## <u>Mesabi Au-Cu Skarn</u> - <u>Kamloops Area</u>

The Mesabi Property is located 36 km. northeast of Kamloops, B.C. and is accessible by paved highway. Logging roads provide access to most areas of the property. The property consists of 9 claims comprised of 58 units which are registered in the name of R.H. McMillan - the claims are held in partnership with Messrs. N.C. Carter and R.R. Blusson. The focus of interest is the gold-copper potential of a 200 metre wide and 1.4 km. long soil geochemical anomaly with copper values to 4500 ppm and gold values of up to 2920 ppb (2.9 g/t). Skarn-related gold deposits have recently been shown to have million (+) ounce gold potential at several U.S. locations.

Phisiographically, the property is located on the Thompson Plateau, within the Intermontane tectonic Belt. It is part of the Quesnel structural terrane and is underlain by "back-arc" submarine mafic to felsic volcanic rocks, limestone and clastic sedimentary rocks of the late Paleozoic Harper Ranch or Upper Triassic Nicola Group. Harper Ranch and Nicola strata have been tilted and folded and appear to dip steeply northeast on the property. Although not documented as yet on the property, regionally the Harper Ranch and Nicola rocks are capped by flat-lying rhyolite and basalt flows of the Miocene Kamloops Group.

**Past Work** Copper and magnetite mineralization was originally discovered on the property in 1915 and by the 1940's some hand trenching had been completed. In 1966, following a ground magnetic survey which documented a strong magnetic anomaly on the south side of the property, Madison Oil Limited drilled four diamond drill holes totaling 250 metres to test strong magnetic anomalies for potential iron ore. Hole #2 returned 4.5 metres grading 1.67% Cu and 0.48 g/t Au in semi-massive magnetite. The hole bottomed in "mineralization", with a second interval assaying 0.11% Cu and 13% Fe over 14 metres, but with no assays for gold. The three other Madison Oil holes reportedly encountered mineralization similar to that in hole #2, but were not sampled and assayed. The Madison Oil holes were drilled south of the road near the south margin of the Mesabi 1 claim. In 1980, Cominco Limited completed a geochemical survey, geological mapping and fluxgate magnetometer survey. Mapping by Cominco demonstrated that the copper mineralization was associated with a pyrite-pyrrhotite-magnetite skarn horizon. Cominco's work documented a strong northwest-trending magnetic anomaly and associated copperin-soil anomaly over a strike length of 1.4 km. - the anomaly is characterized by copper values of several hundred ppm Cu, with a peak value of 1400 ppm Cu. Cominco did not analyze their samples for gold. In 1985, a 58 metre diamond hole was drilled by the road on the flank of the magnetic anomaly. The hole intersected 16 metres of semi-massive magnetite with traces of chalcopyrite from 42 to 58 metres, with a six metre interval (43 to 49 metres) returning 25% Fe and 0.5 g/t Au.

The property was staked by the Mesabi Syndicate (McMillan, Carter and Blusson) in 1993. In 1994 Formation Capital Corporation optioned the property and completed an airborne electomagnetic-magnetic survey and two lines of soil geochemical sampling. The soil survey resulted in some highly anomalous copper (to 2003 ppm) and gold (to 580 ppb Au). The airborne electomagnetic survey detected a weak conductor (2.3 siemens) associated with the strong magnetic anomaly associated with the skarn zone.

In 1997, the property was examined by Echo Bay Mines Ltd. who collected 104 soil samples. Twenty two returned results with > 50 ppb gold, with one sample returning 2920 ppb Au. Echo Bay optioned the property and prepared 31.5 km. of grid, collected 1145 soil samples, attempted a magnetometer survey and prepared a geological map. Unfortunately the rented magnetometer was malfunctional, however the soil geochemical survey confirmed the earlier Cominco results over a strike length of 1.3 km. Copper-insoil values reach 1950 ppm and gold-in-soil values 1430 ppb. In July and September of 1999, McMillan and Blusson completed a combined ground proton magnetometer and VLF-EM survey over the grid (total of 27.75 line km.) utilizing a GEM Systems GSM-19 Omni-directional unit and utilizing the Seattle (24.8 Hz) signal. Several prominent VLF-EM anomalies were detected associated with the strong magnetic anomaly associated with the skarn mineralization. The copper and gold soil anomalies are partially co-incident and located west of, and down-slope from, the strongest magnetic and electromagnetic anomalies. The geological mapping by Echo Bay and Gerry Ray has documented the presence of both "proximal" (garnet-diopside-amphibole-magnetite) and "distal" (epidotecalcite-amphibole) skarn. The distal skarn contains minor amounts of disseminated pyrite and is anomalous in gold (100 to 500 npb), but as there is no explanation regarding the cause of the large soil anomalies. Echo Bay strongly recommended drilling the property, but exited the exploration business for financial reasons in 1997.

Potential Skarn-related gold-copper deposits have recently become important gold producers in adjacent Washington State and in Nevada. In the Okanogan area of Washington State, Echo Bay Mines has been mining skarn-type gold mineralization in the Republic District for the past several years - mineralization is associated with massive magnetite and massive sulphide mineralization with minor copper and is estimated to total approximately 1 million ounces contained in four deposits (Lamefoot, Overlook, Key West and Key East). Battle Mountain's Crown Jewel Mine, also located in the Okanogan area, 27 miles northwest of the Republic District, hosts approximately 1.6 million ounces of gold in magnetite-rich skarn - it is in the permitting stage. In Nevada, the Cove-McCoy and Fortitude Deposits in the Battle Mountain-Eureka "Trend" of central Nevada are also skarn-related. The various ore-mineralized zones at Cove-McCoy, located 30 miles southwest of the town of Battle Mountain, have produced more than 2 million ounces of gold through 1997, and together have a total resource (past production and reserves) of more than 6 million nunces. The Copper Canyon District, located approximately 20 miles north of Cove-McCoy and 10 miles southwest of Battle Mountain, hosted mainly porphyry-style mineralization with production and reserves of 113,400 tonnes of copper and 10 million ounces of gold as well as significant molybdemum and silver - this includes the Fortitude skarn with 2.3 million ounces of gold contained in 10.3 million tonnes of ore which also contained approximately 0.1 % Cu.

The Mesabi property has never been drill-tested for either it's gold or copper potential. The early drill programs appear to have been designed to test magnetic anomalies and the holes are located west of the currently-known soil geochemical anomalies. (2000/01/15)

## Mesabi Au-Cu Property - Kamloops Area

## **Proposed Terms**

• • •

Down Payment	\$ 10,000
Anniversary, Year 1	\$ 10,000
Anniversary, Year 2	\$ 20,000
Anniversary, Year 3	\$ 20,000
Anniversary, Year 4	\$ 40,000
Anniversary, Year 5	\$100,000
Anniversary, Year 6	\$100,000
Anniversary, Year 7	\$100,000
Anniversary, Year 8	\$100,000

- first 1/2% -\$1,000,000

- second 1/2% -\$4,000,000

-all assessment to be filed -annual technical and financial reports -perimeter clause of 5 km.

1999\12\20