

NAME OF PROPERTY SALMON GOLD

OBJECT LOCATED - Upper Adit.

UNCERTAINTY IN METRES 300 Lat. 56°13'10" Long. 130°05'40"

Mining Division	Skeena	District
County		Township or Parish
Lot		Concession or Range
Sec	Tp.	R.

OWNER OR OPERATOR

DESCRIPTION OF DEPOSIT

The country rocks are crudely stratified Mid Jurassic green volcanic conglomerates and breccias with intercalated, thin, volcanic sandstones and tuffaceous bands. Bedding generally dips steeply and trends westerly, but the over-all rock structure has been truncated and obscured by the Summit Lake granodiorite stock, which outcrops 1/2 mile to the north, and by a local dyke swarm. The dykes have been divided into three local groups on the basis of composition and crosscutting relationships. The oldest are fine grained, dioritic, and resemble the Bear River Pass type, but at the mine have been called "green dykes". The younger dykes are porphyritic granodiorites which texturally and compositionally resemble the Premier dyke-swarm type. The youngest are typical lamprophyre dykes which cut all rock units.

A major fault which strikes north 35 degrees west and dips variably from 40 to 57 degrees southwestward can be traced for nearly a mile. The fault-scarp is well exposed on the north edge of the hanging glacier at an elevation of 3,500 feet. This fault is of economic importance because it cuts off mineralized

Associated minerals or products - Silver, lead, zinc, copper. see Card 2

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the 4,000 foot elevation on the west side of Summit Lake, some 19 miles north-northwest of Stewart.

The showings were staked in 1930 by Ted Morris and associates of Stewart as the Salmon Gold group of 26 claims. Some of the claims were reportedly a restaking of the old Columbia group, of which no record has been found. Crown-grants were issued for 15 claims, the Gold No. 11 (Lot 6270), Summit Lake Nos. 1-8 (Lots 6296-6301, 6405, 6406), and Prince Nos. 1, 2, 4-6, and Prince Fr. (Lots 6407-6412).

In September 1931 Premier Gold Mining Company, Limited optioned the property. Work by the company included open cutting, and 718 feet of diamond drilling in 12 holes; the option was dropped late in the year. Salmon Gold Mines, Limited was incorporated in June 1933 to acquire the property. The Consolidated Mining and Smelting Company of Canada Limited acquired an option on the property in February 1934 and during that and the following year carried out diamond drilling in several deep holes, one of which intersected good gold mineralization. The 3,600 level adit (upper adit), begun in 1936 to investigate the values found in drilling, was extended to a total of about 1,500 feet of drifts and crosscuts by 1939. The Consolidated Mining & Smelting Company dropped the option at the end of July 1939.

The owners transferred the property to a new company Morris Summit Gold Mines, Limited which they had incorporated in December 1945. Diamond drilling in 1945 and 1946 totalled 5,861 feet. During 1946 the lower adit (3,000 level) was begun at the 2,925 foot elevation, some 600 feet below the upper adit. The adit was driven westerly and southwesterly for 2,400 feet to the mineralized zone. Development work on the mineralized zone in 1947 and 1948 included about 1,300 feet of drifting, 359 feet of cross-cutting, and 190 feet of raising. About 1,600 tons of ore-grade material was broken in drifting on the veins. Underground diamond drilling during 1947 and 1948 totalled 10,484 feet. Work on the property ceased in 1949. Reserves in the A and B veins, over widths of 80 inches and 29 inches respectively, were estimated at 118,800 tons averaging 0.93 oz/ton gold (uncut), or 0.79 oz/ton (cut) (E.E. Harris, Oct. 1948 Rept. for Morris Summit Gold Ms L).

see Card 2

HISTORY OF PRODUCTION

Between 1981 and 1985, there milled 182,185 tonnes from which were recovered 3,017,000 grams of gold and 1,625,000 grams of silver. (BC Minfile 105 B-34).

MAP REFERENCES

- Geological Map of the Stewart Area, Sc. 1": $\frac{1}{2}$ mile, Fig. 3, Sheet C, Bulletin 58, British Columbia Dept. of Mines (see also Figs. 33 & 34).
- #Geology of northwestern side of Summit Lake, Sc. 1":1,050 ft., Fig. 1, Report of Minister of Mines, British Columbia, 1946, p. 64.
- Preliminary Map Granduc Area, (Geol.), Sc. 1":1 mile, British Columbia Dept. of Mines, 1956.
- Map 307 A, Portland Canal Area, (Geol.), Sc. 1":4 miles - accomp. Memoir 175.
- *Map 104 B, Iskut River, (Topo.), Sc. 1:250,000.
- Map 104 B/1 & B/2, Leduc Glacier, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR	DMacR	JL			
Date	03-79	08-79	09-81	10-90			

REFERENCES

- Reports of Minister of Mines, British Columbia:
 1930, p. 114; 1931, p. 47; 1932, p. 60;
 1933, p. 60; 1934, p. B 29; 1935, p. B 27;
 1936, p. B 58; 1937, p. B 41; 1938, p. B 24;
 1939, p. 66; 1945, p. 62; 1946, pp. 62-66 + ;
 1947, pp. 83-86; 1948, pp. 66-69 ++ ; 1949, p. 74.
- +++Grove, Edward W.; Geology and Mineral Deposits of the Stewart Area, British Columbia; Bulletin 58, pp. 140, British Columbia Dept. of Mines.
- Hanson, George; Portland Canal Area, British Columbia; Memoir 175, p. 167, Geol. Surv. of Canada, 1935.
- Galloway, John D.; Lode Gold Deposits of British Columbia; Bulletin 1, 1932, p. 40, British Columbia Dept. of Mines.
- Hanson, George; Bowser River Area - North Part of Portland Canal Area, British Columbia; Summary Report 1931, Pt. A, p. 20, Geol. Surv. of Canada.
- Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy; 1949, Investigation No. 2520.
- Mineral Policy Sector; Corporation Files: "Premier Gold Mining Company, Limited"; "Salmon Gold Mines, Limited"; "The Consolidated Mining and Smelting Company of Canada Limited" (AR's 1935-37): "Morris Summit Gold Mines, Limited"; "The Granby Consolidated Mining, Smelting and Power Company, Limited" (AR 1957); "Scottie Gold Mines Ltd."; "Northair Mines Ltd."; "Royal Scot Resources Ltd."
- Dickson, M.P. & Ash, W.M.; Report on the Stewart, B.C. Area Property of Scottie Gold Mines Ltd., 9/02/79, in VSE Statement of Material Facts, 4/06/79; and 21/11/79, in SMF 17/12/79.
- Geology, Exploration, and Mining, British Columbia Dept. of Mines; 1978, p. E 257.

NAME OF PROPERTY

SALMON GOLD

DESCRIPTION OF DEPOSIT (continued)

zones of current interest lying to the west, the continuations of which, east of the fault, have not been found. It is thought that the fault-displacement is very large, possibly measurable in miles.

Holes drilled from the surface and from the 3,600 level (upper adit) indicated mineralized zones, with erratic values in gold, which strike westerly and northwesterly and have steep dips. The exact location of the mineralized intersection is not known because the drill-holes, most of which were over 500 feet in length, were not surveyed, and, therefore, the correlation of the mineralized intersections, which are fairly widely separated, cannot be made with certainty.

Later development has exposed mineralized zones containing shoots of important gold mineralization below and south of those indicated by the earlier exploration. One of these shoots has been drilled below and above the 3,000 level (lower adit), on which it is exposed. A raise has been driven up in this shoot for a few feet, near its east end. The other shoots have not been developed.

The mineralized zones consist generally of a central zone, ranging in width from a few inches to several feet, surrounded by a zone in which iron sulphides replace the country rock for a distance up to several feet from the central zone. The central zone consists of a vein or veins of quartz and carbonate, some of which also contain a small proportion of the sulphides chalcopyrite, sphalerite, galena, and arsenopyrite, in massive pyrrhotite and pyrite. In the outer replacement zone the proportions of the iron sulphides are reversed, and pyrite is much more abundant than pyrrhotite.

Three mineralized zones which curve and branch are exposed on the 3,000 level. One drill intersection indicates another zone about 200 feet south of 3004 East drift. A fifth zone splits off the zone exposed in 3002 East drift, about 50 feet above the drift. The general trend of these mineralized zones is westerly to northwesterly, but some veins within the zones diverge slightly from the general trend. Widths up to 20 feet occur, although widths of 2 to 5 feet are most common.

Three vein sections, in drifts 3002 West, 3002 East, and 3004 East, were found to be of better than average grade. These sections are about 220, 90, and 100 feet in length respec-

continued reserse Card 2

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

In 1957 The Granby Consolidated Mining, Smelting and Power Company, Limited and Newmont Mining Corporation jointly purchased a controlling interest in Morris Summit Gold Mines, Limited.

D.A. McLeod & associates, of Vancouver, in October 1978 acquired an option to purchase the controlling interest held by Newmont and Granby (250,000 shares each) in Morris Summit Gold Mines, Limited. Bulk sampling was carried out at that time. The company name (Morris Summit) was changed in January 1979 to Scottie Gold Mines Ltd. Indicated, probable and possible reserves were estimated in February 1979 at 109,698 tons averaging 0.874 oz Au/ton (uncut & undiluted) (VSE SMF 4/06/79, Scottie GML).

Northair Mines Ltd. became a major shareholder and manager of the operation. Underground rehabilitation and exploration began in mid 1979 and the decision to proceed to production was announced in December of that year. A new access adit, collared at the 2,800' elevation at the north end of Summit Lake, was driven 7,700' to the mineralized zone and a raise put up to the 3000 level. A 200 ton per day mill was installed underground and milling began in September 1981. Reserves in all categories were estimated at 226,000 tons at 0.65 oz/t Au (Northern Miner, Dec. 25, 1980). During 1982-83, there was done geological mapping and sampling, trenching, ground and airborne geophysics, and 4,710 feet of diamond drilling in 19 holes. Operations ceased in February 1985 at which time there remained 132,306 tons at 0.56 ounce per ton Au. (Scottie Gold Mines Ltd. 1984 Annual Report). In 1987, the name of the company was changed to Royal Scot Resources Ltd.

DESCRIPTION OF DEPOSIT (continued)

tively. Assays across widths of from 6 to 127 inches gave values of from a trace to 4.82 ounces gold per ton and nil to 2.1 ozs silver per ton. The gold is erratically distributed and appears to be related to the pyrrhotite, though the amount of gold is not directly proportional to the amount of pyrrhotite.