2450

GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL

REPORT

on the

LUC CLAIM GROUP - 55° 124° S.W.

OMINECA MINING DIVISION, B.C.

by

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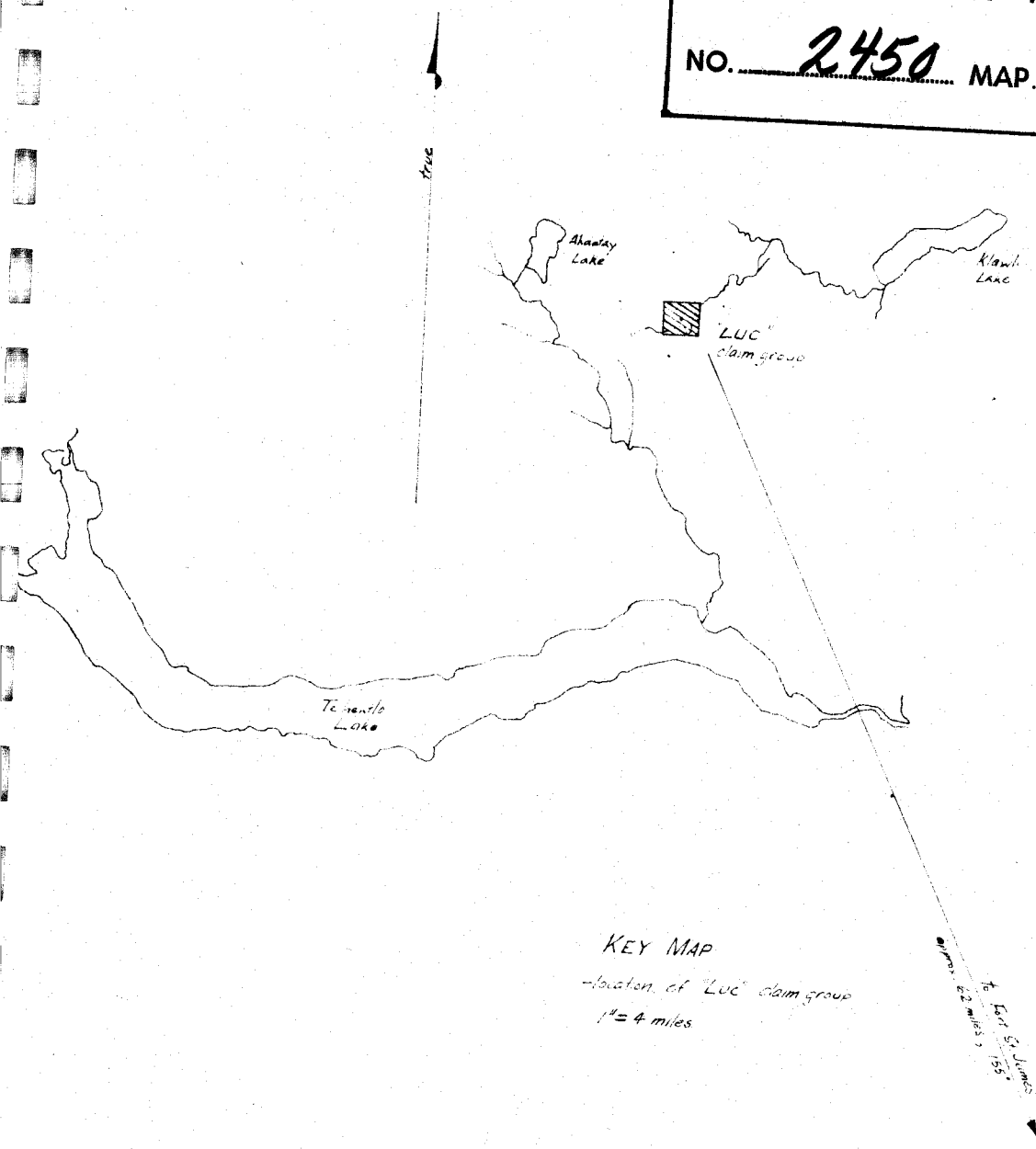
Vancouver, B.C.

July 3, 1970.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2450 MAP #1



KEY MAP
-location of 'Luc' claim group
1" = 4 miles

125°00'
45'
55°00
30'

FIG 1

TABLE OF CONTENTS

FIGURES

INTRODUCTION

The Luc claim group of four claims is located approximately 62 miles northwest of Fort St. James, to the north of Tchentlo Lake and east-south-east of the centre of Ahdatay Lake (See frontispiece key map). The claims are owned by John King of Fort St. James. Record numbers are 79118K - 79121K.

GEOLOGY
(See Figure 2)

The claim group area is underlain mainly by andesites with lesser rhyolite and basalt and very minor marble. The andesites are generally pyroxene porphyries with some feldspar porphyries and all are pervasively saussuritized. The marble bed exposed near survey grid station 1E, 3S strikes 170° and dips about 70° E.

Near station 0N, 0 + 50E a pyrite-rich zone cuts across a rhyolite unit. The zone is about 20 feet in width, strikes about 110° and dips about 55° N. Within this zone malachite, chalcopyrite, abundant calcite and considerable earthy hematite occur. This zone was not traceable along strike for more than 60 feet.

Chalcopyrite occurs in other locations and these are indicated on the accompanying geologic map (Figure 2). The characteristic form of the chalcopyrite occurrences is as blebs throughout the andesite. A second pyrite-rich zone with minor copper minerals occurs in andesitic rocks to the east of station 4N, 3 + 50E.

Feldspar porphyry dykes are observed to be barren but the near vertical contact with andesites near station 5E 3N shows very minor malachite with much earthy hematite, calcite, epidote and some pyrite.

GEOPHYSICAL

A magnetometer survey (See Figure 3) was conducted over a N-S, E-W grid on the claims about their centre. The instrument used was a Craelius Mini-Mag vertical magnetometer, manufactured by N.G.U., Tronheim, Norway.

Readings were taken at 100 foot intervals on lines 200 feet apart on the outer parts of the grid in the northwest, southwest and southeast quadrants, and at 100' intervals on lines 100 feet apart in the area about 0N 0E and the whole of the northeast quadrant. The accompanying map of the grid (Figure 3) indicates the value in gammas at each station. All readings are adjusted for diurnal change.

The values in Figure 3 are contoured with an interval of 500 gammas. A small V-shaped zone of high values is indicated with a depression in the opening of the V and around its edge. A second high area is located to the southeast of the point of the V shape.

The general appearance of the contours indicates some correlation with observed structural air photo lineations which trend northeast, north-northwest, east-west and north-south.

The overall size of the magnetic anomaly is rather small.

GEOCHEMISTRY

At locations shown on Figure 4 a soil sample was taken. Generally, samples were taken at 200 foot intervals on lines 200 feet apart on the east and west extremities of the grid, and at 100 foot intervals on lines 100 feet apart on the whole of the north-east quadrant and on lines near 0E.

In general, the soils were immature and good development was never seen. Where possible, the B horizon was sampled which was characteristically found at a depth of 8-10". The samples were collected in kraft paper bags and analyzed by Chemex Labs Ltd. in North Vancouver.

The bar graph (Figure 5) illustrates distribution of copper values in soil samples. A background of about 40 ppm copper is indicated with rather broad distribution of values above a threshold of about 200 ppm.

The plan of "Soil Sample Results", Figure 4, shows erratic distribution of high copper values in a manner which appears impractical to contour. This erratic distribution is similar to the spotty occurrence of chalcopyrite in various rock types.

CONCLUSION

No zone of probable economic significance is indicated by the work accomplished.

W.R. Bacon, P.Eng.

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SUMMARY OF COSTS

LUC CLAIM GROUP

			Rate		
C. Harivel	Geologist	June 5-14,24	$750/m.	11 days	$275.00
J. Harivel	Assistant	June 5-14	$400/m.	10 days	$133.00
J.C. Stephen	Superintendent	June 24	$40/day		40.00
					$448.00

Helicopter (Proportion of charges June 5 and 14)

1 hour at $150/hour 150.00

Chemex Labs Ltd. - 192 copper determinations at $1.00 ea. 192.00

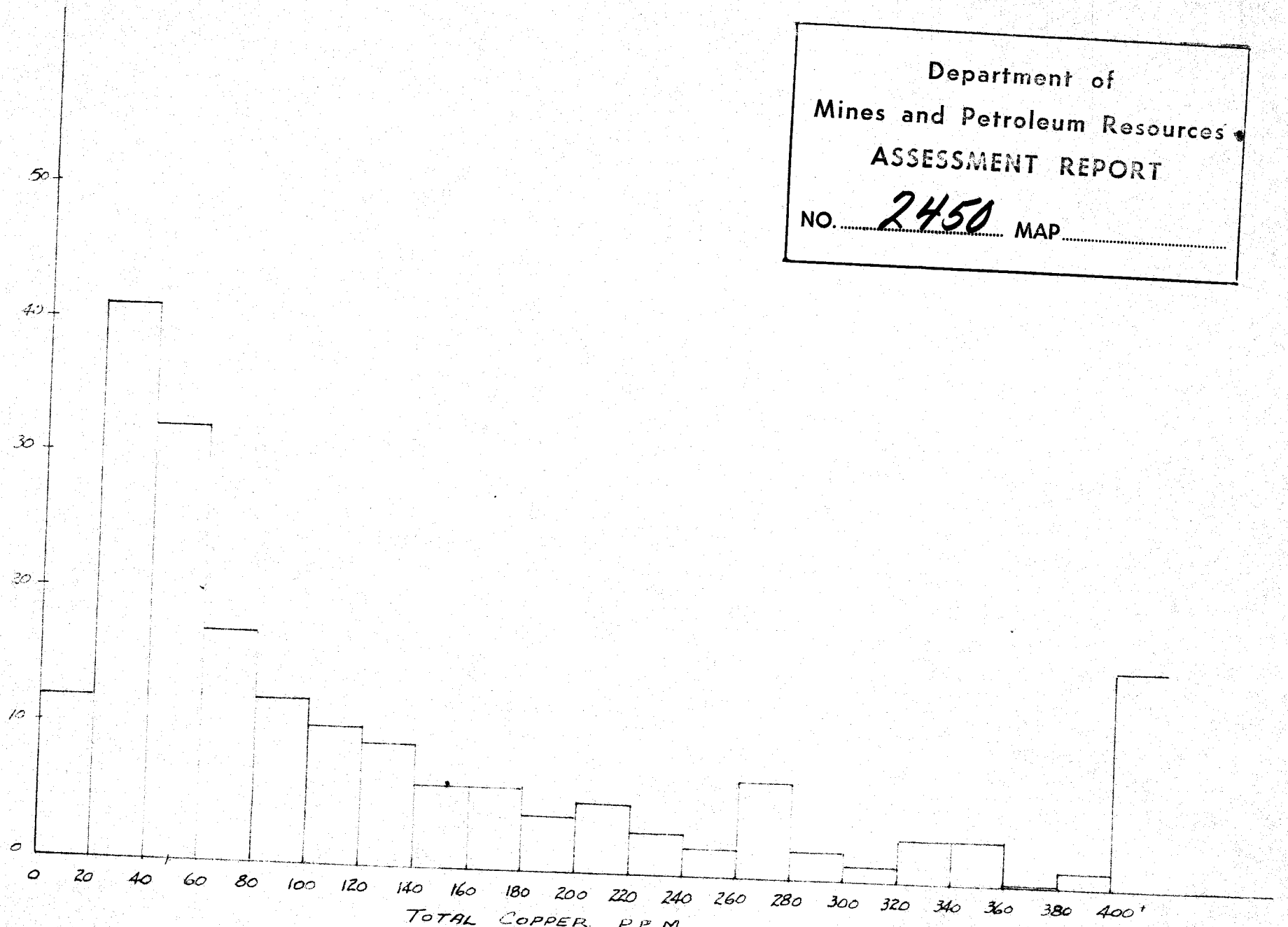
Total $790.00

Declared before me at the City of Vancouver, in the Province of British Columbia, this 6 day of July 1970, A.D.

A Commissioner for taking Affidavits within British Columbia or
A Notary Public

SUB-MINING RECORDER

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2450 MAP



LUC CLAIM GROUP
DISTRIBUTION GRAPH
SOIL SAMPLE VALUES.

FIG 5

10W 8W 6W 4W 2W 0E 2E 4E 6E 8E 10E 12E

Luc 1 | Luc 3

12N
10N
8N
6N
4N
2N
0N
2S
4S
6S
8S
10S
12S

location line

within this area many outcrops of andesite

pond

pond

pond

Luc 2 | Luc 4

2450

FIG. 2

LEGEND

- d feldspar porphyry dyke
- a mainly andesite with some basalt
- r rhyolite
- m marble
- observed geological contact; limit of outcrop
- claim post

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2450 MAP #2

To accompany "Geological, Geochemical and Geophysical Report" by W.R. Bacon, P.Eng. on the Luc Claim Group, Omineca M.D., dated July 3, 1970.

W.R. Bacon, P.Eng.

GEOLOGY MAP
LUC CLAIM GROUP

TCHENTLO LAKE AREA 93N/7
Scale 1"=200' June 1970

	12W	11W	10W	9W	8W	7W	6W	5W	4W	3W	2W	1W	1E	2E	3E	4E	5E	6E	7E	8E	9E	10E
12N																					x 30	
11N															x 30			x 36		x 24		
10N													x 90	x 42						x 25	x 109	
9N															x 178						x 87	x 144
8N					x 212		x 20		x 54	x 87	x 330	x 65				x 52	x 52	x 173		x 562	x 34	x 71
7N									x 20		x 137	x 330			x 310	x 1360			x 144	x 26		x 80
6N							x 277						x 58	x 47	x 40	x 236	x 69	x 484	x 71	x 54		x 52
5N					x 101		x 96	x 248	x 17		x 58	x 270	x 131								x 200	
4N	x 32		x 206		x 33		x 48				x 142	x 30		x 42	x 67	x 144	x 262	x 33	x 58	x 80	x 341	x 22	x 1300
3N									x 22		x 92	x 52		x 292	x 34	x 42	x 103	x 163	x 720	x 277	x 50	x 700	x 98
2N					x 30						x 87			x 25	x 64	x 76	x 386			x 135	x 148	x 83	x 74
1N											x 645	x 30	x 48	x 56	x 105	x 218	x 424	x 133	x 200		x 110	x 137	x 58
	x 54		x 90		x 200	x 48	x 1720	x 69	x 262	x 90	x 330	x 300	x 270	x 62	x 105	x 173	x 562		x 112	x 45	x 224	x 52	x 16
											x 40			x 720	x 163	x 484	x 262	x 189	x 101	x 424		x 43	x 45
1S														x 76	x 96								
2S					x 19		x 34		x 14		x 50			x 40	x 137		x 60		x 36		x 42		
3S											x 133		x 83	x 69	x 26								
4S									x 25		x 40		x 212	x 62	x 30		x 50		x 24		x 40		
5S					x 17						x 64				x 135								
6S							x 32				x 341	x 47	x 352	x 33			x 42				x 16		
7S											x 242								x 36				
8S					x 52	x 36	x 32		x 30		x 40	x 13	x 14	x 36	x 26		x 38		x 8		x 118		
9S											x 48	x 144			x 38								
															x 30								

2450

FIG. 4

To accompany "Geological, Geochemical and Geophysical Report" by W.R. Bacon, P.Eng. on the Luc Claim Group, Omineca M.D., dated July 3, 1970.

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SOIL SAMPLE RESULTS
LUC CLAIM GROUP
TCHENTLO LAKE AREA 93N/7

Scale 1"=100' June 1970