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

Analytical Report

July 29, 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

Project ID:
ACZ Project ID: L67091

Jake Wilkinson:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 14, 2021. This project has been assigned to ACZ's project number, L67091. 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 L67091. 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 August 28, 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: ***L67091-01***
Date Sampled: *07/12/21 08:10*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/22/21 12:33	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 14:43	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	07/20/21 19:02	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:22	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	07/20/21 13:22	bsu
Barium, dissolved	M200.7 ICP	1	0.0130	B		mg/L	0.007	0.035	07/20/21 19:02	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:22	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	<0.00005	U		mg/L	0.00005	0.00025	07/20/21 13:22	bsu
Calcium, dissolved	M200.7 ICP	1	12.7			mg/L	0.1	0.5	07/20/21 19:02	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:22	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:02	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:02	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:02	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:22	bsu
Magnesium, dissolved	M200.7 ICP	1	4.87			mg/L	0.2	1	07/20/21 19:02	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:02	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:23	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:02	kja
Potassium, dissolved	M200.7 ICP	1	0.48	B		mg/L	0.2	1	07/20/21 19:02	kja
Sodium, dissolved	M200.7 ICP	1	1.58			mg/L	0.2	1	07/20/21 19:02	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 18:27	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:02	kja

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

ACZ Sample ID: ***L67091-01***
Date Sampled: *07/12/21 08:10*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	54.1		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	54.1		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.3			%			07/29/21 0:00	calc
Sum of Anions			1.2			meq/L			07/29/21 0:00	calc
Sum of Cations			1.1			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	0.54	B	*	mg/L	0.5	2	07/21/21 16:05	syw
Conductivity @25C	SM2510B	1	107		*	umhos/cm	1	10	07/16/21 21:47	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:23	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		52			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 12:43	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.04	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.041	BH	*	mg/L	0.02	0.1	07/16/21 0:49	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 0:49	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	21.7		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	70		*	mg/L	20	40	07/15/21 12:32	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	3.1	B	*	mg/L	1	5	07/26/21 12:35	syw

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

ACZ Sample ID: ***L67091-02***
Date Sampled: *07/12/21 08:20*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/22/21 12:43	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 14:43	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	07/20/21 19:05	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:24	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00285			mg/L	0.0002	0.001	07/20/21 13:24	bsu
Barium, dissolved	M200.7 ICP	1	0.0125	B		mg/L	0.007	0.035	07/20/21 19:05	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:24	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.00250			mg/L	0.00005	0.00025	07/20/21 13:24	bsu
Calcium, dissolved	M200.7 ICP	1	24.1			mg/L	0.1	0.5	07/20/21 19:05	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:24	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:05	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:05	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:05	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:24	bsu
Magnesium, dissolved	M200.7 ICP	1	7.17			mg/L	0.2	1	07/20/21 19:05	kja
Manganese, dissolved	M200.7 ICP	1	0.015	B		mg/L	0.01	0.05	07/20/21 19:05	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:24	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:05	kja
Potassium, dissolved	M200.7 ICP	1	0.91	B		mg/L	0.2	1	07/20/21 19:05	kja
Sodium, dissolved	M200.7 ICP	1	4.33			mg/L	0.2	1	07/20/21 19:05	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 18:36	kja
Zinc, dissolved	M200.7 ICP	1	0.266			mg/L	0.02	0.05	07/20/21 19:05	kja

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

ACZ Sample ID: ***L67091-02***
Date Sampled: *07/12/21 08:20*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	71.5		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	71.5		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-2.4			%			07/29/21 0:00	calc
Sum of Anions			2.1			meq/L			07/29/21 0:00	calc
Sum of Cations			2.0			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	0.74	B	*	mg/L	0.5	2	07/21/21 16:05	syw
Conductivity @25C	SM2510B	1	199		*	umhos/cm	1	10	07/16/21 21:57	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:24	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		90			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 12:46	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.16	H		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.163	H	*	mg/L	0.02	0.1	07/16/21 0:52	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 0:52	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	21.9		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	128		*	mg/L	20	40	07/15/21 12:34	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	28.0		*	mg/L	1	5	07/26/21 12:35	syw

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

ACZ Sample ID: ***L67091-03***
Date Sampled: *07/12/21 08:40*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/22/21 12:52	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 14:43	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	07/20/21 19:08	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:30	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	07/20/21 13:30	bsu
Barium, dissolved	M200.7 ICP	1	0.0130	B		mg/L	0.007	0.035	07/20/21 19:08	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:30	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.000114	B		mg/L	0.00005	0.00025	07/20/21 13:30	bsu
Calcium, dissolved	M200.7 ICP	1	13.4			mg/L	0.1	0.5	07/20/21 19:08	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:30	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:08	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:08	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:08	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:30	bsu
Magnesium, dissolved	M200.7 ICP	1	5.00			mg/L	0.2	1	07/20/21 19:08	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:08	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:25	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:08	kja
Potassium, dissolved	M200.7 ICP	1	0.48	B		mg/L	0.2	1	07/20/21 19:08	kja
Sodium, dissolved	M200.7 ICP	1	1.69			mg/L	0.2	1	07/20/21 19:08	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 18:40	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:08	kja

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

ACZ Sample ID: ***L67091-03***
Date Sampled: *07/12/21 08:40*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	55.2		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	55.2		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/29/21 0:00	calc
Sum of Anions			1.2			meq/L			07/29/21 0:00	calc
Sum of Cations			1.2			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	0.51	B	*	mg/L	0.5	2	07/21/21 16:05	syw
Conductivity @25C	SM2510B	1	115		*	umhos/cm	1	10	07/16/21 22:15	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:25	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		54.0			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 12:49	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.04	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.039	BH	*	mg/L	0.02	0.1	07/16/21 0:54	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 0:54	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	22.5		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	70		*	mg/L	20	40	07/15/21 12:36	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	4.1	B	*	mg/L	1	5	07/26/21 12:35	syw

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

ACZ Sample ID: ***L67091-04***
Date Sampled: *07/12/21 09:00*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/22/21 13:02	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 14:43	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	07/20/21 19:11	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:31	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	<0.0002	U		mg/L	0.0002	0.001	07/20/21 13:31	bsu
Barium, dissolved	M200.7 ICP	1	0.0130	B		mg/L	0.007	0.035	07/20/21 19:11	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:31	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.000092	B		mg/L	0.00005	0.00025	07/20/21 13:31	bsu
Calcium, dissolved	M200.7 ICP	1	16.3			mg/L	0.1	0.5	07/20/21 19:11	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:31	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:11	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:11	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:11	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:31	bsu
Magnesium, dissolved	M200.7 ICP	1	5.61			mg/L	0.2	1	07/20/21 19:11	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:11	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:28	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:11	kja
Potassium, dissolved	M200.7 ICP	1	0.55	B		mg/L	0.2	1	07/20/21 19:11	kja
Sodium, dissolved	M200.7 ICP	1	1.51			mg/L	0.2	1	07/20/21 19:11	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 18:43	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:11	kja

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

ACZ Sample ID: ***L67091-04***
Date Sampled: *07/12/21 09:00*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	63.8		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	63.8		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/29/21 0:00	calc
Sum of Anions			1.4			meq/L			07/29/21 0:00	calc
Sum of Cations			1.4			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	<0.5	U	*	mg/L	0.5	2	07/21/21 16:05	syw
Conductivity @25C	SM2510B	1	132		*	umhos/cm	1	10	07/16/21 22:24	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:26	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		64			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 12:52	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.03	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.031	BH	*	mg/L	0.02	0.1	07/16/21 0:56	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 0:56	pjb
pH (lab)	SM4500H+ B									
pH		1	8.3	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	22.6		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	82		*	mg/L	20	40	07/15/21 12:38	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	4.1	B	*	mg/L	1	5	07/26/21 12:37	syw

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

ACZ Sample ID: ***L67091-05***
Date Sampled: *07/12/21 09:15*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/23/21 14:44	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 14:43	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	07/20/21 19:14	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:33	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00781			mg/L	0.0002	0.001	07/20/21 13:33	bsu
Barium, dissolved	M200.7 ICP	1	<0.007	U		mg/L	0.007	0.035	07/20/21 19:14	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:33	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.000483			mg/L	0.00005	0.00025	07/20/21 13:33	bsu
Calcium, dissolved	M200.7 ICP	1	14.5			mg/L	0.1	0.5	07/20/21 19:14	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:33	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:14	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:14	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:14	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:33	bsu
Magnesium, dissolved	M200.7 ICP	1	3.33			mg/L	0.2	1	07/20/21 19:14	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:14	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:29	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:14	kja
Potassium, dissolved	M200.7 ICP	1	1.13			mg/L	0.2	1	07/20/21 19:14	kja
Sodium, dissolved	M200.7 ICP	1	4.14			mg/L	0.2	1	07/20/21 19:14	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 18:53	kja
Zinc, dissolved	M200.7 ICP	1	0.064			mg/L	0.02	0.05	07/20/21 19:14	kja

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

ACZ Sample ID: ***L67091-05***
Date Sampled: *07/12/21 09:15*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	42.1		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	42.1		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-4.0			%			07/29/21 0:00	calc
Sum of Anions			1.3			meq/L			07/29/21 0:00	calc
Sum of Cations			1.2			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	0.52	B	*	mg/L	0.5	2	07/21/21 16:05	syw
Conductivity @25C	SM2510B	1	125		*	umhos/cm	1	10	07/16/21 22:33	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:47	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		50			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 12:55	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.04	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.037	BH	*	mg/L	0.02	0.1	07/16/21 0:57	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 0:57	pjb
pH (lab)	SM4500H+ B									
pH		1	8.1	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	22.4		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	82		*	mg/L	20	40	07/15/21 12:42	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	18.9		*	mg/L	1	5	07/26/21 12:37	syw

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

ACZ Sample ID: ***L67091-06***
Date Sampled: *07/12/21 09:20*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/23/21 14:51	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 15:34	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	07/20/21 19:17	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:35	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00079	B		mg/L	0.0002	0.001	07/20/21 13:35	bsu
Barium, dissolved	M200.7 ICP	1	0.0123	B		mg/L	0.007	0.035	07/20/21 19:17	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:35	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.000102	B		mg/L	0.00005	0.00025	07/20/21 13:35	bsu
Calcium, dissolved	M200.7 ICP	1	16.1			mg/L	0.1	0.5	07/20/21 19:17	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:35	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:17	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:17	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:17	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:35	bsu
Magnesium, dissolved	M200.7 ICP	1	5.42			mg/L	0.2	1	07/20/21 19:17	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:17	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:32	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:17	kja
Potassium, dissolved	M200.7 ICP	1	0.58	B		mg/L	0.2	1	07/20/21 19:17	kja
Sodium, dissolved	M200.7 ICP	1	1.66			mg/L	0.2	1	07/20/21 19:17	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 18:56	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:17	kja

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

ACZ Sample ID: ***L67091-06***
Date Sampled: *07/12/21 09:20*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	62.6		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	62.6		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			-3.7			%			07/29/21 0:00	calc
Sum of Anions			1.4			meq/L			07/29/21 0:00	calc
Sum of Cations			1.3			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	<0.5	U	*	mg/L	0.5	2	07/21/21 16:05	syw
Conductivity @25C	SM2510B	1	130		*	umhos/cm	1	10	07/16/21 22:42	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:48	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		63			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 12:58	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.03	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.028	BH	*	mg/L	0.02	0.1	07/16/21 0:58	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 0:58	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	78		*	mg/L	20	40	07/15/21 12:44	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	7.3		*	mg/L	1	5	07/26/21 12:37	syw

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

ACZ Sample ID: ***L67091-07***
Date Sampled: *07/12/21 09:35*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/23/21 14:58	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 15:34	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	07/20/21 19:20	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:37	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00079	B		mg/L	0.0002	0.001	07/20/21 13:37	bsu
Barium, dissolved	M200.7 ICP	1	0.0126	B		mg/L	0.007	0.035	07/20/21 19:20	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:37	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.000098	B		mg/L	0.00005	0.00025	07/20/21 13:37	bsu
Calcium, dissolved	M200.7 ICP	1	16.2			mg/L	0.1	0.5	07/20/21 19:20	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:37	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:20	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:20	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:20	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:37	bsu
Magnesium, dissolved	M200.7 ICP	1	5.47			mg/L	0.2	1	07/20/21 19:20	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:20	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:33	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:20	kja
Potassium, dissolved	M200.7 ICP	1	0.61	B		mg/L	0.2	1	07/20/21 19:20	kja
Sodium, dissolved	M200.7 ICP	1	1.63			mg/L	0.2	1	07/20/21 19:20	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 18:59	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:20	kja

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

ACZ Sample ID: ***L67091-07***
Date Sampled: *07/12/21 09:35*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	63.0		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	63.0		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/29/21 0:00	calc
Sum of Anions			1.4			meq/L			07/29/21 0:00	calc
Sum of Cations			1.4			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	0.58	B	*	mg/L	0.5	2	07/21/21 16:10	syw
Conductivity @25C	SM2510B	1	131		*	umhos/cm	1	10	07/16/21 22:51	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:49	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		63.0			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 13:01	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.03	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.025	BH	*	mg/L	0.02	0.1	07/16/21 0:59	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 0:59	pjb
pH (lab)	SM4500H+ B									
pH		1	8.3	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	22.3		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	80		*	mg/L	20	40	07/15/21 12:46	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	5.1		*	mg/L	1	5	07/27/21 8:13	syw

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

ACZ Sample ID: ***L67091-08***
Date Sampled: *07/12/21 09:45*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/23/21 15:06	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 15:34	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	07/20/21 19:30	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:39	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00178			mg/L	0.0002	0.001	07/20/21 13:39	bsu
Barium, dissolved	M200.7 ICP	1	0.0120	B		mg/L	0.007	0.035	07/20/21 19:30	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:39	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.000088	B		mg/L	0.00005	0.00025	07/20/21 13:39	bsu
Calcium, dissolved	M200.7 ICP	1	17.3			mg/L	0.1	0.5	07/20/21 19:30	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:39	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:30	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:30	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:30	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:39	bsu
Magnesium, dissolved	M200.7 ICP	1	3.35			mg/L	0.2	1	07/20/21 19:30	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:30	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:34	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:30	kja
Potassium, dissolved	M200.7 ICP	1	0.63	B		mg/L	0.2	1	07/20/21 19:30	kja
Sodium, dissolved	M200.7 ICP	1	6.01			mg/L	0.2	1	07/20/21 19:30	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 19:02	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:30	kja

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

ACZ Sample ID: ***L67091-08***
Date Sampled: *07/12/21 09:45*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	52.3		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	52.3		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/29/21 0:00	calc
Sum of Anions			1.4			meq/L			07/29/21 0:00	calc
Sum of Cations			1.4			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	0.84	B	*	mg/L	0.5	2	07/21/21 16:10	syw
Conductivity @25C	SM2510B	1	141		*	umhos/cm	1	10	07/16/21 23:00	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:49	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		57.0			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 13:05	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.04	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.039	BH	*	mg/L	0.02	0.1	07/16/21 1:05	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 1:05	pjb
pH (lab)	SM4500H+ B									
pH		1	8.1	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	96		*	mg/L	20	40	07/15/21 12:48	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	13.7		*	mg/L	1	5	07/27/21 8:13	syw

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

ACZ Sample ID: ***L67091-09***
Date Sampled: *07/12/21 09:55*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Cyanide, total	M335.4 - Manual Distillation								07/23/21 15:13	md
Lab Filtration (0.45um) & Acidification	M200.7/200.8/3005A								07/18/21 15:34	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	07/20/21 19:39	kja
Antimony, dissolved	M200.8 ICP-MS	1	<0.0004	U		mg/L	0.0004	0.002	07/20/21 13:40	bsu
Arsenic, dissolved	M200.8 ICP-MS	1	0.00087	B		mg/L	0.0002	0.001	07/20/21 13:40	bsu
Barium, dissolved	M200.7 ICP	1	0.0130	B		mg/L	0.007	0.035	07/20/21 19:39	kja
Beryllium, dissolved	M200.8 ICP-MS	1	<0.00008	U		mg/L	0.00008	0.00025	07/20/21 13:40	bsu
Cadmium, dissolved	M200.8 ICP-MS	1	0.000096	B		mg/L	0.00005	0.00025	07/20/21 13:40	bsu
Calcium, dissolved	M200.7 ICP	1	16.5			mg/L	0.1	0.5	07/20/21 19:39	kja
Chromium, dissolved	M200.8 ICP-MS	1	<0.0005	U		mg/L	0.0005	0.002	07/20/21 13:40	bsu
Cobalt, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:39	kja
Copper, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:39	kja
Iron, dissolved	M200.7 ICP	1	<0.06	U		mg/L	0.06	0.15	07/20/21 19:39	kja
Lead, dissolved	M200.8 ICP-MS	1	<0.0001	U		mg/L	0.0001	0.0005	07/20/21 13:40	bsu
Magnesium, dissolved	M200.7 ICP	1	5.46			mg/L	0.2	1	07/20/21 19:39	kja
Manganese, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.05	07/20/21 19:39	kja
Mercury, total	M245.1 CVAA	1	<0.0002	U		mg/L	0.0002	0.001	07/27/21 10:35	mlh
Nickel, dissolved	M200.7 ICP	1	<0.008	U		mg/L	0.008	0.04	07/20/21 19:39	kja
Potassium, dissolved	M200.7 ICP	1	0.66	B		mg/L	0.2	1	07/20/21 19:39	kja
Sodium, dissolved	M200.7 ICP	1	1.88			mg/L	0.2	1	07/20/21 19:39	kja
Vanadium, dissolved	M200.7 ICP	1	<0.01	U		mg/L	0.01	0.025	07/21/21 19:12	kja
Zinc, dissolved	M200.7 ICP	1	<0.02	U		mg/L	0.02	0.05	07/20/21 19:39	kja

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

ACZ Sample ID: ***L67091-09***
Date Sampled: *07/12/21 09:55*
Date Received: *07/14/21*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	62.8		*	mg/L	2	20	07/16/21 0:00	eep
Carbonate as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Hydroxide as CaCO3		1	<2	U	*	mg/L	2	20	07/16/21 0:00	eep
Total Alkalinity		1	62.8		*	mg/L	2	20	07/16/21 0:00	eep
Cation-Anion Balance	Calculation									
Cation-Anion Balance			0.0			%			07/29/21 0:00	calc
Sum of Anions			1.4			meq/L			07/29/21 0:00	calc
Sum of Cations			1.4			meq/L			07/29/21 0:00	calc
Chloride	SM4500Cl-E	1	0.57	B	*	mg/L	0.5	2	07/21/21 16:10	syw
Conductivity @25C	SM2510B	1	132		*	umhos/cm	1	10	07/16/21 23:09	eep
Cyanide, total	M335.4 - Colorimetric w/ distillation	0.5	<0.003	U	*	mg/L	0.003	0.01	07/23/21 22:50	pjb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		64			mg/L	0.2	5	07/29/21 0:00	calc
Lab Filtration (0.45um filter)	SOPWC050	1							07/20/21 13:08	cgm
Nitrate as N, dissolved	Calculation: NO3NO2 minus NO2		0.02	BH		mg/L	0.02	0.1	07/29/21 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.021	BH	*	mg/L	0.02	0.1	07/16/21 1:06	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	<0.01	UH	*	mg/L	0.01	0.05	07/16/21 1:06	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H	*	units	0.1	0.1	07/16/21 0:00	eep
pH measured at		1	22.2		*	C	0.1	0.1	07/16/21 0:00	eep
Residue, Filterable (TDS) @180C	SM2540C	1	80		*	mg/L	20	40	07/15/21 12:50	scd
Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	1	5.4		*	mg/L	1	5	07/27/21 8:13	syw

Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

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

REP001.03.15.02

CRG Mining, LLC

ACZ Project ID: ***L67091***

NOTE: If the Rec% column is null, the high/low 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
WG523427													
WG523427PBW1	PBW	07/16/21 16:46				3.5	mg/L		-20	20			
WG523427LCSW3	LCSW	07/16/21 17:04	WC210702-1	820.0001		798.7	mg/L	97	90	110			
WG523427LCSW6	LCSW	07/16/21 20:13	WC210702-1	820.0001		805.3	mg/L	98	90	110			
WG523427PBW2	PBW	07/16/21 20:20				U	mg/L		-20	20			
L67091-02DUP	DUP	07/16/21 22:06			71.5	71.9	mg/L				1	20	
L67100-03DUP	DUP	07/16/21 23:48			238	238.5	mg/L				0	20	
WG523427LCSW9	LCSW	07/17/21 0:09	WC210702-1	820.0001		822.2	mg/L	100	90	110			
WG523427PBW3	PBW	07/17/21 0:15				U	mg/L		-20	20			
WG523427LCSW12	LCSW	07/17/21 3:51	WC210702-1	820.0001		825.2	mg/L	101	90	110			
WG523427PBW4	PBW	07/17/21 3:58				U	mg/L		-20	20			
WG523427LCSW15	LCSW	07/17/21 6:46	WC210702-1	820.0001		826.9	mg/L	101	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2		1.971	mg/L	99	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.15	0.15			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	1.0008		1.013	mg/L	101	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	1.0008	U	1.033	mg/L	103	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	1.0008	U	1.024	mg/L	102	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
WG523619													
WG523619ICV	ICV	07/20/21 13:08	MS210630-2	.0201		.01979	mg/L	98	90	110			
WG523619ICB	ICB	07/20/21 13:10				U	mg/L		-0.00088	0.00088			
WG523619LFB	LFB	07/20/21 13:11	MS210702-2	.01		.00997	mg/L	100	85	115			
L67084-02AS	AS	07/20/21 13:17	MS210702-2	.01	U	.00853	mg/L	85	70	130			
L67084-02ASD	ASD	07/20/21 13:19	MS210702-2	.01	U	.00872	mg/L	87	70	130	2	20	
L67091-09AS	AS	07/20/21 13:42	MS210702-2	.01	U	.00875	mg/L	88	70	130			
L67091-09ASD	ASD	07/20/21 13:44	MS210702-2	.01	U	.00897	mg/L	90	70	130	2	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523619													
WG523619ICV	ICV	07/20/21 13:08	MS210630-2	.05		.04946	mg/L	99	90	110			
WG523619ICB	ICB	07/20/21 13:10				U	mg/L		-0.00044	0.00044			
WG523619LFB	LFB	07/20/21 13:11	MS210702-2	.05005		.05058	mg/L	101	85	115			
L67084-02AS	AS	07/20/21 13:17	MS210702-2	.05005	U	.05159	mg/L	103	70	130			
L67084-02ASD	ASD	07/20/21 13:19	MS210702-2	.05005	U	.05172	mg/L	103	70	130	0	20	
L67091-09AS	AS	07/20/21 13:42	MS210702-2	.05005	.00087	.05194	mg/L	102	70	130			
L67091-09ASD	ASD	07/20/21 13:44	MS210702-2	.05005	.00087	.05296	mg/L	104	70	130	2	20	

CRG Mining, LLC

ACZ Project ID: ***L67091***

NOTE: If the Rec% column is null, the high/low 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
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2		1.9958	mg/L	100	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.021	0.021			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	.5		.4922	mg/L	98	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	.5	.012	.5107	mg/L	100	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	.5	.012	.5121	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
WG523619													
WG523619ICV	ICV	07/20/21 13:08	MS210630-2	.05		.049371	mg/L	99	90	110			
WG523619ICB	ICB	07/20/21 13:10				.000123	mg/L		-0.000176	0.000176			
WG523619LFB	LFB	07/20/21 13:11	MS210702-2	.05005		.051969	mg/L	104	85	115			
L67084-02AS	AS	07/20/21 13:17	MS210702-2	.05005	U	.050656	mg/L	101	70	130			
L67084-02ASD	ASD	07/20/21 13:19	MS210702-2	.05005	U	.050446	mg/L	101	70	130	0	20	
L67091-09AS	AS	07/20/21 13:42	MS210702-2	.05005	U	.050556	mg/L	101	70	130			
L67091-09ASD	ASD	07/20/21 13:44	MS210702-2	.05005	U	.050998	mg/L	102	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
WG523619													
WG523619ICV	ICV	07/20/21 13:08	MS210630-2	.05		.050904	mg/L	102	90	110			
WG523619ICB	ICB	07/20/21 13:10				U	mg/L		-0.00011	0.00011			
WG523619LFB	LFB	07/20/21 13:11	MS210702-2	.05005		.052865	mg/L	106	85	115			
L67084-02AS	AS	07/20/21 13:17	MS210702-2	.05005	U	.050627	mg/L	101	70	130			
L67084-02ASD	ASD	07/20/21 13:19	MS210702-2	.05005	U	.050791	mg/L	101	70	130	0	20	
L67091-09AS	AS	07/20/21 13:42	MS210702-2	.05005	.000096	.050264	mg/L	100	70	130			
L67091-09ASD	ASD	07/20/21 13:44	MS210702-2	.05005	.000096	.0513	mg/L	102	70	130	2	20	

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	100		97.68	mg/L	98	95	105			
WG523614ICB	ICB	07/20/21 18:03				.28	mg/L		-0.3	0.3			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	67.99734		67.37	mg/L	99	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	67.99734	17.3	85.52	mg/L	100	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	67.99734	17.3	85.38	mg/L	100	85	115	0	20	

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523762													
WG523762ICB	ICB	07/21/21 11:38				U	mg/L		-1.5	1.5			
WG523762ICV	ICV	07/21/21 11:38	WI210503-1	54.89		55.15	mg/L	100	90	110			
WG523762LFB1	LFB	07/21/21 16:01	WI200327-3	30.03		31.44	mg/L	105	90	110			
L67088-02AS	AS	07/21/21 16:03	WI200327-3	30.03	6.37	38.41	mg/L	107	90	110			
L67088-03DUP	DUP	07/21/21 16:03			15.2	14.79	mg/L				3	20	
WG523762LFB2	LFB	07/21/21 16:05	WI200327-3	30.03		31.58	mg/L	105	90	110			
L67093-02AS	AS	07/21/21 16:10	WI200327-3	30.03	54.9	80.72	mg/L	86	90	110			M2
L67093-03DUP	DUP	07/21/21 16:10			58.3	57.51	mg/L				1	20	

CRG Mining, LLC

ACZ Project ID: ***L67091***

NOTE: If the Rec% column is null, the high/low 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
WG523619													
WG523619ICV	ICV	07/20/21 13:08	MS210630-2	.05		.04997	mg/L	100	90	110			
WG523619ICB	ICB	07/20/21 13:10				U	mg/L		-0.0011	0.0011			
WG523619LFB	LFB	07/20/21 13:11	MS210702-2	.05		.05061	mg/L	101	85	115			
L67084-02AS	AS	07/20/21 13:17	MS210702-2	.05	U	.05016	mg/L	100	70	130			
L67084-02ASD	ASD	07/20/21 13:19	MS210702-2	.05	U	.05019	mg/L	100	70	130	0	20	
L67091-09AS	AS	07/20/21 13:42	MS210702-2	.05	U	.04987	mg/L	100	70	130			
L67091-09ASD	ASD	07/20/21 13:44	MS210702-2	.05	U	.0511	mg/L	102	70	130	2	20	

Cobalt, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2.004		1.968	mg/L	98	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.06	0.06			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	.5005		.489	mg/L	98	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	.5005	U	.497	mg/L	99	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	.5005	U	.501	mg/L	100	85	115	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523427													
WG523427LCSW2	LCSW	07/16/21 16:52	PCN62852	1410		1413	umhos/cm	100	90	110			
WG523427LCSW5	LCSW	07/16/21 20:01	PCN62852	1410		1406	umhos/cm	100	90	110			
L67091-02DUP	DUP	07/16/21 22:06			199	200	umhos/cm				1	20	
L67100-03DUP	DUP	07/16/21 23:48			659	660	umhos/cm				0	20	
WG523427LCSW8	LCSW	07/16/21 23:55	PCN62852	1410		1404	umhos/cm	100	90	110			
WG523427LCSW11	LCSW	07/17/21 3:38	PCN62852	1410		1397	umhos/cm	99	90	110			
WG523427LCSW14	LCSW	07/17/21 6:32	PCN62852	1410		1387	umhos/cm	98	90	110			

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2		1.952	mg/L	98	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.03	0.03			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	.5		.498	mg/L	100	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	.5	U	.51	mg/L	102	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	.5	U	.51	mg/L	102	85	115	0	20	

CRG Mining, LLC

ACZ Project ID: ***L67091***

NOTE: If the Rec% column is null, the high/low 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
WG523921													
WG523921ICV	ICV	07/23/21 22:06	WI210717-7	.3		.2974	mg/L	99	90	110			
WG523921ICB	ICB	07/23/21 22:07				U	mg/L		-0.003	0.003			
WG523789LRB	LRB	07/23/21 22:08				U	mg/L		-0.003	0.003			
WG523789LFB	LFB	07/23/21 22:09	WI210717-4	.2		.1854	mg/L	93	90	110			
L67147-03DUP	DUP	07/23/21 22:31			U	U	mg/L				0	20	RA
L67147-06LFM	LFM	07/23/21 22:33	WI210717-4	.2	U	.1995	mg/L	100	90	110			
WG523923													
WG523863LRB	LRB	07/23/21 22:45				U	mg/L		-0.003	0.003			
WG523863LFB	LFB	07/23/21 22:46	WI210717-4	.2		.1895	mg/L	95	90	110			
L67118-01DUP	DUP	07/23/21 23:27			.0103	.0107	mg/L				4	20	RA
L67118-02LFM	LFM	07/23/21 23:29	WI210717-4	.2	.325	.5439	mg/L	109	90	110			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2		1.971	mg/L	99	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.18	0.18			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	1.0001		1.013	mg/L	101	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	1.0001	U	1.029	mg/L	103	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	1.0001	U	1.031	mg/L	103	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
WG523619													
WG523619ICV	ICV	07/20/21 13:08	MS210630-2	.05		.04992	mg/L	100	90	110			
WG523619ICB	ICB	07/20/21 13:10				U	mg/L		-0.00022	0.00022			
WG523619LFB	LFB	07/20/21 13:11	MS210702-2	.05005		.05213	mg/L	104	85	115			
L67084-02AS	AS	07/20/21 13:17	MS210702-2	.05005	U	.04997	mg/L	100	70	130			
L67084-02ASD	ASD	07/20/21 13:19	MS210702-2	.05005	U	.05024	mg/L	100	70	130	1	20	
L67091-09AS	AS	07/20/21 13:42	MS210702-2	.05005	U	.0499	mg/L	100	70	130			
L67091-09ASD	ASD	07/20/21 13:44	MS210702-2	.05005	U	.05056	mg/L	101	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
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	100		96.68	mg/L	97	95	105			
WG523614ICB	ICB	07/20/21 18:03				.26	mg/L		-0.6	0.6			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	50.00074		48.3	mg/L	97	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	50.00074	3.35	52.62	mg/L	99	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	50.00074	3.35	52.71	mg/L	99	85	115	0	20	

CRG Mining, LLC

ACZ Project ID: ***L67091***

NOTE: If the Rec% column is null, the high/low 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
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2		1.932	mg/L	97	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.03	0.03			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	.5005		.498	mg/L	100	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	.5005	U	.507	mg/L	101	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	.5005	U	.509	mg/L	102	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
WG523944													
WG523944ICV	ICV	07/27/21 10:07	HG210701-3	.00501		.0052	mg/L	104	95	105			
WG523944ICB	ICB	07/27/21 10:08				U	mg/L		-0.0002	0.0002			
WG523944LRB	LRB	07/27/21 10:10				U	mg/L		-0.00044	0.00044			
WG523944LFB	LFB	07/27/21 10:11	HG210709-9	.002002		.00172	mg/L	86	85	115			
L67040-01LFM	LFM	07/27/21 10:13	HG210709-9	.002002	U	.00183	mg/L	91	85	115			
L67040-01LFMD	LFMD	07/27/21 10:14	HG210709-9	.002002	U	.00172	mg/L	86	85	115	6	20	
L67091-03LFM	LFM	07/27/21 10:26	HG210709-9	.002002	U	.00186	mg/L	93	85	115			
L67091-03LFMD	LFMD	07/27/21 10:27	HG210709-9	.002002	U	.00206	mg/L	103	85	115	10	20	

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2		1.9152	mg/L	96	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.024	0.024			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	.5		.4859	mg/L	97	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	.5	U	.488	mg/L	98	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	.5	U	.4931	mg/L	99	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
WG523366													
WG523366ICV	ICV	07/15/21 23:22	WI210603-7	2.416		2.374	mg/L	98	90	110			
WG523366ICB	ICB	07/15/21 23:23				U	mg/L		-0.02	0.02			
WG523368													
WG523368LFB	LFB	07/16/21 0:48	WI210331-13	2		2.084	mg/L	104	90	110			
L67091-01AS	AS	07/16/21 0:50	WI210331-13	2	.041	2.125	mg/L	104	90	110			
L67091-02DUP	DUP	07/16/21 0:53			.163	.162	mg/L				1	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
WG523366													
WG523366ICV	ICV	07/15/21 23:22	WI210603-7	.609		.599	mg/L	98	90	110			
WG523366ICB	ICB	07/15/21 23:23				U	mg/L		-0.01	0.01			
WG523368													
WG523368LFB	LFB	07/16/21 0:48	WI210331-13	1		1.03	mg/L	103	90	110			
L67091-01AS	AS	07/16/21 0:50	WI210331-13	1	U	1.021	mg/L	102	90	110			
L67091-02DUP	DUP	07/16/21 0:53			U	U	mg/L				0	20	RA

CRG Mining, LLC

ACZ Project ID: ***L67091***

NOTE: If the Rec% column is null, the high/low 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
WG523427													
WG523427LCSW1	LCSW	07/16/21 16:51	PCN61687	6		6	units	100	5.9	6.1			
WG523427LCSW4	LCSW	07/16/21 19:59	PCN61687	6		6.1	units	102	5.9	6.1			
L67091-02DUP	DUP	07/16/21 22:06			8.2	8.2	units				0	20	
L67100-03DUP	DUP	07/16/21 23:48			8.2	8.2	units				0	20	
WG523427LCSW7	LCSW	07/16/21 23:53	PCN61687	6		6.1	units	102	5.9	6.1			
WG523427LCSW10	LCSW	07/17/21 3:37	PCN61687	6		6.1	units	102	5.9	6.1			
WG523427LCSW13	LCSW	07/17/21 6:30	PCN61687	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
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	20		19.47	mg/L	97	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.6	0.6			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	99.99574		97.42	mg/L	97	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	99.99574	.63	100.3	mg/L	100	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	99.99574	.63	100.4	mg/L	100	85	115	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523302													
WG523302PBW	PBW	07/15/21 12:15				U	mg/L		-20	20			
WG523302LCSW	LCSW	07/15/21 12:16	PCN63838	1000		996	mg/L	100	80	120			
L67070-01DUP	DUP	07/15/21 12:20			1190	1186	mg/L				0	10	
L67091-04DUP	DUP	07/15/21 12:40			82	78	mg/L				5	10	RA

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	100		97.28	mg/L	97	95	105			
WG523614ICB	ICB	07/20/21 18:03				.2	mg/L		-0.6	0.6			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	100.0109		96.92	mg/L	97	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	100.0109	6.01	105.4	mg/L	99	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	100.0109	6.01	105.1	mg/L	99	85	115	0	20	

CRG Mining, LLC

ACZ Project ID: ***L67091***

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

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523996													
WG523996ICB	ICB	07/26/21 8:34				U	mg/L		-3	3			
WG523996ICV	ICV	07/26/21 8:34	WI210715-12	20.46		20.9	mg/L	102	90	110			
L67091-05DUP	DUP	07/26/21 12:37			18.9	18.7	mg/L				1	20	
L67091-06AS	AS	07/26/21 12:37	WI210105-3	10	7.3	17.2	mg/L	99	90	110			
WG523996LFB	LFB	07/26/21 12:54	WI210105-3	10		10.4	mg/L	104	90	110			
WG524000													
WG524000ICB	ICB	07/27/21 7:57				U	mg/L		-3	3			
WG524000ICV	ICV	07/27/21 7:57	WI210715-12	20.46		20.5	mg/L	100	90	110			
WG524000LFB	LFB	07/27/21 8:13	WI210105-3	10		10.7	mg/L	107	90	110			
L67091-07DUP	DUP	07/27/21 8:13			5.1	4.9	mg/L				4	20	RA
L67091-08AS	AS	07/27/21 8:13	WI210105-3	10	13.7	24.8	mg/L	111	90	110			M1

Vanadium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523703													
WG523703ICV	ICV	07/21/21 17:55	II210720-1	2		2.001	mg/L	100	95	105			
WG523703ICB	ICB	07/21/21 18:01				U	mg/L		-0.015	0.015			
WG523703LFB	LFB	07/21/21 18:14	II210714-2	.5005		.5115	mg/L	102	85	115			
L67091-01AS	AS	07/21/21 18:30	II210714-2	.5005	U	.5101	mg/L	102	85	115			
L67091-01ASD	ASD	07/21/21 18:33	II210714-2	.5005	U	.503	mg/L	100	85	115	1	20	
L67091-08AS	AS	07/21/21 19:06	II210714-2	.5005	U	.5093	mg/L	102	85	115			
L67091-08ASD	ASD	07/21/21 19:09	II210714-2	.5005	U	.509	mg/L	102	85	115	0	20	

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG523614													
WG523614ICV	ICV	07/20/21 17:57	II210720-1	2		1.946	mg/L	97	95	105			
WG523614ICB	ICB	07/20/21 18:03				U	mg/L		-0.06	0.06			
WG523614LFB	LFB	07/20/21 18:16	II210714-2	.50045		.506	mg/L	101	85	115			
L67091-08AS	AS	07/20/21 19:33	II210714-2	.50045	U	.542	mg/L	108	85	115			
L67091-08ASD	ASD	07/20/21 19:36	II210714-2	.50045	U	.55	mg/L	110	85	115	1	20	

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-01	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523921	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG523996	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-02	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523921	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG523996	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-03	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523921	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG523996	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-04	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523921	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523996	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-05	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523923	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
	WG523996	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-06	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523923	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523996	Sulfate	D516-02/-07/-11 - TURBIDIMETRIC	Q6	Sample was received above recommended temperature.
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-07	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523923	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG524000	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	Q6	Sample was received above recommended temperature.
			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).
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-08	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523923	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG524000	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	Q6	Sample was received above recommended temperature.
			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).
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L67091-09	WG523427	Bicarbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
		Carbonate as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523762	Chloride	SM4500Cl-E	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500Cl-E	Q6	Sample was received above recommended temperature.
	WG523427	Conductivity @25C	SM2510B	Q6	Sample was received above recommended temperature.
	WG523923	Cyanide, total	M335.4 - Colorimetric w/ distillation	Q6	Sample was received above recommended temperature.
			M335.4 - Colorimetric w/ distillation	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG523427	Hydroxide as CaCO3	SM2320B - Titration	Q6	Sample was received above recommended temperature.
	WG523368	Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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	H3	Sample was received and analyzed past holding time.
			M353.2 - Automated Cadmium Reduction	Q6	Sample was received above recommended temperature.
			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.
	WG523427	pH	SM4500H+ B	Q6	Sample was received above recommended temperature.
		pH measured at	SM4500H+ B	Q6	Sample was received above recommended temperature.
	WG523302	Residue, Filterable (TDS) @180C	SM2540C	Q6	Sample was received above recommended temperature.
			SM2540C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG524000	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	Q6	Sample was received above recommended temperature.
			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).
	WG523427	Total Alkalinity	SM2320B - Titration	Q6	Sample was received above recommended temperature.

CRG Mining, LLC ACZ Project ID: ***L67091***

No certification qualifiers associated with this analysis

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

Sample Receipt

CRG Mining, LLC

ACZ Project ID: L67091
Date Received: 07/14/2021 11:09
Received By:
Date Printed: 7/15/2021

Receipt Verification

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

Samples/Containers

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

L67091-01 : Green received with reagent, recreated from the raw

L67091-02 : Green received with reagent, recreated from the raw

L67091-03 : Green received with reagent, recreated from the raw

L67091-04 : Green received with reagent, recreated from the raw

L67091-05 : Green received with reagent, recreated from the raw

L67091-06 : Green received with reagent, recreated from the raw

L67091-07 : Green received with reagent, recreated from the raw

L67091-08 : Green received with reagent, recreated from the raw

L67091-09 : Green received with reagent, recreated from the raw

16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?		X	

Some parameters were received past hold time.

NA indicates Not Applicable

Chain of Custody Related Remarks

REPAD LPII 2012-03

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

Sample Receipt

CRG Mining, LLC

ACZ Project ID: L67091
Date Received: 07/14/2021 11:09
Received By:
Date Printed: 7/15/2021

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
7062	13.3	<=6.0	15	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s) but was thawed by receipt at ACZ.

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

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

ACZ Laboratories, Inc. L67091

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

CHAIN of CUSTODY

Report to:

Name: Jake Wilkinson	Address: 510 S. Wisconsins St
Company: CRG Mining LLC	Gunnison, CO 81230
E-mail: JWilkinson@CRGmining.com	Telephone:

Copy of Report to:

Name: Same	E-mail:
Company:	Telephone:

Invoice to:

Name: Same	Address:
Company:	
E-mail:	Telephone:

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

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

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

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

Sampler's Name: Jake W. **Sampler's Site Information** **State** CO **Zip code** 81230 **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

Quote #: Q2 2021

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material? [ ]

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

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers								
GL1	7/12/21 8:10AM	SW	5								
GL2	7/12/21 8:20AM	SW	5								
GL3	7/12/21 8:40AM	SW	5								
RM1	7/12/21 9:00AM	SW	5								
RM2	7/12/21 9:15AM	SW	5								
RM3	7/12/21 9:20AM	SW	5								
CM1	7/12/21 9:35AM	SW	5								
CM2	7/12/21 9:45AM	SW	5								
CM3	7/12/21 9:55AM	SW	5								

Baseline SW Quarterly

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
Jake Wilkinson	7/12/21 10:20AM	[signature]	7/14/21 11:09

L67091 Chain of Custod