers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does this project require special handling procedures such as CLP protocol?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Are any samples NRC licensable material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) If samples are received past hold time, proceed with requested short hold time analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Is the Chain of Custody form complete and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A change was made in the Sample Id Date:Time Line 1. Remarks section prior to ACZ custody.			

#### Samples/Containers

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

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?
4312	3.4	<=6.0	15	N/A
4062	1.8	<=6.0	14	N/A

Was ice present in the shipment container(s)?

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

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

Rio Algom Mining Company  
4506946843

ACZ Project ID: L46299

Date Received: 08/16/2018 11:18

Received By:

Date Printed: 8/16/2018

<sup>1</sup> 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), Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

1/2

# ACZ

## Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5498

46299

### CHAIN of CUSTODY

Report to:

Name: Kent Applegate	Address: PO Box 218
Company: Rio Algom Mining LLC	Grants, NM 87020
E-mail: Kent.KC.Applegate@bhpbilliton.com	Telephone: 1-505-287-8851

Copy of Report to:

Name: Michaela Gorospe/Clark Short	E-mail: See remarks
Company: INTERA, INC.	Telephone: 505-246-1600 x1207

Invoice to:

Name: Kent Applegate	Address: PO Box 218
Company: Rio Algom Mining LLC	Grants, NM 87020
E-mail: Kent.KC.Applegate@BHPBilliton.com	Telephone: 1-505-287-8851

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 POL for Colorado.

Sampler's Name: B. Williamson Sampler's Site Information State NM Zip code 87020 Time Zone MST

\*Sampler's Signature: [Signature] \*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the true/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION ANALYSES REQUESTED (attach list or use quote number)

Quote #: <u>58763</u>											
PO#: <u>4502696253</u>											
Reporting state for compliance testing:											
Check box if samples include NRC licensed material? <input type="checkbox"/>											
SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	SAP-GW	DP-169						
32-02R	8/13/18 15:53	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AW-1	8/13/18 16:16	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30-04R	8/13/18 15:34	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30-48	8/13/18 14:51	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30-47	8/13/18 13:22	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31-71	8/13/18 12:41	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31-08R	8/13/18 11:57	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31-70R	8/13/18 11:11	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AW-2	8/14/18 10:41	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32-51	8/14/18 11:43	GW	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)											

REMARKS

RAML COC#: 14-08. Note different COC's may have different PO's. Shipment of 3 Coolers.

Please CC report to: cshort@intera.com, apersico@intera.com, Michaela.Gorospe@bhpbilliton.com

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
<u>B. Williamson</u>	<u>8/15/18 16:55</u>	<u>[Signature]</u>	<u>8/16/18 11:18</u>

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

46299 Chain of Custody

