

Ministry of Energy & Mines  
Energy & Minerals Division  
Geological Survey Branch

**ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY**

TITLE OF REPORT [type of survey(s)]	TOTAL COST
PROSPECTING AND GEOLOGICAL RECONNAISSANCE ASSESSMENT REPORT	\$2,920.00

AUTHOR(S) D.G. CARDINAL, P.GEO. SIGNATURE(S) [Signature]

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) \_\_\_\_\_ YEAR OF WORK \_\_\_\_\_

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) 4233005 / AUGUST 24, 2008

PROPERTY NAME APEX

CLAIM NAME(S) (on which work was done) APEX

COMMODITIES SOUGHT GOLD

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN \_\_\_\_\_

MINING DIVISION NEW WESTMINSTER / KAWLOOPS NTS 92I/04

LATITUDE 50° 04' 49" LONGITUDE 121° 39' 26" (at centre of work)

OWNER(S)

1) DAN CARDINAL 2) \_\_\_\_\_

MAILING ADDRESS

1883 AGASSIE AVE.  
AGASSIE, BC V0M 1A2

OPERATOR(S) [who paid for the work]

1) (AS ABOVE) 2) \_\_\_\_\_

MAILING ADDRESS

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

THE CLAIM IS UNDERLAIN BY NW TRENDING BAND OF SERPENTINITE THAT FORMS THE KNOIEK CREEK FAULT SYSTEM. THE FAULT IS BOUNDED ON THE NE. BY PHYLLITES & SCHISTS OF U. JURASSIC BRIDGE RIVER - LAYOOSH ASSEMBLAGE & ON THE SE. BY MAINLY SHALE & ARGILLITE OF M. JURASSIC CADWALLADER ASSEMBLAGE - RELAY MTN. GRP. THE FAULT IS ASSOC. W/ GOLD - ARSENIC - BEARING

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS STRUCTURE TRACEABLE > 2 km.

4985, 13634, 23691

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping	1 km x 2 km	APEX	\$1,820.00
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
<b>GEOCHEMICAL</b>			
(number of samples analysed for ...)			
Soil			
Silt			
Rock			
Other			
<b>DRILLING</b>			
(total metres; number of holes, size)			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)	1 km x 2 km	APEX	\$1100
<b>PREPARATORY/PHYSICAL</b>			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
<b>TOTAL COST</b>			<b>\$2,920.00</b>

Event Number 4233005

BC Geological Survey  
Assessment Report  
30400

**PROSPECTING AND GEOLOGICAL RECONNAISSANCE  
ASSESSMENT REPORT**

**On The**

**APEX MINERAL CLAIM**

Mineral Tenure Number: 565067

**Located On**  
(Claim Centre)

**UTM: Zone 10**  
**5548562N; 595849E**

**NTS:**  
**50° 04' 49" N; 121° 39' 26" W**

**Map Sheet:**  
**NTS: 92I/04**  
**BSGS: 92I.002**

Report Prepared By:

**D.G. Cardinal, P. Geo.**  
1883 Agassiz Avenue  
Agassiz, B.C.  
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**December 16, 2008**

  
PROFESSIONAL  
PROVINCE  
OF  
D. G. CARDINAL  
BRITISH  
COLUMBIA  
GEOLOGICAL  
SCIENTIST  
1  
Dec. 18/08

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## A. INTRODUCTION

The Apex mineral claim lies approximately 27 km due north-northwest of the community of Boston Bar and the Fraser River canyon and Trans Canada Highway. From Boston Bar, it is accessible via series of connecting secondary (year-round) and seasonal (logging) access roads for a combined distance of some 40 road kilometres. The claim encompasses an area of 725.66 hectares along sub-alpine regions of the Pacific Range mountains and straddles a height-of-land with a peak elevation of 1920 metres.

Historically, the watersheds adjacent to the property were prospected at the turn of the century. Subsequently, anomalous gold-bearing quartz structures were discovered on ground now covered by the Apex claim. A couple of old gold workings consisting mainly of open-cuts and shallow pits were first documented by Horwood (GSC, 1939) referred to as the Summit the Serpentine. Duffel and McTaggart initially carried out regional geological mapping over the area (GSC, 1952). This work was later updated by Monger (GSC, 1989) with tectonic terranes incorporated into the regional mapping and structural interpretation. Over the years sporadic regional exploration has taken place with some of the more recent work conducted by Hudson Bay Exploration & Development (Taylor, 1985) consisting of regional geology and geochemical surveys. In 1988, Westerra Resources Ltd. (Cochrane, 1988 private report) carried out sampling and geological surveys examining the Summit and Serpentine showings. A number of the samples collected were highly anomalous in gold and associated arsenic.

Regional geological setting is structurally controlled by a prominent northwest trending belt of serpentinite referred to as the Kwoiek Fault (Monger, 1989). The fault separates 2 distinct lithological units. To the northeast are Mesozoic age, weakly metamorphosed sediments and to the northwest are older, lower greenschist metasediments of Paleozoic age. The Apex claim is underlain by 3 main rock types. Serpentine (1) which is in fault contact with package of intercalated phyllites, argillites and andesitic greenstone (2) and, quartz monzonitic to granitic stock (3). Auriferous-bearing quartz structures are hosted in altered sediments adjacent to the monzonitic intrusive, traceable for at least 2 kilometres along strike. Sections of the intrusive are also anomalous with gold near the contact zone with the sediments.

Reconnaissance mapping and prospecting was carried out along trend of the quartz structures and contact zone. The old workings noted above were located and examined. For mapping control, hand-held GPS garmin model was used to position UTM survey points and an ortho photo map downloaded from MTO Map Place at approximately 1:15000 scale was used in the field for interpreting and plotting GPS points. Field data was entered into field lap top. This reconnaissance work was submitted for assessment work credits under event number: 4233005.

# APEX Claim Location Map: N5548562; E595849 (Claim Centre)

 **APEX Claim Location**

**Topographic Layers**

-  Lakes 1:6M
-  Rivers 1:6M

**BC Border Layers**

-  BC Border 1:6M

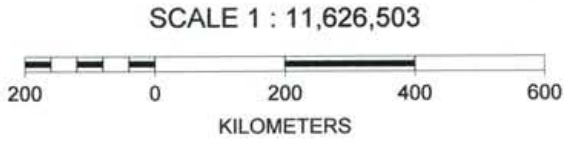
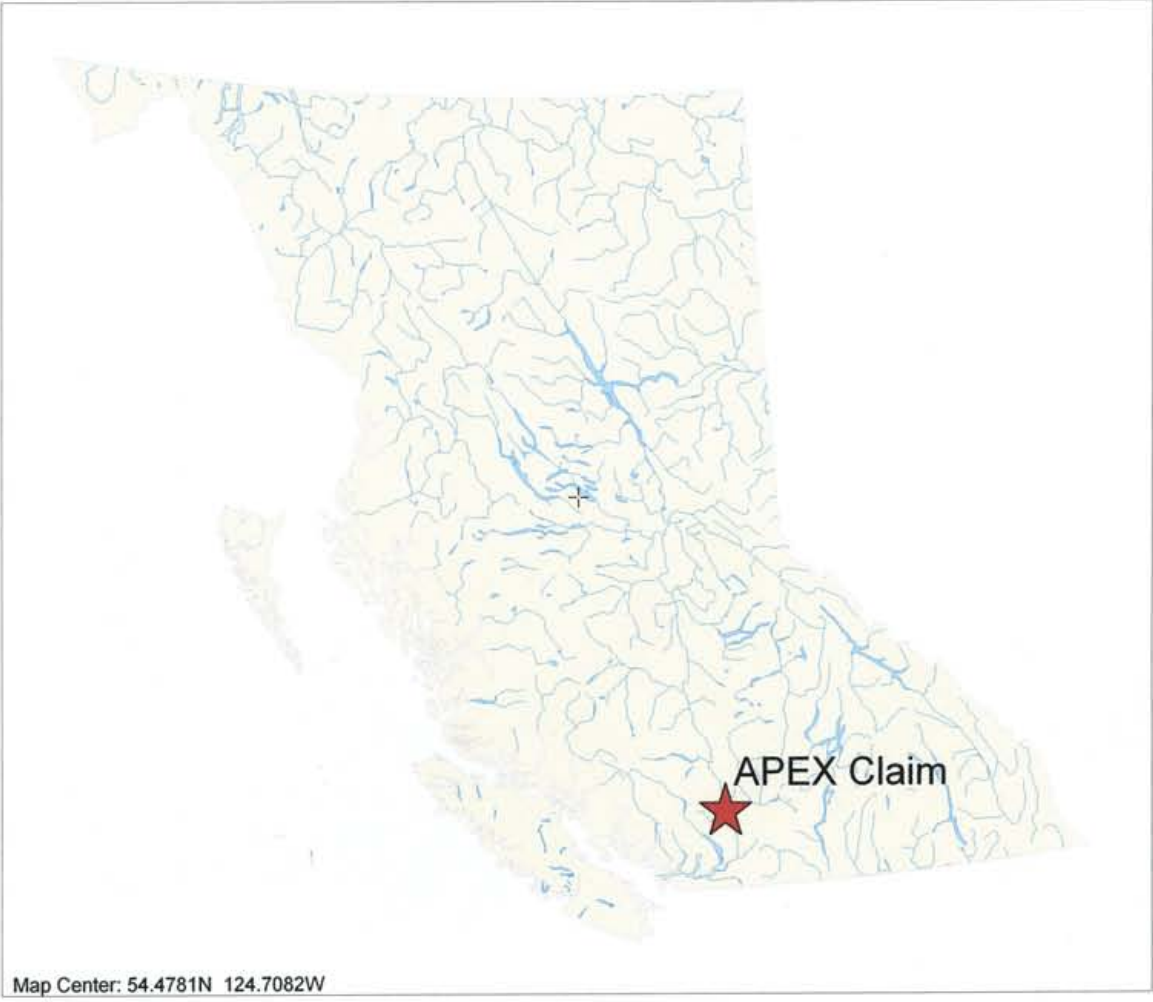


Figure 1.

# APEX Claim Claim Map: Tenure Number 565067

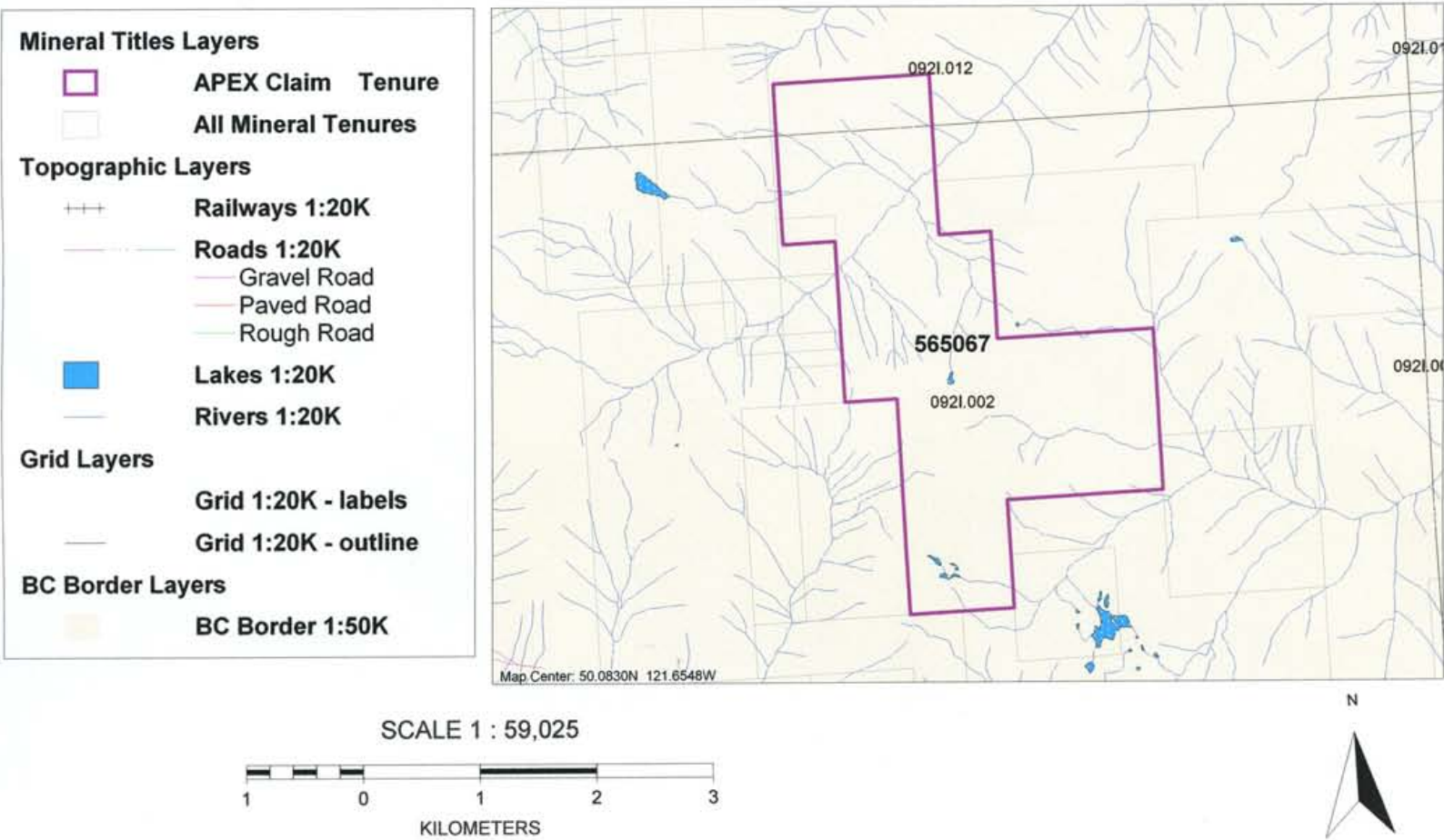


Figure 2.

## B. LOCATION AND ACCESS

The Apex claim is located some 27 kilometres due north-northwest of Boston Bar, BC. NTS co-ordinates which are plotted near the centre portion of the claim are: 50°04'49" N; 121°39'26" W. Geographically, the property lies along the rugged sub-alpine regions of the Pacific Range mountains with property summit at 1920 metres. It straddles a height of land that trends northwest between the Fraser River and its tributaries on the east and the Log Creek drainage basin to the west.

The claim can be reached from Boston Bar via North Bend by a series of connecting secondary and seasonal access roads. Firstly, by heading north from North Bend and paralleling the Fraser River along an all weather road to Nahatlatch River for 16 km. The road then heads westerly following the river valley heading towards the Nahatlatch Lakes, at 25 km the road branches to the north heading up Log Creek. From here the logging road is seasonal with parts of it deactivated, a 4-wheel vehicle is required. At about 8 km (approximately 33 km from Boston Bar) the Log Creek road splits and the road to the right is taken which crosses the Log Creek canyon and begins to climb out of the valley. This road is taken for an additional 8 km or total of 41 km where a very rough trail built as a former fire guard heads easterly for a further 3 km to the property and work area. This last 3 km is only passable by ATV. The fire guard road runs along an east-west trending ridge line overlooking 'Hanging Valley', a small tributary of Kwoiek Creek. Total road distance from Boston Bar is some 44 km. An alternate route to the claim from North Bend was via Keefers (a former trading post settlement) however, this logging road was severely deactivated making access with 4-wheel vehicle next to impossible. Should future exploration resume in the area the road could easily be re-activated with limited expense.

## C. PROPERTY-CLAIM INFORMATION

The claim covers 725.66 hectares. It is 100% owned by the author. The centre of the claim falls within NTS co-ordinates: Lat. 50°04'49"N; Long. 121°39'26"W with corresponding UTM co-ordinates: Zone 10, 5548562N; 595849E. NTS Mapsheet: 092I04.

Pertinent claim data is as follows:

<u>Claim Name</u>	<u>Tenure Number</u>	<u>Current Expiry Date</u>	<u>Area</u>
Apex	565067	2009/Aug/30	725.66



#### **D. BRIEF HISTORICAL BACKGROUND**

The claim covers part of geological favourable belt which, historically, has attracted sporadic exploration both for precious and base metals. Some of the earliest work on property dates back to the early 1900s, prospectors reported finding mineralized quartz veins hosting gold values. This work was first documented by H.C. Horwood in 1936 (GSC Paper 36-7) which consisted mainly of shallow pits and trenches, referred to as the Serpentine and Summit workings (Plates I & II) and now covered by the Apex claim. In recent years, several exploration companies have carried out regional scale type reconnaissance exploration projects and exploratory drilling programs in search of both base and precious metals.

During 1973-74, a section of the northwest regional trending ultramafic body, which is well exposed immediately southeast of the claim, was tested for potential nickel. Majority of the samples collected contained marginal nickel values ranging between .15 to .2% (J.A. Chamberlain, 1973). In 1983, Hudson Bay Exploration & Development Ltd. (HUDBAY) acquired a large tract of ground and conducted reconnaissance geological, geophysical (VLF-EM) and geochemical surveys orientated towards gold exploration. Results from these surveys produced some encouraging values including an area located along the southeastern portion of the claim where coincidental gold-arsenic soil geochemical anomaly was delineated with values ranging 10-30ppb Au and 250-1300ppm As (K.J. Taylor, 1985). Although HUDBAY considered this to be a potential target area no follow up work was conducted. In 1986-87, the area was restaked by Westerra Resources Ltd. and carried out limited geochemical and mapping surveys centered around the old Serpentine and Summit workings. The old trenches and open-cuts were sampled with some of the values running: 1.98 g/t to 4.68 g/t Au (Summit) and 1.4 g/t to 3.61 g/t Au (Serpentine). This work was documented by D.R. Cochrane (Cochrane Consultants Ltd.) in 1988 as a private company in-house report. Since 1990 the property has experience very little exploration. More recently, in 1999, some limited field surveys were carried out (D.G. Cardinal, 2000) but the claims were allowed to lapse.

Between 2000-03, an exploratory drilling program was carried out by a joint-venture partnership on claims known as the Randi located near Pyramid Mountain. The Randi and Apex claims share common claim boundary. Drilling was conducted along a structurally controlled gold-bearing quartz system and altered sulphide-bearing shales. Several quartz veins were encountered during drilling with values up to 3.32 gm/t over 4.5 m. Trench samples also assayed up to 6.0 gm/t across 9.7 m (P. Kollack, 2003). The mineralized structure is interpreted by the author of this report to be the northern extension of the auriferous-bearing structure found on the Apex claim and that both are related to Kwoiek Creek fault system.

The Apex claim was subsequently acquired by the author and, in July 2007, some limited reconnaissance mapping and prospecting was carried out along the central portion of claim. A Statement of Work was filed August 24, 2008 under event number: 4233005.

## E. SUMMARY OF REGIONAL GEOLOGY

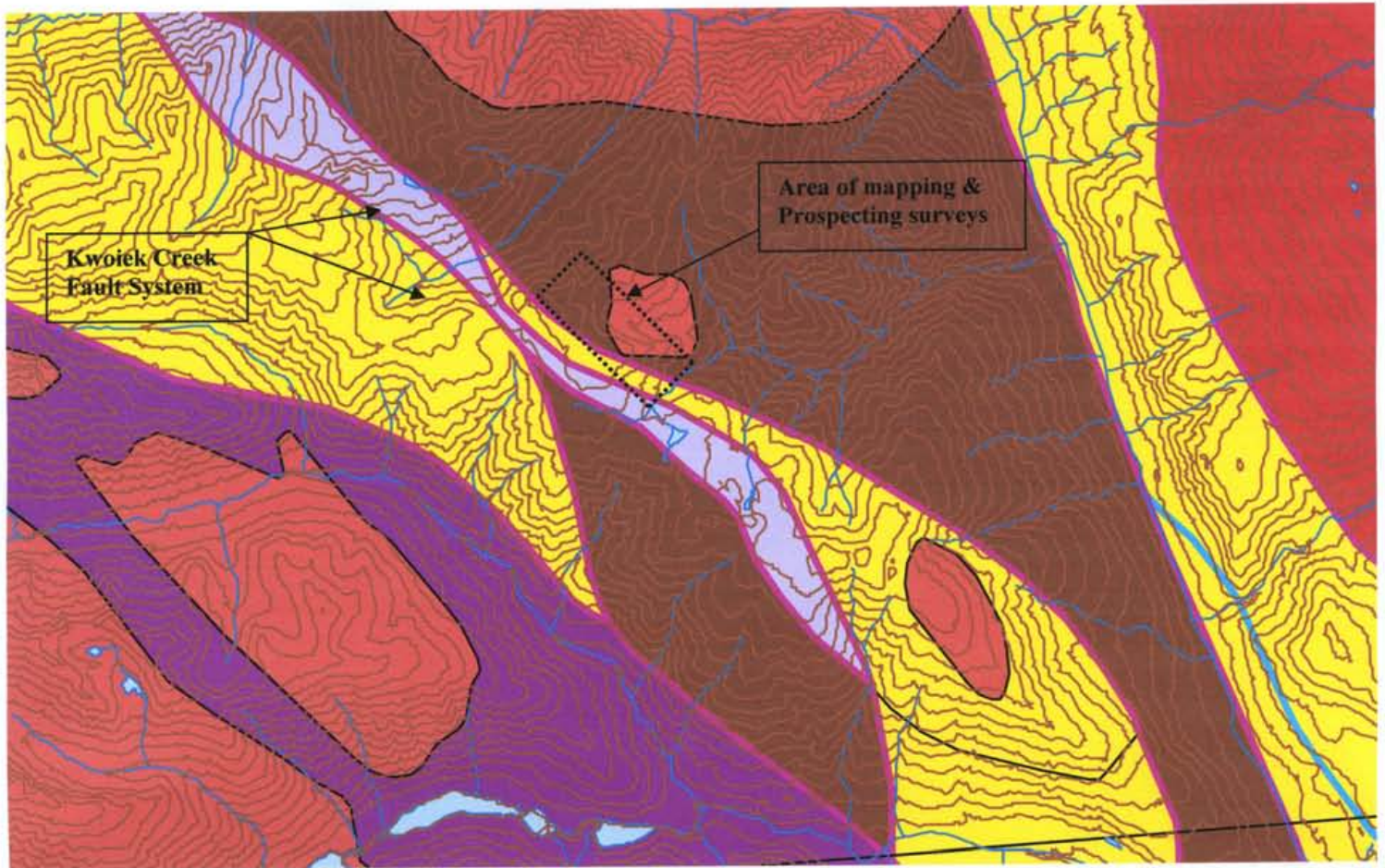
Regional geological setting (Figure 3.) is comprised of a northwest-southeast trending accretionary belt of volcanic, sedimentary and oceanic ultramafic rocks marked by a major structural break referred to as the Kwoiek Creek Fault (J.W.H. Monger & W.J. McMillan, GSC 1989). The fault is represented by a series of sub-parallel, strike-slip and imbricated structures associated with a semi-continuous band of serpentinized ultramafic, which separates the regional rocks into different age units. Regional deformation has produced an overall northwesterly trending, easterly dipping penetrative fabric characterized mainly by schistosity and foliated features.

The Kwoiek Creek Fault-ultramafic complex can be traced for some 30 kilometres along strike and is bounded by 2 lithological units (Figure 4.). To the northeast is a package of intercalated Paleozoic sediments and volcanics believed to be latterly equivalent to Permian age Bridge River complex (Monger & McMillan). These rocks are predominately comprised of greenstone volcanic and phyllitic rocks metamorphosed to lower greenschist facies. To the southwest is the Jurassic to late Cretaceous age Relay Mountain Group consisting mainly of argillite, shale-limy shale interbedded with lesser sandstone and phyllite. The Relay Mountain Group is believed to be latterly equivalent to the Cadwallader Terrane.

The highly altered and sheared lenses of talcose serpentine and lenticular bodies of massive serpentinite that define the fault system and correlated with Bridge River Assemblage, also mark the zone of accretion between the Mesozoic and Paleozoic lithological tectonic plates.

The Cretaceous age Scuzzy Pluton which forms part of the Coast Range granitic intrusives, partly surrounds the above-noted accretionary complex to form a regional roof pendant-like belt of rocks some 30 km long and 10 km wide. Local, possibly younger (Tertiary?) stocks, intrude parts of the belt and have developed localized skarn alteration overprinting regional metamorphism.

Structurally controlled gold mineralization is known to occur along parts of the belt and in places is spatially related to the stocks. These local intrusions probably played a role in introducing and remobilizing mineral-bearing fluids into tensional and dilatent structures. The anomalous gold-arsenic quartz structures found on the former Summit and Serpentine showings are probably genetically related to these types of controls.



**REGIONAL GEOLOGICAL SETTING  
APEX MINERAL CLAIM AREA**

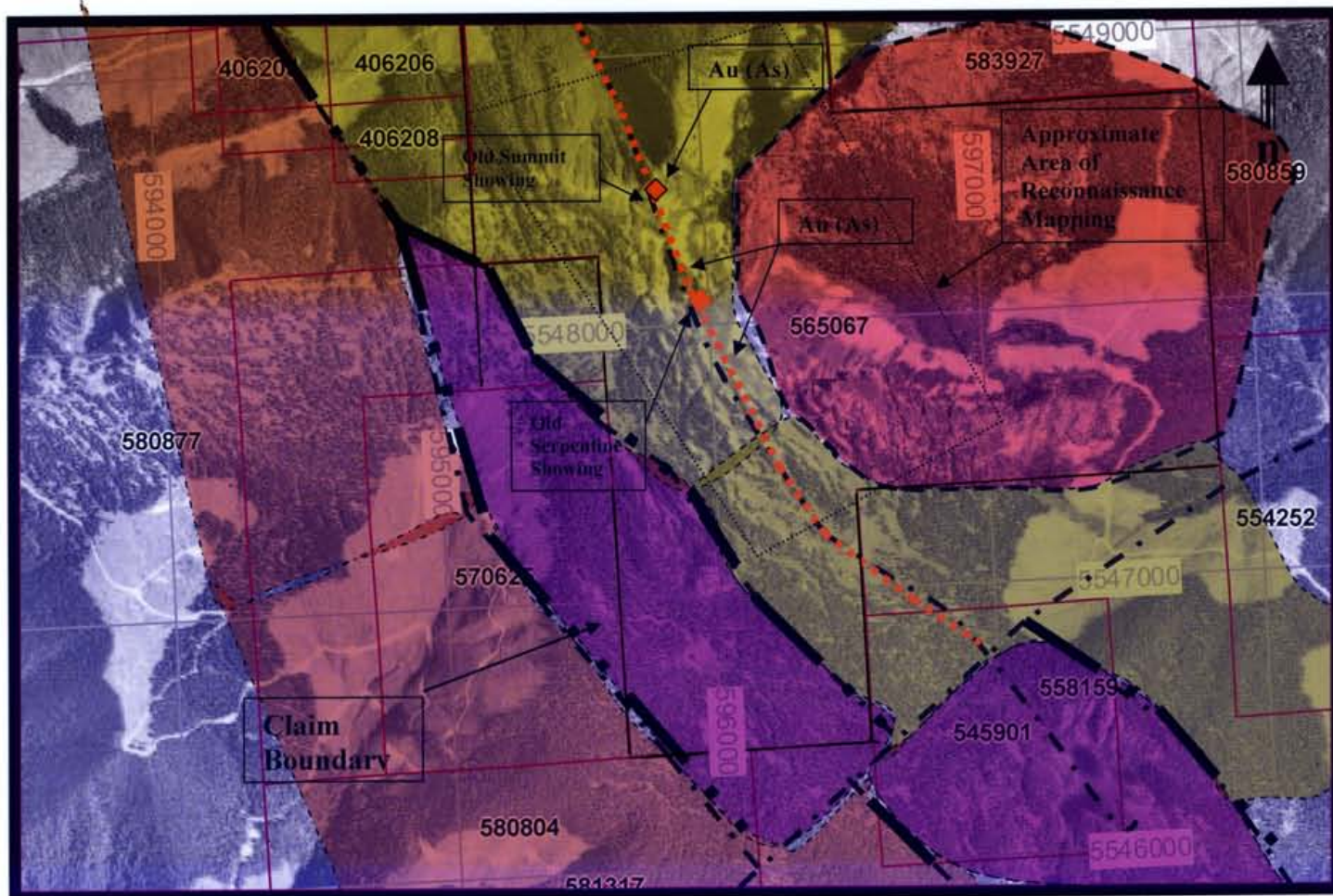
**Legend:**

- Bridge Terrane/Assemblage; phyllites & schists
- Cadwallader Terrane/Cayoosh Assemblage-Relay Mtn. Grp.  
Mainly shales, phyllites, argillites.
- Alpine Ultramafic – Ophiolitic Complex
- Amphibolite Facies – Metamorphic sediments
- Coast Range Granites – Granodioritic  
Local Stocks – quartz monzonitic

— Fault Structures & Contact Zones

Scale 1: 250,000

Figure 3.



## GENERAL GEOLOGY OF PROPERTY

### APEX MINERAL CLAIM

UTM Zone 10

5548562 N; 595849 E (Claim Centre)

Scale: 1:30,000

#### Legend:












- |   |   |  |                              |
|---|---|--|------------------------------|
|  | Quartz Monzite/Granitic                             |  | Kwoiek Creek Fault System    |
|  | Serpentine/Talcosic Lenses (Bridge River Terrane)   |  | Contact                      |
|  | Alpine Ultramafic Rocks                             |  | Cross-Cutting Fault          |
|  | Bridge River Assemblage – Bridge River Terrane      |  | Auriferous-Bearing Structure |
|  | Shales, Argillites, Phyllites & Volcanic Greenstone |  |                              |
|  | Cayoosh Assemblage/Relay Mtn. Grp.                  |  |                              |
|  | Mainly Shales, Argillites & Lesser Phyllites        |  |                              |

Figure 4.

## F. GENERAL GEOLOGY OF PROPERTY AND MINERALIZATION

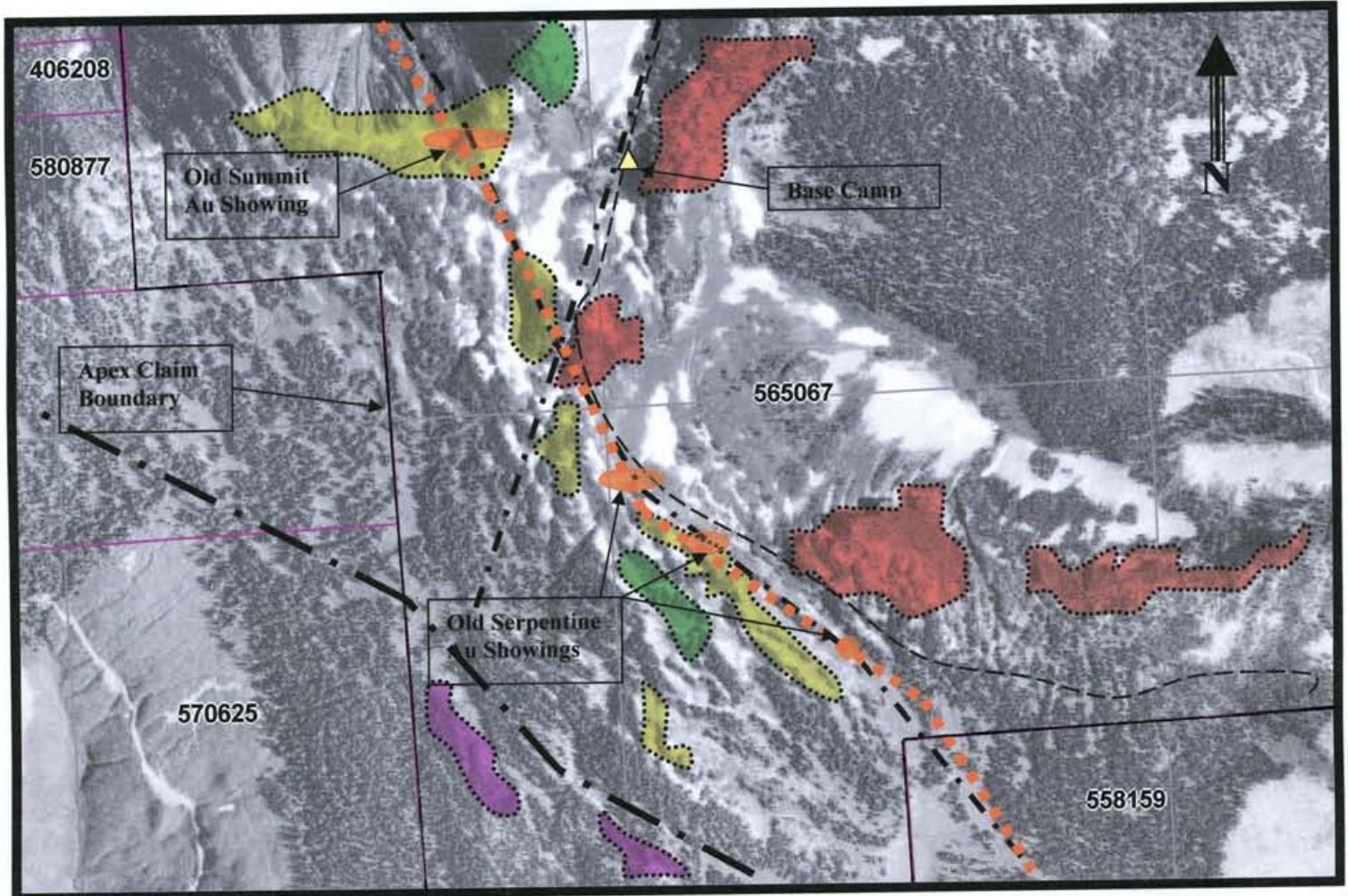
The property is underlain by essentially 4 main rock types and a prominent fault system (Figure 4 & 5.). A steeply dipping, highly foliated mica-quartz schist, grey phyllite and lesser siltstone trend northwest across the property. This unit is intercalated with volcanic greenstone/sandstone. This lower greenschist metamorphic rock unit is believed by the author to be equivalent to Cayoosh Assemblage, which gradationally overlies the Bridge River Assemblage (J.M. Journeay and J.W.H. Monger, GSC, 1994) found further to the north. These rocks are intruded by a granitic stock which grades from a quartz monzonite along the contact boundaries to a medium grained granodiorite away from the contact zone.

Thus unit in turn, is flanked along the southwest by a faulted belt of alpine ultramafic rocks of ophiolitic origin (Journeay and Monger), metamorphosed to a lenticular body of dark green, massive to talcose serpentinite (Figure 5.). The fault is referred to as the Kwoiek Creek Fault (J.W.H. Monger). It forms a structural contact or suture-like zone between the phyllites, shales and argillites mapped and prospected to the southwest which the writer believes are probably latterly equivalent to Relay Mountain Group, and on the northeast is the Cayoosh-Bridge River assemblages noted above.

The rock outcrops prospected and mapped are interpreted by the writer to be 2 separate lithological units representing 2 separate accretionary terranes: Cadwallader Terrane (Relay Mtn. Grp.) to the southwest and Bridge River Terrane (Cayoosh-Bridge assemblages) to the northeast. These tectonic mélange rocks are equivalent to the terrane rocks located and described by Journeay and Monger (GSC, 1994) to the north in the Lillooet and Bridge River regions.

The mineralization occurs between the Kwoiek Fault and the quartz monzonitic stock. A gold-arsenic-quartz bearing structure (Figure 5.) can be traced for at least 2 kilometres trending northwesterly and is open along strike. Two old mineral showings/workings about 1 km apart, occur along this structure, the Summit and Serpentine (Horwood, GSC, 1939) and were briefly examined consisting mainly of several shallow trenches/open cuts and pits. At the Serpentine showing (Plate I), sulphide mineralization is hosted in quartz veinlets and stockwork veins. The host rock(s) a siliceous-iron carbonate altered shale/schist/sandstone which, in places, is altered to listwanite, also carries finely disseminated sulphides. The sulphide assemblage includes in order of visual abundance: arsenopyrite (<0.5%->5.0%), pyrite (<0.5%-2%) pyrrhotite (0.5%-<2%) and minor chalcopyrite.

At the Summit showing, the mineralized structure is well exposed along a steep escarpment exposing a section of prominent milky white quartz veins, mineralized veinlets and altered host rock (Plate II).



**RECONNAISSANCE GEOLOGY & PROSPECTING MAP**  
**APEX MINERAL CLAIM – Tenure Number 565067**  
 UTM Zone 10 – 5548562N; 595849E (Claim Centre)

**Legend:**

- Coarse to Medium Grain  
Quartz Monzonite to Quartz Diorite
- Grey Mica Schist, Phyllite and  
Fine grain Siltstone
- Greestone: Volcanic sandstone
- Massive Serpentine

- Kwoiek Creek Fault Contact
- Cross-cutting Faults
- Contact
- Rock Outcrop
- Trace of Gold-Bearing  
Structure

Foliation (Steeply Dipping)

Scale: 1:15,000 (Approx.)

Figure 5.



**Plate I: Serpentine**  
**Showing**

Top: Shows south-easterly trend of the anomalous gold-bearing structure traceable for over 2km along strike. (Photo looking southeasterly along height of land.)

Bottom: One of the old trenches, 7 grab samples collect from 2 old trenches range between 750 to 1,400 ppb gold.





**Plate II: Summit Showing exposed mineralized quartz structure 20 metres wide with iron oxidized sheared schists hosting sub-parallel quartz structures. Schists are associated with iron carbonate alteration and finely disseminated arsenopyrite, pyrite and minor chalcopyrite anomalous in gold (up to 4.7 gm/t Au).**



The sulphide assemblage and alteration examined on the Summit is very similar as noted at the Serpentine. Based on the exposure along the escarpment and open cuts observed from the 2 showings, the width of the mineralized-altered structure would appear to vary along strike, ranging in width from about 3 to 20 metres. Previous sampling carried out by Westerra Resources Ltd. (Cochrane Consultants, 1988 – private report), the Summit and Serpentine showings range in gold and associated arsenic values between 1.98 gm/t - 4.68 gm/t Au; 1.54% - 2.35% As and 1.29 gm/t - 3.61 gm/t Au; 0.84% - 2.25% As respectively.

Genesis of the gold mineralization found on the Apex claim is believed to be in part related to the Kwoiek Creek Fault - accretionary plate boundary briefly discussed above, which would have produced a zone of tensional and dilatent structures that, in turn, would have provided channels ways for migrating auriferous-bearing solutions. Additionally, subsequent granitic intrusions such as the localized stock mapped on the claim may have aided in remobilizing and re-concentrating mineralized solutions along structures such as that found along the Summit and Serpentine showings.

## **G. FIELD PROCEDURES**

A 2-person camp was established along a small lake situated near the centre of the claim at an elevation of 1830 m, accessible only by ATV along a fire guard cat-trail. From here daily traverses were carried out by a geologist (the author) and seasoned prospector. Reconnaissance mapping and prospecting were conducted a scale of 1:15,000 utilizing a UTM grid orthophoto map. A hand-held Garmin GPS (with Map Source) was used to fix a position on rock outcrops, briefly indentified along with any mineralization encountered and plotted on the map.

The main area of prospecting and mapping covered approximately 1 km east-west by 2 km north-south. This area also covers the old Summit and Serpentine gold-arsenic showings, along an area where a mineralized, altered quartz structure was traced and prospected. The old workings were located, examined and plotted. Some prospecting was carried out along the local small streams with reconnaissance mapping surveys conducted between the granitic stock to the east the faulted serpentine to the west (Figure 5.)

Mineralized samples from the old trenches and open-cuts were collected for future lab analysis.

## H. SUMMARY AND CONCLUSION

The Apex claim is located some 27 kilometres due north-northwest and about 40 kilometres by road from the community of Boston Bar, BC. The claim encompasses 725.66 hectare area along sub-alpine region of the Coast Range mountains.

Regionally, the claim covers part of geological favourable belt associated with a major structural break referred to as the Kwoiek Creek Fault, which is known to host structurally controlled gold-bearing mineralization. The belt trends northwesterly for some 30 kilometres between the Nahatlatch River and Kwoiek Creek watershed. The fault system represents an accretionary zone between 2 different lithological tectonic mélanges, the Bridge River and Cadwallader terranes. A band of alpine ultramafic rock of ophiolitic origin forms the accretionary contact between the 2 lithological units. This ultramafic fault-contact has produced a zone weakness providing tensional and dilation channel ways for the introduction of auriferous-bearing solutions.

The claim is underlain by a northwest trending band of serpentinite that marks the Kwoiek Creek fault. Rocks mapped and prospected to the northeast of the fault consist of phyllite, quartz-mica schist and volcanic schist believed to be part of the Upper Jurassic Bridge River-Cayoosh Assemblage. To the southwest is a sequence of mainly argillite, grey phyllite and lesser shale believed to be latterly equivalent to the Mid-Jurassic Cadwallader Assemblage-Relay Mountain Group., which is found to the northwest in the Lillooet-Bridge River region. A quartz monzonitic to granodioritic stock occurs along the eastern portion of the claim intruding the phyllite/schists. Along the southwestern boundary of the claim is a faulted body of massive to talcose serpentinite associated with the Kwoiek Creek fault system.

A gold-arsenic bearing, mineralized quartz structure trending northwest occurs immediately to west of the quartz monzonite and forms part of a contact zone. The old Summit and Serpentine showings which are about a kilometre apart occur along this mineralized quartz structure. The showings consist of several open-cuts and pits. Previous reported samples collected from these old workings returned values ranging: Summit 1.98 gm/t – 4.68 gm/t Au with 1.53 % - 2.53 % As and Serpentine 1.29 gm/t – 3.61 gm/t Au with 0.84 % - 2.25 % As. The mineralized structure is hosted in altered schists which includes mineralized quartz stockworks, massive quartz veins and sulphide-bearing silicified schists. The sulphide assemblage is composed in order of decreasing abundance: arsenopyrite, pyrite, pyrrhotite and chalcopyrite.

The mineralized structure can be traced for at least 2 kilometres trending northwesterly and is open along strike. It is hosted along tensional and dilation zones associated with the Kwoiek Creek Fault. The fault is believed to have produced channel ways for ascending hydrothermal fluids and the granitic stock may have aided in remobilizing and re-concentrating gold-bearing solutions. The structure and altered host rock form a key exploration gold target a long strike, with arsenic as an excellent pathfinder element.

**I. STATEMENT OF EXPLORATION – COST BREAKDOWN**

Reconnaissance mapping and prospecting surveys were conducted on the Apex claim for 4 days between July 5<sup>th</sup> to July 8<sup>th</sup>, 2008. Expenses incurred are as follows:

Field Crew:

Geologist, 4 days @ \$300 per day	\$ 1,200.00
Prospector, 4 days @ \$200 per day	800.00

Camp Expenses:

Food & supplies, 4 days @ \$50 per day per man	400.00
--	--------

Transportation:

4-wheel drive truck, \$80 per day	320.00
ATV, \$50 per day	200.00

Total Expenses Incurred: **\$ 2,920.00**

Respectfully,



D. G. Cardinal, P. Geo.

## J. REFERENCES

Cardinal, D.G., November 1994, Assessment Report on the Talc Project – Pilot Scale Tests and Diamond Drill Programme, Talc Group. Assessment Report No. 23691.

Chamberlain, J.A., 1973, Geological Report, H Claims, Nahatlatch Area, BC, Department of Mines and Petroleum Assessment Report No. 4985.

Duffel, S. and McTaggart, K.C., 1952, Ashcroft Map Area, British Columbia, Geological Survey of Canada, Memoir 262.

Horwood, H.C., 1936, Preliminary Report on the Nahatlatch Region, GSC Paper 36-7.

Journeay, J.M. and Monger, J.W.H., 1994, Terranes Of The Southern Coast And Intermontane Belts, British Columbia, GSC, Scale 1:500,000.

Monger, J.W.H., 1989, Geology of Hope and Ashcroft Map Area, British Columbia, GSC, Maps 41-1989 and 42-1989.

Taylor, K.J. (Hudson Bay Exploration & Development Co. Ltd.), March 1985, Diamond Drill Report for the Natch 1-4 Claims, Boston Bar Area, BC, Geological Branch Assessment Report No. 13634.

## K. PROFESSIONAL CERTIFICATE

I, Daniel G. Cardinal, of the District of Kent, British Columbia, do hereby certify that:

- I am a Professional Geoscientist and reside at 1883 Agassiz Ave., Agassiz, BC V0M 1A2.
- I am a graduate of the University of Alberta (1978) and received a 2-yr. Diploma certificate from the Northern Alberta Institute of Technology (NAIT) 1972.
- I am member in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo.), membership 18455; and a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (P.Geol.), membership No. M29405.
- I have practiced my profession continuously for the past 30 years.
- I am the registered owner of the Apex claim – Tenure Number 565067.
- and that, I conducted the field surveys described in this report.

Signed in Agassiz, BC this 18<sup>th</sup> day of December, 2008.


Daniel G. Cardinal, P.GEO.