# PROPERTY EVALUATION REPORT

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ON THE

SAM MINERAL CLAIM

Equity Silver Area, Omineca Mining District

British Columbia

NTS Claim Sheet M 93L/1W

54° 11 N / 126° 19 W

For

FARAWAY GOLD MINES LTD.

By

J.E. WALLIS, P.ENG. G.S. DAVIDSON, P.GEOL. MARCH 10, 1987 . 3364

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#### CONCLUSIONS

Mesozoic rocks of the Goosley Lake sequence containing silver mineralization have been intersected in percussion and diamond drill holes on the Sam claim. The geology and mineralization is similar to that of the nearby Equity Silver Mine which is currently producing at the rate of \$4,500 mtpd. The property has excellent potential for hosting a similar type ore body.

However, prior to attempting any further drilling it is compulsory that the following schedule be adhered to:

- a) Existing drill holes must be carefully logged and sectioned.
- b) As soon as weather permits the drill hole collars must be surveyed to permit correlation of drill hole data.
- c) A proper base map of the property must be compiled and the surface geology mapped.
- d) A short (30 km) line grid should be cut over the favourable mineralized area and a magnetometer and VLF survey completed.

The above will be completed in a Phase 1 program and is estimated to cost \$65,000. Phase 2 is primarily a drilling program. Total expenditures for the 1987 program are estimated at \$827,750.

#### INTRODUCTION

Faraway Gold Mines 1td. owns the Sam mineral claim in the Equity Silver area of west-central British Columbia. The property has, periodically been explored from 1969 to 1986, recently by percussion and diamond drilling. Silver mineralization intersected in several drill holes occurs in similar geology to the nearby Equity Silver deposit.

This report, prepared at the request of Lorne Spence of Faraway Gold Mines Ltd. reviews the physical and geological setting of the property, and recommends a two stage exploration program to further investigate the mineralized zone.

# LOCATION AND ACCESS

The Sam claim is located beside Goosley Lake, 32 kilometers southeast of the town of Houston, British Columbia on N.T.S. Map Sheet 93 L/1W (Figure 1). Access to the property is via old logging roads and cat tracks which branch off the Equity Mine Road. Total road distance from Houston to the claim is 40 kilometers. Smithers, 64 kilometers northeast of Houston, has a regional airport with daily flights to Vancouver.

### PHYSIOGRAPHY AND VEGETATION

The property lies on a southwesterly facing slope of moderate relief overlooking Goosley Lake. An upland plateau on the northeastern edge of the claim lies at 1,240 meters of elevation while the southern edge of the claim beside Goosley Lake is at 900 meters. Outcrop is restricted to road cuts on the northwestern corner of the claim, elsewhere overburden covers the property, averaging 12 meters of depth. Vegetation consists of secondary growth on ground previously cleared by logging or forest fire. The secondary growth is mainly jackpine and scrub brush.



## CLIMATE

The Houston area features a temperate climate with summer maximums of  $30^{\circ}$  C and winter minimums of  $-25^{\circ}$  C. Precipitation averages 50 cm per annum. Exploration programs can be conducted on a year round basis.

#### CLAIM COMPOSITION

The Sam property consists of 16 units in one modified grid claim located in the Omineca Mining Division in accordance with the Mining Act Regulations for the Province of British Columbia and recorded in the district mining recorders office in Smithers, B.C. The claim is held by Faraway Gold Mines Ltd. under terms of an option agreement with Kengold Mines Ltd. The claim plan is shown in Figure 2 and the claim status is listed below:

Claim	Claim	Record	Recording	Registered
<u>Name</u>	<u>Units</u>	Number	Date	Owner
Sam	16	2459	Feb 12/1980	Kengold Mines Ltd.

To date the claim remains unsurveyed.

# REGIONAL GEOLOGY

The Houston area is in the northern section of the Nechako Trough, part of the Intermontane belt of the central Cordillera of British Columbia. The Nechako Trough contains Mesozoic volcanic and sedimentary rocks cut by Jurassic to mid-Tertiary intrusives and overlain by broad areas of Tertiary volcanic rock.

Around Goosley Lake Eocene volcanic rocks occur in the Buck Creek basin or caldera structure. They consist of Goosley Lake trachytic andesite flows and pyroclastic rocks and the Buck Creek basaltic andesite flows and breccias.



Northeast of Goosley Lake Mesozoic rocks occur in erosional windows within the Tertiary volcanic rocks. These Mesozoic strata of mid to late Cretaceous age are intruded by granitic and gabbroic stocks and plugs.

The Equity Silver deposit sits in one of these erosional windows, hosted by volcanic-sedimentary formations related to part of the Skeena Group of rocks. Locally, these rocks are known as the Goosley sequence, consisting of a basal conglomerate with minor argillite; intercalated subaerial tuffs and breccias of dacitic to rhyolitic composition; interbedded volcanic conglomerate, sandstone and tuff, all overlain by volcanic flows of andesite to dacitic composition.

The Equity Silver deposit sits conformably in the dacitic to rhyolitic tuffs, breccias and flows. Both volcanogenic and hydrothermal origins have been postulated for the ore body due to its close association with quartz monzonite and gabbroic intrusions. Mineralization consists of pyrite-pyrrhotite-chalcopyrite and tetrahydrite and less galena and sphalerite in fracture and breccia fillings or as disseminated sulphides.

# HISTORY AND PREVIOUS EXPLORATION

The Goosley Lake area was originally mapped by Lang (1942) of the G.S.C. Regional Exploration was initiated in the early 1960's by Kennco Explorations. They collected stream sediment samples from drainages northeast of Goosley Lake which contained slightly anomalous values in copper, zinc, and fluorine. Subsequent work located copper-molybdenum mineralization in a quartz monzonite stock and a surrounding pyritic halo developed in volcanic rocks. Further geochemical surveys outlined anomalous silver values east of the quartz monzonite and follow-up drilling intersected silver rich mineralization. Further drilling between 1972 - 1979 by Equity Mining and Partners outlined the Equity ore body and production begain in late 1980.

By 1969 the Goosley Lake area was widely staked. Dorita Silver Mines Ltd. held a large claim block, part of which covered the present Sam claim. Dorita carried out geological and geochemical surveys prior to abandoning the claims in 1971.

![](_page_8_Figure_0.jpeg)

The area was restaked later that year by Payette River Mines Ltd. They completed an I.P. survey in 1971, that located a chargeability anomaly in the north central part of the claim. Four percussion drill holes tested the geophysical anomaly in 1974. Results were unfavourable and the claim was again allowed to lapse.

The Sam claim was located in 1980 by Kengold Mines Ltd. and optioned to Carpenter Lake Resources Ltd., who met minimal work commitments before defaulting on the option. Faraway Gold Mines Ltd. acquired an option on the claim from Kengold Mines and from 1984 to early 1985 drilled 30 percussion holes. N.C. Carter, P.Eng. reports that the holes were located within an area 400 to 700 metres southwest of the main road in the north-central part of the claim and drilled into the I.P. anomaly located in the early 1970's. Drill cuttings consisted of fine grained grey dacite, containing variable amounts of sericite, quartz and pyrite. The drilling outlined an alteration zone at least 200 metres wide and over a distance of 350 metres in the dacite. Pyrite content in the alteration zone ranges from 2-30% and higher sulphide zones contain significant zinc, silver and lesser copper values. The strongest silver and zinc values obtained in the 30 holes were 1.6 oz/ton and 1.5% respectively.

Through 1985-1986 a further 18 percussion holes and seven diamond drill holes were completed on two zones known as the East and West Zone Prospects. No map is currently available to correlate the East and West Zone Prospects with the earlier percussion drill holes. Bernard H. Kahlert, P.Eng. (1986) reports that diamond drill and percussion holes have intersected volcaniclastic rocks similar to those of the Equity Silver deposit; consisting of dacitic to rhyolitic ash tuffs, lithic and lapilli tuffs, all intercalated with minor dacite flows, dacite porphyry and dacite breccia. He reports that "Only the silver rich zone located near the top of D.D. Holes 3 and 4 could be correlated. In hole DDH-3, the interval 21.35 - 21.90 assayed 134 g/T Ag while in DDH-4, the interval 22.70 - 23.70 m assayed 439 g/T Ag. A second interval 46.0 to 47.7 m in DDH #4 assays 422 g/T Ag."

Core containing sulphides and alteration zones in diamond drill holes 5-7 have not been logged, split or assayed so far.

Sulphide rich zones (5-15%) are common in most of the diamond drill core and several short sections contain up to 30% sulphide. The sulphide is primarily pyrite with minor chalcopyrite, magnetite, sphalerite and tetrahedrite(?).

### DISCUSSION

Mesozoic rocks of the Goosley Lake sequence containing silver mineralization have been intersected in percussion and diamond drill holes on the Sam claim. Unfortunately accurate drill logs and drill hole location plans have not been prepared. Little correlation can presently be made between existing drill holes and much of the necessary geological data has not been compiled.

Before proceeding with any further drilling it is essential to carefully map the property geology and to re-evaluate the work done to date. A plan must be prepared showing surveyed drill hole locations, property boundaries and road locations. A cut line grid should be established for geophysical and geological surveys, and for control in locating future drill holes.

Drill core from diamond drill holes 1 to 7 must be logged and sectioned, and mineralized material in holes 5 to 7 assayed. This preparatory work, Phase I, would lay the groundwork for a second phase drill program outlined in Phase 2 of the recommended work program.

### RECOMMENDATIONS

Establish approximately 30 kms of line grid at 50 metre intervals, map surface geology, log the 1986 diamond drill holes, assay sulphide rich section in diamond drill holes 5 - 7, establish drill sections and accurately survey existing drill hole collars. Cost estimates are detailed as follows:

# Phase 1

\$

Geologist, 30 days @ \$350/day	\$	10,500
Field Assistant, 30 days @ \$200/day		6,000
Establish 30 kms line grid @ \$300/km		9,000
Geophysics, Mag & VLF survey		10,000
Survey drill hole collars		6,000
Vehicle rental and fuel, 1 month		1,500
Consulting Engineer, 10 days @ \$400/day		4,000
Travel expenses		2,000
Camp costs, 3 men for 30 days @ \$100/day		9,000
Report	<del></del>	1,000
Sub-total	\$	59,000
Contingency 10%	******	6,000
Total Phase I	\$	65,000

Phase 2 will be initiated as soon as the results of Phase I are compiled and evaluated. Phase 2, primarily a drilling phase, is detailed as follows:

Geologist, 90 days @ \$350/day	\$ 31,500
Field Assistant, 90 days @ \$200/day	18,000
10,000 ft. diamond drilling @ \$40/ft	400,000
5,000 ft. percussion drilling @ \$12.50/ft	62,500
Dozer rental, 450 hrs @ \$125/hr	56,250
Camp costs, 900 man days @ \$80/man day	72,000
Vehicle rental and fuel, 90 days @ \$50/day	4,500
Travel expense	10,000
Assaying	18,000
Consulting, 30 days @ \$400/day	12,000
Final report	9,000
Sub-total	\$ 693,750
Contingency 10%	69,000
Total Phase 2	<u>\$ 762,750</u>
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Total 1987 Expenditure, Phase 1 and 2

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Phase 2

\$ 827,750