GOLD

TERRITORY

PROVINCE OR PROVINCE OU TERRITOIRE

British Columbia

N.T.S. AREA 104 B/9RÉGION DU S N.R.C.

REF. AU 1 RFF

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

KAY (MacKAY) (UNUK) (VERNA D.)

OBJECT LOCATED - 22 Area (Emma adit). OBJET LOCALISÉ

Skeena

UNCERTAINTY 500 m FACTEUR D'INCERTITUDE Mining Division

Lat. 56°38'30"

Long. 130°26'50" Long.

Cassiar

District District

Division minière County Comté

Township or Parish Canton ou paroisse Concession or Range

Lot Lot Sec

Sect.

Tp.

Concession ou rang R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

Con . Stiking Silmer Std.

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The claims lie along part of an extensively altered and weakly mineralized area which stretches from Sam Coulter Creek on the south end of Prout Plateau to Olie Creek on the northeast. Prout Plateau is underlain largely by green, well-bedded volcanic sandstones, conglomerates, breccias, and lenticular pillow volcanic units. These rocks are part of a well-exposed Lower Jurassic sequence which dips easterly. Battleship Knoll and several other small ridges which form reddish weathering bluffs along the crest of Prout Plateau, consist of metasomatized volcanic conglomerates. Silicification and pyritization predominate with sporadic potash metasomatism.

On the claim group the workings expose altered and minerali zed volcanic breccia, deformed quartz boulder conglomerates, and sheared volcanic conglomerates and siltstones that form part of the northeasterly trending Lower Jurassic sequence. These units are individually lenticular and are extensively deformed in the Eskay Creek shear zone, which trends northeasterly across Prout Plateau.

see Card 2

HISTORY OF EXPLORATION AND DEVELOPMENT HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALFUR

This property is located at elevations of 3,000 to 4,000 feet on the west side of the Unuk River about 2 miles southeast of Tom MacKav Lake.

During 1932 prospectors T.S. MacKay, A.H. Melville, and W.A. Prout, of Stewart, flew into the area and were attracted by the heavily oxidized, vari-coloured knolls and domes on what is locally known as Prout Plateau; they staked the Unuk and Barbara groups, totalling 22 claims, and organized the MacKay Syndicate to explore the showings.

In 1933 the ground adjoining to the northeast was staked as the Verna D., Pawn, and S.K. Groups, totalling 16 claims, by Stewart prospectors who organized the Unuk Valley Gold Syndicate; open cutting was reported on these claims in 1934. Additional staking, both to the northeast and southwest of the above claim groups, was done in 1934 by prospectors A.R. Nichols and R. Wilson of Prince Rupert. Five groups, the Alone, Owl, Top, Gull and Sulphurettes, totalling 24 claims, were held under the name Sulphurettes Prospecting Syndicate; only superficial prospecting was reported on these claims.

Exploration work by the MacKay Syndicate in 1933-34 included trenching, and diamond drilling in 11 holes varying in length from 28 to 115 feet. Premier Gold Mining Company, Limited optioned the MacKay Syndicate property in May 1935 and the Unuk Valley Gold Syndicate property in May 1936. Work on the Unuk group included over 800 lineal feet of open cutting and 3,631 feet of diamond drilling. On the Unuk Valley group 1,500 lineal feet of open cutting and 427 feet of diamond drilling was done. The options were released in 1937.

The MacKay Syndicate and Unuk Valley Gold Syndicate groups were transferred to MacKay Gold Mines, Limited which was incorporated by T.B. MacKay & associates in October 1939; the company was financed by Selukwe Gold Mining and Finance Company Limited. During 1939-40 the company prospected the fault zone and drove an adit for 276 feet into a part of it where encouraging gold values had been found. The company charter was surrendered in July 1940.

Unuk Gold Mines, Limited was incorporated in August 1945 to acquire the property; T.S. MacKay was manager, Canadian Exploration, Limited optioned the property in 1946 and extended the adit to a length of 360 feet (on MacKay zone).

see Card 2

ISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

From 1.68 tons shipped from the property in 1971, 0.3 ounce old, 239 ounces of silver, 64 pounds of lead, and 94 pounds of inc were recovered.

A shipment to Trail in 1979 of 9.65 dry tons of ore yielded, 208 ozs gold, 84.9 ozs silver, with lesser amounts of copper, ead, and zinc (Stikine Silver Ltd. Application for Listing 4/81).

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Geology of MacKay Group, Sc. 1":1,500 ft. (approx.), Fig. 4, Report of Minister of Mines, B.C., 1953, p. 88.

Map 9-1957, Stikine River Area, (Geol.), Sc. 1":4 miles.

Eskay Creek Property (Location Map), Sc. 1:50,000 - accomp. Report by Harris, 1979.

Map 104 B/9, John Peaks, (Topo.), Sc. 1:50,000.

Geology of the Eskay property, Sc. 1.5 cm:100 m, Fig. 51, Geology in British Columbia, 1976.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par			DMacR	DMacR	DMacR	DMacR	JL
Date Date	12-68	10-73	-1-76	06-79	08-81	08-86	02-90

REFERENCES/BIBLIOGRAPHIE

Mineral Policy Sector; Corporation File: "Premier Gold Mining Company, Limited"; "annual reports 1934-37; "Stikine Silver Ltd."; "Consolidated Kalco Valley Mines Ltd."; "Consolidated Silver Butte Mines Ltd."; "Texasgulf Inc."; "May-Ralph Resources Ltd."; "Kerrisdale Resources Ltd."; "Calpine Resources Inc."; "Stikine Resources Ltd."

*Bacon, W.R.; Unuk River Area; Report of Minister of Mines, British Columbia, 1953, pp. 87-89.

Reports of Minister of Mines, British Columbia: 1933, p. 61; 1934, pp. B30-B33; 1935, pp. B9, B27; 1939, p. 65; 1946, p. 85; 1963, p. 10; 1964, p. 20; 1965, p. 44; 1967, p. 30.

Western Miner and Oil Review, Vol. 26, August 1953, p. 43.

++Grove, E.W.; Kay; Geology, Exploration, and Mining, British Columbia Dept. of Mines, 1970, p. 64.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1971, p. 36; 1972, p. 516+++; 1973, p. 499; 1975, p. E 182; 1976, p. E 182.

Phendler, R.W.; Report on the Unuk River Mineral Belt - in Kalco Valley Mines Ltd., Statement of Material Facts, August 29, 1973.

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Harris, C.R.; Report on Kay and Tok claims, 27/06/85 - in Kerrisdale Res L Statement of Material Facts, 29/08/85.

Geology in British Columbia; BCDM: 1976, p. 121.

Exploration in British Columbia; BCDM: 1982, pp. 383, 384.

George Cross News Letters: 1985, No. 87; 1986, No. 3, 41.

JL 10/90

GOLD

PROVINCE OR TERRITORY

PROVINCE OU TERRITOIRE British Columbia

N.T.S. AREA 104 B/9 RÉGION DU S.N.R.C.

REF. AU 1 RÉF.

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

KAY (MacKAY) (UNUK) (VERNA D.)

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

Mineralization found in the volcanic breccias, siltstones, and quartz boulder conglomerates generally consists of quartz stockworks with irregular gold— and silver—bearing sulphides. Vuggy quartz veinlets fill narrow, irregular fractures in the country rocks and form the small stockworks in which erratic sulphide—rich veinlets are localized. The metallic minerals recognized include chalcopyrite, tetrahedrite, arsenopyrite, galena, and sphalerite, as well as ubiquitous pyrite. Gold and silver values are variable and generally low.

Work to 1973 indicated 4 zones of mineralization, the MacKay, 22, 21, and 5 zones. The MacKay or North End zone has an indicated length of 220 feet, width of 46 feet, and grade of 0.12 ounce gold and 15.0 ounces silver per ton. On this zone MacKay Gold Mines drove the 276 foot adit in 1939. The 22 zone (Emma Creek zone) crudely parallels local stratigraphy and is largely confined to an irregular 50-foot-wide quartz pebble conglomerate member. Sulphide mineralization uncovered in 1971 and 1972 occurs as lenses which appear to be restricted to en echelon brecciated cobble or boulder units within the pebble conglomerate; three separate zones totalling about 1.000 feet in length are indicated. Early work on 22 zone indicated that the mineralization comprised isolated patches or stockworks of sulphide-bearing quartz veinlets or stringers. In 1971 one of the stockworks was opened to depth revealing massive sulphide mineralization. This material consists mainly of light to dark brown sphalerite and forms the matrix for the brecciated cobble and boulder conglomerate. Tetrahedrite is disseminated throughout the sphalerite and the massive sulphide lens is also cut by younger tetrahedrite-bearing quartz veinlets.

The 21 open cut zone, located 2,000 feet northeast of 22 open cut zone, as exposed by trenches is 200 feet long with an average width of 30 feet. Where cut by 2 drill holes 115 feet below surface the zone had an indicated width of 18.1 feet. The zone could contain a possible 50,000 tons averaging 0.10 ounce gold and 10.0 ounces silver per ton.

The No. 5 zone is located 900 feet south of 21 Zone.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

American Standard Mines Limited optioned the Canab and Canex groups in 1953. The two groups included some of the claims formerly held by MacKay Gold Mines, Limited as well as recent stakings by T.S. MacKay, T.S. McQuillan, and E. Kvale. Work on the property included trenching, and diamond drilling in 22 holes; expenses were shared equally with Pioneer Gold Mines of B.C. Limited and New York-Alaska Gold Dredging Corporation.

Western Resources Limited, incorporated in June 1963, acquired the Kay group of 36 claims covering the showings and during the year completed about 365 feet of drifting and cross-cutting in one adit. Canex Aerial Exploration L td. held an option on the claims in 1964 and completed 737 feet of underground diamond drilling in 6 holes. The company name, Western Resources Limited, was changed in November 1964 to Stikine Silver Ltd. During 1965 the adit (on 22 Zone) was extended to a length of 586 feet, 1,500 feet of trenching was done, and diamond drilling totalling 52 feet was done in 3 holes. Geological and geophysical surveys were made of the claims in 1967. Granduc Mines, Limited held an option on the property in 1970 and carried out geophysical and geochemical surveys. Stikine Silver carried out trenching, and mapping of the surface and underground workings, in 1971-1972.

Kalco Valley Mines Ltd. optioned the property in 1973, comprising 30 claims (Kay 11-18 and Tok 1-22). Surface geological mapping at 1":40 ft. and 983 feet of diamond drilling in 6 holes was carried. The option was subsequently given up.

Consolidated Silver Butte Mines Ltd. held the adjoining SIB 1-16 claims in 1973. Bulldozer stripping was reported. Texasgulf Inc. optioned the Stikine Silver and Consolidated Silver Butte properties in 1975. Work during 1975-76 included an electromagnetic survey over 13.5 line-kilometres, a magnetometer survey over 18 line-kilometres, and 380 metres of diamond drilling in 7 holes on May 11, 15, 16. Texasgulf dropped the option in 1978.

Reserves were reported in 1973 as an inferred 907,200 tonnes at 0.25 oz/t gold (British Columbia Dept. of Mines, Reserve Inventory).

HISTORY OF EXPLORATION AND DEVELOPMENT (continued) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

L.P. Industries Ltd. in May 1979 optioned from Stikine Silver Ltd. a $87\frac{1}{2}\%$ interest in the Tok 1-22 and May 11-18 recorded claims; the company name (L.P.) was changed in July 1979 to May-Ralph Resources Ltd. During 1979 the company carried out a geological survey of the property and shipped a few tons of high-grade ore.

In March 1980 May-Ralph assigned its rights in the option agreement (but retaining a 5% interest in net proceeds) to Ryan Exploration Company Ltd., a British Columbia incorporated subsidiary of United States Borax & Chemical Corporation, of Los Angeles. The Sib 1-16 claims, owned by Consolidated Silver Butte and covering the southern part of the property, were also optioned in 1980 to U.S. Borax. Work by Ryan in 1982-83 included geochemical silt and rock chip surveys, and 496 m of diamond drilling in 3 holes on No. 22 zone; the option was abandoned in 1983 and the property reverted to Stikine Silver; the company name was changed in January 1985 to Consolidated Stikine Silver Ltd.

Golden Coin Resources Ltd held an option on the property early in 1985 but no work was reported. Kerrisdale Resources Ltd optioned a 60% interest in the property in 1985 but dropped it in 1987. They carried out rock and soil geochemical surveys, prospecting and diamond drilled 2,041 feet in 5 holes. In 1988, Calpine Resources Incorporated optioned 50% interest in the property and carried out geological mapping, soil geochemistry and to the end of April 1989 diamond drilled 70 holes. These intersected up to 1.335 ounces per ton Au and 1.99 ounces Ag per ton over a length of 52.5 feet in the 21 Zone. Calpine earned 50% interest in the property at the end of 1988 and early in 1989, an airborne EM survey was carried out. There were outlined an estimated 2,800,000 tons of 0.23 ounce per ton Au and 3.34 ounces Ag per ton. (Northern Miner June 26, 1989), or 3,000,000 tons of 0.26 ounce per ton Au equivalent including 8% dilution of 0.015 ounce per ton Au. (Northern Miner June 26, 1989). Consolidated Stikine changed its name to Stikine Resources Ltd.