

GEOPHYSICAL REPORT  
ON A GROUP OF CLAIMS  
FOR

655

KAMLOOPS COPPER CONSOLIDATED LIMITED (N.P.L.)

Claims Surveyed:

Crown Granted Mineral Claims: L 1311, L 4666, L 1341, L 878,  
L 879, L 880, L 1036, L 1050,  
L 1066, L 1067, L 1068, L 1302,  
L 1340, L 1342, L 1747, L 5622  
to L 5629 inclusive, L 1301

Mineral Lease - M 21 (L 875)

Mineral claims: Key

Lorna 1 to 4 inclusive

which are located 7 miles southwest of Kamloops, 50°30', 120°SE

The survey was conducted during the period February 1 - 21, 1965.

The report is written by E. B. Nicholls, P.Eng., Geophysicist.

SULMAC EXPLORATION SERVICES LIMITED

MAY 25, 1965

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Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 655 MAP

GEOPHYSICAL REPORT  
ON A GROUP OF CLAIMS  
FOR  
KAMLOOPS COPPER CONSOLIDATED LIMITED (N.P.L.)

KAMLOOPS MINING DISTRICT  
KAMLOOPS, BRITISH COLUMBIA

Introduction

A ground magnetometer survey was carried out over a group of claims for Kamloops Copper Consolidated Limited (N.P.L.) located in the Kamloops area of British Columbia.

The survey was conducted by Sulmac Exploration Services Limited during the period February 1 - 21, 1965. The field work was carried out by Mr. R. Pild, geophysicist, and Mr. R. McLeod, operator.

Results of the survey are shown on the plan accompanying this report.

Summary and Recommendations

A magnetometer survey was carried out over a group of claims for Kamloops Copper Consolidated Limited (N.P.L.). The survey did not indicate any major anomalous

zone, however interpretation of the data did indicate the general geological pattern of the property.

The magnetics infer that the claim group is underlain by the Iron Mask Batholith and rocks of the Kamloops Group lie to the north of the intrusive. These formations are known to be host rocks for ore occurrences in the immediate area.

It is, therefore, recommended that the claim group be surveyed by the Induced Polarization method in order to locate any mineralization that may be present. Any anomalies indicated by the I.P. survey should be further investigated by diamond drilling.

#### Property, Location and Access

The group of claims discussed in this report are shown on the accompanying map and are also listed as follows:

Crown Granted Mineral Claims: L 1311, L 4666, L 1341, L 878,  
L 879, L 880, L 1036, L 1050,  
L 1066, L 1067, L 1068, L 1302,  
L 1340, L 1342, L 1747, L 5622  
to L 5629 inclusive, L 1301

Mineral Lease - M 21 (L 875)

Mineral claims: Key

Lorna 1 to 4 inclusive

The property is located some 7 miles west of Kamloops. Access to the claims is excellent, being by the main Trans-Canada Highway west from Kamloops for about 7 miles.

### General Geology

This area is part of the Interior Plateau region and contains rocks ranging in age from Triassic to Recent. The general geology of the area is shown on Map No. 886A accompanying Memoir 249, Geology and Mineral Deposits of Nicola Map Area, British Columbia, by W. E. Cockfield, published by Department of Mines and Resources.

The property discussed in this report lies within the area underlain by the Iron Mask Batholith. This diorite complex, some 12 miles by 3 miles in area, strikes northwesterly and is found to be the main ore host. To the north this batholith is bounded by volcanics and to the south by Nicola volcanics with some sediments. The batholith varies in composition from syenite to ultrabasic types, all of which are deficient in quartz, but magnetite and apatite are present in most rocks. This batholith

has been subject to considerable movement and shows extensive fracturing. Shearing is found to be maximum in the area of major peridotite inclusions.

All points in the intrusive are favourable for ore occurrence. Showings have been found in the following claims in the immediate area: Iron Cap, Lucky Strike, Evening Star, Iron Mask.

The volcanics are also common hosts to ore filled shears which are not too far from the intrusive. There appears to be close association between copper deposits and certain veins of magnetite within the rocks of the batholith. However, this association of copper and magnetite is not general throughout the area.

#### Method of Survey

A magnetometer survey was carried out over the group of claims based on a grid system of 200 foot lines and 100 foot stations. The baseline of the grid was established in a northwest direction and the traverse lines were turned off at right angles to this line. A total of approximately 39 miles were cut and chained.

The survey was conducted using a Sharpe MF-1 Fluxgate magnetometer. Sensitivity of the instrument was 20 gammas per division on the 1000 gamma scale. A total of approximately 33 miles were surveyed by this method. The results obtained were plotted on a map at a scale of 400 feet to the inch, and contoured. The map accompanies this report.

#### Discussion of Results

The magnetometer survey indicates considerable magnetic relief throughout the property, however no major anomalous zone was located by the survey. The magnetite concentration within the area is very erratic. From the nature of the magnetic results it appears that the area is covered by shallow overburden beneath which the rocks may be divided into three magnetic units. Contacts between these various rock types as inferred by the magnetics are shown on the accompanying map.

The magnetic unit lying on the north boundary and interpreted as consisting of reversely magnetized volcanics is probably due to rocks of the Kamloops Group.

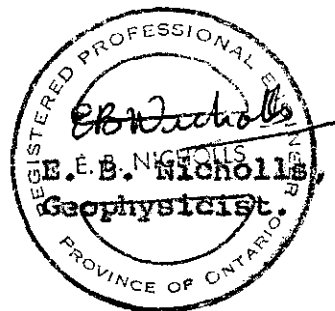
The major portion of the property is underlain by the other two magnetic units, one of which shows much greater

variation in magnetic relief and is interpreted as being the more basic phase of the batholith. Diorite is indicated as the underlying rock type by the other unit.

Numerous faults and fractures are indicated by the magnetic data, but have been omitted until the geological mapping has been completed. On completion of the mapping a more thorough review can be made for a better understanding of the geology of the area.

Respectfully submitted,

SULMAC EXPLORATION SERVICES LIMITED



B.Sc., P. Eng.,

Geophysicist.

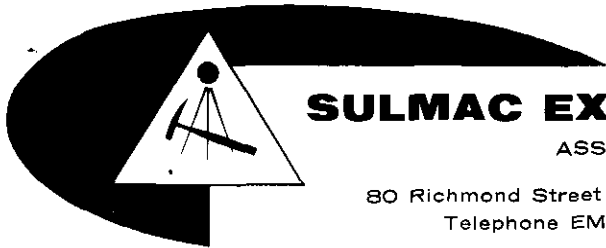
May 25, 1965



APPENDIX

List of Personnel Employed on Geophysical Survey, and Dates:

E. B. Nicholls	Senior Geophysicist	Feb. 15, May 2, 16, 17 and 21, 1965
R. Pild	Field Geophysicist	Feb. 1 - 21, 1965
R. McLeod	Geophysical Operator	Feb. 1 - 21, 1965
D. Grant	Draftsman	May 12-14, 17, 1965
P. Tapon	Draftsman	March 20 & 21, April 19-20, 1965
R. Schulte	Linecutter	Jan. 15-31, 1965
G. Espaniel	"	" "
R. Espaniel	"	" "
P. Jones	"	" "
T. Reid	"	" "
E. Adams	"	" "
N. Stewart	"	" "



# SULMAC EXPLORATION SERVICES LIMITED

ASSOCIATED WITH VELOCITY SURVEYS LIMITED

80 Richmond Street West, Toronto  
Telephone EM. 4-1401

1323 - 48th Ave. North East, Calgary  
Telephone 277-8556

May 25, 1965

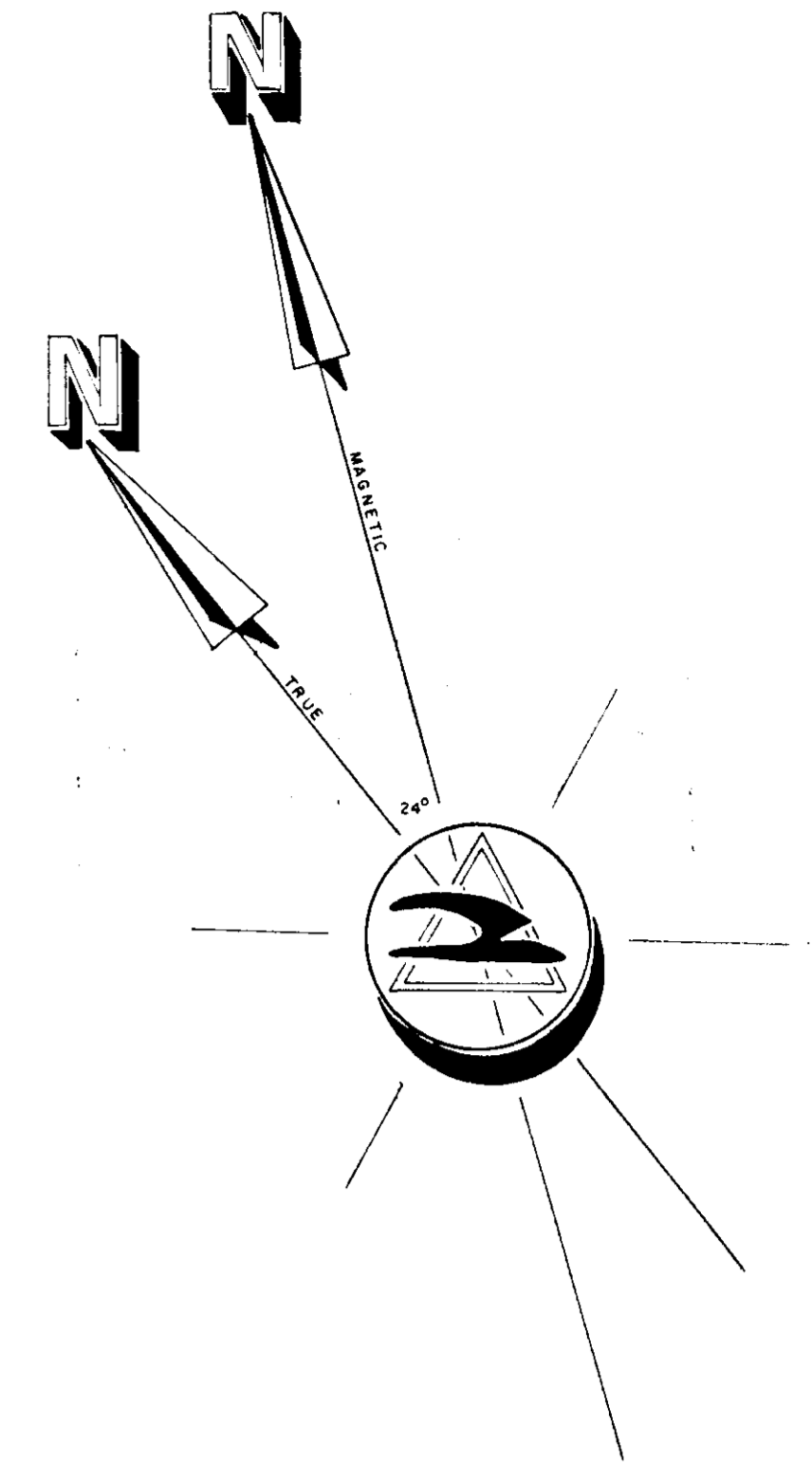
## KAMLOOPS COPPER CONSOLIDATED LIMITED

Line cut and chained - 5.5 miles @ \$75.00	\$ 412.50
Chained only - 33.6 miles @ \$45.00	1,512.00
Magnetometer survey - 33.1 miles @ \$45.00	1,489.50
Report writing	300.00
Visits to property, E. B. Nicholls	200.00
Drafting, 50 hours @ \$5.00	<u>250.00</u>
	<u>\$ 4,164.00</u>

Certified extract of charges billed to and paid by Kamloops  
Copper Consolidated Limited relative to geophysical survey  
carried out on claim group.

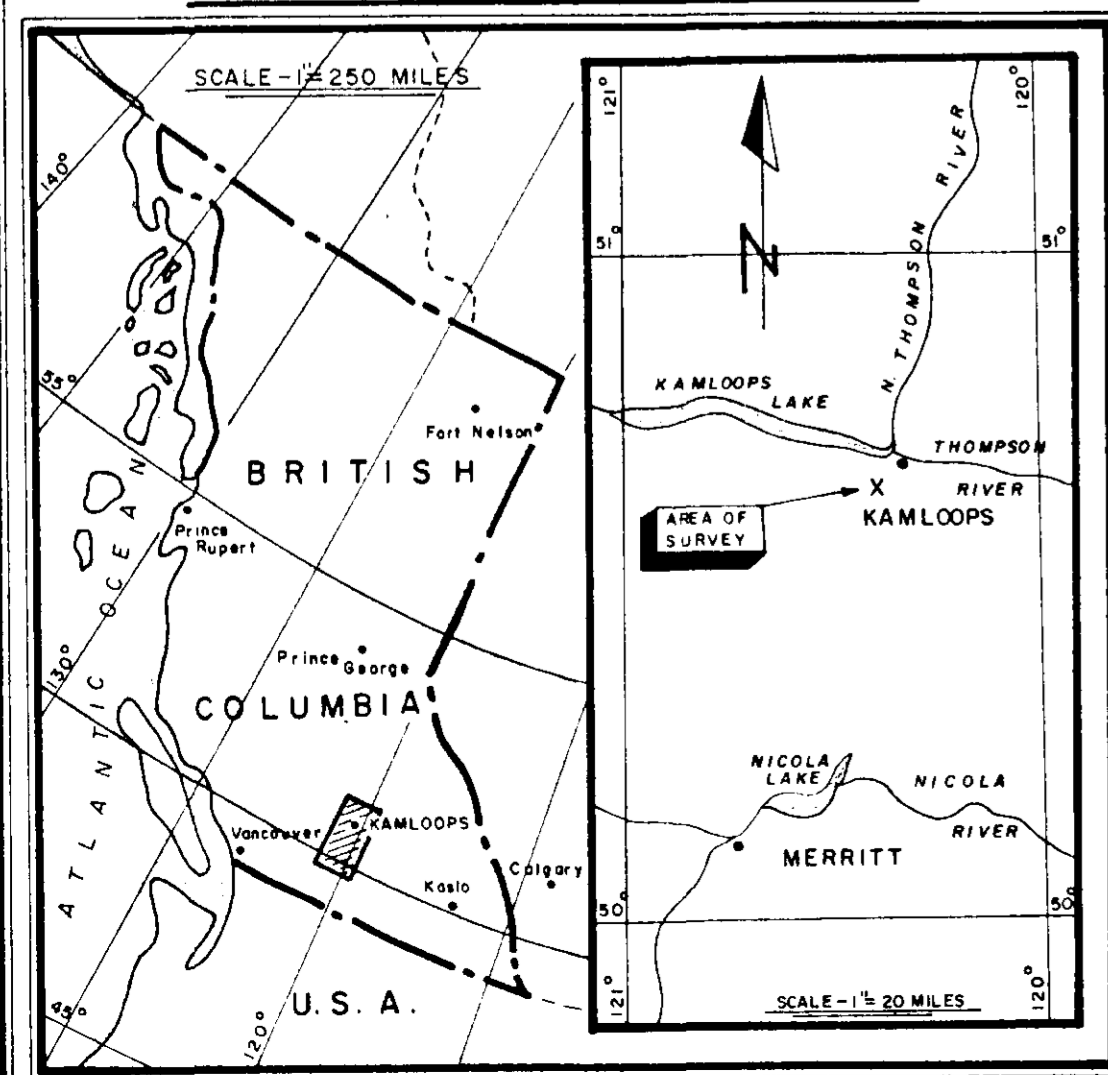
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Secretary-Treasurer



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 655 MAP 1

LOCATION MAP



L E G E N D

- Claim Boundary Outline ————
- Claim Outline ————
- Road or Highway ————
- Lake Outline ————
- Claim Number — L-878-CG (Crown Grant)
- Shaft ■

**KAMLOOPS COPPER  
CONSOLIDATED LIMITED (NPL)**

KAMLOOPS MINING DIVISION  
KAMLOOPS-BRITISH COLUMBIA

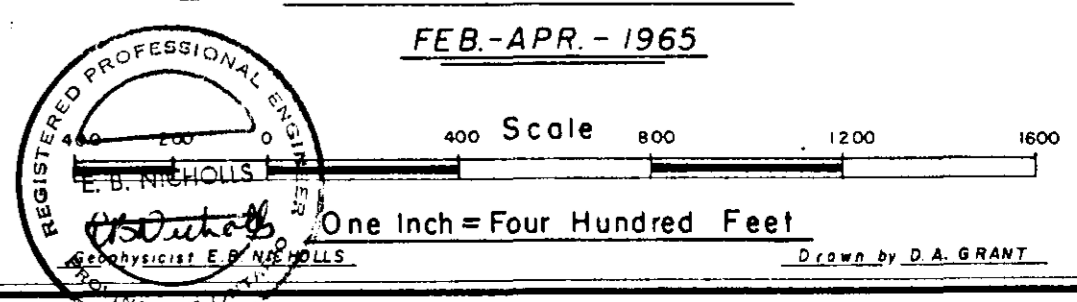
CLAIM MAP

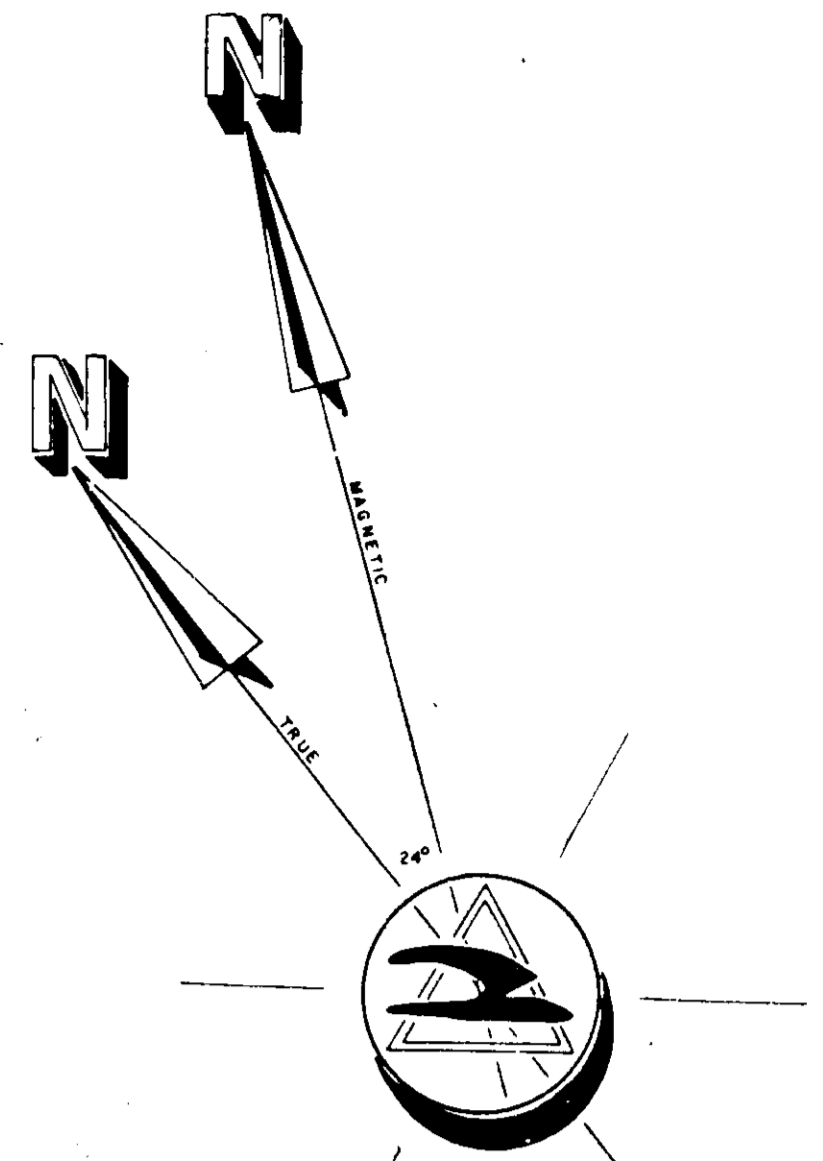
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TO ACCOMPANY REPORT BY E. B. NICHOLLS, DATED MAY 25, 1965.

SULMAC EXPLORATION SERVICES LIMITED

FEB-APR-1965

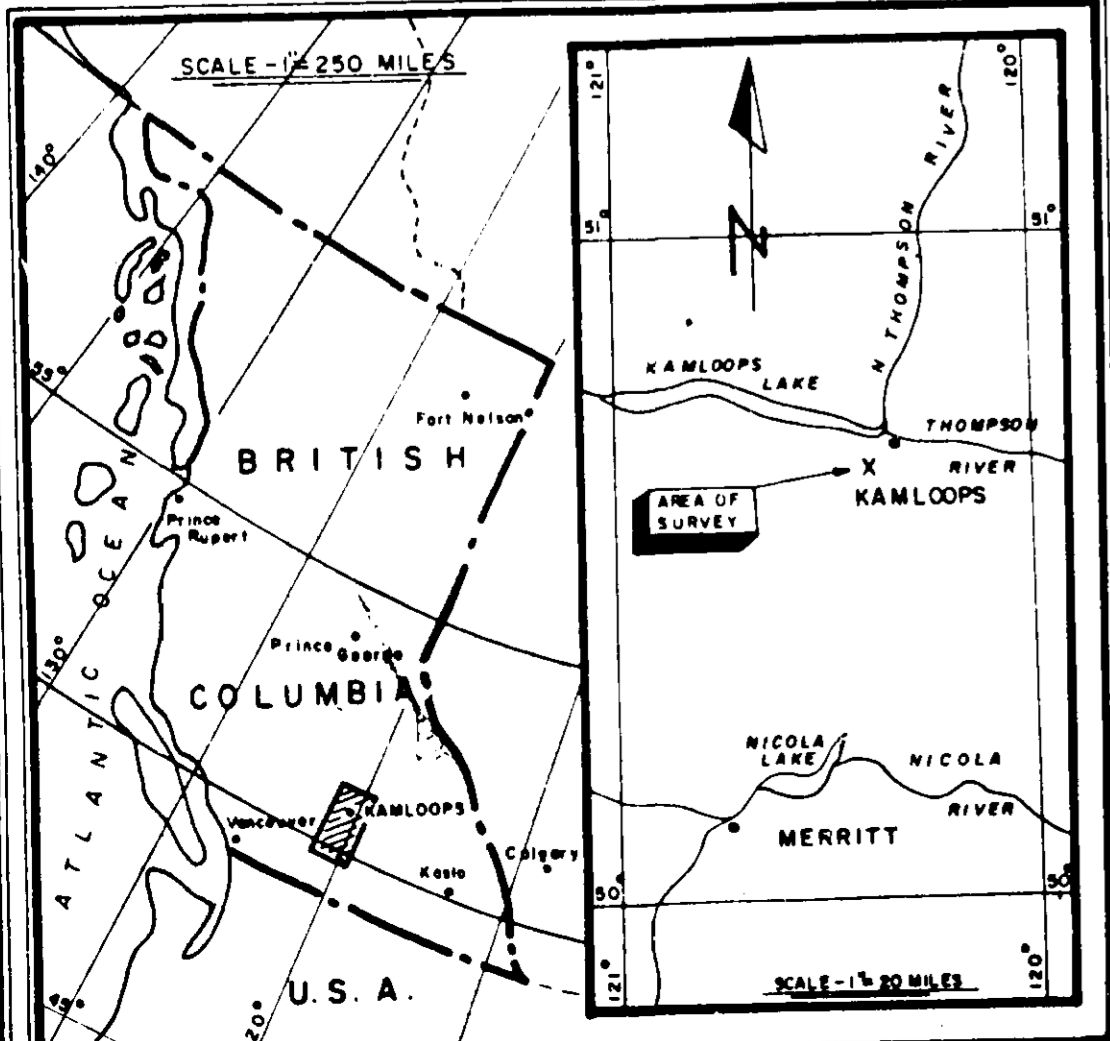




Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 655 MAP 2



**LOCATION MAP**



**LEGEND**

- MAGNETOMETER SURVEY**
- Contour Interval 250 Gammas
  - 1000 Gamma Contour
  - 250 Gamma Contour
  - Magnetic Depression

**MAP SYMBOLS**

- Claim Boundary (approx) - - - - -
- Lake Boundary (approx) ————
- Shaft □
- Contact Inferred from Magnetics —M—

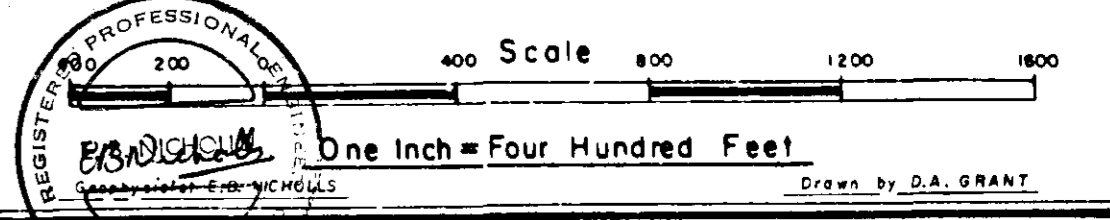
**KAMLOOPS COPPER CONSOLIDATED LIMITED (NPL)**

KAMLOOPS MINING DIVISION  
KAMLOOPS-BRITISH COLUMBIA

**MAGNETOMETER SURVEY**

#655

SULMAC EXPLORATION SERVICES LIMITED  
FEB-APR-1965



TO ACCOMPANY REPORT BY E.B. NICHOLLS, DATED MAY 25, 1965.

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