



Ministry of Energy and Mines  
BC Geological Survey

Assessment Report  
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geology & Prospecting Assessment Report

TOTAL COST: \$ 3,900.00

AUTHOR(S): Daniel G. Cardinal

SIGNATURE(S):

*Dan Cardinal*

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):

YEAR OF WORK:

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 4339406/2011/FEB.25

PROPERTY NAME: Master Ace Claim Group

CLAIM NAME(S) (on which the work was done): Master Ace 1

COMMODITIES SOUGHT: Gold, Copper & Molybdenite

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: New Westminster

NTS/BCGS: 092H/06; 092H.35.1.2

LATITUDE: 49 ° 19 '51 " LONGITUDE: 121 ° 07 '06 " (at centre of work)

OWNER(S):

1) Dan Cardinal (50%)

2) Ron Olynyk (50%)

MAILING ADDRESS:

1883 Agassiz Avenue

Agassiz, BC V0M 1A3

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 property is underlain by northwest trending, steeply dipping Jurassic Ladner Group sedimentary rocks consisting of shale, siltstone, argillite and greywacke. The rocks are intruded by weakly kaolinitic prophyry quartz monzonite stock hosting quartz veins carrying disseminated molybdenite and arsenopyrite. Dimension of the stock is approximately 1500m by 500m and is oval in shape.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 14527, 14544, 14751, 16342 & 25260

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	1.5 km by 1.5km at 1:5,000 (approx.)	Master Ace 1	\$ 3,000.00
Photo interpretation			
<b>GEOPHYSICAL (line-kilometres)</b>			
<b>Ground</b>			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
<b>Airborne</b>			
<b>GEOCHEMICAL (number of samples analysed for...)</b>			
Soil			
Silt			
Rock			
Other			
<b>DRILLING (total metres; number of holes, size)</b>			
Core			
Non-core			
<b>RELATED TECHNICAL</b>			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
<b>PROSPECTING (scale, area)</b>			
	1:5000 area: 1.5km by 1.5km		\$ 900.00
<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>\$ 3,900.00</b>

Assessment Report Event Number 4839406

**GEOLOGICAL RECONNAISSANCE ASSESSMENT REPORT**

[Field Surveys Conducted on Master Ace 1 (721982) Between June 15-17, 2010]

On The

**BC Geological Survey  
Assessment Report  
32251**

**MASTER ACE CLAIM GROUP**

**Tenure Numbers: 58006, 710602, 710682, & 721982**

Located In The

**New Westminster Mining Division  
NTS: 092/06; BCGS: 092H.35.1.2**

**Co-ordinates: (claim group center)  
49 19' 0"N; 121 07" 57"W  
UTM Zone 10 NAD 83  
635700E; 5464380N**

Report Prepared By:

**D.G. (Dan) Cardinal, BSc., P.Geo., F.G.A.C.  
1883 Agassiz Avenue  
Agassiz, British Columbia V0M 1A3**

May 25, 2011

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## **A. INTRODUCTION:**

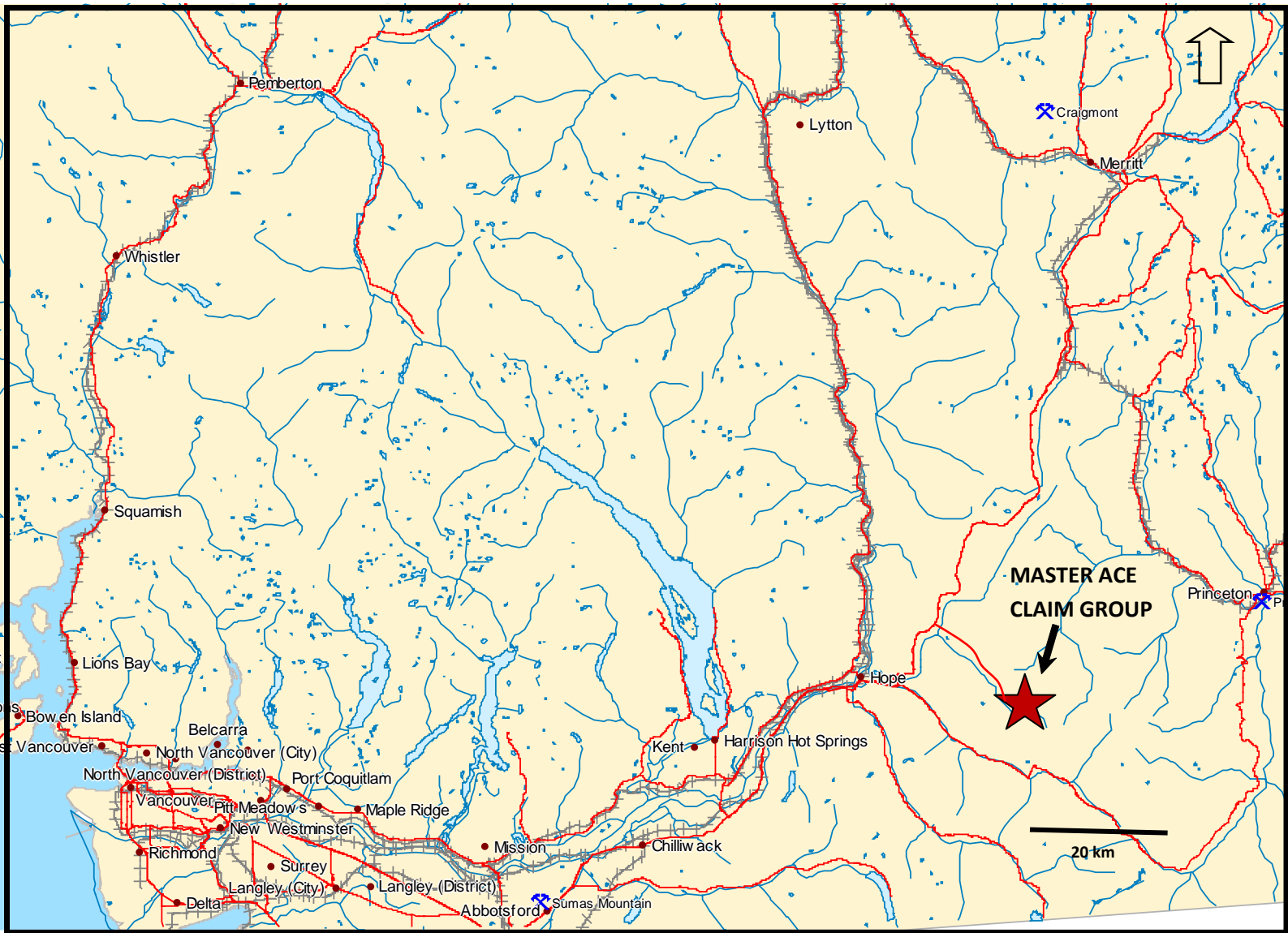
The Master Ace claim group comprises 4 contiguous mineral claims encompassing an area of 1,600.41 hectares. The claims fall within the mining jurisdiction of the New Westminster Mining Division on NTS map sheet 092/06.

The claim group (also property) is easily accessible some 45 minute drive from the town of Hope via the Highway No. 5, driving easterly and unto the Sowaqua Creek logging access road. The road cuts through the claims adjacent to the Rice Creek molybdenite zone.

A total a 3 days, between June 15-17, 2010, of geological and prospecting reconnaissance surveys were carried out in the Rice Creek area covered by mineral tenure 721982 (Master Ace 1). This work was conducted by an experience geologist assisted by a seasoned prospector commuting from Hope on a daily basis.

The property covers a northwest trending tectonic terrane boundary, represented by a collision-accretion structure referred to as the Coquihalla Serpentine Belt that sutures 2 distinct terrane rock types. The Mississippian-Jurassic age Hozameen Group comprised mostly of cherty sediments and volcanic rocks, which form part of the Bridge Rive Complex, occur to the northwest of the structure and, the Lower-Upper Jurassic Ladner and Dewdney groups comprised mainly of argillites and shales that make up part of the Cadwallader-Methow terrane occur to the southeast.

Mineralization is hosted in 2 different rock types. A creamy coloured, weakly kaolinitic altered, quartz monzonite hosts quartz veins carrying disseminated flakes of molybdenite. The quartz monzonite stock intrudes the Ladner Group sedimentary rocks. Structurally controlled gold and copper mineralization occurs along the footwall of talcose-serpentine rocks in fault-contact with cherty argillites of the Hozameen Group.



**LOCATION MAP**

Figure 1.

**Master Ace Mineral Claim Group**  
 Tenure Nos. 584006, 710602, 710682 & 721982

NTS Mapsheet: 92H/06 (092H.025 & 092H.035)  
 Lat. 49 17.6'N; Long. 121 8.2'W

UTM: Zone 10 5461807N – 635422E  
 Southwestern British Columbia

**B. LOCATION AND ACCESS:**

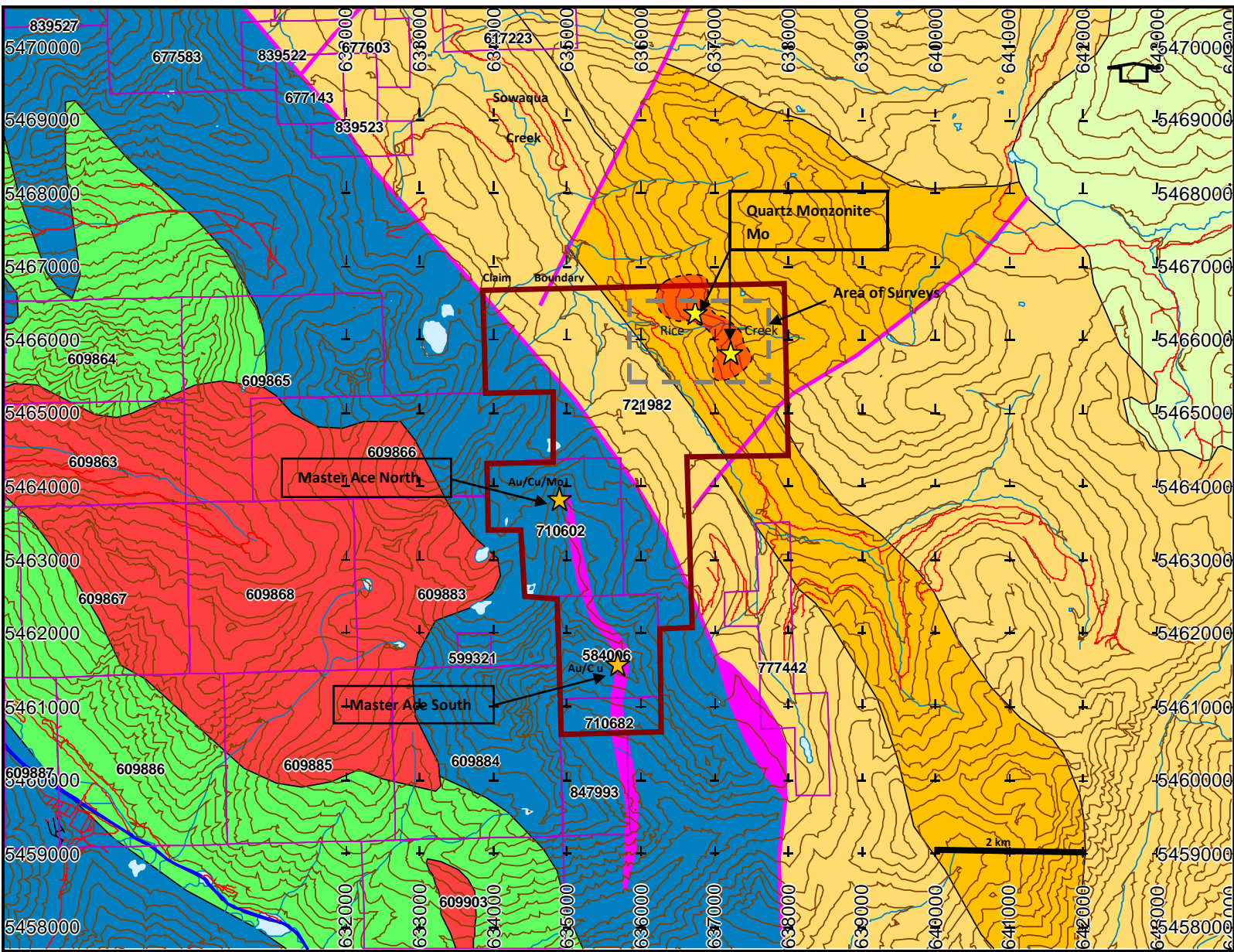
The claim group is located 20 km due east south-east of the town of Hope, in the northern Cascade Range of south western British Columbia (Figure 1). The property is accessible from Hope via the Coquihalla Highway (Hwy No. 5) heading northerly for some 21 km and then turnoff onto the Sowaqua Creek valley logging road. The logging road enters the claims about 18 km from the highway. At this point the logging road crosses over Rice Creek and cuts across the western portion of the Rice Creek molybdenite zone (photos 1a & 2a). Although the Master Ace (Master Ace North & South zones) portion of the claims is only some 4 km west of Rice Creek logging road, the main zone is not readily accessible from the road as it occurs along the mountainous region of the Cascades, as can be viewed by the accompanying photos (photos 1-4). There are a series of old prospecting trails that lead to the old Master Ace showings but require 3-4 hours of arduous hiking. Normally a helicopter is utilized from Hope some 15 minute ferry time to the property, especially if accessing the Master Ace zone.

**C. TENURE INFORMATION:**

The Master Ace claim group which consists of 4 contiguous mineral claims (Figure 2), is equally co-owned by Ronald W. Olynyk (50%) and Daniel G. Cardinal (50%). The claims can be found on mineral tenure claim NTS map sheet: 092H/06 with UTM co-ordinates: northing 541807 and easting 635422, within the New Westminster Mining Division. Pertinent tenure data is as follows:

<b>Tenure Number</b>	<b>Claim Name</b>	<b>Issue Date</b>	<b>Good To Date</b>	<b>Area(ha)</b>
584006	MA Zone	2008/may/11	2011/oct/15	189.61
710602	Master Ace	2010/mar/02	2011/oct/15	294.85
710682	Master Ace	2010/mar/02	2011/oct/15	63.21
721982	Master Ace 1	2010/mar/11	2011/oct/15	1052.74
			Total hectares:	1,600.41

(To review the above mineral titles log on to the BC Ministry of Energy, Mines and Petroleum Resources website @ [www.mtonline.gov.bc.ca](http://www.mtonline.gov.bc.ca))



**MINERAL TENURE MAP With REGIONAL GEOLOGY**

- Post Accretionary**  Early Tertiary Granodiorite.
- Overlap**  Lower Cretaceous, Jackass Mountain Group: shales, siltstone, sandstone, conglomerate.
- Overlap**  Late Oligocene-Early Miocene, Coquihalla Formation: calc-alkaline volcanic rocks.
- Terranes:**
- Cadwallader/Methow**  Lower-Middle Jurassic, Ladner and Dewdney groups: shale, siltstone, greywacke, argillite.
- Bridge River**  Permian-Jurassic, Hozameen Complex: chert, cherty argillite, graphitic argillite.
- Bridge River**  Permian-Jurassic Hozameen Complex: basaltic volcanic rocks.
- Serpentinized Ultramafic lenses and fault/contact – (Coquihalla Serpentine Belt).

Figure 2.



#### **D. BRIEF HISTORY:**

Between mid 1920s to the mid 1930s, a small group of prospectors from the historical community of Coalmont in the Tulameen River valley near Princeton, conducted seasonal prospecting in the headwaters of the Sowaqua Creek watershed. During this period molybdenite mineralization was discovered along a creek now referred to as Rice Creek, after prospector Ernie Rice of Coalmont. Mr. Rice also discovered gold-bearing quartz veins along a serpentinite structure and systematically prospected the structure over several seasons, staking the main area of mineralization as the 'Master Ace' claims.

In 1932, Mr. P.B. Freeland, Mines Inspector of the BC Ministry of Mines examined the main workings and reported as follows: ..... *"Along the southwest granite veins, another quartz vein, varying from 2 to 6 feet in width containing pyrite, arsenopyrite, and chalcopyrite is traceable for several miles. Many samples were taken from the outcrop of these veins over 5 foot widths and the results varied from a trace in gold and silver to: Gold, 0.26 oz. per ton; silver, 5.52 oz. per ton. Picked samples assayed as high as \$14.00 in gold per ton."*..... This vein system describes what this report now refers to as the Master Ace north zone.

However, over time, prospecting in this area gradually ceased and the Sowaqua Creek watershed remained dormant of any mineral exploration for almost a half century. During the 1970s several mining companies attempted to locate the old Master Ace showings but met with little success. Based on a government mineral inventory map, in 1984, the author also tried locating the workings without any success. However, following a meeting with one of the remaining members of the Rice family, it was learnt that the Master Ace showing was plotted incorrectly on the mineral inventory map by some 2-3 km. In the late season of 1984 the showings were rediscovered and subsequently staked.

In 1986-87, a junior resource company optioned the claims and conducted reconnaissance geological and sampling surveys over the area referred to in this report as the Master Ace south zone. The exploration included some limited drilling but due to drilling difficulties some of the drill holes did not reach their intended targets. No exploration work was ever carried out on the Master Ace north zone. The claims were eventually allowed to lapse.

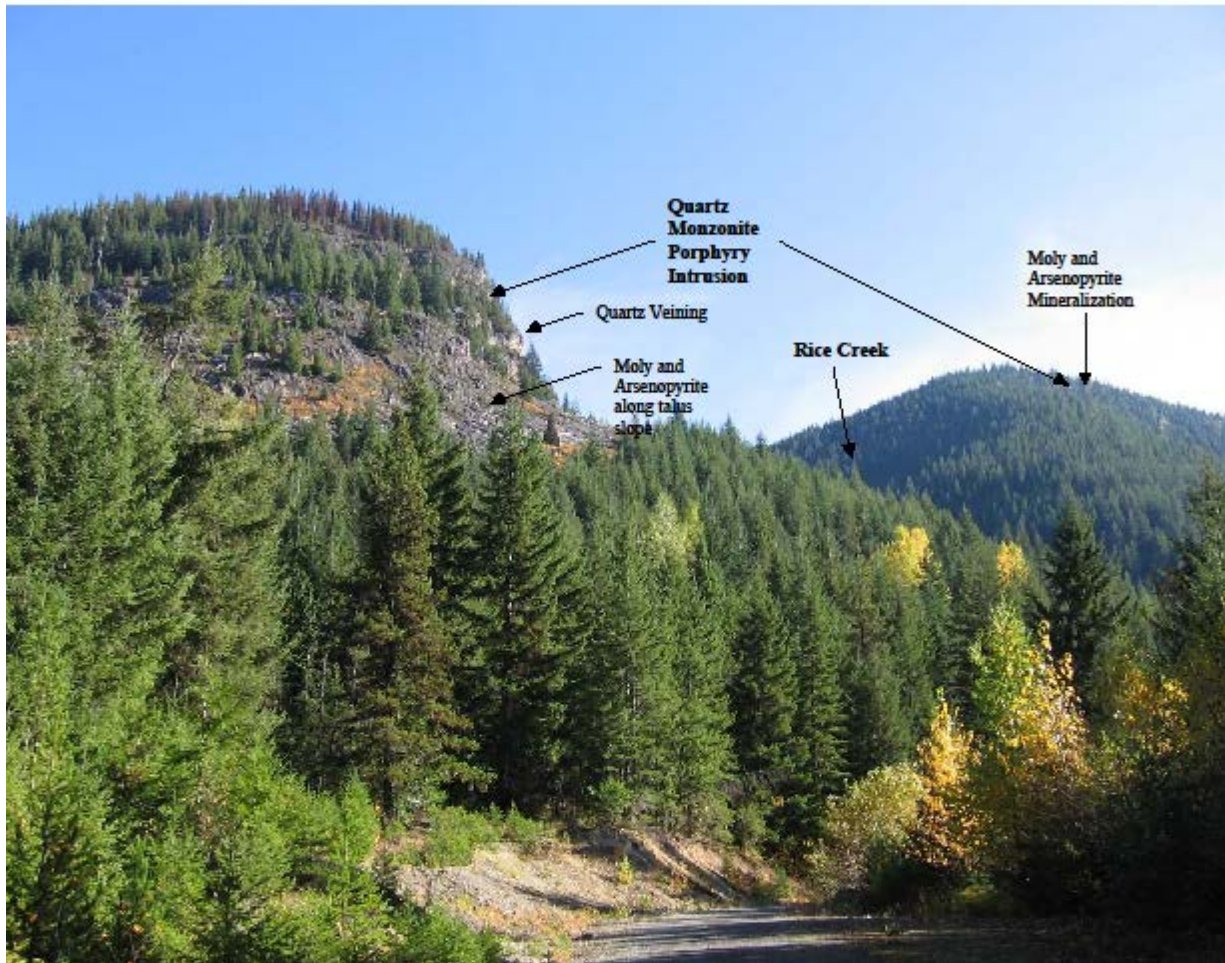
Since the advent of mineral staking-online, the area has continuously been staked by various interested parties but no effort to prospect or explore the gold potential of old the old Master Ace zones has ever been conducted, at least not since the latter part of 1980s. Only recently did the claims covering the Master Ace mineralization come open and D. Cardinal and R. Olynyk staked the area including the Rice Creek molybdenite showing and are now the present owners.

## **E. REGIONAL AND LOCAL GEOLOGY:**

The regional tectonostratigraphic framework along which the Master Ace claim group lies is comprised of 2 main distinct Cordilleran accreted terranes. These terranes make up part of the extreme south western extension of the Intermontane Belt in south western British Columbia. Part of the property straddles the southern eastern extension of the Hozameen Fault which is spatially related to several historical gold occurrences including 2 past producing gold mines (e.g. Carolin & Pipestem). This mineral and former mining camp is known as the the Coquihalla Gold Belt. The fault represents a terrane collision-accretion boundary between the Permian age Bridge River Complex on the southwest and the Jurassic Cadwallader volcanic arc terrane to the northeast. Post accretionary, Tertiary age Mount Outram pluton intrudes the western portion of the claim boundary (see Figure 2).

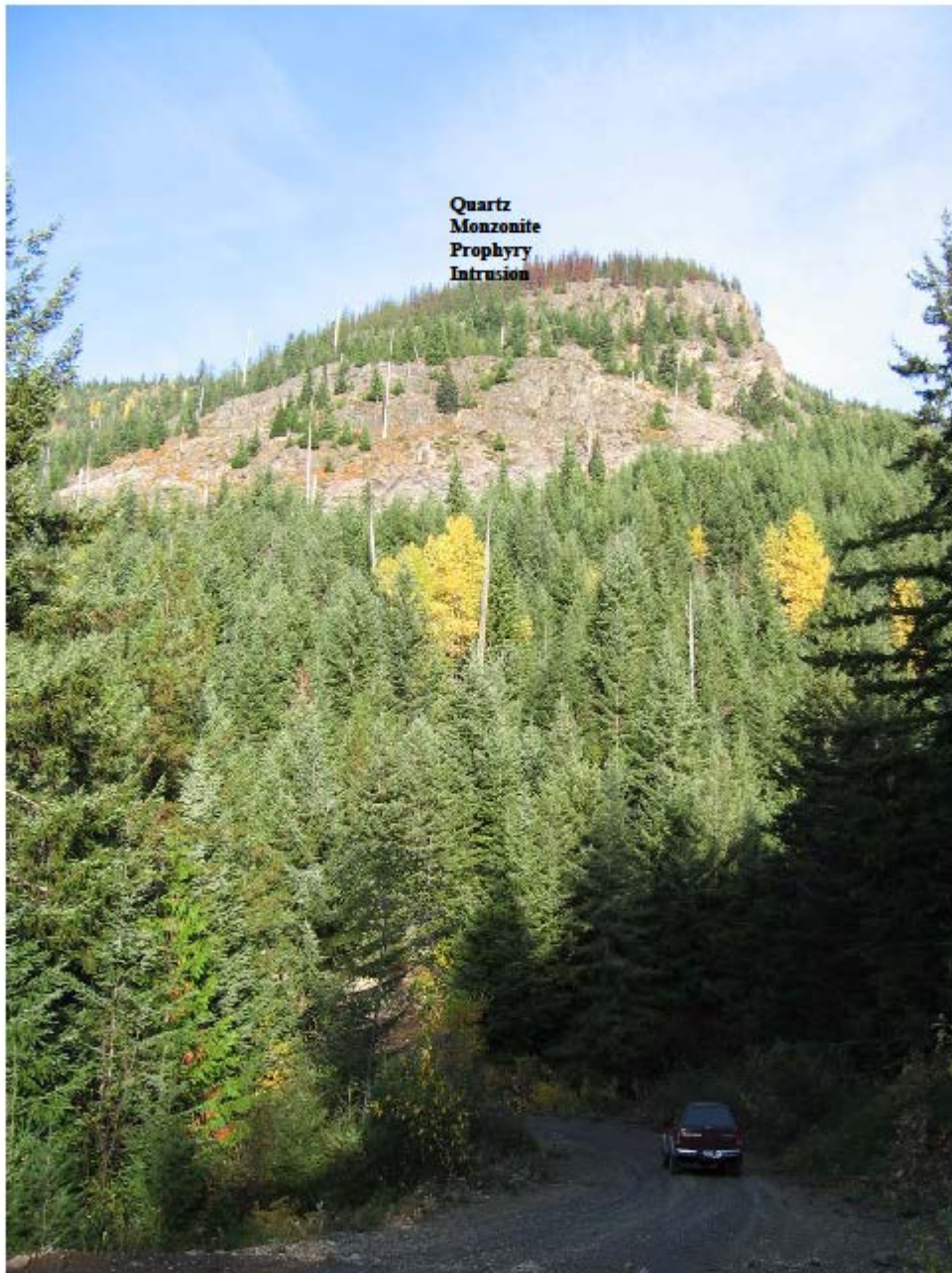
The Hozameen Complex, which makes up part of the Bridge River terrane, underlies the western portion of the claim group. It is comprised of thick sequence of ocean derived sediments, mainly chert layers, highly foliated graphitic argillites, graphitic schists and lesser cherty greenstone volcanics. Hosted within this metamorphic assemblage is a narrow (50-100m wide) lenticular structure or belt comprised of semi-concordant, northwest trending serpentinized ultramafic rocks that is traceable for some 8 kilometres. The serpentine structure dips 60-70 degrees westerly and appears to either pinch out or is faulted off at both ends. The Master Ace gold-bearing zone –Master Ace North & South zones (Figure 2) occurs along the northern-half section of this of this serpentine body. Although this ultramafic body is highly metamorphosed, it appears to resemble more of a sill-like intrusion rather than ocean floor derived ophiolite material, as sections along strike contain preserved crystalline pyroxene-periodotite sills.

The eastern portion of the claim group is underlain by Lower to Middle Jurassic Ladner-Dewdney Group sediments. The sedimentary rocks are interpreted as being laterally equivalent and linked to the Cadwallader arc assemblage found to the northwest in the Bridge River district. The Ladner assemblage has also been referred to as the Methow terrane. The sediments here are weakly metamorphosed to lower green schist facies and are essentially composed of northwest trending, steeply dipping slate, siltstone and argillite. Intruding into this sedimentary package is a Cenozoic age (?), localized body of weak to mildly kaolinitic altered, molybdenite-arsenopyrite-bearing quartz monzonite. The quartz monzonitic intrusion is partly exposed by the westerly flowing Rice Creek, which empties into Sowaqua Creek. The Rice Creek intrusion is traceable for at least 1000 metres along north-south strike and is about 500 metres wide (see photos 1&2a).



**Master Ace Claim Group - Rice Creek Mo Zone:** Photo showing Qtz. Monzonite Porphyry hosting felsic dykes and numerous quartz veins with some carrying fine to coarse flakes of molybdenite and disseminated arsenopyrite. The monzonite intrudes Jurassic Ladner slates. (Access to the property is from Hope, approximately 40 minute drive on good access roads).

Photo 1.



**Rice Creek Mo Zone:** Looking east toward the quartz monzonite intrusion. Rice Creek valley in foreground.

Photo 2a.

## F. MINERALIZATION: RICE CREEK AND MASTER ACE ZONES:

Within the claim group are 2 separate zones of mineralization identified as the **Rice Creek zone** and the **Master Ace zone**. The Rice Creek zone contains 2 separate areas of mineralization: an area of molybdenite-arsenopyrite mineralization and an anomalous gold-arsenic area both which are hosted within the Ladner sediments (Figures 2&3). Master Ace zone hosts at least 2 separate but structurally related known zones (i) a polymetallic-gold-bearing vein system referred to as the North Zone and a (ii) gold-silver-copper anomalous zone referred to as the South Zone.

The **Rice Creek** zone is intruded by a quartz monzonitic intrusive which is cut by a series of quartz veins and a number fine grain felsic dykes. Most veins invariably carry a certain amount of arsenopyrite mineralization while the molybdenite mineralization tends to occur sporadically as narrow seams or as coarse rosettes (Photo 3a). The felsic dykes generally carry disseminated (<2%) pyrite. At least 2 old trenches were noted exposing a mineralized quartz vein. A historical sample collected from one of the trenches assayed 0.917% MoS<sub>2</sub> and 0.02% Cu (Figure 3). Approximately 1000 metres to the south-west along Sowaqua Creek, a highly sheared and oxidized escarpment was examined in 1984 by the author. The area exposes well altered argillites and slates containing abundant iron carbonate associated with minor greenish coloured mineral believed to be mariposite-fuschite alteration (Figure 2). A sample collected from this site contained 1040 ppb gold and 1000 ppm arsenic. Further 1000 metres up stream to the southeast, also exposed along the creek bed, is a felsic (aplitic) dyke cutting the sediments. A sample collected from this dyke was also anomalous in gold and arsenic containing 220 ppb and 1000 ppm respectively (Figure 3).

These anomalous gold-arsenic-bearing zones occur along strike and appear to be structurally related and hosted in second-lower order fault systems, spacially related to the first order Hozameen Fault-accretionary structure which transects this area (Figure 3). The gold-arsenic anomalous felsic dyke found in the creek and the dykes noted cutting the quartz monzonite are probably of one and of the same dyke system. The molybdenite-arsenopyrite-bearing mineralization hosted in the quartz monzonite and the structurally controlled, sedimentary-hosted gold-arsenic-bearing anomalous zones along the creek are believed to be related to same mineral event.

The **Master Ace** zone is not related to the Rice Creek zone although both mineral events probably occurred sometime during syn-post accretionary event and related to (peak)

metamorphism and to post accretionary intrusions. The Master Ace gold zone is directly related to the serpentinized ultramafic structure and to the Mount Outram granodiorite pluton noted above. At least 2 separate but structurally related gold zones are hosted along the serpentine structure, identified as the: 'North Zone' and 'South Zone' (Figure 2.) These zones were discovered in the 1920s by Mr. Rice and his prospecting associates. The North zone occurs at the north-eastern end of the structure. Here, a series of paralleling mineralized quartz veins can be found hosted within the granodiorite near the contact with the serpentine. In 1984, the author obtained samples from the polymetallic quartz veins carrying coarse molybdenite, chalcopyrite and pyrite mineralization. Some of the more encouraging assays returned: 3.6 gm/t Au, 11.3 gm/t Ag, 0.29% Cu and 0.157% MoS<sub>2</sub>. In a report by Mr. Freeland, BC Inspector of Mines, noted above, this area also contains a number of gold-bearing quartz veins associated with the serpentine structure. Mr. Freeland reports (1932) up to 8.9 gm/t Au and 167.8 gm/t Ag including "picked" samples containing over 35gm/t Au, based on "\$14 gold per ton", were obtained from quartz vein systems.

The South zone occurs towards the southern end of the claim (Figure 2) along strike with the North zone. The best exposure of the South zone outcrops along a narrow ridge at an elevation of around 2000 metres. During the reconnaissance exploration surveys in 1986, some of the old (1930s) trenches were re-opened and sampled. A trench at the top of the ridge exposes intensely sheared, talcose schist, quartz vein-malachite stained material. A chip sample obtained across 4.6 metres contained historical values of: 4.1 gm/t Au and 15.8 gm/t Ag. Other old pits were noted at lower elevations, none appear to have encountered bed rock. Several mineralized grab samples obtained from some of these pits ranged as high as 3.2 gm/t Au, 22.2 gm/t Ag and 1.3% Cu.

### **G. RICE CREEK ZONE: Reconnaissance Mapping and Prospecting:**

An area extending approximately 1.5km east-west by 1.5km north-south was reconnaissance mapped and prospected. The UTM co-ordinates (NAD 83) for the center of mapping area are: 636500E and 546600N (Figure 3). Surveys were conducted on the northeast quadrant of mineral tenure 721982 with traverses conducted along the north and south sides of Rice Creek as along the creek bed. For mapping control, a hand held GPS unit was utilized. All outcrops encountered were plotted onto field map (approx. 1:5000 scale) downloaded from MTO-Map Place.

Photos 1 and 2 depict the approximate extent of the area surveyed. The mapping and prospecting target is a molybdenite-bearing quartz monzonite stock intruding steeply dipping, northwest striking shales and siltstones. These rock units are usually silicified and skarnified at the contact with the intrusive. On the north side of the creek, quartz monzonite talus was noted carrying fairly coarse grain rosettes of molybdenite. Some of the mineralized talus was traced back to a molybdenite-bearing quartz veins encountered at higher elevations hosted in quartz monzonite (photos 3 & 4). Just to the east, further prospecting and mapping located an old trench with quartz veins carrying disseminated molybdenite and arsenopyrite. Historical sampling from this trench returned 0.917% MoS<sub>2</sub>. Approximately 400 m further to the east the monzonitic intrusive comes in abrupt contact with sedimentary rocks.

Prospecting conducted along the ridge south of the creek traced the southern extension of the quartz monzonite. At higher elevations, disseminated arsenopyrite and molybdenite mineralization was noted hosted in the monzonite. Further to the east and south only sedimentary rocks were encountered (Figure 3). A mapping traverse was also conducted east up Rice Creek. Sections of the quartz monzonite are exposed with some quartz veining carrying disseminated molybdenite and arsenopyrite mineralization. Based on the limited reconnaissance mapping, the quartz monzonite stock appears to be oval in shape and intrudes the sedimentary rocks and has a approximate dimensions of 1500 m north-south by 500 m east-west.

## **H. CONCLUSION:**

A porphyritic quartz monzonite stock intrudes the Jurassic age Ladner Group sedimentary rocks hosting molybdenite-arsenopyrite-bearing quartz veins.

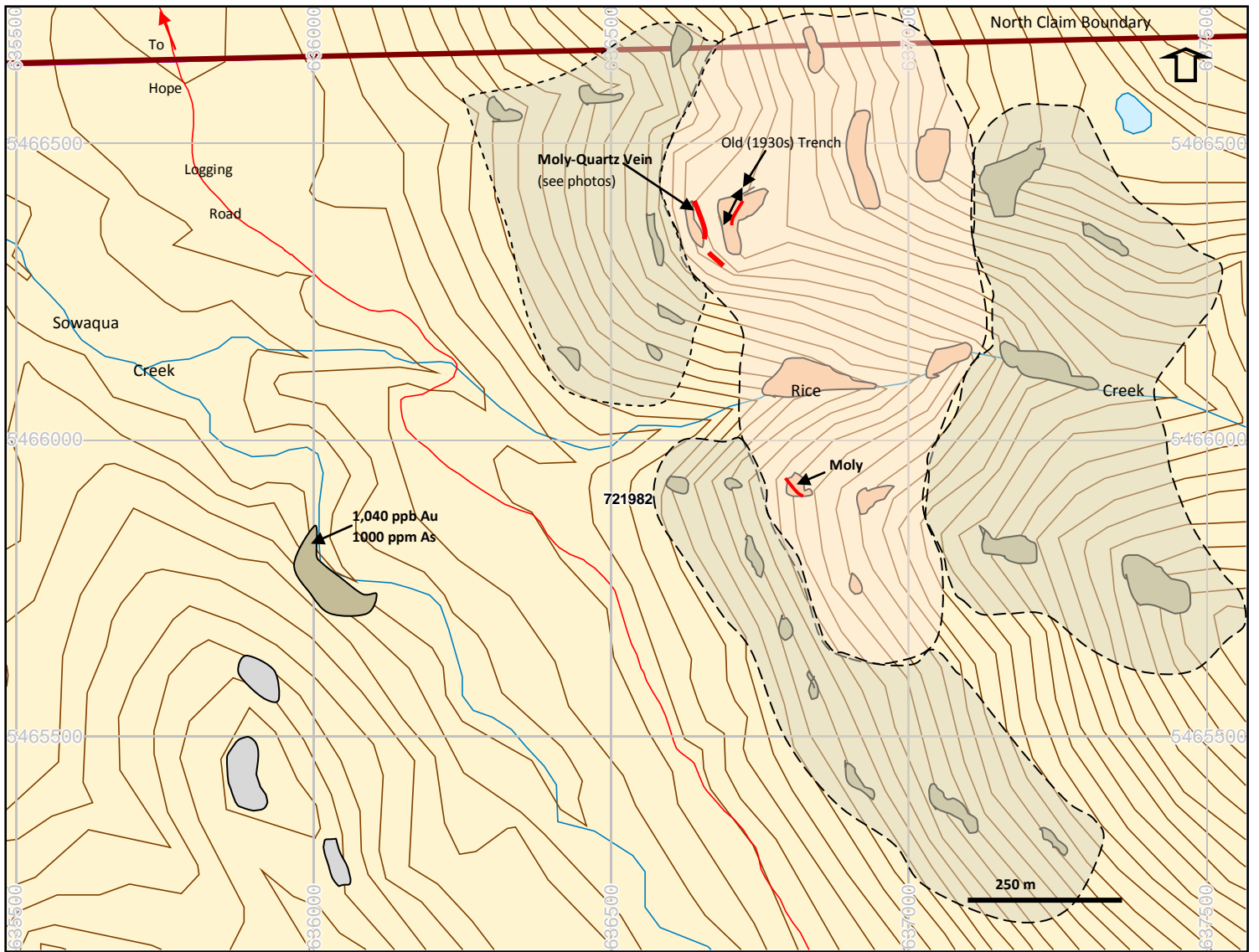
This post accretionary stock of probable Tertiary age, appears to be spatially related to a major first order fault system that makes up the collision-accretionary boundary represented by the Coquihalla Serpentine Belt. This belt forms the suture zone between the Bridge River terrane, Hozameen sediments to the southwest and Cadwallader-Methow terrane, Ladner sediments to the northeast.

Along part of Sowaqua Creek is an exposed section of Ladner sediments that are partly altered, a historical sample collected from this site contained elevated gold values of 1,040 ppb Au. The altered sediments and anomalous gold appear to be structurally related and may represent a second or lower order fault system spatially related to the accretionary structure positioned about 1 km to the west (Figures 2 & 3).

The molybdenite and anomalous gold-bearing, sedimentary-hosted orogenic mineralization found in the Rice Creek area, may also in part, be both spatial and temporal related to one mineral secular event developed during and or after the Lower Jurassic-Mid Cretaceous tectonic emplacement of the Ridge River terrane. The Coquihalla Serpentine Belt, a host to a former producing gold camp (e.g. Carolin, Emancipation and Pipestem gold mines) located some 20 km to the northwest of the Master Ace claim group, is probably related to the same orogen secular event.

Future mineral exploration model(s) need to consider the regional tectonostratigraphic framework and the mineral-bearing influence of first order structures, in targeting adjacent mineral potential sites along this area. The Rice Creek is one such area that warrants further exploration.





**RICE CREEK MOLYBDENITE ZONE**  
Center of Mapping Area - UTM: 636500E – 546600N

**Legend:**






-  Rock outcrop: steeply dipping, northwest striking, thinly bedded shale and siltstone.
-  Rock outcrop: weakly kaolinitic quartz monzonite with cross-cutting rhyolitic dykes.
-  Rock outcrop: medium grain greywacke.
-  Area extent of exposed bedrock.
-  Molybdenite-bearing quartz veins.

Figure 3.



**Rice Creek Mo Zone:** Samples of molybdenite mineralization collected along the talus slope of the Quartz Monzonite intrusion (see accompanying photos). Moly is mostly associated with the quartz veins and disseminated arsenopyrite. Some of the veins are anomalous in gold.

Photo 3.



Disseminated molybdenite mineralization hosted shallow dipping quartz vein (hand chisel for scale).

Photo 4.

**I. STATEMENT OF EXPLORATION EXPENSES:**

**Breakdown of Exploration Costs:**

Reconnaissance geological and prospecting surveys were conducted on along the northeast quadrant of the Master Ace 1 mineral claim, tenure number 721982. This work was carried out between June 15 to June 17, 2010 and filed as assessment work credits February 25, 2011 under event number 4839406.

Exploration expenses incurred are as follows:

Field Crew:

Geologist (D.G. Cardinal), 3 days @ \$500/day	\$ 1,500.00
Prospector (R. Olynyk), 3 days @ \$250/day	750.00

Transportation:

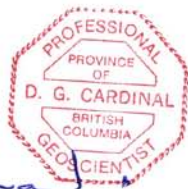
4-wheel drive truck, 3 days @ \$50/day	150.00
----------------------------------------	--------

Report:

Compilation and Documentation	1,500.00
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**Total Expenses Incurred:    \$ 3,900.00**

Respectfully submitted;



D.G. Cardinal, P.Geo., F.G.A.C.

**J. 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 1A3.

I am a graduate of the University of Alberta (1978) and received a 2-yr. technical diploma certificate in Exploration Geology 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.Ge.), membership 18455; a member in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, (P.Geol.), membership No. M29405 and; a Fellow of the Geological Association of Canada (F.G.A.C.)

I have practiced my profession continuously for the past 31 years.

I am 50% registered owner of the Master Ace claim group.

and that, I conducted and supervised the field surveys document in this report and that I am the author of this report.

Signed in Agassiz, BC this 25<sup>th</sup> day of May, 2011.

*Daniel G. Cardinal*

Daniel G. Cardinal, P.Ge., F.G.A.C.



**K. REFERENCES:**

Cardinal, D.G., May 1985, Geological and Geochemical Assessment Report on the Big Range Group – North and Big Range Group – South; BC Geological Branch Assessment Report 14,751.

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