EXPLORATION REPORT
ON THE
SAM MINERAL CLAIM
OMINICA MINING DIVISION, B.C.

for

FARAWAY GOLD MINES LTD. #1 - 1360 West Broadway Vancouver, B.C.

by

May 17th 1985

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# EXPLORATION REPORT ON THE SAM MINERAL CLAIM, OMINICA MINING DIVISION, B.C.

#### SUMMARY

The Sam mineral claim, consisting of sixteen units, is located near the east end of Goosly Lake, and adjoins the property of Equity Silver Mines. It is accessible by logging roads which connect to the main road leading to Houston, B.C. The claim was originally staked in Feb. 1980 and is now owned by Faraway Gold Mines Ltd.

Geologically, the area is underlain by the Hazelton series of volcanic and sedimentary rocks of Cretaceous age which are partly overlain by younger Eocene volcanics, and have been intruded in places by stocks of gabbro and quartz monzonite of Paleocene age, and it is these stocks that are believed to be the origin of the copper-silver-antimony mineralization of the Sam Goosly orebody.

The Sam claim has been subjected to exploration by forty percussion drill holes put down to a depth of over 300 feet. These holes have not been evenly distributed over the claim area, but grouped in the central part of the claim. Logs and assays of the drill cuttings have indicated very low values in copper, but certain holes have returned highly anomalous values in zinc and silver which are considered worthy of further investigation.

Recommendations proposed for the property consist of check drilling four of the highest grade percussion drill holes with an N.Q. core drill, and logging of the core to determine the association of the apparant high grade bands or seams of zinc mineralization.

A second phase of the program would consist of grid drilling

the claim area determine the underlying geological formations and possibly locating any gabbro or quartz monzonite stocks which may lead to the discovery of a Sam Goosly type mineral body.

The work outlined is estimated to cost \$150,000.

#### INTRODUCTION

On November 14th, 1980, the writer made a reconnaissance examination of the Sam claim located in the Goosly Lake area of the Omineca Mining Division of B.C. The ground was snow covered at the time and known to be almost completely covered with glacial drift, so the main purpose of the examination was to verify the position of the claim on the ground and to become familiar with the topography, access routes, etc.

The examination was made on behalf of Carpenter Lake Resources Ltd. who had optioned the claims from the original stakers and owners. Carpenter Lake failed to meet the terms of the option, and the claims reverted to the owners.

This report is a discussion and evaluation of the work carried out by the successor company, Faraway Gold Mines Ltd., #1 - 3630 West Broadway, Vancouver, B.C. Much of the geological information on the area has been obtained from various maps, reports and studies of the Equity Silver Mines, (Sam Goosly Deposit) which adjoins the Sam claim. These are acknowledged under "References".

#### LOCATION AND ACCESS

The claim lies to the east and northeast of the east end of Goosly Lake, about 31km southeast of Houston on Highway #16, the approximate location of the L.C.P. of the Sam claim would be Latitude 54° 11'18"N; Longitude 126° 17'18"W. The Sam claim adjoins the west boundary of the property of Equity Silver, which is now in production.

There are a number of graded logging roads leading to the area, and throughout the claims there are other logging roads now

disused, which could easily be repaired for all wheeled traffic. Other roads have been constructed to the drill sites.

A location map accompanies this report.

### TOPOGRAPHY, TIMBER, ETC.

The topography of the area is of moderate relief, the Sam claim sloping to the northeast from Goosly Lake from an altitude of 3000 feet to about 3700 feet.

The area is heavily timbered with small diameter jackpine, spruce, etc. except for some swamps along the creeks, but much of the timber has been logged off in recent years.

There are numerous creeks and small lakes which would supply sufficient water for all purposes.

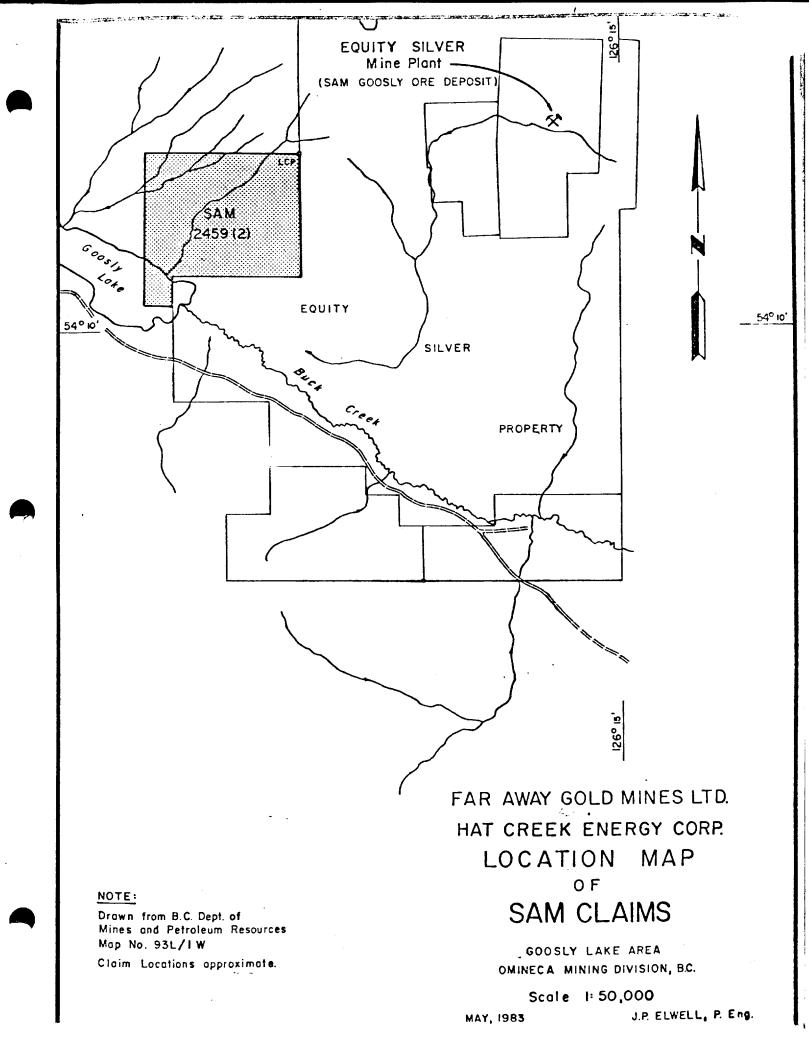
#### PROPERTY

According to the Form G's examined the property consists of the following claim in the Omineca Mining Division of B.C.

Name	<u>Units</u>	Record No.	Date of Record
Sam	16	2459(2)	Feb. 12, 1980

#### PREVIOUS HISTORY

Exploration on the ground now covered by the Sam claims dates from 1971 when it was known as the D.G. group owned by Payette River Mines Ltd. (N.P.L.). During October and November of 1971, D.R. Cochrane, P.Eng. completed 6.3 miles of I.P. survey



resulting in a well defined "thumb print" type of anomaly centered over the D.G. #1 claim which was just to the east of the center of the present Sam claim.

In 1974 the anomaly was tested by four percussion drill holes to a maximum depth of 310 feet. Two holes intersected a dacite below the overburden mineralized with pyrite estimated at 5% to 10% and geochemical analyses of the cuttings indicated minor amounts of copper, zinc, molybdenum, and silver. The third hole cut 125 ft. of younger volcanics overlying the older dacite and then penetrated 85 ft. of mineralizated dacite. The fourth hole was lost.

The D.G. claims were allowed to lapse, and in Feb. 1980, approximately the same area of ground was staked as the Sam claim which was optioned by Carpenter Lake Resources Ltd. Apart from minimal assessment work, Carpenter Lake did not carry out any exploration work as recommended in the writers report of Sept. 20th 1983, resulting in the option being cancelled, and the claim reverted to the owners, who incorporated Faraway Gold Mines Ltd.

Faraway carried out a percussion drilling program in 1984 and 1985 totalling 40 holes, all but a few of which penetrated the overburden and sampled the bedrock down to a maximum depth of 390 feet. The rock cuttings were sampled in 10 ft. sections, logged, and rock geochem analysis was made for copper, silver, and zinc.

#### REGIONAL & ECONOMIC GEOLOGY

The regional geology of the area which covers the Sam claim is somewhat complex, and the fact that almost the entire area is moderately to heavily covered with glacial drift has not allowed any detailed mapping, so the maps available on the area, G.S.C. Open File 351, and 971A are very generalized. The only detailed geological picture is limited to the area in the immediate vicinity of the Sam Goosly ore deposit, and extensive diamond drilling is based on previous operating exploration work by present and exploration companies.

Based on a number of published reports and other data, the general geology may be summarized as follows:- The oldest underlying rocks in the area are the Hazelton series of Cretaceous age, consisting of an assemblage of sedimentary and volcanic rocks including andesite, rhyolite, dacite, basalt and related breccias and tuffs; minor argillite, arkose, sandstone and limestone. Unconformably overlying the Hazelton rocks are the Goosly Lake volcanics consisting of trachytic flows and sills, and considered to be of Eocene age, and also the Buck Creek volcanics of similar age consisting of massive andesite and dacite flows, minor basalt and sediments.

In the Sam Goosly deposit area, this assemblage of volcanic sedimentary rocks has been intruded by stocks gabbro-monzanite and quartz monzanite of later (Paleocene) Copper-silver-antimony mineralization originated hydrothermal fluids from the magmatic stocks and permeated pyroclastic volcanics disseminations and as fillings to form the Sam Goosly ore bodies. Apart from the metalic sulphides mentioned, the most common associated mineral is pyrite, with lesser amounts of molybdenite, galena, sphalerite.

#### EXPLORATION OF THE SAM CLAIM

During the winter of 1984-1985, Faraway Gold Mines Ltd. completed 40 percussion drill holes on the Sam claim, the holes varying in depth up to 390 feet. The locations of these holes is shown on the 1:2500 scale map which accompanies this report (Fig 2). It will be seen that all holes, with the exception of the first 19 which were drilled along a road, are clustered in an area of less than one claim unit. This, it is reported, was due to the heavy snow fall and lack of equipment to cut access roads to put the holes down on a regular grid pattern ovr the entire claim area.

Logs and assays are available for most of the holes, and a study of this data discloses certain phenomena which may, with further explication, lead to a better understanding of the underlying geology and improve the chances of locating an ore body within the claims. Specifically, the logs and assay results indicate:

- (a) Four holes, S10, S12, S14, and S16 are logged as being essentially quartz porphyry, with 3 to 5% pyrite, mica, and minor amounts of ore minerals including Cu Fe S2, Mo S2, Zns and Pbs.
- (b) The remaining holes have been logged as consisting of tuffs, dacite, and andesite with minor sulphides (mainly pyrite). In certain holes there is a capping of recent (Buck Point) volcanics, but in general the underlying rock appears to conform with the description of the Hazelton series rocks.
- (c) Copper assays for all holes are consistantly low, varying from 4 to a maximum of about 80 ppm with a mean in the 20 ppm range, which is about background for a sulphide rich volcanic. The zinc and silver assays however, are quite erratic. Hole S-12 has a 180 ft. section from 210 ft. to end of hole at 390 ft. which assays from 0.26 to

1.5% Zn, with silver values from 4.6 to 23 ppm, well above the norm for silver which appears to be less than 1 ppm in most of the holes. This hole has been logged as consisting mainly of quartz porphyry, but the other holes logged as being similar rock types - S10, S14, and S16 show only moderate zinc and silver values.

Some of the other holes, namely S-20, S-37, S-17, S-25, and S-11 show short sections where zinc is in excess of 0.1% with above average silver values, and although none of the assays approach ore grade, they are much higher than could be expected from ordinary country rock, and definately warrant investigation.

#### EVALUATION OF THE CLAIM AREA

As mentioned in the previous sections, the drilling to date has been concentrated on only a small part of the claim area, and these holes while carrying negligable amounts of copper, have proved to be highly anomalous in zinc and silver in certain sections of certain holes.

To evaluate the mineral potential of the whole claim area, two initial exploration steps appear to be necessary, these being (1) vertical diamond drill holes close to the percussion holes where high zinc-silver values are indicated, and (2) a series of percussion drill holes put down on a grid pattern to cover the remainder of the claim area. The purpose of (1) would be to provide good core sections, in order to determine the nature and association of the zinc and other sulphide mineralization, while the percussion holes will information on the underlying geology of the remainder of the claim area and in particular, may identify gabbro or quartz monzonite stocks which, in the Sam Goosly deposit, are believed to be the source of the mineralization. Specific recommendations are as follows:

#### RECOMMENDATIONS

#### Phase I

- 1. Four vertical diamond drill holes should be put down as close as possible and to the same depth as percussion drill holes Sll, Sl2, S20, and S25. N.Q. is recommended to ensure good core recovery.
- 2. Cores from the above should be logged in detail, split and assay samples taken from the same intervals as the corresponding percussion holes. Assays should be run for Cu, Pb, Zn and Ag.

#### Phase II

- 1. A grid should be laid out over the entire claim, and percussion drill holes laid out on a regular pattern, four per claim unit except for the area already sufficiently covered by the previous drilling. Holes should be drilled to a depth to penetrate the overburden, any recent volcanic cap rock, and sufficiently deep into the underlying rock to provide geological and mineralogical data. Cuttings should be carefully logged and assayed similarly to the previous drilling.
- 2. Further work will be contingent upon favorable results from the above.

# ESTIMATE OF COSTS

# Phase I

1.	Diamond drilling - allow 1500 ft. @ \$20/ft.	\$ 30,000
2.	Mobilization and demobilization of drill	2,000
3.	Supervision, logging & sampling of core	5,000
4.	Assaying, report and maps	10,000
	Total	\$ 47,000

# Phase II

1.	Percussion drilling - allow 60 holes averaging 150 ft. each @ \$8/ft.	\$ 72,000
2.	Logging, sampling and assaying	15,000
3.	Contingencies	16,000
	Total	\$103,000
	Total Phase I and II	\$150,000

May 17th 1985

J.P. ELWELL FACTOR ERING LTD.

#### REFERENCES

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- Discovery, Geological Setting and Style of Mineralization, Sam Goosly Deposit, B.C. - C.S. Ney, J.M. Anderson, A. Panteleyev, CIM Bulletin, July 1972
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#### CERTIFICATE

- I, James Paul Elwell, of 4744 Caulfield Drive, West Vancouver, B.C. do hereby certify that:
- I am a Consulting Mining Engineer residing at 4744 Caulfield Drive, West Vancouver, B.C., and with an office at 1026
   510 West Hastings Street, Vancouver, B.C. V6B 1L8.
- 2. I am a graduate in Mining Engineering from the University of Alberta in 1940, and am a Registered Professional Engineer in the Province of British Columbia.
- 3. I have no personal interest, directly or indirectly, in the properties examined or in Faraway Gold Mines Ltd. securities, nor do I expect to receive directly or indirectly any interest in such property or securities.
- 4. The findings in the report are derived from data acknowledged under "References" and from a personal examination of the property on November 14th, 1980.
- 5. The full text of the report and accompanying maps may be reproduced in the Company's Statement of Material Facts.

DATED at VANCOUVER, B.C. this 17th day of May 1985.

J.P. P.Eng.