

788

92P/9W

Geochemical Report

Friendly Lake No. 1 Claim Group

(Also Groups 2 to 5)

Location: North side of Friendly Lake
approximately 1/4 miles NE of
Bridge Lake, B.C. $51^{\circ}120'$ NE.

Analysis by: Bruce W. Brown, Geochemist

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

Claim Owner: Anaconda American Brass Ltd.

Work for: Anaconda American Brass Ltd.

Date of work: May 15 - July 5, 1966

Reports 789 to 792 are
duplicates of 788 and are
deleted from file.

EU j
Jan. 5/78

Geochemical Report

Friendly Lake No. 1 Claim Group

CONTENTS

Statement of Costs of the Soil Sampling Survey	Appendix 'A'
Evidence of Expenditure Incurred	Appendix 'B'
Introduction	Page 1
# 1 Location and Accessibility	1
Geology	1
Purpose of the Geochemical Survey	2
Details of the Survey	2
Method of Geochemical Analysis	2
Results of the Geochemical Survey	2-3

MAPS

# 1 Plate 1	Location Map	Following Appendix 'B'
# 2 Plate 2	Soil Geochemistry	In Pocket

SUB-MINING RECORDER
RECEIVED

JUL 21 1966

M.R. # 9769 \$ 265.00
VANCOUVER, B.C.

APPENDIX 'A'

Statement of Costs of the Geochemical Survey

Line Cutting:		
Labour	6 man days for four men	\$ 300.00
Maintenance		132.00
Soil Sampling:		
Labour	12 days for two men	300.00
Maintenance		132.00
Soil Sampling Supplies:		10.00
Sample Analysis:	168 samples @ 1.86 each	312.48
Transportation:		20.00
Drafting:		50.00
Supervision:		100.00
		<hr/>
	TOTAL	\$1336.48

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 *21*)
day of *July* *1966*, A.D.)

P. S. Hirst

Jill Turner
.....
Sub-Mining Recorder

**SUB-MINING RECORDER
RECEIVED**

JUL 21 1966

M.R. # 97697 \$ 265.00
VANCOUVER, B. C.

APPENDIX 'B'

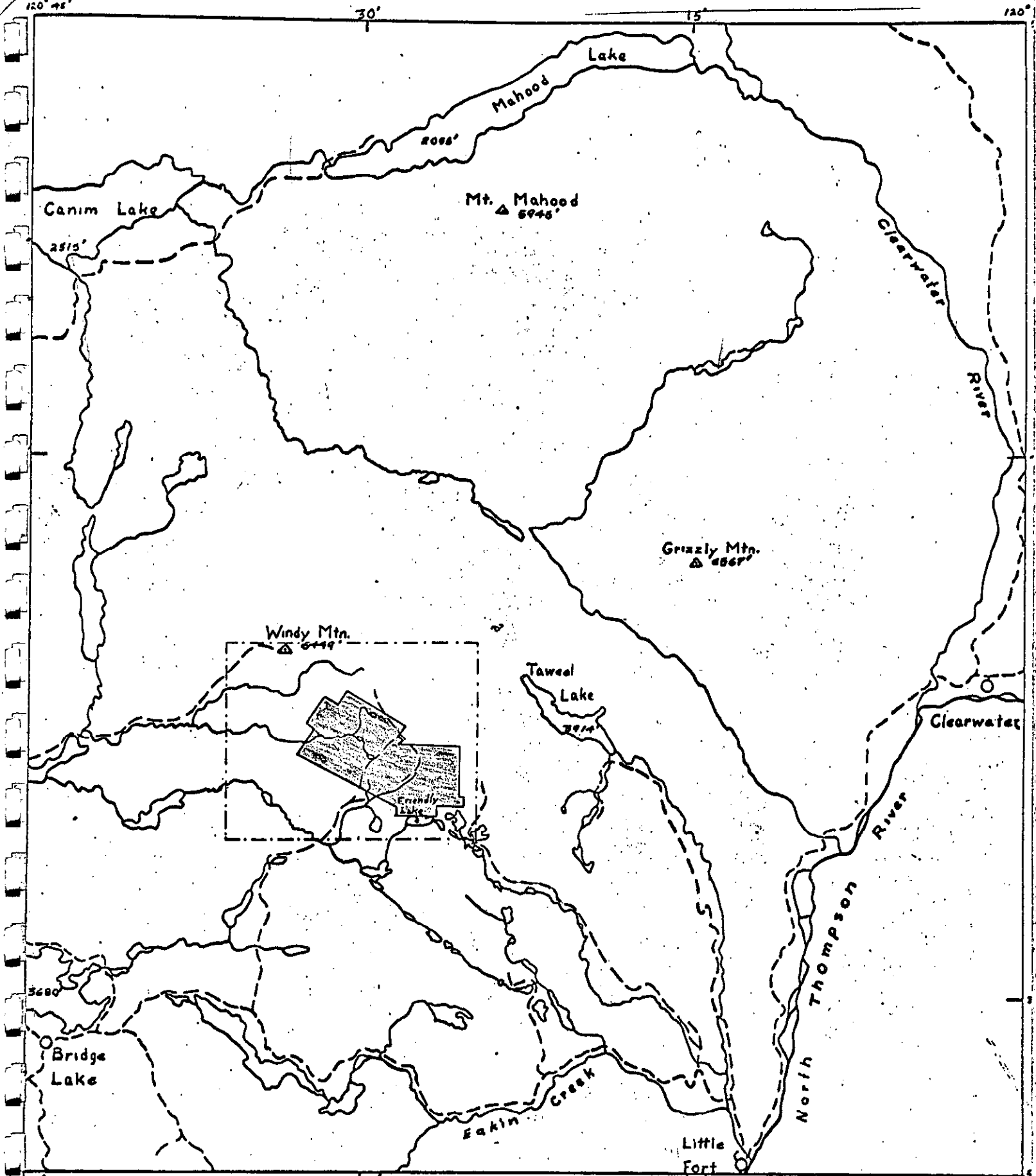
Evidence of Expenditure Incurred

<u>Name</u>	<u>Category</u>	<u>Rate</u>	<u>Days Worked</u>	<u>Period</u>	<u>Wages</u>
Richard Kirk	Line Cutter	\$350.00/mo.	6	May 30 - June 10, 1966	\$ 75.00
Helmuth Mueller	Line Cutter	"	6	May 30 - June 10, 1966	75.00
George Davis	Sampler	"	12	May 30 - July 5, 1966	150.00
Clifford Pearson	Sampler	"	12	May 30 - July 5, 1966	150.00
Sidey Timmins	Line Cutter	"	6	May 30 - June 10, 1966	75.00
Alasdair Campbell	Line Cutter	"	6	May 30 - June 10, 1966	75.00

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) P. E. Hurt
Province of British Columbia, this 21)
day of July 1966, A.D.)

Julie Suran
.....
Sub-Mining Recorder



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

Scale: 1 inch = 4 miles

LOCATION & ACCESSIBILITY FRIENDLY LAKE AREA

Geochemical Report

Friendly Lake No. 1 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 divided into 5 groups for assessment work purposes. The Friendly Lake No. 1 Claim Group consists of the following 24 unsurveyed claims: RO 30, RO 32, RO 34, RO 36, RO 38-43 inclusive, RO 69 Fraction, SO 29, SO 31, SO 33, SO 35, SO 37, SO 39, SO 41, SO 43, SO 45, SO 47, SO 49, SO 51.

A geochemical survey was made over a portion of the Friendly Lake No. 1 Claim Group during the period May 15 - July 5, 1966. The survey covered portions of the following claims: RO 30, RO 32, RO 34, RO 36, RO 38-43, RO 45. Six men spent a total of 48 mandays 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 W. Brown.

Location and Accessibility

The Friendly Lake No. 1 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 or 200 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, zinc, 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 light transmittancy and comparing the values with a standard graph to obtain the respective parts per million.

Copper, lead, and zinc were determined by atomic absorption spectrophotometry using a Techtron AA-3 Atomic Absorption Spectrophotometer, type M-1, Serial No. 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

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

The geochemical survey has indicated that anomalous values in copper, lead, and molybdenum exist in portions of the area surveyed. Values in zinc do not appear to be anomalous.

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,

Peter E. Hirst

Peter E. Hirst, P. Engr.

July 21, 1966



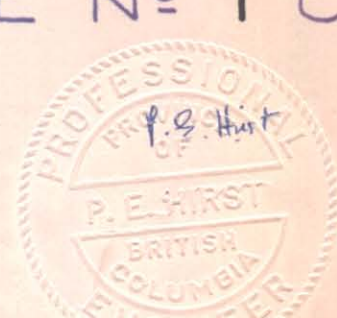
FRIENDLY LAKE No. 1 CLAIM GROUP

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 788 MAP # 2

NOTE:
 THE BASE MAP WAS PREPARED FROM AN ENLARGEMENT OF A 1 INCH TO 1000 FEET
 PHOTOGRAPHIC MAP CONSTRUCTED FROM AERIAL PHOTOGRAPHS BY LOCKWOOD
 SURVEY CORPORATION. SLIGHT INACCURACIES IN SCALE AND ORIENTATION ARE
 POSSIBLE BECAUSE OF LIMITED GROUND CONTROL.

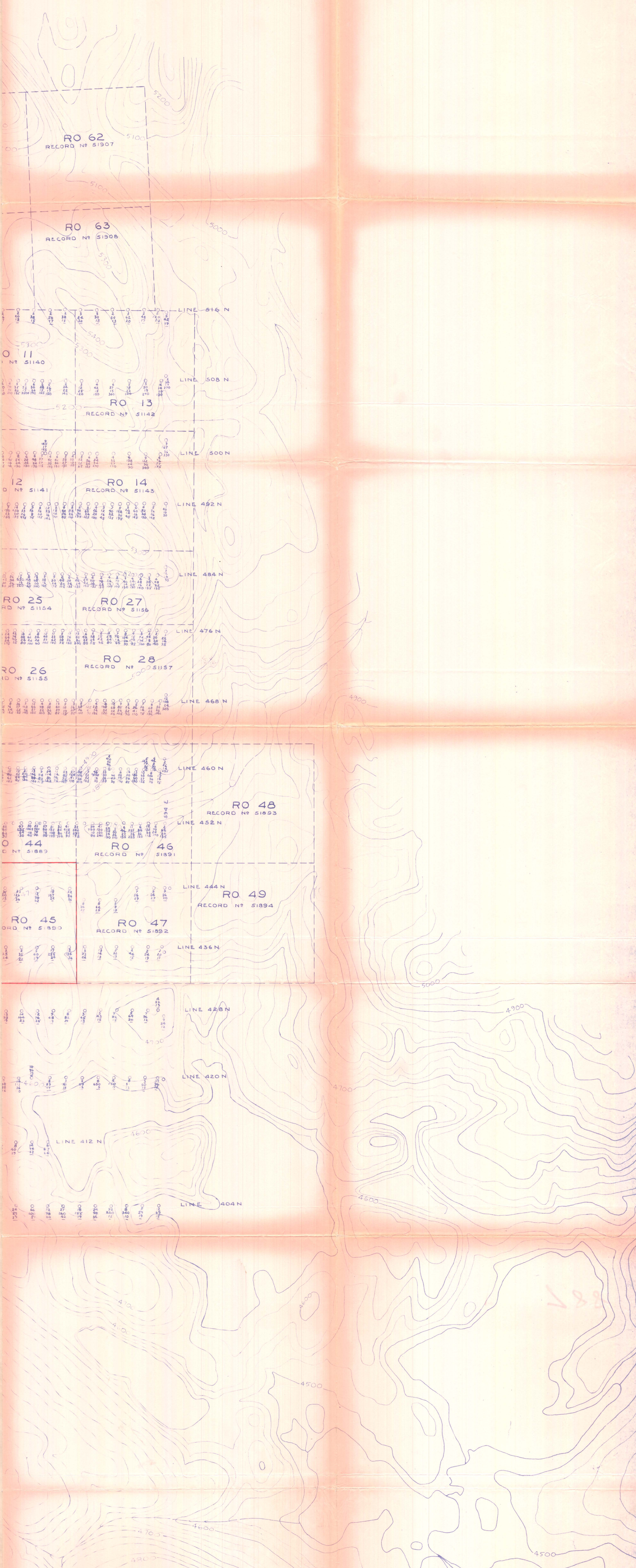
LEGEND:
 * SOIL SAMPLE LOCATION
 † STREAM SEDIMENT SAMPLE LOCATION
 ASSAY RESULTS ARE SHOWN IN PARTS PER MILLION IN THE FOLLOWING SEQUENCE:
 COPPER
 MOLYBDENUM
 LEAD
 ZINC

TO ACCOMPANY REPORT TITLED:
 "GEOCHEMICAL REPORT
 FRIENDLY LAKE No. 1 CLAIM GROUP"
 DATED:
 JULY 21, 1966
 WRITTEN BY:
 PETER E. HIRST
 (PROFESSIONAL ENGINEER)



788 (M1a)

ANACO
FRIE
SOIL



FROM AN ENLARGEMENT OF A 1/4 INCH TO 1000 FEET
 FROM AERIAL PHOTOGRAPHS BY LOCKWOOD
 WITH INACCURACIES IN SCALE AND ORIENTATION ARE
 CORRECTED BY GROUND CONTROL.

ANACONDA AMERICAN BRASS LTD. WESTERN EXPLORATION DIVISION

FRIENDLY LAKE CLAIMS
 KAMLOOPS M.D., B.C.

SOIL GEOCHEMISTRY

SCALE: 1" = 400'

LOCATION
 PARTS PER MILLION IN THE FOLLOWING SEQUENCE:
 MOLYBDENUM
 COPPER
 LEAD
 ZINC

788