

PRODUCT COPPER
PRODUIT

PROVINCE OR TERRITORY PROVINCE OU TERRITOIRE

British Columbia

N.T.S. AREA 103 P/12
RÉGION DU S.N.R.C.

REF. CU 4
RÉF.

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

VANGUARD

OBJECT LOCATED Copper showing Lat. 55°44'10" Long. 129°33'20"
OBJET LOCALISÉ Gold showing 55°44'25" 129°34'10"

UNCERTAINTY 300 m
FACTEUR D'INCERTITUDE

Mining Division Skeena
Division minière

District Cassiar
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

The showings occur in altered feldspar porphyry, which intrudes Jurassic Hazelton Group volcanics; the contact lies a few hundred feet northeast of the showings. Numerous shears in the intrusives strike northwestward. In places the shears are closely spaced, and some of the shear zones so formed are sparsely mineralized with pyrite and chalcopyrite. Two main showings, one known as the "Copper" and the other known as the "Gold", have been described. At the main "Copper" showing, in fault zones subparallel to the shears, are veins and lenses of mineralization composed of massive pyrite and chalcopyrite and minor amounts of quartz and barite. At the surface are several lenses of mineralization a few feet wide. These pinch in a distance of a few feet to widths of a few inches or are cut off by faults crossing them at low angles. In No. 1 adit a drift was driven 50 feet on a quartz carbonate stringer; in this distance it widens to a vein which is 6 feet wide and well mineralized. A sample across 70 inches in the drift face assayed: Gold, 0.01 ounce a ton; silver, 2.6 ounces a ton; copper, 7.9%. At the "Gold" showing the mineralization,

see Card 2

Associated minerals or products - Gold, silver.
Minéraux ou produits associés

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

A number of showings are located between elevations of 2,750 and 3,400 feet on the west side of Homestake Creek, 18 miles north-northwest of the community of Alice Arm. Two groups of claims have been located on the showings, the Vanguard, and, adjoining on the south, the Vanguard Extension. The main "Copper" showings are at about the 2,900 foot elevation; the "Gold" showings lie about 3,000 feet to the northwest at about the 3,300 foot elevation.

Four claims, the Vanguard, Nimrod, Mother Lode, and Nero were located on the showings in 1912 by Morris Petersen and the Strombeck Bros. Some work was done each year by the owners in open cuts and several adits. In about 1925 the "Gold" showing was found and surface work was done on it at that time. The Vanguard group, along with the Red Point, Copper Cliff, and Homestake properties, was bonded in 1926 by V. Spencer & Associates, of Vancouver for Dolly Varden Properties, Limited. Considerable work was done in crosscutting and drifting but the results were disappointing and the option was dropped at the end of the 1927 season. The Vanguard Extension claim group was located at about that time by Morris Petersen. Intermittent exploration and development work was resumed by the owners and continued through 1934. Further work was reported in 1947 and 1951 in driving a crosscut adit from below the "Gold" showing. Development work on the property at this time totalled about 600 feet of crosscutting and drifting in 5 or more adits; the main "Copper" showing has been explored by 3 adit levels; a short adit was driven on the Vanguard Extension group.

Canex Aerial Exploration Ltd. optioned the Vanguard group consisting of 8 claims, from M. Petersen of Alice Arm, one of the original owners of the property. During 1966 the company surveyed the old workings and carried out a program of geological mapping, electromagnetic surveying, and soil sampling. The option was subsequently given up. The owner, M. Petersen, extended an underground working 10 feet in 1968.

Six claims, the Vanguard, Nero, Nimrod, Mother Lode, Vanguard Extension, and De Milo were acquired in February 1980 from the Morris Petersen Estate by Caulfield Resources Ltd. Based on the 1966 surveys and general property examination it

see Card 2

Hanson, George; Portland Canal Area,
British Columbia; Memoir 175, p. 84,
Geol. Surv. of Can. 1935.

Reports of Minister of Mines, British Columbia:

1916, p. 83; 1918, p. 65; 1919, p. 56;
1922, p. 57; 1923, p. 57; 1926, p. 82;
1927, pp. 77, 396; 1928, p. 88; 1929, p. 87;
1930, p. 100; 1931, p. 38; 1932, p. 56;
1947, p. 95; 1951, p. 88; 1966, p. 42; 1968,
p. 58.

Mineral Sector; Corporation Files: "Caulfield Resources
Ltd.".

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

#Geology of Upper Kitsault Valley Area, Sc. 1":2,250 feet,
Fig. 1, Report of Minister of Mines, B.C., 1951, p. 79.
Map 1901, Upper Kitsault Valley, (Geol.), Sc. 1":3,000 feet -
accomp. Summary Report 1921, Pt. A, Geol. Surv. of Canada.
Map 307 A, Portland Canal Area, B.C., (Geol.), Sc. 1":4 miles -
accomp. Memoir 175.
Location of Mining Properties in Upper Kitsault Valley,
Sc. 1":5,000', Fig. 2, Summary Report, 1921, Pt. 8,
p. 14 A.
*Map 103 P/12, Hastings Arm, (Topo.), Sc. 1:50,000.

REMARKS/REMARQUES

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| Comp./Rev. By Comp./rév. par | | | DMacR | | | | |
| Date Date | 02-68 | 11-74 | 10-80 | | | | |

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| NAME OF PROPERTY NOM DE LA PROPRIÉTÉ | VANGUARD | HISTORY OF EXPLORATION AND DEVELOPMENT (continued) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR |
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DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)
 consisting of quartz, carbonate, and minor amounts of pyrite, chalcopyrite, galena and sphalerite, replaces intrusive rock and is without well-defined walls. Samples taken across the mineralization in the main open cut assayed from 0.14 to 2.79 ounces a ton in gold.

was estimated the two adits on the Vanguard claim contain 10,000 tons at 8.6% Cu, 4.1 ozs/t Ag, 0.07 oz/t Au (Caulfield Resources Ltd., Application for Listing, AL 133/80, July 25, 1980).