

92I/9W

BRONZE BIRD

ON

MAP 3 FRACTION

OF

ROBERTS HILLS COPPER MINES LTD.

3000 EAST 100th

JACKO LAKE

KASLOOPS B.C.

NOVEMBER 5, 1972.

DATE

RECORD NUMBER

MAP 3 Fraction

98943

LOCATION - Near Jacko Lake and Peterson Creek,  
3 miles S.E. of Kasloops, and at  
90° 160° N.E.

DATE - April 6, 7, and October 26, 27, 1972.

4009

R. H. SERAPHIM ENGINEERING LIMITED  
GEOLOGICAL ENGINEERING

Telephone: Office 685-2914  
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475 - 470 GRANVILLE STREET  
VANCOUVER 2, B.C.

44009

GEOLOGICAL REPORT

on

MAP 2 FRACTION

of

ROLLING HILLS COPPER MINES LTD.

BUDA SHAFT AREA

JACKO LAKE

KAMLOOPS M.D.

NOVEMBER 3, 1972.

CLAIM

MAP 2 Fraction

RECORD NUMBER

92948

LOCATION - Near Jacko Lake and Peterson Creek, 8 miles S.W.  
of Kamloops, and at 50° 120° NE

DATES - April 6, 7, and October 26, 27, 1972.

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 4009 MAP

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MAPS

- #1 LOCATION - 10 miles = 1 inch.....Following page 1
- #2 GEOLOGICAL - 500 feet = 1 inch.....Front Pocket

R. H. SERAPHIM ENGINEERING LIMITED  
GEOLOGICAL ENGINEERING

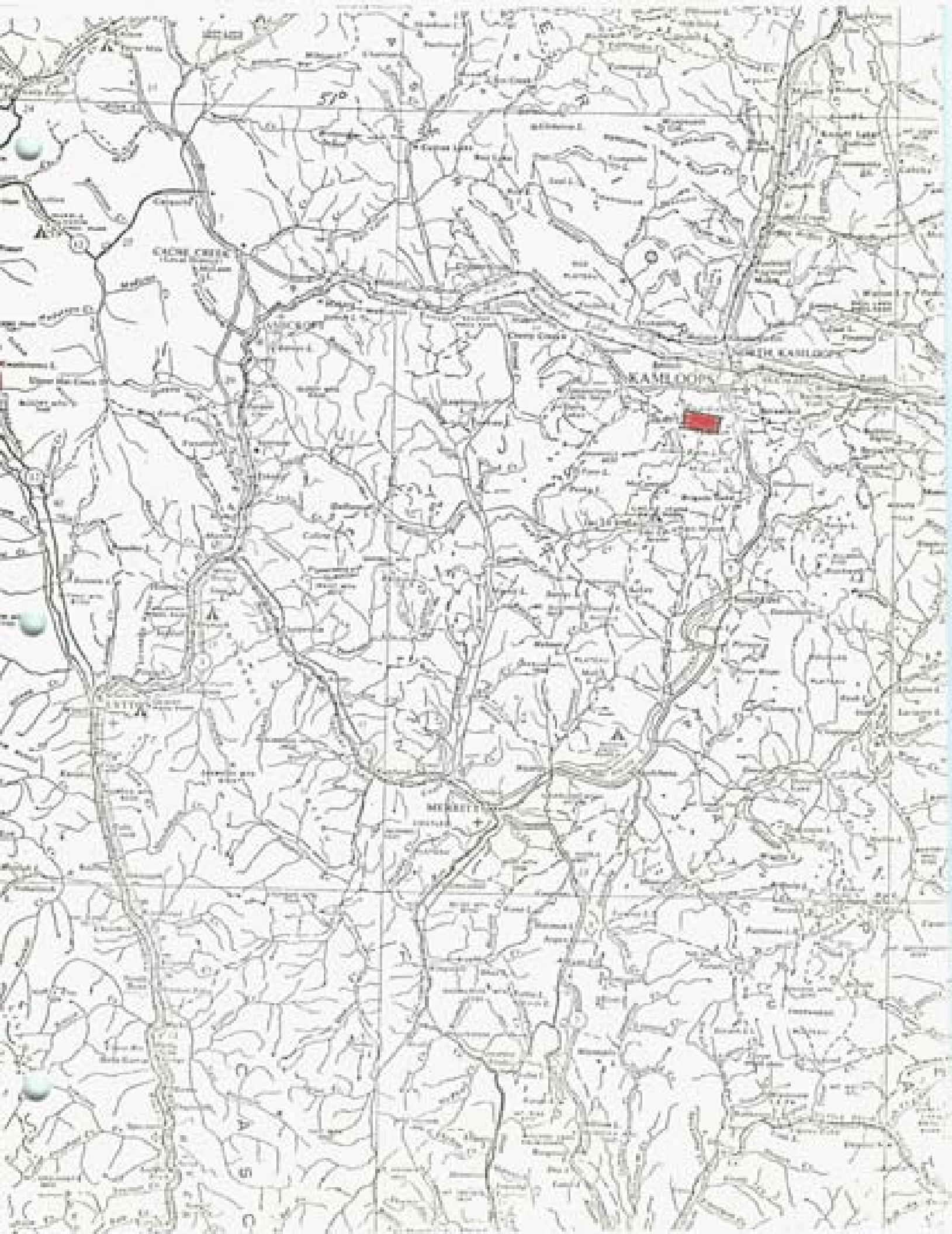
316 — 470 GRANVILLE STREET  
VANCOUVER 2, B.C.

### SUMMARY AND CONCLUSIONS

The geological survey has shown that a band or bands of copper mineralized altered dioritic rocks are exposed near the Buda Shaft on Peterson Creek. Several vertical drill holes show that bands of picrite also exist in the locality. Some angled drill holes are recommended to obtain a better appreciation of the grades and widths of the copper mineralization.

### INTRODUCTION

The general area was examined initially on April 23 and 24, 1971. Previous examinations of other showings in the Iron Mask intrusives had been made in May, 1956, September, 1956, and December, 1964. The field work providing the basis for this report and accompanying map was completed on April 6 and 7, and on October 26 and 27, 1972.



Department of  
Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 4009 MAP #1

The previous geological work in the area by J.M. Carr and V. Preto published in the B.C. Department of Mines Reports for 1967 page 142, and 1956 page 47, and by P.C. Badgeley in 1956 was correlated. Some of this information is used as background to obtain a better appreciation of the information obtained from the mapping of outcrops. Magnetic and I.P. surveys have also been completed, and contribute to an understanding of the geology.

#### CLAIMS

The MAP 2 Fraction is part of the BUDA 71 group, but the subject geological mapping and report are applied only to assessment work on the MAP 2 Fraction.

#### LOCATION, ACCESS, TOPOGRAPHY

The claims are on rolling upland approximately eight miles southwest of Kamloops. Most of the area is open grazing land, with several small ponds and clumps of timber.

#### SURVEY METHOD

The claim survey by McWilliam, Whyte, and Goble made a partial base for geological mapping. An aerial photograph magnified to 500 feet to the inch was also used to plot the location of claim posts, outcrops, and drill holes.

### REGIONAL GEOLOGY

The claims lie near the southwest contact of the Iron Mask batholith. The grain of the country trends northwesterly, and has been emphasized by glacial scour. Outcrops are commonly found on the heads of drumlins i.e. on the northwest ends of the ridges. These drumlins obscure many of the fault zones in the area, and make it difficult to interpret structure from aerial photographs.

The Iron Mask batholith intrudes Nicola volcanics. Four principal rock types have been recognized within the batholith; coarse grained diorite, syenite to monzonite, peridotite or picrite, and hydrothermally altered microdiorite (Sugarloaf intrusion?). Most of the copper mineralization in the district, including that on Cominco's crown granted claims, is hosted by the Iron Mask intrusive and is associated with strong fracturing on the flanks of the picrite bodies.

### LOCAL GEOLOGY

The accompanying map shows the outcrops located by the writer. The work was directed primarily to determine where mineralized Iron Mask intrusives might exist. The intrusive contact lies mostly in the valley of Peterson Creek, and thus is largely obscured by the glacial till in the valley floor. However, a group of outcrops on the north



bank of Peterson Creek, near the 'Buda Shaft' show scattered copper mineralization which has attracted spasmodic exploration.

These mineralized outcrops are predominantly dioritic, with pink feldspathic alteration. Pyrite, and chalcopyrite are associated with the alteration, and appear to be spatially related to steeply dipping fracture zones which strike northerly to northwesterly. A half dozen or more short vertical percussion drill holes in the vicinity have intersected sections of sub-ore grade copper. Several vertical diamond drill holes and some outcrop show that one or more bodies of picrite also exist.

The spatial relations of the outcrops, together with the drilling, as well as the magnetic and I.P. surveys, indicate that the mineralized bands trend northwesterly. Several drill holes, angled either northeasterly or southwesterly, are recommended to give a better cross-section of the mineralization.

November 3, 1972.

  
R.M. Seraphin, Ph.D. P.Eng.

STATEMENT OF COSTS

<u>Personnel</u>	<u>Dates</u>	<u>Rate/day</u>	<u>Total</u>
R.H. SERAPHIM	April 6, 7 Oct. 26, 27 (in part)	100.00	200.00

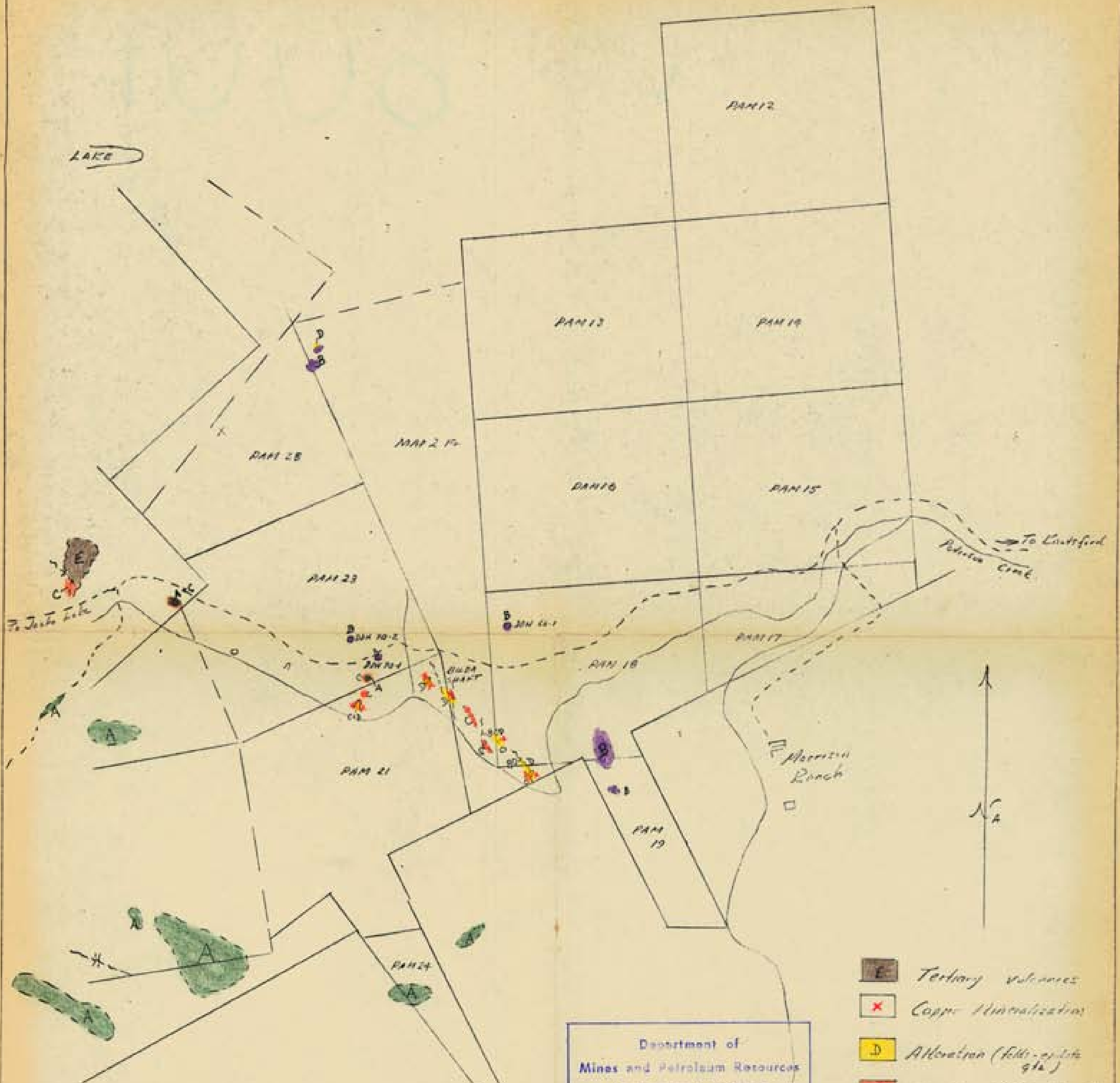
*R.H. Seraphim*  
R.H. Seraphim, F.Eng.

Declared before me at the *City* of *Vancouver*, in the  
Province of British Columbia, this *6*  
day of *November*, 19*72*, A.D.

*R.H. Seraphim*

*A. Geranotto*  
~~A Commissioner for taking Affidavits within British Columbia or~~  
~~A Notary Public in and for the Province of British Columbia~~

SUB-MINING RECORDER



Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 4009 MAP #2

40009 M-2

Geological Survey  
 MUDA SHaft AREA  
 NIAGARA FALLS  
 KAPILONG  
 1972

GEOLOGICAL SURVEY  
 MUDA SHaft AREA  
 NIAGARA FALLS  
 KAPILONG  
 1972