

**GEOLOGICAL AND GEOCHEMICAL REPORT**  
**ON THE**  
**SILVERBOSS PROPERTY**  
**CARIBOO MINING DIVISION**  
**NTS 093A006/093A016**

**Prepared for**

**HAPPY CREEK MINERALS LTD.**  
**38151 Clarke Drive**  
**Box 1852**  
**Squamish, BC**  
**V0N 3G0**

**By**

**D. E. Blann, P.Eng.**  
**Standard Metals Exploration Ltd.**

**D. Ridley**  
**Lodestone Explorations Co. Inc.**

**April 2006**

## Table of Contents

Summary.....	3
1. Location and Access .....	6
2. Claim Status .....	7
3. History .....	7
4. Regional Geology .....	10
4.1 The Boss Mountain Molybdenum Mine .....	11
5. Property Geology .....	12
5.1 Structure .....	12
5.2 Alteration .....	13
5.3 Mineralized zones .....	13
6. 2005 Exploration .....	15
6.1 2005 Exploration Results .....	16
6.2 Silt Samples .....	18
7. Discussion .....	18
8. Conclusions.....	20
9. Recommendations and Budget .....	21
10. Statement of Costs.....	23
11. References .....	24
12. Statement Of Qualifications.....	25

## Tables

1) Mineral Tenure.....	6
2) Rock Sample Descriptions.....	22

## Figures

- 1) Property Location
- 2) Mineral Tenure Location
- 3) Regional Geology
- 4) Property Geology, rock and silt samples
- 5) 2005 Airborne magnetic and radiometric survey

## Appendices

- 1) Assay Certificates
- 2) Petrographic Report

## Summary

The Silverboss property adjoins on three sides the past producing Boss Mt. molybdenum mine, located approximately 50 kilometres northeast of 100 Mile House, British Columbia. The adjacent Boss Mountain Molybdenum Mine, produced approximately 32 million lbs molybdenum at an average grade of 0.20%Mo between 1965 and 1983, and a non 43-101 compliant resource of 4.7 million tonnes grading 0.14% molybdenum remains.

The Silverboss property is underlain by monzodiorite and quartz monzodiorite on the eastern edge of the Takomkane batholith, and is part of the Nicola Group, an island arc assemblage, Upper Triassic Lower Jurassic in age. East of the property, the north northwest trending Molybdenite creek fault lies in contact with Nicola Group basalt and sediments, and approximately 30 kilometres east, the Terrane bounding Eureka Thrust occurs in contact with continental sediments, Paleozoic or older in age.

The Boss Mountain stock, monzogranite in composition, is mid-Cretaceous in age and cuts the Takomkane Batholith near the eastern side and may be associated with regional tectonic extension and dikes of tholeiitic basalt-andesite and rhyolite composition (Cretaceous-Eocene?) that cut the Boss Mountain stock and Takomkane batholith; these rocks are associated with molybdenite-bearing sheeted quartz veins and breccia deposits at the Boss Mountain mine. Alkaline olivine basalt dikes and a surface cinder cone, flow and ash tuff cut and in part overlie all previous rocks and are (post-glacial) Holocene to recent in age.

On the Silverboss property, monzodiorite and monzogranite are cut by dominantly brittle faults and minor shears that trend west-northwest, north and northeast, and have gentle to steep dip. Fractures from 1 mm to 30 cm in thickness contain variable concentrations of quartz, chlorite, epidote, calcite, tourmaline, sericite, k-feldspar. Wall rock alteration, one centimeter to one metre from fractures occurs. The Silverboss property hosts several styles of fracture-controlled mineralization.

At higher elevations, around the Takomkane volcano, quartz veins are approximately five millimeters to 0.5 metres in thickness, and vary in character:

- 1) white, cream colored, breccia, vuggy, dogtooth, comb and locally finely bladed.

- 1a) trace to minor pyrite, silver-grey sulphosalt specs and associated gold, silver values with trace copper, molybdenum, bismuth, arsenic, tungsten
- 1b) moderate pyrite, chalcopyrite and associated copper, gold, silver values and trace molybdenum

- 2) 1 mm to 1 cm, clear-grey, massive, straight wall and subparallel (sheeted) quartz veins contain rare to trace pyrite, chalcopyrite, or molybdenite, and minimal alteration of wallrock.

A previously undocumented trench dating from around 1917 was located at the Dogtooth zone in 2005. In spatial proximity with an andesite dike, quartz veins of Style 1a returned up to 53.01 g/t gold, 343.0 g/t silver in a grab over 10 cm, and approximately 100 metres northeast, 10.06g/t gold, 26.0 g/t silver over 1.0 metre, and adjacent to this, 4.77g/t gold, 35.0 g/t silver over 17 cm. Approximately 250 metres southeast, quartz vein float near returned 5.82 g/t gold, 20.0g/t silver.

Approximately 500 metres south of the Dogtooth zone, the Horse trail zone contains quartz veins of Style 1b, and sampling in 2005 returned up to 0.73% copper, 1.04g/t gold, 40.0 g/t silver over 0.10 metre. These veins appear similar to the Silverboss shaft and adit area, where 9.25 g/t gold, 514.8 g/t silver over 0.25 metres, and a grab of shaft dump material returned 6.7% copper, 443.0 g/t silver, 2.92 g/t gold.

Approximately 500 metres south of the Horse trail zone, on the cliffs above the mine pits, quartz vein float of Style 1a returned 5.55 g/t gold, 15.0 g/t silver. Approximately 500 metres north of the Dogtooth zone, a grab of quartz veins of Style 1a returned 1.38 g/t gold, 13.0 g/t silver, and 750 metres northeast of the Dogtooth zone, angular quartz float returned 1.78 g/t gold, 11.0 g/t silver.

Molybdenite bearing quartz veins and breccia at the Boss Mountain mine is associated with carbonate effervescence of magmatic-hydrothermal fluid, mafic dikes, and is arranged peripherally to a monzogranite stock. Gold-silver bearing quartz veins at higher elevations on the Silverboss property have similar texture, association with mafic dikes, and contain tourmaline, carbonate, and variable copper, gold and silver values and arsenic, bismuth, and

tungsten trace elements. These data suggest potential for a common magmatic fluid source and possible genetic connection to mid Cretaceous monzogranite intrusions.

At lower elevations in 10 Mile creek, fractures from one millimeter to 1 centimetre in thickness contain epidote-diopside/pyroxene, tourmaline veins, massive fine to medium grained pyrite and trace scheelite, and occur sheeted to cross-cutting, and approximately five to 25 per metre (Style 3). A west-northwest trending shear zone, possibly the 10 Mile creek fault, returned 0.21 g/t gold, 0.015% tungsten over 4.0 metres, followed by 0.04 g/t gold, 0.05% tungsten, 37.9 ppm bismuth over a 25 metre grab of moderately fractured quartz monzodiorite wall rock. Approximately one kilometre east, intrusive breccia occurs in proximity with the north side of the Boss Mountain stock, and contains similarly anomalous tungsten in pyrite veins, and silt samples nearby returned up to 54.0 ppm molybdenum.

Prospecting, geology, rock and silt sampling at higher elevations on the Silverboss property in 2005 has identified an area approximately 1 kilometre in width and 2.0 kilometres in length containing gold-silver bearing quartz veins that appears in part consistent with a large-scale intrusion-related gold-silver system. The frequency, distribution, and gold-silver content of these veins are encouraging; however their overall frequency, extent and spatial focus remain unknown, and are an attractive exploration target.

The 10 Mile Creek area of the Silverboss property contains airborne radiometric and magnetic signatures, geology, alteration, mineralization and molybdenum in silt anomalies that are consistent with a previously unknown mid Cretaceous stock and this area hosts potential for molybdenum deposits as at the adjacent Boss Mountain mine.

Further work including property-wide reconnaissance geology and prospecting, and grid-based soil geochemistry over the gold-silver, and molybdenum target areas is recommended followed by detail rock-saw channel sampling of the best zones outlined at a cost of \$125,000.

## 1. Location and Access

The Silverboss Property is located approximately 80 kilometers northeast of 100 Mile House in south central Cariboo, British Columbia (Figure 1). Two kilometres north on Highway 97 from 100 Mile House, B.C., the property is accessed via the Canim-Hendrix road approximately 50 kilometers east to Eagle Creek bridge where the road turns to gravel. At this point the road is called the 6000 logging road. The 6000 road is followed northerly approximately 33 kilometers to the old mine road just south of the Hendrix lake town site. The mine road is taken westerly up the mountain about 7 kilometers to the gate. Access from here is either by foot or ATV and several trails provide access to various parts of the mountain, several of which go through the mine property. Future logging plans include several new roads and clear cuts that would improve access along the northeast side of the Silverboss property. The south side of the property is accessed via the 620 or Boss Creek forestry road, the turnoff being near the 6015 kilometers post of the 6000 road.

The Silverboss property adjoins the Boss Mt. Mine property and locally extends to within 350 meters of an open pit. A hydro transmission line, which powered the mine, is in place and provides stepped-down power for Hendrix Lake town site approximately 7 kilometers east of the property. Topography varies from gentle slopes and plateau-like mountaintop in the central portion of the claims to cliffs in particular around the cirque headwall above the mine pits and parts of 10 Mile creek. Elevations range from 1600 meters in the valley to 2200 meters at the summit of the Takomkane Mountain volcanic cinder cone. The lower slopes are densely forested with spruce, pine, and balsam fir while the higher elevations are covered by isolated stands of stunted sub-alpine fir, and alpine plants. The area receives abundant precipitation, most of which falls as snow between mid October and April, which makes the surface exploration season fairly short at higher elevations. The period from July 1 to September 30 is best for exploration of the higher elevations whereas lower areas may be worked two or three weeks earlier and later.

## 2. Claim Status

The Silverboss property is composed of six claims, totaling 3,320 hectares, owned 100% by Happy Creek Minerals Ltd, subject to an NSR, and are currently registered in the name of D. Ridley or D. Blann (Figure 2, Table 1).

## 3. History

The following historical summary of the area is modified after Ridley (2005). Minerals of economic interest were first discovered on the mountain in 1915-1917 and are well documented in the BC Ministry of Mines Annual Report 1917 (pg. F134-F136). Several trenches and open cuts, a shaft of unknown depth, and a short adit were completed on the Silverboss vein system at this time. Blast trenches were also completed on the southeast edge of the cinder cone and samples of peridotite (evening emerald) were submitted to Tiffany's, New York. The molybdenum showings which were to become the Boss Mt. Mine were discovered at this time as well. The 1917 report concluded that the Silverboss veins were too low grade to be worked under present circumstances. The molybdenum showings were recommended for further work. The peridotite specimens were found to be of remarkably good colour but more or less flawed and so of little commercial value. However it was stated that a careful search may yield unflawed stones which would be of commercial value. The area remained inactive until the 1930's when work was done on the molybdenum showings. However it wasn't until the late 1950's when substantial work programs led to development of the Boss Mt. Molybdenum mine. The following is from Soregaroli (1976) and describes early development of the mine area. Tonnage and grade figures that follow are not deemed NI43-101, according to current regulations, and are for historical reference only.

“Subsequent activity on the claims was not recorded until 1930 when several hand trenches were excavated on one of the larger quartz-molybdenite veins and on a molybdenite-bearing breccia. In 1942, the British Columbia department of Mines did 1,363 feet of X-ray diamond drilling on the main breccia zone (Eastwood, 1964). H.H. Heustis acquired the existing claim in 1955 and directed the staking of additional claims in 1956. In the same year, Climax Molybdenum Company optioned the claims and completed several thousand feet of diamond drilling before the option was terminated in 1960. In 1961, Noranda Exploration company Limited optioned the property and after four years of exploration and development achieved

production in 1965 at a mill rate of 1000 tons per day. Production continued until 1972, when the mine was shut down because of depressed molybdenum markets. During the period 1965 through 1971, a total of 2,968,740 tonnes of ore were processed, from which 7,590,888 kilograms (approximately 16.7 million pounds) of molybdenum were recovered. Rising demand for molybdenum resulted in re-opening the mine in early 1974” (Soregaroli, 1976). After re-opening the mine operated continuously from early 1974 until 1983 when production ceased. During this period a further 4,119,709 tonnes of ore were processed which produced 7,155,403 kilograms of molybdenum. Indicated ore reserves in 1982 were 4,706,112 tonnes grading 0.14% molybdenum as recorded in BCDM Minfile report (093A001, not NI43-101). In total, 32,120,000 lbs molybdenum at an average grade of 0.20%Mo was mined between 1965 and 1983; current metal prices for molybdenum at approximately \$30.00/lb places a value of approximately \$1 billion on historical production using today’s prices. Current resources are estimated at approximately 4.7 million tonnes grading 0.14% molybdenum (resource data from Minfile).

The mine buildings had been dismantled and the workings reclaimed by 1986. No exploration work was recorded between the mines’ re-opening in 1974 and closure in 1983.

In 1969, Exeter Mines Limited staked a large group of claims adjacent to the northwest boundary of the Boss Mt. Mine property including the Silverboss vein system. An exploration program consisting of geological mapping, VLF-EM geophysics, and a limited soil sampling survey were completed in 1970 (Allen, 1970; Mark, 1970). This work defined several VLF-EM conductors, some of which had co-incident copper and/or silver soil anomalies and may indicate minerals similar to the Silverboss structure. An extensive follow-up program was recommended although no further work was recorded. However, a cat road to the Silverboss workings, local cat pushes, and drill core from three holes, and an abandoned camp can be viewed, and suggest at least some further work was completed. Two of the three drill hole collars are located. This work is believed to have occurred prior to the 1972 mine shut-down and after which all work in the area halted. In addition, core from at least five drill holes from around this time also occur at the Gus showing (093A020), north of the Silverboss property (Ridley, 2000).

In 1969, Virgo Explorations Limited staked a large group of claims adjoining both the Exeter and Boss Mt properties. During 1970 an exploration program consisting of detailed stream



sediment and localized soil sampling, coupled with ground magnetometer surveys were conducted covering most of the north and east portion of Big Timothy mountain (Simpson, 1970). Four areas were recommended for further work but none was recorded.

In 1972, Rio Tinto staked the Monty property at the head of Boss creek approximately 2.5 kilometers southwest of the mine property. Apparently 260 soil samples were collected covering the entire 60 unit claim block but no details of this work were recorded. Several old, well-weathered lath pickets can be seen in the open swamps around Boss lake and suggest the work was done.

In 1972, C.E. Moore and Associates staked the 18 unit Trooper claim on the northwest edge of Big Timothy Mountain and approximately 2 kilometers north of the present Silverboss property. Work was conducted from a fly camp and consisted of line-cutting, I.P. surveys, and blasting of trenches. No minerals were encountered on the IP grid or to the south in blast trenches and no further work were recommended (Neilson, 1972).

No work is recorded between 1972 and 1985 in the area.

In 1985, D. Javorsky staked a large group of claims covering the area east of the mine property. A prospecting program with the aid of an excavator was conducted over old logging roads in the area, however the claims shortly lapsed (Javorsky, 1985).

In 1993, D. Ridley staked eight units covering the old Silverboss vein structure. During 1994 and 1995, a small prospecting and mapping program was successful in tracing the surface expression of the Silverboss structure for 350 meters as well as locating several undocumented showings, including the East Breccia (Ridley, 1994; 1995). In 2000, the old drill core lying around the old camp was reviewed, and showed minor copper-molybdenum sulphides in one section of core and a 10 centimetre section of massive pyrite-chalcopyrite likely from the Silverboss structure; drill collars were located at the southwest end of the Silverboss vein structure, in proximity with the cross-cutting 10-Mile fault.

In 2004, a preliminary geological mapping, prospecting, and stream sediment sampling was undertaken mostly on the south side of the property and southwest of the mine area during

2004 and first identified the Horse trail and Headwall zone, where anomalous copper, gold, silver values occur in narrow quartz veins (Blann, Ridley, 2005).

In 2005, Happy Creek Minerals performed additional mapping, rock and silt sampling along the east side of Big Timothy/Takomkane Mountain, down 10 Mile Creek, and Horse trail area and is the subject of this report.

#### 4. Regional Geology

The Silverboss property is located near the eastern side of Quesnell Terrane, in the South Cariboo, British Columbia (Figure 3.) In this area Nicola Group rocks are comprised of basal black phyllite and minor carbonates, sediments, Middle to Upper Triassic in age, and augite-feldspar phyric flow, agglomerate, volcanic conglomerate, monolithic to heterolithic breccia, and tuff of predominantly basalt to andesite composition, Upper Triassic-Lower Jurassic in age. These rocks are apparently roughly coeval with high-level porphyry stocks, dikes and sills of monzonite to diorite composition, Late Triassic-Early Jurassic in age. This island arc assemblage was in part cut by composite granodiorite of the Takomkane Batholith, Late Triassic-Early Jurassic in age. Near Canim Lake, argillite, greywacke, wacke, conglomerate turbidite, and volcanoclastic rocks occur and are Lower Jurassic in age.

Small stocks or irregular-shaped bodies and felsic dikes cut older units and are monzogranite to granodiorite in composition and Middle Cretaceous in age (McDonald, 1996). These rocks are spatially associated with molybdenite at the Boss Mountain Mine (Soregaroli, 1968, MacDonald, 1995).

Alkaline and calc alkaline volcanic rocks and fine grained clastic, sedimentary rocks of the Kamloops Group are Eocene in age and generally occur west of the property.

Alkaline volcanic rocks of the Chilcotin Group, are Miocene to Pleistocene in age, and also occur generally west of the property.

The area was covered by approximately 1200-1800 metres of ice during glaciation, and removed both Tertiary and older rocks, and deposited between 1 and 30 metres or more of till, glaciofluvial and lacustrine cover. The Takomkane Volcano is an alkali basalt volcano with

a cinder cone and associated flows containing olivine, peridot and is post-glacial, or Holocene in age.

#### 4.1 The Boss Mountain Molybdenum Mine

Geology is largely summarized after Soregaroli, 1976 and MacDonald, 1995. The Boss Mountain Stock, monzogranite in composition is Cretaceous in age and cuts the eastern edge of the Takomkane Batholith, monzodiorite to quartz monzodiorite in composition.

Molybdenum deposits at the Boss Mountain Mine occur peripherally to, or on the flanks of the Boss Mountain stock, monzogranite in composition. Felsic (rhyolite) and mafic tholeiitic, alkali basalt dikes cut the Takomkane Batholith and monzogranite and occur in spatial proximity with the quartz matrix breccia and quartz veins comprising the molybdenum deposits.

Early stage coarse-grained molybdenite bearing quartz veins comprise a sheeted vein complex comprised of quartz, orthoclase pyrite and molybdenite with minor sericite and rutile, very minor biotite, amphibole and topaz. Vugs contain zeolite, calcite, siderite, clay and rarely fluorite. A second phase of quartz veins contains no molybdenum, however, lead-copper-bismuth sulphides, bismuthinite, chalcopyrite, sphalerite, galena, scheelite and anatase occur locally within the same structures as the coarse-grained molybdenum veins, and are first to cut the Boss Mountain stock, and have envelopes of k-feldspar and sericite up to 50 centimetres. Molybdenum-rich veins locally occur within the same structures hosting dikes.

Ribbon style quartz molybdenum veins occur in areas hosting other quartz veins and within the same structures hosting mafic dikes. Locally porphyritic felsic dikes cut these veins sets.

Initial molybdenum-bearing magmatic-hydrothermal fluid intersected water-carbon dioxide solvus at approximately 350°C and 350 bars, inducing phase separation, effervescence, and is associated with molybdenite precipitation above the current 1353 metre elevation.

Molybdenite precipitation may be triggered by a change in the carbon dioxide/ trioxide content of dilute, low-saline fluid, depending on either complexing of molybdenum metal, or pH of the fluid (MacDonald, 1995).

## 5. Property Geology

The Silverboss property is underlain by composite granodiorite of the Takomkane Batholith, Upper Triassic Lower Jurassic in age. Intrusive rocks vary from medium grained, grey, biotite-hornblende diorite, quartz diorite, monzodiorite (Thompson, 2005) and quartz monzodiorite/granodiorite in composition; however details of the exact nature, distribution and timing of Takomkane batholith-related intrusive rocks on the Silverboss property remain unclear and are very much generalized in Figure 4. Xenoliths of diorite in granodiorite occur and forms coarse breccia textures locally in proximity with intrusive contacts. Dark, angular magnetic diorite fragments occur in heterolithic intrusion breccia near the Silverboss shaft, and granite/monzonite fragments occur within biotite-hornblende diorite south of 10 Mile creek near the inferred contact of the Boss Mountain monzogranite stock. Diorite is noted in the southern portion of Figure 4, and southwest of the Boss Mountain mine (Soregaroli, Nelson, 1976). All of these rocks are cut by dominantly northwest trending, steeply dipping dikes of andesite composition 0.5-3.0 metres in width, and locally quartz latite porphyry or rhyolite dikes occur. Felsic dikes locally occur in spatial proximity with the andesite.

Holocene aged olivine/peridotite bearing alkaline basalt dikes and ash, tephra and flow cut and overlie all previous rocks at the Takomkane volcano located near the center of the Silverboss property.

### 5.1 Structure

Intrusive rocks are cut by fractures, faults and shears 1-20 metres in width, trend northwest to northeast with a steep dip, and easterly with a south dip, and display cross cutting relationships. The Molybdenite Creek fault strikes north-northwest, dips steeply, and is subparallel the contact between the Takomkane Batholith and Nicola Group rocks to the east. Quartz-molybdenum veins in the northwestern-most pit in the mine dip 45-60 degrees west, and fractures trend northwest in proximity with the Horse trail zone. In the 10 Mile Creek valley, a fault is mapped in the creek trending west-northwest, dipping steeply, and contains strong alteration and iron sulphides. This fault may be part of several that are subparallel to conjugate in orientation and can be traced in part for over 3 kilometres west to near the Silverboss shaft. The 10 Mile Creek fault locally appears steeply dipping and normal in sense of displacement and cuts the northeast trending Silverboss structure, with unknown lateral

offset, and apparently displaces the Molybdenite Creek Fault with a dextral sense of approximately 300 metres (Soregaroli, 1976). Fault and fracture zones locally contain andesite dikes, and occasionally, rhyolite on the Silverboss property.

## 5.2 Alteration

Widespread and locally concentrated fracture zones contain quartz, chlorite, epidote, tourmaline, sericite, clay, carbonate, k-feldspar, and locally diopside/pyroxene, and variably replace mafic minerals and plagioclase within wall rock selvages and intrusion breccia to a limited extent into the wall rock. Quartz veins on the property are in part similar in description, size, and nature of occurrence to some of the quartz veins associated with the adjacent Boss Mountain Mine, in particular where andesite dikes occur.

## 5.3 Mineralized zones

To date several zones of mineralization occurs on the Silverboss property and are summarized here from previous exploration.

The Silverboss vein consists of a northeast trending, steeply dipping 1-2 stage vuggy quartz vein, breccia and stock work, between 0.5 and 2 metres in width and 350 metres in length (Figure 4). Comb and dogtooth quartz, fine grained pyrite, limonite and chalcopryite occurs within and adjacent quartz phases that are within a wider zone of sheared chlorite epidote sericite-clay altered granodiorite and intrusion breccia, often in proximity with or adjacent to andesite dike. Elevated concentrations of manganese, lead, arsenic and antimony occur. Gold and silver values vary. In trench 4 a sample of a 0.50 metre wide shear and quartz vein contains 4.26 g/t gold 64.6 g/t silver and 240 ppm copper. In trench 8, a 0.25 metre wide sample returned 215 ppb gold, 390.4 g/t silver, 3.18% copper. A 0.25 metre chip from part of the Silverboss vein near the shaft returned 9.41 g/t gold, 514.8 g/t silver, 1.34% copper (Ridley, 1995). In 2004, a grab of high grade pyrite-chalcopryite in vuggy quartz returned 6.7% copper, 443.0 g/t silver, 2.92 g/t gold. Approximately 250 metres northwest, a grab sample of vuggy quartz veins and chalcopryite on the margin of a northwest trending andesite dike returned 0.72% copper, 6.0g/t silver, 0.32g/t gold.

Approximately 300 metres east of the shaft, a zone of strongly epidote altered hornblende diorite breccia occurs at the East Breccia; this zone is cut by quartz veins trending 146 degrees containing variable concentrations of chalcopyrite, pyrite and specular hematite. A picked grab sample returned 1,241 ppb gold, 1.21 oz/t silver, 2.48% copper. A chip of wall rock returned 218 ppb gold over 2.0 metres. Further north, a grab sample of quartz float with pyrite, chalcopyrite returned 406 ppb gold, 180 ppm silver, and 1.8% copper (Ridley, 1995).

South of the 10 Mile fault, and approximately 500 metres southwest of the Silverboss shaft, a widespread area of moderate to locally intense epidote-chlorite veins in diorite boulders contains 1-10% pyrite with trace magnetite, chalcopyrite, molybdenite. A contact zone of a hornblende porphyry dike contains 617 ppb gold, 14.4 ppm silver, 461 ppm molybdenum and 873 ppm copper. Other angular float samples nearby returned 442 ppb gold, 16.1 ppm silver, 748 ppm molybdenum, and 3290 ppm copper, and 1183 ppb gold, 1.9 oz/ton silver, 1.09% copper (Ridley 1995).

Approximately 700 metres southwest of the Silverboss shaft, a sample of quartz-k-feldspar altered granodiorite from an old trench returned 464 ppb gold, 6.7 ppm silver, and 95 ppm copper. Nearby, a float sample of quartz veinlets hosted by argillic and silica altered diorite returned 223 ppb gold, 9.3 ppm silver and 226 ppm copper (Ridley, 1995).

In 2000, Rock samples were taken approximately 250 metres southwest of the shaft and near the East Breccia, and returned up to 1627 ppb gold, 8.5 ppm silver, 191 ppm copper, 132 ppm arsenic from quartz vein float up to 0.25 metres in width (Ridley, 2000).

Three additional mineralized zones were found on the Silverboss property during 2004; the South ridge, Headwall, and Horse Trail zone. At the south end of the property, variably propylitic altered diorite contain disseminated and fracture controlled pyrite from trace to 3%, and trace chalcopyrite. Sample 151795 returned 277 ppm copper, 1.0 ppm silver and 12 ppb gold. Around the south ridge of Big Timothy mountain quartz fracture fillings 1-3 cm in width locally contains minor chalcopyrite-magnetite and trace molybdenite. Sample 151674 returned 68 ppm molybdenum, 1926 ppm copper, 17.4 ppm silver, and 149 ppb gold from a grab of talus with narrow, 1-2 centimetre wide quartz veins and chalcopyrite-pyrite and trace molybdenite (Ridley, Blann 2005).

In a large gully on the Headwall zone southwest of the mine pits, vuggy, comb and dogtooth quartz vein float contains pyrite, chalcopyrite, similar to the Silverboss vein and returned 549 ppm copper, 263 ppm lead, 51.0 ppm silver, 723 ppb gold, 226 ppm bismuth, and 230 ppm tungsten. These quartz vein-hosting structures can be traced over 1.5 kilometres laterally and 200 metres higher in elevation on the Silverboss property, where further west, silt samples up to 1.6 ppm silver and 100 ppm copper suggest continuation of mineralized structures remain open (Ridley, Blann, 2005).

The Horse Trail zone was first documented by Ridley in 2004 (Ridley, Blann, 2005). In this area, monzodiorite is cross cut by numerous recessive-weathering and partly covered faults and fracture zones having variable orientation, and steep to gentle dip. Fractures contain quartz-sulphide veins that can be traced at least 100 meters strike length. The veins appear similar to the Silverboss shaft area in that they consist of narrow (20-30 cm wide) shear zones with vuggy cavities filled with dogtooth quartz and inter-grown sulphides, mainly pyrite-chalcopyrite, as well as adjacent, subparallel, sulphide-poor, massive grey-white, straight-wall quartz veins. A grab sample from a poorly exposed, quartz vein outcropping on the old horse trail returned 4238 ppm copper, 27.0 ppm silver, and 2413 ppb gold. A chip sample across a 20 cm wide quartz vein, exposed 100 meters to the south and trending 330/75E returned 5642 ppm copper, 43 ppm silver, and 791 ppb gold. A grab from high-grade quartz-sulphide rubble below this vein returned >10,000 ppm copper, 78 ppm silver, and 1475 ppb gold.

Trace pyrite, chalcopyrite-molybdenite occurs in epidote-chlorite-sericite-tourmaline and k-feldspar altered fractures within biotite diorite/monzodiorite southwest of the Silverboss vein, where Exeter Mines drill tested an area of radial faulting near the 10 Mile Fault in the 1970's. Samples from this drill core taken in 2004 did not return significant copper, gold or silver values (Ridley, Blann, 2005).

## 6. 2005 Exploration

The 2005 exploration program was designed to follow up in more detail previous encouraging gold results at the Horse trail zone, around the northeast side of Takomkane volcano, and investigate the source of the 2005 airborne magnetic and radiometric anomalies that are in part similar to the adjacent Boss Mountain mine (Figure 5), and locate and sample additional quartz veins to identify the distribution and character precious-metal bearing quartz veins.

The historical cat road up the Takomkane Mountain to the Silverboss shaft was rehabilitated for access using ATV's, and was followed by prospecting, collection, description and GPS location of 48 rock and 8 silt samples. Reconnaissance geological mapping was performed. Rock samples were placed into polyethylene bags, tied closed and shipped to Acme Analytical Laboratories in Vancouver for analysis by ICP-MS, and 12 element ICP assay plus gold by fire assay for samples generally greater than 1,000 ppb gold, or 1,000 ppm copper. Rock and silt sample locations and gold, molybdenum results are plotted on Figure 4; rock sample descriptions and rock and silt assays are located in Table 2, and certificates of analyses in Appendix 1. A Petrography report prepared by Anne Thompson on samples from the Silverboss vein and historical drill core is located in Appendix 2.

## 6.1 2005 Exploration Results

### 6.1.1 Dogtooth Zone

Prospecting in 2005 located the Dogtooth zone, the site of a previously undocumented trench dating probably from 1917, and located on the southeast edge of the Takomkane volcano. In this area, a northeast trending shear zone approximately 1-5 metres in width and a minimum 150 metres in length cuts granodiorite-monzodiorite. North to northwest trending faults and fractures also occur. The shear zone is variably silicified, moderate to strongly chlorite-epidote and sericite +/- quartz-k-feldspar altered, and contains subparallel quartz veins from 5 cm to approximately 17 cm in width. Quartz veins from the Dogtooth zone are vuggy, 1-2 stage, clear to milky white or grey, and have comb, dogtooth, and locally fine bladed quartz textures and contain very low concentrations of pyrite, chalcopyrite or other base metal sulphides. Flecks of very fine grained silver-grey to dark colored material having a metallic luster occurs in quartz, or in proximity with 1-2 mm size pyrite grains. Gold and silver values occur with variable and trace values of copper, arsenic, bismuth, and tungsten. A 1.0 metre grab across the silicified shear zone at an old trench returned 10.06g/t gold, 26.0 g/t silver (185364), and an adjacent grab of wall rock containing a 3 cm and 14 cm quartz vein returned 4.77 g/t gold, 35.0 g/t silver (151704). To the southwest, approximately 100 metres, sample 151703 of talus float returned 53.0 g/t gold, 343.0 g/t silver from a 5-10 cm quartz vein in proximity with an andesite dike. Approximately 35 metres northeast of 185364, a grab of quartz vein material from another pit returned 2.99 g/t gold, 5.0 g/t silver (184411). Approximately 200 metres southeast of the pit, float of quartz vein material containing pyrite in k-feldspar altered diorite and andesite dike returned 5.82 g/t gold, 20.0 g/t silver (184412).



### 6.1.2 Horse trail Zone

The Horse trail zone is accessed via a northwest trending structurally controlled valley from the northwest corner of the Boss Mountain molybdenum mine and climbs approximately 200 metres in elevation to the southeast side of Takomkane volcano. Encouraging gold, silver and copper values were obtained during exploration in 2004. Further prospecting in 2005 confirmed additional quartz veins are present that contain variable concentrations of pyrite, chalcopyrite and anomalous to significant gold, silver and copper values. The Horse trail zone generally trends northwest and dips moderate to steeply northeast, however locally quartz veins have variable orientation and dip. Quartz vein and diorite wall rock with pyrite, chalcopyrite returned 0.31% copper, 0.86 g/t gold, 30.0 g/t silver, and trace molybdenum, tungsten over 0.45 metres (184424). At sample 151725, a 10 cm quartz vein strikes northeast with a 20 degree southeast dip, and returned 0.73% copper, 1.04 g/t gold, 40.0 g/t silver.

Approximately 500 metres south of the Horse trail zone, and north of the Headwall zone, narrow quartz veins returned 1.91 g/t gold and 5.55 g/t gold in sample 185374 and 185375, respectively. These veins appear similar to the Headwall or Dogtooth zone in that they contain anomalous bismuth, arsenic and tungsten.

### 6.1.3 10 Mile Creek

The 10 Mile creek area is underlain by rocks of diorite-monzodiorite and quartz monzodiorite/granodiorite composition and are locally cut by andesite dikes, and breccia. Strong west-northwest, north, and northeast trending fractures occur. Rock samples to date returned elevated gold values from quartz vein float located at higher elevations on the north side of 10 Mile creek and are similar in nature to the Dogtooth zone. Sample 185366 returned 1.78 g/t gold, 11.0 g/t silver and anomalous arsenic and bismuth.

At lower elevations in 10 Mile creek, epidote-pyroxene, tourmaline (?) and sericite alteration, trace to 3% pyrite, and locally scheelite in massive, fine to medium grained pyrite veins, 0.1 to 1 centimetre in thickness and approximately 5-25 per metre cross cut the area. Sample 151705 returned 0.21 g/t gold, 0.015% tungsten and 4.8 ppb bismuth over a 4 metres chip sample, followed by 36 ppb (0.04 g/t gold), 0.05% tungsten, 37.9 ppm bismuth in a 25.0 metre grab sample to the southeast (151706).

## 6.2 Silt Samples

Streams sediment samples collected in the field were from active water channels containing fine grained sand and silt and placed in kraft paper soil bags, tied closed, air dried and shipped to Acme Analytical Laboratories for analyses by ICP MS.

In the 10 Mile creek area, silt samples 05DB-1,4 and 5 returned 21.0, 26.0, and 54.0 ppm molybdenum, respectively, from small streams south of the larger 10 Mile creek. In 10 Mile creek, sample 05DB-ST-2 returned 12 ppb gold, 2.8 ppm bismuth, 5.4 ppm arsenic, 5 ppm tungsten. Silt samples from a small creek west of the Boss Mountain mine pits returned up to 6.9 ppm molybdenum.

## 7. Discussion

The Silverboss property is located adjacent the Boss Mountain molybdenum mine, approximately 50 kilometres northwest of 100 Mile House, British Columbia. The property is regionally located on the eastern side of the Quesnell Trough, approximately 30 kilometres west of the Eureka Thrust marking the Terrane boundary between Nicola Group island arc assemblage, Upper Triassic-Lower Jurassic in age, and metamorphosed continental derived sediment of the Snowshoe Group, Paleozoic and older in age. The property is underlain by monzodiorite and quartz monzodiorite (diorite/granodiorite) on the eastern edge of the Takomkane batholith, Upper Triassic-Lower Jurassic in age. The Boss Mountain stock is monzogranite to granodiorite in composition and Middle Cretaceous in age.

In addition to molybdenum deposits occurring in a peripheral arrangement centered on the Boss Mountain stock, dikes of tholeiitic, alkali basalt (basaltic andesite) and felsic composition accompany molybdenum mineralization at the Boss Mountain mine. Similar dikes occur on the Silverboss property, and, likewise are proximal to mineralization. All of these rocks are cut and in part overlain by an alkali-olivine basalt volcano and feeder dikes and is Pleistocene to recent in age.

On the Silverboss property, faults, fractures and shear zones contain variable chlorite-epidote, quartz-sericite, calcite/carbonate, quartz-sericite-pyrite, and locally quartz-epidote-

diopside/pyroxene, tourmaline, k-feldspar minerals. Wall rock alteration appears limited to within 1 meter of fractures, however may coalesce where fracture density is moderate. Historical exploration for porphyry copper-molybdenum deposits resulted in diamond drilling of three holes southwest of the Silverboss shaft, and in proximity with the 10 Mile fault; porphyry style alteration and minerals do occur locally (refer to petrography report, Appendix 2)

At higher elevations on the Silverboss property, quartz veins appear in different styles.

Style 1a) Pinch and swell quartz veins and vein breccia with vuggy, bladed, dogtooth or locally finely bladed texture have generally trace copper, molybdenite and pyrite, and more importantly variable but anomalous concentrations of arsenic, bismuth, and or tungsten. These veins have returned moderate to significant gold and silver values ranging up to 53.0 g/t gold, 343.0 g/t silver in relatively frequent but narrow veins, and occur from the Headwall zone to north of 10 Mile Creek, a distance of approximately 2.0 kilometres.

Style 1b) Pinch and swell quartz veins and vein breccia with vuggy, dogtooth quartz contain dominantly moderate pyrite, chalcopyrite and associated copper, locally molybdenum, and gold and silver values. Antimony, arsenic, bismuth and tungsten, may occur but are much less consistently present than in Style 1a veins. The Horse trail, Silverboss, and East breccia ridge are examples.

Style 2) straight-walled, massive clear to grey 1mm-1.0 cm wide, subparallel, en-echelon "sheeted" style quartz veins. These veins have little wall rock alteration, may contain trace pyrite, molybdenite, or other sulphides and occur adjacent Style 1 veins, at some distance away or in isolated zones. As these veins tend not to readily weather out of the intrusive, they are difficult to see under lichen or sample in situ with rock hammers, and details of their distribution, mineralogy and precious metal content remain poorly defined.

Style 3) veins are dominated by diopside/pyroxene, tourmaline, epidote, sericite, and massive pyrite one millimeter to one centimeter in thickness that contains trace scheelite, and associated tungsten, bismuth and are common and widespread at lower elevations in 10 Mile Creek.

Strong fracturing and intrusion breccia occurs in proximity with the north side of the Boss Mountain stock, or a similar stock occurs beneath the 10 Mile creek area. Favorable geology, structure, alteration, 54.0 ppm molybdenum in silt and comparative radiometric and magnetic data from this area suggests good potential for a molybdenum deposit to occur in the 10 Mile Creek area.

Molybdenite at the Boss Mountain mine, and gold-silver-bismuth-tungsten values on the Silverboss property occur in breccia, and sheeted quartz veins in spatial proximity with large fault and fracture zones, basaltic andesite dikes, and monzogranite and suggest similar timing of the two types of mineralization. Gold-silver bearing quartz veins at higher elevations and molybdenum bearing quartz veins at lower elevations may be related to carbon dioxide effervescence of largely magmatic fluid derived from to Mid Cretaceous aged monzogranite stocks, and cooling of magmatic-hydrothermal fluids distally from such intrusions during a period of extensional tectonics.

## 8. Conclusions

The Silverboss property is located in the south central Cariboo region, British Columbia, adjacent the past producing Boss Mountain molybdenum mine containing current (Non 43-101) resource of 4.7 million tonnes grading 0.14% molybdenum. The property is underlain by monzodiorite, quartz monzodiorite (diorite/granodiorite), and hornblende-biotite porphyry of the Takomkane batholith and is cut by monzogranite of mid Cretaceous age and dikes of alkaline basalt-andesite and rhyolite composition occur. These rocks are locally cut and overlain by alkali-olivine basalt volcano and feeder dikes.

Multiple stages of tectonic and intrusive activity are evident, and between the Mid Cretaceous and Holocene, an extensional tectonic regime is apparent. Molybdenum bearing quartz vein and breccia at the Boss Mountain molybdenum mine is spatially associated with monzogranite, mid –Cretaceous in age, and mafic-rhyolite dikes. On the Silverboss property, fault and fracture systems are extensive, and contain variable concentrations of quartz, chlorite, epidote- diopside/pyroxene, tourmaline, k-feldspar and sericite alteration, and pyrite occurs from trace to over 3%.

Exploration in 2005 discovered the Dogtooth zone returning 53.0 g/t gold, 343.0 g/t silver in a grab sample, and 10.0 g/t gold over 1.0 metre. The gold and silver values occurring in Style 1a quartz veins also contain bismuth, arsenic, and locally tungsten trace elements, and in Style 1 b veins, gold and silver occur generally with moderate pyrite and copper values; both styles can occur proximal to basalt-andesite dikes. Significant gold-silver values associated with arsenic, tungsten and bismuth in quartz veins from the Headwall zone, Horse trail, Dogtooth, East Breccia and north of 10 Mile creek suggest potential for an intrusion-related gold-silver system over 2.0 kilometres in length and over 1.0 kilometre in width.

At lower elevations In 10 Mile Creek, intrusive rocks are moderate to strongly fractured, sericite-diopside/pyroxene(?) tourmaline (?) altered, and contain massive pyrite +/- scheelite veins 1mm to 1 cm in thickness and anomalous concentrations of tungsten, gold, and bismuth. The north side of the Boss Mountain monzogranite stock remains unmapped beneath cover and south of 10 Mile creek intrusive breccia with sericite, epidote, quartz, k-feldspar alteration and 0.5-1.0% pyrite and anomalous tungsten occur. Silt samples in 2005 returned up to 54.0 ppm molybdenum from this area. The presence of intrusive breccia in proximity with the Boss Mountain stock, moderate to strong fracturing, alteration and pyrite and tungsten values, and anomalous molybdenum in stream silt suggest potential for a molybdenum deposit to occur at lower elevations within the 10 Mile Creek area.

## 9. Recommendations and Budget

Exploration to date on the Silverboss property has identified potential for a large-scale gold-silver system associated with a mid-Cretaceous intrusion, and appears similar in part to those documented in the Yukon or Alaska that have 5 million ounces of contained gold.

### Phase 1

Further work totaling \$125, 000 is recommended.

- 1) A 1 km wide by 2 km long grid with 100 metre lines and 25 metre stations covering the north Headwall, Horse trail, Dogtooth, East Breccia, Silverboss prospects. A grid with baseline and 200 metre lines at 50 metre stations in 10 Mile Creek. Reconnaissance prospecting, rock and stream silt sampling over the western portion of the property to search for additional mineralized zones and follow up on airborne radiometric/magnetic

anomalies similar to the 10 Mile creek area. Detailed geological mapping around the Takomkane volcano and 10 Mile creek area.

- 2) Follow up soil geochemical anomalies with rock-saw channel sampling across the best zones located to date with the view towards a bulk tonnage gold or molybdenum deposit.

Phase 2: \$500,000

An induced polarization survey over 10 Mile creek area, and best gold-silver zones outlined by Phase 1, including a Max-Min VLF survey over the Silverboss vein.

Diamond drilling of the best targets outlined by Phase 1

---

David E Blann, P.Eng.

## 10. Statement of Costs

Wages		# Days	\$/Day	Totals
D. Blann, P.Eng		7.66	600	\$4,596.00
D. Ridley, Prospector		12	325	\$3,900.00
D. Black		12	250	\$3,000.00
G. Thomson, P.Geo		0.33	400	\$132.00
		31.99		\$8,496.00
Disbursements		#km	\$/km	
Truck	Mob/Demob-Hwy	940	0.45	\$423.00
		# Days	\$/Day	
Truck	Off Highway	17.83	70	\$1,248.10
	ATV	5	35	\$175.00
	Room/Board	31.99	55	\$1,759.45
	Communications	32	5	\$160.00
	Sat Phone			\$150.00
	Field Supplies			\$45.39
Analyses		# Samples	\$/Sample	
	Assays			
	rocks-ICP	49		\$866.81
	rocks-Assays	12	15	\$180.00
	silts	4	18	\$72.00
	soil	0		\$0.00
	Petrographics	0		\$250.00
	Shipping			
	Reproductions			\$150.00
	Report			\$3,000.00
				\$8,056.75
Wages and Disbursements				\$16,552.75
10% on Wages and Disbursements				\$1,655.28
				\$18,208.03
GST @ 7%				\$1,274.56
Total				\$19,482.59

## 11. References

Allen, AR: 1970; Geological survey of Silverboss, SB, and Gus claim Groups; Asst. # 2513.

Campbell, RB, Tipper, HW: 1971: Geology of Bonaparte Lake Area, 92P; GSC Memoir 363.

Campbell, RB: 1978: Geology of Quesnell Lake Area, 93A, GSC Open File # 574.

Javorsky, D: 1985: Prospecting Report on War Eagle, Golden Cyprus, Jackpot, and Big Chance claims; Asst #13,418.

MacDonald, A.J., Spooner, E.T.C., Lee, G., 1996, The Boss Mountain molybdenum deposit. Central British Columbia, Porphyry Deposits of the Northwestern Cordillera of North America, T.G. Schroeter, Editor, CIM Special Volume 46. Pages 691-696.

Mark, DG: 1970: Geophysical-Geochemical report for Exeter Mines Ltd; Asst # 2785.

Ridley, DW: 1994: Prospecting Report on Silverboss Group for Pioneer Metals Ltd; Asst # 23,677.

Ridley, DW: 1995: Geological and Geochemical Report on Silverboss Group; Asst # 24,208

Ridley, DW, : 2000: Geological and geochemical Report on Silverboss Group; Ass. Rpt. # 26,411

Simpson, JG: 1970: Geophysical and Geochemical Report on J claims; Asst. # 2934.

Soregaroli,AE, Nelson, WI: 1976: Boss Mountain Mine in Porphyry Deposits of the Canadian Cordillera; CIMM Special Volume 15 (pgs. 432-443).

Thompson, Anne, 2005, Petrascience Consultants Inc., Petrographic Report on the Silverboss property rocks, for Standard Metals Exploration Ltd., Private report.



## 12. Statement of Qualifications

I, David E. Blann, P.Eng., of Squamish, British Columbia, do hereby certify:

That I am a Professional Engineer registered in the Province of British Columbia.

That I am a graduate in Geological Engineering from the Montana College of Mineral Science and Technology, Butte, Montana, 1987.

That I am a graduate in Mining Engineering Technology from the B.C. Institute of Technology, 1984.

That I have been actively engaged in the mining and mineral exploration industry since 1984, and conclusions and recommendations within this report are based on regional and property fieldwork conducted between 1991 and 2005.

Dated in Squamish, B.C., April 27, 2006

---

David E Blann, P.Eng.

# Tables



Sample ID	Easting	Northing	Description	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb	Sb ppm	Bi ppm	Ba ppm	W ppm	Cu %	Ag gm/mt	W %	Au** gm/mt
151703	641901	5774609	10cm Fl Q vn Grab, 5-10 cm wide vuggy dogtooth, Qtz vn+Bx, Tr Py, Lim, near andesite dike fl., 040/70 strong, X-cut by 350/45, also 300/10 flat-dip Qtz-Py 0.5 cm+ 1 cm Ser-Ep-Chl envelope	6.6	178.8	10.8	94	>100	85.1	51000.4	0.9	8.8	46	0.1	0.018	343.0	0.003	53.01
151704	641962	5774673	At 185364 trench, 2 m wide shear 17 cm Qtz vn, Tet? 3cm 14 cm vuggy dogtooth Qtz, 040/70.	8	198.2	12.9	32	37.3	30.8	4290	0.9	56.9	6	0.2	0.02	35.0	0.003	4.77
151705	642657	5775140	F.g. Grey-B-Hbl Gd/Qd, mod. Perv. Ser-Qtz Chl/Px-Ep Py, Mod-strg. Fractures 040 shear between 360 walls, chip/grab over 4 m wide shear/fault zone.	9.8	105.7	5.1	64	1.5	7.3	183	0.3	4.8	51	73.0	0.011	<2	0.015	0.21
151706	642726	5775110	Grab outcrop over 25 m, mod. Perv. Chl/Px-Ep weak fractures, Py f.g. Hbl-Bi Q-D/GD, Py locally massive 1-3mm in fractures	5.3	117.2	18.5	80	2.5	2.2	36	0.3	37.9	51	>100	0.012	<2	0.05	0.04
151707	642884	5775083	Grab O/C Py Hbl-QD-chl-ser altered mod-strg fractures 1-3 mm W Ep-Py, small And-Bsilt dike, or Bx, 270/45, edge of swamp.	0.6	73.3	4	44	0.6	4.7	34.3	0.6	5.3	81	7.3	0.008	<2	0.003	0.04
151708	642943	5775226	Grab O/C at creek, mod perv chl/Px-Ep-Ser+Py, Hbl-B-QD/Gd mod Ep-shl-py fractures 1-3 mm X-cutting (Trep?)	0.7	93.8	4.4	131	0.6	2.1	15	0.3	3	66	1.7				
151720	643762	5775327	Grab O/C 7 m. B-HblGD(Bx) weak perv. Ser, fractures 1-10 mm X-cut 30/m+. Ep+/-Qtz-K-Feld, Het lbx?(Boss Bx?) 020/60, 290/60, 310/60, Py.	1.4	115.6	2.8	41	0.4	1.8	16	0.2	1.4	74	8.9				
151721	643743	577296	Grab of outcrop, mod. 0.5-1.0% Py diss., B-Hbl-QD, Dibx. 2 cm veins, Py Ep k-feld. End of sample at B-Hbl Dike (fresh) 643714, 5775293, EPE 13.	1	120.7	3.2	42	0.4	2	4	0.3	3.4	96	5.0				
151722	643578	5775155	At end of Grab sample O/C, S/C Gd, Dibx and Py veins + diss. From 151721	1.6	113.7	4.8	47	0.3	1.8	7	0.2	2.9	72	3.2				
151723	643200	5775180	Grab O/C, S/C down hill from top to base of hill, Hbl-B-Gd, Ep fractures Py.	1.5	44.9	2.9	41	0.2	1.7	5.2	0.3	1.5	89	33.5				
151724	644012	5775515	Float at silt #5, Hbl Gabbro/Px Diss Cp-Py with Ep-Chl veins.	1.8	1529.6	7.1	80	1.9	4.5	62.6	1	0.2	208	0.8	0.153	<2	0.003	0.08
151725	642000	5774078	Horestrail area. Lens of Qtz vein , white, grey. Msv Cp-Py lens 2-3cm in 0.10metre qtz vein.	4.2	7305.4	1.7	57	42.7	9.1	1362.7	0.8	0.5	8	1.0	0.732	40.0	0.005	1.04
151726	642025	5773959	Chip/grab over 1.0 m, Qtz-Py+/-Cp To 25 cm, 1+ m wide zone Qtz-Ep veins (1-2 cm), weak Bx f.g. Di, Big fault 180/60 cuts 320/90.	0.5	446.1	1.8	47	0.5	3.4	17.7	0.6	0.1	62	0.5				
151727	641561	5773836	Grab Qtz+ Ser-Chl-Ep altered Gd wallrock, broken Qtz veins, pegmatite.	0.7	59.2	2.2	8	0.3	1	4.9	0.2	0.1	57	0.2				
151728	641632	5774109	Float boulder Hbl-B Di, mod. Perv. Ser+/-Chl/Px-Ep-Py fractures X-cutting Tr Cp/Mo, outcrop MG Bi-Hbl-Gd/Di, 140/45 fractures, Fault 060/90, Ep+k-feld-Qtz stingers, 360/30 Ep k-feld veins to 1 cm.	122.7	70.3	4	35	0.4	3.4	5.5	0.2	8.5	56	>100				
151729	642922	5773849	Grab S/C 20 metres B-Di, mod Ser+Mag+/-Py-(Cp) in fractures Chl-EP-Qtz	68.2	162.5	2	36	0.2	0.7	2.7	0.1	0.4	142	12.1				
184406	641636	5774965	grab 25 cms; ang rubble; chl-ep altered diorite with mafic dyke and 2 cm qtz vein; cpy-py	279.5	1947.2	2.8	139	3.4	2	63.9	0.8	0.2	95	2.7				
184407	641657	5774987	grab; old blast trench; chl-ep alter diorite, qtz stringers; py to 5%; cpy on fractures; trend 220\80E	3.7	418.3	37.5	147	3.7	102	153.6	1.4	0.6	127	2.6				
184408	641762	5774957	grab; shear zone with py fracture fills to 5%; tr cpy in qtz stringers	4.2	38.2	4.9	84	0.6	14	39	0.6	5.2	51	0.7				
184409	641770	5774975	grab; rubble pile; as at 184408; tr cpy, malachite	5.1	130.1	5.7	92	1.6	10.4	96.4	0.4	9.5	37	51.6				
184410	641845	5774597	grab; old blast trench; pyritic shear in diorite; 060\90; K-spar-ep-chl alt;	3	283.1	4.7	358	0.8	15.4	52.5	1.1	0.5	191	0.6				
184411	641960	5774692	circa 1917 blast trench; limonitic dogtooth qtz, cont from 185364; grab dump material	19.8	112.9	8.5	123	6.3	143.2	2875.7	1.8	24.8	13	1.1	0.013	5.0	0.005	2.99
184412	642039	5774561	float; qtz with 3-5% py in K-spar porphyry diorite; also andesite dyke	5.7	228	3.3	39	23.7	16.9	5395.3	1.6	9.4	42	0.5	0.024	20.0	0.003	5.82
184413	641568	5773837	float/subcrop; vuggy qtz with minor py-cpy-mo; granite pegmatite 5 m to north	243.7	51.9	7.2	2	1	10.4	35	0.2	7.5	8	0.9				

Sample ID	Easting	Northing	Description	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb	Sb ppm	Bi ppm	Ba ppm	W ppm	Cu %	Ag gm/mt	W %	Au** gm/mt
184414	641970	5773998	Horsetrail zone; qtz vein 15 cms; 320\60E; high grade grab; qtz-ep with blobby cpy	3.1	3167.6	10.4	38	10.8	3	96	0.6	0.3	34	0.6				
184415	641977	577988	Horsetrail zone; qtz-chl-ep vein 20 cms; 310\50W; up to 1% cpy	3.4	5832.4	3.1	159	35.5	3.4	420.5	0.6	0.3	113	2.0				
184416	641984	5773978	Horsetrail zone; qtz vein 15 cms; 340\70W; minor ep-cpy-mal	25.7	3102.3	3.5	47	20.5	3.8	246	0.6	0.3	19	0.6				
184421	642067	5773899	float; possible subcrop; qtz bx with py to 5%; tr cpy; heavy Mn stain + limonite	3.4	635.4	8.4	63	1.1	105	71.2	0.6	14.1	67	0.4				
184422	642028	5773998	qtz vein 10 cms; 160\60E; up to 1% py, tr cpy; granite peg trends 240\20S	0.9	33.3	2.5	29	0.4	5.6	11.5	0.5	0.5	62	0.7				
184423	642047	5773974	grab 25 cms; qtz vein; minor ep-py-cpy; tr mo; cont of 184422 vein	95.2	833.8	2.5	69	12.5	2.7	70.2	0.4	0.3	75	0.6				
184424	641980	5773983	grab 45 cms; qtz + diorite wallrx; vein trends 345\40E; 1-2% cpy; minor mal	46.4	2977.7	4.5	129	30.9	2.6	284.9	0.5	0.2	61	21.7	0.313	30.0	0.005	0.86
184425	641893	5774077	ang float; qtz stringers with minor py-cpy; tr mo; at base of cliffs	85.2	4275.6	4.2	83	33.9	13.8	1029.4	0.4	0.2	66	1.2	0.454	35.0	0.003	0.74
185359	641562	5775306	ang float; 2 cms qtz vein in intrusive; tr mo in vein and wallrx	994	51.5	1.2	25	0.5	0.6	4	0.1	0.2	241	5.5				
185360	641558	5775258	float; limonitic, vuggy qtz; magnetite	2.6	55.8	1.5	24	0.2	3.3	4.9	0.7	4.9	2	35.1				
185362	641790	5775018	grab; pyritic qtz veins; 342\80N;	3.2	145.7	37.8	254	12	190.3	1066.9	1.3	3.8	50	3.8	0.017	13.0	0.003	1.38
185363	641721	5774806	subcrop; vuggy qtz stockwork;py-mag	5.9	77	5.5	103	5.7	54.8	326.6	0.7	3.1	72	0.6	0.008	6.0	0.003	0.35
185364	641940	5774669	circa 1917 blast trench; limonitic, vuggy, dogtooth qtz; 1 meter grab; trends 040; dip?	20	642.9	14.7	196	29.3	116.9	9250.9	1.9	56	111	0.7	0.068	26.0	0.005	10.06
185365	642185	5775134	float on talus; altered and sheared vuggy qtz vein; py-po; GPS taken 35 m downslope	5.9	26.8	49.5	14	3.3	29.1	382	0.3	13.1	9	0.5	0.003	3.0	0.003	0.4
185366	642351	5775345	ang float; qtz vein as at 185365;	5.2	36	4.4	15	13.9	200.7	1510.8	0.5	6.2	70	0.2	0.003	11.0	0.003	1.78
185367	642349	5775492	float; dogtooth qtz; minor py	2	148.1	59.8	14	37.8	22.7	106.8	1.5	150.4	7	0.1	0.014	35.0	0.003	0.13
185368	642450	5775462	float; dogtooth qtz	18.5	33.9	134	20	12.9	126.6	656.5	0.9	40.4	12	4.2	0.002	9.0	<.001	0.75
185369	642889	5775658	grab 30 cms; sheared andesite dyke in diorite; 310\80NE; pyritic;	0.6	12.6	3.9	25	0.3	5.6	12.8	1.9	4.2	66	1.6				
185370	642239	5773327	grab outcrop; 35 cm qtz vein; vuggy; pyritic; 093\40N;	5.6	27.4	40.4	30	8.4	23.1	244.6	1.4	5	95	0.6				
185371	642303	5773688	ang float; intrusive cut by andesite dyke; pyritic	35.4	11.7	4.4	87	0.1	1.8	3.8	0.6	14.1	17	48.6				
185372	642305	5773690	ang float; magnetite-rich intrusive; epidote	1.2	23.2	25.6	74	<.1	18.1	5.8	1	0.4	47	0.4				
185373	642275	5773700	grab outcrop;10 cm vein; 030\70NW; vuggy, qtz crystals, pyritic	26.4	21.6	8.9	4	0.6	80.5	111.9	0.7	67.4	133	24.1				
185374	642255	5773701	float; pyritic qtz; up to 4 cm wide	16	53.6	35.2	18	13.4	22.1	1653.1	0.4	13.3	28	9.2	0.004	10.0	0.005	1.91
185375	642258	5773701	ang float; pyritic, epidote-rich qtz vein;	16.7	158.5	30	16	18.4	15.2	4796.6	0.4	11.3	65	4.6	0.014	15.0	0.003	5.55
Sample ID	Easting	Northing	2005 Silt samples	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Au ppb	Sb ppm	Bi ppm	Ba ppm	W ppm				
05DB-ST-1	643886	5775474		21.1	40.4	5.2	65	0.2	2	1.9	0.2	0.6	60	2.8				
05DB-ST-2	643160	5775400		7.2	59.3	16.1	240	0.4	5.4	11.9	0.5	2.8	163	5.1				
05DB-ST-3	643400	5775400		4.7	57.5	7.2	106	0.4	2.7	5.9	0.3	0.8	86	2.6				
05DB-ST-4	643654	5775376		26.4	70.4	6.7	94	0.5	2.6	2.3	0.3	1.3	64	5.2				
05DB-ST-5	644012	5775515		54.3	52.7	6.9	78	0.3	3.9	<.5	0.3	0.6	76	3.0				
BKS1SB05	642540	5773705		7.1	54.1	11.4	142	0.2	3.6	2.6	0.4	0.8	128	4.2				
BKS2SB05	642203	5773743		6.9	56.5	20.5	98	0.2	4.6	3.4	0.4	0.5	143	1.8				
BKS3SB05	642203	5773712		3.6	81.9	13.9	82	0.3	4.7	7.6	0.5	0.3	134	1.4				

# Figures

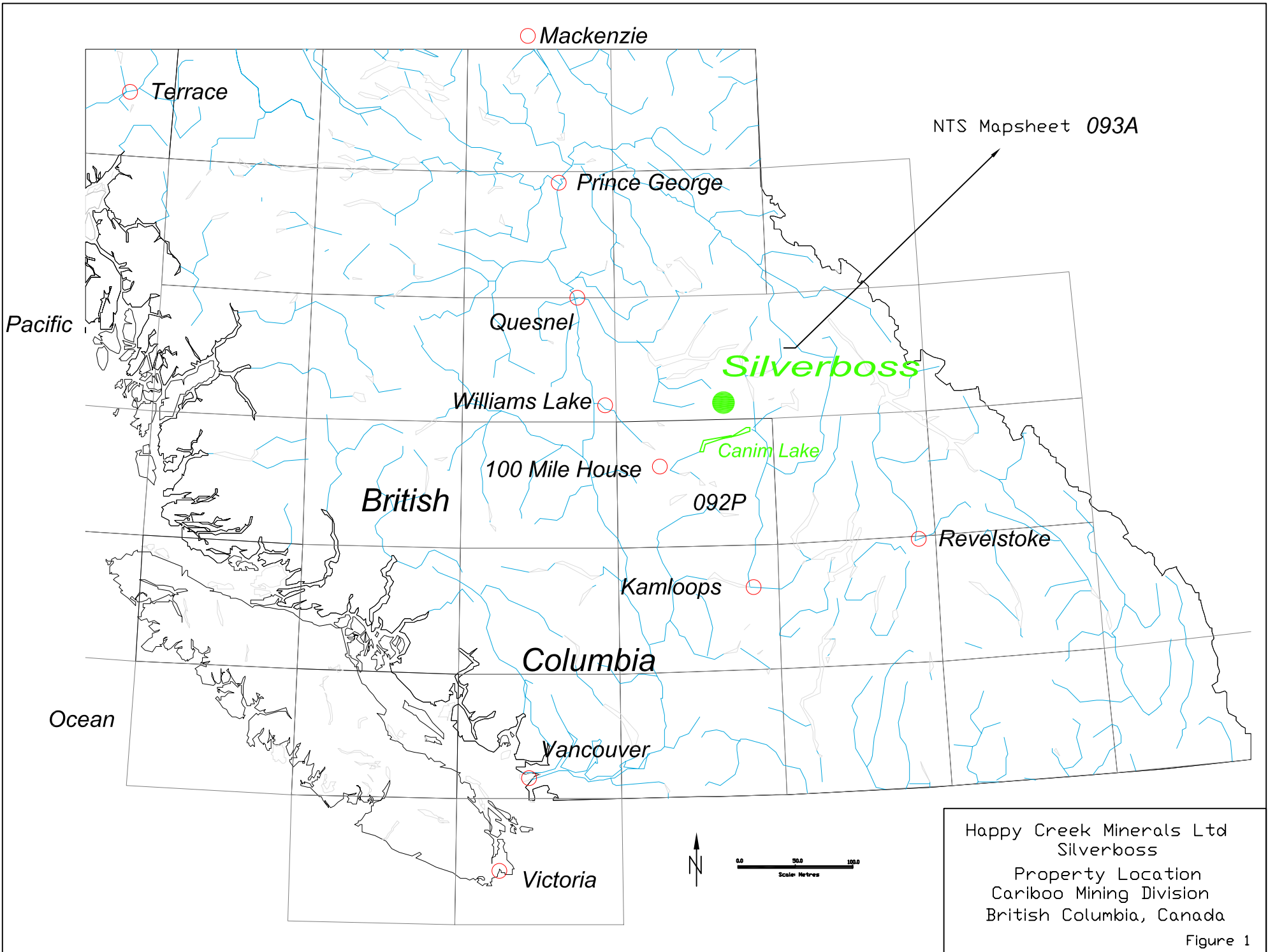
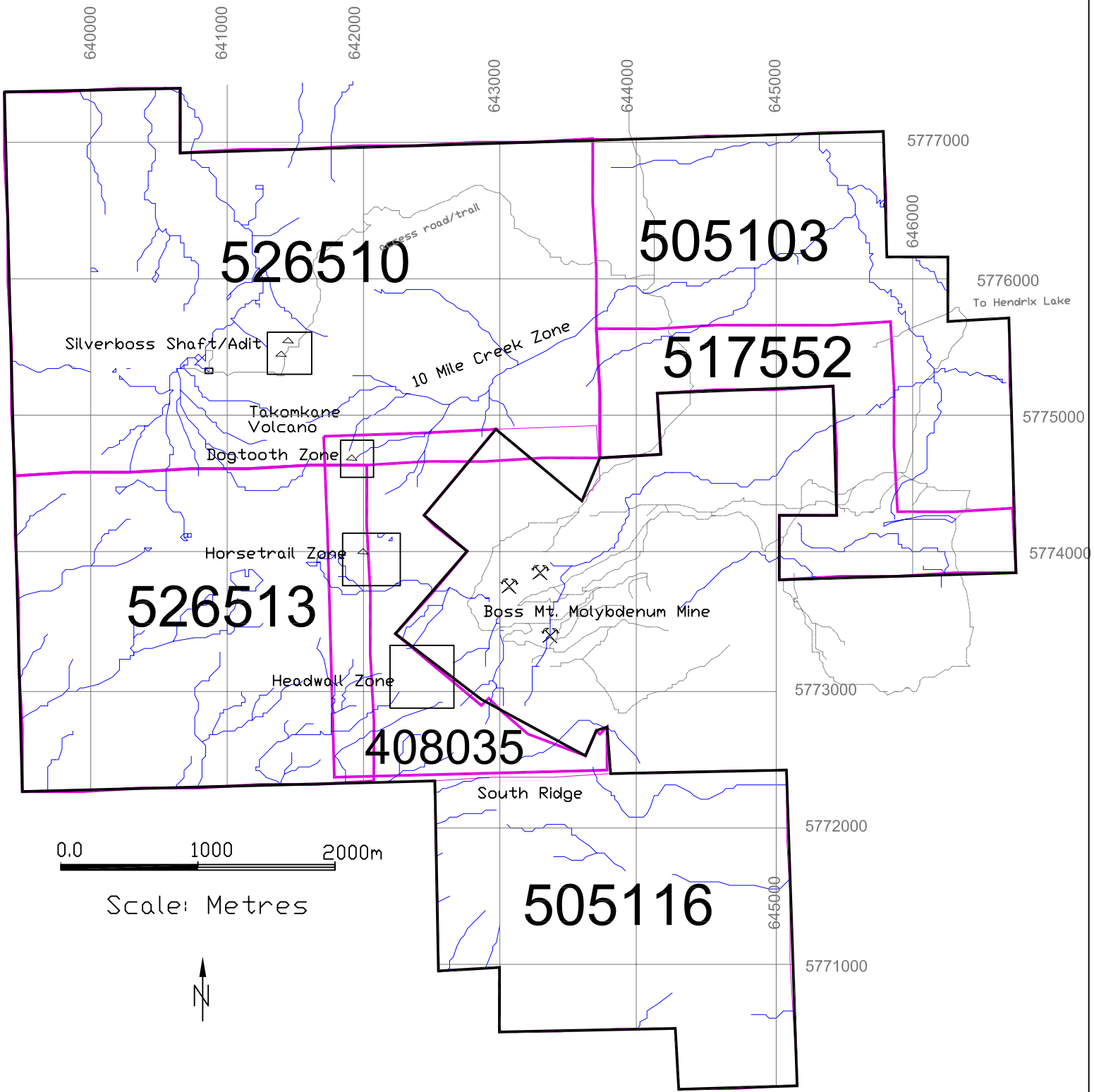


Figure 1



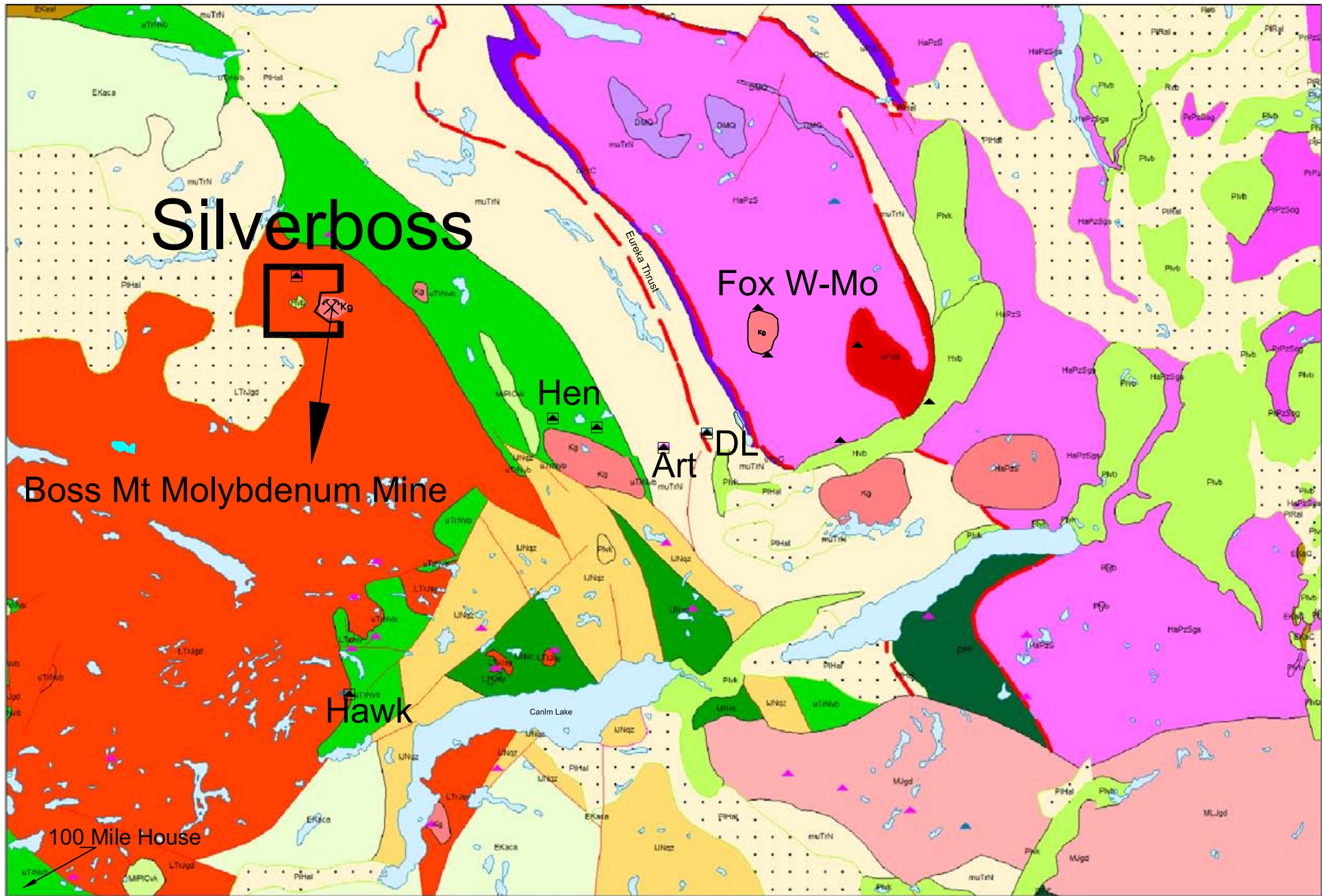
526510 Mineral Tenure #

NTS: 093A.007 NAD 83 Zone 10  
Cariboo Mining Division

Gold-Silver Zones

Happy Creek Minerals Ltd  
Silverboss Property  
Mineral Tenure Location  
British Columbia, Canada Figure 2



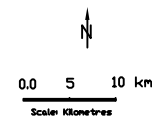


**Geology Legend**

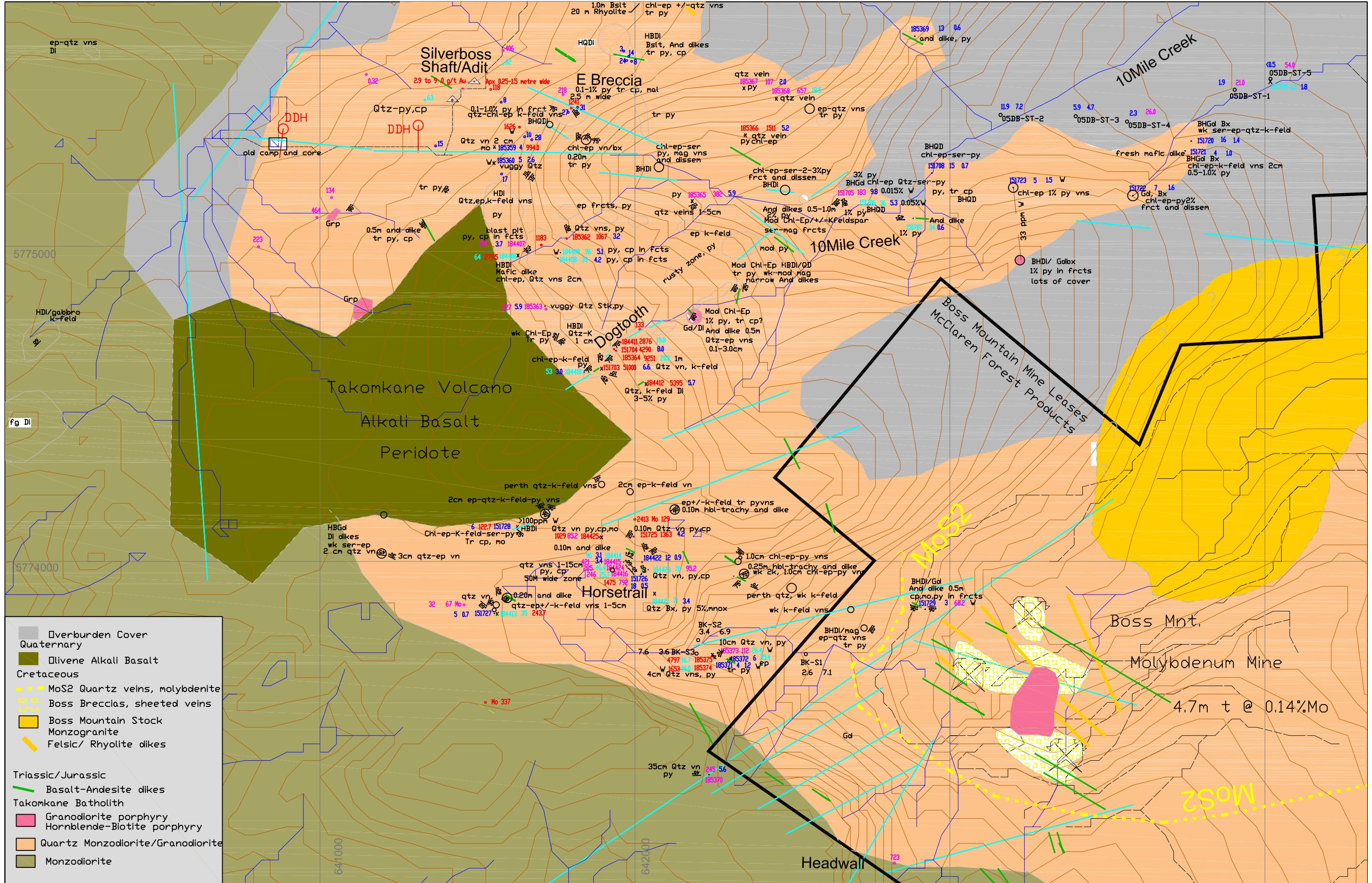
PHal Pleistocene to Holocene Glacial Till, Alluvium  
 Hvb Holocene Basaltic Volcanic Rocks  
 EKaca Eocene Kamloops Group Calcalkaline Volcanic Rocks  
 Plvb Pleistocene Basaltic Volcanic Rocks  
 Plvk Pleistocene Alkaline Volcanic Rocks

LJNvc Lower Jurassic Nicola Group Volcaniclastics  
 LJNqz Lower Jurassic Nicola Group Quartzite, Quartz arenite sedimentary Rocks  
 muTrN Middle-Upper Triassic Basal black phyllite, minor volcanic rocks  
 uTrNvb Upper Triassic Nicola Group Basaltic Volcanic Rocks  
 uPzB Upper Paleozoic Black Riders Mafic Ultramafic Complex  
 DMQ Devonian to Permian Fennel Formation Basaltic Volcanic Rocks  
 HaPzSgs Hadrinian to Paleozoic Snowshoe Group Greenstone, Greenschist, Metamorphic Rocks  
 HaPzS Hadrinian to Paleozoic Snowshoe Group Undivided

Kg Cretaceous undivided Intrusive rocks  
 MJgd Middle Jurassic Granodiorite Intrusive Rocks  
 LTrJgd Late Triassic-Early Jurassic Granodiorite  
 LTrJsy Late Triassic-Early Jurassic syenite, monzonite  
 — Fault  
 — Thrust Fault



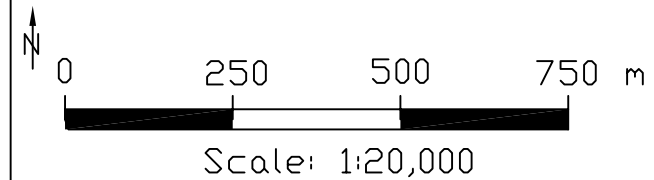
Happy Creek Minerals Ltd  
 Cariboo Project Area  
**Regional Geology**  
 Canim Lake Area, B.C., Canada  
 Figure 3



**Overburden Cover**  
Quaternary  
Olivine Alkali Basalt  
Cretaceous

MoS2 Quartz veins, molybdenite  
Boss Breccias, sheeted veins  
Boss Mountain Stock  
Monzogranite  
Felsic/ Rhyolite dikes

Triassic/Jurassic  
Basalt-Andesite dikes  
Takomkane Batholith  
Granodiorite porphyry  
Hornblende-Biotite porphyry  
Quartz Monzodiorite/Granodiorite  
Monzodiorite



**LEGEND**

Fracture Orientation  
Vein Orientation  
Shear Orientation  
Fault

chl chlorite  
ep epidote  
k-feld k-feldspar  
Qtz quartz  
ser sericite  
py pyrite  
cp chalcopyrite  
mo molybdenite  
W 12-500 ppm tungsten

DDH 1969-1970 DDH Collar

x Float Outcrop  
185375 2005 Rock Sample #  
4797 16.7 Au (ppb) Mo(ppm)  
223 Prior to 2005 Au ppb/gpt Moppm

BK-S2 2005 Silt Sample #  
2.3 26.0 Au (ppb) Mo(ppm)

Happy Creek Minerals Ltd  
Silverboss Property  
Rock and Silt Sample Locations  
Geology

Mapsheet: 093A.007  
Cariboo Mining Division

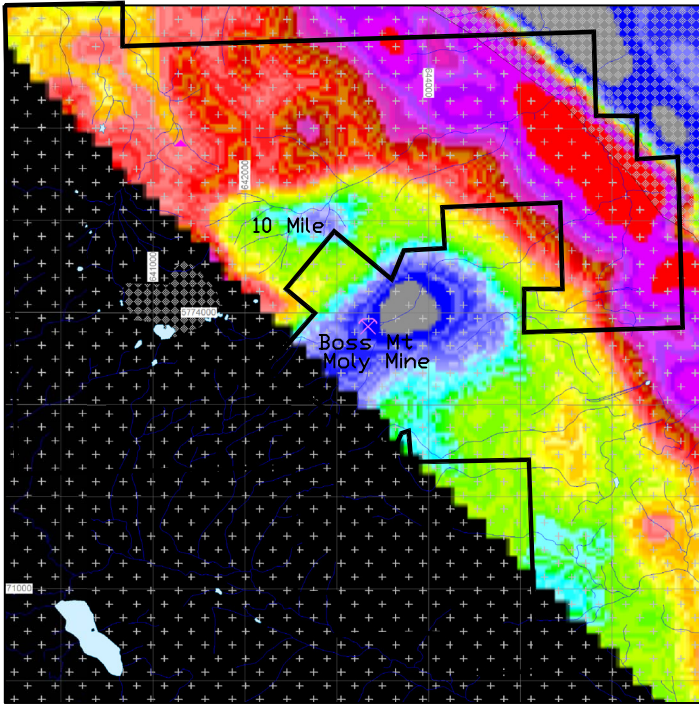
Drawn: D. Blann P.Eng  
Figure: 4

Mine Geology after Soregaroli, 1976

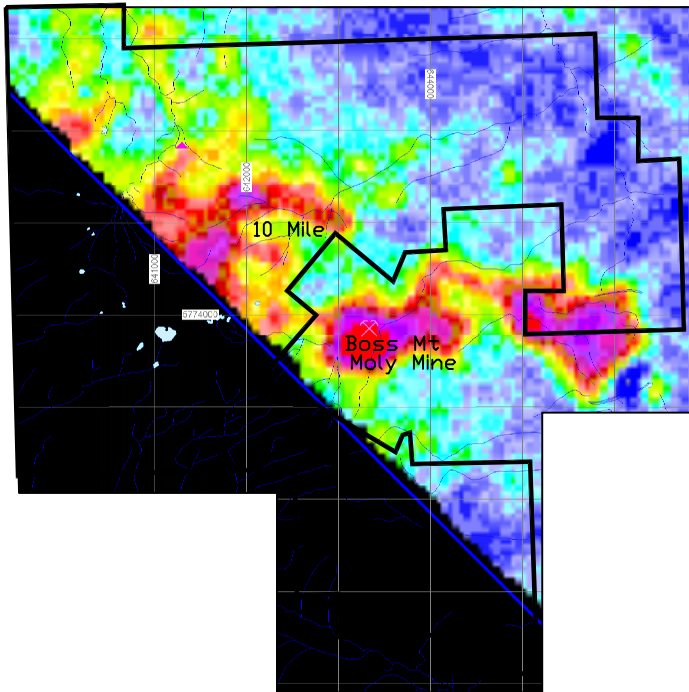
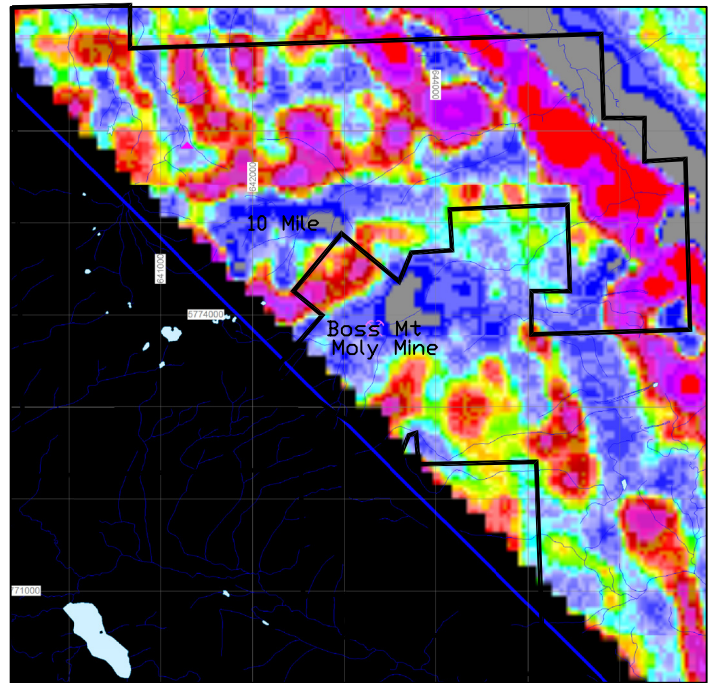
4.7m t @ 0.14%Mo

MoS2

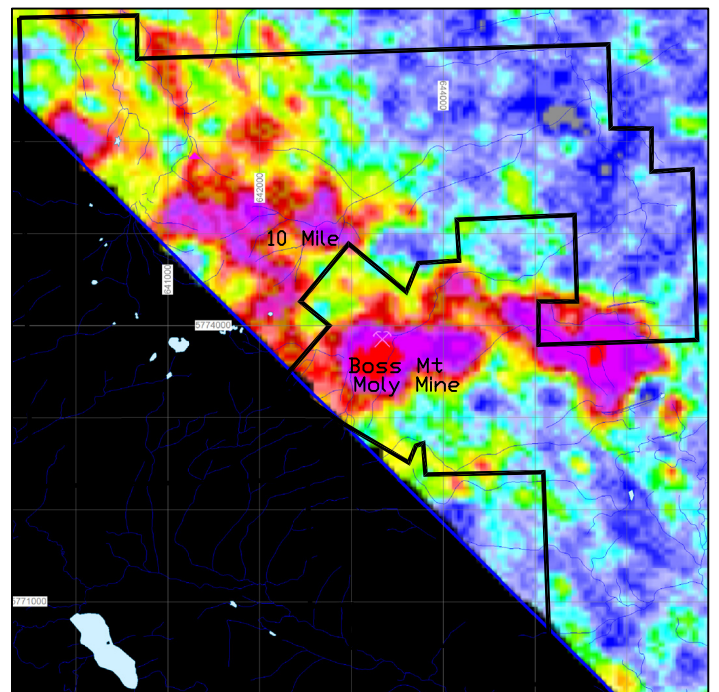
Total Magnetic Field



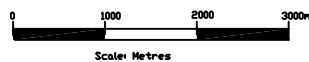
Vertical Magnetic Gradient



Total Absorbed Dose Rate



Total Potassium



Happy Creek Minerals Ltd  
Silverboss Property  
2005 Regional Geophysical Survey  
(Southwest side not available)  
Drawn: D. Blann  
Figure: 5

# Appendix 1

## Assay Certificates



ASSAY CERTIFICATE



Standard Metals PROJECT SB File # A506108R

P.O. Box 1852 38151 Clark, Squamish BC V0N 3G0 Submitted by: David Blann

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Au** gm/mt
G-1	.001	.001	<.01	<.01	<2	.001	<.001	.06	2.08	<.01	.007	<.001	.001	<.01	.62	.081	.004	.60	.99	.09	.50	.003	<.001	-
C151703	<.001	.018	<.01	.01	343	<.001	<.001	<.01	4.88	.01	.001	<.001	.001	<.01	.02	.025	.001	.01	.16	.07	.13	.003	<.001	53.01
C151704	.001	.020	<.01	<.01	35	<.001	<.001	<.01	3.11	<.01	<.001	<.001	.002	.01	.01	.025	<.001	<.01	.05	.01	.01	.003	<.001	4.77
RE C151704	.001	.020	<.01	<.01	35	<.001	<.001	<.01	3.13	<.01	<.001	<.001	.002	.01	.01	.027	<.001	.01	.04	.01	.01	.003	<.001	5.70
C151705	.001	.011	<.01	.01	<2	<.001	.001	.05	5.20	<.01	.004	<.001	<.001	<.01	1.19	.079	.002	.78	1.95	.19	.33	.015	<.001	.21
C151706	.001	.012	<.01	.01	<2	<.001	.001	.06	3.61	<.01	.004	<.001	.002	<.01	.79	.081	<.001	.87	1.52	.10	.38	.050	<.001	.04
C151707	<.001	.008	<.01	<.01	<2	.001	.001	.06	3.59	<.01	.006	<.001	<.001	<.01	1.27	.092	.001	.84	1.70	.16	.43	.003	<.001	.04
C151724	<.001	.153	<.01	.01	<2	.001	.002	.06	4.54	<.01	.010	<.001	.002	<.01	1.37	.129	.001	.83	1.82	.17	.46	.003	<.001	.08
C151725	<.001	.732	<.01	.01	40	<.001	.003	.01	3.13	<.01	.003	<.001	<.001	<.01	.28	.011	.001	.16	.46	.01	.02	.005	<.001	1.04
C184411	.002	.013	<.01	.01	5	<.001	<.001	.01	5.20	.01	<.001	<.001	<.001	<.01	.02	.044	.001	.02	.17	.01	.03	.005	<.001	2.99
C184412	<.001	.024	<.01	<.01	20	<.001	.001	.02	4.81	<.01	.002	<.001	.004	<.01	.29	.018	.001	.35	.70	.02	.23	.003	<.001	5.82
C184424	.005	.313	<.01	.01	30	<.001	.001	.08	4.24	<.01	.008	<.001	.001	<.01	1.28	.082	.001	1.33	1.94	.03	.22	.005	<.001	.86
C184425	.009	.454	<.01	.01	35	.001	.002	.06	4.11	<.01	.003	<.001	.003	<.01	.86	.078	.001	.93	1.48	.06	.19	.003	.001	.74
C185362	.001	.017	.02	.06	13	<.001	.005	.05	7.11	.02	.003	.001	.002	<.01	.52	.045	.001	.77	1.62	.10	.29	.003	<.001	1.38
C185363	<.001	.008	<.01	.01	6	<.001	.001	.07	6.88	.01	.001	<.001	.001	<.01	.03	.048	.001	.87	1.57	.03	.33	.003	<.001	.35
C185364	.002	.068	<.01	.02	26	<.001	.001	.02	9.65	.01	.002	<.001	.004	.01	.10	.089	<.001	.26	.92	.04	.35	.005	<.001	10.06
C185365	.001	.003	<.01	<.01	3	<.001	<.001	<.01	2.17	<.01	<.001	<.001	.003	<.01	.01	.002	.001	.02	.08	.01	.04	.003	<.001	.40
C185366	<.001	.003	<.01	<.01	11	<.001	.001	.01	4.31	.02	.001	<.001	.002	<.01	.04	.024	.001	.12	.40	.02	.33	.003	<.001	1.78
C185367	<.001	.014	<.01	<.01	35	<.001	<.001	<.01	1.15	<.01	<.001	<.001	<.001	.02	<.01	.007	.002	<.01	.02	<.01	.02	.003	<.001	.13
C185368	.001	.002	.01	<.01	9	<.001	<.001	<.01	2.92	.01	.001	<.001	<.001	<.01	.01	.011	.001	.01	.06	.02	.07	<.001	<.001	.75
C185374	.001	.004	<.01	<.01	10	<.001	.001	.01	6.88	<.01	.001	<.001	<.001	<.01	.20	.006	<.001	.11	.35	.02	.08	.005	<.001	1.91
C185375	.001	.014	<.01	<.01	15	<.001	.001	.02	5.82	<.01	.005	<.001	.001	<.01	.80	.019	.001	.24	1.51	.19	.30	.003	<.001	5.55
STANDARD GC-2a/OxL34	.015	.877	9.04	16.54	1023	.007	.001	.21	10.72	.15	.014	.095	.749	<.01	5.73	.283	.003	2.68	.42	.01	.05	.007	.009	5.78

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 250 ML, ANALYSED BY ICP-ES.  
AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.

- SAMPLE TYPE: ROCK PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

DATE RECEIVED: DEC 22 2005 DATE REPORT MAILED: Jan 5/06





SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
C185360	2.6	55.8	1.5	24	.2	.6	.7	46	7.25	3.3	<.1	4.9	.1	2	.5	.7	4.9	17	.04	.021	<.1	6.1	.02	2	.004	1	.07	.001	.01	35.1	.05	.3	<.1	<.05	1	.6
RE C185360	2.4	55.4	1.4	23	.2	1.0	.6	42	7.28	3.3	<.1	4.3	.1	1	.5	.7	4.8	17	.04	.020	<.1	5.8	.02	2	.004	<.1	.07	.001	.01	35.6	.05	.3	<.1	<.05	1	.7
C185361	2.6	84.3	4.1	109	.8	2.9	8.4	526	3.30	4.2	.5	71.1	1.0	56	1.4	.8	4.8	60	1.09	.085	3	5.7	.71	80	127	3	1.77	.130	.33	10.2	.01	2.6	.4	1.49	6	<.5
C185362	3.2	145.7	37.8	254	12.0	3.0	55.2	432	6.69	190.3	.4	1066.9	.6	22	3.3	1.3	3.8	65	.42	.041	1	8.6	.68	50	.082	1	1.41	.073	.24	3.8	.03	4.4	.1	3.41	5	<.5
C185363	5.9	77.0	5.5	103	5.7	3.6	13.5	663	6.32	54.8	1.2	326.6	1.3	11	.2	.7	3.1	78	.03	.046	3	6.7	.78	72	.007	1	1.37	.026	.25	.6	.03	2.8	.1	.09	5	<.5
C185364	20.0	642.9	14.7	196	29.3	2.1	6.2	139	9.29	116.9	.5	9250.9	.8	21	1.0	1.9	56.0	46	.08	.088	-2	6.2	.22	111	.019	2	.93	.037	.31	.7	.04	3.3	.2	1.07	3	.6
C185365	5.9	26.8	49.5	14	3.3	.8	1.4	22	2.02	29.1	<.1	382.0	<.1	1	.1	.3	13.1	7	.01	.003	<.1	13.2	.02	9	.003	1	.07	.006	.03	.5	<.01	.2	<.1	1.09	1	<.5
C185366	5.2	36.0	4.4	15	13.9	2.6	8.8	56	3.91	200.7	.2	1510.8	.5	8	.1	.5	6.2	13	.02	.021	1	6.8	.11	70	.007	1	.39	.016	.25	.2	.02	.7	.1	2.14	2	<.5
C185367	2.0	148.1	59.8	14	37.8	.9	.6	16	1.10	22.7	.3	106.8	<.1	1	.1	1.5	150.4	4	<.01	.010	<.1	16.9	<.01	7	.001	<.1	.02	.002	.02	.1	<.01	.1	<.1	.06	<.1	<.5
C185368	18.5	33.9	134.0	20	12.9	.6	.3	18	2.63	126.6	<.1	656.5	<.1	4	.2	.9	40.4	4	.01	.011	<.1	13.1	.01	12	.003	1	.06	.013	.06	4.2	.01	.2	<.1	.25	<.1	.6
C185369	.6	12.6	3.9	25	.3	8.6	17.6	294	4.63	5.6	.4	12.8	.6	123	.1	1.9	4.2	40	.94	.058	2	12.3	.39	66	.130	2	1.12	.047	.26	1.6	.01	1.9	.1	2.51	4	.5
C185370	5.6	27.4	40.4	30	8.4	.9	2.0	128	3.69	23.1	.1	244.6	.2	17	.1	1.4	5.0	37	.04	.058	1	8.2	.11	95	.022	1	.43	.007	.09	.6	.01	.9	.1	.06	2	1.1
C185371	35.4	11.7	4.4	87	.1	1.3	8.4	744	5.34	1.8	.6	3.8	1.5	35	<.1	.6	14.1	133	.50	.076	2	2.9	2.20	17	.148	2	2.15	.043	.07	48.6	.03	3.9	.1	.57	13	.5
C185372	1.2	23.2	25.6	74	<.1	50.5	36.2	690	11.47	18.1	.1	5.8	.1	93	.4	1.0	.4	630	1.01	.005	<.1	74.1	.97	47	.128	6	2.53	.009	.04	.4	.03	2.6	<.1	<.05	9	<.5
C185373	26.4	21.6	8.9	4	.6	.8	.8	49	10.93	80.5	.2	111.9	.4	33	<.1	.7	67.4	50	.07	.059	1	3.5	.08	133	.074	1	.45	.056	.38	24.1	.14	1.5	.2	1.22	4	2.6
C185374	16.0	53.6	35.2	18	13.4	.9	8.6	101	6.54	22.1	.1	1653.1	.2	13	.1	.4	13.3	16	.18	.007	<.1	5.1	.10	28	.007	<.1	.36	.015	.06	9.2	.01	1.1	.1	4.58	1	.9
C185375	16.7	158.5	30.0	16	18.4	1.0	12.4	133	5.27	15.2	.6	4796.6	1.4	45	.1	.4	11.3	41	.68	.020	1	9.6	.20	65	.028	<.1	1.36	.144	.24	4.6	.01	1.7	.3	4.90	5	.7
STANDARD DS6	11.5	123.7	29.2	144	.3	24.7	10.6	703	2.81	21.3	6.5	44.9	3.0	41	6.1	3.4	4.9	56	.86	.080	14	186.4	.57	165	.084	18	1.90	.072	.16	3.4	.23	3.3	1.7	<.05	6	4.1

Sample type: ROCK R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



GEOCHEMICAL ANALYSIS CERTIFICATE



Standard Metals PROJECT SB File # A506108 Page 1  
P.O. Box 1852 38151 Clark, Squamish BC V0N 3G0 Submitted by: David Blann

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
C151703	6.6	178.8	10.8	94	>100	1.0	.5	52	4.64	85.1	.1	51000.4	.2	5	.3	.9	8.8	18	.01	.023	1	7.0	.01	46	.005	1	.14	.057	.10	1	.07	.5	.1	.44	1	1.2
C151704	8.0	198.2	12.9	32	37.3	.9	2.3	48	2.91	30.8	.1	4290.0	.1	2	.1	.9	56.9	6	.01	.022	<1	9.3	.01	6	.001	1	.04	.006	.01	2	.02	.2	<1	.34	<1	<.5
RE C151704	8.2	204.8	13.0	29	36.7	.6	2.4	48	2.92	29.4	.1	4309.2	.1	2	.2	.9	55.6	5	.01	.023	<1	7.9	.01	6	.001	2	.04	.006	.01	2	.02	.3	<1	.33	<1	<.5
C151705	9.8	105.7	5.1	64	1.5	4.8	15.2	529	4.89	7.3	.6	183.0	1.4	38	.8	.3	4.8	83	.96	.076	3	10.5	.74	51	.122	2	1.79	.134	.27	73.0	<.01	2.9	.6	3.53	7	1.0
C151706	5.3	117.2	18.5	80	2.5	1.5	6.5	556	3.40	2.2	.4	36.0	.9	29	.9	.3	37.9	82	.60	.076	3	5.0	.84	51	.128	1	1.43	.074	.33	>100	<.01	3.5	.8	1.27	6	1.2
C151707	.6	73.3	4.0	44	.6	3.0	13.8	527	3.32	4.7	.7	34.3	1.5	48	.4	.6	5.3	92	1.00	.092	3	5.8	.77	81	.169	2	1.55	.128	.38	7.3	.03	4.3	.8	1.19	6	.6
C151708	.7	93.8	4.4	131	.6	1.9	8.2	544	3.04	2.1	.8	15.0	1.8	47	2.4	.3	3.0	65	1.00	.086	4	4.5	.65	66	.122	2	1.66	.148	.17	1.7	.04	2.8	.3	1.11	6	.5
C151720	1.4	115.6	2.8	41	.4	5.3	5.7	504	2.71	1.8	1.3	16.0	3.5	39	.1	.2	1.4	83	.67	.082	5	8.4	.69	74	.169	2	1.45	.109	.39	8.9	.06	2.9	.5	.17	6	<.5
C151721	1.0	120.7	3.2	42	.4	7.6	11.9	493	3.51	2.0	.6	4.0	1.1	71	.2	.3	3.4	122	1.11	.128	4	12.2	.75	96	.161	3	1.76	.151	.27	5.0	.03	2.7	.3	.71	6	<.5
C151722	1.6	113.7	4.8	47	.3	6.2	10.5	495	3.33	1.8	.8	7.0	1.7	45	.1	.2	2.9	97	.96	.108	4	9.6	.82	72	.165	2	1.89	.169	.36	3.2	.02	3.6	.6	.88	7	<.5
C151723	1.5	44.9	2.9	41	.2	2.4	9.6	446	3.52	1.7	.5	5.2	.7	35	.1	.3	1.5	81	.82	.070	3	6.1	.70	89	.135	6	1.55	.123	.21	33.5	.03	3.0	.3	1.01	6	.7
C151724	1.8	1529.6	7.1	80	1.9	10.2	15.6	489	4.15	4.5	.4	62.6	.6	84	.6	1.0	.2	237	1.11	.132	4	16.3	.79	208	.155	5	1.70	.131	.39	.8	.02	3.2	.1	.16	5	.5
C151725	4.2	7305.4	1.7	57	42.7	2.1	34.8	148	3.22	9.1	.3	1362.7	.2	22	1.4	.8	.5	24	.22	.011	1	7.4	.15	8	.029	1	.46	.006	.02	1.0	.06	.8	<1	1.28	2	5.2
C151726	.5	446.1	1.8	47	.5	2.0	14.6	496	2.65	3.4	.6	17.7	1.4	77	.3	.6	.1	80	.91	.084	3	4.7	.79	62	.144	3	1.34	.045	.15	.5	.01	1.8	<1	<.05	5	<.5
C151727	.7	59.2	2.2	8	.3	.9	1.4	133	.63	1.0	3.2	4.9	11.6	13	.1	.2	.1	10	.20	.010	2	7.1	.11	57	.033	2	.42	.040	.11	.2	.01	.4	<1	<.05	1	<.5
C151728	122.7	70.3	4.0	35	.4	4.0	8.8	401	3.78	3.4	.8	5.5	1.9	38	.2	.2	8.5	81	.57	.085	4	7.7	.63	56	.128	3	1.29	.078	.19	>100	<.01	3.0	.2	1.72	5	.5
C151729	68.2	162.5	2.0	36	.2	2.7	7.5	499	3.13	.7	.7	2.7	1.1	79	<.1	.1	.4	94	.83	.088	4	5.1	.82	142	.137	1	1.76	.092	.36	12.1	<.01	4.5	.4	.38	6	.8
C184406	279.5	1947.2	2.8	139	3.4	4.2	9.0	1158	3.36	2.0	.8	63.9	1.1	38	.7	.8	.2	85	1.12	.076	4	3.4	1.29	95	.165	2	2.36	.066	.39	2.7	<.01	4.5	.2	<.05	6	<.5
C184407	3.7	418.3	37.5	147	3.7	3.0	18.1	1227	4.30	102.0	.4	153.6	.7	50	.7	1.4	.6	67	2.00	.077	4	3.6	1.28	127	.128	9	2.59	.095	.31	2.6	.02	4.4	.1	.63	7	.5
C184408	4.2	38.2	4.9	84	.6	5.5	138.5	915	6.39	14.0	.7	39.0	.8	27	.1	.6	5.2	112	.56	.066	2	3.8	1.29	51	.126	<1	2.31	.094	.49	.7	.01	4.4	.2	2.58	7	.9
C184409	5.1	130.1	5.7	92	1.6	5.4	40.4	840	6.41	10.4	.7	96.4	1.5	45	.2	.4	9.5	111	.96	.064	2	6.4	1.23	37	.164	1	2.39	.171	.75	51.6	<.01	6.4	.3	2.97	6	.6
C184410	3.0	283.1	4.7	358	.8	5.7	9.8	886	5.25	15.4	1.0	52.5	1.6	48	1.0	1.1	.5	159	.35	.102	6	7.0	2.08	191	.243	<1	3.42	.037	1.21	.6	<.01	8.2	.7	.11	9	<.5
C184411	19.8	112.9	8.5	123	6.3	.8	2.1	69	4.98	143.2	.1	2875.7	.1	2	.4	1.8	24.8	27	.01	.044	<1	7.6	.03	13	.004	<1	.17	.005	.03	1.1	.01	.4	<1	<.05	1	1.4
C184412	5.7	228.0	3.3	39	23.7	3.0	8.4	214	4.52	16.9	.4	5395.3	.2	20	.3	1.6	9.4	23	.25	.016	1	9.5	.31	42	.064	<1	.70	.017	.21	.5	.21	1.1	.1	3.11	2	1.0
C184413	243.7	51.9	7.2	2	1.0	1.0	.6	36	.81	10.4	<.1	35.0	<.1	1	<.1	.2	7.5	3	<.01	.002	<1	15.7	.01	8	.001	<1	.05	.005	.03	.9	<.01	.2	<.1	.18	<1	1.0
C184414	3.1	3167.6	10.4	38	10.8	1.4	7.0	275	1.79	3.0	.4	96.0	.8	167	3.8	.6	.3	39	1.32	.052	2	6.9	.35	34	.125	4	1.28	.013	.07	.6	.01	1.7	<.1	.40	5	1.0
C184415	3.4	5832.4	3.1	159	35.5	32.1	49.8	948	5.59	3.4	.4	420.5	.5	15	2.2	.6	.3	103	.34	.047	1	6.3	1.94	113	.200	4	2.41	.015	.46	2.0	.04	3.8	.2	.70	8	2.3
C184416	25.7	3102.3	3.5	47	20.5	10.6	75.4	406	2.97	3.8	.8	246.0	.7	53	1.1	.6	.3	36	.57	.048	1	9.2	.59	19	.112	1	1.04	.009	.07	.6	.01	1.7	<.1	.86	4	2.1
C184421	3.4	635.4	8.4	63	1.1	2.1	36.2	545	6.24	105.0	.5	71.2	1.6	14	.2	.6	14.1	55	.29	.080	3	3.3	.90	67	.037	<1	1.56	.026	.16	.4	.01	4.1	.1	2.53	5	<.5
C184422	.9	33.3	2.5	29	.4	2.2	104.7	360	2.80	5.6	.7	11.5	7.4	13	<.1	.5	.5	38	.20	.032	2	4.5	.50	62	.083	64	.89	.036	.12	.7	.01	1.6	.1	.97	3	.5
C184423	95.2	833.8	2.5	69	12.5	1.8	11.9	460	3.15	2.7	.6	70.2	.9	31	1.4	.4	.3	80	.62	.077	3	5.7	.76	75	.130	1	1.26	.040	.21	.5	.03	2.5	.1	.10	4	<.5
C184424	46.4	2977.7	4.5	129	30.9	2.2	10.5	754	3.92	2.6	.6	284.9	1.1	62	2.9	.5	.2	73	1.06	.083	3	4.9	1.25	61	.152	31	1.82	.027	.20	21.7	.02	2.9	.1	.29	7	1.3
C184425	85.2	4275.6	4.2	83	33.9	3.5	21.7	543	3.87	13.8	.9	1029.4	1.6	27	.9	.4	.2	72	.70	.080	4	3.7	.87	66	.125	1	1.41	.043	.15	1.2	.06	3.0	<.1	.14	4	2.4
C185359	994.0	51.5	1.2	25	.5	2.0	4.7	309	1.70	.6	.3	4.0	.8	30	<.1	.1	.2	56	.33	.038	2	10.2	.51	241	.122	<1	.89	.067	.45	5.5	.01	4.0	.4	<.05	3	.7
STANDARD DS6	11.6	122.0	30.2	141	.3	24.8	10.7	714	2.82	21.3	6.6	49.4	2.9	41	6.0	3.6	5.1	55	.83	.078	14	187.4	.57	165	.081	17	1.92	.073	.15	3.6	.22	3.2	1.7	<.05	6	4.7

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY  
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA

DATE RECEIVED: SEP 28 2005 DATE REPORT MAILED: Oct 18/05





GEOCHEMICAL ANALYSIS CERTIFICATE



Standard Metals PROJECT SB File # A600366

P.O. Box 1852 38151 Clark, Squamish BC V0N 3G0 Submitted by: David Blann

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample gm
G-1	.2	1.5	3.0	42	<.1	4.3	4.0	508	1.79	<.5	2.0	<.5	4.2	65	<.1	<.1	.1	36	.52	.080	8	7.9	.54	190	.133	1	1.01	.068	.51	.1	<.01	2.1	.3	<.05	4	<.5	15.0
05DB-ST-1	21.1	40.4	5.2	65	.2	21.2	9.1	203	1.57	2.0	.6	1.9	.2	23	.9	.2	.6	49	.36	.089	5	27.4	.47	60	.074	1	1.56	.012	.06	2.8	.06	2.0	.1	.20	5	.5	15.0
05DB-ST-2	7.2	59.3	16.1	240	.4	24.9	32.8	1642	3.00	5.4	1.1	11.9	.5	86	4.3	.5	2.8	72	.81	.101	6	28.9	.66	163	.086	2	2.37	.027	.15	5.1	.08	2.2	.3	.11	5	1.2	7.5
05DB-ST-3	4.7	57.5	7.2	106	.4	35.7	18.8	824	2.31	2.7	.7	5.9	.5	26	1.6	.3	.8	60	.46	.117	8	38.7	.68	86	.094	1	2.40	.014	.11	2.6	.08	2.7	.2	.10	6	.5	15.0
05DB-ST-4	26.4	70.4	6.7	94	.5	25.5	23.9	1321	2.35	2.6	.9	2.3	.2	29	2.0	.3	1.3	68	.47	.103	7	32.5	.52	64	.075	1	2.04	.013	.08	5.2	.10	2.1	.2	.10	5	.7	15.0
05DB-ST-5	54.3	52.7	6.9	78	.3	23.3	24.3	1752	3.74	3.9	.7	<.5	.5	33	2.6	.3	.6	112	.55	.112	6	30.6	.51	76	.066	2	1.73	.013	.07	3.0	.09	2.3	.3	.11	4	.7	7.5
BKS-1 SB-05	7.1	54.1	11.4	142	.2	35.8	15.3	975	2.87	3.6	1.2	2.6	.5	74	1.2	.4	.8	85	.68	.140	7	45.6	.98	128	.109	1	2.17	.020	.15	4.2	.05	1.9	.2	.06	6	1.0	7.5
BKS-2 SB-05	6.9	56.5	20.5	98	.2	29.8	14.9	1082	3.07	4.6	2.0	3.4	.3	90	.5	.4	.5	96	.68	.155	9	32.8	.88	143	.111	1	2.06	.025	.15	1.8	.03	1.8	.1	<.05	6	1.1	15.0
BKS-3 SB-05	3.6	81.9	13.9	82	.3	107.3	24.7	713	3.22	4.7	1.8	7.6	1.1	50	.3	.5	.3	75	.81	.131	5	122.2	1.81	134	.129	<1	2.73	.013	.37	1.4	.03	2.2	.3	<.05	7	.8	15.0
STANDARD DS6	11.5	122.8	29.0	142	.3	24.3	10.8	702	2.81	21.5	6.5	46.0	3.0	40	6.1	3.5	5.0	55	.86	.080	13	175.7	.58	165	.081	16	1.90	.071	.16	3.5	.22	3.3	1.7	.06	6	4.5	15.0

GROUP 1DX - 15.00 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: SILT SS80 60C

Data 1 FA \_\_\_\_\_ DATE RECEIVED: JAN 24 2006 DATE REPORT MAILED: Feb 14/06





## Appendix 2

# Petrographic Reports

# **Petrographic Report**

## **Silverboss Rocks**

27 April 2006

Prepared For: David Blann  
Standard Metals

*PetraScience Consultants Inc.*

---

700 – 700 West Pender Street  
Vancouver, B.C. V6C 1G8 Canada  
phone: 604.684.5857 fax: 604.222.4642

info@petrascience.com  
www.petrascience.com

## Background

A set of 8 samples were received from David Blann of Standard Metals. The objective of the work was to define the characteristics of the alteration, mineralization and ore associations. The samples were prepared as polished thin sections for petrographic analysis. No detailed geologic or spatial information was provided with the samples, however brief descriptions were provided. The petrographic work included basic transmitted and reflected light observations, covering description of lithologies (where possible), alteration and mineralization. The analyses were carried out by Anne Thompson and Alexandra Mauler at the PetraScience office, Vancouver and Kathryn Dunne at her office in Salmon Arm. The observations are summarized below and descriptions follow. All percentages in the descriptions are approximate.

## Summary

### *Lithologies*

The sample suite includes variably altered igneous lithologies, vein and skarn assemblages.

SB DDH3-130 is less altered and is identified as a monzodiorite or possibly quartz monzodiorite.

Sample SB5893 – DR3 is a quartz vein and sample SB 00H-1 – 75 is a massive pyrite-chalcopyrite-quartz ?vein.

### *Alteration*

In SB DDH3-130 alteration is less intense selectively pervasive replacement of amphibole and plagioclase by epidote, carbonate, chlorite and sericite. Tourmaline occurs as selvages to fine carbonate-epidote veinlets.

Minor sericite occurs as disseminated patches in sample (SB 00H-1 -75) and trace sericite occurs as alteration in the quartz vein (SB5893 – DR3). Calcite occurs as veinlet in sample SB 00H-1-75.

### *Mineralization*

Minor chalcopyrite and pyrite occur as infill to coarse-grained quartz in SB5893 – DR3. Sample SB 00H-1-75 comprises massive pyrite with lesser chalcopyrite. Samples SB DDH3 – 130 and 00 DR4 comprise minor chalcopyrite±pyrite or pyrrhotite with traces of molybdenite.

**Sample:** SB5893 – DR3

**LITHOLOGY:** Quartz vein

**ALTERATION TYPE:** Weak sericite

**Hand Sample Description:**

Vein comprises translucent to white, massive, coarse-grained quartz, containing numerous vugs typically filled with pyrite and chalcopyrite. Some pinkish veinlets crosscut the sample. Not magnetic, no reaction to HCl. FOV = ~ 3 cm



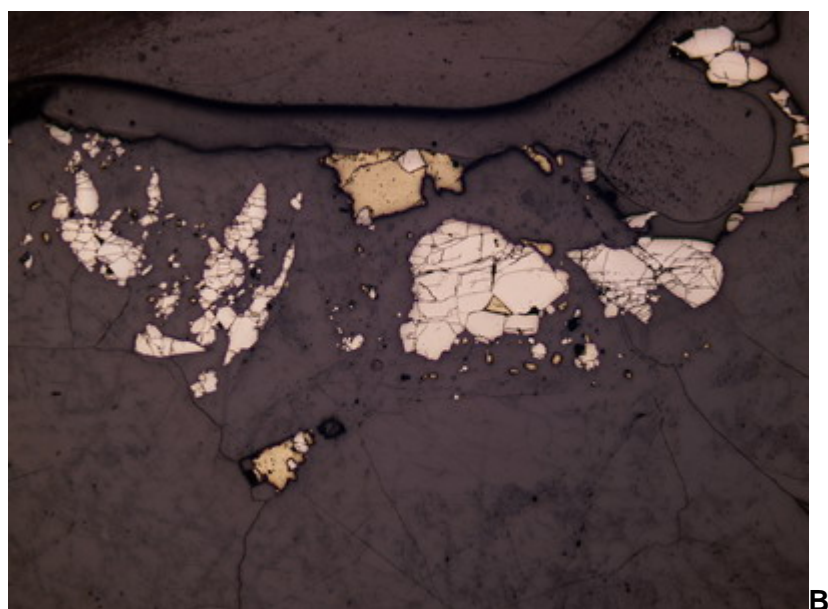
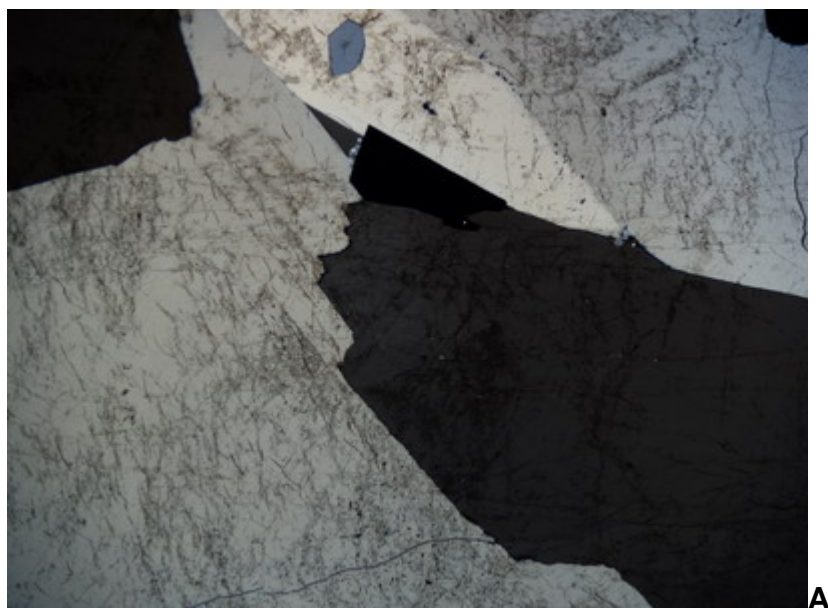
Mineral	%	Distribution & Characteristics	Optical
Quartz	90	coarse-grained granular aggregates, typified by abundant microfractures filled with secondary fluid inclusions; fine to medium-grained, anhedral aggregates, occurs with sulfides as infill to coarse-grained quartz	

**MINOR MINERALS**

Mineral	%	Distribution & Characteristics	Optical
Pyrite	03	fine to medium grained, anhedral, fractured with development of cubic subhedral grains, disseminated, typically heavily fractured and corroded by a thin rim of Fe-oxides	
Chalcopyrite	03	fine to medium-sized anhedral masses and subhedral grains, commonly corroded by a thin rim of Fe-oxides	
Sericite	tr	rare fan-like aggregates, occurs with sulfides and fine to medium-grained quartz	
Fe-oxides	tr	thin rim around sulfides and as fracture infill within quartz vein	yellow-brown

**Thin Section Description:**

Coarse-grained, anhedral massive quartz forms most of the sample, with locally finer granular quartz aggregates and sulfides as infill. Alteration is marked by rare traces of fine sericite disseminated with fine to medium-grained quartz along coarse-grained quartz grain boundaries. Fine pyrite and chalcopyrite are disseminated throughout the sample, typically corroded by a thin rim of Fe-oxides.



**SB5893 – DR3:** A) Representative view of coarse-grained quartz, B) Pyrite and chalcopyrite dissemination  
 FOV = 8.5 mm, A) XPL, B) RL

**Sample:** SB 00H-1 - 75

**LITHOLOGY:** Massive pyrite-chalcopyrite-quartz ?vein

**ALTERATION TYPE:** Sericite

**Hand Sample Description:**

Sample made of massive, heavily fractured pyrite and chalcopyrite disseminated within a quartz matrix. Some thin white calcite veinlets strongly reactive to HCl crosscut the sample. Not magnetic. FOV = ~ 4 cm



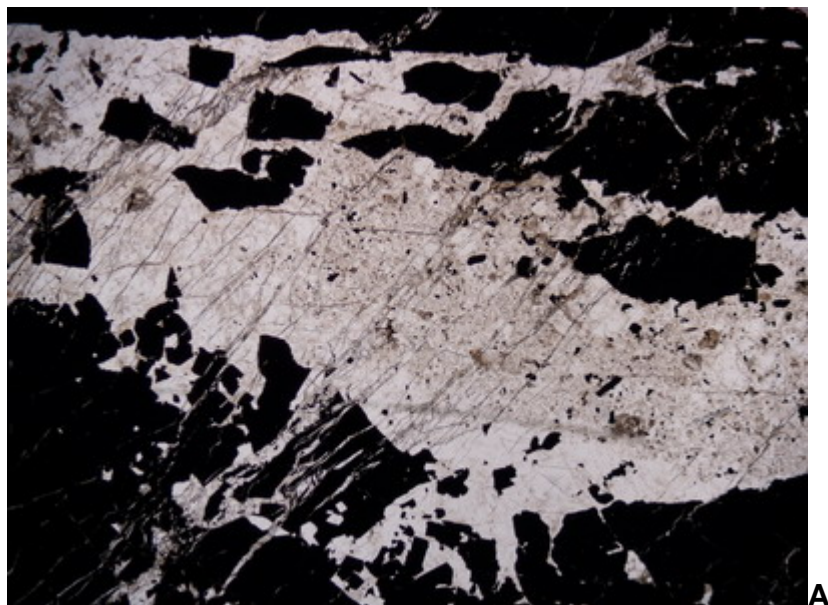
Mineral	%	Distribution & Characteristics	Optical
Pyrite	60	very fine anhedral fragments, subhedral crystals and anhedral coarse masses, heavily fractured with fractures filled with quartz, calcite and locally chalcopyrite	
Quartz	20	fine to medium grained, anhedral, locally development of subgrains, highly fractured, forming most of the gangue	
Chalcopyrite	08	fine-grained, anhedral aggregates, occurs as infill to fractured pyrite, fractured and infilled by calcite	
Calcite	08	fine-grained, anhedral in sets of subparallel veinlets, latest infilling of fractures throughout the sample	

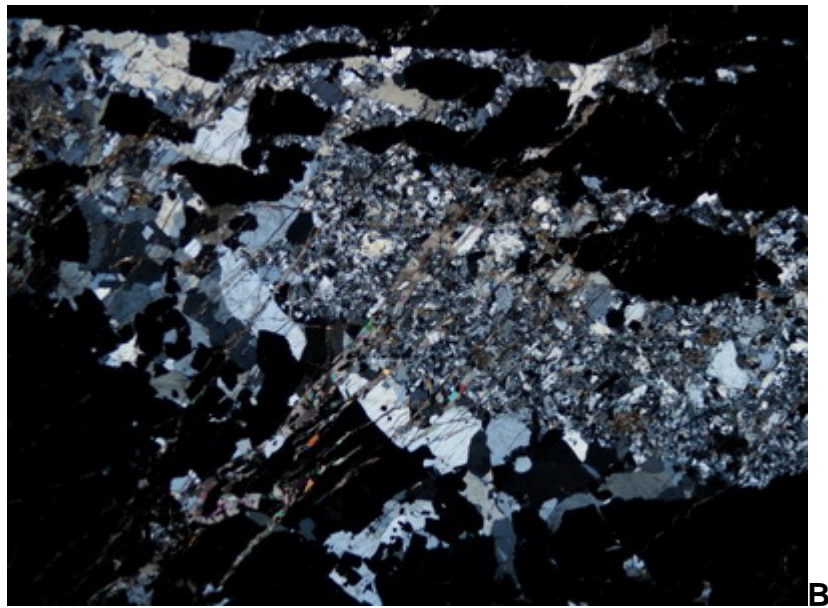
**MINOR MINERALS**

Mineral	%	Distribution & Characteristics	Optical
Sericite-muscovite	04	very fine-grained patches disseminated with fine-grained quartz, locally as fine grained sheaves and irregular veinlets	

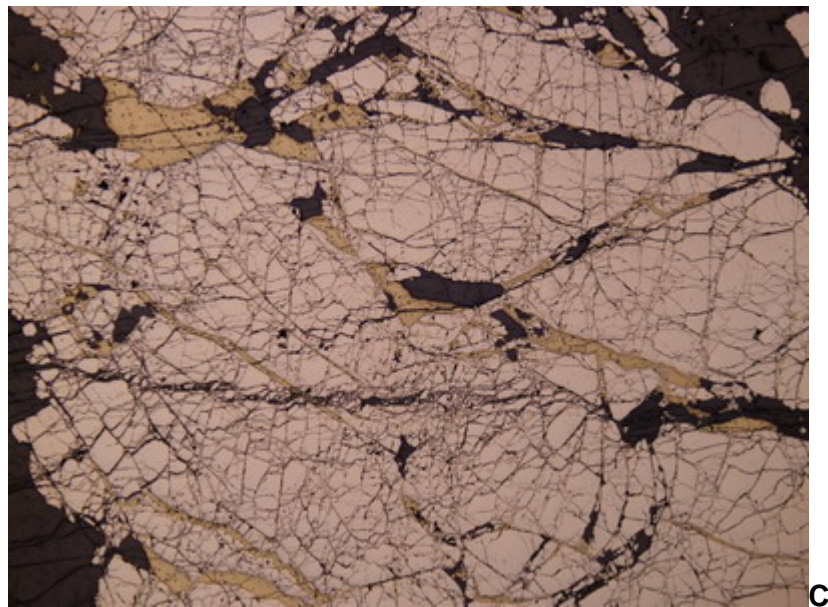
**Thin Section Description:**

The section is mainly composed of heavily fractured massive pyrite with minor chalcopyrite. Commonly chalcopyrite partially infills the pyrite fractures. Gangue minerals around the sulfides include anhedral fine to medium-grained quartz and sericite-muscovite. Locally quartz is prismatic and infilled by chalcopyrite. Sericite alteration is marked by fan-like patches of sericite-muscovite disseminated within the fine-grained quartz subgrains and as irregular veinlets. A later calcite alteration phase is noted both by disseminated grains and subparallel veinlets crosscutting the sample and further infilling most of the fractures in pyrite.





**SB 00H-1 - 75:** Representative view of fracture in pyrite with quartz infill and crosscut by subparallel calcite veins. FOV = 8.5 mm, A) PPL, B) XPL



**SB 00H-1 - 75:** C) Representative view showing massive pyrite cut by veins of chalcopryite, quartz and calcite. FOV = 8.5 mm, RL

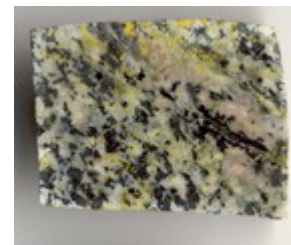
**Sample:** SB DDH3 -130

**LITHOLOGY:** Monzodiorite/Quartz monzodiorite

**ALTERATION TYPE:** Carbonate, epidote-clinzoisite, chlorite, sericite

**Hand Sample Description:**

Medium-grained, equigranular rock with approximately 60% white tabular plagioclase, 25% mafic minerals, 5% quartz and 10% K-feldspar (based on cobaltinitrate stain). The sample is crosscut by a thin vein with a selvage of pinkish material and black ?tourmaline. Magnetic, no reaction to HCl. FOV = ~ 3 cm



Mineral	%	Distribution & Characteristics	Optical
Plagioclase	40	medium-grained, subhedral grains, composition of An <sub>30-45</sub> (based on 3 estimates), typically partly replaced by patchy sericite and locally epidote	<i>polysyn. twins</i>
Hornblende	20	fine- to medium-grained, anhedral crystals, pleocr. pale green to olive green, high relief, intergrown with feldspar, typical amphibole cleavages, partly replaced by chlorite and epidote	<i>inclined ext large 2V.</i>
Orthoclase	10	fine to medium-grained, anhedral, cloudy, development of subgrains, occurs intergrown with plagioclase, quartz and hornblende	
Carbonate	05	Fine irregular patches, and fine subhedral crystals disseminated; very fine-grained, brown, grungy aggregates as veinlets with epidote and quartz; fine-grained, colourless, as discontinuous veinlets	
Chlorite	05	Fine irregular fibrous patches, commonly associated with sulfides	<i>Abnormal brown biref</i>
Epidote-clinozoisite	05	fine patches and disseminated grains, occurs as replacement of hornblende and plagioclase; fine to very fine-grained aggregates, occurs in veinlets with quartz and carbonate	

**MINOR MINERALS**

Mineral	%	Distribution & Characteristics	Optical
Sericite-muscovite	03	extremely fine-grained masses, fine patches within feldspars	
Quartz	03	fine to medium-sized anhedral grains, interstitial to feldspars	
Magnetite	03	fine grained, heavily pitted and fractured subhedral crystals, occurs disseminated	
Chalcopyrite	02	very fine to medium-grained, anhedral grains and masses, occurs disseminated	
Tourmaline	02	fine to medium-grained, strongly pleochroic: pink-brown to dark green, some colour zoning, occurs as carbonate vein selvage	
Pyrite	01	very fine to medium-grained, anhedral grains and masses, occurs disseminated	
Titanite	01	aggregates of fine subhedral grains, locally associated with hornblende and magnetite	
Rutile	tr	very fine grained, anhedral aggregates, occurs with chlorite as replacement of hornblende	
Molybdenite	tr	rare curved plates, straight extinction	

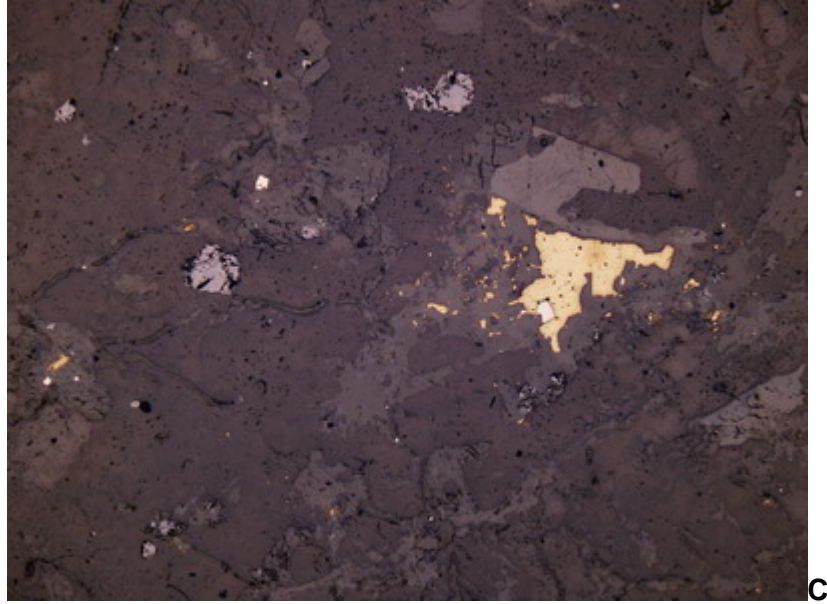
**Thin Section Description:**



This sample appears representative of a monzodiorite or quartz monzodiorite as indicated by a dominantly plagioclase-hornblende-orthoclase composition with minor quartz component. Chlorite and epidote replace amphibole along cleavage planes and grain boundaries showing anomalous brown birefringence colors. Fine-grained sericite forms numerous fine fibrous masses within plagioclase and epidote occur as patchy replacement of plagioclase. Epidote alteration is associated with masses of irregular chalcopyrite grains. Carbonate replaces plagioclase along cleavage planes and grain boundaries. Carbonates, locally with epidote and quartz, also occur as disseminated veinlets. Tourmaline occurs as selvages to brown carbonate-epidote veinlets. Rare flakes of pyrite and chalcopyrite are disseminated throughout the sample. Numerous subhedral broken crystals of magnetite are also disseminated, locally associated with titanite. Trace molybdenite was observed.



**SB DDH3 -130:** Representative view showing plagioclase, orthoclase, minor quartz and hornblende replaced by chlorite and epidote. FOV = 8.5 mm, A) PPL, B) XPL



**SB DDH3 -130: C)** Representative view showing chalcopyrite (yellow) with an inclusion of pyrite (white) and disseminated magnetite grains (bluish), FOV = 8.5 mm, RL