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# GEOCHEMICAL ASSESSMENT REPORT

# **ON THE**

# SUNRISE, SNOW and REDTOP ZINC-LEAD-SILVER-GOLD-COPPER PROSPECTS

# **Mount McClennan**

Minfile No's 082m-044, 045, 046

51° 37' 45" N, 119° 48' 54" W

NTS map sheet 082M12W

May 11, 2006

by

J.E. Leo Lindinger, P.Geo.



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#### SUMMARY

The Sunrise Property covers the SUNRISE (Minfile #082M046), SNOW (Minfile #082M045) and REDTOP (Minfile #082M044) zinc-lead-silver-copper-gold Prospects, the Morrison gold and West Redtop zinc-lead-silver-gold showings. The property is located on BCGS map sheet 082M083 at 51° 37' 45" N., 119° 48' 54" W. in the Kamloops Mining Division 18 km east of Clearwater, near the summit of Mr. McClennan.

The property covers moderately metamorphosed and deformed subaqueous sediments and volcanics of the Paleozoic Eagle Bay Group portion of the Kootenay Terrane, a west facing sequence of interbedded sediments and volcanics off the former coast line of ancestral North America. The closest significant intrusive body is the Cretaceous Raft Batholith to the north.

The SUNRISE, SNOW, REDTOP and West Redtop are four Kuroko style volcanogenic massive sulphide zones, deposits or showings located from east to west respectively on the north limb of a shallowly east plunging antiform of a mixed subaqueous assemblage of Eagle Bay Group sediments and felsic fragmental volcanics. The occurences are separated by 1 to 1.5 kilometers over a 5 kilometer strike length.

Surface rock sampling in 2005 confirmed medium to high grade zinc and lead accompanied by weakly to moderately anomalous copper, silver, gold and cadmium results from massive and semi massive sulphide exposures. The high grade gold results from the 1980's work programs near the Morrison showing could not be repeated. The 2005 work program cost \$2804.00

An assessment report review of the recorded work on the property resulted in continuous recommendations for additional work by previous operators to further explore the numerous untested geological and geophysical targets.

A \$200,000 dollar Stage 1 multiphased program including grid construction, geological mapping, Induced polarization geophysics, and diamond drilling is recommended.

#### INTRODUCTION

This report documents a rock geochemical sampling program completed on the SUNRISE, SNOW and REDTOP zinc-lead-silver-copper gold prospects completed on July 4, 2005.

#### LOCATION AND ACCESS

The Sunrise Property is located 18 kilometers due east of Clearwater on the summit if Mt. McClennan  $51^{\circ}$  37' 45" North,  $119^{\circ}$  48' 54" West on BCGS map sheet 082M083. Road access from Clearwater is east on the Yellowhead Highway 5 for 16 kilometers then north onto the Corbie Lake Forest Service (1000) Road 3 kilometers east of the Birch Island turnoff for 13.7 kilometers. Then west onto the 10.22 forest service road for 0.95 kilometers then north onto local logging and mining roads to the various showings on the property. Road access to the west and north side of the property are via logging roads accessing the west side of Mt. McClennan east of the raft river.

The town of Clearwater has good accommodation and logistical support including helicopters and a hospital. Road access to the property is available from mid May to mid November. However with clear cutting, accessing the south portions can sometimes be made as early a mid April.

#### PHYSIOGRAPHY

The Sunrise Property is located in the south-eastern end of the Cariboo Plateau. Rainfall is about 1 meter per year. The area covered by the claims covers the south slopes of the summit of Mt. McClennan at 1680 meters. The lowest point is at about 1400 meters along the south property perimeter. Vegetation is dominantly lodgepole pine in south slopes with spruce and balsam at the summit, upper elevation marshy areas and upper elevation north facing slopes.

### PROPERTY

The Sunrise Property comprises the following mineral tenure claims located in the Kamloops, Mining Division on NTS map sheet 082M/12 in the Clearwater - Vavenby area.

| Table 1 – Mineral Tenure |             |            |               |            |              |        |                    |         |  |  |  |  |
|--------------------------|-------------|------------|---------------|------------|--------------|--------|--------------------|---------|--|--|--|--|
| Tenure<br>Number         | Tenure Type | Claim Name | Owner         | Map Number | Good To Date | Status | Mining<br>Division | Area    |  |  |  |  |
| 505808                   | Mineral     | sunrise12  | 115758 (100%) | 082M       | 2006/AUG/27  | GOOD   | Kamloops           | 20.068  |  |  |  |  |
| 507850                   | Mineral     |            | 115758 (100%) | 082M       | 2006/AUG/27  | GOOD   | Kamloops           | 60.182  |  |  |  |  |
| 507851                   | Mineral     | sunrise ne | 115758 (100%) | 082M       | 2006/AUG/27  | GOOD   | Kamloops           | 140.415 |  |  |  |  |
| 509172                   | Mineral     |            | 115758 (100%) | 082M       | 2006/AUG/27  | GOOD   | Kamloops           | 581.888 |  |  |  |  |
| 509439                   | Mineral     | sunrisee   | 115758 (100%) | 082M       | 2006/AUG/27  | GOOD   | Kamloops           | 180.628 |  |  |  |  |
| 511802                   | Mineral     | REDTOP     | 115758 (100%) | 082M       | 2006/AUG/27  | GOOD   | Kamloops           | 501.556 |  |  |  |  |
| 512434                   | Mineral     | NREDTOP    | 115758 (100%) | 082M       | 2006/MAY/11  | GOOD   | Kamloops           | 80.233  |  |  |  |  |

Good to date is pending acceptance for assessment credit of the exploration work this report documents as filed in Statement of work no 4059238 dated December 15, 2005.





#### Figure 2 - Mineral Tenure

#### HISTORY

The known history of the property is briefly summarized below.

- Redtop and Sunrise prospects discovered and staked prior to 1922 and the Snow shortly thereafter (Schiarizza & Preto, 1987 P. 72).
- Activity picked up in the 1960's with the building of the Yellowhead Highway (Kerr, Dawson and Associates Ltd., 1978).
- Crowpat mines in the mid 1960's completed test mining at all three prospects. Calbay Mining Ltd., Castlemaine Explorations Ltd. and Craigmont Mines Ltd. also completed exploration work including diamond drilling (Craigmont).
- Kerr-Dawson in 1976 staked the Sunrise and Snow showings and were the first to
  recognize that the showings were volcanogenic hosted i.e. "syngenetic" massive sulphide
  deposits. They, and others completed several soil geochemical surveys, and limited
  magnetometer surveys. The claims were allowed to lapse.
- Placer dome acquired the property by staking in 1980 as the Noble project and completed extensive soil, rock sampling, ground magnetometer, induced polarization and UTEM surveys on several grids. They also completed at least two geological mapping programs.

- In 1988 they drilled 4 deep NQ diamond drill holes two at the Red Top and one each at the Sunrise and Snow prospects.
- In 1994 they optioned the claims to a junior mining company as a listing property and 4 additional drill holes were completed in the area between the Snow and Sunrise areas.
- Placer Dome allowed the claims to lapse in 2000.
- Leo Lindinger, the current tenure owner acquired the property by staking beginning in May 2001. The old mineral tenures were converted to new MTO tenures early in 2005.

### **REGIONAL GEOLOGY**

The following regional geological description is excerpted from Schiarizza and Preto, 1987, pages 13-25.

"...The name "Eagle Bay" was first proposed by Jones (1959) for a series of lowgrade metasedimentary and metavolcanic rocks that outcrop between Shuswap and Adams lakes in the Vernon map area. They comprised the uppermost formation of his Mount Ida Group, which he assigned an "Archean or Younger" age. Campbell (1963) mapped the Adams Lake sheet and recognized that rocks equivalent to the Eagle Bay Formation extended as far north as the Clearwater – Vavenby area. He collected Late Paleozoic fossils from a single limestone unit within the succession and suggested that this might be the age of the entire package.

Further work by Campbell and Tipper (1971) in the Bonaparte Lake map area established that Eagle Bay rocks along Adams Lake extended northwestward to the Barriere River. Following these correlations, the name Eagle Bay Formation came to be used for the rocks underlying a broad area lying west of the Shuswap metamorphic complex from Clearwater southeast to Shuswap Lake (Campbell et al., 1976) (Figure 3).

More recently, Okulitch (1979) revised the geology of the region and correlated the Eagle Bay succession with the stratigraphy of the Kootenay Arc, on the east side of the Shuswap Complex. He correlated part of the Eagle Bay succession with the Lower Paleozoic Lardeau Group, and part (mainly Unit EBP of this report) with the Carboniferous Milford Group which, in the arc, overlies the Lardeau Group with angular unconformity He allowed that sub-Lardeau Group correlatives might also be present within the Eagle Bay succession and, specifically, was correct in correlating the Tshinakin limestone member (EBGt) of the Eagle Bay Formation with the Lower Cambrian Badshot Formation of the Kootenay Arc."...

..."the Eagle Bay Assemblage comprises four Stratigraphic units can be matched from one sheet to another, suggesting that the bounding faults are not the loci of extremely large displacements. Although many lithologic units within the assemblage remain undated, it has been established that the Eagle Bay includes a Lower Paleozoic (and older?) succession of clastic metasediments, carbonate and mafic metavolcanic rocks, and an overlying Devono-Mississippian succession of felsic to intermediate metavolcanic rocks and clastic metasediments."...

... "The Adams Plateau-Clearwater-Vavenby map area is underlain mainly by Paleozoic rocks of the Eagle Bay Assemblage and Fennell Formation. The Eagle Bay Assemblage comprises Early Cambrian to Mississippian metasedimentary and metavolcanic rocks that are locally intruded by Devonian orthogneiss. They resemble, in part, North American miogeoclinal strata to the east. and are included within the parautochthonous or "pericratonic" Kootenay terrane of Price et al. (1985). The Fennell Formation comprises Devonian to Permian oceanic rocks of the Slide Mountain terrane which were tectonically emplaced over Mississippian rocks of the Eagle Bay Assemblage in early Mesozoic time. The Fennell and Eagle Bay rocks were deformed and metamorphosed together during the Jura-Cretaceous Columbian orogeny; the metamorphic grade is lower greenschist through most of the area, but increases sharply to amphibolite facies in places along the eastern and northeastern margins. The Fennell and Eagle Bay successions are cut by mid-Cretaceous granitic rocks of the Raft and Baldy batholiths, and by Early Tertiary quartz feldspar porphyry, basalt and lamprophyre dykes. They are locally overlain by Eocene sedimentary and volcanic rocks of the Kamloops Group and by Miocene plateau lavas.

Paleozoic rocks in the study area occur in four"... ..."north-west-dipping thrust sheets"... ..."separated by southwesterly directed thrust faults (Figure 6, in pocket, and Figure 7). The upper three fault slices contain only Eagle Bay rocks, while the lowest slice comprises Eagle Bay strata structurally overlain by rocks of the Fennell Formation."...

..."The fourth (upper) Eagle Bay fault slice consists of an inverted sequence of mafic metavolcanic rocks and limestone of Unit EBG, structurally overlain by quartzites, grits and quartz mica schists of Unit EBH. Rocks within this fault slice are dated as Early Cambrian and (?) older on the basis of fossil archaeocyathids collected from the Tshinakin limestone member of Unit EBG.

At the base of the third Eagle Bay fault slice is a succession consisting dominantly of quartzites, grits and quartz mica schists (Unit EBQ) intruded by a large sheet of Devonian granitic orthogneiss. Unit EBQ is not dated, but is tentatively correlated with the lithologically similar Early Cambrian and/or older rocks of Unit EBH. The upper part of Unit EBQ locally includes significant proportions of chlorite schist and limestone and may correlate with Unit EBG. Throughout most of the third fault slice, Unit EBQ is overlain by a Devono-Mississippian succession comprising felsic to intermediate metavolcanic rocks (Units EBA and EBF) intercalated with and overlain by dark grey phyllite, sandstone and grit (Unit EBP). These rocks were not dated within the third fault slice, but are correlated with an identical sequence within the first fault slice. In the lower slice, Unit EBA yielded a Middle Devonian radiometric age, and several collections of Mississippian condonts were made from Unit EBP. Locally within the third fault slice, Units EBA and EBF are absent, and Units EBQ and EBP are separated by a succession of schistose sandstones and grits that are assigned to Unit EBS. The second Eagle Bay fault slice consists of mafic metavolcanics, limestone (including the prominent Tshinakin limestone member) and related rocks of Unit EBG. These rocks are not dated within this slice, but are readily correlated with lithologically identical rocks of the uppermost fault slice, within which the Tshinakin limestone member has yielded Early Cambrian archaeocyathids. The second fault slice is not recognized north of the Barriere River strike-slip fault, where rocks of the third slice lie directly above the first. The first and lowest fault slice comprises a succession of Eagle Bay rocks structurally overlain by rocks of the Fennell Formation. The base of the Eagle Bay succession is a heterogeneous assemblage of phyllitic sandstone and grit, intercalated with carbonate and mafic to felsic volcanic and volcaniclastic rocks. The age of these rocks is unknown; they are assigned to Unit EBS and correlated with lithologically similar rocks which locally lie above Unit EBQ in the third fault slice. Within the first fault slice, Unit EBS is overlain by Devono-Mississippian rocks of Units EBA, EBF and EBP, but is locally separated from them by either limestone, calc-silicate schist and skarn of Units EBL and EBK, or by mafic metavolcanic rocks of Unit EBM. The Fennell Formation is an internally imbricated oceanic assemblage consisting mainly of basalt, chert and gabbro, intercalated with lesser amounts of quartz-feldspar-porphyry rhyolite, sandstone, metatuff, limestone, and intraformational conglomerate. It comprises the upper part of the first structural slice, but is separated from Mississippian Eagle Bay rocks of Unit EBP by an early, easterly directed thrust fault; this thrust formed prior to the southwesterly directed structures which dominate the structural pattern of the area."...

. 7



Figure 3. Geologic setting of the Adams Plateau – Clearwater – Vavenby area, modified after Okulitch and Cameron (1976). Not shown are Tertiary volcanics and numerous granitic plutons of Mesozoic and Paleozoic age. Potentially correlative rocks north of the Raft batholith are included within the Eagle Bay Assemblage.

Figure 3 - Regional Geology - From Schiarizza and Preto 1987, page 12.

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Figure 7. Correlation chan showing ages and structural/stratigraphic relationships of rock units within the Adams Plateau - Clearwater - Vavenby area. Figure 4 - Structural Cross Section - Eagle Bay-Fennell Assemblages

#### LOCAL GEOLOGY

The following descriptions of the rocks underlying and surrounding the Sunrise property are excerpted from Schiarizza and Preto, 1987 pages 15-32.

In the Vavenby area Unit EBG rocks outcrop in the fourth fault slice between the Raft and Baldy batholiths. The unit outcrops most extensively on the south side of the North Thompson River, where it occurs in a number of fault blocks separated by late northerly trending faults; it also outcrops on the north side of the river, south and east of the McCorvie Lakes. Unit EBG occurs at the base of the upper slice; in eastern exposures it is structurally overlain by Unit EBH. The succession is overturned and is inferred to comprise the lower limb of a large nappe structure (Figure 5, section H-H'). Unit EBG is separated from underlying rocks of the third fault slice by the Vavenby thrust fault (Figure 6).

Within the fourth fault slice Unit EBG is dominated by calcareous chlorite schists and limestones identical to those which characterize the unit within the second fault slice. The chlorite schist is typically medium to dark green, fine grained, and moderately to strongly fissile. Local intervals within the unit are dolomitic and weather brown or rust coloured. Relatively coarse fragmental rocks are present locally (Plate 4), as is massive greenstone that was probably derived from massive flows. Feldspar and/or hornblende crystals are conspicuous in places and may be accompanied by quartz crystals and abundant sericite where the rocks are derived from relatively more felsic volcanics. Hornblende-feldspar-quartz-sericite-chlorite schist is most abundant in the vicinity of Chuck Creek where it is intercalated with light to medium grey phyllite, fine-grained quartzite and limestone; this interval has been distinguished on the map as Unit EBGt:

Light grey to greenish grey quartzite, grit and chlorite-sericite-quartz schist occur locally within Unit EBG of the fourth fault slice, but are not common. These rocks resemble rocks which characterize Unit EBH and occur mainly in close proximity to the contact with Unit EBH.

Light grey, finely crystalline limestone occurs, at least locally, throughout most of the Unit EBG succession in the fourth fault slice, but rarely constitutes mappable horizons. However, a thick, well-exposed limestone unit, which outcrops on both sides of the North Thompson River near Vavenby (Plate 5), is comparable in thickness to the Tshinakin limestone member of the second fault slice, and is correlated with it (Unit EBGt, Figure 4). Fossil archaeocyathids (Plate 6) were found within this unit 4 kilometres northwest of Vavenby, indicating an Early Cambrian age (Appendix 1). This is the only age control currently known for Unit EBG and the stratigraphically underlying rocks of Unit EBH."...





| LEGEND (Includes BCDM and Schiarizza and Preto unit identifiers)     |   |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|
| Tertiary<br>Plbs   | - Basalt (Clearwater volcanics)   |  |  |  |  |  |  |  |  |
| Jurassic-Cretaceous<br>JKgd<br>Jurassic<br>MLJgd                     | - Granodiorite<br>– Granodiorite (Raft Batholith)   |  |  |  |  |  |  |  |  |
| Kootenay Terrane   |   |  |  |  |  |  |  |  |  |
| Upper Palaeozoic<br>PlRal (EBP?)                                     | -Dark grey phyllite, sandstone, minor volcanics and limestone.  |  |  |  |  |  |  |  |  |
| Devonian<br>Dpy (EBA)<br>exhalative (pyritic o                       | -Intermediate subaqueous? volcanic derived sediments. In part shert).   |  |  |  |  |  |  |  |  |
| Lower Palaeozoic<br>ICmgs (EBG)<br>Includes Tshinakin<br>ICmmb (EBS) | <ul> <li>Intermediate and mafic volcanics and derived sediments.</li> <li>Immestone.</li> <li>Phyllite with minor limestone</li> </ul>                                    |  |  |  |  |  |  |  |  |
| Hadrynian<br>Hacmqz (EBQ)<br>(felsic volcanic and i<br>(EBQI)        | -Quartzite, calcareous phyllite, muscovite-chlorite quartz schist.<br>ntrusive in part) <b>*stratabound massive sulphide host</b><br>– thinly banded to massive limestone |  |  |  |  |  |  |  |  |
| Hadrynian and older<br>PrPzog, HaPzgs                                | -Shuswap complex rocks  |  |  |  |  |  |  |  |  |

Table 2 – Geological Legend

#### ...."UNIT EBQ

Unit EBQ consists of micaceous quartzite, grit, phyllite and quartz mica schist, accompanied by minor amounts of chlorite schist, limestone, calcareous phyllite, calc-silicate schist and amphibolite. It occurs within the third Eagle Bay fault slice, where it is overlain by Devono-Mississippian rocks of Units EBA, EBF and EBP, and locally by Unit EBS (Figures 6 and 7). Its stratigraphic base is not seen because it is underlain by Devonian orthogneiss of Unit Dgn. South of the Barriere River fault, Unit EBQ (designated as Unit SDQ by Schiarizza and Preto, 1984) occupies a northwest-trending belt between Adams and North Barriere lakes. The south-west-dipping rocks within this belt are underlain by Unit Dgn and are juxtaposed, to the southwest, against northeast-dipping Unit EBG rocks of the second fault slice, across what is inferred to be a northeast-dipping thrust fault. North of the Barriere River fault, Unit EBQ occurs mainly on the north and south limbs of a composite east-trending synformal structure between the Raft and Baldy batholiths (Figure 5, sections H-H' and 1-1'). It is stratigraphically overlain by Devono-Mississippian Eagle Bay rocks, and locally by Unit EBS of uncertain age. East of the Chuck Creek fault, however, it is locally structurally overlain by Unit EBG of the fourth Eagle Bay fault slice. Unit EBQ is underlain by Devonian orthogneiss (Unit Dgn) on the south limb of the synformal structure, north of the Baldy batholith (Figure 4). Between Granite Mountain and Barriere River (where it is designated

as Unit EBQgn) it is intruded by bodies of orthogneiss and by sills (?) of quartzeye sericite schist (quartz porphyry) that may be directly related to overlying felsic volcanic rocks of Unit EBA. North of North Thompson River, Unit EBQ rocks are juxtaposed directly above Fennell Formation rocks of the first fault slice.

In most areas Unit EBQ rocks contain greenschist facies metamorphic mineral assemblages, as do other Paleozoic rocks throughout the map area (with the exception of the contact aureoles around the Raft and Baldy batholiths)."...

The dominant rock type within Unit EBQ is light to medium (rarely dark) grey to brownish grey, fine to medium-grained micaceous quartzite. It is generally well foliated, with a platy aspect due to more or less regularly spaced micaceous partings between plates and lenses of quartz-rich rock that are several millimetres to several centimetres thick. The mica is typically muscovite with minor amounts of chlorite, but includes biotite in higher metamorphic grade exposures where garnet porphyroblasts may also be present. The quartz and mica are generally accompanied by minor amounts of plagioclase (albite or oligoclase), opaque oxides, tourmaline and apatite. The quartzites are locally calcareous, in which case they contain calcite as evenly scattered microscopic grains or aggregates, or as pods and lenses oriented parallel to the foliation.

Light grey to white, massive quartzite occurs locally within Unit EBQ, but is not common. Where present it comprises intervals ranging up to several metres thick which are enclosed within typical platy quartzites and quartz mica schists."...

..."Limestone, marble, calc-silicate schist and calcareous phyllite, together with chlorite schist of mafic metavolcanic origin, dominate the upper part of Unit EBQ where it is exposed along the north side of the Baldy batholith, between Granite Mountain and the Barriere River, and along the slopes south of Mount McClennan. These rocks are intercalated with quartzite and quartz mica schist typical of Unit EBQ and are overlain by either Unit EBA or Unit EBS (Figure 4). They bear a strong lithologic resemblance to unit EBG with which they may be correlative (Figure 7). Chlorite schist, limestone and calcareous metasediments occur locally elsewhere within Unit EBQ, but are not common."... The age of Unit EBQ is unknown, other than that it must be older than the mid to late Devonian granitic and volcanic rocks which respectively intrude and overlie it. It is, however, lithologically very similar to Unit EBH, of Early Cambrian and/or older age, with which it is tentatively correlated (Figure 7). This correlation suggests that the mafic metavolcanics, limestone and related rocks which comprise the upper part of Unit EBQ in the vicinity of Mount McClennan and to the northeast of Granite Mountain may be correlative with the lithologically similar Early Cambrian rocks of Unit EBG. Unit EBQ is probably equivalent to map unit I of Campbell and Tipper (1971), which outcrops north of the Raft batholith in the vicinity of Mahood Lake. Their map unit I, comprised largely of quartz mica schist and quartzite, is inferred to be in thrust contact with underlying Fennell Formation rocks, and thus occupies a similar structural position to northwestern EBQ exposures within this study area (Figure 4)."...

#### ..."UNIT EBS

Unit EBS is a heterogeneous package of rocks dominated by fine to coarsegrained clastic metasediments which are The dominant economic mineralization styles on the Sunrise property are intercalated with carbonate and mafic to felsic volcanic and volcaniclastic horizons. Rocks assigned to this unit occur mainly at the base of the first fault slice, but also locally within the third fault slice where they overlie Unit EBQ (Figures 6 and 7)."...

..."Rocks assigned to Unit EBS within the third Eagle Bay fault slice consist mainly of schistose chlorite-sericite grit and sandstone, together with chloritesericite-quartz schist and relatively pure quartzite. These rocks are intercalated with minor amounts of dark grey phyllite, dark green chlorite schist of probable mafic volcanic origin, and rare thin horizons of limestone and dolostone. They outcrop on the slopes south of Mount McClennan on the north side of the North Thompson River, and south of the river east of Jones Creek. They are apparently restricted to a single fault block, within which they are underlain by Unit EBQ and overlain by Unit EBP.

The age of Unit EBS is not known. It is presumed to be Early Cambrian and/or younger as it locally lies above Unit EBQ and Middle Devonian and/or older since it lies beneath the Middle Devonian felsic phyllites of Unit EBA. It is lithologically similar to parts of the Lardeau Group in the Kootenay Arc, which is inferred to be Cambro-Ordovician in age (Read and Wheeler, 1976; Read in Brown et al., 1981, pages 351-352). It is also similar to Paleozoic grit and associated rocks within the Snowshoe Formation of the Barkerville terrane (Struik, 1985)."...

#### ...." EBA

Unit EBA is dominated by light grey chlorite-sericite-quartz phyllite and schist derived mainly from felsic to intermediate volcanic and volcaniclastic rocks.

Green chlorite schist derived from mafic volcanic rocks is present locally. Bands of dark grey phyllite and siltstone comprise approximately 10 per cent of the unit. Unit EBA is host to numerous polymetallic base and precious metal showings within the map area (see Table 1).

The most abundant and characteristic rock type within the unit is fine-grained, light silvery grey to greenish grey sericite quartz phyllite, grading in places to slightly coarser grained muscovite quartz schist. Chlorite is generally present in amounts subordinate to the sericite, but may be absent. Weathered surfaces are light to medium shades of yellowish brown, reddish brown or grey, but may be dark rusty brown or bright yellow in areas of relatively intense pyrite mineralization. The rocks typically display a very fine and well developed papery fissility, although more platy varieties, comprising millimetre to centimetre-thick siliceous lenses and layers separated by thin sericite partings, also occur.

Roundish "eyes" of clear quartz are commonly present and grains of chalky white feldspar are locally evident. In places the phyllite has a spotted appearance due to the presence of porphyroblasts of rusty brown-weathering siderite, or less commonly chlorite or chloritoid.

Thin veins and lenses of quartz or quartz-carbonate often occur parallel to the schistosity. The phyllites are typically quite homogeneous over large intervals and contacts between individual volcanic or volcaniclastic horizons are not commonly evident. Locally the phyllite is coarsely fragmental and probably derived from coarse pyroclastic rocks (Plate 8) although fragmental units are not as common as in overlying Unit EBF. The clasts, comprising sericitic and/or chloritic siliceous lithic fragments, range from less than 1 centimetre to several tens of centimetres in size; they are generally flattened and foliated within the plane of the matrix schistosity but have a higher proportion of chlorite relative to sericite and are usually less quartzose and more feldspathic than their lighter coloured counterparts.

Distinctly more mafic, medium to dark green schists consisting of chlorite, albite, epidote and actinolite or green biotite are also present; these have little or no quartz and sericite. A band of dark green fragmental schist 10 metres thick, exposed along lower Foghorn Creek, contains coarse fragments of both dark green chloritic schist and light grey sericite quartz schist.

Metasedimentary intervals of medium to dark grey phyllite, siliceous phyllite, slate and siltstone are present throughout Unit EBA and are estimated to comprise about 10 per cent of the succession. Individual bands range from a few metres to a few tens of metres in thickness. Contacts with adjacent light-coloured sericite quartz phyllite are generally sharp but locally are gradational and indistinct. The dark grey phyllite and siltstone are usually pyritic and may contain concordant lenses of pyritic quartz or quartz and rusty carbonate. These dark metasediments are very similar in appearance and composition to the slate, phyllite and siltstone which characterize Unit EBP.

Medium-grained, light to medium greenish grey quartzofeldspathic orthogneiss of Unit Dgn intrudes Unit EBA in the southern part of the map area, on both sides of Adams Lake. It occurs as a number of sill-like bodies within the central and lower parts of the exposed EBA succession.

Similar orthogneiss locally cuts Unit EBA rocks of the third fault slice in the vicinity of Harper Creek, Avery Lake and Reg Christie Creek. In this area, however, orthogneiss is more common within the underlying rocks of Unit EBQ. The orthogneiss is Devonian in age and presumed to be genetically related to the volcanic and volcaniclastic rocks of Unit EBA.

Three zircon separates from Unit EBA metavolcanic rocks on the east shore of Adams Lake yielded lead-uranium points which define a discordia line with an upper concordia intercept of 387 million years (Ma) (Preto, 1981; Preto and Schiarizza, 1985). This indicates a Middle Devonian age for this part of the EBA succession. This Middle Devonian age fits well with geological relationships established within the area, as Unit EBA and the overlying rocks of Unit EBF lie beneath Unit EBP metasediments which contain early and late Mississippian conodonts. Dark grey phyllite and siltstone of Units EBA and EBF are similar to those which characterize Unit EBP, while volcaniclastic rocks intercalated with Unit EBP metasediments are similar to those within Unit EBF. The three units are therefore inferred to comprise, at least in part, a more or less continuous volcanicsedimentary succession of Middle Devonian to Late Mississippian age.

The contact relationships between Unit EBA and underlying rocks, none of which are dated, are not clear. Within the third fault slice Unit EBA is underlain by Unit EBQ. The contact is thought to be stratigraphic because Unit EBQ is intruded by Devonian orthogneiss and quartz porphyry sills which may be related to the overlying EBA volcanics. The early Cambrian age which is tentatively inferred for Unit EBQ suggests that the contact is an unconformity within the first fault slice, Unit EBA sits above the clastic metasediments of Unit EES, but is locally separated from them by Units EBK and EBL. Along the northwest end of the belt, Unit EBA itself pinches out and Unit EBS sits directly beneath Unit EBF. None of the contacts is well exposed and it is not known whether they are conformable, unconformable, or structural. The number of units which pinch out at or near the basal EB contact (such as Units EB, EBK and EBM) suggests that the relationship may be unconformable. On the other hand, the presence of felsic to intermediate volcanic and volcaniclastic rocks within the upper part of Unit EBS (for example, Units EBSa and EBSt) is suggestive of a gradation into overlying EBA felsic volcanic rocks."...

..." UNIT EBP

Unit EBP, of Mississippian age, is the youngest unit of the Eagle Bay Assemblage exposed within the study area. It is comprised mainly of dark grey slate, phyllite and siltstone, together with sandstone, granule to pebble conglomerate, limestone, dolostone and intermediate to felsic volcaniclastic rocks. The unit occurs within the first and third Eagle Bay fault slices (Figure 7)."...

..." Unit EBP rocks of the third fault slice outcrop within several fault blocks in the vicinity of Vavenby: Good exposures in this area are mainly in the lower reaches of Jones and Avery creeks.

Slate, phyllite and siltstone are the most abundant rock types within Unit EBP. These rocks are typically dark grey to black in colour, although light greenish grey phyllite is presentlocally: Siltstone may be somewhat lighter in colour than the associated slaty rocks and, in places, has a greenish or reddish cast. Cubes of pyrite and/or siderite or ankerite porphyroblasts are commonly present and may cause the rocks to become rusty; elsewhere the rocks are medium to dark grey on weathered surfaces. Siltstone is generally subordinate to slate or phyllite and occurs as horizons ranging up to a few centimetres in thickness. These may comprise persistent tabular layers (on the scale of an individual outcrop) or they may be markedly lenticular in nature. Rare grading, small-scale channels, flame structures and vague crossbedding were observed within the siltstone/slate sequences.

Slate and phyllite typically display a well-defined papery splitting habit; commonly, however, the slaty cleavage is cut by a strongly developed crenulation cleavage. The slaty rocks consist mainly of a fine-grained (0.04 millimetre), well foliated intergrowth of quartz, sericite and chlorite. Trains of fine, dark carbonaceous material may also be present; grains of tournaline, apatite, plagioclase and zircon are also rarely evident. The coarser grained, less fissile siltstone horizons are similar in composition, but generally display relict clastic textures.

Approximately 30 per cent of the Unit EBP exposures contain horizons of sandstone and/or granule to pebble conglomerate, in addition to slate and siltstone. These coarser grained rocks occur in groups of beds intercalated with slate and phyllite over intervals of several tens of metres or more. They comprise mainly fine to coarse-grained sandstone which occurs in beds ranging from several centimetres to more than 1 metre thick (Plate 12). In general, the thicker beds are coarser grained and often include granule-size clasts. The sandstone beds are commonly graded and rare channels, ripups and sole markings were observed at their bases. These features suggest that much of the sandstone was deposited by turbidity currents (Bouma, 1962; Walker, 1979) although only the A-E divisions of the classic Bouma sequence are recognized.

The metasandstones of Unit EBP were derived mainly from moderately to poorly sorted quartz-rich wackes. Some what flattened grains of monocrystalline and

polycrystalline quartz, together with a much smaller amount of chert, plagioclase, lithic grains, and accessory muscovite, tourmaline and zircon, occur within a finegrained recrystallized and foliated matrix. The matrix typically comprises from 10 to 40 per cent of the rock and consists mainly of quartz, sericite and chlorite; carbonate, opaque oxides and pyrite are minor constituents which may be intergrown with the matrix minerals or occur as relatively large porphyroblasts. The lithic component of the sandstones is largely fine-grained slate and siltstone, possibly derived from underlying beds, but also includes sericitic quartzofeldspathic rock, muscovitic quartzite and graphitic muscovite quartz phyllite or schist.

Foliation within the lithic fragments is, in most cases, continuous with that of the matrix. Rarely, however, lithic grains display a discordant foliation which predates the matrix cleavage. Detrital muscovite grains are invariably present in accessory amounts within the sandstone; these grains are much coarser than the fine-grained foliated sericite of the matrix and are often bent and fractured.

Quartz-pebble conglomerate was noted rarely within Unit EBP and is similar in composition to the finer grained sandstone and granule conglomerate with which it is associated. Clasts range up to 2 centimetres in size and are set within a dark grey silty or sandy phyllitic matrix."...

Further from Schiarizza and Preto.

..."Bands of rusty weathering light to medium greenish grey metatuff and metavolcanic breccia, similar to those in Unit EBF, are intercalated with phyllite and siltstone of Unit EBP at a number of places within the area. These metavolcanic layers are typically a few metres or less in thickness and most cannot be traced for any substantial distance."...

Pale greenish grey schistose chlorite sericite dolostone was slice. It outcrops along Avery Creek and to a lesser extent along Jones Creek and on the lower slopes of the North Thompson River valley east of Peavine Creek. The dolostone is intercalated with dark grey phyllite, granule to pebble conglomerate and rarely, thin lenses of dark grey limestone. Exposures along Avery Creek indicate that the dolostone locally occurs over intervals that are many tens of metres thick.

Unit EBP rocks exposed in the Vavenby area occur at the top of the third Eagle Bay fault slice. Within this area, which is transected by a number of late, northerly trending faults, the unit is generally thin; it is gradationally underlain by Unit EBA and structurally overlain by Unit EBG of the overlying fault slice. However, within one fault block which is drained by Jones Creek on the south side of the North Thompson River and by Crossing Creek to the north, Unit EBP is substantially thicker and is underlain by schistose grit and related rocks of Unit EBS. The abrupt change in Eagle Bay stratigraphy across the bounding faults suggests that they may follow the loci of earlier faults which were active during deposition of the Devono-Mississippian section of the Eagle Bay succession."...

#### MINERAL DEPOSITS

The Property protects three known polymetallic base metal occurences and one historic gold showing. The polymetallic Base metal occurences are as summarized in Schiarizza and Preto, 1987, Pages 71-72

#### """RED TOP (82M-044), SNOW (82M-045), SUNRISE (82M -046)

These showings occur near Mount McClennan, along the divide between the Raft and North Thompson rivers, 14 kilometres east of Clearwater."... ...."The Red Top, Snow and Sunrise showings occur within a heterogeneous succession consisting of quartzite, light to dark grey phyllite, limestone, calc-silicate schist and skarn. These rocks occur within the upper part of Unit EBQ, but are lithologically similar to, and may be correlative with, metasedimentary rocks of Unit EBGs (Figure 7). The mineralization is similar to that within Unit EBGs on the Adams Plateau.

The Red Top showing is 2 kilometres west of Mount McClennan. Four relatively recent trenches expose about 250 metres of moderately north-dipping metasediments. The succession consists mainly of platy quartzites, light green calcsilicate schists and light silvery grey phyllites, together with minor amounts of marble and dark grey phyllite and siltstone.

A light grey marble band in the central part of the interval may correlate with a prominent marble unit exposed on the south face of Mount McClennan (Unit EBQI, Figure 4). The entire interval is rusty weathering and most lithologic units contain 1 to 3 per cent disseminated pyrite. Pyrite is most abundant in bands of light grey, yellowish rusty weathering pyrite-sericite-quartz schist that occur in at least three places in the succession; they range up to 2 metres in thickness. Base metal mineralization occurs mainly within a zone of very rusty platy quartzites 10 metres wide, just below the main marble band in the westernmost trench. Within this zone pyrite, galena, sphalerite and traces of chalcopyrite are present in quartz and quartz-carbonate lenses. Sulphide-bearing lenses are both concordant and discordant to the bedding and schistosity of the host rocks. Minor amounts of fine-grained galena and sphalerite (?) are locally disseminated in quartzites within and adjacent to this mineralized interval.

The Snow showing lies just south of Mount McClennan, 2 kilometres east of the Red Top showing. If the prominent marble on the south face of Mount McClennan correlates with the main marble band exposed in the Red Top trenches, then mineralization at the Snow showing is lower in the stratigraphic section than that at the Red Top (Figure 4). The showing is exposed by a series of old, largely caved, northerly trending trenches. Mineralization is hosted by a

gently north dipping succession of platy quartzites, quartz sericite schists, marble, calc-silicate schists and skarn. Most of the mineralization occurs in a 10 to 15metre interval within which galena, sphalerite and traces of chalcopyrite are present as patches and disseminations in pyritic marble, calc-silicate schist and quartz sericite schist. The interval includes at least one pod of semimassive sulphides, about 20 centimetres thick, consisting mainly of pyrite and galena with traces of sphalerite and chalcopyrite.

The Sunrise showing is 1.3 kilometres east of the Snow mineralization is hosted by a flat-lying succession of platy quartzites, chlorite-sericite-quartz schists and chloritic schists that is overlain by marble, calc-silicate schist and quartzite. It is marked by a number of old pits and trenches, most of which are badly caved. Mineralization occurs mainly within two separate semimassive to massive sulphide zones, each about 1 metre thick, separated by several metres of platy quartzites and chlorite-sericite-quartz schists with local thin zones of rusty, pyritechlorite-quartz schist. The main sulphide zones consist predominantly of pyrite and pyrrhotite in chlorite-quartz-carbonate gangue; locally they contain sphalerite, galena and chalcopyrite. The mineralization has reportedly been traced over a strike length of more than 100 metres (Dawson, 1976, Assessment Report 5813)."...

The Morrison Gold showing (082M047) is a currently unidentified gold showing located near the southwest end of McCorvie Lake. Sampling by Placer Dome in the 1980's has outlined sporadic non repeatable gold mineralization in sulphidic quartz veins and nearby weak gold in soil geochemical anomalies 1 to 3 hundred meters west of McCorvie Lake.

#### 2005 ROCK SAMPLING PROGRAM

On 4 July 2005, Leo Lindinger, P.Geo., and James Oliver, P.Geo. visited the property for one day. Rock samples were taken from a gold showing discovered by Placer Dome in 1987, the Sunrise, Snow and Redtop showings. 20 samples were taken in all. The samples were taken by Jim Oliver and delivered by him to Ecotech Analytical Laboratories Ltd. in Kamloops for gold and 28 element multielement analyses.

#### RESULTS

For details on the analytical result and brief rock descriptions please refer to Appendix 1 attached.

The results of the rock sampling program confirmed the presence of medium to high grade zinc-lead-silver-cadmium at the known semi massive and massive sulphide showings. Moderately to highly anomalous copper, and weakly to moderately anomalous cadmium and molybdenum results were returned from samples from the Sunrise and Snow showings. Sample S9 displayed wispy disseminated chalcopyrite within massive pyrrhotite sulphides.

No anomalous gold results were obtained from the veins previously reporting gold by Placer Dome.

| TABLE 3   |            |      |
|---|------------|------|
| SUNRISE PROJECT STATEMENT OF EX                 | PENDITURES |      |
| Dr. James Oliver, P.Geo.                        | 1 day      | 700  |
| Leo Lindinger, P.Geo.                           | 1 day      | 400  |
| Nissan Frontier 340 kilometers @\$0.60 per km.  | 0.6        | 204  |
| analytical costs 20 samples @\$25.00 per sample |            | 500  |
| Report  |            | 1000 |
| Total for program                               |            | 2804 |

#### CONCLUSIONS

The 2005 sampling confirmed the high grade base metal and moderately to highly anomalous silver and gold results at the SUNRISE and SNOW prospects and also indicated highly anomalous copper results from massive and semi massive pyrrhotite from the 450 meter long lense at the Sunrise Prospect.

#### RECOMMENDATIONS

Earlier work, mostly by Placer Dome Inc. produced many, still untested geophysical anomalies in favourable geological environments that require exploration.

- A \$200,000 stage one multiphased program is recommended. Additional exploration expenditures are partially contingent on exploration of the tested targets, however additional currently lower priority targets are present that would remain untested by the Stage 1 program.
- Geological mapping; In particular an attempt to separate syn mineralization carbonate, skarn and other hydrothermal alteration styles from primary volcanic and sedimentary lithologies to assist in exploration target development. Also required is detailed structural mapping to assist in target vectoring. Also unknown is the structural significance of the cliff north of the SNOW Prospect. It may be an expression of a syn mineralization basin bounding fault.
- Induced polarization; Extend the induced polarization surveys to the east of the SUNRISE Prospect, complete deeper surveys from the REDTOP to the SUNRISE PROSPECTS and the south limb. If possible 3D systems such as E-Scan surveys should be completed.
- Drilling; There are numerous untested geophysical anomalies on both limbs of the antiform along the "favourable horizon" and at depth in all directions. The highest priority targets are the down dip to the north extensions of the REDTOP, SNOW and SUNRISE Prospects, and the down plunge extension of the favourable horizon east of the SUNRISE Prospect. Secondary targets on the south limb remain untested. Down hole electromagnetic testing should be completed prior to drill hole abandonment. 3D down hole surveys should be completed also.

| EXPENSE ITEM                        | CHARGE DETAILS                            | (   | COST    |
|-------------------------------------|---|-----|---------|
| Phase 1                             |   |     |         |
| 3 D Digital database recreation     |   | \$  | 6,000   |
| Access road rehabilitation          | 2-3 km                                    | \$  | 2,500   |
| Grid preparation (IP standard)      | 40 km @ \$400 per km.                     | \$  | 16,000  |
| Geological mapping                  | 12 days at \$700 per day                  | \$  | 8,400   |
| rock samples                        | 40 samples at \$30 per sample             | \$  | 1,200   |
| Lithogeochemical and petrographical |   | \$  | 3,000   |
| Vehicle (geologist)                 | 12 days at 80 per day                     | \$  | 960     |
| Phase 2 Geophysics                  |   |     |         |
| Induced polarization                | N-4 to N-6 survey 50 meter dipole spacing | \$  | 20,000  |
| Induced polarization                | down hole surveys                         | \$  | 3,000   |
| Phase 3 - DRILLING                  |   |     |         |
| drilling - NQ                       | 900 meters @ \$120 per meter              | \$  | 108,000 |
| geological supervision              | 14 days at \$700 per day                  | \$  | 9,800   |
| core sampler                        | 10 days @ \$400 per day                   | \$  | 4,000   |
| core samples                        | 50 samples @ \$30 per sample              | \$  | 1,500   |
| truck                               | 14 days @ \$80 per day                    | \$  | 1,120   |
| Report                              |   | \$  | 9,000   |
| Total budget                        |   | \$  | 194,480 |
| Contingency                         |   | \$  | 5,520   |
| Total budget                        |   | \$2 | 200,000 |

# Table 4 – Recommended Expenditures

Daily rate for personel includes \$100 per day for food and accomodation

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#### STATEMENT OF QUALIFICATIONS

I, J E. L. (Leo) Lindinger, hereby do certify that:

I am a graduate of the University of Waterloo (1980) and hold a BSc. degree in honours Earth Sciences.

I have been practicing my profession as an mineral exploration and mine geologist continually for the past 26 years.

I am a registered member, in good standing as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia (1992).

I participated in the 2005 work program described in this report.

I own the mineral property described as the SUNRISE Claims.

J.E.Leo Lindinger, P.Geo.

J.E.L. (Leo) Lindinger, P.Geo. May 11, 2006 APPENDIX 1 – ANALYTICAL PROCEDURES

1 🔺 A

#### ANALYTICAL METHODS

#### SAMPLE PREPARATION

- 1. Soils are dried and sieved to 80 mesh.
- 2. Rocks are crushed, riffled to pulp size and pulverized to approximately -140 mesh.

#### SAMPLE ANALYSIS

<u>Multi-element ICP-</u> A 1 g sample is digested in hot aqua-regia and finished by the ICP method. This method was used for all elements analyzed for in this report except gold. Only partial extraction is obtained for Ca, Na, K, Fe, Cr, V, Ba, Mg, Mn, P, Sr, Ti, U, W, Al and B. For rock samples, Ba was also done using Lithium Metaborate Fusion for digestion and ICP for finish.

<u>Gold</u>- For geochemical analysis a 10 g sample is preconcentrated by fire assay followed by digestion in aqua-regia and Atomic-Absorption analysis. For assay, the same method is used, but with a 20 g sample. APPENDIX 2 – ANALYTICAL RESULTS AND ROCK SAMPLE DESCRIPTIONS (Jim Oliver)

10.0

20.3042

| ECO TEC<br>10041 Dal<br>KAMLOO<br>V2C 6T4 | ECO TECH LABORATORY LTD. ICP CERTIFICATE OF ANALYSIS AK 2005-571<br>10041 Dalas Drive<br>KAMLOOPS, B.C.<br>V2C 5T4 |           |          |              |          |          |      |            |         |           | Oliver Geoscience International Ltd. All.<br>4377 Karindate Road S-1<br>Kamloops, BC S-6<br>V2B 8N1 S-1 |            |            |       |             |       |              |          |            |         | Ali samples from L. Lindinger's Sunrise Property, Vavenby B.C.<br>S-1 to S-5 PDI FeC Qtz - Au? Vns<br>S-6 -S-12: Sunrise VMS<br>S-13 - S-14 Snow |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
|---|--|-----------|----------|--------------|----------|----------|------|------------|---------|-----------|---|------------|------------|-------|-------------|-------|--------------|----------|------------|---------|--|--------------------------|---------------------------|-------------------------------|-----------------------|----------|----------------|----|--------------|----------|-------------|------------------|------------------|-----------|--|
| Phone: 25<br>Fax : 25                     | 0-573-570<br>0-573 <b>-45</b> 5  | 10<br>7   |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  | No. of<br>Sampi<br>Submi | sam;<br>e typi<br>itted b | les rec<br>a: Roci<br>y:Jim ( | ceived<br>k<br>Oliver | : 20     |                |    |              | S-15     | - S-19A: Re | d Top            |                  |           |  |
| Values in                                 | s in ppm uniess otherwise reported   |           |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
| F1 #                                      | Teo #  | An (nob)  | An A1    | 6 A.         | Ba       | 84       | Ca % | Cd         | Co      | Ст        | Cu  | Fe %       | La (       | No %  | Mn.         | Mio N | ia %         | NI       | P          | Pb      | 8b   | 8n                       | 8r                        | 11%                           | U                     | v        | w              | ,  | , ;          | Za       | Easting     | Northing         | SHOW             | ING I     | Comments   |
| 1   | S-1  | 10        | <0.2 0.1 | 9 <5         | 25       | <        | 0.79 | •          | 5       | 158       | 17  | 1.63       | <10        | 0.22  | 243         | 1     | 0.02         | 28       | 100        | 4       | <5   | <20                      | 26                        | <0.01                         | <10                   | 5        | <10            | <  |              | 13       | 308744      | 572259           | GOLI             | D .       | anastomosing qtz FeC veins   |
| 2   | 5-2<br>5-3   | 15<br>15  | <0.2 0.1 | 1 <5<br>6 10 | 25<br>65 | <5<br><5 | 2.81 | <1<br><1   | 5<br>33 | 154<br>57 | 16<br>197   | 2.43       | <10<br><10 | 0.24  | 452<br>1038 | 4     | 0.01<br>0.01 | 13<br>61 | 170<br>380 | 4       | <5<br><5   | <20<br><20               | 42                        | <0.01                         | <10                   | 16       | <10            | <  | <b>)</b>     | 32<br>73 | 306744      | 572259           | GOLI<br>GOLI     | 6         | grab of oxidized phylitia, walkrock  |
| 4   | S-4  | 15        | <0.2 0.4 | 5 <5         | 50       | <5       | 1.17 | <1         | 5       | 202       | 17  | 0.93       | <10        | 0.25  | 107         | 4     | 0.03         | 19.1     | 570        | 10      | <5   | <20                      | 38                        | 0.05                          | <10                   | 133      | <10            | 11 |              | 25       | 306873      | 572439           | 9 601            | D         | highly schistose comp lam phytike +/- qtz v  |
| 5   | S-5  | 10        | <0.2 0.1 | 7 <5         | 15       | <5       | 0.04 | <1         | 1       | 151       | 15  | 1.16       | <10        | Ç.08  | 74          | 4 <   | 0.01         | 7        | 50         | 4       | <5   | <20                      | 2                         | <0.01                         | <10                   | 3        | <10            | <  | 1            | 10       | 300387      | 5/2202           | o GOLI           |           | ttz FeC veni within prynke, on strike with Si                                      |
| 6   | S-6  | 30        | 1.7 2.2  | 2 10         | 40       | <5       | 0.59 | <1         | 26      | 149       | 159   | 9.86       | <10        | 2.00  | 371         | 6     | 0.03         | 38 1     | 340        | 208     | <5   | <20                      | 13                        | 0.07                          | <10                   | 101      | <10            | <  | 1            | 86       | 305381      | 572335           | SUNRI            | SE        | mafic phyllite, streaky stringer sulphides   |
| 7<br>8                                    | S-7<br>S-8   | 45<br>60  | 3.4 0.3  | 3 <5<br>8 <5 | 70       | <5<br>5  | 0.06 | 3<br><1    | 57      | 49<br>28  | 1986  | >10<br>>10 | <10<br><10 | 0.07  | 155<br>2408 | 24 <  | 0.01         | 60<br>25 | <10<br>520 | 228     | 0  | <20<br><20               | 142                       | <0.01                         | <10                   | 77       | <10            | <  | 2            | 92<br>30 | 305327      | 572338           | 1 SUNRI          | SE        | chloritic phyllite, euhedral py, grab  |
| 9   | S-9  | 60        | 15.4 0.1 | 0 <5         | 100      | <5       | 1.15 | 17         | 69      | 28        | 2548  | >10        | <10        | 0.23  | 849         | 23 <  | 0.01         | 72       | <10        | 1218    | <5   | <20                      | 63                        | <0.01                         | <10                   | 22       | <10            | <  | 57           | 87       | 305278      | 572339           | 2 SUNRI          | SE        | hand cobbed sms at PDi drill collar  |
| 10  | S-10   | 105       | >30 0.4  | 4 <5         | 50       | 65       | >10  | 488        | 15      | 11        | 671   | 9.09       | <10        | 5.11  | 3766        | <1    | 0.01         | 8        | 290 >      | 10000   | <5   | <20                      | 316                       | <0.03                         | <10                   | 24       | <10            | <  | >100         | 00       | 305194      | 5/2338           | 1 SONRI          | SE        | good m.s. bed, sample over 1.5 m   |
| 11  | 11   | 100       | >30 1.2  | 35           | 85       | 90       | >10  | 397        | 12      | 31        | 412   | 7.51       | <10        | 4.95  | 4120        | <1    | 0.01         | 7        | 340 >      | 10000   | <5   | <20                      | 179                       | 0.04                          | <10                   | - 54     | <10            | <  | >100         | 00       | 305205      | 572339           | 6 SUNRI          | SE        | 50 cm ms, sericitezed phylitte hosts   |
| 12  | 12   | 15        | 0.2 0.1  | 5 <5<br>6 60 | 10       | <5       | 2.14 | 6<br>>1000 | 57      | 142       | 26<br>328   | 0.51       | <10<br><10 | 0.11  | 485         | 3 <   | 0.01<br>0.01 | 7        | 40<br>30   | 28      | <5<br><5   | <20<br><20               | 38                        | <0.01                         | <10                   | 14       | s <10<br><10   | <  | 5 4<br>I>100 | 23<br>00 | 305226      | 572338           | 4 SUNKI<br>5 SNO | RSE.<br>W | qiz ven 0.8 m cnip, poseible tratst<br>40cm wide pv sph limv calc phvilite         |
| 14  | 13   | 30        | 28.2 0.3 | 9 25         | 20       | <5       | 1.37 | 7          | 6       | 116       | 7032  | 4.05       | <10        | 0.29  | 995         | 5     | 0.01         | 10       | <10        | 6096    | <5   | <20                      | 26                        | 0.01                          | <10                   | 5        | <10            | <  | 14           | 71       | 303945      | 572373           | 5 SNO            | W         | chalco extension veiniets, cherty phyl grab  |
| 15  | 13A  | 170       | >30 0.2  | 0 5          | 40       | <5       | 0.65 | 53         | 18      | 79        | 9791  | >10        | <10        | 0.48  | 3239        | 7 <   | 0.01         | 10       | <10 >      | 10000   | <\$  | <20                      | 42                        | 0.01                          | <10                   | 5        | i <10          | <  | >100         | 00       | 303945      | 572373           | 5 SNO1           | w         | euhedral py-sph-gl 40 cm wide  |
| 18  | 14   | 105       | >30 0.8  | 8 120        | 35       | <5       | 1.02 | 8          | 24      | 79        | 3243  | >10        | <10        | 1.85  | 6624        | 12    | 0.01         | 13       | <10        | 7770    | <5   | <20                      | 27                        | 0.04                          | <10                   | 15       | <10            | <  | 1 19         | 52       | 304078      | 572371           | 1 SNO            | W         | euhedral py, limy phylike, H20 trench grab   |
| 17  | 17   | 95        | 3.6 0.4  | 3 100        | 25       | <5       | 0.12 | <1         | 23      | 137       | 54  | 5,80       | <10        | 0.17  | 190<br>628  | 4     | 0.02         | 22       | 110        | 1074    | <5   | <20                      | 9                         | 0.02                          | <10                   | 12       | ! <10<br>! <10 | <  | 1            | 74<br>00 | 302124      | 572458<br>572461 | 6 REDTO          | OP<br>OP  | oxid trench rubble, weak ser grab<br>atz rich ohvil, moderstelv ilmon, french anab |
| 19  | 19   | 20        | 0.5 4.5  | 4 20         | 45       | <5       | 2.07 | <1         | 18      | 73        | 33  | 3.71       | <10        | 1.39  | 808         | 1     | 0.38         | 5        | 500        | 84      | 5  | <20                      | 167                       | 0.08                          | <10                   | 101      | <10            | <  | í 1          | 04       | 302692      | 572488           | 8 REDT           | OP        | qtz phy, weak ser, trench grab   |
| 20  | 19A  | 80        | 9.4 2.9  | 4 20         | 40       | <5       | 1.63 | 12         | 12      | 104       | 1263  | 3.59       | <10        | 0.71  | 740         | 2     | 0.20         | 13       | 300        | 1618    | <5   | <20                      | 60                        | 0.05                          | <10                   | 56       | <10            | <  | 1 22         | 94       | 302692      | 572468           | 8 REDT           | OP        | galen-sphaleite 15 - 20 stratabound, ser phyl                                      |
| QC DATA                                   |  |           |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
| Repeat:                                   |  |           |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
| 1   | 8-1  | 15        | <0.2 0.2 | 0 <5         | 25       | <5       | 0.82 | <1         | 5       | 161       | 17  | 1.68       | <10        | 0.23  | 251         | 2     | 0.02         | 28       | 100        | 4       | <5   | <20                      | 28                        | <0.01                         | <10                   | 6        | <10            | <  | 1            | 14       |             |                  |                  |           |  |
| 10  | S-10<br>12A  | 90<br>600 | >30 0.3  | 9 <5         | 55       | 60       | >10  | 446        | 13      | 19        | 599   | 8.48       | <10        | 4.60  | 3524        | <1    | 0.01         | 8        | 290 >      | 10000   | <5   | <20                      | 262                       | <0.01                         | <10                   | 22       | 2 <10          | <  | 1 >100       | 00       |             |                  |                  |           |  |
| 15  | 13A  | 155       |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
|   | 19- <i>Jul</i> -05   |           |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
| ECO TEC                                   | ECO TECH LABORATORY LTD. ICP CERTIFICATE OF ANALYSIS AK 2005-871   |           |          |              |          |          |      |            |         |           |   |            |            | Olive | r Ge        | oscie | nce li       | ntern    | ations     | ai Ltd. |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
|   |  |           |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
| <u>Et #.</u>                              | Tag #  | Au (ppb)  | Ag Al    | A A          | 84       | Bi       | Ca % | Cd         | Co      | Cr        | Cu  | Fe %       | La         | Mg %  | Mn          | Mo N  | ia %         | Ni       | Р          | Pb      | 8b   | \$n                      | Sr                        | TI W                          | U                     | <u> </u> | / W            |    | (            | Zn       |             |                  |                  |           |  |
| Resplit:<br>1                             | S-1  | 10        | <0.2 0.2 | 1 <5         | 25       | <5       | 0.83 | <1         | 5       | 181       | 19  | 1.86       | <10        | 0.21  | 255         | 2     | 0.02         | 32       | 110        | 6       | <5   | <20                      | 24                        | <0.01                         | <10                   | ) e      | 3 <10          | <  | 1            | 16       |             |                  |                  |           |  |
| Standard                                  |  |           |          |              |          |          |      |            |         |           |   |            |            |       |             |       |              |          |            |         |  |                          |                           |                               |                       |          |                |    |              |          |             |                  |                  |           |  |
| GEO '05                                   |  | 140       | 1.5 1.4  | 9 60         | 140      | <5       | 1.31 | <1         | 16      | 56        | 84  | 3.65       | <10        | 6.77  | 560         | <1    | 0.03         | 26       | 610        | 20      | <5   | <20                      | 50                        | 0.10                          | <10                   | 5 64     | × <10          | 1  | 6            | 74       |             |                  |                  |           |  |

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