NAMOOF PROPERTY

GROUSE (LEN) (D. and N.) (LAST CHANCE) (CORNUCOPIA)

OBJECT LOCATED - showing.

UNCERTAINTY IN METRES 100.

Lat. 54°34'42" Long. 126°44'18"

Mining Division Omineca

District

Range 5 Coast

County

Township or Parish

Lot

PRODUCT

Concession or Range

Sec

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT The rocks underlying the map-area belong mainly to the Hazelton Group. They consist of an assemblage of gently dipping resistant lavas and pyroclastic rocks exposed on the summit and north slope of Grouse Mountain plus scattered weaker sedimentary units found mainly near Coppermine Lake on the plateau area and locally west of McQuarrie Lake on the northeast slope. These beds are cut by a system of subparallel dykes representing a variety of compositions and possible ages. The Hazelton volcanic rocks are undivided in the map-area. They consist primarily of massive maroon and grey breccia and tuff deposits interspersed with a few greenish lava flows. A composition breakdown of the rocks based on arc fusion analysis shows 38 per cent basalt, 44 per cent andesite, 15 per cent dacite, and 3 per cent rhyolite. The rocks are never entirely free from the effects of cataclasis or alteration of some type. The most competent units are normally well jointed or cleaved and often display tectonic breccias of varying development in the vicinity of faults. The less completent facies are commonly foliated. see Card 2

Associated minerals or products of value - Copper, gold, zinc, antimony.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the 4,500 foot elevation on the northwest slope of Grouse Mountain, 15 miles southeast of Telkwa.

N.T.S. AREA

The showings were discovered and staked (2 claims) in 1925 by K. Nysven, J. Oakes, and J. Donaldson. Exploration work to 1929 was done in open cuts and a 49 foot crosscut adit. No further activity was reported until 1935 when J. Oakes discovered a new showing on the claims; the property at that time went under the names "Last Chance" and "D. and N." group. High-grade samples were shipped to the Provincial Government Sampling Plant at Prince Rupert in 1938 and 1940.

The showings were held in 1965 by Copper Ridge Mines Ltd. as part of a group of 150 claims; an electromagnetic survey was carried out during the year.

The Grouse 1-16 claims, a restaking of the showings, were owned in 1970 by A. L'Orsa, of Smithers. Work during the year included geological mapping and trenching.

Adams Resources Form (Braz 25/35, 14

120805

HISTORY OF PRODUCTION

During the period 1938-1940, 3 tons of ore were shipped from the D. & N. group. From this ore 366 ounces of silver, and 188 pounds of copper were recovered.

MAP REFERENCES
#Geology of the Grouse Mountain Area, Sc. 1":1,800 ft., Fig. 49, Geology, Exploration and Mining, 1972, British Columbia Dept. of Mines.

Geology of the Cornucopia zone, Sc. 1":230 ft., Fig. 55, Geology, Exploration, and Mining, 1972, p. 414, British Columbia Dept. of Mines.

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

Map 671 A, Houston, (Geol.), Sc. 1":4 miles (1942).
Map 5311 G, Quick, (Aeromag.), Sc. 1":1 mile.
*Map 93 L/10 E, Quick, (Topo.), Sc. 1:50,000.

REMARKS

| Comp./Rev. By | DMacR | | | |
|---------------|-------|--|--|--|
| Date | 12-75 | | | |

REFERENCES

Church, B.N.; Geology of the Grouse Mountain Area; Geology, Exploration, and Mining, 1972, pp. 397-417, British Columbia Dept. of Mines.

Reports of Minister of Mines, British Columbia: 1925, p. 141; 1926, p. 135; 1928, p. 169; 1929, p. 169; 1935, p. C 40; 1937, p. C 11; 1938, p. C 49; 1939, p. 99; 1940, p. 41; 1965, p. 74.

Geology, Exploration and Mining; British Columbia Dept. of Mines: 1970, p. 158.

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PROVINCE OR

TERRITORY

NAME OF PROPERTY

PRODUCT

GROUSE (LEN) (D. and N.) (LAST CHANCE) (CORNUCOPIA)

DESCRIPTION OF DEPOSIT (continued)

The products of partial or complete degeneration of the primary mineral component of these rocks (mainly feldspar, ferromagnesian minerals, and glass) are mica and clay minerals, chlorite, and fine iron oxide dust, carbonates, and less commonly epidote.

The sedimentary rocks comprise an assortment of grey and light brown volcanic wackes and siltstones with some intercalated tuff and breccia lenses. Conglomerates are less common as are shales and argillites; quartzites, cherts, and limy beds are scarce. The main panel of sedimentary rocks, near Coppermine Lake, dips gently to the south and appears to pass laterally into massive volcanic formations from which the clastics were probably originally eroded.

The intrusions on Grouse Mountain are essentially dyke-like bodies which strike north or northwest and dip westerly. Four possibly related varieties have been identified and mapped. These include two types of feldspar porphyry, a feldspar biotite porphyry and aphanitic basic dykes.

A large dyke found on the west side of the mountain is the most conspicuous. This is a bladed feldspar porphyry with exceptionally large plagioclase phenocrysts—some measuring as much as 4 centimetres long and one-half centimetre thick. A second large dyke parallels and locally cuts across the bladed feldspar porphyry. This younger intrusion is typically charged with randomly oriented tablet-shaped plagioclase phenocrysts averaging between 3 and 8 millimetres in diameter. A number of large dykes partially exposed in the central and northeast parts of the map-area are possibly kindred to the bladed and tablet feldspar porphyries. These are fresh rocks composed largely of varying mixtures of fine-grained alkali feldspar, plagioclase and biotite hosting very large poikilitic biotite plates, as much as 1 centimetre in diameter, and scattered smaller plagioclase phenocrysts. In addition to these intrusions, the area is traversed by numerous narrow aphanitic basic dykes. These are light grey in colour, granular in texture, and seldom more than 15 feet wide.

The Cornucopia zone comprises a number of small showings on the northwest slope of Grouse Mountain between 4,400 and 4,600 feet elevation. These consist of narrow silver-bearing quartz veins and breccias following joints and shears developed in an

continued above .

DESCRIPTION OF DEPOSIT (continued)

alternating sequence of dacitic volcanic rocks, siltstones, and argillites.

The principal mineralization is found in a steep northeasterly striking quartz carbonate vein adjacent to a dyke of intermediate composition. This was explored by an adit and surface trenching for a length of 200 feet. According to the Annual Report of the Minister of Mines for 1925 (p. A 140):

"The high-grade mineral occurs in a vein which varies in width from 6 to 15 inches and which shows in places grey copper, specular iron, and copper-stains. A sample of the best mineral showing assayed: gold, 1.7 ounces per ton; silver, 204 ounces per ton; copper, 6.5 per cent."

A grab sample of the vein taken by the writer in the vicinity of the portal assayed: gold, trace; silver, 6.2 ounces per ton; copper, 0.12 per cent; lead, nil; zinc, 0.04 per cent; iron, 4.96 per cent; antimony, 0.06 per cent. Another sample from an open cut on an apparent extension of the vein, about 300 feet southeast of the portal, yielded: gold, 0.05 ounce per ton; silver, 74.1 ounces per ton; copper, 1.44 per cent; lead, 0.06 per cent; zinc, 1.95 per cent; iron, 7.85 per cent; arsenic, 0.09 per cent; antimony, 1.00 per cent.

Additional mineralization is exposed in a bulldozer trench about 400 feet southwest of the portal. This is a northerly trending zone of shattered siltstone cemented by milk quartz with accompanying pyrite and argentiferous tetrahedrite. Two similar but poorly exposed occurrences are found in altered dacitic tuff and carbonaceous shales near a small swamp at the base of a steep slope about 600 feet northwest of the portal. The average assay of three grab samples from the breccias is: gold, trace; silver, 16.5 ounces per ton; copper, 0.25 per cent; lead, 0.18 per cent; zinc, 0.50 per cent; iron, 4.06 per cent; antimony, 0.14 per cent.