

952

Geochemical Report

Friendly Lake No. 2 Claim Group

Location: North side of Friendly Lake  
approximately 14 miles NE of  
Bridge Lake, B.C.  $51^{\circ}120'$  NS.  
92P/7W

Analysis by: Bruce J. Brown, Geochemist

Report by: Peter E. Hirst, P. Engr.

Claim Owner: Anaconda American Brass Ltd.

Work for: Anaconda American Brass Ltd.

Date of Work: August 29, 1966-September 13, 1966

Geochemical Report

Friendly Lake No. 2 Claim Group

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MAPS

/ Plate 1	Location Map	Following Appendix 'B'
✓ Plate 2	Soil Geochemistry East Half	In Pocket
✓ Plate 3	Soil Geochemistry West Half	In Pocket

APPENDIX 'A'

Statement of Costs of the Geochemical Survey

Line Cutting:		
Labour	15 man-days	\$192.50
Maintenance		75.00
Soil Sampling:		
Labour		50.00
Maintenance		20.00
Soil Sampling Supplies:		10.00
Sample Analysis:	163 samples @ \$1.86 ea.	303.18
Drafting:		25.00
Supervision:		50.00
		<hr/>
	TOTAL	\$725.68

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 *31* )  
day of *March* 1967, A.D.)

*P. S. Hart*

*Jill Curran*  
Sub-mining Recorder

APPENDIX 'B'

Evidence of Expenditure Incurred

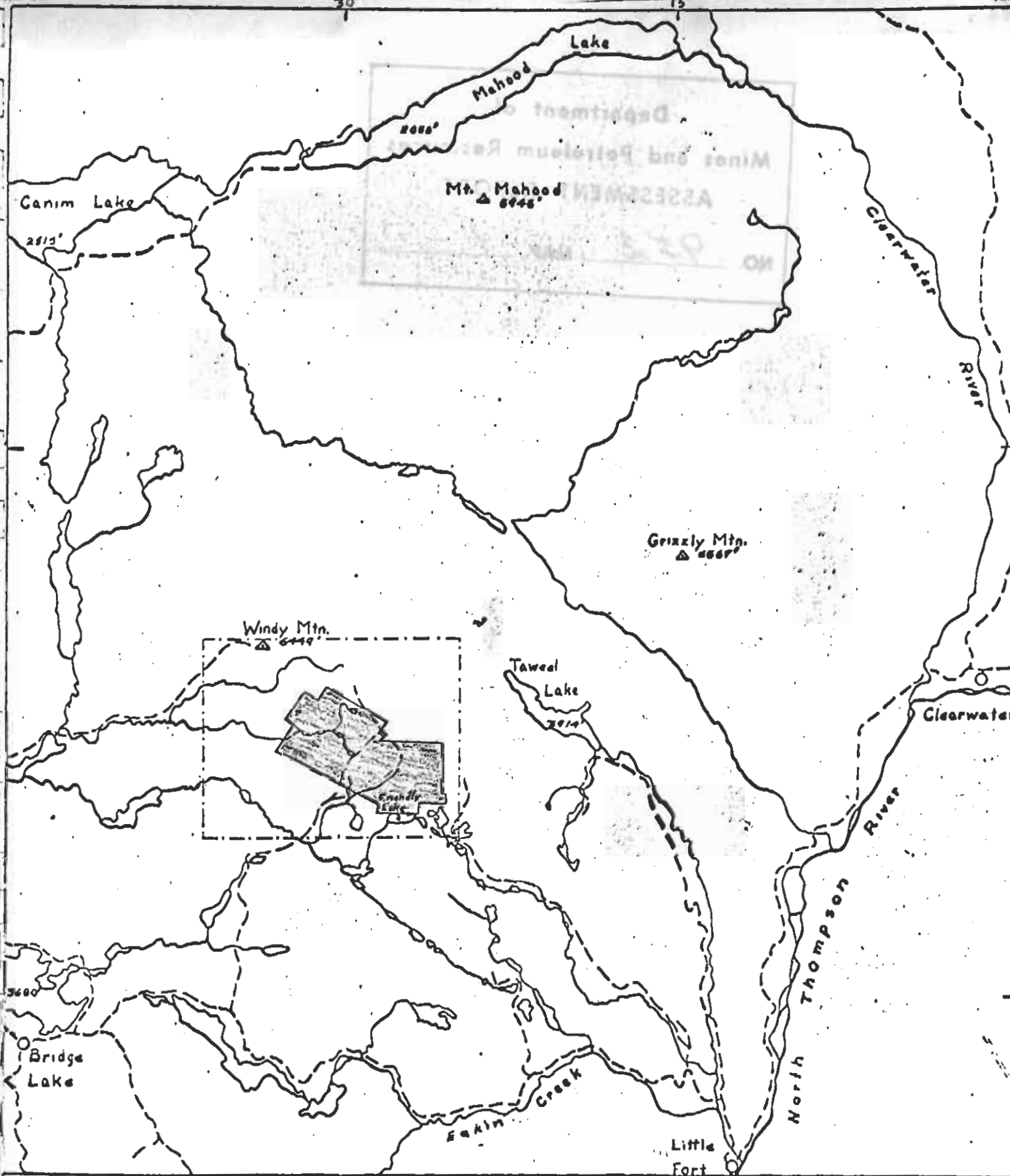
<u>Name</u>	<u>Category</u>	<u>Rate</u>	<u>Days Worked</u>	<u>Period</u>	<u>Wages</u>
Sidey Timmins	Line Cutter	\$350.00/mo.	2	Aug. 28 & 29, 1966	\$ 26.00
Bruce Ferguson	Line Cutter	"	2	Aug. 28 & 29, 1966	26.00
Peter Cable	Line Cutter & Sampler	325.00/mo.	6	Sept. 6 - 13, 1966	75.00
Alfred Cost-Chretien	Line Cutter	375.00/mo.	2	Sept. 9 & 10, 1966	28.00
Terry Hamael	Line Cutter & Sampler	325.00/mo.	6	Sept. 6 - 13, 1966	75.00
Stuart Westie	Line Cutter	325.00/mo.	1	Sept. 9, 1966	12.50
					<hr/> \$242.50

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 *31* )  
day of *March* 1967, A.D.)

*P. S. Hirt*

*Jill Lussner*  
Sub Mining Recorder



- Roads
- Claim Block
- - - Friendly Lake Map Area

# LOCATION & ACCESSIBILITY FRIENDLY LAKE AREA

Scale: 1 inch = 4 miles

## Geochemical Report

### Friendly Lake No. 2 Claim Group

#### Introduction

During the 1965 field season Anaconda American Brass Ltd. staked some 178 claims in the Friendly Lake area of British Columbia. This block of claims has been regrouped as of March 2nd, 1967 for assessment work purposes. The Friendly Lake No. 2 Group consists of the following 40 unsurveyed claims: SO 1, SO 2, SO 3, SO 5, SO 7, SO 8, SO 9, SO 11, SO 13, SO 14, SO 15, SO 16, SO 29, SO 31, SO 32, SO 33, SO 34, SO 35, SO 36, SO 37, SO 38, SO 39, SO 40, SO 41, SO 42, SO 43, SO 44, SO 45, SO 46, SO 47, SO 49, SO 50, SO 51, SO 52, SO 57, SO 58, RO 58, RO 29, RO 30, RO 32, RO 69 Fr.

A geochemical survey was made over a portion of the Friendly Lake No. 2 Claim Group during the period August 28 to September 13, 1966. The survey covered portions of the following claims: SO 29, SO 31, SO 32, SO 33, SO 34, SO 47, SO 49, SO 50, SO 51, SO 52, SO 57, SO 58. Six men spent a total of 19 man-days in line cutting and collecting soil samples. The field work was under the general supervision of Peter E. Hirst. Laboratory analysis was made under the direction of Bruce A. Brown.

#### Location and Accessibility

The Friendly Lake No. 2 Claim Group is a part of a large block of 178 claims which are located on the north side of Friendly Lake in the Kamloops Mining Division, B.C. (see Plate 1). Friendly Lake is approximately 14 miles northeast of the small settlement of Bridge Lake.

Access to the claim area is provided by a dirt road which leaves the Bridge Lake -- Little Fort road approximately 7 miles east of Bridge Lake. Distance from the Bridge Lake -- Little Fort road to the claim area is approximately 10 miles.

#### Geology

The claim area is underlain principally by a series of sedimentary and volcanic rocks of Jurassic (?) Age. Tuffs and flows of andesitic composition are common. Argillite, graywacke, conglomerate and quartzite are locally abundant.

Intrusive rocks in the claim area consist of a number of irregular bodies of syenite. Three fairly large bodies were noted.

At a number of places tuff and andesite contain small amounts of chalcopyrite and galena along fracture surfaces and disseminated in the rock. Variable amounts of bornite, chalcopyrite, and chalcocite occur in several places in brecciated volcanic rocks.

### Purpose of the Geochemical Survey

Approximately 90% of the ground in the claim area is covered by glacial drift. The mineralization noted in several areas indicates that a possibility exists that better concentrations of metals might be concealed beneath the prevalent cover. The geochemical survey was conducted to prospect the covered ground for anomalous concentration of metals in the soil which might be indicative of concealed mineralization worthy of further investigation.

### Details of the Survey

Chain and compass control lines were cut throughout the area to be sampled. These lines were tied into transit surveyed north-south base lines. Soil samples were taken every 100 feet along lines spaced 800 feet apart.

Samples were collected at depths generally varying from 4-6 inches. The friable, somewhat oxidized B horizon was sampled. All samples were sent to the geochemical laboratory at Britannia Beach for analysis.

### Method of Geochemical Analysis

Soil samples were first dried and then screened to minus 80 mesh. A one gram sample was then given a hot acid digestion from which standard acid solutions were prepared.

Separate aliquots of sample solution were analyzed for copper, lead, and molybdenum. Molybdenum was determined by a colorimetric procedure whereby a coloured organic complex is formed that is indicative of the relative metal content. This is accomplished by the reaction between molybdenum thiocyanate and stannous chloride in acid medium with the molybdenum thiocyanate complex being extracted by iso amyl alcohol. The metal content of the coloured organic complex was determined by using a spectrophotometer to obtain the respective parts per million.

Copper and lead were determined by atomic absorption spectrophotometry using a Techtron AA-3 Atomic Absorption Spectrophotometer, type M-1, Serial 313. This unit consists of three major components, a hollow cathode lamp (separate lamps for each element), a burner-atomizer, and a monochromator. The test solution is aspirated directly into the burner atomizer, and the respective transmittancy is read directly on a scale expansion unit on the monochromator. The respective metal contents are calculated by comparing the transmittancy with standard curves.

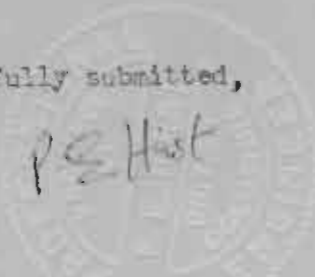
### Results of the Geochemical Survey

Two maps on a scale of 400 feet to the inch are enclosed with this report. It shows the values obtained in parts per million for copper, lead and molybdenum.

The geochemical survey has indicated that anomalous values in copper, lead, and molybdenum exist in portions of the area surveyed.

As most of the ground in the area surveyed is covered it is not possible at this time to determine the cause of the various geochemical anomalies. More work in the area is planned.

Respectfully submitted,



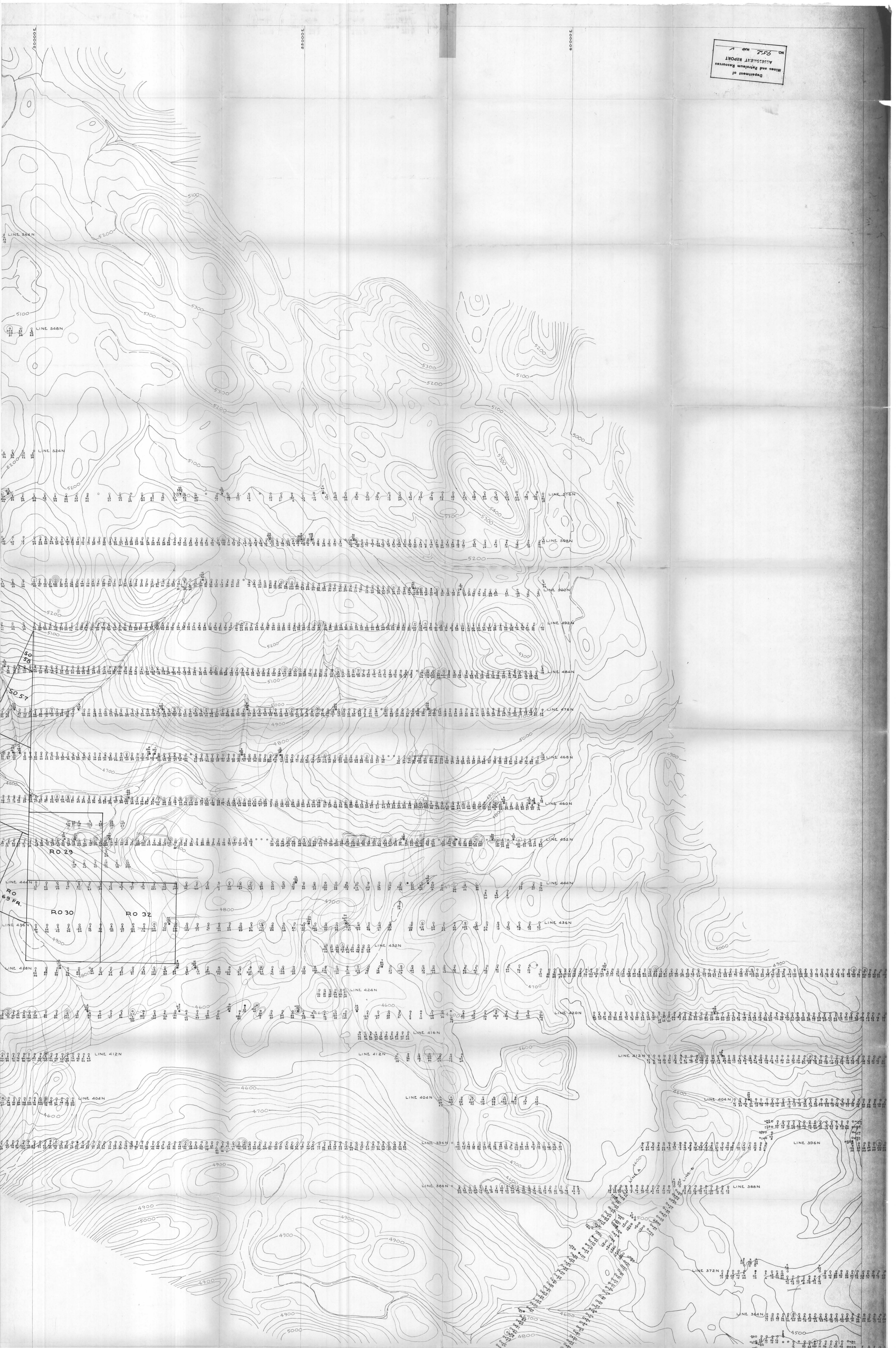
PE Hirst

Peter E. Hirst, P. Engr.

March 28, 1967

PEH:am





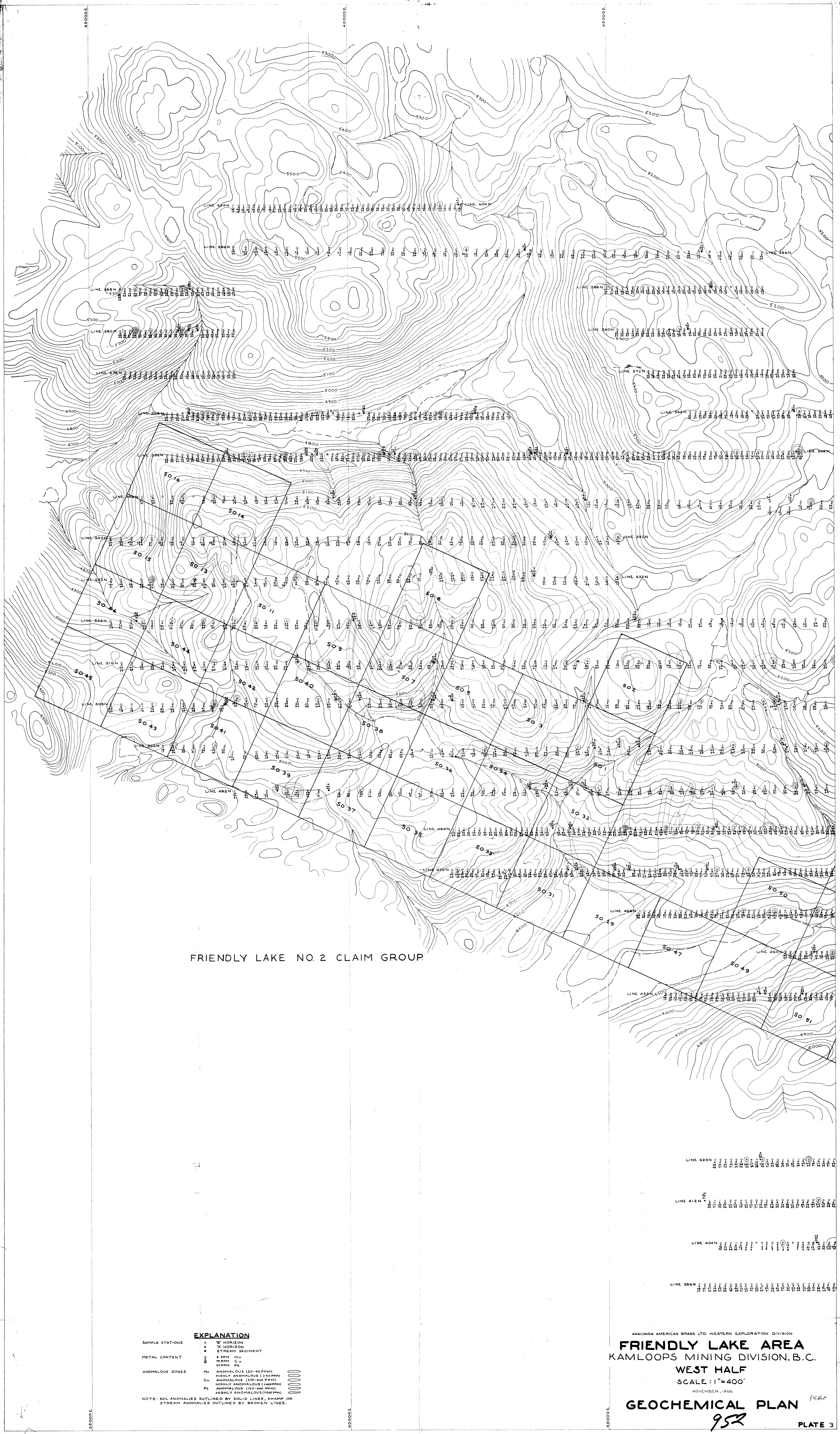
**EXPLANATION**

- SAMPLE STATIONS**  
 ○ 1' HORIZON  
 ● 5' HORIZON  
 \* STREAM SEDIMENT
- METAL CONTENT**  
 10 3 PPM MS  
 25 75 PPM Cu  
 50 PPM Pb
- ANOMALOUS ZONES**  
 M<sub>1</sub> ANOMALOUS (20-40 PPM)  
 H<sub>1</sub> HIGHLY ANOMALOUS (>40 PPM)  
 A<sub>1</sub> ANOMALOUS (20-400 PPM)  
 H<sub>2</sub> HIGHLY ANOMALOUS (>400 PPM)  
 A<sub>2</sub> ANOMALOUS (10-100 PPM)  
 H<sub>3</sub> HIGHLY ANOMALOUS (>100 PPM)
- NOTE: SOIL ANOMALIES OUTLINED BY SOLID LINES, SWAMP OR STREAM ANOMALIES OUTLINED BY BROKEN LINES.

ANACONDA AMERICAN BRASS LTD. WESTERN EXPLORATION DIVISION  
**FRIENDLY LAKE AREA**  
 KAMLOOPS MINING DIVISION, B.C.  
 EAST HALF  
 SCALE: 1"=400'  
 NOVEMBER, 1966

**GEOCHEMICAL PLAN**

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FRIENDLY LAKE NO. 2 CLAIM GROUP

**EXPLANATION**

SAMPLE STATIONS	○	'B' HORIZON
	●	'A' HORIZON
	◆	STREAM SEDIMENT
METAL CONTENT	100	1 PPM Mn
	200	2 PPM Cu
	300	3 PPM Pb
ANOMALOUS ZONES	M	ANOMALOUS (20-40PPM)
	H	HIGHLY ANOMALOUS (>40PPM)
	C	ANOMALOUS (100-200 PPM)
	PH	HIGHLY ANOMALOUS (>200PPM)
		ANOMALOUS (100-200 PPM)
		HIGHLY ANOMALOUS (>200PPM)

NOTE: SOIL ANOMALIES OUTLINED BY SOLID LINES, SWAMP OR STREAM ANOMALIES OUTLINED BY BROKEN LINES.

ANACONDA AMERICAN BRASS LTD. WESTERN EXPLORATION DIVISION  
**FRIENDLY LAKE AREA**  
 KAMLOOPS MINING DIVISION, B.C.  
 WEST HALF  
 SCALE: 1"=400'  
 NOVEMBER, 1966  
**GEOCHEMICAL PLAN**  
 952  
 PLATE 3