42A01SE0202 2.4219 EBY

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NTS: 42 A/1

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OCT 2 3 1981

MINING LANDS SECTION

REPORT

ON

GEOPHYSICAL SURVEYS

GROUP A

JAMES REED et al.

EBY TOWNSHIP

ONTARIO

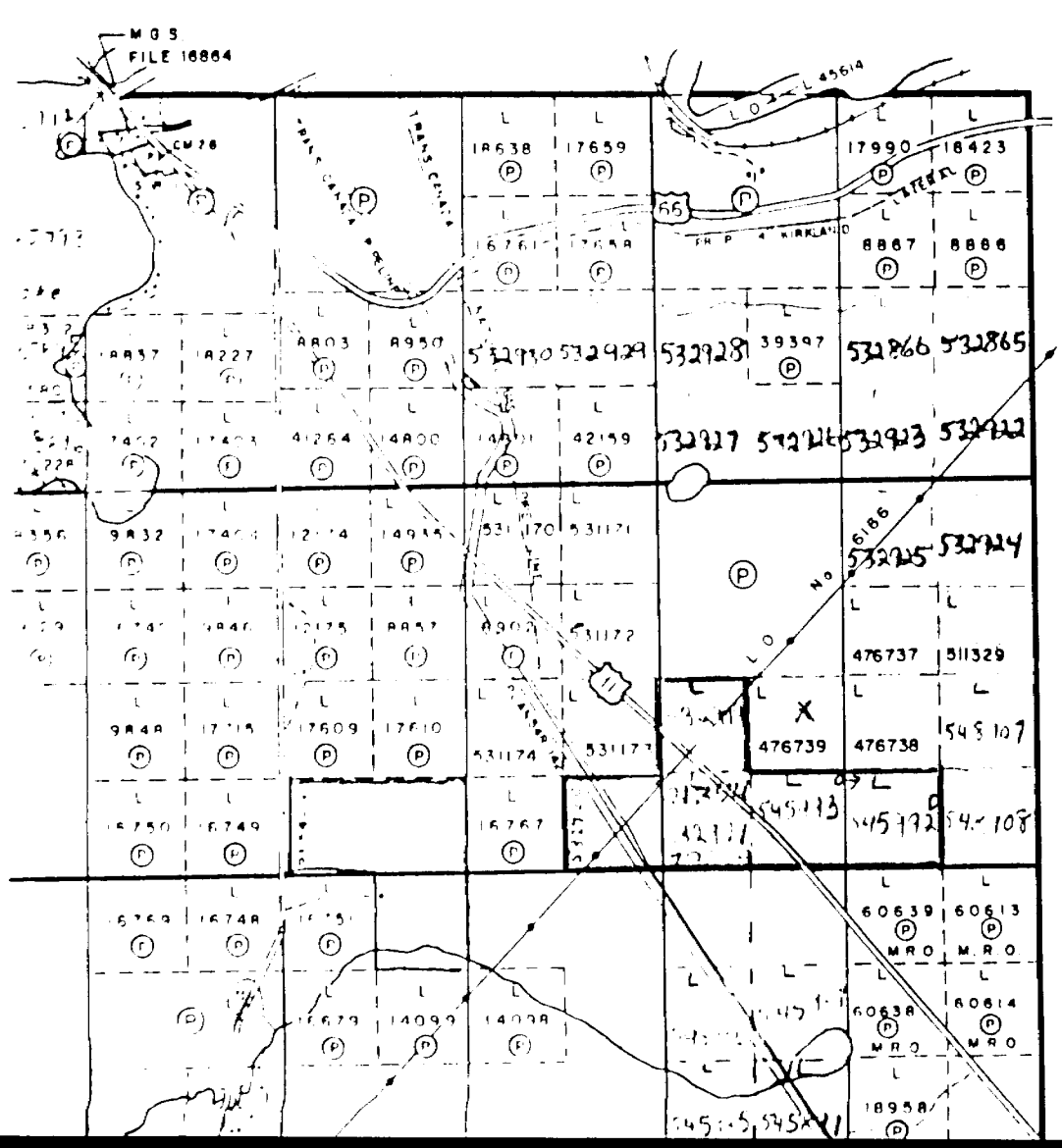
Jomi Minerals & Expediting Ltd.
Tarzwell, Ont
September 26, 1981

Report by

L.M.Dyment

TRIM LINE

Twp. M. 351



THE TOWNSHIP OF

EBY

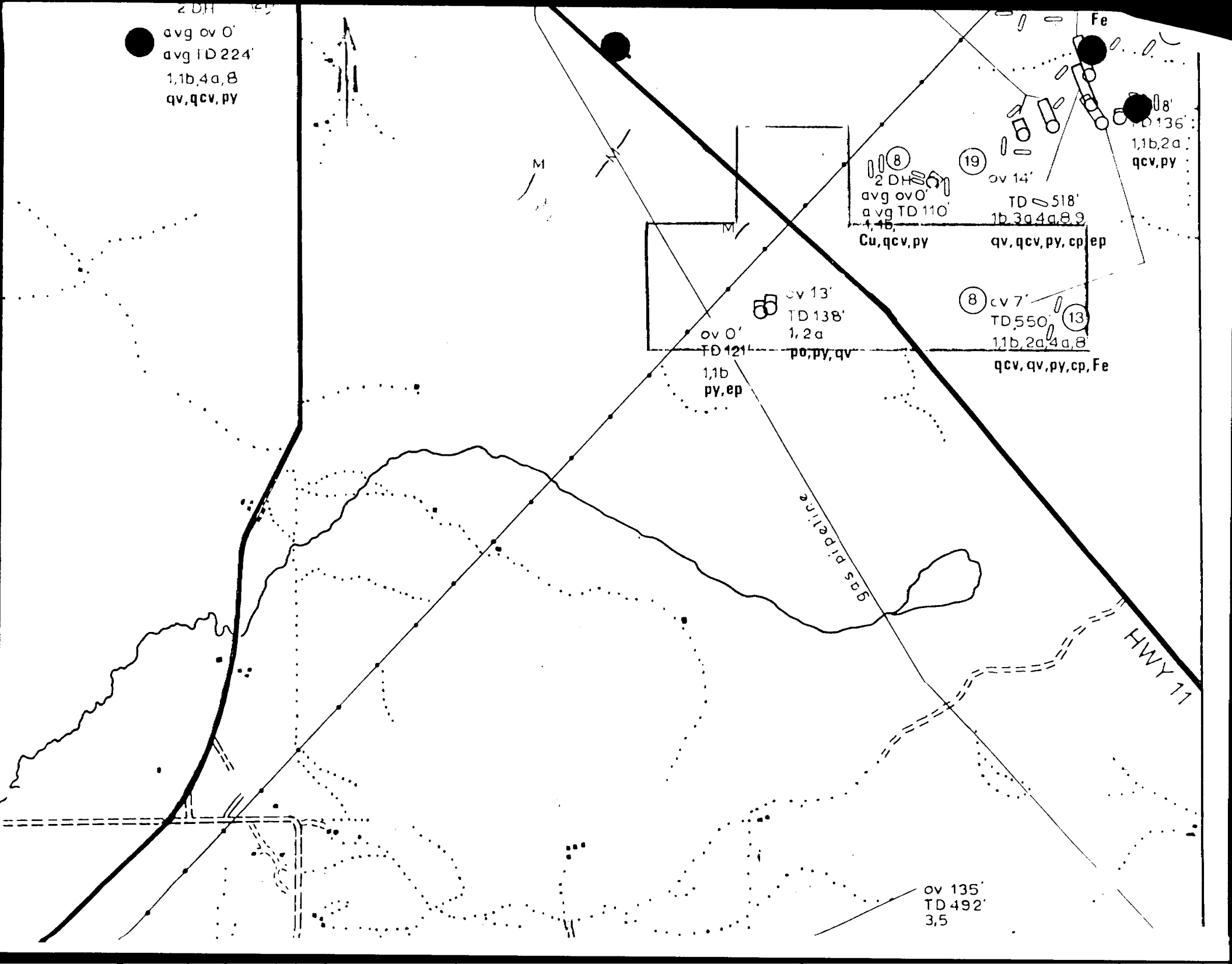
DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHA

LEGEND

PATENTED LAND
CROWN LAND SALE
LEASES
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY
ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS


2 DH
avg ov 0'
avg TD 224'
1,1b,4a,8
qv,qcv,py
Fe
8'
TD 136'
1,1b,2a
qcv,py
8
2 DH
avg ov 0'
avg TD 110'
1,1b,
Cu,qcv,py
19
ov 14'
TD 518'
1b,3a,4a,8,9
qv,qcv,py,cp,ep
ov 13'
TD 138'
1,2a
po,py,qv
ov 0'
TD 121'
1,1b
py,ep
8
ov 7'
TD 550'
13
1,1b,2a,4a,8
qcv,qv,py,cp,Fe
gas pipeline
HWY 11
ov 135'
TD 492'
3,5

CONCLUSION AND RECOMMENDATIONS

Several anomalous areas of conductivity and high magnetics were mapped during the survey which are noted within the report and shown on the accompanying maps.

The areas of interest should now be thoroughly prospected and sampled. Consideration should be given to having the claim group geologically mapped in the 1982 field season, using these geophysical maps as an aid.

INTRODUCTION

Electromagnetic and Magnetometer surveys were carried out on this group of five claims in Eby Twp. by Jomi Minerals in the early part of September, 1981. This group of claims is referred to as "Group A - James Reed et al.". The object of the ground surveys was to locate and delineate conductive and magnetic zones for further investigation.

PROPERTY AND LOCATION

The property consists of five contiguous claims of approximately forty acres each, located in Eby Twp, Larder Lake Mining Division, District of Timiskaming. The claims are registered with the Ont. Dept of Mines under the following numbers and locations:

532919---S½ NW¼ Lot 2 Con V

532920---S½ SE¼ Lot 3 Con V
532921---S½ SW¼ Lot 2 Con V
545992---S½ SW¼ Lot 1 Con V
545993---S½ SE¼ Lot 2 Con V

The property is crossed by HWY11 approximately 3 miles south of Kenogami. Also crossing the property as indicated on the accompanying maps are TransCanada Pipelines and H.E.P.C.

GEOLOGY

The geology of the area as per ODM map 2239 shows the claim group to be covered with mafic Meta volcanics and Meta sediments. The author, on quick perusal during the geophysical survey, noted carbonitization, a small peridotitic plug (?), and what appears to be tuff agglomerate, possibly trachytic. Also, numerous cherty bands trending east-west were noted. This would appear to call for a more detailed geological investigation than has been given this area previously.

SURVEY METHOD AND INSTRUMENT DATA

The geophysical surveys were conducted over cut lines at 400 ft. intervals. A base station was established at 24W on BL #1. The EM survey was carried out using a Crone Radem.

Electromagnetic prospecting methods rely on the measurement of the secondary field generated by conducting bodies in the ground when subjected to a primary electromagnetic field. The Radem VLF method is a passive instrument oper-

ating in the very low radio frequency range (17.8-22.3 Khz) which utilizes powerful radio transmitters at various locations throughout the world as the source of the primary electromagnetic signal. The radiation from these transmitters contains both electric and magnetic components which may energize sub-surface conductors which in turn will create secondary fields.

In order to obtain maximum coupling with conductive zones, a transmitter station which is roughly on strike with the general geological structure should be selected. The VLF-EM system has proven to be an extremely useful mapping tool in locating faults, shear zones, geological contacts and other conductors due to massive sulphides and/or graphite, etc. Its limitations are more evident in areas of flat-lying, highly conductive overburden material, where the relatively high EM frequencies may be severely attenuated, causing not only a loss of depth penetration but inaccurate conductivity estimates as well. Conversely, the high frequency has the advantage of being able to detect the more poorly conductive (disseminated) zones of mineralization which may not be seen with the lower frequency systems. In areas of relatively rough topographic relief, steep hills and valleys may give rise to cross-overs which are not necessarily due to changes in ground conductivity. These effects may be minimized by filtering the regional topographic trend from the VLF profiles, or more simply, by contouring the Field Strength.

The Magnetic readings were taken using a barringer GM 122 Proton Precession magnetometer. This instrument measures the total magnetic field intensity in gammas with an accuracy of plus or minus one gamma. Corrections were noted for diurnal variations and the readings plotted and contoured on a map accompanyin; this report.

RESULTS OF THE GEOPHYSICAL SURVEYS

The results of the surveys are shown on three separate maps. The scale of the maps is 200 ft. to the inch. The axes of the conductive zones are shown and the magnetic conductors have been contoured to stand out.

ELECTROMAGNETIC OBSERVATIONS

Conductor A located at 12S on lines 12W and 16W. No magnetic correlation. Poor outcrop distribution in the vicinity. Field strength and topography indicate a possible over-burden conductor.

Conductor B located on the south side of a beaver pond has no magnetic correlation. Cherty lean Iron Formation and graphites noted 100 ft. east. Strong cross-over.

Conductor C weak cross-over flanking a magnetic high 150-200 ft. south. Cherty graphitic zone close to cross-over. Poor field strength.

Conductor D Small weak cross-over with cherty banded

Iron Formation running east-west located 100 ft. south.

Conductor E Excellent magnetic correlation and field strength. Readings 6S and 7S of line 12E taken approximately 100 ft. west of station because of beaver pond. Possible chainage error and line should be rechecked after freeze-up. An excellent conductor.

Conductor F Strong conductor and field strength correspondence. Located in an area of low topography, alder vegetation. No magnetics.

The conductivity, with the exception of Conductors D and E, is not directly related to high magnetic readings but appears to be on the flanks of magnetic highs.

In summary:

I D and E represent graphite and/or sulphides

II B and C represent cherty graphitic bands

III A and F possible topographical conductors but require further appraisal

MAGNETIC OBSERVATIONS

The magnetic anomalies which stand out on the contour map represent the pyrite-pyrrhotite facies of Iron Formation and cherty banded magnetite which are prevalent in the Eby-Otto area. The one noticeable exception is on line 4E which appears to be a peridotite dike or plug within a magnetic low. All magnetic highs should be investigated through prospecting.

Certificate

I, Leslie Michael Dyment, residing in the township of Marquis, Ontario, and having a mailing address Jomi Minerals & Expediting Ltd., RR#1, Tarzwell, Ontario, do hereby certify:

(1) That I am a Mining Technician having taken the two year course at Haileybury School of Mines, Haileybury, Ontario,

(2) That I have been employed in all phases of mining exploration and developement for 19 years,

(3) That I did personally accumulate and set forth the facts and knowledge in the accompanying report and maps,

(4) That the accompanying report is true.

Dated January 22, 1981
Tarzwell, Ontario

Leslie Michael Dyment

Ontario

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File _____

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OCT 2 3 1981
MINING LANDS SECTION

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) Geophysical (Mag + EM)

Township or Area Eby

Claim Holder(s) [illegible] D. Reed

Survey Company Jem Minerals + Expediting Ltd.

Author of Report L. M. Dyment

Address of Author RR#1 Tarzwell, Ont, P0K1V0

Covering Dates of Survey _____ (linecutting to office)

Total Miles of Line Cut 6.2

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
Electromagnetic	40
Magnetometer	20
Radiometric	
Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Sept 22, 1981 SIGNATURE: [signature]
Author of Report or Agent

Res. Geol. _____ Qualifications [illegible]

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
	532920
	532921
	532919
	545993
	545992

If space insufficient, attach list

TOTAL CLAIMS 5

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations Mag-327; EM 327 Number of Readings Mag-327; EM 307

Station interval 100 Feet Line spacing 400' & 300'

Profile scale 1" = 400'

Contour interval 200 - 400 gammas

MAGNETIC

Instrument EM 122 Barringer Proton Mag

Accuracy – Scale constant ± 1 Gamma

Diurnal correction method Loop

Base Station check-in interval (hours) 2 hr.

Base Station location and value Base line Sta 24W 59064

ELECTROMAGNETIC

Instrument CRONE RADIM VLF

Coil configuration VERTICAL

Coil separation INFINITE

Accuracy Dip Angle ± 3% Esir ± 20%

Method: ☒ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency CUTLER, MAINE 17.8 KZ
(specify V.L.F. station)

Parameters measured Tilt Angle, Field Strength

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

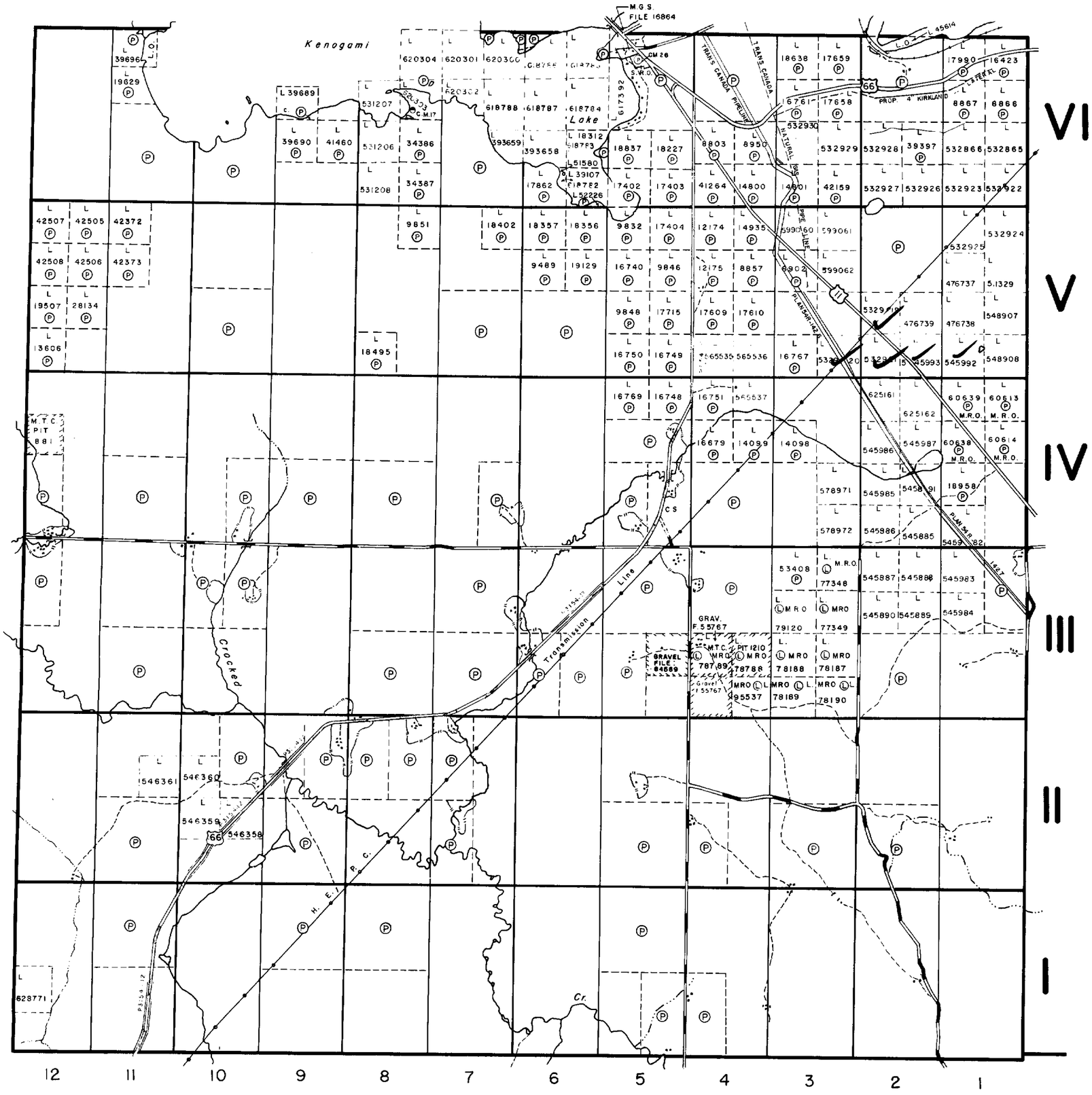
Type of electrode

Grenfell Twp. M.351

Burt Twp. M.334

Otto Twp. M.379

Blain Twp. M.418



200

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K. Kalamov

THE TOWNSHIP OF EBY

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

AREAS WITHDRAWN FROM STAKING
under Sec. 43 of The Mining Act (R.S.O. 1970).

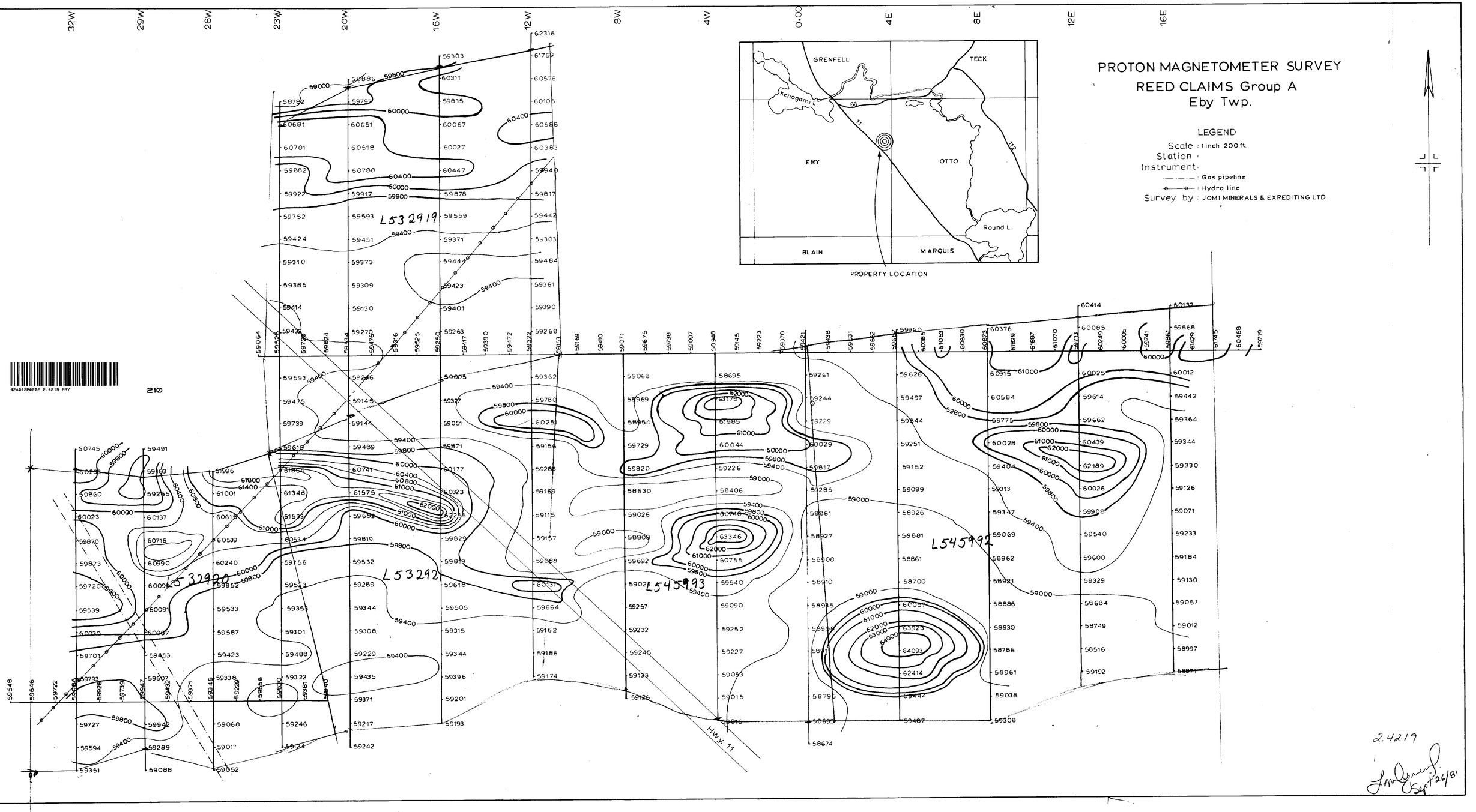
Order No.	File	Date	Disposition

DATE OF ISSUE
NOV - 2 1981
Ministry of Natural Resources
TORONTO

2.4219

PLAN NO.- M-345

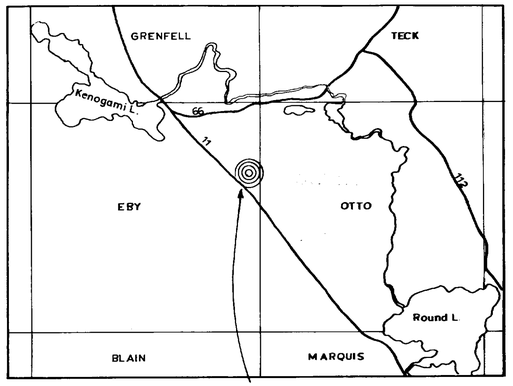
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH


32W
29W
26W
23W
20W
16W
12W
8W
4W
0.00
4E
8E
12E
16E
GRENFELL
TECK
Kenogami L.
66
11
112
EBY
OTTO
Round L.
BLAIN
MARQUIS
PROPERTY LOCATION
PROTON MAGNETOMETER SURVEY
REED CLAIMS Group A
Eby Twp.
LEGEND
Scale : 1 inch 200 ft.
Station :
Instrument :
: Gas pipeline
: Hydro line
Survey by : JOMI MINERALS & EXPEDITING LTD.
L532919
L53292
L532990
L545993
L545992
HWY 11
210
2.4219
Sept 26/81

VLF-EM PROFILES
REED CLAIMS Group A
Eby Twp.

LEGEND

Scale : 1 inch 200 ft. : 1 inch = 40 m/s
Station : Cutler Maine
Instrument : Crone Radem
—·—·— : Gas pipeline
—o—o— : Hydro line
Survey by : JOMI MINERALS & EXPEDITING LTD.



PROPERTY LOCATION

32W 29W 26W 23W 20W 16W 12W 8W 4W 0+00 4E 8E 12E 16E

L532919
L532920
L532921
L545993
L545992
HEPC TRANSFORMER
A
C
D
E
F
HWY. 11

2.4219

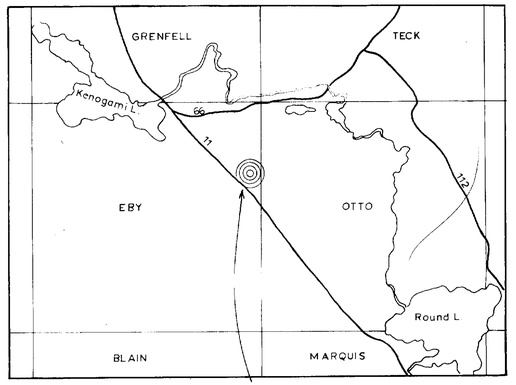
Lm Lyncoln Sept 8/81

42A01SE0202 2.4219 EBY

VLF-EM FIELD STRENGTH SURVEY
REED CLAIMS Group A
Eby Twp.

LEGEND

Scale : 1 inch 200 ft.
Station : Cutler Maine
Instrument : Crone Radem
Gas pipeline
Hydro line
Survey by : JOMI MINERALS & EXPEDITING LTD.



PROPERTY LOCATION

2.4219

Sept. 26/81