

REFERENCE MEMORANDUM

DATE Dec 3 1971

THE ATTACHED PAPERS ARE REFERRED

TO Mr. J. H. Stovel

BY PMK

- | | | | |
|-----------------------|--------------------------|---------------|-------------------------------------|
| PLEASE REPLY DIRECT | <input type="checkbox"/> | PLEASE HANDLE | <input type="checkbox"/> |
| PLEASE SEE ME RE THIS | <input type="checkbox"/> | YOUR COMMENTS | <input type="checkbox"/> |
| FOR YOUR INFORMATION | <input type="checkbox"/> | FOR APPROVAL | <input checked="" type="checkbox"/> |
| PLEASE RETAIN | <input type="checkbox"/> | PLEASE RETURN | <input checked="" type="checkbox"/> |

If you agree with our negative recommendation, will you want to reply to these people or will you want me to?

Paul

P.M.K.
Please reply
VITS

PLEASE RETURN

PLEASE RETURN

FOR YOUR INFORMATION

FOR APPROVAL

PLEASE SEE ME RE THIS

YOUR COMMENTS

PLEASE RETURN DIRECT

PLEASE HANDLE

BY

TO

THE ATTACHED PAPERS ARE REFERRED

DATE

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REFERENCE WENOVINDPW

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

DEC - 2 1971

To G.M. Hogg

From W.M. Sirola

Subject ACROLL OIL and GAS LTD.
Cache Creek, B.C. - 92-I

Date December 1, 1971.

✓	V.S.
✓	M.K.
✓	G.M.H.
	R.D.S.
	B.C.B.
	I.D.B.
	M.D.R.
	J.H.F.
	E.C.J.

John Lund researched the information you submitted on these properties and I reviewed it with him when his work was complete.

Our conclusions are that the properties are underlain either by useless miocene rocks, Cache Creek rocks showing no evidence of mineralization, or in one case by Tertiary sediments that could contain lignite.

I really do not see any point in optioning ground in any of these categories, and my recommendation therefore is that we advise Acroll Oil and Gas of that fact.

WMS/jm
Encls.

Bill
W.M. Sirola.

Paul - This matter was brought to Mr. Sirola's attention, and he referred to Bill Sirola for his evaluation. We have been looking at the general area very closely during the past year, and I believe the assessment of the potential of the Acroll ground in the Cache Creek area is pretty accurate. I agree that no further interest is warranted.

As I have mentioned also, I do not think that the Honduras, Mexican, and Baker Lake situations are of interest.

*I agree PMK.
Dec 3/71*

W.M. Dec 3/71.

November 24, 1971.

To: W.M. Sirola
From: John C. Lund

Re: ACROLL OIL and GAS LTD.
HOLDINGS AT CACHE CREEK, B.C.

Acroll Oil and Gas Ltd. hold 950 claims between Cache Creek and Clinton in the general vicinity of Bethlehem's Maggie Mine. Very briefly the geology of the Maggie deposit consists of a sequence of argillites and cherts with minor interbedded volcanic units of the Cache Creek group (Permian age) that have been intruded by a small granitic intrusion. Mineralization occurs in both the intrusion and intruded rock straddling the contact. A marked halo of oxidized pyrite stains the exposed rocks surrounding the deposit, producing an extensive "gossan" area. Ore reserves are reported to be in excess of 200 million tons of better than 0.4% Cu. Any exploration must be directed toward the search for a similar environment.

For the purpose of evaluation, the properties are divided into 6 groups. These are each discussed briefly below.

1. Large block of claims on the southern boundary of the town of Clinton. One quarter of the claims are underlain by Miocene sediments, one eighth by Cretaceous shales and grits, the remaining five eighths by the favourable Cache Creek rocks. The area is drift covered with few outcrops. No granitic intrusive rocks or mineralization has been reported from this area.
2. Small claim group 1 mile west of the Maggie Mine and 1,000 feet higher in elevation. Underlying rocks are Cache Creek sediments. No intrusive rocks, gossan areas or mineralization reported.
3. Large block of claims extending from the east side of the Maggie Mine to a point 2 miles south of the town of Cache Creek. One third of the area is underlain by Tertiary rocks, the remainder by Cache Creek sediments and

mid to Upper Cretaceous sediments. Two blocks of claims lying to the northwest and west of Cache Creek were formerly held by Pennaroya, who, after a preliminary examination, let the claims lapse. One third of this block has possibly not been explored. Only reported mineralization is a chromite deposit associated with an ultrabasic intrusion.

4. A block of claims located south and west of Carquille. Claims are on the fairly steep western side of Bonaparte Creek in an area of heavy drift cover and little outcrop. I looked this area over in 1970 and found outcrops completely devoid of any sulphides or alteration.
5. A north-south elongate block located west of the Bonaparte River and south of Bonaparte I.R.2. The area is completely underlain by the Tertiary sediments that contain coal beds of the Hat Creek Coal Deposit. This is a relatively high quality lignite coal (water - 8.60%; volatile combustible matter - 35.51%; fixed carbon 46.84%, and ash 9.05%) that at present has no real commercial value. Some of the better deposits are held by B.C. Hydro for possible use in producing hydrothermal power. The ground has no potential for economic metallic mineral deposits.
6. Small claim group lying north of the Cache Creek - Kamloops highway, 5 miles east of Cache Creek town. These claims are almost entirely underlain by Tertiary rocks as mapped by the G.S.C. A narrow strip possibly one claim length wide and parallel to the highway is underlain by mid and upper Jurassic sediments.

Conclusions:

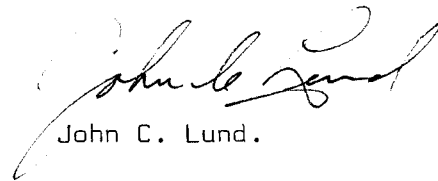
Acroll Oil and Gas Ltd. hold 950 claims in the Cache Creek area. One third of the ground is underlain by unfavourable Tertiary age rocks, about one third has been worked on by a major company, and I examined one block in

Acroll Oil and Gas Ltd.
Holdings at Cache Creek, B.C.

Page 3

November 24, 1971.

1970. Acroll has done nothing, to my knowledge, on their holdings to establish whether or not they do hold potential ground, and base the potential simply on its relation to the Maggie deposit. The ground is essentially "moose pasture" with no specific targets to pursue.

A handwritten signature in cursive script, appearing to read "John C. Lund". The signature is written in dark ink and is positioned above the printed name.

John C. Lund.

KERR ADDISON MINES LIMITED

(FOR INTER-OFFICE USE ONLY)

To..... W. M. Sirola From..... G. M. Hogg

Subject..... Acroll Oil & Gas Ltd. Date..... November 1, 1971


<input checked="" type="checkbox"/>	J.H.S.
<input checked="" type="checkbox"/>	F.M.K.V.
<input checked="" type="checkbox"/>	G.M.H.
<input type="checkbox"/>	R.D.S.
<input type="checkbox"/>	B.C.B.
<input type="checkbox"/>	J.D.P.
<input type="checkbox"/>	M.D.R.
<input type="checkbox"/>	J.H.F.
<input type="checkbox"/>	E.C.I.

Enclosed are some data and correspondence relating to holdings of Acroll Oil & Gas Ltd. of Calgary, Alberta.

As I have told Mr. Ross, Kerr Addison is not interested in the holdings of Acroll in Mexico, Honduras, and in the Northwest Territories, but would like to take a closer look at the Cache Creek properties.

Because of our earlier considerations in the Cache Creek area I am not overly enthusiastic about the potential of the properties held by Acroll. In general grades in the area tend to be less than spectacular, in certain locations at least overburden is a serious problem, and considerable work has been done in the area by majors. However, I would appreciate your comments as to the possible potential of Acroll's extensive holdings.

GMH:lfr
Encls.


G. M. Hogg

COPY

November 1, 1971

Mr. Gerald N. Ross,
President,
Acroll Oil & Gas Ltd.,
574 One Calgary Place,
330 - 5th Avenue S.W.,
CALGARY 1, Alberta.

<input checked="" type="checkbox"/>	J.H.S.
<input checked="" type="checkbox"/>	P.M.K.
<input checked="" type="checkbox"/>	G.M.H.
<input type="checkbox"/>	R.D.S.
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<input type="checkbox"/>	E.C.I.

Dear Mr. Ross:

I have been asked to write to you regarding the properties brought to the attention of Mr. J. H. Stovel in your letter of October 26, 1971.

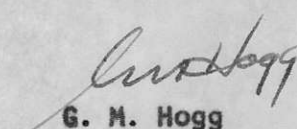
Of possible interest to Kerr Addison are the Acroll Oil & Gas properties in the Cache Creek area of British Columbia. I have sent the data supplied to our Vancouver office for review, and expect to have some word back by the middle of November. I hope that this delay will not inconvenience you in any way.

With regard to the Honduras, Sonora, and Baker Lake properties mentioned in your letter, these are not of interest to Kerr Addison at this time. I might suggest, however, that if you have not already done so, you might contact Dr. A. M. Bell of Noranda Exploration Company (1809 - 44 King Street West, Toronto 1, Ontario) concerning your Honduras and Mexican holdings. Noranda Exploration is active in these areas, and may be interested in participation in the exploration of this ground.

Yours very truly,
KERR ADDISON MINES LIMITED

GMH:lfr

cc: W. M. Sirola


G. M. Hogg
Chief Geologist - Exploration

ACROLL OIL & GAS LTD.



PHONE 263-6161 AREA CODE 403
574 ONE CALGARY PLACE
330-5TH AVENUE S.W.
CALGARY 1, ALBERTA CANADA

October 26, 1971

Comments
Please
JMJ

J.H.S.
<u>P.M.K.</u>
✓ G.M.H.
R.D.S.
B.C.B.
I.D.B.
M.D.R.
J.H.F.

E.C.J.

Kerr Addison Mines
1600, 44 King Street W.
Toronto, Ontario

Attention: Mr. J. H. Stovel, President

Dear Sir:

Re: Cache Creek Area, British Columbia

We enclose for your consideration, informative material along with a map showing the location of Acroll's properties in the above-noted area of southwestern British Columbia.

Bethlehem Copper who have been carrying out an active drilling program in the vicinity of the old Maggie Mine located some 10 miles north of Cache Creek, have officially announced proven reserves of 200 million tons of copper-molybdenum ore valued at \$4.28 per ton though unofficial sources place the reserves in excess of 400 million tons.

Several other mining companies are currently active in the area. Pyramid Mines have commenced drilling as have Noranda who apparently have a \$300,000 program underway.

Indications are that the area could be comparable to Highland Valley, located some 20 miles southeast of Cache Creek, where huge tonnages of low grade, porphyry type, copper-molybdenum deposits have recently been developed. The Cache Creek area does have an advantage over the Highland Valley however in that it is much more accessible making it possible to carry out exploration work the year round.

Acroll's holdings in the Cache Creek area of approximately 950 claims are available either by an outright sale reserving thereout a net smelter return or through a work commitment and/or participation arrangement.

OTHER PROPERTIES

A) Honduras, Central America

Our company also has a copper prospect in the Yoro area in which we are also inviting participation. Geological, geochemical and geophysical surveys have been conducted on the property outlining an anomaly at least 8,000 feet in length and up to 400 feet in width. A drilling program is to commence shortly.

..... 2

OCT 27 1971

B) State of Sonora, Mexico

Acroll has two separate properties in northern Mexico some 20 miles south of the Arizona border.

One property consisting of 640 hectares is located in the Sopresa region. To the west, Copper Ridge Mining Ltd., a Vancouver based company has reported an extensive area of copper, gold and silver mineralization. Penoles (formerly American Metals) also have adjoining claims.

The second property, located in the Plomosa area, is some 40 miles east of the Sopresa property and some 15 miles south and west of Nogales. The claims total 1170 hectares (2400 acres) and are in a known mineral area from which copper-silver mineralization has been extracted by small miners over periods of time extending back into Spanish colonial times. All the preliminary requirements have been fulfilled, including a land survey and corner monumenting.

C) Baker Lake Area, Northwest Territories

A total of 37,440 acres have been retained in Mineral Prospecting Permits 102 and 103 in this area. Geological and geophysical work was carried out on these permits during the summer of 1970 which indicated good base metal potential on Permit 102 and Uranium possibilities on Permit 103. A magnetometer survey conducted along a shear zone on Permit 102 outlined an anomaly over 5,000 feet in length and up to 100 feet in width. Additional work in the form of drilling, trenching and a scintillometer survey are to be carried out on these properties early next year.

Should you be interested in any of these proposals additional geological information will be made available to you.

May we hear from you at your convenience.

Yours very truly,

ACROLL OIL & GAS LTD.

Gerald N. Ross
Gerald N. Ross, *per (Miss) V. E. Sharp*
President

GNR*vs

Encl.

B. H. COREY, P.ENG.

PETROLEUM & MINING CONSULTANT

533 SONORA AVENUE
CALGARY, ALBERTA

TELEPHONE
~~XXXXXXXXXX~~
244-9481

August 17, 1971

Mr. G. N. Ross,
President,
Acroll Oil & Gas Ltd.,
574, 330 - 5th Ave. S.W.,
Calgary 1, Alberta.

Dear Mr. Ross:

Cache Creek Area

INTRODUCTION

The Kamloops - Ashcroft - Cache Creek area, in the Interior Plateau of southern British Columbia has been known for many years for the presence of mineral deposits. The development of huge, low-grade copper - molybdenum mines in the Highland Valley in recent years has directed attention to the area and the possibility of further discoveries.

The Maggie Mine area, north of Cache Creek, was obviously an area where the possibility of locating a large orebody was promising. The highly successful exploration programme carried out by Bethlehem around the old Maggie Mine attracted the attention of several companies and a large scale staking rush was the result. Official reports by Bethlehem of more than 200 million tons of 0.40% equivalent copper - molybdenum content in the Maggie Mine area has spurred the evaluation of several of the properties, with a number of geochemical, induced polarization and magnetometer surveys reporting anomalous areas. In addition to the extensive diamond drilling programme undertaken by Bethlehem, drilling has been carried out by Rolling Hills and Scurry Rainbow. At the present time Noranda and Pyramide Mining are reported to have drills on the ground. Lorne Creek Mines, Highland Chief and Peyto have both reported encouraging results from recent surveys, with diamond drilling proposed.

GEOLOGY

Mineralization appears to be confined to the Cache Creek group, of late Palaeozoic age, and which comprise chert, argillite, minor quartzite, crystalline limestone and altered volcanic rocks. The Bonaparte valley is underlain by Cache Creek sediments which are overlain by the Kamloops group of Tertiary age, comprised of agglomerates and volcanics. North-south trending shear zones have been noted and numerous serpentine intrusive bodies occur in the area.

It is generally concluded that the copper - molybdenum mineralization that occurs in the area is structurally controlled by shearing sub-parallel to the Bonaparte valley, and possibly at the intersection of cross faults. The serpentine intrusive bodies, although not directly related to the mineralization, are thought to be intruded along shears and fault zones of weakness. Serpentinite has been reported in cores from Bethlehem's mineralized zone.

Continued

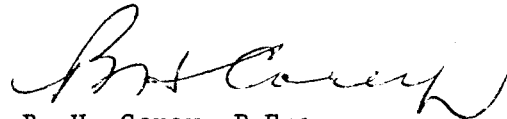
Overburden on the Bethlehem property is reported to be less than one hundred and fifty feet, with mineralization immediately below the overburden.

PROPERTIES

Acroll Oil & Gas Ltd. holds varying interests in approximately 900 claims, shown in yellow on the accompanying sketch map. Several of these claims are favourably located in relation to the presently outlined Bethlehem copper - molybdenum ore-body, while the bulk of the claims lie along, or adjacent to, the Bonaparte Valley. This valley is largely comprised of Cache Creek group members, which is the favourable host for the presently known mineralization. Some of the claims on the eastern portion of the map are located on Tertiary volcanics, which occur as a caprock overlying the Cache Creek group. At the present time geophysical survey methods are unable to locate mineralization below the volcanics, but claims located in this area may prove to have considerable worth should orebodies be found along the geological boundaries.

The Cache Creek area is receiving considerable attention these days by a number of companies, and encouraging results have been reported from several of the properties. The favourable location of the claims in which Acroll holds interests would certainly justify preliminary surveys to determine anomalous areas, which in turn would justify follow-up diamond drilling.

Yours very truly,



B. H. Corey, P.Eng.

REFERENCES:

S. Duffell and K. C. McTaggart (1952): Ashcroft Map-Area, British Columbia; Geol. Surv., Canada, Mem. 262.

W. E. Cockfield (1948): Geology and Mineral Deposits of Nicola Map-Area, British Columbia; Geol. Surv., Canada, Mem. 249.

Tectonic History and Mineral Deposits of the Western Cordillera (1966); Can. Inst. of Mining and Metallurgy. Special Volume No. 8.

R. B. Campbell and H. W. Tipper (1970) Geology and Mineral Exploration Potential of the Quesnel Trough, British Columbia; Bull CIMM July 1970.

British Columbia Minister of Mines: Annual Report

ADERA MINING LIMITED

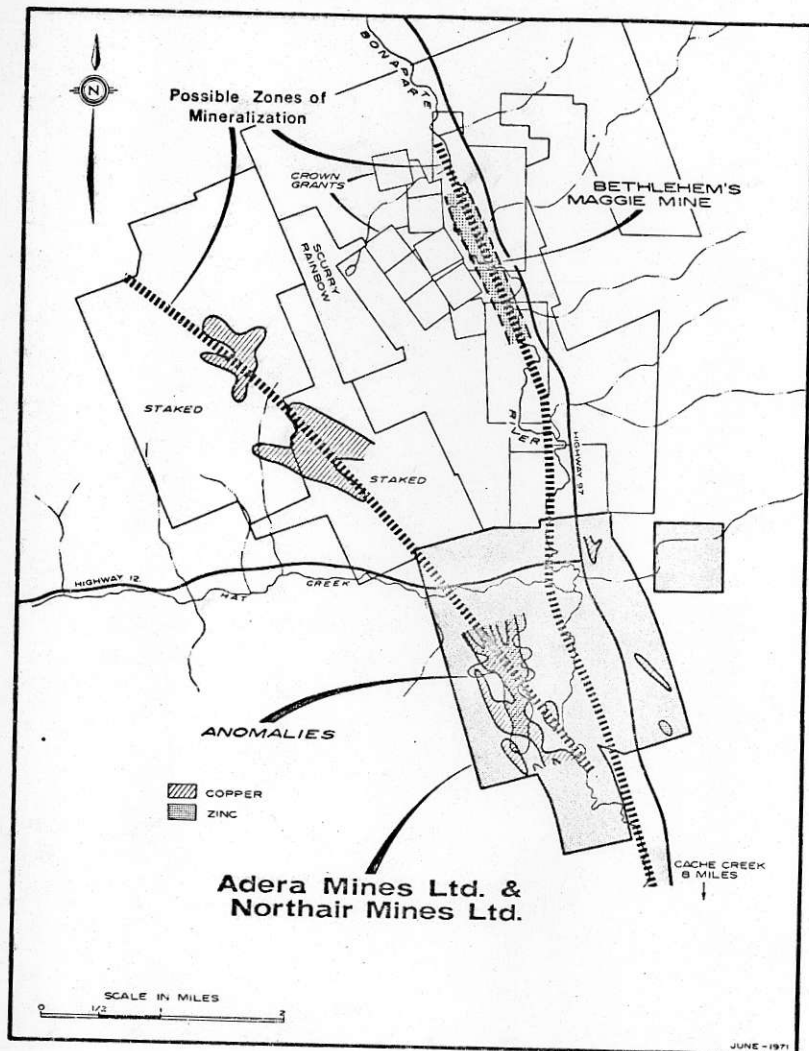
NORTHAIR MINES LTD.

GEOLOGICAL THEORY TO BE TESTED IN NEXT WORK PHASE

As reported earlier, Adera Mining Limited and Northair Mines Ltd. each hold a 50% interest in several blocks of claims in the area 10 miles north of Cache Creek, B.C. The work by Bethlehem Copper Corporation Limited on its Maggie property, a few miles to the north of the joint Adera-Northair property, has established some 200,000,000 tons of plus 0.40% copper equivalent. The work on the Maggie has indicated the zone to be open to the northwest and to depth.

The preliminary work by Adera-Northair has indicated that the geological environment within which the Maggie zone is located, is repeated on their property. The present program for the optioned claims is planned to include detail prospecting, geological mapping, geophysical survey work to be followed by bulldozer trenching and drilling as results warrant.

The theory that there are two major structures which pass through mineralized zones in the area and converge on the option property will be tested as the program continues.



Maggie's reserves grow

Recent drilling results and studies completed in the last three weeks have doubled the geological reserves of ore in Bethlehem Copper Corp.'s Maggie property at Cache Creek, the annual meeting was told here Thursday.

Patrick M. Reynolds, president, said the geological reserves now stand at about 200 million tons having a combined copper-molybdenum content of 0.4 per cent (copper equivalent) or better.

Reynolds' report had followed a review by Robin Anderson, manager of exploration in which he said the ore estimate at the Maggie was 100 million tons with a gross value of \$4.28 a ton at prices of 50 cents a pound for copper and \$1.72 for molybdenum.

"I'm upstaging you, Robin," said Reynolds.

He also referred to information in the annual report on the Lake Zone ore body which Bethlehem shares with Valley Copper Mines Ltd.

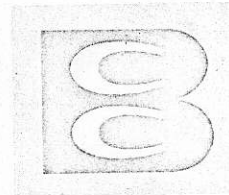
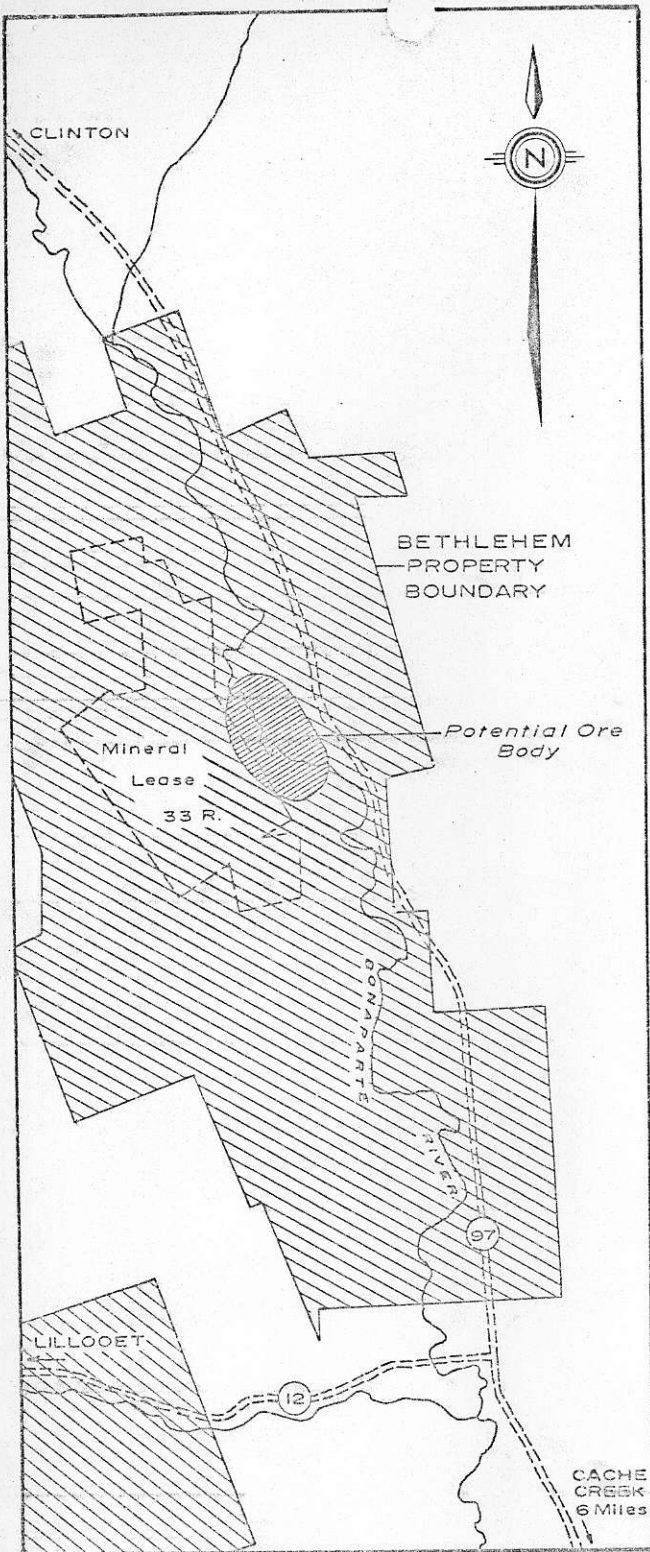
SPECIAL REPORT NO. 2

ON EXPLORATION OF THE

MAGGIE PROSPECT

AT

**CACHE CREEK,
BRITISH COLUMBIA**



October 28, 1970

BETHLEHEM COPPER CORPORATION LTD.

Suite 2100 Guinness Tower
1055 West Hastings Street
Vancouver 1, B.C.

**PROGRESS REPORT
ON EXPLORATION OF
THE MAGGIE PROSPECT**

Exploration of the property has progressed satisfactorily and continues to indicate the presence of a substantial orebody.

Since the report of August 24th, 1970, nine percussion drill holes and nine diamond drill holes have been completed. Total percussion drill holes has now reached 57 for a total of 16,940 feet. Total diamond drill holes is now 15 for a total of 14,232 feet. The diamond drill holes were positioned to test the continuity of the mineralized zone and current drilling will provide additional data in critical areas. Average grade will be established upon completion of the program.

Computerization of all current geological data and assay values will be undertaken by the firm of Meyer and Banfield of Tucson, Arizona.

Metallurgical tests have been initiated at our Mine Laboratory and the ore was found to be highly responsive to flotation of a bulk concentrate. The next phase in the program is designed to investigate methods for separate production of copper and molybdenum concentrates.

The map on the reverse side shows a general outline of our claim holdings in relation to the highway, the ore zone and Mineral Lease 33R which covers our original holdings in the area. A photograph showing the topography is included.

October 28, 1970

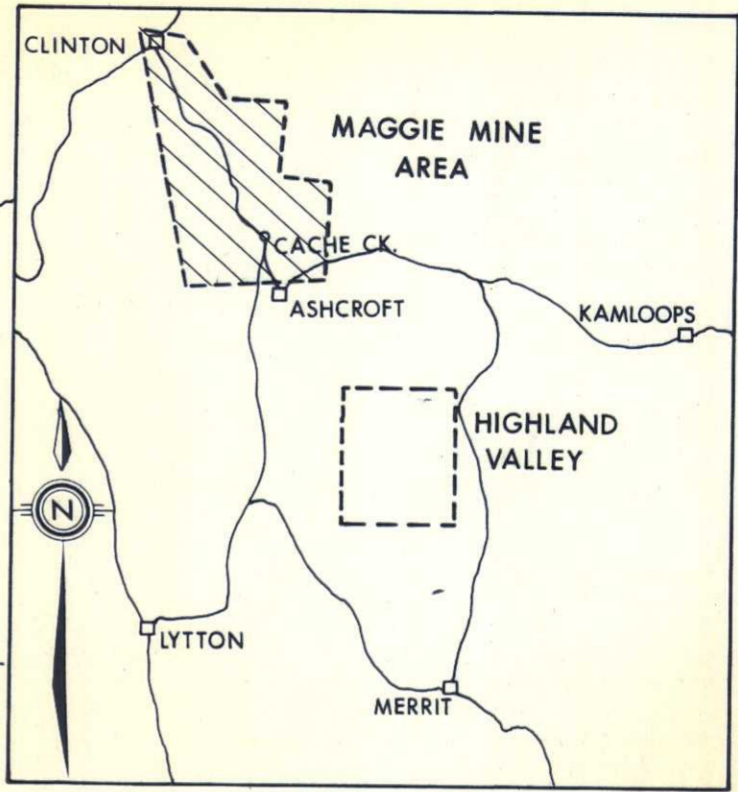
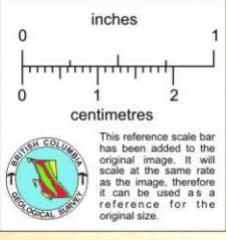
Patrick M. Reynolds
President

*Photograph looking
northwest across
area of strong
mineralization.*



MAGGIE MINE AREA

CACHE CREEK B.C.



- BETHLEHEM COPPER
- ACROLL OIL & GAS LTD
- INDIAN RESERVATIONS
- HIGHWAY

T. 23

T. 22

T. 21

T. 20

R. 26

R. 25

R. 24

