

ELC GEOPHYSICAL REPORT
NO. 71 - 118
MLM CLAIMS GROUP
50° N - 120° W
HIGHLAND VALLEY AREA
NORTH OF MERRITT, B.C.
FOR MAMIT LAKE MINES LTD.
FEBRUARY 15, 1971 to APRIL 23, 1971

by D.L. Hings, P.Eng.

9/22/71

2983

This is Geophysical Report No. 71-118-
for Mamit Lake Mines Ltd.
MLM Claims Group
In The Highland Valley Area, North of Merritt, B.C.
50°N - 120° W 92 I / 7W
Feburary 15, 1971 to April 23, 1971

TABLE OF CONTENTS.

| | <u>PAGE</u> |
|--------------------------|-------------|
| Purpose | 1 |
| Location | 1 |
| Instrumentation | 1 |
| Geological Reference | 2 |
| Presentation | 2 |
| Results; Magnetic Survey | 3 |
| Summary (M. Survey) | 4 |
| Results; REM Survey | 4 |
| Summary (REM Survey) | 5 |
| Conclusions | 5 |
| Recommendations | 6 |
| Statement of costs | 7 |

2983

PLANS

| | | |
|----|---------------|------------|
| #2 | REM PLAN | 71-118-REM |
| #1 | Magnetic Plan | 71-118=M |
| #3 | Location Plan | 71-118-L |

ELC GEOPHYSICS LTD.
250 North Grosvenor Ave
Burnaby 2, B.C.
Telephone 298-9619

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2983 MAP

elc geophysics ltd.

250 NORTH GROSVENOR, VANCOUVER, CANADA TELEPHONE: (604) 298-9619

THIS IS GEOPHYSICAL REPORT NO. 71-118-M-REM FOR MAMIT
LAKE MINES LTD., COVERING THE MLM CLAIMS GROUP IN THE
HIGHLAND VALLEY AREA NORTH OF MERRITT, B.C. 50° N -
120° W. FEBRUARY 15, 1971 to APRIL 23, 1971.

Purpose:

The purpose of this ground geophysical survey is a continuation and extension by radiated electromagnetic and magnetic instrumentation of previous geophysical surveys in this area.

Location:

The MLM claims group are located approximately 4 miles north of Mamit Lake, north of Merritt, B.C. 50° N - 120° W. The location is referred to on the drawing plan No. 71-118-L.

Instrumentation:

The geophysical instruments comprised of a Ronka EM16 manufactured by Geonex Ltd., and a vertical field Fluxgate Magnetometer manufactured by

... con't ...

SABRE Electronics, Vancouver, B.C. The REM survey was conducted on a frequency of 18.6 KHZ signals radiated from NPG in Arlington, Washington, USA.

Geological Reference:

The British Columbia Department of Mines and Petroleum Resources bulletin No. 56 of the Guichon Creek Batholith by K.E. Northcoat, 1969.

Presentation:

The surveys with the two instruments are shown on separate grid plans, 71-118-M for the magnetic survey and 71-118-REM for the radiation Electromagnetic survey. The grid lines are east and west at approximately two hundred foot north south intervals. The base control line extends along the east edge of the property with the western control line as indicated on the plan. Station spacing is varied between 50 and 100 feet in accordance with the reading variable requirements.

The instrument values are shown in profile form wherein the magnetic vertical field of 55,000 gammas is indicated by the gridline with variations +

... con't ...

and - on the scale of one inch to 500 gammas.

The vertical and horizontal components of the REM survey are also shown in profile form along the grid lines. The vertical and horizontal components are shown in percentage of change, as indicated on the plan, with the dashed lines being horizontal component, and the solid lines being the vertical component. A total of 8 miles was traversed for each survey.

Results, Magnetometer Survey:

Referring to drawing No. 71-118-M.
The eastern edge of a north south trend is indicated by the C1A line. The principal anomalous feature extends between L1A and L3A wherein the stronger portion of the anomaly extends between L1A and L2A and is indicated by the zone Z1A. A weaker linear anomalous feature L4A having the same general strike pattern as C1A exists in the northern portion of the survey, west of C1A.

... con't ...

C2A following a north west strike similar to L4A and appears to be the eastern edge of a formation change, wherein weak linear anomalies L5A, L6A and L7A terminate.

Summary:

The Z1A zone appears to be valid and closely associated with formation change C1A. The total anomalous width extends from L1A to L3A and from the grid line 4+00 N to the southern grid line 4+00 S. The linear anomalies east of C2A may be partially the result of topography however, some confirmation of L5A and L6A are supported by the REM survey.

Results, REM Survey:

Referring to the drawing 71-118-REM. The linear anomalous feature C1B, L1B is sufficiently closely associated with the linear magnetic anomaly C1A and may be considered originating from the same source of the zone Z1B. The western edge of the anomalous zone is also confirmed by L3B. The northern linear anomaly L4B coincides with the magnetic anomaly L1A and also C1B. The south western linear anomalies C2B and L5B compare with C2A and L5A. The

.. con't ...

north west portion indicates the linear anomalies L6 and L7 do not coincide with the magnetic anomalies L6A and L7A.

Summary:

The anomalous features indicated, that include the letter B, are valid to both surveys, with the maximum anomalous area being within the zone Z1B. The L6 and L7 linear anomalies would appear to be more valid than the magnetic anomalies L6A and L7A in this area of topographical change. The anomalous changes east of C2 B between 20+00 W and 25+00 W are attributed to topographical influences in this REM survey.

Conclusions:

The Z1A and Z1B anomalous areas are essentially one and the same. The area of interest extends to L3A, L3B. The apparent contact C1A, C1B may be indication of enhancement of the Z1 zone.

... con't ...

Recommendations:

This Z1 area warrants geological investigation either by geochemical or other suitable surface means.


D.L. Hings, P.Eng.
Geophysicist

A STATEMENT OF COSTS FOR GEOPHYSICAL SURVEY NO. 71-118
COVERING THE MLM CLAIMS NORTH OF MERRITT, B. C. BY
ELC GEOPHYSICS LTD. FEBRUARY 15, 1971 to APRIL 23, 1971.

SURVEY CREW:

| | | | |
|-------------|-----------------|---------------|----------|
| R.L. Reece | 14 days @ 60.00 | 840.00 | |
| W. Mather | 13 days @ 40.00 | 520.00 | |
| G. Olheiser | 13 days @ 40.00 | <u>520.00</u> | |
| | | | 1,880.00 |

Transportation:

| | | | |
|-------------|-----------------|---------------|--------|
| 4 x 4 truck | 13 days @ 12.00 | 156.00 | |
| Mileage | 100 miles @ 10¢ | 10.00 | |
| Snowmobile | 13 days @ 15.00 | <u>195.00</u> | |
| | | | 361.00 |

Living Costs:

| | | | |
|-------|-------------------|---------------|--|
| Motel | 13 days @ 12.00 | 156.00 | |
| Food | 39 mandays @ 6.50 | 253.50 | |
| | | <u>409.50</u> | |

Equipment:

| | | | |
|--------------------|-----------------|--------------|--------|
| Ronka EM16 | 13 days @ 10.00 | 130.00 | |
| Sabre Magnetometer | 13 days @ 10.00 | 130.00 | |
| Misc. | 13 days @ 5.00 | <u>65.00</u> | |
| | | | 325.00 |

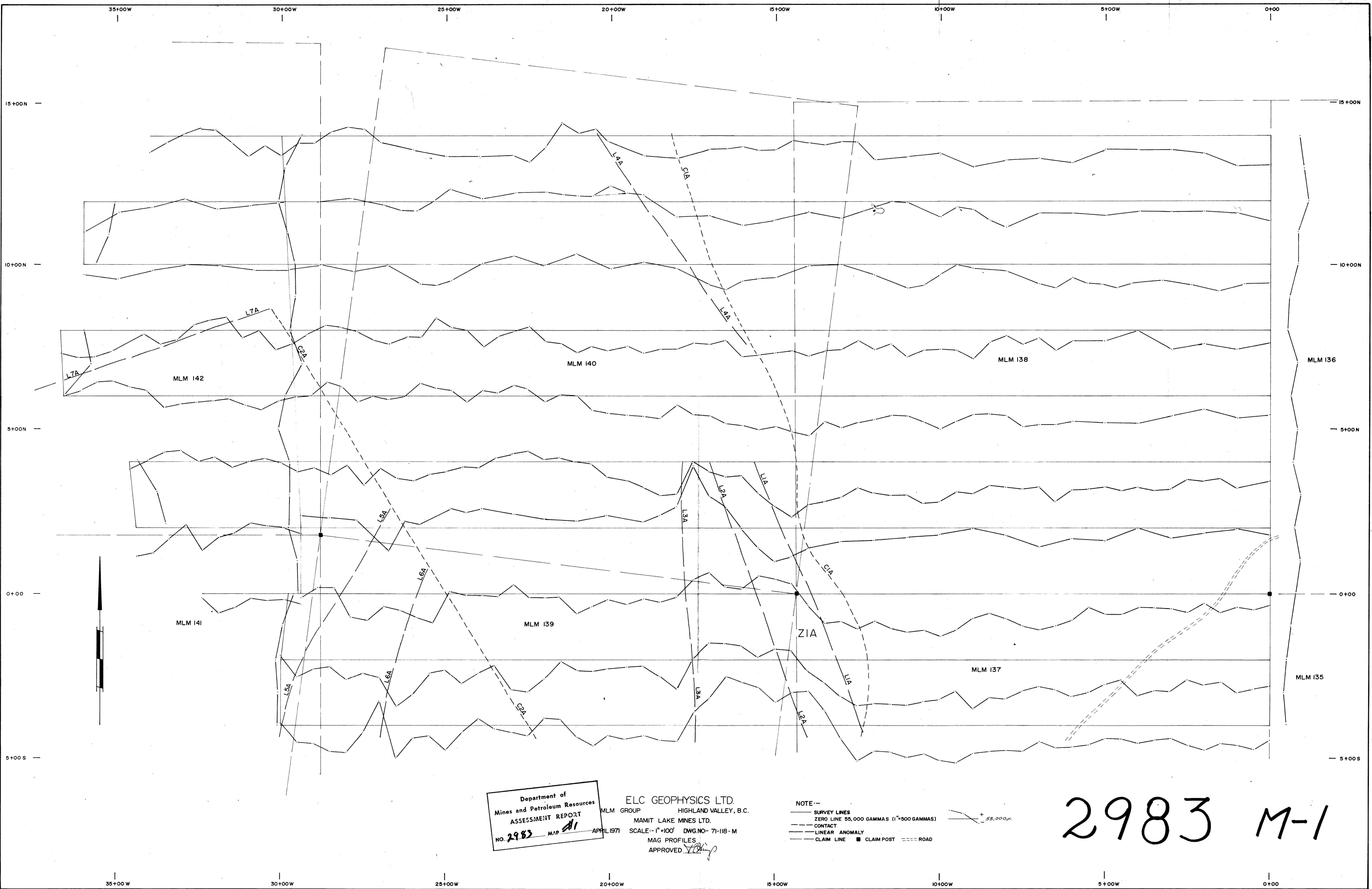
Data Processing & Drafting

| | | | |
|-------------|----------------|--|--------|
| D.A. Cramer | 7 days @ 60.00 | | 420.00 |
|-------------|----------------|--|--------|

Interpretation & Report

| | | | |
|---------------------|--|--|--------|
| D.L. Hings, P. Eng. | | | 350.00 |
|---------------------|--|--|--------|

| | | | |
|-------------|--|--|-----------------|
| Total Costs | | | <u>3,745.50</u> |
|-------------|--|--|-----------------|



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2983 MAP #11

ELC GEOPHYSICS LTD.
MLM GROUP HIGHLAND VALLEY, B.C.
MAMIT LAKE MINES LTD.
APRIL 1971 SCALE: 1"=100' DWG. NO. 71-118-M
MAG PROFILES
APPROVED: [Signature]

NOTE:-
— SURVEY LINES
— ZERO LINE 55,000 GAMMAS (1"=500 GAMMAS)
--- CONTACT
--- LINEAR ANOMALY
--- CLAIM LINE ■ CLAIM POST - - - - ROAD

55,000

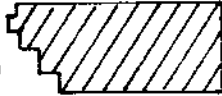
2983 M-1

LOCATION MAP
SCALE :- 1:50,000
DWG.NO. :- 71-118-L

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. **2983** MAP **#3**

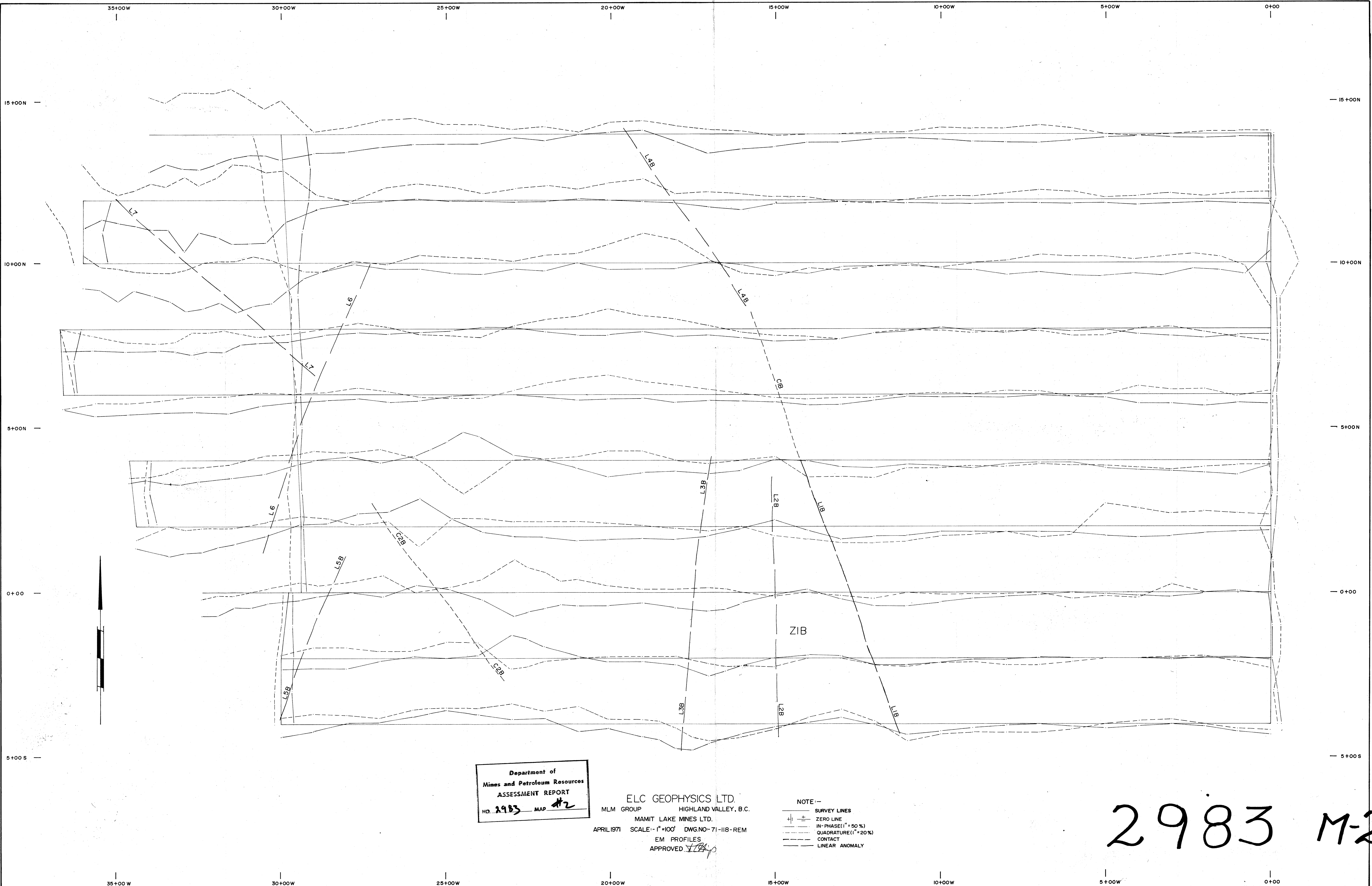
AREA
SURVEYED



2983

M-3

H. Hays



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 2983 MAP #2

ELC GEOPHYSICS LTD.
 MLM GROUP HIGHLAND VALLEY, B.C.
 MAMIT LAKE MINES LTD.
 APRIL 1971 SCALE: 1" = 100' DWG NO-71-118-REM
 EM PROFILES
 APPROVED: *[Signature]*

NOTE:-
 SURVEY LINES
 ZERO LINE
 IN-PHASE (I" = 50%)
 QUADRATURE (I" = 20%)
 CONTACT
 LINEAR ANOMALY

2983 M-2

LOCATION MAP
SCALE :- 1:50,000
DWG.NO. :- 71-118-L

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. **2983** MAP **#3**

AREA
SURVEYED



2983

M-3

J. L. King