

1216

GEOCHEMICAL REPORT  
OWL CLAIM GROUP

53° 124° NW by Omineca M.D.

P. E. Hirst 93 F/15W

March 15, 1968  
Owner: Anaconda American Brass Ltd.

GOVERNMENT AGENT  
RECEIVED  
APR 22 1968

SMITHERS. B. C.

GEOCHEMICAL REPORT

THE OWL CLAIM GROUP

Location: South of Nithi Mtn.,  
approximately 13 miles S.E.  
of Endako, 53°56', 124°51'

Report by: P. E. Hirst, P.Eng.

Owner: Anaconda American Brass Ltd.

Work for: Anaconda American Brass Ltd.

Date of Work: August 12 to August 22, 1967

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## M A P S

Plate 1	Owl Group Claim Map # 1	In Pocket
Plate 2	Geochemical Map # 2	In Pocket

## Introduction

The Owl group consists of the Owl 1-20 (inclusive) mineral claims (record numbers 41545-41564) and the Bee fractional claim (record number 53849). The Owl claims and the Bee fraction were staked in June 1966 and August 1967 respectively for Anaconda American Brass Ltd. During the field season of 1966 a geochemical soil survey was completed over most of the claims and this work was filed as assessment work in 1967. Further geochemical work was carried out during the period August 12 to August 22, 1967. This work involved surface soil sampling over those claims not sampled in 1966 and deep soil sampling in the northern portion of the claim group.

The purpose of this report is to provide an account of the geochemical work completed in 1967.

The Owl group lies within the Omineca Mining District of British Columbia, a few miles south of Nithi Mountain and about 7 miles southeast of the east end of Francois Lake. Principal access to the property is provided by a "jeep road" lying 1500 feet east of the claims and leading to the main gravel road along the Nithi River valley. The property is about 20 miles by road from Fraser Lake.

## Geology

G.S.C. Map 1131 A suggests that the claims are underlain by granitic rocks of the Topley batholith near or within its contact with the Takla group. However, only a few outcrops were found on the property and these consisted of rocks ranging in composition from granite to granodiorite. Most of the area is mantled by glacial till, in part a compact boulder clay, which is overlain in places by a sandy material carrying a large proportion of boulders and cobbles.

## Purpose of the Geochemical Work

Approximately 99 percent of the area is covered by glacial drift. Previous geochemical work has revealed a number of soil anomalies, but the significance of these anomalies could not be determined without further work. It was the aim of the 1967 geochemical work to complete the surface soil and silt sampling started in 1966 and to test, by deep soil sampling, the vertical and lateral extent of the anomalies outlined in 1966. The fundamental objective of all the work was to define areas of probable mineralization as "targets" for drilling or trenching.

### Details of the Geochemical Work

The soil samples were collected at 200-foot intervals along compass and pace traverses. A chained base line was used for control. The majority of the samples were taken from the "B" soil horizon. Silt samples were taken at approximate 200-foot intervals along the major stream courses within the property. A total of 71 soil samples and 24 silt samples were collected.

Deep soil sampling involved digging three-foot holes, 200 feet apart, along three cut and chained lines, as indicated on the accompanying geochemical map. Soil samples were taken at one-foot intervals along the vertical profile of each hole. A total of 79 holes were completed.

All samples were sent to the Anaconda geochemical laboratory for analysis.

### Method of Geochemical Analysis

The samples were dried and then screened to minus 80 mesh. A one gram sample was then digested in a sulphuric-nitric mixture of acids and taken to dryness. The resulting residue was then dissolved and made to a specific volume with dilute hydrochloric acid. This solution was then analysed for copper, lead, zinc, and molybdenum.

Copper, lead, and zinc were determined by atomic absorption spectrophotometry using a Techton 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.

Molybdenum was determined colorimetrically. A coloured molybdenum thiocyanate complex was formed by the addition of thiocyanate and stannous chloride to an acidified aliquot of the sample solution. The coloured complex was then extracted with iso amyl alcohol and the light transmittancy of the complex in alcohol determined by a spectrophotometer to obtain the respective parts per million concentration.

### Results of the Geochemical Survey

A geochemical map showing the trace metal content of each sample in parts per million is enclosed in the pocket of this report.

The results of this work indicate widespread variations in copper, molybdenum, lead, and zinc contents of both stream sediment and soil samples whose significance remains to be determined by further work

Respectfully submitted,

*Peter E. Hirst*

Peter E. Hirst, P.Eng.

PEH:bs

## APPENDIX "A"

Statement of Costs of the Geochemical Survey

Line Cutting		
Labour	6 man-days	93.24
Maintenance		37.30
Soil and Silt Sampling		
Labour	6 man-days	92.28
Maintenance		36.90
Deep Soil Sampling		
Labour	23 man-days	398.94
Maintenance		159.60
Sampling Supplies		13.36
Analysis	332 samples @ \$1.86 each	617.52
Sample Shipment		9.96
Transportation		240.00
Drafting		100.00
Supervision		<u>200.00</u>
	TOTAL	\$1,999.10

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.S. Hist*  
Province of British Columbia, this *11* )  
day of *April, 1968* A.D. )

*J. Paul*  
Sub-mining Recorder

## APPENDIX "B"

Evidence of Expenditure Incurred

<u>NAME</u>	<u>CATEGORY</u>	<u>RATE/DAY</u>	<u>DAYS WORKED</u>			<u>WAGES</u>
			<u>CUTTING LINE</u>	<u>SURFACE SAMPLING</u>	<u>DEEP SOIL SAMPLING</u>	
Garry Bysouth	Geologist	\$25.00			4	\$100.00
Hannes Claasen	Assistant	\$16.34			6	98.04
Brian Woodcock	Assistant	\$16.34	2		1	49.02
John Lucke	Sampler	\$15.38	3		5	123.04
Garry Foye	Sampler	\$15.38		3	5	123.04
Lance Rogers	Sampler	\$15.38		3	2	76.90
Garry Brace	Sampler	\$14.42	1			<u>14.42</u>
					TOTAL	\$584.46

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 *11* )  
day of *April, 1968* A.D. )

*P.S. Hoyt*

*J. Paul*  
Sub-mining Recorder



B.C. 4929:56

OWL 9 41553	OWL 7 41551	OWL 5 41549	OWL 3 41547	OWL 1 41545
OWL 10 41554	OWL 8 41552	OWL 6 41550	OWL 4 41548	OWL 2 41546

BEE #1 FRACTION 53849

OWL 11 41555	OWL 13 41557	OWL 15 41559	OWL 17 41561	OWL 19 41563
OWL 12 41556	OWL 14 41558	OWL 16 41560	OWL 18 41562	OWL 20 41564

B.C. 2929:97

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1216 MAP 1



ANACONDA AMERICAN BRASS LTD WESTERN EXPLORATION DIVISION

**OWL GROUP**  
ENDAKO, OMINECA M.D., B.C.

SCALE: 1" = 660' (APPROXIMATELY)

**CLAIM MAP**

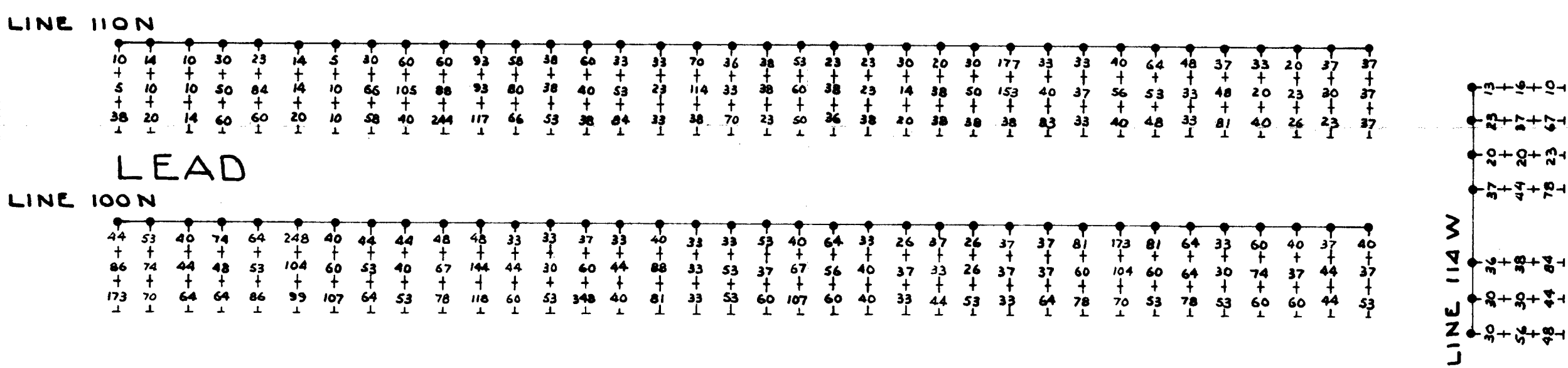
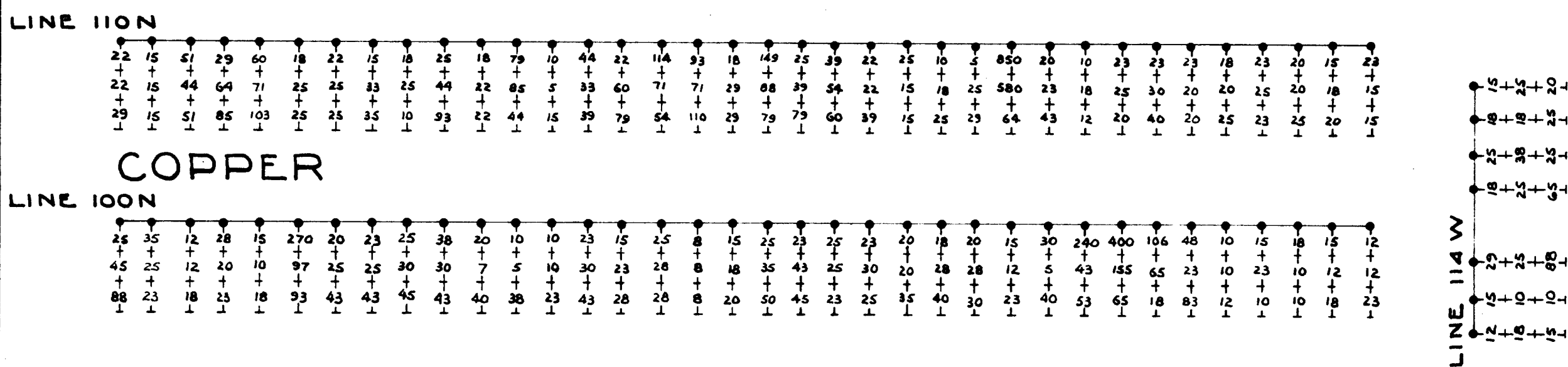
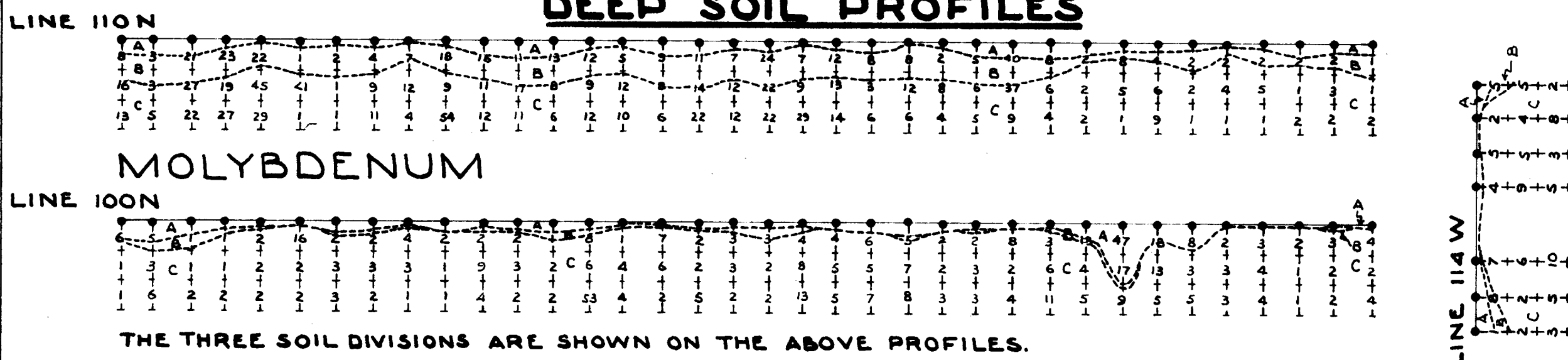
CLAIM NAME WITH RECORD NUMBER BELOW

TO ACCOMPANY GEOCHEMICAL REPORT  
SUBMITTED BY: P.E. HIRST, P.E., DATED: MARCH 15, 1968  
PLATE No 1

1216

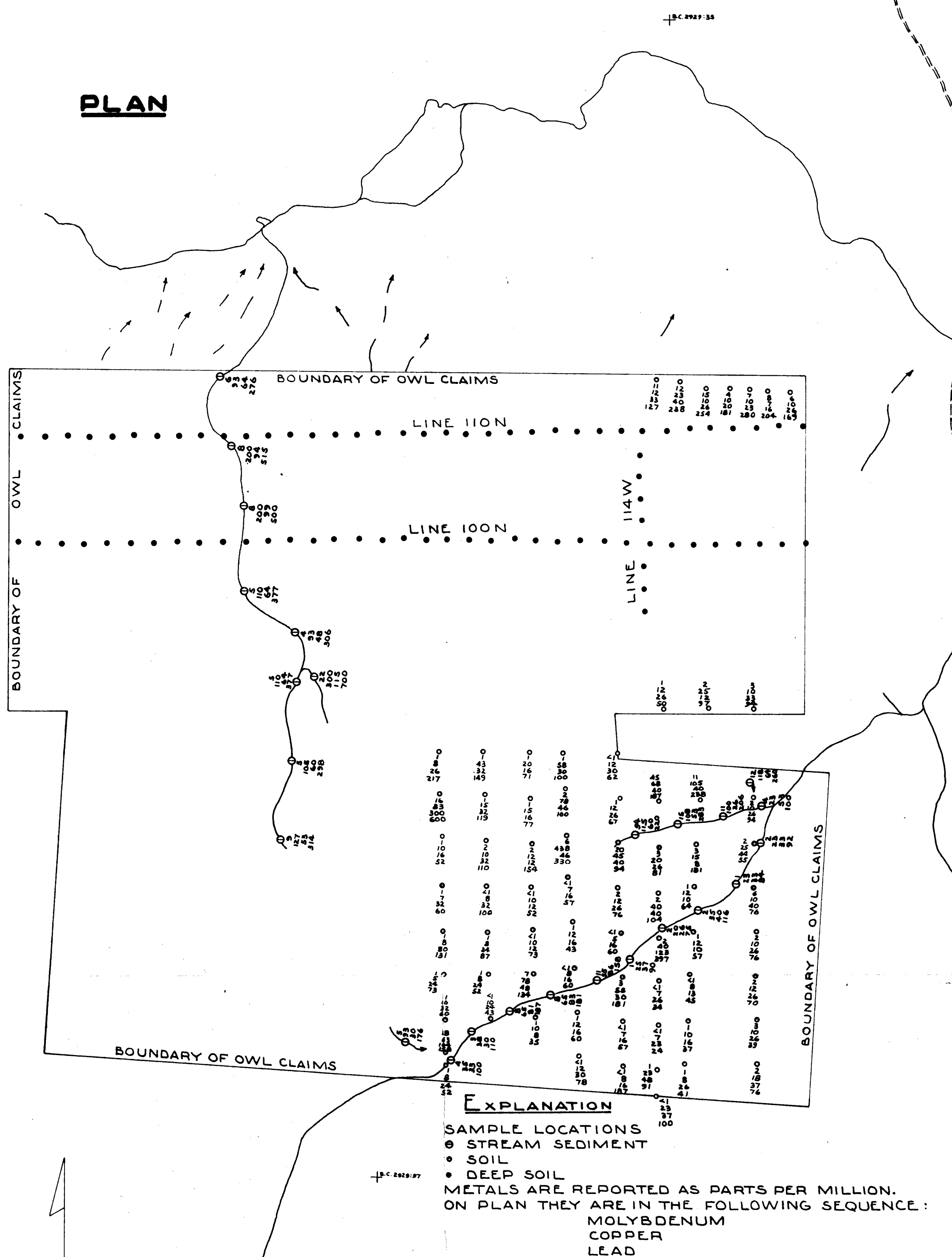
P.E. Hirst P. Eng.

## DEEP SOIL PROFILES



EACH SAMPLE REPRESENTS ONE FOOT OF THE THREE FOOT DEEP HOLES.

## PLAN



ANACONDA AMERICAN BRASS LTD WESTERN EXPLORATION DIVISION

**OWL GROUP**  
ENDAKO, OMINECA M.D., B.C.

SCALE: 1" = 660' (APPROXIMATELY)

## SOIL GEOCHEMISTRY

TO ACCOMPANY GEOCHEMICAL REPORT  
SUBMITTED BY: P.E. HIRST, P.E., DATED: MARCH 15, 1968  
PLATE No 2

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P.S. Hirst P. Eng.