

019350

~~Confidential~~

include in PROPERTY FILE

Property File

104B141,  
359,212

*JA*

GEOLOGICAL REPORT  
— ON THE  
SILVER COIN CLAIM GROUP  
SALMON RIVER DISTRICT  
NORTHWESTERN BRITISH COLUMBIA

SKEENA M.D.

N.T.S. 104B/1E

BY

EDWARD W. GROVE, Ph.D., P. Eng.

FEBRUARY, 1981

E. W. GROVE CONSULTANTS LTD.

## TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
LOCATION	1
PROPERTY	1
HISTORY - SILVER COIN PROPERTY	2
GENERAL GEOLOGY	3
MINERALIZATION	4
SILVER COIN PROPERTY	6
RECOMMENDATION	14
ADDENDA	16
BIBLIOGRAPHY	17
CERTIFICATE	18

INTRODUCTION:

LOCATION:

The "Silver Coin" group of mineral leases is located in the Salmon River District on the west slope of Bear River Ridge.

The Silver Coin group of leases is about 9.7 miles (15.5 km) north-northwest of Stewart, British Columbia and is marked by the presence of Noname Lake which lies near the center of the claim group.

Access to the Silver Coin group is via the Hyder-Big Missouri road.

PROPERTY:

The following Crown granted mineral leases comprise the current Silver Coin property:

<u>Lot No.</u>	<u>Name</u>	<u>Area (acres)</u>
2836	Idaho	36.84
2837	Silver Coin	51.06
2838	Storm	39.86
2839	Fair	46.36
2841	Idaho Fr.	48.63
5090	Storm Fr.	47.58
5091	Dan Fr.	51.65

The above leases are currently in good standing.

The Silver Coin group lies immediately south of the Big Missouri property currently being explored by Western Mines Limited, and north of the past producer, New Indian Mines Ltd. The Silbak Premier mine, one of British Columbia's richest ore deposits, lies about 3 miles to the south.

The entire Stewart area is in a period of intense mineral deposit exploration activity not seen since the 1920's. Virtually every known old deposit and property has been reactivated because of the new gold and silver prices.

#### HISTORY - SILVER COIN PROPERTY:

The claims currently known as the Silver Coin group were included in other properties during their early history. The ground surrounding Noname Lake was first included in the Big Missouri claim group staked in 1904. Later parts of the current group were either open or included with other properties. Work on the Silver Coin property has been erratic and very poorly documented. It appears that the claims were obtained by the late Mr. E. A. Noble in the early 1930's. No work was recorded by the Noble family or estate after 1941. In 1966 the late Mrs. E. A. Noble of West Vancouver approached Granduc Mines

Limited regarding the mineral potential of her property. In 1967 Eric Ostensoe, Chief Geologist, Granduc Mines Limited, spent time on the Silver Coin property in July and later in September. Since then no official work on the property has been recorded.

GENERAL GEOLOGY:

Country rocks along the lower slopes of Bear River Ridge form part of a thick sequence of Lower Jurassic volcanics and sediments known as the Unuk River Formation (Grove, 1971) and generally referred to in the older literature as "Bear River Volcanics" or as Hazelton Group. This largely volcanic assemblage is overlain unconformably by volcanic and sedimentary rocks of the Middle Jurassic Betty Creek Formation which now occurs as scattered structural remnants. These country rocks have undergone considerable physical deformation and have at various times been intruded by batholithic masses, smaller plutons, and a variety of dike swarms.

The intrusive rocks found in the Salmon River District include the Texas Creek granodiorite, the oldest known pluton in the area. Rock age determinations on this unit have shown that its intrusive history spans the late Upper Triassic through to early Lower Middle Jurassic times. Most importantly, the major Silbak Premier and Big Missouri

mineral deposits, as well as many of the smaller deposits, are spatially related to the margins of the Texas Creek pluton and appear to be the product of early Lower Middle Jurassic plutonic-volcanic events.

The main bulk of the Tertiary (50 m.y.) Coast Plutonic Complex lies along or west of the Salmon River. The Texas Creek granodiorite occurs as part of this extensive batholithic complex. Other young intrusions found in the Salmon River District and specifically in the Premier-Big Missouri area include the 50 m.y. Premier dike swarm, the 48 to 50 m.y. Portland Canal dike swarm, the Bear River augite diorite stocks and dikes, and the 32 m.y. lamprophyre dikes. Vein deposits of various types are found localized in, or associated with, all of these young plutons. Conversely, these dikes cut the older mineral deposits.

Further information on the general geology of the area can be found in Bulletin 58, Geology and Mineral Deposits of the Stewart Area, and Bulletin 63, Geology and Mineral Deposits of the Unuk River, Salmon River, and Anyox Map Areas, as well as other government documents and company reports.

#### MINERALIZATION:

Mineral deposits in the Stewart area are

generally automatically compared to the Silbak Premier, an exceptionally rich and extensive vein replacement zone which in British Columbia ranks second in silver production, third in gold, and twelfth in lead and zinc. The Big Missouri deposit although of a somewhat similar type was a minor producer and uneconomic.

Both the Silbak Premier and Big Missouri deposits, as well as a number of others, are found localized in deformed and highly altered Lower Jurassic volcanic tuffs, volcanic conglomerates and breccias, rhyolites and sedimentary members. As previously indicated, most of the significant mineral deposits in this area are found in close spatial relationship to the margins of the Texas Creek granodiorite. Moreover, areal mineral zoning studies exhibit a classical relationship of gold at the intrusive margins with silver, lead, zinc and copper in outer aureoles.

Ground preparation, including cataclasis, alteration and fracturing, appears to have been a significant localization factor determining whether simple veins or replacement veins have formed. The argument whether these deposits are plutonic or volcanogenic is academic - recent lead isotope studies on material from these various deposits merely suggest a common history.

SILVER COIN PROPERTY:

The seven leases comprising the Silver Coin group lie within deformed and extensively altered Lower Jurassic volcanic and minor sedimentary rocks immediately adjacent to extensions of the Texas Creek batholith. Alteration consists of intense silicification with pyritization extending from the intrusive contact to a "line" located just east of Noname Lake. Petrographic studies of rocks in this zone reveal that these greenish or mottled rocks are comprised of up to 90 percent secondary quartz plus several percent fine-grained cubic pyrite. East of this line alteration decreases rapidly and the nature of the volcanics can be more readily observed. Within the claim group area the rocks are marked with a variably developed schistosity - generally steep, northerly trending, indicating the variability of cataclasis and alteration. Non-uniform fracturing is evident and minor faults such as along Myrtle Creek are accentuated by erosion.

To date, the known mineralization on the property consists of irregular, northerly trending quartz-sulfide veins. One adit and several trenches and pits are the main evidence of surface exploration. The work appears to have been concentrated on the Dan Fraction.

North of the Dan Fraction and Idaho leases significant mineralization occurs on the Big Missouri



Winer, and Kansas mineral claims. Extensive sulfide-quartz mineralization has been explored along a northwesterly trending zone that parallels the Big Missouri-Kansas boundary, within a large area across the Big Missouri-Kansas boundary, and in a wide roughly northerly trending zone crossing the Big Missouri-Winer claim boundary.

South of the Silver Coin group at least two major quartz-sulfide veins have been explored on the Indian Mine property. High grade sulfide shoots in the upper portions of these veins were mined and shipped to the Premier mill. These quartz veins extend into the Payroll claim which lies immediately south of the Silver Coin (L2837) lease. There may be an offset along the Myrtle Creek shear.

The following excerpt from an unpublished report for the B.C. Dept. of Mines, assumed to have been prepared by Dr. J. T. Mandy, P. Eng., during the 1930's is included here to indicate his evaluation of the Silver Coin group (then, nine claims and fractions - 320 acres) during the then active exploration period:

"Silver Coin Group

This group of mineral claims consists of nine claims and fractions, namely, the Silver Coin, Fair, Storm and Idaho claims, and the Silver Coin, Idaho, Storm, Dan and Petite Fractions,

comprising an area of more than 320 acres, All crown granted.

The group is situated in the Upper Salmon River Valley in the Stewart District and adjoins the Big Missouri Mine on the south, about 16 miles from Stewart. Group is situated on the Missouri Ridge of the Salmon River Valley, it adjoins the Falls View, Kansas, Dauntless and Knob Hill Claims of the Big Missouri, therefore has the identical geological formation as that found in the Big Missouri Mine, and it can reasonably be expected the formation will contain ore bodies similar to those found on the Big Missouri.

In my opinion, the most important showings so far found, are the showings on the Dan Fraction, the showings on the Idaho claim, and a showing on the Fair claim. The showing on the Dan Fraction is a well defined vein, about six feet wide with fine hanging and foot walls, in a large mineralized zone. This vein appears to be a cross fracture in the zone, but there has not been sufficient work done on the vein to determine this. Should this opinion prove to be correct, it would appear to indicate that the same geological condition exists here that was found in the Premier Mine ore zones,

where cross fractures in the ore zones carried ore of very rich values. An assay taken from the open cut gave values of .35 oz. in gold and 10 oz. silver across the six feet. This sample was taken from the surface, therefore is only an indication that the vein contains mineral of value.

Another showing is on the Idaho claim at the south end of the property. This showing has been broken into for about ten feet. It was shown to Murray Townsend when he was mine manager at the Big Missouri. He examined this showing and considered it to be extremely interesting and worthy of further work, and thought it would prove to be from 25 to 35 feet wide. A sample from the ten feet broken into, gave an assay of .50 oz. gold.

There is another showing on the Fair claim, at the south end of the property. This consists of a well defined porphyry zone well mineralized, about 20 feet wide, but it has not been broken into. This mineralized zone runs into the Fair Claim at the S.E. corner; it should be traced into the Fair Claim and prospected as far as possible on the surface then broken into at the most favorable places with deep open cuts.

Single 0      2843      Adjoining B.C. Silver Mine, South group

*not applicable*

Page 10 is missing from my copy.  
it mainly talks about claims in  
another area (Single O<sub>9</sub> etc).

Then it begins quoting a company  
report for Grandue Mines Ltd,  
written by Eric Ostensoe in  
1967/1968. on the Silver Coin claim  
(including assays <sup>group</sup>).

Dair

occurrence. At the south end of the lake, on Silver Coin M.C., a large trench on a north-south striking quartz vein about 10 feet in width disclosed little mineralization of interest. A grab sample (No. 98912) of quartz and pyrite assayed 0.01 oz. per ton gold, 0.3 Oz. per ton silver.

Despite careful prospecting, a mineralized zone reported to lie at the southeast corner of the Fair M.C. was not located. The description given by Mrs. Noble is very vague and the area is precipitous and heavily mantled by brush. A quartz vein mineralized with minor amounts of tetrahedrite outcrops on the Big Missouri pack trail on the Fair claim but does resemble showings described in Mrs. Noble's report.

The main area of workings is at 3,000 feet elevation on Dan Fr. M.C. close to the north end of the property. A series of small pits and benches, all badly sloughed, and a short adit, the portal of which is caved, explore a mineralized structure for a length of 200 feet. The main trench, located immediately above the tunnel, was cleaned out and enlarged, the portal was opened sufficiently to permit access and the old trenches were re-opened. In the main trench, the mineralized vein lies between a strong northerly striking steeply dipping shear zone

on the east and several moderately steep west dipping faults on the west and is 7 feet wide. The vein was not intersected in the adit that passes 30 feet immediately beneath the trench. Country rocks in the surrounding area are green, very strongly foliated, andesitic volcanics that contain coarse pyrite cubes.

The vein consists of quartz-carbonate gangue with much pyrite, streaks of mixed galena-sphalerite and minor amounts of chalcopyrite. Tetrahedrite was not recognized in hand specimens. The main vein is cut by narrow quartz veinlets.

Small trenches were excavated at intervals for a distance of 200 feet from the main trench in the direction N. 26° E. Similar rock, both mineralized and unmineralized, is exposed but width could not be determined. At the north end of the open cuts the sulphide-bearing vein is much weakened, but large amounts of vein quartz are exposed in cuts and outcrops. From existing rock cuts, one cannot definitely determine the presence or absence of the main vein at this point but it is my impression that the vein maintains its dimensions and metal content for a distance of about 110 to 130 feet from the main trench, then feathers out into a network of stringers vein quartz with minor sulphides."

"Assays

The following samples were taken from trenches on the main mineralized showings on the Silver Coin property. Reference is to the sketch that forms part of this memorandum. The first three samples listed, Nos. G-67-4 to G-67-6, were taken July 7, 1967 before any work had been done on the trenches. The remainder were taken on September 20, 1967 upon completion of trenching work.

Sample No. G-67-4, width 6½ ft., from face in main trench, 0.20 oz. per ton gold, 2.60 oz. per ton silver, 0.15% copper, 2.54% lead and 1.59% zinc.

Sample No. G-67-5 specimen of high grade sulphides from main trench, 0.01 oz. per ton gold, 6.40 oz. per ton silver, 1.05% copper, 8.10% lead and 11.71% zinc.

Sample No. G-67-6 specimen of pyritic rock from main trench, 0.04 oz. per ton gold, 2.60 oz. per ton silver, 0.39% copper, 5.65% lead and 1.60% zinc.

Sample No. 98917, from main trench, width 7 ft., 0.12 oz. per ton gold, 2.4 Oz. per ton silver, 0.16% copper, 1.75% lead and 1.14% zinc.

Sample No. 98918, from trench 70 feet from main trench across 4 feet full width not exposed, 0.02 oz. per ton gold, 1.0 oz. per ton silver, 0.18% copper, 0.85% lead and 2.98% zinc.

Sample No. 98916, from trench at 90 feet from main trench, width 5 feet, 0.02 oz. per ton gold, 1.0 oz. per ton silver, 0.77% lead and 0.91% zinc.

Sample No. 98915, across north end of main zone, width 45 feet, grab sample, 0.02 oz. per ton gold, 0.2 oz. per ton silver, 0.11% lead and 0.28% zinc."

- A sketch copy of the Granduc map showing the workings on the Dan Fraction as well as the sample locations is included with this report.

In summary then, northerly and northwesterly mineralized zones appear to merge on the Kansas claim. Major quartz veins extend in a northerly zone towards Myrtle Creek and a number of quartz-sulfide veins have been superficially examined in the Dan Fraction.

RECOMMENDATION:

The Silver Coin group merits renewed attention because of its strategic location, especially with regard to the Big Missouri property currently undergoing extensive exploration, and also because of the current prices for gold and silver which make the search for large tonnage, low grade deposits an economic reality.

There are several ways to approach disposition of the Silver Coin property at the present time. One would