

5776

REPORT
on the
PAT CLAIMS
of
BOW RIVER RESOURCES LTD.

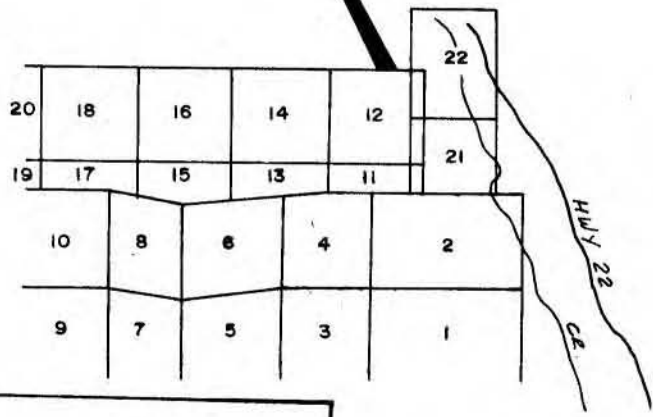
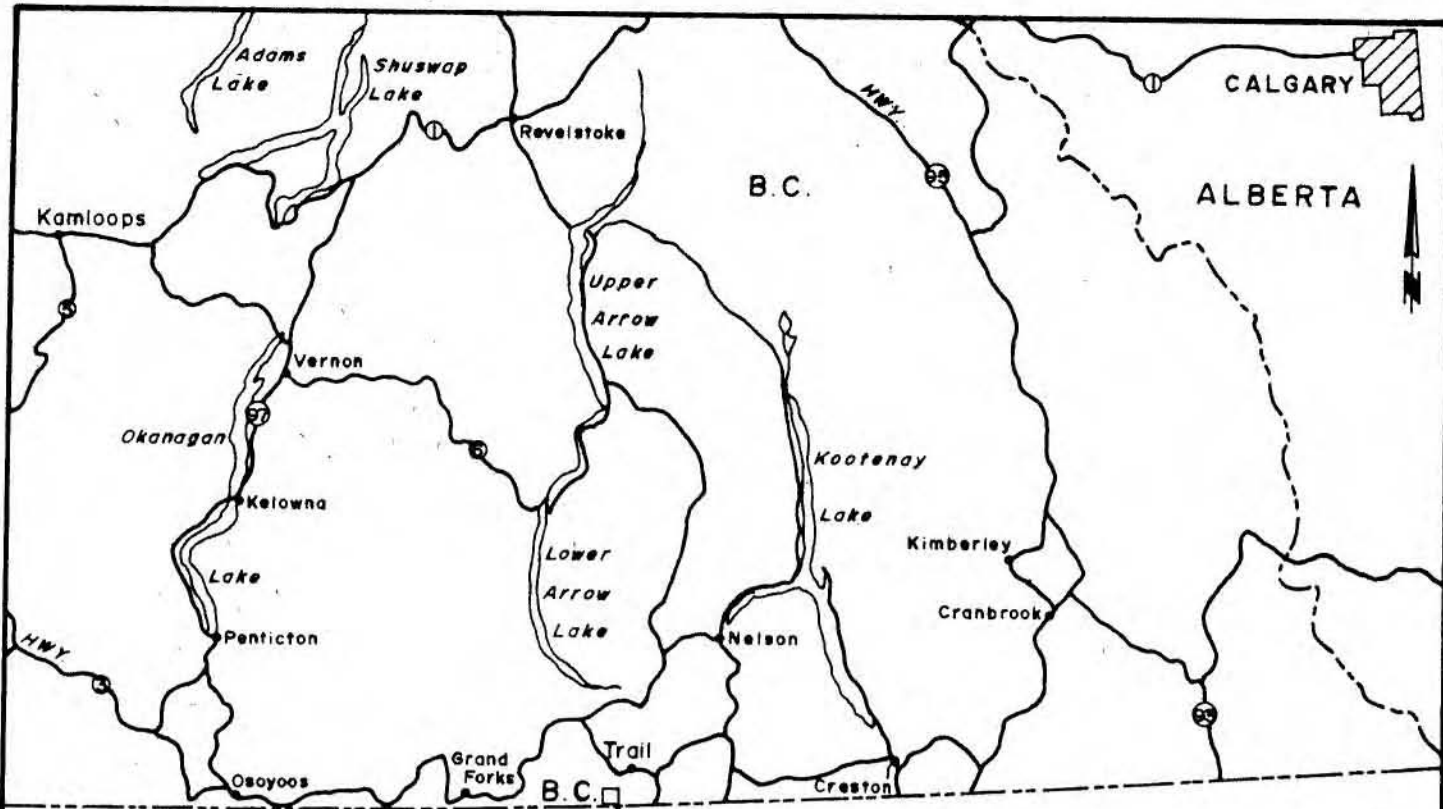
by

E. D. CRUZ, P. ENG.

November 14, 1975

Part 2 ^{#5776} of 2

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5776 MAP _____
PART B



Department of
 Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. 5776 MAP 1
PART B

BOW RIVER RESOURCES LTD.
PAT CLAIMS
LOCATION AND CLAIMS MAP

SCALE LOCATION MAP 1" = 40 MILES APPROX CLAIMS MAP 1/2" = 1500 APPROX

C O N T E N T S

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MAPS

- #1- LOCATION MAP & STRIP MAP
- 2- STRIP MAP "ZINC"
- 3- GEOCHEM MAP "LEAD"
- 4- GEOCHEM MAP "COPPER"

SUMMARY AND CONCLUSION

Bow River Resources Ltd. own, by virtue of staking, a total of 22 mineral claims in the Mount Sophia area of Rossland, Trail Creek Mining Division, B.C.

The claims are underlain by Paleozoic argillites and minor limestone of the Mount Roberts formation occurring as windows in the overlying Rossland formation of mainly volcanic flows and pyroclastics. Mineralization which consists mainly of sphalerite, galena and minor chalcopyrite was reported to occur as fissure filling with dominant quartz gangue in argillites and/or argillaceous quartzite host rocks.

Geochemical soil sampling on the property delimited two northeasterly trending, roughly coincident copper, lead and zinc anomalous zones. These zones could be indicative of subsurface structural zones with parallel or discontinuous vein systems carrying zinc, lead and copper minerals. Limited trenching of one of the anomalies uncovered mineralized material carrying abundant sphalerite, galena and minor chalcopyrite.

The property warrants further exploration.

RECOMMENDATIONS

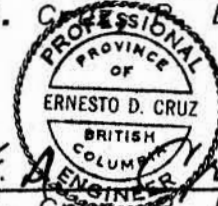
Phase I

1. Run VLF electromagnetic survey over the geochemically anomalous zones to locate favourable structures.
2. Conduct an induced polarization survey using 50' to 100' electrode spacing over the geochemical anomalous zones.
3. Geological mapping and prospecting.
4. Bulldozer trenching of areas delimited by the above survey and of the geochemically anomalous areas.

Phase II

Should the above work show favourable results, diamond drilling should be undertaken. Provision for 2.500 feet of initial drilling is recommended.

Respectfully submitted,
E. D. Cruz, P. Eng



E. D. Cruz
E. D. Cruz, P. Eng.

ESTIMATED EXPENDITURES

Phase I

1. VLF - EM Surveys: 5 line miles @ \$90/mile.....	\$450.00
2. Induced Polarization 5 line miles @ \$600/mile.....	\$3,000.00
3. Line Cutting.....	1,000.00
4. Geological Mapping.....	1,500.00
5. Bulldozer Trenching.....	2,000.00
6. Rock Assaying.....	1,000.00
7. Food & Lodging.....	1,000.00
8. Transportation.....	950.00
9. Report Preparation & Supervision.....	1,600.00
10. Contingencies	<u>1,000.00</u>
Total.....	\$13,500.00

Phase II

1. Diamond Drilling 2,500' @ \$16/foot.....	\$40,000.00
2. Supervision & Report Preparation.....	2,000.00
3. Rock assaying.....	2,000.00
4. Food & Lodging.....	1,000.00
5. Contingencies.....	<u>2,000.00</u>
Total.....	\$47,000.00

INTRODUCTION

This report on the Pat mineral claims is based on a study of data from previous work on the property and from a government published report of the general area. No visit was made by the writer to the property.

PROPERTY

Bow River Resources Ltd. own a total of 22 contiguous mineral claims as shown in the accompanying claim location map. Following are details of the claims:

<u>Claim Name</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>Expiry Dates</u>
<i>Pat 1 - 20</i>	<i>5271 - 5290</i>	<i>Feb. 22, 1974</i>	<i>Feb. 22, 1976</i>
<i>Pat 21 - 22</i>	<i>5200 - 5401</i>	<i>Sept. 27, 1974</i>	<i>Oct. 7, 1976</i>

LOCATION AND ACCESS

The claims are situated on the eastern slope of Mount Sophia about 5 miles southwest of Rossland, British Columbia. The claim block is centered at Latitude 49°00'30"N and Longitude 117°51'W. The easternmost claims are traversed by Highway 22. The showing (Sunset Showing) is accessible by pick-up truck or 4 wheel drive vehicle via an unimproved logging road.

TOPOGRAPHY AND DRAINAGE

The claim block lies on the steep eastern slope of Mount Sophia with elevation ranging from 2200 feet to 4200 feet above sea level.

Little Sheep Creek serves as the main drainage of the area.

GENERAL GEOLOGY AND MINERALIZATION

The claim area and its vicinity is underlain principally by upper Paleozoic Mount Roberts formation consisting of slate, limestone, argillaceous quartzite and greenstone forming a northeasterly trending anticlinal structure. This formation occurs as a window in the overlying Rosslund formation (Lower Jurassic age) consisting of volcanic flows and pyroclastics with minor shale beds. The above formations are intruded elsewhere by Cretaceous to tertiary plutonic rocks.

Mineralization on the property was reported to consist of sphalerite, galena and minor chalcopyrite occurring as fracture filling in the argillaceous quartzite member of the Mount Roberts formation.

About 3 $\frac{1}{2}$ miles to the west on the western slope of Mount Sophia, lies the Douglas and Velvet properties from which considerable amounts of ore have been extracted in the past. On both properties, mineralization was reported to be controlled by NW to NE trending shear zones.

PREVIOUS WORK - GEOCHEMICAL SURVEY

The most recent recorded work on the property was a geochemical soil sampling program conducted by Glen E. White Geophysical Consulting & Services Ltd. on September 23 to October 2, 1974. This program consisted of soil sampling every 200 feet along established grid lines spaced at 400 feet covering the claims. The soil samples were analyzed for zinc, lead, copper, silver and molybdenum.

The geochemical data showed that zinc, lead and copper gave the best geochemical response as depicted on the accompanying geochemical maps. Several discontinuous roughly coincident zinc, lead and copper anomalies forming two significant geochemically anomalous zones were delimited. These apparent northeasterly trending zones are indicative of subsurface structural zones, possibly parallel vein systems. Limited trenching in one of the anomalies reportedly uncovered mineralized material. A sample of this material displayed at the Company Office consists predominantly of sphalerite, galena and minor chalcopyrite and pyrite.


E. D. Cruz, P. ENG.

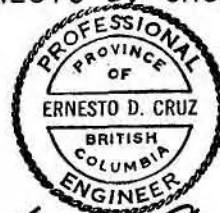
C E R T I F I C A T E

I, Ernesto D. Cruz, DO HEREBY CERTIFY AS FOLLOWS:

- (1) That I am a Consulting Mining Engineer and reside at 7734 Garret Drive, Delta, B.C.*
- (2) That I am a Graduate of Mapua Institute of Technology Phillipines (B.A.Sc.) and University of Washington (M.A.Sc.) in the Faculty of Mining Engineering.*
- (3) That I am a registered P. ENG in the Association of Professional Engineers in the province of British Columbia.*
- (4) That I have practised geological engineering for eleven (11) years.*
- (5) That this report consists of 5 typewritten pages.*
- (6) That I have no interest directly or indirectly in the Pat mineral claims or the securities of Bow River Resources Ltd, nor do I expect to acquire or receive any.*

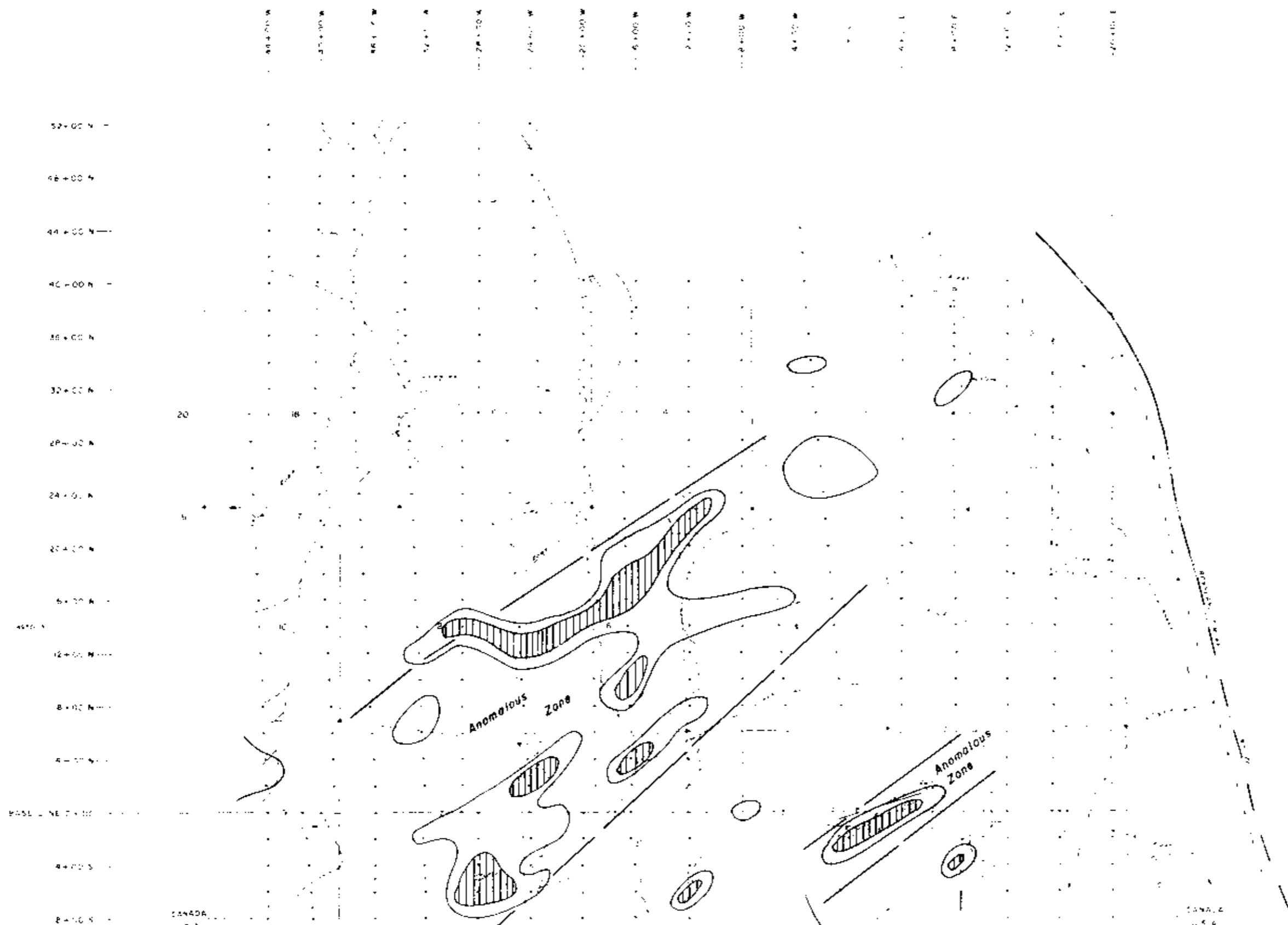
DATED at Vancouver, British Columbia, this 14th day of November, 1975.



ERNESTO D. CRUZ, P. ENG.



E. D. Cruz

Ernesto D. Cruz, P. Eng.



 > 400 P.P.M. Definitely Anomalous
 300-400 P.P.M. Anomalous

Department of
 Geological and Atmospheric Sciences
 Michigan State University
 East Lansing, Michigan 48824
 5776 PART B 2



Part 2

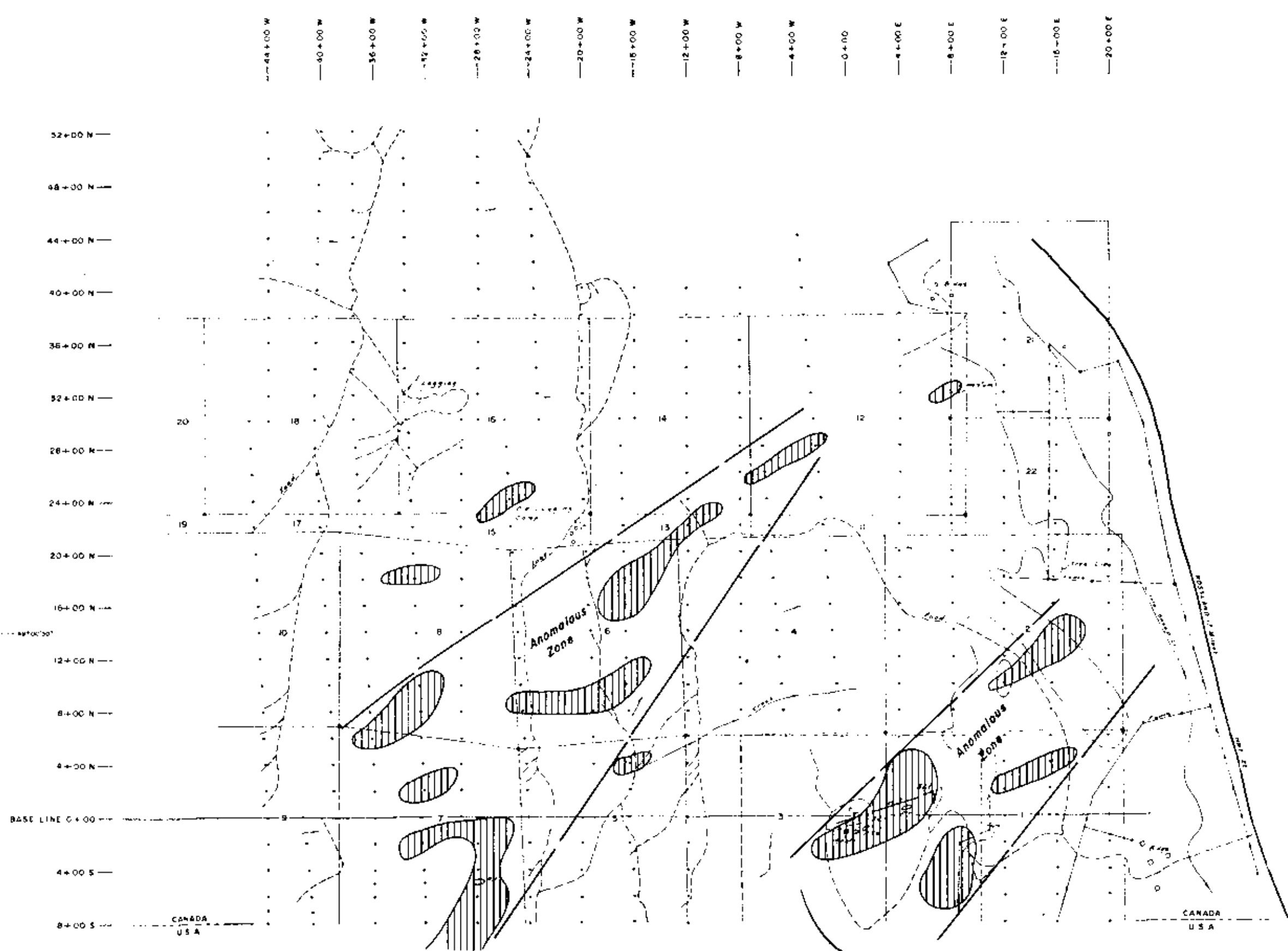
5776 M2



To Accompany Report
by E. D. Cruz, P. Eng.

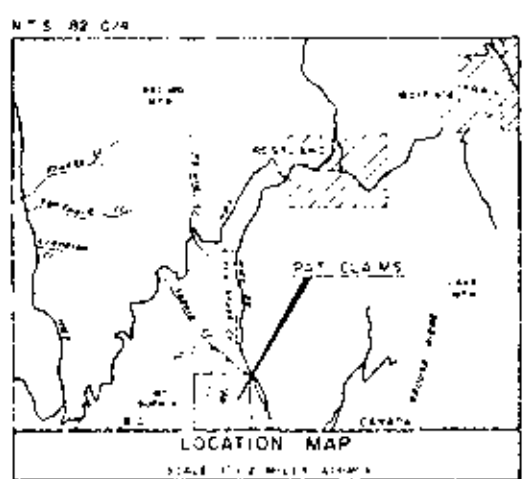
HOWARTH RESOURCES LTD
 4570 S.W. 10th St
 Vancouver, B.C. V6P 6K1
 ZINC

Nov. 14, 1975



370 P.P.M. Anomalous

1. *Ernesto D. Cruz*
 GEOCHEMICAL REPORT
 NO. **5776** MAP **3**
PART B



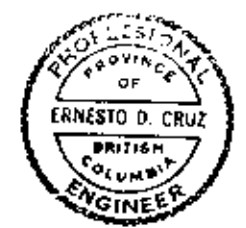
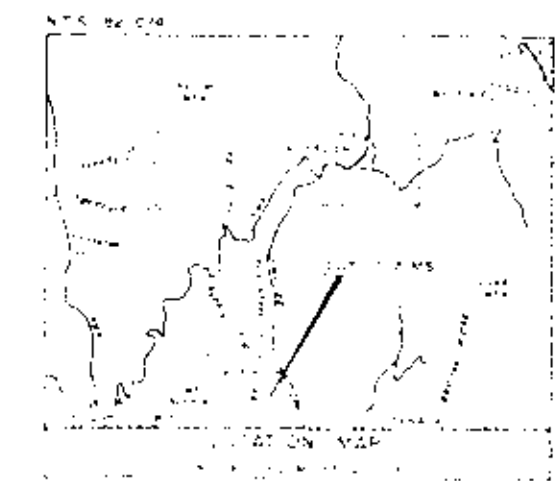
400 0 400 800 1200
 1" = 400'
BOW RIVER RESOURCES LTD.
 PAT. CLAIMS
 NELSON, BRITISH COLUMBIA
 GEOCHEMICAL MAP
LEAD
 Nov. 14, 1975



To Accompany Report
 by E. D. Cruz, P. Eng.



Department of
 Mines and Technical Surveys
 ANOMALY REPORT
 NO. 5776 MAP 4
 PART B



To Accompany Report
 by E. D. Cruz, P. Eng.

BOW RIVER RESOURCES LTD
 PAT. CLAIMS
 NICKEL AND COPPER
 TECHNICAL MAP
 COPPER

Nov 14, 1975