**PROVINCE OR** TERRITORY

*TERRITOIRE* 

PROVINCE OU British Columbia

N.T.S. AREA 92 F/16 RÉGION DU S.N.R.C.

KEF. GE 1 RÉF.

## NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

LANG CREEK (GE)

OBJECT LOCATED - Drilled area on GE 56 claim. OBJET LOCALISÉ

UNCERTAINTY 500 m FACTEUR D'INCERTITUDE Vancouver Mining Division Division minière

Lat. 49°48'10" Lat.

District

Long. 124°23' Long. New Westminster

District Township or Parish Canton ou paroisse

Comté Lot Lot Sec

Sect.

County

Concession or Range Concession ou rang

R. Tp. R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

#### DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

A basin of thin-bedded carbonaceous Eocene sandstone and shale contains germanium-bearing seams up to 5 m thick. The germanium values are primarily contained in the vitrinite fraction of lignite lenses, which makes up 1 to 2% of the seam. Within the vitrinite, germanium is associated with iron and sulphur. Typical analyses of outcrops are 30 to 70 g/mt germanium, 15 to 20 g/mt gallium, and less than 10 g/mt indium.

Preliminary work on the kaolin deposit indicates that while the upper part is sedimentary in origin, there is also a significant thickness of kaolinized intrusive rock underneath.

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

The property is located at Lang (Wolffsohn) Bay, on Malaspina Strait, some 110 km northwest of Vancouver and 15 km southeast of Powell River. The showings are on the west side of Lang Creek, 1.5 to 3 km upstream from the highway.

Samples of Lang Creek coaly material were sent for analysis to the B.C. Dept. of Mines by Charles Fynney, of Powell River in 1949. Following the discovery of germanium in the samples the B.C. Dept. examined the showing near the Power Line about 1.5 km from the highway.

Taiga Mines Ltd staked the showings as the GE group (136 claims) in April 1958. Work in the 1958-61 period included bulldozer trenching, churn and diamond drilling in 15 or more holes, market and metallurgical studies. The drilling indicated an area 500' x 500' averaging 100 g/t over 6'; this would amount to 100,000 tons containing 10 tons of germanium (Northern Miner, October 1, 1959).

Fargo Oil Corporation staked the property in 1981. Bulk samples were taken for metallurgical tests; previous studies included work by the British Columbia Research Council in 1962, National Research Council of Canada in 1969 and Energy Mines & Resources (Canmet) in 1982. A pre-feasibility study was carried out by Wright Engineers Ltd in 1983. Further metallurgical studies have been carried out by Sumitomo Metal Mining Company, American Cyanamid Company and others.

The company name (Fargo Oil) was changed in 1986 to Fargo Resources Limited. Work in 1986 included a refraction seismic survey and 260 m of drilling in 9 rotary holes. In January 1987 a seismic survey was carried out adjacent to the previously drilled area. Drilling early in the year was done in 4 holes; the 4th hole, a step out about ½ mile west, discovered kaolin clay. Additional drilling in 24 holes expanded the kaolin zone. Late in 1987 Brenda Mines Ltd acquired a joint venture option to earn a 50% interest in the property. Additional work in early 1988 included resistivity and magnetometer surveys and 2000 m of drilling in 9 holes. Inferred geological reserves were estimated as 11,000,000 tonnes of primary white kaolin (George Cross Newsletter, 14/03/88).

# MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 1386 A, Fraser River, (Geol.), Sc. 1:1,000,000, Geol. Surv. of Canada, 1979.

Taiga Mines Ltd, drill holes & trenches, Sc. 1":600', Fig. 21, Report of Minister of Mines, 1959, p. 128.

Map 92 F/16, Haslam Lake, (Topo.), Sc. 1:50,000.

Lang Bay germanium prospect, Sc. 1.5 cm: 1 km, Fig. 40-1, Geological Fieldwork, 1985, p. 262.

## REMARKS/REMARQUES

# Comp./Rev. By Comp. /rév. par DMacR DMacR Date Date Date 02-87 06-88

#### REFERENCES/BIBLIOGRAPHIE

Reports of Minister of Mines, British Columbia: 1949, p. 218; 1959, pp. 127-130++.

Mineral Policy Sector; Corporation Files: "Taiga Mines Ltd"; "Brenda Mines Ltd.".

+Qveneau, P.B., Avotins, P.V., Farris, L.F.; Germanium Recovery from Fargo Oil's Lang Bay Property; CIM Bulletin, Vol. 79, No. 886, February 1986, pp. 92-97.

George Cross News Letters: 1986, No. 156, 217; 1987, No. 49, 80, 87, 170, 188, 214, 224; 1988, No. 33, 51.

Mineral Exploration Review; BCDM: 1986, p. 72; 1987, p. 73.

Exploration in British Columbia; BCDM: 1983, p. 212; 1985, p. 160; 1986, p. C188.

Geological Fieldwork; British Columbia Dept. of Mines: 1985, p. 261.

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