



52F16SE0008 2.10224 MCAREE

010

A-658

REPORT ON AN
AIRBORNE MAGNETIC AND VLF-EM SURVEY
SANDYBEACH LAKE PROPERTY
MCAREE & MACFIE TOWNSHIPS
PATRICIA MINING DIVISION, ONTARIO

for
GML MINERALS CONSULTING LTD.

RECEIVED

JUL 22 1987

MINING LANDS SECTION

by

TERRAQUEST LTD.
Toronto, Canada

July 15, 1987



52F16SE0008 2.10224 MCAREE

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- No. A-658-2, Vertical Magnetic Gradient
- No. A-658-3, VLF-EM Survey
- No. A-658-4, Interpretation

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1. INTRODUCTION

This report describes the specifications and results of a geophysical survey carried out for GML Minerals Consulting Ltd. of Suite A17, 6120-2nd Street S.E., Calgary, Alberta, T2H 2L8 by Terraquest Ltd., 905 - 121 Richmond Street West, Toronto, Canada. The field work was performed on January 20, 1987 and the data processing, interpretation and reporting from January 21 to July 15, 1987.

The purpose of a survey of this type is two-fold. One is to prospect directly for anomalously conductive and magnetic areas in the earth's crust which may be caused by, or at least related to, mineral deposits. A second is to use the magnetic and conductivity patterns derived from the survey results to assist in mapping geology, and to indicate the presence of faults, shear zones, folding, alteration zones and other structures potentially favourable to the presence of gold and base-metal concentration. To achieve this purpose the survey area was systematically traversed by an aircraft carrying geophysical instruments along parallel flight lines spaced at even intervals, 100 meters above the terrain surface, and aligned so as to intersect the regional geology in a way to provide the optimum contour patterns of geophysical data.

2. THE PROPERTY

The property is located in McAree and MacFie townships, in the Patricia Mining Division of Ontario about 40 kilometres east of the town of Dryden. The property lies along the east side of Sandybeach Lake and can be reached by bush roads.

The latitude and longitude are 49 degrees 48 minutes, and 92 degrees 18 minutes respectively, and the N.T.S. reference is 52F/16.

The claim numbers are shown in figure 2 and listed below:

Pa	823870-823873	(4)	<i>macFie</i> <i>Kenora</i>
	823963-823964	(2)	
	✓850954-851003	(50)	
	851144-851193	(50)	
	✓861359-861362	(4)	
	861438-861441	(4)	
	861444-861445	(2)total 116 claims

P.A. McAree

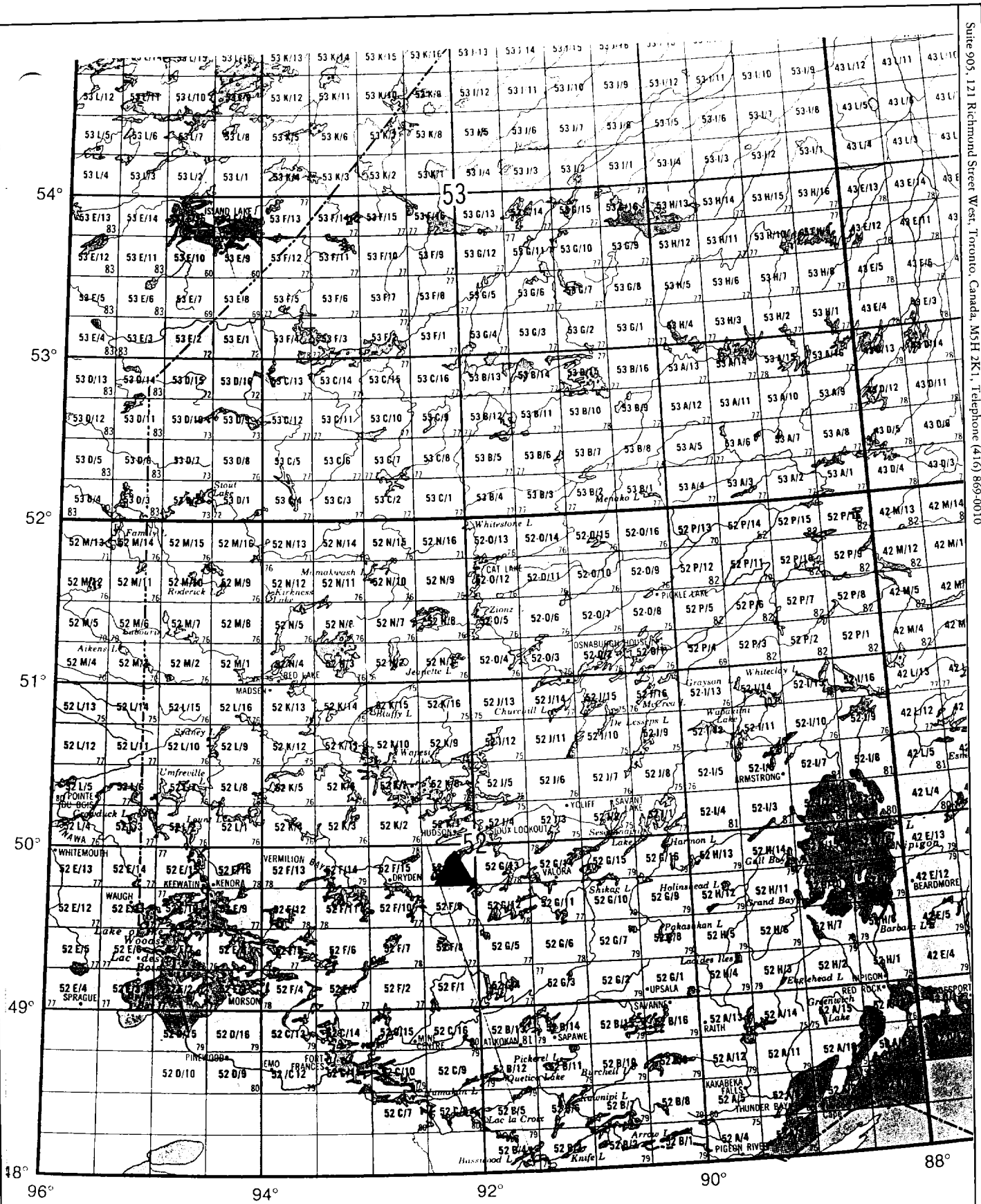


FIGURE 1. General Location

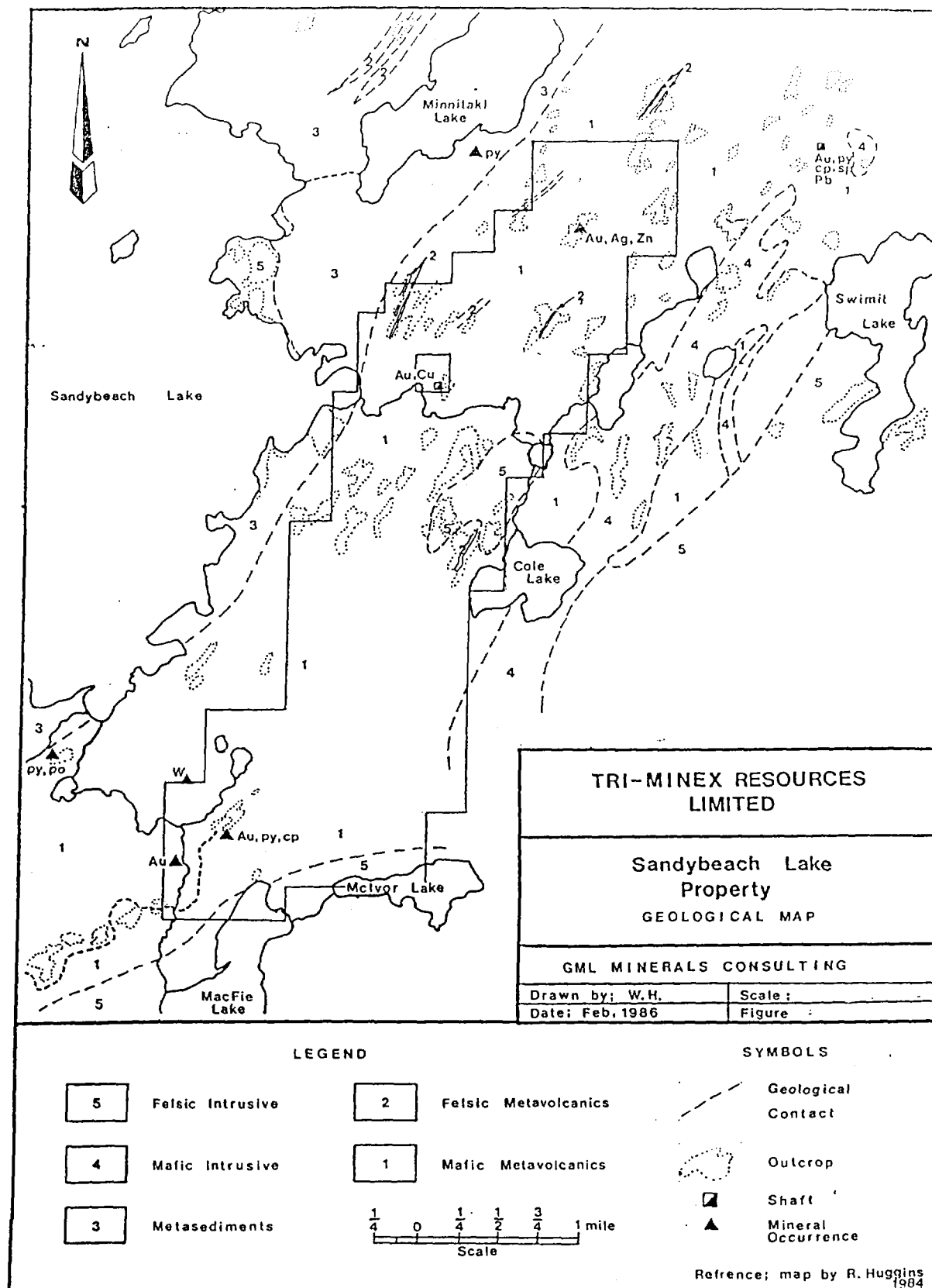


FIGURE 2. Survey Area Location

3. GEOLOGY

Map References

1. Map 41h: Sioux Lookout. scale 1:95,040. O.D.M. 1932
2. Map 2443: Kenora - Fort Francis Geological Compilation. scale 1:253,440. O.G.S. 1981
3. Map P.1204: Sandybeach-Route Lakes Sheet. scale 1:63,360. O.D.M. 1976
4. Map P.3068: Melgund Lake Area, McAree Township. scale 1:15,840. O.G.S. 1987
5. Map P.3069: Melgund Lake Area, MacFie Township. scale 1:15,840. O.G.S. 1987

The survey area is underlain by a northeast trending belt of Archean mafic to intermediate metavolcanics with minor felsic metavolcanics. Medium to fine grained metasediments flank the metavolcanics along the western side. Conformable lenses of gabbro occur along the western and eastern boundaries. Felsic rocks of the Basket Lake Batholith occur to the south and east, and as small pods within the metavolcanics.

The contact between the metasediments and the metavolcanics is shown as a fault (Wabigoon Fault) with some subsidiary faults. One northwest trending fault just north of the property is indicated on the detailed geological map.

Numerous gold showings and one shaft are shown on the geological maps. Gold occurs in three geological settings: a) in large quartz veins within sheared and altered mafic metavolcanics, in a subsidiary structure related to the Wabigoon Fault (locally 025 degrees), b) in silicified and carbonate altered zones at the apparent intersection of northeast- and east-northeast-trending lineaments, and c) in sulphide mineral stringers within iron-rich metasediments.

4. SURVEY SPECIFICATIONS

4.1 Instruments

The survey was carried out using a Cessna 206 aircraft, registration C-GGLS, which carries a magnetometer and a VLF electromagnetic detector.

The magnetometer is a high sensitivity airborne proton (Overhauser) type with the sensor element mounted in a towed bird at a distance of 14 metres below and 24 metres behind the aircraft. It's specifications are as follows:

Resolution: 0.01 gamma

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Accuracy: 0.03 gamma for 2 readings per second
 Cycle time: 0.5 second
 Range: 20000-100000 gammas
 Gradient tolerance: Up to 5000 gammas per meter
 Model: GSM-11
 Manufacturer: GEM Systems Inc., 105 Scarsdale Rd.,
 Don Mills, Ontario, M3B 2R5

The VLF-EM unit uses three orthogonal detector coils to measure (a) the total field strength of the time-varying EM field and (b) the phase relationship between the vertical coil and both the "along line" coil (LINE) and the "cross-line" coil (ORTHO). The LINE coil is tuned to a transmitter station that is ideally positioned at right angles to the flight lines, while the ORTHO coil transmitter should be in line with the flight lines. It's specifications are:

Accuracy: 1%
 Reading interval: 1/2 second
 Model: TOTEM 2A
 Manufacturer: Herz Industries, Toronto

The VLF sensor is mounted in the left wing tip extension.

Other instruments are:

- . King KRA-10A Radar altimeter
- . UDAS-100 data processor with Digidata nine track tape recorder, manufactured by Urtec Ltd., Markham, Ontario.
- . Geocam video camera and recorder for flight path recovery, manufactured by Geotech Ltd., Markham, Ontario.

4.2 Lines and Data

- a) Line spacing: 100 metres
- b) Line direction: 300 degrees
- c) Terrain clearance: 100 metres
- d) Average ground speed: 190 km/hr.
- e) Data point interval: Magnetic: 11 metres
VLF-EM: 11 metres
- f) Tie Line interval: 2 kilometres
- g) Channel 1 (LINE): NAA Cutler, 24.0 kHz
- h) Channel 2 (ORTHO): NLK Seattle, 24.8 kHz
- i) Line km over total survey area: 185
- j) Line km over claim groups: 200

4.3 Tolerances

- a) Line spacing: Any gaps wider than twice the line spacing and longer than 10 times the line spacing were filled in by a new line.

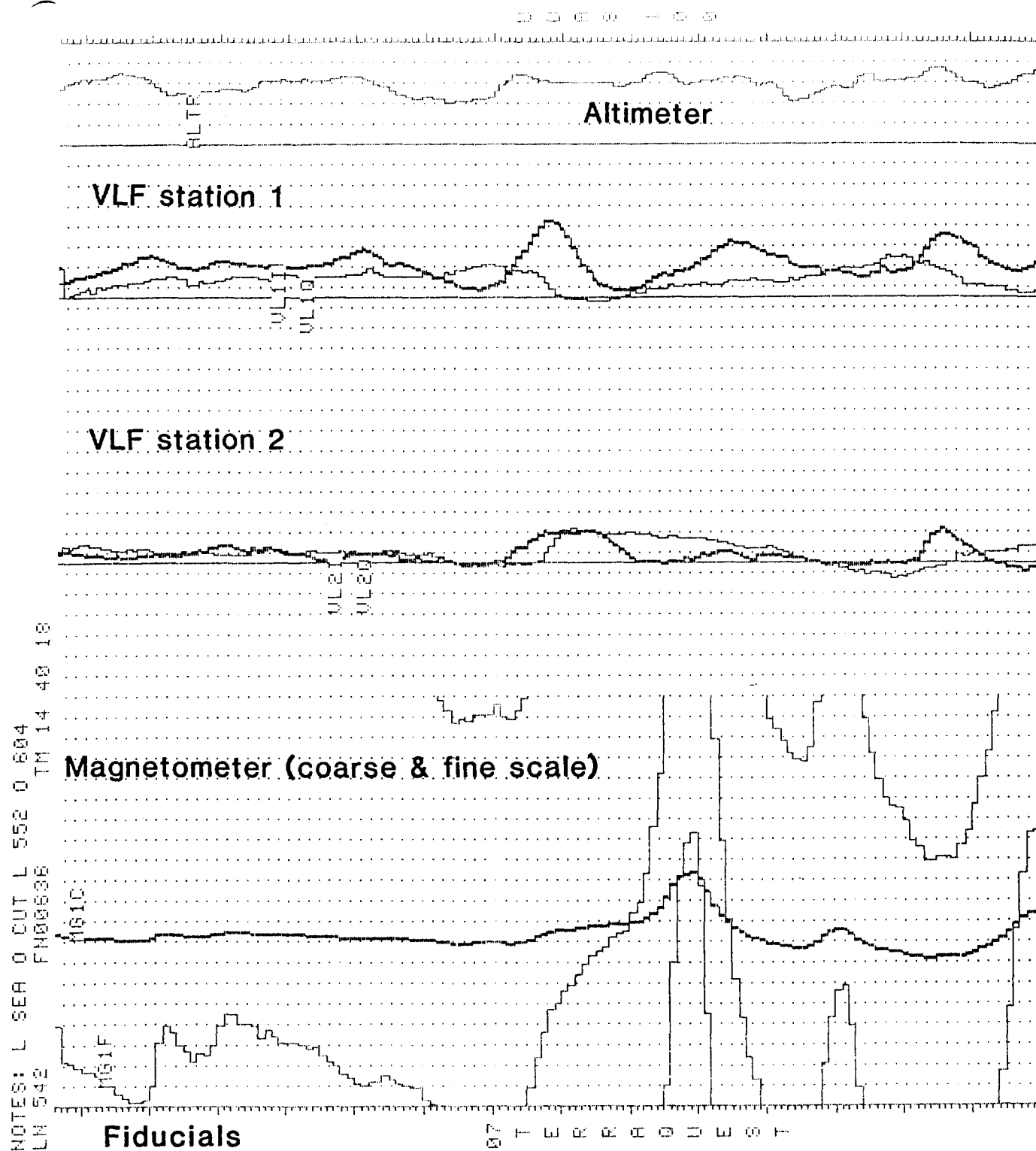


FIGURE 3. Sample of analogue data

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- b) Terrain clearance: Portions of line which were flown above 125 metres for more than one km were reflown if safety considerations were acceptable.
- c) Diurnal magnetic variation: Less than ten gammas deviation from a smooth background over a period of two minutes or less as seen on the base station analogue record.
- d) Manoeuvre noise: nil

4.4 Photomosaics

For navigating the aircraft and recovering the flight path, mosaics of aerial photographs were made from existing air photos.

5. DATA PROCESSING

Flight path recovery was carried out in the field using a video tape viewer to observe the flight path as recorded by the Geocam video camera system. The flight path recovery was completed daily to enable reflights to be selected where needed for the following day.

The magnetic data was levelled in the standard manner by tying survey lines to the tie lines. The IGRF has not been removed. The total field was contoured by computer using a program provided by Dataplotting Services Inc. To do this the final levelled data set is gridded at a grid cell spacing of 1/10th of an inch at map scale.

The vertical magnetic gradient is computed from the total field data using a method of transforming the data set into the frequency domain, applying a transfer function to calculate the gradient, and then transforming back into the spatial domain. The method is described by a number of authors including Grant, 1972 and Spector, 1968. The computer program for this purpose is provided by Paterson, Grant and Watson Ltd. of Toronto.

The VLF data was treated automatically so as to normalize the non conductive background areas to 100 (total field strength) and zero (quadrature). The algorithms to do this were developed by Terraquest and will be provided to anyone interested by application to the company. All of these dataprocessing calculations and map contouring were carried out by Dataplotting Services Inc. of Toronto.

- Grant, F.S. and Spector A., 1970: Statistical Models for Interpreting Aeromagnetic Data; Geophysics, Vol 35
- Grant, F.S., 1972: Review of Data Processing and Interpretation Methods in Gravity and Magnetism; Geophysics 37-4
- Spector, A., 1968: Spectral Analysis of Aeromagnetic maps; unpublished thesis; University of Toronto, 1968.

INTERPRETATION

6.1 General Approach

To satisfy the purpose of the survey as stated in the introduction, the interpretation procedure was carried out on both the magnetic and VLF data. On a local scale the magnetic gradient contour patterns were used to outline geological units which have different magnetic intensity and patterns or "signatures". Where possible these are related to existing geology to provide a geological identity to the units. On a regional scale the total field contour patterns were used in the same way.

Faults and shear zones are interpreted mainly from lateral displacements of otherwise linear magnetic anomalies but also from long narrow "lows". The direction of regional faulting in the general area is taken into account when selecting faults. Folding is usually seen as curved regional patterns. Alteration zones can show up as anomalously quiet areas, often adjacent to strong, circular anomalies that represent intrusives. Magnetic anomalies that are caused by iron deposits of ore quality are usually obvious owing to their high amplitude, often in tens of thousands of gammas.

VLF anomalies are categorized according to whether the phase response is normal, reverse, or no phase at all. The significance of the differing phase responses is not completely understood although in general reverse phase indicates either overburden as the source or a conductor with considerable depth extent, or both. Normal phase response is theoretically caused by surface conductors with limited depth extent.

Areas showing a smooth response somewhat above background (ie. 110 or so) are likely caused by overburden which is thick enough and conductive enough to saturate at these frequencies. In this case no response from bedrock is seen.

The VLF-EM conductor axes have been identified and evaluated according to the Terraquest classification system (Figure 4). This system correlates the nature and orientation of the conductor axes with stratigraphic, structural and topographic features to obtain an association from which one or more origins may be selected. Alternate associations are indicated in parentheses.

6.2 Interpretation

The magnetic and VLF-EM data are shown in contoured format on maps at a scale of 1:10,000 in the back pocket. An interpretation is also provided. The following notes are intended to supplement these maps.

FIGURE 4

TERRAQUEST CLASSIFICATION OF VLF-EM CONDUCTOR AXES

<u>SYMBOL</u>	<u>CORRELATION</u>	<u>ASSOCIATION: Possible Origins</u>
a , A	Coincident with magnetic stratigraphy	Bedrock magnetic horizons: stratabound mineralogic origin or shear zone
b , B	Parallel to magnetic stratigraphy	Bedrock non-magnetic horizons: stratabound mineralogic origin or shear zone
c , C	No correlation with magnetic stratigraphy	Association not known: possible small scale stratabound mineralogic origin, fault or shear zone, overburden
d , D	Coincident with magnetic dyke	Dyke or possible fault: mineralogic or electrolytic
f , F	Coincident with topographic lineament or parallel to fault system	Fault zone: mineralogic or electrolytic
ob , OB	Contours of total field response conform to topographic depression	Most likely overburden: clayey sediments, swampy mud
cul , CUL	Coincident with cultural sources	Electrical, pipe or railway lines

NOTES

- 1 - Upper case symbols denote a relatively strong total field strength
- 2 - Underlined symbols denote a relatively strong quadrature response
- 3 - Mineralogic origins include sulphides, graphite, and in fault zones, gouge
- 4 - Electrolytic origins imply conductivity related to porosity or high moisture content

The total magnetic field has a relief of approximately 465 gammas and shows the general northeast trend of the lithologies. The vertical magnetic gradient data shows improved resolution and has been used to delineate the stratigraphy and structure.

The mafic metavolcanics (Unit 1) correlate with low to moderate magnetic responses along the central part of the property. Areas within this unit that are characterized by higher magnetic responses are shown as Unit 1m on the interpretation map. These may be related to increased concentrations of magnetic minerals such as magnetite or pyrrhotite, or possibly to more mafic compositions including mafic intrusives.

The conformable lenses of gabbro along the western boundary correlate well with strong magnetic responses. Similar responses occur along eastern boundaries south of Cole Lake and therefore have been interpreted to be gabbro. This is not totally consistent with the geological mapping as some metavolcanics occur along the west side of Cole Lake, therefore it is suggested that this magnetic body is derived from a combination of gabbroic intrusives and magnetic metavolcanics.

The metasediments and derived migmatites (Unit 3) along the western side of the survey area correlate with low magnetic responses. Small anomalies toward the north within the metasediments are interpreted to be intercalated mafic metavolcanics. Alternatively, these could represent iron-rich sediments.

The felsic to intermediate intrusives of the Basket Lake Batholith correlate with moderate to moderately strong magnetic responses. The stronger responses indicated as Unit 9m on the interpretation map are probably related to the more mafic phases within the intrusive. The intrusive pod west of Cole Lake has a similar magnetic response as the mafic metavolcanics and cannot be discriminated from them at this scale.

Numerous northeast, north-northwest and northwest trending faults have been interpreted from magnetic displacements, most of them correlating well with airphoto lineaments. Unfortunately the Wabigoon fault and its subsidiaries parallel the gabbroic lenses and their corresponding magnetic responses. Structure parallel to magnetic trends are difficult to detect by magnetic mapping.

The VLF-EM responses are strong to very strong and show good resolution despite the fact that most of them have poor coupling with the transmitter azimuth. Several conductor axes correlate with the shorelines of larger lakes and these have been interpreted to possess overburden type origins. However the smaller lakes and swampy areas in general do not correlate with similar conductive zones and

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therefore the contribution provided by conductive overburden is considered not to mask bedrock sources.

Most of the VLF-EM conductor axes are interpreted to be associated with faults or shear zones. This type of conductivity may be related to:

- a) minerals such as sulfides, graphite or gouge along the structure or;
- b) ionic sources such as porosity along the structure, or clay in an overlying topographic depression.

Most of the VLF-EM interpreted structures appear to be related to either the northwest trends or to the subsidiaries of the northeast trending Wabigoon fault. Faults identified by VLF-EM or magnetic methods may provide primary structural control for the epithermal mineralization.

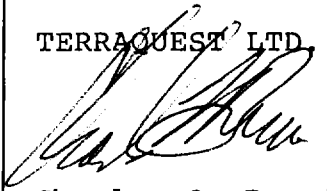
Several conductor axes are associated with stratigraphy. These coincide with or parallel magnetic units, particularly the gabbroic lenses. These responses may be derived from sulfides and should be followed up on the ground by EM or IP methods.

7. SUMMARY

An airborne combined magnetic and VLF-EM mapping survey has been carried out at 100 metre line intervals with data reading stations at 11 metres along the flight lines. All data is produced on maps at a scale of 1:10,000.

The magnetic data has been used to modify and update the existing geology and has shown a number of new contacts and faults. A number of VLF-EM conductor axes were found of which some are associated with structural sources and others are believed to have potential sulphide origins and have been recommended for additional investigation.

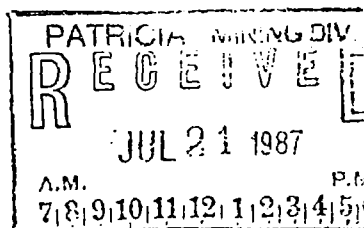
TERRAQUEST LTD.


Charles Q. Barrie, M.Sc.
Geologist

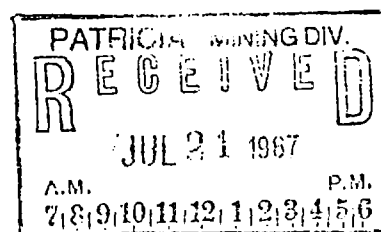
SCHEDULE 1

SANDYBEACH LAKE PROPERTY (56 claims)
PATRICIA MINING DIVISION

<u>CLAIM NUMBER</u>	<u>TOWNSHIP OR AREA</u>	<u>DATE RECORDED</u>
Pa 823963	McAree	Sep 23/1985
823964	McAree	Sep 23/1985
850954	McAree	Feb 13/1986
850955	Keikewabik Lake	Feb 13/1986
850956	Keikewabik Lake	Feb 13/1986
850957	McAree	Feb 13/1986
850958	Keikewabik Lake	Feb 13/1986
850959	Keikewabik Lake	Feb 13/1986
850960	McAree	Feb 13/1986
850961	Keikewabik Lake	Feb 13/1986
850962	Keikewabik Lake	Feb 13/1986
850963	McAree	Feb 13/1986
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850966	McAree	Feb 13/1986
850967	McAree	Feb 13/1986
850968	McAree	Feb 13/1986
850969	McAree	Feb 13/1986
850970	McAree	Feb 13/1986
850971	Keikewabik Lake	Feb 13/1986
850972	Keikewabik Lake	Feb 13/1986
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850974	McAree	Feb 13/1986
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850979	McAree	Feb 13/1986
850980	McAree	Feb 13/1986
850981	McAree	Feb 13/1986
850982	McAree	Feb 13/1986
850983	McAree	Feb 13/1986
850984	McAree	Feb 13/1986
850985	McAree	Feb 13/1986
850986	McAree	Feb 13/1986
850987	McAree	Feb 13/1986



<u>CLAIM NUMBER</u>	<u>TOWNSHIP OR AREA</u>	<u>DATE RECORDED</u>
850988	McAree	Feb 13/1986
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850990	McAree	Feb 13/1986
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851003	McAree	Feb 13/1986
861359	McAree	Feb 13/1986
861360	McAree	Feb 13/1986
861361	McAree	Feb 13/1986
861362	McAree	Feb 13/1986



TERRAQUEST LTD.



A-658

July 21, 1987

Ministry of Northern Development and Mines
Room 6610
Whitney Block, Queen's Park
Toronto, Ontario
M7A 1W3

Dear Sirs,

Please find enclosed two copies of our airborne Mag and VLF-EM survey .
over the Sandybeach Lake property in McAree & MacFie Twps, Ontario in
the Patricia Mining Division, claims Pa 823870 et al. to be used for
assessment purposes.

RECEIVED

JUL 22 1987

MINING LANDS SECTION

Yours Truly,

TERRAQUEST LIMITED

Charles Q. Barrie
Vice President

*Lead
2.8305*

Encl.



Report of Work

(Geophysical, Geological,
Geochemical and Expenditures)

#145-87

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.

Mining Act

Type of Survey(s) Geophysical (Fixed Wing Airborne Mag-VLF)		Township or Area MACFIE TWP See Schedule 1 attached M-1945	
Claim Holder(s) Loydex Resources Inc.		Prospector's Licence No. T 1293	
Address 24 Kenton Court, Whitby, Ontario L1N 5X7			
Survey Company Terraquest Ltd.		Date of Survey (from & to) 20 01 87 Day Mo. Yr.	
Name and Address of Author (of Geo-Technical report) Charles Barrie, Terraquest Ltd.		Total Miles of line Cut	

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

[illegible]

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JUL 29 1987

MINING LANDS SECTION

RECORDED
JUL 24 1987
7891011121123456 P2

Expenditures (excludes power stripping)

Type of Work Performed								
Performed on Claim(s)								
Calculation of Expenditure Days Credits								
<table> <tr> <td>Total Expenditures</td> <td></td> <td></td> <td>Total Days Credits</td> </tr> <tr> <td>\$</td> <td></td> <td>÷ 15 =</td> <td></td> </tr> </table>	Total Expenditures			Total Days Credits	\$		÷ 15 =	
Total Expenditures			Total Days Credits					
\$		÷ 15 =						
<p>Instructions</p> <p>Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.</p>								

823 870

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

60

Date	Received Holder or Agent (Signature)
July 17, 1987	<i>[Signature]</i>

For Office Use Only			
Total Days Cr. Recorded	Date Recorded	Mining Recorder	
4800	July 24/87	ME Lemay/ades	
	Date Approved as Recorded	Branch Director	
	1987-09-30	for M. Chackosky	

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

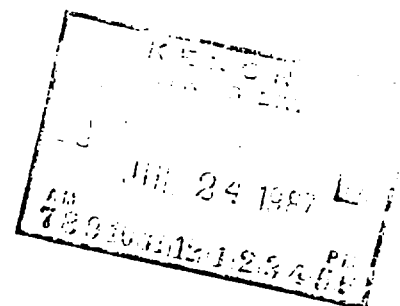
George M. Leary, Suite A17, Block A, 6120-2nd Street SE, Calgary, Alberta T2H 2L8

Date Certified July 17, 1987	Certified by (Signature) 
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#145-87

SCHEDULE 1SANDYBEACH LAKE PROPERTY (60 claims)
KENORA MINING DIVISION

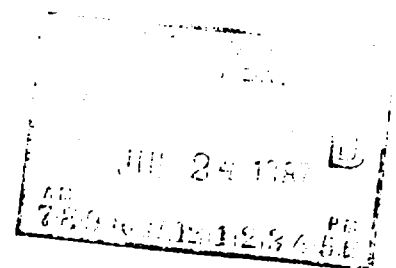
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823871	MacFie	May 8/1985
823872	MacFie	May 8/1985
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851144	MacFie	Feb 13/1986
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851167	MacFie	Feb 13/1986



#145-87

Schedule 1
Page 2

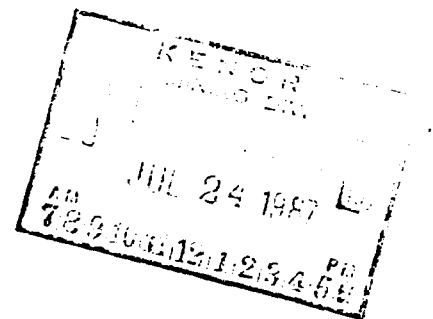
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861444	MacFie	Feb 13/1986
861445	MacFie	Feb 13/1986



#145-87

SCHEDULE 1SANDYBEACH LAKE PROPERTY (60 claims)
KENORA MINING DIVISION

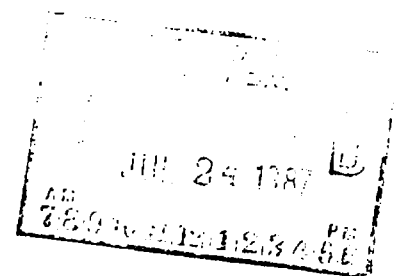
<u>CLAIM NUMBER</u>	<u>TOWNSHIP OR AREA</u>	<u>DATE RECORDED</u>
K 823870	MacFie	May 8/1985
823871	MacFie	May 8/1985
823872	MacFie	May 8/1985
823873	MacFie	May 8/1985
851144	MacFie	Feb 13/1986
851145	MacFie	Feb 13/1986
851146	MacFie	Feb 13/1986
851147	MacFie	Feb 13/1986
851148	MacFie	Feb 13/1986
851149	MacFie	Feb 13/1986
851150	MacFie	Feb 13/1986
851151	MacFie	Feb 13/1986
851152	MacFie	Feb 13/1986
851153	MacFie	Feb 13/1986
851154	MacFie	Feb 13/1986
851155	MacFie	Feb 13/1986
851156	MacFie	Feb 13/1986
851157	MacFie	Feb 13/1986
851158	MacFie	Feb 13/1986
851159	MacFie	Feb 13/1986
851160	MacFie	Feb 13/1986
851161	MacFie	Feb 13/1986
851162	MacFie	Feb 13/1986
851163	MacFie	Feb 13/1986
851164	MacFie	Feb 13/1986
851165	MacFie	Feb 13/1986
851166	MacFie	Feb 13/1986
851167	MacFie	Feb 13/1986



#145-87

Schedule 1
Page 2

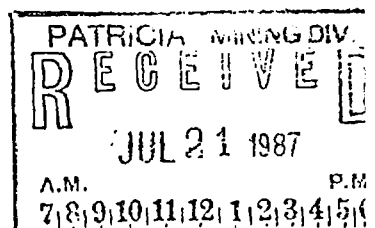
<u>CLAIM NUMBER</u>	<u>TOWNSHIP OR AREA</u>	<u>DATE RECORDED</u>
851168	MacFie	Feb 13/1986
851169	MacFie	Feb 13/1986
851170	MacFie	Feb 13/1986
851171	MacFie	Feb 13/1986
851172	MacFie	Feb 13/1986
851173	MacFie	Feb 13/1986
851174	MacFie	Feb 13/1986
851175	MacFie	Feb 13/1986
851176	MacFie	Feb 13/1986
851177	MacFie	Feb 13/1986
851178	MacFie	Feb 13/1986
851179	MacFie	Feb 13/1986
851180	MacFie	Feb 13/1986
851181	MacFie	Feb 13/1986
851182	MacFie	Feb 13/1986
851183	MacFie	Feb 13/1986
851184	MacFie	Feb 13/1986
851185	MacFie	Feb 13/1986
851186	MacFie	Feb 13/1986
851187	MacFie	Feb 13/1986
851188	MacFie	Feb 13/1986
851189	MacFie	Feb 13/1986
851190	MacFie	Feb 13/1986
851191	MacFie	Feb 13/1986
851192	MacFie	Feb 13/1986
851193	MacFie	Feb 13/1986
861438	MacFie	Feb 13/1986
861439	MacFie	Feb 13/1986
861440	MacFie	Feb 13/1986
861441	MacFie	Feb 13/1986
861444	MacFie	Feb 13/1986
861445	MacFie	Feb 13/1986



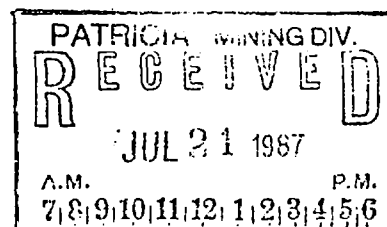
SCHEDULE 1

SANDYBEACH LAKE PROPERTY (56 claims)
PATRICIA MINING DIVISION

<u>CLAIM NUMBER</u>	<u>TOWNSHIP OR AREA</u>	<u>DATE RECORDED</u>
Pa 823963	McAree	Sep 23/1985
823964	McAree	Sep 23/1985
850954	McAree	Feb 13/1986
850955	Keikewabik Lake	Feb 13/1986
850956	Keikewabik Lake	Feb 13/1986
850957	McAree	Feb 13/1986
850958	Keikewabik Lake	Feb 13/1986
850959	Keikewabik Lake	Feb 13/1986
850960	McAree	Feb 13/1986
850961	Keikewabik Lake	Feb 13/1986
850962	Keikewabik Lake	Feb 13/1986
850963	McAree	Feb 13/1986
850964	McAree	Feb 13/1986
850965	Keikewabik Lake	Feb 13/1986
850966	McAree	Feb 13/1986
850967	McAree	Feb 13/1986
850968	McAree	Feb 13/1986
850969	McAree	Feb 13/1986
850970	McAree	Feb 13/1986
850971	Keikewabik Lake	Feb 13/1986
850972	Keikewabik Lake	Feb 13/1986
850973	McAree	Feb 13/1986
850974	McAree	Feb 13/1986
850975	McAree	Feb 13/1986
850976	McAree	Feb 13/1986
850977	McAree	Feb 13/1986
850978	McAree	Feb 13/1986
850979	McAree	Feb 13/1986
850980	McAree	Feb 13/1986
850981	McAree	Feb 13/1986
850982	McAree	Feb 13/1986
850983	McAree	Feb 13/1986
850984	McAree	Feb 13/1986
850985	McAree	Feb 13/1986
850986	McAree	Feb 13/1986
850987	McAree	Feb 13/1986



<u>CLAIM NUMBER</u>	<u>TOWNSHIP OR AREA</u>	<u>DATE RECORDED</u>
850988	McAree	Feb 13/1986
850989	McAree	Feb 13/1986
850990	McAree	Feb 13/1986
850991	McAree	Feb 13/1986
850992	McAree	Feb 13/1986
850993	McAree	Feb 13/1986
850994	McAree	Feb 13/1986
850995	McAree	Feb 13/1986
850996	McAree	Feb 13/1986
850997	McAree	Feb 13/1986
850998	McAree	Feb 13/1986
850999	McAree	Feb 13/1986
851000	McAree	Feb 13/1986
851001	McAree	Feb 13/1986
851002	McAree	Feb 13/1986
851003	McAree	Feb 13/1986
861359	McAree	Feb 13/1986
861360	McAree	Feb 13/1986
861361	McAree	Feb 13/1986
861362	McAree	Feb 13/1986



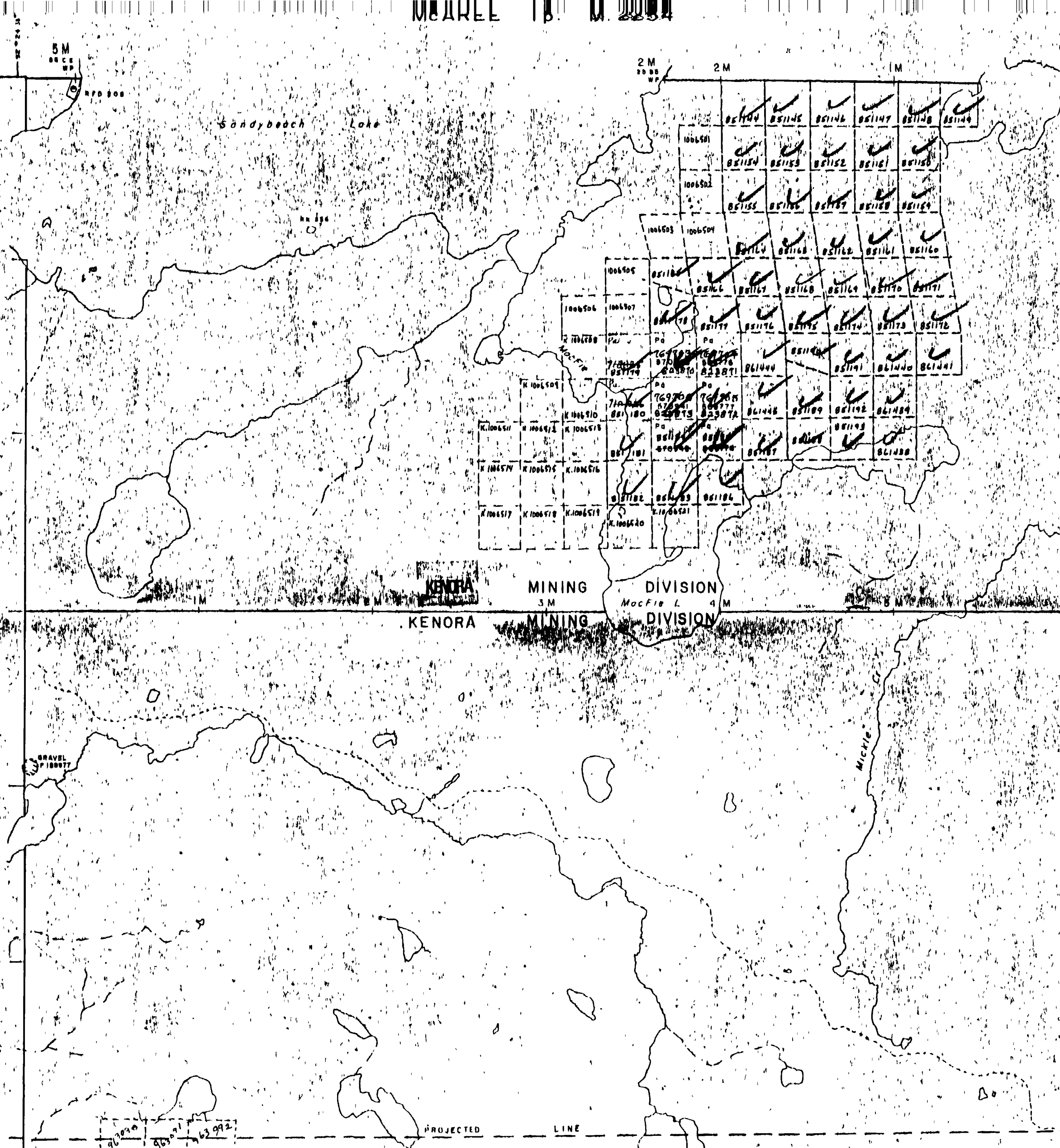
400' surface rights reservation along the shores
of all lakes and rivers.

Oct 28, 1983
Apr 24, 1984

May 1, 1984
May 8, 1985
See also

HARTMAN Tp. M. 1986

KENORA MINING DIVISION



KENORA MINING DIVISION

AVERY Tp. M. 2677

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

ORIGINAL SHORELINE

MARSH OR MUSKEG

MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT

PATENT, SURFACE & MINING RIGHTS

SURFACE RIGHTS ONLY

MINING RIGHTS ONLY

LEASE, SURFACE & MINING RIGHTS

SURFACE RIGHTS ONLY

MINING RIGHTS ONLY

LICENCE OF OCCUPATION

CROWN LAND SALE

ORDER-IN-COUNCIL

RESERVATION

CANCELLED

SAND & GRAVEL

SYMBOL

●

○

○

○

○

○

○

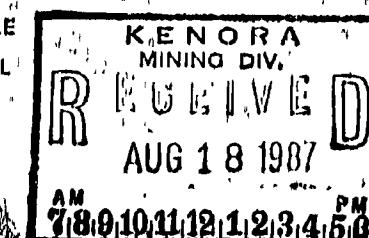
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○

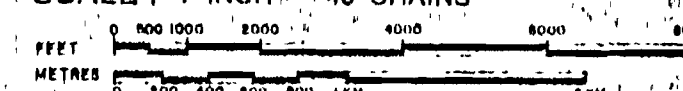
○

○

○



SCALE: 1 INCH = 40 CHAINS



ACRES

40

HECTARES

16

TOWNSHIP

MacFIE

DISTRICT

KENORA

MINING DIVISION

KENORA-



Ministry of Natural
Resources

Ontario Surveys and Mapping Branch

Date

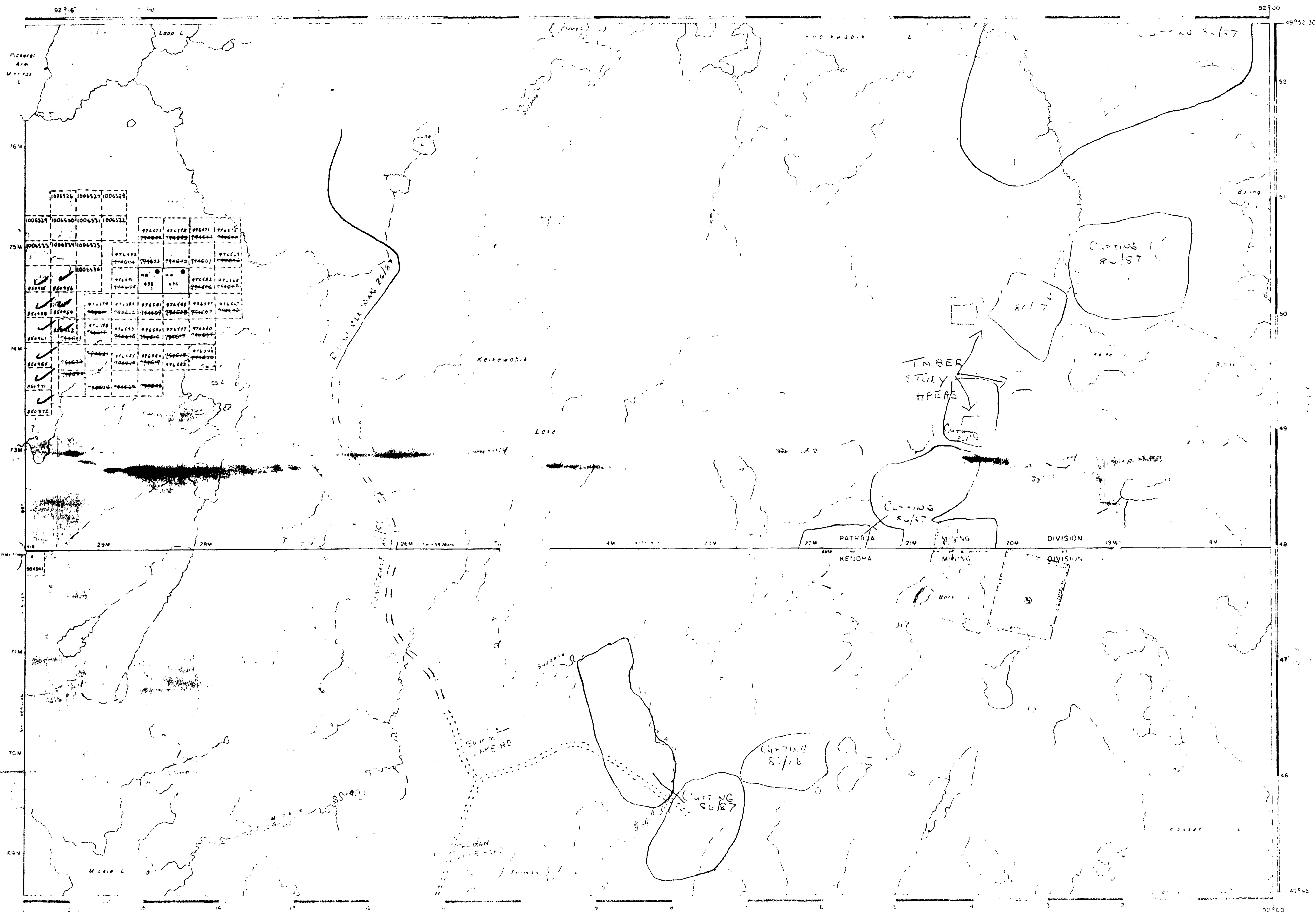
8 74

Plan No

Whitney Block
Queen's Park, Toronto

M.1945





DISPOSITION OF CROWN LAND

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 PATENT SURFACE RIGHTS ARE NOT VALID UNLESS THEY ARE REGISTERED IN THE MINING ACT REGISTRY DIVISION BY THE 1ST OF JANUARY 1987.

REFERENCES

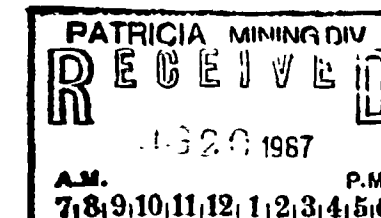
AREAS WITHDRAWN FROM DISPOSITION

DESCRIPTION	ORDER NO.	DATE	DISPOSITION	FILE
M.R.O. MINING RIGHTS ONLY				
S.R.O. SURFACE RIGHTS ONLY				
M+S MINING AND SURFACE RIGHTS				

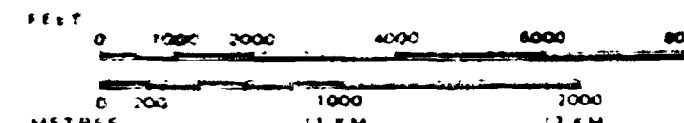
June 12, 1984

Feb 1, 1986

Aug 15/87

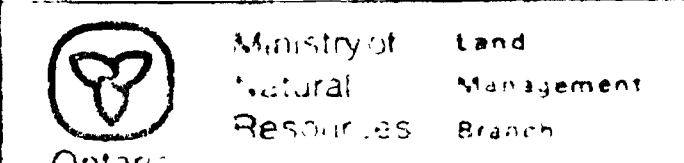


SCALE: 1 INCH = 40 CHAINS



AREA KEIKEWABII LAKE

MNR ADMINISTRATIVE DISTRICT
SIOUX LOOKOUT/IGNAC
MINING DIVISION
KENORA - PATRICIA
LAND TITLES / REGISTRY DIVISION
KENORA



Date: FEB 12, 1984

G-208

MELGUND LAKE M 2677



SUZANNE LAKE G-2562

4.0 Surface rights reservation along the shores
of lakes and rivers

ECHO Tp. M. 2236

SAND & GRAVEL

- ① QUARRY PERMIT
- ② MTC Pit N° 1200
- ③ MTC Pit N° 1112

RESERVES

AREAS WITHDRAWN FROM STAKING

SR SURFACE RIGHTS		MR MINING RIGHTS		
Section	Date	Disposition	File	Order N°
①-13(RSC 70)	16 Jan, 74	SR	125106	W1 / 74

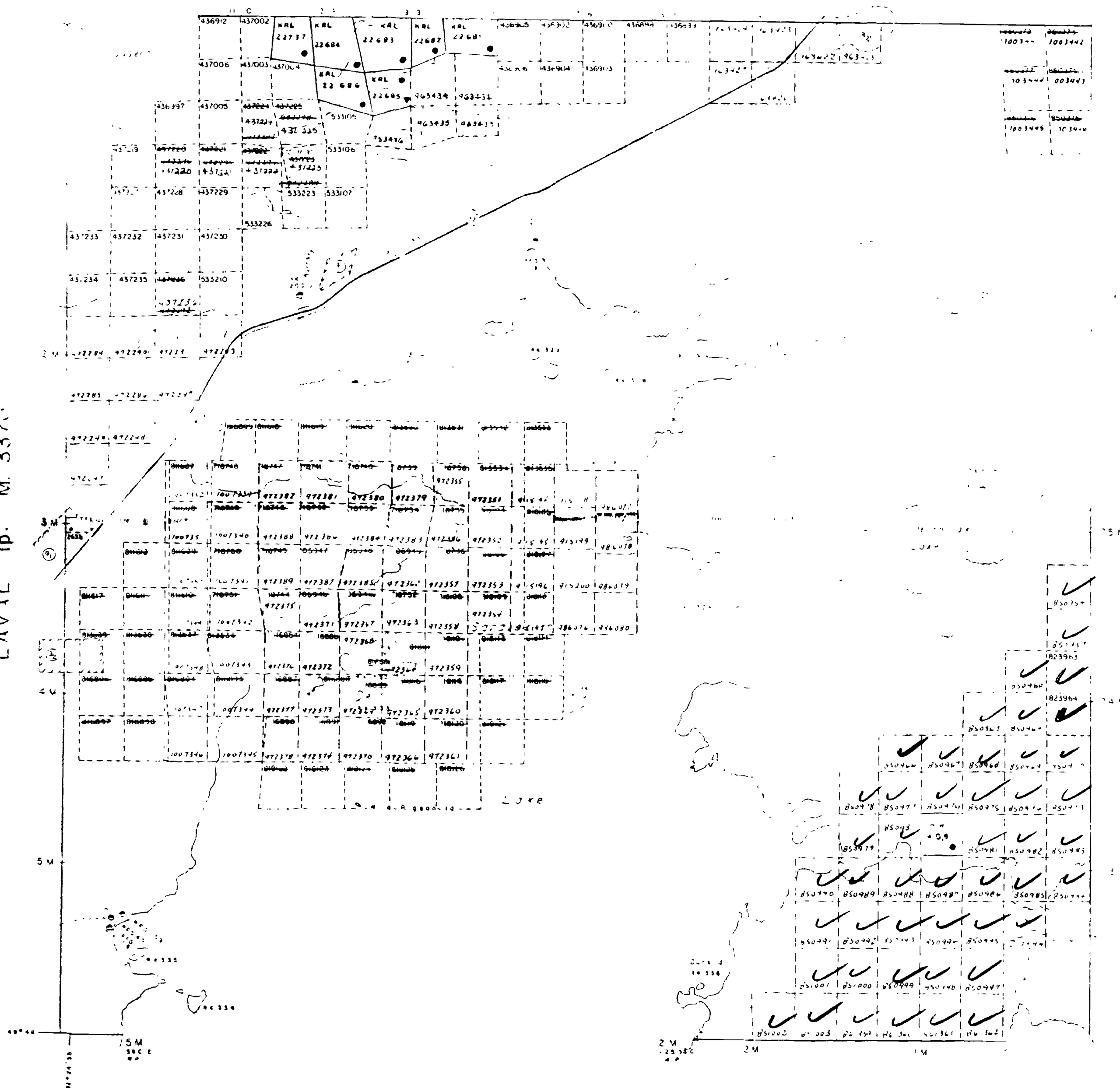
Feb 13, 1986
July 15, 1986
Jan 23, 87
Sept 11, 87
Sept 21, 87

Dec 4/86
Dec 16/86
Dec 31/86
Jan 20/87

Mar 6/87

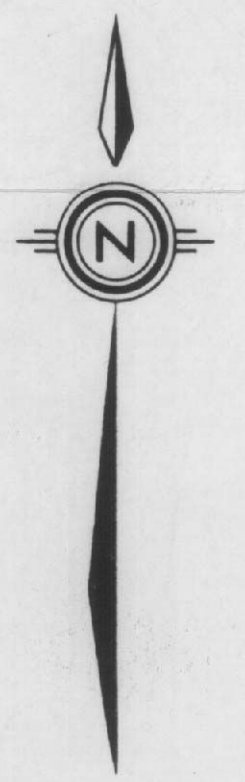
JUNE 16/87
JULY 9/87


LAV1L Tp. M. 3370





LEGEND
Terrain Clearance 100 meters
Line Spacing 100 meters
TOTAL MAGNETIC FIELD
500 gammas
100 gammas
25 gammas
5 gammas



GML MINERALS CONSULTING LTD.	
AIRBORNE MAGNETIC SURVEY TOTAL MAGNETIC FIELD	
SANDYBEACH LAKE PROPERTY	
NTS. NO. 52F/16	DRAWING NO. A-658-1
SCALE: 1:10,000	DATE: July 1987
TERRAQUEST LTD. 	
TORONTO, CANADA	

MB

2.10224

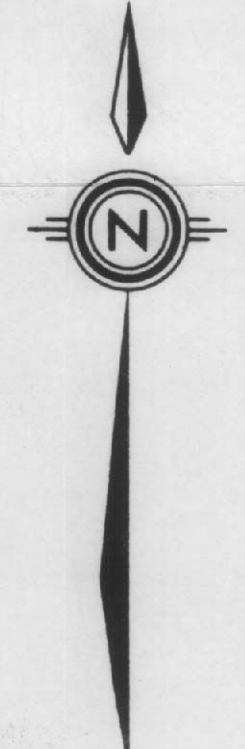



LEGEND

Terrain Clearance 100 meters
Line Spacing 100 meters

VERTICAL MAGNETIC GRADIENT

2.500 gammas/meter
.500 gammas/meter
.100 gammas/meter
.025 gammas/meter



GML MINERALS CONSULTING LTD.	
AIRBORNE MAGNETIC SURVEY VERTICAL MAGNETIC GRADIENT Calculated From Total Field	
SANDYBEACH LAKE PROPERTY	
NT.S. NO. 52F/16	DRAWING NO. A-658-2
SCALE: 1:10,000	DATE: July 1987
TERRAQUEST LTD. 	
TORONTO, CANADA	

CMB

210224





LEGEND

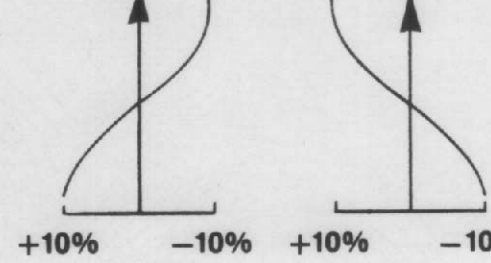
Terrain Clearance 100 meters
Line Spacing 100 meters

TOTAL FIELD STRENGTH (Contours)

50%
10%
2%

QUADRATURE (Profiles)

Normal Slope Reverse Slope



VLF Transmitter
NAA Cutler, 24.0 kHz
Azimuth 097

GML MINERALS CONSULTING LTD.

AIRBORNE VLF-EM SURVEY
CONTOURS OF TOTAL FIELD STRENGTH
PROFILES OF QUADRATURE

SANDYBEACH LAKE PROPERTY

N.T.S. NO. 52F/16 DRAWING NO. A-658-3

SCALE: 1:10,000 DATE: July 1987

TERRAQUEST LTD. 
TORONTO, CANADA

210224



