



32005SW0123 2.11164 BISLEY

010

REPORT ON VLF-EM SURVEY
B-30 GRID
BISLEY TOWNSHIP
LARDER LAKE MINING DIVISION, ONTARIO
NTS 32DS

Jim Whelan May 1, 1988

RECEIVED
MAY 10 1988
MINING LANDS SECTION



32D05SW0123 2.11164 BISLEY

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Fig. 2	Location Map	1:100,000

ENCLOSURE

Grid B-30 VLF-EM Survey Values and Profile 1:5000

INTRODUCTION

In October of 1987 LAC Minerals Ltd. conducted a VLF-EM Survey on the B-30 property. Line cutting was carried out by Charles Bosum Ltd. in February 1987.

PROPERTY DESCRIPTION

The B-30 property consists of 6 contiguous unpatented claims (L-890930 - 890934 inclusive and L-858271) located in the southeast corner of Bisley Township.

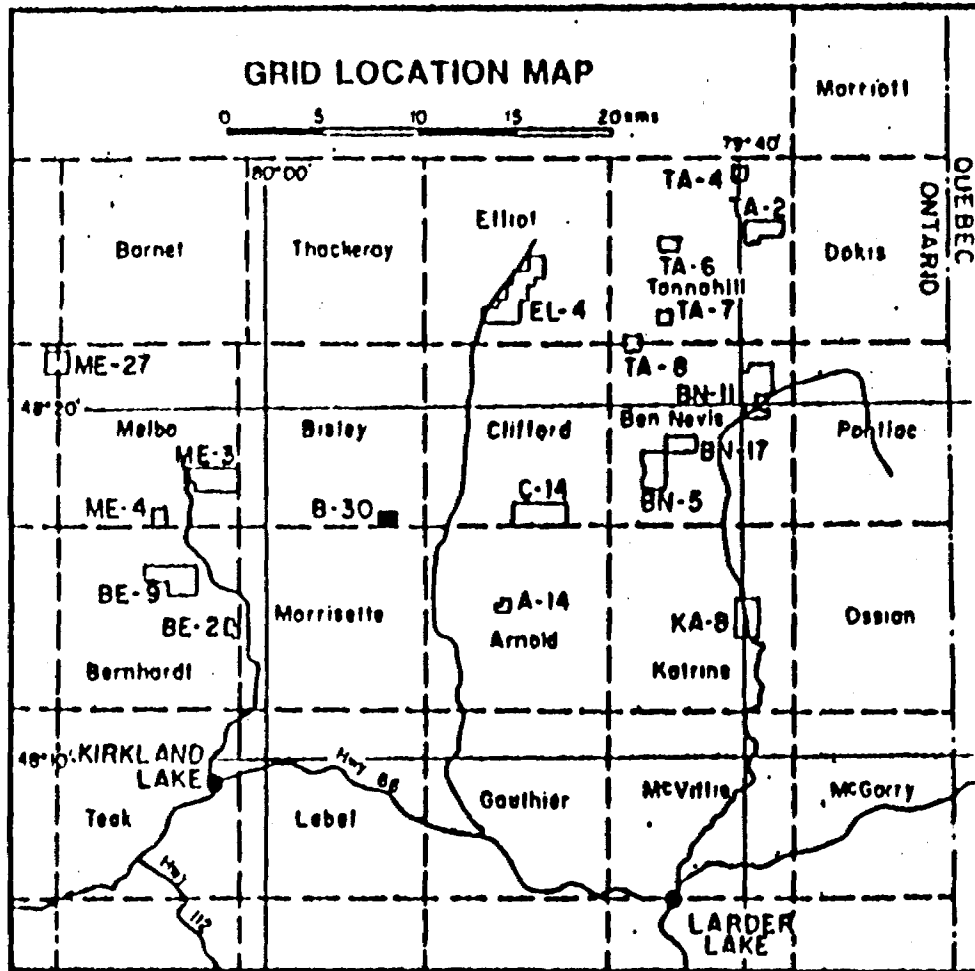
ACCESS

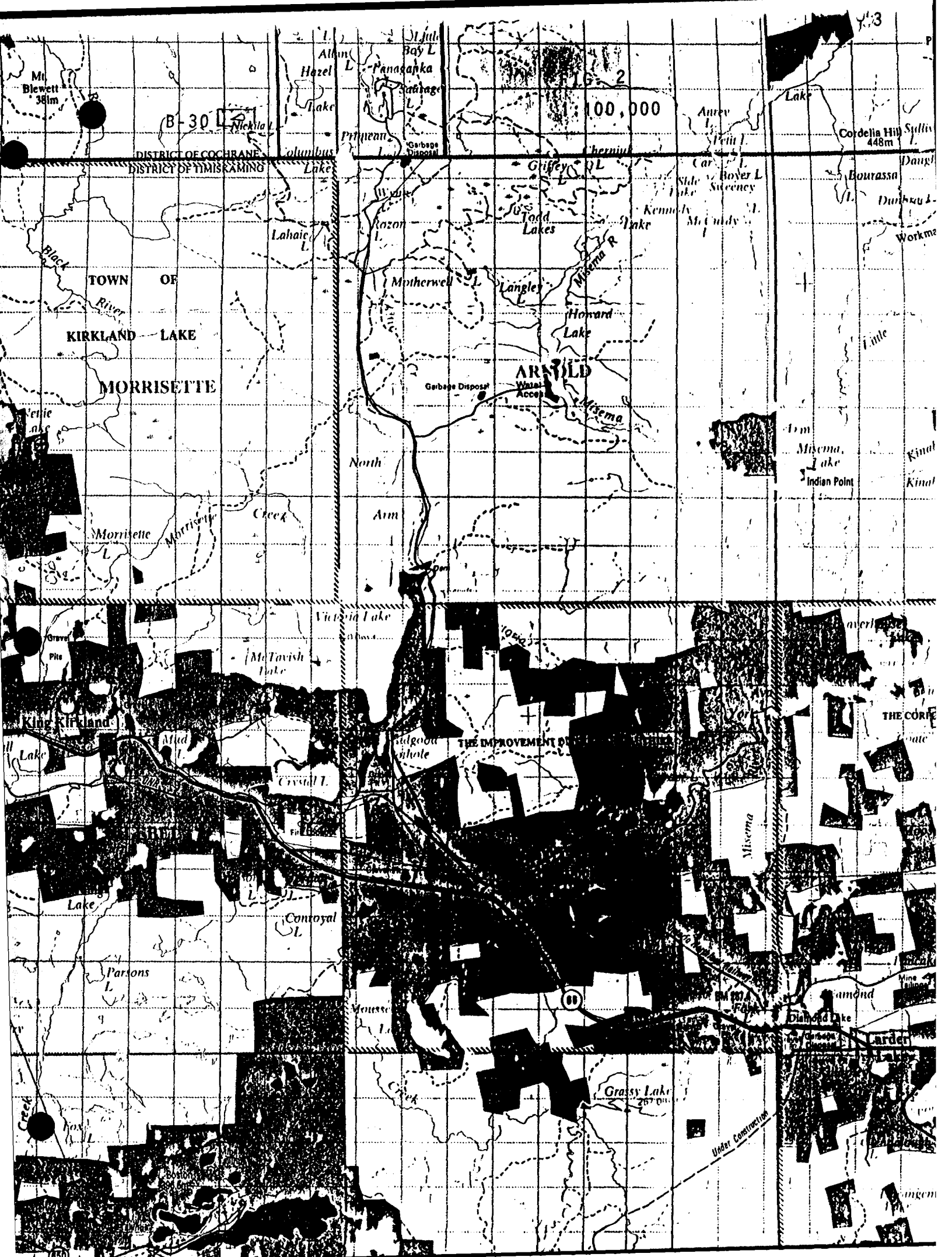
The property is accessible via the Esker Park Road from Hwy 66 and a northwesterly trending bush road approximately 15km north of Hwy 66. (see Fig 1)

VEGETATION AND TOPOGRAPHY

Elevation on the property ranges from 1050 to 1150 feet as indicated on the 1:50,000 Topographic Map 32D/5 "Magusi River". Nickila Lake lies in the approximate centre of the property and is drained by a westerly trending stream. Vegetation consists of a mixture of Pine, Spruce and Poplar. Logging was previously carried out on a large portion of the property leaving few mature trees.

FIG. 1
1cm = 4 km





Mt. Blewett 381m

B-30

100,000

DISTRICT OF COCHRANE
DISTRICT OF TIMISKAMING

TOWN OF

KIRKLAND LAKE

MORRISSETTE

ARNOLD

Cordella Hill 448m

Bourassa

Dunham L.

Workme

Linte

Misema Lake

Indian Point

Kinal

Kinal

Gravel Pit

King Island

Atad L.

Crystal L.

Lake

Contoyal L.

Parsons L.

Grassy Lake 267m

Diamond Lake

Lardes

Under Construction

THE IMPROVEMENT OF

THE CORP

PREVIOUS WORK

Ground Magnetic and VLF-EM Surveys were conducted by Falconbridge Ltd. in 1979 and Monpros in 1984. Monpros also conducted gravity, induced Polarization and a 6 hole overburden drilling program in 1984. In 1982 the Ontario Geological Survey carried out a Reverse Circulation Drilling Program in the area. Visible gold flakes were observed in hole 82-16. In 1986-1987 LAC Minerals conducted Magnetic surveys over the property.

PROPERTY GEOLOGY

The area is mainly underlain with Archean Mafic to Felsic Volcanics with Mafic Intrusives. The property is mapped as mainly drift covered intermediate volcanics with a quartz gabbro located southwest of Nikila Lake. A northwest trending fault cuts through the property west of Nikila Lake. (From OGS Geological Report 103 map 2252)

SURVEY PROCEDURE

The survey was conducted by the Author using a Geonics EM-16 Electromagnetic Receiver and the transmitter at Cutler Maine (24.0 KHz) inphase and quadrature values were recorded at 25 meter intervals with a line spacing of 125 meters. The operator was facing in a northerly direction. The survey results are presented as profiles of inphase and quadrature data.

SURVEY RESULTS

A number of weak crossovers occur on the property, most can probably be attributed to bed rock topography.

RECOMMENDATIONS

An Induced Polarization Survey and mapping of the property would better determine the source of the weak VLF-EM anomalies.

JW/lep

REFERENCES

Boucher D., 1984: Geophysical Report Magnetic and VLF-EM Surveys Kirkland Lake Project Kirkland Lake Assessment Files Report No. 26586.

Jensen L.S. 1972: Geology of Melba and Bisley Townships, District of Timiskaming Ontario, Division of Mines Geological Report 103 accompanied by map 2252 1:31680.

Saukko, R.N. 1981: Report on Geophysical Surveys Bisley Township Property of Fallon Bridge Mines Ltd. Kirkland Lake Assessment File Report No.2.3680.

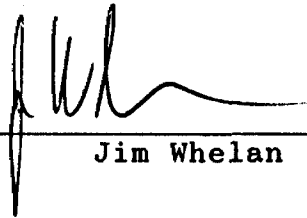
Walker, A.J. 1986: Report on Magnetic Survey Grid B-30 Bisley Township Ontario Larder Lake Mining Division Kirkland Lake Assessment Files.

I Jim Whelan of 6 Baron Avenue Kirkland Lake Ontario Hereby certify:

That I am a Geotechnician employed by LAC Minerals Ltd.

That I have been practicing my profession for 6 years.

That I am qualified to write this report.



Jim Whelan

APPENDIX



File _____

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) VLF-EM
Township or Area Bisley Township
Claim Holder(s) LAC Minerals Ltd.
91 Duncan Ave., Kirkland Lake
Survey Company LAC Minerals Ltd.
Author of Report Jim Whelan
Address of Author 6 Baron Ave., Kirkland Lake, Ont.
Covering Dates of Survey October 6-8, 1987
Total Miles of Line Cut 9.1

MINING CLAIMS TRAVERSED
List numerically
Table with columns for prefix and number, listing claims 858271, 890930, 890931, 890932, 890933, 890934.

SPECIAL PROVISIONS CREDITS REQUESTED
Table with columns for Geophysical, Geological, Geochemical and DAYS per claim. Includes entries for Electromagnetic (20), Magnetometer, Radiometric, and Other.

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: May 1, 1988 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys
Table with columns: File No., Type, Date, Claim Holder

TOTAL CLAIMS 6

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations 312 Number of Readings 312
Station interval 25 meter Line spacing 125 meter
Profile scale 1 cm = 50%
Contour interval

MAGNETIC

Instrument Geonics EM-16
Accuracy - Scale constant
Diurnal correction method
Base Station check-in interval (hours)
Base Station location and value

ELECTROMAGNETIC

Instrument Geonics EM-16
Coil configuration Not applicable
Coil separation Not applicable
Accuracy +/- 1%
Method: [X] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency Cutler Maine 24.0 KH2 (specify V.L.F. station)
Parameters measured Inphase and Quad Phase components of vertical Magnetic Field as a percentage of Horizontal primary field

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____



91 Duncan Ave. South
Kirkland Lake, Ontario
P2N 1Y2
(705) 567-5656

LAC

Lac Minerals Ltd.
Exploration Division

May 5, 1988

RECEIVED

MAY 10 1988

Mining Lands Section,
Mineral Development and Lands **MINING LANDS SECTION**
Branch,
Whitney Block,
Queen's Park,
Toronto, Ontario
M7A 1W3

Dear Sirs:

Please find enclosed two copies of a Report on a VLF-EM Survey conducted on 6 claims (L-890930-890934 and 858271) in Bisley Township Larder Lake Mining Division.

Yours truly

Jim Whelan

Encl.: Two copies of a Report of Work

2. 11164

REFERENCES

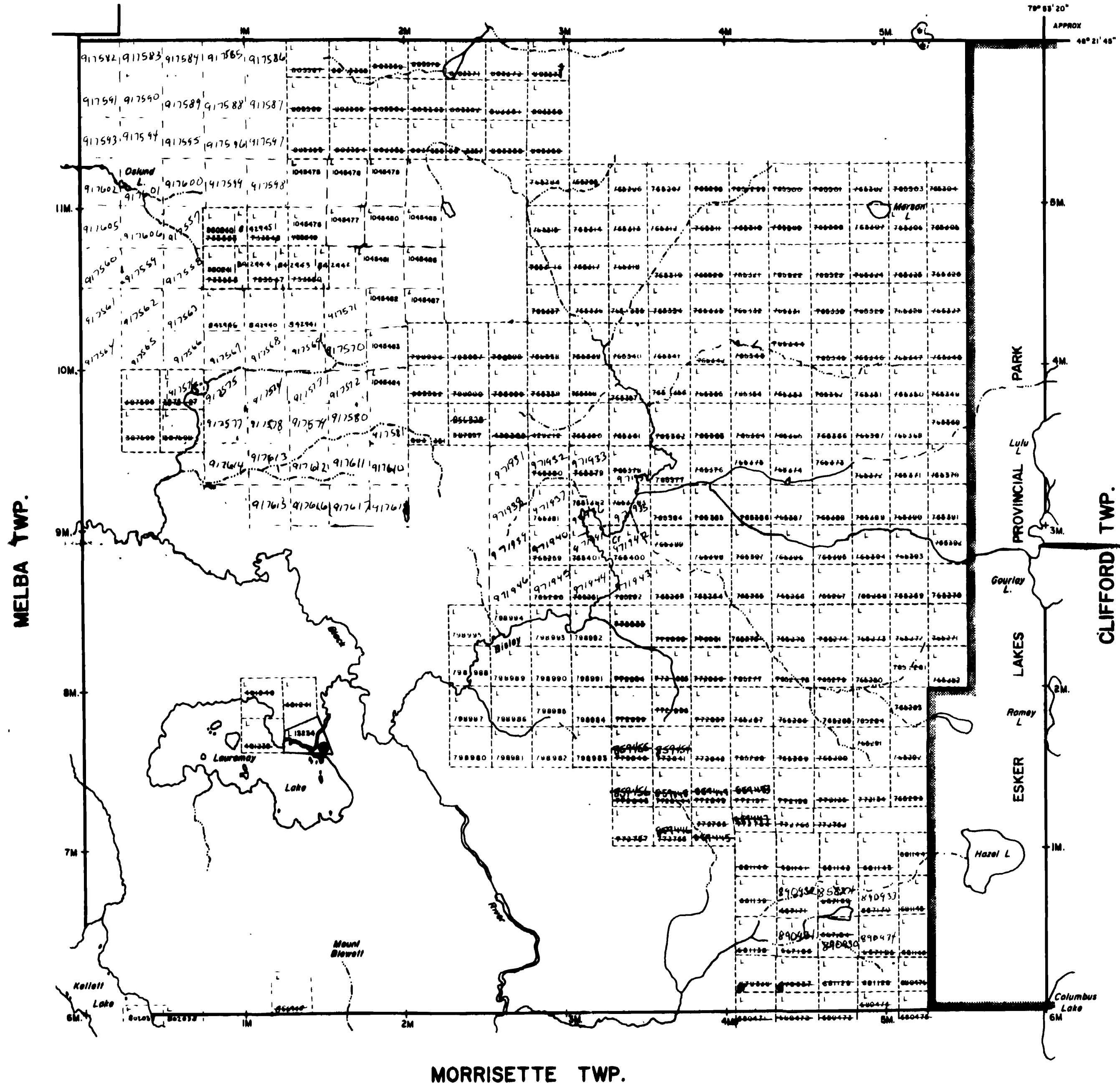
AREAS WITHDRAWN FROM DISPOSITION

M.R.O. - MINING RIGHTS ONLY
 S.R.O. - SURFACE RIGHTS ONLY
 M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

BARNET TWP.

THACKERAY TWP.



79° 53' 20" APPROX
 48° 21' 45"

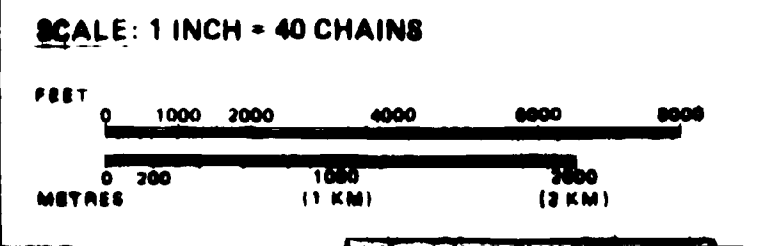
LEGEND

HIGHWAY AND ROUTE No	
OTHER ROADS	
TRAILS	
SURVEYED LINES: TOWNSHIP, BASE LINES, ETC	
LOTS, MINING CLAIMS, PARCELS, ETC	
UNSURVEYED LINES LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1914, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 200, SEC. 60, SUBSEC. 1.

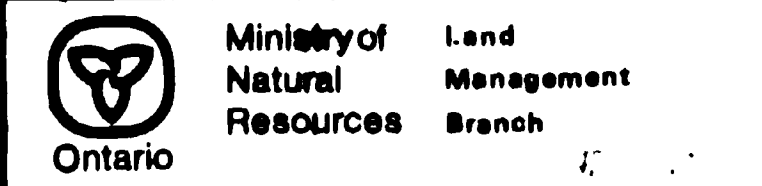


DATE OF ISSUE
 JUN 9 1988

TOWNSHIP
BISLEY

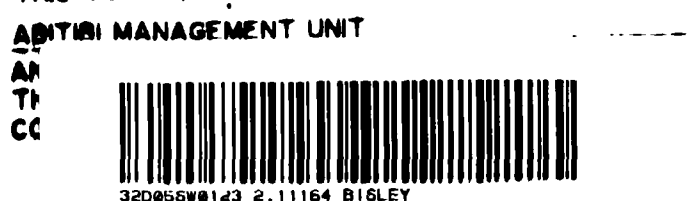
LARDER LAKE
 MINING RECORDER'S OFFICE

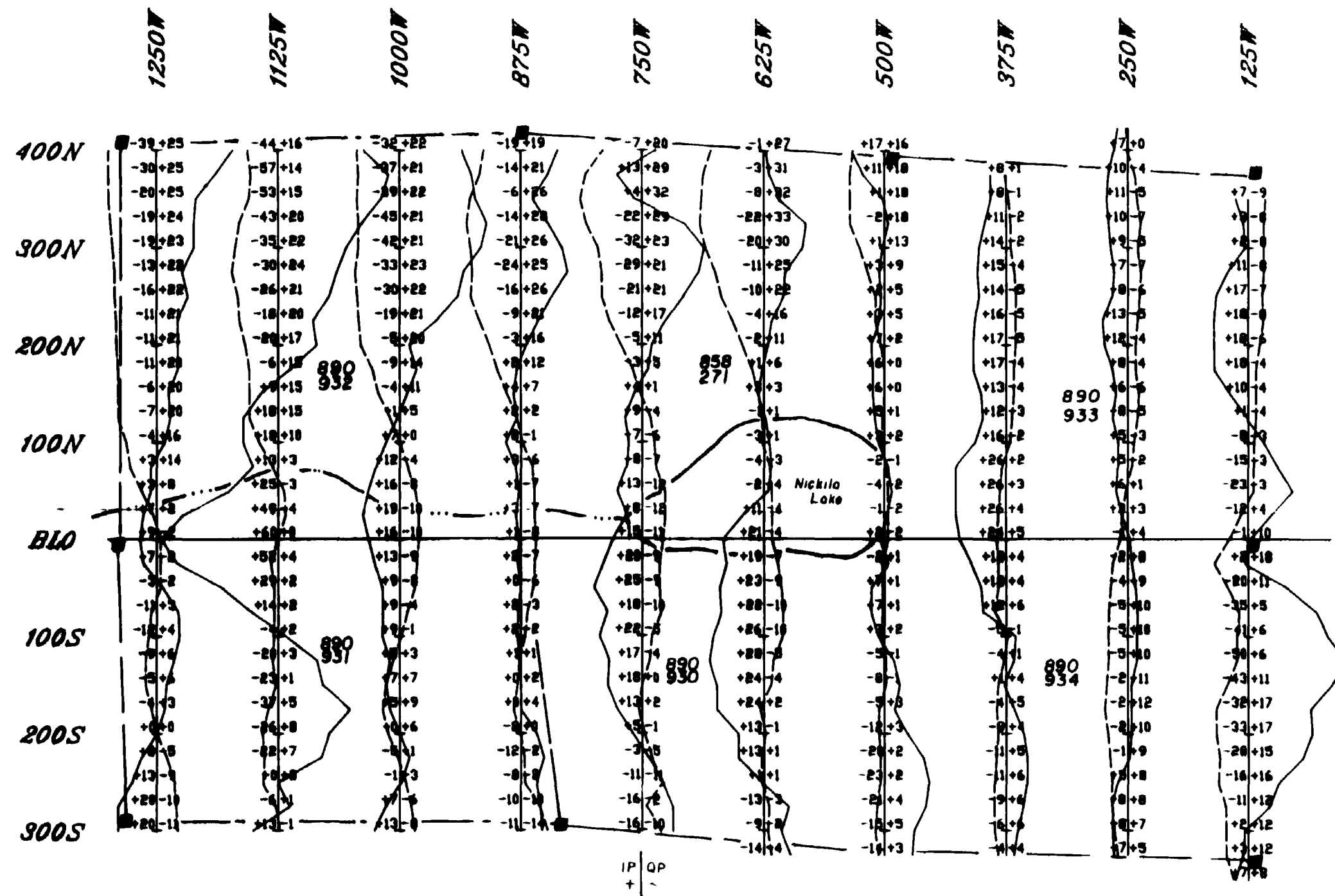
M.N.R. ADMINISTRATIVE DISTRICT
 KIRKLAND LAKE
 MINING DIVISION
 LARDER LAKE
 LAND TITLES / REGISTRY DIVISION
 COCHRANE



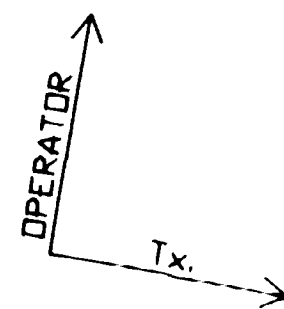
Date JANUARY 1988
 Number
G-3191

NOTICE OF FORESTRY ACTIVITY
 THIS TOWNSHIP / AREA FALLS WITHIN THE _____





2.11164



Instrument Geonics Em-16
 Tx: At Cutler Maine 24.0KHz
 Vertical Scale : 1cm = 25%
 Inphase _____
 Quadrature _____



LAC Minerals Ltd.
 EXPLORATION DIVISION
 Kirkland Lake, Ontario

DRAWN BY *Peter Hofman*
 CHECKED BY _____
 APPROVED BY _____
 REVISED BY _____
 DRAWING NO _____

TITLE
 B80 VLF-EM Survey
 Inphase and Quad. Profiles
 Scale - 1:5000

