A-629

REPORT ON AN
AIRBORNE MAGNETIC AND VLF-EM SURVEY
CENTRAL PATRICIA, PICKLE CROW AND SOUTH CROW PROPERTIES
PATRICIA MINING DIVISION, ONTARIO

for

QUINTERRA RESOURCES INC.

RECEIVED
DEC 0 1987
MINING LANDS SECTION

by

TERRAQUEST LTD.
Toronto, Canada

October 17, 1986

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF MAPS IN JACKET

The survey is divided into two sheet areas hence there are two map sheets for each of the maps listed above.

1. INTRODUCTION

This report describes the specifications and results of a geophysical survey carried out for Quinterra Resources Inc. of 1275 Main Street West, North Bay, Ontario P1B 2W7 by Terraquest Ltd., 905 - 121 Richmond St. W., Toronto, Canada. The field work was performed on August 24, 1986 and the data processing, interpretation and reporting from August 25 to October 17, 1986.

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 metres 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 Ponsford, Connell and McCullagh townships, in the Patricia Mining Division of Ontario. The survey area extends from Pickle Lake eastwards beyond Pickle Crow. Highways # 808 and # 646 and numerous bush roads cross the survey area.

The latitude and longitude are 51 degrees 00 minutes, and 90 degrees 00 minutes respectively, and the N.T.S. reference is 52O/8&9.

The claim numbers are shown in figure 2.

3. GEOLOGY

Map References

1. Map 39a: Pickle Lake - Crow River Area. scale 1:63,360. O.D.M. 1930
2. Map 47b: Crow River Area. scale 1:12,000. O.D.M. 1938
3. Map 2218: Cat Lake - Pickle Lake Geological Compilation Series. scale 1:253,440. O.D.M. 1975
4. Map P.809: Achapi Lake - Misehkow River. scale 1:126,720. O.D.M. 1973
5. Map P.1009: Crow River Area. scale 1:12,000. O.D.M. 1975

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

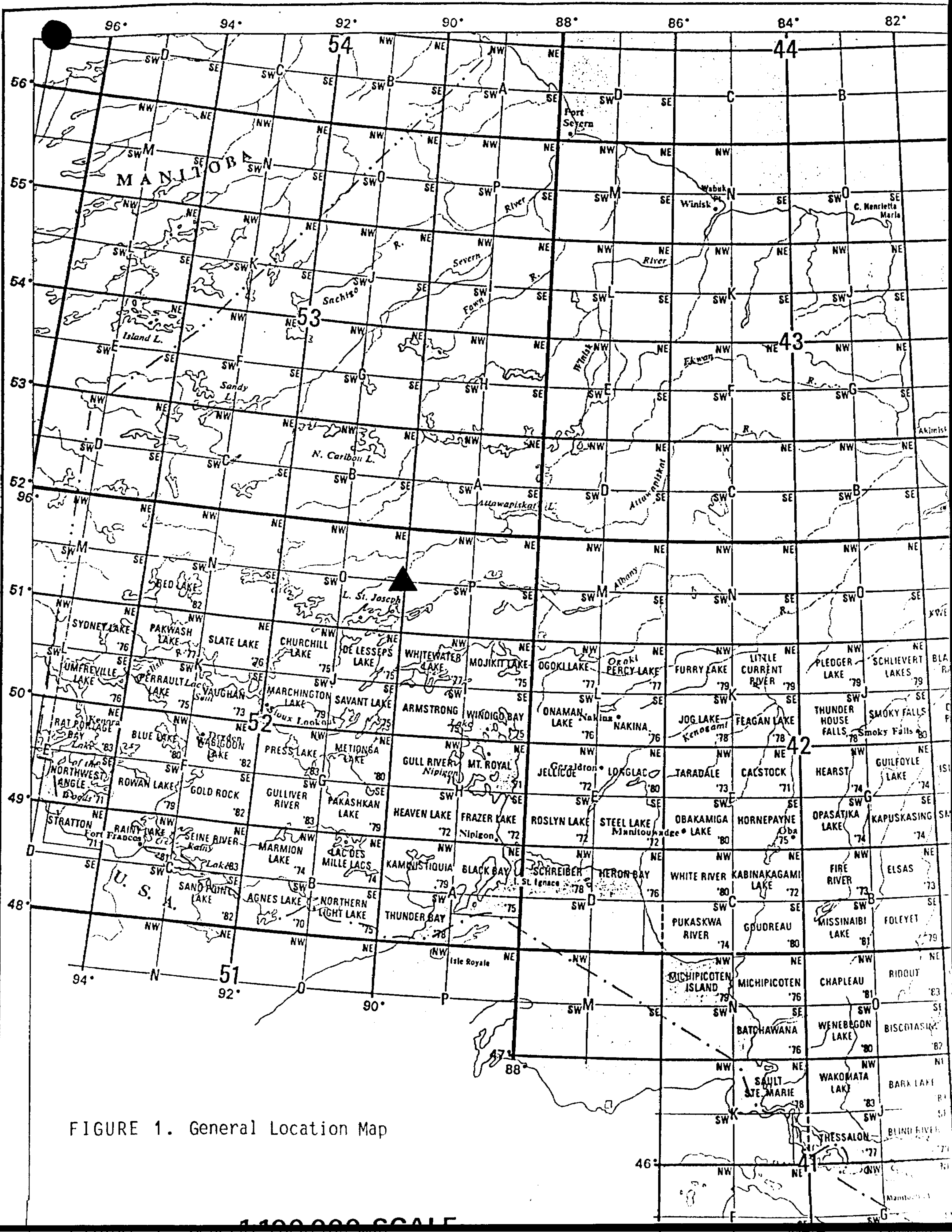


FIGURE 1. General Location Map

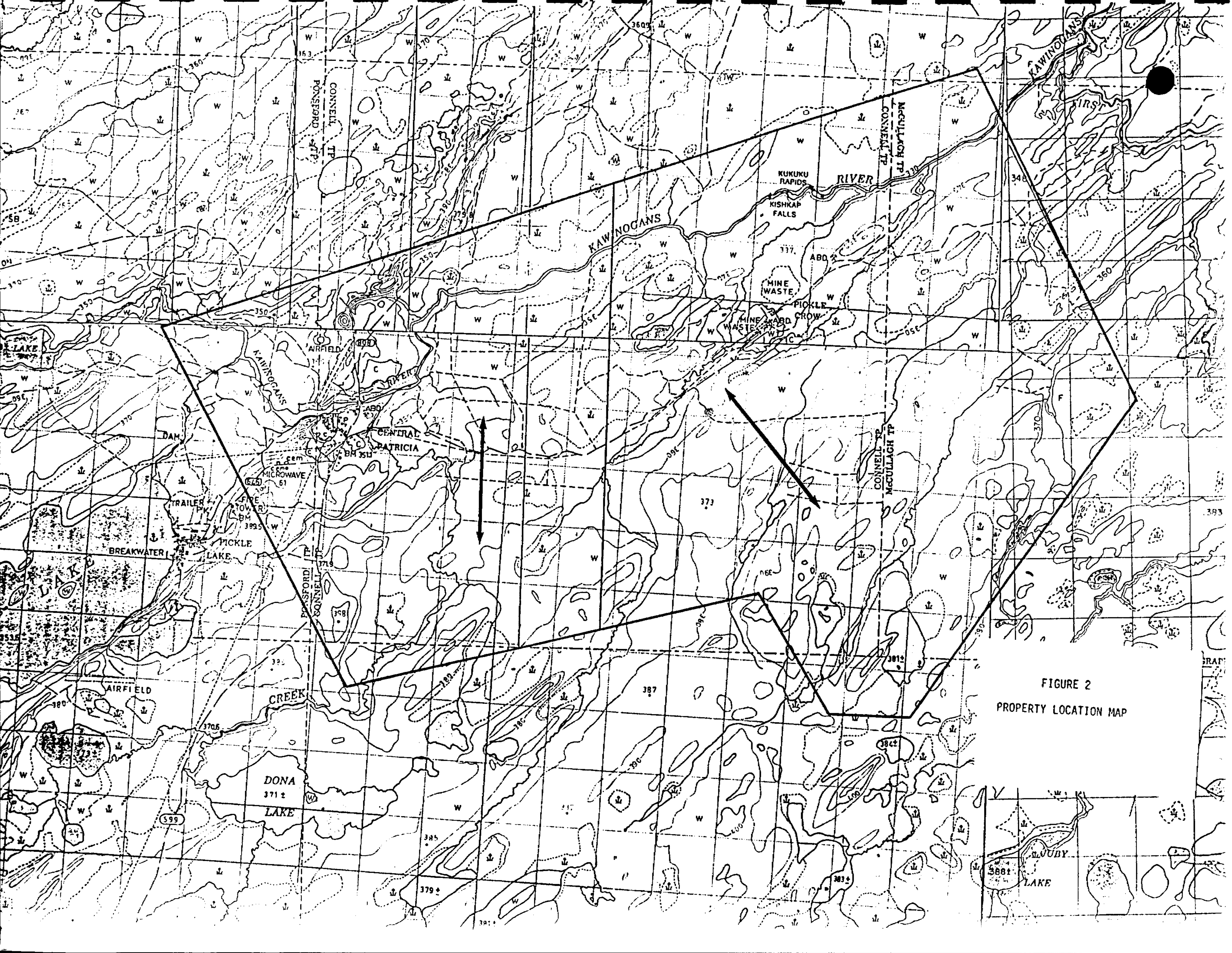


FIGURE 2

PROPERTY LOCATION MAP

The survey area is underlain by a suite of extrusive, mafic to felsic Precambrian volcanics, including both flows and fragmentals. Intercalated with these are metasediments, narrow well-defined iron formations and quartz albite porphyry. They are intruded by small gabbroic sills, quartz diorite sills and dykes, minor biotite lamprophyre and late Precambrian diabase dykes. Granitic intrusions occur to the west (Pickle Lake Stock), south (Hooker Burkoski Stock) and east. Faults trend to the northwest and northeast.

The area has numerous gold showings and has supported several operating mines. Gold occurs as fissures of composite quartz veins, stockworks in iron formation, siliceous shear zones and replacement bodies.

4. SURVEY SPECIFICATIONS

4.1 Instruments

The survey was carried out using a Cessna 182 aircraft, registration C-FAKK, which carries a magnetometer and a VLF electromagnetic detector.

The magnetometer is a proton precession type based on the Overhauser effect. The Overhauser effect allows for polarization of a proton rich liquid of the sensor by adding a "free radical" to it and irradiating it by RF magnetic field. Strong precession signals are generated with modest RF power. The sensor element is mounted in an extension of the right wing tip. It's specifications are as follows:

Resolution:	0.5 gamma
Accuracy:	0.5 gamma
Cycle time:	0.5 second
Range:	20,000 - 100,000 gammas in 23 overlapping steps
Gradient tolerance:	Up to 5000 gammas per metre
Model:	GSM-9BA
Manufacturer:	GEM Systems Inc., 105 Scarsdale Rd., Don Mills, Ontario, M3B 2R5

The VLF-EM unit uses three orthoganol 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

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

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:	360 degrees West sheet
	320 degrees East sheet
c) Terrain clearance:	100 metres
d) Average ground speed:	156 km/hr.
e) Data point interval:	
Magnetic:	27 metres
VLF-EM:	27 metres
f) Tie Line interval:	2 kilometres
g) Channel 1 (LINE):	NAA Cutler, 24.0 kHz
h) Channel 2 (ORTHO):	NSS Annapolis. 21.4 kHz
i) Line km over survey area:	Magnetic survey totals.... 1,225 line km
	VLF-EM survey totals...... 1,225 line km

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.
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 twenty 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: Approximately +/-5 gammas.

4.4 Photomosaics

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

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

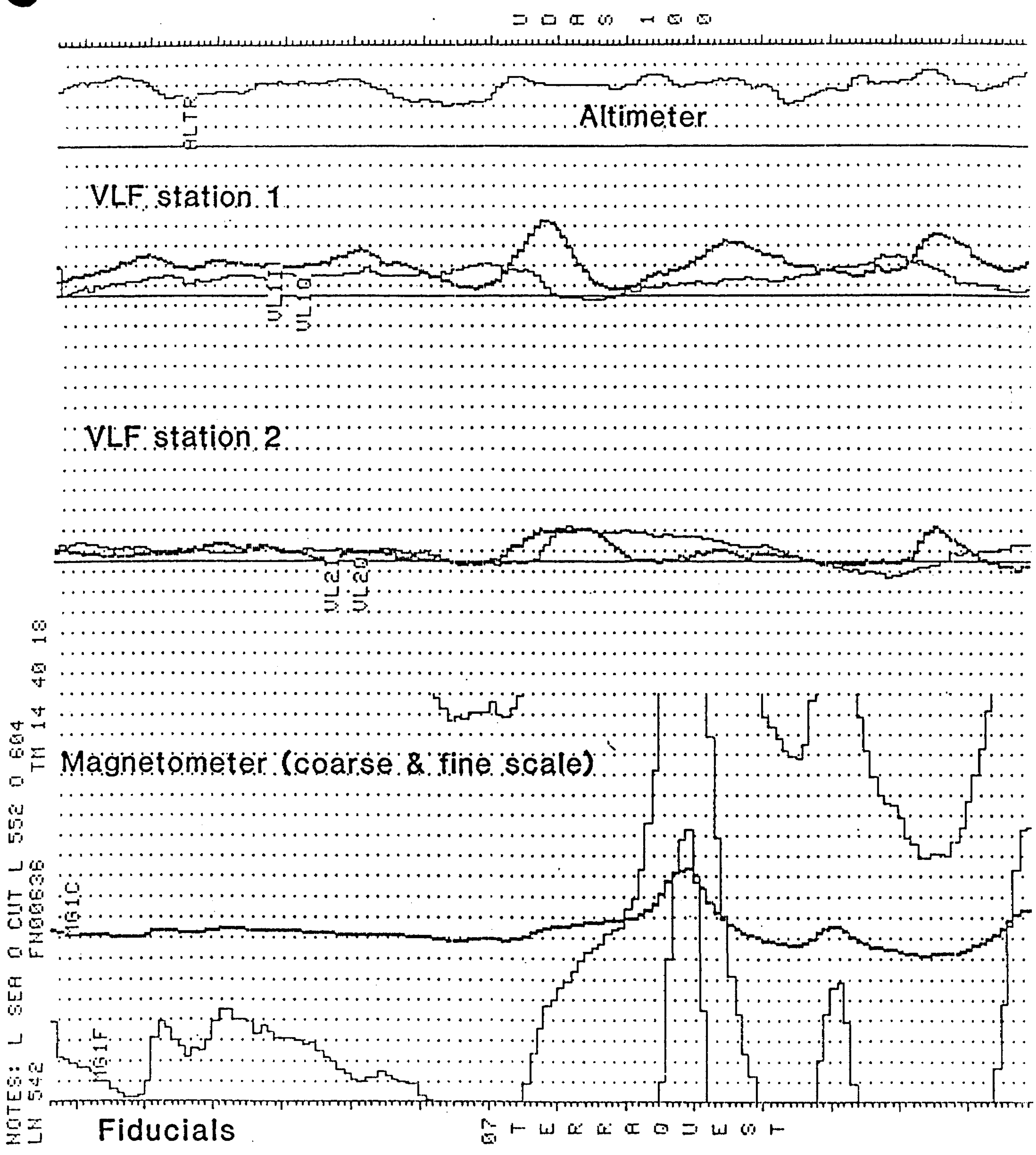


FIGURE 3. Sample of analogue data

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

TERRAQUEST LTD.

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.

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

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 Magnetics; Geophysics Vol 37-4
Spector, A., 1968: Spectral Analysis of Aeromagnetic maps; unpublished thesis; University of Toronto

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

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.

6.2 Interpretation

The total magnetic field has a very substantial relief of over 7,200 gammas. The gradients range from extremely steep down to areas of low, flat magnetic responses. The vertical derivative magnetic data shows improved resolution and has been used to delineate the stratigraphy and structure. The total magnetic field data was used to delineate the larger bodies (granites) and to establish the relative magnetic intensities of the mapped units. The following notes supplement the data and interpretation maps which represent the major objective of the survey.

The very strong magnetic anomalies correlate with the iron formations (Unit 4). Despite the data enhancement technique (calculated vertical derivative) the magnetic susceptibility of these horizons still overpower the responses from adjacent rocks and prevent the discrimination of closely spaced iron formations. The strengths of the anomalies are related to a combination of (a) concentration of magnetite and (b) the mass or total volume of the magnetic strata. Weaker anomalies mapped as iron formation are probably characterized by weaker and/or fewer horizons.

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

The diabase dyke on the western sheet has a strong magnetic response. The magnetically mapped width may be prone to exaggeration.

Exposures of biotite granite (Unit 7) correlate with very weak and uniform magnetic responses. The contacts are best defined by the total magnetic field data. The magnetic pattern is characterized by widely spaced contours representing the magnetic residual decreasing away from the volcanics. The total field low that extends northwest from the Hooker Burkoski Stock is interpreted to be an extension of the intrusive beneath the volcanic strata.

The extrusive volcanics (Unit 1), fragmental volcanics (Unit 2), metasediments (Unit 3), gabbro (Unit 5) and quartz albite porphyry (Unit 6) all possess similar magnetic responses at this scale. In some cases, such as with the gabbro, there may not be sufficient rock volume to influence the total magnetic response.

Some of the volcanic strata possess slightly higher magnetic responses (Units 1m and 2m). These are probably related to increased concentrations of magnetic minerals (such as magnetite or pyrrhotite) or to more mafic horizons. The broad horizon of Unit 2m that crosses the eastern map sheet may, in part, be related to lean or thin iron formation.

Interpreted faults trend to the northeast, northwest and rarely to the north-northeast. Faults parallel to magnetic stata are difficult to detect. The interpreted faults correlate well with the geologically mapped faults.

Numerous 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.

The swampy and low areas within this survey area are characterized by conductive overburden and may mask possible bedrock conductors. The interpreted conductive faults may possess conductive minerals (such as gouge, graphite or sulphides), porosity or conductive overburden. Faults interpreted from magnetic or VLF-EM data may provide primary structural control for epithermal mineralization.

Those conductor axes that coincide with or parallel magnetic strata possess potential for bedrock sources, either as mineralogic or electrolytic (porosity) origins. Those that have not already been ground tested should be followed up by EM or IP techniquies.

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

TERRAQUEST LTD.

FIGURE 4

TERRAQUEST CLASSIFICATION OF VLF-EM CONDUCTOR AXES

SYMBOL	CORRELATION	ASSOCIATION: Possible Origins
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

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1. Telephone (416) 869-0010

7. SUMMARY

An airborne combined magnetic and VLF-EM survey has been done on the property at line intervals of 100 metres. The total field and vertical gradient magnetic data, VLF-EM data and interpretation maps are produced at a scale of 1:10,000.

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

TERRAQUEST LTD.

Charles Q. Barrie, M.Sc.
Geologist

Suite 905, 121 Richmond Street West, Toronto, Canada, M5H 2K1, Telephone (416) 869-0010

Ministry of Northern Development and Mines
Ontario

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

52009SE9335 2.10626 TARP LAKE

900

MINING LANDS W8703-217

Type of Survey(s): Airborne Geophysical Survey	Township or Area: Weiberg Lake (G-2248) Dona Lake Area (G-2007)
Claim Holder(s): Pure Gold Resources Inc	Prospector's Licence No.: T-4689
Address: 1275 Main St W North Bay, Ontario P1B2W7	
Survey Company: Terraquest Ltd	Date of Survey (from & to): 24 Day 08 Mo. 86 Yr. – 24 Day 08 Mo. 86 Yr.
Total Miles of line Cut: 90 km	
Name and Address of Author (of Geo-Technical report): 905-121 Richmond St. W Toronto Ont.	

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	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

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

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	40
	Magnetometer	40
	Radiometric	

RECEIVED NOV 25 1987 PATRICIA MINING DIVISION

ONTARIO GEOLOGICAL SURVEY DEC 17 1987 RECEIVED

RECEIVED DEC 4 1987 MINING LANDS SECTION

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.

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
Pa	864922			865086	
	864923			865087	
	864924			865088	
	864925			865089	
	864926			865090	
	864927			865091	
	864928			865092	
	865059			865093	
	865060			865094	
	865061			865095	
	865062			865096	
	865063			865109	
	865064			865110	
	865066			865111	
	865067			865112	
	865068			865113	
	865069			865114	
	865070			865115	
	865071			865116	
	865072			865117	
	865073			865118	
	865084			865119	
	865085			865120	

Pa. 864922

Total number of mining claims covered by this report of work: 59

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1873	Nov. 25, 1987	[signature]
	Date Approved as Recorded: 14 Dec 87	Branch Director: [signature]

Date	Recorded Holder or Agent (Signature)
Nov 23, 1987	[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: Noramco Explorations Inc 1275 Main St W North Bay Ont

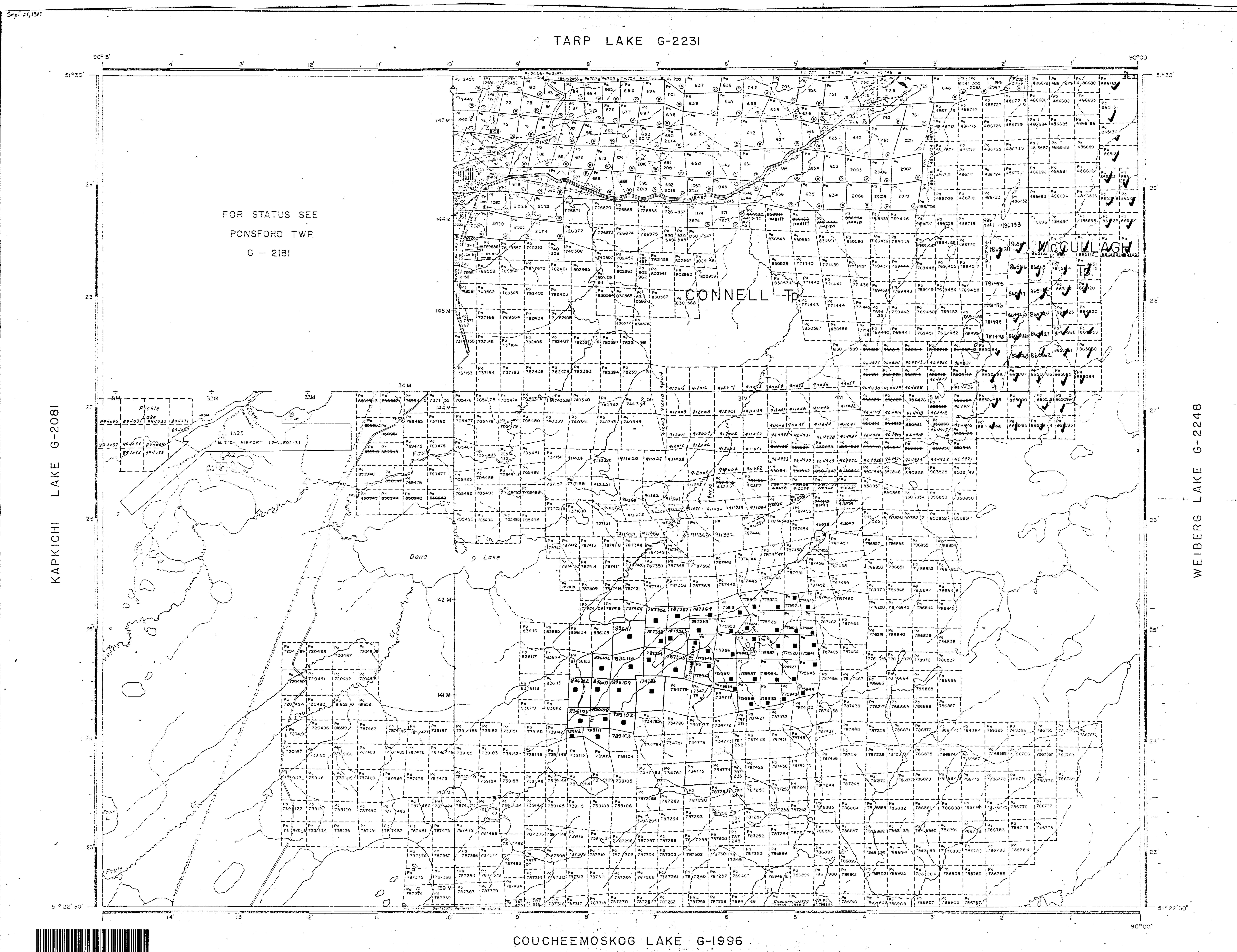
Date Certified	Certified by (Signature)
Nov 23, 1987	Michelle Dubeau

1362 (85/12)

SOUTH CROW PROPERTY

CLAIM NUMBER

Pa 865121
Pa 865122
Pa 865123
Pa 865124
Pa 865125
Pa 865126
Pa 865127
Pa 865128
Pa 865129
Pa 865130
Pa 865131
Pa 865132
Pa 865133



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.

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

Jan 29/87
Jan 30/87
Feb 19/87
Feb 20/87
Mar 13/87

R-2 Sec. 31(b) M+S WITHDRAWN - ANTENNA SITE

Names of Towns in this area shown thus ( )

(1) Pickle Lake
(2) Central Patricia
(3) Pickle Crow

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 (1 KM) 2000 (2 KM)

AREA

DONA LAKE

M.N.R. ADMINISTRATIVE DISTRICT

SIOUX LOOKOUT

MINING DIVISION

PATRICIA

LAND TITLES / REGISTRY DIVISION

KENORA (PATRICIA PORTION)

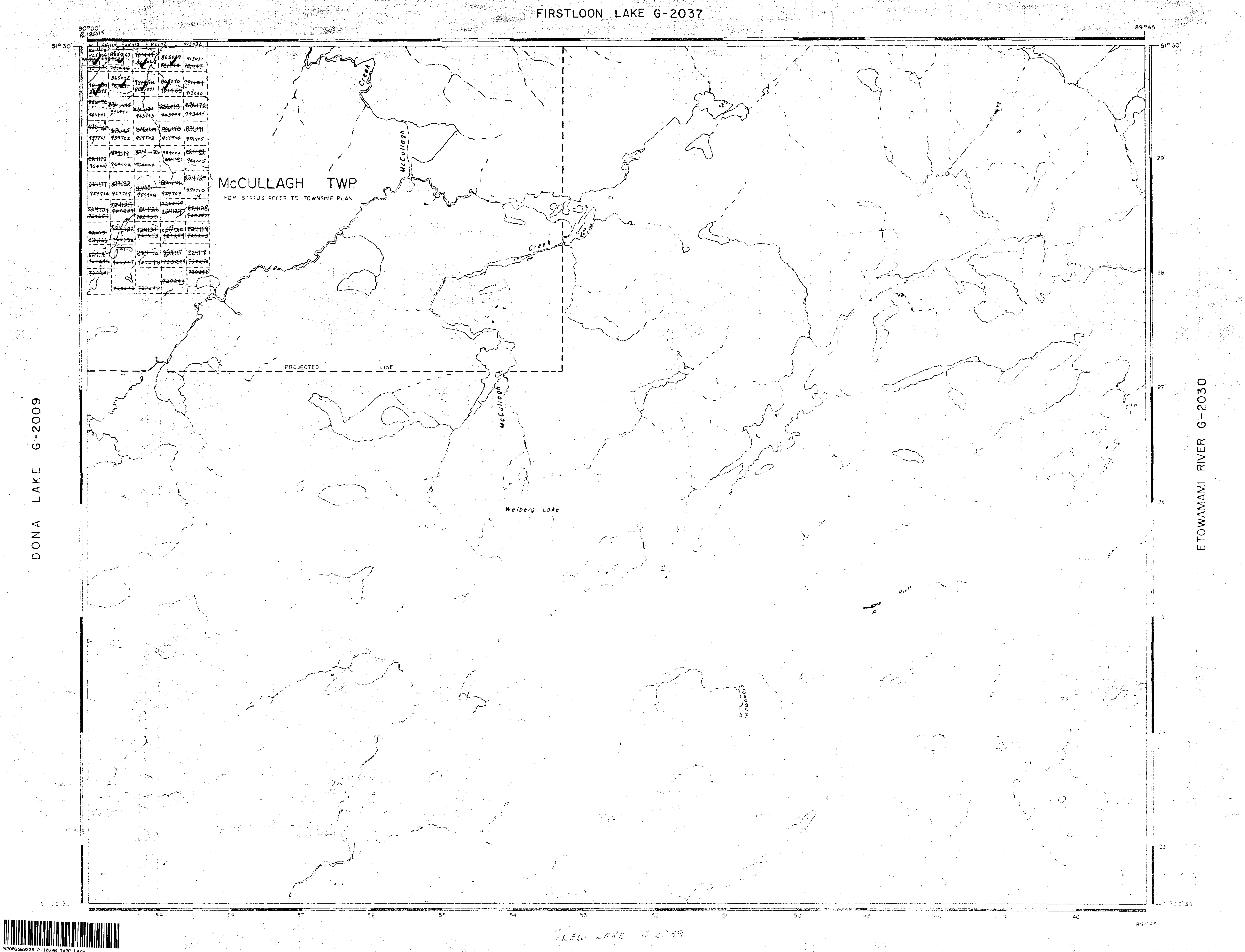
Ministry of Natural Resources
Ontario
Land Management Branch

Date FEBRUARY 1984

Number

G-2009

52O09SE9335 2.10626 TARP LAKE



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

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
	May 9, 1984			
	May 24, 1985			
	Jan 29/86			
	Mar. 17/86			
	Jan. 12/87			
	Mar. 23/87			

PATRICIA MINING DIV.
RECEIVED
MAR 30 1987
A.M. P.M.
7,8,9,10,11,12,1,2,3,4,5,6

SCALE 1 INCH – 40 CHAINS

AREA

WEIBERG LAKE

M.N.R. ADMINISTRATIVE DISTRICT

SIOUX LOOKOUT

MINING DIVISION

PATRICIA

LAND TITLES / REGISTRY DIVISION

KENORA (PATRICIA PORTION)

Ontario
Ministry of Natural Resources
Land Management Branch

Date FEBUARY, 1984

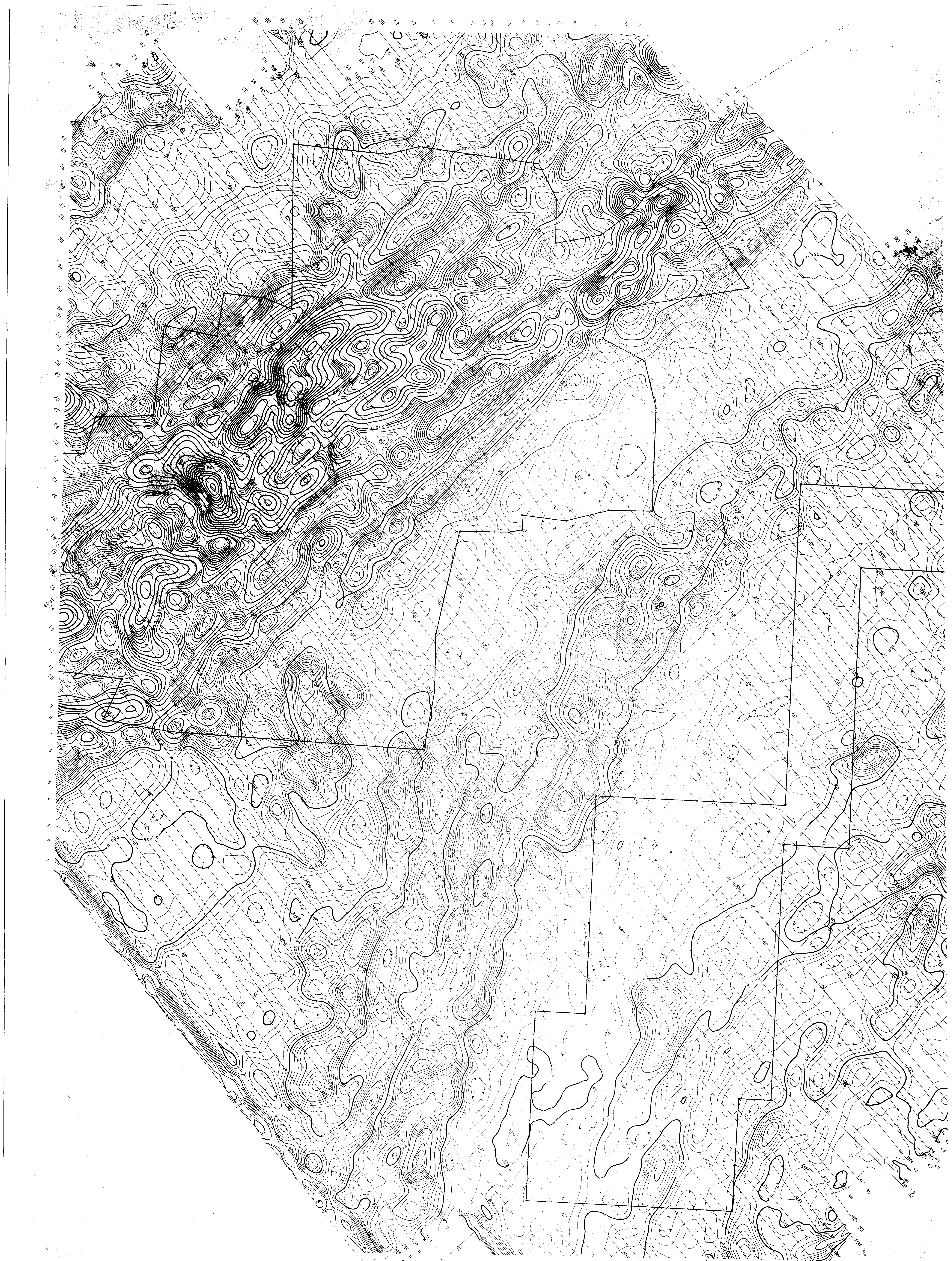
Number G-2248

52089SE9335 2.10628 TARP LAKE

210


f
b
f
4 ?
b (f)
a (f)
a (f)
OB
1,5,6
1,2
a (cul)
ob
OB
A+OB
4,6
f
f
a (cul)
OB
a (f)
a
a (f)
F
F
1,2
b (ob)
ob
CUL (F)
2m,4?
1,6
4,5
cul
a (ob)
A (OB)
b (f)
a (f)
f (a)
ob
ob (a)
B (OB)
ob
a (ob)
f
b (ob)
a (ob)
2m ?
b (ob)
ob
ob
OB

230



240

LITHOLOGY

11	Diabase
7	Biotite Granite
9	Quartz Albite Porphyry
5	Gabbro
4	Iron Formation
3	Metasediments
2m	Magnetic Unit within 2
2	Fragmental Volcanics
1m	Magnetic Unit within 1
1	Extrusive Volcanics

LEGEND

INTERPRETATION

- Contact
- Fault
- Property Boundary

VLF-EM Conductor Axes

- normal quadrature
- reverse quadrature
- total field only

Terrain Clearance .... 100 meters
Line Spacing .... 100 meters

See text for classification of VLF-EM conductor axes

N

NAA Cutler 24.0 kHz
Azimuth 106

QUINTERRA RESOURCES INC.

INTERPRETATION

SOUTH CROW &
PICKLE CROW PROPERTY

N.T.S. NO.	52O/8,9	DRAWING NO.	A-629-4 East
SCALE:	1:10,000	DATE:	October 1986

TERRAQUEST LTD.
TORONTO, CANADA

LEGEND

Terrain Clearance	100 meters
Line Spacing	100 meters
1000 gammas	
250 gammas	
50 gammas	
10 gammas	

QUINTERRA RESOURCES INC.

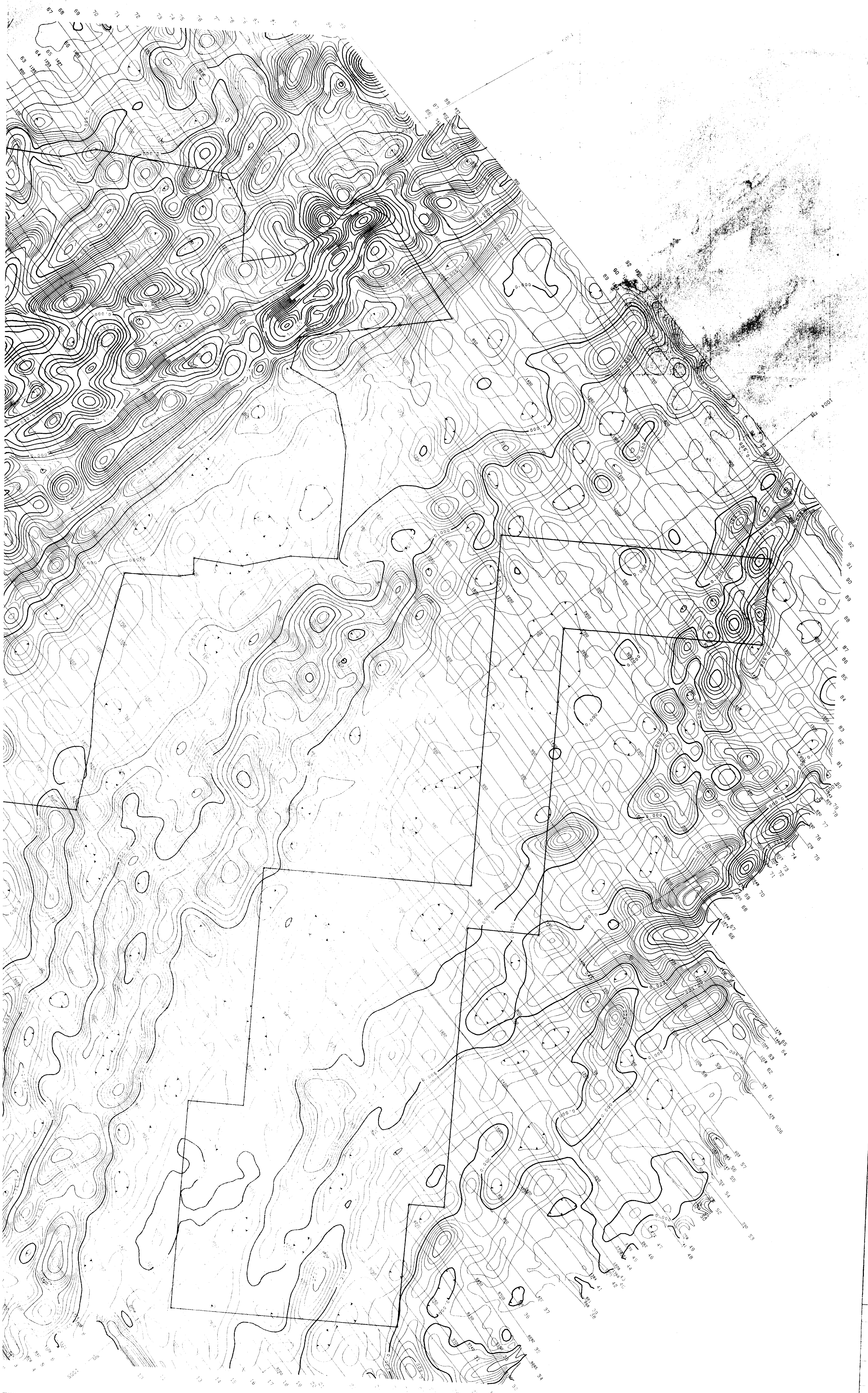
AIRBORNE MAGNETIC SURVEY
TOTAL MAGNETIC FIELD

2.10626

SOUTH CROW &
PICKLE CROW PROPERTY

NTS NO	520/8,9	DRAWING NO	A-629-1 East
SCALE	1:10,000	DATE	October 1986

TERRAQUEST LTD.
TORONTO CANADA



LEGEND

Terrain Clearance	100 meters
Line Spacing	100 meters

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

QUINTERRA RESOURCES INC.

AIRBORNE MAGNETIC SURVEY
VERTICAL MAGNETIC GRADIENT
Calculated From Total Field

SOUTH CROW &
PICKLE CROW PROPERTY

LEGEND

Terrain Clearance	100 meters
Line Spacing	100 meters

Field Strength

50%

10%

2%

QUADRATURE

Normal Slope — Reverse Slope

-10% +10% -10% +10%

NAA Cutler 24.0 kHz

Azimuth 106

QUINTERRA RESOURCES INC.

AIRBORNE VLF-EM SURVEY

CONTOURS OF TOTAL FIELD STRENGTH

PROFILES OF QUADRATURE

2.10626

SOUTH CROW &

PICKLE CROW PROPERTY