



410155W0002 2.11285 RANEY

010C

TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	1
LOCATION AND ACCESS.....	1
CLAIM STATUS.....	1
GEOLOGY	
Regional Geology.....	2
Property Geology.....	4
PREVIOUS WORK.....	5
SURVEY PROCEDURE	
MAGNETICS	
Theory.....	11
Field Method.....	12
PERSONNEL AND EQUIPMENT.....	13
INTERPRETATION.....	13
CONCLUSIONS AND RECOMMENDATIONS.....	14
REFERENCES.....	15
CERTIFICATION	
APPENDIX A:     Equipment Specifications	
<u>LIST OF FIGURES</u>	
Figure 1	Property Location - Regional
Figure 2	Property Location - Local
Figure 3	Claim Map

INTRODUCTION

During the first part of 1988, a magnetic survey was completed on 7 claims of the 72 claim Raney Township property of Raney Minerals Ltd.

The survey, conducted by Robert S. Middleton Exploration Services Inc., was used to define conductors and structure on the western area of the property, extending the coverage of previous surveys.

LOCATION AND ACCESS

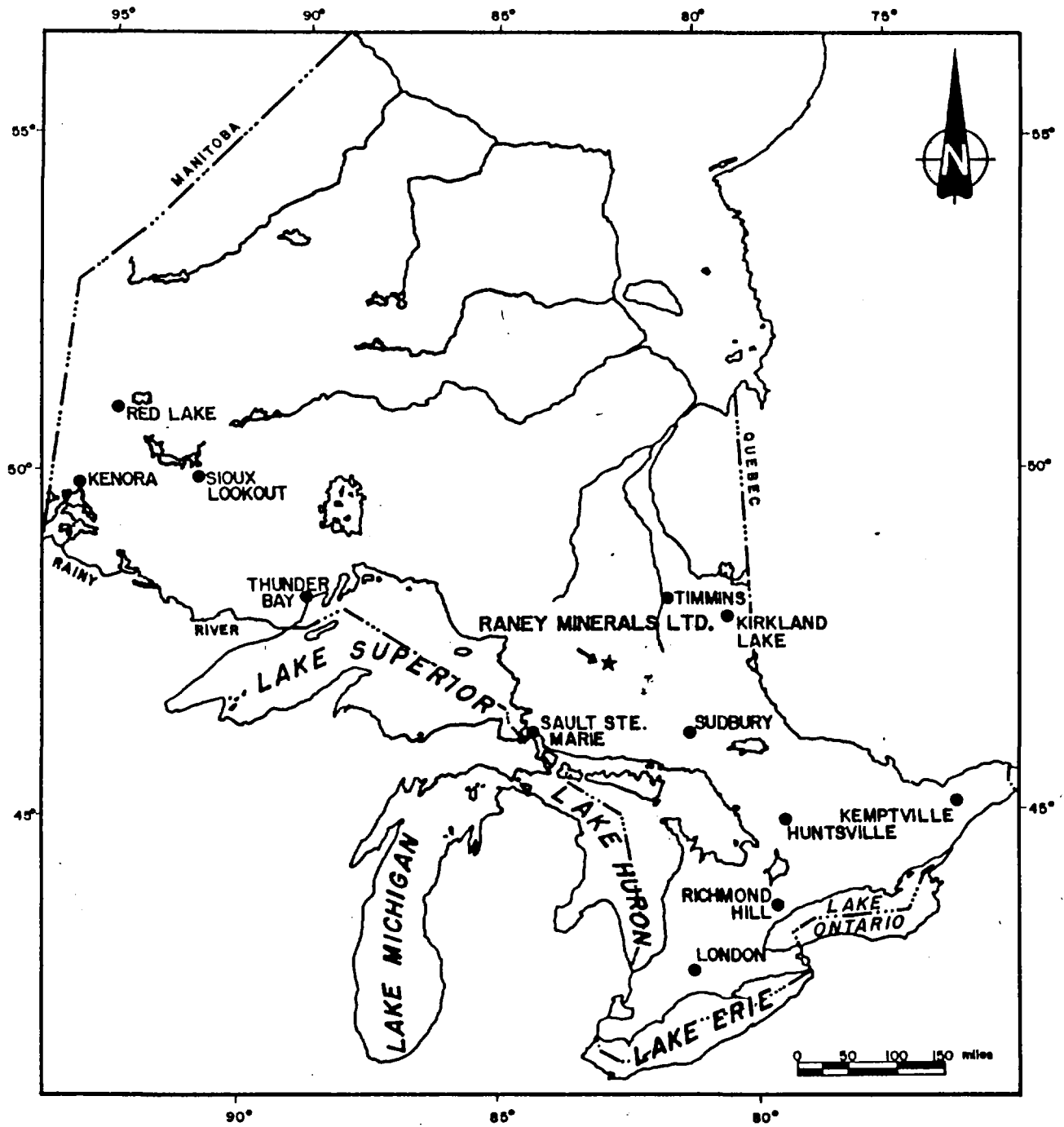
The property is located east of Raney Lake and north of Denyes Lake in Raney Township, Ontario, approximately 50km south west of Foleyet, Ontario. (Figure 1 and 2). Access is by fixed wing aircraft (available in Foleyet or Timmins) to either lake.

CLAIM STATUS

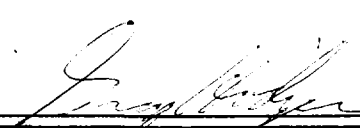
The area surveyed consists of 7 un-patented mining claims in the Porcupine Mining District, all of which are held by Raney Minerals Ltd. of 1300-33 Yonge Street, Toronto, Ontario.

The claims are:

<u>Claims</u>	<u>Recording Date</u>
P-905890-896	March 27, 1987



PROVINCE OF ONTARIO

REVISIONS	 <b>ROBERT S. MIDDLETON</b> <b>EXPLORATION SERVICES INC.</b>		
	for	<b>RANEY MINERALS LTD.</b>	
	Title	<b>RANEY LAKE</b> <b>PROPERTY LOCATION</b>	
		Fig. 1	
	Date: MAY 88	Scale: 1"=160mi.	N.T.S.:
	Drawn:	Approved:	File: M-69



410155W0002 2.11285 RANEY

010

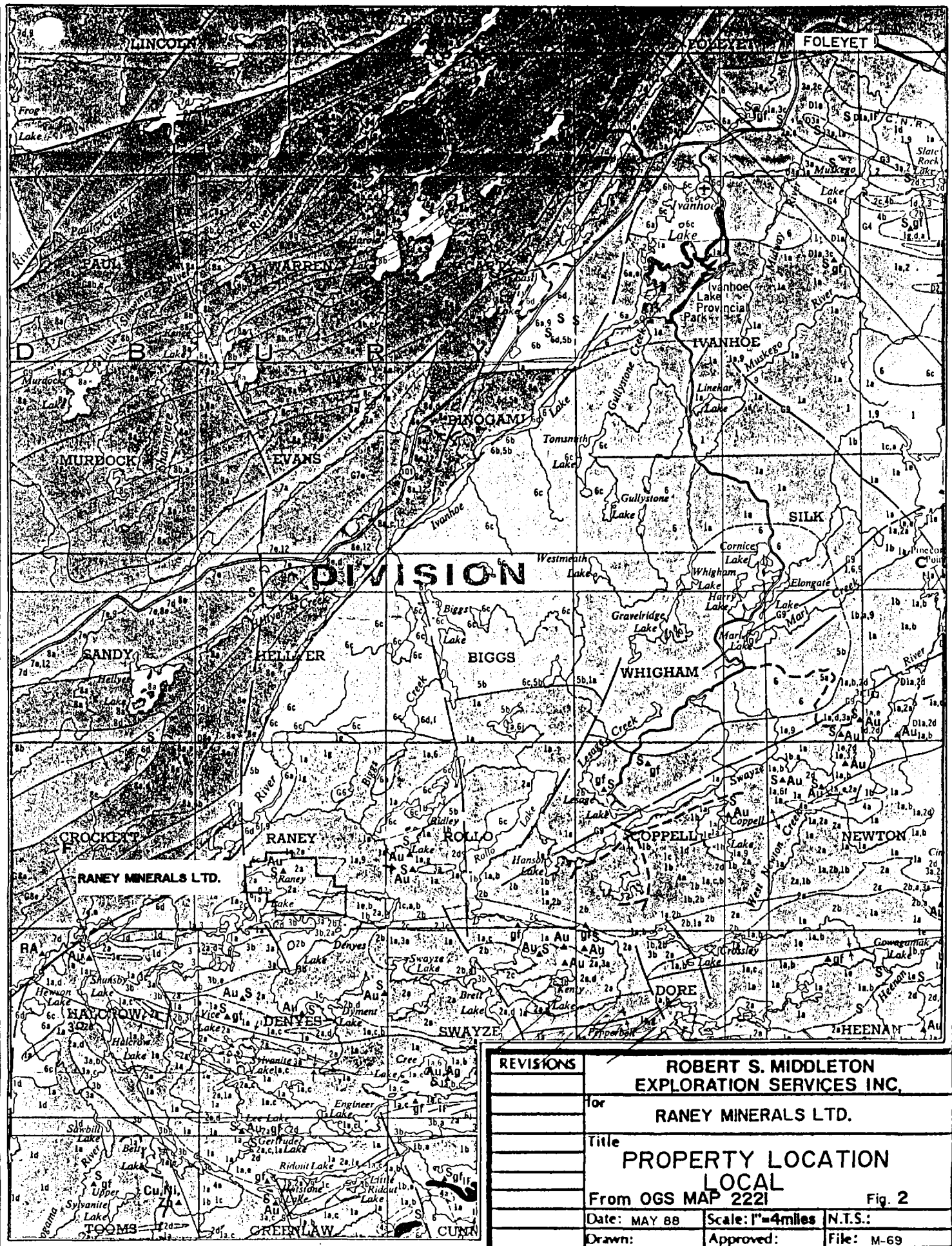
REPORT ON THE  
Magnetic Survey  
on the  
Raney Township Property  
of  
RANEY MINERALS LTD.  
by  
D. Greg Hodges, B.Sc.  
May 31, 1988

*Final  
2.5919*

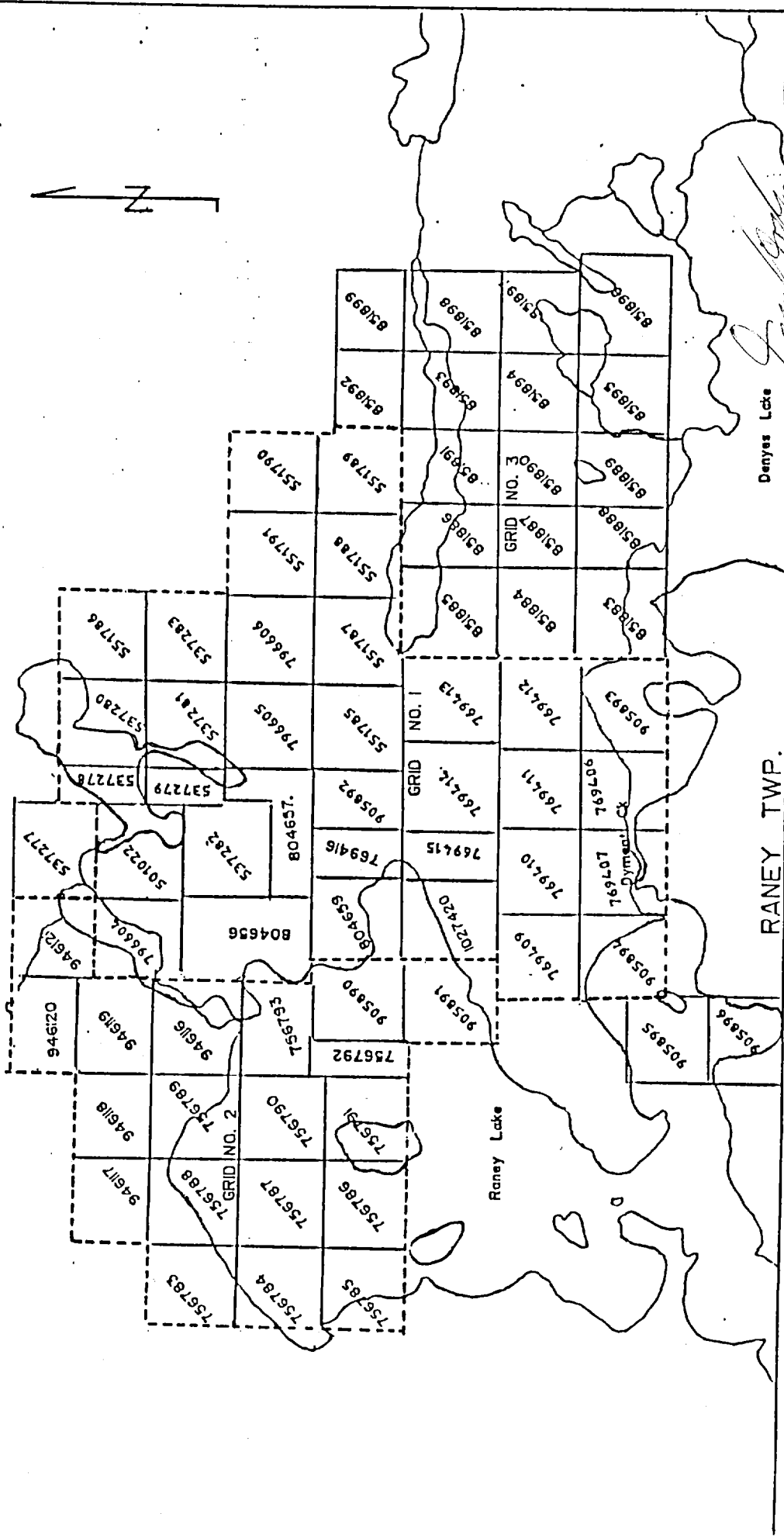
**RECEIVED**

JUN 7 1988

**MINING LANDS SECTION**



REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.	
	for RANEY MINERALS LTD.	
	Title PROPERTY LOCATION LOCAL	
	From OGS MAP 2221 Fig. 2	
Date: MAY 88	Scale: 1"=4miles	N.T.S.:
Drawn:	Approved:	File: M-69



RANEY TWP.  
DENYES TWP.

REVISIONS	KENNETH H. DARKE Consultants Limited
for	RANEY MINERALS LTD.
title	CLAIM MAP
Date: OCT/87	Scale: 1"=1/2 mile N.T.S.
Drawn: S.S.	Approved:

Fig 3

File: M-69

## GEOLOGY

The following is quoted from Cairn and Coster, 1984:

### Regional Geology

"Raney Township is situated in the western end of the Abitibi greenstone belt and is underlain by Early Precambrian (Archean) supracrustal rocks of volcanic and sedimentary origin. The supracrustal rocks have been intruded by Archean felsic and mafic intrusives. The plutonic rocks occupy the southwestern corner and the northwestern portion of the township.

The youngest rocks are lamprophyre dikes, that may possibly occupy pre-existing faults. The dikes are believed to be Late Jurassic to Early Cretaceous in age. The next youngest rocks are believed to be the felsic intrusives. These rocks have been interpreted by Thurston, Siragusa and Sage to be Early Precambrian in age, and include massive to weakly foliated biotite and hornblende trondhjemite, granodiorite and minor quartz diorite. These rocks were not encountered on the J-dex Raney property. The next youngest rocks are the felsic to intermediate metavolcanics including felsic porphyritic and pyroclastic rocks with thin cherty interflow metasediments. These rocks occurred

- 
1. 1977: Geology of the Chapleau Area, Districts of Algoma, Sudbury and Cochrane: Geoscience Report 157

throughout a large portion of the J-dex Raney property.

The oldest rocks in Raney Township are mafic to intermediate metavolcanics including basaltic to andesitic flows, pillow lavas, and gabbroic coarse-grained flows or intrusions. Among these the andesitic flows are predominant. The J-dex Raney property is thought, by the authors, to lie within the Swayze - Deloro metavolcanic - metasedimentary belt, which is part of the Abitibi Subprovince.

The rocks of the Swayze - Deloro metavolcanic - metasedimentary belt generally have foliations and schistositities parallel or at low angles to the bedding and banding. Well foliated rocks occurred sporadically throughout the J-dex Raney property. The foliation was not discernable in the more massive varieties of the mafic metavolcanics.

Secondary lineations are relatively common in the metavolcanic - metasedimentary belts in the map area including elongated pyroclastic fragments, small scale crenulations and elongated clasts in detrital rocks. Several of these secondary lineations were seen on the J-dex Raney property.

A lack of outcrop throughout most of the Swayze Deloro map area makes the positive defining of faults a



difficult process. Strike-slip faults exist throughout the map area together with east-trending shear zones. More major north-northwest to northwest striking faults are conspicuous throughout the metavolcanic - metasedimentary belt. Throughout the Swayze - Deloro belt, the faulting is indicated by abrupt discontinuities in the felsic metavolcanic units, similar to that on the J-dex Raney property.

#### Property Geology

The 21 claim J-dex, Raney Township property is underlain by metavolcanic and metasedimentary rocks of the Swayze - Volcanic belt. The metavolcanic sequence includes predominantly calc-alkalic basaltic to andesitic massive flows, pillowed flows and tholeiitic coarser grained massive flows, as well as predominantly rhyodacitic ash tuffs and crystal tuffs related to a felsic to intermediate volcanic center and possible shallow water volcanogenic sedimentation.

In the northern part of the property sheared felsic to intermediate tuffs occur that are greater than 400 metres in thickness. Along the lower contact, basaltic to andesitic massive flows, pillowed flows and intermittent tholeiitic basalts occur that are

silicified and somewhat brecciated along the mafic-felsic contact.

Towards the centre of the claim group the basaltic to andesitic massive flows and pillowed flows predominate. Pillow top directions were difficult to determine although south facing tops were seen in one locality. Numerous zones of felsic pyroclastic rocks composed of rhyodacitic crystal tuffs and ash tuffs are indiscriminantly scattered throughout the sequence and indicates that intermittent felsic explosive activity continued during the accumulation of the predominantly mafic metavolcanic sequence. In the southern part of the property, a thicker sequence of felsic pyroclastic rock occurs, including waterlain rhyodacitic crystal lapilli tuffs and fine ash tuffs."

#### PREVIOUS WORK

The following is quoted from Cairn and Coster, 1984:

"The Swayze gold belt has been intermittently explored over a time span of about 80 years. Most of the interest has centered on gold but base metals have been searched for as well.

Current exploration activity has been directed to the search of gold mineralization. Some of the more

prominent gold exploration activity has been by; Orofino east of Raney township; Quintera Resources in Tooms and Greenlaw townships southwest of Raney township; and by Carlson Mines in Rollo township. This activity has discovered significant gold values within chert and quartz-carbonate zones within basalts. These occurrences coupled with many known gold occurrences in the Swayze Gold Belt implies a good environment to search for gold deposits.

The following summary of the previous work in the area has been abstracted from assessment work files and reports from others who have worked in the area. Figure No. 2 shows the location of the J-dex Raney township claim group relative to neighbouring townships along the Swayze gold belt.

A review of the assessment work files in the Timmins Resident Geologist's office reveals that sporadic exploration has been carried out on the J-dex property in the northeast corner of Raney Lake. It is as follows:

1984

Hole No. 84-15EA

245' of winkie drilling encountered visible gold in quartz stringers with disseminated pyrite, molybdenite, sphalerite, chalcopyrite and associated apple green mineral (fuchsite?), tourmaline within an east-west trending fault zone.

Hole No. 84-15EB

216' of winkie drilling encountered visible gold in quartz stringers with disseminated pyrite and associated fuchsite?, tourmaline, fault zone.

Hole No. 84-15WA

213' of winkie drilling encountered visible gold, disseminated pyrite, pyrrhotite, sphalerite, chalcopyrite associated with quartz floodings, fault zone.

Hole No. 84-15WB

197' of winkie drilling encountered visible gold, with disseminated pyrrhotite, pyrite, molybdenite associated with quartz floodings, fault zone.

Hole No. 84-30EA

186' of winkie drilling encountered visible gold, with disseminated pyrrhotite, pyrite, molybdenite associated with quartz-carbonate veining, within an east-west fault zone.

Hole No. 84-30EB

199' of winkie drilling with visible gold, and disseminated molybdenite and pyrite within quartz-carbonate veins in tuffs.

Hole No. 84-30EC

181' of winkie drilling with visible gold, and disseminated molybdenite pyrite and sphalerite within quartz-carbonate veins in tuffs.

Hole No. 84-450NA

185' of winkie drilling encountered disseminated pyrite and pyrrhotite within Dacitic tuffs.

Hole No. 84-450NB

163' of winkie drilling encountered disseminated pyrite, pyrrhotite and chalcopyrite within Dacitic tuffs.

Hole No. 84-450NC

123' of winkie drilling encountered disseminated pyrite within Dacitic tuffs.

Hole No. 84-450ND

110' of winkie drilling encountered disseminated pyrite within tuffs.

1983 218' of winkie drilling in one hole. Visible gold with disseminated galena, pyrite, tourmaline within an east-west trending fault zone with associated quartz-carbonate veins.

1982 Magnetic and VLF surveys by J-dex Mining and Exploration Ltd. and Ingamar Resources.

Sporadic exploration has been carried out on properties in the immediate vicinity located east and southeast of the J-dex Raney Township claim group.

This work is briefly summarized as follows:

1932 & 1935

Throne - Greaser Gold Showing

Reported on by Furse G.D. (1932) and Rickaby H.C. (1935).  
Located on the south shore of a small pond north of Raney Lake.  
2' wide quartz vein traced for 100' in arkose and impure quartzite.  
Veins strikes Az 080° and dips steeply to the north.  
Vein contains pyrite, carbonate and trace native gold.  
Smaller 6" quartz vein in feldspar porphyry 500' south of larger vein; strikes Az 060° and traced for 100'.  
At one location native gold, pyrite, chalcopyrite, galena and tourmaline was reported.

1972

Claw Lake Molybdenite Mines Ltd.

Located over part of Raney Lake and beyond to the east.  
Aeromagnetic survey:  
Ground Magnetic Survey - 52 miles.  
Magnetics reported to be flat.

1972 - 1982

J-dex Mining and Exploration

Claim blocks on southwest end of Raney Lake.  
1972  
345' of winkie drilling in 3 holes.  
Rhyolite with some disseminated pyrite intersected.  
1973  
I.P., Magnetic and Geochemical Surveys Produced:  
9 zones of anomalous charge-abilities.  
Magnetic distortions.  
Highest geochemical - copper 65ppm, Zn - 205ppm.  
110' of winkie drilling done.

1975 - 1979

5 winkie drill holes totalling  
1,568'.

1976

Umex

Airborne survey southwest end of  
Raney Lake. Part of a larger  
program over parts of the Swayze  
Gold Belt.

1982

Ontario Geological Survey

Ⓡ Input aeromagnetic survey over  
the Swayze Belt Magnetic and  
Electromagnetic surveys flown.

1983

Lacana Mining

Geological survey work on west  
boundary of Raney Township west  
of J-dex claim group.  
Carbonatite - alkalic complex.  
Rock types associated with  
Kapusking structural zone  
mapped."

During the summer of 1986 induced polarization, magnetics  
and VLF-EM surveys were conducted by Goldrock Resources. The IP  
survey covered the north central area of the claim block, and the  
mag/VLF survey covered the south-central area. Several  
interesting IP anomalies were detected, some of which extend west  
into the current claim block.

During 1987 a magnetics survey was completed on the western  
area of the property, and an electromagnetic and magnetic survey

---

Ⓡ Registered trade mark of Barringer Research Ltd.

was conducted on the eastern 17 claims (Grid 3) of the group.

## SURVEY PROCEDURE

### MAGNETICS

#### Theory

The magnetic method is based on measuring alteration in the shape and magnitude of the earth's naturally occurring magnetic field caused by changes in the magnetization of the rocks in the earth.

These changes in magnetization are due mainly to the presence of the magnetic minerals, of which the most common is magnetite, and to a lesser extent ilmenite, pyrrhotite, and some less common minerals.

Magnetic anomalies in the earth's field are caused by changes in two types of magnetization: induced and remanent (permanent). Induced magnetization is caused by the magnetic field being altered and enhanced by increases in the magnetic susceptibility of the rocks, which is a function of the concentration of the magnetic minerals.

Remanent magnetism is independent of the earth's magnetic field, and is the permanent magnetization of the magnetic particles (magnetite, etc.) in the rock. This is created when these particles orient themselves parallel to the ambient field when cooling. This magnetization may not be in the same



direction as the present earth's field, due to changes in the orientation of the rock or the field.

The most common method of measuring the total magnetic field in ground exploration is with a proton precession magnetometer. This device measures the effect of the magnetic field on the magnetic dipole of hydrogen protons. This dipole is caused by the "spin" of the proton, and in a magnetometer these dipoles in a sample of hydrogen-rich fluid are oriented parallel to a magnetic field applied by an electric coil surrounding the sample. After this magnetic field is removed, the dipoles begin to precess (wobble) around their orientation under the influence of the ambient earth's magnetic field. The frequency of this precession is proportional to the earth's magnetic field intensity.

#### Field Method

The magnetics data were collected with a proton precession magnetometer, which measures the absolute value of the total magnetic field of the earth to an accuracy of  $\pm 1$  n Tesla. The magnetometer is carried down the survey line by a single operator, with the sensor mounted on a short pole to remove it from the surface geologic noise. Readings are normally taken at 25 m intervals, and at 12.5 m intervals where the operator observes a high gradient (anomaly).

The readings are corrected for changes in the earth's total

field (diurnal drift) by repeating readings at base stations and "tie points" several times each day.

#### PERSONNEL AND EQUIPMENT

The linecutting and survey were conducted by Guy Thibeault Exploration Services of P.O. Box 1670, Timmins, Ontario, who provided 1 man to complete the survey.

The survey was completed with a Geometrics G-816 proton precession magnetometer. Specifications for this instrument may be found in Appendix A.

#### INTERPRETATION

The small size of the blocks surveyed limits the effectiveness of the data collected on them. They do serve to fill in blanks in the larger surveys completed previously (Hodges 1987 a & B).

The data for Grid A shows a small magnetic high in the northeast corner, probably due to a mafic volcanic unit. Fifty meters north of the south boundary is a northeast trending magnetic low, probably caused by a fault and the subsequent reduction of magnetite along it.

Grid B appears to be in a complex mafic volcanic unit.

The data for Grid C is relatively flat, indicating that it is on an area of felsic pyroclastics or feldspar porphyry (Caira

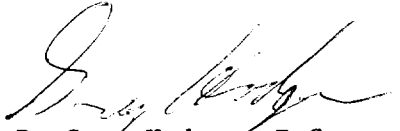
and Coster 1984).

Grid D also appears to be on mostly felsic volcanics, with some mafic units in the northeast corner.

CONCLUSIONS AND RECOMMENDATIONS

The four small grids surveyed should be tied in with the data for the rest of the property (Hodges 1987 a,b, and 1986) to provide a more complete picture. The fault crossing Grid A should be further investigated for possible mineralization. Induced polarization surveying is recommended.

Respectfully submitted



D. Greg Hodges, B.Sc.  
Geophysicist

REFERENCES

- CAIRA, NADIA and COSTER, IAN  
1984  
Geological Report of the  
21 claim property for  
J-Dex Mining and Exploration
- HODGES, D. GREG  
1986  
Geological Report on the Raney  
Township Property of J-Dex Mining  
and Exploration. Robert S.  
Middleton Exploration Services Inc.
- HODGES, D. GREG  
1987(a)  
Report on the Magnetometer  
Survey on the Raney Township  
Property of Goldrock  
Resources Inc.
- HODGES, D. GREG  
1987(b)  
Report on the Electromagnetic and  
Magnetic Survey on the Raney  
Township Property, Grid 3 of  
Goldrock Resources Inc., Robert S.  
Middleton Exploration Services Inc.

CERTIFICATION

I, D. Greg Hodges, of 136 Cedar Street South, in the city of Timmins, Province of Ontario, certify as follows concerning my report on the Raney Minerals Limited property in Raney Township, Province of Ontario and dated May 31, 1988:

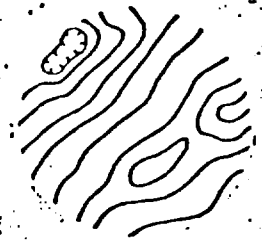
1. I am a member in good standing of the Society of Exploration Geophysicists
2. I am a graduate of Queen's University at Kingston, Ontario, with a B.Sc. (Hons.) Geological Sciences with Physics, obtained in 1980.
3. I have been practising in Canada, and occasionally in the United States, Europe, and Australia for the past eight years.
4. I have no direct interest in the properties, leases, or securities of Raney Minerals Limited, nor do I expect to receive any.
5. The attached report is a product of:
  - a) Examination of data included in the report which was collected on the property concerned.

Dated this May 31, 1988  
Timmins, Ontario

  
\_\_\_\_\_  
D. Greg Hodges, Geophysicist

A P P E N D I X A

# geometrics



Instrument Division

## PORTABLE PROTON MAGNETOMETER MODEL G-816



- ★ 1 gamma sensitivity and repeatability
- ★ Very small size and weight: less than 12 lbs complete with batteries and sensor
- ★ Over 10,000 readings per set of alkaline "D" cell (flashlight) batteries
- ★ Provision to attach sensor to carrying harness for use without staff
- ★ Pushbutton operation—numeric display directly in gammas
- ★ Total field measurements— independent of orientation—no calibration—no leveling

The Model G-816 is a complete portable magnetometer for all man-carry field applications. As an accurate yet simple to operate instrument, it features an outstanding combination of one gamma sensitivity and repeatability, compact size and weight, operation on standard universally available flashlight batteries, ruggedized packaging and very low price.

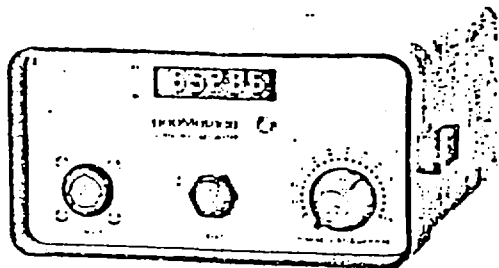
The G-816 magnetometer allows precise mapping of very small or large amplitude anomalies for ground geophysical surveys, or for detail follow-up to aeromagnetic reconnaissance surveys. It is a rugged, light-weight, and versatile instrument, equally well suited for field studies in geophysics, research programs or other magnetic mapping application where low cost, dependable operation and accurate measurements are required.

For marine, airborne or ground recording systems consider Geometrics Models G-801, G-803, and G-826A.



### "Hands-free" Back Pack Sensor

Based upon the principle of nuclear precession (proton) the G-816 offers absolute drift-free measurements of the total field directly in gammas. (The proton precession method is the officially recognized standard for measurement of the earth's magnetic field.) Operation is worldwide with one gamma sensitivity and repeatability maintained throughout the range. There is no temperature drift, no set-up or leveling required, and no adjustment for orientation, field polarity, or arbitrary reference levels. Operation is very simple with no prior training required. Only 6 seconds are required to obtain a measurement which is always correct to one gamma, regardless of operator experience. Only the Proton Magnetometer offers such repeatability—an important consideration even for 10 gamma survey resolution.



### Complete Field Portable System

The Model G-816 comes complete, ready for portable field operation and consists of:

1. Electronics console with internally mounted and easily replaced "D" cell battery pack.
  2. Proton sensor and signal cable for attachment to carrying harness or staff.
  3. Adjustable carrying harness.
  4. 8 foot collapsible aluminum staff.
5. Instruction manual, complete set of spare batteries, applications manual, and rugged field suitcase.

Price and lease rates on the G-816 magnetometer are available upon request.

## SPECIFICATIONS

<b>Sensitivity:</b>	± 1 gamma throughout range
<b>Range:</b>	20,000 to 100,000 gammas (worldwide)
<b>Tuning:</b>	Multi-position switch with signal amplitude indicator light on display
<b>Gradient Tolerance:</b>	Exceeds 800 gammas/ft
<b>Sampling Rate:</b>	Manual push-button, one reading each 6 seconds
<b>Output:</b>	5 digit numeric display with readout directly in gammas
<b>Power Requirements:</b>	Twelve self-contained 1.5 volt "D" cell, universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.

<b>Battery Type</b>	<b>Number of Readings</b>
Alkaline	over 10,000
Premium Carbon Zinc	over 4,000
Standard Flashlight	over 1,500

*NOTE: Battery life decreases with low temperature operation.*

<b>Temperature Range:</b>	Console and sensor: -40° to +85°C															
	Battery Pack: 0° to +50°C (limited use to -15°C; lower temperature battery belt operation—optional)															
<b>Accuracy (Total Field):</b>	± 1 gamma through 0° to +50°C temperature range															
<b>Sensor:</b>	High signal, noise cancelling, interchangeably mounted on separate staff or attached to carrying harness															
<b>Size:</b>	Console: 3.5 x 7 x 10.5 inches (9 x 18 x 27 cm) Sensor: 3.5 x 5 inches (9 x 13 cm) Staff: 1 inch diameter x 8 ft length (3 cm x 2.44 m)															
<b>Weight:</b>	<table border="0"> <tr> <td></td> <td>Lbs.</td> <td>Kgs.</td> </tr> <tr> <td>Console (w/batteries):</td> <td>5.5</td> <td>2.5</td> </tr> <tr> <td>Sensor &amp; signal cable:</td> <td>4</td> <td>1.8</td> </tr> <tr> <td>Aluminum staff:</td> <td>2</td> <td>0.9</td> </tr> <tr> <td><b>Total:</b></td> <td><b>11.5</b></td> <td><b>5.2</b></td> </tr> </table>		Lbs.	Kgs.	Console (w/batteries):	5.5	2.5	Sensor & signal cable:	4	1.8	Aluminum staff:	2	0.9	<b>Total:</b>	<b>11.5</b>	<b>5.2</b>
	Lbs.	Kgs.														
Console (w/batteries):	5.5	2.5														
Sensor & signal cable:	4	1.8														
Aluminum staff:	2	0.9														
<b>Total:</b>	<b>11.5</b>	<b>5.2</b>														

*All magnetometers and parts are covered by a one year warranty beginning with the date of receipt but not to exceed fifteen months from the shipping date.*

**geoMetrics, INC.** 385 JAVA DRIVE  
SUNNYVALE CA 94086 U.S.A.  
TEL (408) 734-4616  
CABLE "GEOMETRICS"  
TELEX NO 357-435

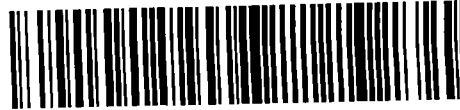
**geoMetrics** 436 LIMESTONE CRESCENT  
SERVICES(CANADA) LTD. DOWNSVIEW (TORONTO),  
ONTARIO CANADA  
TEL: (416) 661-1956  
TELEX NO 06 22694

**geoMetrics** 80 ALFRED ST.  
INTERNATIONAL CORP. MILSON'S POINT  
SYDNEY NSW 2061  
AUSTRALIA  
TEL 929 9942  
TELEX NO 790 22624





Ministry of  
Northern Development  
and Mines



410155W0002 2.11285 RANEY

900

Ontario

Ministère du  
Développement du Nord  
et des Mines

July 19, 1988

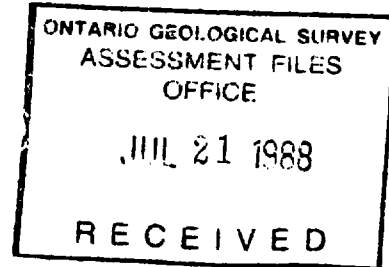
Your file: W8806-110

Our file: 2.11285

Mining Recorder  
Ministry of Northern Development and Mines  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

Re: Notice of Intent dated July 4, 1988  
Geophysical (Magnetometer) Survey  
submitted on Mining Claims P 905890 et al  
in the Township of Raney



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, Manager  
Mining Lands Section  
Mines & Minerals Division

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

Telephone: (416) 965-4888

DK:p1  
Enclosure

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

Resident Geologist  
Timmins, Ontario

Goldrock Resources, Inc.  
c/o P.O. Box 1637  
Timmins, Ontario  
P4N 7W8



Recorded Holder **Goldrock Resources Inc.**

Township of ~~Area~~ **Raney**

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 Geological _____ days Geochemical _____ 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.	P-905890-91 905893 to 96 inclusive

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

15 days Magnetometer  
P-905892

**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.



Ministry of Northern Development and Mines

Report of Work  
(Geophysical, Geological, Geochemical and Expenditures)

DOCUMENT No. W 8806-110

- Instructions: - Please type or print.  
- If number of mining claims traversed exceeds space on this form, attach a list.  
Note: - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.  
- Do not use shaded areas below.

2.11280

Mining Act

Type of Survey(s) <b>Ground Geophysics</b>		Township or Area <b>Raney</b>	
Claim Holder(s) <b>Goldrock Resources, Inc.</b>		Prospector's Licence No. <b>T 4715</b>	
Address <b>c/o P.O. Box 1637 Timmins, On. P4N 7W8</b>			
Survey Company <b>R.S. Middleton Exploration Services</b>		Date of Survey (from & to) Day   Mo.   Yr. <b>07   03   88</b> to <b>19   03   88</b>	
Name and Address of Author (of Geo-Technical report) <b>D.G. Hodges P.O. Box 1637 Timmins, On. P4N 7W8</b>		Total Miles of line Cut <b>N/A</b>	

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	<b>20</b>
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
<b>P</b>	<b>905890</b>				
	<b>905891</b>				
	<b>905892</b>				
	<b>905893</b>				
	<b>905894</b>				
	<b>905895</b>				
	<b>905896</b>				

**RECEIVED**  
**MAY 24 1988**  
**MINING LANDS SECTION**

**RECORDED**  
**MAR 25 1988**

Expenditures (excludes power stripping)

Type of Work Performed

Performed on **MAR 25 1988**

Calculation of Expenditure Days Credits

Total Expenditures **\$** ÷ **15** =  Total Days Credits

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.

Total number of mining claims covered by this report of work. **7**

Date **Mar 22/88** Recorded Holder or Agent (Signature) *[Signature]*

For Office Use Only

Total Days Cr. Recorded **140** Date Recorded **March 25/88** Mining Recorder *[Signature]*

Date Approved as Recorded *[Signature]* Branch Director *[Signature]*

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  
**C. Jones P.O. Box 1637 Timmins, On. P4N 7W8**

Date Certified **Mar 22/88** Certified by (Signature) *[Signature]*

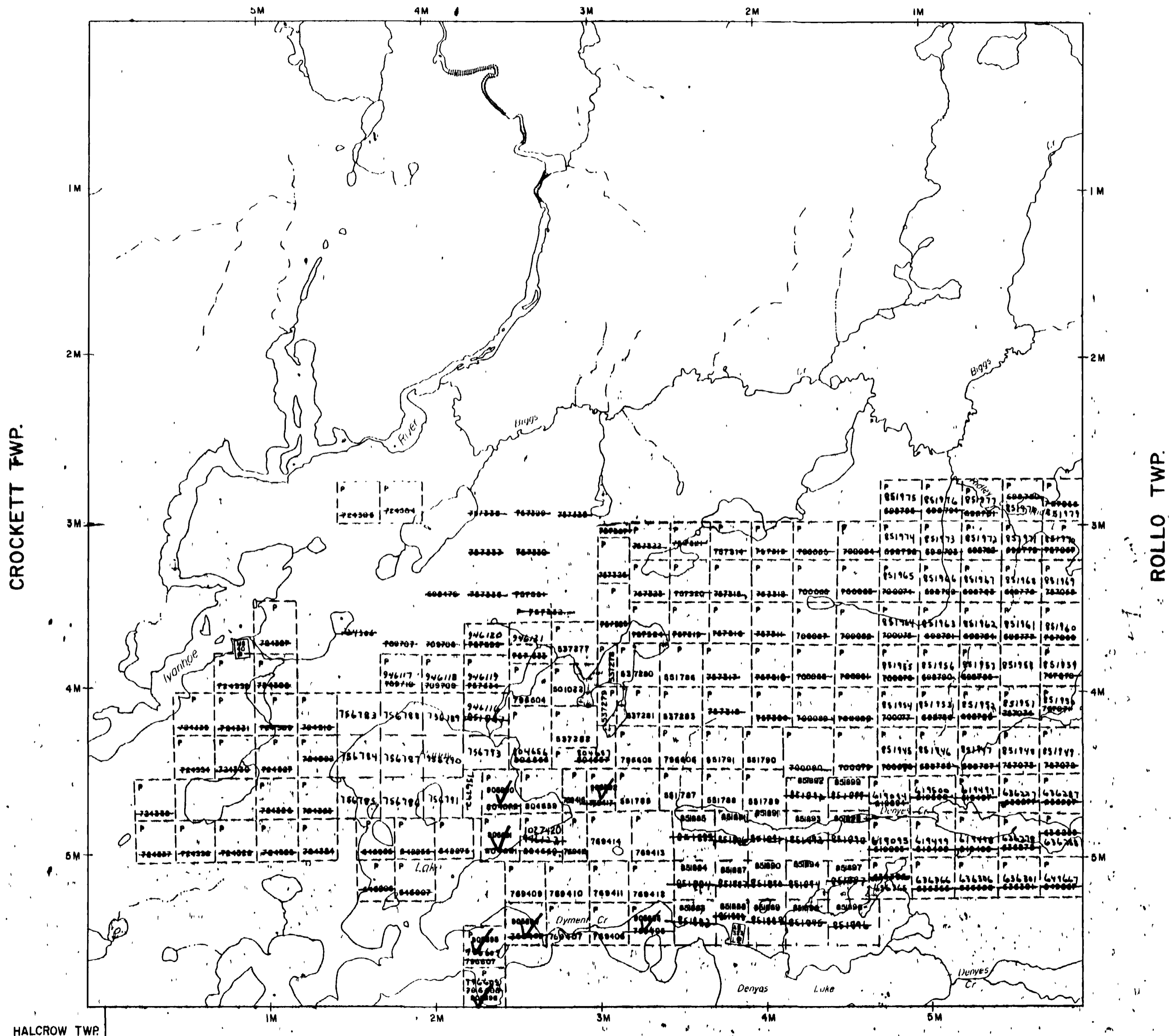
AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description    Order No.    Date    Disposition    File

*SMR  
MSA+MA withdrawn from status  
NAU - 7/8/86 cancelled*

HELLYER TWP.



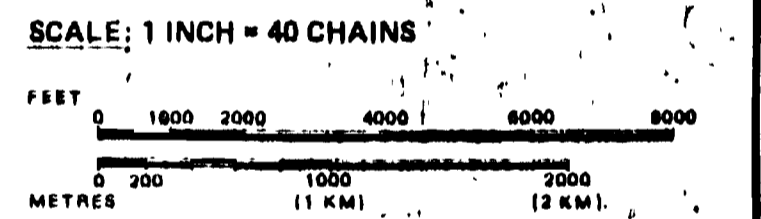
**LEG.**

HIGHWAY AND ROUTE No	
OTHER ROADS	
TRAILS	
SURVEYED LINES	
TOWNSHIPS, BASE LINES, ETC.	
LOTS, MINING CLAIMS, PARCELS, ETC	
UNSURVEYED LINES	
LOT LINES	
PARCEL BOUNDARY	
MINING CLAIMS ETC	
RAILWAY AND RIGHT OF WAY	
UTILITY LINES	
NON PERENNIAL STREAM	
FLOODING OR FLOODING RIGHTS	
SUBDIVISION OR COMPOSITE PLAN	
RESERVATIONS	
ORIGINAL SHORELINE	
MARSH OR MUSKEG	
MINES	
TRAVERSE MONUMENT	

**DISPOSITION OF CROWN LANDS**

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LEASE, SURFACE & MINING RIGHTS	
" SURFACE RIGHTS ONLY	
" MINING RIGHTS ONLY	
LICENCE OF OCCUPATION	
ORDER-IN-COUNCIL	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC 83, SUBSEC 1.



TOWNSHIP  
**RANEY**  
M.N.R. ADMINISTRATIVE  
**CHAPLEAU**  
MINING DIVISION  
**PORCUPINE**  
LAND TITLES / REGISTRY DIVISION  
**SUDBURY**

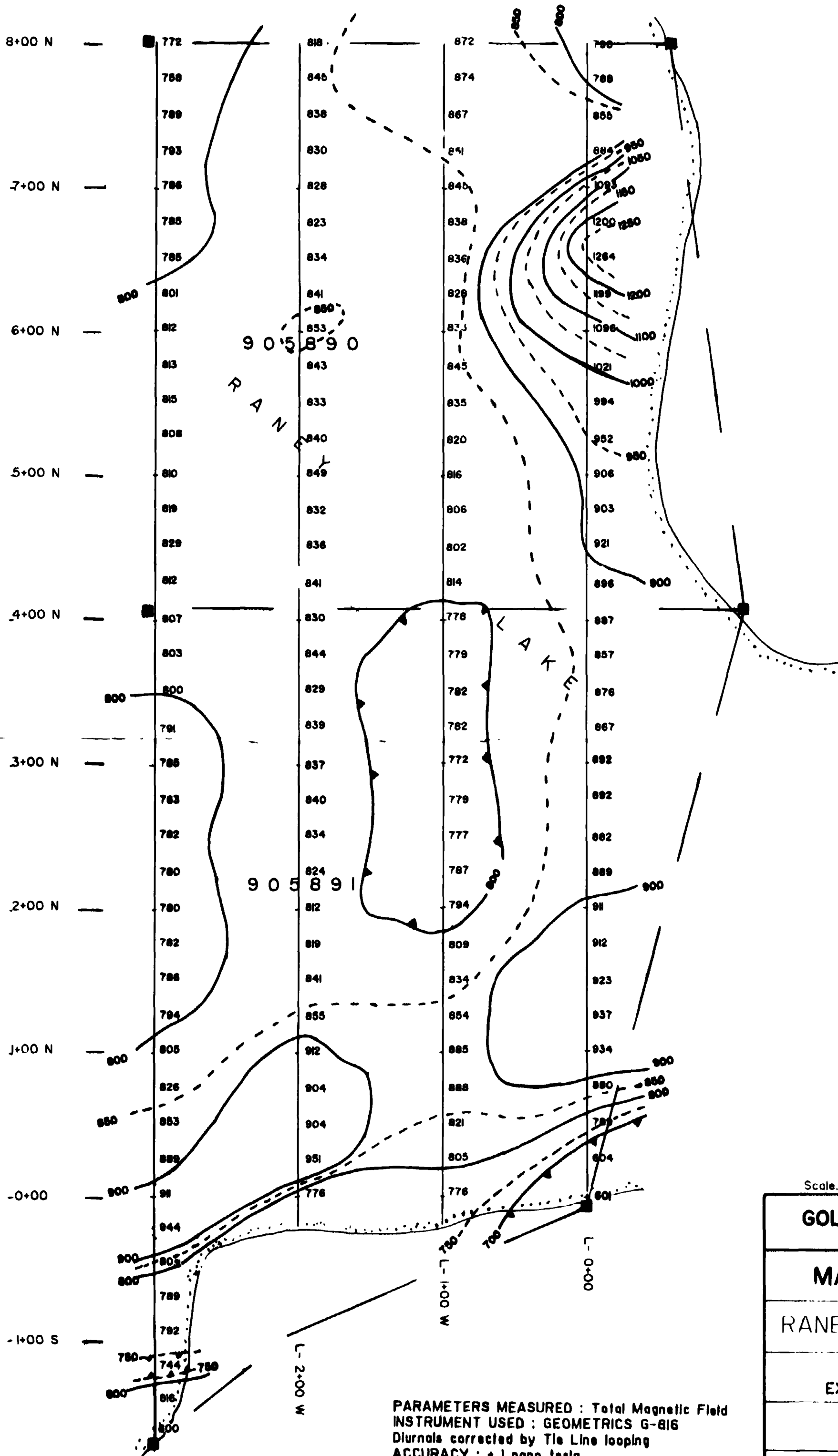
*RECEIVED*  
OCT 28 1987

Ministry of Land Management  
Natural Resources Branch  
Ontario

Date MARCH, 1985  
Number **G-3245**



# GRID " A "



PARAMETERS MEASURED : Total Magnetic Field  
 INSTRUMENT USED : GEOMETRICS G-816  
 Diurnals corrected by Tie Line looping  
 ACCURACY : ± 1 nano Tesla  
 CONTOUR INTERVAL : 50 nT  
 BACKGROUND : 58 000 nT

Scale: 1:2500

211285

**GOLD ROCK RESOURCES INC.**  
M-69

**MAGNETIC SURVEY**

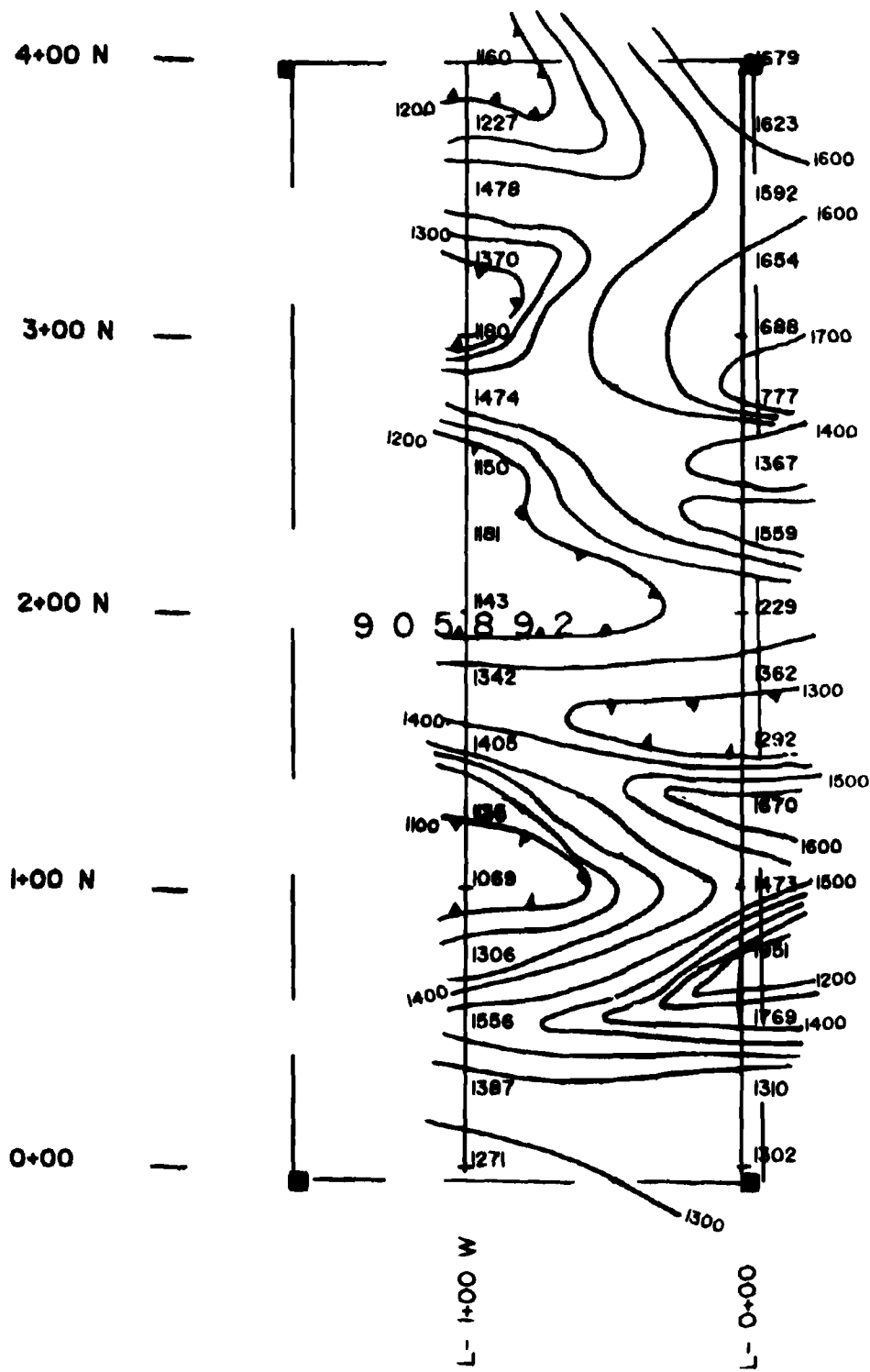
RANEY LAKE PROPERTY

ROBERT S. MIDDLETON  
EXPLORATION SERVICES INC.

Survey by Guy Thibault Exploration Services  
Operators B-McALLISTER



# GRID " B "



211285

Scale 1:2500

**GOLD ROCK RESOURCES INC.**  
M-69

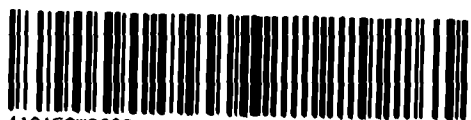
**MAGNETIC SURVEY**

RANEY LAKE PROPERTY

ROBERT S. MIDDLETON  
EXPLORATION SERVICES INC.

PARAMETERS MEASURED : Total Magnetic Field  
 INSTRUMENT USED : GEOMETRICS G-816  
 Diurnals corrected by Tie Line looping  
 ACCURACY : ± 1 nano tesla  
 CONTOUR INTERVAL : 50 nT  
 BACKGROUND : 58 000 nT

Survey by *CLJ* Thibault Exploration Services  
 Operators B-McALLISTER



410165W0002 2.11285 RANEY

10+00 N

# GRID " C "

9+00 N

8+00 N

7+00 N

6+00 N

5+00 N

4+00 N

3+00 N

2+00 N

1+00 N

L- 0+00

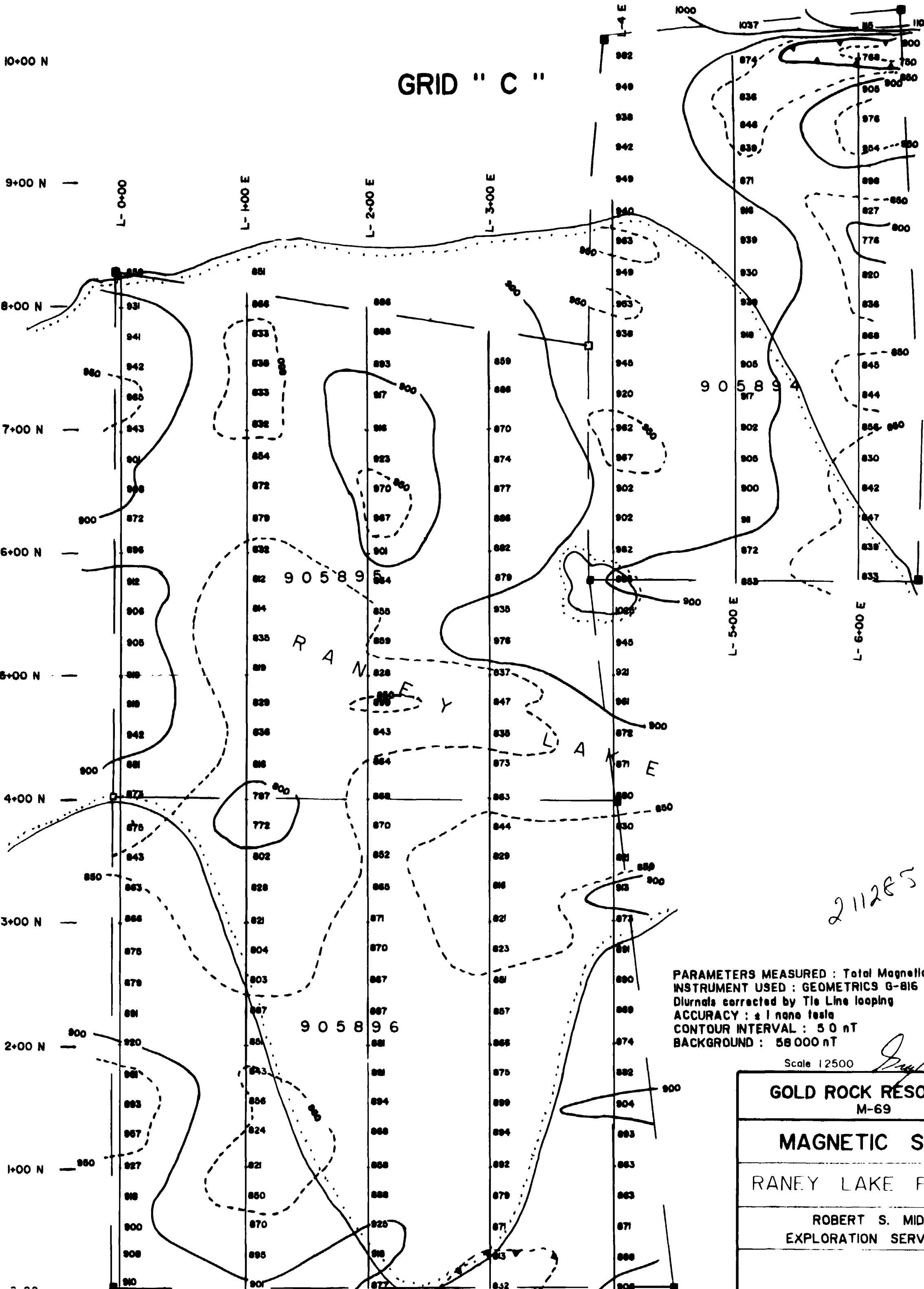
L- 1+00 E

L- 2+00 E

L- 3+00 E

L- 5+00 E

L- 6+00 E



PARAMETERS MEASURED : Total Magnetic Field  
 INSTRUMENT USED : GEOMETRICS G-816  
 Diurnals corrected by Tie Line looping  
 ACCURACY : ± 1 nano tesla  
 CONTOUR INTERVAL : 50 nT  
 BACKGROUND : 58 000 nT

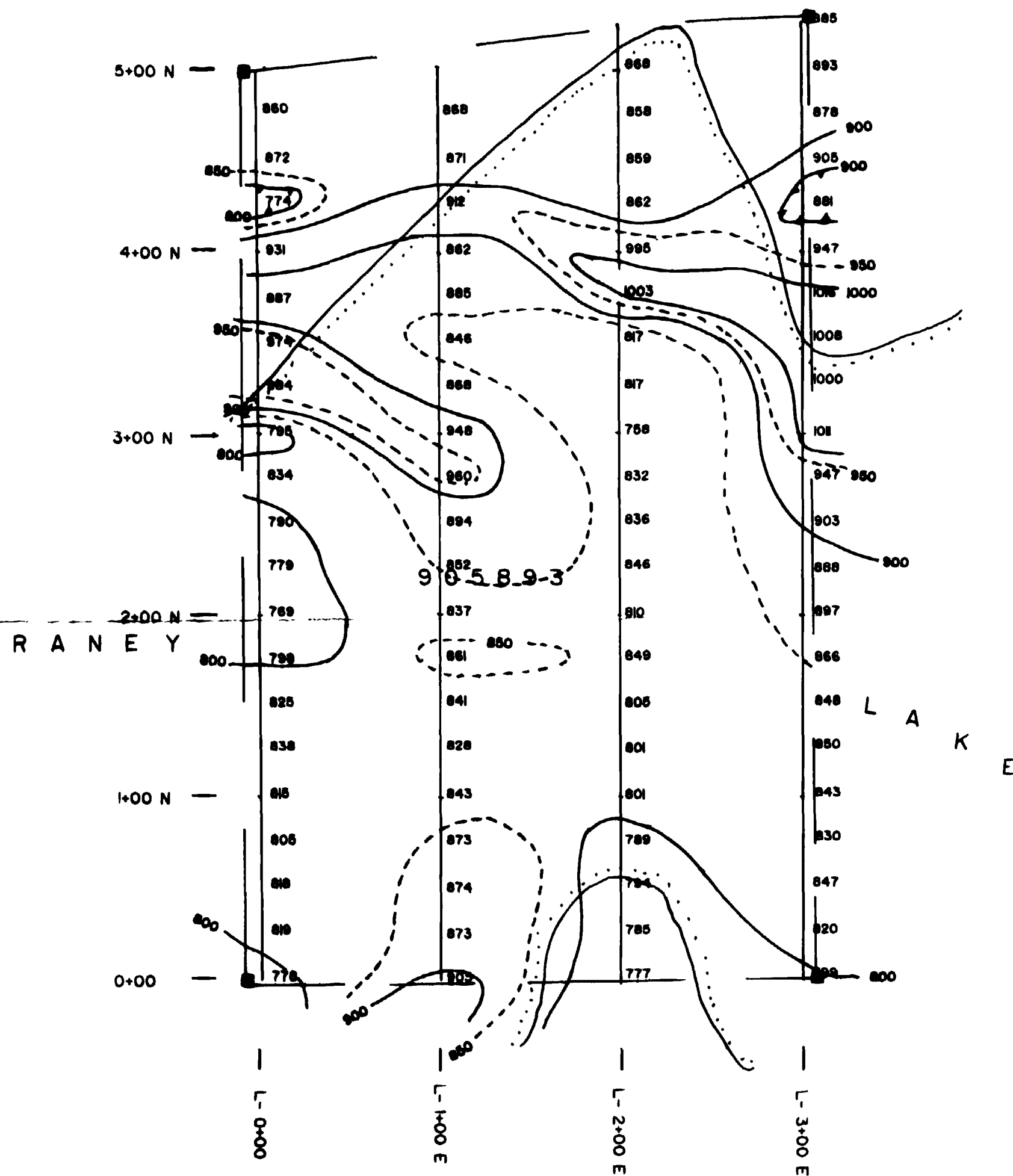
Scale 1:2500

211285

<b>GOLD ROCK RESOURCES INC.</b> M-69
<b>MAGNETIC SURVEY</b>
RANEY LAKE PROPERTY
ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
Survey by <i>Gly Thibault</i> Exploration Services Operators: B- McALLISTER



# GRID " D "



211285

Scale 1:2500

**GOLD ROCK RESOURCES INC.**  
M-69

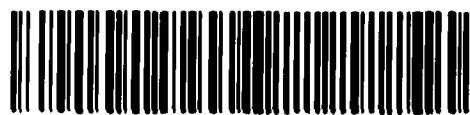
**MAGNETIC SURVEY**

RANEY LAKE PROPERTY

ROBERT S. MIDDLETON  
EXPLORATION SERVICES INC.

Survey by *Guy Thibault Exploration Services*  
Operators B-McALLISTER

PARAMETERS MEASURED : Total Magnetic Field  
INSTRUMENT USED : GEOMETRICS G-816  
Diurnals corrected by Tie Line looping  
ACCURACY : ± 1 nano tesla  
CONTOUR INTERVAL : 50 nT  
BACKGROUND : 58 000 nT



4101589002 2 11285 RANEY