REPORT on GANN
THE INDIAN RESERVATION NO. 15 GROUP
of
RED ROCK MINES LTD.

by: R.W. Phendler, B.Sc., P.Eng.

673563 March 10, 1970.

REPORT

on

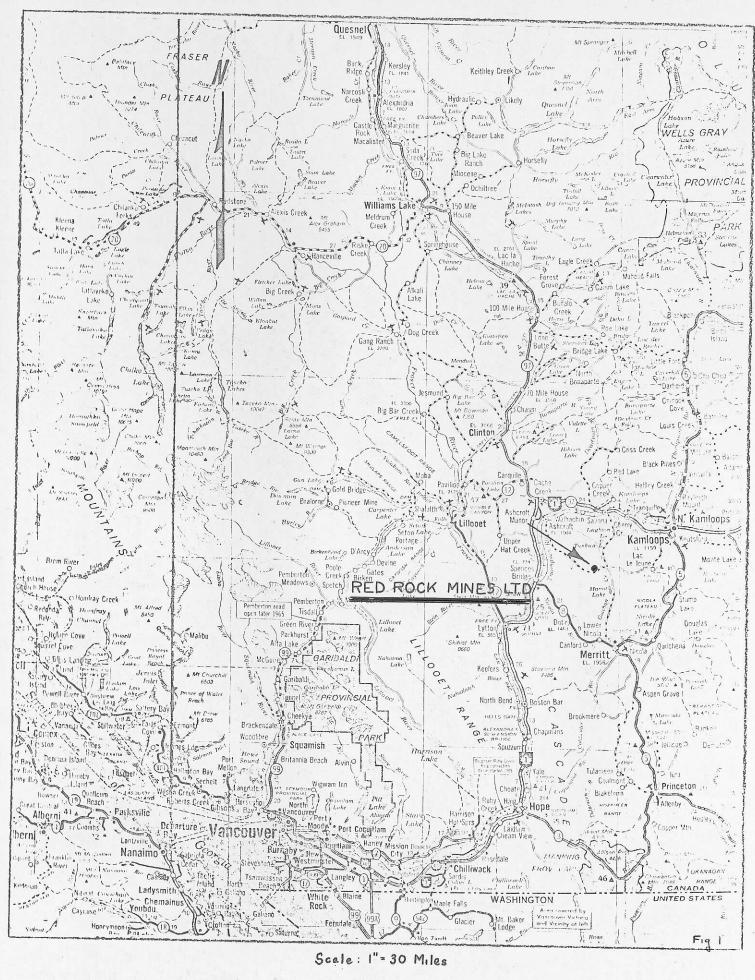
THE INDIAN RESERVATION NO. 15 GROUP

of

RED ROCK MINES LTD.

by

R.W. PHENDLER, B.Sc., P. Eng.



Scale: 1"= 30 Miles

## TABLE OF CONTENTS

		Page
SUMMARY,	CONCLUSIONS AND RECOMMENDATIONS	1
LOCATION	AND ACCESS	2
PROPERTY	AND OWNER SHIP	2
HISTORY		2
GEOLOGY		3
GEOPHYSI	CAL	5
GEO CHEMI	STRY	5
RECOMMEN:	DATION	6

### LIST OF ILLUSTRATIONS

Fig.	1	**	Location	Map -	1" = 30 miles	Frontispiece	
Fig.	2	**	Property	Map -	Highland Valley - 1" = 4k mi.	Back of report	
Fig.	3		Red Rock	Mines	- I.R. 15 Group - 1" = 500"	Back of report	

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The eight claims of Red Rock Mines Ltd. are located in the Highland Valley area of central British Columbia, about twenty-five miles north of Merritt. They are close to the Highland Valley road and just north of Indian Reservation No. 15.

Underlying the claims, according to B.C. Department of Mines Bulletin No. 56, are varieties of the Highland Valley phase of Guichon Creek granodiorite. Immediately southeast of the claims are later intrusions of Witches Brook granodiorite. Some copper mineralization in the Highland Valley area is thought to be associated with this rock.

Aeromagnetic maps show nothing of interest in the region of the claims. In 1967, rotary drilling carried out by Lornex Mining Corporation Ltd. nearby showed that overburden depths were as much as 870°. The excessive overburden does not favour the application of geochemical exploration methods; in 1969 84 soil samples were taken with discouraging results.

No mineralization has been found on the property and no further work is recommended at this time. It must be remembered, however, that no part of the Guichon Creek batholith has been proven completely unfavourable for the deposition of copper bearing minerals. For this reason the claims should be retained. Regional structural studies may eventually prove that favourable zones of fracturing project onto the property.

# LOCATION AND ACCESS (See Fig. 1)

The Indian Reservation No. 15 group of claims is twentyfive miles southeast of Ashcroft and twenty-five miles north of Merritt
in the Highland Valley area of central British Columbia. Ashcroft is
just east of the Trans-Canada Highway, about 230 road miles northeast
of Vancouver.

Access to the property is by the Highland Valley road which passes about 2000 feet south of the property. From a point about five miles west of the junction with the Guichon Creek road, a bush road leads north to the claims (See Fig. 3).

# PROPERTY AND OWNERSHIP (See Fig. 2)

The eight claims occur in the Kamloops Mining Division and are as follows:

TURE 7, 8, 9, 10, 11, 12, 13 and 14

They are held by Red Rock Mines Ltd. and recent claim maps show that adjoining claims are held by Valley Copper Mines Ltd., Highland Valley Mines Ltd., Jericho Mines Ltd. and New Indian Mines Ltd.

#### HISTORY

The earliest record of this claim group is in 1964
when Red Rock Mines Ltd. held 35 claims. No work was reported for
that year. In 1966, thirty-seven claims were held by the company
which carried out bulldozer trenching under the direction of D.M. Morgan.

Depth of overburden was found to be excessive and bedrock was not exposed. This work was done on the recommendation of H. Cohen, Mining Consultant.

In October and November of 1967 Lornex Mining Corporation carried out rotary drilling on the claims. A letter report by W.L. Brown, P.Eng., of Robinson, Roberts & Brown Limited, groundwater geo-logists comments on the work performed and the results obtained.

Reconnaissance soil sampling was carried out in 1969.

#### GEOLOGY

The area of the claims is underlain by granodiorite of the Guichon Creek batholith. This batholith measures 30 miles in a northerly direction by 15 miles and intrudes sedimentary and volcanic rocks of the Cache Creek and Nicola groups (of Permian and Upper Triassic age, respectively).

Middle Jurassic and Tertiary volcanic and sedimentary rocks unconformably overlie the Guichon Creek batholith but are almost completely eroded.

The property is in the east central portion of the batholith. The regional geological maps by K.E. Northcote, accompanying B.C. Department of Mines Bulletin No. 56, "Geology and Geochronology of the Guichon Creek Batholith", show that the Red Rock Mines Ltd. claims are underlain by the Highland Valley phase of granodiorite.

Northcote sub-divides the Highland Valley phase into the Guichon variety and the Chataway variety. The contact between the two varieties is

believed to pass through the claims. The rocks are similar but the Chataway variety contains less mafic minerals. They are not considered to be favourable host rocks for mineralization except under good structural conditions.

A later phase of intrusive (Witches Brook) is shown by Northcote to underlie the area southeast of the claim group. This granodiorite entered fractures, forming dykes and irregular masses in earlier phases of the Guichon Creek batholith. It is closely related to the earlier Bethlehem phase and both are mineral-bearing. It is believed that the Bethlehem ores were introduced during the emplacement of the Witches Brook granodiorite phase.

During late fall of 1967 Lornex Mining Corporation Ltd. drilled three rotary holes as follows:

Hole	e No.	Elevation	Depth Overburden	Bedrock Penetrated
RWT	67-8	3067	870	61
8.8	67-9	3190	710	101
9.9	67-10	3558	242	161

Recent discussion with R. Erdman, who did the drilling, revealed that the holes were drilled for water on claims that were held by Red Rock Mines Ltd. at that time. They were located about two claim lengths west of the present claims, close to the road and valley bottom of Witches Brook. All holes were vertical and unmineralized "granite" was penetrated in each one (after W.L. Brown, Groundwater Test Drilling, Redrock Claims, Highland Valley - Feb. 25, 1968).

No mineral occurrences have been reported on the claims.

The nearest copper showings are on the claims of Jericho Mines Ltd.

## GEOPHYSICAL

A study of published aeromagnetic maps shows that the area of the claims has relatively flat magnetic contours in the 2800-3000 gamma range. Most orebodies in the Highland Valley are in areas of low magnetic intensity. Surface geophysical work does not appear to be warranted.

## (See Fig. 3)

In October 1969 a reconnaissance soil survey was conducted on the claims. Two complete lines and a partial line were chained and flagged across the claims in an east-west direction. The lines were 800° apart and soil samples were taken at 200° intervals.

Of the 84 samples taken, seven had values greater than 50 parts per million (which is considered to be background for the area). Of these, three exceeded 75 parts per million. Samples in the 25 ppm range dominated the lower group (below 50 ppm).

The probable depths of overburden indicate that further geochemical work is not likely to be useful. The present soil cover is not indicative of what exists in the underlying bedrock.

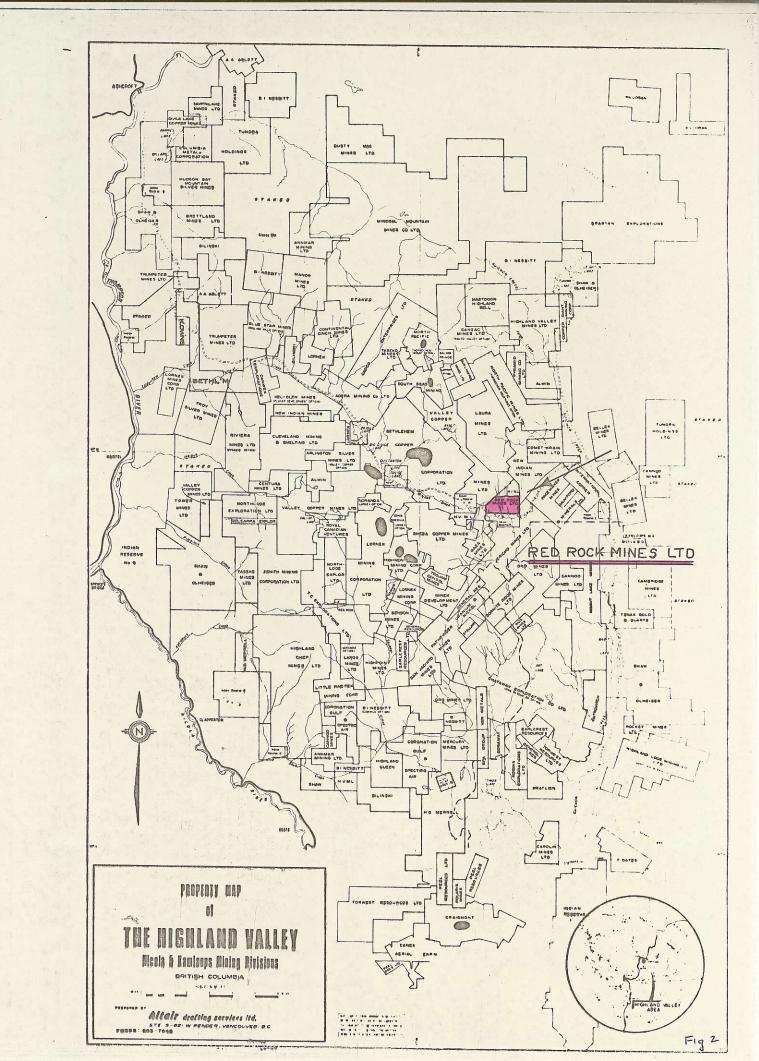
### RECOMMENDATION

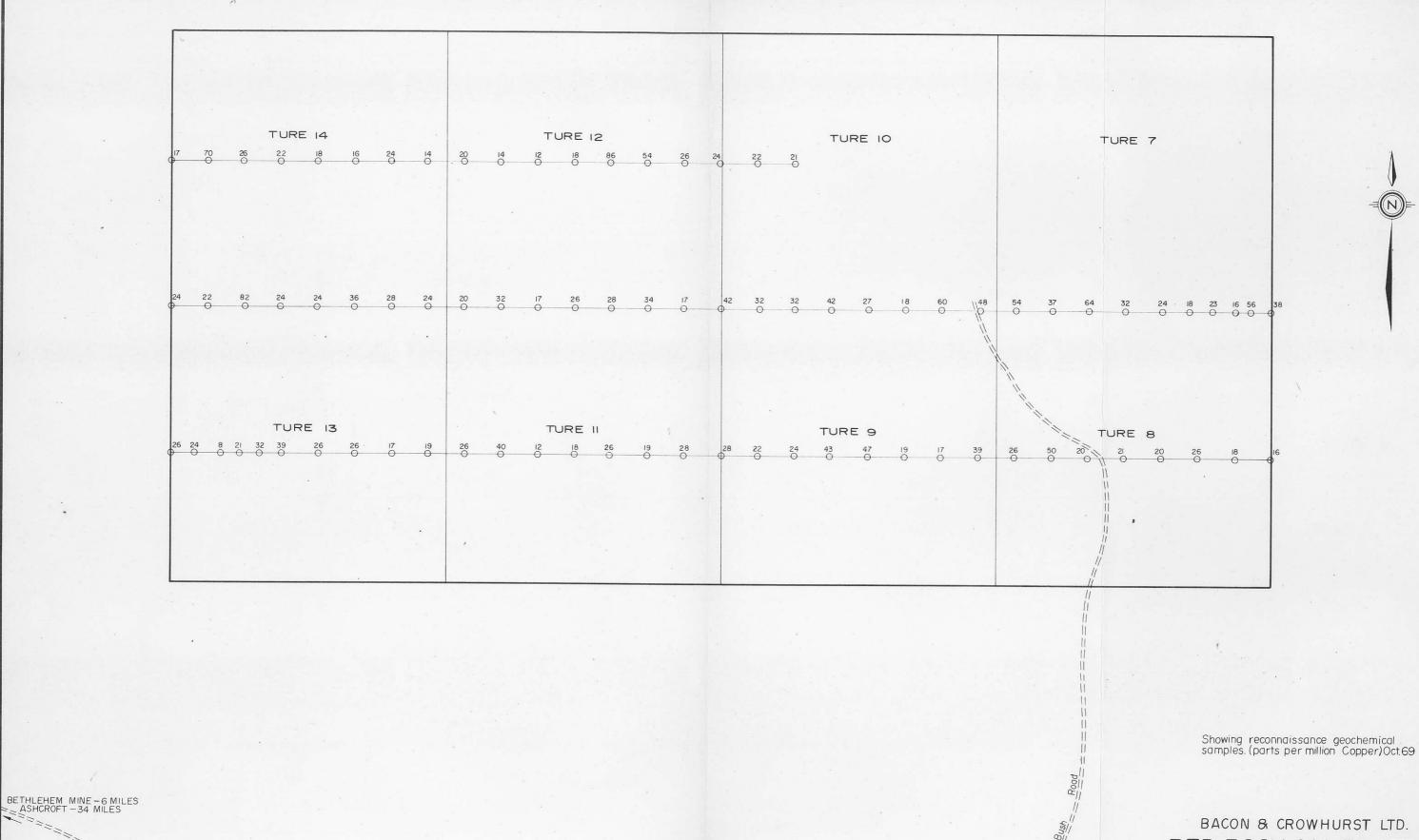
It is recommended that no further work be carried out on the claims at this time, but that they be retained. They may prove to be of value if ore-grade mineralization is disclosed on neighbouring claims. No part of the Guichon Creek batholith can be entirely written off at this relatively early stage of development.

> Respectfully submitted, BACON & CROWHURST LTD.

R.W. Phendter, E.Sc., P.Eng.

Engle P. Eng





Indian Reservation No. 15

Brook

BACON & CROWHURST LTD. RED ROCK MINES LTD.

INDIAN RESERVATION No. 15 GROUP HIGHLAND VALLEY, B.C.

SCALE I" = 500' 500 Feet MARCH, 1970 FIG. 3