Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

March 10, 2020

Mr. Lucas West
State of Colorado
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - San Luis, Colorado
Annual Report and Fee 2019
CMLRB Permit No. M-1988-112

Dear Mr. West:

Please find included the Battle Mountain Resources, Inc. (BMRI) "San Luis Project" (Permit No. M-1988-112) Annual Report and a site map as requested in the February 22, 2020, letter from the Colorado Division of Reclamation, Mining, and Safety (CDRMS) to Julio Madrid of BMRI/Newmont. The following summarizes the operation, reclamation, permitted area, dam inspections, and site monitoring activities performed, as well as any technical revisions and permit amendments made for the San Luis Project during 2019.

General Reclamation Activities

Reclamation activities and technical revisions during 2019 included:

- Continued stormwater management on and adjacent to reclaimed and unreclaimed mine land. Stormwater inspections were performed on June 10, 2019 and October 15, 2019, and any issues noted were corrected;
- Treatment of water from the West Pit and Rito Seco alluvial groundwater systems;
- Tailing facility storage pond, underdrain, and leak detection system management;
- Surface and ground water management;
- Completed construction of a new concrete spillway for the South Diversion Ditch on the southwest side of tailings facility for stormwater runoff and regrading of the South Diversion Ditch Overflow Section per Technical Revision 34 (TR-34) and an addendum to Technical Revision TR-34.
- Technical Revision 35 (TR-35) was submitted and approved to discontinue sampling of wells M-4R and M-15, including decommissioning and abandonment of M-15.
- Replacement of lysimeters LS3 (shallow) and LD3 (deep), both located near the Lined Tailing Facility (LTF) collection pond.

Reclamation Areas

BMRI did not perform any additional reclamation in 2019. The Pink Gneiss Pit haul road was seeded several years ago, and after years of successful growth, the 3.8 acres are considered revegetated and reclaimed. Therefore, there are 78.7 acres of reclamation remaining, as summarized in Table 1.

Table 1 - Summary of San Luis Project Reclamation

Area	Actual Disturbance (Acres)	Reclamation Completed Through 2018 (Acres)	Reclamation Completed In 2019 (Acres)	Remaining Reclamation (Acres)
East Pit	20	20	0	0
West Pit	100	71.3	0	28.7
Waste Rock A	0	0	0	0
Waste Rock B	18	18	0	0
Waste Rock C	28	28	0	0
Waste Rock D	42	42	0	0
South Waste Rock	35	35	0	0
Mill Area	25.6	25.6	0	0
ESI Leach Pad	10	10	0	0
Borrow Area	5.5	0	0	5.5
Road Around Tailing Facility and Collection Pond	4	0	0	4
Tailing Facility Perimeter Road	12.9	0	0	12.9
Waste Rock C Access Road	3.7	3.7	0	0
Pink Gneiss Pit Haul Road	3.8	0	3.8	0
Tailing Facility	192	169.4	0	22.6
Tailing Collection Pond	5	0	0	5
Admin. Office Complex – Deeded lands to Costilla County Soil Conservation District (CCSCD)	3	3	0	0
Total Area	508.5	426	3.8	78.7

Permitted Areas

The current unreleased Permit Areas consist of both reclaimed and unreclaimed land and disturbed and undisturbed land. BMRI did not request release any land in 2019, therefore the Permit Area remains at 736.92 acres. Table 2 summarizes the disturbed areas in the permit.

Table 2 - Summary of Permitted Areas

Area	Permitted Disturbance (Acres)	Actual Disturbance Areas (Acres)	Disturbance Areas Released from Permit Area (Acres)	Disturbance Areas Remaining in Permit Area (Acres)
East Pit	20	20	20	0
West Pit	110	100	8.9	91.1
Waste Rock A	0	0	0	0
Waste Rock B	18	18	0	18
Waste Rock C	30	28	25.8	2.2
Waste Rock D	42	42	42	0
South Waste Rock	50	35	33.6	1.4
Mill Area	25.6	25.6	3.1	22.5
ESI Leach Pad	10	10	10	0
Borrow Area	11	5.5	0	5.5
Roads	30	24.4	3.7	20.7
Tailing Facility	192	192	0	192
Tailing Collection Pond	5	5	0	5
Admin. Office Complex – Deeded lands to Costilla County Soil Conservation District (CCSCD)	3	3	3	0
Total Area	546.6	508.5	150.1	358.4

Dam Inspections

In 2014, BMRI provided the first annual San Luis Project Tailings Dam Detailed Inspection Report (Detailed Inspection Report) (Miller Geotechnical Consultants, Inc., February 2014). The Detailed Inspection Report concluded that the LTF dam is in good condition, but included recommendations for improvements to the South Diversion Ditch and the associated drop structure to minimize risks associated with stormwater during major precipitation events. In 2015, 2016, and 2017, Miller Geotechnical Consultants, Inc. (MGC) completed hydrologic and geotechnical studies, and prepared design drawings and specifications for improvements to the South Diversion Ditch and drop structure in order to address the recommendations. The improvements include replacement of the existing drop structure with a larger reinforced concrete drop structure at the south embankment, and increasing the capacity of the South Diversion Ditch. BMRI submitted a proposed Technical Revision in February 2017 for construction of a new drop structure on the south embankment of the tailing's facility dam which CDRMS approved in TR-34 on March 23,

2017. Construction of the drop structure started in summer of 2018 and was completed in the summer of 2019.

During 2019, quarterly dam inspections were performed as required in Technical Revision 33 (TR-33). The first, third and fourth quarter dam inspections were performed by BMRI. An annual dam inspection was performed by MGC during the second quarter, in lieu of the second quarter inspection. The quarterly dam inspections were submitted previously to CDRMS and are also included in Appendix A of this report.

Site Monitoring

Water level data, laboratory analytical results, and flows were submitted to CDRMS as part of the Monthly Reports throughout 2019, and are also included in Appendix B of this report. During 2019, groundwater sampling and water level measurements were performed as required in Technical Revision 32 (TR-32). Sampling and laboratory analyses for groundwater monitoring well M-14 continued during 2019 under the CDRMS approved Response Plan. M-14 will continue to be sampled and results reported as required in TR-32 in 2020.

The LTF collection pond leak detection system (underdrain) was monitored monthly and evacuated and pumped to the LTF. The monthly leak-detection flows for 2019 ranged from a low of 24.3 gallons per day (gpd) to a high of 30 gpd. The average monthly leak-detection flow, for 2019, was 27.9 gpd. The collection pond underdrain water was sampled and analyzed quarterly and the laboratory analytical results and flows were submitted to CDRMS in the Monthly and Quarterly Sampling Reports and are also included in Appendix B of this report.

The LTF underdrain flows were monitored monthly at the base of the embankment and the flows for 2019 ranged from a low of 31.5 gallons per minute (gpm) to a high of 36.5 gpm. In 2019, the monthly average underdrain flow was 33.9 gpm. The monthly underdrain flows were submitted previously to CDRMS as part of the Monthly Reports and are also included in Appendix B of this report.

The LTF system lysimeters were monitored monthly. The lysimeters were dry and no groundwater was present for sampling or analysis in 2019. In December 2019, two lysimeters LS3 and LD3 were replaced with two new lysimeters identified as LS3R and LD3R, respectively 30-40 feet southeast of the original lysimeters. The details of the new lysimeter boring logs are contained in Appendix C. The monthly lysimeter readings were submitted previously to CDRMS in the Monthly Reports and are also included in Appendix B of this report.

There was no sludge transferred from the water treatment plant drying pads to the LTF in 2019. The monthly sludge management information was submitted previously to the CDRMS in the Monthly Reports which are also included in Appendix B of this report.

During 2019, BMRI managed the Rito Seco and West Pit alluvial hydrologic systems, in compliance with Technical Revision 26 (TR-26). BMRI measured the West Pit backfill monitoring wells weekly and the monthly average groundwater elevations were maintained below the TR-26 required level of 8,582 feet above mean sea level (amsl). The groundwater

table elevations and potentiometric surface maps, developed by Engineering Analytics, Inc., confirm the groundwater flow gradient was from the Rito Seco alluvium to the West Pit backfill during 2019. The groundwater elevations and potentiometric surface maps were previously submitted to CDPHE with the DMR's, BMP, and WET Testing Reports under permit number CO0045675 and are also included in Appendix D of this report. BMRI also performed monthly visual inspections for seepage in the historic seepage area along the Rito Seco Creek and no seeps were observed during 2019.

Additionally, the two groundwater capture wells, M-32 and M-33, were operated in conjunction with other groundwater table elevation control in the West Pit during 2019. Groundwater elevations were maintained equal to or lower than 8,540 feet amsl in wells M-32 and M-33, as required under TR-26. These elevations were also previously submitted to CDPHE with the DMR's, BMP, and WET Testing Reports under permit number CO0045675 and are also included in Appendix D of this report. Groundwater pumped from these wells was either treated at the West Pit Water Treatment Plant and discharged to the Rito Seco under the BMRI discharge permit, or pumped to the LTF for water management. In 2019, the West Pit water treatment plant treated and discharged a total of 91,738,100 gallons of water to the Rito Seco Creek. Additionally, a total of 4,131,900 gallons of water was transferred from the West Pit to the LTF.

There were two Technical Revisions in 2019; one addendum to TR-34 and TR-35. The TR-34 addendum was to regrade the South Diversion Ditch Overflow Section. The TR-34 addendum was approved via email from Lucas West on March 27, 2019. TR-35 released monitoring wells M-4R and M-15 from the monitoring plan. M-4R is located in the 35.14-acre area released to from the permit area in 2014, it is now under the ownership of San Luis Valley Animal Welfare Society and will not be decommissioned by BMRI. M-15 is in the current permit area but not impacted by former site operations. TR-35 was approved on June 6, 2019 and MW-15 was decommissioned and properly abandoned on December 4, 2019. There were no other Technical Revisions submitted for the 2019 calendar year.

Should additional information be required or if any clarifications are necessary, please contact me at (719) 379-0538.

Julio Madrid

Sr. Supervisor Legacy Sites Closure and Reclamation

Cc: Devon Hornveldt (electronic)
Lawrence Fiske, BMRI (electronic)
Melissa Chalona, EA
BMRI File

Enclosures:

Appendix A – Dam Inspection Reports
Appendix B – Monthly Reports and Monthly and Quarterly Sampling Results
Appendix C – Lysimeters LS3R and LD3R Boring Logs
Appendix D – Quarterly DMR's, BMP, and WET Testing Reports
Report Request
2019 Site Map

APPENDIX A

BATTLE MOUNTAIN RESOURCES, INC.

RECEIVED
JUN 10 2019
DIVISION OF RECLAMATION
MINING AND SAFETY

*Kall Small pics!

June 5, 2019

Mr. Lucas J. West
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: San Luis Project Tailing Dam Report 1st Quarter 2019, Technical Revision No. 33, Permit No. M-1988-112

Dear Mr. West:

Battle Mountain Resources Inc. ("BMRI") is pleased to provide the San Luis Project Tailing Dam Report for the 1st Quarter 2019 in accordance with Technical Revision No. 33 to BMRI's Reclamation Permit.

Enclosed along with the inspection report are photos of the tailings dam and impoundment, new concrete spillway (still under construction), the under drain collection system and monthly piezometer readings.

Should you have any questions, please do not hesitate to contact me at 719-379-0538.

Respectfully,

Julio F. Madrid
Sr. Supervisor Legacy Sites Reclamation and Closure
Battle Mountain Resources Inc.

cc: Larry Fiske BMRI
David Carino BMRI

INSPECTION PERIOD: Jan 2019 thru March 2019 — page 1/1

INSPECTOR: David S. Cariño

DAM: SAN LUIS PROJECT TAILING DAM

AREA INSPECTED	ITEM NO.	CONDITION	YES	NO	OBSERVATIONS	CHECK ACTION NEEDED: MONITOR	INVESTI-GATE	REPAIR
CREST	1	ANY SURFACE CRACKING?		✓				
	2	ANY UNUSUAL LOW AREAS?		✓				
	3	ANY RUTS OR PUDDLES?		✓				
	4	ANY HORIZONTAL OFFSET?		✓				
	5	NEED VEGETATION CONTROL?		✓				
UPSTREAM SLOPE & BEACH AREA	6	ANY SLIDES, SLOUGHS, SCARPS?		✓				
	7	ANY SINKHOLES OR UNUSUAL DEPRESSIONS?		✓				
	8	ANY EROSION ?		✓				
	9	CHANGES AT ABUTMENT CONTACTS?		✓				
	10	NEED VEGETATION CONTROL?		✓				
	11							
DOWNSTREAM SLOPE	12	ANY WET AREAS?		✓				
	13	ANY SLIDES, SLOUGHS, SCARPS?		✓				
	14	CHANGES AT DAM-ABUTMENT CONTACT?		✓				
	15	ANY EROSION?	✓		minor erosion on North grain area	✓		
	16	ANY UNUSUAL BULGING OR SLOPE MOVEMENT?		✓				
	17	NEED VEGETATION CONTROL?		✓				
	18							
SEEPAGE COLLECTION AND PUMPBACK SYSTEM	19	IS DRAIN OUTLET CLOGGED OR OBSTRUCTED?		✓				
	20	ARE DRAIN FLOWS MUDDY OR TURBID?		✓				
	21	IS EMBANKMENT WET AROUND DRAIN OUTLET?	✓		Minor leakage around piping	✓		
	22	ANY PROBLEMS WITH COLLECTION POND?		✓				
	23	IS PUMPBACK SYSTEM WORKING PROPERLY?		✓				
	24							
DIVERSION CHANNEL AND DROP STRUCTURE	25	ANY EROSION?		✓				
	26	NEED VEGETATION CONTROL?		✓				
	27	ANY DEBRIS IN CHANNELS OR DROP STRUCTURE?		✓				
	28	ANY CRACKS OR DETERIORATION OF CONCRETE?		✓				
	29	ANY CORROSION OF PIPE?		✓				
	30							

ADDITIONAL COMMENTS (REFER TO ITEM NO. IF APPLICABLE):

QUARTERLY INSPECTION SUMMARY

NAME OF DAM:	San Luis Project Tailing Dam	CO DRMS Permit #:	M-1988-112
REPORTING PERIOD:	1/2019 thru 3/2019	REPORT #:	

INSPECTION ITEMS		PHOTOS
Piezometer Levels	Included in report	No
Drain Collection and Pumpback System Observations	System working properly	Yes
Seepage/Erosion Observations	Minor erosion on north groin area (down stream)	Yes
Vegetation/Rodent/ Other Maintenance Observations	None	No
Diversion System Observations	Channel in good condition, no issues	Yes

RECOMMENDATIONS/COMMENTS

INSPECTION AND REPORTING PERSONNEL

NAME	REPRESENTING	TITLE/ROLE
David S. Curino	BMRI	Site Manager
Julio Madrid	BMRI	Site Supervisor

First Quarter 2019 Tailing Dam Inspection Photograph Details:

Photos #1 & #2: West side of Tailing Dam looking East

Photo #3: Northwest groin area re-vegetation looking down from crest

Photo #4 Inlet new Concrete Drop Structure (South Diversion Channel)

Photo #5 & #6: Under-drain pipeline collection system

Photo #7: Tailing Dam Roadway Southside look North

Photo #8: East side Tailing Dam looking West

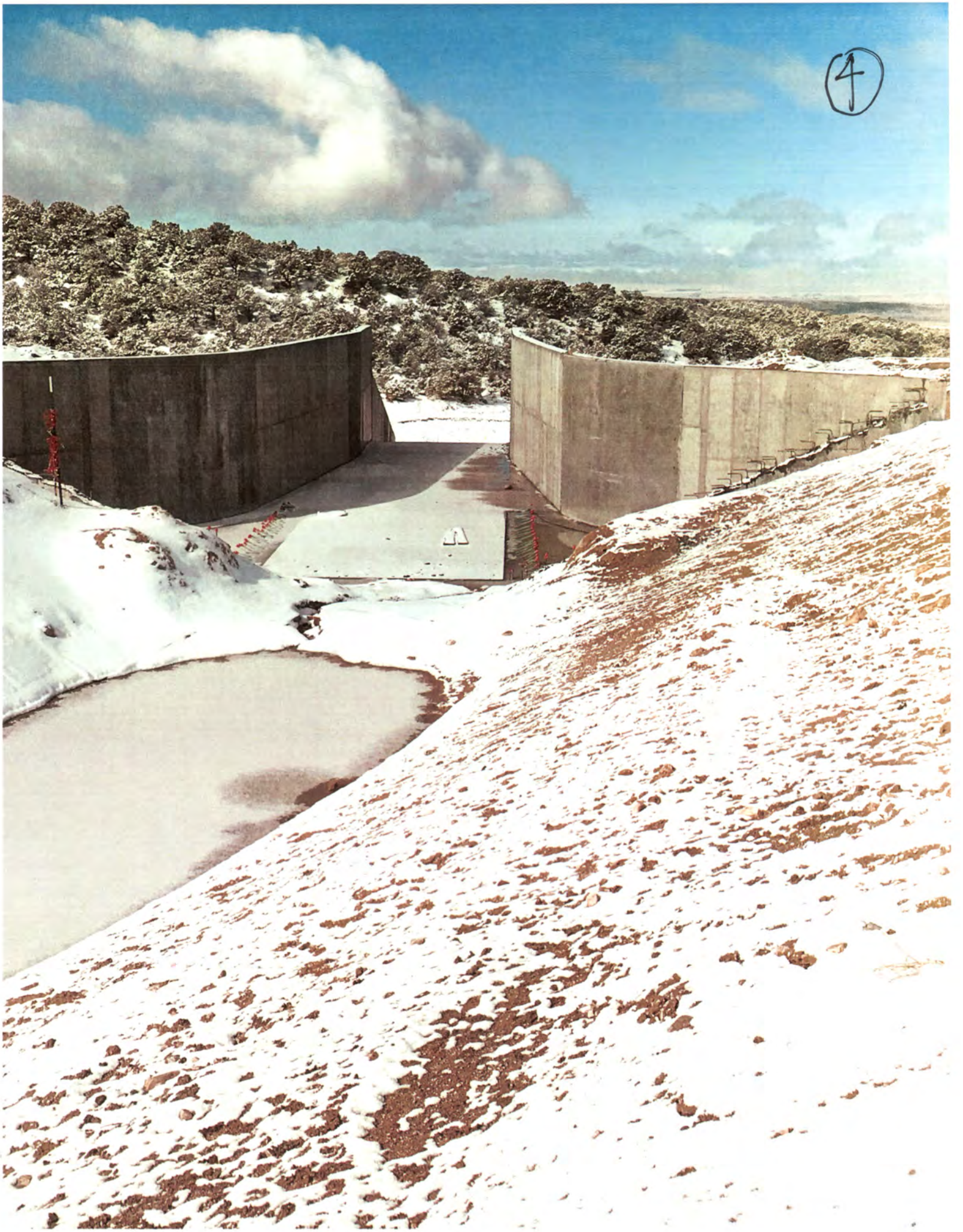
Photos #9 and #10 Tailing Impoundment from roadway on Tailing Dam looking East

Photos #11 and #12 South Diversion Channel

1

2

3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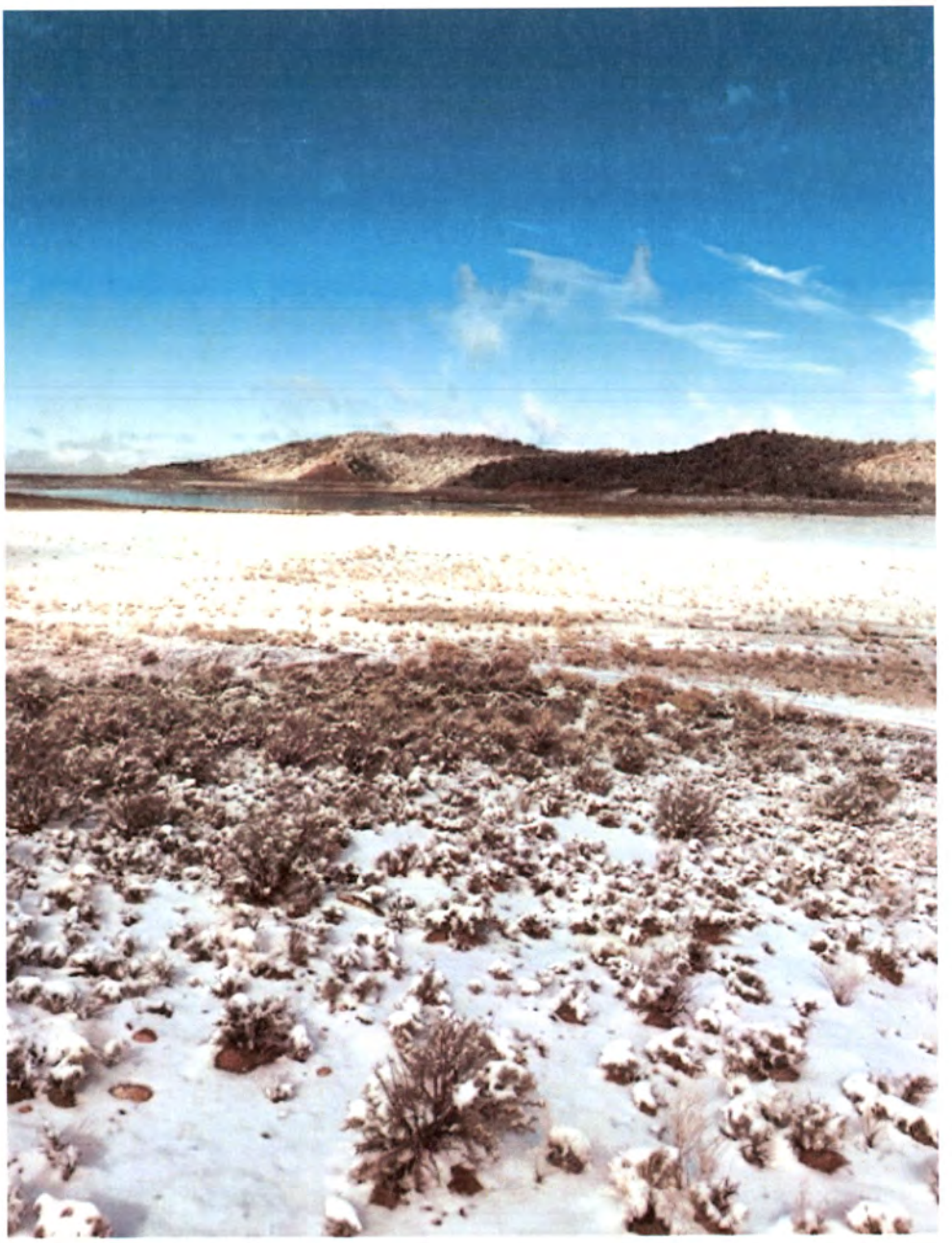

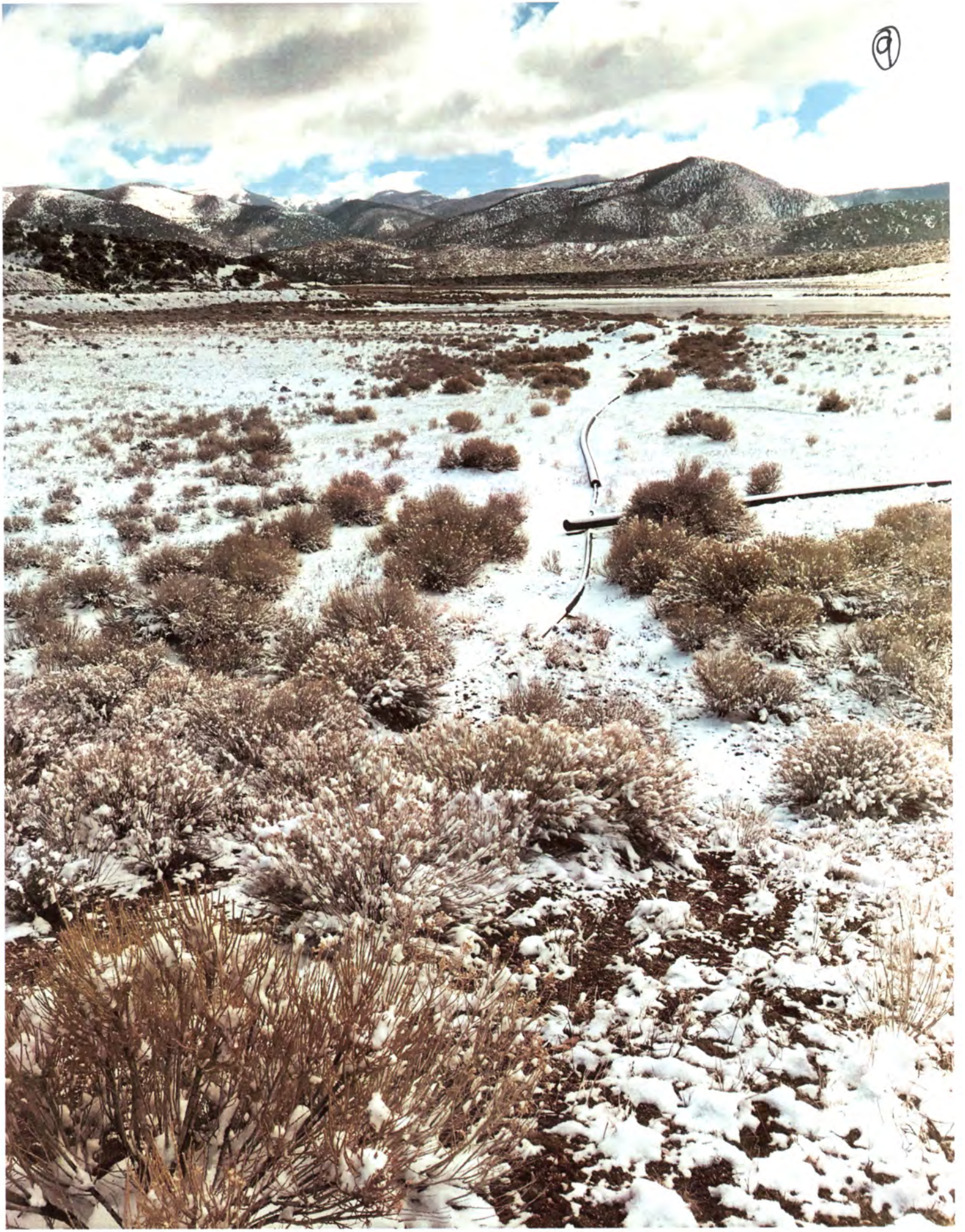

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Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	01/31/2019	72.46	DRY	N/A
P7	01/31/2019	92.50	92.32	0.18
P8	01/31/2019	97.51	96.68	0.83
P9	01/31/2019	72.30	71.95	0.35
P10	01/31/2019	58.30	57.56	0.74
P11	01/31/2019	41.80	41.39	0.41
P12	01/31/2019	41.71	41.68	0.03
P13	01/31/2019	41.34	41.06	0.28
P14	01/31/2019	41.24	DRY	N/A
P15	01/31/2019	41.10	40.85	0.25

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	02/28/2019	72.46	DRY	N/A
P7	02/28/2019	92.50	92.31	0.19
P8	02/28/2019	97.51	96.67	0.84
P9	02/28/2019	72.30	71.95	0.35
P10	02/28/2019	58.30	57.57	0.73
P11	02/28/2019	41.80	41.39	0.41
P12	02/28/2019	41.71	41.68	0.03
P13	02/28/2019	41.34	41.05	0.29
P14	02/28/2019	41.24	DRY	N/A
P15	02/28/2019	41.10	40.86	0.24

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	03/29/2019	72.46	DRY	N/A
P7	03/29/2019	92.50	92.30	0.20
P8	03/29/2019	97.51	96.67	0.84
P9	03/29/2019	72.30	71.93	0.37
P10	03/29/2019	58.30	57.57	0.73
P11	03/29/2019	41.80	41.39	0.41
P12	03/29/2019	41.71	41.68	0.03
P13	03/29/2019	41.34	41.04	0.30
P14	03/29/2019	41.24	DRY	N/A
P15	03/29/2019	41.10	40.86	0.24

BATTLE MOUNTAIN RESOURCES, INC.

Mr. Lucas J. West
CDRMS
1313 Sherman Street, Room 215
Denver, CO 80203

P.O. Box 310 • San Luis, Colorado 81152-0310 • (719) 379-0798 • Fax (719) 379-0713
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OCT 22 2019
DIVISION OF RECLAMATION
MINING & SAFETY

*Small maps/pics !

October 18, 2019

Mr. Lucas West
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: San Luis Project Tailing Dam 2019 Annual Inspection Report, Technical Revision No. 33,
Permit No. M-1988-112

Dear Mr. West:

Battle Mountain Resources Inc. ("BMRI") is pleased to provide the San Luis Project Tailing Dam 2019 Annual Report in accordance with Technical Revision No. 33 to BMRI's Reclamation Permit.

The annual inspection was conducted by Deb Miller with Miller Geotechnical Consultants, Inc.

Enclosed with the inspection report are photos of the tailing dam, concrete drop structure and the under drain discharge area.

Should you have any questions, please do not hesitate to contact me.

Respectfully,

Julio F. Madrid
Sr. Supervisor Legacy Sites Reclamation and Closure
Battle Mountain Resources Inc.
719-379-0538

cc: Larry Fiske BMRI
David Carino BMRI

July 3, 2019

Miller Geotechnical Consultants, Inc.
2837 Skimmerhorn St.
Fort Collins, CO 80526
(970)581-8988 (mobile)
Deb.Miller@mgcgeo.com

Battle Mountain Resources, Inc.
PO Box 310
San Luis, CO 81152-0310

Attn: Mr. David Carino, Site Manager
Mr. Devon Horntvedt, Director Legacy Sites

Re: 2019 Dam Safety Inspection Report for San Luis Tailings Dam

Dear Mr. Carino and Mr. Horntvedt:

Contained herein is the 2019 Annual Inspection Report for San Luis Tailing Dam. This is the sixth annual dam safety inspection for the facility following the initial (2013) detailed inspections and dam safety analyses of the facility which are documented in the initial Detailed Inspection Report (MGC 2014[1]). The history of dam safety inspections and related activities is summarized as follows:

- San Luis Project Tailing Dam Detailed Inspection Report (MGC, February 2014)
- 2014 Annual Inspection Report (MGC, June 17, 2014)
- 2015 Annual Inspection Report (MGC, May 28, 2015)
- 2016 Annual Inspection Report (MGC, July 6, 2016)
- 2017 Annual Inspection Report (Engineering Analytics, August, 2017)
- 2018 Annual Inspection Report (MGC, August 7, 2018)

An overall site plan of the San Luis Tailing Facility is presented on Figure 1. Specific inspection results are detailed on the Tailing Dam Inspection Form (Attachment 1), and captioned Photographs taken during the inspection are included as Attachment 2. The location and orientation of the photos are shown on Figure 1.

[1] MGC (2014). San Luis Project Tailing Dam Detailed Inspection Report, prepared for Battle Mountain Resources Inc. by Miller Geotechnical Consultants (MGC), Fort Collins, CO, February.

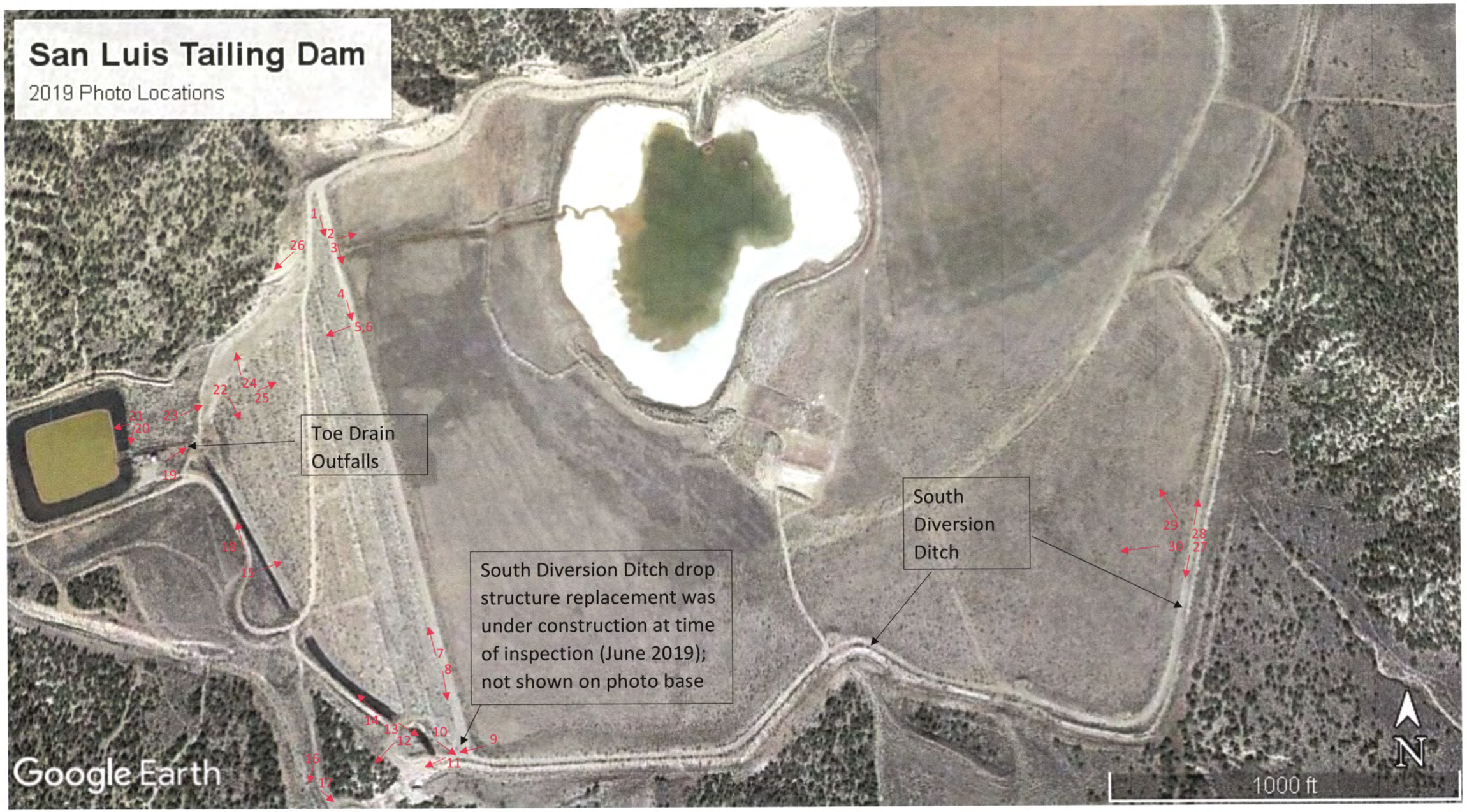


Figure 1. Site Map Showing 2019 Photo Locations and Orientation (note, Google Earth base photo does not show current ground conditions)

INSTRUMENTATION

Piezometers: Piezometer readings from July, 2018 through May, 2019 are presented graphically on Figure 2. The piezometers all indicate dry conditions or minor amounts of water present at the bottom of the casings due to moisture condensation. This behavior is consistent with historic observations and indicates that the sub-drains are functioning. Low phreatic conditions are maintained within the dam embankment. No abnormalities are indicated in the measurements.

Underdrains: Discharge rates from the underdrain system, as measured flows to the seepage collection pond from June, 2018 through May, 2019 are presented in Table 1. Figure 3 shows a graph of the discharge rates for the 6-year period between May 2014 and May 2019. Prior to June 2018, flow rates generally ranged from 37.5 to 42.5 gpm, with an average of approximately 39 gpm. The recorded flow rates for this past year from June 2018 through May 2019, ranged from 28.5 to 34.5 gpm, with an average of approximately 33 gpm, or about 6 gpm lower than historic averages. The cause for this reduction in underdrain flow rates is unknown, and may be attributable to historic drought conditions in the region. It is also possible that drain flows may be partially restricted due to increased clogging by sediment or precipitates. It is recommended that the pipes be cleaned and inspected again to confirm that the reduction in flows is due to drought conditions and is not due to pipe clogging.

Table 1. San Luis TSF Underdrain Flow Measurements: July 2018 – May 2019

Date	Flow (gpm)
6/28/2018	28.5
7/31/2018	33.0
8/31/2018	34.0
9/27/2018	34.0
10/25/2018	34.5
11/29/2018	34.0
12/31/2018	33.5
1/31/2019	33.0
2/27/2019	32.8
3/31/2019	32.5
4/30/2019	31.5
5/30/2019	34.0

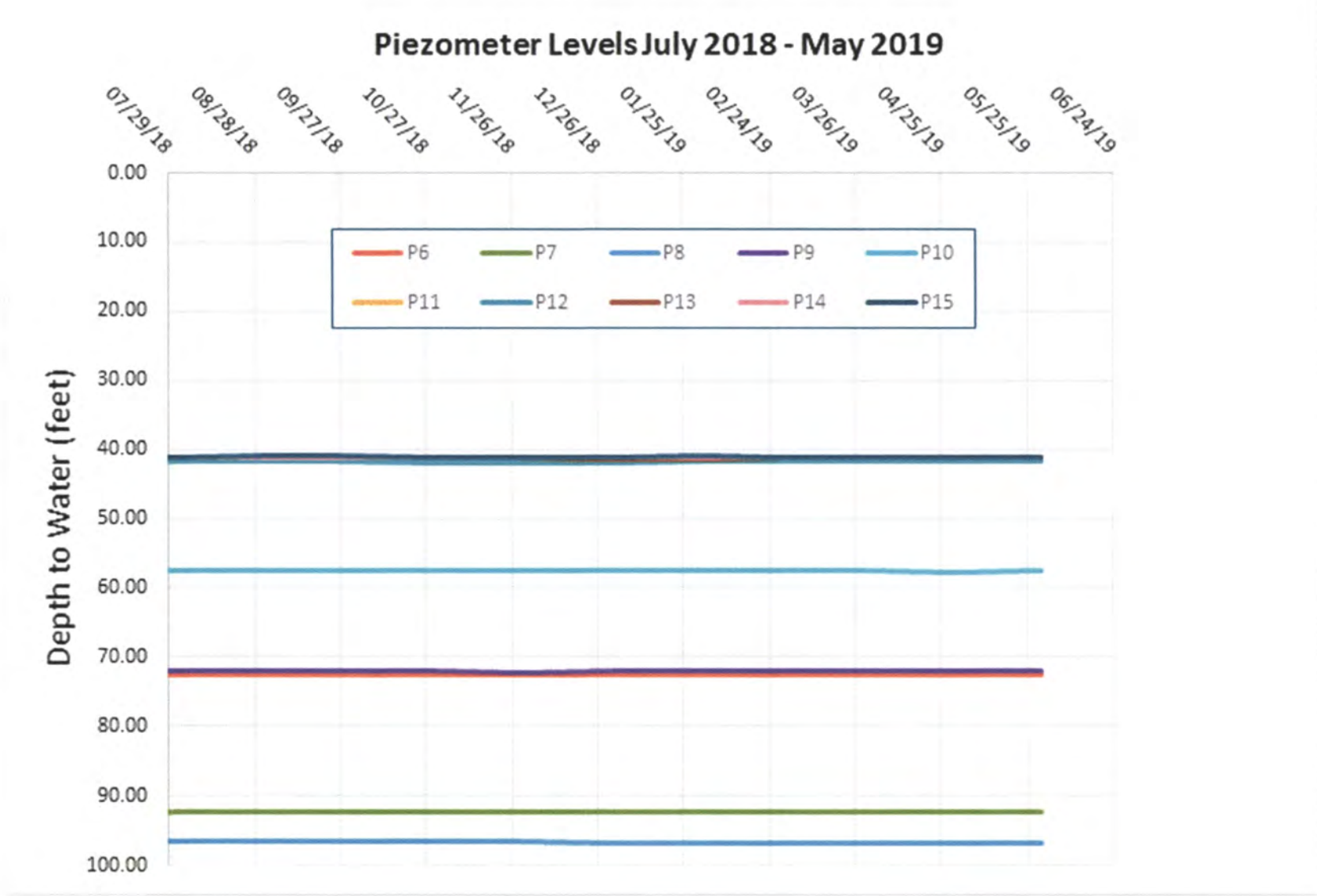


Figure 2. Piezometer Water Levels

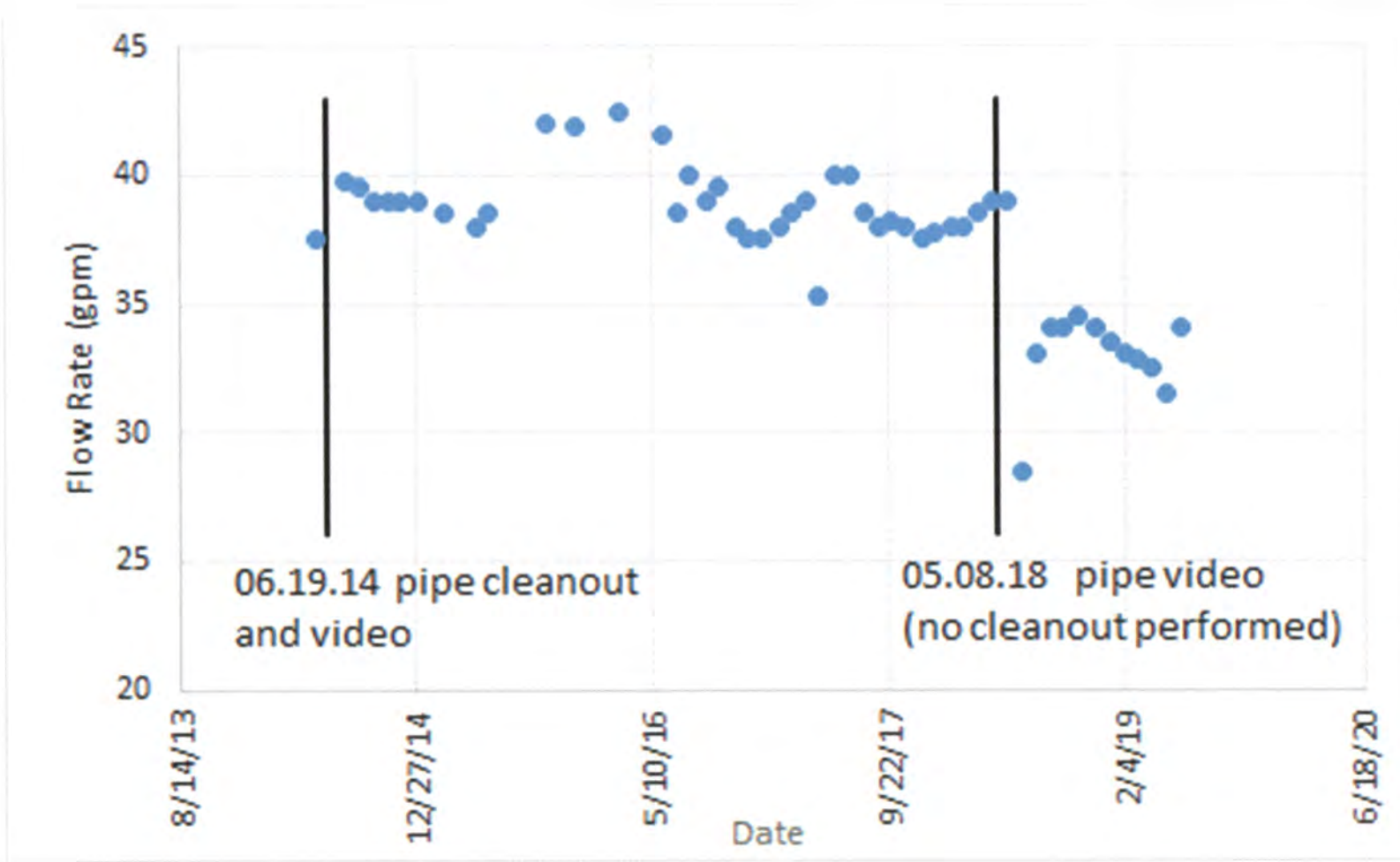


Figure 3. Underdrain Flow Rate

INSPECTION OBSERVATIONS AND MAINTENANCE RECOMMENDATIONS

Specific dam-safety related observations are summarized as follows:

- ***South Diversion Ditch Improvements***: The South Diversion Ditch rehabilitation project, which was designed to minimize risk to the dam during major flood events, was nearing completion at the time of the June 4, 2019 inspection. The project substantially increases the hydraulic capacity of the South Diversion Ditch. The project includes grading improvements to the diversion channel that collects and conveys storm water runoff from the major contributing watershed areas south of the tailing facility, and replacement of the drop structure at the left dam abutment with a robust, reinforced-concrete, open-chute spillway structure. Channel improvements were completed by BMRI in 2016. The drop structure replacement project construction was in progress on the date of this current inspection (June 4, 2019) as shown on Photos 8-12 and 16-17. Construction phase engineering services are being provided by Engineering Analytics (EA) with consultation by MGC.

- ***Maintenance Issues***: Three on-going maintenance issues have been identified:

  (1) ***Surface erosion on downstream slope***: Minor surface erosion (rilling and gullying) is occurring on the downstream slope of the dam (see Photo 25 for example), and notably in the vicinity of the lower left (south) lined drainage ditch (see Photo 15). Deeper gullies that could eventually undermine the left (south)-side ditch liner should be maintained. The right downstream slope area that was repaired in 2013 and again in 2014 to correct significant erosion damage which was impacting the ditch liner on the north end of the downstream slope is performing fairly well (see Photos 23 and 24). Erosion control measures in this area include surface re-grading and seeding, and installation of cross-berms and riprap-lined down-drain channels. The upgraded erosion-control systems appear to be generally effective as vegetation continues to become established and mature. Ongoing maintenance of this area is recommended to maintain the erosion control measures until vegetation is well-established.

  (2) ***Storm Water Diversion Away from Downstream Toe Area.*** There continues to be sediment buildup and minor ponding in the area due to surface runoff that appears to originate from the downstream right groin area (Photos 18 and 19). It is recommended that the area be graded to direct storm-water runoff away from the toe area and minimize the maintenance required to keep the pipe discharge area open and dry for inspections.

  (3) ***Underdrain collector pipe outlets***: The three, 8-inch diameter sub-drain pipe outlets at the downstream toe of the dam were connected to a manifold at the time of the inspection (see Photo 19) so it could not be determined if all three pipes are flowing.

Subdrain flows were consistently lower over the past year, in the range of approximately 31 to 35 gpm (Table 1), compared to the previous 5 years where flows ranged from 37.5 to 42.5 gpm. There was an historic drought in the region in 2018 and the dry conditions may explain the reduction in underdrain flows. At the time of this 2019 inspection, the slope above the pipes remains dry, and all piezometers remain dry, and it is considered unlikely that the observed reduction in underdrain flows is attributable to significant pipe clogging.

In order to confirm that the pipes are not becoming clogged it is recommended that jetting and another camera inspection of the pipes be performed. The camera inspection completed in May 2018 showed some accumulation of sediment or precipitates was occurring. Damage and partial collapse of the pipes that has been documented by previous camera inspections (2018, 2014) has not been considered to be a dam safety concern as long as the pipes are flowing. It is prudent to continue maintaining the downstream ends of the pipes to ensure that they are clean of sediment and precipitates that could clog the flows from the sub-drain system, and to avoid the risk of pore pressure buildup at the toe of the dam.

In summary, maintenance-related recommendations include:

1. Continue to maintain the surface erosion control measures (cross berms and rock-lined down drains) in the repaired area at the right downstream slope of the dam.
2. Monitor erosion gullies that are forming on left downstream slope area next to the lined ditch. Perform maintenance grading as needed to prevent gullies from undermining the ditch liner.
3. Clean the underdrain pipes by jetting to remove accumulated sediment and precipitate buildup, and conduct a camera inspection to evaluate the condition of accessible lengths of the pipes.
4. Modify the grading in the lower right groin area to direct surface runoff away from the downstream toe and to reduce erosion, sediment transport and accumulation of sediment at the toe of the dam which builds up around the under-drain pipe outlets.

The overall condition of the dam is "Conditionally Satisfactory", pending completion of construction of the South Diversion Ditch drop structure. Please feel free to contact me if you have any questions regarding this report.

Regards,

Debora J. Miller, Ph.D., P.E.
MILLER GEOTECHNICAL CONSULTANTS, INC.

Attachment 1 – 2019 Inspection Form

DAM NAME: **San Luis Tailing Dam** DATE OF REPORT: **06/04/19**

TAILING DAM INSPECTION FORM

Name of Professional Conducting Inspection: **Debora J. Miller, Ph.D., P.E.**	Colorado P.E. License No.: **25018**
Company Name and Address: **Miller Geotechnical Consultants, Inc.** **2837 Skimmerhorn Street** **Fort Collins, CO 80526**	Phone No.: **(970) 581-8988 (M)** email: **Deb.Miller@mgcgeo.com**

INSPECTION PREPARATION: I have reviewed all pertinent technical documentation related to this dam and site in the Owner's files:
☑ Yes ☐ No Comment:

STATEMENT OF EXPERIENCE: I am experienced in the technical disciplines necessary to properly inspect this dam and appurtenant works, including civil and geotechnical engineering.
☑ Yes ☐ No Comment:

YR COMPL **1990-91 Ph I** **1993 Ph II Raise 1** **1995 Ph II Raise 2**	T/R/Section **Not Applicable/** **Sangre de Cristo Land Grant**	COUNTY **Costilla**	DATE OF INSPECTION: **06/04/19**	
DAM HEIGHT (FT) **155**	DAM LENGTH (FT) **1,900**	CREST WIDTH (FT) **25**	PREVIOUS INSPECTION: **06/20/18**	
FREEBOARD (FT) **± 12**	DRAINAGE AREA (AC) **741 total; 537 diverted**	CREST ELEV (FT) **± 8620**	MAX. STORAGE (AF) **1105 (at dam crest)**	MAX. SURFACE AREA (AC) **136.7 (at dam crest)**
BEACH LENGTH ABOVE POOL (FT): **600 FT**		DIVERSION CHANNEL CAPACITY (CFS): **0* Upgrade under construction**		
OWNER: **Battle Mountain Resources, Inc.**			OWNER REPRESENTATIVE/CONTACT: **David Carino**	
OWNER ADDRESS: **P.O. Box 310, San Luis, CO 81152**			OWNER CONTACT PHONE NOS.: **719-379-0827 (site plant)**	
FIELD CONDITIONS OBSERVED	WATER LEVEL BELOW DAM CREST: **±12 FT**			
	GROUND MOISTURE CONDITION: ☑ DRY ☐ WET ☐ SNOW COVER ☐ OTHER			

Directions: Mark an ✓ for conditions found and underline words that apply

UPSTREAM SLOPE AND BEACH AREA

PROBLEMS NOTED: ☑ (0) NONE ☐ (1) EROSION PROTECTION - Missing, Sparse ☐ (2) BEACH AREA WAVE EROSION
☐ (3) CRACKS WITH DISPLACEMENT ☐ (4) SINKHOLE ☐ (5) APPEARS TOO STEEP
☐ (6) DEPRESSIONS OR BULGES ☐ (7) SLIDES ☐ (8) ANIMAL BURROWS
☐ (9) OTHER:

CONDITIONS OBSERVED: ☑ GOOD ☐ ACCEPTABLE ☐ POOR

CREST

PROBLEMS NOTED: ☑(10) NONE ☐ (11) RUTS OR PUDDLES ☐ (12) EROSION
☐ (13) CRACKS WITH DISPLACEMENT ☐ (14) SINKHOLES ☐ (15) NOT WIDE ENOUGH
☐ (16) LOW AREA ☐ (17) MISALIGNMENT ☐ (18) IMPROPER SURFACE DRAINAGE
☐ (19) OTHER

CONDITIONS OBSERVED: ☑ GOOD ☐ ACCEPTABLE ☐ POOR

DOWNSTREAM SLOPE

PROBLEMS NOTED: ☐ (20) NONE ☐ (21) LIVESTOCK DAMAGE ☐ (22) EROSION OR GULLIES
☐ (23) CRACKS WITH DISPLACEMENT ☐ (24) SINKHOLE ☐ (25) APPEARS TOO STEEP
☐ (26) DEPRESSIONS OR BULGES ☐ (27) SLIDES ☐ (28) SOFT AREAS
☑ (9) OTHER: Minor gullying and rilling.

CONDITIONS OBSERVED: ☐ GOOD ☑ ACCEPTABLE ☐ POOR

Photo 15: Minor gullying observed on lower slope, adjacent to left abutment groin ditch liner.

DAM NAME: **San Luis Tailing Dam** DATE OF REPORT: **06/04/19**

TAILING DAM INSPECTION FORM

Directions: Mark an ✓ for conditions found and underline words that apply

SEEPAGE AND DRAIN OUTFALL

PROBLEMS NOTED: ☐ (30) NONE ☐ (31) SATURATED EMBANKMENT AREA ☐ (32) SEEPAGE EXITS ON DAM
☐ (33) SEEPAGE EXITS AT POINT SOURCE ☑ (34) MINOR PONDING OF PIPE LEAKAGE AT TOE
DRAIN OUTFALL SEEN: ☐ YES ☑ NO ☐ (35) FLOW ADJACENT TO DRAIN PIPE ☐ (36) DRAIN OUTFLOW TURBID
☐ (37) DRAIN DRY/OBSTRUCTED ☐ (38) OTHER:

SHOW LOCATION OF DRAIN ON SKETCH AND INDICATE AMOUNT AND QUALITY OF SEEPAGE

See ***Figure 1*** for location. ***Table 1*** summarizes toe drain discharge rates over reporting period. ***Photo 15*** shows conditions at time of inspection: toe drain manifold collection pipe was connected so drainage from pipes could not be observed. Storm-water runoff sediment accumulation from right groin area continues to be a minor maintenance/access issue in the toe area.

CONDITIONS OBSERVED: ☐ GOOD ☑ ACCEPTABLE ☐ POOR

STORM WATER MANAGEMENT SYSTEM

PROBLEMS NOTED: ☐ (40) NONE ☐ (41) NO EMERGENCY SPILLWAY
☐ (42) EROSION AT DROP STRUCTURE ☐ (43) CONCRETE DETERIORATED/UNDERMINED ☐ (45) STRUCTURE MAY BE TOO SMALL
☐ (46) DIVERSION CHANNEL EROSION ☐ (47) INADEQUATE CHANNEL FLOW CAPACITY ☐ (48) CHANNEL FLOW OBSTRUCTED
☑ (49) OTHER: ***Photos 9-12 and 17***: South Diversion Ditch drop structure replacement project was under construction at the time of inspection. During construction, storm water from upstream watershed is being contained in the channel by a cofferdam (berm) constructed across the ditch channel upstream from the structure.

CONDITIONS OBSERVED: ☑ GOOD ☐ ACCEPTABLE ☐ POOR

MONITORING

EXISTING INSTRUMENTATION FOUND: ☐ (50) NONE ☐ (51) GAGE ROD IN POOL AREA ☑ (52) PIEZOMETERS
☐ (53) SEEPAGE WEIRS/FLUMES ☐ (54) SURVEY MONUMENTS ☑ (55) OTHER: Underseepage flows
MONITORING OF INSTRUMENTATION: ☐ (56) NO ☑ (57) YES
PERIODIC INSPECTIONS BY: ☑ (58) OWNER ☐ (59) ENGINEER

See ***Figure 2*** for piezometer measurements - all instruments remain dry. See ***Figure 3*** for underdrain flow rates; average underseepage flow rates (measured at outfall pipe) have decreased by about 6 gpm compared to historic (5 previous years) record, and vary between 31 and 35 gpm over current reporting period.

CONDITIONS OBSERVED: ☑ GOOD ☐ ACCEPTABLE ☐ POOR

MAINTENANCE AND REPAIRS

PROBLEMS NOTED: ☐ (60) NONE ☐ (61) ACCESS ROAD NEEDS MAINTENANCE ☐ (62) CATTLE DAMAGE
☐ (63) BRUSH ON: UPSTREAM SLOPE/BEACH, CREST, DOWNSTREAM SLOPE, TOE
☐ (64) RODENT ACTIVITY ON: UPSTREAM SLOPE/BEACH, CREST, DOWNSTREAM SLOPE, TOE
☑ (65) OTHER: Continue to maintain surface erosion controls (cross berms and rock-lined downspouts) in right d/s groin repair area, and repair minor gullying adjacent to left abutment groin lined ditch. Consider re-directing surface runoff from right lower groin away from d/s toe area to prevent deposition of sediment.

CONDITIONS OBSERVED: ☑ GOOD ☐ ACCEPTABLE ☐ POOR

OVERALL CONDITIONS

Based on this inspection and recent file review, the overall surficial condition is determined to be:
☐ SATISFACTORY ☑ CONDITIONALLY SATISFACTORY ☐ UNSATISFACTORY

DAM NAME: **San Luis Tailing Dam** DATE OF REPORT: **06/04/19**

TAILING DAM INSPECTION FORM

ITEMS REQUIRING ACTION BY OWNER TO IMPROVE THE SAFETY OF THE DAM

MAINTENANCE ● MINOR REPAIR ● MONITORING

☐ (1) PROVIDE ADDITIONAL EROSION PROTECTION: _____

☐ (2) CLEAR BRUSH FROM: _____

☐ (3) INITIATE RODENT CONTROL PROGRAM AND PROPERLY BACKFILL EXISTING HOLES: _____

☐ (4) GRADE CREST TO A UNIFORM ELEVATION WITH DRAINAGE TO THE UPSTREAM SLOPE: _____

☑ (5) PROVIDE SURFACE DRAINAGE FOR: **Modify the grading in the lower right groin area to direct surface runoff away from the downstream toe area.**

☑ (6) MONITOR: **Gullies that are forming on lower downstream slope may start to undermine left groin ditch liner. Maintain as needed.**

☑ (7) OTHER: **Continue to maintain right downstream slope cross-berms and riprap-lined down drains until vegetation is established.**

☑ (8) OTHER: **Completion of South Diversion Ditch Improvements (underway) will improve flood protection**

☑ (9) OTHER: **Perform jetting cleanout and camera inspection of accessible lengths of underdrain pipes.**

ENGINEERING ● EMPLOY AN ENGINEER EXPERIENCED IN DESIGN AND CONSTRUCTION OF DAMS TO:

(Plans and specifications to be approved by CDRMS prior to construction.)

☐ (10) PREPARE PLANS AND SPECIFICATIONS FOR REHABILITATION OF THE DAM _____

☐ (11) PREPARE AS-BUILT DRAWINGS OF: _____

☐ (12) PERFORM A GEOTECHNICAL INVESTIGATION TO EVALUATE THE STABILITY OF THE DAM: _____

☐ (13) PERFORM A HYDROLOGIC STUDY TO DETERMINE REQUIRED SIZE OF FLOOD BYPASS/SPILLWAY: _____

☐ (14) PREPARE PLANS AND SPECIFICATIONS FOR AN ADEQUATE SPILLWAY _____

☐ (15) SET UP OR IMPROVE MONITORING SYSTEM: _____

☐ (16) OTHER: _____

☐ (17) OTHER: _____

Attachments:

1) Photo Log and map (Figure 1)

2) Recent piezometer (Figure 2) and under-drainage flow rate readings (Figure 3)

☑ Photographs ☑ Attachments

ENGINEER'S INSTRUCTION: Instructed owner on the safety concerns with the structure and how to monitor and inspect the dam and appurtenant works in the interim period between the regulatory annual inspections. ☑ Yes ☐ No

Comment:

Professional Engineer's Signature: _____ Date: 7/1/19

Reviewed by: _____ Date: 10.9.2019

Owner/Owner's Representative

DAM NAME: **San Luis Tailing Dam** DATE OF REPORT: **06/04/19**

GUIDELINES FOR DETERMINING CONDITIONS

CONDITIONS OBSERVED - APPLIES TO UPSTREAM SLOPE, CREST, DOWNSTREAM SLOPE

GOOD	ACCEPTABLE	POOR
In general, this part of the structure has a good appearance, and conditions observed in this area do not appear to threaten the safety of the dam.	Although general cross-section is maintained, surfaces may be irregular, eroded, rutted, spalled, or otherwise not in new condition. Conditions in this area do not currently appear to threaten the safety of the dam.	Conditions observed in this area appear to threaten the safety of the dam.

CONDITIONS OBSERVED - APPLIES TO SEEPAGE

GOOD	ACCEPTABLE	POOR
No evidence of uncontrolled seepage. No unexplained increase in flows from designed drains. All seepage is clear. Seepage conditions did not appear to threaten the safety of the dam.	Some seepage exists at areas other than the drain outfalls, or other designed drains. No unexplained increase in seepage. All seepage is clear. Seepage conditions observed do not currently appear to threaten the safety of the dam.	Seepage conditions observed appear to threaten the safety of the dam. Examples: 1) Designed drain or seepage flows have increased without increases in pool level. 2) Drain or seepage flows contain sediment, i.e., muddy water or particles in jar samples. 3) Widespread seepage, concentrated seepage, or ponding appears to threaten the safety of the dam.

CONDITIONS OBSERVED - APPLIES TO MONITORING

GOOD	ACCEPTABLE	POOR
Monitoring includes movement surveys, leakage measurements, and piezometer readings. Instrumentation is in reliable, working condition. A plan for monitoring the instrumentation and analyzing results by the owner's engineer is in effect. Periodic inspections by Owner's engineer.	Monitoring includes movement surveys and leakage measurements. Instrumentation is in serviceable condition. A plan for monitoring instrumentation is in effect by owner. Periodic inspections by Owner or representative.	Instrumentation and monitoring described under "ACCEPTABLE" here are not provided, or required periodic readings are not being made, or unexplained changes in readings are not reacted to by Owner.

CONDITIONS OBSERVED - APPLIES TO MAINTENANCE AND REPAIR

GOOD	ACCEPTABLE	POOR
Dam appears to receive effective on-going maintenance and repair, and only a few minor items may need to be addressed.	Dam appears to receive maintenance, but some maintenance items need to be addressed. No major repairs are required.	Dam does not appear to receive adequate maintenance. One or more items needing maintenance or repair has begun to threaten the safety of the dam.

OVERALL CONDITIONS

SATISFACTORY	CONDITIONALLY SATISFACTORY	UNSATISFACTORY
The safety inspection indicates no conditions that appear to threaten the safety of the dam, and the dam is expected to perform satisfactorily under all design loading conditions. Most of the required monitoring is being performed.	The safety inspection indicates symptoms of structural distress (seepage, evidence of minor displacements, etc.) which, if conditions worsen, could lead to the failure of the dam. Essential monitoring, inspection, and maintenance must be performed as a requirement for continued full storage in the impoundment area.	The safety inspection indicates definite signs of structural distress (excessive seepage, cracks, slides, sinkholes, severe deterioration, etc.), which could lead to the failure ofthe dam if the reservoir is used to full capacity. The dam is judged unsafe for full storage of water.

Attachment 2 – 2019 Captioned Photos

Photo 1. View looking south from right dam abutment of upper downstream dam face

Photo 2. View looking east from dam crest at pump-back pipeline and upstream pond area, minor pipe leakage that was noted in the 2018 inspection appears to have been sealed

Photo 3. View looking south from dam crest of upstream slope and beach area

Photo 4. View looking south from dam crest of downstream slope

Photo 5. View of typical small rodent burrow near dam crest

Photo 6. View looking west from dam crest at lined pump-back pond on downstream toe

Photo 7. View looking north from dam crest near left end of dam

Photo 8. Construction activity in area of intake to drop structure at left dam abutment

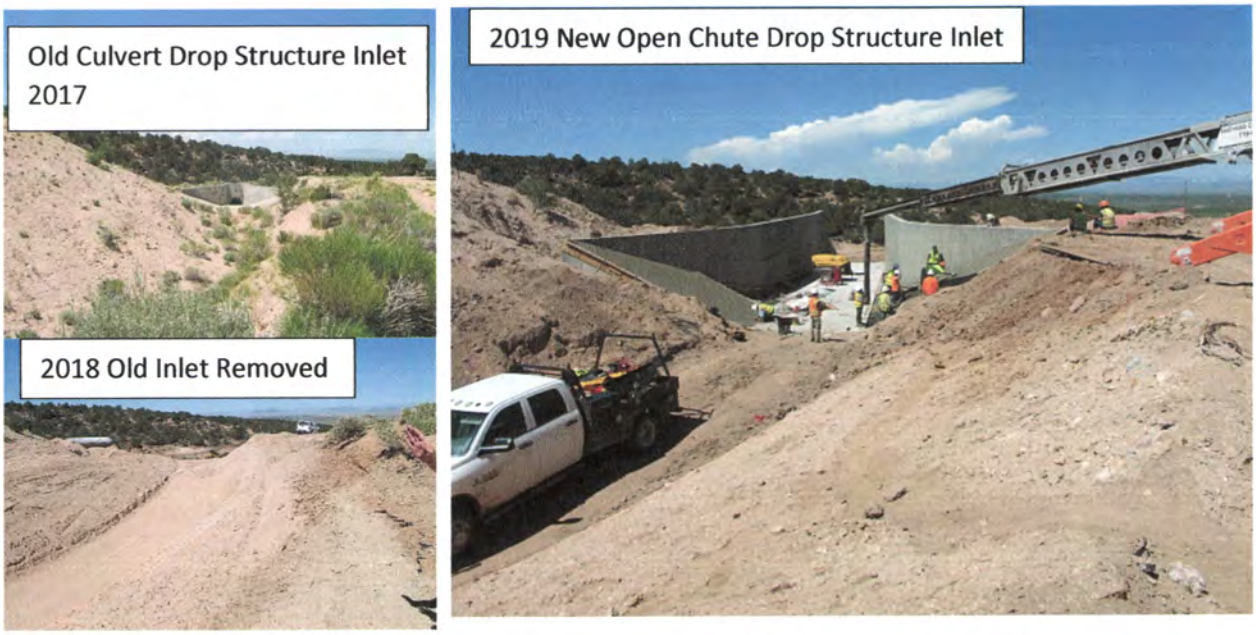


Photo 9. Construction was underway placing concrete for new South Diversion Ditch open chute drop structure at left (south) dam abutment, view looking west from upstream at inlet to top of the drop

Photo 10. View looking upstream at concrete being placed for drop structure inlet

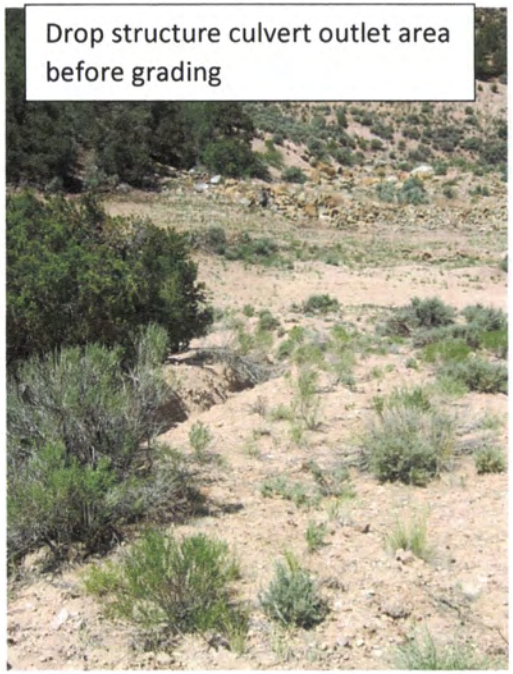


Photo 11. View looking west from top of chute of new South Diversion Ditch Drop Structure.

Photo 12. View of lower end of drop structure chute from upper bench at left dam abutment

Photo 13. View of exposed liner at downstream upper left groin

Photo 14. View looking northwest of exposed ditch liner in left dam downstream groin area

Photo 15. View of shallow erosion gullies forming on slope above left groin ditch liner

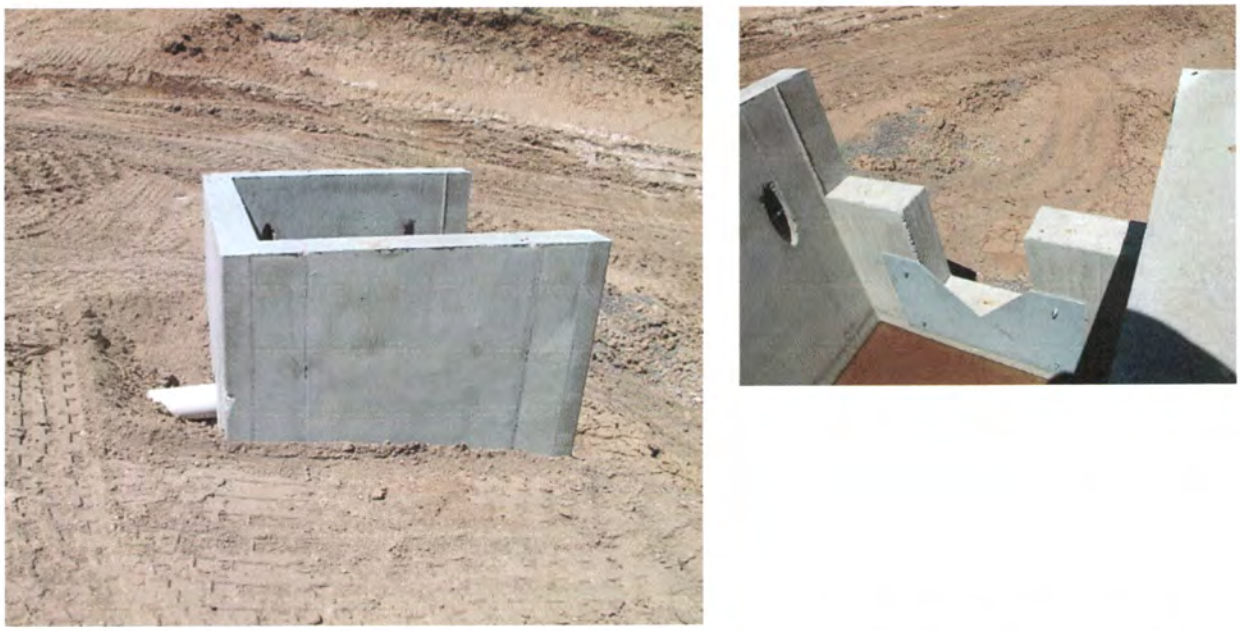


Photo 16. New underdrain collection vault and measurement weir at downstream dam toe

Photo 17. Chute (left) and End Wall (right) of new drop structure

Photo 18. Surface erosion and sediment transport from downstream right groin into toe area

Photo 19. Toe drain collection manifold – note sediment accumulation from surface runoff

Photo 20. Lined seepage collection and pump-back pond at downstream dam toe

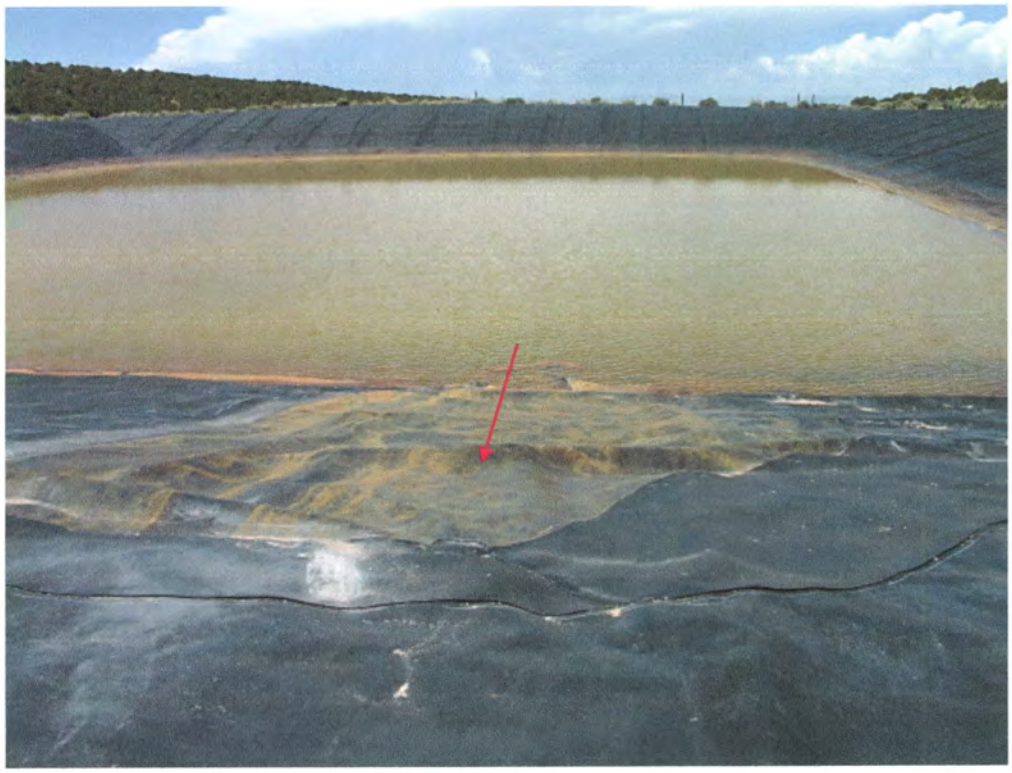


Photo 21. Recent patch in collection pond liner

Photo 22. Typical good condition of vegetation on majority of downstream slope

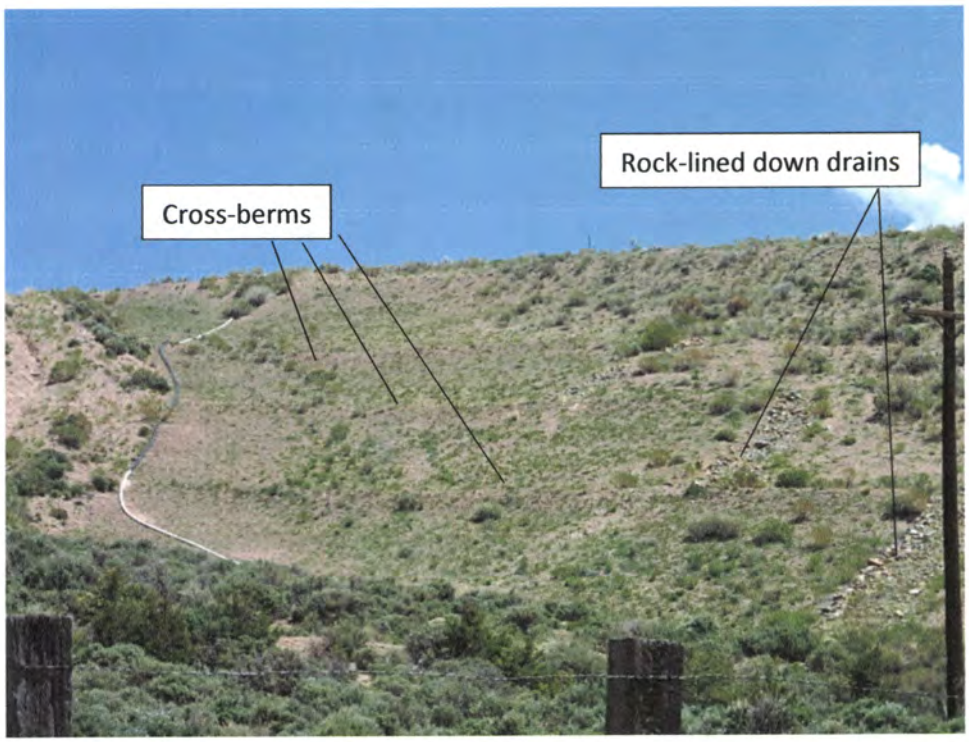


Photo 23. Right downstream slope and groin area that was re-graded in 2014; note cross berms and rock-lined down-drains installed for erosion control

Photo 24. Typical cross-berm to control runoff on right downstream slope of dam in area that was re-graded and reclaimed in 2014; vegetation continues to become established and erosion control cross berms and rock-lined downspouts appear to be generally effective

Photo 25. Minor erosion gullying on downstream right slope

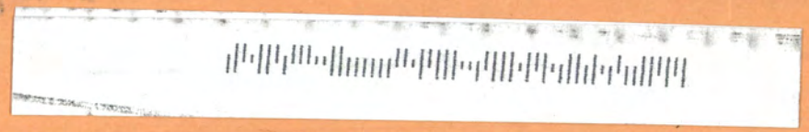
Photo 26. View of downstream right abutment drainage ditch near dam crest

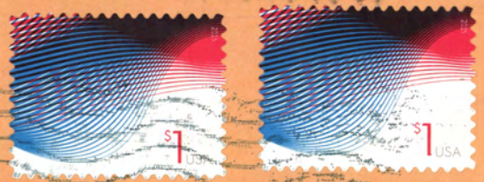
Photo 27. View looking south on upper portion of South Diversion Ditch, in vicinity of where dike overflow section is to be built

Photo 28. View looking north on upper portion of South Diversion Ditch where dike overflow section is to be built

Photo 29. View looking northwest across reclaimed tailing impoundment area from upper reach of South Diversion Ditch

Photo 30. View looking west towards dam across reclaimed tailing impoundment area from upper reach of South Diversion Ditch





Denver, CO P&DC 802-ZIP
SAT 19 OCT 2019

BATTLE MOUNTAIN RESOURCES, INC.

Mr. Lucas J. West
CDRMS
1313 Sherman Street, Room 215
Denver, CO 80203

P.O. Box 310 • San Luis, Colorado 81152-0310 • (719) 379-0798 • Fax (719) 379-0713
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RECEIVED

OCT 22 2019

DIVISION OF RECLAMATION
MINING & SAFETY

*small photos

October 18, 2019

Mr. Lucas J. West
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: San Luis Project Tailing Dam Report 3rd Quarter 2019, Technical Revision No. 33, Permit No. M-1988-112

Dear Mr. West:

Battle Mountain Resources Inc. ("BMRI") is pleased to provide the San Luis Project Tailing Dam Report for the 3rd Quarter 2019 in accordance with Technical Revision No. 33 to BMRI's Reclamation Permit.

Enclosed along with the inspection report are photos of the tailings dam and impoundment, new concrete spillway, the under drain collection system and monthly piezometer readings.

Should you have any questions, please do not hesitate to contact me at 719-379-0538.

Respectfully,

Julio F. Madrid
Sr. Supervisor Legacy Sites Reclamation and Closure
Battle Mountain Resources Inc.

cc: Larry Fiske BMRI
David Carino BMRI

[redacted]

INSPECTION PERIOD: July 2019 thru Sept 2019 | page 1/1

INSPECTOR: David S. Cariño

DAM: SAN LUIS PROJECT TAILING DAM

AREA INSPECTED	ITEM NO.	CONDITION	YES	NO	OBSERVATIONS	CHECK ACTION NEEDED: MONITOR	INVESTIGATE	REPAIR
CREST	1	ANY SURFACE CRACKING?		✓				
	2	ANY UNUSUAL LOW AREAS?		✓				
	3	ANY RUTS OR PUDDLES?		✓				
	4	ANY HORIZONTAL OFFSET?		✓				
	5	NEED VEGETATION CONTROL?		✓				
UPSTREAM SLOPE & BEACH AREA	6	ANY SLIDES, SLOUGHS, SCARPS?		✓				
	7	ANY SINKHOLES OR UNUSUAL DEPRESSIONS?		✓				
	8	ANY EROSION ?		✓				
	9	CHANGES AT ABUTMENT CONTACTS?		✓				
	10	NEED VEGETATION CONTROL?		✓				
	11							
DOWNSTREAM SLOPE	12	ANY WET AREAS?		✓				
	13	ANY SLIDES, SLOUGHS, SCARPS?		✓				
	14	CHANGES AT DAM-ABUTMENT CONTACT?		✓				
	15	ANY EROSION?	✓		Minor erosion on North groin area	✓		
	16	ANY UNUSUAL BULGING OR SLOPE MOVEMENT?		✓				
	17	NEED VEGETATION CONTROL?		✓				
	18							
SEEPAGE COLLECTION AND PUMPBACK SYSTEM	19	IS DRAIN OUTLET CLOGGED OR OBSTRUCTED?		✓				
	20	ARE DRAIN FLOWS MUDDY OR TURBID?		✓				
	21	IS EMBANKMENT WET AROUND DRAIN OUTLET?	✓		Minor leakage around piping	✓		
	22	ANY PROBLEMS WITH COLLECTION POND?		✓				
	23	IS PUMPBACK SYSTEM WORKING PROPERLY?	✓					
	24							
DIVERSION CHANNEL AND DROP STRUCTURE	25	ANY EROSION?		✓				
	26	NEED VEGETATION CONTROL?		✓				
	27	ANY DEBRIS IN CHANNELS OR DROP STRUCTURE?		✓				
	28	ANY CRACKS OR DETERIORATION OF CONCRETE?		✓				
	29	ANY CORROSION OF PIPE?		✓				
	30							

ADDITIONAL COMMENTS (REFER TO ITEM NO. IF APPLICABLE):

#19 Had pipes jetted on 9/24/19 and camera/video recording.

QUARTERLY INSPECTION SUMMARY

NAME OF DAM:	San Luis Project Tailing Dam	CO DRMS Permit #:	M-1988-112
REPORTING PERIOD:	thru	REPORT #:	

INSPECTION ITEMS		PHOTOS
Piezometer Levels	Included in Report.	No
Drain Collection and Pumpback System Observations	System working properly	Yes
Seepage/Erosion Observations	Minor erosion on North groin area (down stream)	Yes
Vegetation/Rodent/ Other Maintenance Observations	None	No
Diversion System Observations	Channel in good Condition, no issues. spillway has been completed.	Yes

RECOMMENDATIONS/COMMENTS

INSPECTION AND REPORTING PERSONNEL

NAME	REPRESENTING	TITLE/ROLE
David S. Cariño	BMRI / Newmont	Site Manager
Julio Madrid	BMRI / Newmont	Site Supervisor

Table 2 – Monthly Piezometer Elevations Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	07/31/2019	72.46	DRY	N/A
P7	07/31/2019	92.50	92.30	0.20
P8	07/31/2019	97.51	96.67	0.84
P9	07/31/2019	72.30	71.89	0.41
P10	07/31/2019	58.30	57.57	0.73
P11	07/31/2019	41.80	41.39	0.41
P12	07/31/2019	41.71	41.68	0.03
P13	07/31/2019	41.34	41.03	0.31
P14	07/31/2019	41.24	41.21	0.03
P15	07/31/2019	41.10	40.85	0.25

Monthly Piezometer Elevations Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	08/30/2019	72.46	DRY	N/A
P7	08/30/2019	92.50	92.30	0.20
P8	08/30/2019	97.51	96.70	0.81
P9	08/30/2019	72.30	71.89	0.41
P10	08/30/2019	58.30	57.57	0.73
P11	08/30/2019	41.80	41.39	0.41
P12	08/30/2019	41.71	41.67	0.04
P13	08/30/2019	41.34	41.03	0.31
P14	08/30/2019	41.24	DRY	N/A
P15	08/30/2019	41.10	40.86	0.24

Table 2 – Monthly Piezometer Elevations Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	09/30/2019	72.46	DRY	N/A
P7	09/30/2019	92.50	92.29	0.21
P8	09/30/2019	97.51	96.70	0.81
P9	09/30/2019	72.30	71.90	0.40
P10	09/30/2019	58.30	57.57	0.73
P11	09/30/2019	41.80	41.39	0.41
P12	09/30/2019	41.71	41.67	0.04
P13	09/30/2019	41.34	41.03	0.31
P14	09/30/2019	41.24	DRY	N/A
P15	09/30/2019	41.10	40.87	0.23

Third Quarter 2019 Tailing Dam Inspection Photograph Details:

Photos #1: West side of Tailing Dam looking East

Photo #2 and #3: Under drain collection area and pipeline

Photo #4 and #5: Northwest groin area re-vegetation looking down from crest

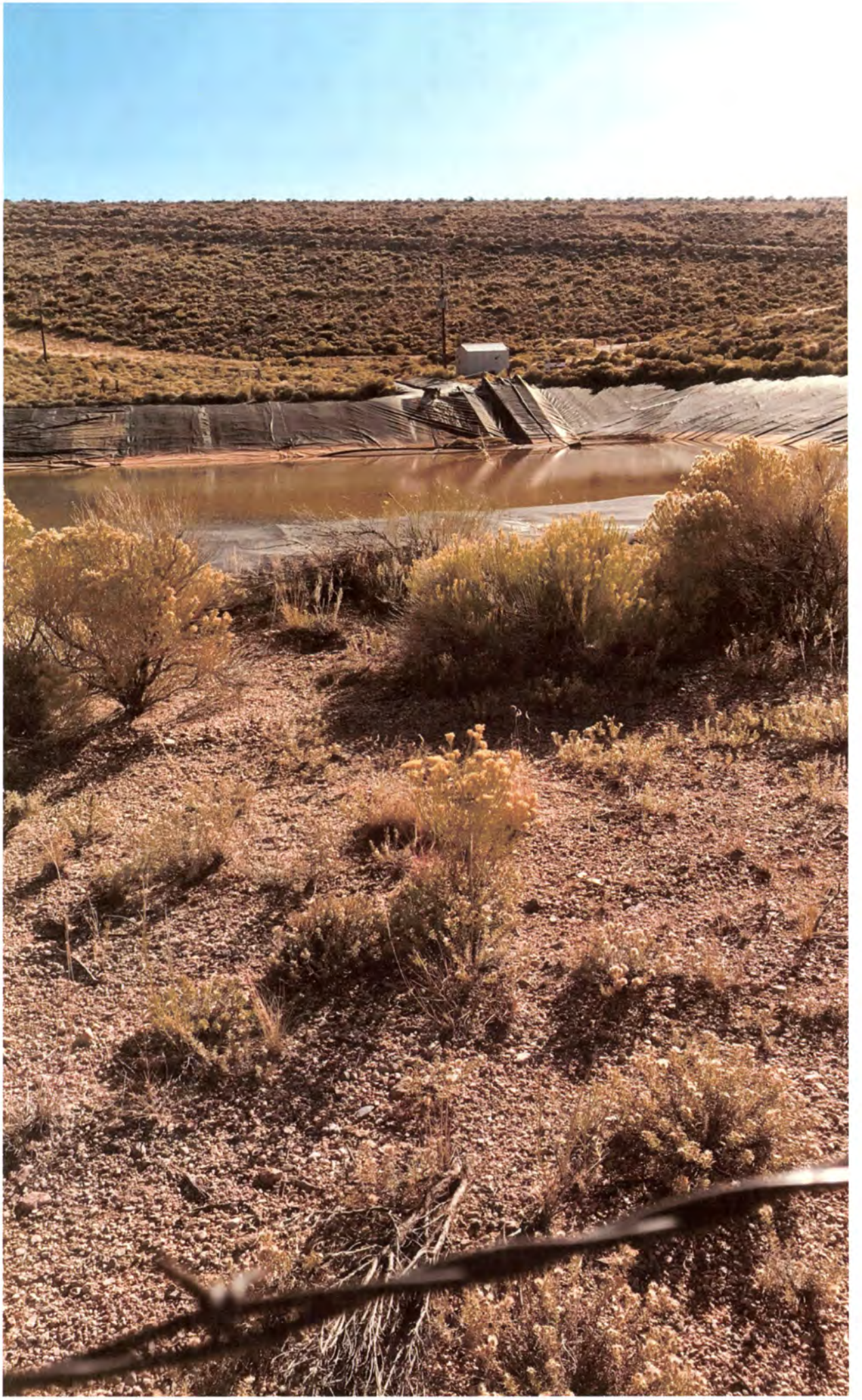
Photos #6 and #7 Tailing Impoundment from roadway on Tailing Dam looking East

Photo #8: Tailing Dam Roadway Southside look North

Photo #9 Inlet new Concrete Drop Structure (South Diversion Channel)

Photos #10 and #11 South Diversion Channel

Photo #12 and #13: East side Tailing Dam looking West



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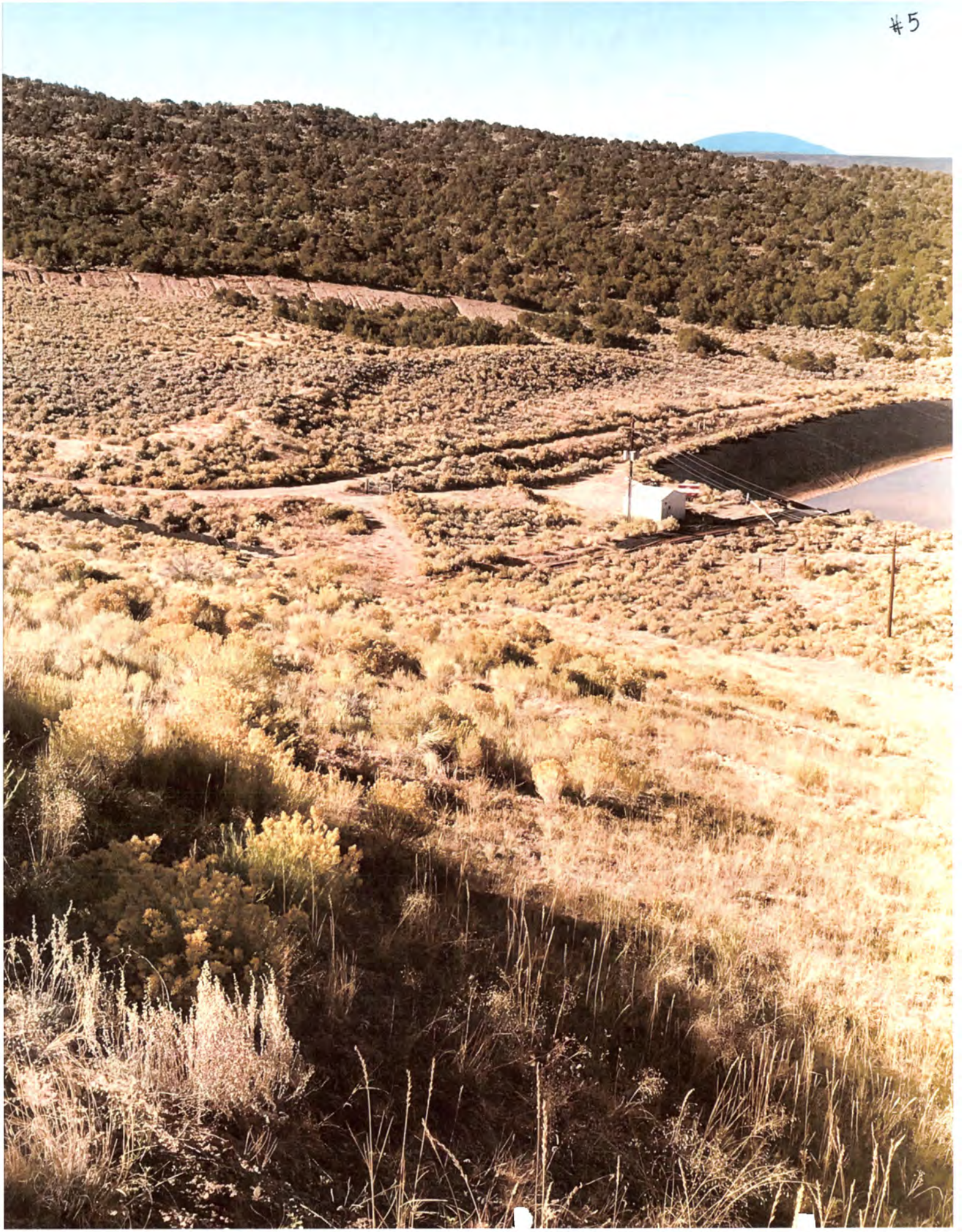

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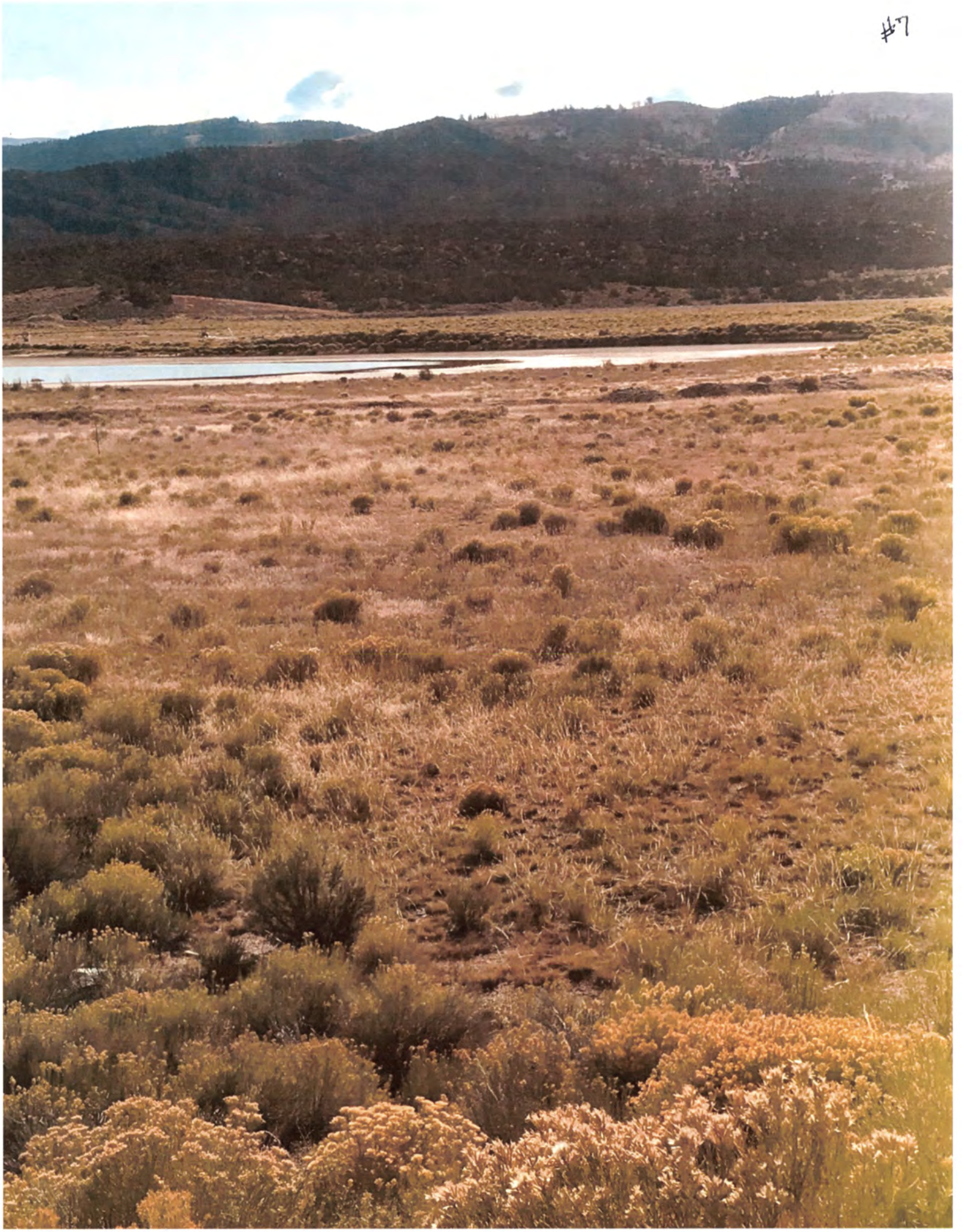

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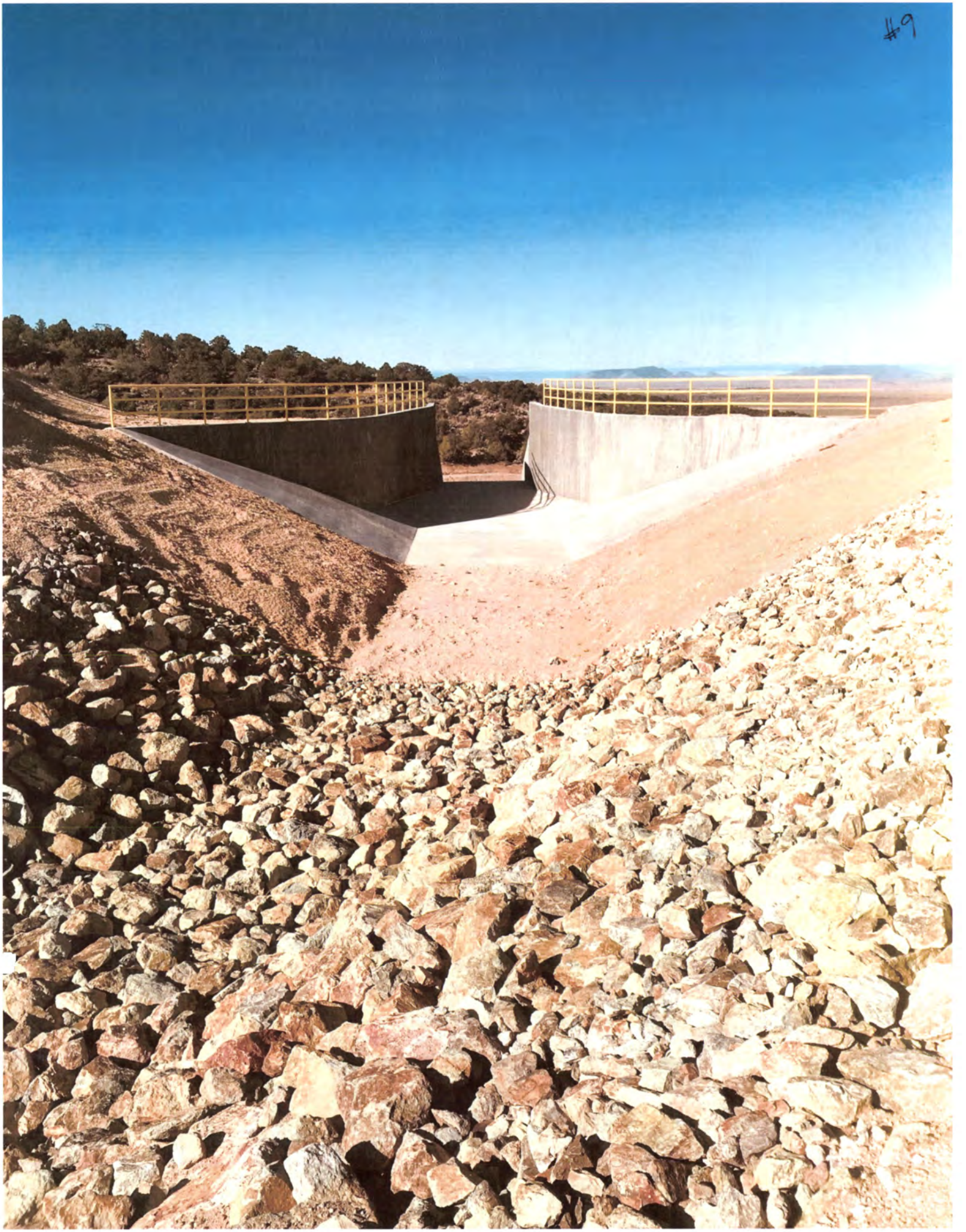
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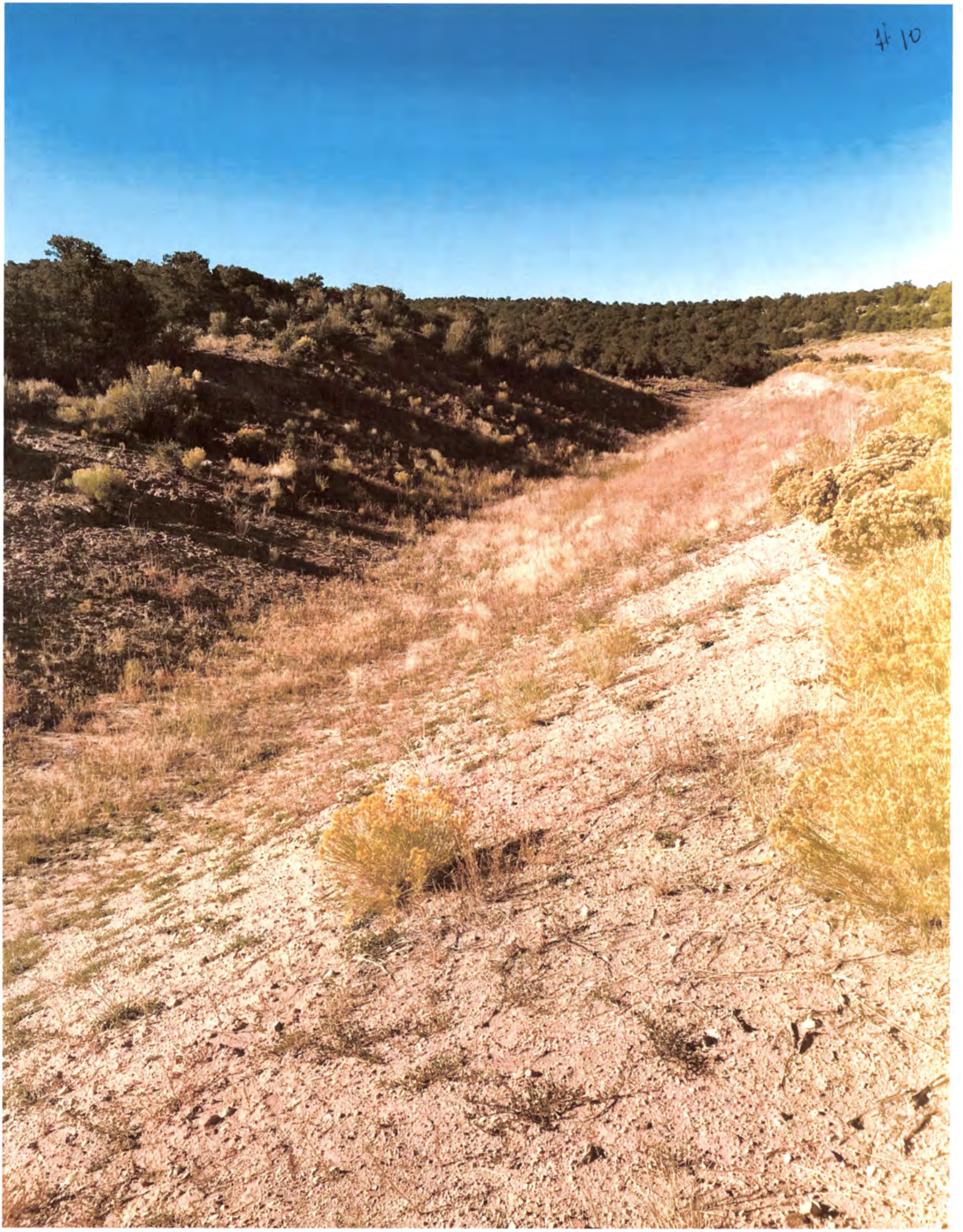
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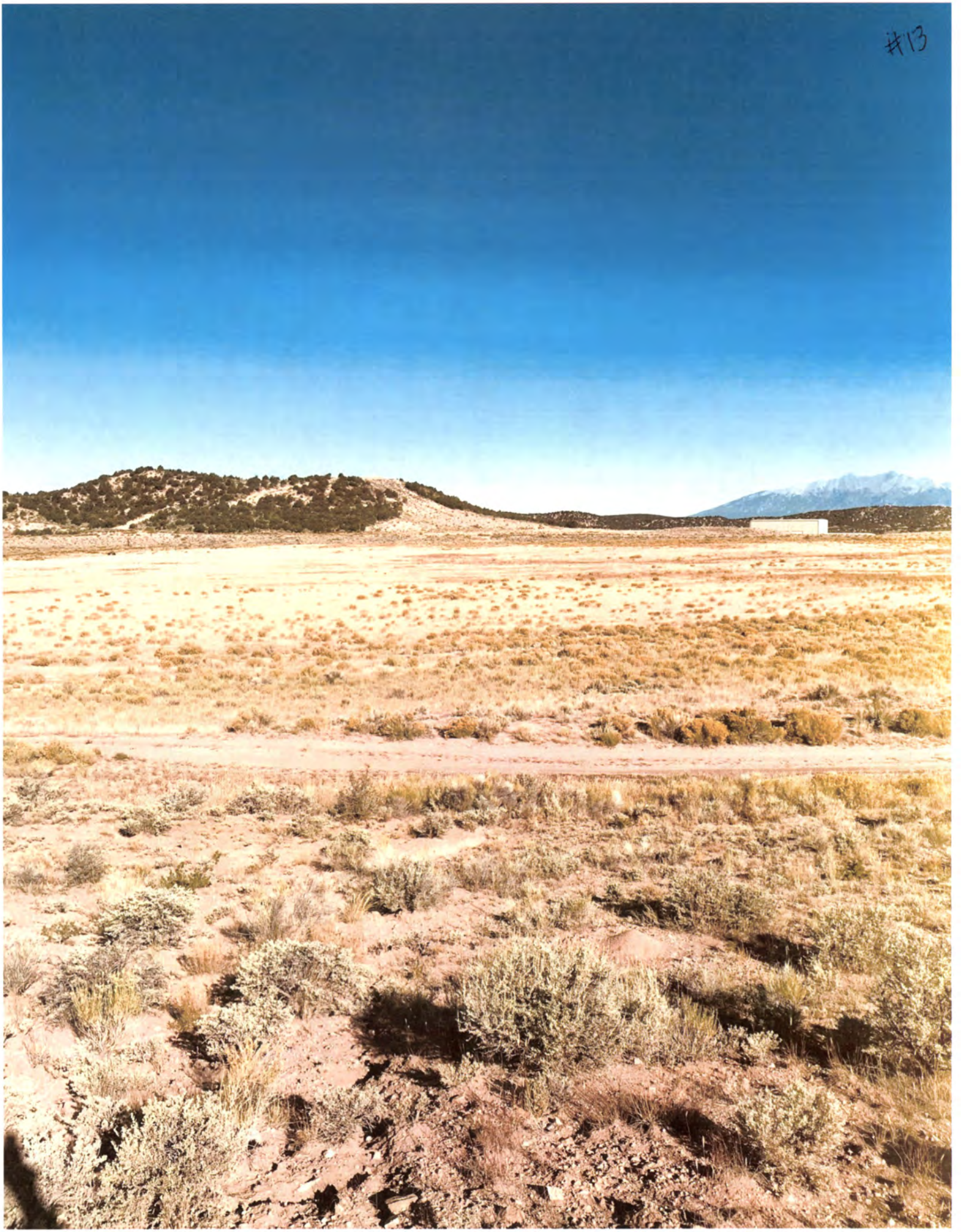
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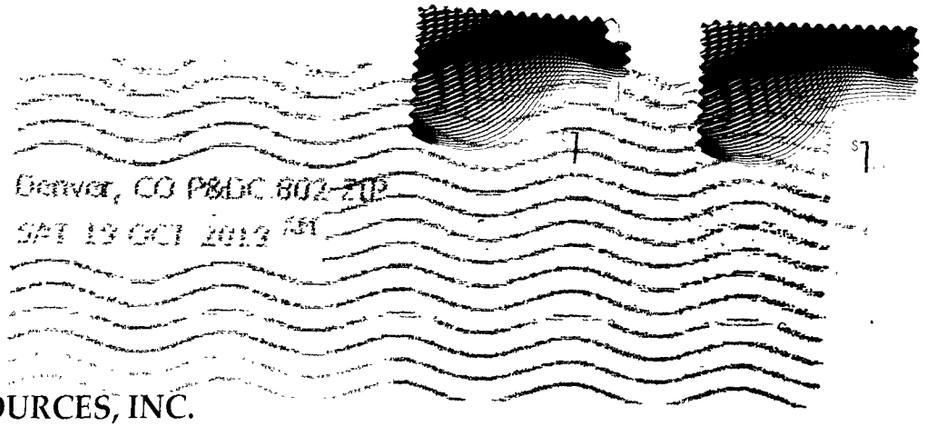

BATTLE MOUNTAIN RESOURCES, INC.

Mr. Lucas J. West
CDRMS
1313 Sherman Street, Room 215
Denver, CO 80203

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DIVISION OF RECLAMATION
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February 10, 2020

Mr. Lucas West

Colorado Division of Reclamation, Mining and Safety

1313 Sherman Street, Room 215

Denver, CO 80203

Re: San Luis Project Tailing Dam Q4 2019 Inspection Report, Technical Revision No. 33, Permit No. M-1988-112

Dear Mr. West:

Battle Mountain Resources Inc. (BMRI) is pleased to provide the Q4 2019 San Luis Tailing Dam Inspection Report in accordance with Technical Revision No. 33 to BMRI's Reclamation Permit.

The Inspection was conducted by myself and BMRI Site Manager David Carino.

Enclosed with the inspection report are photos of the Tailing Impoundment facilities to include the newly constructed drop structure and the under-drain discharge area. Also included are the Q4 Piezometer Inspection results.

Respectfully,

Julio F. Madrid

Sr. Supervisor Colorado Legacy Sites

(719) 379-0538

cc: Larry Fiske

David Carino

		INSPECTION PERIOD: 10/2019 thru 12/2019			page 1/1		
		INSPECTOR: David S. Cariño Julio F. Madrid					
DAM:	SAN LUIS PROJECT TAILING DAM				CHECK ACTION NEEDED		
AREA INSPECTED	ITEM NO.	CONDITION	YES	NO	OBSERVATIONS	MONITOR	INVESTI-GATE	REPAIR
CREST	1	ANY SURFACE CRACKING?		✓				
	2	ANY UNUSUAL LOW AREAS?		✓				
	3	ANY RUTS OR PUDDLES?		✓				
	4	ANY HORIZONTAL OFFSET?		✓				
	5	NEED VEGETATION CONTROL?		✓				
UPSTREAM SLOPE & BEACH AREA	6	ANY SLIDES, SLOUGHS, SCARPS?		✓				
	7	ANY SINKHOLES OR UNUSUAL DEPRESSIONS?		✓				
	8	ANY EROSION ?		✓				
	9	CHANGES AT ABUTMENT CONTACTS?		✓				
	10	NEED VEGETATION CONTROL?		✓				
	11							
DOWNSTREAM SLOPE	12	ANY WET AREAS?		✓				
	13	ANY SLIDES, SLOUGHS, SCARPS?		✓				
	14	CHANGES AT DAM-ABUTMENT CONTACT?		✓				
	15	ANY EROSION?	✓		Minor erosion on North grain area.	✓		
	16	ANY UNUSUAL BULGING OR SLOPE MOVEMENT?		✓				
	17	NEED VEGETATION CONTROL?		✓				
	18							
SEEPAGE COLLECTION AND PUMPBACK SYSTEM	19	IS DRAIN OUTLET CLOGGED OR OBSTRUCTED?		✓				
	20	ARE DRAIN FLOWS MUDDY OR TURBID?		✓				
	21	IS EMBANKMENT WET AROUND DRAIN OUTLET?	✓		Minor leakage around piping	✓		
	22	ANY PROBLEMS WITH COLLECTION POND?		✓				
	23	IS PUMPBACK SYSTEM WORKING PROPERLY?	✓					
	24							
DIVERSION CHANNEL AND DROP STRUCTURE	25	ANY EROSION?		✓				
	26	NEED VEGETATION CONTROL?		✓				
	27	ANY DEBRIS IN CHANNELS OR DROP STRUCTURE?		✓				
	28	ANY CRACKS OR DETERIORATION OF CONCRETE?		✓				
	29	ANY CORROSION OF PIPE?		✓				
	30							
ADDITIONAL COMMENTS (REFER TO ITEM NO. IF APPLICABLE):								

QUARTERLY INSPECTION SUMMARY

NAME OF DAM:	San Luis Project Tailing Dam			CO DRMS Permit #:	M-1988-112
REPORTING PERIOD:		thru		REPORT #:	

INSPECTION ITEMS		PHOTOS
Piezometer Levels	Included in report	NO
Drain Collection and Pumpback System Observations	system working properly	Yes
Seepage/Erosion Observations	Minor erosion on North groin area (down stream)	Yes
Vegetation/Rodent/ Other Maintenance Observations	None	NO
Diversion System Observations	Channel in good condition, no issues	Yes

RECOMMENDATIONS/COMMENTS

INSPECTION AND REPORTING PERSONNEL

NAME	REPRESENTING	TITLE/ROLE
David S. Cariño	BMRI / Newmont	Site Manager
Julio Madrid	BMRI / Newmont	Site Supervisor

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	10/31/2019	72.46	DRY	N/A
P7	10/31/2019	92.50	92.29	0.21
P8	10/31/2019	97.51	96.70	0.81
P9	10/31/2019	72.30	71.89	0.41
P10	10/31/2019	58.30	57.57	0.73
P11	10/31/2019	41.80	41.39	0.41
P12	10/31/2019	41.71	41.68	0.03
P13	10/31/2019	41.34	41.03	0.31
P14	10/31/2019	41.24	DRY	N/A
P15	10/31/2019	41.10	40.86	0.24

Monitoring Well Identification	**Observation Date**	**Piezometer Depth (ft)**	**Depth to Water (ft)**	**Depth of Water (ft)**
P6	11/28/2019	72.46	DRY	N/A
P7	11/28/2019	92.50	92.29	0.21
P8	11/28/2019	97.51	96.68	0.83
P9	11/28/2019	72.30	71.88	0.42
P10	11/28/2019	58.30	57.55	0.75
P11	11/28/2019	41.80	41.36	0.44
P12	11/28/2019	41.71	41.67	0.04
P13	11/28/2019	41.34	41.00	0.34
P14	11/28/2019	41.24	DRY	N/A
P15	11/28/2019	41.10	40.85	0.25

Monitoring Well Identification	**Observation Date**	**Piezometer Depth (ft)**	**Depth to Water (ft)**	**Depth of Water (ft)**
P6	12/31/2019	72.46	DRY	N/A
P7	12/31/2019	92.50	92.28	0.22
P8	12/31/2019	97.51	96.67	0.84
P9	12/31/2019	72.30	71.89	0.41
P10	12/31/2019	58.30	57.55	0.75
P11	12/31/2019	41.80	41.38	0.42
P12	12/31/2019	41.71	41.68	0.03
P13	12/31/2019	41.34	41.02	0.32
P14	12/31/2019	41.24	DRY	N/A
P15	12/31/2019	41.10	40.86	0.24

Q4 2019 TAILING DAM INSPECTION PHOTOGRAPH DETAILS

Photos #1 and #2 – West side of Collection Pond looking east

Photos #3 and #4 – Underdrain Collection Pipeline

Photo #5 – Looking up from Underdrain Collection area to north groin area

Photo #6 – Northwest tailing embankment looking down from crest

Photos #6 and #7 – Tailing Impoundment from Main Embankment looking east

Photo #8 – Tailing main embankment roadway looking from south to north

Photo #9 – Inlet of concrete drop structure (south diversion channel)

Photos #10 and #11 – South Diversion Channel

Photo # 12 – Southside Tailing Impoundment looking west towards Main Embankment

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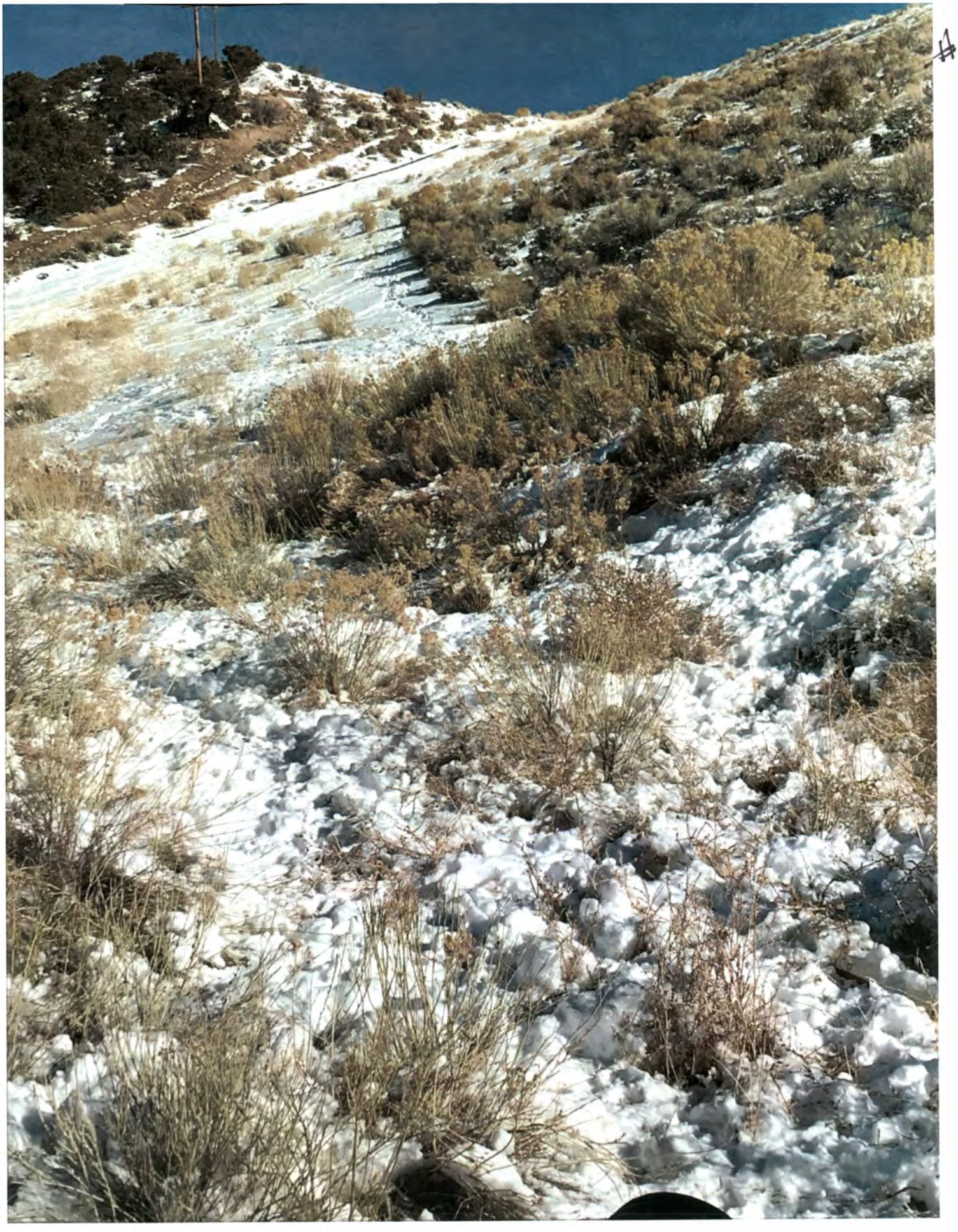

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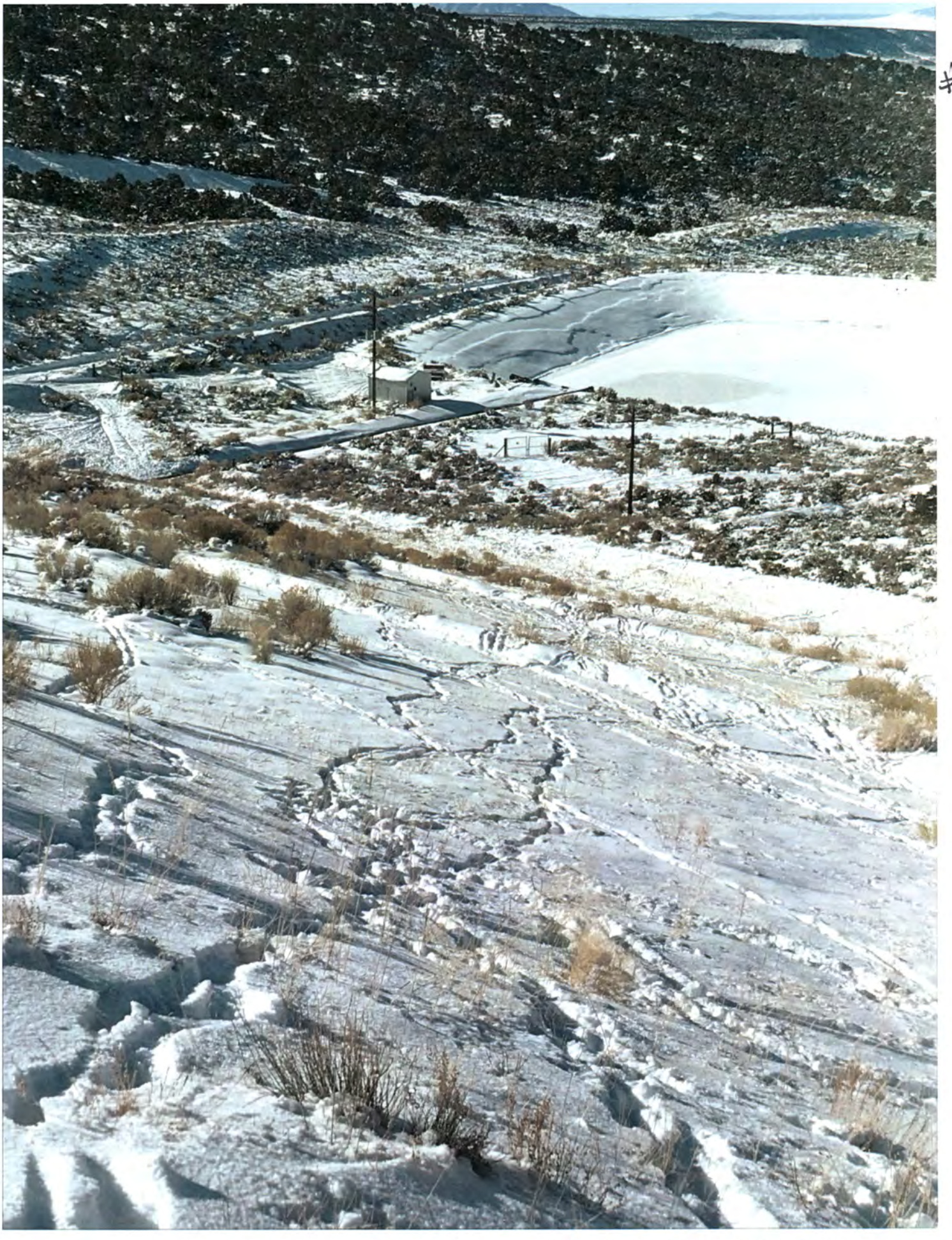

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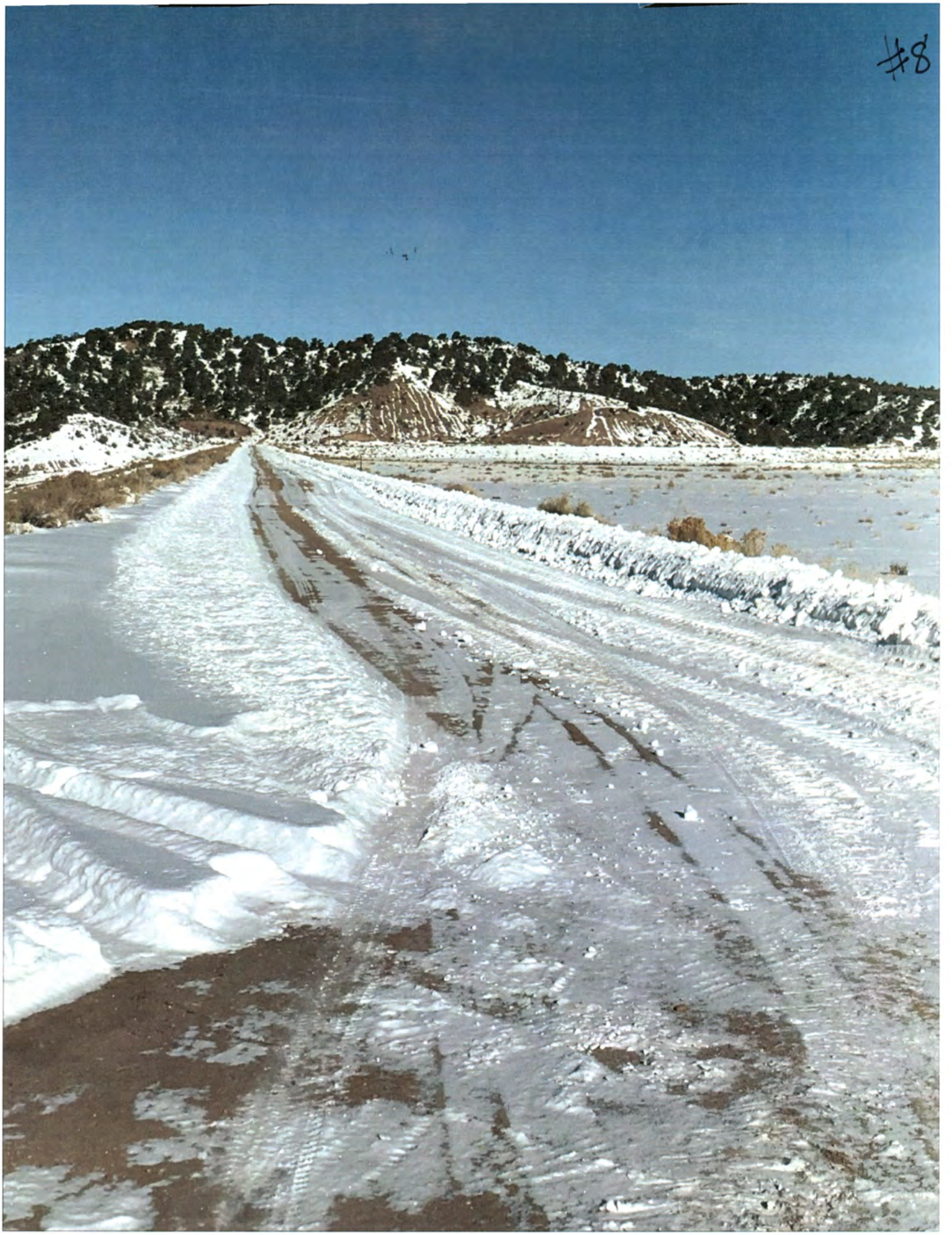
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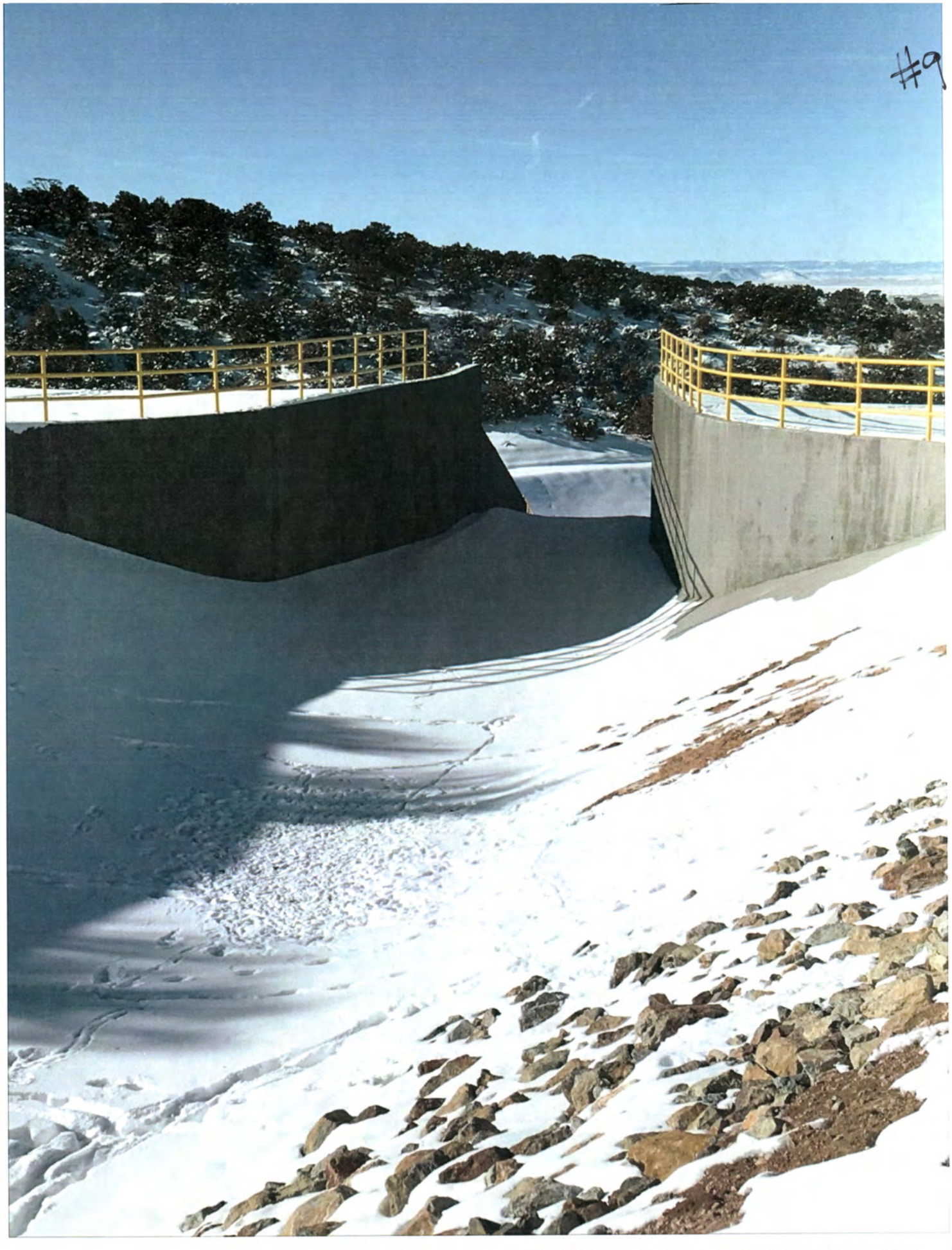
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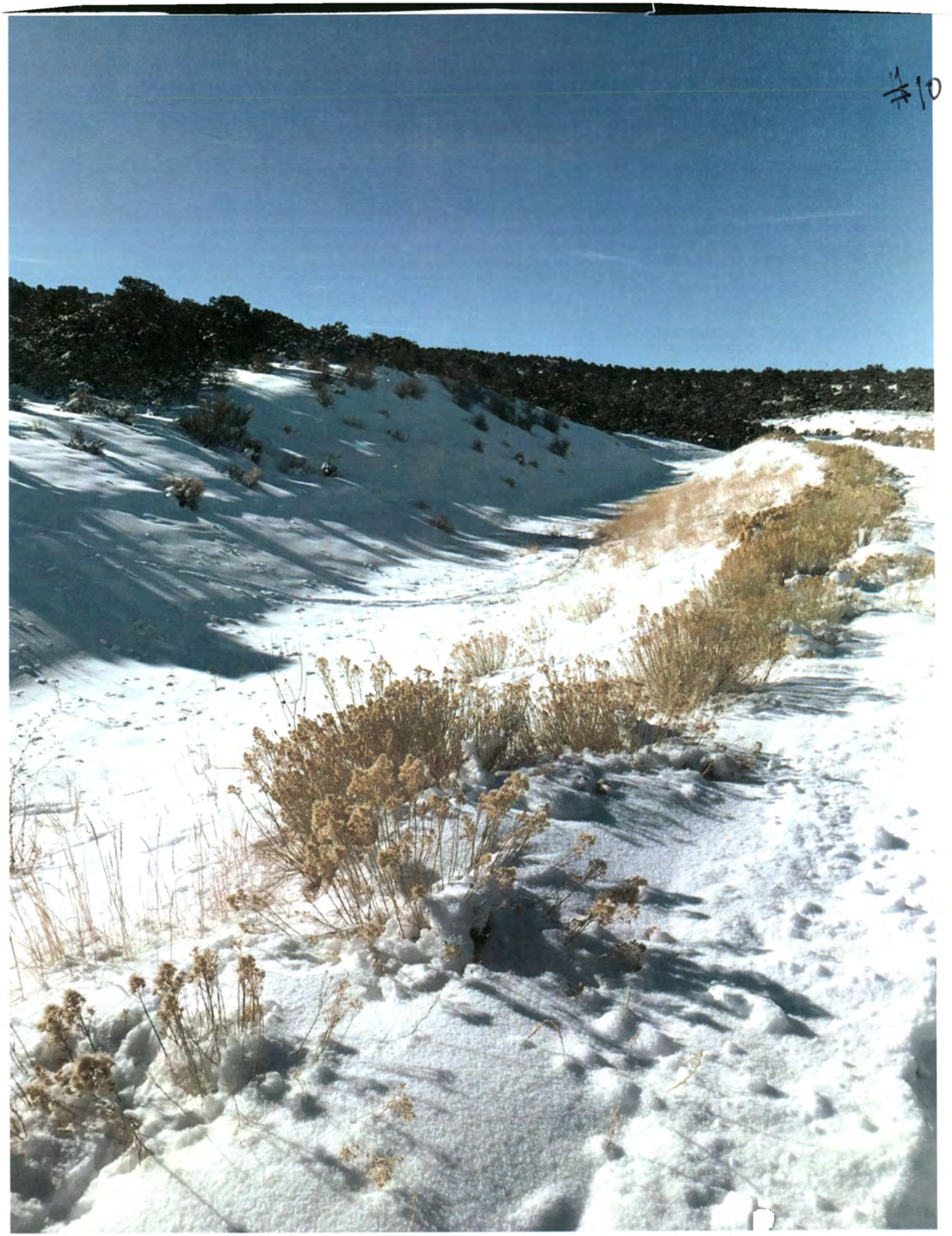
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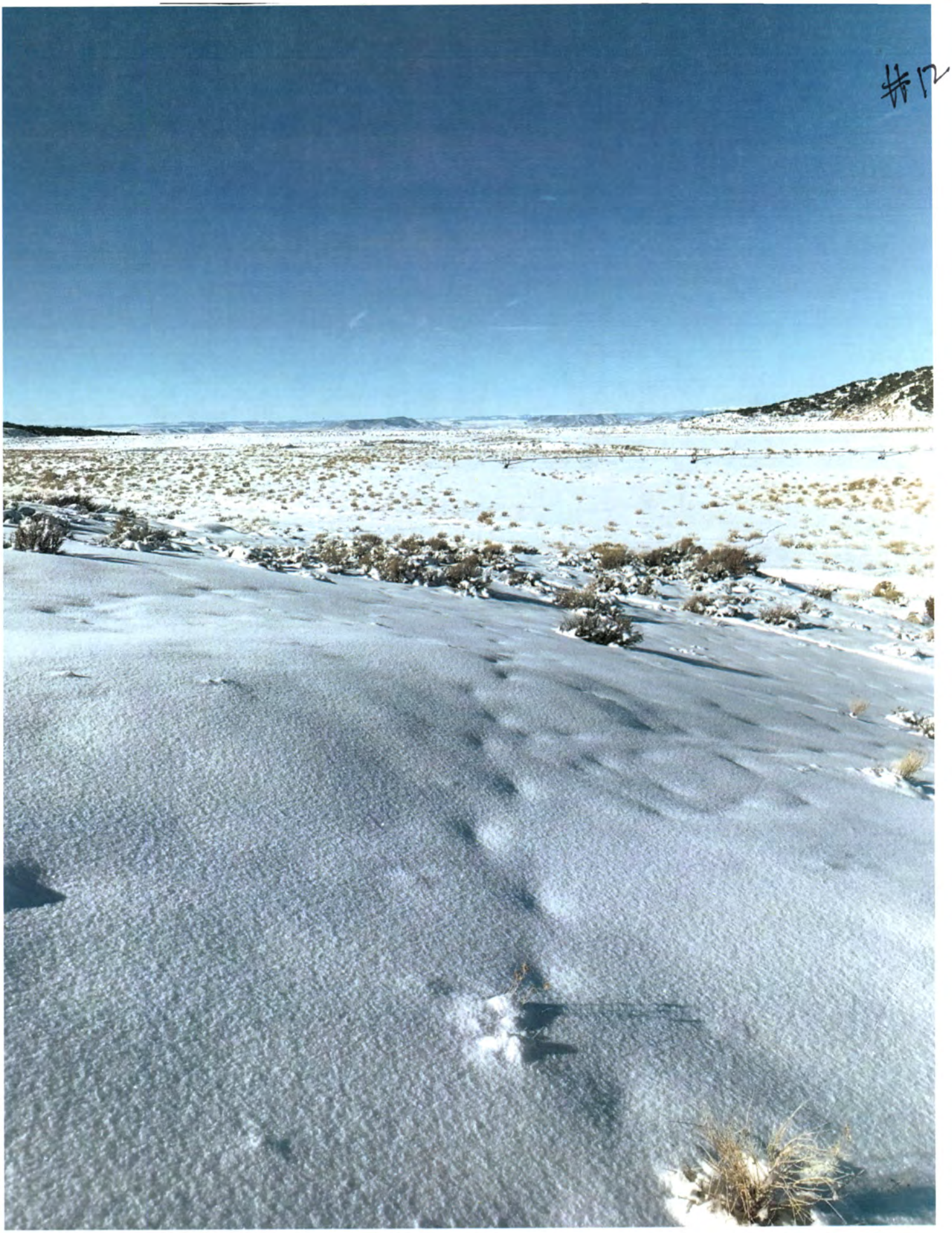
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APPENDIX B

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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DIVISION OF RECLAMATION
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February 8, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
January 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of January 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In January 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	01/31/2019	DRY
LS2R2	01/31/2019	DRY
LS3	01/31/2019	DRY
LD1R2	01/31/2019	DRY
LD2R2	01/31/2019	DRY
LD3	01/31/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	01/31/2019	72.46	DRY	N/A
P7	01/31/2019	92.50	92.32	0.18
P8	01/31/2019	97.51	96.68	0.83
P9	01/31/2019	72.30	71.95	0.35
P10	01/31/2019	58.30	57.56	0.74
P11	01/31/2019	41.80	41.39	0.41
P12	01/31/2019	41.71	41.68	0.03
P13	01/31/2019	41.34	41.06	0.28
P14	01/31/2019	41.24	DRY	N/A
P15	01/31/2019	41.10	40.85	0.25

The leak detection system at the TSF Collection Pond was inspected January 30, 2019. A total of 850 gallons (28.3 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 33.0 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of January 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of January, 7,497,800 gallons (23.01 acre-feet) of treated water was discharged to the Rito Seco. There was 651,500 gallons (2.00 acre-feet) of water transferred from the West Pit to the LTF in January 2019. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on January 31, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during January 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

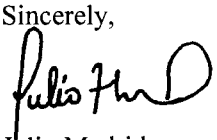
Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	01/31/2019	24.92
BF-5R	01/31/2019	30.83
BF-6	01/31/2019	30.94
M-6	01/31/2019	DRY
M-7	01/31/2019	DRY
M-8	01/31/2019	DRY
M-9	01/31/2019	141.53
M-10	01/31/2019	25.46
M-11R	01/31/2019	38.73
M-12	01/31/2019	174.88
M-13R	01/31/2019	125.97

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-14	01/31/2019	131.96
M-15	01/31/2019	90.35
M-16	01/31/2019	23.20
M-17	01/31/2019	30.58
M-18	01/31/2019	26.96
M-19	01/31/2019	24.57
M-21	01/31/2019	18.58
M-22	01/31/2019	16.97
M-23	01/31/2019	43.08
M-24	01/31/2019	25.51
M-26	01/31/2019	14.64
M-31	01/31/2019	38.12
M-32	01/31/2019	43.77
M-33	01/31/2019	45.18
M-34	01/31/2019	23.66

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,



Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

Engineers
Attn: Ala
600 Specht Point Rd.
Suite 209
Fort Collins, CO 80525

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Lucas J. West
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1313 Sherman Street, Room 21
Denver, CO 80203

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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March 8, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
February 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of February 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In February 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	02/27/2019	DRY
LS2R2	02/27/2019	DRY
LS3	02/27/2019	DRY
LD1R2	02/27/2019	DRY
LD2R2	02/27/2019	DRY
LD3	02/27/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	02/28/2019	72.46	DRY	N/A
P7	02/28/2019	92.50	92.31	0.19
P8	02/28/2019	97.51	96.67	0.84
P9	02/28/2019	72.30	71.95	0.35
P10	02/28/2019	58.30	57.57	0.73
P11	02/28/2019	41.80	41.39	0.41
P12	02/28/2019	41.71	41.68	0.03
P13	02/28/2019	41.34	41.05	0.29
P14	02/28/2019	41.24	DRY	N/A
P15	02/28/2019	41.10	40.86	0.24

The leak detection system at the TSF Collection Pond was inspected February 28, 2019. A total of 860 gallons (29.7 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 32.8 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of February 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of February, 5,982,300 gallons (18.36 acre-feet) of treated water was discharged to the Rito Seco. There was 376,200 gallons (1.15 acre-feet) of water transferred from the West Pit to the LTF in February 2019. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on February 27, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during February 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	02/28/2019	24.95
BF-5R	02/28/2019	30.83
BF-6	02/28/2019	30.95
M-6	02/28/2019	DRY
M-7	02/28/2019	DRY
M-8	02/28/2019	DRY
M-9	02/28/2019	141.76
M-10	02/28/2019	25.49
M-11R	02/28/2019	38.98
M-12	02/28/2019	175.08
M-13R	02/28/2019	126.07

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-14	02/28/2019	131.05
M-15	02/28/2019	90.62
M-16	02/28/2019	23.68
M-17	02/28/2019	30.56
M-18	02/28/2019	26.99
M-19	02/28/2019	24.66
M-21	02/28/2019	18.69
M-22	02/28/2019	17.12
M-23	02/28/2019	43.28
M-24	02/28/2019	25.66
M-26	02/28/2019	14.68
M-31	02/28/2019	38.33
M-32	02/28/2019	42.33
M-33	02/28/2019	48.37
M-34	02/28/2019	23.65

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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Engineering Analytics, Inc.
1600 Specht Point Rd. Ste. 209 Fort Collins, CO 80525

TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

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Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

April 9, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
March 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of March 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In March 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	03/31/2019	DRY
LS2R2	03/31/2019	DRY
LS3	03/31/2019	DRY
LD1R2	03/31/2019	DRY
LD2R2	03/31/2019	DRY
LD3	03/31/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	03/29/2019	72.46	DRY	N/A
P7	03/29/2019	92.50	92.30	0.20
P8	03/29/2019	97.51	96.67	0.84
P9	03/29/2019	72.30	71.93	0.37
P10	03/29/2019	58.30	57.57	0.73
P11	03/29/2019	41.80	41.39	0.41
P12	03/29/2019	41.71	41.68	0.03
P13	03/29/2019	41.34	41.04	0.30
P14	03/29/2019	41.24	DRY	N/A
P15	03/29/2019	41.10	40.86	0.24

The leak detection system at the TSF Collection Pond was inspected March 29, 2019. A total of 870 gallons (30.0 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 32.5 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of March 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of March, 6,544,500 gallons (20.08 acre-feet) of treated water was discharged to the Rito Seco and 367,200 gallons (1.13 acre-feet) of water transferred from the West Pit to the LTF. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on March 28, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during March 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	03/29/2019	24.90
BF-5R	03/29/2019	30.82
BF-6	03/29/2019	30.93
M-6	03/29/2019	DRY
M-7	03/29/2019	DRY
M-8	03/29/2019	DRY
M-9	03/29/2019	141.43
M-10	03/29/2019	25.36
M-11R	03/29/2019	38.86
M-12	03/29/2019	174.79
M-13R	03/29/2019	125.86
M-14	03/29/2019	130.91
M-15	03/29/2019	90.33
M-16	03/29/2019	23.42
M-17	03/29/2019	30.26
M-18	03/29/2019	26.65
M-19	03/29/2019	23.84

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-21	03/29/2019	18.17
M-22	03/29/2019	16.89
M-23	03/29/2019	43.31
M-24	03/29/2019	25.63
M-26	03/29/2019	14.23
M-31	03/29/2019	38.18
M-32	03/29/2019	38.72
M-33	03/29/2019	50.94
M-34	03/29/2019	23.54

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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Engineering Analytics, Inc.
1600 Specht Point Rd. Ste. 209 Fort Collins, CO 80525

TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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MAY 21 2019
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MINING AND SAFETY

May 9, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
April 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of April 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In April 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	04/30/2019	DRY
LS2R2	04/30/2019	DRY
LS3	04/30/2019	DRY
LD1R2	04/30/2019	DRY
LD2R2	04/30/2019	DRY
LD3	04/30/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	04/30/2019	72.46	DRY	N/A
P7	04/30/2019	92.50	92.29	0.21
P8	04/30/2019	97.51	96.67	0.84
P9	04/30/2019	72.30	71.90	0.40
P10	04/30/2019	58.30	57.58	0.72
P11	04/30/2019	41.80	41.39	0.41
P12	04/30/2019	41.71	41.67	0.04
P13	04/30/2019	41.34	41.03	0.31
P14	04/30/2019	41.24	DRY	N/A
P15	04/30/2019	41.10	40.86	0.24

The leak detection system at the TSF Collection Pond was inspected April 30, 2019. A total of 860 gallons (26.9 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 31.5 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of April 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of April, 8,112,900 gallons (24.90 acre-feet) of treated water was discharged to the Rito Seco and 464,400 gallons (1.43 acre-feet) of water transferred from the West Pit to the LTF. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on April 30, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during April 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	04/30/2019	24.83
BF-5R	04/30/2019	30.75
BF-6	04/30/2019	30.84
M-6	04/30/2019	DRY
M-7	04/30/2019	DRY
M-8	04/30/2019	DRY
M-9	04/30/2019	141.33
M-10	04/30/2019	25.13
M-11R	04/30/2019	39.52
M-12	04/30/2019	174.73
M-13R	04/30/2019	125.73
M-14	04/30/2019	130.88
M-15	04/30/2019	90.36
M-16	04/30/2019	22.50
M-17	04/30/2019	29.34
M-18	04/30/2019	25.59
M-19	04/30/2019	22.95

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-21	04/30/2019	17.37
M-22	04/30/2019	16.25
M-23	04/30/2019	43.46
M-24	04/30/2019	25.64
M-26	04/30/2019	14.11
M-31	04/30/2019	38.86
M-32	04/30/2019	51.11
M-33	04/30/2019	49.65
M-34	04/30/2019	23.31

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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1600 Specht Point Rd. Ste. 209 Fort Collins, CO 80525

TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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June 7, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
May 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of May 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In May 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	05/30/2019	DRY
LS2R2	05/30/2019	DRY
LS3	05/30/2019	DRY
LD1R2	05/30/2019	DRY
LD2R2	05/30/2019	DRY
LD3	05/30/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	05/30/2019	72.46	DRY	N/A
P7	05/30/2019	92.50	92.29	0.21
P8	05/30/2019	97.51	96.67	0.84
P9	05/30/2019	72.30	71.88	0.42
P10	05/30/2019	58.30	57.57	0.73
P11	05/30/2019	41.80	41.39	0.41
P12	05/30/2019	41.71	41.67	0.04
P13	05/30/2019	41.34	41.02	0.32
P14	05/30/2019	41.24	DRY	N/A
P15	05/30/2019	41.10	40.86	0.24

The leak detection system at the TSF Collection Pond was inspected May 30, 2019. A total of 730 gallons (24.3 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 34.0 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of May 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of May, 8,883,600 gallons (27.26 acre-feet) of treated water was discharged to the Rito Seco and 500,400 gallons (1.54 acre-feet) of water transferred from the West Pit to the LTF. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on May 30, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during May 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	05/30/2019	24.90
BF-5R	05/30/2019	30.82
BF-6	05/30/2019	30.89
M-6	05/30/2019	DRY
M-7	05/30/2019	DRY
M-8	05/30/2019	DRY
M-9	05/30/2019	141.44
M-10	05/30/2019	25.05
M-11R	05/30/2019	39.65
M-12	05/30/2019	174.82
M-13R	05/30/2019	125.95
M-14	05/30/2019	130.89
M-15	05/30/2019	90.77
M-16	05/30/2019	21.28
M-17	05/30/2019	29.63
M-18	05/30/2019	25.37
M-19	05/30/2019	22.85

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-21	05/30/2019	17.22
M-22	05/30/2019	15.98
M-23	05/30/2019	43.31
M-24	05/30/2019	25.50
M-26	05/30/2019	14.99
M-31	05/30/2019	38.97
M-32	05/30/2019	50.82
M-33	05/30/2019	54.45
M-34	05/30/2019	23.05

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

Engineering Analytics, Inc.
1600 Specht Point Rd. • Ste. 209 • Fort Collins, CO • 80525

Mr. Lucas West
State of Colorado
Colorado Department of Reclamation,
Mining & Safety
1313 Sherman Street, Rm 215
Denver, CO 80203

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Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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July 8, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
June 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of June 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In June 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	06/28/2019	DRY
LS2R2	06/28/2019	DRY
LS3	06/28/2019	DRY
LD1R2	06/28/2019	DRY
LD2R2	06/28/2019	DRY
LD3	06/28/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	06/27/2019	72.46	DRY	N/A
P7	06/27/2019	92.50	92.29	0.21
P8	06/27/2019	97.51	96.65	0.86
P9	06/27/2019	72.30	71.89	0.41
P10	06/27/2019	58.30	57.57	0.73
P11	06/27/2019	41.80	41.39	0.41
P12	06/27/2019	41.71	41.67	0.04
P13	06/27/2019	41.34	41.03	0.31
P14	06/27/2019	41.24	DRY	N/A
P15	06/27/2019	41.10	40.85	0.25

The leak detection system at the TSF Collection Pond was inspected June 27, 2019. A total of 820 gallons (29.3 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 36.5 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of June 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of June, 9,430,200 gallons (28.94 acre-feet) of treated water was discharged to the Rito Seco and 432,200 gallons (1.33 acre-feet) of water transferred from the West Pit to the LTF. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on June 28, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during June 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	06/27/2019	25.15
BF-5R	06/27/2019	30.85
BF-6	06/27/2019	30.94
M-6	06/27/2019	DRY
M-7	06/27/2019	DRY
M-8	06/27/2019	DRY
M-9	06/27/2019	141.69
M-10	06/27/2019	25.06
M-11R	06/27/2019	39.22
M-12	06/27/2019	175.10
M-13R	06/27/2019	126.18
M-14	06/27/2019	131.21
M-15	06/27/2019	90.75
M-16	06/27/2019	20.79
M-17	06/27/2019	29.69
M-18	06/27/2019	25.48
M-19	06/27/2019	23.18

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-21	06/27/2019	17.43
M-22	06/27/2019	16.04
M-23	06/27/2019	43.01
M-24	06/27/2019	25.30
M-26	06/27/2019	15.01
M-31	06/27/2019	38.58
M-32	06/27/2019	51.73
M-33	06/27/2019	48.23
M-34	06/27/2019	22.86

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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Engineering Analytics, Inc.
1600 Specht Point Rd. Ste. 209 Fort Collins, CO 80525

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TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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August 7, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
July 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of July 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In July 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	07/31/2019	DRY
LS2R2	07/31/2019	DRY
LS3	07/31/2019	DRY
LD1R2	07/31/2019	DRY
LD2R2	07/31/2019	DRY
LD3	07/31/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	07/31/2019	72.46	DRY	N/A
P7	07/31/2019	92.50	92.30	0.20
P8	07/31/2019	97.51	96.67	0.84
P9	07/31/2019	72.30	71.89	0.41
P10	07/31/2019	58.30	57.57	0.73
P11	07/31/2019	41.80	41.39	0.41
P12	07/31/2019	41.71	41.68	0.03
P13	07/31/2019	41.34	41.03	0.31
P14	07/31/2019	41.24	41.21	0.03
P15	07/31/2019	41.10	40.85	0.25

The leak detection system at the TSF Collection Pond was inspected July 31, 2019. A total of 870 gallons (25.6 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 35.5 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of July 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of July, 9,496,100 gallons (29.14 acre-feet) of treated water was discharged to the Rito Seco and no water was transferred from the West Pit to the LTF. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on July 31, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during July 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	07/31/2019	24.93
BF-5R	07/31/2019	30.86
BF-6	07/31/2019	30.97
M-6	07/31/2019	DRY
M-7	07/31/2019	DRY
M-8	07/31/2019	DRY
M-9	07/31/2019	141.68
M-10	07/31/2019	25.31
M-11R	07/31/2019	39.38
M-12	07/31/2019	175.02
M-13R	07/31/2019	126.18
M-14	07/31/2019	131.09
M-15	07/31/2019	91.12
M-16	07/31/2019	21.76
M-17	07/31/2019	30.28
M-18	07/31/2019	26.56
M-19	07/31/2019	23.95

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-21	07/31/2019	18.10
M-22	07/31/2019	16.69
M-23	07/31/2019	43.16
M-24	07/31/2019	25.42
M-26	07/31/2019	15.26
M-31	07/31/2019	38.73
M-32	07/31/2019	53.18
M-33	07/31/2019	48.32
M-34	07/31/2019	23.24

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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80525

Engineering Analytics, Inc.
1600 Specht Point Rd. Ste. 209 Fort Collins, CO 80525

TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

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SEP 13 2019

DIVISION OF RECLAMATION
MINING AND SAFETY

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

September 9, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
August 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of August 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In August 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	08/29/2019	DRY
LS2R2	08/29/2019	DRY
LS3	08/29/2019	DRY
LD1R2	08/29/2019	DRY
LD2R2	08/29/2019	DRY
LD3	08/29/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	08/30/2019	72.46	DRY	N/A
P7	08/30/2019	92.50	92.30	0.20
P8	08/30/2019	97.51	96.70	0.81
P9	08/30/2019	72.30	71.89	0.41
P10	08/30/2019	58.30	57.57	0.73
P11	08/30/2019	41.80	41.39	0.41
P12	08/30/2019	41.71	41.67	0.04
P13	08/30/2019	41.34	41.03	0.31
P14	08/30/2019	41.24	DRY	N/A
P15	08/30/2019	41.10	40.86	0.24

The leak detection system at the TSF Collection Pond was inspected August 30, 2019. A total of 890 gallons (29.7 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 35.0 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of August 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of August, 7,747,400 gallons (23.78 acre-feet) of treated water was discharged to the Rito Seco and no water was transferred from the West Pit to the LTF. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on August 29, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during August 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	08/30/2019	24.92
BF-5R	08/30/2019	30.85
BF-6	08/30/2019	30.97
M-6	08/30/2019	DRY
M-7	08/30/2019	DRY
M-8	08/30/2019	DRY
M-9	08/30/2019	141.68
M-10	08/30/2019	25.46
M-11R	08/30/2019	39.20
M-12	08/30/2019	174.98
M-13R	08/30/2019	125.98
M-14	08/30/2019	131.03
M-15	08/30/2019	92.91
M-16	08/30/2019	22.46
M-17	08/30/2019	30.37
M-18	08/30/2019	26.68
M-19	08/30/2019	23.92

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-21	08/30/2019	17.88
M-22	08/30/2019	16.74
M-23	08/30/2019	43.19
M-24	08/30/2019	25.39
M-26	08/30/2019	15.04
M-31	08/30/2019	38.56
M-32	08/30/2019	49.52
M-33	08/30/2019	48.02
M-34	08/30/2019	23.52

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Devon Horntvedt, Newmont USA Limited
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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OCT 16 2019
DIVISION OF RECLAMATION
MINING AND SAFETY

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

October 9, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
September 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of September 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In September 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	09/30/2019	DRY
LS2R2	09/30/2019	DRY
LS3	09/30/2019	DRY
LD1R2	09/30/2019	DRY
LD2R2	09/30/2019	DRY
LD3	09/30/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	09/30/2019	72.46	DRY	N/A
P7	09/30/2019	92.50	92.29	0.21
P8	09/30/2019	97.51	96.70	0.81
P9	09/30/2019	72.30	71.90	0.40
P10	09/30/2019	58.30	57.57	0.73
P11	09/30/2019	41.80	41.39	0.41
P12	09/30/2019	41.71	41.67	0.04
P13	09/30/2019	41.34	41.03	0.31
P14	09/30/2019	41.24	DRY	N/A
P15	09/30/2019	41.10	40.87	0.23

The leak detection system at the TSF Collection Pond was inspected September 30, 2019. A total of 850 gallons (27.4 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 35.0 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of September 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of September, 7,368,800 gallons (22.61 acre-feet) of treated water was discharged to the Rito Seco and no water was transferred from the West Pit to the LTF. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on September 30, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during September 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	09/30/2019	24.95
BF-5R	09/30/2019	30.84
BF-6	09/30/2019	30.97
M-6	09/30/2019	DRY
M-7	09/30/2019	DRY
M-8	09/30/2019	DRY
M-9	09/30/2019	141.54
M-10	09/30/2019	25.55
M-11R	09/30/2019	38.84
M-12	09/30/2019	174.84
M-13R	09/30/2019	125.86
M-14	09/30/2019	130.92
M-15	09/30/2019	92.97
M-16	09/30/2019	22.84
M-17	09/30/2019	30.52
M-18	09/30/2019	26.74
M-19	09/30/2019	23.96

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-21	09/30/2019	17.26
M-22	09/30/2019	16.24
M-23	09/30/2019	42.87
M-24	09/30/2019	25.12
M-26	09/30/2019	14.83
M-31	09/30/2019	38.22
M-32	09/30/2019	49.49
M-33	09/30/2019	48.59
M-34	09/30/2019	23.69

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Devon Horntvedt, Newmont USA Limited
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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OCT 16 2019

DIVISION OF RECLAMATION
MINING AND SAFETY

Engineering Analytics, Inc.

1600 Specht Point Rd. • Ste. 209 • Fort Collins, CO • 80525

TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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NOV 15 2019
DIVISION OF RECLAMATION
MINING & SAFETY

November 9, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
October 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of October 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In October 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	10/31/2019	DRY
LS2R2	10/31/2019	DRY
LS3	10/31/2019	DRY
LD1R2	10/31/2019	DRY
LD2R2	10/31/2019	DRY
LD3	10/31/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	10/31/2019	72.46	DRY	N/A
P7	10/31/2019	92.50	92.29	0.21
P8	10/31/2019	97.51	96.70	0.81
P9	10/31/2019	72.30	71.89	0.41
P10	10/31/2019	58.30	57.57	0.73
P11	10/31/2019	41.80	41.39	0.41
P12	10/31/2019	41.71	41.68	0.03
P13	10/31/2019	41.34	41.03	0.31
P14	10/31/2019	41.24	DRY	N/A
P15	10/31/2019	41.10	40.86	0.24

The leak detection system at the TSF Collection Pond was inspected October 31, 2019. A total of 850 gallons (27.4 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system flow was measured to be approximately 34.5 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of October 2019, the West Pit Water Treatment Plant was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 for discharge into the Rito Seco alluvial aquifer. During the month of October, 7,108,200 gallons (21.8 acre-feet) of treated water was discharged to the Rito Seco. There was 231,000 gallons (0.71 acre-feet) of water transferred from the West Pit to the LTF in October 2019. There was no sludge transferred from the water treatment plant drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on October 31, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area during October 2019.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	10/31/2019	24.86
BF-5R	10/31/2019	30.78
BF-6	10/31/2019	30.91
M-6	10/31/2019	DRY
M-7	10/31/2019	DRY
M-8	10/31/2019	DRY
M-9	10/31/2019	141.79
M-10	10/31/2019	25.38
M-11R	10/31/2019	38.38
M-12	10/31/2019	175.12
M-13R	10/31/2019	126.13
M-14	10/31/2019	131.12
M-15	10/31/2019	90.93
M-16	10/31/2019	22.93
M-17	10/31/2019	30.58
M-18	10/31/2019	26.55

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-19	10/31/2019	23.81
M-21	10/31/2019	17.33
M-22	10/31/2019	15.97
M-23	10/31/2019	42.48
M-24	10/31/2019	24.85
M-26	10/31/2019	14.33
M-31	10/31/2019	37.80
M-32	10/31/2019	48.32
M-33	10/31/2019	46.81
M-34	10/31/2019	23.55

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Devon Horntvedt, Newmont USA Limited
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

Engineering Analytics, Inc.
1600 Specht Point Rd. Ste. 209 Fort Collins, CO 80525

TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

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Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

December 6, 2019

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
November 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of November 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

In November 2019, the six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	11/27/2019	DRY
LS2R2	11/27/2019	DRY
LS3	11/27/2019	DRY
LD1R2	11/27/2019	DRY
LD2R2	11/27/2019	DRY
LD3	11/27/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	11/28/2019	72.46	DRY	N/A
P7	11/28/2019	92.50	92.29	0.21
P8	11/28/2019	97.51	96.68	0.83
P9	11/28/2019	72.30	71.88	0.42
P10	11/28/2019	58.30	57.55	0.75
P11	11/28/2019	41.80	41.36	0.44
P12	11/28/2019	41.71	41.67	0.04
P13	11/28/2019	41.34	41.00	0.34
P14	11/28/2019	41.24	DRY	N/A
P15	11/28/2019	41.10	40.85	0.25

The leak detection system at the LTF Collection Pond was inspected November 28, 2019. A total of 830 gallons (29.6 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system was visually inspected November 27th, 2019 and the flow rate was measured to be approximately 34.0 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of November 2019, the West Pit Waste Water Treatment Plant (WWTP) was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 and discharged 6,548,800 gallons (20.1 acre-feet) of treated water into the Rito Seco alluvial aquifer. Additionally, 257,800 gallons (1.1 acre-feet) of water was transferred from the West Pit to the LTF. There was no sludge transferred from the WWTP drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on November 27, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	11/28/2019	24.96
BF-5R	11/28/2019	30.85
BF-6	11/28/2019	30.97
M-6	11/28/2019	DRY
M-7	11/28/2019	DRY
M-8	11/28/2019	DRY
M-9	11/28/2019	141.38
M-10	11/28/2019	25.36
M-11R	11/28/2019	38.28
M-12	11/28/2019	174.86
M-13R	11/28/2019	125.86
M-14	11/28/2019	130.89
M-15	11/28/2019	90.52
M-16	11/28/2019	23.00
M-17	11/28/2019	30.55
M-18	11/28/2019	26.67

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-19	11/28/2019	23.97
M-21	11/28/2019	17.52
M-22	11/28/2019	16.17
M-23	11/28/2019	42.23
M-24	11/28/2019	24.67
M-26	11/28/2019	14.35
M-31	11/28/2019	37.57
M-32	11/28/2019	48.85
M-33	11/28/2019	45.28
M-34	11/28/2019	23.44

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Devon Horntvedt, Newmont USA Limited
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

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JAN 15 2020
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MINING & SAFETY

January 8, 2020

Mr. Lucas J. West
State of Colorado
Colorado Department of Reclamation, Mining, & Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Re: Battle Mountain Resources, Inc.
San Luis Project - M-88-112
December 2019 Monthly Report

Dear Mr. West:

The following summarizes monitoring and site activities at the Battle Mountain Resources Inc. (BMRI) "San Luis Project" (M-88-112) for the month of December 2019. Surface and groundwater monitoring and analysis were completed for all the required sites during the month as specified in the TR-32 Quality Assurance and Quality Control (QA/QC) Plan.

Tailing Facility / Leak Detection System

On December 4, 2019, lysimeters LS3 and LD3 were replaced due to failure and new lysimeters (LS3R, LD3R) were installed approximately 30-40 feet southeast of the corresponding original lysimeters. The six lysimeters which are a part of the Lined Tailing Facility (LTF) leak detection system were inspected and verified for proper vacuum and operation. As shown in Table 1, there was no pore space water found to be present in any of the six lysimeter collection pans, therefore, no sampling or laboratory analysis was required.

Table 1 – Monthly Lysimeter Monitoring

Lysimeter Identification	Observation Date	Depth to Water (feet)
LS1R2	12/31/2019	DRY
LS2R2	12/31/2019	DRY
LS3R	12/31/2019	DRY
LD1R2	12/31/2019	DRY
LD2R2	12/31/2019	DRY
LD3R	12/31/2019	DRY

The ten piezometers located on the tailing impoundment main embankment were inspected and measured for depth to water. The depths to water found for each piezometer are shown in Table 2. All piezometers were either dry or contained less than twelve inches of water.

Table 2 – Monthly Piezometer Elevations

Monitoring Well Identification	Observation Date	Piezometer Depth (ft)	Depth to Water (ft)	Depth of Water (ft)
P6	12/31/2019	72.46	DRY	N/A
P7	12/31/2019	92.50	92.28	0.22
P8	12/31/2019	97.51	96.67	0.84
P9	12/31/2019	72.30	71.89	0.41
P10	12/31/2019	58.30	57.55	0.75
P11	12/31/2019	41.80	41.38	0.42
P12	12/31/2019	41.71	41.68	0.03
P13	12/31/2019	41.34	41.02	0.32
P14	12/31/2019	41.24	DRY	N/A
P15	12/31/2019	41.10	40.86	0.24

The leak detection system at the LTF Collection Pond was inspected December 31, 2019. A total of 890 gallons (27.0 GPD) were evacuated from the leak detection system and pumped to the LTF. The LTF underdrain system was visually inspected December 31, 2019 and the flow rate was measured to be approximately 33.0 gallons per minute (gpm).

West Pit Waste Water Treatment Plant

During the month of December 2019, the West Pit Waste Water Treatment Plant (WWTP) was operated under Colorado Department of Public Health and Environment (CDPHE) CDPS Permit No. CO0045675 and discharged 7,017,500 gallons (21.5 acre-feet) of treated water into the Rito Seco alluvial aquifer. Additionally, 851,200 gallons (2.6 acre-feet) of water was transferred from the West Pit to the LTF. There was no sludge transferred from the WWTP drying pad to the LTF.

BMRI performed the monthly visual seepage expression inspections on December 31, 2019 in the historic seepage area identified in Figure 2 of the permit. No seepage expressions were observed in the historic seepage area.

BMRI measured the monthly West Pit backfill, alluvial and monitoring wells as required under in the QA/QC Plan. On December 4, 2019, monitoring well M-15 was abandoned as approved in Technical Revision (TR) 35 and can no longer be sampled. Measurements obtained for the monthly wells are shown in Table 3.

Table 3 – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
BF-4	12/31/2019	24.89
BF-5R	12/31/2019	30.77
BF-6	12/31/2019	30.91
M-6	12/31/2019	DRY
M-7	12/31/2019	DRY
M-8	12/31/2019	DRY
M-9	12/31/2019	141.58
M-10	12/31/2019	25.33
M-11R	12/31/2019	38.25
M-12	12/31/2019	174.95
M-13R	12/31/2019	125.96
M-14	12/31/2019	131.07

Table 3 Continued – Monthly and Quarterly Groundwater Depth to Water

Monitoring Well Identification	Observation Date	Depth to Water (ft)
M-15	12/31/2019	ABANDONED
M-16	12/31/2019	23.11
M-17	12/31/2019	30.54
M-18	12/31/2019	26.79
M-19	12/31/2019	24.22
M-21	12/31/2019	17.86
M-22	12/31/2019	16.33
M-23	12/31/2019	42.08
M-24	12/31/2019	24.63
M-26	12/31/2019	14.45
M-31	12/31/2019	37.58
M-32	12/31/2019	46.96
M-33	12/31/2019	57.03
M-34	12/31/2019	23.40

Should you have any questions or comments, please do not hesitate to call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Devon Horntvedt, Newmont USA Limited
Lawrence Fiske, Newmont USA Limited
Alan Fosdick, Engineering Analytics, Inc.

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Engineering Analytics, Inc.
1600 Specht Point Rd. Ste. 209 Fort Collins, CO 80525

RECEIVED
JAN 15 2020
DIVISION OF RECLAMATION
MINING AND SAFETY

TO:

Mr. Lucas J. West
CDRMS
1313 Sherman, Room 215
Denver, CO 80203

RECEIVED
JAN 15 2020
DIVISION OF RECLAMATION
MINING & SAFETY

LJW

M1988-112

RECEIVED

MAY 03 2019

DIVISION OF RECLAMATION
MINING AND SAFETY

April 30, 2019

Mr. Lucas West
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 and Quarterly Sampling

Mr. West:

Enclosed are the analytical results from SVL Analytical, Inc., Energy Laboratories and Seacrest Group for the recent monthly and quarterly 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. Cariño

David S Carino
Sr. Supervisor Legacy Sites
Closure and Reclamation

Enclosures
cc: Larry Fiske
File

One Government Gulch - PO Box 925
Kellogg, ID 83837-0925
(208) 784-1258
www.svl.net

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

Project Name: BMSL - Routine
Work Order: **X9A0051**
Reported: 21-Jan-19 17:04

Client Sample ID: **190102BMGRS1**
SVL Sample ID: **X9A0051-01 (Surface Water)**

Sampled: 02-Jan-19 09:00
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	16.7	mg/L	0.100	0.069		X901172	DT	01/18/19 12:01	
EPA 200.7	**Magnesium**	4.30	mg/L	0.50	0.32		X901172	DT	01/18/19 12:01	
EPA 200.7	**Potassium**	0.70	mg/L	0.50	0.18		X901172	DT	01/18/19 12:01	
EPA 200.7	**Silica (SiO2)**	12.5	mg/L	0.17	0.12		X901172	DT	01/18/19 12:01	
EPA 200.7	**Sodium**	3.50	mg/L	0.50	0.12		X901172	DT	01/18/19 12:01	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X901026	AS	01/14/19 11:45	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X902273	DPW	01/15/19 10:44	
Metals (Total Recoverable)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X901171	DT	01/18/19 13:19	
EPA 200.7	**Manganese**	0.0105	mg/L	0.0080	0.0017		X901171	DT	01/18/19 13:19	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X901168	AS	01/17/19 10:14	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X901168	AS	01/17/19 10:14	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X901168	AS	01/17/19 10:14	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X901168	AS	01/17/19 10:14	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X901109	KWH	01/17/19 12:31	
Metals (Potentially Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X901174	AS	01/20/19 11:29	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X901174	AS	01/20/19 11:29	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X901174	AS	01/20/19 11:29	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X901174	AS	01/20/19 11:29	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901108	KWH	01/17/19 09:13	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X901108	KWH	01/17/19 11:25	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X901112	AJH	01/08/19 12:51	
SM 2320 B	**Total Alkalinity**	64.6	mg/L as CaCO3	1.0			X902137	DKS	01/14/19 12:46	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X901117	RS	01/04/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.55	mg/L	0.20	0.14		X902280	DJS	01/17/19 18:41	
EPA 300.0	**Fluoride**	0.539	mg/L	0.100	0.062		X902280	DJS	01/17/19 18:41	
EPA 300.0	**Sulfate as SO4**	5.67	mg/L	0.30	0.18		X902280	DJS	01/17/19 18:41	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.37 meq/L Anion Sum: 1.45 meq/L C/A Balance: -3.08 %

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

Connor Williams
Project Manager

One Government Gulch - PO Box 929
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(208) 784-1258
www.svl.net

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

Project Name: BMSL - Routine
Work Order: **X9A0051**
Reported: 21-Jan-19 17:04

Client Sample ID: **190102BMGRS5**
SVL Sample ID: **X9A0051-02 (Surface Water)**

Sampled: 02-Jan-19 10:05
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	24.8	mg/L	0.100	0.069		X901172	DT	01/18/19 12:12	
EPA 200.7	**Magnesium**	5.47	mg/L	0.50	0.32		X901172	DT	01/18/19 12:12	
EPA 200.7	**Potassium**	1.68	mg/L	0.50	0.18		X901172	DT	01/18/19 12:12	
EPA 200.7	**Silica (SiO2)**	14.6	mg/L	0.17	0.12		X901172	DT	01/18/19 12:12	
EPA 200.7	**Sodium**	8.84	mg/L	0.50	0.12		X901172	DT	01/18/19 12:12	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X901026	AS	01/14/19 11:48	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X902273	DPW	01/15/19 10:46	
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.631	mg/L	0.100	0.028		X901171	DT	01/18/19 13:27	
EPA 200.7	**Manganese**	0.186	mg/L	0.0080	0.0017		X901171	DT	01/18/19 13:27	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X901168	AS	01/17/19 10:25	
EPA 200.7	**Iron**	0.182	mg/L	0.100	0.056		X901168	AS	01/17/19 10:25	
EPA 200.7	**Manganese**	0.171	mg/L	0.0080	0.0034		X901168	AS	01/17/19 10:25	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X901168	AS	01/17/19 10:25	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X901109	KWH	01/17/19 12:23	
Metals (Potentially Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X901174	AS	01/20/19 11:40	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X901174	AS	01/20/19 11:40	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X901174	AS	01/20/19 11:40	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X901174	AS	01/20/19 11:40	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901108	KWH	01/17/19 09:26	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X901108	KWH	01/17/19 11:33	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X901112	AJH	01/08/19 12:54	
SM 2320 B	**Total Alkalinity**	80.8	mg/L as CaCO3	1.0			X902137	DKS	01/14/19 12:53	
SM 2540 D	**Total Susp. Solids**	5.0	mg/L	5.0			X901117	RS	01/04/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.20	mg/L	0.20	0.14		X902280	DJS	01/17/19 19:32	
EPA 300.0	**Fluoride**	0.787	mg/L	0.100	0.062		X902280	DJS	01/17/19 19:32	
EPA 300.0	**Sulfate as SO4**	23.4	mg/L	0.30	0.18		X902280	DJS	01/17/19 19:32	

Cation/Anion Balance and TDS Ratios

Cation Sum: 2.14 meq/L Anion Sum: 2.23 meq/L C/A Balance: -2.24 %

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

Connor Williams
Project Manager

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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: **X9A0051**
Reported: 21-Jan-19 17:04

Client Sample ID: **190102BMGRS5**
SVL Sample ID: **X9A0051-03 (Surface Water)**

Sampled: 02-Jan-19 10:05
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.677	mg/L	0.100	0.028		X901171	DT	01/18/19 13:44	
EPA 200.7	**Manganese**	0.196	mg/L	0.0080	0.0017		X901171	DT	01/18/19 13:44	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.162	mg/L	0.100	0.056		X901168	AS	01/17/19 10:29	
EPA 200.7	**Manganese**	0.178	mg/L	0.0080	0.0034		X901168	AS	01/17/19 10:29	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X901029	AJH	01/07/19 15:03	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	23.5	mg/L	0.30	0.18		X902280	DJS	01/17/19 19:58	

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

Connor Williams
Project Manager

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

Project Name: BMSL - Routine
Work Order: X9A0052
Reported: 21-Jan-19 17:12

Client Sample ID: **190102BMGRS2**
SVL Sample ID: **X9A0052-01 (Surface Water)**

Sampled: 02-Jan-19 09:35
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	18.4	mg/L	0.100	0.069		X901172	DT	01/18/19 12:16	
EPA 200.7	**Magnesium**	4.89	mg/L	0.50	0.32		X901172	DT	01/18/19 12:16	
EPA 200.7	**Potassium**	0.90	mg/L	0.50	0.18		X901172	DT	01/18/19 12:16	
EPA 200.7	**Silica (SiO2)**	13.2	mg/L	0.17	0.12		X901172	DT	01/18/19 12:16	
EPA 200.7	**Sodium**	4.83	mg/L	0.50	0.12		X901172	DT	01/18/19 12:16	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X901026	AS	01/14/19 11:51	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X902273	DPW	01/15/19 10:48	
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.244	mg/L	0.100	0.028		X901171	DT	01/18/19 13:48	
EPA 200.7	**Manganese**	0.0342	mg/L	0.0080	0.0017		X901171	DT	01/18/19 13:48	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X901168	AS	01/17/19 10:33	
EPA 200.7	**Iron**	0.106	mg/L	0.100	0.056		X901168	AS	01/17/19 10:33	
EPA 200.7	**Manganese**	0.0173	mg/L	0.0080	0.0034		X901168	AS	01/17/19 10:33	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X901168	AS	01/17/19 10:33	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X901109	KWH	01/17/19 12:33	
Metals (Potentially Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X901174	AS	01/20/19 11:44	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X901174	AS	01/20/19 11:44	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X901174	AS	01/20/19 11:44	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X901174	AS	01/20/19 11:44	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901108	KWH	01/17/19 09:29	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X901108	KWH	01/17/19 11:36	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X901112	AJH	01/08/19 12:57	
SM 2320 B	**Total Alkalinity**	69.6	mg/L as CaCO3	1.0			X902137	DKS	01/14/19 13:00	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X901117	RS	01/04/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.92	mg/L	0.20	0.14		X902279	DJS	01/15/19 07:39	
EPA 300.0	**Fluoride**	0.604	mg/L	0.100	0.062		X902279	DJS	01/15/19 07:39	
EPA 300.0	**Sulfate as SO4**	9.33	mg/L	0.30	0.18		X902279	DJS	01/15/19 07:39	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.57 meq/L Anion Sum: 1.64 meq/L C/A Balance: -2.41 %

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

Connor Williams
Project Manager

SVL holds the following certifications:
AZ:0538, CA:2080, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

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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: **X9A0052**
Reported: 21-Jan-19 17:12

Client Sample ID: **190102BMGRS2**
SVL Sample ID: **X9A0052-02 (Surface Water)**

Sampled: 02-Jan-19 09:35
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Aluminum**	0.10	mg/L	0.08	0.05		X901172	DT	01/18/19 12:19	
EPA 200.7	**Barium**	0.0257	mg/L	0.0020	0.0019		X901172	DT	01/18/19 12:19	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X901172	DT	01/18/19 12:19	
EPA 200.7	**Calcium**	18.4	mg/L	0.100	0.069		X901172	DT	01/18/19 12:19	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X901172	DT	01/18/19 12:19	
EPA 200.7	**Iron**	0.317	mg/L	0.100	0.056		X901172	DT	01/18/19 12:19	
EPA 200.7	**Magnesium**	4.92	mg/L	0.50	0.32		X901172	DT	01/18/19 12:19	
EPA 200.7	**Manganese**	0.0346	mg/L	0.0080	0.0034		X901172	DT	01/18/19 12:19	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X901172	DT	01/18/19 12:19	
EPA 200.7	**Potassium**	0.95	mg/L	0.50	0.18		X901172	DT	01/18/19 12:19	
EPA 200.7	**Silica (SiO2)**	13.3	mg/L	0.17	0.12		X901172	DT	01/18/19 12:19	
EPA 200.7	**Sodium**	4.86	mg/L	0.50	0.12		X901172	DT	01/18/19 12:19	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X901172	DT	01/18/19 12:19	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X901026	AS	01/14/19 11:54	D1
EPA 200.8	Cadmium	< 0.00050	mg/L	0.00050	0.00032	5	X901026	AS	01/14/19 11:54	D1
EPA 200.8	Copper	< 0.00200	mg/L	0.00200	0.00180	5	X901026	AS	01/14/19 11:54	D1
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00070	5	X901026	AS	01/14/19 11:54	D1
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0012	5	X901026	AS	01/14/19 11:54	D1
EPA 200.8	Silver	< 0.000400	mg/L	0.000400	0.000305	5	X901026	AS	01/14/19 11:54	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X902273	DPW	01/15/19 10:49	
SM 2340 B	**Hardness (as CaCO3)**	66.2	mg/L	2.31	1.49		N/A		01/18/19 12:19	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X901168	AS	01/17/19 10:37	
EPA 200.7	**Barium**	0.0233	mg/L	0.0020	0.0019		X901168	AS	01/17/19 10:37	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X901168	AS	01/17/19 10:37	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X901168	AS	01/17/19 10:37	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X901168	AS	01/17/19 10:37	
EPA 200.7	**Manganese**	0.0167	mg/L	0.0080	0.0034		X901168	AS	01/17/19 10:37	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X901168	AS	01/17/19 10:37	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X901168	AS	01/17/19 10:37	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X901109	KWH	01/17/19 12:36	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X901109	KWH	01/17/19 12:36	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901109	KWH	01/17/19 12:36	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X901109	KWH	01/17/19 12:36	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X901109	KWH	01/17/19 12:36	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X901109	KWH	01/17/19 12:36	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X901123	DPW	01/08/19 13:42	

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(208) 784-1258
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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9A0052**
San Luis, CO 81152	Reported: 21-Jan-19 17:12

Client Sample ID: **190102BMGRS2**
SVL Sample ID: **X9A0052-02 (Surface Water)**

Sampled: 02-Jan-19 09:35
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X901111	AJH	01/07/19 13:49	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X901112	AJH	01/08/19 13:00	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X902117	DPW	01/10/19 14:58	
SM 2320 B	**Total Alkalinity**	70.8	mg/L as CaCO3	1.0			X902019	RS	01/07/19 16:21	
SM 2320 B	**Bicarbonate**	70.8	mg/L as CaCO3	1.0			X902019	RS	01/07/19 16:21	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X902019	RS	01/07/19 16:21	
SM 2540 C	**Total Diss. Solids**	86	mg/L	10			X901119	RS	01/04/19 11:30	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X901117	RS	01/04/19 11:30	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X901029	AJH	01/07/19 14:43	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.96	mg/L	0.20	0.14		X902279	DJS	01/15/19 08:40	
EPA 300.0	**Fluoride**	0.592	mg/L	0.100	0.062		X902279	DJS	01/15/19 08:40	
EPA 300.0	**Sulfate as SO4**	9.38	mg/L	0.30	0.18		X902279	DJS	01/15/19 08:40	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.57 meq/L Anion Sum: 1.67 meq/L C/A Balance: -3.17 % Calculated TDS: 96 TDS/cTDS: 0.90

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

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Project Name: BMSL - Routine
Work Order: **X9A0052**
Reported: 21-Jan-19 17:12

Client Sample ID: **190102BMGM19**
SVL Sample ID: **X9A0052-03 (Ground Water)**

Sampled: 02-Jan-19 11:30
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	24.9	mg/L	0.100	0.069		X901172	DT	01/18/19 12:23	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.238	mg/L	0.100	0.056		X901168	AS	01/17/19 10:41	
EPA 200.7	**Manganese**	0.319	mg/L	0.0080	0.0034		X901168	AS	01/17/19 10:41	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901109	KWH	01/17/19 12:39	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	107	mg/L	10			X901119	RS	01/04/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.953	mg/L	0.100	0.062		X902279	DJS	01/15/19 09:10	
EPA 300.0	**Sulfate as SO4**	9.08	mg/L	0.30	0.18		X902279	DJS	01/15/19 09:10	

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Project Name: BMSL - Routine
Work Order: **X9A0052**
Reported: 21-Jan-19 17:12

Client Sample ID: **190102BMGM21**
SVL Sample ID: **X9A0052-04 (Ground Water)**

Sampled: 02-Jan-19 12:05
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	31.2	mg/L	0.100	0.069		X901172	DT	01/18/19 12:27	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X901168	DT	01/17/19 13:03	
EPA 200.7	**Manganese**	0.355	mg/L	0.0080	0.0034		X901168	AS	01/17/19 11:03	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901109	KWH	01/17/19 12:41	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	138	mg/L	10			X901119	RS	01/04/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.41	mg/L	0.100	0.062		X902279	DJS	01/15/19 09:40	
EPA 300.0	**Sulfate as SO4**	18.3	mg/L	0.30	0.18		X902279	DJS	01/15/19 09:40	

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Project Name: BMSL - Routine
Work Order: **X9A0052**
Reported: 21-Jan-19 17:12

Client Sample ID: **190102BMGM24**
SVL Sample ID: **X9A0052-05 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 02-Jan-19 12:40
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	100	mg/L	0.100	0.069		X901172	DT	01/18/19 12:39	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.67	mg/L	0.100	0.056		X901168	DT	01/17/19 13:07	
EPA 200.7	**Manganese**	1.09	mg/L	0.0080	0.0034		X901168	AS	01/17/19 11:07	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901109	KWH	01/17/19 12:44	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	521	mg/L	10			X901119	RS	01/04/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.718	mg/L	0.100	0.062		X902279	DJS	01/15/19 10:10	
EPA 300.0	**Sulfate as SO4**	233	mg/L	3.00	1.80	10	X902279	DJS	01/15/19 10:25	D2

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Project Name: BMSL - Routine
Work Order: X9A0052
Reported: 21-Jan-19 17:12

Client Sample ID: **190102BMGM11R**
SVL Sample ID: **X9A0052-06 (Ground Water)**

Sampled: 02-Jan-19 13:15
Received: 03-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	76.8	mg/L	0.100	0.069		X901172	DT	01/18/19 12:43	
EPA 200.7	**Magnesium**	15.2	mg/L	0.50	0.32		X901172	DT	01/18/19 12:43	
EPA 200.7	**Potassium**	2.36	mg/L	0.50	0.18		X901172	DT	01/18/19 12:43	
EPA 200.7	**Silica (SiO2)**	18.3	mg/L	0.17	0.12		X901172	DT	01/18/19 12:43	
EPA 200.7	**Sodium**	14.8	mg/L	0.50	0.12		X901172	DT	01/18/19 12:43	
SM 2340 B	**Hardness (as CaCO3)**	254	mg/L	2.31	1.49		N/A		01/18/19 12:43	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X901168	AS	01/17/19 11:11	
EPA 200.7	**Barium**	0.0427	mg/L	0.0020	0.0019		X901168	AS	01/17/19 11:11	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X901168	AS	01/17/19 11:11	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X901168	AS	01/17/19 11:11	
EPA 200.7	**Iron**	0.387	mg/L	0.100	0.056		X901168	DT	01/17/19 13:11	
EPA 200.7	**Manganese**	0.345	mg/L	0.0080	0.0034		X901168	AS	01/17/19 11:11	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X901168	AS	01/17/19 11:11	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X901168	AS	01/17/19 11:11	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X901109	KWH	01/17/19 12:47	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X901109	KWH	01/17/19 12:47	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X901109	KWH	01/17/19 12:47	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X901109	KWH	01/17/19 12:47	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X901109	KWH	01/17/19 12:47	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X901123	DPW	01/08/19 13:44	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	172	mg/L as CaCO3	1.0			X902137	DKS	01/14/19 13:08	
SM 2540 C	**Total Diss. Solids**	364	mg/L	10			X901119	RS	01/04/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.25	mg/L	0.20	0.14		X902279	DJS	01/15/19 10:40	
EPA 300.0	**Fluoride**	0.871	mg/L	0.100	0.062		X902279	DJS	01/15/19 10:40	
EPA 300.0	**Sulfate as SO4**	127	mg/L	3.00	1.80	10	X902279	DJS	01/15/19 10:55	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 5.82 meq/L Anion Sum: 6.22 meq/L C/A Balance: -3.30 % Calculated TDS: 362 TDS/cTDS: 1.01

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Project Name: BMSL - Routine
Work Order: **X9A0067**
Reported: 21-Jan-19 17:23

Client Sample ID: **190103BMGM16**
SVL Sample ID: **X9A0067-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 03-Jan-19 08:20
Received: 04-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	17.9	mg/L	0.100	0.069		X901172	DT	01/18/19 12:47	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.108	mg/L	0.100	0.056		X902087	AS	01/20/19 12:59	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X902087	AS	01/20/19 12:59	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X902080	KWH	01/17/19 11:57	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	93	mg/L	10			X901135	RS	01/04/19 15:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.610	mg/L	0.100	0.062		X902280	DJS	01/17/19 23:05	
EPA 300.0	**Sulfate as SO4**	8.26	mg/L	0.30	0.18		X902280	DJS	01/17/19 23:05	

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Project Name: BMSL - Routine
Work Order: **X9A0067**
Reported: 21-Jan-19 17:23

Client Sample ID: **190103BMGFB**
SVL Sample ID: **X9A0067-02 (Surface Water)**

Sampled: 03-Jan-19 08:15
Received: 04-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X901172	DT	01/18/19 12:54	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X902087	AS	01/20/19 13:12	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X902087	AS	01/20/19 13:12	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X902080	KWH	01/17/19 11:59	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X901135	RS	01/04/19 15:55	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X902280	DJS	01/17/19 23:30	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X902280	DJS	01/17/19 23:30	

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Project Name: BMSL - Routine
Work Order: **X9A0067**
Reported: 21-Jan-19 17:23

Client Sample ID: **190103BMGRB**
SVL Sample ID: **X9A0067-03 (Surface Water)**

Sampled: 03-Jan-19 08:35
Received: 04-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X901172	DT	01/18/19 12:58	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X902087	AS	01/20/19 13:17	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X902087	AS	01/20/19 13:17	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X902080	KWH	01/17/19 12:02	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X901135	RS	01/04/19 15:55	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X902280	DJS	01/17/19 23:43	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X902280	DJS	01/17/19 23:43	

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Project Name: BMSL - Routine
Work Order: **X9A0067**
Reported: 21-Jan-19 17:23

Client Sample ID: **190103BMGM22**
SVL Sample ID: **X9A0067-04 (Ground Water)**

Sampled: 03-Jan-19 09:05
Received: 04-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	41.8	mg/L	0.100	0.069		X901172	DT	01/18/19 13:02	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.321	mg/L	0.100	0.056		X902087	AS	01/20/19 13:21	
EPA 200.7	**Manganese**	0.162	mg/L	0.0080	0.0034		X902087	AS	01/20/19 13:21	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X902080	KWH	01/17/19 12:05	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	205	mg/L	10			X901135	RS	01/04/19 15:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.45	mg/L	0.100	0.062		X902280	DJS	01/17/19 23:56	
EPA 300.0	**Sulfate as SO4**	43.8	mg/L	0.30	0.18		X902280	DJS	01/17/19 23:56	

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Project Name: BMSL - Routine
Work Order: **X9A0067**
Reported: 21-Jan-19 17:23

Client Sample ID: **190103BMGM26**
SVL Sample ID: **X9A0067-05 (Ground Water)**

Sampled: 03-Jan-19 09:40
Received: 04-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	33.8	mg/L	0.100	0.069		X901172	DT	01/18/19 13:05	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.559	mg/L	0.100	0.056		X902087	AS	01/20/19 13:26	
EPA 200.7	**Manganese**	0.284	mg/L	0.0080	0.0034		X902087	AS	01/20/19 13:26	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X902080	KWH	01/17/19 12:07	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	166	mg/L	10			X901135	RS	01/04/19 15:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.757	mg/L	0.100	0.062		X902280	DJS	01/18/19 00:47	
EPA 300.0	**Sulfate as SO4**	11.9	mg/L	0.30	0.18		X902280	DJS	01/18/19 00:47	

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

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Project Name: BMSL - Routine
Work Order: **X9A0067**
Reported: 21-Jan-19 17:23

Client Sample ID: **190103BMGM34**
SVL Sample ID: **X9A0067-06 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 03-Jan-19 10:15
Received: 04-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	20.0	mg/L	0.100	0.069		X901172	DT	01/18/19 13:09	
EPA 200.7	**Magnesium**	5.22	mg/L	0.50	0.32		X901172	DT	01/18/19 13:09	
EPA 200.7	**Potassium**	0.84	mg/L	0.50	0.18		X901172	DT	01/18/19 13:09	
EPA 200.7	**Silica (SiO2)**	15.3	mg/L	0.17	0.12		X901172	DT	01/18/19 13:09	
EPA 200.7	**Sodium**	7.18	mg/L	0.50	0.12		X901172	DT	01/18/19 13:09	
SM 2340 B	**Hardness (as CaCO3)**	71.4	mg/L	2.31	1.49		N/A		01/18/19 13:09	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X902087	AS	01/20/19 13:30	
EPA 200.7	**Barium**	0.0384	mg/L	0.0020	0.0019		X902087	AS	01/20/19 13:30	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X902087	AS	01/20/19 13:30	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X902087	AS	01/20/19 13:30	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X902087	AS	01/20/19 13:30	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X902087	AS	01/20/19 13:30	
EPA 200.7	**Manganese**	0.199	mg/L	0.0080	0.0034		X902087	AS	01/20/19 13:30	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X902087	AS	01/20/19 13:30	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X902087	AS	01/20/19 13:30	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X902080	KWH	01/17/19 11:44	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X902080	KWH	01/17/19 11:44	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X902080	KWH	01/17/19 11:44	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X902080	KWH	01/17/19 11:44	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X902271	DPW	01/15/19 09:41	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	72.3	mg/L as CaCO3	1.0			X902137	DKS	01/14/19 13:15	
SM 2540 C	**Total Diss. Solids**	124	mg/L	10			X901135	RS	01/04/19 15:55	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.31	mg/L	0.20	0.14		X902280	DJS	01/18/19 01:13	
EPA 300.0	**Fluoride**	0.513	mg/L	0.100	0.062		X902280	DJS	01/18/19 01:13	
EPA 300.0	**Sulfate as SO4**	19.3	mg/L	0.30	0.18		X902280	DJS	01/18/19 01:13	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.78 meq/L Anion Sum: 1.94 meq/L C/A Balance: -4.33 % Calculated TDS: 114 TDS/cTDS: 1.09

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

Connor Williams
Project Manager

SVL holds the following certifications:
AZ:0538, CA:2080, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9A0067**
Reported: 21-Jan-19 17:23

Client Sample ID: **190103BMGM10**
SVL Sample ID: **X9A0067-07 (Ground Water)**

Sampled: 03-Jan-19 10:50
Received: 04-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	64.0	mg/L	0.100	0.069		X901172	DT	01/18/19 13:13	
EPA 200.7	**Magnesium**	9.20	mg/L	0.50	0.32		X901172	DT	01/18/19 13:13	
EPA 200.7	**Potassium**	1.58	mg/L	0.50	0.18		X901172	DT	01/18/19 13:13	
EPA 200.7	**Silica (SiO2)**	27.7	mg/L	0.17	0.12		X901172	DT	01/18/19 13:13	
EPA 200.7	**Sodium**	19.6	mg/L	0.50	0.12		X901172	DT	01/18/19 13:13	
SM 2340 B	**Hardness (as CaCO3)**	198	mg/L	2.31	1.49		N/A		01/18/19 13:13	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X902087	AS	01/20/19 13:45	
EPA 200.7	**Barium**	0.120	mg/L	0.0020	0.0019		X902087	AS	01/20/19 13:45	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X902087	AS	01/20/19 13:45	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X902087	AS	01/20/19 13:45	
EPA 200.7	**Iron**	1.01	mg/L	0.100	0.056		X902087	AS	01/20/19 13:45	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X902087	AS	01/20/19 13:45	
EPA 200.7	**Manganese**	0.803	mg/L	0.0080	0.0034		X902087	AS	01/20/19 13:45	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X902087	AS	01/20/19 13:45	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X902087	AS	01/20/19 13:45	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X902080	KWH	01/17/19 12:10	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X902080	KWH	01/17/19 12:10	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X902080	KWH	01/17/19 12:10	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X902080	KWH	01/17/19 12:10	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X902271	DPW	01/15/19 09:43	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	231	mg/L as CaCO3	1.0			X902137	DKS	01/14/19 13:22	
SM 2540 C	**Total Diss. Solids**	312	mg/L	10			X901135	RS	01/04/19 15:55	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.09	mg/L	0.20	0.14		X902280	DJS	01/18/19 02:04	
EPA 300.0	**Fluoride**	0.918	mg/L	0.100	0.062		X902280	DJS	01/18/19 02:04	
EPA 300.0	**Sulfate as SO4**	35.5	mg/L	0.30	0.18		X902280	DJS	01/18/19 02:04	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.92 meq/L Anion Sum: 5.49 meq/L C/A Balance: -5.50 % Calculated TDS: 300 TDS/cTDS: 1.04

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

Connor Williams
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Project Name: BMSL - Routine
Work Order: **X9A0350**
Reported: 05-Feb-19 11:51

Client Sample ID: **190116BMGM12**
SVL Sample ID: **X9A0350-01 (Ground Water)**

Sampled: 16-Jan-19 09:00
Received: 18-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	48.6	mg/L	0.100	0.069		X904127	DT	01/31/19 13:24	
EPA 200.7	**Magnesium**	8.09	mg/L	0.50	0.32		X904127	DT	01/31/19 13:24	
EPA 200.7	**Potassium**	1.93	mg/L	0.50	0.18		X904127	DT	01/31/19 13:24	
EPA 200.7	**Silica (SiO2)**	21.3	mg/L	0.17	0.12		X904127	DT	01/31/19 13:24	
EPA 200.7	**Sodium**	12.9	mg/L	0.50	0.12		X904127	DT	01/31/19 13:24	
SM 2340 B	**Hardness (as CaCO3)**	155	mg/L	2.31	1.49		N/A		01/31/19 13:24	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X904126	AS	02/04/19 12:27	
EPA 200.7	**Barium**	0.162	mg/L	0.0020	0.0019		X904126	AS	02/04/19 12:27	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X904126	AS	02/04/19 12:27	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X904126	AS	02/04/19 12:27	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X904126	AS	02/04/19 12:27	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X904126	AS	02/04/19 12:27	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X904126	AS	02/04/19 12:27	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X904126	AS	02/04/19 12:27	
EPA 200.7	Zinc	0.521	mg/L	0.010	0.005		X904126	AS	02/04/19 12:27	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X904144	KWH	01/31/19 09:39	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X904144	KWH	01/31/19 09:39	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X904144	KWH	01/31/19 09:39	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X904144	KWH	01/31/19 09:39	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X905018	DPW	01/30/19 14:12	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	148	mg/L as CaCO3	1.0			X904222	DKS	01/28/19 08:02	
SM 2540 C	**Total Diss. Solids**	212	mg/L	10			X904020	KAG	01/21/19 14:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X904120	AJH	01/23/19 13:18	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	21.5	mg/L	2.00	1.40	10	X905089	DJS	01/30/19 21:51	D2
EPA 300.0	**Fluoride**	0.312	mg/L	0.100	0.062		X905089	DJS	01/30/19 21:36	
EPA 300.0	**Sulfate as SO4**	12.4	mg/L	0.30	0.18		X905089	DJS	01/30/19 21:36	

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.73 meq/L Anion Sum: 3.84 meq/L C/A Balance: -1.45 % Calculated TDS: 216 TDS/cTDS: 0.98

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

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Project Name: BMSL - Routine
Work Order: **X9A0350**
Reported: 05-Feb-19 11:51

Client Sample ID: **190116BMGM9**
SVL Sample ID: **X9A0350-02 (Ground Water)**

Sampled: 16-Jan-19 09:40
Received: 18-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	81.0	mg/L	0.100	0.069		X904127	DT	01/31/19 13:33	
EPA 200.7	**Magnesium**	12.4	mg/L	0.50	0.32		X904127	DT	01/31/19 13:33	
EPA 200.7	**Potassium**	1.73	mg/L	0.50	0.18		X904127	DT	01/31/19 13:33	
EPA 200.7	**Silica (SiO2)**	26.8	mg/L	0.17	0.12		X904127	DT	01/31/19 13:33	
EPA 200.7	**Sodium**	24.6	mg/L	0.50	0.12		X904127	DT	01/31/19 13:33	
SM 2340 B	**Hardness (as CaCO3)**	253	mg/L	2.31	1.49		N/A		01/31/19 13:33	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X904126	AS	02/04/19 12:33	
EPA 200.7	**Barium**	0.132	mg/L	0.0020	0.0019		X904126	AS	02/04/19 12:33	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X904126	AS	02/04/19 12:33	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X904126	AS	02/04/19 12:33	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X904126	AS	02/04/19 12:33	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X904126	AS	02/04/19 12:33	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X904126	AS	02/04/19 12:33	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X904126	AS	02/04/19 12:33	
EPA 200.7	**Zinc**	0.393	mg/L	0.010	0.005		X904126	AS	02/04/19 12:33	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X904144	KWH	01/31/19 09:47	
EPA 200.8	**Copper**	0.00470	mg/L	0.00300	0.00036		X904144	KWH	01/31/19 09:47	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X904144	KWH	01/31/19 09:47	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X904144	KWH	01/31/19 09:47	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X905018	DPW	01/30/19 14:14	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	294	mg/L as CaCO3	1.0			X904222	DKS	01/28/19 08:05	
SM 2540 C	**Total Diss. Solids**	334	mg/L	10			X904020	KAG	01/21/19 14:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X904120	AJH	01/23/19 12:54	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.76	mg/L	0.20	0.14		X905089	DJS	01/30/19 22:06	
EPA 300.0	**Fluoride**	0.255	mg/L	0.100	0.062		X905089	DJS	01/30/19 22:06	
EPA 300.0	**Sulfate as SO4**	19.9	mg/L	0.30	0.18		X905089	DJS	01/30/19 22:06	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.20 meq/L Anion Sum: 6.41 meq/L C/A Balance: -1.66 % Calculated TDS: 347 TDS/cTDS: 0.96

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

Connor Williams
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Project Name: BMSL - Routine
Work Order: **X9A0350**
Reported: 05-Feb-19 11:51

Client Sample ID: **190116BMGM13R**
SVL Sample ID: **X9A0350-03 (Ground Water)**

Sampled: 16-Jan-19 10:50
Received: 18-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	86.6	mg/L	0.100	0.069		X904127	DT	01/31/19 13:37	
EPA 200.7	**Magnesium**	14.2	mg/L	0.50	0.32		X904127	DT	01/31/19 13:37	
EPA 200.7	**Potassium**	1.41	mg/L	0.50	0.18		X904127	DT	01/31/19 13:37	
EPA 200.7	**Silica (SiO2)**	25.2	mg/L	0.17	0.12		X904127	DT	01/31/19 13:37	
EPA 200.7	**Sodium**	31.2	mg/L	0.50	0.12		X904127	DT	01/31/19 13:37	
SM 2340 B	**Hardness (as CaCO3)**	275	mg/L	2.31	1.49		N/A		01/31/19 13:37	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X904126	AS	02/04/19 12:37	
EPA 200.7	**Barium**	0.143	mg/L	0.0020	0.0019		X904126	AS	02/04/19 12:37	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X904126	AS	02/04/19 12:37	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X904126	AS	02/04/19 12:37	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X904126	AS	02/04/19 12:37	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X904126	AS	02/04/19 12:37	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X904126	AS	02/04/19 12:37	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X904126	AS	02/04/19 12:37	
EPA 200.7	**Zinc**	0.625	mg/L	0.010	0.005		X904126	AS	02/04/19 12:37	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X904144	KWH	01/31/19 09:49	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X904144	KWH	01/31/19 09:49	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X904144	KWH	01/31/19 09:49	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X904144	KWH	01/31/19 09:49	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X905018	DPW	01/30/19 14:16	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	335	mg/L as CaCO3	1.0			X904222	DKS	01/28/19 08:09	
SM 2540 C	**Total Diss. Solids**	369	mg/L	10			X904020	KAG	01/21/19 14:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X904120	AJH	01/23/19 13:20	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.72	mg/L	0.20	0.14		X905089	DJS	01/30/19 22:36	
EPA 300.0	**Fluoride**	0.383	mg/L	0.100	0.062		X905089	DJS	01/30/19 22:36	
EPA 300.0	**Sulfate as SO4**	18.1	mg/L	0.30	0.18		X905089	DJS	01/30/19 22:36	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.91 meq/L Anion Sum: 7.20 meq/L C/A Balance: -2.00 % Calculated TDS: 382 TDS/cTDS: 0.97

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

Connor Williams
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Project Name: BMSL - Routine
Work Order: **X9A0563**
Reported: 15-Feb-19 14:40

Client Sample ID: **190130BMGLD**
SVL Sample ID: **X9A0563-01 (Ground Water)**

Sampled: 30-Jan-19 09:25
Received: 31-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	516	mg/L	0.100	0.069		X905242	AS	02/15/19 12:13	M3
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X905242	AS	02/15/19 12:13	
EPA 200.7	**Sodium**	964	mg/L	5.00	1.20	10	X905242	AS	02/15/19 12:45	D2,M4
EPA 200.7	**Zinc**	< 0.010	mg/L	0.010	0.005		X905242	AS	02/15/19 12:13	
EPA 200.8	**Copper**	0.0615	mg/L	0.00200	0.00180	5	X905228	KWH	02/13/19 12:41	D1
Classical Chemistry Parameters										
SM 4500 CN I	**Cyanide (WAD)**	< 0.0100	mg/L	0.0100	0.0044		X906030	AJH	02/05/19 13:55	

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

Connor Williams
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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9A0563**
San Luis, CO 81152	Reported: 15-Feb-19 14:40

Client Sample ID: **190130BMGCOL**
SVL Sample ID: **X9A0563-02 (Surface Water)**

Sampled: 30-Jan-19 09:45
Received: 31-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	556	mg/L	0.100	0.069		X905242	AS	02/15/19 12:23	
EPA 200.7	**Iron**	84.7	mg/L	0.100	0.056		X905242	AS	02/15/19 12:23	
EPA 200.7	**Sodium**	962	mg/L	5.00	1.20	10	X905242	AS	02/15/19 12:57	D2
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X905242	AS	02/15/19 12:23	
EPA 200.8	**Copper**	0.0473	mg/L	0.00200	0.00180	5	X905228	KWH	02/13/19 12:44	D1
Classical Chemistry Parameters										
SM 4500 CN I	**Cyanide (WAD)**	0.0170	mg/L	0.0100	0.0044		X906030	AJH	02/05/19 13:57	

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

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Project Name: BMSL - Routine
Work Order: **X9A0563**
Reported: 15-Feb-19 14:40

Client Sample ID: **190130BMGTAILS**
SVL Sample ID: **X9A0563-03 (Surface Water)**

Sampled: 30-Jan-19 10:30
Received: 31-Jan-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	174	mg/L	0.100	0.069		X905242	AS	02/15/19 12:26	
EPA 200.7	**Iron**	0.122	mg/L	0.100	0.056		X905242	AS	02/15/19 12:26	
EPA 200.7	**Sodium**	339	mg/L	0.50	0.12		X905242	AS	02/15/19 12:26	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X905242	AS	02/15/19 12:26	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X905228	KWH	02/13/19 12:33	D1
EPA 200.8	**Copper**	0.0117	mg/L	0.00200	0.00180	5	X905228	KWH	02/13/19 12:33	D1

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

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Project Name: BMSL - Routine
Work Order: **X9B0045**
Reported: 22-Feb-19 16:28

Client Sample ID: **190204BMGRS2**
SVL Sample ID: **X9B0045-01 (Surface Water)**

Sampled: 04-Feb-19 08:05
Received: 05-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Aluminum**	0.35	mg/L	0.08	0.05		X905242	AS	02/15/19 12:30	
EPA 200.7	**Barium**	0.0281	mg/L	0.0020	0.0019		X905242	AS	02/15/19 12:30	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X905242	AS	02/15/19 12:30	
EPA 200.7	**Calcium**	19.0	mg/L	0.100	0.069		X905242	AS	02/15/19 12:30	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X905242	AS	02/15/19 12:30	
EPA 200.7	**Iron**	0.599	mg/L	0.100	0.056		X905242	AS	02/15/19 12:30	
EPA 200.7	**Magnesium**	4.81	mg/L	0.50	0.32		X905242	AS	02/15/19 12:30	
EPA 200.7	**Manganese**	0.0704	mg/L	0.0080	0.0034		X905242	AS	02/15/19 12:30	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X905242	AS	02/15/19 12:30	
EPA 200.7	**Potassium**	1.62	mg/L	0.50	0.18		X905242	AS	02/15/19 12:30	
EPA 200.7	**Silica (SiO2)**	13.5	mg/L	0.17	0.12		X905242	AS	02/15/19 12:30	
EPA 200.7	**Sodium**	5.46	mg/L	0.50	0.12		X905242	AS	02/15/19 12:30	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X905242	AS	02/15/19 12:30	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X905228	KWH	02/13/19 12:47	D1
EPA 200.8	Cadmium	< 0.00050	mg/L	0.00050	0.00032	5	X905228	KWH	02/13/19 12:47	D1
EPA 200.8	Copper	< 0.00200	mg/L	0.00200	0.00180	5	X905228	KWH	02/13/19 12:47	D1
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00070	5	X905228	KWH	02/13/19 12:47	D1
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0012	5	X905228	KWH	02/13/19 12:47	D1
EPA 200.8	Silver	< 0.000400	mg/L	0.000400	0.000305	5	X905228	KWH	02/13/19 12:47	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X907090	DPW	02/13/19 12:55	
SM 2340 B	**Hardness (as CaCO3)**	67.1	mg/L	2.31	1.49		N/A		02/15/19 12:30	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X906113	DT	02/20/19 09:15	
EPA 200.7	**Barium**	0.0212	mg/L	0.0020	0.0019		X906113	DT	02/20/19 09:15	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X906113	DT	02/20/19 09:15	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X906113	DT	02/20/19 09:15	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X906113	DT	02/20/19 09:15	
EPA 200.7	**Manganese**	0.0144	mg/L	0.0080	0.0034		X906113	DT	02/20/19 09:15	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X906113	DT	02/20/19 09:15	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X906113	DT	02/20/19 09:15	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X906126	KWH	02/19/19 07:50	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X906126	KWH	02/19/19 07:50	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906126	KWH	02/19/19 07:50	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X906126	KWH	02/19/19 07:50	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X906126	KWH	02/19/19 07:50	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X906126	KWH	02/19/19 07:50	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X907168	DPW	02/14/19 13:42	

SVL holds the following certifications:
AZ:0538, CA:2080, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

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Battle Mountain - San Luis
PO Box 310
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Project Name: BMSL - Routine
Work Order: **X9B0045**
Reported: 22-Feb-19 16:28

Client Sample ID: **190204BMGRS2**
SVL Sample ID: **X9B0045-01 (Surface Water)**

Sampled: 04-Feb-19 08:05
Received: 05-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X906132	AJH	02/08/19 11:19	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X906133	AJH	02/11/19 11:50	
EPA 353.2	Nitrate/Nitrite as N	0.067	mg/L	0.050	0.049		X906178	SM	02/12/19 11:15	
SM 2320 B	Total Alkalinity	65.2	mg/L as CaCO3	1.0			X906120	DKS	02/07/19 08:25	
SM 2320 B	Bicarbonate	65.2	mg/L as CaCO3	1.0			X906120	DKS	02/07/19 08:25	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X906120	DKS	02/07/19 08:25	
SM 2540 C	Total Diss. Solids	97	mg/L	10			X908177	RS	02/21/19 12:00	H1
SM 2540 D	Total Susp. Solids	5.0	mg/L	5.0			X906123	RS	02/06/19 14:55	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X906088	AJH	02/06/19 13:16	
Anions by Ion Chromatography										
EPA 300.0	Chloride	0.84	mg/L	0.20	0.14		X907159	DJS	02/19/19 15:54	
EPA 300.0	Fluoride	0.541	mg/L	0.100	0.062		X907159	DJS	02/19/19 15:54	
EPA 300.0	Sulfate as SO4	7.68	mg/L	0.30	0.18		X907159	DJS	02/19/19 15:54	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.63 meq/L Anion Sum: 1.52 meq/L C/A Balance: 3.59 % Calculated TDS: 93 TDS/cTDS: 1.04

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

Dianne Gardner
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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9B0045
San Luis, CO 81152	Reported: 22-Feb-19 16:28

Client Sample ID: **190204BMGRS5**
SVL Sample ID: **X9B0045-02 (Surface Water)**

Sampled: 04-Feb-19 08:40
Received: 05-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Iron	1.02	mg/L	0.100	0.028		X907018	AS	02/12/19 09:02	
EPA 200.7	Manganese	0.235	mg/L	0.0080	0.0017		X907018	AS	02/12/19 09:02	
Metals (Dissolved)										
EPA 200.7	Iron	0.256	mg/L	0.100	0.056		X906113	DT	02/20/19 09:18	
EPA 200.7	Manganese	0.199	mg/L	0.0080	0.0034		X906113	DT	02/20/19 09:18	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X906088	AJH	02/06/19 13:18	
Anions by Ion Chromatography										
EPA 300.0	Sulfate as SO4	12.5	mg/L	0.30	0.18		X907159	DJS	02/19/19 16:33	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9B0045**
San Luis, CO 81152	Reported: 22-Feb-19 16:28

Client Sample ID: **190204BMGM19**
SVL Sample ID: **X9B0045-03 (Surface Water)**

Sampled: 04-Feb-19 09:20
Received: 05-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	26.9	mg/L	0.100	0.069		X905242	AS	02/15/19 12:33	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.245	mg/L	0.100	0.056		X906113	DT	02/20/19 09:37	
EPA 200.7	**Manganese**	0.319	mg/L	0.0080	0.0034		X906113	DT	02/20/19 09:37	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906126	KWH	02/19/19 08:02	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	106	mg/L	10			X906124	RS	02/06/19 14:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.900	mg/L	0.100	0.062		X907159	DJS	02/19/19 16:58	
EPA 300.0	**Sulfate as SO4**	8.98	mg/L	0.30	0.18		X907159	DJS	02/19/19 16:58	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9B0045**
San Luis, CO 81152	Reported: 22-Feb-19 16:28

Client Sample ID: **190204BMGM21**
SVL Sample ID: **X9B0045-04 (Surface Water)**

Sampled: 04-Feb-19 09:55
Received: 05-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	35.0	mg/L	0.100	0.069		X905242	AS	02/15/19 12:36	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X906113	DT	02/20/19 09:41	
EPA 200.7	**Manganese**	0.348	mg/L	0.0080	0.0034		X906113	DT	02/20/19 09:41	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906126	KWH	02/19/19 08:04	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	145	mg/L	10			X906124	RS	02/06/19 14:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.37	mg/L	0.100	0.062		X907159	DJS	02/19/19 17:11	
EPA 300.0	**Sulfate as SO4**	18.2	mg/L	0.30	0.18		X907159	DJS	02/19/19 17:11	

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Battle Mountain - San Luis
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San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: **X9B0045**
Reported: 22-Feb-19 16:28

Client Sample ID: **190204BMGM24**
SVL Sample ID: **X9B0045-05 (Surface Water)**

Sampled: 04-Feb-19 10:35
Received: 05-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	106	mg/L	0.100	0.069		X905242	AS	02/15/19 12:49	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.22	mg/L	0.100	0.056		X906113	DT	02/20/19 09:45	
EPA 200.7	**Manganese**	1.04	mg/L	0.0080	0.0034		X906113	DT	02/20/19 09:45	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906126	KWH	02/19/19 08:07	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	510	mg/L	10			X906124	RS	02/06/19 14:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.671	mg/L	0.100	0.062		X907159	DJS	02/19/19 18:02	
EPA 300.0	**Sulfate as SO4**	221	mg/L	3.00	1.80	10	X907159	DJS	02/19/19 18:15	D2

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

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Project Name: BMSL - Routine
Work Order: **X9B0045**
Reported: 22-Feb-19 16:28

Client Sample ID: **190204BMGM11R**
SVL Sample ID: **X9B0045-06 (Surface Water)**

Sampled: 04-Feb-19 11:10
Received: 05-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	80.8	mg/L	0.100	0.069		X905242	AS	02/15/19 12:53	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.122	mg/L	0.100	0.056		X906113	DT	02/20/19 09:48	
EPA 200.7	**Manganese**	0.243	mg/L	0.0080	0.0034		X906113	DT	02/20/19 09:48	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906126	KWH	02/19/19 08:09	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	346	mg/L	10			X906124	RS	02/06/19 14:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.803	mg/L	0.100	0.062		X907159	DJS	02/19/19 18:28	
EPA 300.0	**Sulfate as SO4**	112	mg/L	3.00	1.80	10	X907159	DJS	02/19/19 18:41	D2

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9B0140**
Reported: 22-Feb-19 15:19

Client Sample ID: **190206BMGBF4**
SVL Sample ID: **X9B0140-01 (Ground Water)**

Sampled: 06-Feb-19 08:35
Received: 07-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	147	mg/L	0.100	0.069		X907078	DT	02/20/19 15:09	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.503	mg/L	0.100	0.056		X907071	DT	02/21/19 13:30	
EPA 200.7	**Manganese**	5.28	mg/L	0.0080	0.0034		X907071	DT	02/21/19 13:30	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906215	KWH	02/20/19 08:39	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	697	mg/L	10			X907013	KG	02/11/19 14:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	4.31	mg/L	0.100	0.062		X908113	DJS	02/21/19 13:59	
EPA 300.0	**Sulfate as SO4**	298	mg/L	3.00	1.80	10	X908113	DJS	02/21/19 14:13	D2

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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9B0140
San Luis, CO 81152	Reported: 22-Feb-19 15:19

Client Sample ID: **190206BMGBF6**
SVL Sample ID: **X9B0140-02 (Ground Water)**

Sampled: 06-Feb-19 09:05
Received: 07-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	124	mg/L	0.100	0.069		X907078	DT	02/20/19 15:20	
Metals (Dissolved)										
EPA 200.7	**Iron**	9.44	mg/L	0.100	0.056		X907071	DT	02/21/19 13:38	
EPA 200.7	**Manganese**	6.69	mg/L	0.0080	0.0034		X907071	DT	02/21/19 13:38	
EPA 200.8	**Copper**	0.149	mg/L	0.00300	0.00036		X906215	KWH	02/20/19 08:42	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	492	mg/L	10			X907013	KG	02/11/19 14:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	2.93	mg/L	0.100	0.062		X908113	DJS	02/21/19 14:26	
EPA 300.0	**Sulfate as SO4**	212	mg/L	3.00	1.80	10	X908113	DJS	02/21/19 14:40	D2

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9B0140**
Reported: 22-Feb-19 15:19

Client Sample ID: **190206BMGFB**
SVL Sample ID: **X9B0140-03 (Ground Water)**

Sampled: 06-Feb-19 09:00
Received: 07-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X907078	DT	02/20/19 15:23	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X907071	DT	02/21/19 13:41	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X907071	DT	02/21/19 13:41	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906215	KWII	02/20/19 08:45	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X907013	KG	02/11/19 14:45	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X908113	DJS	02/21/19 16:13	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X908113	DJS	02/21/19 16:13	

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9B0140**
Reported: 22-Feb-19 15:19

Client Sample ID: **190206BMGRB**
SVL Sample ID: **X9B0140-04 (Ground Water)**

Sampled: 06-Feb-19 09:20
Received: 07-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X907078	DT	02/20/19 15:27	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X907071	DT	02/21/19 13:44	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X907071	DT	02/21/19 13:44	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X906215	KWH	02/20/19 08:47	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X907013	KG	02/11/19 14:45	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X908113	DJS	02/21/19 16:26	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X908113	DJS	02/21/19 16:26	

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9B0477**
Reported: 13-Mar-19 11:21

Client Sample ID: **190226WTPEFF**
SVL Sample ID: **X9B0477-01 (Ground Water)**

Sampled: 26-Feb-19 09:00
Received: 28-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X909242	KWH	03/08/19 11:55	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X909234	DPW	03/05/19 13:06	
Metals (Total Recoverable)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X910008	DT	03/11/19 11:35	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X910008	DT	03/11/19 11:35	
EPA 200.7	Molybdenum	0.014	mg/L	0.008	0.002		X910008	DT	03/11/19 11:35	
EPA 200.8	Aluminum	< 0.0100	mg/L	0.0100	0.0040	2	X910073	KWH	03/08/19 12:26	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X910073	KWH	03/08/19 12:26	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X910002	DT	03/08/19 14:01	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X910002	DT	03/08/19 14:01	
Metals (Potentially Dissolved)										
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X910010	AS	03/05/19 10:05	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X910010	AS	03/05/19 10:05	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X910079	KWH	03/11/19 10:49	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X910079	KWH	03/11/19 10:49	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X910079	KWH	03/11/19 10:49	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X910079	KWH	03/11/19 10:49	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X910079	KWH	03/11/19 10:49	
EPA 200.8	Uranium	0.00248	mg/L	0.00100	0.000052		X910079	KWH	03/11/19 10:49	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	114	mg/L	10			X909221	RS	03/01/19 12:10	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X909220	RS	03/01/19 12:10	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X910114	APH	03/06/19 12:03	
SM 4500 S F	Sulfide	< 1.00	mg/L	1.00	0.26		X909213	AGF	03/01/19 16:44	
Anions by Ion Chromatography										
EPA 300.0	Chloride	11.5	mg/L	2.00	1.40	10	X910124	DJS	03/11/19 19:18	D2
EPA 300.0	Fluoride	1.28	mg/L	0.100	0.062		X910124	DJS	03/11/19 19:01	
EPA 300.0	Sulfate as SO4	47.8	mg/L	3.00	1.80	10	X910124	DJS	03/11/19 19:18	D2

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

Sophie Milam
Project Manager

SVL holds the following certifications:
AZ:0538, CA:2080, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

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

Project Name: BMSL - Routine
Work Order: **X9B0479**
Reported: 12-Mar-19 13:56

Client Sample ID: **190227BMGTAILS**
SVL Sample ID: **X9B0479-01 (Surface Water)**

Sampled: 27-Feb-19 10:10
Received: 28-Feb-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X909242	KWH	03/08/19 12:08	D1

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

Dianne Gardner
Project Manager

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

Project Name: BMSL - Routine
Work Order: **X9C0139**
Reported: 21-Mar-19 13:35

Client Sample ID: **190306BMGWD1**
SVL Sample ID: **X9C0139-01 (Surface Water)**

Sampled: 06-Mar-19 08:50
Received: 07-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	**Iron**	0.222	mg/L	0.100	0.056		X911063	DPW	03/13/19 13:20	
EPA 200.7	**Manganese**	0.113	mg/L	0.0080	0.0034		X911063	DPW	03/13/19 13:20	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X911063	DPW	03/13/19 13:20	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X910222	AS	03/18/19 10:09	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X910222	AS	03/18/19 10:09	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X910229	APH	03/08/19 13:11	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.709	mg/L	0.100	0.062		X911245	DJS	03/20/19 21:09	
EPA 300.0	**Sulfate as SO4**	20.1	mg/L	0.30	0.18		X911245	DJS	03/20/19 21:09	

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

Connor Williams
Project Manager

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

Project Name: BMSL - Routine
Work Order: **X9C0139**
Reported: 21-Mar-19 13:35

Client Sample ID: **190306BMGSRW**
SVL Sample ID: **X9C0139-02 (Ground Water)**

Sampled: 06-Mar-19 09:25
Received: 07-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X911070	DPW	03/18/19 10:50	
EPA 200.7	**Barium**	0.0812	mg/L	0.0020	0.0019		X911070	DPW	03/18/19 13:08	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X911070	DPW	03/18/19 10:50	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X911070	DPW	03/18/19 10:50	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X911070	DPW	03/18/19 10:50	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X911070	DPW	03/18/19 10:50	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X911070	DPW	03/18/19 10:50	
EPA 200.7	Molybdenum	< 0.008	mg/L	0.008	0.003		X911070	DPW	03/18/19 10:50	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X911070	DPW	03/18/19 10:50	
EPA 200.7	**Zinc**	0.011	mg/L	0.010	0.005		X911070	DPW	03/18/19 10:50	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X910217	AS	03/18/19 11:41	D1
EPA 200.8	Cadmium	< 0.00050	mg/L	0.00050	0.00032	5	X910217	AS	03/18/19 11:41	D1
EPA 200.8	Copper	< 0.00200	mg/L	0.00200	0.00180	5	X910217	AS	03/18/19 11:41	D1
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0012	5	X910217	AS	03/18/19 11:41	D1
EPA 200.8	Silver	< 0.000400	mg/L	0.000400	0.000305	5	X910217	AS	03/18/19 11:41	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X911139	DPW	03/14/19 09:56	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X910229	APH	03/08/19 13:13	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.408	mg/L	0.100	0.062		X911245	DJS	03/20/19 22:02	

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

Connor Williams
Project Manager

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9C0139**
San Luis, CO 81152	Reported: 21-Mar-19 13:35

Client Sample ID: **190306BMGSLM2A**
SVL Sample ID: **X9C0139-03 (Ground Water)**

Sampled: 06-Mar-19 10:05
Received: 07-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	22.2	mg/L	0.100	0.069		X911070	DPW	03/18/19 11:02	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X911063	DPW	03/13/19 13:24	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X911063	DPW	03/13/19 13:24	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	116	mg/L	10			X910250	RS	03/08/19 14:05	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X910229	APH	03/08/19 13:15	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.433	mg/L	0.100	0.062		X911245	DJS	03/20/19 22:37	
EPA 300.0	**Sulfate as SO4**	5.16	mg/L	0.30	0.18		X911245	DJS	03/20/19 22:37	

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

Connor Williams
Project Manager

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9C0139**
San Luis, CO 81152	Reported: 21-Mar-19 13:35

Client Sample ID: **190306BMGSLM2B**
SVL Sample ID: **X9C0139-04 (Ground Water)**

Sampled: 06-Mar-19 10:20
Received: 07-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	22.9	mg/L	0.100	0.069		X911070	DPW	03/18/19 11:05	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X911063	DPW	03/13/19 13:27	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X911063	DPW	03/13/19 13:27	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	109	mg/L	10			X910250	RS	03/08/19 14:05	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X910229	APH	03/08/19 13:17	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.427	mg/L	0.100	0.062		X911245	DJS	03/20/19 22:55	
EPA 300.0	**Sulfate as SO4**	5.76	mg/L	0.30	0.18		X911245	DJS	03/20/19 22:55	

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

Connor Williams
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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9C0139
San Luis, CO 81152	Reported: 21-Mar-19 13:35

Client Sample ID: **190306BMGSLTW**
SVL Sample ID: **X9C0139-05 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 06-Mar-19 10:50
Received: 07-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X911070	DPW	03/18/19 11:09	
EPA 200.7	Barium	0.0446	mg/L	0.0020	0.0019		X911070	DPW	03/18/19 13:12	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X911070	DPW	03/18/19 11:09	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X911070	DPW	03/18/19 11:09	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X911070	DPW	03/18/19 11:09	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X911070	DPW	03/18/19 11:09	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X911070	DPW	03/18/19 11:09	
EPA 200.7	Molybdenum	< 0.008	mg/L	0.008	0.003		X911070	DPW	03/18/19 11:09	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X911070	DPW	03/18/19 11:09	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X911070	DPW	03/18/19 11:09	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X910217	AS	03/18/19 11:44	D1
EPA 200.8	Cadmium	< 0.00050	mg/L	0.00050	0.00032	5	X910217	AS	03/18/19 11:44	D1
EPA 200.8	Copper	0.00228	mg/L	0.00200	0.00180	5	X910217	AS	03/18/19 11:44	D1
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0012	5	X910217	AS	03/18/19 11:44	D1
EPA 200.8	Silver	< 0.000400	mg/L	0.000400	0.000305	5	X910217	AS	03/18/19 11:44	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X911139	DPW	03/14/19 09:58	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X910229	APH	03/08/19 13:19	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	0.450	mg/L	0.100	0.062		X911245	DJS	03/20/19 23:30	

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

Connor Williams
Project Manager

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

Project Name: BMSL - Routine
Work Order: X9C0237
Reported: 27-Mar-19 11:55

Client Sample ID: **190312BMGM14**
SVL Sample ID: **X9C0237-01 (Ground Water)**

Sampled: 12-Mar-19 09:55
Received: 13-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	185	mg/L	0.100	0.069		X911070	DPW	03/18/19 11:12	
EPA 200.7	**Magnesium**	29.7	mg/L	0.50	0.32		X911070	DPW	03/18/19 11:12	
EPA 200.7	**Potassium**	2.13	mg/L	0.50	0.18		X911070	DPW	03/18/19 11:12	
EPA 200.7	**Silica (SiO2)**	29.8	mg/L	0.17	0.12		X911070	DPW	03/18/19 11:12	
EPA 200.7	**Sodium**	32.8	mg/L	0.50	0.12		X911070	DPW	03/18/19 13:16	
SM 2340 B	**Hardness (as CaCO3)**	584	mg/L	2.31	1.49		N/A		03/18/19 11:12	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X911192	DPW	03/22/19 15:21	
EPA 200.7	**Barium**	0.399	mg/L	0.0020	0.0019		X911192	DPW	03/22/19 15:21	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X911192	DPW	03/22/19 15:21	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X911192	DPW	03/22/19 15:21	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X911192	DPW	03/22/19 15:21	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X911192	DPW	03/22/19 15:21	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X911192	DPW	03/22/19 15:21	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X911192	DPW	03/22/19 15:21	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X911192	DPW	03/22/19 15:21	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X910222	AS	03/18/19 10:11	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X910222	AS	03/18/19 10:11	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X910222	AS	03/18/19 10:11	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X910222	AS	03/18/19 10:11	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X912006	DPW	03/19/19 11:16	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	610	mg/L as CaCO3	1.0			X912015	KAG	03/18/19 11:08	
SM 2540 C	**Total Diss. Solids**	669	mg/L	10			X911183	RS	03/14/19 12:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X911218	APH	03/15/19 12:04	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.30	mg/L	0.20	0.14		X911256	DJS	03/26/19 15:54	
EPA 300.0	**Fluoride**	0.352	mg/L	0.100	0.062		X911256	DJS	03/26/19 15:54	
EPA 300.0	**Sulfate as SO4**	26.5	mg/L	0.30	0.18		X911256	DJS	03/26/19 15:54	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.2 meq/L Anion Sum: 13.0 meq/L C/A Balance: 0.68 % Calculated TDS: 681 TDS/cTDS: 0.98

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

Connor Williams
Project Manager

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

Project Name: BMSL - Routine
Work Order: **X9C0368**
Reported: 04-Apr-19 16:13

Client Sample ID: **190319BMGSLM4**
SVL Sample ID: **X9C0368-01 (Ground Water)**

Sampled: 19-Mar-19 09:00
Received: 20-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	20.7	mg/L	0.100	0.069		X912184	DJS	04/02/19 11:40	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X912183	AS	04/03/19 09:10	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X912183	AS	04/03/19 09:10	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	99	mg/L	10			X912167	dks	03/21/19 10:45	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X912139	APH	03/21/19 11:40	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.374	mg/L	0.100	0.062		X914048	DJS	04/04/19 10:44	
EPA 300.0	**Sulfate as SO4**	6.79	mg/L	0.30	0.18		X914048	DJS	04/04/19 10:44	

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

Connor Williams
Project Manager

One Government Gulch - PO Box 92
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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9C0368
San Luis, CO 81152	Reported: 04-Apr-19 16:13

Client Sample ID: **190319BMGSLM1**
SVL Sample ID: **X9C0368-02 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 19-Mar-19 10:10
Received: 20-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	35.7	mg/L	0.100	0.069		X912184	DJS	04/02/19 11:50	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X912183	AS	04/03/19 09:22	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X912183	AS	04/03/19 09:22	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	152	mg/L	10			X912167	dks	03/21/19 10:45	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X912139	APH	03/21/19 11:42	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.691	mg/L	0.100	0.062		X914048	DJS	04/04/19 11:02	
EPA 300.0	**Sulfate as SO4**	16.0	mg/L	0.30	0.18		X914048	DJS	04/04/19 11:02	

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

Connor Williams
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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9C0368**
San Luis, CO 81152	Reported: 04-Apr-19 16:13

Client Sample ID: **190319BMGSLM3**
SVL Sample ID: **X9C0368-03 (Ground Water)**

Sampled: 19-Mar-19 11:10
Received: 20-Mar-19
Sampled By: AT

Sample Report Page 1 of 1

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X912184	DJS	04/02/19 11:54	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X912183	AS	04/03/19 09:26	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X912183	AS	04/03/19 09:26	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	109	mg/L	10			X912167	dks	03/21/19 10:45	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X912139	APH	03/21/19 11:50	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.557	mg/L	0.100	0.062		X914048	DJS	04/04/19 11:37	
EPA 300.0	**Sulfate as SO4**	18.2	mg/L	0.30	0.18		X914048	DJS	04/04/19 11:37	

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

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

Project Name: BMSL - Routine
Work Order: **X9C0368**
Reported: 04-Apr-19 16:13

Client Sample ID: **190319BMGSLM5**
SVL Sample ID: **X9C0368-04 (Ground Water)**

Sampled: 19-Mar-19 11:50
Received: 20-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	85.5	mg/L	0.100	0.069		X912184	DJS	04/02/19 11:58	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.916	mg/L	0.100	0.056		X912183	AS	04/03/19 09:30	
EPA 200.7	**Manganese**	0.304	mg/L	0.0080	0.0034		X912183	AS	04/03/19 09:30	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	341	mg/L	10			X912167	dks	03/21/19 10:45	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X912139	APH	03/21/19 11:52	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.816	mg/L	0.100	0.062		X914048	DJS	04/04/19 12:12	
EPA 300.0	**Sulfate as SO4**	26.3	mg/L	0.30	0.18		X914048	DJS	04/04/19 12:12	

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

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9C0581**
San Luis, CO 81152	Reported: 11-Apr-19 10:01

Client Sample ID: **190327BMGTAILS**
SVL Sample ID: **X9C0581-01 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 27-Mar-19 08:00
Received: 28-Mar-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X913295	KWH	04/10/19 09:45	D1

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

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

Project Name: BMSL - Routine
Work Order: **X9D0021**
Reported: 18-Apr-19 14:42

Client Sample ID: **190401BMGRS1**
SVL Sample ID: **X9D0021-01 (Surface Water)**

Sampled: 01-Apr-19 08:05
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	17.3	mg/L	0.100	0.069		X914180	AS	04/17/19 14:06	
EPA 200.7	**Magnesium**	3.92	mg/L	0.50	0.32		X914180	AS	04/17/19 14:06	
EPA 200.7	**Potassium**	0.69	mg/L	0.50	0.18		X914180	AS	04/17/19 14:06	
EPA 200.7	**Silica (SiO2)**	11.5	mg/L	0.17	0.12		X914180	AS	04/17/19 14:06	
EPA 200.7	**Sodium**	3.89	mg/L	0.50	0.12		X914180	AS	04/17/19 14:06	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X914136	KWH	04/16/19 13:06	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X914227	DPW	04/05/19 12:12	
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.180	mg/L	0.100	0.028		X914219	DJS	04/17/19 09:11	
EPA 200.7	**Manganese**	0.0157	mg/L	0.0080	0.0017		X914219	DJS	04/17/19 09:11	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 14:29	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X914175	DJS	04/17/19 14:29	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 14:29	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 14:29	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:09	
Metals (Potentially Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X914179	AS	04/18/19 12:07	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X914179	AS	04/18/19 12:07	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X914179	AS	04/18/19 12:07	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914179	AS	04/18/19 12:07	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914183	KWH	04/16/19 12:36	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914183	KWH	04/16/19 12:36	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X914196	APH	04/04/19 13:20	
SM 2320 B	**Total Alkalinity**	60.2	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 11:48	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X914165	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.66	mg/L	0.20	0.14		X916085	AJH	04/16/19 20:29	
EPA 300.0	**Fluoride**	0.523	mg/L	0.100	0.062		X916085	AJH	04/16/19 20:29	
EPA 300.0	**Sulfate as SO4**	6.75	mg/L	0.30	0.18		X916085	AJH	04/16/19 20:29	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.38 meq/L Anion Sum: 1.39 meq/L C/A Balance: -0.26 %

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

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Battle Mountain - San Luis
PO Box 310
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Project Name: BMSL - Routine
Work Order: **X9D0021**
Reported: 18-Apr-19 14:42

Client Sample ID: **190401BMGRS5**
SVL Sample ID: **X9D0021-02 (Surface Water)**

Sampled: 01-Apr-19 09:15
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	23.5	mg/L	0.100	0.069		X914180	AS	04/17/19 14:14	
EPA 200.7	**Magnesium**	4.80	mg/L	0.50	0.32		X914180	AS	04/17/19 14:14	
EPA 200.7	**Potassium**	1.14	mg/L	0.50	0.18		X914180	AS	04/17/19 14:14	
EPA 200.7	**Silica (SiO2)**	12.3	mg/L	0.17	0.12		X914180	AS	04/17/19 14:14	
EPA 200.7	**Sodium**	7.23	mg/L	0.50	0.12		X914180	AS	04/17/19 14:14	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X914136	KWH	04/16/19 13:09	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X914227	DPW	04/05/19 12:14	
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.709	mg/L	0.100	0.028		X914219	DJS	04/17/19 09:20	
EPA 200.7	**Manganese**	0.139	mg/L	0.0080	0.0017		X914219	DJS	04/17/19 09:20	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 14:41	
EPA 200.7	**Iron**	0.268	mg/L	0.100	0.056		X914175	DJS	04/17/19 14:41	
EPA 200.7	**Manganese**	0.122	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 14:41	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 14:41	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:12	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.08	mg/L	0.08	0.05		X914179	AS	04/18/19 12:16	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X914179	AS	04/18/19 12:16	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X914179	AS	04/18/19 12:16	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914179	AS	04/18/19 12:16	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914183	KWH	04/16/19 12:44	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914183	KWH	04/16/19 12:44	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X914196	APH	04/04/19 13:33	
SM 2320 B	**Total Alkalinity**	73.1	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 11:52	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X914165	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.06	mg/L	0.20	0.14		X916085	AJH	04/16/19 21:07	
EPA 300.0	**Fluoride**	0.646	mg/L	0.100	0.062		X916085	AJH	04/16/19 21:07	
EPA 300.0	**Sulfate as SO4**	13.6	mg/L	0.30	0.18		X916085	AJH	04/16/19 21:07	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.94 meq/L Anion Sum: 1.84 meq/L C/A Balance: 2.64 %

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9D0021**
Reported: 18-Apr-19 14:42

Client Sample ID: **190401BMGRS5**
SVL Sample ID: **X9D0021-03 (Surface Water)**

Sampled: 01-Apr-19 09:15
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.697	mg/L	0.100	0.028		X914219	DJS	04/17/19 09:24	
EPA 200.7	**Manganese**	0.140	mg/L	0.0080	0.0017		X914219	DJS	04/17/19 09:24	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.277	mg/L	0.100	0.056		X914175	DJS	04/17/19 14:45	
EPA 200.7	**Manganese**	0.124	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 14:45	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X914260	APH	04/05/19 10:57	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	13.5	mg/L	0.30	0.18		X916085	AJH	04/16/19 21:20	

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

Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 14:55

Client Sample ID: **090401BMGRS2**
SVL Sample ID: **X9D0030-01 (Surface Water)**

Sampled: 01-Apr-19 08:40
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	18.6	mg/L	0.100	0.069		X914180	AS	04/17/19 14:17	
EPA 200.7	**Magnesium**	4.40	mg/L	0.50	0.32		X914180	AS	04/17/19 14:17	
EPA 200.7	**Potassium**	0.93	mg/L	0.50	0.18		X914180	AS	04/17/19 14:17	
EPA 200.7	**Silica (SiO2)**	12.4	mg/L	0.17	0.12		X914180	AS	04/17/19 14:17	
EPA 200.7	**Sodium**	5.04	mg/L	0.50	0.12		X914180	AS	04/17/19 14:17	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X914136	KWH	04/16/19 13:11	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X914227	DPW	04/05/19 12:16	
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.470	mg/L	0.100	0.028		X914219	DJS	04/17/19 09:27	
EPA 200.7	**Manganese**	0.0619	mg/L	0.0080	0.0017		X914219	DJS	04/17/19 09:27	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 14:53	
EPA 200.7	**Iron**	0.125	mg/L	0.100	0.056		X914175	DJS	04/17/19 14:53	
EPA 200.7	**Manganese**	0.0168	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 14:53	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 14:53	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:14	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.09	mg/L	0.08	0.05		X914179	AS	04/18/19 12:19	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X914179	AS	04/18/19 12:19	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X914179	AS	04/18/19 12:19	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914179	AS	04/18/19 12:19	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914183	KWH	04/16/19 12:46	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914183	KWH	04/16/19 12:46	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X914196	APH	04/04/19 13:35	
SM 2320 B	**Total Alkalinity**	62.6	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 11:56	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X914165	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.98	mg/L	0.20	0.14		X916085	AJH	04/16/19 22:24	
EPA 300.0	**Fluoride**	0.562	mg/L	0.100	0.062		X916085	AJH	04/16/19 22:24	
EPA 300.0	**Sulfate as SO4**	8.68	mg/L	0.30	0.18		X916085	AJH	04/16/19 22:24	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.55 meq/L Anion Sum: 1.49 meq/L C/A Balance: 2.01 %

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 14:55

Client Sample ID: **090401BMGRS2**
SVL Sample ID: **X9D0030-02 (Surface Water)**

Sampled: 01-Apr-19 08:40
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Aluminum**	0.32	mg/L	0.08	0.05		X914180	AS	04/17/19 14:20	
EPA 200.7	**Barium**	0.0280	mg/L	0.0020	0.0019		X914180	AS	04/17/19 14:20	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X914180	AS	04/17/19 14:20	
EPA 200.7	**Calcium**	18.6	mg/L	0.100	0.069		X914180	AS	04/17/19 14:20	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914180	AS	04/17/19 14:20	
EPA 200.7	**Iron**	0.524	mg/L	0.100	0.056		X914180	AS	04/17/19 14:20	
EPA 200.7	**Magnesium**	4.41	mg/L	0.50	0.32		X914180	AS	04/17/19 14:20	
EPA 200.7	**Manganese**	0.0568	mg/L	0.0080	0.0034		X914180	AS	04/17/19 14:20	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914180	AS	04/17/19 14:20	
EPA 200.7	**Potassium**	0.91	mg/L	0.50	0.18		X914180	AS	04/17/19 14:20	
EPA 200.7	**Silica (SiO2)**	12.8	mg/L	0.17	0.12		X914180	AS	04/17/19 14:20	
EPA 200.7	**Sodium**	5.04	mg/L	0.50	0.12		X914180	AS	04/17/19 14:20	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914180	AS	04/17/19 14:20	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Cadmium	< 0.00050	mg/L	0.00050	0.00032	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Copper	< 0.00200	mg/L	0.00200	0.00180	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00070	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0012	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Silver	< 0.000400	mg/L	0.000400	0.000305	5	X914136	KWH	04/16/19 12:59	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X914227	DPW	04/05/19 12:18	
SM 2340 B	**Hardness (as CaCO3)**	64.5	mg/L	2.31	1.49		N/A		04/17/19 14:20	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X914175	DJS	04/17/19 14:57	
EPA 200.7	**Barium**	0.0239	mg/L	0.0020	0.0019		X914175	DJS	04/17/19 14:57	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X914175	DJS	04/17/19 14:57	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 14:57	
EPA 200.7	**Iron**	0.115	mg/L	0.100	0.056		X914175	DJS	04/17/19 14:57	
EPA 200.7	**Manganese**	0.0160	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 14:57	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 14:57	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914175	DJS	04/17/19 14:57	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X914184	KWH	04/16/19 12:02	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X914184	KWH	04/16/19 12:02	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:02	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X914184	KWH	04/16/19 12:02	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:02	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914184	KWH	04/16/19 12:02	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915022	DPW	04/09/19 12:19	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9D0030**
San Luis, CO 81152	Reported: 18-Apr-19 14:55

Client Sample ID: **090401BMGRS2**
SVL Sample ID: **X9D0030-02 (Surface Water)**

Sampled: 01-Apr-19 08:40
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X914259	APH	04/05/19 11:59	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X914196	APH	04/04/19 13:38	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X915258	SM	04/12/19 12:05	
SM 2320 B	**Total Alkalinity**	63.4	mg/L as CaCO3	1.0			X914178	KAG	04/03/19 15:30	
SM 2320 B	**Bicarbonate**	63.4	mg/L as CaCO3	1.0			X914178	KAG	04/03/19 15:30	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X914178	KAG	04/03/19 15:30	
SM 2540 C	**Total Diss. Solids**	104	mg/L	10			X914155	TL	04/03/19 12:35	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X914165	TL	04/03/19 12:35	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X914260	APH	04/05/19 10:59	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.97	mg/L	0.20	0.14		X916085	AJH	04/16/19 22:37	
EPA 300.0	**Fluoride**	0.543	mg/L	0.100	0.062		X916085	AJH	04/16/19 22:37	
EPA 300.0	**Sulfate as SO4**	8.70	mg/L	0.30	0.18		X916085	AJH	04/16/19 22:37	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.55 meq/L Anion Sum: 1.51 meq/L C/A Balance: 1.26 % Calculated TDS: 90 TDS/cTDS: 1.16

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

Connor Williams
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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 14:55

Client Sample ID: **090401BMGM19**
SVL Sample ID: **X9D0030-03 (Ground Water)**

Sampled: 01-Apr-19 10:00
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	23.9	mg/L	0.100	0.069		X914180	AS	04/17/19 14:23	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.286	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:10	
EPA 200.7	**Manganese**	0.312	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:10	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:16	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	116	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.911	mg/L	0.100	0.062		X916085	AJH	04/16/19 22:50	
EPA 300.0	**Sulfate as SO4**	12.4	mg/L	0.30	0.18		X916085	AJH	04/16/19 22:50	

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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 14:55

Client Sample ID: **090401BMGM21**
SVL Sample ID: **X9D0030-04 (Ground Water)**

Sampled: 01-Apr-19 10:35
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	33.6	mg/L	0.100	0.069		X914180	AS	04/17/19 14:26	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:15	
EPA 200.7	**Manganese**	0.375	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:15	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:19	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	147	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.36	mg/L	0.100	0.062		X916085	AJH	04/16/19 23:02	
EPA 300.0	**Sulfate as SO4**	18.2	mg/L	0.30	0.18		X916085	AJH	04/16/19 23:02	

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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 14:55

Client Sample ID: **090401BMGM24**
SVL Sample ID: **X9D0030-05 (Ground Water)**

Sampled: 01-Apr-19 11:10
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	111	mg/L	0.100	0.069		X914180	AS	04/17/19 14:29	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.68	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:19	
EPA 200.7	**Manganese**	1.17	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:19	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:26	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	542	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.674	mg/L	0.100	0.062		X916085	AJH	04/16/19 23:15	
EPA 300.0	**Sulfate as SO4**	229	mg/L	3.00	1.80	10	X916085	AJH	04/16/19 23:28	D2

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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 14:55

Client Sample ID: **090401BMGM11R**
SVL Sample ID: **X9D0030-06 (Ground Water)**

Sampled: 01-Apr-19 11:45
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	83.2	mg/L	0.100	0.069		X914180	AS	04/17/19 14:31	
EPA 200.7	**Magnesium**	14.3	mg/L	0.50	0.32		X914180	AS	04/17/19 14:31	
EPA 200.7	**Potassium**	2.39	mg/L	0.50	0.18		X914180	AS	04/17/19 14:31	
EPA 200.7	**Silica (SiO2)**	16.7	mg/L	0.17	0.12		X914180	AS	04/17/19 14:31	
EPA 200.7	**Sodium**	16.9	mg/L	0.50	0.12		X914180	AS	04/17/19 14:31	
SM 2340 B	**Hardness (as CaCO3)**	267	mg/L	2.31	1.49		N/A		04/17/19 14:31	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X914175	DJS	04/17/19 15:23	
EPA 200.7	**Barium**	0.0459	mg/L	0.0020	0.0019		X914175	DJS	04/17/19 15:23	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X914175	DJS	04/17/19 15:23	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 15:23	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:23	
EPA 200.7	**Manganese**	0.337	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:23	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 15:23	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914175	DJS	04/17/19 15:23	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X914184	KWH	04/16/19 12:29	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:29	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X914184	KWH	04/16/19 12:29	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:29	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914184	KWH	04/16/19 12:29	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915022	DPW	04/09/19 12:20	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	169	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 12:00	
SM 2540 C	**Total Diss. Solids**	391	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.34	mg/L	0.20	0.14		X916085	AJH	04/16/19 23:41	
EPA 300.0	**Fluoride**	0.825	mg/L	0.100	0.062		X916085	AJH	04/16/19 23:41	
EPA 300.0	**Sulfate as SO4**	124	mg/L	3.00	1.80	10	X916085	AJH	04/16/19 23:54	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.15 meq/L Anion Sum: 6.10 meq/L C/A Balance: 0.41 % Calculated TDS: 363 TDS/cTDS: 1.08

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

Connor Williams
Project Manager

SVL holds the following certifications:
AZ:0538, CA:2080, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

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

Project Name: BMSL - Routine
Work Order: X9D0030
Reported: 18-Apr-19 15:10

Client Sample ID: **190401BMGRS2**
SVL Sample ID: **X9D0030-01 (Surface Water)**

Sampled: 01-Apr-19 08:40
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	18.6	mg/L	0.100	0.069		X914180	AS	04/17/19 14:17	
EPA 200.7	**Magnesium**	4.40	mg/L	0.50	0.32		X914180	AS	04/17/19 14:17	
EPA 200.7	**Potassium**	0.93	mg/L	0.50	0.18		X914180	AS	04/17/19 14:17	
EPA 200.7	**Silica (SiO2)**	12.4	mg/L	0.17	0.12		X914180	AS	04/17/19 14:17	
EPA 200.7	**Sodium**	5.04	mg/L	0.50	0.12		X914180	AS	04/17/19 14:17	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X914136	KWH	04/16/19 13:11	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X914227	DPW	04/05/19 12:16	
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.470	mg/L	0.100	0.028		X914219	DJS	04/17/19 09:27	
EPA 200.7	**Manganese**	0.0619	mg/L	0.0080	0.0017		X914219	DJS	04/17/19 09:27	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 14:53	
EPA 200.7	**Iron**	0.125	mg/L	0.100	0.056		X914175	DJS	04/17/19 14:53	
EPA 200.7	**Manganese**	0.0168	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 14:53	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 14:53	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:14	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.09	mg/L	0.08	0.05		X914179	AS	04/18/19 12:19	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X914179	AS	04/18/19 12:19	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X914179	AS	04/18/19 12:19	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914179	AS	04/18/19 12:19	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914183	KWH	04/16/19 12:46	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914183	KWH	04/16/19 12:46	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X914196	APH	04/04/19 13:35	
SM 2320 B	**Total Alkalinity**	62.6	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 11:56	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X914165	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.98	mg/L	0.20	0.14		X916085	AJH	04/16/19 22:24	
EPA 300.0	**Fluoride**	0.562	mg/L	0.100	0.062		X916085	AJH	04/16/19 22:24	
EPA 300.0	**Sulfate as SO4**	8.68	mg/L	0.30	0.18		X916085	AJH	04/16/19 22:24	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.55 meq/L Anion Sum: 1.49 meq/L C/A Balance: 2.01 %

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

Connor Williams
Project Manager

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Battle Mountain - San Luis
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San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 15:10

Client Sample ID: **190401BMGRS2**
SVL Sample ID: **X9D0030-02 (Surface Water)**

Sampled: 01-Apr-19 08:40
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Aluminum**	0.32	mg/L	0.08	0.05		X914180	AS	04/17/19 14:20	
EPA 200.7	**Barium**	0.0280	mg/L	0.0020	0.0019		X914180	AS	04/17/19 14:20	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X914180	AS	04/17/19 14:20	
EPA 200.7	**Calcium**	18.6	mg/L	0.100	0.069		X914180	AS	04/17/19 14:20	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914180	AS	04/17/19 14:20	
EPA 200.7	**Iron**	0.524	mg/L	0.100	0.056		X914180	AS	04/17/19 14:20	
EPA 200.7	**Magnesium**	4.41	mg/L	0.50	0.32		X914180	AS	04/17/19 14:20	
EPA 200.7	**Manganese**	0.0568	mg/L	0.0080	0.0034		X914180	AS	04/17/19 14:20	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914180	AS	04/17/19 14:20	
EPA 200.7	**Potassium**	0.91	mg/L	0.50	0.18		X914180	AS	04/17/19 14:20	
EPA 200.7	**Silica (SiO2)**	12.8	mg/L	0.17	0.12		X914180	AS	04/17/19 14:20	
EPA 200.7	**Sodium**	5.04	mg/L	0.50	0.12		X914180	AS	04/17/19 14:20	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914180	AS	04/17/19 14:20	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Cadmium	< 0.00050	mg/L	0.00050	0.00032	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Copper	< 0.00200	mg/L	0.00200	0.00180	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00070	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0012	5	X914136	KWH	04/16/19 12:59	D1
EPA 200.8	Silver	< 0.000400	mg/L	0.000400	0.000305	5	X914136	KWH	04/16/19 12:59	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X914227	DPW	04/05/19 12:18	
SM 2340 B	**Hardness (as CaCO3)**	64.5	mg/L	2.31	1.49		N/A		04/17/19 14:20	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X914175	DJS	04/17/19 14:57	
EPA 200.7	**Barium**	0.0239	mg/L	0.0020	0.0019		X914175	DJS	04/17/19 14:57	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X914175	DJS	04/17/19 14:57	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 14:57	
EPA 200.7	**Iron**	0.115	mg/L	0.100	0.056		X914175	DJS	04/17/19 14:57	
EPA 200.7	**Manganese**	0.0160	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 14:57	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 14:57	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914175	DJS	04/17/19 14:57	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X914184	KWH	04/16/19 12:02	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X914184	KWH	04/16/19 12:02	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:02	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X914184	KWH	04/16/19 12:02	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:02	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914184	KWH	04/16/19 12:02	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915022	DPW	04/09/19 12:19	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9D0030**
San Luis, CO 81152	Reported: 18-Apr-19 15:10

Client Sample ID: **190401BMGRS2**
SVL Sample ID: **X9D0030-02 (Surface Water)**

Sampled: 01-Apr-19 08:40
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X914259	APH	04/05/19 11:59	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X914196	APH	04/04/19 13:38	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X915258	SM	04/12/19 12:05	
SM 2320 B	**Total Alkalinity**	63.4	mg/L as CaCO3	1.0			X914178	KAG	04/03/19 15:30	
SM 2320 B	**Bicarbonate**	63.4	mg/L as CaCO3	1.0			X914178	KAG	04/03/19 15:30	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X914178	KAG	04/03/19 15:30	
SM 2540 C	**Total Diss. Solids**	104	mg/L	10			X914155	TL	04/03/19 12:35	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X914165	TL	04/03/19 12:35	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X914260	APH	04/05/19 10:59	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.97	mg/L	0.20	0.14		X916085	AJH	04/16/19 22:37	
EPA 300.0	**Fluoride**	0.543	mg/L	0.100	0.062		X916085	AJH	04/16/19 22:37	
EPA 300.0	**Sulfate as SO4**	8.70	mg/L	0.30	0.18		X916085	AJH	04/16/19 22:37	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.55 meq/L Anion Sum: 1.51 meq/L C/A Balance: 1.26 % Calculated TDS: 90 TDS/cTDS: 1.16

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

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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 15:10

Client Sample ID: **190401BMGM19**
SVL Sample ID: **X9D0030-03 (Ground Water)**

Sampled: 01-Apr-19 10:00
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	23.9	mg/L	0.100	0.069		X914180	AS	04/17/19 14:23	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.286	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:10	
EPA 200.7	**Manganese**	0.312	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:10	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:16	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	116	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.911	mg/L	0.100	0.062		X916085	AJH	04/16/19 22:50	
EPA 300.0	**Sulfate as SO4**	12.4	mg/L	0.30	0.18		X916085	AJH	04/16/19 22:50	

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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 15:10

Client Sample ID: **190401BMGM21**
SVL Sample ID: **X9D0030-04 (Ground Water)**

Sampled: 01-Apr-19 10:35
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	33.6	mg/L	0.100	0.069		X914180	AS	04/17/19 14:26	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:15	
EPA 200.7	**Manganese**	0.375	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:15	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:19	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	147	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.36	mg/L	0.100	0.062		X916085	AJH	04/16/19 23:02	
EPA 300.0	**Sulfate as SO4**	18.2	mg/L	0.30	0.18		X916085	AJH	04/16/19 23:02	

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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 15:10

Client Sample ID: **190401BMGM24**
SVL Sample ID: **X9D0030-05 (Ground Water)**

Sampled: 01-Apr-19 11:10
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	111	mg/L	0.100	0.069		X914180	AS	04/17/19 14:29	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.68	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:19	
EPA 200.7	**Manganese**	1.17	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:19	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:26	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	542	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.674	mg/L	0.100	0.062		X916085	AJH	04/16/19 23:15	
EPA 300.0	**Sulfate as SO4**	229	mg/L	3.00	1.80	10	X916085	AJH	04/16/19 23:28	D2

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Project Name: BMSL - Routine
Work Order: **X9D0030**
Reported: 18-Apr-19 15:10

Client Sample ID: **190401BMGM11R**
SVL Sample ID: **X9D0030-06 (Ground Water)**

Sampled: 01-Apr-19 11:45
Received: 02-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	83.2	mg/L	0.100	0.069		X914180	AS	04/17/19 14:31	
EPA 200.7	**Magnesium**	14.3	mg/L	0.50	0.32		X914180	AS	04/17/19 14:31	
EPA 200.7	**Potassium**	2.39	mg/L	0.50	0.18		X914180	AS	04/17/19 14:31	
EPA 200.7	**Silica (SiO2)**	16.7	mg/L	0.17	0.12		X914180	AS	04/17/19 14:31	
EPA 200.7	**Sodium**	16.9	mg/L	0.50	0.12		X914180	AS	04/17/19 14:31	
SM 2340 B	**Hardness (as CaCO3)**	267	mg/L	2.31	1.49		N/A		04/17/19 14:31	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X914175	DJS	04/17/19 15:23	
EPA 200.7	**Barium**	0.0459	mg/L	0.0020	0.0019		X914175	DJS	04/17/19 15:23	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X914175	DJS	04/17/19 15:23	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X914175	DJS	04/17/19 15:23	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X914175	DJS	04/17/19 15:23	
EPA 200.7	**Manganese**	0.337	mg/L	0.0080	0.0034		X914175	DJS	04/17/19 15:23	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X914175	DJS	04/17/19 15:23	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X914175	DJS	04/17/19 15:23	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X914184	KWH	04/16/19 12:29	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X914184	KWH	04/16/19 12:29	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X914184	KWH	04/16/19 12:29	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X914184	KWH	04/16/19 12:29	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X914184	KWH	04/16/19 12:29	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915022	DPW	04/09/19 12:20	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	169	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 12:00	
SM 2540 C	**Total Diss. Solids**	391	mg/L	10			X914155	TL	04/03/19 12:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.34	mg/L	0.20	0.14		X916085	AJH	04/16/19 23:41	
EPA 300.0	**Fluoride**	0.825	mg/L	0.100	0.062		X916085	AJH	04/16/19 23:41	
EPA 300.0	**Sulfate as SO4**	124	mg/L	3.00	1.80	10	X916085	AJH	04/16/19 23:54	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.15 meq/L Anion Sum: 6.10 meq/L C/A Balance: 0.41 % Calculated TDS: 363 TDS/cTDS: 1.08

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

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Project Name: BMSL - Routine
Work Order: **X9D0121**
Reported: 24-Apr-19 12:14

Client Sample ID: **190402BMGM16**
SVL Sample ID: **X9D0121-01 (Ground Water)**

Sampled: 02-Apr-19 08:00
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	19.4	mg/L	0.100	0.069		X915014	AS	04/17/19 14:46	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X915004	AS	04/19/19 12:56	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X915004	AS	04/19/19 12:56	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 13:39	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	38	mg/L	10			X914282	TL	04/05/19 14:10	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.585	mg/L	0.100	0.062		X916095	AJH	04/22/19 09:12	
EPA 300.0	**Sulfate as SO4**	8.37	mg/L	0.30	0.18		X916095	AJH	04/22/19 09:12	

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

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Project Name: BMSL - Routine
Work Order: **X9D0121**
Reported: 24-Apr-19 12:14

Client Sample ID: **190402BMGFB**
SVL Sample ID: **X9D0121-02 (Surface Water)**

Sampled: 02-Apr-19 07:55
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X915014	AS	04/17/19 14:54	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X915004	AS	04/19/19 13:05	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:05	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 13:53	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X914282	TL	04/05/19 14:10	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X916095	AJH	04/22/19 09:50	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X916095	AJH	04/22/19 09:50	

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Project Name: BMSL - Routine
Work Order: **X9D0121**
Reported: 24-Apr-19 12:14

Client Sample ID: **190402BMGRB**
SVL Sample ID: **X9D0121-03 (Surface Water)**

Sampled: 02-Apr-19 08:10
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X915014	AS	04/17/19 14:57	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X915004	AS	04/19/19 13:08	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:08	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 13:56	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	16	mg/L	10			X914282	TL	04/05/19 14:10	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X916095	AJH	04/22/19 10:41	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X916095	AJH	04/22/19 10:41	

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

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Project Name: BMSL - Routine
Work Order: **X9D0121**
Reported: 24-Apr-19 12:14

Client Sample ID: **190402BMGM22**
SVL Sample ID: **X9D0121-04 (Ground Water)**

Sampled: 02-Apr-19 08:40
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	46.3	mg/L	0.100	0.069		X915014	AS	04/17/19 15:00	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.314	mg/L	0.100	0.056		X915004	AS	04/19/19 13:11	
EPA 200.7	**Manganese**	0.176	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:11	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 13:59	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	172	mg/L	10			X914282	TL	04/05/19 14:10	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.35	mg/L	0.100	0.062		X916095	AJH	04/22/19 11:07	
EPA 300.0	**Sulfate as SO4**	42.8	mg/L	0.30	0.18		X916095	AJH	04/22/19 11:07	

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

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Project Name: BMSL - Routine
Work Order: **X9D0121**
Reported: 24-Apr-19 12:14

Client Sample ID: **190402BMGM26**
SVL Sample ID: **X9D0121-05 (Ground Water)**

Sampled: 02-Apr-19 09:15
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	36.0	mg/L	0.100	0.069		X915014	AS	04/17/19 15:03	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.397	mg/L	0.100	0.056		X915004	AS	04/19/19 13:14	
EPA 200.7	**Manganese**	0.311	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:14	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 14:02	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	127	mg/L	10			X914282	TL	04/05/19 14:10	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.709	mg/L	0.100	0.062		X916095	AJH	04/22/19 11:33	
EPA 300.0	**Sulfate as SO4**	11.5	mg/L	0.30	0.18		X916095	AJH	04/22/19 11:33	

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

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Project Name: BMSL - Routine
Work Order: **X9D0121**
Reported: 24-Apr-19 12:14

Client Sample ID: **190402BMGM34**
SVL Sample ID: **X9D0121-06 (Ground Water)**

Sampled: 02-Apr-19 09:40
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	22.0	mg/L	0.100	0.069		X915014	AS	04/17/19 15:05	
EPA 200.7	**Magnesium**	4.99	mg/L	0.50	0.32		X915014	AS	04/17/19 15:05	
EPA 200.7	**Potassium**	0.87	mg/L	0.50	0.18		X915014	AS	04/17/19 15:05	
EPA 200.7	**Silica (SiO2)**	14.9	mg/L	0.17	0.12		X915014	AS	04/17/19 15:05	
EPA 200.7	**Sodium**	8.10	mg/L	0.50	0.12		X915014	AS	04/17/19 15:05	
SM 2340 B	**Hardness (as CaCO3)**	75.6	mg/L	2.31	1.49		N/A		04/17/19 15:05	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X915004	AS	04/19/19 13:16	
EPA 200.7	**Barium**	0.0386	mg/L	0.0020	0.0019		X915004	AS	04/19/19 13:16	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X915004	AS	04/19/19 13:16	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X915004	AS	04/19/19 13:16	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X915004	AS	04/19/19 13:16	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X915004	AS	04/19/19 13:16	
EPA 200.7	**Manganese**	0.208	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:16	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X915004	AS	04/19/19 13:16	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X915004	AS	04/19/19 13:16	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X915111	KWH	04/18/19 14:04	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 14:04	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X915111	KWH	04/18/19 14:04	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X915111	KWH	04/18/19 14:04	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915026	MWD	04/11/19 10:45	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	69.6	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 12:43	
SM 2540 C	**Total Diss. Solids**	125	mg/L	10			X915007	dks	04/08/19 13:40	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.26	mg/L	0.20	0.14		X916095	AJH	04/22/19 11:58	
EPA 300.0	**Fluoride**	0.498	mg/L	0.100	0.062		X916095	AJH	04/22/19 11:58	
EPA 300.0	**Sulfate as SO4**	19.2	mg/L	0.30	0.18		X916095	AJH	04/22/19 11:58	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.90 meq/L Anion Sum: 1.88 meq/L C/A Balance: 0.51 % Calculated TDS: 115 TDS/cTDS: 1.09

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

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Project Name: BMSL - Routine
Work Order: **X9D0121**
Reported: 24-Apr-19 12:14

Client Sample ID: **190402BMGM10**
SVL Sample ID: **X9D0121-07 (Ground Water)**

Sampled: 02-Apr-19 10:20
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	72.6	mg/L	0.100	0.069		X915014	AS	04/17/19 15:14	
EPA 200.7	**Magnesium**	8.98	mg/L	0.50	0.32		X915014	AS	04/17/19 15:14	
EPA 200.7	**Potassium**	1.67	mg/L	0.50	0.18		X915014	AS	04/17/19 15:14	
EPA 200.7	**Silica (SiO2)**	27.2	mg/L	0.17	0.12		X915014	AS	04/17/19 15:14	
EPA 200.7	**Sodium**	22.5	mg/L	0.50	0.12		X915014	AS	04/17/19 15:14	
SM 2340 B	**Hardness (as CaCO3)**	218	mg/L	2.31	1.49		N/A		04/17/19 15:14	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X915004	AS	04/19/19 13:25	
EPA 200.7	**Barium**	0.120	mg/L	0.0020	0.0019		X915004	AS	04/19/19 13:25	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X915004	AS	04/19/19 13:25	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X915004	AS	04/19/19 13:25	
EPA 200.7	**Iron**	1.04	mg/L	0.100	0.056		X915004	AS	04/19/19 13:25	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X915004	AS	04/19/19 13:25	
EPA 200.7	**Manganese**	0.839	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:25	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X915004	AS	04/19/19 13:25	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X915004	AS	04/19/19 13:25	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X915111	KWH	04/18/19 14:07	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 14:07	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X915111	KWH	04/18/19 14:07	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X915111	KWH	04/18/19 14:07	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915026	MWD	04/11/19 10:47	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	223	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 12:53	
SM 2540 C	**Total Diss. Solids**	318	mg/L	10			X915007	dks	04/08/19 13:40	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.98	mg/L	0.20	0.14		X916095	AJH	04/22/19 13:15	
EPA 300.0	**Fluoride**	0.873	mg/L	0.100	0.062		X916095	AJH	04/22/19 13:15	
EPA 300.0	**Sulfate as SO4**	34.5	mg/L	0.30	0.18		X916095	AJH	04/22/19 13:15	

Cation/Anion Balance and TDS Ratios

Cation Sum: 5.46 meq/L Anion Sum: 5.30 meq/L C/A Balance: 1.44 % Calculated TDS: 305 TDS/cTDS: 1.04

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

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Project Name: BMSL - Routine
Work Order: X9D0122
Reported: 24-Apr-19 12:14

Client Sample ID: **190403BMGM12**
SVL Sample ID: **X9D0122-01 (Ground Water)**

Sampled: 03-Apr-19 08:40
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	52.2	mg/L	0.100	0.069		X915014	AS	04/17/19 15:17	
EPA 200.7	**Magnesium**	8.11	mg/L	0.50	0.32		X915014	AS	04/17/19 15:17	
EPA 200.7	**Potassium**	1.96	mg/L	0.50	0.18		X915014	AS	04/17/19 15:17	
EPA 200.7	**Silica (SiO2)**	21.1	mg/L	0.17	0.12		X915014	AS	04/17/19 15:17	
EPA 200.7	**Sodium**	14.3	mg/L	0.50	0.12		X915014	AS	04/17/19 15:17	
SM 2340 B	**Hardness (as CaCO3)**	164	mg/L	2.31	1.49		N/A		04/17/19 15:17	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X915004	AS	04/19/19 13:28	
EPA 200.7	**Barium**	0.146	mg/L	0.0020	0.0019		X915004	AS	04/19/19 13:28	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X915004	AS	04/19/19 13:28	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X915004	AS	04/19/19 13:28	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X915004	AS	04/19/19 13:28	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X915004	AS	04/19/19 13:28	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:28	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X915004	AS	04/19/19 13:28	
EPA 200.7	**Zinc**	0.424	mg/L	0.010	0.005		X915004	AS	04/19/19 13:28	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X915111	KWH	04/18/19 14:10	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 14:10	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X915111	KWH	04/18/19 14:10	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X915111	KWH	04/18/19 14:10	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915026	MWD	04/11/19 10:54	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	145	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 12:59	
SM 2540 C	**Total Diss. Solids**	223	mg/L	10			X914293	TL	04/05/19 14:40	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X914260	APH	04/05/19 11:43	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	20.8	mg/L	2.00	1.40	10	X916095	AJH	04/22/19 13:57	D2
EPA 300.0	**Fluoride**	0.317	mg/L	0.100	0.062		X916095	AJH	04/22/19 13:44	
EPA 300.0	**Sulfate as SO4**	12.1	mg/L	0.30	0.18		X916095	AJH	04/22/19 13:44	

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.97 meq/L Anion Sum: 3.75 meq/L C/A Balance: 2.79 % Calculated TDS: 218 TDS/cTDS: 1.02

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

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Project Name: BMSL - Routine
Work Order: **X9D0122**
Reported: 24-Apr-19 12:14

Client Sample ID: **190403BMGM9**
SVL Sample ID: **X9D0122-02 (Ground Water)**

Sampled: 03-Apr-19 09:35
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	87.5	mg/L	0.100	0.069		X915014	AS	04/17/19 15:20	
EPA 200.7	**Magnesium**	12.4	mg/L	0.50	0.32		X915014	AS	04/17/19 15:20	
EPA 200.7	**Potassium**	1.70	mg/L	0.50	0.18		X915014	AS	04/17/19 15:20	
EPA 200.7	**Silica (SiO2)**	26.5	mg/L	0.17	0.12		X915014	AS	04/17/19 15:20	
EPA 200.7	**Sodium**	27.0	mg/L	0.50	0.12		X915014	AS	04/17/19 15:20	
SM 2340 B	**Hardness (as CaCO3)**	270	mg/L	2.31	1.49		N/A		04/17/19 15:20	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X915004	AS	04/19/19 13:31	
EPA 200.7	**Barium**	0.114	mg/L	0.0020	0.0019		X915004	AS	04/19/19 13:31	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X915004	AS	04/19/19 13:31	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X915004	AS	04/19/19 13:31	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X915004	AS	04/19/19 13:31	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X915004	AS	04/19/19 13:31	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:31	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X915004	AS	04/19/19 13:31	
EPA 200.7	**Zinc**	0.356	mg/L	0.010	0.005		X915004	AS	04/19/19 13:31	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X915111	KWH	04/18/19 14:13	
EPA 200.8	**Copper**	0.00464	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 14:13	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X915111	KWH	04/18/19 14:13	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X915111	KWH	04/18/19 14:13	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915026	MWD	04/11/19 10:56	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	288	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 13:04	
SM 2540 C	**Total Diss. Solids**	332	mg/L	10			X914293	TL	04/05/19 14:40	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X914260	APH	04/05/19 11:45	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.65	mg/L	0.20	0.14		X916095	AJH	04/22/19 14:10	
EPA 300.0	**Fluoride**	0.240	mg/L	0.100	0.062		X916095	AJH	04/22/19 14:10	
EPA 300.0	**Sulfate as SO4**	19.5	mg/L	0.30	0.18		X916095	AJH	04/22/19 14:10	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.63 meq/L Anion Sum: 6.28 meq/L C/A Balance: 2.71 % Calculated TDS: 351 TDS/cTDS: 0.95

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

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Project Name: BMSL - Routine
Work Order: **X9D0122**
Reported: 24-Apr-19 12:14

Client Sample ID: **190403BMGM13R**
SVL Sample ID: **X9D0122-03 (Ground Water)**

Sampled: 03-Apr-19 10:40
Received: 04-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	93.7	mg/L	0.100	0.069		X915014	AS	04/17/19 15:23	
EPA 200.7	**Magnesium**	13.9	mg/L	0.50	0.32		X915014	AS	04/17/19 15:23	
EPA 200.7	**Potassium**	1.43	mg/L	0.50	0.18		X915014	AS	04/17/19 15:23	
EPA 200.7	**Silica (SiO2)**	24.0	mg/L	0.17	0.12		X915014	AS	04/17/19 15:23	
EPA 200.7	**Sodium**	34.1	mg/L	0.50	0.12		X915014	AS	04/17/19 15:23	
SM 2340 B	**Hardness (as CaCO3)**	291	mg/L	2.31	1.49		N/A		04/17/19 15:23	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X915004	AS	04/19/19 13:33	
EPA 200.7	**Barium**	0.123	mg/L	0.0020	0.0019		X915004	AS	04/19/19 13:33	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X915004	AS	04/19/19 13:33	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X915004	AS	04/19/19 13:33	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X915004	AS	04/19/19 13:33	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X915004	AS	04/19/19 13:33	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X915004	AS	04/19/19 13:33	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X915004	AS	04/19/19 13:33	
EPA 200.7	**Zinc**	0.570	mg/L	0.010	0.005		X915004	AS	04/19/19 13:33	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X915111	KWH	04/18/19 14:21	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X915111	KWH	04/18/19 14:21	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X915111	KWH	04/18/19 14:21	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X915111	KWH	04/18/19 14:21	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X915026	MWD	04/11/19 10:58	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	329	mg/L as CaCO3	1.0			X915124	KAG	04/10/19 13:13	
SM 2540 C	**Total Diss. Solids**	347	mg/L	10			X914293	TL	04/05/19 14:40	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X914260	APH	04/05/19 11:47	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.63	mg/L	0.20	0.14		X916095	AJH	04/22/19 14:35	
EPA 300.0	**Fluoride**	0.354	mg/L	0.100	0.062		X916095	AJH	04/22/19 14:35	
EPA 300.0	**Sulfate as SO4**	17.7	mg/L	0.30	0.18		X916095	AJH	04/22/19 14:35	

Cation/Anion Balance and TDS Ratios

Cation Sum: 7.37 meq/L Anion Sum: 7.06 meq/L C/A Balance: 2.11 % Calculated TDS: 386 TDS/cTDS: 0.90

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

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Project Name: BMSL - Routine
Work Order: **X9D0275**
Reported: 26-Apr-19 15:17

Client Sample ID: **190408BMGBF4**
SVL Sample ID: **X9D0275-01 (Ground Water)**

Sampled: 08-Apr-19 14:05
Received: 10-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	152	mg/L	0.100	0.069		X916033	AS	04/23/19 15:24	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.510	mg/L	0.100	0.056		X916003	AS	04/24/19 12:18	
EPA 200.7	**Manganese**	5.11	mg/L	0.0080	0.0034		X916003	AS	04/24/19 12:18	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X916100	KWH	04/24/19 14:50	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	677	mg/L	10			X915271	dks	04/12/19 13:15	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	4.05	mg/L	0.100	0.062		X917094	AJH	04/25/19 14:42	
EPA 300.0	**Sulfate as SO4**	291	mg/L	3.00	1.80	10	X917094	AJH	04/25/19 14:57	D2

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

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Project Name: BMSL - Routine
Work Order: **X9D0275**
Reported: 26-Apr-19 15:17

Client Sample ID: **190408BMGBF6**
SVL Sample ID: **X9D0275-02 (Ground Water)**

Sampled: 08-Apr-19 14:25
Received: 10-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	130	mg/L	0.100	0.069		X916033	AS	04/23/19 15:27	
Metals (Dissolved)										
EPA 200.7	**Iron**	9.81	mg/L	0.100	0.056		X916003	AS	04/24/19 12:22	
EPA 200.7	**Manganese**	6.73	mg/L	0.0080	0.0034		X916003	AS	04/24/19 12:22	
EPA 200.8	**Copper**	0.200	mg/L	0.00300	0.00036		X916100	KWH	04/24/19 14:53	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	463	mg/L	10			X915271	dks	04/12/19 13:15	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	2.75	mg/L	0.100	0.062		X917094	AJH	04/25/19 15:12	
EPA 300.0	**Sulfate as SO4**	219	mg/L	3.00	1.80	10	X917094	AJH	04/25/19 15:28	D2

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

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San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: **X9D0275**
Reported: 26-Apr-19 15:17

Client Sample ID: **190409BMGM14**
SVL Sample ID: **X9D0275-03 (Ground Water)**

Sampled: 09-Apr-19 10:22
Received: 10-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	196	mg/L	0.100	0.069		X916033	AS	04/23/19 15:30	
EPA 200.7	**Magnesium**	30.6	mg/L	0.50	0.32		X916033	AS	04/23/19 15:30	
EPA 200.7	**Potassium**	2.08	mg/L	0.50	0.18		X916033	AS	04/23/19 15:30	
EPA 200.7	**Silica (SiO2)**	28.7	mg/L	0.17	0.12		X916033	AS	04/23/19 15:30	
EPA 200.7	**Sodium**	32.5	mg/L	0.50	0.12		X916033	AS	04/23/19 15:30	
SM 2340 B	**Hardness (as CaCO3)**	615	mg/L	2.31	1.49		N/A		04/23/19 15:30	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X916003	AS	04/24/19 12:25	
EPA 200.7	**Barium**	0.358	mg/L	0.0020	0.0019		X916003	AS	04/24/19 12:25	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X916003	AS	04/24/19 12:25	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X916003	AS	04/24/19 12:25	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X916003	AS	04/24/19 12:25	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X916003	AS	04/24/19 12:25	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X916003	AS	04/24/19 12:25	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X916003	AS	04/24/19 12:25	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X916003	AS	04/24/19 12:25	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X916100	KWH	04/24/19 09:17	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X916100	KWH	04/24/19 14:55	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X916100	KWH	04/24/19 09:17	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X916100	KWH	04/24/19 09:17	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X916055	MWD	04/17/19 11:54	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	608	mg/L as CaCO3	1.0			X917034	KAG	04/22/19 15:16	
SM 2540 C	**Total Diss. Solids**	650	mg/L	10			X915271	dks	04/12/19 13:15	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X916045	APH	04/16/19 10:55	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.32	mg/L	0.20	0.14		X917094	AJH	04/25/19 15:43	
EPA 300.0	**Fluoride**	0.317	mg/L	0.100	0.062		X917094	AJH	04/25/19 15:43	
EPA 300.0	**Sulfate as SO4**	25.6	mg/L	0.30	0.18		X917094	AJH	04/25/19 15:43	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.8 meq/L Anion Sum: 12.9 meq/L C/A Balance: 3.17 % Calculated TDS: 689 TDS/cTDS: 0.94

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

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

Project Name: BMSL - Routine
Work Order: **X9D0566**
Reported: 08-May-19 15:47

Client Sample ID: **190422BMGSLM4**
SVL Sample ID: **X9D0566-01 (Ground Water)**

Sampled: 22-Apr-19 10:30
Received: 24-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	21.1	mg/L	0.100	0.069		X917253	AS	05/06/19 10:07	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X917250	AS	05/07/19 08:32	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X917250	AS	05/07/19 08:32	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	123	mg/L	10			X917191	TL	04/25/19 12:15	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X917230	APH	04/26/19 10:23	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.366	mg/L	0.100	0.062		X918244	AJH	05/07/19 11:56	
EPA 300.0	**Sulfate as SO4**	6.49	mg/L	0.30	0.18		X918244	AJH	05/07/19 11:56	

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9D0566**
Reported: 08-May-19 15:47

Client Sample ID: **190422BMGSLM2A**
SVL Sample ID: **X9D0566-02 (Ground Water)**

Sampled: 22-Apr-19 11:25
Received: 24-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	20.1	mg/L	0.100	0.069		X917253	AS	05/06/19 10:16	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X917250	AS	05/07/19 08:42	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X917250	AS	05/07/19 08:42	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	130	mg/L	10			X917191	TL	04/25/19 12:15	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X917230	APH	04/26/19 10:31	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.425	mg/L	0.100	0.062		X918244	AJH	05/07/19 12:34	
EPA 300.0	**Sulfate as SO4**	4.93	mg/L	0.30	0.18		X918244	AJH	05/07/19 12:34	

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Project Name: BMSL - Routine
Work Order: **X9D0566**
Reported: 08-May-19 15:47

Client Sample ID: **190422BMGSLM2B**
SVL Sample ID: **X9D0566-03 (Ground Water)**

Sampled: 22-Apr-19 11:40
Received: 24-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	21.1	mg/L	0.100	0.069		X917253	AS	05/06/19 10:19	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X917250	AS	05/07/19 08:45	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X917250	AS	05/07/19 08:45	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	103	mg/L	10			X917191	TL	04/25/19 12:15	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X917230	APH	04/26/19 10:33	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.440	mg/L	0.100	0.062		X918244	AJH	05/07/19 13:00	
EPA 300.0	**Sulfate as SO4**	5.08	mg/L	0.30	0.18		X918244	AJH	05/07/19 13:00	

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Project Name: BMSL - Routine
Work Order: **X9D0566**
Reported: 08-May-19 15:47

Client Sample ID: **190423BMGSLM5**
SVL Sample ID: **X9D0566-04 (Ground Water)**

Sampled: 23-Apr-19 08:20
Received: 24-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	89.1	mg/L	0.100	0.069		X917253	AS	05/06/19 10:22	
Metals (Dissolved)										
EPA 200.7	**Iron**	1.16	mg/L	0.100	0.056		X917250	AS	05/07/19 08:48	
EPA 200.7	**Manganese**	0.331	mg/L	0.0080	0.0034		X917250	AS	05/07/19 08:48	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	338	mg/L	10			X917191	TL	04/25/19 12:15	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X917230	APH	04/26/19 10:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.805	mg/L	0.100	0.062		X918244	AJH	05/07/19 13:38	
EPA 300.0	**Sulfate as SO4**	24.5	mg/L	0.30	0.18		X918244	AJH	05/07/19 13:38	

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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9D0566
San Luis, CO 81152	Reported: 08-May-19 15:47

Client Sample ID: **190423BMGWD1**
SVL Sample ID: **X9D0566-05 (Ground Water)**

Sampled: 23-Apr-19 08:50
Received: 24-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	**Iron**	0.198	mg/L	0.100	0.056		X917250	AS	05/07/19 08:51	
EPA 200.7	**Manganese**	0.0454	mg/L	0.0080	0.0034		X917250	AS	05/07/19 08:51	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X917250	AS	05/07/19 08:51	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X917267	KWH	05/07/19 08:38	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X917267	KWH	05/07/19 08:38	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X917230	APH	04/26/19 10:37	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.677	mg/L	0.100	0.062		X918244	AJH	05/07/19 13:51	
EPA 300.0	**Sulfate as SO4**	16.1	mg/L	0.30	0.18		X918244	AJH	05/07/19 13:51	

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9D0566**
Reported: 08-May-19 15:47

Client Sample ID: **190423BMGSLM1**
SVL Sample ID: **X9D0566-06 (Ground Water)**

Sampled: 23-Apr-19 10:05
Received: 24-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	36.5	mg/L	0.100	0.069		X917253	AS	05/06/19 10:24	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X917250	AS	05/07/19 08:54	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X917250	AS	05/07/19 08:54	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	148	mg/L	10			X917191	TL	04/25/19 12:15	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X917230	APH	04/26/19 10:39	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.685	mg/L	0.100	0.062		X918244	AJH	05/07/19 14:04	
EPA 300.0	**Sulfate as SO4**	16.4	mg/L	0.30	0.18		X918244	AJH	05/07/19 14:04	

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Project Name: BMSL - Routine
Work Order: **X9D0566**
Reported: 08-May-19 15:47

Client Sample ID: **190423BMGSLM3**
SVL Sample ID: **X9D0566-07 (Ground Water)**

Sampled: 23-Apr-19 11:30
Received: 24-Apr-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	24.4	mg/L	0.100	0.069		X917253	AS	05/06/19 10:27	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X917250	AS	05/07/19 09:14	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X917250	AS	05/07/19 09:14	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	140	mg/L	10			X917191	TL	04/25/19 12:15	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X917230	APH	04/26/19 10:41	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.558	mg/L	0.100	0.062		X918244	AJH	05/07/19 14:17	
EPA 300.0	**Sulfate as SO4**	18.1	mg/L	0.30	0.18		X918244	AJH	05/07/19 14:17	

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

Project Name: BMSL - Routine
Work Order: **X9E0057**
Reported: 20-May-19 10:23

Client Sample ID: **190430BMGLD**
SVL Sample ID: **X9E0057-01 (Surface Water)**

Sampled: 30-Apr-19 08:35
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	510	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:36	M3
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X918260	DJS	05/16/19 14:29	
EPA 200.7	**Sodium**	976	mg/L	5.00	1.20	10	X918260	DJS	05/17/19 08:37	D2,M4
EPA 200.7	**Zinc**	< 0.010	mg/L	0.010	0.005		X918260	DJS	05/16/19 14:29	
EPA 200.8	**Copper**	0.0613	mg/L	0.00200	0.00180	5	X918305	KWH	05/14/19 11:15	D1
Classical Chemistry Parameters										
SM 4500 CN I	**Cyanide (WAD)**	< 0.0100	mg/L	0.0100	0.0044		X919028	APH	05/08/19 09:51	

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

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9E0057**
San Luis, CO 81152	Reported: 20-May-19 10:23

Client Sample ID: **190430BMGCOL**
SVL Sample ID: **X9E0057-02 (Surface Water)**

Sampled: 30-Apr-19 08:50
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	524	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:44	
EPA 200.7	**Iron**	29.3	mg/L	0.100	0.056		X918260	DJS	05/16/19 14:36	
EPA 200.7	**Sodium**	992	mg/L	5.00	1.20	10	X918260	DJS	05/17/19 08:43	D2
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X918260	DJS	05/16/19 14:36	
EPA 200.8	Copper	< 0.00200	mg/L	0.00200	0.00180	5	X918305	KWH	05/14/19 11:18	D1
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X919028	APH	05/08/19 09:53	

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

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9E0057**
San Luis, CO 81152	Reported: 20-May-19 10:23

Client Sample ID: **190430BMGTAILS**
SVL Sample ID: **X9E0057-03 (Surface Water)**

Sampled: 30-Apr-19 10:15
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	427	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:48	
EPA 200.7	**Iron**	0.352	mg/L	0.100	0.056		X918260	DJS	05/16/19 14:40	
EPA 200.7	**Sodium**	449	mg/L	0.50	0.12		X918260	DJS	05/16/19 14:40	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X918260	DJS	05/16/19 14:40	
EPA 200.8	**Arsenic**	< 0.0100	mg/L	0.0100	0.00105	5	X918305	KWH	05/14/19 11:21	D1
EPA 200.8	**Copper**	0.0577	mg/L	0.00200	0.00180	5	X918305	KWH	05/14/19 11:21	D1

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: X9E0053
Reported: 21-May-19 12:11

Client Sample ID: **190501BMGRS2**
SVL Sample ID: **X9E0053-01 (Surface Water)**

Sampled: 01-May-19 08:05
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Aluminum**	0.58	mg/L	0.08	0.05		X918260	DJS	05/16/19 13:57	
EPA 200.7	**Barium**	0.0311	mg/L	0.0020	0.0019		X918260	DJS	05/16/19 13:57	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X918260	DJS	05/16/19 13:57	
EPA 200.7	**Calcium**	16.2	mg/L	0.100	0.069		X918260	DJS	05/16/19 13:57	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X918260	DJS	05/16/19 13:57	
EPA 200.7	**Iron**	0.725	mg/L	0.100	0.056		X918260	DJS	05/16/19 13:57	
EPA 200.7	**Magnesium**	4.02	mg/L	0.50	0.08		X918260	DJS	05/16/19 13:57	
EPA 200.7	**Manganese**	0.0685	mg/L	0.0080	0.0034		X918260	DJS	05/16/19 13:57	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X918260	DJS	05/16/19 13:57	
EPA 200.7	**Potassium**	0.95	mg/L	0.50	0.18		X918260	DJS	05/16/19 13:57	
EPA 200.7	**Silica (SiO2)**	13.6	mg/L	0.17	0.12		X918260	DJS	05/16/19 13:57	M2
EPA 200.7	**Sodium**	4.97	mg/L	0.50	0.12		X918260	DJS	05/16/19 13:57	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X918260	DJS	05/16/19 13:57	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X918305	KWH	05/14/19 11:02	D1
EPA 200.8	Cadmium	< 0.00050	mg/L	0.00050	0.00032	5	X918305	KWH	05/14/19 11:02	D1
EPA 200.8	**Copper**	0.00283	mg/L	0.00200	0.00180	5	X918305	KWH	05/14/19 11:02	D1
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00070	5	X918305	KWH	05/14/19 11:02	D1
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0012	5	X918305	KWH	05/15/19 07:51	D1
EPA 200.8	Silver	< 0.000400	mg/L	0.000400	0.000305	5	X918305	KWH	05/15/19 07:51	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X920020	MWD	05/14/19 11:18	
Metals (Dissolved)										
EPA 200.7	**Aluminum**	0.22	mg/L	0.08	0.05		X918310	DJS	05/17/19 15:33	
EPA 200.7	**Barium**	0.0275	mg/L	0.0020	0.0019		X918310	DJS	05/17/19 15:33	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X918310	DJS	05/17/19 15:33	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X918310	DJS	05/17/19 15:33	
EPA 200.7	**Iron**	0.164	mg/L	0.100	0.056		X918310	DJS	05/17/19 15:33	
EPA 200.7	**Manganese**	0.0284	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 15:33	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X918310	DJS	05/17/19 15:33	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X918310	DJS	05/17/19 15:33	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X918306	KWH	05/15/19 08:05	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X918306	KWH	05/15/19 08:05	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X918306	KWH	05/15/19 08:05	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X918306	KWH	05/15/19 08:05	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X918306	KWH	05/15/19 08:05	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X918306	KWH	05/15/19 08:05	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X920022	MWD	05/14/19 10:03	
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X918270	APH	05/03/19 12:52	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X918266	APH	05/03/19 11:06	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X919016	SM	05/06/19 15:27	
SM 2320 B	**Total Alkalinity**	55.8	mg/L as CaCO3	1.0			X919111	KAG	05/09/19 13:00	
SM 2320 B	**Bicarbonate**	55.8	mg/L as CaCO3	1.0			X919111	KAG	05/09/19 13:00	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X919111	KAG	05/09/19 13:00	
SM 2540 C	**Total Diss. Solids**	91	mg/L	10			X918291	TL	05/03/19 13:50	
SM 2540 D	**Total Susp. Solids**	16.0	mg/L	5.0			X918297	TL	05/03/19 13:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X918271	APH	05/03/19 13:46	

SVL holds the following certifications:
AZ:0538, CA:2080, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9E0053**
Reported: 21-May-19 12:11

Client Sample ID: **190501BMGRS2**
SVL Sample ID: **X9E0053-01 (Surface Water)**

Sampled: 01-May-19 08:05
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	1.30	mg/L	0.20	0.14		X919180	DT	05/17/19 09:37	
EPA 300.0	**Fluoride**	0.589	mg/L	0.100	0.062		X919180	DT	05/17/19 09:37	
EPA 300.0	**Sulfate as SO4**	10.8	mg/L	0.30	0.18		X919180	DT	05/17/19 09:37	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.41 meq/L Anion Sum: 1.41 meq/L C/A Balance: 0.06 % Calculated TDS: 86 TDS/cTDS: 1.06

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

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Project Name: BMSL - Routine
Work Order: **X9E0053**
Reported: 21-May-19 12:11

Client Sample ID: **190501BMGRS5**
SVL Sample ID: **X9E0053-02 (Surface Water)**

Sampled: 01-May-19 08:30
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.950	mg/L	0.100	0.028		X918311	DJS	05/16/19 14:45	
EPA 200.7	**Manganese**	0.0602	mg/L	0.0080	0.0017		X918311	DJS	05/16/19 14:45	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.225	mg/L	0.100	0.056		X918310	DJS	05/17/19 15:45	
EPA 200.7	**Manganese**	0.0492	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 15:45	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X918271	APH	05/03/19 13:48	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	11.3	mg/L	0.30	0.18		X919180	DT	05/17/19 10:12	

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

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Project Name: BMSL - Routine
Work Order: **X9E0053**
Reported: 21-May-19 12:11

Client Sample ID: **190501BMGM19**
SVL Sample ID: **X9E0053-03 (Ground Water)**

Sampled: 01-May-19 09:15
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	20.5	mg/L	0.100	0.069		X918260	DJS	05/16/19 14:01	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.413	mg/L	0.100	0.056		X918310	DJS	05/17/19 15:49	
EPA 200.7	**Manganese**	0.276	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 15:49	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X918306	KWH	05/15/19 08:18	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	90	mg/L	10			X918291	TL	05/03/19 13:50	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.885	mg/L	0.100	0.062		X919180	DT	05/17/19 10:47	
EPA 300.0	**Sulfate as SO4**	14.2	mg/L	0.30	0.18		X919180	DT	05/17/19 10:47	

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Project Name: BMSL - Routine
Work Order: **X9E0053**
Reported: 21-May-19 12:11

Client Sample ID: **190501BMGM21**
SVL Sample ID: **X9E0053-04 (Ground Water)**

Sampled: 01-May-19 09:50
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	31.4	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:18	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X918310	DJS	05/17/19 15:53	
EPA 200.7	**Manganese**	0.359	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 15:53	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X918306	KWH	05/15/19 08:21	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	160	mg/L	10			X918291	TL	05/03/19 13:50	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.23	mg/L	0.100	0.062		X919180	DT	05/17/19 11:57	
EPA 300.0	**Sulfate as SO4**	16.0	mg/L	0.30	0.18		X919180	DT	05/17/19 11:57	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9E0053**
San Luis, CO 81152	Reported: 21-May-19 12:11

Client Sample ID: **190501BMGM24**
SVL Sample ID: **X9E0053-05 (Ground Water)**

Sampled: 01-May-19 10:30
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	103	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:21	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.99	mg/L	0.100	0.056		X918310	DJS	05/17/19 15:57	
EPA 200.7	**Manganese**	1.21	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 15:57	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X918306	KWH	05/15/19 08:24	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	506	mg/L	10			X918291	TL	05/03/19 13:50	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.694	mg/L	0.100	0.062		X919180	DT	05/17/19 12:32	
EPA 300.0	**Sulfate as SO4**	196	mg/L	3.00	1.80	10	X919180	DT	05/17/19 12:49	D2

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9E0053**
San Luis, CO 81152	Reported: 21-May-19 12:11

Client Sample ID: **190501BMGM11R**
SVL Sample ID: **X9E0053-06 (Ground Water)**

Sampled: 01-May-19 11:05
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	103	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:25	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X918310	DJS	05/17/19 16:01	
EPA 200.7	**Manganese**	0.647	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 16:01	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X918306	KWH	05/15/19 08:26	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	445	mg/L	10			X918291	TL	05/03/19 13:50	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.788	mg/L	0.100	0.062		X919180	DT	05/17/19 13:07	
EPA 300.0	**Sulfate as SO4**	160	mg/L	3.00	1.80	10	X919180	DT	05/17/19 13:25	D2

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Project Name: BMSL - Routine
Work Order: **X9E0053**
Reported: 21-May-19 12:11

Client Sample ID: **190501BMGFB**
SVL Sample ID: **X9E0053-07 (Surface Water)**

Sampled: 01-May-19 11:00
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:29	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X918310	DJS	05/17/19 16:15	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 16:15	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X918306	KWH	05/15/19 08:29	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X918291	TL	05/03/19 13:50	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X919180	DT	05/17/19 13:42	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X919180	DT	05/17/19 13:42	

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Project Name: BMSL - Routine
Work Order: **X9E0053**
Reported: 21-May-19 12:11

Client Sample ID: **190501BMGRB**
SVL Sample ID: **X9E0053-08 (Surface Water)**

Sampled: 01-May-19 11:15
Received: 02-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X918260	DJS	05/16/19 16:33	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X918310	DJS	05/17/19 16:19	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X918310	DJS	05/17/19 16:19	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X918306	KWH	05/15/19 08:32	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X918291	TL	05/03/19 13:50	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X919180	DT	05/17/19 14:00	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X919180	DT	05/17/19 14:00	

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9E0327**
Reported: 06-Jun-19 16:22

Client Sample ID: **190514WTPEFF**
SVL Sample ID: **X9E0327-01 (Ground Water)**

Sampled: 14-May-19 10:50
Received: 15-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00105	5	X920178	KWH	06/06/19 07:44	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X922015	MWD	05/29/19 11:41	
Metals (Total Recoverable)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X921044	DJS	05/30/19 14:24	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X921044	DJS	05/30/19 14:24	
EPA 200.7	Molybdenum	0.015	mg/L	0.008	0.002		X921044	DJS	05/30/19 14:24	
EPA 200.8	Aluminum	< 0.0100	mg/L	0.0100	0.0040	2	X920226	KWH	06/05/19 13:59	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X920226	KWH	06/05/19 13:59	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X921024	DJS	05/30/19 10:33	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X921024	DJS	05/30/19 10:33	
Metals (Potentially Dissolved)										
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X921046	DJS	05/30/19 13:52	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X921046	DJS	05/30/19 13:52	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X920195	KWH	06/06/19 07:03	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X920195	KWH	06/06/19 07:03	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X920195	KWH	06/06/19 07:03	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X920195	KWH	06/06/19 07:03	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X920195	KWH	06/06/19 07:03	
EPA 200.8	Uranium	0.00296	mg/L	0.00100	0.000052		X920195	KWH	06/06/19 07:03	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	157	mg/L	10			X920179	dks	05/16/19 11:30	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X920184	DKS	05/16/19 11:30	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X920215	APH	05/17/19 11:04	
SM 4500 S F	Sulfide	< 1.00	mg/L	1.00	0.26		X920121	SM	05/16/19 15:32	
Anions by Ion Chromatography										
EPA 300.0	Chloride	6.91	mg/L	0.20	0.14		X921318	DT	05/28/19 19:04	
EPA 300.0	Fluoride	1.35	mg/L	0.100	0.062		X921318	DT	05/28/19 19:04	
EPA 300.0	Sulfate as SO4	54.4	mg/L	3.00	1.80	10	X921318	DT	05/28/19 19:21	D2

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: X9E0505
Reported: 11-Jun-19 15:11

Client Sample ID: **190520BMGM14165**
SVL Sample ID: **X9E0505-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 20-May-19 10:00
Received: 22-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	175	mg/L	0.100	0.035		X921256	AS	06/07/19 12:06	
EPA 200.7	**Magnesium**	28.9	mg/L	0.50	0.04		X921256	AS	06/07/19 12:06	
EPA 200.7	**Potassium**	2.02	mg/L	0.50	0.09		X921256	AS	06/07/19 12:06	
EPA 200.7	**Silica (SiO2)**	28.2	mg/L	0.17	0.06		X921256	AS	06/07/19 16:47	
EPA 200.7	**Sodium**	29.2	mg/L	0.50	0.06		X921256	AS	06/07/19 12:06	
SM 2340 B	**Hardness (as CaCO3)**	556	mg/L	2.31	0.255		N/A		06/07/19 12:06	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X921253	AS	06/07/19 11:29	
EPA 200.7	**Barium**	0.362	mg/L	0.0020	0.0019		X921253	AS	06/07/19 11:29	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X921253	AS	06/07/19 11:29	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X921253	AS	06/07/19 11:29	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X921253	AS	06/07/19 11:29	
EPA 200.7	**Lead**	0.0223	mg/L	0.0075	0.0049		X921253	DJS	06/07/19 13:55	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X921253	AS	06/07/19 11:29	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X921253	AS	06/07/19 11:29	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X921253	AS	06/07/19 11:29	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X921377	KWH	06/08/19 08:17	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X921377	KWH	06/08/19 08:17	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X921377	KWH	06/08/19 08:17	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X921377	KWH	06/08/19 08:17	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X923011	MWD	06/04/19 14:02	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	616	mg/L as CaCO3	1.0			X921229	KAG	05/23/19 12:26	
SM 2540 C	**Total Diss. Solids**	646	mg/L	10			X921261	TL	05/23/19 10:45	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0044		X922091	APH	05/30/19 11:18	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.50	mg/L	0.20	0.14		X923228	DT	06/08/19 03:20	
EPA 300.0	**Fluoride**	0.325	mg/L	0.100	0.062		X923228	DT	06/08/19 03:20	
EPA 300.0	**Sulfate as SO4**	26.8	mg/L	0.30	0.18		X923228	DT	06/08/19 03:20	

Cation/Anion Balance and TDS Ratios

Cation Sum: 12.4 meq/L Anion Sum: 13.1 meq/L C/A Balance: -2.64 % Calculated TDS: 669 TDS/cTDS: 0.97

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

Connor Williams
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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9E0683**
San Luis, CO 81152	Reported: 17-Jun-19 11:28

Client Sample ID: **190525BMGTAILS**
SVL Sample ID: **X9E0683-01 (Surface Water)**

Sampled: 28-May-19 08:40
Received: 30-May-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X922204	KWH	06/14/19 11:02	

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Battle Mountain - San Luis
PO Box 310
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Project Name: BMSL - Routine
Work Order: **X9F0163**
Reported: 25-Jun-19 10:17

Client Sample ID: **190605BMGRS2**
SVL Sample ID: **X9F0163-01 (Surface Water)**

Sampled: 05-Jun-19 07:25
Received: 07-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X925021	MWD	06/18/19 12:07	
SM 2340 B	**Hardness (as CaCO3)**	37.9	mg/L	2.31	0.255		N/A		06/19/19 12:39	
Metals (Total Recoverable)										
EPA 200.7	**Aluminum**	1.27	mg/L	0.08	0.03		X924100	AS	06/19/19 12:39	M1
EPA 200.7	**Barium**	0.0324	mg/L	0.0020	0.0010		X924100	AS	06/19/19 12:39	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X924100	AS	06/19/19 12:39	
EPA 200.7	**Calcium**	10.2	mg/L	0.100	0.035		X924100	AS	06/19/19 12:39	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X924100	AS	06/19/19 12:39	
EPA 200.7	**Iron**	1.51	mg/L	0.100	0.028		X924100	AS	06/19/19 12:39	
EPA 200.7	**Magnesium**	3.05	mg/L	0.50	0.04		X924100	AS	06/19/19 12:39	
EPA 200.7	**Manganese**	0.0953	mg/L	0.0080	0.0017		X924100	AS	06/19/19 12:39	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X924100	AS	06/19/19 12:39	
EPA 200.7	**Potassium**	0.91	mg/L	0.50	0.09		X924100	AS	06/19/19 12:39	
EPA 200.7	**Silica (SiO2)**	16.5	mg/L	0.17	0.06		X924100	AS	06/19/19 12:39	
EPA 200.7	**Sodium**	3.93	mg/L	0.50	0.06		X924100	AS	06/19/19 12:39	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X924100	AS	06/19/19 12:39	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00042	2	X924088	KWH	06/21/19 10:24	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.00013	2	X924088	KWH	06/21/19 10:24	
EPA 200.8	**Copper**	0.00595	mg/L	0.00100	0.00072	2	X924088	KWH	06/21/19 10:24	
EPA 200.8	**Lead**	0.00300	mg/L	0.00300	0.00028	2	X924088	KWH	06/21/19 10:24	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0005	2	X924088	KWH	06/21/19 10:24	
EPA 200.8	Silver	< 0.000160	mg/L	0.000160	0.000122	2	X924088	KWH	06/21/19 10:24	
Metals (Dissolved)										
EPA 200.7	**Aluminum**	0.09	mg/L	0.08	0.05		X924105	AS	06/20/19 12:56	
EPA 200.7	**Barium**	0.0175	mg/L	0.0020	0.0019		X924105	AS	06/20/19 12:56	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X924105	AS	06/20/19 12:56	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X924105	AS	06/20/19 12:56	
EPA 200.7	**Iron**	0.150	mg/L	0.100	0.056		X924105	AS	06/20/19 12:56	
EPA 200.7	**Manganese**	0.0259	mg/L	0.0080	0.0034		X924105	AS	06/20/19 12:56	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X924105	AS	06/20/19 12:56	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X924105	AS	06/20/19 12:56	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X924205	KWH	06/21/19 10:00	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X924205	KWH	06/21/19 10:00	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X924205	KWH	06/21/19 10:00	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X924205	KWH	06/21/19 10:00	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X924205	KWH	06/21/19 10:00	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X924205	KWH	06/21/19 10:00	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X925026	MWD	06/18/19 13:48	

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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9F0163
San Luis, CO 81152	Reported: 25-Jun-19 10:17

Client Sample ID: **190605BMGRS2**
SVL Sample ID: **X9F0163-01 (Surface Water)**

Sampled: 05-Jun-19 07:25
Received: 07-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X924051	APH	06/11/19 10:00	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X924173	APH	06/13/19 13:27	
EPA 353.2	Nitrate/Nitrite as N	0.107	mg/L	0.050	0.049		X925172	SM	06/21/19 15:21	
SM 2320 B	Total Alkalinity	39.5	mg/L as CaCO3	1.0			X924179	KAG	06/12/19 12:20	
SM 2320 B	Bicarbonate	39.5	mg/L as CaCO3	1.0			X924179	KAG	06/12/19 12:20	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X924179	KAG	06/12/19 12:20	
SM 2540 C	Total Diss. Solids	67	mg/L	10			X924066	TL	06/10/19 14:20	
SM 2540 D	Total Susp. Solids	12.0	mg/L	5.0			X924068	TL	06/10/19 14:10	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X924127	APH	06/12/19 10:02	
Anions by Ion Chromatography										
EPA 300.0	Chloride	1.04	mg/L	0.20	0.14		X925123	DT	06/20/19 22:10	
EPA 300.0	Fluoride	0.420	mg/L	0.100	0.062		X925123	DT	06/20/19 22:10	
EPA 300.0	Sulfate as SO4	7.52	mg/L	0.30	0.18		X925123	DT	06/20/19 22:10	

Cation/Anion Balance and TDS Ratios

Cation Sum: 0.97 meq/L Anion Sum: 1.00 meq/L C/A Balance: -1.67 % Calculated TDS: 68 TDS/cTDS: 0.99

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

Connor Williams
Project Manager

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9F0163**
Reported: 25-Jun-19 10:17

Client Sample ID: **190605BMGRS5**
SVL Sample ID: **X9F0163-02 (Surface Water)**

Sampled: 05-Jun-19 07:45
Received: 07-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	1.02	mg/L	0.100	0.028		X924100	AS	06/19/19 12:45	
EPA 200.7	**Manganese**	0.0566	mg/L	0.0080	0.0017		X924100	AS	06/19/19 12:45	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.196	mg/L	0.100	0.056		X924105	AS	06/20/19 13:07	
EPA 200.7	**Manganese**	0.0343	mg/L	0.0080	0.0034		X924105	AS	06/20/19 13:07	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X924127	APH	06/12/19 10:04	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	7.63	mg/L	0.30	0.18		X925123	DT	06/20/19 22:45	

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Project Name: BMSL - Routine
Work Order: **X9F0163**
Reported: 25-Jun-19 10:17

Client Sample ID: **190605BMGM19**
SVL Sample ID: **X9F0163-03 (Ground Water)**

Sampled: 05-Jun-19 08:30
Received: 07-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	19.1	mg/L	0.100	0.069		X924121	DJS	06/21/19 12:16	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.336	mg/L	0.100	0.056		X924105	AS	06/20/19 13:10	
EPA 200.7	**Manganese**	0.170	mg/L	0.0080	0.0034		X924105	AS	06/20/19 13:10	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X924205	KWH	06/21/19 10:08	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	94	mg/L	10			X924160	TL	06/12/19 13:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.970	mg/L	0.100	0.062		X925123	DT	06/20/19 23:03	
EPA 300.0	**Sulfate as SO4**	11.9	mg/L	0.30	0.18		X925123	DT	06/20/19 23:03	

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

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Project Name: BMSL - Routine
Work Order: **X9F0163**
Reported: 25-Jun-19 10:17

Client Sample ID: **190605BMGM21**
SVL Sample ID: **X9F0163-04 (Ground Water)**

Sampled: 05-Jun-19 09:10
Received: 07-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	31.8	mg/L	0.100	0.069		X924121	DJS	06/21/19 12:28	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.121	mg/L	0.100	0.056		X924105	AS	06/20/19 13:14	
EPA 200.7	**Manganese**	0.266	mg/L	0.0080	0.0034		X924105	AS	06/20/19 13:14	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X924205	KWH	06/21/19 10:11	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	144	mg/L	10			X924160	TL	06/12/19 13:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.28	mg/L	0.100	0.062		X925123	DT	06/20/19 23:56	
EPA 300.0	**Sulfate as SO4**	17.2	mg/L	0.30	0.18		X925123	DT	06/20/19 23:56	

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Project Name: BMSL - Routine
Work Order: **X9F0163**
Reported: 25-Jun-19 10:17

Client Sample ID: **190605BMGM24**
SVL Sample ID: **X9F0163-05 (Ground Water)**

Sampled: 05-Jun-19 09:50
Received: 07-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	108	mg/L	0.100	0.069		X924121	DJS	06/21/19 12:32	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.10	mg/L	0.100	0.056		X924105	AS	06/20/19 13:18	
EPA 200.7	**Manganese**	1.03	mg/L	0.0080	0.0034		X924105	AS	06/20/19 13:18	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X924205	KWH	06/21/19 10:13	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	527	mg/L	10			X924160	TL	06/12/19 13:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.727	mg/L	0.100	0.062		X925123	DT	06/21/19 00:31	
EPA 300.0	**Sulfate as SO4**	212	mg/L	3.00	1.80	10	X925123	DT	06/21/19 00:48	D2

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

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Project Name: BMSL - Routine
Work Order: **X9F0163**
Reported: 25-Jun-19 10:17

Client Sample ID: **190605BMGM11R**
SVL Sample ID: **X9F0163-06 (Ground Water)**

Sampled: 05-Jun-19 10:30
Received: 07-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.7	**Calcium**	105	mg/L	0.100	0.069		X924121	DJS	06/21/19 12:36	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X924105	AS	06/20/19 13:21	
EPA 200.7	**Manganese**	0.670	mg/L	0.0080	0.0034		X924105	AS	06/20/19 13:21	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X924205	KWH	06/21/19 10:16	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	436	mg/L	10			X924160	TL	06/12/19 13:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.883	mg/L	0.100	0.062		X925123	DT	06/21/19 01:06	
EPA 300.0	**Sulfate as SO4**	163	mg/L	3.00	1.80	10	X925123	DT	06/21/19 01:23	D2

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9F0664**
Reported: 10-Jul-19 14:00

Client Sample ID: **190626BMGTAILS**
SVL Sample ID: **X9F0664-01 (Surface Water)**

Sampled: 26-Jun-19 10:25
Received: 27-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X927009	AS	07/10/19 09:34	

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

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PO Box 310
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Project Name: BMSL - Routine
Work Order: **X9F0588**
Reported: 17-Jul-19 15:40

Client Sample ID: **190624BMGM14165**
SVL Sample ID: **X9F0588-01 (Ground Water)**

Sampled: 24-Jun-19 10:20
Received: 25-Jun-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	185	mg/L	0.100	0.035		X926182	AS	07/11/19 11:10	M3
EPA 200.7	**Magnesium**	29.9	mg/L	0.50	0.04		X926182	AS	07/11/19 11:10	
EPA 200.7	**Potassium**	2.25	mg/L	0.50	0.09		X926182	AS	07/11/19 11:10	
EPA 200.7	**Silica (SiO2)**	29.7	mg/L	0.17	0.06		X926182	AS	07/12/19 10:31	
EPA 200.7	**Sodium**	32.0	mg/L	0.50	0.06		X926182	AS	07/11/19 11:10	
SM 2340 B	**Hardness (as CaCO3)**	585	mg/L	2.31	0.255		N/A		07/11/19 11:10	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X926170	JFB	07/09/19 11:33	
EPA 200.7	**Barium**	0.379	mg/L	0.0020	0.0019		X926170	JFB	07/09/19 11:33	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X926170	JFB	07/09/19 11:33	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X926170	JFB	07/09/19 11:33	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X926170	JFB	07/09/19 11:33	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X926170	JFB	07/09/19 11:33	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X926170	JFB	07/09/19 11:33	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X926170	JFB	07/09/19 11:33	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X926170	JFB	07/09/19 11:33	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X926221	KWH	07/16/19 13:03	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X926221	KWH	07/16/19 13:03	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X926221	KWH	07/16/19 13:03	M1
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X926221	KWH	07/16/19 13:03	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X927040	MWD	07/03/19 13:41	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	608	mg/L as CaCO3	1.0			X927054	KAG	07/02/19 12:01	
SM 2540 C	**Total Diss. Solids**	667	mg/L	10			X926154	TL	06/26/19 10:40	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X927030	APH	07/02/19 11:03	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	9.19	mg/L	0.20	0.14		X927208	RS	07/09/19 12:29	
EPA 300.0	**Fluoride**	0.390	mg/L	0.100	0.062		X927208	RS	07/09/19 12:29	
EPA 300.0	**Sulfate as SO4**	28.2	mg/L	0.30	0.18		X927208	RS	07/09/19 12:29	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.2 meq/L Anion Sum: 13.0 meq/L C/A Balance: 0.54 % Calculated TDS: 681 TDS/cTDS: 0.98

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

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

Project Name: BMSL - Routine
Work Order: X9G0040
Reported: 19-Jul-19 13:34

Client Sample ID: **190701BMGRS2**
SVL Sample ID: **X9G0040-01 (Surface Water)**

Sampled: 01-Jul-19 08:20
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929042	MWD	07/16/19 14:47	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	11.5	mg/L	0.100	0.035		X927195	DJS	07/17/19 11:34	
EPA 200.7	**Iron**	0.702	mg/L	0.100	0.028		X927195	DJS	07/18/19 12:13	
EPA 200.7	**Magnesium**	3.08	mg/L	0.50	0.04		X927195	DJS	07/18/19 12:13	
EPA 200.7	**Manganese**	0.0597	mg/L	0.0080	0.0017		X927195	DJS	07/17/19 11:34	
EPA 200.7	**Potassium**	0.85	mg/L	0.50	0.09		X927195	DJS	07/17/19 11:34	
EPA 200.7	**Silica (SiO2)**	5.58	mg/L	0.17	0.06		X927195	DJS	07/17/19 15:38	M1
EPA 200.7	**Sodium**	4.82	mg/L	0.50	0.06		X927195	DJS	07/17/19 11:34	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X928003	KWH	07/18/19 08:20	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X927199	DJS	07/18/19 12:35	
EPA 200.7	**Iron**	0.123	mg/L	0.100	0.056		X927199	DJS	07/18/19 12:35	
EPA 200.7	**Manganese**	0.0196	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 12:35	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X927199	DJS	07/18/19 12:35	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X928007	KWH	07/18/19 09:54	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.19	mg/L	0.08	0.05		X928009	DJS	07/17/19 15:38	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X928009	DJS	07/17/19 15:38	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X928009	DJS	07/17/19 15:38	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X928009	DJS	07/17/19 15:38	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928005	KWH	07/18/19 10:58	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X928005	KWH	07/18/19 10:58	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X927149	APH	07/03/19 12:08	
SM 2320 B	**Total Alkalinity**	36.5	mg/L as CaCO3	1.0			X927269	KAG	07/09/19 10:42	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X927142	KAG	07/03/19 13:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	1.16	mg/L	0.20	0.14		X927211	RS	07/10/19 19:39	M1
EPA 300.0	**Fluoride**	0.490	mg/L	0.100	0.062		X927211	RS	07/10/19 19:39	M1
EPA 300.0	**Sulfate as SO4**	8.22	mg/L	0.30	0.18		X927211	RS	07/10/19 19:39	M1
Cation/Anion Balance and TDS Ratios										

Cation Sum: 1.09 meq/L Anion Sum: 0.96 meq/L C/A Balance: 6.22 %

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

Project Name: BMSL - Routine
Work Order: **X9G0040**
Reported: 19-Jul-19 13:34

Client Sample ID: **190701BMGRS2**
SVL Sample ID: **X9G0040-02 (Surface Water)**

Sampled: 01-Jul-19 08:20
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929042	MWD	07/16/19 14:49	
SM 2340 B	**Hardness (as CaCO3)**	40.4	mg/L	2.31	0.255		N/A		07/18/19 12:19	
Metals (Total Recoverable)										
EPA 200.7	**Aluminum**	0.59	mg/L	0.08	0.03		X927195	DJS	07/17/19 11:41	
EPA 200.7	**Barium**	0.0247	mg/L	0.0020	0.0010		X927195	DJS	07/17/19 11:41	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X927195	DJS	07/17/19 11:41	
EPA 200.7	**Calcium**	11.1	mg/L	0.100	0.035		X927195	DJS	07/17/19 11:41	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X927195	DJS	07/17/19 11:41	
EPA 200.7	**Iron**	0.737	mg/L	0.100	0.028		X927195	DJS	07/18/19 12:19	
EPA 200.7	**Magnesium**	3.05	mg/L	0.50	0.04		X927195	DJS	07/18/19 12:19	
EPA 200.7	**Manganese**	0.0565	mg/L	0.0080	0.0017		X927195	DJS	07/17/19 11:41	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X927195	DJS	07/17/19 11:41	
EPA 200.7	**Potassium**	0.89	mg/L	0.50	0.09		X927195	DJS	07/17/19 11:41	
EPA 200.7	**Silica (SiO2)**	12.9	mg/L	0.17	0.06		X927195	DJS	07/17/19 16:58	
EPA 200.7	**Sodium**	4.65	mg/L	0.50	0.06		X927195	DJS	07/17/19 11:41	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X927195	DJS	07/17/19 11:41	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X928003	KWH	07/18/19 08:22	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X928003	KWH	07/18/19 08:22	
EPA 200.8	**Copper**	0.00153	mg/L	0.00100	0.00036	2	X928003	KWH	07/18/19 08:22	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.00014	2	X928003	KWH	07/18/19 08:22	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X928003	KWH	07/18/19 08:22	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X928003	KWH	07/18/19 08:22	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X927199	DJS	07/18/19 12:53	
EPA 200.7	**Barium**	0.0167	mg/L	0.0020	0.0019		X927199	DJS	07/18/19 12:53	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X927199	DJS	07/18/19 12:53	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X927199	DJS	07/18/19 12:53	
EPA 200.7	**Iron**	0.152	mg/L	0.100	0.056		X927199	DJS	07/18/19 12:53	
EPA 200.7	**Manganese**	0.0186	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 12:53	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X927199	DJS	07/18/19 12:53	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X927199	DJS	07/18/19 12:53	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X928007	KWH	07/18/19 09:40	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X928007	KWH	07/18/19 09:40	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 09:40	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X928007	KWH	07/18/19 09:40	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X928007	KWH	07/18/19 09:40	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X928007	KWH	07/18/19 09:40	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929043	MWD	07/16/19 13:48	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9G0040**
San Luis, CO 81152	Reported: 19-Jul-19 13:34

Client Sample ID: **190701BMGRS2**
SVL Sample ID: **X9G0040-02 (Surface Water)**

Sampled: 01-Jul-19 08:20
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X928032	APH	07/08/19 12:36	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X927149	APH	07/03/19 12:11	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X928094	SM	07/12/19 16:13	
SM 2320 B	**Total Alkalinity**	36.8	mg/L as CaCO3	1.0			X927165	KAG	07/05/19 12:55	
SM 2320 B	**Bicarbonate**	36.8	mg/L as CaCO3	1.0			X927165	KAG	07/05/19 12:55	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X927165	KAG	07/05/19 12:55	
SM 2540 C	**Total Diss. Solids**	63	mg/L	10			X927141	KAG	07/03/19 13:35	R2B
SM 2540 D	**Total Susp. Solids**	10.0	mg/L	5.0			X927142	KAG	07/03/19 13:35	R2B
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X928015	APH	07/08/19 11:38	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	1.23	mg/L	0.20	0.14		X927211	RS	07/10/19 20:32	
EPA 300.0	**Fluoride**	0.485	mg/L	0.100	0.062		X927211	RS	07/10/19 20:32	
EPA 300.0	**Sulfate as SO4**	8.64	mg/L	0.30	0.18		X927211	RS	07/10/19 20:32	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.04 meq/L Anion Sum: 0.98 meq/L C/A Balance: 3.18 % Calculated TDS: 65 TDS/cTDS: 0.97

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

Connor Williams
Project Manager

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9G0040**
San Luis, CO 81152	Reported: 19-Jul-19 13:34

Client Sample ID: **190701BMGM19**
SVL Sample ID: **X9G0040-03 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 01-Jul-19 09:55
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	17.2	mg/L	0.100	0.035		X928204	AS	07/16/19 12:12	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.239	mg/L	0.100	0.056		X927199	DJS	07/18/19 12:57	
EPA 200.7	**Manganese**	0.221	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 12:57	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 09:56	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	87	mg/L	10			X927141	KAG	07/03/19 13:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.15	mg/L	0.100	0.062		X927211	RS	07/10/19 20:50	
EPA 300.0	**Sulfate as SO4**	11.7	mg/L	0.30	0.18		X927211	RS	07/10/19 20:50	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9G0040**
San Luis, CO 81152	Reported: 19-Jul-19 13:34

Client Sample ID: **190701BMGM21**
SVL Sample ID: **X9G0040-04 (Ground Water)**

Sampled: 01-Jul-19 10:30
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	30.4	mg/L	0.100	0.035		X928204	AS	07/16/19 12:22	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:01	
EPA 200.7	**Manganese**	0.300	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:01	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 09:59	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	139	mg/L	10			X927141	KAG	07/03/19 13:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.49	mg/L	0.100	0.062		X927211	RS	07/10/19 21:25	M1
EPA 300.0	**Sulfate as SO4**	18.4	mg/L	0.30	0.18		X927211	RS	07/10/19 21:25	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9G0040**
San Luis, CO 81152	Reported: 19-Jul-19 13:34

Client Sample ID: **190701BMGM24**
SVL Sample ID: **X9G0040-05 (Ground Water)**

Sampled: 01-Jul-19 11:05
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	103	mg/L	0.100	0.035		X928204	AS	07/16/19 12:25	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.21	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:06	
EPA 200.7	**Manganese**	1.07	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:06	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:07	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	525	mg/L	10			X927141	KAG	07/03/19 13:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.799	mg/L	0.100	0.062		X927211	RS	07/10/19 23:10	
EPA 300.0	**Sulfate as SO4**	235	mg/L	3.00	1.80	10	X927211	RS	07/10/19 23:27	D2

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

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Battle Mountain - San Luis
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San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: **X9G0040**
Reported: 19-Jul-19 13:34

Client Sample ID: **190701BMGM11R**
SVL Sample ID: **X9G0040-06 (Ground Water)**

Sampled: 01-Jul-19 11:40
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
SM 2340 B	**Hardness (as CaCO3)**	269	mg/L	2.31	0.255		N/A		07/18/19 12:23	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	82.5	mg/L	0.100	0.035		X927195	DJS	07/17/19 11:44	
EPA 200.7	**Magnesium**	15.4	mg/L	0.50	0.04		X927195	DJS	07/18/19 12:23	
EPA 200.7	**Potassium**	2.63	mg/L	0.50	0.09		X927195	DJS	07/17/19 11:44	
EPA 200.7	**Silica (SiO2)**	17.3	mg/L	0.17	0.06		X927195	DJS	07/17/19 17:02	
EPA 200.7	**Sodium**	17.5	mg/L	0.50	0.06		X927195	DJS	07/17/19 11:44	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X927199	DJS	07/18/19 13:10	
EPA 200.7	**Barium**	0.0438	mg/L	0.0020	0.0019		X927199	DJS	07/18/19 13:10	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X927199	DJS	07/18/19 13:10	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X927199	DJS	07/18/19 13:10	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:10	
EPA 200.7	**Manganese**	0.374	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:10	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X927199	DJS	07/18/19 13:10	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X927199	DJS	07/18/19 13:10	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X928007	KWH	07/18/19 10:10	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:10	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X928007	KWH	07/18/19 10:10	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X928007	KWH	07/18/19 10:10	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X928007	KWH	07/18/19 10:10	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929043	MWD	07/16/19 13:49	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	168	mg/L as CaCO3	1.0			X927269	KAG	07/09/19 10:45	
SM 2540 C	**Total Diss. Solids**	344	mg/L	10			X927141	KAG	07/03/19 13:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.51	mg/L	0.20	0.14		X927211	RS	07/10/19 23:45	
EPA 300.0	**Fluoride**	1.01	mg/L	0.100	0.062		X927211	RS	07/10/19 23:45	
EPA 300.0	**Sulfate as SO4**	117	mg/L	3.00	1.80	10	X927211	RS	07/11/19 00:03	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.24 meq/L Anion Sum: 5.94 meq/L C/A Balance: 2.39 % Calculated TDS: 358 TDS/cTDS: 0.96

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

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Project Name: BMSL - Routine
Work Order: **X9G0036**
Reported: 19-Jul-19 10:04

Client Sample ID: **190701BMGRS1**
SVL Sample ID: **X9G0036-01 (Surface Water)**

Sampled: 01-Jul-19 08:00
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929042	MWD	07/16/19 14:34	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	10.2	mg/L	0.100	0.035		X927195	DJS	07/17/19 11:19	
EPA 200.7	**Iron**	0.617	mg/L	0.100	0.028		X927195	DJS	07/18/19 11:59	
EPA 200.7	**Magnesium**	2.91	mg/L	0.50	0.04		X927195	DJS	07/18/19 11:59	
EPA 200.7	**Manganese**	0.0345	mg/L	0.0080	0.0017		X927195	DJS	07/17/19 11:19	
EPA 200.7	**Potassium**	0.63	mg/L	0.50	0.09		X927195	DJS	07/17/19 11:19	
EPA 200.7	Silica (SiO2)	< 0.17	mg/L	0.17	0.06		X927195	DJS	07/17/19 14:40	
EPA 200.7	**Sodium**	2.51	mg/L	0.50	0.06		X927195	DJS	07/17/19 11:19	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X928003	KWH	07/18/19 08:09	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X927199	DJS	07/18/19 12:04	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X927199	DJS	07/18/19 12:04	
EPA 200.7	**Manganese**	0.0088	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 12:04	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X927199	DJS	07/18/19 12:04	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X928007	KWH	07/18/19 09:48	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.19	mg/L	0.08	0.05		X928009	DJS	07/17/19 15:25	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X928009	DJS	07/17/19 15:25	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X928009	DJS	07/17/19 15:25	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X928009	DJS	07/17/19 15:25	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928005	KWH	07/18/19 10:47	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X928005	KWH	07/18/19 10:47	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X927149	APH	07/03/19 12:02	
SM 2320 B	**Total Alkalinity**	34.9	mg/L as CaCO3	1.0			X927269	KAG	07/09/19 10:34	
SM 2540 D	**Total Susp. Solids**	5.0	mg/L	5.0			X927123	KAG	07/03/19 12:36	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.42	mg/L	0.20	0.14		X927211	RS	07/10/19 16:44	
EPA 300.0	**Fluoride**	0.376	mg/L	0.100	0.062		X927211	RS	07/10/19 16:44	
EPA 300.0	**Sulfate as SO4**	5.06	mg/L	0.30	0.18		X927211	RS	07/10/19 16:44	

Cation/Anion Balance and TDS Ratios

Cation Sum: 0.90 meq/L Anion Sum: 0.83 meq/L C/A Balance: 3.70 %

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Project Name: BMSL - Routine
Work Order: **X9G0036**
Reported: 19-Jul-19 10:04

Client Sample ID: **190701BMGRS5**
SVL Sample ID: **X9G0036-02 (Surface Water)**

Sampled: 01-Jul-19 08:45
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929042	MWD	07/16/19 14:40	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	12.6	mg/L	0.100	0.035		X927195	DJS	07/17/19 11:23	
EPA 200.7	**Iron**	0.757	mg/L	0.100	0.028		X927195	DJS	07/18/19 12:02	
EPA 200.7	**Magnesium**	3.25	mg/L	0.50	0.04		X927195	DJS	07/18/19 12:02	
EPA 200.7	**Manganese**	0.0663	mg/L	0.0080	0.0017		X927195	DJS	07/17/19 11:23	
EPA 200.7	**Potassium**	0.87	mg/L	0.50	0.09		X927195	DJS	07/17/19 11:23	
EPA 200.7	**Silica (SiO2)**	5.86	mg/L	0.17	0.06		X927195	DJS	07/17/19 15:35	
EPA 200.7	**Sodium**	2.92	mg/L	0.50	0.06		X927195	DJS	07/17/19 11:23	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X928003	KWH	07/18/19 08:17	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X927199	DJS	07/18/19 12:17	
EPA 200.7	**Iron**	0.167	mg/L	0.100	0.056		X927199	DJS	07/18/19 12:17	
EPA 200.7	**Manganese**	0.0403	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 12:17	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X927199	DJS	07/18/19 12:17	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X928007	KWH	07/18/19 09:51	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.16	mg/L	0.08	0.05		X928009	DJS	07/17/19 15:35	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X928009	DJS	07/17/19 15:35	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X928009	DJS	07/17/19 15:35	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X928009	DJS	07/17/19 15:35	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928005	KWH	07/18/19 10:55	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X928005	KWH	07/18/19 10:55	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X927149	APH	07/03/19 12:05	
SM 2320 B	**Total Alkalinity**	41.7	mg/L as CaCO3	1.0			X927269	KAG	07/09/19 10:38	
SM 2540 D	**Total Susp. Solids**	13.0	mg/L	5.0			X927123	KAG	07/03/19 12:36	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.60	mg/L	0.20	0.14		X927211	RS	07/10/19 17:02	
EPA 300.0	**Fluoride**	0.399	mg/L	0.100	0.062		X927211	RS	07/10/19 17:02	
EPA 300.0	**Sulfate as SO4**	4.49	mg/L	0.30	0.18		X927211	RS	07/10/19 17:02	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.07 meq/L Anion Sum: 0.96 meq/L C/A Balance: 5.27 %

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Project Name: BMSL - Routine
Work Order: **X9G0036**
Reported: 19-Jul-19 10:04

Client Sample ID: **190701BMGRS5**
SVL Sample ID: **X9G0036-03 (Surface Water)**

Sampled: 01-Jul-19 08:45
Received: 02-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.889	mg/L	0.100	0.028		X927195	DJS	07/18/19 12:06	
EPA 200.7	**Manganese**	0.0707	mg/L	0.0080	0.0017		X927195	DJS	07/17/19 11:27	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.200	mg/L	0.100	0.056		X927199	DJS	07/18/19 12:21	
EPA 200.7	**Manganese**	0.0423	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 12:21	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X928015	APH	07/08/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	4.77	mg/L	0.30	0.18		X927211	RS	07/10/19 17:19	

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Project Name: BMSL - Routine
Work Order: **X9G0063**
Reported: 25-Jul-19 12:47

Client Sample ID: **190702BMGFB**
SVL Sample ID: **X9G0063-01 (Surface Water)**

Sampled: 02-Jul-19 08:00
Received: 03-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X928204	AS	07/16/19 12:29	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:14	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:14	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:12	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X930126	DKS	07/23/19 12:50	H1
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X927212	RS	07/11/19 22:55	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X927212	RS	07/11/19 22:55	

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

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Project Name: BMSL - Routine
Work Order: **X9G0063**
Reported: 25-Jul-19 12:47

Client Sample ID: **190702BMGM16**
SVL Sample ID: **X9G0063-02 (Ground Water)**

Sampled: 02-Jul-19 08:05
Received: 03-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	19.2	mg/L	0.100	0.035		X928204	AS	07/16/19 12:33	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.157	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:22	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:22	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:18	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	107	mg/L	10			X927232	TL	07/05/19 15:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.614	mg/L	0.100	0.062		X927212	RS	07/11/19 23:08	
EPA 300.0	**Sulfate as SO4**	8.83	mg/L	0.30	0.18		X927212	RS	07/11/19 23:08	

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

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Project Name: BMSL - Routine
Work Order: **X9G0063**
Reported: 25-Jul-19 12:47

Client Sample ID: **190702BMGRB**
SVL Sample ID: **X9G0063-03 (Surface Water)**

Sampled: 02-Jul-19 08:15
Received: 03-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X928204	AS	07/16/19 12:36	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:27	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:27	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:20	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X927232	TL	07/05/19 15:45	R2B
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X927212	RS	07/11/19 23:46	
EPA 300.0	Sulfate as SO4	0.39	mg/L	0.30	0.18		X927212	RS	07/11/19 23:46	

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

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Project Name: BMSL - Routine
Work Order: **X9G0063**
Reported: 25-Jul-19 12:47

Client Sample ID: **190702BMGM22**
SVL Sample ID: **X9G0063-04 (Ground Water)**

Sampled: 02-Jul-19 08:40
Received: 03-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	45.8	mg/L	0.100	0.035		X928204	AS	07/16/19 12:58	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.357	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:31	
EPA 200.7	**Manganese**	0.170	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:31	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:23	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	228	mg/L	10			X927232	TL	07/05/19 15:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.45	mg/L	0.100	0.062		X927212	RS	07/11/19 23:59	
EPA 300.0	**Sulfate as SO4**	40.4	mg/L	0.30	0.18		X927212	RS	07/11/19 23:59	

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

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Project Name: BMSL - Routine
Work Order: **X9G0063**
Reported: 25-Jul-19 12:47

Client Sample ID: **190702BMGM26**
SVL Sample ID: **X9G0063-05 (Ground Water)**

Sampled: 02-Jul-19 09:10
Received: 03-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	36.8	mg/L	0.100	0.035		X928204	AS	07/16/19 13:02	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.495	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:54	
EPA 200.7	**Manganese**	0.309	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:54	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:26	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	189	mg/L	10			X927232	TL	07/05/19 15:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.737	mg/L	0.100	0.062		X927212	RS	07/12/19 00:24	
EPA 300.0	**Sulfate as SO4**	12.5	mg/L	0.30	0.18		X927212	RS	07/12/19 00:24	

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Project Name: BMSL - Routine
Work Order: **X9G0063**
Reported: 25-Jul-19 12:47

Client Sample ID: **190702BMGM34**
SVL Sample ID: **X9G0063-06 (Ground Water)**

Sampled: 02-Jul-19 09:35
Received: 03-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
SM 2340 B	**Hardness (as CaCO3)**	76.5	mg/L	2.31	0.255		N/A		07/19/19 12:43	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	21.8	mg/L	0.100	0.035		X927201	DJS	07/19/19 12:43	
EPA 200.7	**Magnesium**	5.36	mg/L	0.50	0.04		X927201	DJS	07/19/19 12:43	
EPA 200.7	**Potassium**	0.84	mg/L	0.50	0.09		X927201	DJS	07/18/19 18:32	
EPA 200.7	**Silica (SiO2)**	14.6	mg/L	0.17	0.06		X927201	DJS	07/19/19 12:43	
EPA 200.7	**Sodium**	7.34	mg/L	0.50	0.06		X927201	DJS	07/18/19 18:32	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X927199	DJS	07/18/19 13:58	
EPA 200.7	**Barium**	0.0409	mg/L	0.0020	0.0019		X927199	DJS	07/18/19 13:58	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X927199	DJS	07/18/19 13:58	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X927199	DJS	07/18/19 13:58	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X927199	DJS	07/18/19 13:58	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X927199	DJS	07/18/19 13:58	
EPA 200.7	**Manganese**	0.214	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 13:58	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X927199	DJS	07/18/19 13:58	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X927199	DJS	07/18/19 13:58	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X928007	KWH	07/18/19 10:28	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:28	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X928007	KWH	07/18/19 10:28	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X928007	KWH	07/18/19 10:28	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929043	MWD	07/16/19 13:51	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	71.3	mg/L as CaCO3	1.0			X927269	KAG	07/09/19 10:56	
SM 2540 C	**Total Diss. Solids**	144	mg/L	10			X927232	TL	07/05/19 15:45	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.42	mg/L	0.20	0.14		X927212	RS	07/12/19 00:50	
EPA 300.0	**Fluoride**	0.520	mg/L	0.100	0.062		X927212	RS	07/12/19 00:50	
EPA 300.0	**Sulfate as SO4**	20.4	mg/L	0.30	0.18		X927212	RS	07/12/19 00:50	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.89 meq/L Anion Sum: 1.94 meq/L C/A Balance: -1.53 % Calculated TDS: 116 TDS/cTDS: 1.24

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

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Project Name: BMSL - Routine
Work Order: **X9G0063**
Reported: 25-Jul-19 12:47

Client Sample ID: **190702BMGM10**
SVL Sample ID: **X9G0063-07 (Ground Water)**

Sampled: 02-Jul-19 10:15
Received: 03-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
SM 2340 B	**Hardness (as CaCO3)**	210	mg/L	2.31	0.255		N/A		07/19/19 12:47	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	68.5	mg/L	0.100	0.035		X927201	DJS	07/19/19 12:47	
EPA 200.7	**Magnesium**	9.49	mg/L	0.50	0.04		X927201	DJS	07/19/19 12:47	
EPA 200.7	**Potassium**	1.68	mg/L	0.50	0.09		X927201	DJS	07/18/19 18:36	
EPA 200.7	**Silica (SiO2)**	27.8	mg/L	0.17	0.06		X927201	DJS	07/19/19 12:47	
EPA 200.7	**Sodium**	20.9	mg/L	0.50	0.06		X927201	DJS	07/18/19 18:36	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X927199	DJS	07/18/19 14:02	
EPA 200.7	**Barium**	0.125	mg/L	0.0020	0.0019		X927199	DJS	07/18/19 14:02	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X927199	DJS	07/18/19 14:02	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X927199	DJS	07/18/19 14:02	
EPA 200.7	**Iron**	1.10	mg/L	0.100	0.056		X927199	DJS	07/18/19 14:02	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X927199	DJS	07/18/19 14:02	
EPA 200.7	**Manganese**	0.880	mg/L	0.0080	0.0034		X927199	DJS	07/18/19 14:02	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X927199	DJS	07/18/19 14:02	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X927199	DJS	07/18/19 14:02	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X928007	KWH	07/18/19 10:31	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X928007	KWH	07/18/19 10:31	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X928007	KWH	07/18/19 10:31	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X928007	KWH	07/18/19 10:31	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X929043	MWD	07/16/19 13:57	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	221	mg/L as CaCO3	1.0			X927269	KAG	07/09/19 11:02	
SM 2540 C	**Total Diss. Solids**	337	mg/L	10			X927232	TL	07/05/19 15:45	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.11	mg/L	0.20	0.14		X927212	RS	07/12/19 01:16	
EPA 300.0	**Fluoride**	0.895	mg/L	0.100	0.062		X927212	RS	07/12/19 01:16	
EPA 300.0	**Sulfate as SO4**	35.0	mg/L	0.30	0.18		X927212	RS	07/12/19 01:16	

Cation/Anion Balance and TDS Ratios

Cation Sum: 5.23 meq/L Anion Sum: 5.28 meq/L C/A Balance: -0.46 % Calculated TDS: 300 TDS/cTDS: 1.12

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

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Project Name: BMSL - Routine
Work Order: **X9G0380**
Reported: 01-Aug-19 16:35

Client Sample ID: **190716BMGM14**
SVL Sample ID: **X9G0380-01 (Ground Water)**

Sampled: 16-Jul-19 10:00
Received: 17-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	199	mg/L	0.100	0.035		X930162	JFB	07/29/19 15:56	
EPA 200.7	**Magnesium**	30.5	mg/L	0.50	0.04		X930162	JFB	07/29/19 15:56	
EPA 200.7	**Potassium**	1.98	mg/L	0.50	0.09		X930162	JFB	07/29/19 16:35	
EPA 200.7	**Silica (SiO2)**	29.3	mg/L	0.17	0.06		X930162	JFB	07/29/19 16:35	
EPA 200.7	**Sodium**	30.5	mg/L	0.50	0.06		X930162	JFB	07/29/19 16:35	
SM 2340 B	**Hardness (as CaCO3)**	623	mg/L	2.31	0.255		N/A		07/29/19 15:56	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X930163	AS	07/24/19 11:22	
EPA 200.7	**Barium**	0.386	mg/L	0.0020	0.0019		X930163	AS	07/24/19 11:22	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X930163	AS	07/24/19 11:22	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X930163	AS	07/24/19 11:22	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X930163	AS	07/24/19 11:22	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X930163	DJS	07/24/19 15:09	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X930163	AS	07/24/19 11:22	
EPA 200.7	Nickel	0.0118	mg/L	0.0100	0.0023		X930163	AS	07/24/19 11:22	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X930163	AS	07/24/19 11:22	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X929307	KWH	07/25/19 10:57	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X929307	KWH	07/25/19 10:57	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X929307	KWH	07/25/19 10:57	M1
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X929307	KWH	07/25/19 10:57	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X930167	MWD	07/25/19 12:01	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	605	mg/L as CaCO3	1.0			X929251	KAG	07/18/19 13:28	
SM 2540 C	**Total Diss. Solids**	656	mg/L	10			X929272	DKS	07/19/19 10:40	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X930101	APH	07/23/19 13:01	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	9.02	mg/L	0.20	0.14		X929280	DT	07/22/19 12:44	
EPA 300.0	**Fluoride**	0.319	mg/L	0.100	0.062		X929280	DT	07/22/19 12:44	
EPA 300.0	**Sulfate as SO4**	28.5	mg/L	0.30	0.18		X929280	DT	07/22/19 12:44	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.8 meq/L Anion Sum: 13.0 meq/L C/A Balance: 3.28 % Calculated TDS: 692 TDS/cTDS: 0.95

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

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Project Name: BMSL - Routine
Work Order: **X9G0380**
Reported: 01-Aug-19 16:35

Client Sample ID: **190716BMGBF4**
SVL Sample ID: **X9G0380-02 (Ground Water)**

Sampled: 16-Jul-19 11:20
Received: 17-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	136	mg/L	0.100	0.035		X930162	JFB	07/29/19 16:08	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.682	mg/L	0.100	0.056		X930163	AS	07/24/19 11:31	
EPA 200.7	**Manganese**	4.63	mg/L	0.0080	0.0034		X930163	AS	07/24/19 11:31	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X929307	KWH	07/25/19 11:11	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	540	mg/L	10			X929272	DKS	07/19/19 10:40	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	4.08	mg/L	0.100	0.062		X929280	DT	07/22/19 13:02	
EPA 300.0	**Sulfate as SO4**	231	mg/L	3.00	1.80	10	X929280	DT	07/22/19 13:19	D2

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

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Project Name: BMSL - Routine
Work Order: **X9G0380**
Reported: 01-Aug-19 16:35

Client Sample ID: **190716BMGBF6**
SVL Sample ID: **X9G0380-03 (Ground Water)**

Sampled: 16-Jul-19 11:40
Received: 17-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	163	mg/L	0.100	0.035		X930162	JFB	07/29/19 16:12	
Metals (Dissolved)										
EPA 200.7	**Iron**	28.3	mg/L	0.100	0.056		X930163	AS	07/24/19 11:34	
EPA 200.7	**Manganese**	11.1	mg/L	0.0080	0.0034		X930163	AS	07/24/19 11:34	
EPA 200.8	**Copper**	0.290	mg/L	0.00300	0.00036		X929307	KWH	07/25/19 11:14	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	654	mg/L	10			X929272	DKS	07/19/19 10:40	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	3.21	mg/L	0.100	0.062		X929280	DT	07/22/19 14:11	
EPA 300.0	**Sulfate as SO4**	377	mg/L	3.00	1.80	10	X929280	DT	07/22/19 14:29	D2

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

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Project Name: BMSL - Routine
Work Order: **X9G0380**
Reported: 01-Aug-19 16:35

Client Sample ID: **190716BMGFB**
SVL Sample ID: **X9G0380-04 (Ground Water)**

Sampled: 16-Jul-19 11:35
Received: 17-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X930162	JFB	07/29/19 16:16	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X930163	AS	07/24/19 11:37	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X930163	AS	07/24/19 11:37	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X929307	KWH	07/25/19 11:17	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X931093	TL	07/30/19 11:45	H1
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X929280	DT	07/22/19 14:46	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X929280	DT	07/22/19 14:46	

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Project Name: BMSL - Routine
Work Order: **X9G0380**
Reported: 01-Aug-19 16:35

Client Sample ID: **190716BMGRB**
SVL Sample ID: **X9G0380-05 (Ground Water)**

Sampled: 16-Jul-19 11:55
Received: 17-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X930162	JFB	07/29/19 16:20	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X930163	AS	07/24/19 11:40	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X930163	AS	07/24/19 11:40	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X929307	KWH	07/25/19 11:20	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X929272	DKS	07/19/19 10:40	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X929280	DT	07/22/19 15:21	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X929280	DT	07/22/19 15:21	

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Project Name: BMSL - Routine
Work Order: **X9G0571**
Reported: 08-Aug-19 10:10

Client Sample ID: **190722BMGSLM4**
SVL Sample ID: **X9G0571-01 (Ground Water)**

Sampled: 22-Jul-19 15:00
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	21.8	mg/L	0.100	0.035		X931220	JFB	08/05/19 15:49	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X931146	AS	08/06/19 12:22	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X931146	AS	08/06/19 12:22	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	113	mg/L	10			X930270	TL	07/26/19 13:25	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.379	mg/L	0.100	0.062		X931060	RS	07/30/19 10:13	
EPA 300.0	**Sulfate as SO4**	6.76	mg/L	0.30	0.18		X931060	RS	07/30/19 10:13	

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

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Project Name: BMSL - Routine
Work Order: **X9G0571**
Reported: 08-Aug-19 10:10

Client Sample ID: **190723BMGSLM5**
SVL Sample ID: **X9G0571-02 (Ground Water)**

Sampled: 23-Jul-19 07:00
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	96.5	mg/L	0.100	0.035		X931220	JFB	08/05/19 16:01	
Metals (Dissolved)										
EPA 200.7	**Iron**	1.36	mg/L	0.100	0.056		X931146	AS	08/06/19 12:31	
EPA 200.7	**Manganese**	0.375	mg/L	0.0080	0.0034		X931146	AS	08/06/19 12:31	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	359	mg/L	10			X930270	TL	07/26/19 13:25	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.815	mg/L	0.100	0.062		X931060	RS	07/30/19 11:08	
EPA 300.0	**Sulfate as SO4**	24.1	mg/L	0.30	0.18		X931060	RS	07/30/19 11:08	

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

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Project Name: BMSL - Routine
Work Order: **X9G0571**
Reported: 08-Aug-19 10:10

Client Sample ID: **190723BMGWD1**
SVL Sample ID: **X9G0571-03 (Surface Water)**

Sampled: 23-Jul-19 07:35
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Dissolved)										
EPA 200.7	**Iron**	0.351	mg/L	0.100	0.056		X931146	AS	08/06/19 12:34	
EPA 200.7	**Manganese**	0.0381	mg/L	0.0080	0.0034		X931146	AS	08/06/19 12:34	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X931146	AS	08/06/19 12:34	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X931265	KWH	08/07/19 12:38	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X931265	KWH	08/07/19 12:38	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.545	mg/L	0.100	0.062		X931060	RS	07/30/19 11:26	
EPA 300.0	**Sulfate as SO4**	7.74	mg/L	0.30	0.18		X931060	RS	07/30/19 11:26	

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

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Project Name: BMSL - Routine
Work Order: **X9G0571**
Reported: 08-Aug-19 10:10

Client Sample ID: **190723BMGSLM1**
SVL Sample ID: **X9G0571-04 (Ground Water)**

Sampled: 23-Jul-19 08:00
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	39.0	mg/L	0.100	0.035		X931220	JFB	08/05/19 16:05	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X931146	AS	08/06/19 12:37	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X931146	AS	08/06/19 12:37	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	157	mg/L	10			X930270	TL	07/26/19 13:25	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.697	mg/L	0.100	0.062		X931060	RS	07/30/19 11:45	
EPA 300.0	**Sulfate as SO4**	16.3	mg/L	0.30	0.18		X931060	RS	07/30/19 11:45	

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

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Project Name: BMSL - Routine
Work Order: **X9G0571**
Reported: 08-Aug-19 10:10

Client Sample ID: **190723BMGSRW**
SVL Sample ID: **X9G0571-05 (Ground Water)**

Sampled: 23-Jul-19 08:50
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X931009	MWD	07/30/19 13:19	
Metals (Total Recoverable)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.03		X931005	JFB	08/06/19 13:14	
EPA 200.7	**Barium**	0.0695	mg/L	0.0020	0.0010		X931005	JFB	08/06/19 13:14	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X931005	JFB	08/06/19 13:14	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X931005	JFB	08/06/19 13:14	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X931005	JFB	08/06/19 14:47	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0025		X931005	JFB	08/06/19 13:14	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0017		X931005	JFB	08/06/19 13:14	
EPA 200.7	Molybdenum	< 0.008	mg/L	0.008	0.002		X931005	JFB	08/06/19 13:14	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X931005	JFB	08/06/19 13:14	
EPA 200.7	Zinc	0.014	mg/L	0.010	0.003		X931005	JFB	08/06/19 14:47	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X931198	KWH	08/07/19 12:47	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X931198	KWH	08/07/19 12:47	
EPA 200.8	**Copper**	0.00227	mg/L	0.00100	0.00036	2	X931198	KWH	08/07/19 12:47	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X931198	KWH	08/07/19 12:47	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X931198	KWH	08/07/19 12:47	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.415	mg/L	0.100	0.062		X931060	RS	07/30/19 12:40	

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

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Project Name: BMSL - Routine
Work Order: **X9G0624**
Reported: 08-Aug-19 10:14

Client Sample ID: **190723BMGSLM2A**
SVL Sample ID: **X9G0624-01 (Ground Water)**

Sampled: 23-Jul-19 09:40
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	32.1	mg/L	0.100	0.035		X931148	JFB	08/06/19 11:54	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X931212	AS	08/02/19 11:18	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X931212	AS	08/02/19 11:18	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	157	mg/L	10			X931093	TL	07/30/19 11:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.419	mg/L	0.100	0.062		X931156	RS	07/31/19 21:02	
EPA 300.0	**Sulfate as SO4**	12.2	mg/L	0.30	0.18		X931156	RS	07/31/19 21:02	

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

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Project Name: BMSL - Routine
Work Order: **X9G0624**
Reported: 08-Aug-19 10:14

Client Sample ID: **190723BMGSLM2B**
SVL Sample ID: **X9G0624-02 (Ground Water)**

Sampled: 23-Jul-19 09:55
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	24.9	mg/L	0.100	0.035		X931148	JFB	08/06/19 12:04	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X931212	AS	08/02/19 11:27	
EPA 200.7	**Manganese**	< 0.0080	mg/L	0.0080	0.0034		X931212	AS	08/02/19 11:27	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	117	mg/L	10			X931093	TL	07/30/19 11:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.408	mg/L	0.100	0.062		X931156	RS	07/31/19 22:53	
EPA 300.0	**Sulfate as SO4**	7.07	mg/L	0.30	0.18		X931156	RS	07/31/19 22:53	

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Project Name: BMSL - Routine
Work Order: **X9G0624**
Reported: 08-Aug-19 10:14

Client Sample ID: **190723BMGSLTW**
SVL Sample ID: **X9G0624-03 (Ground Water)**

Sampled: 23-Jul-19 10:30
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X931208	MWD	08/02/19 13:09	
Metals (Total Recoverable)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.03		X931148	JFB	08/06/19 12:07	
EPA 200.7	Barium	0.0437	mg/L	0.0020	0.0010		X931148	JFB	08/06/19 12:07	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X931148	JFB	08/06/19 12:07	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X931148	JFB	08/06/19 12:07	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X931148	JFB	08/06/19 13:45	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0025		X931148	JFB	08/06/19 12:07	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0017		X931148	JFB	08/06/19 12:07	
EPA 200.7	Molybdenum	< 0.008	mg/L	0.008	0.002		X931148	JFB	08/06/19 12:07	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X931148	JFB	08/06/19 12:07	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X931148	JFB	08/06/19 12:53	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X931198	KWH	08/07/19 13:00	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X931198	KWH	08/07/19 13:00	
EPA 200.8	Copper	0.00107	mg/L	0.00100	0.00036	2	X931198	KWH	08/07/19 13:00	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X931198	KWH	08/07/19 13:00	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X931198	KWH	08/07/19 13:00	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	0.460	mg/L	0.100	0.062		X931156	RS	08/01/19 00:06	

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

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Project Name: BMSL - Routine
Work Order: **X9G0624**
Reported: 08-Aug-19 10:14

Client Sample ID: **190723BMGSLM3**
SVL Sample ID: **X9G0624-04 (Ground Water)**

Sampled: 23-Jul-19 10:30
Received: 25-Jul-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	25.5	mg/L	0.100	0.035		X931148	JFB	08/06/19 12:10	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X931212	AS	08/02/19 11:30	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X931212	AS	08/02/19 11:30	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	117	mg/L	10			X931093	TL	07/30/19 11:45	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.518	mg/L	0.100	0.062		X931156	RS	08/01/19 00:24	
EPA 300.0	**Sulfate as SO4**	11.7	mg/L	0.30	0.18		X931156	RS	08/01/19 00:24	

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

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Project Name: BMSL - Routine
Work Order: **X9H0010**
Reported: 15-Aug-19 17:26

Client Sample ID: **190731BMGLD**
SVL Sample ID: **X9H0010-01 (Ground Water)**

Sampled: 31-Jul-19 08:10
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	480	mg/L	0.500	0.345	10	X931271	JFB	08/09/19 14:26	D2
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.028		X931271	JFB	08/09/19 11:06	
EPA 200.7	**Sodium**	854	mg/L	2.50	0.60	10	X931271	JFB	08/09/19 14:26	D2
EPA 200.7	**Zinc**	< 0.010	mg/L	0.010	0.003		X931271	JFB	08/09/19 11:06	
EPA 200.8	**Copper**	0.0558	mg/L	0.00100	0.00036	2	X931193	KWH	08/15/19 10:56	

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

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Project Name: BMSL - Routine
Work Order: **X9H0010**
Reported: 15-Aug-19 17:26

Client Sample ID: **190731BMGCOL**
SVL Sample ID: **X9H0010-02 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 31-Jul-19 08:25
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	532	mg/L	0.500	0.345	10	X931271	JFB	08/09/19 14:29	D2
EPA 200.7	**Iron**	30.4	mg/L	0.100	0.028		X931271	JFB	08/09/19 11:10	
EPA 200.7	**Sodium**	920	mg/L	2.50	0.60	10	X931271	JFB	08/09/19 14:29	D2
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X931271	JFB	08/09/19 11:10	
EPA 200.8	Copper	< 0.00100	mg/L	0.00100	0.00036	2	X931193	KWH	08/15/19 10:58	

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

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Project Name: BMSL - Routine
Work Order: **X9H0010**
Reported: 15-Aug-19 17:26

Client Sample ID: **190731BMGTAILS**
SVL Sample ID: **X9H0010-03 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 31-Jul-19 08:25
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	578	mg/L	0.500	0.345	10	X931271	JFB	08/09/19 14:32	D2
EPA 200.7	**Iron**	9.69	mg/L	0.100	0.028		X931271	JFB	08/09/19 11:13	
EPA 200.7	**Sodium**	1950	mg/L	2.50	0.60	10	X931271	JFB	08/09/19 14:32	D2
EPA 200.7	**Zinc**	0.015	mg/L	0.010	0.003		X931271	JFB	08/09/19 11:13	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X931193	KWH	08/15/19 11:01	
EPA 200.8	**Copper**	0.118	mg/L	0.00100	0.00036	2	X931193	KWH	08/15/19 11:01	

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

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Project Name: BMSL - Routine
Work Order: **X9H0010**
Reported: 15-Aug-19 17:26

Client Sample ID: **190731BMGLD**
SVL Sample ID: **X9H0010-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 31-Jul-19 08:10
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	480	mg/L	0.500	0.345	10	X931271	JFB	08/09/19 14:26	D2
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.028		X931271	JFB	08/09/19 11:06	
EPA 200.7	**Sodium**	854	mg/L	2.50	0.60	10	X931271	JFB	08/09/19 14:26	D2
EPA 200.7	**Zinc**	< 0.010	mg/L	0.010	0.003		X931271	JFB	08/09/19 11:06	
EPA 200.8	**Copper**	0.0558	mg/L	0.00100	0.00036	2	X931193	KWH	08/15/19 10:56	

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

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Project Name: BMSL - Routine
Work Order: **X9H0010**
Reported: 15-Aug-19 17:26

Client Sample ID: **190731BMGCOL**
SVL Sample ID: **X9H0010-02 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 31-Jul-19 08:25
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	532	mg/L	0.500	0.345	10	X931271	JFB	08/09/19 14:29	D2
EPA 200.7	**Iron**	30.4	mg/L	0.100	0.028		X931271	JFB	08/09/19 11:10	
EPA 200.7	**Sodium**	920	mg/L	2.50	0.60	10	X931271	JFB	08/09/19 14:29	D2
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X931271	JFB	08/09/19 11:10	
EPA 200.8	Copper	< 0.00100	mg/L	0.00100	0.00036	2	X931193	KWH	08/15/19 10:58	

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

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Project Name: BMSL - Routine
Work Order: **X9H0010**
Reported: 15-Aug-19 17:26

Client Sample ID: **190731BMGTAILS**
SVL Sample ID: **X9H0010-03 (Ground Water)**

Sampled: 31-Jul-19 08:25
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	578	mg/L	0.500	0.345	10	X931271	JFB	08/09/19 14:32	D2
EPA 200.7	**Iron**	9.69	mg/L	0.100	0.028		X931271	JFB	08/09/19 11:13	
EPA 200.7	**Sodium**	1950	mg/L	2.50	0.60	10	X931271	JFB	08/09/19 14:32	D2
EPA 200.7	**Zinc**	0.015	mg/L	0.010	0.003		X931271	JFB	08/09/19 11:13	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X931193	KWH	08/15/19 11:01	
EPA 200.8	**Copper**	0.118	mg/L	0.00100	0.00036	2	X931193	KWH	08/15/19 11:01	

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

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Project Name: BMSL - Routine
Work Order: **X9H0009**
Reported: 26-Aug-19 17:22

Client Sample ID: **190729BMGM12**
SVL Sample ID: **X9H0009-01 (Ground Water)**

Sampled: 29-Jul-19 08:20
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	51.9	mg/L	0.100	0.035		X931271	JFB	08/09/19 10:47	
EPA 200.7	**Magnesium**	8.44	mg/L	0.50	0.04		X931271	JFB	08/09/19 10:47	
EPA 200.7	**Potassium**	1.96	mg/L	0.50	0.09		X931271	JFB	08/09/19 10:47	
EPA 200.7	**Silica (SiO2)**	22.0	mg/L	0.17	0.06		X931271	JFB	08/09/19 14:08	
EPA 200.7	**Sodium**	13.7	mg/L	0.50	0.06		X931271	JFB	08/09/19 14:08	
SM 2340 B	**Hardness (as CaCO3)**	164	mg/L	2.31	0.255		N/A		08/09/19 10:47	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X932179	JFB	08/12/19 13:47	
EPA 200.7	**Barium**	0.158	mg/L	0.0020	0.0019		X932179	JFB	08/12/19 13:47	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X932179	JFB	08/12/19 13:47	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X932179	JFB	08/12/19 13:47	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X932179	JFB	08/12/19 13:47	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X932179	JFB	08/12/19 14:33	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X932179	JFB	08/12/19 13:47	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X932179	JFB	08/12/19 13:47	
EPA 200.7	Zinc	0.399	mg/L	0.010	0.005		X932179	JFB	08/12/19 13:47	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X932197	KWH	08/20/19 12:05	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X932197	KWH	08/20/19 12:05	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X932197	KWH	08/20/19 12:05	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X932197	KWH	08/20/19 12:05	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X933045	MWD	08/13/19 12:31	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	149	mg/L as CaCO3	1.0			X932208	KAG	08/08/19 15:08	
SM 2540 C	**Total Diss. Solids**	248	mg/L	10			X931267	tl	08/02/19 12:00	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	19.4	mg/L	2.00	1.40	10	X932058	DT	08/06/19 11:16	D2,M4
EPA 300.0	**Fluoride**	0.325	mg/L	0.100	0.062		X932058	DT	08/06/19 11:00	
EPA 300.0	**Sulfate as SO4**	12.3	mg/L	0.30	0.18		X932058	DT	08/06/19 11:00	

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.95 meq/L Anion Sum: 3.80 meq/L C/A Balance: 2.01 % Calculated TDS: 219 TDS/cTDS: 1.13

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

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Project Name: BMSL - Routine
Work Order: **X9H0009**
Reported: 26-Aug-19 17:22

Client Sample ID: **190729BMGM9**
SVL Sample ID: **X9H0009-02 (Ground Water)**

Sampled: 29-Jul-19 09:10
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	81.8	mg/L	0.100	0.035		X931271	JFB	08/09/19 10:51	
EPA 200.7	**Magnesium**	12.7	mg/L	0.50	0.04		X931271	JFB	08/09/19 10:51	
EPA 200.7	**Potassium**	1.65	mg/L	0.50	0.09		X931271	JFB	08/09/19 10:51	
EPA 200.7	**Silica (SiO2)**	28.8	mg/L	0.17	0.06		X931271	JFB	08/09/19 14:11	
EPA 200.7	**Sodium**	25.7	mg/L	0.50	0.06		X931271	JFB	08/09/19 14:11	
SM 2340 B	**Hardness (as CaCO3)**	257	mg/L	2.31	0.255		N/A		08/09/19 10:51	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X932179	JFB	08/12/19 13:56	
EPA 200.7	**Barium**	0.118	mg/L	0.0020	0.0019		X932179	JFB	08/12/19 13:56	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X932179	JFB	08/12/19 13:56	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X932179	JFB	08/12/19 13:56	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X932179	JFB	08/12/19 13:56	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X932179	JFB	08/12/19 14:43	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X932179	JFB	08/12/19 13:56	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X932179	JFB	08/12/19 13:56	
EPA 200.7	**Zinc**	0.372	mg/L	0.010	0.005		X932179	JFB	08/12/19 13:56	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X932197	KWH	08/20/19 12:12	
EPA 200.8	**Copper**	0.00542	mg/L	0.00300	0.00036		X932197	KWH	08/20/19 12:12	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X932197	KWH	08/20/19 12:12	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X932197	KWH	08/20/19 12:12	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X933045	MWD	08/13/19 12:32	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	285	mg/L as CaCO3	1.0			X932208	KAG	08/08/19 15:13	
SM 2540 C	**Total Diss. Solids**	370	mg/L	10			X931267	tl	08/02/19 12:00	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.76	mg/L	0.20	0.14		X932058	DT	08/06/19 14:07	
EPA 300.0	**Fluoride**	0.246	mg/L	0.100	0.062		X932058	DT	08/06/19 14:07	
EPA 300.0	**Sulfate as SO4**	18.9	mg/L	0.30	0.18		X932058	DT	08/06/19 14:07	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.31 meq/L Anion Sum: 6.21 meq/L C/A Balance: 0.81 % Calculated TDS: 345 TDS/cTDS: 1.07

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9H0009**
Reported: 26-Aug-19 17:22

Client Sample ID: **190729BMGM13R**
SVL Sample ID: **X9H0009-03 (Ground Water)**

Sampled: 29-Jul-19 10:10
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	87.6	mg/L	0.100	0.035		X931271	JFB	08/09/19 10:54	
EPA 200.7	**Magnesium**	14.9	mg/L	0.50	0.04		X931271	JFB	08/09/19 10:54	
EPA 200.7	**Potassium**	1.41	mg/L	0.50	0.09		X931271	JFB	08/09/19 10:54	
EPA 200.7	**Silica (SiO2)**	26.9	mg/L	0.17	0.06		X931271	JFB	08/09/19 14:14	
EPA 200.7	**Sodium**	33.1	mg/L	0.50	0.06		X931271	JFB	08/09/19 14:14	
SM 2340 B	**Hardness (as CaCO3)**	280	mg/L	2.31	0.255		N/A		08/09/19 10:54	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X932179	JFB	08/12/19 13:59	
EPA 200.7	**Barium**	0.129	mg/L	0.0020	0.0019		X932179	JFB	08/12/19 13:59	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X932179	JFB	08/12/19 13:59	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X932179	JFB	08/12/19 13:59	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X932179	JFB	08/12/19 13:59	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X932179	JFB	08/12/19 14:46	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X932179	JFB	08/12/19 13:59	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X932179	JFB	08/12/19 13:59	
EPA 200.7	Zinc	0.533	mg/L	0.010	0.005		X932179	JFB	08/12/19 13:59	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X932197	KWH	08/20/19 12:15	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X932197	KWH	08/20/19 12:15	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X932197	KWH	08/20/19 12:15	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X932197	KWH	08/20/19 12:15	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X933045	MWD	08/13/19 12:41	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	324	mg/L as CaCO3	1.0			X932208	KAG	08/08/19 15:22	
SM 2540 C	**Total Diss. Solids**	400	mg/L	10			X931267	tl	08/02/19 12:00	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.71	mg/L	0.20	0.14		X932058	DT	08/06/19 14:39	
EPA 300.0	**Fluoride**	0.375	mg/L	0.100	0.062		X932058	DT	08/06/19 14:39	
EPA 300.0	**Sulfate as SO4**	17.2	mg/L	0.30	0.18		X932058	DT	08/06/19 14:39	

Cation/Anion Balance and TDS Ratios

Cation Sum: 7.10 meq/L Anion Sum: 6.96 meq/L C/A Balance: 1.02 % Calculated TDS: 380 TDS/cTDS: 1.05

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

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Project Name: BMSL - Routine
Work Order: **X9H0191**
Reported: 26-Aug-19 11:26

Client Sample ID: **190807BMGM19**
SVL Sample ID: **X9H0191-01 (Ground Water)**

Sampled: 07-Aug-19 09:15
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	18.2	mg/L	0.100	0.035		X933210	JFB	08/16/19 12:27	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.183	mg/L	0.100	0.056		X933069	JFB	08/15/19 12:03	
EPA 200.7	**Manganese**	0.244	mg/L	0.0080	0.0034		X933069	JFB	08/15/19 12:03	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933088	KWH	08/21/19 08:33	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	111	mg/L	10			X933005	DKS	08/12/19 13:20	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.988	mg/L	0.100	0.062		X933170	RS	08/15/19 18:20	
EPA 300.0	**Sulfate as SO4**	8.49	mg/L	0.30	0.18		X933170	RS	08/15/19 18:20	

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

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Project Name: BMSL - Routine
Work Order: **X9H0191**
Reported: 26-Aug-19 11:26

Client Sample ID: **190807BMGM21**
SVL Sample ID: **X9H0191-02 (Ground Water)**

Sampled: 07-Aug-19 09:50
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	32.5	mg/L	0.100	0.035		X933210	JFB	08/16/19 12:32	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X933069	JFB	08/15/19 12:15	
EPA 200.7	**Manganese**	0.371	mg/L	0.0080	0.0034		X933069	JFB	08/15/19 12:15	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933088	KWH	08/21/19 08:41	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	140	mg/L	10			X933005	DKS	08/12/19 13:20	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.41	mg/L	0.100	0.062		X933170	RS	08/15/19 19:40	
EPA 300.0	**Sulfate as SO4**	16.0	mg/L	0.30	0.18		X933170	RS	08/15/19 19:40	

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

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Project Name: BMSL - Routine
Work Order: **X9H0191**
Reported: 26-Aug-19 11:26

Client Sample ID: **190807BMGM24**
SVL Sample ID: **X9H0191-03 (Ground Water)**

Sampled: 07-Aug-19 10:30
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	99.6	mg/L	0.100	0.035		X933210	JFB	08/16/19 12:36	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.68	mg/L	0.100	0.056		X933069	JFB	08/15/19 12:19	
EPA 200.7	**Manganese**	1.15	mg/L	0.0080	0.0034		X933069	JFB	08/15/19 12:19	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933088	KWH	08/21/19 08:43	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	515	mg/L	10			X933005	DKS	08/12/19 13:20	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.729	mg/L	0.100	0.062		X933170	RS	08/15/19 20:44	
EPA 300.0	**Sulfate as SO4**	209	mg/L	3.00	1.80	10	X933170	RS	08/15/19 21:00	D2

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

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Project Name: BMSL - Routine
Work Order: **X9H0191**
Reported: 26-Aug-19 11:26

Client Sample ID: **190807BMGM11R**
SVL Sample ID: **X9H0191-04 (Ground Water)**

Sampled: 07-Aug-19 11:05
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	92.1	mg/L	0.100	0.035		X933210	JFB	08/16/19 12:40	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.135	mg/L	0.100	0.056		X933069	JFB	08/15/19 12:23	
EPA 200.7	**Manganese**	0.511	mg/L	0.0080	0.0034		X933069	JFB	08/15/19 12:23	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933088	KWH	08/21/19 08:46	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	426	mg/L	10			X933005	DKS	08/12/19 13:20	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.881	mg/L	0.100	0.062		X933170	RS	08/15/19 21:16	
EPA 300.0	**Sulfate as SO4**	137	mg/L	3.00	1.80	10	X933170	RS	08/15/19 21:32	D2

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

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Project Name: BMSL - Routine
Work Order: **X9H0191**
Reported: 26-Aug-19 11:26

Client Sample ID: **190807BMGFB**
SVL Sample ID: **X9H0191-05 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 07-Aug-19 11:00
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X933210	JFB	08/16/19 12:44	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X933069	JFB	08/15/19 12:27	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X933069	JFB	08/15/19 12:27	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933088	KWH	08/21/19 08:49	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X933005	DKS	08/12/19 13:20	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X933170	RS	08/15/19 21:48	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X933170	RS	08/15/19 21:48	

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

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Project Name: BMSL - Routine
Work Order: **X9H0191**
Reported: 26-Aug-19 11:26

Client Sample ID: **190807BMGRB**
SVL Sample ID: **X9H0191-06 (Ground Water)**

Sampled: 07-Aug-19 11:20
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X933210	JFB	08/16/19 12:48	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X933069	JFB	08/15/19 12:32	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X933069	JFB	08/15/19 12:32	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933088	KWH	08/21/19 08:51	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X933005	DKS	08/12/19 13:20	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X933170	RS	08/15/19 22:36	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X933170	RS	08/15/19 22:36	

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

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Project Name: BMSL - Routine
Work Order: **X9H0091**
Reported: 26-Aug-19 17:54

Client Sample ID: **190730WTPEFF**
SVL Sample ID: **X9H0091-01 (Ground Water)**

Sampled: 30-Jul-19 11:20
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.8	Arsenic	< 0.00750	mg/L	0.00750	0.00105	5	X933040	KWH	08/14/19 13:46	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X933044	MWD	08/13/19 11:06	
Metals (Total Recoverable)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X932181	AS	08/13/19 10:58	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X932181	AS	08/13/19 10:58	
EPA 200.7	Molybdenum	0.013	mg/L	0.008	0.002		X932181	AS	08/13/19 10:58	
EPA 200.8	Aluminum	< 0.0100	mg/L	0.0100	0.0040	2	X932172	KWH	08/15/19 09:56	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X932172	KWH	08/15/19 09:56	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X932125	JFB	08/07/19 14:04	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X932125	JFB	08/07/19 14:04	
Metals (Potentially Dissolved)										
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X932191	JFB	08/12/19 14:30	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X932191	JFB	08/12/19 14:30	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X932199	KWH	08/20/19 11:45	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X932199	KWH	08/20/19 11:45	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X932199	KWH	08/20/19 11:45	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X932199	KWH	08/20/19 11:45	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X932199	KWH	08/20/19 11:45	
EPA 200.8	Uranium	0.00169	mg/L	0.00100	0.000052		X932199	KWH	08/20/19 11:45	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	154	mg/L	10			X932118	TL	08/07/19 10:40	H1
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X932119	TL	08/07/19 10:40	H1
SM 4500 S F	Sulfide	< 1.00	mg/L	1.00	0.26		X932133	MH	08/07/19 12:10	H1
Anions by Ion Chromatography										
EPA 300.0	Chloride	10.7	mg/L	2.00	1.40	10	X932185	RS	08/12/19 22:53	D2,M4
EPA 300.0	Fluoride	1.42	mg/L	0.100	0.062		X932185	RS	08/12/19 22:36	
EPA 300.0	Sulfate as SO4	57.9	mg/L	3.00	1.80	10	X932185	RS	08/12/19 22:53	D2,M4

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

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Project Name: BMSL - Routine
Work Order: **X9H0092**
Reported: 26-Aug-19 18:23

Client Sample ID: **190730BMGPD1**
SVL Sample ID: **X9H0092-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 30-Jul-19 11:00
Received: 01-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.8	Arsenic	< 0.00750	mg/L	0.00750	0.00105	5	X933040	KWH	08/14/19 14:00	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X933044	MWD	08/13/19 11:08	
Metals (Total Recoverable)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X932181	AS	08/13/19 11:01	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X932181	AS	08/13/19 11:01	
EPA 200.7	Molybdenum	0.029	mg/L	0.008	0.002		X932181	AS	08/13/19 11:01	
EPA 200.8	Aluminum	< 0.0100	mg/L	0.0100	0.0040	2	X932172	KWH	08/15/19 09:59	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X932172	KWH	08/15/19 09:59	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X932125	JFB	08/07/19 14:08	
EPA 200.7	Manganese	1.43	mg/L	0.0080	0.0034		X932125	JFB	08/07/19 14:08	
Metals (Potentially Dissolved)										
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X932191	JFB	08/12/19 14:41	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X932191	JFB	08/12/19 14:41	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X932199	KWH	08/20/19 11:52	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X932199	KWH	08/20/19 11:52	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X932199	KWH	08/20/19 11:52	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X932199	KWH	08/20/19 11:52	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X932199	KWH	08/20/19 11:52	
EPA 200.8	Uranium	0.0159	mg/L	0.00100	0.000052		X932199	KWH	08/20/19 11:52	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	393	mg/L	10			X932118	TL	08/07/19 10:40	H1
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X932119	TL	08/07/19 10:40	H1
SM 4500 S F	Sulfide	< 1.00	mg/L	1.00	0.26		X932133	MH	08/07/19 12:10	H1
Anions by Ion Chromatography										
EPA 300.0	Chloride	4.89	mg/L	0.20	0.14		X932185	RS	08/12/19 23:46	
EPA 300.0	Fluoride	2.54	mg/L	0.100	0.062		X932185	RS	08/12/19 23:46	
EPA 300.0	Sulfate as SO4	122	mg/L	3.00	1.80	10	X932185	RS	08/13/19 00:03	D2

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: X9H0268
Reported: 30-Aug-19 14:01

Client Sample ID: **190812BMGM14165**
SVL Sample ID: **X9H0268-01 (Ground Water)**

Sampled: 12-Aug-19 13:30
Received: 14-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	186	mg/L	0.100	0.035		X933210	JFB	08/16/19 12:52	
EPA 200.7	**Magnesium**	29.0	mg/L	0.50	0.04		X933210	JFB	08/16/19 12:52	
EPA 200.7	**Potassium**	2.05	mg/L	0.50	0.09		X933210	JFB	08/16/19 12:52	
EPA 200.7	**Silica (SiO2)**	29.0	mg/L	0.17	0.06		X933210	JFB	08/16/19 12:52	
EPA 200.7	**Sodium**	30.5	mg/L	0.50	0.06		X933210	JFB	08/16/19 12:52	
SM 2340 B	**Hardness (as CaCO3)**	584	mg/L	2.31	0.255		N/A		08/16/19 12:52	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X933245	JFB	08/20/19 17:10	
EPA 200.7	**Barium**	0.385	mg/L	0.0020	0.0019		X933245	JFB	08/20/19 17:10	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X933245	JFB	08/20/19 17:10	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X933245	JFB	08/20/19 17:10	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X933245	JFB	08/20/19 17:10	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X933245	JFB	08/20/19 17:10	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X933245	JFB	08/20/19 17:10	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X933245	JFB	08/20/19 17:10	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X933245	JFB	08/20/19 17:10	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X933241	KWH	08/28/19 09:36	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933241	KWH	08/28/19 09:36	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X933241	KWH	08/28/19 09:36	M1
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X933241	KWH	08/28/19 09:36	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X934125	MWD	08/22/19 09:20	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	589	mg/L as CaCO3	1.0			X933229	KAG	08/16/19 12:47	
SM 2540 C	**Total Diss. Solids**	698	mg/L	10			X933196	TL	08/15/19 13:35	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.68	mg/L	0.20	0.14		X933228	RS	08/16/19 05:17	
EPA 300.0	**Fluoride**	0.371	mg/L	0.100	0.062		X933228	RS	08/16/19 05:17	
EPA 300.0	**Sulfate as SO4**	26.3	mg/L	0.30	0.18		X933228	RS	08/16/19 05:17	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.1 meq/L Anion Sum: 12.6 meq/L C/A Balance: 1.88 % Calculated TDS: 665 TDS/cTDS: 1.05

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9H0176**
Reported: 29-Aug-19 14:19

Client Sample ID: **190807BMGRS2**
SVL Sample ID: **X9H0176-01 (Surface Water)**

Sampled: 07-Aug-19 08:10
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X933136	MWD	08/16/19 10:33	
SM 2340 B	**Hardness (as CaCO3)**	54.3	mg/L	2.31	0.255		N/A		08/15/19 14:51	
Metals (Total Recoverable)										
EPA 200.7	**Aluminum**	0.40	mg/L	0.08	0.03		X933063	JFB	08/15/19 14:51	
EPA 200.7	**Barium**	0.0267	mg/L	0.0020	0.0010		X933063	JFB	08/15/19 16:07	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X933063	JFB	08/15/19 14:51	
EPA 200.7	**Calcium**	15.4	mg/L	0.100	0.035		X933063	JFB	08/15/19 14:51	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X933063	JFB	08/15/19 14:51	
EPA 200.7	**Iron**	0.640	mg/L	0.100	0.028		X933063	JFB	08/15/19 14:51	
EPA 200.7	**Magnesium**	3.82	mg/L	0.50	0.04		X933063	JFB	08/15/19 14:51	
EPA 200.7	**Manganese**	0.0510	mg/L	0.0080	0.0017		X933063	JFB	08/15/19 14:51	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X933063	JFB	08/15/19 14:51	
EPA 200.7	**Potassium**	0.83	mg/L	0.50	0.09		X933063	JFB	08/15/19 14:51	
EPA 200.7	**Silica (SiO2)**	14.7	mg/L	0.17	0.06		X933063	JFB	08/15/19 16:07	
EPA 200.7	**Sodium**	3.67	mg/L	0.50	0.06		X933063	JFB	08/15/19 14:51	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X933063	JFB	08/15/19 14:51	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X933059	KWH	08/21/19 08:28	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X933059	KWH	08/21/19 08:28	
EPA 200.8	**Copper**	0.00131	mg/L	0.00100	0.00036	2	X933059	KWH	08/21/19 08:28	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.00014	2	X933059	KWH	08/21/19 08:28	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X933059	KWH	08/21/19 08:28	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X933059	KWH	08/21/19 08:28	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X933066	AS	08/15/19 10:37	
EPA 200.7	**Barium**	0.0217	mg/L	0.0020	0.0019		X933066	AS	08/15/19 10:37	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X933066	AS	08/15/19 10:37	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X933066	AS	08/15/19 10:37	
EPA 200.7	**Iron**	0.187	mg/L	0.100	0.056		X933066	AS	08/15/19 10:37	
EPA 200.7	**Manganese**	0.0167	mg/L	0.0080	0.0034		X933066	AS	08/15/19 10:37	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X933066	AS	08/15/19 10:37	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X933066	AS	08/15/19 10:37	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X933088	KWH	08/21/19 08:28	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X933088	KWH	08/21/19 08:28	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X933088	KWH	08/21/19 08:28	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X933088	KWH	08/21/19 08:28	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X933088	KWH	08/21/19 08:28	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X933088	KWH	08/21/19 08:28	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X933130	MWD	08/16/19 13:36	

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Project Name: BMSL - Routine
Work Order: **X9H0176**
Reported: 29-Aug-19 14:19

Client Sample ID: **190807BMGRS2**
SVL Sample ID: **X9H0176-01 (Surface Water)**

Sampled: 07-Aug-19 08:10
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X933147	DT	08/19/19 15:13	
EPA 353.2	Nitrate/Nitrite as N	0.057	mg/L	0.050	0.049		X934127	SM	08/23/19 11:05	
SM 2320 B	Total Alkalinity	52.2	mg/L as CaCO3	1.0			X933090	KAG	08/13/19 14:56	
SM 2320 B	Bicarbonate	52.2	mg/L as CaCO3	1.0			X933090	KAG	08/13/19 14:56	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X933090	KAG	08/13/19 14:56	
SM 2540 C	Total Diss. Solids	73	mg/L	10			X932242	DKS	08/12/19 11:30	
SM 2540 D	Total Susp. Solids	12.0	mg/L	5.0			X932243	dks	08/12/19 11:30	
Anions by Ion Chromatography										
EPA 300.0	Chloride	0.56	mg/L	0.20	0.14		X933186	RS	08/16/19 16:51	
EPA 300.0	Fluoride	0.455	mg/L	0.100	0.062		X933186	RS	08/16/19 16:51	
EPA 300.0	Sulfate as SO4	4.47	mg/L	0.30	0.18		X933186	RS	08/16/19 16:51	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.28 meq/L Anion Sum: 1.18 meq/L C/A Balance: 4.01 % Calculated TDS: 75 TDS/cTDS: 0.97

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

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Project Name: BMSL - Routine
Work Order: **X9H0176**
Reported: 29-Aug-19 14:19

Client Sample ID: **190807BMGRS5**
SVL Sample ID: **X9H0176-02 (Surface Water)**

Sampled: 07-Aug-19 08:30
Received: 09-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.998	mg/L	0.100	0.028		X933063	JFB	08/15/19 15:03	
EPA 200.7	**Manganese**	0.0762	mg/L	0.0080	0.0017		X933063	JFB	08/15/19 15:03	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.290	mg/L	0.100	0.056		X933066	AS	08/15/19 10:50	
EPA 200.7	**Manganese**	0.0582	mg/L	0.0080	0.0034		X933066	AS	08/15/19 12:17	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	11.6	mg/L	0.30	0.18		X932187	RS	08/13/19 22:59	

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

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9H0644**
San Luis, CO 81152	Reported: 12-Sep-19 13:20

Client Sample ID: **190827BMGTAILS**
SVL Sample ID: **X9H0644-01 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 27-Aug-19 09:30
Received: 28-Aug-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X935202	KWH	09/12/19 11:30	

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Project Name: BMSL - Routine
Work Order: **X9I0076**
Reported: 20-Sep-19 11:18

Client Sample ID: **190904BMGRS2**
SVL Sample ID: **X9I0076-01 (Surface Water)**

Sampled: 04-Sep-19 07:30
Received: 05-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X938005	MWD	09/17/19 13:01	
SM 2340 B	**Hardness (as CaCO3)**	56.1	mg/L	2.31	0.255		N/A		09/16/19 15:59	
Metals (Total Recoverable)										
EPA 200.7	**Aluminum**	0.29	mg/L	0.08	0.03		X937064	JFB	09/16/19 15:59	
EPA 200.7	**Barium**	0.0293	mg/L	0.0020	0.0010		X937064	JFB	09/16/19 15:59	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X937064	JFB	09/16/19 16:21	
EPA 200.7	**Calcium**	15.5	mg/L	0.100	0.035		X937064	JFB	09/16/19 15:59	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X937064	JFB	09/16/19 15:59	
EPA 200.7	**Iron**	0.690	mg/L	0.100	0.028		X937064	JFB	09/16/19 15:59	
EPA 200.7	**Magnesium**	4.24	mg/L	0.50	0.04		X937064	JFB	09/16/19 15:59	
EPA 200.7	**Manganese**	0.0658	mg/L	0.0080	0.0017		X937064	JFB	09/16/19 15:59	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X937064	JFB	09/16/19 15:59	
EPA 200.7	**Potassium**	1.07	mg/L	0.50	0.09		X937064	JFB	09/16/19 15:59	
EPA 200.7	**Silica (SiO2)**	13.5	mg/L	0.17	0.06		X937064	JFB	09/16/19 15:59	
EPA 200.7	**Sodium**	9.55	mg/L	0.50	0.06		X937064	JFB	09/16/19 15:59	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X937064	JFB	09/16/19 15:59	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X937053	KWH	09/19/19 07:00	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X937053	KWH	09/19/19 07:00	
EPA 200.8	**Copper**	0.00100	mg/L	0.00100	0.00036	2	X937053	KWH	09/19/19 07:00	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.00014	2	X937053	KWH	09/19/19 07:00	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X937053	KWH	09/19/19 07:00	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X937053	KWH	09/19/19 07:00	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X937105	AS	09/18/19 09:45	
EPA 200.7	**Barium**	0.0243	mg/L	0.0020	0.0019		X937105	AS	09/18/19 09:45	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X937105	AS	09/18/19 09:45	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X937105	AS	09/18/19 09:45	
EPA 200.7	**Iron**	0.201	mg/L	0.100	0.056		X937105	AS	09/18/19 09:45	
EPA 200.7	**Manganese**	0.0089	mg/L	0.0080	0.0034		X937105	AS	09/18/19 09:45	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X937105	AS	09/18/19 09:45	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X937105	AS	09/18/19 09:45	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X937107	KWH	09/19/19 10:09	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X937107	KWH	09/19/19 10:09	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X937107	KWH	09/19/19 10:09	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X937107	KWH	09/19/19 10:09	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X937107	KWH	09/19/19 10:09	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X937107	KWH	09/19/19 10:09	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X938010	MWD	09/17/19 13:26	

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San Luis, CO 81152

Project Name: BMSL - Routine
Work Order: **X9I0076**
Reported: 20-Sep-19 11:18

Client Sample ID: **190904BMGRS2**
SVL Sample ID: **X9I0076-01 (Surface Water)**

Sampled: 04-Sep-19 07:30
Received: 05-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	**Cyanide (total)**	0.623	mg/L	0.0500	0.0191	5	X937237	DT	09/13/19 19:42	D2
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X937076	DT	09/11/19 13:31	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X937328	SM	09/17/19 14:14	
SM 2320 B	**Total Alkalinity**	51.8	mg/L as CaCO3	1.0			X937040	KAG	09/10/19 12:08	
SM 2320 B	**Bicarbonate**	51.8	mg/L as CaCO3	1.0			X937040	KAG	09/10/19 12:08	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X937040	KAG	09/10/19 12:08	
SM 2540 C	**Total Diss. Solids**	104	mg/L	10			X936175	DKS	09/06/19 11:10	
SM 2540 D	**Total Susp. Solids**	7.0	mg/L	5.0			X936177	DKS	09/06/19 11:10	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X937238	DT	09/13/19 14:27	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.86	mg/L	0.20	0.14		X937087	RS	09/11/19 11:27	
EPA 300.0	**Fluoride**	0.759	mg/L	0.100	0.062		X937087	RS	09/11/19 11:27	
EPA 300.0	**Sulfate as SO4**	19.8	mg/L	0.30	0.18		X937087	RS	09/11/19 11:27	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.58 meq/L Anion Sum: 1.60 meq/L C/A Balance: -0.61 % Calculated TDS: 99 TDS/cTDS: 1.05

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

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Project Name: BMSL - Routine
Work Order: **X9I0076**
Reported: 20-Sep-19 11:18

Client Sample ID: **190904BMGRS5**
SVL Sample ID: **X9I0076-02 (Surface Water)**

Sampled: 04-Sep-19 07:50
Received: 05-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.750	mg/L	0.100	0.028		X937064	JFB	09/16/19 16:08	
EPA 200.7	**Manganese**	0.0599	mg/L	0.0080	0.0017		X937064	JFB	09/16/19 16:08	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.371	mg/L	0.100	0.056		X937105	AS	09/18/19 09:56	
EPA 200.7	**Manganese**	0.0510	mg/L	0.0080	0.0034		X937105	AS	09/18/19 09:56	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X937238	DT	09/13/19 14:35	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	8.69	mg/L	0.30	0.18		X937087	RS	09/11/19 12:22	

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Project Name: BMSL - Routine
Work Order: **X9I0076**
Reported: 20-Sep-19 11:18

Client Sample ID: **190904BMGM19**
SVL Sample ID: **X9I0076-03 (Ground Water)**

Sampled: 04-Sep-19 08:25
Received: 05-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	18.6	mg/L	0.100	0.035		X937064	JFB	09/16/19 16:11	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.199	mg/L	0.100	0.056		X937105	AS	09/18/19 10:00	
EPA 200.7	**Manganese**	0.208	mg/L	0.0080	0.0034		X937105	AS	09/18/19 10:00	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X937107	KWH	09/19/19 10:16	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	94	mg/L	10			X936175	DKS	09/06/19 11:10	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.06	mg/L	0.100	0.062		X937087	RS	09/11/19 13:21	
EPA 300.0	**Sulfate as SO4**	8.94	mg/L	0.30	0.18		X937087	RS	09/11/19 13:21	

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Project Name: BMSL - Routine
Work Order: X9I0076
Reported: 20-Sep-19 11:18

Client Sample ID: **190904BMGM21**
SVL Sample ID: **X9I0076-04 (Ground Water)**

Sampled: 04-Sep-19 09:00
Received: 05-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	30.3	mg/L	0.100	0.035		X937064	JFB	09/16/19 16:14	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X937105	AS	09/18/19 10:04	
EPA 200.7	**Manganese**	0.326	mg/L	0.0080	0.0034		X937105	AS	09/18/19 10:04	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X937107	KWH	09/19/19 10:19	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	158	mg/L	10			X936175	DKS	09/06/19 11:10	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.37	mg/L	0.100	0.062		X937087	RS	09/11/19 14:16	
EPA 300.0	**Sulfate as SO4**	15.4	mg/L	0.30	0.18		X937087	RS	09/11/19 14:16	

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

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Project Name: BMSL - Routine
Work Order: **X910076**
Reported: 20-Sep-19 11:18

Client Sample ID: **190904BMGM24**
SVL Sample ID: **X910076-05 (Ground Water)**

Sampled: 04-Sep-19 09:40
Received: 05-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	103	mg/L	0.100	0.035		X937064	JFB	09/16/19 16:17	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.25	mg/L	0.100	0.056		X937105	AS	09/18/19 10:08	
EPA 200.7	**Manganese**	1.06	mg/L	0.0080	0.0034		X937105	AS	09/18/19 10:08	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X937107	KWH	09/19/19 10:21	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	514	mg/L	10			X936175	DKS	09/06/19 11:10	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.718	mg/L	0.100	0.062		X937087	RS	09/11/19 14:53	
EPA 300.0	**Sulfate as SO4**	215	mg/L	3.00	1.80	10	X937087	RS	09/11/19 15:11	D2

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

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Project Name: BMSL - Routine
Work Order: **X9I0076**
Reported: 20-Sep-19 11:18

Client Sample ID: **190904BMGM11R**
SVL Sample ID: **X9I0076-06 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 04-Sep-19 10:20
Received: 05-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	73.0	mg/L	0.100	0.035		X937064	JFB	09/16/19 16:26	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X937105	AS	09/18/19 10:12	
EPA 200.7	**Manganese**	0.236	mg/L	0.0080	0.0034		X937105	AS	09/18/19 10:12	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X937107	KWH	09/19/19 10:24	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	335	mg/L	10			X936175	DKS	09/06/19 11:10	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.938	mg/L	0.100	0.062		X937087	RS	09/11/19 15:29	
EPA 300.0	**Sulfate as SO4**	96.9	mg/L	3.00	1.80	10	X937087	RS	09/11/19 15:48	D2

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Project Name: BMSL - Routine
Work Order: X9I0282
Reported: 26-Sep-19 17:45

Client Sample ID: **190911BMGM14165**
SVL Sample ID: **X9I0282-01 (Ground Water)**

Sample Report Page 1 of 1

Sampled: 11-Sep-19 10:00
Received: 12-Sep-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	188	mg/L	0.100	0.035		X937271	JFB	09/17/19 12:25	
EPA 200.7	**Magnesium**	29.5	mg/L	0.50	0.04		X937271	JFB	09/17/19 12:25	
EPA 200.7	**Potassium**	2.23	mg/L	0.50	0.09		X937271	JFB	09/17/19 13:22	
EPA 200.7	**Silica (SiO2)**	28.4	mg/L	0.17	0.06		X937271	JFB	09/17/19 13:22	
EPA 200.7	**Sodium**	29.4	mg/L	0.50	0.06		X937271	JFB	09/17/19 13:22	
SM 2340 B	**Hardness (as CaCO3)**	591	mg/L	2.31	0.255		N/A		09/17/19 12:25	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X938144	AS	09/25/19 10:49	
EPA 200.7	**Barium**	0.390	mg/L	0.0020	0.0019		X938144	AS	09/25/19 10:49	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X938144	AS	09/25/19 10:49	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X938144	AS	09/25/19 10:49	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X938144	AS	09/25/19 10:49	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X938144	AS	09/25/19 10:49	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X938144	AS	09/25/19 10:49	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X938144	AS	09/25/19 10:49	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X938144	AS	09/25/19 10:49	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X938090	DJS	09/25/19 12:12	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X938090	DJS	09/25/19 12:12	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X938090	DJS	09/25/19 12:12	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X938090	DJS	09/25/19 12:12	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X939013	MWD	09/24/19 14:57	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	605	mg/L as CaCO3	1.0			X937315	KAG	09/16/19 13:28	
SM 2540 C	**Total Diss. Solids**	687	mg/L	10			X938078	TL	09/17/19 14:30	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X938277	DT	09/24/19 12:12	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.64	mg/L	0.20	0.14		X938054	RS	09/18/19 02:43	
EPA 300.0	**Fluoride**	0.403	mg/L	0.100	0.062		X938054	RS	09/18/19 02:43	
EPA 300.0	**Sulfate as SO4**	28.3	mg/L	0.30	0.18		X938054	RS	09/18/19 02:43	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.2 meq/L Anion Sum: 12.9 meq/L C/A Balance: 0.83 % Calculated TDS: 678 TDS/cTDS: 1.01

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

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Project Name: BMSL - Routine
Work Order: **X9J0050**
Reported: 10-Oct-19 12:00

Client Sample ID: **190930BMGTAILS**
SVL Sample ID: **X9J0050-01 (Surface Water)**

Sampled: 30-Sep-19 10:20
Received: 01-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X940227	DJS	10/08/19 11:33	

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

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Project Name: BMSL - Routine
Work Order: **X9J0097**
Reported: 17-Oct-19 12:17

Client Sample ID: **191001BMGRS2**
SVL Sample ID: **X9J0097-01 (Surface Water)**

Sampled: 01-Oct-19 07:40
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X940318	JFB	10/08/19 14:30	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	16.1	mg/L	0.100	0.035		X941034	AS	10/14/19 13:09	
EPA 200.7	**Iron**	0.769	mg/L	0.100	0.028		X941034	AS	10/14/19 13:09	
EPA 200.7	**Magnesium**	4.69	mg/L	0.50	0.04		X941034	AS	10/14/19 13:09	
EPA 200.7	**Manganese**	0.0601	mg/L	0.0080	0.0017		X941034	AS	10/14/19 13:09	
EPA 200.7	**Potassium**	1.28	mg/L	0.50	0.09		X941034	JFB	10/14/19 15:36	
EPA 200.7	**Silica (SiO2)**	13.7	mg/L	0.17	0.06		X941034	AS	10/14/19 13:09	
EPA 200.7	**Sodium**	10.2	mg/L	0.50	0.06		X941034	AS	10/14/19 13:09	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X941004	DJS	10/11/19 06:04	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941088	JFB	10/15/19 15:18	
EPA 200.7	**Iron**	0.238	mg/L	0.100	0.056		X941088	JFB	10/15/19 15:18	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 15:18	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941088	JFB	10/15/19 15:18	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X941007	DJS	10/11/19 11:54	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.09	mg/L	0.08	0.05		X941090	AS	10/15/19 14:10	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941090	AS	10/15/19 11:10	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941090	AS	10/15/19 11:10	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X941090	AS	10/15/19 11:10	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X941006	DJS	10/16/19 10:24	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X941006	DJS	10/16/19 10:24	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X942061	SLH	10/15/19 11:32	
SM 2320 B	**Total Alkalinity**	53.5	mg/L as CaCO3	1.0			X940325	KAG	10/07/19 13:03	
SM 2540 D	**Total Susp. Solids**	6.0	mg/L	5.0			X940293	dks	10/04/19 10:55	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	4.62	mg/L	0.20	0.14		X940306	RS	10/04/19 18:34	
EPA 300.0	**Fluoride**	0.825	mg/L	0.100	0.062		X940306	RS	10/04/19 18:34	
EPA 300.0	**Sulfate as SO4**	24.1	mg/L	0.30	0.18		X940306	RS	10/04/19 18:34	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.69 meq/L Anion Sum: 1.74 meq/L C/A Balance: -1.71 %

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

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Project Name: BMSL - Routine
Work Order: **X9J0097**
Reported: 17-Oct-19 12:17

Client Sample ID: **191001BMGM19**
SVL Sample ID: **X9J0097-02 (Ground Water)**

Sampled: 01-Oct-19 09:05
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	17.4	mg/L	0.100	0.035		X941034	AS	10/14/19 13:13	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.187	mg/L	0.100	0.056		X941088	JFB	10/15/19 15:22	
EPA 200.7	**Manganese**	0.225	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 15:22	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X941007	DJS	10/11/19 11:57	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	85	mg/L	10			X940290	dks	10/04/19 10:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.995	mg/L	0.100	0.062		X940306	RS	10/04/19 19:11	
EPA 300.0	**Sulfate as SO4**	9.15	mg/L	0.30	0.18		X940306	RS	10/04/19 19:11	

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

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Project Name: BMSL - Routine
Work Order: **X9J0097**
Reported: 17-Oct-19 12:17

Client Sample ID: **191001BMGM21**
SVL Sample ID: **X9J0097-03 (Ground Water)**

Sampled: 01-Oct-19 09:40
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	25.2	mg/L	0.100	0.035		X941034	AS	10/14/19 13:16	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.119	mg/L	0.100	0.056		X941088	JFB	10/15/19 15:26	
EPA 200.7	**Manganese**	0.268	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 15:26	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X941007	DJS	10/11/19 12:00	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	117	mg/L	10			X940290	dks	10/04/19 10:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.26	mg/L	0.100	0.062		X940306	RS	10/04/19 20:06	
EPA 300.0	**Sulfate as SO4**	13.2	mg/L	0.30	0.18		X940306	RS	10/04/19 20:06	

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

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Project Name: BMSL - Routine
Work Order: **X9J0097**
Reported: 17-Oct-19 12:17

Client Sample ID: **191001BMGM24**
SVL Sample ID: **X9J0097-04 (Ground Water)**

Sampled: 01-Oct-19 10:20
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	86.5	mg/L	0.100	0.035		X941034	AS	10/14/19 13:32	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.72	mg/L	0.100	0.056		X941088	JFB	10/15/19 15:30	
EPA 200.7	**Manganese**	1.15	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 15:30	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X941007	DJS	10/11/19 12:02	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	490	mg/L	10			X940290	dks	10/04/19 10:55	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.721	mg/L	0.100	0.062		X940306	RS	10/04/19 20:24	
EPA 300.0	**Sulfate as SO4**	207	mg/L	3.00	1.80	10	X940306	RS	10/04/19 20:43	D2

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

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Project Name: BMSL - Routine
Work Order: **X9J0097**
Reported: 17-Oct-19 12:17

Client Sample ID: **191001BMGM11R**
SVL Sample ID: **X9J0097-05 (Ground Water)**

Sampled: 01-Oct-19 10:50
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
SM 2340 B	**Hardness (as CaCO3)**	206	mg/L	2.31	0.255		N/A		10/14/19 13:36	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	61.5	mg/L	0.100	0.035		X941034	AS	10/14/19 13:36	
EPA 200.7	**Magnesium**	12.8	mg/L	0.50	0.04		X941034	AS	10/14/19 13:36	
EPA 200.7	**Potassium**	2.16	mg/L	0.50	0.09		X941034	JFB	10/14/19 15:39	
EPA 200.7	**Silica (SiO2)**	15.6	mg/L	0.17	0.06		X941034	AS	10/14/19 13:36	
EPA 200.7	**Sodium**	14.0	mg/L	0.50	0.06		X941034	AS	10/14/19 13:36	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X941088	AS	10/16/19 14:00	
EPA 200.7	**Barium**	0.0424	mg/L	0.0020	0.0019		X941088	AS	10/16/19 14:00	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941088	AS	10/16/19 14:00	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941088	JFB	10/15/19 15:34	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941088	JFB	10/15/19 15:34	
EPA 200.7	**Manganese**	0.229	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 15:34	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941088	JFB	10/15/19 15:34	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X941088	JFB	10/15/19 15:34	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X941007	DJS	10/11/19 11:30	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X941007	DJS	10/11/19 11:30	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X941007	DJS	10/11/19 11:30	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X941007	DJS	10/11/19 11:30	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X941007	DJS	10/11/19 11:30	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X940315	JFB	10/09/19 15:32	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	162	mg/L as CaCO3	1.0			X940325	KAG	10/07/19 13:07	
SM 2540 C	**Total Diss. Solids**	291	mg/L	10			X940290	dks	10/04/19 10:55	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.97	mg/L	0.20	0.14		X940306	RS	10/04/19 21:01	
EPA 300.0	**Fluoride**	0.892	mg/L	0.100	0.062		X940306	RS	10/04/19 21:01	
EPA 300.0	**Sulfate as SO4**	91.1	mg/L	3.00	1.80	10	X940306	RS	10/04/19 21:20	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.80 meq/L Anion Sum: 5.26 meq/L C/A Balance: -4.57 % Calculated TDS: 298 TDS/cTDS: 0.98

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

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Battle Mountain - San Luis
PO Box 310
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Project Name: BMSL - Routine
Work Order: **X9J0086**
Reported: 17-Oct-19 12:21

Client Sample ID: **191001BMGRS1**
SVL Sample ID: **X9J0086-01 (Surface Water)**

Sampled: 01-Oct-19 07:10
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X940318	JFB	10/08/19 14:27	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	14.8	mg/L	0.100	0.035		X941034	AS	10/14/19 12:52	
EPA 200.7	**Iron**	0.342	mg/L	0.100	0.028		X941034	AS	10/14/19 12:52	
EPA 200.7	**Magnesium**	4.02	mg/L	0.50	0.04		X941034	AS	10/14/19 12:52	
EPA 200.7	**Manganese**	0.0335	mg/L	0.0080	0.0017		X941034	AS	10/14/19 12:52	
EPA 200.7	**Potassium**	0.73	mg/L	0.50	0.09		X941034	JFB	10/14/19 15:24	
EPA 200.7	**Silica (SiO2)**	12.3	mg/L	0.17	0.06		X941034	AS	10/14/19 12:52	
EPA 200.7	**Sodium**	3.50	mg/L	0.50	0.06		X941034	AS	10/14/19 12:52	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X941004	DJS	10/11/19 05:59	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941088	JFB	10/15/19 14:36	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941088	JFB	10/15/19 14:36	
EPA 200.7	**Manganese**	0.0152	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 14:36	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941088	JFB	10/15/19 14:36	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X941007	DJS	10/11/19 11:49	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.08	mg/L	0.08	0.05		X941090	AS	10/15/19 13:57	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941090	AS	10/15/19 10:54	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941090	AS	10/15/19 10:54	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X941090	AS	10/15/19 10:54	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X941006	DJS	10/16/19 10:13	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X941006	DJS	10/16/19 10:13	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X941124	SLH	10/09/19 17:07	
SM 2320 B	**Total Alkalinity**	59.4	mg/L as CaCO3	1.0			X940325	KAG	10/07/19 12:37	
SM 2540 D	**Total Susp. Solids**	7.0	mg/L	5.0			X941013	TL	10/07/19 13:40	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	0.46	mg/L	0.20	0.14		X940306	RS	10/04/19 14:17	
EPA 300.0	**Fluoride**	0.468	mg/L	0.100	0.062		X940306	RS	10/04/19 14:17	
EPA 300.0	**Sulfate as SO4**	3.76	mg/L	0.30	0.18		X940306	RS	10/04/19 14:17	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.25 meq/L Anion Sum: 1.30 meq/L C/A Balance: -1.95 %

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Project Name: BMSL - Routine
Work Order: **X9J0086**
Reported: 17-Oct-19 12:21

Client Sample ID: **191001BMGRS5**
SVL Sample ID: **X9J0086-02 (Surface Water)**

Sampled: 01-Oct-19 08:15
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X940318	JFB	10/08/19 14:29	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	24.7	mg/L	0.100	0.035		X941034	AS	10/14/19 13:02	
EPA 200.7	**Iron**	0.958	mg/L	0.100	0.028		X941034	AS	10/14/19 13:02	
EPA 200.7	**Magnesium**	5.43	mg/L	0.50	0.04		X941034	AS	10/14/19 13:02	
EPA 200.7	**Manganese**	0.0674	mg/L	0.0080	0.0017		X941034	AS	10/14/19 13:02	
EPA 200.7	**Potassium**	1.35	mg/L	0.50	0.09		X941034	JFB	10/14/19 15:33	
EPA 200.7	**Silica (SiO2)**	14.9	mg/L	0.17	0.06		X941034	AS	10/14/19 13:02	
EPA 200.7	**Sodium**	8.42	mg/L	0.50	0.06		X941034	AS	10/14/19 13:02	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X941004	DJS	10/11/19 06:02	
Metals (Dissolved)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941088	JFB	10/15/19 14:47	
EPA 200.7	**Iron**	0.382	mg/L	0.100	0.056		X941088	JFB	10/15/19 14:47	
EPA 200.7	**Manganese**	0.0572	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 14:47	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941088	JFB	10/15/19 14:47	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X941007	DJS	10/11/19 11:51	
Metals (Potentially Dissolved)										
EPA 200.7	**Aluminum**	0.10	mg/L	0.08	0.05		X941090	AS	10/15/19 14:07	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941090	AS	10/15/19 11:06	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941090	AS	10/15/19 11:06	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X941090	AS	10/15/19 11:06	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X941006	DJS	10/16/19 10:22	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X941006	DJS	10/16/19 10:22	
Classical Chemistry Parameters										
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X941124	SLH	10/09/19 17:10	
SM 2320 B	**Total Alkalinity**	87.9	mg/L as CaCO3	1.0			X940325	KAG	10/07/19 12:41	
SM 2540 D	**Total Susp. Solids**	6.0	mg/L	5.0			X941013	TL	10/07/19 13:40	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.97	mg/L	0.20	0.14		X940306	RS	10/04/19 15:12	
EPA 300.0	**Fluoride**	0.716	mg/L	0.100	0.062		X940306	RS	10/04/19 15:12	
EPA 300.0	**Sulfate as SO4**	13.3	mg/L	0.30	0.18		X940306	RS	10/04/19 15:12	

Cation/Anion Balance and TDS Ratios

Cation Sum: 2.11 meq/L Anion Sum: 2.15 meq/L C/A Balance: -1.09 %

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

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9J0086**
San Luis, CO 81152	Reported: 17-Oct-19 12:21

Client Sample ID: **191001BMGRS5**
SVL Sample ID: **X9J0086-03 (Surface Water)**

Sampled: 01-Oct-19 08:15
Received: 02-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.843	mg/L	0.100	0.028		X941034	AS	10/14/19 13:05	
EPA 200.7	**Manganese**	0.0682	mg/L	0.0080	0.0017		X941034	AS	10/14/19 13:05	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.363	mg/L	0.100	0.056		X941088	JFB	10/15/19 14:52	
EPA 200.7	**Manganese**	0.0570	mg/L	0.0080	0.0034		X941088	JFB	10/15/19 14:52	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X941056	DT	10/09/19 12:52	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	13.3	mg/L	0.30	0.18		X940306	RS	10/04/19 16:26	

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: X9J0263
Reported: 23-Oct-19 17:45

Client Sample ID: **191008BMGM12**
SVL Sample ID: **X9J0263-01 (Ground Water)**

Sampled: 08-Oct-19 08:35
Received: 09-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	51.5	mg/L	0.100	0.035		X941253	AS	10/18/19 11:25	
EPA 200.7	**Magnesium**	8.92	mg/L	0.50	0.04		X941253	AS	10/18/19 11:25	
EPA 200.7	**Potassium**	2.16	mg/L	0.50	0.09		X941253	AS	10/18/19 11:25	
EPA 200.7	**Silica (SiO2)**	20.4	mg/L	0.17	0.06		X941253	AS	10/21/19 09:49	
EPA 200.7	**Sodium**	14.2	mg/L	0.50	0.06		X941253	AS	10/18/19 11:25	
SM 2340 B	**Hardness (as CaCO3)**	165	mg/L	2.31	0.255		N/A		10/18/19 11:25	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X941250	JFB	10/21/19 17:57	
EPA 200.7	**Barium**	0.167	mg/L	0.0020	0.0019		X941250	JFB	10/21/19 14:27	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941250	JFB	10/21/19 14:27	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941250	JFB	10/21/19 14:27	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941250	JFB	10/21/19 14:27	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941250	JFB	10/21/19 14:27	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X941250	JFB	10/21/19 14:27	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941250	JFB	10/21/19 14:27	
EPA 200.7	**Zinc**	0.304	mg/L	0.010	0.005		X941250	JFB	10/21/19 14:27	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X942112	KWH	10/18/19 11:42	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:42	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X942112	KWH	10/18/19 11:42	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X942112	KWH	10/18/19 11:42	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X943038	JFB	10/23/19 12:28	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	147	mg/L as CaCO3	1.0			X941278	KAG	10/14/19 11:24	
SM 2540 C	**Total Diss. Solids**	205	mg/L	10			X941255	TL	10/11/19 12:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X942165	DT	10/17/19 15:42	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	20.7	mg/L	2.00	1.40	10	X941281	RS	10/15/19 21:18	D2
EPA 300.0	**Fluoride**	0.325	mg/L	0.100	0.062		X941281	RS	10/15/19 21:01	
EPA 300.0	**Sulfate as SO4**	13.0	mg/L	0.30	0.18		X941281	RS	10/15/19 21:01	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.00 meq/L Anion Sum: 3.81 meq/L C/A Balance: 2.41 % Calculated TDS: 219 TDS/cTDS: 0.93

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: X9J0263
Reported: 23-Oct-19 17:45

Client Sample ID: **191008BMGM9**
SVL Sample ID: **X9J0263-02 (Ground Water)**

Sampled: 08-Oct-19 09:35
Received: 09-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	84.8	mg/L	0.100	0.035		X941253	AS	10/18/19 11:29	
EPA 200.7	**Magnesium**	13.4	mg/L	0.50	0.04		X941253	AS	10/18/19 11:29	
EPA 200.7	**Potassium**	1.93	mg/L	0.50	0.09		X941253	AS	10/18/19 11:29	
EPA 200.7	**Silica (SiO2)**	26.7	mg/L	0.17	0.06		X941253	AS	10/21/19 09:53	
EPA 200.7	**Sodium**	26.7	mg/L	0.50	0.06		X941253	AS	10/18/19 11:29	
SM 2340 B	**Hardness (as CaCO3)**	267	mg/L	2.31	0.255		N/A		10/18/19 11:29	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X941250	JFB	10/21/19 18:00	
EPA 200.7	**Barium**	0.128	mg/L	0.0020	0.0019		X941250	JFB	10/21/19 14:31	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941250	JFB	10/21/19 14:31	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941250	JFB	10/21/19 14:31	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941250	JFB	10/21/19 14:31	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941250	JFB	10/21/19 14:31	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X941250	JFB	10/21/19 14:31	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941250	JFB	10/21/19 14:31	
EPA 200.7	**Zinc**	0.377	mg/L	0.010	0.005		X941250	JFB	10/21/19 14:31	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X942112	KWH	10/18/19 11:46	
EPA 200.8	**Copper**	0.00484	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:46	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X942112	KWH	10/18/19 11:46	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X942112	KWH	10/18/19 11:46	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X943038	JFB	10/23/19 12:30	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	287	mg/L as CaCO3	1.0			X941278	KAG	10/14/19 11:29	
SM 2540 C	**Total Diss. Solids**	317	mg/L	10			X941255	TL	10/11/19 12:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X942165	DT	10/17/19 15:44	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.83	mg/L	0.20	0.14		X941281	RS	10/15/19 21:36	
EPA 300.0	**Fluoride**	0.253	mg/L	0.100	0.062		X941281	RS	10/15/19 21:36	
EPA 300.0	**Sulfate as SO4**	20.2	mg/L	0.30	0.18		X941281	RS	10/15/19 21:36	

Cation/Anion Balance and TDS Ratios

Cation Sum: 6.57 meq/L Anion Sum: 6.28 meq/L C/A Balance: 2.26 % Calculated TDS: 350 TDS/cTDS: 0.91

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

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Project Name: BMSL - Routine
Work Order: **X9J0263**
Reported: 23-Oct-19 17:45

Client Sample ID: **191008BMGM13R**
SVL Sample ID: **X9J0263-03 (Ground Water)**

Sampled: 08-Oct-19 10:40
Received: 09-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	91.8	mg/L	0.100	0.035		X941253	AS	10/18/19 11:33	
EPA 200.7	**Magnesium**	15.5	mg/L	0.50	0.04		X941253	AS	10/18/19 11:33	
EPA 200.7	**Potassium**	1.62	mg/L	0.50	0.09		X941253	AS	10/18/19 11:33	
EPA 200.7	**Silica (SiO2)**	25.0	mg/L	0.17	0.06		X941253	AS	10/21/19 09:57	
EPA 200.7	**Sodium**	34.3	mg/L	0.50	0.06		X941253	AS	10/18/19 11:33	
SM 2340 B	**Hardness (as CaCO3)**	293	mg/L	2.31	0.255		N/A		10/18/19 11:33	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X941250	JFB	10/21/19 18:03	
EPA 200.7	**Barium**	0.136	mg/L	0.0020	0.0019		X941250	JFB	10/21/19 14:36	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941250	JFB	10/21/19 14:36	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941250	JFB	10/21/19 14:36	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941250	JFB	10/21/19 14:36	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941250	JFB	10/21/19 14:36	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X941250	JFB	10/21/19 14:36	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941250	JFB	10/21/19 14:36	
EPA 200.7	**Zinc**	0.620	mg/L	0.010	0.005		X941250	JFB	10/21/19 14:36	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X942112	KWH	10/18/19 11:48	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:48	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X942112	KWH	10/18/19 11:48	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X942112	KWH	10/18/19 11:48	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X943038	JFB	10/23/19 12:35	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	329	mg/L as CaCO3	1.0			X941278	KAG	10/14/19 11:38	
SM 2540 C	**Total Diss. Solids**	383	mg/L	10			X941255	TL	10/11/19 12:50	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X942165	DT	10/17/19 15:46	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	3.83	mg/L	0.20	0.14		X941281	RS	10/15/19 22:11	
EPA 300.0	**Fluoride**	0.372	mg/L	0.100	0.062		X941281	RS	10/15/19 22:11	
EPA 300.0	**Sulfate as SO4**	18.3	mg/L	0.30	0.18		X941281	RS	10/15/19 22:11	

Cation/Anion Balance and TDS Ratios

Cation Sum: 7.42 meq/L Anion Sum: 7.08 meq/L C/A Balance: 2.33 % Calculated TDS: 388 TDS/cTDS: 0.99

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

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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGM16**
SVL Sample ID: **X9J0222-01 (Ground Water)**

Sampled: 07-Oct-19 08:05
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	18.4	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:24	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:07	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:07	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:12	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	56	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.624	mg/L	0.100	0.062		X941078	RS	10/10/19 01:06	
EPA 300.0	**Sulfate as SO4**	12.3	mg/L	0.30	0.18		X941078	RS	10/10/19 01:06	

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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGFB**
SVL Sample ID: **X9J0222-02 (Surface Water)**

Sampled: 07-Oct-19 08:00
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:27	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:54	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:54	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:19	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X941078	RS	10/10/19 02:01	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X941078	RS	10/10/19 02:01	

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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGRB**
SVL Sample ID: **X9J0222-03 (Surface Water)**

Sampled: 07-Oct-19 08:20
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:30	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:57	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:57	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:21	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X941078	RS	10/10/19 02:19	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X941078	RS	10/10/19 02:19	

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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGM22**
SVL Sample ID: **X9J0222-04 (Ground Water)**

Sampled: 07-Oct-19 08:50
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	45.2	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:33	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.358	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:27	
EPA 200.7	**Manganese**	0.168	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:27	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:24	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	158	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.45	mg/L	0.100	0.062		X941078	RS	10/10/19 02:38	
EPA 300.0	**Sulfate as SO4**	39.8	mg/L	0.30	0.18		X941078	RS	10/10/19 02:38	

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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGM26**
SVL Sample ID: **X9J0222-05 (Ground Water)**

Sampled: 07-Oct-19 09:35
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	36.6	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:36	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.557	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:30	
EPA 200.7	**Manganese**	0.312	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:30	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:26	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	133	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.750	mg/L	0.100	0.062		X941078	RS	10/10/19 02:56	
EPA 300.0	**Sulfate as SO4**	9.90	mg/L	0.30	0.18		X941078	RS	10/10/19 02:56	

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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGM34**
SVL Sample ID: **X9J0222-06 (Ground Water)**

Sampled: 07-Oct-19 10:10
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
SM 2340 B	**Hardness (as CaCO3)**	76.5	mg/L	2.31	0.255		N/A		10/17/19 17:39	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	22.1	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:39	
EPA 200.7	**Magnesium**	5.20	mg/L	0.50	0.04		X941130	JFB	10/17/19 17:39	
EPA 200.7	**Potassium**	0.81	mg/L	0.50	0.09		X941130	JFB	10/17/19 17:39	
EPA 200.7	**Silica (SiO2)**	14.5	mg/L	0.17	0.06		X941130	AS	10/18/19 08:30	
EPA 200.7	**Sodium**	7.80	mg/L	0.50	0.06		X941130	JFB	10/17/19 17:39	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X941129	JFB	10/21/19 14:33	
EPA 200.7	**Barium**	0.0408	mg/L	0.0020	0.0019		X941129	JFB	10/21/19 14:33	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941129	JFB	10/21/19 14:33	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941129	JFB	10/21/19 14:33	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:33	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941129	JFB	10/21/19 14:33	
EPA 200.7	**Manganese**	0.216	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:33	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941129	JFB	10/21/19 14:33	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X941129	JFB	10/21/19 14:33	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X942112	KWH	10/18/19 11:28	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:28	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X942112	KWH	10/18/19 11:28	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X942112	KWH	10/18/19 11:28	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X943038	JFB	10/23/19 12:24	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	71.0	mg/L as CaCO3	1.0			X941135	KAG	10/09/19 12:44	
SM 2540 C	**Total Diss. Solids**	116	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.38	mg/L	0.20	0.14		X941078	RS	10/10/19 03:33	
EPA 300.0	**Fluoride**	0.512	mg/L	0.100	0.062		X941078	RS	10/10/19 03:33	
EPA 300.0	**Sulfate as SO4**	19.7	mg/L	0.30	0.18		X941078	RS	10/10/19 03:33	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.91 meq/L Anion Sum: 1.92 meq/L C/A Balance: -0.40 % Calculated TDS: 116 TDS/cTDS: 1.00

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

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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGM10**
SVL Sample ID: **X9J0222-07 (Ground Water)**

Sampled: 07-Oct-19 10:45
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
SM 2340 B	**Hardness (as CaCO3)**	214	mg/L	2.31	0.255		N/A		10/17/19 17:42	
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	70.1	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:42	
EPA 200.7	**Magnesium**	9.41	mg/L	0.50	0.04		X941130	JFB	10/17/19 17:42	
EPA 200.7	**Potassium**	1.62	mg/L	0.50	0.09		X941130	JFB	10/17/19 17:42	
EPA 200.7	**Silica (SiO2)**	27.3	mg/L	0.17	0.06		X941130	AS	10/18/19 08:33	
EPA 200.7	**Sodium**	21.6	mg/L	0.50	0.06		X941130	JFB	10/17/19 17:42	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X941129	JFB	10/21/19 14:45	
EPA 200.7	**Barium**	0.122	mg/L	0.0020	0.0019		X941129	JFB	10/21/19 14:45	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X941129	JFB	10/21/19 14:45	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X941129	JFB	10/21/19 14:45	
EPA 200.7	**Iron**	1.13	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:45	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X941129	JFB	10/21/19 15:34	
EPA 200.7	**Manganese**	0.869	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:45	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X941129	JFB	10/21/19 14:45	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X941129	JFB	10/21/19 14:45	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X942112	KWH	10/18/19 11:35	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:35	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X942112	KWH	10/18/19 11:35	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X942112	KWH	10/18/19 11:35	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X943038	JFB	10/23/19 12:26	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	220	mg/L as CaCO3	1.0			X941135	KAG	10/09/19 12:48	
SM 2540 C	**Total Diss. Solids**	281	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	2.94	mg/L	0.20	0.14		X941078	RS	10/10/19 03:51	
EPA 300.0	**Fluoride**	0.911	mg/L	0.100	0.062		X941078	RS	10/10/19 03:51	
EPA 300.0	**Sulfate as SO4**	31.9	mg/L	0.30	0.18		X941078	RS	10/10/19 03:51	

Cation/Anion Balance and TDS Ratios

Cation Sum: 5.33 meq/L Anion Sum: 5.19 meq/L C/A Balance: 1.36 % Calculated TDS: 298 TDS/cTDS: 0.94

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

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Battle Mountain - San Luis
PO Box 310
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Project Name: BMSL - Routine
Work Order: **X9J0222**
Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGBF4**
SVL Sample ID: **X9J0222-08 (Ground Water)**

Sampled: 07-Oct-19 11:10
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	132	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:48	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.487	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:48	
EPA 200.7	**Manganese**	4.06	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:48	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:37	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	568	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	4.02	mg/L	0.100	0.062		X941078	RS	10/10/19 04:46	
EPA 300.0	**Sulfate as SO4**	248	mg/L	3.00	1.80	10	X941078	RS	10/10/19 05:04	D2

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

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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9J0222
San Luis, CO 81152	Reported: 23-Oct-19 17:33

Client Sample ID: **191007BMGBF6**
SVL Sample ID: **X9J0222-09 (Ground Water)**

Sampled: 07-Oct-19 11:40
Received: 08-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	131	mg/L	0.100	0.035		X941130	JFB	10/17/19 17:57	
Metals (Dissolved)										
EPA 200.7	**Iron**	19.6	mg/L	0.100	0.056		X941129	JFB	10/21/19 14:51	
EPA 200.7	**Manganese**	8.03	mg/L	0.0080	0.0034		X941129	JFB	10/21/19 14:51	
EPA 200.8	**Copper**	0.271	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:39	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	479	mg/L	10			X941132	TL	10/09/19 12:30	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	3.30	mg/L	0.100	0.062		X941078	RS	10/10/19 05:23	
EPA 300.0	**Sulfate as SO4**	277	mg/L	3.00	1.80	10	X941078	RS	10/10/19 05:41	D2

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

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Project Name: BMSL - Routine
Work Order: **X9J0303**
Reported: 24-Oct-19 12:00

Client Sample ID: **191009BMGM14**
SVL Sample ID: **X9J0303-01 (Ground Water)**

Sampled: 09-Oct-19 10:15
Received: 10-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	182	mg/L	0.100	0.035		X942131	JFB	10/21/19 15:37	
EPA 200.7	**Magnesium**	29.1	mg/L	0.50	0.04		X942131	JFB	10/21/19 15:37	
EPA 200.7	**Potassium**	2.08	mg/L	0.50	0.09		X942131	JFB	10/21/19 15:37	
EPA 200.7	**Silica (SiO2)**	26.7	mg/L	0.17	0.06		X942131	JFB	10/21/19 15:37	M2
EPA 200.7	**Sodium**	30.1	mg/L	0.50	0.06		X942131	JFB	10/21/19 15:37	
SM 2340 B	**Hardness (as CaCO3)**	575	mg/L	2.31	0.255		N/A		10/21/19 15:37	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X942007	JFB	10/21/19 18:02	
EPA 200.7	**Barium**	0.367	mg/L	0.0020	0.0019		X942007	JFB	10/21/19 18:02	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X942007	JFB	10/21/19 18:02	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X942007	JFB	10/21/19 18:02	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X942007	JFB	10/21/19 18:02	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X942007	JFB	10/21/19 18:02	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X942007	JFB	10/21/19 18:02	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X942007	JFB	10/21/19 18:02	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X942007	JFB	10/21/19 18:02	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X942112	KWH	10/18/19 11:51	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X942112	KWH	10/18/19 11:51	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X942112	KWH	10/18/19 11:51	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X942112	KWH	10/18/19 11:51	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X943038	JFB	10/23/19 13:06	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	618	mg/L as CaCO3	1.0			X942188	KAG	10/17/19 11:28	
SM 2540 C	**Total Diss. Solids**	660	mg/L	10			X942121	dks	10/16/19 14:00	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X942165	DT	10/17/19 15:48	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.91	mg/L	0.20	0.14		X942101	RS	10/17/19 14:26	
EPA 300.0	**Fluoride**	0.334	mg/L	0.100	0.062		X942101	RS	10/17/19 14:26	
EPA 300.0	**Sulfate as SO4**	27.9	mg/L	0.30	0.18		X942101	RS	10/17/19 14:26	

Cation/Anion Balance and TDS Ratios

Cation Sum: 12.9 meq/L Anion Sum: 13.2 meq/L C/A Balance: -1.32 % Calculated TDS: 678 TDS/cTDS: 0.97

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

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Project Name: BMSL - Routine
Work Order: **X9K0009**
Reported: 14-Nov-19 12:23

Client Sample ID: **191031BMGLD**
SVL Sample ID: **X9K0009-01 (Ground Water)**

Sampled: 31-Oct-19 09:25
Received: 01-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	500	mg/L	0.500	0.345	10	X944254	KH	11/06/19 15:46	D2
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.028		X944254	KH	11/06/19 14:41	
EPA 200.7	**Sodium**	934	mg/L	2.50	0.60	10	X944254	KH	11/06/19 15:46	D2
EPA 200.7	**Zinc**	< 0.010	mg/L	0.010	0.003		X944254	KH	11/06/19 14:41	
EPA 200.8	**Copper**	0.0628	mg/L	0.00100	0.00036	2	X945023	AS	11/11/19 11:11	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X945055	SLH	11/07/19 23:41	

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Project Name: BMSL - Routine
Work Order: **X9K0009**
Reported: 14-Nov-19 12:23

Client Sample ID: **191031BMGCOL**
SVL Sample ID: **X9K0009-02 (Surface Water)**

Sampled: 31-Oct-19 09:45
Received: 01-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	516	mg/L	0.500	0.345	10	X944254	KH	11/06/19 15:26	D2
EPA 200.7	**Iron**	48.7	mg/L	0.100	0.028		X944254	KH	11/06/19 14:54	
EPA 200.7	**Sodium**	930	mg/L	2.50	0.60	10	X944254	KH	11/06/19 15:26	D2
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X944254	KH	11/06/19 14:54	
EPA 200.8	**Copper**	0.00148	mg/L	0.00100	0.00036	2	X945023	AS	11/11/19 12:40	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X945055	SLH	11/07/19 23:43	

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Project Name: BMSL - Routine
Work Order: **X9K0009**
Reported: 14-Nov-19 12:23

Client Sample ID: **191031BMGTAILS**
SVL Sample ID: **X9K0009-03 (Surface Water)**

Sampled: 31-Oct-19 10:30
Received: 01-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	240	mg/L	0.100	0.035		X944254	KH	11/06/19 14:57	
EPA 200.7	**Iron**	0.776	mg/L	0.100	0.028		X944254	KH	11/06/19 14:57	
EPA 200.7	**Sodium**	594	mg/L	2.50	0.60	10	X944254	KH	11/06/19 15:29	D2
EPA 200.7	**Zinc**	0.010	mg/L	0.010	0.003		X944254	KH	11/06/19 14:57	
EPA 200.8	**Arsenic**	< 0.00300	mg/L	0.00300	0.00021	2	X945023	AS	11/13/19 08:27	
EPA 200.8	**Copper**	0.567	mg/L	0.00100	0.00036	2	X945023	AS	11/11/19 12:43	

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

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Project Name: BMSL - Routine
Work Order: **X9J0604**
Reported: 14-Nov-19 15:44

Client Sample ID: **191028BMGRS2**
SVL Sample ID: **X9J0604-01 (Surface Water)**

Sampled: 28-Oct-19 13:10
Received: 29-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X945084	JFB	11/07/19 12:35	
SM 2340 B	**Hardness (as CaCO3)**	59.3	mg/L	2.31	0.255		N/A		11/06/19 14:31	
Metals (Total Recoverable)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.03		X944194	KH	11/06/19 14:31	
EPA 200.7	**Barium**	0.0233	mg/L	0.0020	0.0010		X944194	KH	11/06/19 14:31	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X944194	JFB	11/06/19 12:57	
EPA 200.7	**Calcium**	17.0	mg/L	0.100	0.035		X944194	JFB	11/06/19 12:57	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X944194	JFB	11/06/19 12:57	
EPA 200.7	**Iron**	0.238	mg/L	0.100	0.028		X944194	KH	11/06/19 14:31	
EPA 200.7	**Magnesium**	4.09	mg/L	0.50	0.04		X944194	KH	11/06/19 14:31	
EPA 200.7	**Manganese**	0.0262	mg/L	0.0080	0.0017		X944194	JFB	11/06/19 12:57	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X944194	JFB	11/06/19 12:57	
EPA 200.7	**Potassium**	1.28	mg/L	0.50	0.09		X944194	JFB	11/06/19 12:57	
EPA 200.7	**Silica (SiO2)**	11.7	mg/L	0.17	0.06		X944194	KH	11/06/19 14:31	
EPA 200.7	**Sodium**	4.70	mg/L	0.50	0.06		X944194	JFB	11/06/19 12:57	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X944194	JFB	11/06/19 12:57	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X944185	AS	11/14/19 10:25	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X944185	AS	11/14/19 10:25	
EPA 200.8	Copper	< 0.00100	mg/L	0.00100	0.00036	2	X944185	AS	11/14/19 10:25	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.00014	2	X944185	AS	11/14/19 10:25	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X944185	AS	11/14/19 10:25	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X944185	AS	11/14/19 10:25	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X944188	JFB	11/11/19 12:58	
EPA 200.7	**Barium**	0.0239	mg/L	0.0020	0.0019		X944188	JFB	11/11/19 12:58	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X944188	JFB	11/11/19 12:58	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X944188	JFB	11/11/19 12:58	
EPA 200.7	**Iron**	0.148	mg/L	0.100	0.056		X944188	JFB	11/11/19 12:58	
EPA 200.7	**Manganese**	0.0181	mg/L	0.0080	0.0034		X944188	JFB	11/11/19 12:58	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X944188	JFB	11/11/19 12:58	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X944188	JFB	11/11/19 12:58	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X945012	AS	11/14/19 11:47	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X945012	AS	11/14/19 11:47	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X945012	AS	11/14/19 11:47	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X945012	AS	11/14/19 11:47	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X945012	AS	11/14/19 11:47	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X945012	AS	11/14/19 11:47	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X945085	JFB	11/07/19 13:18	

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Project Name: BMSL - Routine
Work Order: **X9J0604**
Reported: 14-Nov-19 15:44

Client Sample ID: **191028BMGRS2**
SVL Sample ID: **X9J0604-01 (Surface Water)**

Sampled: 28-Oct-19 13:10
Received: 29-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X944142	SLH	10/31/19 15:06	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X945061	SLH	11/05/19 16:21	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X945183	SM	11/12/19 13:48	
SM 2320 B	**Total Alkalinity**	61.1	mg/L as CaCO3	1.0			X944198	KAG	11/01/19 11:48	
SM 2320 B	**Bicarbonate**	61.1	mg/L as CaCO3	1.0			X944198	KAG	11/01/19 11:48	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X944198	KAG	11/01/19 11:48	
SM 2540 C	**Total Diss. Solids**	90	mg/L	10			X944120	dks	10/30/19 11:40	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X944122	dks	10/30/19 11:40	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X944053	DT	11/07/19 22:51	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	1.12	mg/L	0.20	0.14		X944136	DT	10/30/19 15:47	
EPA 300.0	**Fluoride**	0.505	mg/L	0.100	0.062		X944136	DT	10/30/19 15:47	
EPA 300.0	**Sulfate as SO4**	7.01	mg/L	0.30	0.18		X944136	DT	10/30/19 15:47	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.43 meq/L Anion Sum: 1.43 meq/L C/A Balance: 0.14 % Calculated TDS: 84 TDS/cTDS: 1.07

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

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Project Name: BMSL - Routine
Work Order: **X9J0638**
Reported: 18-Nov-19 15:48

Client Sample ID: **191029WTPEFF**
SVL Sample ID: **X9J0638-01 (Ground Water)**

Sampled: 29-Oct-19 10:50
Received: 30-Oct-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00042	2	X945076	AS	11/13/19 12:33	D1
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X945261	JFB	11/12/19 10:53	
Metals (Total Recoverable)										
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X944194	JFB	11/06/19 13:41	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.028		X944194	JFB	11/13/19 15:37	
EPA 200.7	**Molybdenum**	0.015	mg/L	0.008	0.002		X944194	JFB	11/06/19 13:41	
EPA 200.8	Aluminum	< 0.0100	mg/L	0.0100	0.0040	2	X944185	AS	11/14/19 11:11	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X944185	AS	11/14/19 11:11	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X944188	JFB	11/11/19 13:07	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X944188	JFB	11/11/19 13:07	
Metals (Potentially Dissolved)										
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X944209	KH	11/08/19 15:07	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X944209	KH	11/08/19 15:07	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X945122	AS	11/18/19 12:25	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X945122	AS	11/18/19 08:03	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X945122	AS	11/18/19 08:03	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X945122	AS	11/18/19 08:03	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X945122	AS	11/18/19 08:03	
EPA 200.8	**Uranium**	0.00195	mg/L	0.00100	0.000052		X945122	AS	11/18/19 08:03	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	149	mg/L	10			X944161	TL	10/31/19 11:40	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X944162	TL	10/31/19 11:40	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X945055	SLH	11/07/19 23:19	
SM 4500 S F	**Sulfide**	1.20	mg/L	1.00	0.26		X945009	MH	11/04/19 10:25	M2
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	14.5	mg/L	2.00	1.40	10	X944212	RS	11/01/19 11:48	D2,M4
EPA 300.0	**Fluoride**	1.66	mg/L	0.100	0.062		X944212	RS	11/01/19 11:34	
EPA 300.0	**Sulfate as SO4**	63.9	mg/L	3.00	1.80	10	X944212	RS	11/01/19 11:48	D2,M4

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

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Project Name: BMSL - Routine
Work Order: **X9K0245**
Reported: 02-Dec-19 16:52

Client Sample ID: **191111BMGM14165**
SVL Sample ID: **X9K0245-01 (Ground Water)**

Sampled: 11-Nov-19 10:00
Received: 13-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	193	mg/L	0.100	0.035		X947058	JFB	11/26/19 14:24	
EPA 200.7	**Magnesium**	30.4	mg/L	0.50	0.04		X947058	JFB	11/26/19 14:24	
EPA 200.7	**Potassium**	2.34	mg/L	0.50	0.09		X947058	JFB	11/26/19 14:24	
EPA 200.7	**Silica (SiO2)**	30.4	mg/L	0.17	0.06		X947058	JFB	11/26/19 13:45	
EPA 200.7	**Sodium**	33.1	mg/L	0.50	0.06		X947058	JFB	11/26/19 14:24	
SM 2340 B	**Hardness (as CaCO3)**	607	mg/L	2.31	0.255		N/A		11/26/19 14:24	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X946224	JFB	11/25/19 17:43	
EPA 200.7	**Barium**	0.356	mg/L	0.0020	0.0019		X946224	JFB	11/25/19 17:43	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X946224	JFB	11/25/19 17:43	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X946224	JFB	11/25/19 17:43	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X946224	JFB	11/25/19 17:43	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X946224	KH	11/27/19 10:51	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X946224	JFB	11/25/19 17:43	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X946224	JFB	11/25/19 17:43	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X946224	JFB	11/25/19 17:43	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X947062	AS	12/02/19 12:55	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X947062	AS	12/02/19 12:55	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X947062	AS	12/02/19 12:55	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X947062	AS	12/02/19 12:55	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X946251	JFB	11/19/19 15:47	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	613	mg/L as CaCO3	1.0			X947123	KAG	11/19/19 16:10	
SM 2540 C	**Total Diss. Solids**	678	mg/L	10			X946245	TL	11/15/19 14:45	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X946281	SLH	11/20/19 15:36	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.81	mg/L	0.20	0.14		X946189	RS	11/20/19 00:49	
EPA 300.0	**Fluoride**	0.399	mg/L	0.100	0.062		X946189	RS	11/20/19 00:49	
EPA 300.0	**Sulfate as SO4**	27.9	mg/L	0.30	0.18		X946189	RS	11/20/19 00:49	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.6 meq/L Anion Sum: 13.1 meq/L C/A Balance: 2.05 % Calculated TDS: 694 TDS/cTDS: 0.98

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

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Project Name: BMSL - Routine
Work Order: **X9K0135**
Reported: 02-Dec-19 14:57

Client Sample ID: **191106BMGRS2**
SVL Sample ID: **X9K0135-01 (Surface Water)**

Sampled: 06-Nov-19 07:20
Received: 07-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X946116	JFB	11/14/19 16:37	
SM 2340 B	**Hardness (as CaCO3)**	56.2	mg/L	2.31	0.255		N/A		11/18/19 11:58	
Metals (Total Recoverable)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.03		X945224	KH	11/18/19 14:46	
EPA 200.7	**Barium**	0.0226	mg/L	0.0020	0.0010		X945224	JFB	11/18/19 11:58	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X945224	JFB	11/18/19 11:58	
EPA 200.7	**Calcium**	15.3	mg/L	0.100	0.035		X945224	JFB	11/18/19 11:58	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X945224	JFB	11/18/19 11:58	
EPA 200.7	**Iron**	0.182	mg/L	0.100	0.028		X945224	KH	11/18/19 14:46	
EPA 200.7	**Magnesium**	4.39	mg/L	0.50	0.04		X945224	JFB	11/18/19 11:58	
EPA 200.7	**Manganese**	0.0221	mg/L	0.0080	0.0017		X945224	JFB	11/18/19 11:58	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X945224	JFB	11/18/19 11:58	
EPA 200.7	**Potassium**	1.23	mg/L	0.50	0.09		X945224	JFB	11/18/19 11:58	
EPA 200.7	**Silica (SiO2)**	12.2	mg/L	0.17	0.06		X945224	JFB	11/18/19 11:58	
EPA 200.7	**Sodium**	12.9	mg/L	0.50	0.06		X945224	JFB	11/18/19 11:58	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X945224	JFB	11/18/19 11:58	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X945258	AS	11/26/19 14:35	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X945258	AS	11/26/19 14:35	
EPA 200.8	Copper	< 0.00100	mg/L	0.00100	0.00036	2	X945258	AS	11/26/19 14:35	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.00014	2	X945258	AS	11/26/19 14:35	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X945258	AS	11/26/19 14:35	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X945258	AS	11/29/19 07:50	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X945213	KH	11/15/19 14:36	
EPA 200.7	**Barium**	0.0215	mg/L	0.0020	0.0019		X945213	JFB	11/18/19 09:25	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X945213	KH	11/15/19 14:36	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X945213	KH	11/15/19 14:36	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X945213	KH	11/15/19 14:36	
EPA 200.7	**Manganese**	0.0167	mg/L	0.0080	0.0034		X945213	KH	11/15/19 14:36	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X945213	KH	11/15/19 14:36	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X945213	KH	11/15/19 14:36	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X946005	AS	11/22/19 09:58	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X946005	AS	11/22/19 09:58	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X946005	AS	11/22/19 09:58	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X946005	AS	11/22/19 09:58	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X946005	AS	11/22/19 09:58	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X946005	AS	11/22/19 09:58	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X945264	JFB	11/12/19 13:06	

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Project Name: BMSL - Routine
Work Order: **X9K0135**
Reported: 02-Dec-19 14:57

Client Sample ID: **191106BMGRS2**
SVL Sample ID: **X9K0135-01 (Surface Water)**

Sampled: 06-Nov-19 07:20
Received: 07-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X946280	SLH	11/18/19 16:35	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X946034	SLH	11/11/19 15:41	
EPA 353.2	Nitrate/Nitrite as N	< 0.050	mg/L	0.050	0.049		X946222	SM	11/14/19 13:49	
SM 2320 B	**Total Alkalinity**	45.5	mg/L as CaCO3	1.0			X946221	KAG	11/14/19 13:52	
SM 2320 B	**Bicarbonate**	45.5	mg/L as CaCO3	1.0			X946221	KAG	11/14/19 13:52	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X946221	KAG	11/14/19 13:52	
SM 2540 C	**Total Diss. Solids**	115	mg/L	10			X946129	TL	11/13/19 15:35	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X946161	TL	11/13/19 16:10	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X946055	SLH	11/18/19 15:31	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	5.78	mg/L	0.20	0.14		X945250	RS	11/13/19 17:10	
EPA 300.0	**Fluoride**	0.896	mg/L	0.100	0.062		X945250	RS	11/13/19 17:10	
EPA 300.0	**Sulfate as SO4**	27.4	mg/L	0.30	0.18		X945250	RS	11/13/19 17:10	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.72 meq/L Anion Sum: 1.69 meq/L C/A Balance: 0.91 % Calculated TDS: 107 TDS/cTDS: 1.07

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

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Project Name: BMSL - Routine
Work Order: **X9K0135**
Reported: 02-Dec-19 14:57

Client Sample ID: **191106BMGRS5**
SVL Sample ID: **X9K0135-02 (Surface Water)**

Sampled: 06-Nov-19 07:40
Received: 07-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.704	mg/L	0.100	0.028		X945224	KH	11/18/19 14:58	
EPA 200.7	**Manganese**	0.0770	mg/L	0.0080	0.0017		X945224	JFB	11/18/19 12:03	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.302	mg/L	0.100	0.056		X945213	KH	11/15/19 14:39	
EPA 200.7	**Manganese**	0.0654	mg/L	0.0080	0.0034		X945213	KH	11/15/19 14:39	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X946055	SLH	11/18/19 15:39	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	17.9	mg/L	0.30	0.18		X945250	RS	11/13/19 17:54	

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

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Battle Mountain - San Luis	Project Name: BMSL - Routine
PO Box 310	Work Order: X9K0135
San Luis, CO 81152	Reported: 02-Dec-19 14:57

Client Sample ID: **191106BMGM19**
SVL Sample ID: **X9K0135-03 (Ground Water)**

Sampled: 06-Nov-19 08:20
Received: 07-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	19.9	mg/L	0.100	0.035		X947030	JFB	11/20/19 15:38	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.233	mg/L	0.100	0.056		X945213	KH	11/15/19 14:42	
EPA 200.7	**Manganese**	0.222	mg/L	0.0080	0.0034		X945213	KH	11/15/19 14:42	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X946005	AS	11/22/19 10:33	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	108	mg/L	10			X946129	TL	11/13/19 15:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.971	mg/L	0.100	0.062		X945250	RS	11/13/19 18:24	
EPA 300.0	**Sulfate as SO4**	10.4	mg/L	0.30	0.18		X945250	RS	11/13/19 18:24	

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9K0135**
Reported: 02-Dec-19 14:57

Client Sample ID: **191106BMGM21**
SVL Sample ID: **X9K0135-04 (Ground Water)**

Sampled: 06-Nov-19 08:45
Received: 07-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	29.0	mg/L	0.100	0.035		X947030	JFB	11/20/19 15:42	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.135	mg/L	0.100	0.056		X945213	KH	11/15/19 14:45	
EPA 200.7	**Manganese**	0.280	mg/L	0.0080	0.0034		X945213	KH	11/15/19 14:45	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X946005	AS	11/22/19 10:37	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	85	mg/L	10			X946129	TL	11/13/19 15:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.24	mg/L	0.100	0.062		X945250	RS	11/13/19 18:38	
EPA 300.0	**Sulfate as SO4**	14.1	mg/L	0.30	0.18		X945250	RS	11/13/19 18:38	

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

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Project Name: BMSL - Routine
Work Order: **X9K0135**
Reported: 02-Dec-19 14:57

Client Sample ID: **191106BMGM24**
SVL Sample ID: **X9K0135-05 (Ground Water)**

Sampled: 06-Nov-19 09:25
Received: 07-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	102	mg/L	0.100	0.035		X947030	JFB	11/20/19 15:46	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.34	mg/L	0.100	0.056		X945213	KH	11/15/19 14:48	
EPA 200.7	**Manganese**	1.07	mg/L	0.0080	0.0034		X945213	KH	11/15/19 14:48	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X946005	AS	11/22/19 10:40	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	447	mg/L	10			X946129	TL	11/13/19 15:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.688	mg/L	0.100	0.062		X945250	RS	11/13/19 19:23	
EPA 300.0	**Sulfate as SO4**	207	mg/L	3.00	1.80	10	X945250	RS	11/13/19 19:38	D2

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

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Project Name: BMSL - Routine
Work Order: **X9K0135**
Reported: 02-Dec-19 14:57

Client Sample ID: **191106BMGM11R**
SVL Sample ID: **X9K0135-06 (Ground Water)**

Sampled: 06-Nov-19 09:55
Received: 07-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	75.3	mg/L	0.100	0.035		X947030	JFB	11/20/19 15:50	
Metals (Dissolved)										
EPA 200.7	**Iron**	< 0.100	mg/L	0.100	0.056		X945213	KH	11/15/19 14:51	
EPA 200.7	**Manganese**	0.154	mg/L	0.0080	0.0034		X945213	KH	11/15/19 14:51	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X946005	AS	11/22/19 10:43	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	266	mg/L	10			X946129	TL	11/13/19 15:35	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.877	mg/L	0.100	0.062		X945250	RS	11/13/19 19:52	
EPA 300.0	**Sulfate as SO4**	97.4	mg/L	3.00	1.80	10	X945250	RS	11/13/19 20:07	D2

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

Connor Williams
Project Manager

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9K0534**
San Luis, CO 81152	Reported: 11-Dec-19 16:29

Client Sample ID: **191125BMGTAILS**
SVL Sample ID: **X9K0534-01 (Surface Water)**

Sample Report Page 1 of 1

Sampled: 25-Nov-19 11:10
Received: 26-Nov-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X949082	AS	12/11/19 10:33	

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

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

Project Name: BMSL - Routine
Work Order: **X9L0283**
Reported: 27-Dec-19 13:52

Client Sample ID: **191211BMGM14165**
SVL Sample ID: **X9L0283-01 (Ground Water)**

Sampled: 11-Dec-19 10:20
Received: 12-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	189	mg/L	0.100	0.035		X951027	KH	12/18/19 10:57	
EPA 200.7	**Magnesium**	30.2	mg/L	0.50	0.04		X951027	KH	12/18/19 10:57	
EPA 200.7	**Potassium**	2.12	mg/L	0.50	0.09		X951027	KH	12/18/19 10:57	
EPA 200.7	**Silica (SiO2)**	31.9	mg/L	0.17	0.06		X951027	KH	12/19/19 11:33	
EPA 200.7	**Sodium**	30.9	mg/L	0.50	0.06		X951027	KH	12/18/19 10:57	
SM 2340 B	**Hardness (as CaCO3)**	596	mg/L	2.31	0.255		N/A		12/18/19 10:57	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X951100	KH	12/19/19 16:07	
EPA 200.7	**Barium**	0.382	mg/L	0.0020	0.0019		X951100	KH	12/20/19 11:50	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X951100	KH	12/19/19 16:07	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X951100	KH	12/19/19 16:07	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X951100	KH	12/20/19 11:50	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X951100	KH	12/19/19 16:07	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X951100	KH	12/19/19 16:07	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X951100	KH	12/19/19 16:07	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X951100	KH	12/19/19 16:07	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X951081	AS	12/26/19 14:56	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X951081	AS	12/26/19 14:56	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X951081	AS	12/26/19 14:56	M1
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X951081	AS	12/27/19 09:49	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X951129	JFB	12/20/19 15:23	
Classical Chemistry Parameters										
SM 2320 B	**Total Alkalinity**	641	mg/L as CaCO3	1.0			X951065	KAG	12/20/19 13:47	
SM 2540 C	**Total Diss. Solids**	715	mg/L	10			X951068	dks	12/17/19 11:20	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X952017	SLH	12/23/19 16:52	
Anions by Ion Chromatography										
EPA 300.0	**Chloride**	8.54	mg/L	0.20	0.14		X951022	RS	12/23/19 22:45	
EPA 300.0	**Fluoride**	0.332	mg/L	0.100	0.062		X951022	RS	12/23/19 22:45	
EPA 300.0	**Sulfate as SO4**	26.9	mg/L	0.30	0.18		X951022	RS	12/23/19 22:45	

Cation/Anion Balance and TDS Ratios

Cation Sum: 13.3 meq/L Anion Sum: 13.6 meq/L C/A Balance: -1.10 % Calculated TDS: 704 TDS/cTDS: 1.01

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

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Battle Mountain - San Luis
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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGRS2**
SVL Sample ID: **X9L0236-01 (Surface Water)**

Sampled: 09-Dec-19 08:30
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X951029	JFB	12/17/19 17:53	
SM 2340 B	**Hardness (as CaCO3)**	59.1	mg/L	2.31	0.255		N/A		12/18/19 10:39	
Metals (Total Recoverable)										
EPA 200.7	**Aluminum**	0.18	mg/L	0.08	0.03		X951027	KH	12/19/19 11:20	
EPA 200.7	**Barium**	0.0243	mg/L	0.0020	0.0010		X951027	KH	12/18/19 10:39	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.004		X951027	KH	12/18/19 10:39	
EPA 200.7	**Calcium**	16.5	mg/L	0.100	0.035		X951027	KH	12/18/19 10:39	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X951027	KH	12/18/19 10:39	
EPA 200.7	**Iron**	0.379	mg/L	0.100	0.028		X951027	KH	12/18/19 10:39	
EPA 200.7	**Magnesium**	4.31	mg/L	0.50	0.04		X951027	KH	12/18/19 10:39	
EPA 200.7	**Manganese**	0.0441	mg/L	0.0080	0.0017		X951027	KH	12/19/19 11:20	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0012		X951027	KH	12/19/19 11:20	
EPA 200.7	**Potassium**	0.80	mg/L	0.50	0.09		X951027	KH	12/18/19 10:39	
EPA 200.7	**Silica (SiO2)**	13.7	mg/L	0.17	0.06		X951027	KH	12/19/19 11:20	
EPA 200.7	**Sodium**	4.05	mg/L	0.50	0.06		X951027	KH	12/18/19 10:39	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.003		X951027	KH	12/18/19 10:39	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X951007	AS	12/23/19 13:43	
EPA 200.8	Cadmium	< 0.00020	mg/L	0.00020	0.000063	2	X951007	AS	12/23/19 13:43	
EPA 200.8	Copper	< 0.00100	mg/L	0.00100	0.00036	2	X951007	AS	12/23/19 13:43	
EPA 200.8	Lead	< 0.00300	mg/L	0.00300	0.00014	2	X951007	AS	12/23/19 13:43	
EPA 200.8	Selenium	< 0.0030	mg/L	0.0030	0.0002	2	X951007	AS	12/23/19 13:43	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061	2	X951007	AS	12/23/19 13:43	
Metals (Dissolved)										
EPA 200.7	Aluminum	< 0.08	mg/L	0.08	0.05		X951048	KH	12/17/19 10:50	
EPA 200.7	**Barium**	0.0221	mg/L	0.0020	0.0019		X951048	KH	12/17/19 10:50	
EPA 200.7	Boron	< 0.040	mg/L	0.040	0.008		X951048	KH	12/17/19 10:50	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X951048	KH	12/17/19 10:50	
EPA 200.7	**Iron**	0.110	mg/L	0.100	0.056		X951048	KH	12/17/19 10:50	
EPA 200.7	**Manganese**	0.0230	mg/L	0.0080	0.0034		X951048	KH	12/17/19 10:50	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0023		X951048	KH	12/17/19 10:50	
EPA 200.7	Zinc	< 0.010	mg/L	0.010	0.005		X951048	KH	12/17/19 10:50	
EPA 200.8	Arsenic	< 0.0100	mg/L	0.0100	0.00021		X951014	AS	01/06/20 12:42	
EPA 200.8	Cadmium	< 0.00030	mg/L	0.00030	0.000063		X951014	AS	01/06/20 12:42	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X951014	AS	01/06/20 12:42	
EPA 200.8	Lead	< 0.00500	mg/L	0.00500	0.00011		X951014	AS	01/06/20 12:42	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.0002		X951014	AS	01/06/20 12:42	
EPA 200.8	Silver	< 0.000100	mg/L	0.000100	0.000061		X951014	AS	01/06/20 12:42	
Metals (Filtered)										
EPA 245.1	Mercury	< 0.00020	mg/L	0.00020	0.000093		X951127	JFB	12/20/19 15:44	

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Battle Mountain - San Luis	**Project Name: BMSL - Routine**
PO Box 310	Work Order: **X9L0236**
San Luis, CO 81152	Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGRS2**
SVL Sample ID: **X9L0236-01 (Surface Water)**

Sampled: 09-Dec-19 08:30
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Classical Chemistry Parameters										
EPA 335.4	Cyanide (total)	< 0.0100	mg/L	0.0100	0.0038		X951087	SLH	01/03/20 12:32	H1
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X951148	SLH	12/20/19 16:40	D2
EPA 353.2	Nitrate/Nitrite as N	0.053	mg/L	0.050	0.049		X951096	DT	12/20/19 16:51	
SM 2320 B	Total Alkalinity	60.6	mg/L as CaCO3	1.0			X950292	KAG	12/17/19 11:59	
SM 2320 B	Bicarbonate	60.6	mg/L as CaCO3	1.0			X950292	KAG	12/17/19 11:59	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X950292	KAG	12/17/19 11:59	
SM 2540 C	Total Diss. Solids	89	mg/L	10			X950258	dks	12/13/19 14:15	
SM 2540 D	Total Susp. Solids	7.0	mg/L	5.0			X951020	TL	12/16/19 10:45	
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X952017	SLH	12/23/19 16:08	
Anions by Ion Chromatography										
EPA 300.0	Chloride	0.86	mg/L	0.20	0.14		X950280	RS	12/18/19 12:02	
EPA 300.0	Fluoride	0.554	mg/L	0.100	0.062		X950280	RS	12/18/19 12:02	
EPA 300.0	Sulfate as SO4	7.54	mg/L	0.30	0.18		X950280	RS	12/18/19 12:02	

Cation/Anion Balance and TDS Ratios

Cation Sum: 1.39 meq/L Anion Sum: 1.43 meq/L C/A Balance: -1.36 % Calculated TDS: 85 TDS/cTDS: 1.05

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

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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGRS5**
SVL Sample ID: **X9L0236-02 (Surface Water)**

Sampled: 09-Dec-19 08:50
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Iron**	0.897	mg/L	0.100	0.028		X951027	KH	12/18/19 10:54	
EPA 200.7	**Manganese**	0.124	mg/L	0.0080	0.0017		X951027	KH	12/19/19 11:30	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.291	mg/L	0.100	0.056		X951048	KH	12/17/19 10:53	
EPA 200.7	**Manganese**	0.109	mg/L	0.0080	0.0034		X951048	KH	12/17/19 10:53	
Classical Chemistry Parameters										
SM 4500 CN I	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0040		X952017	SLH	12/23/19 16:10	
Anions by Ion Chromatography										
EPA 300.0	**Sulfate as SO4**	16.3	mg/L	0.30	0.18		X950280	RS	12/18/19 12:49	

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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGM19**
SVL Sample ID: **X9L0236-03 (Surface Water)**

Sampled: 09-Dec-19 09:40
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	19.6	mg/L	0.100	0.035		X951187	KH	12/23/19 09:39	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.225	mg/L	0.100	0.056		X951048	KH	12/17/19 10:56	
EPA 200.7	**Manganese**	0.246	mg/L	0.0080	0.0034		X951048	KH	12/17/19 10:56	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X951014	AS	12/23/19 15:13	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	99	mg/L	10			X950258	dks	12/13/19 14:15	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.06	mg/L	0.100	0.062		X950280	RS	12/18/19 13:23	
EPA 300.0	**Sulfate as SO4**	9.86	mg/L	0.30	0.18		X950280	RS	12/18/19 13:23	

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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGM21**
SVL Sample ID: **X9L0236-04 (Surface Water)**

Sampled: 09-Dec-19 10:20
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	29.1	mg/L	0.100	0.035		X951187	KH	12/23/19 09:51	
Metals (Dissolved)										
EPA 200.7	**Iron**	0.100	mg/L	0.100	0.056		X951048	KH	12/17/19 10:59	
EPA 200.7	**Manganese**	0.327	mg/L	0.0080	0.0034		X951048	KH	12/17/19 10:59	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X951014	AS	12/23/19 15:16	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	131	mg/L	10			X950258	dks	12/13/19 14:15	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	1.43	mg/L	0.100	0.062		X950280	RS	12/18/19 13:55	
EPA 300.0	**Sulfate as SO4**	15.3	mg/L	0.30	0.18		X950280	RS	12/18/19 13:55	

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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGM24**
SVL Sample ID: **X9L0236-05 (Surface Water)**

Sampled: 09-Dec-19 10:50
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	97.0	mg/L	0.100	0.035		X951187	KH	12/23/19 09:55	
Metals (Dissolved)										
EPA 200.7	**Iron**	5.17	mg/L	0.100	0.056		X951048	KH	12/17/19 11:02	
EPA 200.7	**Manganese**	1.10	mg/L	0.0080	0.0034		X951048	KH	12/17/19 11:02	
EPA 200.8	**Copper**	< 0.00300	mg/L	0.00300	0.00036		X951014	AS	12/23/19 15:19	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	515	mg/L	10			X950258	dks	12/13/19 14:15	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.770	mg/L	0.100	0.062		X950280	RS	12/18/19 22:35	
EPA 300.0	**Sulfate as SO4**	212	mg/L	3.00	1.80	10	X950280	RS	12/18/19 22:51	D2

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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGM11R**
SVL Sample ID: **X9L0236-06 (Surface Water)**

Sampled: 09-Dec-19 11:30
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	**Calcium**	72.9	mg/L	0.100	0.035		X951187	KH	12/23/19 09:59	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X951048	KH	12/17/19 11:11	
EPA 200.7	**Manganese**	0.155	mg/L	0.0080	0.0034		X951048	KH	12/17/19 11:11	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X951014	AS	12/23/19 15:29	
Classical Chemistry Parameters										
SM 2540 C	**Total Diss. Solids**	309	mg/L	10			X950258	dks	12/13/19 14:15	
Anions by Ion Chromatography										
EPA 300.0	**Fluoride**	0.910	mg/L	0.100	0.062		X950280	RS	12/18/19 23:07	
EPA 300.0	**Sulfate as SO4**	99.5	mg/L	3.00	1.80	10	X950280	RS	12/18/19 23:22	D2

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

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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGFB**
SVL Sample ID: **X9L0236-07 (Surface Water)**

Sampled: 09-Dec-19 11:25
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X951187	KH	12/23/19 10:04	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X951048	KH	12/17/19 11:14	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X951048	KH	12/17/19 11:14	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X951014	AS	12/23/19 15:32	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X950258	dks	12/13/19 14:15	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X950280	RS	12/18/19 23:38	
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X950280	RS	12/18/19 23:38	

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

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Project Name: BMSL - Routine
Work Order: **X9L0236**
Reported: 06-Jan-20 13:20

Client Sample ID: **191209BMGRB**
SVL Sample ID: **X9L0236-08 (Surface Water)**

Sampled: 09-Dec-19 11:40
Received: 10-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.035		X951187	KH	12/23/19 10:08	
Metals (Dissolved)										
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X951048	KH	12/17/19 11:17	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X951048	KH	12/17/19 11:17	
EPA 200.8	Copper	< 0.00300	mg/L	0.00300	0.00036		X951014	AS	12/23/19 15:35	
Classical Chemistry Parameters										
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X950258	dks	12/13/19 14:15	
Anions by Ion Chromatography										
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.062		X950280	RS	12/18/19 23:53	
EPA 300.0	Sulfate as SO4	0.32	mg/L	0.30	0.18		X950280	RS	12/18/19 23:53	

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

Connor Williams
Project Manager

One Government Gulch - PO Box 929
Kellogg, ID 83837-0929
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www.svl.net

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

Project Name: BMSL - Routine
Work Order: **X9L0400**
Reported: 06-Jan-20 12:06

Client Sample ID: **191219BMGTAILS**
SVL Sample ID: **X9L0400-01 (Surface Water)**

Sampled: 19-Dec-19 08:30
Received: 20-Dec-19
Sampled By: AT

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable)										
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021	2	X952069	AS	01/02/20 14:23	

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

Connor Williams
Project Manager

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

Inorganic Analytical Results

Battle Mountain Resources, Inc.
Project ID:
Sample ID: 190226WTPEFF

ACZ Sample ID: *L50195-02*
Date Sampled: *02/26/19 09:00*
Date Received: *02/27/19*
Sample Matrix: *Groundwater*

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	03/05/19 9:49	mfm

Battle Mountain Resources, Inc.
Project ID:
Sample ID: 190514WTPEFF

ACZ Sample ID: *L51864-02*
Date Sampled: *05/14/19 10:50*
Date Received: *05/17/19*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Mercury, total	M1631, Atomic Fluorescence	1	0.3	B	*	ng/L	0.2	0.5	05/29/19 13:18	mfm

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

Inorganic Analytical Results

Battle Mountain Resources, Inc.
Project ID:
Sample ID: 190730BMCPD1

ACZ Sample ID: *L53603-02*
Date Sampled: *07/30/19 11:00*
Date Received: *07/31/19*
Sample Matrix: *Surface Water*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Mercury, total	M1631, Atomic Fluorescence	1	0.2	B		ng/L	0.2	0.5	08/07/19 10:40	mfm

Battle Mountain Resources, Inc.
Project ID:
Sample ID: 190730WTPEFF

ACZ Sample ID: *L53603-03*
Date Sampled: *07/30/19 11:20*
Date Received: *07/31/19*
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	08/07/19 10:54	mfm

Battle Mountain Resources, Inc.
Project ID:
Sample ID: 191029WTPEFF

ACZ Sample ID: *L55634-02*
Date Sampled: *10/29/19 10:50*
Date Received: *11/01/19*
Sample Matrix: *Surface Water*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Mercury, total	M1631, Atomic Fluorescence	1	0.3	B		ng/L	0.2	0.5	11/13/19 11:50	mfm

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19010122-001
Client Sample ID: 190102BMGRS1

Report Date: 01/29/19
Collection Date: 01/02/19 09:00
DateReceived: 01/07/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	5.1	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Alpha precision (±)	1.5	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Alpha MDC	1.1	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Beta	0.4	pCi/L	U			E900.0	01/16/19 00:29 / trs
Gross Beta precision (±)	1.6	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Beta MDC	2.6	pCi/L				E900.0	01/16/19 00:29 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19010122-002
Client Sample ID: 190102BMGRS2

Report Date: 01/29/19
Collection Date: 01/02/19 09:35
DateReceived: 01/07/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	4.5	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Alpha precision (±)	1.5	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Alpha MDC	1.2	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Beta	1.1	pCi/L	U			E900.0	01/16/19 00:30 / trs
Gross Beta precision (±)	1.3	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Beta MDC	2.7	pCi/L				E900.0	01/16/19 00:30 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19010122-003
Client Sample ID: 190102BMGRS5

Report Date: 01/29/19
Collection Date: 01/02/19 10:05
DateReceived: 01/07/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	3.3	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Alpha precision (±)	1.3	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Alpha MDC	1.4	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Beta	2.4	pCi/L	U			E900.0	01/16/19 00:30 / trs
Gross Beta precision (±)	1.6	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Beta MDC	2.8	pCi/L				E900.0	01/16/19 00:30 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19010122-004
Client Sample ID: 190102BMGM11R

Report Date: 01/29/19
Collection Date: 01/02/19 13:15
DateReceived: 01/07/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	4.6	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Alpha precision (±)	1.4	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Alpha MDC	1.3	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Beta	3.7	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Beta precision (±)	1.8	pCi/L				E900.0	01/16/19 00:30 / trs
Gross Beta MDC	2.8	pCi/L				E900.0	01/16/19 00:30 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19010122-005
Client Sample ID: 190102BMGM34

Report Date: 01/29/19
Collection Date: 01/02/19 10:15
DateReceived: 01/07/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	4.9	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Alpha precision (±)	1.7	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Alpha MDC	1.3	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Beta	1.4	pCi/L	U			E900.0	01/16/19 00:29 / trs
Gross Beta precision (±)	1.2	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Beta MDC	3.1	pCi/L				E900.0	01/16/19 00:29 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19010122-006
Client Sample ID: 190102BMGM10

Report Date: 01/29/19
Collection Date: 01/03/19 10:50
DateReceived: 01/07/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	4.7	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Alpha precision (±)	1.5	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Alpha MDC	1.5	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Beta	2.7	pCi/L	U			E900.0	01/16/19 00:29 / trs
Gross Beta precision (±)	1.8	pCi/L				E900.0	01/16/19 00:29 / trs
Gross Beta MDC	2.9	pCi/L				E900.0	01/16/19 00:29 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: Not Indicated
Lab ID: C19010599-001
Client Sample ID: 190116BMGM12

Report Date: 02/11/19
Collection Date: 01/16/19 09:00
DateReceived: 01/18/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	8.7	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha precision (±)	2.5	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha MDC	1.8	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta	4.4	pCi/L				E900.0	02/06/19 01:23 / trs
Gross Beta precision (±)	1.7	pCi/L				E900.0	02/06/19 01:23 / trs
Gross Beta MDC	2.9	pCi/L				E900.0	02/06/19 01:23 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: Not Indicated
Lab ID: C19010599-003
Client Sample ID: 190116BMGM9D

Report Date: 02/11/19
Collection Date: 01/16/19 09:40
DateReceived: 01/18/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	290	mg/L		5		A2320 B	01/24/19 18:17 / ljl
Chloride	4	mg/L		1		E300.0	01/25/19 00:34 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	01/22/19 11:21 / ljl
Sulfate	18	mg/L		1		E300.0	01/25/19 00:34 / ljl
Calcium	84	mg/L		1		E200.7	01/29/19 00:10 / eli-b
Magnesium	13	mg/L		1		E200.7	01/29/19 00:10 / eli-b
Potassium	2	mg/L		1		E200.7	01/29/19 21:00 / eli-b
Silica	26.1	mg/L		0.2		E200.7	01/29/19 00:10 / eli-b
Sodium	27	mg/L		1		E200.7	01/29/19 00:10 / eli-b
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	01/25/19 11:29 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	262	mg/L		4		A2340 B	01/29/19 00:10 / mav
Solids, Total Dissolved TDS @ 180 C	352	mg/L		10		A2540 C	01/22/19 11:02 / kjp
METALS, DISSOLVED							
Aluminum	0.06	mg/L		0.03		E200.8	01/25/19 21:54 / eli-b
Arsenic	0.001	mg/L		0.001		E200.8	01/25/19 21:54 / eli-b
Barium	0.11	mg/L		0.05		E200.8	01/30/19 20:31 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	01/25/19 21:54 / eli-b
Chromium	ND	mg/L		0.005		E200.8	01/25/19 21:54 / eli-b
Copper	0.006	mg/L		0.005		E200.8	01/25/19 21:54 / eli-b
Iron	0.17	mg/L		0.02		E200.8	01/30/19 20:31 / eli-b
Lead	0.001	mg/L		0.001		E200.8	01/30/19 20:31 / eli-b
Manganese	0.004	mg/L		0.001		E200.8	01/25/19 21:54 / eli-b
Mercury	ND	mg/L		0.0001		E245.1	01/28/19 10:40 / eli-b
Nickel	ND	mg/L		0.005		E200.8	01/25/19 21:54 / eli-b
Selenium	0.003	mg/L		0.001		E200.8	01/30/19 20:31 / eli-b
Silver	ND	mg/L		0.001		E200.8	01/30/19 20:31 / eli-b
Zinc	0.40	mg/L		0.01		E200.8	01/25/19 21:54 / eli-b
RADIONUCLIDES, TOTAL							
Gross Alpha	9.8	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha precision (±)	3.6	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha MDC	3.3	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta	5.8	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta precision (±)	2.1	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta MDC	3.8	pCi/L				E900.0	01/31/19 00:13 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: Not Indicated
Lab ID: C19010599-004
Client Sample ID: 190116BMGM13R

Report Date: 02/11/19
Collection Date: 01/16/19 10:50
DateReceived: 01/18/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	35.3	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha precision (±)	7.6	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha MDC	2.6	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta	11.6	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta precision (±)	2.1	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta MDC	3.5	pCi/L				E900.0	01/31/19 00:13 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: Not Indicated
Lab ID: C19010599-005
Client Sample ID: 190116BMGM13RD

Report Date: 02/11/19
Collection Date: 01/16/19 10:50
DateReceived: 01/18/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	333	mg/L		5		A2320 B	01/24/19 18:24 / ljl
Chloride	2	mg/L		1		E300.0	01/25/19 00:48 / ljl
Fluoride	0.4	mg/L		0.1		A4500-F C	01/22/19 11:23 / ljl
Sulfate	6	mg/L		1		E300.0	01/25/19 00:48 / ljl
Calcium	89	mg/L		1		E200.7	01/29/19 00:14 / eli-b
Magnesium	15	mg/L		1		E200.7	01/29/19 00:14 / eli-b
Potassium	2	mg/L		1		E200.7	01/29/19 21:04 / eli-b
Silica	24.9	mg/L		0.2		E200.7	01/29/19 00:14 / eli-b
Sodium	34	mg/L		1		E200.7	01/29/19 00:14 / eli-b
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	01/25/19 11:50 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	283	mg/L		4		A2340 B	01/29/19 00:14 / mav
Solids, Total Dissolved TDS @ 180 C	388	mg/L		10		A2540 C	01/22/19 11:02 / kjp
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	01/25/19 22:32 / eli-b
Arsenic	ND	mg/L		0.001		E200.8	01/25/19 22:32 / eli-b
Barium	0.12	mg/L		0.05		E200.8	01/30/19 20:36 / eli-b
Cadmium	ND	mg/L		0.001		E200.8	01/25/19 22:32 / eli-b
Chromium	ND	mg/L		0.005		E200.8	01/25/19 22:32 / eli-b
Copper	ND	mg/L		0.005		E200.8	01/25/19 22:32 / eli-b
Iron	ND	mg/L		0.02		E200.8	01/30/19 20:36 / eli-b
Lead	ND	mg/L		0.001		E200.8	01/30/19 20:36 / eli-b
Manganese	ND	mg/L		0.001		E200.8	01/25/19 22:32 / eli-b
Mercury	ND	mg/L		0.0001		E245.1	01/28/19 10:42 / eli-b
Nickel	ND	mg/L		0.005		E200.8	01/25/19 22:32 / eli-b
Selenium	0.006	mg/L		0.001		E200.8	01/30/19 20:36 / eli-b
Silver	ND	mg/L		0.001		E200.8	01/30/19 20:36 / eli-b
Zinc	0.51	mg/L		0.01		E200.8	01/25/19 22:32 / eli-b
RADIONUCLIDES, TOTAL							
Gross Alpha	38.1	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha precision (±)	8.1	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Alpha MDC	2.5	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta	16.3	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta precision (±)	2.7	pCi/L				E900.0	01/31/19 00:13 / trs
Gross Beta MDC	4.3	pCi/L				E900.0	01/31/19 00:13 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19020680-001
Client Sample ID: 190226WTPEFF

Report Date: 03/20/19
Collection Date: 02/26/19 09:00
DateReceived: 02/27/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Radium 226	1.2	pCi/L				E903.0	03/14/19 09:37 / nsr
Radium 226 precision (±)	0.4	pCi/L				E903.0	03/14/19 09:37 / nsr
Radium 226 MDC	0.2	pCi/L				E903.0	03/14/19 09:37 / nsr
Radium 228	1.4	pCi/L	U			RA-05	03/07/19 15:39 / plj
Radium 228 precision (±)	0.9	pCi/L				RA-05	03/07/19 15:39 / plj
Radium 228 MDC	1.6	pCi/L				RA-05	03/07/19 15:39 / plj
Radium 226 + Radium 228	2.6	pCi/L				A7500-RA	03/18/19 11:15 / sec
Radium 226 + Radium 228 precision (±)	1.0	pCi/L				A7500-RA	03/18/19 11:15 / sec
Radium 226 + Radium 228 MDC	1.6	pCi/L				A7500-RA	03/18/19 11:15 / sec

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19030419-001
Client Sample ID: 190312BMGM14

Report Date: 03/26/19
Collection Date: 03/12/19 09:55
DateReceived: 03/15/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	156	pCi/L				E900.0	03/20/19 23:49 / trs
Gross Alpha precision (±)	30.9	pCi/L				E900.0	03/20/19 23:49 / trs
Gross Alpha MDC	2.6	pCi/L				E900.0	03/20/19 23:49 / trs
Gross Beta	21.1	pCi/L				E900.0	03/20/19 23:49 / trs
Gross Beta precision (±)	2.5	pCi/L				E900.0	03/20/19 23:49 / trs
Gross Beta MDC	2.9	pCi/L				E900.0	03/20/19 23:49 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040163-001
Client Sample ID: 190401BMGRS1

Report Date: 04/15/19
Collection Date: 04/01/19 08:05
DateReceived: 04/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	2.5	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha precision (±)	1.4	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha MDC	1.6	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta	1.1	pCi/L	U			E900.0	04/09/19 01:19 / trs
Gross Beta precision (±)	1.2	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta MDC	2.7	pCi/L				E900.0	04/09/19 01:19 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040163-002
Client Sample ID: 190401BMGRS2

Report Date: 04/15/19
Collection Date: 04/01/19 08:40
DateReceived: 04/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	5.5	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha precision (±)	2.0	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha MDC	1.8	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta	0.004	pCi/L	U			E900.0	04/09/19 01:19 / trs
Gross Beta precision (±)	2.0	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta MDC	3.2	pCi/L				E900.0	04/09/19 01:19 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040163-003
Client Sample ID: 190401BMGRS5

Report Date: 04/15/19
Collection Date: 04/01/19 09:15
DateReceived: 04/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	4.3	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha precision (±)	1.7	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha MDC	1.6	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta	2.4	pCi/L	U			E900.0	04/09/19 01:19 / trs
Gross Beta precision (±)	1.5	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta MDC	3.2	pCi/L				E900.0	04/09/19 01:19 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040163-004
Client Sample ID: 190401BMGM11R

Report Date: 04/15/19
Collection Date: 04/01/19 11:45
DateReceived: 04/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	7.5	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha precision (±)	3.0	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Alpha MDC	2.9	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta	3.7	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta precision (±)	1.9	pCi/L				E900.0	04/09/19 01:19 / trs
Gross Beta MDC	3.7	pCi/L				E900.0	04/09/19 01:19 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040242-001
Client Sample ID: 190402BMGM34

Report Date: 04/30/19
Collection Date: 04/02/19 09:40
DateReceived: 04/04/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	3.5	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Alpha precision (±)	1.6	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Alpha MDC	1.6	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Beta	1.1	pCi/L	U			E900.0	04/24/19 02:04 / trs
Gross Beta precision (±)	1.2	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Beta MDC	3.1	pCi/L				E900.0	04/24/19 02:04 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040242-002
Client Sample ID: 190402BMGM10

Report Date: 04/30/19
Collection Date: 04/02/19 10:20
DateReceived: 04/04/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	1.8	pCi/L	U			E900.0	04/24/19 02:04 / trs
Gross Alpha precision (±)	1.8	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Alpha MDC	2.2	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Beta	5.2	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Beta precision (±)	2.2	pCi/L				E900.0	04/24/19 02:04 / trs
Gross Beta MDC	3.6	pCi/L				E900.0	04/24/19 02:04 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040227-001
Client Sample ID: 190403BMGM12

Report Date: 05/10/19
Collection Date: 04/03/19 08:40
DateReceived: 04/04/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	9.0	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha precision (±)	3.0	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha MDC	2.6	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Beta	5.3	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta precision (±)	1.8	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta MDC	3.7	pCi/L				E900.0	04/26/19 00:44 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040227-002
Client Sample ID: 190403BMGM12D

Report Date: 05/10/19
Collection Date: 04/03/19 08:40
DateReceived: 04/04/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	147	mg/L		5		A2320 B	04/05/19 21:01 / dmb
Chloride	21	mg/L		1		E300.0	04/07/19 14:02 / dmb
Fluoride	0.3	mg/L		0.1		A4500-F C	04/05/19 10:49 / dmb
Sulfate	12	mg/L		1		E300.0	04/07/19 14:02 / dmb
Calcium	50	mg/L		1		E200.7	04/23/19 18:23 / meh
Magnesium	8	mg/L		1		E200.7	04/23/19 18:23 / meh
Potassium	2	mg/L		1		E200.7	04/23/19 18:23 / meh
Silica	22	mg/L	D	1		E200.7	04/23/19 18:23 / meh
Sodium	14	mg/L		1		E200.7	04/23/19 18:23 / meh
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	04/09/19 09:16 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	159	mg/L		4		A2340 B	04/23/19 18:23 / tla
Solids, Total Dissolved TDS @ 180 C	236	mg/L		10		A2540 C	04/08/19 15:21 / adw
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	04/15/19 23:15 / jcg
Arsenic	ND	mg/L		0.001		E200.8	04/18/19 03:04 / jcg
Barium	0.14	mg/L		0.05		E200.8	04/15/19 23:15 / jcg
Cadmium	ND	mg/L		0.001		E200.8	04/15/19 23:15 / jcg
Chromium	ND	mg/L		0.005		E200.8	04/15/19 23:15 / jcg
Copper	ND	mg/L		0.005		E200.8	04/15/19 23:15 / jcg
Iron	0.04	mg/L		0.02		E200.8	04/18/19 19:41 / jcg
Lead	ND	mg/L		0.001		E200.8	04/15/19 23:15 / jcg
Manganese	ND	mg/L		0.001		E200.8	04/18/19 03:04 / jcg
Mercury	ND	mg/L		0.0001		E245.1	04/12/19 11:21 / eli-b
Nickel	ND	mg/L		0.005		E200.8	04/18/19 03:04 / jcg
Selenium	0.001	mg/L		0.001		E200.8	04/18/19 19:41 / jcg
Silver	ND	mg/L		0.001		E200.8	04/15/19 23:15 / jcg
Zinc	0.42	mg/L	D	0.02		E200.8	04/18/19 19:41 / jcg
RADIONUCLIDES, TOTAL							
Gross Alpha	9.5	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha precision (±)	2.8	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha MDC	2.1	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Beta	1.5	pCi/L	U			E900.0	04/26/19 00:44 / trs
Gross Beta precision (±)	1.3	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta MDC	3.4	pCi/L				E900.0	04/26/19 00:44 / trs

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040227-003
Client Sample ID: 190403BMGM9

Report Date: 05/10/19
Collection Date: 04/03/19 09:35
DateReceived: 04/04/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	8.5	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha precision (±)	2.8	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha MDC	2.4	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Beta	4.6	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta precision (±)	1.7	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta MDC	3.4	pCi/L				E900.0	04/26/19 00:44 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040227-004
Client Sample ID: 190403BMGM13R

Report Date: 05/10/19
Collection Date: 04/03/19 10:40
DateReceived: 04/04/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	32.9	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha precision (±)	7.2	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha MDC	2.4	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Beta	14.9	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta precision (±)	2.7	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta MDC	4.1	pCi/L				E900.0	04/26/19 00:44 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19040227-005
Client Sample ID: 190403BMGM13RD

Report Date: 05/10/19
Collection Date: 04/03/19 10:40
DateReceived: 04/04/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	339	mg/L		5		A2320 B	04/05/19 22:03 / dmb
Chloride	4	mg/L		1		E300.0	04/07/19 14:21 / dmb
Fluoride	0.4	mg/L		0.1		A4500-F C	04/05/19 10:51 / dmb
Sulfate	17	mg/L		1		E300.0	04/07/19 14:21 / dmb
Calcium	88	mg/L		1		E200.7	04/23/19 18:27 / meh
Magnesium	15	mg/L		1		E200.7	04/23/19 18:27 / meh
Potassium	1	mg/L		1		E200.7	04/23/19 18:27 / meh
Silica	25	mg/L	D	1		E200.7	04/23/19 18:27 / meh
Sodium	33	mg/L		1		E200.7	04/23/19 18:27 / meh
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	04/09/19 09:19 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	280	mg/L		4		A2340 B	04/23/19 18:27 / tla
Solids, Total Dissolved TDS @ 180 C	392	mg/L		10		A2540 C	04/08/19 15:22 / adw
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	04/15/19 23:20 / jcg
Arsenic	ND	mg/L		0.001		E200.8	04/18/19 03:08 / jcg
Barium	0.11	mg/L		0.05		E200.8	04/15/19 23:20 / jcg
Cadmium	ND	mg/L		0.001		E200.8	04/15/19 23:20 / jcg
Chromium	ND	mg/L		0.005		E200.8	04/15/19 23:20 / jcg
Copper	ND	mg/L		0.005		E200.8	04/15/19 23:20 / jcg
Iron	ND	mg/L		0.02		E200.8	04/18/19 03:08 / jcg
Lead	ND	mg/L		0.001		E200.8	04/15/19 23:20 / jcg
Manganese	ND	mg/L		0.001		E200.8	04/18/19 03:08 / jcg
Mercury	ND	mg/L		0.0001		E245.1	04/12/19 11:23 / eli-b
Nickel	ND	mg/L		0.005		E200.8	04/18/19 03:08 / jcg
Selenium	0.007	mg/L	D	0.004		E200.8	04/15/19 23:20 / jcg
Silver	ND	mg/L		0.001		E200.8	04/18/19 03:08 / jcg
Zinc	0.57	mg/L	D	0.02		E200.8	04/19/19 18:51 / jcg
RADIONUCLIDES, TOTAL							
Gross Alpha	23.4	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha precision (±)	5.3	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Alpha MDC	2.2	pCi/L				E900.0	04/18/19 23:22 / trs
Gross Beta	17.7	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta precision (±)	2.9	pCi/L				E900.0	04/26/19 00:44 / trs
Gross Beta MDC	3.9	pCi/L				E900.0	04/26/19 00:44 / trs

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.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19050630-001
Client Sample ID: 190514WTPEFF

Report Date: 06/13/19
Collection Date: 05/14/19 10:50
DateReceived: 05/15/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Radium 226	0.03	pCi/L	U			E903.0	06/11/19 13:41 / nsr
Radium 226 precision (±)	0.1	pCi/L				E903.0	06/11/19 13:41 / nsr
Radium 226 MDC	0.2	pCi/L				E903.0	06/11/19 13:41 / nsr
Radium 228	-0.07	pCi/L	U			RA-05	06/06/19 14:04 / plj
Radium 228 precision (±)	1.3	pCi/L				RA-05	06/06/19 14:04 / plj
Radium 228 MDC	2.2	pCi/L				RA-05	06/06/19 14:04 / plj

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070221-001
Client Sample ID: 190701BMGRS1

Report Date: 08/05/19
Collection Date: 07/01/19 08:00
DateReceived: 07/05/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	2.1	pCi/L				E900.0	07/31/19 02:40 / trs
Gross Alpha precision (±)	1.4	pCi/L				E900.0	07/31/19 02:40 / trs
Gross Alpha MDC	1.6	pCi/L				E900.0	07/31/19 02:40 / trs
Gross Beta	0.7	pCi/L	U			E900.0	07/31/19 02:40 / trs
Gross Beta precision (±)	1.9	pCi/L				E900.0	07/31/19 02:40 / trs
Gross Beta MDC	3.1	pCi/L				E900.0	07/31/19 02:40 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070221-002
Client Sample ID: 190701BMGRS2

Report Date: 08/05/19
Collection Date: 07/01/19 08:20
DateReceived: 07/05/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	1.2	pCi/L	U			E900.0	07/31/19 02:45 / trs
Gross Alpha precision (±)	1.4	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Alpha MDC	1.7	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Beta	2.6	pCi/L	U			E900.0	07/31/19 02:45 / trs
Gross Beta precision (±)	1.7	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Beta MDC	2.9	pCi/L				E900.0	07/31/19 02:45 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070221-003
Client Sample ID: 190701BMGRS5

Report Date: 08/05/19
Collection Date: 07/01/19 08:45
DateReceived: 07/05/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	0.4	pCi/L	U			E900.0	07/31/19 02:45 / trs
Gross Alpha precision (±)	1.1	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Alpha MDC	1.8	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Beta	0.5	pCi/L	U			E900.0	07/31/19 02:45 / trs
Gross Beta precision (±)	1.9	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Beta MDC	3.2	pCi/L				E900.0	07/31/19 02:45 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070221-004
Client Sample ID: 190701BMGM11R

Report Date: 08/05/19
Collection Date: 07/01/19 11:40
DateReceived: 07/05/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	4.7	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Alpha precision (±)	2.1	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Alpha MDC	2.1	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Beta	2.1	pCi/L	U			E900.0	07/31/19 02:45 / trs
Gross Beta precision (±)	1.5	pCi/L				E900.0	07/31/19 02:45 / trs
Gross Beta MDC	3.3	pCi/L				E900.0	07/31/19 02:45 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070221-005
Client Sample ID: 190702BMGM34

Report Date: 08/05/19
Collection Date: 07/02/19 09:35
DateReceived: 07/05/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	2.5	pCi/L	U			E900.0	07/31/19 02:44 / trs
Gross Alpha precision (±)	2.4	pCi/L				E900.0	07/31/19 02:44 / trs
Gross Alpha MDC	2.8	pCi/L				E900.0	07/31/19 02:44 / trs
Gross Beta	-0.5	pCi/L	U			E900.0	07/31/19 02:44 / trs
Gross Beta precision (±)	1.8	pCi/L				E900.0	07/31/19 02:44 / trs
Gross Beta MDC	3.1	pCi/L				E900.0	07/31/19 02:44 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070221-006
Client Sample ID: 190702BMGM10

Report Date: 08/05/19
Collection Date: 07/02/19 10:15
DateReceived: 07/05/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	-0.7	pCi/L	U			E900.0	07/31/19 02:44 / trs
Gross Alpha precision (±)	1.1	pCi/L				E900.0	07/31/19 02:44 / trs
Gross Alpha MDC	2.0	pCi/L				E900.0	07/31/19 02:44 / trs
Gross Beta	1.7	pCi/L	U			E900.0	07/31/19 02:44 / trs
Gross Beta precision (±)	2.4	pCi/L				E900.0	07/31/19 02:44 / trs
Gross Beta MDC	3.7	pCi/L				E900.0	07/31/19 02:44 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19071223-001
Client Sample ID: 190729BMGM12D

Report Date: 09/03/19
Collection Date: 07/29/19 08:20
DateReceived: 07/30/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	152	mg/L		5		A2320 B	07/31/19 19:00 / dmb
Chloride	19	mg/L		1		E300.0	08/02/19 21:51 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	08/05/19 12:09 / dmb
Sulfate	12	mg/L		1		E300.0	08/02/19 21:51 / ljl
Calcium	51	mg/L		1		E200.7	07/31/19 16:14 / meh
Magnesium	9	mg/L		1		E200.7	07/31/19 16:14 / meh
Potassium	2	mg/L		1		E200.7	07/31/19 16:14 / meh
Silica	21	mg/L	DL	1		E200.7	07/31/19 16:14 / meh
Sodium	14	mg/L		1		E200.7	07/31/19 16:14 / meh
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	08/02/19 11:51 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	163	mg/L		4		A2340 B	07/31/19 16:14 / tlf
Solids, Total Dissolved TDS @ 180 C	232	mg/L		10		A2540 C	07/31/19 15:52 / kjp
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	08/01/19 21:14 / jcg
Arsenic	ND	mg/L		0.001		E200.8	08/01/19 21:14 / jcg
Barium	0.15	mg/L		0.05		E200.8	08/01/19 21:14 / jcg
Cadmium	ND	mg/L		0.001		E200.8	08/01/19 21:14 / jcg
Chromium	ND	mg/L		0.005		E200.8	08/01/19 21:14 / jcg
Copper	ND	mg/L		0.005		E200.8	08/01/19 21:14 / jcg
Iron	ND	mg/L		0.02		E200.8	08/01/19 21:14 / jcg
Lead	ND	mg/L		0.001		E200.8	08/01/19 21:14 / jcg
Manganese	ND	mg/L		0.001		E200.8	08/01/19 21:14 / jcg
Mercury	ND	mg/L		0.0001		E245.1	08/05/19 11:17 / eli-b
Nickel	ND	mg/L		0.005		E200.8	08/01/19 21:14 / jcg
Selenium	0.004	mg/L		0.001		E200.8	08/01/19 21:14 / jcg
Silver	ND	mg/L		0.001		E200.8	08/01/19 21:14 / jcg
Zinc	0.41	mg/L		0.01		E200.8	08/01/19 21:14 / jcg
RADIONUCLIDES, TOTAL							
Gross Alpha	8.8	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Alpha precision (±)	2.7	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Alpha MDC	2.3	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Beta	4.8	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Beta precision (±)	1.7	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Beta MDC	3.2	pCi/L				E900.0	08/27/19 02:10 / trs

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19071223-002
Client Sample ID: 190729BMGM9D

Report Date: 09/03/19
Collection Date: 07/29/19 09:10
DateReceived: 07/30/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	291	mg/L		5		A2320 B	07/31/19 19:26 / dmb
Chloride	3	mg/L		1		E300.0	08/02/19 22:10 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	08/05/19 12:15 / dmb
Sulfate	19	mg/L		1		E300.0	08/02/19 22:10 / ljl
Calcium	83	mg/L		1		E200.7	07/31/19 16:18 / meh
Magnesium	13	mg/L		1		E200.7	07/31/19 16:18 / meh
Potassium	2	mg/L		1		E200.7	07/31/19 16:18 / meh
Silica	27	mg/L	DL	1		E200.7	07/31/19 16:18 / meh
Sodium	26	mg/L		1		E200.7	07/31/19 16:18 / meh
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	08/02/19 11:55 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	261	mg/L		4		A2340 B	07/31/19 16:18 / tlf
Solids, Total Dissolved TDS @ 180 C	353	mg/L		10		A2540 C	07/31/19 15:52 / kjp
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	08/01/19 21:18 / jcg
Arsenic	0.001	mg/L		0.001		E200.8	08/01/19 21:18 / jcg
Barium	0.12	mg/L		0.05		E200.8	08/01/19 21:18 / jcg
Cadmium	ND	mg/L		0.001		E200.8	08/01/19 21:18 / jcg
Chromium	ND	mg/L		0.005		E200.8	08/01/19 21:18 / jcg
Copper	0.006	mg/L		0.005		E200.8	08/01/19 21:18 / jcg
Iron	ND	mg/L		0.02		E200.8	08/01/19 21:18 / jcg
Lead	ND	mg/L		0.001		E200.8	08/01/19 21:18 / jcg
Manganese	0.002	mg/L		0.001		E200.8	08/01/19 21:18 / jcg
Mercury	ND	mg/L		0.0001		E245.1	08/05/19 11:18 / eli-b
Nickel	ND	mg/L		0.005		E200.8	08/01/19 21:18 / jcg
Selenium	0.006	mg/L		0.001		E200.8	08/01/19 21:18 / jcg
Silver	ND	mg/L		0.001		E200.8	08/01/19 21:18 / jcg
Zinc	0.42	mg/L		0.01		E200.8	08/01/19 21:18 / jcg
RADIONUCLIDES, TOTAL							
Gross Alpha	7.9	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Alpha precision (±)	2.9	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Alpha MDC	2.9	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Beta	5.7	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Beta precision (±)	2.3	pCi/L				E900.0	08/27/19 02:10 / trs
Gross Beta MDC	4.1	pCi/L				E900.0	08/27/19 02:10 / trs

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100470-001
Client Sample ID: 191007BMGM34

Report Date: 10/21/19
Collection Date: 10/07/19 10:10
DateReceived: 10/09/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	1.9	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Alpha precision (±)	1.2	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Alpha MDC	1.6	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Beta	0.7	pCi/L	U			E900.0	10/15/19 00:32 / amm
Gross Beta precision (±)	2.2	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Beta MDC	3.6	pCi/L				E900.0	10/15/19 00:32 / amm

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100470-002
Client Sample ID: 191007BMGM10

Report Date: 10/21/19
Collection Date: 10/07/19 10:45
DateReceived: 10/09/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	1.4	pCi/L	U			E900.0	10/15/19 00:32 / amm
Gross Alpha precision (±)	1.2	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Alpha MDC	1.7	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Beta	5.3	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Beta precision (±)	2.3	pCi/L				E900.0	10/15/19 00:32 / amm
Gross Beta MDC	3.6	pCi/L				E900.0	10/15/19 00:32 / amm

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070664-001
Client Sample ID: 190715BMGM12

Report Date: 08/29/19
Collection Date: 07/15/19 08:50
DateReceived: 07/16/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	5.9	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha precision (±)	2.0	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha MDC	1.8	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Beta	3.0	pCi/L	U			E900.0	08/27/19 03:32 / trs
Gross Beta precision (±)	1.6	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta MDC	3.3	pCi/L				E900.0	08/27/19 03:32 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070664-002
Client Sample ID: 190715BMGM12D

Report Date: 08/29/19
Collection Date: 07/15/19 08:50
DateReceived: 07/16/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	147	mg/L		5		A2320 B	07/19/19 00:41 / dmb
Chloride	21	mg/L		1		E300.0	07/20/19 08:12 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	07/18/19 11:07 / dmb
Sulfate	12	mg/L		1		E300.0	07/20/19 08:12 / ljl
Calcium	50	mg/L		1		E200.7	07/19/19 19:36 / meh
Magnesium	8	mg/L		1		E200.7	07/19/19 19:36 / meh
Potassium	2	mg/L		1		E200.7	07/19/19 19:36 / meh
Silica	21	mg/L	DL	1		E200.7	07/19/19 19:36 / meh
Sodium	13	mg/L		1		E200.7	07/19/19 19:36 / meh
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		Kelada-01	07/22/19 10:53 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	159	mg/L		4		A2340 B	07/19/19 19:36 / tlf
Solids, Total Dissolved TDS @ 180 C	239	mg/L		10		A2540 C	07/18/19 11:51 / kjp
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	07/22/19 19:04 / jcg
Arsenic	ND	mg/L		0.001		E200.8	07/22/19 19:04 / jcg
Barium	0.15	mg/L		0.05		E200.8	07/22/19 19:04 / jcg
Cadmium	ND	mg/L		0.001		E200.8	07/22/19 19:04 / jcg
Chromium	ND	mg/L		0.005		E200.8	07/22/19 19:04 / jcg
Copper	ND	mg/L		0.005		E200.8	07/22/19 19:04 / jcg
Iron	ND	mg/L		0.02		E200.8	07/22/19 19:04 / jcg
Lead	0.001	mg/L		0.001		E200.8	07/22/19 19:04 / jcg
Manganese	ND	mg/L		0.001		E200.8	07/22/19 19:04 / jcg
Mercury	ND	mg/L		0.0001		E245.1	07/25/19 11:06 / eli-b
Nickel	ND	mg/L		0.005		E200.8	07/22/19 19:04 / jcg
Selenium	0.002	mg/L		0.001		E200.8	07/22/19 19:04 / jcg
Silver	ND	mg/L		0.001		E200.8	07/23/19 22:18 / jcg
Zinc	0.43	mg/L		0.01		E200.8	07/22/19 19:04 / jcg
RADIONUCLIDES, TOTAL							
Gross Alpha	7.6	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha precision (±)	2.4	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha MDC	1.9	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Beta	7.0	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta precision (±)	1.9	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta MDC	3.4	pCi/L				E900.0	08/27/19 03:32 / trs
DATA QUALITY							
A/C Balance	0.37	%				A1030 E	07/23/19 09:14 / tlf
Anions	3.79	meq/L				A1030 E	07/23/19 09:14 / tlf

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070664-002
Client Sample ID: 190715BMGM12D

Report Date: 08/29/19
Collection Date: 07/15/19 08:50
DateReceived: 07/16/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
DATA QUALITY							
Cations	3.81	meq/L				A1030 E	07/23/19 09:14 / tlf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070664-003
Client Sample ID: 190715BMGM9

Report Date: 08/29/19
Collection Date: 07/15/19 09:50
DateReceived: 07/16/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	7.6	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha precision (±)	2.7	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha MDC	2.5	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Beta	3.6	pCi/L	U			E900.0	08/27/19 03:32 / trs
Gross Beta precision (±)	1.8	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta MDC	3.9	pCi/L				E900.0	08/27/19 03:32 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070664-004
Client Sample ID: 190715BMGM9D

Report Date: 08/29/19
Collection Date: 07/15/19 09:50
DateReceived: 07/16/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	296	mg/L		5		A2320 B	07/19/19 00:49 / dmb
Chloride	3	mg/L		1		E300.0	07/20/19 08:31 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	07/18/19 11:10 / dmb
Sulfate	19	mg/L		1		E300.0	07/20/19 08:31 / ljl
Calcium	84	mg/L		1		E200.7	07/19/19 19:40 / meh
Magnesium	12	mg/L		1		E200.7	07/19/19 19:40 / meh
Potassium	2	mg/L		1		E200.7	07/19/19 19:40 / meh
Silica	28	mg/L	DL	1		E200.7	07/19/19 19:40 / meh
Sodium	25	mg/L		1		E200.7	07/19/19 19:40 / meh
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		Kelada-01	07/22/19 11:01 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	259	mg/L		4		A2340 B	07/19/19 19:40 / tlf
Solids, Total Dissolved TDS @ 180 C	368	mg/L		10		A2540 C	07/18/19 11:51 / kjp
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	07/22/19 19:08 / jcg
Arsenic	0.001	mg/L		0.001		E200.8	07/22/19 19:08 / jcg
Barium	0.13	mg/L		0.05		E200.8	07/22/19 19:08 / jcg
Cadmium	ND	mg/L		0.001		E200.8	07/22/19 19:08 / jcg
Chromium	ND	mg/L		0.005		E200.8	07/22/19 19:08 / jcg
Copper	0.005	mg/L		0.005		E200.8	07/22/19 19:08 / jcg
Iron	ND	mg/L		0.02		E200.8	07/22/19 19:08 / jcg
Lead	ND	mg/L		0.001		E200.8	07/22/19 19:08 / jcg
Manganese	ND	mg/L		0.001		E200.8	07/22/19 19:08 / jcg
Mercury	ND	mg/L		0.0001		E245.1	07/25/19 11:11 / eli-b
Nickel	ND	mg/L		0.005		E200.8	07/22/19 19:08 / jcg
Selenium	0.004	mg/L		0.001		E200.8	07/22/19 19:08 / jcg
Silver	ND	mg/L		0.001		E200.8	07/23/19 22:45 / jcg
Zinc	0.38	mg/L		0.01		E200.8	07/22/19 19:08 / jcg
RADIONUCLIDES, TOTAL							
Gross Alpha	7.6	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha precision (±)	2.7	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha MDC	2.6	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Beta	5.8	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta precision (±)	2.3	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta MDC	4.2	pCi/L				E900.0	08/27/19 03:32 / trs
DATA QUALITY							
A/C Balance	-0.94	%				A1030 E	07/23/19 09:14 / tlf
Anions	6.42	meq/L				A1030 E	07/23/19 09:14 / tlf

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070664-004
Client Sample ID: 190715BMGM9D

Report Date: 08/29/19
Collection Date: 07/15/19 09:50
DateReceived: 07/16/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
DATA QUALITY							
Cations	6.30	meq/L				A1030 E	07/23/19 09:14 / tlf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070664-005
Client Sample ID: 190715BMGM13R

Report Date: 08/29/19
Collection Date: 07/15/19 10:50
DateReceived: 07/16/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	28.7	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha precision (±)	6.5	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha MDC	3.1	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Beta	17.0	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta precision (±)	3.0	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta MDC	4.7	pCi/L				E900.0	08/27/19 03:32 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19070774-001
Client Sample ID: 190716BMGM14

Report Date: 08/29/19
Collection Date: 07/16/19 10:00
DateReceived: 07/18/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	158	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha precision (±)	31.8	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Alpha MDC	5.3	pCi/L				E900.0	08/13/19 02:35 / trs
Gross Beta	78.2	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta precision (±)	9.3	pCi/L				E900.0	08/27/19 03:32 / trs
Gross Beta MDC	7.8	pCi/L				E900.0	08/27/19 03:32 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19080008-001
Client Sample ID: 190730WTPEFF

Report Date: 08/29/19
Collection Date: 07/30/19 11:20
DateReceived: 07/31/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Radium 226	0.08	pCi/L	U			E903.0	08/26/19 14:10 / trs
Radium 226 precision (±)	0.1	pCi/L				E903.0	08/26/19 14:10 / trs
Radium 226 MDC	0.2	pCi/L				E903.0	08/26/19 14:10 / trs
Radium 228	-0.0009	pCi/L	U			RA-05	08/20/19 11:51 / plj
Radium 228 precision (±)	0.9	pCi/L				RA-05	08/20/19 11:51 / plj
Radium 228 MDC	1.5	pCi/L				RA-05	08/20/19 11:51 / plj
Radium 226 + Radium 228	0.07	pCi/L	U			A7500-RA	08/28/19 17:34 / dmf
Radium 226 + Radium 228 precision (±)	0.9	pCi/L				A7500-RA	08/28/19 17:34 / dmf
Radium 226 + Radium 228 MDC	1.5	pCi/L				A7500-RA	08/28/19 17:34 / dmf

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19080008-002
Client Sample ID: 190730BMGPDI

Report Date: 08/29/19
Collection Date: 07/30/19 11:00
DateReceived: 07/31/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Radium 226	0.5	pCi/L				E903.0	08/26/19 14:10 / trs
Radium 226 precision (±)	0.2	pCi/L				E903.0	08/26/19 14:10 / trs
Radium 226 MDC	0.2	pCi/L				E903.0	08/26/19 14:10 / trs
Radium 228	0.6	pCi/L	U			RA-05	08/20/19 11:51 / plj
Radium 228 precision (±)	1.0	pCi/L				RA-05	08/20/19 11:51 / plj
Radium 228 MDC	1.7	pCi/L				RA-05	08/20/19 11:51 / plj
Radium 226 + Radium 228	1.1	pCi/L	U			A7500-RA	08/28/19 17:34 / dmf
Radium 226 + Radium 228 precision (±)	1.1	pCi/L				A7500-RA	08/28/19 17:34 / dmf
Radium 226 + Radium 228 MDC	1.7	pCi/L				A7500-RA	08/28/19 17:34 / dmf

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100234-001
Client Sample ID: 191001BMGRS1

Report Date: 11/01/19
Collection Date: 10/01/19 07:10
DateReceived: 10/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	2.5	pCi/L				E900.0	10/09/19 00:39 / trs
Gross Alpha precision (±)	1.5	pCi/L				E900.0	10/09/19 00:39 / trs
Gross Alpha MDC	1.7	pCi/L				E900.0	10/09/19 00:39 / trs
Gross Beta	2.4	pCi/L	U			E900.0	10/09/19 00:39 / trs
Gross Beta precision (±)	1.7	pCi/L				E900.0	10/09/19 00:39 / trs
Gross Beta MDC	3.0	pCi/L				E900.0	10/09/19 00:39 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100234-002
Client Sample ID: 191001BMGRS2

Report Date: 11/01/19
Collection Date: 10/01/19 07:40
DateReceived: 10/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	2.8	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Alpha precision (±)	1.3	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Alpha MDC	1.5	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Beta	1.1	pCi/L	U			E900.0	10/11/19 19:08 / trs
Gross Beta precision (±)	1.6	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Beta MDC	3.2	pCi/L				E900.0	10/11/19 19:08 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100234-003
Client Sample ID: 191001BMGRS5

Report Date: 11/01/19
Collection Date: 10/01/19 08:15
DateReceived: 10/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	2.2	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Alpha precision (±)	1.2	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Alpha MDC	1.5	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Beta	2.4	pCi/L	U			E900.0	10/11/19 19:08 / trs
Gross Beta precision (±)	2.0	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Beta MDC	3.4	pCi/L				E900.0	10/11/19 19:08 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100234-004
Client Sample ID: 191001BMGM11R

Report Date: 11/01/19
Collection Date: 10/01/19 10:50
DateReceived: 10/03/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	2.8	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Alpha precision (±)	1.5	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Alpha MDC	1.8	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Beta	2.0	pCi/L	U			E900.0	10/11/19 19:08 / trs
Gross Beta precision (±)	1.9	pCi/L				E900.0	10/11/19 19:08 / trs
Gross Beta MDC	3.4	pCi/L				E900.0	10/11/19 19:08 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100462-001
Client Sample ID: 191008BMGM12

Report Date: 11/05/19
Collection Date: 10/08/19 08:35
DateReceived: 10/09/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	6.1	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha precision (±)	1.8	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha MDC	1.6	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta	2.7	pCi/L	U			E900.0	10/30/19 11:05 / trs
Gross Beta precision (±)	2.0	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta MDC	3.7	pCi/L				E900.0	10/30/19 11:05 / trs

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.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100462-002
Client Sample ID: 191008BMGM9

Report Date: 11/05/19
Collection Date: 10/08/19 09:35
DateReceived: 10/09/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	8.7	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha precision (±)	2.4	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha MDC	1.9	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta	5.7	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta precision (±)	2.1	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta MDC	3.5	pCi/L				E900.0	10/30/19 11:05 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100462-003
Client Sample ID: 191008BMGM9D

Report Date: 11/05/19
Collection Date: 10/08/19 09:35
DateReceived: 10/09/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	292	mg/L		5		A2320 B	10/11/19 04:47 / dmb
Chloride	3	mg/L		1		E300.0	10/14/19 22:57 / ljl
Fluoride	0.3	mg/L		0.1		A4500-F C	10/16/19 12:54 / dmb
Sulfate	19	mg/L		1		E300.0	10/14/19 22:57 / ljl
Calcium	88	mg/L		1		E200.7	10/25/19 22:31 / jcg
Magnesium	14	mg/L		1		E200.7	10/25/19 22:31 / jcg
Potassium	2	mg/L		1		E200.7	10/23/19 06:22 / jcg
Silicon	13.4	mg/L	D	0.4		E200.7	10/23/19 06:22 / jcg
Silica	29	mg/L	D	1		E200.7	10/23/19 06:22 / jcg
Sodium	27	mg/L		1		E200.7	10/25/19 22:31 / jcg
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	10/11/19 15:02 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	277	mg/L		4		A2340 B	10/25/19 22:31 / tlf
Solids, Total Dissolved TDS @ 180 C	366	mg/L		10		A2540 C	10/10/19 09:01 / kjp
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	10/22/19 01:27 / meh
Arsenic	0.001	mg/L		0.001		E200.8	10/22/19 01:27 / meh
Barium	0.12	mg/L		0.05		E200.8	10/22/19 01:27 / meh
Cadmium	ND	mg/L		0.001		E200.8	10/22/19 01:27 / meh
Chromium	ND	mg/L		0.005		E200.8	10/22/19 01:27 / meh
Copper	0.005	mg/L		0.005		E200.8	10/22/19 01:27 / meh
Iron	ND	mg/L		0.02		E200.8	10/22/19 01:27 / meh
Lead	ND	mg/L		0.001		E200.8	10/22/19 01:27 / meh
Manganese	ND	mg/L		0.001		E200.8	10/22/19 01:27 / meh
Mercury	ND	mg/L		0.0001		E245.1	10/16/19 13:18 / eli-b
Nickel	ND	mg/L		0.005		E200.8	10/22/19 01:27 / meh
Selenium	0.004	mg/L		0.001		E200.8	10/22/19 01:27 / meh
Silver	ND	mg/L		0.001		E200.8	10/22/19 01:27 / meh
Zinc	0.37	mg/L		0.01		E200.8	10/22/19 01:27 / meh
RADIONUCLIDES, TOTAL							
Gross Alpha	6.1	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha precision (±)	1.9	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha MDC	1.9	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta	4.9	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta precision (±)	2.1	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta MDC	3.5	pCi/L				E900.0	10/30/19 11:05 / trs

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.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100462-004
Client Sample ID: 191008BMGM13R

Report Date: 11/05/19
Collection Date: 10/08/19 10:40
DateReceived: 10/09/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	30.0	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha precision (±)	6.3	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha MDC	2.0	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta	18.9	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta precision (±)	3.0	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta MDC	3.5	pCi/L				E900.0	10/30/19 11:05 / trs

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100462-005
Client Sample ID: 191008BMG13RD

Report Date: 11/05/19
Collection Date: 10/08/19 10:40
DateReceived: 10/09/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Total as CaCO3	334	mg/L		5		A2320 B	10/11/19 04:55 / dmb
Chloride	3	mg/L		1		E300.0	10/14/19 23:16 / ljl
Fluoride	0.4	mg/L		0.1		A4500-F C	10/16/19 13:00 / dmb
Sulfate	17	mg/L		1		E300.0	10/14/19 23:16 / ljl
Calcium	93	mg/L		1		E200.7	10/23/19 06:27 / jcg
Magnesium	16	mg/L		1		E200.7	10/25/19 22:35 / jcg
Potassium	2	mg/L		1		E200.7	10/23/19 06:27 / jcg
Silica	27	mg/L	D	1		E200.7	10/23/19 06:27 / jcg
Sodium	34	mg/L		1		E200.7	10/23/19 06:27 / jcg
INORGANICS							
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036C	10/11/19 15:05 / eli-b
PHYSICAL PROPERTIES							
Hardness as CaCO3	296	mg/L		4		A2340 B	10/23/19 06:27 / tla
Solids, Total Dissolved TDS @ 180 C	397	mg/L		10		A2540 C	10/10/19 09:04 / kjp
METALS, DISSOLVED							
Aluminum	ND	mg/L		0.03		E200.8	10/22/19 01:31 / meh
Arsenic	ND	mg/L		0.001		E200.8	10/22/19 01:31 / meh
Barium	0.13	mg/L		0.05		E200.8	10/22/19 01:31 / meh
Cadmium	ND	mg/L		0.001		E200.8	10/22/19 01:31 / meh
Chromium	ND	mg/L		0.005		E200.8	10/22/19 01:31 / meh
Copper	ND	mg/L		0.005		E200.8	10/22/19 01:31 / meh
Iron	ND	mg/L		0.02		E200.8	10/22/19 01:31 / meh
Lead	ND	mg/L		0.001		E200.8	10/22/19 01:31 / meh
Manganese	ND	mg/L		0.001		E200.8	10/22/19 01:31 / meh
Mercury	ND	mg/L		0.0001		E245.1	10/16/19 13:20 / eli-b
Nickel	ND	mg/L		0.005		E200.8	10/22/19 01:31 / meh
Selenium	0.007	mg/L		0.001		E200.8	10/22/19 01:31 / meh
Silver	ND	mg/L		0.001		E200.8	10/22/19 01:31 / meh
Zinc	0.62	mg/L		0.01		E200.8	10/22/19 01:31 / meh
RADIONUCLIDES, TOTAL							
Gross Alpha	28.8	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha precision (±)	6.1	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Alpha MDC	2.4	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta	19.8	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta precision (±)	3.3	pCi/L				E900.0	10/30/19 11:05 / trs
Gross Beta MDC	4.1	pCi/L				E900.0	10/30/19 11:05 / trs

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.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19100581-001
Client Sample ID: 191009BMGM14

Report Date: 11/18/19
Collection Date: 10/09/19 10:15
DateReceived: 10/11/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Gross Alpha	125	pCi/L				E900.0	10/31/19 19:36 / amm
Gross Alpha precision (±)	25.2	pCi/L				E900.0	10/31/19 19:36 / amm
Gross Alpha MDC	3.6	pCi/L				E900.0	10/31/19 19:36 / amm
Gross Beta	71.9	pCi/L				E900.0	10/31/19 19:36 / amm
Gross Beta precision (±)	8.8	pCi/L				E900.0	10/31/19 19:36 / amm
Gross Beta MDC	7.0	pCi/L				E900.0	10/31/19 19:36 / amm

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.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

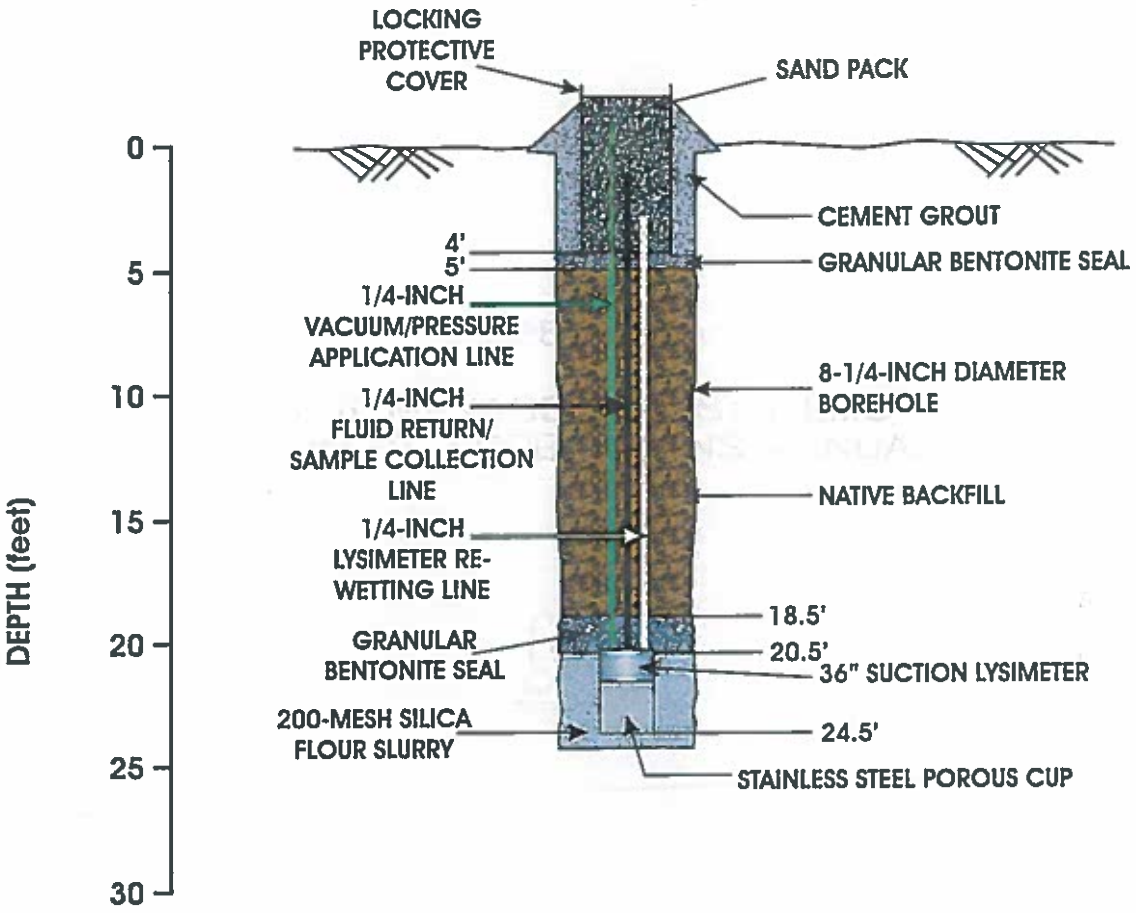
Client: Battle Mountain Resources Inc
Project: San Luis
Lab ID: C19101167-001
Client Sample ID: 191029WTPEFF

Report Date: 11/26/19
Collection Date: 10/29/19 10:50
DateReceived: 10/30/19
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES, TOTAL							
Radium 226	0.1	pCi/L				E903.0	11/17/19 13:33 / sec
Radium 226 precision (±)	0.1	pCi/L				E903.0	11/17/19 13:33 / sec
Radium 226 MDC	0.1	pCi/L				E903.0	11/17/19 13:33 / sec
Radium 228	0.5	pCi/L	U			RA-05	11/11/19 15:10 / plj
Radium 228 precision (±)	1	pCi/L				RA-05	11/11/19 15:10 / plj
Radium 228 MDC	1.6	pCi/L				RA-05	11/11/19 15:10 / plj
Radium 226 + Radium 228	0.7	pCi/L	U			A7500-RA	11/22/19 15:51 / sec
Radium 226 + Radium 228 precision (±)	1	pCi/L				A7500-RA	11/22/19 15:51 / sec
Radium 226 + Radium 228 MDC	1.6	pCi/L				A7500-RA	11/22/19 15:51 / sec

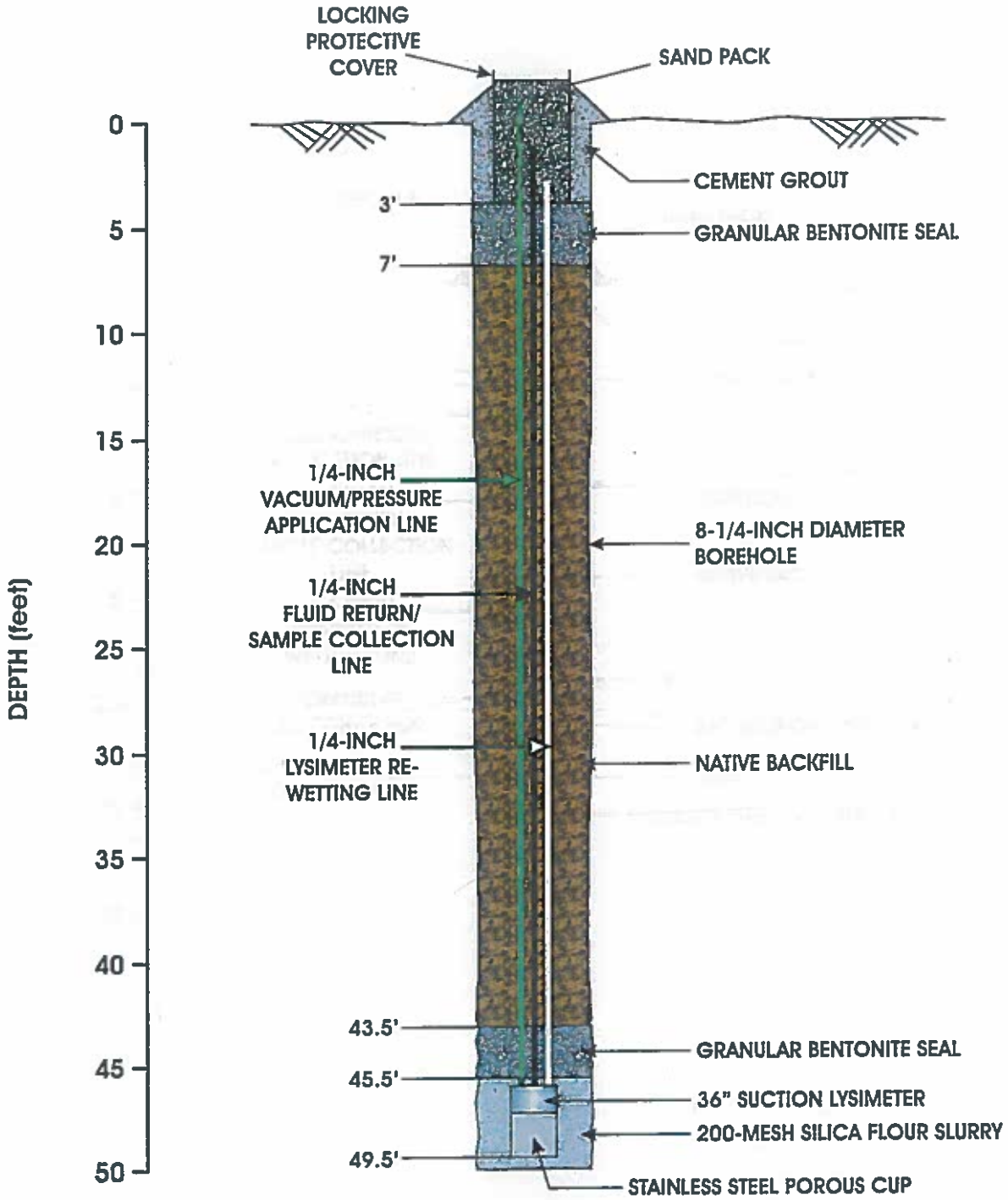
Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration

APPENDIX C



Notes:
1) Lysimeter replaced on December 4, 2019.
2) Borehole drilled by Elite Drilling, using a hollow-stem auger.

BATTLE MOUNTAIN RESOURCES, INC.		
REPLACEMENT LYSIMETER CONSTRUCTION DETAILS SITE 3 SHALLOW		
File Name: LysimeterDetails-3shallow.cdr		Date: 12/12/2019
Project No.: 1006-04	Drawn By: VAL	Fig. No.: 3



Notes:
1) Lysimeter replaced on December 4, 2019.
2) Borehole drilled by Elite Drilling, using a hollow-stem auger.

BATTLE MOUNTAIN RESOURCES, INC.		
REPLACEMENT LYSIMETER CONSTRUCTION DETAILS SITE 3 DEEP		
File Name: LysimeterDetails-1deep.cdr		Date: 12/12/2019
Project No.: 1006-04	Drawn By: VAL	Fig. No.: 2

APPENDIX D

Received
APR 30 2019
Water Quality Control

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

April 26, 2019

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project - San Luis, Colorado
First Quarter 2019 – DMR's, BMP, and WET Testing Reports
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

Please find the enclosed Battle Mountain Resources, Inc. "San Luis Project" (Permit No. CO0045675) Colorado Department of Public Health and Environment-Colorado Discharge Permit System (CDPS) Best Management Practices (BMP) report for permitted outfall 002 for the first quarter 2019. The quarterly BMP report provides the required data associated with groundwater well elevations, the quarterly potentiometric surface map and groundwater well chemistry.

In addition, the first quarter 2019 Discharge Monitoring Reports (DMRs) were submitted for each of the permitted water treatment plant discharges in the NetDMR System and the WET Testing Reports were attached to the appropriate DMR submittal in NetDMR. These permitted discharges consist of water treatment plant Discharge Numbers 001-A and 001-B. During the quarter, the maximum 30-day average flow was 0.24 million gallons of water discharged per day, therefore the applicable permit criteria for the reporting period is associated with discharge number 001-B.

Should any questions arise or if I can be of any assistance providing clarification, please call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Tim Runnells, Engineering Analytics
Alan Fosdick, Engineering Analytics

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

April 26, 2019

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project
First Quarter 2019 BMP Report
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

In accordance with and compliance of the permit limitations and permit terms and conditions contained in Part I, Section 5 Discharge Point 002: (Permit Limitations, Best Management Practices, and Schedule of Compliance of the *State of Colorado Authorization to Discharge Under the Colorado Discharge Permit System*, Battle Mountain Resources, Inc. submits the following *Quarterly Best Management Practices Report.*

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Sections 61.8(2), 61.8(3)(n), and 61.8(3)(r), 5 C.C.R. 1002-61, the permittee shall continue to implement the following limitations, compliance schedules, and Best Management Practices (BMPs).

The attainment of applicable water quality standards will be implemented and evaluated through the application of the following limitations, compliance schedules, and BMPs that are designed to monitor and control the groundwater quality and quantity discharging from the West Pit to the Rito Seco alluvial aquifer.

Specifically, the limitations, compliance schedules, and BMPs are those activities that address contaminated groundwater that may flow into the Rito Seco. This includes: (1) the potential flow of the affected groundwater from the West Pit that, in the past, manifested itself in the formation of the surface seeps along the arroyo sidewall of the Rito Seco, and (2) the plume of affected groundwater within the Rito Seco alluvial aquifer downgradient of the West Pit that flows along the naturally occurring hydraulic gradient and that may flow into the Rito Seco. The activities will include the following specific requirements:

1) The elevation of the groundwater table in the vicinity of the West Pit shall be measured on a weekly basis at the following locations: (i) the West Pit backfill wells BF-4 and BF-5 and (ii) the Rito Seco alluvial wells M-16 and M-20, as shown in Figure 3 of the permit, for purposes of determining the performance of the

"pump and treat" system that regulates the flow and quality of the groundwater in the seepage front. The permittee shall also determine on a quarterly basis the elevations of the groundwater table at BF-3, BF-4, BF-5, BF-6, M-11R, M-16, M-17, M-18, M-19, M-20, M-21, M-22, M-23, M-24, M-25, M-26, M-27, M-28, M-29, M-30, M-31, M-32, and M-33 for the purpose of developing a groundwater potentiometric map as monitoring confirmation of the groundwater flow direction. The quarterly data regarding depth to groundwater and groundwater potentiometric surface map will be submitted to the WQCD with the BMP report as described.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the weekly West Pit backfill and alluvial wells as required under Paragraph 1 of the specific requirements. Measurements obtained for the weekly West Pit backfill wells (BF-4 and BF-5R) and alluvial wells (M-16 and M-20) are shown in Table 1. The quarterly groundwater elevations required under Paragraph 1 were also measured and are shown in Table 2. A potentiometric surface map, developed by Engineering Analytics, is shown in Figure 1. The groundwater table elevations and potentiometric map confirm that the groundwater flow gradient during the first quarter of 2019 was from the Rito Seco to the West Pit. No corrective action is required under Paragraph 1 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 1 – Weekly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-4	01/02/2019	8579.26
	01/09/2019	8579.22
	01/16/2019	8579.21
	01/23/2019	8579.22
	01/30/2019	8579.26
	02/06/2019	8579.24
	02/13/2019	8579.23
	02/20/2019	8579.31
	02/27/2019	8579.23
	03/06/2019	8579.27
	03/13/2019	8579.33
	03/20/2019	8579.29
	03/27/2019	8579.28
BF-5R	01/02/2019	8579.06
	01/09/2019	8579.03
	01/16/2019	8579.04
	01/23/2019	8579.04
	01/30/2019	8579.05
	02/06/2019	8579.05
	02/13/2019	8579.03
	02/20/2019	8579.10
	02/27/2019	8579.05
	03/06/2019	8579.06
	03/13/2019	8579.12
	03/20/2019	8579.09
	03/27/2019	8579.06

Table 1 – Weekly Groundwater Elevations (continued)

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
M-16	01/02/2019	8601.29
	01/09/2019	8601.23
	01/16/2019	8601.19
	01/23/2019	8601.19
	01/30/2019	8601.17
	02/06/2019	8601.10
	02/13/2019	8601.05
	02/20/2019	8600.99
	02/27/2019	8600.69
	03/06/2019	8600.70
	03/13/2019	8600.78
	03/20/2019	8600.84
	03/27/2019	8600.95
M-20	01/02/2019	8580.04
	01/09/2019	8580.03
	01/16/2019	8579.89
	01/23/2019	8580.04
	01/30/2019	8580.04
	02/06/2019	8580.02
	02/13/2019	8579.96
	02/20/2019	8579.96
	02/27/2019	8579.94
	03/06/2019	8580.15
	03/13/2019	8580.34
	03/20/2019	8580.38
	03/27/2019	8580.43

Table 2 – Quarterly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-3	01/31/2019	8578.11
BF-4	01/31/2019	8579.26
BF-5R	01/31/2019	8579.05
BF-6	01/31/2019	8579.00
M-11R	01/31/2019	8550.71
M-16	01/31/2019	8601.17
M-17	01/31/2019	8586.31
M-18	01/31/2019	8579.30
M-19	01/31/2019	8580.47
M-20	01/31/2019	8580.04
M-21	01/31/2019	8577.00
M-22	01/31/2019	8572.70
M-23	01/31/2019	8556.10
M-24	01/31/2019	8559.33
M-25	01/31/2019	DRY
M-26	01/31/2019	8543.87
M-27	01/31/2019	DRY
M-28	01/31/2019	8579.70
M-29	01/31/2019	8580.29
M-30	01/31/2019	8610.14
M-31	01/31/2019	8550.28
M-32	01/31/2019	8531.50
M-33	01/31/2019	8538.14

2) The weekly groundwater table elevation data shall be tabulated and reported on the quarterly BMP reports, and the data will be used to evaluate compliance with the following permit limitations.

The groundwater table elevation, based on the average of all measured values for each calendar month in the West Pit backfill groundwater monitoring wells BF-4 and BF-5, must be equal to or lower than an elevation of 8582 feet above sea level (ft. amsl).

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the measurements are shown in Table 1. The groundwater measurements for wells BF-4 and BF-5R were averaged by calendar month and the results are shown in Table 3. The January, February, March 2019 averages were below the 8582 ft. amsl required in Paragraph 2. No corrective action is required under the Paragraph 2 requirement and schedule compliance monitoring will continue unchanged next quarter.*

Table 3 – Quarterly West Pit Backfill Monthly Average Groundwater Table Elevations

Monitoring Well Identification	Month (2019)	Number of Observations	Average Monthly Groundwater Elevation (ft amsl)
BF-4	January	5	8579.23
	February	4	8579.25
	March	4	8579.29
BF-5R	January	5	8579.04
	February	4	8579.06
	March	4	8579.08

3) If the average monthly groundwater table elevation in the West Pit backfill for any calendar month, measured as described in the above paragraph, is greater than 8582 ft. amsl or the quarterly determination of the groundwater potentiometric surface map indicates that the flow of the groundwater is from the West Pit to the Rito Seco alluvium, the permittee shall verbally communicate such condition to WQCD within 24 hours of the determination of the condition (elevated West Pit backfill table or groundwater flow from the West Pit as indicated by the quarterly groundwater potentiometric surface map) and initiate the following compliance schedule.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the calendar month average groundwater measurement elevations (Table 3) were below the 8582 ft. amsl required in Paragraph 2. The January 31, 2019, potentiometric surface map (Figure 1) shows the groundwater flow gradient was from the Rito Seco alluvium to the West Pit backfill. Therefore, site operations demonstrated the West Pit backfill groundwater level was maintained at or below an elevation of 8582 ft. amsl through the quarter. Therefore, no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.3 is required.*

4) The quality of groundwater in the vicinity of the West Pit shall be monitored on a monthly basis in the Rito Seco alluvial groundwater monitoring wells M-19, M-21, M-24 and M-11R for the purposes of monitoring the changes in the quality of the plume or affected groundwater in the Rito Seco alluvial aquifer. Groundwater quality in these monitoring wells will be analyzed for pH, temperature, total dissolved solids, calcium, sulfate, manganese, fluoride, copper, and iron for the purpose of evaluating the status of the groundwater quality in the downgradient groundwater plume. The groundwater quality data will be summarized and transmitted to the WQCD in the quarterly BMP report required under Part I, Section E.1 of this permit.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly groundwater samples in the vicinity of the West Pit backfill area from Rito Seco alluvial monitoring wells M-19, M-21, M-24 and M-*

11R. Results of analyses performed on these wells are shown in Table 4. No corrective action is required under the Paragraph 4 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.

Table 4 – Rito Seco Alluvial Groundwater Quality Summary

Analyte	Reporting Units	Sample Date	Monitoring Well Identifier			
			M-11R	M-19	M-21	M-24
pH	SU	01/02/2019	6.84	6.59	6.56	6.54
		02/04/2019	7.12	7.35	7.06	6.85
		03/04/2019	7.01	6.65	6.62	6.67
Temperature	°C	01/02/2019	9.20	10.9	8.20	8.20
		02/04/2019	9.70	10.6	8.70	8.70
		03/04/2019	9.50	9.90	8.40	8.10
Calcium, Total	mg/L	01/02/2019	76.8	24.9	31.2	100
		02/04/2019	80.8	26.9	35.0	106
		03/04/2019	84.3	25.0	34.7	103
Copper, Dissolved	mg/L	01/02/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		02/04/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		03/04/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
Fluoride	mg/L	01/02/2019	0.871	0.953	1.41	0.718
		02/04/2019	0.803	0.900	1.37	0.671
		03/04/2019	0.810	0.914	1.39	0.691
Iron, Dissolved	mg/L	01/02/2019	0.387	0.238	< 0.100	5.67
		02/04/2019	0.122	0.245	< 0.100	5.22
		03/04/2019	0.152	0.224	< 0.100	5.47
Manganese, Dissolved	mg/L	01/02/2019	0.345	0.319	0.355	1.09
		02/04/2019	0.243	0.319	0.348	1.04
		03/04/2019	0.381	0.331	0.393	1.17
Sulfate	mg/L	01/02/2019	127	9.08	18.3	233
		02/04/2019	112	8.98	18.2	221
		03/04/2019	136	10.3	18.7	229
Total Dissolved Solids	mg/L	01/02/2019	364	107	138	521
		02/04/2019	346	106	145	510
		03/04/2019	381	94	147	524

5) The historical seeps were caused by the plume of affected groundwater and may, in the future, also be caused by natural variation in the flow of groundwater in the vicinity of the area where the past seeps occurred. The permittee shall conduct a monthly visual inspection of the area of historical seeps and the permittee shall report any seepage flow that is associated with the area historic seepage expression, as is identified in Figure 2 of the permit. Results of the seep monitoring shall be tabulated and summarized in the quarterly BMP report.

   If these inspections identified the occurrence of seeps, the permittee will be required to communicate verbally to the WQCD within 24 hours of the seepage observation, followed by written notification within 7 calendar days of the seepage observation. Verbal updates will then be provided to the WQCD every second day thereafter until the WQCD has made a determination regarding the status of the West Pit groundwater control system through the implementation of the following compliance schedule.

   Compliance Action Taken: *Battle Mountain Resources, Inc. performed monthly visual seepage expression inspections in the historic seepage area identified in Figure 2 of the permit. Visual observations during these inspections are shown in Table 5. No seepage expressions were observed in the historic seepage area during the first quarter of 2019. Therefore, no verbal or written notifications were required and the implementation of the compliance schedule was not required. No corrective action is required under the Paragraph 5 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 5 – Monthly Seepage Expression Inspection Tabulation

Visual Inspection Date	Was Visual Observation of Seepage Determined in the Area of the Historic Seepage Expression	Comments
01/31/2019	No	All Dry
02/27/2019	No	All Dry
03/28/2019	No	All Dry

6) The BMP for the groundwater flow downgradient from the groundwater divide (see section VI.A.2 for the Rationale) that has been developed in the Rito Seco alluvial aquifer consists of a groundwater capture system in conjunction with groundwater table elevation control in the West Pit. The water management plan for the Rito Seco alluvial aquifer consists of pumping two groundwater capture wells (M-32 and M-33) located downgradient of the plume of affected groundwater. This action will allow flushing of constituents in the groundwater of the Rito Seco alluvial aquifer in that portion (plume) of the aquifer affected by previous flow of groundwater from the West Pit. Measurements of the groundwater table elevations will be taken on a weekly basis from M-32 and M-33. This data shall be tabulated and reported for outfall 002 on the quarterly BMP report, and the data will be used to evaluate compliance with the following permit limitation.

   The groundwater table elevation, based on the average of all measured values for each calendar month at M-32 and M-33 in the Rito Seco alluvial aquifer, must be equal to or lower than an elevation of 8540 ft. amsl.

   If the average monthly groundwater table elevations measured in the Rito Seco alluvial aquifer at M-32 and M-33 is greater than 8540 ft. amsl, the permitee shall initiate the following compliance schedule within 24 hours of the determination of groundwater table elevation exceedance.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the alluvial aquifer monitoring wells (M-32 and M-33) weekly and the resulting elevations are presented in Table 6. The groundwater elevations for wells M-32 and M-33 were averaged by calendar month and the results are shown in Table 6. The January, February, March 2019 averages were below the 8540 ft. amsl required under Paragraph 6. Therefore, site operations were in full compliance of Part I, Section 5.5 and there were no requirements(s) to initiate actions contained within the schedule of compliance for Section 5.5. No corrective action is required under Paragraph 6 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 6 – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2018)	Average Monthly Groundwater Elevation (ft amsl)
M-32	01/02/2019	8530.72	January	8530.98
	01/09/2019	8530.11		
	01/16/2019	8530.77		
	01/23/2019	8531.62		
	01/30/2019	8531.18		
	01/31/2019	8531.50		
	02/06/2019	8531.99	February	8532.46
	02/13/2019	8531.50		
	02/20/2019	8532.59		
	02/27/2019	8533.29		
	02/28/2019	8532.94		

Table 6 (Cont) – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2019)	Average Monthly Groundwater Elevation (ft amsl)
M-32	03/06/2019	8535.17	March	8535.14
	03/13/2019	8534.02		
	03/20/2019	8534.60		
	03/27/2019	8535.38		
	03/29/2019	8536.55		
M-33	01/02/2019	8537.28	January	8538.07
	01/09/2019	8537.63		
	01/16/2019	8538.21		
	01/23/2019	8538.59		
	01/30/2019	8538.55		
	01/31/2019	8538.14		
	02/06/2019	8538.63	February	8534.80
	02/13/2019	8531.45		
	02/20/2019	8534.15		
	02/27/2019	8534.83		
	02/28/2019	8534.95		
	03/06/2019	8535.01	March	8532.23
	03/13/2019	8535.33		
	03/20/2019	8527.74		
	03/27/2019	8530.67		
	03/29/2019	8532.38		

7) The water quality of the Rito Seco will be assessed using surface water quality collected at RS-2, as shown in Figure 3. Surface water monitoring in the Rito Seco shall be conducted at RS-2 on a monthly basis and the laboratory analytical results shall be submitted to the WQCD in the quarterly BMP report. Water quality samples collected at RS-2 shall be analyzed for the following constituents: calcium, magnesium, sodium, potassium, ammonia, total dissolved solids, total hardness, pH, total suspended solids, cyanide (WAD and total), bicarbonate, alkalinity, chloride, sulfate, nitrate-nitrite, fluoride and the total and dissolved concentrations of aluminum, arsenic, barium, boron, cadmium, copper, chromium, iron, lead, manganese, mercury, nickel, selenium, silica, silver and zinc. The following compliance schedule shall be implemented in the event that any constituent exceeds the applicable water quality standards for the Rito Seco.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly surface water samples in January, February, March 2019 at location RS-2, as shown in Figure 3 of the permit. Results of analyses performed on these samples are shown in Table 7. The results of the laboratory analytical testing show that the applicable water quality standards were met for the Rito Seco during the months of January, February, March 2019. Site operations were in full compliance of Part I, Section 5.7 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.7. Scheduled compliance monitoring will continue unchanged next quarter.*

Table 7 – RS-2 Surface Water Quality Results

Analyte	Reporting Units	01/02/2019	02/04/2019	03/04/2019
Alkalinity	mg/L as $CaCO_3$	69.6	65.2	62.8
Aluminum, Dissolved	mg/L	< 0.08	< 0.08	< 0.08
Aluminum, Total	mg/L	0.10	0.35	0.39
Ammonia as N	mg/L	< 0.030	< 0.030	< 0.030
Arsenic, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Arsenic, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Barium, Dissolved	mg/L	0.0233	0.0212	0.0220
Barium, Total	mg/L	0.0257	0.0281	0.0307
Bicarbonate	mg/L as $CaCO_3$	70.8	65.2	62.8
Boron, Dissolved	mg/L	< 0.040	< 0.040	< 0.040
Boron, Total	mg/L	< 0.040	< 0.040	< 0.040
Cadmium, Dissolved	mg/L	< 0.00030	< 0.00030	< 0.00030
Cadmium, Total	mg/L	< 0.00050	< 0.00050	< 0.00050
Calcium, Total	mg/L	18.4	19.0	19.1
Carbonate	mg/L as $CaCO_3$	< 1.0	< 1.0	< 1.0
Chloride	mg/L	0.92	0.84	0.98
Chromium, Dissolved	mg/L	< 0.0060	< 0.0060	< 0.0060
Chromium, Total	mg/L	< 0.0060	< 0.0060	< 0.0060
Copper, Dissolved	mg/L	< 0.00300	< 0.00300	< 0.00300
Copper, Total	mg/L	< 0.00200	< 0.00200	< 0.00200
Cyanide, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Cyanide, WAD	mg/L	< 0.0100	< 0.0100	< 0.0100
Fluoride	mg/L	0.592	0.541	0.542
Hardness	mg/L	66.2	67.1	67.5
Iron, Dissolved	mg/L	< 0.100	< 0.100	0.148
Iron, Total	mg/L	0.317	0.599	0.668
Lead, Dissolved	mg/L	< 0.00500	< 0.00500	< 0.00500
Lead, Total	mg/L	< 0.00500	< 0.00500	< 0.00500
Magnesium, Total	mg/L	4.89	4.81	4.83
Manganese, Dissolved	mg/L	0.0167	0.0144	0.0131
Manganese, Total	mg/L	0.0346	0.0704	0.0746
Mercury, Dissolved	mg/L	< 0.00020	< 0.00020	< 0.00020
Mercury, Total	mg/L	< 0.00020	< 0.00020	< 0.00020
Nickel, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Nickel, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Nitrate+Nitrite as N	mg/L	< 0.050	0.067	< 0.050
pH	SU	6.89	7.94	6.92
Potassium, Total	mg/L	0.90	1.62	1.08
Selenium, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Selenium, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Silica, Total	mg/L	13.2	13.5	13.4
Silver, Dissolved	mg/L	< 0.000100	< 0.000100	< 0.000100
Silver, Total	mg/L	< 0.000400	< 0.000400	< 0.000400
Sodium, Total	mg/L	4.83	5.46	5.27
Sulfate	mg/L	9.33	7.68	8.34
Total Dissolved Solids	mg/L	86	97	84
Total Suspended Solids	mg/L	< 5.0	5.0	6.0
Zinc, Dissolved	mg/L	< 0.010	< 0.010	< 0.010
Zinc, Total	mg/L	< 0.010	< 0.010	< 0.010

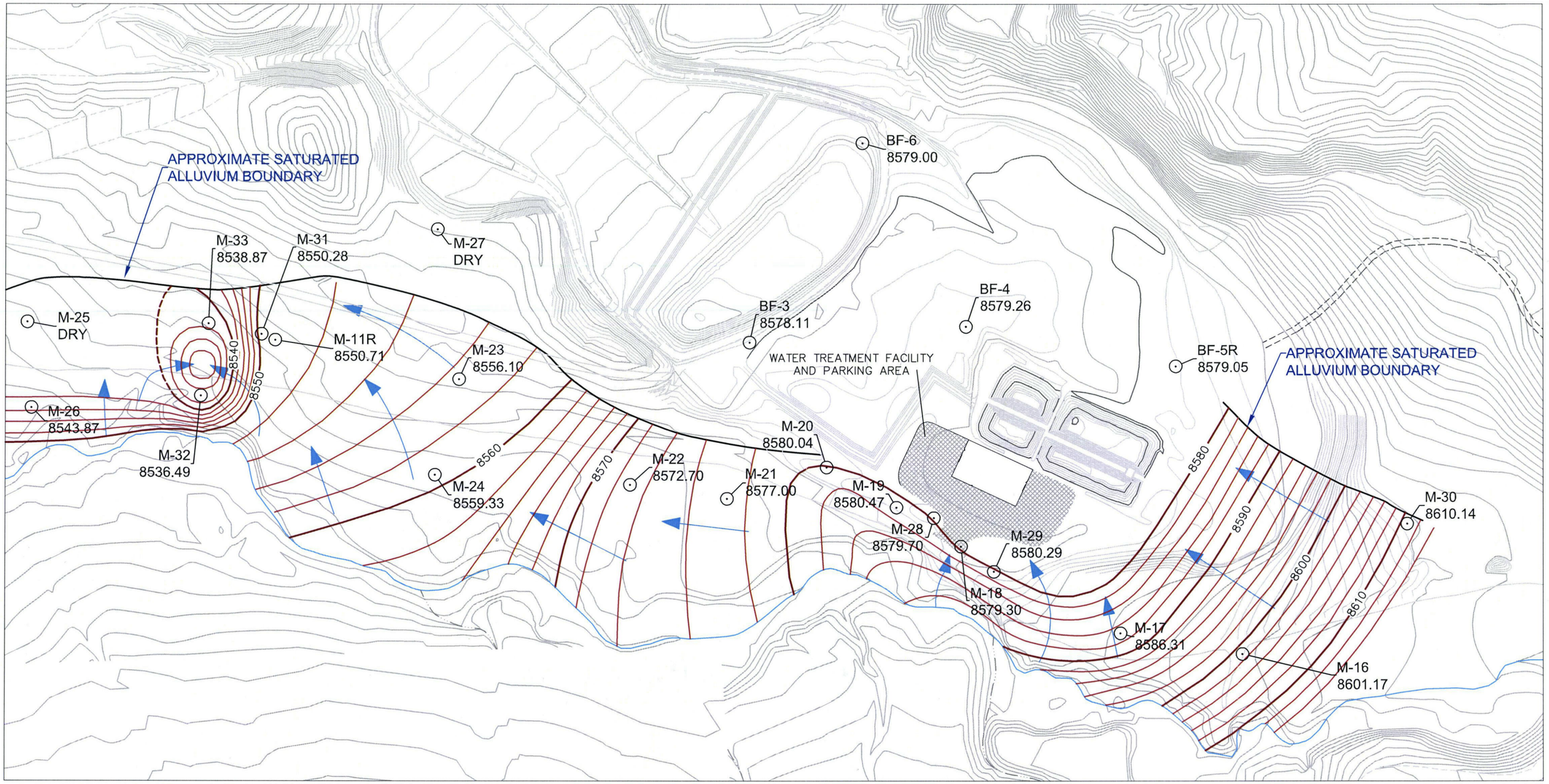
8) If any component of the groundwater control system is not performing within the limits set forth in this permit, the permittee will be required to initiate appropriate compliance schedule activities, including the preparation of a response plan, for any and all components of the groundwater control system that do not meet the applicable requirements. The permittee shall also conduct weekly sampling at RS-2 until such time as the other compliance schedule activity(ies) have been completed.

Compliance Action Taken: *As demonstrated by the information and data presented in this report, all components of the groundwater control system performed within the limits set forth in the permit. Therefore, site operations were in full compliance of Part I, Section 8 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 8.*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is to the best of my knowledge and belief, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Julio Madrid Signature:

Date: April 26, 2019



KEY

NORTH

SCALE IN FEET
0 200

GROUND WATER FLOW DIRECTION

8560 LINE OF EQUIPOTENTIAL HYDRAULIC HEAD

M-23 8555.1 — WELL NAME / WATER LEVEL

NO	REVISION DESCR.	DATE	BY
A			
B			
C			
1			
2			

THIS SHEET, INCLUDING ENGINEERING, RESEARCH AND SPECIFICATIONS IS INTENDED SOLELY FOR THE PROJECT STATED IN THE TITLE BLOCK. IT MAY NOT BE SUITABLE OR SAFE FOR OTHER PROJECTS. ANY OTHER USE OF THE SHEET, WITHOUT THE WRITTEN CONSENT OF THE ENGINEER, IS PROHIBITED.

ALLUVIAL GROUND WATER POTENTIOMETRIC SURFACE MAP
FIRST QUARTER (JANUARY 2019)

SAN LUIS PROJECT

Engineering Analytics, Inc.

ISSUED BY

Drawn By:	RDP
Designed By:	AF
Approved By:	AF
Date:	4/15/2019
Project:	210105:06
Scale:	1" = 200'
Sheet Number:	1

O:_05 San Luis\POTENTIOMETRIC MAPS\GW Map 2019 1st qtr\Groundwater 2019 1st Qtr.dwg SAVED: 4/15/19 PRINTED: 4/15/19

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

Water Quality Control
AUG 02 2019
Received

July 26, 2019

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project - San Luis, Colorado
Second Quarter 2019 – DMR's, BMP, and WET Testing Reports
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

Please find the enclosed Battle Mountain Resources, Inc. "San Luis Project" (Permit No. CO0045675) Colorado Department of Public Health and Environment-Colorado Discharge Permit System (CDPS) Best Management Practices (BMP) report for permitted outfall 002 for the second quarter 2019. The quarterly BMP report provides the required data associated with groundwater well elevations, the quarterly potentiometric surface map and groundwater well chemistry.

In addition, the second quarter 2019 Discharge Monitoring Reports (DMRs) were submitted for each of the permitted water treatment plant discharges in the NetDMR System and the WET Testing Reports were attached to the appropriate DMR submittal in NetDMR. These permitted discharges consist of water treatment plant Discharge Numbers 001-A and 001-B. During the quarter, the maximum 30-day average flow was 0.31 million gallons of water discharged per day, therefore the applicable permit criteria for the reporting period is associated with discharge number 001-B.

Should any questions arise or if I can be of any assistance providing clarification, please call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Lawrence Fiske, Newmont USA Limited
Tim Runnells, Engineering Analytics
Alan Fosdick, Engineering Analytics

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

July 26, 2019

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project
Second Quarter 2019 BMP Report
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

In accordance with and compliance of the permit limitations and permit terms and conditions contained in Part I, Section 5 Discharge Point 002: (Permit Limitations, Best Management Practices, and Schedule of Compliance of the *State of Colorado Authorization to Discharge Under the Colorado Discharge Permit System*, Battle Mountain Resources, Inc. submits the following *Quarterly Best Management Practices Report.*

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Sections 61.8(2), 61.8(3)(n), and 61.8(3)(r), 5 C.C.R. 1002-61, the permittee shall continue to implement the following limitations, compliance schedules, and Best Management Practices (BMPs).

The attainment of applicable water quality standards will be implemented and evaluated through the application of the following limitations, compliance schedules, and BMPs that are designed to monitor and control the groundwater quality and quantity discharging from the West Pit to the Rito Seco alluvial aquifer.

Specifically, the limitations, compliance schedules, and BMPs are those activities that address contaminated groundwater that may flow into the Rito Seco. This includes: (1) the potential flow of the affected groundwater from the West Pit that, in the past, manifested itself in the formation of the surface seeps along the arroyo sidewall of the Rito Seco, and (2) the plume of affected groundwater within the Rito Seco alluvial aquifer downgradient of the West Pit that flows along the naturally occurring hydraulic gradient and that may flow into the Rito Seco. The activities will include the following specific requirements:

1) The elevation of the groundwater table in the vicinity of the West Pit shall be measured on a weekly basis at the following locations: (i) the West Pit backfill wells BF-4 and BF-5 and (ii) the Rito Seco alluvial wells M-16 and M-20, as shown in Figure 3 of the permit, for purposes of determining the performance of the

"pump and treat" system that regulates the flow and quality of the groundwater in the seepage front. The permittee shall also determine on a quarterly basis the elevations of the groundwater table at BF-3, BF-4, BF-5, BF-6, M-11R, M-16, M-17, M-18, M-19, M-20, M-21, M-22, M-23, M-24, M-25, M-26, M-27, M-28, M-29, M-30, M-31, M-32, and M-33 for the purpose of developing a groundwater potentiometric map as monitoring confirmation of the groundwater flow direction. The quarterly data regarding depth to groundwater and groundwater potentiometric surface map will be submitted to the WQCD with the BMP report as described.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the weekly West Pit backfill and alluvial wells as required under Paragraph 1 of the specific requirements. Measurements obtained for the weekly West Pit backfill wells (BF-4 and BF-5R) and alluvial wells (M-16 and M-20) are shown in Table 1. The quarterly groundwater elevations required under Paragraph 1 were also measured and are shown in Table 2. A potentiometric surface map, developed by Engineering Analytics, is shown in Figure 1. The groundwater table elevations and potentiometric map confirm that the groundwater flow gradient during the second quarter of 2019 was from the Rito Seco to the West Pit. No corrective action is required under Paragraph 1 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 1 – Weekly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-4	04/03/2019	8579.29
	04/10/2019	8579.33
	04/17/2019	8579.32
	04/24/2019	8579.31
	05/01/2019	8579.35
	05/08/2019	8579.32
	05/15/2019	8579.37
	05/22/2019	8579.24
	05/29/2019	8579.28
	06/05/2019	8579.26
	06/12/2019	8579.37
	06/19/2019	8579.30
	06/26/2019	8579.28
BF-5R	04/03/2019	8579.07
	04/10/2019	8579.10
	04/17/2019	8579.10
	04/24/2019	8579.10
	05/01/2019	8579.12
	05/08/2019	8579.08
	05/15/2019	8579.13
	05/22/2019	8579.03
	05/29/2019	8579.05
	06/05/2019	8579.03
	06/12/2019	8579.12
	06/19/2019	8579.07
	06/26/2019	8579.05

Table 1 – Weekly Groundwater Elevations (continued)

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
M-16	04/03/2019	8601.08
	04/10/2019	8601.22
	04/17/2019	8601.36
	04/24/2019	8601.58
	05/01/2019	8601.91
	05/08/2019	8602.23
	05/15/2019	8602.55
	05/22/2019	8602.88
	05/29/2019	8603.09
	06/05/2019	8603.29
	06/12/2019	8603.50
	06/19/2019	8603.61
	06/26/2019	8603.58
M-20	04/03/2019	8580.69
	04/10/2019	8580.89
	04/17/2019	8580.92
	04/24/2019	8581.05
	05/01/2019	8581.14
	05/08/2019	8581.15
	05/15/2019	8581.27
	05/22/2019	8581.19
	05/29/2019	8581.12
	06/05/2019	8581.25
	06/12/2019	8581.31
	06/19/2019	8581.14
	06/26/2019	8580.92

Table 2 – Quarterly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-3	04/30/2019	8578.11
BF-4	04/30/2019	8579.35
BF-5R	04/30/2019	8579.13
BF-6	04/30/2019	8579.10
M-11R	04/30/2019	8549.92
M-16	04/30/2019	8601.87
M-17	04/30/2019	8587.55
M-18	04/30/2019	8580.67
M-19	04/30/2019	8582.09
M-20	04/30/2019	8581.13
M-21	04/30/2019	8578.21
M-22	04/30/2019	8573.42
M-23	04/30/2019	8555.72
M-24	04/30/2019	8559.20
M-25	04/30/2019	DRY
M-26	04/30/2019	8544.40
M-27	04/30/2019	DRY
M-28	04/30/2019	8580.74
M-29	04/30/2019	8581.25
M-30	04/30/2019	8611.19
M-31	04/30/2019	8549.54
M-32	04/30/2019	8524.16
M-33	04/30/2019	8533.67

2) The weekly groundwater table elevation data shall be tabulated and reported on the quarterly BMP reports, and the data will be used to evaluate compliance with the following permit limitations.

   The groundwater table elevation, based on the average of all measured values for each calendar month in the West Pit backfill groundwater monitoring wells BF-4 and BF-5, must be equal to or lower than an elevation of 8582 feet above sea level (ft. amsl).

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the measurements are shown in Table 1. The groundwater measurements for wells BF-4 and BF-5R were averaged by calendar month and the results are shown in Table 3. The April, May, June 2019 averages were below the 8582 ft. amsl required in Paragraph 2. No corrective action is required under the Paragraph 2 requirement and schedule compliance monitoring will continue unchanged next quarter.*

Table 3 – Quarterly West Pit Backfill Monthly Average Groundwater Table Elevations

Monitoring Well Identification	Month (2019)	Number of Observations	Average Monthly Groundwater Elevation (ft amsl)
BF-4	April	4	8579.31
	May	5	8579.31
	June	4	8579.30
BF-5R	April	4	8579.09
	May	5	8579.08
	June	4	8579.07

3) If the average monthly groundwater table elevation in the West Pit backfill for any calendar month, measured as described in the above paragraph, is greater than 8582 ft. amsl or the quarterly determination of the groundwater potentiometric surface map indicates that the flow of the groundwater is from the West Pit to the Rito Seco alluvium, the permittee shall verbally communicate such condition to WQCD within 24 hours of the determination of the condition (elevated West Pit backfill table or groundwater flow from the West Pit as indicated by the quarterly groundwater potentiometric surface map) and initiate the following compliance schedule.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the calendar month average groundwater measurement elevations (Table 3) were below the 8582 ft. amsl required in Paragraph 2. The April 30, 2019, potentiometric surface map (Figure 1) shows the groundwater flow gradient was from the Rito Seco alluvium to the West Pit backfill. Therefore, site operations demonstrated the West Pit backfill groundwater level was maintained at or below an elevation of 8582 ft. amsl through the quarter. Therefore, no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.3 is required.*

4) The quality of groundwater in the vicinity of the West Pit shall be monitored on a monthly basis in the Rito Seco alluvial groundwater monitoring wells M-19, M-21, M-24 and M-11R for the purposes of monitoring the changes in the quality of the plume or affected groundwater in the Rito Seco alluvial aquifer. Groundwater quality in these monitoring wells will be analyzed for pH, temperature, total dissolved solids, calcium, sulfate, manganese, fluoride, copper, and iron for the purpose of evaluating the status of the groundwater quality in the downgradient groundwater plume. The groundwater quality data will be summarized and transmitted to the WQCD in the quarterly BMP report required under Part I, Section E.1 of this permit.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly groundwater samples in the vicinity of the West Pit backfill area from Rito Seco alluvial monitoring wells M-19, M-21, M-24 and M-*

11R. Results of analyses performed on these wells are shown in Table 4. No corrective action is required under the Paragraph 4 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.

Table 4 – Rito Seco Alluvial Groundwater Quality Summary

Analyte	Reporting Units	Sample Date	Monitoring Well Identifier			
			M-11R	M-19	M-21	M-24
pH	SU	04/01/2019	6.74	6.33	6.52	6.46
		05/01/2019	6.84	6.40	6.55	6.59
		06/05/2019	6.8	6.36	6.47	6.55
Temperature	°C	04/01/2019	9.7	9.0	8.6	8.6
		05/01/2019	9.6	7.0	8.6	8.7
		06/05/2019	9.7	6.5	9.0	8.6
Calcium, Total	mg/L	04/01/2019	83.2	23.9	33.6	111
		05/01/2019	103	20.5	31.4	103
		06/05/2019	105	19.1	31.8	108
Copper, Dissolved	mg/L	04/01/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		05/01/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		06/05/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
Fluoride	mg/L	04/01/2019	0.825	0.911	1.36	0.674
		05/01/2019	0.788	0.885	1.23	0.694
		06/05/2019	0.883	0.970	1.28	0.727
Iron, Dissolved	mg/L	04/01/2019	< 0.100	0.286	< 0.100	5.68
		05/01/2019	< 0.100	0.413	< 0.100	5.99
		06/05/2019	< 0.100	0.336	0.121	5.10
Manganese, Dissolved	mg/L	04/01/2019	0.337	0.312	0.375	1.17
		05/01/2019	0.647	0.276	0.359	1.21
		06/05/2019	0.670	0.170	0.266	1.03
Sulfate	mg/L	04/01/2019	124	12.4	18.2	229
		05/01/2019	160	14.2	16.0	196
		06/05/2019	163	11.9	17.2	212
Total Dissolved Solids	mg/L	04/01/2019	391	116	147	542
		05/01/2019	445	90	160	506
		06/05/2019	436	94	144	527

5) The historical seeps were caused by the plume of affected groundwater and may, in the future, also be caused by natural variation in the flow of groundwater in the vicinity of the area where the past seeps occurred. The permittee shall conduct a monthly visual inspection of the area of historical seeps and the permittee shall report any seepage flow that is associated with the area historic seepage expression, as is identified in Figure 2 of the permit. Results of the seep monitoring shall be tabulated and summarized in the quarterly BMP report.

   If these inspections identified the occurrence of seeps, the permittee will be required to communicate verbally to the WQCD within 24 hours of the seepage observation, followed by written notification within 7 calendar days of the seepage observation. Verbal updates will then be provided to the WQCD every second day thereafter until the WQCD has made a determination regarding the status of the West Pit groundwater control system through the implementation of the following compliance schedule.

   Compliance Action Taken: *Battle Mountain Resources, Inc. performed monthly visual seepage expression inspections in the historic seepage area identified in Figure 2 of the permit. Visual observations during these inspections are shown in Table 5. No seepage expressions were observed in the historic seepage area during the second quarter of 2019. Therefore, no verbal or written notifications were required and the implementation of the compliance schedule was not required. No corrective action is required under the Paragraph 5 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 5 – Monthly Seepage Expression Inspection Tabulation

Visual Inspection Date	Was Visual Observation of Seepage Determined in the Area of the Historic Seepage Expression	Comments
04/30/2019	No	All Dry
05/30/2019	No	All Dry
06/28/2019	No	All Dry

6) The BMP for the groundwater flow downgradient from the groundwater divide (see section VI.A.2 for the Rationale) that has been developed in the Rito Seco alluvial aquifer consists of a groundwater capture system in conjunction with groundwater table elevation control in the West Pit. The water management plan for the Rito Seco alluvial aquifer consists of pumping two groundwater capture wells (M-32 and M-33) located downgradient of the plume of affected groundwater. This action will allow flushing of constituents in the groundwater of the Rito Seco alluvial aquifer in that portion (plume) of the aquifer affected by previous flow of groundwater from the West Pit. Measurements of the groundwater table elevations will be taken on a weekly basis from M-32 and M-33. This data shall be tabulated and reported for outfall 002 on the quarterly BMP report, and the data will be used to evaluate compliance with the following permit limitation.

   The groundwater table elevation, based on the average of all measured values for each calendar month at M-32 and M-33 in the Rito Seco alluvial aquifer, must be equal to or lower than an elevation of 8540 ft. amsl.

   If the average monthly groundwater table elevations measured in the Rito Seco alluvial aquifer at M-32 and M-33 is greater than 8540 ft. amsl, the permitee shall initiate the following compliance schedule within 24 hours of the determination of groundwater table elevation exceedance.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the alluvial aquifer monitoring wells (M-32 and M-33) weekly and the resulting elevations are presented in Table 6. The groundwater elevations for wells M-32 and M-33 were averaged by calendar month and the results are shown in Table 6. The April, May, June 2019 averages were below the 8540 ft. amsl required under Paragraph 6. Therefore, site operations were in full compliance of Part I, Section 5.5 and there were no requirements(s) to initiate actions contained within the schedule of compliance for Section 5.5. No corrective action is required under Paragraph 6 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 6 – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2018)	Average Monthly Groundwater Elevation (ft amsl)
M-32	04/03/2019	8526.58	April	8523.96
	04/10/2019	8522.32		
	04/17/2019	8523.07		
	04/24/2019	8523.69		
	04/30/2019	8524.16		
	05/01/2019	8524.14		
	05/08/2019	8524.58	May	8524.60
	05/15/2019	8524.91		
	05/22/2019	8524.96		
	05/29/2019	8524.56		
	05/30/2019	8524.45		

Table 6 (Cont) – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2019)	Average Monthly Groundwater Elevation (ft amsl)
M-32	06/05/2019	8524.24	June	8523.96
	06/12/2019	8524.45		
	06/19/2019	8523.98		
	06/26/2019	8523.61		
	06/27/2019	8523.54		
M-33	04/03/2019	8534.95	April	8534.84
	04/10/2019	8534.64		
	04/17/2019	8535.16		
	04/24/2019	8535.76		
	04/30/2019	8533.67		
	05/01/2019	8533.87		
	05/08/2019	8530.67	May	8529.19
	05/15/2019	8527.10		
	05/22/2019	8526.33		
	05/29/2019	8528.32		
	05/30/2019	8528.87		
	06/05/2019	8530.56	June	8533.83
	06/12/2019	8534.58		
	06/19/2019	8533.91		
	06/26/2019	8534.99		
	06/27/2019	8535.09		

7) The water quality of the Rito Seco will be assessed using surface water quality collected at RS-2, as shown in Figure 3. Surface water monitoring in the Rito Seco shall be conducted at RS-2 on a monthly basis and the laboratory analytical results shall be submitted to the WQCD in the quarterly BMP report. Water quality samples collected at RS-2 shall be analyzed for the following constituents: calcium, magnesium, sodium, potassium, ammonia, total dissolved solids, total hardness, pH, total suspended solids, cyanide (WAD and total), bicarbonate, alkalinity, chloride, sulfate, nitrate-nitrite, fluoride and the total and dissolved concentrations of aluminum, arsenic, barium, boron, cadmium, copper, chromium, iron, lead, manganese, mercury, nickel, selenium, silica, silver and zinc. The following compliance schedule shall be implemented in the event that any constituent exceeds the applicable water quality standards for the Rito Seco.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly surface water samples in April, May, June 2019 at location RS-2, as shown in Figure 3 of the permit. Results of analyses performed on these samples are shown in Table 7. Trace metals prepared under 40 CFR Part 136 method 200.2 have been reported as total metals. The results of the laboratory analytical testing show that the applicable water quality standards were met for the Rito Seco during the months of April, May, June 2019. Site operations were in full compliance of Part I, Section 5.7 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.7. Scheduled compliance monitoring will continue unchanged next quarter.*

Table 7 – RS-2 Surface Water Quality Results

Analyte	Reporting Units	04/01/2019	05/01/2019	06/05/2019
Alkalinity	mg/L as $CaCO_3$	62.6	55.8	39.5
Aluminum, Dissolved	mg/L	< 0.08	0.22	0.09
Aluminum, Total	mg/L	0.32	0.58	1.27
Ammonia as N	mg/L	< 0.030	< 0.030	< 0.030
Arsenic, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Arsenic, Total	mg/L	< 0.0100	< 0.0100	< 0.003
Barium, Dissolved	mg/L	0.0239	0.0275	0.0175
Barium, Total	mg/L	0.0280	0.0311	0.0324
Bicarbonate	mg/L as $CaCO_3$	63.4	55.8	39.5
Boron, Dissolved	mg/L	< 0.040	< 0.040	< 0.040
Boron, Total	mg/L	< 0.040	< 0.040	< 0.040
Cadmium, Dissolved	mg/L	< 0.00030	< 0.00030	< 0.00030
Cadmium, Total	mg/L	< 0.00050	< 0.00050	< 0.00020
Calcium, Total	mg/L	18.6	16.2	10.2
Carbonate	mg/L as $CaCO_3$	< 1.0	< 1.0	< 1.0
Chloride	mg/L	0.97	1.30	1.04
Chromium, Dissolved	mg/L	< 0.0060	< 0.0060	< 0.0060
Chromium, Total	mg/L	< 0.0060	< 0.0060	< 0.0060
Copper, Dissolved	mg/L	< 0.00300	< 0.00300	< 0.00300
Copper, Total	mg/L	< 0.00200	0.00283	0.00595
Cyanide, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Cyanide, WAD	mg/L	< 0.0100	< 0.0100	< 0.0100
Fluoride	mg/L	0.543	0.589	0.420
Hardness	mg/L	64.5		37.9
Iron, Dissolved	mg/L	0.115	0.164	0.150
Iron, Total	mg/L	0.524	0.725	1.51
Lead, Dissolved	mg/L	< 0.00500	< 0.00500	< 0.00500
Lead, Total	mg/L	< 0.00500	< 0.00500	0.003
Magnesium, Total	mg/L	4.40	4.02	3.05
Manganese, Dissolved	mg/L	0.0160	0.0284	0.0259
Manganese, Total	mg/L	0.0568	0.0685	0.0953
Mercury, Dissolved	mg/L	< 0.00020	< 0.00020	< 0.00020
Mercury, Total	mg/L	< 0.00020	< 0.00020	< 0.00020
Nickel, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Nickel, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Nitrate+Nitrite as N	mg/L	< 0.050	< 0.050	0.107
pH	SU	6.94	6.84	6.71
Potassium, Total	mg/L	0.91	0.95	0.91
Selenium, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Selenium, Total	mg/L	< 0.0100	< 0.0100	< 0.0030
Silica, Total	mg/L	12.4	13.6	16.5
Silver, Dissolved	mg/L	< 0.000100	< 0.000100	< 0.000100
Silver, Total	mg/L	< 0.000400	< 0.000400	< 0.000160
Sodium, Total	mg/L	5.04	4.97	3.93
Sulfate	mg/L	8.68	10.8	7.52
Total Dissolved Solids	mg/L	104	91	67
Total Suspended Solids	mg/L	< 5.0	16.0	12.0
Zinc, Dissolved	mg/L	< 0.010	< 0.010	< 0.010
Zinc, Total	mg/L	< 0.010	< 0.010	< 0.010

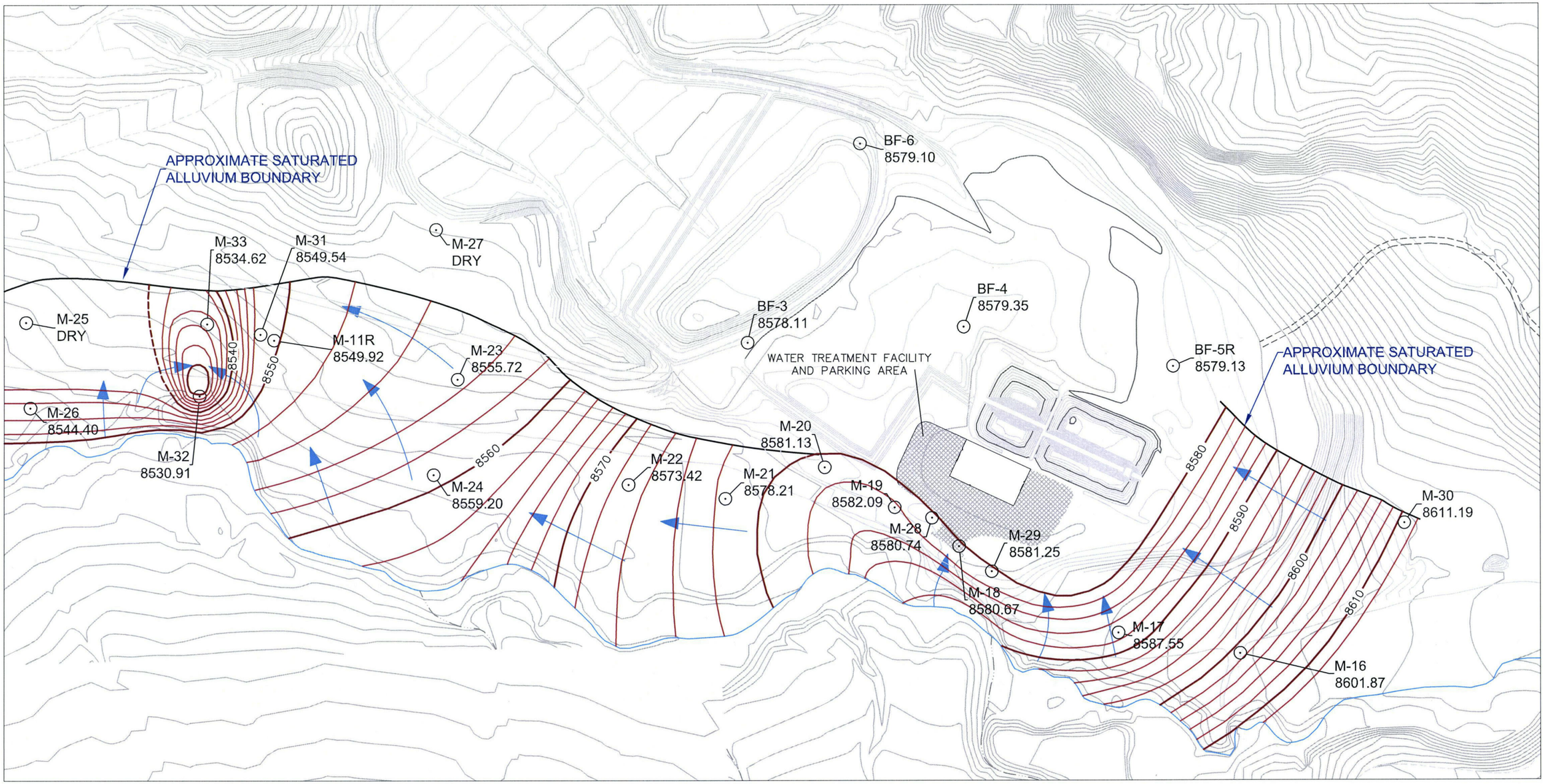
8) If any component of the groundwater control system is not performing within the limits set forth in this permit, the permittee will be required to initiate appropriate compliance schedule activities, including the preparation of a response plan, for any and all components of the groundwater control system that do not meet the applicable requirements. The permittee shall also conduct weekly sampling at RS-2 until such time as the other compliance schedule activity(ies) have been completed.

Compliance Action Taken: *As demonstrated by the information and data presented in this report, all components of the groundwater control system performed within the limits set forth in the permit. Therefore, site operations were in full compliance of Part I, Section 8 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 8.*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is to the best of my knowledge and belief, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Julio Madrid Signature:

Date: July 26, 2019



KEY

NORTH

SCALE IN FEET
0 200

GROUND WATER FLOW DIRECTION

LINE OF EQUIPOTENTIAL
HYDRAULIC HEAD
8560

M-23 8555.72
WELL NAME
WATER LEVEL

NO	REVISION DESCR.	DATE	BY
A			
B			
C			
1			
2			

THIS SHEET, INCLUDING ENGINEERING DESIGNED AND SPECIFICATIONS IS INTENDED SOLELY FOR THE PROJECT STATED IN THE TITLE BLOCK. IT MAY NOT BE USED, IN WHOLE OR IN PART, FOR OTHER PROJECTS. ANY OTHER USE OF THE SHEET, WITHOUT THE WRITTEN CONSENT OF THE ENGINEER, IS PROHIBITED.

ALLUVIAL GROUND WATER POTENTIOMETRIC SURFACE MAP
SECOND QUARTER (APRIL 2019)

SAN LUIS PROJECT

Asian Monastic Resources, Inc. San Luis, Colorado

ISSUED BY:
Engineering Analytics, Inc.

Drawn By:	RDP
Designed By:	AF
Approved By:	AF
Date:	7/26/2019
Project:	210105:06
Scale:	1" = 200'
Sheet Number:	1

O:_05 San Luis\POTENTIOMETRIC MAPS\GW Map 2019 2nd qtr\Groundwater 2019 2nd Qtr.dwg SAVED: 7/26/19 PRINTED: 7/26/19

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Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

Received
NOV 06 2019
Water Quality Control

October 26, 2019

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project - San Luis, Colorado
Third Quarter 2019 – DMR's, BMP, and WET Testing Reports
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

Please find the enclosed Battle Mountain Resources, Inc. "San Luis Project" (Permit No. CO0045675) Colorado Department of Public Health and Environment-Colorado Discharge Permit System (CDPS) Best Management Practices (BMP) report for permitted outfall 002 for the third quarter 2019. The quarterly BMP report provides the required data associated with groundwater well elevations, the quarterly potentiometric surface map and groundwater well chemistry.

In addition, the third quarter 2019 Discharge Monitoring Reports (DMRs) were submitted for each of the permitted water treatment plant discharges in the NetDMR System and the WET Testing Reports were attached to the appropriate DMR submittal in NetDMR. These permitted discharges consist of water treatment plant Discharge Numbers 001-A and 001-B. During the quarter, the maximum 30-day average flow was 0.31 million gallons of water discharged per day, therefore the applicable permit criteria for the reporting period is associated with discharge number 001-B.

Should any questions arise or if I can be of any assistance providing clarification, please call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Devon Horntvedt, Newmont USA Limited
Lawrence Fiske, Newmont USA Limited
Tim Runnells, Engineering Analytics
Alan Fosdick, Engineering Analytics

Electronic Document

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

Received
NOV 06 2019
Water Quality Control

October 26, 2019

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project
Third Quarter 2019 BMP Report
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

In accordance with and compliance of the permit limitations and permit terms and conditions contained in Part I, Section 5 Discharge Point 002: (Permit Limitations, Best Management Practices, and Schedule of Compliance of the *State of Colorado Authorization to Discharge Under the Colorado Discharge Permit System*, Battle Mountain Resources, Inc. submits the following *Quarterly Best Management Practices Report.*

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Sections 61.8(2), 61.8(3)(n), and 61.8(3)(r), 5 C.C.R. 1002-61, the permittee shall continue to implement the following limitations, compliance schedules, and Best Management Practices (BMPs).

The attainment of applicable water quality standards will be implemented and evaluated through the application of the following limitations, compliance schedules, and BMPs that are designed to monitor and control the groundwater quality and quantity discharging from the West Pit to the Rito Seco alluvial aquifer.

Specifically, the limitations, compliance schedules, and BMPs are those activities that address contaminated groundwater that may flow into the Rito Seco. This includes: (1) the potential flow of the affected groundwater from the West Pit that, in the past, manifested itself in the formation of the surface seeps along the arroyo sidewall of the Rito Seco, and (2) the plume of affected groundwater within the Rito Seco alluvial aquifer downgradient of the West Pit that flows along the naturally occurring hydraulic gradient and that may flow into the Rito Seco. The activities will include the following specific requirements:

1) The elevation of the groundwater table in the vicinity of the West Pit shall be measured on a weekly basis at the following locations: (i) the West Pit backfill wells BF-4 and BF-5 and (ii) the Rito Seco alluvial wells M-16 and M-20, as shown in Figure 3 of the permit, for purposes of determining the performance of the

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"pump and treat" system that regulates the flow and quality of the groundwater in the seepage front. The permittee shall also determine on a quarterly basis the elevations of the groundwater table at BF-3, BF-4, BF-5, BF-6, M-11R, M-16, M-17, M-18, M-19, M-20, M-21, M-22, M-23, M-24, M-25, M-26, M-27, M-28, M-29, M-30, M-31, M-32, and M-33 for the purpose of developing a groundwater potentiometric map as monitoring confirmation of the groundwater flow direction. The quarterly data regarding depth to groundwater and groundwater potentiometric surface map will be submitted to the WQCD with the BMP report as described.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the weekly West Pit backfill and alluvial wells as required under Paragraph 1 of the specific requirements. Measurements obtained for the weekly West Pit backfill wells (BF-4 and BF-5R) and alluvial wells (M-16 and M-20) are shown in Table 1. The quarterly groundwater elevations required under Paragraph 1 were also measured and are shown in Table 2. A potentiometric surface map, developed by Engineering Analytics, is shown in Figure 1. The groundwater table elevations and potentiometric map confirm that the groundwater flow gradient during the third quarter of 2019 was from the Rito Seco to the West Pit. No corrective action is required under Paragraph 1 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 1 – Weekly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-4	07/03/2019	8579.27
	07/10/2019	8579.18
	07/17/2019	8579.24
	07/24/2019	8579.26
	07/31/2019	8579.25
	08/07/2019	8579.23
	08/14/2019	8579.24
	08/21/2019	8579.24
	08/28/2019	8579.24
	09/04/2019	8579.22
	09/11/2019	8579.24
	09/18/2019	8579.21
	09/25/2019	8579.23
BF-5R	07/03/2019	8579.04
	07/10/2019	8579.02
	07/17/2019	8579.02
	07/24/2019	8579.04
	07/31/2019	8579.02
	08/07/2019	8579.02
	08/14/2019	8579.02
	08/21/2019	8579.02
	08/28/2019	8579.02
	09/04/2019	8579.03
	09/11/2019	8579.04
	09/18/2019	8579.02
	09/25/2019	8579.03

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Table 1 – Weekly Groundwater Elevations (continued)

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
M-16	07/03/2019	8603.41
	07/10/2019	8603.25
	07/17/2019	8603.07
	07/24/2019	8602.82
	07/31/2019	8602.61
	08/07/2019	8602.42
	08/14/2019	8602.28
	08/21/2019	8602.07
	08/28/2019	8601.91
	09/04/2019	8601.77
	09/11/2019	8601.71
	09/18/2019	8601.63
	09/25/2019	8601.42
M-20	07/03/2019	8580.78
	07/10/2019	8580.58
	07/17/2019	8580.43
	07/24/2019	8580.37
	07/31/2019	8580.36
	08/07/2019	8580.32
	08/14/2019	8580.33
	08/21/2019	8580.37
	08/28/2019	8580.46
	09/04/2019	8580.40
	09/11/2019	8580.50
	09/18/2019	8580.58
	09/25/2019	8580.64

Table 2 – Quarterly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-3	07/31/2019	8578.02
BF-4	07/31/2019	8579.25
BF-5R	07/31/2019	8579.02
BF-6	07/31/2019	8578.97
M-11R	07/31/2019	8550.06
M-16	07/31/2019	8602.61
M-17	07/31/2019	8586.61
M-18	07/31/2019	8579.70
M-19	07/31/2019	8581.09
M-20	07/31/2019	8580.36
M-21	07/31/2019	8577.48
M-22	07/31/2019	8572.98
M-23	07/31/2019	8556.02
M-24	07/31/2019	8559.42
M-25	07/31/2019	DRY
M-26	07/31/2019	8543.25
M-27	07/31/2019	DRY
M-28	07/31/2019	8580.22
M-29	07/31/2019	8580.49
M-30	07/31/2019	8612.49
M-31	07/31/2019	8549.67
M-32	07/31/2019	8522.09
M-33	07/31/2019	8535.00

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2) The weekly groundwater table elevation data shall be tabulated and reported on the quarterly BMP reports, and the data will be used to evaluate compliance with the following permit limitations.

   The groundwater table elevation, based on the average of all measured values for each calendar month in the West Pit backfill groundwater monitoring wells BF-4 and BF-5, must be equal to or lower than an elevation of 8582 feet above sea level (ft. amsl).

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the measurements are shown in Table 1. The groundwater measurements for wells BF-4 and BF-5R were averaged by calendar month and the results are shown in Table 3. The July, August, September 2019 averages were below the 8582 ft. amsl required in Paragraph 2. No corrective action is required under the Paragraph 2 requirement and schedule compliance monitoring will continue unchanged next quarter.*

Table 3 – Quarterly West Pit Backfill Monthly Average Groundwater Table Elevations

Monitoring Well Identification	Month (2019)	Number of Observations	Average Monthly Groundwater Elevation (ft amsl)
BF-4	July	5	8579.24
	August	4	8579.24
	September	4	8579.23
BF-5R	July	5	8579.03
	August	4	8579.02
	September	4	8579.03

3) If the average monthly groundwater table elevation in the West Pit backfill for any calendar month, measured as described in the above paragraph, is greater than 8582 ft. amsl or the quarterly determination of the groundwater potentiometric surface map indicates that the flow of the groundwater is from the West Pit to the Rito Seco alluvium, the permittee shall verbally communicate such condition to WQCD within 24 hours of the determination of the condition (elevated West Pit backfill table or groundwater flow from the West Pit as indicated by the quarterly groundwater potentiometric surface map) and initiate the following compliance schedule.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the calendar month average groundwater measurement elevations (Table 3) were below the 8582 ft. amsl required in Paragraph 2. The July 31, 2019, potentiometric surface map (Figure 1) shows the groundwater flow gradient was from the Rito Seco alluvium to the West Pit backfill. Therefore, site operations demonstrated the West Pit backfill groundwater level was maintained at or below an elevation of 8582 ft. amsl through the quarter. Therefore, no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.3 is required.*

4) The quality of groundwater in the vicinity of the West Pit shall be monitored on a monthly basis in the Rito Seco alluvial groundwater monitoring wells M-19, M-21, M-24 and M-11R for the purposes of monitoring the changes in the quality of the plume or affected groundwater in the Rito Seco alluvial aquifer. Groundwater quality in these monitoring wells will be analyzed for pH, temperature, total dissolved solids, calcium, sulfate, manganese, fluoride, copper, and iron for the purpose of evaluating the status of the groundwater quality in the downgradient groundwater plume. The groundwater quality data will be summarized and transmitted to the WQCD in the quarterly BMP report required under Part I, Section E.1 of this permit.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly groundwater samples in the vicinity of the West Pit backfill area from Rito Seco alluvial monitoring wells M-19, M-21, M-24 and M-*

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11R. Trace metals prepared under 40 CFR Part 136 method 200.2 have been reported as total metals. Results of analyses performed on these wells are shown in Table 4. No corrective action is required under the Paragraph 4 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.

Table 4 – Rito Seco Alluvial Groundwater Quality Summary

Analyte	Reporting Units	Sample Date	Monitoring Well Identifier			
			M-11R	M-19	M-21	M-24
pH	SU	07/01/2019	6.86	6.53	6.56	6.67
		08/07/2019	6.79	6.53	6.59	6.53
		09/04/2019	6.98	6.78	6.77	6.74
Temperature	°C	07/01/2019	12.3	7.6	8.6	9.2
		08/07/2019	9.9	7.6	9.2	8.8
		09/04/2019	10.0	8.7	9.3	9.6
Calcium, Total	mg/L	07/01/2019	82.5	17.2	30.4	103
		08/07/2019	92.1	18.2	32.5	99.6
		09/04/2019	73.0	18.6	30.3	103
Copper, Dissolved	mg/L	07/01/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		08/07/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		09/04/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
Fluoride	mg/L	07/01/2019	1.01	1.15	1.49	0.799
		08/07/2019	0.881	0.988	1.41	0.729
		09/04/2019	0.938	1.06	1.37	0.718
Iron, Dissolved	mg/L	07/01/2019	< 0.100	0.239	< 0.100	5.21
		08/07/2019	0.135	0.183	< 0.100	5.68
		09/04/2019	< 0.100	0.199	< 0.100	5.25
Manganese, Dissolved	mg/L	07/01/2019	0.374	0.221	0.300	1.07
		08/07/2019	0.511	0.244	0.371	1.15
		09/04/2019	0.236	0.208	0.326	1.06
Sulfate	mg/L	07/01/2019	117	11.7	18.4	235
		08/07/2019	137	8.49	16.0	209
		09/04/2019	96.9	8.94	15.4	215
Total Dissolved Solids	mg/L	07/01/2019	344	87	139	525
		08/07/2019	426	111	140	515
		09/04/2019	335	94	158	514

5) The historical seeps were caused by the plume of affected groundwater and may, in the future, also be caused by natural variation in the flow of groundwater in the vicinity of the area where the past seeps occurred. The permittee shall conduct a monthly visual inspection of the area of historical seeps and the permittee shall report any seepage flow that is associated with the area historic seepage expression, as is identified in Figure 2 of the permit. Results of the seep monitoring shall be tabulated and summarized in the quarterly BMP report.

If these inspections identified the occurrence of seeps, the permittee will be required to communicate verbally to the WQCD within 24 hours of the seepage observation, followed by written notification within 7 calendar days of the seepage observation. Verbal updates will then be provided to the WQCD every second day thereafter until the WQCD has made a determination regarding the status of the West Pit groundwater control system through the implementation of the following compliance schedule.

Compliance Action Taken: *Battle Mountain Resources, Inc. performed monthly visual seepage expression inspections in the historic seepage area identified in Figure 2 of the permit. Visual observations during these inspections are shown in Table 5. No seepage expressions were observed in the historic seepage area during the third quarter of 2019. Therefore, no verbal or written notifications were required and the implementation of the compliance schedule was not required. No corrective action is required under the*

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Paragraph 5 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.

Table 5 – Monthly Seepage Expression Inspection Tabulation

Visual Inspection Date	Was Visual Observation of Seepage Determined in the Area of the Historic Seepage Expression	Comments
07/31/2019	No	All Dry
08/29/2019	No	All Dry
09/30/2019	No	All Dry

6) The BMP for the groundwater flow downgradient from the groundwater divide (see section VI.A.2 for the Rationale) that has been developed in the Rito Seco alluvial aquifer consists of a groundwater capture system in conjunction with groundwater table elevation control in the West Pit. The water management plan for the Rito Seco alluvial aquifer consists of pumping two groundwater capture wells (M-32 and M-33) located downgradient of the plume of affected groundwater. This action will allow flushing of constituents in the groundwater of the Rito Seco alluvial aquifer in that portion (plume) of the aquifer affected by previous flow of groundwater from the West Pit. Measurements of the groundwater table elevations will be taken on a weekly basis from M-32 and M-33. This data shall be tabulated and reported for outfall 002 on the quarterly BMP report, and the data will be used to evaluate compliance with the following permit limitation.

The groundwater table elevation, based on the average of all measured values for each calendar month at M-32 and M-33 in the Rito Seco alluvial aquifer, must be equal to or lower than an elevation of 8540 ft. amsl.

If the average monthly groundwater table elevations measured in the Rito Seco alluvial aquifer at M-32 and M-33 is greater than 8540 ft. amsl, the permitee shall initiate the following compliance schedule within 24 hours of the determination of groundwater table elevation exceedance.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the alluvial aquifer monitoring wells (M-32 and M-33) weekly and the resulting elevations are presented in Table 6. The groundwater elevations for wells M-32 and M-33 were averaged by calendar month and the results are shown in Table 6. The July, August, September 2019 averages were below the 8540 ft. amsl required under Paragraph 6. Therefore, site operations were in full compliance of Part I, Section 5.5 and there were no requirements(s) to initiate actions contained within the schedule of compliance for Section 5.5. No corrective action is required under Paragraph 6 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 6 – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2018)	Average Monthly Groundwater Elevation (ft amsl)
M-32	07/03/2019	8523.36	July	8522.13
	07/10/2019	8521.96		
	07/17/2019	8522.17		
	07/24/2019	8521.13		
	07/31/2019	8522.09		
	08/07/2019	8522.00	August	8523.51
	08/14/2019	8522.42		
	08/21/2019	8522.32		
	08/28/2019	8525.04		
	08/30/2019	8525.75		

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Table 6 (Cont) – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2019)	Average Monthly Groundwater Elevation (ft amsl)
M-32	09/04/2019	8525.46	September	8525.89
	09/11/2019	8525.54		
	09/18/2019	8526.06		
	09/25/2019	8526.59		
	09/30/2019	8525.78		
M-33	07/03/2019	8535.53	July	8535.08
	07/10/2019	8535.08		
	07/17/2019	8535.50		
	07/24/2019	8534.37		
	07/31/2019	8535.00		
	08/07/2019	8535.58	August	8536.10
	08/14/2019	8536.24		
	08/21/2019	8536.24		
	08/28/2019	8537.15		
	08/30/2019	8535.30		
	09/04/2019	8535.73	September	8534.97
	09/11/2019	8535.62		
	09/18/2019	8534.04		
	09/25/2019	8534.74		
	09/30/2019	8534.73		

7) The water quality of the Rito Seco will be assessed using surface water quality collected at RS-2, as shown in Figure 3. Surface water monitoring in the Rito Seco shall be conducted at RS-2 on a monthly basis and the laboratory analytical results shall be submitted to the WQCD in the quarterly BMP report. Water quality samples collected at RS-2 shall be analyzed for the following constituents: calcium, magnesium, sodium, potassium, ammonia, total dissolved solids, total hardness, pH, total suspended solids, cyanide (WAD and total), bicarbonate, alkalinity, chloride, sulfate, nitrate-nitrite, fluoride and the total and dissolved concentrations of aluminum, arsenic, barium, boron, cadmium, copper, chromium, iron, lead, manganese, mercury, nickel, selenium, silica, silver and zinc. The following compliance schedule shall be implemented in the event that any constituent exceeds the applicable water quality standards for the Rito Seco.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly surface water samples in July, August, September 2019 at location RS-2, as shown in Figure 3 of the permit. Results of analyses performed on these samples are shown in Table 7. Trace metals prepared under 40 CFR Part 136 method 200.2 have been reported as total metals. The results of the laboratory analytical testing show that the applicable water quality standards were met for the Rito Seco during the months of July, August, September 2019. Site operations were in full compliance of Part I, Section 5.7 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.7. Scheduled compliance monitoring will continue unchanged next quarter.*

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Table 7 – RS-2 Surface Water Quality Results

Analyte	Reporting Units	07/01/2019	08/07/2019	09/04/2019
Alkalinity	mg/L as $CaCO_3$	36.5	52.2	51.8
Aluminum, Dissolved	mg/L	< 0.08	< 0.08	< 0.08
Aluminum, Total	mg/L	0.59	0.40	0.29
Ammonia as N	mg/L	< 0.030	< 0.030	< 0.030
Arsenic, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Arsenic, Total	mg/L	< 0.00300	< 0.00300	< 0.00300
Barium, Dissolved	mg/L	0.0167	0.0217	0.0243
Barium, Total	mg/L	0.0247	0.0267	0.0293
Bicarbonate	mg/L as $CaCO_3$	36.8	52.2	51.8
Boron, Dissolved	mg/L	< 0.040	< 0.040	< 0.040
Boron, Total	mg/L	< 0.040	< 0.040	< 0.040
Cadmium, Dissolved	mg/L	< 0.00030	< 0.00030	< 0.00030
Cadmium, Total	mg/L	< 0.00020	< 0.00020	< 0.00020
Calcium, Total	mg/L	11.1	15.4	15.5
Carbonate	mg/L as $CaCO_3$	< 1.0	< 1.0	< 1.0
Chloride	mg/L	1.16	0.56	3.86
Chromium, Dissolved	mg/L	< 0.0060	< 0.0060	< 0.0060
Chromium, Total	mg/L	< 0.0060	< 0.0060	< 0.0060
Copper, Dissolved	mg/L	< 0.00300	< 0.00300	< 0.00300
Copper, Total	mg/L	0.00153	0.00131	0.00100
Cyanide, Total	mg/L	< 0.0100	<0.0100	<0.0100J*
Cyanide, WAD	mg/L	< 0.0100	< 0.0100	< 0.0100
Fluoride	mg/L	0.485	0.455	0.759
Hardness	mg/L	40.4	54.3	56.1
Iron, Dissolved	mg/L	0.123	0.187	0.201
Iron, Total	mg/L	0.702	0.640	0.690
Lead, Dissolved	mg/L	< 0.00500	< 0.00500	< 0.00500
Lead, Total	mg/L	< 0.00300	< 0.00300	< 0.00300
Magnesium, Total	mg/L	3.05	3.82	4.24
Manganese, Dissolved	mg/L	0.0186	0.0167	0.0089
Manganese, Total	mg/L	0.0565	0.0510	0.0658
Mercury, Dissolved	mg/L	< 0.00020	< 0.00020	< 0.00020
Mercury, Total	mg/L	< 0.00020	< 0.00020	< 0.00020
Nickel, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Nickel, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Nitrate+Nitrite as N	mg/L	< 0.050	0.057	< 0.050
pH	SU	7.02	6.93	7.10
Potassium, Total	mg/L	0.85	0.83	1.07
Selenium, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Selenium, Total	mg/L	< 0.0030	< 0.0030	< 0.0030
Silica, Total	mg/L	< 0.000100	< 0.000100	< 0.000100
Silver, Dissolved	mg/L	< 0.000100	< 0.000100	< 0.000100
Silver, Total	mg/L	4.65	3.67	9.55
Sodium, Total	mg/L	0.85	0.83	1.07
Sulfate	mg/L	8.22	4.47	19.8
Total Dissolved Solids	mg/L	63	73	104
Total Suspended Solids	mg/L	< 5.0	12.0	7.0
Zinc, Dissolved	mg/L	< 0.010	< 0.010	< 0.010
Zinc, Total	mg/L	< 0.010	< 0.010	< 0.010

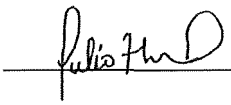
*-Cyanide result is considered estimated as it was analyzed outside of analytical holding times. The sample could not be resampled within the month of September; however, a verification sample was collected in October 2019. Historically this sample has not shown the presence of cyanide above the reporting limit.

Electronic Document

8) If any component of the groundwater control system is not performing within the limits set forth in this permit, the permittee will be required to initiate appropriate compliance schedule activities, including the preparation of a response plan, for any and all components of the groundwater control system that do not meet the applicable requirements. The permittee shall also conduct weekly sampling at RS-2 until such time as the other compliance schedule activity(ies) have been completed.

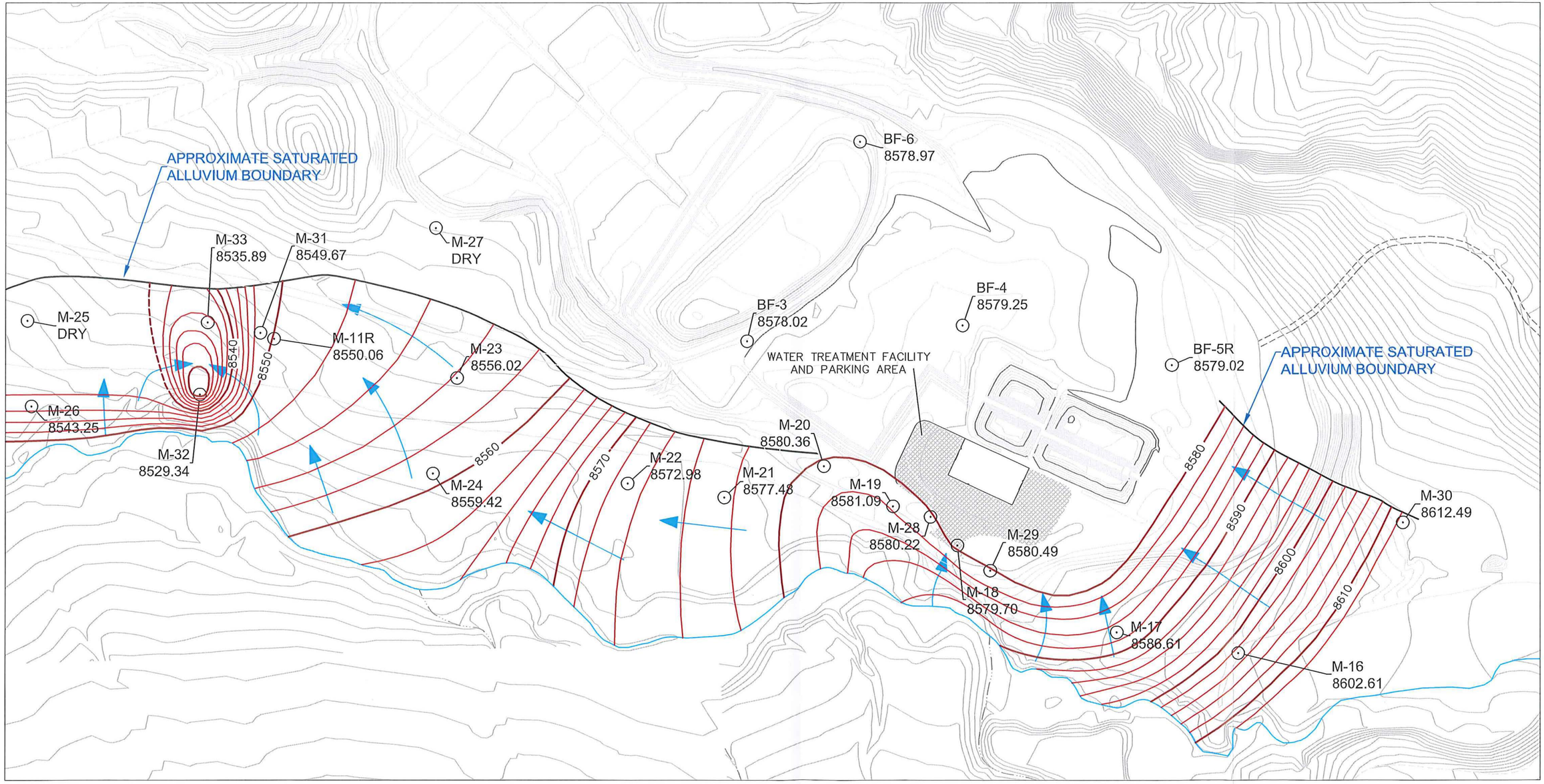
Compliance Action Taken: *As demonstrated by the information and data presented in this report, all components of the groundwater control system performed within the limits set forth in the permit. Therefore, site operations were in full compliance of Part I, Section 8 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 8.*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is to the best of my knowledge and belief, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Julio Madrid Signature: 

Date: October 26, 2019

Electronic Document



KEY

NORTH

SCALE IN FEET
0 200

GROUND WATER FLOW DIRECTION

LINE OF EQUIPOTENTIAL
8560
HYDRAULIC HEAD

M-23
8555.72
WELL NAME
WATER LEVEL

NO	REVISION DESCR.	DATE	BY
A			
B			
C			
1			
2			

THIS SHEET, INCLUDING ENGINEERING, DESIGNED AND SPECIFICATIONS IS INTENDED SOLELY FOR THE PROJECT STATED IN THE TITLE BLOCK. IT MAY NOT BE SUITABLE OR SAFE FOR OTHER PROJECTS. ANY OTHER USE OF THE SHEET, WITHOUT THE WRITTEN CONSENT OF THE ENGINEER, IS PROHIBITED.

ALLUVIAL GROUND WATER POTENTIOMETRIC SURFACE MAP

THIRD QUARTER (JULY 2019)

SAN LUIS PROJECT

Rocky Mountain Resources, Inc. Rocky Mountain Exploration, Inc.

ISSUED BY
Engineering Analytics, Inc.

Drawn By:	RDP
Designed By:	AF
Approved By:	AF
Date:	10/28/2019
Project:	21010506
Scale:	1" = 200'
Sheet Number:	1

O:_05 San Luis\POTENTIOMETRIC MAPS\GW Map 2019 3rd qtr\Groundwater 2019 3rd Qtr.dwg SAVED:10/25/19 PRINTED:10/28/19

Electronic Document

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

Received
FEB 04 2020
Water Quality Control

January 27, 2020

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project - San Luis, Colorado
Fourth Quarter 2020 – DMR's, BMP, Influent Summary and WET Testing Reports
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

Please find the enclosed Battle Mountain Resources, Inc. "San Luis Project" (Permit No. CO0045675) Colorado Department of Public Health and Environment-Colorado Discharge Permit System (CDPS) Best Management Practices (BMP) report for permitted outfall 002 for the fourth quarter 2019. The quarterly BMP report provides the required data associated with groundwater well elevations, the quarterly potentiometric surface map and groundwater well chemistry.

In addition, the fourth quarter 2019 Discharge Monitoring Reports (DMRs) were submitted for each of the permitted water treatment plant discharges in the NetDMR System and the WET Testing Reports were attached to the appropriate DMR submittal in NetDMR. These permitted discharges consist of water treatment plant Discharge Numbers 001-A and 001-B. During the quarter, the maximum 30-day average flow was 0.23 million gallons of water discharged per day, therefore the applicable permit criteria for the reporting period is associated with discharge number 001-B.

Should any questions arise or if I can be of any assistance providing clarification, please call me at (719) 379-0538.

Sincerely,

Julio Madrid
Authorized Agent
Battle Mountain Resources, Inc.

Cc: BMRI File
Devon Horntvedt, Newmont USA Limited
Lawrence Fiske, Newmont USA Limited
Tim Runnells, Engineering Analytics
Alan Fosdick, Engineering Analytics

Battle Mountain Resources, Inc.
San Luis Project
P.O. Box 310
San Luis, Colorado 81152-0310
(719) 379-0798

January 27, 2020

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: WQDC-B2 – DMR Receipt
4300 Cherry Creek Drive
Denver, CO 80246-1530

Re: Battle Mountain Resources, Inc.
San Luis Project
Fourth Quarter 2019 BMP Report
CDPHE CDPS Permit No. CO0045675

Dear Sir or Madame:

In accordance with and compliance of the permit limitations and permit terms and conditions contained in Part I, Section 5 Discharge Point 002: (Permit Limitations, Best Management Practices, and Schedule of Compliance of the *State of Colorado Authorization to Discharge Under the Colorado Discharge Permit System*, Battle Mountain Resources, Inc. submits the following *Quarterly Best Management Practices Report.*

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Sections 61.8(2), 61.8(3)(n), and 61.8(3)(r), 5 C.C.R. 1002-61, the permittee shall continue to implement the following limitations, compliance schedules, and Best Management Practices (BMPs).

The attainment of applicable water quality standards will be implemented and evaluated through the application of the following limitations, compliance schedules, and BMPs that are designed to monitor and control the groundwater quality and quantity discharging from the West Pit to the Rito Seco alluvial aquifer.

Specifically, the limitations, compliance schedules, and BMPs are those activities that address contaminated groundwater that may flow into the Rito Seco. This includes: (1) the potential flow of the affected groundwater from the West Pit that, in the past, manifested itself in the formation of the surface seeps along the arroyo sidewall of the Rito Seco, and (2) the plume of affected groundwater within the Rito Seco alluvial aquifer downgradient of the West Pit that flows along the naturally occurring hydraulic gradient and that may flow into the Rito Seco. The activities will include the following specific requirements:

1) The elevation of the groundwater table in the vicinity of the West Pit shall be measured on a weekly basis at the following locations: (i) the West Pit backfill wells BF-4 and BF-5 and (ii) the Rito Seco alluvial wells M-16 and M-20, as shown in Figure 3 of the permit, for purposes of determining the performance of the

"pump and treat" system that regulates the flow and quality of the groundwater in the seepage front. The permittee shall also determine on a quarterly basis the elevations of the groundwater table at BF-3, BF-4, BF-5, BF-6, M-11R, M-16, M-17, M-18, M-19, M-20, M-21, M-22, M-23, M-24, M-25, M-26, M-27, M-28, M-29, M-30, M-31, M-32, and M-33 for the purpose of developing a groundwater potentiometric map as monitoring confirmation of the groundwater flow direction. The quarterly data regarding depth to groundwater and groundwater potentiometric surface map will be submitted to the WQCD with the BMP report as described.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the weekly West Pit backfill and alluvial wells as required under Paragraph 1 of the specific requirements. Measurements obtained for the weekly West Pit backfill wells (BF-4 and BF-5R) and alluvial wells (M-16 and M-20) are shown in Table 1. The quarterly groundwater elevations required under Paragraph 1 were also measured and are shown in Table 2. A potentiometric surface map, developed by Engineering Analytics, is shown in Figure 1. The groundwater table elevations and potentiometric map confirm that the groundwater flow gradient during the fourth quarter of 2019 was from the Rito Seco to the West Pit. No corrective action is required under Paragraph 1 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 1 – Weekly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-4	10/02/2019	8579.22
	10/09/2019	8579.24
	10/16/2019	8579.22
	10/23/2019	8579.28
	10/30/2019	8579.32
	11/06/2019	8579.26
	11/13/2019	8579.28
	11/19/2019	8579.25
	11/27/2019	8579.22
	12/04/2019	8579.22
	12/11/2019	8579.24
	12/18/2019	8579.20
	12/26/2019	8579.32
BF-5R	10/02/2019	8579.03
	10/09/2019	8579.04
	10/16/2019	8579.03
	10/23/2019	8579.07
	10/30/2019	8579.11
	11/06/2019	8579.08
	11/13/2019	8579.08
	11/19/2019	8579.07
	11/27/2019	8579.03
	12/04/2019	8579.04
	12/11/2019	8579.04
	12/18/2019	8579.01
	12/26/2019	8579.11

Table 1 – Weekly Groundwater Elevations (continued)

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
M-16	10/02/2019	8601.52
	10/09/2019	8601.49
	10/16/2019	8601.46
	10/23/2019	8601.46
	10/30/2019	8601.44
	11/06/2019	8601.45
	11/13/2019	8601.43
	11/19/2019	8601.40
	11/27/2019	8601.37
	12/04/2019	8601.35
	12/11/2019	8601.32
	12/18/2019	8601.26
	12/26/2019	8601.23
M-20	10/02/2019	8580.65
	10/09/2019	8580.67
	10/16/2019	8580.65
	10/23/2019	8580.72
	10/30/2019	8580.71
	11/06/2019	8580.63
	11/13/2019	8580.67
	11/19/2019	8580.65
	11/27/2019	8580.60
	12/04/2019	8580.56
	12/11/2019	8580.57
	12/18/2019	8580.49
	12/26/2019	8580.46

Table 2 – Quarterly Groundwater Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)
BF-3	10/31/2019	8578.10
BF-4	10/31/2019	8579.32
BF-5R	10/31/2019	8579.10
BF-6	10/31/2019	8579.03
M-11R	10/31/2019	8551.06
M-16	10/31/2019	8601.44
M-17	10/31/2019	8586.31
M-18	10/31/2019	8579.71
M-19	10/31/2019	8581.23
M-20	10/31/2019	8580.71
M-21	10/31/2019	8578.25
M-22	10/31/2019	8573.70
M-23	10/31/2019	8556.70
M-24	10/31/2019	8559.99
M-25	10/31/2019	DRY
M-26	10/31/2019	8544.18
M-27	10/31/2019	DRY
M-28	10/31/2019	8580.23
M-29	10/31/2019	8580.47
M-30	10/31/2019	8610.94
M-31	10/31/2019	8550.60
M-32	10/31/2019	8526.95
M-33	10/31/2019	8536.51

2) The weekly groundwater table elevation data shall be tabulated and reported on the quarterly BMP reports, and the data will be used to evaluate compliance with the following permit limitations.

The groundwater table elevation, based on the average of all measured values for each calendar month in the West Pit backfill groundwater monitoring wells BF-4 and BF-5, must be equal to or lower than an elevation of 8582 feet above sea level (ft. amsl).

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the measurements are shown in Table 1. The groundwater measurements for wells BF-4 and BF-5R were averaged by calendar month and the results are shown in Table 3. The October, November, December 2019 averages were below the 8582 ft. amsl required in Paragraph 2. No corrective action is required under the Paragraph 2 requirement and schedule compliance monitoring will continue unchanged next quarter.*

Table 3 – Quarterly West Pit Backfill Monthly Average Groundwater Table Elevations

Monitoring Well Identification	Month (2019)	Number of Observations	Average Monthly Groundwater Elevation (ft amsl)
BF-4	October	5	8579.26
	November	4	8579.25
	December	4	8579.25
BF-5R	October	5	8579.06
	November	4	8579.07
	December	4	8579.05

3) If the average monthly groundwater table elevation in the West Pit backfill for any calendar month, measured as described in the above paragraph, is greater than 8582 ft. amsl or the quarterly determination of the groundwater potentiometric surface map indicates that the flow of the groundwater is from the West Pit to the Rito Seco alluvium, the permittee shall verbally communicate such condition to WQCD within 24 hours of the determination of the condition (elevated West Pit backfill table or groundwater flow from the West Pit as indicated by the quarterly groundwater potentiometric surface map) and initiate the following compliance schedule.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the West Pit backfill monitoring wells (BF-4 and BF-5R) weekly and the calendar month average groundwater measurement elevations (Table 3) were below the 8582 ft. amsl required in Paragraph 2. The October 31, 2019, potentiometric surface map (Figure 1) shows the groundwater flow gradient was from the Rito Seco alluvium to the West Pit backfill. Therefore, site operations demonstrated the West Pit backfill groundwater level was maintained at or below an elevation of 8582 ft. amsl through the quarter. Therefore, no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.3 is required.*

4) The quality of groundwater in the vicinity of the West Pit shall be monitored on a monthly basis in the Rito Seco alluvial groundwater monitoring wells M-19, M-21, M-24 and M-11R for the purposes of monitoring the changes in the quality of the plume or affected groundwater in the Rito Seco alluvial aquifer. Groundwater quality in these monitoring wells will be analyzed for pH, temperature, total dissolved solids, calcium, sulfate, manganese, fluoride, copper, and iron for the purpose of evaluating the status of the groundwater quality in the downgradient groundwater plume. The groundwater quality data will be summarized and transmitted to the WQCD in the quarterly BMP report required under Part I, Section E.1 of this permit.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly groundwater samples in the vicinity of the West Pit backfill area from Rito Seco alluvial monitoring wells M-19, M-21, M-24 and M-*

11R. Trace metals prepared under 40 CFR Part 136 method 200.2 have been reported as total metals. Results of analyses performed on these wells are shown in Table 4. No corrective action is required under the Paragraph 4 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.

Table 4 – Rito Seco Alluvial Groundwater Quality Summary

Analyte	Reporting Units	Sample Date	Monitoring Well Identifier			
			M-11R	M-19	M-21	M-24
pH	SU	10/01/2019	7.29	7.03	6.83	7.13
		11/06/2019	7.22	6.77	6.79	7.04
		12/09/2019	7.29	6.88	7.04	7.19
Temperature	°C	10/01/2019	9.9	9.3	9.1	9.1
		11/06/2019	10.2	10.6	8.8	9.2
		12/09/2019	9.6	9.9	8.4	8.4
Calcium, Total	mg/L	10/01/2019	61.5	17.4	25.2	86.5
		11/06/2019	75.3	19.9	29.0	102
		12/09/2019	72.9	19.6	29.1	97.0
Copper, Dissolved	mg/L	10/01/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		11/06/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
		12/09/2019	< 0.00300	< 0.00300	< 0.00300	< 0.00300
Fluoride	mg/L	10/01/2019	0.892	0.995	1.26	0.721
		11/06/2019	0.877	0.971	1.24	0.688
		12/09/2019	0.910	1.06	1.43	0.770
Iron, Dissolved	mg/L	10/01/2019	< 0.100	0.187	0.119	5.72
		11/06/2019	< 0.100	0.233	0.135	5.34
		12/09/2019	< 0.100	0.225	0.100	5.17
Manganese, Dissolved	mg/L	10/01/2019	0.229	0.225	0.268	1.15
		11/06/2019	0.154	0.222	0.280	1.07
		12/09/2019	0.155	0.246	0.327	1.10
Sulfate	mg/L	10/01/2019	91.1	9.15	13.2	207
		11/06/2019	97.4	10.4	14.1	207
		12/09/2019	99.5	9.86	15.3	212
Total Dissolved Solids	mg/L	10/01/2019	291	85	117	490
		11/06/2019	266	108	85	447
		12/09/2019	309	99	131	515

5) The historical seeps were caused by the plume of affected groundwater and may, in the future, also be caused by natural variation in the flow of groundwater in the vicinity of the area where the past seeps occurred. The permittee shall conduct a monthly visual inspection of the area of historical seeps and the permittee shall report any seepage flow that is associated with the area historic seepage expression, as is identified in Figure 2 of the permit. Results of the seep monitoring shall be tabulated and summarized in the quarterly BMP report.

   If these inspections identified the occurrence of seeps, the permittee will be required to communicate verbally to the WQCD within 24 hours of the seepage observation, followed by written notification within 7 calendar days of the seepage observation. Verbal updates will then be provided to the WQCD every second day thereafter until the WQCD has made a determination regarding the status of the West Pit groundwater control system through the implementation of the following compliance schedule.

   Compliance Action Taken: *Battle Mountain Resources, Inc. performed monthly visual seepage expression inspections in the historic seepage area identified in Figure 2 of the permit. Visual observations during these inspections are shown in Table 5. No seepage expressions were observed in the historic seepage area during the fourth quarter of 2019. Therefore, no verbal or written notifications were required and the implementation of the compliance schedule was not required. No corrective action is required under the*

Paragraph 5 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.

Table 5 – Monthly Seepage Expression Inspection Tabulation

Visual Inspection Date	Was Visual Observation of Seepage Determined in the Area of the Historic Seepage Expression	Comments
10/31/2019	No	All Dry
11/30/2019	No	All Dry
12/31/2019	No	All Dry

6) The BMP for the groundwater flow downgradient from the groundwater divide (see section VI.A.2 for the Rationale) that has been developed in the Rito Seco alluvial aquifer consists of a groundwater capture system in conjunction with groundwater table elevation control in the West Pit. The water management plan for the Rito Seco alluvial aquifer consists of pumping two groundwater capture wells (M-32 and M-33) located downgradient of the plume of affected groundwater. This action will allow flushing of constituents in the groundwater of the Rito Seco alluvial aquifer in that portion (plume) of the aquifer affected by previous flow of groundwater from the West Pit. Measurements of the groundwater table elevations will be taken on a weekly basis from M-32 and M-33. This data shall be tabulated and reported for outfall 002 on the quarterly BMP report, and the data will be used to evaluate compliance with the following permit limitation.

   The groundwater table elevation, based on the average of all measured values for each calendar month at M-32 and M-33 in the Rito Seco alluvial aquifer, must be equal to or lower than an elevation of 8540 ft. amsl.

   If the average monthly groundwater table elevations measured in the Rito Seco alluvial aquifer at M-32 and M-33 is greater than 8540 ft. amsl, the permitee shall initiate the following compliance schedule within 24 hours of the determination of groundwater table elevation exceedance.

Compliance Action Taken: *Battle Mountain Resources, Inc. measured the alluvial aquifer monitoring wells (M-32 and M-33) weekly and the resulting elevations are presented in Table 6. The groundwater elevations for wells M-32 and M-33 were averaged by calendar month and the results are shown in Table 6. The October, November, December 2019 averages were below the 8540 ft. amsl required under Paragraph 6. Therefore, site operations were in full compliance of Part I, Section 5.5 and there were no requirements(s) to initiate actions contained within the schedule of compliance for Section 5.5. No corrective action is required under Paragraph 6 specific requirement and scheduled compliance monitoring will continue unchanged next quarter.*

Table 6 – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2019)	Average Monthly Groundwater Elevation (ft amsl)
M-32	10/02/2019	8525.65	October	8526.75
	10/09/2019	8527.09		
	10/16/2019	8527.29		
	10/23/2019	8526.91		
	10/30/2019	8526.61		
	10/31/2019	8526.95		
	11/06/2019	8526.58	November	8526.41
	11/13/2019	8526.35		
	11/19/2019	8526.32		
	11/27/2019	8526.36		
	11/28/2019	8526.42		

Table 6 (Cont) – Weekly/Monthly Rito Seco Alluvial Aquifer Average Groundwater Table Elevations

Monitoring Well Identification	Observation Date	Groundwater Elevation (ft amsl)	Month (2019)	Average Monthly Groundwater Elevation (ft amsl)
M-32	12/04/2019	8526.32	December	8527.06
	12/11/2019	8526.27		
	12/18/2019	8527.13		
	12/26/2019	8527.29		
	12/31/2019	8528.31		
M-33	10/02/2019	8534.85	October	8535.85
	10/09/2019	8535.38		
	10/16/2019	8535.77		
	10/23/2019	8536.14		
	10/30/2019	8536.46		
	10/31/2019	8536.51		
	11/06/2019	8536.67	November	8537.52
	11/13/2019	8537.30		
	11/19/2019	8537.52		
	11/27/2019	8538.07		
	11/28/2019	8538.04		
	12/04/2019	8538.36	December	8536.09
	12/11/2019	8538.45		
	12/18/2019	8538.66		
	12/26/2019	8538.70		
	12/31/2019	8526.29		

7) The water quality of the Rito Seco will be assessed using surface water quality collected at RS-2, as shown in Figure 3. Surface water monitoring in the Rito Seco shall be conducted at RS-2 on a monthly basis and the laboratory analytical results shall be submitted to the WQCD in the quarterly BMP report. Water quality samples collected at RS-2 shall be analyzed for the following constituents: calcium, magnesium, sodium, potassium, ammonia, total dissolved solids, total hardness, pH, total suspended solids, cyanide (WAD and total), bicarbonate, alkalinity, chloride, sulfate, nitrate-nitrite, fluoride and the total and dissolved concentrations of aluminum, arsenic, barium, boron, cadmium, copper, chromium, iron, lead, manganese, mercury, nickel, selenium, silica, silver and zinc. The following compliance schedule shall be implemented in the event that any constituent exceeds the applicable water quality standards for the Rito Seco.

Compliance Action Taken: *Battle Mountain Resources, Inc. collected monthly surface water samples in October, November, December 2019 at location RS-2, as shown in Figure 3 of the permit. Results of analyses performed on these samples are shown in Table 7. Trace metals prepared under 40 CFR Part 136 method 200.2 have been reported as total metals. The results of the laboratory analytical testing show that the applicable water quality standards were met for the Rito Seco during the months of October, November, December 2019. Site operations were in full compliance of Part I, Section 5.7 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 5.7. Scheduled compliance monitoring will continue unchanged next quarter.*

Table 7 – RS-2 Surface Water Quality Results

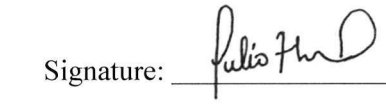
Analyte	Reporting Units	10/28/2019	11/06/2019	12/09/2019
Alkalinity	mg/L as $CaCO_3$	61.1	45.5	60.6
Aluminum, Dissolved	mg/L	< 0.08	< 0.08	< 0.08
Aluminum, Total	mg/L	< 0.08	< 0.08	0.18
Ammonia as N	mg/L	< 0.030	< 0.030	< 0.030
Arsenic, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Arsenic, Total	mg/L	< 0.00300	< 0.00300	< 0.00300
Barium, Dissolved	mg/L	0.0239	0.0215	0.0221
Barium, Total	mg/L	0.0233	0.0226	0.0243
Bicarbonate	mg/L as $CaCO_3$	61.1	45.5	60.6
Boron, Dissolved	mg/L	< 0.040	< 0.040	< 0.040
Boron, Total	mg/L	< 0.040	< 0.040	< 0.040
Cadmium, Dissolved	mg/L	< 0.00030	< 0.00030	< 0.00030
Cadmium, Total	mg/L	< 0.00020	< 0.00020	< 0.00020
Calcium, Total	mg/L	17.0	15.3	16.5
Carbonate	mg/L as $CaCO_3$	< 1.0	< 1.0	< 1.0
Chloride	mg/L	1.12	5.78	0.86
Chromium, Dissolved	mg/L	< 0.0060	< 0.0060	< 0.0060
Chromium, Total	mg/L	< 0.0060	< 0.0060	< 0.0060
Copper, Dissolved	mg/L	< 0.00300	< 0.00300	< 0.00300
Copper, Total	mg/L	< 0.00100	< 0.00100	< 0.00100
Cyanide, Total	mg/L	< 0.0100	<0.0100	<0.0100
Cyanide, WAD	mg/L	< 0.01	< 0.0100	< 0.0100
Fluoride	mg/L	0.505	0.896	0.554
Hardness	mg/L	59.3	56.2	59.1
Iron, Dissolved	mg/L	0.148	< 0.100	0.110
Iron, Total	mg/L	0.238	0.182	0.379
Lead, Dissolved	mg/L	< 0.00500	< 0.00500	< 0.00500
Lead, Total	mg/L	< 0.00300	< 0.00300	< 0.00300
Magnesium, Total	mg/L	4.09	4.39	4.31
Manganese, Dissolved	mg/L	0.0181	0.0167	0.0230
Manganese, Total	mg/L	0.0262	0.0221	0.0441
Mercury, Dissolved	mg/L	< 0.00020	< 0.00020	< 0.00020
Mercury, Total	mg/L	< 0.00020	< 0.00020	< 0.00020
Nickel, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Nickel, Total	mg/L	< 0.0100	< 0.0100	< 0.0100
Nitrate+Nitrite as N	mg/L	< 0.050	< 0.050	0.053
pH	SU	7.83	7.45	7.33
Potassium, Total	mg/L	1.28	1.23	0.80
Selenium, Dissolved	mg/L	< 0.0100	< 0.0100	< 0.0100
Selenium, Total	mg/L	< 0.0030	< 0.0030	< 0.0030
Silica, Total	mg/L	< 0.000100	< 0.000100	< 0.000100
Silver, Dissolved	mg/L	< 0.000100	< 0.000100	< 0.000100
Silver, Total	mg/L	4.70	12.9	4.05
Sodium, Total	mg/L	1.28	1.23	0.80
Sulfate	mg/L	7.01	27.4	7.54
Total Dissolved Solids	mg/L	90	115	89
Total Suspended Solids	mg/L	< 5.0	< 5.0	7.0
Zinc, Dissolved	mg/L	< 0.010	< 0.010	< 0.010
Zinc, Total	mg/L	< 0.010	< 0.010	< 0.010

8) If any component of the groundwater control system is not performing within the limits set forth in this permit, the permittee will be required to initiate appropriate compliance schedule activities, including the preparation of a response plan, for any and all components of the groundwater control system that do not

meet the applicable requirements. The permittee shall also conduct weekly sampling at RS-2 until such time as the other compliance schedule activity(ies) have been completed.

Compliance Action Taken: *As demonstrated by the information and data presented in this report, all components of the groundwater control system performed within the limits set forth in the permit. Therefore, site operations were in full compliance of Part I, Section 8 and there was no requirement(s) to initiate actions contained within the schedule of compliance for Section 8.*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is to the best of my knowledge and belief, is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Julio Madrid Signature: 

Date: January 27, 2020

APPROXIMATE SATURATED ALLUVIUM BOUNDARY

M-33 8537.32

M-31 8550.60

M-27 DRY

BF-6 8579.03

M-25 DRY

M-11R 8551.06

M-23 8556.70

BF-3 8578.10

BF-4 8579.32

WATER TREATMENT FACILITY AND PARKING AREA

BF-5R 8579.10

APPROXIMATE SATURATED ALLUVIUM BOUNDARY

M-26 8544.18

M-32 8533.03

M-24 8559.99

M-20 8580.71

M-22 8573.70

M-21 8578.25

M-19 8581.23

M-28 8580.23

M-29 8580.47

M-18 8579.71

M-17 8586.31

M-30 8610.94

M-16 8601.44

8550

8560

8570

8580

8590

8600

8610

KEY

NORTH

SCALE IN FEET
0 200

GROUND WATER FLOW DIRECTION

LINE OF EQUIPOTENTIAL HYDRAULIC HEAD

8560

M-23 8555.72

WELL NAME

WATER LEVEL

NO	REVISION DESCR.	DATE	BY
A			
B			
C			
1			
2			

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ALLUVIAL GROUND WATER POTENTIOMETRIC SURFACE MAP

FOURTH QUARTER (OCTOBER 2019)

SAN LUIS PROJECT

Alpine Mountain Resources, Inc. San Luis, Colorado

ISSUED BY

Engineering Analytics, Inc.

Drawn By:	RDP
Designed By:	AF
Approved By:	AF
Date:	01/24/2020
Project:	210105:06
Scale:	1" = 200'
Sheet Number:	1

O:_05 San Luis\POTENTIOMETRIC MAPS\GW Map 2019 4th qtr\Groundwater 2019 4th Qtr.dwg SAVED:1/23/20 PRINTED:1/24/20

Battle Mountain Resources, Inc.
San Luis Gold Project - Discharge Permit CO-0045675
Wastewater Treatment Plant - 2019 Influent Analytical Results Summary

Analyte	Reporting Units	POND1
		07/30/2019
Aluminum, Total Recoverable	mg/L	LT 0.0100
Arsenic, Total	mg/L	LT 0.00750
Arsenic, Total Recoverable	mg/L	LT 0.00300
Cadmium, Potentially Dissolved	mg/L	LT 0.00030
Chloride	mg/L	4.89
Chromium, Total Recoverable	mg/L	LT 0.0060
Copper, Potentially Dissolved	mg/L	LT 0.00300
Cyanide, WAD	mg/L	LT 0.0100
Fluoride	mg/L	2.54
Iron, Dissolved	mg/L	LT 0.100
Iron, Total Recoverable	mg/L	LT 0.100
Lead, Potentially Dissolved	mg/L	LT 0.00500
Manganese, Dissolved	mg/L	1.43
Mercury, Total	mg/L	LT 0.00020
Molybdenum, Total Recoverable	mg/L	0.029
Nickel, Potentially Dissolved	mg/L	LT 0.0100
Selenium, Potentially Dissolved	mg/L	LT 0.0100
Silver, Potentially Dissolved	mg/L	LT 0.000100
Sulfate	mg/L	122
Sulfide	mg/L	LT 1.00
Total Dissolved Solids	mg/L	393
Total Suspended Solids	mg/L	LT 5.0
Uranium, Potentially Dissolved	mg/L	0.0159
Zinc, Potentially Dissolved	mg/L	LT 0.010
Radium 226/228	pCi/L	LT 2.1
Mercury, Total (Low Level)	ng/L	LT 0.5

REPORT REQUEST

From: Division of Reclamation, Mining and Safety <dnr_drms_permitadmin@state.co.us>
Sent: Saturday, February 22, 2020 12:14:56 AM
To: Julio Madrid <Julio.Madrid@newmont.com>
Subject: (EXTERNAL)Annual Fee, Report, and Map Due

02/22/20

Annual Fee, Report, and Map Due

Under the terms of your NOI or Permit and Colorado Statutes, you must submit an Annual Fee and Annual Report (including a map). You must pay the Annual Fee and submit an Annual Report each year until reclamation responsibility release is granted. The Annual Fee is not a renewal fee. The Fee and Report are for last year's exploration or mining and reclamation season, and must be paid even if your operation was inactive.

If you have requested reclamation responsibility release from the Division of Reclamation, Mining and Safety ("Division") but release has not been granted by the anniversary date listed below, the Annual Fee, Report and Map must be submitted. If the permit is released before the anniversary date, then by Statute, it is not necessary to pay an Annual Fee or submit an Annual Report for that year. The annual fee, report, and map are due on or before the Anniversary Date for the following operation:

Permit: M1988112

ePermit Number: 127925

Operation Name: San Luis Project

Anniversary Date: 03/23/20

Total Fee Due: $1,150.00

As of January 1, 2018, all annual reports, maps and fees must be filed electronically. If you have not yet set up your ePermitting account, click on the link below to get started:

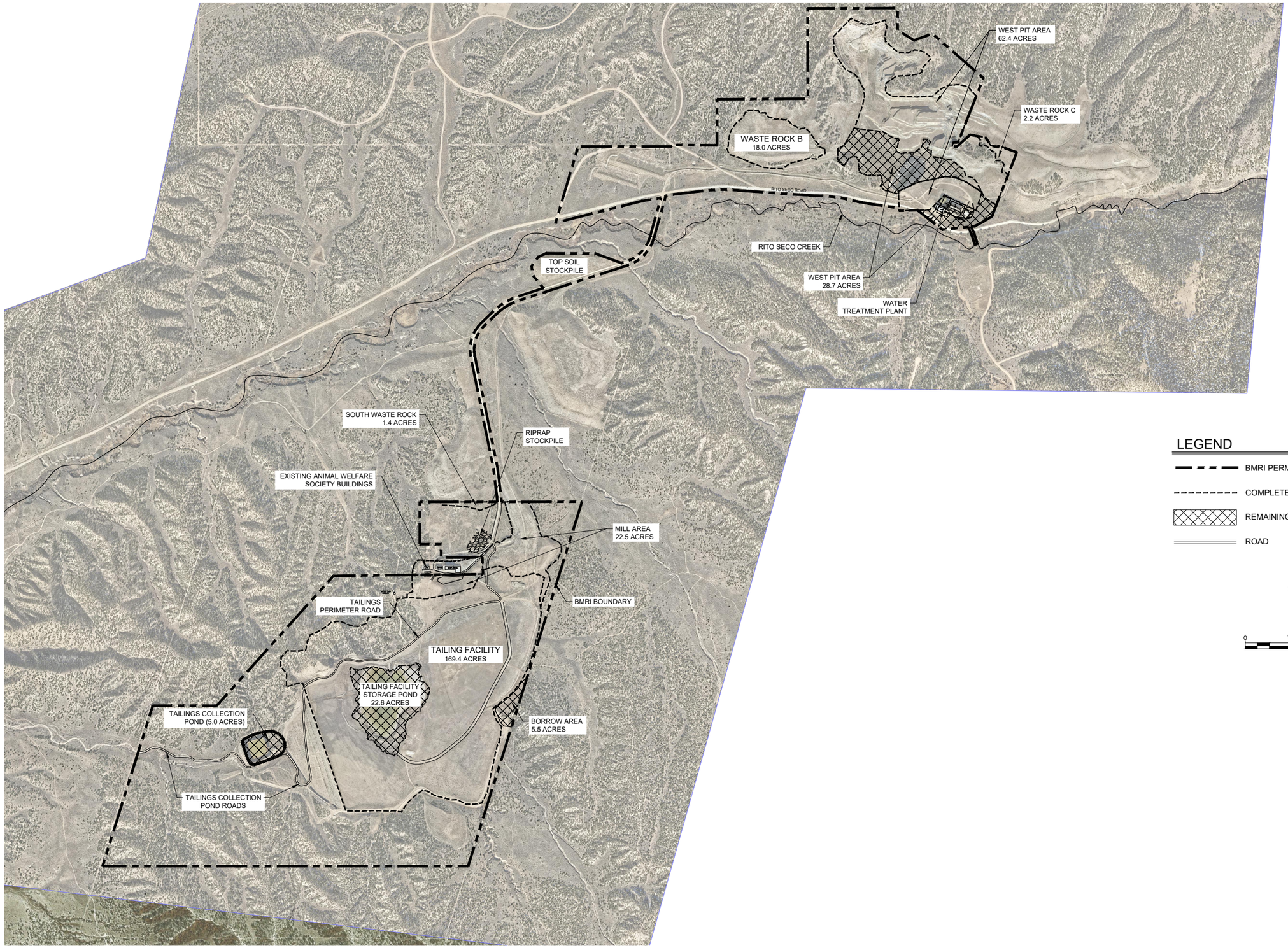
http://mining.state.co.us/Pages/ePermitting.aspx

If you have already established your ePermitting account, click on the link below to file your report, upload your map, and pay your fee online now.

https://dnrforms.state.co.us/Forms/DRMSeForms_LandingPage

If you need additional information or have any questions, please contact Lucas West at the Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at (303) 866-3567 x8187, or by email at lucas.west@state.co.us.

2019 SITE MAP



LEGEND

- BMRI PERMIT BOUNDARY
- COMPLETED RECLAMATION AREAS
- REMAINING RECLAMATION AREAS
- ROAD

N

0 700' 1,400'

NO	REVISION/DESCR.	DATE	BY

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BATTLE MOUNTAIN RECLAMATION

2019 SAN LUIS PERMIT AREA

SITE MAP

Engineering Analytics, Inc.
1600 Specht Point Road, Suite 209
Fort Collins, CO 80525
(970) 488-3111

ISSUED BY:

Project Number:	101.05.06
Drawn By:	SK
Designed By:	MLC
Approved By:	MLC
Date:	2/24/2020
Scale:	1" = 1400'
Drawing Number:	1.0

O:\05 San Luis\06 Reporting\Annual Report\2019\2019 Annual Report.dwg SAVED:3/12/20 PRINTED:3/12/20