42A01SE0181 2.10210 EBY

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Mary Ellen Resources Limited

Assessment Report on Claim L-842563

Eby Township

Larder Lake Mining Division

By

S. Carmichael

RECEIVED
JUL 15 1987
MINING LANDS SECTION

Project # M-002 N.T.S. 42A/SE

June 17, 1987

Kirkland Lake, Ontario

Introduction

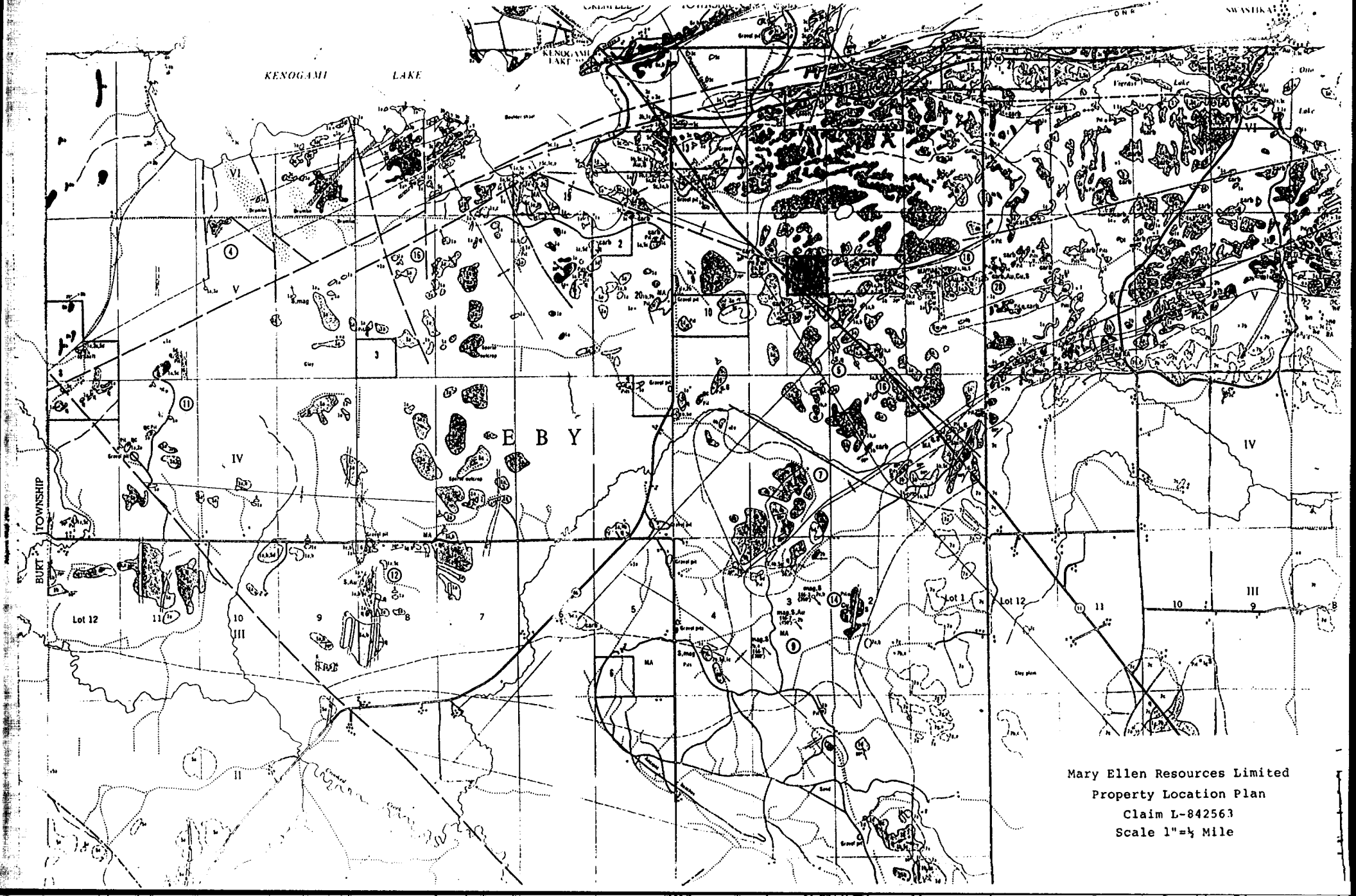
Claim No. L-842563 was staked to cover the east extension of a known carbonate horizon occurring one mile to the west on ground presently under option to Mary Ellen Resources Ltd.

Claim No. L-842563 was staked on October 3, 1985 and transferred to Mary Ellen Resources on October 7, 1985. The claim is currently under a work extension until June 30, 1987.

During June 1987, Mary Ellen Resources completed linecutting followed by ground VLF-EM and magnetometer surveys. Geophysical surveys were completed on June 13 and June 14, 1987.

Location and Access

Claim No. L-842563 is located in Eby Township, District of Timiskaming, concession 5, Lot 3, North 1/2, S.E. 1/4. The claim may be reached by Highway 11, approximately two miles south of the village of Kenogami.


KENOGAMI LAKE
KENOGAMI LAKE
E B Y
BURT TOWNSHIP
Lot 12
Lot 1
Lot 12
Mary Ellen Resources Limited
Property Location Plan
Claim L-842563
Scale 1"=½ Mile

Topography and Vegetation

The claim is characterized by a topographic high on the south part of the claim and low ground to the north. A swamp covers the west central portion of the claim.

The entire claim east of highway 11 has been recently logged over with resulting alders and low bush covering the claim. Overburden is generally ten feet or less. Outcrop exposure is estimated at 10-20%.

Previous Work

The close proximity of the claim to the Kirkland-Larder Lake "Break" would indicate that the claim has been prospected thoroughly in the past.

The assessment files indicate that the only recorded work completed on the claim was in 1966 by Taylor Gold Mines Ltd. A magnetometer survey was completed over a four claim block, one which was present claim L-842563. Taylor Gold Mines recommended geological mapping and a vertical loop electromagnetic survey over the property. These recommendations do not appear to have been followed up.

Method of Survey

Lines were cut at 100m centers using the south claim line as a baseline. Due to a swamp covering the central west portion of the claim, line 0+25E was not cut completely across the claim. Magnetometer (Geometrics G-826 protor magnetometer) and VLF-EM (Phoenix VLF-II) readings were taken at 25m intervals. Magnetometer readings were contoured at 50 gamma intervals and Field Strength-Dip Angles were profiled for the VLF-EM survey.

Conclusion and Recommendations

The claim shows a general flat magnetic response over the north half of the property. The south half of the property shows a general increase in magnetics. One magnetic anomaly occurs over the south-east corner of the property and is characterized by a magnetic low associated with a weak to moderate VLF-EM anomaly.

VLF anomalies A and B are probably due to conductive overburden and anomaly C, associated with magnetic low may represent graphitic sediments. Overburden in the area of anomaly C is five feet or less and should be stripped to determine the nature of the anomaly.

Respectfully submitted,

S.J. Carmichael

S.J. Carmichael, B.Sc.

Bibliography

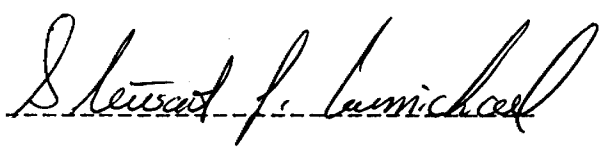
Lovell, H. L.: Geology of Eby and Otto Area District of Timiskaming. Ontario Department of Mines and Northern Affairs. Geological Report 99 (1972).

Certificate of Qualifications

I, Stewart J. Carmichael, of the Town of Kirkland Lake, in the District of Timiskaming, in the Province of Ontario, Canada, do hereby certify that:

1. I am a geologist with Mary Ellen Resources Ltd. with an office in Kenogami, Ontario, address P.O. Box 546, Kirkland Lake, Ontario, P2N 3J5.
2. I am a graduate of McMaster University, Hamilton, Ontario having received the degree of Bachelor of Science, Geology, from the Faculty of Science in 1982. I have since practiced in the field of mineral exploration continuously since graduation.
3. I have knowledge of, and previous exploration experience in the region in which the Mary Ellen Resources Claim L-842563 is located.
4. In addition to my personal knowledge of the area, I have made use of the records of the Ministry of Natural Resources of Ontario, and of Mary Ellen Resources Ltd. in the preparation of this report. I surveyed the property relevant to this report from June 11-15, 1987.

Dated this 24 day of June, 1987



Stewart J. Carmichael, B.Sc.

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

Fund Allowance — 27c/87

The Min

42A01SE0181 2.10210 EBY

900

Type of Survey(s)
Geophysical (Magnetometer, VLF-EM) | Eby Township

Claim Holder(s)
Mary Ellen Resources Ltd.

Prospector's Licence No.
T-1566

Survey Company
Mary Ellen Resources Ltd.

Survey Dates (linecutting to office)
11 Day | 06 Mo. | 87 Yr. | 15 Day | 06 Mo. | 87 Yr.

Total Miles of line Cut
2.0 km.

Name and Address of Author (of Geo-Technical report)
Stewart Carmichael, Mary Ellen Res Ltd. P.O. Box 546, Kirkland L. Ont.

Special Provisions Credits Requested

Instructions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	40
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days

Instructions		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	842563				

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JUN 1987
MINING LANDS SECTION

LAKE
1987
1:2

Total number of mining claims covered by this report of work. 1

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	JUN 87	A. F. Wern
	Date Approved as Recorded	Regional/Branch Director
	1987.08.19	pp RMKennedy

OK

Report Completed

Date of Report	Recorded Holder or Agent (Signature)
June 17 1987	S. Carmichael

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying
S. Carmichael, Mary Ellen Resources
P.O. Box 546 Kirkland L. Ont.

Date Certified	Certified by (Signature)
June 24 1987	S. Carmichael

Ontario

Ministry of Northern Development and Mines

Geophysical-Geological-Geochemical Technical Data Statement

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) Magnetometer, VLF-EM

Township or Area Eby Township, District of Timiskaming

Claim Holder(s) Mary Ellen Resources Limited.
P.O Box 546, Kirkland Lake, Ont.

Survey Company Mary Ellen Resources Limited

Author of Report Stewart Carmichael

Address of Author P.O. Box 546, Kirkland Lake Ont.

Covering Dates of Survey June 11 - 15, 1987 (linecutting to office)

Total ~~Miles~~ kms of Line Cut 2.0 kilometers

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: June 24/87 SIGNATURE: S. L. Carmichael
Author of Report or Agent

Res. Geol. _____ Qualifications 2.7032

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

L 842563
(prefix) (number)

If space insufficient, attach list

TOTAL CLAIMS _____

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MINING LANDS SECTION

OFFICE USE ONLY

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 66 Number of Readings 66

Station interval 25 meters Line spacing 100 meters

Profile scale 1cm = 20° (VLF-EM)

Contour interval 50 gammas

MAGNETIC

Instrument Geometrics G-826 Proton Magnetometer

Accuracy -- Scale constant ± 10 gammas

Diurnal correction method Base station check before and after Survey

Base Station check-in interval (hours) 2.5 hrs

Base Station location and value # 3 post, L- 842563 , 58,602 gammas

ELECTROMAGNETIC

Instrument Phoenix VLF-II

Coil configuration

Coil separation Infinite

Accuracy ± 5°

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

Frequency Cutler, Maine 24.0 kHz
(specify V.L.F. station)

Parameters measured Orientation and magnitude of the Major and Minor Axes of the Eclipse of Polarization

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 _____

_____

_____

_____

_____

_____

_____

_____

_____

Grenfell Twp. M.351

Burt Twp. M.334

Otto Twp. M.379

Blain Twp. M.418

M.N.R. FILE 16864

Lake

Crockett

L.U.P.

Hydro Line

Transmission Line

Gravel File 84889

Gravel F.55767

Cr.

12 11 10 9 8 7 6 5 4 3 2 1

VI V IV

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

N½ Lot 7, Con. 3 - Cert. of Forfeiture - Sept 17/85

DATE OF ISSUE

MAY 26 1987

LARDER LAKE MINING RECORDER'S OFFICE

#7

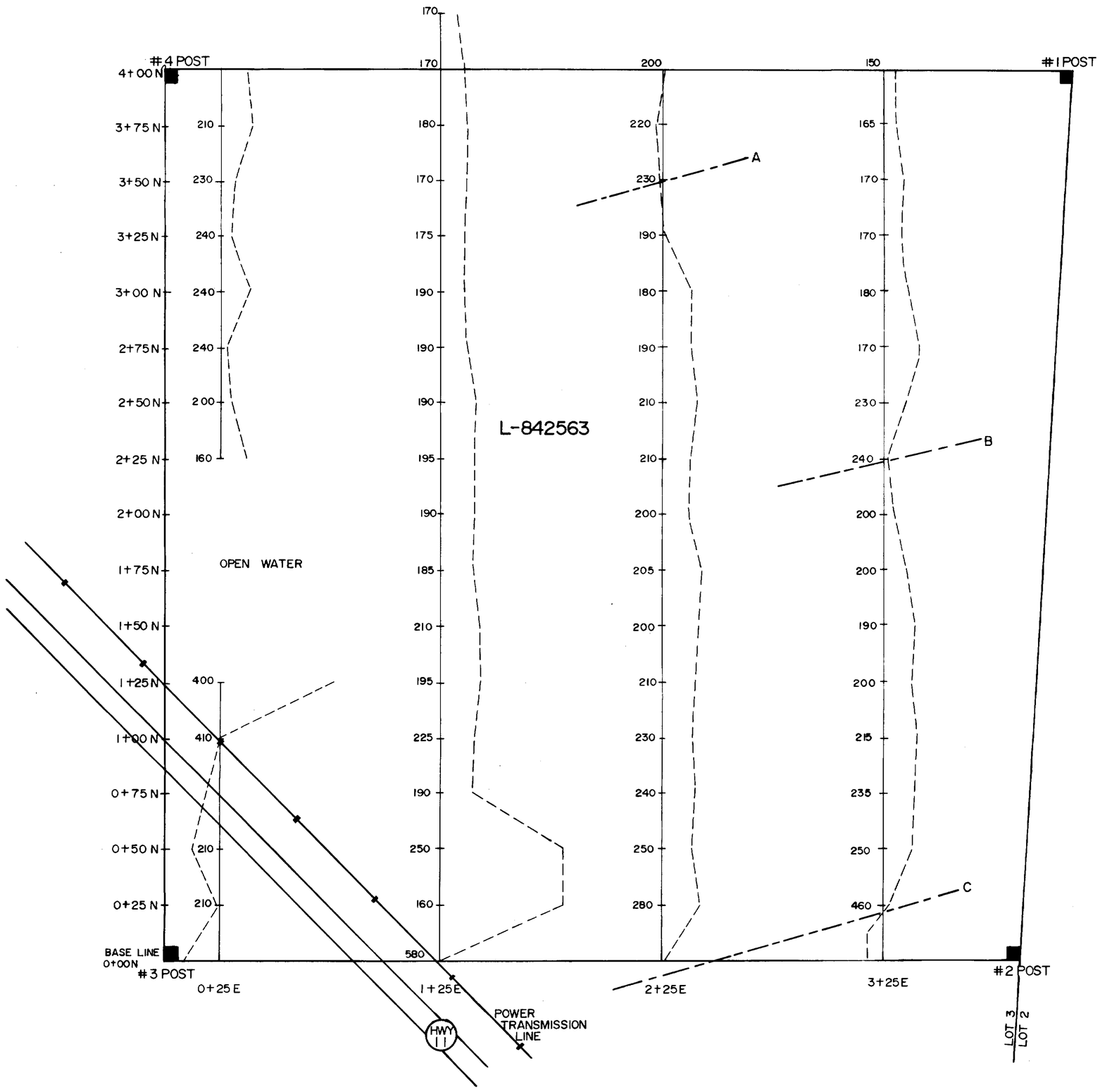
PLAN NO.- M-345

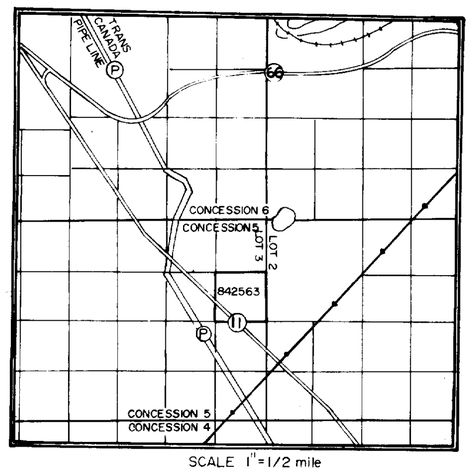
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

42A01SE0181 2.10210 EBY

200

K. Kolomer



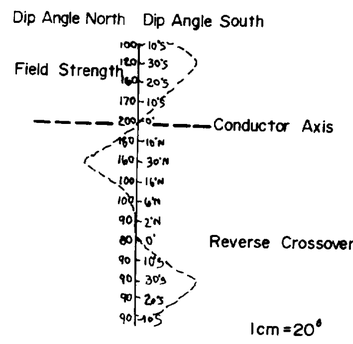


SCALE 1" = 1/2 mile

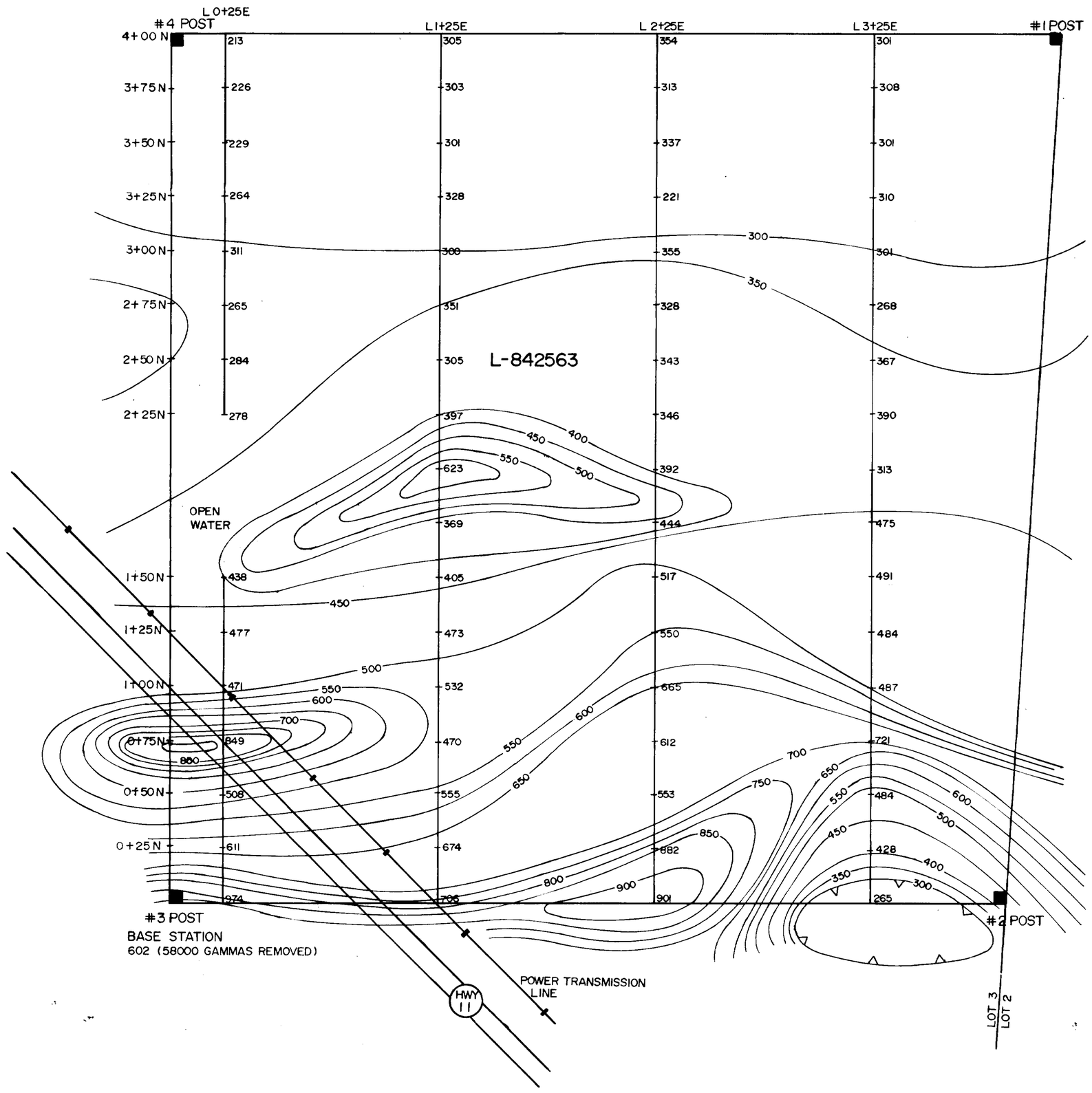


LEGEND

V.L.F. PROFILES



Instrument - Phoenix V.L.F.-2
Frequency - 24.0 KHz
Station - Cutler, Maine



INSTRUMENT - GEOMETRIC G-826 PROTON MAGNETOMETER

CONTOUR INTERVALS OF 50 GAMMAS

2.10210

S. J. Carmichael June 24/87

CLAIM L-842563

VLF-EM SURVEY
MAGNETOMETER SURVEY
EBY TOWNSHIP
DISTRICT of TIMISKAMING
LARDER LAKE MINING DIVISION

SCALE 1cm = 12.5m (25m 0 25m 50m)

MARY ELLEN RESOURCES

PROJECT NO. M-002	DATE : JUNE 1987	DRAWING NO. 1

42A01SE0101 2.10210 EBY