



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Highland Valley Project, Geology, Broom Creek Area, Nicola Mining Division, Merritt, British Columbia, Canada

TOTAL COST: \$12,590,19

AUTHOR(S): Locke B. Goldsmith, P. Eng,, P. Geo. SIGNATURE(S):

Schlamith

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): Event # 5631672, Jan 2, 2017; 5644605, April 20, 2017

YEAR OF WORK: 2016

PROPERTY NAME: Highland Valley

CLAIM NAME(S) (on which work was done): 1041000, 041003, 1041007

COMMODITIES SOUGHT: Copper, molybdenum

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 92ISE063, 62ISE159, 92ISE175 MINING DIVISION: Nicola NTS / BCGS: NTS 92I 07 / 92I 036 LATITUDE: <u>59° 19' 36"</u> LONGITUDE: <u>120° 51' 26"</u> (at centre of work) UTM Zone: NAD 83 Zone 10N EASTING: 652500 NORTHING: 5577175

OWNER(S): Charles Hugh Maddin

MAILING ADDRESS: 907-2222 Belleview Ave., West Vancouver, B.C V7V 1C7

OPERATOR(S) [who paid for the work]: Charles Hugh Maddin

MAILING ADDRESS: 907-2222 Belleview Ave., West Vancouver, B.C V7V 1C7

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

Late Triassic Nicola Group island-arc andesite and related volcanic sediments. Phases of Late Triassic Guichon Creek Batholith: Highland Valley Phase: Transition - quartz diorite to granodiorite; Guichon - variety – granodiorite; Transition – Guichon to Chataway variety granodiorite; Chataway variety granodiorite. Shear zones trend north to northwesterly, and in the vicinity contain sulphide copper, silver, and molybdenum mineralization.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 451, 737, 749, 764, 1790, 3552, 3742, 4043, 4056, 4107, 4108, 7450, 7494, 8595, 9699, 9943, 11610, 14978, 22839, 23100, 23944, 24884, 25561, 29036, 29223, 29969, 34051, 34867.

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	1:5000 270 ha	1041000, 1041003, 1041007	\$12,590.19
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne Magnetic Interpretation			
GEOCHEMICAL (number of samp	les analysed for)		
Soil			
Silt			
Rock			
Other			
DRILLING (total metres, number o	f holes, size, storage location)		
0			
Core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (sc	ale, area)		
Legal Surveys (scale, area)		
Road, local access (km)/tra	ail		
Trench (number/metres)			
Underground development	(metres)		
Other	<u> </u>		
		TOTAL COST	\$12,590.19

BC Geological Survey Assessment Report 36583

Highland Valley Project Geology

Broom Creek Area Nicola Mining Division Merritt, British Columbia, Canada

Tenures 1041000, 1041003, 1041007

NTS 92I 07 BCGS 92I 036 Latitude 50° 19' 36" N Longitude 120° 51' 26" W UTM NAD 83 Zone 10N: 652500 E 5577175 N

Prepared for

Granby Gold Inc.

Charles Hugh Maddin Owner and Operator

Event numbers 5631672 5646505

Locke B. Goldsmith, P.Eng., P.Geo. Consulting Geologist

March 23, 2017

Table of Contents

1	Introduction 1.1 General	1 1						
	 Property Location Property Description Physiography, Accessibility, Climate, Local Resources, and Infrastructure Exploration History 	1 1 4 4						
2	Geology and Mineralization 2.1 Regional Geology, Stratigraphy, and Structure 2.2 Mineralization	6 6 7						
3	Property Geology	. 10						
4	Conclusions	. 15						
5	Recommendations							
6	Cost Estimate							
7	References							
8	Engineer's and Geologist's Certificate19							
9	Cost Statement, 2016 Program							

List of Figures

Figure 1. Location map	2
Figure 2. Claim map on topography	3
Figure 3. Regional geology with claim boundaries	8
Figure 4. Regional and property geology legend	9
Figure 5. Property geology	.11
Figure 6. IP and drill holes on geology	.12
Figure 7. Total magnetic field and drill holes on geology	13
Figure 8. Total magnetic field, IP, and VLF EM conductors on geology	14

List of Tables

Table 1. Mineral tenures1

List of Appendices

Appendix 1 – Highland Valley area field notes, October 2016

1 INTRODUCTION

1.1 General

Mapping of geology on the Highland Valley property was undertaken from October 22, 2016 to January 2, 2017.on tenures 1041000, 1041003, 1041007.

1.2 Property Location

The Highland Valley mineral claims held by Granby Gold Inc. are located in south central BC in the Broom Creek area, west of Guichon Creek, and approximately 15 km north of the community of Lower Nicola. The property is located 25 km northwest of Merritt, BC. Merritt and Kamloops act as supply centres for goods and services and provide many modern amenities. Major airline services are available through the Kamloops airport.

1.3 Property Description

The Highland Valley property comprises 6 contiguous mineral claims covering an area of approximately 475 hectares, 100% owned by Charles Hugh Maddin, held in trust for Granby Gold Inc. Claim status is summarized in Table 1.

Tenure Number	Claim Name	Owner	Map Number	Issue Date	Good To Date	Area (ha)
1041000		116570 (100%)	921 07	2016/jan/06	2022/jun/08	103.13
1041003		116570 (100%)	921 07	2016/jan/06	2022/jun/08	185.67
1041007		116570 (100%)	921 07	2016/jan/06	2022/jun/08	61.88
1049016		116570 (100%)	921 07	2017/jan/07	2018/jan/07	41.27
1049017		116570 (100%)	921 07	2017/jan/07	2018/jan/07	20.63
1049020		116570 (100%)	921 07	2017/jan/07	2018/jan/07	61.91

Table 1. Mineral tenures



Figure 1. Location map



Figure 2. Claim map on topography

1.4 Physiography, Accessibility, Climate, Local Resources, and Infrastructure

The property is east of the Cascade Mountains and south of the Highland Valley in the Thompson Plateau physiographic region of British Columbia. Most of the property is covered by windfalls and dense stands comprised of Lodgepole pine. Spruce and fir trees are found growing at lower elevations to the southeast, and locally in areas with a sufficient moisture budget. Broom Creek crosses the property, flowing from a north to south direction. A number of smaller creeks, both seasonal and perennial, also traverse the property. Much of the area is covered by glacial drift. Scattered outcrops of granodiorite occur in the north and west at higher elevations.

An all-weather road provides access from Merritt to Lower Nicola, thence north via the Craigmont Mine and Aberdeen Mine road. Highway 97C, between Merritt and Logan Lake, lies to the east of the eastern claim boundary. Within the property unmaintained logging roads provide access to parts of the property. The UTM Grid System used is NAD 83, Zone 10N.

Optimum conditions for an exploration program are between mid May and mid October. Snow cover can still be still present in May on the property. The climate is typical of the southern interior with an average annual precipitation of 30 centimetres. Temperatures in the summer can reach 35°C and plunge to -40°C in the winter. Snow covers the property from mid November to May.

Merritt, population 5300, provides basic services of groceries, meals, fuel, and accommodation. Heavy equipment for purposes of excavating is available.

1.5 Exploration History

The area of the Granby Gold claims, variably known as Vimy or Dot, has been included in the holdings of at least eleven companies from 1960 to the present, Two historic mine workings are located in the vicinity of the Granby Gold claims; neither the Aberdeen nor Vimy (Dot) is within the Granby Gold claim group. Information in this section is compiled from Stewart, G. (1997), Stewart, E. B, (2008), and Wyllie (2013):

"In 1887 chalcocite was discovered at what would later become the Aberdeen Mine (Waypoint 46), approximately 700 metres south of the southeast corner of Granby Gold claim 1049020. Small shipments (21.8 tons) of mineralization grading 7% copper were shipped in 1916 and 1917 to a smelter in Tacoma, WA (Sanguinetti, 1972). Handpicked ore assayed 0.03 oz./t (OPT) gold, 2.96 OPT silver and 12.62% copper. Stewart (1997) lists production as 111,700 kg of copper, 24,321 grams of silver, and 280 grams of gold.

The Vimy (Dot) mine workings (Waypoint 8) are located approximately 600 metres south of Granby Gold claim 1041007. Historic production is listed as 8,400 kg of copper and 1,866 grams of silver (Stewart, 1997). Sporadic mining of the Upper and Lower Vimy zones occurred between 1920 and 1927 (Sanguinetti, 1972). The Northwest Zone (Upper Vimy) had a shaft sunk to 50 metres depth to access a mineralized shear zone.

The Lower Vimy deposit was stripped and drilled, then had two small adits driven into shear-hosted, high-grade lenses of chalcopyrite, bornite and copper carbonate. The Southeast Zone and adjacent Copper Zone were discovered by Alhambra Resources Ltd. in 1996 and 1997.

In 1956 the Chataway Mining Syndicate acquired mineral tenure in the area surrounding the Roscoe showing. In 1962 Chataway Exploration Co. Ltd. conducted exploration comprising prospecting, geophysical and geochemical surveys, stripping and diamond drilling. South of Gypsum Lake, significant copper mineralisation was discovered by trenching in Zone 04. This lies about 3 km northwest of the Northwest Zone on the Dot Property. The showing was optioned in 1965 by Bralorne Pioneer Mines Ltd. Stripping, geophysical surveying (Induced Polarization) with diamond and percussion drilling delineated a low-grade, high tonnage deposit deemed uneconomical at the time (Meyer, 1968). By the end of 1967, there had been 57 diamond drill holes (3,999 metres) and 20 percussion holes (3,097 metres) completed on Zone 04.

In 1968, Bralorne Pioneer Mines Ltd. and Chataway Exploration Co. Ltd. conducted geological mapping, surveying, sampling, geochemical and geophysical (Induced Polarization) surveys and limited trenching. No new occurrences were identified and all existing showings were determined to be sub-economic.

ASARCO (American Smelting and Refining Co.) drilled 148 percussion holes for a total of 5,166 metres on a 610-metre grid (Wells, 1981). The exact locations for the drill collars are unknown, but the program is assumed to be related to the Zone 04 occurrence. This would place it northwest of the Dot Property (Norman, 1992).

During 1972 Aselo Industries conducted an Induced Polarization Survey.

Lawrence Mining conducted IP and magnetometer surveys to the north and south of existing showings and grids. Magnetic lows with coincident chargeability anomalies were drill tested using percussion and diamond drilling. Diamond drilling amounted to 20 holes (3,400.5 metres) and percussion to 30 holes (2,301.2 metres) in 1981. The core was stored on the property (Wells, 1981). This program identified the Northwest Zone on the Dot Property. Lawrence Mining completed an additional three diamond drill holes in 1982 to the west of the Aberdeen Mine. Zappa Resources Ltd. completed six reverse-circulation (RC) holes for a total of 638.5 metres in order to extend the Northwest Zone along strike for 255 metres and to 100 metres depth. All of the holes intersected copper mineralisation grading between 0.33% and 0.91% (Norman, 1992).

Zappa Resources contracted metallurgical testing of the mineralisation at the Dot Property. The results indicated that the ore would be amenable to heap leaching.

Two new zones of copper mineralisation, the Southeast and adjacent Copper zones were discovered by Alhambra Resources Ltd. in 1996 and 1997. Both are along strike from the Upper Vimy occurrence. Both zones were tested with 16 diamond drill holes (3,108.9 metres) in 1996 and five diamond drill holes (1,290 metres) in 1997. A non-

compliant 43-101 resource estimate of 9.8 million tonnes grading 0.46% copper was published (Robinson, 2009).

Dot Resources Ltd. carried out a fall and spring program of surface mapping, sampling, geophysical surveys (IP, Mag and VLF-EM) and diamond drilling in 2007-2008. There were 9.35 line-km of IP survey, and 132 line-km of both magnetic and VLF-EM survey completed. Diamond drilling was used to verify historical reports of mineralized intersections, test strike and depth extent of mineralisation at Northwest, Copper and Southeast zones, and to test IP anomalies in the area of the Vimy Zone. Drilling in the lower Vimy only encountered narrow, low-grade copper intersections. The drill program totaled 3,097.4 metres in 14 holes.

Dot Resources commissioned an Extreme Low-Frequency (ELF) survey over portions of the property in February and March of 2013. The survey outlined a north-south trending Electro-magnetic (EM) anomaly that coincides with the locations of the Northwest, Southeast, Copper and Lower Vimy showings. An extension of survey lines to the southwest also produced a bulls-eye anomaly over the historic Aberdeen mine workings."

2 **GEOLOGY AND MINERALIZATION**

2.1 Regional Geology, Stratigraphy, and Structure

Regional geology (from McMillan 1978) of the Highland Valley project is shown on Figures 3 and 4. Regional geology is summarized from Byrne et al (2017):

"The Quesnel terrane in the Canadian Cordillera is characterized by Mesozoic islandarc assemblages comprising volcanic and sedimentary rocks and associated intrusions. The most important rocks for this study are the Late Triassic Nicola Group and the Guichon Creek batholith (Coney et al., 1980; Logan and Mihalynuk, 2014). The Nicola Group consists primarily of andesitic submarine volcanic and associated volcanosedimentary rocks of island-arc affinity (Preto, 1979; Mortimer, 1987; Ray et al., 1996) that were deposited in a rifted marine basin above an east-dipping subduction zone (Colpron et al., 2007). The I-type, Iow-K tholeiitic to medium-K calcalkalic Guichon Creek batholith (Figures 1, 2a; Northcote, 1969; McMillan, 1976; D'Angelo, 2016) intruded the ca. 238–202 Ma Nicola Group between ca. 211 and 204 Ma, prior to docking with ancestral North America (Logan and Mihalynuk, 2014; Mihalynuk et al., 2016). The region subsequently underwent Cretaceous shortening and localized Paleogene–Neogene extensional deformation (Colpron et al., 2007).

Several texturally and compositionally distinct intrusive facies are recognized in the Guichon Creek batholith (Northcote, 1969; McMillan, 1976; D'Angelo, 2016.). Older marginal and equigranular mafic rocks transition to younger, centrally located, inequigranular to porphyritic felsic facies (Figure 2a). A cluster of at least four porphyry Cu deposits, hosted by the inner intrusive facies, and ~160 additional Cu showings occur in the HVC district (Figure 2a; McMillan et al., 2009; Byrne et al., 2013). Two main

stages of mineral- ization are recognized at HVC (McMillan, 1985; Byrne et al., 2013), and these are separated by ~1 m.y. and intrusion and crystallization of the most evolved intrusive rocks (D'Angelo, 2016). A postmineral, north-trending, dextral strike-slip fault cuts the Valley and Lornex deposits (Fig- ure 2a). Restoring approximately 3.5 km of dextral movement suggests that the Valley and Lornex deposits were once a single porphyry centre (Hollister et al., 1976; McMillan, 1976).

Several features indicate that some of the porphyry centres at HVC were deeply emplaced. Plutonic hostrocks, hornblende bathymetry (D'Angelo, 2016), presence of unidirectional solidification textures and coarse muscovite–dominated (Byrne et al., 2013) early halo-type (or greisen-like) veins imply that the Valley-Lornex cupola and porphyry Cu system was likely emplaced between 4 and 5 km deep (Seedorff et al., 2008; Proffett, 2009; Riedell and Proffett, 2014). A 4–5 km emplacement depth for the Valley-Lornex porphyry system (Figure 3) is also consistent with stratigraphic-thickness estimates for southern Quesnel Nicola Group rocks of between 3 and 6 km (Preto, 1979). At depths greater than approximately 4 km, a single-phase supercritical fluid (of moderate salinity, ~10%) would likely have been stable, possibly leading to mineralization styles and an alteration footprint that are atypical of porphyry environments (Rusk et al., 2008; Richards, 2011b; D'Angelo, 2016). The exposure and prevalence of Na-Ca alteration indicates a deep level of erosion (Figure 3; Seedorff et al., 2008; Halley et al., 2015)."

2.2 Mineralization

Mineralization was not observed on the Granby Gold claims during the 2016 field work. Overburden covers most of the area. Copper deposits at the Vimy and Aberdeen locations as described in Section 1.5 are located on adjacent non-owned claims to the east and south of the Granby Gold property. The style of mineralization sought is similar to shear zone-hosted copper sulphides in facies of the Guichon batholith as at the Vimy and Aberdeen occurrences.



Figure 3. Regional geology with claim boundaries

120	ARLINGTON VOLCANIC GROUP AND INTRUSIVE ROCKS: BIOTITE QUARTZ	
120	PLAGIOCLASE PORPHYRY; INTRUSIVE AND EXTRUSIVE BRECCIA STOCKS AND ASSOCIATED FLOWS OF BIOTITE HORNBLENDE	
120	PLAGIOCLASE PORPHYRY VOLCANIC PEBBLE CONGLOMERATE, SANSTONE, MUDSTONE,	
5 12c	MINOR AMOUNTS OF DIATOMITE, AND SCATTERED LAVA FLOWS	
12 a	FIGUOMINANTEL INTERNEDIALE, OMIE AND AND DAVID EAVE	
CENE (1 COLDW/	?) ATER SERIES	
11	SEDIMENTARY ROCKS; SANDSTONE, SHALE, CONGLOMERATE, COAL MEASURES	
10	BASALT, ANDESITE, HORNBLENDE NEEDLE PORPHYRY (DACITE) VOLCANIC BRECCIA, LOCAL BASAL SANDSTONE AND CONGLOMERATE	
SPENCE	S BRIDGE GROUP	
9f	SWARMS OF ANDESITE TO BASALTIC DYKES	
9a	RHYOLITE AND RHYODACITE FLOWS	
9b	VOLCANIC BRECCIA, SOME AGGLOMERATE, TUFF, RED ANDESITIC LAVAS	
9b	SANDSTONE, PEBBLE CONGLOMERATE, SHALE (CARBONIZED PLANT REMMAINS COMMON)	
9 9 a	MAINLY INTERMEDIATE LAVA FLOWS, DARK-COLOURED PORPHYRITIC PLAGIOCLASE ANDESITES, BASALT	
RASSIC		
	DFT FORMATION BLACK SHALE, SILTSTONE, SANDSTONE, MINOR CONGLOMERATE AND LIMESTONE	
	PEBBLE TO BOULDER CONGLOMERATE	
	ON CREEK BATHOLITH** AND ASSOCIATED INTRUSIONS	
7	GUMP LAKE PHASE - GRANODIORITE TO QUARTZ MONZONITE	
6	SPATSUM QUARTZ MONZONITE; BARNES LAKE PLAGIOCLASE APLITE	
GUICHO	DN CREEK BATHOLITH	
5b	BETHSAIDA PHASE - QUARTZ MONZONITE TO GRANODIORITE AND SLIGHTLY YOUNGER (?) PORPHYRY DYKES AND PLUGS	
5a	SKEENA VARIETY - GRANODIORITE, INTERMEDIATE IN COMPOSITION AND TEXTURE BETWWEN BETHLEHEM AND BETHSAIDA PHASES	
4 4a	BETHLEHEM PHASE - GRANODIORITE AND SLIGHTLY YOUNGER PORPHYRY DYKES AND PLUGS	
Bx	BRECCIA BODIES OF EXPLOSIVE ORIGIN	
3e	ROCKS WITH TEXTURES AND COMPOSITIONS TRASITIONAL BETWEEN HIGHLAND	
	WALLET AND DE INLEMENT PRACE ON AREAS WITH SWARING OF BETRLEMENT PRACE OF RES IN HIGHLAND VALLEY PHASE HIGHLAND VALLEY PHASE	
3d	CHATAWAY VARIETY - GRANODIORITE	
3c	GRANODIORITES WITH TEXTURES AND COMPOSITIONS TRANSITIONAL BETWEEN GUICHON AND CHATAWAY VARIETIES	
3b	GUICHON VARIETY - GRANODIORITE, INCLUDES AREAS OF FINER GRAINED GRANODIORITE NEAR CHATAWAY LAKE WHICH HAVE TEXTURES AND COMPOSITIONS LIKE THOSE OF NORMAL GUICHON VARIETY	
3a	GRANODIORITE TO QUARTZ DOIRITE WITH TEXTURES AND COMPOSITIONS TRANSITIONAL BETWEN BORDER AND HIGHLAND VALLEY PHASES	
2	BORDER PHASE - QUARTZ DIORITE TO GRANODIORITE	
2a	DIORITE TO QUARTZ DIORITE WITH COMPOSITIONS AND TEXTURES TRANSITIONAL BETWEEN NICOLA GROUP ROCKS AND BORDER PHASE QUARTZ DIORITE	
INTRUS	SION OF POST-NICOLA, PRE-SPENCES BRIDGE GROUP AGE	
f 1g	COYLE STOCK - DIORITE TO QUARTZ MONZONITE, LOCAL ALASKITE AND MAFIC QUARTZ PLAGIOCLASE PORPHYRY PLUGS; PROBABLY RELATED TO AKTE-STAGE NICOLA VOLCANISM	
NICOL	A GROUP	
1e	ACIDIC VOLCANICS FLOWS AND PYROCLASTIC ROCKS	REGIONAL GEOLOGY HIGHLAND VALLEY
1d	MAINLY VOLCANIC ROCKS OF INTERMEDIATE TO BASIC COMPOSITION	LEGEND PROJECT
1c	VOLCANIC BRECCIAS AND FLOWS, FLOW BRECCIA AND DEBRIS SLIDES	GRANBY GOLD INC
	MIXED VOLCANIC AND SEDIMENTARY ROCKS	DRAWN BY: NTS: PROJECTION: DATA: Fig No: R B 92007 NAD33 (ITM 210M March 2017

Figure 4. Regional and property geology legend

3 PROPERTY GEOLOGY

Outcrops within the property are variations of the Highland Valley phase of the Guichon Creek batholith (Fig 5). On the property geology and geophysical maps, areas of outcrop are of darker shades within paler colors to interpreted boundaries. Overburden is extensive.

Guichon Variety (3b) fine to medium-grained gray granodiorite, minor hornblende, with faint pale brown to tan FeOx stain underlies the central portion of the claims. A fabric of weak shearing trends north-northwest. Granodiorite transitional between Guichon and Chataway Varieties (3c) underlies the eastern section of claim 1041007. Texture is medium grained. The Chataway Variety (3d) of granodiorite in the southwestern claims is medium grained, perhaps with more hornblende than the Guichon Variety.

Ground geophysical survey coverage by previous operators extends into the northeastern Granby Gold claims. An Induced Polarization (IP) survey (Wells,1981) in the Vimy area detected northnorthwest trending patterns of chargeability anomalies that correspond with copper mineralization in altered shear zones. Seven IP anomalies are present on the Granby gold claims (Fig 6). Two of these anomalies were tested with three angle percussion drill holes that passed through overburden (20-30 m) into bedrock (Wells, 1981). Assay logs record low copper values. Logs of cuttings are not available.

A total magnetic field survey was completed in conjunction with the IP survey and percussion drilling (Wells, 1981). Contoured results are shown as a layer on geology (Fig 7). Copper mineralization at the Vimy occurrences tends to be located in north-northwest trends of magnetic responses in the interval between high-low pairs. Bands of magnetic high-low pairs trend continue north into the Granby Gold claims.

A color plot of total magnetic field, IP chargeability / resistivity, and Very Low Frequency Electromagnetic (VLF EM) responses from the Vimy area is presented in Fig 8 (Vivian, G. and White, D., 2007, Fig 18). Vimy copper deposits are situated on north-northwest contours between magnetic high-low pairs, on chargeability highs, and on VLF EM anomalies. Resistivity lows tend to occur with magnetic lows. The patterns extend north into the Granby Gold property.



Figure 5. Property geology



Figure 6. IP and drill holes on geology



Figure 7. Total magnetic field and drill holes on geology



Figure 8. Total magnetic field, IP, and VLF EM conductors on geology

4 CONCLUSIONS

In the adjacent Vimy area shear zones with copper sulphide mineralization trend northnorthwest toward the Granby Gold claims. Certain geophysical magnetic, IP, and VLF EM patterns mark the shear zones and may accentuate sites of copper mineralization. The patterns trend north-northeast into the Granby Gold claims.

5 **RECOMMENDATIONS**

Geological mapping and search for outcrop should continue along the geophysical trends within the northern claims. Mapping should be commenced on the southern claims.

6 COST ESTIMATE

A 5-day field program.

Geologist and assistant.

R&B.

Travel, vehicle, fuel.

Analyses.

Supplies.

Report.

Contingencies @ 10%.

Total

\$19,000

Prices escalate rapidly. Cost of items to be estimated near the time of program initiation.

7 **REFERENCES**

- Anderson, J. M. (1981): Geophysical report on an induced polarization survey, Caper claim, Merritt area, Nicola Mining Division, B.C. Private report for Heron Resources Ltd. Assessment report 9943.
- Bergey, W. R. (2007): Geological and photogeological report on the Chat and Skuhun claim groups, Highland Valley area, British Columbia. Private report for Gary Robert Brown, Assessment report 29036.
- Bissig, T, et al (2010): Geochemical variations in the Late Triassic Nicola Arc and matallogenic implications, Central British Columbia (NTS 092P, 093A, N: preliminary results. Summary of Activities 2009, Geoscience BC, Report 2010-1, p. 49 52.
- Bouzari, F. et al (2010): Porphyry indicator minerals (PIMs): exploration for concealed deposits in South-central British Columbia (NTS 092I/06, 093A/12, 093N/01, 14). Geoscience BC, Summary of Activities 2009, Report 2010-1, p. 25 32.
- Bouzari, F. et al (2017): Mineralogical and geochemical characteristics of porphyry-fertile plutons: Guichon Creek, Takomkane and Granite Mountain Batholiths, South-central British Columbia. Geoscience BC, Summary of Activities 2016, Report 2017-1, p. 189 200.
- Brace, G. and Murphy, J. (1972): Geophysical report on Chataway Exploration property. Private report for Canadian Superior Exploration Co. Assessment report 3552.
- Byrne, K. et al (2017): Large scale sodic-calcic alteration around porphyry copper systems; examples from the Highland Valley copper district, Guichon Batholith, South-central British Columbia. Geoscience BC, Summary of Activities 2016, Report 2017-1, p. 213 222.
- Chouinard, R. L. et al (2017): Surficial geochemical footprint of buried Cu-Mo mineralization at the Highland Valley Copper operations, South-central British Columbia: project update. Geoscience BC, Summary of Activities 2016, Report 2017-1, p. 125 132.
- Faessler, C. W. (1962): Report on an induced polarization survey in the Merritt area, Nicola Mining Division, British Columbia. Private report tor Earlcrest Resources Limited. Assessment report 451.
- Falconer, J. S. (1983): Diamond drilling assessment work on the Caper claim, Nicola Mining Division, British Columbia. Private report for Heron Resources Ltd. Assessment report 11610.
- Gower, S. C. (1986): Reconnaissance geology, and silt and rock geochemistry in the Chataway I-A mineral claim, Gypsum Lake area, B.C., Nicola mining Division, B.C. Private report for John Lepinski. Assessment report 14978.
- Hainsworth, W. G. (1973): Geological report of the Eva claims, Nicola Mining Division. Private report for Cairn Mines Ltd. Assessment report 4107.
- Hainsworth, W. G. (1973): Geochemical report of the Eva claims, Nicola Mining Division. Private report for Cairn Mines Ltd. Assessment report 4108.

- Hallof, P. G. and Mullan, A. W. (1972): Report on he induced polarization and resistivity survey on the southeast portion, Chataway option claim group, Nicola Mining Division, British Columbia. Private report for Aselo Industries Ltd. Assessment report 4043.
- Kerr, J. R. (1981): Geochemical report on the Caper claim. Private report for Heron Resources Ltd. Assessment report 8595.
- Lindinger, J. F. L. 1998): Diamond drilling report on the Gypsy Roy property, Gypsum Lake area, Nicola Minng Division. Private report for Tarco Oil and Gas Ltd. Assessment report 25561.
- McMillan, W. J. et al (1978): Preliminary geological map of the Guichon Creek Batholith and Highland Valley porphyry copper district, British Columbia. BC Geological Survey, Preliminary Map PM30a.
- McMillan, W. J. et al (1978): Preliminary geological map of the Guichon Creek Batholith and Highland Valley porphyry copper district, British Columbia. BC Geological Survey, Preliminary Map PM30b.
- McMillan, W. J. (1982): Nicola project, Merritt area. BC Geological Survey, Preliminary Map PM47.
- McMillan, W. J. et al (2009): Geology and mineral occurrences (MINFILE), the Guichon Creek Batholith and Highland Valley porphyry copper district, British Columbia. Geological Survey of Canada, Open File 6079, 2 sheets.
- Meyer, W. and Robinson, M. C. (1968): Report on geological survey of the Chataway Exploration Co. Ltd (N.P.L.) property, Chataway Lake, B.C., Nicola and Kamloops Mining Divisions. Private report for King Resources Company. Assessment report 1790.
- Mortensen, J. K. et al (2011): Geological investigations of the Quesnel Terrane in Southern British Columbia (NTS 082E, F, L, 092H, I): progress report. Geoscience BC, Summary of Activities 2010, Report 2011-1, p. 133 – 142.
- Mullan, A. W. (1979): Report on the induced polarization and resistivity survey, Vimy claims #100 & 200, Nicola Mining Division, B.C. Private report for Lawrence Mining Corporation Ltd. Assessment report 7494.
- Norman, G. (1993): Report on the 1992 exploration program on the Dot copper project, Nicola Mining Division. Private report for Zappa Resources Ltd. Assessment report 22839.
- Robinson, R. J. (2009): Technical report on a mineral resource estimate, Dot property, Nicola Mining Division, Merritt, British Columbia. Private report for Dot Resources Ltd.
- Robinson, R. J. (2010): Technical report on a diamond drill program and mineral resource estimate, Dot property, Nicola Mining Division, Merritt, British Columbia. Private report for Dot Resources Ltd.
- Sanguinetti, M. H. and Reeve, A. F. (1972): Geophysical rport on the Chataway Bethlehem option, Highland Valley area, Nicola Mining Division, British Columbia. Private report for Aselo Industries Ltd. Assessment report 4056.

- Shear, H. H. (1972): Report of geochemical survey on Caper group, Broom Creek. Private report for Doral Resources Ltd. Assessment report 3742.
- Shear, H. H. (1979): Report on percussion drilling program on Caper claim, Nicola Mining Division. Private report for H. H. Shear and D. F. Pasco. Assessment report 7450.
- Sookochoff, L. (1995): Geological assessment report on the Caper claim, Nicola Mining Division. Private report for Fintra Ventures Ltd. Assessment report 23944.
- Sookochoff, L. (2015): Geological assessment report on a structural analysis, Tenure 534017, Dot claim group, Nicola Mining Division. Private report for Dot Resources Ltd. Assessment Report 34867.
- Stewart, E. B. (2007): A geological report on the induced polarization, total field magnetic, and VLF EM surveys on the Dot property, British Columbia, Nicola Mining Division. Private report for Alhambra Resources Ltd. Assessment Report 29223.
- Stewart, E. B. (2008): A report on the geological mapping, diamond drilling, and geophysical surveys on the Dot property, British Columbia, Nicola Mining Division. Private report for Dot Resources Ltd. Assessment Report 29969.
- Stewart, G. (1997): Report on the 1996 exploration program on the Dot property, Nicola Mining Division. Private report for Alhambra Resources Ltd. Assessment Report 24884.
- Vivian, G. and White, D. (2007): Technical report on 2006 ground geophysics and previous exploration, including diamond drilling, Dot property, British Columbia, Nicola Mining Division. Private report for Dot Resources Ltd.
- Walcott, P. E. (1993): A geophysical report on induced polarization surveying, CVS property, Highland Valley area, B.C. Private report for Hudson Bay Exploration and Development Company Limited. Assessment report 23100.
- Weeks, J. F. (1966): Geophysical report (Mag),on the southwest, southeast, mid-east, and north groups of claims, Gypsum Lake, Nicola Mining Division. Private report for Bralorne Pioneer Mines Limited. Assessment report 737.
- Weeks, J. F. (1966): Geochemical report on the southwest, southeast, mid-east, and north groups of claims, Gypsum Lake. Private report for Bralorne Pioneer Mines Limited. Assessment report 749.
- Weeks, J. F. (1966): Geophysical report (IP) on the southwest, southeast, mid-east, and north groups of claims, Gypsum Lake. Private report for Bralorne Pioneer Mines Limited. Assessment report 764.
- Wells, R. A. (1981): Assessment reports for the Viny property mineral claims in the Nicola Mining Division. percussion and diamond drilling reports. Private report for Lawrence Mining Corporation Ltd. Assessment report 9699.
- Wylie, R. (2013): Assessment report, Dot property, Nicola Mining Division, British Columbia, Canada. Private report for Dot Resources Ltd. Assessment Report 34051.

8 ENGINEER'S AND GEOLOGIST'S CERTIFICATE

LOCKE B. GOLDSMITH, M.SC., P. GEO., P. ENG.

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Provinces of Ontario and British Columbia, and a Registered Professional Geologist in the Province of British Columbia and the States of Oregon, Minnesota, and Wisconsin. My address is 601–150 24th St., West Vancouver, B.C. My occupation is that of Consulting Geologist.

2. I have a Mining Technician Certificate from the Haileybury School of Mines, a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study at Michigan Technological University and the University of Nevada. I am a member of the Society of Economic Geologists and the AIME.

3. I have been engaged in mining exploration for the past 58 years. I have conducted exploration programs and evaluations of mineral deposits worldwide.

4. I have written the report entitled, "Highland Valley Project, Geology, Broom Creek Area, Nicola Mining Division, Merritt, British Columbia, Canada", dated March 23, 2017. The report is based on published and unpublished geological and geophysical reports, maps, and data collected during a 2016 exploration program.

Respectfully submitted,

Gella GOLDSMITH BAI NUE OF OHT Vancouver, B.C Locke B. Goldsmith, P.Eng., P.Geo.

Vancouver, B.C March 23, 2017 Locke B. Goldsmith, P.Eng., P.Geo. Consulting Geologist

9 COST STATEMENT, 2016 PROGRAM

Personnel

L.B. Goldsmith, 1/2 Oct 27, 1/4 28, 29, 30, 31, 1/2 Nov 4, 5, 1/2	7,	
¼ Dec 6, ¾ 7, ½ Jan 2, total 7 ¼ days @ \$1,040 / day	\$ 7,540.00	
C.Lee, ¼ Oct 29, 29, 30, 31, total 3 ¼ days @ \$440/day	1,430.00	
	8,970.00	8,970.00
Food, Accommodation		
Room	\$ 188.10	
Meals	190.71	
Total cost of \$ 378.81	378.81	378.81
÷ 7 man days = \$ 54.12 / man / day		
Transportation		
4x4 vehicle, 3 days @ \$100/day	\$ 300.00	
Gas	132.01	
764 km @ \$0.50/km	382.00	
Total cost of \$814.01	814.01	814.01
÷ 3 days = \$274.31 / day		
Supplies		
Field books		64.87
Report		
Electronic drafting, prints, scans, materials		2,362.50
Total:	S	\$ 12,590.19

Appendix 1 – Highland Valley area field notes, October 2016

	HIGHLAND VALLEY PROPERTY, GRANBY GOLD INC.								
	Field Notes, L.B.Goldsmith, P.Eng., P.Geo., October 2016								
	tion	Elevation	Way-	Specimen	Sample				
NAD 83 Zo	one 10N	m	point	N°	N°				
E		507	- 1			Lower Nicola Abardoon road junction			
051301	5567582	587				Lower Nicola - Aberdeen road junction			
651910	5569294	1010	2			Aberdeen road, end of pavement, follow right fork.			
						No outcrop from last observation.			
652569	5572932	1026	3			On road. Flat plateau.			
						No outcrop from last observation.			
652801	5573563	1027	4			Junction, "A" fork, follow right branch. "Caution" sign.			
						No outcrop from last observation.			
652844	5574167	1025	5			Junction, "B" fork. Follow right branch.			
						No outcrop from last observation.			
653086	5574245	1026	6			Junction, "C: fork, follow left (main) branch.			
						No outcrop from last observation.			
653315	5575758	1032	7			Junction, Fork "D". Dot Lake road to west (left), Follow right branch.			
						No outcrop from last observation.			
653471	5576364	1029	8			Jnction, Fork "E", follow right branch, sharp bend.			

				No outcrop from last observation.
653958	5576376	1024	9	Junction, Fork "F". Right branch descends, follow left branch along plateau.
				No outcrop from last observation.
654314	5577303	1014	10	Junction, Fork "G", in a clearing. 13 road mark. Branch to right, downhill, too
				muddy. Follow left (main) branch to north.
				No outcrop from last observation.
				14 road mark, unused road to left.
				No exteres from lost observation
654292	5577620	1024	11	Bond in road
004000	5577020	1024		
				No outcrop from last observation
654429	5578180	1034	12	Creek, wet crossing, Steep, muddy, Return to Fork F.
				Fork F to SE, "No public access, private drive". Return to Fork E.
				Fork E to left (NW), deep water hole, mud. Return ro Fork D
				Fork D, follow Dot Lake road to west. Slope up onto plateau.
				No outcrop from Fork D
653266	5576319	1091	13	On Dot Lake road.
	ļ			No outcrop from last observation.
050400		4000		
653108	55/6251	1093	14	Junction, Fork "H". Unused to left (west). Follow right (north) branch.

					No outcrop from last observation.
653078	5576370	1098	15		Junction, Fork "I". Unused to left (west), Follow right (north) branch.
					No outcrop from last observation.
653195	5576604	1097	16		Junction, Fork "J". Right branch trends uphill. Follow left branch.
					No outcrop from last observation.
653052	5576799	1104	17		Junction Fork "K". 27 road to left. Follow right (north) branch.
					No outcrop from last observation.
050404	FERR 400	1100	10		
653401	5577423	1109	18		Junction, Fork "L". Branch to right (east) trends downhill. Follow left (north)
					branch, Dot Lake road.
					No esteres fremalest cheen setien
					No outcrop from last observation.
652422	5577649	11/2	10		Swithchack to SW/
000400	5577040	1142	19	D-0	
					No outeron from last observation
653183	5577528	1172	20		Swithchack to NW/
000100	0011020	1172	20		
					No outcrop from last observation. Slope uphill
653016	5577977	1237	21		Junction, Fork "M" on switchback to SW. Follow right (north) branch.
					No outcrop from last observation. Slope uphill.
652895	5578584	1329	22		Climb onto plateau. End of track. Return to Fork M
		-			
					Follow SW branch, Fork M

				No outcrop from last observation. Slope uphill.
652478	5577486	1292	23	Junction, Fork "S", on switchback to NW, branch to left (S). Follow right (N)
				branch.
				No outcrop from last observation. Slope uphill.
652316	5578477	1402	24	Switchback to SW
				No outcrop from last observation. Slope uphill.
050444	5570000	4 4 4 7	05	
652144	5578382	1417	25	I Junction, Fork "N", Chataway road to right (NVV). Follow left branch (S).
				No outeren from loot observation. Descand on plateou
652102	5577520		26	Clearing
032102	5577520		20	
				No outcrop from last observation. Descend on plateau
651785	5577317	1383	27	Clearing.
				No outcrop from last observation. Descend on plateau.
651362	5577354	1360	28	Small clearing and tree replant.
				No outcrop from last observation. Descend on plateau.
651139	5577346	1352	29	End of track in small clearcut. Return to Fork N.
				Follow NW branch, Fork N
				No outcrop from last observation.
054046		4.400		
651616	5578964	1468	30	Junction, Fork "O", branch to right (NE), follow branch to left (NW).

					No outcrop from last observation.
651522	5579009	1467	31		Junction, Fork "P". Follow left (SW) branch. Descend.
					No outcrop from last observation.
651596	5578416	1445	32		Clearing, tree replant on plateau.
					No outcrop from last observation.
050007	5570000	4450			
650987	5578306	1456	33		Height of land, Clearing, tree replant.
					No outeres from last observation
650801	5578322	1//0	34		End Deturn to Fork D
030091	JJ70322	1443	54		
					Follow N branch, Fork P
651036	5579277	1462	35		Descend
					No outcrop from last observation.
650963	5579306		36		Junction, Fork "Q", branch to right (NE), follow left (N) branch.
					No outcrop from last observation.
650592	5579647	1436	37		Junction, Fork "R", branch ti SW. Small lake to the SW. Return to Fork S
652461	5577491	1297	38		Fork S, on south branch
					No outcrop from last observation.
652495	5577410	1283	39	HV-1	Hornblende granodiorite. Small bluff on Fork S, south branch.
					No outcrop from last observation.

6525065576923123740On road, no outcrop.Image: String of the string of th						
Image: Constraint of the second se	652506	5576923	3 1237	40		On road, no outcrop.
Image: Constraint of the second se						
6526095576552117741Junction, Fork "T". Branch to right (NW), follow left (S) branch.65260955765521117741Junction, Fork "T". Branch to right (NW), follow left (S) branch.6526985576094113042On road, no outcrop.6526985575552108143On road, no outcrop from last observation.6527055575552108143On road, pond to left (E).6525495575121107544HV-2Hornblende granodiorite, medium grained.6525165574945107145HV-3Hornblende granodiorite, medium grained.6526165574945107145HV-3Hornblende granodiorite, medium grained.6526165574945107145HV-3Hornblende granodiorite, medium grained.6526165574945107145HV-3Hornblende granodiorite, medium grained.						No outcrop from last observation.
652609 5576552 1177 41 Junction, Fork "T". Branch to right (NW), follow left (S) branch. Image: Start S						
Image: Constraint of the second se	652609	5576552	2 1177	41		Junction, Fork "T". Branch to right (NW), follow left (S) branch.
Image: State of the state						
6526985576094113042On road, no outcrop.6526985576094113042On road, no outcrop.11111111No outcrop from last observation.652705557552108143On road, pond to left (E).11 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>No outcrop from last observation.</td></t<>						No outcrop from last observation.
652698 5576094 1130 42 On road, no outcrop. Image: Solution of the state in						
Image: constraint of the second sec	652698	5576094	4 1130	42		On road, no outcrop.
No outcrop from last observation. 652705 5575552 1081 43 On road, pond to left (E). 652705 557552 1081 43 On road, pond to left (E). 652705 5575121 1075 44 HV-2 Hornblende granodiorite, medium grained. 652549 5575121 1075 44 HV-2 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
6527055575552108143On road, pond to left (E).6527055575552108143On road, pond to left (E).6525495575121107544HV-2Hornblende granodiorite, medium grained.6525495575121107544HV-2Hornblende granodiorite, medium grained.6526165574945107145HV-3Hornblende granodiorite, medium grained.6526165574945107145HV-3Hornblende granodiorite, medium grained.00						 No outcrop from last observation.
652705 5575552 1081 43 On road, pond to left (E). Image: Constraint of the state of the						
Image: Second	652705	5575552	2 1081	43		On road, pond to left (E).
No outcrop from last observation. 652549 5575121 1075 44 HV-2 Hornblende granodiorite, medium grained. 652549 5575121 1075 44 HV-2 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. No outcrop from last observation. No outcrop from last observation. No outcrop from last observation.						
652549 5575121 1075 44 HV-2 Hornblende granodiorite, medium grained. 652549 5575121 1075 44 HV-2 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained.						No outcrop from last observation.
652549 5575121 1075 44 HV-2 Hornblende granodiorite, medium grained. Image: Signal state	050540	5575404	4 4075			
Image: Second	652549	5575121	1 1075	44	HV-2	Hornblende granodlorite, medium grained.
Image: Construction of the image of the						No outeren frem lest cheen atien
652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 652616 5574945 1071 45 HV-3 Hornblende granodiorite, medium grained. 652617 652618 652618 No outcrop from last observation.						
052010 5574945 1071 45 110-5 Infinitiende granodionte, medium grained. Image: Ima	652616	5574045	5 1071	45		Horphlanda granodiarita, modium grainad
No outcrop from last observation.	052010	5574945	5 1071	45	110-3	
			-			No outcrop from last observation
			-			
652608 5574430 1043 46 HV-4 HV-4 Shear zone in bornblende granodiorite Aberdeen Mine Caved adit on	652608	5574430	0 1043	46	H\/_4	Shear zone in hornblende granodiorite Aberdeen Mine, Caved adit on
0.8 - 1.5 m-wide rusty zone with malachite 300° 90°. Grab sample from	002000	0074400		-10		$0.8 - 1.5$ m-wide rusty zone with malachite 300° 90°. Grab sample from
No outcrop from last observation						No outcrop from last observation
652838 5574163 1030 47 Junction, Fork B.	652838	5574163	3 1030	47		Junction, Fork B.
652801 5573573 1030 48 Junction, Fork A.	652801	5573573	3 1030	48		Junction, Fork A.