

NAME OF PROPERTY

DAVIS-KEAYS, EAGLE-MIKE VEIN

OBJECT LOCATED - Eagle-Mike vein.

UNCERTAINTY IN METRES 300. Lat. 58°33'15" Long. 125°26'40"

Mining Division Liard District

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

DESCRIPTION OF DEPOSIT

The property is underlain by Precambrian strata of the Aida Formation that has been divided into three units, which from bottom to top comprise limestone and interbedded calcareous shale, dolomite and interbedded dolomitic shale, and calcareous shale with minor interbedded impure limestone. A large number of diabase dykes, ranging from a few to more than 300 feet wide, trend, for the most part, northeasterly and dip steeply or vertically. The dykes are characterized by a minimal amount of contact metamorphism of the surrounding sedimentary rock. The Precambrian strata are folded about axes that plunge gently southeastward. Most folds are concentrated in a northeasterly trending belt roughly 8,000 feet wide that crosses the property from southwest to northeast. This belt, though not particularly rich in diabase dykes, contains almost all the quartz carbonate veins known in the area. Nearly all these veins trend northeasterly parallel to the belt and dip vertically or steeply northwest, nearly perpendicular to the axes of the southeasterly plunging folds. Of all the veins discovered thus far in the

see Card 2

Associated minerals or products

HISTORY OF EXPLORATION AND DEVELOPMENT

The Eagle-Mike vein lies between elevations of 6,100 and 7,300 feet across a ridge at the head of a south fork of Yedhe Creek, a tributary of the Toad River about 100 miles west-southwest of Fort Nelson.

Two Fort Nelson prospectors, Harris Davis and Robert Keays, staked the showings and in June 1967 incorporated Davis-Keays Mining Co. Ltd. to carry out exploration work. Additional staking was done to a total of 398 claims in the Bonanza, Eagle, Lois, DK, Ger, and other groups. Work during 1968-69 was done in three adits totalling 8,048 feet of crosscutting, drifting, and raising. Underground diamond drilling was done in 16 holes totalling 3,478 feet on the Eagle vein.

In March 1970 a finance loan agreement was reached whereby The Dowa Mining Co., Ltd. of Tokyo, advanced Davis-Keays \$1,300,000 for exploration work and feasibility studies. Work during the year, mainly on the Eagle-Mike vein, included geological mapping, 12,878 feet of drifting, crosscutting, and raising on 3 levels, and 9,475 feet of underground diamond drilling in 34 holes. To date the Eagle-Mike vein had been explored underground over a vertical distance of 1,600 feet by a system of four levels, three sublevels, and a number of connecting raises. Reserves were estimated by MacDonald Consultants in a feasibility report of May 1970 as follows:

Proven	1,007,362 tons	at 3.56% Cu
Probable	562,322 "	" " 3.18% Cu
Possible	439,260 "	, no grade stated

(The Dickenson Group of Companies, AR 1970).

Kam-Kotia Mines Limited acquired a 20% interest in Davis-Keays through a stock purchase early in 1970. By an agreement of July 1970 Kam-Kotia acquired an option to increase its interest by way of financing further development work. Kam-Kotia assumed active management of the property on August 1, 1970. Work during 1971 included 1,452 feet of drift on the 5,950 foot level of the Eagle vein, and 872 feet of underground diamond drilling. Reserves were reported in June 1971 by Chapman, Wood & Griswold as follows:

Semi proven	1,233,700	at 3.43% Cu
Probable	142,000	at 2.92% Cu
Possible	750,000	grade undetermined

(VSE SMF 4/07/72, Davis-Keays Mining Co. L.) see Card 2 ..

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa

503371

HISTORY OF PRODUCTION

REFERENCES

+Sinclair, A.J. and Deraisme, J.; A Geostatistical Study of the Eagle Copper Vein, Northern British Columbia; The Canadian Institute of Mining & Metallurgy, Bulletin, Vol. 67, June 1974, pp. 131-142.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 51; 1970, p. 42; 1971, pp. 76-78 ++ ; 1972, p. 491.

Mineral Policy Sector; Corporation Files: "Davis-Keays Mining Co. Ltd."; "Kam-Kotia Mines Limited"; "Dickenson Mines Limited".

Western Miner, Nov. 1970, p. 28.

MAP REFERENCES

#Generalized Geology and Location Map in the Vicinity of the Eagle and Harris Veins, Sc. 1":1,900 ft. (approx.), Fig. 9, Geology, Exploration, and Mining, 1971, British Columbia Dept. of Mines.

Map 1343 A, Tuchodi Lakes, (Geol.), Sc. 1:125,000 - accomp. Memoir 373, Geol. Surv. of Canada, 1973.

*Map 94 K/11 W, Racing River, (Topo.), Sc. 1:50,000.

REMARKS

For other veins on the Davis-Keays property see: Cu 10 to 13 and PB 1.

Comp./Rev. By	DMacR						
Date	1-79						

NAME OF PROPERTY

DAVIS-KEAYS, EAGLE-MIKE VEIN

DESCRIPTION OF DEPOSIT (continued)

area, only the Eagle-Mike vein has been proven to contain economic copper mineralization. This structure has been traced for a horizontal distance of roughly 4,500 feet, and has been explored underground over a vertical distance of 1,600 feet.

The vein occurs in a tightly folded sequence of shale, limestone and dolomite of Late Precambrian age. Adjacent to the vein, these wall rocks have undergone various degrees of silicification and decalcification. Contacts between vein and altered wall rock are sharp.

Sulphides occur in both massive and disseminated form. Chalcopyrite is by far the most abundant (80 to 95% of total sulphides), with pyrite and negligible quantities of covellite being the only others recognized to date. Chalcopyrite is commonly present as massive patches of large anhedral grains. Less commonly, it forms a fine, fracture filling in the earlier-deposited pyrite. Pyrite forms small irregular masses or individual grains distributed unevenly throughout the vein. Covellite occurs sporadically throughout the mine in very minor amounts, principally as a thin rim around some chalcopyrite grains and along thin irregular fractures within pyrite grains. Small amounts of limonite are associated spatially with covellite. Oxidation at and near the surface, and along some fracture zones, has produced abundant limonite, malachite and azurite locally. The vast proportion of the vein, however, is essentially unoxidized. Gangue is principally quartz with lesser but variable amounts of carbonate.

The vein strikes approximately N36°E and dips steeply to the northwest. Dips are variable, averaging about 80 degrees in the upper part of the vein and about vertical in the lower levels. Local reversals of dip have been observed in the northern section of the lower workings.

Average vein width is about 4 feet, but considerable variation exists, mostly in the range of 1 to 9 feet giving the vein a complex lenticular form. Despite abundant post-ore faults, the vein is essentially continuous. Only two faults with significant lateral offsets (10 to 20 ft) are known.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

During 1972 diamond drilling was done in 10 holes totalling 9,108 feet on the Eagle and Bonanza claim groups. By 1976 the property had been reduced to 139 claims. Kam-Kotia held a 38% interest in Davis-Keays. The Dowa Mining Co. Ltd., which held a mortgage on the property, agreed not to foreclose for 5 years, with a 5 year extension under certain conditions.