

April 13, 2020

Report to:

Jake Wilkinson
CRG Mining, LLC
510 S Wisconsin St
Gunnison, CO 80231

Bill to:

Jake Wilkinson
CRG Mining, LLC
510 S Wisconsin St
Gunnison, CO 80231

Project ID:

ACZ Project ID: L58263

Jake Wilkinson:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on April 03, 2020. This project has been assigned to ACZ's project number, L58263. Please reference this number in all future inquiries.

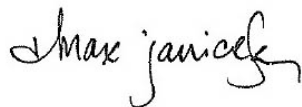
All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L58263. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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 May 13, 2020. 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.



Max Janicek has reviewed and
approved this report.



CRG Mining, LLC
Project ID:
Sample ID: GL 1

ACZ Sample ID: **L58263-01**
Date Sampled: 04/02/20 10:20
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 11:54	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:15	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 15:50	mfm
Arsenic, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0002	0.001	04/08/20 15:50	mfm
Barium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.007	0.04	04/08/20 20:15	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 15:50	mfm
Cadmium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00005	0.0003	04/08/20 15:50	mfm
Calcium, dissolved	M200.7 ICP	1	14.2			mg/L	0.1	0.5	04/08/20 20:15	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 15:50	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:15	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:15	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:15	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	04/08/20 15:50	mfm
Magnesium, dissolved	M200.7 ICP	1	4.9			mg/L	0.2	1	04/08/20 20:15	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:15	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/09/20 16:30	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:15	jlw
Potassium, dissolved	M200.7 ICP	1	0.4	B		mg/L	0.2	1	04/08/20 20:15	jlw
Sodium, dissolved	M200.7 ICP	1	2.1			mg/L	0.2	1	04/08/20 20:15	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:15	jlw
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.02	0.05	04/08/20 20:15	jlw

CRG Mining, LLC

Project ID:

Sample ID: GL 1

ACZ Sample ID: **L58263-01**

Date Sampled: 04/02/20 10:20

Date Received: 04/03/20

Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	62.6			mg/L	2	20	04/10/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Total Alkalinity		1	62.6			mg/L	2	20	04/10/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.0			%			04/13/20 0:00	calc
Sum of Anions			1.3			meq/L			04/13/20 0:00	calc
Sum of Cations			1.2			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U		mg/L	0.5	2	04/09/20 11:35	rbt
Conductivity @25C	SM2510B	1	122			umhos/cm	1	10	04/10/20 0:53	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U		mg/L	0.003	0.01	04/07/20 13:59	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		56			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:00	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.12			mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.12		*	mg/L	0.02	0.1	04/03/20 21:59	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 21:59	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	04/10/20 0:00	eep
pH measured at		1	20.9			C	0.1	0.1	04/10/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	138			mg/L	20	40	04/06/20 9:11	mlh
Sulfate	D516-02/-07/-11 - Turbidimetric	1	3.7	B		mg/L	1	5	04/08/20 11:05	rbt

CRG Mining, LLC
Project ID:
Sample ID: GL 2

ACZ Sample ID: **L58263-02**
Date Sampled: 04/02/20 10:28
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 12:05	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:18	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 15:52	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.003			mg/L	0.0002	0.001	04/08/20 15:52	mfm
Barium, dissolved	M200.7 ICP	1	0.011	B		mg/L	0.007	0.04	04/08/20 20:18	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 15:52	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00216			mg/L	0.00005	0.0003	04/08/20 15:52	mfm
Calcium, dissolved	M200.7 ICP	1	23.3			mg/L	0.1	0.5	04/08/20 20:18	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 15:52	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:18	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:18	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:18	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	04/08/20 15:52	mfm
Magnesium, dissolved	M200.7 ICP	1	7.0			mg/L	0.2	1	04/08/20 20:18	jlw
Manganese, dissolved	M200.7 ICP	1	0.02	B		mg/L	0.01	0.05	04/08/20 20:18	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/09/20 16:31	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:18	jlw
Potassium, dissolved	M200.7 ICP	1	0.6	B		mg/L	0.2	1	04/08/20 20:18	jlw
Sodium, dissolved	M200.7 ICP	1	4.1			mg/L	0.2	1	04/08/20 20:18	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:18	jlw
Zinc, dissolved	M200.7 ICP	1	0.24			mg/L	0.02	0.05	04/08/20 20:18	jlw

CRG Mining, LLC
Project ID:
Sample ID: GL 2

ACZ Sample ID: **L58263-02**
Date Sampled: 04/02/20 10:28
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	75.3			mg/L	2	20	04/10/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Total Alkalinity		1	75.3			mg/L	2	20	04/10/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-5.0			%			04/13/20 0:00	calc
Sum of Anions			2.1			meq/L			04/13/20 0:00	calc
Sum of Cations			1.9			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:35	rbt
Conductivity @25C	SM2510B	1	197			umhos/cm	1	10	04/10/20 1:03	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U		mg/L	0.003	0.01	04/07/20 14:00	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		87.0			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:03	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.08	B		mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.08	B	*	mg/L	0.02	0.1	04/03/20 22:05	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:05	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	04/10/20 0:00	eep
pH measured at		1	19.7			C	0.1	0.1	04/10/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	164			mg/L	20	40	04/06/20 9:13	mlh
Sulfate	D516-02/-07/-11 - Turbidimetric	1	27.9			mg/L	1	5	04/08/20 11:05	rbt

CRG Mining, LLC
Project ID:
Sample ID: GL 3

ACZ Sample ID: **L58263-03**
Date Sampled: 04/02/20 10:30
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 12:15	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:21	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 15:53	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0003	B		mg/L	0.0002	0.001	04/08/20 15:53	mfm
Barium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.007	0.04	04/08/20 20:21	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 15:53	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00021	B		mg/L	0.00005	0.0003	04/08/20 15:53	mfm
Calcium, dissolved	M200.7 ICP	1	15.3			mg/L	0.1	0.5	04/08/20 20:21	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 15:53	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:21	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:21	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:21	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	04/08/20 15:53	mfm
Magnesium, dissolved	M200.7 ICP	1	5.2			mg/L	0.2	1	04/08/20 20:21	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:21	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/09/20 16:32	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:21	jlw
Potassium, dissolved	M200.7 ICP	1	0.4	B		mg/L	0.2	1	04/08/20 20:21	jlw
Sodium, dissolved	M200.7 ICP	1	2.2			mg/L	0.2	1	04/08/20 20:21	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:21	jlw
Zinc, dissolved	M200.7 ICP	1	0.02	B		mg/L	0.02	0.05	04/08/20 20:21	jlw

CRG Mining, LLC
Project ID:
Sample ID: GL 3

ACZ Sample ID: **L58263-03**
Date Sampled: 04/02/20 10:30
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	63.9			mg/L	2	20	04/10/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Total Alkalinity		1	63.9		*	mg/L	2	20	04/10/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.7			%			04/13/20 0:00	calc
Sum of Anions			1.4			meq/L			04/13/20 0:00	calc
Sum of Cations			1.3			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:35	rbt
Conductivity @25C	SM2510B	1	131			umhos/cm	1	10	04/10/20 1:52	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U		mg/L	0.003	0.01	04/07/20 14:00	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		60			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:06	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.10			mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.10		*	mg/L	0.02	0.1	04/03/20 22:06	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:06	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	04/10/20 0:00	eep
pH measured at		1	19.9			C	0.1	0.1	04/10/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	98		*	mg/L	20	40	04/06/20 19:10	jck
Sulfate	D516-02/-07/-11 - Turbidimetric	1	7.0			mg/L	1	5	04/08/20 11:05	rbt

CRG Mining, LLC

Project ID:

Sample ID: RM 1

ACZ Sample ID: **L58263-04**

Date Sampled: 04/02/20 10:47

Date Received: 04/03/20

Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 12:26	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:25	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 15:55	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0003	B		mg/L	0.0002	0.001	04/08/20 15:55	mfm
Barium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.007	0.04	04/08/20 20:25	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 15:55	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00017	B		mg/L	0.00005	0.0003	04/08/20 15:55	mfm
Calcium, dissolved	M200.7 ICP	1	16.9			mg/L	0.1	0.5	04/08/20 20:25	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 15:55	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:25	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:25	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:25	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	04/08/20 15:55	mfm
Magnesium, dissolved	M200.7 ICP	1	5.4			mg/L	0.2	1	04/08/20 20:25	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:25	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/09/20 16:33	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:25	jlw
Potassium, dissolved	M200.7 ICP	1	0.5	B		mg/L	0.2	1	04/08/20 20:25	jlw
Sodium, dissolved	M200.7 ICP	1	2.2			mg/L	0.2	1	04/08/20 20:25	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:25	jlw
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.02	0.05	04/08/20 20:25	jlw

CRG Mining, LLC
Project ID:
Sample ID: RM 1

ACZ Sample ID: **L58263-04**
Date Sampled: 04/02/20 10:47
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	68.7			mg/L	2	20	04/10/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Total Alkalinity		1	68.7		*	mg/L	2	20	04/10/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			04/13/20 0:00	calc
Sum of Anions			1.5			meq/L			04/13/20 0:00	calc
Sum of Cations			1.4			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:23	rbt
Conductivity @25C	SM2510B	1	139			umhos/cm	1	10	04/10/20 2:02	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U	*	mg/L	0.003	0.01	04/07/20 14:01	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		64			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:09	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.10			mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.10		*	mg/L	0.02	0.1	04/03/20 22:07	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:07	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	04/10/20 0:00	eep
pH measured at		1	20.4			C	0.1	0.1	04/10/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	96		*	mg/L	20	40	04/06/20 19:13	jck
Sulfate	D516-02/-07/-11 - Turbidimetric	1	6.6			mg/L	1	5	04/08/20 11:05	rbt

CRG Mining, LLC
Project ID:
Sample ID: RM 2

ACZ Sample ID: **L58263-05**
Date Sampled: 04/02/20 10:49
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 12:46	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:28	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 15:57	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0083			mg/L	0.0002	0.001	04/08/20 15:57	mfm
Barium, dissolved	M200.7 ICP	1		U		mg/L	0.007	0.04	04/08/20 20:28	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 15:57	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00047			mg/L	0.00005	0.0003	04/08/20 15:57	mfm
Calcium, dissolved	M200.7 ICP	1	14.0			mg/L	0.1	0.5	04/08/20 20:28	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 15:57	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:28	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:28	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:28	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	04/08/20 15:57	mfm
Magnesium, dissolved	M200.7 ICP	1	3.1			mg/L	0.2	1	04/08/20 20:28	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:28	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/09/20 16:34	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:28	jlw
Potassium, dissolved	M200.7 ICP	1	0.8	B		mg/L	0.2	1	04/08/20 20:28	jlw
Sodium, dissolved	M200.7 ICP	1	3.9			mg/L	0.2	1	04/08/20 20:28	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:28	jlw
Zinc, dissolved	M200.7 ICP	1	0.05			mg/L	0.02	0.05	04/08/20 20:28	jlw

CRG Mining, LLC
Project ID:
Sample ID: RM 2

ACZ Sample ID: **L58263-05**
Date Sampled: 04/02/20 10:49
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	57.6			mg/L	2	20	04/10/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Total Alkalinity		1	57.6		*	mg/L	2	20	04/10/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-11.1			%			04/13/20 0:00	calc
Sum of Anions			1.5			meq/L			04/13/20 0:00	calc
Sum of Cations			1.2			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:23	rbt
Conductivity @25C	SM2510B	1	123			umhos/cm	1	10	04/10/20 2:13	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U	*	mg/L	0.003	0.01	04/07/20 14:03	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		48			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:12	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.04	B		mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.04	B	*	mg/L	0.02	0.1	04/03/20 22:08	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:08	pjb
pH (lab)	SM4500H+ B									
pH		1	8.1	H		units	0.1	0.1	04/10/20 0:00	eep
pH measured at		1	19.9			C	0.1	0.1	04/10/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	90		*	mg/L	20	40	04/06/20 19:15	jck
Sulfate	D516-02/-07/-11 - Turbidimetric	1	17.9			mg/L	1	5	04/08/20 11:05	rbt

CRG Mining, LLC
Project ID:
Sample ID: RM 3

ACZ Sample ID: **L58263-06**
Date Sampled: 04/02/20 11:17
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 13:07	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:38	jlw
Antimony, dissolved	M200.8 ICP-MS	1	0.0004	B		mg/L	0.0004	0.002	04/08/20 16:02	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0013			mg/L	0.0002	0.001	04/08/20 16:02	mfm
Barium, dissolved	M200.7 ICP	1	0.011	B		mg/L	0.007	0.04	04/08/20 20:38	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 16:02	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00019	B		mg/L	0.00005	0.0003	04/08/20 16:02	mfm
Calcium, dissolved	M200.7 ICP	1	16.5			mg/L	0.1	0.5	04/08/20 20:38	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 16:02	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:38	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:38	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:38	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	04/08/20 16:02	mfm
Magnesium, dissolved	M200.7 ICP	1	5.2			mg/L	0.2	1	04/08/20 20:38	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:38	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/09/20 16:38	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:38	jlw
Potassium, dissolved	M200.7 ICP	1	0.5	B		mg/L	0.2	1	04/08/20 20:38	jlw
Sodium, dissolved	M200.7 ICP	1	2.2			mg/L	0.2	1	04/08/20 20:38	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:38	jlw
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.02	0.05	04/08/20 20:38	jlw

CRG Mining, LLC
Project ID:
Sample ID: RM 3

ACZ Sample ID: **L58263-06**
Date Sampled: 04/02/20 11:17
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	66.4			mg/L	2	20	04/11/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/11/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/11/20 0:00	eep
Total Alkalinity		1	66.4			mg/L	2	20	04/11/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			04/13/20 0:00	calc
Sum of Anions			1.5			meq/L			04/13/20 0:00	calc
Sum of Cations			1.4			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:23	rbt
Conductivity @25C	SM2510B	1	140			umhos/cm	1	10	04/11/20 2:30	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U	*	mg/L	0.003	0.01	04/07/20 14:05	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		63			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:16	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.09	B		mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.09	B	*	mg/L	0.02	0.1	04/03/20 22:10	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:10	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	04/11/20 0:00	eep
pH measured at		1	19.7			C	0.1	0.1	04/11/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	90		*	mg/L	20	40	04/06/20 19:18	jck
Sulfate	D516-02/-07/-11 - Turbidimetric	1	7.6			mg/L	1	5	04/08/20 11:05	rbt

CRG Mining, LLC
Project ID:
Sample ID: CM 1

ACZ Sample ID: **L58263-07**
Date Sampled: 04/02/20 11:30
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 13:18	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:47	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 16:04	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0016			mg/L	0.0002	0.001	04/08/20 16:04	mfm
Barium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.007	0.04	04/08/20 20:47	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 16:04	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00016	B		mg/L	0.00005	0.0003	04/08/20 16:04	mfm
Calcium, dissolved	M200.7 ICP	1	16.8			mg/L	0.1	0.5	04/08/20 20:47	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 16:04	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:47	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:47	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:47	jlw
Lead, dissolved	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0005	04/08/20 16:04	mfm
Magnesium, dissolved	M200.7 ICP	1	5.3			mg/L	0.2	1	04/08/20 20:47	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:47	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/09/20 16:39	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:47	jlw
Potassium, dissolved	M200.7 ICP	1	0.5	B		mg/L	0.2	1	04/08/20 20:47	jlw
Sodium, dissolved	M200.7 ICP	1	2.2			mg/L	0.2	1	04/08/20 20:47	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:47	jlw
Zinc, dissolved	M200.7 ICP	1	0.02	B		mg/L	0.02	0.05	04/08/20 20:47	jlw

CRG Mining, LLC
Project ID:
Sample ID: CM 1

ACZ Sample ID: **L58263-07**
Date Sampled: 04/02/20 11:30
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	66.7			mg/L	2	20	04/11/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/11/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/11/20 0:00	eep
Total Alkalinity		1	66.7			mg/L	2	20	04/11/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			04/13/20 0:00	calc
Sum of Anions			1.5			meq/L			04/13/20 0:00	calc
Sum of Cations			1.4			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:24	rbt
Conductivity @25C	SM2510B	1	142			umhos/cm	1	10	04/11/20 2:40	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U	*	mg/L	0.003	0.01	04/07/20 14:06	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		64			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:19	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.08	B		mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.08	B	*	mg/L	0.02	0.1	04/03/20 22:11	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:11	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	04/11/20 0:00	eep
pH measured at		1	19.8			C	0.1	0.1	04/11/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	96		*	mg/L	20	40	04/06/20 19:21	jck
Sulfate	D516-02/-07/-11 - Turbidimetric	1	8.2			mg/L	1	5	04/08/20 11:05	rbt

CRG Mining, LLC
Project ID:
Sample ID: CM 2

ACZ Sample ID: **L58263-08**
Date Sampled: 04/02/20 11:37
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 13:28	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:51	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 16:09	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0021			mg/L	0.0002	0.001	04/08/20 16:09	mfm
Barium, dissolved	M200.7 ICP	1	0.010	B		mg/L	0.007	0.04	04/08/20 20:51	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 16:09	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00008	B		mg/L	0.00005	0.0003	04/08/20 16:09	mfm
Calcium, dissolved	M200.7 ICP	1	17.2			mg/L	0.1	0.5	04/08/20 20:51	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 16:09	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:51	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:51	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:51	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	04/08/20 16:09	mfm
Magnesium, dissolved	M200.7 ICP	1	3.2			mg/L	0.2	1	04/08/20 20:51	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:51	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/10/20 13:53	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:51	jlw
Potassium, dissolved	M200.7 ICP	1	0.3	B		mg/L	0.2	1	04/08/20 20:51	jlw
Sodium, dissolved	M200.7 ICP	1	5.7			mg/L	0.2	1	04/08/20 20:51	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:51	jlw
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.02	0.05	04/08/20 20:51	jlw

CRG Mining, LLC
Project ID:
Sample ID: CM 2

ACZ Sample ID: **L58263-08**
Date Sampled: 04/02/20 11:37
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	54.7			mg/L	2	20	04/10/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Total Alkalinity		1	54.7			mg/L	2	20	04/10/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			04/13/20 0:00	calc
Sum of Anions			1.4			meq/L			04/13/20 0:00	calc
Sum of Cations			1.4			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:24	rbt
Conductivity @25C	SM2510B	1	142			umhos/cm	1	10	04/10/20 19:00	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U	*	mg/L	0.003	0.01	04/07/20 14:08	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		56			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:22	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.03	B		mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.03	B	*	mg/L	0.02	0.1	04/03/20 22:13	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:13	pjb
pH (lab)	SM4500H+ B									
pH		1	8.1	H		units	0.1	0.1	04/10/20 0:00	eep
pH measured at		1	20.5			C	0.1	0.1	04/10/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	106		*	mg/L	20	40	04/06/20 19:23	jck
Sulfate	D516-02/-07/-11 - Turbidimetric	1	13.7			mg/L	1	5	04/08/20 11:06	rbt

CRG Mining, LLC
Project ID:
Sample ID: CM3

ACZ Sample ID: **L58263-09**
Date Sampled: 04/02/20 11:45
Date Received: 04/03/20
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation		-						04/07/20 13:39	rbt
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								04/07/20 14:07	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U		mg/L	0.05	0.3	04/08/20 20:54	jlw
Antimony, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0004	0.002	04/08/20 16:11	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.0017			mg/L	0.0002	0.001	04/08/20 16:11	mfm
Barium, dissolved	M200.7 ICP	1	0.012	B		mg/L	0.007	0.04	04/08/20 20:54	jlw
Beryllium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	04/08/20 16:11	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00015	B		mg/L	0.00005	0.0003	04/08/20 16:11	mfm
Calcium, dissolved	M200.7 ICP	1	17.1			mg/L	0.1	0.5	04/08/20 20:54	jlw
Chromium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0005	0.002	04/08/20 16:11	mfm
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:54	jlw
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:54	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.06	0.2	04/08/20 20:54	jlw
Lead, dissolved	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0005	04/08/20 16:11	mfm
Magnesium, dissolved	M200.7 ICP	1	5.1			mg/L	0.2	1	04/08/20 20:54	jlw
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	04/08/20 20:54	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	04/10/20 13:56	slm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	04/08/20 20:54	jlw
Potassium, dissolved	M200.7 ICP	1	0.6	B		mg/L	0.2	1	04/08/20 20:54	jlw
Sodium, dissolved	M200.7 ICP	1	2.5			mg/L	0.2	1	04/08/20 20:54	jlw
Vanadium, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.03	04/08/20 20:54	jlw
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.02	0.05	04/08/20 20:54	jlw

CRG Mining, LLC
Project ID:
Sample ID: CM3

ACZ Sample ID: **L58263-09**
Date Sampled: 04/02/20 11:45
Date Received: 04/03/20
Sample Matrix: Surface Water

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO ₃	SM2320B - Titration									
Bicarbonate as CaCO ₃		1	66.2			mg/L	2	20	04/10/20 0:00	eep
Carbonate as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Hydroxide as CaCO ₃		1		U		mg/L	2	20	04/10/20 0:00	eep
Total Alkalinity		1	66.2			mg/L	2	20	04/10/20 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			04/13/20 0:00	calc
Sum of Anions			1.5			meq/L			04/13/20 0:00	calc
Sum of Cations			1.4			meq/L			04/13/20 0:00	calc
Chloride	SM4500Cl-E	1		U	*	mg/L	0.5	2	04/09/20 11:24	rbt
Conductivity @25C	SM2510B	1	139			umhos/cm	1	10	04/10/20 19:10	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5		U	*	mg/L	0.003	0.01	04/07/20 14:09	rbt
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		64			mg/L	0.2	5	04/13/20 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							04/03/20 15:25	nnk
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.08	B		mg/L	0.02	0.1	04/13/20 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.08	B	*	mg/L	0.02	0.1	04/03/20 22:16	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	04/03/20 22:16	pjb
pH (lab)	SM4500H+ B									
pH		1	8.1	H		units	0.1	0.1	04/10/20 0:00	eep
pH measured at		1	20.6			C	0.1	0.1	04/10/20 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	92		*	mg/L	20	40	04/06/20 19:26	jck
Sulfate	D516-02/-07/-11 - Turbidimetric	1	8.7			mg/L	1	5	04/08/20 11:06	rbt

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>

CRG Mining, LLC

ACZ Project ID: **L58263**

NOTE: If the Rec% column is null, the high/low 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
WG495268													
WG495268PBW1	PBW	04/09/20 17:50				U	mg/L		-20	20			
WG495268LCSW3	LCSW	04/09/20 18:09	WC200407-7	820.0001		849	mg/L	104	90	110			
WG495268LCSW6	LCSW	04/09/20 21:54	WC200407-7	820.0001		856	mg/L	104	90	110			
WG495268PBW2	PBW	04/09/20 22:03				U	mg/L		-20	20			
L58263-02DUP	DUP	04/10/20 1:14			75.3	75.4	mg/L				0	20	
WG495268LCSW9	LCSW	04/10/20 1:33	WC200407-7	820.0001		860	mg/L	105	90	110			
WG495268PBW3	PBW	04/10/20 1:42				U	mg/L		-20	20			
L58339-02DUP	DUP	04/10/20 3:20			11.7	12.2	mg/L				4	20	RA
WG495268LCSW12	LCSW	04/10/20 5:31	WC200407-7	820.0001		861	mg/L	105	90	110			
WG495268PBW4	PBW	04/10/20 5:40				U	mg/L		-20	20			
WG495268LCSW15	LCSW	04/10/20 9:45	WC200407-7	820.0001		892	mg/L	109	90	110			
WG495350													
WG495350PBW1	PBW	04/10/20 18:05				U	mg/L		-20	20			
WG495350LCSW3	LCSW	04/10/20 18:24	WC200407-7	820.0001		846	mg/L	103	90	110			
L58286-05DUP	DUP	04/10/20 19:58			97.2	97	mg/L				0	20	
WG495350LCSW6	LCSW	04/10/20 22:03	WC200407-7	820.0001		855	mg/L	104	90	110			
WG495350PBW2	PBW	04/10/20 22:12				U	mg/L		-20	20			
WG495350LCSW9	LCSW	04/11/20 2:11	WC200407-7	820.0001		856	mg/L	104	90	110			
WG495350PBW3	PBW	04/11/20 2:20				U	mg/L		-20	20			
L58367-05DUP	DUP	04/11/20 3:59			487	475	mg/L				2	20	
WG495350LCSW12	LCSW	04/11/20 5:41	WC200407-7	820.0001		858	mg/L	105	90	110			
WG495350PBW4	PBW	04/11/20 5:50				U	mg/L		-20	20			
WG495350LCSW15	LCSW	04/11/20 9:56	WC200407-7	820.0001		865	mg/L	105	90	110			

Aluminum, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.971	mg/L	99	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.15	0.15			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	1.0012		.96	mg/L	96	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	1.0012	U	.975	mg/L	97	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	1.0012	U	.984	mg/L	98	85	115	1	20	

Antimony, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495160													
WG495160ICV	ICV	04/08/20 15:39	MS200331-1	.02004		.02107	mg/L	105	90	110			
WG495160ICB	ICB	04/08/20 15:41				U	mg/L		-0.00088	0.00088			
WG495160LFB	LFB	04/08/20 15:48	MS200120-3	.01		.00896	mg/L	90	85	115			
L58263-05AS	AS	04/08/20 15:59	MS200120-3	.01	U	.0078	mg/L	78	70	130			
L58263-05ASD	ASD	04/08/20 16:00	MS200120-3	.01	U	.00831	mg/L	83	70	130	6	20	

CRG Mining, LLC

ACZ Project ID: **L58263**

NOTE: If the Rec% column is null, the high/low 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
WG495160													
WG495160ICV	ICV	04/08/20 15:39	MS200331-1	.05		.0497	mg/L	99	90	110			
WG495160ICB	ICB	04/08/20 15:41				U	mg/L		-0.00044	0.00044			
WG495160LFB	LFB	04/08/20 15:48	MS200120-3	.05005		.04715	mg/L	94	85	115			
L58263-05AS	AS	04/08/20 15:59	MS200120-3	.05005	.0083	.05642	mg/L	96	70	130			
L58263-05ASD	ASD	04/08/20 16:00	MS200120-3	.05005	.0083	.05791	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
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.9873	mg/L	99	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.021	0.021			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	.5005		.4787	mg/L	96	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	.5005	U	.4794	mg/L	96	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	.5005	U	.4789	mg/L	96	85	115	0	20	

Beryllium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495160													
WG495160ICV	ICV	04/08/20 15:39	MS200331-1	.05		.048369	mg/L	97	90	110			
WG495160ICB	ICB	04/08/20 15:41				U	mg/L		-0.000176	0.000176			
WG495160LFB	LFB	04/08/20 15:48	MS200120-3	.05005		.045209	mg/L	90	85	115			
L58263-05AS	AS	04/08/20 15:59	MS200120-3	.05005	U	.048416	mg/L	97	70	130			
L58263-05ASD	ASD	04/08/20 16:00	MS200120-3	.05005	U	.049032	mg/L	98	70	130	1	20	

Cadmium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495160													
WG495160ICV	ICV	04/08/20 15:39	MS200331-1	.05		.048586	mg/L	97	90	110			
WG495160ICB	ICB	04/08/20 15:41				U	mg/L		-0.00011	0.00011			
WG495160LFB	LFB	04/08/20 15:48	MS200120-3	.05005		.046237	mg/L	92	85	115			
L58263-05AS	AS	04/08/20 15:59	MS200120-3	.05005	.00047	.047699	mg/L	94	70	130			
L58263-05ASD	ASD	04/08/20 16:00	MS200120-3	.05005	.00047	.047735	mg/L	94	70	130	0	20	

Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	100		99.5	mg/L	100	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.3	0.3			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	67.99353		61.61	mg/L	91	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	67.99353	14	74.07	mg/L	88	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	67.99353	14	74.5	mg/L	89	85	115	1	20	

CRG Mining, LLC

ACZ Project ID: **L58263**

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

Chloride

SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495203													
WG495203ICB	ICB	04/09/20 8:00				U	mg/L		-1.5	1.5			
WG495203ICV	ICV	04/09/20 8:00	WI190501-1	54.835		55.25	mg/L	101	90	110			
WG495203LFB1	LFB	04/09/20 11:12	WI200327-3	30.03		32.94	mg/L	110	90	110			
L58266-01AS	AS	04/09/20 11:24	WI200327-3	30.03	58.6	84.81	mg/L	87	90	110			M2
L58266-02DUP	DUP	04/09/20 11:24			42.9	42.88	mg/L				0	20	
L58249-01AS	AS	04/09/20 11:34	WI200327-3	30.03	28.6	58.29	mg/L	99	90	110			
L58249-03DUP	DUP	04/09/20 11:34			37.9	37.94	mg/L				0	20	
WG495203LFB2	LFB	04/09/20 11:46	WI200327-3	30.03		31.65	mg/L	105	90	110			

Chromium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495160													
WG495160ICV	ICV	04/08/20 15:39	MS200331-1	.05		.05238	mg/L	105	90	110			
WG495160ICB	ICB	04/08/20 15:41				U	mg/L		-0.0011	0.0011			
WG495160LFB	LFB	04/08/20 15:48	MS200120-3	.05005		.04598	mg/L	92	85	115			
L58263-05AS	AS	04/08/20 15:59	MS200120-3	.05005	U	.04509	mg/L	90	70	130			
L58263-05ASD	ASD	04/08/20 16:00	MS200120-3	.05005	U	.04655	mg/L	93	70	130	3	20	

Cobalt, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2.002		1.942	mg/L	97	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.03	0.03			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	.5		.479	mg/L	96	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	.5	U	.474	mg/L	95	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	.5	U	.474	mg/L	95	85	115	0	20	

Conductivity @25C

SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495268													
WG495268LCSW2	LCSW	04/09/20 17:56	PCN60029	1410		1420	umhos/cm	101	90	110			
WG495268LCSW5	LCSW	04/09/20 21:41	PCN60029	1410		1420	umhos/cm	101	90	110			
L58263-02DUP	DUP	04/10/20 1:14			197	197	umhos/cm				0	20	
WG495268LCSW8	LCSW	04/10/20 1:20	PCN60029	1410		1420	umhos/cm	101	90	110			
L58339-02DUP	DUP	04/10/20 3:20			72	72	umhos/cm				0	20	
WG495268LCSW11	LCSW	04/10/20 5:18	PCN60029	1410		1400	umhos/cm	99	90	110			
WG495268LCSW14	LCSW	04/10/20 9:32	PCN60029	1410		1400	umhos/cm	99	90	110			
WG495350													
WG495350LCSW2	LCSW	04/10/20 18:11	PCN60029	1410		1430	umhos/cm	101	90	110			
L58286-05DUP	DUP	04/10/20 19:58			235	233	umhos/cm				1	20	
WG495350LCSW5	LCSW	04/10/20 21:50	PCN60029	1410		1430	umhos/cm	101	90	110			
WG495350LCSW8	LCSW	04/11/20 1:58	PCN60029	1410		1420	umhos/cm	101	90	110			
L58367-05DUP	DUP	04/11/20 3:59			1830	1830	umhos/cm				0	20	
WG495350LCSW11	LCSW	04/11/20 5:28	PCN60029	1410		1420	umhos/cm	101	90	110			
WG495350LCSW14	LCSW	04/11/20 9:42	PCN60029	1410		1410	umhos/cm	100	90	110			

CRG Mining, LLC

ACZ Project ID: **L58263**

NOTE: If the Rec% column is null, the high/low 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

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.944	mg/L	97	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.03	0.03			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	.502		.485	mg/L	97	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	.502	U	.48	mg/L	96	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	.502	U	.486	mg/L	97	85	115	1	20	

Cyanide, total

M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495062													
WG495062ICV	ICV	04/07/20 13:46	WI200325-11	.3		.2934	mg/L	98	90	110			
WG495062ICB	ICB	04/07/20 13:47				U	mg/L		-0.003	0.003			
WG495033LRB	LRB	04/07/20 13:48				U	mg/L		-0.003	0.003			
WG495033LFB	LFB	04/07/20 13:49	WI200325-7	.2		.2026	mg/L	101	90	110			
L58263-04LFM	LFM	04/07/20 14:02	WI200325-7	.2	U	.2024	mg/L	101	90	110			
L58263-05DUP	DUP	04/07/20 14:04			U	U	mg/L				0	20	RA
L58239-01LFM	LFM	04/07/20 14:12	WI200325-7	.2	.247	.4435	mg/L	98	90	110			
L58260-06DUP	DUP	04/07/20 14:20			3.54	3.536	mg/L				0	20	

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.93	mg/L	97	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.18	0.18			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	1.0018		.97	mg/L	97	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	1.0018	U	.966	mg/L	96	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	1.0018	U	.969	mg/L	97	85	115	0	20	

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495160													
WG495160ICV	ICV	04/08/20 15:39	MS200331-1	.05		.05097	mg/L	102	90	110			
WG495160ICB	ICB	04/08/20 15:41				U	mg/L		-0.00022	0.00022			
WG495160LFB	LFB	04/08/20 15:48	MS200120-3	.05005		.0462	mg/L	92	85	115			
L58263-05AS	AS	04/08/20 15:59	MS200120-3	.05005	U	.04616	mg/L	92	70	130			
L58263-05ASD	ASD	04/08/20 16:00	MS200120-3	.05005	U	.04647	mg/L	93	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
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	100		97.93	mg/L	98	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.6	0.6			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	49.99828		47.4	mg/L	95	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	49.99828	3.1	49.91	mg/L	94	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	49.99828	3.1	50.31	mg/L	94	85	115	1	20	

CRG Mining, LLC

ACZ Project ID: **L58263**

NOTE: If the Rec% column is null, the high/low 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
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.944	mg/L	97	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.03	0.03			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	.5015		.499	mg/L	100	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	.5015	U	.496	mg/L	99	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	.5015	U	.494	mg/L	99	85	115	0	20	

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495146													
WG495146ICV	ICV	04/09/20 13:25	HG200224-3	.004995		.0051	mg/L	102	95	105			
WG495146ICB	ICB	04/09/20 13:26				U	mg/L		-0.0002	0.0002			
WG495200													
WG495200LRB	LRB	04/09/20 16:28				U	mg/L		-0.00044	0.00044			
WG495200LFB	LFB	04/09/20 16:29	HG200330-3	.002002		.00194	mg/L	97	85	115			
L58263-05LFM	LFM	04/09/20 16:35	HG200330-3	.002002	U	.00189	mg/L	94	85	115			
L58263-05LFMD	LFMD	04/09/20 16:35	HG200330-3	.002002	U	.00186	mg/L	93	85	115	2	20	
WG495269													
WG495269ICV	ICV	04/10/20 13:48	HG200224-3	.004995		.00502	mg/L	101	95	105			
WG495269ICB	ICB	04/10/20 13:49				U	mg/L		-0.0002	0.0002			
WG495269LRB	LRB	04/10/20 13:51				U	mg/L		-0.00044	0.00044			
WG495269LFB	LFB	04/10/20 13:52	HG200330-3	.002002		.00182	mg/L	91	85	115			
L58263-08LFM	LFM	04/10/20 13:54	HG200330-3	.002002	U	.0019	mg/L	95	85	115			
L58263-08LFMD	LFMD	04/10/20 13:55	HG200330-3	.002002	U	.00192	mg/L	96	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
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.9632	mg/L	98	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.024	0.024			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	.501		.494	mg/L	99	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	.501	U	.4887	mg/L	98	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	.501	U	.4913	mg/L	98	85	115	1	20	

Nitrate/Nitrite as N, dissolved

M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494941													
WG494941ICV	ICV	04/03/20 21:45	WI200213-7	2.416		2.444	mg/L	101	90	110			
WG494941ICB	ICB	04/03/20 21:47				U	mg/L		-0.02	0.02			
WG494941LFB	LFB	04/03/20 21:50	WI200331-15	2		2.011	mg/L	101	90	110			
L58263-07AS	AS	04/03/20 22:12	WI200331-15	2	.08	2.097	mg/L	101	90	110			
L58263-08DUP	DUP	04/03/20 22:15			.03	.028	mg/L				7	20	RA
L58262-01AS	AS	04/03/20 22:24	WI200331-15	50	19.8	71.91	mg/L	104	90	110			
L58262-02DUP	DUP	04/03/20 22:26			3.57	3.564	mg/L				0	20	

CRG Mining, LLC

ACZ Project ID: **L58263**

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

Nitrite as N, dissolved

M353.2 - Automated Cadmium Reduction

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494941													
WG494941ICV	ICV	04/03/20 21:45	WI200213-7	.609		.609	mg/L	100	90	110			
WG494941ICB	ICB	04/03/20 21:47				U	mg/L		-0.01	0.01			
WG494941LFB	LFB	04/03/20 21:50	WI200331-15	1		.993	mg/L	99	90	110			
L58262-01AS	AS	04/03/20 21:53	WI200331-15	1	U	1.002	mg/L	100	90	110			
L58262-02DUP	DUP	04/03/20 21:55			.07	.068	mg/L				3	20	RA
L58263-07AS	AS	04/03/20 22:12	WI200331-15	1	U	.981	mg/L	98	90	110			
L58263-08DUP	DUP	04/03/20 22:15			U	U	mg/L				0	20	RA

pH (lab)

SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495268													
WG495268LCSW1	LCSW	04/09/20 17:54	PCN59370	6		6.1	units	102	5.9	6.1			
WG495268LCSW4	LCSW	04/09/20 21:39	PCN59370	6		6.1	units	102	5.9	6.1			
L58263-02DUP	DUP	04/10/20 1:14			8.2	8.2	units				0	20	
WG495268LCSW7	LCSW	04/10/20 1:18	PCN59370	6		6.1	units	102	5.9	6.1			
L58339-02DUP	DUP	04/10/20 3:20			6.9	6.9	units				0	20	
WG495268LCSW10	LCSW	04/10/20 5:16	PCN59370	6		6.1	units	102	5.9	6.1			
WG495268LCSW13	LCSW	04/10/20 9:30	PCN59370	6		6.1	units	102	5.9	6.1			
WG495350													
WG495350LCSW1	LCSW	04/10/20 18:09	PCN59370	6		6	units	100	5.9	6.1			
L58286-05DUP	DUP	04/10/20 19:58			7.5	7.6	units				1	20	
WG495350LCSW4	LCSW	04/10/20 21:48	PCN59370	6		6.1	units	102	5.9	6.1			
WG495350LCSW7	LCSW	04/11/20 1:56	PCN59370	6		6.1	units	102	5.9	6.1			
L58367-05DUP	DUP	04/11/20 3:59			8.6	8.6	units				0	20	
WG495350LCSW10	LCSW	04/11/20 5:26	PCN59370	6		6.1	units	102	5.9	6.1			
WG495350LCSW13	LCSW	04/11/20 9:40	PCN59370	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
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	20		20.22	mg/L	101	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.6	0.6			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	99.96426		107.3	mg/L	107	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	99.96426	.8	107.1	mg/L	106	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	99.96426	.8	107.9	mg/L	107	85	115	1	20	

Residue, Filterable (TDS) @180C

SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG494968													
WG494968PBW	PBW	04/06/20 8:54				U	mg/L		-20	20			
WG494968LCSW	LCSW	04/06/20 8:56	PCN60924	1000		1050	mg/L	105	80	120			
L58264-04DUP	DUP	04/06/20 9:28			2430	2400	mg/L				1	10	
WG495021													
WG495021PBW	PBW	04/06/20 18:55				U	mg/L		-20	20			
WG495021LCSW	LCSW	04/06/20 18:57	PCN60924	1000		1010	mg/L	101	80	120			
L58217-05DUP	DUP	04/06/20 19:02			1050	1000	mg/L				5	10	RA

CRG Mining, LLC

ACZ Project ID: **L58263**

NOTE: If the Rec% column is null, the high/low 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
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	100		100.27	mg/L	100	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.6	0.6			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	100.0086		97.04	mg/L	97	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	100.0086	3.9	100.1	mg/L	96	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	100.0086	3.9	100.9	mg/L	97	85	115	1	20	

Sulfate

D516-02/-07/-11 - Turbidimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495133													
WG495133ICB	ICB	04/08/20 9:08				U	mg/L		-3	3			
WG495133ICV	ICV	04/08/20 9:08	WI200406-1	20		19.2	mg/L	96	90	110			
WG495133LFB	LFB	04/08/20 11:05	WI190801-3	10.01		9.8	mg/L	98	90	110			
L58263-01AS	AS	04/08/20 11:05	WI190801-3	10.01	3.7	13.9	mg/L	102	90	110			
L58263-02DUP	DUP	04/08/20 11:05			27.9	28.4	mg/L				2	20	

Vanadium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.976	mg/L	99	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.015	0.015			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	.4995		.4928	mg/L	99	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	.4995	U	.4858	mg/L	97	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	.4995	U	.49	mg/L	98	85	115	1	20	

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG495168													
WG495168ICV	ICV	04/08/20 19:49	II200403-1	2		1.916	mg/L	96	95	105			
WG495168ICB	ICB	04/08/20 19:55				U	mg/L		-0.06	0.06			
WG495168LFB	LFB	04/08/20 20:08	II200407-3	.50075		.491	mg/L	98	85	115			
L58263-05AS	AS	04/08/20 20:31	II200407-3	.50075	.05	.529	mg/L	96	85	115			
L58263-05ASD	ASD	04/08/20 20:34	II200407-3	.50075	.05	.533	mg/L	96	85	115	1	20	

CRG Mining, LLC
ACZ Project ID: L58263

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L58263-01	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
L58263-02	WG495203	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
L58263-03	WG495203	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG495021	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495268	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).
L58263-04	WG495203	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG495062	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).
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG495021	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495268	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).

CRG Mining, LLC

ACZ Project ID: **L58263**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L58263-05	WG495203	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG495062	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).
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG495021	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG495268	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).
L58263-06	WG495203	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG495062	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).
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG495021	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L58263-07	WG495203	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG495062	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).
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time precedes filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG495021	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

CRG Mining, LLC

ACZ Project ID: **L58263**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L58263-08	WG495203	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG495062	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).
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG495021	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L58263-09	WG495203	Chloride	SM4500CI-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG495062	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).
	WG494941	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
		Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			M353.2 - Automated Cadmium Reduction	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG495021	Residue, Filterable (TDS) @180C	SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

CRG Mining, LLC

ACZ Project ID: **L58263**

No certification qualifiers associated with this analysis

CRG Mining, LLC

ACZ Project ID: L58263

Date Received: 04/03/2020 11:27

Received By:

Date Printed: 4/6/2020

Receipt Verification

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

Samples/Containers

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

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----	-----
6613	3.16	<=6.0	13	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.

CRG Mining, LLC

ACZ Project ID: L58263

Date Received: 04/03/2020 11:27

Received By:

Date Printed: 4/6/2020

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

ACZ**Laboratories, Inc.** L58263**CHAIN of CUSTODY**

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

Report to:

Name: JACOB WILKINSON
Company: CRG MINING LLC
E-mail: JWILKINSON@CRGMINING.COMAddress: 510 South Wisconsin St
Gunnison, CO 81230
Telephone: 970-417-3311

Copy of Report to:

Name:
Company:E-mail:
Telephone:

Invoice to:

Name: JACOB WILKINSON
Company: CRG MINING LLC
E-mail: JWILKINSON@CRGMINING.COMAddress: SAME ↑
Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES ☐
NO ☐

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

Are samples for SDWA Compliance Monitoring?

Yes ☐ No ☒

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

Sampler's Name: PAUL WOLFE Sampler's Site Information State CO Zip code 81401 Time Zone Mountain

*Sampler's Signature: PAUL WOLFE
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 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												
				GL 1	4-2-20/10:20AM	SW													
				GL 2	4-2-20/10:20AM	SW													
				GL 3	4-2-20/10:30AM	SW													
				PM 1	4-2-20/10:47AM	SW													
				PM 2	4-2-20/10:49AM	SW													
				PM 3	4-2-20/10:47AM	SW													
				CM 1	4-2-20/11:30AM	SW													
				CM 2	4-2-20/11:37AM	SW													
				CM 3	4-2-20/11:45AM	SW													

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

PAUL WOLFE 4/2/20 2:10PM JENNIFER 4/3/20 11:27

158263 Chain of Custody