PROVINCE OR PROVINCE OU **TERRITORY** 

**TERRITOIRE** 

British Columbia

82 E/2 N.T.S. AREA REGION DU S.N.R.C.

REF. AU 10 RÉF.

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

SYLVESTER K

OBJECT LOCATED - sulphide zone. OBJET LOCALISÉ

GOLD

UNCERTAINTY FACTEUR D'INCERTITUDE Mining Division Greenwood

Division minière

District

District

Long. 118°36'15"

Similkameen

County Comté Lot

Township or Parish Canton ou paroisse Concession or Range Concession ou rang

Lat. 49°06'20"

Lot Sec Sect.

Tp.

R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

## DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

Palaeozoic rocks of the Knob Hill group, including chert, quartzite, and argillites are unconformably overlain by Triassic clastic, carbonate and tuffaceous units of the Brooklyn formation and cut by small diorite to svenite intrusives.

The sulphide zone appears to be concordant with transitional strata between Brooklyn limestone and sharpstone conglomerate. The zone has an average width of about 11.5' and strike length of 800'. Drilling indicates the mineralized zone is cut-off by a nearly flat fault structure about 100' below the surface; part of this structure is occupied by a complex of post-mineral volcanic dykes. The sulphide zone consists of massive to sub-massive pyrrhotite. pyrite and minor chalcopyrite carrying persistent gold values.

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

The Sylvester K claim is located at the 4,600' elevation on the north side of Twin Creek, 3 miles east of Greenwood. The Phoenix mine open pit, which closed in 1978, is located about a mile to the southeast.

In 1981 the property comprised 6 claims and fractions. the Sylvester K (Lot 2385), Sylvester K Fr. (Lot 2836), Timer Fr. (Lot 1705), Belmont Fr. (Lot 1422), Cimeron (Lot 980), and New York (Lot 901).

Initial exploration within these claims was limited to trenching and sampling. Some of the claims were Crowngranted in the 1898-1900 period; others were Crown-granted in 1915 and 1926. In later years the claims became part of the extensive holdings of the Granby Mining Companies Phoenix mine. Control of Granby's holdings passed to Noranda Mines Limited in 1980.

Kettle River Mines Ltd. in May 1981 optioned a 49% interest in the Noranda property from its wholly owned subsidiary Noranda Exploration Company, Limited. The company name Kettle River Mines was changed in July 1981 to Kettle River Resources Ltd. The company began a systematic program of exploration based on a stratigraphic and syngenetic model. Work in 1981-82 included geological mapping, sampling, a geophysical survey and trenching. This program led to the discovery of a massive sulphide zone on the Sylvester K claim in October 1982 through backhoe trenching of a VLF electromagnetic anomaly. Work in 1983 included further trenching and 6,724' of diamond drilling in 20 holes, Kettle thereby earning its 49% interest. The original discovery zone is estimated to contain 50,000 to 100,000 tons of 0.25 oz/t gold (Kettle River Res.L., Exploration Update, February 1986).

## REFERENCES/BIBLIOGRAPHIE

- Geological Fieldwork; British Columbia Dept. of Mines: 1983, pp. 7-14; 1985, pp. 45-48.
- Dawson, J.M.; Report on the Sylvester K property, 20/09/82 in VSE Statement of Material Facts, Kettle River Resources Ltd. 13/01/83.
- Mineral Policy Sector; Corporation Files: "Kettle River Resources Ltd.".
- George Cross News Letters: 1982, Nos. 199, 246; 1983, Nos. 34, 118, 150, 207.
- Exploration in British Columbia; British Columbia Dept. of Mines: 1982, p. 25.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES
Map 6-1957, Kettle River, (Geol.), Sc. 1":4 miles, Geol. Surv.
of Canada.

- Claim Map, Sylvester K property, Sc. 1:50,000, Fig. 279-2, Report by Dawson 20/09/82.
- #Geology and Self Potential Survey of the Sylvester K, Sc. 2.45 cm:100 m, Fig. 1, Geological Fieldwork, 1983, p. 9.
- \*Map 82 E/2, Greenwood, (Topo.), Sc. 1:50,000.

## REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR	DMacR			 
Date Date	12-85	03-88		L	

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