



42A04NW0107 2.14147 PENHORWOOD

010

REPORT ON  
GEOPHYSICAL WORK  
ON  
PENHORWOOD TOWNSHIP CLAIMS  
PENHORWOOD & KENOGAMING TOWNSHIPS  
FOR  
FALCONBRIDGE LIMITED

NTS: 42-B/1

PROJ #: 8198

**RECEIVED**

MAY 28 1991

**MINING LANDS SECTION**

MAY 1991

D. LONDRY  
TIMMINS GEOPHYSICS LTD.

## SUMMARY AND RECOMMENDATIONS

HLEM and magnetic surveys were carried out over 25 claims which straddle the Penhorwood-Kenogaming Township line.

West of the Nat River, the Nat River Iron Formation is mapped by good conductivity (Anomaly 'A') and a strong magnetic response which strikes northeast. Anomaly 'B', located 80 metres south of 'A' has not been previously drilled. It is recommended that both anomalies are tested by one hole located between Lines 7900 and 8000 East.

East of the Nat River, the Nat River Iron Formation is a poor conductor with a weak magnetic response which strikes east-west. It is recommended that the formation is tested between 9700 and 9800 East where there is good width and a coincident magnetic high anomaly.



42A04NW0107 2.14147 PENHORWOOD

010C

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## INTRODUCTION

During March 1991, magnetic and horizontal loop electromagnetic (HLEM) surveys were carried out on the Penhorwood Property for Falconbridge Limited.

The property is located approximately 63 kilometres southwest of the city of Timmins in the Porcupine Mining Division (Figure 1). It consists of 25 contiguous claims between the Nat River in Penhorwood Township and Hanrahan Lake in Kenogaming Township. The claims are numbered as follows:

P-1169776 P-1169787 inclusive

P-1169801 P-1169813 inclusive

The property was accessed by snowmobile along bush roads which were accessed from Highway 101.

The field data was collected by J. DerWeduwen, L. Varin and B. Pigeon.

## GENERAL GEOLOGY

The regional geology is described by Milne (1972). The area is underlain by isoclinally folded Archean metavolcanics and metasediments. These rocks are intruded by ultramafic bodies and north-south striking diabase dikes.

The property covers a section of the Nat River Iron Formation which is located between the Hanrahan Lake felsic volcanic complex under the north half of the property and mafic volcanics to the south. Serpentinized ultramafic intrusives within the Hanrahan Lake Complex occur as conformable sheets.

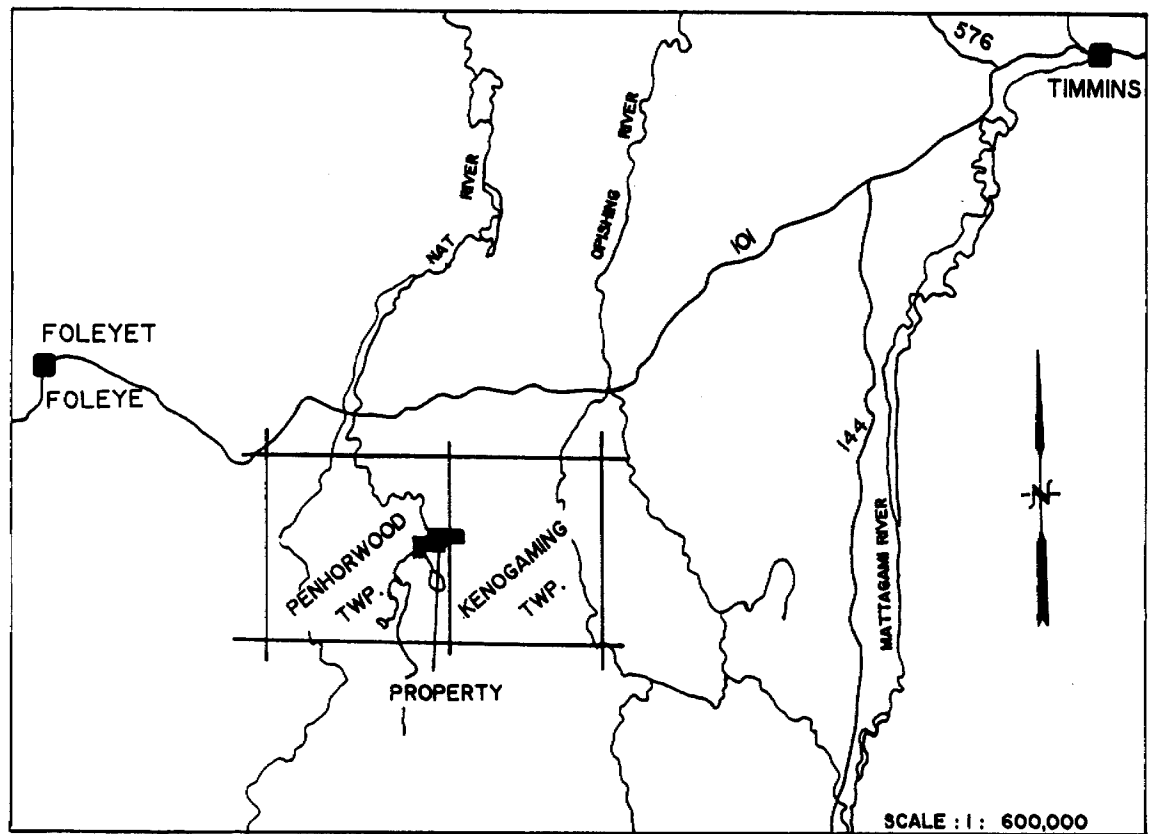


Figure 1(a) : Location Map

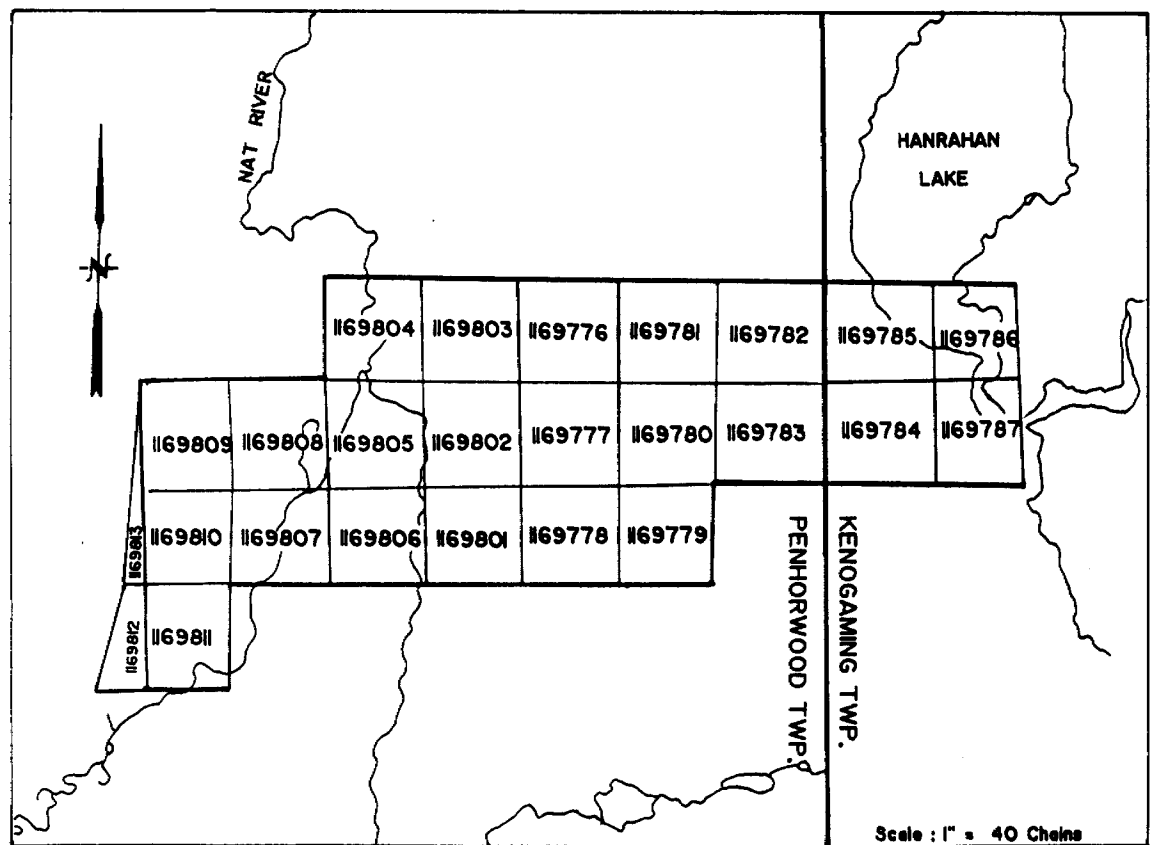


Figure 1 (b) : Claim Map

## PREVIOUS WORK

Table 1 is a summary of the previous work carried out over portions of the 25 claims covered in this report.

YEAR	COMPANY	GEOPHYSICS	DRILL HOLES	ASSESSMENT FILE
1964	INTERNATIONAL NICKEL COMPANY OF CANADA		26693	T-862
1971	NORANDA EXPLORATION CO. LTD.	MAG, HLEM	P-71-15 P-71-16	T-637
1978	GEOPHYSICAL ENGINEERING LIMITED	VLEM	QQQ-1	T-1854

Table 1. Summary of Previous Work

In 1964, Inco held the seven most western claims and drilled one hole on claim P-1169807. The hole intersected iron formation in a sedimentary, mafic volcanic sequence.

In 1971, Noranda held a 23 claim group in the Nat River Area. Ten of the present claims are part of the area covered by magnetic and vertical loop electromagnetic (VLEM) surveys. Two holes were drilled to test VLEM anomalies on claims P-1169777 and 1169778. Hole P17-15 intersected rhyolite tuff with pyritic sections; the bottom half of the hole was in diabase dike and the hole likely did not intersect the conductor which was targeted. Hole P71-16 intersected graphite and pyrite, with minor pyrrhotite and chalcopyrite in acidic volcanics.

In 1978, Geophysical Engineering Limited controlled a four claim group in Kenogaming township. A vertical loop EM anomaly on what is now claim P-1169784 was drilled and the conductor determined to be pyrrhotite in intermediate tuffs. Samples from Hole QQQ-1 were assayed for copper and zinc but not for nickel.

### SURVEY DESCRIPTIONS

The grid on the property consists of north-south lines spaced every 100 metres and picketed every 20 metres (Figure 3).

The horizontal loop EM survey was carried out with the Apex Parametrics MaxMin I. This instrument measures the in-phase and quadrature components of the secondary field as a percentage of the primary field. Readings were taken every 20 metres using a coil separation of 120 metres and frequencies of 444 and 1777 Hertz.

The magnetic readings were taken with a Scintrex IGS-2/MP-4. This instrument is a proton precession magnetometer which measures the earth's total magnetic field to an accuracy of 0.1 gammas. Diurnal variations were monitored every 20 seconds with a Scintrex MP-3 base station magnetometer.

### RESULTS

The results of the HLEM survey are plotted on maps 1 and 2 and the magnetic results are presented on Map 3 at a scale of 1:5000.

Six bedrock conductors were detected in the EM survey.



Anomaly 'A' strikes northeast between Lines 7700 and 8700 East. The source of the anomaly has very good conductivity (Table 1) and a strong coincident magnetic field; both the conductivity and magnetic field decrease to the northeast. The dip cannot be determined on Lines 7700 to 8200 East because of interference from Anomaly 'B'; a south dip is suggested on Lines 8300 to 8500 East. Hole 26693 was drilled by Inco to test this conductor at approximately 8300 East; it intersected iron formation.

East of Line 8800 East the anomaly strikes approximately east-west across the rest of the property. It is located along the north flank of a very weak magnetic anomaly with local highs. The conductivity, east of Line 8800 East, is poor; the logs from Hole QQQ-1 indicate that the conductivity is due to pyrite and pyrrhotite. The change in strike and geophysical responses at 8800 East suggest the presence of a north-northeast striking fault coincident with the Nat River.

Anomaly 'B' is located between 60 and 100 metres south of Anomaly 'A', from 7800 East to 8200 East. The anomaly is difficult to interpret because of the interference from the stronger response of Anomaly 'A'.

Anomalies 'C', 'D' and 'E' reflect closely spaced conductors along the southern edge of the property between 9100 and 9600 East. The anomalies are incomplete and therefore difficult to interpret. The source of these anomalies was the target of Hole H-71-16 which intersected pyritic graphite.

Anomaly 'F' is located only on Line 8000 East at 9110 North; it reflects a poor conductor which was detected only in the high frequency survey. It does however appear to be a bedrock conductor.

LINE	ANOMALY CENTRE	ANOMALY WIDTH (M)	IP (%)	Q (%)	DEPTH (M)	CONDUCTIVITY THICKNESS (MHOS)	COMMENTS
7700 E	9510 N	?	47	8	10	47	
7800 E	9505 N	35	58	8	<10	50	
7900 E	9540 N	?	63	12	<10	47	
8000 E	9570 N	?	40	15	10	21	
8100 E	9600 N	20	18	5	40	33	
8200 E	9655 N	20	32	17	14	12	
8300 E	9730 N	10	39	14	12	25	
8400 E	9790 N	5	23	15	20	8	
8500 E	9820 N	10	29	20	11	8	
8600 E	9880 N	NARROW	5	3	62	9	
8700 E	9920 N	NARROW	5	3	62	9	
8800 E	?	?	?	?	?	?	
8900 E	9990 N	20	9	7	44	7	
9000 E	10005 N	10	18	10	31	9	
9100 E	10000 N	NARROW	5	6	36	2	
9200 E	9980 N	NARROW	5	11	12	1	
9300 E	9960 N	NARROW	6	7	38	3	
9400 E	9930 N	20	11	12	28	4	
9500 E	9935 N	10	18	17	17	5	
9600 E	9940 N	NARROW	3	3	48	3	
9700 E	9910 N	15	24	16	18	8	
9800 E	9950 N	15	20	17	17	6	
9900 E	9950 N	20	5	6	36	2	
10000 E	9970 N	20	2	4	24	1	
10100 E	9960 N	15	4	6	30	2	
10200 E	?	?	?	?	?	?	
10300 E	10000 N	?	6	8	31	2	
10400 E	9990 N	?	5	4	56	6	
10500 E	?	?	?	?	?	?	
10600 E	10040 N	?	2	4	24	1	
10700 E	10050 N	?	4	5	40	2	
10800 E	10040 N	20	19	12	28	8	
10900 E	10050 N	20	13	8	38	8	
11000 E	10050 N	12	3	4	38	2	
11100 E	10050 N	15	8	6	48	7	
11200 E	10040 N	35	12	10	32	6	
11300 E	10030 N	15	7	5	53	8	
11400 E	10040 N	?	3	4	38	2	

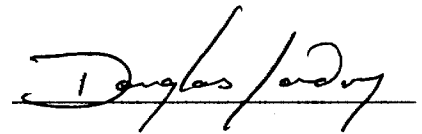
Table 2: Anomaly 'A', 1777 Hz, 120 metre coil separation.

Ultramafics in the northeast quadrant of the property are reflected by a broad high magnetic anomaly; there is no conductivity associated with this unit. High readings, to the south of the ultramafics on Lines 9600, 10200, 10400 and

11300 East, suggest the presence of north-south striking diabase dikes close to these lines.

MAY 15, 1991

DATE

A handwritten signature in cursive script, reading "Douglas Londry", written over a horizontal line.

DOUGLAS LONDREY  
TIMMINS GEOPHYSICS LTD.

## REFERENCES

MILNE, V.,G.

1972: Geology of the Kukatuch-Sewell Lake Area, District of Sudbury; O.D.M. GR.97, 116p. Accompanied by Maps 2230, 2231, scale 1 inch to 1/2 mile.

**APPENDIX A**



Ministry of  
Northern Development  
and Mines

Geophysical-Geological-Geochemical  
Technical Data Statement

File 2.14147

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 PENHORWOOD & KENOGAMING  
Claim Holder(s) FALCONBRIDGE LIMITED  
P.O. Box 1140, Timmins, Ontario P4N 7H9  
Survey Company TIMMINS GEOPHYSICS LTD.  
Author of Report D. LONDRY  
Address of Author P.O. Box 1783, South Porcupine, Ont. P0N1H0  
Covering Dates of Survey Feb. 19/91 - Mar. 10/91  
(linecutting to office)  
Total Miles of Line Cut 42.96 km

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	<u>20</u>
-Magnetometer	<u>40</u>
-Radiometric	
-Other	
Geological	
Geochemical	

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

Magnetometer            Electromagnetic            Radiometric             
(enter days per claim)

DATE: MAY 15/91 SIGNATURE: Douglas Londry  
Author of Report or Agent

Res. Geol.            Qualifications 2.2289.

Previous Surveys

File No.	Type	Date	Claim Holder

**MINING CLAIMS TRAVERSED**  
List numerically

SEE ATTACHED LIST

(prefix)

(number)

TOTAL CLAIMS 25

If space insufficient, attach list

LIST OF CLAIMS:

P - 1169776	P - 1169801
P - 1169777	P - 1169802
P - 1169778	P - 1169803
P - 1169779	P - 1169804
P - 1169780	P - 1169805
P - 1169781	P - 1169806
P - 1169782	P - 1169807
P - 1169783	P - 1169808
P - 1169784	P - 1169809
P - 1169785	P - 1169810
P - 1169786	P - 1169811
P - 1169787	P - 1169812
	P - 1169813

TOTAL CLAIMS: 25

# GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 2389 Number of Readings HLEM - 1953  
MAG - 2388  
 Station interval 20 metres Line spacing 100 metres  
 Profile scale 1 cm = 40% (444 & 1777 Hz)  
 Contour interval 500 gammas

**MAGNETIC**

Instrument Scintrex IGS- /MP-4  
 Accuracy - Scale constant  $\pm .1$  gammas  
 Diurnal correction method Scintrex MP-3 Base Station Magnetometer  
 Base Station check-in interval (hours) 20 seconds  
 Base Station location and value Line 10500 East - 9920 North  
58707

**ELECTROMAGNETIC**

Instrument Apex Parametrics MaxMin I  
 Coil configuration Horizontal Loop  
 Coil separation 120  
 Accuracy 1%  
 Method: ☐ Fixed transmitter ☐ Shoot back ☒ In line ☐ Parallel line  
 Frequency 444 Hz - 1777 Hz  
 (specify V.L.F. station)  
 Parameters measured In-phase and quadrature components of the secondary field measured as  
percent of the 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 \_\_\_\_\_





Ontario



42A04NW0107 2.14147 PENHORWOOD

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Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des Mines

Mining Lands Section  
159 Cedar Street, 4th Floor  
Sudbury, Ontario  
P3E 6A5

Telephone: (705) 670-7264  
Fax: (705) 670-7262

Your File: 9160.00101  
Our File: 2.14147

July 5, 1991

Mining Recorder  
Ministry of Northern Development  
and Mines  
60 Wilson Avenue  
Timmins, Ontario  
p4N 1S7

Dear Sir/Madam:

RE: Notice of Intent dated June 5, 1991 for Geophysical  
(Electromagnetic and Magnetometer) Surveys on mining  
claims P.1169776 et al. in the Townships of Penhorwood  
and Kenogaming.

-----  
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,

Ron. C. Gashinski,  
Provincial Manager, Mining Lands  
Mines & Minerals Division

CDS

CDS/jl

Enclosures:

cc: Falconbridge Limited  
Timmins, Ontario

✓ Assessment Files Office  
Toronto, Ontario

Timmins Geophysics Ltd.  
South Porcupine, Ontario

Resident Geologist  
Timmins, Ontario



Recorded Here

Falconbridge Limited

Township or Area

Penhorwood and Kenogaming Townships

Type of survey and number of  
Assessment days credit per claim

Mining Claims Assessed

Geophysical

Electromagnetic 20.0 days

Magnetometer 40.0 days

Radiometric days

Induced polarization days

Other days

Section 77 (19) See "Mining Claims Assessed" column

Geological days

Geochemical days

Men days ☐

Airborne ☐

Special provision ☒

Ground ☒

☐ Credits have been reduced because of partial  
coverage of claims.

☐ Credits have been reduced because of corrections  
to work dates and figures of applicant.

P.1169776 to 787 incl.  
1169801 to 812 incl.

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

P.1169813

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) - 80.



Instructions

- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed for each survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch:

**Mining Act**

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

Type of Survey(s) <b>Geophysical</b>	Mining Division <b>Porcupine</b>	Township or Area <b>Penhorwood &amp; Kenogaming Twps.</b>
Recorded Holder(s) <b>Falconbridge Limited</b>	<b>2.14147</b>	Prospector's Licence No. <b>A21647</b>
Address <b>571 Moneta Ave., Box 1140, Timmins, Ont. P4N 7H9</b>		Telephone No. <b>(705) 267-1188</b>
Survey Company <b>Timmins Geophysics Ltd.</b>		
Name and Address of Author (of Geo-Technical Report) <b>D. Londry, P.O. Box 1783, South Porcupine, Ontario P0N 1H0</b>		Date of Survey (from & to) 19 02 91 10 03 91 Day Mo. Yr. Day Mo. Yr.

Credits Requested per Each Claim in Columns at right

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

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

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

Total miles flown over claim(s).	
Date <b>March 26/91</b>	Recorded Holder or Agent (Signature) <b>D. Londry</b>

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Mining Claim		Mining Claim	
Prefix	Number	Prefix	Number	Prefix	Number
P	1169776	P	1169806		
P	1169777	P	1169807		
P	1169778	P	1169808		
P	1169779	P	1169809		
P	1169780	P	1169810		
P	1169781	P	1169811		
P	1169782	P	1169812		
P	1169783	P	1169813		
P	1169784				
P	1169785				
P	1169786				
P	1169787				
P	1169801				
P	1169802				
P	1169803				
P	1169804				
P	1169805				

**RECEIVED**  
**APR 17 1991**  
**MINING LANDS SECTION**

Total number of mining claims covered by this report of work.	<b>25</b>
---	-----------

**Certification Verifying Report of Work**

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

Name and Address of Person Certifying

**Doug Cruji, 571 Moneta Ave., Box 1140, Timmins, Ont. P4N 7H9**

Telephone No.

**(705) 267-1188**

Date

**March 26/91**

Certified By (Signature)

**D. Londry**

Received Stamp

**For Office Use Only**

Total Days Cr. Recorded <b>1,500</b>	Date Recorded <b>MAR. 26/91</b>	Mining Recorder <b>D. Londry</b>
	Date Approved as Recorded	Provincial Manager, Mining Lands

**"SEE REVISED WORK STATEMENT"**

<b>RECEIVED</b> <b>MAR 26 1991</b> <b>12:30 (C)</b>	<b>RECORDED</b> <b>MAR 26 1991</b> <b>JA</b>
---	--



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Type of Survey(s) GEOPHYSICAL

Township or Area PENHORWOOD & KENOGAMING

Claim Holder(s) FALCONBRIDGE LIMITED

P.O. Box 1140, Timmins, Ontario P4N 7H9

Survey Company TIMMINS GEOPHYSICS LTD.

Author of Report D. LONDRY

Address of Author P.O. Box 1783, South Porcupine, Ont. P0N1H0

Covering Dates of Survey Feb. 19/91 - Mar. 10/91  
(linecutting to office)

Total Miles of Line Cut 42.96 km

**MINING CLAIMS TRAVERSED**  
**List numerically**

SEE ATTACHED LIST

(prefix)

(number)

**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 15/91 SIGNATURE: Douglas Londry  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications 2.2289

**Previous Surveys**

File No.	Type	Date	Claim Holder

**TOTAL CLAIMS** 25

OFFICE USE ONLY

# **GEOPHYSICAL TECHNICAL DATA**

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

Number of Stations 2389 Number of Readings HLEM - 1953  
MAG - 2388  
 Station interval 20 metres Line spacing 100 metres  
 Profile scale 1 cm = 40% (444 & 1777 Hz)  
 Contour interval 500 gammas

**MAGNETIC**

Instrument Scintrex IGS- /MP-4  
 Accuracy – Scale constant  $\pm .1$  gammas  
 Diurnal correction method Scintrex MP-3 Base Station Magnetometer  
 Base Station check-in interval (hours) 20 seconds  
 Base Station location and value Line 10500 East - 9920 North  
58707 GAMMAS

**ELECTROMAGNETIC**

Instrument Apex Parametrics MaxMin I  
 Coil configuration Horizontal Loop  
 Coil separation 120  
 Accuracy 1%  
 Method: ☐ Fixed transmitter ☐ Shoot back ☒ In line ☐ Parallel line  
 Frequency 444 Hz - 1777 Hz  
 (specify V.L.F. station)  
 Parameters measured In-phase and quadrature components of the secondary field measured as percent of the 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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

LIST OF CLAIMS:

P - 1169776	P - 1169801
P - 1169777	P - 1169802
P - 1169778	P - 1169803
P - 1169779	P - 1169804
P - 1169780	P - 1169805
P - 1169781	P - 1169806
P - 1169782	P - 1169807
P - 1169783	P - 1169808
P - 1169784	P - 1169809
P - 1169785	P - 1169810
P - 1169786	P - 1169811
P - 1169787	P - 1169812
	P - 1169813

TOTAL CLAIMS: 25



# REFERENCE

## 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
400' RESERVE			S.R.O.	03537
SEC 43/70	W. 91/72	27/12/72	S.R.O.	163006 V.2
SEC 36/70		1/7/78	S.R.O.	03537
ORDER OF THE MINISTER #33/87 DATED MARCH 30/87				
WITHDRAWS MINING AND SURFACE RIGHTS UNDER SECTION				
36 OF THE MINING ACT R.S.O. 1980				

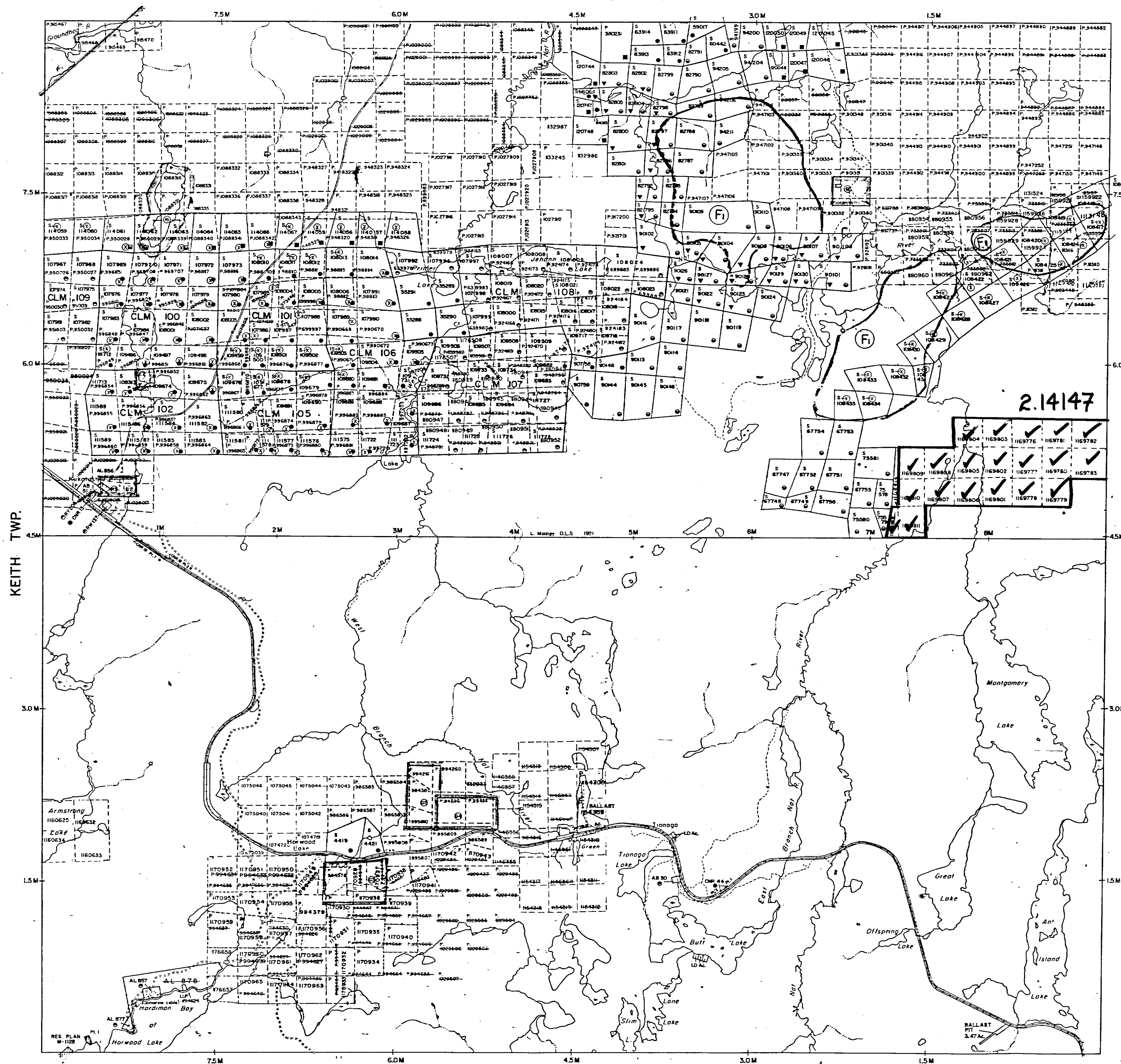
## SAND AND GRAVEL

GRAVEL	FILE	38729
GRAVEL PIT	FILE	03555 V.6
GRAVEL	FILE	106274
QUARRY PERMIT #22805 ISSUED FOR THE REMOVAL OF THE QUARTZ JULY 1, 1987		
QUARRY PERMIT #22806 ISSUED FOR THE REMOVAL OF QUARTZ SEPT. 10, 1987		
CANCELLED PATENT AND LEASED CLAIMS		

F. - THIS TWP. SUBJECT TO FOREST ACTIVITY IN 1991/92. FURTHER INFORMATION AVAILABLE ON FILE.

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF

## REEVES TWP.



## LEGEND

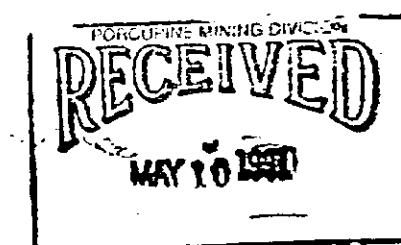
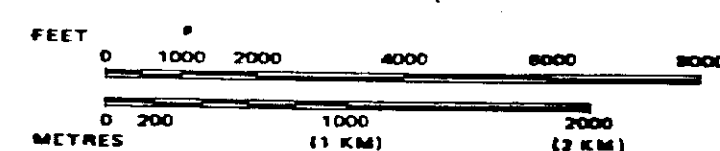
HIGHWAY AND ROUTE NO.	
OTHER ROADS	
TRAILS	
SURVEYED LINES:	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC.	
UNSURVEYED LINES:	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC.	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON-PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE 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	

LAND USE PERMIT  
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS



ACTIVATED JANUARY 30, 1990.

## TOWNSHIP

PENHORWOOD

M.R.A. ADMINISTRATIVE DISTRICT

CHAPLEAU

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

SUDBURY

Ministry of Natural Resources  
Ontario Land Management Branch

Date MARCH 1985

Number

G-3244



4204N0107 2.14147 PENHORWOOD

# REFERENCE

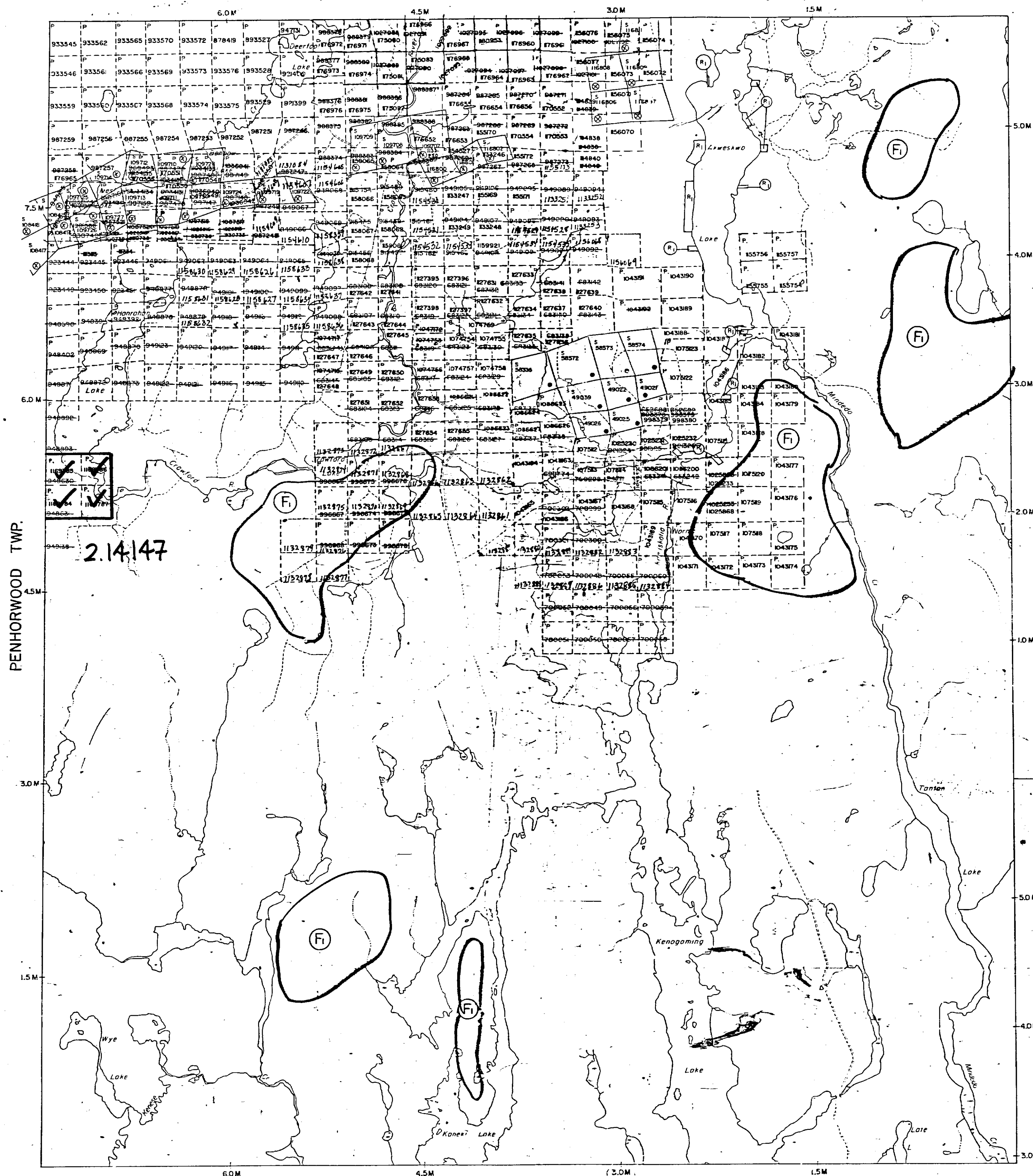
## AREAS WITHDRAWN FROM DISPOSITION

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

Description Order No. Date Disposition File

F. THIS TWP SUBJECT TO FOREST ACTIVITY IN 1991/92.  
FURTHER INFORMATION ON FILE.

## SEWELL TWP.



## LEGEND

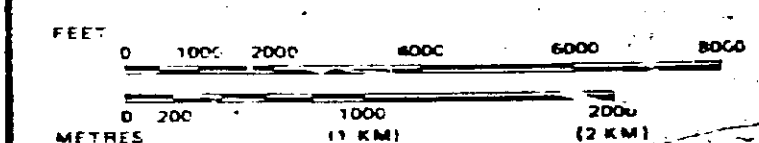
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING 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	

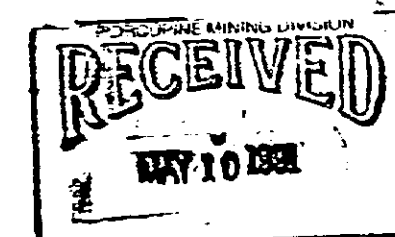
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CAP. 360 SEC. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS

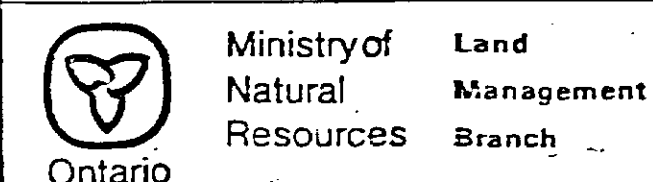


## NOTE

- PROPOSED COTTAGING AREAS
- NOTICE RECEIVED DEC. 22/88



TOWNSHIP  
**KENOGAMING**  
M.N.R. ADMINISTRATIVE DISTRICT  
TIMMINS  
MINING DIVISION  
PORCUPINE  
LAND TITLES / REGISTRY DIVISION  
SUDBURY



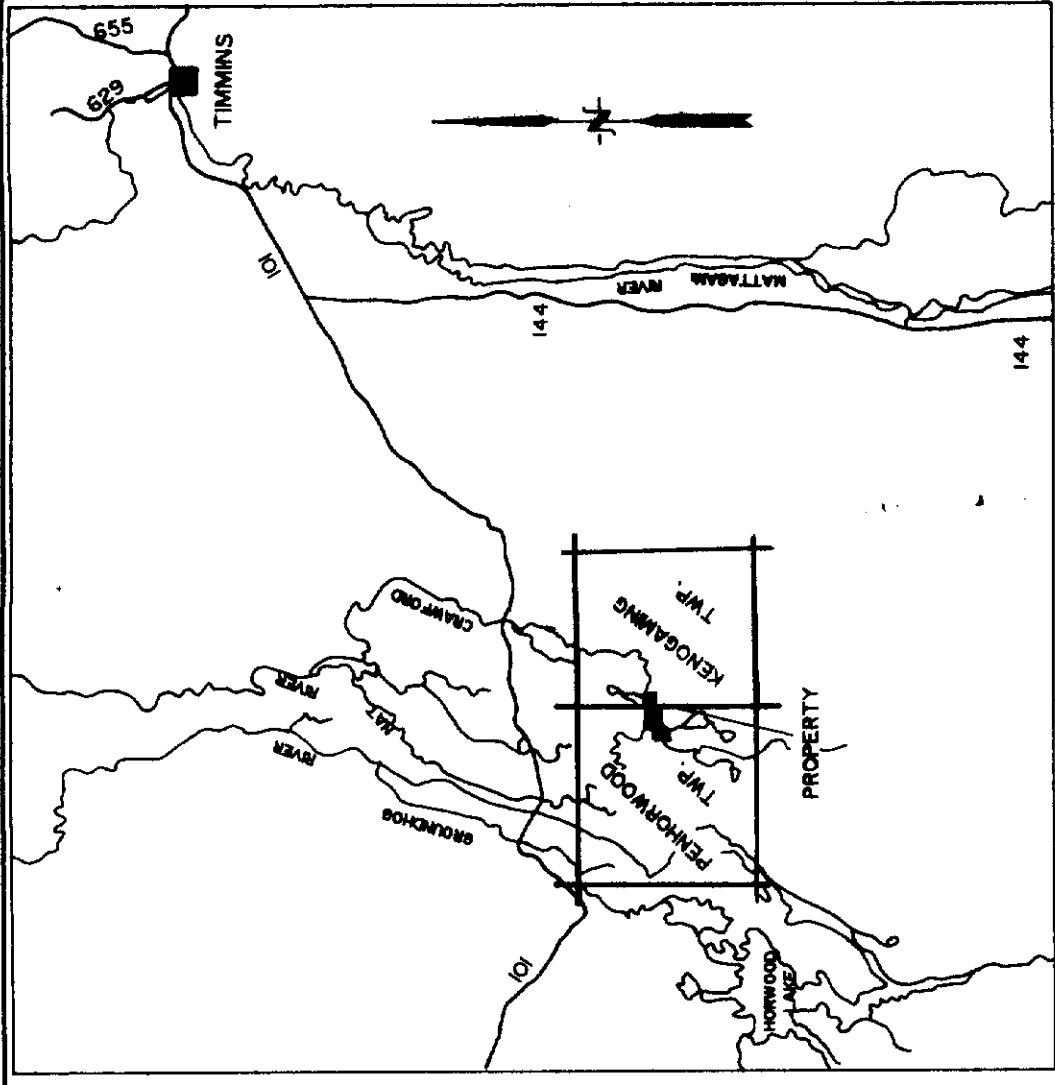
Date APRIL 1985  
RECEIVED APR 22/87  
Number  
**G-3239**

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING

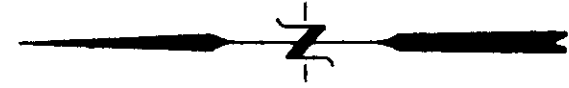


42A84N0187 2, 14147 PENHORWOOD





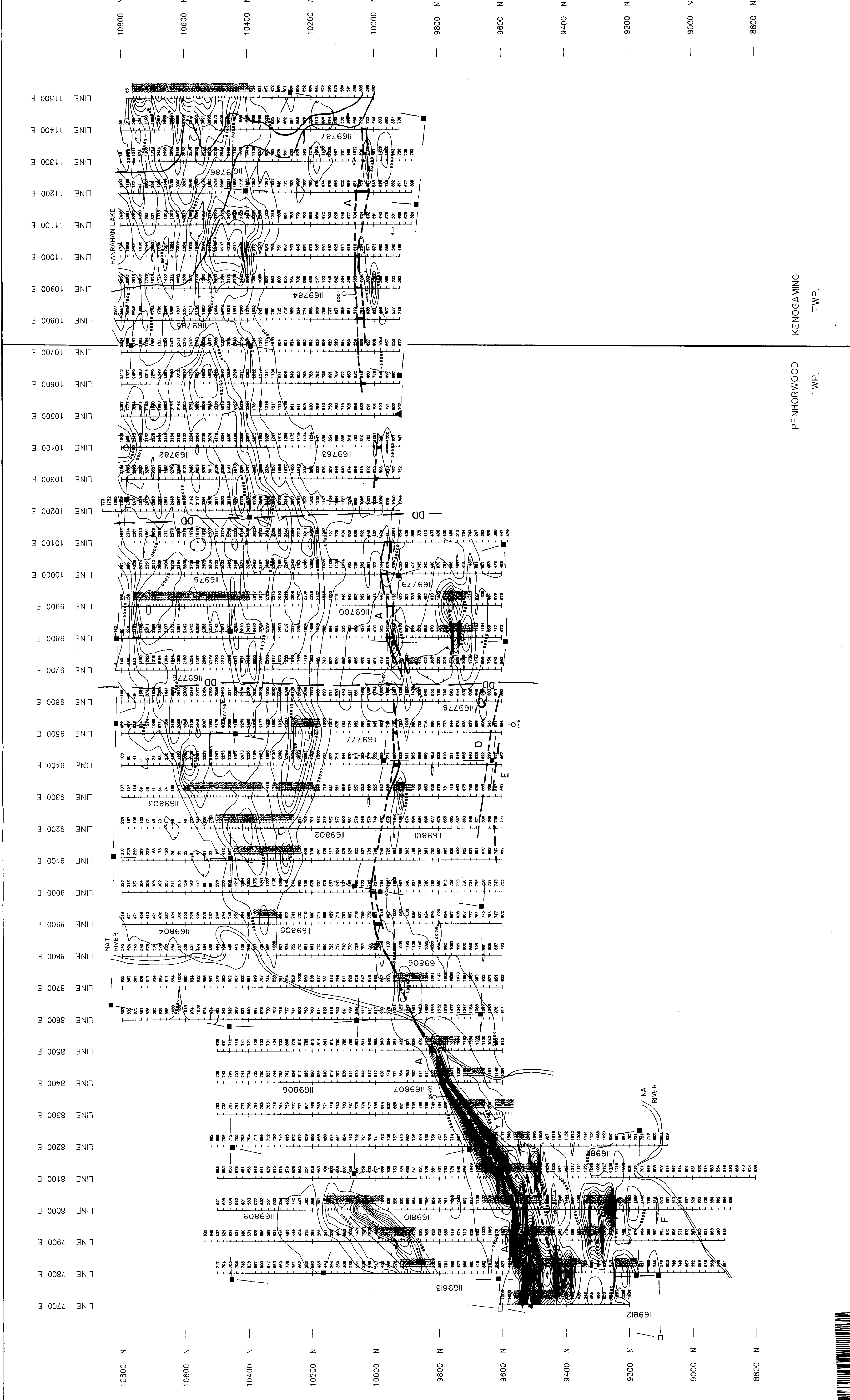
SCALE 1: 800,000



- DD-Diabase Dikes
- Approximate DDH Location
- EM Anomaly (1777 Hz)
- Base Station
- Clamposts :
  - Unlocated
  - Located
- Instrument : Sinterex 16S-2/MP-4
- Type : Total Field Proton Precession
- Contour Interval : 500 gammas
- Datum Level : 58000 gammas

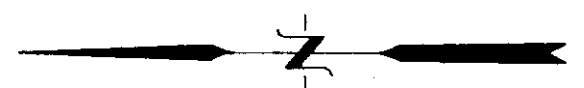
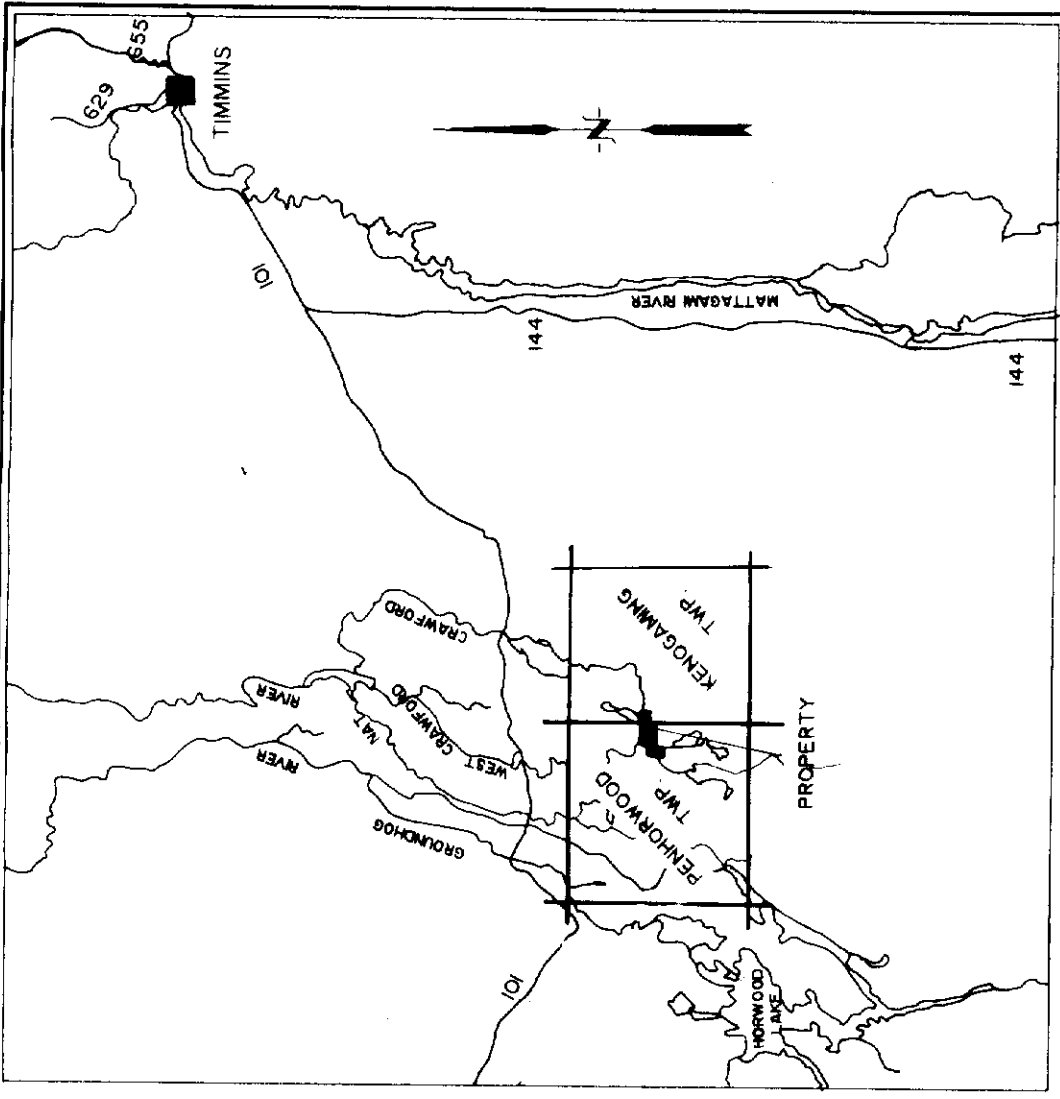
2.14147

FALCONBRIDGE LIMITED	
MAGNETIC SURVEY	
PENHORWOOD TOWNSHIP CLAIMS	
PENHORWOOD KENOGAMING TOWNS.	
NTS : 42-B/I	PROJ. #: 8198
SCALE : 1: 5000	DATE : March 1991
FILE : PEN-MAG	WORK BY : <i>[Signature]</i>
Timmins Geophysics Ltd.	



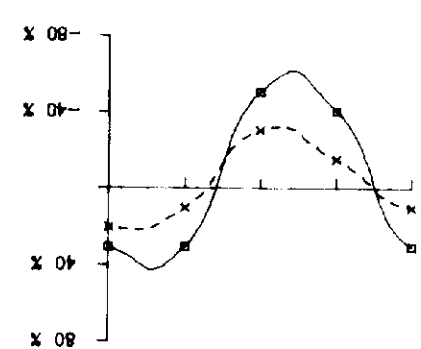
PENHORWOOD TWP.

KENOGAMING TWP.



- DDH
- Anomaly
- Claimposts
- Unlocated
- Located

Instrument : Apex Parametrics MaxMin I  
Frequency : 444 Hz  
Coil Separation : 120 Metres  
Profile Scale : 1 cm = 40%



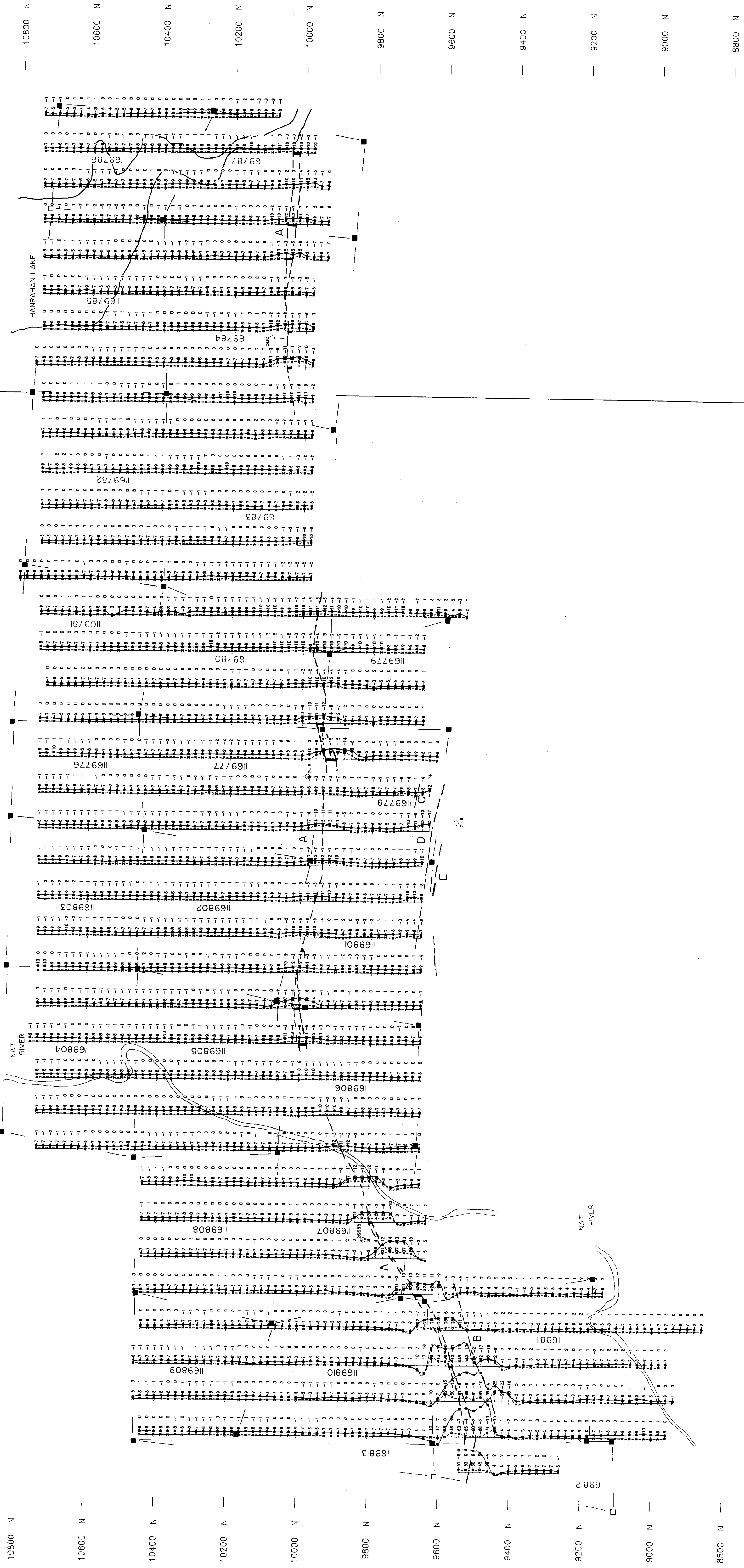
2.14147

In-phase  
Quadrature

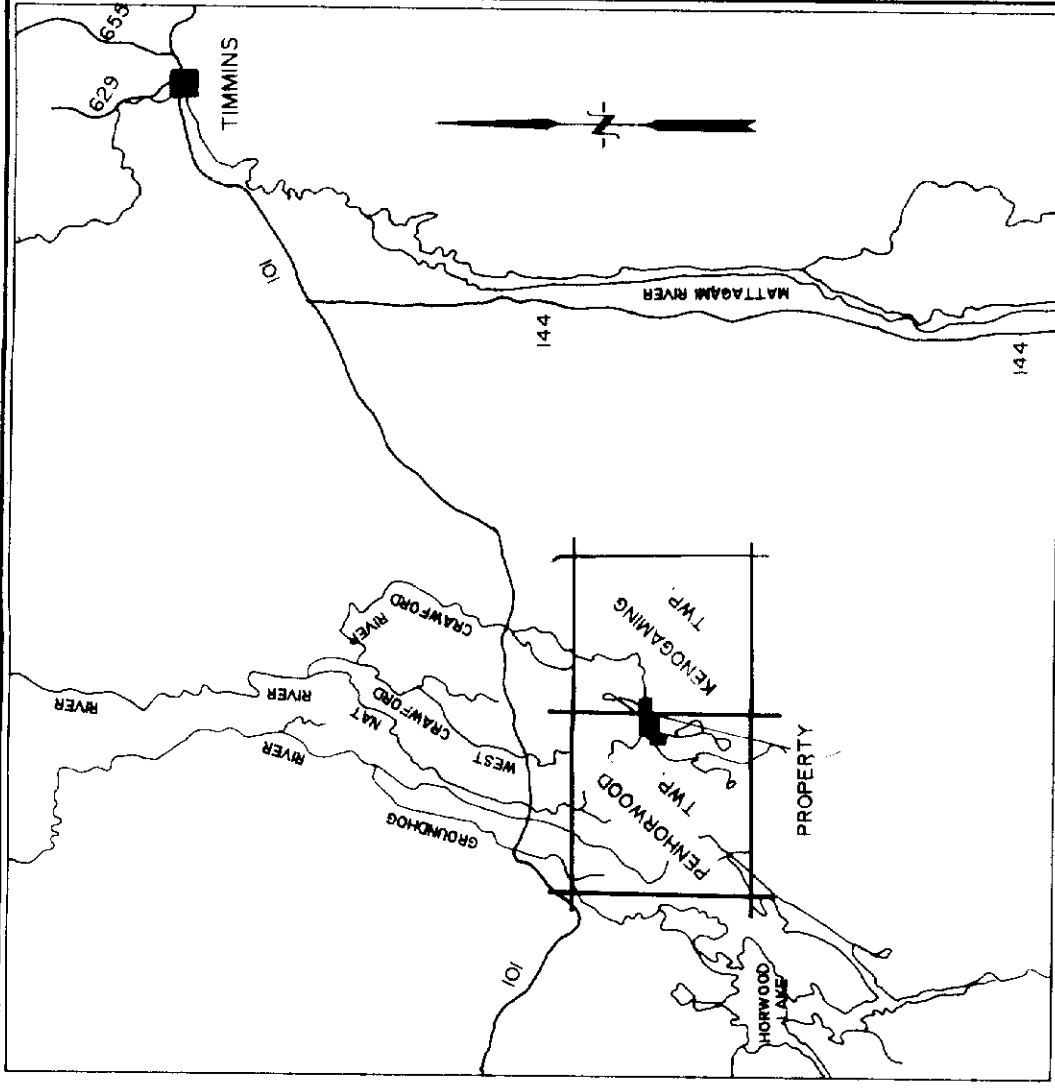
FALCONBRIDGE LIMITED	
HLEM SURVEY	
PENHORWOOD TOWNSHIP CLAIMS	
PENHORWOOD KENOGAMING TOWNS.	
NTS : 42-B/I	PROJ # : 898
SCALE : 1: 5000	DATE : MARCH 1991
FILE : PENWOOD.HL	WORK BY : <i>D. J. J. J.</i>
Timmins Geophysics Ltd.	

KENOGAMING  
TWP.

PENHORWOOD  
TWP.





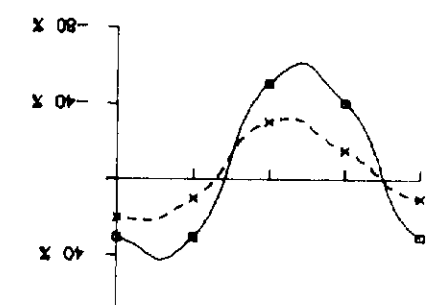


SCALE 1:60000  
KEY MAP



- DDH
- Anomaly
- Claimposts
- Unlocated
- Located

Instrument : Apex Parametrics MaxMin I  
Frequency : 1777 Hz  
Coil Separation : 120 Metres  
Profile Scale : 1 cm = 40%



2.14147

- In-phase
- Quadrature

FALCONBRIDGE LIMITED

HLEM SURVEY

PENHORWOOD TOWNSHIP CLAIMS

PENHORWOOD - KENOGAMING TWPS.

NTS : 42-B/L

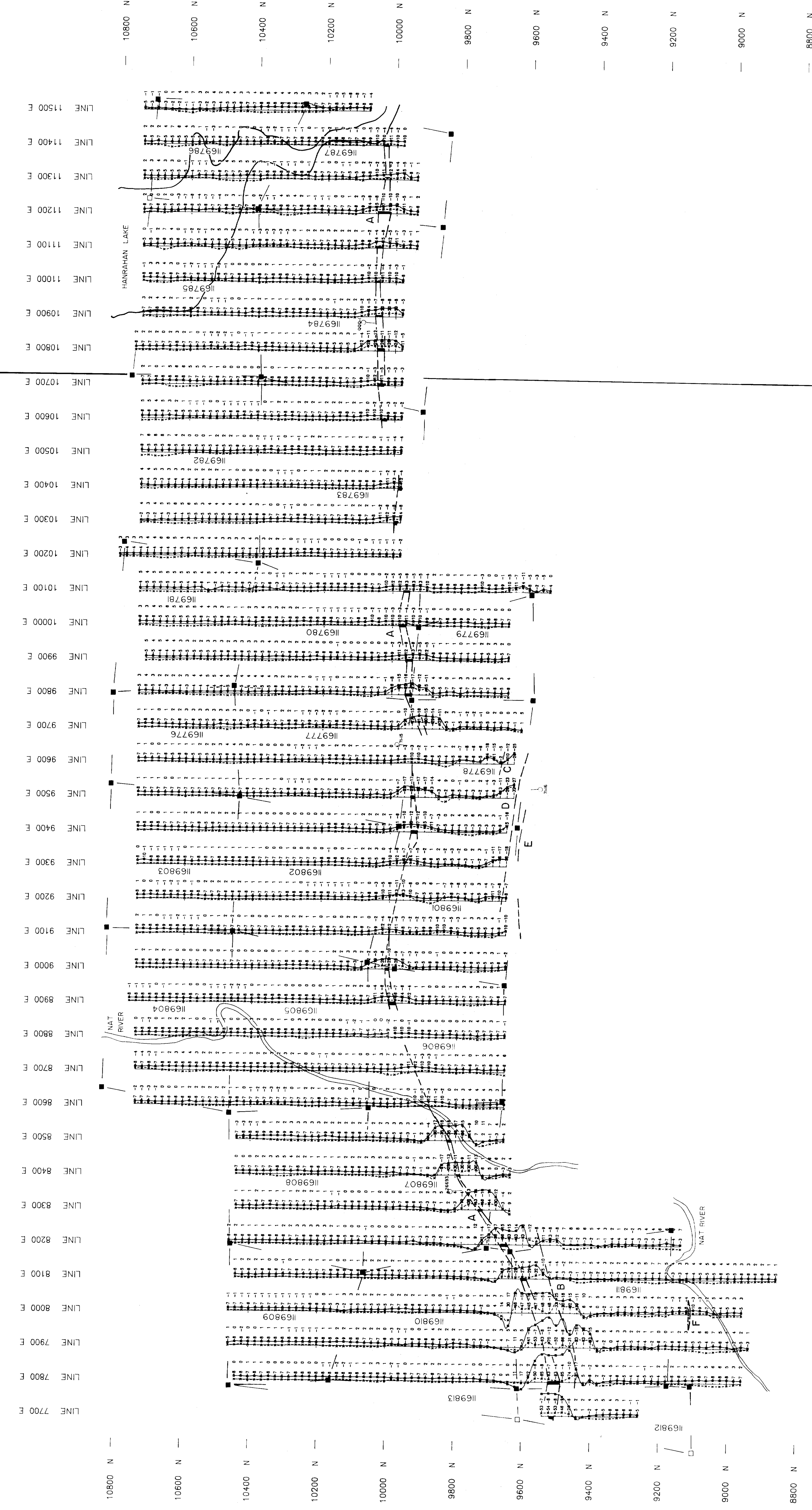
SCALE : 1: 5000

DATE : MARCH 1991

FILE : PENWOOD1.HL

WORK BY : Timmins Geophysics Ltd.

PROJ # : 8198



PENHORWOOD TWP.  
KENOGAMING TWP.

