## TECHNICAL REPORT ON THE HOT SPRINGS PEAK GOLD PROJECT, HUMBOLDT COUNTY, NEVADA, USA

Prepared for Buena Vista Minerals Inc. One East Liberty Street, Suite 424 Reno, Nevada 89501

**Report by** 

Timothy D. Master, MS, CPG #10737 AIPG, Nevada Professional Geologist

June 30, 2017

Timothy D. Master, 4440 Calle De Nubes, Las Cruces, New Mexico 88012 (775) 233 0073 Tim\_mstr@yahoo.com



		Title Page	1
		Table of Contents	2
1.0		Summary	3
2.0		Introduction	4
	2.1	Issuer	4
	2.2	Purpose for Report and Terms of Reference	4
	2.3	Sources of Information	5
	2.4	Details of Personal Inspection	6
3.0		Reliance on Other Experts, Opinions, Disclaimers	6
4.0		Property Location, Description, Ownership and Underlying Agreements	6
5.0		Accessibility, Climate, Local Resources, Infrastructure and Physiography	10
6.0		History	10
	6.1	Prior Ownership	10
	6.2	Type and Amount of Exploration	11
	6.2.1	Verification Efforts by the Author of Reported Gold Mineralization in the AMAX Area	12
	6.3	Resources or Production Known	18
7.0		Geological Setting and Mineralization	18
	7.1	Regional, Local and Property Geology	18
	7.2	Mineralization on Property	19
8.0		Deposit Types Being Explored	26
9.0		Exploration by Issuer	27
10.0		Drilling Results	27
11.0		Sample Preparation, Analyses and Security	29
	11.1	Issuer	29
	11.2	Past Exploration	29
12.0		Data Verification	29
13.0		Mineral Processing and Metallurgical Testing	30
14.0		Resource Estimates	30
15.0-2	22.0	Not Applicable For Early Stage Exploration Project	30
23.0		Adjacent Properties	30
24.0		Other Relevant Data and Information	30
25.0		Interpretation and Conclusions	30
26.0		Recommendations	31
27.0		References	32

#### LIST OF FIGURES AND TABLES

um (884 ppm),
e hole HSP-05-06 14
ia zone 16
ng
omi core

	crosscutting quartz veins	16
Figure 4e	Spotted hornfels altered calcareous sandstone in the mine area	17
Figure 4f	A second vein type containing quartz-limonite veins surrounded	
	by coarse sericite-muscovite reaction rims	17
Figure 4g	GPS Verification Sampling of Reported Gold Occurrence	18
Figure 5	Nevada Magnetic Map and Gold Deposit Trends	20
Figure 6	Regional Magnetic Map and Surrounding Gold Deposits with Structural Trends.	21
Figure 6a	Northwest trending silicification on the HUB Claims	22
Figure 7	Local Geological Mapping	23
Figure 8	Property Scale Geological Map	24
Figure 8a	Topographic Map Showing Core-Hole Locations	25
Figure 9	Turquoise Ridge Model for Exploration	26
Figure 10		28
Figure 11	Airborne Geophysical Survey Plan	31
Table 1	Core intervals from the Doe Run Core logged by author and selected for assaying	g.13.
Table 2		18
APPENDIX	List of Claims	33

#### 1.0 Summary

The Hot Springs Property consists of 98 unpatented lode mining claims owned by Buena Vista Minerals Inc. in the northern Hot Springs Range in northern Nevada and 4 claims leased from a private owner. The property is an early stage gold exploration project with little drill data, although indications of a "Carlin Style" alteration system in Mesozoic Age phyllite-argillite are present and untested in more favorable carbonate host rocks under and adjacent to the phyllite. A second intrusive related model has emerged from field investigation of the project. There are no gold resources delineated on the project and a few poorly documented gold occurrences from prospect pits. Regional magnetic data shows what is believed to be an alteration low on the property and has been partially tested by past core drilling at one location and intense alteration has been confirmed at shallow depths above 150 meters. The current exploration model is to explore with geophysics and drilling for a "Carlin Style" gold deposit using Turquoise Ridge as the nearby deposit model. The Turquoise Ridge Deposit has similar alteration and the property is aligned magnetically to the Getchell Fault Trend hosting the deposit. The confirmation of gold mineralization in shear zones within the 1-mile (1.6 km) long trend of mines and prospect pits surrounded by hornfels alteration is indicative of intrusive related mineralization.

I have concluded that the property is untested for a "Carlin Style" gold deposit below the intense alteration intersected by shallow core drilling. The discovery of chromium-nickel micas in the core indicate alteration products of possibly a lamprophyre dike and is supportive for a "Carlin Style" Model. A second model of intrusive related gold mineralization has emerged from this study. Alteration mapping has proven to be most helpful in defining the trend of mines and prospects. A recommended program of airborne magnetic and IP/Resistivity surveys should be helpful for guiding early drill tests, as the ground surveys by Doe Run Mining Company on the HUG Claims indicates. A gold discovery is not likely to happen in the first few drill holes as an understanding of the alteration and geophysical responses may lead to testing the most probable locations for gold mineralization by using a number of established case studies on the known gold deposits in Nevada.

## 2.0 Introduction

## 2.1 Issuer

**Linear Measure** 

The issuer of this report, Buena Vista Minerals Inc. (BVMI), is the wholly owned United States Subsidiary of Buena Vista Gold Inc.; a Toronto based private company engaged in gold exploration. BVMI has contracted me to complete this report as a first time filing with the Canadian Stock Exchange, to become a public company. BVMI has other projects in Nevada. This report meets the requirements for the Canadian National Instrument 43-101 and the changes that became effective June 30, 2011 (Petryk, 2011).

## 2.2 Purpose for Report and Terms of Reference

The purpose for the technical report is to provide BVMI with a source of information that can be used for public disclosure. The author has completed a due-diligence study of the existing data to comment on the validity of the data and recommend how it can be used to design an exploration-discovery program. The author has formed his own opinions on exploration target concepts, exploration methods and merits of the property and these opinions are not necessarily the opinions of BVMI.

The following is a list of terms for reference where they may be used in the report. Units of measure are commonly reported in the Imperial System. Past exploration costs and budget figures are reported in U. S. dollars and cents. Units of measure, conversion factors and currency partially used in this report are as follows:

1 inch 1 foot 1 yard 1 mile <b>Area Measure</b>	= 2.54 centimeters = 254 millimeters = 0.3048 meter = 0.9144 meter = 1.6 kilometers		
1 acre 1 square mile	= 0.4047 hectare = 640 acres, or 259 hectares		
Capacity Measure (liquid)			
1 US gallon	= 4 quart or 3.785 liters		
Weight			
1 short ton 1 pound = 16 oz	= 2000 pounds = 0.907 tonne = 0.454 kg = 14.5833 troy ounces		

#### **Analytical Values**

1%	Percent	Grams per Metric Tonne	Troy Ounces per Short Ton (opt)
1%	1%	10,000	291.667
1 gr/tonne	0.0001%	1	0.0291667
1 oz troy/ton	0.003429%	34.2857	1
100 ppb			0.0029
100 ppm			2.917

#### **Commonly used abbreviations and acronyms**

	set abbieviations and actoryins
AA	atomic absorption spectrometry
Ag	silver
Au	gold
Core	diamond drilling method, producing a cylinder of rock
FA-AA	fire assay with an atomic absorption finish
g	grams
g/t Ag	grams of silver per metric tonne, equivalent to ppm
g/t Au	grams of gold per metric tonne, equivalent to ppm
g/t Au-eq	grams per metric ton expressed in gold-equivalent.
ha	hectares
m	meters
mm	millimeters
km	kilometers
ppm	parts per million
ppb	parts per billion
RC	reverse circulation drilling method
t	tonnes
tpd	tonnes per day
GPS	Garmin hand held Geographic Positioning System downloaded to geographic
	information system Google Earth air photography.

#### 2.3 Source of Information

The sources of information for the report are from the Nevada Bureau of Mines and Geology, past company files available from an owner of 4 claims leased to BVMI and the Bureau of Land Management's LR2000 website for claim status verification. Reports on the drilling and soil-rock sampling and assay results were supplied by the property owner without restriction. I have completed sampling of outcroppings and existing core and had them analyzed by ALS Chemex, a certified lab in Reno, Nevada. Drill core from the project was observed and logged by me in Winnemucca Nevada at a core storage facility.

## 2.4 Details of Personal Inspection

I have spent 2 full days (June 14-15, 2017) on the property sampling outcrop to try and confirm a reported gold occurrence, confirming core-hole locations of the core that I submitted for assay. Core-hole locations were confirmed from Google Earth satellite viewing of mapped locations and then site inspection. I also located claim corners to confirm the claim map accuracy. Alteration at some of the mine-prospect sites were sampled at the location where a reported gold mineralized outcrop or mine dump contains 4.45 grams/ton gold that cannot be verified from the data.

I have spent 4 days observing and logging core from the property and selecting intervals for analyses during a prior inspection of the core in year 2013. Assays were recently completed for this report by ALS Minerals Lab in Reno Nevada. No prior assays of the core were available at the time of this reporting.

## **3.0** Reliance on Other Experts, Opinions and Disclaimers

Most in-house data and reports were generated in the 1980s and are not considered "qualified reports" and data on maps cannot be verified with adequate assay records in some cases. The data still has value being from reputable geologists and past companies in Nevada such as John Hogg's annual report for Westmont Mining Inc. and is used as an indicator of where alteration and mineralization is expected. The core logs completed by the Doe Run Company in 2005 have been verified by me during core logging. The analyses from the core and outcrop sampling have not been confirmed, although are credible with analytical lab reports. There are no analyses available for review from any core on the property except from my own assay efforts. The soil and stream sediment data reported by Westmont and Tenneco are the least relied upon as I did not see sample procedure and lab analytical sheets, although still completed by past recognized exploration companies in Nevada and reported at least in the Westmont Reports. All drill results on the leased property, completed by the same companies, have analytical records although are not compliant with current qualified procedures for public reporting.

The small scale geophysical study completed by Monroe on the leased property and overlapping into the BVMI main claim block is well documented and knowing him personally and working with him in the past, he is recognized for quality geophysical surveys and can be relied upon as representing the electrical responses of the rocks in the small area that he surveyed. The geological mapping by Dr. Elizabeth Jones as part of her PhD Thesis is relied upon as accurate and useful for planning future exploration program. Geophysical maps in this report, generated from the public domain database are also relied on heavily for the design of a future geophysical survey. The Bureau of Land Management LR2000 website has been relied on and is accurate for showing that the claim holdings are current for the year 2017.

## 4.0 Property Location, Description, Ownership and Underlying Agreements

The property is located approximately 30–35 miles (50-58km) northeast of Winnemucca in northern Nevada and at the northern edge of the Hot Springs Range and along the Little Humboldt River Drainage (Figures 1 and 2). The property consists of 98 unpatented lode mining claims (the DS Claims), 10 of which were staked by Dutch Flat Minerals in 2011, a past wholly owned subsidiary of BVMI that has been dissolved into BVGI. The original 10 claims are shown in green on figure 3. There were 88

new claims staked in 2017 and have verified that the claims are registered with the Bureau of Land Management (BLM) and Humboldt County (Appendix). I have observed location monuments and found proper re-staking by replacing old posts with new posts and leaving old posts on the ground with accurate locations on the map compared to ground locations. The 88 new claims are shown in figure 3. The 4 additional HUG claims in pink are the claims under lease to BVMI. All claims are contained in Townships 40-41N and Range 40E and within latitudes 4,577,500 - 4,585,000mN and longitudes 460,000 - 470,000mE. One lode claim is 20 acres so the entire property consists of 1,960 acres. All claims have been file with the BLM and are current for year 2017. There are no environmental restrictions or hazards known on the property and no historic structures except mine shafts. To conduct exploration, a plan of operations permit for drilling with less than a 5 acre disturbance will be required from the Bureau of Land Management. There are no reasons identified for not being able to acquire an operating permit in 30 days from the date of submitting the permit.



Figure 1 Project Location in northern Nevada

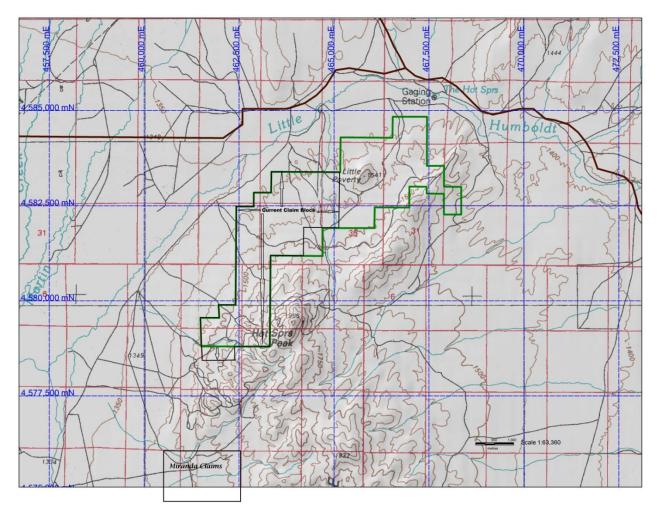
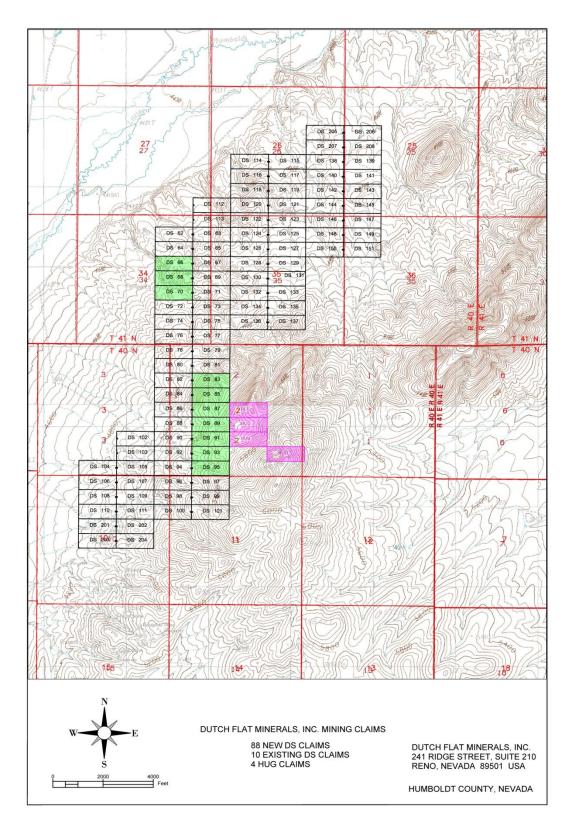
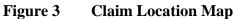


Figure 2 Current property positions in black on northern slope of Hot Springs Range showing sections and UTM grids. Prior property position is shown in green.

BVMI has an underlying Agreement with the owners of the four HUG Claims(personal communication with the Issuer). The lease consisted of a \$10,000 payment in 2012, followed by BLM claim payments for the past 5 years. The HUG Claims are located on the west border of the claim block in a heavily explored area where surface outcropping gold mineralization has been drilled but failed to define a resource, although mineralization was encountered in shallow drill holes with deeper potential not adequately tested.

There are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.





## 5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Property is readily accessible from Winnemucca and Interstate 80 by heading north on U.S. Highway 95 approximately 23.0 miles (37.0 km) to State Route 290 (paved). Head north for approximately 12 miles (19.3 km) to Shelton Road (Route 440). Drive east on Shelton Road, an improved gravel road, and approximately 6.0 miles (9.7 km) to the Hot Springs Ranch. From the ranch and the York Mine sign, drive south approximately 0.6 miles (1.0 km), turn left and travel southeast on the dirt road towards the Snowdrift Mine for approximately 2.6 miles (4.2 km), then turn right and travel approximately 0.8 miles (1.3 km) to the claim block via a four-wheel drive, rutted two-track road (Rodgers and Stage, adjacent property report, 2008).

Seasonal temperatures range from a low of 15 F (-10C) in January to a high of 95 F (35 C) in July. The area surrounding the Hot Springs Range is arid and sunny. The average annual rainfall varies from five to ten inches (12.7 to 25.4 cm). The Hot Springs Peak project area can accumulate several feet of snow during the winter.

The local resources of Humboldt County, Nevada are largely rural with a population of approximately 15,000. Winnemucca is the largest city in Humboldt County with a population of approximately 6,700. Winnemucca has a general aviation airport and daily passenger rail service and the main industry in the area is gold mining. Winnemucca is capable of supplying most of the labor, equipment, or service requirements for conducting exploration or mine-related activities. Winnemucca and the surrounding area currently support large, open-pit gold mines including the Twin Creeks Mine operated by Newmont, and Turquoise Ridge-Getchell Mines JV operated by Barrick Gold (Newmont owns 25%), approximately 15 miles (22.5 km) east of the Property.

There is little infrastructure at the property, however, improved gravel roads and power lines are located approximately 3.5 miles (5.6 km) to the north. Cell phone service is available at the Property, depending on the cell phone provider. The surface ownership is federal public land typically used for cattle grazing and mining. Surface and ground water rights are not known although commonly on federal lands can be allotted from the State for mining. I am not aware of any restrictions to prohibit exploration and mining on the project. The length of the operating season can be year around with proper road maintenance during winter months.

Elevations on the property range from 4600-5600 feet. Surface water has not been observed on the property (Google Earth Website). The Little Humboldt River is dry during summer months. Sagebrush covers much of the property. Abundant water was in the Humboldt River at the time of my visit on June 14-15, 2017

## 6.0 History

## 6.1 Prior Ownership

Mercury mine production from unknown owners was recorded in 1936-1957 from mines on the south claim block on the property and further south. There is no recorded production from the mines on the property, although a mercury retort plant site and remains occurs not far south of the property. The

mercury mines produced 1900 flasks of mercury from cinnabar replacements in carbonate rocks, mostly from the Cahill Mine at the south boundary of the property (Bailey and Phoenix, 1944).

Prior owners and lessees of the property were Black Jack Exploration Inc. prior to 1987, Tenneco Minerals 1987-1988, AMAX Gold 1987, Westmont Gold 1990-1992, Doe Run Resources Company 2004-2006 and Dutch Flats Minerals Inc. 2011-present, now part of Buena Vista Minerals Inc (BVMI). Two additional companies were identified as working on the claim block area, Nerco Minerals and Vanguard Exploration Company. Nothing is known of the later programs except that Vanguard flew an airborne magnetic survey. Miranda Gold held claims south of the claim block in the mercury mine area and the current status is not known.

## 6.2 Type and Amount of Past Exploration

The first significant exploration program was conducted by Tenneco Minerals. Tenneco acquired the property (75 claims) and added 10 additional claims then collected 334 rock samples and approximately 168 stream sediment samples and 68 soil samples. The highest gold value was 0.116 opt gold from a float sample along the west margin of the property on the HUG Claims under lease and 4 reverse circulation holes were drilled to depth of 145-500 feet with reported low gold values and the property was dropped. I have estimated this program to cost approximately \$205,000 for work completed on the Dutch Flats Claims. I do not value this data as being reliable, as maps were not generated with locations and quality control for sampling and analytical work is lacking.

At the same time, AMAX Gold was drilling on the Dutch Flats Claim Block at a prospected area containing shafts and prospect pits with reported gold mineralization (0.13ounces per ton gold) from written notes. My effort on this verification trip was to collect 10 rock chip aggregate samples from mine shaft dumps and outcrops at this location to verify that gold mineralization exists. Air photos were used to locate these shafts and prospects. AMAX apparently drilled 4 core holes at this location (personal communication with HUG claim block owner) although no data was seen to confirm the holes. I am unable to estimate expenditures by AMAX. At the same time Nerco also had a program underway northeast of the Hot Springs Peak although no data is available to estimate expenditures for this effort on the current claim area.

The next significant exploration effort was completed by Westmont Gold Inc. Rock chip sampling identified 0.376 opt gold in jasperoid outcrop on the adjacent property and these jasperoid outcrops were drilled across the direction of the jasperoids and discovered 5-10 feet intervals with gold grades ranging from 0.019 to 0.226 opt gold in three of the holes (Hogg 1990 and 1992). The jasperoids (silicified breccias) trend northwest perpendicular to stratigraphy. Westmont assembled the Tenneco data into geochemical plot maps and completed a soil grid sampling program of 151 samples and identified three areas of anomalous gold and pathfinder elements on the HUG Claims (Zucker 1990, 1993). A sage brush sampling program of 185 samples was collected and contained low values of detectable gold (0.29-2.41ppb). Westmont terminated the lease shortly after the sampling program. I value the Westmont results highly and they meet current qualified standards. I estimate this program to cost \$75,000 on the current claims with the majority of the program being on the HUG claims (\$150,000).

The third and most recent exploration effort was completed by the Doe Run Mining Company. A claim staking program of 44 claims were placed on the current claim block area, adding to the HUG Claims. A

coring program of 7 core holes was completed with 3 core holes on the Dutch Flats Claim Block (BVMI) near the reported AMAX core holes. The 4 core holes on the HUG Claims were targeted primarily by a ground geophysical survey of magnetic and Induced Polarization-Resistivity. Intense alteration was identified by core drilling of the magnetic lows but only weak anomalous gold (less than 0.012 opt gold) was reported although not verified by myself. Assay results were not available on the AMAX core holes or the three Doe Run core holes near the AMAX core drill area. I located the 3 core holes by Doe Run on Google Earth air photography and verified the locations in the field, during my visit. The Doe Run data and the geophysical survey by Monroe, 2005 are high quality and can be relied on for future planning. The total expenditures by Doe Run Mining for work completed on the current claims and lease are estimated to be \$300,000.

Dutch Flats Minerals (DFM-BVMI), staked 88 claims in 2017 and held 10 claims from prior staking in 2011, to make up the land position of 98 claims. The claim staking cost and filing fees are estimated to be \$35,000. BVMI has not performed any further work that I am aware of.

The estimated expenditures for past exploration programs on the current claim block are \$600,000 including the DFM estimates and are likely to be greater than \$1,000,000 when adding programs that were not available to estimate. This estimate does not include the adjacent Black Jack Property estimated at \$400,000 of expenditures.

# 6.2.1 Verification Efforts by the Author of Reported Gold Mineralization in the AMAX Area

I have spent time logging two of the three core holes from the Doe Run drilling on the current claim block near the AMAX drill area and intense alteration containing brecciation, carbon flooding, silicification and sericitization-hornfels alteration with pyrite (QSP) are present (Table 1 and Figure 4a-b). A total of 879 feet of 2.5 inch diameter core was logged by me on holes 5 and 6. Core hole 7, approximately the same depth of 390 feet was less altered and not logged in detail. I submitted samples of core for assay and the results were released to the owner of the HUG Claims and the core. The owner then released the assays to me for this study. The results show that weakly anomalous gold (maximum 26ppb)-arsenic (maximum 57ppm), stronger mercury (maximum 21ppm) and very strong chromium (889 ppm)-nickel (639 ppm) are present.

I further researched the physical properties of the core containing the strong chromium-nickel and concluded that the apple green micaceous alteration minerals are the chromium mica fuchsite and the chromium-nickel mica, listwanite (Fig. 4a), (Wikipedia). These micas are the alteration products of a sheared mafic dike, possibly a lamprophyre dike (9.18% magnesium), mantle derived and commonly high in chromium and nickel content. The high mercury content of 21 ppm is common with these micas and is found in the Mc Laughlin Gold Mine, California and gold deposits of China (Buckman and Ashley, 2010). Lamprophyre dikes are well documented in Carlin Gold Deposits of Nevada.

Core ID	Interval, feet	Core Description by author, assay performed by ALS Labs in Reno, Nevada			
HSP-05-06	59-60	Black carbonaceous phyllite, bed angle to core axis ~ 30deg.			
	82-83	Carbonaceous silty argillite, bedding angle to core axis ~ 30 deg.			
	02.05				
	139-139.5	и и и и и			
	149.5-150	Carbonaceous phyllite, bedding angle to core axis ~ 30 deg.			
	185-186	Carbonaceous breccia with silicified fragments			
	254.5-255	Silicified breccia, sericitized, green fuchsite-listwanite alteration micas.			
	Fuchsite-listwanite altered-brecciated lamprophyre? dike. Chromium 88				
Photo, Fig. 4a	270-271	nickel 639ppm, mercury 21ppm, magnesium 9.18%			
	295-296	и и и и			
	308.5-				
	309.5	Partially silicified and argillized, bleached phyllite with sulfide veinlets			
	323-324	Carbonaceous breccia with silicified fragments, no observed sulfides, graphitic			
	324-325	" " gold 26ppb			
Photo, Fig.4b	392.5-393	Carbonaceous breccia with silicified fragments			
HSP-05-05	206-207	Black phyllite, moderate silicification, fine disseminated pyrite ~ 2%			
	321-321.5	Gray carbonaceous phyllite, strong silicification, disseminated pyrite			
	350.5-351	Quartz veined silicified phyllite			
	385.5-386	Moderate to strongly silicified phyllite, bedding angle ~ 45 deg.			
	417-418	Black carbonaceous phyllite, moderate-strong silicification, disseminated pyrite			
	464-464.5	Carbonaceous phyllite, strong silicification and quartz veined, pyrite ~ 3%			
Table 1 Co	no intervol	s from the Doe Run holes logged by the author and selected for assaying			

Table 1Core intervals from the Doe Run holes logged by the author and selected for assaying.



Figure 4a Fuchsite-Listwanite altered mafic dike containing chromium (884 ppm), nickel (639 ppm) and mercury (21 ppm) Doe Run Core Hole HSP-05-06. X-ray mineral identification not completed.

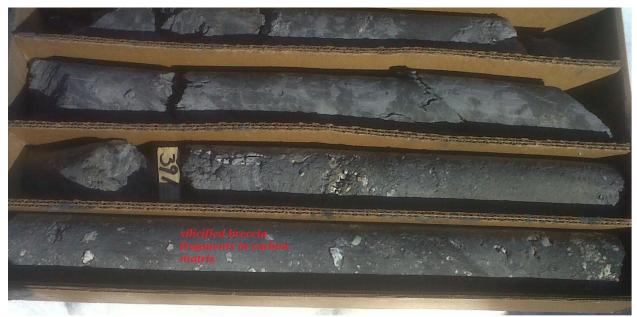


Figure 4b Carbon rich breccia with silicified fragments in Doe Run core hole HSP-05-06

Gold mineralization in the AMAX Area was not confirmed by the core assay results drilled approximately 1,000 feet away.

Ten rock chip aggregate samples were collected from the mine shafts and outcrops in the AMAX Area and extending northeast along the mine trend. Seven of the samples were collected directly in the AMAX Area. The deeper shafts are estimated to be 100 feet deep and are sunk on steeply dipping brecciated quartz veined shear zones up to 8 feet wide (Figure 4c) Calcite veining is also present. The wall-rocks and surrounding area are strongly hornfels altered, hundreds of feet wide, with crosscutting quartz-calcite veins (Figure 4d-e). A second type of alteration fracture veining contains quartz-limonite centers with strong reaction rims of sericite-muscovite further altering the hornfels surrounding the veins Figure 4f). The hornfels altered trend of shafts and prospect pits on the claim block was measured along one mile distance (1.6km) and contains a quartz eye biotite rhyolite porphyry intrusion that is argillized and liesegang banded with limonite.



Figure 4c Shaft in the AMAX Area sunk on vertical quartz veined breccia zone



Figure 4dHornfels altered wall rock surrounding the mines and containing<br/>crosscutting quartz veins



Figure 4e Spotted hornfels altered calcareous sandstone host rock in the mine area



Figure 4f A second vein type containing quartz-limonite veins surrounded by coarse sericite-muscovite reaction rims, further altering the surrounding hornfels.

The following table shows the assay results for the sampling of the AMAX Area and confirms the gold mineralization. The elevated arsenic with gold mineralization is supportive to a "Carlin Type" system.

	Rock Chip Sampling of the AMAX Area and Mine Trend						
Sample #	Description	Gold ppm	Gold opt	Silver ppm	Arsenic ppm	Mercury ppm	Antimony ppm
HSP89151	quartz hematite veins, shaft dump, shaft depth 40', collapsed	0.376	0.011	5	552	0.341	35
HSP89152	hornfels/quartz veins, shaft dump, shaft depth 20', collapsed	0.057		3	1025	0.126	42
HSP89153	hornfels, quartz-sericite veined	0.008		1.7	502	0.038	15
H SP89154	hornfels, quartz-sericite veined	<0.005		<0.5	486	0.085	13
HSP89155	quartz-hematite veins, shaft dump, shaft depth. +100'	24	0.701	1.8	213	0.1	5
H SP 89156	hornfels, quartz-hematite veins, shaft dump	0.046		0.6	551	0.337	16
HSP89157	phyllite, quartz-sericite veined, prospect pit	<0.005		<0.5	19	0.017	<5
H SP89158	Quartz-calcite veined breccia in hornfels, shaft dump, 100' deep	0.021		<0.5	455	0.039	12
H SP89159	Quartz boudin breccia in hornfels, shaft dump	0.014		3.4	582	0.074	23
H SP89160	Quartz eye rhyolite porphyry, argillized, limonite	<.005		<0.5	7	0.005	<5

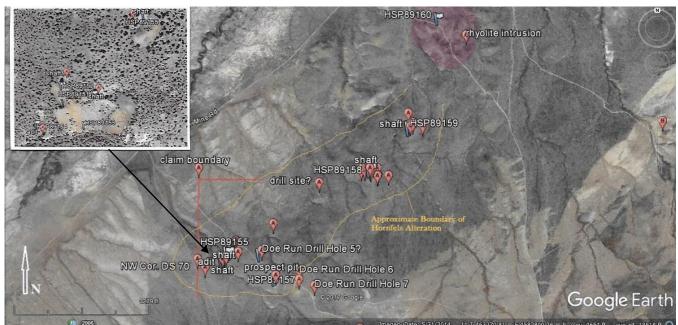


Figure 4g GPS Verification Sampling of Reported Gold Mineralization and Preliminary Mapping of Hornfels Alteration and Rhyolite Intrusion

## 6.3 Resources or Production Known

There are no gold resources delineated and no recorded gold production from the property. There are mercury mines and prospects on the property but I am not aware of any recorded production. Mercury production is recorded from mines adjacent to the property.

## 7.0 Geological Setting and Mineralization

## 7.1 Regional, Local and Property Geology

The following regional interpretation of the distribution of gold deposits in north central Nevada is from my own interpretation of experience in Nevada and generally conforms to the literature. The BVMI

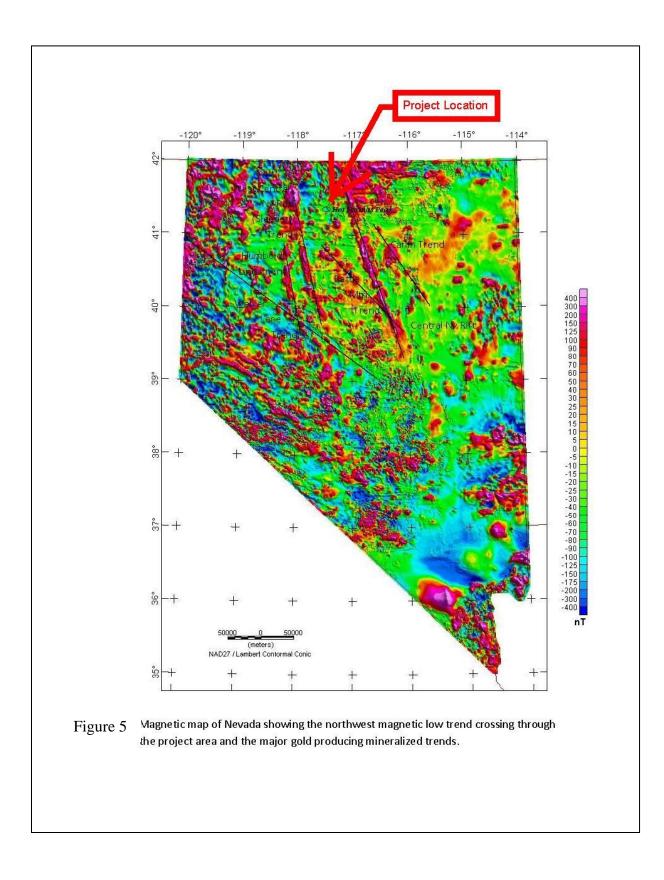
Property is located between two major rift trends or deep crustal breaks defined by the following magnetic maps (Figures 5 and 6). These northwest trends are inter-connecting by suture zones or deep crustal breaks oriented North-South, West-Northwest and Northeast across the intermediate ground between the two major rift trends. The large gold deposits of Twin Creeks to the west of the property are oriented on a northern suture zone, similar to the Lone Tree Mine further south. The Getchell-Pinson Deposits are oriented on a northeast suture with an intersection of a northwest suture (Getchell Fault) controlling the large Turquoise Ridge underground gold mines. The regional magnetic map (Figure 6) shows an interpretation by the author of these suture zones controlling some of the major gold deposits in the area between the major rift at Cortez forming the Cortez-Pipeline Gold Deposits. The host rocks on the property are not as critical to the mineralization as the structures, although carbonate host rocks such as the Triassic Age Poverty Peak Limestone and the Permian Age Poverty Peak Group, should be more reactive as are the carbonate hosts to most of the larger gold deposits on the Carlin and Cortez-Battle Mtn. Trends.

On the local scale, the Property is on the northwest projection of the Getchell Fault Trend from the Turquoise Ridge Gold Deposit with some definition of a northwest linear trend defined by a magnetic low boundary across the property and extending toward the Turquoise Ridge Deposit Area. The local geologic map of the Northern Hot Springs Range shows northwest, north-south and northeast fault directions mapped on the property (Figure 7). The property scale mapping identifies gold mineralized and silicified fault breccias on the western boundary of the property and HUG Claims (Figure8, 8a) that are mapped as northeast trending and were re-mapped by the claim owner, a qualified person, and Westmont Mining as northwest trending where mineralized. I have confirmed the northwest trending silicification direction in the field (Figure 6a) on the HUB Claims.

The host rocks on the property are mafic volcanics and chert with interbedded clastic and carbonate rocks mostly of the Triassic-Permian Age Poverty Peak group of rocks. Late Paleozoic carbonate rocks are exposed on the east side of the property and these are potential host rocks for concealed mineralization on the west side of the property under the younger Permian Age Melange, Jurassic Age Auld Lang Syne shale-phyllite and also under gravel cover. More detail of the geologic units is listed on the geological map. Tertiary Age rhyolite porphyry intrusions occur on the north side of the property and two small rhyolite porphyry plugs are mapped just northwest of the AMAX drill area. A northeast trending cluster of prospects has been located on air photos by the author and trend from the AMAX Area, 6 kilometers to a location at the edge of the Humboldt River where a recent sinter ring containing hot spring pools, indicating that hydrothermal activity continues into recent time.

## 7.2 Mineralization on the Property

There is documented gold mineralization on the HUG Claims both on the surface and in drill holes. There is a hand written assay value of 0.13 ounces gold per ton (opt) from a prospect at the AMAX area and has been verified by my sampling as discussed in the prior section 6. There are no analyses available for me to document from any drilling on the property. There are no mercury assays from known prospects to document that mineralization. The core analyses completed for this report as shown in section 6.2.1, table 1, contain moderate mercury with detectable gold. However, surface mine sampling contains as high as 0.701 opt in the AMAX Area.



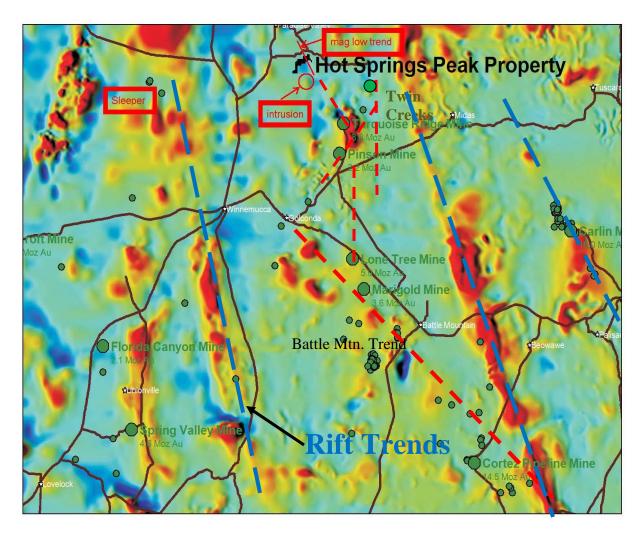


Figure 6 Magnetic trends showing older crustal breaks between the major northeast rift trends and locations of major gold deposits along the older breaks. The property is located on a northwest linear possibly extending from Turquoise Ridge



Figure 6a Northwest trending silicification on the HUG Claims

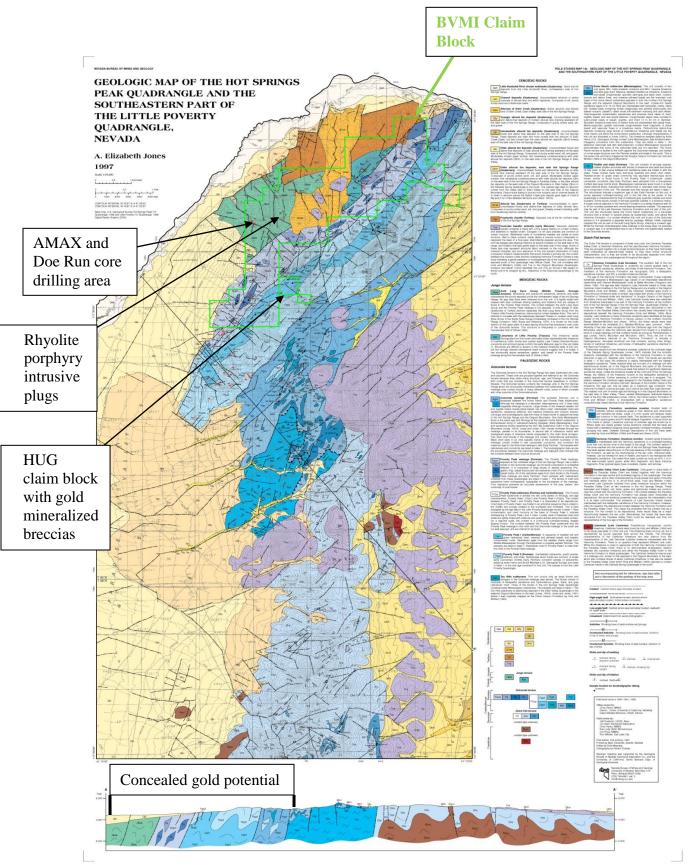


Figure 7 Local geological map of the project area showing mapped faults and stratigraphy across the property.

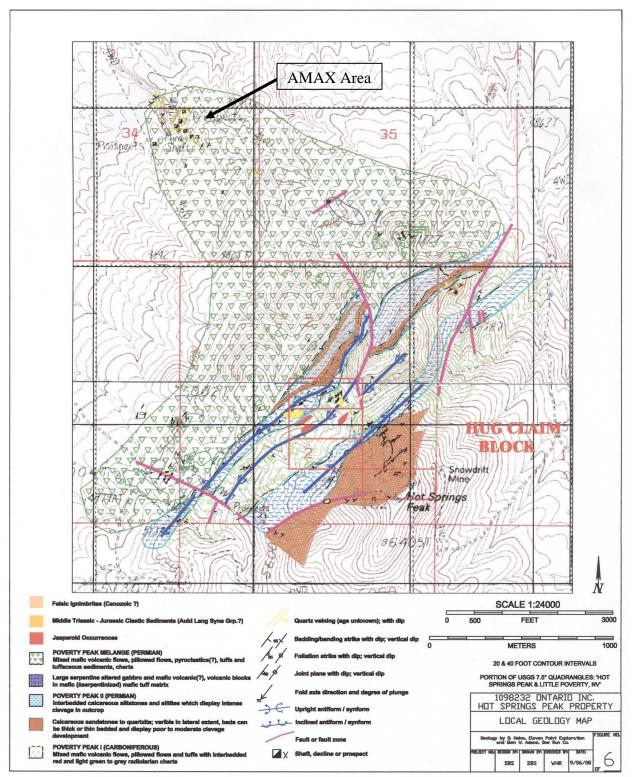
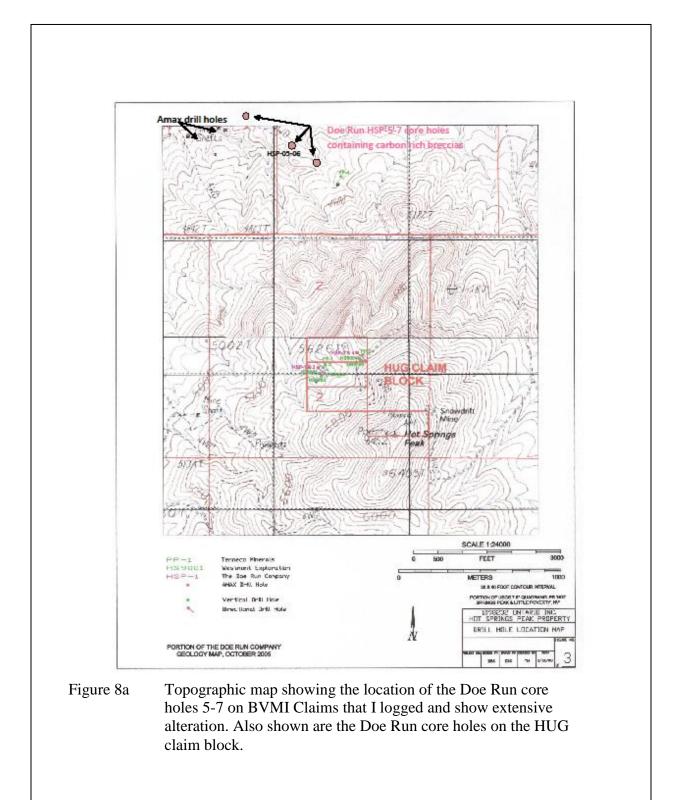


Figure 8 Property scale geological map by Doe Run Geologists showing the gold mineralized silicified breccias on the HUG Claims and the greenstone volcanic section on the claim block, mostly under gravel cover and containing prospects in the AMAX Area, section 34 where 0.13 opt gold grade in quartz veins is indicated but poorly documented.



#### 8.0 Deposit Types Being Explored

The most likely deposit to expect and explore for is a "Carlin Style" sedimentary hosted gold deposit with arsenian pyrite in a carbonate host. Turquoise Ridge is this type of deposit and there is evidence for the trend continuing toward the property (Figure 9). Mercury occurrences are common in the latest phase of mineralization and high above the main gold zones. The gold trends in Nevada commonly contain a single type of gold occurrence as in the Carlin Trend or the epithermal vein deposits in the Central Nevada Rift or the Sleeper Trend. A Sleeper Type, Fire Creek or Mule Canyon Type volcanic/intrusive hosted epithermal vein deposit extending into the intruded sedimentary rocks is indicated in the AMAX Area where hornfels alteration and gold occurrences have been located by the author. The "Carlin Style" alteration in the core contains carbon rich breccias and widespread silica replacement of the phyllite, more common in "Carlin Type" systems. What mineralization has been discovered and assayed contains high arsenic, low silver and antimony-mercury, most common to "Carlin Type" mineralization. The following cross section after Muntean, 2009 shows the model for exploring this type of deposit, with an eye on the possibility of an epithermal vein type deposit associated with the rhyolite intrusions and possibly in the rhyolite porphyry intrusions or the mafic volcanic greenstone section of Paleozoic mélange. One of the core holes contains quartz-sericite-pyrite replacement of the phyllite and this alteration can occur in both "Carlin Type" and epithermal vein deposits. The discovery of an altered mafic dike (lamprophyre?) is common in Carlin Type. I have not seen evidence for stratiform massive sulfide mineralization even though Rodgers and Stage mention an occurrence of syngenetic copper.

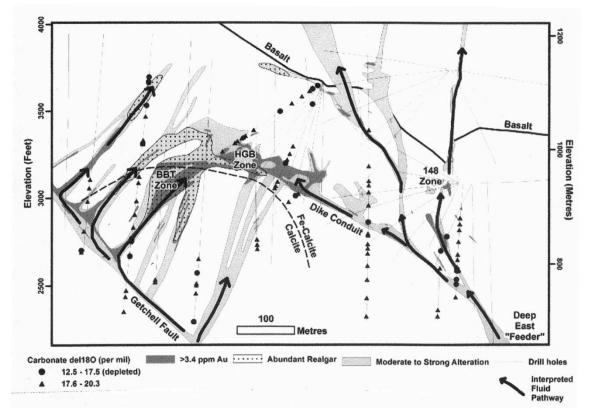


Figure 9 Turquoise Ridge Gold Deposit Model for the BVMI Property

## 9.0 Exploration by BVMI

BVMI has not done any exploration work on the property except my field due-diligence of the data, surface sampling to verify a poorly documented gold occurrence, alteration and structural observations, core logging and assays of selected core intervals, along with the assistance of planning the airborne magnetic survey as covered under section 26.0 Recommendations.

## **10.0 Drilling Results**

As shown in Figure 8a, the only verified drilling on the property are the three Doe Run core holes HSP-05-05 through 07 and I have logged them to verify the type and extent of alteration and visual mineralization used for determining the type of gold deposit most likely to be explored. Doe Run geologists sampled only selected intervals of the core and the results were kept confidential. Visual identification of fuchsite-listwanite in an altered mafic dike has been supported by the high chromium-nickel in core hole #6 at a depth of 254.5 – 313.5 feet surrounded by quartz-sericite-pyrite (QSP) alteration. Doe Run appears to have maintained high standards for sampling and analyses in the results available from the HUG Claims and I expect they did the same for this core. There were no lost intervals in the core. There is also no direction and angle data for interpreting the core and a map of the locations and hole-numbers was not divulged so the hole-locations were found from the site reclamation map filed with the Bureau of Land Management showing the GPS locations of drilling with core hole 6 likely between 5 and 7. Air photos and field observations have resolved the drill hole location uncertainty.

#### AMAX

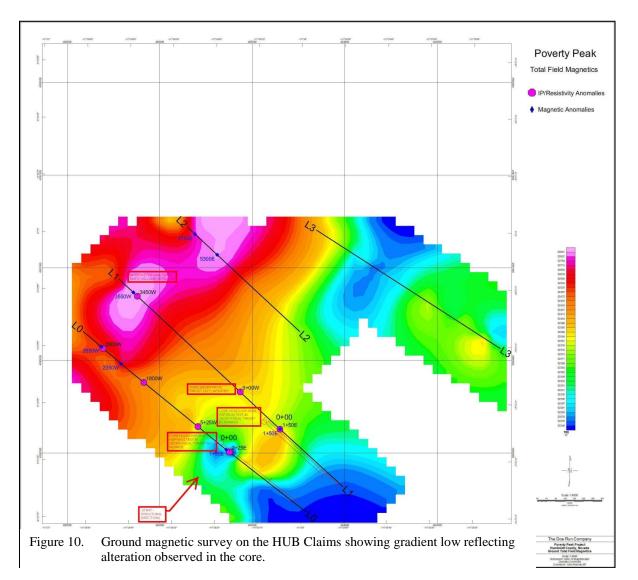
The AMAX drilling of 4 core holes is only from discussion with the HUG Claims property owner and no drill hole location data or results have been seen. Also on the map of figure 8 is a location of a drill hole PP-4 approximately 1,000 feet southeast of the Doe Run core holes. This hole is believed to be a Tenneco Minerals drill hole drilled to a depth of approximately 200 feet and angled to the southwest at 70 degrees and is reported by Rogers and Stage to be strongly hematite altered but without significant gold or silver mineralization. The drill log with analytical results is apparently available for review but the lab certificate is not.

#### Westmont Mining

The four HUG Claims were the focus of exploration drilling. This location contains documented surface and drilled gold mineralization to approximately 200 feet depth by Westmont Mining. The mineralization is contained within jasperoid breccias and contain the following drilled intervals; HS 9001, 45-50 feet depth = 0.113 opt gold, HS 9002, 50-55 feet = 0.226 opt gold, HS 9003, 15-20 feet = 0.120 opt gold. This shallow jasperoid target was adequately tested to determine that it is a mineralized occurrence although not of interest for further testing at that depth level. I also believe this to be the case, even though I am not able to verify the past data. A drill indicated resource has not been estimated for this occurrence.

#### Doe Run Mining Company

The Doe Run Mining Company took a different approach and conducted a ground geophysical survey to see what electrical responses are associated with the mineralized jasperoid at depth and found that a much larger magnetic low gradient is present underlying the jasperoid and found by core drilling that extensive silicification, argillization and hematite alteration occurs in a large area but with little gold mineralization (0.012 opt maximum grade in sampled intervals). I have observed the core and find this interesting from a standpoint of using a magnetic survey for mapping the alteration on the HUG Claims to help with drill targeting. I have plotted the core drilling on the magnetic gradient map by Monroe, 2005 and this survey acts as an orientation survey for testing the usefulness of a large scale airborne geophysical survey that I have participated in the design for BVMI's future targeting of drilling. The geology on the HUG Claims is a continuation of the geology on BVMI's Claim Block but does not necessarily indicate that mineralization will be found on the Hot Springs Peak Property. The intrusive related alteration and gold mineralization found in the AMAX Area mine trend does not occur on the HUG Claims.



## **11.0** Sample Preparation Analysis and Security

## 11.1 Issuer (BVMI)

There have been no samples submitted except the 18 core pieces by me and the 10 surface rock chip samples that I have collected. I have marked the intervals for splitting and the lab has cut, pulverized and did internal checks on the analyses. Core boxes with intervals selected for splitting were delivered to the lab by myself and signed off for delivery. Core cutting and preparation of samples were performed by ALS Minerals Labs, according to certified standards for reporting results. However, upon review of the core with the assay report, I have found discrepancies with matching assayed intervals with the actual cut core. The lab is investigating what might have happened. The discrepancies do not impact the results used for this report.

The same preparation and analyses were completed for the surface samples. My opinion of the adequacy of the sample preparation, security and analytical procedures of the lab is that high quality work has been completed and the results can be relied upon for any future decisions. Internal standards, blanks and duplicates are part of routine internal checks by the lab. Future drilling by BVMI should have outside standards, blanks and duplicates inserted into the sample analytical stream.

## 11.2 Past Exploration

There are no other analyses to report on the drilling. The soil, rock chip and vegetation sampling completed by Westmont followed proper protocol of standards, duplicates and blanks in the sample stream. There is no record of any quality control for the Tenneco stream sediment, soil and rock sampling.

## 12.0 Data Verification

There is a box of records from the past work on the BVMI and HUG Claims that is held by the owner of the HUG Claims and this box was the source for all data accumulated for the past 25 years. I reviewed all of these records without restriction and discussed the information with the owner of the HUG Claims. Sample data with lab assay reports was given more credibility than maps and number lists of assay values without lab assay reports. The data is likely to be representative of the surface given that mostly quality exploration companies known in the past were associated with the data and a qualified geologist owns and discussed the numbers. There are no core assays to verify on the property except the samples I submitted. The data is inadequate to conclude anything about the presence or absence of a gold deposit and the potential for discovery based on the data. The indication of 3 generations of drilling on the property, although only 1-4 holes by each company, is somewhat encouraging and the alteration logged by me in the core and observed on the surface is a good reason to be interested in the property, regardless of some undocumented gold values. My surface sampling has verified the gold reported in the AMAX Area

## 13.0 Mineral Processing and Metallurgical Testing

There is no known mineral processing or metallurgical testing on any samples from the property.

## 14.0 Mineral Resource Estimates

There are no mineral resource estimates known from any mineral occurrences on the property.

## 15-0 – 22.0 Not Applicable for an Early Stage Exploration Project

## 23.0 Adjacent Properties

There are no adjacent properties with documented mineralization known.

## 24.0 Other Relevant Data and Information

As the project matures and more is understood about the subsurface, other exploration methods may be employed such as surface IP/resistivity. From my point of view, there is a starting point with a trend projection from a major producing gold deposit, a large alteration system in existing core and a northeast trend of alteration and gold mineralization at the surface to help with future exploration focus as the project moves forward.

## 25.0 Interpretations and Conclusions

The current interpretation from the limited but available data and my own core logging is that a large scale alteration system has intensely altered somewhat unfavorable host rock phyllite and argillite of the Triassic Age Auld Lang Syne Group of rocks. The Auld Lang Syne phyllite should overly and is adjacent to much more reactive carbonate rocks of the Poverty Peak Limestone and the Permian Age Poverty Peak Group mafic mélange and calcareous siltstones, considered better host rocks for gold mineralization.

The discovery of gold in shear zones at one location along a mile length of hornfels altered trend is very encouraging for finding a gold resource.

The most prominent style of alteration in the core is carbon rich breccias, replacement silicification, quartz veining, jasperoid breccia, sericitization with pyrite mineralization (QSP alteration) and argillization, all common in "Carlin Style" systems and occurs in the Turquoise Ridge Deposit.

Ground Magnetics on a small area of gold mineralization and alteration has show to be useful in mapping the subsurface alteration possibly associated with gold mineralization, although the core drilling in the alteration contains only weakly anomalous gold where sampled. The alteration in the core may be distal to the gold zone of a possible "Carlin System" such as the high level alteration at Turquoise Ridge that is un-mineralized 1500 feet above the main deposit containing 14.5 million tons @ 0.487 opt gold or 7.06 million ounces of gold (Mining Almanac, 2011).

Even though there is significant alteration, the project remains high risk for discovery at this early stage of exploration with drilling costs higher for deeper drilling, if the alteration remains un-mineralized. The surface gold discovered in the mine trend lowers the risk of finding a resource.

To conclude, the project is currently untested for a major gold system that is indicated by the alteration pattern in shallow core testing and will require an integration of geophysical surveys with deeper core testing than prior drilling to understand alteration-geochemical patterns that may lead to an economic gold discovery. It is not likely that the first few core or reverse circulation holes will intersect a major gold deposit. However, the numerous geophysical surveys over known gold deposits in Nevada should make target recognition for a mineralized zone somewhat easier than in the past.

## 26.0 Recommendations

The initial phase of exploration during 2017 is to complete an airborne magnetic survey of approximately 2.5 square miles, investigate surface prospects and if warranted, stake additional claims on selective areas not divulged in this report. The airborne magnetic survey is designed as a detail drill-targeting survey with line spacing of 50 meters (30sq.km.) (Figure 10). The budget for the first phase of exploration is estimated at \$89,000.

Airborne Magnetic Survey	\$22,000
Claim Staking	\$15,000
Field Investigations	\$10,000
Analyses	\$2,000
Manpower-Expenses	\$40,000



Figure 11 Airborne magnetic survey plan for the Hot Springs Peak Project showing flight-line density of 50 meters with cross connector lines at wider spacing.

The second phase of exploration during the second ½ of this year overlapping into 2018 is likely to be ground IP/resistivity, claim filing, drill targeting-mapping, drill permitting and possibly the first drill hole (core or reverse circulation). In my opinion, a second phase of geophysical investigation and drill targeting should be completed, regardless of the phase 1 results, as phase one is designed to better position follow-up surveys for drill targeting. A review and consensus on the phase 2 program can then be completed.

A second phase program might be designed as follows and the budget might total \$270,000.IP/Resistivity\$40,000Claim filing\$20,000Drill target/mapping\$10,000Drill permit/bond\$20,000First core hole (400m)\$80,000 (or combination RC/Core)Assays\$10,000Manpower\$90,000

#### 27.0 References

Bailey, E.H. and Phoenix, D.A., 1944, Quicksilver Deposits in Nevada: Nevada Bureau of Mines and Geology Bulletin 41, p. 101-106.

Buckman, S and Ashley, P.M., 2010, Silica – carbonate (listwanites) related gold mineralization associated with epithermal alteration of serpentite bodies.

Hogg, J.M., 1990 and 1992, The Hot Springs Peak Project Annual Report, Humboldt County, Nevada, Westmont Mining Inc., December 1990 and December 1992.

Jones, A.E., 1997, Geologic Map of the Hot Springs Peak Quadrangle and the Southeastern Part of The Little Poverty Quadrangle, Nevada, Nevada Bureau of Mines and Geology, Map and Text, 12 pgs.

Mining Almanac, 2011, Barrick Gold Corp's Turquoise Ridge Deposit: Reserves and Production, December 2011

Munroe, J., 2005, IP/Resistivity & Magnetic Survey, Interpretation Results, Hot Springs Peak Project, Humboldt County, Nevada, US Exploration Services, May 18, 2005 (Revised November 26, 2005). Internal report supplied by the property owner.

Muntean, J.L. et, al., 2009, Fluid Pathways at the Turquoise Ridge Carlin-type Gold Deposit, Getchell District, Nevada

Petryk, L.M., 2011, Changes to National Instrument NI 43-101: Standards of Disclosure for Mineral Projects, McMillan and Company

Rodgers W.L. and Stage, D.B., 2008, Technical Report on Hot Springs Peak Property, Humboldt County, Nevada, USA, 34 pgs., Internal report supplied by author on adjacent property with permission from owner.

Wikipedia Research on Lamprophyre, Fuchsite and Listwanite

Zuker, J.S., 1990, Hot Springs Geochemistry Report, Humboldt County, Nevada, Westmont Mining Inc., October 1990

Zuker, J.S., 1993, The Hot Springs Soil Survey Evaluation for 1992 Annual Report, Humboldt County, Nevada, Westmont Mining Inc., April 16, 1993.

#### APPENDIX

**Claim List of Holdings** 

Claim	Loc. Date	Humboldt County Doc.#	BLM-NMC #
DS 62	3/13/2017	2017-02987	1144184
DS 63	3/13/2017	2017-02988	1144185
DS 64	3/13/2017	2017-02989	1144186
DS 65	3/13/2017	2017-02990	1144187
DS 66	3/11/2011	2011-3038	1045356
DS 67	3/13/2017	2017-02991	1144188
DS 68	3/11/2011	2011-3040	1045358
DS 69	3/13/2017	2017-02992	1144189
DS 70	3/11/2011	2011-3042	1045360
DS 71	3/13/2017	2017-02993	1144190
DS 72	3/13/2017	2017-02994	1144191
DS 73	3/13/2017	2017-02995	1144192
DS 74	5/2/2017	2017-02996	1144193
DS 75	5/2/2017	2017-02997	1144194
DS 76	5/2/2017	2017-02998	1144195
DS 77	5/2/2017	2017-02999	1144196
DS 78	5/2/2017	2017-03000	1144197
DS 79	5/2/2017	2017-03001	1144198
DS 80	5/2/2017	2017-03002	1144199
DS 81	5/2/2017	2017-03003	1144200
DS 82	5/2/2017	2017-03004	1144201
DS 83	3/11/2011	2011-3055	1045373
DS 84	5/2/2017	2017-03005	1144202
DS 85	3/11/2011	2011-3057	1045375

DS 86	5/2/2017	2017-03006	1144203
DS 87	3/11/2011	2011-3059	1045377
DS 88	5/2/2017	2017-03007	1144204
DS 89	3/11/2011	2011-3061	1045379
DS 90	5/2/2017	2017-03008	1144205
DS 91	3/11/2011	2011-3063	1045381
DS 92	5/2/2017	2017-03009	1144206
DS 93	3/11/2011	2011-3065	1045383
DS 94	5/2/2017	2017-03010	1144207
DS 95	3/11/2011	2011-3067	1045385
DS 96	5/2/2017	2017-03011	1144208
DS 97	5/2/2017	2017-03012	1144209
DS 98	5/2/2017	2017-03013	1144210
DS 99	5/2/2017	2017-03014	1144211
DS 100	5/2/2017	2017-03015	1144212
DS 101	5/2/2017	2017-03016	1144213
DS 102	5/2/2017	2017-03017	1144214
DS 103	5/2/2017	2017-03018	1144215
DS 104	5/2/2017	2017-03019	1144216
DS 105	5/2/2017	2017-03020	1144217
DS 106	5/2/2017	2017-03021	1144218
DS 107	5/2/2017	2017-03022	1144219
DS 108	5/2/2017	2017-03023	1144220
DS 109	5/2/2017	2017-03024	1144221
DS 110	5/2/2017	2017-03025	1144222
DS 111	5/2/2017	2017-03026	1144223
DS 112	3/13/2017	2017-03027	1144224
DS 113	3/13/2017	2017-03028	1144225
DS 114	3/13/2017	2017-03029	1144226
DS 115	3/13/2017	2017-03030	1144227
DS 116	3/13/2017	2017-03031	1144228
DS 117	3/13/2017	2017-03032	1144229
DS 118	3/13/2017	2017-03033	1144230
DS 119	3/13/2017	2017-03034	1144231
DS 120	3/13/2017	2017-03035	1144232
DS 121	3/13/2017	2017-03036	1144233
DS 122	3/13/2017	2017-03037	1144234
DS 123	3/13/2017	2017-03038	1144235
DS 124	3/13/2017	2017-03039	1144236
DS 125	3/13/2017	2017-03040	1144237
DS 126	3/13/2017	2017-03041	1144238
DS 127	3/13/2017	2017-03042	1144239
DS 128	3/13/2017	2017-03043	1144240

DS 129	3/13/2017	2017-03044	1144241
DS 130	3/13/2017	2017-03045	1144242
DS 131	3/13/2017	2017-03046	1144243
DS 132	3/13/2017	2017-03047	1144244
DS 133	3/13/2017	2017-03048	1144245
DS 134	3/13/2017	2017-03049	1144246
DS 135	3/13/2017	2017-03050	1144247
DS 136	3/13/2017	2017-03051	1144248
DS 137	3/13/2017	2017-03052	1144249
DS 138	3/13/2017	2017-03053	1144250
DS 139	3/13/2017	2017-03054	1144251
DS 140	3/13/2017	2017-03055	1144252
DS 141	3/13/2017	2017-03056	1144253
DS 142	3/13/2017	2017-03057	1144254
DS 143	3/13/2017	2017-03058	1144255
DS 144	3/13/2017	2017-03059	1144256
DS 145	3/13/2017	2017-03060	1144257
DS 146	3/13/2017	2017-03061	1144258
DS 147	3/13/2017	2017-03062	1144259
DS 148	3/13/2017	2017-03063	1144260
DS 149	3/13/2017	2017-03064	1144261
DS 150	3/13/2017	2017-03065	1144262
DS 151	3/13/2017	2017-03066	1144263
DS 201	5/2/2017	2017-03067	1144264
DS 202	5/2/2017	2017-03068	1144265
DS 203	5/2/2017	2017-03069	1144266
DS 204	5/2/2017	2017-03070	1144267
DS 205	3/13/2017	2017-03071	1144268
DS 206	3/13/2017	2017-03072	1144269
DS 207	3/13/2017	2017-03073	1144270
DS 208	3/13/2017	2017-03074	1144271
HUG 3	3/10/1987		400674
HUG 8	3/25/1987		400678
HUG 9	3/14/1987		400679
HUG 10	3/14/1987		400680