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REPORT  
ON  
MAGNETIC AND VLF-EM SURVEYS  
ON THE  
STAUNTON LAKE PROPERTY  
DISTRICT OF KENORA, PATRICIA MINING DIVISION  
NORTHWESTERN ONTARIO  
FOR  
POWER EXPLORATIONS INC.

NTS 53-B/15 NW

RECEIVED

SEP 12 1988

MINING LANDS SECTION

May 1988

Stephen B. Medd, B.Sc.



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## 1.0 SUMMARY

Magnetic and VLF-EM surveys, were carried out during January and February, 1988, on the Staunton Lake property of Power Explorations Inc.

Three geological domains are interpreted from the magnetic and VLF-EM data in conjunction with previous geological data. From north to south, they are: clastic metasediments, mafic metavolcanics with iron formation, and tonalitic batholith rocks.

Hosted within the mafic metavolcanic domain are three weak to moderate magnetic bands representing weak iron formation units. Parts of these units are conductive indicating pyrrhotite-pyrite bearing iron formation or mineralized stratabound shear structures in oxide facies iron formation. At the west end of the property, the magnetic units appear to be squeezed as the distances between them narrow. This could be a result of emplacement of the tonalitic batholith to the south. An apparent thickening of parts of the iron formation in this area suggest possible small scale folding.

Magnetic data also reveal a number of north-northwest to north-northeast crosscutting faults.

The majority of VLF-EM conductors are interpreted as representing fault/shear structures. The North Caribou River Fault System is the dominant structural feature believed to cross through the property. It is marked by two main, weak to moderate conductive trends, and a number of small-scale, parallel and subparallel conductors. The fault system changes direction from west-northwest on the west end of the

west end of the property, where it crosscuts two iron formation units, to east-northeast on the central and east parts of the property.

Seven fences have been selected along which diamond drilling should initially commence. This totals to 21 holes and approximately 6,300 feet of drilling.

## 2.0 INTRODUCTION

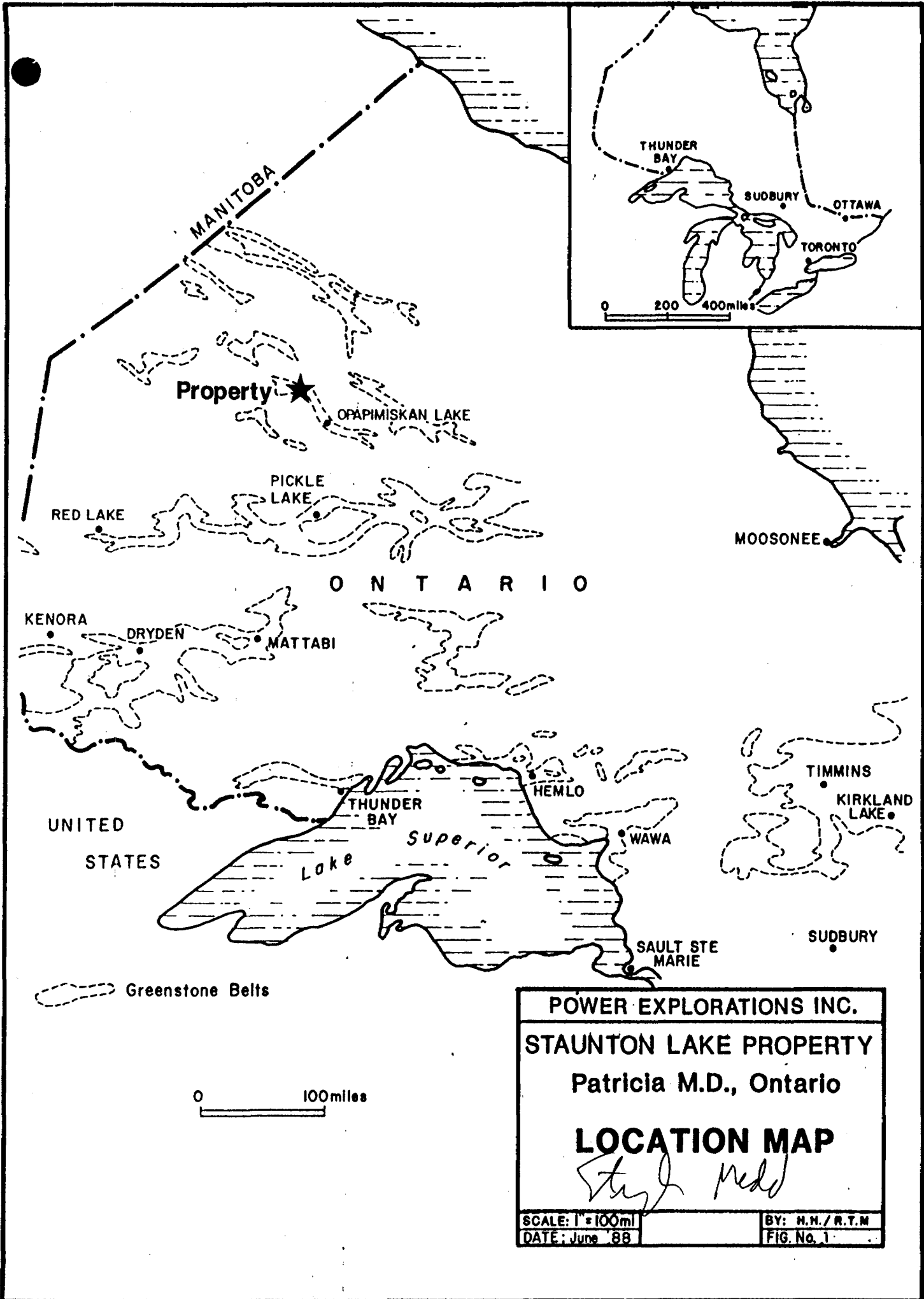
The following report describes the results of ground magnetic and VLF-EM surveys conducted during January and February, 1988, over the Staunton Lake property of Moss Resources Ltd. The two surveys were undertaken to delineate lithological units, structural trends and alteration zones, and to locate conductive zones of sulphide-bearing iron formation, other stratabound sulphide mineralization and shearing, all of which could host gold. Particular attention was given to delineating the North Caribou River Fault Zone which is known to traverse the property in an east-northeast direction. This is the most prominent fault zone in the North Caribou Lake greenstone belt and one which is known to host Cu-Ag-Au mineralization.

## 3.0 PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Staunton Lake property is located approximately 110 air miles north-northwest of the town of Pickle Lake and 170 air miles northeast of the town of Red Lake in Northwestern Ontario (Fig. No. 1). A block of 74 contiguous, unpatented mining claims form the property (Fig. No. 2). The property does not include a block of 8 contiguous claims which it encloses. To the southwest, the property is bordered by a claim block held by E.W. Bazinet for Milner Consolidated Silver Mines Ltd. and Beaufield Resources Inc. Claim numbers and recording dates are as follows:

<u>Claim Numbers</u>		<u>Recording Dates</u>
Pa 1007849-1007886 inclusive	(38)	October 14, 1987
Pa 1007929-1007934 inclusive	( 6)	October 14, 1987
Pa 1008072-1008101 inclusive	<u>(30)</u>	October 14, 1987

Total 74 Claims



Property

OPAPIMISKAN LAKE

PICKLE LAKE

RED LAKE

O N T A R I O

KENORA

DRYDEN

MATTABI

UNITED STATES

THUNDER BAY

HEMLO

WAWA

Superior Lake

SAULT STE MARIE

SUDBURY

TIMMINS

KIRKLAND LAKE

Greenstone Belts

0 100 miles

POWER EXPLORATIONS INC.

STAUNTON LAKE PROPERTY

Patricia M.D., Ontario

LOCATION MAP

*Steve Peden*

SCALE: 1" = 100mi  
DATE: June '88

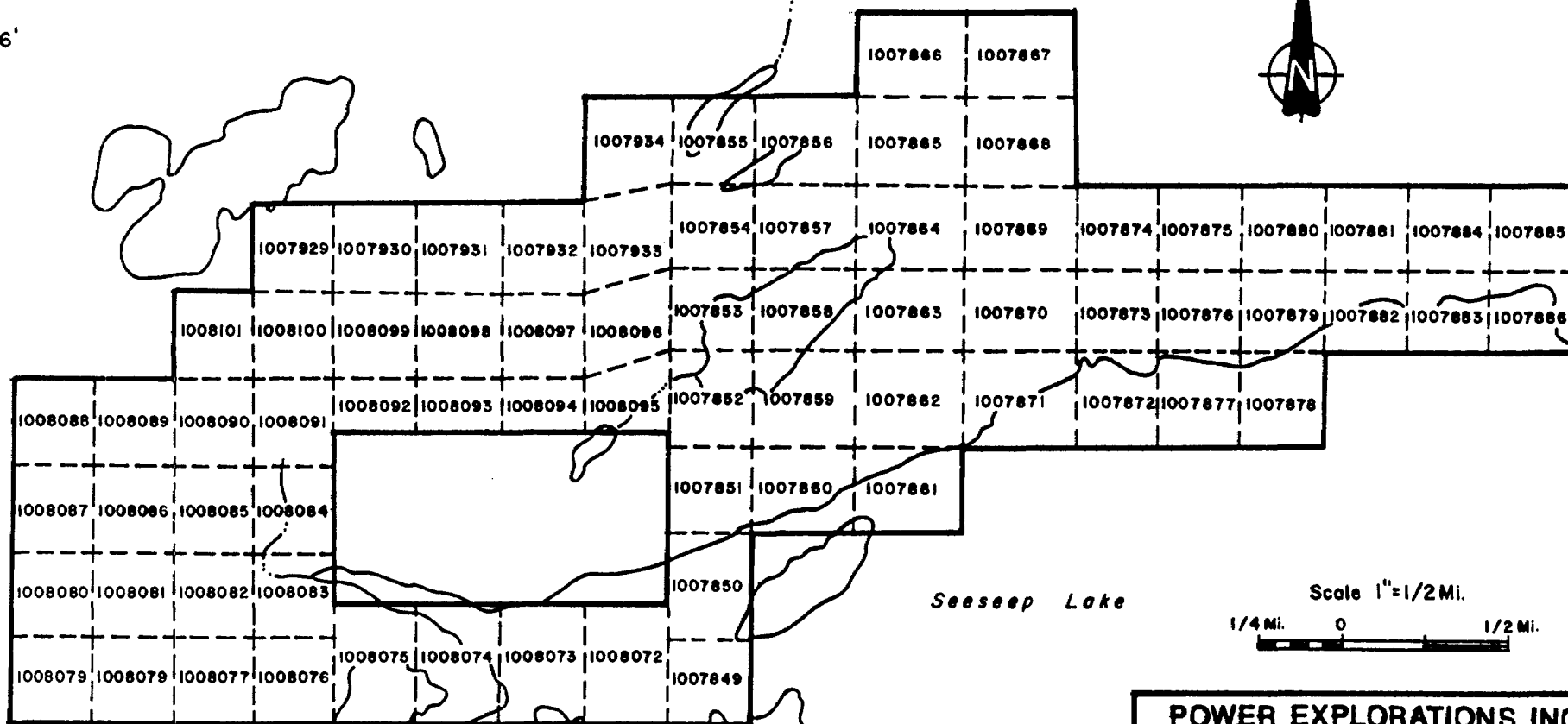
BY: H.N./R.T.M  
FIG. No. 1



90°57'

90°52'

52°56'



Seeseep Lake

Scale 1"=1/2 Mi.



52°54'

STAUNTON LAKE

<b>POWER EXPLORATIONS INC.</b>	
<b>STAUNTON LAKE PROPERTY</b>	
Patricia M.D., Ontario	
<b>CLAIM MAP</b>	
<i>Stacy Medd</i>	
	BY: R.T.M.
	DATE: June '88
	SCALE: 1"=2640'
	FIG. No. 2
GEOCANEX LTD TORONTO, CANADA	

These claims held by Moss Resources Ltd., 1003-34 King Street East, Toronto, Ontario, M5C 1E5.

Access to the property is attained by helicopter or by float plane from Pickle Lake or Red Lake to a number of lakes on, or adjacent to the property. Furthermore, Highway 808, an all-weather gravel road from Pickle Lake to Windigo Lake, ends approximately 25 miles south of the property. During January to April, a winter road exists between Windigo Lake and Weagamow Lake and passes within five miles of the property.

#### 4.0 TOPOGRAPHY AND VEGETATION

The property is situated along the north shores of Staunton and Seeseep Lakes. Lakes, ponds and rivers cover 20% of the property. Overburden ridges trend northeast and are produced by well-drained sand and boulder drumlinoid deposits. Clay till sheets commonly occupy the low-lying areas which are covered by black spruce and thick muskeg.

#### 5.0 PREVIOUS WORK

The following is a chronological account of previous work on the property and adjacent areas:

1939 - The geology of the area was mapped at a scale of one inch to one mile by Jack Satterly for the Ontario Department of Mines.

1960 - An airborne magnetometer survey was flown in the area by the O.D.M.-G.S.C. (Maps 909G and 919G). The survey indicates that at least one east-northeast trending iron formation traverses the property.

1978 - Linecutting, geological mapping, and ground magnetic and electromagnetic surveys were conducted over six claim blocks held by St. Joseph Explorations Ltd., located southwest of the property. Diamond drilling for gold and massive sulphides was recommended.

1979 - Six holes were diamond drilled by St. Joseph Explorations Ltd. for a total of 1,788 feet. All six holes were located on the present Randall Lake property of Power Explorations Inc. situated along the North Caribou River Fault to the southwest. Assays were carried out for Au, Cu, and Zn.

1982 - The Ontario Geological Survey published a regional geological compilation map (Map 2292) at a scale of one inch to four miles (O.G.S., 1982). This map was compiled from data obtained during a 1973 reconnaissance geological survey.

1984 - Moss Resources Ltd. staked 75 claims covering a 5.4 mile strike length along the North Caribou River Fault southwest of the property.

1985 - In March, 1985, magnetic and VLF-EM surveys were conducted over the Randall Lake property belonging to Moss Resources Ltd. and Power Explorations Inc. under a joint venture agreement.

1985 - The Ontario Geological Survey released a preliminary geological map (Map P.2834) at a scale of one inch to one-half mile (Bartlett et al., 1985). This map was based on geological mapping of the Eyapamikama Lake area during the summer of 1984.

1986 - The Ontario Geological Survey released a set of 38 airborne magnetic and electromagnetic maps (scale 1:20,000) that covered the entire North Caribou - Opapimiskan Lakes greenstone belt. The airborne survey was flown by Aerodat Ltd. during the winter of 1985. Maps 80726 and 80727 cover the property area.

1986 - Geological mapping, magnetic and horizontal-loop EM surveys were performed over the claim block bordering the Staunton Lake property to the southwest. The work was done for Milner Consolidated Silver Mines Ltd. and Beaufield Resources Inc. under a joint venture agreement. Details of the three surveys are referred to in Section 7.0 (Property Geology) of this report.

1987 - A staking rush in the belt accelerated in 1987 such that by year's end, the entire length of the North Caribou River Fault and the boundary between South Rim Metavolcanics and Eyapamikama Metasediments were completely staked.

1987 - The Milner Consolidated Silver Mines Ltd. - Beaufield Resources Inc. joint venture diamond drilled seven holes for a total of 2,572.5 feet on the claim block adjacent to the Staunton Lake property on its southwest side. The best gold assay yielded 0.021 ounces gold per ton from interval 171-180 feet of Hole No. 3 located at co-ordinates 2+30N,8+00W (Grid 1) on claim 870717. The auriferous interval contained interbanded chert-magnetite-grunerite with 20% pyrite and

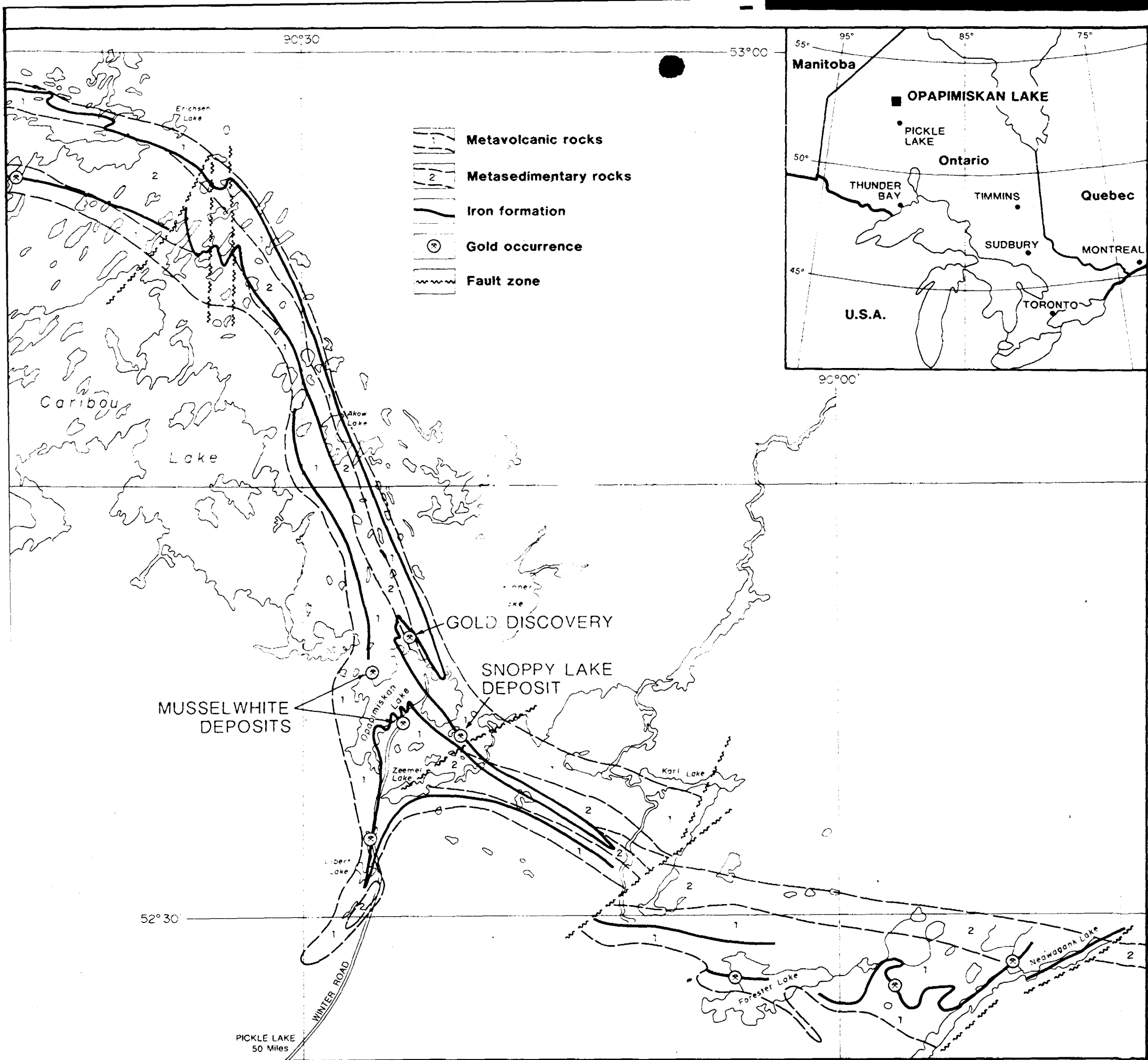
pyrrhotite as massive bands and fracture-fillings. The zone was micro folded and sheared with trace amounts of arsenopyrite. Overall, results were disappointing and no further work was recommended in the near future.

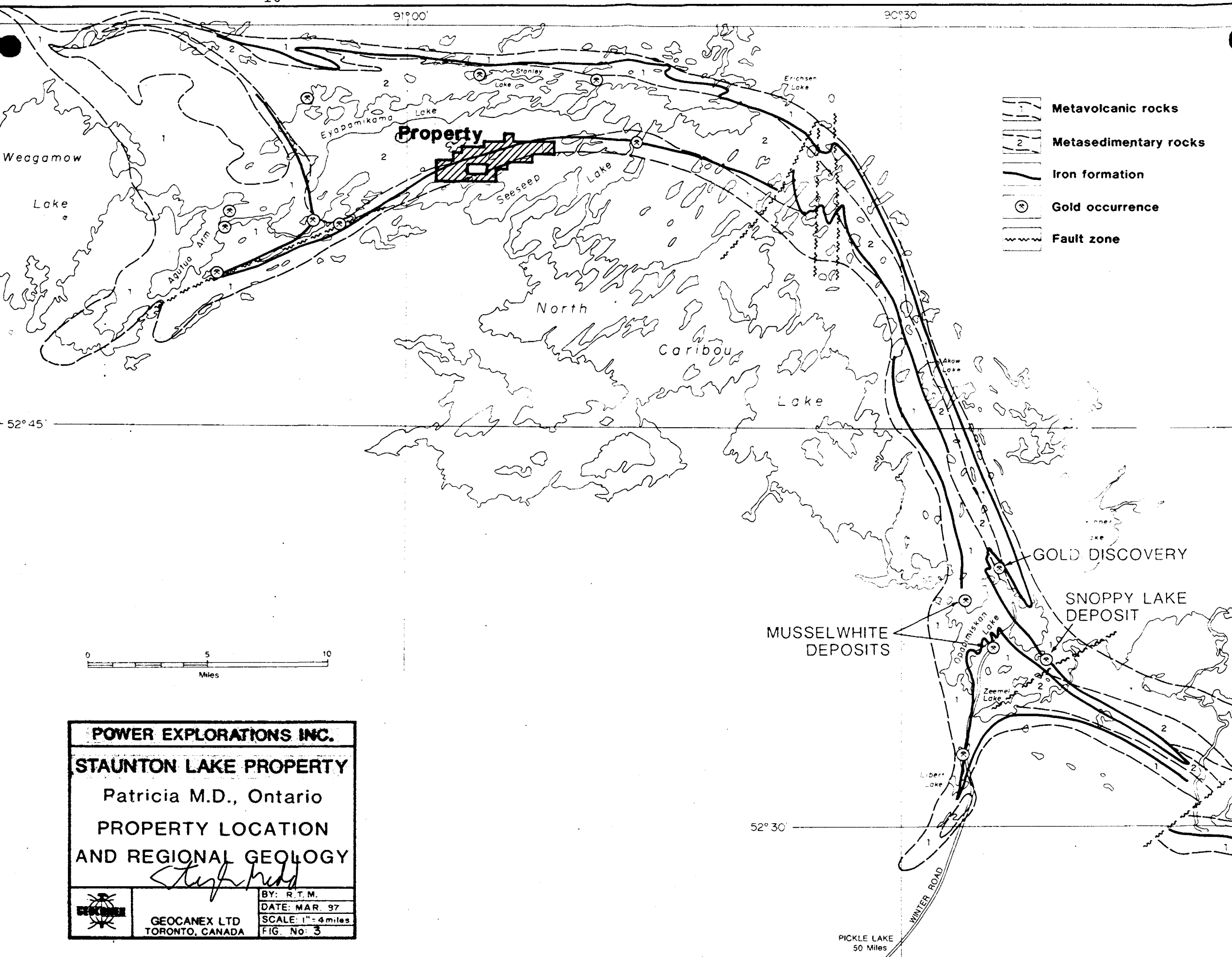
## 6.0 REGIONAL GEOLOGY AND ECONOMIC MINERALIZATION






The property is located in the North Caribou - Opapimiskan Lakes greenstone belt which belongs to the Sachigo Sub-province of the Superior Province of the Canadian Shield. The belt forms a narrow, arcuate, isoclinal synclinorium that stretches for approximately 90 miles from end to end (Fig. No. 3).

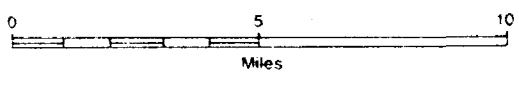
A thick clastic metasedimentary sequence, known as the Eyapamikama Lake Metasediments, occupies the central and northwest part of the belt. This sequence is flanked to the north by the North Rim Metavolcanics and to the south by the South Rim Metavolcanics. The South Rim Metavolcanics contain mafic to felsic metavolcanic flows and tuffs; the main lithologies being fine-to-medium grained, massive and pillowed mafic flows. The North Rim Metavolcanics contain predominantly mafic metavolcanic rocks. Both units host extensive zones of banded oxide facies iron formation and cherty chemical sediments. Gabbro and quartz-feldspar porphyry sills and dykes are found throughout the North and South Rim Metavolcanics. These intrusives are probably co-magnetic with their host rocks because they commonly predate D<sub>1</sub> structures.

In the vicinity of Opapimiskan Lake, the North and South Rim Metavolcanic units pinch out and they are replaced by the Opapimiskan-Markop Metavolcanics. These rocks are mafic and






-  Metavolcanic rocks
-  Metasedimentary rocks
-  Iron formation
-  Gold occurrence
-  Fault zone



**POWER EXPLORATIONS INC.**

**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
 PROPERTY LOCATION  
 AND REGIONAL GEOLOGY

*Steph Hudd*

	BY: R.T.M.
	DATE: MAR. 97
	SCALE: 1" = 4 miles
	FIG. No: 3

**GEOCANEX LTD**  
 TORONTO, CANADA

MUSSELWHITE DEPOSITS

GOLD DISCOVERY

SNOPPY LAKE DEPOSIT

PICKLE LAKE  
50 Miles

WINTER ROAD

ultramafic in composition, and are possibly older and geochemically more primitive. They are similar compositionally to the Keeyask Lake Metavolcanics at the west end of the belt. Located at the easternmost end of the belt are a sequence of pillowed and massive mafic metavolcanic flows known as the Forester-Neawagank Metavolcanics. These rocks may be confused with metamorphosed mafic plutonic rocks, however, the presence of interbeds of banded iron formation and pillow structures are evidence of their volcanic origin (Breaks, et al., 1986).

Granitoid paragneiss and migmatized rocks border the north side of the belt. Felsic intrusives such as the North Caribou Lake Batholith border the south side. A myriad of felsic porphyry, aplite and pegmatite dykes crosscut the margins of the belt.

The regional metamorphic grade varies from greenschist to lower-middle amphibolite facies.

Deformation of the belt involved at least three phases of folding. Only rare examples can be documented of the D<sub>1</sub> event which produced isoclinal folding resulting in the synclinal shape of the belt. The present isoclinal shapes of F<sub>1</sub> folds are sometimes seen in banded iron formation and are probably the result of rotation of fold limbs nearly parallel to F<sub>2</sub> fold limbs. The D<sub>2</sub> deformation event was the major tectonic and metamorphic event in the belt. F<sub>2</sub> folds are closed to open, asymmetric Z and S mesoscopic folds which possess near vertical, axial planar, penetrative cleavage. In most of the belt, this cleavage is generally oriented in a northwest to west-northwest direction with associated lineations having shallow plunges to the northwest



or northeast. D<sub>3</sub> structures are only locally penetrative and are usually manifested as broad open warps in the stratigraphy and earlier fabrics.

Gold mineralization occurs with quartz-pyrrhotite veins and disseminated sulphides in grunerite-chert banded iron formation at Opapimiskan Lake. The presence of grunerite in banded iron formation correlates with zones of increased shearing that commonly parallel iron formation banding and axial planes of F<sub>2</sub> folds. Sulphide mineralization commonly shows a preferential association with these gruneritic zones. Sulphide-bearing quartz-carbonate ± tourmaline veins and shear zones are gold-bearing and could be related to either S<sub>1</sub> or S<sub>2</sub> structures. D<sub>1</sub> related shear zones, such as the North Caribou River Fault are hosts for gold. The gold is associated with intense shearing and quartz-sulphide-iron carbonate alteration (North, 1987).

To date, the most economic gold zones in the belt are found in the west Anticline Zone of the Musselwhite deposit and the Snoppy Lake deposit, located in the Opapimiskan Lake area. Published reserves for the West Anticline Zone are over 3.2 million tons at 0.17 ounces gold per ton. The Snoppy Lake deposit has estimated reserves of 6 million tons grading 0.2 ounces gold per ton.

## 7.0 PROPERTY GEOLOGY

No previously recorded detailed geological data is known to exist for the property. However, regional mapping of the area was carried out in 1973 by the O.G.S. and the results were released in 1982 on Map 2292 at a scale of one inch to

four miles (O.G.S., 1982). A more focussed mapping program of the Eyapamikama Lake area was undertaken by the O.G.S. in 1984. The results of this survey are presented on preliminary geological map P.2834 at a scale of one inch to one-half mile, released in 1985 (Bartlett et al., 1985). Detailed geology, geophysics and diamond drilling were carried out in 1986-1987 on the Milner Consolidated Silver Mines property which borders the Staunton Lake property on its southwest side.

From the sources of geological data mentioned above, a rudimentary picture of the property geology can be constructed. Bedrock exposure is poor, approximately 5%, with a majority of outcrops apparently occurring along parts of the Seeseep and Staunton Lakes shorelines. Drilling on the adjacent property to the southwest encountered overburden thicknesses of 5 to 40 feet. Geological, magnetic and electromagnetic data from the adjacent property indicate that three geological domains continue east-northeasterly on to the Staunton Lake property. From north to south, they are: clastic metasediments of the Eyapamikama Metasediments; mafic fine-to-medium grained metavolcanic flows and tuffs of the South Rim Metavolcanics; and tonalite and granitoid rocks belonging to the North Caribou Lake Batholith. The data also indicates the possible extension on to the property of at least one continuous conductive iron formation unit contained within the mafic metavolcanics. This iron formation unit is flanked on its north side by a linear topographic depression and coincident EM conductor which could represent a concordant shear zone within the North Caribou River Fault System. Two other narrow, linear magnetic features, possibly oxide facies iron formation, also strike on to the property.

Drill core data from the adjacent property to the southwest reveal that the iron formation - shear zone area contains ubiquitous micro folding, brecciation and shearing in the rocks. The best gold assay came from this potential shear zone and yielded 0.021 ounces gold per ton over nine feet from interbanded chert-magnetite-grunerite with 20% pyrite and pyrrhotite as massive bands and fracture-fillings. Similar mineralized structures probably exist on the Staunton Lake property.

#### 8.0 DESCRIPTION OF GEOPHYSICAL PROGRAM

During January and February, 1988, linecutting, and ground magnetic and VLF-EM surveys were conducted over the Staunton Lake property of Power Explorations Inc. The personnel involved were:

C. Bertrand	Val d'Or, Quebec	Linecutter	Jan.9-20, 1988
C. Darveau	Amos, Quebec	Linecutter	Jan.9-20, 1988
R. Darveau	Amos, Quebec	Linecutter	Jan.9-20, 1988
Y. Gregoire	Amos, Quebec	Linecutter	Jan.9-20, 1988
Y. Jacques	Amos, Quebec	Linecutter	Jan.9-20, 1988
R. LeMay	Amos, Quebec	Linecutter	Jan.9-20, 1988
J. Paquette	LaSarre, Quebec	Linecutter	Jan.9-20, 1988
P. Trapper	LaSarre, Quebec	Linecutter	Jan.9-20, 1988
F. Recoskie	Pickle Lake, Ontario	Magnetometer Operator	Jan. 28- Feb. 10, 1988
D.J. Recoskie	Val d'Or, Quebec	Magnetometer Operator	Jan. 28- Feb. 10, 1988
D.E. Recoskie	Val d'Or, Quebec	VLF Operator	Jan. 28- Feb. 10, 1988
R. Carpenter	Sioux Lookout, Ontario	VLF Operator	Jan. 28- Feb. 10, 1988

An east-west trending baseline was cut across the property and perpendicular lines were cut 200 feet apart with pickets erected at 100 foot intervals.

The magnetic survey was performed using a Scintrex Fluxgate MF-2 magnetometer. Readings of the vertical magnetic field were taken every 100 feet along the survey lines, and in areas of high magnetic gradient readings were taken at 50 foot intervals. Diurnal drift changes in the magnetic field were estimated by taking repeat readings at previously established stations at time intervals not exceeding 1.5 hours. Corrections were made, accordingly, to the vertical magnetic field value obtained at each station. The results of the magnetic survey were plotted and contoured and are presented on maps in back of the report.

The VLF-EM survey employed a Geonics EM-16 receiver tuned to receive the 24.0 kHz signal transmitted from Cutler, Maine (NAA). Readings of inphase (tilt-angle) and quadrature were taken every 100 feet along the survey lines. The results are presented in profiled format and contoured format (Fraser-filtered inphase values) on maps in back of the report.

## 9.0 RESULTS AND INTERPRETATION

Refer to the geophysical interpretation maps in back of the report.

### 9.1 Magnetic Data

Three major geological domains are inferred from the magnetic data, in conjunction with geological data from two sources (Bartlett et al., 1985) and (Milner Consolidated Silver Mines Ltd., 1986):

1. Clastic metasediments (Eyapamikama Metasediments) - north part of the property.
2. Mafic metavolcanic flows and tuffs with iron formation (South Rim Metavolcanics) - central part of the property.
3. Tonalite and granitoid rocks (North Caribou Lake Batholith) - south part of the property.

The property is dominated by an east to east-northeast trending package of mafic metavolcanics containing three relatively narrow magnetic bands interpreted to be sulphide and/or oxide facies iron formation. Iron formation bands IF-1 and IF-2, on the north and central parts of the property, respectively, have weak to moderate magnetic responses with values generally between 1000 and 4000 gammas. IF-1 peaks magnetically at 19,000 gammas on the west side of the property. IF-2 peaks magnetically at 8600 gammas on the centre of the property. IF-2 is believed to be the east extension of a chert-magnetite iron formation which was mapped and verified magnetically on the adjacent property to the southwest. Iron formation IF-3 borders the tonalite domain and is considerably weaker and less continuous magnetically than IF-1 and IF-2, with values generally between 600 and 1500 gammas. A peak value of 3500 gammas occurs on its west side.

The mafic metavolcanic/iron formation package is bordered to the north by a domain of relatively subdued and isolated magnetic peaks and depressions. Values generally range between 100 and 500 gammas. This area is interpreted to be clastic metasediments. Bordering the south side of the mafic metavolcanic/iron formation package is a domain of intermediate granitoid rocks or tonalite. This area is characterized by a very flat magnetic response, with values falling within a narrow range between 400 and 600 gammas.

Two west-northwest trending dykes and one north-northeast trending dyke traverse through the tonalite domain but do not appear to enter the adjacent mafic metavolcanic/iron formation package of rocks. These dykes could be diabasic in composition.

Numerous faults or shears cross the property, however, only a fraction of these are indicated by flexures or disruption of magnetic and VLF-EM conductors. Those faults that are apparent from the magnetic data include two north-northeast trending faults and one north-south trending fault on the east part of the property. On the west part of the property, two north-northwest trending faults have been interpreted based on magnetic data. Furthermore, two west to west-northwest trending conductors, A<sub>4</sub> and B<sub>4</sub>, cut obliquely across iron formation bands IF-1 and IF-2, respectively, appearing to disrupt and abate their magnetic responses. These two conductors are believed to be parallel, conductive shears within the North Caribou River Fault System.

On the west part of the property, distances narrow between iron formation bands IF-1, IF-2 and IF-3, suggesting they have been squeezed into their present position by the tonalitic batholith to the south. Deformation appears to be intense in this area as seen by the dense concentration of conductors, interpreted to be shears; and by the suggestion of small scale folding and apparent thickening of the iron formation bands.

## 9.2 VLF-EM Data

Six types of bedrock conductors are interpreted as occurring on the property. They are summarized below:

- I Stratabound Conductors with a Magnetic Association
  - Type 2 - pyrrhotite-pyrite bearing iron formation or sheared iron formation with secondary sulphide mineralization.
  
- II Conductors without a Magnetite Association
  - A. Concordant and Subconcordant Conductors Type 2
    - Type 2 - ambiguous source: pyritic and/or graphitic concordant horizons, conductive contacts, concordant faults and shears.
  
    - Type 3 - concordant or subconcordant faults and shears.
  
  - B. Discordant Conductors
    - Type 4 - west to west-northwest trending faults and shears.
  
    - Type 5 - east-northeast trending faults and shears.
  
    - Type 6 - west-northwest trending faults and shears.

Table No. 1 describes each conductor in detail and assigns a priority (very high, high, moderate, low) with respect to the conductor's potential for gold mineralization.

Note that each conductor is assigned a conductor strength rating (strong, moderate, low, very low) based on a scheme outline below. Negative quadrature response refers to quadrature that behaves inversely to the inphase (i.e. quadrature values are positive when inphase values are negative and vice versa). This is typical of good conductors. Positive

response refers to quadrature that behaves the same way as the inphase (i.e. quadrature values are positive when inphase values are negative). This is typical of poor conductors. Also, note that most conductors vary in strength along strike, therefore, conductor strengths are given as a percentage over the total length of the conductor.

I Strong Conductance

- A. Inphase peak-to-peak response is 60-100%+ with negative (inverse) quadrature or weak to moderate positive quadrature response, or
- B. Inphase peak-to-peak response is 50-60% with strong negative quadrature response.

II Moderate Conductance

- A. Inphase peak-to-peak response is 30-60% with negative quadrature or weak to moderate positive quadrature response, or
- B. Inphase peak-to-peak response is 60-70% with strong negative quadrature response, or
- C. Inphase peak-to-peak response is 60-70% with strong positive quadrature response.

III Low Conductance

- A. Inphase peak-to-peak response is 10-30% with negative quadrature or weak to moderate positive quadrature response, or
- B. Inphase peak-to-peak response is 30-40% with strong positive quadrature response.



TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label (Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
A <sub>1</sub>	West	Iron Fm. (IF-1)	35% strong 25% moderate 40% weak	2,500	Very high	Strongest part associated with high magnetics adjacent to discordant conductive shear (A <sub>4</sub> ).
B <sub>1</sub>	West	Iron Fm. (IF-1)	15% moderate 70% weak 15% very weak	4,400	Very high	Pyrrhotite-pyrite in iron formation or sheared iron formation. Same zone as conductor A <sub>1</sub> .
C <sub>1</sub>	West	Iron Fm. (IF-1)	75% moderate 25% weak	4,200	Very high	Pyrrhotite-pyrite in iron formation or sheared iron formation. Same zone as conductors A <sub>1</sub> , B <sub>1</sub> .
D <sub>1</sub>	East	Iron Fm. (IF-1)	100% very weak	1,400	Moderate	Weak pyrrhotite pyrite in iron formation. Magnetic response is weak.
E <sub>1</sub>	West	Iron Fm. (IF-1)	100% moderate	400	Very high	Sulphide lens in folded part of iron formation IF-1.
F <sub>1</sub>	West	Iron Fm. (IF-2)	100% very weak	700	High	Adjacent to discordant conductive shear (B <sub>4</sub> ) which could be main North Caribou River Fault.
G <sub>1</sub>	West	Iron Fm. (IF-2)	100% very weak	700	Moderate	Weak pyrrhotite-pyrite in iron formation. Same zone as conductor F <sub>1</sub> .
H <sub>1</sub>	West	Iron Fm. (IF-2)	100% weak	1,300	High	Weak pyrrhotite-pyrite in iron formation. Same zone as conductors F <sub>1</sub> , G <sub>1</sub> .
I <sub>1</sub>	East/ West	Iron Fm. (IF-2)	15% strong 50% moderate 35% weak	6,600	Very high	Strongest part associated with high magnetics. Pyrrhotite-pyrite in iron formation or sheared iron formation.

TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label (Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
J <sub>1</sub>	East	Iron Fm. (IF-2)	100% weak	400	Low	Sulphide lens in iron formation or overburden noise.
K <sub>1</sub>	East/ West	Iron Fm. (IF-3)	45% moderate 40% weak 15% very weak	7,600	High	Pyrrhotite-pyrite in weak iron formation (IF-3 north horizon).
L <sub>1</sub>	East	Iron Fm. (IF-3)	15% moderate 30% weak 55% very weak	3,000	Moderate	Could be same zone as conductor K <sub>1</sub> .
M <sub>1</sub>	West	Iron Fm. (IF-3)	35% strong 25% moderate 40% weak	1,600	Very high	Pyrrhotite-pyrite in folded/faulted iron formation.
N <sub>1</sub>	East/ West	Iron Fm. (IF-3)	10% strong 60% weak 30% very weak	6,500	High	Pyrrhotite-pyrite in weak iron formation (IF-3 south horizon) adjacent to tonalitic batholith.
A <sub>2</sub>	West	Clastic Metasediment	100% weak	700	Low	Could be a weakly conductive contact or concordant fault in the clastic metasediments.
B <sub>2</sub>	West	Clastic Metasediment	100% weak	1,300	Low	Same zone as A <sub>2</sub> .
C <sub>2</sub>	West	Clastic Metasediment	100% very weak	1,200	Low	Same zone as A <sub>2</sub> , B <sub>2</sub> .

TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label (Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
D <sub>2</sub>	West	Clastic Metasediments	100% very weak	1,200	Low	Same zone as A <sub>2</sub> , B <sub>2</sub> , C <sub>2</sub> .
E <sub>2</sub>	West	Clastic Metasediments	15% moderate 85% weak	3,000	Low	Same zone as A <sub>2</sub> , B <sub>2</sub> , C <sub>2</sub> , D <sub>2</sub> .
F <sub>2</sub>	West	Clastic Metasediments	50% weak 50% very weak	800	Low	Could be a weakly conductive contact or concordant fault in the clastic metasediments.
G <sub>2</sub>	West	Clastic Metasediments	40% weak 60% very weak	2,200	Low	Same zone as F <sub>2</sub> .
H <sub>2</sub>	West	Clastic Metasediments	100% weak	900	Low	Same zone as F <sub>2</sub> , G <sub>2</sub> .
I <sub>2</sub>	East	Clastic Metasediments	100% very weak	600	Low	Could be a lens of disseminated pyrite.
J <sub>2</sub>	West	Mafic Metavolcanics-Iron Fm. (IF-1) Contact	100% very weak	1,200	Moderate	Weakly conductive contact or sheared contact.
K <sub>2</sub>	West	Mafic Metavolcanics-Iron Fm. (IF-3) Contact	5% strong 35% moderate 60% weak	5,400	Very high	Could be sulphide bearing and sheared iron formation contact. Sinuous shape due to faulting/folding.
L <sub>2</sub>	East/ West	Mafic Metavolcanics	50% moderate 50% weak	1,200	Low	Weak magnetic association. Could be sulphide bearing mafic metavolcanic horizon.

TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label (Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
M <sub>2</sub>	East	Mafic Metavolcanics	100% weak	400	Low	Same zone as L <sub>2</sub> .
N <sub>2</sub>	East	Mafic Metavolcanics	35% weak 65% very weak	2,800	Low	Same zone as L <sub>2</sub> , M <sub>2</sub> . Weak magnetic association.
O <sub>2</sub>	East	Mafic Metavolcanics	25% moderate 75% weak	3,600	Moderate	Weak magnetic association. Could be sulphide bearing mafic horizon or very weak iron formation.
P <sub>2</sub>	East	Mafic Metavolcanics	100% very weak	1,200	Low	Could be a weakly conductive contact or concordant fault.
Q <sub>2</sub>	East	Mafic Metavolcanics	100% weak	400	Low	Same zone as P <sub>2</sub> .
R <sub>2</sub>	East	Mafic Metavolcanics	50% weak 50% very weak	800	Low	Same zone as P <sub>2</sub> , Q <sub>2</sub> .
S <sub>2</sub>	East	Mafic Metavolcanics	100% weak	1,100	Low	Could be weakly conductive contact or concordant fault.
T <sub>2</sub>	East	Mafic Metavolcanics	65% weak 35% very weak	1,200	Low	Similar to conductor T <sub>2</sub> .
U <sub>2</sub>	East	Mafic Metavolcanics	55% moderate 45% weak	2,800	Moderate	Could be conductive contact or concordant shear parallel to concordant shear I <sub>3</sub> .

TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label (Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
A <sub>3</sub>	East/ West	Clastic Metasediment	20% moderate 80% weak	1,800	Moderate	Could be subconcordant shear connecting with conductor C <sub>1</sub> in iron formation (IF-1)
B <sub>3</sub>	East	Clastic Metasediment	50% moderate 50% very weak	1,600	Low	Same zone as A <sub>3</sub> .
C <sub>3</sub>	West	Mafic Metavolcanics	70% weak 30% very weak	2,300	Moderate	Subconcordant shear which could intersect iron formation (IF-1).
D <sub>3</sub>	West	Mafic Metavolcanics	60% moderate 40% weak	2,400	Moderate	Same zone as C <sub>3</sub> . Appears to crosscut weak magnetic trend in mafic metavolcanics.
E <sub>3</sub>	East	Mafic Metavolcanics	15% moderate 85% weak	2,400	Low	Could be same zone as C <sub>3</sub> , D <sub>3</sub> .
F <sub>3</sub>	West	Mafic Metavolcanics	100% weak	1,600	Moderate	Subconcordant shear which could intersect iron formation (IF-2).
G <sub>3</sub>	East	Mafic Metavolcanics	50% weak 50% very weak	1,800	Moderate	Subconcordant shear which could connect with conductor I <sub>1</sub> in iron formation (IF-2).
H <sub>3</sub>	East	Mafic Metavolcanics	100% very weak	1,200	Low	Subconcordant shear parallel to conductor G <sub>3</sub> .
I <sub>3</sub>	East/ West	Mafic Metavolcanics	25% moderate 65% weak 10% very weak	13,600	High	Could be main part of the North Caribou River Fault. Strength increases over magnetic highs.

TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
J <sub>3</sub>	East	Mafic Metavolcanics	75% weak 25% very weak	3,200	Moderate	Subconcordant shear which could intersect iron formation (IF-3). Possible extension L <sub>1</sub> .
K <sub>3</sub>	East/ West	Tonalite	25% strong 40% moderate 35% weak	5,100	Moderate	Edge effect on north side of Seeseep Lake Could also be a shear along tonalite boundary.
L <sub>3</sub>	East	Tonalite	45% moderate 30% weak 25% very weak	3,900	Moderate	Same as conductor K <sub>3</sub> .
M <sub>3</sub>	East	Tonalite	50% moderate 50% weak	2,900	Moderate	Same as conductors K <sub>3</sub> , L <sub>3</sub> .
N <sub>3</sub>	West	Tonalite	50% weak 50% very weak	900	Low	Fault subconcordant to tonalite boundary.
O <sub>3</sub>	West	Tonalite	30% moderate 70% weak	700	Low	Could be same fault as conductor N <sub>3</sub> but disrupted by two dykes.
P <sub>3</sub>	West	Tonalite	60% moderate 40% weak	2,800	Low	Could be same fault as conductors N <sub>3</sub> , O <sub>3</sub> , but disrupted by two dykes.
Q <sub>3</sub>	West	Tonalite	100% moderate	800	Low	Fault subconcordant to tonalite boundary.
R <sub>3</sub>	West	Tonalite	100% moderate	800	Low	Could be same fault as conductor Q <sub>3</sub> .
S <sub>3</sub>	West	Tonalite	80% moderate 20% weak	1,100	Low	Could be same fault as conductors Q <sub>3</sub> , R <sub>3</sub> , but disrupted by two dykes.

TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label (Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
T <sub>3</sub>	West	Tonalite	65% weak 35% very weak	1,100	Low	Fault subconcordant to tonalite boundary.
U <sub>3</sub>	West	Tonalite	100% strong	600	Low	Could be same fault as conductor T <sub>3</sub> but disrupted by a dyke.
V <sub>3</sub>	West	Tonalite	15% moderate 70% weak 15% very weak	2,600	Low	Fault subconcordant to tonalite boundary.
W <sub>3</sub>	West	Tonalite	60% moderate 40% weak	2,000	Low	Similar to conductor V <sub>3</sub> .
A <sub>4</sub>	West	Clastic Metasediments, Iron Fm. (IF-1) and Mafic Metavolcanics	25% moderate 60% weak 15% very weak	5,600	Very high	West-northwest trending discordant shear cutting IF-1. Part of the North Caribou River Fault System.
B <sub>4</sub>	West	Mafic Metavolcanics and Iron Fm. (IF-2)	90% weak 10% very weak	5,500	Very high	West-northwest trending discordant shear cutting IF-2. Part of the North Caribou Fault System.
A <sub>5</sub>	West	Tonalite	35% moderate 65% weak	1,100	Low	East-northeast trending discordant fault.
B <sub>5</sub>	West	Tonalite and Iron Fm. (IF-3)	55% weak 45% very weak	2,900	Moderate	East-northeast trending discordant fault intersecting iron formation (IF-3).

TABLE NO. 1 - VLF-EM BEDROCK CONDUCTORS

STAUNTON LAKE PROPERTY

Conductor Label Numeral Denotes Conductor Type)	Map Sheet	Probable Host Rock	Conductor Strength	Length (Feet)	Priority	Interpretation
C <sub>5</sub>	West	Tonalite and Iron Fm. (IF-3)	10% strong 65% moderate 25% weak	4,800	High	East-northeast trending discordant fault intersecting iron formation (IF-3).
D <sub>5</sub>	West	Tonalite	25% moderate 55% weak 20% very weak	4,100	Low	East-northeast trending discordant fault cut by dyke.
A <sub>6</sub>	West	Tonalite	15% strong 85% moderate	2,300	Moderate	West-northwest trending fault (graphitic?) along edge of dyke. Could also be lake edge effect.
B <sub>6</sub>	West	Tonalite	100% strong	3,200	Moderate	West-northwest trending fault (graphitic?) along edge of another parallel dyke.
C <sub>6</sub>	West	Mafic Metavolcanics	50% weak 50% very weak	900	Low	West-northwest trending fault.
D <sub>6</sub>	West	Mafic Metavolcanics	80% weak 20% very weak	2,100	Low	West-northwest trending discordant fault.
E <sub>6</sub>	West	Clastic Metasediments	85% weak 15% very weak	1,800	Low	West-northwest trending discordant fault.
F <sub>6</sub>	West	Clastic Metasediments	65% weak 35% very weak	1,200	Low	West-northwest trending discordant fault.



#### IV Very Low Conductance

- A. Inphase peak-to-peak response is less than 10% with negative quadrature or weak to moderate positive quadrature response, or
- B. Inphase peak-to-peak response is 10-20% with strong positive quadrature response.

The North Caribou River Fault System is interpreted as changing from a northeast direction, southwest of the property, to a west to west-northwest direction at the west end of the property. As it continues towards the east end of the property, it changes direction again, to an east-northeast trend that parallels the shoreline of Seeseep Lake. The north shoreline of Seeseep Lake may in fact be fault-bounded.

Generally, the fault system is interpreted to form a 1,200 foot wide zone on the west end of the property between conductors A<sub>4</sub> and B<sub>4</sub>. These two conductors are believed to be two of the more dynamic and prominent shears within the fault system. They cut obliquely across iron formations IF-1 and IF-2, respectively, causing marked flexures and abatements in the magnetic responses of the iron formation units. An abatement in the magnetic intensity could reflect hydrothermally produced grunerite from magnetite, as well as silica and carbonate flooding. All are important ingredients for gold deposition in the area.

On the central and east parts of the property, the fault system is interpreted as being confined mainly between iron formations IF-2 and IF-3. Conductor I<sub>3</sub> is a dominant, continuous conductor between the two iron formation units and could be the east extension of a shear represented by conductor B<sub>4</sub>. Similarly, conductors I<sub>1</sub>, and G<sub>3</sub> could form the east extension of a shear represented by conductor A<sub>4</sub>.

## 10.0 CONCLUSIONS AND RECOMMENDATIONS

Drill target selection is based on two general models of gold mineralization for the west end of the North Caribou - Opapimiskan Lakes greenstone belt. Gold mineralization on the Staunton Lake property should be sought in the following geological environments:

1. Iron Formation: particularly, D<sub>2</sub> fold hinges; concordant to subconcordant axial shear zones; conductive zones which could represent both primary and secondary replacement of magnetite; and areas of magnetic abatement which could represent gruneritization, and silica and carbonate flooding.
2. D<sub>1</sub> fault/shear structures: namely, the North Caribou River Fault System and subsidiary splay structures, particularly where individual shears intersect or are proximal to iron formation.

An initial diamond drilling program should test a variety of targets based on the two models described above. To accomplish this, seven fences have been selected for drilling for a total of 21 holes and approximately 6,300 feet. This is based on an average hole depth of 300 feet; an average hole separation of 400 feet; and a drilling direction from south to north at an inclination of -50°.

### Fence No. 1

Location: L88+00W, 7+00S to 14+00S  
Number of Holes: 3  
Approximate Footage: 900 feet

Targets to Test:

1. North contact of iron formation IF-1 and west end of conductor B<sub>1</sub> which appears to be offset from conductor A<sub>1</sub> by a crosscutting conductive shear (A<sub>4</sub>).
2. Conductor A<sub>4</sub>, which could represent one of the more prominent shear structures within the North Caribou River Fault System. It becomes locally stronger where it intersects iron formation IF-1. Furthermore, the intersection is marked by a flexure and abatement in the magnetic response.
3. South contact of iron formation IF-1 and east end of conductor A<sub>1</sub> which appears to be offset from conductor B<sub>1</sub> by a crosscutting conductive shear (A<sub>4</sub>).

Fence No. 2

Location: L80+00W, 4+00S to 12+00S

Number of Holes: 2

Approximate Footage: 600 feet

Targets to Test:

1. Conductor B<sub>1</sub>, which could represent pyrrhotite-pyrite mineralization within iron formation IF-1 or within a stratabound shear. Magnetic data suggest faulting and/or folding near this part of the conductor.
2. Conductor A<sub>4</sub>, which could represent a dynamic shear within the North Caribou River Fault System.

Fence No. 3

Location: L68+00W, BL0+00 to 6+00S

Number of Holes: 2

Approximate Footage: 600 feet

Targets to Test:

1. Conductor B<sub>1</sub> in an area of possible small scale folding and apparent thickening of iron formation IF-1.
2. Conductor E<sub>1</sub>, a short, moderate strength conductor which could represent a lens of pyrrhotite-pyrite within folded iron formation IF-1 or a mineralized axial shear structure.

Fence No 4

Location: L76+00W, 23+00S to 31+00S

Number of Holes: 3

Approximate Footage: 900 feet

Targets to Test:

1. Conductor B<sub>4</sub>, which could represent a dynamic shear structure within the North Caribou River Fault System similar to conductor A<sub>4</sub>.
2. Conductor K<sub>2</sub>, which could be a mineralized or sheared contact along the north side of iron formation IF-3.
3. Conductor C<sub>5</sub>, which crosscuts iron formation IF-3 in a northeast direction and could represent a splay fault off a shear structure marked by conductor B<sub>4</sub>. A north-northwest trending fault crosscuts the iron formation nearby. The magnetic intensity is weakened in this area.

Fence No. 5

Location: L104+00W, 13+00S to 28+00S

Number of Holes: 3

Approximate Footage: 900

Targets to Test:

1. Conductor A<sub>1</sub> in iron formation IF-1 where a marked abatement in the magnetic intensity exists.
2. Conductor B<sub>4</sub>, which could represent a dynamic shear structure in the North Caribou River Fault System. The conductor crosscuts iron formation IF-2 in an area which is marked by a very large and prominent abatement in the magnetic intensity, possibly a result of hydrothermal alteration.
3. Conductor K<sub>2</sub>, which could be a mineralized or sheared contact along the north side of iron formation IF-3. The magnetic intensity is weakened in this area.

Fence No. 6

Location: L20+00E, 8+00N to 13+00S

Number of Holes: 4

Approximate Footage: 1,200 feet

Targets to Test:

1. Conductor I<sub>1</sub> which could represent pyrrhotite-pyrite mineralization in iron formation IF-2 or within a stratabound shear. Conductor I<sub>1</sub>, could be the east extension of conductor A<sub>4</sub>, a possible shear structure within the North Caribou River Fault System.

2. Conductor I<sub>3</sub>, which could be the east extension of conductor B<sub>4</sub>, another possible shear structure within the North Caribou River Fault System.
3. Conductor K<sub>1</sub>, associated with a weakening of the magnetic intensity along the north horizon of iron formation IF-3.
4. Conductor N<sub>1</sub>, associated with a weakening of the magnetic intensity along the south horizon of iron formation IF-3.

Fence No. 7

Location: L32+00E, 11+00N to 9+00S  
Number of Holes: 4  
Approximate Footage: 1,200 feet  
Targets to Test: Along strike of the same four conductors in Fence No. 6.

Respectfully submitted,



Stephen B. Medd, B.Sc.  
Geocanex Ltd.

11.0 REFERENCES

- Milner Consolidated Silver Mines Ltd., 1986. A report on geological and geophysical surveys on their Staunton Lake property by E.W. Bazinet; from the Ontario Geological Survey Assessment Files Research Office, Toronto.
- Milner Consolidated Silver Mines Ltd., 1987. A report on diamond drilling results from their Staunton Lake property by E.W. Bazinet; from the Ontario Geological Survey Assessment Files Research Office, Toronto.
- Barlett, J.R., et al., 1985. Precambrian Geology of Eyapamikama Lake Area (Opapimiskan Lake Project), Kenora Geological Survey, Map P.2834, Geological Series - Preliminary Map. Series 1:31,680. Geology 1984.
- Breaks, F.W., et al., 1985. Opapimiskan Lake Project. Precambrian and Quaternary Geology of the North Caribou Lake Area, District of Kenora, Patricia Portion; p.268-276 in Summary of Fieldwork and Other Activities 1985, Ontario Geological Survey.
- Breaks, F.W. et al., 1986. Opapimiskan Lake Project: Precambrian Geology of the Opapimiskan - Forester Lakes Area, District of Kenora, Patricia Portion; p.368-378 in Summary of Fieldwork and Other Activities 1986, Ontario Geological Survey.
- Hodge, H.J., May, 1985. VLF-EM and Magnetic Surveys, Randall Lake Property, District of Kenora (Patricia Portion), Patricia Mining Division, Ontario, Moss Resources Ltd. for Moss Resources Ltd. - Horseshoe Resources Ltd. Joint Venture; 25p., unpublished report of Geocanex Ltd.
- North, J.W., August, 1987. Report on Prospecting, Trenching, Channel Sampling and Geological Mapping, Randall Lake Property, District of Kenora, Patricia Mining Division, Northwestern Ontario for Power Explorations Inc.; 39p., unpublished report of Geocanex Ltd.
- O.D.M.-G.S.C., 1960. Aeromagnetic Maps 909G and 919G; Scale: one inch to one mile.
- O.G.S., 1982. Map 2292, Big Trout Lake - North Caribou Lake Geological Compilation Series, Scale: one inch to four miles.

- O.G.S., 1985. Airborne Electromagnetic and Total Intensity Magnetic Survey, Opapimiskan Lake Area, District of Kenora, Patricia Portion; by Aerodat Limited for Ontario Geological Survey, Geophysical/Geochemical Series, Maps 80726 and 80727, Scale 1:20,000. Survey and Compilation, March to July, 1985.
- Piroschco, D., and Shields, H., 1985. Geology and Gold Mineralization of the Eyapamikama Lake Area of the North Caribou Lake Greenstone Belt, District of Kenora (Patricia Portion); p. 277-286 in Summary of Fieldwork and Other Activities 1985, Ontario Geological Survey.
- Piroschco, D., 1986. Structural Geology and Gold Mineralization of the Eyapamikama Lake Area of the North Caribou Lake Greenstone Belt, District of Kenora (Patricia Portion); p.379-385 in Summary of Fieldwork and Other Activities 1986, Ontario Geological Survey.
- Sage, R.P., and Breaks, F.W., 1982. Geology of the Cat Lake - Pickle Lake Area, Districts of Kenora and Thunder Bay; Ontario Geological Survey, Report 207, 238 p.



APPENDIX A  
CERTIFICATE OF QUALIFICATION

CERTIFICATE OF QUALIFICATION

THIS IS TO CERTIFY THAT:

I have been a resident of Toronto, Ontario since 1984.


I have been actively engaged in Canadian and foreign mining and explorations since 1979.

I am a graduate of the University of Waterloo, Waterloo, Ontario, with an Honours B.Sc. (1983) in the Co-op Program of Earth Sciences.

I am an associated member, in good standing, of the Geological Association of Canada.

I have disclosed, to the best of my knowledge, all relevant material, descriptive and interpretative, used in the compilation of this report.

DATED THIS 16<sup>th</sup> DAY OF June, 1988

  
Stephen B. Medd, B.Sc.  
Geologist



53B15NW0007

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DOCUMENT NO.  
W8803-211

Mining Act

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 "Expend. Days Cr." columns.  
- Do not use shaded areas below.

Oct 21

Type of Survey(s) Geophysical Survey 2.11603 Township or Area Seeseep lake Area G2204

Claim Holder(s) see attached Prospector's Licence No. see attached

Address 1003-34 King St. East, Toronto, Ontario M5C 1E5

Survey Company Geocanex Ltd Date of Survey (from & to) 08 Day | 01 | 88 to 26 Day | 02 | 88 Total Miles of line Cut 441

Name and Address of Author (of Geo-Technical report)  
Stephen B. Medd, 1117-7 Crescent Pl. Toronto, Ontario

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
see attached					

RECEIVED  
SEP 6 1988

RECEIVED  
SEP 14 1988  
MINING DIVISION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures \$  ÷ 15 = Total Days Credits

Total number of mining claims covered by this report of work. 74

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.

Date Aug 24/88 Recorded Holder or Agent (Signature)

For Office Use Only

Total Days Cr. Recorded 4440 Date Recorded Sept. 1, 1988 Mining Recorder

Date Approved as Recorded 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 H.J. Hodge 1003-34 King St. East, Toronto, Ontario M5C 1E5

Date Certified Aug 24/88 Certified by (Signature)

STAUNTON LAKE PROPERTY

FOR

POWER EXPLORATIONS INC.

CLAIMS NUMBERS

Claude Darveau  
License # K 20388

Rene Darveau  
License # S 6095

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Total 74 Claims





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) Magnetic and VLF-EM
Township or Area SEESEEP Lake area
Claim Holder(s) see attached
Survey Company Geocanex Ltd.
Author of Report Stephen B. Medd
Address of Author 1117-7 Crescent Place, Toronto, Ont.
Covering Dates of Survey January 9 - February 26, 1988
Total Miles of Line Cut 441 Miles

MINING CLAIMS TRAVERSED
List numerically
See Attached List
TOTAL CLAIMS 74

SPECIAL PROVISIONS
CREDITS REQUESTED
Geophysical
--Electromagnetic 40
--Magnetometer 20
--Radiometric
--Other
Geological
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: Sept. 9/88 SIGNATURE: Author of Report or Agent

Res. Geol. Qualifications 2.9752

Previous Surveys
Table with columns: File No., Type, Date, Claim Holder

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 23093 Number of Readings MAG 28173 VLF 23093
Station interval 100 Feet (50 Feet) Line spacing 400 Feet
Profile scale 1 Inch = 40% for VLF-EM
Contour interval 100 Gammas for Magnetics

MAGNETIC

Instrument Scintrex Fluxgate MF-2 Magnetometer
Accuracy - Scale constant +/- 10 Gammas
Diurnal correction method Looping Back to Control Stations
Base Station check-in interval (hours) < 1.5 Hours
Base Station location and value Variable

ELECTROMAGNETIC

Instrument Geonics EM-16 VLF-EM Receiver
Coil configuration Vertical
Coil separation Infinity
Accuracy +/- 2%
Method: [X] Fixed transmitter [ ] Shoot back [ ] In line [ ] Parallel line
Frequency 24 KHz Cutler, Maine (NAA)
Parameters measured Inphase (Tilt Angle) 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

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 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

STAUNTON LAKE PROPERTY

FOR

POWER EXPLORATIONS INC.

CLAIMS NUMBERS

Claude Darveau  
License # K 20388

Rene Darveau  
License # S 6095

Pa 1007849  
1007850  
1007851  
1007852  
1007853  
1007854  
1007855  
1007856  
1007857  
1007858  
1007859  
1007860  
1007861  
1007862  
1007863  
1007864  
1007865  
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1007881  
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1007883  
1007884  
1007885  
1007886

Pa 1007929  
1007930  
1007931  
1007932  
1007933  
1007934

Pa 1008072  
1008073  
1008074  
1008075  
1008076  
1008077  
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1008080  
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1008092  
1008093  
1008094  
1008095  
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1008097  
1008098  
1008099  
1008100  
1008101

Total 74 Claims



Ministry of  
Northern Development  
and Mines

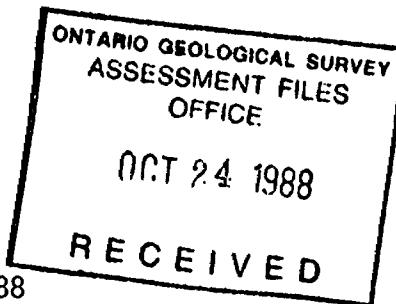
Ontario

Ministère du  
Développement du Nord  
et des Mines

October 14, 1988

Your file: W8803-211  
Our file: 2.11603

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 September 29, 1988  
Geophysical (Electromagnetic and Magnetometer) Survey  
submitted on Mining Claims PA 1007849 et al  
in the Area of Seeseep Lake

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,

W.R. Cowan  
Provincial Manager, Mining Lands  
Mines & Minerals Division

Whitney Block, Room 6610  
Queen's Park  
Toronto, Ontario  
M7A 1W3

Telephone: (416) 965-4888

*LM*  
RM:pl  
Enclosure

cc: Mr. G.H. Ferguson  
Mining and Lands Commissioner  
Toronto, Ontario

Resident Geologist  
Sioux Lookout, Ontario

Mr. C. Darveau/Mr. R. Darvea/  
Power Explorations Inc.  
Suite 1003  
34 King Street E.  
Toronto, Ontario  
M5C 1E5  
Attn: Mr. H.J. Hodge



Ontario

Ministry of Northern Development and Mines

Technical Assessment Work Credits

File
2.11603
Mining Recorder's Report of Work No.
W8803.211

Date
Sept. 26/88

Recorded Holder	Claude Darveau/Rene Darveau/Power Exploration Inc.
Township or Area	Seeseep Lake Area

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ 40 _____ days	PA 1007854-855
Magnetometer _____ days	1007857 to 864 inclusive
Radiometric _____ days	1007867
Induced polarization _____ days	1007869 to 872 inclusive
Other _____ days	1007875 to 866 inclusive
	1007929 to 934 inclusive
	1008072 to 093 inclusive
Section 77 (19) See "Mining Claims Assessed" column	1008095-096
Geological _____ days	1008098
Geochemical _____ days	1008100
	1008101
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

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

30 days ELECTROMAGNETIC	20 days ELECTROMAGNETIC	10 days ELECTROMAGNETIC
PA 1007853	PA 1007850-851	PA 1007849
1007856	1007868	10077852
1007865-866	1007873	1008094
1007874		1008097
1008099		

No credits have been allowed for the following mining claims

<input type="checkbox"/> not sufficiently covered by the survey	<input type="checkbox"/> 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.



Recorded Holder  
Claude Darveau/Rene Darveau/Power Explorations Inc.

Township or Area  
Seeseep Lake Area

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer <u>20</u> days Radiometric _____ days Induced polarization _____ days Other _____ days  Section 77 (19) See "Mining Claims Assessed" column  <b>Geological</b> _____ days  <b>Geochemical</b> _____ days  Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/>  <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	PA 1007854-855 1007857 to 864 inclusive 1007867 to 872 inclusive 1007874 to 886 inclusive 1007929 to 934 inclusive 1008072 to 098 inclusive 1008100-101

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

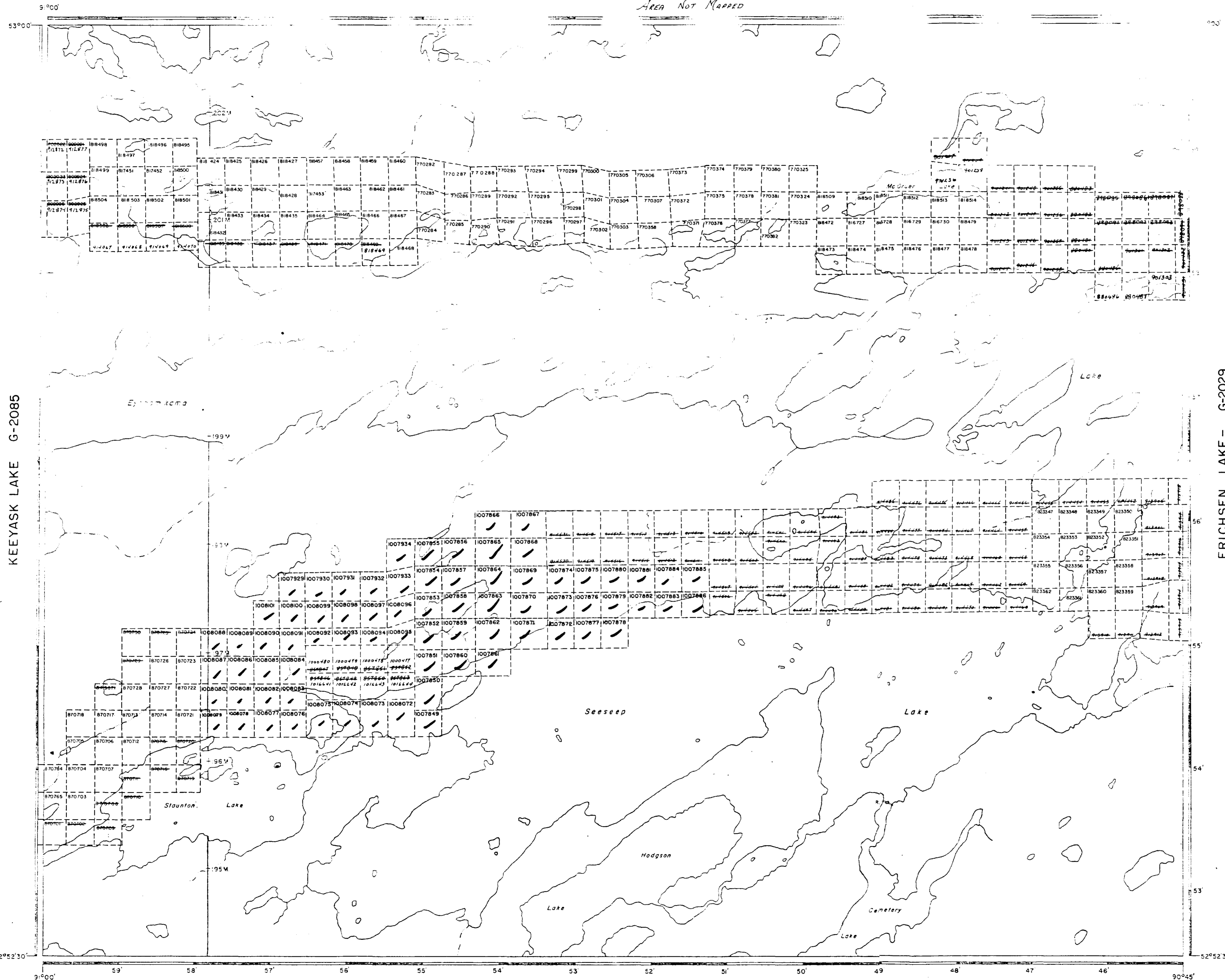
15 days MAGNETOMETER PA 1007853 1007856 1007865-866 1008099	10 days MAGNETOMETER PA 1007850-851 1007873	5 days MAGNETOMETER PA 1007849 1007852
---	---	--

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.

AREA NOT MAPPED



KEYYASK LAKE G-2085

ERICHSEN LAKE - G-2029

ROADS  
 DUMET  
 FLOODING OR FLOODING RIGHTS  
 SUBDIVISION OR COMPOSITE PLAN  
 RESERVATIONS  
 SHORELINE

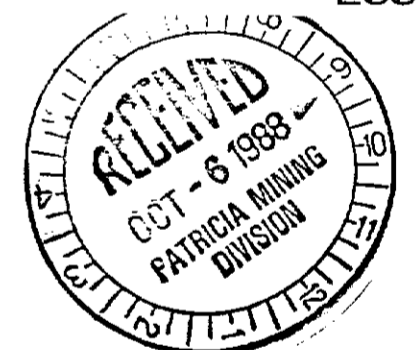
DOCUMENT	SYMBOL
SURFACE & MINING RIGHTS	.....
SURFACE RIGHTS	.....
MINING RIGHTS	.....
SURFACE & MINING RIGHTS	.....
MINING RIGHTS ONLY	.....
SURFACE RIGHTS ONLY	.....

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION  
 M.R. MINING RIGHTS ONLY



April 18, 1986  
 SEPT. 14, 1986  
 Oct 23, 1986  
 Also 4/1/86  
 Jan 12, 1987  
 APR 2, 1987  
 Apr 20, 87  
 Apr 30, 87  
 11/24/87



SCALE: 1 INCH = 40 CHAINS  
 FEET 0 1000 2000 4000 6000 8000  
 METRES 0 200 400 600 800 1000 (2 KM)

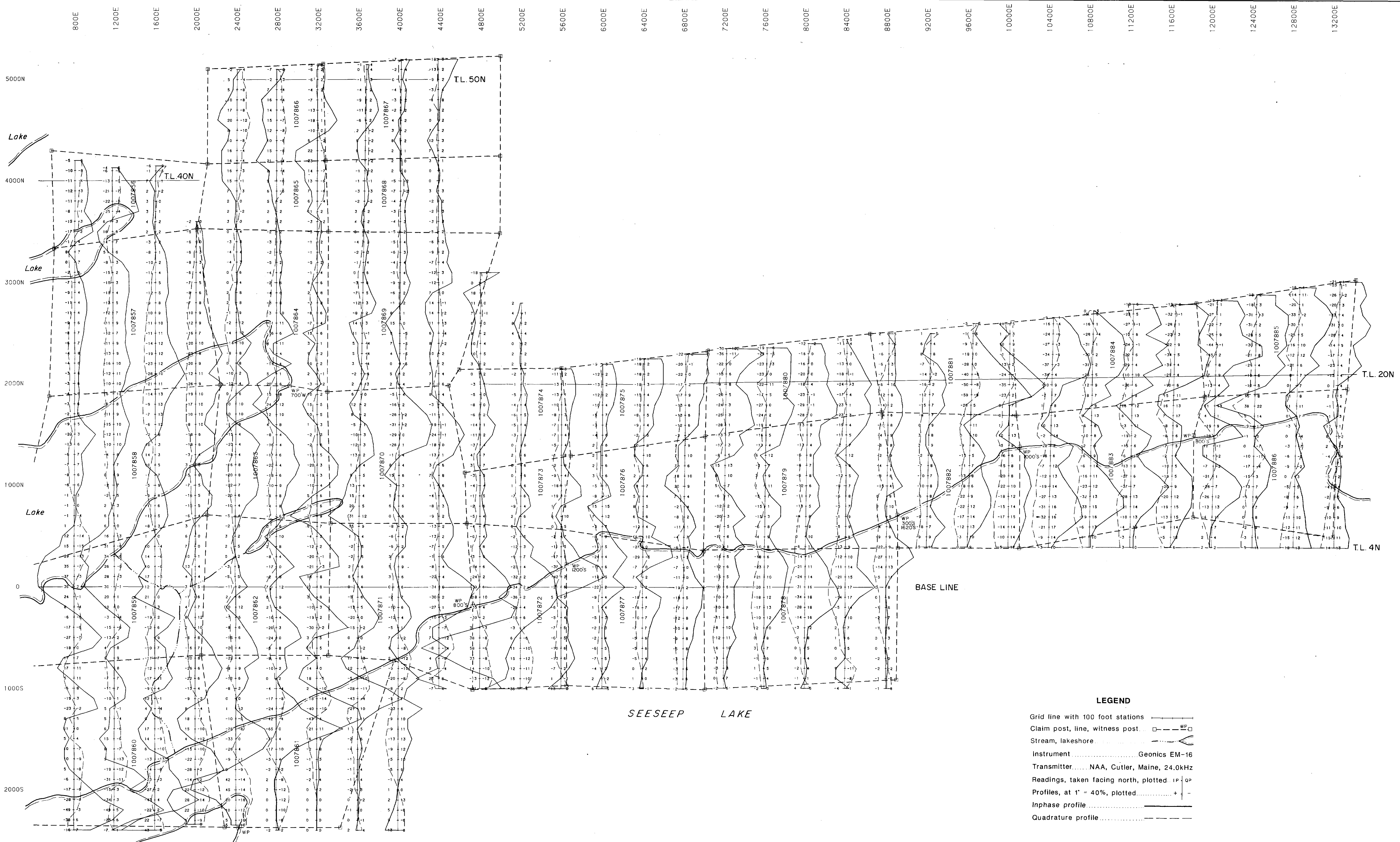
SEESEEP LAKE

M.N.R. ADMINISTRATIVE DISTRICT  
 SIOUX LOCKOUT  
 MINING DIVISION  
 PATRICIA  
 LAND TITLES / REGISTRY DIVISION  
 KENORA (PATRICIA PORTION)

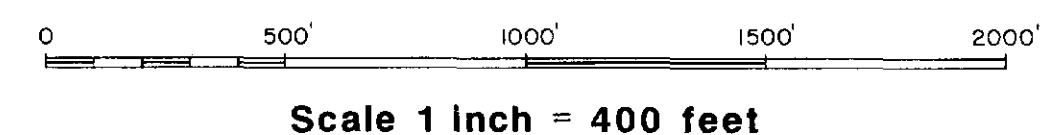
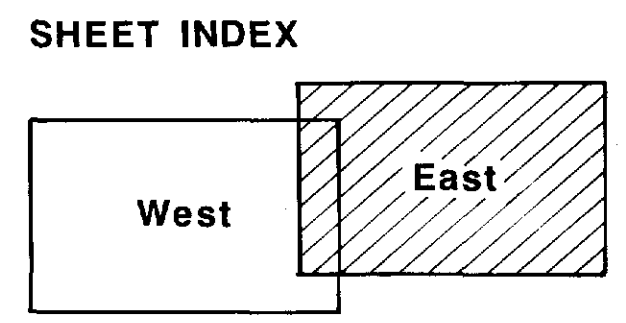
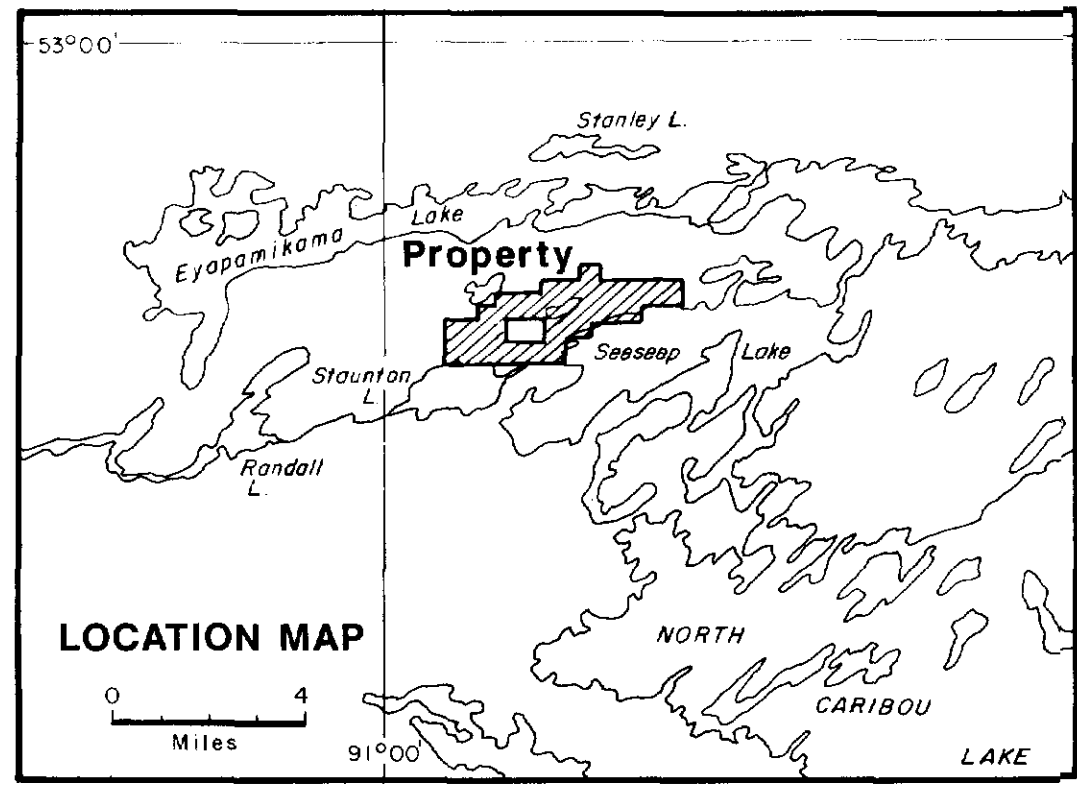
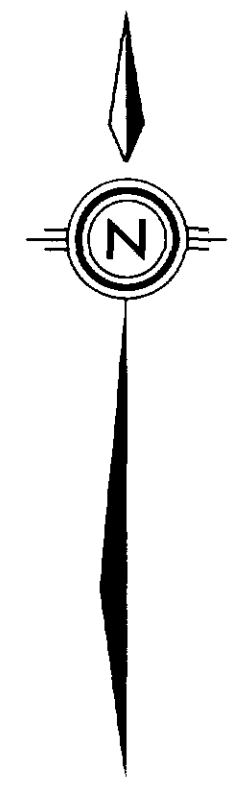
Ministry of Land and Natural Resources  
 Kenora, Ontario

CEMETERY LAKE G-1989

G-2204



- LEGEND**
- Grid line with 100 foot stations
  - Claim post, line, witness post
  - Stream, lakeshore
  - Instrument ..... Geonics EM-16
  - Transmitter ..... NAA, Cutler, Maine, 24.0kHz
  - Readings, taken facing north, plotted
  - Profiles, at 1' = 40%, plotted
  - Inphase profile
  - Quadrature profile



2.11003



**POWER EXPLORATIONS INC.**  
**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**EAST SHEET**  
**VLF EM Survey**  
**INPHASE & QUADRATURE**  
**PROFILES**

BY: JH/R.T.M.  
 DATE: April 1988  
 SCALE: 1:4800  
 DWG. No: SL-3-E

**GEONICS** *Steph mdy*  
 GEOCANEX LTD  
 TORONTO, CANADA



**POWER EXPLORATIONS INC.**  
**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**WEST SHEET**  
**VLF EM Survey**  
**INPHASE & QUADRATURE PROFILES**

BY: JH/R.T.M.  
 DATE: April 1988  
 SCALE: 1" = 4800'  
 DWG. No. SL-3-W

GEOCANEX LTD  
 TORONTO, CANADA

**LEGEND**

Grid line with 100 foot stations

Claim post, line, witness post WP

Stream, lakeshore

Instrument ..... Geonics EM-16

Transmitter ..... NAA, Cutler, Maine, 24.0kHz

Readings, taken facing north, plotted IP

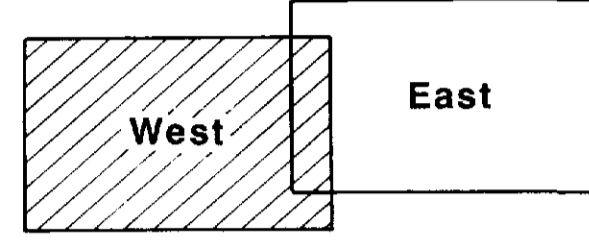
Inphase profile

Quadrature profile

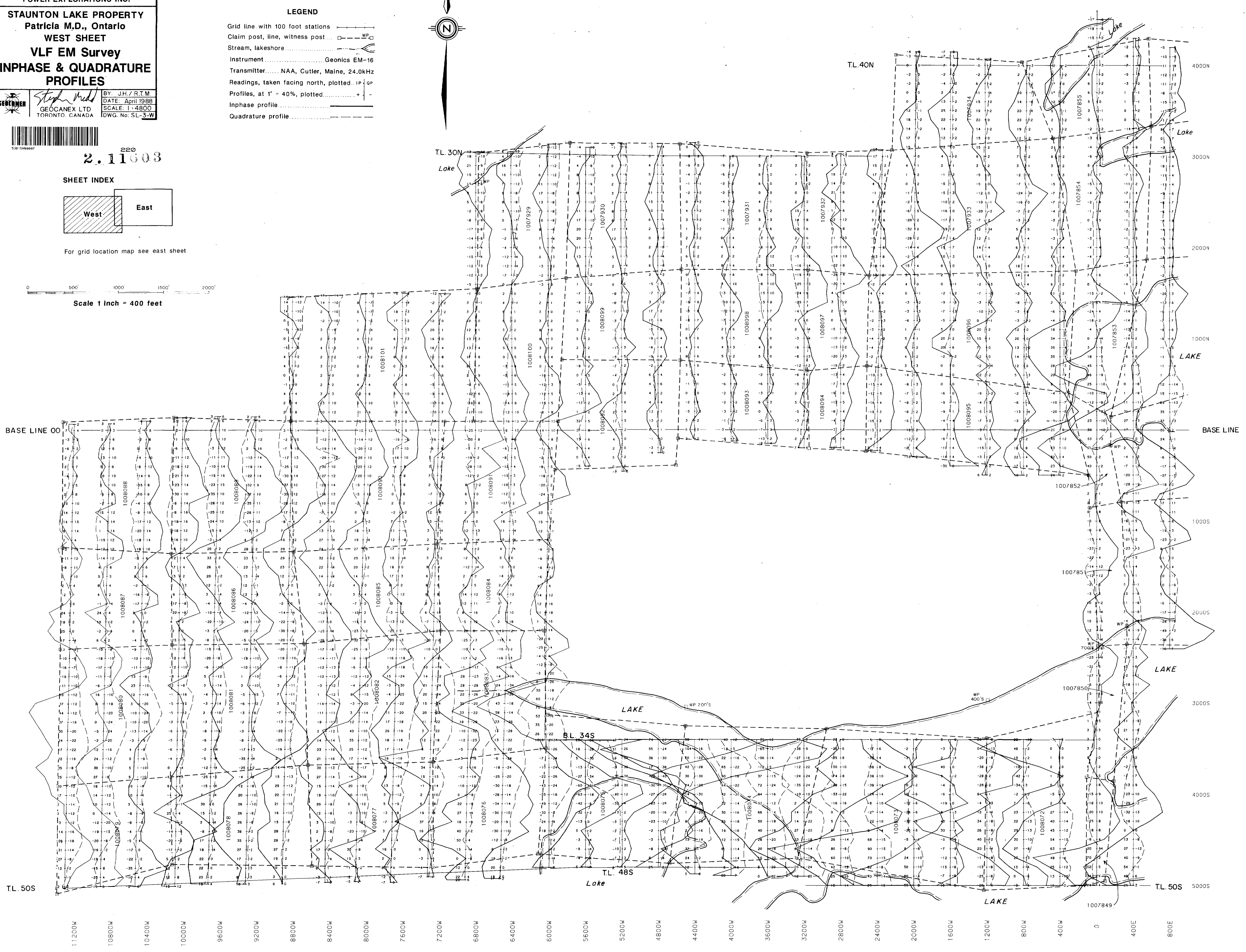
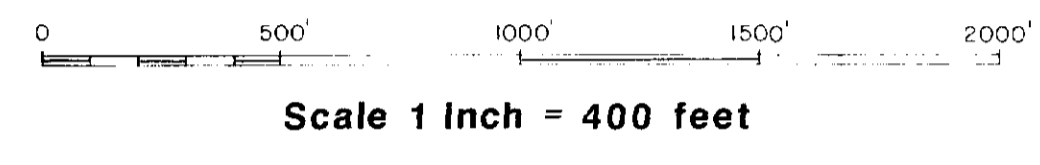


220  
**2.11603**

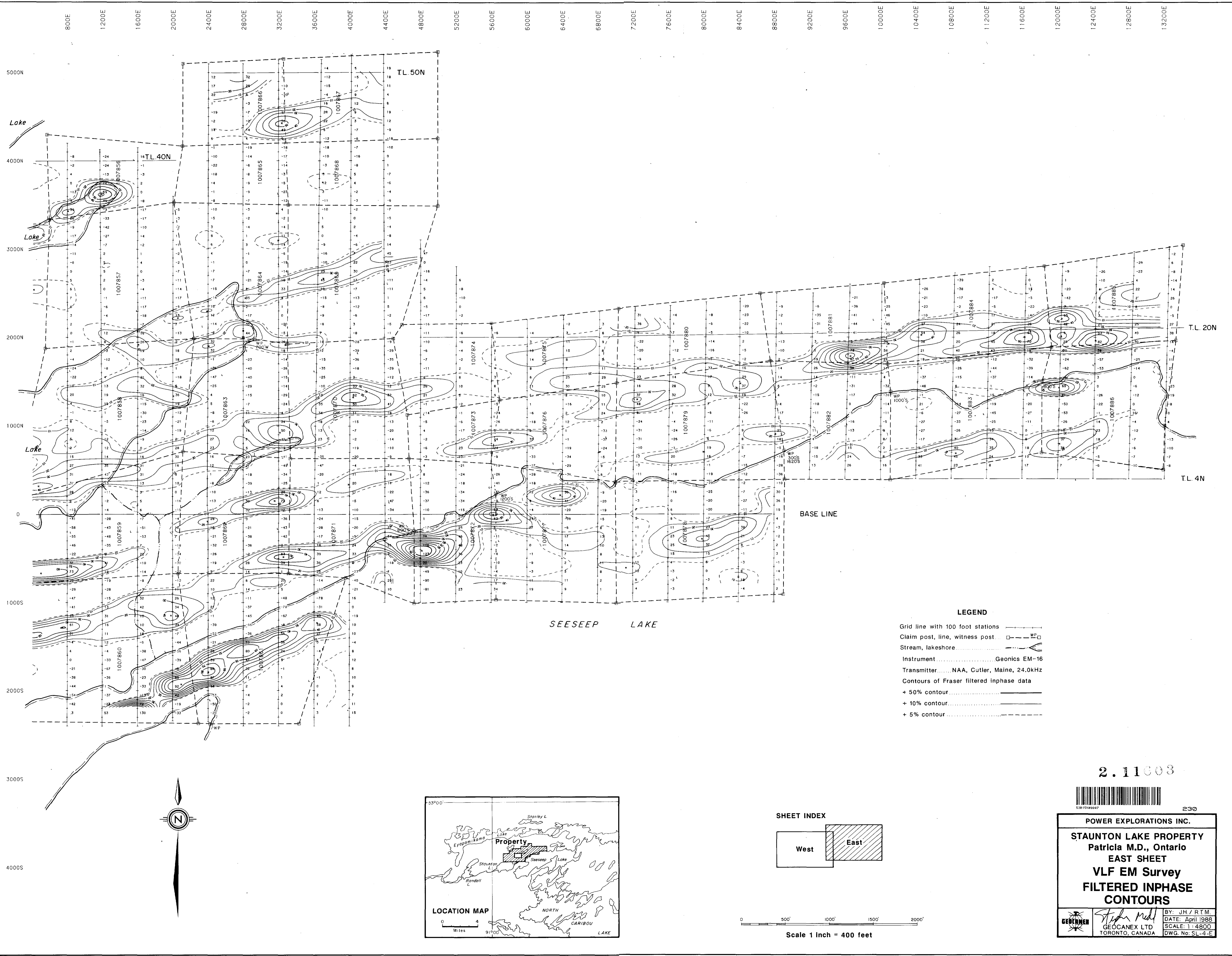
**SHEET INDEX**



For grid location map see east sheet







Lake

Lake

Lake

4000S

3000S

2000S

1000S

0

1000N

2000N

3000N

4000N

5000N

TL 50N

TL 40N

TL 20N

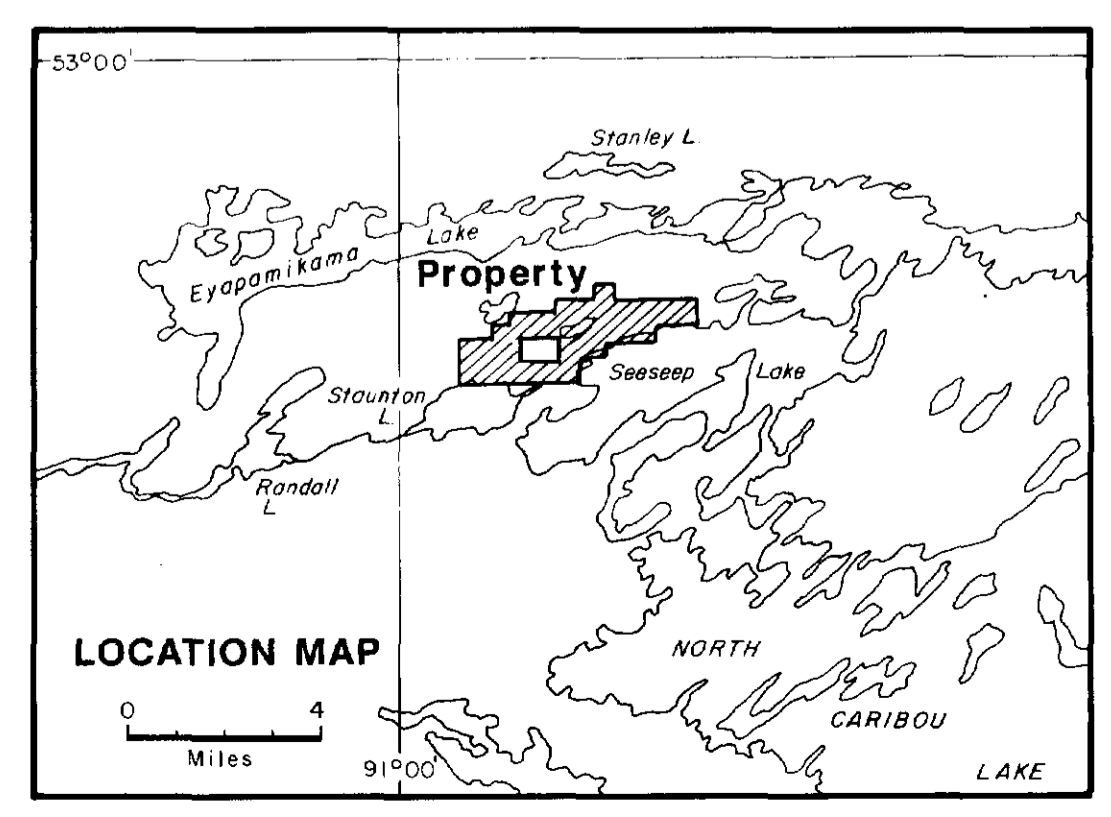
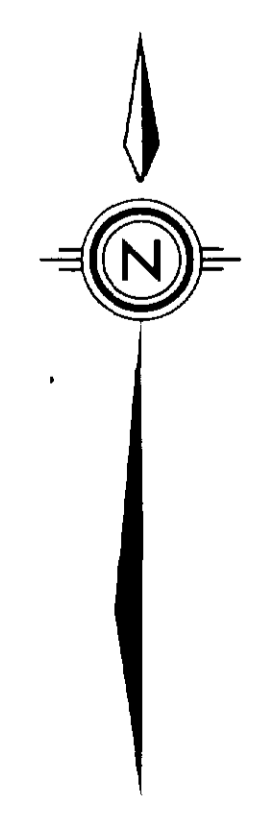
TL 4N

BASE LINE

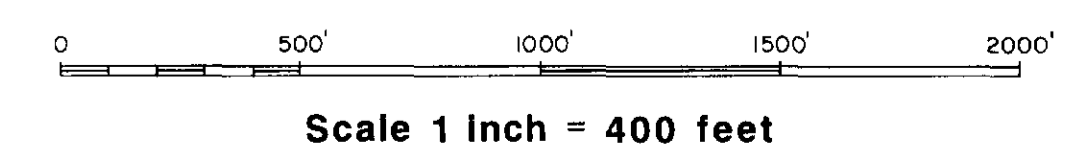
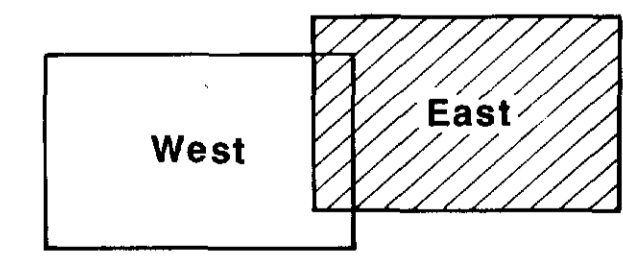
SEESEEP LAKE

**LEGEND**

- Grid line with 100 foot stations
- Claim post, line, witness post
- Stream, lakeshore
- Instrument Geonics EM-16
- Transmitter NAA, Cutler, Maine, 24.0kHz
- Contours of Fraser filtered inphase data
  - + 50% contour
  - + 10% contour
  - + 5% contour



**SHEET INDEX**



2.11003



230

**POWER EXPLORATIONS INC.**

**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**EAST SHEET**  
**VLF EM Survey**  
**FILTERED INPHASE**  
**CONTOURS**

**Geonics**

*John M. ...*

**Geocanex Ltd**  
 TORONTO, CANADA

BY: JH / R.T.M.  
 DATE: April 1988  
 SCALE: 1 : 4800  
 DWG. No. SL-4-E

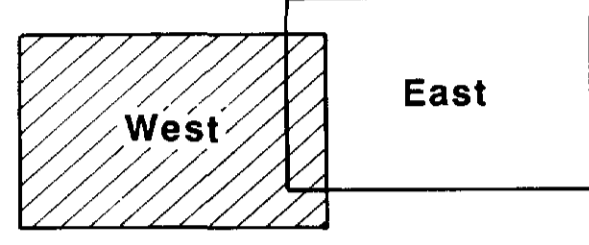
POWER EXPLORATIONS INC.  
**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**WEST SHEET**  
**VLF EM Survey**  
**FILTERED INPHASE**  
**CONTOURS**

BY: JH/R.T.M.  
 DATE: April 1988  
 SCALE: 1:4800  
 DWG. No: SL-4-W

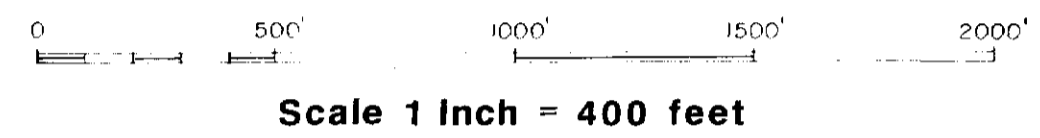


2.11.88

SHEET INDEX



For grid location map see east sheet



**LEGEND**

Grid line with 100 foot stations

Claim post, line, witness post WP

Stream, lakeshore

Instrument Geonics EM-16

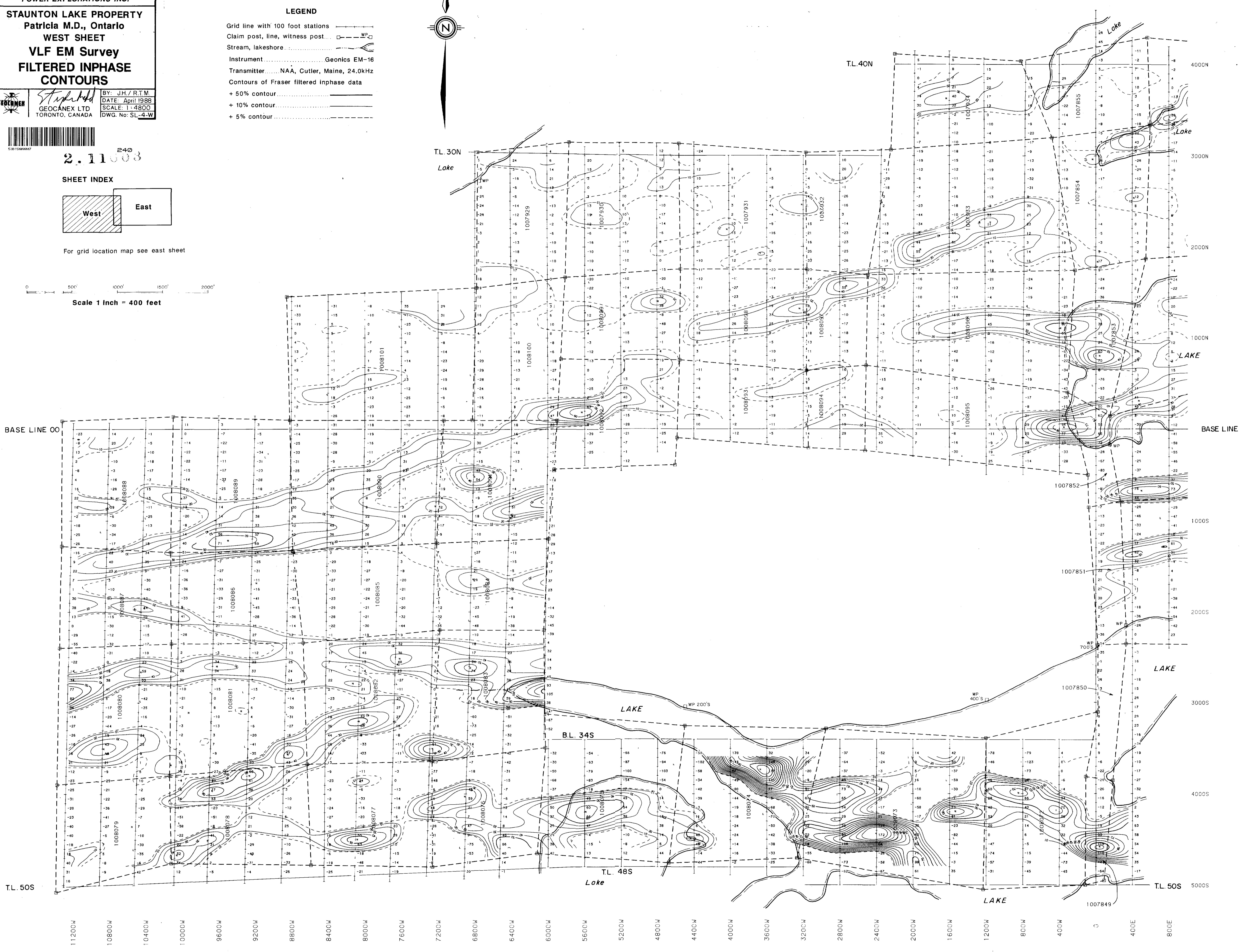
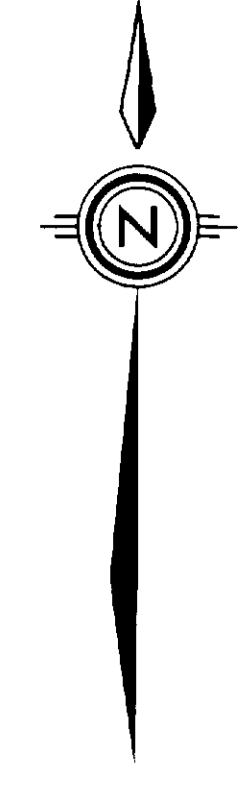
Transmitter NAA, Cutler, Maine, 24.0kHz

Contours of Fraser filtered inphase data

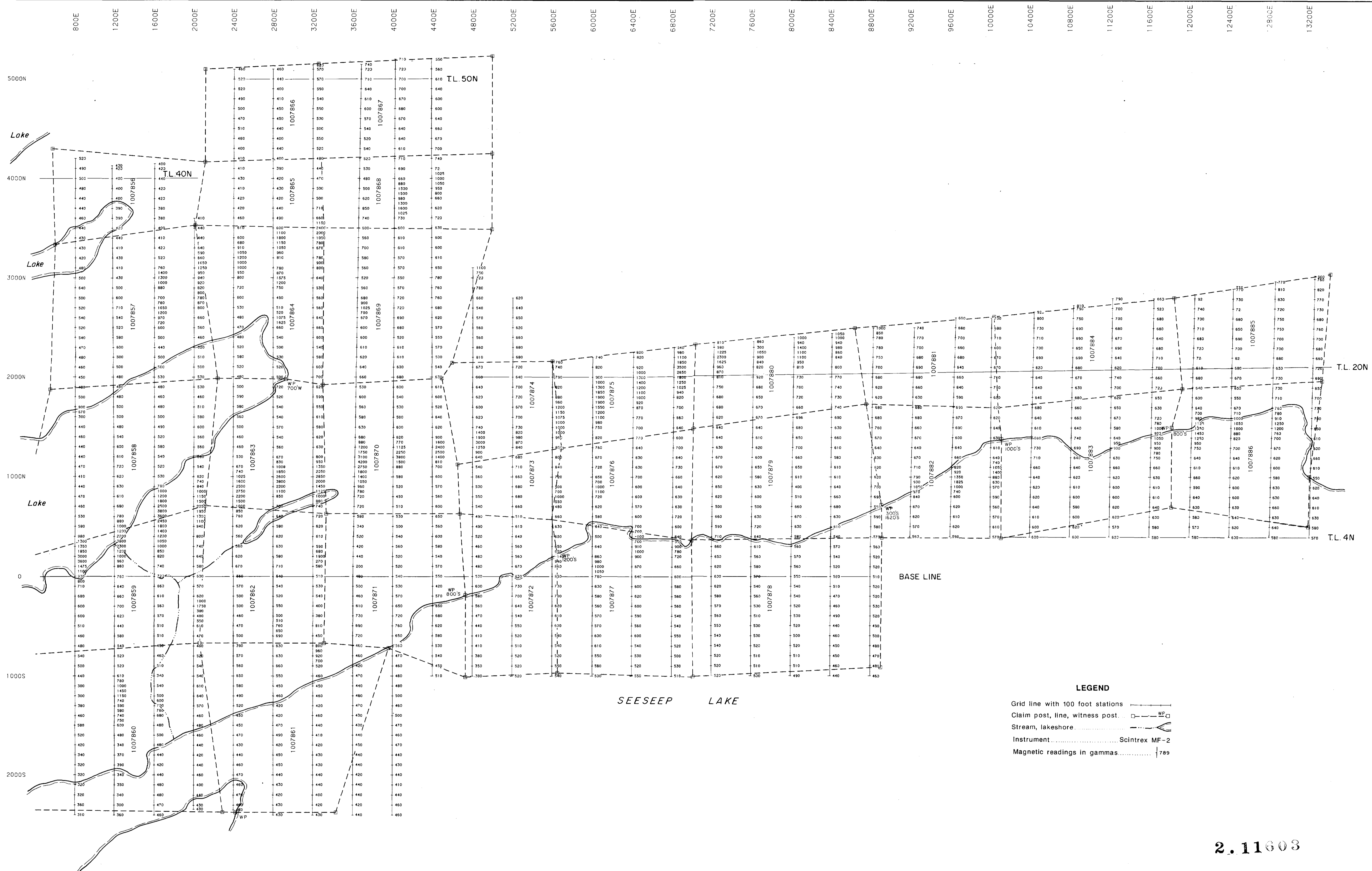
+ 50% contour

+ 10% contour

+ 5% contour







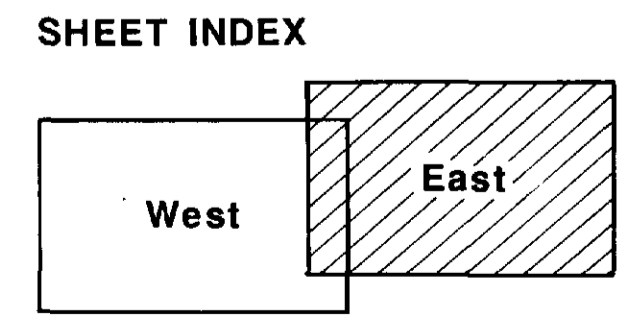
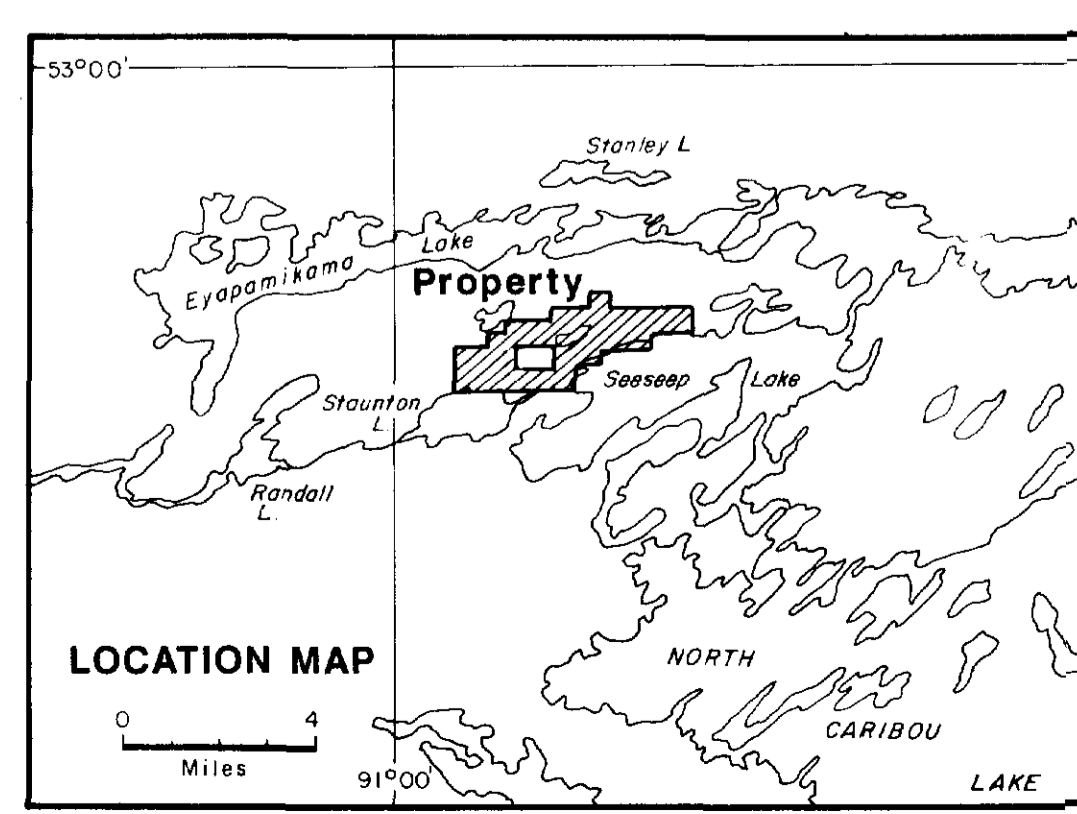
**LEGEND**

- Grid line with 100 foot stations
- Claim post, line, witness post.
- Stream, lakeshore
- Instrument
- Magnetic readings in gammas

2.11603



250



Scale 1 Inch = 400 feet

**POWER EXPLORATIONS INC.**

**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**EAST SHEET**

**Magnetometer Survey**  
**VERTICAL FIELD**  
**READINGS**

BY: JH / RTM  
 DATE: April 1988  
 SCALE: 1 : 4800  
 DWG. No: SL-1-E

**GEOCANEX LTD**  
 TORONTO, CANADA

**POWER EXPLORATIONS INC.**  
**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**WEST SHEET**  
**Magnetometer Survey**  
**VERTICAL FIELD READINGS**

BY: J.H./R.T.M.  
 DATE: April 1988  
 SCALE: 1:4800  
 DWG. No: SL-1-W

**GEOMAX**  
 Stephen Bell  
 GEOCANEX LTD  
 TORONTO, CANADA

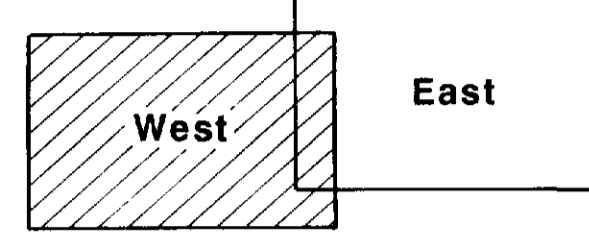
- LEGEND**
- Grid line with 100 foot stations
  - Claim post, line, witness post. WP
  - Stream, lakeshore
  - Instrument Scintrex MF-2
  - Magnetic readings in gammas 789



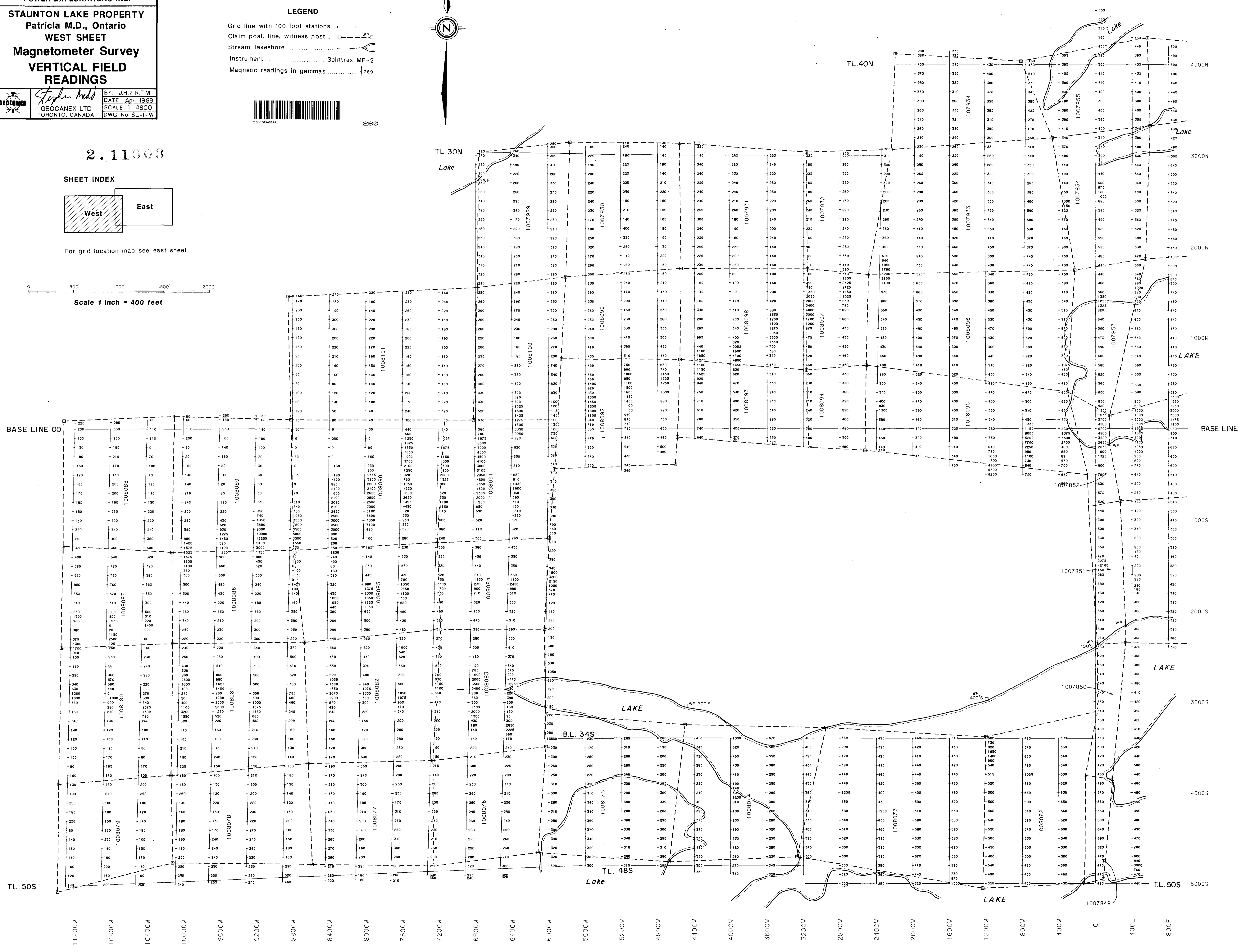
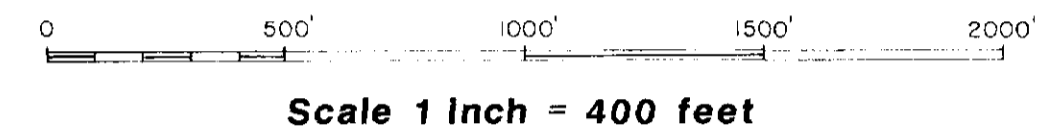
260

2.11603

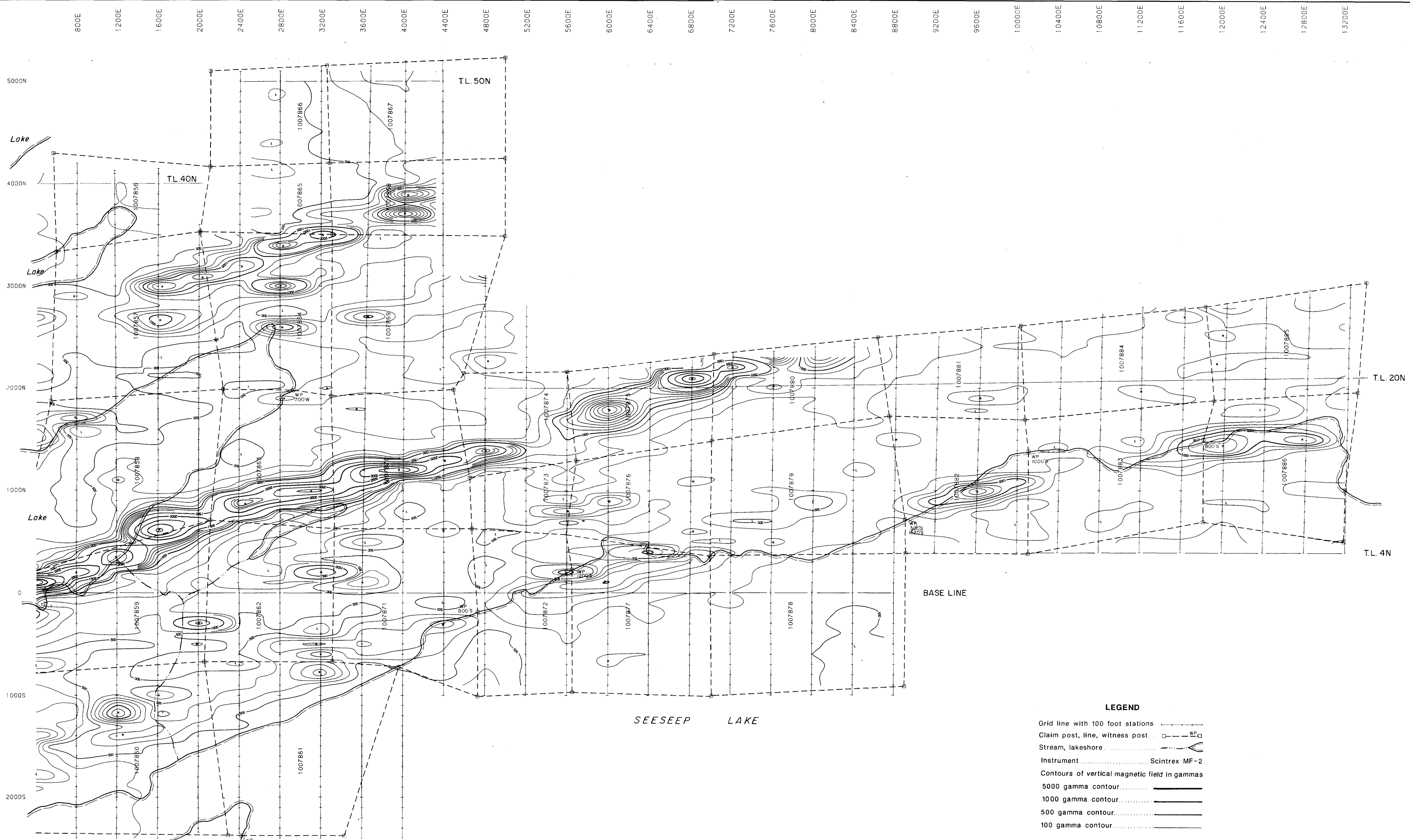
SHEET INDEX



For grid location map see east sheet







SEESEEP LAKE

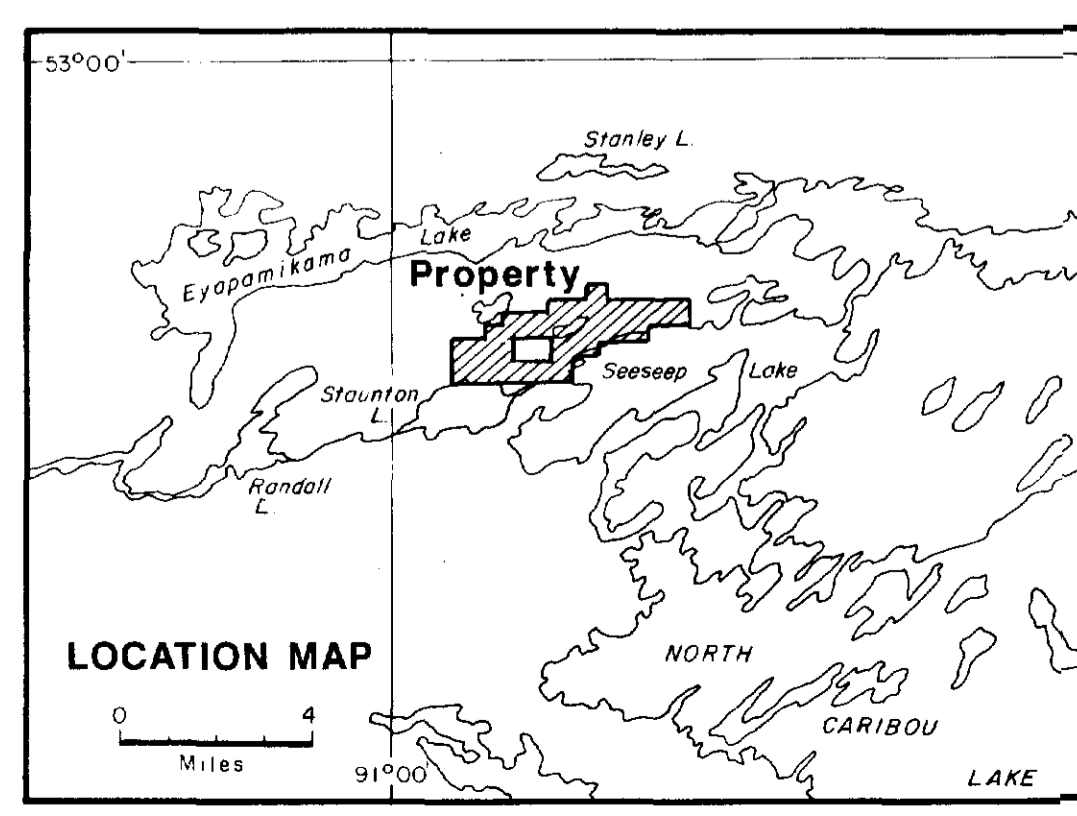
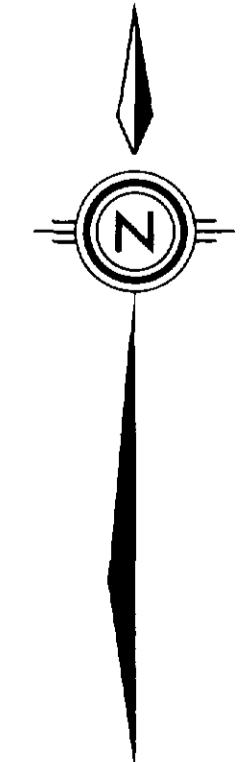
**LEGEND**

- Grid line with 100 foot stations
- Claim post, line, witness post
- Stream, lakeshore
- Instrument Scintrex MF-2
- Contours of vertical magnetic field in gammas
- 5000 gamma contour
- 1000 gamma contour
- 500 gamma contour
- 100 gamma contour

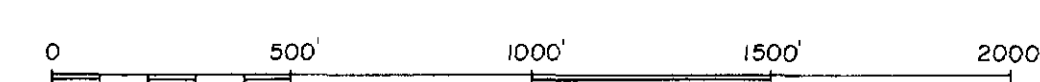
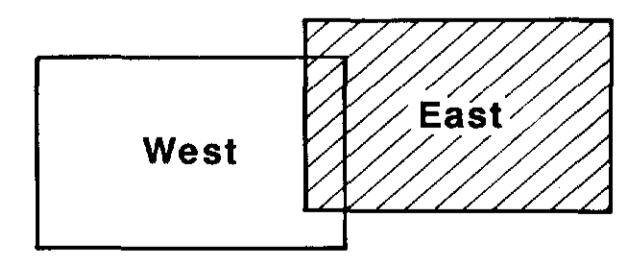
2.11603



270



**SHEET INDEX**



Scale 1 Inch = 400 feet

**POWER EXPLORATIONS INC.**  
**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**EAST SHEET**  
**Magnetometer Survey**  
**VERTICAL FIELD**  
**CONTOURS**

*John R. T.M.*  
 BY: JH / R.T.M.  
 DATE: April 1988  
 SCALE: 1 : 4800  
 DWG. No. SL-2-E  
 GEOCANEX LTD  
 TORONTO, CANADA

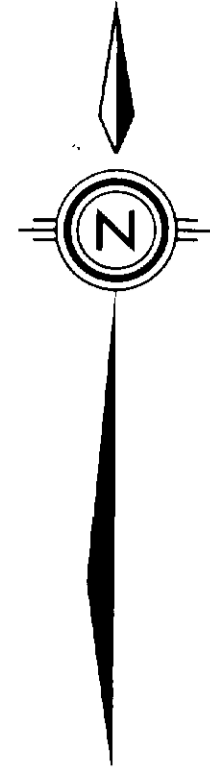
POWER EXPLORATIONS INC.  
**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**WEST SHEET**  
**Magnetometer Survey**

**CONTOURS**

BY: JH / R.T.M.  
 DATE: April 1988  
 SCALE: 1:4800  
 DWG. No: SL-2-W

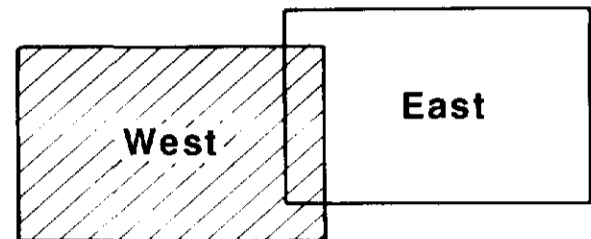
**GEOCANEX LTD.**  
 TORONTO, CANADA

- LEGEND**
- Grid line with 100 foot stations
  - Claim post, line, witness post
  - Stream, lakeshore
  - Instrument
  - Contours of vertical magnetic field in gammas
  - 5000 gamma contour
  - 1000 gamma contour
  - 500 gamma contour
  - 100 gamma contour

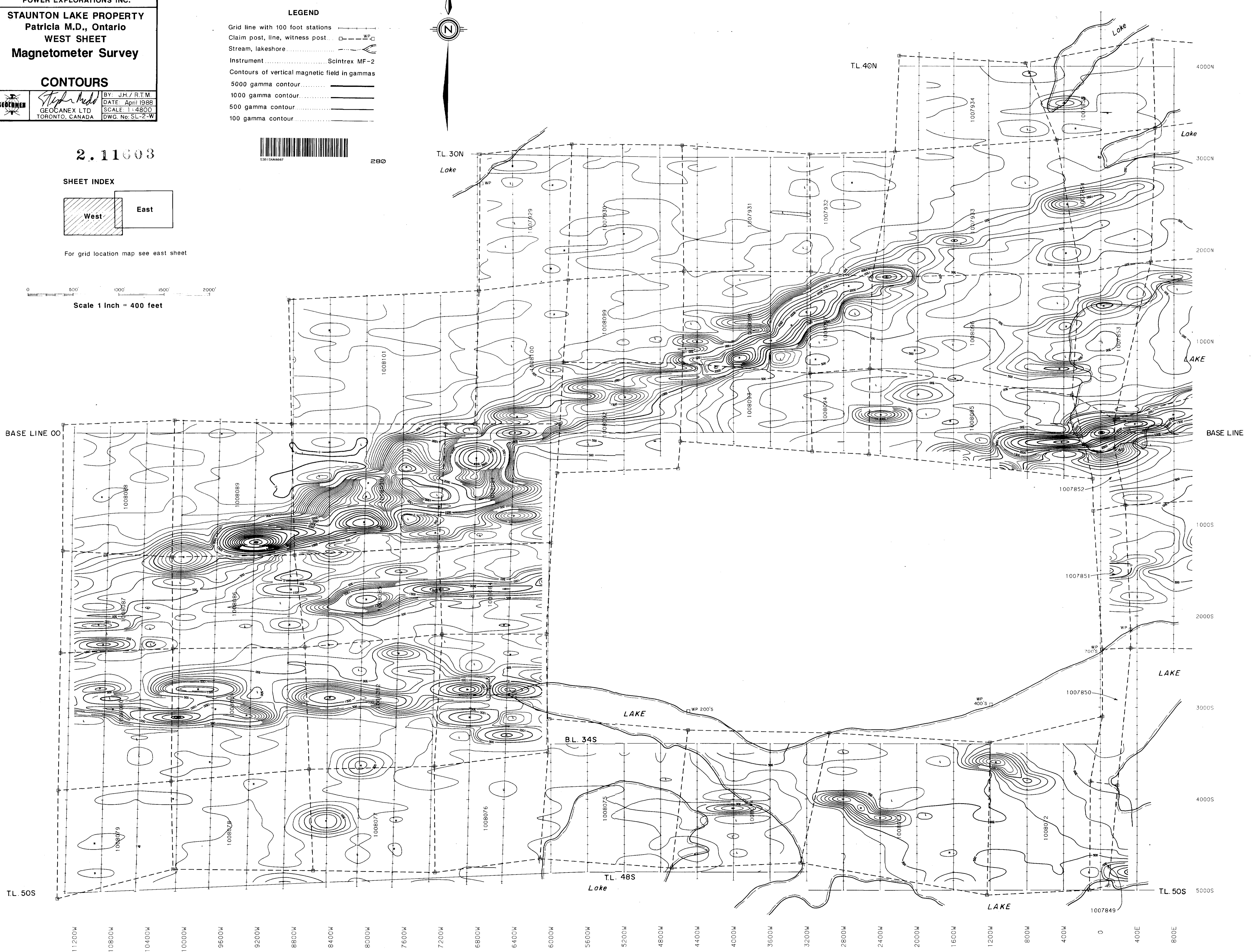
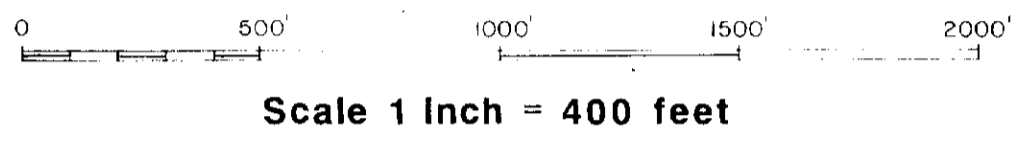


2.11003

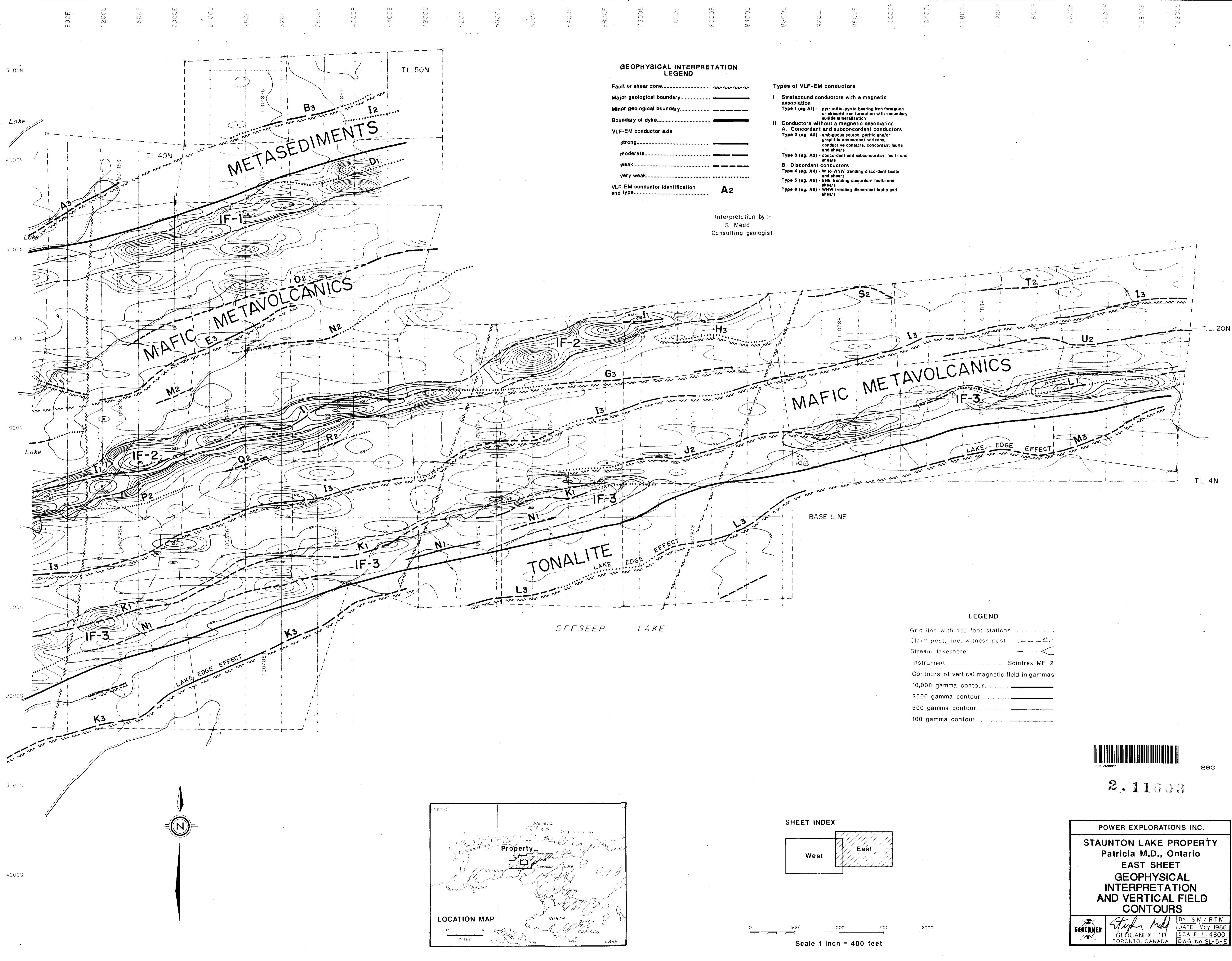
SHEET INDEX



For grid location map see east sheet







**GEOPHYSICAL INTERPRETATION LEGEND**

Fault or shear zone.....	~~~~~
Major geological boundary.....	—————
Minor geological boundary.....	- - - - -
Boundary of dyke.....	—————
VLF-EM conductor axis	
strong.....	—————
moderate.....	—————
weak.....	- - - - -
very weak.....	.....
VLF-EM conductor identification and type.....	<b>A2</b>

- Types of VLF-EM conductors**
- I Stratabound conductors with a magnetic association
    - Type 1 (eg. A1) - pyrrhotite-pyrite bearing iron formation or sheared iron formation with secondary sulfide mineralization
  - II Conductors without a magnetic association
    - A. Concordant and subconcordant conductors
      - Type 2 (eg. A2) - ambiguous source: pyritic and/or graphitic concordant horizons, conductive contacts, concordant faults and shears.
      - Type 3 (eg. A3) - concordant and subconcordant faults and shears
    - B. Discordant conductors
      - Type 4 (eg. A4) - W to WNW trending discordant faults and shears
      - Type 5 (eg. A5) - ENE trending discordant faults and shears
      - Type 6 (eg. A6) - WNW trending discordant faults and shears

Interpretation by :-  
S. Medd  
Consulting geologist

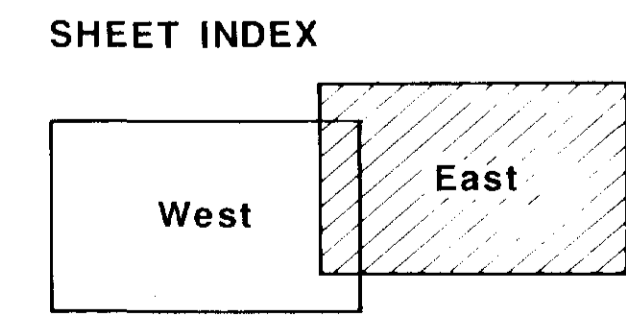
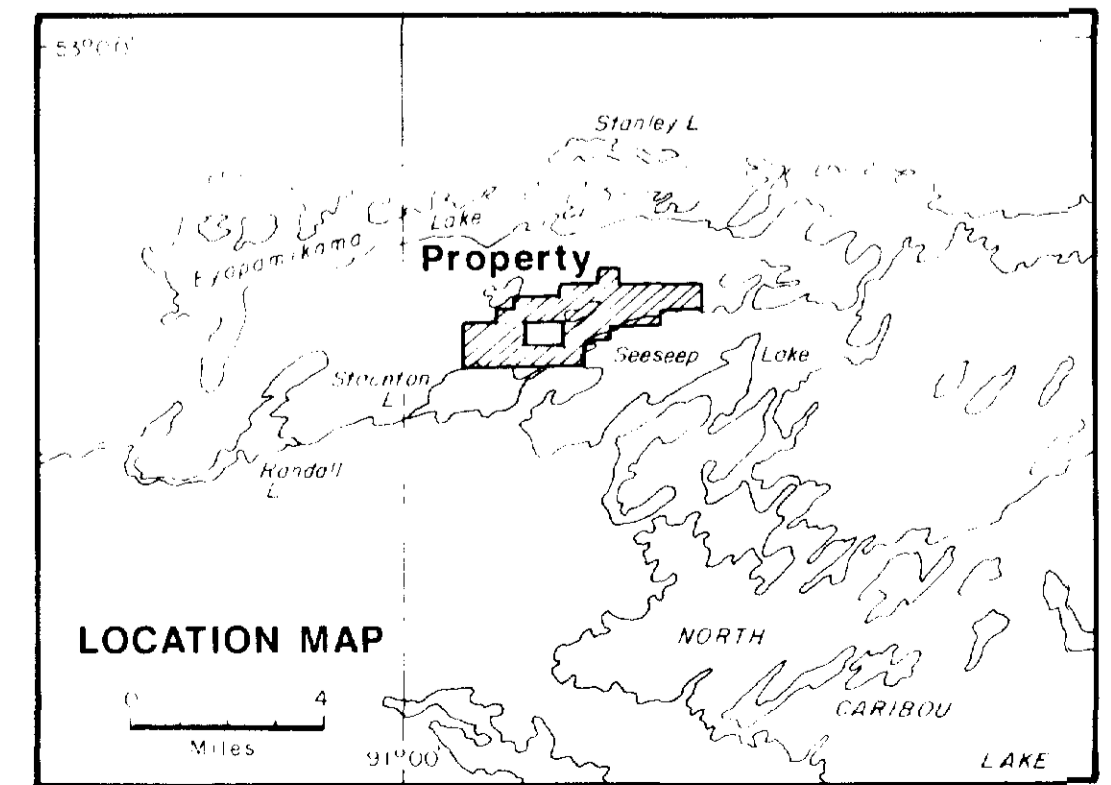
**LEGEND**

Grid line with 100 foot stations .....	.....
Claim post, line, witness post .....	———
Stream, lakeshore .....	~~~~~
Instrument .....	Scintrex MF-2
Contours of vertical magnetic field in gammas	
10,000 gamma contour.....	—————
2500 gamma contour.....	—————
500 gamma contour.....	—————
100 gamma contour.....	—————



290

2.11603



0 500 1000 1500 2000'  
Scale 1 inch = 400 feet

POWER EXPLORATIONS INC.

**STAUNTON LAKE PROPERTY**  
Patricia M.D., Ontario  
EAST SHEET

**GEOPHYSICAL INTERPRETATION AND VERTICAL FIELD CONTOURS**

		BY S.M./R.T.M.
		DATE May 1988
GEOCANEX LTD TORONTO, CANADA		SCALE 1:4800 DWG. No. SL-5-E



POWER EXPLORATIONS INC.  
**STAUNTON LAKE PROPERTY**  
 Patricia M.D., Ontario  
**WEST SHEET**  
**GEOPHYSICAL INTERPRETATION AND VERTICAL FIELD CONTOURS**

BY S.M./RTM  
 DATE May 1988  
 SCALE 1:4800  
 DWG. No. SL-5-W

GEOCANEX LTD  
 TORONTO, CANADA

**LEGEND**

Grid line with 100 foot stations	-----
Claim post, line, witness post	WP
Stream, lakeshore	~~~~~
Instrument	Scintrex MF-2
Contours of vertical magnetic field in gammas	
10,000 gamma contour	-----
2500 gamma contour	-----
500 gamma contour	-----
100 gamma contour	-----



**GEOPHYSICAL INTERPRETATION LEGEND**

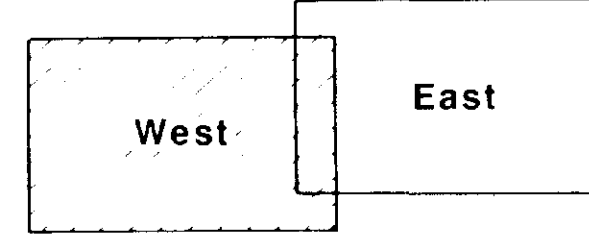
Fault or shear zone	-----
Major geological boundary	-----
Minor geological boundary	-----
Boundary of dyke	-----
VLF-EM conductor axis	
strong	-----
moderate	-----
weak	-----
very weak	-----
VLF-EM conductor identification and type	<b>A2</b>

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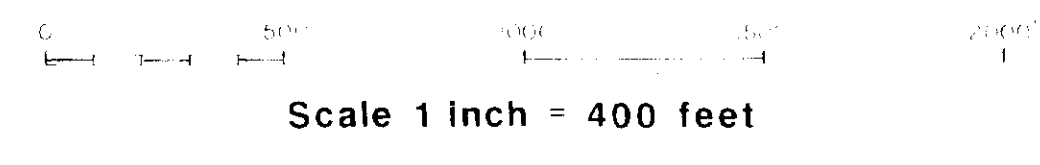
300 2.11603

**SHEET INDEX**



Interpretation by:-  
 S. Medd  
 Consulting geologist

For grid location map see east sheet



BASE LINE 00

BASE LINE

TL 50S

TL 50S

