

NAME OF PROPERTY

HEK (LUCKY JOHN) (SIMPSON)
(EXCHANGE) (PASS CREEK)

OBJECT LOCATED

Lower showing - from
descriptive data.

UNCERTAINTY IN METRES

300.

Lat. 49°11'27"

Long. 118°27'50"

Mining Division

Greenwood

District

Similkameen

County

Township or Parish

Lot

Concession or Range

Sec

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The general geology is shown on Geological Survey of Canada Map 6-1957, Kettle River (East Half). The rocks are Permian (?) Anarchist sediments intruded by Lower Cretaceous (?) Nelson porphyritic granodiorite and granodiorite, which in turn are intruded by Paleocene (?) Coryell syenite, shonkinite, and pulaskite.

The principal showing is on the edge of the main valley at elevation 2,060 feet. A dark-grey crystalline fine-grained rock, micaceous but not noticeably foliated, containing finely disseminated pyrite and chalcopyrite is cut by, and included in, a fine-grained light-grey highly siliceous rock. Both are cut by fractures which are filled with iron oxides; rare fresh material in the fractures is quartz mineralized with pyrrhotite and chalcopyrite. Most fractures are fractions of an inch in width. Both rocks and mineralized fractures are cut by andesite dykes. The mineralized zone trends about east, is exposed for about 75 feet along strike, and is 40 feet wide. The north side is bordered by a coarse quartz porphyry which contains very

see Card 2

Associated minerals or products of value - Silver, copper.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the west side of the Granby River 11 miles north of Grand Forks. The showings are at about the 2,100 foot elevation on the north side of Pass Creek, near the junction with Glover Creek.

The first report of activity on the property was in 1896 when a number of claims were staked and development work carried out. Work to 1901 included a 20 foot shaft with a 10 foot drift on the Exchange group, and trenching on the Flying Cloud group.

The Exchange group was owned in 1928 by R. Simpson and associates, of Grand Forks. An old shaft was deepened to 45 feet and another shaft about 500 feet to the west was unwatered. Both shafts are said to expose massive pyrite and pyrrhotite. A trial shipment of ore was reportedly sent to the Granby smelter at Grand Forks. Further assessment work was reported in 1930. In 1939 the property was optioned by L.E. Hanley of Wallace, Idaho. Development work during the year included 370 feet of crosscutting, 286 feet of drifting, 10 feet of sinking, and a 6 foot raise. A total of 364 tons of ore were shipped to Trail. Operations ceased in September 1939.

Fento Mines Ltd. in 1966 held 170 claims and fractions including the Exchange, Lucky John, and FNO groups. Work during the year included geological mapping, magnetometer and induced polarization surveys over the Exchange 1, 2, 3, FNO 2, 16, 31, and Lucky John claims, trenching, and 1,050 feet of diamond drilling in 5 holes. Hole No. 2, near Glover creek, is reported to have cut 18 feet averaging 0.30 ounce gold and 3.75 ounces silver per ton, and 0.54% copper.

The showings were restaked as the HEK 1-3 claims by I. Wiebe in April 1974. Short reconnaissance magnetometer and electromagnetic surveys were carried out for Mr. Wiebe at that time. Further magnetometer and electromagnetic surveys, and 236 feet of diamond drilling in 4 holes was carried out in April 1975. The existing 3 claims were abandoned and the ground restaked as a 9 unit claim under the modified grid system.

Consolidated Boundary Exploration Limited optioned the property from Mr. Wiebe in August 1975.

120568

Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa.

Consolidated Boundary Expl. L.

HISTORY OF PRODUCTION

In 1939, 364 tons of ore were shipped from this property. From this ore 259 ounces of gold and 90 ounces of silver were recovered. (Report of Minister of Mines, British Columbia, 1939, p. 91).

REFERENCES

McKechnie, N.D.; Lucky John, Exchange; Report of Minister of Mines, 1966, p. 196. +
 Chang, W.B.; Geophysical Report KEK Mineral Claims; accomp. Consolidated Boundary Exploration Limited Statement of Material Facts, October 1975. ++
 Reports of Minister of Mines, British Columbia: 1896, p. 578; 1897, p. 596; 1898, p. 1128; 1901, p. 1065; 1928, p. 238; 1930, p. 227; 1931, p. 121; 1939, p. 91.
 Mineral Development Sector; Corporation Files: "Fento Mines Ltd."; "Consolidated Boundary Exploration Limited".

*Map 507 10 July 86 - of 400 ft. Inc.
 Geol. 1986; No. 137*

MAP REFERENCES

Map 6-1957, Kettle River, (Geol.), Sc. 1":4 miles.
 Map 8487 G, Grand Forks, (Aeromag.), Sc. 1":1 mile.
 #Map 82 E/1 W, Grand Forks, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR						
Date	2-76						

PRODUCT

GOLD

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 82 E/1

Card 2
REF. AU 5

NAME OF PROPERTY

HEK (LUCKY JOHN) (SIMPSON)
(EXCHANGE) (PASS CREEK)

DESCRIPTION OF DEPOSIT (continued)

little dark mineral; it is not mineralized. The quartz porphyry is intruded by white pegmatite. The relationship between the quartz porphyry and pegmatite and the andesite dykes is not evident.

..... The mineralization includes, in addition to the above minor sphalerite, tourmaline, and garnet.

About 500 feet from this showing, on bearing north 65 degrees west and 100 feet higher in elevation, is an exposure of similar rocks and mineralization but with fewer mineralized fractures. Rocks to the northward are also quartz porphyry. A fresh dark-grey syenite porphyry cuts across the westward strike of the zone.