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REPORT *936/10*
ON
THE GROUSE MOUNTAIN PROPERTY
OMINECA MINING DISTRICT
FOR
RAINSTORM EXPLORATION LTD. (N.P.L.)

by
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INTRODUCTION

The property of Rainstorm Exploration Ltd. (N.P.L.), situate ten miles north of Houston, B. C., is comprised of 54 mineral claims. The area has long been known to contain copper-bearing veins, but much of the earlier work was done on adjoining ground. The claims are underlain by Hazelton volcanics and sediments locally intruded by diorite and monzonite dykes. Narrow veins containing values in copper and silver occur in both volcanics and tuffaceous sediments. An extensive, but generally thin layer of overburden covers much of the claims area.

The program outlined herein is designed to test the property for the presence of larger and more persistent vein structures and/or stratiform deposits.

LOCATION AND ACCESS

The claims are located on the northern and northwestern slopes of Grouse Mountain (lat. $54^{\circ} 34'$ N, long. $126^{\circ} 42'$ W), approximately 10 miles north of Houston, B. C. The elevation of the claims varies between approximately 3,200 and 5,100 feet above sea level.

Access is by 4 miles of unimproved road from Highway 16 to the Rainstorm area in the central claims. An additional 1 mile of poor road leads to the Smithers and Last Chance workings.

HISTORY AND DEVELOPMENT

Copper mineralization was first reported from Grouse Mountain in 1914. Between 1915 and 1937 a number of small prospect pits and $\frac{3}{2}$ small adits were put in on mineralized outcrops within the claims area.

Seventeen of the claims within the area of this report have been held since the mid-1960's by Messrs. Mel Chapman and Cliff Delage, both of Smithers, B. C. Additional claims were staked here in 1969 by Mel Chapman and A. L'Orsa, of Smithers.

During the period 1915-1930, attention was mainly directed toward the Copper Crown, Ruby, Eureka and Lakeview crown-granted claims (See location map) currently held by Copper Ridge Mines Ltd. upon which it is reported that approximately 3,700 feet of development work was done. By 1953, 14,317 feet of diamond drilling on the crown grants outlined approximately 233,000 tons of mineralized rock grading 4.25% Zn, 0.31% Cu and 0.73 oz./ton Ag.

GEOLOGY

General Geology. The general area of Grouse Mountain is underlain by volcanic and subsidiary sedimentary rocks assigned to the Hazelton Group.

The volcanic rocks range in composition from andesite to rhyolite and include flows, tuffs and volcanic breccias. The sedimentary rocks

comprise fossiliferous water-lain tuffs, argillaceous rocks, sandstone and minor limestone, and are believed to represent a part of the middle division of the Hazelton Group.

A few dioritic to monzonitic dykes have been observed on Grouse Mountain and a mineralized granitic stock outcrops on the west side of Mineral Hill 2-1/2 miles southwest.

Major fold axes and most major faults strike northwest, although a few large northeast striking faults are observed or suspected in the general vicinity.

Property Geology. A preliminary examination indicates that the most abundant rock types in the central claims are tuffs, including rhyolite tuffs and thin bedded water-lain tuffs, some of which are fossiliferous. Minor limestone and argillaceous rocks are also present. Andesitic rocks appear to predominate in the northern claims.

The rocks strike generally westward in the central claims and dip mostly to the south. In the northern claims strikes are to the northwest, in accordance with the regional trend.

Several dioritic to monzonitic dykes outcrop within the claims, the largest of which is a diorite porphyry with conspicuous plagioclase phenocrysts up to 2 inches in length. The width of the dyke is unknown, except that it exceeds 50 feet and might reach 200 feet.

Small, steeply-dipping, west-striking faults are common locally and some of these faults carry sulphide mineralization.

Mineralization. Chalcopyrite, sphalerite, galena, tetrahedrite, greenockite and pyrite occur associated with quartz and minor calcite in bedded tuffs in the central and eastern claims. On the northern claims a tetrahedrite vein is exposed in andesite and minor bornite is found in rhyolite.

The various mineral occurrences are outlined individually below (see location map).

Rainstorm Area. This area embraces the known mineralization in the central claims. Galena, sphalerite, chalcopyrite, greenockite and pyrite are found in northeast-striking quartz veins in tuffs and fossiliferous tuffs with minor disseminated sulphide minerals in the wallrock.

Individual veins appear to be discontinuous and rarely exceed 1 foot in width.

In one instance a mineralized width of 23 feet has been reported (Minister of Mines Report, 1926, p. A135).

Chalcopyrite and other sulphide minerals have been exposed along strike of the tuffs in scattered prospect pits from the western part of the Smithers #5 claim to North Lake, a distance of about 3,200 feet. Most of the area is covered by shallow overburden.

Two samples were taken on the Rainstorm group:

	<u>Ag</u>	<u>Cu</u>
(1) Composite of mineralized material from 4"-9" vein	3.2 oz.	3.21%
(2) Chip across 8" vein by road	14.8	6.99

East Lode

Rum Claims. On the eastern slopes of Grouse Mountain and approximately 3,300 feet northeast of the most easterly Rainstorm prospect pit, several old pits and cuts have exposed chalcopyrite, pyrite and minor sphalerite in rhyolitic rocks. Some argillaceous outcrops were noted nearby.
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One heavy chip sample was taken across a rather indefinite mineralized zone approximately 30" wide which assayed .44 oz Ag and 1.10% Cu.

Hidden Treasure. Approximately 1,500 feet west of the Rum showings, an adit 45 feet in length has been driven on a lenticular quartz vein containing shoots of galena, chalcopyrite, sphalerite and pyrite.

The mineralized zone attains a maximum width of 5 feet but lenses out or is faulted off within 30 feet uphill. The host rocks are fine-grained tuffs, calcareous in part. Hematitic tuffs are exposed nearby.

A galena-rich grab sample from this zone assayed tr Au, 5 oz/ton Ag, 1.5% Cu, 24% Pb and 11% Zn. A grab sample containing chalcopyrite and pyrite assayed tr Au, 1.6 oz/ton Ag and 4.3% Cu. (Minister of Mines Report 1928, p. C169).

Last Chance . On the north end of Grouse Mountain at 4,500 feet elevation a quartz vein containing tetrahedrite and chalcopyrite is exposed in a 40 foot long adit and several trenches along a strike length of 300 feet. The vein strikes north and is generally less than 1 foot wide. Andesite is the host rock. This prospect is approximately 1 mile north of the Rainstorm showings. The writer did not see this showing.

The following assays are from the Report of the Minister of Mines, 1937, p. C11.

<u>Width</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>	<u>% Cu</u>
9", composite over 18' lgth.	0.035	44.0	1.0
6", " " 24' "	0.04	30.2	0.8
3"	0.33	312.0	4.0
6"	0.06	97.8	2.0

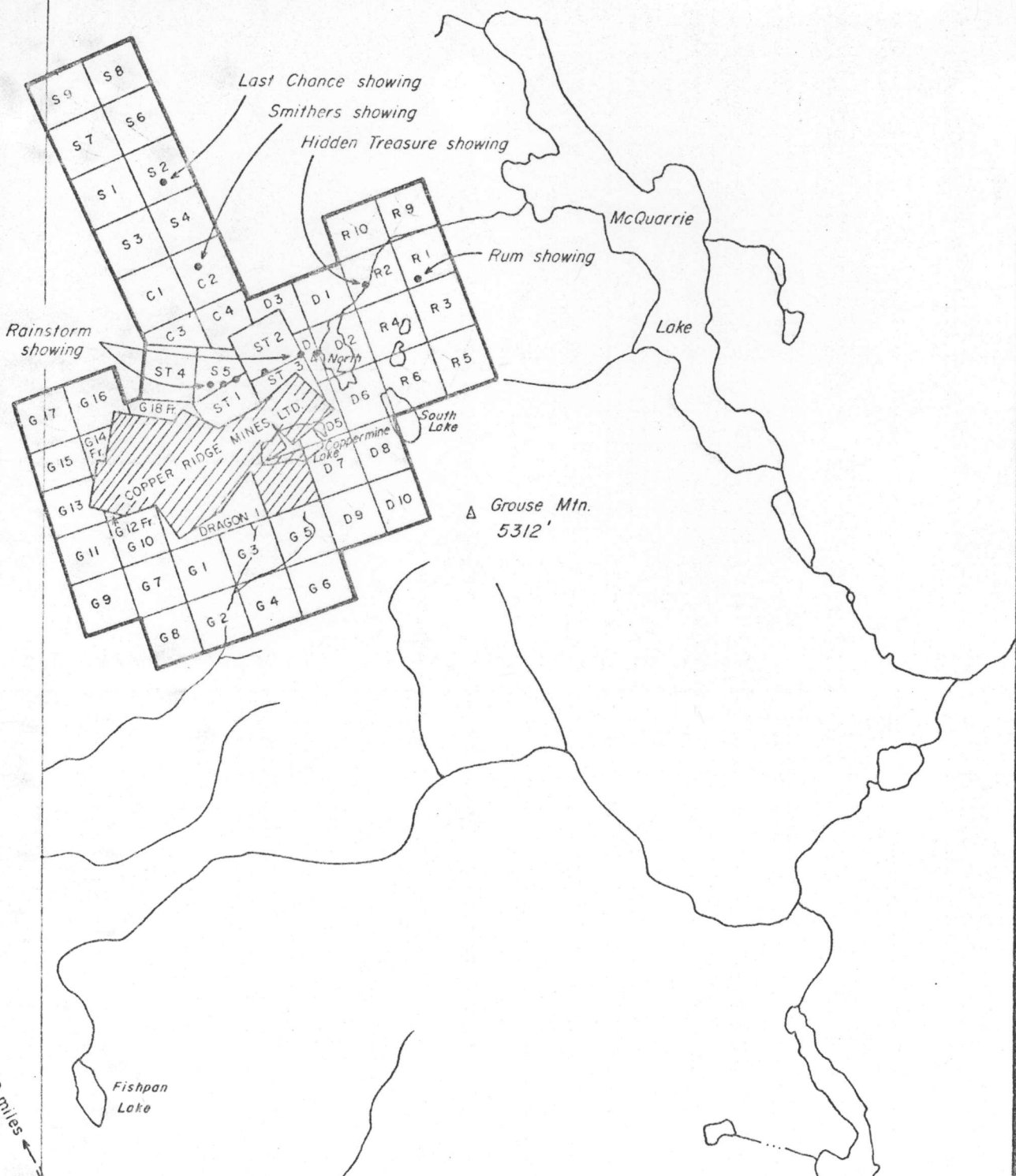
Smithers Claims. Approximately 3,000 feet north of the Rainstorm pits, minor bornite occurs as disseminations in slightly sheared pink to pale grey rhyolite within 20 feet of an inferred contact with hematitic tuffs. 150 feet east of this occurrence, brecciated rhyolite samples piled beside an old caved-in prospect pit carry small amounts of galena, sphalerite and chalcopyrite.

REFERENCES

British Columbia, Annual Reports of the Minister of Mines
for the years 1952, 1951, 1937, 1928 & 1926.

Carter, N. C. & Kirkham, R. V., 1969, Geological Compilation
Map of the Smithers, Hazelton & Terrace
Areas: B. C. Department of Mines &
Petroleum Resources, Map 69-1.

L'Orsa, A., 1967, Rainstorm, Hidden Treasure, Last Chance &
Smithers. Prospects on Grouse Mountain,
Houston, B. C.; Unpublished report for Texas
Gulf Sulphur Co. Inc.



SMITHERS - 29 miles

56°30'

126°45'

CLAIM GROUPS

- G - GROUSE
- S - SMITHERS
- ST - SILVER TIP
- C - CHIEF
- D - DOME
- R - RUM

MacDonald Consultants Ltd.		CLAIM MAP
RAINSTORM EXPLORATION LTD.		
SCALE	1" = 8 mi. (1:50,000)	
DRAWN	ghs	
DATE	Feb. 23/70	
NO.	221-37-2	