

R. H. SERAPHIM ENGINEERING LIMITED
GEOLOGICAL ENGINEERING

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

4014

GEOLOGICAL REPORT

on

B 30 to 33 CLAIMS

of

ROLLING HILLS COPPER MINES LTD.

JACKO LAKE AREA

KAMLOOPS M.D.

NOVEMBER 27, 1972.

CLAIMS

B 30 to 33 inc.

RECORD NUMBERS

52968 to 52971 inc.

LOCATION - Near Knutsford and Peterson Creek,
8 miles S.W. of Kamloops, and at
50° 120° N.E.

DATES - November 9, 10, 11, and 25, 1972.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. **4014** MAP.....

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MAPS

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

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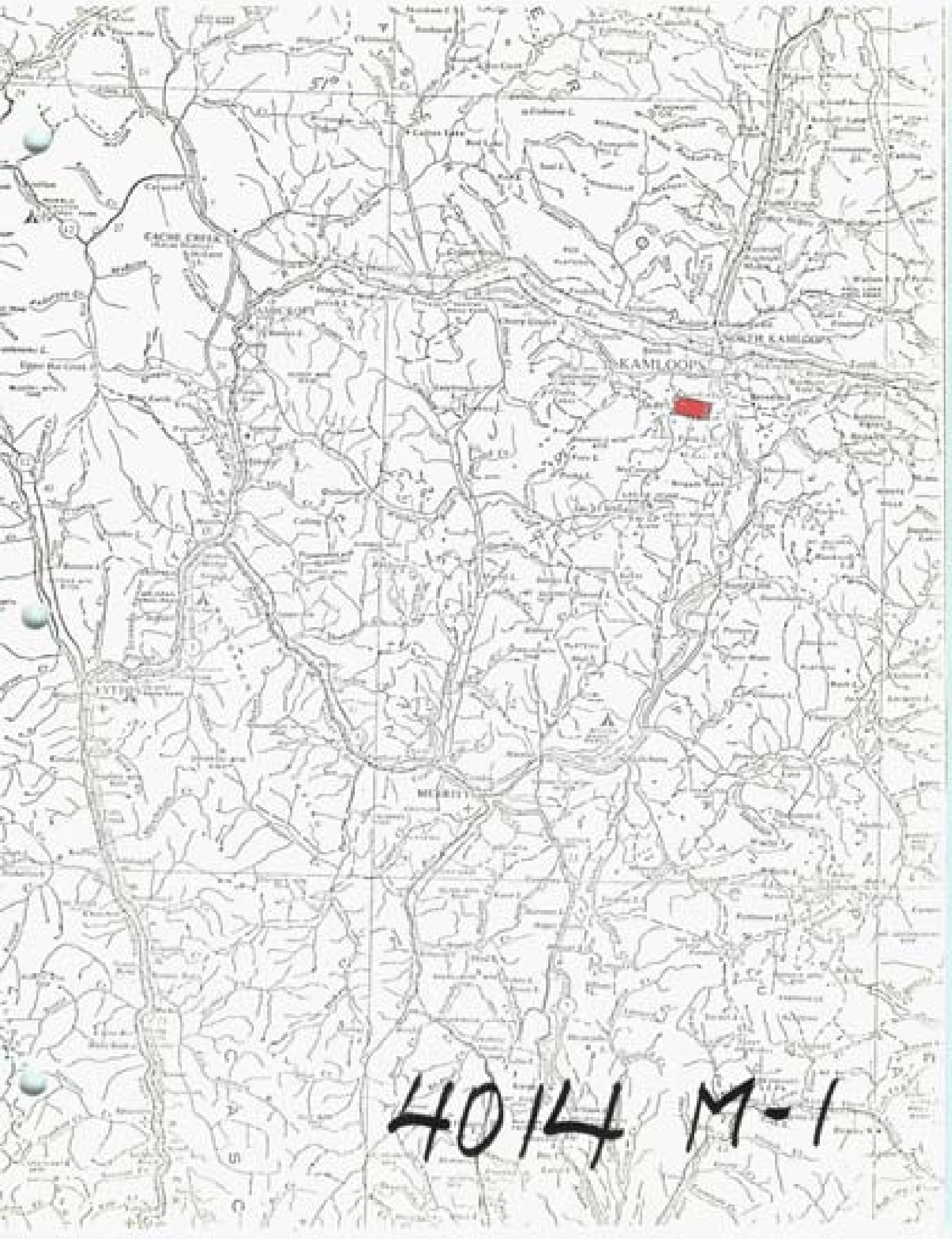
316 - 470 GRANVILLE STREET
VANCOUVER 2, B.C.

SUMMARY AND CONCLUSIONS

The B 30 to 33 inc claims straddle the Edith Lake road, southwest of Kamloops. Outcrops of dioritic rocks are relatively abundant, particularly on the north-east parts of the claims. Several outcrops include sparse copper mineralization in weak shatter zones. However, neither copper mineralization nor rock alteration are widespread. Some induced polarization and magnetic surveys over local areas of overburden co-incident with the south-east trending lineaments is recommended for follow-up work.

INTRODUCTION

The general area has been examined by the author at intervals in 1956, 1964, and 1971. The field work on the subject claims was completed on November 9, 10, and 11, 1972. Mapping to the northwest, nearer to Jacko Lake, earlier in 1972 gave a background to the work reported herein. The previous geological work in the Kamloops 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.G. Badgeley in 1956 (private report) also provided background information.



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Department of
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ASSESSMENT REPORT

NO.

4074

MAP

#1107

CLAIMS

The B 30 to 33 claims were surveyed by McWilliam, Whyte, & Gobel, B.C. Land Surveyors. Their survey plan provided part of the base for the included map. The subject claims were located prior to the 1971-72 overstaking, and are believed to be full sized claims.

LOCATION, ACCESS, TOPOGRAPHY

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

SURVEY METHOD

An aerial photograph reproduced at 500 feet to the inch was used to plot the location of claim posts, outcrops, drill holes, roads and streams. The claim survey was added to a mylar overlay on the photograph for the actual field work.

REGIONAL GEOLOGY

The claims lie within the Iron Mask batholith, and close to the southern contact. The grain of the country trends northwesterly, and has been emphasized by glacial scour. Numerous drumlins obscure most of the bedrock structure, and make it difficult to interpret tectonic features.

The Iron Mask batholith is composed of many phases, some of which are intergradational. The dioritic rocks have varying amounts of mafics and also show variations in grain size. Peridotite and microdiorite have been mapped in the district, but were not recognized in outcrops on the B 30 to 33 claims.

Most of the copper mineralization has been found on or near the picrite contacts, or near the contacts of the main batholith with the Nicola rocks.

LOCAL GEOLOGY

The accompanying map shows the outcrops located during the survey. All the outcrops are of dioritic rocks or alteration products. The diorite does show some variation in composition, separated into three phases as follows:

- (1) a pale phase with abundant white feldspar and minor chloritized hornblende, called leuco-diorite
- (2) a pink-grey colored phase, with the color produced by a pink to grey feldspar, chloritized mafics also minor, (phase named syenite)
- (3) a dark phase, named mafic diorite, with abundant coarse hornblende and minor feldspar.

Alteration in the claim area is neither strong nor widespread. The outcrops along the road near the center of the four claims are pyritized, and contain some small stringers of feldspathized rock. Several shear zones exposed in trenches and shallow shafts are also accompanied by clay alteration and pyrite.

A few of the shear zones contain sparse copper mineralization, and the location of this mineralization is shown on the accompanying map. None of the copper-mineralized zones appeared to be large enough to attract detailed exploration.

Two drill sites, apparently from percussion drilling, were noted during the survey, but records of the results are not known to the author.

Follow-up work might include a few I.P. survey lines across the lineaments, to determine if zones with more abundant sulfide are obscured by the overburden in these depressions.

November 27, 1972.


R.H. Seraphim, Ph.D. P.Eng.

Appendix

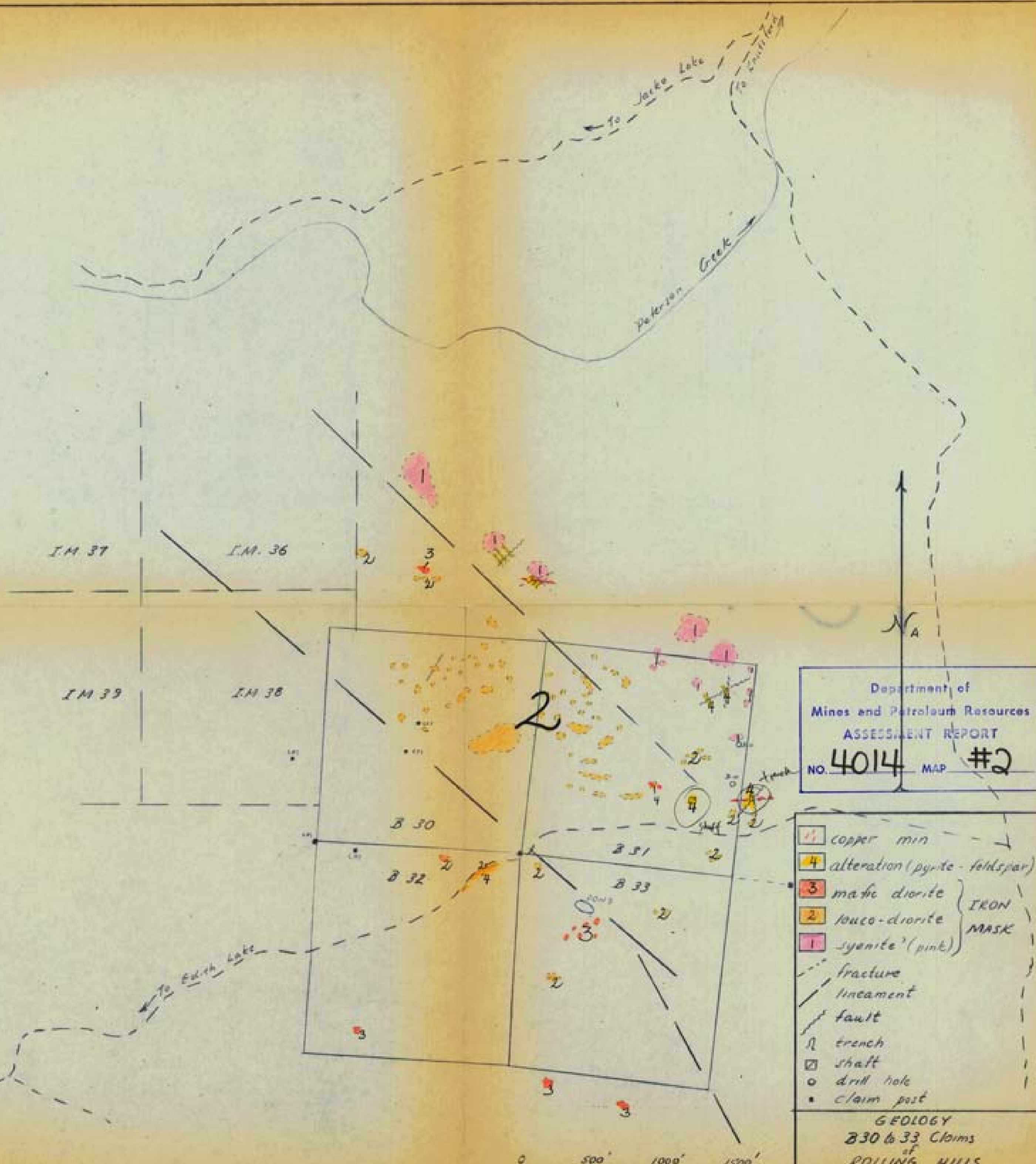
STATEMENT OF COSTS

<u>Personnel</u>	<u>Dates</u>	<u>Rate/day</u>	<u>Total</u>
R.H. Seraphim	Nov. 9,10,11,25	\$100.00	\$400.00
Transportation - Airfare -		\$44.00	
U-Drive -		51.09	
			95.09
			<u>\$495.09</u>

Declared before me at the *City*
of *Chancellor*, in the
Province of British Columbia this *7*
day of *Dec.* 1972, A.D.

R.H. Seraphim
R.H. Seraphim, P.Eng.

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



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- 1 copper min
- 4 alteration (pyrite - feldspar)
- 3 mafic diorite
- 2 leuco-diorite
- 1 syenite? (pink)
- fracture
- lineament
- fault
- trench
- shalt
- drill hole
- claim post

GEOLOGY
B 30 to 33 Claims
of
ROLLING HILLS

0 500' 1000' 1500'

To accompany report of P.M. Strathairn
on B-30 to 33 claims of Rolling Hills dated Nov 27/72

RHS