

May 17, 2016

Report to:

Randy McClure
Rio Grande Silver, Inc.
112 E. 12th St.
Creede, CO 81130

Bill to:

Randy McClure
Rio Grande Silver, Inc.
112 E. 12th St.
Creede, CO 81130

cc: Janet Shangraw

Project ID: BO-35028

ACZ Project ID: L30192

Randy McClure:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on May 03, 2016. This project has been assigned to ACZ's project number, L30192. 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 L30192. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after June 16, 2016. 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.



Sue Webber has reviewed and
approved this report.



Rio Grande Silver, Inc.

May 17, 2016

Project ID: BO-35028

ACZ Project ID: L30192

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 7 miscellaneous samples from Rio Grande Silver, Inc. on May 3, 2016. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L30192. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic, organic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further explanation not provided by the Extended Qualifier Report:

1. For the Mercury value flagged with a "Q5", the sample was preserved in the clean room upon arrival at the lab, which is acceptable within the method.
2. For the Mercury value flagged with a "Q1" on sample L30192-04, the sample was received in a broken bottle. It was transferred to new bottle prior to oxidation/analysis.

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-L

ACZ Sample ID: **L30192-01**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								05/05/16 14:25	krh
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								05/04/16 16:08	spl
Total Recoverable Digestion	M200.2 ICP-MS								05/05/16 16:18	enb
Total Recoverable Digestion	M200.2 ICP								05/05/16 6:35	gss

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-L

ACZ Sample ID: **L30192-01**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.76			mg/L	0.03	0.2	05/05/16 20:31	gss
Aluminum, total recoverable	M200.7 ICP	1	3.47			mg/L	0.03	0.2	05/05/16 16:02	gss
Arsenic, dissolved	M200.8 ICP-MS	1	0.0275			mg/L	0.0002	0.001	05/10/16 16:24	msh
Arsenic, total recoverable	M200.8 ICP-MS	1	0.0317			mg/L	0.0002	0.001	05/09/16 16:20	enb
Boron, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/09/16 10:34	aeb
Boron, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:02	gss
Cadmium, dissolved	M200.8 ICP-MS	1	0.0042			mg/L	0.0001	0.0005	05/10/16 16:24	msh
Cadmium, total recoverable	M200.8 ICP-MS	1	0.0042			mg/L	0.0001	0.0005	05/09/16 16:20	enb
Calcium, dissolved	M200.7 ICP	1	17.3			mg/L	0.1	0.5	05/05/16 20:31	gss
Chromium, total recoverable	M200.8 ICP-MS	1	0.0008	B		mg/L	0.0005	0.002	05/09/16 16:20	enb
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 20:31	gss
Cobalt, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:02	gss
Copper, dissolved	M200.8 ICP-MS	1	0.0056			mg/L	0.0005	0.003	05/10/16 16:24	msh
Copper, total recoverable	M200.8 ICP-MS	1	0.0073			mg/L	0.0005	0.003	05/09/16 16:20	enb
Iron, dissolved	M200.7 ICP	1	1.42			mg/L	0.02	0.05	05/09/16 10:34	aeb
Iron, total recoverable	M200.7 ICP	1	1.76			mg/L	0.02	0.05	05/05/16 16:02	gss
Lead, dissolved	M200.8 ICP-MS	1	0.0024			mg/L	0.0001	0.0005	05/10/16 16:24	msh
Lead, total recoverable	M200.8 ICP-MS	1	0.0040			mg/L	0.0001	0.0005	05/09/16 16:20	enb
Magnesium, dissolved	M200.7 ICP	1	1.9			mg/L	0.2	1	05/05/16 20:31	gss
Manganese, dissolved	M200.7 ICP	1	0.008	B		mg/L	0.005	0.03	05/05/16 20:31	gss
Manganese, total recoverable	M200.7 ICP	1	0.011	B		mg/L	0.005	0.03	05/05/16 16:02	gss
Mercury, total	M1631, Atomic Fluorescence	1	7.8		*	ng/L	0.2	0.5	05/17/16 12:51	mfm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 20:31	gss
Nickel, total recoverable	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 16:02	gss
Potassium, dissolved	M200.7 ICP	1	1.9			mg/L	0.2	1	05/05/16 20:31	gss
Selenium, dissolved	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	05/11/16 13:42	msh
Selenium, total recoverable	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	05/09/16 16:20	enb
Silica, dissolved	M200.7 ICP	1	27			mg/L	0.2	1	05/05/16 20:31	gss
Silica, total recoverable	M200.7 ICP	1	34.9		*	mg/L	0.2	1	05/05/16 16:02	gss
Silver, dissolved	M200.8 ICP-MS	1	0.00006	B	*	mg/L	0.00005	0.0003	05/10/16 16:24	msh
Silver, total recoverable	M200.8 ICP-MS	1	0.00017	B		mg/L	0.00005	0.0003	05/09/16 16:20	enb
Sodium, dissolved	M200.7 ICP	1	3.3			mg/L	0.2	1	05/05/16 20:31	gss
Uranium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	05/10/16 16:24	msh
Uranium, total recoverable	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0005	05/09/16 16:20	enb
Zinc, dissolved	M200.8 ICP-MS	1	0.977			mg/L	0.002	0.005	05/10/16 16:24	msh

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-L

ACZ Sample ID: **L30192-01**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

Sample Matrix: Surface Water

Zinc, total recoverable	M200.8 ICP-MS	1	1.040			mg/L	0.002	0.005	05/09/16 16:20	enb
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	14.8	B		mg/L	2	20	05/03/16 0:00	sck
Carbonate as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Hydroxide as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Total Alkalinity		1	14.8	B		mg/L	2	20	05/03/16 0:00	sck
Carbon, dissolved organic (DOC)	SM5310B	1	6.2		*	mg/L	1	5	05/09/16 15:14	bsu
Cation-Anion Balance	Calculation									
Cation-Anion Balance			3.7			%			05/17/16 0:00	calc
Sum of Anions			1.3			meq/L			05/17/16 0:00	calc
Sum of Cations			1.4			meq/L			05/17/16 0:00	calc
Chemical Oxygen Demand	M410.4	1	18	B	*	mg/L	10	20	05/06/16 11:26	emk
Chloride	M300.0 - Ion Chromatography	1	0.83	B		mg/L	0.5	2.5	05/10/16 18:41	bsu
Fluoride	SM4500F-C	1	0.22	B	*	mg/L	0.05	0.3	05/04/16 16:40	abd
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		51			mg/L	0.2	5	05/17/16 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.32			mg/L	0.02	0.1	05/17/16 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.32		*	mg/L	0.02	0.1	05/04/16 0:47	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	05/04/16 0:47	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	05/05/16 15:13	spl
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.4	B		mg/L	0.1	0.5	05/17/16 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.4	B	*	mg/L	0.1	0.5	05/07/16 0:00	pjb
pH (lab)	SM4500H+ B									
pH		1	7.6	H		units	0.1	0.1	05/03/16 0:00	sck
pH measured at		1	22.7			C	0.1	0.1	05/03/16 0:00	sck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.11		*	mg/L	0.02	0.05	05/04/16 22:20	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	150			mg/L	10	20	05/03/16 13:47	sck
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	05/03/16 14:39	sck
Sulfate	M300.0 - Ion Chromatography	1	43.2			mg/L	0.5	2.5	05/10/16 18:41	bsu
Sulfide as S	SM4500S2-D	1	0.02	B	*	mg/L	0.02	0.1	05/03/16 15:30	emk

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-D

ACZ Sample ID: **L30192-02**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								05/05/16 14:38	krh
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								05/04/16 16:13	spl
Total Recoverable Digestion	M200.2 ICP								05/05/16 7:37	gss
Total Recoverable Digestion	M200.2 ICP-MS								05/05/16 16:27	enb

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-D

ACZ Sample ID: **L30192-02**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	1.16			mg/L	0.03	0.2	05/05/16 20:34	gss
Aluminum, total recoverable	M200.7 ICP	1	3.31			mg/L	0.03	0.2	05/05/16 16:05	gss
Arsenic, dissolved	M200.8 ICP-MS	1	0.0260			mg/L	0.0002	0.001	05/10/16 16:27	msh
Arsenic, total recoverable	M200.8 ICP-MS	1	0.0324			mg/L	0.0002	0.001	05/09/16 16:24	enb
Boron, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/09/16 10:37	aeb
Boron, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:05	gss
Cadmium, dissolved	M200.8 ICP-MS	1	0.0041			mg/L	0.0001	0.0005	05/10/16 16:27	msh
Cadmium, total recoverable	M200.8 ICP-MS	1	0.0043			mg/L	0.0001	0.0005	05/09/16 16:24	enb
Calcium, dissolved	M200.7 ICP	1	17.3			mg/L	0.1	0.5	05/05/16 20:34	gss
Chromium, total recoverable	M200.8 ICP-MS	1	0.0008	B		mg/L	0.0005	0.002	05/09/16 16:24	enb
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 20:34	gss
Cobalt, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:05	gss
Copper, dissolved	M200.8 ICP-MS	1	0.0053			mg/L	0.0005	0.003	05/10/16 16:27	msh
Copper, total recoverable	M200.8 ICP-MS	1	0.0074			mg/L	0.0005	0.003	05/09/16 16:24	enb
Iron, dissolved	M200.7 ICP	1	1.23			mg/L	0.02	0.05	05/09/16 10:37	aeb
Iron, total recoverable	M200.7 ICP	1	1.70			mg/L	0.02	0.05	05/05/16 16:05	gss
Lead, dissolved	M200.8 ICP-MS	1	0.0023			mg/L	0.0001	0.0005	05/10/16 16:27	msh
Lead, total recoverable	M200.8 ICP-MS	1	0.0041			mg/L	0.0001	0.0005	05/09/16 16:24	enb
Magnesium, dissolved	M200.7 ICP	1	2			mg/L	0.2	1	05/05/16 20:34	gss
Manganese, dissolved	M200.7 ICP	1	0.009	B		mg/L	0.005	0.03	05/05/16 20:34	gss
Manganese, total recoverable	M200.7 ICP	1	0.011	B		mg/L	0.005	0.03	05/05/16 16:05	gss
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 20:34	gss
Nickel, total recoverable	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 16:05	gss
Potassium, dissolved	M200.7 ICP	1	1.9			mg/L	0.2	1	05/05/16 20:34	gss
Selenium, dissolved	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0003	05/11/16 13:44	msh
Selenium, total recoverable	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	05/09/16 16:24	enb
Silica, dissolved	M200.7 ICP	1	28.7			mg/L	0.2	1	05/05/16 20:34	gss
Silica, total recoverable	M200.7 ICP	1	34.5		*	mg/L	0.2	1	05/05/16 16:05	gss
Silver, dissolved	M200.8 ICP-MS	1	0.00006	B	*	mg/L	0.00005	0.0003	05/10/16 16:27	msh
Silver, total recoverable	M200.8 ICP-MS	1	0.00017	B		mg/L	0.00005	0.0003	05/09/16 16:24	enb
Sodium, dissolved	M200.7 ICP	1	3.3			mg/L	0.2	1	05/05/16 20:34	gss
Uranium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	05/10/16 16:27	msh
Uranium, total recoverable	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0005	05/09/16 16:24	enb
Zinc, dissolved	M200.8 ICP-MS	1	0.976			mg/L	0.002	0.005	05/10/16 16:27	msh
Zinc, total recoverable	M200.8 ICP-MS	1	1.040			mg/L	0.002	0.005	05/09/16 16:24	enb

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-D

ACZ Sample ID: **L30192-02**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

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	14.4	B		mg/L	2	20	05/03/16 0:00	sck
Carbonate as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Hydroxide as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Total Alkalinity		1	14.4	B		mg/L	2	20	05/03/16 0:00	sck
Carbon, dissolved organic (DOC)	SM5310B	1	6.9		*	mg/L	1	5	05/09/16 15:14	bsu
Cation-Anion Balance	Calculation									
Cation-Anion Balance			7.1			%			05/17/16 0:00	calc
Sum of Anions			1.3			meq/L			05/17/16 0:00	calc
Sum of Cations			1.5			meq/L			05/17/16 0:00	calc
Chemical Oxygen Demand	M410.4	1	18	B	*	mg/L	10	20	05/06/16 11:57	emk
Chloride	M300.0 - Ion Chromatography	1	0.83	B		mg/L	0.5	2.5	05/10/16 18:59	bsu
Fluoride	SM4500F-C	1	0.22	B	*	mg/L	0.05	0.3	05/04/16 16:44	abd
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		51			mg/L	0.2	5	05/17/16 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.32			mg/L	0.02	0.1	05/17/16 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.32		*	mg/L	0.02	0.1	05/04/16 0:48	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	05/04/16 0:48	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	05/05/16 15:15	spl
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.4	B		mg/L	0.1	0.5	05/17/16 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.4	B	*	mg/L	0.1	0.5	05/07/16 0:03	pjb
pH (lab)	SM4500H+ B									
pH		1	7.5	H		units	0.1	0.1	05/03/16 0:00	sck
pH measured at		1	22.7			C	0.1	0.1	05/03/16 0:00	sck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.12		*	mg/L	0.02	0.05	05/04/16 22:21	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	152			mg/L	10	20	05/03/16 13:49	sck
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	05/03/16 14:41	sck
Sulfate	M300.0 - Ion Chromatography	1	43.4			mg/L	0.5	2.5	05/10/16 18:59	bsu
Sulfide as S	SM4500S2-D	1		U	*	mg/L	0.02	0.1	05/03/16 15:53	emk

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-9360-B

ACZ Sample ID: **L30192-03**

Date Sampled: 05/02/16 11:30

Date Received: 05/03/16

Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								05/05/16 14:50	krh
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								05/04/16 16:19	spl
Total Recoverable Digestion	M200.2 ICP								05/05/16 8:40	gss
Total Recoverable Digestion	M200.2 ICP-MS								05/05/16 16:37	enb

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-9360-B

ACZ Sample ID: **L30192-03**

Date Sampled: 05/02/16 11:30

Date Received: 05/03/16

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.53			mg/L	0.03	0.2	05/05/16 20:44	gss
Aluminum, total recoverable	M200.7 ICP	1	4.37			mg/L	0.03	0.2	05/05/16 16:08	gss
Arsenic, dissolved	M200.8 ICP-MS	1	0.0253			mg/L	0.0002	0.001	05/10/16 16:29	msh
Arsenic, total recoverable	M200.8 ICP-MS	1	0.0376			mg/L	0.0002	0.001	05/09/16 16:27	enb
Boron, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/09/16 10:47	aeb
Boron, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:08	gss
Cadmium, dissolved	M200.8 ICP-MS	1	0.0065			mg/L	0.0001	0.0005	05/10/16 16:29	msh
Cadmium, total recoverable	M200.8 ICP-MS	1	0.0069			mg/L	0.0001	0.0005	05/09/16 16:27	enb
Calcium, dissolved	M200.7 ICP	1	14.5			mg/L	0.1	0.5	05/05/16 20:44	gss
Chromium, total recoverable	M200.8 ICP-MS	1	0.0008	B		mg/L	0.0005	0.002	05/09/16 16:27	enb
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 20:44	gss
Cobalt, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:08	gss
Copper, dissolved	M200.8 ICP-MS	1	0.0102			mg/L	0.0005	0.003	05/10/16 16:29	msh
Copper, total recoverable	M200.8 ICP-MS	1	0.0144			mg/L	0.0005	0.003	05/09/16 16:27	enb
Iron, dissolved	M200.7 ICP	1	1.36			mg/L	0.02	0.05	05/09/16 10:47	aeb
Iron, total recoverable	M200.7 ICP	1	2.34			mg/L	0.02	0.05	05/05/16 16:08	gss
Lead, dissolved	M200.8 ICP-MS	1	0.0007			mg/L	0.0001	0.0005	05/10/16 16:29	msh
Lead, total recoverable	M200.8 ICP-MS	1	0.0019			mg/L	0.0001	0.0005	05/09/16 16:27	enb
Magnesium, dissolved	M200.7 ICP	1	1.8			mg/L	0.2	1	05/05/16 20:44	gss
Manganese, dissolved	M200.7 ICP	1	0.153			mg/L	0.005	0.03	05/05/16 20:44	gss
Manganese, total recoverable	M200.7 ICP	1	0.165			mg/L	0.005	0.03	05/05/16 16:08	gss
Mercury, total	M1631, Atomic Fluorescence	1	7.7		*	ng/L	0.2	0.5	05/17/16 12:57	mfm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 20:44	gss
Nickel, total recoverable	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 16:08	gss
Potassium, dissolved	M200.7 ICP	1	1.8			mg/L	0.2	1	05/05/16 20:44	gss
Selenium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0003	05/11/16 13:46	msh
Selenium, total recoverable	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0003	05/09/16 16:27	enb
Silica, dissolved	M200.7 ICP	1	25.9			mg/L	0.2	1	05/05/16 20:44	gss
Silica, total recoverable	M200.7 ICP	1	38.6		*	mg/L	0.2	1	05/05/16 16:08	gss
Silver, dissolved	M200.8 ICP-MS	1		U	*	mg/L	0.00005	0.0003	05/10/16 16:29	msh
Silver, total recoverable	M200.8 ICP-MS	1	0.00010	B		mg/L	0.00005	0.0003	05/09/16 16:27	enb
Sodium, dissolved	M200.7 ICP	1	2.9			mg/L	0.2	1	05/05/16 20:44	gss
Uranium, dissolved	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0005	05/10/16 16:29	msh
Uranium, total recoverable	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0005	05/09/16 16:27	enb
Zinc, dissolved	M200.8 ICP-MS	1	0.877			mg/L	0.002	0.005	05/10/16 16:29	msh

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-9360-B

ACZ Sample ID: **L30192-03**

Date Sampled: 05/02/16 11:30

Date Received: 05/03/16

Sample Matrix: Surface Water

Zinc, total recoverable	M200.8 ICP-MS	1	0.960		mg/L	0.002	0.005	05/09/16 16:27	enb
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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	15.9	B		mg/L	2	20	05/03/16 0:00	sck
Carbonate as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Hydroxide as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Total Alkalinity		1	15.9	B		mg/L	2	20	05/03/16 0:00	sck
Carbon, dissolved organic (DOC)	SM5310B	1	6.6		*	mg/L	1	5	05/09/16 15:14	bsu
Cation-Anion Balance	Calculation									
Cation-Anion Balance			4.3			%			05/17/16 0:00	calc
Sum of Anions			1.1			meq/L			05/17/16 0:00	calc
Sum of Cations			1.2			meq/L			05/17/16 0:00	calc
Chemical Oxygen Demand	M410.4	1	22		*	mg/L	10	20	05/06/16 12:08	emk
Chloride	M300.0 - Ion Chromatography	1	0.80	B	*	mg/L	0.5	2.5	05/10/16 19:17	bsu
Fluoride	SM4500F-C	1	0.19	B	*	mg/L	0.05	0.3	05/04/16 16:48	abd
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		44			mg/L	0.2	5	05/17/16 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.24			mg/L	0.02	0.1	05/17/16 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.24		*	mg/L	0.02	0.1	05/04/16 0:49	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	05/04/16 0:49	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	05/05/16 15:16	spl
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.4	B		mg/L	0.1	0.5	05/17/16 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.4	B	*	mg/L	0.1	0.5	05/07/16 0:04	pjb
pH (lab)	SM4500H+ B									
pH		1	7.6	H		units	0.1	0.1	05/03/16 0:00	sck
pH measured at		1	22.8			C	0.1	0.1	05/03/16 0:00	sck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.15		*	mg/L	0.02	0.05	05/04/16 22:25	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	142			mg/L	10	20	05/03/16 13:52	sck
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	05/03/16 14:44	sck
Sulfate	M300.0 - Ion Chromatography	1	33.6			mg/L	0.5	2.5	05/10/16 19:17	bsu
Sulfide as S	SM4500S2-D	1	0.02	B	*	mg/L	0.02	0.1	05/03/16 16:17	emk

Rio Grande Silver, Inc.

Project ID: BO-35028
Sample ID: WG-9700-W

ACZ Sample ID: **L30192-04**
Date Sampled: 05/02/16 12:10
Date Received: 05/03/16
Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								05/05/16 15:03	krh
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								05/04/16 16:24	spl
Total Recoverable Digestion	M200.2 ICP								05/05/16 9:42	gss
Total Recoverable Digestion	M200.2 ICP-MS								05/05/16 16:46	enb

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-9700-W

ACZ Sample ID: **L30192-04**

Date Sampled: 05/02/16 12:10

Date Received: 05/03/16

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.71			mg/L	0.03	0.2	05/05/16 20:47	gss
Aluminum, total recoverable	M200.7 ICP	1	5.03			mg/L	0.03	0.2	05/05/16 16:11	gss
Arsenic, dissolved	M200.8 ICP-MS	1	0.0277			mg/L	0.0002	0.001	05/10/16 16:37	msh
Arsenic, total recoverable	M200.8 ICP-MS	1	0.0415			mg/L	0.0002	0.001	05/09/16 16:30	enb
Boron, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/09/16 10:50	aeb
Boron, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:11	gss
Cadmium, dissolved	M200.8 ICP-MS	1	0.0015			mg/L	0.0001	0.0005	05/10/16 16:37	msh
Cadmium, total recoverable	M200.8 ICP-MS	1	0.0017			mg/L	0.0001	0.0005	05/09/16 16:30	enb
Calcium, dissolved	M200.7 ICP	1	9.2			mg/L	0.1	0.5	05/05/16 20:47	gss
Chromium, total recoverable	M200.8 ICP-MS	1	0.0014	B		mg/L	0.0005	0.002	05/09/16 16:30	enb
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 20:47	gss
Cobalt, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:11	gss
Copper, dissolved	M200.8 ICP-MS	1	0.0129			mg/L	0.0005	0.003	05/10/16 16:37	msh
Copper, total recoverable	M200.8 ICP-MS	1	0.0176			mg/L	0.0005	0.003	05/09/16 16:30	enb
Iron, dissolved	M200.7 ICP	1	1.45			mg/L	0.02	0.05	05/09/16 10:50	aeb
Iron, total recoverable	M200.7 ICP	1	2.76			mg/L	0.02	0.05	05/05/16 16:11	gss
Lead, dissolved	M200.8 ICP-MS	1	0.0008			mg/L	0.0001	0.0005	05/10/16 16:37	msh
Lead, total recoverable	M200.8 ICP-MS	1	0.0022			mg/L	0.0001	0.0005	05/09/16 16:30	enb
Magnesium, dissolved	M200.7 ICP	1	1.3			mg/L	0.2	1	05/05/16 20:47	gss
Manganese, dissolved	M200.7 ICP	1	0.117			mg/L	0.005	0.03	05/05/16 20:47	gss
Manganese, total recoverable	M200.7 ICP	1	0.128			mg/L	0.005	0.03	05/05/16 16:11	gss
Mercury, total	M1631, Atomic Fluorescence	1	9.9		*	ng/L	0.2	0.5	05/17/16 13:02	mfm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 20:47	gss
Nickel, total recoverable	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 16:11	gss
Potassium, dissolved	M200.7 ICP	1	1.6			mg/L	0.2	1	05/05/16 20:47	gss
Selenium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0003	05/11/16 13:48	msh
Selenium, total recoverable	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	05/09/16 16:30	enb
Silica, dissolved	M200.7 ICP	1	26.2			mg/L	0.2	1	05/05/16 20:47	gss
Silica, total recoverable	M200.7 ICP	1	38.2		*	mg/L	0.2	1	05/05/16 16:11	gss
Silver, dissolved	M200.8 ICP-MS	1		U	*	mg/L	0.00005	0.0003	05/10/16 16:37	msh
Silver, total recoverable	M200.8 ICP-MS	1	0.00009	B		mg/L	0.00005	0.0003	05/09/16 16:30	enb
Sodium, dissolved	M200.7 ICP	1	2.7			mg/L	0.2	1	05/05/16 20:47	gss
Uranium, dissolved	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0005	05/10/16 16:37	msh
Uranium, total recoverable	M200.8 ICP-MS	1	0.0003	B		mg/L	0.0001	0.0005	05/09/16 16:30	enb
Zinc, dissolved	M200.8 ICP-MS	1	0.145			mg/L	0.002	0.005	05/10/16 16:37	msh

Rio Grande Silver, Inc.

Project ID: BO-35028
Sample ID: WG-9700-W

ACZ Sample ID: **L30192-04**
Date Sampled: 05/02/16 12:10
Date Received: 05/03/16
Sample Matrix: Surface Water

Zinc, total recoverable	M200.8 ICP-MS	1	0.175			mg/L	0.002	0.005	05/09/16 16:30	enb
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	21.2			mg/L	2	20	05/03/16 0:00	sck
Carbonate as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Hydroxide as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Total Alkalinity		1	21.2			mg/L	2	20	05/03/16 0:00	sck
Carbon, dissolved organic (DOC)	SM5310B	1	8.0		*	mg/L	1	5	05/09/16 15:14	bsu
Cation-Anion Balance	Calculation									
Cation-Anion Balance			11.5			%			05/17/16 0:00	calc
Sum of Anions			0.711			meq/L			05/17/16 0:00	calc
Sum of Cations			0.896			meq/L			05/17/16 0:00	calc
Chemical Oxygen Demand	M410.4	1	22		*	mg/L	10	20	05/06/16 12:40	emk
Chloride	M300.0 - Ion Chromatography	1	0.73	B	*	mg/L	0.5	2.5	05/10/16 19:52	bsu
Fluoride	SM4500F-C	1	0.13	B	*	mg/L	0.05	0.3	05/04/16 16:53	abd
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		28			mg/L	0.2	5	05/17/16 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.14			mg/L	0.02	0.1	05/17/16 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.14		*	mg/L	0.02	0.1	05/04/16 0:51	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	05/04/16 0:51	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	05/05/16 15:21	spl
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.5			mg/L	0.1	0.5	05/17/16 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.5		*	mg/L	0.1	0.5	05/07/16 0:05	pjb
pH (lab)	SM4500H+ B									
pH		1	7.7	H		units	0.1	0.1	05/03/16 0:00	sck
pH measured at		1	22.8			C	0.1	0.1	05/03/16 0:00	sck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.17		*	mg/L	0.02	0.05	05/04/16 22:26	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	122			mg/L	10	20	05/03/16 13:54	sck
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	05/03/16 14:47	sck
Sulfate	M300.0 - Ion Chromatography	1	11.9			mg/L	0.5	2.5	05/10/16 19:52	bsu
Sulfide as S	SM4500S2-D	1	0.02	B	*	mg/L	0.02	0.1	05/03/16 16:25	emk

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-U

ACZ Sample ID: **L30192-05**

Date Sampled: 05/02/16 12:55

Date Received: 05/03/16

Sample Matrix: Surface Water

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								05/05/16 15:15	krh
Phosphorus, total	M365.1 - Auto Ascorbic Acid Digestion								05/04/16 16:29	spl
Total Recoverable Digestion	M200.2 ICP								05/05/16 10:45	gss
Total Recoverable Digestion	M200.2 ICP-MS								05/05/16 16:55	enb

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-U

ACZ Sample ID: **L30192-05**

Date Sampled: 05/02/16 12:55

Date Received: 05/03/16

Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.70			mg/L	0.03	0.2	05/05/16 20:50	gss
Aluminum, total recoverable	M200.7 ICP	1	6.11			mg/L	0.03	0.2	05/05/16 16:14	gss
Arsenic, dissolved	M200.8 ICP-MS	1	0.0020			mg/L	0.0002	0.001	05/10/16 16:39	msh
Arsenic, total recoverable	M200.8 ICP-MS	1	0.0024			mg/L	0.0002	0.001	05/09/16 16:33	enb
Boron, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/09/16 10:53	aeb
Boron, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:14	gss
Cadmium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	05/10/16 16:39	msh
Cadmium, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	05/09/16 16:33	enb
Calcium, dissolved	M200.7 ICP	1	8.2			mg/L	0.1	0.5	05/05/16 20:50	gss
Chromium, total recoverable	M200.8 ICP-MS	1	0.0014	B		mg/L	0.0005	0.002	05/09/16 16:33	enb
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 20:50	gss
Cobalt, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 16:14	gss
Copper, dissolved	M200.8 ICP-MS	1	0.0007	B		mg/L	0.0005	0.003	05/10/16 16:39	msh
Copper, total recoverable	M200.8 ICP-MS	1	0.0018	B		mg/L	0.0005	0.003	05/09/16 16:33	enb
Iron, dissolved	M200.7 ICP	1	0.38			mg/L	0.02	0.05	05/09/16 10:53	aeb
Iron, total recoverable	M200.7 ICP	1	2.97			mg/L	0.02	0.05	05/05/16 16:14	gss
Lead, dissolved	M200.8 ICP-MS	1	0.0005			mg/L	0.0001	0.0005	05/10/16 16:39	msh
Lead, total recoverable	M200.8 ICP-MS	1	0.0012			mg/L	0.0001	0.0005	05/09/16 16:33	enb
Magnesium, dissolved	M200.7 ICP	1	1.1			mg/L	0.2	1	05/05/16 20:50	gss
Manganese, dissolved	M200.7 ICP	1	0.015	B		mg/L	0.005	0.03	05/05/16 20:50	gss
Manganese, total recoverable	M200.7 ICP	1	0.027	B		mg/L	0.005	0.03	05/05/16 16:14	gss
Mercury, total	M1631, Atomic Fluorescence	1	8.5		*	ng/L	0.2	0.5	05/13/16 11:31	mfm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 20:50	gss
Nickel, total recoverable	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 16:14	gss
Potassium, dissolved	M200.7 ICP	1	1.5			mg/L	0.2	1	05/05/16 20:50	gss
Selenium, dissolved	M200.8 ICP-MS	1		U	*	mg/L	0.0001	0.0003	05/10/16 16:39	msh
Selenium, total recoverable	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0003	05/09/16 16:33	enb
Silica, dissolved	M200.7 ICP	1	28.6			mg/L	0.2	1	05/05/16 20:50	gss
Silica, total recoverable	M200.7 ICP	1	46.2		*	mg/L	0.2	1	05/05/16 16:14	gss
Silver, dissolved	M200.8 ICP-MS	1		U	*	mg/L	0.00005	0.0003	05/10/16 16:39	msh
Silver, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.00005	0.0003	05/09/16 16:33	enb
Sodium, dissolved	M200.7 ICP	1	2.7			mg/L	0.2	1	05/05/16 20:50	gss
Uranium, dissolved	M200.8 ICP-MS	1	0.0001	B		mg/L	0.0001	0.0005	05/10/16 16:39	msh
Uranium, total recoverable	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0005	05/09/16 16:33	enb
Zinc, dissolved	M200.8 ICP-MS	1	0.003	B		mg/L	0.002	0.005	05/10/16 16:39	msh

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-U

ACZ Sample ID: **L30192-05**

Date Sampled: 05/02/16 12:55

Date Received: 05/03/16

Sample Matrix: Surface Water

Zinc, total recoverable	M200.8 ICP-MS	1	0.008			mg/L	0.002	0.005	05/09/16 16:33	enb
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	25.5			mg/L	2	20	05/03/16 0:00	sck
Carbonate as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Hydroxide as CaCO ₃		1		U		mg/L	2	20	05/03/16 0:00	sck
Total Alkalinity		1	25.5			mg/L	2	20	05/03/16 0:00	sck
Carbon, dissolved organic (DOC)	SM5310B	1	9.1		*	mg/L	1	5	05/09/16 15:14	bsu
Cation-Anion Balance	Calculation									
Cation-Anion Balance			11.5			%			05/17/16 0:00	calc
Sum of Anions			0.601			meq/L			05/17/16 0:00	calc
Sum of Cations			0.757			meq/L			05/17/16 0:00	calc
Chemical Oxygen Demand	M410.4	1	25		*	mg/L	10	20	05/06/16 12:50	emk
Chloride	M300.0 - Ion Chromatography	1	0.69	B	*	mg/L	0.5	2.5	05/10/16 20:28	bsu
Fluoride	SM4500F-C	1	0.08	B	*	mg/L	0.05	0.3	05/04/16 17:09	abd
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation		25			mg/L	0.2	5	05/17/16 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂			U		mg/L	0.02	0.1	05/17/16 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.02	0.1	05/04/16 0:53	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	05/04/16 0:53	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	05/05/16 15:22	spl
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH ₃		0.5			mg/L	0.1	0.5	05/17/16 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.5		*	mg/L	0.1	0.5	05/07/16 0:07	pjb
pH (lab)	SM4500H+ B									
pH		1	7.8	H		units	0.1	0.1	05/03/16 0:00	sck
pH measured at		1	23.0			C	0.1	0.1	05/03/16 0:00	sck
Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	1	0.13		*	mg/L	0.02	0.05	05/04/16 22:27	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	134			mg/L	10	20	05/03/16 13:57	sck
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	05/03/16 14:49	sck
Sulfate	M300.0 - Ion Chromatography	1	3.19			mg/L	0.5	2.5	05/10/16 20:28	bsu
Sulfide as S	SM4500S2-D	1	0.02	B	*	mg/L	0.02	0.1	05/03/16 16:33	emk

Rio Grande Silver, Inc.

Project ID: BO-35028
Sample ID: EQUIPMENT BLANK

ACZ Sample ID: **L30192-06**
Date Sampled: 05/02/16 11:05
Date Received: 05/03/16
Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1	0.04	B		mg/L	0.03	0.2	05/05/16 20:53	gss
Arsenic, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0002	0.001	05/10/16 16:42	msh
Boron, dissolved	M200.7 ICP	1	0.01	B		mg/L	0.01	0.05	05/09/16 10:56	aeb
Cadmium, dissolved	M200.8 ICP-MS	1	0.0018			mg/L	0.0001	0.0005	05/10/16 16:42	msh
Calcium, dissolved	M200.7 ICP	1		U		mg/L	0.1	0.5	05/05/16 20:53	gss
Cobalt, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	05/05/16 20:53	gss
Copper, dissolved	M200.8 ICP-MS	1	0.0013	B		mg/L	0.0005	0.003	05/10/16 16:42	msh
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.02	0.05	05/09/16 10:56	aeb
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	05/10/16 16:42	msh
Magnesium, dissolved	M200.7 ICP	1		U		mg/L	0.2	1	05/05/16 20:53	gss
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.005	0.03	05/05/16 20:53	gss
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	05/05/16 20:53	gss
Potassium, dissolved	M200.7 ICP	1		U		mg/L	0.2	1	05/05/16 20:53	gss
Selenium, dissolved	M200.8 ICP-MS	1		U	*	mg/L	0.0001	0.0003	05/10/16 16:42	msh
Silica, dissolved	M200.7 ICP	1		U		mg/L	0.2	1	05/05/16 20:53	gss
Silver, dissolved	M200.8 ICP-MS	1		U	*	mg/L	0.00005	0.0003	05/10/16 16:42	msh
Sodium, dissolved	M200.7 ICP	1		U		mg/L	0.2	1	05/05/16 20:53	gss
Uranium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	05/10/16 16:42	msh
Zinc, dissolved	M200.8 ICP-MS	1		U		mg/L	0.002	0.005	05/10/16 16:42	msh

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Carbon, dissolved organic (DOC)	SM5310B	1	1.2	B	*	mg/L	1	5	05/09/16 15:14	bsu
Chloride	M300.0 - Ion Chromatography	1		U	*	mg/L	0.5	2.5	05/11/16 12:08	bsu
Fluoride	SM4500F-C	1		U	*	mg/L	0.05	0.3	05/04/16 17:15	abd
Hardness as CaCO ₃ (dissolved)	SM2340B - Calculation			U		mg/L	0.2	5	05/17/16 0:00	calc
Nitrate as N, dissolved	Calculation: NO ₃ NO ₂ minus NO ₂		0.29			mg/L	0.02	0.1	05/17/16 0:00	calc
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1	0.29		*	mg/L	0.02	0.1	05/04/16 0:56	pjb
Nitrite as N, dissolved	M353.2 - Automated Cadmium Reduction	1		U	*	mg/L	0.01	0.05	05/04/16 0:56	pjb
Sulfate	M300.0 - Ion Chromatography	1	0.71	B		mg/L	0.5	2.5	05/11/16 12:08	bsu

Rio Grande Silver, Inc.

Project ID: BO-35028
Sample ID: TRIP BLANK

ACZ Sample ID: **L30192-07**
Date Sampled: 05/02/16 10:45
Date Received: 05/03/16
Sample Matrix: Surface Water

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Mercury, total	M1631, Atomic Fluorescence	1		U	*	ng/L	0.2	0.5	05/17/16 13:07	mfm


Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

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

Method References

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

Comments

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

For a complete list of ACZ's Extended Qualifiers, please click:

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

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Alkalinity as CaCO₃ SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402390													
WG402390PBW1	PBW	05/03/16 16:20				U	mg/L		-20	20			
WG402390LCSW3	LCSW	05/03/16 16:37	WC160426-7	820.0001		784	mg/L	96	90	110			
WG402390LCSW6	LCSW	05/03/16 19:38	WC160426-7	820.0001		785	mg/L	96	90	110			
WG402390PBW2	PBW	05/03/16 19:46				U	mg/L		-20	20			
L30206-01DUP	DUP	05/03/16 21:21			539	555	mg/L				3	20	
WG402390LCSW9	LCSW	05/03/16 22:27	WC160426-7	820.0001		806	mg/L	98	90	110			
WG402390PBW3	PBW	05/03/16 22:35				U	mg/L		-20	20			
WG402390LCSW12	LCSW	05/03/16 23:41	WC160426-7	820.0001		809	mg/L	99	90	110			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	2		2.048	mg/L	102	95	105			
WG402442ICB	ICB	05/05/16 19:53				.037	mg/L		-0.09	0.09			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	.150195		.187	mg/L	125	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	200.410195		201.2	mg/L	100	1	200			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	1.0013		1.039	mg/L	104	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	1.0013	.05	1.058	mg/L	101	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	1.0013	.05	1.028	mg/L	98	85	115	3	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	1		1.015	mg/L	102	90	110			
WG402442CCB1	CCB	05/05/16 20:40				.032	mg/L		-0.09	0.09			
L30213-02AS	AS	05/05/16 21:03	II160429-3	1.0013	.06	1.037	mg/L	98	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	1.0013	.06	1.053	mg/L	99	85	115	2	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	1		1.048	mg/L	105	90	110			
WG402442CCB2	CCB	05/05/16 21:19				.03	mg/L		-0.09	0.09			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	1		1.053	mg/L	105	90	110			
WG402442CCB3	CCB	05/05/16 21:41				.031	mg/L		-0.09	0.09			

Aluminum, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402506													
WG402506ICV	ICV	05/05/16 14:30	II160419-1	2		2.068	mg/L	103	95	105			
WG402506ICB	ICB	05/05/16 14:36				U	mg/L		-0.09	0.09			
WG402506PQV	PQV	05/05/16 14:39	II160426-3	.150195		.153	mg/L	102	70	130			
WG402506SIC	SIC	05/05/16 14:42	II160427-4	200.410195		209.6	mg/L	105	1	200			
WG402407LRB	LRB	05/05/16 14:48				U	mg/L		-0.066	0.066			
WG402407LFB	LFB	05/05/16 14:51	II160429-3	1.0013		1.026	mg/L	102	85	115			
WG402506CCV1	CCV	05/05/16 15:17	II160504-1	1		1.02	mg/L	102	90	110			
WG402506CCB1	CCB	05/05/16 15:20				U	mg/L		-0.09	0.09			
L30167-04LFM	LFM	05/05/16 15:41	II160429-3	1.0013	.71	1.843	mg/L	113	70	130			
L30167-04LFMD	LFMD	05/05/16 15:44	II160429-3	1.0013	.71	1.858	mg/L	115	70	130	1	20	
WG402506CCV2	CCV	05/05/16 15:53	II160504-1	1		1.032	mg/L	103	90	110			
WG402506CCB2	CCB	05/05/16 15:56				U	mg/L		-0.09	0.09			
WG402506CCV3	CCV	05/05/16 16:17	II160504-1	1		1.023	mg/L	102	90	110			
WG402506CCB3	CCB	05/05/16 16:20				U	mg/L		-0.09	0.09			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Arsenic, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.05		.053	mg/L	106	90	110			
WG402694ICB	ICB	05/10/16 16:05				U	mg/L		-0.0006	0.0006			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.0501		.05019	mg/L	100	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.0501	U	.05309	mg/L	106	70	130			
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.0501	U	.05508	mg/L	110	70	130	4	20	
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.1002		.10091	mg/L	101	90	110			
WG402694CCB1	CCB	05/10/16 16:34				U	mg/L		-0.0006	0.0006			
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.1002		.10142	mg/L	101	90	110			
WG402694CCB2	CCB	05/10/16 17:04				U	mg/L		-0.0006	0.0006			
WG402694CCV3	CCV	05/10/16 17:19	MS160419-13	.1002		.09886	mg/L	99	90	110			
WG402694CCB3	CCB	05/10/16 17:21				U	mg/L		-0.0006	0.0006			

Arsenic, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.05125	mg/L	103	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.0006	0.0006			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.00044	0.00044			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.0501		.05033	mg/L	100	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.1002		.09647	mg/L	96	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.0006	0.0006			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.0501	.0008	.05424	mg/L	107	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.0501	.0008	.0511	mg/L	100	70	130	6	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.1002		.09724	mg/L	97	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.0006	0.0006			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.1002		.09717	mg/L	97	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.0006	0.0006			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.1002		.09781	mg/L	98	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.0006	0.0006			

Boron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402571													
WG402571ICV	ICV	05/09/16 9:51	II160419-1	2		1.964	mg/L	98	95	105			
WG402571ICB	ICB	05/09/16 9:57				U	mg/L		-0.03	0.03			
WG402571PQV	PQV	05/09/16 10:00	II160426-3	.05005		.056	mg/L	112	70	130			
WG402571SIC	SIC	05/09/16 10:03	II160427-4	.1001		.093	mg/L	93	80	120			
WG402571LFB	LFB	05/09/16 10:09	II160429-3	.5005		.528	mg/L	105	85	115			
L30185-04AS	AS	05/09/16 10:25	II160429-3	.5005	U	.519	mg/L	104	85	115			
L30185-04ASD	ASD	05/09/16 10:28	II160429-3	.5005	U	.528	mg/L	105	85	115	2	20	
WG402571CCV1	CCV	05/09/16 10:41	II160504-1	1		.986	mg/L	99	90	110			
WG402571CCB1	CCB	05/09/16 10:44				U	mg/L		-0.03	0.03			
L30213-05AS	AS	05/09/16 11:15	II160429-3	.5005	U	.534	mg/L	107	85	115			
WG402571CCV2	CCV	05/09/16 11:19	II160504-1	1		.957	mg/L	96	90	110			
WG402571CCB2	CCB	05/09/16 11:22				U	mg/L		-0.03	0.03			
L30213-05ASD	ASD	05/09/16 11:25	II160429-3	.5005	U	.529	mg/L	106	85	115	1	20	
WG402571CCV3	CCV	05/09/16 11:41	II160504-1	1		.968	mg/L	97	90	110			
WG402571CCB3	CCB	05/09/16 11:44				U	mg/L		-0.03	0.03			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Boron, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402506													
WG402506ICV	ICV	05/05/16 14:30	II160419-1	2		2.058	mg/L	103	95	105			
WG402506ICB	ICB	05/05/16 14:36				U	mg/L		-0.03	0.03			
WG402506PQV	PQV	05/05/16 14:39	II160426-3	.05005		.055	mg/L	110	70	130			
WG402506SIC	SIC	05/05/16 14:42	II160427-4	.1001		.099	mg/L	99	80	120			
WG402407LRB	LRB	05/05/16 14:48				U	mg/L		-0.022	0.022			
WG402407LFB	LFB	05/05/16 14:51	II160429-3	.5005		.532	mg/L	106	85	115			
WG402506CCV1	CCV	05/05/16 15:17	II160504-1	1		1.011	mg/L	101	90	110			
WG402506CCB1	CCB	05/05/16 15:20				U	mg/L		-0.03	0.03			
L30167-04LFM	LFM	05/05/16 15:41	II160429-3	.5005	.02	.542	mg/L	104	70	130			
L30167-04LFMD	LFMD	05/05/16 15:44	II160429-3	.5005	.02	.556	mg/L	107	70	130	3	20	
WG402506CCV2	CCV	05/05/16 15:53	II160504-1	1		1.024	mg/L	102	90	110			
WG402506CCB2	CCB	05/05/16 15:56				U	mg/L		-0.03	0.03			
WG402506CCV3	CCV	05/05/16 16:17	II160504-1	1		1.015	mg/L	102	90	110			
WG402506CCB3	CCB	05/05/16 16:20				U	mg/L		-0.03	0.03			

Cadmium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.05		.05035	mg/L	101	90	110			
WG402694ICB	ICB	05/10/16 16:05				U	mg/L		-0.0003	0.0003			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.05005		.04889	mg/L	98	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.05005	U	.0474	mg/L	95	70	130			
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.05005	U	.04893	mg/L	98	70	130	3	20	
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.1001		.09869	mg/L	99	90	110			
WG402694CCB1	CCB	05/10/16 16:34				U	mg/L		-0.0003	0.0003			
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.1001		.09922	mg/L	99	90	110			
WG402694CCB2	CCB	05/10/16 17:04				U	mg/L		-0.0003	0.0003			
WG402694CCV3	CCV	05/10/16 17:19	MS160419-13	.1001		.09834	mg/L	98	90	110			
WG402694CCB3	CCB	05/10/16 17:21				U	mg/L		-0.0003	0.0003			

Cadmium, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.04788	mg/L	96	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.0003	0.0003			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.00022	0.00022			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.05005		.0473	mg/L	95	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.1001		.09588	mg/L	96	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.0003	0.0003			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.05005	U	.04936	mg/L	99	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.05005	U	.04622	mg/L	92	70	130	7	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.1001		.09397	mg/L	94	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.0003	0.0003			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.1001		.09386	mg/L	94	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.0003	0.0003			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.1001		.09397	mg/L	94	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.0003	0.0003			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Calcium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	100		101.08	mg/L	101	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.3	0.3			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	.50095		.48	mg/L	96	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	200.88095		197.7	mg/L	98	1	200			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	68.01588		68.75	mg/L	101	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	68.01588	24.8	93.12	mg/L	100	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	68.01588	24.8	91.85	mg/L	99	85	115	1	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	50		49.79	mg/L	100	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.3	0.3			
L30213-02AS	AS	05/05/16 21:03	II160429-3	68.01588	33.7	100.1	mg/L	98	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	68.01588	33.7	100.3	mg/L	98	85	115	0	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	50		51.04	mg/L	102	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.3	0.3			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	50		50.98	mg/L	102	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.3	0.3			

Carbon, dissolved organic (DOC)

SM5310B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG401936													
WG401936ICV	ICV	04/27/16 16:00	WI160420-9	100		98.7	mg/L	99	90	110			
WG401936ICB	ICB	04/27/16 16:00				U	mg/L		-3	3			
WG402670													
WG402670CCV1	CCV	05/09/16 15:14	WI160304-3	50		51.1	mg/L	102	90	110			
WG402670CCB1	CCB	05/09/16 15:14				U	mg/L		-3	3			
WG402670PQV	PQV	05/09/16 15:14	WI160420-8	5		5.2	mg/L	104	70	130			
WG402670LFB1	LFB	05/09/16 15:14	WI151203-3	50		51.3	mg/L	103	90	110			
L30185-01DUP	DUP	05/09/16 15:14			3.5	3.6	mg/L				3	20	RA
L30185-02AS	AS	05/09/16 15:14	WI151203-3	50	3.3	55.8	mg/L	105	90	110			
WG402670CCV2	CCV	05/09/16 15:14	WI160304-3	50		51	mg/L	102	90	110			
WG402670CCB2	CCB	05/09/16 15:14				U	mg/L		-3	3			
L30192-06DUP	DUP	05/09/16 15:14			1.2	1.2	mg/L				0	20	RA
L30262-01AS	AS	05/09/16 15:14	WI151203-3	50	8.6	61.1	mg/L	105	90	110			
WG402670CCV3	CCV	05/09/16 15:14	WI160304-3	50		51.4	mg/L	103	90	110			
WG402670CCB3	CCB	05/09/16 15:14				U	mg/L		-3	3			
WG402670LFB2	LFB	05/09/16 15:14	WI151203-3	50		52.5	mg/L	105	90	110			
WG402670CCV4	CCV	05/09/16 15:14	WI160304-3	50		51.6	mg/L	103	90	110			
WG402670CCB4	CCB	05/09/16 15:14				U	mg/L		-3	3			
WG402670CCV5	CCV	05/09/16 15:14	WI160304-3	50		51.7	mg/L	103	90	110			
WG402670CCB5	CCB	05/09/16 15:14				U	mg/L		-3	3			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Chemical Oxygen Demand M410.4

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402556													
WG402556ICV	ICV	05/06/16 9:30	WC151013-9	200		215	mg/L	108	90	110			
WG402556ICB	ICB	05/06/16 9:40				U	mg/L		-10	10			
WG402556LRB	LRB	05/06/16 9:51				U	mg/L		-10	10			
WG402556LFB	LFB	05/06/16 10:01	WC160406-3	50		55	mg/L	110	90	110			
WG402556CCV1	CCV	05/06/16 11:36	WC160406-2	400		415	mg/L	104	90	110			
WG402556CCB1	CCB	05/06/16 11:47				U	mg/L		-10	10			
L30192-03AS	AS	05/06/16 12:19	WC160406-3	50	22	72	mg/L	100	90	110			
L30192-03DUP	DUP	05/06/16 12:29			22	21	mg/L				5	20	RA
L30192-05DUP	DUP	05/06/16 13:01			25	27	mg/L				8	20	RA
L30192-05AS	AS	05/06/16 13:11	WC160406-3	50	25	73	mg/L	96	90	110			
WG402556CCV2	CCV	05/06/16 13:22	WC160406-2	400		416	mg/L	104	90	110			
WG402556CCB2	CCB	05/06/16 13:33				U	mg/L		-10	10			

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG400298													
WG400298ICV	ICV	03/14/16 19:12	WI160202-2	20.02		20.3	mg/L	101	90	110			
WG400298ICB	ICB	03/14/16 19:30				U	mg/L		-0.5	0.5			
WG402734													
WG402734CCV1	CCV	05/10/16 13:54	WI160217-3	50		51.3	mg/L	103	90	110			
WG402734CCB1	CCB	05/10/16 14:11				U	mg/L		-0.5	0.5			
WG402734PQV	PQV	05/10/16 14:29	WI160503-3	2.4975		2.3	mg/L	92	70	130			
WG402734LFB1	LFB	05/10/16 14:47	WI151103-3	30		30.4	mg/L	101	90	110			
L30147-01DUP	DUP	05/10/16 15:41			99.7	99.7	mg/L				0	20	
WG402734CCV2	CCV	05/10/16 17:29	WI160217-3	50		51.3	mg/L	103	90	110			
WG402734CCB2	CCB	05/10/16 17:47				U	mg/L		-0.5	0.5			
L30192-03DUP	DUP	05/10/16 19:35			.8	.77	mg/L				4	20	RA
L30192-04AS	AS	05/10/16 20:10	WI151103-3	30	.73	31.5	mg/L	103	90	110			
WG402734CCV3	CCV	05/10/16 21:04	WI160217-3	50		51.3	mg/L	103	90	110			
WG402734CCB3	CCB	05/10/16 21:22				U	mg/L		-0.5	0.5			
WG402734LFB2	LFB	05/10/16 23:27	WI151103-3	30		30.5	mg/L	102	90	110			
WG402734CCV4	CCV	05/11/16 0:39	WI160217-3	50		51.3	mg/L	103	90	110			
WG402734CCB4	CCB	05/11/16 0:57				U	mg/L		-0.5	0.5			
WG402734CCV5	CCV	05/11/16 4:14	WI160217-3	50		51.4	mg/L	103	90	110			
WG402734CCB5	CCB	05/11/16 4:32				U	mg/L		-0.5	0.5			
WG402734CCV6	CCV	05/11/16 10:03	WI160217-3	50		51.3	mg/L	103	90	110			
WG402734CCB6	CCB	05/11/16 10:21				U	mg/L		-0.5	0.5			
WG402734PQV1	PQV	05/11/16 10:38	WI160503-3	2.4975		2.29	mg/L	92	70	130			
L30148-01AS	AS	05/11/16 11:50	WI151103-3	150	74.2	224	mg/L	100	90	110			
WG402734CCV7	CCV	05/11/16 12:26	WI160217-3	50		51.2	mg/L	102	90	110			
WG402734CCB7	CCB	05/11/16 12:44				U	mg/L		-0.5	0.5			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Chromium, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.04856	mg/L	97	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.0015	0.0015			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.0011	0.0011			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.05005		.04887	mg/L	98	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.1001		.09634	mg/L	96	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.0015	0.0015			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.05005	U	.0499	mg/L	100	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.05005	U	.0469	mg/L	94	70	130	6	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.1001		.09755	mg/L	97	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.0015	0.0015			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.1001		.09709	mg/L	97	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.0015	0.0015			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.1001		.09487	mg/L	95	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.0015	0.0015			

Cobalt, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	2.002		1.918	mg/L	96	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.03	0.03			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	.0498		.055	mg/L	110	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	.0996		.105	mg/L	105	80	120			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	.498		.517	mg/L	104	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	.498	U	.509	mg/L	102	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	.498	U	.51	mg/L	102	85	115	0	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	1.001		.959	mg/L	96	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.03	0.03			
L30213-02AS	AS	05/05/16 21:03	II160429-3	.498	U	.511	mg/L	103	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	.498	U	.512	mg/L	103	85	115	0	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	1.001		.984	mg/L	98	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.03	0.03			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	1.001		.976	mg/L	98	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.03	0.03			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Cobalt, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402506													
WG402506ICV	ICV	05/05/16 14:30	II160419-1	2.002		1.942	mg/L	97	95	105			
WG402506ICB	ICB	05/05/16 14:36				U	mg/L		-0.03	0.03			
WG402506PQV	PQV	05/05/16 14:39	II160426-3	.0498		.051	mg/L	102	70	130			
WG402506SIC	SIC	05/05/16 14:42	II160427-4	.0996		.103	mg/L	103	80	120			
WG402407LRB	LRB	05/05/16 14:48				U	mg/L		-0.022	0.022			
WG402407LFB	LFB	05/05/16 14:51	II160429-3	.498		.516	mg/L	104	85	115			
WG402506CCV1	CCV	05/05/16 15:17	II160504-1	1.001		.971	mg/L	97	90	110			
WG402506CCB1	CCB	05/05/16 15:20				U	mg/L		-0.03	0.03			
L30167-04LFM	LFM	05/05/16 15:41	II160429-3	.498	U	.506	mg/L	102	70	130			
L30167-04LFMD	LFMD	05/05/16 15:44	II160429-3	.498	U	.515	mg/L	103	70	130	2	20	
WG402506CCV2	CCV	05/05/16 15:53	II160504-1	1.001		.985	mg/L	98	90	110			
WG402506CCB2	CCB	05/05/16 15:56				U	mg/L		-0.03	0.03			
WG402506CCV3	CCV	05/05/16 16:17	II160504-1	1.001		.975	mg/L	97	90	110			
WG402506CCB3	CCB	05/05/16 16:20				U	mg/L		-0.03	0.03			

Copper, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.05		.05017	mg/L	100	90	110			
WG402694ICB	ICB	05/10/16 16:05				U	mg/L		-0.0015	0.0015			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.0501		.0481	mg/L	96	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.0501	U	.04654	mg/L	93	70	130			
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.0501	U	.04672	mg/L	93	70	130	0	20	
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.2505		.24155	mg/L	96	90	110			
WG402694CCB1	CCB	05/10/16 16:34				U	mg/L		-0.0015	0.0015			
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.2505		.24117	mg/L	96	90	110			
WG402694CCB2	CCB	05/10/16 17:04				U	mg/L		-0.0015	0.0015			
WG402694CCV3	CCV	05/10/16 17:19	MS160419-13	.2505		.24057	mg/L	96	90	110			
WG402694CCB3	CCB	05/10/16 17:21				U	mg/L		-0.0015	0.0015			

Copper, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.04981	mg/L	100	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.0015	0.0015			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.0011	0.0011			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.0501		.04911	mg/L	98	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.2505		.2376	mg/L	95	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.0015	0.0015			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.0501	U	.0483	mg/L	96	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.0501	U	.0462	mg/L	92	70	130	4	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.2505		.2454	mg/L	98	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.0015	0.0015			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.2505		.2427	mg/L	97	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.0015	0.0015			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.2505		.2404	mg/L	96	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.0015	0.0015			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Fluoride

SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402460													
WG402460ICV	ICV	05/04/16 15:55	WC160425-7	2		1.9	mg/L	95	95	105			
WG402460ICB	ICB	05/04/16 16:01				U	mg/L		-0.15	0.15			
WG402460PQV	PQV	05/04/16 16:05	WC160503-1	.24975		.24	mg/L	96	70	130			
WG402460LFB1	LFB	05/04/16 16:08	WC160419-8	4.995		4.588	mg/L	92	90	110			
L30182-01AS	AS	05/04/16 16:18	WC160419-8	199.8	U	157.4	mg/L	79	90	110			M2
L30182-01DUP	DUP	05/04/16 16:22			U	4.7	mg/L				200	20	RA
WG402460CCV1	CCV	05/04/16 16:56	WC160425-7	2		1.909	mg/L	95	90	110			
WG402460CCB1	CCB	05/04/16 17:04				U	mg/L		-0.15	0.15			
WG402460CCV2	CCV	05/04/16 17:56	WC160425-7	2		1.935	mg/L	97	90	110			
WG402460CCB2	CCB	05/04/16 18:04				U	mg/L		-0.15	0.15			
WG402460LFB2	LFB	05/04/16 18:25	WC160419-8	4.995		4.548	mg/L	91	90	110			
WG402460CCV3	CCV	05/04/16 18:40	WC160425-7	2		1.935	mg/L	97	90	110			
WG402460CCB3	CCB	05/04/16 18:48				U	mg/L		-0.15	0.15			
WG402460CCV4	CCV	05/04/16 19:35	WC160425-7	2		1.952	mg/L	98	90	110			
WG402460CCB4	CCB	05/04/16 19:42				U	mg/L		-0.15	0.15			
WG402460CCV5	CCV	05/04/16 20:34	WC160425-7	2		1.883	mg/L	94	90	110			
WG402460CCB5	CCB	05/04/16 20:41				U	mg/L		-0.15	0.15			

Iron, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402571													
WG402571ICV	ICV	05/09/16 9:51	II160419-1	2		1.991	mg/L	100	95	105			
WG402571ICB	ICB	05/09/16 9:57				U	mg/L		-0.06	0.06			
WG402571PQV	PQV	05/09/16 10:00	II160426-3	.050085		.047	mg/L	94	70	130			
WG402571SIC	SIC	05/09/16 10:03	II160427-4	200.390085		191.4	mg/L	96	1	200			
WG402571LFB	LFB	05/09/16 10:09	II160429-3	1.0001		1.099	mg/L	110	85	115			
L30185-04AS	AS	05/09/16 10:25	II160429-3	1.0001	.03	1.118	mg/L	109	85	115			
L30185-04ASD	ASD	05/09/16 10:28	II160429-3	1.0001	.03	1.123	mg/L	109	85	115	0	20	
WG402571CCV1	CCV	05/09/16 10:41	II160504-1	1		1.002	mg/L	100	90	110			
WG402571CCB1	CCB	05/09/16 10:44				U	mg/L		-0.06	0.06			
L30213-05AS	AS	05/09/16 11:15	II160429-3	1.0001	U	1.081	mg/L	108	85	115			
WG402571CCV2	CCV	05/09/16 11:19	II160504-1	1		.993	mg/L	99	90	110			
WG402571CCB2	CCB	05/09/16 11:22				U	mg/L		-0.06	0.06			
L30213-05ASD	ASD	05/09/16 11:25	II160429-3	1.0001	U	1.092	mg/L	109	85	115	1	20	
WG402571CCV3	CCV	05/09/16 11:41	II160504-1	1		.993	mg/L	99	90	110			
WG402571CCB3	CCB	05/09/16 11:44				U	mg/L		-0.06	0.06			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Iron, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402506													
WG402506ICV	ICV	05/05/16 14:30	II160419-1	2		2.017	mg/L	101	95	105			
WG402506ICB	ICB	05/05/16 14:36				U	mg/L		-0.06	0.06			
WG402506PQV	PQV	05/05/16 14:39	II160426-3	.050085		.051	mg/L	102	70	130			
WG402506SIC	SIC	05/05/16 14:42	II160427-4	200.390085		193	mg/L	96	1	200			
WG402407LRB	LRB	05/05/16 14:48				U	mg/L		-0.044	0.044			
WG402407LFB	LFB	05/05/16 14:51	II160429-3	1.0001		1.098	mg/L	110	85	115			
WG402506CCV1	CCV	05/05/16 15:17	II160504-1	1		1.006	mg/L	101	90	110			
WG402506CCB1	CCB	05/05/16 15:20				U	mg/L		-0.06	0.06			
L30167-04LFM	LFM	05/05/16 15:41	II160429-3	1.0001	1.02	2.049	mg/L	103	70	130			
L30167-04LFMD	LFMD	05/05/16 15:44	II160429-3	1.0001	1.02	2.082	mg/L	106	70	130	2	20	
WG402506CCV2	CCV	05/05/16 15:53	II160504-1	1		1.025	mg/L	103	90	110			
WG402506CCB2	CCB	05/05/16 15:56				U	mg/L		-0.06	0.06			
WG402506CCV3	CCV	05/05/16 16:17	II160504-1	1		1.017	mg/L	102	90	110			
WG402506CCB3	CCB	05/05/16 16:20				U	mg/L		-0.06	0.06			

Lead, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.05		.05118	mg/L	102	90	110			
WG402694ICB	ICB	05/10/16 16:05				U	mg/L		-0.0003	0.0003			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.05005		.04846	mg/L	97	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.05005	.0001	.04937	mg/L	98	70	130			
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.05005	.0001	.05075	mg/L	101	70	130	3	20	
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.25025		.24985	mg/L	100	90	110			
WG402694CCB1	CCB	05/10/16 16:34				U	mg/L		-0.0003	0.0003			
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.25025		.24955	mg/L	100	90	110			
WG402694CCB2	CCB	05/10/16 17:04				U	mg/L		-0.0003	0.0003			
WG402694CCV3	CCV	05/10/16 17:19	MS160419-13	.25025		.24926	mg/L	100	90	110			
WG402694CCB3	CCB	05/10/16 17:21				U	mg/L		-0.0003	0.0003			

Lead, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.05179	mg/L	104	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.0003	0.0003			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.00022	0.00022			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.05005		.05033	mg/L	101	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.25025		.253	mg/L	101	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.0003	0.0003			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.05005	.0005	.05392	mg/L	107	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.05005	.0005	.05046	mg/L	100	70	130	7	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.25025		.25	mg/L	100	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.0003	0.0003			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.25025		.2492	mg/L	100	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.0003	0.0003			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.25025		.2497	mg/L	100	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.0003	0.0003			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Magnesium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	100		100.49	mg/L	100	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.6	0.6			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	1.0007		.98	mg/L	98	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	201.0607		205.3	mg/L	102	1	200			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	49.99998		47.83	mg/L	96	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	49.99998	14.1	62.3	mg/L	96	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	49.99998	14.1	61.3	mg/L	94	85	115	2	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	50		49.24	mg/L	98	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.6	0.6			
L30213-02AS	AS	05/05/16 21:03	II160429-3	49.99998	6.8	53.91	mg/L	94	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	49.99998	6.8	54.03	mg/L	94	85	115	0	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	50		50.37	mg/L	101	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.6	0.6			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	50		50.31	mg/L	101	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.6	0.6			

Manganese, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	2		1.9345	mg/L	97	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.015	0.015			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	.025025		.0296	mg/L	118	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	50.025025		48.81	mg/L	98	1	200			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	.5		.535	mg/L	107	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	.5	.014	.5311	mg/L	103	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	.5	.014	.5297	mg/L	103	85	115	0	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	1		.97	mg/L	97	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.015	0.015			
L30213-02AS	AS	05/05/16 21:03	II160429-3	.5	.247	.7495	mg/L	101	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	.5	.247	.7577	mg/L	102	85	115	1	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	1		.9892	mg/L	99	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.015	0.015			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	1		.9933	mg/L	99	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.015	0.015			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Manganese, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402506													
WG402506ICV	ICV	05/05/16 14:30	II160419-1	2		1.9398	mg/L	97	95	105			
WG402506ICB	ICB	05/05/16 14:36				U	mg/L		-0.015	0.015			
WG402506PQV	PQV	05/05/16 14:39	II160426-3	.025025		.0251	mg/L	100	70	130			
WG402506SIC	SIC	05/05/16 14:42	II160427-4	50.025025		48.5	mg/L	97	1	200			
WG402407LRB	LRB	05/05/16 14:48				U	mg/L		-0.011	0.011			
WG402407LFB	LFB	05/05/16 14:51	II160429-3	.5		.5216	mg/L	104	85	115			
WG402506CCV1	CCV	05/05/16 15:17	II160504-1	1		.9686	mg/L	97	90	110			
WG402506CCB1	CCB	05/05/16 15:20				U	mg/L		-0.015	0.015			
L30167-04LFM	LFM	05/05/16 15:41	II160429-3	.5	.134	.6473	mg/L	103	70	130			
L30167-04LFMD	LFMD	05/05/16 15:44	II160429-3	.5	.134	.6601	mg/L	105	70	130	2	20	
WG402506CCV2	CCV	05/05/16 15:53	II160504-1	1		.9846	mg/L	98	90	110			
WG402506CCB2	CCB	05/05/16 15:56				U	mg/L		-0.015	0.015			
WG402506CCV3	CCV	05/05/16 16:17	II160504-1	1		.9759	mg/L	98	90	110			
WG402506CCB3	CCB	05/05/16 16:20				U	mg/L		-0.015	0.015			

Mercury, total

M1631, Atomic Fluorescence

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402625													
WG402625ICV	ICV	05/13/16 9:54	HG160223-4	10		9.2	ng/L	92	79	121			
WG402625ICB	ICB	05/13/16 9:59				.33	ng/L		-0.5	0.5			
WG402625LFB	LFB	05/13/16 10:09	HG160223-6	2		1.8	ng/L	90	71	125			
WG402625CCV1	CCV	05/13/16 10:56	HG160223-4	10		11	ng/L	110	76.5	123.4			
WG402625CCB1	CCB	05/13/16 11:01				.53	ng/L		-0.5	0.5			BB
WG402625CCB2	CCB	05/13/16 11:06				.27	ng/L		-0.5	0.5			
L30251-02MS	MS	05/13/16 11:52	HG5XPREP	50	41	52	ng/L	110	71	125			
L30251-02MSD	MSD	05/13/16 11:57	HG5XPREP	50	41	53	ng/L	120	71	125	2	24	
WG402625CCV2	CCV	05/13/16 12:02	HG160223-4	10		11	ng/L	110	76.5	123.4			
WG402625CCB3	CCB	05/13/16 12:07				.6	ng/L		-0.5	0.5			BB
WG402625CCB4	CCB	05/13/16 12:12				U	ng/L		-0.5	0.5			
WG402625PQV1	PQV	05/13/16 12:37	HG160223-5	.5		.59	ng/L	118	70	130			
WG402625CCV3	CCV	05/13/16 12:42	HG160223-4	10		10.3	ng/L	103	76.5	123.4			
WG402625CCB5	CCB	05/13/16 12:47				.37	ng/L		-0.5	0.5			
WG403091													
WG403091ICV	ICV	05/17/16 10:13	HG160223-4	10		10.3	ng/L	103	79	121			
WG403091ICB	ICB	05/17/16 10:19				U	ng/L		-0.5	0.5			
WG403113													
WG403113CCV1	CCV	05/17/16 12:28	HG160223-4	10		7.99	ng/L	80	76.5	123.4			
WG403113CCB1	CCB	05/17/16 12:34				U	ng/L		-0.5	0.5			
WG403113PQV	PQV	05/17/16 12:39	HG160223-5	.5		.35	ng/L	70	70	130			
WG403113LFB	LFB	05/17/16 12:44	HG160223-6	2		1.69	ng/L	85	71	125			
L30264-01MS	MS	05/17/16 13:18	HG160223-6	2	.5	2.04	ng/L	77	71	125			
L30264-01MSD	MSD	05/17/16 13:23	HG160223-6	2	.5	2.07	ng/L	79	71	125	1	24	
WG403113CCV2	CCV	05/17/16 13:28	HG160223-4	10		8.13	ng/L	81	76.5	123.4			
WG403113CCB2	CCB	05/17/16 13:33				U	ng/L		-0.5	0.5			
WG403113CCV3	CCV	05/17/16 14:31	HG160223-4	10		8.1	ng/L	81	76.5	123.4			
WG403113CCB3	CCB	05/17/16 14:36				U	ng/L		-0.5	0.5			
WG403113CCV4	CCV	05/17/16 15:13	HG160223-4	10		9.15	ng/L	92	76.5	123.4			
WG403113CCB4	CCB	05/17/16 15:18				U	ng/L		-0.5	0.5			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Nickel, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	2		1.9925	mg/L	100	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.024	0.024			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	.04008		.0435	mg/L	109	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	.1002		.098	mg/L	98	80	120			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	.501		.5282	mg/L	105	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	.501	U	.5097	mg/L	102	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	.501	U	.5148	mg/L	103	85	115	1	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	1		.9953	mg/L	100	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.024	0.024			
L30213-02AS	AS	05/05/16 21:03	II160429-3	.501	U	.5114	mg/L	102	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	.501	U	.5148	mg/L	103	85	115	1	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	1		1.018	mg/L	102	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.024	0.024			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	1		1.02	mg/L	102	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.024	0.024			

Nickel, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402506													
WG402506ICV	ICV	05/05/16 14:30	II160419-1	2		1.9925	mg/L	100	95	105			
WG402506ICB	ICB	05/05/16 14:36				U	mg/L		-0.024	0.024			
WG402506PQV	PQV	05/05/16 14:39	II160426-3	.04008		.0385	mg/L	96	70	130			
WG402506SIC	SIC	05/05/16 14:42	II160427-4	.1002		.0958	mg/L	96	80	120			
WG402407LRB	LRB	05/05/16 14:48				U	mg/L		-0.0176	0.0176			
WG402407LFB	LFB	05/05/16 14:51	II160429-3	.501		.5144	mg/L	103	85	115			
WG402506CCV1	CCV	05/05/16 15:17	II160504-1	1		1.002	mg/L	100	90	110			
WG402506CCB1	CCB	05/05/16 15:20				U	mg/L		-0.024	0.024			
L30167-04LFM	LFM	05/05/16 15:41	II160429-3	.501	U	.5078	mg/L	101	70	130			
L30167-04LFMD	LFMD	05/05/16 15:44	II160429-3	.501	U	.5215	mg/L	104	70	130	3	20	
WG402506CCV2	CCV	05/05/16 15:53	II160504-1	1		1.018	mg/L	102	90	110			
WG402506CCB2	CCB	05/05/16 15:56				U	mg/L		-0.024	0.024			
WG402506CCV3	CCV	05/05/16 16:17	II160504-1	1		.9999	mg/L	100	90	110			
WG402506CCB3	CCB	05/05/16 16:20				U	mg/L		-0.024	0.024			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

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
WG402396													
WG402396ICV	ICV	05/04/16 0:25	WI160304-5	2.416		2.272	mg/L	94	90	110			
WG402396ICB	ICB	05/04/16 0:26				U	mg/L		-0.02	0.02			
WG402396LFB	LFB	05/04/16 0:30	WI151215-9	2		1.94	mg/L	97	90	110			
L30176-01AS	AS	05/04/16 0:32	WI151215-9	2	.08	1.95	mg/L	94	90	110			
L30176-02DUP	DUP	05/04/16 0:35			.08	.087	mg/L				8	20	RA
WG402396CCV1	CCV	05/04/16 0:40	WI160426-3	2		1.953	mg/L	98	90	110			
WG402396CCB1	CCB	05/04/16 0:43				U	mg/L		-0.02	0.02			
L30192-04AS	AS	05/04/16 0:52	WI151215-9	2	.14	2.128	mg/L	99	90	110			
L30192-05DUP	DUP	05/04/16 0:54			U	.021	mg/L				200	20	RA
WG402396CCV2	CCV	05/04/16 0:57	WI160426-3	2		1.941	mg/L	97	90	110			
WG402396CCB2	CCB	05/04/16 1:00				U	mg/L		-0.02	0.02			
WG402396CCV3	CCV	05/04/16 1:07	WI160426-3	2		1.934	mg/L	97	90	110			
WG402396CCB3	CCB	05/04/16 1:10				U	mg/L		-0.02	0.02			

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
WG402396													
WG402396ICV	ICV	05/04/16 0:25	WI160304-5	.609		.623	mg/L	102	90	110			
WG402396ICB	ICB	05/04/16 0:26				U	mg/L		-0.01	0.01			
WG402396LFB	LFB	05/04/16 0:30	WI151215-9	1		1.02	mg/L	102	90	110			
L30176-01AS	AS	05/04/16 0:32	WI151215-9	1	U	1.015	mg/L	102	90	110			
L30176-02DUP	DUP	05/04/16 0:35			U	U	mg/L				0	20	RA
WG402396CCV1	CCV	05/04/16 0:40	WI160426-3	1		1.036	mg/L	104	90	110			
WG402396CCB1	CCB	05/04/16 0:43				U	mg/L		-0.01	0.01			
L30192-04AS	AS	05/04/16 0:52	WI151215-9	1	U	1.054	mg/L	105	90	110			
L30192-05DUP	DUP	05/04/16 0:54			U	U	mg/L				0	20	RA
WG402396CCV2	CCV	05/04/16 0:57	WI160426-3	1		1.031	mg/L	103	90	110			
WG402396CCB2	CCB	05/04/16 1:00				U	mg/L		-0.01	0.01			
WG402396CCV3	CCV	05/04/16 1:07	WI160426-3	1		1.031	mg/L	103	90	110			
WG402396CCB3	CCB	05/04/16 1:10				U	mg/L		-0.01	0.01			

Nitrogen, ammonia

M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402515													
WG402515ICV	ICV	05/05/16 14:42	WI160426-2	11.988		12.148	mg/L	101	90	110			
WG402515ICB	ICB	05/05/16 14:44				U	mg/L		-0.05	0.05			
WG402515LFB	LFB	05/05/16 14:45	WI160121-1	10		9.793	mg/L	98	90	110			
WG402515CCV1	CCV	05/05/16 15:00	WI160426-1	10		10.402	mg/L	104	90	110			
WG402515CCB1	CCB	05/05/16 15:02				U	mg/L		-0.05	0.05			
L30141-01AS	AS	05/05/16 15:09	WI160121-1	10	U	10.359	mg/L	104	90	110			
L30141-02DUP	DUP	05/05/16 15:12			U	U	mg/L				0	20	RA
WG402515CCV2	CCV	05/05/16 15:18	WI160426-1	10		10.432	mg/L	104	90	110			
WG402515CCB2	CCB	05/05/16 15:19				U	mg/L		-0.05	0.05			
WG402515CCV3	CCV	05/05/16 15:35	WI160426-1	10		10.42	mg/L	104	90	110			
WG402515CCB3	CCB	05/05/16 15:37				U	mg/L		-0.05	0.05			
WG402515CCV4	CCV	05/05/16 15:45	WI160426-1	10		10.381	mg/L	104	90	110			
WG402515CCB4	CCB	05/05/16 15:46				U	mg/L		-0.05	0.05			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Nitrogen, total Kjeldahl

M351.2 - TKN by Block Digester

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402613													
WG402613ICV	ICV	05/06/16 23:34	WI160429-1	4		3.86	mg/L	97	90	110			
WG402613ICB	ICB	05/06/16 23:35				U	mg/L		-0.1	0.1			
WG402477LRB1	LRB	05/06/16 23:36				U	mg/L		-0.1	0.1			
WG402477LFB1	LFB	05/06/16 23:37	WI160225-4	2.5		2.52	mg/L	101	90	110			
WG402613CCV1	CCV	05/06/16 23:47	WI160429-3	2.5		2.58	mg/L	103	90	110			
WG402613CCB1	CCB	05/06/16 23:49				U	mg/L		-0.1	0.1			
L30185-02LFM	LFM	05/06/16 23:54	WI160225-4	2.5	.2	1.34	mg/L	46	90	110			M2
L30185-03DUP	DUP	05/06/16 23:56			.2	.15	mg/L				29	20	RA
WG402613CCV2	CCV	05/07/16 0:01	WI160429-3	2.5		2.58	mg/L	103	90	110			
WG402613CCB2	CCB	05/07/16 0:02				U	mg/L		-0.1	0.1			
WG402477LRB2	LRB	05/07/16 0:10				.13	mg/L		-0.1	0.1			BA
WG402477LFB2	LFB	05/07/16 0:11	WI160225-4	2.5		2.55	mg/L	102	90	110			
WG402613CCV3	CCV	05/07/16 0:14	WI160429-3	2.5		2.62	mg/L	105	90	110			
WG402613CCB3	CCB	05/07/16 0:16				U	mg/L		-0.1	0.1			
WG402613CCV4	CCV	05/07/16 0:32	WI160429-3	2.5		2.61	mg/L	104	90	110			
WG402613CCB4	CCB	05/07/16 0:33				U	mg/L		-0.1	0.1			

pH (lab)

SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402390													
WG402390LCSW1	LCSW	05/03/16 16:24	PCN48559	6.01		6	units	100	5.9	6.1			
WG402390LCSW4	LCSW	05/03/16 19:25	PCN48559	6.01		6.1	units	101	5.9	6.1			
L30206-01DUP	DUP	05/03/16 21:21			8.1	8.1	units				0	20	
WG402390LCSW7	LCSW	05/03/16 22:13	PCN48559	6.01		6.1	units	101	5.9	6.1			
WG402390LCSW10	LCSW	05/03/16 23:27	PCN48559	6.01		6	units	100	5.9	6.1			

Phosphorus, total

M365.1 - Auto Ascorbic Acid (digest)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402468													
WG402468ICV	ICV	05/04/16 21:54	WI160502-3	.65228		.66	mg/L	101	90	110			
WG402468ICB	ICB	05/04/16 21:56				U	mg/L		-0.02	0.02			
WG402451LRB	LRB	05/04/16 21:57				U	mg/L		-0.02	0.02			
WG402451LFB	LFB	05/04/16 21:59	WI160504-4	.5		.475	mg/L	95	90	110			
WG402468CCV1	CCV	05/04/16 22:09	WI160502-2	.5		.499	mg/L	100	90	110			
WG402468CCB1	CCB	05/04/16 22:10				U	mg/L		-0.02	0.02			
L30184-03LFM	LFM	05/04/16 22:17	WI160504-4	.5	.05	.535	mg/L	97	90	110			
L30188-02DUP	DUP	05/04/16 22:19			.04	.036	mg/L				11	20	RA
WG402468CCV2	CCV	05/04/16 22:22	WI160502-2	.5		.494	mg/L	99	90	110			
WG402468CCB2	CCB	05/04/16 22:23				U	mg/L		-0.02	0.02			
WG402468CCV3	CCV	05/04/16 22:35	WI160502-2	.5		.473	mg/L	95	90	110			
WG402468CCB3	CCB	05/04/16 22:36				U	mg/L		-0.02	0.02			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Potassium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	20		20.01	mg/L	100	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.6	0.6			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	1.001		1.05	mg/L	105	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	1.001		1.03	mg/L	103	80	120			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	99.96008		98.46	mg/L	98	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	99.96008	.4	100.4	mg/L	100	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	99.96008	.4	98.07	mg/L	98	85	115	2	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	10		9.92	mg/L	99	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.6	0.6			
L30213-02AS	AS	05/05/16 21:03	II160429-3	99.96008	4.4	101.9	mg/L	98	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	99.96008	4.4	102	mg/L	98	85	115	0	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	10		10.04	mg/L	100	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.6	0.6			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	10		10.12	mg/L	101	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.6	0.6			

Residue, Filterable (TDS) @180C

SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402364													
WG402364PBW	PBW	05/03/16 13:00				U	mg/L		-20	20			
WG402364LCSW	LCSW	05/03/16 13:02	PCN50252	260		252	mg/L	97	80	120			
L30192-05DUP	DUP	05/03/16 14:00			134	138	mg/L				3	10	

Residue, Non-Filterable (TSS) @105C

SM2540D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402363													
WG402363PBW	PBW	05/03/16 14:00				U	mg/L		-15	15			
WG402363LCSW	LCSW	05/03/16 14:02	PCN50252	160		158	mg/L	99	80	120			
L30201-04DUP	DUP	05/03/16 15:00			12	11	mg/L				9	10	RA

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Selenium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.05		.05426	mg/L	109	90	110			
WG402694ICB	ICB	05/10/16 16:05				.00016	mg/L		-0.0003	0.0003			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.0501		.04846	mg/L	97	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.0501	U	.03895	mg/L	78	70	130			
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.0501	U	.03853	mg/L	77	70	130	1	20	
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.2505		.25002	mg/L	100	90	110			
WG402694CCB1	CCB	05/10/16 16:34				.00033	mg/L		-0.0003	0.0003			BE
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.2505		.25574	mg/L	102	90	110			
WG402694CCB2	CCB	05/10/16 17:04				.00042	mg/L		-0.0003	0.0003			BE

WG402796

WG402796ICV	ICV	05/11/16 13:32	MS160419-12	.05		.0501	mg/L	100	90	110			
WG402796ICB	ICB	05/11/16 13:34				U	mg/L		-0.0003	0.0003			
WG402796LFB	LFB	05/11/16 13:36	MS160510-5	.0501		.04988	mg/L	100	85	115			
L30223-01AS	AS	05/11/16 13:51	MS160510-5	.0501	U	.04646	mg/L	93	70	130			
WG402796CCV1	CCV	05/11/16 13:53	MS160510-2	.2505		.2494	mg/L	100	90	110			
WG402796CCB1	CCB	05/11/16 13:55				.00014	mg/L		-0.0003	0.0003			
L30223-01ASD	ASD	05/11/16 13:57	MS160510-5	.0501	U	.04835	mg/L	97	70	130	4	20	
WG402796CCV2	CCV	05/11/16 14:05	MS160510-2	.2505		.2445	mg/L	98	90	110			
WG402796CCB2	CCB	05/11/16 14:07				.00012	mg/L		-0.0003	0.0003			

Selenium, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.05012	mg/L	100	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.0003	0.0003			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.00022	0.00022			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.0501		.05048	mg/L	101	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.2505		.2489	mg/L	99	90	110			
WG402673CCB1	CCB	05/09/16 16:45				.00012	mg/L		-0.0003	0.0003			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.0501	.0123	.06836	mg/L	112	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.0501	.0123	.0656	mg/L	106	70	130	4	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.2505		.2513	mg/L	100	90	110			
WG402673CCB2	CCB	05/09/16 17:22				.00012	mg/L		-0.0003	0.0003			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.2505		.2539	mg/L	101	90	110			
WG402673CCB3	CCB	05/09/16 18:00				.00014	mg/L		-0.0003	0.0003			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.2505		.2505	mg/L	100	90	110			
WG402673CCB4	CCB	05/09/16 18:09				.00018	mg/L		-0.0003	0.0003			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Silica, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	42.8		41.23	mg/L	96	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.6	0.6			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	1.07075		1.16	mg/L	108	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	1.07075		1.16	mg/L	108	80	120			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	21.428		22.34	mg/L	104	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	21.428	3.1	24.72	mg/L	101	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	21.428	3.1	24.68	mg/L	101	85	115	0	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	21.4		20.69	mg/L	97	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.6	0.6			
L30213-02AS	AS	05/05/16 21:03	II160429-3	21.428	56.8	76.65	mg/L	93	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	21.428	56.8	77.54	mg/L	97	85	115	1	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	21.4		20.99	mg/L	98	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.6	0.6			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	21.4		21.13	mg/L	99	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.6	0.6			

Silica, total recoverable

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402506													
WG402506ICV	ICV	05/05/16 14:30	II160419-1	42.8		42.13	mg/L	98	95	105			
WG402506ICB	ICB	05/05/16 14:36				U	mg/L		-0.6	0.6			
WG402506PQV	PQV	05/05/16 14:39	II160426-3	1.07075		1.11	mg/L	104	70	130			
WG402506SIC	SIC	05/05/16 14:42	II160427-4	1.07075		1.11	mg/L	104	80	120			
WG402407LRB	LRB	05/05/16 14:48				U	mg/L		-0.44	0.44			
WG402407LFB	LFB	05/05/16 14:51	II160429-3	21.428		22.02	mg/L	103	85	115			
WG402506CCV1	CCV	05/05/16 15:17	II160504-1	21.4		21.12	mg/L	99	90	110			
WG402506CCB1	CCB	05/05/16 15:20				U	mg/L		-0.6	0.6			
L30167-04LFM	LFM	05/05/16 15:41	II160429-3	21.428	8	23.23	mg/L	71	70	130			
L30167-04LFMD	LFMD	05/05/16 15:44	II160429-3	21.428	8	23.16	mg/L	71	70	130	0	20	
WG402506CCV2	CCV	05/05/16 15:53	II160504-1	21.4		21.36	mg/L	100	90	110			
WG402506CCB2	CCB	05/05/16 15:56				U	mg/L		-0.6	0.6			
WG402506CCV3	CCV	05/05/16 16:17	II160504-1	21.4		21.26	mg/L	99	90	110			
WG402506CCB3	CCB	05/05/16 16:20				U	mg/L		-0.6	0.6			

Silver, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.02004		.01873	mg/L	93	90	110			
WG402694ICB	ICB	05/10/16 16:05				U	mg/L		-0.00015	0.00015			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.01001		.009332	mg/L	93	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.01001	U	.006625	mg/L	66	70	130			M2 ZA
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.01001	U	.005908	mg/L	59	70	130	11	20	M2 ZA
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.025025		.024938	mg/L	100	90	110			
WG402694CCB1	CCB	05/10/16 16:34				.000115	mg/L		-0.00015	0.00015			
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.025025		.025083	mg/L	100	90	110			
WG402694CCB2	CCB	05/10/16 17:04				.000079	mg/L		-0.00015	0.00015			
WG402694CCV3	CCV	05/10/16 17:19	MS160419-13	.025025		.024904	mg/L	100	90	110			
WG402694CCB3	CCB	05/10/16 17:21				U	mg/L		-0.00015	0.00015			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Silver, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.02004		.01822	mg/L	91	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.00015	0.00015			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.00011	0.00011			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.01001		.00886	mg/L	89	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.025025		.02432	mg/L	97	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.00015	0.00015			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.01001	U	.00877	mg/L	88	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.01001	U	.00826	mg/L	83	70	130	6	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.025025		.02349	mg/L	94	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.00015	0.00015			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.025025		.02344	mg/L	94	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.00015	0.00015			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.025025		.0236	mg/L	94	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.00015	0.00015			

Sodium, dissolved

M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402442													
WG402442ICV	ICV	05/05/16 19:47	II160419-1	100		96.84	mg/L	97	95	105			
WG402442ICB	ICB	05/05/16 19:53				U	mg/L		-0.6	0.6			
WG402442PQV	PQV	05/05/16 19:56	II160426-3	1.001		1.01	mg/L	101	70	130			
WG402442SIC	SIC	05/05/16 19:59	II160427-4	1.001		1.02	mg/L	102	80	120			
WG402442LFB	LFB	05/05/16 20:05	II160429-3	100.0149		94.78	mg/L	95	85	115			
L30185-02AS	AS	05/05/16 20:15	II160429-3	100.0149	.6	96.73	mg/L	96	85	115			
L30185-02ASD	ASD	05/05/16 20:18	II160429-3	100.0149	.6	94.5	mg/L	94	85	115	2	20	
WG402442CCV1	CCV	05/05/16 20:37	II160504-1	50		47.52	mg/L	95	90	110			
WG402442CCB1	CCB	05/05/16 20:40				U	mg/L		-0.6	0.6			
L30213-02AS	AS	05/05/16 21:03	II160429-3	100.0149	17.6	110.4	mg/L	93	85	115			
L30213-02ASD	ASD	05/05/16 21:06	II160429-3	100.0149	17.6	110.6	mg/L	93	85	115	0	20	
WG402442CCV2	CCV	05/05/16 21:16	II160504-1	50		48.27	mg/L	97	90	110			
WG402442CCB2	CCB	05/05/16 21:19				U	mg/L		-0.6	0.6			
WG402442CCV3	CCV	05/05/16 21:38	II160504-1	50		48.31	mg/L	97	90	110			
WG402442CCB3	CCB	05/05/16 21:41				U	mg/L		-0.6	0.6			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Sulfate

M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG400298													
WG400298ICV	ICV	03/14/16 19:12	WI160202-2	50.05		51.4	mg/L	103	90	110			
WG400298ICB	ICB	03/14/16 19:30				U	mg/L		-0.5	0.5			
WG402734													
WG402734CCV1	CCV	05/10/16 13:54	WI160217-3	50		50.9	mg/L	102	90	110			
WG402734CCB1	CCB	05/10/16 14:11				U	mg/L		-0.5	0.5			
WG402734PQV	PQV	05/10/16 14:29	WI160503-3	2.5025		2.21	mg/L	88	70	130			
WG402734LFB1	LFB	05/10/16 14:47	WI151103-3	30		30.3	mg/L	101	90	110			
L30148-01AS	AS	05/10/16 16:16	WI151103-3	30	72.4	100	mg/L	92	90	110			
WG402734CCV2	CCV	05/10/16 17:29	WI160217-3	50		50.9	mg/L	102	90	110			
WG402734CCB2	CCB	05/10/16 17:47				U	mg/L		-0.5	0.5			
L30192-03DUP	DUP	05/10/16 19:35			33.6	33.4	mg/L				1	20	
L30192-04AS	AS	05/10/16 20:10	WI151103-3	30	11.9	42.1	mg/L	101	90	110			
WG402734CCV3	CCV	05/10/16 21:04	WI160217-3	50		50.8	mg/L	102	90	110			
WG402734CCB3	CCB	05/10/16 21:22				U	mg/L		-0.5	0.5			
WG402734LFB2	LFB	05/10/16 23:27	WI151103-3	30		30.2	mg/L	101	90	110			
WG402734CCV4	CCV	05/11/16 0:39	WI160217-3	50		51	mg/L	102	90	110			
WG402734CCB4	CCB	05/11/16 0:57				U	mg/L		-0.5	0.5			
WG402734CCV5	CCV	05/11/16 4:14	WI160217-3	50		50.9	mg/L	102	90	110			
WG402734CCB5	CCB	05/11/16 4:32				U	mg/L		-0.5	0.5			
WG402734CCV6	CCV	05/11/16 10:03	WI160217-3	50		50.8	mg/L	102	90	110			
WG402734CCB6	CCB	05/11/16 10:21				U	mg/L		-0.5	0.5			
WG402734PQV1	PQV	05/11/16 10:38	WI160503-3	2.5025		2.13	mg/L	85	70	130			
L30147-01DUP	DUP	05/11/16 11:14			96	96.5	mg/L				1	20	
WG402734CCV7	CCV	05/11/16 12:26	WI160217-3	50		50.6	mg/L	101	90	110			
WG402734CCB7	CCB	05/11/16 12:44				U	mg/L		-0.5	0.5			

Sulfide as S

SM4500S2-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402374													
WG402374ICV	ICV	05/03/16 14:03	WC160503-9	.34		.314	mg/L	92	90	110			
WG402374ICB	ICB	05/03/16 14:10				U	mg/L		-0.06	0.06			
WG402374LFB	LFB	05/03/16 14:18	WC160503-12	.2213333		.243	mg/L	110	80	120			
WG402374CCV1	CCV	05/03/16 15:38	WC160503-10	.166		.166	mg/L	100	90	110			
WG402374CCB1	CCB	05/03/16 15:45				U	mg/L		-0.06	0.06			
L30192-02AS	AS	05/03/16 16:01	WC160503-12	.2213333	U	.061	mg/L	28	75	125			M2
L30192-02DUP	DUP	05/03/16 16:09			U	.08	mg/L				200	20	RA
L30192-05AS	AS	05/03/16 16:41	WC160503-12	.2213333	.02	.059	mg/L	18	75	125			M2
L30192-05DUP	DUP	05/03/16 16:49			.02	U	mg/L				200	20	RA
WG402374CCV2	CCV	05/03/16 16:57	WC160503-10	.166		.164	mg/L	99	90	110			
WG402374CCB2	CCB	05/03/16 17:05				U	mg/L		-0.06	0.06			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Uranium, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.05		.05263	mg/L	105	90	110			
WG402694ICB	ICB	05/10/16 16:05				U	mg/L		-0.0003	0.0003			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.05		.04967	mg/L	99	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.05	U	.0519	mg/L	104	70	130			
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.05	U	.05342	mg/L	107	70	130	3	20	
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.1		.10154	mg/L	102	90	110			
WG402694CCB1	CCB	05/10/16 16:34				U	mg/L		-0.0003	0.0003			
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.1		.10113	mg/L	101	90	110			
WG402694CCB2	CCB	05/10/16 17:04				U	mg/L		-0.0003	0.0003			
WG402694CCV3	CCV	05/10/16 17:19	MS160419-13	.1		.10147	mg/L	101	90	110			
WG402694CCB3	CCB	05/10/16 17:21				U	mg/L		-0.0003	0.0003			

Uranium, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.05163	mg/L	103	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.0003	0.0003			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.00022	0.00022			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.05		.05141	mg/L	103	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.1		.1012	mg/L	101	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.0003	0.0003			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.05	.0059	.06464	mg/L	117	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.05	.0059	.06066	mg/L	110	70	130	6	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.1		.1003	mg/L	100	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.0003	0.0003			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.1		.1006	mg/L	101	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.0003	0.0003			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.1		.1011	mg/L	101	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.0003	0.0003			

Zinc, dissolved

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402694													
WG402694ICV	ICV	05/10/16 16:02	MS160419-12	.05		.0493	mg/L	99	90	110			
WG402694ICB	ICB	05/10/16 16:05				U	mg/L		-0.006	0.006			
WG402694LFB	LFB	05/10/16 16:07	MS160419-4	.050135		.0483	mg/L	96	85	115			
L30189-03AS	AS	05/10/16 16:17	MS160419-4	.050135	.007	.0543	mg/L	94	70	130			
L30189-03ASD	ASD	05/10/16 16:20	MS160419-4	.050135	.007	.0564	mg/L	99	70	130	4	20	
WG402694CCV1	CCV	05/10/16 16:32	MS160419-13	.50135		.4924	mg/L	98	90	110			
WG402694CCB1	CCB	05/10/16 16:34				U	mg/L		-0.006	0.006			
WG402694CCV2	CCV	05/10/16 17:01	MS160419-13	.50135		.4983	mg/L	99	90	110			
WG402694CCB2	CCB	05/10/16 17:04				U	mg/L		-0.006	0.006			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Zinc, total recoverable

M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
WG402673													
WG402673ICV	ICV	05/09/16 16:08	MS160419-12	.05		.0479	mg/L	96	90	110			
WG402673ICB	ICB	05/09/16 16:11				U	mg/L		-0.006	0.006			
WG402528LRB	LRB	05/09/16 16:14				U	mg/L		-0.0044	0.0044			
WG402528LFB	LFB	05/09/16 16:17	MS160419-4	.050135		.0488	mg/L	97	85	115			
WG402673CCV1	CCV	05/09/16 16:42	MS160419-13	.50135		.4989	mg/L	100	90	110			
WG402673CCB1	CCB	05/09/16 16:45				U	mg/L		-0.006	0.006			
L30246-01LFM	LFM	05/09/16 16:52	MS160419-4	.050135	.008	.056	mg/L	96	70	130			
L30246-01LFMD	LFMD	05/09/16 16:55	MS160419-4	.050135	.008	.0572	mg/L	98	70	130	2	20	
WG402673CCV2	CCV	05/09/16 17:19	MS160419-13	.50135		.4879	mg/L	97	90	110			
WG402673CCB2	CCB	05/09/16 17:22				U	mg/L		-0.006	0.006			
WG402673CCV3	CCV	05/09/16 17:57	MS160419-13	.50135		.4828	mg/L	96	90	110			
WG402673CCB3	CCB	05/09/16 18:00				U	mg/L		-0.006	0.006			
WG402673CCV4	CCV	05/09/16 18:06	MS160419-13	.50135		.4834	mg/L	96	90	110			
WG402673CCB4	CCB	05/09/16 18:09				U	mg/L		-0.006	0.006			

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L30192-01	WG403113	Mercury, total	M1631, Atomic Fluorescence	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG402506	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG402694	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG402670	Carbon, dissolved organic (DOC)	SM5310B	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).
	WG402556	Chemical Oxygen Demand	M410.4	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).
	WG402460	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	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).
	WG402396	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).
		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).
	WG402515	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG402613	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - TKN by Block Digester	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).
	WG402468	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	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).
	WG402363	Residue, Non-Filterable (TSS) @105C	SM2540D	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).
	WG402374	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	QD	Reported value is the background-corrected concentration, as described by the method.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L30192-02	WG402506	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG402694	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG402670	Carbon, dissolved organic (DOC)	SM5310B	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).
	WG402556	Chemical Oxygen Demand	M410.4	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).
	WG402460	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	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).
	WG402396	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).
		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).
	WG402515	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG402613	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - TKN by Block Digester	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).
	WG402468	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	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).
	WG402363	Residue, Non-Filterable (TSS) @105C	SM2540D	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).
	WG402374	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	QD	Reported value is the background-corrected concentration, as described by the method.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L30192-03	WG403113	Mercury, total	M1631, Atomic Fluorescence	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG402506	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG402694	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG402670	Carbon, dissolved organic (DOC)	SM5310B	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).
	WG402556	Chemical Oxygen Demand	M410.4	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).
	WG402734	Chloride	M300.0 - Ion Chromatography	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).
	WG402460	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	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).
	WG402396	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).
		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).
	WG402515	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG402613	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - TKN by Block Digester	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).
	WG402468	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	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).
	WG402363	Residue, Non-Filterable (TSS) @105C	SM2540D	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).
	WG402374	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	QD	Reported value is the background-corrected concentration, as described by the method.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L30192-04	WG403113	Mercury, total	M1631, Atomic Fluorescence	Q1	Sample integrity was not maintained. See Case Narrative.
			M1631, Atomic Fluorescence	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
	WG402506	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG402694	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG402670	Carbon, dissolved organic (DOC)	SM5310B	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).
	WG402556	Chemical Oxygen Demand	M410.4	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).
	WG402734	Chloride	M300.0 - Ion Chromatography	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).
	WG402460	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	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).
	WG402396	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).
		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).
	WG402515	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG402613	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - TKN by Block Digester	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).
	WG402468	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	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).
	WG402363	Residue, Non-Filterable (TSS) @105C	SM2540D	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).
	WG402374	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	QD	Reported value is the background-corrected concentration, as described by the method.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L30192-05	WG402625	Mercury, total	M1631, Atomic Fluorescence	BB	Target analyte detected in calibration blank at or above acceptance limit. Sample value was > 10X the concentration in the calibration blank.
	WG402694	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [$< \text{MDL}$].
	WG402506	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG402694	Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG402670	Carbon, dissolved organic (DOC)	SM5310B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402556	Chemical Oxygen Demand	M410.4	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402734	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402460	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402396	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 ($< 10\text{x MDL}$).
		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 ($< 10\text{x MDL}$).
	WG402515	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402613	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M351.2 - TKN by Block Digester	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402468	Phosphorus, total	M365.1 - Auto Ascorbic Acid (digest)	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402363	Residue, Non-Filterable (TSS) @105C	SM2540D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).
	WG402374	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	QD	Reported value is the background-corrected concentration, as described by the method.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\text{x MDL}$).

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L30192-06	WG402694	Selenium, dissolved	M200.8 ICP-MS	BE	Target analyte in continuing calibration blank (CCB) at or above the acceptance criteria. Target analyte was not detected in the sample [$< \text{MDL}$].
		Silver, dissolved	M200.8 ICP-MS	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.8 ICP-MS	ZA	Poor recovery for Silver quality control is accepted due to low Silver solubility in samples, digestates, or extracts that do not contain sufficient Hydrochloric acid.
	WG402670	Carbon, dissolved organic (DOC)	SM5310B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\times \text{MDL}$).
	WG402734	Chloride	M300.0 - Ion Chromatography	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\times \text{MDL}$).
	WG402460	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500F-C	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($< 10\times \text{MDL}$).
	WG402396	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 ($< 10\times \text{MDL}$).
		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 ($< 10\times \text{MDL}$).
L30192-07	WG403113	Mercury, total	M1631, Atomic Fluorescence	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-L

ACZ Sample ID: **L30192-01**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

Sample Matrix: Surface Water

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**

Extract Method:

Workgroup: WG402482

Analyst: id

Extract Date:

Analysis Date: 05/05/16 10:57

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-D

ACZ Sample ID: **L30192-02**

Date Sampled: 05/02/16 10:35

Date Received: 05/03/16

Sample Matrix: Surface Water

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**

Extract Method:

Workgroup: WG402482

Analyst: id

Extract Date:

Analysis Date: 05/05/16 11:16

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10

Rio Grande Silver, Inc.

Project ID: BO-35028
Sample ID: WG-9360-B

ACZ Sample ID: **L30192-03**
Date Sampled: 05/02/16 11:30
Date Received: 05/03/16
Sample Matrix: Surface Water

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: WG402482

Analyst: id
Extract Date:
Analysis Date: 05/05/16 11:36

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10

Rio Grande Silver, Inc.

Project ID: BO-35028
Sample ID: WG-9700-W

ACZ Sample ID: **L30192-04**
Date Sampled: 05/02/16 12:10
Date Received: 05/03/16
Sample Matrix: Surface Water

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: **WG402482**

Analyst: id
Extract Date:
Analysis Date: 05/05/16 11:56

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10

Rio Grande Silver, Inc.

Project ID: BO-35028

Sample ID: WG-U

ACZ Sample ID: **L30192-05**

Date Sampled: 05/02/16 12:55

Date Received: 05/03/16

Sample Matrix: Surface Water

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**

Extract Method:

Workgroup: **WG402482**

Analyst: id

Extract Date:

Analysis Date: 05/05/16 12:15

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10


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>LCL</i>	Lower Control Limit
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #4) 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>	Amount of the true value or spike added recovered, 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>UCL</i>	Upper Control Limit
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>SURR</i>	Surrogate	<i>LFM</i>	Laboratory Fortified Matrix
<i>INTS</i>	Internal Standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBS</i>	Prep Blank - Soil
<i>LFB</i>	Laboratory Fortified Blank	<i>PBW</i>	Prep Blank - Water

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.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
O	Analyte concentration is estimated due to result exceeding calibration range.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
J	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
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 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
- (3) EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
- (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) Excluding Oil & Grease, solid & biological matrices for organic analyses are reported on a wet weight basis.
- (3) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
- (4) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

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

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

Oil & Grease, Total Recoverable

1664A - Gravimetric

WG402482

MS		Sample ID: L30149-01MS		PCN/SCN: OP160428-2				Analyzed: 05/05/16 9:39		
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40	U	37.1	mg/L	93.0	78	114			

LCSW		Sample ID: WG402482LCSW		PCN/SCN: OP160428-2				Analyzed: 05/05/16 16:10		
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		30.4	mg/L	76.0	78	114			RL

LCSWD		Sample ID: WG402482LCSWD		PCN/SCN: OP160428-2				Analyzed: 05/05/16 16:30		
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		31.8	mg/L	80.0	78	114	5	18	

PBW		Sample ID: WG402482PBW				Analyzed: 05/05/16 9:00				
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE			U	mg/L						

ACZ Project ID: **L30192**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L30192-01	WG402482	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			1664A - Gravimetric	RL	Recovery for either the LCS or LCS duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
L30192-02	WG402482	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			1664A - Gravimetric	RL	Recovery for either the LCS or LCS duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
L30192-03	WG402482	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			1664A - Gravimetric	RL	Recovery for either the LCS or LCS duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
L30192-04	WG402482	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			1664A - Gravimetric	RL	Recovery for either the LCS or LCS duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
L30192-05	WG402482	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			1664A - Gravimetric	RL	Recovery for either the LCS or LCS duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.

Rio Grande Silver, Inc.

ACZ Project ID: **L30192**

No certification qualifiers associated with this analysis

Rio Grande Silver, Inc.
BO-35028

ACZ Project ID: L30192
Date Received: 05/03/2016 09:22
Received By: lzg
Date Printed: 5/3/2016

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? The quotation was entered as "SW-2015" per the project manager.	☐	☒	☐
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples? A change was made in the sample information section prior to ACZ custody.	☒	☐	☐

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?	☒	☐	☐

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
4506	3.1	<=6.0	17	Yes
NA23804	4.1	<=6.0	17	N/A

Was ice present in the shipment container(s)?

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

Rio Grande Silver, Inc.
BO-35028

ACZ Project ID: L30192

Date Received: 05/03/2016 09:22

Received By: lzg

Date Printed: 5/3/2016

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).

Report to:

Name: Randy McClure	Address: 625 USFS Road 504. 1A
Company: Rio Grande Silver, Inc.	Creede, CO 81130
E-mail: rmccclure@hecla-mining.com	Telephone: 719-658-1080

Copy of Report to:

Name: Janet Shangraw	E-mail: jshangraw@comcast.net
Company: JNS, Inc.	Telephone: 303-972-8596

Invoice to:

Name: Randy McClure	Address: 625 USFS Road 504. 1A
Company: Rio Grande Silver, Inc.	Creede, CO 81130
E-mail: rmccclure@hecla-mining.com	Telephone: 719-658-1080

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: R. McClure Sampler's Site Information State CO Zip code 81130 Time Zone mdt

*Sampler's Signature: _____ I attest to the authenticity and validity of this sample. I understand that 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 #: Mod-Extended-SW 2016	# of Containers <u>MACZ 842 samples SW-2016</u>																		
PO#: BO-35028																			
Reporting state for compliance testing:																			
Check box if samples include NRC licensed material? ☐																			
SAMPLE IDENTIFICATION	DATE:TIME	Matrix																	
WG- SL	5-2-16 10:35a	SW	9	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
WG-D	5-2-16 " a	SW	8	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
WG-9360-B	5-2-16 11:30am	SW	9	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
WG-9700-W	5-2-16 12:40 pm	SW	9	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
WG-U	5-2-16 12:55p	SW	9	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Equipment Blank	5-2-16 11:05a	SW	3	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Trip Blank	5-2-16 10:45 am	SW	2	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
(Mercury using 1631				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Samples not filtered				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
or preserved)				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Matrix	SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)																		

Field Equip Blank and any listed trip blanks should be included on one report. There may be more than one cooler for this COC. Please send an additional report to rmccclure@hecla-mining.com

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

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
<u>[Signature]</u>	5-2-16 4pm	<u>[Signature]</u>	5-31-16 9:22

L30192 Chain of Custody