

3378

92E/11E

GEOLOGICAL SURVEY

HY 50-64 CLAIMS

KAMLOOPS M.D.

121 - 51 NE

2-9-71 : 26-9-71

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3378 MAP.....

For:

Q.C. EXPLORATIONS Ltd. (N.P.L.)
Vancouver, B.C.

By:

ALLEN GEOLOGICAL ENGINEERING LTD.
303 - 325 Howe Street
Vancouver, B.C.



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✓ G-1 : Geology

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GEOLOGICAL SURVEY

HY 50 - 64

2-9-71 - 26-9-71

INTRODUCTION

The claims area has been investigated by magnetometer and geochemical surveys over a grid system.

Using the surveyed grid as a control, traverses were made over most of the property and outcrops observed and mapped by the writer. This was carried out intermittently from September 2 to 26th., 1971.

Cache Creek was used as a base and travel to the property was by automobile via the Bethlehem road.

LOCATION AND ACCESSIBILITY

The claims area lies on the westerly slopes of Glossy Mountain eight miles southeast of Ashcroft.

Access is by secondary roads which branch northerly off the Bethlehem highway onto Glossy Mountain. Much of the area has been logged, and there is a network of old secondary roads on the southerly part of the property.

West longitude $121^{\circ}-12'$ and north latitude $50^{\circ}-40'$ may be considered the geographic location.

PROPERTY

The Q.C. Explorations property is composed of the following adjoining located mineral claims:

HY 50-64 inclusive

Tag numbers, 86860 M - 86874 M inclusive

Record numbers, 85989 R - 86003 R inclusive

Recently staked claims include the following which lie on the southerly boundary.

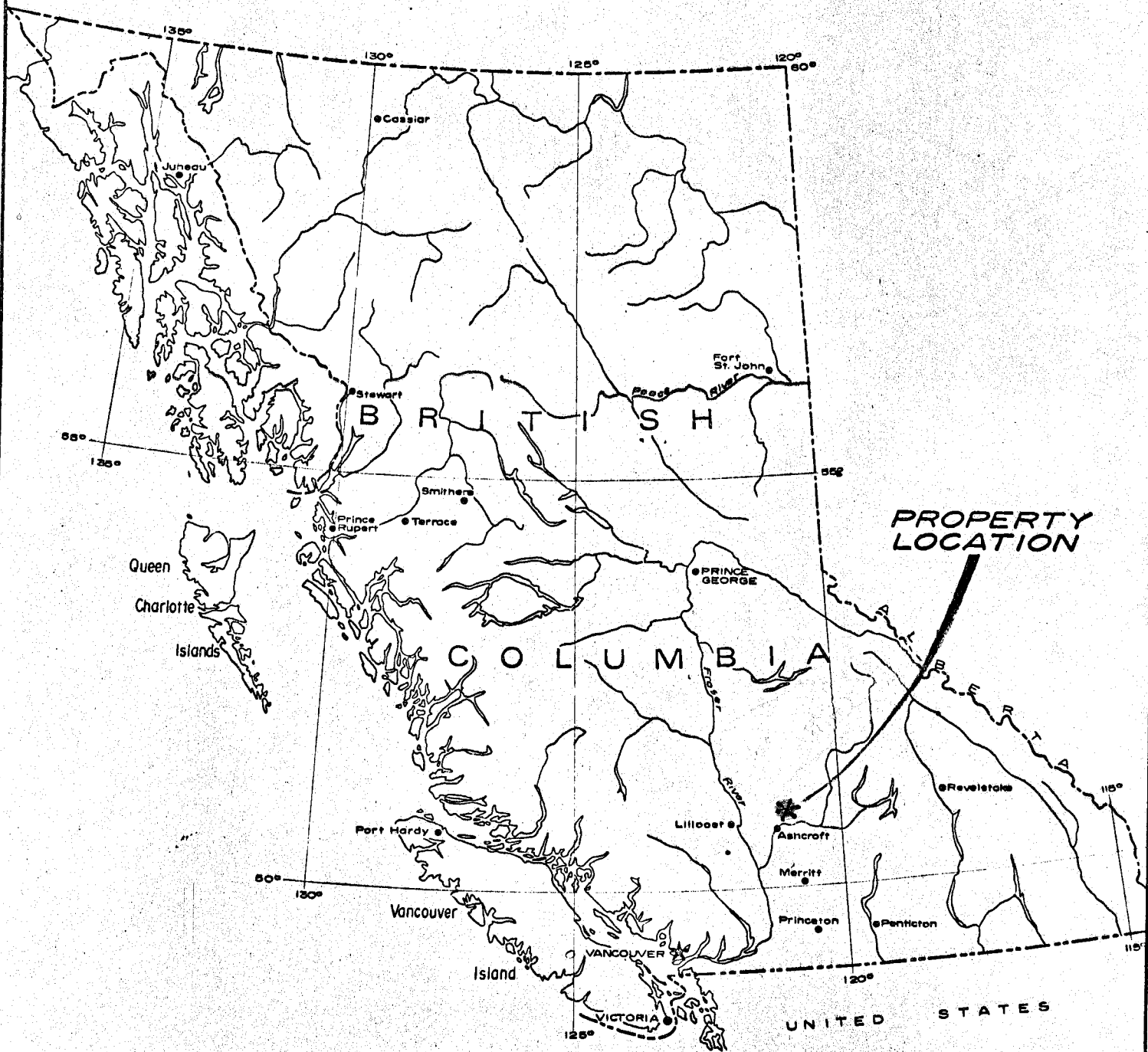
HY 65-70 inclusive

TOPOGRAPHY

The claims are located on the west side of Glossy Mountain, one of the highest mountains in the Highland Valley area. There is a flat, broad ridge extending west from the top of Glossy Mountain. The claims extend north from this and swing to the east on the north end of the property.

There are rocky ridges on the easterly side of the property which, to the west, and lower down the slopes, give way to open grassy areas and stands of scattered pine and light underbrush.

Elevations range from 5,000 to 6,000 feet above sea level.



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Q.C. Explorations Ltd. (N.P.L.)	
LOCATION MAP	
SCALE 1"=136 Mls.	
Drawn by ALTAIR	Date OCT. 1971
Checked by A.A.	Dwg. no. L-1
<i>Alfred R. Allen</i> ALLEN GEOLOGICAL ENGINEERING LTD.	

GEOLOGICAL SURVEY

A 400 by 100- foot grid has been established over the property. Using this as a control, the claims area was closely traversed by the writer.

Pace and Brunton compass traverses were made between and across many of the grid lines.

Trenching to bedrock on the HY 61 claim provided valuable information.

The grid, traverses, and geological data acquired are shown on the accompanying map.

SURVEY RESULTS

The HY 50-64 claims are on the west side of Glossy Mountain.

Exposures of granodiorite, quartz diorite and related dykes occur on the property. A band of the igneous rock extends northerly for the length of the property. It is 0.8 miles wide at this location, and is flanked on the east by older Nicola volcanics and on the west by Upper Jurassic shale, conglomerate and sandstone.

The only exposures on the HY 50-64 claims area, however, are igneous intrusives of the Guichon Creek batholith.

An average description, from megascopic examination is as follows:

Light grey holocrystalline medium-grained quartz diorite

Quartz approximately	20%
Orthoclase approximately	10%
Plagioclase approximately	48%
Ferro magnesian approximately	20%
Accessory approximately	2%

The quartz is in clear glassy irregular grains. The orthoclase is flesh to light-grey with some pinkish tinting at isolated locations.

The plagioclase is grey and angular.

The ferro magnesian minerals are biotite and hornblende with minor augite.

The accessory minerals appear to be chiefly magnetite and sphene.

Fracturing is evident but not strongly developed. One persistent fracture pattern is flat to 20° northwest. There are others at 130° and 50° to 70° northeast, 170° and 50° westerly, north and vertical and east and 70° to vertical.

On the HY 56, 57 and 58 claims, there are strong shear zones trending easterly and vertical. These are up to 30 feet wide. The rock is light grey, fine-grained and schistose. The mafic minerals are absent. The feldspars are fractured and rounded. The matrix is soft and greenish in colour.

On the HY 57 claim there is an easterly trending dyke up to 20 feet wide. It is a fine-grained light grey rock, compact and siliceous. It appears, by megascopic examination, to be felsitic. In and near it are narrow-fine fractures with a dark grey to black very fine-grained siliceous filling. There are minor scattered flakes of biotite and phlogopite.

Trenching on the HY 61 claim has recently exposed altered igneous rock. It is darker than the quartz diorite and strongly sheared and banded. There is an abundance of fine-grained biotite, augite and chlorite. Fracture fillings appear to be mainly very fine chlorite and calcite. There is magnetite in widely scattered grains, and very finely disseminated pyrite. Malachite staining is evident in some of the calcite-filled vuggy fractures.

Although the southern and most northerly parts of the claims area are completely covered with overburden, the central eight claims are known by outcrop evidence to be underlain by Guichon Creek quartz diorite. This is the hybrid peripheral phase of the batholith. The extent of the zone of alteration partially exposed on the HY 61 claim by trenches is not known. So far as copper and molybdenum mineral potential of the property is concerned, the importance of the altered zone is considerable, and additional exploratory work should be concentrated in this area.

SUMMARY AND CONCLUSIONS

The HY 50-64 claims are located in an accessible area of the Western Highland Valley copper-molybdenum mining region. The property lies over a wide band of Guichon Creek quartz diorite. Younger dykes and fracturing and shearing are evident within the quartz diorite. More important, recent trenching has exposed an altered zone on the HY 61 claim which contains signs of metallic mineralization. Very finely disseminated pyrite and copper stain have been noted in this rock.

It is concluded that the property warrants additional investigation. Geophysical work followed by diamond drilling is recommended.

RECOMMENDATIONS

It is herewith recommended that the following field programme be carried out on the HY 50-64 claims.

	<u>Estimated costs</u>
1. Conduct induced polarization surveys over selected areas of the property,	\$ 8,000.00
2. Diamond drill as indicated by geophysical results, 400 feet,	5,000.00
3. Office, overhead and supervision,	1,500.00
4. Contingencies,	500.00
Total estimated costs,	\$15,000.00

The recommended work should not require more than two months to complete.

Respectfully submitted,
ALLEN GEOLOGICAL ENGINEERING LTD.
Per Alfred R. Allen P. Eng.
Alfred R. Allen

Vancouver, B.C.
November 3, 1971

REFERENCES

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Cockfield, W.E., G.S.C. Mem 249

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Northcote, K.E., B.C. Dept. of Mines, Bul. #56, 1969

Carr, J.M., B.C. Dept. of Mines, Ann. Reports 1960 & 1962

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Alfred R. Allen

GEOLOGICAL SURVEY

HY 50-64 121-51 NE

KAMLOOPS M.D.

2-9-71 : 26-9-71

A.R. Allen, P.Eng.	Sept. 2, 13, 18, 24, 25, 26, 1971 Oct. 2, 3, Nov. 3, 1971.	\$1400.00
Motel, gas, oil, food		85.00
Bush transportation		32.00
Maps, Report, etc.		25.00
		<u>\$1542.00</u>

Declared before me at the
of
Province of British Columbia, this
day of
VANCOUVER, B.C. ^{in the}
NOV 23 1971, A.D.
L. Hussey
Sub - Mining Recorder

Alfred R. Allen

.....
A Commissioner for taking Affidavits in British Columbia or
A Notary Public in and for the Province of British Columbia.



3378 M-2

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- LEGEND**
- GRID LINES ———
 - QUARTZ DIORITE (Altered)
 - ACID DYKE
 - SHEAR ZONE (vertical)
 - Fracture Zone (inclined)
 - Fracture Zone (vertical)
 - Fracture Zone (Flat)
 - TRENCHES

Q.C. EXPLORATIONS
LTD. N.P.L.

HY 50-64
GEOLOGICAL SURVEY

400 0 400 800
Scale - Feet

Oct 27/71 *Alfred H. Allen* P.Eng.