

This is ELC GEOPHYSICAL Report No. GC-M-133-71
GCM RIDGE Claims Groups
For Mamit Lake Mines Ltd.
Highland Valley Area, B.C. 50° N - 120° W.
October 16, 1971 to January 31, 1972

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PLANS

1 Magnetometer Profile Plan	M-133-71-P east
2 Magnetometer Profile Plan	M-133-71-P west
3 Geochem plan	GC-133-71-C east
4 Geochem Plan	GC-133-71-C west
5 Location Plan	M- GC-133-71-L

ELC GEOPHYSICS LTD.
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Burnaby 2, B.C.

298-9619

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3588

elc geophysics ltd.

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

ELC GEOPHYSICAL REPORT NO. GC-M-133-71 COVERING THE GCM RIDGE CLAIMS GROUP FOR MAMIT LAKE MINES LTD. ONE MILE NORTH AND EAST OF MAMIT LAKE, IN THE HIGHLAND VALLEY AREA, B. C. 50°N-120°W. OCTOBER 16, 1971 to JANUARY 31, 1972.

Purpose:

The purpose of the survey was to follow up with a ground magnetometer and geochemical geophysical survey over a magnetically anomalous area previously aeromagnetically surveyed in February 1970, and reported in Klyceptor International Geophysical Survey Report No. A-70-100. The area was selected from the airborne survey and a ground survey in part, conducted in February 1970 and reported in Klyceptor International Geophysical Report no. A-70-100-M.

The purpose of this survey was to extend the work in this area to the north, east and west by magnetometer and add a complete geochemical survey.

Presentation:

The magnetometer readings and geochemical determinations, were taken at 100 foot or less intervals

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wherever possible, with an average spacing of 200 feet between grid lines, shown on the plans M-133-71-P east and M-133-71-P west for magnetic profiles and GC-133-71-C east and GC-133-71-C west for geochemical contours. The north-south and east-west coordinates and baselines are common to the earlier surveys as indicated, and to the extensions. This area is directly north of the power lines and west of the Guichon Creek, on the Merritt-Kamloops road.

The magnetic profiles are shown with a value of 500 gammas per inch. The geochemical determinations are contoured at 50 ppm and 100+ ppm against a background average of less than 20 ppm. A total of 50,500 feet of line was covered with a total of 1158 geochem determinations.

Instrumentation:

The magnetometer survey was conducted with a model M100 vertical field fluxgate self levelling direct reading magnetometer made by Sabre Electronics Ltd. of Vancouver B.C. The baseline value represents a vertical field of 55,000 gammas.

Sampling Method:

The geochemical sampling was taken from the "B" horizon, first by removal of any overlying debris, then by digging a hole, using a round mouthed spade, approximately 15 inches below the surface. A sample from the hole was packaged using a standard kraft soil bag obtained from Acme Analytical Laboratories Ltd. The sample determinations were made by Acme Analytical Laboratories Ltd. 6455 Laurel Ave., Burnaby, B.C.

Location:

The area surveyed lies approximately 1 1/2 miles north of Mamit Lake, adjoining Guichon Creek to the west, on the Kamloops-Merritt road. See location plan drawing No. M-GC-133-71-L. Coordinates 50° N - 120° W.

Geological Reference:

B.C. Department of Mines and Petroleum Resources, Bulletin No. 56, Geology of the Guichon Creek Batholith, by K.E. Northcote.

Personnel:

The surveys were conducted under the super-

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vision of W. Mather, assisted by G. Wells, E. Pettersen, P. Savage and E. Wiggins. October 16, 1971 to November 21, 1971.

Magnetometer Survey Results:

Referring to the ELC plans No, M-133-71-P east and M-133-71-P west, it will be noted that the southern portion of the survey from coordinate 20+00 S to 48+00 S is the revised and expanded section of the magnetometer survey, No. A-70-100-M of Feb. 1970. The linear anomalies signified by the letter L and P are from the previous survey. The linear anomalies beginning with M and R represent the more recent magnetometer survey extensions.

A prominent topographical feature between 20+00 W and 30+00 W and 10+00 N and 10+00 S is a ravine, bracketed by the line R1 and R2 with the magnetic low M13 extending down the centre. The north-south linear lines R1, R2, R3 and R4 are all ridges having a general north south strike and increasing in elevation to the west.

The north south 00 baseline follows closely to a road and small valley extending along a bench between the Guishon Valley and the 00W ridge, R1.

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The F3 linear anomaly extends across the property and appears to form the northern limit of the east-west linear strikes. North of F3 the linears are predominantly north and south. The outcropping, west of the ridge N1 provides the predominant magnetic anomalous features.

Geochemical Results:

Referring to the plans GC-113-71-C east and GC-113-71-C west, the nine geochemical anomalies (GC1-GC9), indicated on the plan, show some correlation with both magnetometer anomalies and surface drainage features. For example, the GC4 anomaly exists within the ravine bounded by the N1, N2 magnetometer anomalies, and GC4 coincides with the magnetometer N13 magnetic low in the ravine. It should be noted that within this ravine a number of stations show no sample taken due to talus fill. The two samples of higher enrichment in GC4 and the small GC8 anomaly to the northeast, align with the magnetometer linear anomaly N14 to the southwest, and there may be some correlation along this strike.

The long linear GC3 northwest, southeast anomaly follows closely to the drainage pattern between

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the ravine and the Guichon Valley,. It is interesting to note enrichment increases south of the magnetic anomaly F3.

The larger anomalous areas GC1, GC3, GC5 are along the shoulder of the bench and also follow the drainage pattern from the bench to the Guichon Valley.

Some correlation may be seen along the strike of F3 and L4 by the slight dislocation of the GC3 geochem anomaly. The pattern of the GC3 anomaly follows closely to the topographical features of the bench suggesting drainage concentrations.

The GC1 enrichment coincides closely with the M1, M3 magnetic linear anomalies in the southern portion of the survey. The high enrichment of the line 40+00 S is in a swamp area.

In the northwest the GC7 enrichment although small shows an alignment with the M16 linear anomaly. There appears to be some correlation of the western portion of the GC5 enrichment with the M9 linear anomaly. The GC6 enrichment correlates closely with the F3 anomaly.

Conclusions:

Generally speaking the best correlation be-

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tween the geochem anomalous features and the magnetic linear anomalies appears to be with the magnetometer linear anomalies having a northeast-southwest trend. Whereas geochem anomalies having a southeast northwest trend appear to be associated with drainage. It should be noted the bedding and surface linear features have a general north south strike.

A summation will be withheld and will be submitted under a separate report including all the Mamit Lake surveys that have been submitted in this series for 1971


D.L. Hings, P. Eng.
Geophysicist

A statement of Costs for ELC Geophysical Survey
 No. GC-M-133-71
 GCM RIDGE Claims Groups
 For Mamait Lake Mines Ltd.
 Highland Valley Area, B.C. 50° N - 120° W.
 October 16, 1971 to January 31, 1972.

Field Crew

W. Mather	16 days @ 45.00	720.00	
K. Pettersen	15 days @ 40.00	600.00	
B. Wiggins	13 days @ 30.00	390.00	
P. Savage	7 days @ 30.00	210.00	
G. Wells	7 days @ 30.00	210.00	
			2130.00

Transportation

4 x 4 Truck	15 days @ 12.00	180.00	
565 miles @ 12¢		67.80	
			247.80

Food & Lodging

57 mandays @ 12.00			684.00
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Instrument & Equipment

1 Magnetometer	15 days @ 10.00	150.00	
Misc. Supplies	15 days @ 5.00	75.00	
			225.00

Data Processing & Drafting

R.L. Reece	6 days @ 60.00	360.00	
D.A. Cramer	5 days @ 60.00	300.00	
			660.00

Interpretation & Report

D.L. Hings, P. Eng.	3 days @ 120.00		360.00
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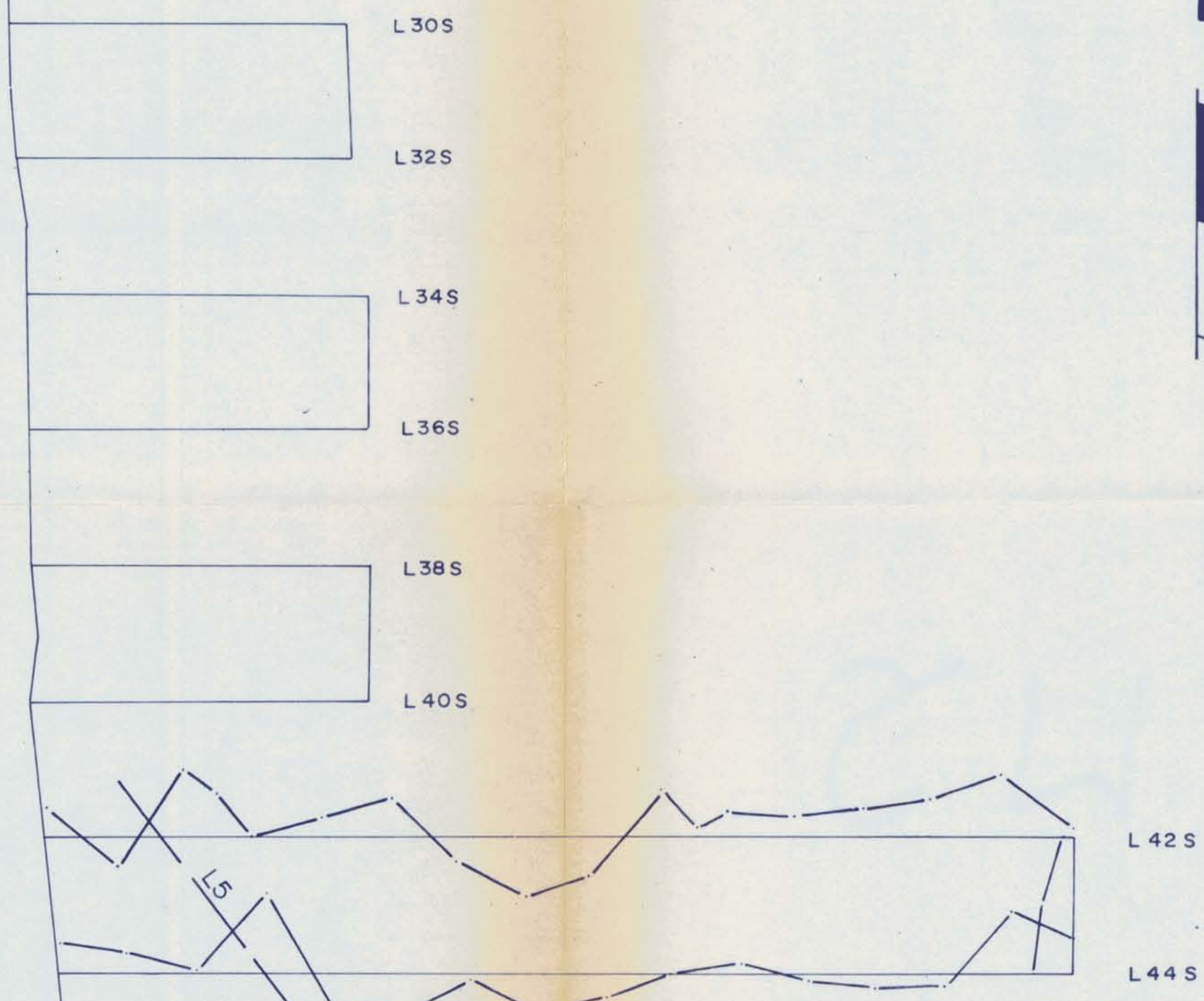
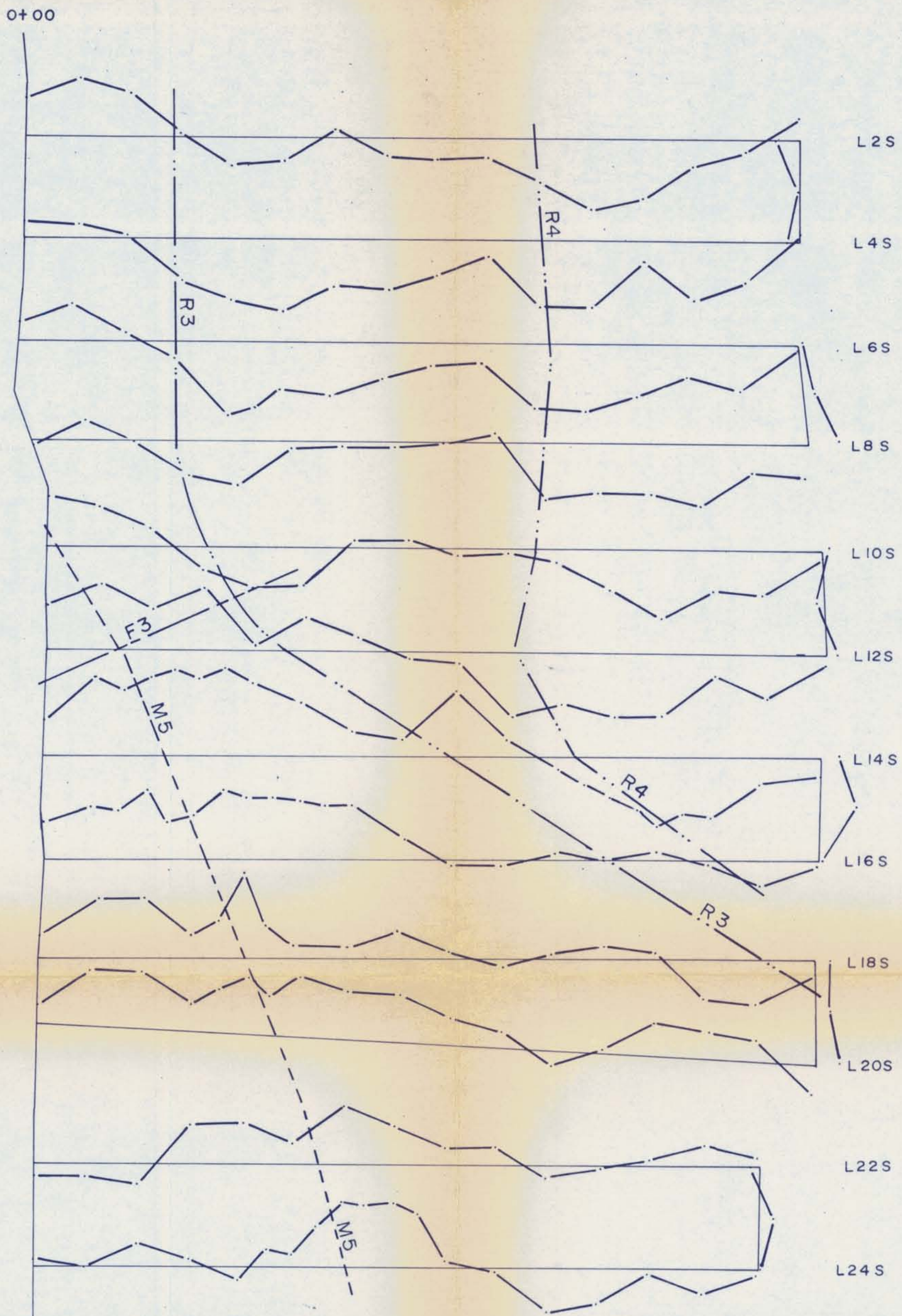
Acme Analytical Labs.			1200.00
1158 Soil determinations			

TOTAL			\$ 5506.80
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Declared before me at the City
of Vancouver, in the
Province of British Columbia, this 24
day of February 1972, A.D.

D.A. Crammer

Joan Turner
A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.
Sub-Mining Recorder.



Department of
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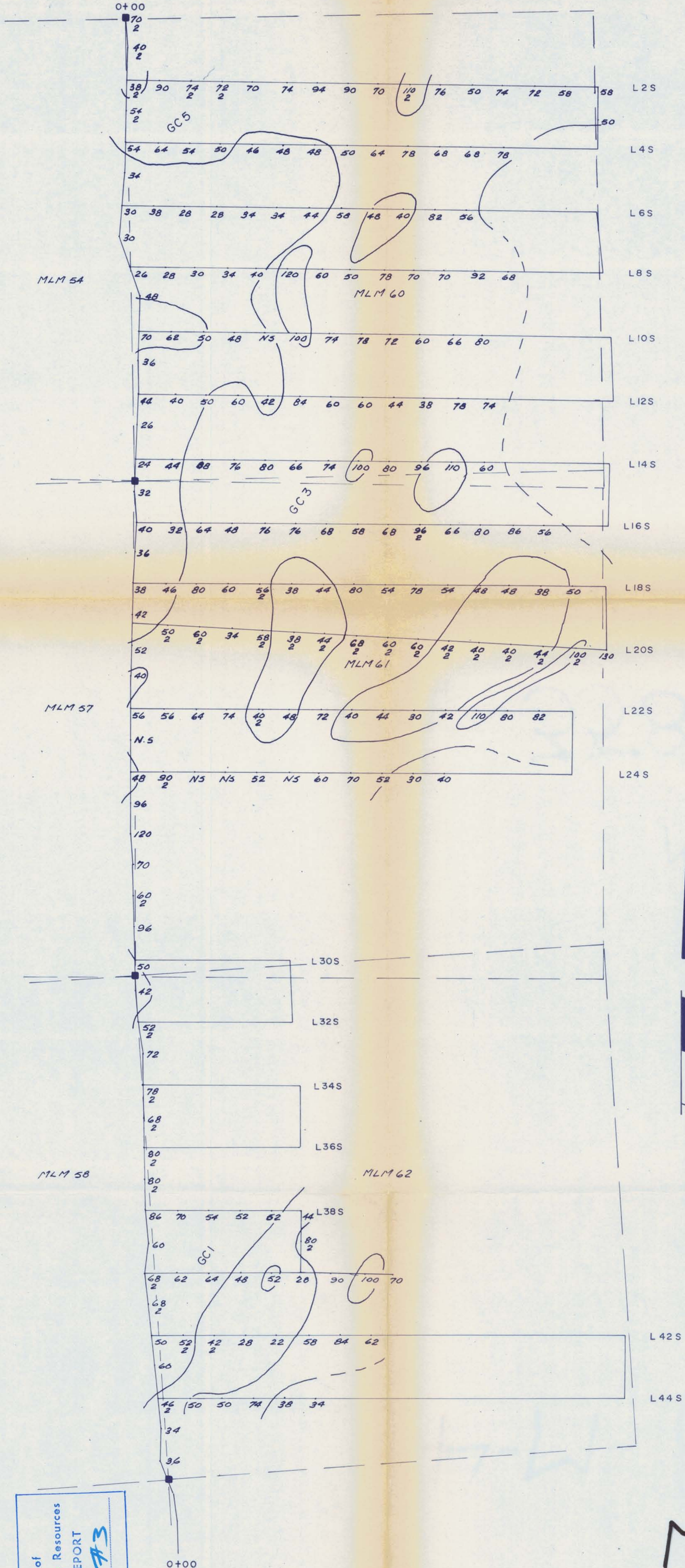
3588 M-1

ELC GEOPHYSICS LTD
MLM & GCM GROUPS MAMIT LAKE AREA, B.C.
MAMIT LAKE MINES LTD.
JAN. 1972 SCALE: 1" = 200' DWG. NO. M-133-71-P-East
MAG. PROFILES
APPROVED: *[Signature]*

NOTE:-
See notes dwg. no. M-133-71-P-West

MLM 53

MLM 59



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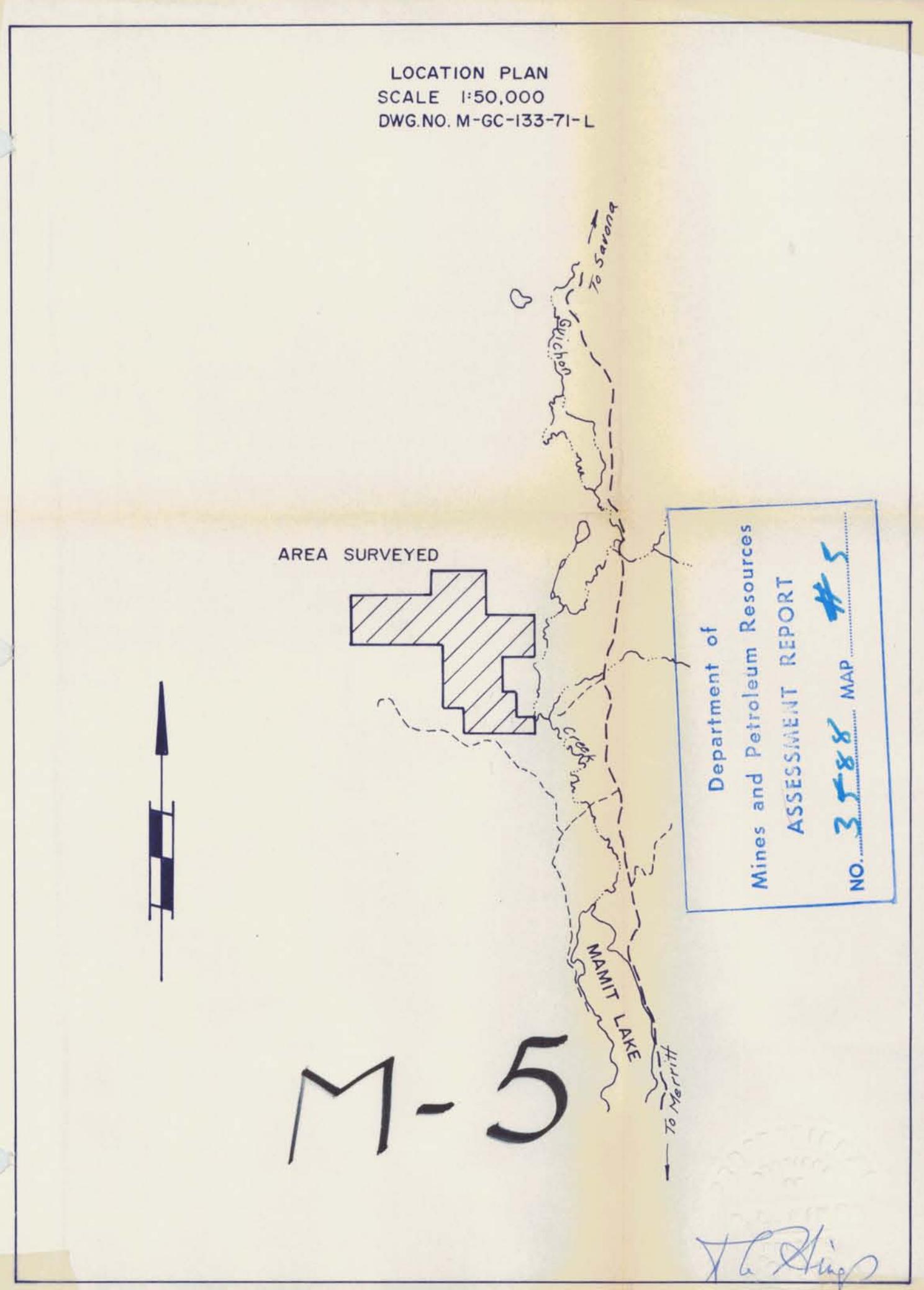
ELC GEOPHYSICS LTD
MLM & GCM GROUPS MAMIT LAKE AREA, B.C.
MAMIT LAKE MINES LTD.
JAN. 1972 SCALE: 1"=200' DWG. NO. GC-133-71-C-East
GEOCHEM PLAN
APPROVED: *[Signature]*

NOTE:-
See notes dwg. no. GC-133-71-C-West
3588

M-3



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ELC GEOPHYSICS LTD.
MLM & GCM GROUPS MAMIT LAKE AREA, B.C.
MAMIT LAKE MINES LTD
JAN 1972 SCALE: 1"=200' DWG. NO.: GC-133-71-C-West
GEOCHEM PLAN
APPROVED *J.C. Ship*

NOTE: -
SURVEY LINES & STATIONS
CLAIM POST --- CLAIM LINE
50 & 100 PPM CU CONTOURS
PPM CU
PPM MO

3588 M-4