

J. A. C. ROSS & ASSOCIATES LTD.

MINING CONSULTANTS

102-1111 West Georgia Street
Vancouver 5, B.C.

November 14th, 1969.

Bacon & Crowhurst Ltd.,
102 - 1111 W. Georgia St.,
Vancouver, 5, B.C.

Attention: Mr. J.J. Crowhurst

Dear Jack:

Re: Paradise Mine

This will confirm our recent conversations regarding the matter of your staff assembling and studying the data on the Paradise Mine.

As I mentioned, I would like to have a formal report from you on the property embodying recommendations for a work program and costs for same if, of course, you find justification that this course could be advantageously followed.

There is no urgency in this matter but I would like to have it before the spring of 1970 so that I can consider it and make a decision as to whether I should participate in financing the project or sell it to other interests.

I am attaching hereto a list of the various maps which I have been able to collect by visiting the Mineral King and checking other sources.

I am also attaching hereto a file of data which I think would be helpful in your study. You will note it includes several Government maps, a file indicating that I did not pick up the water licenses but have allowed them to lapse, a summary of the claims and the tax status (1969 taxes have already been paid) and a complete production summary which Gordon has compiled from the official reports now in my possession. These reports are also handed to you herewith and include the various reports issued monthly by the property manager.

You will note that I own outright now 12 Crown granted mineral claims and two surface land lots, one over the Royal Stag mineral claim and the other, Block A, which covers the old millsite and tailings pond down by the road turnoff on Toby Creek.

Please let me know if there is any further data or information you require to carry out this work.

Yours very truly,

A handwritten signature in cursive script that reads "Jack". The signature is written in dark ink and has a horizontal line underneath the name.

J.A.C. Ross

JACR/ic

P.S. In studying the claim map, you will note the following list of Crown granted mineral claims adjoins the Paradise. I believe most of them are in good standing and held by Scovil interests. It might be advisable to briefly investigate this property and see if there would be any advantage to the two properties being operated jointly.

3698
3696
10151
11436
11438
15299
15300

LIST OF MAPS

PARADISE MINE - INVERMERE, B.C.

- Roll No. 1 - ~~Hard~~ Plan - Levels composite.
- 2 - Plans & Sections - Recent workings (linens).
 - 3 - Mine Sections - Recent.
 - 4 - Mine Sections - Linen Sheets 5-21
Mine Sections - Sheets 1-4
Assay Plans - Scale 1" = 20'
Blueprint Copies
 - 5 - Old Stope Maps.
 - 6 - Miscellaneous Plans & Sections.
 - 7 - Old Blueprint & Plans of Paradise ? or adjoining mine ?
 - 8 - Miscellaneous Plans & Sections - Scales 1" = 40' & 1" = 30'
 - 9 - Assay Plans.
 - 10 - Geology Plan (old).
 - 11 - Miscellaneous Geology (recent).
 - 12 - Detailed Geology & Assay Plans - linens.
 - 13 - Ore Reserve Stope Plans - Years 1950, 51, 52, 53.
 - 14 - Regional Maps -
2123M - Toby Creek & Columbia River
131M - Horsethief, Bugaboo & Columbia Rivers
133M - Toby & Hamill Creeks
82K/7E - Jumbo & Glacier Creeks
82K/8W - Toby Creek
Composite - Columbia River Valley
Relief Map - S.E. part of B.C.
 - 15 - Claim Maps.
 - 16 - Miscellaneous drawings of Surface Buildings, Townsite, Mill,
Road Surveys, etc.
 - 17 - Tramline Survey - Scale 1" = 100'.

REPORT
ON
THE PARADISE MINE
WINDERMERE LAKE AREA, B.C.

by

Bacon & Clowhurst Ltd

VANCOUVER, B.C.

JAN 1970

LOCATION AND ACCESS.

The Paradise Mine is at an elevation of 7800 feet in southeastern British Columbia, about thirty miles east of the north end of Kesteven Lake.

Cranbrook the nearest large town in the region is 85 miles to the southeast and Calgary lies about 100 miles to the northeast.

The town of Windermere is on Route 95-93 about half way between Golden and Cranbrook. Access to the Paradise mine is from Windermere ^{on the highway} via about twenty five ~~five~~ miles ^{by gravel road} to the east ~~for~~ a point six miles north of ~~into~~ highway through Athalmer and up Toby Creek. The gravel road passes the Paradise mill site at Jackpine Flat ~~is~~ twelve miles from Lake Windermere station. The mine is 7 1/2 miles from the mill.

PROPERTY AND OWNERSHIP.

The old property of eight crown granted claims was bought by Sheep Creek Gold Mines Limited in 1942. More recently Mr. J. A. C. Ross acquired these claims and his holdings now include twelve crown granted claims two surface land lots, which cover the old mill site & a Jackpine Flats tailings pond.

HISTORY.

Three mineral claims were located in 1899 on an impressive oxidized showing and development work started immediately. The 7800 level was started in 1903 and about 5000 feet of development work was completed and 2000 tons of ore removed when work stopped in 1906. Grade of ore shipped was 51 g Ag per ton and 59% Pb.

Ten years later the mine re-opened and during the following ten years 12,190 tons of ore was produced averaging 34 g Ag per ton and 36.5% Pb.

In 1926 the Victoria Syndicate of London England purchased the property from Mr. R. R. Bruce and development was carried out on the 7819 and 7900 sub levels and the principal ore zone was intersected on the principal 7800 level. A 50.75 ton per day mill began production in 1928 and was closed late in the year after 7600 tons of ore was treated.

In 1942 Sheep Creek Gold Mines Limited purchased the property. Drilling was carried out in 1943 and 1944 and a 50 ton per day mill was built at Jackpine Flats in 1948 and 1949. Operations continued from mid 1949
Mining & milling

until up to late 1952, when production curtailment in the Trail smelter and low metal prices faced a suspension of operations. Between May mid 1949 and 1952, 53,292 tons of ore was produced which averaged 4.89 g Ag, 4.81% Pb & 9.48% Zn.

During 1953 No. 2 winze (No. 2) was deepened (~~was~~) from the main haulage principal a 7800 level was deepened to 150' or 71 feet below the 7700 level. This level had advanced to 330' in from the portal and had disclosed an 80 foot length of ore. No mining was carried out until ~~1955~~.

The property was inactive until 1955 when 694 tons was mined by square set methods. Again from 1955-1960 nothing was done because of market conditions. In 1960 rehabilitation was carried out and 1100 tons of ore was graded 5.5 g Ag, 4.8% Pb and 8.2% Zn was mined from above the 7800 level, although some exploration work was carried out from the 7700 level.

From
~~Five~~ years later in 1964 another attempt was made to develop the property and several cuts were made along the outcrop of known orebodies during the summer of 1964 and 931 tons of ore was loaded and trucked by the Sheep Creek Mine Limited to their concentrator at the Mineral King Mine.

This is the last recorded activity at the property. Total production of the mine to 1952 is 71,247 tons averaging 10.3% Ag per ton, 11.5% Pb and 5.7% Zn.

GEOLOGY AND MINERALIZATION

The area in which the Paradise Mine is located is underlain by sedimentary rocks of the Mount Nelson formation of the Purcell series of Lower Cambrian age. These rocks are mainly argillaceous and calcareous sedimentary rocks that are contorted and folded. Within the predominant shales, slates, ^{quartzites} and ^{and} ^{illites} are occasional bands of limestones. ~~These~~ ^{Such} limestone bands are ~~relatively narrow and are the host rocks for the mineralization at the Paradise Mine.~~ Underlying the limestone are quartzites. All rock units are involved in folding and fracturing.

The ore is a relatively massive replacement in grey siliceous magnesian limestone. ~~near overlying slates.~~ All these rocks are involved in folding and fracturing. The ore zone is near the upper contact of the limestone with overlying slates and is found in fracture zones on the lower levels; it may be further localized by ^{strikes northwest} folding.

The main zone or series of orebodies strikes at 15° to 20° to the southwest and a second partly explored zone strikes at about 15° to the northwest.

Drifting has been carried out on this limestone-slate contact zone for about 2000 feet on the ~~principal~~ main haulage level ~~a~~ (7800) level. On this level the ^{main} ore-body is wide and irregular with most of the ore lying in a pool 70 feet long by 30 feet in maximum width. This ore lies 2000' in from the portal while ^{the} secondary

geology and mineralization

smaller zone was encountered about 175 feet in from the portal. Between these two ore zones a narrow zone of pyritic mineralization is followed for some 600 to 700 feet.

The ore is all of the replacement type although the nearest known intrusion is located ten miles to the northwest. This intrusion is ~~is~~ about ten miles in diameter and is of acid to intermediate in composition (granitic).

All ore at the Paradise Mine is oxidized and consisted typically of "sand carbonate" in which there was only a small proportion of galena in grains or nodules. Most of the iron and zinc appear to have been leached out. The ore was pocketly irregular and so soft that blasting was seldom required. The ground is much shattered and there are many clay slips in the ore; the overlying slate is schistose and requires heavy timbering.

The ore contains much pyrite in addition to galena and sphalerite. It is somewhat oxidized to the lowest known level down the No. 2 winze. Ore has been proved proven to a depth of 75 feet below the 7800 level but since that statement was made (B. C. Department of Mines, 1949) the winze ~~is~~ was sunk to 150' and some stoping has been carried out.

Verbal discussion with Dr. A. G. Pentland, who was Chief Geologist with Sleep Creek Gold Mines Ltd during the 1948-1953 production years, indicates that the ore zones did not appear to change with depth and that depth possibilities were in no way exhausted.

Selective mining by square set-cut and fill mining methods produced ~~grades~~ ^{ore} grades that averaged 4.59 g Ag per ton, 4.81% Pb and 9.48% Zn. There is no reason why substantial tonnages of this grade material cannot be found in depth.

It has not been determined. The ore controls regarding the main ore body have not been determined. The continuity over a distance greater than 1200 feet is impressive although the B. C. Dept of Mines bulletin for 1927 states that the ore on the 7819 level lay in a transverse fold of the limestones which dipped at 20° and raked to the west at 15-20°.

DEVELOPMENT →

The Paradise Mine has been developed by two main levels (7800 and 8000) and four sublevels (7819, 7900, 7919 & 8100) ~~total~~. The low level 7700 level is partially developed by 350' of drifting on the favourable limestone-shale ^{contact} near the main haulage portal and about 100' of lateral development below the No 2 wing.

The 7800 level (main haulage) is 2400 feet long (see fig 2) and all but about 100' is in barren limestone.

The 8000 level, which is 240 feet vertically above the 7800 level, is 900' long with about one third in ore grade material. Average width of ore is about 10 feet.

The principal ore shoot has been developed down the strike for 1200 feet. ~~Down~~ Exploration below the present levels will require in excess of 2000' (7700 level) of lateral drive.

PARADISE - 7800'

1928. - MOND NICKLE CO - Built mill

Mill feed 4.5 Ag, 4.5 Pb, 12% Zn.

Idle 1906-1915

1915 - pass 88

shipped 1901-1906 - 2000 tons - 51.4 Ag, 59.3 Pb

Shales, slates, argillites & occ. bands of limestone, all contorted
min bands replaced ls. zone or layer
2-6' wide -

Probably several parallel bands of replaced ls. in which the
"sand carbonate" ore occurs
general strike NW - dips 45° to flat.

No 1 tunnel is highest - a decline on the ore to No 2

No 2 tunnel - 125' below (vert) - hits ore at 500'
- 885' in average was sunk at 45° on ore for 180'

No 3 tunnel - 750' below #2 - 1800' long

1917 - 2000 tons shipped - 30 g Ag - 30 Pb.

Mill - 7 1/2 miles from mine at Jackpine flat on Toby Creek, 12 mi from
Tale Warden's station

Milling suspended in 1952, Dec.

1948 - Study by A. G. Pentland. - reopened the mine

PARADISE, - 7800'
New adit at 7700' level
drifting on 7930 sublevel and mill started

1949 Sheep Creek Gold Mine bought in 1942 and began production in 1949

1901 - 1st production

- 1901-1906

1906-1916 - idle

1916-1926 - 1200 tons

produced 34% Ag, 36.5 Pb.

Ore in grey siliceous magnesian limestone of Mount Nelson formation which is involved in folds truncated by the unconformably overlying ^{Toby} conglomerate, which in turn is folded and strongly cleaved

No 2 Winze sunk to 125'

7700 level driven to 330' in July.

PARADISE MINE - 50° S - 116 E

1929

7880' above sea level. - 19 Miles east of Windermere Lake
75" NW of Cranbrook in Purcell Mts

1926. 50-75 ton mill constructed
8400-8800'

1920.

1922 Ore on 3 level and up to 2 level.

Ore consists of soft sand carbonate - 1g Ag per 9. Pb
Several samples do indicate that mine average 42.5 Ag & 44g Pb.
700 tons of ore hauled - 18 miles to railway.

1925. Primary ore of this mine was undoubtedly a mixture of lead, zinc and iron sulphides and occurred as a replacement deposit in limestone between slate and quartzite. Subsequent movement crushed and sheared the vein matter, which then became subjected to the action of surface water, resulting in the leaching out of the zinc, most of the iron and leaving a residue called "SAND CARBONATES". During leaching, this material accumulated in pockets along the bedding planes, joint planes and in cross fractures forming irregular-shaped and disconnected ore bodies.

Between 3rd and 4th level - 24' wide - 12' of it assayed
14.3g Ag, 16.9 Pb, 23.2 Zn.

1927 - page C275 - ~~Memo Nickel~~ Co. Victoria Syndicate

50 ~~ton~~ concentrator operating under construction

New ore on 90' level above 7800' level - Length is 350'
with width of 10 feet. Ore body dipped at 20° - lay in a transverse fold which naked to the west

Mineral solution replaced a thin band of limestone and were controlled by a slate band under which the ore occurred.

~~Pat - Thurs -~~

Paradise.

Spice geol mapping

Geochem. as outlined

Open ~~at~~ 7800' adit. - examine old workings
geological mapping where sensible.

examine intermediate showings - sampling &
estimate. whats left

Pump out winze.

Test drill. below ~~at~~ winze level.

Spice drilling?

Upper portal.

Met work

In situ trenching re geochem results

Spice drilling re geochem results.

Spice drilling re winze ore.

Met work

X-cutting & drifting - N side or S side

+ U / ~~at~~ drilling

Check Shamrock 2, 3, Parupani, Old Crow etc.
"titles"

Check aerial maps re roads etc.