



52J07NW0003 2.13651 ARMIT LAKE

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2.13651

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NOV 06 1990

MINING LANDS SECTION

A REPORT ON GEOPHYSICAL WORK ON THE  
KASHAWEOGAMA PROPERTY, NORTHWESTERN ONTARIO,  
DURING 1990

November 1, 1990

G.M. Hogg & Associates Ltd.,  
28 Thompson Avenue,  
Toronto, Ontario M8Z 3T3

Qual 2.2579

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### INTRODUCTION

The Kash gold property consists of 37 contiguous, unpatented mining claims located in the Savant Lake area of northwestern Ontario. It lies approximately five miles west of Highway 599 which runs between Ignace and Pickle Lake (see Figure 1), and is easily accessible by boat on Kashaweogama Lake.

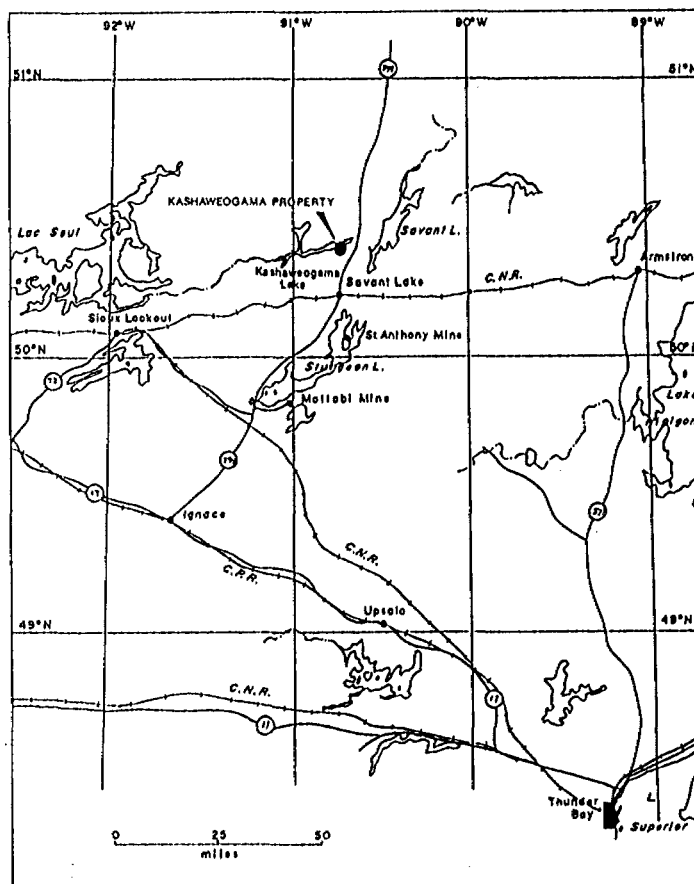


Figure 1: Location of the Kashaweogama Gold Property.

The original claims of the property were acquired through staking by R.G. Ramsay and G.M. Hogg in 1986, and peripheral claims have since been added.

The purpose of this report is to describe the geophysical survey work carried out in the northwestern part of the property during August, 1990. This was carried out by R.G. Ramsay, operator, using local labour for line cutting purposes.

All VLF-EM data considered in this report is derived from the survey completed by R.G. Ramsay. Compilation and interpretation has been done by G.M. Hogg, P.Eng.

#### PROPERTY ACCESS, CULTURE

The property lies about 5 miles west of Highway 599, which runs between Savant Lake and Pickle Lake in northwestern Ontario. It is easily accessible via the waters of Kashaweogama Lake from a boat landing which located about  $\frac{1}{2}$  mile west of the highway. There is also a bush road running west from the boat landing which extends to within one mile of the property.

The area is wooded with spruce, poplar and pine, with second growth in areas which were cut in the past. It has a maximum relief of about 25 meters, and has moderate outcrop exposure. Overburden is generally composed of sand and poorly sorted glacial till. The area drains west through the Marchington River into the Lac Seul system which is part of the James Bay watershed.

The nearest hydroelectric facility is the power line running north to Pickle Lake close to Highway 599. Local labor and supplies are available at Savant Lake about 15 miles to the south. The nearest active mining area is the Mattabi district lying about 60 kilometers south close to Highway 599.

### CLAIM STATUS, OWNERSHIP

The property consists of 37 contiguous, unpatented mining claims. They are currently in good standing, and title is registered in the name of R.G. Ramsay. They are illustrated in Figure 2 to this report.

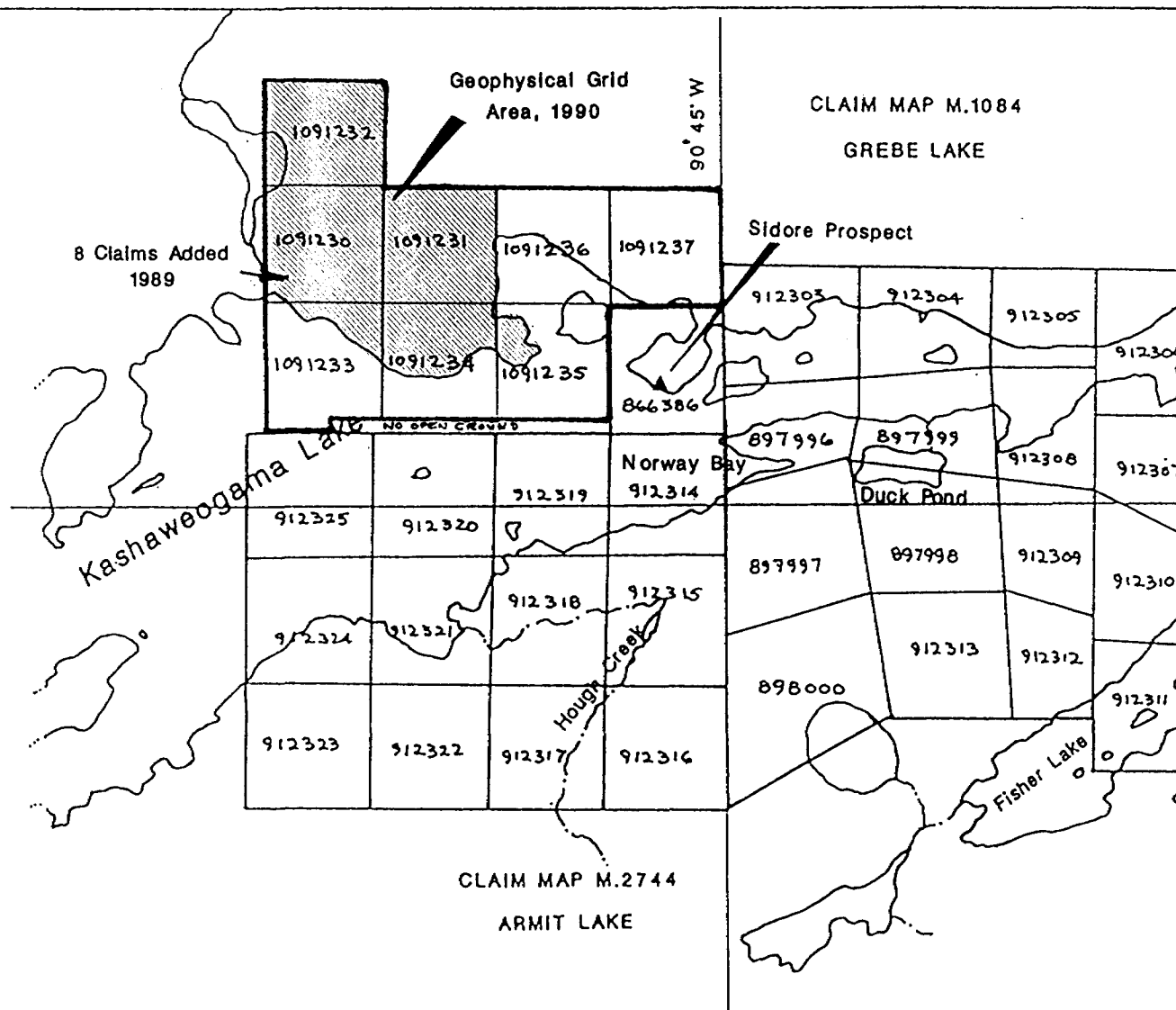
In reference to Figure 2, the 8 mining claims comprising the northwestern part of the property were staked in 1989 (claims PA 1091230-1091237 incl.). It was in this area that the geophysical surveying completed during 1990 was carried out.

### GEOLOGICAL SUMMARY

The Kashaweogama, or Kash property lies on the northern rim of the Savant-Kashaweogama metasedimentary basin. The basin area contains magnetic iron formation, conglomerate, quartzite and lesser mafic volcanic material. It is bounded by mafic volcanics interbedded with conglomerate and generally siliceous and tuffaceous metasediments in the property area, these containing variable amounts of sulphide mineralization. The gross magnetic signature in the property vicinity is illustrated in Figure 3 to this report.

The area is structurally complex, and the various rock units show considerable evidence of widespread folding and faulting. In reference to Figure 3, a large thrust fault is interpreted to underlie Kashaweogama Lake striking at Az. 80°. Within the property area basin rocks lie to the south of this locus, and mafic volcanics with interbedded metasediments to the north.

Sulphide mineralization is commonly associated with metasediments in the property area, and consists dominantly of pyrite. It is probably of



CLAIM MAP M.1084

GREBE LAKE

Sidore Prospect

8 Claims Added  
1989

Geophysical Grid  
Area, 1990

90° 45' W

Kashawogama Lake

Norway Bay  
912314

Duck Pond

Hough Creek

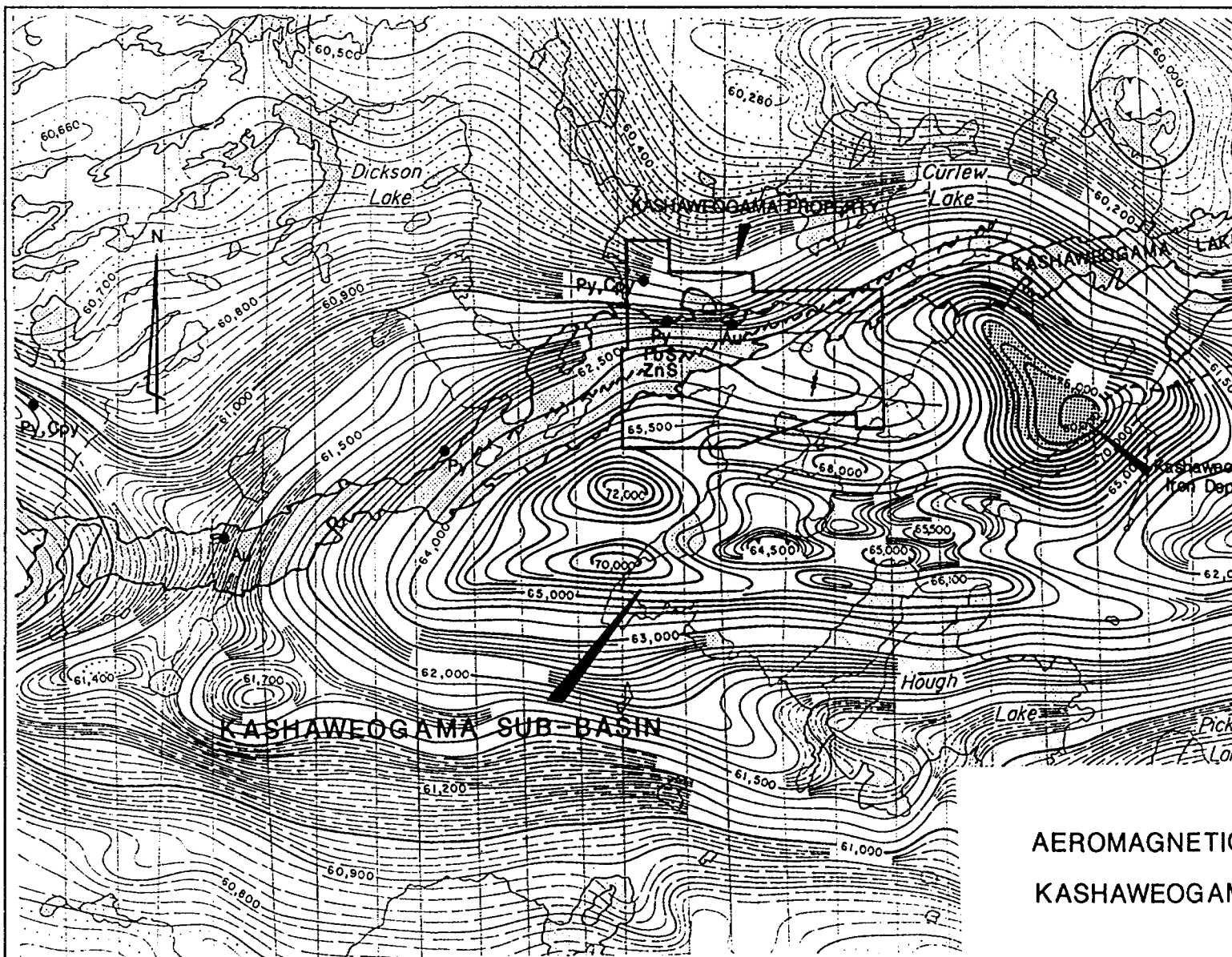
Fisher Lake

CLAIM MAP M.2744

ARMIT LAKE

# CLAIM LOCATION PLAN, KASHAWEOGAMA GOLD PROPERTY

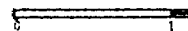
SCALE: 1 inch = 2,000 feet



G.M. HOOG & ASSOCIATES LTD.

AEROMAGNETIC  
KASHAWEOGAMA

From G.S.C. Map 1119G



syngenetic origin, representing a pyritic facies of iron formation in the basin rim area. However, chalcopyrite, galena and sphalerite are also present, as well as highly anomalous quantities of gold and silver. In some locations, notably the Sidore prospect area on the north shore, strong development of quartz veining containing visible gold has been noted.

Insofar as the northern part of the property appears particularly complex structurally and exhibits the greatest frequency of mineral occurrence, exploration efforts during 1990 have been concentrated therein. VLF-EM surveying was undertaken in an effort to trace mineralized formations in this area, and also to define locations of particularly strong structural deformation within them. It will be noted that graphite is not a common mineral constituent of the rock units in this vicinity, so conductivity may be expected to be largely a response to the presence of sulphide mineralization or strong, wet shear systems.

#### GEOPHYSICAL SURVEY OPERATIONS

##### GENERAL COMMENTS:

As indicated on Maps No. 1 and No. 2 (in pocket), the 1990 VLF-EM survey area lies within claims PA 1091230, 1091231, 1091232, 1091233 and 1091234 of the Kash property. Map No. 1 shows the in phase and out of phase VLF-EM readings over the grid area. Map No. 2 shows the Fraser Filter contour plan over this same area. As well, Map No. 2 shows the contoured VLF-EM plan over the northern part of the Redaurum Grid which was completed in 1988. The area surveyed during 1990 is indicated in Figure 2.

The 1990 Grid Area includes a 2,800 foot base line (Az. 100°), and 10 cross lines totalling 19,300 linear feet. This grid was cut and chained during August, 1990, and concurrently surveyed by VLF-EM methods. Plotting



and interpretation of the resulting data was done during September, 1990.

EQUIPMENT & SURVEY PROCEDURE:

The survey was completed by R.G. Ramsay using a Ronka EM-16 unit. The transmission signal from Station NAA, Cutler, Maine, at a frequency of 24.0 kHz was utilized for survey purposes.

In phase and out of phase readings were taken at stations spaced at 100 foot intervals over the crosslines of the grid area. A total of 200 readings were taken over the survey area.

PERSONNEL, SURVEY PERIOD:

One operator and two linecutters completed the survey during the period August 14th to August 21st, inclusive (8 days). The personnel employed are listed as follows:

Operator: R.G. Ramsay, 10 Cook Street, Barrie, Ontario  
Linecutter: H. Maggotte, Savant Lake, Ontario  
Linecutter: P. Machimity, Savant Lake, Ontario

RESULTS OF SURVEY

In reference to Map No. 1 (in pocket), a strongly conductive zone is indicated striking in an easterly direction across the grid area. It extends from 12W, 12+50N to 10E, 6+50N, and appears to continue beyond the grid area to the east and west. This conductive zone is multiple in character in the vicinity of line 0+00.

Other weakly conductive zones occur within the grid area, including a marginal response at 4W, 17+50N. This is in the vicinity of a strongly mineralized quartz vein system known as the "North Zone".

Suprisingly, no response was obtained in the vicinity of the "Cliff Zone" at 7E, 6+50S. This is a broadly sheared and mineralized area in graywacke containing up to 10 percent disseminated sulphides.

Map No. 2 (in pocket) shows the contoured VLF-EM data, and indicates the strong conductor at 12W, 12+50N to be displaced by either folding or faulting in the vicinity of 0+00, 8+00N. As the "Stringer Zone", which is a variably mineralized system of crenulated quartz veining, occurs just south of the conductor, and a strong system of easterly-trending shearing occurs just to the south of it, the conductive area clearly warrants further evaluation.

In respect to the "Cliff Zone" area, it appears that the most strongly conductive part of the mineralized system lies just to the south of the grid area (as indicated by the results of the Redaurum survey of 1988). Accordingly, any response from the broadly mineralized area immediately north has probably been masked by this strongly conductive locus. It will be noted that both geological and geophysical data indicate structural complexity to exist in this area also.

#### CONCLUSIONS & RECOMMENDATIONS


The northwest part of the Kash property was surveyed by VLF-EM methods during August, 1990. This is the first ground geophysical surveying done in this area.

The survey results suggest that well-mineralized formational units extend

in an easterly direction across the grid area, and that they are disturbed by folding and/or faulting action. As such formations in this area are known to be polymetallic and highly anomalous, and since there is abundant evidence of the development of strong shearing and quartz veining in the area, these disturbed areas in particular could well be of economic interest.

It is recommended that a limited program of reconnaissance drilling be undertaken to determine the nature of these conductive horizons.

Respectfully Submitted,

  
G.M. Hogg, P. Eng.



Qual 2.2579

MINING LANDS: PLEASE COMPLETE THIS  
TO THE GEOSCIENCE I



52J07NW0003 2.13651 ARMIT LAKE

900

DATE REMOVED: JUNE 3/92  
(from GDC)

DATE RETURNED: \_\_\_\_\_  
(to GDC)

REPORT # : 2.13651

FICHE NO. : \_\_\_\_\_ (where applicable)

REASON FOR REQUESTING REPORT (complete #1-4 below):

1. INFORMATION ADDED TO EXISTING PAGES OF REPORT:

IF YES, SPECIFY PAGES: \_\_\_\_\_  
: \_\_\_\_\_  
: \_\_\_\_\_

2. a) PAGES/MAPS ADDED TO THIS REPORT: \_\_\_\_\_ TOTAL PAGES ADDED  
: \_\_\_\_\_ TOTAL MAPS ADDED

b) TYPE OF PGS ADDED: \_\_\_\_\_ CORRESPONDENCE  
: \_\_\_\_\_ WORK REPORTS (AMENDED)  
: \_\_\_\_\_ WORK RPTS (NEW)  
: \_\_\_\_\_ MISSING PAGES OF TEXT  
: \_\_\_\_\_ OTHER (PLEASE SPECIFY)

3. a) REMOVAL OF PGS FROM REPORT: \_\_\_\_\_ TOTAL PGS REMOVED

b) TYPE OF PAGES REMOVED : \_\_\_\_\_ CORRESPONDENCE  
: \_\_\_\_\_ WORK REPORTS  
: \_\_\_\_\_ PGS OF TEXT  
: \_\_\_\_\_ OTHER (PLEASE SPECIFY)

4. REPORT NEEDED FOR REFERENCE ONLY:   
NO INFORMATION ALTERED :   
NO INFORMATION ADDED :   
NO INFORMATION DELETED :

\*NOTE: ENTER "X" IN APPLICABLE BOXES



Ontario

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OCT 30 1991

*T. Anderson*

Ministry of  
Northern Development  
and Mines

MINING LANDS BRANCH

Mineral Lands Section  
✓ 159 Cedar Street, 4th Floor  
SUDBURY, Ontario  
P3E 6A5

Ministère du  
Développement du Nord  
et des Mines

Telephone: (705) 670-7264  
Fax: (705) 670-7262

Your File: W9003.255  
Our File : 2.13651

February 19, 1991

Mining Recorder  
Ministry of Northern Development and Mines  
Court House Building  
P. O. Box 3000  
SIOUX LOOKOUT, Ontario  
POV 2T0

Dear Madam/Sir:

RE: Notice of Intent dated January 17, 1991 for Geophysical  
(Electromagnetic) Survey submitted on Mining Claim Pa  
1091230 et al in Armit Lake Area.

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

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

Yours sincerely,

*Ron C. Gashinski*

R. C. Gashinski  
Provincial Manager, Mining Lands  
Mines and Minerals Division

*AS*  
DM/dvl  
Enclosure

cc: Mr. W. D. Tieman  
Mining and Lands Commissioner  
Toronto, Ontario

Resident Geologist  
Sioux Lookout, Ontario

Raymond G. Ramsay  
Barrie, Ontario

G. M. Hogg  
Toronto, Ontario



Recorded Holder  
**Raymond G. Ramsay**

Township or Area  
**Armit Lake**

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic <u>30.8</u> days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days	Pa 1091230 to 234 incl.
<b>Section 77 (19) See "Mining Claims Assessed" column</b>	
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input type="checkbox"/> <input checked="" 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.	

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

**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  
Natural Resources

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

DOCUMENT No.  
W9003-255

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 "Expend. Days Cr." columns.  
- Do not use shaded areas below.

**MINING LANDS**

**2, 136 51**

Type of Survey(s) <b>ELECTROMAGNETIC</b>	Township or Area <b>6-1933</b>
Claim Holder(s) <b>RAYMOND G. RAMSAY</b>	Prospector's Licence No. <b>2, 136 51 LA 3800</b>
Address <b>10 COOK STREET BARRIE ONTARIO L4M 4E9</b>	
Survey Company <b>R. RAMSAY 705 726-8322</b>	Date of Survey (from & to) Day   Mo.   Yr.   Day   Mo.   Yr. <b>14   8   90   8   90</b>
Total Miles of line Cut <b>4.12</b>	
Name and Address of Author (of Geo-Technical report) <b>G.M. HOGG 28 THOMPSON AVE. TORONTO ONT. M8Z 3T3</b>	

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	<b>40</b>
For each additional survey: using the same grid: Enter 20 days (for each)	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Man Days Complete reverse side and enter total(s) here	Geochemical	
	Geophysical	
	- Electromagnetic	
	- Magnetometer	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Mining Claims Traversed (List in numerical sequence)			Mining Claims Traversed (List in numerical sequence)		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
<b>PA</b>	<b>1091230</b>				
	<b>1091231</b>				
	<b>1091232</b>				
	<b>1091233</b>				
	<b>1091234</b>				

**RECEIVED**  
SEP 28 1990  
MINING LANDS SECTION  
POSTMARKED SEPT. 11/90  
**RECEIVED**  
SEP 14 1990  
PATRICIA MINING DIVISION

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

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. **5**

For Office Use Only

Total Days Cr. Recorded **200**

Date Recorded **SEPT. 14/90**

Date Approved as Recorded **See revised Report of Work**

Branch Director **K. Mayhew**

Date **SEPT 11/90**

Recorded Holder or Agent (Signature) **R.G. Ramsay**

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.

Map 4/1/70 C  
July 3/90 R  
S.L.Y. 15/80 R  
H.L.G. 1/80 C

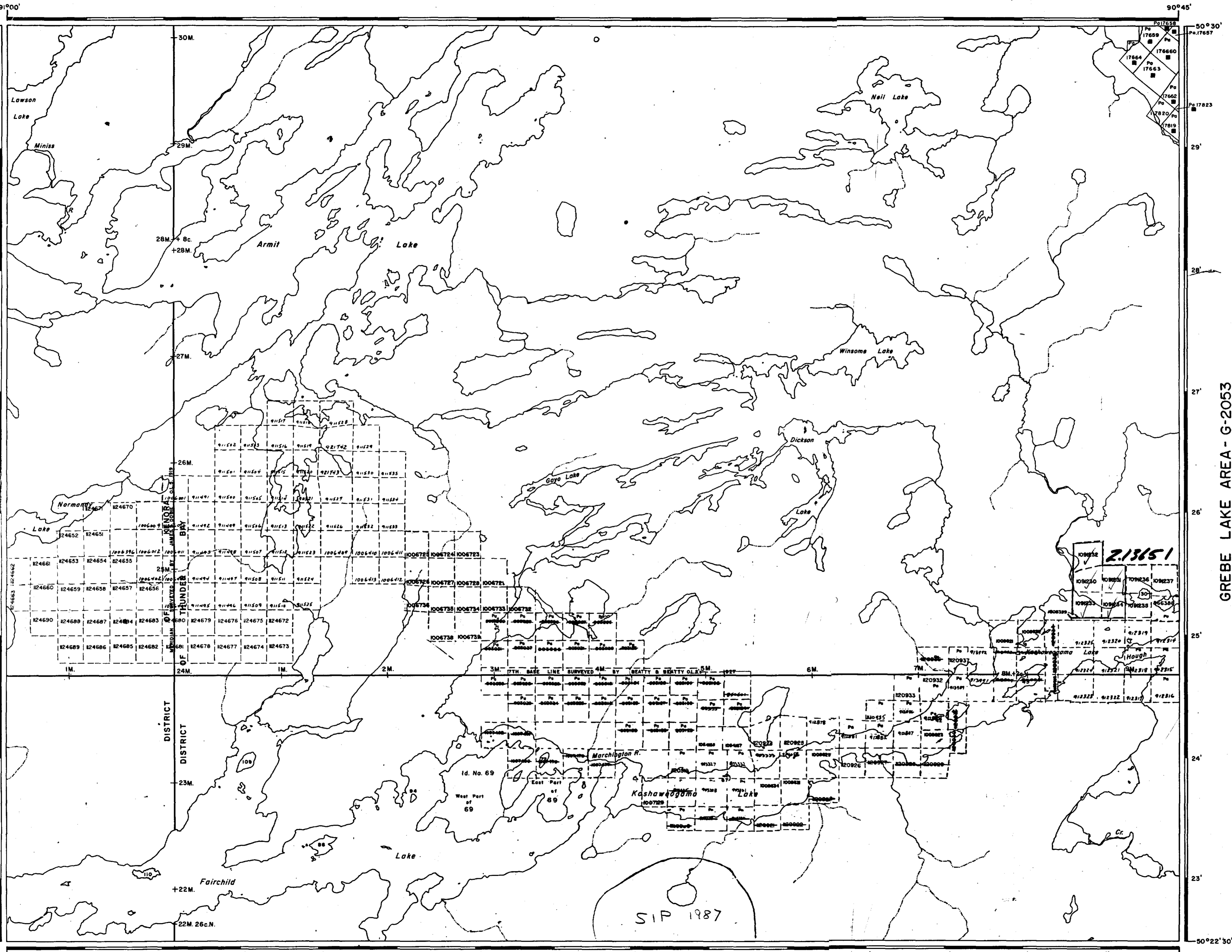
Sept 9/88  
Oa. 30/40 C

HILL LAKE G-2067

RUNWAY LAKE G-2194

GREBE LAKE AREA - G-2053

HOUGHTON LAKE - G-2070



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE DESIRING 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.

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	⊙

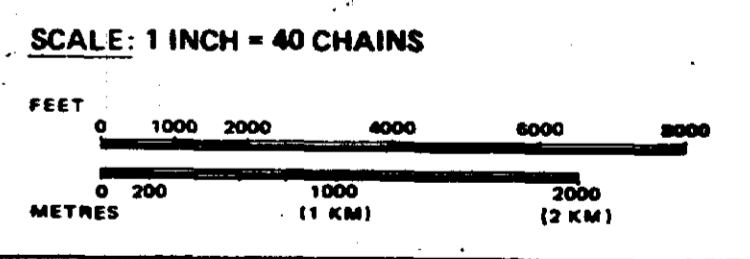
NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEES BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 390, SEC. 43, SUBSEC. 1.

REFERENCES

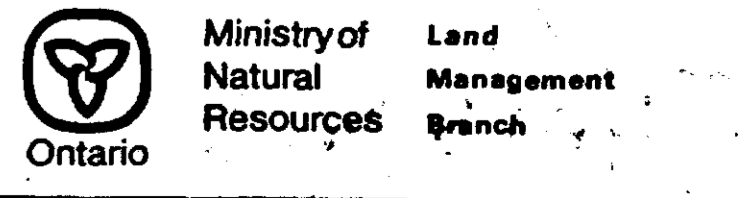
AREAS WITHDRAWN FROM DISPOSITION

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

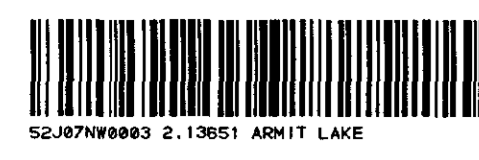
Description	Order No.	Date	Disposition	File
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		July 25/86		
		July 31/86		
		Sept 7/86		
		Sept 8/86		
		Apr 13/87		
		Apr 15/87		
		Apr 18/87		
		Apr 20/87		
		Apr 21/87		
		Apr 24/87		
		Apr 27/87		
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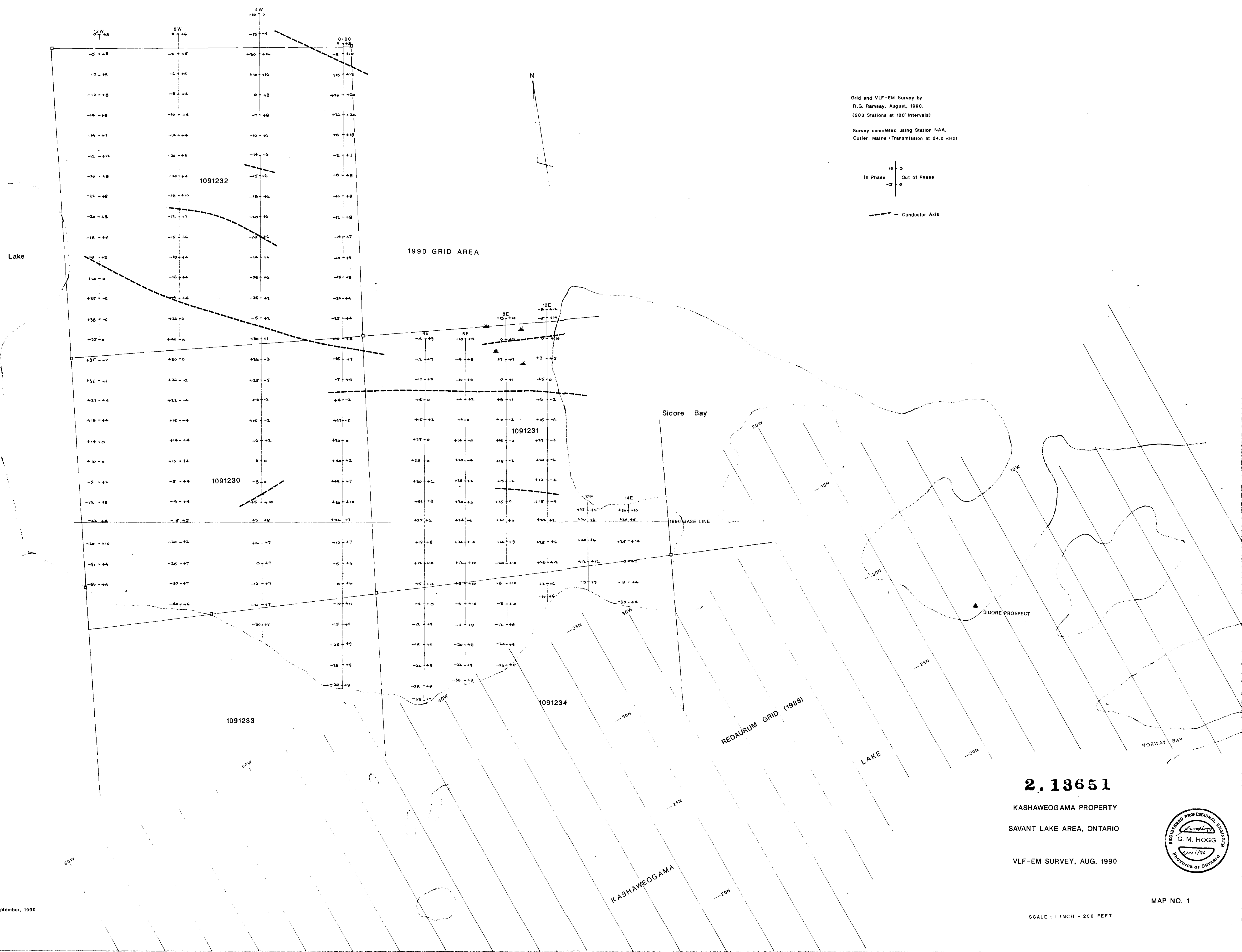
AREA  
**ARMIT LAKE**  
M.N.R. ADMINISTRATIVE DISTRICT  
SIOUX LOOKOUT  
MINING DIVISION  
PATRICIA  
LAND TITLES / REGISTRY DIVISION  
KENORA / THUNDER BAY



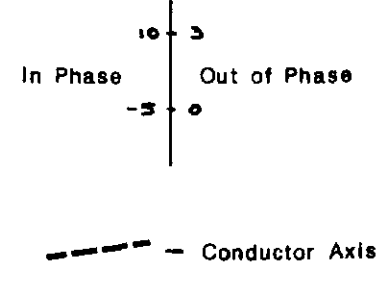
Date JANUARY, 1984  
Number **G-1933**







Grid and VLF-EM Survey by  
 R.G. Ramsay, August, 1990.  
 (203 Stations at 100' Intervals)  
 Survey completed using Station NAA,  
 Cutler, Maine (Transmission at 24.0 kHz)



**2.13651**

KASHAWEOGAMA PROPERTY  
 SAVANT LAKE AREA, ONTARIO  
 VLF-EM SURVEY, AUG. 1990



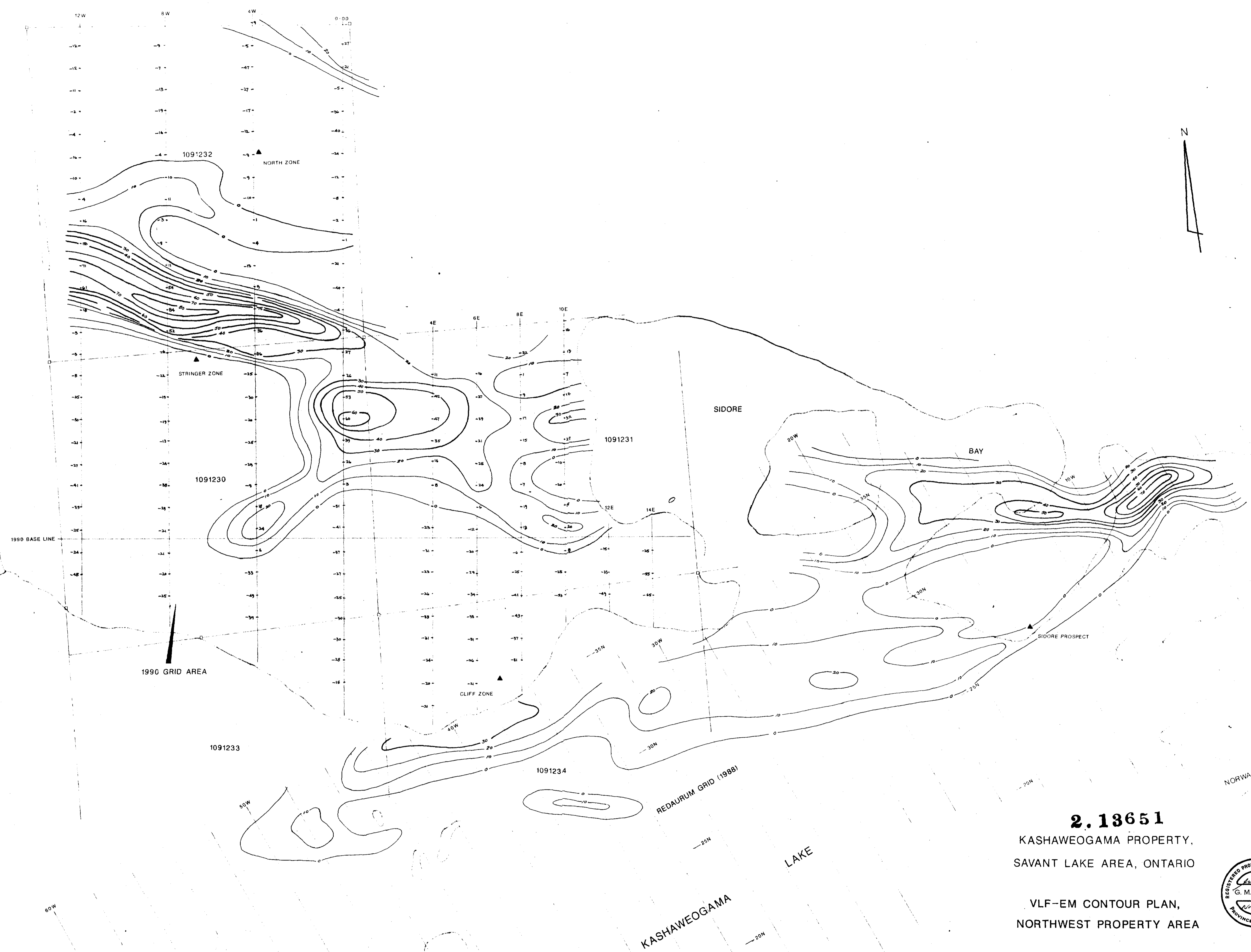
MAP NO. 1

SCALE: 1 INCH = 200 FEET

Compilation by G.M. Hogg, September, 1990



JUNE  
LAKE



1990 GRID AREA

1091230

1091232

1091231

1091233

1091234

REDAURUM GRID (1988)

KASHAWEOGAMA  
LAKE

**2.13651**  
 KASHAWEOGAMA PROPERTY,  
 SAVANT LAKE AREA, ONTARIO

VLF-EM CONTOUR PLAN,  
 NORTHWEST PROPERTY AREA



SCALE: 1 INCH = 200 FT.

MAP NO. 2

