



52006NW0050 52006NW0021 MEEN LAKE

010

GEOSEARCH CONSULTANTS LIMITED

Horizontal Loop
Electromagnetic Survey
for
UMEX INC.
Crobie Project
Dorothy Lake Property
Dorothy Lake Area, Ontario
To Accompany Maps 86-152 to 155

RECEIVED

OCT 13 1986

MINING LANDS SECTION

September 12, 1986

INTRODUCTION

A horizontal loop electromagnetic survey was carried out for Umex Inc. on a portion of their Grobie Project, Dorothy Lake Property in August, 1986.

The property is located approximately 80 km east/south-east of Pickle Lake, Ontario from where access was made by fixed wing aircraft.

The unpatented mining claims covered in whole or in part by this survey are listed on the technical data sheet appended to this report.

The purpose of the survey was to delineate a geo-electrical sub-surface conductor. The conductor was well located by the horizontal loop survey. The accompanying maps show the area surveyed and the results obtained.

METHOD AND INTERPRETATION OF RESULTS - ELECTROMAGNETIC SURVEY

Operating Principle: When an electrical conductor is subjected to a primary alternating field, a secondary current is induced in the conductor. This current produces a secondary alternating field which together with the primary field produces a resultant field of different amplitude and phase from the applied primary field. These differences may indicate the presence of a conductor.

Operation: The battery-powered transmitter sets up a primary field while the in-phase and out-of-phase (quadrature) components of the complex secondary vertical field are detected by a receiving coil and measured by means of a compensator-amplifier unit located a fixed distance from the transmitter unit. These parameters are expressed in percentage of the primary field.

Conductor Recognition: The typical curve over a steeply-dipping conductor shows a low (negative - greater than 5%) over the centre of the conductor, flanked by positive readings on both sides of the conductor. Both the in-phase and the out-of-phase components usually produce the same general shape of curve. An asymmetrical curve may indicate one or more of the following conditions: (1) more than one conductor (2) variable conductive overburden (3) a shallow dipping conductor.

Conductivity Determination: The ratio of the amplitudes of the two measured components, in-phase to out-of-phase, is directly proportional to the conductivity of the conductor, in areas of non-conductive overburden.

Conductor Location: For a single conductor, both component readings are normally zero when either the transmitting or receiving coil is directly above the conductor. The location of the conductor is calculated by adding one-half the distance between the transmitting coil and the receiving coil (coil interval) to the co-ordinate at which the readings are zero. A unique solution is generally not possible in the case of multiple conductors spaced less than one coil interval apart. This results in the possibility that an apparently wide conductor may actually consist of two or more narrow conductors.

Depth of Penetration: The maximum depth of penetration for detection of a steeply-dipping conductor in a geo-electrically neutral background is about 0.7 times the coil interval. Over horizontal or flatly-dipping conductors, penetration of up to 1.5 times the coil interval is possible.

RESULTS

The horizontal loop electromagnetic survey located a long conductor extending across most of the survey area. The conductor extends from Line 2W, 5+40N (Maps 86-152, 153) to Line 15E, 0+90S (Maps 86-154, 155).

This very steeply dipping conductor is quite linear with a strike of approximately 130 degrees. The conductor has minimal apparent width over most of its length except for the western extremity where it widens from 4 metres on Line 0 to 10 metres on Line 2W. This wide conductor ends abruptly between Lines 2W and 3W.

The conductivity of this conductor varies over its entire length as is indicated by the solid and dashed lines on the accompanying maps.

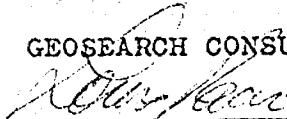
RECOMMENDATIONS

The length and continuity of this conductor suggest it lies along some formation feature, perhaps a rock contact. The results of this survey should be used in conjunction with the known geology to plan further work.

Based solely on the results of this survey, the following drill holes are recommended to test the stronger sections of the conductor.

LOCATION	IP/OP Low freq.	DEPTH ESTIMATE (metres)
1) L1W, 4+87N	4.5	18
2) L4E, 3+44N	1.3	12
3) L15E, 0+00N	1	28

GEOSEARCH CONSULTANTS LTD.


Louis Racic, B.Sc.
Geophysicist



52006NW0050 52006NW0021 MEEN LAKE

Geophysical-Geological-Geochemical Technical Data Statement

900

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) Electromagnetic
 Township or Area Dorothy Lake Area
 Claim Holder(s) Umex Inc.
1935 Leslie St., Don Mills, Ontario
 Survey Company Geosearch Consultants Ltd.
 Author of Report Louis Racic
 Address of Author 360 - 111 Queen St. E., Toronto
 Covering Dates of Survey Aug. 20/86 - Sept. 12/86
(linecutting to office)
 Total Miles of Line Cut 9.25 km

MINING CLAIMS TRAVERSED List numerically

Pa (prefix)	836188 (number)
	836189
	836190
	836198
	836199
	836401
	836402
	836403
	836416
	836417
	836418

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

Geophysical

DAYS
per claim

--Electromagnetic 20
 --Magnetometer _____
 --Radiometric _____
 --Other _____
 Geological _____
 Geochemical _____

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

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

DATE: Sept. 12, 1986 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications 2. 8017

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS
RECEIVED
 OCT 16 1986
 A.M. P.M.
 7:00-11:59 12:00-4:59

TOTAL CLAIMS 11

GEOPHYSICAL TECHNICAL DATA

Dorothy Lake Area

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

Number of Stations 312 Number of Readings 322
Station interval 25m Line spacing 100m
Profile scale 1 cm to 20%
Contour interval

MAGNETIC

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

ELECTROMAGNETIC

Instrument Apex Maxmin II
Coil configuration Co-planar
Coil separation 100m
Accuracy 1%
Method: [] Fixed transmitter [] Shoot back [X] In line [] Parallel line
Frequency 888 Hz, 3555 Hz (specify V.L.F. station)
Parameters measured In-phase and out-of-phase of the secondary vertical magnetic field

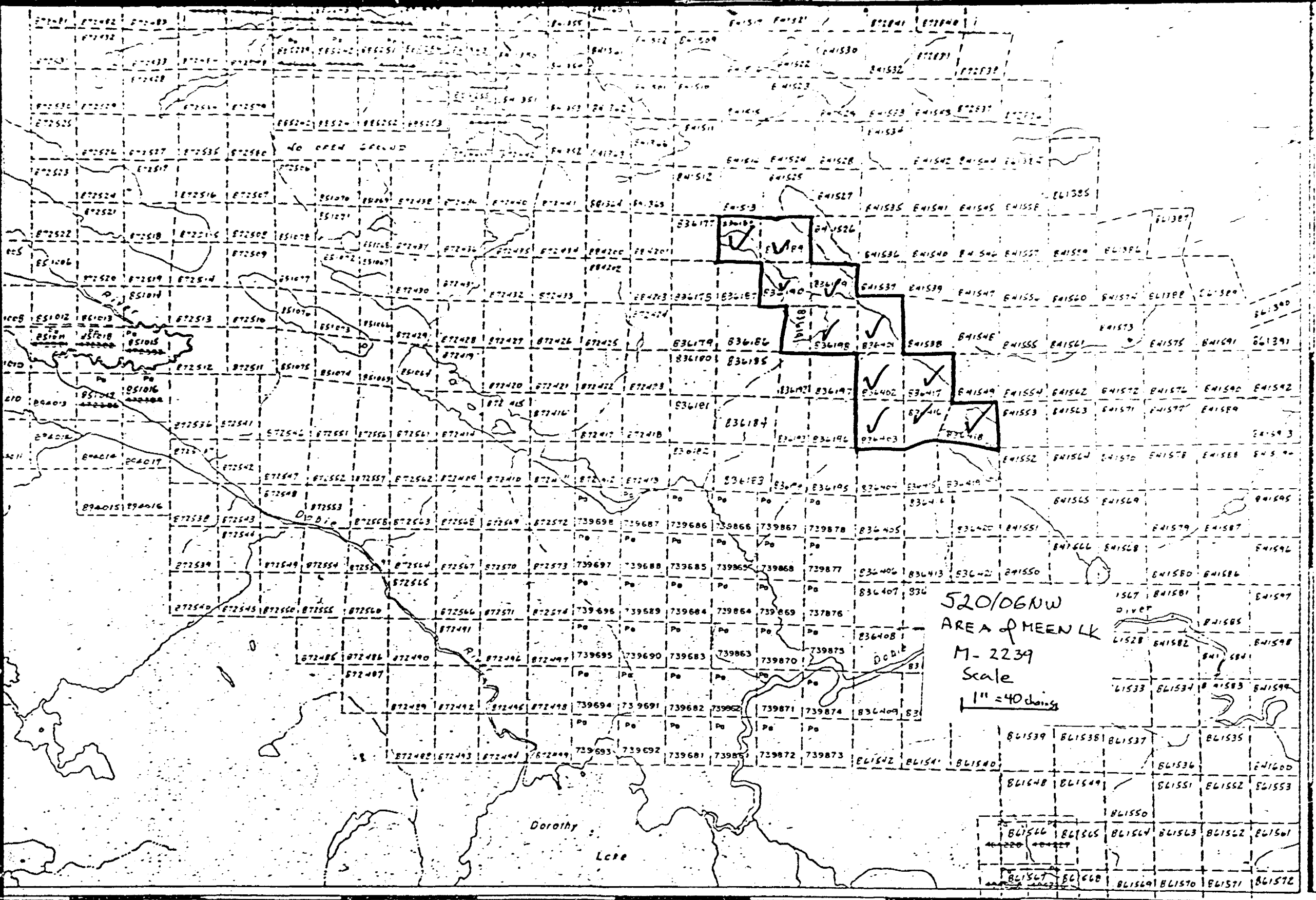
GRAVITY

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

DOBIE LAKE - G



520/06NW
 AREA of MEEN LK
 M-2239
 Scale
 1" = 40 chains

NABEMAKOSEKA LAKE - G-2135

SCALE

AREA

M

M.N.R. ACT

SIoux
 MINING
 RED
 LAND TIT
 KENC



Ontario

DATE MAR

R. Nicholls

#86-150
29467
Mining Act

Type of Survey(s) Electromagnetic	Township or Area Heer Lake
Claim Holder(s) Umex Inc.	Dorothy Lake Area 62122
Address 1935 Leslie St., Don Mills, Ontario M3B 2M3	Prospector's Licence No. T 133
Survey Company Geosearch Consultants Ltd.	Date of Survey (from & to) 20 08 86 12 09 86
Name and Address of Author (of Geo-Technical report) Louis Racic, Suite 360, 111 Queen St. E., Toronto, M5C 1S2	Total Miles of line Cut 9.25 km

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

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

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total (if any)	Electromagnetic	
	Magnetometer	
	Radiometric	
	Other	
	Geological	
	Geochemical	

Autborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Autborne Surveys	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claim		Expense Days Cr.	Mining Claim		Expense Days Cr.
Prefix	Number		Prefix	Number	
Pa	836188				
	836189				
	836190				
	836198				
	836199				
	836401				
	836402				
	836403				
	836416				
	836417				
	836418				

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.

PATRICIA MINING DIV.
RECEIVED
OCT 10 1986
A.M. P.M.
7 8 9 10 11 12 1 2 3 4 5 6

Pa. 836177

Total number of mining claims covered by this report of work: **11**

Date **Oct 6**
Sept 12, 1986

Recorded Holder or Agent's Signature
David Unger

For Office Use Only

Total Days Cr. Date Recorded
Recorded **Oct. 10/86** Mining Recorder

Date Approved Date Recorded
220 *See Revised Statement* Branch Director

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
Louis Racic, Suite 360, 111 Queen St. E., Toronto, Ontario M5C 1S2

Date Certified **Sept. 12, 1986** Certified by (Signature)
Louis Racic



Ministry of
Northern Development
and Mines

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

#86-150

2.9467

Instructions

Please type or print

If number of mining claims traversed exceeds space on this form, attach a list. Only days credits calculated in the "Expenditures" section may be entered in the "Days Cr." columns. Do not use shaded areas below.

Mining Act

Type of Survey(s) Electromagnetic	Township and Area NEED LK
Claim Holder(s) Umex Inc.	Dorothy Lake Area G2122 Proprietor's Licence No.
Address 1935 Leslie St., Don Mills, Ontario M3B 2M3	T 133
Survey Company Geosarch Consultants Ltd.	Date of Survey (From & to) 20 08 86 12 09 86 Day Mo Yr Day Mo Yr
Name and Address of Author (of Geo Technical report) Louis Racic, Suite 360, 111 Queen St. E., Toronto, M5C 1S2	Total Miles of line Cut 9.25 km

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim	Mining Claim		Expend Days Cr.	Mining Claim		Expend Days Cr.
			Prefix	Number		Prefix	Number	
For first survey: Enter 40 days. (This includes line cutting)	Electromagnetic	20		836188	3/4			
	Magnetometer			836189 ✓	1/4			
	Radiometric			836190 ✓	3/4			
	Other			836198 ✓	3/4			
	Geological			836199 ✓	1/2			
For each additional survey using the same grid: Enter 20 days (for each)	Geophysical			836401 ✓	✓			
	Electromagnetic			836402 ✓	1/4			
	Magnetometer			836403	3/4			
	Radiometric			836416	✓			
	Other			836417 ✓	✓			
Man Days Complete reverse side and enter totals here	Geophysical			836418 ✓	3/4			
	Electromagnetic							
	Magnetometer							
	Radiometric							
	Other							
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys	Geophysical							
	Electromagnetic							
	Magnetometer							
	Radiometric							
	Other							

475
11 x 20 = 220
220 + 15.75 =
13.9 (14)

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures ÷ 15 = Total Days Credits

\$ ÷ 15 =

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.

Pa 836177

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

11

Date Oct 6
Sept 12, 1986

Recorded by Holder or Agent (Signature)
David Unger

For Office Use Only		Mining Recorder
Total Days Cr. Recorded	Date Recorded	
	Date Approved as Recorded	Branch Director

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
Louis Racic, Suite 360, 111 Queen St. E., Toronto, Ontario M5C 1S2

Date Certified
Sept. 12, 1986

Certified by Signature
Louis Racic



Recorded Holder: UMAX INC
Township or Area: MEEN AND DOROTHY LAKE AREAS

Table with 2 columns: Type of survey and number of Assessment days credit per claim; Mining Claims Assessed. Includes rows for Geophysical (Electromagnetic, Magnetometer, Radiometric, etc.), Geological, and Geochemical surveys.

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims
not sufficiently covered by the survey
insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

UMEX INC.

1935 Leslie Street, Don Mills, (Toronto) Canada M3B 2M3
Cable Address UMEXCORP, TORONTO
Telephone (416) 445-8832 Telex 06-966679

October 6, 1986

G.6345

RECEIVED
OCT 11 1986
MINING LANDS SECTION

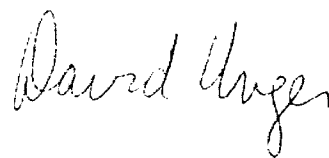
Ministry of Northern Development
and Mines
Mining Lands Branch
Whitney Block, Queen's Park
Toronto, Ontario
M7A 1W3

Dear Sir,

Please find enclosed copy of Report of Work, Technical Report and related maps for geophysical work performed on 11 claims in the Meen Lake area, claim map G.2122.

We hereby request that this work be recorded as assessment work on these claims.

Yours truly,



David Unger
Geologist

/tn
encl.

October 17, 1986

File: 2.9467

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 3000
Sioux Lookout, Ontario
POV 2T0

Dear Sir:

We received reports and maps on October 15, 1986 for a Geophysical (Electromagnetic) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims PA 836188, et al, in the Area of Dorothy Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with your office prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

AB/mc

cc: Umex Inc
1935 Leslie Street
Don Mills, Ontario
M3B 2M3

Louis Racic
Suite 365
111 Queen Street East
Toronto, Ontario
M5C 1S2

2.9467

December 3, 1986

Your File: 86-150
Our File: 2.9467

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 3000
Sioux Lookout, Ontario
POV 2T0

Dear Sir:

RE: Notice of Intent dated October 31, 1986
Geophysical (Electromagnetic) Survey
on Mining Claims PA 836188, et al, in
Meen and Dorothy Lake Areas

The assessment work credits, as listed with the above-mentioned
Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and
so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc

cc: Umex Inc
1935 Leslie Street
Don Mills, Ontario
M3B 2M3

Louis Racic
Suite 360
111 Queen Street East
Toronto, Ontario
M5C 1S2

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Sioux Lookout, Ontario

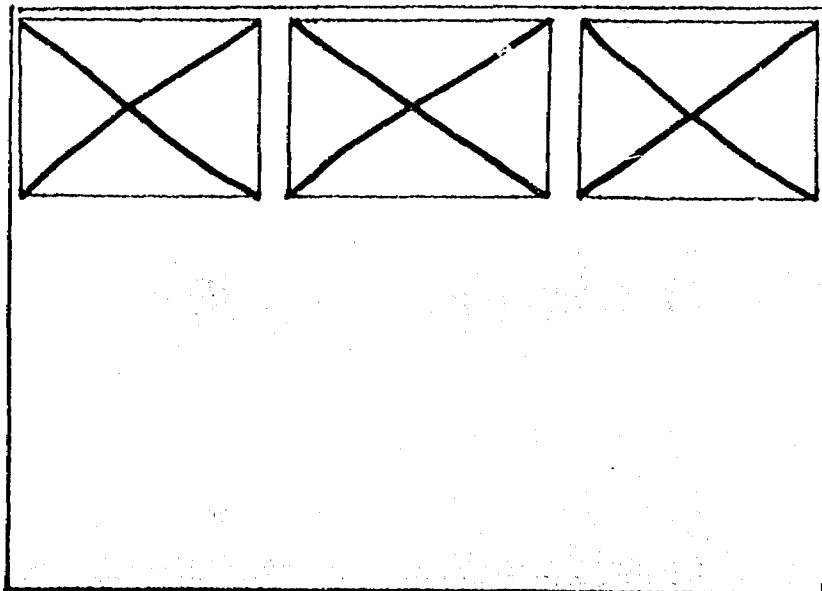
Encl.

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

520/06NW-0021 # 1-3

LOCATED IN THE MAP
CHANNEL IN THE
FOLLOWING SEQUENCE

(X)

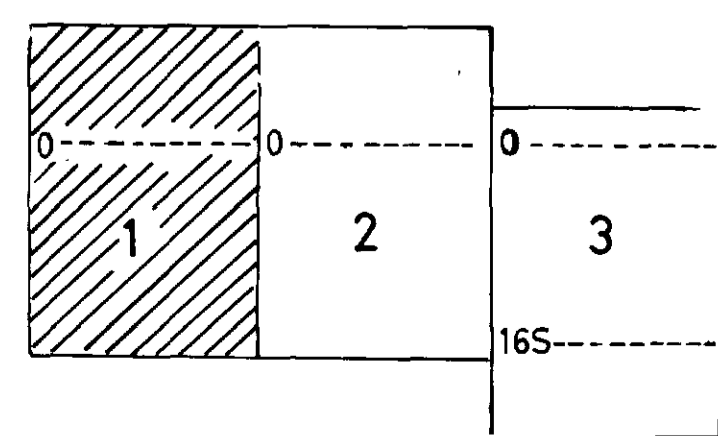
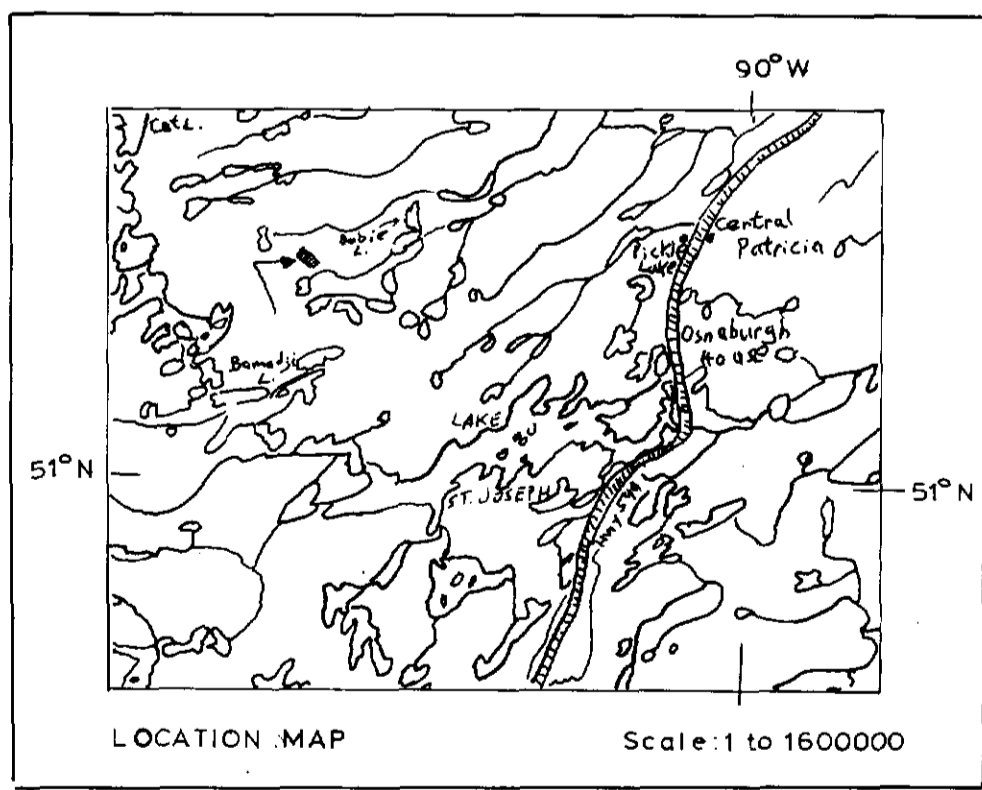
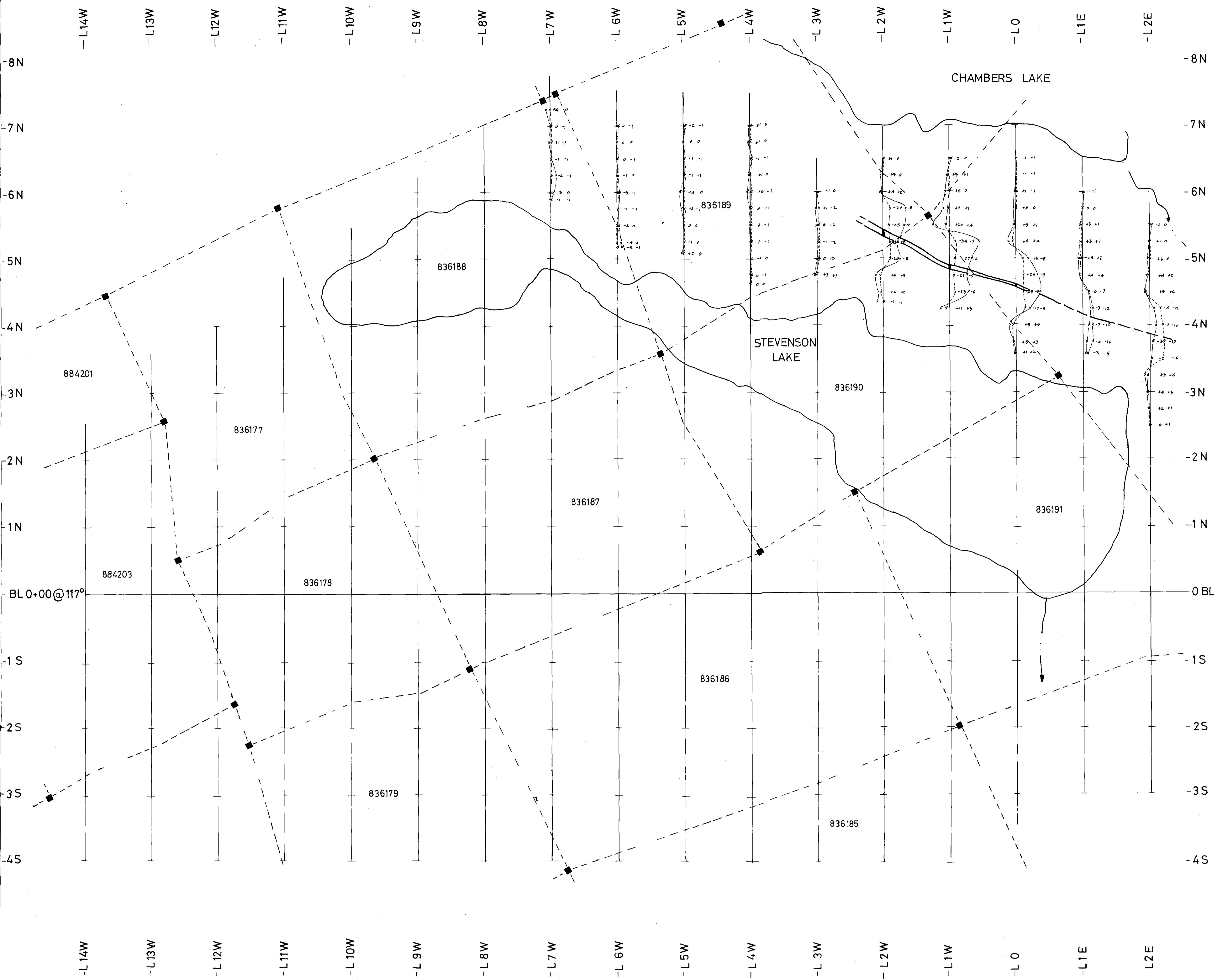


FOR ADDITIONAL

INFORMATION

SEE MAPS:

520/06 NW-0021 # 4



520/06NW-0021, #2



LEGEND

COIL INTERVAL — 100 m
 FREQUENCY — 888 Hz
 PROFILE SCALE — 1 cm to 20%

CONDUCTOR —
 Strong Weak Indefinite

CONDUCTIVE ZONE —
 (one or more conductors)
 Strong Weak

In-Phase Out-of-Phase

Kee-Kee

2.9467

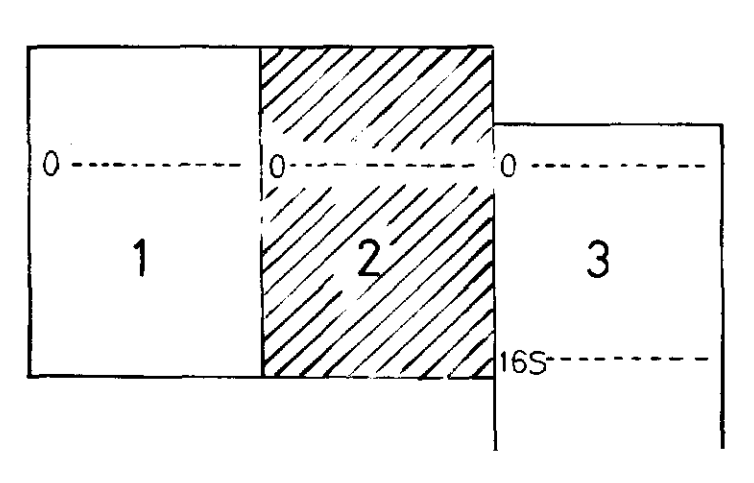
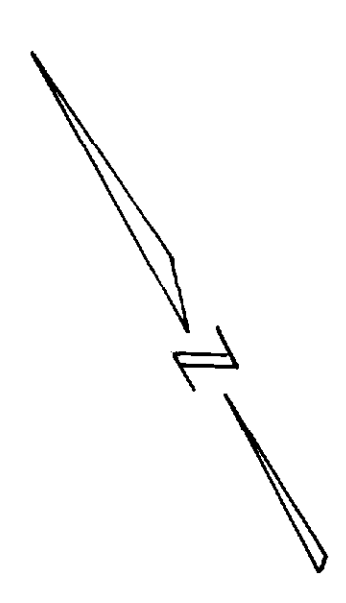
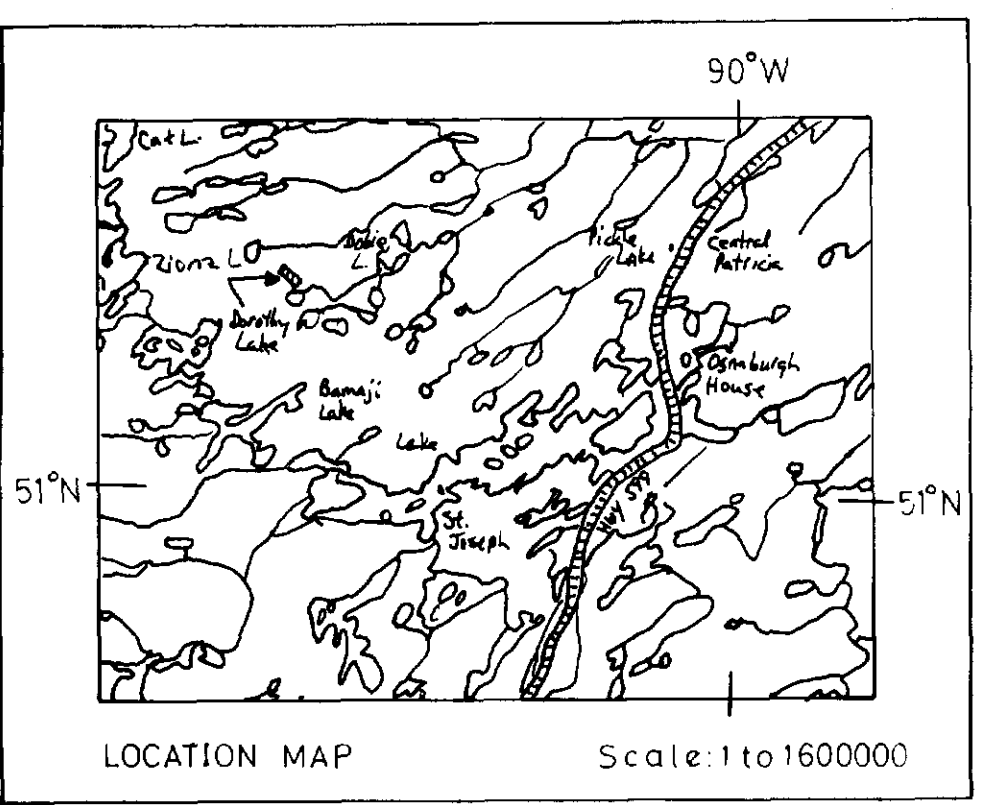
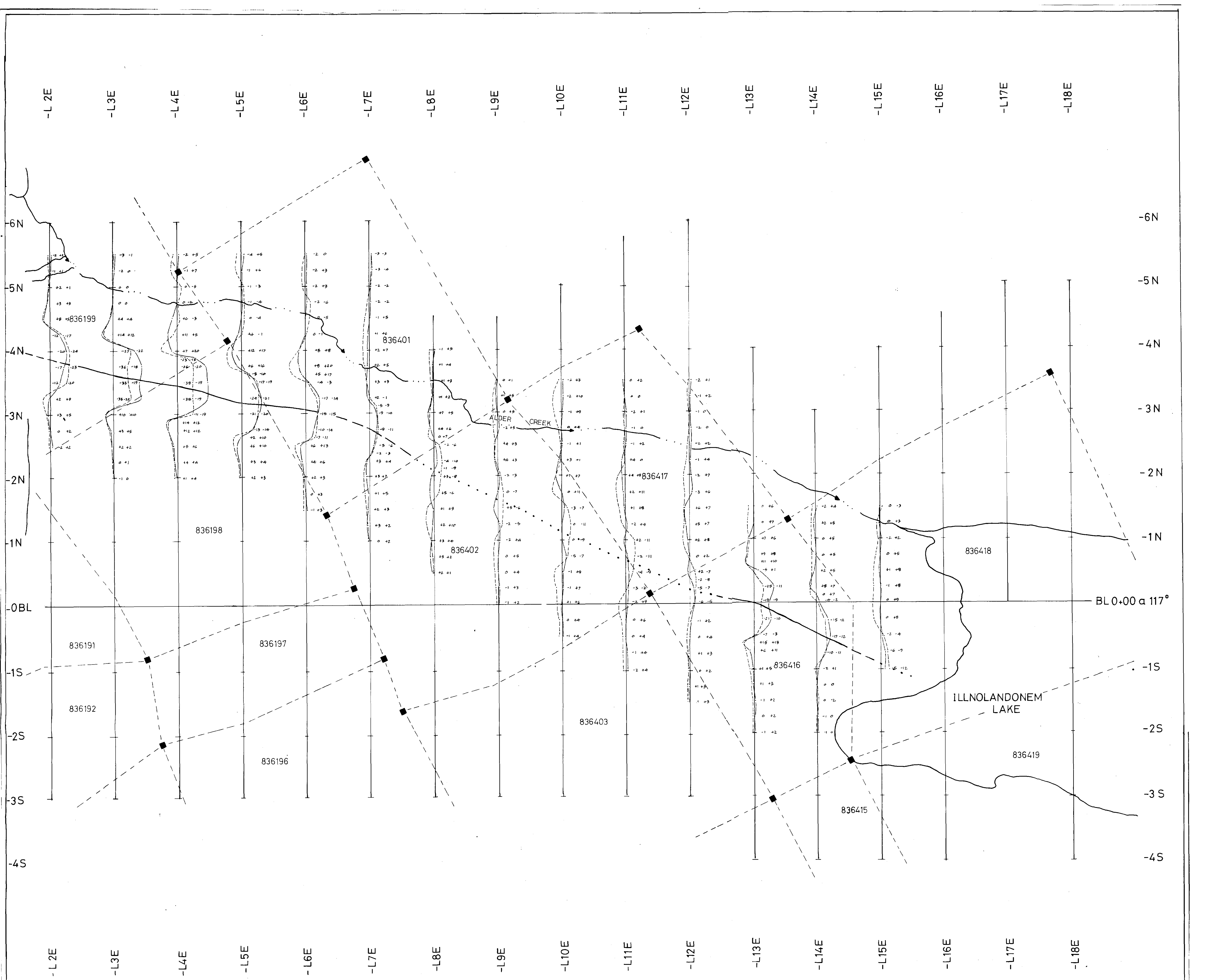
UMEX INC

CROBIE PROJECT
 Patricia Mining Division
 DOROTHY LAKE PROPERTY

Horizontal Loop Electromagnetic Survey
 888 Hz

Survey by: GEOSEARCH CONSULTANTS LTD. Date: Aug 1986/Drawn: M.M.
 Scale: 1 to 2500 N.T.S. 52 0/6
 Claim Man: Moon Lake R2122





520/06NW-0021, #3

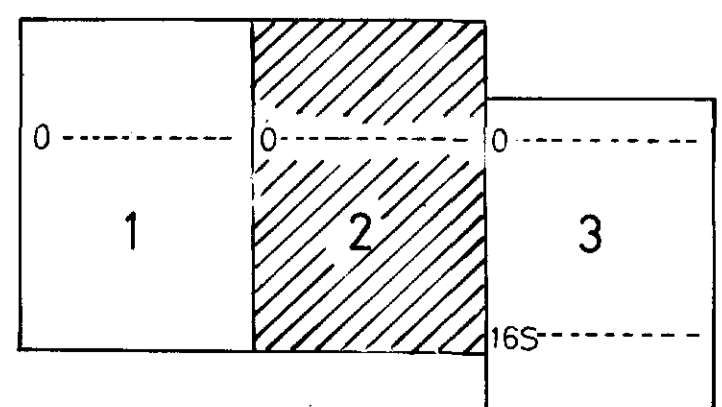
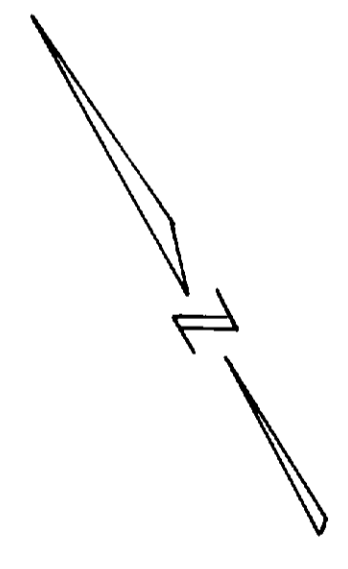
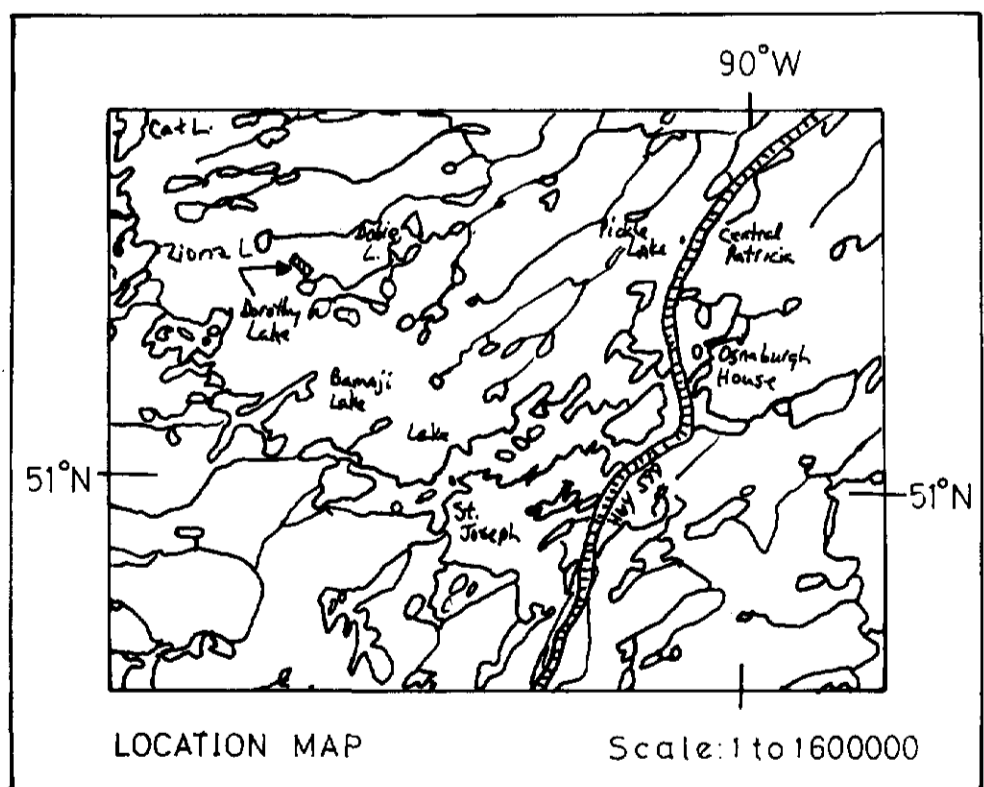
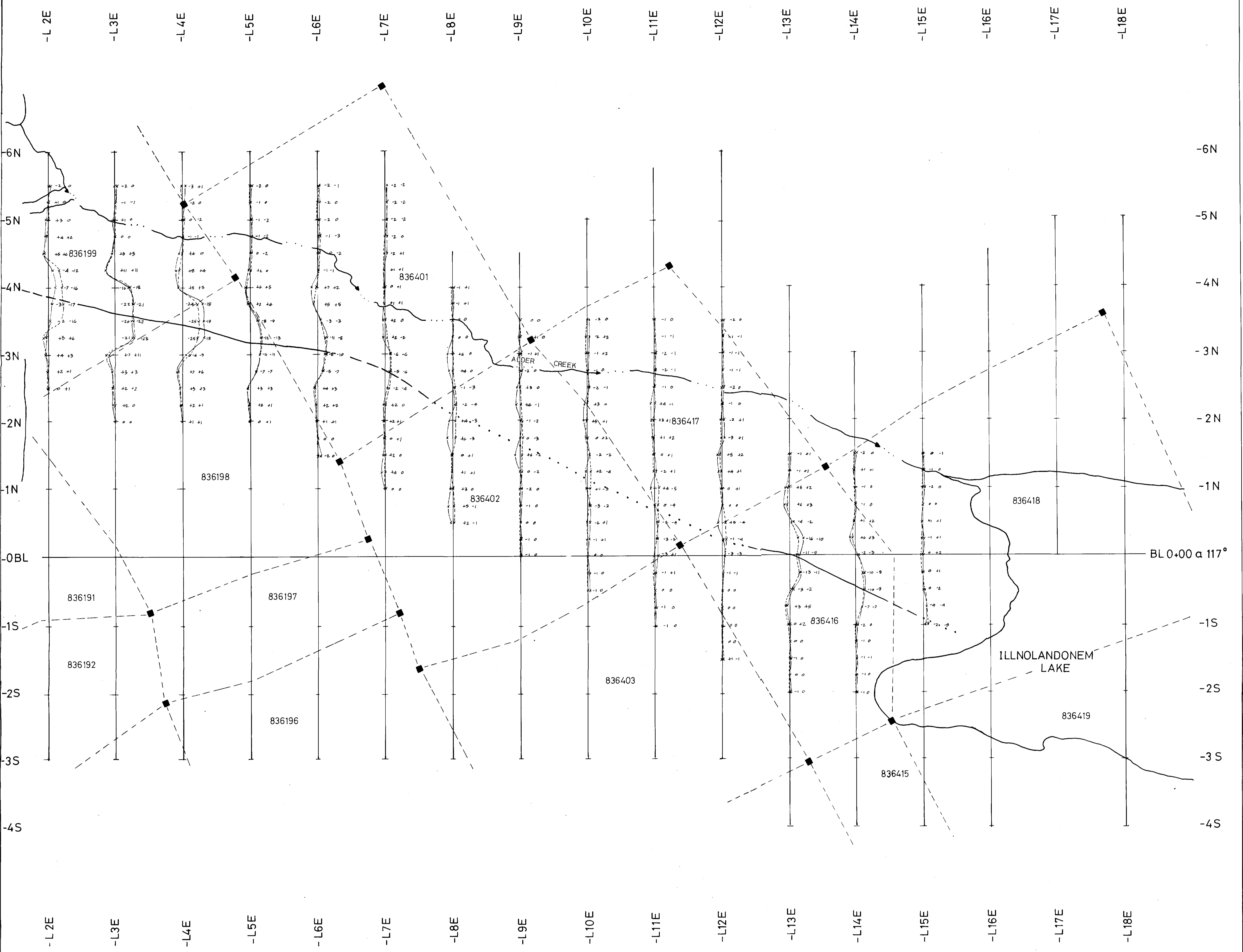


LEGEND
 COIL INTERVAL — 100 m
 FREQUENCY — 3555 Hz
 PROFILE SCALE — 1 cm to 20%
 CONDUCTOR — (one or more conductors)
 CONDUCTIVE ZONE — (one or more conductors)
 In phase / Out of phase

2.9467

UMEX INC
CROBIE PROJECT
 Patricia Mining Division
DOROTHY LAKE PROPERTY
 Horizontal Loop Electromagnetic Survey
 3555 Hz

Survey by: GEOSARCH CONSULTANTS LTD. Date: Aug. 1986 / Drawn: M.M.
 Scale: 1 to 2500 NTS 52 0/6
 Claim Map Meen Lake S 2122 Dwg no 2 MAP 86-154



LEGEND
 COIL INTERVAL — 100 m
 FREQUENCY — 888 Hz
 PROFILE SCALE — 1cm to 20%

CONDUCTOR —
 Strong Weak Indefinite

CONDUCTIVE ZONE —
 (one or more conductors)
 Strong Weak

In Phase Out of Phase

29467

UMEX INC	
CROBIE PROJECT Patricia Mining Division	
DOROTHY LAKE PROPERTY	
Horizontal Loop Electromagnetic Survey 888 Hz	
Survey by: GEOSSEARCH CONSULTANTS LTD. Date: Aug 1986 / Drawn: M.M.	Scale: 1 to 2500
Claim Map Meen Lake G2122	Dwg no 2 MAP 86-55

520/06 NW-0021, #4