634

#### GEOPHYSICAL REPORT ON

#### RAINBOW GROUP OF CLAIMS

FOR

#### WESTERN BEAVER LODGE MINES LIMITED

Claims Surveyed:

Rainbow 1 to 20 inclusive

Rainbow 22 and 23

Lone Tree Grant Lot 883

D. Praction

A. Fraction

Rob 3

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

The survey was conducted during the period February 22 to

March 11, 1965.

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

SULMAC EXPLORATION SERVICES LIMITED

MARCH 29, 1965

# INDEX

|                               | Page |
|-------------------------------|------|
| Introduction                  | 1    |
| Summary & Recommendations     | 1    |
| Property, Location and Access | 2    |
| General Geology               | 3    |
| Method of Survey              | 4    |
| Discussion of Results         | 5    |

Appendix: List of Personnel Employed on Geophysical Survey

Maps 1 In Pocket: Claim Map at scale 1" = 400'

Map of Magnetometer Survey at scale 1" = 400' 2

Department of Mines and Petroleum Resources ASSESSMENT REPORT

NO. 634 MAP

#### GEOPHYSICAL REPORT

#### ON RAINBOW CLAIMS

POR

#### WESTERN BEAVER LODGE MINES LIMITED

# KAMLOOPS MINING DISTRICT KAMLOOPS BRITISH COLUMBIA

## Introduction

A ground magnetometer survey was carried out over the Rainbow group of claims for Western Beaver Lodge Mines Limited, located in the Mamloops area of British Columbia.

The survey was conducted by Sulmac Exploration Services Limited during the period February 22 to March 11, 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 the Rainbow group of claims for Western Beaver Lodge Mines Limited. The survey did not indicate any major anomalous zone. However,

on interpretation of the data obtained it is possible to indicate the contacts between the various rock types and two possible north-south faults.

The magnetics infer that the central portion of the claim group is underlain by the Iron Mask Batholith and that rocks of the Kamloops and Nicola Groups lie to the west and east respectively of this central band. These formations are known to be the host rocks for ore occurrences in the immediate area. All places in the intrusive are favourable, as are shears in the volcanics near the contact with the intrusive.

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

#### Property, Location and Access

The property of Western Beaver Lodge Mines

Limited consists of a group of some 55 claims, however only

one portion of these claims were covered by the present survey.

These are shown on the accompanying map and are listed as

follows:

Rainbow 1 to 20 Mineral Claims
Rainbow 22 and 23 Mineral Claims
Various Fractions D. Fraction

A. Fraction

Lone Tree Crown Grant Lot 883 and Rob 3

The property is located 10 miles by road south-west of Kamloops. Access to the claims is good, being by the main Trans-Canada Highway west from Kamloops for about 7 miles to the junction of the Lac Le Jeune road, and thence south for approximately 3 miles.

## General Geology

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 symmite 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 Rainbow 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 north-south direction and the traverse lines were turned off at right angles to this line. A total of 47 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 47 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

magnetic relief throughout the property, however no major anomalous zone was found. The central portion of the area surveyed showed numerous one and two reading magnetic 'highs', indicating that the magnetite concentration within the band is very erratic. Contacts between the various rock types have been inferred from the magnetics and are shown on the accompanying map. Two probable main faults are also shown on the map, however a number of minor faults indicated by the magnetics are not shown.

The central band of high magnetics probably indicates the presence of the Iron Mask Intrusive. To the west of this zone lies a zone of medium intensity magnetics, which is probably due to rocks of the Kamloops Group. The low magnetics on the eastern portion of the property is due to rocks of the Nicola Group.

the claim group is located in a favourable geological environment, as the rocks underlying the property are known to be the host for ore occurrence in the immediate vicinity. Purther exploration work in the form of an I.P. survey, followed by diamond drilling, should be undertaken.

Respectfully submitted,
SULMAC EXPLORATION SERVICES LIMITED

E. 尊. Nicho<del>lls</del>, ā.Sc., P.Eng., Geophysicist / 8

NCE OF

March 29, 1965

# APPENDIX

# List of Personnel Employed on Geophysical Survey:

E. B. Nicholls Senior Geophysicist

R. Pild Field Geophysicist

R. McLeod Geophysical Operator

K. Schulte Linecutter

G. Espaniel

R. Espaniel "

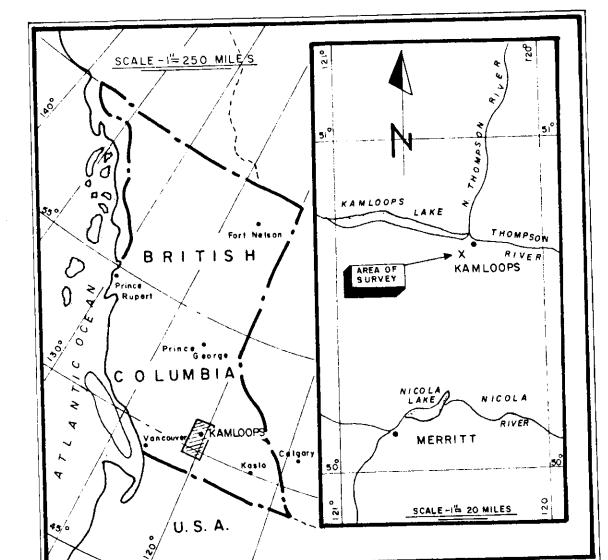
P. Jones

T. Reid "

B. Adams

N. Stewart

RAINBOW" 16 RAINBOW 18 RAINBOW 15 RAINBOW 3 LOT 883 RAINBOW 6 LONE TREE RAINBOW RAIN BOW 5 RAINBOV RAINBOW RAINBOW RAINBOW\_ 8 RAINBOW 7 RAINBOW 4 RAINBOW RAINBOW 90 W MAP LOCATION CLAIM BOUNDARY OUTLINE SCALE - 1 = 250 MILE'S

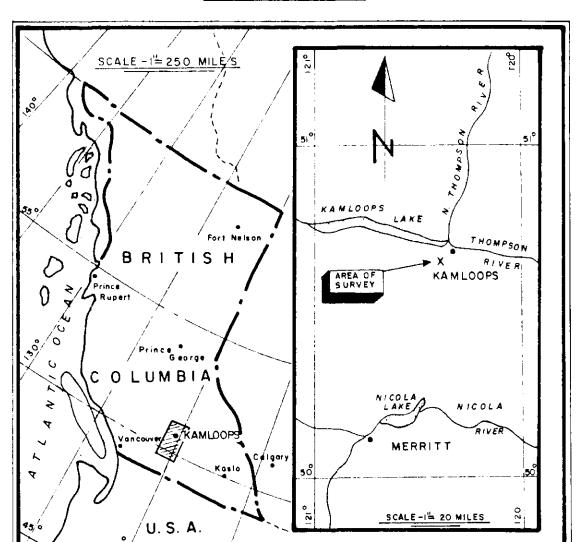


CLAIM OUTLINE -

TO ACCOMPANY REPORT BY E.B. NICHOLLS,

DATED MAR. 29,1965.





CLAIM BOUNDARY OUTLINE -CLAIM OUTLINE -

KAMLOOPS MINING DIVISION

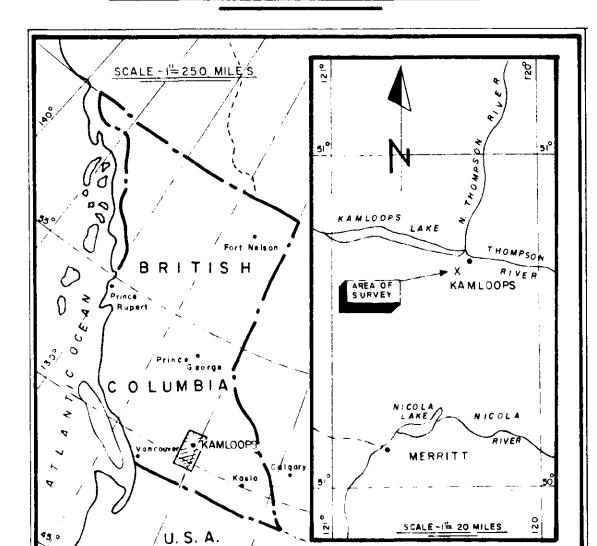
(RAINBOW CLAIM GROUP ONLY)

CLAIM MAP Department of

Mines and Petroleum Resources ASSESSMENT REPORT NO. 634 MAP /

SULMAC EXPLORATION SERVICES LIMITED





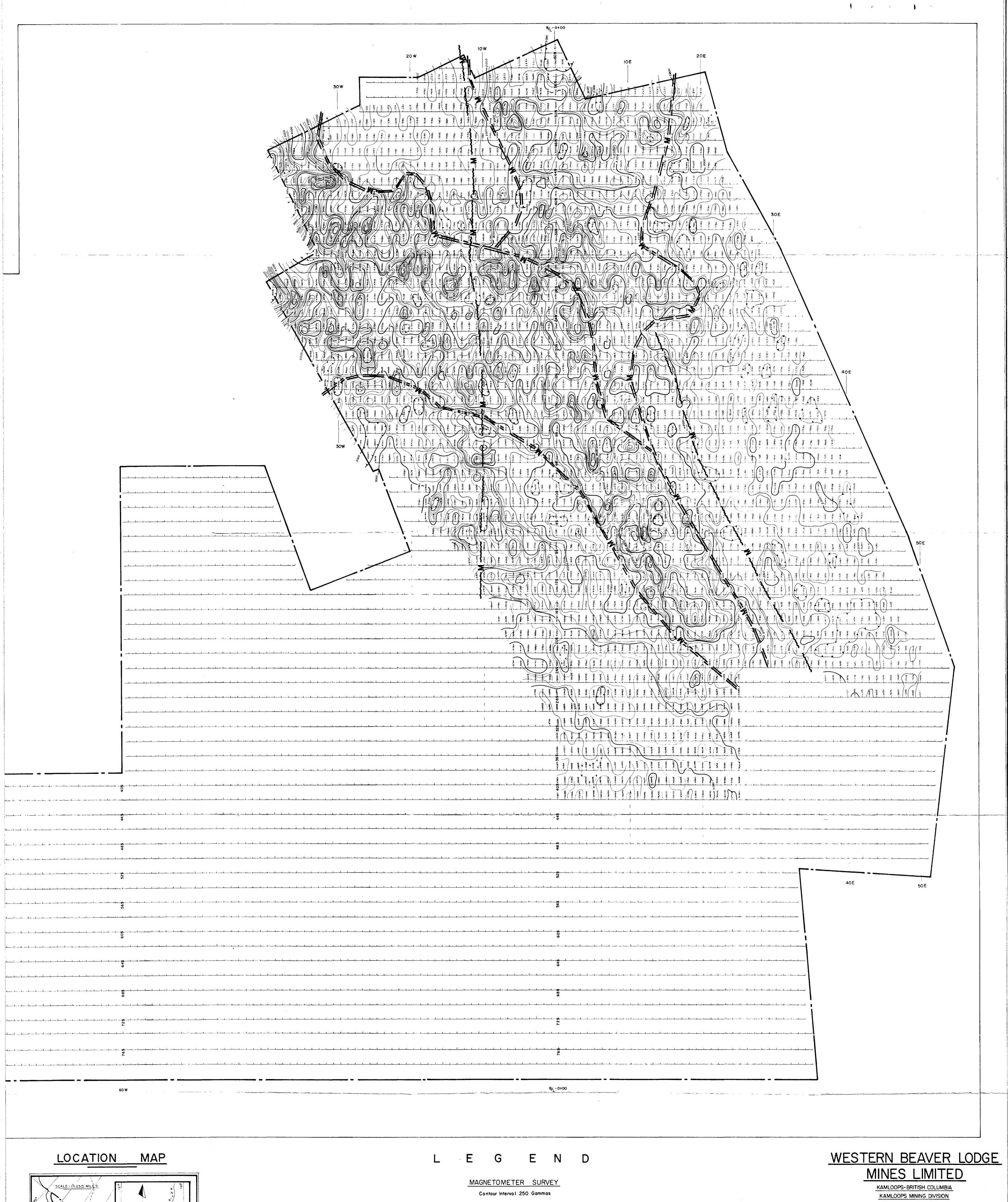
MAGNETOMETER SURVEY

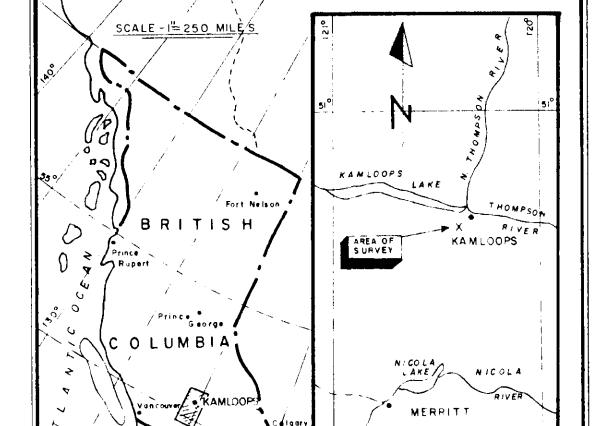
Contour Interval 250 Gammas

1000 Gamma Contour

250 Gamma Contour

Magnetic Depression





-1000 Gamma Contour - 250 Gamma Contour

MAP SYMBOLS Contact Inferred from Magnetics 

TO ACCOMPANY REPORT BY E.B. NICHOLLS,

DATED MAR. 29,1965.

(RAINBOW CLAIM GROUP ONLY)

MAGNETOMETER

