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REPORT

ON

## MAGNETIC AND VLF-EM SURVEYS

ON THE

ZEEMEL LAKE PROPERTY

DISTRICT OF KENORA, PATRICIA MINING DIVISION

NORTHWESTERN ONTARIO

FOR

POWER EXPLORATIONS INC.

NTS 53 - B/9

# RECEIVED

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MINING LANDS SECTION

December 23, 1986

Stephen B. Modd, B.Sc.

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#### 1.0 SUMMARY

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Ground magnetic and VLF-EM surveys were carried out during October, 1986, on the Zeemel Lake property, held under a Joint Venture Agreement among Power Explorations Inc., H.J. Hodge and W.G. Beach.

Magnetic data in conjunction with regional geological data were used to outline a package of multiple zoned iron formation interbedded with mafic metavolcanics that crosses through the centre of the property in a west-northwest direction. This unit is interpreted as being adjoined to the north by clastic metasediments and to the south by part of a tonalitic intrusion.

A number of late stage faults are interpreted as crosscutting the stratigraphy, on the basis of magnetic and VLF-EM discontinuities. A group of earlier faults or shear zones strike concordantly or nearly concordantly to the stratigraphy, and are based on VLF-EM conductive responses. They form an anastamosing pattern, and the longest ones are located near the boundaries of the iron formation - mafic metavolcanics package. They may be related to the major tectonic and gold mineralizing event that was responsible for the Musselwhite deposit of Dome et al. Also, possibly related to this event, is a region of intense folding in the centre of the property.

The structures mentioned above, are especially significant where they are associated with areas of abated magnetic response within formation zones. Such areas may reflect the hydrothermal alteration of magnetite to grunerite <u>+</u> sulfides and the possible deposition of gold. Based on this information, eleven of the most promising drilling target areas have been identified and described.

## 2.0 INTRODUCTION

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The following report describes the results of a ground magnetic survey and a VLF-EM survey conducted during October, 1986, over the Zeemel Lake property held under a Joint Venture Agreement among Power Explorations Inc., H.J. Hodge and W.G. Beach. The two surveys were performed in order to delineate lithological units and structural trends and to locate conductive zones of sulfide-bearing iron formation, other stratabound massive or disseminated sulfide mineralization, and shearing, all of which might host gold.

## 3.0 PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Zeemel Lake property is located approximately 70 miles north of the town of Pickle Lake in Northwestern Ontario, three miles southeast of Opapimiskan Lake and immediately southeast of Zeemel Lake (Fig. No. 1). A block of 53 contiguous, unpatented mining claims, forms the property (Fig. No. 2). To the north, the Zeemel Lake property is adjoined by a large claim block held by a consortium of companies that include Dome Exploration (Canada) Ltd., Inco Ltd., Esso Minerals Canada and Lacana Mining Corp. This block of claims contains the Musslewhite gold deposit and the Snoppy Lake gold zone. To the east, the Zeemel Lake property is adjoined by a small property held by Inco Ltd., and to the west by a property held by Santa Maria Resources Ltd. Claim numbers and recording dates are as follows:

## 2.0 INTRODUCTION

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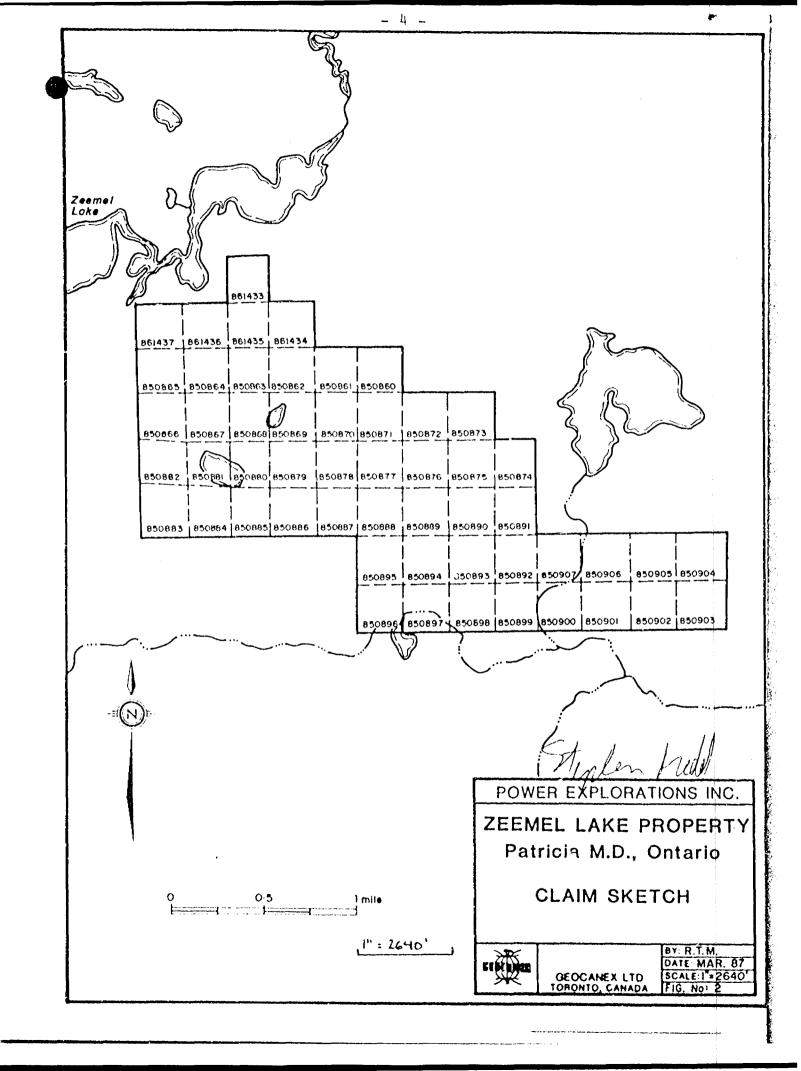
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The following report describes the results of a ground magnetic survey and a VLF-EM survey conducted during October, 1986, over the Zeemel Lake property held under a Joint Venture Agreement among Power Explorations Inc., H.J. Hodge and W.G. Beach. The two surveys were performed in order to delineate lithological units and structural trends and to locate conductive zones of sulfide-bearing iron formation, other stratabound massive or disseminated sulfide mineralization, and shearing, all of which might host gold.

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## Claim Numbers

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## Recording Date

Pa 850860-850907 inclusive (48) January 29, 1986 Pa 861433-861437 inclusive (5) February 7, 1986

Total 53 Claims

The claims are held by Power Explorations Inc. of 804-34 King Street East, Toronto, Ontario, M5C 1E5.

The property is accessible by float or ski plane onto Zeemel Lake or by helicopter from Pickle Lake. Highway 808, an all-weather gravel road from Pickle Lake to Windigo Lake, passes within 20 miles to the southwest of the property. A winter haulage road connects Highway 808 with the Musselwhite deposit and passes within three miles to the west of the property.

#### 4.0 TOPOGRAPHY AND VEGETATION

The property is dominated on the surface by flat-lying, flooded bog, and swamp land on the south side of Zeemel Lake. Very little outcrop exists.

#### 5.0 PREVIOUS WORK

1950's Ben Ohmen and the Kovals

In the Libert Lake area, Ben Ohmen, a prospector working for the Kovals of Pickle Lake, discovered gold in iron formation and put down a number of trenches.

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1962 The Musselwhite Brothers

Gold was first discovered on the adjacent Musselwhite property of the Dome et al consortium by the Musselwhite brothers in 1962.

1963 Kenpat Mines Ltd.

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The property staked by the Musselwhite brothers in 1962, was optioned by Kenpat Mines Ltd., who in 1963, carried out geological and geophysical surveys and diamond drilling. Two gold zones were discovered with a number of ore grade intersections. However, work was suspended.

## 1962-1963 Inco Ltd.

Eighteen holes were drilled on the north and south sides of Zeemel Lake for a total of 4,503 feet. Two of these holes (#15,800 and #23,107) were drilled along strike to the east and west, respectively, of the Zeemel Lake property, encountering chlorite schist and intermediate to mafic metavolcanics with up to 15% pyrrhotite and pyrite. Another eight holes were drilled, for a total of 1,034 feet, in the Karl Lake and Markop Lake areas east and southeast, respectively, of the Zeemel Lake property.

1973-1981 Dome Exploration (Canada) Ltd. et al

In 1973, the Musselwhite brothers formed a grub stake financed and operated by Dome Exploration (Canada) Ltd., in Joint Venture with Canico Ltd., Esso Minerals Canada and Lacana Mining Corp. Since that time, considerable geophysical and geochemical work has been done and a total of 180

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holes were drilled as of 1980. This work culminated in the announcement of the discovery of a major gold deposit containing in excess of 1,000,000 tons, grading 0.20 ounces of gold per ton (Northern Miner, March 5, 1981).

1976 John Reed

Prospecting, trenching and diamond drilling were performed in the Libert Lake property, by John Reed, an independent prospector.

1981-Present Various Companies

Since 1981, considerable amounts of work including geological mapping, geophysics, geochemistry and diamond drilling have been performed in the Libert Lake area by a number of companies or individuals, some of whom include: H.J. Hodge; 493217 Ontario Ltd.; Van Horne Gold Exploration Inc. and Legion Resources Ltd.; and G. Armstrong, A. Best, B. Reid and S. Johnson.

1981 Dome Exploration (Canada) Ltd.

An airborne magnetic and electromagnetic survey, part of which covered the Zeemel Lake property, was conducted by Aerodat Ltd. over the area surrounding the Musselwhite deposit.

1981 Canadian Nickel Company Ltd. (Canico Ltd.)

A geological survey and ground magnetic survey were carried out, using a mapping scale of 1:2,500, in the Karl Lake area east of the Zeemel Lake property.

## 1985 Ontario Geological Survey

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An airborne magnetic and electromagnetic survey was carried out by Aerodat Ltd. during the winter of 1985, and in early 1986, the results were released to the public on a set of 38 maps (scale 1:20,000). Maps 80743 and 80744 cover the Zeemel Lake property.

## 6.0 REGIONAL GEOLOGY AND ECONOMIC MINERALIZATION

The North Caribou Lake and Opapimiskan Lake greenstone belts are comprised of Archean metavolcanic and metasedimentary rocks that belong to the Sachigo Subprovince of the Superior Geological Province of the Canadian Shield. Together, the two belts form a narrow, arcuate, isoclinal syncline that stretches for approximately 140 kilometers from end to end. The metamorphic grade is upper greenschist to middle amphibolite facies. A thick clastic metasedimentary sequence, known as the Eyapamikama Lake Metasediments occupies the central and northwestern part of the North Caribou Lake greenstone 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 the North and South Rim Metavolcanic units host extensive zones of banded iron formation.

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In the vicinity of Opapimiskan Lake, these two metavolcanic units rinch out and they are replaced by the Opapimiskan-Markop Metavolcanics. These rocks are mafic to ultramafic in composition and are possibly older and geochemically more primitive. They are similar compositionally to the Keeyask Lake Metavolcanics at the western end of Eyapamikama Lake. The metavolcanics are macroscopically intercalated with clastic metasediments between Opapimiskan and Markop Lakes. At the eastern end of the Opapimiskan Lake greenstone belt, a sequence of pillowed and mafic metavolcanics exist, and are known as the Forester-Neawagank metavolcanics (Breaks et al, 1986).

Chemical metasediments are extensive in the Opapimiskan-Markop, Forester-Neawagank, North Rim and South Rim Metavolcanic sequences. The presence of grunerite in banded iron formation, correlates with zones of increased shearing that commonly parallel iron formation banding and axial planes of folds. Sulfide mineralization commonly F2 shows а preferential association with these gruneritic zones. Conversion of magnetite to grunerite is also locally evident in progressing from limbs to crests of  $F_2$  folds in banded iron formation at the Musselwhite gold property (Breaks et al, 1985).

The main gold zones in the North Caribou Lake and Opapimiskan Lake greenstone belts occur on the southern shore of Opapimiskan Lake. The Musselwhite deposit was originally discovered by the Musslewhite brothers in 1962. Between 1973 and 1980, the property was extensively explored and drilled by a consortium of companies headed by Dome Exploration (Canada) Ltd. This work culminated in the announcement of

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the discovery of a major gold deposit containing in excess of 1,000,000 tons, grading 0.20 ounces of gold per ton (The Northern Miner, March 5, 1981). Reserves currently stand at 3,200,000 tons, grading 0.17 ounces of gold per ton in four zones. The discovery of the new Snoppy Lake gold deposit located two miles to the east, was recently announced by Dome Exploration (Canada) Ltd., (The Northern Miner, August 11, 1986). It currently stands as a shallow dipping zone 4,300 feet in length grading 0.24 ounces of gold per ton over an average width of 12 feet. Both of these deposits occur in complexly folded banded iron formation.

## 7.0 PROPERTY GEOLOGY

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No geological and prospecting survey has yet been undertaken by Power Explorations Inc. on the Zeemel Lake property. However, from the regional mapping done by the O.G.S. in 1986 (Breaks et al, 1986), three main lithologies are interpreted as crossing the property in a west-northwest direction. They are (from north to south): clastic metasediments, mafic and ultramafic volcanic flows hosting banded iron formation that belong to the Opapimiskan-Markop Metavolcanic sequence, and part of a biotite-hornblende tonalitic intrusion.

## 8.0 DESCRIPTION OF GEOPHYSICAL PROGRAM

During September and October, 1986, linecutting, magnetic surveying and VLF-EM surveying were carried out on the Zeemel Lake property. The personnel involved were:

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J.Robert Amos, Quebec Sept.28-Oct.6 Linecutter Amos, Quebec J.L.Pacquette Sept.28-Oct.6 Linecutter C.Darveau Amos, Quebec Linecutter Sept.28-Oct.6 M.Lariviere Amos, Quebec Linecutter Sept.28-Oct.6 J.Hodge Devlin, Ontario Oct.1-13 Geophysical Operator F.Recoskie Val d'Or, Quebec Oct.1-13 Geophysical Operator C.Beqqs Toronto, Ontario Oct.1-13 Geophysical Operator

A total of 41.2 line miles were cut on the property. A baseline trending 290° was cut through the property along with three shorter parallel tielines for grid control. Survey lines were cut perpendiculary to the baseline at an azimuth of 20°. A 400-foot linespacing interval was used with pickets erected at 100-foot intervals along each line. The magnetic survey was performed using a Scintrex MF-2 Fluxgate 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 òγ taking 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 are presented on the Vertical Field Readings map and the Vertical Field Contours map (Drawings No. ZL-1 and ZL-2, respectively) in back of the report.

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The VLF-EM survey was performed along the survey lines using a Geonics EM-16 receiver tuned to receive the 24.0 KHz signal

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transmitted from Cutler, Maine (NAA). Inphase (tilt-angle) and quadrature measurements 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 (Drawings No. ZL-3 and ZL-4, respectively) in back of the report.

## 9.0 RESULTS AND INTERPRETATION

Refer to the magnetic, VLF-EM and compilation data presented in Drawings No. ZL-1 to ZL-5 inclusive, in back of the report.

## 9.1 Lithology

A package of multiple zoned iron formation, interbedded with mafic metavolcanics, is interpreted as crossing the central portion of the property in a west-northwest direction. This unit contains several narrow magnetic bands of high gradient. The iron formation zones are probably relatively weak and/or thin since a magnetic value of only 11,500 gammas (L12,400, 5+50N) is the highest reading within the unit. North of this unit is a flatter magnetic area with a dominantly low magnetic background. This area probably contains clastic metasediments. South of the iron formation --mafic metavolcanic unit is an area with a spotty, irregular magnetic character that probably represents part of a biotite-hornblende tonalitic intrusion.

## 9.2 Faulting and Shearing

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The property contains a complicated network of faulting and shearing that probably represents several different phases of structural deformation. The most recent of these faults/ shears, are believed to be represented by structures f-1 to inclusive, which are easily discernible from f-8, the regional airborne magnetic contours data (O.G.S., 1985). Generally, these structures do not possess VLF-EM conductive Structures f-1 and f-2 strike north-south to responses. north-northeast and are based on discontinuities in magnetic and VLF-EM conductive trends. Structures f-3, f-4, f-5, f-6 and f-7 strike northeast and are based on discontinuities in magnetic and VLF-EM conductive trends. They are likely related to northeast-trending mafic or intermediate dykes that are common throughout the area. Structure f-8 strikes northwest and is based on discontinuities in magnetic and VLF-EM conductive trends.

Numerous weakly to moderately conductive VLF-EM responses occur throughout the property. Most of them appear to belong to the anastomosing fault/shear pattern that has formed due to the shallow angles that exist between conjugate faults. These faults/shears generally strike from west-northwest through to east-west. They are believed to represent the deformation D2 and gold mineralizing event and are. therefore, excellent target areas for gold exploration, especially where they are hosted in iron formation (Breaks, et al, 1986). Three major structures of this kind (F-1, F-2 and F-3) are located mainly on the basis of long VLF-EM conductive trends. Structures F-1 and F-2 run parallel and adfacent to the southern boundary of the iron formation -

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mafic metavolcanic unit. Structure F-3 runs parallel and adjacent to the northern boundary of the iron formation mafic metavolcanic unit. Several smaller conductive faults/shears exist within the iron formation - mafic metavolcanic unit between structures F-1 and F-3.

## 9.3 Folding

The most intense folding, as interpreted from the magnetic data, exists in the area defined by L4+00W to L48+00W, BL0+00 to 20+00N. Mesoscopic to megascopic Z-folds in iron formation may occur here in association with axial plane shearing. This folding is believed to represent the  $D_2$  deformation and gold mineralizing event and is therefore, an excellent target area for gold exploration (Breaks et al, 1985).

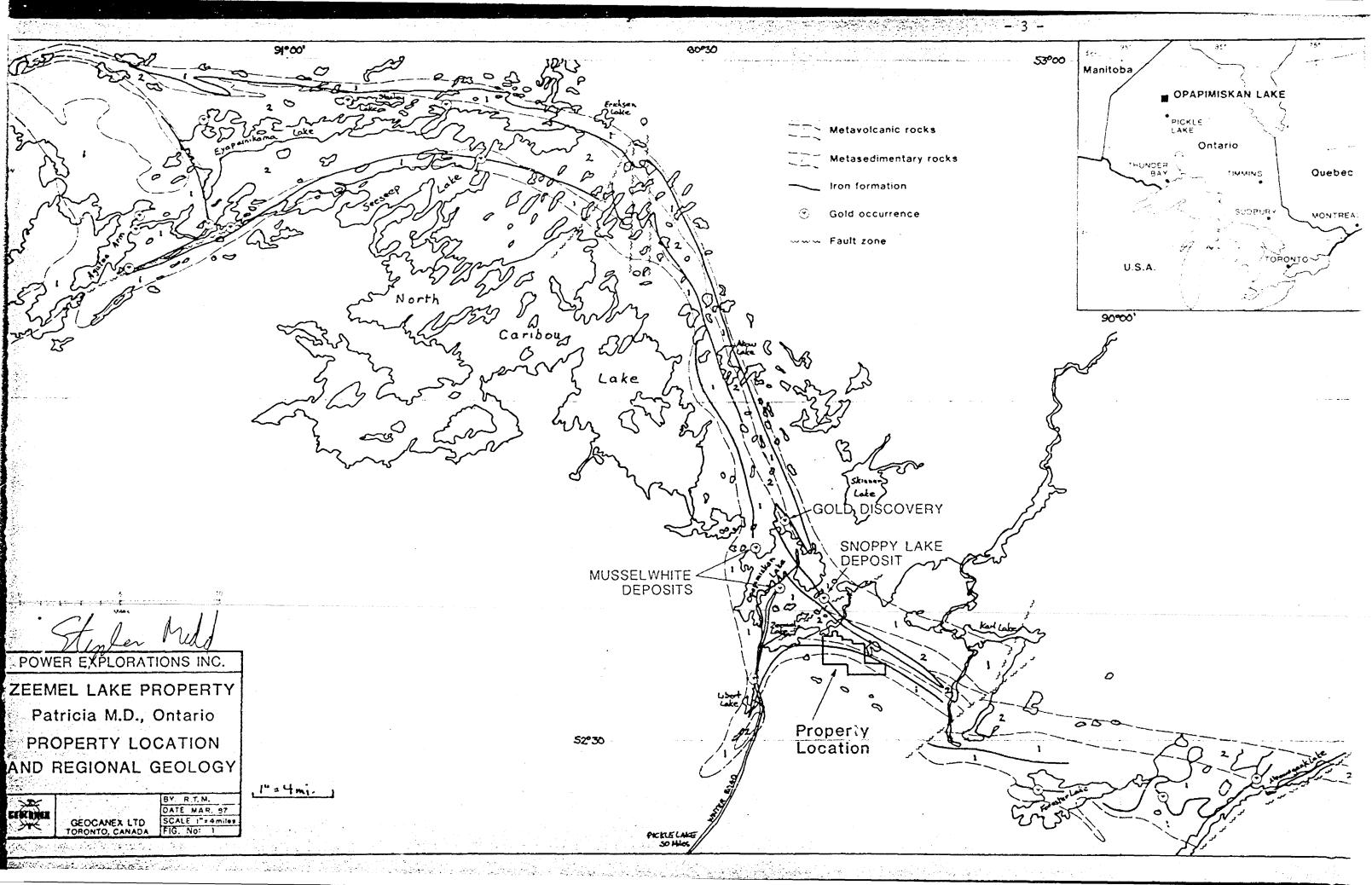
Small scale, low amplitude, open flexuring is noticeable from the magnetic contours, especially in areas of high magnetic gradient.

## 10.0 CONCLUSIONS AND RECOMMENDATIONS

The Zeemel Lake property is crossed by a west-northwest trending unit of multiple zoned iron formation hosted in mafic metavolcanics. It is interpreted as being adjoined to the north by clastic metasediments and to the south by part of a tonalitic intrusion. Several generations of faults or shear zones cross the property, but the most important ones for gold exploration, are interpreted as being the west-







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northwest to east-west trending, conductive structures that form an anastamosing fault/shear pattern. Three long conductive structures of this kind occur adjacent and parallel to the boundaries of the iron formation - mafic metavolcanic unit. Similar, shorter structures occur within the iron formation-mafic metavolcanic unit between the longer structures. An area of intense folding is interpreted as occuring within iron formation on the centre of the property. This area may contain Z-folded iron formation zones with small axial plane shear zones.

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The structures described above are believed to represent the  $D_2$  deformation event which was the main period of gold deposition (Breaks et al, 1985). These structures are especially significant where they are associated with areas of abated magnetic response within iron formation zones. Such areas may reflect the hydrothermal alteration of magnetite to grunerite  $\pm$  sulfides and the possible deposition of gold.

The presence of grunerite  $\pm$  sulfides in the Akow-Eyapamikama Lakes banded iron formation correlates with zones of increased boudinage and shearing. Also, conversion of magnetite to grunerite is locally evident in progressing from limbs to crests of F<sub>2</sub> folds in the banded iron formation at the Musselwhite gold property (Breaks et al, 1985).

Using these two examples as models for the Zeemel Lake property, 11 of the most promising areas have been outlined for drilling. Refer to the Compilation Map (Drawing No. ZL-5) in back of the report. <u>Area 1</u> contains two short, parallel, weak conductors associated with a pronounced magnetic abatement within a magnetic horizon (probably iron formation). A nonconductive north-northeast fault crosses nearby to the east. The two conductors are concordant to the stratigraphy, and probably represent conductive portions of two parallel shear structures. Pyrite <u>+</u> pyrrhotite <u>+</u> grunerite is the probable causative source of the conductors.

<u>Area 2</u> is similar to Area 1 in that it contains two short, parallel, weak conductors associated with a pronounced magnetic abatement within the same magnetic horizon as in Area 1. A nonconductive north-south fault crosses through the target area. Pyrite  $\pm$  pyrrhotite  $\pm$  grunerite in two concordant shear zones is the probable causative source of the conductors.

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<u>Area 3</u> contains a local strengthening in a west-northwest conductive shear zone. It is associated with a slight abatement in the magnetic response of a possible, weak iron formation horizon. Pyrite <u>+</u> pyrrhotite <u>+</u> grunerite is the probable causative source of the conductor.

<u>Area 4</u> contains a local strengthening in the same west-northwest conductive shear zone that passes through Area 3. It is associated with a large, pronounced magnetic abatement. A nonconductive northeast fault crosses through the western part of the target zone.

<u>Area 5</u> contains part of a west-northwest conductive shear zone that is associated with a slight magnetic abatement in a possible iron formation horizon. Pyrite  $\pm$  pyrrhotite  $\pm$ grunerite is the probable causative source of the conductor.

- 16 -

A nonconductive northeast fault crosses nearby to the east. The magnetic contours suggest that the target area may lie within the cresc of a small fold or flexure.

<u>Area 6</u> contains the junction between possible conductive east-west and west-northwest shear zones. Pyrite  $\pm$ pyrrhotite  $\pm$  grunerite is the probable causative source of the conductors. A magnetic abatement in probable iron formation marks the junction of the two shear zones. The target area lies within a region of complex folding.

<u>Area 7</u> contains part of a west-northwest conductive shear zone that is associated with the core region of complexly folded iron formation. Pyrite  $\pm$  pyrrhotite  $\pm$  grunerite is the probable causative source of the conductor. A slight magnetic abatement is associated with this part of the conductor. A nonconductive northeast fault crosses through the target area.

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<u>Area 8</u> contains part of the same west-northwest conductive shear zone that passes through Area 7. It is associated with a slight magnetic abatement in a probable iron formation horizon. A nonconductive northeast fault crosses through the target area.

<u>Area 9</u> contains part of a west-northwest conductive shear zone that is associated with a pronounced magnetic low on the limb of complexly folded iron formation. Pyrite <u>+</u> pyrrhotite <u>+</u> grunerite is the probable causative source of the conductor.

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<u>Area 10</u> contains a local strengthening in a west-northwest conductive shear zone that crosses obliquely a horizon of probable iron formation. Pyrite <u>+</u> pyrrhotite <u>+</u> grunerite is the probable causative source of the conductor. Flexuring of the magnetic contours suggests gentle open folding and/or faulting of, in this area. A nonconductive northeast fault crosses through the target area.

<u>Area 11</u> contains a local strengthening in a west-northwest conductive shear zone that is associated with a slight magnetic abatement in a probable iron formation horizon. Pyrite <u>+</u> pyrrhotite <u>+</u> grunerite is the probable causative source of the conductor. Flexuring of the magnetic contours and the conductor suggests gentle open folding.

Respectfully submitted,

Stephen hedd

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

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## 11.0 REFERENCES

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- Breaks, F.W., et al, 1985. Opapimiskan Lake Project: Precambrian and Quaternary Geology of the North Caribou Lake Area, District of Kenora, Patricia Portion; p268-276 in Summary of Field Work, 1985, O.G.S., Paper S54.
- Breaks, F.W., et al, 1986. Opapimiskan Lake Project: Precambrian Geology of the Opapimiskan - Forester Lake Area, District of Kenora, Patricia Portion; p368-378 in Summary of Field Work, 1986, O.G.S., Paper 075.
- Hodge, H.J., 1981. Report on Gold Properties adjacent to Dome-Inco-Esso-Lacana Discovery, Opapimiskan Lake Area, Patricia Division, Ontario; unpublished report of Geocanex Ltd.
- Hodge, H.J., 1982. Report on Geological Mapping, Geochemical Sampling and Prospecting, Libert Lake Property of 493217 Ontario Ltd., District of Kenora, Patricia Portion, Patricia Mining Division, Ontario; unpublished report of Geocanex Ltd.
- Ontario Geological Survey, Resident Geologist Files Toronto and Sioux Lookout, Various unpublished assessment reports.
- 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 80743 and 80744, Scale 1:20,000. Survey and Compilation March to July, 1985.

## APPENDIX A

## CERTIFICATE OF QUALIFICATIONS

CERTIFICATE OF QUALIFICATIONS

#### THIS IS TO CERTIFY THAT:

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P. Call

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

I have been actively engaged in Canadian and foreign mining and exploration 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 associate 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 MAR DAY OF March, 1987.

Stiplin Medd

Stephen B. Medd, B.Sc. Geologist

## APPENDIX B

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## TECHNICAL DATA STATEMENT



**OFFICE USE ONLY** 

Ministry of Northern Development and Mines

## Geophysical-Geological-Geochemical Technical Data Statement

File	<b>P</b>	

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#### 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) Ground Magnetic and VLF-EM	
Township or Area_Zeemel lake	MINING CLAIMS TRAVERSED
Claim Holder(s) See Attached	List numerically
804 - 34 King ST. E., Toronto, Ont.	
Survey Company Geocanex 1td.	
Author of Banar, Stephen B. Medd, B. Sc.	(prefix) (number)
Address of Author 1117 - 7 Crescent Pl. Toronto, Ont.	SEE.ATTACHED.SHEET
Covering Dates of Survey Sept. 28 to Dec. 23, 1986	
(linecutting to office) Total Miles of Line Cut 41.2 miles	
SPECIAL PROVISIONS CREDITS REQUEST. 7 Geophysical DAYS per claim	
ENTER 40 days (includes	
survey -Radiometric	
ENTER 20 days for each -Other	
Geological	
same grid. Geochemical	
AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)	
MagnetometerElectromagnetic Radiometric	
(enter days per claim) DATE: MAN 17/87 SIGNATURE: Author of Report or Agent	
Res. GeolQualifications	
Previous Surveys	
File No. Type Date Claim Holder	
	TOTAL CLAINS 53
	TOTAL CLAIMS
837 (85/12)	

## GEOPHYSICAL TECHNICAL DATA

7

<u>GI</u>	<u>ROUND SURVEYS</u> – If more than one survey, specify da	ita for each type of survey	•
Nu	mber of Stations 1974	Number of Readings Mag 2565	EM 1974
Sta			
Pro			
Co	ntour interval		
•	Instrument Scintrex MF-2 Fluxgate magn	100 gammas         Scintrex_MF-2_Fluxgate_magnetnmeter         ale constant_± 10 gammas         ale constant_± 10 gammas         tion method_Looping back to control stations         neck-in interval (hours)_Not exceeding 1.5 hours         Geonics EM-16_VLF-EM receiver         Geonics EM-16_VLF-EM receiver         ion_Vertical	
NA N		ig 1.5 hours	
~4	Base Station location and value Various		
	- Coopies FM-16 VIE-FM rocoi	Nor	
-			
	*		l l
	-		D Parallel line
ECI	Frequency 24.0 KHz Cutler, Maine (NAA	N)`	
E	(specify	V.L.F. station)	
			······
	Instrument		
	Scale constant		
È	Corrections made		
GRAVI			
5	Base station value and location		
			·
	Elevation accuracy		······
	Method	Frequency Domain	
	Parameters - On time	•	
A	- Delay time	-	
N I	- Integration time		
RESISTIVITY	Power		
RI	Electrode array		
	Electrode spacing		
	Type of electrode		
	••		

INDUCED POLARIZATION

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## ZEEMEL LAKE PROPERTY

Claim Holder	Claim Number	License Number
Frank Rescoskie	l'a 850860	K-19788
	850861	
	850862	
	850863	
	850864	
	850865	:
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	850901	Stephen hild
	850902	$\leq // \sqrt{1}$
	850903	Y laferal 1 one
	850904	
	850905	
	850906	
	850907	/2

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## ZEEMEL LAKE PROPERTY

## Claim Holder

Claim Number

## License Number

- 14

5-6130

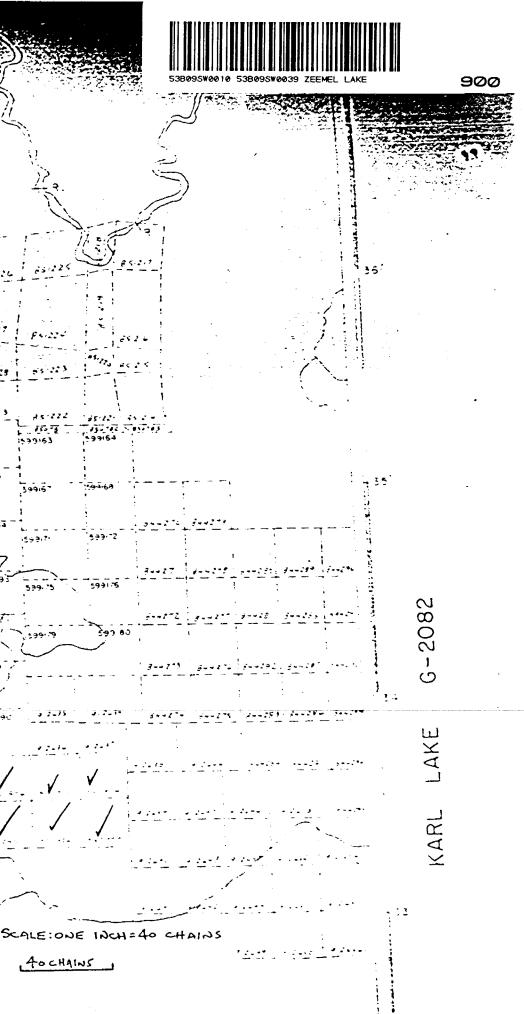
William Masakeyash

Pa 861433 861434 861435 861436 861437

#### TOTAL 53 claims

- 2 -

- 329491 529490 1229495 529494 1529493 7 5751 555459 15975,4 255785 369786 B JELITET SLIPIS 167753 367744 162745 303746 529839 - 1529035 52995 1529832 Grand 159748 163749 529828 1 2627524 2 363147 3 3 S sturid ... 5253411523540 52538 629831 521036 1 : 20 521839 11 ís, **a** ) Q1518 12 9949 13 9850 5-1847 229996 1 3 372372 31223 1708 - 370875 12 509006 S09007 Harris 1 529854 2185 429852 1327851 2: 5 5 7 7 9 2 7 7 5 9 4777 5 9 4777 5 129859 3 0 = les 52,1107 52,1970 23866 529861 529868 65:225 BS1146 BS1144 BC1203 3520 651204 351236 9 53890 5.5479 1529878 1 529877 1529876 152955 1 20 229597 22967 22967 351197 451198 85120 2520- 851210 BS1227 FEILER 165-235 1 ATT211 1 35-223 1 1529888 3529889 529890 229991 11:9566 1523408 1523407 523408 ; - 152956 52996 529914 529568 1529916 152997 - 529918 - 529919 529654 129657 529568 529675 529686 529693 529386 529395 529320 <sup>\*</sup> \$29605 \$29616 \$29617 24.00 \$2950 \$ \$2950 \$ \$2950 \$ \$2950 \$ \$2950 \$ \$2950 \$ \$2950 \$ \$2950 \$ 529658 529667 529686 529694 529595 529593 559977 529593 559977 59977 59977 59977 12955 BLISSE 2296 529584 529595 329388 329393 539.75 599175 3507600 529525 229384 529392 529525 229384 529392 599.79 599.80 1.506 26.50" 31.508 36.50" 86.50 " 36.50 " 26.4.8 " 26.4.0 B61420 12951 529555 - 529572 1. ---- 651000 escere escere escere auera 100000 (55000 Be Site of the state of the sta ALS - BLSIT BUSIB B-SID BLSID 529573 861525 81523 861523 B61522 86.52 Vers have a series and a series of the serie At I VIIII 40 CHAINS



Ministry of Northern Attairs and Mines	Report of Work (Geophysical, Geolog Geochemical and Exp			2988		Please type or prin If numbe: of min exceeds space on th Only days credits "Expenditures" sec in the "Expendi	ing claims travers his form, attach a li calculated in t tion may be enter
K. Giller		••••••••••••••••••••••••••••••••••••••	Mining A	ct 0-	Township	Do not use shaded a	
Geophysical					i i	Lake Are	a G-2278
see attached						1	ached
Address 804 - 34 King	St E Toron			NEC 1DE			
804 - 34 King Survey Company			<u>arı o</u>	Date of Survey 1	110m & 10)	10 06 1 / 1	es of line Cut
Geocanex Lt	of Geo-Technical report)		angan panta ta ta na na angan sa na	Bay Mo. 1	Day	12 86 41.	
Stephen Medd, redits Requested per Each	<u>1117 - 7 Cre</u>	scent_P	lace.	Toronto.	Ontari	0 M4C 517	
pecial Provisions	Geophysical	Unt Days per	Contractory of the local division of the loc	ms Traversed (L ng Claim	Expend.	Mining Cla	im Expend
For first survey:		Claim	Pretix	Number	Days Cr.	Prefix Nu	mber Davs Ci
Enter 40 days. (This includes line cutting)	- Electromagnetic	40	M see	attachee	1		
includes line cutting)	<ul> <li>Magnetometer</li> </ul>	40	1380			×1.	
For each additional survey: using the same grid:	- Radiometric					in the second se	
Enter 20 days (for each)	- Other						
	Geological						
	Geochemical					in ar	
Man Days	Geophysical	Davs per Claim					
Complete reverse side and enter total(s) here	- Electromagnetic			RECEIV	ED		
and enter totaltsi here	- Magnatomater		SEE				
	Fladiometric		-	JAN 5-0-1	<del>387</del>		
			Antre-				
	- Other		S. HIN	ING LANDS	SECTION		
	Geological						
	Geochemical						
Airborne Credits		Days per Claim					
Note: Special provisions	Electromagnetic						
credits do not apply to Airborne Surveys.	Magnetometer			3 (			
	Radiometric			JAN2S 4	G7		
xpenditures (excludes pow	l er stripping)						
ype of Work Performed							
Performed on Claim(s)	*					1. S. S	
alculation of Expenditure Day	Credits						
Total Expanditures		otal Credits	2.12.2.2.2				
\$	÷ 15 ≈					Total number of m	
nstructions			Pa	. 8442	70	- claims covered by t - heport of work.	53
Total Days Credits may be as choice. Enter number of days		1	Fo	r Office Use Or		11-1	
in columns at right.			Recorded	JAN. 28	1927	Mining Hecorder	
Rei	corned Holder or Agent IS	ignaturp	12.10	Date Approved	s Recorded	Brance Director	ani/a
1/21/87 <	Flenkin Y	ul	4240			$\square \bigcirc \square$	
ertification Verifying Repo	فالإياد المتحد والمتحد فالباد الباغان والمستحدين أكاله المتحد فيهاموها كالماد فيبود ويهجه					· · · · · · · · · · · · · · · · · · ·	
I hereby certify that I have a or witnessed same during and					f Work annes	ked hereto, having pe	rtorm work
ame and Postal Audress of Peri	ion Certifying	· · · · · · · · · · · · · · · · · · ·			·		
Stephen Medd,	. 1117 - 7 Cr	escent	Place.	Toronto.	Ontar	io M4C	
ocephen neudy				Date Certified		Certified by ISignal	

## ZEEMEL LAKE PROPERTY

#### <u>Claim Holder</u> Claim Number License Number Pa 850860 K-19788 Frank Rescoskie PATRICIA MININGERY. JAN 2 B Inct C 1 9.040 19.140 <u>-</u> 121. 850905 ..../2

## ZEEMEL LAKE PROPERTY

## Claim Holder

William Masakeyash

## <u>Claim Number</u> Pa 861433 861434 861435 861436 861437

TOTAL 53 claims

12 JAN 2 B ree-5 6 <u>6 6 7 7 7</u> 7 7 7

<u>License Number</u> S-6130

- 2 -

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Ministry of Northern Development and Mines	Technical Assessn Work Credits	πθηζ	Date March 27, 19	Mining Reco Work Nu. 187	2.9884 prder's Report : 87-12
ecorded Holder	FRANK RESCOSK	IE/W. MASAKEYASH			
ownship or Ares	ZEEMEL LAKE A	REA			
Type of survey and numb Assessment days credit per			Mining Claims Asses	sed	
Seophysical	40		n ann an Anna ann an Air Ann an Ai	antar ayar da antar ya da di siya katar da katar Yangan di kaya ku	
Electromagnetic	days		PA 850860 to 6		
Radiometric			850882 to 8	3 inclusive 6 inclusive	
Induced polarization	days		850901 to (	98 inclusive 97 inclusive 97 inclusive	
Other	days				
Section 77 (19) See "Mining Claims A	\ssessed'' column				
Geological	days				
Geochemical	days				
Man days 🔲	Airborne				
<ul> <li>Special provision X</li> <li>Credits have been reduced becaus coverage of claims.</li> <li>Credits have been reduced becaus to work dates and figures of applications.</li> </ul>	e of corrections				
ecial credits under section 77 (16)	ويستشارك المراجع المراجع والمراجع والمستخد والمستحد والمراجع والمراجع المراجع				
30 DAYS ELECTROM 15 DAYS MAGNETOM PA 850866 850877 861433 - 34		20 DAYS ELECTRO 10 DAYS MAGNETO PA 850875 - 76 850879 - 80 850887 850899-900		10 DAYS EL AND 5 DAYS PA 850874 850878 850881	
credits have been allowed for the	following mining clair	ms			
<ul> <li>not sufficiently covered by the su</li> <li>LINECUTTING</li> </ul>		insufficient technical data fil		CTROMAGNETIC	SURVEY.
e Mining Recorder may reduce the aboved the maximum allowed as follows:				ays recorded on each	claim Joes no

2.9884

April 22, 1987

Your File: 87-12 Our File: 2.9884

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

Dear Sir:

RE: Notice of Intent dated March 27, 1987 Geophysical (Electromagnetic & Magnetometer) Surveys on Mining Claims PA 850860, et al, in the Zeemel Lake Area

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

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

Yours sincerely,

J.C. Smith, A/Manager Mining Lands Section Mineral Development and Lands Branch Hines and Minerals Division

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

Telephone: (416) 965-4888

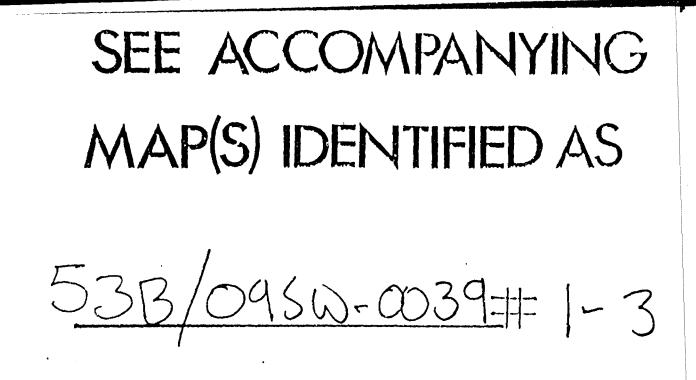
DK/mc cc: Frank Rescoskie Suite 804 34 King Street East Toronto, Ontario M5C 1E5

> Mr. G.H. Ferguson Mining & Lands Commissioner **Toro**nto, Ontario

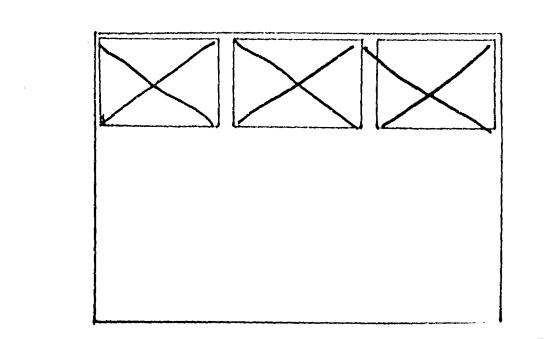
Stephen Hedd Suite 1117 7 Crescent Place Toronto, Ontario H4C 5L7 William Masakeyash Suite 804 34 King Street East Toronto, Ontario M5C 1E5

"Resident Geólogist Sioux Lookout, Ontario

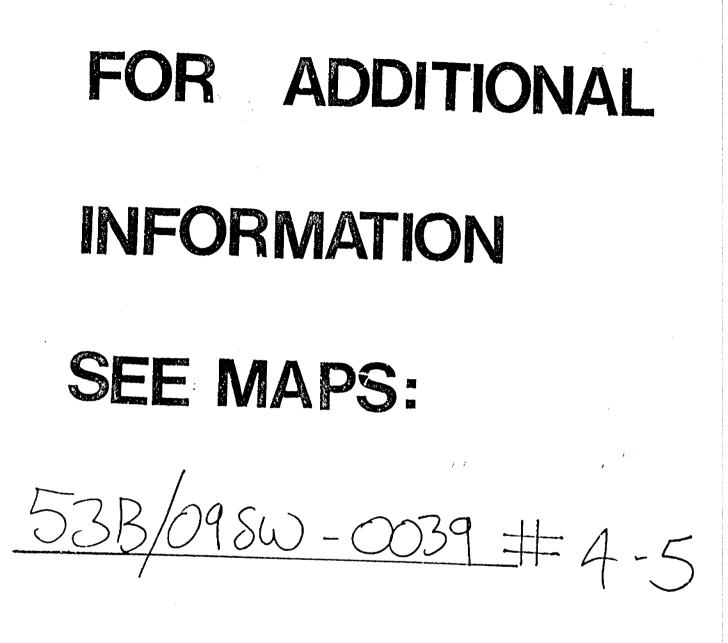
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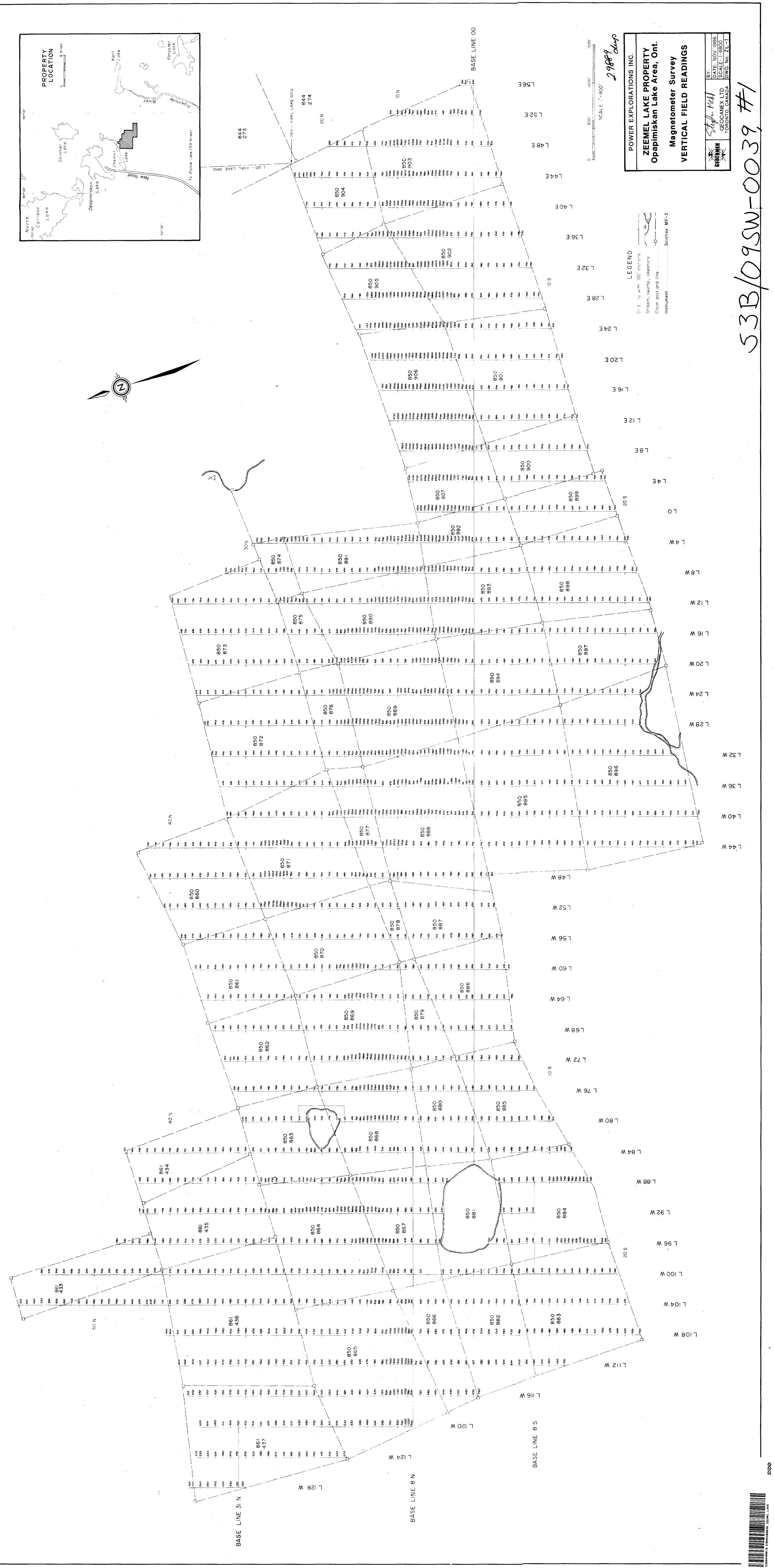


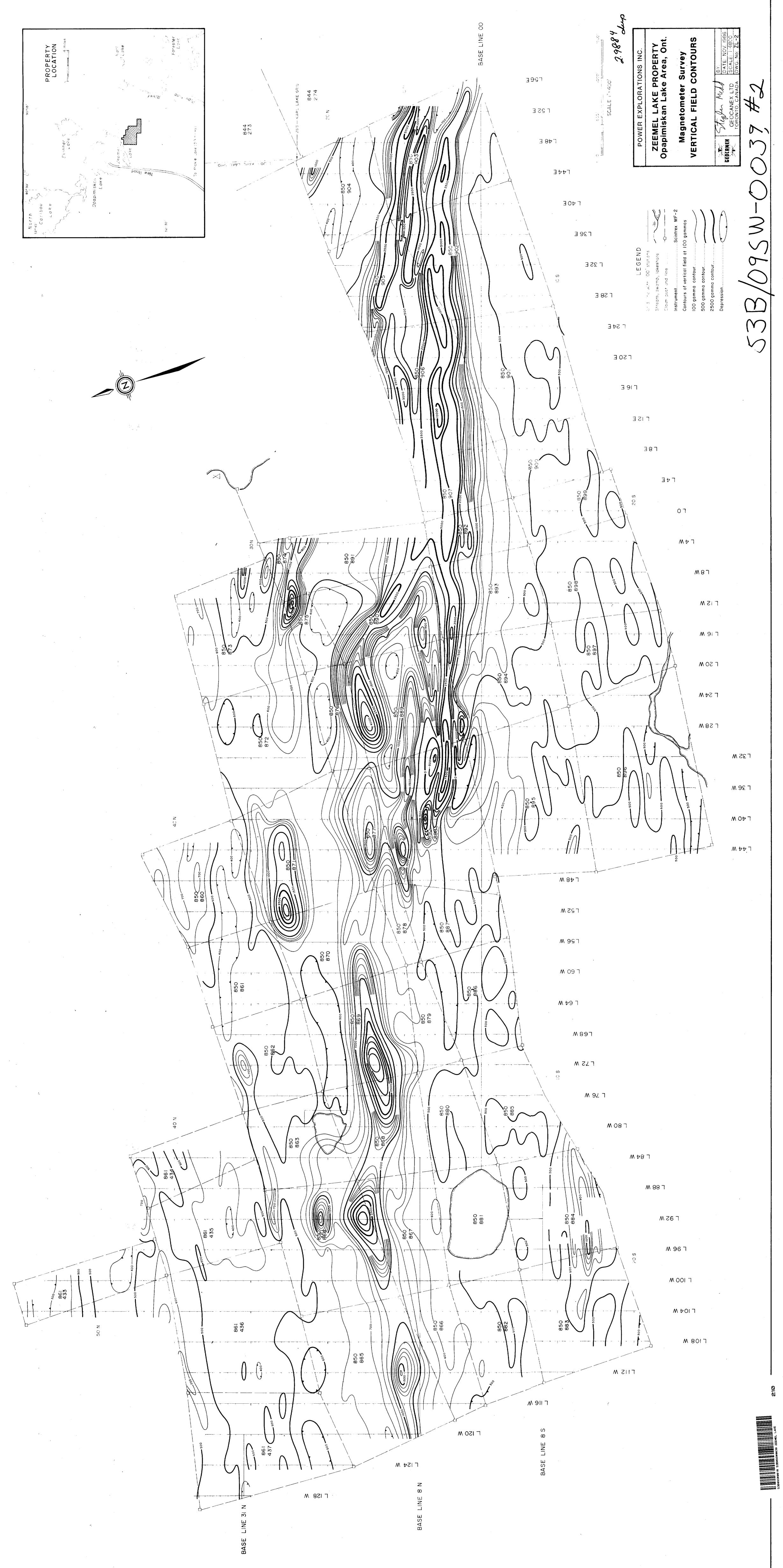
# LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE



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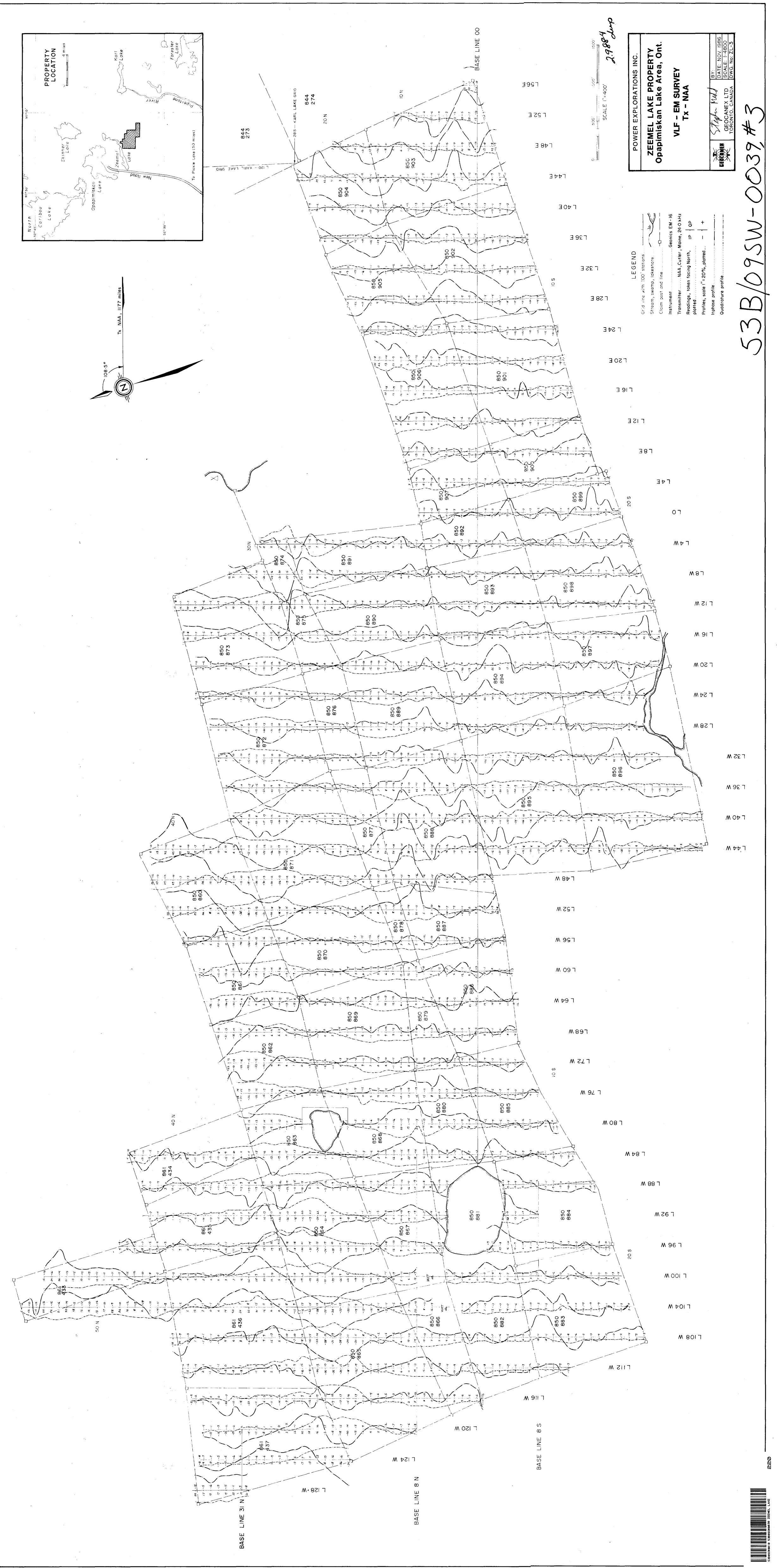
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