

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ BARNES LAKE (WW)

OBJECT LOCATED Syncline northeast of Barnes Lake.
OBJET LOCALISÉ

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|--------------------------------------|-------------|---|
| UNCERTAINTY FACTEUR D'INCERTITUDE | Lat. 49°27' | Long. 114°41' 40" |
| | Lat. | Long. |
| Mining Division Division minière | Fort Steele | District District Kootenay |
| County Comté | | Township or Parish Canton ou paroisse |
| Lot Lot | | Concession or Range Concession ou rang |
| Sec Sect. | Tp. Ct. | R. R. |

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The phosphate zone is an oolitic bed 0.9 to 1.2 m thick at the base of the Jurassic Fernie Formation. Cominco, in prospecting the synclinal structure in 1930 reported a showing of 2 feet of 66 per cent tricalcium phosphate ($\text{Ca}_3\text{P}_2\text{O}_8$) (Cominco Annual Report, 1930, p. 28).

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

In the Barnes Lake Area, some 28 km east-southeast of Fernie, phosphate is exposed in a small synclinal structure northeast of the lake, and on both side of the anticlinal Limestone Ridge, just west of the lake.

The Consolidated Mining and Smelting Company of Canada Limited (Cominco Ltd) carried out a widespread search for phosphate in the late 1920's and this area was prospected at that time.

The WW 1-110 claims in this vicinity were held by S.R. Dun in the period 1967-1977. Western Werner Oils Ltd under an option agreement carried out bulldozer trenching in 1967. Imperial Oil Limited, under a sub-option from Western Werner in 1968 carried out 641.5 feet of diamond drilling in 7 holes. Further work by Western Werner in 1969-72 included extensive bulldozer trenching, some 1 460 feet of diamond drilling in 16 holes. In 1975, a near surface refraction seismic survey was carried out over 1 line km.

Medesto Exploration Ltd in 1977 held an option on this ground and the nearby PH property; one rotary hole (13.5 m) was drilled on WW 85. Cochrane Oil & Gas Ltd optioned the property from Western Werner in 1978. Drilling totalling 36.7 : in 3 holes was done on WW 104 and the PH property.

HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

REFERENCES/BIBLIOGRAPHIE

Reports of Minister of Mines, British Columbia; 1967, p. 314;
1968, p. 324; 1969, p. 398; 1970, p. 504; 1971, p. 469;
1972, p. 605.

Exploration in British Columbia; BCDM: 1975, p. 202; 1977,
p. 254; 1978, p. 291.

Cominco Ltd - 1930 Annual Report.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 1154 A, Flathead (Upper Flathead, E_{1/2}), (Geol.), Sc. 1"=
1 mile, accomp. Memoir 336, Geol. Surv. of Canada, 1965.

Map 82 G/7, Flathead Ridge, (Topo.), Sc. 1: 50 000

REMARKS/REMARQUES

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| Comp./Rev. By Comp./rév. par | DMacR | | | | | | |
| Date Date | 10-87 | | | | | | |

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