



31E13SE0001 OP92-245 LOUNT

010

LOUNT TOWNSHIP EXPLORATION PROGRAMME

1992

by

**Paul C. McLean M.A.Sc.,
Exploration Geologist**

December 30, 1992



31E13SE0001 OP92-245 LOUNT

010C

TABLE OF CONTENTS

	page
Introduction	2
Location and Means of Access	3
History of the Area	3
General Geology of the Area	4
Table of Formations	4
Geology of the Areas	4
Geological Mapping	6
Self Potential Survey	6
Magnetometer Survey	7
Conclusions and Recommendations	7
References	8
Maps	8

LOUNT TOWNSHIP EXPLORATION PROGRAMME
1992

Introduction:

With the assistance of a grant from the Ontario Prospectors Assistance Programme, the writer carried out an exploration programme on several areas in Lount Township, Southern Ontario Mining Division, Ontario.

The writer was aware of an interesting copper showing in the vicinity of the Lake of Many Islands road, on lot 124 Con. B. Two claims were staked to cover this showing, flagged line grid was subsequently laid out in the general area. A north-south base line was established by means of pace and compass and cross lines were run at 100 foot intervals. Geological mapping was carried out on the grid on a scale of 1 inch to 100 feet. As the copper showing was associated with massive garnet, particular attention was paid to those areas underlain by a massive garnet horizon. The copper showing, which consisted of a 6 by 9 foot shaft reported to be 43 feet deep, has been filled in since examined by the writer in 1953; however a considerable amount of well mineralized material is still present on the dump. Geological mapping and geophysics has indicated that this showing is a local occurrence and could not be traced for any distance.

Geological mapping was also undertaken on a massive garnet formation on lots 124-125 and 126 Con. B. This formation was traced for some 3,000 feet across these lots, and two interesting self potential anomalies were located in areas of disseminated sulphide mineralization. Western Garnet Company, which is the largest producer of industrial garnet in the world, has expressed an interest in the garnet horizons, and requested that samples be sent to their mine in Idaho. No assessment of these samples has yet been received.

Location and Means of Access:

The area of interest is located in the south central section of Lount Township, Southern Ontario Mining Division, Ontario. The area is readily accessible via secondary roads, including the old Nipissing Road, and lies some 16 miles west of the Village of South River, and 8 miles north of the Village of Magnetawan.

History of the Area:

Frequent magnetite iron showings were explored by the early prospectors and many pits and trenches were blasted on these occurrences. In addition, a shaft and pits were sunk on copper showings on lots 124 Con. A and B. An old pit was also blasted on a nickel showing of claim 593446. A number of pits and trenches were excavated prior to 1931 by the Great Northern Iron Smelting Company on lots 124-125 and 126 Con. B. These pits were often located of the massive garnet formation which contains local disseminated magnetite.

During 1953, The Ontario Department of Mines published airborne magnetic maps of a large area, including Lount Township. During this period, the writer carried out an extensive exploration programme in the northwest section of the township. The object of this work was to assess various disseminated magnetite occurrences, and a total of 14 drill holes was completed. The magnetite was found to be too high in titanium to be of value.

In May 1963, Broulan Reef Mines Ltd., carried out a drilling programme on copper showings on lot 124 Con A and lot 124 Con. III. A total of 1,002 feet of drilling was completed in 4 holes. Disseminated chalcopryrite was reported in 3 of the 4 holes.

General Geology of the Area:

The area is underlain by Grenville type paragneisses which are thought to be the equivalent of a highly metamorphosed sedimentary series. The rocks are mainly quartz biotite and quartz hornblende gneiss, meta-quartzite, amphibolite, crystalline limestone, and massive garnet formation. Local late diorite dykes intrude to gneisses. In general the formations trend northeast to northwest and dips are relatively flat, and rarely exceed 45° .

TABLE OF FORMATIONS

Diorite intrusives, medium to fine grained, dark green, non gneissic
Peridotite medium grained, nickeliferous, talc alteration
Pegmatite, Lit par lit injections and as dykes, mainly feldspar and quartz
Quartz hornblende gneiss + or - 50% quartz or hornblende
Metaquartzite, pinkish, fine to coarse grained 60% to 90% quartz
Crystalline limestone, white relatively pure.
Massive garnet formation, 75 to 90% dark red garnet, calcite and apatite
Skarn, garnet, apatite, magnetite
Sulphides, pyrite, chalcopryrite
Metagabbro, amphibolite, hornblende and biotite with minor quartz
metagabbro coarse grained granitic texture, non gneissic

Geology of the Areas:

A) Claim 593446

The author located an old pit on this claim where nickel values had been reported. Geological mapping and self potential work were carried out in the vicinity of this pit. A small circular plug of nickeliferous peridotite was indicated by the mapping, and was confirmed by the self potential survey. This structure, which is approximately 200 feet in diameter contained disseminated pyrrhotite and or pentlandite, and minor chalcopryrite. Values of .12% and .04% nickel were obtained in grab samples.

B) claims 593443 and 1165586

The presence of coarse chalcopryrite mineralization associated with massive garnet suggested that the garnet formation present on these claims might be a favourable host for more extensive copper mineralization. A grab sample of this material returned 3.48% copper.

The area was mapped of a scale of 1 inch to 100 feet, and self potential and magnetometer surveys were conducted on the grid. The garnet horizon was

traced intermittently for some 1,900 feet southwest across the claims and onto lot 123 Con. A. This formation is closely associated with a band of crystalline limestone. A sulphide showing was located within the garnet formation near the northwest corner of claim 593443, however the mineralization was mainly pyrite with minor chalcopyrite. Self potential work at this location indicated that this was a local occurrence that did not extend much more than 50 feet.

A coincident magnetic and self potential anomaly was encountered on line 5 south at 1+50 west. This feature is likely caused by sulphides within the garnet formation; unfortunately these anomalies did not extend to the adjacent lines, indicating that this is also a local occurrence.

A band of amphibolite containing disseminated magnetite occurs near the northwest corner of claim 1165586. This structure has caused a series of strong magnetic anomalies across the north part of the claim.

C) Lots 124-125 and 126 Con. A

A copper showing described by Satterly was located on lot 124. This showing consisted of 2 pits some 125 feet apart containing sulphide mineralization. The sulphides were located within a band of massive garnet, similar to the showing on claim 1165586. The more northerly pit contained pyrite and chalcopyrite, and a value of .38% copper was reported. The second pit contained pyrite. This area was mapped, and detailed self potential work was carried out.

A strong self potential anomaly was encountered between the pits with lesser values near the pits. There appears to be a lens of sulphides about 150 feet long at this location, and there appears to be a good chance that higher grade copper will occur between these pits.

A massive garnet formation similar to that on claims 593443 and 1165586 was found to be present on these lots, the only difference being the absence of crystalline limestone. A north south base line was flagged by pace and compass and east west cross lines were established at 100 foot intervals. The garnet formation was mapped on a scale of 1 inch to 100 feet, and was traced northeast from lot 124 through lot 125 and lot 126. It is thought to extend into lot 19 Con. I on the south, and into lot 127 on the north. Local disseminated magnetite occurs within this formation and several pits and trenches were blasted during the 1930's. Two drill casings were also noted along this horizon.

A band of garnet skarn on lot 125 was explored by a series of pits and trenches. This band contained considerable disseminated magnetite along with some pyrite and chalcopyrite. Detailed self potential work was carried out at this location and a 300 foot long anomaly was found to be present.

Several other garnet locations were prospected in the south part of the Township, however no sulphide mineralization was discovered.

Geological Mapping:

On claims 593443 and 1165586, a north south base line was established by pace and compass, and was extended for 2,700 feet. The base line was flagged at 100 foot intervals, and east-west cross lines were run 1,500 feet on each side of the base line, where possible. A considerable amount of swamp and open muskeg was encountered on claim 1165586. A total of $9\frac{1}{2}$ miles was mapped at this location.

On lots 124-125 and 126 Con.A, A north-south base line was established and run for 3,960 feet by pace and compass. The line was flagged at 100 foot intervals and east-west cross lines were established at 100 foot intervals. Some difficulty was encountered because of strong local attraction due to disseminated magnetite. Survey posts were located on the Nipissing Road and two lot lines were flagged and mapped across con. A. A total of 7.9 miles was mapped at this location, making a total of 17.4 miles at the two locations.

Self Potential Survey:

On claims 593443 and 1165586, a self potential survey was carried out on the part of the property not covered by swamp. The equipment used was a micronta digital multimeter and two porous pots filled with copper sulphate solution. The pots were placed 50 feet apart and voltage readings were taken at 50 foot intervals, and at 25 foot intervals or less where anomalous values were encountered. When help was not available, a reel containing 400 feet of wire was employed, and readings were taken at 50 foot intervals or less from the base station. This method allowed the writer to work alone, although a great deal of walking was done as it was necessary to return to the base station for every reading. A total of 4.2 miles of self potential surveying was completed in the different areas.

Magnetometer Survey:

On claims 593443 and 1165586, a magnetometer survey was carried out on the claims. The equipment used was a sharp fluxgate magnetometer which was rented for this work. Readings were taken at 50 foot intervals on the grid and at 25 foot intervals in anomalous areas.

A total of 6.5 miles of magnetometer survey was completed.

Conclusions and Recommendations:

Exploration work on claims 593443, 593446 and 1165586 failed to turn up any good copper or nickel targets. The nickeliferous peridotite of claim 593446 is of academic interest only as this structure is too small and the grade is too low to be of commercial value. There is always the chance of finding a larger intrusive with better grade nickel in the general vicinity.

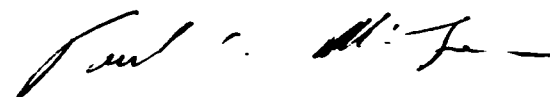
On claims 593443 and 1165586, sulphide mineralization was found to be local in extent.

In the event that the garnet is found to be of commercial grade bulk sampling of the horizon will be required.

On lots 124-125 and 126 ConA, the two self potential anomalies require additional work. Trenching and blasting and two short drill holes are recommended at these locations. Additional mapping and self potential work should be completed on the unexplored parts of these lots, and should be extended to the north onto lot 127.

In the event that the garnet is found to be of commercial grade bulk sampling will also be required. The possibility of using the garnet as a ground cover has to be further investigated. On checking with a large garden centre in Toronto, the writer was advised that the massive garnet would be saleable.

Respectfully submitted,



Paul C. McLean M.A.Sc.
Exploration Geologist.

References:

This report was written with reference to the following Government and Company reports and the Author's personal knowledge of the area:

Mineral Occurrences in Parry Sound District, Ontario Department of Mines, Vol LI part II, 1942 by J. Satterly.

Airborn magnetometer survey, Shenango Furnace Company Magnetawan Area 1952.

A.C. McLean and Associates, Iron exploration programme Lount Twp. Paul C. McLean 1953.

Ontario Department of Mines Air Magnetic Survey Lount Township 1953.

Geology of Lount Township, Ontario Department of Mines Vol LXIV part 6, 1955 by J. Satterly.

Maps:

Lount Township Garnet Horizon lots 123-4 Con. B and claim 593443 on a scale of 1 inch to 100 feet. •

Lount Township Garnet horizon lots 124-5-6 Con. A. on a scale of 1 inch to 100 feet.

Magnetometer survey claims 593443 and 1165586 Lount Township on a scale of 1 inch to 100 feet.

Self Potential Survey claims 593443 and 1165586 Lount Township on a scale of 1 inch to 100 feet.

Plan of geology and Self Potential Survey Nickeliferous peridotite claim 593446, Lount Township on a scale of 1 inch to 100 feet.

Self Potential Survey sulphide showing lot 124 Con. A. on a scale of 50 feet to the inch.

Self Potential Survey Sulphide-magnetite showing lot 125 Con.A on a scale of 50 feet to the inch.



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

FACSIMILE TRANSMITTAL

Box 190, Main St.
Dorset, Ontario
POA 1E0

Telephone: (705) 766-2494
FAX: (705) 766-9976

TO: Ed Solonyka
Mineral Development Section
4th floor

FROM: Chris Marmont
Northern Development & Mines
Box 190, Main St.
Dorset, Ontario
POA 1E0

DATE: 05 August 1993

NO. OF PAGES
(Cover + 1)

COMMENTS:

MINISTRE DU DEVELOPPEMENT
DU NORD ET DES MINES

AUG 5 1993

INCENTIVES OFFICE

Any questions regarding this transmittal, please call:

NAME: JANICE JONES

TELEPHONE: (705) 766-2494



Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

5th August, 1993

Memo to: Ed Solonyka
Copies to: Dave Villard
From: Chris Marmont

Re: OPAP report by Paul McLean on Garnet in Lount Township, 1992

Dear Ed,

I spoke to Paul McLean this morning, and asked his permission for you to send me a copy of the above mentioned report. He said, "No problem, go right ahead".

I shall keep it under wraps here anyway, but in the event that I would wish to extract any of the information for reporting, I shall obtain further permission from him, as is standard OGS procedure.

Many thanks,

A handwritten signature in cursive script that reads "Chris".

Christopher Marmont,
Geologist,
P.O. Box 190, Main St.,
Dorset, Ontario, Canada.
POA 1E0

Tel: (705) 766-2494
Fax: (705) 766-9976

< CONFIRMATION REPORT >

08-06-1993(FRI) 13:47

[RECEIVE]

NO.	DATE	TIME	DESTINATION	PG.	DURATION	MODE	RESULT
7056	8-06	13:46		2	0*00'52"	NORM.E	OK
				2	0*00'52"		

LEGEND

- CANCELLED (C)
- PATENTED LAND (CS)
- CROWN LAND SALE (L)
- LEASES (LOC)
- LOCATED LAND (LO)
- LICENSE OF OCCUPATION (MRO)
- MINING RIGHTS ONLY (SRO)
- SURFACE RIGHTS ONLY

400' Surface rights reservation around all lakes & rivers

LOUNT

EASTERN ONTARIO MINING DIVISION
Scale - 40 Chains - Inch

PRINGLE

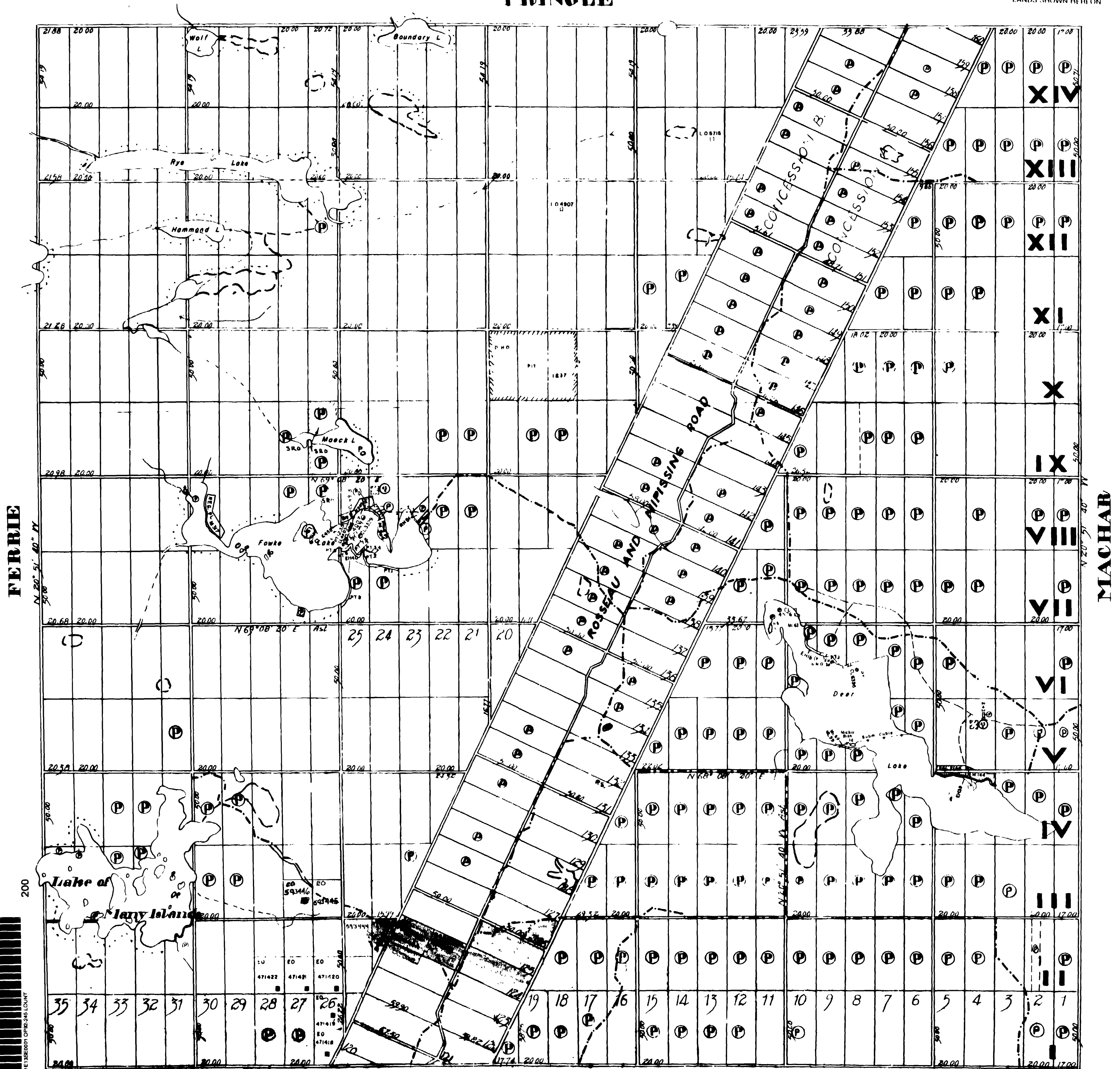
Areas withdrawn from staking under Section 47 of the Mining Act R.S.O. 1970

File	Date	Disposition
160707	31/8/72	SRO (location enclosed 8/11/72)
171870	22/2/83	J.R.M.R.
	22/1/83	S.R.O. Order No W 3 83

DATE OF ISSUE



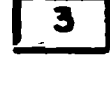

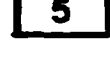











1987

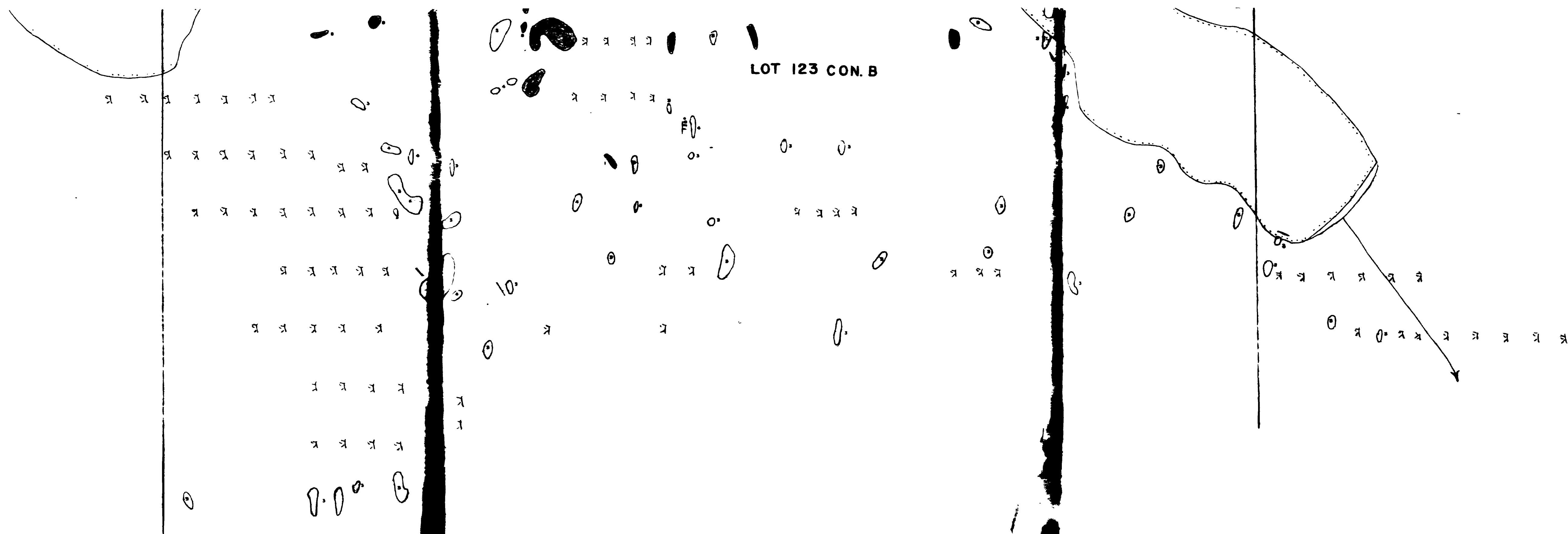
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.



EXPLORATION AREAS

LEGEND

-  Olivite
-  Pegmatite
-  Quartz hornblend, hornblende quartz gneiss
-  Metaquartzite
-  Massive garnet formation
-  Skarn, garnet, apatite, magnetite
-  Sulphides, pyrite, chalcopyrite
-  Crystalline limestone
-  Amphibolite, metagabbro
-  Strike and dip
-  Swamp
-  Magnetic attraction
-  Creek
-  Trail
-  Pit
-  Trench



LOUNT TWP. GARNET HORIZON
LOTS 123-4 CON. B & 59344

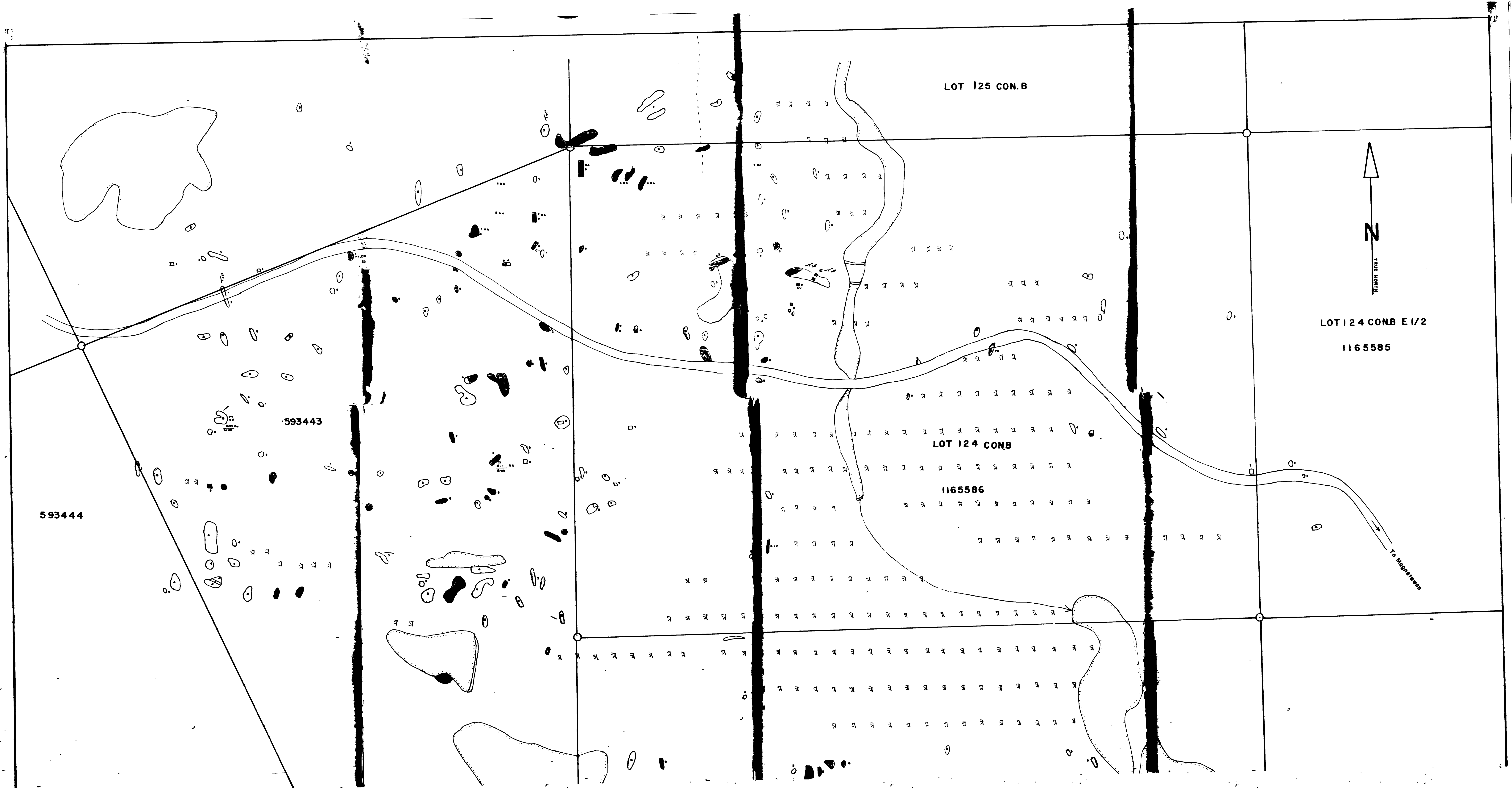
PLAN OF GEOLOGY

Scale: 1 inch=100 feet

PAUL C. WILSON REGISTERED GEOLOGIST

Paul C. Wilson





593444

593443

LOT 125 CON. B

LOT 124 CONB

1165586

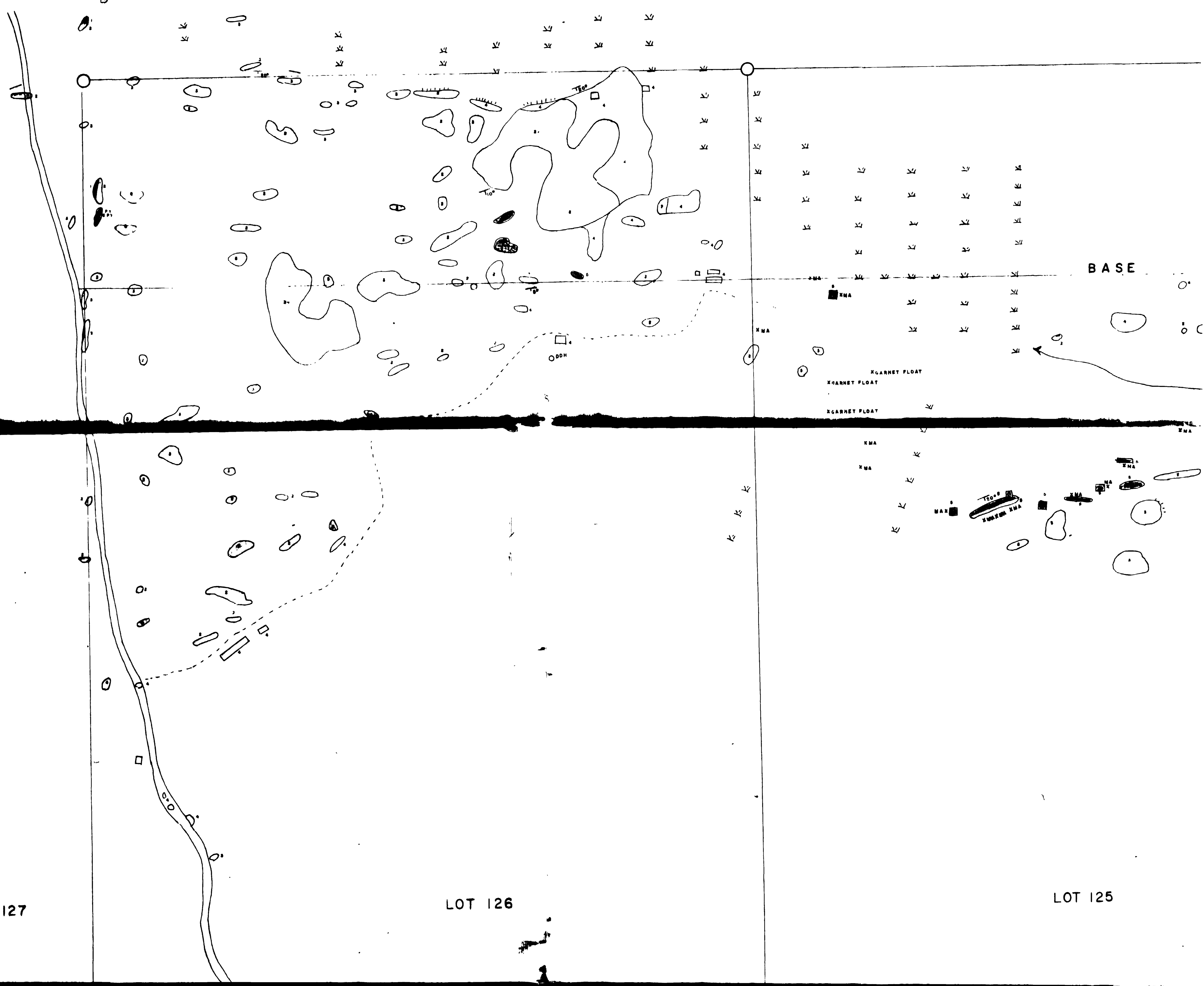
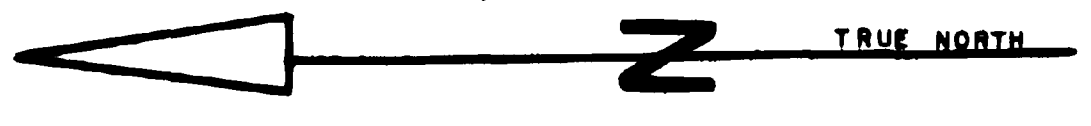
LOT 124 CONB E 1/2

1165585

















TRUE NORTH



To Highway



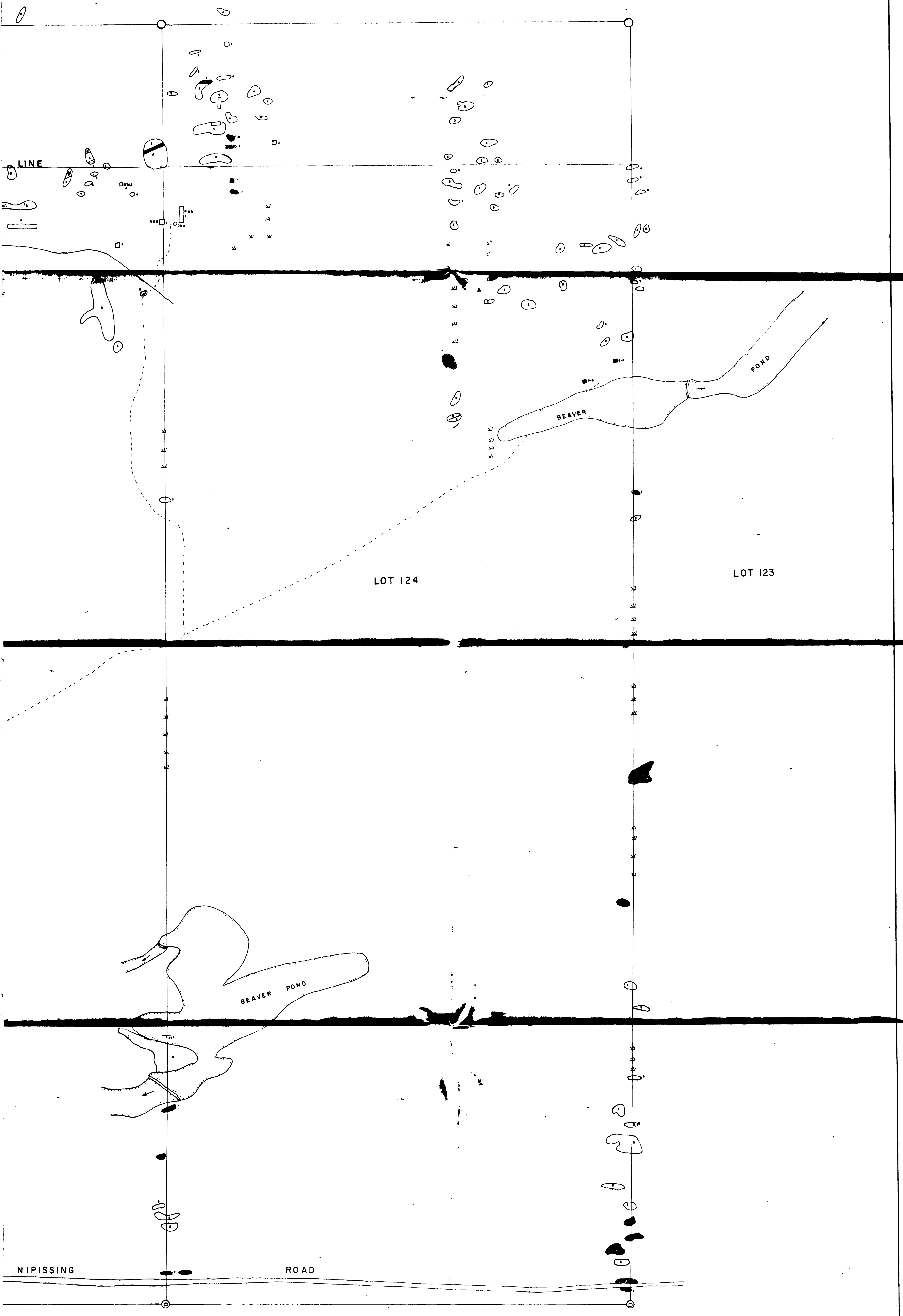
LEGEND

-  Regmatite
-  Quartz hornblende, Hornblende quartz gneiss
-  Metaquartzite
-  Massive garnet formation
-  Skarn, garnet, apatite, magnetite
-  Sulphides, pyrite, chalcopyrite
-  Metagabbro, amphibolite
-  Strike and dip
-  Swamp
-  Cliff
-  Trail
-  Creek
-  Drill hole
-  Pit
-  Trench
-  Survey post

**LOUNT TWP. GARNET HORIZON
LOTS 124-5-6 CON. A**

**PLAN OF GEOLOGY
Scale: 1 inch=100feet**





LINE

BEAVER

POND

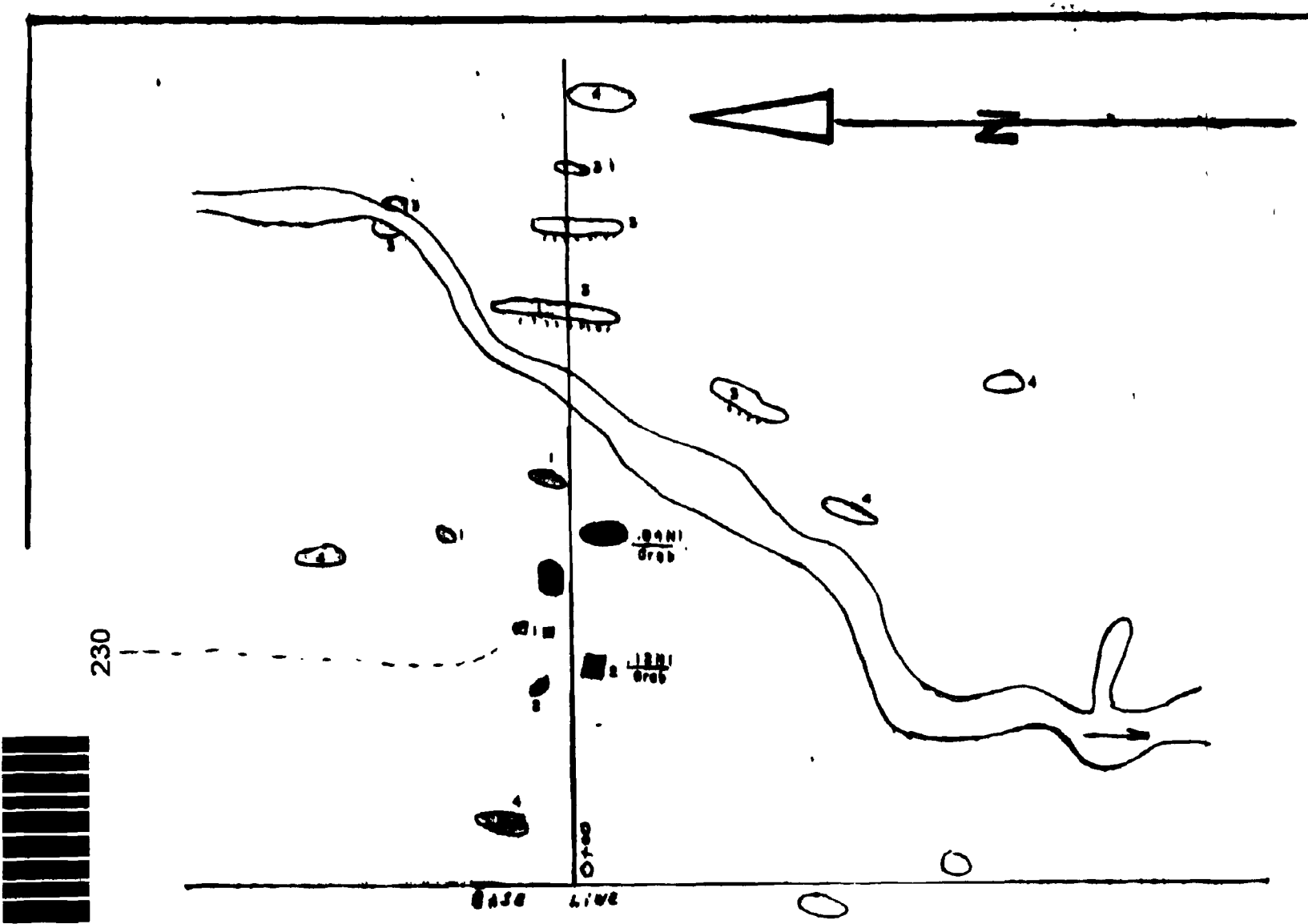
LOT 124

LOT 123

BEAVER POND

NIPISSING

ROAD



230

BASE LINE

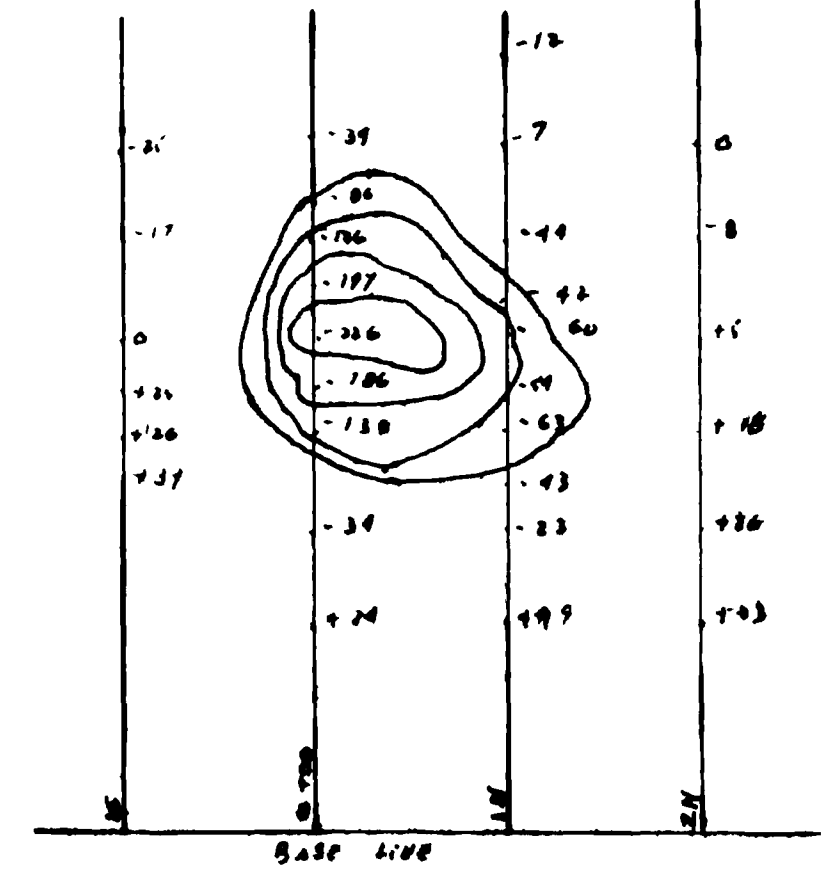



31E135E001 0P92-245 LOUNT

**PLAN OF GEOLOGY & SELF POTENTIAL SURVEY
NICKELIFEROUS PERIDOTITE CLAIM 593446
LOUNT TOWNSHIP**

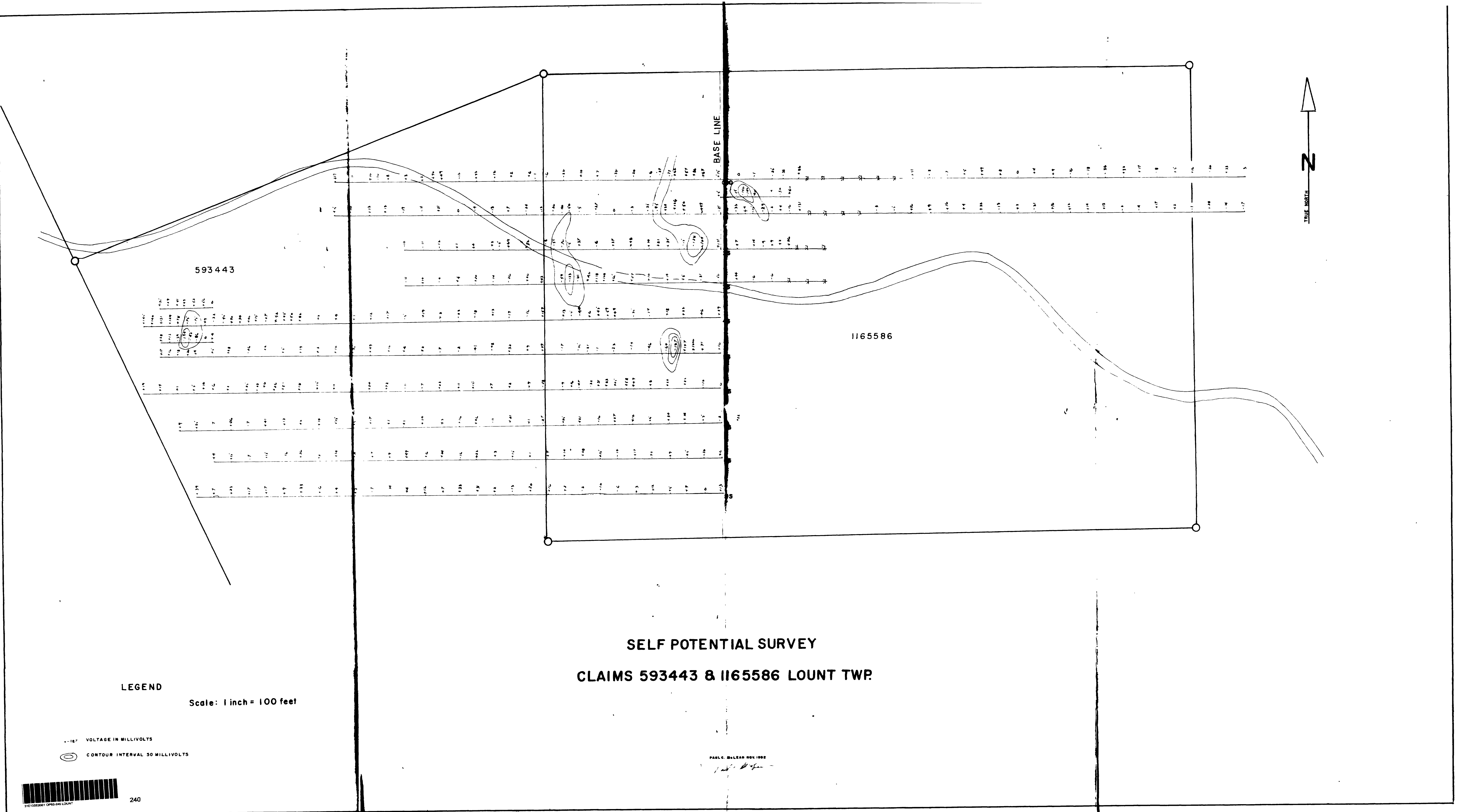
- 1 TALC ALTERATION
- 2 PERIDOTITE
- 3 METAQUARTZITE
- 4 HORNBLENDE QUARTZ, QUARTZ HORNBLENDE GNEISS

SCALE:
1 inch = 100 feet



... VOLAGE IN MILLIVOLTS
 CONTOUR INTERVAL 60 MILLIVOLTS

P. C. Miller
Nov. 1992



593443

1165586

BASE LINE

**SELF POTENTIAL SURVEY
CLAIMS 593443 & 1165586 LOUNT TWP.**

LEGEND

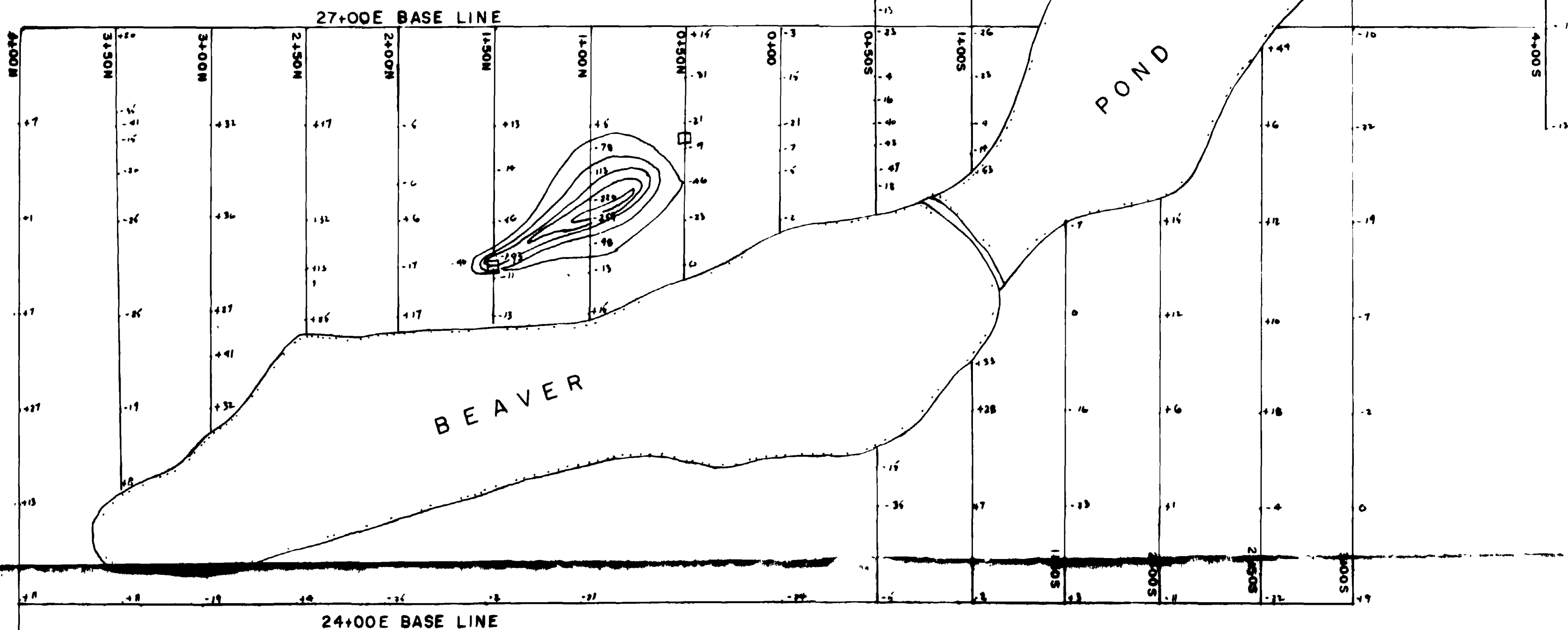
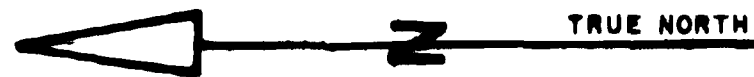
Scale: 1 inch = 100 feet

- VOLTAGE IN MILLIVOLTS
- CONTOUR INTERVAL 50 MILLIVOLTS



240

PAUL G. MILLER NOV 1982



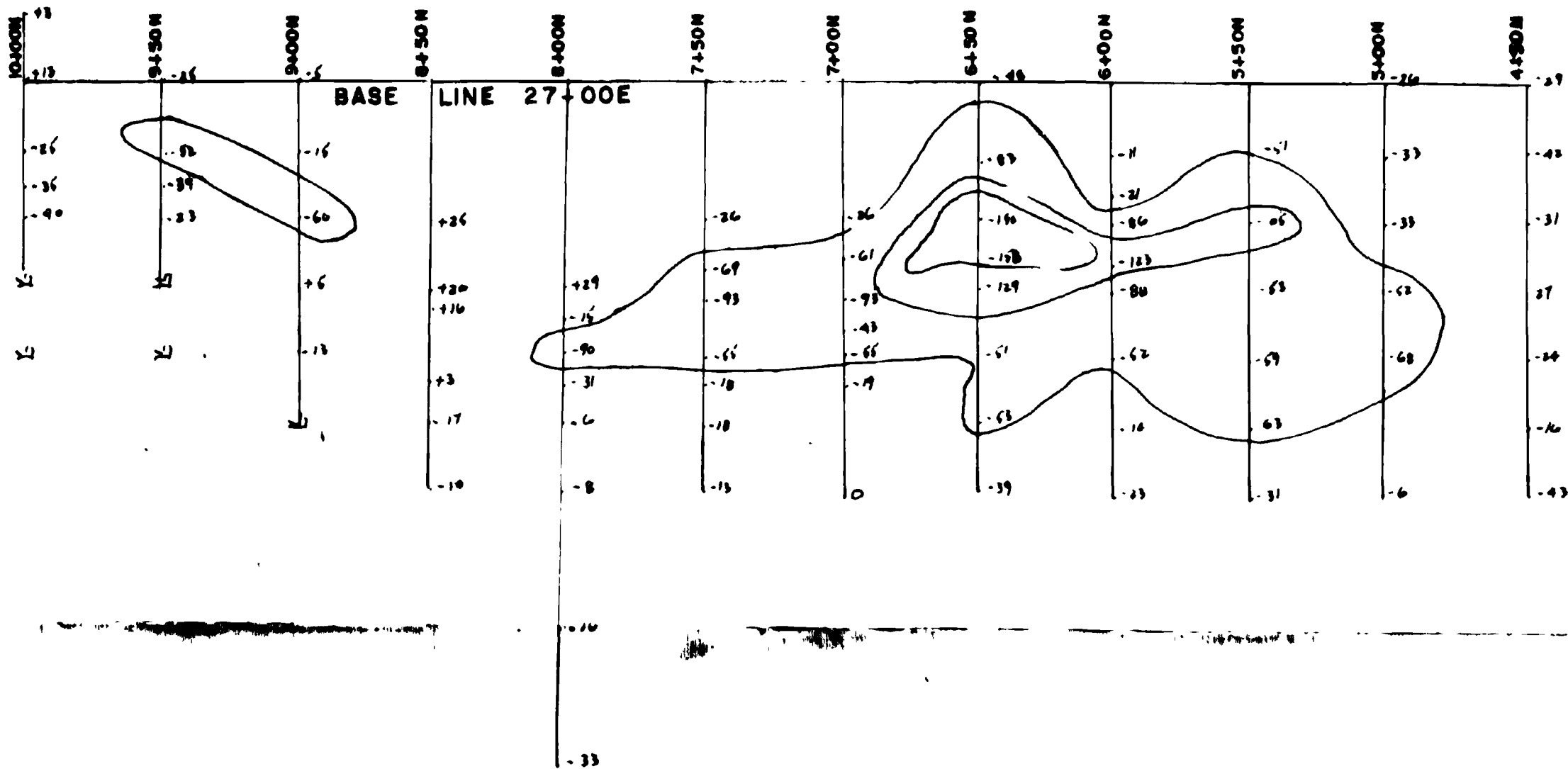
SELF POTENTIAL SURVEY
SULPHIDE SHOWING
LOT 124 CON. A

LEGEND

Scale: 1 inch = 50 feet

- VOLTAGE IN MILLIVOLTS
- CONTOUR INTERVAL 50 MILLIVOLTS





260



STE13SED001 OPR2-245 LOUNT

SELF POTENTIAL SURVEY SULPHIDE - MAGNETITE SHOWING LOT 125 CON. A

LEGEND

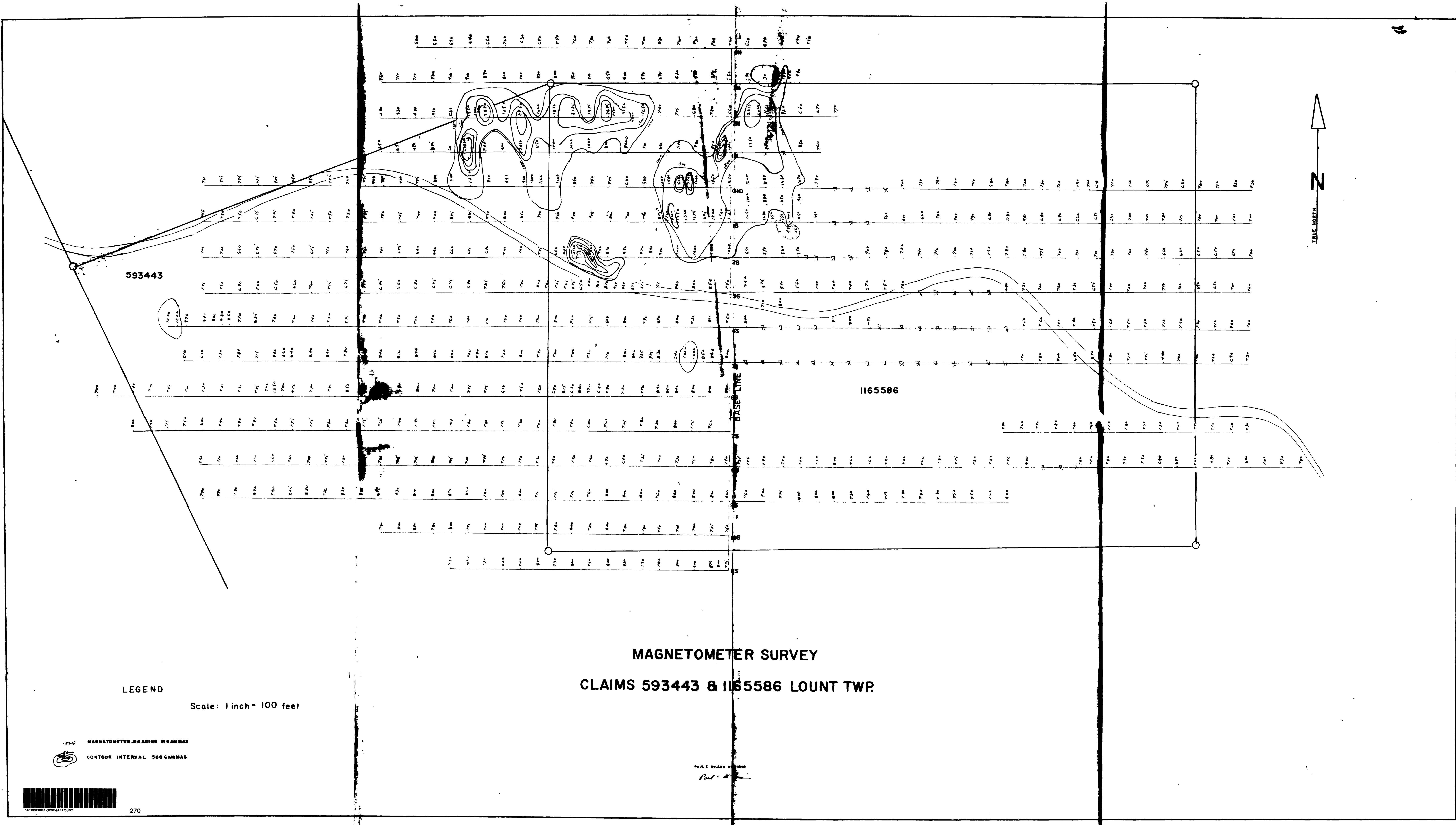
Scale: 1 inch = 50 feet

---190 VOLTAGE IN MILLIVOLTS



CONTOUR INTERVAL 50 MILLIVOLTS

Paul C. McLean
PAUL C. McLEAN NOV 1982



593443

1165586

BASE LINE



**MAGNETOMETER SURVEY
CLAIMS 593443 & 1165586 LOUITA TWP.**

LEGEND
Scale: 1 inch = 100 feet

MAGNETOMETER READING IN GAUSS
CONTOUR INTERVAL 500 GAUSS



270

PAUL C. BILLYE
Paul C. Billye