

NAME OF PROPERTY

DUCHESS

OBJECT LOCATED - adit.

UNCERTAINTY IN METRES 300.

Lat. 54°28'10" Long. 127°27'

Mining Division Omineca

District Range 5 Coast

County

Township or Parish

Lot

Concession or Range

Sec

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The country rocks in the area are flows and pyroclastic strata of the Hazelton Group, cut by numerous basic and acid dykes and locally strongly altered and mineralized. In the region north of Howson Creek, the strata dip to the south at moderate angles; to the south of Howson Creek, dips are easterly and generally somewhat steeper.

The Duchess vein, a northerly trending shear zone mineralized with chalcopyrite, pyrite, hematite, and quartz, is exposed at the upper portal. Tetrahedrite is also reported from the vein. The shear is localized near the contact between a fine-grained green epidotized andesite to the west and fine-grained purplish-brown to olive-brown tuff to the east. The width of mineralization ranges up to 12 feet. Highly broken and sheared, buff-coloured feldspar porphyry dykes cut the volcanic rocks and carry only very minor amounts of sulphides. A few feet above the upper portal, a narrow vesicular basaltic dyke parallels the vein and cuts through the middle of the mineralized zone.

see Card 2

Associated minerals or products of value - Silver.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the head of Howson Creek, 25 miles south-southwest of Smithers. The Duchess showings are at about the 5,300 foot elevation; the Countess showings are near the summit of the ridge about 1,800 feet north of the Duchess showings.

The Duchess and Countess claims were acquired in 1906 by Tel-Kwa Mines, Limited, and Crown-granted (Lots 1820 R. 5 and 1826 R. 5, respectively) in 1909. Development work to 1911 included open cuts and 108 feet of adit on the Duchess claim and open cuts on the Countess claim. In 1915 the property was optioned to the Jefferson-Dockrill Syndicate, which was financed by New York interests. Development work continued until 1917 when the option was given up. The workings at that time included a lower adit 60 feet long, and an upper adit, 167 feet above the lower, which was driven 253 feet and with crosscuts totals about 500 feet. The company charter was surrendered in 1932.

The Consolidated Mining and Smelting Company of Canada Limited optioned the property in 1928 and began extending the lower adit. Considerable exploration and development work was done before the option was given up in the fall of 1929.

Kennco Explorations, (Canada) Limited held the property in 1952 and carried out trenching and mapping.

Norcan Mines Ltd. in 1966 acquired the Duchess property as part of a group of 255 claims covering Howson Basin. Work during the year included geological mapping, geophysical surveys, and trenching.

Bethex Explorations Ltd. optioned the Norcan Mines property in November 1966. Work on the Duchess showings in 1967 included considerable trenching and diamond drilling; drill hole #3 reportedly cut 62 feet grading 1.84 ounces silver per ton and 3.97% copper. Further work by Bethex in 1967 included geophysical and geochemical surveys. The option was subsequently given up.

By an August 1970 agreement between Norcan Mines and Pathfinder Resources Ltd., Pathfinder acquired the right to earn a 50% undivided interest in the property prior to Sept. 30, 1971; the terms of the agreement were met and Pathfinder became the operator. The company name (Norcan) was changed in 1972 to Accent Resources Ltd.

120391*

HISTORY OF PRODUCTION

REFERENCES

Preto, V.A.G.; Norcan Mines Ltd.; Report of Minister of Mines, British Columbia, 1967, pp. 91-97.

Reports of Minister of Mines, British Columbia: 1906, p. 99; 1907, pp. 79, 275; 1910, p. 246; 1916, p. 125; 1917, p. 117; 1926, p. 138; 1928, p. 168; 1929, p. 169; 1952, p. 95; 1966, p. 92; 1968, p. 127.

Leach, W.W.; The Telkwa Mining District, B.C.; Summary Report 1906, p. 41, Geol. Surv. of Canada.

Leach, W.W.; The Bulkley Valley, B.C.; Summary Report 1907, p. 21, Geol. Surv. of Canada.

Mineral Policy Sector, Corporation Files: "Accent Resources Ltd."; "Bethex Explorations Ltd."; "Pathfinder Resources Ltd.".

MAP REFERENCES

Map 69-1, Smithers, Hazelton, and Terrace Areas, (Geological compilation), Sc. 1":4 miles, British Columbia Dept. of Mines.

Preliminary Map 44-23, Smithers, (Geol.), Sc. 1":2 miles, Paper 44-23, Geol. Surv. of Canada.

Map 5309 G, Thautil River, (Aeromag.), Sc. 1":1 mile.

#Norcan Mines Ltd., Sketch of mineralized showings and northerly trending faults, Sc. 1":2,270 ft. (approx.), Fig. 9, Report of Minister of Mines, British Columbia, 1967, p. 94.

*Map 93 L/6, Thautil River, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR						
Date	12-75						

PRODUCT

COPPER

PROVINCE OR
TERRITORY

British Columbia

N.T.S. AREA 93 L/6

- Card 2 -
REF. CU.3

NAME OF PROPERTY

DUCHESS

DESCRIPTION OF DEPOSIT (continued)

Faulting and shearing of pre- and post-mineral age is evident throughout the rock exposures created along the recent trenches and at the portals of the two adits. Approximately 180 feet east of the lower portal, along the bulldozer trail, a major shear zone trending north 30 degrees east and dipping very steeply is exposed. Low copper and silver values are reported from this zone by company officials. Approximately 500 feet west of the Duchess adits a major fault strikes north 10 to 15 degrees west and dips at approximately 70 degrees to the west. The fault is exposed along the bottom of a steep gully, where it is paralleled by a narrow basaltic dyke and is marked by discontinuous narrow zones of a bluish-grey breccia. A zone of quartz-garnet-epidote skarn extends from the west side of the gully eastward to the workings, and its easternmost exposures may be found at the west end of the upper bulldozer trench.

Evidence of post-mineral movement, possibly subsidiary to later movements along the northerly trending faults, is also found at the Duchess. Company officials report a fault which truncates the main lode 90 feet from the portal along the upper adit. This structure is reported to trend north 75 degrees west and to dip steeply south. Although company reports speak of solid sulphide mineralization between this fault and the portal, three inclined diamond-drill holes, driven in a northwesterly direction from points on the bulldozer trail a very short distance to the east of the portal and designed to intersect the vein a few feet below the floor of the adit, went well past the projected intersection and failed to encounter the lode. A sharp slip surface which trends north 50 degrees east and dips at approximately 45 degrees to the southwest is exposed a few feet west of the portal and probably represents a set of fractures which is responsible for some of the displacement of the mineralized veins.