



41010NW0055 2.5569 TOOMS

010

KIDD CREEK MINES LTD.

REPORT ON GEOPHYSICAL WORK

TOOMS TOWNSHIP

SWAYZE BELT PROJECT

**RECEIVED**

MAY 2 1983

**MINING LANDS SECTION**

MAY, 1983

M.W. ZANG

## SUMMARY AND RECOMMENDATIONS

A single highly conductive zone was detected by a horizontal loop survey carried out on a group of four claims in Tooms Township. A coincident magnetic survey carried out in March 1983 gave good correlating anomalies over most of the conductor.

Geological mapping and a V.L.F. survey is planned for the summer of 1983 over the claim group. Plans for further geophysical surveys will be based on the results of the summer program.



41010NW0055 2.5569 T00MS

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## INTRODUCTION

In March of 1983 a geophysical program consisting of proton precession magnetometer and horizontal loop electromagnetic surveys was carried out on four contiguous claims in Tooms Township. The claims, P 636233 to P 636236 inclusive are located in the west central part of the township located 140 kilometres southwest of Timmins.

Access to the property was attained by helicopter from Timmins.

There has been no previous work recorded on this property but the ground was staked in 1978.

People involved in the field work include R. Majcher, M. Mageau and D. Londry.

## SURVEY DESCRIPTION

The base line of the property runs north-south with crosslines cut at 100 metre intervals and stations established every 20 metres.

Magnetic readings were taken with a Geometrics G816 proton precession magnetometer. This instrument measures the earth's total magnetic field to an accuracy of  $\pm 1$  gamma.

Base stations were established by looping at all the cross lines on base line 0. All other readings were tied into these stations. A total of 419 stations were sampled along 7.21 kilometres of line.

The horizontal loop survey was carried out with an Apex Parametrics MaxMin II using a coil separation of 120 metres. Readings were taken every 40 metres, 20 metres over anomalous areas at frequencies of 444 and 1777 Hz. A total of 265 stations were sampled along 6.12 kilometres of line.

### SURVEY RESULTS

The horizontal loop survey outlined a single, highly conductive zone labelled anomaly 'A'. The interpretation of this anomaly at the two survey frequencies is given in Tables 1 and 2.

The anomaly found on Line 100 South through to Line 600 South represents a strong, deeply buried bedrock conductor. The responses on Lines 100, 200 and 300 South are coincident with the north flank of a 500 gamma magnetic high that trends east southeast. On Line 400 South the anomaly is found in a 200 gamma magnetic low whereupon it trends east northeast through a 2000 gamma mag high and ends in a slight magnetic low. The HEM anomaly coincident with this magnetic high on Line 500 South indicates a conductive source at a depth of 70 metres from surface.

MWZ/mg

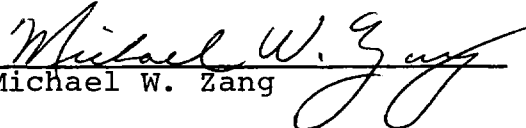
  
Michael W. Zang

Table 1: Anomaly 'A' March 1983 HEM Anomalies Tooms 4, 1777 Hz, 120m spacing

Line	Anomaly Center	Anomaly Width	Indicated Depth	I.P. Max.	O.P. Max.	Response Parameter	Conductivity Thickness	Remarks
100S	0+50 N	Thin	NC	NC	NC	NC	NC	Marginal Response North Flank of 600 gamma Mag High
200S	0+05 N	Thin	NC	NC	NC	NC	NC	Marginal Response North Flank of 600 gamma Mag High
300S	0+20 S	Thin	40m	-17	-6	35	20 mhos	Assume Dip 60° West North Flank of 600 gamma Mag High
400S	0+36 S	Thin	40m	-17	-7	35	20 mhos	Assume Dip 90° 200 gamma mag low.
500S	0+26 N	Thin	70m	-4	-2	15	9 mhos	Assume Dip 90° Just North of a single station 2000 gamma anomaly
600S	0+94 N	14m	40m	-17	-6	35	20 mhos	Assume Dip 90° Slight magnetic low.

Table 2: Anomaly 'A' March 1983 HEM Anomalies Tooms 41, 444 Hz, 120m spacing.

Line	Anomaly Center	Anomaly Width	Indicated Depth	I.P. Max.	O.P. Max.	Response Parameter	Conductivity Thickness	Remarks
300S	0+20 S	Thin	50m	-10	4	30	70 mhos	Assume Dip 60° West on North Flank of a 600 gamma mag anomaly
400S	0+36 S	Thin	45m	-14	-6	20	50 mhos	Assume Dip 90° 200 gamma mag low.
500S	0+35 N	Thin	70m	-2	-2	5	12 mhos	Assume Dip 90° Just North of a 2000 gamma single station anomaly.
600S	0+90 N	4m	50m	-9	-7	12	28 mhos	Assume Dip 90° In a slight magnetic low.

**Kidd Creek Mines Ltd.**

Box 1140  
571 Moneta Avenue,  
Timmins, Ontario P4N 7H9  
(705) 267-1188



41010NW0055 2.5569 TOOMS

900

Exploration Division

May 19, 1983

Mr. E.F. Anderson  
Director, Land Management Branch  
Whitney Block, Room 6450  
Queen's Park  
TORONTO, Ontario  
M7A 1W3

**RECEIVED**

MAY 24 1983

**MINING LANDS SECTION**

Dear Sir:

Re: Tooms Township Assessment Report

Enclosed please find duplicate copies of a report and maps covering claims in Tooms Township. The claims aforementioned are P-636233, P-636234, P-636235 and P-636236.

Your prompt attention to this matter would be greatly appreciated.

Yours very truly,

*Michael W. Zang*  
MIKE ZANG

MZ/pp  
Encls.





#78 636233

2.5569

1983 06 01

Mr. William L. Good  
Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received reports and maps for a Geophysical  
(Electromagnetic and Magnetometer) survey submitted under  
Special Provisions (credit for Performance and Coverage)  
on mining claims P 636233 et al in the Township of Tooms.

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

Yours very truly,

E. F. Anderson  
Director  
Land Management Branch  
Whitney Block, Room 6450  
Queen's Park  
Toronto, Ontario  
M7A 1W3

Phone: (416) 965-1380

A.Barr:md

cc: Kidd Creek Mines Ltd.  
571 Moneta Avenue  
P.O. Box 1140  
Timmins, Ontario  
P4N 7H9 Attention: Mr. M. Zang.



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

May 23rd

2.5569  
#78  
The Mining Act P-636233

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

Type of Survey(s) <b>Geophysical</b>	Township or Area <b>Tooms</b>
Claim Holder(s) <b>Kidd Creek Mines Ltd.</b>	
Address <b>571 Moneta Ave., P.O. Box 1140, Timmins, Ontario P4N 7H9</b>	
Survey Company <b>Kidd Creek Mines Ltd.</b>	Prospector's Licence No. <b>T-1</b>
Date of Survey (from & to) Day   Mo   Yr   Day   Mo   Yr <b>01   07   82   23   03   83</b>	
Total Miles of line Cut <b>9.6 kilometres</b>	
Name and Address of Author (of Geo-Technical report) <b>M. Zang, P.O. Box 1140, 571 Moneta Ave., Timmins, Ontario P4N 7H9</b>	

**Credits Requested per Each Claim in Columns at right**

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20
	- Magnetometer	40
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
Man Days Complete reverse side and enter total(s) here	Geological	
	Geochemical	
	Geophysical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
Geological		
Geochemical		

**Mining Claims Traversed (List in numerical sequence)**

Mining Claim	Prefix	Number	Expend. Days Cr.	Mining Claim	Prefix	Number	Expend. Days Cr.
	P	636233					
		636234					
		636235					
		636236					

**RECEIVED**  
APR 11 1983  
MINING LANDS SECTION

**RECORDED**  
MAR 24 1983  
Receipt No. ....

**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.

Total number of mining claims covered by this report of work. **4**

Date **March 23/83** Recorded Holder or Agent (Signature) *[Signature]*

**For Office Use Only**

Total Days Cr. Recorded <b>240</b>	Date Recorded <b>MAR 24/83</b>	Mining Recorder <i>[Signature]</i>
Date Approved/As Recorded <b>83.04.09</b>	Regional Mining Recorder <i>[Signature]</i>	

**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.



Ministry of  
Natural  
Resources

Geotechnical  
Report  
Approval

File  
**2.5569**

*June 13/83*

Mining Lands Comments


To: Geophysics *Mr. Barlow.*

Comments

<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date <i>Sept 1/83</i>	Signature <i>Ry Rh</i>
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To: Geology - Expenditures

Comments

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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To: Geochemistry

Comments

*LD*

<input type="checkbox"/> Approved	<input type="checkbox"/> Wish to see again with corrections	Date	Signature
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Ministry of Natural Resources

File \_\_\_\_\_

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL  
TECHNICAL DATA STATEMENT

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  
Township or Area TOOMS  
Claim Holder(s) KIDD CREEK MINES LTD.  
571 Moneta Avenue, Box 1140, Timmins  
Ontario  
Survey Company Kidd Creek Mines Ltd.  
Author of Report Michael W. Zang  
Address of Author Same as above  
Covering Dates of Survey July 19/82 - March 15/83  
(linecutting to office)  
Total Miles of Line Cut 6

MINING CLAIMS TRAVERSED  
List numerically

P 636233  
(prefix) (number)  
P 636234  
P 636235  
P 636236

SPECIAL PROVISIONS  
CREDITS REQUESTED

DAYS  
per claim

Geophysical  
-Electromagnetic 20  
-Magnetometer 40  
-Radiometric \_\_\_\_\_  
-Other \_\_\_\_\_  
Geological \_\_\_\_\_  
Geochemical \_\_\_\_\_

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

ENTER 20 days for each  
additional survey using  
same grid.

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

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: May 19, 1983 SIGNATURE: Michael W. Zang  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications 24262

Previous Surveys

File No.	Type	Date	Claim Holder

If space insufficient, attach list

RECEIVED

MAY 23 1983

MINING LANDS SECTION

TOTAL CLAIMS 4

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations Mag: 419 HL: 265 Number of Readings Mag: 419 HL: 530
Station interval Mag: 20m HL: 40m Line spacing 100m
Profile scale 1 cm = 10%
Contour interval 100 gammas

MAGNETIC

Instrument Geometrics G816 Proton Precession Magnetometer
Accuracy - Scale constant + 1 gamma
Diurnal correction method Closed Loop
Base Station check-in interval (hours) Approximately 1/2 hour
Base Station location and value Intersection of grid lines and base line.

ELECTROMAGNETIC

Instrument Apex Parametrics MaxMin II
Coil configuration Horizontal Loop
Coil separation 120m
Accuracy +/- 1%
Method: [ ] Fixed transmitter [ ] Shoot back [x] In line [ ] Parallel line
Frequency 1777 Hz, 444 Hz. (specify V.L.F. station)
Parameters measured Percent of 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

Halcrow Twp. M.906

THE TOWNSHIP  
OF  
**TOOMS**

DISTRICT OF  
**SUDBURY**

PORCUPINE  
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

Mountbatten Twp. - M.875  
INDIAN RESERVE No.76 A

Greenlaw Twp. - M.895

Eisenhower Twp. M.781

**LEGEND**

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S
LEASES	Ⓛ
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 around  
all lakes and rivers.

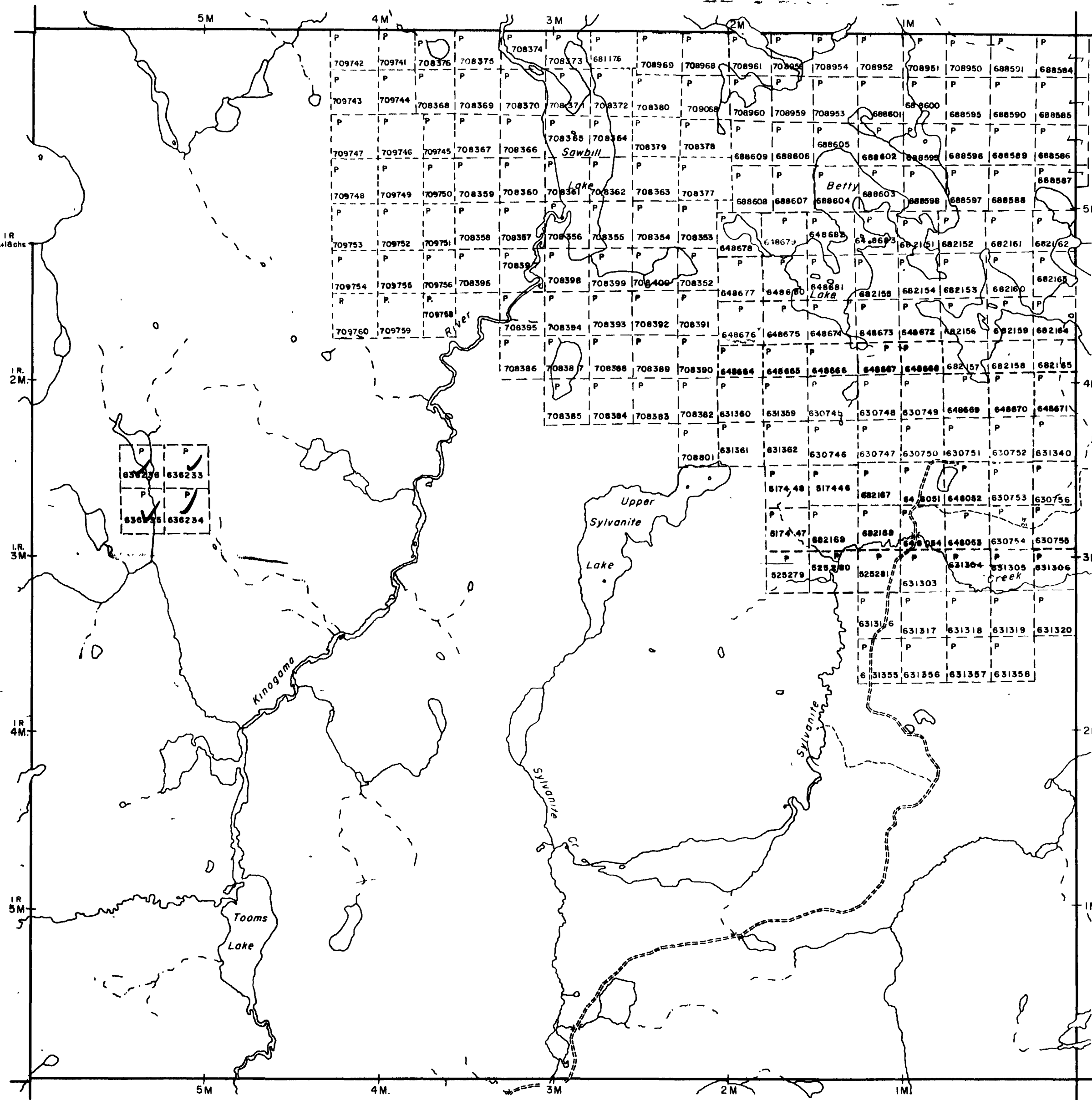
DATE OF ISSUE

SEP - 8 1983

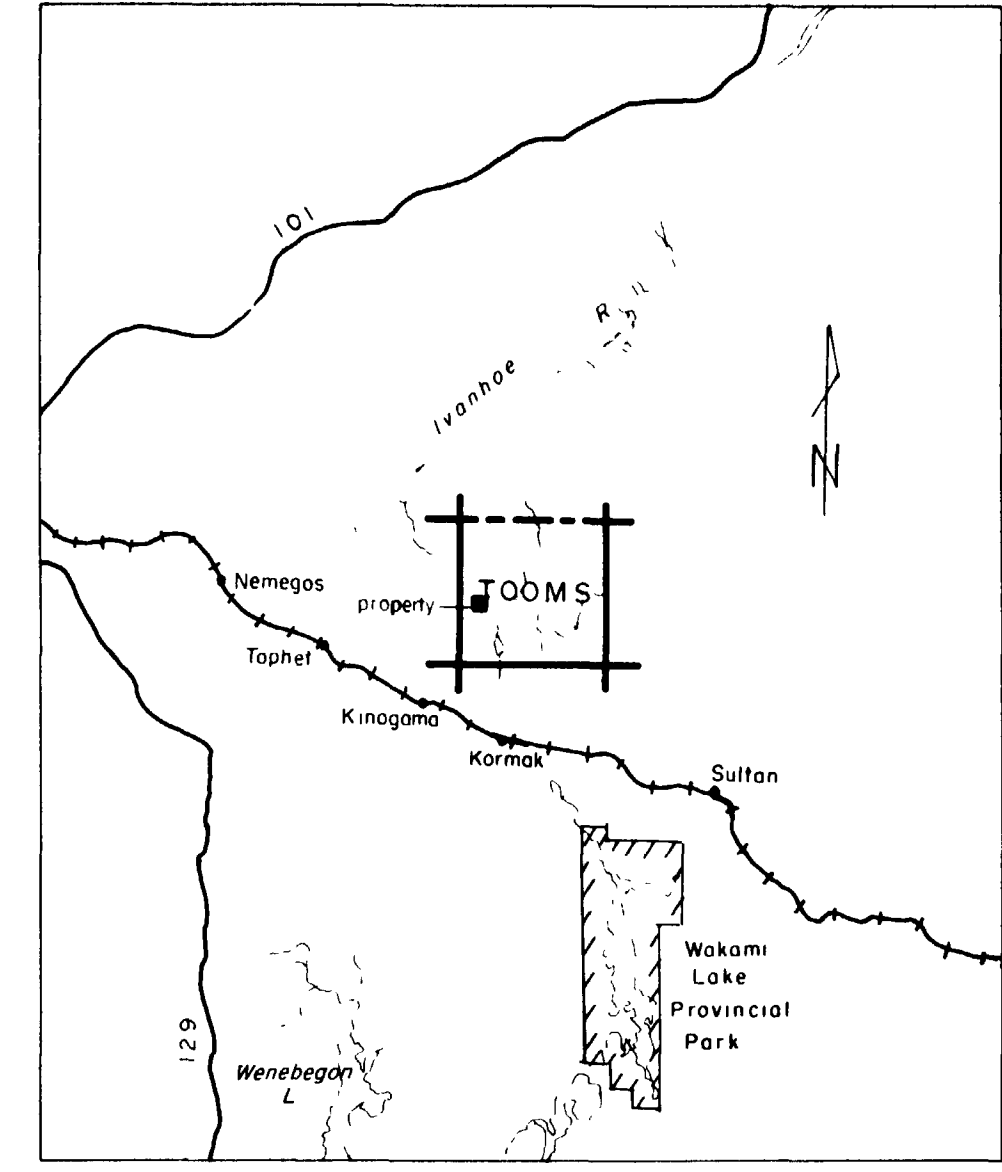
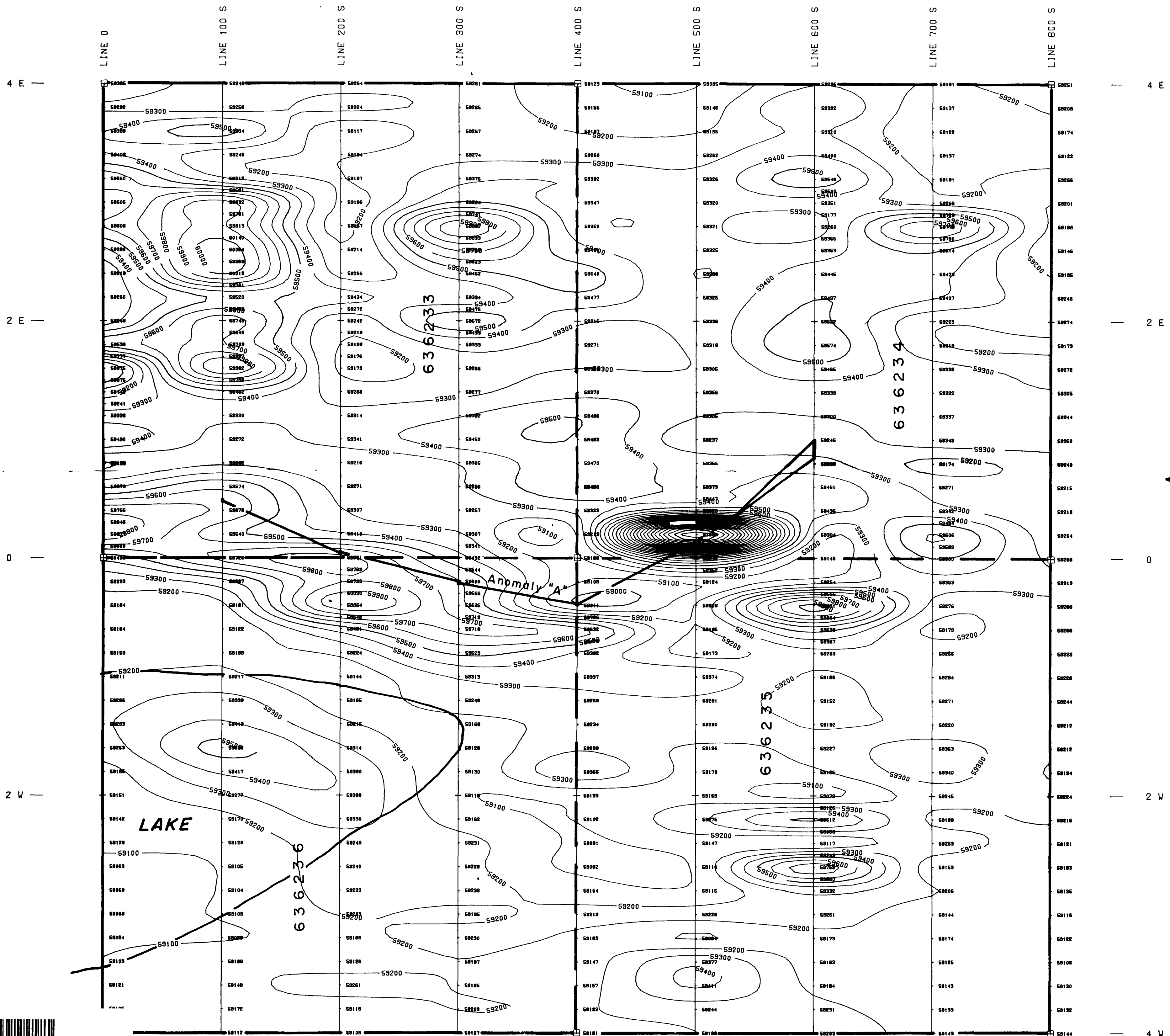
Ministry of Natural Resources  
TORONTO

PLAN NO. **M.1159**

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEY AND MAPPING BRANCH



41010N0055 2.5569 TOOMS



ASTRO

HEM Anomaly

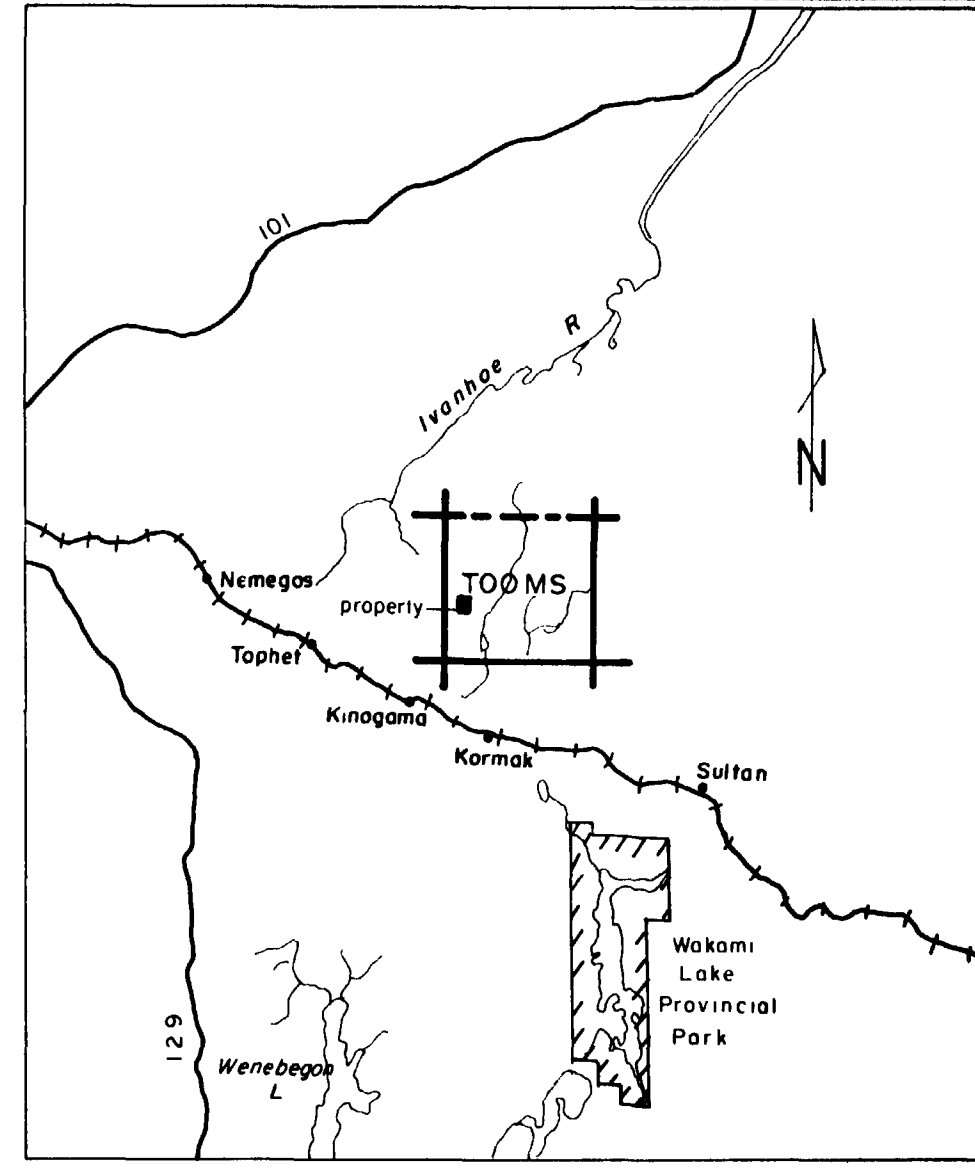
**LEGEND**

INSTRUMENT : GEOMETRICS G816  
 TYPE : PROTON PRECESSION MAGNETOMETER  
 READINGS IN GAMMAS  
 ▲ MAGNETIC BASE STATION

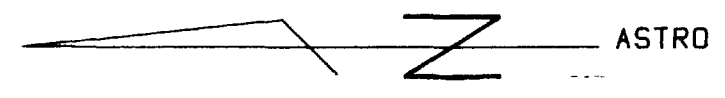
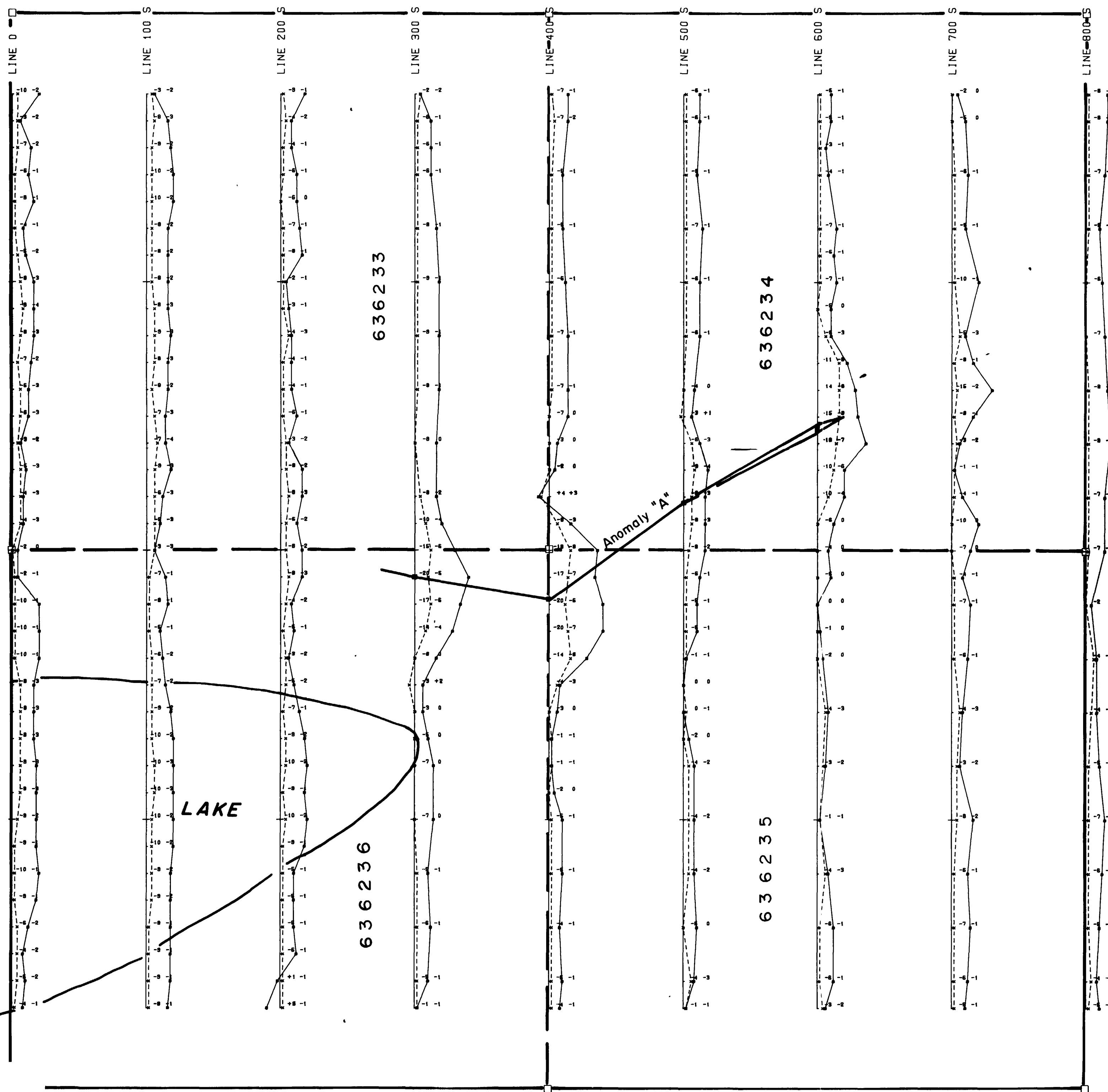


<b>KIDD CREEK MINES LTD.</b>	
<b>MAGNETIC SURVEY</b>	
<b>SWAYZE BELT PROJECT</b>	
<b>TOOMS #1</b>	
NTS: 41-0-10	PROJ. #56
WORK BY <i>Michael W. Gray</i>	DATE 1983





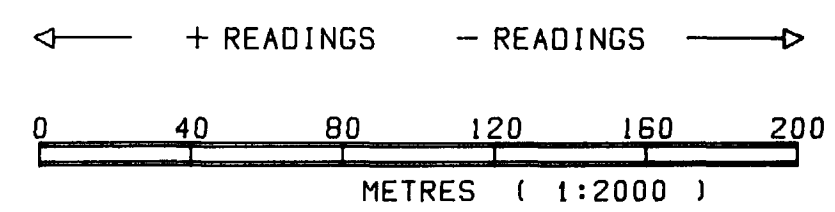
KEY MAP 1" = 1/4 mile



LEGEND

444 Hz  
 IN-PHASE READINGS  
 QUADRATURE READINGS

INSTRUMENT : APEX PARAMETRICS MAXMIN II  
 FREQUENCY : 444 Hz  
 COIL SPACING : 120 METRES  
 PROFILE SCALE : 1 CM = 10%



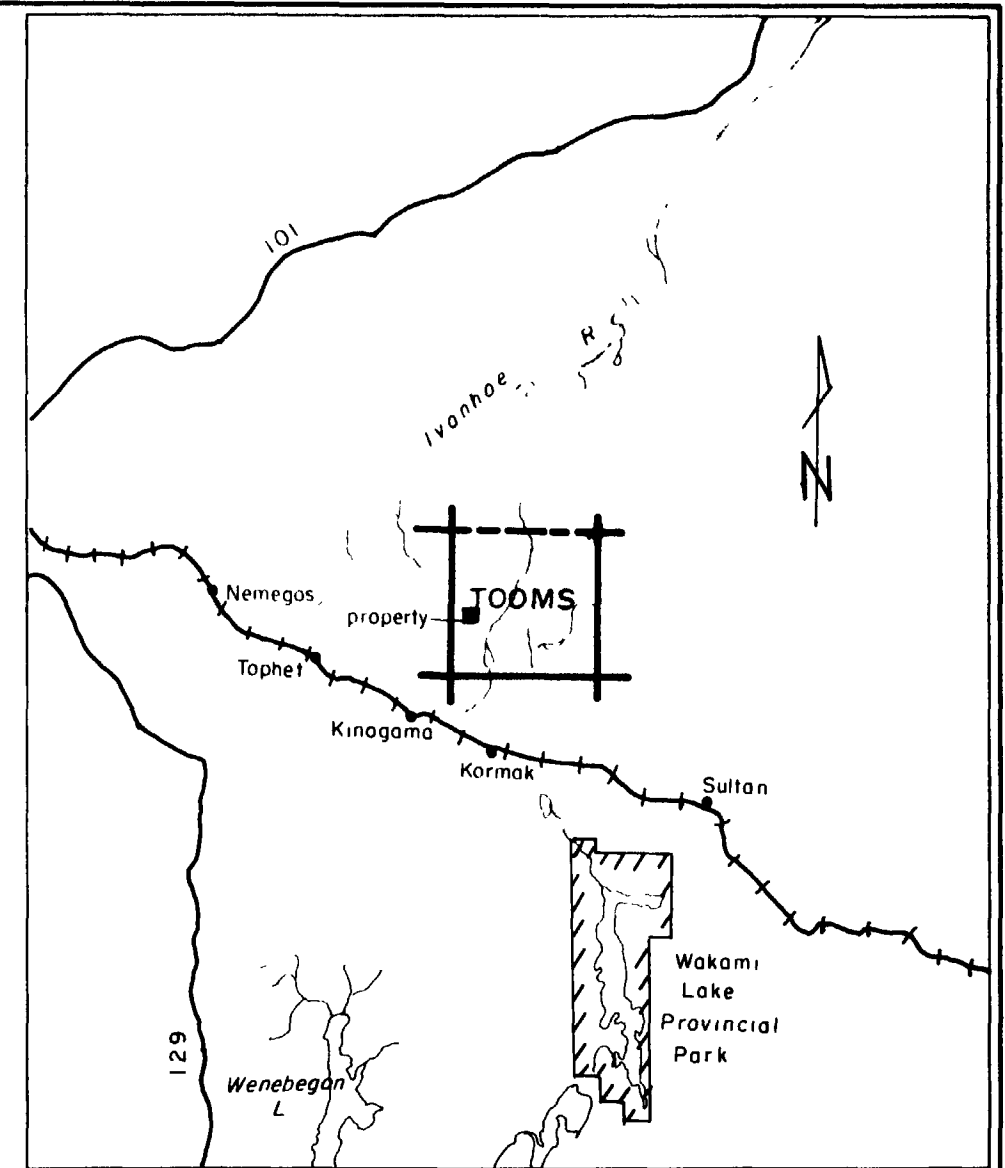
**KIDD CREEK MINES LTD.**  
 HORIZONTAL LOOP SURVEY  
 SWAYZE BELT PROJECT  
 TOOMS 41

NTS: 41-0-10      PROJ. #56

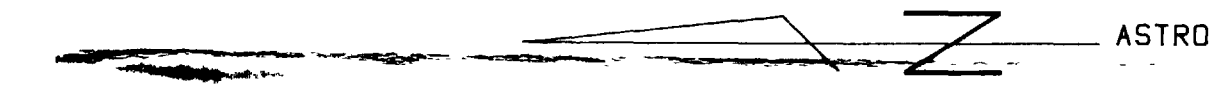
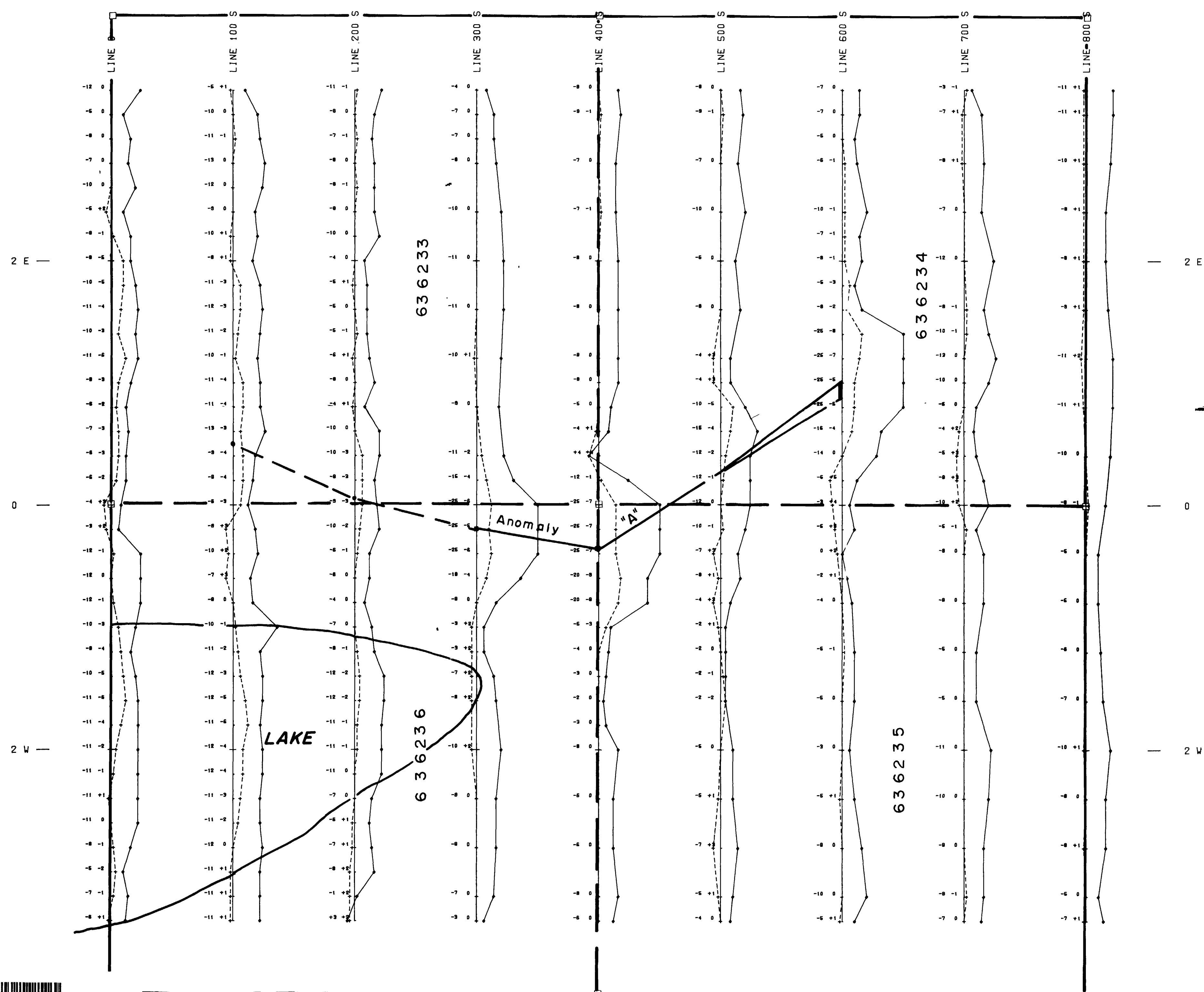
WORK BY <i>Michael W. Z...</i>	DATE 1983
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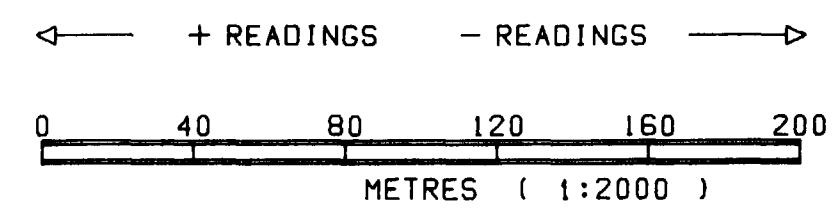
KEY MAP 1" = 1/4 mile



**LEGEND**

1777 Hz  
 IN-PHASE READINGS  
 QUADRATURE READINGS

INSTRUMENT : APEX PARAMETRICS MAXMIN II  
 FREQUENCY : 1777 Hz  
 COIL SPACING : 120 METRES  
 PROFILE SCALE : 1 CM = 10%



**KIDD CREEK MINES LTD.**  
**HORIZONTAL LOOP SURVEY**  
**SWAYZE BELT PROJECT**  
**TOOMS 41**

NTS:41-0-10 PROJ.#56

JORK BY: *Michael W. Z...* DATE: 1983

