

**NAME OF PROPERTY**  
**NOM DE LA PROPRIÉTÉ**

**OBJECT LOCATED** - Trenching  
**OBJET LOCALISÉ**

**INCERTAINTY** 300 m  
**FACTEUR D'INCERTITUDE**

Lat. 52°24'25" Long. 119°09'  
Lat. Long.

Mining Division Kamloops District Kamloops  
*Division minière* *District*

County Township or Parish  
*Comté* *Canton ou paroisse*

Lot Concession or Range  
*Lot* *Concession ou rang*

Sec. Tp. R.  
*Sect.* *Ct.* *R.*

**OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT**

**DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT**

Carbonatite sill-like bodies occur in quartz-mica and hornblende gneisses of the Proterozoic Horsethief Creek Group. Two types of carbonatite occur. One is calcitic and contains variable amounts of olivine, magnetite, pyrochlore, apatite, zircon, and biotite or vermiculite. The second is dolomitic with amphibole, magnetite, apatite, pyrochlore, zircon, and columbite. Spectroscopic analysis indicated the presence of columbium (niobium) in all samples. Uranian pyrochlore and uranian columbite occur in places.

Vermiculite content ranges from less than 1 to more than 10 per cent; it occurs as isolated books in the carbonatite and as solid lenses up to 4 feet wide and 25 feet long at carbonatite-gneiss contacts. Apatite occurs as greenish-white grains that make up from 4 to 11 per cent of the carbonatites. Yttrium and lanthanum in amounts of less than 0.1 per cent occur in some samples.

Assays by the BC Dept. of Mines of samples which gave Geiger counter readings of 1½ to 2 times those generally recorded for the carbonatite were reported as follows:

p.t.o.

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

The property is located on the east side of the North Thompson River some 200 km north-northeast of Kamloops.

Showings of vermiculite were discovered in 1950 by the D.E. French family who staked the Verity 1-5 claims and carried out trenching. Subsequent prospecting resulted in the discovery in 1951 of radioactive carbonate rocks, and additional claims were staked adjacent (Counter group), and several miles to the east (Paradise group 83 D/6, Cb 2).

St. Eugene Mining Corporation, Limited optioned the property in the spring of 1952 and staked additional claims. Work in 1952-53 included geological mapping, prospecting and bulldozer trenching. A scintillometer survey in most cases produced counts of about 3 times background. Bulldozer trenching was also done on the Mill 1, 2 and 10 claims, located about 1 1/4 miles north of the Verity claims.

The Verity 1 and AR 1-4 (59 units) were owned in 1977-78 by John Kruszewski. Work included scintillometer prospecting, trenching and sampling.

Canada Rare Minerals Corp. acquired the property in 1987. Limited drilling on the property indicated more than two million tons of tantalum-and niobium-bearing material. (Northern Miner, April 27/87, p. 19).

## DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (cont.)

Width (inches)	Per cent				
	Nb <sub>2</sub> O <sub>5</sub>	U <sub>3</sub> O <sub>8</sub>	CaO	MgO	P <sub>2</sub> O <sub>5</sub>
A.....5	0.38	0.039	-	-	-
B.....60	0.37	<0.01	27.6	12.4	1.88
C.....39	<0.1	<0.01	36.8	5.7	2.75
D.....31	<0.1	0.33	42.4	4.7	2.02
E.....54	<0.1	0.017	-	-	-
F.....44	0.60	0.101	33.3	12.5	4.85

Hogarth (1961) reported an analysis of a sample showed 0.83 % SrO, 60.90 % Nb<sub>2</sub>O<sub>5</sub>, 6.55 % Ta<sub>2</sub>O<sub>5</sub>.

Carbonatite thicknesses of 30 metres have been recorded in drill sections.

## REFERENCES/BIBLIOGRAPHIE

- Reports of Minister of Mines, British Columbia: 1950, p. 229; 1952, p. 115; 1954, p. 111.
- Exploration in British Columbia; BCDM: 1978, p. 117.
- Rowe, R.W.; Niobium (Columbium) Deposits of Canada; Economic Geology Report No. 18, p. 31, Geol. Surv. of Canada, 1958.
- Hogarth, D.D.; A Study of Pyrochlore and Betafite-in The Canadian Mineralogist, Vol. 6, pp. 610-633, 1961.
- Dawson, K.R.; Niobium (Columbium) and Tantalum in Canada; Economic Geology Report No. 29, p. 71, Geol. Surv. of Canada, 1974.
- Pell, J.; Carbonatites and Related Rocks in British Columbia; Geological Fieldwork, 1984, pp. 84, 92, B.C. Dept. of Mines.

## MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 15-1967, Canoe River, (Geol.), Sc. 1": 4 miles, Geol. Surv. of Canada.

#Sketch map of the Verity property, Sc. 1": 3 700 feet, Fig. 3, Economic Geology Report No. 18, Geol. Surv. of Canada.

#Tape and compass survey on Verity claims, Sc. 1": 200 feet, Report of Minister of Mines, B.C., 1952, p. 116.

\*Map 83 D/6, Lempriere, (Topo.), Sc. 1: 50 000.

## REMARKS/REMARQUES

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