

2.1222

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PROJECTS  
SECTION



42L05NE0062 2.1222 SUMMIT LAKE

010

MAGNETOMETER SURVEY  
ON THE PROPERTY OF  
GIANT GRIPP MINES INC.  
MARSHALL LAKE, ONTARIO  
NTS 42L/5

for

ST. JOSEPH EXPLORATIONS LIMITED

Toronto, Ontario

Peter T. George

April 1973

## INTRODUCTION

The property consists of 45 leased claims and 21 unpatented claims all of which are or are in the process of being transferred to Giant Gripp Mines Inc., 427 - 12 Richmond Street East, Toronto, Ontario, M5C 1N1.

This survey is filed on behalf of Giant Gripp Mines Inc. by St. Joseph Explorations Limited, 600 - 2323 Yonge Street, Toronto, Ontario M4P 2C9.

The following claims constitute the property:

Leases:	101642 to 101674 inclusive	37
	101475 to 101486 inclusive	12
Claims:	TB 346422 to 346424 inclusive	
	TB 321308 to 321315 inclusive	
	TB 321380 to 321389 inclusive	

The data was filed under the Special Provisions regulation and all pertinent data is recorded on the required forms.

## LOCATION AND ACCESS

The property is located in the Summit Lake Area, Ontario (NTS 42L/5), at the west end of Marshall Lake.

Access to the property is via float or ski-equipped aircraft from either Nakina or Jellicoe, a distance of approximately 50 miles.

A winter road exists to the property from Auden, a distance of approximately 20 miles.

LOCATION AND ACCESS ..... continued

The most economical means of supplying the camp is by air. If a large quantity of material is required, it can be trucked to Auden and flown in from that point.

PREVIOUS WORK

Considerable work has been carried out on the property by a number of previous holders. Sheridan Magniphase EM, some VLF-EM, a limited amount of IP and approximately 10,000 feet of diamond drilling have been completed to date.

An estimated 500,000 tons of mineralization grading 1.02% Cu, 3.80% Zn, and 2.13 oz/ton Ag have been outlined in the Main Zone above the 500 foot level in the area of lines 32 West to 24 West, 800 to 1000 feet south of the baseline.

The magnetometer survey was recommended to aid in the interpretation of the geology of the property in an effort to extend the potential of the known mineralization.

Results of the Survey (Map in pocket)

The results of the survey are presented on the map included with this report.

The magnetic background on the property was arbitrarily set at approximately 500 gammas in order to use the most sensitive scale on the MF-1 magnetometer.

Results of the Survey ..... continued

The majority of the property has relatively low magnetic relief of approximately 200 gammas with local relief to 1000 gammas. A broad zone of higher magnetic background and relief occurs in the northwest part of the survey area. A narrow zone of high magnetic relief cuts in a northerly direction across the property.

INTERPRETATION

The following lithologic and structural interpretation has been made on the basis of the magnetic survey data.

(A) LITHOLOGIES:

At least four lithologic units can be defined on the basis of the available data.

The broad zone of relatively higher relief and background in the northwest part of the map area is inferred to be due to pyrrhotitic quartzites.

The narrow zone of high magnetic values correlates with a known diabase dike.

To the west of the dike, that part of the property south of the inferred pyrrhotitic quartzite can be divided into two areas on the basis of the change in background from 600 gammas to 400 gammas. This change may be due to a decrease in pyrrhotite and magnetite content of the underlying quartzites.

INTERPRETATION ..... continued

Immediately east of the diabase dike the magnetic background is approximately 400 gammas and this area is correlated with the south part of the property on the west side of the dike. The dike is assumed to occupy a fault zone with a minimum of 5000 feet of left hand, strike-slip displacement.

The magnetic pattern to the east of Fault A<sub>1</sub> (discussed below) is difficult to correlate with the remainder of the property.

### STRUCTURE

Two sets of faults have been inferred on the basis of the magnetic data.

#### **FAULT SYSTEM A**

A series of faults having a northwesterly strike direction have been inferred on the basis of termination and offsets of magnetic features. Fault A<sub>1</sub> was suspected on the basis of the government airborne data and appears to be a major regional break along which there has been considerable movement. A parallel fault, Fault A<sub>2</sub> offsets the pyrrhotitic quartzite zone approximately 1200 feet in a left hand, strike-slip direction and may indicate the regional movement direction of the zone.

STRUCTURE ..... continued

FAULT SYSTEM B

A north trending fault system has been inferred on the basis of offsetting of the pyrrhotitic quartzite and of offsetting across the zone occupied by the diabase dike.

Left hand, strike-slip displacement characterizes this fault system.

CONCLUSIONS

A weak, 100 gamma magnetic anomaly correlates with the mineralized zone, west of the diabase dike. However, because of the low relief characteristic of much of the property, magnetic surveying will not be useful in defining economic mineralization and drill targets.

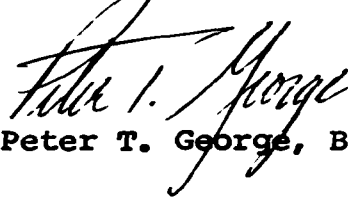
The results of the magnetic survey would indicate that the mineralization encountered in the Main Zone, to the east of the diabase dike is not related to that west of the dike. Previous workers (Oja, personal communication) had suspected this on the basis of a comparative change in the general appearance of the mineralization across the dike.

On the basis of this data, the area west of the diabase dike, south of the pyrrhotitic quartzite

CONCLUSIONS ..... continued

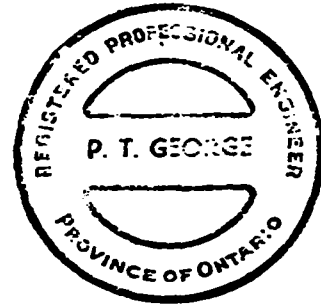
zone would have the highest potential for additional mineralization similar to the west part of the Main Zone.

Respectfully submitted,



Peter T. George, B.Sc., P.Eng.

PTG/bb

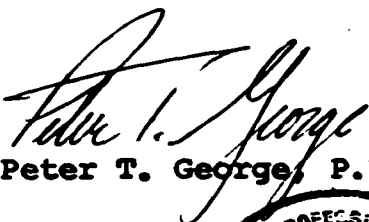


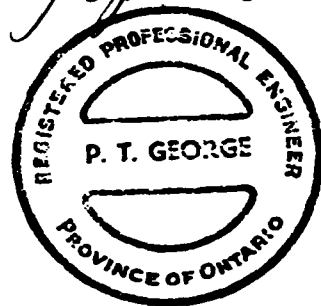
C E R T I F I C A T E

This is to certify that I, Peter T. George,

- 1) Graduated in 1964 from Queen's University, Kingston, Ontario with an Honours B.Sc. in Geological Sciences and that I have completed two years of graduate studies at Queen's University;
- 2) Have been practicing my profession as an exploration geologist for nine years;
- 3) Am a member of the Association of Professional Engineers of Ontario;
- 4) Have no interest directly or indirectly in Giant Gripp Mines Inc.

Toronto, Ontario  
April 25, 1973

  
Peter T. George, P. Eng.







42L05NE0062 2.1222 SUMMIT LAKE

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GEOPHYSICAL - GEOLOGICAL GEOCHEMICAL  
TECHNICAL DATA STATEMENT

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 Magnetometer and Linecutting  
Township or Area Summit Lake Area  
Claim holder(s) Giant Gripp Mines Inc., under option  
St. Joseph Explorations Ltd  
Author of Report Peter T. George, B.Sc., P.Eng.  
Address 600 - 2323 Yonge St., Toronto, Ont.  
Covering Dates of Survey Feb. 2 - March 28, 1973  
(linecutting to office)  
Total Miles of Line cut 19.3

MINING CLAIMS TRAVERSED  
List numerically

TB	346422
(prefix)	(number)
TB	346423
TB	346424
TB	321308
TB	321309
TB	321310
TB	321311
TB	321312
TB	<del>#</del> 321313
TB	321314
TB	321315
TB	321380
TB	321381
TB	321382
TB	321383
TB	321384
TB	321385
TB	321386
TB	321387
TB	321388
TB	321389
TOTAL CLAIMS <u>21</u>	

SPECIAL PROVISIONS CREDITS REQUESTED	Geophysical	DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	-Electromagnetic	
	-Magnetometer	40
	-Radiometric	
	-Other	
ENTER 20 days for each additional survey using same grid.	Geological	
	Geochemical	

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

DATE: April 26, 1973 SIGNATURE: P. T. GEORGE  
Author of Report or Agent

PROJECTS SECTION  
Res. Geol. \_\_\_\_\_ Qualifications \_\_\_\_\_

Previous Surveys \_\_\_\_\_

Checked by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH \_\_\_\_\_

Approved by \_\_\_\_\_ date \_\_\_\_\_

OFFICE USE ONLY

If space insufficient, attach list

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

## GEOPHYSICAL TECHNICAL DATA

### GROUND SURVEYS

Number of Stations 1020 Number of Readings 1120  
Station interval 100' with 50' where required  
Line spacing 400'  
Profile scale or Contour intervals 100 gammas  
(specify for each type of survey)

### MAGNETIC

Instrument MF - 1 Sharpe Fluxgate # 710311  
Accuracy - Scale constant 20 gammas per scale division  
Diurnal correction method Tie in to base stations at 100' intervals on base line  
Base station location Not tied to regional base

### ELECTROMAGNETIC

Instrument \_\_\_\_\_  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency \_\_\_\_\_  
(specify V.L.F. station)

Parameters measured \_\_\_\_\_

### GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
Base station value and location \_\_\_\_\_

Elevation accuracy \_\_\_\_\_

### INDUCED POLARIZATION - RESISTIVITY

Instrument \_\_\_\_\_  
Time domain \_\_\_\_\_ Frequency domain \_\_\_\_\_  
Frequency \_\_\_\_\_ Range \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

**ST. JOE MINERALS CORPORATION LIMITED**

A SUBSIDIARY OF ST. JOE MINERALS CORPORATION

2323 YONGE ST., SUITE 600, TORONTO 315, CANADA • (416) 488-4620

<u>CLAIM NUMBER</u>	<u>DAYS</u>
TB 346422	20
346423	20
346424	20
321308	20
321309	20
321310	20
321311	20
321312	20
321313	20
321314	15
321315	1
321380	20
321381	15
321382	15
321383	15
321384	5
321385	20
321386	20
321387	20
322388	20
<u>321389</u>	<u>20</u>
<b>21 Claims</b>	<b>366 days</b>





Ontario

Ministry of  
Natural  
Resources

W 1617, Parliament Buildings  
Toronto, Ontario M7A 1X1  
Telephone: 965-0918

December 3, 1973

Our file number 2.1222 .

Your file number .

R. A. Baxter  
Regional Director  
Ministry of Natural Resources  
235 Bay Street  
Thunder Bay "P", Ontario  
P7B IR4

Attn: Mr. R. A. Poutanen

Dear Sir:

Re: Mining Claims TB 321308 et al, Summit  
Lake, File 2.1222

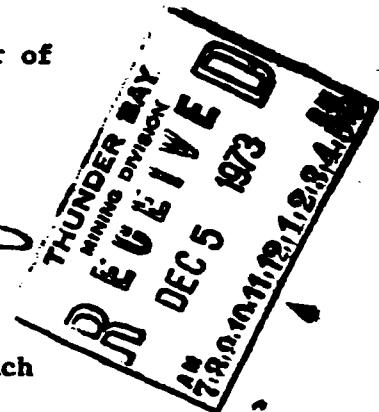
The Geophysical (Magnetometer) assessment work credits as listed with my Notice of Intent dated November 16, 1973 have been approved as of the date above.

The Mining recorder should inform the recorded holder of these mining claims and so indicate on his records.

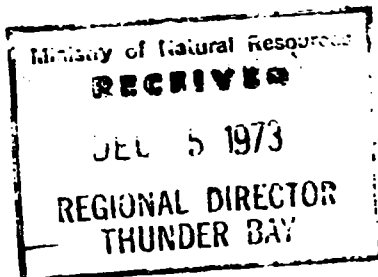
Yours very truly,

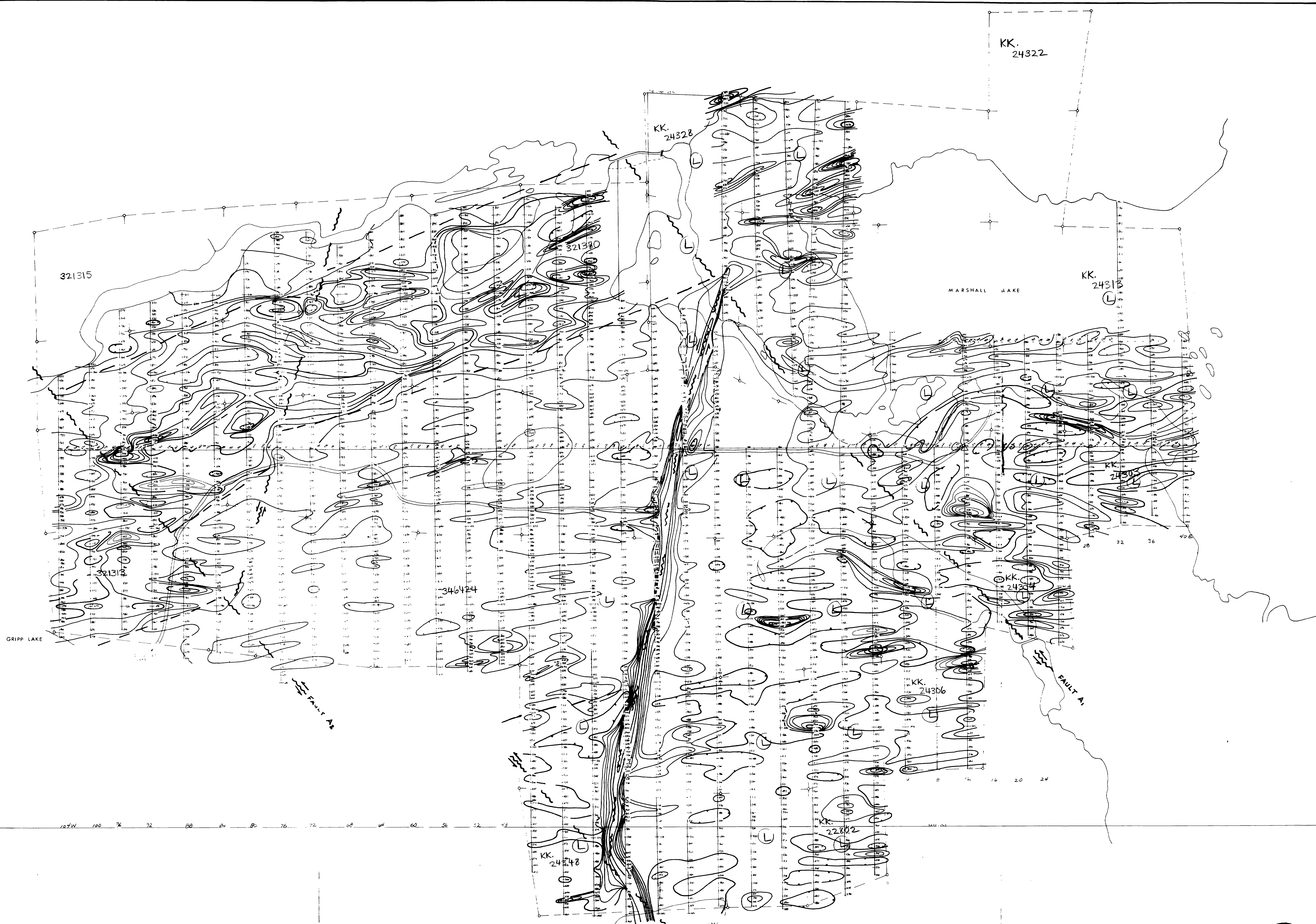
for J. R. McGinn  
Director  
Lands Administration Branch

OJ/mw



- cc: Giant Gripp Mines Inc.,
- cc: St. Joseph Explo. Ltd.,
- cc: Resident Geologist  
Thunder Bay, Ontario





GRUPP LAKE

MARSHALL LAKE

FAULT A

KK.  
24322

KK.  
24328

KK.  
24313

KK.  
24306

KK.  
22802

KK.  
24348

34614

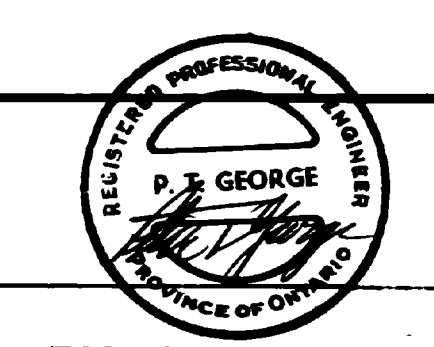
32135

32131

28 32 36

76 20 24

BASE 04



<b>LEGEND</b> ▲ MNA BASE CONTROL POINT ○ MAGNETIC HIGH ○ MAGNETIC DEPRESSION --- INFERRED GEOLOGIC CONTACT - - - INFERRED FAULT CONTROLS INTERVAL: 100 GAMMAS DIURNAL CORRECTION TIME INTERVAL: 30 MIN INSTRUMENT: "SIEMENS"	<b>ST. JOSEPH EXPLORATIONS LIMITED</b> <small>INCORPORATED IN CANADA</small>	
	<b>MAGNETOMETER SURVEY</b> <b>GIANT GRIPP MINES INC.</b>	
PROJECT NO. _____ SHEET NO. _____ DATE: _____ REPORT NO. _____	SHEET NO. _____ OF _____ DATE: _____ REPORT NO. _____	SHEET NO. _____ OF _____ DATE: _____ REPORT NO. _____

2.1222

