

BARRIER REEF RESOURCES LTD. (N.P.L.)

SUITE 904
675 WEST HASTINGS STREET
VANCOUVER, B.C.
CANADA

604-688-3584

A REVIEW OF MINERAL PROSPECTS AND EXPLORATION PROJECTS

APRIL 1977

BARRIER REEF RESOURCES LTD. (N.P.L.)

DIRECTORS:

R. Page Chilcott

Jurgen T. Lau

Albert F. Reeve

Bryan J. Reynolds

OFFICERS:

Albert F. Reeve, President

Jurgen T. Lau, Secretary

SOLICITORS:

Bull, Housser & Tupper
Vancouver, B.C.

AUDITORS:

MacGillivray & Co.
Vancouver, B.C.

TRANSFER AGENT & REGISTRAR:

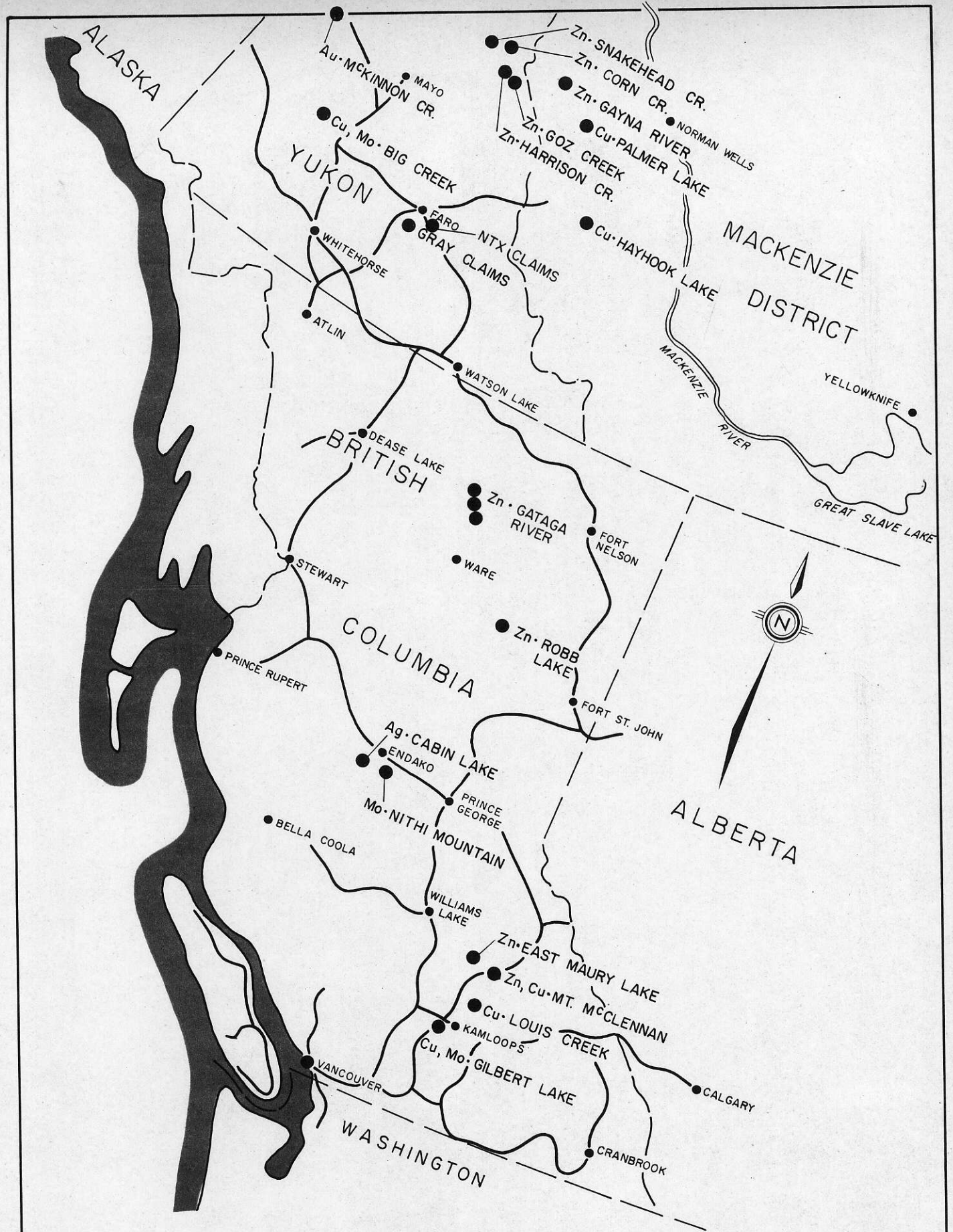
Canada Permanent Trust Company
701 West Georgia Street
Vancouver, B.C. V7Y 1E5

BUSINESS OFFICE:

904 - 675 West Hastings Street
Vancouver, B.C. V6B 1N2

REGISTERED OFFICE:

3000 Royal Centre
1055 West Georgia Street
Vancouver, B.C. V6E 3R3



BARRIER REEF RESOURCES LTD. (NPL)
MINERAL PROSPECTS & PROPERTY INTERESTS
 APR. 1977.

C O N T E N T S

	<u>PAGE</u>
INTRODUCTION	1
ROBB LAKE ZINC PROSPECT, BRITISH COLUMBIA	2
OTHER PROSPECTS IN BRITISH COLUMBIA	4
GOZ CREEK ZINC PROSPECT, YUKON TERRITORY	5
OTHER PROSPECTS IN THE YUKON TERRITORY	7
JOINT INTERESTS WITH RIO TINTO CANADIAN EXPLORATION LIMITED IN THE YUKON AND NORTHWEST TERRITORIES	7
GAYNA RIVER ZINC PROSPECT	7
HAYHOOK LAKE COPPER PROSPECT	7
PALMER LAKE AND SNAKEHEAD CREEK PROSPECTS	8
INTERESTS IN OTHER COMPANIES	8
CASTLEMAINE EXPLORATIONS LTD.	8
KAPVIK EXPLORATION LTD.	9
NITHEX EXPLORATION LTD. (N.P.L.)	9

LIST OF ILLUSTRATIONS

INDEX MAP

ROBB LAKE ZINC PROSPECT - GEOLOGICAL MAP

GOZ CREEK ZINC PROSPECT

 GEOLOGICAL MAP

 CROSS SECTION HAB ZONE

 CROSS SECTION HAB ZONE

 SECTION ZZ

INTRODUCTION

Barrier Reef Resources Ltd. (N.P.L.) is a mineral exploration organization, based in Vancouver, British Columbia, with mineral property interests in western Canada. It is a public company with its shares traded on the Vancouver Stock Exchange. The Company was formed by the amalgamation of Windermere Exploration Ltd. and Peregrine Exploration Ltd., in 1972. Since 1969, under the direction of the Company's present management, two and one-half million dollars has been spent on mineral exploration by Barrier and its predecessors. In addition, three and one half million dollars has been spent by major mining companies on projects initiated by Barrier and its predecessors.

At Robb Lake in northeastern British Columbia, where the Company owns a 20% carried interest in a zinc prospect, exploration drilling is well advanced and there are good prospects for the eventual development of a commercial ore reserve. Through direct ownership, exploration agreements, and equity in other companies, Barrier presently holds interests in a total of twenty-one mineral properties located in British Columbia, Yukon and the Northwest Territories. It is expected that drilling will be undertaken on at least three of these properties in 1977. Also, the Company is planning to seek additional mineral prospects through an active exploration programme in 1977. Following are summary descriptions of the various mineral property interests held by the Company.

ROBB LAKE ZINC PROSPECT, BRITISH COLUMBIA

Barrier holds a 20% carried interest in a zinc-lead prospect (459 claims) at Robb Lake in northeastern British Columbia. Ecstall Mining Limited, a subsidiary of Texasgulf Inc., and Arrow Inter-America Corporation, a subsidiary of W. R. Grace & Co., each have a 40% interest and have provided all of the funds for exploration work.

Robb Lake is located at 56°57' Latitude, 123°45' Longitude, fifty miles west of Pink Mountain on the Alaska Highway and ninety miles west of the B. C. Railway. There is a 3,000 foot airstrip on the property, and a tractor road, usable in the winter months and in dry weather, extends from Robb Lake to Pink Mountain.

During 1972, 1973, 1974 and 1975 a total of one and one-half million dollars was spent on drilling and geological work. Eighty diamond drill holes totalling 43,478 feet have been bored.

At Robb Lake, gently dipping Middle Devonian carbonate beds are irregularly mineralized with zinc and lead sulphides within a stratigraphic interval of about 600 feet in the lower part of the "2b" and upper part of the "2c" dolostone formations, shown on the enclosed geological maps and cross section. The mineralized zones are crudely stratiform breccia masses containing one to three million tons of possible ore grade material. The potential is for an "ore field" containing a number of these deposits. Experience elsewhere in the world suggests that fields of this kind can only be evaluated by extensive pattern drilling. At Robb Lake, vertical drill holes approximately 1,000 feet apart, have been used to explore some geologically favourable areas; followed by pattern drilling on 200 to 400 foot centres around successful exploratory holes. Less than one-half of the potential ore field has been explored in this way.

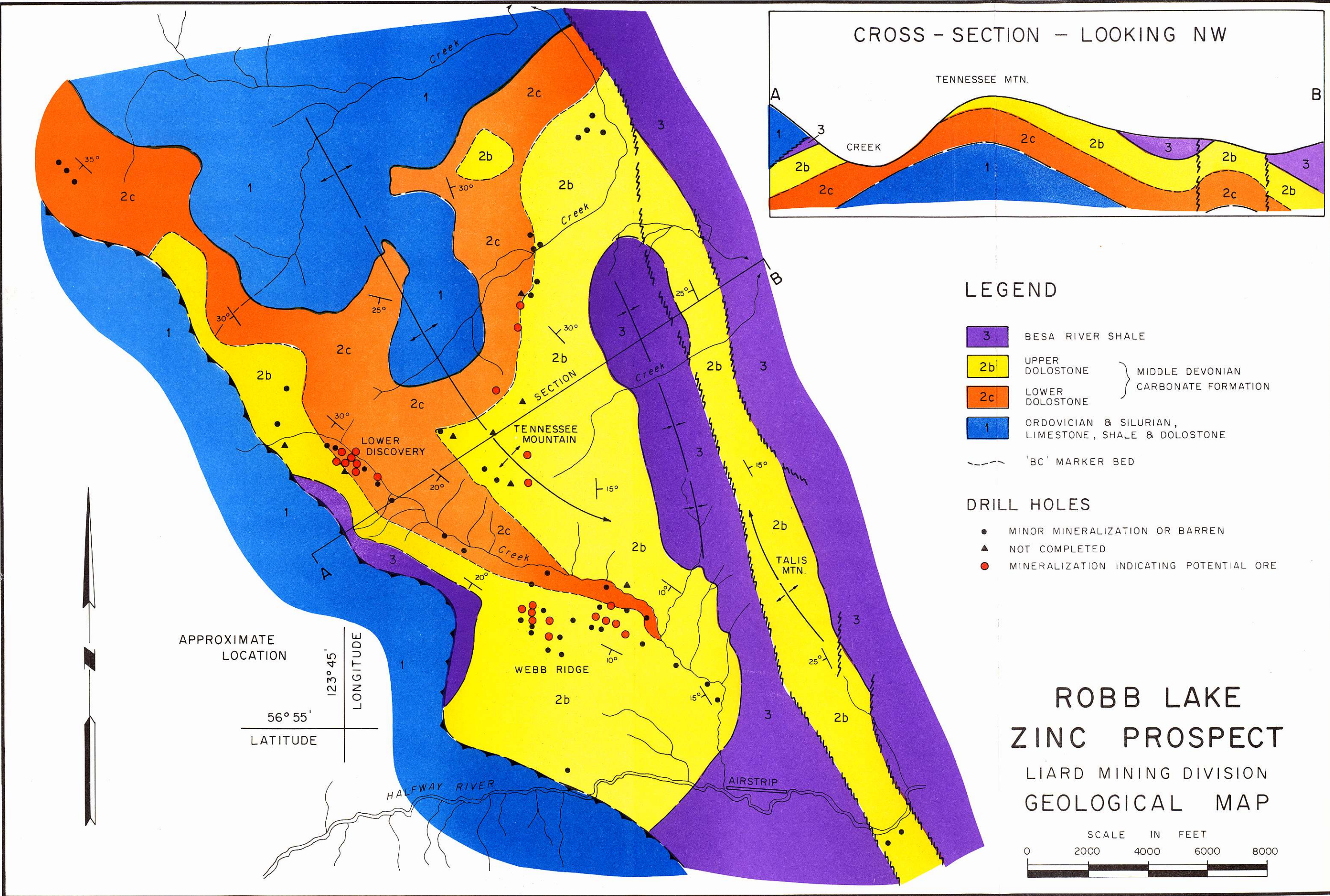
To date, reserves inferred by follow up drilling are as follows:

	Average grade % Pb Zn	Millions of tons	
West Webb Ridge Zone	8.5	2.9	
East Webb Ridge Zone	6.5	1.7	open for expansion
Lower Discovery Zone	5.7	1.5	open for expansion
TOTAL	6.1 million tons averaging 7.3% combined lead and zinc.		

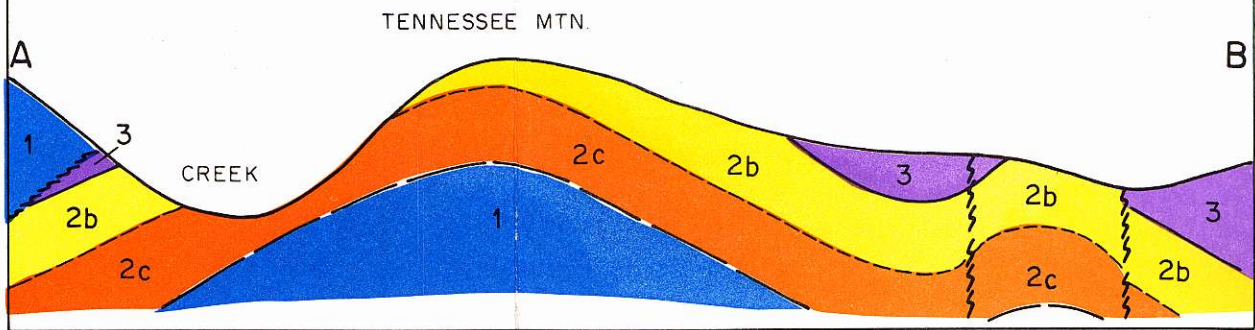
Mineralization encountered in 5 drill holes on other parts of the property indicates ore potential in the Tennessee Mountain area and in the valley immediately to the north. In addition, there is geological potential for finding ore by drilling in the Talis Mountain and Halfway River Valley areas.

A preliminary metallurgical test produced a high quality flotation concentrate containing 64% zinc, with acceptable metal recoveries. The dolomitic host rocks and mineralized breccia zones are uniformly massive and competent and would be amenable to large scale low cost underground mining methods of the kind used elsewhere in similar geological environments. A small part of the present drill inferred reserve has open pit mining potential.

W. R. Grace & Co. and Texasgulf have not planned any exploration work at Robb Lake during 1977 for reasons not entirely related to the merits of the prospect. However, the terms of the Robb Lake Joint Venture Agreement require some activity which would favour Barrier's interest prior to the end of 1978.



CROSS - SECTION - LOOKING NW



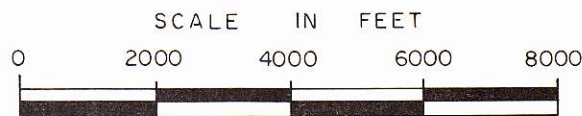
LEGEND

- 3 BESA RIVER SHALE
 - 2b UPPER DOLOSTONE
 - 2c LOWER DOLOSTONE
 - 1 ORDOVICIAN & SILURIAN, LIMESTONE, SHALE & DOLOSTONE
 - 'BC' MARKER BED
- } MIDDLE DEVONIAN CARBONATE FORMATION

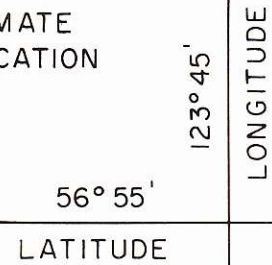
DRILL HOLES

- MINOR MINERALIZATION OR BARREN
- NOT COMPLETED
- MINERALIZATION INDICATING POTENTIAL ORE

ROBB LAKE
ZINC PROSPECT
LIARD MINING DIVISION
GEOLOGICAL MAP



APPROXIMATE LOCATION



OTHER PROSPECTS IN BRITISH COLUMBIA

The Company has recently acquired a thirty unit claim block which covers a porphyry copper-molybdenum prospect located at Gilbert Lake, about ten miles southwest of Kamloops. Geophysical and geochemical surveys at Gilbert Lake are planned for 1977.

At East Maury Lake, about twenty miles northwest of Clearwater, British Columbia, the Company has acquired a massive sulphide zinc prospect. Geological and geophysical work is planned by the Company at East Maury Lake in 1977.

GOZ CREEK ZINC PROSPECT, YUKON TERRITORY

The Company is the sole owner of a zinc prospect (213 claims) located at 64°25' Latitude, 130°30' Longitude, 125 miles northeast of Mayo, Yukon Territory. Present access is by air from Mayo. During 1973, 1974 and 1975 Barrier carried out drilling and geological work at a total cost of 1.25 million dollars. Fifty-five diamond drill holes with a total length of 20,500 feet have been bored.

At Goz Creek, gently inclined Lower Cambrian dolostone beds are mineralized with zinc sulphides which have been partially converted to zinc carbonates and oxides by deep weathering. The mineralization occupies two distinct stratigraphic units each about 400 feet in thickness, separated by a relatively barren interval of approximately 500 feet. Northwest trending elongate breccia masses form high grade runs which contain up to 30% zinc. Lean material (1 to 5% zinc) occurs as extensive crude layers or mantos several tens of feet in thickness. The form and distribution of the mineralization as it is presently known is illustrated on the enclosed geological map and cross sections.

It is estimated that potential tonnage within an area of 2,000 feet x 4,000 feet, in the "A₁" horizon, that includes forty drill holes, is as follows:

Breccias

	<u>MMT</u>	<u>% Zn</u>
* HAB breccia (open), 10 intersections;	1.75	18%
Total geological potential for breccia zones, including HAB;	5	13%

Mantos

Twenty-five intersections, average thickness 18 feet;	7	4%
* Gross value @ \$.30/lb. for zinc = \$189,000,000		

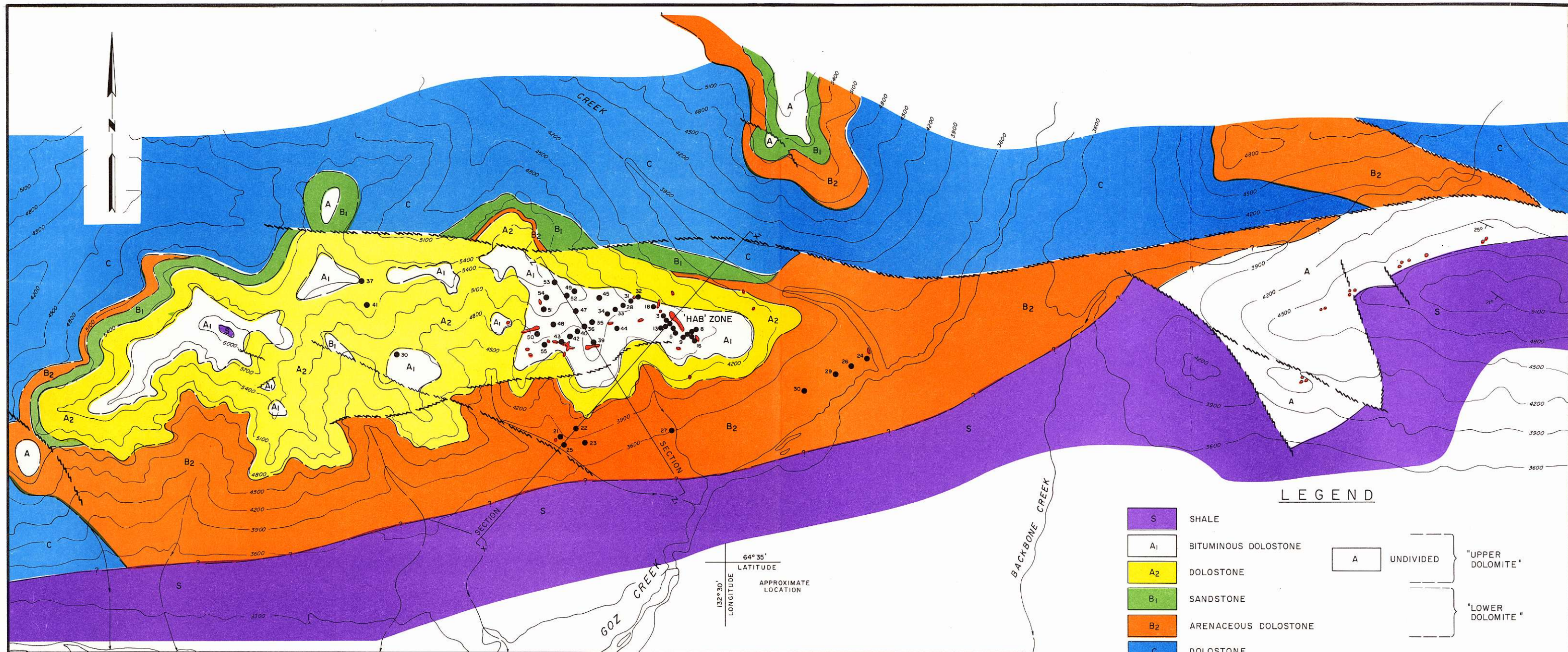
The zinc grades represent undiluted total zinc content and include an estimated average of one quarter oxidized zinc.

The restricted tonnage potential indicated by the detailed grid drilling of the "A₁", in the discovery outcrop area, does not approach an economic reserve. However, there are at least

three other geological prospects within the potential ore field on the Goz Creek property which could yield the required additional tonnage subject to exploratory drilling. They are as follows:

1. There is some evidence to suggest that the HAB zone in unit "A₁" is the upper part of a break-through breccia and may¹ be connected by a rich pipe-like zone to mantos which occur in the "B₂" horizon.
2. A possible system of mantos and breccias in the "B₂" arenaceous dolostone is suggested by the mineralization intersected in drill holes #21, #25 and #22.
3. About three miles east of the HAB zone, where no drilling has been done, the favourable "A" dolostone unit is partly exposed in an area of about one and one-half square miles that includes a number of mineralized outcrops and extensive enrichment of the soil cover by zinc and lead.

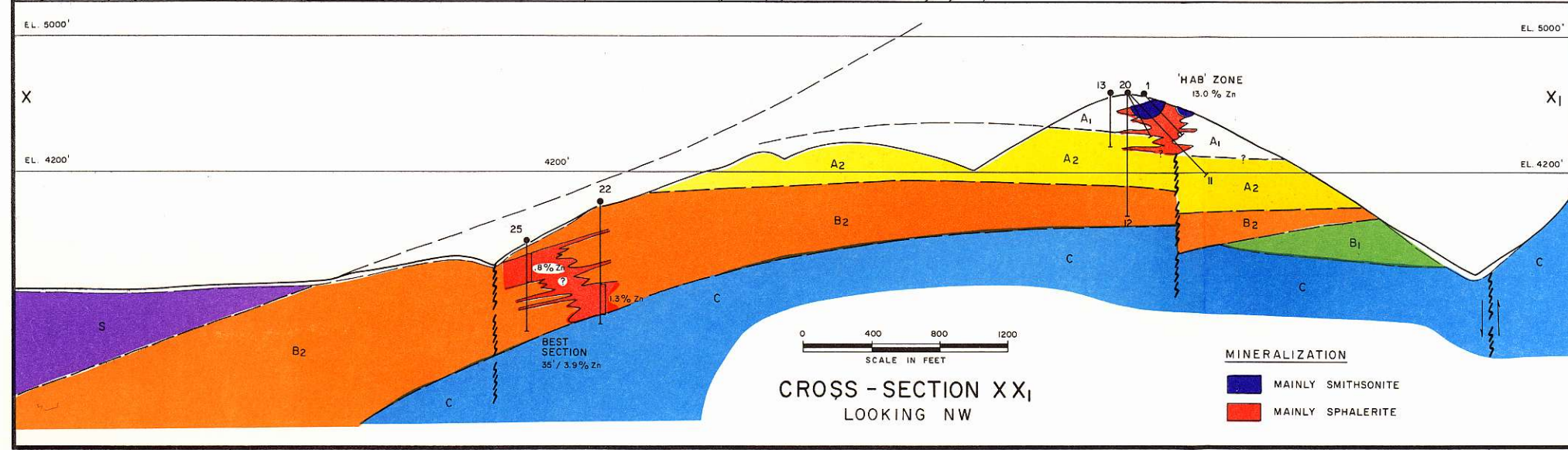
A substantial exploration drilling programme is required to test the Goz Creek Prospect for additional reserve potential. It is not within the Company's present means to carry out such a programme and for this reason participation by a major mining company is being sought.



LEGEND

- | | | | | |
|--|----------------|----------------------|--|------------------|
| | S | SHALE | | |
| | A ₁ | BITUMINOUS DOLOSTONE | | "UPPER DOLOMITE" |
| | A ₂ | DOLOSTONE | | |
| | B ₁ | SANDSTONE | | "LOWER DOLOMITE" |
| | B ₂ | ARENACEOUS DOLOSTONE | | |
| | C | DOLOSTONE | | |
- PRINCIPAL OUTCROPS MINERALIZED DIAMOND DRILL HOLE WITH SPHALERITE

64° 35' LATITUDE
APPROXIMATE LOCATION
132° 30' LONGITUDE

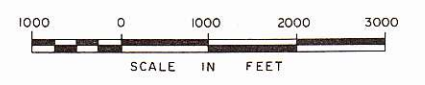


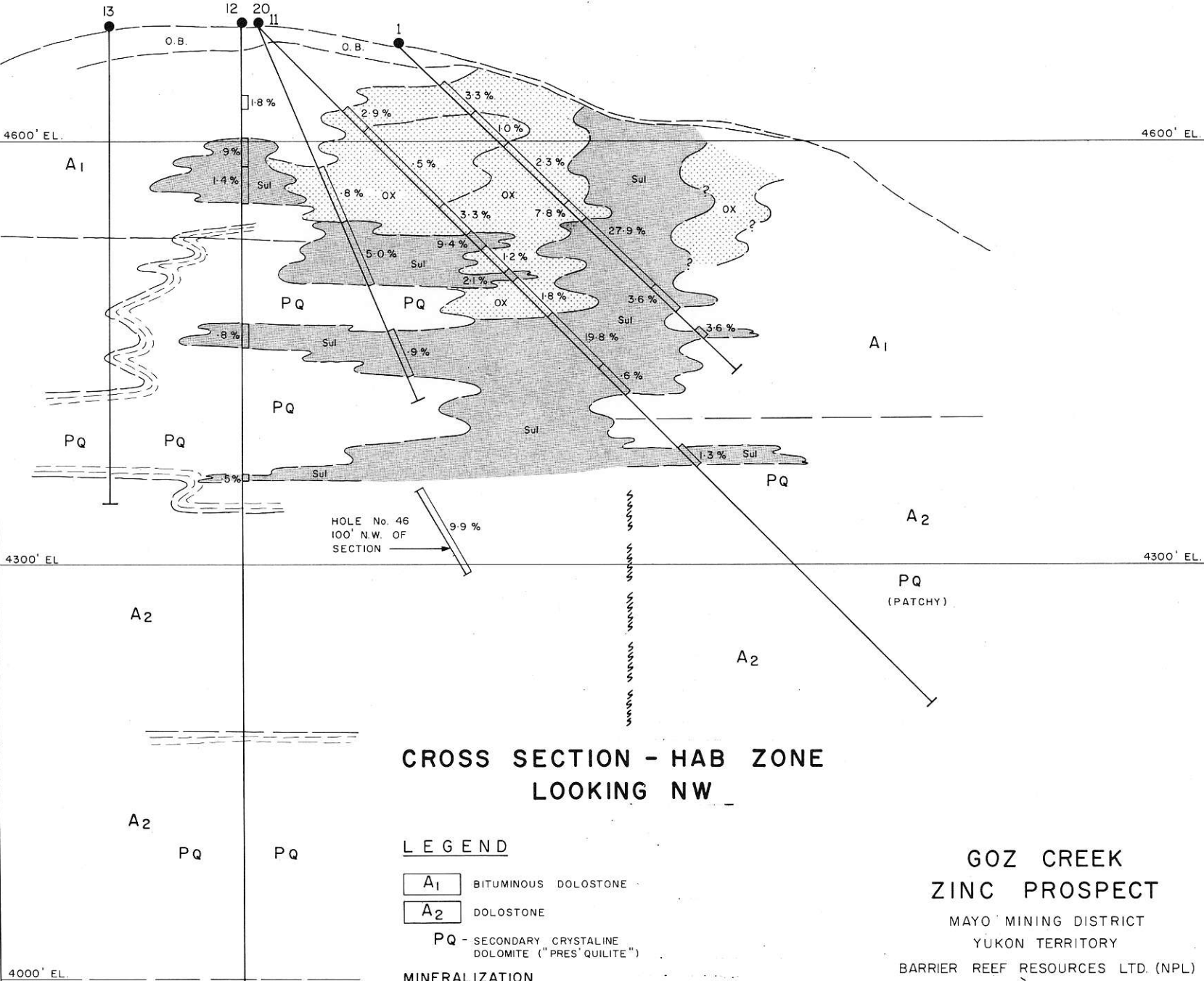
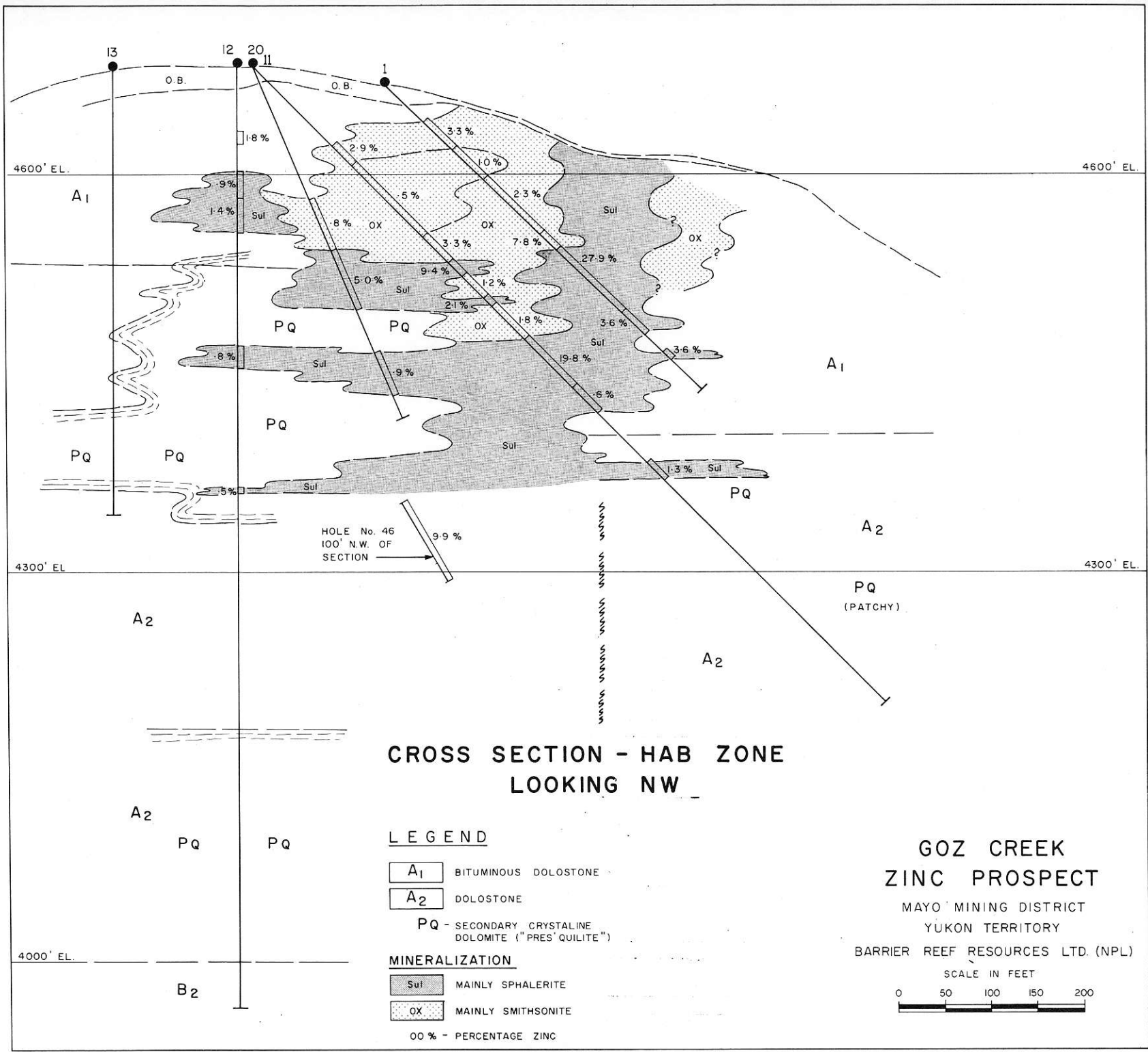
**GOZ CREEK
ZINC PROSPECT**

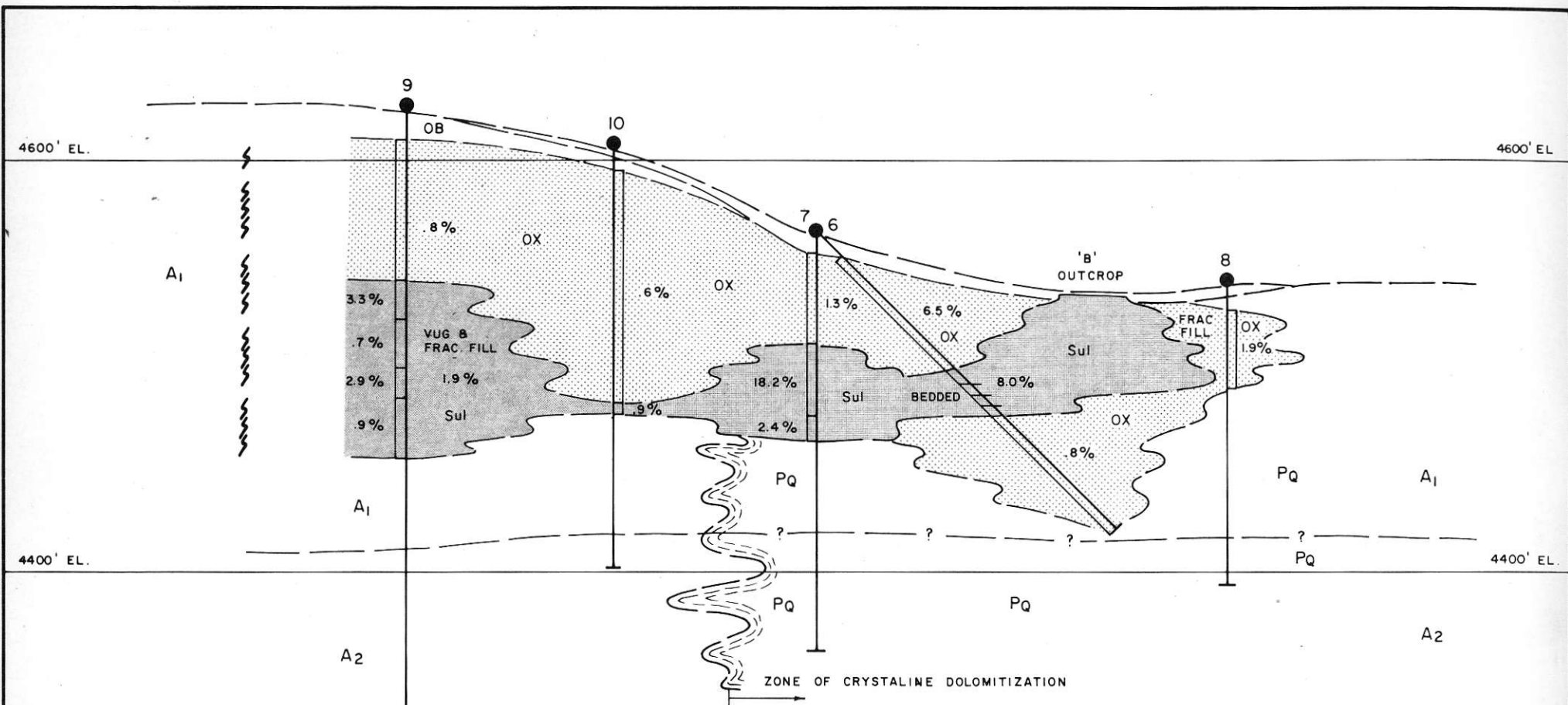
MAYO MINING DISTRICT · YUKON TERRITORY

GEOLOGICAL MAP

BARRIER REEF RESOURCES LTD. (NPL)







LEGEND

- A₁ BITUMINOUS DOLOSTONE
- A₂ DOLOSTONE
- PQ - SECONDARY CRYSTALLINE DOLOMITE ("PRES' QUILITE")

MINERALIZATION

- Sul MAINLY SPHALERITE
- OX MAINLY SMITHSONITE

00% - PERCENTAGE ZINC

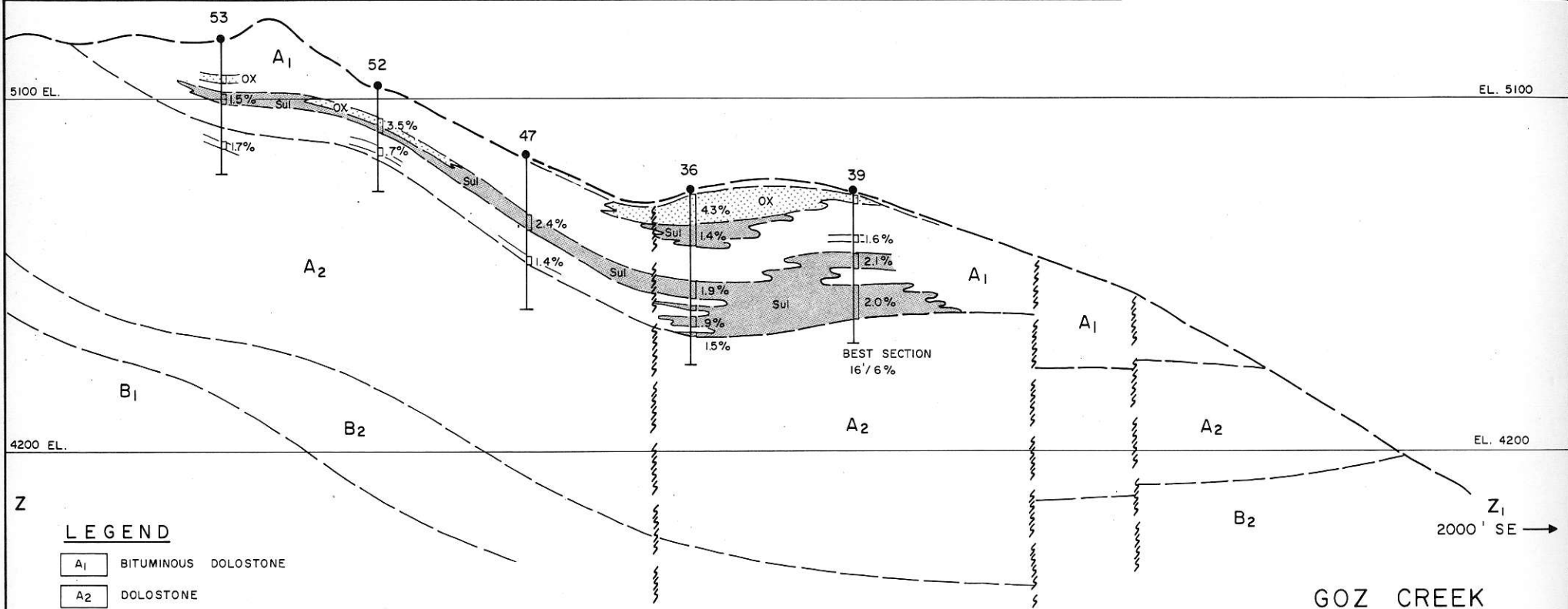
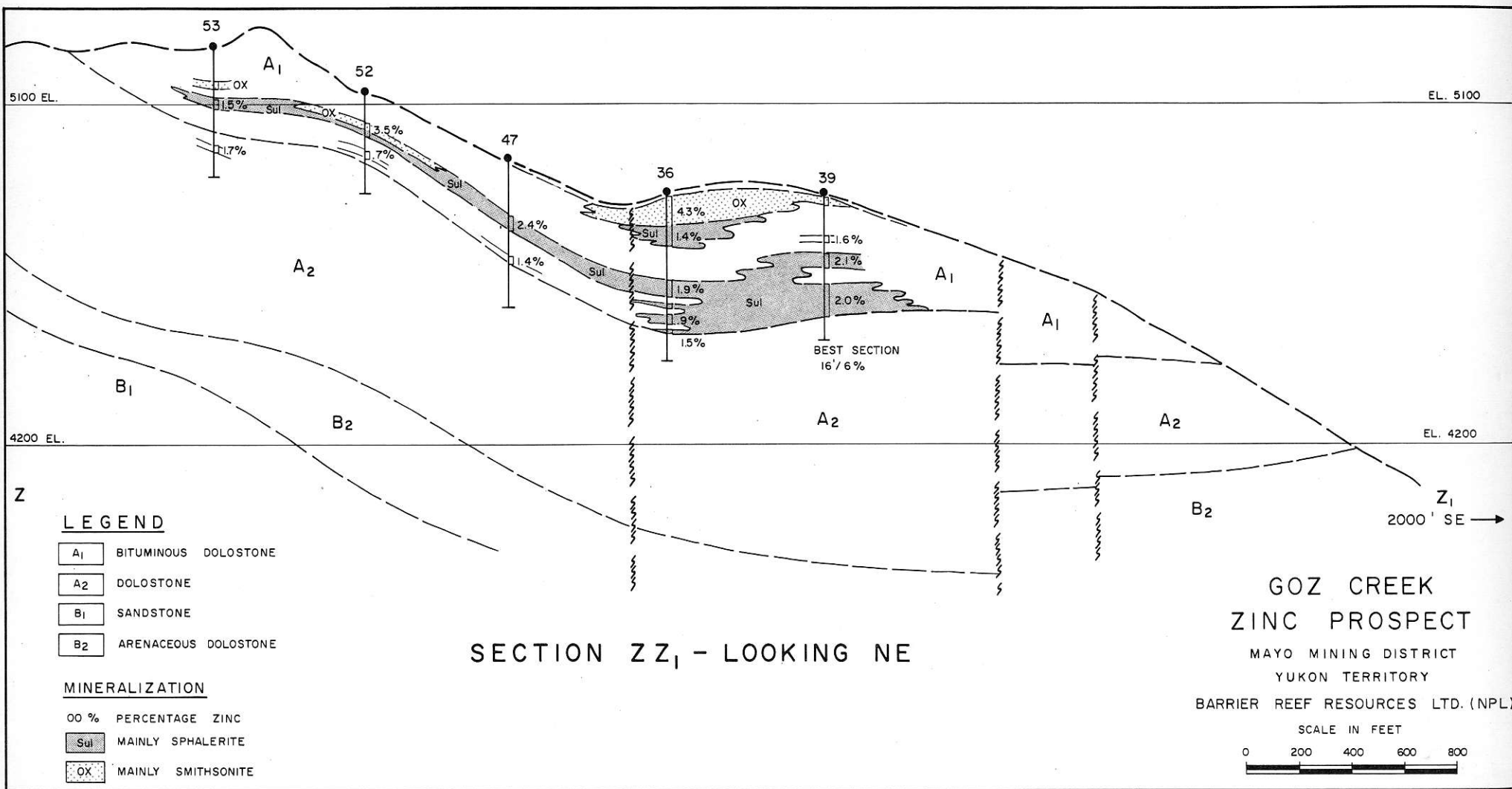
**CROSS SECTION - HAB ZONE
LOOKING NW**

**GOZ CREEK
ZINC PROSPECT**

MAYO MINING DISTRICT
YUKON TERRITORY
BARRIER REEF RESOURCES LTD. (NPL)

SCALE IN FEET





OTHER PROSPECTS IN THE YUKON TERRITORY

The Company owns a silver-lead-zinc prospect (32 claims) at Corn Creek, about thirty miles northwest of the Company's Goz Creek property. The Corn Creek property adjoins claims held under option by Cominco. The Company is planning to hold its claims at Corn Creek pending further developments in the area.

The Company owns a zinc prospect at Harrison Creek, ten miles west of Goz Creek. The property is presently under option to Norcen Energy Resources Ltd., a successor to Great Plains Development Company of Canada Ltd. Great Plains has expended over \$200,000 on geological and geophysical work and drilling at Harrison Creek.

JOINT INTERESTS WITH RIO TINTO CANADIAN EXPLORATION LIMITED IN THE YUKON AND NORTHWEST TERRITORIES

The Company has a 5% carried interest (convertible to a 10% participating interest when a production decision has been made) in four mineral prospects being explored by Rio Canex in MacKenzie District and the Yukon Territory.

GAYNA RIVER ZINC PROSPECT

At Gayna River, located one hundred miles west of Norman Wells, Proterozoic carbonate rocks are extensively mineralized with zinc and lead sulphides. In 1975 and 1976 Rio Canex made exploration expenditures of more than one million dollars on the Gayna River property. Eighty-four diamond drill holes, having a total length of 44,000 feet, have been bored. It is expected that Rio Canex will continue drilling at Gayna River in 1977.

HAYHOOK LAKE COPPER PROSPECT

Hayhook Lake is located near the Redstone River, about one hundred and thirty miles south of Norman Wells in the Northwest Territories. Extensive "bedded" copper deposits are found in Proterozoic sedimentary rocks in the Redstone District. A recent drilling programme in this area by Shell Canada Limited indicated a deposit of twenty-two million tons averaging 2.7% Cu. During 1976, at the Hayhook Lake property (563 claims), Rio Canex carried out an extensive programme of geological and geochemical surveys and it is anticipated that diamond drilling will be initiated in 1977.

PALMER LAKE AND SNAKEHEAD CREEK PROSPECTS

Rio Canex has also done geological work on a prospect at Snakehead Creek (72 claims) on the Bonnet Plume River where lead and zinc sulphides occur in Proterozoic shales and carbonate rocks. Rio has recently staked 147 claims near Palmer Lake in MacKenzie District, where copper mineralization similar to that found in the Redstone District occurs. Barrier's interest in the Palmer Lake prospect is disputed by Rio.

INTERESTS IN OTHER COMPANIES

Through minority interests in other corporations, Barrier has interests in nine other prospects and mineral properties in British Columbia and the Yukon.

CASTLEMAINE EXPLORATIONS LTD.

Barrier owns 17% (145,666 shares) of the issued capital of Castlemaine, which is a private British Columbia company.

Castlemaine owns one hundred and forty mineral claim units at Mt. McClennan, located in the North Thompson River area, approximately seventy miles north-northeast of Kamloops, B.C. Copper and zinc mineralization, of probable volcanogenic origin, occurs in a geological setting that is similar to the Goldstream and Kutcho Creek areas where important discoveries have been made recently by Noranda and Imperial Oil. At Mt. McClennan, "Eagle Bay" phyllitic metasedimentary and metavolcanic rocks, capped by a carbonate horizon, are extensively mineralized with iron sulphides, accompanied by sphalerite and chalcopyrite. The sulphide zone appears to be stratiform and has been traced intermittently along strike for a distance of about three miles. This property has been optioned to Canadian Nickel Company, a subsidiary of Inco Limited. A substantial programme of geophysical and geological surveys was begun by Canadian Nickel in the fall of 1976.

Castlemaine also holds a copper prospect in the favourable Eagle Bay formation about thirty miles northeast of Kamloops.

Castlemaine holds a 25% interest in the Carmacks Syndicate, which owns a porphyry copper-molybdenum prospect located on Big Creek, 18 miles northwest of Mt. Freegold, Yukon. An option to purchase the Carmacks property has been acquired by Klotassin Syndicate; a consortium of Marietta Resources International Ltd., Newconex Canadian Exploration Ltd., and

Molycorp Inc. A drilling programme by Klotassin has recently been completed on the Carmacks property. The results of this are not yet available.

In partnership with Welcome North Mines Ltd., Castlemaine has recently acquired 300 claims in the Gataga River area in northeastern British Columbia. The claims cover lead and zinc prospects in the Besa River shale formation.

KAPVIK EXPLORATION LTD.

Barrier holds a 3.8% interest, 28,000 shares, in Kapvik Exploration Ltd., a private British Columbia company. Kapvik owns a 33-1/3% interest in a prospect on McKinnon Creek in the Klondike District, Yukon Territory, where gold occurs in a quartz-pebble conglomerate formation. Kapvik also owns 17% of the issued shares of Castlemaine Explorations Ltd.

NITHEX EXPLORATION LTD. (N.P.L.)

Barrier owns 52,500 shares, 3.5% of Nithex, which is a public company with its shares listed on the Curb Section of the Vancouver Stock Exchange. Nithex owns property (Gray claims and NTX claims) in the Ross River District, Yukon, a molybdenum prospect at Nithi Mountain in the Endako area of British Columbia and holds an option on a silver prospect at Cabin Lake, also in the Endako area. Nithex also holds 17% of the issued shares of Castlemaine Explorations Ltd.