



53808NE0010 53808NE0013 FORESTER LAKE

010

REPORT
ON
MAGNETIC AND VLF-EM SURVEYS
ON
FORESTER LAKE PROPERTY
OF
581356 ONTARIO LTD.
PATRICIA MINING DIVISION, ONTARIO

RECEIVED

JAN 30 1985

MINING LANDS SECTION

Robert E. Gillick
Geophysicist

December, 1984.

2.7734 Dup



53B08NE0010 53B08NE0013 FORESTER LAKE

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TABLE OF CONTENTS

	<u>Page</u>
1.0 SUMMARY	1
2.0 INTRODUCTION	2
3.0 GEOLOGY	2
General Location Map	3
Property Location Map	4
Forester Lake Property Map	5
4.0 HISTORY	6
5.0 PRESENT PROGRAM	7
6.0 RESULTS AND INTERPRETATION	8
7.0 CONCLUSIONS AND RECOMMENDATIONS	10

APPENDICS

1. REFERENCES	12
2. LIST OF MAPS	
Total Field Magnetics (East Sheet) Map 1-E.	(back of report)
Total Field Magnetics (West Sheet) Map 1-W	" "
VLF-EM Survey (East Sheet) Map 2-E	" "
VLF-EM Survey (West Sheet) Map 2-W	" "

1.0 SUMMARY

Numerous VLF-EM conductors have been delineated on the Forester Lake property of 581356 Ontario Ltd. At least twenty of these conductors are interpreted as possible sulphide zones on mineralized shear zones.

Based on known occurrences of gold with sulphides on this property ground investigation of the land conductors is recommended. It is also recommended that two conductors located under Forester Lake be drill tested based on the present geophysical results.

2.0 INTRODUCTION

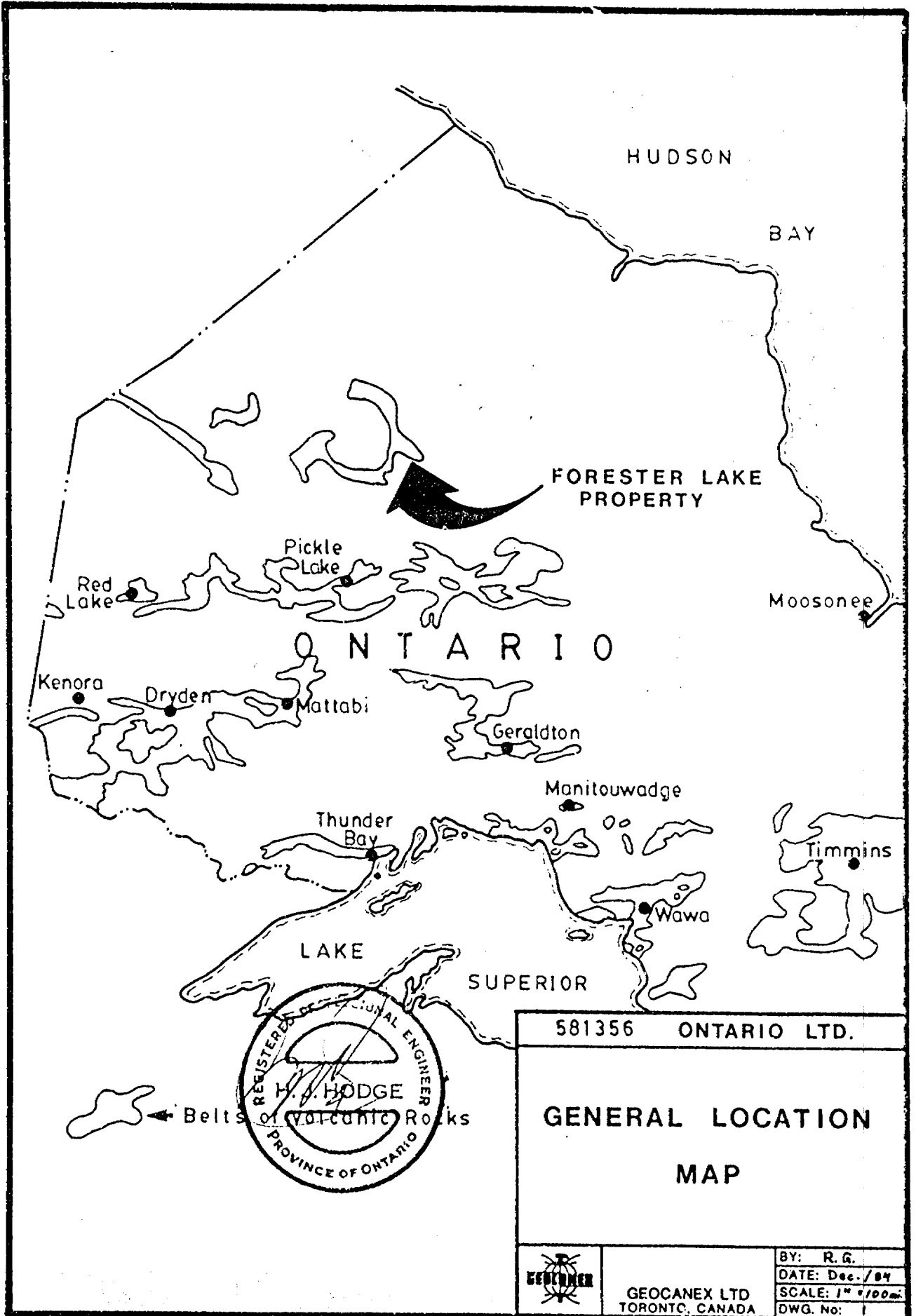
The following report describes linecutting and ground geophysical surveys (magnetics and VLF-EM) carried out over The Forester Lake property of 581356 Ontario Ltd. during August and December, 1984.

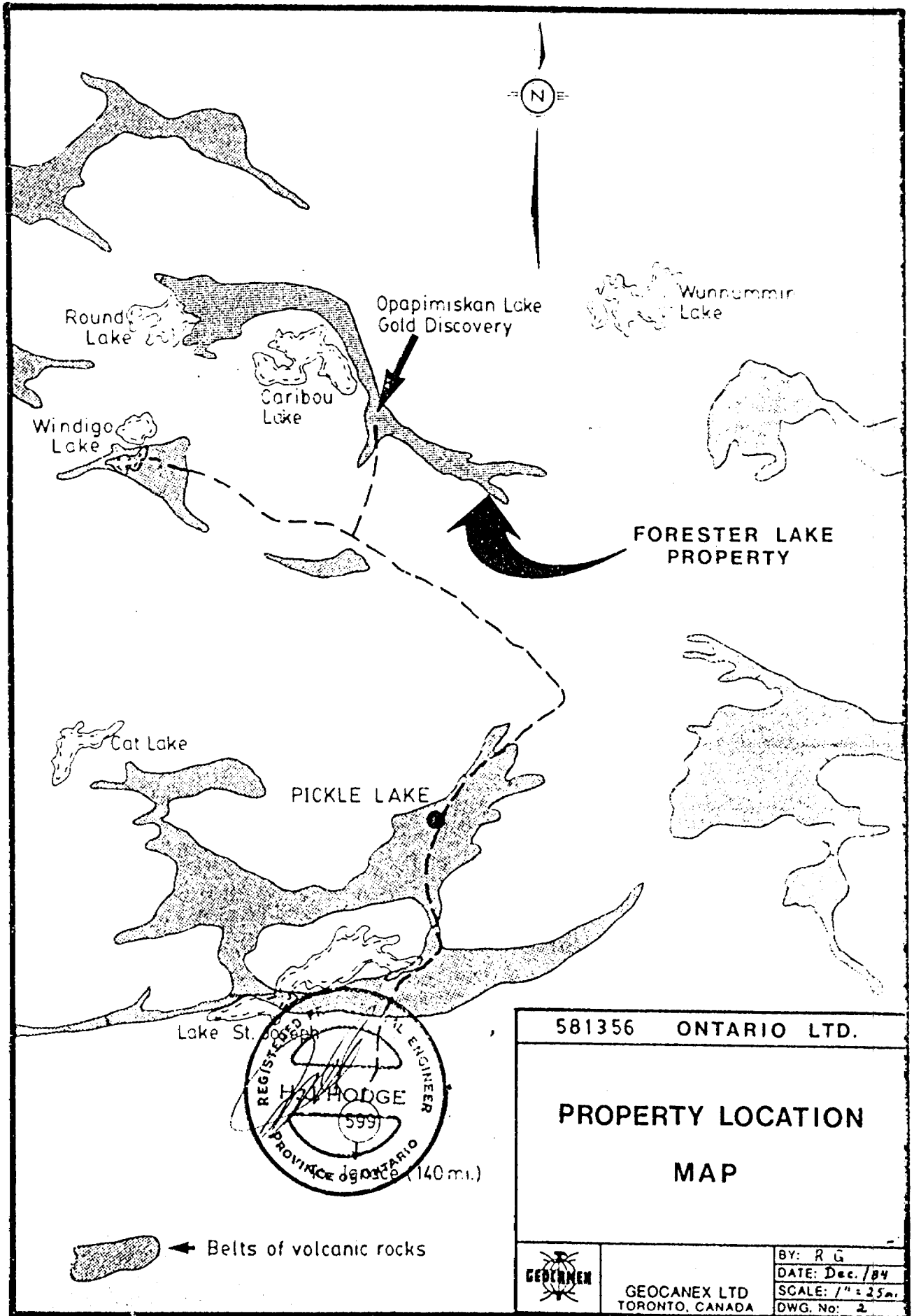
The property consists of a block of 50 unpatented mining claims located in the Forester Lake area approximately 109 kilometres north of the town of Pickle Lake in Northwestern Ontario (Figures 1,2 and 3). The property is accessible by float or ski-equipped aircraft from Pickle Lake to Forester Lake. The claim group lies at the west end of, and partially covered by Forester Lake.

3.0 GEOLOGY

The Forester Lake greenstone belt is a southeasterly extension of the Weagamow-North Caribou Lakes metavolcanic-metasedimentary belt. The Forester Lake belt includes mafic to intermediate metavolcanics, ranging from andesitic basaltic flows to lapilli tuffs and agglomerates as well as metasedimentary sequences of arkose, siltstone, greywacke and their metamorphosed equivalents. Iron formation has been observed along the belt especially in the Sage Lake area, about eight kilometres east of the property of 581356 Ontario Ltd. The belt is bounded to the north, south, and east by granitic intrusive rocks.

The Forester Lake property itself is underlain by both mafic and ultramafic volcanics and intrusives. The ultramafic rocks, predominantly peridotite, are reported to occur as "small, poorly exposed, lenticular to ovoid shaped pods ranging





FORESTER LAKE PROPERTY

Opapimiskan Lake
Gold Discovery

Caribou Lake

Round Lake

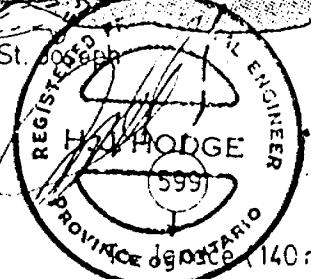
Windigo Lake

Wunnumin Lake

Cat Lake

PICKLE LAKE

Lake St. Joseph



← Belts of volcanic rocks

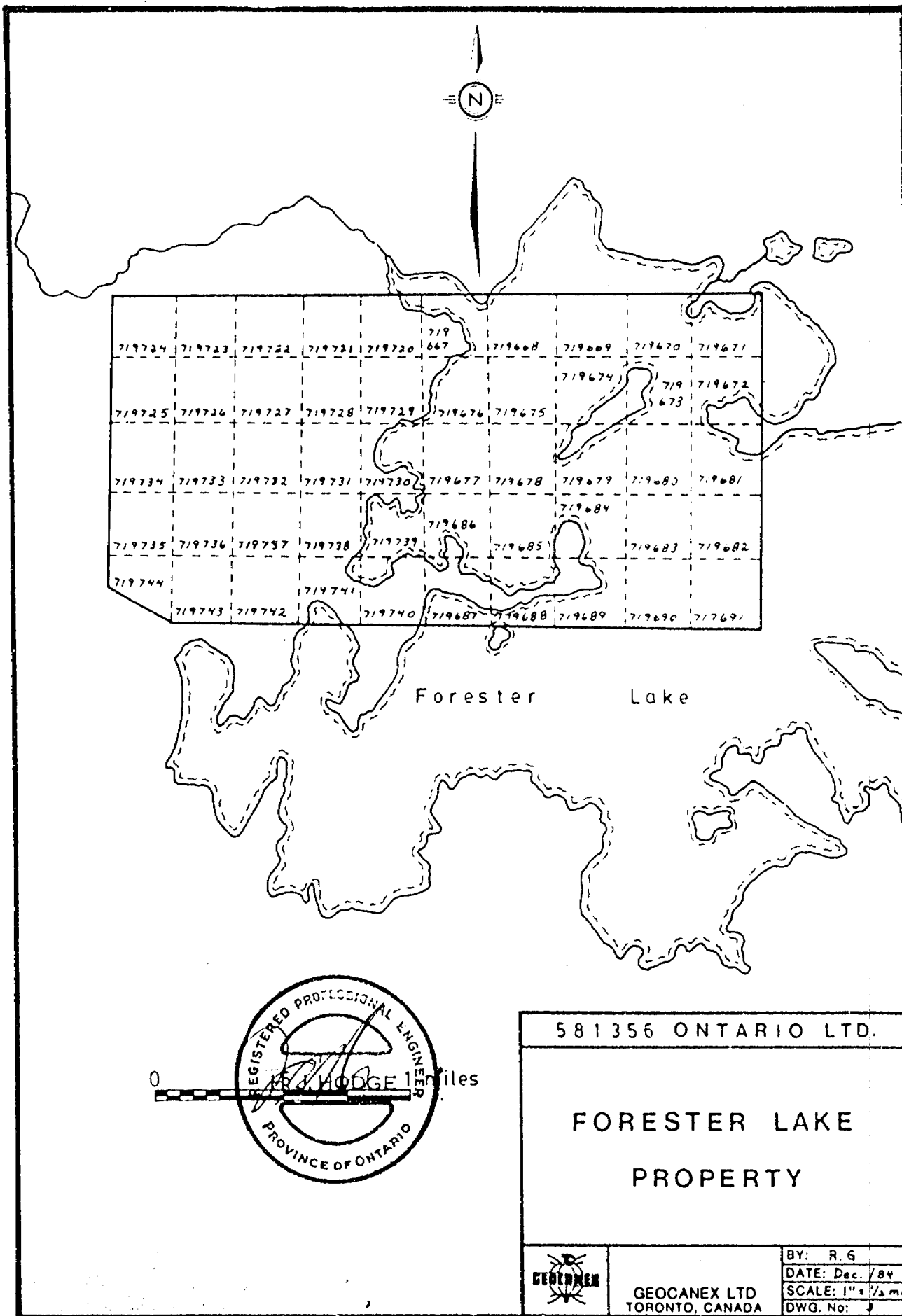
581356 ONTARIO LTD.

**PROPERTY LOCATION
MAP**



GEOCANEX LTD
TORONTO, CANADA

BY: R G
DATE: Dec. /84
SCALE: 1" = 25m.
DWG. No: 2



between 15 and 75 metres in width, and between 75 and 300 metres in length",¹ and trending parallel to the host rock foliation. The ultramafics are also reported to contain appreciable amounts of magnetite.

Numerous shears and fractures containing varying amounts of pyrite, pyrrhotite and chalcopyrite reportedly occur on the property. One such shear occurs near the southern contact of the Forester Lake belt. Also noted on the property were zones of massive sulphides. A previous drill hole (1962) intersected massive pyrrhotite (40-60% sulphides) 1.9 metres in thickness and assaying up to .02 ounces gold per ton.

4.0 HISTORY

In the late 1950's, W. Taylor and M. Stewart prospected parts of the Forester Lake belt. They carried out trenching across a major shear zone located at the western end of Forester Lake near the southern contact of the belt.

In the early 1960's, Rio Tinto Canadian Exploration Limited carried out a major exploration program in the belt. Airborne and ground geophysical surveys, geological mapping, trenching and limited diamond drilling were performed. Part of Rio Tinto's work took place over the south-central part of the present claim block. Although Rio's geophysical program delineated 14 conductive zones, only one of these zones was reportedly drilled. Massive pyrrhotite was intersected returning assays of up to .02 ounces gold per ton.

In the winter of 1962, INCO carried out limited exploration over Forester Lake near the southeast corner of the present claim block. One drill hole put down by INCO in this area intersected massive pyrrhotite, pyrite and arsenopyrite mineralization. No gold values were reported.

There has been no work reported on the Forester Lake property of 581356 Ontario Ltd. from 1965 to the present.

5.0 PRESENT PROGRAM

During August, 1984, linecutting was carried out on the land portion of the Forester Lake property of 581356 Ontario Ltd. In December, 1984, lines were established on the ice of Forester Lake to complete grid coverage of the property. The finished grid was centred about a 13,200 foot baseline oriented east-west across the property. Lines were established at 400 foot intervals over the western half of the property and at 200 foot intervals over the eastern half. Ground geophysical surveys (magnetics and VLF-EM) were carried out over the grid in December, 1984.

The mileage breakdown for the work performed is as follows:

Linecutting	67.90 miles
Magnetometer Surveying	65.85 miles
VLF-EM Surveying	65.21 miles

The personnel involved in the work were:

R. Morin	Vald'or, Que.	Linecutter
G. Robert	Vald'or, Que.	Linecutter
J. Robert	Vald'or, Que.	Linecutter
J. Hodge	Devlin, Ont.	Geophysical Operator
F. Recoskie	Vald'or, Que.	Geophysical Operator

The magnetometer survey was carried out using a G-816 proton precession magnetometer with a reading sensitivity of 1 gamma. Readings of the total geomagnetic field were taken at 50 foot intervals (100 foot intervals over some non-anomalous areas)

along all grid cross lines. Drift/diurnal changes were determined by taking repeat readings at previously established stations at time intervals not exceeding 1.5 hours. The results of the survey were plotted and contoured and are presented on Map #1 in the back of report.

The VLF-EM survey was performed with a Geonics EM-16 VLF receiver tuned to receive the 24.8 KHz signals transmitted from Seattle, Washington (NLK). Readings of in-phase (tilt angle) and quadrature were taken at 100 foot intervals (50 foot intervals over some anomalous zones) along all grid cross lines. The results of the survey were plotted and profiled and are presented on Map #2, in back of report.

6.0 RESULTS AND INTERPRETATION

The magnetics over the property (Maps 1-E and 1-W) are dominated by a wide magnetically active band trending from east to west across the claim group. The band is up to 5000 feet in width covering most of the east half of the property and much of the west half. The band is characterized by a high background response (2000 gammas) on which many magnetic peaks in the 3000 to 6000 gamma range are superimposed. The magnetic activity weakens towards the west and is virtually absent at the west boundary of the property except for a narrower zone near the north-west corner of the block. This wide band is believed to be predominantly a response of the ultramafic flows and intrusives which are known to occur in this area. The large magnetic susceptibility contrast between these ultramafics and the relatively unresponsive granitic rocks in the south and west parts of the property produces quite a clear outline of the contact between these two rock types.

A change in magnetic character also occurs in the north-eastern part of the property. Here, an east-west trending magnetic high strikes parallel to, and just inside the north property boundary. The amplitude of the anomaly is in the 2000 to 3000 gamma range and increases gradually towards the east. The on-property strike length of the feature is about 5800 feet. The smooth character of the response indicates a source which is magnetically homogeneous compared to the rapid changing ultramafics to the south. The feature may represent a gabbroic or dioritic dyke or sill intruding the volcanics. Gabbroic rocks outcrop about 5.5 kilometres to the east along the strike of this magnetic high.

Numerous VLF conductors have been delineated over the grid. At least twenty of these (labelled A-T on Maps 2-E and 2-W) are considered worthy of further investigation.

Conductor A strikes westward from line 6CE to line 14E near the southern boundary of the property. The VLF response over this conductor is generally well-developed and of moderate to large amplitude (up to 97% peak-to-peak in-phase). The conductor correlates directly with a narrow magnetic anomaly ranging in amplitude from 2000 to 5000 gammas above background. The conductor is interpreted as an east-west striking shear along the southern contact of the Forester Lake metavolcanic belt. The magnetic high associated with the conductor may indicate pyrrhotite mineralization within the shear.

Conductors B, C and D, striking parallel to Conductor A about 500-600 feet to the north, may indicate parallel shears. Positional correlation of Conductors B and C along parts of their lengths with magnetic peaks suggests the possible presence of pyrrhotite.

Further to the west, Conductors E,F,G,H and I continue westward approximately on strike with Conductor A. Conductor H exhibits good magnetic correlation along most of its length and probably represents a continuation of the main shear interpreted from Conductor A. Conductors E,F,G and I to the south and west of Conductor H may indicate parallel shearing in the granitic rocks outside the Forester Lake belt.

Anomalies M,N,O,P,Q,R,S and T are interpreted as bedrock conductors on the basis of moderate to strong magnetic correlations. These conductors may represent sulphide zones and merit further investigation.

7.0 CONCLUSIONS AND RECOMMENDATIONS

A band of mafic to ultramafic volcanics containing numerous VLF conductors has been outlined on the Forester Lake property. A mineralized shear has been interpreted near the southern volcanic-granitic contact. In the northeast part of the property a magnetic trend is interpreted as a mafic dyke intruding the volcanics.

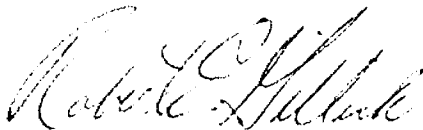
Since gold associated with sulphides is known to occur on the property, the VLF conductors, which have been interpreted as potential sulphide bodies or sulphide-containing structural zones, should be further investigated.

The following additional work is recommended on the property:

1. Geological mapping and prospecting of the land portion of the property.
2. Geochemical surveying of the land portion of the property.
3. Drilling of selected VLF conductors based on the results of the above geological and geochemical surveys.

4. Drilling of Conductors A and B (located under Forester Lake) based on the present geophysical results.

Respectfully submitted,



Robert E. Gillick
Geophysicist

December, 1984.

REFERENCES:

1. R.P. Sage and F.W. Breaks, OGS Report 207: Geology of the Cat Lake-Pickle Lake Area, 1982.
2. Aeromagnetic Map #927-G.
3. Government Assessment Files: 53B/08NE - 0010 A1
53B/08NE - 0010 B1
53B/08NE - 0010 C1
53B/08NE - 0011



53B08NE0010 53B08NE0013 FORESTER LAKE

900

Mining Lands Section

File No 2.7734

Control Sheet

TYPE OF SURVEY



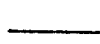
GEOPHYSICAL



GEOLOGICAL



GEOCHEMICAL



EXPENDITURE

MINING LANDS COMMENTS:

Multiple horizontal lines for handwritten comments.

L.D. Ltd.

Dennis R.

Signature of Assessor

Feb. 1 / 85

Date

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 4600 (approx.) Number of Readings 6000 (approx.)
Station interval 100ft(50 ft. in anomalous areas) line spacing 400 ft.(200ft. over Lake ice)
Profile scale 1" = ± 40%
Contour interval 100,500,1000,5000 gammas

MAGNETIC

Instrument Geometrics G-816 Proton Precession Magnetometer
Accuracy - Scale constant 1 gamma
Diurnal correction method Repeat readings at designated base stations.
Base Station check-in interval (hours) Not more than 1.5 hours.
Base Station location and value various

ELECTROMAGNETIC

Instrument Geonics EM-16
Coil configuration Vertical Loop
Coil separation infinity
Accuracy ±2%
Method: [X] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency 24.8 KHz, Seattle, Washington
Parameters measured In-phase and Quadrature

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

90°00'

52'

Pa	Pa	Pa											
751036	751037	771945											
Pa	Pa	Pa											
751035	751038	751040											
Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
751034	751039	719748	719749	719756	719757	719764	719765	719695	719696	719703	719704	719711	
Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
751033	719769	719747	719750	719755	719758	719763	719766	719694	719697	719702	719705	719710	
	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
	719746	719751	719754	719759	719762	719767	719693	719698	719701	719706	719709		
	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
	719745	719752	719753	719760	719761	719768	719692	719699	719700	719707	719710		
Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
719724	719723	719722	719721	719720	719667	719668	719669	719670	719671				
Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
719725	719726	719727	719728	719729	719676	719675	719674	719673	719672				
Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
719734	719733	719732	719731	719730	719677	719678	719679	719680	719681				
Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
719735	719736	719737	719738	719739	719696	719695	719684	719683	719682				
Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa	Pa
719744	719743	719742	719741	719740	719687	719688	719689	719690	719691				

53B/08NE
M 2719

1" = 40 CHAINS

Lake

Forester

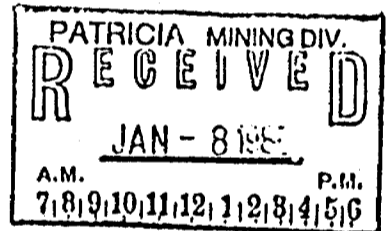
29'

28'

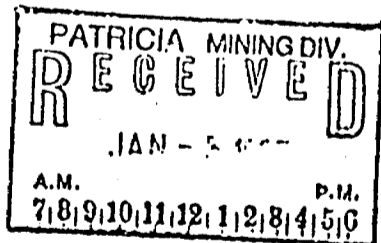
27'

Mining Claims

Pa	719667	Pa	719720
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	719669		719722
	719670		719723
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	719672		719725
	719673		719726
	719674		719727
	719675		719728
	719676		719729
	719677		719730
	719678		719731
	719679		719732
	719680		719733
	719681		719734
	719682		719735
	719683		719736
	719684		719737
	719685		719738
	719686		719739
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	719688		719741
	719689		719742
	719690		719743
	719691		719744



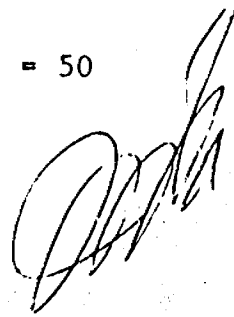
Total Claims = 50



Pa 719667
719668
719669
719670
719671
719672
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719681
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719688
719689
719690
719691

Pa 719720
719721
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719738
719739
719740
719741
719742
719743
719744

Total Claims = 50



2.7784

Mining Claims

<u>E.N.</u>	<u>Loc.</u>	<u>Pa</u>	<u>E.N.</u>	<u>Clag</u>
719667	✓		719720	✓
719668	✓		719721	✓
719669	✓		719722	✓
719670	✓		719723	✓
719671	✓		719724	✓
719672	✓		719725	✓
719673	✓		719726	✓
719674	✓		719727	✓
719675	✓		719728	✓
719676	✓		719729	✓
719677	✓		719730	✓
719678	✓		719731	✓
719679	✓		719732	✓
719680	✓		719733	✓
719681	✓		719734	✓
719682	✓		719735	✓
719683	✓		719736	✓
719684	✓		719737	✓
719685	✓		719738	✓
719686	✓		719739	✓
719687	✓		719740	✓
719688	✓		719741	✓
719689	✓		719742	✓
719690	✓		719743	✓
719691	✓		719744	✓

Handwritten notes:
7/1/1985
Pat. 23

PATRICIA MINING DIV.
RECEIVED
 JAN - 8 1985
 A.M. P.M.
 7 8 9 10 11 12 1 2 3 4 5 6

Total Claims = 50

PATRICIA MINING DIV.
RECEIVED
 JAN - 5 1985
 A.M. P.M.
 7 8 9 10 11 12 1 2 3 4 5 6

Handwritten: D.K.

581356 ONTARIO LIMITED
804-34 King Street, East
Toronto, Ontario M5C 1E5

January 28th, 1985

Mr. F.W. Matthews
Supervisor, Projects Section
Mining Lands
Ministry of Natural Resources
Room 6610, Whitney Block
Toronto, Ontario
M7A 1W3

RE: Assessment Reports, Claims Pa 719667
et al, Forester Lake Area

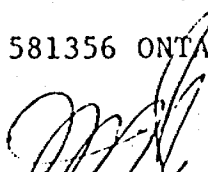
Dear Mr. Matthews,

Please find enclosed two copies of a report covering geophysical surveys over 50 claims in the Forester Lake Area, Patricia Mining Division.

I trust that all else is in order.

Yours very truly,

581356 ONTARIO LIMITED

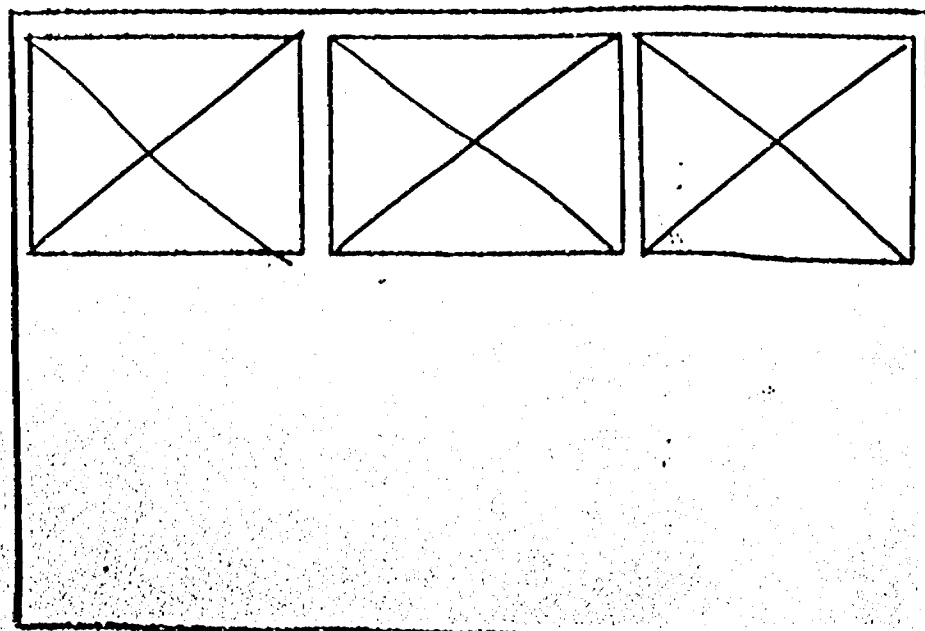

H.J. Hodge P.Eng.
President

HJH/jmh
Encls.

RECEIVED
JAN 30 1985
MINING LANDS SECTION

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS
53B/08NE-0013, #1-3

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)

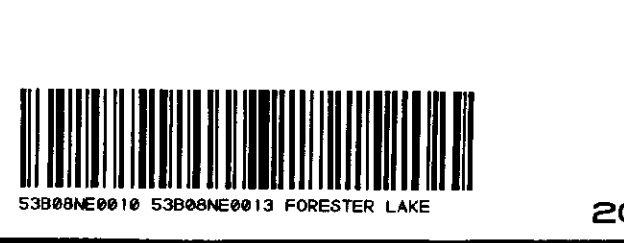
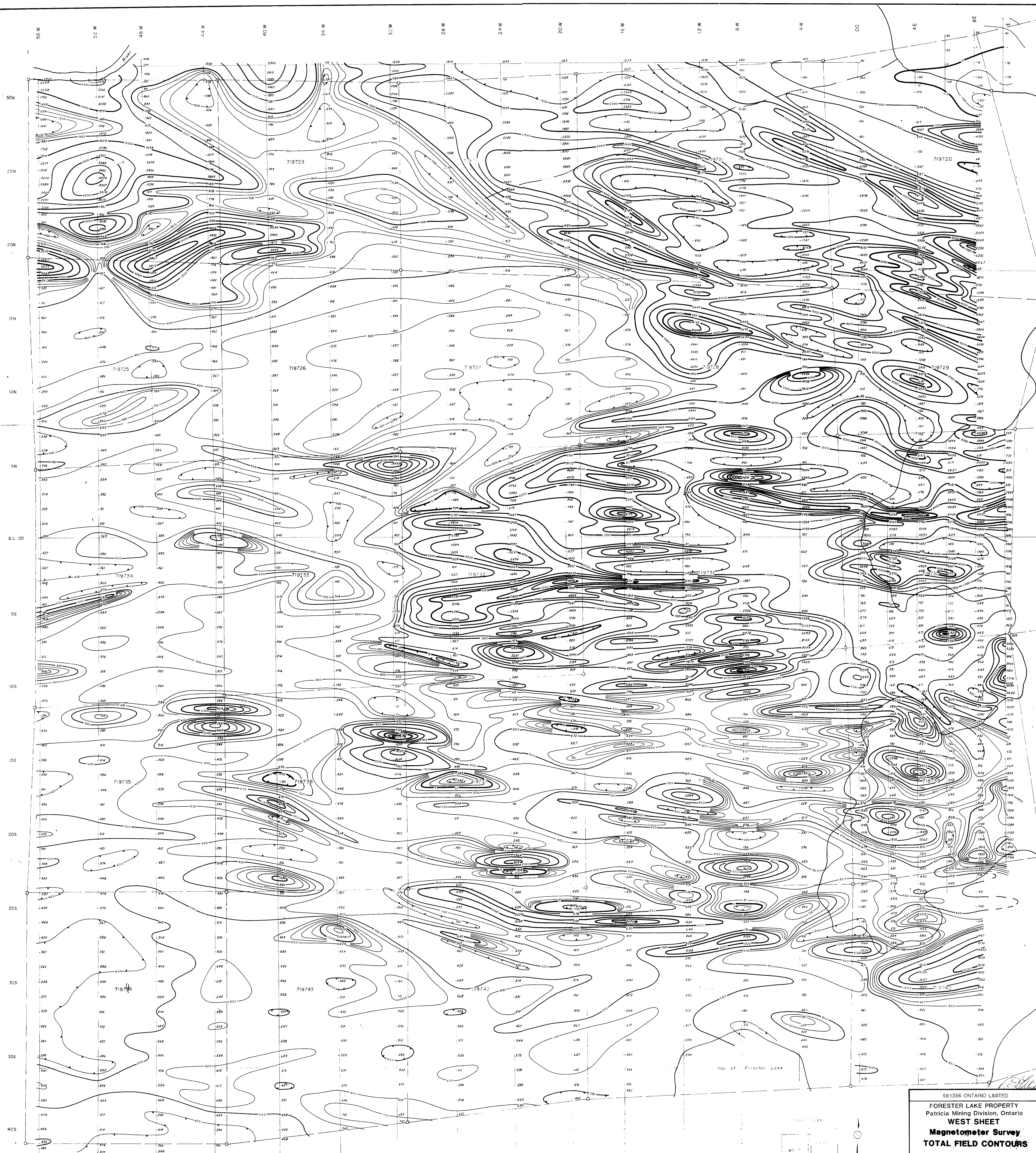


•
FOR ADDITIONAL

INFORMATION

SEE MAPS:

53B/08NE-0013 #4



SEE EAST SHEET FOR LEGEND

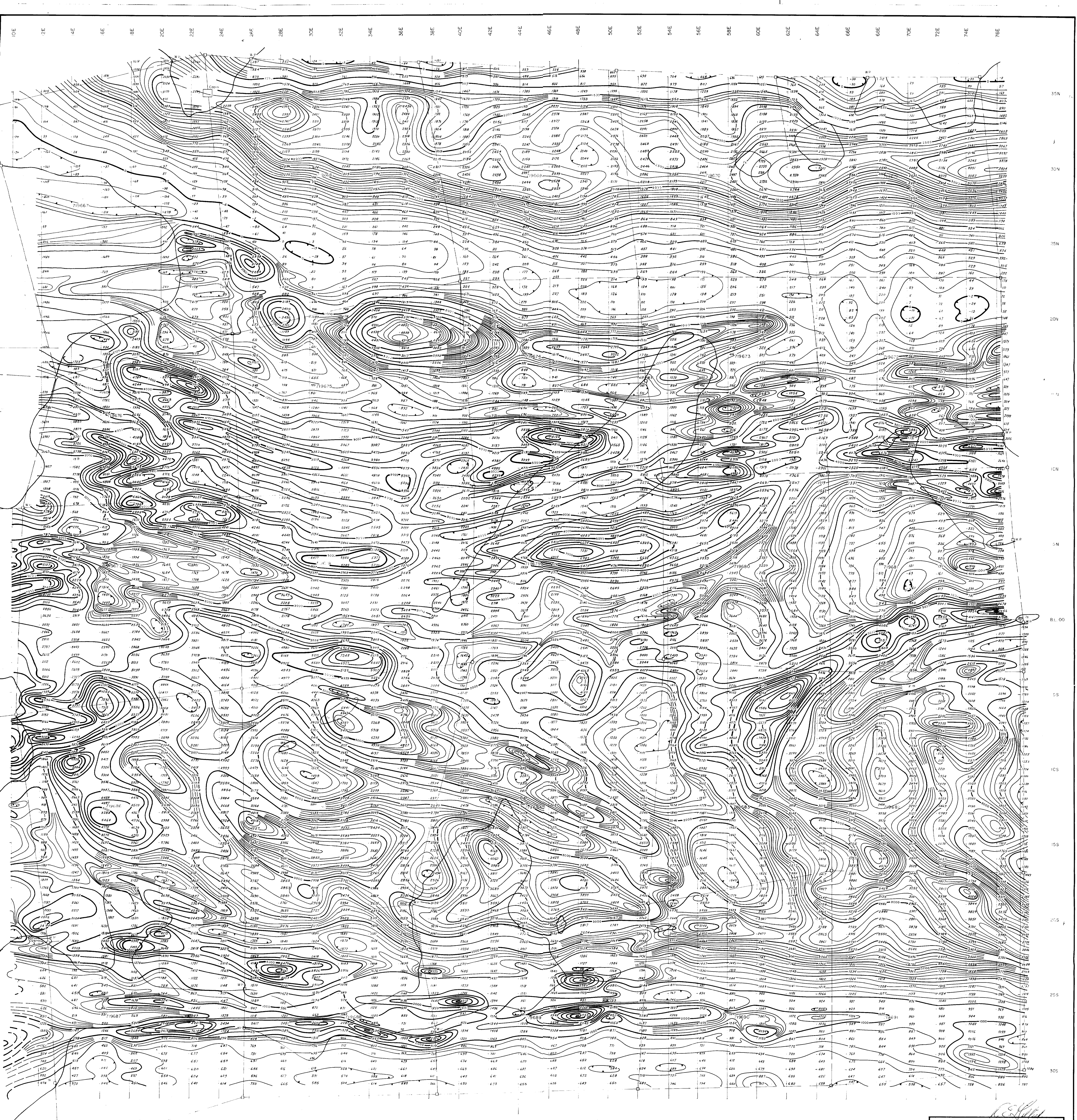
53B/08NE-0013.#1

581356 ONTARIO LIMITED
FORESTER LAKE PROPERTY
Patricia Mining Division, Ontario
WEST SHEET
Magnetometer Survey
TOTAL FIELD CONTOURS

0 100 200 300 400 500
1:200

BY: DATE: Dec 1994
SCALE: 1" = 200'
GEOCANEX LTD TORONTO, CANADA DWG. No: 1-W

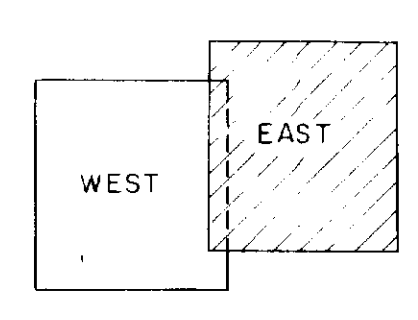
2/123



LEGEND

- Instrument : Geometrics G-816
- Risings above base level of 60,000 gammas
- Contour interval : 100 gammas
- 100 gamma contour : [dashed line]
- 500 gamma contour : [dotted line]
- 1000 gamma contour : [solid line]
- 5000 gamma contour : [thick solid line]
- Depression : [line with inward-pointing ticks]

SHEET INDEX

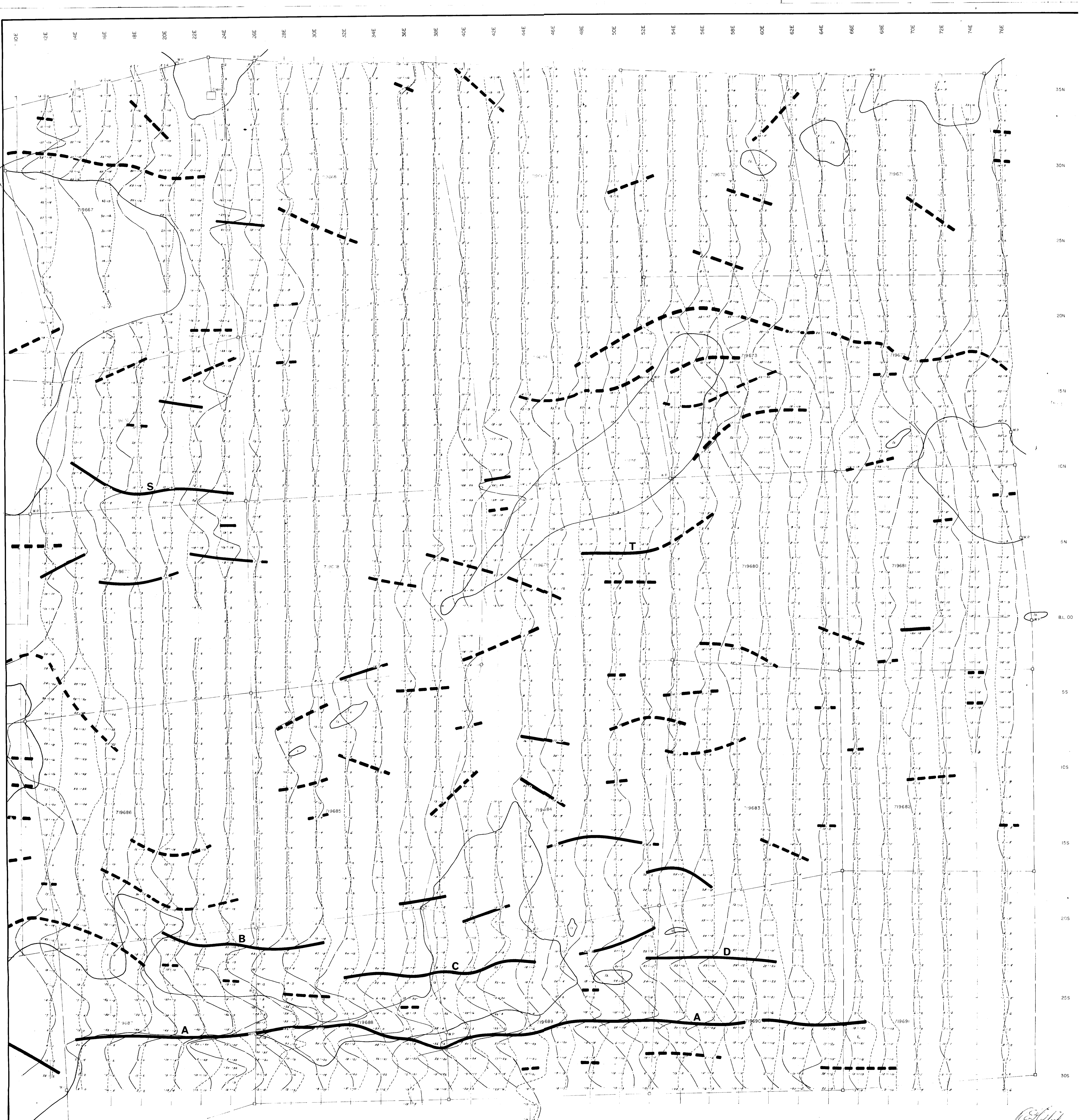


581356 ONTARIO LIMITED
 FORESTER LAKE PROPERTY
 Patricia Mining Division, Ontario
EAST SHEET
Magnetometer Contour
TOTAL FIELD CONTOUR

0 100 200 300 400 500'

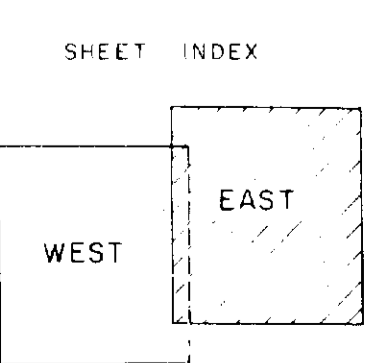
DATE: Dec 1984
 SCALE: 1" = 200'
 DWG. No. 1-E

53B/08NE-0013.#2



VLF Conductors:
 Interpreted Bedrock Conductor:
 Other Conductor:

LEGEND
 Instrument Geonics EM-16
 Transmitter..... NLK Seattle, Wash., 24.8 kHz
 Stations road facing North
 Readings plotted IP | OP
 Profiles at 1" = 40' plotted. + | -
 Inphase profile
 Quadrature profile



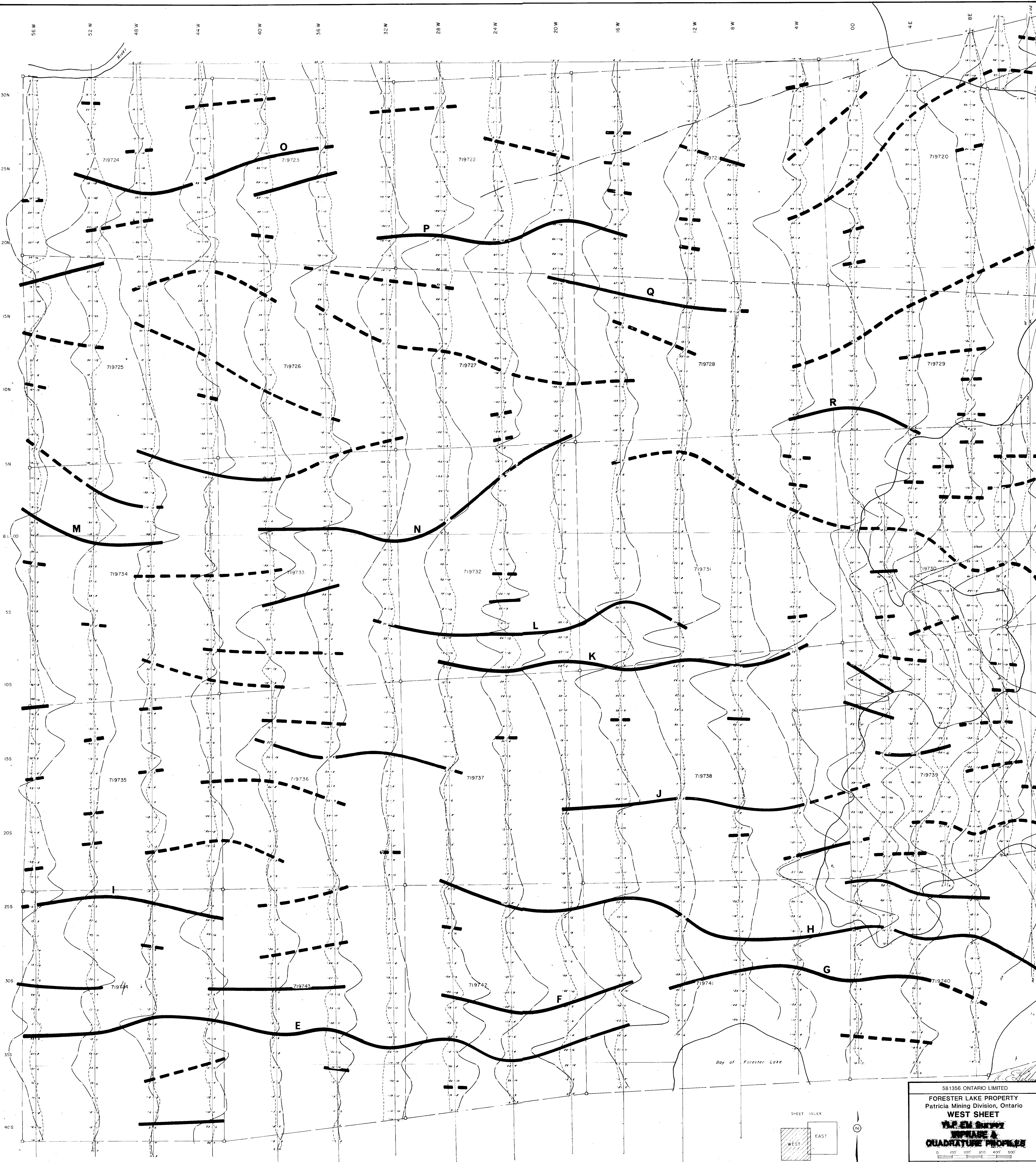
581356 ONTARIO LIMITED
FORESTER LAKE PROPERTY
 Patricia Mining Division, Ontario
EAST SHEET
VLF EM Survey
INPHASE & QUADRATURE PROFILES

0 100 200 300 400 500

BY:
 DATE: Dec. 1984
 SCALE: 1" = 200'
 DWG. No. 2-E

GEONEX
 GEOCANEX LTD
 TORONTO, CANADA

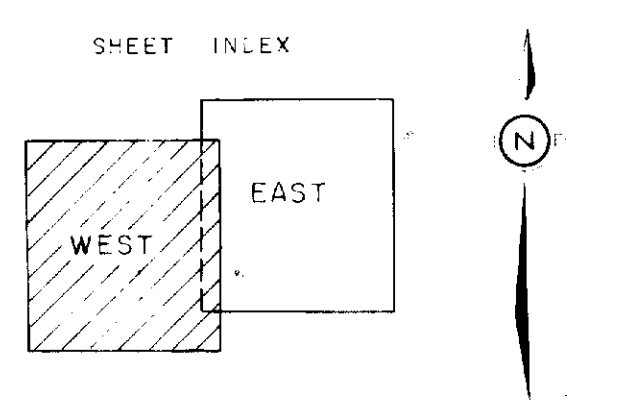
53B/08NE-0013, #4



581356 ONTARIO LIMITED
FORESTER LAKE PROPERTY
 Patricia Mining Division, Ontario
WEST SHEET
3-D EM SURVEY
PHASE 2
QUADRATURE PROFILES

BY: [Signature]
 DATE: Dec. 1984
 SCALE: 1" = 200'
 DWG. No.: 2-W

GEOCANEX LTD
 TORONTO, CANADA



SEE EAST SHEET FOR LEGEND

53B/08NE-0013#3