



### ASSESSMENT REPORT TITLE PAGE AND SUMMARY

**TITLE OF REPORT:** Highland Valley East Project, Geology, Guichon Creek area, Nicola Mining Division, Merritt, British Columbia, Canada.

**TOTAL COST:** \$ 6,083.50

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

SIGNATURE(S):



NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):Events 5655209, July 5, 2017; Amended May 2, 2018

YEAR OF WORK: 2017

PROPERTY NAME: Highland Valley East

CLAIM NAME(S) (on which work was done): 1041028

COMMODITIES SOUGHT: Copper, gold

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Nicola

NTS / BCGS: NTS 92I 07. BCGS 92I 036

LATITUDE: <u>50°</u><u>19'</u><u>31"</u>

LONGITUDE: <u>120°</u> <u>49'</u> <u>33"</u> (at centre of work)

UTM Zone: NAD 83 Zone 10N EASTING: 655000 NORTHING: 5576500

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. Glacial till–outwash.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: ARIS: 34867

TYPE OF WORK IN THIS REPORT	EXTENT OF V (in metric u		ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)				
Ground, mapping	1:5000	0.8 sq km	As above	\$ 6,083.50
Airborne geophysical interpretation				
GEOPHYSICAL (line-kilometr	es)	· · ·		
Ground				
Magnetic				
Electromagnetic				
Induced Polarization				
Radiometric				
Seismic				
Other				
Airborne Magnetic, Gravit Interpretation	У			
GEOCHEMICAL (number of sa	mples analysed for	)		
Soil				
Silt				
Rock				
Other				
DRILLING (total metres, number	er of holes, size, stor	age locati	on)	
Core				
Non-core				
RELATED TECHNICAL	1	I	I	
Sampling / Assaying				
Petrographic				
Mineralographic				
Metallurgic				
PROSPECTING (scale/area)		· · ·		
PREPATORY / PHYSICAL				
Line/grid (km)				
Topo/Photogrammetric (s	cale, area)			
Legal Surveys (scale, are	a)			
Road, local access (km) /	trail			
Trench (number/metres)				
Underground developmer	it (metres)			
Other				
			TOTAL COST	\$ 6,083.50

BC Geological Survey Assessment Report 36992

# Highland Valley East Project Geology

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

Tenure 1041028

NTS 92I 07 BCGS 92I 036 Latitude 50° 19' 31" N Longitude 120° 49' 33" W UTM NAD 83 Zone 10N: 655000 E 5576500 N

Prepared for

# Granby Gold Inc.

Charles Hugh Maddin Owner and Operator

Event number 5655209

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

> October 10, 2017 Amended May 2, 2018

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### 1 INTRODUCTION

### 1.1 General

Work in the on the Highland Valley East property was undertaken from May 28 to July 5, 2017 on tenure 1041028.

### 1.2 Property Location

The Highland Valley East mineral claim held by Granby Gold Inc. is located in south central BC in the Guichon Creek Valley, approximately 22 km by road north of the community of Lower Nicola and 27 km north-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 East property comprises 1 mineral claim covering an area of approximately 41.26 hectares, 100% owned by Charles Hugh Maddin, held in trust for Granby Gold Inc. Claim status is summarized in Table 1.

#### Table 1. Mineral tenure

Tenure Number	Claim Name	Owner	Map Number	Issue Date	Good To Date	Area (ha)
1041028		116570 (100%)	921 07	2016/jan/06	2027/jul/06	41.26



Figure 1. Location map

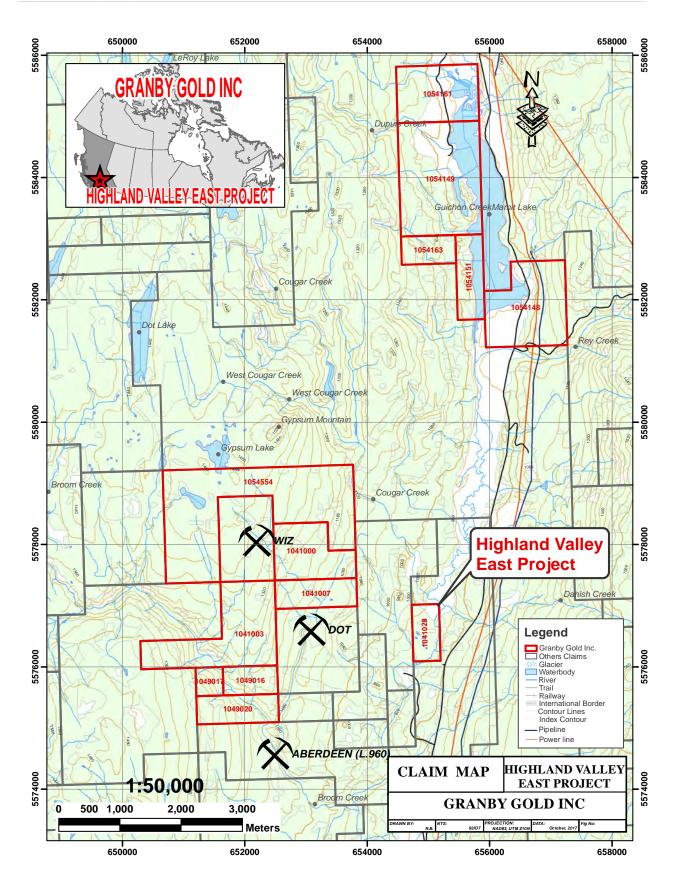


Figure 2. Claim map on topography

### 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 claim is located in the Guichon Creek valley where the glacial outwash terrane is predominantly pastures, pothole ponds, drumlins, and marsh. Guichon Creek flows from north to south in the eastern part of the claim. Spruce and fir trees grow on slopes near the western margin of the claim. Much of the area is covered by glacial drift. Rounded granodiorite boulders are noted in uplands to the west and northwest of the claim.

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 the western parts of the property. Several houses are currently occupied close to the south and east edges of the claim (Figure 6). 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

An area 2 km to the west of the Granby Gold claim, 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 area west of the Granby Gold claim; neither the Aberdeen (3km southwest) 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, low-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)."

The Granby Gold claim is situated near the eastern margin of the Guichon Creek batholith. Glacial outwash deposits and lesser boulder till cover the area of the claim. The most recent vector of glacial transport in the vicinity is from the northwest.

### 2.2 Mineralization

Mineralization was not observed on or adjacent to the Granby Gold claim during the 2017 field work. Copper deposits at the Vimy and Aberdeen locations as described in Section 1.5 are located on non-owned claims to the west of the Granby Gold claim. 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.

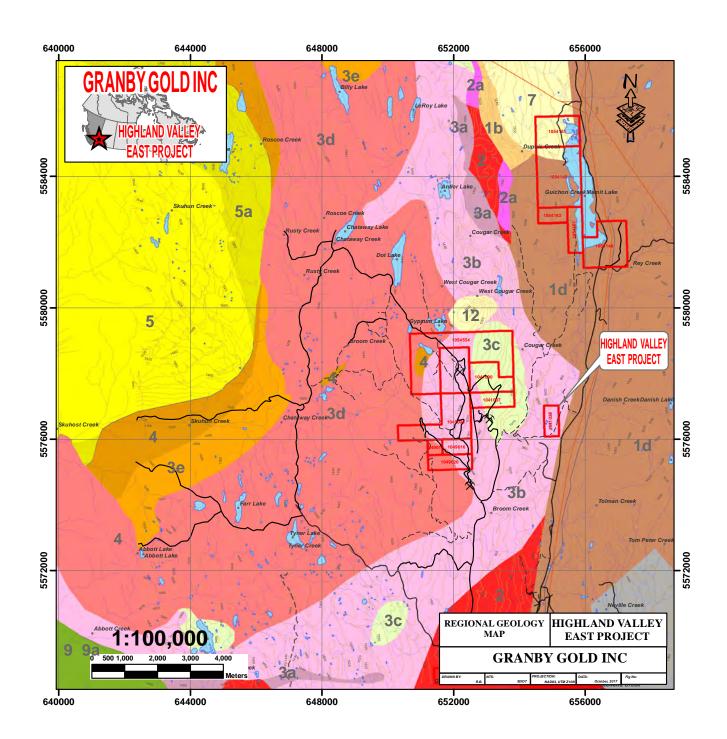


Figure 3. Regional geology with claim boundaries

KAMLOOPS	S GROUP *		
12e	ALGINGUELASE PORPHYRY, INTRUSIVE AND EXTRUSIVE BRECCIA STOCKS AND ASSOCIATED FLOWS OF BIOTITE HORNBLENDE		
12d	PLAGIOCLASE PORPHYRY		
2b 12c	VOLCANIC PEBBLE CONGLOMERATE, SANSTONE, MUDSTONE, MINOR AMOUNTS OF DIATOMITE, AND SCATTERED LAVA FLOWS		
2 12 a	PREDOMINANTLY INTERMEDIATE, SOME ACID AND BASIC LAVA FLOWS; MINOR TUFFS AND VOLCANIC BRECCIAS		
OCENE (?) COLDWATI	ER SERIES		
11	SEDIMENTARY ROCKS; SANDSTONE, SHALE, CONGLOMERATE, COAL MEASURES		
RETACEOU			
KINGSVAL	BASALT, ANDESITE, HORNBLENDE NEEDLE PORPHYRY (DACITE)		
SPENCES	VOLCANIC BRECCIA, LOCAL BASAL SANDSTONE AND CONGLOMERATE		
9f	SWARMS OF ANDESITE TO BASALTIC DYKES		
9a	RHYOLITE AND RHYODACITE FLOWS		
an ah	VOLCANIC BRECCIA, SOME AGGLOMERATE, TUFF, RED ANDESITIC LAVAS		
9b	SANDSTONE, PEBBLE CONGLOMERATE, SHALE (CARBONIZED PLANT REMMAINS COMMON)		
0.00	MAINLY INTERMEDIATE LAVA FLOWS, DARK-COLOURED PORPHYRITIC		
JURASSIC	PLAGIOCLASE ANDESITES, BASALT		
	TFORMATION		
8	BLACK SHALE, SILTSTONE, SANDSTONE, MINOR CONGLOMERATE AND LIMESTONE		
8a	PEBBLE TO BOULDER CONGLOMERATE		
	CREEK BATHOLITH** AND ASSOCIATED INTRUSIONS OF POST-BORDER PHASE AGE		
7	GUMP LAKE PHASE - GRANODIORITE TO QUARTZ MONZONITE		
6	SPATSUM QUARTZ MONZONITE; BARNES LAKE PLAGIOCLASE APLITE		
GUICHON	CREEK BATHOLITH		
5 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 BE	THLEHEM PHASE - GRANODIORITE AND SLIGHTLY YOUNGER PORPHYRY DYKES AND PLUGS		
Bx	BRECCIA BODIES OF EXPLOSIVE ORIGIN		
3e	ROCKS WITH TEXTURES AND COMPOSITIONS TRASITIONAL BETWEEN HIGHLAND VALLEY AND BETHLEHEM PHASES OR AREAS WITH SWARMS OF BETHLEHEM PHASE DYKES		
н	IN HIGHLAND VALLEY PHASE IGHLAND VALLEY PHASE		
3d	CHATAWAY VARIETY - GRANODIORITE		
3c	GRANODIORITES WITH TEXTURES AND COMPOSITIONS TRANSITIONAL BETWEEN GUICHON AND CHATAWAY VARIETIES		
Зb	GUICHON VARIETY - GRANODIORITE, INCLUDES AREAS OF FINER GRAINED GRANODIORITE NEAR CHATAWAY LAKE WHICH HAVE TEXTURES AND COMPOSITIONS LIKE THOSE OF NORMAL GUICHON VARIETY		
3a	GRANDIGNTE TO QUARTZ DOINTE 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		
INTRUSIO	N OF POST-NICOLA, PRE-SPENCES BRIDGE GROUP AGE		
1f 1g	COYLE STOCK - DIORITE TO QUARTZ MONZONITE, LOCAL ALASKITE AND MAFIC QUARTZ PLAGIOCLASE PORPHYRY PLUGS; PROBABLY RELATED TO AKTE-STAGE NICOLA VOLCANISM		
NICOLA	SROUP		
1e	ACIDIC VOLCANICS FLOWS AND PYROCLASTIC ROCKS	REGIONAL AND PROPERTY	HIGHLAND VALLEY
1d	MAINLY VOLCANIC ROCKS OF INTERMEDIATE TO BASIC COMPOSITION	GEOLOGY LEGEND	EAST PROJECT
1c	VOLCANIC BRECCIAS AND FLOWS, FLOW BRECCIA AND DEBRIS SLIDES	GRANBY	GOLD INC
1b	MIXED VOLCANIC AND SEDIMENTARY ROCKS	DRAWN B Y: NTS: PROJECTION: R.B. 22107 NAD83	DATA: Fig No: UTM ZI ON October, 2017

Figure 4. Regional and property geology legend

## **3 PROPERTY GEOLOGY**

Rock unit of the regional geology as interpreted within the area of the claim is variation 3b of the Highland Valley phase of the Guichon Creek batholith (Figs 3, 4). Guichon Variety (3b) fine to medium-grained gray granodiorite, minor hornblende, with faint pale brown to tan FeOx stain is interpreted to underly the Granby Gold claim. A fabric of weak shearing trends north-northwest.

Locked gates, dogs, fences, and 'No Trespassing' signs restrict access to the property. Most of a day of travel along the east and west claim boundaries, beginning on Highway 97C near the east margin of the claim, a return to Lower Nicola, then north on the Craigmont Mine – Aberdeen road, was required to find an entry near the northwest edge of the claim. Waypoints were recorded for reference to identify tracks that do not approach the claim, and to identify a trail that reaches the claim.

Property geology is noted in the waypoints of Figure 5. Overburden is extensive. Outcrop was not observed on or adjacent to the Granby Gold claim during the 2017 field work.

A structural analysis by Sookochoff (2015, Figures 5 and 7)) indicates that a "primary major structure" crosses the area from the vicinity of Waypoint 19 of the 2017 work, trending east-southeasterly through Waypoints 20, 37, 34, and 33, passing just north if the north boundary of the Granby Gold claim. The topographic linear is visible on imagery in Figure 6 of this report (Earthstar Geographics SIO, 2017) and was followed on the ground during the 2017 investigation. Faulting was not observed. The interpreted structure continues to and beyond a right angle bend in Guichon Creek, immediately east of the northeast corner of the Granby Gold claim. The location is in a meadow in the flat valley floor. The abrupt change in direction of Guichon Creek as it trends SSW from the bend may reflect an intersection of faults.

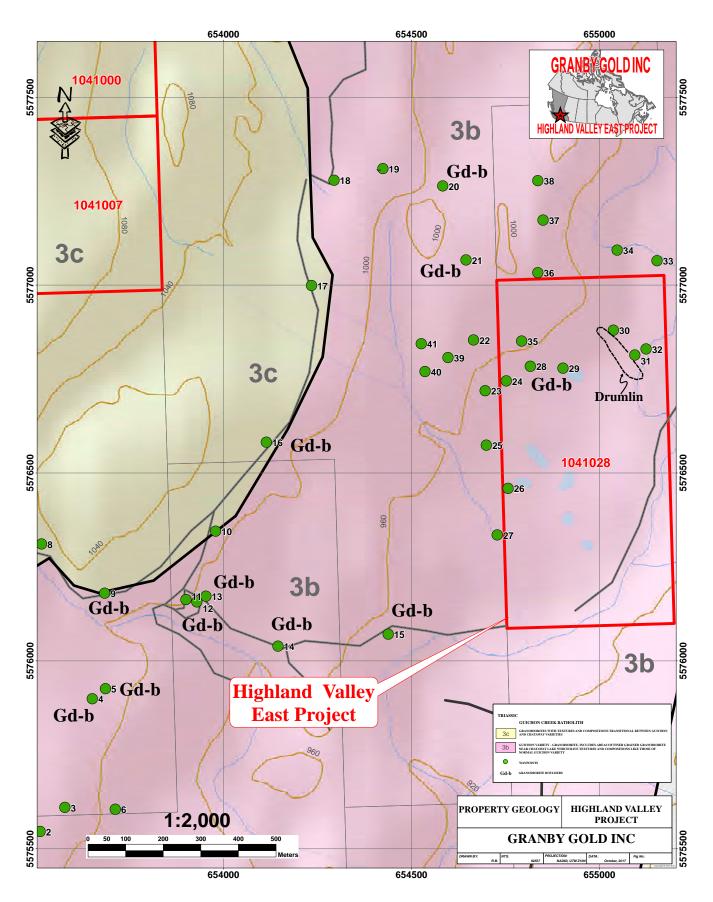


Figure 5. Property geology

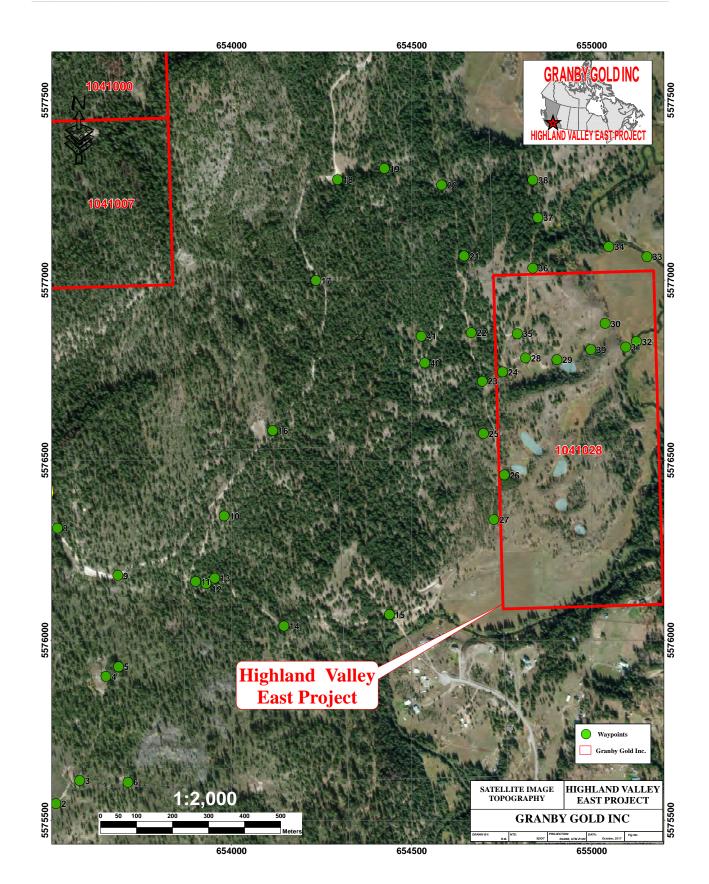


Figure 6. Satellite image topography

## 4 **CONCLUSIONS**

In the Vimy area two km to the west, shear zones with copper sulphide mineralization trend south-southwest. Certain geophysical magnetic, IP, and VLF EM patterns mark the shear zones and may accentuate sites of copper mineralization.

### 5 **RECOMMENDATIONS**

Geological mapping and search for outcrop should continue along the structural trends on and adjacent to the Granby Gold claim. Auger sampling of till along the topographic linears should be planned.

### 6 COST ESTIMATE

A 5-day field p	rogram.
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Geologist, assistant, auger samplers.

R&B.

Travel, vehicle, fuel.

Analyses.

Supplies.

Report.

Contingencies @ 10%.

Total

\$30,000

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

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## 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 24<sup>th</sup> 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 59 years. I have conducted exploration programs and evaluations of mineral deposits worldwide.

4. I have written the report entitled, "Highland Valley East Project, Geology, Guichon Creek Area, Nicola Mining Division, Merritt, British Columbia, Canada", dated October 10, 2017, and amended May 2, 2018. The report is based on published and unpublished geological reports, maps, and data collected during a 2017 exploration program.

Respectfully submitted,



Vancouver, B.C October 10, 2017 Amended May 2, 2018 Locke B. Goldsmith, P.Eng., P.Geo. Consulting Geologist

# 9 COST STATEMENT, 2017 PROGRAM

#### Personnel

L.B. Goldsmith, May 28, June 5, ¾ 6, ¾ 7, ½ 8, ½ 9, 7/8 29,					
½ July 5, total 5 7/8 days @ \$1,080 / day	\$ 6,345.00				
C. Lee, June 5, 7/8 29, total 1 7/8 days @ \$480/day	900.00				
	7,245.00	7,245.00			
Food, Accommodation					
Room	\$ 87.13				
Meals	54.40				
Total cost of \$ 141,53	141.53	141.53			
÷ 3 ¾ man days = \$ 37.74 / man / day					
Transportation					
4x4 vehicle, 2 days @ \$100/day	\$ 200.00				
Gas	45.74				
264 km @ \$0.50/km	132.00				
Total cost of \$377.74	377.74	377.74			
÷2 days = \$188.87 / day					
Report					
Electronic drafting, prints, scans, materials		1,680.00			
Total:		\$ 9,444.27			
Applied to Claim 1041028		6,083.50			
Credited to PAC Account		\$ 3,360.77			
		,- <b></b>			

Appendix 1 – Highland Valley East field notes, June 2017

#### Page 1 of 5

7E+05	5576311	1017	8	Road bends to E.
				No outcrop from last observation.
7E+05	5576180	1015	9	Boulders in till.
				No outcrop from last observation.
7E+05	5576345	1014	10	Junction, Fork "C". Follow east branch, switch back and downhill.
				No outcrop from last observation.
7E+05	5576163	1012	11	On track
				No outcrop from last observation.
7E+05	5576157	994	12	Switchback to N. Granodiorite boulders.
				No outcrop from last observation.
7E+05	5576172	987	13	Switchback to S. Boulders.
				No outcrop from last observation.
7E+05	5576039	987	14	Switchback to N. Boulders.
				No outcrop from last observation.
7E+05	5576071	946	15	Foot of hill. Creek. Granodiorite boulders.
				No outcrop from last observation.
				Return to Fork "C". Follow N branch.
				No outcrop from Fork "C".
7E+05	5576582	1014	16	Boulders.

				No outcrop from last observation.
7E+05	5576999	1018	17	On road. Boulders.
				No outcrop from last observation.
7E+05	5577279	1009	18	Junction "D", clearing. Follow branch to right (east), trends downhill.
				No outcrop from last observation.
7E+05	5577310	1004	19	At fence, no gate.
				No outcrop from last observation.
7E+05	5577264	995	20	Small clearing. Granodiorite boulders.
				No outcrop from last observation. Slope downhill.
7E+05	5577067	987	21	Fork "E". Bend to NE. Follow NE branch. Walking trail to S. Boulders.
				No outcrop from last observation.
7E+05	5576854	972	22	Small flat with clearing.
				No outcrop from last observation.
7E+05	5576719	955	23	T Junction "F" at foot of hill. Follow left (N) branch. Deadfall.
				No outcrop from last observation.
7E+05	5576745	954	24	Deadfall.
				No outcrop from last observation.
				Return to Junction "F". Follow S branch.
7E+05	5576574	951	25	Deadfall. Walk to S.

				No outcrop from last observation.
7E+05	5576459	950	26	Depression and pond to E. No outctop to E and NE,
				No outcrop from last observation.
7E+05	5576335	944	27	On track. Unused track continues at 190°, 250 m, to new house. Also a house at 130°, across the valley.
				Return to Junction "F" and continue to the N past the deadfall.
7E+05	5576784	952	28	Depression to S with reeds. Boulder till.
				No outcrop from Waypoint 25.
7E+05	5576779	933	29	Depression and swale to E. Boulder hills.
				No outcrop from last observation.
7E+05	5576880	934	30	S edge of broad meadow. Boulder hills / drumlins extend to S.
				No outcrop from last observation.
7E+05	5576814	931	31	Unused dozer track around E foot of drumlin, above S-flowing stream.
				No outcrop from last observation.
7E+05	5576830	926	32	Steel bridge deck, plank floor, approaches washed out, OK for foot traffic. Track on E side of stream turns N, climbs into hills.
				No outcrop from last observation.
7E+05	5577065	930	33	Cross meadow to the N, on W side of stream.Stream bends to W. The track on the east side of the stream crosses a ridge at 135° near a house.
				No outcrop from last observation.

7E+05	5577093	933	34	Stream bends to the E base of hills. No outcrop in stream bed.
				No outcrop from last observation.
				Return to Junction "F". Follow track uphill to the NW.
7E+05	5576851	971	35	On flat bench. Collapsed log cabin.
				No outcrop from Junction "F".
7E+05	5577033	990	36	Hilltop.
				No outcrop from last observation.
7E+05	5577173	989	37	On track.
				No outcrop from last observation
7E+05	5577278	990	38	On track.
				No outcrop from last observation.
				Return to Fork "E". Walk track to S.
7E+05	5576807	994	39	Track follows the contour.
				No outcrop from Fork "E"
7E+05	5576770	999	40	Flat ridgetop, track bends to the NW.
				No outcrop from last observation.
7E+05	5576844	999	41	Track ends.
				Return to Fork "A".