

November 02, 2021

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

cc: Sid Tolbert

Project ID:

ACZ Project ID: L68996

Jake Wilkinson:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 06, 2021. This project has been assigned to ACZ's project number, L68996. Please reference this number in all future inquiries.

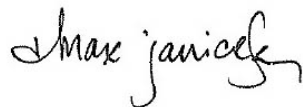
All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L68996. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

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

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



Max Janicek has reviewed and
approved this report.



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

ACZ Sample ID: **L68996-01**
Date Sampled: 10/05/21 09:50
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 9:58	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 13:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:18	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:45	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	10/19/21 15:45	mfm
Barium, dissolved	M200.7 ICP	1	0.0130	B		mg/L	0.007	0.035	10/12/21 17:18	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:11	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000093	B		mg/L	0.00005	0.00025	10/28/21 18:58	mfm
Calcium, dissolved	M200.7 ICP	1	15.2			mg/L	0.1	0.5	10/12/21 17:18	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:45	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:18	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:18	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:18	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00019	B		mg/L	0.0001	0.0005	10/28/21 18:58	mfm
Magnesium, dissolved	M200.7 ICP	1	4.88			mg/L	0.2	1	10/12/21 17:18	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:18	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:33	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:18	kja
Potassium, dissolved	M200.7 ICP	1	0.65	B		mg/L	0.2	1	10/12/21 17:18	kja
Sodium, dissolved	M200.7 ICP	1	1.98			mg/L	0.2	1	10/12/21 17:18	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:18	kja
Zinc, dissolved	M200.7 ICP	1	0.163			mg/L	0.02	0.05	10/12/21 17:18	kja

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

ACZ Sample ID: **L68996-01**
Date Sampled: 10/05/21 09:50
Date Received: 10/06/21
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	57.5			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	57.5			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/02/21 0:00	calc
Sum of Anions			1.3			meq/L			11/02/21 0:00	calc
Sum of Cations			1.3			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.92	B		mg/L	0.5	2	10/14/21 11:42	md
Conductivity @25C	SM2510B	1	120			umhos/cm	1	10	10/14/21 19:14	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:01	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		58			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 7:55	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.109			mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.109		*	mg/L	0.02	0.1	10/07/21 1:49	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 1:49	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.5			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	68		*	mg/L	20	40	10/11/21 11:53	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	6.7		*	mg/L	1	5	10/15/21 15:23	wtc

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

ACZ Sample ID: **L68996-02**
Date Sampled: 10/05/21 10:00
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 10:18	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:27	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:47	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00319			mg/L	0.0002	0.001	10/19/21 15:47	mfm
Barium, dissolved	M200.7 ICP	1	0.0129	B		mg/L	0.007	0.035	10/12/21 17:27	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:13	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.00385			mg/L	0.00005	0.00025	10/28/21 19:00	mfm
Calcium, dissolved	M200.7 ICP	1	25.4			mg/L	0.1	0.5	10/12/21 17:27	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:47	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:27	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:27	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:27	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00010	B		mg/L	0.0001	0.0005	10/28/21 19:00	mfm
Magnesium, dissolved	M200.7 ICP	1	7.48			mg/L	0.2	1	10/12/21 17:27	kja
Manganese, dissolved	M200.7 ICP	1	0.020	B		mg/L	0.01	0.05	10/12/21 17:27	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:34	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:27	kja
Potassium, dissolved	M200.7 ICP	1	0.94	B		mg/L	0.2	1	10/12/21 17:27	kja
Sodium, dissolved	M200.7 ICP	1	4.48			mg/L	0.2	1	10/12/21 17:27	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:27	kja
Zinc, dissolved	M200.7 ICP	1	0.302			mg/L	0.02	0.05	10/12/21 17:27	kja

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

ACZ Sample ID: **L68996-02**
Date Sampled: 10/05/21 10:00
Date Received: 10/06/21
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	71.8			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	71.8			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.3			%			11/02/21 0:00	calc
Sum of Anions			2.2			meq/L			11/02/21 0:00	calc
Sum of Cations			2.1			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.76	B		mg/L	0.5	2	10/14/21 11:42	md
Conductivity @25C	SM2510B	1	214			umhos/cm	1	10	10/14/21 19:23	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:02	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		94			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:01	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.328			mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.328		*	mg/L	0.02	0.1	10/07/21 1:50	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 1:50	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.6			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	130		*	mg/L	20	40	10/11/21 11:56	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	33.4		*	mg/L	1	5	10/15/21 15:24	wtc

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

ACZ Sample ID: **L68996-03**
Date Sampled: 10/05/21 10:25
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 10:37	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:30	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:49	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00027	B		mg/L	0.0002	0.001	10/19/21 15:49	mfm
Barium, dissolved	M200.7 ICP	1	0.0126	B		mg/L	0.007	0.035	10/12/21 17:30	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:15	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000257			mg/L	0.00005	0.00025	10/28/21 19:07	mfm
Calcium, dissolved	M200.7 ICP	1	15.4			mg/L	0.1	0.5	10/12/21 17:30	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:49	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:30	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:30	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:30	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	10/28/21 19:07	mfm
Magnesium, dissolved	M200.7 ICP	1	5.13			mg/L	0.2	1	10/12/21 17:30	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:30	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:35	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:30	kja
Potassium, dissolved	M200.7 ICP	1	0.68	B		mg/L	0.2	1	10/12/21 17:30	kja
Sodium, dissolved	M200.7 ICP	1	2.17			mg/L	0.2	1	10/12/21 17:30	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:30	kja
Zinc, dissolved	M200.7 ICP	1	0.076			mg/L	0.02	0.05	10/12/21 17:30	kja

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

ACZ Sample ID: **L68996-03**
Date Sampled: 10/05/21 10:25
Date Received: 10/06/21
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	58.5			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	58.5			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/02/21 0:00	calc
Sum of Anions			1.3			meq/L			11/02/21 0:00	calc
Sum of Cations			1.3			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	1.09	B		mg/L	0.5	2	10/14/21 11:44	md
Conductivity @25C	SM2510B	1	129			umhos/cm	1	10	10/14/21 19:32	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:04	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		60			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:07	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.120			mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.120		*	mg/L	0.02	0.1	10/07/21 1:52	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 1:52	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.5			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	74			mg/L	20	40	10/11/21 12:00	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	5.6		*	mg/L	1	5	10/15/21 15:24	wtc

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

ACZ Sample ID: **L68996-04**
Date Sampled: 10/05/21 10:35
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 10:46	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:33	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:51	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00024	B		mg/L	0.0002	0.001	10/19/21 15:51	mfm
Barium, dissolved	M200.7 ICP	1	0.0124	B		mg/L	0.007	0.035	10/12/21 17:33	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:20	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000215	B		mg/L	0.00005	0.00025	10/28/21 19:09	mfm
Calcium, dissolved	M200.7 ICP	1	17.2			mg/L	0.1	0.5	10/12/21 17:33	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:51	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:33	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:33	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:33	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	10/28/21 19:09	mfm
Magnesium, dissolved	M200.7 ICP	1	5.71			mg/L	0.2	1	10/12/21 17:33	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:33	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:38	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:33	kja
Potassium, dissolved	M200.7 ICP	1	0.71	B		mg/L	0.2	1	10/12/21 17:33	kja
Sodium, dissolved	M200.7 ICP	1	1.98			mg/L	0.2	1	10/12/21 17:33	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:33	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:33	kja

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

ACZ Sample ID: **L68996-04**
Date Sampled: 10/05/21 10:35
Date Received: 10/06/21
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	66.0			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	66.0			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			11/02/21 0:00	calc
Sum of Anions			1.5			meq/L			11/02/21 0:00	calc
Sum of Cations			1.4			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.71	B		mg/L	0.5	2	10/14/21 11:44	md
Conductivity @25C	SM2510B	1	143			umhos/cm	1	10	10/14/21 19:41	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:05	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		67			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:13	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.099	B		mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.099	B	*	mg/L	0.02	0.1	10/07/21 1:53	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 1:53	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.5			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	72			mg/L	20	40	10/11/21 12:02	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	5.4		*	mg/L	1	5	10/15/21 15:24	wtc

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

ACZ Sample ID: **L68996-05**
Date Sampled: 10/05/21 10:50
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 10:56	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:43	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:53	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00884			mg/L	0.0002	0.001	10/19/21 15:53	mfm
Barium, dissolved	M200.7 ICP	1	<0.007	U		mg/L	0.007	0.035	10/12/21 17:43	kja
Beryllium, dissolved	M200.8 ICP-MS	1	0.000124	B		mg/L	0.00008	0.00025	10/26/21 11:22	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000613			mg/L	0.00005	0.00025	10/28/21 19:11	mfm
Calcium, dissolved	M200.7 ICP	1	14.8			mg/L	0.1	0.5	10/12/21 17:43	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:53	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:43	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:43	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:43	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	10/28/21 19:11	mfm
Magnesium, dissolved	M200.7 ICP	1	3.23			mg/L	0.2	1	10/12/21 17:43	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:43	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:39	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:43	kja
Potassium, dissolved	M200.7 ICP	1	1.12			mg/L	0.2	1	10/12/21 17:43	kja
Sodium, dissolved	M200.7 ICP	1	4.19			mg/L	0.2	1	10/12/21 17:43	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:43	kja
Zinc, dissolved	M200.7 ICP	1	0.082			mg/L	0.02	0.05	10/12/21 17:43	kja

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

ACZ Sample ID: **L68996-05**
Date Sampled: 10/05/21 10:50
Date Received: 10/06/21
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	42.2			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	42.2			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.0			%			11/02/21 0:00	calc
Sum of Anions			1.3			meq/L			11/02/21 0:00	calc
Sum of Cations			1.2			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.90	B		mg/L	0.5	2	10/14/21 11:45	md
Conductivity @25C	SM2510B	1	127			umhos/cm	1	10	10/14/21 19:50	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:06	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		50			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:19	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.046	B		mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.046	B	*	mg/L	0.02	0.1	10/07/21 1:54	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 1:54	pjb
pH (lab)	SM4500H+ B									
pH		1	8.0	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.6			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	76			mg/L	20	40	10/11/21 12:04	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	20.3		*	mg/L	1	5	10/15/21 15:24	wtc

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

ACZ Sample ID: **L68996-06**
Date Sampled: 10/05/21 11:05
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 11:06	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:46	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:54	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00131			mg/L	0.0002	0.001	10/19/21 15:54	mfm
Barium, dissolved	M200.7 ICP	1	0.0116	B		mg/L	0.007	0.035	10/12/21 17:46	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:24	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000247	B		mg/L	0.00005	0.00025	10/28/21 19:14	mfm
Calcium, dissolved	M200.7 ICP	1	17.0			mg/L	0.1	0.5	10/12/21 17:46	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:54	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:46	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:46	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:46	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00011	B		mg/L	0.0001	0.0005	10/28/21 19:14	mfm
Magnesium, dissolved	M200.7 ICP	1	5.44			mg/L	0.2	1	10/12/21 17:46	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:46	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:42	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:46	kja
Potassium, dissolved	M200.7 ICP	1	0.75	B		mg/L	0.2	1	10/12/21 17:46	kja
Sodium, dissolved	M200.7 ICP	1	2.15			mg/L	0.2	1	10/12/21 17:46	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:46	kja
Zinc, dissolved	M200.7 ICP	1	0.036	B		mg/L	0.02	0.05	10/12/21 17:46	kja

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

ACZ Sample ID: **L68996-06**
Date Sampled: 10/05/21 11:05
Date Received: 10/06/21
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	63.8			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	63.8			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			11/02/21 0:00	calc
Sum of Anions			1.4			meq/L			11/02/21 0:00	calc
Sum of Cations			1.4			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.83	B		mg/L	0.5	2	10/14/21 11:45	md
Conductivity @25C	SM2510B	1	142			umhos/cm	1	10	10/14/21 19:59	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:08	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		65			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:26	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.098	B		mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.098	B	*	mg/L	0.02	0.1	10/07/21 1:57	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 1:57	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.6			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	68			mg/L	20	40	10/11/21 12:06	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	6.4		*	mg/L	1	5	10/15/21 15:24	wtc

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

ACZ Sample ID: **L68996-07**
Date Sampled: 10/05/21 11:20
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 11:15	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:49	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:56	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00129			mg/L	0.0002	0.001	10/19/21 15:56	mfm
Barium, dissolved	M200.7 ICP	1	0.0135	B		mg/L	0.007	0.035	10/12/21 17:49	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:26	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000210	B		mg/L	0.00005	0.00025	10/28/21 19:16	mfm
Calcium, dissolved	M200.7 ICP	1	17.0			mg/L	0.1	0.5	10/12/21 17:49	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:56	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:49	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:49	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:49	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00013	B		mg/L	0.0001	0.0005	10/28/21 19:16	mfm
Magnesium, dissolved	M200.7 ICP	1	5.53			mg/L	0.2	1	10/12/21 17:49	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:49	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:43	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:49	kja
Potassium, dissolved	M200.7 ICP	1	0.74	B		mg/L	0.2	1	10/12/21 17:49	kja
Sodium, dissolved	M200.7 ICP	1	2.14			mg/L	0.2	1	10/12/21 17:49	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:49	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:49	kja

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

ACZ Sample ID: **L68996-07**
Date Sampled: 10/05/21 11:20
Date Received: 10/06/21
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	64.4			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	64.4			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			11/02/21 0:00	calc
Sum of Anions			1.5			meq/L			11/02/21 0:00	calc
Sum of Cations			1.4			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.84	B		mg/L	0.5	2	10/14/21 11:46	md
Conductivity @25C	SM2510B	1	144			umhos/cm	1	10	10/14/21 20:08	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:09	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		65			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:32	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.081	B		mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.081	B	*	mg/L	0.02	0.1	10/07/21 1:59	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 1:59	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.5			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	72			mg/L	20	40	10/11/21 12:09	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	6.6		*	mg/L	1	5	10/15/21 15:25	wtc

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

ACZ Sample ID: **L68996-08**
Date Sampled: 10/05/21 11:35
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 11:25	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:52	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 15:58	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00189			mg/L	0.0002	0.001	10/19/21 15:58	mfm
Barium, dissolved	M200.7 ICP	1	0.0111	B		mg/L	0.007	0.035	10/12/21 17:52	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:31	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000124	B		mg/L	0.00005	0.00025	10/28/21 19:23	mfm
Calcium, dissolved	M200.7 ICP	1	17.4			mg/L	0.1	0.5	10/12/21 17:52	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 15:58	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:52	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:52	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:52	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	10/28/21 19:23	mfm
Magnesium, dissolved	M200.7 ICP	1	3.27			mg/L	0.2	1	10/12/21 17:52	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:52	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:44	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:52	kja
Potassium, dissolved	M200.7 ICP	1	0.62	B		mg/L	0.2	1	10/12/21 17:52	kja
Sodium, dissolved	M200.7 ICP	1	5.96			mg/L	0.2	1	10/12/21 17:52	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:52	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:52	kja

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

ACZ Sample ID: **L68996-08**
Date Sampled: 10/05/21 11:35
Date Received: 10/06/21
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	53.0			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	53.0			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.7			%			11/02/21 0:00	calc
Sum of Anions			1.3			meq/L			11/02/21 0:00	calc
Sum of Cations			1.4			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.79	B	*	mg/L	0.5	2	10/14/21 11:47	md
Conductivity @25C	SM2510B	1	146			umhos/cm	1	10	10/14/21 20:17	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:10	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		57			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:38	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.044	B		mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.044	B	*	mg/L	0.02	0.1	10/07/21 2:05	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 2:05	pjb
pH (lab)	SM4500H+ B									
pH		1	8.1	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.6			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	90			mg/L	20	40	10/11/21 12:11	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	12.2		*	mg/L	1	5	10/15/21 15:25	wtc

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

ACZ Sample ID: **L68996-09**
Date Sampled: 10/05/21 11:50
Date Received: 10/06/21
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								10/13/21 11:34	mjj1
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								10/10/21 14:32	kja

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	<0.05	U		mg/L	0.05	0.25	10/12/21 17:55	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	10/19/21 16:00	mfm
Arsenic, dissolved	M200.8 ICP-MS	1	0.00141			mg/L	0.0002	0.001	10/19/21 16:00	mfm
Barium, dissolved	M200.7 ICP	1	0.0118	B		mg/L	0.007	0.035	10/12/21 17:55	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	10/26/21 11:33	mfm
Cadmium, dissolved	M200.8 ICP-MS	1	0.000199	B		mg/L	0.00005	0.00025	10/28/21 19:25	mfm
Calcium, dissolved	M200.7 ICP	1	17.0			mg/L	0.1	0.5	10/12/21 17:55	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	10/19/21 16:00	mfm
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:55	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:55	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	10/12/21 17:55	kja
Lead, dissolved	M200.8 ICP-MS	1	0.00011	B		mg/L	0.0001	0.0005	10/28/21 19:25	mfm
Magnesium, dissolved	M200.7 ICP	1	5.37			mg/L	0.2	1	10/12/21 17:55	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	10/12/21 17:55	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	10/11/21 12:45	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	10/12/21 17:55	kja
Potassium, dissolved	M200.7 ICP	1	0.76	B		mg/L	0.2	1	10/12/21 17:55	kja
Sodium, dissolved	M200.7 ICP	1	2.42			mg/L	0.2	1	10/12/21 17:55	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	10/12/21 17:55	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	10/12/21 17:55	kja

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

ACZ Sample ID: **L68996-09**
Date Sampled: 10/05/21 11:50
Date Received: 10/06/21
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	63.8			mg/L	2	20	10/14/21 0:00	jck
Carbonate as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Hydroxide as CaCO ₃		1	<2	U		mg/L	2	20	10/14/21 0:00	jck
Total Alkalinity		1	63.8			mg/L	2	20	10/14/21 0:00	jck
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.4			%			11/02/21 0:00	calc
Sum of Anions			1.5			meq/L			11/02/21 0:00	calc
Sum of Cations			1.4			meq/L			11/02/21 0:00	calc
Chloride	SM4500Cl-E	1	0.84	B	*	mg/L	0.5	2	10/14/21 11:48	md
Conductivity @25C	SM2510B	1	144			umhos/cm	1	10	10/14/21 20:35	jck
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	10/13/21 17:11	mjj1
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		65			mg/L	0.2	5	11/02/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							10/08/21 8:44	mlh
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.077	B		mg/L	0.02	0.1	11/02/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.077	B	*	mg/L	0.02	0.1	10/07/21 2:06	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	U	*	mg/L	0.01	0.05	10/07/21 2:06	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/14/21 0:00	jck
pH measured at		1	22.7			C	0.1	0.1	10/14/21 0:00	jck
Residue, Filterable (TDS) @180C	SM2540C	1	80			mg/L	20	40	10/11/21 12:13	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	7.0		*	mg/L	1	5	10/15/21 15:25	wtc



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

ACZ Project ID: **L68996**

NOTE: If the Rec% column is null, the high/low 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
WG529511													
WG529511PBW1	PBW	10/14/21 18:36				7.9	mg/L		-20	20			
WG529511LCSW3	LCSW	10/14/21 18:55	WC210930-12	820.0001		807.1	mg/L	98	90	110			
L68996-08DUP	DUP	10/14/21 20:26			53	52.9	mg/L				0	20	
L69013-01DUP	DUP	10/14/21 22:10			224	209.2	mg/L				7	20	
WG529511LCSW6	LCSW	10/14/21 22:28	WC210930-12	820.0001		795.7	mg/L	97	90	110			
WG529511PBW2	PBW	10/14/21 22:36				2.1	mg/L		-20	20			
WG529511LCSW9	LCSW	10/15/21 2:23	WC210930-12	820.0001		810	mg/L	99	90	110			
WG529511PBW3	PBW	10/15/21 2:30				U	mg/L		-20	20			
WG529511LCSW12	LCSW	10/15/21 6:01	WC210930-12	820.0001		816.4	mg/L	100	90	110			
WG529511PBW4	PBW	10/15/21 6:09				2.7	mg/L		-20	20			
WG529511LCSW15	LCSW	10/15/21 9:41	WC210930-12	820.0001		823.9	mg/L	100	90	110			

Aluminum, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		1.955	mg/L	98	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.15	0.15			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	1.0008		.979	mg/L	98	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	1.0008	U	.985	mg/L	98	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	1.0008	U	.986	mg/L	99	85	115	0	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	1.0008	U	1.032	mg/L	103	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	1.0008	U	1.035	mg/L	103	85	115	0	20	

Antimony, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529823													
WG529823ICV	ICV	10/19/21 15:20	MS211013-2	.0201		.02083	mg/L	104	90	110			
WG529823ICB	ICB	10/19/21 15:22				.00058	mg/L		-0.00088	0.00088			
WG529823LFB	LFB	10/19/21 15:24	MS210927-3	.01		.00939	mg/L	94	85	115			
L68900-05AS	AS	10/19/21 15:31	MS210927-3	.01	.00191	.01034	mg/L	84	70	130			
L68900-05ASD	ASD	10/19/21 15:33	MS210927-3	.01	.00191	.01076	mg/L	89	70	130	4	20	
L69100-01AS	AS	10/19/21 16:07	MS210927-3	.01	U	.00881	mg/L	88	70	130			
L69100-01ASD	ASD	10/19/21 16:09	MS210927-3	.01	U	.00905	mg/L	91	70	130	3	20	

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529823													
WG529823ICV	ICV	10/19/21 15:20	MS211013-2	.05		.05164	mg/L	103	90	110			
WG529823ICB	ICB	10/19/21 15:22				U	mg/L		-0.00044	0.00044			
WG529823LFB	LFB	10/19/21 15:24	MS210927-3	.05005		.04983	mg/L	100	85	115			
L68900-05AS	AS	10/19/21 15:31	MS210927-3	.05005	.024	.07832	mg/L	109	70	130			
L68900-05ASD	ASD	10/19/21 15:33	MS210927-3	.05005	.024	.07901	mg/L	110	70	130	1	20	
L69100-01AS	AS	10/19/21 16:07	MS210927-3	.05005	.00411	.05567	mg/L	103	70	130			
L69100-01ASD	ASD	10/19/21 16:09	MS210927-3	.05005	.00411	.04917	mg/L	90	70	130	12	20	

CRG

ACZ Project ID: **L68996**

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

Barium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		1.9998	mg/L	100	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.021	0.021			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	.5		.4934	mg/L	99	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	.5	.013	.5088	mg/L	99	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	.5	.013	.508	mg/L	99	85	115	0	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	.5	.0366	.5383	mg/L	100	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	.5	.0366	.5383	mg/L	100	85	115	0	20	

Beryllium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530291													
WG530291ICV	ICV	10/26/21 11:06	MS211013-2	.05		.054663	mg/L	109	90	110			
WG530291ICB	ICB	10/26/21 11:08				.000165	mg/L		-0.000176	0.000176			
WG530291LFB	LFB	10/26/21 11:09	MS210927-3	.05005		.051959	mg/L	104	85	115			
L68996-03AS	AS	10/26/21 11:17	MS210927-3	.05005	U	.053836	mg/L	108	70	130			
L68996-03ASD	ASD	10/26/21 11:18	MS210927-3	.05005	U	.052299	mg/L	104	70	130	3	20	

Cadmium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530570													
WG530570ICV	ICV	10/28/21 18:51	MS211013-2	.05		.055247	mg/L	110	90	110			
WG530570ICB	ICB	10/28/21 18:53				U	mg/L		-0.00011	0.00011			
WG530570LFB	LFB	10/28/21 18:56	MS210927-3	.05005		.050308	mg/L	101	85	115			
L68996-02AS	AS	10/28/21 19:02	MS210927-3	.05005	.00385	.066011	mg/L	124	70	130			
L68996-02ASD	ASD	10/28/21 19:05	MS210927-3	.05005	.00385	.066638	mg/L	125	70	130	1	20	

Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	100		99.09	mg/L	99	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.3	0.3			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	67.98972		67.48	mg/L	99	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	67.98972	15.2	82.83	mg/L	99	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	67.98972	15.2	82.24	mg/L	99	85	115	1	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	67.98972	120	185.1	mg/L	96	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	67.98972	120	185.9	mg/L	97	85	115	0	20	

Chloride

SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529444													
WG529444ICV	ICV	10/14/21 11:30	WI210503-1	54.89		53.47	mg/L	97	90	110			
WG529444ICB	ICB	10/14/21 11:30				U	mg/L		-1.5	1.5			
WG529444LFB1	LFB	10/14/21 11:31	WI210908-11	29.97		29.48	mg/L	98	90	110			
L68970-06AS	AS	10/14/21 11:39	WI210908-11	29.97	31.5	59.77	mg/L	94	90	110			
L68970-07DUP	DUP	10/14/21 11:40			27.3	28.63	mg/L				5	20	
WG529444LFB2	LFB	10/14/21 11:46	WI210908-11	29.97		29.12	mg/L	97	90	110			
L68996-08AS	AS	10/14/21 11:47	WI210908-11	29.97	.79	28.86	mg/L	94	90	110			
L68996-09DUP	DUP	10/14/21 11:48			.84	.75	mg/L				11	20	RA

CRG

ACZ Project ID: **L68996**

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

Chromium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529823													
WG529823ICV	ICV	10/19/21 15:20	MS211013-2	.05		.05357	mg/L	107	90	110			
WG529823ICB	ICB	10/19/21 15:22				U	mg/L		-0.0011	0.0011			
WG529823LFB	LFB	10/19/21 15:24	MS210927-3	.05		.04996	mg/L	100	85	115			
L68900-05AS	AS	10/19/21 15:31	MS210927-3	.05	U	.05156	mg/L	103	70	130			
L68900-05ASD	ASD	10/19/21 15:33	MS210927-3	.05	U	.0508	mg/L	102	70	130	1	20	
L69100-01AS	AS	10/19/21 16:07	MS210927-3	.05	.00122	.04904	mg/L	96	70	130			
L69100-01ASD	ASD	10/19/21 16:09	MS210927-3	.05	.00122	.04326	mg/L	84	70	130	13	20	

Cobalt, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2.01		1.965	mg/L	98	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.06	0.06			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	.5005		.486	mg/L	97	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	.5005	U	.48	mg/L	96	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	.5005	U	.487	mg/L	97	85	115	1	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	.5005	U	.494	mg/L	99	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	.5005	U	.488	mg/L	98	85	115	1	20	

Conductivity @25C

SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529511													
WG529511LCSW2	LCSW	10/14/21 18:42	PCN64228	1409		1453	umhos/cm	103	90	110			
L68996-08DUP	DUP	10/14/21 20:26			146	147	umhos/cm				1	20	
L69013-01DUP	DUP	10/14/21 22:10			575	573	umhos/cm				0	20	
WG529511LCSW5	LCSW	10/14/21 22:17	PCN64228	1409		1442	umhos/cm	102	90	110			
WG529511LCSW8	LCSW	10/15/21 2:10	PCN64228	1409		1440	umhos/cm	102	90	110			
WG529511LCSW11	LCSW	10/15/21 5:48	PCN64228	1409		1436	umhos/cm	102	90	110			
WG529511LCSW14	LCSW	10/15/21 9:28	PCN64228	1409		1429	umhos/cm	101	90	110			

Copper, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		1.947	mg/L	97	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.03	0.03			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	.5		.494	mg/L	99	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	.5	U	.499	mg/L	100	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	.5	U	.499	mg/L	100	85	115	0	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	.5	U	.508	mg/L	102	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	.5	U	.51	mg/L	102	85	115	0	20	

CRG

ACZ Project ID: **L68996**

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

Cyanide, total

M335.4 - Colorimetric w/ distillation

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529386													
WG529386ICV	ICV	10/13/21 16:56	WI211011-7	.3		.2924	mg/L	97	90	110			
WG529386ICB	ICB	10/13/21 16:57				U	mg/L		-0.003	0.003			
WG529299LRB	LRB	10/13/21 16:58				U	mg/L		-0.003	0.003			
WG529299LFB	LFB	10/13/21 16:59	WI211011-4	.2		.199	mg/L	100	90	110			
L68996-01DUP	DUP	10/13/21 17:01			U	U	mg/L				0	20	RA
L68996-02LFM	LFM	10/13/21 17:03	WI211011-4	.2	U	.1895	mg/L	95	90	110			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		1.944	mg/L	97	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.18	0.18			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	1.0001		.985	mg/L	98	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	1.0001	U	.992	mg/L	99	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	1.0001	U	.993	mg/L	99	85	115	0	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	1.0001	U	.999	mg/L	100	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	1.0001	U	.994	mg/L	99	85	115	1	20	

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG530570													
WG530570ICV	ICV	10/28/21 18:51	MS211013-2	.05		.05488	mg/L	110	90	110			
WG530570ICB	ICB	10/28/21 18:53				U	mg/L		-0.00022	0.00022			
WG530570LFB	LFB	10/28/21 18:56	MS210927-3	.05005		.0522	mg/L	104	85	115			
L68996-02AS	AS	10/28/21 19:02	MS210927-3	.05005	.0001	.06162	mg/L	123	70	130			
L68996-02ASD	ASD	10/28/21 19:05	MS210927-3	.05005	.0001	.06187	mg/L	123	70	130	0	20	

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	100		95.13	mg/L	95	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.6	0.6			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	49.99828		46.92	mg/L	94	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	49.99828	4.88	52.32	mg/L	95	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	49.99828	4.88	51.78	mg/L	94	85	115	1	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	49.99828	41.7	90.13	mg/L	97	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	49.99828	41.7	90.39	mg/L	97	85	115	0	20	

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		1.933	mg/L	97	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.03	0.03			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	.5005		.493	mg/L	99	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	.5005	U	.499	mg/L	100	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	.5005	U	.493	mg/L	99	85	115	1	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	.5005	U	.501	mg/L	100	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	.5005	U	.501	mg/L	100	85	115	0	20	

CRG

ACZ Project ID: **L68996**

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

Mercury, total

M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529090													
WG529090ICV	ICV	10/11/21 12:13	HG211004-3	.00501		.00488	mg/L	97	95	105			
WG529090ICB	ICB	10/11/21 12:14				U	mg/L		-0.0002	0.0002			
WG529088													
WG529088LRB	LRB	10/11/21 12:32				U	mg/L		-0.00044	0.00044			
WG529088LFB	LFB	10/11/21 12:32	HG211004-6	.002002		.00204	mg/L	102	85	115			
L68996-03LFM	LFM	10/11/21 12:36	HG211004-6	.002002	U	.00207	mg/L	103	85	115			
L68996-03LFMD	LFMD	10/11/21 12:37	HG211004-6	.002002	U	.00203	mg/L	101	85	115	2	20	

Nickel, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		1.9792	mg/L	99	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.024	0.024			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	.5		.4949	mg/L	99	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	.5	U	.4952	mg/L	99	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	.5	U	.4933	mg/L	99	85	115	0	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	.5	U	.5001	mg/L	100	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	.5	U	.498	mg/L	100	85	115	0	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
WG528870													
WG528870ICV	ICV	10/07/21 1:28	WI210904-1	2.4161		2.304	mg/L	95	90	110			
WG528870ICB	ICB	10/07/21 1:30				U	mg/L		-0.02	0.02			
WG528870LFB	LFB	10/07/21 1:34	WI211001-5	2		1.976	mg/L	99	90	110			
L68954-03AS	AS	10/07/21 1:39	WI211001-5	2	U	1.962	mg/L	98	90	110			
L68955-01DUP	DUP	10/07/21 1:41			1.08	1.086	mg/L				1	20	
L68996-05AS	AS	10/07/21 1:55	WI211001-5	2	.046	2.074	mg/L	101	90	110			
L68996-06DUP	DUP	10/07/21 1:58			.098	.093	mg/L				5	20	RA

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
WG528870													
WG528870ICV	ICV	10/07/21 1:28	WI210904-1	.6089		.629	mg/L	103	90	110			
WG528870ICB	ICB	10/07/21 1:30				U	mg/L		-0.01	0.01			
WG528870LFB	LFB	10/07/21 1:34	WI211001-5	1		.99	mg/L	99	90	110			
L68954-03AS	AS	10/07/21 1:39	WI211001-5	1	U	.991	mg/L	99	90	110			
L68955-01DUP	DUP	10/07/21 1:41			.241	.241	mg/L				0	20	
L68996-05AS	AS	10/07/21 1:55	WI211001-5	1	U	1.032	mg/L	103	90	110			
L68996-06DUP	DUP	10/07/21 1:58			U	U	mg/L				0	20	RA

CRG

ACZ Project ID: **L68996**

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

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529511													
WG529511LCSW1	LCSW	10/14/21 18:40	PCN62948	6		6.1	units	102	5.9	6.1			
L68996-08DUP	DUP	10/14/21 20:26			8.1	8.1	units				0	20	
L69013-01DUP	DUP	10/14/21 22:10			8.4	8.4	units				0	20	
WG529511LCSW4	LCSW	10/14/21 22:15	PCN62948	6		6.1	units	102	5.9	6.1			
WG529511LCSW7	LCSW	10/15/21 2:08	PCN62948	6		6.1	units	102	5.9	6.1			
WG529511LCSW10	LCSW	10/15/21 5:46	PCN62948	6		6.1	units	102	5.9	6.1			
WG529511LCSW13	LCSW	10/15/21 9:26	PCN62948	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
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	20		19.58	mg/L	98	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.6	0.6			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	99.96008		96.72	mg/L	97	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	99.96008	.65	98.62	mg/L	98	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	99.96008	.65	97.47	mg/L	97	85	115	1	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	99.96008	1.36	102.9	mg/L	102	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	99.96008	1.36	103.2	mg/L	102	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529134													
WG529134PBW	PBW	10/11/21 11:30				U	mg/L		-20	20			
WG529134LCSW	LCSW	10/11/21 11:32	PCN64137	1000		992	mg/L	99	80	120			
L68996-02DUP	DUP	10/11/21 11:58			130	122	mg/L				6	10	RA
L68998-02DUP	DUP	10/11/21 12:19			1060	1066	mg/L				1	10	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	100		99.01	mg/L	99	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.6	0.6			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	100.007		97.51	mg/L	98	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	100.007	1.98	100.7	mg/L	99	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	100.007	1.98	99.77	mg/L	98	85	115	1	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	100.007	271	357.9	mg/L	87	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	100.007	271	360.5	mg/L	89	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
WG529577													
WG529577ICB	ICB	10/15/21 9:05				U	mg/L		-3	3			
WG529577ICV	ICV	10/15/21 9:05	WI211012-1	20.46		20.2	mg/L	99	90	110			
WG529577LFB	LFB	10/15/21 15:21	WI210105-3	10		9.3	mg/L	93	90	110			
L68996-08AS	AS	10/15/21 15:25	WI210105-3	10	12.2	23.8	mg/L	116	90	110			M1
L68996-09DUP	DUP	10/15/21 15:25			7	7	mg/L				0	20	RA

CRG

ACZ Project ID: **L68996**

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

Vanadium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		2.002	mg/L	100	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.015	0.015			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	.5005		.4987	mg/L	100	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	.5005	U	.497	mg/L	99	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	.5005	U	.5	mg/L	100	85	115	1	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	.5005	U	.5277	mg/L	105	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	.5005	U	.517	mg/L	103	85	115	2	20	

Zinc, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG529231													
WG529231ICV	ICV	10/12/21 16:48	II211001-1	2		1.947	mg/L	97	95	105			
WG529231ICB	ICB	10/12/21 16:53				U	mg/L		-0.06	0.06			
WG529231LFB	LFB	10/12/21 17:06	II210930-2	.50045		.506	mg/L	101	85	115			
L68996-01AS	AS	10/12/21 17:21	II210930-2	.50045	.163	.666	mg/L	101	85	115			
L68996-01ASD	ASD	10/12/21 17:24	II210930-2	.50045	.163	.666	mg/L	101	85	115	0	20	
L68998-04AS	AS	10/12/21 18:10	II210930-2	.50045	U	.544	mg/L	109	85	115			
L68998-04ASD	ASD	10/12/21 18:20	II210930-2	.50045	U	.528	mg/L	106	85	115	3	20	

CRG Mining, LLC

ACZ Project ID: **L68996**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68996-01	WG529386	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).
	WG528870	Nitrate/Nitrite as N, dissolved	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	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG529134	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).
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68996-02	WG529386	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).
	WG528870	Nitrate/Nitrite as N, dissolved	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	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG529134	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).
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68996-03	WG529386	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).
	WG528870	Nitrate/Nitrite as N, dissolved	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	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68996-04	WG529386	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).
	WG528870	Nitrate/Nitrite as N, dissolved	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	ZU	Analysis date/time preceeds filter date/time. A portion of sample was filtered and analyzed prior to the creation of a Filter workgroup.
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

CRG Mining, LLC

ACZ Project ID: **L68996**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68996-05	WG529386	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).
	WG528870	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.
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68996-06	WG529386	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).
	WG528870	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.
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68996-07	WG529386	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).
	WG528870	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.
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

CRG Mining, LLC

ACZ Project ID: **L68996**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L68996-08	WG529444	Chloride	SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529386	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).
	WG528870	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.
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L68996-09	WG529444	Chloride	SM4500Cl-E	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG529386	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).
	WG528870	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.
	WG529577	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			D516-02/-07/-11 - TURBIDIMETRIC	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

CRG Mining, LLC

ACZ Project ID: **L68996**

No certification qualifiers associated with this analysis

CRG Mining, LLC

ACZ Project ID: L68996

Date Received: 10/06/2021 10:49

Received By:

Date Printed: 10/7/2021

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?
-----	-----	-----	-----	-----
6266	2.8	<=6.0	15	Yes

Was ice present in the shipment container(s)?

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

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

CRG Mining, LLC

ACZ Project ID: L68996

Date Received: 10/06/2021 10:49

Received By:

Date Printed: 10/7/2021

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

ACZ**Laboratories, Inc.** L68996

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

CHAIN of CUSTODY**Report to:**

Name: SAKE WILKINSON
Company: CRG MINING LLC
E-mail: SWILKINSON@CRGMINING.COM

Address: 510 SOUTH WISCONSIN ST
GUNNISON, CO 81230
Telephone: 970-641-3450

Copy of Report to:

Name: SID TOLBERT
Company: CRG MINING LLC

E-mail: SID_TOLBERT@outlook.com
Telephone: 970-641-2128

Invoice to:

Name: SAME
Company:
E-mail:

Address:
Telephone:

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

YES ☒
NO ☐

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

Are samples for SDWA Compliance Monitoring?

Yes ☐ No ☒

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

Sampler's Name: SAKE WILKINSON Sampler's Site Information State CO Zip code 81270 Time Zone MS

*Sampler's Signature: [Signature]

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

PROJECT INFORMATION

ANALYSES REQUESTED (attach 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	10-5-21 09:50	SW	5
GL 2	10-5-21 10:00		
GL 3	10-5-21 10:25		
BM 1	10-5-21 10:35		
BM 2	10-5-21 10:50		
BM 3	10-5-21 11:05		
CM 1	10-5-21 11:20		
CM 2	10-5-21 11:35		
CM 3	10-5-21 11:50		
		↓	↓

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**SAKE WILKINSON[Signature]10/5/21 10:49

L68996 Chain of Custody

Account: CRG/CRG Mining, LLC

Bottle Order: BO48179

Internal Note:

Bill to Account: Bill to ACZ

Ship Date Requested: 09/27/2021

Request Placed at: 09/24/2021 15:33

Service Requested: UPS Ground

Sampling supplies

PACK	Qty	ACZ ID	Type	Description
	1	COC	Chain of Custody	Chain of Custody, 1 for 10 samples.
	2	SEAL	Custody Seal	Custody seals for cooler, two for each cooler.
	1	RETURN	Return Address	Return Address label, one for each cooler.
	45	LABELS	Sample Labels	ACZ supplied labels for sample containers
		TRIP HG		

ACZ Coolers

PACK	Qty	ACZ ID	Size	Weight	UPS Tracking Number
	1	6266	Large	12	

Quote number: BASELINE-SW-QTRLY

Sample Quantity: 9

2 Surface water samples quarterly, client is not field filtering

FILT products in quote. A FILT sticker affixed to a sample container indicates the laboratory will perform filtration.

PACK	Qty	Type	Size	Filter/Raw/Preserve	Instructions
	1	GREEN PC	125 ML	Green pre-cleaned Filtered/Nitric	Metals (dissolved including ICPMS) - This is a filtered sample. Completely fill container.
	1	PURPLE	250 ML	Raw/NaOH	Cyanide - Do not overfill as there is Sodium Hydroxide in the bottle.
	1	RAW	500 ML	Raw	Wet Chemistry (analyses that do not require preservative or filtration) - Completely fill container.
	1	RED	250 ML	Raw/Nitric	Metals (total except ICPMS) - Do not overfill as there is Nitric Acid in the bottle.
	1	WHITE	250 ML	Filtered	Wet chemistry (dissolved) - This is a filtered sample. Completely fill container.

Prepared By/Date: _____

mjj