

**EQUITY SILVER MINES LIMITED**

92.12.14

**MEMORANDUM**

**TO: MINE MANAGER**  
**FROM: EXPLORATION GEOLOGIST**  
**RE: LIMONITE CREEK MINERAL PROPERTY**

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**INTRODUCTION**

This report summarizes the geological setting, work-to-date, and the exploration potential of the Limonite Creek mineral property. Sources of information for this study include a brief property examination in 1990 and a detailed report by Cyprus Canada Inc. on an integrated geological, geochemical, geophysical and diamond drilling work program in 1992.

**SUMMARY**

The Limonite Creek property contains a newly discovered zone(s?) of aluminous alteration (Equity style) at least 1000 metres in length and 150 metres in width, occurring in volcanics distal to a weak porphyry copper system. The alteration zone is spatially related to pulse EM conductors, exotic limonite deposits, and a copper soil geochemistry anomaly. Based on analogies world-wide (including Equity Silver) there is significant potential to host copper and precious metal disseminated or bonanza type deposits.

Equity should acquire a percentage interest in the Limonite Creek property from Cyprus Canada Inc. A budget of \$200,000 is required for drilling and geology programs. No property payments are required until late 1993.

**LOCATION AND ACCESS**

The Limonite Creek property is located 50 kilometres west-southwest of the town of Smithers on the north side of Telkwa Pass.

Access is by helicopter from either Smithers or Terrace. A four wheel drive road, a 500,000 volt power line, and a natural gas line pass several within two kilometres of the property.

## **EXPLORATION HISTORY AND CLAIM STATUS**

The exotic limonite deposits were explored for their iron content in the early 1900's and 1950's. In the 1960's the property was explored for its porphyry copper potential. In 1992, Cyprus Canada Inc. optioned the Bear claim from Willard Tompson of Smithers and conducted pulse EM, geological mapping, and soil-water-rock geochemistry surveys and completed 394.5 metres of diamond drilling in 3 holes.

The property is defined by four (4) modified grid claims totalling 60 units.

## **ALTERATION ZONE**

Intense, high aluminous alteration is exposed in two outcrops and intersected in drilling along a northeast trending zone in excess of 500 metres long and 150 metres wide. This rare alteration is described as a fine grained, porous, friable aggregate of sericite, quartz, andalusite, pyrite, lazulite, and corundum with accessory specularite, rutile, and trace chalcopyrite. Most of these minerals were identified by petrographic work, however, blue lazulite is visible megascopically.

The hard, friable nature of the altered rock resulted in poor drilling conditions. Recovery was poor; one hole was abandoned; and abrasive sand caused abnormal bit wear.

Traces of chalcopyrite were observed with pyrite (5-40%) within the aluminous alteration. Intersections of weakly anomalous copper and silver were reported from the core geochemistry. No arsenic or antimony anomalies were detected.

## **PULSE EM GEOPHYSICS**

Four narrow conductors were detected coincident with zones of alteration.

## **SOIL GEOCHEMISTRY**

A copper soil geochemistry anomaly occurs in orange limonitic soils developed over and adjacent to an exotic limonite deposit downslope from the main alteration zone of interest. Values range from 200 to 2456 ppm copper in an area 150 metres wide and 300 metres long. Groundwater transport and precipitation of copper in limonite is indicated. No arsenic or silver soil anomalies were detected but most of the samples were analyzed for only copper and zinc.

### **PROPOSED EXPLORATION PROGRAM**

The main alteration zone should be further drill tested over its entire width. In addition more detailed mapping, petrographic studies, and rock-soil geochemistry should be conducted over the other alteration zones with coincident EM anomalies. All soils should be analyzed by 31 element ICP.

Anticipated cost of this program would be in the order of \$200,000.

### **PROPOSED JOINT VENTURE AGREEMENT**

Cyprus Canada Inc. currently has an option to acquire 100% interest in the Limonite Creek claims. No option payments are required until late 1993. By spending \$200,000 on the property, Equity should expect to acquire at least a 50% interest. No discussion has taken place with Cyprus on the exact terms.

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Exploration Geologist