

42A055E0129 2.10720 DENTON

010

MAGNETIC SURVEY

for

KEEFER LAKE RESOURCES INC.

on the

GODON LAKE PROPERTY

in

DENTON TOWNSHIP

PORCUPINE MINING DIVISION

DISTRICT OF COCHRANE

ONTARIO

by

Kian A. Jensen
Consulting Geologist/Geophysicist

December, 1987

RECEIVED
JAN 11 1988
MINING LANDS SECTION

Qual 2.3969



42A055E0129 2.10720 DENTON

010C

Table of Contents

	Page
Title Page	i
Table of Contents	ii
Introduction	1
Location and Access	2
Property	2
General Geology	5
Previous Exploration Activities	6
Geophysical Survey	7
Introduction	7
Magnetic Survey	7
Interpretation	8
Conclusions	9
Recommendations	9
Certificate	
Appendix	

List of Figures

Figure 1: Location Map	3
Figure 2: Claim Map and Property Location Map	4
Figure 3: Magnetic Survey Contour Map	folder

INTRODUCTION

During October and November, 1987, linecutting and a total field magnetic survey were completed on the 30 contiguous unpatented mining claims known as the Godon Lake Property in Denton Township.

A total of 28.2 miles of linecutting was completed to establish a total of 1497 magnetic readings. The survey was completed from November 4 to 10, 1987, by personnel of Guy Thibault Exploration Services under the supervision of the author. The data reductions, drafting, interpretation and report were completed by the author from November 16 to December 28, 1987.

The project area is located approximately 12.5 miles (20 km) west of the junction of Highways 101 and 144. The claims cover the east and west portions of the southern part of Godon Lake located in the southwestern quadrant of Denton Township, Porcupine Mining Division, District of Cochrane, Ontario.

The purpose of the survey was to identify the lithological units, structural features and favourable areas for gold mineralization.

LOCATION AND ACCESS

The 30 unpatented mining claims cover the area on the eastern and western portion of the southern part of Godon Lake located in the southwestern quadrant of Denton Township, Porcupine Mining Division, District of Cochrane, Ontario as shown in Figure 1.

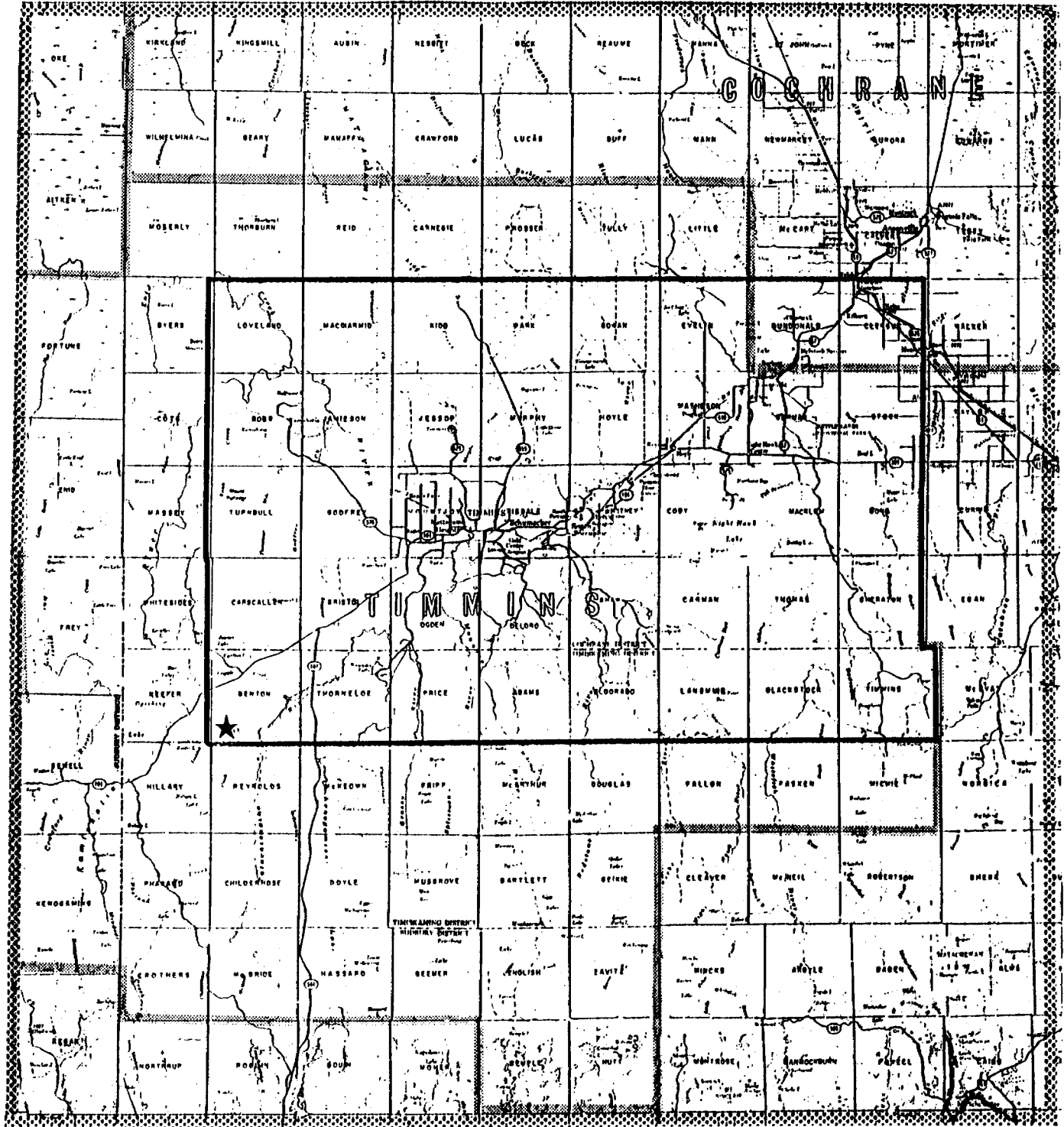
The project area is located approximately 12.5 miles (20 km) west of the junction of Highways 101 and 144. On the east side of Warran Lake, a logging road leads south to southeasterly through Keefer Township to the southwest corner of Denton Township and the project area. A four wheel drive vehical would be required to travel the road for a short distance. Further access is either by four wheel vehicle or walking.

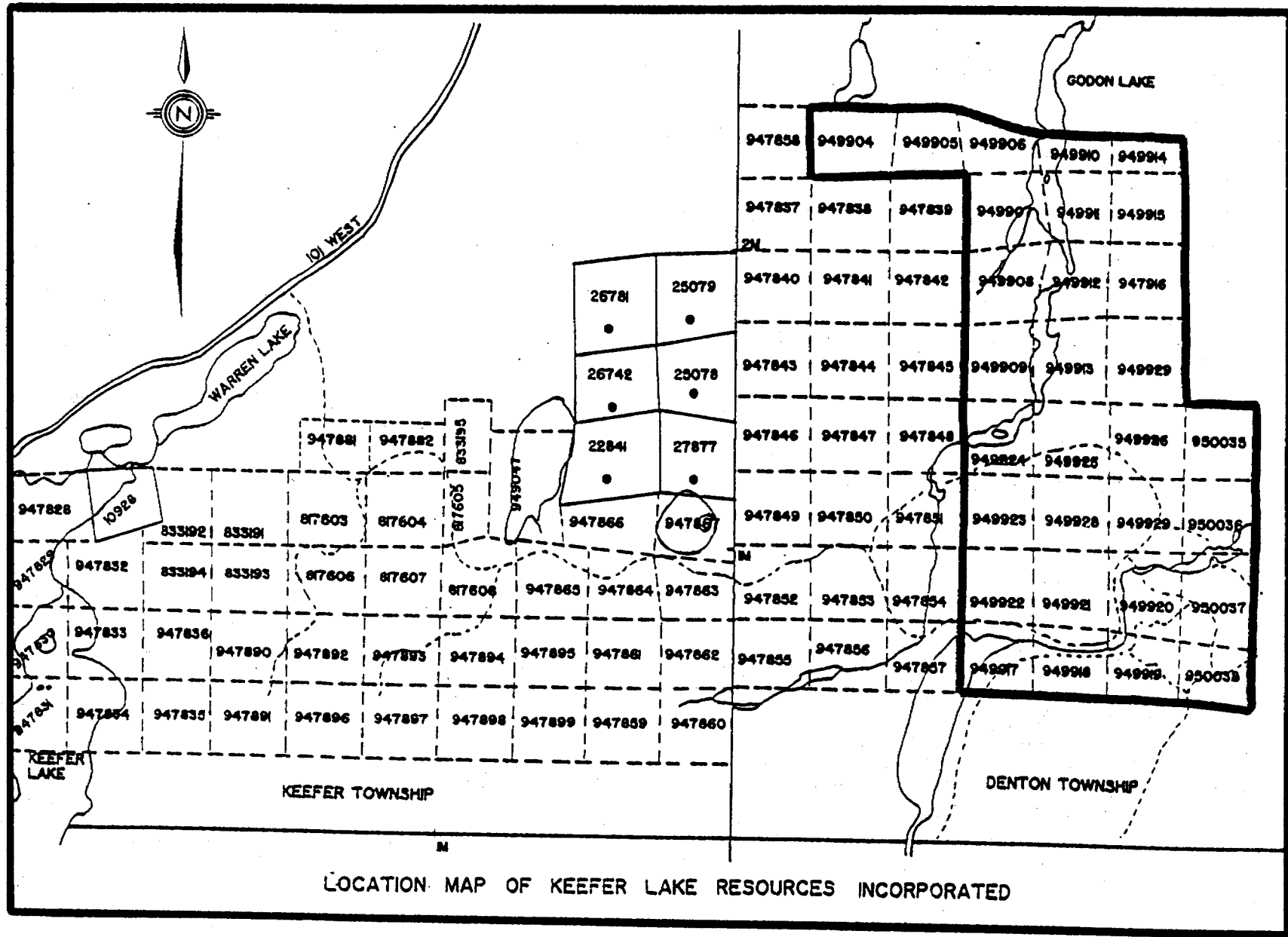
Additional access from Denton Township approximately 1 mile west of Cripple Creek. This road can be travelled by four whell vehicle on the southern route to southeast of Godon Lake.

PROPERTY

The portion of the Keefer Lake Resources Inc. holdings covered by this report consists of 30 unpatented mining claims as shown in Figure 2, and consists of the following mining claims and recording dates:

P-949904 to P-949929 inclusively	November 12, 1987
P-950035 to P-950038 inclusively	November 12, 1987





LOCATION MAP OF KEEFEE LAKE RESOURCES INCORPORATED

GENERAL GEOLOGY

The bedrock in the area consists of an early Precambrian metavolcanic-metasedimentary sequence and has been intruded by granitic rocks.

The rock units strike in a northeast to east direction. The oldest rocks appear to be pale colour ultramafic flows which are intercalated with metasediments. In isolated areas these rocks grade into a massive flow consisting of serpentinized peridotitic komatite. These rocks are overlain by basaltic komatite and/or Mg tholeiites. The above rocks are succeeded upwards by Fe tholeiite, calc-alkalic basalt, intermediate to felsic metavolcanics and clastic metasediments.

The intermediate to felsic metavolcanics consist of tuffs, breccia and foliated to massive flows. This unit grades into metasediments and clastic metasediments. Within isolated areas the metasediments contain a zone of chert and magnetite iron formation.

The above lithological units are intruded by gabbroic to dioritic rocks. The felsic intrusives appear to have three stages, being: quartz diorite to tonalite, porphyritic granodiorite and a medium grained granodiorite.

Metamorphism in the area is of the greenschist facies. Rocks near the late intrusive have been altered to an epidote amphibolite to amphibolite facies.

Intruding all the above lithological units are north to northerly trending diabase dikes.

The structure in the area appears to be dominated by north northwest trending transverse faults, several are filled by the later diabase dikes. Several northeast trending shear zones are located in the southern portion of Godon Lake.

PREVIOUS EXPLORATION ACTIVITIES

A detailed description of the exploration activities and the various properties up to 1938 is given in the O.D.M. Report Volume 47, Part 4, titled "Geology of the Keefer-Eldorado Area" by W.D. Harding and L.G. Berry.

From 1945 to 1947, A. Phillips trenched and diamond drilled a sericite-carbonate schist zone located about 1 mile southwest of Godon Lake. In 1961 Paymaster Consolidated Mines Limited conducted a ground magnetic and electromagnetic surveys in the area. Results of sampling of the trenches returned values up to 0.07 o.p.t. of gold.

During 1971, Texas Gulf Sulphur Company Inc. and Conwest Exploration Company Limited were joint venture partners on the Galata property. They conducted an airborne survey over portions of Keefer and Denton Townships.

In 1972, Falconbridge Nickel Mines Limited conducted a magnetic survey without locating any significant anomalies.

In recent years, Frank Galata has trenched many areas of Keefer and Denton Townships. Most of the sites are quartz or quartz-carbonate veining.

The present exploration program of Keefer Lake Resources Inc. is to define gold bearing target by means of geophysical surveys, geological mapping, trenching, and diamond drilling.

GEOPHYSICAL SURVEY

INTRODUCTION:

The linecutting was conducted by Guy Thibault Exploration Services of Timmins, Ontario, from October to early November, 1987. The base line was extended from the original 14 claim group located on the west side of Mosher Lake in Keefer Township. The east trending base line within the property covered by this report extends from 99+00 East to 152+00 East. North-south grid lines were established at 400 foot intervals and picketed every 100 feet. Several tie lines were established, these being: TL 20+00 South, TL 39+00 South, TL 23+00 North (which intersected the lake), TL 32+00 North (between the two lakes) and TL 51+00 North. A total of 28.2 line miles of grid was established.

On completion of the linecutting, Guy Thibault Exploration Services conducted a total field magnetic survey with the following personnel and dates: Guy Thibault - November 10, 1987, Andre Belisle - November 8 to 10, 1987, and Mike Caron - November 4 to 10, 1987. The survey was conducted with the Geometrics G-816 proton procession magnetometers.

The data reductions, drafting, interpretation and report were completed by the author from November 16 to December 28, 1987.

MAGNETIC SURVEY:

The magnetic base station was established on the existing grid in Keefer Township with an average base value of 58,529 gammas. The base line and all the tie lines were surveyed at 100 foot intervals in a looping fashion to establish accurate control stations for each grid line. The north-south grid lines were surveyed at 100 foot intervals.

The data was corrected for the daily drift and the tie-ins at the control stations. A base level of 58,000 gammas has been removed from all the observed readings.

The corrected data was plotted on a base map with a scale of 1 inch to 200 feet (1:2400). The data was contoured at 100 gamma intervals wherever possible as shown in Figure 3.

INTERPRETATION:

The magnetic data exhibits moderate to high magnetic "bull's eyes" and are suspected to be the results of the northerly trending diabase dikes. The author in contouring the data has included a trending to assist in the location of the dikes.

The diabase dikes are the most prominent feature within the map area. The dikes vary from a little over 100 feet wide to approximately 300 to 400 feet wide. Due to the magnetic characteristic of the dikes, a magnetic low may exist on either side or both side. The result of the effects of the parallel dikes is the obscuring the magnetic signature of the host lithological units.

Of the five diabase dikes located generally in the south and east central portions of the property, only one dike which is located on the base line at 133+00 East appears to traverse the property. This dike either filled in an old fault zone or is parallel to a major fault. The dike located on the base line at 120+00 East appears to be terminated near the southeast part of Godon Lake. However, the spot highs located further to the north on the same line may indicate the presence of the same dike.

In the vicinity of tie line 20+00 South from lines 100+00 East to 108+00 East, the high magnetic anomaly appears to indicate the presence of a magnetite rich metasediment to tuff. Due to the presence of the diabase dikes further to the east, this body is difficult to trace.

The background magnetic value appears to vary from 58700 to 58900 gammas and no distinct feature is observed. The remainder of the rock units are suspected to be composed of intermediate to mafic metavolcanics to metasediments derived from the volcanic rocks.

CONCLUSIONS

The magnetic survey was a limited success in locating lithological units. The prominent anomalies of the diabase dikes has made the interpretation difficult in locating and tracing geological contacts.

The most prominent structural feature of the area appears to be filled by a diabase dike traversing the property on a bearing of north-northeast.

Some of the magnetic lows may be due in part to carbonatization of the metavolcanics-metasediments and may be a favourable target for further investigation. The shear zones near the southern portion of Godon Lake could not be located due the lack of access to the lake.

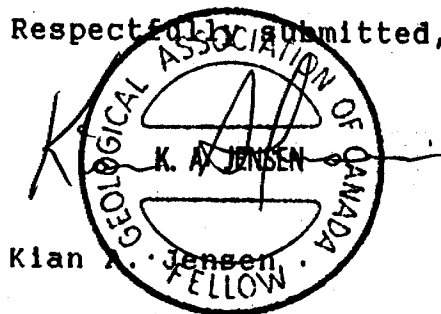
RECOMMENDATIONS

Based upon the results of the present survey and the available information, the aurther recommends a limited amount of prospecting and geological mapping of the property. The areas of importance is in the vacinity of the magnetic lows and the reported quartz filled shear zones around Godon Lake.

Based upon the recommended work, minor trenching may be warranted and possibly a limited diamond drilling program.

Dated at Timmins, Ontario
December 28, 1987

Respectfully submitted,



*2nd
25969*

CERTIFICATE

With reference to my report on the Magnetic Survey on the Godon Lake Property of Keefer Lake Resources Inc. Dated December 28, 1987.....

I, Kian A. Jensen, of the City of Timmins, Ontario, do hereby certify the following to be true and accurate to the best of my knowledge:

1) That I received an Honour B.Sc. degree in Earth Science, Geology Major, from the University of Waterloo,

2) That I have been employed as a geologist and/or geophysicist by various exploration companies and consulting companies since 1978,

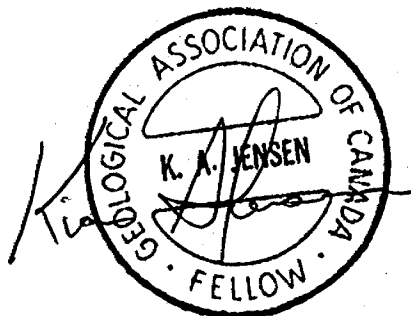
3) That I have been and still am a member in good standing in the following associations:

- a) Society of Exploration Geophysicists - Associate, 1981
- b) Geological Association of Canada - Fellow, 1983

4) That I am the author of the corresponding report, and have been actively exploring and prospecting in the Timmins area since 1981,

5) That I have no interest directly or indirectly in the mining claims comprising the property described in this report or in the shares of any company or companies in this joint venture on this property or the surrounding properties, nor do I expect to receive any directly or indirectly.

Dated this 28th of December, 1987
Timmins, Ontario



Kian A. Jensen, B.Sc.
Consulting Geologist/Geophysicist

1.0 GENERAL INFORMATION

1.1 INTRODUCTION

The Model G-816/826 Portable Proton Magnetometer is a complete system designed for man-carry field applications requiring simple operation and stable measurements of the total intensity of the earth's magnetic field. The G-816/826 is accurate and has a sensitivity of ± 1 gamma over a range from 20,000 to 90,000 gammas. Since the instrument measures total field intensity, the accuracy of each measurement is not affected by sensor orientation. The inherent simplicity of the G-816/826 Proton Magnetometer allows rapid, accurate measurements to be obtained from a rugged, compact field instrument. This is a precision instrument and reasonable attention must be given to handling, battery condition, and magnetic environment.

1.2 MAGNETIC ENVIRONMENT

It is important that the earth's magnetic field is not perturbed by allowing unwanted magnetic objects to come close to the sensor. Such objects include rings, keys, watches, belt buckles, pocket knives, metal pencils, zippers, etc. When the sensor is used on the staff, one gamma surveys are easily performed provided the sensor is kept at a distance of three feet (.9 m) from the operator. When the sensor is used in the backpack, certain articles of clothing and some types of batteries within the console will cause a five to ten gamma heading error in the readings. The G-816/826, however, still provides one gamma sensitivity and repeatability despite the presence of such a base line shift. The backpack feature is recommended for use in difficult terrain where "hands free" operation is required.

Prior to survey use, objects that are suspected to be magnetic may be checked in the following manner:

1. Attach sensor to staff and connect coiled signal cable to console. Sensor should not be moved or turned during the test, and the suspected article should be far away initially.
2. Cycle the magnetometer a few times by depressing the READ button--releasing--and waiting for a reading each cycle.
3. Observe measurement readings. Each reading should repeat to ± 1 gamma. (A slow shift may occur over several minutes due to a diurnal change in the earth's field.)
4. Place the suspected article at the distance from the sensor expected during actual survey operation.
5. Cycle magnetometer several times and note the readings.

6. Remove the article and repeat steps 2 and 3 to check for diurnal shifts in the earth's field. If a diurnal shift is present, repeat entire test.
7. If the readings obtained in step 5 differ by more than + 1 gamma (+ one count) from those obtained in steps 3 and 6, then the article is magnetic.

IF THE ARTICLE IS HIGHLY MAGNETIC, OR IF THE SENSOR IS INSIDE OR NEAR A BUILDING OR VEHICLE, THE PROTON PRECESSION SIGNAL WILL BE LOST, GIVING COMPLETELY ERRATIC READINGS AND LOSS OF + 1 COUNT REPEATABILITY.

The magnetometer should not be operated in areas that are known sources of radio frequency energy, power line noise (transformers), in buildings or near highly magnetic objects. The sensor should always be placed on the staff above the ground, or in the "backpack." The sensor will NOT operate properly when placed directly on the ground.

1.3 SPECIFICATIONS

Sensitivity:	<u>+ 1 gamma</u> throughout range.
Range:	20,000 to 90,000 gammas (worldwide).
Tuning:	Multiposition switch with signal amplitude indicator light on display.
Gradient Tolerance:	Exceeds 800 gammas/feet.
Sampling Rate:	Manual push button, one reading each six seconds.
Output:	Five digit numeric display with readout directly in gammas.
Power Requirements:	Twelve 1.5 volt "D" cell universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.
Temperature Range:	Console and sensor: -40° to +85° C. Battery pack: 0° to +50° C (limited use to -15° C; lower temperature battery belt operation - optional).
Accuracy (Total Field):	<u>+ 1 gamma</u> through 0° to +50° C temperature range.

Sensor: High signal, noise cancelling, mounted on staff or attached to backpack.

Size: Console: 3.5 x 7 x 11 inches
 (9 x 18 x 28 cm)
 Sensor: 3.5 x 5 inches (9 x 13 cm)
 Staff: 1 inch diameter x 8 ft. length
 (3 cm x 2.5 m)

Weight:		Lbs.	Kgs.
	Console (w/batteries):	5.5	2.5
	Sensor and signal cable:	4	1.8
	Aluminum staff:	2	.9
		<u>11.5</u>	<u>5.2</u>

1.4 INVENTORY INSPECTION

When received from the manufacturer, the G-816/826 Magnetometer should include the following items:

- | | | |
|-----|--|---------|
| 1. | G-816/826 Magnetometer console | 1 each |
| 2. | Sensor | 1 each |
| 3. | Collapsible sensor staff | 1 each |
| 4. | Signal cable-staff (long) | 1 each |
| 5. | Signal cable-backpack (short) | 1 each |
| 6. | Adjustable carrying harness | 1 each |
| 7. | Batteries: Type D Premium Carbon Zinc with cardboard jacket (12 each within console) | 24 each |
| 8. | Applications Manual for Portable Magnetometers | 1 each |
| 9. | Operator's Manual | 1 each |
| 10. | Storage/Carrying Case | 1 each |



42A05SE0129 2.10720 DENTON

900



Ministry of Northern Development and Mines

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

#307/87

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.

2.10720

Mining Act

Type of Survey(s) MAGNETIC SURVEY	Township or Area DENTON TOWNSHIP
Claim Holder(s) KEEFER LAKE RESOURCES INC.	Prospector's Licence No. T SC10
Address 160 KING-CROSS DRIVE, BOX 72, KING CITY ONTARIO L0G 1K0	
Survey Company KIAN A. JENSEN EXPLORATION & CONSULTING	Date of Survey (from & to) 2 10 87 10 10 87 Day Mo. Yr. Day Mo. Yr.
Name and Address of Author (of Geo-Technical report) KIAN A. JENSEN, P.O. BOX 37, SOUTH PORCUPINE, ONTARIO, P0N 1H0	
Total Miles of line Cut 30.0 miles	

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- 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	Electromagnetic	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	949904		P	949926	
	949905			949927	
	949906			949928	
	949907			950035	
	949908			950036	
	949909			950037	
	949910			950038	
	949911				
	949912				
	949913				
	949914				
	949915				
	949916				
	949929				
	949917				
	949918				
	949919				
	949920				
	949921				
	949922				
	949923				
	949924				
	949925				

Expenditures (excludes power stripping)

Type of Work Performed ASSESSMENT FILED RESEARCH OFFICE	LOGICAL SURVEY
Performed on Claim(s) FEB 11 1988	
Calculation of Expenditure Days Credits	Total Days Credits
Total Expenditures	15 =
<p>RECEIVED</p> <p>NOV 12 1987</p>	
Date Nov 11/87	Recorded Holder or Agent (Signature) <i>Kian Jensen</i>

RECORDED

NOV 12 1987

For Office Use Only

Total Days Cr. Recorded 1200	Date Recorded Nov. 12/87	Mining Recorder <i>Blwhite</i>
	Date Approved as Recorded	Branch Director

Total number of mining claims covered by this report of work. **30**

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 KIAN A. JENSEN, P.O. BOX 37, SOUTH PORCUPINE ONTARIO, P0N 1H0	Date Certified Nov-11/87	Certified by (Signature) <i>Kian Jensen</i>
--	------------------------------------	--

REFERENCES

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
SEC 43/70			M.+S.	171506
DANA AND JAWSEY PARK RESERVE			S.R.O.	
SEC 36/80 W 64/83			M.R.O.	
RESERVED FOR PUBLIC USE			S.R.O.	
M.R.W. 99/84			S.R.O.	
APPLICATION FOR CROWN LAND				

SAND AND GRAVEL

M.T.C.	PIT 1417	FILE	126351
M.T.C.	PIT 1236	FILE	126351
M.T.C.	PIT 1470		
M.T.C.	PIT 1331		

NOTES

THIS TOWNSHIP LIES WITHIN THE MUNICIPALITY OF THE CITY OF TIMMINS.

IMPORTANT NOTICE

THIS TOWNSHIP FORMS PART OF THE WAFERBOARD FOREST MANAGEMENT AGREEMENT.

THE 1985/86 ANNUAL PLAN, ON FILE IN THE MINING RECORDER'S OFFICE, SHOWS THE AREAS TO BE AFFECTED IN THE NEXT YEAR.

IF THIS PLAN AFFECTS YOU, FURTHER INFORMATION MAY BE OBTAINED FROM:

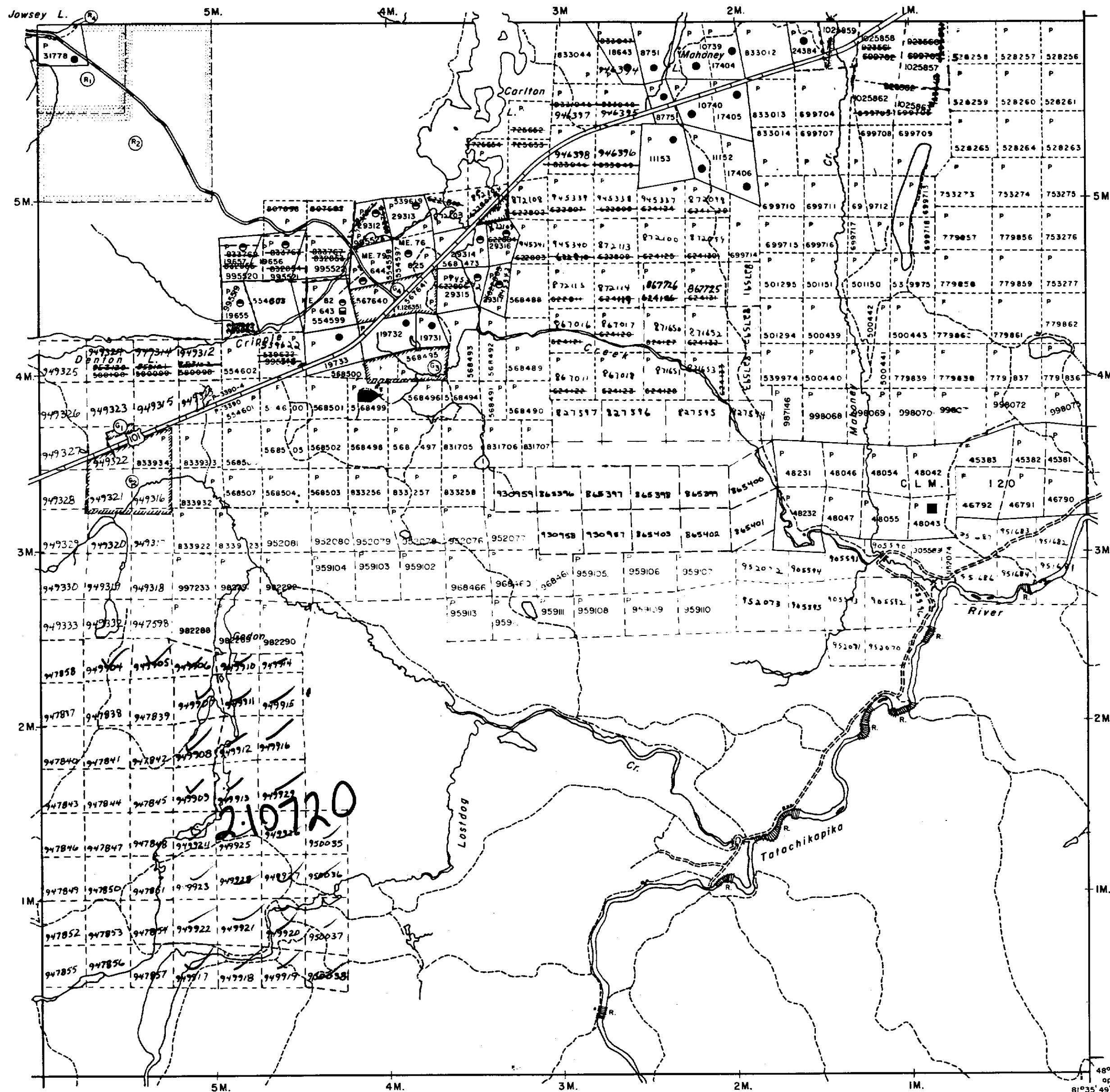
MR. MALCOM KILGOUR,
UNIT FORESTER,
MINISTRY OF NATURAL RESOURCES,
896 Riverside Drive,
Timmins, Ontario

Tel: 705-267-7951

or

Mr. Pierre Corbeil,
Waferboard Group
Tel: 705-268-1462

CARSCALLEN TWP.



REYNOLDS TWP.

LEGEND

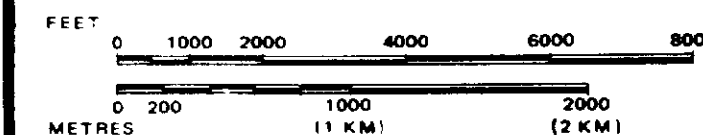
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION 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	OC
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. 63, SUBSEC. 1.

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP

DENTON

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS
MINING DIVISION

PORCUPINE
LAND TITLES / REGISTRY DIVISION

COCHRANE

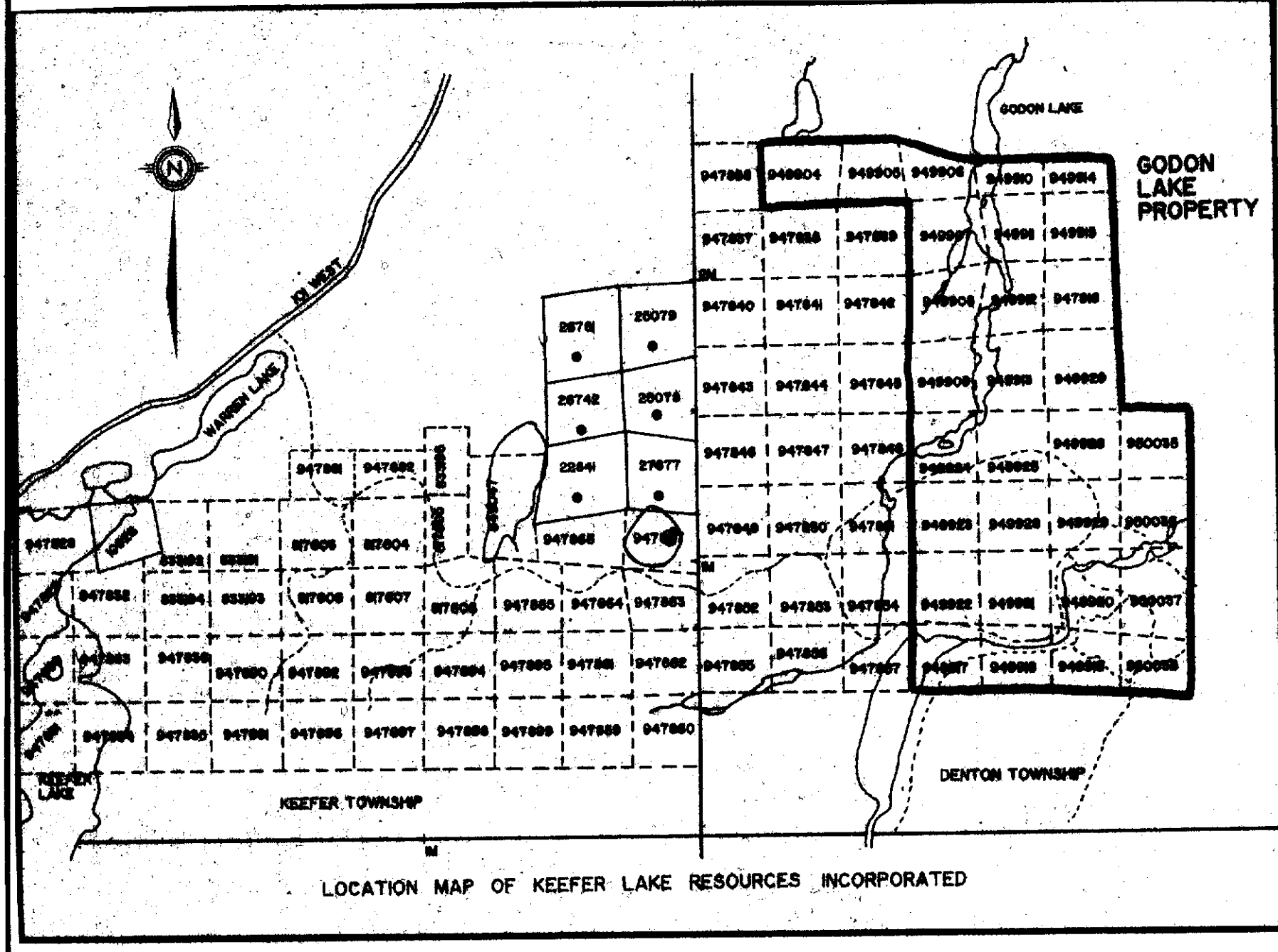
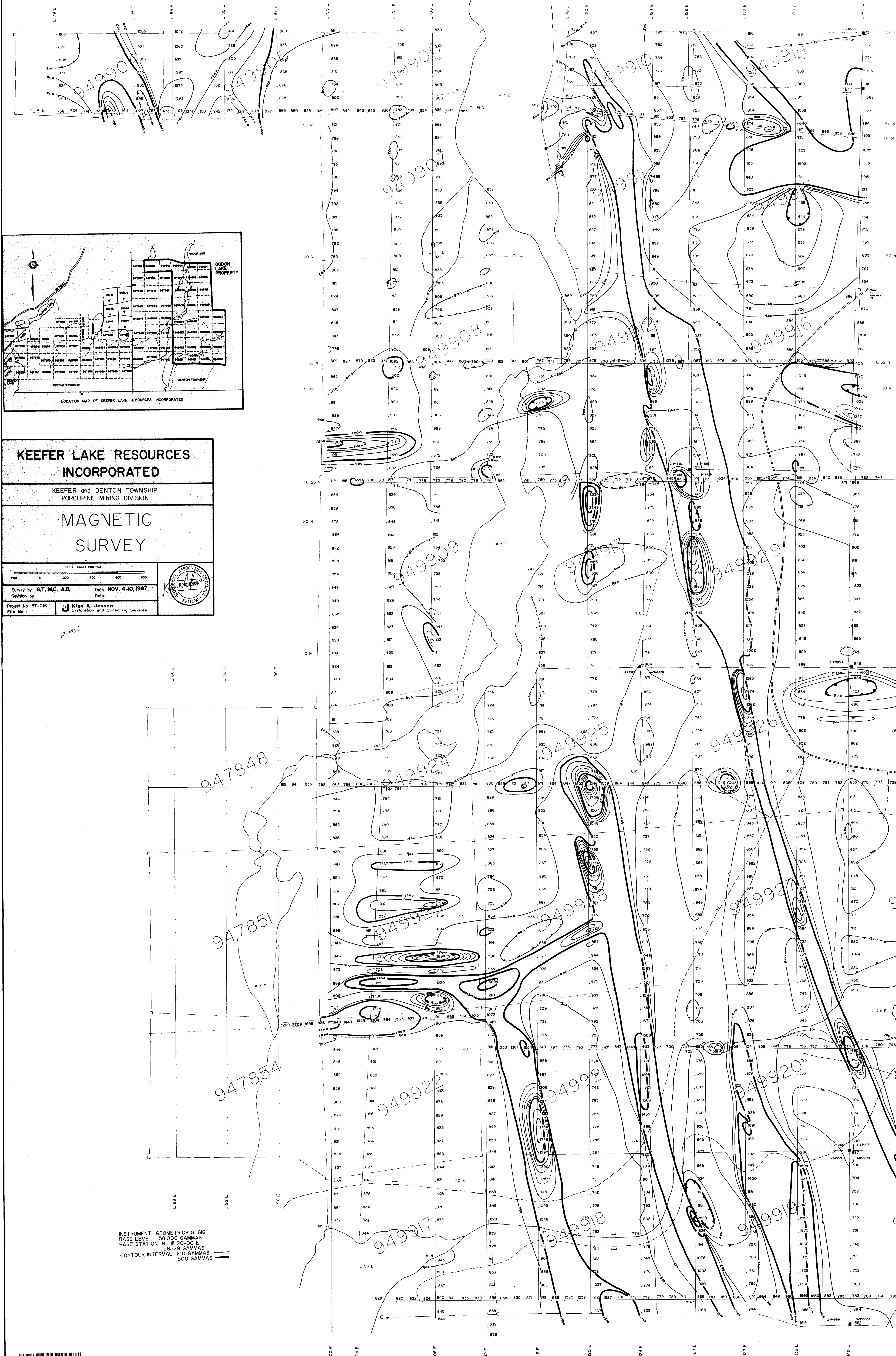
Ministry of Natural Resources
Land Management Branch
Ontario

Date MARCH, 1985

Number

G-322





KEEFEE LAKE RESOURCES INCORPORATED

KEEFEE and DENTON TOWNSHIP
PORCUPINE MINING DIVISION

MAGNETIC SURVEY

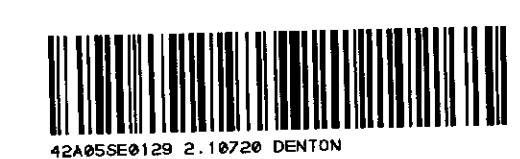
Scale: 1 inch = 200 feet

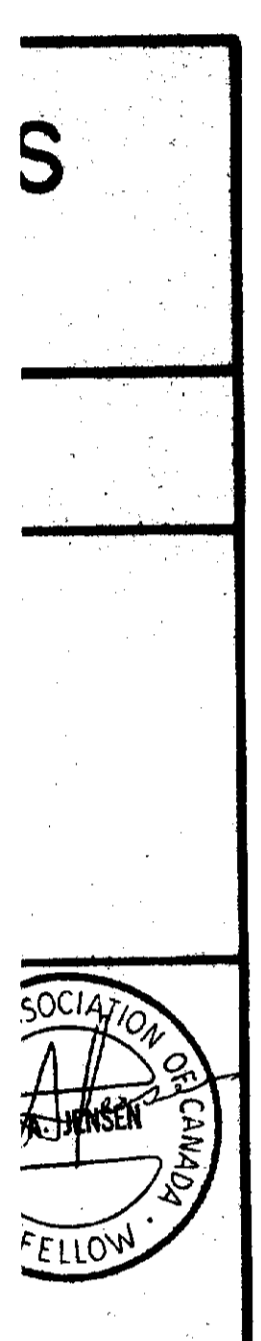
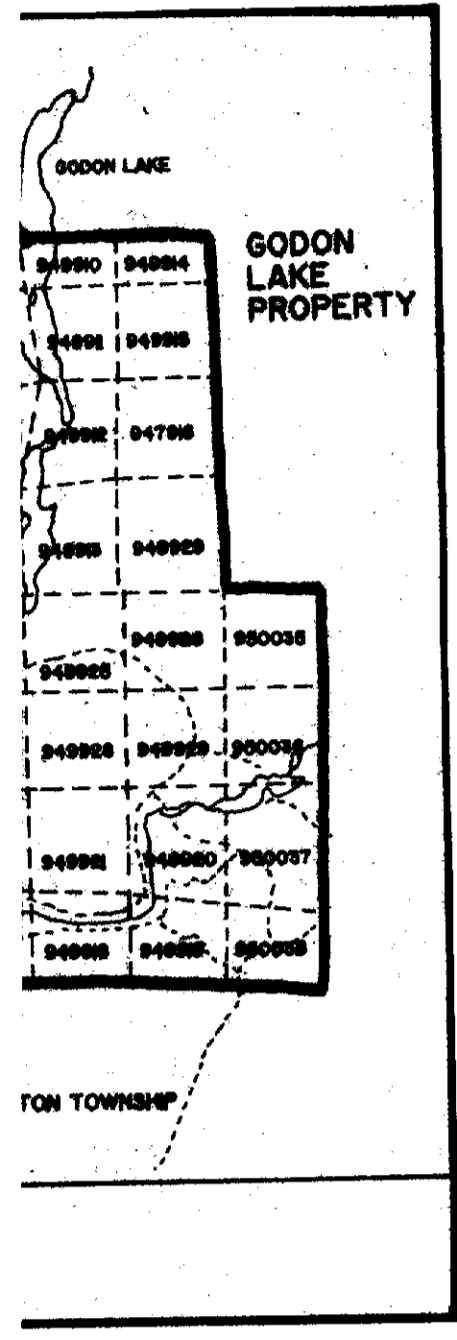
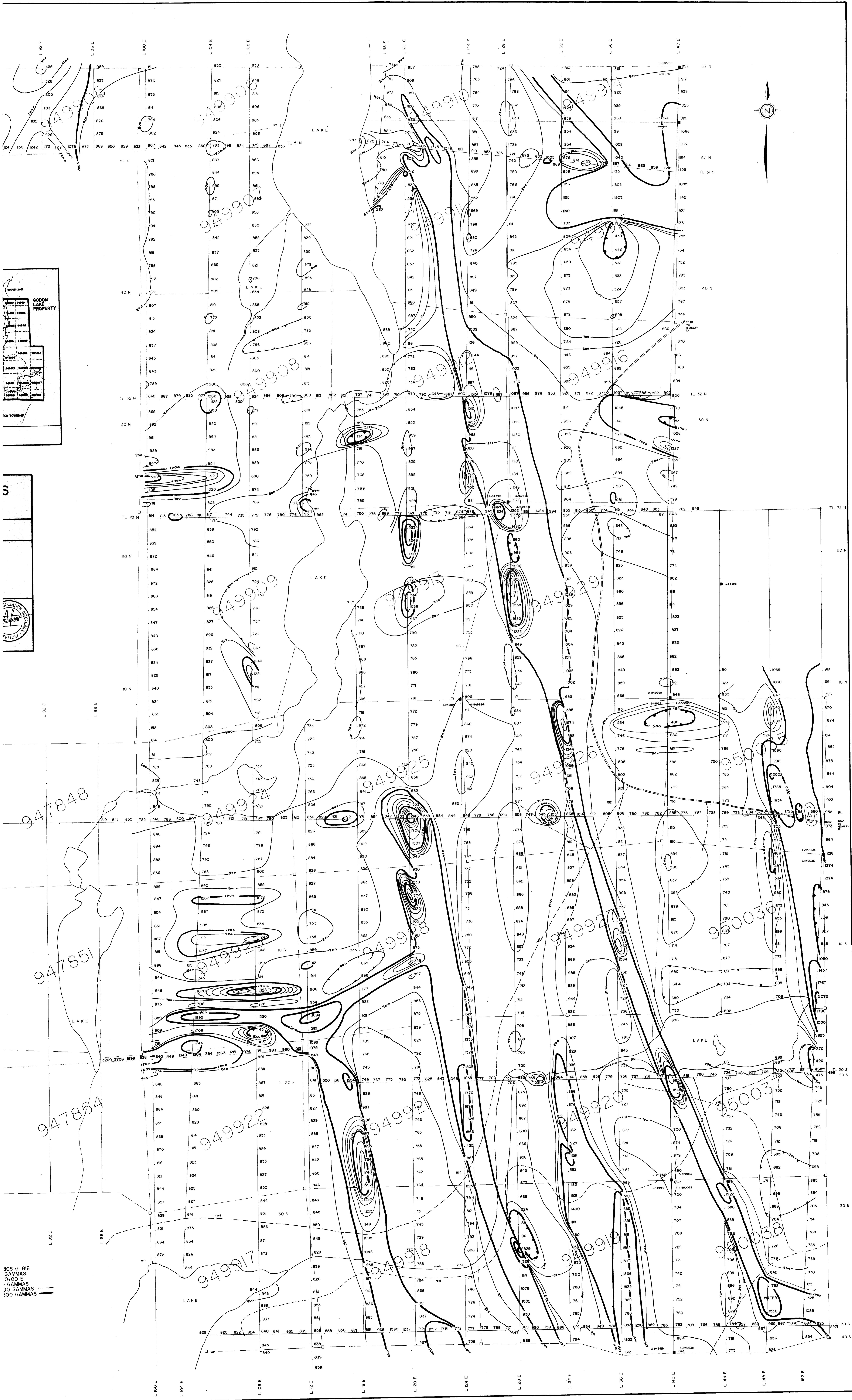
Survey by: G.T. M.C. A.B. Date: NOV. 4-10, 1987
Revision by: _____ Date: _____

Project No. 87-016
File No. _____

Klan A. Jensen
Exploration and Consulting Services

INSTRUMENT GEOMETRICS G-816
BASE LEVEL 58,000 GAMMAS
BASE STATION BL. 20-00 E
58529 GAMMAS
CONTOUR INTERVAL 100 GAMMAS
500 GAMMAS





ICS G-816
GAMMAS
0.00 E
GAMMAS
100 GAMMAS