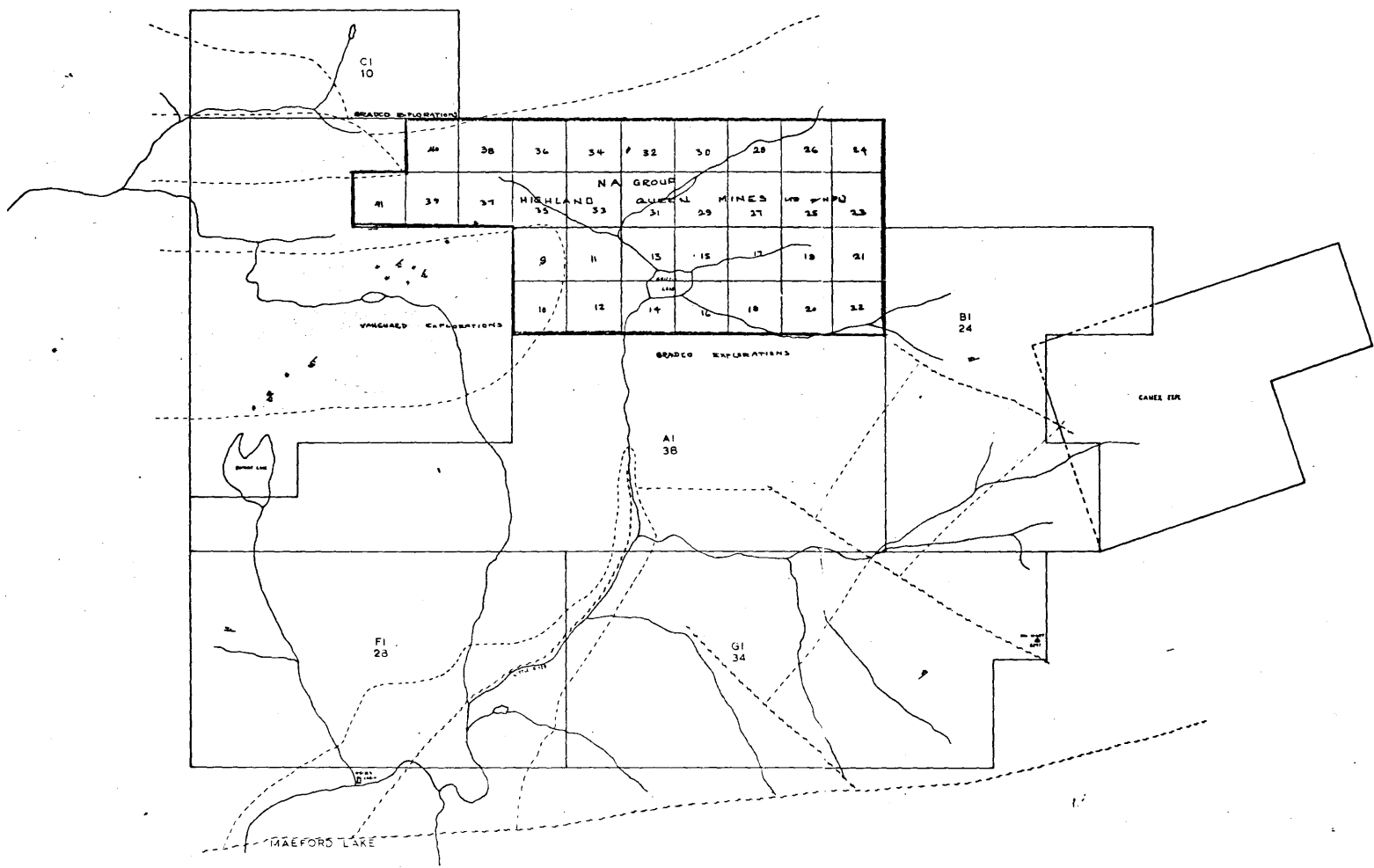


93A1/W

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- LEGEND**
- Isolated Works
 - Structure Permission
 - Yukon Basin Exploration
 - Common Lineation
 - Ag. No. 24 Showing
 - Drainage
 - Geological Contact
 - Fault

MAEFORD LAKE AREA
 PROPERTY MAP
 HIGHLAND QUEEN MINE LTD. NVY
 CARIBO, B.C.
 Scale in feet

GEOLOGICAL REPORT
QUESNEL LAKE PROPERTY

CARIBOO M.D.

January 29th. 1971

For:

HIGHLAND QUEEN MINES LTD (N.P.L.)
1010 - 789 West Pender Street
Vancouver 1, B.C.

By:

ALLEN GEOLOGICAL ENGINEERING LTD.
507 - 789 West Pender Street
Vancouver 1, B.C.

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MAP - HQ - 1

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THE QUESNEL LAKE PROPERTY

CARIBOO M.D.

B.C.

INTRODUCTION

The Highland Queen Mines property is located in east-central British Columbia, 6 miles northwest of the north arm of Quesnel Lake.

The property was examined September 29th. 1970, by the writer, at which time assistance was rendered by Clifford Gunn the locator of the claims and L. Miskovic of Vancouver.

The purpose of this report is to provide a general description of the area with emphasis on the geology, and recommendations for a field programme for the spring of 1971, on the NA 9-41 claims area.

LOCATION AND ACCESSIBILITY

The NA 9-41 claims are located in east-central British Columbia north of Quesnel Lake and three miles north of Macford Lake. This is seventy miles east of Quesnel, at $120^{\circ}-55'$ west longitude and $52^{\circ}-49'$ north latitude.

2.

Access to the area is via secondary roads from Williams Lake or Likely. Logging roads are now within 8 miles of the property, and in the next few years will reportedly be traversing the Maeford Lake area and the property.

For the examination, access was via helicopter from Williams Lake.

TOPOGRAPHY

The property is located in a ruggedly mountainous area. It is about $3\frac{1}{2}$ miles northeast of Maeford Lake at an elevation of 4,800 to 6,000 feet above sea level.

It is circled by high rocky ridges rising to peaks such as Mount Wart, 6,297 feet, Mount Matthew, 8,506 feet, and Three Ladies Mountain.

Drainage is southerly from Grizzly and Summit Lakes into Maeford Lake and thence westerly via the Little River system.

PROPERTY

Thirty-three located adjoining mineral claims constitute the Highland Queen property, as follows:

Some of the posts and lines of the NA Group were examined by the writer and the staking is in accordance with the requirements of the British Columbia Mineral Act.

GEOLOGY

The area north of Quesnel Lake has been studied by representatives of the British Columbia Department of Mines and the Geological Survey of Canada for the past seventeen years.

Mapping and detailed studies close to the Maeford Lake area have not resolved the many controversial problems relating to the stratigraphic and structural aspects of the area.

For the purposes of this report, the geology of the immediate area of the Highland Queen property will be briefly described in accordance with data supplied by R.B. Campbell of the Geological Survey of Canada, as a result of the field surveys of 1961 and 1962 and as presented on Map 1-1963, Geology-Quesnel Lake - East Half.

The area is underlain by intensely folded, faulted and metamorphosed rocks of the Cariboo Group, of Cambrian age. Igneous intrusive activity of Jura-Cretaceous age is significantly evident by a sizeable exposure of granitic rocks near the west boundary of the Highland Queen property. The Cambrian strata have

been down warped into a northwesterly striking and plunging synclitorium bordered by Proterozoic members of the Kaza Group and Isaac Formation.

On and near the NA group of Mineral Claims held by Highland Queen Mines, the basal member of the Cariboo Group, the Cunningham Limestone, is the predominant rock type. This is overlain by the Yankee Belle formation. These appear to be faulted against the Snowshoe formation which extends southeasterly across the north end of Maeford Lake.

The Snowshoe formation is composed of massive grey-weathering creamy white marble.

The Cunningham is composed of grey-weathering massive grey limestone.

The Yankee Belle consists of thin-bedded green to brown shale and phyllite.

The general trend of the strata is west to northwesterly and there is evidence of isoclinal folding overturned to the southwest. Faulting appears to trend northeasterly up the Little River valley and northwesterly displacing large blocks of the Yankee Belle formation.

Silver, lead, zinc mineralization has been found associated with pyrite in fractured and silicified grey to buff limestone and darker argillaceous limestone to the

southwest of the Highland Queen property on the Vanguard Exploration holdings and also to the southeast on the Canex property.

There are vuggy quartz stringers associated with the sulphide mineralization, in places the silicified limestone is brecciated. Disseminated pyrite gives a brown cast to the mineralized outcrops in places.

The most prevalent mineralization, however, appears to be very finely crystalline galena in blebs, bunches, veins and replacements within light grey fine-grained limestone.

There is one small exposure of pyritized argillaceous limestone on the NA 37 claim close to the boundary of the property. This appears to be on or near the zone of mineralization extending from Summitt Lake easterly across the Vanguard property. Insufficient work has been done on any of the showings in the area, however, to enable a preliminary assessment of the nature and extent of the silver, lead zinc mineralization to be made.

SUMMARY AND CONCLUSIONS

The NA 9-41 mineral claims, held by Highland Queen Mines are in the Maeford Lake area, northwest of the north arm of Quesnel Lake. This locale is believed favourable for the occurrence of silver, lead, zinc mineral deposits by virtue of the discovery of scattered

showings of same in an excellent geological environment.

It is concluded that the Highland Queen property should be investigated for the possible occurrence of silver, lead, zinc mineral deposits, and the first stage of an exploration programme is herewith recommended.

RECOMMENDATIONS

The following exploratory programme is recommended on the NA 9-41 claims area:

	<u>Estimated costs</u>
1. Conduct a detailed geological survey over the claims area,	\$3,000.00
2. Conduct geochemical investigations of selected areas,	2,000.00
3. Strip and trench where necessary to test and sample zones of mineralization	1,000.00
4. On a surveyed grid conduct an electromagnetic survey over the claims area,	5,000.00
5. Administration, overhead and supervision,	3,000.00
6. Contingencies,	1,000.00
Total estimated costs,	\$15,000.00

The estimated time required for this field programme is two months.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LTD.

Per Alfred R. Allen P.Eng.

Alfred R. Allen

Vancouver, B.C.
January 29th. 1971.

REFERENCES

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- Campbell R.B. and Campbell K.V.:
Quesnel Lake Map-Area, B.C., (93A)
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- Campbell, R.B. and Mansy, J.L.
Stratigraphy and Structure of the
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Quesnel Lake Map-Area,
Geol. Surv. Can. Part A,
April - October 1969, pp 38-41

ALLEN GEOLOGICAL ENGINEERING LTD.

507-789 WEST PENDER STREET
VANCOUVER 1, B.C.

January 29th. 1971.

C E R T I F I C A T E

I, Alfred R. Allen, certify that:

I am a graduate of the University of British Columbia and hold the following degrees therefrom:

BASc Geological Engineering 1939

MASc Geological Engineering 1941

I am a member of the Association of Professional Engineers of the Province of British Columbia.

I have practised my profession for the past twenty-eight years.

I hold no interest in the properties or securities of Highland Queen Mines Ltd. (N.P.L.), or affiliates thereof, nor do I expect to receive any, directly or indirectly.

My report of January 29th. 1971, entitled Geological Report, Quesnel Lake Property, Cariboo M.D., is based upon an examination of the property by the writer on September 29th. 1970.

I consent to this report being filed with the British Columbia Securities Commission.

Some of the posts and lines of the NA Group were examined by the writer and the staking is in accordance with the requirements of the British Columbia Mineral Act.

Alfred R. Allen P.Eng.

Alfred R. Allen

(b) Other Properties

The Company is also the recorded and beneficial owner of one of the two outstanding shares of Highland Queen Mines (1968) Ltd. (N.P.L.), a company incorporated and subsisting under the laws of the Province of British Columbia. Highland Queen Mines (1968) Ltd. (N.P.L.) is the recorded and beneficial owner of the JT 1 to 40 and the LD No. 3 Fr. and LD No. 4 Fr. mineral claims situate in the Highland Valley area, Kamloops Mining Division, Province of British Columbia.

The JT 1 to 40 claims were originally staked by John T. Chrystal, and D. F. Williamson at a cost of approximately \$1,000.00, for which they received 750,000 shares of the Company. John T. Chrystal is the recorded owner of 145,000 escrowed shares and Rudolph Nosaelk is the recorded owner of 580,000 escrowed shares. Mr. Nosalek paid \$5,800.00 for his shares.

By Agreement dated August 1st, 1969, Cominco Ltd. acquired the right to conduct an exploration program on the JT 1 to 40, LD 3 Fr., LD 4 Fr, as well as other mineral claims then owned by Highland Queen Mines (1968) Ltd. (N.P.L.). Cominco Ltd. spent approximately \$40,000.00 in carrying out an exploration program which consisted

Company was incorporated under the laws of the Province of British Columbia on the 19th day of November, A.D. 1965. The Company was converted from a private to a public Company on the 24th day of July, A.D. 1967. There have been no further amendments to the Memorandum or Articles of Association.

DESCRIPTION OF BUSINESS AND PROPERTY OF THE COMPANY

The Company is a mining Company engaged in prospecting for and exploring and developing mining properties. The shares offered hereby are of a speculative nature (see also front cover).

(a) Cariboo Property

The Company is the recorded owner of the NA 9 - 41 mineral claims located in the Cariboo Mining Division of the Province of British Columbia. By Agreement dated October 9th, 1970, between the Company and Clifford E. Gunn, the Company acquired the sole and exclusive option with respect to the aforementioned claims for the sum of \$12,500.00, \$5,000.00 being paid on the execution of the option agreement, \$2,500.00 being payable on or before May 1, 1971, and \$5,000.00 being payable on or before December 1, 1971. The claims are located in east central British Columbia, North of Quesnel Lake, and three miles north of Maeford Lake, being 70 miles East of Quesnel. Access to the claims is via secondary roads

of 18.4 miles of line cutting, and I.P and resistivity survey, as well as diamond and percussion drilling on these claims. The Agreement was terminated on December 31st, 1969.

These claims are subject to a joint venture agreement dated January 31st, 1969, between the Company, Coronation Gulf Mines Ltd. (N.P.L.) and Spectroair Explorations Limited (N.P.L.), wherein the Company is required to provide 50 per cent of exploration and development costs should such a program be undertaken.

Barry Robert Reed
550 West Keith Road
North Vancouver, B.C.
Director

Security Salesman
Wolverton & Co. Ltd.

Rudolph Nosalek
1649 Drummond Drive
Vancouver, B.C.
Vice-President

Security Salesman
Wolverton & Co. Ltd.

REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

No remuneration has been paid or is payable by the Company to any of its Directors or Officers in their capacity as such from