GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

SILVERBOSS PROPERTY
(SB 1-4 mineral claims)

CARIBOO MINING DIVISION

NTS 093A006/093A016

Prepared for

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Summary

The Silverboss property is located adjoining the past producing Boss Mt. molybdenum mine, in the south central portion of the Cariboo region, British Columbia. The property surrounds the adjacent Boss Mountain Molybdenum Mine, which produced 32 million lbs molybdenum at an average grade of 0.20%Mo between 1965 and 1975; current metal prices for molybdenum at approximately $30.00/lb puts a value of over $1 billion on historical production. Current resources are estimated at approximately 14.5 million tonnes grading 0.14% molybdenum or a present in-situ value of $700 million.

The Silverboss property is underlain by Takomkane granodiorite, diorite and monzodiorite, Upper Triassic Lower Jurassic in age, cut by dikes of andesite to rhyolite composition, a quartz monzonite stock Cretaceous in age. An alkaline olivine basalt volcano and associated dikes cut all previous rocks and is Pleistocene to recent in age. The Takomkane volcano happens to contain peridote, a semi precious to precious gemstone and is associated with diamondiferous kimberlite- an intriguing aspect to this unusually well preserved volcano.

On the Silverboss property, large scale faults trend northwest to northeast and are several kilometres in length. Widespread zones of moderate to strong fracturing are accompanied by variable quartz, chlorite, epidote, sericite alteration, and pyrite from trace to 3% occurs. Vuggy, dogtooth quartz veins are filled by fine grained pyrite, chalcopyrite, and contain significant concentrations of copper, gold and silver. Trace elements present include variable amounts of molybdenum, bismuth, lead, tungsten, manganese.

At the northwest pit in the adjacent mine, high grade quartz-molybdenite veins dip west-southwest, towards the Silverboss property, approximately 350 metres away, along the Molybdenite creek fault zone; this area is an obvious place to look for extensions to the existing resources at the mine.

Geology and prospecting in 2004 identified three new zones containing significant copper, gold and silver values. The South ridge, Horse Trail, and Headwall zones all contain generally similar style of veins, alteration, and sulphides as the Silverboss vein,

which can be traced on surface for 350 metres, is up to 2.0 metres in width and returned maximum values of 9.41 g\t gold, 602 g\t silver and 6.7% copper.

Sample 151679 returned 4238 ppm (0.42%) copper, 28.0 ppm silver, and 2413 ppb (2.4g/t) gold from the Horse trail zone, Sample 151797 returned 549 ppm copper, 51.0 ppm silver, 723 ppb gold, along with 226 ppm bismuth, and 230 ppm tungsten from the Headwall zone, and 1926, ppm copper, 17.4 ppm silver, 149 ppb gold from the South ridge zone. Significant copper, gold and silver values occur for several kilometres around the Boss Mountain molybdenum mine, and the relationship between these distinct mineral types is unclear. Although all of these areas remain largely un-sampled and un-mapped, the source of copper, gold and silver may be from a much larger hydrothermal system associated with porphyry intrusion on the Silverboss property.

The Silverboss property hosts excellent potential for copper-molybdenum-gold-silver porphyry, high grade telescoped epithermal gold-silver vein structures, and molybdenum bearing vein, stock work and breccia zones similar to the Boss Mountain Mine.

Further work including property-wide reconnaissance geology and prospecting, extending molybdenum zones from the existing mine onto the Silverboss property up Molybdenite creek, and a Max Min Survey over the Silverboss and Horse trail zones, to is expected to cost $100,000. It is recommended to allow an additional $150,000 for drilling of 1,000 metres on the three best targets.

1. Location and Access

The Silverboss Property is located approximately 80 kilometers northeast of 100 Mile House in south central portion of the Cariboo, British Columbia (Figure 1). The route from 100 Mile House begins 2 kilometers north of the town at the easterly trending Canim-Hendrix road which is followed about 50 kilometers to the Eagle Creek bridge where the road turns to gravel and is called the 6000 logging road. The 6000 road is taken northerly approximately 33 kilometers to the junction with 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, many of which go through the mine property. Future logging plans include several new roads and clear cuts on the mountain which will greatly improve access. An alternate route which accesses the southern portion of the property is via the 620 or Boss Creek forestry road which leaves the 6000 main near 6015 kilometers post.

The Silverboss property adjoins the Boss Mt. Mine property to the east and the property begins within 350 meters of the Boss Mt. Mine workings. A hydro transmission line, which powered the mine, is in place and provides power for Hendrix Lake town site approximately 7 kilometers east of the property. Topography varies from gentle slopes on the plateau-like mountaintop in the central portion of the claims to steep, precipitous cliffs, particularly in the cirque above the mine site. Elevations range from 1600 meters in the valley to 2200 meters on top of the 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. The area receives abundant precipitation, most of which falls as snow, which makes the effective field season fairly short. The period from July 1 to September 30 is best for 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 four 20 unit claims, the SB 1-4, and is jointly owned by Ridley and Blann (Figure 2, Table 1). An option was signed in December 2004 with Happy Creek Minerals Ltd. Happy Creek can earn a 100% interest in the property, subject to a 2.5% NSR retained by Ridley and Blann, by spending $50,000 on the property during 2005. In January 2005 two cell claims were acquired, SB 5 and 6, and will be included in subsequent work programs. This report is to satisfy assessment requirements for one year on the SB 1-4 claims which was filed online Jan. 31, 2005 (event number 4013554).

Table 1

Mineral Tenure

Claim Name	Tenure #	Units	**Expiry Date**
SB 1	408032	20	Feb. 1 2006
SB 2	408033	20	Feb. 1 2006
SB 3	408034	20	Feb. 1 2006
SB 4	408035	20	Feb. 1 2006

** pending assessment report approval**

3. History

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 peridote (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 peridote 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 is 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.

"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).

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 from the mine gate to and past the Silverboss workings, evidence of cat trenching at scattered locales, and drill core found at the old camp testify to the fact that the work was completed. It is believed this work was done prior to the 1972 mine shut-down after which all work in the area halted. In addition, core from at least five drill holes have been found relating to the Gus showing (093A020) and core from three drill holes has been found relating to the Silverboss area.

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 show 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 SB 1-4 claims. 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).

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). The mine buildings had been dismantled and the workings reclaimed by 1986. It’s interesting to note that no work has been recorded on any ground around the mine between its re-opening in 1974 and its closure in 1983. In fact very little work has been recorded in the area up to the present.

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. Nothing of significance was found and the claims shortly lapsed (Javorsky, 1985).

In 1993, D. Ridley staked eight units covering the old Silverboss vein structure. During 1994 and 1995 a modest prospecting and mapping program was successful in tracing the surface expression of the Silverboss structure for 350 meters as well as “discovering” several unknown showings (Ridley, 1994; 1995). In 2000, Ridley again visited the property and examined the old drill core lying around the old camp. This examination showed minor copper-molybdenum minerals in one section of core and a 10 cms section of massive pyrite-chalcopyrite from the Silverboss structure (Ridley, 2000).

The Silverboss property surrounds the adjacent Boss Mountain Molybdenum Mine, which produced 32,120,000 lbs molybdenum at an average grade of 0.20%Mo between 1965 and 1975; current metal prices for molybdenum at approximately $30.00/lb puts a value of over $1 billion on historical production at today’s prices. Current resources are estimated at approximately 14.5 million tonnes grading 0.14% molybdenum or over $700 million at today’s prices.

The present property was witness post staked in January 2004 after reviewing past data and seeing a surge of exploration interest in BC. A preliminary geological mapping, prospecting, and stream sediment sampling was undertaken during 2004 and forms the subject of this report.

4. Regional Geology

The Silverboss property is located within the Takomkane batholith, Upper Triassic-Lower Jurassic in age, near the eastern side of Quesnell Terrane, in the South Cariboo, British Columbia (Figure 3.) The batholith cuts Nicola Group rocks, an island arc assemblage comprised of basal black phyllite and minor carbonates, overlain by flow, breccia and tuff of predominantly basalt to andesite composition, are cut by stocks, dikes and sills of monzonite to diorite composition and are Upper Triassic-Lower Jurassic in age.

Stocks, dikes and sills of quartz monzonite to granodiorite composition cut older volcanic and intrusive rocks and are Cretaceous in age; these rocks are spatially associated with dikes of rhyolite porphyry and molybdenite at the Boss Mountain Mine (Soregaroli, 1976). The Boss Mountain quartz monzonite porphyry stock is the most northerly body of Cretaceous intrusions extending as much as 130 kilometres to the southeast. The Deception stock, located approximately 15 kilometres east, cuts schist and calc-silicates of the Snowshoe Formation, Paleozoic in age and also contains significant tungsten and molybdenum.

Alkaline, olivine and peridote bearing basalt dike, flow, and minor tuff cut all previous units and are Tertiary to Pleistocene in age. 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.

5. Property Geology

The Silverboss property is underlain by hornblende diorite, biotite hornblende granodiorite, and biotite granodiorite of the Takomkane batholith (Figure 4). Locally, zenoliths of mixed granodiorite and diorite occur. Dark, angular magnetic diorite fragments appear as heterolithic intrusion breccia near the Silverboss shaft. Biotite diorite (tonalite?) is noted in the south ridge area of the property. These rocks are cut by dominantly northwest trending, steeply dipping dikes of andesite composition 1-3 metres in width, and locally quartz latite porphyry and rhyolite dikes occur. Olivine-peridote bearing alkaline basalt dikes cut older rocks and trend north-northeast in the mine area, and the Takomkane volcano located near the center of the Silverboss property, is comprised of a cinder cone facies of ash, tephra and flow.

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 northwest, dips steeply, and extends for over 3 kilometres; this fault occurs in spatial proximity with the Boss Mountain mine ore deposits and extends northwest onto the Silverboss property over 400 metres higher in elevation, where it is in part covered by recent volcanic rocks. Quartz –molybdenum veins in the northwestern-most pit in the mine dip 40 degrees west, towards the Silverboss property and the Horse trail zone (Section 5.1)

The youngest faults on the property trend easterly (approximately 110 degrees), dip steeply, and can also be traced for several kilometres. The Ten Mile Creek Fault apparently displaces the Molybdenite Creek Fault with a right lateral movement of approximately 300 metres (Soregaroli, 1976).

Widespread chlorite, sericite, epidote variably replace mafic minerals and plagioclase within diorite, granodiorite, and is strongly fracture controlled. Weak to moderate pervasive alteration is noted within intrusion breccias in proximity to the Silverboss vein. Fractures contain quartz, k-feldspar, sericite, pyrite minerals and variable concentrations of chalcopyrite, with trace scheelite, bismuthinite and magnetite. The Silverboss vein and others on the property appear similar to descriptions of the Stage 4 veins within the Boss Mountain Mine to the east. Although mapping is limited to date, molybdenite occurs locally on the Silverboss property, generally near the eastern side.

The Silverboss vein consists of a northeast trending, steeply dipping 1-2 stage vuggy quartz vein, breccia and stock work, between 25 and 2 metres in width and comb and dogtooth quartz, fine grained pyrite, limonite and chalcopyrite that is within a wider zone of sheared chlorite epidote sericite-clay altered andesite, granodiorite and intrusion breccia. Geochemical elevated values 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. (Asst #24208)

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.

South of the 10 Mile fault, and approximately 500 metres southeast of the Silverboss shaft, widespread area of 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, 873 ppm copper. Other angular float samples nearby returned 442 ppb gold, 16.1 ppm silver, 748 ppm molybdenite, 3290 ppm copper, and 1183 ppb gold, 1.9 oz/ton silver, 1.09% copper.

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.

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 (Asst Report # 26411).

6. 2004 Results

A total of 25 rock samples were collected and analyzed during the 2004 field season. 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. Several rocks containing anomalous tungsten were re-assayed by multi-assay Neutron Activation for their true tungsten content, and check of gold and silver geochemistry. Rock and silt sample locations and results are plotted on Figure 5; rock sample descriptions are located in Table 2, and certificates of analyses in appendix 1. Reports on petrography samples are located in Appendix 2.

A total of 24 stream sediment samples were collected and submitted for analysis during the 2004 field season (Figure 5). Samples were placed in kraft paper soil bags, tied closed ,air-dried and shipped to Acme Analytical Labs, Vancouver, BC, where they were analyzed by ICP-XMS for 53 elements(appendix 1). The stream sediment survey was concentrated on the south and south-western edge of Big Timothy mountain due to easy access along new forest logging roads and provided excellent coverage of streams draining the southern portion of the property.

6.1 Rock Samples

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 cms wide quartz-chalcopyrite-pyrite and trace molybdenite, and other veins in the area remain un-sampled.

In a large gully on the Headwall, southwest of the Mine pits, vuggy, comb and dogtooth quartz vein float contains pyrite, chalcopyrite, similar to the Silverboss vein; sample 151797 returned 549 ppm copper, 263 ppm lead, 51.0 ppm silver, 723 ppb gold, 226 ppm bismuth, and 230 ppm tungsten. These veins appear associated with a prominent southwest striking fault zone that can be traced over 1 kilometre up the gully and well past the ridge on the Silverboss property, a distance of approximately 1.5 kilometres.

The “newly discovered” Horse Trail zone was likely known to past operators although this is the first known documentation. Several quartz-sulphide veins occur over an area of at least 100 meters strike length. The veins bear remarkable similarities to the Silverboss veins in that they consist of narrow (20-30 cms wide) quartz veins with vuggy cavities filled with dogtooth quartz and inter-grown sulphides, mainly chalcopyrite. A grab sample from a poorly exposed, weakly mineralized quartz vein outcropping on the old horse trail returned 4238 ppm copper, 27 ppm silver, and 2413 ppb gold (#151679). 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 (#151677). A grab from high-grade quartz-sulphide rubble below this vein returned >10,000 ppm copper, 78 ppm silver, and 1475 ppb gold (151678). Other mineralized veins were noted in the area but time constraints prohibited a closer examination.

Chalcopyrite-molybdenite occurs in chlorite-sericite altered fractures within biotite granodiorite southwest of the Silverboss shaft, where Exeter Mines drill tested an area of radial faulting near the 10 Mile Fault in the 1970’s (sample 151766,151767).

6.2 Silt Samples

Streams silt samples collected in the field were placed in kraft paper soil bags, tied closed, air dried and shipped to Acme Analytical Laboratories for analyses by ICP MS.

One stream sample, draining the southeast side of Big Timothy Mountain and just south of the mine property returned 5.4 ppm molybdenum (SB04DS10). Two samples from a drainage on the southwest side of the ridge also returned anomalous molybdenum results ranging between 6.9 and 4.5 (04DB-SB2; SB04DS7).

A stream, near the end of the access road along the north side of Boss creek, was sampled at several points from the valley to ridge top and returned the highest values of this survey. The lowest elevation sample, SB04DS4, returned the lowest values of 49 ppm copper. Sample 04DB-SB1 was taken about 400 meters upstream returned 43 ppm copper, 12 ppm lead, and 145 ppm zinc. The next sample was taken approximately 1000 meters further upstream and just below the top of the ridge and returned 5 ppm molybdenum, 99 ppm copper, 15 ppm lead, 159 ppm zinc, and 1632 ppb silver (04DB-SB6). Another sample 200 meters north of DB6 returned 70 ppm copper and 706 ppb silver (04DB-SB4).

7. Discussion

The Silverboss property is located adjacent the Boss Mountain molybdenum mine, in the south central Cariboo, British Columbia, and is underlain by dominantly granodiorite and diorite and andesite dikes, Upper Triassic-Lower Jurassic Nicola Group in age, and cut by Cretaceous quartz monzonite porphyry, andesite and rhyolite dikes, Cretaceous in age; these rocks are cut and in part overlain by an alkali-olivine basalt volcano and feeder dikes, Pleistocene to recent in age.

Pyrite concentrations from trace to 3% on both sides of the South ridge, and silt samples containing anomalous molybdenum and silver suggest potential for porphyry, breccia and precious metal veins to occur in proximity to this area. Anomalous silver in silt southwest of sample 151674 (0.19% copper, 17.4 ppm silver, 149 ppb gold) suggest a possible strike length of approximately 750 metres to this structure.

The Horse trail zone is located northwest of the mine pits in spatial proximity with the Molybdenite creek fault, K feldspar crystic granite porphyry, and andesite dikes; these rocks are moderate to strongly fractured, altered to chlorite, epidote, sericite, and pyrite and contain quartz veins and associated copper, silver and gold values. Sample 151679 returned 0.42% copper, 2413 ppb (2.4 g/t) gold, and 130 ppm molybdenum. Sample tak95DR16, 27 returned 1.1% copper, 1183 ppb gold, and 0.01% copper, 464 ppb gold, from the north and northwest side of the Takomkane volcano, respectively. Along with the Silverboss stricture, all of these samples appear to mark a large area around the mine or the volcano in which elevated precious metals occur with copper.

Pits of the Boss Mountain molybdenum mine occur within 350 metres of the Silverboss property, however to date, most of the economic minerals of interest on the Silverboss property are gold, silver and copper, and appear similar to descriptions of the late stage 4 mineral event at the mine, however this relationship remains unclear. Quartz veins with similar texture, sulphide content and elevated gold and silver values, along with andesite dikes occur for several kilometres outboard of the molybdenum mine, and appear distinct from the molybdenite-bearing veins at the mine. These copper-gold-silver veins may be related to a larger hydrothermal system originating from another, possibly blind intrusive (porphyry Cu-Mo-Au-Ag). The alkali basalt volcano currently cannot be ruled out as a possible source or contributed to redistribution of precious and base metals.

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 resources of 4.7 million tonnes grading 0.14% molybdenum and an in situ value of $700,000,000. The property is underlain by the Takomkane granodiorite and cut by dikes of andesite to rhyolite composition, quartz monzonite porphyry, and are in part overlain by an alkali-olivine basalt volcano and feeder dikes.

These rocks are moderate to strongly faulted and fractured and contain quartz, chlorite, epidote, sericite alteration, and widespread pyrite from trace to 3%. Zones of well-fractured rocks contain vuggy, coarse grained, and dogtooth quartz filled by fine grained pyrite and chalcopyrite, and contains significant copper, gold, and silver values, and locally molybdenum, over a large area.

Geology and prospecting in 2004 identified the South ridge, Horse trail, and Headwall zones as containing generally similar style of veins, alteration, and sulphides. Sample 151679 returned 4238 ppm (0.42%) copper, 28.0 ppm silver, and 2413 ppb (2.4g/t) gold from the Horse trail zone, Sample 151797 returned 549 ppm copper, 51.0 ppm silver, 723 ppb gold, along with 226 ppm bismuth, and 230 ppm tungsten from the Headwall zone, and 1926, ppm copper, 17.4 ppm silver, 149 ppb gold from the South ridge zone. All of these areas remain largely un-sampled and un-mapped.

The Silverboss property, located within 350 metres of an existing pit of the Boss Mountain Molybdenum mine may host additional molybdenite in breccia, veins and stock work in extensions to the existing pits, along strike northwest towards the Horse trail zone, and are an obvious and quality target.

In addition, significant copper, silver and gold values occur in quartz veins, breccia and stock work over 2 kilometres from the Mine and widespread dikes of andesite to felsic composition and propylitic to sericite alteration occur; these observations may reflect genetic and spatial proximity with a large porphyry copper-molybdenum gold-silver system on the Silverboss property.

The precious metal vein system appear strongly zoned, and possibly telescoped, resulting in rapid precipitation or dumping of metals; the strike length, and depth potential of the quartz veins are encouraging, and these large structure may locally host extremely high grades that remain at depth. The Silverboss vein system can be traced for 350 meters on surface and appears to be geochemically zoned along strike. The south end contains gold with very low copper and silver, followed by high grade gold-silver-copper, near the center at the shaft, and finally high silver and copper with very low gold at the northern extremity. Values range up to 9.6 g\t gold, 602 g\t silver and 3%

copper. A 2004 selected grab sample from the Silverboss shaft returned 6.7% copper, 443.0 g/t silver, 2.92 g/t gold.

The Silverboss property hosts excellent potential for copper-molybdenum-gold-silver porphyry, high grade epithermal vein structures, and molybdenum bearing vein, stock work and breccia zones similar to the Boss Mountain Mine.

9. Recommendations and Budget

Phase 1

Further work totaling $100, 000 is recommended for phase 1.

1) Reconnaissance prospecting, geological mapping, rock and stream sampling covering the entire property to search for additional mineralized zones.
2) Detailed geological mapping around known showings and mineralized zones found during 2004 (this report). A small grid in the Horse trail area could be included in a Max-Min survey if initial results warrant it.
3) A detailed grid over the Silverboss structure and a Max-Min survey would be a good tool to trace sulphide-rich, conductive sections along strike as well as at depth.

Phase 2

Diamond drilling of 5 holes, totaling 1,000 metres on the 3 best targets outlined by the above are recommended, and expected to cost $150,000.

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David E Blann, P.Eng.

10. Statement of Costs

Wages			# days	$/day	Totals
D. Blann, P.Eng			5	500	$2,500.00
D. Ridley, Prospector			4	275	$1,100.00
					$3,600.00
Disbursements					
Truck			6	100	$600.00
Room/Board			9	60	$540.00
Communications			9	2.5	$22.50
Field Supplies					$50.00
Analyses					
	Assays	Rocks	25	22.5	$562.50
		Silts	24	18.5	$444.00
	Petrographics		2	125	$250.00
Shipping					$100.00
Reproductions					$150.00
Report					$1,800.00
					$4,519.00
				Wages and Disbursements	$8,119.00
				12% on Wages and Disbursements	$974.28
					$9,093.28
				GST @ 7%	$636.53
				Total	$9,729.81

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.

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).

12. Statement of Qualifications

I, David Wayne Ridley, PO Box 77, Eagle Creek, Bc, V0K 1L0, do hereby certify:

1) I completed the “Mineral Exploration for Prospectors” course hosted by the BC Ministry of Mines at Mesachie Lake, Bc in 1984.

2) I completed the short course entitled “Petrology for Prospectors” held in Smithers, BC and hosted by the Smithers Exploration Group in 1990 and 1994.

3) I attended several short courses hosted by the Kamloops Exploration Group during the Keg convention and include “Intrusion-related Gold” (1999) “Massive Sulphides” (2001) and “Metellogeny of Volcanic Arcs” (1998).

4) I have prospected independently since 1982 and have been employed as a contract prospector by various exploration companies in BC, Alaska, and Yukon Territory since 1984

.

5) I participated in the 2004 work program

6) I currently own a beneficial interest in the property.

D. Ridley

Feb. 10, 2005

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 2004.

Dated in Squamish, B.C., March 23, 2005

David E Blann, P.Eng.

Tables

Happy Creek Minerals Limited

Silverboss Property
Table 2

Rock Sample Descriptions

Area	Sample ID	Easting	Northing	Elev	EPE	Description	Mo	Cu	Pb	Zn	Ag	As	Au	Sb	Bi	Ca	Ba	W
							ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm
SB-South	151770	641580	5771571	1642	16	float boulder py-chl-ep/saus vns 1-2mm cuttng cg hbl-B-Gd	1.2	74.3	14.2	66	0.5	3.2	4.8	0.3	0.4	0.84	77	1.1
SB-South	151771	641706	5770627	1657	5	grab 20m rusty Gd +/- ep-Qtz	0.3	5.9	3.2	23	<.1	2.2	<.5	0.2	<.1	0.19	175	0.4
SB-South	151772	ridley				K-spar corner grab qtz-k chl vns 2X3m	0.5	5.2	2.4	31	<.1	1.6	<.5	0.1	<.1	0.34	71	<.1
SilverBoss	151795	642256	5771421	1700	8	Rock float grab , py, ep-chl-frct'd Diorite	1.5	277.1	3.6	54	1.4	1.3	11.6	0.1	0.8	0.94	85	5.7
SilverBoss	151796	642556	5771006	1607	8	Rock float grab , py,+/- Bo, mag-ep-chl-frct'd Diorite	3.2	136.7	3.2	51	0.4	1.7	5.4	0.2	2.5	0.77	138	10.2
SilverBoss	151797	642900	5773000	1500	7	Rock Float fro botom of gully-Qtz vn with mag p cp	4.7	548.8	263	95	51.3	35.8	797.0	1.3	226.4	0.18	61	230
SilverBoss	151798	642920	5773020	1500	7	Rock Float silica flooded Gd Qtz vns, pycp	5.1	147.0	12.2	10	2.1	3.2	32.5	0.3	8.7	0.02	63	12.2
SilverBoss	151799	642920	5773000	1500	7	Q-S-py QD, p, cp, bo?, mal.	3.8	267.1	33.7	112	2.5	3.5	60.5	0.2	30.8	1.27	41	216
SilverBoss	151800	642925	5772892	1961	8	rock fl, Q-Ep-py, mag, 1-3m vns,	1.3	98.5	116	112	2.6	4.0	50.4	1.4	18.1	1.01	11	12
SilverBoss	151801	643202	5772482	1984	5	Rock subcrop, Qtzvn, py, vuggy,mag-py Netrend	4.2	110.2	83.1	93	3.0	61.8	63.7	0.7	4.2	1.01	104	4.8
SilverBoss	151802	642708	5770016	1657	6	Rock lim-GrP ep-ser-py	1.7	18.5	5.5	32	0.1	2.2	0.9	0.2	0.2	0.55	636	0.3
SilverBoss	151641	647796	5773121			qtz vein float; Telephone Hill area; new road	2	133	<2	9	0.4	<5	30	<5	<5	0.11	55	<10
SilverBoss	151657	644521	5769960			ang float; aug porp agglom; minor po; on road	0.4	53.8	1.4	50	0.1	13.8	2.4	2.1	0.1	1.05	356	0.2
SilverBoss	151658	642119	5771321			ang float; pyritic diorite; up to 10% py. Tr	3.6	279.3	4.9	34	1.5	6.3	10.4	0.1	24.3	0.23	59	1.8
SilverBoss	151674	643199	5772496			talus grab;qtz vein 2 cm qtz vein;minor py-cpy-mo	68.2	1926.5	5.2	121	17.4	7.1	149.0	0.3	0.1	0.85	89	0.2
SilverBoss	151675	641534	5773540			float; qtz bx; mixed diorite-basalt clasts; 2-3% py	337	215.3	2.7	41	0.3	0.8	4.9	0.1	0.7	0.25	125	2.5
SilverBoss	151676	641488	5773840			ang float; qtz vein; up to 1% py	68.7	47.0	36.8	3	0.5	7.6	31.7	0.2	1.8	0.01	19	9.7
SilverBoss	151677	641984	5773978			grab 20 cm qtz vein outcrop; 330\75E; vuggy,clots of cpy	28.2	5642.1	11.7	68	43.7	22.9	791.7	0.8	0.5	0.11	19	0.7
SilverBoss	151678	641987	5773985			high grade grab; float from 151677 vein	42.7	>10000	1.9	132	78.8	32.2	1475.5	1.5	1.0	0.36	44	2.1
SilverBoss	151679	641988	5774074			poorly exposed qtz vein; minor py-cpy	130	4238.0	1.1	53	27.9	27.3	2413.0	0.3	1.6	0.03	14	1.7

							%	%	%	%	g/t	%	g/t
							Mo	Cu	Pb	Zn	Ag	W	Au
SilverBoss	C 151765	640149	5775329	2011	6	SilverBoss 10 mile fault, mafic clast Bx, cut by 310deg, mal-py-cp frcts, with Qtz-2K, cp-py vns 1-3 cm	0.003	0.24	<.01	<.01	2.0		0.06
SilverBoss	C 151766	640821	5775326	1977	6	SB Drillcore, 1967-1971 from last box at 267ft, Hbl-B-chl-ep qtz-2K-epvns w py, tr cp	<.001	0.01	<.01	<.01	<2		0.02
SilverBoss	C 151767	640821	5775326	1977	6	SB Drillcore, 1967-1971 "hole#2 grab- Hbl-Gd	<.001	0.01	<.01	<.01	<2		0.01
SilverBoss	C 151768	641130	5775546	1973	6	Grab of 1-3cm qtz-cp vuggy qtz-2K chl Hbl-Gd	0.004	0.72	<.01	<.01	6.0		0.32
SilverBoss	C 151769	641415	5775443	2026	5	SB shaft dump grab of Vuggy , coarse grained dog-tooth qtz filled with py-cp	<.001	6.70	0.03	0.01	443.0		2.92

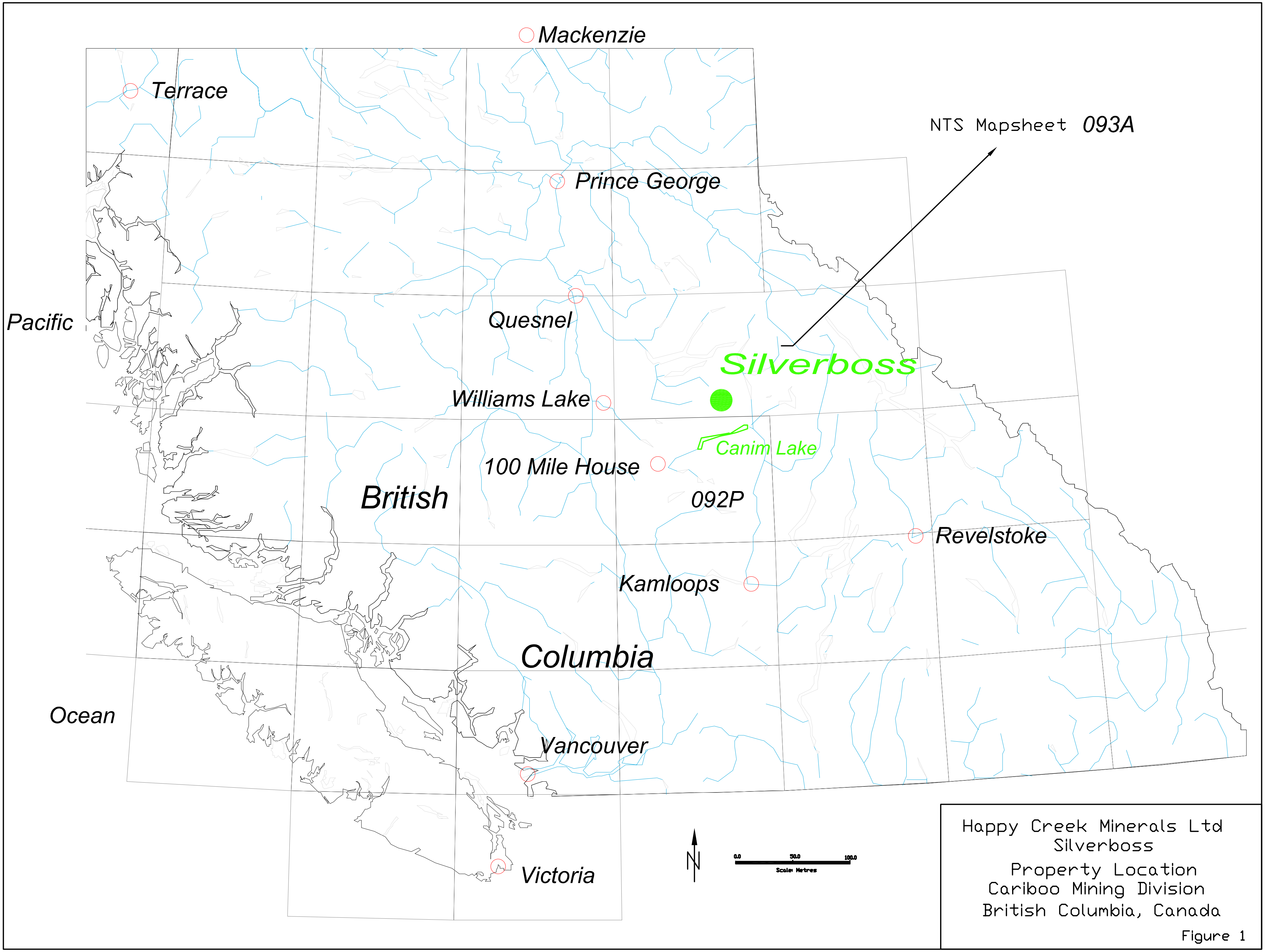
Happy Creek Minerals Limited

Silverboss Property
Table 3

Silt Sample Results

Sample ID	Easting	Northing	Elev	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Sb	Bi	Ca	Ba	W	Sn	Pd	Pt
				ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppb	ppb
SB04DS1	641374	5771411		3.0	49.42	10.4	92.6	121	30.3	14.8	818	3.69	4.7	1.8	0.48	0.2	0.58	160.6	0.8	0.4	<10	<2
SB04DS2	641473	5771583		3.2	37.84	9.1	89.3	379	13.3	9.7	801	2.85	8.4	1.9	0.33	0.6	0.44	88.4	1.6	0.3	<10	<2
SB04DS3	641581	5771546		2.6	37.48	12.5	89	324	14	8.2	557	2.61	6.7	2.8	0.27	0.4	0.53	89	0.8	0.3	<10	<2
SB04DS4	641749	5771469		1.3	49.99	7.1	49.7	106	16.1	12.5	594	3.96	5.5	2.6	0.29	0.4	0.51	107.2	0.9	0.2	<10	<2
SB04DS5	641902	5771409		3.6	37.58	5.4	47.7	196	16.1	10.2	556	4.17	3.8	1.7	0.22	1.1	0.39	94	3.3	0.3	<10	<2
SB04DS6	642035	5771343		1.9	47.47	5.9	49.1	153	13.7	10.3	532	3.77	3.6	1.8	0.24	1.0	0.44	85.9	2.2	0.2	<10	<2
SB04DS7	642287	5771196		4.6	25.81	3.8	40.7	128	8.7	6.5	485	2.55	2.2	1.7	0.17	0.8	0.43	58.9	3.8	0.2	<10	<2
SB04DS8	646172	5769803		0.9	29.05	4.3	53.2	90	26.4	14.8	1713	2.94	4.3	1.6	0.28	0.1	0.46	136.1	0.2	0.2	<10	<2
SB04DS9	645803	5770770		3.2	35.9	5.6	58.4	79	30	24	2212	3.66	10.3	1.2	0.46	0.1	0.42	134.8	0.3	0.3	<10	3
SB04DS10	646167	5770918		5.4	38.15	5.2	59.1	77	30.9	23.4	2147	4.18	8.7	2.6	0.5	0.2	0.45	130.3	0.9	0.3	<10	<2
SB04DS11	646174	5771011		2.3	37.66	5.4	67.4	97	21.1	16.3	1229	3.92	8.6	11.9	0.31	0.2	0.44	98.9	0.6	0.3	<10	<2
SB04DS12	646965	5769122		1.5	28.21	4.3	53.7	71	21.8	11.8	934	2.93	4.1	1.0	0.26	0.1	0.54	190.4	0.3	0.2	<10	<2
04DB-SB-1	641878	5771884	1754	1.5	43.74	12.6	144.9	108	17	11.6	820	3.23	5.6	2.0	0.38	0.2	0.7	98.1	1.1	0.3	<10	2
04DB-SB-2	642335	5771132	1617	6.9	52.1	6.7	66.5	113	15	10.2	541	3.51	3.3	2.8	0.24	1.8	0.55	115.6	5.3	0.3	<10	<2
04DB-SB-3	646128	5771010	1463	2.6	36.1	6.0	58.9	207	19.6	16.4	1536	3.66	5.7	1.2	0.33	0.2	0.47	119.6	0.5	0.3	<10	<2
04DB-SB-4	642739	5772550	2048	1.3	70.21	10.8	85.2	706	22.6	11.2	583	2.92	8.1	4.8	0.48	0.3	0.24	69	0.4	0.4	<10	<2
04DB-SB-5	642732	5772384	2010	3.0	28.62	9.0	91.1	480	11.1	7.1	412	1.84	3.3	1.5	0.4	0.2	0.33	54	0.4	0.3	<10	<2
04DB-SB-6	642789	5772347	2009	5.3	99.9	15.1	159.1	1632	25.9	12.9	1494	3.1	6.5	4.5	0.78	0.2	0.44	70.3	0.3	0.3	<10	<2
04DB-SB-7	643287	5772538	1945	5.7	34.88	15.3	127.5	473	13.7	9.2	1090	2.17	3.3	3.1	0.54	1.0	0.43	78.8	2.7	0.3	<10	<2
04DB-B-1	642358	5769285	1802	0.6	15.59	8.1	62.4	83	24.9	17.3	1625	2.32	2.7	0.4	0.22	0.1	0.5	196	<.1	0.2	<10	<2
04DB-B-2	642140	5769572	1772	0.7	9.79	5.1	41.9	59	19.6	15.3	2575	3.11	4.1	17.3	0.17	0.1	0.36	174.7	<.1	0.2	<10	<2
04DB-B-3	642371	5770036	1705	0.8	17.26	9.6	58	124	22.5	17.5	1681	2.24	3.5	0.5	0.26	0.1	0.36	309.5	<.1	0.4	<10	<2
04DB-B-4	642287	5770250	1656	0.5	23.46	6.0	41.8	151	24.2	7.8	256	1.84	3.9	2.5	0.3	0.1	0.38	286.8	<.1	0.3	<10	<2
04DB-B-5	643132	5770001	1593	0.2	25.22	6.7	52	60	67	12.6	752	2.46	3.3	0.9	0.23	0.0	0.71	414.6	0.2	0.3	<10	<2

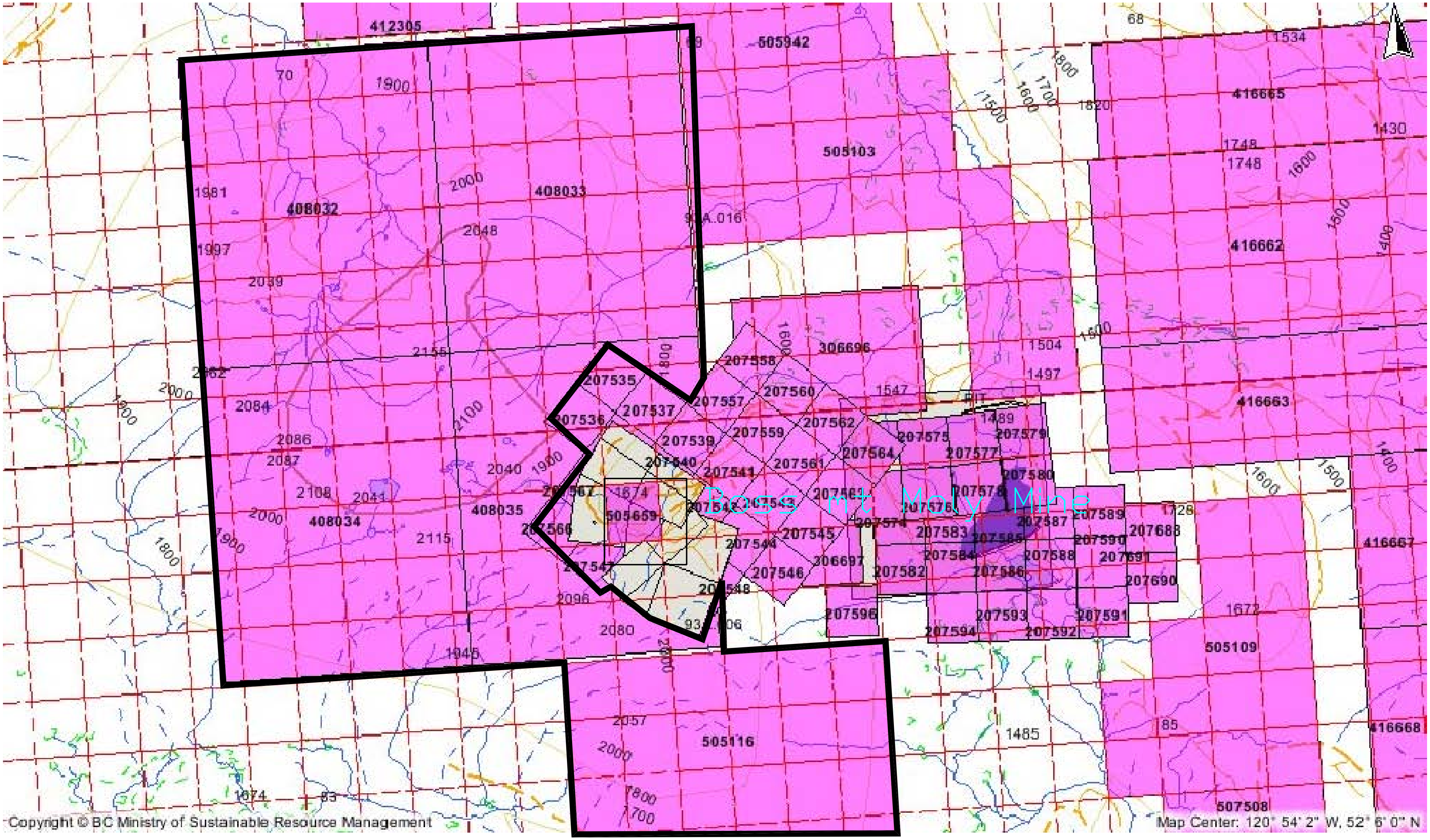
Figures



Happy Creek Minerals Ltd
Silverboss

Property Location
Cariboo Mining Division
British Columbia, Canada

Figure 1



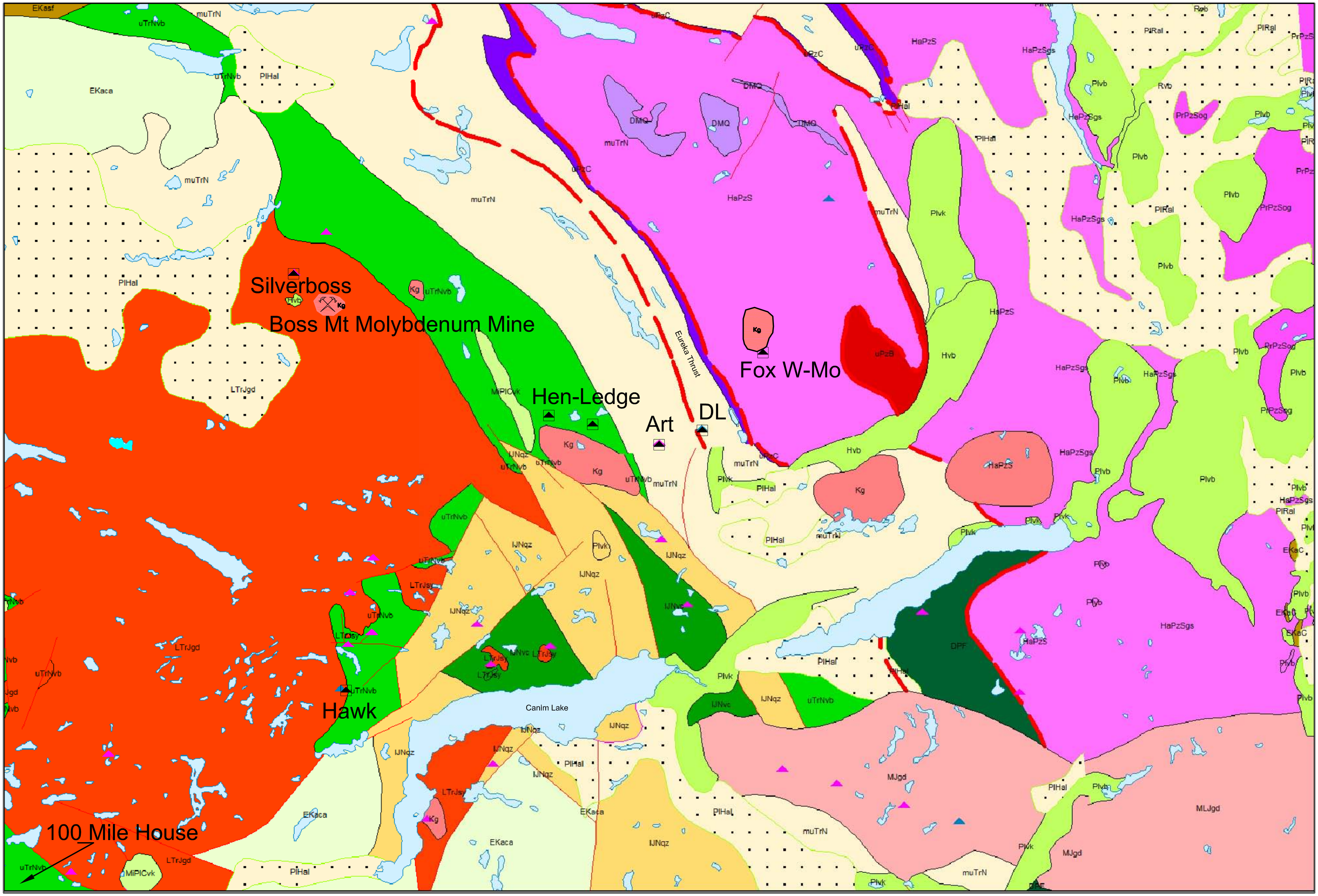
0.0 1000 2000m

Scale: Metres

N

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

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



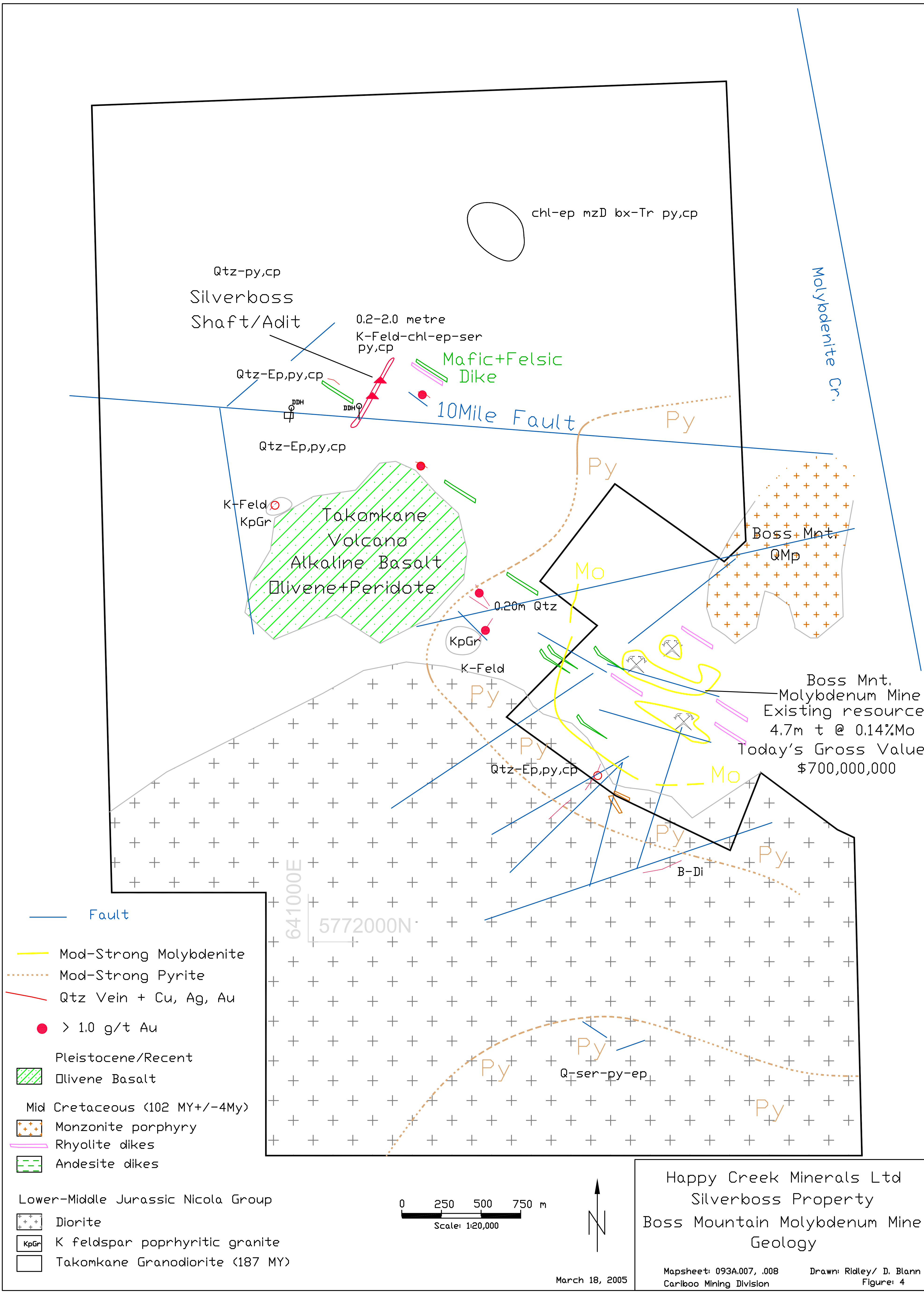
Geology Legend

PlHal	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	Devonican 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 Granodioite Intrusive Rocks
LTrJgd	Late Triassic-Early Jurassic Granodiorite
LTrJsy	Late Triassic-Early Jurassic syenite, monzonite
	Fault
	Thrust Fault

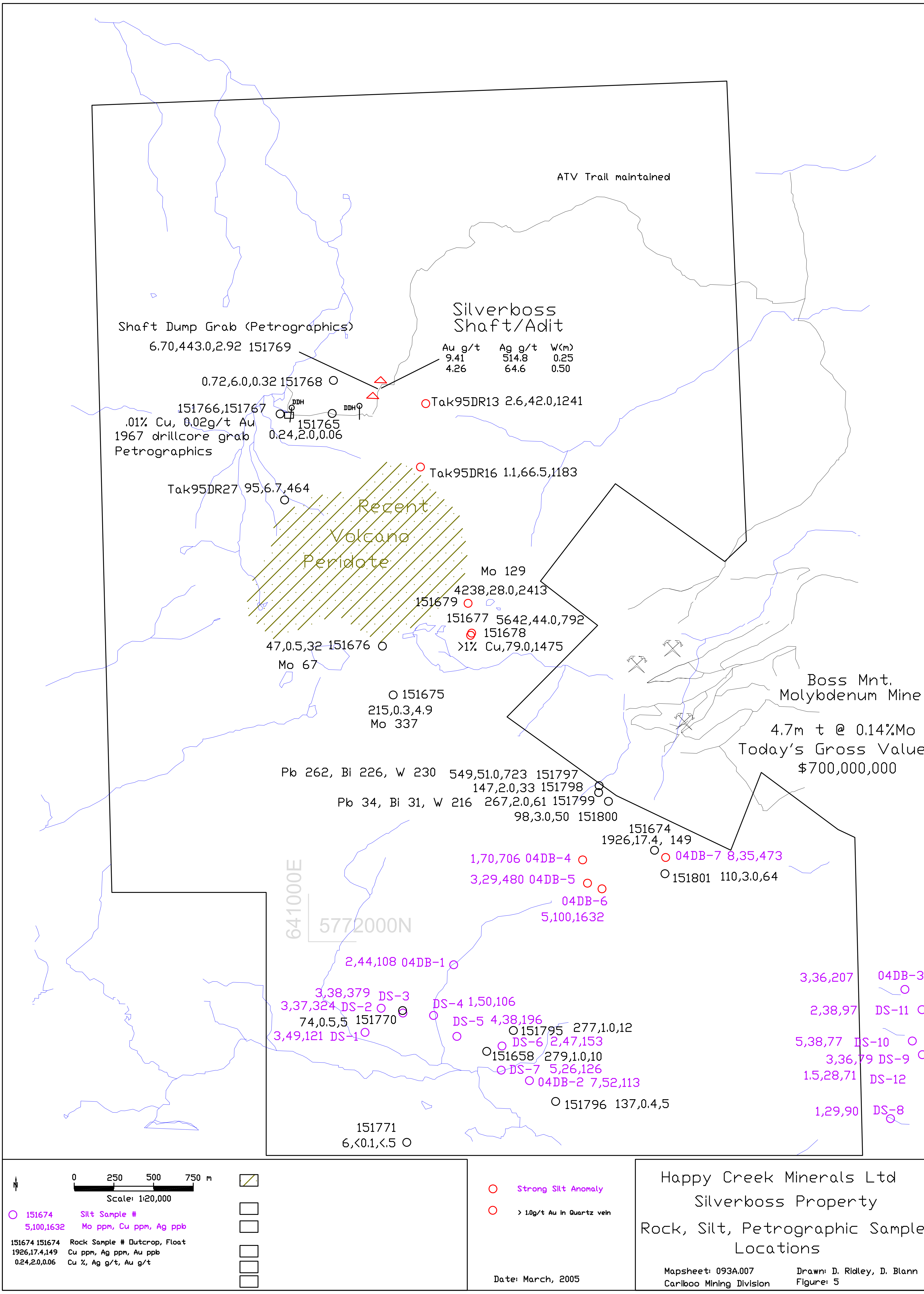
N

0.0 5 10 km
Scale: Kilometres

Happy Creek Minerals Ltd
Cariboo Project Area
Regional Geology
Canim Lake Area, B.C., Canada
Mapsheets: 092P, 093A
D. Blann, P.Eng. Feb, 2005
Figure: 3



chl-ep mzD bx-Tr py,cp
Qtz-py,cp
Silverboss Shaft/Adit
0.2-2.0 metre
K-Feld-chl-ep-ser
py,cp
Mafic+Felsic Dike
Qtz-Ep,py,cp
DDH
10Mile Fault
Molybdenite Cr.
Py
Qtz-Ep,py,cp
K-Feld
KpGr
Takomkane Volcano Alkaline Basalt Olivene+Peridote
Mo
Boss Mnt. QMp
0.20m Qtz
KpGr
K-Feld
Boss Mnt. Molybdenum Mine
Existing resource:
4.7m t @ 0.14%Mo
Today's Gross Value
$700,000,000
Qtz-Ep,py,cp
B-Di
641000E
5772000N
Q-ser-py-ep
Fault
Mod-Strong Molybdenite
Mod-Strong Pyrite
Qtz Vein + Cu, Ag, Au
> 1.0 g/t Au
Pleistocene/Recent
Olivene Basalt
Mid Cretaceous (102 MY+/-4My)
Monzonite porphyry
Rhyolite dikes
Andesite dikes
Lower-Middle Jurassic Nicola Group
Diorite
K feldspar poprhyritic granite
Takomkane Granodiorite (187 MY)
0 250 500 750 m
Scale: 1:20,000
N
March 18, 2005
Happy Creek Minerals Ltd
Silverboss Property
Boss Mountain Molybdenum Mine
Geology
Mapsheet: 093A.007, .008
Cariboo Mining Division
Drawn: Ridley/ D. Blann
Figure: 4



ATV Trail maintained
Silverboss Shaft/Adit
Au g/t Ag g/t W(m)
9.41 514.8 0.25
4.26 64.6 0.50
Shaft Dump Grab (Petrographics)
6.70,443.0,2.92 151769
0.72,6.0,0.32 151768
151766,151767
.01% Cu, 0.02g/t Au
1967 drillcore grab
Petrographics
DDH
151765
0.24,2.0,0.06
Tak95DR13 2.6,42.0,1241
Tak95DR16 1.1,66.5,1183
Tak95DR27 95,6.7,464
Recent Volcano Peridote
Mo 129
4238,28.0,2413
151679
151677 5642,44.0,792
151678
>1% Cu,79.0,1475
47,0.5,32 151676
Mo 67
151675
215,0.3,4.9
Mo 337
Boss Mnt. Molybdenum Mine
4.7m t @ 0.14%Mo
Today's Gross Value
$700,000,000
Pb 262, Bi 226, W 230 549,51.0,723 151797
147,2.0,33 151798
Pb 34, Bi 31, W 216 267,2.0,61 151799
98,3.0,50 151800
151674
1926,17.4, 149
1,70,706 04DB-4
04DB-7 8,35,473
3,29,480 04DB-5
151801 110,3.0,64
04DB-6
5,100,1632
641000E
5772000N
2,44,108 04DB-1
3,38,379 DS-3
3,37,324 DS-2
74,0.5,5 151770
3,49,121 DS-1
DS-4 1,50,106
DS-5 4,38,196
151795 277,1.0,12
DS-6 2,47,153
151658 279,1.0,10
DS-7 5,26,126
04DB-2 7,52,113
151796 137,0.4,5
151771
6,<0.1,<.5
3,36,207 04DB-3
2,38,97 DS-11
5,38,77 DS-10
3,36,79 DS-9
1.5,28,71 DS-12
1,29,90 DS-8
N
0 250 500 750 m
Scale: 1:20,000
151674 Silt Sample #
5,100,1632 Mo ppm, Cu ppm, Ag ppb
151674 151674 Rock Sample # Outcrop, Float
1926,17.4,149 Cu ppm, Ag ppm, Au ppb
0.24,2.0,0.06 Cu %, Ag g/t, Au g/t
Strong Silt Anomaly
> 1.0g/t Au in Quartz vein
Date: March, 2005
Happy Creek Minerals Ltd
Silverboss Property
Rock, Silt, Petrographic Sample Locations
Mapsheet: 093A.007
Cariboo Mining Division
Drawn: D. Ridley, D. Blann
Figure: 5

Appendix 1

Assay Certificates

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Standard Metals PROJECT SILVER BOSS File # A406831 (a)

38151 Clarke Drive, P.O., Squamish BC V0N 3G0 Submitted by: David Blann

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	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
SB04DS1	2.95	49.42	10.41	92.6	121	30.3	14.8	818	3.69	4.7	1.4	1.8	1.9	47.8	.35	.48	.22	126
SB04DS2	3.18	37.64	9.11	69.3	379	13.3	9.7	801	2.85	8.4	1.1	1.9	.6	37.1	.74	.33	.62	91
SB04DS3	2.62	37.48	12.51	89.0	324	14.0	8.2	557	2.61	6.7	.9	2.8	.4	45.4	.65	.27	.42	85
SB04DS4	1.28	49.99	7.11	49.7	106	16.1	12.5	594	3.96	5.5	.9	2.6	1.8	33.1	.38	.29	.38	143
SB04DS5	3.58	37.58	5.43	47.7	196	16.1	10.2	556	4.17	3.8	2.3	1.7	.9	26.2	.24	.22	1.12	98
SB04DS6	1.92	47.47	5.86	49.1	153	13.7	10.3	532	3.77	3.6	2.5	1.8	1.1	24.9	.29	.24	1.01	124
SB04DS7	4.57	25.81	3.83	40.7	126	8.7	6.5	485	2.55	2.2	1.0	1.7	.8	26.9	.26	.17	.76	63
SB04DS8	.93	29.05	4.27	53.2	90	26.4	14.8	1713	2.94	4.3	.8	1.6	1.1	42.2	.26	.28	.09	99
SB04DS9	3.18	35.90	5.62	59.4	79	30.0	24.0	2212	3.66	10.3	.6	1.2	1.5	31.3	.22	.46	.10	120
SB04DS10	5.43	38.15	5.19	59.1	77	30.9	23.4	2147	4.18	8.7	.6	2.6	1.7	35.3	.25	.50	.23	145
SB04DS11	2.27	37.66	5.36	67.4	97	21.1	16.3	1229	3.92	6.6	.5	11.9	1.0	31.5	.31	.31	.17	128
SB04DS12	1.48	28.21	4.34	53.7	71	21.8	11.8	934	2.93	4.1	1.0	1.0	1.1	41.7	.21	.26	.10	92
RE SB04DS12	1.61	25.88	4.27	52.0	69	20.7	10.5	870	2.88	4.1	1.0	.9	1.4	40.7	.22	.25	.10	93
04DB-SB-1	1.54	43.74	12.60	144.9	108	17.0	11.6	820	3.23	5.6	.9	2.0	1.1	48.4	.76	.36	.20	103
04DB-SB-2	6.91	52.10	6.70	66.5	113	15.0	10.2	541	3.51	3.3	3.0	2.8	1.5	32.8	.25	.24	1.77	90
04DB-SB-3	2.56	36.10	5.99	58.9	207	19.6	16.4	1536	3.66	5.7	.6	1.2	.6	37.6	.42	.33	.23	111
04DB-SB-4	1.33	70.21	10.76	85.2	706	22.6	11.2	583	2.92	8.1	.8	4.8	1.4	22.1	.38	.48	.28	72
04DB-SB-5	2.99	28.62	9.01	91.1	480	11.1	7.1	412	1.84	3.3	1.1	1.5	.1	22.8	.95	.40	.21	60
04DB-SB-6	5.28	99.90	15.09	159.1	1632	25.9	12.9	1494	3.10	6.5	3.4	4.5	.2	26.6	1.08	.78	.21	86
04DB-SB-7	5.73	34.88	15.27	127.5	473	13.7	9.2	1090	2.17	3.3	1.2	3.1	.2	31.7	1.22	.54	1.01	66
04DB-B-1	.61	15.59	8.07	62.4	83	24.9	17.3	1625	2.32	2.7	3.9	.4	.6	42.8	.27	.22	.07	66
04DB-B-2	.65	9.79	5.13	41.9	59	19.6	15.3	2575	3.11	4.1	2.3	17.3	.6	32.8	.15	.17	.05	55
04DB-B-3	.75	17.26	9.55	56.0	124	22.5	17.5	1681	2.24	3.5	3.6	.5	.1	42.7	.37	.26	.11	57
04DB-B-4	.53	23.46	6.03	41.8	151	24.2	7.8	256	1.84	3.9	17.6	2.5	.3	36.8	.20	.30	.08	76
04DB-B-5	.24	25.22	6.65	52.0	60	67.0	12.6	752	2.46	3.3	2.7	.9	1.9	119.0	.11	.23	.04	54
STANDARD DS6	11.08	126.48	29.44	142.1	271	24.0	9.8	689	2.75	20.7	6.3	45.0	2.9	39.7	5.86	3.66	4.86	55

SAMPLE#	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
SB04DS1	.58	.090	8.1	30.6	.85	160.6	.147	2	1.99	.016	.07	.6	2.6	.06	.01	23	.2	.02	6.3
SB04DS2	.44	.061	5.5	18.5	.49	88.4	.057	1	1.75	.014	.05	1.5	1.7	.08	.03	51	.3	.04	5.6
SB04DS3	.53	.067	5.0	18.7	.60	89.0	.054	2	1.82	.013	.05	.8	1.8	.06	.03	45	.2	.04	5.5
SB04DS4	.51	.068	5.9	22.2	.62	107.2	.097	1	1.71	.017	.07	.9	2.5	.05	<.01	18	.2	.04	5.0
SB04DS5	.39	.066	6.9	24.5	.49	94.0	.064	<1	1.81	.009	.07	3.3	2.3	.08	.02	38	.2	.06	5.0
SB04DS6	.44	.069	6.0	21.9	.51	85.9	.068	1	1.57	.010	.06	2.2	1.9	.07	<.01	17	.2	.04	5.0
SB04DS7	.43	.091	5.8	15.0	.34	58.9	.052	<1	1.07	.010	.06	3.8	1.6	.08	<.01	17	.2	.03	3.3
SB04DS8	.46	.076	8.4	41.4	.49	136.1	.076	1	1.46	.012	.06	.2	2.5	.06	.01	35	.3	<.02	4.2
SB04DS9	.42	.093	8.8	51.9	.64	134.6	.095	<1	1.73	.017	.08	.3	3.1	.08	<.01	26	.3	.02	5.1
SB04DS10	.45	.097	9.6	53.7	.64	130.3	.102	1	1.66	.017	.09	.9	3.1	.08	<.01	20	.3	.03	5.2
SB04DS11	.44	.089	5.8	33.3	.67	98.9	.086	1	1.67	.014	.07	.6	2.3	.08	<.01	28	.2	.05	5.3
SB04DS12	.54	.077	8.2	29.7	.49	190.4	.065	1	1.46	.015	.05	.3	2.3	.05	<.01	35	.2	.02	4.2
RE SB04DS12	.51	.080	8.3	28.0	.48	176.7	.066	1	1.40	.014	.05	.2	2.3	.05	.01	26	.2	<.02	4.1
04DB-SB-1	.70	.073	4.6	17.6	.86	98.1	.072	1	1.97	.021	.09	1.1	2.5	.07	.01	18	.1	.03	5.5
04DB-SB-2	.55	.087	7.6	25.1	.62	115.6	.083	<1	1.94	.013	.10	5.3	3.0	.18	.01	29	.2	.08	5.9
04DB-SB-3	.47	.091	6.7	31.8	.57	119.6	.065	1	1.70	.013	.06	.5	2.3	.09	.02	52	.2	.02	4.9
04DB-SB-4	.24	.087	6.5	34.4	.71	69.0	.088	1	2.62	.012	.10	.4	2.5	.19	.04	56	.4	.18	6.4
04DB-SB-5	.33	.105	4.3	22.4	.54	54.0	.024	1	1.68	.011	.11	.4	.8	.09	.09	32	.6	.05	4.3
04DB-SB-6	.44	.165	6.9	60.4	1.06	70.3	.027	1	2.44	.011	.22	.3	1.7	.19	.06	50	1.0	.17	6.3
04DB-SB-7	.43	.106	4.4	17.1	.50	78.8	.038	1	1.91	.013	.09	2.7	1.1	.13	.08	52	.7	.05	4.9
04DB-B-1	.50	.100	9.3	35.1	.47	196.0	.050	1	1.51	.016	.04	<.1	1.3	.06	.03	49	.2	<.02	3.7
04DB-B-2	.36	.084	7.5	27.7	.37	174.7	.048	1	1.32	.010	.03	<.1	1.5	.06	.01	29	.1	<.02	3.8
04DB-B-3	.36	.084	7.2	35.8	.43	309.5	.025	2	1.85	.010	.05	<.1	1.1	.08	.06	69	.3	<.02	5.2
04DB-B-4	.38	.073	15.3	57.1	.45	286.8	.038	1	1.82	.012	.05	<.1	1.9	.05	.04	39	.5	<.02	4.7
04DB-B-5	.71	.083	11.5	85.8	1.23	414.6	.075	1	2.15	.010	.06	.2	3.6	.03	<.01	27	.2	<.02	5.8
STANDARD DS6	.83	.075	13.6	186.6	.55	159.4	.069	17	1.83	.073	.15	3.5	3.0	1.63	.02	222	4.2	2.21	5.7

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data FA ____ DATE RECEIVED: NOV 3 2004 DATE REPORT MAILED: Nov 24/04

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)...-31.. FAX(...)25.. 16
(ISO 900 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Standard Metals PROJECT SILVER BOSS File # A406830
38151 Clarke Drive, P.O., Squamish BC VON 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
SI	.4	1.7	.2	1	<.1	.6	.1	10	.18	<.5	<.1	<.5	<.1	3	<.1	<.1	<.1
151674	68.2	1926.5	5.2	121	17.4	2.6	10.9	507	3.64	7.1	1.3	149.0	3.7	25	1.3	.3	.1
151675	337.0	215.3	2.7	41	.3	17.5	11.6	349	3.16	.8	.7	4.9	1.9	9	<.1	.1	.7
151676	68.7	47.0	36.8	3	.5	1.4	.7	26	1.09	7.6	.1	31.7	.1	2	<.1	.2	1.8
151677	28.2	5642.1	11.7	68	43.7	2.1	8.6	204	3.43	22.9	.3	791.7	.5	10	.5	.8	.5
151678	42.7	>10000	1.9	132	78.8	2.7	57.8	320	6.10	32.2	.4	1475.5	.6	28	1.9	1.5	1.0
151679	129.7	4238.0	1.1	53	27.9	3.4	9.1	53	3.41	27.3	.1	2413.0	.1	7	.3	.3	1.6
151795	1.5	277.1	3.6	54	1.4	2.8	9.5	588	3.51	1.3	.8	11.6	2.0	40	.1	.1	.8
151796	3.2	136.7	3.2	51	.4	4.0	9.7	473	3.36	1.7	1.7	5.4	5.6	39	.3	.2	2.5
151797	4.7	548.8	262.9	95	51.3	1.8	2.5	169	11.31	35.8	.4	722.7	.4	8	1.0	1.3	226.4
151798	5.1	147.0	12.2	10	2.1	2.3	3.7	40	2.49	3.2	<.1	32.5	.1	2	.2	.3	8.7
151799	3.8	267.1	33.7	112	2.5	7.2	24.7	850	6.58	3.5	.4	60.5	1.5	20	.6	.2	30.8
151800	1.3	98.5	116.1	112	2.6	2.1	4.7	449	4.56	4.0	.7	50.4	.3	75	1.3	1.4	18.1
RE 151800	1.4	95.2	114.5	112	2.5	1.8	4.8	447	4.52	3.8	.8	43.0	.3	75	1.5	1.3	17.8
151801	4.2	110.2	83.1	93	3.0	2.5	11.8	866	4.63	61.8	.6	63.7	1.0	36	.4	.7	4.2
151802	1.7	18.5	5.5	32	.1	15.0	6.4	528	1.60	2.2	.7	.9	2.6	35	.1	.2	.2
STANDARD DS6	11.2	124.0	29.9	142	.3	24.7	10.6	686	2.83	21.7	6.4	47.1	2.9	37	5.9	3.3	4.9

SAMPLE#	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
SI	1	.14	<.001	<1	2.2	<.01	4	<.001	<1	.01	.625	.01	<.1	<.01	<.1	<.1	<.05	<1	<.5
151674	101	.85	.080	5	4.6	.85	89	.152	4	1.44	.101	.25	.2	.05	3.8	.1	.15	5	1.1
151675	59	.25	.046	3	36.7	.43	125	.032	<1	.88	.055	.36	2.5	.01	4.9	.4	.32	4	1.3
151676	4	.01	.005	<1	10.4	.01	19	.002	<1	.05	.005	.02	9.7	<.01	.2	<.1	<.05	<1	.5
151677	20	.11	.016	1	11.4	.30	19	.034	2	.55	.018	.07	.7	.05	1.3	.1	.81	2	5.6
151678	49	.36	.049	1	5.6	.78	44	.096	<1	1.20	.019	.13	2.1	.10	1.5	.1	2.30	5	9.2
151679	12	.03	.015	1	10.5	.05	14	.020	1	.20	.008	.02	1.7	.05	.3	<.1	.63	1	9.0
151795	96	.94	.074	4	6.7	.85	85	.174	<1	1.69	.129	.31	5.7	.01	3.6	.3	.42	7	.5
151796	86	.77	.073	6	8.9	.94	138	.147	<1	1.64	.085	.40	10.2	.06	5.5	.5	1.00	6	.7
151797	49	.18	.024	1	2.1	.26	61	.041	<1	.60	.023	.23	>100	.10	1.6	.2	.31	4	2.9
151798	10	.02	.007	<1	11.3	.02	63	.009	<1	.12	.020	.07	12.2	<.01	.3	<.1	.41	1	.5
151799	60	1.27	.059	4	8.5	1.00	41	.015	<1	1.32	.036	.16	>100	.05	6.1	.1	2.44	5	1.5
151800	50	1.01	.029	1	3.5	.35	11	.081	<1	1.15	.020	.03	12.0	<.01	1.9	<.1	.22	5	<.5
RE 151800	47	1.02	.028	1	3.0	.35	11	.080	<1	1.16	.019	.03	11.3	<.01	1.9	<.1	.17	5	<.5
151801	68	1.01	.065	2	7.6	.86	104	.103	1	1.84	.091	.30	4.8	.01	3.3	.1	.59	6	<.5
151802	16	.55	.050	13	42.6	.26	636	.002	1	.56	.055	.23	.3	<.01	2.7	<.1	<.05	2	<.5
STANDARD DS6	55	.82	.075	14	187.2	.59	164	.080	17	1.84	.068	.14	3.6	.23	3.2	1.7	<.05	6	4.5

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 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ____ DATE RECEIVED: NOV 3 2004 DATE REPORT MAILED: Nov 29/04

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

1716

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)2[illegible]
(ISO 9002 Accredited Co.)

ASSAY CERTIFICATE

Standard Metals PROJECT SMX04-3 File # A403154

38151 Clarke Drive, P.O., 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
SI	<.001	<.001	<.01	<.01	<2	.001	<.001	<.01	.08	<.01	<.001	<.001	.001	<.01	.21	.001	<.001	<.01	.01	.76	<.01	<.001	<.001	<.01
C 151649	<.001	.001	<.01	<.01	<2	.002	<.001	.04	1.40	<.01	.001	<.001	.001	<.01	.06	.018	.002	.05	.25	.06	.15	.001	<.001	.02
C 151650	<.001	.001	<.01	<.01	<2	.002	<.001	.11	3.84	.01	.001	<.001	.001	<.01	.07	.020	.001	.08	.50	.12	.26	<.001	<.001	.01
C 151651	<.001	<.001	<.01	<.01	2	.001	.001	.06	1.97	<.01	.007	<.001	.002	<.01	2.43	.015	<.001	.51	1.24	<.01	.52	.001	<.001	.04
C 151656	<.001	.014	<.01	<.01	<2	.004	.002	.06	3.60	<.01	.003	<.001	.002	<.01	2.70	.014	.001	.97	2.48	.33	.11	.001	<.001	<.01
C 151763	<.001	.085	<.01	<.01	<2	.013	.009	.04	7.76	<.01	.001	<.001	<.001	<.01	1.14	.054	.005	.67	1.18	.36	.17	<.001	<.001	.06
C 151764	.002	.008	<.01	.03	<2	.008	<.001	.01	1.50	<.01	.026	<.001	.001	<.01	2.80	.325	.003	.09	1.48	.20	.05	<.001	<.001	.02
C 151765	.003	.244	<.01	<.01	2	.001	.002	.08	4.03	<.01	.003	<.001	.001	<.01	1.47	.072	.001	1.16	2.08	.40	.55	<.001	<.001	.06
C 151766	<.001	.012	<.01	<.01	<2	<.001	.002	.09	3.74	<.01	.006	<.001	<.001	<.01	1.88	.066	<.001	1.27	2.17	.33	.69	<.001	<.001	.02
C 151767	<.001	.009	<.01	<.01	<2	<.001	.001	.09	3.93	<.01	.006	<.001	<.001	<.01	1.81	.070	<.001	1.13	1.83	.34	.39	<.001	<.001	.01
RE C 151767	<.001	.008	<.01	<.01	<2	.001	.001	.09	3.91	<.01	.006	<.001	<.001	<.01	1.82	.073	.001	1.13	1.87	.34	.40	<.001	<.001	.01
C 151768	.004	.718	<.01	<.01	6	.001	.002	.05	4.88	<.01	.004	<.001	<.001	<.01	1.06	.071	<.001	.79	1.53	.34	.44	<.001	<.001	.32
C 151769	<.001	6.695	.03	.01	443	.003	<.001	<.01	10.89	<.01	<.001	<.001	.010	.02	.02	.003	<.001	.02	.15	.01	.10	<.001	<.001	2.92
STANDARD R-2a/AU-1	.048	.571	1.54	4.30	158	.379	.046	.21	23.07	.22	.165	.029	.125	<.01	2.37	.073	.073	1.65	1.33	.23	.61	.063	.173	3.41

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.
AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data f FA ____ DATE RECEIVED: JUN 30 2004 DATE REPORT MAILED: July 15/04

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Standard Metals File # A404645

38151 Clarke Drive, P.O., 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
S1	.1	.6	.6	1	<.1	.3	<.1	<1	.04	<.5	<.1	.6	<.1	2	<.1	<.1	<.1	1
C 151657	.4	53.8	1.4	50	.1	11.3	18.2	370	3.14	13.8	.3	2.4	.6	83	.1	2.1	.1	110
C 151658	3.6	279.3	4.9	34	1.5	2.8	7.9	291	3.87	6.3	1.6	10.4	3.2	11	.2	.1	24.3	46
C 151659	.6	265.1	1.7	46	.1	15.9	18.0	452	2.86	3.5	.1	1.3	.1	138	.1	.1	.2	84
C 151660	1.3	5.7	1.3	24	<.1	6.4	30.4	335	4.86	9.6	.2	61.5	.5	16	<.1	.1	.2	54
C 151661	.8	134.8	2.5	67	.2	17.3	19.3	372	3.10	193.9	.5	4.6	.7	46	.2	.6	<.1	90
C 151770	1.2	74.3	14.2	66	.5	2.3	13.0	567	2.51	3.2	.5	4.8	1.1	44	.3	.3	.4	52
C 151771	.3	5.9	3.2	23	<.1	3.3	3.5	325	1.15	2.2	.5	<.5	1.7	27	<.1	.2	<.1	18
C 151772	.5	5.2	2.4	31	<.1	2.8	3.7	356	1.16	1.6	.9	<.5	3.3	59	<.1	.1	<.1	19
C 151773	1.7	94.4	5.2	89	.2	30.6	23.7	889	4.64	6.8	.6	<.5	1.7	34	.8	.2	.1	165
C 151774	6.0	102.2	10.5	188	.3	34.5	20.4	279	3.23	54.4	1.0	<.5	1.1	77	2.6	2.3	.1	79
C 151775	1.0	98.4	1.9	38	.1	14.7	14.0	364	3.44	6.3	.6	.7	.9	62	<.1	.4	.1	148
C 151776	8	>10000	1.1	17	20.6	8.9	6.3	322	1.37	1.7	.3	2219.8	.1	73	.5	.3	7.0	56
RE C 151776	.9	>10000	1.0	16	20.1	9.0	6.2	315	1.34	1.6	.3	2154.1	.1	69	.4	.3	7.0	54
C 151777	.4	8897.5	1.0	9	11.0	4.9	3.6	433	.99	1.4	.3	1112.4	.1	139	.5	.2	4.2	37
C 151778	.2	358.5	.9	15	.3	5.2	4.4	638	.85	3.6	.4	34.6	<.1	318	.2	.1	.1	33
C 151779	.2	158.9	1.0	12	.1	5.3	4.7	833	1.16	4.0	.4	10.4	.1	301	.1	<.1	<.1	44
C 151780	.6	>10000	2.5	20	5.5	14.8	8.1	578	1.65	1.9	.2	554.3	.1	117	.3	.2	3.9	52
C 151781	.5	2344.5	1.2	33	2.6	10.4	10.4	440	1.88	3.5	.3	325.4	.3	123	.2	.5	1.2	77
C 151782	.6	6789.0	.8	24	11.1	15.4	10.4	378	1.57	1.5	.2	1312.5	.1	67	.3	.3	3.6	60
C 151783	.2	1201.1	.9	25	.9	12.8	9.6	530	1.76	3.1	.3	157.4	.2	220	.2	.2	.5	67
C 151784	.6	5359.0	1.1	15	7.0	8.2	6.1	548	1.23	1.8	.5	910.2	.2	181	.3	.2	2.8	44
C 151785	.5	8074.7	1.6	15	10.2	7.1	6.1	482	1.26	2.4	.4	1715.1	.1	146	.5	.3	3.1	48
C 151786	4.0	130.3	2.7	74	.5	21.6	12.4	482	3.31	<.5	.3	2.2	1 4	76	.2	.1	.1	77
C 151787	.8	130 2	10.7	80	.3	26.9	16.1	311	2.01	108.8	.5	15.7	.8	32	.5	.9	<.1	39
C 151788	5.9	108.0	202.7	298	.2	66.5	43.0	2466	7.14	87.2	.9	4.7	1.0	19	1.0	2.2	.1	138
STANDARD DS5	12.5	145.7	25.2	140	.3	24.5	12.1	778	3.00	18.8	6.0	45.1	2.6	46	5.4	3.7	5.9	64

SAMPLE#	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
S1	.07	<.001	<1	1.5	<.01	3	<.001	1	.01	.347	<.01	.1	<.01	<.1	<.1	<.05	<1	<.5
C 151657	1.05	.048	2	11.9	1.14	356	.234	3	2.39	.282	.86	.2	<.01	4.6	.4	.24	6	<.5
C 151658	.23	.055	3	5.3	.63	59	.046	2	1.20	.038	.36	1.8	.01	3.0	.5	2.53	4	<.5
C 151659	1.25	.103	1	31.6	1.09	17	.113	4	1.10	030	.16	.3	.01	3.0	<.1	<.05	4	<.5
C 151660	.64	.060	2	12.3	.77	41	.042	2	1.40	.056	.20	1.5	.02	3.1	.1	3.53	5	1.0
C 151661	1.27	.123	6	22.9	.96	103	.159	12	1.69	.056	.09	.3	.01	3.1	<.1	.08	6	1.0
C 151770	.84	.084	3	3.5	.47	77	.081	2	1.35	.119	.11	1.1	.01	1.3	.1	.55	4	<.5
C 151771	.19	.036	5	5.3	.21	175	.017	2	.54	.049	.17	.4	<.01	1.2	<.1	<.05	2	<.5
C 151772	.34	.037	6	5.6	.37	71	.012	1	.75	.070	.09	<.1	.04	1.2	<.1	<.05	4	<.5
C 151773	.75	.121	6	65.0	1.94	30	.199	1	1.99	.042	.11	.4	.02	5.3	.2	.87	7	1.8
C 151774	2.20	.132	5	27.1	.54	44	.133	3	2.62	.191	.21	1.0	.02	2.7	.2	1.42	9	4.7
C 151775	.85	.148	5	33.7	.94	330	.271	2	1.58	.119	.69	.3	<.01	2.6	.1	.49	5	.6
C 151776	2.32	.147	1	81.3	.62	8	.122	<1	.63	.046	.06	.6	.29	4.2	<.1	<.05	2	5.0
RE C 151776	2.29	.136	1	77.9	.61	8	.120	<1	.63	.045	.06	.6	.31	3.8	<.1	.07	2	4.7
C 151777	9.58	.110	1	43.4	.40	6	.091	<1	.36	.009	.03	.3	.26	2.7	<.1	<.05	1	3.2
C 151778	26.62	.072	1	31.8	.57	4	.047	1	.29	.006	.07	.1	.03	2.4	<.1	.11	1	<.5
C 151779	23.41	.085	1	51.4	.54	4	.070	1	.30	.011	.10	.1	.02	2.2	<.1	.14	1	<.5
C 151780	7.74	.106	1	158.3	.88	11	.123	<1	.62	.021	.09	.3	.28	4.1	<.1	.57	2	3.1
C 151781	6.33	.152	2	50.1	.80	19	.130	<1	.76	.031	.12	.4	.15	3.1	<.1	.20	3	1.4
C 151782	2.00	.157	1	113.5	1.08	14	.126	<1	.87	.048	.14	.4	.43	4.5	<.1	.19	3	5.2
C 151783	12.99	.119	1	103.0	.87	22	.104	<1	.65	.020	.18	.2	.44	3.0	<.1	.12	2	.8
C 151784	9.49	.132	1	59.9	.56	12	.091	<1	.53	.014	.12	.5	.38	3.0	<.1	.18	2	3.4
C 151785	7.47	.142	1	67.7	.64	8	.106	1	.55	.022	.04	.4	.96	3.9	<.1	.06	2	3.6
C 151786	1.30	.059	4	21.7	.82	88	.182	<1	2.37	.331	.75	.7	<.01	7.3	.5	1.53	7	5.3
C 151787	1.20	.088	5	36.3	.68	55	.121	60	1.24	.056	.09	.3	.03	2.5	<.1	.11	4	.7
C 151788	.39	.118	10	168.3	1.55	150	.017	4	2.22	.012	.25	<.1	.08	13.3	.1	<.05	6	.5
STANDARD DS5	.72	.095	12	187.1	.69	135	.096	17	1.98	.031	.14	4.7	.18	3.3	1.1	.06	6	5.0

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: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data ✓ FA ____ DATE RECEIVED: AUG 16 2004 DATE REPORT MAILED: Sept. 2/04.

Assay recommend for Cu > 1%
Au > 1000 ppb

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

Client : Acme Analytical Laboratories Ltd.
852 Hasting St.
Vancouver, BC, Canada, V6A 1R6
Attention : Clarence Leong

Results of Analysis

T05-00010.0

SILVERBOSS

Becquerel Laboratories Unit #4
Mississauga, ON, Canada, L5N 5L9
Ph: (905) 826-3080 Fax : (905) 826-4151
email : ballen@becquerellabs.com

ISO 17025

Date Received : 10-Jan-05
Date Reported : 28-Jan-05
Reference # : A406630R
Samples were run as received.
Analysis performed by Neutron Activation (Method BQ-NAA-1)
A negative result denotes "Less Than".

#	ID	Wt grams	Sb ppm	As ppm	Ba ppm	Br ppm	Ca %	Ce ppm	Cs ppm	Cr ppm	Co ppm	Eu ppm	Au ppb	Hf ppm	Ir ppb	Fe %
1	151678	17.58	4.0	34.0	1200	-0.5	3	9	2	6	52	0.4	1460	1	8	7.03
2	151797	20.05	3.2	36.0	670	-0.5	-1	5	6	-5	3	0.3	797	-1	-5	12.30
3	151799	17.48	1.8	3 5	1800	-0.5	1	16	5	14	24	-0.2	39	2	-5	6.79

#	La ppm	Lu ppm	Hg ppm	Mo ppm	Nd ppm	Ni ppm	Rb ppm	Sm ppm	Sc ppm	Se ppm	Ag ppm	Na %	Sr ppm	Ta ppm	Tb ppm	Th ppm	Sn ppm	W ppm	U ppm	Yb ppm	Zn ppm
1	3.9	0.15	-1	46	6	-100	28	1.2	6.8	6	34	0.51	-500	-0.5	-0.5	0.8	-100	3	0.9	1.0	100
2	2.3	0.08	-1	-1	-5	-100	52	0.7	4.4	-3	21	0.45	-500	-0.5	-0.5	0.7	-100	230	0.9	0 4	110
3	7.6	0.15	-1	-1	9	-100	49	2.0	8.8	-3	-5	2.18	-500	-0.5	-0.5	1.6	-100	216	0.7	1.0	130

Approved : R. Allen
R. Allen, BSc
NAA Supervisor

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Standard Metals PROJECT SILVER BOSS File # A406831 (b)

38151 Clarke Drive, P.O., Squamish BC V0N 3G0 Submitted by: David Blann

SAMPLE#	Cs ppm	Ge ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Ta ppm	Zr ppm	Y ppm	Ce ppm	In ppm	Re ppb	Be ppm	Li ppm	Pd ppb	Pt ppb
SB04DS1	2.84	.1	.03	2.00	8.0	.4	<.05	2.3	6.05	16.7	.02	1	.5	17.8	<10	<2
SB04DS2	3.06	<.1	<.02	.65	6.7	.3	<.05	.3	4.72	9.6	<.02	<1	.6	14.3	<10	<2
SB04DS3	3.67	<.1	<.02	.55	7.0	.3	<.05	.2	4.45	8.8	<.02	<1	.4	15.0	<10	<2
SB04DS4	1.61	.1	.02	.49	5.4	.2	<.05	.7	5.27	13.2	.02	<1	.3	13.1	<10	<2
SB04DS5	2.10	<.1	<.02	.67	7.5	.3	<.05	.4	5.19	12.3	<.02	<1	.4	12.4	<10	<2
SB04DS6	2.14	.1	<.02	.45	6.6	.2	<.05	.5	5.16	12.3	<.02	<1	.3	11.8	<10	<2
SB04DS7	1.58	<.1	<.02	.40	6.6	.2	<.05	.3	4.52	9.7	<.02	<1	.2	8.5	<10	<2
SB04DS8	.79	<.1	<.02	.83	5.7	.2	<.05	.7	5.56	17.4	<.02	<1	.4	10.6	<10	<2
SB04DS9	.90	<.1	<.02	.75	7.5	.3	<.05	1.0	5.84	18.4	.02	<1	.3	11.0	<10	3
SB04DS10	.98	.1	.02	.68	7.6	.3	<.05	1.1	6.46	20.9	<.02	<1	.3	11.1	<10	<2
SB04DS11	1.45	.1	<.02	.54	6.3	.3	<.05	.5	4.94	13.6	<.02	<1	.4	12.5	<10	<2
SB04DS12	1.02	<.1	<.02	.69	5.8	.2	<.05	.5	5.55	14.8	<.02	<1	.4	11.4	<10	<2
RE SB04DS12	.99	<.1	<.02	.66	5.7	.2	<.05	.5	5.37	14.6	<.02	<1	.2	10.6	<10	<2
04DB-SB-1	4.31	<.1	<.02	.28	8.5	.3	<.05	.2	4.89	10.1	<.02	<1	.3	20.1	<10	2
04DB-SB-2	3.36	.1	.02	.58	11.7	.3	<.05	.8	6.16	11.8	<.02	<1	.2	15.7	<10	<2
04DB-SB-3	1.45	<.1	<.02	.51	6.0	.3	<.05	.4	5.63	13.6	<.02	<1	.2	11.2	<10	<2
04DB-SB-4	4.94	<.1	.03	1.24	10.5	.4	<.05	1.4	4.20	14.3	.02	<1	.2	16.8	<10	<2
04DB-SB-5	7.87	<.1	<.02	.33	13.7	.3	<.05	.1	4.40	10.2	.02	<1	.5	14.1	<10	<2
04DB-SB-6	14.19	<.1	<.02	.28	32.3	.3	<.05	.1	10.88	14.3	.03	<1	1.0	16.5	<10	<2
04DB-SB-7	5.76	<.1	<.02	.44	9.8	.3	<.05	.2	3.69	9.7	.02	1	.5	14.4	<10	<2
04DB-B-1	.90	<.1	<.02	.85	4.9	.2	<.05	.3	5.04	19.2	<.02	<1	.6	15.1	<10	<2
04DB-B-2	.82	<.1	<.02	.68	4.1	.2	<.05	.3	3.78	14.8	<.02	<1	.4	11.9	<10	<2
04DB-B-3	1.49	<.1	<.02	.59	9.3	.4	<.05	.1	4.37	16.0	.02	<1	.5	18.2	<10	<2
04DB-B-4	1.23	<.1	<.02	.70	7.1	.3	<.05	.3	9.38	21.3	.02	<1	.9	18.7	<10	<2
04DB-B-5	.66	<.1	.03	.58	4.9	.3	<.05	.7	7.96	26.5	<.02	<1	.8	30.6	<10	<2
STANDARD DS6	5.23	<.1	.02	1.46	13.4	5.6	<.05	3.1	6.63	28.3	1.86	1	2.4	15.5	170	40

GROUP 1F1 - 1.00 GM SAMPLE LEACHED WITH 6 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 20 ML, ANALYSED BY ICP/ES & MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: SILT SS80 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data Wk FA ____ DATE RECEIVED: NOV 3 2004 DATE REPORT MAILED: Nov 24/04

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

Appendix 2

Petrographic Reports

Petrographic Report

Silverboss Rocks

16 May 2005

Prepared For: David Blann
Standard Metals

PetraScience Consultants Inc.

700 – 700 West Pender Street
Vancouver, B.C. V6C 1G8 Canada
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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.

Sample Hen98-16 is a pervasively altered, vaguely granular holocrystalline rock. SampleHen98-19 a mottled, vaguely porphyritic rock. SB DDH3-130 is less altered and is identified as a monzodiorite or possibly quartz monzodiorite.

Samples Hen941 – 69.5, Hen 92 – D3, and 00 DR4 are identified as calcic skarns. Sample Hen941 – 69.5 is banded with an assemblage of quartz-actinolite-tremolite-epidote-biotite-carbonate-K-feldspar-clinopyroxene. Sample Hen 92 – D3 has as similar skarn assemblage (except without biotite) but is not banded. Sample 00 DR4 is a semi-massive garnet-clinopyroxene (clinozoisite-epidote-calcite) skarn.

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

Alteration

The igneous samples have been variably altered. In Hen98-16 the original mineralogy and textures are replaced by patchy to pervasive epidote, quartz, K-feldspar and sericite. Veinlets of epidote-K-feldspar-quartz and K-feldspar-biotite vein selvages occur locally. In Hen98-19 the rock is replaced by epidote-clinozoisite, K-feldspar, actinolite-tremolite and quartz. 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.

Calcic skarn alteration comprises bands of biotite-quartz-sulfides, clinopyroxene-carbonate-quartz, K-feldspar-epidote and carbonate-amphibole (Hen 941 – 69.5). In sample Hen 93 – D3, the skarn alteration comprises patchy aggregates of quartz-epidote-actinolite-tremolite-K-feldspar and clinopyroxene. In sample 00 DR4 clinozoisite-epidote and calcite aggregates partly replace clinopyroxene. Garnet is fractured and infilled by quartz, calcite and clinozoisite-epidote.

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

Mineralization in Hen98-16, 19 and Hen941 – 69.5 comprises minor to major disseminated pyrrhotite with minor to trace chalcopyrite and arsenopyrite. Sample Hen 92 – D3 has 10% disseminated arsenopyrite. 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.

A

B

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

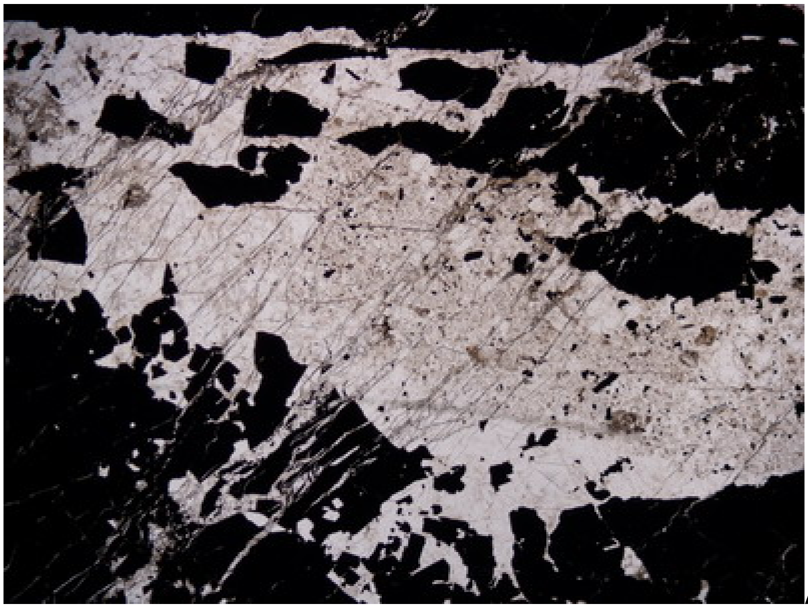
Mineral	%	Distribution & Characteristics	Optical
Pyrite	60	very fine anhedral fragments, subhedral crystals and anhedral coarse masses, heavily fractured with fractures filled with quartz, calcite and locally chalcopyrite	
Quartz	20	fine to medium grained, anhedral, locally development of subgrains, 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

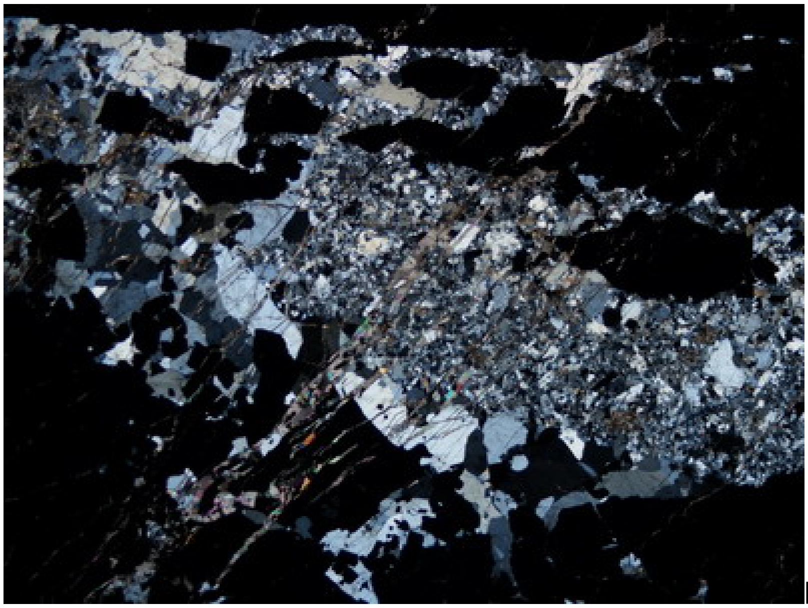
Mineral	%	Distribution & Characteristics	Optical
Sericite-muscovite	04	very –fine-grained patches disseminated with fine-grained quartz, locally as fine grained sheaves and irregular veinlets	

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.

Kathryn Dunne, P.Geo., Alexandra Mauler, Ph. D. and Anne J.B. Thompson, P.Geo.

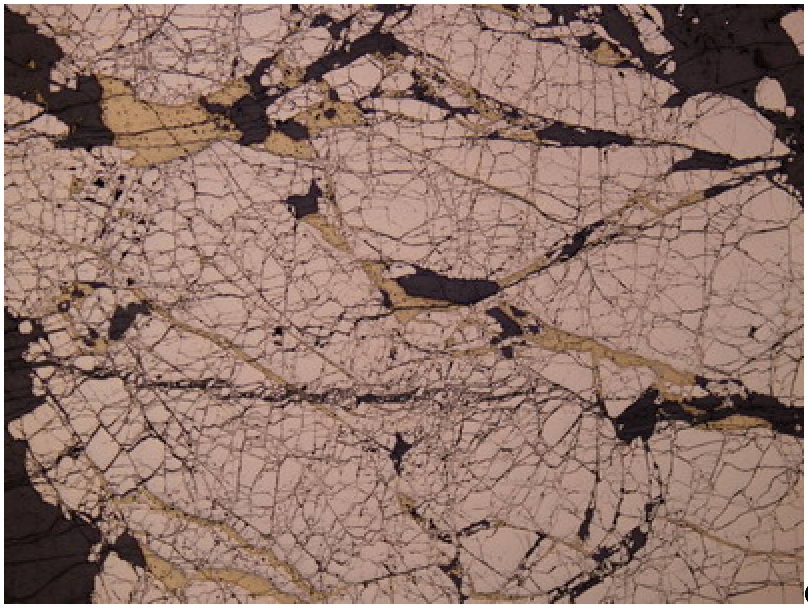


A



B

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



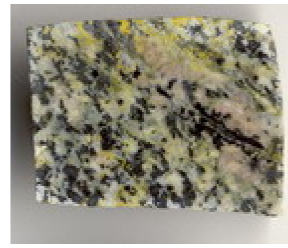
C

SB 00H-1 - 75: C) Representative view showing massive pyrite cut by veins of chalcopyrite, 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 $_{30-45}$ (based on 3 estimates), typically partly replaced by patchy sericite and locally epidote	*polysyn. twins*
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	*inclined ext large 2V.*
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	*Abnormal brown biref*
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	

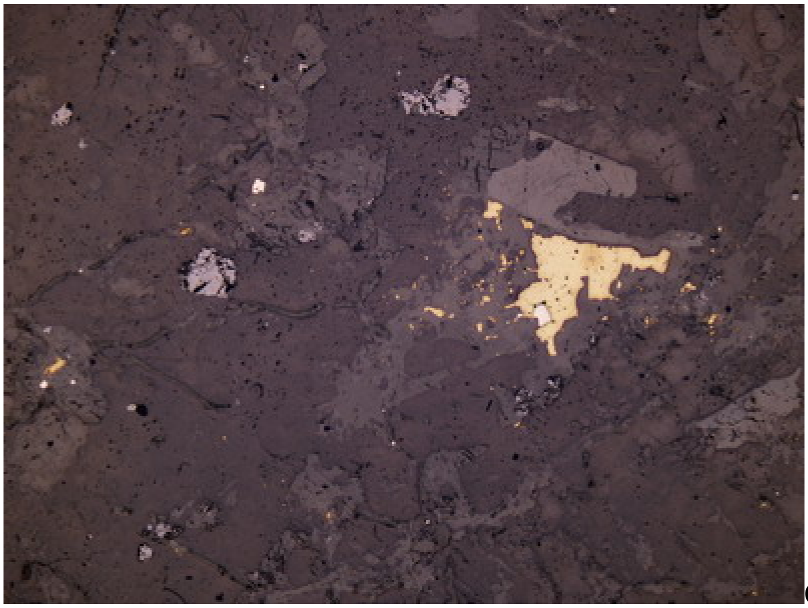
Thin Section Description:

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.

A

B

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



C

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