Consulting Geologist

1410 Wende Road Victoria, B.C. V8P 3T5 (604) 477-0419

July 17,1990

The President and Directors Comp-U-Test Software Ltd. 305 - 455 Granville Street Vancouver, B.C. V6C 1V2

Dear Sirs:

GNAT PASS PROPERTY
Liard Mining Division, British Columbia
Latitude 58 12' North; Longitude 129 52' West
NTS Map-Area 1041/4W

# Summary

Comp-U-Test Software Ltd. and Bonaventure Resources Ltd. have entered into an agreement with Equity Silver Mines Limited whereby Comp-U-Test and Bonaventure can jointly earn a 100% working interest in Equity's Gnat Pass property.

Previous work on the Gnat Pass property has identified several mineralized zones with interesting gold-copper values and warranting additional investigation. The geological setting of the large property area is considered to be prospective for the discovery of additional mineralized zones.

A two-phase exploration program, including diamond drilling, is recommended at an estimated cost of \$397,900.00 of which Comp-U-Test Software Ltd.'s share would be one-half or approximately \$200,000.00.

#### Introduction

This letter report on the Gnat Pass property, prepared at the request of Comp-U-Test Software Ltd., is based principally on results of a 1989 exploration program as detailed in a report by J.F. Wetherill and on published and unpublished reports and maps pertaining to the property and its regional setting.

The writer examined parts of the property July 23,1989

while the exploration program was in progress.

# Location and Access

The property is situated in Gnat Pass 35 km south of Dease Lake in northwestern British Columbia (Figure 1).

The Stewart-Cassiar highway (Provincial highway 37) passes through the property and a 4-wheel drive road south of Upper Gnat Lake provides access to the principal areas of interest at elevations of 1400-1600 metres above sea level (Figure 2) on the east flank of Thenatlodi Mountain. Much of the property area is in alpine or sub-alpine terrain.

### Mineral Property

The Gnat Pass property consists of 13 Crown granted and 6 Modified Grid mineral claims comprising 106 units (Figure 2). Both the Crown granted mineral claims and the Modified Grid mineral claims are subject to underlying agreements between Equity Silver Mines Limited and and the original vendors. Details of the claims are as follows:

Claim Name MAC 3545	Lot No.	Record No.	<u>Units</u>	Expiry Date
NEW DEAL No.2	3546			
NEW DEAL No.1	3547			
NEW DEAL No.3	3548			
NEW DEAL No.4	3549			
DALVENIE No.2	3537			
DALVENIE No.3	3538			
DALVENIE No.4	3539			
DALVENIE No.5	3540			
DALVENIE No.6	3541			
DALVENIE No.7	3542			
DALVENIE No.8	3543			
DALVENIE No.9	3544			
PASS 38		4781	18	July 6,1992
PASS 39		4782	18	"11" 11
PASS 40		4783	16	11 11
PASS 41		4784	20	11 11
PASS 42		4785	20	11 11
PASS 43		4786	14	11 11

# Previous Work

Mineral claims were first located on Thenatlodi Mountain by the Clearihue family in 1899. By 1935, workings on what was known as the Dalvenie property consisted of a number of hand trenches which exposed copper mineralization over a strike length of 350 metres.

Thirteen claims were Crown granted subsequent to 1935 and the property was examined and sampled on several occasions in the 1950's. Copper Pass Mines Ltd. completed geological mapping, soil geochemistry, an Induced Polarization survey, some bulldozer trenching and a few short diamond drill holes in 1966. Copper Pass also drilled seven BQ diamond drill holes totalling 627 metres in 1968.

The claims comprising the Gnat Pass property were acquired by Equity Silver Mines Limited in 1988 and 1989. A 1989 exploration program, carried out on behalf of Equity by Stetson Resource Management Corp. included 36 km of grid construction covering the sputhern Crown grants and part of the PASS 41 claim (Figure 2), geological mapping, the collection and analyses of 756 soil samples and 89 rock samples and VLF-EM and magnetometer surveys.

# Geological Setting

The Gnat Pass property is situated in the northern part of the Intermontane tectonic belt which is made up principally of late Paleozoic and Mesozoic volcanic and sedimentary rocks. More specifically, the property is on the Stikine Arch, one of the transverse structures that divides the Intermontane belt. Rather than connoting a geographic area, the Stikine Arch is more properly a structural high tectonic feature reflecting persistent and reactivated deep crustal fracture zones.

The Stikine Arch features a number of early Mesozoic granitic plutons which are roughly coeval with the layered rocks they intrude. Examples include the Hickman and Hotailuh batholiths. Quaternary volcanic centres are evidence of continued geological activity along the Stikine Arch - a good example is the Mt. Edziza complex 70 km southwest of the Gnat Pass property.

A number and variety of mineral deposits and occurrences are known throughout the Stikine Arch. These include coppergold alkalic porphyry deposits, examples of which include

Galore Creek in the lower Stikine River area (125 million tons of 1.06% copper, 0.014 oz/ton gold) and the Gnat Pass deposit (32 million tons grading 0.4% copper and 0.0x oz/ton gold) immediately north of the subject property (Figure 2).

# Property Geology, Geochemistry and Geophysics

Geology

The Gnat Pass property is underlain principally by late Triassic (Stuhini Group) volcanic and sedimentary rocks at the northwest margin of the composite Hotailuh batholith (Figure 3) which ranges in age from late Triassic to early Jurassic. Stuhini Group volcanics and sediments are also intruded in the southern property area by a coeval 1 by 2 km pluton composed of pyroxenite, hornblendite and gabbro (Gnat Pass Ultramafic - Figure 3).

Stuhini Group rocks in the southern property area include pyroxene porphyry flows and fragmental rocks and strongly deformed, schistose sedimentary rocks. These layered rocks are transected by north-northeast striking faults (Figure 3) which provide one of the major controls for known mineralization in the southern property area.

Three principal mineralized zones have been identified by work to date. The southernmost of these is the original Dalvenie zone which has been traced over 500 metres by several old open cuts. Where best exposed at the southern margin of the zone, disseminated to near massive 0.5-1 metre sulphide bands consisting of pyrite, pyrrhotite, chalcopyrite and arsenopyrite are developed in quartz veins and silicified wallrocks within a north-northeast shear zone up to several wide. Post-mineral andesite dykes metres separate sulphide bands and parallel the northeast shear direction. Six chip samples, collected in 1989 over 10 metres of strike length and across 1-1.5 metre widths (Wetherill, 1990) yielded values of between 0.008 and 0.30 oz/ton gold and 0.16-2.99% copper.

Two shallow holes, drilled in 1968 15-20 metres vertically below the surface exposures, yielded values of 0.10 oz/ton gold, 0.89% copper and 0.14 oz/ton gold and 3.73% copper over core lengths of 2.2 and 1.53 metres respectively (Wetherill,1990). Some 300 metres north, a select sample from a sloughed pit returned 7194 ppb gold.

The North zone, between 750 and 1000 metres north of the

N.C. CARTER, Ph.D., P.Eng. CONSULTING GEOLOGIST

Dalvenie zone (Figure 3), consists of several poorly exposed quartz veins up to 0.5 metre wide and containing appreciable pyrite, arsenopyrite and minor chalcopyrite. These are hosted by pyroxenites and diorites, part of the ultramafic complex, and are proximal to north-northeast trending andesite-dacite dykes. 1989 chip and grab samples included values of up to 3713 ppb gold and 1220 ppm copper over 0.3 metre. This zone is believed to be the area from which a 1955 sample assayed 0.16 oz/ton gold over 4.6 metres.

The West zone, 400 metres southwest of the North zone (Figure 3) consists of poorly exposed massive arsenopyrite lenses in schistose sedimentary rocks. Grab samples yielded values of up to 2977 ppb gold.

Other areas of mineralization known on the property, and largely untested, include reported occurrences on the northern Crown granted claims and grey quartz with pyrite, arsenopyrite and chalcopyrite exposed in a road cut 700 metres east of the North zone and from which a grab sample yielded 2083 ppb gold.

Sampling of the ultramafic body by Nixon and others (1989) indicated relatively low platinum group element values.

### Geochemistry

Soil samples were analysed for gold by fire assay techniques and for 29 other elements by ICP spectrographic analysis. Three zones with anomalous values for two or more elements within the grid area (Figure 4) are crudely coincident with known mineralized zones and indicate possible extensions to them.

Area A, which includes and extends 200 metres south of the North zone, has values in soils of up to 242 ppb gold, 1628 ppm copper and 1620 ppm arsenic. Area B includes copper values of up to 882 ppm and arsenic up to 732 ppm some 150 metres south of the known limits of the Dalvenie zone. These anomalous values may continue south of the existing grid. Area C, including three anomalous lead (to 882 ppm) and 204 (to ppm) is 100-250 metres south antimony mineralization noted in the West zone.

# Geophysics

VLF-EM and magnetometer surveys have defined a number of

N.C. CARTER, Ph.D., P.Eng. CONSULTING GEOLOGIST

north-northeast to north trending conductive zones with coincident magnetic low features west of the baseline (Figure 4). The most persistent conductor, extending over 1 km, is coincident with the shear zone hosting the Dalvenie zone at its southern end. A splay off the main conductor extends west of the shear zone (Figure 4). A north trending conductor parallels the trend of mineralization seen at the North zone while several smaller conductors are marginal to the West zone.

# Conclusions and Recommendations

Work to date on the Gnat Pass property has identified several zones with interesting gold and copper values. The most significant zone is related to a wide, persistent shear zone which warrants further investigation.

A two-phase exploration program is recommended to include excavator trenching and detailed sampling of the Dalvenie shear zone and the North and West zones, all of which are open along strike as indicated by geochemical and geophysical surveys. This work would be preparatory to testing by Phase II diamond drilling.

Only a small part of the of the prospective property area has been explored in any detail and it is further recommended that the existing grid be expanded to the north to facilitate geochemical and geophysical surveys and geological mapping of the northern Crown granted cleims and part of the PASS 42 claim as part of the Phase I work.

# Selected References

Wetherill, J.F. (1990): Geological, Geochemical and Geophysical Report on the Gnat Pass Property, Liard Mining Division, B.C. - private report for Equity Silver Mines Limited prepared by Stetson Resource Management Corp.

Nixon, Graham T., Ash, Christopher H., Connelly, James N. (1989):

Alaskan Type Ultramafic Rocks in B.C.:

The Gnat Lakes, Hickman and Menard Creek

Complexes in Geological Fieldwork 1988,

BCMEMPR Paper 1989-1, pp. 429-442

# Cost Estimate

# Phase I

Grid Construction - 15 km @ \$300/km Rock and Soil Geochemistry - sample collection and analyses VLF-EM and magnetometer surveys - 15 km @ \$500/km Excavator trenching - 25 hours @ \$200/hour Geology, supervision Travel, accommodation, meals Equipment rental, supplies Engineering, reporting Contingencies	\$4,500.00 \$16,000.00 \$6,000.00 \$5,000.00 \$10,000.00 \$20,000.00 \$5,000.00 \$7,000.00 \$11,025.00
Total, Phase I	\$84,525.00
Phase II	
Diamond Drilling - 2000 metres @ \$100/metre Bulldozer - drill road preparation Sample analyses Engineering, supervision, wages Travel expenses Equipment rentals, supplies Reporting and assessment filing fees Contingencies	\$200,000.00 \$5,000.00 \$10,000.00 \$20,000.00 \$10,000.00 \$7,500.00 \$20,000.00 \$40,875.00
Total, Phase II	\$313,375.00
Total, Phases I and II	\$397,900.00
Total, Fliases I and II	\$331,300.00

N.C. Carter, Ph.D. P.Eng

#### CERTIFICATE

I, NICHOLAS C. CARTER, of 1410 Wende Road, Victoria, B.C., do hereby certify that:

- 1. I am a Consulting Geologist registered with the Association of Professional Engineers of British Columbia since 1966.
- 2. I am a graduate of the University of New Brunswick with B.Sc.(1960), Michigan Technological University with M.S.(1962) and the University of British Columbia with Ph.D.(1974).
- I have practised my profession in eastern and western Canada and in parts of the United States for more than 25 years.
- 4. The foregoing letter report on the Gnat Pass property, Liard Mining Division, British Columbia, is based on a personal examination of the property July 23,1989 and on a comprehensive report of exploration results obtained during a 1989 exploration program by J.F. Wetherill and on unpublished reports and maps pertaining to the property and its regional geological setting.
- 5. I hold no interest, directly or indirectly, in the mineral claims comprising the Gnat Pass property or in the securities of Comp-U-Test Software Ltd. or Bonaventure Resources Ltd. nor do I expect to receive any such interest.

N.C. Carter, Ph.D. P.Eng.

Victoria, B.C. July 17,1990







