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May 18,1992

## EAGLE PROPERTY Nation Lakes Area Omineca Mining Division British Columbia

## Introduction

Noranda Exploration Company, Limited is seeking a joint venture partner for further exploration of their optioned Eagle property situated immediately south of Tchentlo Lake in central British Columbia. The property includes two distinct styles of mineralization within and marginal to granitic rocks of the early Jurassic Hogem batholith.

The Gibson zone, hosted by hornfelsed Takla Group volcanic rocks along the southwest margin of the batholith, consists of pyrite-galena-sphalerite mineralization within irregular clay-sericite-quartz alteration zones. Five closely spaced drill holes returned an average of 0.126 oz/ton gold, 15.7 oz/ton silver, 1.36% lead and 1.31% zinc over an average sample interval of 4.15 metres.

Copper-gold mineralization, developed in dioritic rocks of the batholith, is exposed in three areas within a 2.5 km northwesterly trending zone. Two of these showings areas have been tested by limited drilling which returned values of between 0.62 and 1.14% copper and 0.007 and 0.012 oz/ton gold over widths of close to 20 metres. This style of mineralization is considered to be the most significant on the Eagle property.

#### Mineral Property

7 Modified Grid mineral claims comprising 126 units (see diagram). Five of the claims are subject to an option agreement with the Halleran interests of Fort St. James,B.C. Aggregate property payments of \$628,000 are due by mid-1995; \$58,000 has been paid to date and a \$60,000 payment is due August 15,1992. The underlying agreement calls for an NSR of 1% on base metals production and 2% on precious metals production.

Noranda acquired the property in 1988 and expenditures

to date are in excess of \$500,000. Proposed terms for participation include a minimum \$1 million expenditure over 3 to 4 years to earn a 50% interest with a \$100,000 - \$150,000 first year commitment.

#### Location and Access

The property is situated south of Tchentlo Lake 100 km northwest of Fort St. James and 50 km west of Mt. Milligan in Central British Columbia. Access is currently by air or water; all-weather logging roads extend to within 15 km of the claims.

The claims are located on a north-facing slope near the east end of Tchentlo Lake. Elevations range from 870 to 1470 metres above sea level.

#### Previous Work

Copper mineralization within the present property area was originally investigated by a subsidiary of Cyprus Minerals in the late 1960's - early 1970's. Work done included geological mapping, soil geochemistry, IP surveys and 1000 metres of diamond drilling.

Since acquiring the property in 1988, Noranda has completed IP and magnetometer surveys, soil geochemistry, geological mapping and 17 inclined drill holes totalling 1483.3 metres.

#### Regional Geological Setting

The Eagle claims cover the southern margin of the Hogem granitic batholith which is in contact with Takla Group volcanic rocks. A pronounced 7 by 5 km aeromagnetic high is coincident with the granitic rocks.

#### Property Geology

Much of the claims area is underlain by dioritic rocks of the Hogem batholith which are gradational to more potassic granodiorites in the northeastern claims area. A coarsegrained basic intrusive rock, with significant magnetite and biotite and originally mapped as a gabbro, occurs as a northwest trending elongate body in the central claims area.

The diorites are in contact with hornfelsed Takla volcanic rocks in the southwestern claims area.

#### <u>Mineral Zones</u>

Four principal mineral zones are known within the claims area. Three of these, the Vector, Mid and Nighthawk zones, are considered to be part of the same system while the recently discovered Gibson showing is distinctly different.

## Vector - Mid - Nighthawk Zones

These three zones are crudely aligned and occur over a northwest strike length of 2.5 km. Principal fracture and shear directions within this zone are 150/65E and 050/40W but the main structural trend at the principal showings is 110 - 130. The Vector and Nighthawk zones were originally investigated by a subsidiary of Cyprus Minerals in the late 1960's - early 1970's.

The <u>Vector</u>, the most northerly zone, has been traced for more than 350 metres along a north-flowing creek. Propylitically altered diorites contain 2-3% pyrite and 2-5% chalcopyrite which occur in 0.1 - 8 cm wide fractures and in breccia zones with massive magnetite.

Grab samples from the Vector zone ranged from 0.41-3.9% copper and 580 -3460 ppb gold (0.017 - 0.10 oz/ton). Samples of bedrock exposures collected for geochemical analyses returned values of 1221 and 5952 ppm (0.12 and 0.59%) copper and 195 and 40 ppb gold.

Two inclined drill holes, of less than 100 metres each, were drilled 180 metres apart in 1991. Both holes intersected a moderately northeast dipping mineralized zone and results are as follows:

<u>Hole No.</u>	<u>Interval(m)</u>	<u>Length(m)</u>	<u>Cu(%)</u>	<u>Au(oz/ton)</u>
EA-91-12	18.50-36.40	17.9	0.82	0.012
EA-91-13	24.40-42.20	17.8	0.62	0.009

The <u>Mid\_</u>zone, as the name implies, is situated midway along the 2.5 km northwest-trending structure. Grab samples from bedrock exposures within this zone range from 0.35 -1.3% copper and 520 - 1600 ppb gold (0.015 - 0.046 oz/ton). Both disseminated and fracture filling pyrite and chalcopyrite in propylitically altered diorites have been reported from this zone and massive magnetite veins are not uncommon.

This zone, based on limited bedrock sampling by Noranda, appears to have excellent size potential. Available information indicates a 1400 metre long, 200-400 metre wide zone, elongate in a northwest direction, within which copper values in bedrock exceed 1000 ppm (0.1%). Gold values are spotty but can range up to 670 ppb. This zone has not been tested by drilling.

The <u>Nighthawk</u> zone is the southernmost of the three zones. Here, chalcopyrite and pyrite occur as disseminations and in stockwork veinlets in diorites featuring chlorite magnetite- epidote alteration. Noranda grab samples yielded ranges of 1.5 -7.6% copper and 950 -2070 ppb gold (0.017 -0.06 oz/ton).

Two inclined drill holes, drilled on the same section, intersected a moderately northeast dipping mineralized zone at vertical depths of between 5 and 35 metres. Results are as follows:

<u>Hole No.</u>	<u>Interval(m)</u>	Length(m)	<u>Cu(%)</u>	<u>Au(oz/ton)</u>
EA-91-6	5.07-24.08	19.01	1.14	0.012
EA-91-7	48.16-60.66	12.50	0.83	0.007

Soil geochemistry over the grid area including the three zones yielded fairly good results. Overburden depths range from 0 to 20 metres. As might be expected, the higher areas of the property, within and adjacent to the Mid and Nighthawk zones where bedrock exposure is relatively abundant, yielded the most uniform results. A broad area, 220 by 1400 metres, with 100 - 1000+ ppm copper values flanks the Mid - Nighthawk zones on the southwest. Within this are two areas with spotty gold values - one 400 by 200 metre area with 10 - 700 ppb values near the Nighthawk zone and an area with less than 50 ppb gold mainly 200 - 500 metres northeast of the baseline in the vicinity of the Mid zone. Anomalous copper values are partially coincident with and downslope to the northeast from the Vector zone. Low gold values, in the 10 - 50 ppb range, are scattered to the northeast of the zone.

Both magnetometer and IP surveys have been completed over the grid area. The area of highest magnetic response is coincident with the area of broadest IP response. This is in the central grid area southwest of the baseline and significantly it flanks the Mid and Nighthawk zones and in particular is marginal to the large zone with anomalous copper (gold) values in bedrock.

Four inclined holes were drilled in 1991 to test areas of high IP response north and west of the Nighthawk zone. 20 - 40% magnetite was intersected in most of these holes and is believed to be the cause of the high chargeability readings. Only low copper values were encountered.

### Gibson Showing

samples collected June of Soil in 1990 at the southwestern ends of several lines within the main grid area were found to have anomalous concentrations of lead-zincsilver and gold. Hand trenching disclosed the presence of oxidized massive sulphide breccia veins in silicified and sericitized volcanic rocks. Mineralization consisted of massive, fine-grained galena, arsenopyrite, sphalerite, chalcopyrite and pyrite. Trench samples yielded 12.86 g/t gold, 144.7 g/t silver, 0.21% lead, 1.63% arsenic and 0.08% zinc over 1.5 metres and 5.35 g/t gold, 2136 g/t silver, 7.03% lead, 1.05% arsenic and 0.07% zinc over 1.7 metres.

This mineral zone is developed in altered Takla banded tuffs in a contact zone several hundred metres southwest of the batholith contact. Soil geochemistry in this general area has indicated that arsenic values of between 10 and 1200 ppm are widespread and are contained in two principal anomalous areas.

Anomalous copper (50-200 ppm), lead (+100 ppm) and zinc (300-2000 ppm) values are crudely coincident with the arsenic anomalies. Silver is spotty with higher values in the 6.8 -35 ppm range in the area of the southern arsenic anomaly only. Weakly anomalous gold values, in the 20- 45 ppb range, are also restricted to the southern arsenic anomaly.

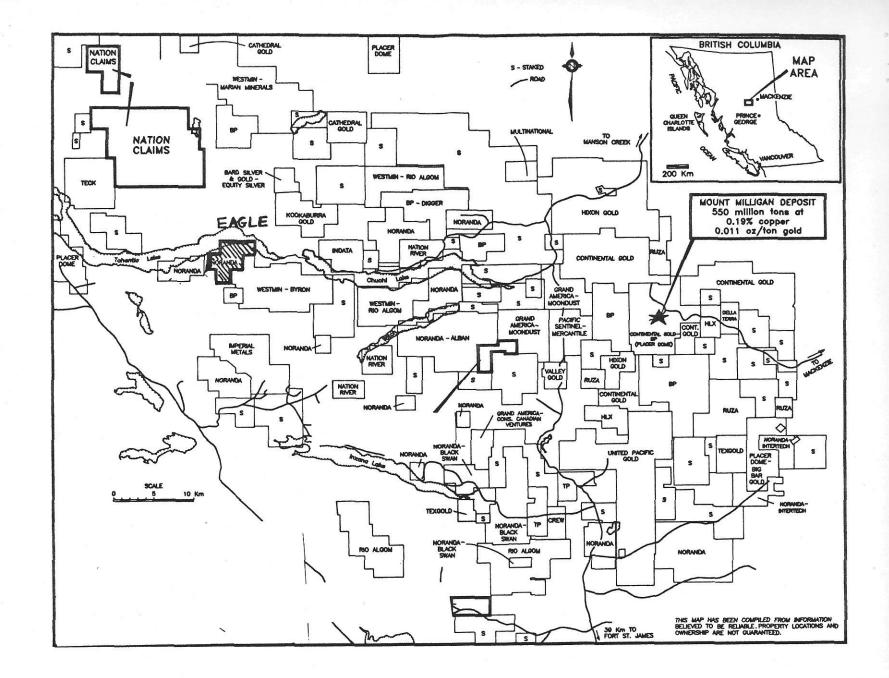
The area of the hand trenches is flanked by two parallel, northwest trending zones of higher IP chargeability which extend 300 metres northwest and 600 metres southeast. These chargeability highs, which are 100 - 150 metres wide, are flanked on the east by higher resistivities which are crudely coincident with the southern arsenic anomaly. Two smaller chargeability highs to the north are coincident with the northern arsenic anomalies.

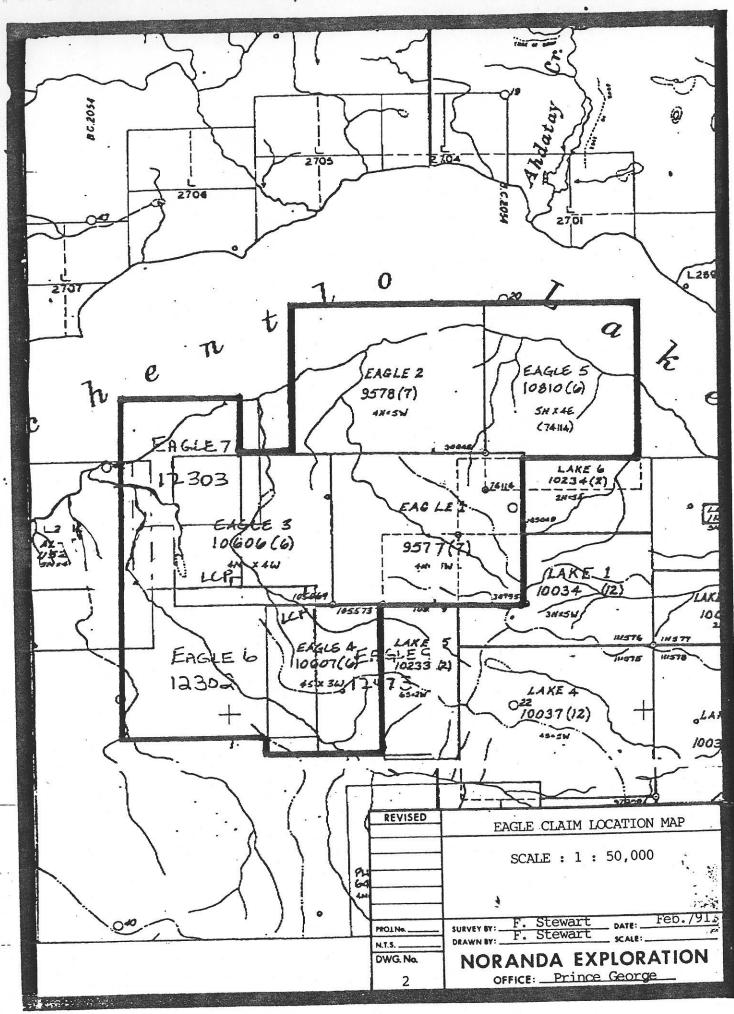
The Gibson showing was tested by nine shallow inclined holes in 1991. The first five holes, collared within a 45 x 20 metre area, intersected a structurally complex claysericite-quartz alteration zone containing pyrite, galena and sphalerite mineralization. These holes returned average grades of 0.126 oz/ton gold, 15.7 oz/ton silver, 1.36% lead and 1.31% zinc over an average sample length of 4.15 metres. Four additional holes, drilled 200 metres northwest and southeast, yielded generally low values.

## <u>Conclusions</u>

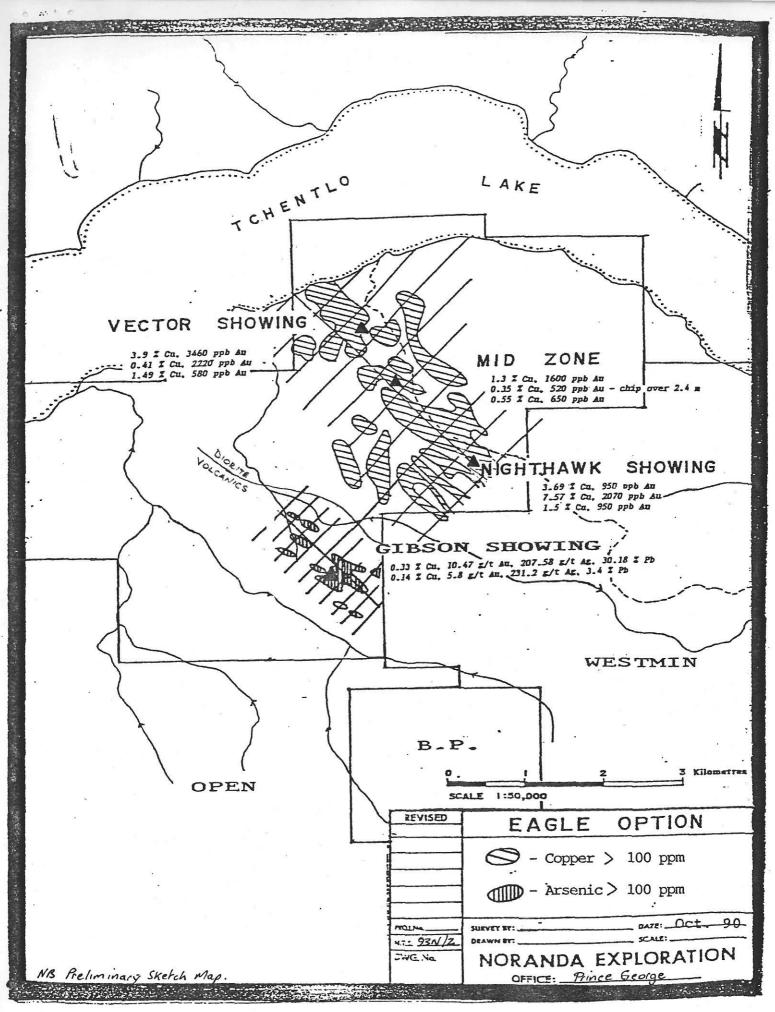
The 2.5 km northwesterly trending zone containing the Nighthawk, Mid and Vector zones is considered to be the most significant on the Eagle property. Limited drilling to date of the two zones at the known limits of the structural trend has indicated the presence of "Afton" quality copper and gold grades over widths in the order of 20 metres. It is entirely possible that the same order of grades could occur over even greater widths along the 2.5 km trend. It is important to note that the Mid zone, the most extensive surface showing, has not been tested by drilling.

The Gibson zone is typical of mineralization developed peripheral to larger porphyry systems. The potential of this zone is unknown and a program of mechanical trenching has been recommended to gain a better understanding of the structural complexity.





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# N.C. CARTER, Ph.D., P.Eng.

Consulting Geologist

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1410 Wende Road Victoria, B.C. V8P 3T5 (604) 477-0419 May 22, 1992

Mr. Darryl Hanson Chief Geologist Equity Silver Mines Limited P.O. Box 1450 Houston, B.C. VOJ 120

Dear Darryl:

## Re: Eagle (Noranda) Property Nation Lakes Area

Enclosed is a summary report prepared by me based on information provided by Bob Cluff of Noranda. My role here is simply as a facilitator and the only direct or indirect compensation I expect to receive would be the possibility of some consulting work work on behalf of an incoming party.

I think the copper-gold zones here have some potential. We're talking Afton style grades - ie. - 0.80 - 1% Cu and +0.10 oz/ton gold. Naturally, one would want to see better thicknesses of mineralization than those drilled to date but it is possible that these could be present within the 2.5 km strike length containing the three known zones.

Noranda's proposed deal might be a bit stiff in view of the property payments contained in the underlying agreement. These include a \$60,000 payment in August.

Anyway, have a look at this and let me know your thoughts.

I am also taking this opportunity to enclose a revised summary report on the Trail Peak property in the Babine area in which I have an interest. I finally got copies of old drill logs which indicate some fair sections of copper mineralization. The core is stored in the Babine Range and the plan is to re-sample some of this to determine possible gold contents.

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