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BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geochemical

TOTAL COST: $99,591

AUTHOR(S): A. Walus, P. Geo

SIGNATURE(S): A. Walus

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK: 2016

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): Event#5616443 - August 31, 2016
Event 5619956 - September 27, 2016, Event #5628446 - Dec.06, 2016

PROPERTY NAME: Surprise Creek

CLAIM NAME(S) (on which the work was done): 540453, 540454, 519018, 540456, 519021

COMMODITIES SOUGHT: lead, zinc, silver, copper, gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 104A192, 104A193

MINING DIVISION: Skeena

NTS/BCGS: 104 A/4

LATITUDE: 56 ° 12 ' " LONGITUDE: 129 ° 40 ' " (at centre of work)

OWNER(S):
1) Mountain Boy Minerals
2) Great Bear Resources

MAILING ADDRESS:
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Stewart, BC ; Box 859

1125 Wellington Dr
North Vancouver, BC; V7K 1L3

OPERATOR(S) [who paid for the work]:
1) Mountain Boy Minerals
2)

MAILING ADDRESS:
Same as above

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Kuroko style VMS mineralization, felsic volcanic centers of Mt. Dilworth Formation, lead-zinc-silver mineralization, barite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 23935, 24996, 27290
27577, 27981, 29446

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TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	—		
Photo interpretation	—		
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	—		
Electromagnetic	—		
Induced Polarization	—		
Radiometric	—		
Seismic	—		
Other	—		
Airborne	—		
GEOCHEMICAL (number of samples analysed for...)			
Soil	—		
Silt	—		
Rock	218	540453, 540454, 540456 519018, 519021	99,591
Other	—		
DRILLING (total metres; number of holes, size)			
Core	—		
Non-core	—		
RELATED TECHNICAL			
Sampling/assaying	—		
Petrographic	—		
Mineralographic	—		
Metallurgic	—		
PROSPECTING (scale, area)	—		
PREPARATORY / PHYSICAL			
Line/grid (kilometres)	—		
Topographic/Photogrammetric (scale, area)	—		
Legal surveys (scale, area)	—		
Road, local access (kilometres)/trail	—		
Trench (metres)	—		
Underground dev. (metres)	—		
Other	—		
		TOTAL COST:	99,591

ASSESSMENT REPORT ON GEOCHEMICAL SAMPLING

SURPRISE CREEK PROPERTY

**Located 32 km Northeast of
Stewart, British Columbia
Skeena Mining Division**

**56 degrees 12 minutes latitude
129 degrees 40 minutes longitude
N.T.S. 104A/4**

Event Numbers: 5616443, 5619956 and 5628446

**Project Period:
July 01 to November 30, 2016**

**On Behalf of
Mountain Boy Minerals
Stewart, B.C.**

**Report By
A. Walus, P.Geo.**

Date: December 12, 2016

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SUMMARY

The Surprise Creek property is situated approximately 32 kilometers northeast of Stewart, British Columbia. The claim area is centered approximately on 56 degrees 12 minutes latitude and 129 degrees 40 minutes longitude on NTS sheet 104A/4.
The property consists of 19 claims totaling 7,472.10 hectares located between Todd and Surprise creeks. Ownership of all 19 claims is presently registered with Mountain Boy Minerals (50%) and Great Bear Resources (50%).

To date, the following types of mineralization were found on Surprise Creek Property:

1. Extremely fine grained syngenetic pyrite, sphalerite and galena with high silver, mercury, and manganium hosted in black chert, limestone and mudstone.
2. Exhalite
3. Barite-carbonate veins and replacement zones with galena and sphalerite.
4. Very strongly K-feldspar altered and silicified andesite/dacite with pyrite, sphalerite, galena, and chalcopyrite.
5. Precious metals bearing quartz with pyrite, arsenopyrite, chalcopyrite, galena, sphalerite and tetrahedrite.
6. Quartz with sphalerite and galena.

The first type which represents the VMS Kuroko type mineralization is by far the most abundant in Surprise Creek area. It can be found in every glacial valley from Mt. Patullo to Nelson Glacier, a distance of over 22 kilometres. It is found mostly as numerous boulders and to lesser extent in place. The mineralization is hosted in laminated chert, limestone and mudstone which often display strong soft sediment deformation, frequently forming synsedimentary breccia. Sulphides form thin laminae and disseminations, often concentrating in matrix of synsedimentary breccia. Content of zinc, lead and silver vary in a broad range from slightly elevated values to the highs of 7.61% for zinc, 1.1% for lead and 106 g/t for silver.

This report is based on the results of 2016 geochemical rock sampling on Surprise Creek property. The program was conducted under author's supervision on behalf of Mountain Boy Minerals in the period from July 01 to October 15, 2016. Altogether 218 rock samples were collected during the entire program. All samples were analyzed by Loring Laboratories Ltd – an ISO certified Lab of Calgary, Alberta. The 2016 sampling program was focused on Ataman Zone (called Rumble Zone in 2010 AR) located on the south side of Jagiello Glacier valley. At the bottom of Ataman Zone there is a zone of intense sericite-quartz-pyrite alteration with locally developed quartz stockwork, veins and replacements which carry from minor to 3% galena, sphalerite and chalcopyrite. Pyrite is very abundant, up to 30% in some areas, which occurs as disseminations, clots, stringers and veins up to 5 cm in width. The sericite dominated zone is

approximately 100-120 metres high and 200-220 metres long (see figure 3). The full size of Ataman zone is not known as the zone was not fully explored. It is at least 200 by 600 metres in horizontal and 650 metres in vertical dimension.

The entire Surprise Creek area has an excellent potential to host multiply Kuroko type VMS deposits. Zinc-lead-silver VMS mineralization can be found along a north - south belt stretching from Mt. Patullo to Nelson Glacier over a distance of 22 kilometres. VMS mineralization seems to be spatially associated with volcanic eruption centers within felsic volcanic rocks of Mt. Dilworth Formation. In the area, felsic volcanic rocks of this formation form a relatively thin horizon 70 to 200 metres wide within prevailing volcanic rocks of intermediate to mafic composition. To date, three major zones of Kuroko style VMS mineralization has been identified. Of those Barbara zone attracted the most attention with over 178 holes drilled. Another zone (Jagiello zone) located several km west of Ataman Zone attracted little attention due mainly to difficult access. This area however is highly promising as it is the source of numerous boulders carrying VMS lead-zinc-silver mineralization which form a distinct boulder trail a few kilometres long. Large areas of Surprise Creek property are weakly explored due to extensive ice coverage. However, the rapidly receding ice enables better access to these areas which may host more mineralized zones similar to Barbara and Ataman zones.

For the 2017 exploration season a total of 2,000 metres of drilling in 6-8 holes 250 to 350 metres long is recommended. The holes should test the newly discovered VMS mineralization on Ataman zone. The cost of the 2017 drilling program is estimated at 568,000 dollars.

INTRODUCTION

This report is based on the results of 2016 geochemical rock sampling on Surprise Creek property. The program was conducted under author's supervision on behalf of Mountain Boy Minerals in the period from July 01 to October 15, 2016. The pertinent statements on exploration work performed in this period were filed on August 31 (event # 5616443), September 27 (event # 5619956) and December 06, 2016 (event # 5628446). Statement of expenditures show total costs incurred during these three events.
Data from previous assessment reports and MINFILE were also used. The complete list of sources used in this report is provided in references.

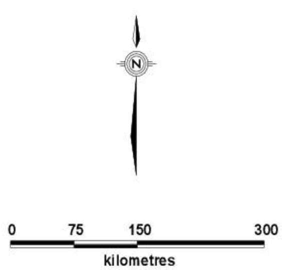
Location and Access

The property is situated approximately 32 kilometers northeast of Stewart, British Columbia. The claim area is centered approximately on 56 degrees 12 minutes latitude and 129 degrees 40 minutes longitude on NTS sheet 104A/4. Location of the claim area is shown on figures 1 and 2.

At the present time access to the property is by helicopter from Stewart or Meziadin camp located some 20 km to the east, on the junction of Highways 37 and 37A. Highway 37 A running between Stewart and Meziadin junction comes just 2.0 kilometres from the southern boundary of the property. An old mining road (non-maintained) runs from the Highway 37 A to the former gold-silver Nordore Mine, located approximately one kilometer to the southeast from the southeast corner of the property.

Physiography and Topography

The area of Surprise Creek property encompasses steep mountain slopes typical of the Coast Range region of British Columbia. The property includes the southern part of Mount Patullo and the headwaters of Surprise and Todd creeks. Topography is rugged with numerous glaciers transecting the area. Slopes range from moderate to precipitous. Elevations vary from about 600 m in the eastern portion of the property to about 2733 m (Mount Patullo). Most of the western part of the property is covered by ice and snow fields. Eastern part of the property is to large degree covered by glacial material. Overall, outcrops comprise approximately 30-35% of the property. Lower slopes of the mountain valleys are occupied by spruce and hemlock trees. Higher elevations are covered by alpine grass and heather.
Due to the large snowfall, the surface exploration is restricted to summer and early fall with the maximum rock exposure occurring in late August and September.

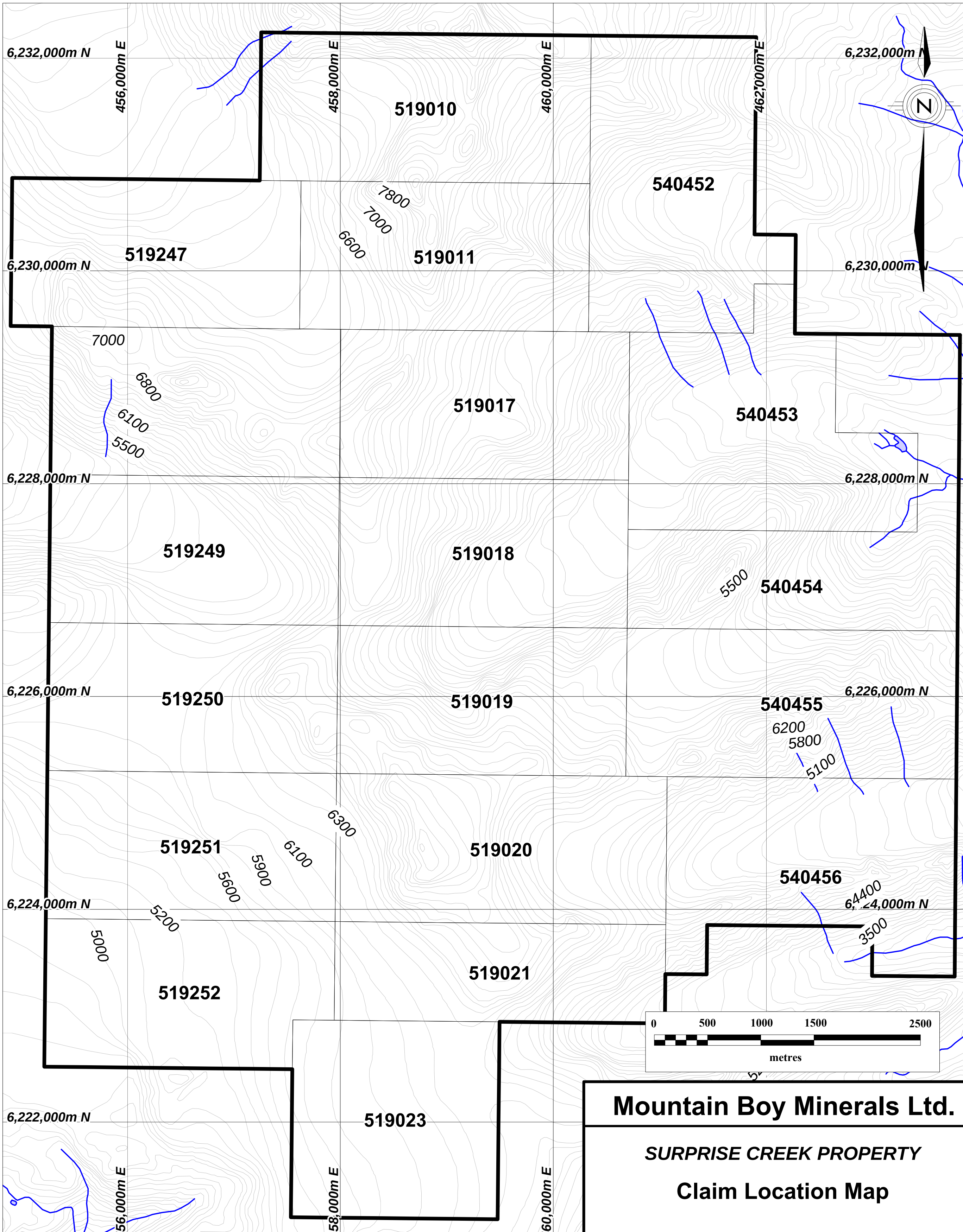


Mountain Boy Minerals Ltd.

SURPRISE CREEK PROPERTY

Claim Location Map

Date Dec 20, 2016	*Scale* 1:8,000,000	*Figure*
Projection UTM Zone 9 - NAD83	*State/Province* BC	
BCGS -	*NTS* 104 A/04	1
Author MJD	*File* SurpLoc	



Mountain Boy Minerals Ltd.

SURPRISE CREEK PROPERTY

Claim Location Map

Date	Dec 13, 2016	*Scale*	1:50,000	*Figure*
Projection	UTM Zone 9 - NAD83	*State/Province*	BC	2
BCGS	-	*NTS*	104 A/04	
Author	MJD	*File*	SurpClaim	

Property Ownership

The Surprise Creek property consists of 19 claims totaling 7,472.10 hectares located between Todd and Surprise creeks. Claims location copied from MINFILE database is presented in fig. 2. Ownership of all 19 claims is presently registered with Mountain Boy Minerals (50%) and Great Bear Resources (50%). Relevant claim information is summarized in the table below.

Title Number	Claim Name	Owner	Issue Date	Good To Date	Area (ha)
519010	ATAMAN3	277053 (50%)	2005/aug/13	2018/sep/28	431.67
519011	ATAMAN4	277053 (50%)	2005/aug/13	2018/sep/28	377.84
519017	ATAMAN5	277053 (50%)	2005/aug/13	2018/sep/28	377.95
519018	ATAMAN6	277053 (50%)	2005/aug/13	2018/sep/28	378.07
519019	ATAMAN7	277053 (50%)	2005/aug/13	2018/sep/28	378.19
519020	ATAMAN8	277053 (50%)	2005/aug/13	2018/sep/28	432.35
519021	ATAMAN9	277053 (50%)	2005/aug/13	2018/sep/28	288.31
519023	ATAMAN10	277053 (50%)	2005/aug/13	2018/sep/28	360.51
519247		277053 (50%)	2005/aug/22	2018/sep/28	377.85
519248		277053 (50%)	2005/aug/23	2018/sep/28	377.97
519249		277053 (50%)	2005/aug/23	2018/sep/28	378.10
519250		277053 (50%)	2005/aug/23	2018/sep/28	378.22
519251		277053 (50%)	2005/aug/23	2018/sep/28	378.33
519252		277053 (50%)	2005/aug/23	2018/sep/28	360.43
540452		277053 (50%)	2006/sep/05	2018/sep/05	449.73
540453		277053 (50%)	2006/sep/05	2018/sep/05	449.97
540454		277053 (50%)	2006/sep/05	2018/sep/05	432.05
540455		277053 (50%)	2006/sep/05	2018/sep/05	432.21
540456		277053 (50%)	2006/sep/05	2018/sep/05	432.35
				TOTAL	**7472.11**

WORK HISTORY

1970s - 1990s

In the 1970s and 1980s, the area presently covered by Surprise Creek claims was prospected and trenched but there are no records of this work. In 1989, the Surp claims were acquired by Teuton Resources Corp. The following year, Teuton Resources conducted soil, silt and rock sampling. In 1994 and 1996, Teuton Resources conducted an exploration program consisting of reconnaissance geochemical rock and silt sampling as well as geological mapping. The work concentrated on area presently covered by claims No. 540453, 540454 and 540455. The program was focused on finding gold bearing mineralization.

2003

In 2003 Pinnacle Mines collected a total of 78 rock samples from outcrop and float as well as 23 silt samples during an exploration program. Assay results yielded highly anomalous values for gold, silver, lead, zinc, arsenic and copper. The highs for these metals were as follow: 13.02 ppm for gold, 3,076.8 ppm for silver, >9999 ppm for lead, 56,866 ppm for zinc, >9999 ppm for arsenic and 28,026 ppm for copper.

2004

That year Pinnacle continued reconnaissance geochemical rock and silt sampling of the property. A total of 220 rock samples both from outcrop and float as well as 19 silt samples were collected during the exploration program. Assay results of the samples indicate highly anomalous values for gold, silver, lead, zinc, arsenic and copper. The highest assay for gold was 3.9 ppm, for silver 1305 ppm, for lead 9.1%, for zinc > 10,000 ppm, for arsenic >10,000 ppm and for copper 8.67%.

2005

In 2005 Pinnacle continued exploration on Surprise Creek property. That year a total of 279 rock and 8 silt samples were collected. These samples represented abundant and diverse mineralization found on the property. The most important mineralization consisted of extremely fine-grained syngenetic pyrite, sphalerite and galena with high silver, mercury, and manganium hosted in black chert, limestone and mudstone. Contents of zinc, lead, silver and mercury varied in a broad range from slightly elevated values to the highs of 7.61% for zinc, 1.1% for lead, 106 g/t for silver, and 33,800 ppb for mercury.

2006

Pinnacle work in 2006 was focused on the west part of the property. This area features very intense zone of pervasive K-feldspar alteration which stretches out for at least 10 kilometres in the north-south and 4-5 kilometres in the east-west direction. The extent of this alteration was determined by K-feldspar staining (using sodium cobaltinitrite) of a few dozen samples collected from the area. The intensity of K-feldspar alteration was determined in percentages by visual estimate of stained samples.

A total of 58 rock samples were collected during 2006 exploration program. The highest assays in 2006 exploration program came from the southeast corner of the property. Sample S06-1, a float of mudstone/siltstone with some hydrozincite and a few % of sphalerite, yielded 10.3g/t Ag, 0.2% Pb, 1.94% Zn and 6000 ppb Hg. Another sample (S06-2) from the same area (a float of silicified breccia composed of jasper fragments with 2-3% galena, 1-2% pyrite and trace malachite) returned 100.8g/t Ag, 3.62% Pb, 0.15% Zn and 3000ppb Hg.

2007

In 2007, an exploration program by Pinnacle Mines consisted of four diamond-drill holes totaling 1995 metres of NQ core. These holes did not test any specific target but were drilled within a broad area suspected of hosting at depth a Kuroko type VMS mineralization. The holes did not encounter any economic grade VMS mineralization. However, hole SP07-04 intersected (just below a major fault) a weakly mineralized felsic crackle breccia believed to represent a footwall of the VMS system. A combined interval of 5 core samples (15.25 metres) from this hole returned anomalous values in silver (14.18 g/t), lead (0.07%) and zinc (0.16%). Litologically and geochemically this rock closely resemble a footwall of a VMS mineralization encountered in many holes drilled on a BA property. No sediment hosted VMS mineralization was intersected in this hole which most likely was displaced by a fault.

2010

The 2010 exploration program on Surprise Creek property conducted by Great Bear Resources consisted of a helicopter-borne geophysical survey as well as program of geological mapping and sampling. Geophysical survey consisted of a versatile time domain electromagnetic (VTEM) survey and a cesium magnetometer survey. A total of 3327 line-kilometres were flown over BA and Surprise Creek claims. From September 6 to September 23, Coast Mountain Geological was contracted to perform a program of geological mapping, prospecting and lithogeochemical sampling over the Surprise Creek claims. During a program a total of 61 rock samples were collected of which one-third was collected from Ataman Zone (called Rumble Zone in 2010 assessment report).

GEOLOGY

Regional Geology

The Surprise Creek property lies in the Stewart area, east of the Coast Crystalline Complex and within the western boundary of the Bowser Basin. Rocks in the area belong to the Mesozoic Stuhini Group, Hazelton Group and Bowser Lake Group that have been intruded by plutons of both Cenozoic and Mesozoic age.

According to C.F. Greig, in G.S.C. Open File 2931, portions of the general Stewart area are underlain by Triassic age Stuhini Group. The Stuhini Group rocks either underlie or are in fault contact with the rocks of Hazelton Group. These Triassic age rocks consist of dark gray, laminated to thickly bedded silty mudstone, and fine to coarse-grained sandstone. Local hetherolitic pebble to cobble conglomerate, massive tuffaceous mudstone and thick-bedded sedimentary breccia and conglomerate also form part of the Stuhini Group.

The large exposure of Hazelton Group rocks on the west side of Bowser Basin has been named the Stewart Complex. It forms a north-northwesterly trending belt extending from Alice Arm to the Iskut River. At the base of the Hazelton Group is the lower Lower Jurassic volcaniclastic Unuk River Formation. This is overlain at steep discordant angles by a second, lithologically similar, middle Lower Jurassic volcanic package (Betty Creek Formation), which in turn is overlain by an upper Lower Jurassic thin felsic tuff horizon (Mt. Dilworth Formation). Middle Jurassic non-marine sediments with minor volcanics of the Salmon River Formation unconformably overlie the above volcaniclastic sequence.

The Unuk River Formation is at least 4500 metres thick, monotonous package of green andesitic rocks which include ash and crystal tuff, lapilli-tuff, pyroclastic breccia and lava flows.

The Betty Creek Formation represents another cycle of trough filling with a sequence of distinctively coloured red to green epiclastic rocks with interbedded tuffs and flows which range in composition from andesitic to dacitic.

The upper Lower Jurassic Mt. Dilworth Formation consists of a 20 to 120m thick sequence composed chiefly of variably welded dacite tuffs. Hard, resistant, often pyritic rocks of this formation often form gossaneous cliffs. Rocks of Mt. Dilworth Formation are important stratigraphic marker in the Stewart area.

The Middle Jurassic Salmon River Formation is a thick package of complexly folded sedimentary rocks which include banded, predominantly dark colored siltstone, greywacke, and sandstone with intercalated calcarenite rocks, minor limestone, argillite, conglomerate, littoral deposits, volcanic sediments and minor flows.

Overlying the above sequences are the Upper Jurassic Bowser Lake Group rocks. These rocks are exposed along the western edge of the Bowser Basin, they also occur as remnants on mountaintops in the Stewart area. These rocks consist of dark grey to black clastic rocks dominated by silty mudstone and thick beds of massive, dark green to dark grey, fine to medium grained arkosic sandstone.

A variety of intrusive rocks formed in the area during Early Jurassic and Tertiary periods. The granodiorites of the Coast Plutonic Complex largely engulf the Mesozoic volcanic terrain to the west. To the east, there are numerous smaller intrusions which range in composition from monzonite to granite. Some of them probably represent apophysis of the Coast plutonism, others are synvolcanic. Double plunging, northwesterly trending folds of the Salmon River and underlying Betty Creek Formations dominate the structural setting of the area.

Property Geology

The following description of the property's geology is based on the observations made by the author during the 2005-2007 programs as well as on GSC open file map by C. Greig (1994).
The Surprise Creek claim group is underlain by a sequence of Jurassic clastic and volcanic rocks which trend north-south to northwest-southeast. The area is dominated by a major anticline, which displays eastern vergence. An area located close to the anticline's axial plane is occupied by reddish to maroon andesitic volcaniclastic and volcanic rocks of Betty Creek Formation. To the west and east of the anticline's axis there are felsic rocks of Mount Dilworth Formation (?). They form horizon, 70-200 metres wide, composed of apple green, light gray or white coloured felsic volcanic rocks which include: flows (with flow banded texture), intrusions and pyroclastic rocks. East of the felsic rocks of Mount Dilworth Formation (?) a monotonous sequence of thinly bedded mudstone, siltstone, tuffaceous chert, chert and cherty argillite belonging to Salmon River Formation are present. The pyrite-bearing black mudstones and argillites of this formation tend to weather to a rusty color. Area to the west of the rocks of Mount Dilworth Formation (?) is underlined by a thick sequence of undivided mostly intermediate volcanic, pyroclastic and epiclastic rocks with subordinate amounts of intercalated sedimentary rocks which include: gray to black limestone, chert and mudstone. Volcanic rocks in this area are dominated by feldspar, feldspar-hornblende and feldspar-augite porphyritic andesites. All these rocks most likely belong to Betty Creek Formation.

The structural pattern of the Surprise Creek property is only partly understood due to incomplete exposure from beneath an ice sheet and widespread K-feldspar alteration obliterating earlier structures. The orientation of bedding planes is variable across the property with the majority of planes oriented NW-SE with NE dip. The bedding is reoriented on limbs of the folds with hinges trending NW-SE to NNW-SSE. The folds axes are plunging gently to the NNW (340/35) or locally to the SE (140/20). In nearly all lithologies except for the massive andesites, there is a well-developed axial cleavage of folds. The cleavages planes dip steeply to the NNE or NE. The attitude of cleavage together with the geometry of outcrop-scale folds indicate the SW-ward vergency of map-scale fold structures. The majority of exposures represent normal NE-dipping limbs of these folds. Locally, in particular directly east of the main ridge, a very steep overturned limb is exposed. The K-feldspar altered rocks bear fairly consistent foliation inclined to the W or SSE at a moderate angle. The orientation of the foliation seems to be unrelated to the position of bedding and axial cleavage of folds. The outcrops of K-feldspars altered rocks are at least partly bounded by faults (255/65 NW; 146/78 SW).
A number of meso- to map-scale faults occur in the area. They strike mostly NW-SE and NE-SW and form two conjugate sets developed under a N-S compression regime. In one case, a thrust was observed having the SW-ward polarity (150/40 NE oriented plane) and the amplitude exceeding a few dozen meters.

MINERALIZATION AND ALTERATION

Mineralization

To date, the following types of mineralization were found on Surprise Creek Property:

1. Extremely fine grained syngenetic pyrite, sphalerite and galena with high silver, mercury, and manganium hosted in black chert, limestone and mudstone.
2. Exhalite
3. Barite-carbonate veins and replacement zones with galena and sphalerite.
4. Very strongly K-feldspar altered and silicified andesite/dacite with pyrite, sphalerite, galena, and chalcopyrite.
5. Precious metals bearing quartz with pyrite, arsenopyrite, chalcopyrite, galena, sphalerite and tetrahedrite.
6. Quartz with sphalerite and galena.

The first type of mineralization is by far the most abundant in Surprise Creek area. It can be found in every glacial valley from Mt. Patullo to Nelson Glacier, a distance of over 22 kilometres. It is found mostly as numerous boulders and to lesser extent in place. The mineralization is hosted in laminated chert, limestone and mudstone which often display strong soft sediment deformation, frequently forming synsedimentary breccia. Sulphides form thin laminae and disseminations, often concentrating in matrix of synsedimentary breccia. Content of zinc, lead and silver vary in a broad range from slightly elevated values to the highs of 7.61% for zinc, 1.1% for lead and 106 g/t for silver.

Mineralization described as exhalite can be found mostly as float and less frequently in situ. It is composed of finely laminated bright red chert +/-hematite+/-magnetite. Some of the exhalite is composed of thin intercalated laminae of chert, magnetite and hematite closely resembling rocks of iron formation. This type of mineralization carry only minor zinc, lead and silver values.

The bulk of mineralization listed as type three can be found on Ataman zone where numerous veins and shear zones up to 25 metres wide were found. Assay values are up to 297 g/t silver and up to several per cent of combined lead and zinc.

Mineralization types 4, 5 and 6 were found as float only.

Alteration

K-feldspar alteration

Surprise Creek area features a large zone of very intense, pervasive K-feldspar alteration occupying the western part of the property. It stretches out for at least 10 kilometres in the north-south and 4-5 kilometres in the east-west direction. The extent and intensity of this alteration zone was determined by K-feldspar staining using sodium cobaltinitrite of a few dozen samples collected from the area.

Sericite-quartz-pyrite alteration

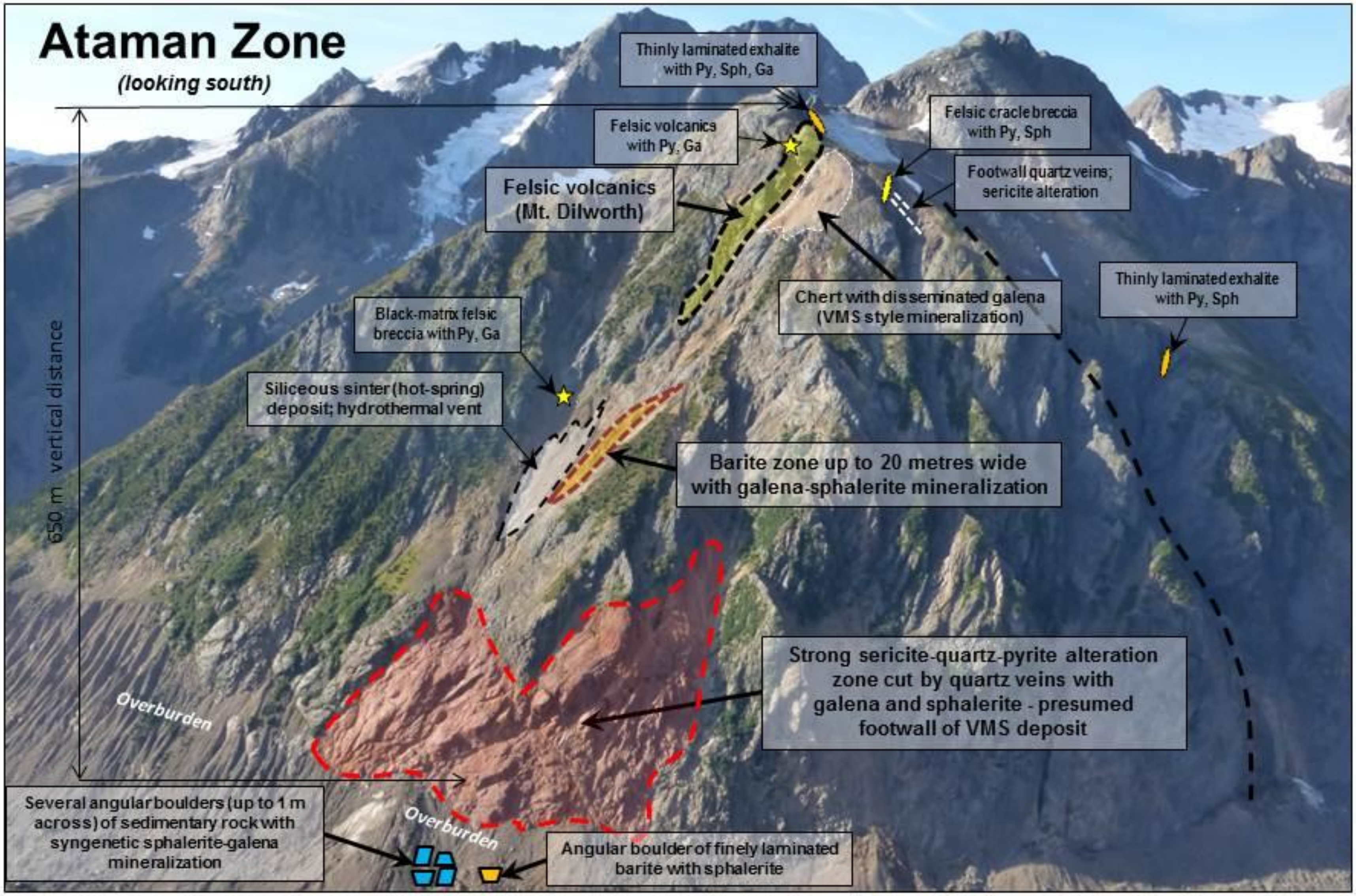
The most prominent zone of this alteration type can be observed at the base of Ataman zone (see description of Ataman Zone below). Similar but smaller alteration zones exist on the property but were not explored due to difficult access.

Major Mineralized Zones

Ataman Zone

Ataman Zone (called Rumble Zone in 2010 AR) is located on the south side of Jagiello Glacier valley. At the bottom of it there is a zone of intense sericite-quartz-pyrite alteration with locally developed quartz stockwork, veins and replacements which carry from minor to 3% galena, sphalerite and chalcopyrite. Pyrite is very abundant, up to 30% in some areas, which occurs as disseminations, clots, stringers and veins up to 5 cm in width. The sericite dominated zone is approximately 100-120 metres high and 200-220 metres long (see figure 3). The full size of Ataman zone is not known as the zone was not fully explored. It is at least 200 by 600 metres in horizontal and 650 metres in vertical dimension. In 2010, Great Bear Resources crew collected 9 chip and 3 grab samples from parts of sericite zone. The samples returned an average of 29.3 ppm Ag, 1819 ppm Pb and 3054 ppm Zn. Also in 2010, numerous boulders composed of barite and carbonates containing up to 15% galena and 5% sphalerite were found just above the sericite zone. At the bottom of Ataman zone a float composed of finely laminated barite and sphalerite was found which assayed 2.28% Zn.

Figure 3



Ataman Zone
(looking south)
650 m vertical distance
Thinly laminated exhalite with Py, Sph, Ga
Felsic volcanics with Py, Ga
Felsic volcanics (Mt. Dilworth)
Felsic cracle breccia with Py, Sph
Footwall quartz veins; sericite alteration
Chert with disseminated galena (VMS style mineralization)
Thinly laminated exhalite with Py, Sph
Black-matrix felsic breccia with Py, Ga
Siliceous sinter (hot-spring) deposit; hydrothermal vent
Barite zone up to 20 metres wide with galena-sphalerite mineralization
Strong sericite-quartz-pyrite alteration zone cut by quartz veins with galena and sphalerite - presumed footwall of VMS deposit
Overburden
Overburden
Several angular boulders (up to 1 m across) of sedimentary rock with syngenetic sphalerite-galena mineralization
Angular boulder of finely laminated barite with sphalerite

Jagiello Zone

The zone located in the headwaters of Jagiello Glacier attracted little attention due mainly to difficult access. This area however is highly promising as it is the source of numerous boulders carrying VMS zinc-lead-silver mineralization which form a distinct boulder trail a few kilometres long. A float sample (A05-234) collected in 2005 just below the zone returned 1.1% Pb, 7.61 Zn and 60.5 g/t Ag.

2016 GEOCHEMICAL SAMPLING

Introduction

Locations and Au, Ag, Cu, Pb and Zn results of the rock geochemical samples collected from Surprise Creek property during the 2016 exploration program are presented in figure 4 and 5. Full geochemical results are presented in appendix II. Samples locations were determined using GPS (NAD83). Icefield boundaries have been taken from the most recent government topographic maps; however, ablation in the Stewart area during the past years has exposed much new rock outcrop and substantially reduced the size of snow and ice cover.

Altogether 218 rock samples were collected during the entire program. All samples were analyzed by Loring Laboratories Ltd – an ISO certified Lab of Calgary, Alberta. All samples were analyzed for 30 elements ICP and gold by fire assay with AA finish. Samples which exceeded a threshold of 100 g/t for silver, 10,000 ppm for lead and 10.000 ppm for zinc were assayed using multi acid digestion, peroxide fusion and AA finish.

Significant Sampling Results

During the 2016 geochemical program on Surprise Creek property a total of 218 rock samples were collected. The program was focused on Ataman Zone where early in 2016 field program Mountain Boy crew found several angular boulders up to 1.0 metres in size composed of limestone/ mudstone with 1 to 15% sphalerite. Three samples collected from these boulders (AW-5, 6 and 10) assayed 3.04, 3.13 and 11.64 % zinc plus anomalous lead, silver, gold, arsenic and tungsten; gold assays averaged 90 ppb. Subsequent prospecting carried out on Ataman Zone led to the discovery of several new mineralized occurrences (see figure 3). Close to the top of Ataman zone a six metres thick horizon of finally laminated exhalite with sphalerite mineralization was found (see figure 3 for reference). Five grab samples (KMJ-42 to 46) collected from this horizon averaged 23.4 ppm Ag, 0.34% Pb and 1.24% Zn. Also in the top part of Ataman Zone a float sample AW-33 of breccia composed of chert and barite fragments cemented by limonite yielded 479 ppm Ag, 176 ppb Au, 2.45% Pb and 0.7% Zn. Nearby, a zone at least 60 metres across of chalcedonic quartz with trace to 3% of galena was found. A float sample AW-32 derived from this zone returned 8.7 ppm Ag, 202 ppb Au, 1.64% Pb and 0.3%

Zn. Approximately 50 metres below, a composite sample RZ-12 of several grab samples from limestone/chert horizon at least 3-4 metres wide with extremely fine grained sphalerite returned 81 ppm Ag, 0.22% Pb and 5.53% Zn. In the middle part of the Ataman zone several barite-carbonate veins and shear zones up to 25 metres wide were found. They carry from trace to 5% galena and sphalerite. Sample RZ-7, a 1.0 m chip from barite-carbonate vein with 1-2% galena and 2-3% sphalerite assayed 297 ppm Ag, 0.85% Pb and 3.10% Zn. Close to Ataman zone a float composed of quartz, carbonate and 15-20% galena (sample AW-18) returned 7.88% Pb, 239 g/t Ag and 318 ppb Au. Another float sample (AW-9) collected from the same area of sphalerite-pyrite vein assayed 26.12% Zn, 0.86% Pb, 592 ppb Au and 200 ppm Ag.
In addition to several mineralized zones an occurrence of presumed silica sinter was found indicating the presence of vent area at this location. Approximately 1.3 kilometres south from Ataman zone numerous float of limestone /chert with up to 1-2% sphalerite was found. Five float samples collected from these boulders assayed an average of 0.5% Zn. These samples most likely represent the distal portion of VMS system centered on Ataman Zone.

A few float samples collected during the 2016 program returned high gold and silver values. Sample JSKM-07 returned 45270 ppb Au and 45.5 ppm Ag. Sample AW-66 assayed 17500 ppb Au and 187 ppm Ag. Sample AW-67 yielded 1568 ppb Au and 121 ppm Ag. These samples represent mineralization type # 5 as listed in chapter Mineralization i.e. precious metals bearing quartz veins with pyrite, arsenopyrite, chalcopyrite, galena, sphalerite and tetrahedrite.

Field Procedure and Laboratory Technique

Rock samples were taken in the field with a prospector's pick and collected in standard plastic sample bags. Weight of individual samples ranged from 0.5 to 2.0 kilos. Descriptions of the rock samples are presented in appendix I.
Rock samples were first crushed to minus 10 mesh (70 % of sample) using jaw and cone crushers. Then 250 grams of the minus 10-mesh material was pulverized to minus 150 mesh using a ring pulverizer. A modified aqua regia solution is added to each sample and leached for 1 hour at greater than 95 degrees Celsius. The resulting solution was then analyzed by atomic absorption. The analytical results were then compared to prepared standards for the determination of the absolute amounts. For the determination of the remaining trace and major elements Inductively Coupled Argon Plasma (ICP) was used. In this procedure a 0.5-gram portion of the minus 140-mesh material is digested with aqua regia for 1 hour at 95 degrees Celsius and made up to a volume of 20 mls prior to the actual analysis in the plasma. Again the absolute amounts were determined by comparing the analytical results to those of prepared standards.
Laboratory procedures for specific metals are presented below:

Procedure summary for gold fire assay:
Lead flux and silver inquart are added to the sample and mixed. Samples are fused in batches of 24 assays along with natural standard and a reagent blank. This batch of 26 assays is carried through the whole procedure as a set.
After cuppelation (which removes lead), the precious metal bead the precious metal bead is parted in nitric acid to remove the silver. The remaining gold bead is either weighted (gravimetric finish) or dissolved in aqua regia and analyzed on atomic adsorption spectrometer, using a suitable standard set. The natural standard fused along with the sample set must be within 2 standard deviations of its known value or the whole set is re-assayed. 10% of the samples in a set are re-assayed and reported in duplicate, along with the standard and reagent blank.
Detection limit: 0.001 g/tonne

Procedure summary for lead, zinc and silver assays:
A 1.000 gram sub-sample is weighed from the pulp bag for analysis. Each batch of 30 assays has three duplicates, two natural standards and a reagent blank included. The samples are digested with HNO_3, HBr, and HCl. After digestion is complete, extra HCl is added to the flask to bring the concentration of HCl to 25% in solution. This is to prevent precipitation of lead and silver chloride. The resulting solutions are analyzed on an atomic absorption spectrometer (AAS), using appropriate calibration standard sets.
The natural standard(s) digested along with this set must be within 2 standard deviations of the known or the whole set is re-assayed. If any of the samples assay over the concentration range of the calibration curve, the sample is re-assayed using a smaller sample weight. At least 10% of samples are assayed in duplicate.
Detection limit: 0.01% for lead, 0.1 g/tonne for silver, 0.01% for zinc

Statistical Treatment of Data

In this program (similarly as in other small geochemical surveys) a statistical treatment of geochemical data according to standard methods was not considered practical as anomalous values for specific metals would vary considerably depending on the rock type. Instead, the author has chosen anomalous levels for specific metals by reference to several other geochemical programs conducted on other properties in the Stewart area over the last 18 years. On this basis, the following anomalous levels are considered anomalous on Surprise Creek property and elsewhere in the Stewart area: gold values greater than 100 ppb, silver values greater than 3.2 ppm, lead values greater than 160 ppm, zinc values greater than 320 ppm, and copper values greater than 200 ppm, mercury values greater than 200 ppb.

CONCLUSIONS AND DISCUSSION

The 2016 rock sampling program on Surprise Creek property was focused on Ataman Zone where several new VMS occurrences were found. Assay results from samples collected from these occurrences indicate a strong possibility for hosting a VMS deposit at this location.

The entire Surprise Creek area has an excellent potential to host multiply Kuroko type VMS deposits. Zinc-lead-silver VMS mineralization can be found along a north - south belt stretching from Mt. Patullo to Nelson Glacier over a distance of 22 kilometres. VMS mineralization seems to be spatially associated with volcanic eruption centers within felsic volcanic rocks of Mt. Dilworth Formation. In the area, felsic volcanic rocks of this formation form a relatively thin horizon 70 to 200 metres wide within prevailing volcanic rocks of intermediate to mafic composition. To date, three major zones of Kuroko style VMS mineralization has been identified. Of those Barbara zone attracted the most attention with over 178 holes drilled. Another zone (Jagiello zone) located several km west of Ataman Zone attracted little attention due mainly to difficult access. This area however is highly promising as it is the source of numerous boulders carrying VMS lead-zinc-silver mineralization which form a distinct boulder trail a few kilometres long. A float sample (A05-234) collected in 2005 just below the zone returned 1.1% Pb, 7.61 Zn and 60.5 g/t Ag.

Large areas of Surprise Creek property are weakly explored due to extensive ice coverage. However, the rapidly receding ice enables better access to these areas which may host more mineralized zones similar to Barbara and Ataman zones.

RECOMMENDATIONS

For the 2017 exploration season a total of 2,000 metres of drilling in 6-8 holes 250 to 350 metres long is recommended. The holes should test the newly discovered VMS mineralization on Ataman zone. The cost of the 2017 drilling program is estimated at 568,000 dollars.

Estimated Cost of the Program

A total of 2,000 metres of drilling @ $140/a metre (all inclusive)………………..280,000
Geologist, 20 days @650/a day……………………………………………………13,000
Field assistant, 20 days @ $350/a day…………………………………………….7,000
Drilling pads…………………………………………………………….……..15,000
Mob/demob……………………………………………………………..……....10,000
Helicopter support……………………………………………………. ....…150,000
Expediting…………………………………………………………… 10,000
Core cutting………………………………………………………….…......5,000
Vehicle rental……………………………………………………….........2,000
Assaying…………………………………………………………………..…5,000
Accommodation and food (in Stewart)…………………………………........15,000
Report…………..………………………………………………….......... .5,000

Subtotal………………………………………………………………………..517,000
Contingency (10%)…………………………………………………………….. .51,000

Total…………...$568,000

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CERTIFICATE OF AUTHOR'S QUALIFICATIONS

I, Alojzy Aleksander Walus, of 8577-165 Street, Surrey, in the Province of British Columbia, do hereby certify that:

1. I am a graduate of the University of Wroclaw, Poland and hold M.Sc. Degree in Geology.
2. I am a consulting geologist working on behalf of Mountain Boy Minerals.
3. I have worked in British Columbia from 1988 to 2016 as a geologist with several exploration companies.
4. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
5. This report is based on my work completed on the Surprise Creek property in the period from July to October 2016, as well as on work completed by previous operators of the property.
6. I have a general knowledge of the Stewart region gained during exploration programs in the period 1988 - 2016.

DATED AT SURREY, B.C., December 12, 2016

Alojzy A. Walus, P.Geo.

STATEMENT OF EXPENDITURES

ITEM	Quantity	Units	Rate	Subtotal	Totals
Field Personnel					**33975**
Alex Walus - geologist	23.5	days @	$650.00	15275	
Dates worked: Aug. 9,12,17-22, 24-26					
Sept. 25-30, Oct.1-7					
Krzysztof Mastalerz - geologist	18	days @	$650.00	11700	
Dates worked: Aug. 22-26, Sept. 25-30					
Oct. 1-7					
Ewa Radkiewicz-Walus - geologist	14	days @	$500.00	7000	
Dates worked: Aug. 17-22, 24-26					
Sept. 25-29					
Helicopter	20.2	hours @	$1,858.37	37539.2	**37539**
Field Expenses					**11273**
4x4 Vehicle rental	28	days @	$95.00	2660	
Gas				1180	
Accommodation	24	days @	$33.00	792	
Food	55.5	man/days @	$71.23	3953	
Shipment of samples				453	
Field equipment and supplies				2235	
Assay Costs					**9004**
Rock samples	218	samples @	$41.30	9003.74	
Data compilation and Report					**7800**
Data compilation	5	days @	$650.00	3250	
Report	7	days @	$650.00	4550	
			Grand Total		**99591**

APPENDIX I

ROCK SAMPLES DESCRIPTION

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
ATKM-1	462,437	6,228,222	Float	Intermediate volcanic/tuff, slightly silicified with quartz-pyrite veins; semi-massive Py in
				veins 25-40%
ATKM-2	462,437	6,228,222	Float	White to yellowish (where oxidized) quartz vein-to-breccia with specularite hematite 1-3%
				and some Py
ATKM-3	462,437	6,228,222	Float	Greenish-brown intermediate tuff(?) with calcite/carbonate veins/pods; cubed Py 3-5%, tr.
				Ga, Sph
ATKM-4	462,313	6,228,239	Grab	Greenish magnetic aphanitic intrusive(?) with quartz-carbonate-barite, 5-10 cm thick veins
				with semi-massive Py
ATKM-5	462,300	6,228,248	Grab	Dark-green aphanitic intrusive (diabase?) with 10-15 cm thick quartz-carbonate vein; G
				a 5-10% and Sph 1% within the vein
ATKM-6	462,279	6,228,253	Grab	White quartz-carbonate-Barite vein cutting through greenish aphanitic intrusive(?), vuggy;
				Py up to 10-15%, Ga 1%
ATKM-7	462,270	6,228,266	Grab	Whitish quartz-calcite veins and lenses cutting through greenish magnetic intrusive(?); tr. Py,
				Ga; likely Barite
ATKM-8	462,334	6,228,227	Grab	Quartz-carbonate-barite vein cutting through greenish magnetic intrusive; Ga 1-3%, Sph 1%,
ATKM-10	462,380	6,228,466	Float	3 metre boulder of a quartz breccia of a banded quartz-carbonate-siliceous rock, relics of 1%
				convoluted banding; Py 3-5%, Sph , tr Ga
ATKM-11	462,380	6,228,466	Float	5 metre boulder of a strongly quartz impregnated rock (strong replacement); Py 3-10%, Sph
				1%, tr. Ga, Cpy
ATKM-12	462,371	6,228,492	Float	Boulder of banded chalcedony/chert; Sph 1.5%, Py, tr. Ga
ATKM-13	462,371	6,228,492	Float	Greenish-brown andesite with quartz veinlets; Py, Ga, Sph
AW-1	462401	6228206	grab	Irregular vein of vuggy quartz 30 cm wide with abundant black, sooty, soft substance.
AW-2	462525	6228435	float	Angular boulder 30x15 cm of vuggy quartz with 3-5% disseminated pyrite
AW-3	462411	6228485	float - composite grab	Large angular boulder 1.6x1.2 m in size composed of sericite-quartz-carbonate
				altered andesitic volcanics with 2-3% disseminated pyrite ans 1-2% sphalerite.
AW-4	462411	6228485	float	Angular boulder 0.6x0.5 m of altered andesitic volcanics with 2-3% pyrite and trace
				to 1% chalcopyrite.
AW-5	462387	6228447	float	Very angular boulder of mudstone/chert with bluish hydrozincite (?) stain containing
				1-2% pyrite and 0.5 to 3% very fine grained sphalerite as disseminations and streaks.
				The rock contains numerous small carbonate veinlets and replacements. The sample
				came from one of several similar boulders measuring 0.5 to 1.1 m in size situated close to
				each other.
AW-6	462387	6228447	float	Same as AW-5
AW-7	462387	6228447	float	Rounded boulder 0.1 m across of vuggy quartz with abundant limonite/goethite.
AW-8	462325	6228423	float	Angular float 0.3 m across of carbonate-sericite altered argillite with 1-2% disseminated
				pyrite and minor bluish stain.

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
AW-9	462312	6228428	float - selective grab	Angular float 0.9x0.1 m in size. Sample was taken from 2-3 cm wide quartz vein with
				15-20% sphalerite, 3-5% pyrite and minor chalcopyrite. The vein is hosted in chloritizied
				andesitic rock.
AW-10	462387	6228447	float	Same as AW-5 and 6. Sampled boulder contains 4-5% sphalerite.
AW-11	462326	6228305	float	Angular boulder 0.15 m across representing fragment of barite-carbonate-quartz vein
				with 3-5% of combined galena and sphalerite.
AW-12	462481	6228440	float	Fist size semi-angular boulder of carbonate vein fragment with 2-3% pyrite and
				abundant limonite.
AW-13	462479	6228489	float - selective grab	Angular boulder 20 cm across of carbonate altered andesitic rock containing 1 cm
				wide quartz-pyrite vein. Sample was concentrated on the vein.
AW-14	462529	6228482	float	Fist size boulder of quartz with minor pyrite and trace of gray unidentified gray sulphide.
AW-15	462568	6228471	float	Angular float 0.2 m across of chert (?) with 1-2% disseminated fine grained pyrite, galena
				and chalcopyrite.
AW-16	462605	6228467	float	Angular boulder 0.2x0.1 m in size representing fragment of carbonate vein with
				15-20% galena and less than 1% chalcopyrite. Vein is hosted is andesitic rock.
AW-17	462666	6228502	float	Angular float 0.3 m across of sericite-quartz altered rock cut by pyrite veinlets. Pyrite
				content 15-20%.
AW-18	462655	6228490	float	Angular float 0.5x0.15 m in size composed of quartz, carbonate, 15-20% galena and
				1-2% pyrite.
AW-19	463026	6228359	grab	Quartz vein 7-8 cm wide containing 3-5% pyrite. Orientation 0/20 W.
AW-20	463520	6228006	float	Grab from semirounded boulder 1.3x1.0 m in size of very strongly silicified rock with
				1-2% galena.
AW-21	463243	6227852	float	Angular boulder 1.0x0.8 m in size of silicified rock with 1-2% pyrite
AW-22	463181	6227733	float	Angular boulder 0.9x0.6 m in size of silicified rock with 2-3% pyrite
AW-23	463160	6227695	float	Semirounded float 0.15 m across of silicified rock with 10-12% disseminated pyrite
				and trace galena.
AW-24	463082	6227604	float	Angular boulder 0.3 m across of very siliceous flow banded felsic rock containing minor
				very fine grained disseminated pyrite.
AW-25	463192	6227660	float	Angular boulder 1.0x0.6 m in size of massive siliceous felsic rock with minor
				disseminated pyrite and some greenish substance.
AW-26	462101	6227917	float	Angular float 0.5x 0.2 m of goethite-limonite cemented breccia with completely
				altered clasts.
AW-27	462089	6227928	grab	Small outcrop of vuggy, crystalline quartz with with 30-40% limonite/goethite.
				Outcrop seems to be a portion of a vein at least 10 cm wide. Vein orient. 280/20 N.
AW-28	462047	6227915	grab	Gray chert with minor disseminated pyrite band trace galena
AW-29	462055	6227912	grab	Same as AW-28
AW-30	462058	6227913	grab	Gray chert with 1.0% disseminated pyrite and 0.5% galena.

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
AW-31	462085	6227888	grab	Very fine grained quartz/chert with trace pyrite and galena.
AW-32	462052	6227895	float	Angular boulder 0.5x0.3 m of gray chert with 1-2% pyrite and 2-3% galena occurring as
				fine disseminated grains.
AW-33	461981	6227924	float	Angular boulder 0.15 m in size of breccia composed of chert and barite clasts
				cemented by limonite and wad.
AW-34	461993	6227907	float	Angular float 10x5 cm of interbedded limestone and chert with minor galena.
AW-35	461982	6227807	float	Angular fist size float of chert/quartz with 2-3% galena and 15-20% limonite.
AW-36	461868	6227682	grab	Small outcrop of finely laminated rock composed of limestone and chert. Some laminae
				are limonitic. Bedding 20/25E
AW-37	461680	6227659	float	Angular boulder 0.2 m across of limonitic quartz.
AW-38	461585	6227658	grab	Sample from large outcrop of interbedded limestone and chert. Layers are often
				disturbed, frequent manganese stain, no visible sulphides. Bedding 340/20N
AW-39	461595	6227647	grab	Same as AW-38
AW-40	461764	6227891	float	Small angular float 10x5 cm of limestone/chert with manganese stain. The sample
				contains 0.5% disseminated pyrite and trace of extremaly fine grained gray sulphide.
AW-41	461764	6227891	float	Angular boulder 0.6x0.4 m in size of silicified rock with abundant limonite.
AW-42	458123	6227715	grab	Suboutcrop of limestone with minor disseminated pyrite and strong Mn-oxides on surface.
AW-43	458123	6227715	grab	Suboutcrop of breccia composed of limestone fragments coated with earthy limonite,
				wad and very porous, vuggy chert. They form lenses several meters in size within
				andesite pyroclastics.
AW-44	458242	6227773	grab	Limestone/chert with limonite and wad stain.
AW-45	458211	6227732	grab	Lens of chert 1.0 metre thick hosted in limestone with some extremaly fine grained
				disseminated pyrite and abundant limonite.
AW-46	458384	6227292	grab	Completely K-feldspar (?) altered rock with minor disseminated pyrite and limonite.
				The zone measure 3-4 metres across.
AW-47	458128	6227127	grab	Soboutcrop (5x3 m) of breccia composed of jasper fragments cemented by limonite.
AW-48	457999	6227345	float	Angular boulder of completely sericite altered rock fractured to brecciated with open
				spaces filled with limonite, locally carbonate veining. The sample came from one of
				many bouldes which occupy an area of approximately 50 m across.
AW-49	457988	6227373	grab	Same as AW-48
AW-50	457979	6227384	grab	Same as AW-48
AW-51	458084	6227124	grab	Suboutcrop of small body (< than 1.0 m across) of limonite cemented jasper breccia.
AW-52	458115	6227026	grab	Small outcrop (0.5 m across) of limonite cemented breccia composed of sericite
				altered fragments.
AW-53	458149	6227004	grab	Suboutcrop of breccia composed of vuggy quartz fragments cemented by limonite.
AW-54	458196	6226978	grab	Suboutcrop of breccia composed of sericite altered fragments cemented by limonite.
AW-55	462067	6227931	float	Small float of very vuggy quartz containing abundant limonite.

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
AW-56	462160	6227971	grab	Completely silicified rock with trace to minor pyrite. The zone is 35 by 20 metres.
AW-57	462357	6228138	grab	Alteration zone composed of sericite, quartz and minor disseminated pyrite. The zone
				is an upward extension of ramble zone.
AW-60	463548	6223696	float	Angular boulder 0.5x0.3 m in size of very limonitic quartz-sericite altered rock with minor
				disseminated pyrite.
AW-61	463156	6223559	float	Angular boulder 0.3x0.2 m in size of silicified andesite with 1-2% pyrite and minor galena.
AW-62	462628	6223453	float	Angular float 0.3x0.2 m in size of laminated siltstone with bands of extremely fine
				grained pyrite (?).
AW-63	462522	6223436	float	Angular float 15x15 cm of felsic breccia cemented by limonite.
AW-64	462377	6223533	float	Angular boulder 0.6x0.4 m in size of black matrix felsic breccia. The rock is limonitic due
				to the presence of extremely fine grained pyrite in matrix.
AW-65	462235	6223399	float	Angular float 20 cm across of black chert with minor disseminated pyrite and/or
				chalcopyrite.
AW-66	462443	6223563	float	Small angular fragment of quartz vein with 10-15% pyrite, 1-2% chalcopyrite and minor
				arsenopyrite.
AW-67	462464	6223543	float - selective grab	Angular float 0.3x02 m in size of andesitic rock with 5 cm wide quartz-galena-sphalerite
				vein. The sample was taken mainly from vein material.
AW-68	462538	6223565	float - selective grab	Angular boulder 0.8x0.6 m of laminated limestone/chert containing 10 cm wide band of
				jasper. Sample was taken from limestone/chert with some disseminated extremely fine
				grained pyrite.
AW-69	461007	6222830	float	Angular boulder 0.2x0.1 m in size of felsic breccia with strongly limonitic matrix and some
				manganese stain. There are many similar boulders nearby.
AW-70	460986	6222808	float	Same as AW-69
AW-71	460626	6223040	float	Boulder 0.4 m across of laminated limestone/chert with some extremely fine grained
				disseminated sulphides.
AW-72	460731	6223079	float	Angular boulder 0.3x0.2 m of limestone/mudstone with some extremely fine grained
				disseminated sulphides.
AW-73	461077	6227704	float	Fist size float of finely laminated rock composed of chert and mudstone. Abundant limonite,
				trace pyrite and galena.
AW-74	461122	6227856	float	Angular boulder 0.2x0.1 m in size of finely laminated chert/limestone with minor pyrite and
				trace galena.
AW-75	461173	6227750	float	Small angular float of laminated limestone with minor sphalerite as streaks and disseminated
				grains.
AW-76	461183	6227757	float	Small, angular boulder 10 cm across of laminated limestone with minor pyrite and 0.5%
				sphalerite.

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
AW-77	461179	6227733	float	Float 0.2 m across of folded laminated limestone/chert with trace to minor pyrite and
				sphalerite, trace galena.
AW-78	462977	6227285	float	Angular boulder 0.2 m across of laminated limestone with 1-2% pyrite and 0.5-1.0%
				sphalerite. There are many similar boulders nearby up to 1.0 m across.
AW-79	462972	6227291	float	Angular boulder 0.4x0.2 m in size of finely laminated chert/limestone with 1-2% pyrite
				and 0.5-1.0% sphalerite as thin laminae, streaks and blebs.
AW-80	462945	6227265	float	Small fist size float of black limestone with 2-3% pyrite as thin laminae < 1 mm thick.
AW-81	463125	6227394	float - selective grab	Grab from a boulder 1.5x1.5x1.0 m in size of strongly silicified rock with 1-2% pyrite cut
				by veins of white quartz. Sample was concentrated on silicified part with pyrite.
AW-82	462321	6228958	grab	Rock composed of laminae of brown weathering limestone and fine adesite tuff. Trace
				to minor specularite or sphalerite. Bedding 315/45N
FLKM-01	461,098	6,222,768	Float	Dark greenish-gray laminated/thick banded tuffaceous-argillaceous sediment; no visible
				mineralization
FLKM-02	461,116	6,222,751	Float	Black, thick laminated banded, chert/siliceous mudstone, significantly brecciated; tr. Py
FLKM-02a	461,116	6,222,751	Float	Black to dark gray, distinctly brecciated chart (relicks of banding), numerous quartz veinlets;
				tr.-0.5% Ga, Tr. Py, Sph
FLKM-03	461,116	6,222,734	Grab	Strongly vesicular top of crudely flow banded felsic volcanic, strongly silicified at the contact
				with some mudstone fragments; slightly oxidized (goethite/limonite), diss./blebs Py
FLKM-04	461,075	6,222,737	Float	Reddish to pinkish, irregularly banded jasperoid; diss./bothrioidal Py 5-7%
FLKM-05	460,690	6,222,757	Float	Dark gray, thin banded, strongly siliceous, cherty-argillaceous exhalite(?); tr. Py
FLKM-06	460,635	6,222,819	Float	Pale greenish-gray, aphanitic felsic(?) volcanic rock; 1% diss. Py
FLKM-07	460,837	6,223,052	Float	Gray to brownish, banded argillaceous/calcareous exhalite/chert, jasperoid pods; cubed and
				stringers of Py 5-7%
FLKM-08	460,837	6,223,052	Float	Dark gray to brownish, parallel laminated argillaceous sediment, exhalite-distal sinter(?)
FLKM-09	461,018	6,222,934	Float	Black-matrix, clast supported breccia of felsic volcanic rock, strongly siliceous; tr. Py
JGKM-01	459,107	6,227,282	Grab	Massive Pyrite (50-70% Py) in quartz-rodochrosite? Vein; vein cut through maroon i
				intermediate volcanic
JGKM-02	459,107	6,227,282	Grab	Wall rock of the JGKM-01 vein: maroon intermediat volcanic with diss/blebs Py 5-10%,
-	-	-	-	tr Ga, Sph
JGKM-03	460,798	6,227,386	Float	Dark maroon-gray tuff with quartz veining; coarse cryst Py 3-5%, tr Cpy
JGKM-04	460,811	6,227,349	Float	Slightly yellowish-rusty quartz-Pyrite vein; Py 30-35%, coarse crystalline
JGKM-05	460,845	6,227,340	Float	Quartz vein with folded/smeared laminea of Goethite with Pyrite, jasperoid stringers
JGKM-06	460,859	6,227,263	Float	Thinly banded/laminated siliceous sinter/chert, jasperoid stringers; diss Py, magnetite and
				specularite
JGKM-07	460,859	6,227,263	Float	Banded reddish jasperoid cut by 2 cm thick quartz vein with specularite hematite

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	**Northing**		
JGKM-08	460,859	6,227,263	Float	Massive jasperoid with some thin quartz veining; hematite (specularite) rich, locally diss Py,
				Cpy, Malachite up to 1%
JGKM-09	469,888	6,227,213	Float	Dark gray laminated sediment (siltstone/mudstone) with yellowish-rusty laminae
JGKM-10	460,853	6,227,181	Float	Black tuffaceous(?) mudstone with quartz and carbonate veins; finelly diss Py 1-2%
JGKM-11	460,830	6,227,219	Float	Over 1m in diameter boulders of contorted, regular laminations in light brownish to black
				limestone
JGKM-12	460,803	6,227,260	Float	Over 1 m in diameter boulder of black massive to crudely laminated mudstone
JGKM-13	460,789	6,227,269	Float	Black, thinly laminated argillie, siliceous
JGKM-14	460,704	6,227,439	Float	Dark green volcanic with Quartz-Epidote veins; specularite along the edges of quartz veins
JGKM-15	460,562	6,227,486	Float	Grayish to pale brownish, laminated/bedded calcareous-(siliceous) laminite; diss Py 1%
JGKM-16	460,562	6,227,486	Float	Black, massive mudstone/argillite, moderately silicified, locally brecciated, locally quartz
				veinlets; Py diss/stringers/cubes 1-2%
JGKM-17	460,562	6,227,486	Float	Black, partly brecciated, strongly siliceous laminite/banded exhalite; locally opalline silica;
				Py in fractures 1-2%, tr. Sph, tr. Ga?
JGKM-18	460,562	6,227,486	Float	Black breccia of silicified mudstone/argillite, some quartz veinlets; Py in fractures and quartz
				veins,tr. Sph
JGKM-19	460,562	6,227,486	Float	Pinkish-gray, laminated/banded chert/exhalite, jasperoidal, partly calcareous; Py 3-4%
JGKM-20	460,562	6,227,486	Float	Black, strongly fractured, laminated/banded cherty exhalite(?); very finely diss Py 3-5%
JGKM-21	460,485	6,227,518	Float	Greenish-gray, polymictic coarse-grained tuff, slightly oxidized and moderately silicified;
				cubed Py 3-5%, tr. Sph
JGKM-22	460,338	6,227,564	Float	Black mudstone/argillite; diss Py 1-3%, tr. Ga along fractures
JGKM-23	460,251	6,227,618	Float	Black fine grained sediment with diffuse lense of cherty jasperoid; tr. Diss Py
JGKM-24	460,199	6,227,647	Float	slighly oxidized, clay-sericite-pyrite alteration; 5-35% Py
JGKM-25	462,369	6,228,219	Grab	Quartz/(carbonate) vein with sheared CS textures; tr. Ga
JGKM-26	462,964	6,228,756	Float	Greenish-gray andesite with irregular jasperoid pods/veins, crudely banded; Py 5-10%
JGKM-27	462,944	6,228,770	Float	Coarse-crystalline quartz-pyrite vein in polymictic andesitic(?) lapilli tuff; Py 70-75%
JGKM-28	462,867	6,228,827	Float	Laminated/banded grayish-brown calcareous-argillaceous sediment to limestone; tr.-1%
				diss Py, tr. Ga, some Py(?) very thin laminae
JSKM-01	462,966	6,227,345	Float	Dark brownish, thin banded calcareous chert; Py 1-3%, Sph tr.-0.5%, Ga - tr.
JSKM-02	462,971	6,227,300	Float	Dark brownish, thin banded calcareous chert, strongly siilceous; Py 3-5%, Sph 0.5-1%,
				Ga - tr.-0.5%, Apy?
JSKM-03	462,971	6,227,300	Float	Dark brown, brecciated, poorly laminated/banded calcareous chert, strongly siliceous;
				Sph - 2%, tr. Ga, Py
JSKM-04	462,967	6,227,272	Float	Light gray felsic volcanic, siliceous; Cpy - tr.-1%, Malachite
JSKM-05	462,991	6,227,233	Float	Black tuffaceous mudstone/argillite or argilaceous tuff, locally laminated; Py tr.-1%,
				Ga up to 1-2%, tr. Sph

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
JSKM-06	463,019	6,227,271	Float	Dark greenish-gray, aphanitic to fine crystalline, magnetic intrusive, incipient cleavage;
				Py, Sph 1%
JSKM-07	463,054	6,227,305	Float	Quartz-pyrite-manganese-sphalerite veins in older, greenish volcanic/volcaniclastic rock
JSKM-08	463,261	6,227,719	Float	Black tuffaceous argillite to tuff with small pods of pinkish jasperoid;
				Py (locally up to 10%), diss. Ga 0.5% and tr. Sph
JSKM-09	463,260	6,227,741	Float	Whitish quartz-carbonate breccia in andesitic volcanic; Manganese oxide stain, small,
				gray, needle-like crystals
KMJ-01	462,001	6,227,907	Composite Grab	Whitish, strongly silicified intermediate/felsic volcaniclastic; thin chalcedony veins; 1-2%
				diss./stringer Py, tr. Sph; Fe-Mn-oxide stain
KMJ-02	461,997	6,227,906	Composite Grab	Light gray, moderately silicified intermediate volcaniclastic, Fe-Mn oxides; diss. Py 1%, tr. Ga
KMJ-03	461,995	6,227,906	Grab	Light gray, moderately/strongly silicified intermediate(?) volcaniclastic, abundant Fe-Mn
				oxides;diss./pods/stringers Py 3-5%, locally Marcasite
KMJ-04	461,991	6,227,905	Selective Grab	Gray, slightly silicified intermediate tuff with strongly siliceous pods, common relics of thin
				laminations, locally contorted, fragmental to afanitic texture; diss. Py 1-2%, tr
KMJ-05	461,989	6,227,904	Float	Quartz veins (various widths) in grayish-green meta?-volcanic (felsic?) or meta?-sediment,
			Selective Grab	sometimes siliceous; tr. Py, common Hematite
KMJ-06	461,987	6,227,903	Grab	Shear/fracture zone in greenish-gray intermediate fragmental volcanic, locally silicified; diss.
				Py 1-2%, common Goethite/Hematite 2-5%
KMJ-07	461,985	6,227,907	Grab	Light gray to whitish, shear/fracture zone in intermediate/felsic fragmental volcanic
				(carapace breccia?), relics of thin banding in fragments; diss Py 5-10%, tr. Sph
KMJ-08	461,980	6,227,906	Composite Grab	Gray, commonly silicified, felsic to intermediate volcanic, usually fragmental volcanic, locally
				crackle breccia; diss/stringer/pods Py 1-5%, abundant Fe-Mn oxides
KMJ-09	461,972	6,227,906	Composite Grab	Grayish, fine-grained volcaniclastics abd tuffaceous sediments, locally clayey, strongly
				weathered and oxidized (limonite-Goethite 5-10%); diss Py 1-2%
KMJ-10	461,974	6,227,895	Grab	Greenish-gray, siliceous, coarse fragmental volcaniclastic flow(?); spotty Py 1-3%, tr. Sph
KMJ-11	461,974	6,227,895	Float	Dark gray, fine-grained, laminated silty-argillaceous sediments with finely diss Py 1% and
				distinct stains of Hydrozinckite
KMJ-12	461,971	6,227,915	Grab	Quartz veins in felsic-intermediate fragmental volcanic, common very porous-spongy
				textures (subordinate feeder channel/vein system); diss/cubed Py 1-%5, limonite
KMJ-13	461,971	6,227,915	Float	Dark brown, medium-to-fine laminated/banded calcareous sediment, heavy (Barite?); diss
				Py/Marcasite, tr. Sph, Barite
KMJ-14	462,060	6,227,805	Grab	Whitish, thick, irregular quartz/silicification zone (locally stockwork style) in yellowish,
				gossaneous felsic(?) tuff/lapilli tuff, strong Fe-Mn-oxide stains, Py 1%, tr. Ga
KMJ-15	462,104	6,227,756	Grab	Irregular lens/channel of quartz impregnated (pods, veins) rock cutting through
				intermediate(?) tuff/lapilli tuff; tr. Py, Ga

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
KMJ-16	462,107	6,227,697	Grab	Whitish, strongly siliceous lens of felsic(?) tuff; diss/blebs Py 3%, tr. Sph
KMJ-17	461,662	6,227,955	Chip-35cm	Dark brown, thin laminated/banded, cherty-calcareous sediments, common contorted
				banding; very thin laminae of extremely fine Py and amorphous yellowish Sph (2-3%)
KMJ-18	461,662	6,227,955	Composite Grab	Greenish to gray, thinly laminated/banded cherty sediments, common contorted banding;
				interbedded tuffaceous seds; very fine diss Py in laminae, tr. Sph
KMJ-19	461,690	6,227,942	Float	Greenish-gray lapilli tuff, sheared. With pods, veins of rusty-brown carbonate/barite(?)
				replacements; tr. Py, Sph
KMJ-20	461,818	6,227,919	Grab	Argillaceous-siliceous fault zone/gouge, strong Fe-Mn stain; fault cut through thinly
				laminated tuffaceous sediments
KMJ-21	461,838	6,227,877	Grab	Gark gray, fine tuffaceous sediments, near the contact with flow banded rhyolite; lenses
				of Py 1-3%, Limonite/Goehtite
KMJ-22	461,822	6,227,857	Grab	Grayish-green, laminated intermediate/felsic tuff; diss Py 3-4%, strongly limonitic
KMJ-23	461,829	6,227,742	Grab	Gray, fine-grained sediments, likely tuffaceous sediments, moderately silicified; diss Py 2-3%
KMJ-24	461,796	6,227,688	Float	Intermediate fragmental volcanic with rusty-brown zone of carbonate-(barite) impregnation;
				Py 1%, tr. Sph
KMJ-25	461,606	6,227,686	Float	Whitish, flow banded rhyolite, strongly siliceous, aphanitic
KMJ-26	461,617	6,228,100	Grab	Grayish andesite/dacite flow, massive; epidote, chlorite alt'n; tr diss Py, tr Ga
KMJ-27	461,524	6,227,874	Float	Black-matrix breccia to lapilli tuff of felsic volcanic, flow, strongly silicified, vuggy felsic fragments
KMJ-28	461,510	6,227,833	Float	Black, strongly silicified argillite?, rich in Fe-oxides
KMJ-29	461,566	6,227,623	Grab	White quartz-carbonate vein, near its contact with intermediate tuff/lapilli tuff; tr Ga
KMJ-30	461,581	6,227,592	Grab	Irregular zone of rhyolite rich in quartz phenocrysts and tuffaceous sediments, gossaneous,
				Fe-oxides; Py 1%
KMJ-31	461,596	6,227,585	Grab	Black-matrix breccia of felsic volcanic, base flow breccia, silicified.
KMJ-32	461,609	6,227,660	Grab	Dark gray, silicified, fine-grained argillaceous sediments beneath felsic flow; diss Py 1-3%
KMJ-33	461,609	6,227,660	Grab	Black, argillaceous, probably tuffaceous sediments, locally silicified; beneath felsic flow
KMJ-34	461,618	6,227,668	Grab	Black-matrix breccia to flow banded exhalite? of felsic volcanic, strongly silicified, tr diss Py
KMJ-35	462,013	6,227,879	Grab	Grayish, felsic(?) tuff, strongly cleaved, silicified, locally tectonically brecciated (fault beccia?)
				strongly oxidized; diss Py 1%
KMJ-36	462,022	6,227,895	Grab	Grayish, strongly silicified, vuggy breccia(?) of rhyolite-dacite (likely chaotic geyserite?
				deposit); nearby rhyolite display flow banding
KMJ-37	462,027	6,227,892	Grab	Very strongly oxidized (Fe-Mn?), crudely layered, strongly vuggy, silica deposit - siliceous
				sinter to geyserite
KMJ-38	462,054	6,227,896	Grab	Interbedded felsic breccia (black-matrix) and siliceous sinter, locally vuggy; tr Py and Ga
KMJ-39	462,060	6,227,901	Grab	Black-matrix rhyolite breccia, very siliceous; Py 3-5% in stringers, disseminations and cubes
KMJ-40	462,095	6,227,867	Grab	Moderately silicified andesite/dacite lapilli tuff, mixed composition, common plagiclase
				phenocrysts

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
KMJ-41	462,118	6,227,865	Grab	Strongly tectonically deformed, tectonic breccia of felsic volcanic flow unit, locally
				slickensided, limonitic; diss Py 1-2%
KMJ-42	462,049	6,227,710	Composite Grab	Dark brownish, thinly banded/laminated chert-to-calcareous tufa, some convolutions,
				baritic?; thin laminae of pale-yellowish sphalerite 2%, also Py laminae
KMJ-43	462,049	6,227,710	Grab	Dark brownish, thinly banded/laminated chert-to-calcareous tufa, some convolutions,
				baritic?; thin laminae of pale-yellowish sphalerite 2%, also Py laminae; stain of hydrozinckite
KMJ-44	462,049	6,227,710	Grab	Dark brown, thinly banded/laminated chert-to-calcareous tufa, some convolutions, baritic?;
				fine spots of Ga 0.5%; same layer as two previous samples; approx 1 m below the KMJ-43
KMJ-45	462,049	6,227,710	Grab	Dark brown, thinly banded/laminated chert-to-calcareous tufa, some convolutions, baritic?;
				Py 2-4%, tr. Ga; same layer as two previous samples; approx 1-1.5 m below the KMJ-44
KMJ-46	462,049	6,227,710	Grab	Dark brown thinly banded/laminated chert-to-calcareous tufa, some convolutions, baritic?;
				same layer as two previous samples; approx 1 m below the KMJ-45
KMJ-47	463,966	6,223,575	Float	Dark reddish, strongly siliceous banded jasperoid?, thin banding with some convolutions;
				abundant Hematite, Py 3-5%
KMJ-48	463,966	6,223,575	Float	Dark gray-to-greenish lapilli tuff with black argillaceous matrix; diss Py 3-5%, tr. Ga
KMJ-49	463,894	6,223,612	Float	Light gray, felsic volcanic with quartz and feldspar fenocrystals, strongly silicified; diss. Py 3%
KMJ-50	463,780	6,223,647	Float	Dacitic-andesitic lapilli tuff to volcanic breccia, strongly oxidized, locally siliceous-jasperoid
				impregnations; 1-5% Py, locally larger pods of Py-Marcasite
KMJ-51	463,396	6,223,568	Float	Brownish-orange veins/pods of carbonate-barite(?) in intermediate volcaniclastic, some
				quartz veining; Py pods 3-5%, tr. Ga
KMJ-52	463,251	6,223,506	Float	Grayish, intermediate tuff to fine lapilli tuff, siliceous, few quartz veins and pods with 3-5%
				Ga along the edges of quartz
KMJ-53	463,222	6,223,455	Float	Brownish-orange veins/pods of carbonate-barite(?) replacements in intermediate
				volcaniclastic; Py 1-3%, tr. Sph, Ga
KMJ-54	463,001	6,223,436	Float	Brownish-orange veins/pods of carbonate-barite(?) replacements in intermediate
				volcaniclastic, some quartz veining; Py 1-3%, tr. Sph, Ga
RZ-1	462417	6228221	float	Angular float 20x10 cm of barite-carbonate vein fragment with 5-7% of combined galena
				and sphalerite.
RZ-3	462269	6228062	float	Angular float 0.7 m across of quartz-carbonate replaced rock with 2-3% pyrite.
RZ-3A	462269	6228062	float	Angular float 0.8 m across of quartz-carbonate replaced rock with 2-3% pyrite.
RZ-4A	462244	6228096	grab	Carbonate/barite pod 1.0 metres across with 2-3% galena.
RZ-4B	462244	6228096	grab	Same as RZ-4A
RZ-5	462272	6228141	composite grab	Composite sample of 4 separate grab samples collected 1 metre apart from barite-carbonate
				vein with 3-5% of combined galena and sphalerite.
RZ-6	462272	6228141	1.0 m chip	Barite-carbonate vein with 2-3% of combined galena and sphalerite.
RZ-7	462272	6228141	1.0 m chip	Barite-carbonate vein with 1-2% galena and 2-3% sphalerite.

Sample #	Coordinates (NAD 83)		Sample type	Description
	Easting	Northing		
RZ-8	462256	6228147	composite grab	Sample consisted of 7 separate grab samples taken from a shear zone which is at least 7
				metres wide. The zone is in large apart (>50%) replaced by barite and carbonate with up
				3% galena and sphalerite. Zone orientation is 80 degrees with vertical dip.
RZ-9	462221	6228099	1.5 m chip	Barite-carbonate replaced zone at least 7-8 metres wide with up to 2% sphalerite and
				minor galena
RZ-10	462221	6228099	composite grab	Sample consisted of several grab samples taken from an area 3-4 metre across. The samples
				consisted of sericite-chlorite altered rock with minor galena and sphalerite.
RZ-11	462276	6226166	0.9 m chip	Sericite-chlorite altered, sheared andesite pyroclastics in large part replaced by barite and
				carbonates with up to 3% galena and sphalerite. Shearing/foliation 150/80N
RZ-12	462100	6228056	composite grab	The sample consisted of several grab samples colected from limestone/chert with minor to
				3% sphalerite.
RZ-13	462100	6228056	composite grab	Altered andesitic rocks with 1-2% disseminated pyrite
RZ-14	462118	6228084	composite grab	Altered andesitic rocks with 1-2% disseminated pyrite
RZ-15	462148	6228140	composite grab	Altered andesitic rocks with trace to minor disseminated pyrite
RZ-16	462088	6228063	grab	Small outcrop of limestone with minor galena and manganese stain on the surface.
RZ-17	462113	6228072	grab	Altered andesitic rocks with trace to minor disseminated pyrite
RZ-18	461981	62227927	grab	Limestone with trace galena. Limestone bed is at least 0.5 m thick with bottom obscured by
				talus
RZ-19	461894	6227950	grab	Silicified andesite tuff with minor disseminated pyrite.
RZ-20	461796	6227996	grab	Altered andesite tuff with minor disseminated pyrite.
RZ-21				
RZ-22	461604	6228091	composite grab	Composite sample of four grabs samples collected from a small outcrop of limestone/
				mudstone with some limonite and trace to minor disseminated sphalerite (?)
RZ-23	461610	6228095	composite grab	Composite sample of several grab samples collected from small outcrop of altered andesitic
				rock cut by quartz veining with specularite.
RZ-28	461695	6228084	grab	Altered andesitic rock cut by carbonate veining with 1-2% specularite and trace of gray
				sulphide.
RZ-29	461677	6228074	grab	Altered andesitic rocks with minor disseminated pyrite.

APPENDIX II

GEOCHEMICAL RESULTS

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File No : 6 0 2 6 5
Date : October 24, 2016
Samples : Rock

Attn: Ed Kruchkowski

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
AW 1	<0.5	0.07	11	28	398	3	0.09	4	13	77	8	0.52	0.04	2	0.01	3257	2	0.01	4	0.01	219	7	21	3	<0.01	<1	<1	3	263	<1
AW 2	1.2	0.11	16	29	969	23	0.02	3	1	73	14	1.21	0.08	2	0.01	62	49	0.01	2	<0.01	271	17	19	12	<0.01	<1	2	7	465	1
AW 3	23.2	0.12	1032	31	81	18	3.62	412	17	30	140	1.91	0.10	3	0.18	8986	139	0.01	5	0.02	7036	78	226	33	<0.01	<1	<1	595	>10000	1
AW 4	9.0	0.58	19	19	160	58	0.21	4	13	25	960	<0.01	0.41	<1	0.95	1756	3	0.03	4	0.01	125	<1	14	104	0.01	<1	7	12	459	5
AW 5	2.0	0.04	87	28	66	8	4.37	207	13	53	39	1.41	0.05	2	0.20	5712	49	0.01	8	0.01	423	20	404	14	<0.01	<1	<1	298	>10000	<1
AW 6	3.9	0.05	348	25	83	15	2.86	208	17	61	49	1.87	0.07	<1	0.18	3962	201	0.01	10	0.01	726	50	208	29	<0.01	<1	<1	297	>10000	1
AW 7	2.7	0.15	185	14	366	95	0.06	6	<1	14	187	2.15	0.04	<1	0.00	69	10	0.03	1	0.03	919	<1	11	186	<0.01	51	6	48	924	5
AW 8	14.4	0.30	309	27	283	17	4.14	54	26	24	1472	1.96	0.25	<1	0.49	5943	46	0.01	11	0.05	1412	116	881	33	<0.01	<1	10	66	7352	2
AW 9	>100	0.21	95	43	86	27	0.13	1811	135	28	4055	<0.01	0.12	<1	0.02	257	1226	0.01	30	0.03	8566	321	25	54	<0.01	8	11	2425	>10000	3
AW 10	6.0	0.10	98	26	93	16	3.84	472	26	34	144	1.90	0.12	2	0.38	8391	183	0.01	12	0.02	942	36	234	31	<0.01	<1	1	745	>10000	1
AW 11	8.5	0.12	12	24	213	5	2.52	384	3	47	44	1.10	0.05	2	0.10	3333	9	0.01	2	<0.01	2075	14	293	10	<0.01	<1	10	495	>10000	<1
AW 12	2.1	0.32	13	31	590	12	0.59	78	3	68	208	0.60	0.19	7	0.01	1200	8	0.01	5	0.09	358	10	39	6	<0.01	<1	3	90	>10000	5
AW 13	2.0	0.39	43	27	345	9	2.90	33	12	29	20	1.12	0.27	7	0.03	3948	5	0.01	4	0.11	78	<1	91	11	<0.01	<1	9	32	3493	4
AW 14	0.8	0.22	44	28	665	18	0.05	11	5	76	85	2.06	0.14	<1	0.06	1588	3	0.02	4	0.01	303	9	9	32	<0.01	<1	7	12	1306	2
AW 15	1.2	0.14	181	29	560	14	0.35	3	16	38	625	1.87	0.14	4	0.03	795	11	0.02	4	0.09	49	637	67	29	<0.01	<1	4	4	398	6
AW 16	>100	0.14	436	19	106	23	0.32	953	10	15	124	<0.01	0.06	<1	0.11	431	7	0.01	3	0.01	>10000	159	111	43	0.01	1	22	1220	>10000	1
AW 17	10.4	0.34	140	19	132	76	0.04	29	20	42	54	2.24	0.35	<1	0.01	95	4	0.04	4	0.06	1674	111	19	158	<0.01	37	19	26	2897	5
AW 18	>100	0.02	6	23	216	7	0.09	20	1	62	17	1.40	0.04	<1	<0.01	87	1	0.01	2	0.01	>10000	257	88	15	<0.01	2	1	21	2366	<1
AW 19	28.6	<0.01	372	20	90	397	0.04	4	42	80	39	<0.01	0.01	<1	0.01	411	1	0.02	3	<0.01	876	80	5	114	<0.01	24	2	1	87	3
AW 20	5.3	0.08	36	26	236	5	1.78	35	9	104	35	0.77	0.05	1	0.03	1079	4	0.01	8	0.02	6315	22	432	6	<0.01	<1	3	52	6034	1
AW 21	<0.5	0.17	60	26	171	8	0.36	1	3	59	7	1.15	0.12	8	0.03	219	15	0.02	3	0.02	116	3	23	15	<0.01	<1	1	1	85	3
AW 22	0.8	0.30	38	22	162	18	1.16	12	26	43	177	1.97	0.34	2	0.18	1512	17	0.02	8	0.04	125	<1	48	33	<0.01	<1	3	13	1342	6
AW 23	4.4	0.12	35	26	295	13	2.02	8	13	30	60	1.82	0.12	5	0.13	2565	2	0.02	5	0.08	274	48	487	26	<0.01	<1	12	8	830	2
AW 24	<0.5	0.11	15	29	102	2	0.92	<1	2	92	116	0.56	0.10	7	0.03	545	1	0.01	4	<0.01	43	72	44	9	<0.01	<1	1	1	57	14
AW 25	<0.5	0.20	2	29	144	4	1.57	<1	1	85	5	0.82	0.16	4	0.20	858	3	0.02	3	<0.01	29	<1	76	10	<0.01	<1	<1	1	36	8
AW 26	12.6	0.16	1041	23	352	163	0.02	2	<1	45	80	<0.01	0.54	<1	<0.01	35	128	0.02	1	0.10	3547	1408	26	123	0.01	28	9	1332	521	7
AW 27	3.1	0.09	10	18	442	115	0.01	3	<1	36	165	<0.01	0.03	<1	<0.01	29	20	0.02	1	0.01	848	165	35	157	<0.01	42	6	20	530	7
AW 28	1.6	0.17	71	30	1625	7	0.03	5	4	73	215	1.16	0.13	2	0.05	36	11	0.02	5	0.01	1403	130	95	13	0.01	<1	12	16	737	5
AW 29	<0.5	0.08	44	30	2138	4	0.05	2	3	101	38	0.81	0.08	1	<0.01	19	5	0.01	4	0.02	1136	33	70	8	<0.01	<1	2	5	244	4
AW 30	0.8	0.11	64	28	1529	6	0.02	1	9	73	63	1.13	0.12	1	<0.01	17	4	0.02	4	<0.01	2085	50	82	11	<0.01	1	3	3	57	4
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* Sample is digested with Aqua Regia at 95C for one hour and bulked to 20 ml with distilled water.
Partial dissolution for Al, B, Ba,Ca, Cr,Fe,K,La,Mg,Mn,Na,P,Sr,Ti and W.

* Sample received on September 6, 2016

Certified by: ______________________

Loring Laboratories (Alberta) Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 403- 274-2777 Fax: 403-275-0541
loringlabs@telus.net

To:
Mountian Boy Minerals
PO Box 859 426 King St.
Stewart BC V0T 1W0

Attn: Ed Kruchkowski

File No : 6 0 2 6 5
Date : October 24, 2016
Samples : Rock

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
AW 31	<0.5	0.10	111	30	348	13	0.02	1	1	81	5	1.69	0.39	2	<0.01	17	4	0.02	2	0.07	301	8	34	21	<0.01	1	3	3	79	3
AW 32	8.7	0.10	409	32	237	13	0.10	18	4	52	1167	1.60	0.28	<1	<0.01	11	26	0.03	1	0.01	>10000	22	213	19	<0.01	2	7	30	2931	5
AW 33	>100	<0.01	30	19	255	67	0.02	52	9	15	26	2.10	0.06	5	<0.01	>10000	12	0.02	5	0.02	>10000	10	197	127	<0.01	<1	<1	62	7036	<1
AW 34	4.0	<0.01	35	27	288	3	5.59	3	2	20	<1	0.53	0.03	8	0.03	>10000	1	<0.01	1	0.01	1086	6	434	2	<0.01	<1	<1	7	681	<1
AW 35	0.8	0.25	235	27	323	29	0.13	104	22	50	31	<0.01	0.23	<1	0.02	6537	13	0.02	7	0.04	779	9	12	60	<0.01	<1	4	122	>10000	5
AW 36	2.5	0.16	312	32	360	11	5.30	10	8	19	16	1.63	0.15	6	0.06	>10000	3	0.01	11	0.04	181	11	399	20	<0.01	<1	<1	8	790	<1
AW 37	<0.5	0.24	12	36	204	4	0.09	1	1	85	9	0.63	0.19	5	0.01	128	3	0.02	4	0.01	219	1	8	10	<0.01	<1	2	3	294	8
AW 38	2.4	0.03	4	24	76	5	5.41	2	1	5	<1	0.87	0.06	6	1.80	>10000	1	0.01	<1	0.01	89	<1	343	6	<0.01	<1	<1	3	324	<1
AW 39	1.6	0.23	11	16	34	3	3.87	19	1	33	3	0.75	0.01	2	0.18	4065	2	<0.01	1	0.01	14	2	86	5	<0.01	<1	<1	22	2336	1
AW 40	2.3	0.06	105	16	81	6	3.77	1	3	19	5	1.16	0.09	1	0.07	7626	1	<0.01	4	0.02	55	5	513	12	<0.01	<1	<1	1	85	1
AW 41	<0.5	0.16	20	16	111	5	0.58	3	2	53	22	1.16	0.13	<1	0.01	1161	2	0.01	2	0.04	67	4	16	13	<0.01	<1	1	4	370	10
AW 42	1.2	0.03	16	19	78	2	4.21	2	1	39	3	0.36	0.02	1	0.06	2078	2	0.01	2	0.02	10	0	507	2	<0.01	<1	<1	3	339	1
AW 43	2.4	0.16	62	21	260	5	4.26	11	16	19	2	0.96	0.12	4	0.04	9010	4	0.01	3	0.03	160	10	318	8	<0.01	<1	<1	9	1017	2
AW 44	2.4	<0.01	82	15	197	2	4.31	6	1	5	<1	0.51	0.01	1	0.06	8516	3	<0.01	1	0.01	118	3	376	2	<0.01	<1	<1	8	864	<1
AW 45	8.2	0.33	387	21	38	11	1.48	33	25	79	14	1.53	0.03	<1	0.11	1533	186	0.01	5	0.02	1188	56	47	22	<0.01	19	58	33	3589	3
AW 46	<0.5	0.33	10	18	128	7	0.77	1	3	38	81	1.32	0.24	11	0.02	540	2	0.03	1	0.07	14	14	27	21	<0.01	<1	8	1	96	6
AW 47	4.5	0.34	445	19	60	23	0.07	6	3	64	20	1.77	0.01	<1	<0.01	1257	10	0.01	<1	0.01	76	36	4	49	<0.01	<1	43	3	274	<1
AW 48	<0.5	2.05	4	13	237	7	3.27	2	2	12	<1	1.22	0.32	7	0.03	1782	2	0.01	<1	0.05	27	2	46	18	<0.01	<1	7	1	108	9
AW 49	1.6	2.41	13	15	50	11	2.59	1	8	13	3	1.49	0.25	<1	0.14	1022	5	0.01	1	0.05	116	10	103	28	<0.01	<1	8	1	122	7
AW 50	2.0	1.83	3	14	785	9	3.50	2	1	16	5	1.35	0.22	<1	0.03	1363	1	0.01	1	0.04	70	4	98	22	<0.01	<1	5	1	129	9
AW 51	2.9	0.33	14	16	455	9	3.50	162	1	34	3	1.38	0.02	5	0.05	2932	2	<0.01	1	0.01	140	17	173	18	<0.01	<1	29	6	124	4
AW 52	<0.5	1.67	8	16	201	18	0.11	2	5	22	<1	1.68	0.14	3	0.02	1909	2	0.01	<1	0.05	23	5	9	44	<0.01	<1	38	1	141	3
AW 53	1.2	1.69	79	12	156	27	0.05	2	1	43	8	1.70	0.13	<1	0.01	706	11	0.01	<1	0.02	3	21	7	58	<0.01	5	42	2	160	1
AW 54	2.0	1.08	1205	11	167	49	0.03	2	3	12	9	1.63	0.26	<1	<0.01	1429	24	0.02	<1	0.13	39	116	111	110	<0.01	11	45	1	137	<1
AW 55	17.3	0.06	1117	12	192	92	0.01	3	<1	29	75	1.58	0.02	<1	<0.01	6	76	0.01	<1	0.00	2792	155	17	124	<0.01	38	6	26	517	<1
AW 56	1.6	0.10	232	18	210	5	0.02	<1	<1	19	5	1.01	0.21	3	<0.01	17	3	0.01	<1	0.03	89	2	11	10	<0.01	<1	1	<1	12	1
AW 57	5.4	0.23	81	17	114	10	2.17	1	18	10	26	1.50	0.25	<1	0.03	1990	1	0.01	6	0.12	52	6	152	21	<0.01	<1	11	2	166	<1
AW 58	2.5	1.13	111	17	36	39	2.45	2	1	13	<1	1.45	0.03	<1	0.52	>10000	2	0.01	<1	0.03	<1	12	113	77	<0.01	<1	<1	1	55	1
AW 59	3.7	0.54	119	17	95	12	1.72	17	29	5	31	1.58	0.38	<1	0.09	2497	12	0.03	2	0.11	324	17	21	26	0.04	<1	8	13	1411	1
AW 60	1.6	0.67	106	18	75	10	3.17	19	18	6	14	1.39	0.32	3	0.15	5747	12	0.02	1	0.11	165	10	50	20	0.06	<1	<1	18	1918	1
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* Sample is digested with Aqua Regia at 95C for one hour and bulked to 20 ml with distilled water.
Partial dissolution for Al, B, Ba,Ca, Cr,Fe,K,La,Mg,Mn,Na,P,Sr,Ti and W.

* Sample received on September 6, 2016

Certified by: ______________________

Loring Laboratories (Alberta) Ltd.

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loringlabs@telus.net

To:
Mountian Boy Minerals
PO Box 859 426 King St.
Stewart BC V0T 1W0

File No : 6 0 2 6 5
Date : October 24, 2016
Samples : Rock

Attn: Ed Kruchkowski

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
AW 61	1.2	0.68	46	17	153	7	2.71	7	20	13	11	1.25	0.28	3	0.14	3585	6	0.03	2	0.12	235	5	46	15	0.04	<1	<1	8	814	3
AW 62	<0.5	0.43	188	20	65	14	1.59	3	12	19	19	1.58	0.28	<1	0.05	2518	83	0.03	5	0.09	93	53	83	29	<0.01	<1	13	5	513	3
AW 63	<0.5	0.27	4	19	53	24	0.25	2	3	33	1	1.62	0.28	<1	0.14	3701	1	0.01	<1	0.08	<1	5	18	50	<0.01	<1	<1	4	419	<1
AW 64	<0.5	0.29	37	16	92	5	0.36	1	5	19	11	1.05	0.25	6	0.03	912	2	0.02	2	0.06	96	8	12	13	<0.01	<1	3	2	206	5
AW 65	<0.5	0.05	165	20	24	2	0.01	<1	1	114	870	0.52	0.03	<1	<0.01	46	22	<0.01	4	<0.01	48	32	2	4	<0.01	<1	5	<1	44	<1
AW 66	>100	<0.01	>10000	11	14	182	0.11	4	<1	20	8833	1.50	0.01	<1	0.43	>10000	1	0.02	<1	<0.01	172	410	1	152	<0.01	<1	<1	62	523	<1
AW 67	>100	0.06	3133	12	7	24	0.15	830	2	43	338	1.57	0.10	<1	0.27	9241	1	0.01	1	0.01	9829	463	16	42	<0.01	<1	<1	1399	<1	<1
AW 68	3.3	1.11	112	15	36	13	3.99	14	8	18	55	1.42	0.01	<1	0.38	3802	1	<0.01	<1	0.04	308	7	214	23	0.01	<1	131	14	1525	1
KMJ 1	6.4	0.20	89	19	268	6	1.23	3	7	15	25	1.21	0.16	5	0.01	2163	3	0.01	2	0.10	119	14	74	14	<0.01	<1	3	4	439	3
KMJ 2	2.7	0.25	83	21	228	6	1.56	9	6	11	13	1.11	0.21	5	0.01	2243	3	0.01	2	0.11	54	8	21	12	<0.01	<1	3	11	1106	2
KMJ 3	2.5	0.23	136	19	240	7	0.83	45	5	9	19	1.31	0.20	2	0.01	1085	3	0.01	2	0.12	38	8	18	15	<0.01	<1	6	32	3611	2
KMJ 4	6.0	0.13	61	18	149	3	3.50	67	3	13	13	0.76	0.12	3	0.02	5909	9	0.01	2	0.05	2023	31	409	6	<0.01	<1	<1	62	6837	5
KMJ 5	<0.5	0.18	26	22	295	3	0.11	4	2	63	12	0.72	0.12	3	0.01	638	21	0.01	3	0.02	285	4	11	8	<0.01	<1	1	5	534	5
KMJ 6	2.8	0.42	89	19	299	16	0.07	10	2	15	33	1.64	0.28	<1	<0.01	391	8	0.02	<1	0.09	444	18	80	31	<0.01	2	7	26	1714	1
KMJ 7	2.9	0.25	290	20	274	14	0.20	6	11	18	26	1.58	0.19	<1	<0.01	1947	9	0.01	2	0.10	105	23	13	25	<0.01	<1	4	10	957	2
KMJ 8	2.4	0.25	103	21	347	7	0.60	15	9	15	16	1.22	0.19	5	0.01	3886	3	0.01	3	0.10	59	12	25	14	<0.01	<1	<1	19	1900	3
KMJ 9	14.4	0.25	160	17	297	32	0.01	19	5	15	54	1.87	0.13	4	<0.01	3724	26	0.01	3	0.02	723	<1	16	67	<0.01	<1	3	30	3087	1
KMJ 10	13.2	0.13	99	21	107	6	3.94	74	5	8	13	1.10	0.14	<1	0.07	>10000	2	<0.01	6	0.04	628	5	436	11	<0.01	<1	8	56	5951	2
KMJ 11	33.5	0.11	136	22	105	8	3.92	281	8	9	170	1.23	0.11	<1	0.02	8602	49	0.01	7	0.04	4939	58	609	14	<0.01	<1	10	548	>10000	5
KMJ 12	4.3	0.25	51	20	107	20	0.06	2	1	43	10	1.70	0.40	<1	<0.01	81	9	0.02	3	0.03	184	<1	46	30	<0.01	8	3	21	254	<1
KMJ 13	26.7	<0.01	42	23	58	8	4.00	104	5	4	1	1.14	0.03	<1	0.07	>10000	12	<0.01	10	0.01	2005	15	1250	10	<0.01	<1	13	119	>10000	<1
KMJ 14	1.2	0.09	24	26	270	2	0.30	30	6	87	12	0.54	0.06	6	<0.01	1318	2	0.01	5	0.02	912	7	13	5	<0.01	<1	2	11	1175	4
KMJ 15	15.2	0.11	53	24	175	3	1.70	51	7	73	77	0.79	0.08	<1	0.04	1454	15	<0.01	5	0.02	2667	49	106	6	<0.01	<1	3	74	8105	2
KMJ 16	6.9	0.18	170	22	125	16	1.07	29	14	63	29	1.64	0.14	<1	0.02	986	8	0.01	8	0.03	1272	26	100	32	<0.01	3	7	30	3308	<1
KMJ 17	12.5	0.13	288	20	56	17	3.48	55	12	10	46	1.49	0.23	<1	0.04	8810	35	0.01	8	0.07	1545	38	132	34	<0.01	<1	8	92	>10000	1
KMJ 18	8.3	0.86	136	16	89	18	3.43	44	10	12	39	1.45	0.16	<1	0.21	7329	31	0.01	11	0.06	621	3	171	36	<0.01	<1	22	70	7983	<1
KMJ 19	4.4	0.26	23	18	183	11	3.37	1	11	11	628	1.36	0.30	1	1.43	4485	2	0.01	5	0.04	38	1	347	23	<0.01	<1	21	2	194	4
KMJ 20	2.8	0.63	864	20	249	19	0.18	17	9	25	48	1.59	0.39	6	0.02	2279	9	0.02	4	0.04	65	8	25	30	<0.01	<1	14	17	1809	6
KMJ 21	1.6	0.34	87	17	143	17	0.70	2	10	10	21	1.61	0.43	2	0.02	1396	5	0.02	3	0.13	177	<1	21	32	<0.01	<1	6	3	311	1
KMJ 22	<0.5	0.36	21	19	145	17	0.09	1	8	17	12	1.70	0.42	2	0.04	572	3	0.02	4	0.06	133	<1	7	36	<0.01	5	8	1	124	<1
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

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Date : October 24, 2016
Samples : Rock

Attn: Ed Kruchkowski

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
KMJ 23	<0.5	0.33	191	22	119	10	1.76	1	10	18	12	1.47	0.32	<1	0.13	2330	4	0.02	5	0.08	49	<1	78	23	<0.01	<1	7	1	125	4
KMJ 24	1.6	0.22	2	19	113	13	3.69	1	10	6	<1	1.36	0.23	<1	3.42	4376	<1	0.01	5	0.03	19	<1	450	26	<0.01	<1	21	2	192	3
KMJ 25	2.4	0.26	9	21	76	2	0.72	<1	2	75	3	0.52	0.20	6	0.03	769	2	0.02	3	0.02	15	<1	18	11	<0.01	<1	3	<1	41	8
KMJ 26	<0.5	1.44	18	22	55	8	0.89	<1	21	25	3	1.38	0.22	3	1.52	835	2	0.03	<1	0.13	9	<1	99	18	0.14	<1	112	1	131	3
KMJ 27	<0.5	0.26	35	18	113	3	1.10	1	2	58	7	0.67	0.23	4	0.03	937	5	0.01	4	0.02	24	<1	24	10	<0.01	<1	3	1	121	8
KMJ 28	<0.5	<0.01	7	22	556	8	2.94	1	12	28	<1	1.26	0.10	<1	1.33	>10000	<1	0.01	3	0.13	41	<1	410	13	0.02	<1	29	2	265	<1
KMJ 29	2.7	0.21	8	24	42	5	1.87	7	2	86	9	0.88	0.11	<1	0.04	1786	14	0.01	4	0.02	457	<1	76	7	<0.01	<1	4	12	1305	3
KMJ 30	<0.5	0.27	58	24	118	2	0.38	2	3	50	5	0.67	0.24	11	0.01	516	10	0.01	3	0.01	117	2	18	14	<0.01	<1	2	1	142	13
KMJ 31	<0.5	0.24	8	22	70	3	1.19	2	2	66	6	0.68	0.18	4	0.02	815	3	0.02	4	0.02	38	2	27	12	<0.01	<1	3	2	165	11
KMJ 32	3.6	0.12	7	15	15	5	4.07	4	1	2	4	0.93	0.09	<1	0.36	8988	6	<0.01	2	0.02	94	<1	341	8	<0.01	<1	9	5	586	1
KMJ 33	7.0	0.16	34	16	54	11	2.19	9	15	6	61	1.50	0.21	<1	0.03	2752	9	0.01	7	0.11	316	15	158	23	<0.01	<1	5	19	2063	2
KMJ 34	1.7	0.25	9	23	123	2	0.68	1	2	51	3	0.44	0.20	5	0.02	625	4	0.01	4	0.01	16	<1	16	10	<0.01	<1	2	1	72	11
KMJ 35	5.5	0.21	337	20	393	27	0.03	3	6	39	24	1.69	0.21	7	<0.01	4896	50	0.01	4	0.10	207	<1	30	61	<0.01	<1	4	11	1127	<1
KMJ 36	9.3	0.11	70	19	704	23	0.02	1	<1	42	16	1.40	0.06	2	<0.01	59	16	0.01	2	0.01	230	43	10	17	<0.01	3	4	7	125	1
KMJ 37	6.9	0.11	99	17	554	35	0.03	1	<1	75	10	1.73	0.07	2	<0.01	31	50	0.01	16	<0.01	118	12	12	38	<0.01	10	3	195	366	<1
KMJ 38	20.8	0.03	134	15	30	73	0.03	6	1	18	28	1.62	<0.01	<1	<0.01	<1	26	0.02	2	0.04	1271	<1	18	92	<0.01	29	3	33	882	<1
KMJ 39	<0.5	0.09	34	22	516	11	0.02	6	10	65	11	1.32	0.14	2	<0.01	18	4	0.01	5	<0.01	134	4	13	14	<0.01	3	2	11	936	2
KMJ 40	4.3	0.38	98	22	486	8	0.18	4	6	18	44	1.35	0.28	7	0.01	242	17	0.01	4	0.10	376	3	12	18	<0.01	<1	9	11	1096	1
KMJ 41	59.3	0.16	363	19	198	24	0.01	1	<1	60	162	1.68	0.10	<1	<0.01	25	115	0.01	9	0.06	7240	179	34	45	<0.01	13	8	10	783	<1
KMJ 42	32.6	0.11	746	19	117	20	3.53	85	9	15	73	1.52	0.12	<1	0.09	6345	47	0.01	7	0.04	4975	39	174	39	<0.01	<1	7	140	>10000	2
KMJ 43	9.7	0.02	672	16	295	10	3.80	72	8	25	41	1.36	0.04	<1	0.01	7418	14	<0.01	5	0.02	1187	18	79	19	<0.01	<1	5	59	6567	2
KMJ 44	19.4	0.25	79	21	109	12	2.89	94	11	22	57	1.41	0.26	<1	0.21	4063	18	0.01	9	0.08	3599	36	341	23	<0.01	<1	10	92	>10000	2
KMJ 45	38.4	0.23	165	17	83	21	1.63	114	22	16	93	1.62	0.26	<1	0.04	2681	15	0.01	12	0.08	5551	56	43	44	<0.01	<1	9	121	>10000	<1
KMJ 46	17.0	0.26	86	19	125	12	3.72	73	17	19	57	1.46	0.23	<1	0.11	6785	4	0.01	12	0.06	1923	26	171	23	<0.01	<1	11	69	7719	1
KMJ 47	3.6	0.18	23	17	208	9	4.19	6	3	40	11	1.38	0.06	<1	0.05	4717	1	<0.01	1	0.01	57	3	124	17	0.01	<1	27	4	320	1
KMJ 48	2.8	0.25	50	19	196	12	0.68	31	19	32	45	1.66	0.16	<1	0.14	2733	49	0.01	3	0.05	413	<1	28	25	<0.01	<1	29	13	1664	6
KMJ 49	1.6	0.11	25	18	156	3	0.06	1	10	85	17	0.81	0.10	8	<0.01	56	10	0.01	3	0.03	100	4	18	9	<0.01	<1	3	1	191	8
KMJ 50	9.9	0.32	31	19	47	9	2.86	58	17	34	115	1.39	0.23	2	0.04	1410	4	0.01	3	0.06	542	6	81	18	<0.01	<1	13	100	7871	8
KMJ 51	<0.5	0.16	1	14	96	7	2.48	1	2	40	7	1.28	0.09	1	0.64	1097	1	0.03	<1	0.07	10	<1	342	16	<0.01	<1	8	0	83	3
KMJ 52	7.8	0.21	461	14	47	24	0.35	9	8	31	8	1.68	0.21	<1	0.33	>10000	1	0.01	2	0.05	242	<1	13	41	<0.01	<1	9	16	1904	5
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* Sample is digested with Aqua Regia at 95C for one hour and bulked to 20 ml with distilled water.
Partial dissolution for Al, B, Ba,Ca, Cr,Fe,K,La,Mg,Mn,Na,P,Sr,Ti and W.

* Sample received on September 6, 2016

Certified by: ____________________

Loring Laboratories (Alberta) Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 403- 274-2777 Fax: 403-275-0541
loringlabs@telus.net

To:
Mountian Boy Minerals
PO Box 859 426 King St.
Stewart BC V0T 1W0

File No : 6 0 2 6 5
Date : October 24, 2016
Samples : Rock

Attn: Ed Kruchkowski

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
KMJ 53	1.2	0.18	304	16	81	11	2.14	2	23	61	7	1.51	0.17	<1	0.40	4308	10	0.01	1	0.03	24	<1	117	22	<0.01	<1	4	2	309	7
KMJ 54	>100	0.17	1457	13	55	18	1.02	108	6	57	1198	1.63	0.16	<1	0.30	9815	1	0.01	1	0.05	427	838	33	34	<0.01	<1	9	126	8581	2
RZ - 1	27.6	0.13	9	18	122	2	0.71	142	1	83	14	0.55	0.01	2	0.09	793	<1	<0.01	2	<0.01	4427	23	511	4	<0.01	<1	11	161	9994	<1
RZ - 3	6.5	0.09	11	17	124	8	2.60	16	2	106	24	1.37	0.04	<1	0.04	2802	2	0.01	4	0.01	525	<1	687	16	<0.01	<1	11	21	2433	1
RZ - 3A	3.6	0.06	12	19	213	7	0.22	13	3	119	52	1.38	0.03	<1	0.01	1536	5	<0.01	5	0.02	75	12	29	16	<0.01	<1	2	14	1813	1
RZ - 4A	41.2	0.01	18	26	323	4	0.02	2	<1	65	13	0.68	0.01	<1	<0.01	53	1	<0.01	2	0.01	>10000	19	595	5	<0.01	1	1	2	225	<1
RZ - 4B	39.9	0.01	29	18	233	5	0.02	3	<1	62	12	0.81	0.01	<1	<0.01	37	1	<0.01	1	0.01	>10000	22	561	6	<0.01	2	1	2	226	<1
RZ - 5	56.8	0.09	4	18	299	2	0.49	44	1	72	8	0.58	0.01	<1	0.10	589	<1	<0.01	2	<0.01	2960	11	657	4	<0.01	<1	8	47	5124	<1
RZ - 6	12.2	0.37	32	16	181	9	1.00	43	9	26	33	1.44	0.18	<1	0.13	1874	1	0.01	3	0.07	1224	2	387	18	0.01	<1	22	41	4328	1
RZ - 7	>100	0.18	7	17	84	4	0.62	203	1	90	21	1.03	0.03	<1	0.13	834	<1	<0.01	2	<0.01	8465	54	369	9	<0.01	<1	16	241	>10000	<1
RZ - 8	17.7	0.11	9	18	212	3	1.27	63	4	66	11	0.75	0.09	1	0.02	1397	1	<0.01	2	0.02	1057	5	493	6	<0.01	<1	8	67	6473	<1
RZ - 9	8.4	0.18	20	17	252	3	0.23	37	5	54	16	0.77	0.08	2	0.01	625	6	<0.01	3	0.02	2056	11	343	7	<0.01	<1	5	49	5286	3
RZ - 10	16.8	0.46	14	18	178	4	0.74	61	7	26	15	1.00	0.18	4	0.14	987	3	0.01	7	0.06	5970	14	348	10	0.01	<1	13	70	6585	3
RZ - 11	24.7	0.93	19	13	273	8	1.19	23	11	78	22	1.39	0.13	<1	0.66	4014	1	0.01	6	0.03	2578	<1	235	18	0.04	<1	47	27	3004	1
RZ - 12	81.3	0.07	63	16	44	7	3.50	207	7	33	127	1.23	0.08	<1	0.02	7412	16	0.01	4	0.02	2249	131	345	13	<0.01	<1	6	309	>10000	3
RZ - 13	12.8	0.30	33	19	192	10	0.60	5	12	39	194	1.54	0.19	6	0.06	2809	2	0.01	5	0.06	763	13	94	24	<0.01	<1	12	5	706	7
RZ - 14	8.2	0.13	140	18	149	13	1.01	2	12	34	186	1.65	0.13	<1	0.09	3336	8	0.01	3	0.06	219	8	149	29	<0.01	<1	10	3	395	5
RZ - 15	2.0	0.26	10	18	437	14	0.70	4	5	23	436	1.68	0.19	2	0.11	3850	1	0.01	1	0.06	112	<1	94	32	<0.01	<1	9	4	523	7
RZ - 16	32.9	<0.01	22	18	48	5	4.16	118	2	1	6	0.84	0.01	10	0.04	>10000	12	<0.01	2	0.01	3027	28	1457	5	<0.01	<1	17	159	8107	<1
RZ - 17	11.6	0.19	71	19	208	15	0.83	5	8	54	722	1.59	0.13	<1	0.15	3709	6	0.01	4	0.04	222	433	161	34	<0.01	<1	11	5	666	8
RZ - 18	25.6	0.26	71	21	153	6	2.98	37	11	9	40	1.16	0.19	3	0.03	4765	4	0.01	4	0.09	1758	39	215	12	<0.01	<1	12	35	3640	6
RZ - 19	<0.5	0.20	13	20	399	6	1.02	10	6	70	26	1.19	0.17	3	0.01	2227	8	0.01	3	0.03	80	<1	21	15	<0.01	<1	5	12	1453	12
RZ - 20	<0.5	0.51	34	19	269	8	0.98	1	8	9	52	1.35	0.28	3	0.16	1170	3	0.01	6	0.07	17	<1	33	17	<0.01	<1	7	1	173	5
RZ - 22	0.8	0.67	6	20	326	12	3.33	1	10	18	11	1.47	0.45	<1	0.45	3241	<1	0.01	2	0.10	13	<1	240	26	0.09	<1	78	1	206	2
RZ - 23	<0.5	1.63	10	18	221	12	0.70	1	23	17	1	1.54	0.43	1	1.53	849	1	0.02	5	0.14	10	<1	53	29	0.08	<1	120	1	209	2
RZ - 28	0.8	1.45	7	22	135	10	2.77	1	26	17	37	1.46	0.25	<1	1.58	1151	1	0.03	7	0.09	9	<1	106	22	0.20	<1	145	1	185	5
RZ - 29	9.9	0.06	225	20	183	5	3.79	24	13	54	20	0.97	0.07	1	0.13	4833	23	0.01	3	0.02	185	13	305	9	<0.01	<1	7	25	2645	1
~~MBHG-1~~	~~>100~~	~~0.09~~	~~2~~	~~19~~	~~14~~	~~11~~	~~0.44~~	~~1362~~	~~13~~	~~79~~	~~572~~	~~0.73~~	~~0.02~~	~~<1~~	~~0.04~~	~~732~~	~~23~~	~~0.01~~	~~2~~	~~<0.01~~	~~>10000~~	~~6~~	~~52~~	~~4~~	~~<0.01~~	~~<1~~	~~6~~	~~2262~~	~~>10000~~	~~<1~~
~~MBHG-2~~	~~>100~~	~~0.44~~	~~165~~	~~10~~	~~52~~	~~11~~	~~2.66~~	~~83~~	~~12~~	~~51~~	~~>10000~~	~~1.37~~	~~0.18~~	~~<1~~	~~0.32~~	~~3583~~	~~5~~	~~0.01~~	~~2~~	~~0.04~~	~~1745~~	~~1480~~	~~170~~	~~18~~	~~0.01~~	~~<1~~	~~35~~	~~80~~	~~6613~~	~~1~~
~~MBHG-3~~	~~>100~~	~~0.55~~	~~4~~	~~17~~	~~326~~	~~11~~	~~3.01~~	~~12~~	~~21~~	~~63~~	~~1840~~	~~1.47~~	~~0.04~~	~~2~~	~~0.35~~	~~4262~~	~~1~~	~~<0.01~~	~~4~~	~~0.01~~	~~400~~	~~55~~	~~254~~	~~21~~	~~0.02~~	~~<1~~	~~45~~	~~23~~	~~2068~~	~~1~~
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* Sample is digested with Aqua Regia at 95C for one hour and bulked to 20 ml with distilled water.
Partial dissolution for Al, B, Ba,Ca, Cr,Fe,K,La,Mg,Mn,Na,P,Sr,Ti and W.

* Sample received on September 6, 2016

Certified by: ____________________

Loring Laboratories (Alberta) Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541
loringlabs@telus.net

ISO9001:2008 Certified

TO: Mountian Boy Minerals
PO Box 859 426 King St.
Stewart BC V0T 1W0

Attn: Ed Kruchkowski

File No : 6 0 2 6 5
Date : November 1, 2016
Sample :

Certificate of Assay

Sample No.	Cu %	Pb %	Zn %
"Assay Analysis"			
AW 3	-	-	9.32
AW 5	-	-	3.04
AW 6	-	-	3.13
AW 9	-	-	26.12
AW 10	-	-	11.64
AW 11	-	-	5.98
AW 12	-	-	1.02
AW 16	-	7.77	16.61
AW 18	-	7.88	-
AW 32	-	1.64	-
AW 33	-	2.45	-
AW 35	-	-	1.32
KMJ 11	-	-	8.58
KMJ 13	-	-	1.88
KMJ 17	-	-	1.23
KMJ 42	-	-	1.96
KMJ 44	-	-	1.26
KMJ 45	-	-	1.55
RZ 4A	-	2.92	-
RZ 4B	-	3.34	-
RZ 7	-	-	3.10
RZ 12	-	-	5.53
Methodology:	Used multi acid digestion, peroxide fusion and AA finish		
Received Date:	September 6, 2016		

I HEREBY CERTIFY that the above results are those assays
made by me upon the herein described samples:

Assayer

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541
loringlabs@telus.net

ISO9001:2008 Certified

To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

FILE: 6 0 2 6 5
DATE: October 24, 2016

SAMPLES: Rock

Certificate of Assay

Attn: Ed Kruchkowski

Sample No.	Au ppb	Au gm/tonne	Ag gm/tonne
RZ-14	141	--	--
RZ-15	99	--	--
RZ-16	119	--	--
RZ-17	117	--	--
RZ-18	103	--	--
RZ-19	96	--	--
RZ-20	115	--	--
RZ-22	101	--	--
RZ-23	97	--	--
RZ-28	99	--	--
RZ-29	107	--	--
RZ-14 check	144	--	--
STD GS-1T (1080 ppb)	1013	--	--
Blank	<5	--	--
Methodology:	-Au- Fire Assay with AA / Gravimetric finish.		
Received Date:	September 6, 2016		

I HEREBY CERTIFY that the above results are those assays
made by me upon the herein described samples:

Loring Laboratories (Alberta) Ltd.
629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 403- 274-2777 Fax: 403-275-0541
loringlabs@telus.net

To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

File No : 6 0 4 3 1
Date : November 7, 2016
Samples : Rock

Attn: Ed Kruchkowski

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
JSKM 01	3.9	0.20	41	22	150	37	3.60	24	2	33	11	<0.01	0.06	<1	0.21	4883	3	0.01	2	0.01	1242	7	190	73	<0.01	<1	3	20	2143	<1
JSKM 02	17.1	0.38	2131	33	261	13	5.36	63	25	22	47	1.85	0.27	<1	0.12	9336	17	0.01	7	0.02	1022	29	403	21	<0.01	<1	<1	82	7319	4
JSKM 03	2.4	0.20	238	31	178	10	4.83	42	14	39	53	1.70	0.15	<1	0.25	6924	17	0.01	4	0.02	294	9	332	17	<0.01	<1	<1	41	4535	1
JSKM 04	1.2	0.43	14	38	347	4	1.33	1	25	43	630	0.94	0.25	<1	0.02	734	6	0.04	3	0.07	39	30	95	9	<0.01	<1	8	1	105	2
JSKM 05	16.7	0.18	56	35	287	4	5.70	41	6	21	31	0.81	0.12	<1	0.09	7762	24	0.01	2	0.02	923	15	677	6	<0.01	<1	8	36	3675	3
JSKM 06	5.0	<0.01	109	35	279	7	5.19	143	8	6	19	1.34	0.05	<1	0.13	>10000	17	0.01	3	0.03	419	11	2047	11	<0.01	<1	<1	161	9244	<1
JSKM 07	45.5	0.50	181	28	116	332	1.65	82	7	21	33	<0.01	0.63	<1	0.34	>10000	1	0.08	<1	0.04	1781	21	100	85	<0.01	<1	<1	101	4332	<1
JSKM 08	4.0	0.10	28	40	376	4	5.55	3	6	23	35	0.44	0.07	<1	0.13	6556	8	0.01	3	0.01	3091	25	898	2	<0.01	<1	8	3	253	2
JSKM 09	2.1	0.15	2	271	315	4	5.56	1	1	67	<1	0.52	0.02	<1	0.20	7468	1	0.01	2	0.20	50	2	1005	3	<0.01	<1	1	1	48	<1
FLKM 01	5.0	3.46	<1	48	265	20	1.86	5	3	11	<1	<0.01	0.69	<1	0.90	1634	2	0.10	1	0.04	122	13	88	42	0.01	<1	37	10	1115	<1
FLKM 02	<0.5	0.17	202	51	483	4	0.30	28	5	196	19	0.87	0.10	<1	0.01	213	141	0.01	7	0.02	898	30	38	7	<0.01	<1	6	8	1125	2
FLKM 02a	<0.5	0.18	420	45	413	8	0.22	8	3	160	24	1.71	0.17	<1	0.01	152	246	0.02	4	0.03	2208	68	81	18	<0.01	<1	12	6	827	1
FLKM 03	2.5	1.13	18	46	177	15	1.45	3	9	55	10	<0.01	0.62	<1	0.16	2591	9	0.07	7	0.07	78	5	25	31	<0.01	<1	13	3	401	4
FLKM 04	1.5	0.60	59	38	148	24	4.32	2	8	136	4	<0.01	0.07	<1	0.27	5364	10	0.01	7	0.02	114	37	360	47	<0.01	<1	49	3	237	<1
FLKM 05	1.6	1.57	<1	54	208	7	3.02	1	3	66	9	1.49	0.55	<1	0.21	2217	3	0.06	1	0.09	27	3	112	19	0.02	<1	15	5	606	6
FLKM 06	2.0	1.24	46	48	161	19	3.65	2	10	101	92	<0.01	0.42	<1	0.23	3661	5	0.04	19	0.06	71	24	209	39	0.01	<1	59	4	483	3
FLKM 07	1.9	0.34	254	37	104	12	1.76	23	9	115	7	<0.01	0.02	<1	0.08	810	18	0.01	5	<0.01	1021	31	56	24	<0.01	<1	12	19	2414	<1
FLKM 08	2.8	0.10	155	70	159	64	2.28	7	4	92	10	<0.01	0.01	<1	0.17	3377	85	0.02	9	0.01	246	46	156	131	<0.01	<1	16	16	340	<1
FLKM 09	<0.5	0.52	30	43	275	20	0.22	17	22	72	11	<0.01	0.38	4	0.05	1569	5	0.02	2	0.04	185	6	20	43	<0.01	<1	6	19	2357	4
ATKM 01	3.3	0.34	160	40	809	37	0.06	3	22	55	50	<0.01	0.30	3	0.01	323	7	0.03	8	0.07	1052	19	18	54	<0.01	<1	9	3	416	<1
ATKM 02	<0.5	0.16	13	40	218	3	0.86	62	6	48	1	0.87	0.08	<1	0.01	2224	5	0.01	6	0.04	208	3	24	7	<0.01	<1	1	76	7575	3
ATKM 03	1.6	1.15	6	43	256	11	2.73	10	9	79	5	1.87	0.58	<1	0.07	2521	2	0.03	5	0.09	109	8	44	22	<0.01	<1	28	19	2148	1
ATKM 04	0.8	0.35	281	38	1492	12	0.08	35	4	29	25	<0.01	0.18	<1	0.05	433	11	0.02	2	0.03	377	14	458	25	0.01	<1	23	42	4906	<1
ATKM 05	42.1	0.13	58	40	647	6	0.07	66	2	14	110	1.37	0.06	<1	0.01	370	5	0.01	2	0.01	>10000	161	535	12	<0.01	<1	5	81	8217	<1
ATKM 06	8.0	0.22	18	40	1127	8	0.06	16	4	19	25	1.62	0.13	<1	0.02	74	2	0.02	2	0.03	>10000	65	440	16	0.01	<1	9	20	2455	<1
ATKM 07	2.0	0.10	70	42	476	6	0.69	113	5	11	18	1.29	0.06	<1	0.02	516	3	0.01	2	0.01	887	12	748	11	<0.01	<1	5	126	>10000	<1
ATKM 08	34.4	0.06	73	43	1109	8	0.05	158	4	25	51	1.58	0.02	<1	0.01	706	3	0.01	2	<0.01	8906	107	537	15	<0.01	<1	2	131	>10000	<1
ATKM 10	1.2	0.57	306	41	181	34	2.68	56	26	54	627	<0.01	0.36	<1	0.16	4620	213	0.03	11	0.08	219	7	231	54	<0.01	<1	8	56	5672	1
ATKM 11	1.7	0.31	149	37	1216	60	0.15	154	25	82	1032	<0.01	0.07	1	0.01	209	107	0.01	8	0.03	2372	53	74	59	<0.01	<1	15	147	>10000	<1
ATKM 12	2.4	0.19	72	37	190	9	5.22	120	17	26	19	1.58	0.13	<1	0.34	>10000	60	0.01	7	0.01	130	5	491	15	<0.01	<1	0	187	>10000	2
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* Sample is digested with Aqua Regia at 95C for one hour and bulked to 20 ml with distilled water.
  Partial dissolution for Al, B, Ba,Ca, Cr,Fe,K,La,Mg,Mn,Na,P,Sr,Ti and W.

* Samples received on October 20, 2016

Certified by: ______________________________

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loringlabs@telus.net

To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

File No : 6 0 4 3 1
Date : November 7, 2016
Samples : Rock

Attn: Ed Kruchkowski

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
ATKM 13	3.2	1.88	<1	27	165	82	1.90	253	20	22	780	<0.01	0.41	<1	0.61	4471	50	0.04	9	0.04	159	7	312	111	<0.01	<1	26	244	>10000	<1
AW 69	1.7	0.82	<1	44	298	25	1.77	6	4	45	8	<0.01	0.57	<1	0.09	3513	3	0.03	1	0.06	48	6	205	53	<0.01	<1	11	14	1740	8
AW 70	6.5	0.93	<1	39	298	36	3.05	6	7	44	6	<0.01	0.58	<1	0.07	4915	2	0.04	<1	0.04	67	6	245	75	<0.01	<1	12	7	824	8
AW 71	3.1	4.80	<1	48	287	51	4.02	5	8	6	<1	2.14	0.20	<1	0.64	7747	4	0.02	<1	0.08	50	8	558	104	0.02	<1	62	5	489	<1
AW 72	4.9	2.82	164	42	168	65	3.39	48	14	12	8	<0.01	0.05	<1	0.75	3872	5	0.02	<1	0.02	1153	15	247	133	0.01	<1	30	60	5304	<1
AW 73	2.7	0.53	31	37	244	40	4.26	85	11	17	16	<0.01	0.09	<1	0.15	9652	13	0.01	6	0.03	2750	18	257	80	<0.01	<1	<1	102	7490	<1
AW 74	2.9	0.34	79	39	195	22	5.02	56	5	15	12	<0.01	0.04	<1	0.26	>10000	7	0.01	4	0.01	758	7	421	41	<0.01	<1	<1	84	6817	<1
AW 75	2.7	0.23	87	39	203	8	4.97	77	3	29	33	1.45	0.15	<1	0.12	9821	23	0.01	4	0.02	951	13	591	14	<0.01	<1	<1	168	9575	1
AW 75_CHK	3.7	0.24	92	47	219	7	5.18	80	3	29	34	1.52	0.16	<1	0.12	>10000	24	0.01	4	0.02	993	13	617	14	<0.01	<1	<1	177	>10000	1
AW 76	2.7	0.08	24	21	117	5	4.07	51	2	7	19	0.85	0.06	<1	0.05	4308	4	<0.01	2	0.01	80	4	312	6	<0.01	<1	<1	96	8662	<1
AW 77	2.0	0.02	13	21	147	11	4.05	13	4	13	1	<0.01	0.01	<1	0.11	5490	3	<0.01	2	0.01	238	4	327	18	<0.01	<1	<1	11	1699	<1
AW 78	3.5	0.06	292	19	51	7	3.85	67	7	16	32	1.18	0.08	<1	0.08	6392	21	<0.01	2	0.02	510	9	173	11	<0.01	<1	<1	59	6668	<1
AW 79	3.5	0.05	121	23	71	5	3.29	54	9	26	44	0.98	0.05	<1	0.05	4638	6	<0.01	4	0.02	803	18	155	8	<0.01	<1	<1	46	5822	<1
AW 80	5.2	0.18	57	24	88	7	4.07	30	12	7	31	1.28	0.17	<1	0.07	8338	41	0.01	3	0.03	361	14	301	12	<0.01	<1	<1	37	4715	1
AW 81	1.2	0.37	104	31	99	6	1.11	2	18	30	26	1.30	0.30	<1	0.13	929	21	0.02	5	0.07	71	6	29	14	<0.01	<1	11	1	172	4
AW 82	1.9	0.06	3	22	310	3	3.71	1	1	24	8	0.58	0.05	<1	0.03	3866	1	0.00	1	0.01	71	2	315	4	<0.01	<1	4	1	102	<1
JGKM 01	2.7	0.20	22	17	170	52	0.07	4	1	32	17	<0.01	0.29	<1	0.01	93	6	0.02	<1	<0.01	105	71	5	99	<0.01	<1	8	1	129	<1
JGKM 02	2.1	0.50	298	23	145	27	0.14	2	34	37	42	<0.01	0.45	2	0.03	308	12	0.02	9	0.05	129	29	10	51	<0.01	<1	18	1	157	<1
JGKM 03	1.7	1.01	16	35	170	12	2.44	1	15	16	1	<0.01	0.50	<1	0.32	6123	3	0.04	4	0.10	48	19	105	22	0.04	<1	51	2	163	<1
JGKM 04	2.9	0.19	590	17	212	63	0.56	5	2	35	29	<0.01	0.10	<1	0.07	312	1	0.02	<1	0.01	115	19	18	120	<0.01	<1	23	1	53	<1
JGKM 05	2.4	0.22	20	26	124	5	3.76	3	3	50	4	1.05	0.05	<1	0.08	2582	1	0.01	1	0.01	17	6	102	9	<0.01	<1	9	1	69	<1
JGKM 06	1.2	0.97	14	25	204	10	2.55	22	7	39	6	<0.01	0.19	<1	0.44	1088	1	0.01	2	0.02	17	7	100	19	0.01	<1	24	2	283	1
JGKM 07	0.8	0.03	<1	24	147	12	1.65	1	1	78	2	<0.01	0.01	<1	0.01	620	1	0.01	3	<0.01	22	3	62	22	<0.01	<1	25	1	45	<1
JGKM 08	2.9	0.23	7	23	306	6	4.30	31	1	21	43	1.12	0.11	<1	0.07	3488	1	0.01	<1	<0.01	538	9	505	9	<0.01	<1	23	4	38	<1
JGKM 09	3.9	0.71	30	29	319	6	1.57	1	9	20	8	1.13	0.49	<1	0.36	1040	3	0.01	6	0.06	26	4	53	11	<0.01	<1	9	1	66	3
JGKM 10	1.6	1.29	9	25	300	7	1.47	1	8	25	1	1.30	0.54	<1	1.20	900	12	0.03	3	0.05	14	2	46	14	<0.01	<1	21	<1	48	3
JGKM 12	3.3	0.58	21	23	202	5	4.26	1	3	9	4	0.90	0.23	<1	0.34	1894	5	0.01	1	0.04	19	3	451	7	<0.01	<1	18	1	68	1
JGKM 13	6.0	0.35	34	27	173	4	4.13	1	2	13	6	0.77	0.23	<1	0.12	2303	16	0.01	1	0.03	39	4	476	6	<0.01	<1	15	1	112	2
JGKM 14	2.1	1.87	<1	27	130	8	2.64	1	18	39	14	1.44	0.25	<1	1.38	1355	1	0.10	8	0.10	10	1	93	18	0.10	<1	78	2	223	6
JGKM 15	3.9	0.20	60	23	104	3	3.93	2	1	22	2	0.67	0.07	<1	0.06	3439	6	0.01	1	0.02	15	6	188	5	<0.01	<1	32	1	101	2
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* Sample is digested with Aqua Regia at 95C for one hour and bulked to 20 ml with distilled water.
Partial dissolution for Al, B, Ba,Ca, Cr,Fe,K,La,Mg,Mn,Na,P,Sr,Ti and W.

* Samples received on October 20, 2016

Certified by: ______________________

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To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

File No : 6 0 4 3 1
Date : November 7, 2016
Samples : Rock

Attn: Ed Kruchkowski

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
JGKM 16	7.0	0.26	301	33	229	5	3.99	4	1	18	<1	0.93	0.13	<1	0.07	8964	21	0.01	3	0.02	328	17	522	8	<0.01	<1	34	6	819	4
JGKM 17	1.2	1.52	221	24	269	15	1.05	3	10	62	7	0.00	0.02	<1	0.50	945	5	0.01	3	0.02	170	16	41	28	<0.01	<1	153	19	2886	<1
JGKM 18	1.9	0.25	179	24	88	5	3.57	2	1	60	<1	1.02	0.01	<1	0.04	4534	5	0.01	2	<0.01	23	8	249	10	<0.01	<1	26	4	633	4
JGKM 19	3.3	0.39	109	31	206	5	3.95	3	2	46	9	1.04	0.17	<1	0.08	4619	9	0.01	3	0.02	20	12	135	8	<0.01	<1	50	2	201	2
JGKM 20	2.8	0.33	792	27	71	17	2.90	11	2	45	7	0.00	0.03	<1	0.03	3101	4	0.01	1	0.01	536	35	146	31	<0.01	<1	108	12	1786	<1
JGKM 21	3.5	0.48	13	32	84	2	3.74	<1	1	40	1	0.29	0.19	<1	0.07	2631	11	0.01	2	0.02	10	1	359	2	<0.01	<1	31	<1	43	2
JGKM 22	5.3	1.44	24	32	160	10	1.32	167	12	13	46	0.00	0.62	<1	0.20	1844	5	0.02	2	0.08	5005	36	26	19	<0.01	<1	32	150	>10000	3
JGKM 23	2.8	0.23	30	26	243	10	3.77	5	3	15	51	1.35	0.08	<1	0.10	2800	2	0.01	<1	0.01	66	10	267	15	<0.01	<1	31	10	185	<1
JGKM 25	12.0	0.23	12	30	268	8	0.16	17	2	20	34	1.38	0.09	<1	0.02	597	6	0.01	2	0.01	>10000	18	222	15	<0.01	<1	15	15	2483	<1
JGKM 26	2.0	0.78	67	29	72	20	1.58	2	46	24	17	<0.01	0.63	<1	0.12	1013	7	0.03	10	0.09	580	19	66	38	0.01	<1	46	1	163	<1
JGKM 27	7.9	0.14	<1	14	318	418	0.27	7	52	26	645	<0.01	0.21	<1	0.05	267	1	0.03	8	0.01	223	6	17	154	<0.01	<1	3	1	65	<1
JGKM 28	2.4	1.01	116	28	198	38	2.91	4	3	22	10	<0.01	0.04	<1	0.27	3847	8	0.01	1	0.02	292	31	134	63	<0.01	<1	15	5	323	<1
SHKM 001	1.2	0.55	8	34	239	5	0.17	1	2	21	3	1.07	0.50	8	0.03	98	3	0.04	1	0.05	142	6	11	11	<0.01	<1	5	1	207	1
SHKM 002	1.6	0.34	22	30	189	6	0.21	4	3	58	7	1.18	0.28	4	0.02	74	3	0.02	2	0.10	983	8	23	12	<0.01	<1	12	2	340	1
SHKM 003	<0.5	0.13	360	32	286	4	0.04	9	5	93	2	0.77	0.08	2	0.01	34	8	0.01	4	0.01	3038	38	14	6	<0.01	<1	6	2	444	1
JGKM 21a	0.8	0.57	9	26	200	5	0.95	1	3	57	5	1.04	0.35	<1	0.06	272	1	0.04	2	0.05	28	3	44	12	<0.01	<1	9	1	216	3
JGKM 24	3.2	0.68	95	29	220	16	0.27	4	18	45	8	<0.01	0.57	<1	0.03	371	5	0.04	12	0.05	218	25	17	31	<0.01	<1	35	3	439	<1
JGKM 24_CHK	1.6	0.57	94	27	212	16	0.22	4	17	39	6	<0.01	0.55	<1	0.03	362	5	0.04	9	0.05	210	25	12	30	<0.01	<1	33	3	431	<1
SHKM 004	0.4	0.13	264	23	94	5	0.04	7	1	50	1	1.08	0.10	1	0.01	380	35	<0.01	2	0.01	1708	34	7	10	<0.01	<1	14	4	760	<1
SHKM 005	0.8	0.44	15	23	140	4	0.21	2	2	33	7	0.87	0.33	4	0.04	201	1	0.02	1	0.06	74	4	12	8	<0.01	<1	12	2	309	1
SHKM 006	3.6	0.55	13	26	108	7	1.12	1	3	36	5	1.28	0.38	<1	0.09	277	1	0.04	4	0.03	27	5	29	13	<0.01	<1	11	1	140	1
SHKM 007	0.8	0.39	109	25	188	9	0.04	1	<1	32	1	<0.01	0.45	5	0.05	21	114	0.04	2	<0.01	38	31	8	18	<0.01	<1	8	<1	37	4
SHKM 008	0.4	0.28	9	24	123	2	0.15	<1	<1	22	2	0.61	0.26	7	0.01	22	3	0.03	1	0.05	93	3	10	7	<0.01	<1	4	1	159	1
SHKM 009	2.0	0.40	10	23	68	5	0.32	8	2	30	9	1.04	0.24	<1	0.05	251	2	0.03	1	0.04	4222	13	20	9	<0.01	<1	15	4	832	1
SHKM 010	0.8	0.21	11	23	90	3	0.10	1	1	46	6	0.70	0.20	3	0.01	61	2	0.01	2	0.04	555	4	11	6	<0.01	<1	7	1	76	1
SHKM 011	0.8	0.47	11	23	71	7	0.19	9	6	20	8	1.34	0.26	3	0.12	1230	1	0.01	2	0.07	144	5	14	13	<0.01	<1	21	5	902	<1
SHKM 012	0.8	0.34	13	28	142	3	0.13	1	2	48	8	0.74	0.32	6	0.02	45	2	0.02	1	0.05	1731	8	9	7	<0.01	<1	10	1	178	2
SHKM 013	1.2	0.22	12	25	100	4	0.23	6	5	30	7	0.92	0.22	3	0.03	820	1	0.01	2	0.06	171	9	19	8	<0.01	<1	11	3	645	1
SHKM 014	1.6	0.28	14	28	75	4	1.68	4	5	61	18	0.78	0.15	<1	0.02	1189	2	0.01	3	0.04	7234	21	132	7	<0.01	<1	15	4	675	2
SHKM 015	2.4	0.67	14	36	122	4	2.91	3	8	59	24	0.79	0.35	<1	0.04	3155	2	0.02	3	0.05	4224	13	110	6	0.01	<1	20	2	370	2
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* Sample is digested with Aqua Regia at 95C for one hour and bulked to 20 ml with distilled water.
Partial dissolution for Al, B, Ba,Ca, Cr,Fe,K,La,Mg,Mn,Na,P,Sr,Ti and W.

* Samples received on October 20, 2016

Certified by: ______________________

ISO9001:2008 Certified

Loring Laboratories (Alberta) Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541
loringlabs@telus.net

To: Mountian Boy Minerals
PO Box 859 426 King St.
Stewart BC V0T 1W0

Attn: Ed Kruchkowski

File No : 6 0 4 3 1
Date : November 24, 2016

Certificate of Assay

Sample No.	Pb %	Zn %
"Assay Analysis"		
ATKM05	1.72	-
ATKM06	1.38	-
ATKM07	-	1.53
ATKM08	-	1.43
ATKM11	-	1.59
ATKM12	-	2.44
ATKM13	-	3.21
AW75	-	2.23
JGKM22	-	2.61
JGKM25	3.69	-
SC165	-	2.44
Methodology:	Used multi acid digestion, peroxide fusion and AA finish	
Received Date:	October 20, 2016	

I HEREBY CERTIFY that the above results are those assays
made by me upon the herein described samples:

Assayer

Rejects and pulps are retained for one month unless specific arrangements are made in advance.

FORM ASYC-015

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541
loringlabs@telus.net

ISO9001:2008 Certified

To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

FILE: 6 0 4 3 1
DATE: November 7, 2016
SAMPLES: Rock

Certificate of Assay

Attn: Ed Kruchkowski

Sample No.	Au ppb	Au gm/tonne
"Assay Analysis"		
JSKM-01	<5	
JSKM-02	7	
JSKM-03	<5	
JSKM-04	24	
JSKM-05	<5	
JSKM-06	<5	
JSKM-07	>10000	45.27
JSKM-08	10	
JSKM-09	154	
FLKM-01	151	
FLKM-02	26	
FLKM-02A	11	
FLKM-03	49	
FLKM-04	33	
FLKM-05	131	
FLKM-06	53	
FLKM-07	<5	
Check JSKM-02	56	
STD GS-1T (1080 ppb)	1049	
Blank	<5	
Methodology:	-Au- Fire Assay with AA finish.	
Received Date:	October 20, 2016	

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples:

Assayer

Rejects and pulps are retained for one month unless specific arrangements are made in advance.

Loring Laboratories Ltd.

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ISO9001:2008 Certified

To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

FILE: 6 0 4 3 1
DATE: November 7, 2016
SAMPLES: Rock

Certificate of Assay

Attn: Ed Kruchkowski

Sample No.	Au ppb
"Assay Analysis"	
FLKM-08	<5
FLKM-09	<5
ATKM-01	93
ATKM-02	<5
ATKM-03	9
ATKM-04	4
ATKM-05	9
ATKM-06	4
ATKM-07	7
ATKM-08	3
ATKM-10	440
ATKM-11	101
ATKM-12	26
ATKM-13	57
AW-69	<5
AW-70	5
AW-71	<5
Check ATKM-13	74
STD GS-1T (1080 ppb)	983
Blank	<5
Methodology:	-Au- Fire Assay with AA finish.
Received Date:	October 20, 2016

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples:

Assayer

P2

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541
loringlabs@telus.net

ISO9001:2008 Certified

To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

FILE: 6 0 4 3 1
DATE: November 7, 2016
SAMPLES: Rock

Certificate of Assay

Attn: Ed Kruchkowski

Sample No.	Au ppb
"Assay Analysis"	
AW-72	19
AW-73	16
AW-74	63
AW-75	42
AW-76	26
AW-77	7
AW-78	27
AW-79	5
AW-80	16
AW-81	6
AW-82	<5
JGKM-01	<5
JGKM-02	15
JGKM-03	31
JGKM-04	426
JGKM-05	66
JGKM-06	165
Check JGKM-01	<5
STD GS-1T (1080 ppb)	1118
Blank	<5
Methodology:	-Au- Fire Assay with AA finish.
Received Date:	October 20, 2016

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples:

Assayer

Loring Laboratories Ltd.
629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541
loringlabs@telus.net

ISO9001:2008 Certified

To: Mountain Boy Minerals
P. O. Box 211
426, King Street,
Stewart, B. C., V0T 1W0

FILE: 6 0 4 3 1
DATE: November 7, 2016
SAMPLES: Rock

Certificate of Assay

Attn: Ed Kruchkowski

Sample No.	Au ppb
"Assay Analysis"	
JGKM-07	85
JGKM-08	61
JGKM-09	55
JGKM-10	68
JGKM-11	30
JGKM-12	<5
JGKM-13	29
JGKM-14	25
JGKM-15	32
JGKM-16	24
JGKM-17	7
JGKM-18	<5
JGKM-19	16
JGKM-20	<5
JGKM-21	<5
JGKM-22	18
JGKM-23	37
Check JGKM-20	15
STD GS-1T (1080 ppb)	960
Blank	<5
Methodology:	-Au- Fire Assay with AA finish.
Received Date:	October 20, 2016

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples:

Assayer

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
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FILE: 6 0 4 3 1
DATE: November 7, 2016
SAMPLES: Rock

Certificate of Assay

Attn: Ed Kruchkowski

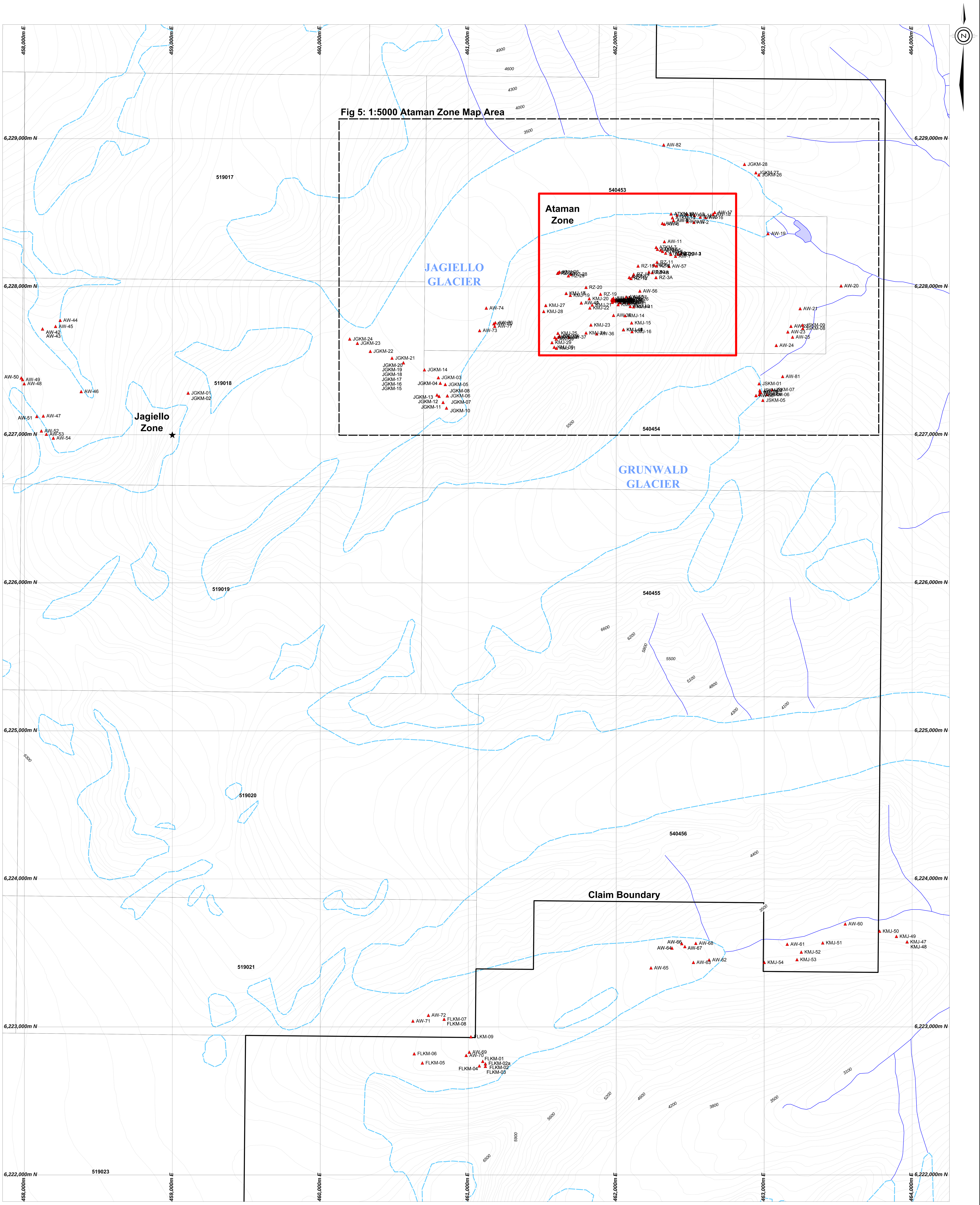
Sample No.	Au ppb
"Assay Analysis"	
JGKM-24	106
JGKM-25	111
JGKM-26	95
JGKM-27	<5
JGKM-28	105
~~SHKM-01~~	~~115~~
~~SHKM-02~~	~~124~~
~~SHKM-03~~	~~116~~
~~SHKM-04~~	~~<5~~
~~SHKM-05~~	~~104~~
~~SHKM-06~~	~~88~~
~~SHKM-07~~	~~106~~
~~SHKM-08~~	~~108~~
~~SHKM-09~~	~~95~~
~~SHKM-10~~	~~97~~
~~SHKM-11~~	~~<5~~
~~SHKM-12~~	~~108~~
Check JGKM-27	5
STD GS-1T (1080 ppb)	960
Blank	<5
Methodology:	-Au- Fire Assay with AA finish.
Received Date:	October 20, 2016

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples:

Assayer

P5

Sample_#	Au_ppb	Ag_ppm	Cu_ppm	Pb_ppm	Zn_ppm
ATKM-1	93	3.3	50	1052	416
ATKM-2	<5	<0.5	1	208	7575
ATKM-3	9	1.6	5	109	2148
ATKM-4	4	0.8	25	377	4906
ATKM-5	9	42.1	110	17200	8217
ATKM-6	4	8	25	13800	2455
ATKM-7	7	2	18	887	15300
ATKM-8	3	34.4	51	8906	14300
ATKM-10	440	1.2	627	219	5672
ATKM-11	101	1.7	1032	2372	15900
ATKM-12	26	2.4	19	130	24400
ATKM-13	57	3.2	780	159	32100
AW-1	86	<0.5	8	219	263
AW-2	138	1.2	14	271	465
AW-3	108	23.2	140	7036	93200
AW-4	75	9	960	125	459
AW-5	57	2	39	423	30400
AW-6	98	3.9	49	726	31300
AW-7	1015	2.7	187	919	924
AW-8	114	14.4	1472	1412	7352
AW-9	592	200	4055	8566	261200
AW-10	115	6	144	942	116400
AW-11	71	8.5	44	2075	59800
AW-12	44	2.1	208	358	10200
AW-13	68	2	20	78	3493
AW-14	92	0.8	85	303	1306
AW-15	222	1.2	625	49	398
AW-16	130	141	124	77700	166100
AW-17	67	10.4	54	1674	2897
AW-18	318	239	17	78800	2366
AW-19	5062	28.6	39	876	87
AW-20	115	5.3	35	6315	6034
AW-21	84	<0.5	7	116	85
AW-22	81	0.8	177	125	1342
AW-23	125	4.4	60	274	830
AW-24	65	<0.5	116	43	57
AW-25	65	<0.5	5	29	36
AW-26	750	12.6	80	3547	521
AW-27	1692	3.1	165	848	530
AW-28	144	1.6	215	1403	737
AW-29	88	<0.5	38	1136	244
AW-30	110	0.8	63	2085	57
AW-31	143	<0.5	5	301	79
AW-32	202	8.7	1167	16400	2931
AW-33	176	479	26	24500	7036
AW-34	58	4	<1	1086	681
AW-35	60	0.8	31	779	13200
AW-36	22	2.5	16	181	790
AW-37	10	<0.5	9	219	294
AW-38	9	2.4	<1	89	324
AW-39	9	1.6	3	14	2336
AW-40	<5	2.3	5	55	85
AW-41	<5	<0.5	22	67	370
AW-42	<5	1.2	3	10	339
AW-43	<5	2.4	2	160	1017
AW-44	<5	2.4	<1	118	864
AW-45	<5	8.2	14	1188	3589
AW-46	<5	<0.5	81	14	96
AW-47	<5	4.5	20	76	274
AW-48	<5	<0.5	<1	27	108
AW-49	<5	1.6	3	116	122
AW-50	<5	2	5	70	129
AW-51	<5	2.9	3	140	124
AW-52	<5	<0.5	<1	23	141
AW-53	<5	1.2	8	3	160
AW-54	341	2	9	39	137
AW-55	<5	17.3	75	2792	517
AW-56	<5	1.6	5	89	12
AW-57	<5	5.4	26	52	166
AW-60	<5	1.6	14	165	1918
AW-61	<5	1.2	11	235	814
AW-62	<5	<0.5	19	93	513
AW-63	<5	<0.5	1	<1	419
AW-64	7	<0.5	11	96	206
AW-65	<5	<0.5	870	48	44
AW-66	17500	187	8833	172	523
AW-67	1568	121	338	9829	<1
AW-68	52	3.3	55	308	1525
AW-69	<5	1.7	8	48	1740
AW-70	5	6.5	6	67	824
AW-71	<5	3.1	<1	50	489
AW-72	19	4.9	8	1153	5304
AW-73	16	2.7	16	2750	7490
AW-74	63	2.9	12	758	6817
AW-75	42	2.7	33	951	22300
AW-76	26	2.7	19	80	8662
AW-77	7	2	1	238	1699
AW-78	27	3.5	32	510	6668
AW-79	5	3.5	44	803	5822
AW-80	16	5.2	31	361	4715
AW-81	6	1.2	26	71	172
AW-82	<5	1.9	8	71	102
FLKM-01	151	5	<1	122	1115
FLKM-02	26	<0.5	19	898	1125
FLKM-02a	11	<0.5	24	2208	827
FLKM-03	49	2.5	10	78	401
FLKM-04	33	1.5	4	114	237
FLKM-05	131	1.6	9	27	606
FLKM-06	53	2	92	71	483
FLKM-07	<5	1.9	7	1021	2414
FLKM-08	<5	2.8	10	246	340
FLKM-09	<5	<0.5	11	185	2357
JGKM-01	<5	2.7	17	105	129
JGKM-02	15	2.1	42	129	157
JGKM-03	31	1.7	1	48	163
JGKM-04	426	2.9	29	115	53
JGKM-05	66	2.4	4	17	69
JGKM-06	165	1.2	6	17	283
JGKM-07	85	0.8	2	22	45
JGKM-08	61	2.9	43	538	38
JGKM-09	55	3.9	8	26	66
JGKM-10	68	1.6	1	14	48
JGKM-11	30	24.5	<1	24	179
JGKM-12	<5	3.3	4	19	68
JGKM-13	29	6	6	39	112
JGKM-14	25	2.1	14	10	223
JGKM-15	32	3.9	2	15	101
JGKM-16	24	7	<1	328	819
JGKM-17	7	1.2	7	170	2886
JGKM-18	<5	1.9	<1	23	633
JGKM-19	16	3.3	9	20	201
JGKM-20	<5	2.8	7	536	1786
JGKM-21	<5	3.5	1	10	43
JGKM-22	18	5.3	46	5005	26100
JGKM-23	37	2.8	51	66	185
JGKM-24	106	3.2	8	218	439
JGKM-25	111	12	34	36900	2483
JGKM-26	95	2	17	580	163
JGKM-27	<5	7.9	645	223	65
JGKM-28	105	2.4	10	292	323
JSKM-01	<5	3.9	11	1242	2143
JSKM-02	7	17.1	47	1022	7319
JSKM-03	<5	2.4	53	294	4535
JSKM-04	24	1.2	630	39	105
JSKM-05	<5	16.7	31	923	3675
JSKM-06	<5	5	19	419	9244
JSKM-07	45270	45.5	33	1781	4332
JSKM-08	10	4	35	3091	253
JSKM-09	154	2.1	<1	50	48
KMJ-01	22	6.4	25	119	439
KMJ-02	164	2.7	13	54	1106
KMJ-03	30	2.5	19	38	3611
KMJ-04	19	6	13	2023	6837
KMJ-05	41	<0.5	12	285	534
KMJ-06	75	2.8	33	444	1714
KMJ-07	165	2.9	26	105	957
KMJ-08	25	2.4	16	59	1900
KMJ-09	58	14.4	54	723	3087
KMJ-10	27	13.2	13	628	5951
KMJ-11	310	33.5	170	4939	85800
KMJ-12	153	4.3	10	184	254
KMJ-13	155	26.7	1	2005	18800
KMJ-14	6	1.2	12	912	1175
KMJ-15	10	15.2	77	2667	8105
KMJ-16	116	6.9	29	1272	3308
KMJ-17	113	12.5	46	1545	12300
KMJ-18	65	8.3	39	621	7983
KMJ-19	17	4.4	628	38	194
KMJ-20	457	2.8	48	65	1809
KMJ-21	261	1.6	21	177	311
KMJ-22	31	<0.5	12	133	124
KMJ-23	31	<0.5	12	49	125
KMJ-24	<5	1.6	<1	19	192
KMJ-25	5	2.4	3	15	41
KMJ-26	<5	<0.5	3	9	131
KMJ-27	16	<0.5	7	24	121
KMJ-28	126	<0.5	<1	41	265
KMJ-29	9	2.7	9	457	1305
KMJ-30	7	<0.5	5	117	142
KMJ-31	<5	<0.5	6	38	165
KMJ-32	6	3.6	4	94	586
KMJ-33	203	7	61	316	2063
KMJ-34	<5	1.7	3	16	72
KMJ-35	179	5.5	24	207	1127
KMJ-36	362	9.3	16	230	125
KMJ-37	142	6.9	10	118	366
KMJ-38	625	20.8	28	1271	882
KMJ-39	49	<0.5	11	134	936
KMJ-40	19	4.3	44	376	1096
KMJ-41	519	59.3	162	7240	783
KMJ-42	85	32.6	73	4975	19600
KMJ-43	37	9.7	41	1187	6567
KMJ-44	39	19.4	57	3599	12600
KMJ-45	43	38.4	93	5551	15500
KMJ-46	28	17	57	1923	7719
KMJ-47	24	3.6	11	57	320
KMJ-48	22	2.8	45	413	1664
KMJ-49	27	1.6	17	100	191
KMJ-50	28	9.9	115	542	7871
KMJ-51	20	<0.5	7	10	83
KMJ-52	300	7.8	8	242	1904
KMJ-53	101	1.2	7	24	309
KMJ-54	946	680	1198	427	8581
RZ-1	46	27.6	14	4427	9994
RZ-3	35	6.5	24	525	2433
RZ-3A	36	3.6	52	75	1813
RZ-4A	46	41.2	13	29200	225
RZ-4B	57	39.9	12	33400	226
RZ-5	30	56.8	8	2960	5124
RZ-6	27	12.2	33	1224	4328
RZ-7	42	297	21	8465	31000
RZ-8	24	17.7	11	1057	6473
RZ-9	22	8.4	16	2056	5286
RZ-10	25	16.8	15	5970	6585
RZ-11	34	24.7	22	2578	3004
RZ-12	25	81.3	127	2249	55300
RZ-13	25	12.8	194	763	706
RZ-14	141	8.2	186	219	395
RZ-15	99	2	436	112	523
RZ-16	119	32.9	6	3027	8107
RZ-17	117	11.6	722	222	666
RZ-18	103	25.6	40	1758	3640
RZ-19	96	<0.5	26	80	1453
RZ-20	115	<0.5	52	17	173
RZ-22	101	0.8	11	13	206
RZ-23	97	<0.5	1	10	209
RZ-28	99	0.8	37	9	185
RZ-29	107	9.9	20	185	2645



▲ rock sample location

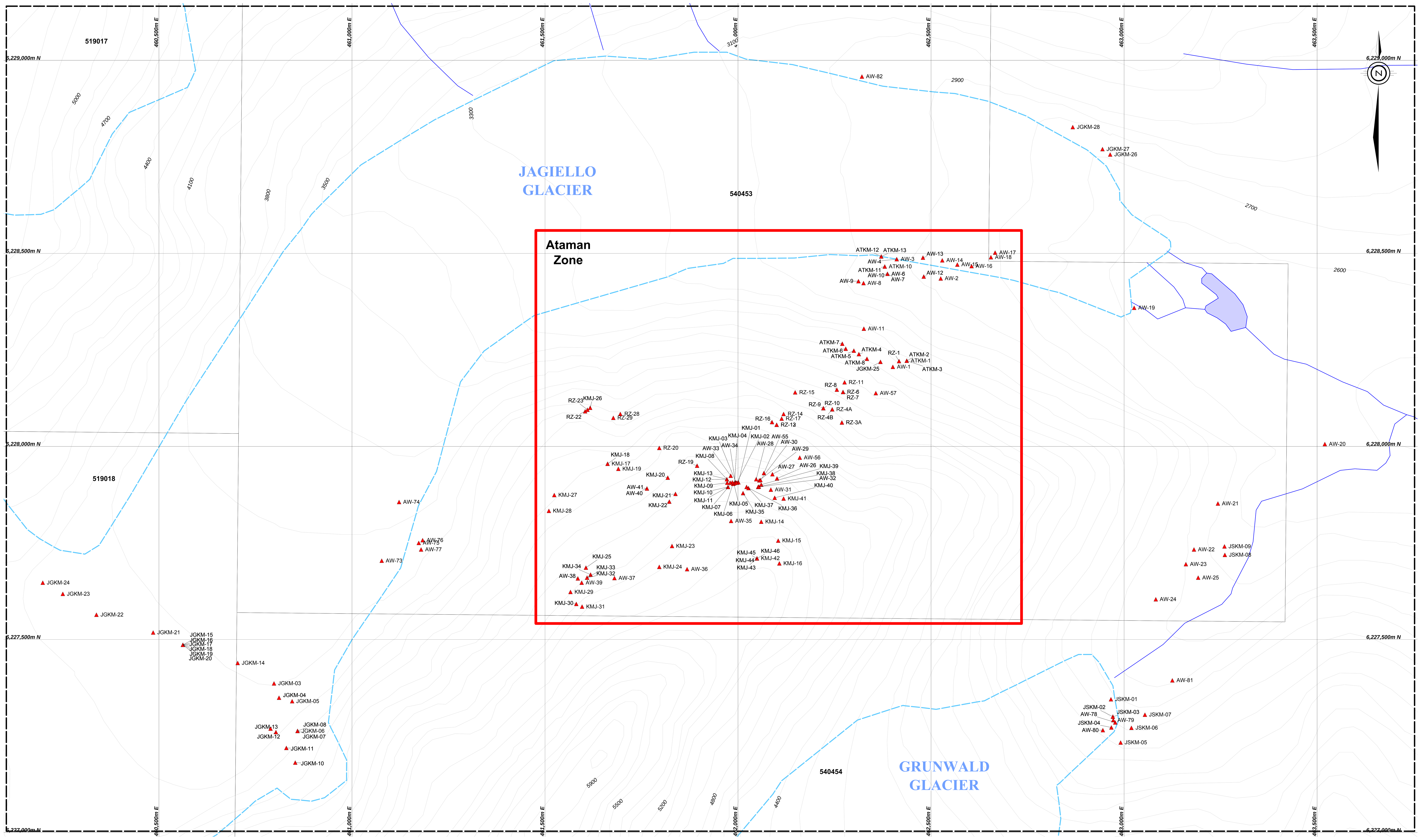
0 200 400 600 1000
metres

Mountain Boy Minerals Ltd.
SURPRISE CREEK PROPERTY

Rock sample locations and Au, Ag, Cu, Pb, Zn results

Date	Dec 20, 2016	Scale	1:10,000	Figure
Projection	UTM Zone 9 - NAD83	State/Province	BC	4
Author	AW	File	Surp_Rocks	

Sample_#	Au_ppb	Ag_ppm	Cu_ppm	Pb_ppm	Zn_ppm
ATKM-1	93	3.3	50	1,052	416
ATKM-2	<5	<0.5	1	208	7,575
ATKM-3	9	1.6	5	109	2,148
ATKM-4	4	0.8	25	377	4,906
ATKM-5	9	42.1	110	17,200	8,217
ATKM-6	4	8	25	13,800	2,455
ATKM-7	7	2	18	887	15,300
ATKM-8	3	34.4	51	8,906	14,300
ATKM-10	440	1.2	627	219	5,672
ATKM-11	101	1.7	1032	2,372	15,900
ATKM-12	26	2.4	19	130	24,400
ATKM-13	57	3.2	780	159	32,100
AW-1	86	<0.5	8	219	263
AW-2	138	1.2	14	271	465
AW-3	108	23.2	140	7,036	93,200
AW-4	75	9	960	125	459
AW-5	57	2	39	423	30,400
AW-6	98	3.9	49	726	31,300
AW-7	1015	2.7	187	919	924
AW-8	114	14.4	1472	1,412	7,352
AW-9	592	200	4055	8,566	261,200
AW-10	115	6	144	942	116,400
AW-11	71	8.5	44	2,075	59,800
AW-12	44	2.1	208	358	10,200
AW-13	68	2	20	78	3,493
AW-14	92	0.8	85	303	1,306
AW-15	222	1.2	625	49	398
AW-16	130	141	124	77,700	166,100
AW-17	67	10.4	54	1,674	2,897
AW-18	318	239	17	78,800	2,366
AW-19	5062	28.6	39	876	87
AW-20	115	5.3	35	6,315	6,034
AW-21	84	<0.5	7	116	85
AW-22	81	0.8	177	125	1,342
AW-23	125	4.4	60	274	830
AW-24	65	<0.5	116	43	57
AW-25	65	<0.5	5	29	36
AW-26	750	12.6	80	3,547	521
AW-27	1692	3.1	165	848	530
AW-28	144	1.6	215	1,403	737
AW-29	88	<0.5	38	1,136	244
AW-30	110	0.8	63	2,085	57
AW-31	143	<0.5	5	301	79
AW-32	202	8.7	1167	16,400	2,931
AW-33	176	479	26	24,500	7,036
AW-34	58	4	<1	1,086	681
AW-35	60	0.8	31	779	13,200
AW-36	22	2.5	16	181	790
AW-37	10	<0.5	9	219	294
AW-38	9	2.4	<1	89	324
AW-39	9	1.6	3	14	2,336
AW-40	<5	2.3	5	55	85
AW-41	<5	<0.5	22	67	370
AW-55	<5	17.3	75	2,792	517
AW-56	<5	1.6	5	89	12
AW-57	<5	5.4	26	52	166
AW-73	16	2.7	16	2,750	7,490
AW-74	63	2.9	12	758	6,817
AW-75	42	2.7	33	951	22,300
AW-76	26	2.7	19	80	8,662
AW-77	7	2	1	238	1,699
AW-78	27	3.5	32	510	6,668
AW-79	5	3.5	44	803	5,822
AW-80	16	5.2	31	361	4,715
AW-81	6	1.2	26	71	172
AW-82	<5	1.9	8	71	102
JGKM-03	31	1.7	1	48	163
JGKM-04	426	2.9	29	115	53
JGKM-05	66	2.4	4	17	69
JGKM-06	165	1.2	6	17	283
JGKM-07	85	0.8	2	22	45
JGKM-08	61	2.9	43	538	38
JGKM-10	68	1.6	1	14	48
JGKM-11	30	24.5	<1	24	179
JGKM-12	<5	3.3	4	19	68
JGKM-13	29	6	6	39	112
JGKM-14	25	2.1	14	10	223
JGKM-15	32	3.9	2	15	101
JGKM-16	24	7	<1	328	819
JGKM-17	7	1.2	7	170	2,886
JGKM-18	<5	1.9	<1	23	633
JGKM-19	16	3.3	9	20	201
JGKM-20	<5	2.8	7	536	1,786
JGKM-21	<5	3.5	1	10	43
JGKM-22	18	5.3	46	5,005	26,100
JGKM-23	37	2.8	51	66	185
JGKM-24	106	3.2	8	218	439
JGKM-25	111	12	34	36,900	2,483
JGKM-26	95	2	17	580	163
JGKM-27	<5	7.9	645	223	65
JGKM-28	105	2.4	10	292	323
JSKM-01	<5	3.9	11	1,242	2,143
JSKM-02	7	17.1	47	1,022	7,319
JSKM-03	<5	2.4	53	294	4,535
JSKM-04	24	1.2	630	39	105
JSKM-05	<5	16.7	31	923	3,675
JSKM-06	<5	5	19	419	9,244
JSKM-07	45270	45.5	33	1,781	4,332
JSKM-08	10	4	35	3,091	253
JSKM-09	154	2.1	<1	50	48
KMJ-01	22	6.4	25	119	439
KMJ-02	164	2.7	13	54	1,106
KMJ-03	30	2.5	19	38	3,611
KMJ-04	19	6	13	2,023	6,837
KMJ-05	41	<0.5	12	285	534
KMJ-06	75	2.8	33	444	1,714
KMJ-07	165	2.9	26	105	957
KMJ-08	25	2.4	16	59	1,900
KMJ-09	58	14.4	54	723	3,087
KMJ-10	27	13.2	13	628	5,951
KMJ-11	310	33.5	170	4,939	85,800
KMJ-12	153	4.3	10	184	254
KMJ-13	155	26.7	1	2,005	18,800
KMJ-14	6	1.2	12	912	1,175
KMJ-15	10	15.2	77	2,667	8,105
KMJ-16	116	6.9	29	1,272	3,308
KMJ-17	113	12.5	46	1,545	12,300
KMJ-18	65	8.3	39	621	7,983
KMJ-19	17	4.4	628	38	194
KMJ-20	457	2.8	48	65	1,809
KMJ-21	261	1.6	21	177	311
KMJ-22	31	<0.5	12	133	124
KMJ-23	31	<0.5	12	49	125
KMJ-24	<5	1.6	<1	19	192
KMJ-25	5	2.4	3	15	41
KMJ-26	<5	<0.5	3	9	131
KMJ-27	16	<0.5	7	24	121
KMJ-28	126	<0.5	<1	41	265
KMJ-29	9	2.7	9	457	1,305
KMJ-30	7	<0.5	5	117	142
KMJ-31	<5	<0.5	6	38	165
KMJ-32	6	3.6	4	94	586
KMJ-33	203	7	61	316	2,063
KMJ-34	<5	1.7	3	16	72
KMJ-35	179	5.5	24	207	1,127
KMJ-36	362	9.3	16	230	125
KMJ-37	142	6.9	10	118	366
KMJ-38	625	20.8	28	1,271	882
KMJ-39	49	<0.5	11	134	936
KMJ-40	19	4.3	44	376	1,096
KMJ-41	519	59.3	162	7,240	783
KMJ-42	85	32.6	73	4,975	19,600
KMJ-43	37	9.7	41	1,187	6,567
KMJ-44	39	19.4	57	3,599	12,600
KMJ-45	43	38.4	93	5,551	15,500
KMJ-46	28	17	57	1,923	7,719
RZ-1	46	27.6	14	4,427	9,994
RZ-3	35	6.5	24	525	2,433
RZ-3A	36	3.6	52	75	1,813
RZ-4A	46	41.2	13	29,200	225
RZ-4B	57	39.9	12	33,400	226
RZ-5	30	56.8	8	2,960	5,124
RZ-6	27	12.2	33	1,224	4,328
RZ-7	42	297	21	8,465	31,000
RZ-8	24	17.7	11	1,057	6,473
RZ-9	22	8.4	16	2,056	5,286
RZ-10	25	16.8	15	5,970	6,585
RZ-11	34	24.7	22	2,578	3,004
RZ-12	25	81.3	127	2,249	55,300
RZ-13	25	12.8	194	763	706
RZ-14	141	8.2	186	219	395
RZ-15	99	2	436	112	523
RZ-16	119	32.9	6	3,027	8,107
RZ-17	117	11.6	722	222	666
RZ-19	96	<0.5	26	80	1,453
RZ-20	115	<0.5	52	17	173
RZ-22	101	0.8	11	13	206
RZ-23	97	<0.5	1	10	209
RZ-28	99	0.8	37	9	185
RZ-29	107	9.9	20	185	2,645



▲ rock sample location

0 200 400 600 1000
metres

Mountain Boy Minerals Ltd.

SURPRISE CREEK PROPERTY

Ataman Zone
Rock sample locations and
Au, Ag, Cu, Pb, Zn results

Date: Dec 20, 2016	Scale: 1:10,000	Figure	
Projection: UTM Zone 9 - NAD83	State/Province: BC		5
Author: AW	File: Surp_Rocks		