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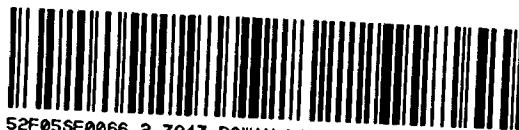
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REPORT
ON AN
AIRBORNE GEOPHYSICAL SURVEY
OF THE
ISINGLASS LAKE PROPERTY
KENORA MINING DIVISION
ONTARIO
NTS 52F/5

RECEIVED
APR 01 1985
MINING LANDS SECTION

JENS E. HANSEN, P.Eng.

March 28, 1985



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1. INTRODUCTION

The present mineral exploration project was carried out over 35 claims north of Isinglass Lake in the Cameron Lake - Rowan Lake area of Northwestern Ontario. Interest in this area was sparked by Nuinsco Resources Ltd. announcing an apparently significant gold discovery at Cameron Lake - Beggs Lake.

The subject claim group was staked in 1983 following opening up for staking of an area where the Surface and Mining Rights had been withdrawn from staking according to Section 36 of the Mining Act.

The claims cover a gold occurrence which is called the Roseman-Thompson occurrence in the OGS documentation. Additionally minor prospecting and sampling was carried out in 1983-84, 5 samples were taken, four of which were anomalously mineralized in gold.

Terraquest Ltd. of Toronto conducted an airborne geophysical (VLF, magnetics) survey over the 35 claims in December 1984 and the results of this survey are the subject of the present report.

2. LOCATION AND ACCESS

The property is located on the north shore of Isinglass Lake between Isinglass Lake and Caviar Lake. An access road is apparently being constructed to the Nuinsco Cameron Lake gold deposit which is 7 kilometres south of the claims. The writer is not at present aware of the route that this road will take.

At present the most convenient access is by float equipped aircraft from Nestor Falls, which is 30 kilometres to the southwest. Alternatively, they can be reached by float equipped aircraft from Kenora, 70 kilometres to the northwest or Dryden 70 kilometres to the northeast. It is believed that the group can also be reached by outboard motorboat from Sioux Narrows using Dogpaw Lake and Caviar Lake.

The Nuinsco Cameron-Beggs Lake deposit is 7 kilometres south and the Nuinsco Monte-Cristo property is 9 kilometres southeast from the Isinglass claim group.

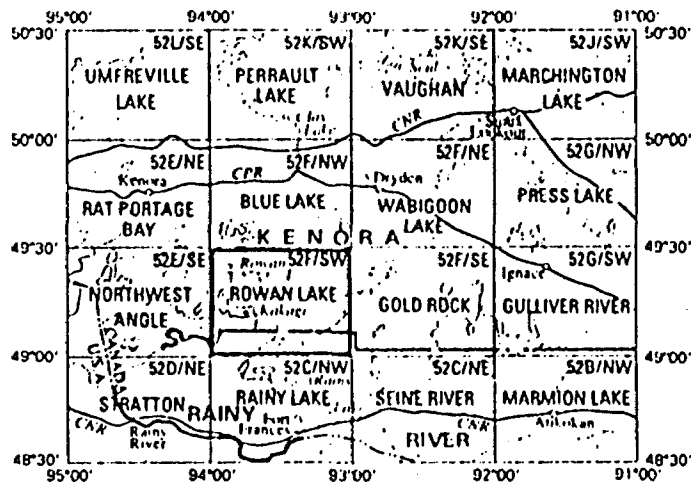
In the event that either of these are put into production, the availability of transport, personnel and services will be significantly enhanced. The recent announcement of a joint venture between Nuinsco and Echo Bay Mines Limited would appear to increase the possibility of bringing one of the deposits to production.

The 35 claims are held in the name of the writer, Jens E. Hansen, Prospector's Licence A45202.

N.T.S. 52F/SW

ROWAN LAKE

PROVINCIAL SERIES



LOCATION MAP

FIGURE 1

3. GOLD DEPOSITS IN THIS ENVIRONMENT

The primary reason for renewed interest in the gold potential of the Kakagi-Cameron-Rowan Lakes area is the discoveries by Nuinsco. The Cameron-Beggs Lake deposit is at present estimated to contain approximately 1.5 million tons grading 0.14 oz/ton gold and the Monte Cristo deposit is estimated to contain approximately 450,000 tons in two zones averaging 0.17 oz/ton gold.

Gold mineralization at these deposits is localized within a large shear zone of pervasive alteration within a discordant shear zone in fine grained massive to pillowed basaltic volcanics. The alteration envelope hosting the gold mineralization is characterized by bleaching due to sericitization of chlorite by widespread introduction of carbonate and, in the vicinity of the ore, by silicification marked by multistage quartz veining.

The main zone at Beggs Lake consists of quartz carbonate stockworks and discrete veins in sheared, sericitized, carbonatized, pyritic host basalt. Gold occurs in economic concentrations in association with 2-5% fine grained, disseminated pyrite.

In a general sense, there appears to be an association between the alteration zones and the gabbro-basalts contact. The overriding control to mineralization appears to be structural.

Magnetics has been applied at Cameron-Beggs Lake as has I.P. and resistivity. Magnetics were useful in defining stratigraphic trends and in pinning down the extent of gabbroic rocks but did not readily outline alteration or

mineralization until applied at a detail scale (100 x 25 foot grid) where a weak low coincided with the alteration.

I.P. was generally not definitive although resistivities of less than 100 ohm-metres in a background of 350 to 400 ohm-metres were observed. Such a contrast should be detectable by VLF techniques.

Gold occurrences in the Kakagi-Cameron-Rowan Lakes area are shown on FIGURE 2.

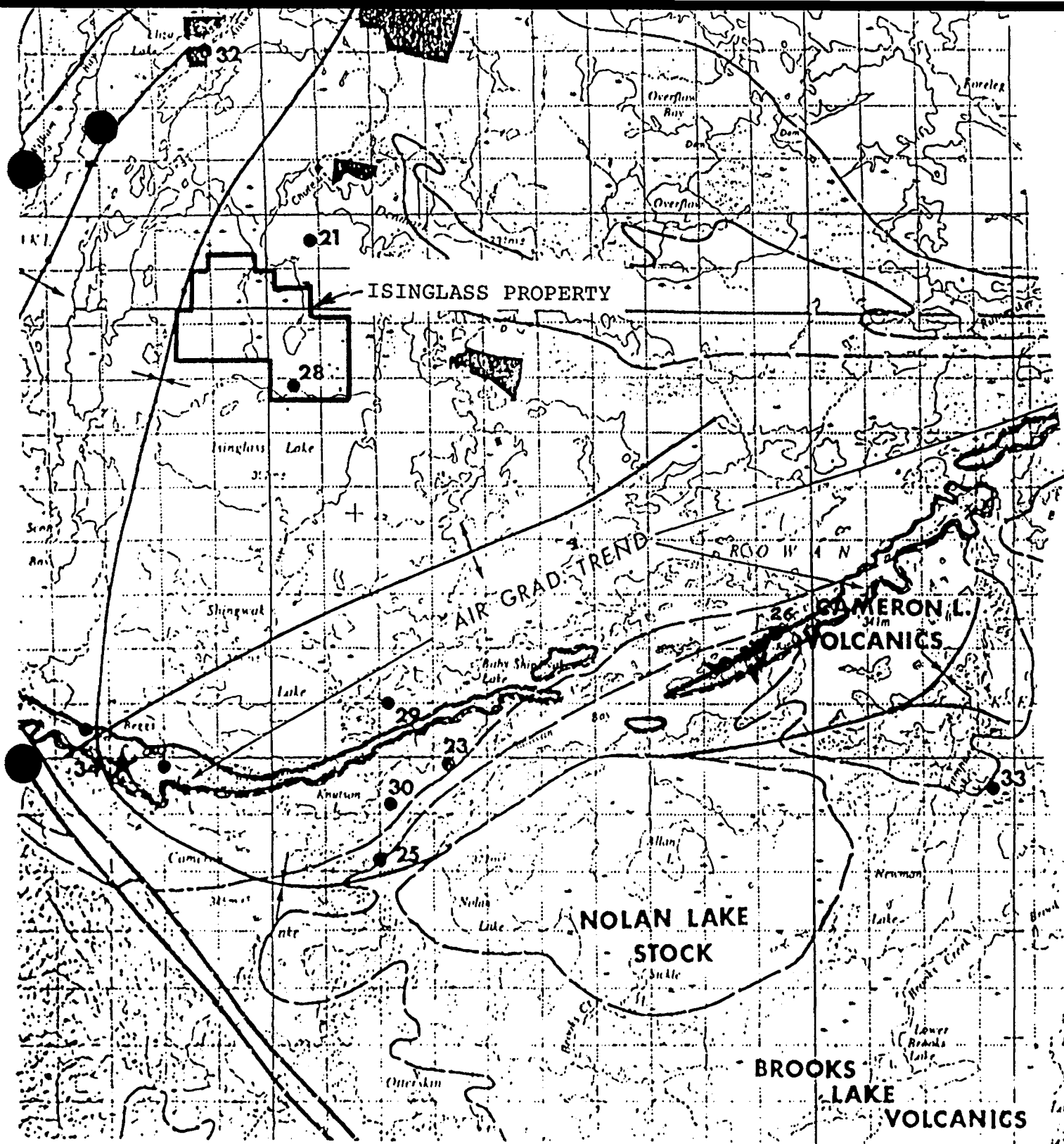


FIGURE 2

scale 1:100,000

GOLD OCCURRENCES IN THE CAMERON-ROWAN LAKE AREA

- | | | | |
|----|--------------------------------|----|------------------------------|
| 21 | Caviar Lake Occurrence | 29 | Roy Shingwak Lake Prospect |
| 23 | Kuryliew-Sullivan Bay Prospect | 30 | Sullivan Occurrences |
| 25 | Meston Occurrence | 32 | Virginia or Lizzie Mine. Au. |
| 26 | Monte Cristo Deposit | 33 | Wampum Lake |
| 28 | Roseman-Thompson Deposit | 34 | Nuinsco Cameron-Beggs Lake |

4. GEOLOGY AND PREVIOUS WORK ON THE CLAIMS

L. Kaye of the Ontario Geological Survey mapped the Rowan Lake Area, covering the present claim group, in 1973. The mapping was published within the OGS Geological Series, Preliminary Map P811.

The southern part of the claims is shown to be underlain by mafic intrusive rocks, primarily gabbro and minor pyroxinite. These rocks have intruded a mafic to intermediate volcanic sequence consisting of massive basalt and recrystallized, dense, brittle lavas. Small felsic intrusives have been mapped near the southern boundary close to the Roseman-Thompson gold occurrence. Isolated felsic intrusives are noted elsewhere on the claims.

Copper and nickel occurrences associated with an ultramafic intrusive metavolcanic complex on the northern shore of Isinglass Lake were examined by Dome Exploration in 1955. Most of this work was immediately south of the present claims. The same area was again investigated by Canadian Nickel Company in 1971. The mineralization was typically 1% combined copper-nickel.

The area has been covered by airborne surveys on several occasions although the survey data does not appear to be in the assessment files.

Map P811 shows a number of mineral occurrences on the property including chalcopyrite, malachite, sulphides, rusty schist, epidote and nickel. A gold occurrence known as the Roseman-Thompson occurrence is located on the north shore of Isinglass Lake in the southern portion of the claims. It consists of

narrow quartz veins in sheared mafic volcanics (NW trending) and ultramafic sills that are reported to have yielded assays of 0.09 oz/ton gold. Two pits were dug on the occurrence. There appears to be some similarity between the Cameron-Beggs Lake occurrence and the Roseman-Thompson occurrence.

The Geological Survey of Canada covered the Rowan Lake area with a magnetometer-gradiometer survey which was open filed (OFR 879) in 1982. The specific objective of the survey was to isolate granitic plutons and establish if there were fracturing within them to determine if these plutons might be suitable containment sites for nuclear waste disposal. The vertical gradiometer is a relatively new airborne geophysical technique which is extremely effective at mapping near surface structure and geology. It has provided a regional geological picture of the area.

5. GEOLOGICAL SAMPLING

Several rock samples were gathered by Geotest personnel during August 1983. Additionally, the area was visited by Eldor Resources in 1984 as part of a regional reconnaissance and one rock sample from their work was analyzed.

The sample locations are shown on the accompanying interpretation map. The sample descriptions and gold analysis are as follows:

<u>SAMPLE</u>	<u>DESCRIPTION</u>	<u>GOLD</u>
#1A	Fine grained hornblende meta-andesite Trace quartz eyes. Pyrite is concentrated on joint surfaces.	0.014 oz/t Au (480 ppb)
#1B	3" quartz stringer with trace disseminated pyrite with sheared silicified walls. Contains 3-5% pyrite with epidote present on late fractures	0.017 oz/t Au (580 ppb)
#2	Quartz rich altered hornblende (chlorite ?) granite with considerable calcite, contains 5% disseminated pyrite, one bleb chalcopyrite.	0.021 oz/t Au (720 ppb)
#3	Very fine grained dark green meta-andesite with coarse grained blebs of pyrite as well as pyritic joints.	0.005 oz/t Au
#133	Sampled by Eldor. August 1984. The sample is located near a contact between gabbro and mafic metavolcanics. The rocks are sheared and contain 3-5% pyrite with minor pyrrhotite.	

Analysis by Bondar-Clegg - Sample #133

Au ppb	Ag ppm	Cu ppm	Ni ppm	Pb ppm	Zn ppm
2450	0.4	240	8	8	25

Re-analysis for Rare Elements. Sample #133

Au ppb	Pt ppb	Pd ppb	Ir ppb	Os ppb	Re ppb	Rh ppb	Ru ppb
1800	«1000	«35	«0.5	«3	«5	«1	«25

6. GEOPHYSICAL SURVEY EQUIPMENT AND PROCEDURES

The airborne geophysical survey was flown and compiled in late 1984 by Terraquest Ltd. of Toronto, Ontario. The maps were subsequently completed and interpreted by Geotest Corporation of Nepean, Ontario.

A total of 50 line kilometres were flown over the 35 claims using Terraquest's Cessna 182 at a nominal flight line spacing of 100 metres and flying at a ground clearance of 100 metres. Flying speed was a nominal 150 kilometres per hour which provides a datapoint at intervals of about 42 metres.

Navigation was by visual means using a photomosaic prepared from Ontario Ministry of Natural Resources 1:15,840 scale photography. The flight path was recovered from video cassette tape using a Geotech Datacam Video Flight Recorder System. The VHS video tape was compared to the airphoto mosaic and recognizable common points were picked. The data is presented on a photomosaic base at a scale of 1:10,000.

The magnetometer used for the survey was a Geometrics 803 magnetometer with a one gamma accuracy and a one second recording interval. The magnetic data is presented as contours of the total field and as contours of the calculated vertical gradient.

The VLF instrument was a Totem 2A manufactured by Herz Industries Ltd. of Toronto. Two VLF transmitting stations were used namely Annapolis Maryland transmitting at 21.4 kHz and Cutler Maine transmitting at 24.0 kHz. The data from Annapolis was presented on the accompanying map of VLF total field contours and quadrature profiles.

A UDAS-100 data processing unit with nine track tape recorder was used for data gathering and storage.

7. INTERPRETATION OF GEOPHYSICAL DATA

In a regional sense, the GSC vertical gradiometer map is of interest. Plotting the significant gold deposits in the region on this map it is apparent that the hosting gabbros are clearly mapped as are many significant crosscutting shear zones.

The horizons that contain the two Nuinsco deposits are clearly shown.

At Isinglass Lake a rather unique circular feature is evident with a magnetic low measuring approximately 3 kilometres by 1 1/2 kilometres directly under the lake. This low is surrounded by a ring of strong anomalies which according to the geological mapping is caused by gabbros. It appears that a mafic intrusion with a felsic core is present. This intrusion should be considered as a possible source for gold mineralization in the area.

FIGURE 3 represents a photostated copy of a portion of the gradiometer map. The original was coloured with dark shades representing high gradiometer values which are generally caused by gabbros.

The geophysical data gathered by Terraquest is presented on accompanying MAPS 1, 2 and 3 with the interpretation shown on MAP 4. The magnetic interpretation is based primarily on the calculated vertical gradient data.

From the magnetics, two separate domains are apparent. UNIT 1 appearing on the map is interpreted to be caused by mafic to intermediate metamorphic rocks and UNIT 3 is interpreted

to be caused by mafic intrusive rocks. The mafic intrusives are cut by a series of faults or shears which show a strong northwesterly orientation (approximately 120° Az).

Considering that sheared gabbro is the host of gold mineralization at the Nuinsco deposits, it would appear that the prime exploration targets within the claims would be where the faults intersect mafic intrusives. The mapped location of the Roseman-Thompson occurrence and sample locations 1A and 1B appear to be in such an environment. Sample 2 (720 ppb Au) is also close to an interpreted fault-gabbro contact. The Copper-Nickel drilled by Dome and Canadian Nickel appears to be on the contact between metavolcanics and gabbros. It appears from the assessment records that this core was not sampled for gold.

Some 10 conductors of varying intensity were located by the VLF survey. It should be noted that none of them coincide with lakes hence conductive surficial clays are probably not widespread. This enhances the probability of bedrock sources for some of the conductors. The conductors appear for the most part to have the same regional trend as the interpreted faults which in turn is almost parallel to the flight line direction so the position of the conductor axis will not be precise. The most significant conductors will be those located adjacent to or within gabbros.

Of the conductors, the most significant are those labelled d-d and the conductor at the north end of claim 729073 as well as e-e, f-f, g-g and h-h.

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ISINGLASS
LAKE PROPERTY

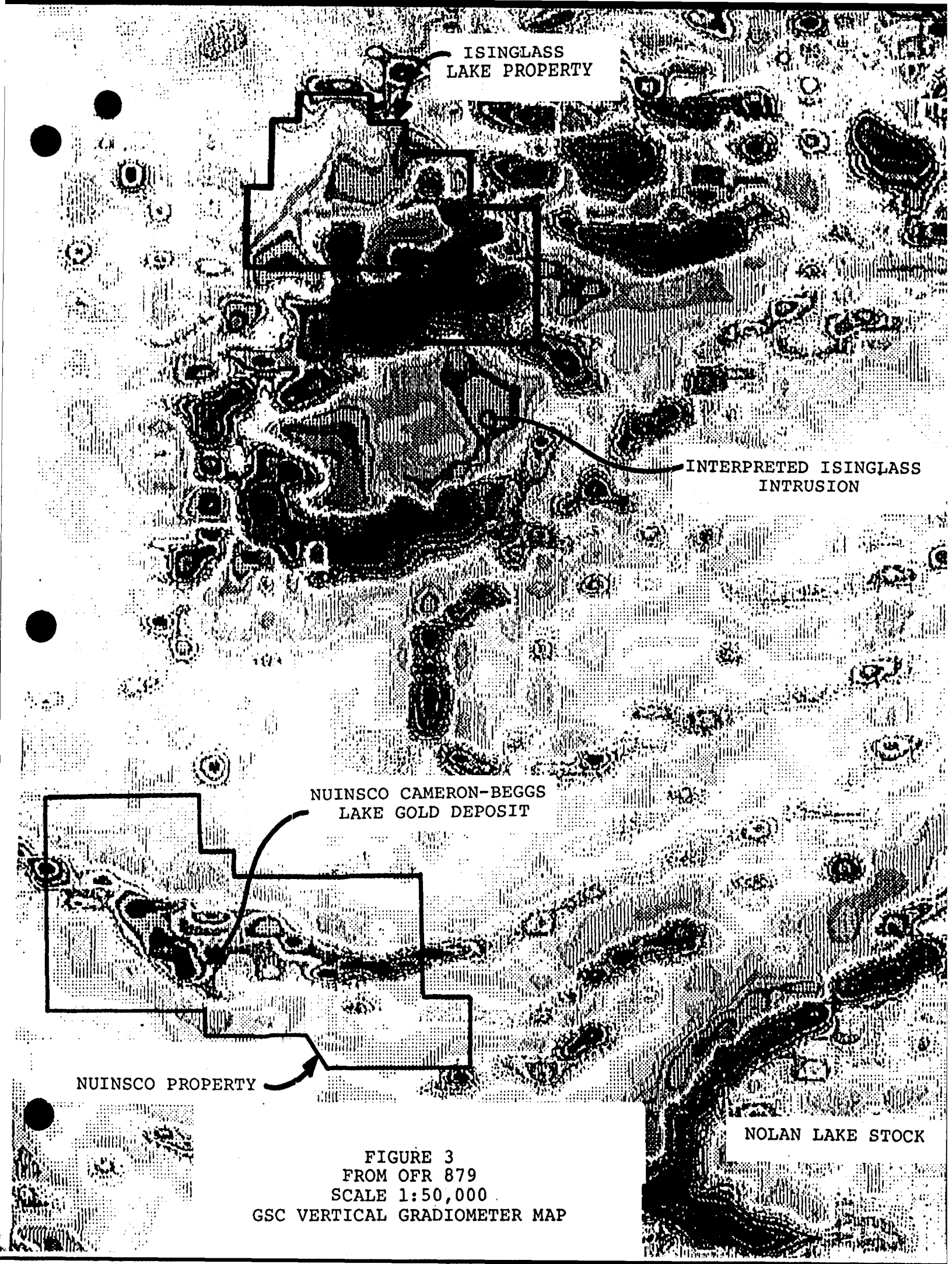
INTERPRETED ISINGLASS
INTRUSION

NUINSCO CAMERON-BEGGS
LAKE GOLD DEPOSIT

NUINSCO PROPERTY

NOLAN LAKE STOCK

FIGURE 3
FROM OFR 879
SCALE 1:50,000
GSC VERTICAL GRADIOMETER MAP



8. CONCLUSIONS AND RECOMMENDATIONS

The extremely limited sampling has demonstrated that there is gold in the environment with four out of five samples returning anomalous gold (480, 580, 720, 2450 ppb Au). The most significant samples are within or adjacent to faulting and gabbros.

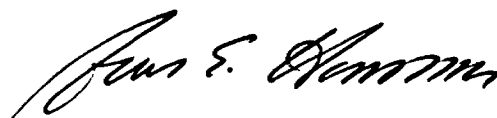
Intersections between the interpreted faults and gabbros should be examined and sampled.

The conductors listed in the interpretation section should be examined and sampled.

The vicinity of the mapped location of the Roseman-Thompson occurrence should be explored in detail.

The Dome-Canadian Nickel copper-nickel discovery should be checked to determine if gold is also present.

Respectfully submitted,



JENS E. HANSEN, P.Eng.

March 28, 1985

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- Hunter, A.D., Curtis, L.W.
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Aeromagnetic Map 1169G
- Rivett, Scott and MacTavish, A.D.
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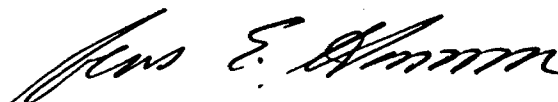
ASSESSMENT FILE REPORTS

- Canadian Nickel Company Ltd.
Diamond Drilling 1970-73.
- Dome Exploration Canada Ltd.
Diamond Drilling 1955.

CERTIFICATE

I, Jens Eskelund Hansen of the City of Nepean, in the Municipality of Ottawa-Carleton do hereby declare:

1. That I am a consulting geophysicist residing at 19 Nesbitt Street, Nepean, Ontario K2H 8C4.
2. That I am a graduate of Engineering Physics of Queens University, Kingston, Ontario in 1964 and have been continuously engaged as a practicing geophysicist since that time, and that I am a Registered Professional Engineer in the Province of Ontario.
3. That I interpreted the data discussed in this report.
4. That I am familiar with the Kenora area and have personally conducted field work in the Rowan Lake Area. I have however not personally been on the Isinglass property.

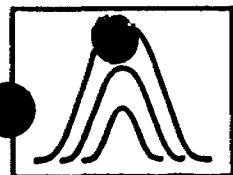


JENS ESKEKUND HANSEN, P.Eng.
Consulting Geophysicist

Nepean, Ontario
March 28, 1985

APPENDIX A

GEOPHYSICAL EQUIPMENT
SPECIFICATIONS



Features

- Improves performance of existing magnetometers at low cost
- Minimum operator interaction
- Simple to install and interface to any digital or analog recorder

The M-1000 Digital Processor is one in a line of dedicated micro-processor controlled filters that is ideally suited for magnetometry. Various options are available that allow the real time digital filtering of Larmor signals from proton or optically pumped magnetometers resulting in improved performance and superior system resolution.

The M-1000 provides both analog and BCD outputs as well as a noise monitoring channel which is used to evaluate the reliability of the reading during the measuring period. The 40 character alphanumeric display provides a menu for operator selection of parameters.

Various console configurations are available for integration into marine, base station or truck borne and airborne gradiometer. The Geotech Video Datacam flight path recovery system can also be configured to accept the M-1000 reducing rack space and system weight.

Specifications: Proton

CONTROLS:

ON/OFF — push button illuminated

RESET — initializes unit

CONTROL KEYS (1) Enter — information and date
 (2) Return — returns to previously entered command or function
 (3&4) Cursors — are used to select and adjust the parameters

DISPLAY: 40 character alphanumeric, single line

DIGITAL & ANALOG INPUTS/OUTPUTS:

INPUT PARALLEL PORT — for remote control from other processors

INPUT SIGNAL — (BNC) gain adjustable to accommodate signals from 100mV upwards. Input impedance 5 kOhms

EXTERNAL TRIGGER CONTROL — (BNC)

DIGITAL OUTPUT — 10 parallel digits (BCD or binary equivalent)
 7 digits for magnetometer, 3 digits for noise level monitor

OUTPUT PARALLEL PORT — for printer or other auxiliary units

TRIGGER PULSE OUTPUT — (BNC) 5 Volts adjustable, 4 microsec to 10 millisecc

All I/O are TTL-CMOS compatible

ANALOG MAG RECORD FINE — Three digit resolution, recording 0 to 99

ANALOG MAG RECORD COARSE — Two digit resolution, recording 0 to 99

ANALOG NOISE MONITOR — Two digit resolution, noise level monitor
 Each analog output can be adjusted for full scale deviation and sensitivity

NON VOLATILE MEMORY: (2 kBytes) retains last entered parameter settings

SAMPLING RATE: Selectable in increments of 0.01 seconds from 0.2 seconds minimum. Sample rate to be selected for best performance (signal to noise ratio).
 Measuring time for resolution at 0.1mT (gamma) is less than 0.1 second.

RESOLUTION: 0.1nT (gamma)

SIZE: 4.45 cm high x 48.3 cm wide x 30.5 cm deep (1.75 x 19 x 12 in.)

WEIGHT: 2.0 kg (4.5 lbs.)

POWER: 12-30 VDC — 0.5A

GEOTECH LTD.

20 - 101 Amber Street, Markham, Ontario, Canada L3R 3B2
 Telephone: Sales: (416) 475-6999 Service: (416) 498-5845

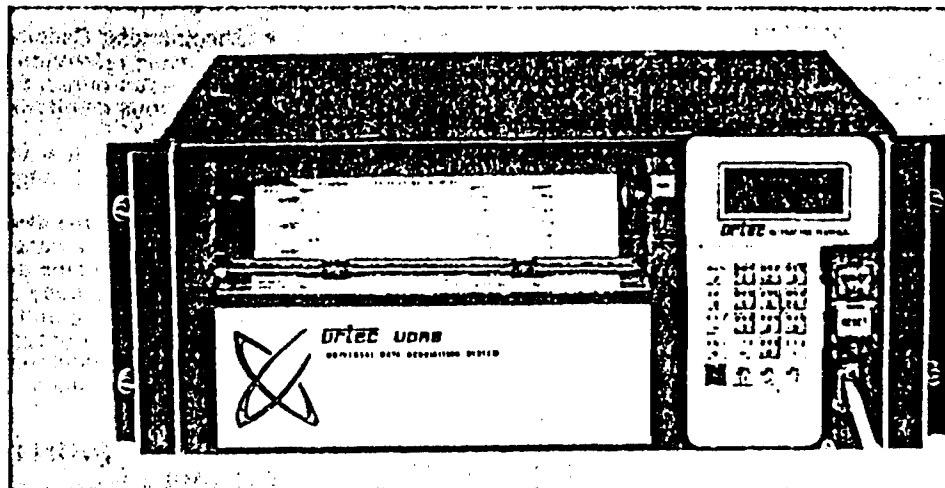
UTEEC

UNIVERSAL DATA ACQUISITION SYSTEM

UDAS 100

FEATURES

- INTEGRATED GEOPHYSICAL MULTI SENSOR SYSTEM DESIGN
- SYSTEM CAN MEASURE, COLLECT, RECORD, VERIFY, RELOT AND PROCESS A VARIETY OF GEOPHYSICAL DATA.
- ANALOG AND DIGITAL RECORDING COMBINED IN ONE COMPACT LIGHTWEIGHT CONSOLE.
- PROGRAMED AS A COMBINED DATA ACQUISITION SYSTEM OR AS A FULLY INTEGRATED AIRBORNE SURVEY SYSTEM INCLUDING SPECTROMETER AND MAGNETOMETER.
- INTELLIGENT INTERACTIVE HAND HELD TERMINAL WITH KEYBOARD AND DISPLAY CAN BE FIXED TO CONSOLE OR OPERATED IN A REMOTE POSITION.
- LIGHTWEIGHT, COMPACT AND LOW POWERED.



The Universal Data Acquisition System, or UDAS, is the most advanced and versatile programable data acquisition system available for ground and airborne geophysical survey applications. This small, lightweight system will accept data in virtually any format — analog or digital, serial or parallel — from any number of simultaneous sensors and sources.

The UDAS combines both digital and analog recording functions into a single compact lightweight console. All recorded data can be simultaneously registered on any 9-track magnetic tape unit as well as being recorded in analog form on an internal printer/recorder. The printer/recorder operates under software control, it can register up to 16 separate traces with total flexibility as to channel width and position.

The UDAS can be supplied as a combined digital/analog recording system or as a fully integrated geophysical survey system. With the addition of an interface and control console the UDAS is programed to handle a dual (upward/downward) full spectrum gamma ray spectrometer capable of accommodating

up to 14 crystal detectors in a coincidence or anti-coincidence mode. It also includes a proton magnetometer featuring automatic tuning with 0.1 gamma sensitivity. The system can also be programed to process the signal or frequency from cesium and fluxgate magnetometers.

All functions are controlled via a hand held terminal with keyboard and a 24 alphanumeric character display. The terminal can be fixed to the console or operated in a remote position.

The system inputs and outputs include a 24 character alphanumeric display, 2 RS232 input/output ports, 16 input analog channels, 30 separate input/output ports and 56 input/output lines for BCD and binary data, 3 accumulator inputs for frequency and pulse counting and a CPIB - IEEE-488 high speed data BUS. Optional features include an interface to dual floppy disk converting the basic UDAS to a software development or data processing system.

The system can be interfaced to any number of recording devices such as magnetic tape drive, external chart recorder, cartridge tape drive, CRT display and plotter/printer.

In addition to its main function as a lightweight, compact data acquisition system for airborne geophysics, the versatility of the UDAS hardware and software makes it suitable for a variety of additional applications such as marine geophysics, truckborne geophysics, field editing tape copy and processing, base station monitoring, borehole logging, environment and industrial monitoring as well as a stand alone software development system.

URTEC MODEL — UDAS-100

SPECIFICATIONS: UNIVERSAL DATA ACQUISITION SYSTEM URTEC MODEL — UDAS-100

BASIC UDAS

MICROPROCESSOR AND MEMORY:

- Texas Instruments TMS 9900 - 16 BIT with built in multiply and divide hardware.
- Total memory expandable to 32k words.
- Basic system contains:
 - 16k - 16 bit word RAM
 - Up to 8k - 16 bit word EPROM
 - Cartridge program loading
 - 12k - Bytes of non volatile RAM program storage (optional)

INPUTS AND OUTPUTS

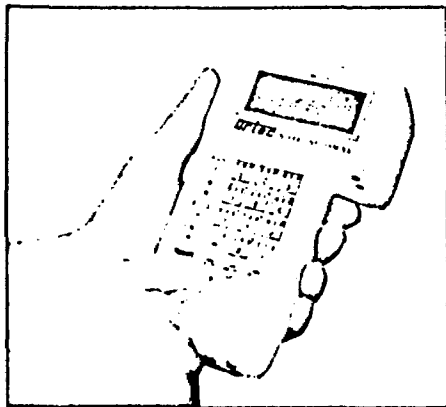
- Analog input: 16 differential input channels with 12 bit resolution at $\pm 5V$ full scale
- Analog output - up to 16 channels (optional)
- 30 addressable ports for multiple byte transfer
- 56 input/output lines for BCD and binary data information (transferred in multiples of 8 bit bytes)
- 3 pulse accumulator inputs for frequency and pulse information. (eg. — Doppler navigation and radar altimeter).
- 2 digital spectrometer inputs. (eg. upward and downward detectors selectable at 256 or 512 channels)
- 1 RS 232 serial port for interactive keyboard and display
- 1 RS 232 serial port for addition of CRT floppy disks and other terminals.
- 1 same protocol as RS 232 with TTL level
- 1 operator controlled fiducial input (switch or keyboard activated)
- Y output for graphic display on oscilloscope
- High speed data transfer-lines GPIB — IEEE-488 compatible

INTERFACES:

- Magnetometer control and signal input for proton and cesium magnetometers
- Error condition indicator level for remote monitoring of diagnostic tests.
- Controller and outputs for two 9 track 1/2 inch magnetic tape units.
- Printer/Recorder controller.
- Digital interface to navigation camera (8 digits of fiducial and coding information).
- Controller for magnetic tape cartridge (program loader)
- Disk storage interfaced via RS-232 or GPIB — IEEE-488 BUS

CONTROLS:

- System power on/off switch
- Keyboard with 24 character alphanumeric display. Keyboard/display can be operated on main console or remotely
- Manual start and load of Julian clock and fiducial numbers.
- All control functions interrogate with YES or NO answer.



Hand Held Interactive Terminal

SOFTWARE:

The basic system is supplied with the necessary programs (on magnetic cartridge) to execute routine operational functions and standard survey requirements. Additional dedicated programs are also included to provide:

- Spectrometer Calibration
- Automatic resolution check
- Full spectra printout on recorder/printer
- Continuous monitoring of system gain using natural "K" photopeak
- Automatic window adjustments
- Fast total count sampling (0.1 sec) for point sources resolution.
- Selective graphic display options.
- Read after write data verification.
- Selective data tape dump
- Magnetic tape copy (optional)
- Data processing and plotting program (optional)
- Diagnostic test programs
- A variety of additional special functions programs are available on request.

PRINTER/RECORDER

CONTROLS

- Power on/off switch
- Automatic paper feed
- Print contrast control
- On/off print head control
- Automatic take-up spool

FORMATS

- Alphanumeric, complete ASCII character set. Thermal 5 x 7 dot matrix
- Graphics 70 x 70 dots per inch resolution
- Software programmable under UDAS control
- Records up to 16 analog traces each with variable O and F.S. setting. Traces can be stacked or overlapping. Software controlled. Trace position and amplitude can be adjusted via interactive keyboard.
- Overflow is automatic by digital stepping.
- Complete alphanumeric annotations can be printed on recording chart (eg. name of project and survey area details, fiducial numbers, time, recording scales and parameters etc.)

PAPER

- Thermosensitive paper 222mm (8.75 in.) wide, 30 meter (100 ft.) long
- Thermal print head is board mounted and easy to replace

POWER

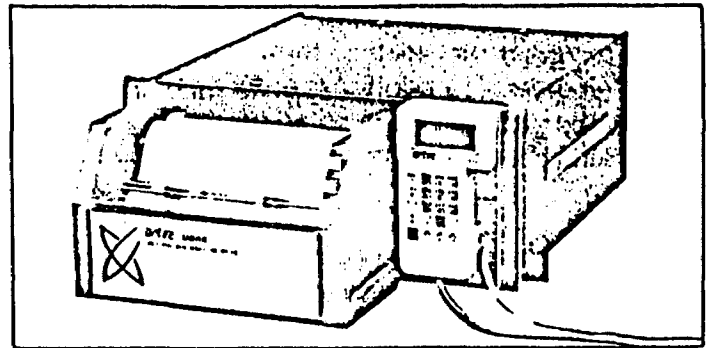
- 24 - 28VDC 3.0 A average

WEIGHT

- 15.6 kg. 35 lbs.

DIMENSIONS

- 48.2 cm (19 in.) wide, 17.8 cm (7.0 in.) high, 40.6 cm (16 in.) deep (standard rack mount).



UDAS-100 Console with Printer/Recorder Extended

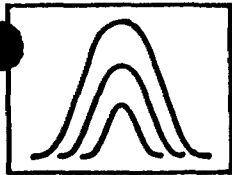
FOR FURTHER INFORMATION CONTACT

urtec

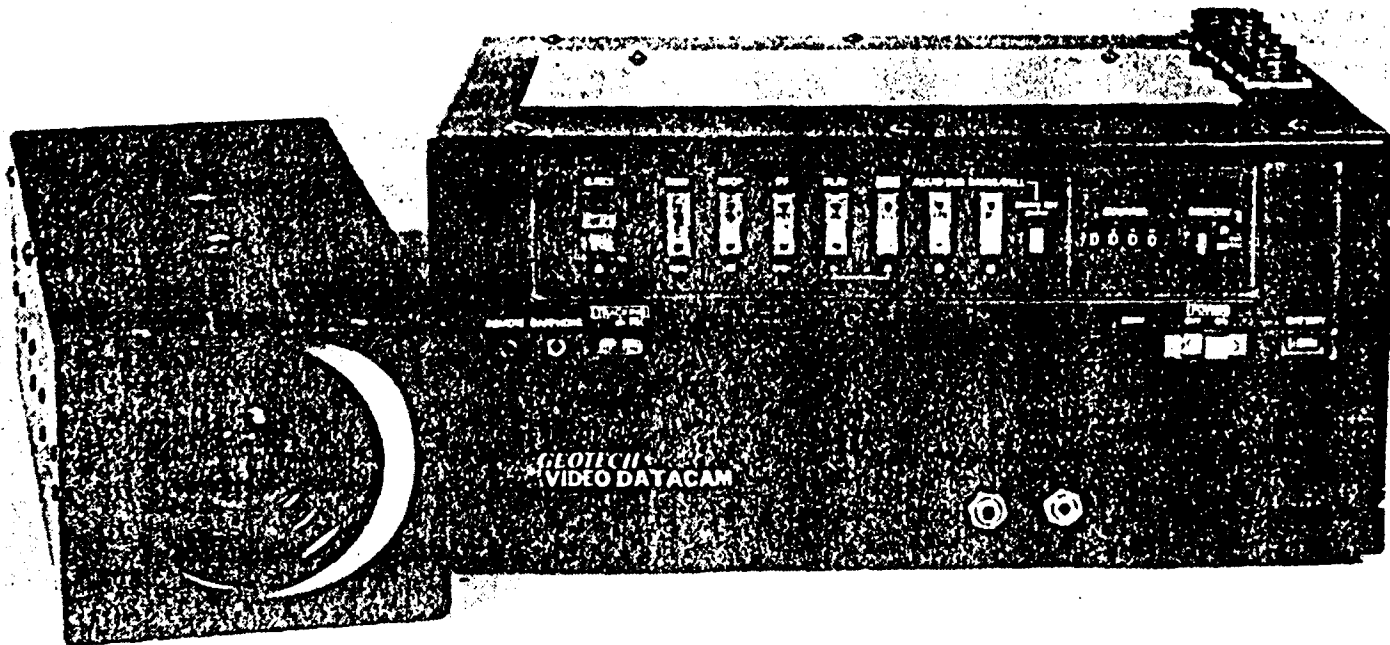
INSTRUMENTS SALES LIMITED

131 TILSON ROAD MARKHAM (TORONTO) ONTARIO CANADA L3R 1E4 • TELEPHONE (416) 475-1133 TELEX 06 986677 CABLE "URMARK"

Geotech



Geotech Datacam Video Flight Recorder System



The Geotech Datacam System provides an innovative method of recording the flight path together with data from the user's acquisition equipment on video cassette tape instead of the usual 35 mm film. The system consists of a data interface, video camera and a video cassette recorder. All data and video are available for review immediately after each flight since no processing is required. The B&W video camera is fitted with a super wide angle lens and automatic iris for accurate exposure control, even under low light conditions, with no operator adjustment. Usable video can be obtained with only 0.1 foot candles of light.

The video cassette recorder is designed for easy loading and can store data such as real time, day and date, fiducial numbers, values of magnetometer, VLF and other information on the top portion of each frame. All data and video images are available for immediate review after each flight without processing. Each cassette provides two hours of recording time when run at normal speed. Longer recording times are available with some sacrifice in resolution. Interfacing Datacam to the data acquisition system of the user will be required.

Features

- Datacam pays for itself in one season due to savings in film
- Reusable magnetic tape cassettes
- Instant playback in field giving total confidence in data recorded
- Same weight as conventional 35 mm film equipment
- Automatic exposure control
- Super wide angle lens
- On board video monitor
- Selection of normal or low tape speeds

Specifications

Weight	8.5 kg camera and recorder
Size	9 x 11 x 26 cm for camera 14 x 25 x 29 cm for recorder
Lens	5.5 cm super wide angle with automatic iris
Temperature range	0 to 40° C
Format	VHS B&W
Power requirements	28 Vdc, 2A

Specifications subject to change without notice.

Geotech Datacam Video Flight Path Recovery System

The Geotech Datacam video flight path recovery system complements the Datacam recorder system and is used to locate the flight path points recorded on the video cassette by means of the self-contained B&W CRT monitor. A single control knob selects all playback functions; high speed forward and reverse; slow motion forward and reverse; or single frame. Various forward and reverse speeds are provided to enable the operator to quickly locate the frame of specific interest. A separate push button advances the frames in still mode. Advanced circuitry produces a sharp screen image and eliminates all noise and blur even on slow motion or still frames regardless of tape speed.

Operation of the Datacam recovery system is simplified by the use of an infra-red type remote control unit which duplicates all functions of the control knob. The remote control unit has a range of 6 m extending over an arc of 60°. An optional power unit adapts the recovery unit for operation from any power supply in use throughout the world.

Features

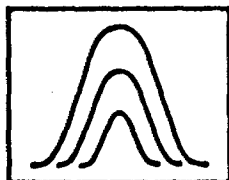
- Convenient wide selection of forward and reverse speeds enables operator to quickly locate frames of interest
- Slow motion and still frames reproduced without blur or noise
- Instant playback in the field
- All controls duplicated by infra-red remote control unit for ease of operation
- Rugged construction
- Optional power supply for world wide use

Specifications

Weight	19 kg
Size	56 x 33 x 33 cm
Remote control	Infra-red, hand held

Specifications subject to change without notice

Geotech



GEOTECH LTD.

2-210 Don Park Road,
Markham, Ontario, Canada
L3R 2V2

Telephone:
Sales: (416) 475-6999
Service: (416) 498-5845

PRINTED IN CANADA

Totem 2A

Multi channel

VLF Electromagnetic airborne survey instrument

Specifications

Introduction.

The Totem-2A measures basically the same parameters and shares the same package configuration as the well established Totem-1A.

This new generation instrument, however, measures multiple parameters on two channels simultaneously, with less noise and greater accuracy. These advancements have been achieved while maintaining the simple installation and operating procedures of the 1A model.

The Totem-2A employs state of art digital and linear integrated circuits to implement the functions of crystal controlled phase locked loop frequency synthesizers, dual frequency heterodyne conversion and proprietary time domain sampling vector computation techniques.

Features.

The principal parameters measured are the change in total field and the vertical quadrature field. Parameters also available are the total field gradient (from sensors in two locations) and the horizontal quadrature field. The quadrature polarity is defined by the direction of flight relative to the field. The total and quadrature magnitudes are insensitive to sensor orientation in pitch, roll and yaw.

One obvious advantage of dual frequency operation is that primary sources can be selected to ensure good coupling with conductors of any orientation. Potential uses of the gradient mode are enhanced interline contouring and delineation of multiple conductors with horizontal and vertical gradient respectively.

Specifications subject to change.

Primary source: Magnetic field component radiated from VLF radio transmitters (one or two simultaneously).

Parameters measured: Total field, vertical quadrature, horizontal quadrature, gradient.

Frequency range: 15kHz to 25.0kHz front panel selectable for each channel in 100Hz steps.

Sensitivity range: 130uV m to 100mV m at 20kHz. 3dB down at 14kHz and 24kHz.

VLF signal bandpass: -3dB at ± 80 Hz, $\pm 4\%$ variation at ± 50 Hz.

Adjacent channel rejection: 300 to 800Hz = 20 to 32dB. 800 to 1500Hz = 32 to 40dB, > 1500 Hz > 40 dB (for $\pm 2\%$ noise envelope).

Out of band rejection: 10kHz to 2.5kHz = 5×10^{-4} A m to 5×10^{-1} A m ± 2.5 kHz rising at 12dB octave
30kHz to 60kHz = 5×10^{-4} A m to 8×10^{-3} A m > 60 kHz rising at 6dB octave (for no overload condition).

Output span: $\pm 100\% = \pm 1.0$ V

Output filter: Time constant 1sec for 0 to 50% or 10% to 90% noise bandwidth 0.3Hz (second order LP).

Internal noise: 1.3uV m rms (ambient noise will exceed this).

Sferics filter: Reduces noise contribution of impulse interference.

Electric field rejection: $\pm 0.5\%$ error for 20m tow cable.

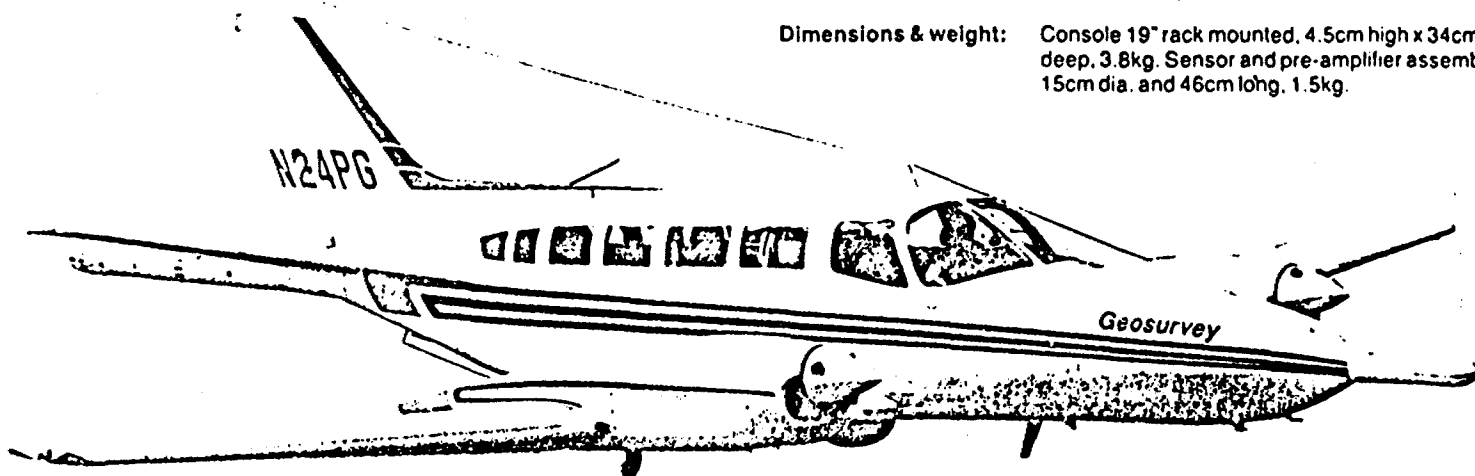
Controls: Power switch, frequency selector switches (line & ortho) level controls (line & ortho), meter switch (total quad) sferics filter switch.

Displays: Meters (line & ortho), sferics light, overload light.

Inputs: Power, 23 to 32 Vdc fused 0.5Amp.
Signal, Sensor upper, Sensor lower.

Outputs: Total, quad, gradient, multiplexed (line & ortho).
Audio monitor, stereo line & ortho.

Dimensions & weight: Console 19" rack mounted, 4.5cm high x 34cm deep, 3.8kg. Sensor and pre-amplifier assembly 15cm dia. and 46cm long, 1.5kg.



Herz Industries Ltd.

Suite 704
141 Roshampton Avenue
Toronto, Ontario
M4P 1P9

Tel: 416-483-6091
or
McPhar Instrument Corp.
Tel: 416-497-1700

HERZ Manufacturers
of geophysical
instruments

TDC 3000 DIGITAL CARTRIDGE RECORDER



Features

Cartridge convenience

- Cartridge easy to insert, yet very positive locking in place.
- Label and tape motion can be observed when operating.
- Individual Track Write Protect and Unit Select switches behind front panel.
- Automatic Load Point search.
- Controlled cartridge ejection by electrical signal.

Reliability

- Speed-independent formatting by measurement of capstan encoder displacement.
- No programming restrictions on motor or servo.
- Precision casting with no adjustments or tolerance build-up.
- Electromechanical cartridge locking with high forces.

Cost effective

- Modular and flexible organization satisfy most requirements.
- Built-in Formatter and Power Supply for compact table-top or rack mount operation.

Drive Performance Specifications

Cartridge type	: DC 300A with 91 m (300 feet) of 6,3 mm (0,25") tape.
Tape drive	: Single capstan motor drives roller inside the cartridge (no contact between tape and capstan).
Capstan Servo	: Velocity feedback, generated from optical encoder.
Tape speed, synchronous	: 0,25 to 0,76 m/s (10 to 30 ips) forward and reverse, continuously adjustable.
Tape speed, search	: 2,3 m/s (90 ips) \pm 5%, forward and reverse.
Rewind speed	: Same as reverse search speed (different command).
Speed variation, synchronous	: \pm 3% long term \pm 5% short term (Measured per ANSI/ECMA/ISO standards).
Start time of capstan at synchronous speed	: 23 ms \pm 5% at 0,76 m/s (30 ips).
Stop time	: 23 ms \pm 5%
Start distance	: 7,6 mm (0,30") max. 5,1 mm (0,20") min.
Stop distance	: 10,2 mm (0,40") max. 7,6 mm (0,30") min. Note: Capstan displacement and direction can be measured by counting the output from the optical encoder with pulse spacing corresponding to 8 data bit on the tape.
Start/stop time to search speed	: 70 ms nominal
Start/stop distance to search speed	: 75 mm (3,0") nominal
Rewind time	: 40 s nominal for full length of tape
Drive reliability	: 5000 h MTBF

Environmental Specifications

For the assembled systems, the following specifications apply:

Temperature, operating	: 0 to + 50°C, hardware limited + 5 to + 40°C, cartridge limited
Temperature, non-operating	: - 40 to + 65°C, hardware + 5 to + 45°C, cartridge storage - 40 to + 45°C, cartridge transportation
Humidity	: 10 to 95% RH, hardware 20 to 80% RH, cartridge
Altitude, operating	: 3000 m (10 000 feet)
Altitude, non-operating	: 12 000 m (40 000 feet)
Vibration, operating	: Tested with 0,5 G, 10 to 60 Hz
Shock, non-operating	: Tested with 50 G, 10 ms, half sine-wave
Operating attitude	: Any, however, the cartridge entrance must be horizontal or point upwards to prevent the cartridge from falling out after ejection.
Dust environments	: The drive is designed to withstand the dust level of a typical office environment. If it is used in particular dusty areas, more frequent cleaning of the head is required. Alternatively, the equipment should be protected by a cover door.

Drive Power Requirements

Servo power:	+ 20 V, \pm 10% non-regulated	: 1,8 A peak (in 70 ms max.), 0,7 A running 16 V min. in valley of ripple
	- 20 V, \pm 10% non-regulated	: Same as for + 20 V, except peak current does not occur simultaneously.
Regulated power:	+ 12 V, \pm 2%	: 0,4 A
	- 12 V, \pm 2%	: 0,5 A
	+ 5 V, \pm 4%	: 1,0 A
Alternative AC input power		: 115/230 Vrms \pm 10%, 48+ (115) 25-80 W depending upon configuration
Power Supply Capacity		: One power supply handles two drives and one formatter

Mechanical Specifications

Dimensions:	
single cabinet	: 210 mm (8,27") wide, 132 mm (5,2") high, 395 mm (15,8") deep
table top	: 420 mm (16,53") wide, 132 mm (5,2") high, 395 mm (15,8") deep
dual drive	: 483 mm (19") wide, 132 mm (5,2") high (equals 3 rack increments), 375 mm (14,8") deep behind mounting surface, 20 mm (0,79") in front of mounting surface.
table top	
single and	
dual rack mount	

Rack slides may be supplied for easy access when servicing.

Weight:	without Power Supply:
single drive cabinet	: 4,7 kg (10,3 lbs)
dual drive with power supply and formatter	: 12,4 kg (27,3 lbs)

Drive Data Specifications

Packing density	: 63 bits per mm (1600 bpi)
Recording code	: Phase Encoded (Bi-Phase Level)
Data rate	: 48 k bits/second at 0,76 m/s (30 ips).
Input to write electronics	: Encoded data, no clock
Output from read electronics	: Decoded data Decoded bit clock Data Detect status line

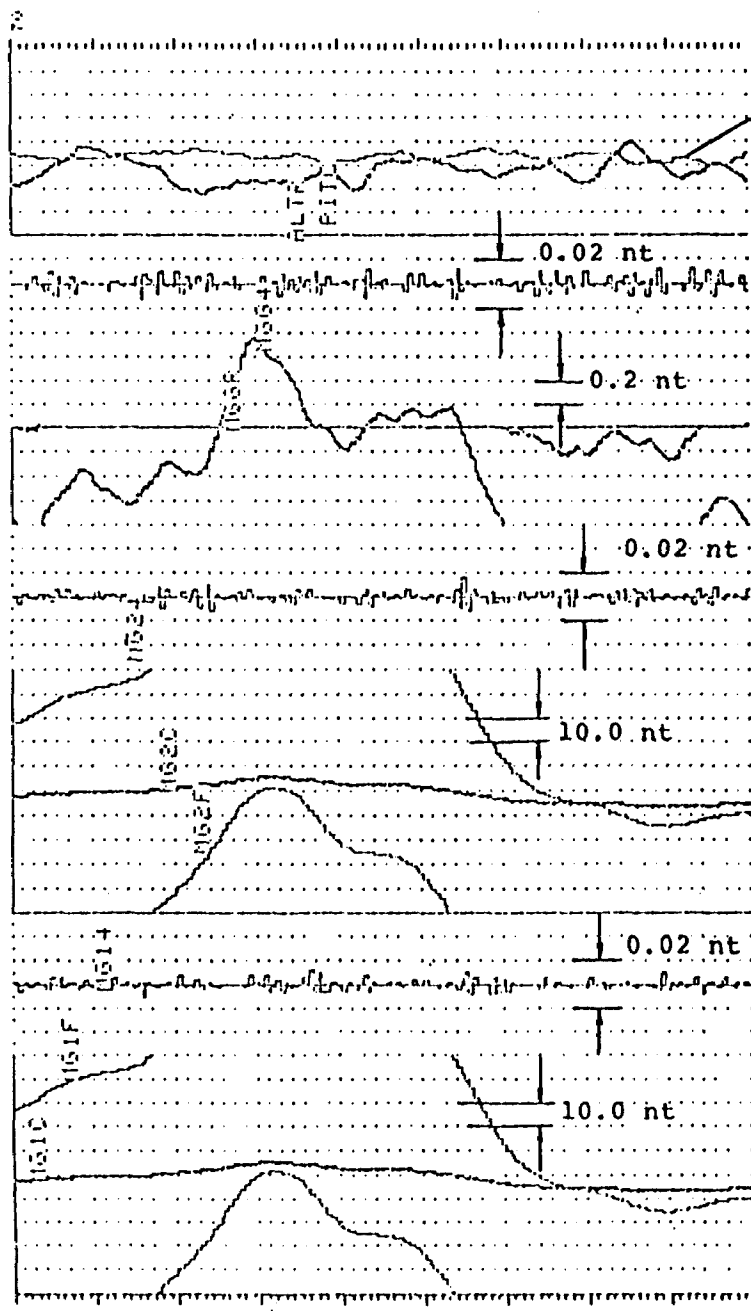
The decode electronics require that the encoded data is formatted with a preamble according to the ANSI/ECMA/ISO standards.

Capacity of one cartridge:	23 million bits, unformatted
Capacity per track	: 642 k bytes with 2048 byte records (max) (87% utilization). 364 k bytes with 256 byte records (50% utilization). 171 k bytes with 80 byte records (26% utilization). This corresponds to 2140 lines or 89 terminal pages of 80 characters by 24 lines each.

ANALOG PRESENTATION OF REPLOT PROGRAM

FIG. DIST. FIG. DIST. FIG. DIST. FIG. DIST. FIG. DIST.
 227 114 2380
 ACFT G-50JH FN GRAD-0W FLTR 03 QTE 840227 SURFLT 500FT
 FIG. TIMING 1.0 SEC.
 PROG. VER. 230184-GRAD..

Ln 05H



Pitch: 1 div.=5 degrees
 Radar altitude
 146 feet full scale
 1 div.= 18.3 feet

Vertical gradient 4 th diff
 4 th difference
 10 milligammas per division

Vertical gradient
 1.6 nt full scale
 0.02 nt per division

Upper sensor
 4 th difference
 10 milligammas per division

Upper sensor
 coarse = 1000 nt full scale
 fine = 100 nt full scale

Lower sensor
 4 th difference
 10 milligammas per division

Lower sensor
 coarse = 1000 nt full scale
 fine = 100 nt full scale



52F05SE0066 2.7947 ROWAN LAKE

#91-85
Type of print
Number of mining claims traversed
Indicate space on this form, attach a list.
Days credits calculated in the
"auditures" section may be entered
in the "Expend. Days Cr." columns.

900

Do not use shaded areas below

Type of Survey(s)
AIRBORNE GEOPHYSICS

Claims Holder(s)
JENS E. HANSEN

Address
Box 11385, Stn H, Nepean, Ontario K2H 7V1

Survey Company
Terraquest Ltd. for Geotest Corporation

Date of Survey (from & to)
21 Mar 84 to 28 Mar 85

Township or Area
G. 2603 M-2580

Prospector's Licence No.
M2580

Total Miles of line Cut
50 line km flown

Name and Address of Author (of Geo Technical report)
Jens E. Hansen, Box 11385, Stn H, Nepean, Ontario K2H 7V1

Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence)

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

Prefix	Mining Claim Number	Expend. Days Cr.
	K729001	
	729002	
	735139	
	735145	
	721710	
	721713	
	721714	
	721716	
	721717	
	721720	
	721732	
	721733	
	729051	
	729052	
	729053	
	729054	
	729055	
	729056	
	729057	
	729058	
	729060	
	729061	
	729062	
	729063	
	729069	

Prefix	Mining Claim Number	Expend. Days Cr.
	K729070	
	729071	
	K729072	
	729073	
	767534	
	767535	
	774952	
	774953	
	735175	
	735176	

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.

RECEIVED
APR 01 1985
MINING LANDS SECTION
Postmarked
March 29/85

Total number of mining claims covered by this report of work. **35**

For Office Use Only

Total Days Credits Recorded **2800**

Date Recorded **Apr 9/85**

Date Approved as Recorded **see revised statement**

Mining Recorder **[Signature]**

Branch Director **[Signature]**

Date **March 27, 1985**

Recorded Holder or Agent Signature **[Signature]**

JENS E. HANSEN

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
JENS E. HANSEN Box 11385 STN "H" NEPEAN ONT K2H 7V1

Date Certified **March 28 1985**

Certified by (Signature) **[Signature]**



Ontario

Ministry of Natural Resources

Technical Assessment Work Credits

File
2.7947

Date
1985 06 04

Mining Recorder's Report of Work No. 91-85

Recorded Holder
JENS E. HANSEN

Township or Area
ROWAN LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ 40 days	K 721710
Magnetometer _____ 40 days	721713-714
Radiometric _____ days	721716-717
Induced polarization _____ days	721732-733
Other _____ days	729001-002
Section 77 (19) See "Mining Claims Assessed" column	729051 to 058 inclusive
Geological _____ days	729060 to 063 inclusive
Geochemical _____ days	729069 to 073 inclusive
Man days <input type="checkbox"/>	735139
Airborne <input checked="" type="checkbox"/>	735145
Special provision <input type="checkbox"/>	735175 - 176
Ground <input type="checkbox"/>	767534 - 535
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	774952 - 953
<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

K 721720



Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) AIRBORNE GEOPHYSICS
Township or Area _____ - ROWAN LAKE M2580
Claim Holder(s) JENS E. HANSEN
Survey Company Terraquest Ltd. for Geotest
Author of Report Jens E. Hansen Corporation
Address of Author Box 11385, Stn H, Nepean, Ont.
Covering Dates of Survey 21-11-84 / 28-02-85
(linecutting to office)
Total Miles of Line Cut _____

MINING CLAIMS TRAVERSED	
List numerically	
(prefix)	(number)
K729001	K729072
729002	729073
735139	767534
735145	767535
721710	774952
721713	774953
721714	735175
721716	735176
721717	
721720	
721732	
721733	
729051	
729052	
729053	
729054	
729055	
729056	
729057	
729058	
729060	
729061	
729062	
729063	
729069	
729070	
729071	
TOTAL CLAIMS <u>35</u>	

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED	DAYS per claim.
ENTER 40 days (includes line cutting) for first survey.	Geophysical
ENTER 20 days for each additional survey using same grid.	-Electromagnetic _____
	-Magnetometer _____
	-Radiometric _____
	-Other _____
	Geological _____
	Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer 40 Electromagnetic 40 Radiometric _____
(enter days per claim)

DATE: March 27, 1985 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications 2.5580

Previous Surveys			
File No.	Type	Date	Claim Holder

RECEIVED
APR 01 1985
MINING LANDS SECTION

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____
Station interval _____ Line spacing _____
Profile scale _____
Contour interval _____

MAGNETIC

Instrument _____
Accuracy – Scale constant _____
Diurnal correction method _____
Base Station check-in interval (hours) _____
Base Station location and value _____

ELECTROMAGNETIC

Instrument _____
Coil configuration _____
Coil separation _____
Accuracy _____
Method: Fixed transmitter Shoot back In line Parallel line
Frequency _____
(specify V.L.F. station)
Parameters measured _____

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION
RESISTIVITY

Instrument _____
Method Time Domain Frequency Domain
Parameters – On time _____ Frequency _____
– Off time _____ Range _____
– Delay time _____
– Integration time _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) Magnetics and VLF Electromagnetics

Instrument(s) Herz Industries Ltd. Totem 2A VLF EM System

GEM Systems GSM 8BA Airborne Proton Magnetometer.
(specify for each type of survey)

Accuracy Magnetometer + 1 gamma, 1 sec. interval, VLF Total field + 1% quadrature + 1% (specify for each type of survey)

Aircraft used Cessna 182 registration C-PAKK

Sensor altitude 100 metres mean terrain clearance

Navigation and flight path recovery method Photomosaics, scale 1:10,000

flight path recovery on mosaics using Geotech Datacam Video Flight Recorder

Aircraft altitude 100 metres mean terrain clearance Line Spacing 100 metres

Miles flown over total area 65 line kilometres Over claims only 50 line kilometres

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

Mining Lands Section

File No 27947

Control Sheet

TYPE OF SURVEY GEOPHYSICAL
 GEOLOGICAL
 GEOCHEMICAL
 EXPENDITURE

MINING LANDS COMMENTS:

Claim K721720 not touched

_____ *ld*

LD

Dovey
Signature of Assessor

10/5/85
Date

1985 06 25

Your File:91/85
Our File:2.7947

Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

Dear Sir:

RE: Notice of Intent dated June 4, 1985
Airborne Geophysical (Magnetometer &
Electromagnetic) Survey on Mining
Claims K 721710, et al, in the Area
of Rowan Lake

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,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

D. Isherwood:mc

cc: Jens E. Hansen
Box 11385
Station "H"
Nepean, Ontario
K2H 7V1

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario
cc: Resident Geologist
Kenora, Ontario

Encl.



June 19/85

1985 06 04

Your File: 91/85
Our File: 2.7947

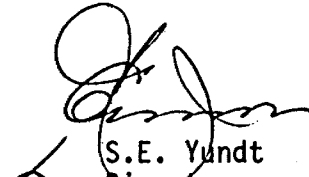
Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact
Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,


S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

rd D. Isherwood:mc
Encls.

cc: Jens E. Hansen
Box 11385
Station "H"
Nepean, Ontario
K2H 7V1
cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
toronto, Ontario



Ministry of
Natural
Resources

Notice of Intent
for Technical Reports

1985 06 04

2.7947/91/85

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

1985 04 19

File: 2.7947

Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5080
Kenora, Ontario
P9N 3X9

Dear Sir:

We received reports and maps on April 1, 1985 for an Airborne Geophysical (Magnetometer and Electromagnetic) Survey submitted on Mining Claims K 729001, et al, in the Area of Rowan Lake.

This material will be examined and assessed and a statement of assessment work credits will be issued.

We do not have a copy of the report of work which is normally filed with your office prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

A. Barr:mc

cc: Jens E. Hansen
BBax112885
Station :H:
Nepean, Ontario
K2H 7V1

En



GEOTEST CORPORATION

P.O. Box 11385
Station "H"
19 Nesbitt Street
Nepean, Ontario, Canada
K2H 7V1

Project: 60-082

March 28, 1985

Land Management Branch
Ontario Ministry of Natural Resources
Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Sir:

RE: ISINGLASS LAKE PROPERTY
KENORA MINING DISTRICT - NTS 52F/5

Enclosed is a Report of Work and two Geotechnical Data reports on an airborne survey over the 35 claim group in Isinglass Lake, Kenora Mining District.

We trust this fulfills your requirements.

Yours sincerely,

JENS E. HANSEN
Geophysicist

RECEIVED
Land Management Branch
SEARCHED
INDEXED
APR 1 1985
G. E. YOUNG
W. F. GOOD
E. J. HOGAN
W. P. BROOK
RETURN TO R. 6643

Telephone: 613 828-6462
Telex: 053-3911

PLEASE NOTE:
our telephone no. is now:
613-726-1508

RECEIVED

APR 01 1985

MINING LANDS SECTION

Mining Act

Type of Survey(s) AIRBORNE GEOPHYSICS		Township or Area -ROWAN LAKE
Claim Holder(s) JENS E. HANSEN		Prospector's Licence No. M2580 A45202
Address Box 11385, Stn H, Nepean, Ontario K2H 7V1		
Survey Company Terraquest Ltd. for Geotest Corporation	Date of Survey (from & to) 21 11 84 to 28 02 85	Total Miles of line Cut 50 line km flown
Name and Address of Author (of Geo-Technical report) Jens E. Hansen, Box 11385, Stn H, Nepean, Ontario K2H 7V1		

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
\	K729001	✓		K729070	✓
\	729002	✓		729071	✓
\	735139	✓		K729072	✓
\	735145	✓		729073	✓
\	721710	✓		767534	✓
\	721713	✓		767535	✓
\	721714	✓		774952	✓
\	721716	✓		774953	✓
\	721717	✓		735175	✓
\	721720	X		735176	✓
\	721732	✓			
\	721733	✓			
\	729051	✓			
\	729052	✓			
\	729053	✓			
\	729054	✓			
\	729055	✓			
\	729056	✓			
\	729057	✓			
\	729058	✓			
\	729060	✓			
\	729061	✓			
\	729062	✓			
\	729063	✓			
\	729069	✓			

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.

Date **March 27, 1985** Recorded Holder or Agent (Signature) *Jens E. Hansen*
JENS E. HANSEN

Total number of mining claims covered by this report of work. **35**

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
	Date Approved as Recorded	Branch Director

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
JENS E. HANSEN Box 11385 STN "H" NEPEAN ONT K2H 7V1

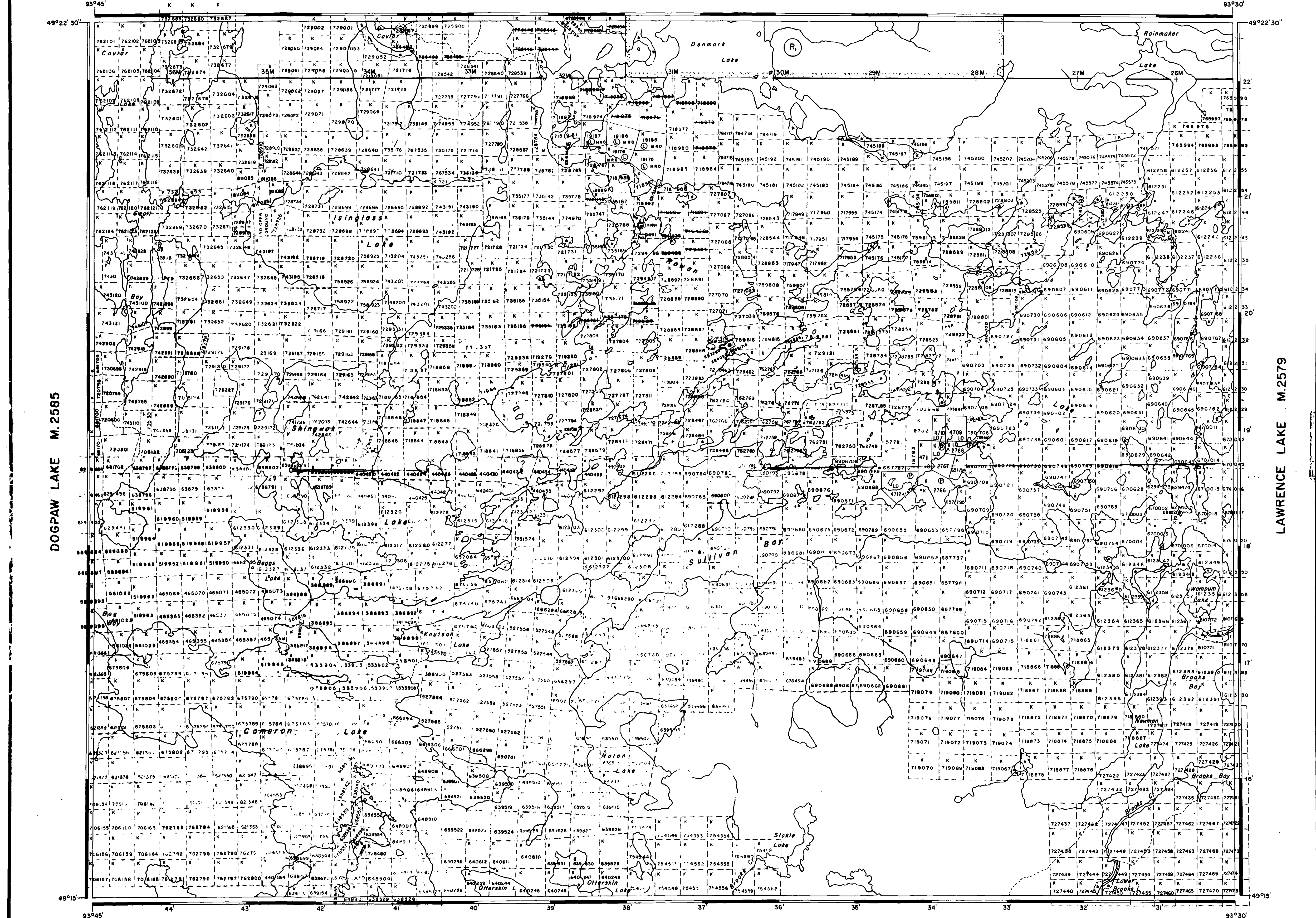
Date Certified **March 28 1985** Certified by (Signature) *Jens E. Hansen*

M-5280

M-5280

TRIM LINE

ATIKWA LAKE (GRAPNEL BAY) M.2629



AREA OF
ROWAN LAKE
 DISTRICT OF
 KENORA
 KENORA
 MINING DIVISION
 SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	● or ⊙
CROWN LAND SALE	C.S.
LEASES	⊙
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	—
CANCELLED	—
PATENTED S.R.O.	—

NOTES
 400' Surface Rights Reservation along the shores of all lakes and rivers.
 AREAS WITHDRAWN FROM DISPOSITION
 M.R.O. - MINING RIGHTS ONLY
 S.R.O. - SURFACE RIGHTS ONLY
 M.F.S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
SEC 36/80	W 16/83	26/6/83	M.S.	18551

NATURAL RESOURCES
 MAY 9 1985
 TITLES SECTION

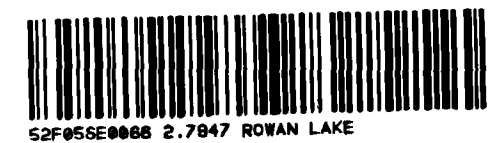
NATIONAL TOPOGRAPHIC SERIES 52 F5
 PLAN NO. **M.2580**
 ONTARIO
 MINISTRY OF NATURAL RESOURCES
 SURVEYS AND MAPPING BRANCH

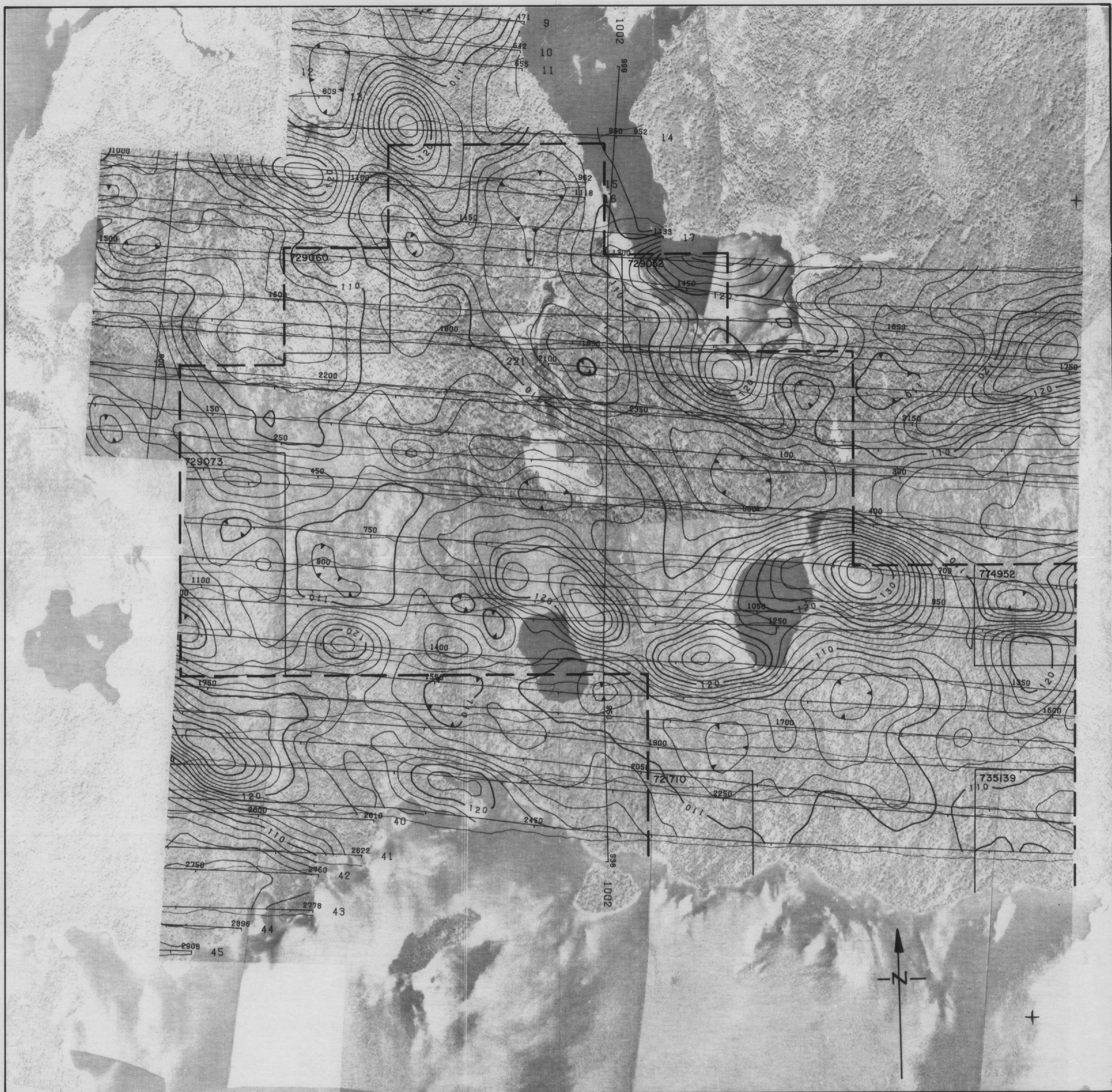
DOGPAW LAKE M.2585

LAWRENCE LAKE M.2579

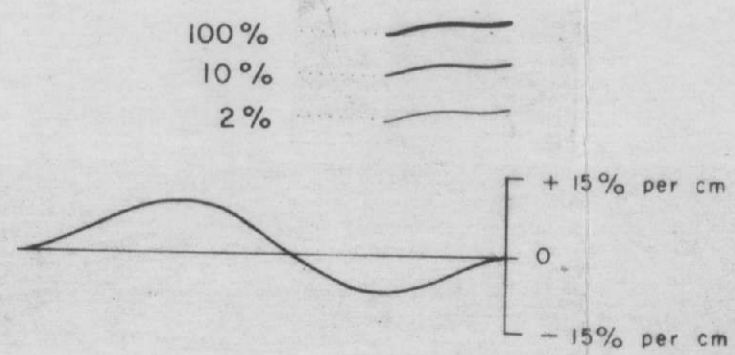
BROOKS LAKE M.2473

TRIM LINE





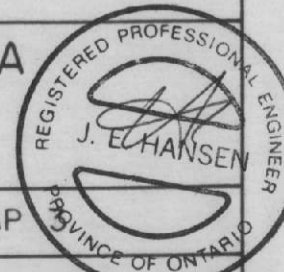
STATION - NAA CUTLER ME. - 24.0 Hz



GEOTEST CORPORATION

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

ISINGLASS LAKE AREA
ONTARIO



N.T.S. NO: 52 F/5

DRAWING NO. MAP

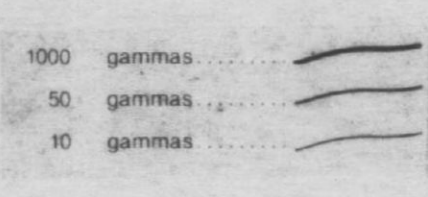
SCALE 1:10,000

DATE: February, March 1985

FLOWN BY TERRAQUEST LIMITED TORONTO
FOR GEOTEST CORP. OTTAWA

2.7947





GEOTEST CORPORATION

AIRBORNE MAGNETIC SURVEY
 TOTAL MAGNETIC FIELD

ISINGLASS LAKE AREA
 ONTARIO

N.T.S. NO: 52 F / 5 DRAWING NO. MAP
 SCALE 1:10,000 DATE: February, March 1985

FLOWN BY TERRAQUEST LIMITED TORONTO
 FOR GEOTEST CORP. OTTAWA



27947





0.00 gammas /m
 0.05 gammas /m
 0.01 gammas /m

GEOTEST CORPORATION

AIRBORNE MAGNETIC SURVEY
 VERTICAL MAGNETIC GRADIENT
 Calculated From Total Field

ISINGLASS LAKE AREA
 ONTARIO



N.T.S. NO: 52 F / 5

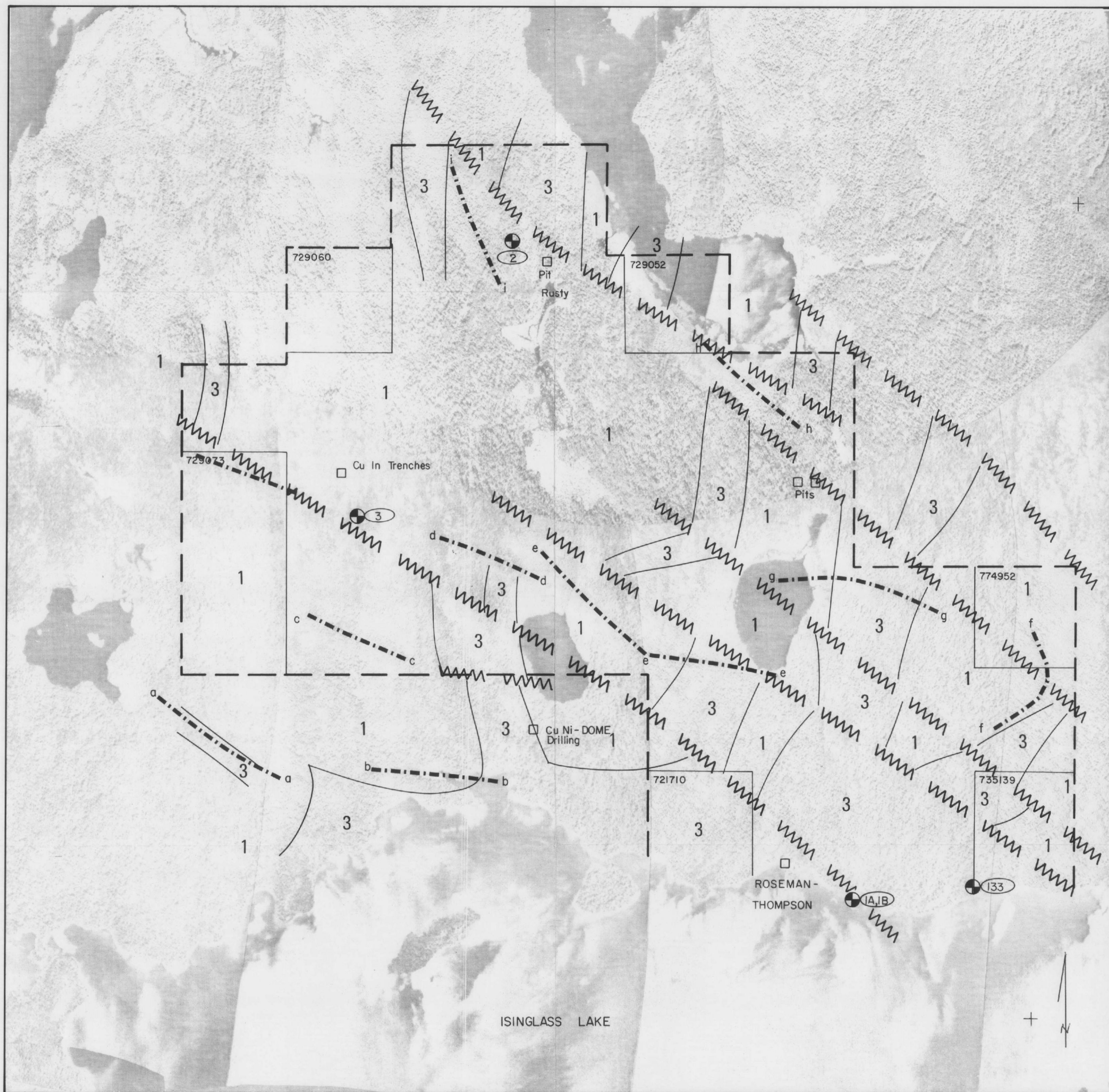
DRAWING NO. M-1000
 DATE: February, March 1985

SCALE 1:10,000

FLOWN BY TERRAQUEST LIMITED TORONTO
 FOR GEOTEST CORP. OTTAWA

27947





— POSSIBLE CONTACT
 W W W W W POSSIBLE FAULT

3 INTERPRETED MAFIC INTRUSIVES (GABBRO)
 1 INTERPRETED MAFIC TO INTERMEDIATE VOLCANICS

— VLF-EM CONDUCTOR AXES WITH IDENTIFIER

GEOLOGICAL INFORMATION

□ OCCURRENCES FROM MAP P831
 ● 1983-84 SAMPLE LOCATIONS WITH NUMBER

GEOTEST CORPORATION

INTERPRETATION

ISINGLASS LAKE AREA
 ONTARIO

N.T.S. NO: 52 F/5

DRAWING NO. MAP

SCALE 1:10,000

DATE: February, March 1985

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2.7947

