

WTE
April 07, 2014

Mr. Wally Erickson
State of Colorado
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, Colorado 80203

Subject: Battle Mountain Resources, Inc. DMG Permit No. M-88-112
✓ Monthly, Quarterly and Semi-Annual Sampling.

Mr. Erickson:

Enclosed are the analytical results from SVL Analytical Inc. and Energy Laboratories for the recent monthly, quarterly and semi-annual sampling periods as specified in the April 1992 Abatement Plan. The cross-reference table between sample identification, sample types and sample locations are also attached.

All required sampling was completed. Analysis that have been received are enclosed and those that have not been received will be forwarded to you as soon as they are sent to me.

Sincerely:

David S. Carino
Environmental Representative III

David S. Carino

Enclosures
cc: Larry Fiske
File

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APR 10 2014

Division of Reclamation,
Mining & Safety



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4B0437**
Reported: 06-Mar-14 10:29

Client Sample ID: **140227BMGTAILS**SVL Sample ID: **W4B0437-01 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 27-Feb-14 11:50

Received: 28-Feb-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Metals (Total)

EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0008	2.5	W410006	KWH	03/05/14 11:53	
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This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Linda Johann
Supervisor Microbiology Lab

*Monthly**Temp - 7.1°C**P.H - 8.28***RECEIVED**

APR 10 2014

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4B0437**
Reported: 06-Mar-14 10:29

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Total) EPA 200.8	Arsenic	mg/L	<0.0100	0.0008	0.0100	W410006	05-Mar-14	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total) EPA 200.8	Arsenic	mg/L	0.0224	0.0250	89.5	85 - 115	W410006	05-Mar-14	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total) EPA 200.8	Arsenic	mg/L	0.0233	<0.0100	0.0250	93.2	70 - 130	W410006	05-Mar-14	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Total) EPA 200.8	Arsenic	mg/L	0.0219	0.0233	0.0250	87.5	6.3	20	W410006	05-Mar-14	

Notes and Definitions

LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0266**
Reported: 31-Jan-14 12:06

Client Sample ID: **140115BMGM12**SVL Sample ID: **W4A0266-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 15-Jan-14 15:10

Received: 17-Jan-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	49.1	mg/L	0.040	0.015		W403215	DT	01/22/14 12:49	
EPA 200.7	Magnesium	8.02	mg/L	0.200	0.039		W403215	DT	01/22/14 12:49	
EPA 200.7	Potassium	1.90	mg/L	0.50	0.13		W403215	DT	01/22/14 12:49	
EPA 200.7	Silica (SiO ₂)	21.1	mg/L	0.17	0.06		W403215	DT	01/22/14 12:49	
EPA 200.7	Sodium	13.1	mg/L	0.50	0.08		W403215	DT	01/22/14 12:49	
SM 2340B	Hardness (as CaCO ₃)	156	mg/L	0.923	0.198		N/A		01/22/14 12:49	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W404007	AS	01/22/14 14:43	
EPA 200.7	Barium	0.153	mg/L	0.0020	0.0005		W404007	AS	01/22/14 13:26	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0007		W404007	AS	01/22/14 13:26	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W404007	AS	01/22/14 13:26	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W404007	AS	01/22/14 13:26	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W404007	AS	01/22/14 13:26	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W404007	AS	01/22/14 13:26	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W404007	AS	01/22/14 13:26	
EPA 200.7	Zinc	0.298	mg/L	0.0100	0.0023		W404007	AS	01/22/14 13:26	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0003		W404023	KWH	01/22/14 07:32	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404023	KWH	01/22/14 07:32	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00026		W404023	KWH	01/22/14 07:32	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000012		W404023	KWH	01/22/14 07:32	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W404131	STA	01/23/14 11:47	

Classical Chemistry Parameters

SM 2320B/2310B	Total Alkalinity	149	mg/L as CaCO ₃	1.0			W404207	DKS	01/23/14 11:09	
SM 2540 C	Total Diss. Solids	222	mg/L	10			W404072	RS	01/21/14 10:20	
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0019		W404068	VRH	01/22/14 09:47	

Anions by Ion Chromatography

EPA 300.0	Chloride	18.5	mg/L	2.00	0.40	10	W405215	AEW	01/31/14 11:22	D2
EPA 300.0	Fluoride	0.34	mg/L	0.10	0.02		W405215	AEW	01/30/14 17:51	
EPA 300.0	Sulfate as SO ₄	13.1	mg/L	0.30	0.02		W405215	AEW	01/30/14 17:51	

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.74 meq/L Anion Sum: 3.79 meq/L C/A Balance: -0.60 % Calculated TDS: 215 TDS/cTDS: 1.03

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Kirby Gray
Technical Director

Quarterly

Temp - 10.4 °C
P.H. - 7.8

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APR 10 2014

Division of Reclamation,
Mining & Safety

SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 2 of 7



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

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Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0266**
Reported: 31-Jan-14 12:06

Client Sample ID: **140115BMGM9**SVL Sample ID: **W4A0266-02 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 15-Jan-14 16:05

Received: 17-Jan-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	82.6	mg/L	0.040	0.015		W403215	DT	01/22/14 12:52	
EPA 200.7	Magnesium	12.9	mg/L	0.200	0.039		W403215	DT	01/22/14 12:52	
EPA 200.7	Potassium	2.63	mg/L	0.50	0.13		W403215	DT	01/22/14 12:52	
EPA 200.7	Silica (SiO ₂)	50.0	mg/L	0.17	0.06		W403215	DT	01/22/14 12:52	
EPA 200.7	Sodium	23.6	mg/L	0.50	0.08		W403215	DT	01/22/14 12:52	
SM 2340B	Hardness (as CaCO ₃)	259	mg/L	0.923	0.198		N/A		01/22/14 12:52	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W404007	AS	01/22/14 14:53	
EPA 200.7	Barium	0.116	mg/L	0.0020	0.0005		W404007	AS	01/22/14 13:43	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0007		W404007	AS	01/22/14 13:43	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W404007	AS	01/22/14 13:43	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W404007	AS	01/22/14 13:43	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W404007	AS	01/22/14 13:43	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W404007	AS	01/22/14 13:43	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W404007	AS	01/22/14 13:43	
EPA 200.7	Zinc	0.409	mg/L	0.0100	0.0023		W404007	AS	01/22/14 13:43	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0003		W404023	KWH	01/22/14 07:46	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404023	KWH	01/22/14 07:46	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00026		W404023	KWH	01/22/14 07:46	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000012		W404023	KWH	01/22/14 07:46	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W404131	STA	01/23/14 11:49	

Classical Chemistry Parameters

SM 2320B/2310B	Total Alkalinity	300	mg/L as CaCO ₃	1.0			W404207	DKS	01/23/14 11:16	
SM 2540 C	Total Diss. Solids	349	mg/L	10			W404072	RS	01/21/14 10:20	
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0019		W404068	VRH	01/22/14 09:55	

Anions by Ion Chromatography

EPA 300.0	Chloride	4.08	mg/L	0.20	0.04		W405215	AEW	01/30/14 18:13	
EPA 300.0	Fluoride	0.29	mg/L	0.10	0.02		W405215	AEW	01/30/14 18:13	
EPA 300.0	Sulfate as SO ₄	20.4	mg/L	0.30	0.02		W405215	AEW	01/30/14 18:13	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.30 meq/L Anion Sum: 6.55 meq/L C/A Balance: -1.97 % Calculated TDS: 377 TDS/cTDS: 0.93

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Kirby Gray
Technical Director

Quarterly

Temp - 10.8 °C

P.H. - 7.37



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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0266**
Reported: 31-Jan-14 12:06

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
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Metals (Total)

EPA 200.7	Calcium	mg/L	<0.040	0.015	0.040	W403215	22-Jan-14	
EPA 200.7	Magnesium	mg/L	<0.200	0.039	0.200	W403215	22-Jan-14	
EPA 200.7	Potassium	mg/L	<0.50	0.13	0.50	W403215	22-Jan-14	
EPA 200.7	Silica (SiO ₂)	mg/L	<0.17	0.06	0.17	W403215	22-Jan-14	
EPA 200.7	Sodium	mg/L	<0.50	0.08	0.50	W403215	22-Jan-14	

Metals (Dissolved)

EPA 200.7	Aluminum	mg/L	<0.040	0.031	0.040	W404007	22-Jan-14	
EPA 200.7	Barium	mg/L	<0.0020	0.0005	0.0020	W404007	22-Jan-14	
EPA 200.7	Cadmium	mg/L	<0.0020	0.0007	0.0020	W404007	22-Jan-14	
EPA 200.7	Chromium	mg/L	<0.0060	0.0015	0.0060	W404007	22-Jan-14	
EPA 200.7	Iron	mg/L	<0.060	0.023	0.060	W404007	22-Jan-14	
EPA 200.7	Lead	mg/L	<0.0075	0.0027	0.0075	W404007	22-Jan-14	
EPA 200.7	Manganese	mg/L	<0.0040	0.0013	0.0040	W404007	22-Jan-14	
EPA 200.7	Nickel	mg/L	<0.010	0.003	0.010	W404007	22-Jan-14	
EPA 200.7	Zinc	mg/L	<0.0100	0.0023	0.0100	W404007	22-Jan-14	
EPA 200.8	Arsenic	mg/L	<0.0100	0.0003	0.0100	W404023	22-Jan-14	
EPA 200.8	Copper	mg/L	<0.00300	0.000061	0.00300	W404023	22-Jan-14	
EPA 200.8	Selenium	mg/L	<0.0100	0.00026	0.0100	W404023	22-Jan-14	
EPA 200.8	Silver	mg/L	<0.000100	0.000012	0.000100	W404023	22-Jan-14	
EPA 245.1	Mercury	mg/L	<0.00020	0.000045	0.00020	W404131	23-Jan-14	

Classical Chemistry Parameters

SM 2320B/2310B	Total Alkalinity	mg/L as CaCO ₃	<1.0		1.0	W404207	23-Jan-14	
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W404072	21-Jan-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0100	0.0019	0.0100	W404068	22-Jan-14	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	<0.20	0.04	0.20	W405215	30-Jan-14	
EPA 300.0	Fluoride	mg/L	<0.10	0.02	0.10	W405215	30-Jan-14	
EPA 300.0	Sulfate as SO ₄	mg/L	<0.30	0.02	0.30	W405215	30-Jan-14	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
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Metals (Total)

EPA 200.7	Calcium	mg/L	18.6	20.0	92.9	85 - 115	W403215	22-Jan-14	
EPA 200.7	Magnesium	mg/L	18.0	20.0	89.8	85 - 115	W403215	22-Jan-14	
EPA 200.7	Potassium	mg/L	18.8	20.0	94.1	85 - 115	W403215	22-Jan-14	
EPA 200.7	Silica (SiO ₂)	mg/L	10.2	10.7	95.4	85 - 115	W403215	22-Jan-14	
EPA 200.7	Sodium	mg/L	17.9	19.0	94.3	85 - 115	W403215	22-Jan-14	

Metals (Dissolved)

EPA 200.7	Aluminum	mg/L	0.979	1.00	97.9	85 - 115	W404007	22-Jan-14	
EPA 200.7	Barium	mg/L	0.987	1.00	98.7	85 - 115	W404007	22-Jan-14	
EPA 200.7	Cadmium	mg/L	0.947	1.00	94.7	85 - 115	W404007	22-Jan-14	
EPA 200.7	Chromium	mg/L	0.974	1.00	97.4	85 - 115	W404007	22-Jan-14	
EPA 200.7	Iron	mg/L	9.54	10.0	95.4	85 - 115	W404007	22-Jan-14	
EPA 200.7	Lead	mg/L	0.960	1.00	96.0	85 - 115	W404007	22-Jan-14	
EPA 200.7	Manganese	mg/L	0.958	1.00	95.8	85 - 115	W404007	22-Jan-14	
EPA 200.7	Nickel	mg/L	0.927	1.00	92.7	85 - 115	W404007	22-Jan-14	
EPA 200.7	Zinc	mg/L	0.923	1.00	92.3	85 - 115	W404007	22-Jan-14	
EPA 200.8	Arsenic	mg/L	0.0266	0.0250	107	85 - 115	W404023	22-Jan-14	
EPA 200.8	Copper	mg/L	0.0262	0.0250	105	85 - 115	W404023	22-Jan-14	

SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 4 of 7



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Project Name: **BMSL - Routine**
Work Order: **W4A0266**
Reported: 31-Jan-14 12:06

Quality Control - LABORATORY CONTROL SAMPLE Data (Continued)

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved) (Continued)									
EPA 200.8	Selenium	mg/L	0.0266	0.0250	107	85 - 115	W404023	22-Jan-14	
EPA 200.8	Silver	mg/L	0.0278	0.0250	111	85 - 115	W404023	22-Jan-14	
EPA 245.1	Mercury	mg/L	0.00479	0.00500	95.8	85 - 115	W404131	23-Jan-14	
Classical Chemistry Parameters									
SM 2320B/2310B	Total Alkalinity	mg/L as CaCO ₃	101	99.3	102	85 - 115	W404207	23-Jan-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.144	0.150	96.0	90 - 110	W404068	22-Jan-14	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	3.02	3.00	101	90 - 110	W405215	30-Jan-14	
EPA 300.0	Fluoride	mg/L	2.09	2.00	104	90 - 110	W405215	30-Jan-14	
EPA 300.0	Sulfate as SO ₄	mg/L	10.5	10.0	105	90 - 110	W405215	30-Jan-14	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B/2310B	Total Alkalinity	mg/L as CaCO ₃	<1.0	<1.0	UDL	20	W404207	23-Jan-14	
SM 2540 C	Total Diss. Solids	mg/L	221	222	0.5	10	W404072	21-Jan-14	
SM 2540 C	Total Diss. Solids	mg/L	341	349	2.3	10	W404072	21-Jan-14	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	mg/L	189	159	20.0	R > 4S	70 - 130	W403215	22-Jan-14	M3
EPA 200.7	Magnesium	mg/L	44.9	24.9	20.0	100	70 - 130	W403215	22-Jan-14	
EPA 200.7	Potassium	mg/L	21.1	1.77	20.0	96.6	70 - 130	W403215	22-Jan-14	
EPA 200.7	Silica (SiO ₂)	mg/L	38.6	26.4	10.7	114	70 - 130	W403215	22-Jan-14	
EPA 200.7	Sodium	mg/L	46.3	26.3	19.0	105	70 - 130	W403215	22-Jan-14	
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	0.973	<0.040	1.00	97.3	70 - 130	W404007	22-Jan-14	
EPA 200.7	Barium	mg/L	1.15	0.153	1.00	100	70 - 130	W404007	22-Jan-14	
EPA 200.7	Cadmium	mg/L	0.977	<0.0020	1.00	97.7	70 - 130	W404007	22-Jan-14	
EPA 200.7	Chromium	mg/L	0.983	<0.0060	1.00	98.3	70 - 130	W404007	22-Jan-14	
EPA 200.7	Iron	mg/L	9.50	<0.060	10.0	95.0	70 - 130	W404007	22-Jan-14	
EPA 200.7	Lead	mg/L	0.999	<0.0075	1.00	99.9	70 - 130	W404007	22-Jan-14	
EPA 200.7	Manganese	mg/L	0.947	<0.0040	1.00	94.7	70 - 130	W404007	22-Jan-14	
EPA 200.7	Nickel	mg/L	0.933	<0.010	1.00	93.3	70 - 130	W404007	22-Jan-14	
EPA 200.7	Zinc	mg/L	1.26	0.298	1.00	96.6	70 - 130	W404007	22-Jan-14	
EPA 200.8	Arsenic	mg/L	0.0275	<0.0020	0.0250	103	70 - 130	W404023	22-Jan-14	
EPA 200.8	Copper	mg/L	0.0241	0.00101	0.0250	92.5	70 - 130	W404023	22-Jan-14	
EPA 200.8	Selenium	mg/L	0.0279	<0.00100	0.0250	110	70 - 130	W404023	22-Jan-14	
EPA 200.8	Silver	mg/L	0.0259	<0.000100	0.0250	104	70 - 130	W404023	22-Jan-14	
EPA 245.1	Mercury	mg/L	0.00101	<0.00020	0.00100	101	70 - 130	W404131	23-Jan-14	
EPA 245.1	Mercury	mg/L	0.00103	<0.00020	0.00100	103	70 - 130	W404131	23-Jan-14	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	<0.0100	0.100	98.0	75 - 125	W404068	22-Jan-14	

SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 5 of 7



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: W4A0266
Reported: 31-Jan-14 12:06

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	6.73	3.62	3.00	103	90 - 110	W405215	30-Jan-14	
EPA 300.0	Chloride	mg/L	21.4	18.5	3.00	97.6	90 - 110	W405215	31-Jan-14	D2
EPA 300.0	Fluoride	mg/L	2.22	0.23	2.00	99.5	90 - 110	W405215	30-Jan-14	
EPA 300.0	Fluoride	mg/L	2.35	0.34	2.00	100	90 - 110	W405215	30-Jan-14	
EPA 300.0	Sulfate as SO ₄	mg/L	30.9	20.0	10.0	108	90 - 110	W405215	30-Jan-14	
EPA 300.0	Sulfate as SO ₄	mg/L	24.2	13.1	10.0	110	90 - 110	W405215	30-Jan-14	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Total)											
EPA 200.7	Calcium	mg/L	180	189	20.0	103	4.9	20	W403215	22-Jan-14	M3
EPA 200.7	Magnesium	mg/L	43.0	44.9	20.0	90.6	4.4	20	W403215	22-Jan-14	
EPA 200.7	Potassium	mg/L	20.6	21.1	20.0	94.2	2.3	20	W403215	22-Jan-14	
EPA 200.7	Silica (SiO ₂)	mg/L	37.0	38.6	10.7	99.3	4.3	20	W403215	22-Jan-14	
EPA 200.7	Sodium	mg/L	44.8	46.3	19.0	97.4	3.3	20	W403215	22-Jan-14	
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	0.997	0.973	1.00	99.7	2.5	20	W404007	22-Jan-14	
EPA 200.7	Barium	mg/L	1.11	1.15	1.00	96.0	3.7	20	W404007	22-Jan-14	
EPA 200.7	Cadmium	mg/L	0.942	0.977	1.00	94.2	3.6	20	W404007	22-Jan-14	
EPA 200.7	Chromium	mg/L	0.951	0.983	1.00	95.1	3.3	20	W404007	22-Jan-14	
EPA 200.7	Iron	mg/L	9.36	9.50	10.0	93.6	1.5	20	W404007	22-Jan-14	
EPA 200.7	Lead	mg/L	0.957	0.999	1.00	95.7	4.4	20	W404007	22-Jan-14	
EPA 200.7	Manganese	mg/L	0.932	0.947	1.00	93.2	1.6	20	W404007	22-Jan-14	
EPA 200.7	Nickel	mg/L	0.930	0.933	1.00	93.0	0.4	20	W404007	22-Jan-14	
EPA 200.7	Zinc	mg/L	1.22	1.26	1.00	92.1	3.7	20	W404007	22-Jan-14	
EPA 200.8	Arsenic	mg/L	0.0285	0.0275	0.0250	107	3.5	20	W404023	22-Jan-14	
EPA 200.8	Copper	mg/L	0.0249	0.0241	0.0250	95.5	3.1	20	W404023	22-Jan-14	
EPA 200.8	Selenium	mg/L	0.0286	0.0279	0.0250	113	2.5	20	W404023	22-Jan-14	
EPA 200.8	Silver	mg/L	0.0254	0.0259	0.0250	102	1.9	20	W404023	22-Jan-14	
EPA 245.1	Mercury	mg/L	0.00099	0.00101	0.00100	99.0	2.0	20	W404131	23-Jan-14	

Classical Chemistry Parameters

SM 4500-CN-I	Cyanide (WAD)	mg/L	0.103	0.102	0.100	99.0	1.0	20	W404068	22-Jan-14	
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Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	6.79	6.73	3.00	105	0.9	20	W405215	30-Jan-14	
EPA 300.0	Fluoride	mg/L	2.26	2.22	2.00	102	1.9	20	W405215	30-Jan-14	
EPA 300.0	Sulfate as SO ₄	mg/L	31.2	30.9	10.0	112	1.0	20	W405215	30-Jan-14	M1



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0404**
Reported: 10-Feb-14 13:41

Client Sample ID: **140122BMGBF4**SVL Sample ID: **W4A0404-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 14:25
Received: 24-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Metals (Total)

EPA 200.7	Calcium	154	mg/L	0.040	0.015		W404243	AS	02/04/14 15:24	
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Metals (Dissolved)

EPA 200.7	Iron	1.26	mg/L	0.060	0.023		W405008	AS	01/27/14 13:55	
EPA 200.7	Manganese	7.03	mg/L	0.0040	0.0013		W405008	AS	01/27/14 13:55	
EPA 200.8	Copper	0.0272	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:41	

Classical Chemistry Parameters

SM 2540 C	Total Diss. Solids	697	mg/L	10			W405034	RS	01/27/14 13:10	
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Anions by Ion Chromatography

EPA 300.0	Fluoride	7.65	mg/L	2.50	0.68	25	W406209	AEW	02/08/14 02:06	D2
EPA 300.0	Sulfate as SO4	326	mg/L	7.50	1.38	25	W406209	AEW	02/08/14 02:06	D2

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

*Temp - 9.9°C
p.H. - 6.71*



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0404**
Reported: 10-Feb-14 13:41

Client Sample ID: **140122BMGBF6**SVL Sample ID: **W4A0404-02 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 14:55
Received: 24-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	167	mg/L	0.040	0.015		W404243	AS	02/04/14 15:27	
Metals (Dissolved)										
EPA 200.7	Iron	19.7	mg/L	0.060	0.023		W405008	AS	01/27/14 13:58	
EPA 200.7	Manganese	12.1	mg/L	0.0040	0.0013		W405008	AS	01/27/14 13:58	
EPA 200.8	Copper	0.372	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:42	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	699	mg/L	10			W405034	RS	01/27/14 13:10	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	5.52	mg/L	0.10	0.03		W406209	AEW	02/07/14 21:48	
EPA 300.0	Sulfate as SO4	384	mg/L	7.50	1.38	25	W406209	AEW	02/07/14 21:58	D2

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 10.8°C
P.H. - 6.39



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: W4A0404
Reported: 10-Feb-14 13:41

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Total)								
EPA 200.7	Calcium	mg/L	<0.040	0.015	0.040	W404243	04-Feb-14	
Metals (Dissolved)								
EPA 200.7	Iron	mg/L	<0.060	0.023	0.060	W405008	27-Jan-14	
EPA 200.7	Manganese	mg/L	<0.0040	0.0013	0.0040	W405008	27-Jan-14	
EPA 200.8	Copper	mg/L	<0.00300	0.00010	0.00300	W404232	27-Jan-14	
Classical Chemistry Parameters								
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W405034	27-Jan-14	
Anions by Ion Chromatography								
EPA 300.0	Fluoride	mg/L	<0.10	0.03	0.10	W406209	07-Feb-14	
EPA 300.0	Sulfate as SO4	mg/L	<0.30	0.06	0.30	W406209	07-Feb-14	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)									
EPA 200.7	Calcium	mg/L	18.9	20.0	94.7	85 - 115	W404243	04-Feb-14	
Metals (Dissolved)									
EPA 200.7	Iron	mg/L	10.3	10.0	103	85 - 115	W405008	27-Jan-14	
EPA 200.7	Manganese	mg/L	0.991	1.00	99.1	85 - 115	W405008	27-Jan-14	
EPA 200.8	Copper	mg/L	0.0249	0.0250	99.5	85 - 115	W404232	27-Jan-14	
Anions by Ion Chromatography									
EPA 300.0	Fluoride	mg/L	1.92	2.00	96.2	90 - 110	W406209	07-Feb-14	
EPA 300.0	Sulfate as SO4	mg/L	10.3	10.0	103	90 - 110	W406209	07-Feb-14	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2540 C	Total Diss. Solids	mg/L	382	390	2.1	10	W405034	27-Jan-14	
SM 2540 C	Total Diss. Solids	mg/L	695	697	0.3	10	W405034	27-Jan-14	



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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: W4A0404
Reported: 10-Feb-14 13:41

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	mg/L	106	86.8	20.0	96.9	70 - 130	W404243	04-Feb-14	
Metals (Dissolved)										
EPA 200.7	Iron	mg/L	10.7	<0.060	10.0	107	70 - 130	W405008	27-Jan-14	
EPA 200.7	Iron	mg/L	10.6	<0.060	10.0	106	70 - 130	W405008	27-Jan-14	
EPA 200.7	Manganese	mg/L	15.5	14.7	1.00	80.9	70 - 130	W405008	27-Jan-14	M3
EPA 200.7	Manganese	mg/L	1.08	0.0066	1.00	107	70 - 130	W405008	27-Jan-14	
EPA 200.8	Copper	mg/L	0.0248	<0.00300	0.0250	97.5	70 - 130	W404232	27-Jan-14	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	mg/L	2.06	<0.10	2.00	99.8	90 - 110	W406209	08-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	19.2	8.11	10.0	111	90 - 110	W406209	08-Feb-14	M1

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Total)											
EPA 200.7	Calcium	mg/L	105	106	20.0	92.6	0.8	20	W404243	04-Feb-14	
Metals (Dissolved)											
EPA 200.7	Iron	mg/L	10.6	10.7	10.0	106	0.9	20	W405008	27-Jan-14	
EPA 200.7	Manganese	mg/L	15.6	15.5	1.00	82.4	0.1	20	W405008	27-Jan-14	M3
EPA 200.8	Copper	mg/L	0.0250	0.0248	0.0250	98.1	0.7	20	W404232	27-Jan-14	
Anions by Ion Chromatography											
EPA 300.0	Fluoride	mg/L	2.07	2.06	2.00	100	0.4	20	W406209	08-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	19.3	19.2	10.0	112	0.4	20	W406209	08-Feb-14	M1

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Client Sample ID: **140122BMGM16**SVL Sample ID: **W4A0359-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 08:50
Received: 23-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	16.9	mg/L	0.040	0.015		W404243	AS	02/04/14 14:49	
Metals (Dissolved)										
EPA 200.7	Iron	0.079	mg/L	0.060	0.023		W404242	AS	01/27/14 12:02	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W404242	AS	01/27/14 12:02	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:32	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	100	mg/L	10			W404248	JDM	01/24/14 12:45	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	0.68	mg/L	0.10	0.03		W406208	AEW	02/07/14 17:09	
EPA 300.0	Sulfate as SO ₄	9.66	mg/L	0.30	0.06		W406208	AEW	02/07/14 17:09	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 4.0 °C
P.H. - 6.37



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Client Sample ID: **140122BMGM22**SVL Sample ID: **W4A0359-02 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 09:15
Received: 23-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	55.4	mg/L	0.040	0.015		W404243	AS	02/04/14 15:05	
Metals (Dissolved)										
EPA 200.7	Iron	0.326	mg/L	0.060	0.023		W404242	AS	01/27/14 12:05	
EPA 200.7	Manganese	0.219	mg/L	0.0040	0.0013		W404242	AS	01/27/14 12:05	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:34	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	245	mg/L	10			W404248	JDM	01/24/14 12:45	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	1.21	mg/L	0.10	0.03		W406208	AEW	02/07/14 17:20	
EPA 300.0	Sulfate as SO ₄	88.8	mg/L	1.50	0.28	5	W406208	AEW	02/10/14 11:07	D2

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 8.6°C
P.H. - 7.19



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Client Sample ID: **140122BMGM26**SVL Sample ID: **W4A0359-03 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 09:35
Received: 23-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	26.5	mg/L	0.040	0.015		W404243	AS	02/04/14 15:08	
Metals (Dissolved)										
EPA 200.7	Iron	0.418	mg/L	0.060	0.023		W404242	AS	01/27/14 12:07	
EPA 200.7	Manganese	0.291	mg/L	0.0040	0.0013		W404242	AS	01/27/14 12:07	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:36	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	129	mg/L	10			W404248	JDM	01/24/14 12:45	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	0.85	mg/L	0.10	0.03		W406208	AEW	02/07/14 17:32	
EPA 300.0	Sulfate as SO ₄	10.7	mg/L	0.30	0.06		W406208	AEW	02/07/14 17:32	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Temp - 8.0°C
P.H. - 7.31

Quarterly



One Government Gulch - PO Box 929

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Client Sample ID: **140122BMGM34**SVL Sample ID: **W4A0359-04 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 10:00
Received: 23-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	18.1	mg/L	0.040	0.015		W404243	AS	02/04/14 15:10	
EPA 200.7	Magnesium	4.58	mg/L	0.200	0.039		W404243	AS	02/04/14 15:10	
EPA 200.7	Potassium	0.80	mg/L	0.50	0.13		W404243	AS	02/04/14 15:10	
EPA 200.7	Silica (SiO ₂)	13.9	mg/L	0.17	0.06		W404243	AS	02/04/14 15:10	
EPA 200.7	Sodium	6.69	mg/L	0.50	0.08		W404243	AS	02/04/14 15:10	
SM 2340B	Hardness (as CaCO ₃)	64.1	mg/L	0.923	0.198		N/A		02/04/14 15:10	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W404242	AS	01/27/14 12:10	
EPA 200.7	Barium	0.0394	mg/L	0.0020	0.0005		W404242	AS	01/27/14 12:10	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0007		W404242	AS	01/27/14 12:10	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W404242	AS	01/27/14 12:10	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W404242	AS	01/27/14 12:10	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W404242	AS	01/27/14 12:10	
EPA 200.7	Manganese	0.208	mg/L	0.0040	0.0013		W404242	AS	01/27/14 12:10	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W404242	AS	01/27/14 12:10	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0023		W404242	AS	01/27/14 12:10	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0003		W404232	KWH	01/27/14 07:23	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:23	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00026		W404232	KWH	01/27/14 07:23	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000012		W404232	KWH	01/27/14 07:52	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W405062	STA	01/28/14 11:41	
Classical Chemistry Parameters										
SM 2320B/2310B	Total Alkalinity	68.9	mg/L as CaCO ₃	1.0			W404284	DKS	01/29/14 09:56	
SM 2540 C	Total Diss. Solids	101	mg/L	10			W404248	JDM	01/24/14 12:45	
Anions by Ion Chromatography										
EPA 300.0	Chloride	2.85	mg/L	0.20	0.04		W406208	AEW	02/07/14 17:43	
EPA 300.0	Fluoride	0.57	mg/L	0.10	0.03		W406208	AEW	02/07/14 17:43	
EPA 300.0	Sulfate as SO ₄	14.2	mg/L	0.30	0.06		W406208	AEW	02/07/14 17:43	
Cation/Anion Balance and TDS Ratios										
Cation Sum: 1.60 meq/L		Anion Sum: 1.78 meq/L		C/A Balance: -5.27 %		Calculated TDS: 103		TDS/cTDS: 0.98		

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 8.1°C
P.H. - 6.85



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Client Sample ID: **140122BMGM10**SVL Sample ID: **W4A0359-05 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 10:35
Received: 23-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	69.3	mg/L	0.040	0.015		W404243	AS	02/04/14 15:13	
EPA 200.7	Magnesium	9.54	mg/L	0.200	0.039		W404243	AS	02/04/14 15:13	
EPA 200.7	Potassium	1.69	mg/L	0.50	0.13		W404243	AS	02/04/14 15:13	
EPA 200.7	Silica (SiO ₂)	28.0	mg/L	0.17	0.06		W404243	AS	02/04/14 15:13	
EPA 200.7	Sodium	21.2	mg/L	0.50	0.08		W404243	AS	02/04/14 15:13	
SM 2340B	Hardness (as CaCO ₃)	212	mg/L	0.923	0.198		N/A		02/04/14 15:13	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W404242	AS	01/27/14 12:13	
EPA 200.7	Barium	0.133	mg/L	0.0020	0.0005		W404242	AS	01/27/14 12:13	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0007		W404242	AS	01/27/14 12:13	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W404242	AS	01/27/14 12:13	
EPA 200.7	Iron	1.31	mg/L	0.060	0.023		W404242	AS	01/27/14 12:13	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W404242	AS	01/27/14 12:13	
EPA 200.7	Manganese	1.04	mg/L	0.0040	0.0013		W404242	AS	01/27/14 12:13	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W404242	AS	01/27/14 12:13	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0023		W404242	AS	01/27/14 12:13	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0003		W404232	KWH	01/27/14 07:38	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:38	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00026		W404232	KWH	01/27/14 07:38	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000012		W404232	KWH	01/27/14 08:01	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W405062	STA	01/28/14 11:42	

Classical Chemistry Parameters

SM 2320B/2310B	Total Alkalinity	228	mg/L as CaCO ₃	1.0		W404284	DKS	01/29/14 10:02	
SM 2540 C	Total Diss. Solids	306	mg/L	10		W404248	JDM	01/24/14 12:45	

Anions by Ion Chromatography

EPA 300.0	Chloride	10.8	mg/L	0.20	0.04	W406208	AEW	02/07/14 18:18	
EPA 300.0	Fluoride	0.92	mg/L	0.10	0.03	W406208	AEW	02/07/14 18:18	
EPA 300.0	Sulfate as SO ₄	33.4	mg/L	0.30	0.06	W406208	AEW	02/07/14 18:18	

Cation/Anion Balance and TDS Ratios

Cation Sum: 5.30 meq/L Anion Sum: 5.60 meq/L C/A Balance: -2.80 % Calculated TDS: 312 TDS/cTDS: 0.98

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 8.6°C
p.H. - 7.73



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Client Sample ID: **140122BMGM13R**SVL Sample ID: **W4A0359-06 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 22-Jan-14 11:25
Received: 23-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	86.8	mg/L	0.040	0.015		W404243	AS	02/04/14 15:16	
EPA 200.7	Magnesium	15.1	mg/L	0.200	0.039		W404243	AS	02/04/14 15:16	
EPA 200.7	Potassium	1.37	mg/L	0.50	0.13		W404243	AS	02/04/14 15:16	
EPA 200.7	Silica (SiO ₂)	23.9	mg/L	0.17	0.06		W404243	AS	02/04/14 15:16	
EPA 200.7	Sodium	31.9	mg/L	0.50	0.08		W404243	AS	02/04/14 15:16	
SM 2340B	Hardness (as CaCO ₃)	279	mg/L	0.923	0.198		N/A		02/04/14 15:16	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W404242	AS	01/27/14 12:21	
EPA 200.7	Barium	0.141	mg/L	0.0020	0.0005		W404242	AS	01/27/14 12:21	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0007		W404242	AS	01/27/14 12:21	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W404242	AS	01/27/14 12:21	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W404242	AS	01/27/14 12:21	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W404242	AS	01/27/14 12:21	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W404242	AS	01/27/14 12:21	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W404242	AS	01/27/14 12:21	
EPA 200.7	Zinc	0.727	mg/L	0.0100	0.0023		W404242	AS	01/27/14 12:21	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0003		W404232	KWH	01/27/14 07:39	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.000061		W404232	KWH	01/27/14 07:39	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00026		W404232	KWH	01/27/14 07:39	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000012		W404232	KWH	01/27/14 08:03	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W405062	STA	01/28/14 11:44	

Classical Chemistry Parameters

SM 2320B/2310B	Total Alkalinity	345	mg/L as CaCO ₃	1.0			W404284	DKS	01/29/14 10:09	
SM 2540 C	Total Diss. Solids	393	mg/L	10			W404248	JDM	01/24/14 12:45	
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0019		W405133	VRH	01/29/14 10:34	

Anions by Ion Chromatography

EPA 300.0	Chloride	3.63	mg/L	0.20	0.04		W406208	AEW	02/07/14 18:40	
EPA 300.0	Fluoride	0.51	mg/L	0.10	0.03		W406208	AEW	02/07/14 18:40	
EPA 300.0	Sulfate as SO ₄	18.9	mg/L	0.30	0.06		W406208	AEW	02/07/14 18:40	

Cation/Anion Balance and TDS Ratios

Cation Sum: 7.03 meq/L Anion Sum: 7.42 meq/L C/A Balance: -2.70 % Calculated TDS: 389 TDS/cTDS: 1.01

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 12.2°C

pH - 7.33



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
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Metals (Total)

EPA 200.7	Calcium	mg/L	<0.040	0.015	0.040	W404243	04-Feb-14	
EPA 200.7	Magnesium	mg/L	<0.200	0.039	0.200	W404243	04-Feb-14	
EPA 200.7	Potassium	mg/L	<0.50	0.13	0.50	W404243	04-Feb-14	
EPA 200.7	Silica (SiO ₂)	mg/L	<0.17	0.06	0.17	W404243	04-Feb-14	
EPA 200.7	Sodium	mg/L	<0.50	0.08	0.50	W404243	04-Feb-14	

Metals (Dissolved)

EPA 200.7	Aluminum	mg/L	<0.040	0.031	0.040	W404242	27-Jan-14	
EPA 200.7	Barium	mg/L	<0.0020	0.0005	0.0020	W404242	27-Jan-14	
EPA 200.7	Cadmium	mg/L	<0.0020	0.0007	0.0020	W404242	27-Jan-14	
EPA 200.7	Chromium	mg/L	<0.0060	0.0015	0.0060	W404242	27-Jan-14	
EPA 200.7	Iron	mg/L	<0.060	0.023	0.060	W404242	27-Jan-14	
EPA 200.7	Lead	mg/L	<0.0075	0.0027	0.0075	W404242	27-Jan-14	
EPA 200.7	Manganese	mg/L	<0.0040	0.0013	0.0040	W404242	27-Jan-14	
EPA 200.7	Nickel	mg/L	<0.010	0.003	0.010	W404242	27-Jan-14	
EPA 200.7	Zinc	mg/L	<0.0100	0.0023	0.0100	W404242	27-Jan-14	
EPA 200.8	Arsenic	mg/L	<0.0100	0.0003	0.0100	W404232	27-Jan-14	
EPA 200.8	Copper	mg/L	<0.00300	0.00010	0.00300	W404232	27-Jan-14	
EPA 200.8	Selenium	mg/L	<0.0100	0.00052	0.0100	W404232	27-Jan-14	
EPA 200.8	Silver	mg/L	<0.000100	0.000018	0.000100	W404232	27-Jan-14	
EPA 245.1	Mercury	mg/L	<0.00020	0.000045	0.00020	W405062	28-Jan-14	

Classical Chemistry Parameters

SM 2320B/2310B	Total Alkalinity	mg/L as CaCO ₃	<1.0		1.0	W404284	29-Jan-14	
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W404248	24-Jan-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0100	0.0019	0.0100	W405133	29-Jan-14	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	<0.20	0.04	0.20	W406208	07-Feb-14	
EPA 300.0	Fluoride	mg/L	<0.10	0.03	0.10	W406208	07-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	<0.30	0.06	0.30	W406208	07-Feb-14	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
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Metals (Total)

EPA 200.7	Calcium	mg/L	18.9	20.0	94.7	85 - 115	W404243	04-Feb-14	
EPA 200.7	Magnesium	mg/L	20.1	20.0	100	85 - 115	W404243	04-Feb-14	
EPA 200.7	Potassium	mg/L	19.8	20.0	98.8	85 - 115	W404243	04-Feb-14	
EPA 200.7	Silica (SiO ₂)	mg/L	10.7	10.7	99.6	85 - 115	W404243	04-Feb-14	
EPA 200.7	Sodium	mg/L	18.8	19.0	98.9	85 - 115	W404243	04-Feb-14	

Metals (Dissolved)

EPA 200.7	Aluminum	mg/L	1.02	1.00	102	85 - 115	W404242	27-Jan-14	
EPA 200.7	Barium	mg/L	1.04	1.00	104	85 - 115	W404242	27-Jan-14	
EPA 200.7	Cadmium	mg/L	1.02	1.00	102	85 - 115	W404242	27-Jan-14	
EPA 200.7	Chromium	mg/L	1.03	1.00	103	85 - 115	W404242	27-Jan-14	
EPA 200.7	Iron	mg/L	10.4	10.0	104	85 - 115	W404242	27-Jan-14	
EPA 200.7	Lead	mg/L	1.03	1.00	103	85 - 115	W404242	27-Jan-14	
EPA 200.7	Manganese	mg/L	1.01	1.00	101	85 - 115	W404242	27-Jan-14	
EPA 200.7	Nickel	mg/L	1.03	1.00	103	85 - 115	W404242	27-Jan-14	
EPA 200.7	Zinc	mg/L	1.00	1.00	100	85 - 115	W404242	27-Jan-14	
EPA 200.8	Arsenic	mg/L	0.0245	0.0250	98.2	85 - 115	W404232	27-Jan-14	
EPA 200.8	Copper	mg/L	0.0249	0.0250	99.5	85 - 115	W404232	27-Jan-14	

SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 8 of 11



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: W4A0359
Reported: 10-Feb-14 13:45

Quality Control - LABORATORY CONTROL SAMPLE Data (Continued)

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved) (Continued)									
EPA 200.8	Selenium	mg/L	0.0237	0.0250	94.9	85 - 115	W404232	27-Jan-14	
EPA 200.8	Silver	mg/L	0.0254	0.0250	102	85 - 115	W404232	27-Jan-14	
EPA 245.1	Mercury	mg/L	0.00506	0.00500	101	85 - 115	W405062	28-Jan-14	
Classical Chemistry Parameters									
SM 2320B/2310B	Total Alkalinity	mg/L as CaCO ₃	104	99.3	105	85 - 115	W404284	29-Jan-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.158	0.150	105	90 - 110	W405133	29-Jan-14	
Anions by Ion Chromatography									
EPA 300.0	Chloride	mg/L	2.88	3.00	96.1	90 - 110	W406208	07-Feb-14	
EPA 300.0	Fluoride	mg/L	1.92	2.00	95.9	90 - 110	W406208	07-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	10.2	10.0	102	90 - 110	W406208	07-Feb-14	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2320B/2310B	Total Alkalinity	mg/L as CaCO ₃	68.0	68.9	1.2	20	W404284	29-Jan-14	
SM 2540 C	Total Diss. Solids	mg/L	362	376	3.8	10	W404248	24-Jan-14	
SM 2540 C	Total Diss. Solids	mg/L	388	393	1.3	10	W404248	24-Jan-14	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	mg/L	106	86.8	20.0	96.9	70 - 130	W404243	04-Feb-14	
EPA 200.7	Magnesium	mg/L	35.2	15.1	20.0	100	70 - 130	W404243	04-Feb-14	
EPA 200.7	Potassium	mg/L	21.2	1.37	20.0	99.3	70 - 130	W404243	04-Feb-14	
EPA 200.7	Silica (SiO2)	mg/L	35.5	23.9	10.7	109	70 - 130	W404243	04-Feb-14	
EPA 200.7	Sodium	mg/L	50.9	31.9	19.0	100	70 - 130	W404243	04-Feb-14	
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.16	<0.040	1.00	116	70 - 130	W404242	27-Jan-14	
EPA 200.7	Barium	mg/L	1.27	0.141	1.00	113	70 - 130	W404242	27-Jan-14	
EPA 200.7	Cadmium	mg/L	1.13	<0.0020	1.00	113	70 - 130	W404242	27-Jan-14	
EPA 200.7	Chromium	mg/L	1.14	<0.0060	1.00	114	70 - 130	W404242	27-Jan-14	
EPA 200.7	Iron	mg/L	11.4	<0.060	10.0	114	70 - 130	W404242	27-Jan-14	
EPA 200.7	Lead	mg/L	1.09	<0.0075	1.00	109	70 - 130	W404242	27-Jan-14	
EPA 200.7	Manganese	mg/L	1.15	<0.0040	1.00	115	70 - 130	W404242	27-Jan-14	
EPA 200.7	Nickel	mg/L	1.10	<0.010	1.00	110	70 - 130	W404242	27-Jan-14	
EPA 200.7	Zinc	mg/L	1.82	0.727	1.00	109	70 - 130	W404242	27-Jan-14	
EPA 200.8	Arsenic	mg/L	0.0277	<0.0100	0.0250	111	70 - 130	W404232	27-Jan-14	
EPA 200.8	Copper	mg/L	0.0248	<0.00300	0.0250	97.5	70 - 130	W404232	27-Jan-14	
EPA 200.8	Selenium	mg/L	0.0288	<0.0100	0.0250	114	70 - 130	W404232	27-Jan-14	
EPA 200.8	Silver	mg/L	0.0200	<0.000100	0.0250	80.0	70 - 130	W404232	27-Jan-14	
EPA 245.1	Mercury	mg/L	0.00106	<0.00020	0.00100	106	70 - 130	W405062	28-Jan-14	
EPA 245.1	Mercury	mg/L	0.0107	0.00973	0.00100	97.6	70 - 130	W405062	28-Jan-14	

Classical Chemistry Parameters

SM 4500-CN-I	Cyanide (WAD)	mg/L	0.107	<0.0100	0.100	107	75 - 125	W405133	29-Jan-14	
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SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 9 of 11



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0359**
Reported: 10-Feb-14 13:45

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	Chloride	mg/L	3.33	0.37	3.00	98.6	90 - 110	W406208	07-Feb-14	
EPA 300.0	Chloride	mg/L	4.02	1.15	3.00	95.7	90 - 110	W406208	07-Feb-14	
EPA 300.0	Fluoride	mg/L	2.54	0.52	2.00	101	90 - 110	W406208	07-Feb-14	
EPA 300.0	Fluoride	mg/L	2.16	0.15	2.00	101	90 - 110	W406208	07-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	558	560	10.0	R > 4S	90 - 110	W406208	07-Feb-14	D2,M3
EPA 300.0	Sulfate as SO ₄	mg/L	20.2	8.95	10.0	112	90 - 110	W406208	07-Feb-14	M1

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Total)											
EPA 200.7	Calcium	mg/L	105	106	20.0	92.6	0.8	20	W404243	04-Feb-14	
EPA 200.7	Magnesium	mg/L	34.9	35.2	20.0	98.8	0.9	20	W404243	04-Feb-14	
EPA 200.7	Potassium	mg/L	21.2	21.2	20.0	99.0	0.3	20	W404243	04-Feb-14	
EPA 200.7	Silica (SiO ₂)	mg/L	35.3	35.5	10.7	107	0.6	20	W404243	04-Feb-14	
EPA 200.7	Sodium	mg/L	50.9	50.9	19.0	100	0.0	20	W404243	04-Feb-14	
Metals (Dissolved)											
EPA 200.7	Aluminum	mg/L	1.09	1.16	1.00	109	5.8	20	W404242	27-Jan-14	
EPA 200.7	Barium	mg/L	1.25	1.27	1.00	110	1.9	20	W404242	27-Jan-14	
EPA 200.7	Cadmium	mg/L	1.08	1.13	1.00	108	4.0	20	W404242	27-Jan-14	
EPA 200.7	Chromium	mg/L	1.10	1.14	1.00	110	3.6	20	W404242	27-Jan-14	
EPA 200.7	Iron	mg/L	11.2	11.4	10.0	112	2.1	20	W404242	27-Jan-14	
EPA 200.7	Lead	mg/L	1.06	1.09	1.00	106	3.1	20	W404242	27-Jan-14	
EPA 200.7	Manganese	mg/L	1.11	1.15	1.00	111	4.0	20	W404242	27-Jan-14	
EPA 200.7	Nickel	mg/L	1.06	1.10	1.00	106	3.8	20	W404242	27-Jan-14	
EPA 200.7	Zinc	mg/L	1.77	1.82	1.00	105	2.6	20	W404242	27-Jan-14	
EPA 200.8	Arsenic	mg/L	0.0279	0.0277	0.0250	112	0.9	20	W404232	27-Jan-14	
EPA 200.8	Copper	mg/L	0.0250	0.0248	0.0250	98.1	0.7	20	W404232	27-Jan-14	
EPA 200.8	Selenium	mg/L	0.0281	0.0288	0.0250	111	2.5	20	W404232	27-Jan-14	
EPA 200.8	Silver	mg/L	0.0204	0.0200	0.0250	81.6	1.9	20	W404232	27-Jan-14	
EPA 245.1	Mercury	mg/L	0.00106	0.00106	0.00100	106	0.0	20	W405062	28-Jan-14	

Classical Chemistry Parameters

SM 4500-CN-I	Cyanide (WAD)	mg/L	0.107	0.107	0.100	107	0.0	20	W405133	29-Jan-14	
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Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	3.37	3.33	3.00	100	1.4	20	W406208	07-Feb-14	
EPA 300.0	Fluoride	mg/L	2.56	2.54	2.00	102	0.9	20	W406208	07-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	555	558	10.0	R > 4S	0.6	20	W406208	07-Feb-14	D2,M3



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0497**
Reported: 06-Feb-14 15:23

Client Sample ID: **140129BMGLD**SVL Sample ID: **W4A0497-01 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 29-Jan-14 09:20
Received: 30-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	508	mg/L	0.040	0.015		W405245	DT	02/04/14 14:37	
EPA 200.7	Iron	0.060	mg/L	0.060	0.023		W405245	DT	02/04/14 14:37	
EPA 200.7	Sodium	828	mg/L	0.50	0.08		W405245	DT	02/04/14 14:37	
EPA 200.7	Zinc	0.0132	mg/L	0.0100	0.0023		W405245	DT	02/04/14 14:37	
EPA 200.8	Copper	0.0566	mg/L	0.00300	0.00025	2.5	W405266	KWH	02/05/14 07:03	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0019		W406139	VRH	02/06/14 10:06	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 6.6 °C
P.H. - 6.96



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Kellogg ID 83837-0929

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0497**
Reported: 06-Feb-14 15:23

Client Sample ID: **140129BMGCOL**SVL Sample ID: **W4A0497-02 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 29-Jan-14 09:35
Received: 30-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	510	mg/L	0.040	0.015		W405245	DT	02/04/14 14:40	M3
EPA 200.7	Iron	22.6	mg/L	0.060	0.023		W405245	DT	02/04/14 14:40	
EPA 200.7	Sodium	803	mg/L	0.50	0.08		W405245	DT	02/04/14 14:40	M3
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0023		W405245	DT	02/04/14 14:40	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00025	2.5	W405266	KWH	02/05/14 07:08	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	0.157	mg/L	0.0100	0.0019		W406021	VRH	02/03/14 13:25	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Temp - 8.2°C
P.H. - 7.26

Quarterly



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Battle Mountain - San Luis
PO Box 310
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Project Name: **BMSL - Routine**
Work Order: **W4A0497**
Reported: 06-Feb-14 15:23

Client Sample ID: **140129BMGTAILS**SVL Sample ID: **W4A0497-03 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 29-Jan-14 10:35
Received: 30-Jan-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	577	mg/L	0.040	0.015		W405245	DT	02/04/14 14:50	
EPA 200.7	Iron	0.285	mg/L	0.060	0.023		W405245	DT	02/04/14 14:50	
EPA 200.7	Sodium	888	mg/L	5.00	0.83	10	W405245	DT	02/04/14 15:03	D2
EPA 200.7	Zinc	0.0300	mg/L	0.0100	0.0023		W405245	DT	02/04/14 14:50	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0008	2.5	W405266	KWH	02/05/14 06:46	
EPA 200.8	Copper	0.0240	mg/L	0.00300	0.00025	2.5	W405266	KWH	02/05/14 06:46	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly
Monthly

Temp - 2.1 °C
P.H. - 7.31



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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4A0497**
Reported: 06-Feb-14 15:23

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Total)								
EPA 200.7	Calcium	mg/L	<0.040	0.015	0.040	W405245	04-Feb-14	
EPA 200.7	Iron	mg/L	<0.060	0.023	0.060	W405245	04-Feb-14	
EPA 200.7	Sodium	mg/L	<0.50	0.08	0.50	W405245	04-Feb-14	
EPA 200.7	Zinc	mg/L	<0.0100	0.0023	0.0100	W405245	04-Feb-14	
EPA 200.8	Arsenic	mg/L	<0.0100	0.0008	0.0100	W405266	05-Feb-14	
EPA 200.8	Copper	mg/L	<0.00300	0.00025	0.00300	W405266	05-Feb-14	

Classical Chemistry Parameters

SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0100	0.0019	0.0100	W406021	03-Feb-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0100	0.0019	0.0100	W406139	06-Feb-14	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)									
EPA 200.7	Calcium	mg/L	18.9	20.0	94.5	85 - 115	W405245	04-Feb-14	
EPA 200.7	Iron	mg/L	9.53	10.0	95.3	85 - 115	W405245	04-Feb-14	
EPA 200.7	Sodium	mg/L	18.4	19.0	96.6	85 - 115	W405245	04-Feb-14	
EPA 200.7	Zinc	mg/L	0.881	1.00	88.1	85 - 115	W405245	04-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0250	0.0250	99.8	85 - 115	W405266	05-Feb-14	
EPA 200.8	Copper	mg/L	0.0254	0.0250	102	85 - 115	W405266	05-Feb-14	

Classical Chemistry Parameters

SM 4500-CN-I	Cyanide (WAD)	mg/L	0.148	0.150	98.7	90 - 110	W406021	03-Feb-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.148	0.150	98.7	90 - 110	W406139	06-Feb-14	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	mg/L	532	510	20.0	113	70 - 130	W405245	04-Feb-14	M3
EPA 200.7	Iron	mg/L	32.1	22.6	10.0	94.9	70 - 130	W405245	04-Feb-14	
EPA 200.7	Sodium	mg/L	830	803	19.0	R > 4S	70 - 130	W405245	04-Feb-14	M3
EPA 200.7	Zinc	mg/L	0.875	<0.0100	1.00	87.2	70 - 130	W405245	04-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0272	<0.0038	0.0250	103	70 - 130	W405266	05-Feb-14	
EPA 200.8	Copper	mg/L	0.0475	0.0240	0.0250	93.7	70 - 130	W405266	05-Feb-14	

Classical Chemistry Parameters

SM 4500-CN-I	Cyanide (WAD)	mg/L	0.102	<0.0100	0.100	99.0	75 - 125	W406021	03-Feb-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0970	<0.0100	0.100	97.0	75 - 125	W406139	06-Feb-14	



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Project Name: **BMSL - Routine**
Work Order: **W4A0497**
Reported: 06-Feb-14 15:23

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Total)											
EPA 200.7	Calcium	mg/L	519	532	20.0	R > 4S	2.5	20	W405245	04-Feb-14	M3
EPA 200.7	Iron	mg/L	31.4	32.1	10.0	87.6	2.3	20	W405245	04-Feb-14	
EPA 200.7	Sodium	mg/L	812	830	19.0	R > 4S	2.2	20	W405245	04-Feb-14	M3
EPA 200.7	Zinc	mg/L	0.873	0.875	1.00	87.0	0.2	20	W405245	04-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0268	0.0272	0.0250	102	1.3	20	W405266	05-Feb-14	
EPA 200.8	Copper	mg/L	0.0458	0.0475	0.0250	87.1	3.5	20	W405266	05-Feb-14	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.101	0.102	0.100	98.0	1.0	20	W406021	03-Feb-14	
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.0980	0.0970	0.100	98.0	1.0	20	W406139	06-Feb-14	

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable



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Battle Mountain - San Luis
PO Box 310
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Project Name: **BMSL - Routine**
Work Order: **W4B0065**
Reported: 19-Feb-14 08:40

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Total)								
EPA 200.7	Calcium	mg/L	<0.040	0.015	0.040	W406169	16-Feb-14	
Metals (Dissolved)								
EPA 200.7	Iron	mg/L	<0.060	0.023	0.060	W406185	10-Feb-14	
EPA 200.7	Manganese	mg/L	<0.0040	0.0013	0.0040	W406185	10-Feb-14	
EPA 200.8	Copper	mg/L	<0.00300	0.00010	0.00300	W407008	10-Feb-14	
Classical Chemistry Parameters								
SM 2540 C	Total Diss. Solids	mg/L	<10		10	W406172	07-Feb-14	
Anions by Ion Chromatography								
EPA 300.0	Fluoride	mg/L	<0.10	0.03	0.10	W408081	17-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	<0.30	0.06	0.30	W408081	17-Feb-14	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)									
EPA 200.7	Calcium	mg/L	19.4	20.0	97.2	85 - 115	W406169	16-Feb-14	
Metals (Dissolved)									
EPA 200.7	Iron	mg/L	9.19	10.0	91.9	85 - 115	W406185	10-Feb-14	
EPA 200.7	Manganese	mg/L	0.962	1.00	96.2	85 - 115	W406185	10-Feb-14	
EPA 200.8	Copper	mg/L	0.0255	0.0250	102	85 - 115	W407008	10-Feb-14	
Anions by Ion Chromatography									
EPA 300.0	Fluoride	mg/L	1.93	2.00	96.4	90 - 110	W408081	17-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	10.2	10.0	102	90 - 110	W408081	17-Feb-14	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2540 C	Total Diss. Solids	mg/L	447	429	4.1	10	W406172	07-Feb-14	
SM 2540 C	Total Diss. Solids	mg/L	66	74	11.4	10	W406172	07-Feb-14	R1B



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Kellogg ID 83837-0929

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4B0065**
Reported: 19-Feb-14 08:40

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	mg/L	68.1	49.2	20.0	94.5	70 - 130	W406169	16-Feb-14	
Metals (Dissolved)										
EPA 200.7	Iron	mg/L	9.58	0.137	10.0	94.5	70 - 130	W406185	10-Feb-14	
EPA 200.7	Manganese	mg/L	1.12	0.149	1.00	97.6	70 - 130	W406185	10-Feb-14	
EPA 200.8	Copper	mg/L	0.0254	0.00105	0.0250	97.5	70 - 130	W407008	10-Feb-14	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	mg/L	2.26	<0.10	2.00	111	90 - 110	W408081	17-Feb-14	M1
EPA 300.0	Fluoride	mg/L	5.37	3.22	2.00	108	90 - 110	W408081	17-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	272	270	10.0	R > 4S	90 - 110	W408081	17-Feb-14	D2,M3
EPA 300.0	Sulfate as SO ₄	mg/L	166	162	10.0	R > 4S	90 - 110	W408081	17-Feb-14	D2,M3

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Total)											
EPA 200.7	Calcium	mg/L	70.1	68.1	20.0	104	2.9	20	W406169	16-Feb-14	
Metals (Dissolved)											
EPA 200.7	Iron	mg/L	9.47	9.58	10.0	93.4	1.2	20	W406185	10-Feb-14	
EPA 200.7	Manganese	mg/L	1.11	1.12	1.00	96.5	1.0	20	W406185	10-Feb-14	
EPA 200.8	Copper	mg/L	0.0253	0.0254	0.0250	97.2	0.3	20	W407008	10-Feb-14	
Anions by Ion Chromatography											
EPA 300.0	Fluoride	mg/L	5.41	5.37	2.00	109	0.7	20	W408081	18-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	168	166	10.0	R > 4S	1.2	20	W408081	18-Feb-14	D2,M3

Notes and Definitions

D2	Sample required dilution due to high concentration of target analyte.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
R1B	RPD exceeded the method acceptance limit.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 9 of 9



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Battle Mountain - San Luis
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Project Name: **BMSL - Routine**
Work Order: **W4B0065**
Reported: 19-Feb-14 08:40

Client Sample ID: **140203BMGFB**SVL Sample ID: **W4B0065-04 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 03-Feb-14 14:30

Received: 06-Feb-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.040	mg/L	0.040	0.015		W406169	AS	02/16/14 13:34	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W406185	DT	02/10/14 13:39	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W406185	DT	02/10/14 13:39	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00010		W407008	KWH	02/10/14 09:42	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			W406172	JDM	02/07/14 11:30	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.10	mg/L	0.10	0.03		W408081	AEW	02/17/14 22:04	
EPA 300.0	Sulfate as SO ₄	< 0.30	mg/L	0.30	0.06		W408081	AEW	02/17/14 22:04	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Temp - 0.0 °C
P.H. - 7.46

Field Blank



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Battle Mountain - San Luis
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San Luis, CO 81152

Project Name: **BMSL - Routine**
Work Order: **W4B0065**
Reported: 19-Feb-14 08:40

Client Sample ID: **140203BMGRB**SVL Sample ID: **W4B0065-06 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 03-Feb-14 15:00
Received: 06-Feb-14
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.040	mg/L	0.040	0.015		W406169	AS	02/16/14 13:40	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W406185	DT	02/10/14 13:53	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W406185	DT	02/10/14 13:53	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00010		W407008	KWH	02/10/14 09:45	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			W406172	JDM	02/07/14 11:30	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.10	mg/L	0.10	0.03		W408081	AEW	02/17/14 22:34	
EPA 300.0	Sulfate as SO ₄	< 0.30	mg/L	0.30	0.06		W408081	AEW	02/17/14 22:34	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Rinse Blank



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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: **BMSL - Routine / SAN LUIS**
Work Order: **W4B0061**
Reported: 18-Feb-14 14:32

Client Sample ID: **140205BMGWD1**SVL Sample ID: **W4B0061-01 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 05-Feb-14 09:20

Received: 06-Feb-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	Iron	0.137	mg/L	0.060	0.023		W406185	DT	02/10/14 13:23	
EPA 200.7	Manganese	0.149	mg/L	0.0040	0.0013		W406185	DT	02/10/14 13:23	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0023		W406185	DT	02/10/14 14:35	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0003		W407008	KWH	02/10/14 09:32	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00010		W407008	KWH	02/10/14 09:32	

Classical Chemistry Parameters

SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0019		W407071	VRH	02/11/14 12:38	
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Anions by Ion Chromatography

EPA 300.0	Fluoride	0.91	mg/L	0.10	0.03		W408071	AEW	02/17/14 18:45	
EPA 300.0	Sulfate as SO ₄	35.2	mg/L	0.30	0.06		W408071	AEW	02/17/14 18:45	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Temp - 0.1 °C
P.H. - 7.47

Quarterly



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine / SAN LUIS

Work Order: W4B0061

Reported: 18-Feb-14 14:32

Client Sample ID: 140205BMGSRW

SVL Sample ID: W4B0061-02 (Ground Water)

Sample Report Page 1 of 1

Sampled: 05-Feb-14 09:55

Received: 06-Feb-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W406169	AS	02/16/14 13:03	
EPA 200.7	Barium	0.0778	mg/L	0.0020	0.0005		W406169	AS	02/16/14 13:03	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.010		W408021	DT	02/18/14 10:10	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W406169	AS	02/16/14 13:03	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W406169	AS	02/16/14 13:03	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W406169	AS	02/16/14 13:03	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W406169	AS	02/16/14 13:03	
EPA 200.7	Molybdenum	< 0.008	mg/L	0.008	0.003		W406169	AS	02/16/14 13:03	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W406169	AS	02/16/14 13:03	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0023		W406169	AS	02/16/14 13:03	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0008	2.5	W406196	KWH	02/11/14 08:03	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.00008	2.5	W406196	KWH	02/11/14 08:03	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00025	2.5	W406196	KWH	02/11/14 08:03	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00130	2.5	W406196	KWH	02/11/14 08:03	
EPA 200.8	Silver	< 0.000200	mg/L	0.000200	0.000045	2.5	W406196	KWH	02/11/14 08:03	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W407053	STA	02/11/14 15:38	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0019		W407071	VRH	02/11/14 12:40	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	0.38	mg/L	0.10	0.03		W408071	AEW	02/17/14 18:55	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Temp - 9.4°C
P.H. - 7.25

Semi Annual



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine / SAN LUIS

Work Order: W4B0061

Reported: 18-Feb-14 14:32

Client Sample ID: 140205BMGSLTW

SVL Sample ID: W4B0061-03 (Ground Water)

Sample Report Page 1 of 1

Sampled: 05-Feb-14 10:30

Received: 06-Feb-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W406169	AS	02/16/14 13:16	
EPA 200.7	Barium	0.0389	mg/L	0.0020	0.0005		W406169	AS	02/16/14 13:16	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.010		W408021	DT	02/18/14 10:19	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W406169	AS	02/16/14 13:16	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W406169	AS	02/16/14 13:16	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W406169	AS	02/16/14 13:16	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W406169	AS	02/16/14 13:16	
EPA 200.7	Molybdenum	< 0.008	mg/L	0.008	0.003		W406169	AS	02/16/14 13:16	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W406169	AS	02/16/14 13:16	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0023		W406169	AS	02/16/14 13:16	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0008	2.5	W406196	KWH	02/11/14 08:17	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.00008	2.5	W406196	KWH	02/11/14 08:17	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00025	2.5	W406196	KWH	02/11/14 08:17	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00130	2.5	W406196	KWH	02/11/14 08:17	
EPA 200.8	Silver	< 0.000200	mg/L	0.000200	0.000045	2.5	W406196	KWH	02/11/14 08:17	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W407053	STA	02/11/14 15:40	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0019		W407071	VRH	02/11/14 12:42	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	0.45	mg/L	0.10	0.03		W408071	AEW	02/17/14 19:05	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Temp - 11.8°C
P.H. - 7.76

~~Quarterly~~
Semi Annual



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine / SAN LUIS

Work Order: W4B0061

Reported: 18-Feb-14 14:32

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Metals (Total)								
EPA 200.7	Aluminum	mg/L	<0.040	0.031	0.040	W406169	16-Feb-14	
EPA 200.7	Barium	mg/L	<0.0020	0.0005	0.0020	W406169	16-Feb-14	
EPA 200.7	Boron	mg/L	<0.040	0.010	0.040	W408021	18-Feb-14	
EPA 200.7	Chromium	mg/L	<0.0060	0.0015	0.0060	W406169	16-Feb-14	
EPA 200.7	Iron	mg/L	<0.060	0.023	0.060	W406169	16-Feb-14	
EPA 200.7	Lead	mg/L	<0.0075	0.0027	0.0075	W406169	16-Feb-14	
EPA 200.7	Manganese	mg/L	<0.0040	0.0013	0.0040	W406169	16-Feb-14	
EPA 200.7	Molybdenum	mg/L	<0.008	0.003	0.008	W406169	16-Feb-14	
EPA 200.7	Nickel	mg/L	<0.010	0.003	0.010	W406169	16-Feb-14	
EPA 200.7	Zinc	mg/L	<0.0100	0.0023	0.0100	W406169	16-Feb-14	
EPA 200.8	Arsenic	mg/L	<0.0100	0.0008	0.0100	W406196	11-Feb-14	
EPA 200.8	Cadmium	mg/L	<0.00030	0.00008	0.00030	W406196	11-Feb-14	
EPA 200.8	Copper	mg/L	<0.00300	0.00025	0.00300	W406196	11-Feb-14	
EPA 200.8	Selenium	mg/L	<0.0100	0.00130	0.0100	W406196	11-Feb-14	
EPA 200.8	Silver	mg/L	<0.000200	0.000045	0.000200	W406196	11-Feb-14	
EPA 245.1	Mercury	mg/L	<0.00020	0.000045	0.00020	W407053	11-Feb-14	
Metals (Dissolved)								
EPA 200.7	Iron	mg/L	<0.060	0.023	0.060	W406185	10-Feb-14	
EPA 200.7	Manganese	mg/L	<0.0040	0.0013	0.0040	W406185	10-Feb-14	
EPA 200.7	Zinc	mg/L	<0.0100	0.0023	0.0100	W406185	10-Feb-14	
EPA 200.8	Arsenic	mg/L	<0.0100	0.0003	0.0100	W407008	10-Feb-14	
EPA 200.8	Copper	mg/L	<0.00300	0.00010	0.00300	W407008	10-Feb-14	
Classical Chemistry Parameters								
SM 4500-CN-I	Cyanide (WAD)	mg/L	<0.0100	0.0019	0.0100	W407071	11-Feb-14	
Anions by Ion Chromatography								
EPA 300.0	Fluoride	mg/L	<0.10	0.03	0.10	W408071	17-Feb-14	
EPA 300.0	Sulfate as SO4	mg/L	<0.30	0.06	0.30	W408071	17-Feb-14	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)									
EPA 200.7	Aluminum	mg/L	0.958	1.00	95.8	85 - 115	W406169	16-Feb-14	
EPA 200.7	Barium	mg/L	0.952	1.00	95.2	85 - 115	W406169	16-Feb-14	
EPA 200.7	Boron	mg/L	0.853	1.00	85.3	85 - 115	W408021	18-Feb-14	
EPA 200.7	Chromium	mg/L	0.952	1.00	95.2	85 - 115	W406169	16-Feb-14	
EPA 200.7	Iron	mg/L	9.68	10.0	96.8	85 - 115	W406169	16-Feb-14	
EPA 200.7	Lead	mg/L	0.907	1.00	90.7	85 - 115	W406169	16-Feb-14	
EPA 200.7	Manganese	mg/L	0.961	1.00	96.1	85 - 115	W406169	16-Feb-14	
EPA 200.7	Molybdenum	mg/L	0.977	1.00	97.7	85 - 115	W406169	16-Feb-14	
EPA 200.7	Nickel	mg/L	0.919	1.00	91.9	85 - 115	W406169	16-Feb-14	
EPA 200.7	Zinc	mg/L	0.917	1.00	91.7	85 - 115	W406169	16-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0228	0.0250	91.3	85 - 115	W406196	11-Feb-14	
EPA 200.8	Cadmium	mg/L	0.0247	0.0250	98.8	85 - 115	W406196	11-Feb-14	
EPA 200.8	Copper	mg/L	0.0243	0.0250	97.3	85 - 115	W406196	11-Feb-14	
EPA 200.8	Selenium	mg/L	0.0214	0.0250	85.8	85 - 115	W406196	11-Feb-14	
EPA 200.8	Silver	mg/L	0.0275	0.0250	110	85 - 115	W406196	11-Feb-14	
EPA 245.1	Mercury	mg/L	0.00474	0.00500	94.8	85 - 115	W407053	11-Feb-14	
Metals (Dissolved)									
EPA 200.7	Iron	mg/L	9.19	10.0	91.9	85 - 115	W406185	10-Feb-14	

SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 5 of 7



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine / SAN LUIS

Work Order: W4B0061

Reported: 18-Feb-14 14:32

Quality Control - LABORATORY CONTROL SAMPLE Data

(Continued)

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Dissolved) (Continued)									
EPA 200.7	Manganese	mg/L	0.962	1.00	96.2	85 - 115	W406185	10-Feb-14	
EPA 200.7	Zinc	mg/L	0.989	1.00	98.9	85 - 115	W406185	10-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0253	0.0250	101	85 - 115	W407008	10-Feb-14	
EPA 200.8	Copper	mg/L	0.0255	0.0250	102	85 - 115	W407008	10-Feb-14	
Classical Chemistry Parameters									
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.155	0.150	103	90 - 110	W407071	11-Feb-14	
Anions by Ion Chromatography									
EPA 300.0	Fluoride	mg/L	2.05	2.00	103	90 - 110	W408071	17-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	10.3	10.0	103	90 - 110	W408071	17-Feb-14	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Metals (Total)										
EPA 200.7	Aluminum	mg/L	0.965	<0.040	1.00	96.5	70 - 130	W406169	16-Feb-14	
EPA 200.7	Barium	mg/L	1.02	0.0778	1.00	94.3	70 - 130	W406169	16-Feb-14	
EPA 200.7	Boron	mg/L	0.870	<0.040	1.00	85.4	70 - 130	W408021	18-Feb-14	
EPA 200.7	Chromium	mg/L	0.941	<0.0060	1.00	94.1	70 - 130	W406169	16-Feb-14	
EPA 200.7	Iron	mg/L	9.47	<0.060	10.0	94.7	70 - 130	W406169	16-Feb-14	
EPA 200.7	Lead	mg/L	0.896	<0.0075	1.00	89.3	70 - 130	W406169	16-Feb-14	
EPA 200.7	Manganese	mg/L	0.940	<0.0040	1.00	94.0	70 - 130	W406169	16-Feb-14	
EPA 200.7	Molybdenum	mg/L	0.971	<0.008	1.00	97.1	70 - 130	W406169	16-Feb-14	
EPA 200.7	Nickel	mg/L	0.899	<0.010	1.00	89.9	70 - 130	W406169	16-Feb-14	
EPA 200.7	Zinc	mg/L	0.909	<0.0100	1.00	90.0	70 - 130	W406169	16-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0231	<0.0100	0.0250	92.5	70 - 130	W406196	11-Feb-14	
EPA 200.8	Cadmium	mg/L	0.0241	<0.00030	0.0250	96.4	70 - 130	W406196	11-Feb-14	
EPA 200.8	Copper	mg/L	0.0262	<0.00300	0.0250	94.2	70 - 130	W406196	11-Feb-14	
EPA 200.8	Selenium	mg/L	0.0216	<0.0100	0.0250	86.3	70 - 130	W406196	11-Feb-14	
EPA 200.8	Silver	mg/L	0.0264	<0.000200	0.0250	105	70 - 130	W406196	11-Feb-14	
EPA 245.1	Mercury	mg/L	0.00098	<0.00020	0.00100	98.0	70 - 130	W407053	11-Feb-14	
EPA 245.1	Mercury	mg/L	0.00099	<0.00020	0.00100	99.0	70 - 130	W407053	11-Feb-14	
Metals (Dissolved)										
EPA 200.7	Iron	mg/L	9.58	0.137	10.0	94.5	70 - 130	W406185	10-Feb-14	
EPA 200.7	Manganese	mg/L	1.12	0.149	1.00	97.6	70 - 130	W406185	10-Feb-14	
EPA 200.7	Zinc	mg/L	1.02	<0.0100	1.00	102	70 - 130	W406185	10-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0331	0.0043	0.0250	115	70 - 130	W407008	10-Feb-14	
EPA 200.8	Copper	mg/L	0.0254	0.00105	0.0250	97.5	70 - 130	W407008	10-Feb-14	
Classical Chemistry Parameters										
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.105	<0.0100	0.100	105	75 - 125	W407071	11-Feb-14	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	mg/L	2.55	0.35	2.00	110	90 - 110	W408071	17-Feb-14	
EPA 300.0	Fluoride	mg/L	2.23	0.12	2.00	106	90 - 110	W408071	17-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	32.8	18.5	10.0	142	90 - 110	W408071	17-Feb-14	MI
EPA 300.0	Sulfate as SO ₄	mg/L	16.0	4.94	10.0	110	90 - 110	W408071	17-Feb-14	

SVL holds the following certifications:

AZ:0538, CA:2080, FL(NELAC):E87993, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, WA:C573

Work order Report Page 6 of 7



One Government Gulch - PO Box 929

Kellogg ID 83837-0929

(208) 784-1258

Fax (208) 783-0891

Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine / SAN LUIS

Work Order: W4B0061

Reported: 18-Feb-14 14:32

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	%R	RPD	RPD Limit	Batch ID	Analyzed	Notes
Metals (Total)											
EPA 200.7	Aluminum	mg/L	0.991	0.965	1.00	99.1	2.6	20	W406169	16-Feb-14	
EPA 200.7	Barium	mg/L	1.05	1.02	1.00	96.9	2.5	20	W406169	16-Feb-14	
EPA 200.7	Boron	mg/L	0.869	0.870	1.00	85.3	0.1	20	W408021	18-Feb-14	
EPA 200.7	Chromium	mg/L	0.962	0.941	1.00	96.2	2.2	20	W406169	16-Feb-14	
EPA 200.7	Iron	mg/L	9.80	9.47	10.0	98.0	3.5	20	W406169	16-Feb-14	
EPA 200.7	Lead	mg/L	0.909	0.896	1.00	90.5	1.4	20	W406169	16-Feb-14	
EPA 200.7	Manganese	mg/L	0.966	0.940	1.00	96.6	2.7	20	W406169	16-Feb-14	
EPA 200.7	Molybdenum	mg/L	0.992	0.971	1.00	99.2	2.2	20	W406169	16-Feb-14	
EPA 200.7	Nickel	mg/L	0.915	0.899	1.00	91.5	1.8	20	W406169	16-Feb-14	
EPA 200.7	Zinc	mg/L	0.926	0.909	1.00	91.7	1.8	20	W406169	16-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0228	0.0231	0.0250	91.2	1.4	20	W406196	11-Feb-14	
EPA 200.8	Cadmium	mg/L	0.0238	0.0241	0.0250	95.2	1.2	20	W406196	11-Feb-14	
EPA 200.8	Copper	mg/L	0.0259	0.0262	0.0250	93.1	1.1	20	W406196	11-Feb-14	
EPA 200.8	Selenium	mg/L	0.0209	0.0216	0.0250	83.7	3.1	20	W406196	11-Feb-14	
EPA 200.8	Silver	mg/L	0.0263	0.0264	0.0250	105	0.3	20	W406196	11-Feb-14	
EPA 245.1	Mercury	mg/L	0.00099	0.00098	0.00100	99.0	1.0	20	W407053	11-Feb-14	
Metals (Dissolved)											
EPA 200.7	Iron	mg/L	9.47	9.58	10.0	93.4	1.2	20	W406185	10-Feb-14	
EPA 200.7	Manganese	mg/L	1.11	1.12	1.00	96.5	1.0	20	W406185	10-Feb-14	
EPA 200.7	Zinc	mg/L	1.02	1.02	1.00	102	0.2	20	W406185	10-Feb-14	
EPA 200.8	Arsenic	mg/L	0.0327	0.0331	0.0250	114	1.1	20	W407008	10-Feb-14	
EPA 200.8	Copper	mg/L	0.0253	0.0254	0.0250	97.2	0.3	20	W407008	10-Feb-14	
Classical Chemistry Parameters											
SM 4500-CN-I	Cyanide (WAD)	mg/L	0.104	0.105	0.100	104	1.0	20	W407071	11-Feb-14	
Anions by Ion Chromatography											
EPA 300.0	Fluoride	mg/L	2.39	2.55	2.00	102	6.7	20	W408071	17-Feb-14	
EPA 300.0	Sulfate as SO ₄	mg/L	30.2	32.8	10.0	117	8.2	20	W408071	17-Feb-14	M1

Notes and Definitions

M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable



One Government Gulch - PO Box 929

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(208) 784-1258

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Battle Mountain - San Luis
PO Box 310
San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: W4B0292
Reported: 05-Mar-14 09:19

Client Sample ID: 140218BMGM14165

SVL Sample ID: W4B0292-01 (Ground Water)

Sample Report Page 1 of 1

Sampled: 18-Feb-14 15:50

Received: 20-Feb-14

Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	198	mg/L	0.040	0.015		W409018	MCE	02/27/14 12:58	B7,M3
EPA 200.7	Magnesium	31.5	mg/L	0.200	0.039		W409018	MCE	02/27/14 12:58	
EPA 200.7	Potassium	2.23	mg/L	0.50	0.13		W409018	MCE	02/27/14 12:58	
EPA 200.7	Silica (SiO ₂)	32.4	mg/L	0.17	0.06		W409018	MCE	02/27/14 12:58	
EPA 200.7	Sodium	33.7	mg/L	0.50	0.08		W409018	MCE	02/27/14 12:58	
SM 2340B	Hardness (as CaCO ₃)	624	mg/L	0.923	0.198		N/A		02/27/14 12:58	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.040	mg/L	0.040	0.031		W408221	AS	03/02/14 09:51	
EPA 200.7	Barium	0.347	mg/L	0.0020	0.0005		W408221	AS	03/02/14 09:51	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0007		W408221	AS	03/02/14 09:51	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0015		W408221	AS	03/02/14 09:51	
EPA 200.7	Iron	< 0.060	mg/L	0.060	0.023		W408221	AS	03/02/14 09:51	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0027		W408221	AS	03/02/14 09:51	
EPA 200.7	Manganese	< 0.0040	mg/L	0.0040	0.0013		W408221	AS	03/02/14 09:51	
EPA 200.7	Nickel	< 0.010	mg/L	0.010	0.003		W408221	AS	03/02/14 09:51	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0023		W408221	AS	03/02/14 09:51	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.0003		W409006	KWH	02/25/14 07:07	M1
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00010		W409006	KWH	02/25/14 07:07	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00052		W409006	KWH	02/25/14 07:07	M1
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000018		W409006	KWH	02/25/14 07:07	
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000045		W408244	STA	02/25/14 11:20	
Classical Chemistry Parameters										
SM 2320B/2310B	Total Alkalinity	605	mg/L as CaCO ₃	1.0			W409023	AGF	02/24/14 14:51	
SM 2540 C	Total Diss. Solids	644	mg/L	10			W408222	JDM	02/21/14 14:00	
SM 4500-CN-I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		W409093	VRH	02/26/14 12:13	
Anions by Ion Chromatography										
EPA 300.0	Chloride	8.34	mg/L	0.20	0.04		W410031	AEW	03/03/14 17:49	M1
EPA 300.0	Fluoride	0.58	mg/L	0.10	0.03		W410031	AEW	03/03/14 17:49	
EPA 300.0	Sulfate as SO ₄	21.9	mg/L	0.30	0.06		W410031	AEW	03/03/14 17:49	
Cation/Anion Balance and TDS Ratios										
Cation Sum: 14.0 meq/L		Anion Sum: 12.8 meq/L		C/A Balance: 4.46 %		Calculated TDS: 692		TDS/cTDS: 0.93		

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

Quarterly

Temp - 16.2°C
P.H. - 6.87



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: Not Indicated
Lab ID: C14020618-001
Client Sample ID: 140218BMGM14165

Report Date: 03/06/14
Collection Date: 02/18/14 15:50
Date Received: 02/21/14
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Gross Alpha	154	pCi/L			E900.0		03/04/14 06:03 / lbb
Gross Alpha precision (±)	6.7	pCi/L			E900.0		03/04/14 06:03 / lbb
Gross Alpha MDC	3.8	pCi/L			E900.0		03/04/14 06:03 / lbb
Gross Beta	31.2	pCi/L			E900.0		03/04/14 06:03 / lbb
Gross Beta precision (±)	3.7	pCi/L			E900.0		03/04/14 06:03 / lbb
Gross Beta MDC	5.0	pCi/L			E900.0		03/04/14 06:03 / lbb

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc

Report Date: 03/06/14

Project: Not Indicated

Work Order: C14020618

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0										Batch: GrAB-1693
Sample ID: Th230-GrAB-1693	Laboratory Control Sample			Run: G5000W_140228A			03/03/14 17:35			
Gross Alpha		118	pCi/L	104	80	120				
Sample ID: Sr90-GrAB-1693	Laboratory Control Sample			Run: G5000W_140228A			03/03/14 17:35			
Gross Beta		170	pCi/L	96	80	120				
Sample ID: MB-GrAB-1693	6 Method Blank			Run: G5000W_140228A			03/03/14 17:35			
Gross Alpha		-0.9	pCi/L							U
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		1	pCi/L							
Gross Beta		-3	pCi/L							U
Gross Beta precision (±)		2	pCi/L							
Gross Beta MDC		3	pCi/L							
Sample ID: C14020574-001BDUP	6 Sample Duplicate			Run: G5000W_140228A			03/03/14 17:35			
Gross Alpha		43.5	pCi/L							
Gross Alpha precision (±)		10.8	pCi/L							
Gross Alpha MDC		14.6	pCi/L							
Gross Beta		16.3	pCi/L							
Gross Beta precision (±)		13.9	pCi/L							
Gross Beta MDC		22.6	pCi/L							
Sample ID: C14020618-001AMS	Sample Matrix Spike			Run: G5000W_140228A			03/04/14 06:03			
Gross Alpha		373	pCi/L	113	70	130				
Sample ID: C14020618-001AMSD	Sample Matrix Spike Duplicate			Run: G5000W_140228A			03/04/14 06:03			
Gross Alpha		427	pCi/L	140	70	130	14	15.2	S	
- Sample activity for this radionuclide is much larger than the spike activity added. Therefore the matrix spike recovery could not be calculated. The LCS and the RPD of the MS/MSD pair are acceptable; this batch is approved.										
Sample ID: C14020618-001AMS	Sample Matrix Spike			Run: G5000W_140228A			03/04/14 06:03			
Gross Beta		306	pCi/L	91	70	130				
Sample ID: C14020618-001AMSD	Sample Matrix Spike Duplicate			Run: G5000W_140228A			03/04/14 06:03			
Gross Beta		328	pCi/L	98	70	130	6.9	14.5		

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

MONTHLY, QUARTERLY AND SEMI-ANNUAL SAMPLING

SAMPLE I.D	SAMPLE TYPE	SAMPLE LOCATION	PH
131016BMGBF4	QUARTERLY	BF-4	6.81
131016BMGBF6	QUARTERLY	BF-6	6.41
131021BMGM9	QUARTERLY	M-9	7.34
131021BMGM13R	QUARTERLY	M-13R	7.24
131028BMGM16	QUARTERLY	M-16	6.82
131028BMGM22	QUARTERLY	M-22	7.24
131028BMGM10	QUARTERLY	M-10	7.74
131028BMGM34	QUARTERLY	M-34	6.88
131031BMGLD	QUARTERLY	LEAK DETECTION	6.92
131031BMGTAILS	MONTHLY/QUARTERLY	TAILINGS POND	7.86
131031BMGCOL	QUARTERLY	COLLECTION POND	7.42
131125BMGTAILS	MONTHLY	TAILINGS POND	7.91
131202BMGWD1	QUARTERLY	WD-1	7.73
131202BMGFB		FIELD BLANK	
131202BMGRB		RINSE BLANK	
131209BMGFB		FIELD BLANK	
131209BMGRB		RINSE BLANK	
131209BMGM26	QUARTERLY	M-26	7.23
131230BMGTAILS	MONTHLY	TAILINGS POND	7.34
140102BMGRS1	QUARTERLY	RS-1	7.67
140102BMGRS2	QUARTERLY	RS-2	7.42
140102BMGRS5	QUARTERLY	RS-5	7.51
140102BMGFB		FIELD BLANK	
140102BMGRB		RINSE BLANK	
140108BMGM19	QUARTERLY	M-19	6.65
140108BMGM21	QUARTERLY	M-21	6.84
140108BMGM24	QUARTERLY	M-24	7.26
140108BMGM11R	QUARTERLY	M-11R	7.2

MONTHLY, QUARTERLY AND SEMI-ANNUAL SAMPLING

SAMPLE I.D	SAMPLE TYPE	SAMPLE LOCATION	PH
140227BMGTAILS	MONTHLY	TAILINGS POND	8.28
140115BMGM12	QUARTERLY	M-12	7.8
140115BMGM9	QUARTERLY	M-9	7.37
140122BMGBF4	QUARTERLY	BF-4	6.71
140122BMGBF6	QUARTERLY	BF-6	6.39
140122BMGM16	QUARTERLY	M-16	6.37
140122BMGM22	QUARTERLY	M-22	7.19
140122BMGM10	QUARTERLY	M-10	7.73
140122BMGM26	QUARTERLY	M-26	7.34
140122BMGM13R	QUARTERLY	M-13R	7.33
140129BMGLD	QUARTERLY	LEAK DETECTION	6.96
140129BMGCOL	QUARTERLY	COLLECTION POND	7.26
140205BMGSLTW	BI/YEARLY	SAN LUIS TOWN WELL	7.76
140205BMGSRW	BI/YEARLY	SHALOM RANCH WELL	7.25
140129BMGTAILS	MONTHLY/QUARTERLY	TAILINGS POND	7.31
140203BMGFB		FIELD BLANK	7.46
140203BMGRB		RINSE BLANK	
140205BMGWD1	QUARTERLY	WD-1	7.47
140122BMGM34	QUARTERLY	M-34	6.85