

Ministry of Energy and Mines BC Geological Survey



Assessment Report Title Page and Summary

| TYPE OF REPORT [type of survey(s)]: Geological Assessment Report | TOTAL COST: \$ 25,785.00 |
|--|--|
| AUTHOR(s): D.G. (Dan) Cardinal, P. Geo., F.G.A.C. | SIGNATURE(S): Dan Car and |
| NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): MX-3-128 STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): EV | уеак оf work: 2015 /ent No. ID 5583561; Recorded Date 2015/DEC/28 |
| PROPERTY NAME: DOT-APEX CLAIM GROUP | · · · · · · · · · · · · · · · · · · · |
| CLAIM NAME(S) (on which the work was done): 839461 (no name), 8394 | 68 (no name), Dragon (558159) and Apex (565067) |
| | с. с |
| COMMODITIES SOUGHT: Gold | |
| MINUNG DIVISION: New Westminster/Kamloops | NTS/BCGS: NTS: 0921/4 BCGS: 091.002 |
| LATITUDE: <u>50</u> ° <u>03</u> <u>'56</u> " LONGITUDE: <u>121</u> | ^o <u>38</u> <u>'43</u> " (at centre of work) |
| OWNER(S): 2) 1) Dan Cardinal 2) | |
| MAILING ADDRESS: PO Box 593, 380 Dewdney Avenue | |
| Hope, BC VOA 1L0 OPERATOR(S) [who paid for the work]: 1) Same 2) | |
| MAILING ADDRESS: | |
| PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alt Bridge River Terrane, Kowiek Creek Fault, Mississippian - Permiar granodiorite, intrusive related gold, sedimentary-hosted, orogenic arsenopyrite, pyrite, quartz veins, sheeted veins, Apex zone, struct | eration, mineralization, size and attitude): n, serpentinite, ultramafic, biotite , accretonary, lower order fault, carbonitization, iron carbonate cural contact, quartz-graphitic schist. |
| | |

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 4985, 13634, 22665, 25411, 30564 & 31003

| TYPE OF WORK IN THIS REPORT | EXTENT OF WORK (IN METRIC UNITS) | ON WHICH CLAIMS | PROJECT COSTS APPORTIONED (incl. support) |
|---|-------------------------------------|---------------------------------|---|
| GEOLOGICAL (scale, area) | <i>p</i> | | |
| Ground, mapping 1000mx800m and 1000mx450m | | 839461, 839468, 558159 & 565067 | \$13,635.00 |
| Photo interpretation | | | |
| GEOPHYSICAL (line-kilometres) | | | |
| Ground | | | |
| Magnetic | | | |
| Electromagnetic | | | |
| Induced Polarization | | · · · · · · · | |
| Radiometric | | | |
| Seismic | in a strag | | |
| Other Transportation (helic | copter + 4x4 truck) | 839461,839468,558159 & 565067 | \$3,750.00 |
| Airborne | | | |
| GEOCHEMICAL (number of samples analysed for) | | | |
| Soil | | | |
| Silt | | | |
| Rock | | | |
| Other | | | |
| DRILLING (total metres; number of holes, size) | | | |
| Core | | | |
| Non-core | | | |
| RELATED TECHNICAL | | | |
| Sampling/assaying | | | |
| Petrographic | | | |
| Mineralographic | | | |
| Metallurgic | | | |
| PROSPECTING (scale, area) | | | |
| PREPARATORY / PHYSICAL | | | |
| Line/grid (kilometres) | | | |
| Topographic/Photogrammetric (scale, area) | | | |
| Legal surveys (scale, area) | | | |
| Road, local access (kilometres)/trai | ii 6.5 km | | \$4,000.00 |
| Trench (metres) | | | |
| Underground dev. (metres) | | | |
| other Report: field compilation | n & documentation | As above | \$4,400.00 |
| | | TOTAL COST: | \$25,785.00 |

EVENT NUMBER 5583561 Exploration Permit #MX-3-128 BC Geological Survey Assessment Report 36001

GEOLOGICAL ASSESSMENT REPORT RECONNAISSANCE GEOLOGICAL MAPPING SURVEY

ON THE

DOT-APEX CLAIM GROUP

Surveys Conducted On Claim Titles 565067,558159, 839468 & 839461 Center of Work Site: Lat. 50°03′56″N; Long. 121°38′43″W (UTM: 597000E – 5547000N)

Surveys Commenced August 25 Completed September 10, 2015

Located Within

NEW WESTMINSTER & KAMLOOPS MINING DIVISIONS NTS: 0921/04; BCGS: 0921.002 Co-ordinates centered on claim group: Latitude: 50°03'39"N; Longitude: 121°38'22'W

Report Prepared By:

D.G. (Dan) Cardinal, P.Geo., F.G.A.C. P.O. Box 593 Hope, BC VOX 1L0

March 25, 2016

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A. INTRODUCTION:

The Dot-Apex claim group encompasses 2,364.63 (the property) hectares of contiguous ground located in southwestern British Columbia and situated along tectonic elements that form southeastern edge of the geomorphological Coast Belt and the Bridge River and Methow accretionary terrane boundary.

This geological survey report herein submitted for assessment work credits documents field work conducted along the central portion of the claim group on parts of mineral tenures 558159, 565067, 839461 & 839468 during the field season of 2015.

Previous surveys carried out by the author over the northern portion of the claim group defined a structurally controlled, sedimentary-hosted gold-bearing mineralization referred to as the Apex zone. In structural contact with the zone is biotite granodiorite stock, which hosts sheetedlike quartz veins and later cross-cutting veins carrying anomalous gold values. The stock has characteristics of a reduced (magnetite depleted) intrusive related gold system (RIRGS).

Much of the field work carried out in 2015 was to the south of this mineralized system with the object of mapping bedrock rock and related structures in attempt to defining the possible extension of the gold mineralization southward.

Collecting of geospatial data was critical to the project. Mapping surveys were conducted at a scale of about 1:5000 using downloaded MINFILE and GOOGLE earth maps. For field mapping and sampling control both hand-held Garmin GPS unit and Trimble manufactured Yuma Tablet PC were utilized. The tablet is a GIS spatial mapping unit, which can be applied efficiently as a geospatial mapping tool with downloaded GPS and moving map software. Field notes were also kept in conjunction with digital photos to record rock outcrops and samples collected, with corresponding fixed GPS UTM co-ordinates.

A 2-person base camp was established near the mapping area adjacent to an old exploration access road. Much of bedrock mapping was accessible by foot from camp, a helicopter was briefly retained to reach the more rugged part of the mapping area .

B. SUMMARY

Property:

Dot-Apex property encompasses 2,634.63 contiguous hectares of highly prospective mineral claims. The property is strategically located in southwestern BC adjacent to a major transportation corridor (Trans Canada Hwy) along the Fraser River canyon with easy access to

major centres such as the town of Hope and is some 3.5 hours drive to the port city of Vancouver. Helicopter based in Hope can be utilized to access more remote sites on the property, about half-hour ferry time (one-way). The property is owned by D.G. (Dan) Cardinal, P. Geo., author of this report.

Background:

Gold was initially discovered by local prospectors on the property circa 1930s. Minor exploration was conducted in early 1970s for nickel potential along the serpentine belt. Between 1983-85, a number of the old gold showings were re-discovered, a major mining company carried out reconnaissance exploration surveys including limited exploratory drilling to test a structurally controlled gold zone (Dot zone) located along the southeastern portion of the property. In 2011, a junior resource company tested the Dot zone with 5 exploratory drill holes. In 2012, the author conducted limited exploration surveys along the northwestern portion of the property where several old (circa 1930s) gold workings were found referred to as the Apex zone. During the reconnaissance surveys a mineralized, quartz vein-hosted granodioritic stock located immediately adjacent to the zone was examined and discovered to carry gold-bearing mineralization. Limited follow-up work was carried out by the author in 2013 with additional gold results obtained. The intrusive stock hosts sheeted veins with Au+As+Bi+Sb+Te signature that characterize the stock as an IRGS, a newly discovered gold-bearing system. Follow-up sampling in 2014 has further defined the gold mineralization occurring both within the intrusive and adjacent altered sedimentary rocks. Field evidence indicates paralleling lower order faultshear structures are important to hosting gold-bearing sites.

Geology:

Regionally, the property is situated along the southeastern edge of tectono-magmatic arc Coast Belt, which forms part of the continental-margin Cordilleran magmatic arc. Along this tectonic region, the amalgamated Bridge River-Cadwallader terranes form accretionary zone (Yalakom-Hozameen suture) with the Methow and Quesnellia terranes to the east. Within this structurally complex setting are 2 known gold districts the Bralorne and Coquihalla districts both spatially and temporally related to first order crustal breaks. Favourably located between these districts are the Dot-Apex gold-bearing structures. The property is underlain by prominent northwest trending, steeply, east dipping thrust fault, a crustal break referred to as the Kwoiek Creek fault (KCF). The fault is represented by boudin-shape serpentinite bodies bounded on the east and west by sedimentary-greenstone schist rocks that make up the Bridge River Complex. Spatially related to the fault are lower-order fault-shear structures, which host the Dot and Apex goldbearing zones. The complex is intruded by 2 post accretionary granodioritic stocks.

Mineralization:

The Apex mineralization is hosted in structurally controlled sedimentary-hosted, lower-order fault-shear systems.

The zone is traceable for some 1,500m along strike and hosts a several sub-paralleling, weakly mineralized quartz structures. Sedimentary rocks adjacent to the veins are well altered and replaced by sulphides. Alteration assemblage includes: iron carbonate dominant, silica with quartz veinlets, chlorite, minor albite and white mica with associated mariposite in places. Sulphide assemblage is arsenopyrite dominant, pyrite and lesser pyrrhotite. It is also anomalous in tellurium, bismuth and antimony. Gold is closely associated with arsenopyrite. A biotite granodiorite intrusive stock (Four-Barrel Creek Stock) intrudes and is in structural contact with the altered sedimentary rocks and is believed to be temporally related and causative to the gold-bearing mineralization hosted along the Apex zone. The stock is gold-bearing and has a reduced intrusive related gold type signature (RIRGS). Various grab samples collected from old pits and open-cuts along the zone contain <1 gm/t to >6 gm/t Au (avagering about 3-4 gm/t) Preliminary grab samples collect from the granodiorite contain <1 gm/t to >4 gm/t Au (avagering about 1-2gm/t).

During the field of 2015, the author conducted a series reconnaissance mapping surveys to the south and southwest of the Apex with the object to attempt to define the possible extension of the zone. This field work is documented herein for assessment work credits.

C. LOCATION AND ACCESS

The property is located in southwestern British Columbia (Figure 1). Geographically, it is situated along the southern end of the Lillooet Range, which forms part of the mountain range that flanks the south-eastern Coast Mountain Belt.

It is some 135 km due northeast of the city of Vancouver or, about 3.5 -4 hour drive via the Trans Canada Highway (Hwy# 1) and is about a 2-2 .5 hour drive north of the town of Hope. It is also about ½ hour ferry ride by helicopter from Hope.

Access is from the community of Boston Bar located about 1 hour drive north of Hope on Hwy 1. From Boston Bar the property and project site can be reached by a series of roads for a total distance of 30 km. The first 15 km is along well maintained, all season public gravel road leading to the Nahatlatch River valley provincial park. From here, remaining 15 km is along seasonal roads with the last 10 km recommended for 4-wheel drive vehicle use only, which is part of the old forestry fire-tower lookout and mineral exploration road. It is approximately 1- 1.5 hour drive from Boston Bar to reach the project site and base camp at elevation 1,580 m asl.



DOT-APEX CLAIM GROUP

NTS: 0921/04

Lat: 50°03'39"; Long: 121°38'22"

NEW WESTMINSTER/KAMLOOPS MINING DIVISION

FIGURE 1

D. MINERAL CLAIM - TENURE INFORMATION: The Dot-Apex claim group consists of 12 contiguous mineral claims encompassing 2,364.63 hectares (Figure 2 & Table 1). The claims partly straddle the New Westminster and Kamloops mining divisions within NTS mapsheet 092I/04 in southwestern British Columbia. Co-ordinates are centered on the claim group at: Latitude: 50°03'39" N and Longitude: 121°38'22" W. The property is owned by D. G. (Dan) Cardinal, P.Geo. , FMC # 104232.



MINERAL TENURE MAP NTS: 092I/04 New Westminster & Kamloops M.D.

| Title Number | Claim Name | Good To Date | Area (ha) | Owner/F | мс |
|--------------|------------|----------------|-----------------|----------|----|
| | | | | | |
| 558159 | Dragon | Sept. 30, 2021 | 477.11 | 104232 | 2 |
| 565067 | Apex | Sept. 30, 2021 | 725.66 | 104232 | 2 |
| 598515 | Apex | Sept. 30, 2021 | 62.2 | 104232 | 2 |
| 604687 | Dot 2 | Sept. 30, 2021 | 249.01 | 104232 | 2 |
| 623903 | Dot | Sept. 30, 2021 | 373.62 | 104232 | 2 |
| 759322 | Dot 3 | Sept. 30, 2021 | 62.27 | 104232 | 2 |
| 779482 | Apex | Sept. 30, 2021 | 82.92 | 104232 | 2 |
| 779503 | Apex | Sept. 30, 2021 | 145.11 | 104232 | 2 |
| 839461 | | Sept. 30, 2021 | 41.48 | 104232 | 2 |
| 839468 | | Sept. 30, 2021 | 41.48 | 104232 | 2 |
| 920089 | Dot 10 | Sept. 30, 2021 | 62.27 | 104232 | 2 |
| 1015469 | Apex | Sept. 30, 2021 | 41.50 | 104232 | 2 |
| | | | | | |
| | | | Total Hectares: | 2,364.63 | |

Pertinent title information listed in Table 1 below:

The Dot-Apex claim group are currently in good standing to September 30, 2020 (note: except for claims 839461 &839468). The property presently has a Mineral & Coal Exploration Activities & Reclamation Permit, Permit Number: MX-3-128, which allows for exploratory drilling and limited trenching on both the Dot and Apex zones.

E. PHYSIOGRAPHY AND INFRASTRUCTURE

The property straddles a height of land along the southern end of the Lillooet Ranges (a subdivision of the Pacific Ranges), a rugged mountain range that flanks the eastern side of the southeastern Coast Mountain Belt. It covers topography that ranges from a summit of 1,940m at the northern end along the Apex zone, down to 820m in the south at the Dot zone. Vegetation varies from sub-alpine type to timber stands of helmlock and pine at lower elevations. There are semi-plateau areas with small, fen-like marshes and snow-fed lakes (e.g. Photo 1). The area experiences more of the dry weather type climate influenced by the dry, semi-arid interior plateau located to the east and south such as in Lytton and Boston Bar communities. The Apex zone is generally free of snow by mid-June through to mid-October with the Dot zone open to surface exploration by late April through to late October-early November. Boston Bar lies along an active transportation corridor that includes the Trans Canada Highway and 2 major railways (see map below). For electrical power, there is hydro power grids that run adjacent to the property including a run-of-the-river power-plant (in final phases of construction) located few kilometers to the northeast. Boston Bar is a historical logging community with an experience work force, and the town of Hope offers schools, hospital, stores and heavy equipment contractors.



PHYSIOGRPAHY AND INFRASTRUCTURE

F. REGIONAL GEOLOGICAL AND TECTONIC SETTING:

The project area is within the southeastern Coast Belt near its contact boundary with the Intermontane Belt, an area of structural complexity and intense deformation. Tectonically, the region is largely underlain by Mississipian to Middle Jurassic accretionary oceanic rock assemblages of the Bridge River Complex and the stratigraphically overlying Cayoosh Assesmblage, that make up the Bridge River Terrane. To the east, these assemblages are juxtaposed, as a result of the Paleogene age Fraser Fault dextral offset, with clastic, marine to mainly non-marine successions belonging to: (i)lower-mid Jurassic Ladner Group (Methow Basin sequence) and Tyaughton Formation that correlate with volcanic arc rocks of the Cadwallader terrane and, (ii)overlapping Upper-Cretaceous clastic, Jackass Mountain Group.

Magmatically, the region is intruded by a range of Cretaceous-Tertiary plutonic arc rocks that define the southeastern limit of the Coast Plutonic Complex and back-arc setting of the Dot-Apex gold zones. The project is bordered to the south by the Spuzzum batholith with several local small stocks intruding the mapping area. Structurally, the region is marked by a prominent transpressional, crustal break referred to as the Kwoiek Creek Fault, reactivated during the younger (Tertiary) dextral movement of the Fraser Fault. KCF is represented by a belt of faulted, serpentinized-ophiolitic rocks that comprise part of the Bridge River terrane oceanic complex. This first order fault is spatially related to structurally controlled, gold mineralization hosted in lower order fault-shear systems and to proximal intrusive related gold mineralization, which make up the Dot and Apex gold zones.



Bralorne and Dot-Apex gold sites occur along the eastern flank of continental magmatic back arc setting.

Globally, magmatic arcs are fertile settings known to host orogenic and intrusive related gold systems.

FIGURE 3



G. BRIEF HISTORICAL BACKGROUND:

Historically, exploration in the region can initially be traced back to the Fraser canyon - Yale gold rush of 1856, which was shortly followed by the Cariboo gold rush of 1857-58. Local streams and gravel bars along the Fraser River led prospectors to explore larger tributaries such as the Nahatlatch River watershed near Boston Bar.

By 1932, the BC Ministry of Mines Annual Report documented prospectors had found coarse (placer) gold on Log Creek, a tributary of the Nahatlatch, which flanks the western side of the Dot-Apex claim group. Potential source for some of this placer gold led prospectors to explore the Kwoiek Creek fault system and serpentine belt.

In 1936, H.C. Horwood of the G.S.C. (Paper36-7) briefly examined 3 gold and silver workings along the belt, this included: 'Serpentine and Summit' now covered by the Apex claims; and 'Jubilee' covered by the Dot claims. He describes the workings consisting mainly of open-cuts and shallow pits and reported to contain "quartz veins with sulphide mineralization in altered sediments carrying minor amounts of gold and silver" (majority of these working were re-located by the author).

It is interesting to note, based on reliable 'oral' information (retired prospector-historian in Boston Bar), that some time during this period (1930s), an American investment group conducted limited diamond drilling on the Serpentine-Summit gold showings. However, no documented data exists for this work.

In 1947-48, G.S.C. (S. Duffel and K.C. McTaggart, Memoir 262) carried out regional mapping program, which included surveys of the Kwoiek fault system. In 1989, J.W.H. Monger (G.S.C.) updated and produced a structural terrane map of the region.

In 1972-73, limited reconnaissance geological and sampling surveys were conducted, investigating the serpentinized ultramfic bodies spatially related to the Kwoiek fault system for potential nickel mineralization by Nahatlatch Resources Ltd.

Late season of the 1983, the author was commissioned by a resource company to attempt to relocate a number of the old gold showings reported by Horwood. The Jubilee showing noted above was re-discovered. A grab sample obtained from oxidized shear zone hosting veins and containing abundant arsenopyrite assayed 26.5 gm/t gold.

In 1983-85, spurred by this initial find, Hudson Bay Exploration & Development Co. Ltd. optioned the ground and conducted a series of reconnaissance geological, geochemical and geophysical (VLF-EM) surveys followed by limited diamond drilling on the Jubilee, now referred to as the 'Dot zone'. Although the company was encouraged by gold values encountered in the 6 holes drilled, *it concluded...*"*with a dramatic increase in the price of gold, the claims might still have some potential, however, at present price levels of US \$300-350 per oz. it is not longer worth pursuing*". *No follow-up work was conducted.*

By 2003-05, the author was able to acquire the ground and began systematically conducting geological and limited sampling surveys.

In 2009-11, Electra Gold Inc. optioned the claims and re-activated mineral exploration roads leading to the Dot and Apex zones. The company conducted a small drilling program of 5 holes over the Dot zone to test the Hudbay historical drill results. All 5 holes encountered a number of paralleling, structurally controlled mineralized quartz veins carrying encouraging gold values. However, due to financial restrictions, the company was not able to honour its optioned agreement and elected to return the Dot-Apex claim group to the author.

In 2012, the author focused on the Apex zone. Here, the author had previously located a series of old (1930s) trenches and open-cuts. The workings follow structurally controlled, sedimentaryhosted, altered gold-bearing structure, traceable for at 1,500 metres, referred to as the 'Apex zone'. A number of the grab samples collected from some of the workings contained elevated gold values ranging between 4 to >6 gm/t. During the 2012 reconnaissance survey a new gold target was identified. A granodioritic stock was outlined adjacent to the Apex zone with an IRGS type characteristics. Numerous, flat lying, stacked sheeted veins and occasional cross-cutting fault-shear controlled veins were noted. Grab samples collected from these vein systems contained as high as >3 gm/t gold.

The author conducted limited follow-up work in 2013 to better define the mineralized stock and its relationship to the Apex structural zone. Additional samples were randomly collected from the stacked sheet veins and altered granodiorite between the veins, majority of the samples contained >1 gm/t gold. Surveys In 2014 better defined the Apex mineralization 16 rock samples collected over half contained anomalous gold up to >4 gm/t Au majority were obtained from the intrusive mineralized system. Structure appears to play a key role in controlling some of the gold mineralization.

During the field season of 2015 further systematic mapping was conducted to the south and southwest of the Apex zone to better constrain the host rocks carrying the mineralization and spatially related structural systems.

H. GENERAL PROPERTY GEOLOGY:

The dominant structural feature underlying the property is the Kwoiek Creek Fault (KCF), a firstorder structural system characterized by a northwest trending, steeply dipping reverse thrust. This crustal break is defined by fault-bounded serpentinized-ophiolitic rocks, which form part of the Bridge River Complex. It is traceable for some 35 km from the Nahatlatch River (just west of the Fraser River) where it is dextrally offset by the Fraser Fault, extending northwest to the Stein River watershed where it is cut-off by southeast Coast Belt batholithic rocks (Figures 3 & 4). This structure is interpreted to be the southern extension of the Bralorne structure (Figure 3).

Along the southern part of the property (Dot zone proper) the dominant rock type is a northwest trending, steeply dipping, foliated, graphitic-quartz schist to slatey phyllite. To the north along strike, this rock unit intercalates with lower green schist facies, volcanic clastic - greenstone volcanic rocks. The schist is in fault-contact and structurally bounds a body of massive, dark green, serpentinite and talcose schist, which defines part of the KCF system. Based on the mapping, the serpentinite is interpreted as northwest trending, lensoid body offset by dextral and sinistral cross-cutting faults (Figure 4). This structural complex is spatially associated to 2 post accretionary granodioritic stocks herein referred to by the author as 'Four-Barrel Creek' and 'Hannah Creek' stocks. Both structural and magmatic events, have played a role in the mineralization, and are spatially and temporally, related to at least 2 gold-enriched sites (Dot and Apex zones).

I. 2015 MAPPING PROJECT:

Systematic reconnaissance surveys were carried along 2 different parts of the property (see Figure 5), which are located at UTM co-ordinates centres: 597500E-5546300N (Map A) and at 597000E-5547500N (Map B)

Mapping was conducted at scale of a 1:4000. Base maps were downloaded from Minfile data base and rock outcrops encountered plotted onto the UTM grid base map. For field mapping control purposes both hand-held garmin GPS unit and a Trimble manufactured Yuma tablet were utilized for geospatial mapping. Field notes were also kept recording rock types and structural fabrics.

A 2-person base camp was established at a small lake (Dragon Fly lake) located at UTM coordinates: 598350E-5545300N, within walking distance of mapping area A. To reach mapping area B a helicopter was utilized to access the site.



Figure 5 with topographic features such as contours, streams and lakes in relation to the mapping project sites. On the lower right hand corner is location of base camp from here mapping area A was easily accessible. Mapping area B required helicopter support. Old mineral exploration constructed in 1984 was re-habilitated with excavator machinery, which allowed for 4-wheel drive access to base camp (Figure 6 below).



In order to gain 4-wheel drive access to the project site a former mineral exploration road constructed in 1984 was rehabilitated utilizing a small (Bobcat E50) excavator. A total of 6.5 kilometres was re-established, as shown by the yellow dashed line Figure 6. Base camp was established at a small lake (Dragon Fly lake) at elevation 1850 metres from here Map Area A was easily accessible.





Map are A is underlain by 3 main rock types. It is dominantly underlain by dark green, massive serpentinite, rock outcrops are plotted in purple in Figure 7 along where mapping traverses were conducted. The serpentine tends to have slight foliated fabric with a northwest trending lineation. It hosts <1% disseminated magnetite and chromite with associated lesser pyrrhotite and minor pentlendite. The serpentinite is cut by 2 northwest-southeast striking belts of talcose schist hosting lensoid, crystalline white magnesite. They range in width from about 5m to 75m and traceable for at least 500m. To the north and northeast the serpentinite is in fault contact with black, highly foliated quartz schist, mapped outcrops in grey. Along the eastern side of the lake is a faulted (black dashed line) wedge of carbonaceous-quartz schist, which is associated with fine crystalline pinkish-grey marble (mapped in blue, Figure 7 above).

Structurally, on the northwest, the serpentinite is sinsitrally offset by a northeast-southwest trending cross-cutting fault (bold black dashed line). It is offset by some 500m to the left. Along the western shore of the lake numerous angular quartz fragments were observed suggesting that a quartz vein system is proximal to the area. Although little mineralization was noted with the fragments further prospecting should be conducted along this area to attempt to locate the vein system.



Map area B above is underlain by 2 main rock types. On the west is northwest trending, steeply dipping, foliated chloritic schist (mapped in green). It is in fault-contact with a moderately altered equigranular, biotite granodiorite stock (out crops mapped in red). Adjacent to the fault-contact boundary is a black, coarse crystalline, pyroxenitic dyke (mapped as dark green, see photos 3 & 4 below).

The intrusive stock is cut by a series of northwest trending, steeply east dipping, sub-paralleling faults (black dashed lines). A number of these faults are oxidized and host numerous mineralized quartz veins (see photos 5, 7 & 8). Previous (2013-14) mapping just to the east of mapping area B similar quartz vein structures are auriferous-bearing.

Additional future mapping and sampling along the faulted granodiorite stock is required to constrain the structurally controlled mineralization and potential gold. Previous mapping and sampling along the Apex fault system (bold black dashed line) west and northwest of mapping area B hosts anomalous gold values.



Photo 1: mapping area A with talc schist and serpentinite rock outcrops behind author with mapping area B along distant ridge in background. Photo 2: massive outcrop of serpentinite (also in photo 1 to the right) with mapping area B in background.



Photo 3 looking NW shows pyroxenite dyke about 15m wide (refer to map area B) at elevation 1880m. Photo 4 close-up view of coarse crystalline with pyroxene megacrysts, moderately altered pyroxenite.

Photo 5 depicting iron oxidized fault controlled, mineralized-quartz-bearing structure (refer to map area B) hosted in biotite granodiorite at elevation 1780m. Photo 6 looking downslope and to the northwest of mineralized structure (dashed yellow line).

Photo 7 showing massive quartz vein structure along ridge top of map area B at elevation 1800m. It is continuation and along southeast strike of mineralized quartz structure depicted in photos 5 and 6 above (also refer to quartz vein plotted on map area B).

J. CONCLUSION:

In conclusion, the object of the mapping project was to attempt to define potential gold-bearing mineralized targets for future exploration. Although mapping area A did not locate mineralized targets, angular quartz-bearing float noted found along the west shore of the lake requires follow-up. Map Area B shows promise. Here structurally controlled mineralized quartz veins at least 10 metres wide are hosted in biotite granodiorite stock. Several of these cross-cutting faults can be mapped along ridge line and will require more detail mapping and sampling. This field work is proposed for the 2016 field season.

K. STATEMENT OF EXPLORATION EXPENSES:

The mapping project was conducted on mineral tenure claims: 558159, 565067, 839461 & 839468 for 12 days between August 25 and September 10, 2015. Mapping surveys were carried out by a 2-person team consisting of geologist and field assistant. Expenses included up-grading and re-habilitating a former mineral exploration road, base camp, 4-wheel drive truck and helicopter support.

Expenses incurred are as follows:

| Field Crew: | | |
|--|--------------------------|-------------|
| Geologist; 12 days @ \$700/day | | \$8,400.00 |
| Field Assistant; 12 days @ \$300/day | | 3,600.00 |
| Camp: | | |
| Field crew; 12 days @ \$60/day/man | | 1,440.00 |
| Misc. camp materials | | 195.00 |
| Transportation: | | |
| 4-wheel drive truck; 12 days @\$150 | | 1,800.00 |
| Helicopter support; 1.5 hours @ \$1,300/hr. | | 1,950.00 |
| Equipment: | | |
| Excavator; 3 days @ \$1,000/day | | 3,000.00 |
| Road up-grade and repair | | |
| MobDemob. | | 1,000.00 |
| Report: | | |
| Documentation, compilation, interpretation and p | olotting | 4,400.00 |
| | Total Expenses Incurred: | \$25,785.00 |

Respectfully submitted;

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D.G. (Dan) Cardinal, P. Geo., F.G.A.C.

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M. PROFESSIONAL CERTIFICATE:

I, Daniel G. Cardinal, of the Municipality of Hope, British Columbia, do hereby certify that:

- I am a Professional Geoscientist and reside at 380 Dewdney Avenue, Hope, B.C. VOX 1L0.
- I am a graduate of the University of Alberta (1978) and received a 2 year technical diploma in Exploration-Geology from the Northern Alberta Institute of Technology (1972).
- I am member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo.), membership #18455; a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (P.Geol.), membership #M29405; a Fellow of the Geological Association of Canada (FGAC) and, ,member ID #9166924 with The Geological Society Of America.
- I have practiced my profession continuously for the past 35 years.
- I am the registered owner of Dot-Apex claim group.
- I conducted the geological mapping surveys documented in this assessment report.
- And, I am the author of this report.

Signed in Hope, British Columbia this 25th day of March, 2016.

ESSIO ROVINCE G. CARDINAL CIEN

D.G. (Dan) Cardinal, P. Geo., F.G.A.C.