

3436

GEOCHEMICAL SURVEY

RIO ALTO EXPLORATION LTD.

Bull River Property, 7 mi. NE of Wardner, B.C.
Latitude 49° 30' Longitude 115° 21'

AUTHOR: G. L. Anselmo, President

3436

P. ENGINEER: W. G. Stevenson

DATE OF WORK: July 7-15 and October 2, 1971

826/60

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

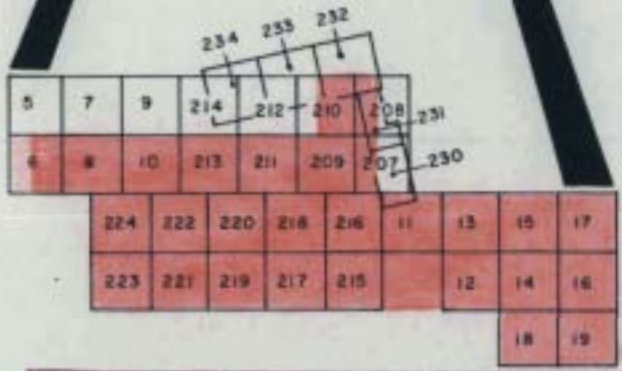
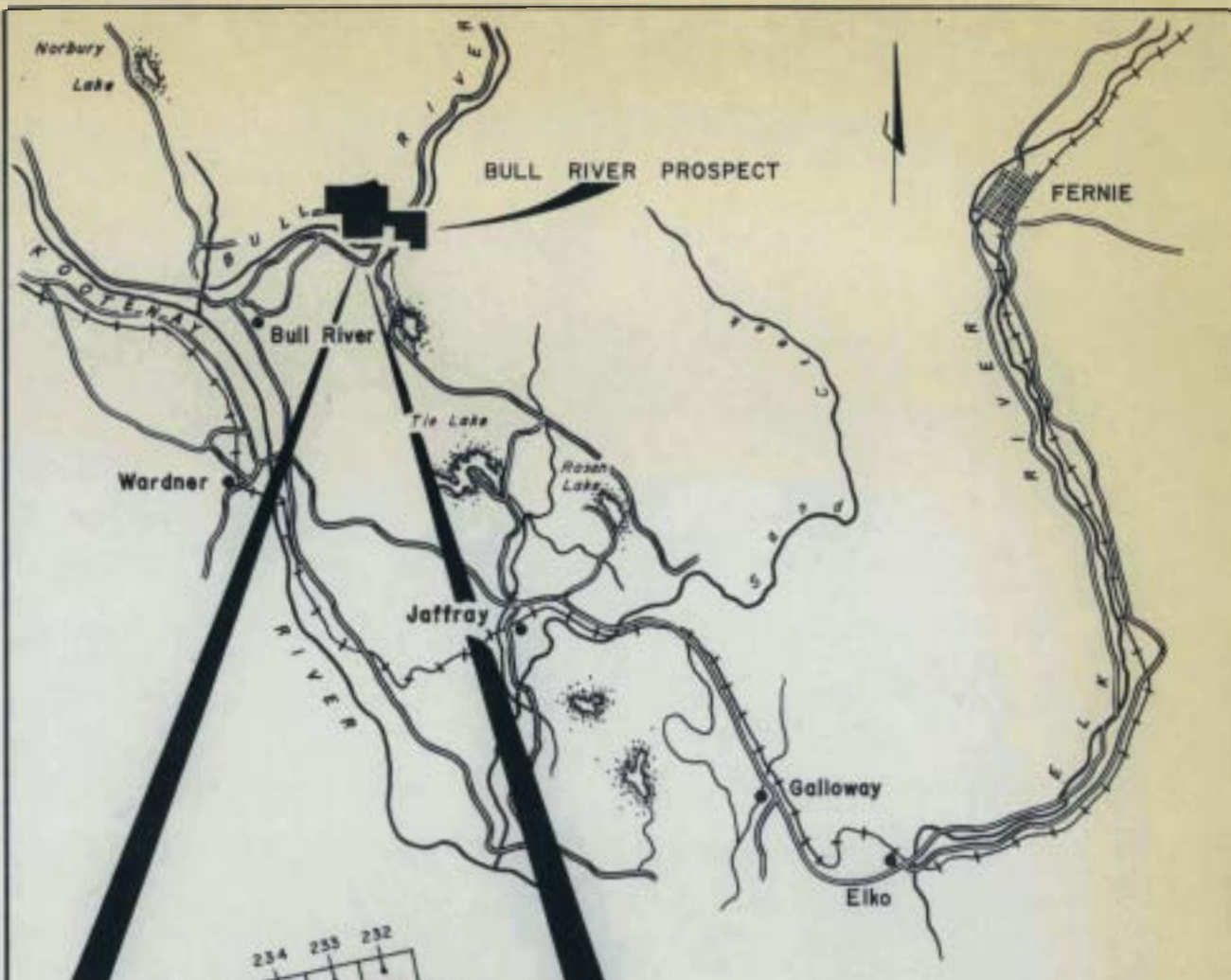
NO. 3436 MAP.....

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I L L U S T R A T I O N S

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L E G E N D

-  Outline of Claims
-  Highways & Roads
-  Shore Line
-  Creeks & Rivers
-  Railway
-  Area Surveyed

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ASSESSMENT REPORT
 NO. 3436 MAP #1

RIO ALTO EXPLORATION LTD.

BULL RIVER PROSPECT

LOCATION AND CLAIMS MAP

SCALE: LOCATION MAP: 1" = 4 MILES APPROX. CLAIMS MAP: 1" = 5000 FEET APPROX.

INTRODUCTION

From July 7 -15 and October 2, 1971, Tri-Con Exploration Surveys Ltd., on behalf of Rio Alto Exploration Ltd., conducted a program of geochemical surveying on the Bull River Prospect (Figure 1), Fort Steele Mining Division, Province of British Columbia.

LOCATION & ACCESS

The claims surveyed are situated approximately 7 miles northeast of Wardner, British Columbia. Bull River runs between the claims and the Placid Oil copper property which is presently in production. The exact location is at longitude $115^{\circ} 21'$ and latitude $49^{\circ} 30'$, N.T.S. 82G/11.

Access to the property is by all weather road, 4 miles north of Wardner then 3 miles east-northeast along the Placid road to Bull River Dam and across the dam to the claims.

PROPERTY

The Bull River Prospect consists of 38 mineral claims, described as follows:

<u>Claim</u>	<u>Record Number</u>
Rio 5-19	16552-74
Rio 207-224	16594-603
Rio 230-234	16787-91

SURVEY SPECIFICATIONS

Survey Grid

A detailed grid was established on the property using 500' line spacings and 500' sample intervals. The author, on investigating the property, located various sample flags on or near their supposed position on the grid lines.

Geochemical Survey

The soils of the property are for the most part, clays varying to a sand-clay mixture. There are oxidized zones spread throughout the soils.

A detailed study of the soil can be seen on Plate 1.

The soil sample holes were dug with a mattock to an average depth of 12". The soils were taken by hand and placed in a water resistant sample envelope where they remained until analysis.

The soils were delivered to Loring Laboratories Ltd. of Calgary, Alberta, where drying, -80 mesh sieving, hot acid extraction, and analysis by atomic absorption was carried out under the supervision of professional chemists.

Data Presentation

The survey data accompany this report as planimetric maps and illustrations as follows:

Geochemical Map	Copper contoured at 15, 20, and 25 ppm.
Geochemical Map	Zinc contoured at 60, 70 and 80 ppm.
Geochemical Map	Lead contoured at 20, 25 and 30 ppm.
Geochemical Map	Silver contoured at 0.8 and 1.6 ppm.
Plate 1	Soil Profile 1

DISCUSSION OF RESULTS

Geochemistry

The property contains various sporadic anomalies in Cu, Zn, Pb, and Ag. The silver anomaly is more consistent.

The zinc, silver and lead anomalies lying coincident in the area designated by Soil Profile 1, as shown on the geochemical maps, is of particular interest as this area is at the same altitude as, and is directly across the river from, the Placid Deposit.

The extremely high pH's (7.0-8.0) in the soils makes ion migration virtually impossible. Therefore, any anomalous values encountered would

be of considerable interest.

CONCLUSIONS

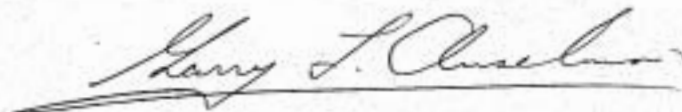
A detailed program of geochemical surveying was conducted on the Bull River Property, Fort Steele Mining Division, B.C.

The survey located various areas of interest with anomalous values in primarily lead and zinc and silver. The anomalies are sporadic and further investigation of these areas is necessary to determine their significance. Should the clay overburden be as extensive in depth as is expected (from the author's visual examination of the area), the geochemical values would be far more significant than they appear at present.

RECOMMENDATIONS

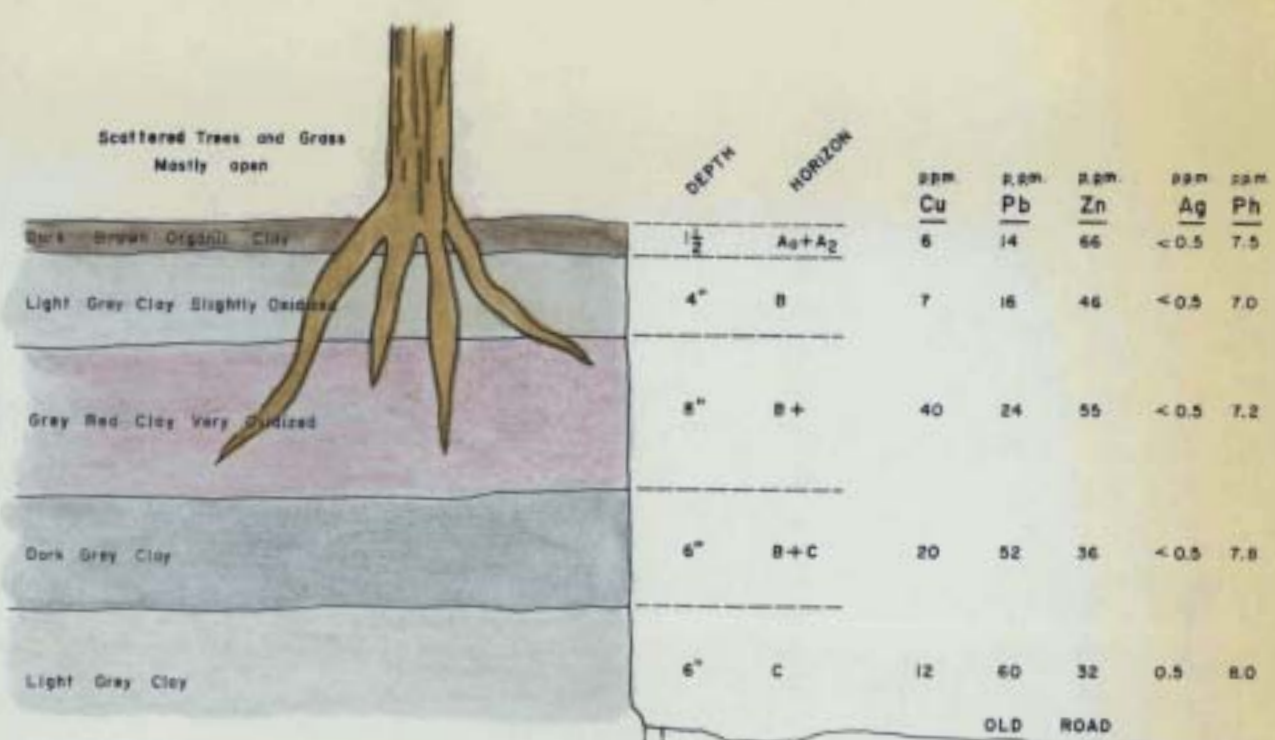
1. Geologically investigate the property.
2. Conduct soil augering of the area near soil profile 1 or trenching to enable a geochemical study in physical depth.
3. Further work may be recommended on the outcome of steps 1 and 2.

Respectfully submitted,
TRI-CON EXPLORATION SURVEYS LTD.



G. L. Anselmo
President

Soil Profile No 1



Department of
 Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. 3436 MAP #2

24"	C						
			10	65	50	0.5	7.8

SOIL PROFILE I

RIO ALTO EXPLORATION LTD.

BULL RIVER PROSPECT

SCALE 1" = 10" APPROX.

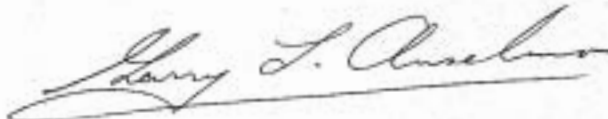
CERTIFICATE

I, Garry L. Anselmo, DO HEREBY CERTIFY:

- That I am President of Tri-Con Exploration Surveys Ltd. with offices at Suite 200 - 1405 Hunter Street, North Vancouver, British Columbia, and a Consultant in Geochemical Exploration.
- That I studied Geology and Geochemistry at the University of British Columbia for three years and am a graduate of Simon Fraser University with the Degree of Bachelor of Arts.
- That I have been engaged in Mining Exploration for six years.
- That I have no direct, indirect or contingent interest in the Bull River Property or in the securities of Rio Alto Exploration Ltd., nor do I intend to receive any such interest.
- That this report dated December 8, 1971 is based on information derived from a Geochemical Survey carried out by Tri-Con Exploration Surveys Ltd.

Dated at Vancouver, British Columbia,
this 8 day of December, 1971.

TRI-CON EXPLORATION SURVEYS LTD.



G. L. Anselmo, B.A.
President

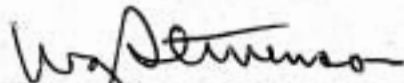
CERTIFICATE

I, William G. Stevenson, DO HEREBY CERTIFY:

- That I am a Consulting Geological Engineer with offices at Suite 209 Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.
- That I am a graduate of the University of Utah, 1946, with a B.Sc. Degree.
- That I am a registered Professional Engineer in the Association in British Columbia.
- That I have practised my profession for 22 years.
- That I have no direct, indirect or contingent interest in the Bull River Property or in the securities of Rio Alto Exploration Ltd., nor do I intend to receive any such interest.
- That I have reviewed a report dated December 8, 1971 based on work conducted by Tri-Con Exploration Surveys Ltd. under the supervision of G. L. Anselmo, President.

DATED at Vancouver, British Columbia, this 10th day of *December*, 1971

W. G. STEVENSON & ASSOCIATES LIMITED
Consulting Geologists



W. G. Stevenson, P. Eng.

DOMINION OF CANADA: }
 PROVINCE OF BRITISH COLUMBIA. } **In the Matter of**
 To Wit: }
 GEOCHEMICAL SURVEY

I, G. L. Anselmo, President of Tri-Con Exploration Surveys Ltd.

of #200 - 1405 Hunter Street, North Vancouver,

in the Province of British Columbia, do solemnly declare that the following is a true statement of cost of the survey for report enclosed.

<u>PERSONNEL</u>	<u>DATE OF WORK</u>	<u>MAN DAYS</u>	<u>WAGES/DAY</u>	<u>TOTAL</u>
K. Poscente	July 7-15, 1971	9	\$60	\$ 540.00
D. Buckland	" " "	9	\$45	\$ 405.00
D. Hilland	" " "	9	\$45	\$ 405.00
G. Anselmo	October 1, 1971	1/2	\$100	\$ 50.00
J. Bolechowsky	" " "	1/2	\$45	\$ 22.00
Food & Accommodation @ \$15/day/man @ 28 Man Days				\$ 420.00
Analysis 226 Samples @ \$2.70 + 7 profiles @ \$3.40				\$ 634.00
Vehicle @ \$20/day + 20¢/mi. @ 9.5 Days & 150 miles				\$ 220.00
Materials				\$ 85.00
Interpretation Maps & Reports				\$1150.00
Secretarial				\$ 58.00
			Sub Total	\$3989.00
Administration @ 10%				\$ 399.00
			Total	\$4388.00
			Total Applied	\$3800.00

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City
 of Vancouver, in the
 Province of British Columbia, this 10
 day of Dec. 1971, A.D. } *G. L. Anselmo*

Jill Jensen
 Commissioner for taking Affidavits within British Columbia or
 A Notary Public in and for the Province of British Columbia.
 Sub-mining Recorder

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.
To Wit:

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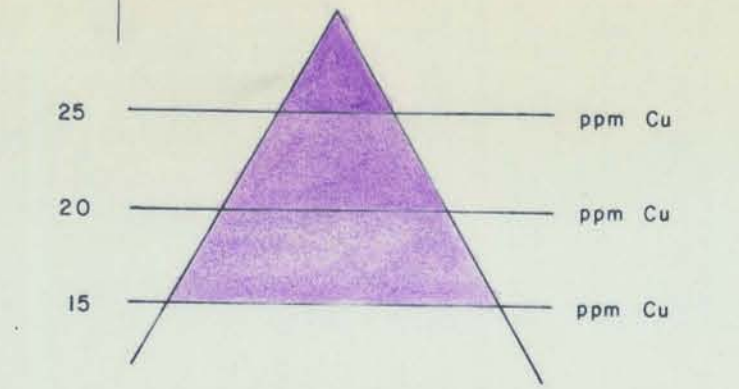
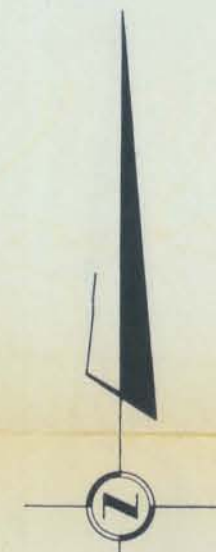
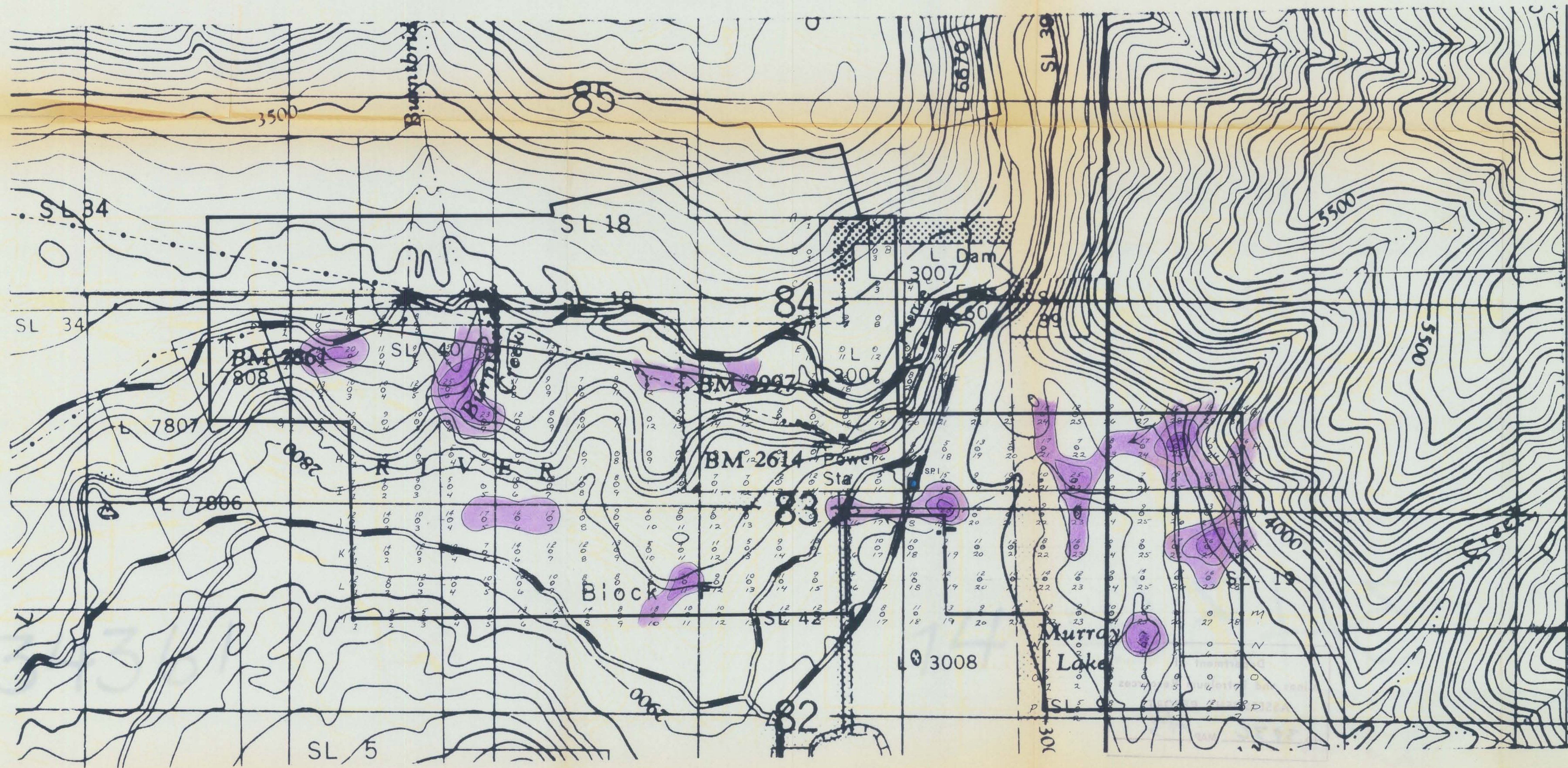
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Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 10
day of Dec. 1971, A.D.

[Signature]

[Signature]
A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.
300 - 1111 - 1111



COPPER

LEGEND

- Outline of BULL RIVER PROSPECT
- Soil Profile

RIO ALTO EXPLORATION LTD.
BULL RIVER PROSPECT

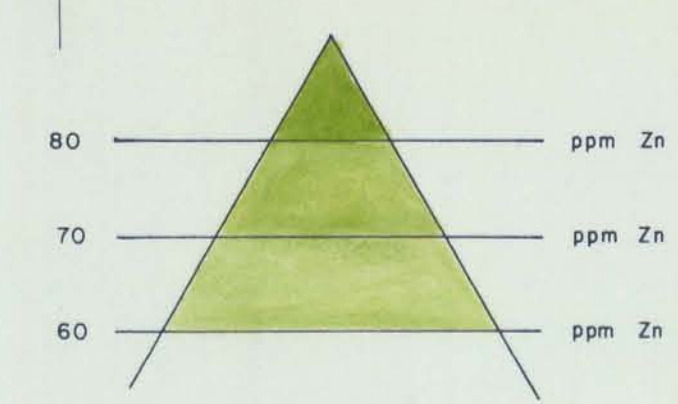
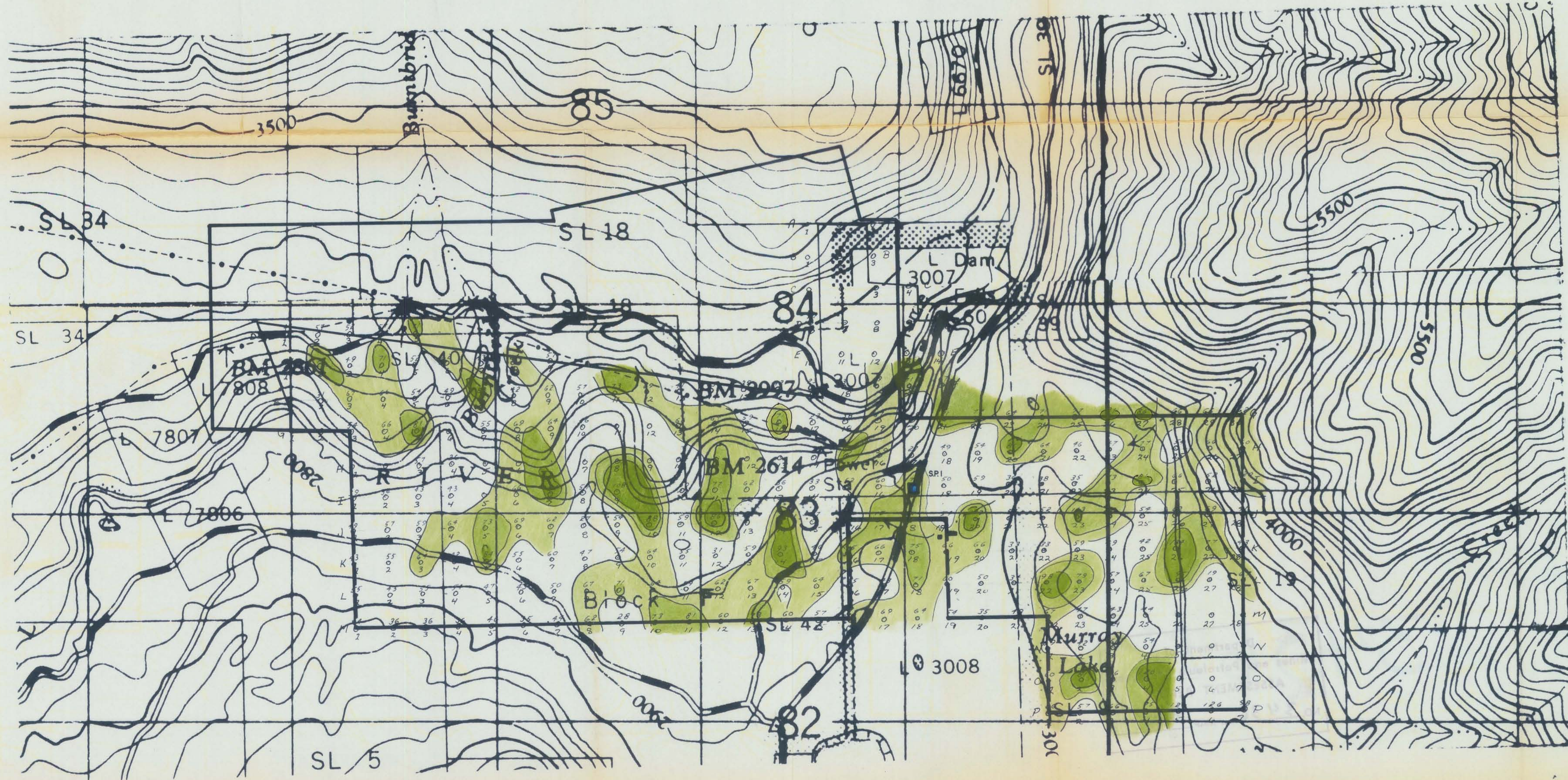
3436
SCALE 5" = 1 MILE

NOTE:
To Accompany Geochemical Report Dated Dec. 8/71 on
BULL RIVER PROSPECT

By: G.L. Anselmo *[Signature]* President

M-3





ZINC
L E G E N D

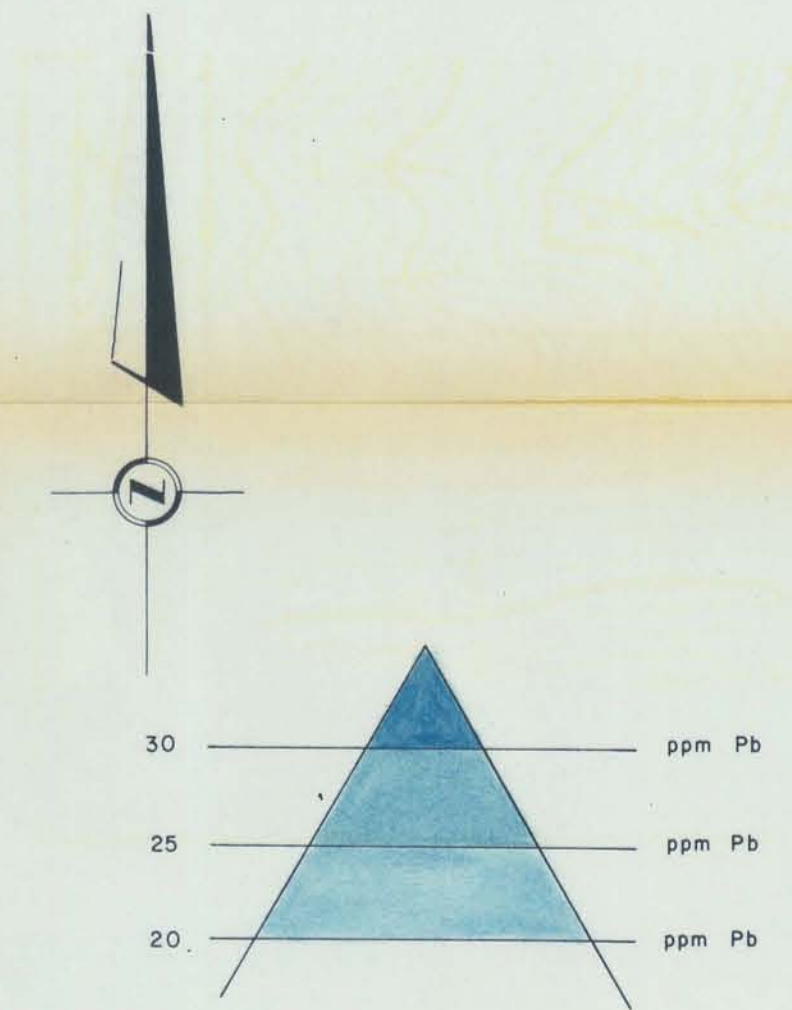
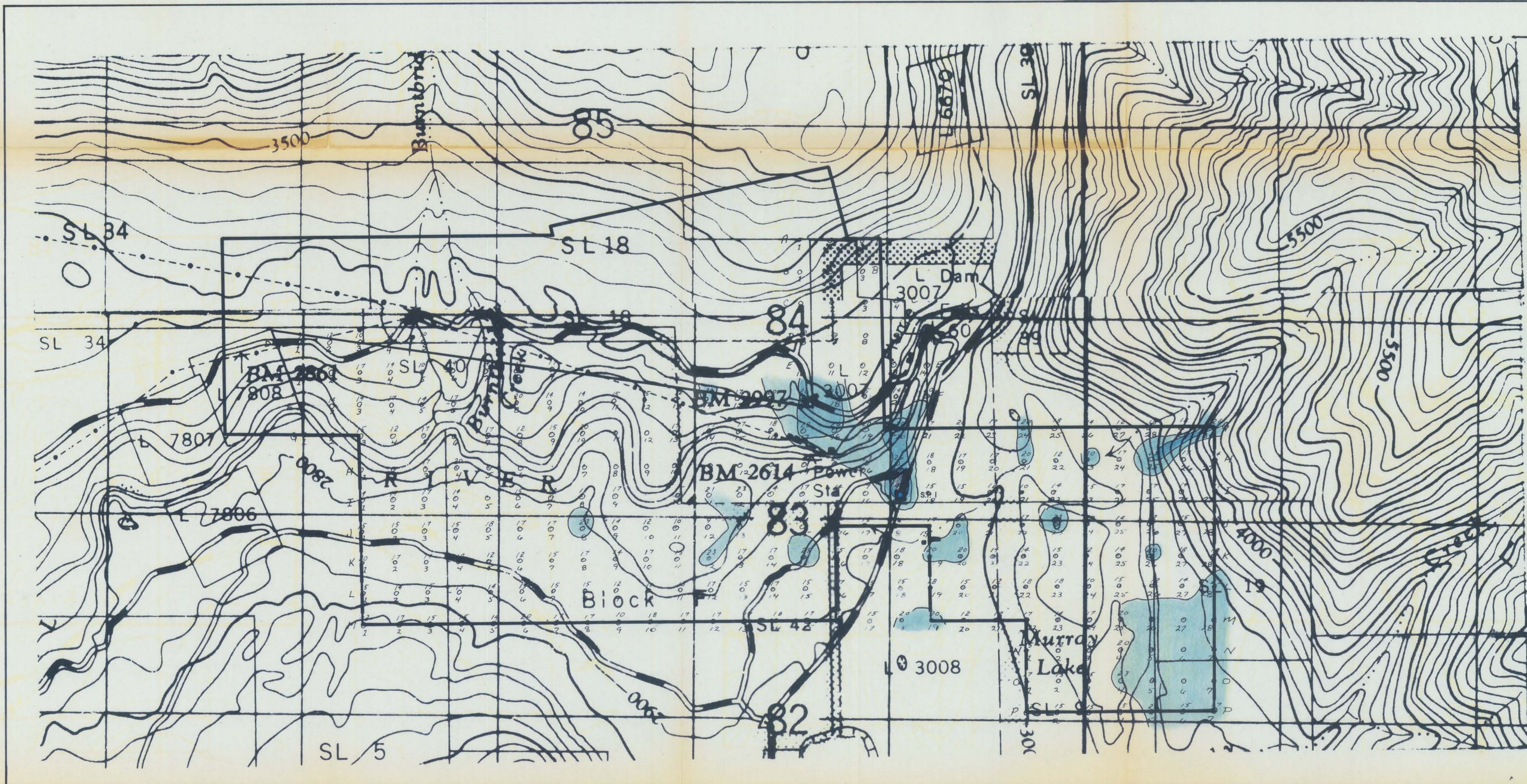
- Outline of BULL RIVER PROSPECT
- Soil Profile

RIO ALTO EXPLORATION LTD.
BULL RIVER PROSPECT

SCALE: 5" = 1 MILE



3436M4

NOTE:
To Accompany Geochemical Report Dated Dec 8/71 on
BULL RIVER PROSPECT
By: G. L. Anselmo *G. L. Anselmo* President.



LEAD

L E G E N D

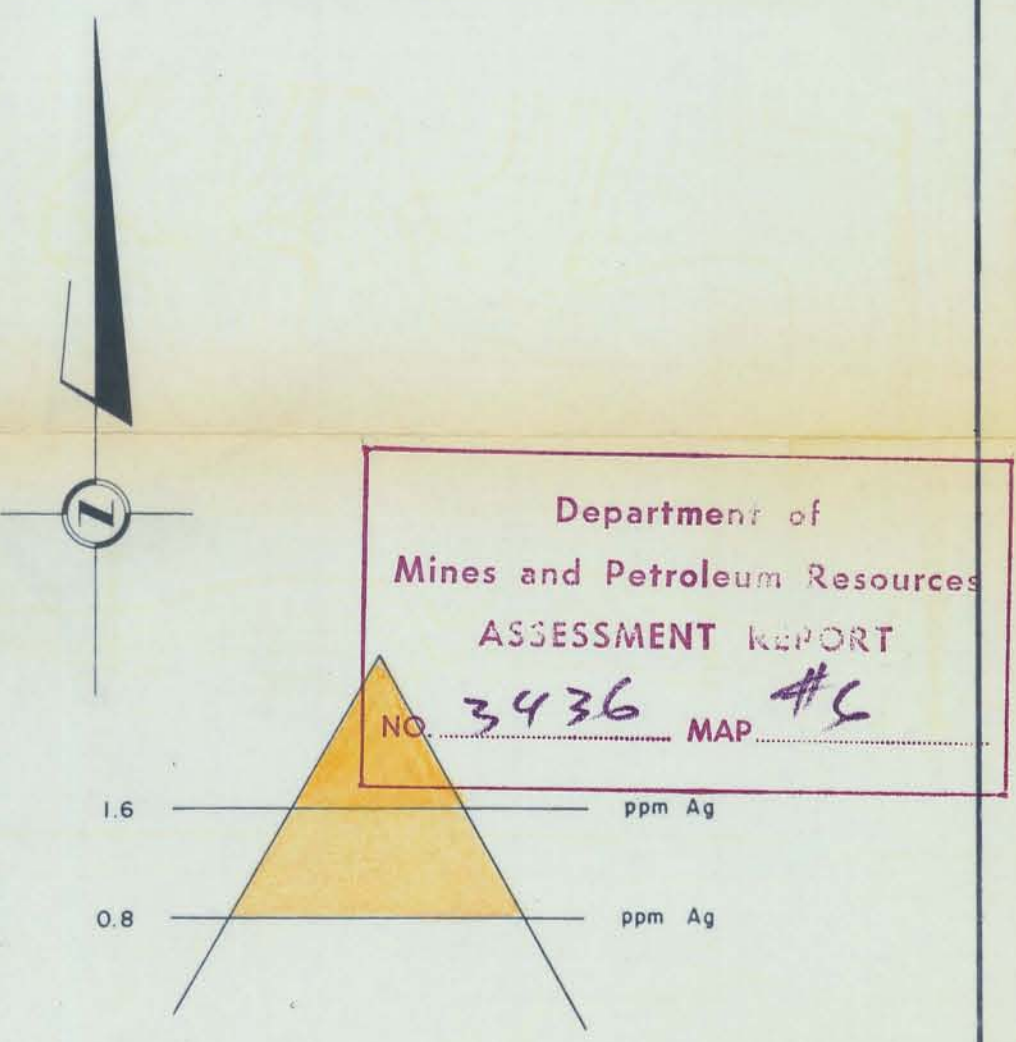
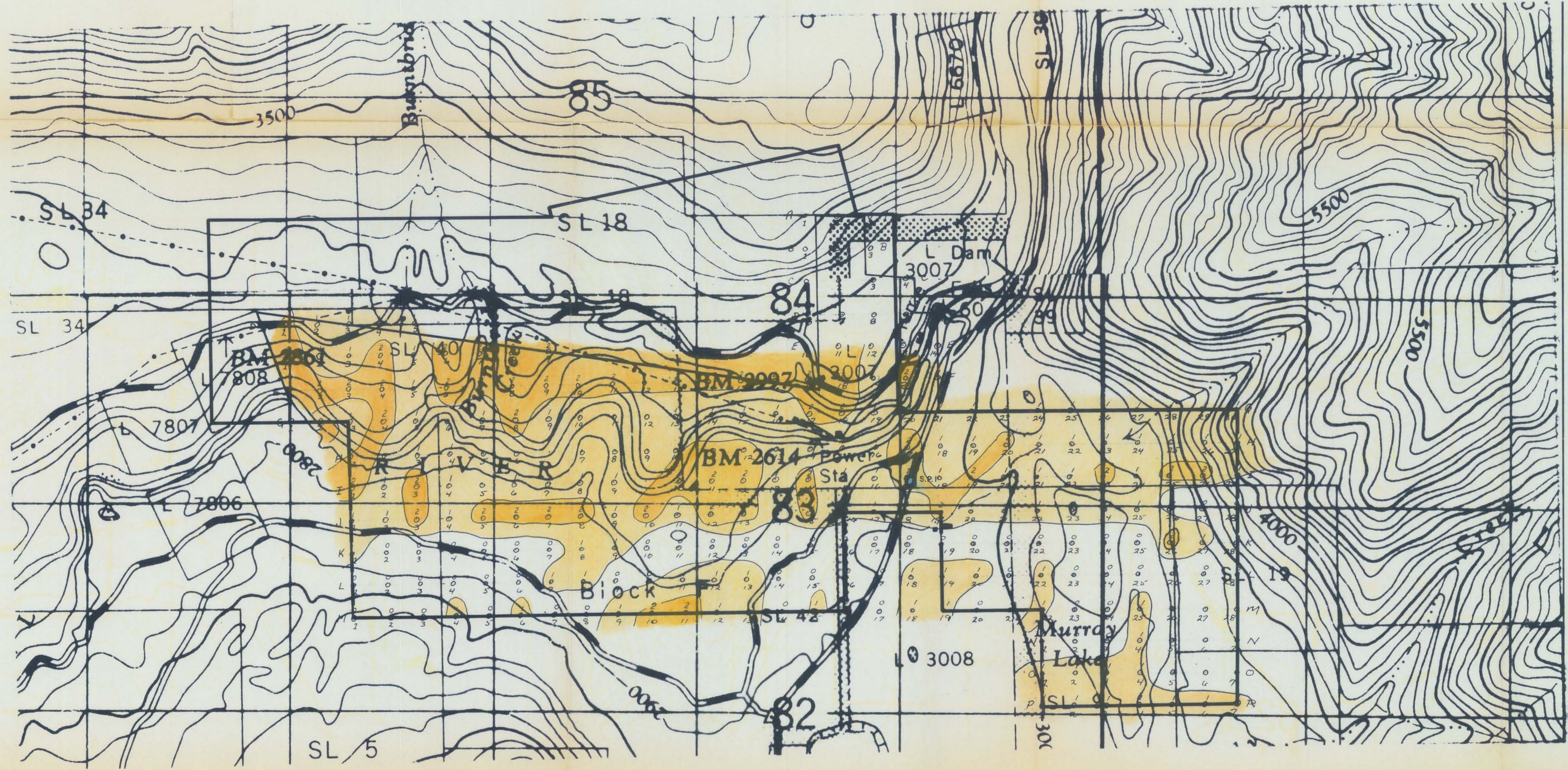
-  Outline of BULL RIVER PROSPECT
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RIO ALTO EXPLORATION LTD.
BULL RIVER PROSPECT

SCALE: 5" = 1 MILE

Department of
 Mines and Petroleum Resources
ASSESSMENT REPORT
 NO. **3436** MAP **#5**

NOTE:
 To Accompany Geochemical Report Dated Dec 27, 1961 on
 BULL RIVER PROSPECT
 By: G.L. Anselmo *G.L. Anselmo* President.



SILVER
L E G E N D

— Outline of BULL RIVER PROSPECT
 ■ Soil Profile

RIO ALTO EXPLORATION LTD.
 BULL RIVER PROSPECT

SCALE: 5" = 1 MILE

NOTE:
 To Accompany Geochemical Report Dated Dec 8/71 on
 BULL RIVER PROSPECT
 By: G. L. Anselmo *[Signature]* President.