010

COMSTATE RESOURCES

MAGNETIC

AND

ELECTROMAGNETIC

SURVEY

SOUTH DELORO TOWNSHIP

PROPERTY

MAY, 1984

D. R. Pyke, Ph.D.

D R Pyke

COMSTATE RESOURCES

MAGNETIC AND ELECTROMAGNETIC SURVEY

SOUTH DELORO TOWNSHIP PROPERTY

Introduction

The property consists of 57 contiguous claims in the south to southeast portion of Deloro Township (Figure 1); four of the claims extend into Adams Township. The property, 8 miles south of the Timmins City centre, is within the District of Cochrane, Porcupine Mining Division, and comprises the appended list of claims.

Location and Access

The claims occupy much of the southeast portion of Deloro Township. The eastern part of the property is best reached by a bush road extending south from the Buffalo Ankerite Mine, a distance of about 8 miles. The western portion of the claim group is most accessible by logging roads extending east from Pine Street South, near the west boundary of Deloro Township.

Previous Work

Deloro Township was first mapped by Burrows (1911, 1915, 1924) and later by Hurst (1939) and Carlson (1967). Adams Township was mapped by Harding and Berry (1938) and Pyke (1975b). Previous work on the property and area is illustrated in Figure 1.

The Deloro-Wright Syndicate, and subsequently Delwin Mines Limited, a Company formed in 1937, formerly held 15 claims near

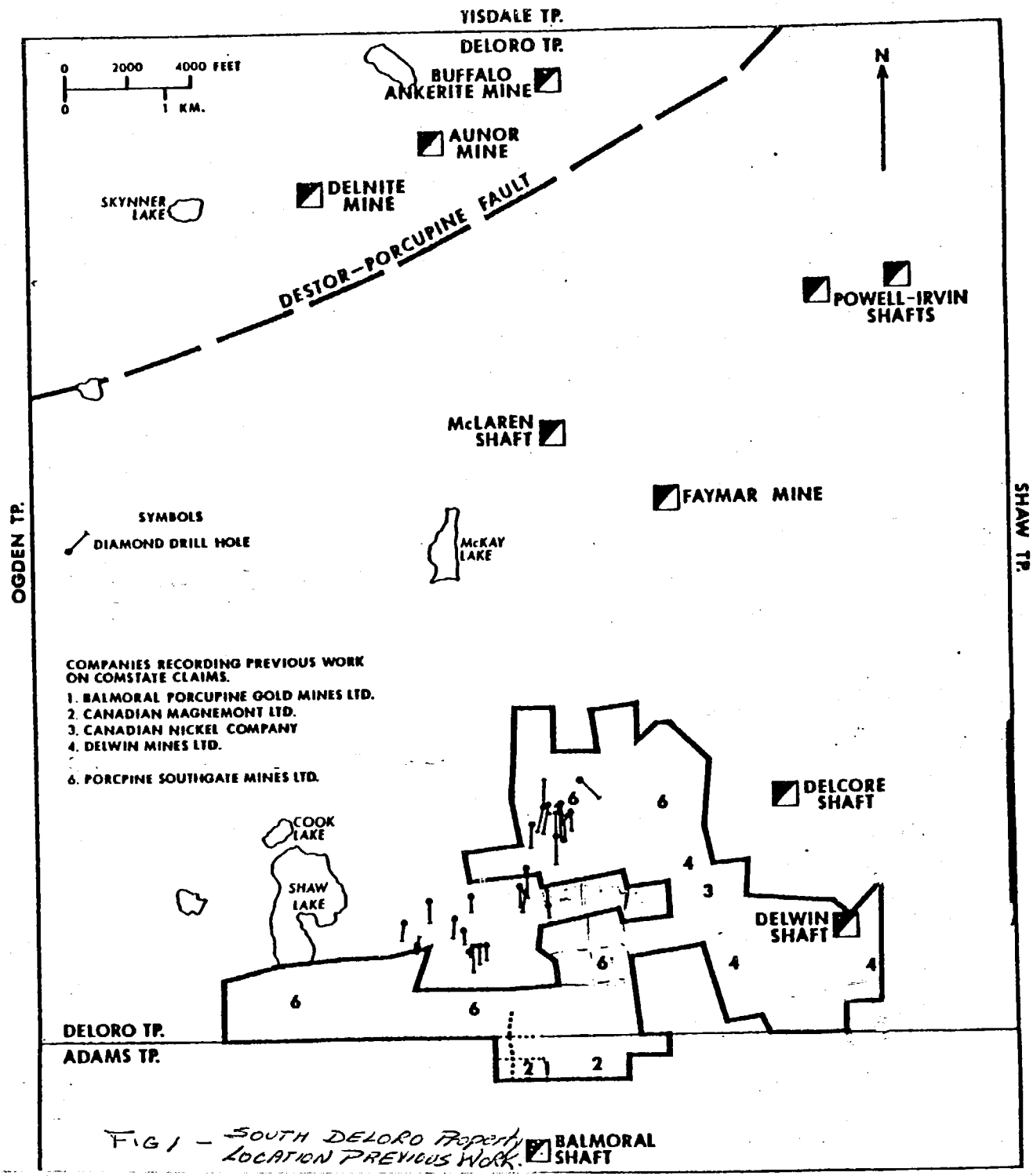

FIG 1 – SOUTH DELORO Property LOCATION PREVIOUS WORK.

the southeast corner of Deloro Township. In 1936, a shaft was sunk on the property to a depth of 135 feet (Ferguson et al, 1971). A level was cut at 125 feet and a cross-cut driven 55 feet south. Seven drill holes were put down on the shaft zone, and two test pits to a depth of 12 feet were excavated in the vicinity of the shaft. Considerable rock trenching was reportedly done on two other gold bearing zones on the property. Visible gold was reported on the property in the outcrop area located one-half mile northwest of the shaft, however, the best quoted assays from the property are 0.16 ounces of gold per ton (no widths indicated) and 0.09 ounces of gold per ton over four feet.

In 1969, Canadian Nickel Company Limited conducted a magnetic and electromagnetic survey over four claims in the northwest corner of the claims formerly held by Delwin Mines (File 63-2594). A number of weak conductors were detected. One diamond drill hole was sunk for 613 feet and intersected serpentinite, gabbro and diabase; no assays are given.

Porcupine Southgate Mines Limited (File T-108) formerly held a group of 47 claims, extending west and northwest from the Delwin property. In 1944-45, Porcupine Southgate geologically mapped the property at a scale of one inch to 500 feet, and drilled 29 diamond drill holes totalling 26,603 feet (Carlson, 1967), of which about half was drilled on claims currently held by Comstate Resources. The drilling, on what is now Comstate ground, was confined to four claims in the northwest portion of the property, and most was done within an area of two claims.

The property was considered a gold prospect; the best recorded assay on Comstate ground was 0.34 ounces of gold per ton over 2.5 feet. Numerous values of 0.05 to 0.08 ounces of gold per ton over 5 foot widths are reported.

In 1964, much of the Porcupine Southgate property was acquired by Canadian Magnesite Mines Limited. A magnesite deposit on the property, not within the confines of Comstate claims, was subjected to rigorous analyses (Griffis, 1972), but proved to be sub-economic.

In 1946, Balmoral Porcupine Gold Mines Limited (File T-143) drilled one diamond drill hole on the Adams-Deloro Township boundary, on what is now part of the Comstate claim group; no assays are given.

In 1971-72, Canadian Magnemont Limited conducted a magnetic (Sharpe MF-1 Fluxgate) survey and electromagnetic (EM-16) survey over a portion of the claims currently held by Comstate in Adams Township. One VLF anomaly was detected on Comstate property and interpreted to be caused by a shear zone or conductive overburden. No follow-up work was undertaken.

In 1980, Amax Minerals Exploration Ltd. conducted an air-borne magnetic survey of Deloro Township, and many of the surrounding townships (File 2-3367).

In 1981, Comstate Resources Ltd. conducted a humus survey on six claims in the vicinity of the former Delwin Shaft area. Two anomalous east-west trending zones, with gold values ranging from 20 to 76 ppb, were outlined over a strike length of 3800 feet.

In 1981-82, approximately 1000 feet of portable percussion overburden drilling was done by Comstate Resources south of the Delwin Shaft area. Of the basal sediment samples collected and analyzed for gold and arsenic, none returned anomalous values.

In 1983, Questor Surveys Ltd. flew a combined airborne magnetic and INPUT survey for Comstate Resources over much of south Deloro Township and part of north Adams Township.

General Geology

The claims are near the southwest margin of the Shaw Dome, and straddle the contact between the Deloro and Tisdale Group volcanic rocks (Figure 2). The contact has not been mapped in detail, but would appear to be transitional in nature, in that it represents an intercalation of calc-alkaline volcanic rocks of the Deloro Group, with overlying komatiitic volcanic rocks at the base of the Tisdale Group. Large sill-like intrusions of dunite-peridotite with minor associated gabbro underlie much of the central portion of the township.

Pervasive carbonatization and chloritization are particularly common in the south part of the township.

Property Geology

The property straddles the contact between the Deloro and Tisdale Group volcanic rocks (Figure 2). Serpentinized and carbonatized komatiitic volcanic rocks of the Tisdale Group largely underlie the southeast part of the property in proximity to the Deloro-Adams township boundary. Outcrop in this particular

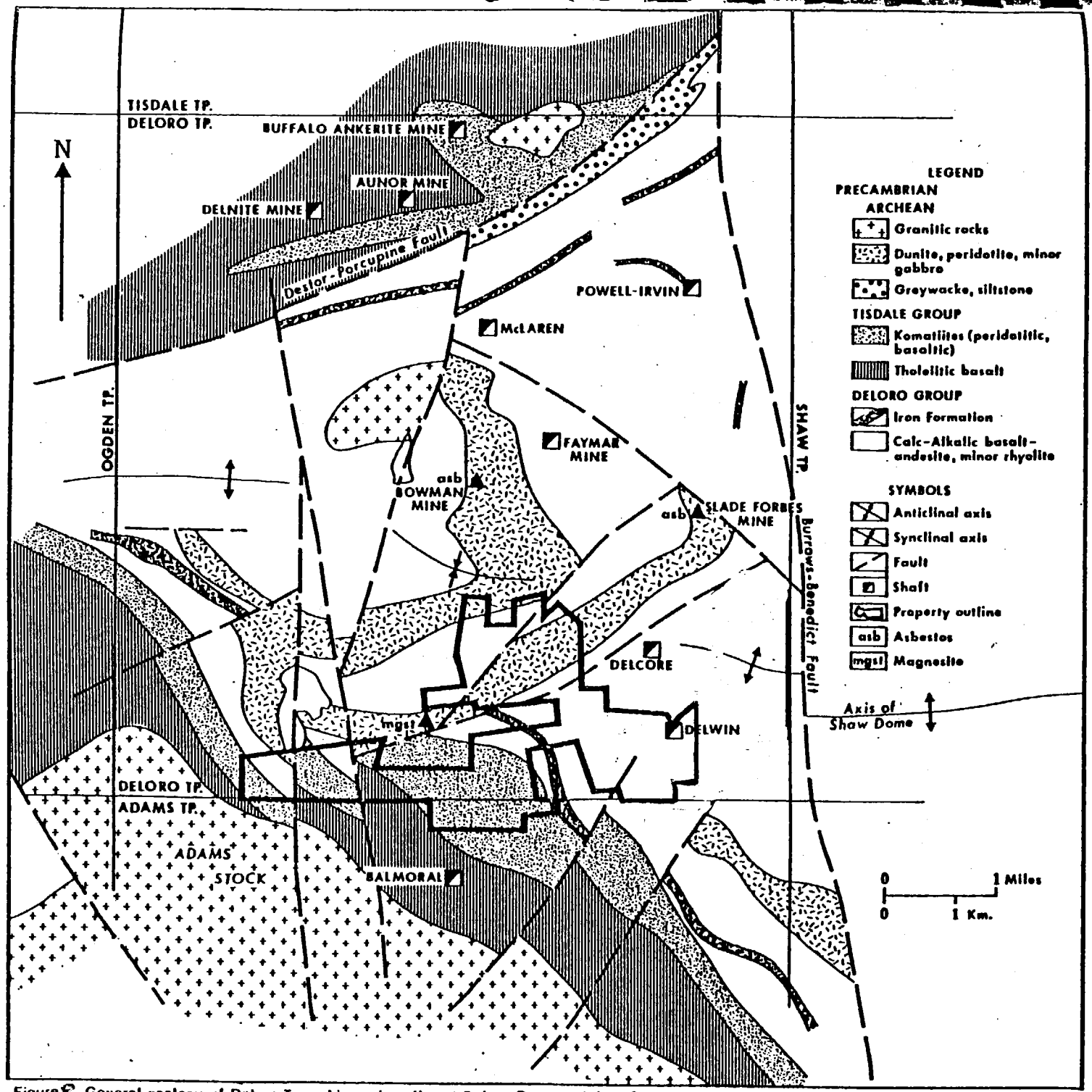

Figure 2 - General geology of Deloro Township and southeast Deloro Property (after Carlson 1967, Pyke 1974).

area is sparse, and exploration work along the general contact zone has been minor - mapping by Porcupine Southgate and one drill hole by Balmoral Mines. The remainder of the property is largely underlain by variably chloritized and carbonatized calc-alkaline basalt-andesite of the Deloro Group. A large sill of serpentinized dunite-peridotite extends across the northwestern portion of the claim group. The southwestern part of this sill is extensively altered to magnesite and talc.

Magnetic Survey

Most of the present survey was done during the period September 8th - September 17th, 1983, by Wollex Exploration for Comstate Resources. Minor fill-in lines were completed by Exsics Exploration during the period March 11th - March 20th, 1984.

North trending picket lines were cut at 400 foot intervals over most of the property; 200 foot picket lines were established on the east part of the property in the vicinity of the Delwin Shaft area. A base line was established along the Deloro-Adams Township boundary and east-west tie-lines were cut at approximately 32N, 58N and 86N. A total of 49.3 miles of line were cut.

Magnetic readings were taken with a Geometrics portable proton magnetometer, model G-816. The instrument measures the total field directly in gammas (see attached specifications). Readings were taken every 50 feet along the picket lines. For the fill-in magnetics, completed by Exsics Exploration, an EDA PPM-350 proton magnetometer was used. (see attached specifications)

For the purpose of diurnal correction, a base station was established at 16W, 2N. Readings were taken at 30 second intervals, corresponding to times at which readings were taken on the grid. The base station value was 59966 gammas.

Results of Magnetic Survey

Magnetic relief on the property is approximately 5000 gammas, the maximum relief being in the north half of Map 1A.

Virtually all the areas of high magnetic relief are interpreted to be underlain by ultramafic intrusive rocks as outlined by Carlson (1967). This would include most of Map 1A, with the exception of the wedge-shaped SW trending area of lower magnetic susceptibilities which are fault bounded to the southeast. Some of the small areas of magnetic lows within the highs may indicate areas of alteration (eg. - carbonatization). The extreme west margin of Map 1B and portions of the northwest part of Map 1C are also considered to be in a large part underlain by ultramafic intrusive rocks. Nevertheless, some iron formation is also known to occur in the northeast part of Map 1C on claims P628512 and P628513. In addition, mapping by Comstate Resources indicates an area of carbonatized ultramafic intrusive rocks in the north part of claims P651358 and P651365.

The magnetic data suggests an overall west to WNW strike of the bedrock.

Elsewhere on the property, mafic volcanic rocks predominate, and minor ultramafic flows are known to outcrop in the SE portion of Map 1C, near the Adams-Deloro Township boundary.

Two major faults are interpreted; a NE trending fault on Map 1A and a NW trending fault on Map 1C.

Electromagnetic Survey

The VLF electromagnetic survey was conducted by Wollex Explorations for Maps 2A, 2B and parts of 2C, during the period September 8th - September 17, 1983. Minor fill-in lines were completed by Exsics Exploration on Map 2A; in addition, most of the VLF on Map 2C (in the 200 foot grid area) was conducted by Exsics, the remainder by Wollex.

Two instruments were used for the survey; an EM-16 and a Radem. Specifications for both instruments are attached. The transmitter station for the survey was Cutler Maine, which uses a frequency of 17.8 kH_z with a radiated power of 1000 KW. Wollex Exploration utilized the EM-16 and measured both the vertical in-phase component and the vertical out-of-phase component (quadrature). Exsics used the Crone Radem unit and measured the dip angle.

With either instrument, it is possible to outline poor conductors such as sheared contacts, breccia zones, alteration zones, faults, in addition to good sulphide conductors.

Electromagnetic readings were taken at 50 foot intervals, with the exception of part of the area on Map 2C, where the readings on some of the 200 foot grid were spaced at 100 foot intervals. A total of 4891 readings were taken.

Results of VLF Survey

The VLF data are given on Maps 2A, B, C (profile) and 3A, B, C (Frazer filter).

All the profile cross-overs are not indicated as the Frazer filter is considered to effectively delineate the axis of all main conductors.

The main conductors are largely confined to Maps 2C - 3C, and trend in an easterly direction.

Some of the conductors are roughly coincident with high gold values obtained from previous geochemical (humus) analyses (Assessment Files), and may therefore reflect true bedrock structures or stratigraphy.

Recommendations

It is recommended that detailed mapping and sampling of the property be completed, and that the results be critically examined in combination with the geophysical surveys to determine the course of further exploration expenditures.

REFERENCES

Burrows, A. G.

1911: The Porcupine Gold Area; Ontario Bureau of Mines, Vol. 20, pt. 2.

1915: The Porcupine Gold Area, Second Report; Ontario Bureau of Mines, Vol. 21, pt. 1, p. 205-249.

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Carlson, H. D.

1967: Geology of Odgen, Deloro and Shaw Townships; Ontario Department of Mines, Open File Report 5012, 117 p..

Harding, W. D. and
Berry, L. G.

1938: Geology of the Keefer-Eldorado Area; Ontario Department of Mines, Vol. 47, pt. 4, p. 1-26.

Hurst, M. E.

1939: Porcupine Area, District of Cochrane; Ontario Department of Mines, Map 47a, Scale: 1 inch to 2000 feet.

Pyke, D. R.

1975: Geology of Adams and Eldorado Townships; Ontario Division of Mines, GR. 121, 51 p..

geoMetrics

Instrument Division

PORTABLE PROTON MAGNETOMETER
MODEL G-816 826

Data Sheet
August 1974

- ★ 1 gamma sensitivity and repeatability
- ★ Very small size and weight: less than 12 lbs complete with batteries and sensor
- ★ Over 10,000 readings per set of alkaline "D" cell (flashlight) batteries
- ★ Provision to attach sensor to carrying harness for use without staff
- ★ Pushbutton operation—numeric display directly in gammas
- ★ Total field measurements—independent of orientation—no calibration—no leveling

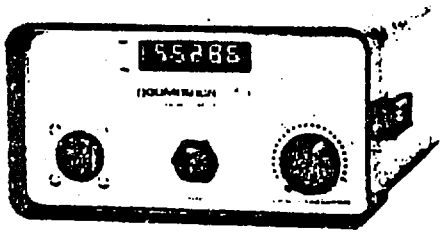
The Model G-816 is a complete portable magnetometer for all man-carry field applications. As an accurate yet simple to operate instrument, it features an outstanding combination of one gamma sensitivity and repeatability, compact size and weight, operation on standard universally available flashlight batteries, ruggedized packaging and very low price.

The G-816 magnetometer allows precise mapping of very small or large amplitude anomalies for ground geophysical surveys, or for detail follow-up to aeromagnetic reconnaissance surveys. It is a rugged, lightweight, and versatile instrument, equally well suited for field studies in geophysics, research programs or other magnetic mapping application where low cost, dependable operation and accurate measurements are required.

For marine, airborne or ground recording systems consider GeoMetrics Models G-801, G-803, and G-826.

"Hands-free" Back Pack Sensor

Based upon the principle of nuclear precession (proton) the G-816 offers absolute drift-free measurements of the total field directly in gammas. (The proton precession method is the officially recognized standard for measurement of the earth's magnetic field.) Operation is worldwide with one gamma sensitivity and repeatability maintained throughout the range. There is no temperature drift, no set-up or leveling required, and no adjustment for orientation, field polarity, or arbitrary reference levels. Operation is very simple with no prior training required. Only 6 seconds are required to obtain a measurement which is always correct to one gamma, regardless of operator experience. Only the Proton Magnetometer offers such repeatability—an important consideration even for 10 gamma survey resolution.



Complete Field Portable System

The Model G-816 comes complete, ready for portable field operation and consists of:

1. Electronics console with internally mounted and easily replaced "D" cell battery pack.
2. Proton sensor and signal cable for attachment to carrying harness or staff.
3. Adjustable carrying harness.
4. 8 foot collapsible aluminum staff.
5. Instruction manual, complete set of spare batteries, applications manual, and rugged field suitcase.

Price and lease rates on the G-816 magnetometer are available upon request.

SPECIFICATIONS

Sensitivity: ±1 gamma throughout range

Range: 20,000 to 90,000 gammas (worldwide)

Tuning: Multi-position switch with signal amplitude indicator light on display

Gradient Tolerance: Exceeds ~~300 gammas/ft increased gradient tolerance~~ 800 gammas/ft ~~upon request~~)

Sampling Rate: Manual push-button, one reading each 6 seconds

Output: 5 digit numeric display with readout directly in gammas

Power Requirements: Twelve self-contained 1.5 volt "D" cell, universally available flashlight-type batteries. Charge state or replacement signified by flashing indicator light on display.

Battery Type	Number of Readings
Alkaline	over 10,000
Premium Carbon Zinc	over 4,000
Standard Flashlight	over 1,500

NOTE: Battery life decreases with low temperature operation.

Temperature Range: Console and sensor: -40° to +85°C

Battery Pack: 0° to +50°C (limited use to -15°C; lower temperature battery belt operation—optional)

Accuracy (Total Field): ±1 gamma through 0° to +50°C temperature range

Sensor: High signal, noise cancelling, interchangeably mounted on separate staff or attached to carrying harness

Size: Console: 3.5 x 7 x 10.5 inches (9 x 18 x 27 cm)
Sensor: 4.5 x 6 inches (11 x 15 cm)
Staff: 1 inch diameter x 8 ft lenght (3 cm x 2.44 m)

Weight:

	Lbs.	Kgs.
Console (w/batteries):	5.5	2.4
Sensor & signal cable:	4	1.8
Aluminum staff:	2	0.9
Total:	11.5	5.1

All magnetometers and parts are covered by a one year warranty beginning with the date of receipt but not to exceed fifteen months from the shipping date.

geoMetrics 396 JAVA DRIVE SUNNYVALE, CA. 94086 U.S.A. (408) 734-4616 CABLE: "GEOMETRICS" SUNNYVALE TELEX NO: 357-435

GEOMETRICS INTERNATIONAL CORP 80 ALFRED ST., MILSON'S POINT SYDNEY NSW 2061 PHONE: 929-9842

Exploranium Division of GEOMETRICS 436 LIMESTONE CRESCENT, DOWNSVIEW (TORONTO), ONTARIO, CANADA TELEPHONE (416) 661-1966 TELEX NO: 06-22694

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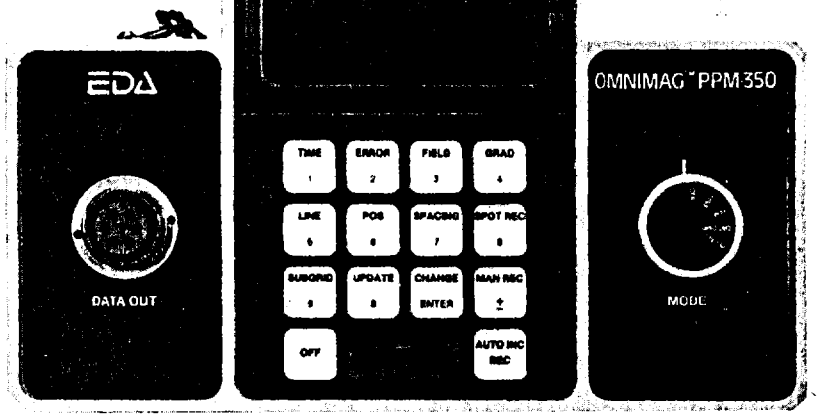
OMNIMAG PPM-350
Total Field Magnetometer

EDA



The PPM-350 is the latest addition to EDA's OMNIMAG*™ series of magnetometers and gradiometers. It is engineered to provide users with the latest state-of-the-art advances in microprocessor technology, including many features that are unique in the field.

Major benefits and features include:

- Significant increase in productivity
- Lowered survey costs
- Automatic diurnal correction
- Programmable grid coordinates
- Highly reproduceable data
- Ergonomic design
- Simplified fieldwork
- Computer-compatible

Specifications

Dynamic Range	18,000 to 93,000 gammas
Sensitivity	±0.02 gamma
Statistical Error Resolution	0.01 gamma
Standard Memory Capacity	1383 data blocks or readings
Absolute Accuracy	±15 ppm at 23°C, 50 ppm over the operating temperature range
Display Resolution	0.1 gamma
Capture Range	±25% relative to ambient field strength of last stored value
Display	Custom-designed, ruggedized liquid crystal display with an operating temperature range from −35°C to +55°C
Gradient Tolerance	5,000 gammas per meter
Sensor	Optimized miniature design. Magnetic cleanliness is consistent with the specified absolute accuracy
Sensor Cable	Remains flexible in temperature range; includes low strain connector
Operating Environmental Range	−35°C to +55°C; 0–100% relative humidity; weather-proof
Power Supply	Non-magnetic rechargeable sealed lead acid battery cartridge or belt; or, Disposable "C" cell battery cartridge or belt
Battery Cartridge Life	2,000 to 5,000 readings, depending upon ambient temperature and rate of readings
Weight and Dimensions	
Instrument Console only	3.4 kg, 238 x 150 x 250 mm
Lead Acid Battery Cartridge	1.9 kg
Sensor	1.2 kg, 56 mm diameter x 200 mm
System Complement	Electronics console; sensor with 3-meter cable; sensor staff; power supply; harness assembly; operation manual.

EDA is a pioneer in the development of advanced geophysical systems and has created many innovations that increase field productivity and lower survey costs.

EDA's OMNIMAG series consists of the PPM-350 Total Field Magnetometer, PPM-400 Base Station Magnetometer, and the PPM-500 Vertical Gradiometer. Contact us *now* for details.

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E D A Instruments Inc.
5151 Ward Road
Wheat Ridge, Colorado
U.S.A. 80033
Telex: 00 450681 DVR
(303) 422-9112

Printed in Canada

VLF

EM16

One of the most popular and widely used electromagnetic instruments, the EM16 VLF receiver makes the ideal reconnaissance EM. This can be attributed to its field reliability, operational simplicity, compactness and mutual compatibility with other reconnaissance instruments such as portable magnetometers and radiometric detectors.

The VLF method of EM surveying, pioneered by Geonics, has proven to be a simple economical means of mapping geological structure and fault tracing. The applications are many and varied, ranging from direct detection of massive sulphide conductors to the indirect detection of precious metals and radioactive deposits.

FEATURES

- The EM16 is the only VLF instrument that measures the quad-phase as well as the in-phase secondary field. This has the advantage of providing an additional piece of data for a more comprehensive interpretation and also allows a more accurate determination of the tilt angle.
- The secondary fields are measured as a ratio to the primary field making the measurement independent of absolute field strength.
- The EM16 is the only VLF receiver that can be adapted to measure VLF resistivity.

Specifications

MEASURED QUANTITY	In-phase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity)
SENSITIVITY	In-phase : ±150% Quad-phase : ± 40%
RESOLUTION	±1%
OUTPUT	Nulling by audio tone. In-phase indication from mechanical inclinometer and quad-phase from a graduated dial.
OPERATING FREQUENCY	15-25 kHz VLF Radio Band. Station selection done by means of plug-in units.
OPERATOR CONTROLS	On/Off switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclino meter.
POWER SUPPLY	6 disposable 'AA' cells
DIMENSIONS	42 x 14 x 9 cm
WEIGHT	Instrument: 1.6 kg Shipping : 5.5 kg

VLF RESISTIVITY METER

EM16R

A simple, button-on attachment to the EM16 converts it to a direct reading terrrain resistivity meter. The EM16R attachment interfaces a pair of potential electrodes to the EM16 enabling the measurement of the ratio of, and the phase angle between, the horizontal electric and magnetic fields of the plane wave propagated by distant VLF radio transmitters.

The EM16R is direct reading in ohm-meters of apparent ground resistivity. If the phase angle is 45°, the resistivity reading is the true value and the earth is uniform to the depth of exploration (i.e. a skin depth). Any departure from 45° of phase indicates a layered earth. Two layer interpretation curves are supplied with each instrument to permit an interpretation based on a two layer earth model.

This highly portable resistivity meter makes an ideal tool for quick geological mapping and has been used successfully for a variety of applications.

- Detection of massive and disseminated sulphide deposits
- Overburden conductivity and thickness measurements
- Permafrost mapping
- Detection and delineation of industrial mineral deposits
- Aquifer mapping

Specifications

MEASURED QUANTITY	● Apparent Resistivity of the ground in ohm-meters ● Phase angle between E_x and H_y in degrees
RESISTIVITY RANGES	● 10 — 300 ohm-meters ● 100 — 3000 ohm-meters ● 1000 — 30000 ohm-meters
PHASE RANGE	0-90 degrees
RESOLUTION	● Resistivity : ±2% full scale ● Phase : ±0.5°
OUTPUT	Null by audio tone. Resistivity and phase angle read from graduated dials.
OPERATING FREQUENCY	15-25 kHz VLF Radio Band. Station selection by means of rotary switch.
INTERPROBE SPACING	10 meters
PROBE INPUT IMPEDANCE	100 MΩ in parallel with 0.5 picofarads
DIMENSIONS	19 x 11.5 x 10 cm. (attached to side of EM16)
WEIGHT	1.5 kg (including probes and cable)

CRONE GEOPHYSICS LIMITED

3607 WOLFEDALE ROAD,
MISSISSAUGA, ONTARIO,
CANADA,
L5C 1V8

Phone: (416) 270-0096

Cable: CRONGEO, TORONTO

RADEM

AN EM RECEIVER MEASURING THE FIELD STRENGTH, DIP ANGLE AND QUADRATURE COMPONENTS OF THE VLF COMMUNICATION STATIONS

This is a rugged, simple to operate, ONE MAN EM unit. It can be used without line cutting and is thus ideally suited for GROUND LOCATION OF AIRBORNE CONDUCTORS and the CHECKING OUT OF MINERAL SHOWINGS. This instrument utilizes higher than normal EM frequencies and is capable of detecting DISSEMINATED SULPHIDE DEPOSITS and SMALL SULPHIDE BODIES. It accurately isolates BANDED CONDUCTORS and operates through areas of HIGH HYDRO NOISE. The method is capable of deep penetration but due to the high frequency used its penetration is limited in areas of clay and conductive overburden.

The DIP ANGLE measurement detects a conductor from a considerable distance and is used primarily for locating conductors. The FIELD STRENGTH measurement is used to define the shape and attitude of the conductor.

SPECIFICATIONS

SOURCE OF PRIMARY FIELD: VLF Communication Stations 12 to 24K hz

NUMBER OF STATIONS: 7 switch selectable

STATIONS AVAILABLE: The seven stations my be selected from:

Code	Station & Location	Frequency
CM	Cutler, Maine	17.8 KHz
SW	Seattle, Washington	18.6 KHz
AM	Annapolis, Maryland	21.4 KHz
H	Laulualei, Hawaii	23.4 KHz
BOF	Bordeaux, France	15.1 KHz
E	Rugby, England	16.0 KHz
MS	Gorki, Russia	17.1 KHz
OD	Odessa (Black Sea)	15.6 KHz
NC	Australia, N.W.C.	22.3 KHz
YJ	Yosamai, Japan	17.4 KHz
HN	Hegaland, Norway	17.6 KHz
TJ	Tokyo, Japan	20.0 KHz
BA	Buenos Aires	23.6 KHz

CHECK THAT STATION IS TRANSMITTING: Audible signal from speaker.

PARAMETERS MEASURED:

(1) DIP ANGLE in degrees of the magnetic field component, from the horizontal, of the major axis of the polarization ellipse. Detected by a minimum on the field strength meter and read from an inclinometer with a range of ± 90° and an accuracy of ± ½°.

(2) FIELD STRENGTH (total or horizontal) of the magnetic component of the VLF field, (amplitude of the major axis of the polarization ellipse). Measured as a percent of normal field strength established at a base station. Accuracy ± 2% dependent on signal. Meter has two ranges: 0 — 300% and 0 — 600%.

(3) OUT-OF-PHASE component of the magnetic field, perpendicular in direction to the resultant field, as a percent of normal field strnegth, (amplitude of the minor axis of the polarization ellipse). This is the minimum reading of the Field Strength meter obtained when measuring the dip angle. Accuracy ± 2%.

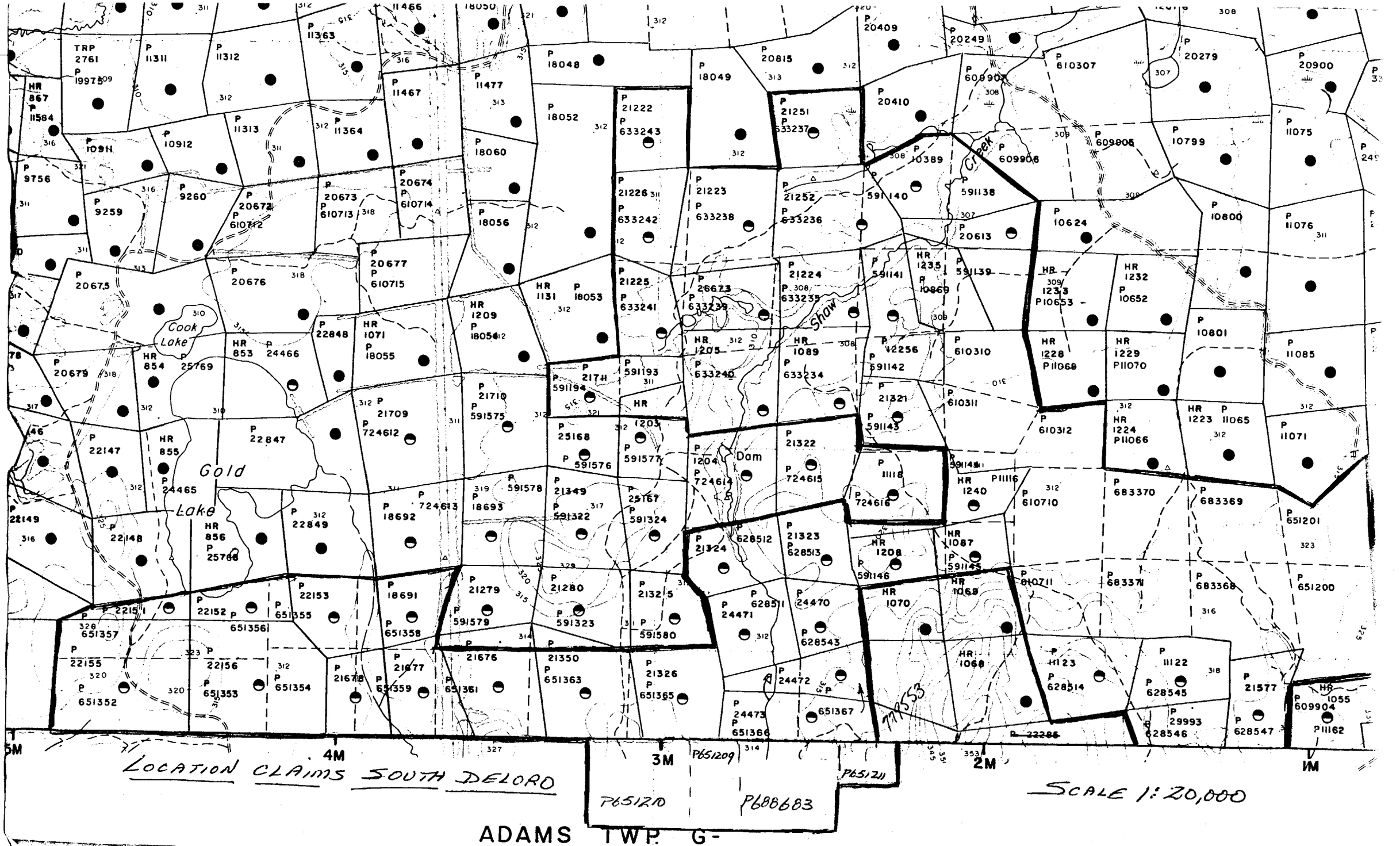
OPERATING TEMPERATURE RANGE: -30°C (-20°F) to +50°C (120°F)

DIMENSIONS AND WEIGHT: 9 x 19 x 27cm — 2.7Kg (6 lb)

SHIPPING: Instrument with foam lined wooden case,
shipping wt. — 6.0Kg (13 lb)

BATTERIES: 2 of 9 volt — Eveready 216
Average life expectancy — 20 hours for continuous operation

UNITS AVAILABLE ON A RENTAL OR PURCHASE BASIS.
CONTRACT SERVICES AVAILABLE FOR FIELD SURVEYS.


Cook Lake
Gold Lake
Dam
Creek
Show
5M
4M
3M
2M
1M
P651210
P688683
P651209
P651211
LOCATION CLAIMS SOUTH DELORO
SCALE 1: 20,000
ADAMS TWP. G-

Ministry of Natural Resources
Ontario

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

#1

W8406-115

The Mini

42A06NE0459 2.6771 DELORO

900

Type of Survey(s): Geophysical	Township or Area: DELORO
Claim Holder(s): D. R. PYKE	Prospector's Licence No.
Address: 31 DELAIR CRES. THORNHILL, ONT L3T 2M3	
Survey Company: COMSTATE RESOURCES	Date of Survey (from & to): 8 09 83 / 17 09 83 (Day / Mo. / Yr.) — Total Miles of line Cut
Name and Address of Author (of Geo-Technical report): D.R. PYKE, 31 DELAIR CRES, THORNHILL, ONT. L3T 2M3	

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	20
	- Magnetometer	20
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	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	610310	
	610311	
	610312	
	610710	
	610711	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECORDED
MAR 22 1984
No. 84.

RECEIVED
MAY 11 1984
MINING LANDS SECTION

PORCUPINE MINING DIVISION
RECEIVED
MAR 22 1984
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Total number of mining claims covered by this report of work: 5

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
200	Mar 22/84	
	Date Approved as Recorded: Sept 25/84	Branch Director

Date	Recorded Holder or Agent (Signature)
Mar 20/84	D. R. Pyke

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: D R PYKE, 31 DELAIR CRES, THORNHILL ONTARIO L3T2M3

Date Certified	Certified by (Signature)
Mar 20/83	D R Pyke

Ministry of Natural Resources
Ontario

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

W.R. # 137/84

The Mining Act May 28/84

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.

Type of Survey(s): Geophysical

Township or Area: DELORO - ADAMS

Claim Holder(s): D. R. PYKE

Prospector's Licence No.: K19126

Address: 31 DELAIR CRES. THORNHILL ONT L3T 2M3

Survey Company: COMSTATE RESOURCES Ltd; EXSICS EXPLORATION

Date of Survey (from & to): 8 09 83 (Day Mo. Yr.) 20 03 84 (Day Mo. Yr.)

Total Miles of line Cut: 44.9

Name and Address of Author (of Geo-Technical report): D. R. PYKE, 31 DELAIR CRES, THORNHILL, ONTARIO L3T 2M3

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	20
	- Magnetometer	20
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	

RECEIVED MAR 27 1984 A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

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

RECORDED MAR 27 1984 Receipt No. 30

RECEIVED MAY 11 1984 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.

Date: May 22/84 Recorded Holder or Agent (Signature): D R Pyke

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	591138	
	591139	
	591140	
	591141	
	591142	
	591143	
	591144	
	591145	
	591146	
	591193	
	591194	
	628511	
	628512	
	628513	
	628543	
	633234	
	633235	
	633236	
	633237	
	633238	
	633239	
	633240	
	633241	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	633242	
	633243	
	651209	
	651210	
	651211	
	651352	
	651353	
	651354	
	651355	
	651356	
	651357	
	651358	
	651359	
	651361	
	651363	
	651365	
	651366	
	651367	
	688683	
	see revised	
	statement	

Total number of mining claims covered by this report of work: 42

For Office Use Only

Total Days Cr. Recorded: 1680

Date Recorded: March 27, 1984

Date Approved as Recorded:

Mining Recorder: [signature]

Branch Director Mining Recorder

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: D R Pyke, 31 DELAIR CRES THORNHILL ONT L3T2M3

Date Certified: May 22/84 Certified by (Signature): D R Pyke

Ministry of Natural Resources
Ontario

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

W.R. #157184

The Mining Act

June 11

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.

Type of Survey(s): GEOPHYSICAL	Township or Area: DELORO
Claim Holder(s): D.R. PYKE	Prospector's Licence No.: K19126
Address: 31 DELAIR CRES., THORNHILL, ONT L3T 2M3	
Survey Company: COMSTATE RESOURCES LTD	Date of Survey (from & to): 20 3 84 (Day Mo. Yr.) – 30 3 84 (Day Mo. Yr.)
Total Miles of line Cut: 18.3	
Name and Address of Author (of Geo-Technical report): D.R. PYKE, 31 DELAIR CRES, THORNHILL, ONT. L3T 2M3	

Credits Requested per Each Claim in Columns at right

		Days per Claim
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 - Electromagnetic	20
	- 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.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	628544	
	628545	
	628546	
	628547	
	651200	
	651201	
	683368	
	683369	
	683370	
	683371	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
MAY 11 1984
MINING LANDS SECTION

RECEIVED
APR 10 1984
Receipt No. 30

PORCUPINE MINING DIVISION
RECEIVED
APR 10 1984
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

Total number of mining claims covered by this report of work: 10

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	Recorded Holder or Agent (Signature)
April 10/84	D.R. Pyke

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
200	April 10, 1984	Stanley
	Date Approved as Recorded: Sept 25/84	Per Mining Recorder: [illegible]

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: D R PYKE 31 DELAIR CRES THORNHILL, ONT L3T 2M3

Date Certified	Certified by (Signature)
April 10/84	D.R. Pyke

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) GEOPHYSICAL

Township or Area DELORO – ADAMS

Claim Holder(s) D.R. PYKE

Survey Company WOLLEX EXPLORATION, EXSICS EXPLOR.

Author of Report D.R. PYKE

Address of Author 31 DELAIR CRES THORNHILL, ONT L3T 2M3

Covering Dates of Survey AUG 1/83 — MAY 17/84 (linecutting to office)

Total Miles of Line Cut 46.4.

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	20
–Magnetometer	20
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____ (enter days per claim)

DATE: MAY 21/84 SIGNATURE: D.R. Pyke
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

RECEIVED
MAY 29 1984
MINING LANDS SECTION

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	591138
P	591139
P	591140
P	591141
P	591142
P	591143
P	591144
P	591145
P	591146
P	591193
P	591194
P	628511
P	628512
P	628513
P	628543
P	633234
P	633235
P	633236
P	633237
P	633238
P	633239
P	633240

TOTAL CLAIMS 47

If space insufficient, attach list

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 3899 Number of Readings 3899

Station interval 50 FT Line spacing 400 FT

Profile scale

Contour interval 100 GAMMAS

MAGNETIC

Instrument Geometrics Model G816 ; EDA PPM-350

Accuracy – Scale constant 1 GAMMA

Diurnal correction method base station established on property

Base Station check-in interval (hours) base stn. ~~re~~read every 30 seconds

Base Station location and value L16W, 2N – 59966 GAMMAS

ELECTROMAGNETIC

Instrument GEONICS EM-16 ; CRONE RADEM

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency VLF STATION CUTLER MAINE 17.8KHz
(specify V.L.F. station)

Parameters measured IN-PHASE COMPONENT & QUADRATURE; DIP ANGLE.

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

MINING CLAIMS (CONTINUED)

P633241
633242 < 633243
651209
651210
651211
651352
651353
651354
651355
651356
651357
651358
651359
651361
651363
651365
651366
651367
688683

P610310
610311
610312
610710
610711

These 5 claims submitted as separate Report of Work.

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) GEOPHYSICAL

Township or Area DELORO

Claim Holder(s) D. R. PYKE

Survey Company WOLLEX EXPLOR. EXSICS EXPLOR.

Author of Report D. R. PYKE

Address of Author 31 DELAIR CRES, THORNHILL ONT.

Covering Dates of Survey AUG 1/83 – MAY 17/84 (linecutting to office)

Total Miles of Line Cut 18.3

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	20
–Magnetometer	
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____ (enter days per claim)

DATE: May 17/84 SIGNATURE: D R Pyke (Author of Report or Agent)

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	628544
P	628545
P	628546
P	628546
P	628547
P	651200
P	651201
P	683368
P	683369
P	683370
P	683371

TOTAL CLAIMS 10

If space insufficient, attach list

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 992. Number of Readings 992

Station interval 50FT -100 FT Line spacing 200 FT

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 GEONICS EM-16; CRONE RADEM.

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency VLF STATION CUTLER MAINE, 17.8 KHz
(specify V.L.F. station)

Parameters measured IN-PHASE COMPONENT & quadrature; DIP Angle

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

1984 10 31

Your File: 137/84
Our File: 2.6771

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Notice of Intent dated September 25, 1984
Geophysical (Electromagnetic & Magnetometer)
Survey on Mining Claims P 591138 et al in
the Townships of Deloro and Adams

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: D.R. Pyke
31 Delair Crescent
Thornhill, Ontario
L3T 2M3

cc: G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Encl.

cc: Resident Geologist
Timmins, Ontario

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.6771

Date 1984 09 24

Mining Recorder's Report of Work No. 137/84

Recorded Holder: D.R. PYKE

Township or Area: DELORO, ADAMS TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	P 591138 to 143 inclusive 591145-146 591194 628511 to 513 inclusive 628543 633234 to 243 inclusive 651209 to 211 inclusive 651352 to 359 inclusive 651361 651363 651365 to 367 inclusive 688683
Electromagnetic 20 days	
Magnetometer 20 days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ 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

10 DAYS ELECTROMAGNETIC
10 DAYS MAGNETOMETER

P 591193

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☒ Insufficient technical data filed

P 591144

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77 (19)—60:

828 (83/6)

Ministry of
Natural
Resources

Ontario

OCT 19/84

1984 09 25

Your File: 137/84
Our File: 2.6771

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

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

D. Isherwood:mc

Encls.

cc: D.R. Pyke
31 Delair Crescent
Thornhill, Ontario
L3T 2M3

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

Ministry of Natural Resources
Ontario

Notice of Intent

for Technical Reports

1984 09 25

2.6771/137/84

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.

Ministry of
Natural
Resources

Ontario

July 30, 1984

Our File: 2.6771

D.R. Pyke
31 Delair Crescent
Thornhill, Ontario
L3T 2M3

Dear Sir:

RE: Geophysical (Electromagnetic, Magnetometer) Surveys submitted on Mining Claims P 591138 et al in the Townships of Deloro and Adams

Enclosed are plans, (A & C), in duplicate, for the above-mentioned surveys. Credits have been requested for claim P 591144, however, this claim cannot be located on your survey plans. Could you please check the position and numbering of the claims and correct for any omissions.

For further information, please contact Mr. Ray Pichette at (416)965-4888.

Yours sincerely,

RECEIVED
SEP 13 1984
MINING LANDS SECTION

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: Mining Recorder
Timmins, Ontario

Encl.

Dear Ray:

Claim P591144 coincides with claim P610311. I have therefore cancelled claim P591144.

Dale.

Ministry of Natural Resources

Ontario

THE MINING ACT

APPLICATION TO RECORD THE STAKING OUT OF MINING CLAIM(S)

PAGE

PLEASE PRINT IN BLOCK LETTER

FULL NAME OF APPLICANT	PROSPECTOR'S LICENCE	OFFICE USE	NAME AND ADDRESS FOR SERVICE IN ONTARIO IF NON-RESIDENT
Richard HOPSON	M-20955	046966 (RECEIPT NO.)	

FULL ADDRESS (If not an Ontario resident, also give name and address for service ⟶)

(P.O. Box 1678)
150 HUOT STREET, SOUTH PORCUPINE ONT. P0N 1H0

SIGNATURE OF APPLICANT	DATE	DATED AT
R. Hopson	9/3/81	Timmins

MINING DIVISION	TOWNSHIP OR AREA (See Note 1 below)
Porcupine	Deloro Twp.

GROUP CLAIM NO	TAG NUMBER (Record Number) See Note 2	STAKING DATE	STAKING TIME	DESCRIPTION IF TOWNSHIP IS SUBDIVIDED	RESTAKING OF CLAIM NO.	OFFICE USE ONLY (RESERVATIONS)
	610310	March 7/81	9:00 A.M.		-	
	610311	March 7/81	11:00 A.M.		-	
	610312	March 7/81	1:00 P.M.		-	
	610710	March 7/81	2:30 P.M.		-	
	610711	March 7/81	4:00 P.M.		-	

NOTES: 1. A SEPARATE APPLICATION AND GROUP SKETCH MUST BE USED FOR EACH SEPARATE TOWNSHIP OR AREA.
2. WHEN CLAIMS ARE PRETAGGED THE TAG NUMBERS MUST BE SHOWN ABOVE AND ON THE GROUP SKETCH ON PAGE 4.

FOR DEPARTMENT USE ONLY:

MAR 16 1981
AM 8 9 10 11 12 1 2 3 4 5 6 PM

RECORDED
MAR 16 1981
Receipt No. 046966

file 610310

Ministry of Natural Resources
Ontario

Application to Record The Staking Out of Mining Claim(s)

The Mining Act

Please Print in Block Letters

RECEIVED
JUL 17 1984
MINING AND LANDS COMMISSIONER

Full Name of Applicant	Prospector's Licence	Office Use - Receipt No.	Name and Address for service in Ontario if non-resident
Glen Coyne	P-20248		

Full Address (If not an Ontario resident, also give name and address for service)
527 Mountjoy Street, Timmins.

Signature of Applicant: Glen Coyne
Date: November 30, 1981
Dated at: Timmins

Mining Division: Porcupine
Township or Area (see Note 1 below): Deloro Twp. M272.

Group Claim No.	Tag Number (Record Number) See Note 2	Staking Date	Staking Time	Description if Township is subdivided	Restaking of Claim No.	Office Use Only Reservations
1	633243	November 5, 1981	8:00 AM			MRC
2	633242	November 5, 1981	10:00 AM			MRC 4.
3	633241	November 5, 1981	1:00 PM.			MRC 4
4	633239	November 5, 1981	3:30 PM.		591193	MRO 4, 1
5	633238	November 5, 1981	5:00 PM			MRO 4, 1
6	633240	November 5, 1981	2:30 PM			MRC 1
7	633237	November 6, 1981	7:30 AM			MRO
8	633236	November 6, 1981	9:30 AM			MRO 1, 4
9	633235	November 6, 1981	12:00 Noon			MRO 1
10	633234	November 6, 1981	5:00 PM			MRO
11	591142	November 6, 1981	2:00 PM			MRO
12	591143	November 6, 1981	3:00 PM			MRO
13	591138	November 7, 1981	9:00 AM			MRO 1
14	591139	November 7, 1981	10:20 AM			MRO 1
15	591140	November 7, 1981	1:00 PM			MRO 4, 1
16	591141	November 7, 1981	3:00 PM			MRO 1
17	591144	November 8, 1981	9:00 AM			MRO
18	591145	November 8, 1981	11:00 AM			MRO
19	591146	November 8, 1981	2:00 PM			MRO

Entered on caseload: Mar 23/82. Inspection report to 02/82. filed

Filed only DEC 7/1981

Application continued until March 26, 1982 by Order of the Mining Recorder dated Feb 5/82

Notes: 1. A separate application and group sketch must be used for each separate township or area.
2. When claims are pretagged the tag numbers must be shown above and on the group sketch on page 4.

For Department Use Only

RECEIVED
DEC 7 1981
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM
PORCUPINE MINING DIVISION

~~RECORDED~~
DEC 7 1981
Receipt No. 113028

File # 591139

RECORDED
MAR 23 1982
Receipt No. .....

786 (6/77)

T-3490

July 30, 1984 Our File: 2.6771

D.R. Pyke
31 Delair Crescent
Thornhill, Ontario
L3T 2M3

Dear Sir:

RE: Geophysical (Electromagnetic, Magnetometer) Surveys submitted on Mining Claims P 591138 et al in the Townships of Deloro and Adams

---

Enclosed are plans, (A & C) in duplicate, for the above-mentioned surveys. Credits have been requested for claim P 591144, however, this claim cannot be located on your survey plans. Could you please check the position and numbering of the claims and correct for any omissions.

For further information, please contact Mr. Ray 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
Phone:(416)965-4888

D. Isherwood:mc

cc: Mining Recorder
Timmins, Ontario

Encl.

1984 05 29

Your File:115, 137, 157.
Our File:2.6771

Mr. Bruce Hanley
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic & Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims P 591138 et al in the Township of Deloro.

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

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416) 965-6918

A. Barr:sc

cc: Dr. D.R. Pyke
31 Delair Cres.
Thornhill, Ontario
L3T 2M3

Mining Lands Section

File No 26771

Control Sheet

TYPE OF SURVEY ✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

Work Stopped on claims

#137/84 NoI

#115/84 & 157/84 approval

Signature of Assessor

6/11/84

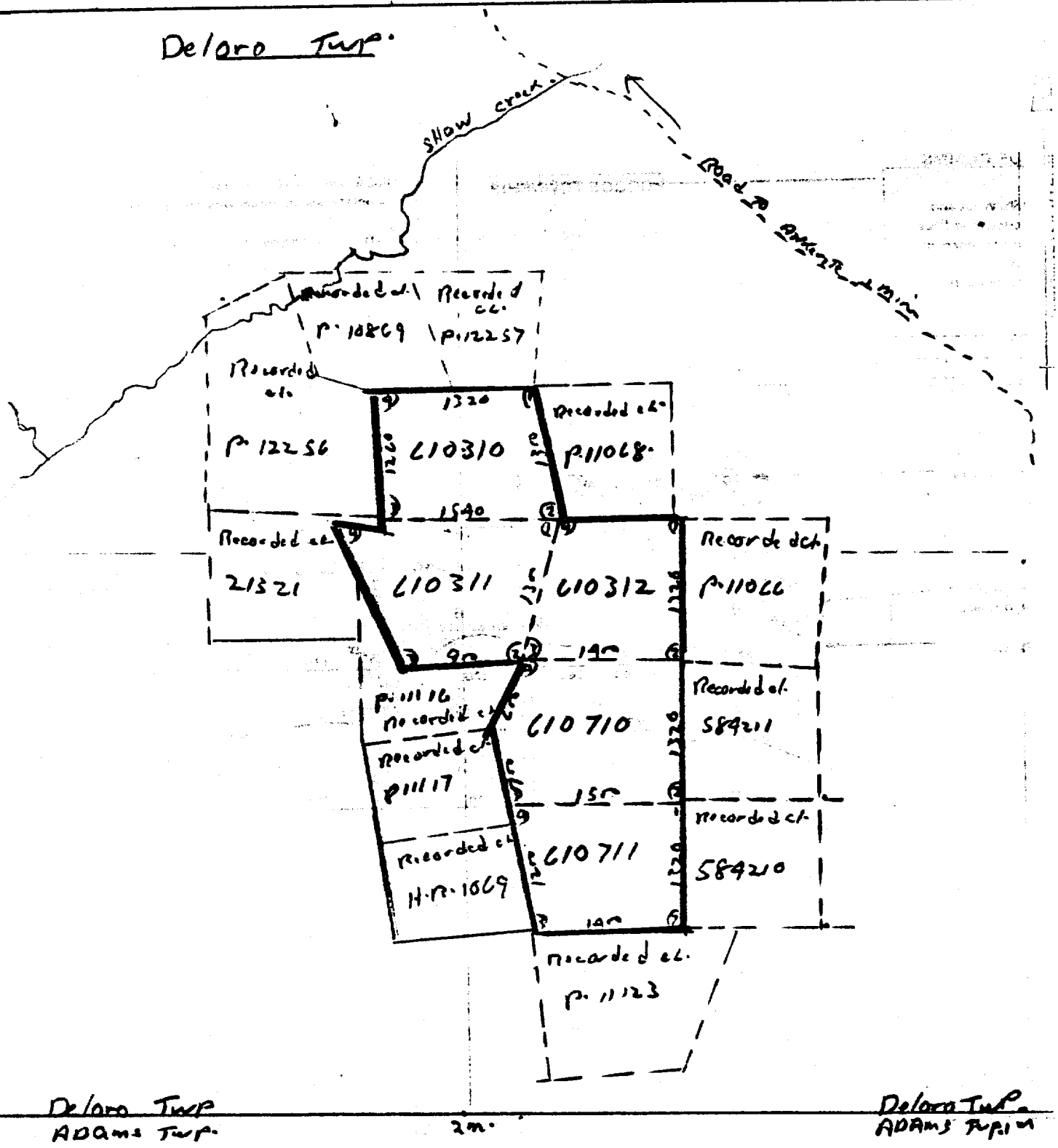
Date

2.6771

	Em	Mag		Em	Mag
P 610 510	1/4	1/4	651209	✓	✓
311	1/4	1/4	210	✓	✓
312	✓	✓	211	✓	✓
710	✓	✓	352	✓	✓
711	1/4	1/4	353	✓	✓
591138	1/4	1/4	354	✓	✓
139	✓	1/4	355	✓	✓
140	✓	✓	356	1/4	1/4
141	✓	✓	357	✓	✓
142	✓	✓	358	1/4	1/4
143	✓	✓	359	✓	✓
144	deim cancelled		361	1/4	1/4
145	✓	✓	363	✓	✓
146	✓	✓	365	✓	✓
193	1/2	1/2	366	✓	✓
194	✓	✓	367	✓	✓
628511	✓	✓	688683	✓	✓
512	✓	✓			
513	✓	✓	628544	✓	
543	✓	✓	545	✓	
633234	✓	✓	546	✓	
235	✓	✓	547	✓	
236	✓	✓	651200	✓	
237	1/4	1/4	201	✓	
238	✓	✓	683368	✓	
239	✓	✓	369	✓	
240	✓	✓	370	✓	
241	✓	✓	371	✓	
242	✓	✓			
243	1/4	1/4			

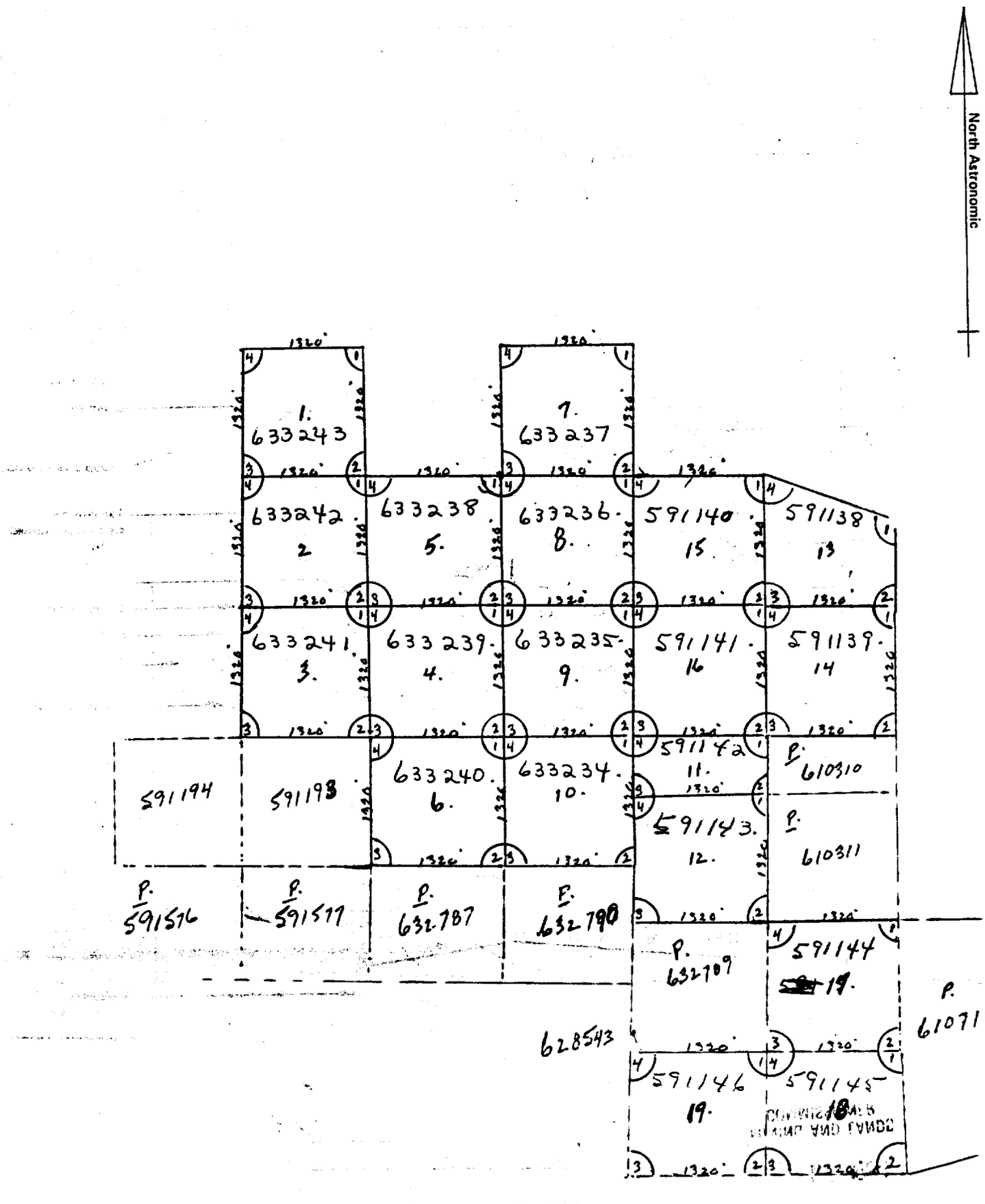
GROUP SKETCH OF CLAIMS LISTED ON PAGE 1

SCALE: 1 Inch = 1320 feet (20 chains)

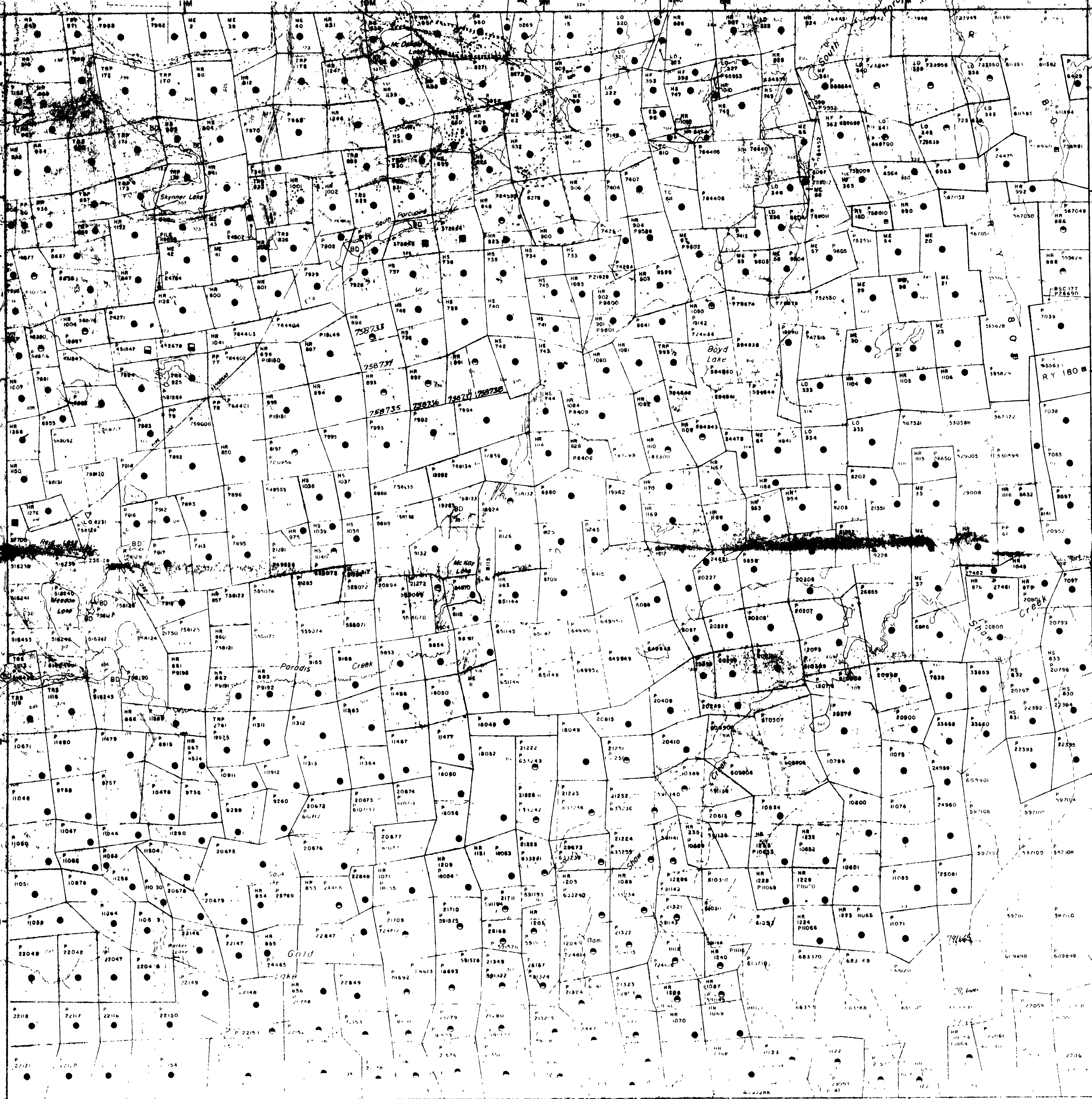


Group Sketch of claims listed on page 1

Scale: 1 inch = 1320 feet
(20 chains)



TISDALE TWP. G-3976



ADAMS TWP. G

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

LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT — SYMBOL

PATENT, SURFACE & MINING RIGHTS
" SURFACE RIGHTS ONLY
" MINING RIGHTS ONLY
LEASE, SURFACE & MINING RIGHTS
" SURFACE RIGHTS ONLY
" MINING RIGHTS ONLY
LICENCE OF OCCUPATION
ORDER IN COUNCIL — OC
RESERVATION
CANCELLED
SAND & GRAVEL

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC. 1

SCALE 1:20 000

NOTES

REGISTERED PLAN OF SUBDIVISION

TOWNSHIP

DELORO

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION

COCHRANE

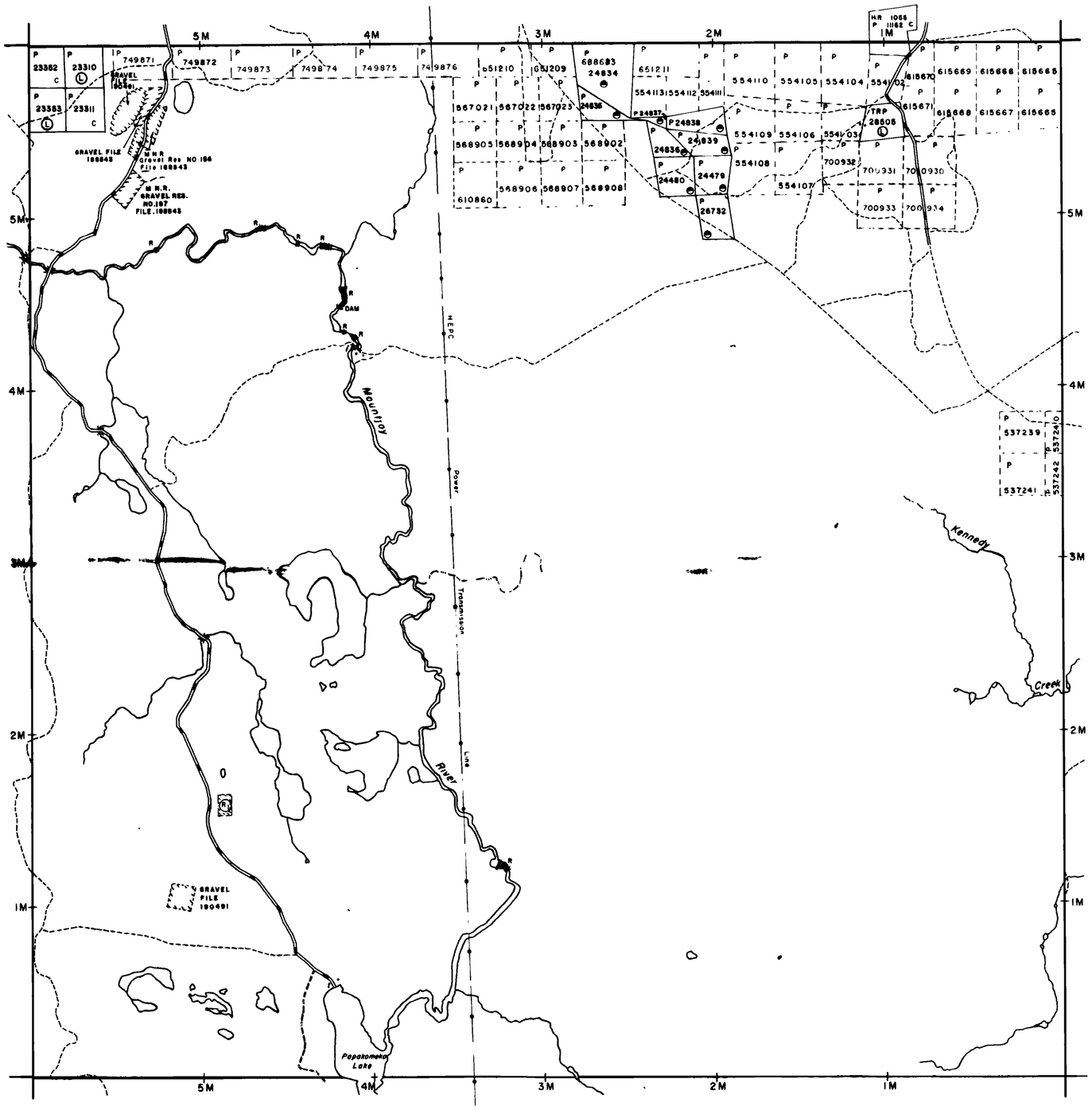
Ministry of Natural Resources

G-3993

42A06NE0459 2.6771 DELORO

200

Deloro Twp. - M.272



Price Twp. - M.307

Eldorado Twp. - M.276

McArthur Twp. - M.298

THE TOWNSHIP
OF

ADAMS

DISTRICT OF
COCHRANE

PORCUPINE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

LEGEND

PATENTED LAND	P
CROWN LAND SALE	C.S
LEASES	L
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	C

NOTES

400' Surface Rights Reservation along the shores of all lakes and rivers.

This township lies within the Municipality of CITY of TIMMINS

Areas withdrawn from staking under Section 43 of the Mining Act, R.S.O. 1970

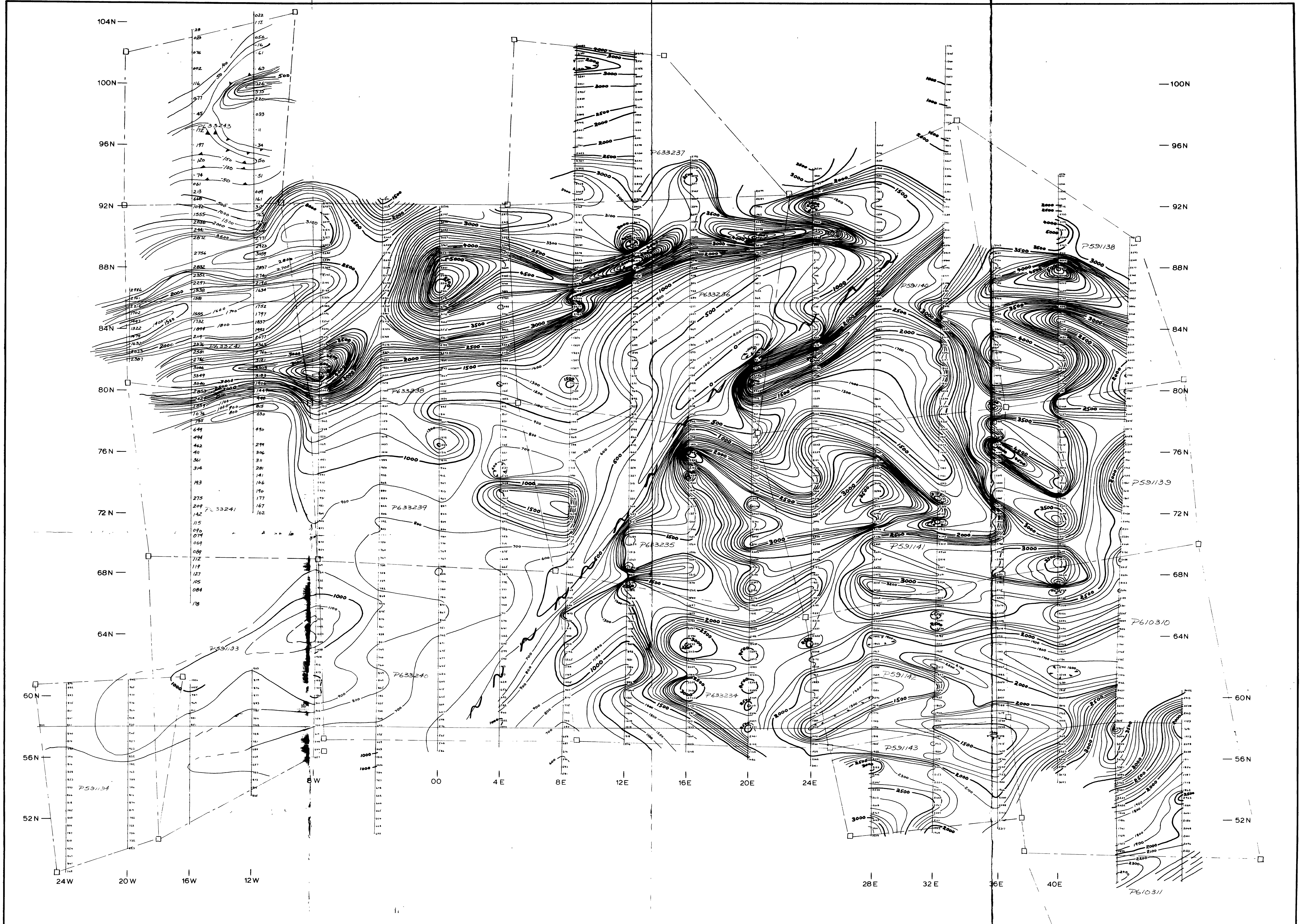
Disp. No	File	Date	Disposition
W 25/77	188543	11/3/77	S R O

PLAN NO. M.261

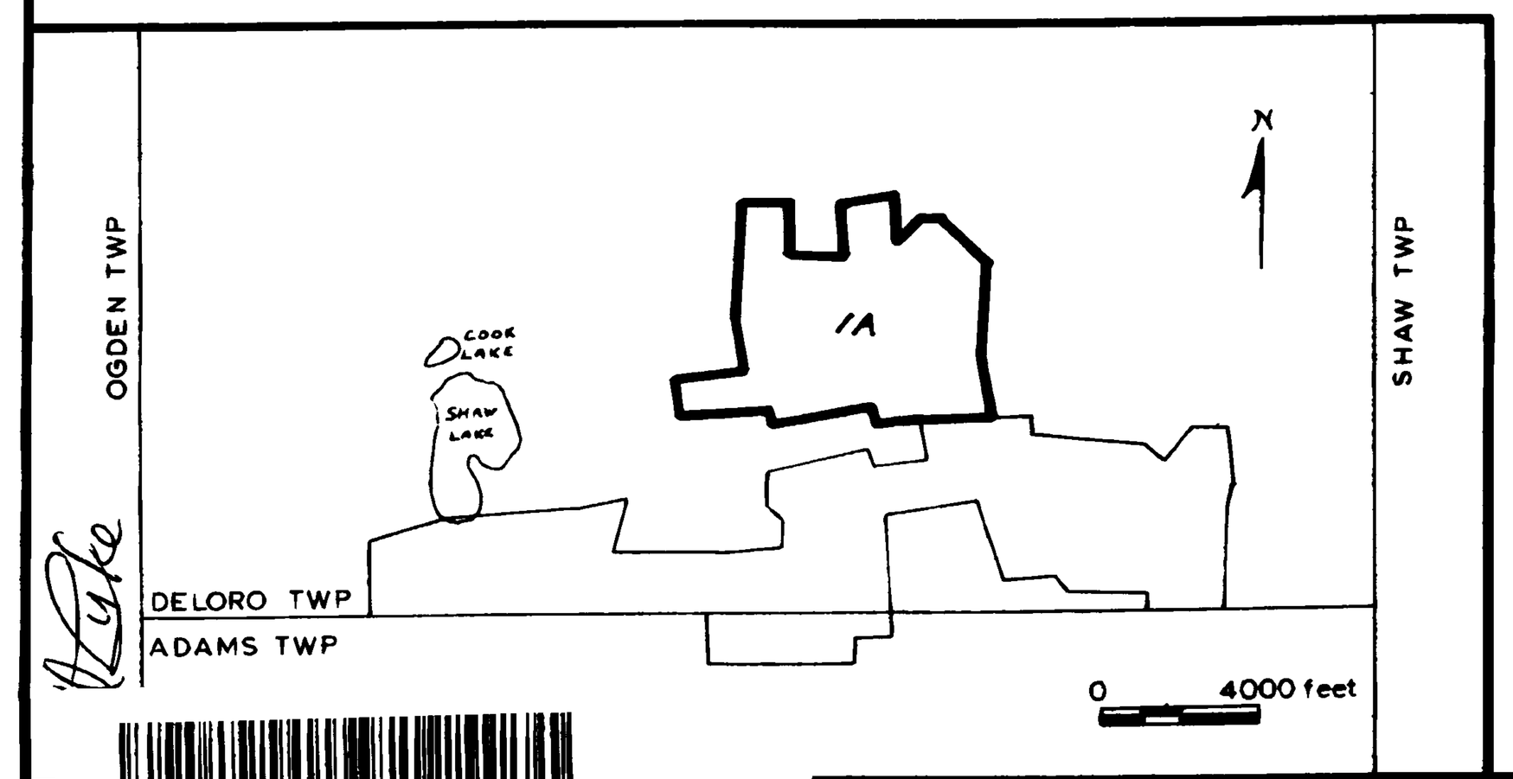
ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

bk

TRIM LINE



LOCATION MAP



26771

LEGEND

(59) 759 TOTAL MAGNETIC FIELD IN GAMMAS

MAGNETIC CONTOUR

100 GAMMAS

500 GAMMAS

MAGNETIC LOW

CLAIM POST

MAGNETIC DIURNAL WAS CORRECTED BY MEANS OF A BASE STATION LOCATED AT 16W, 2N

READINGS WERE ADJUSTED TO TIE-IN WITH GOV'T BASE STATION M-71-56, KENILWORTH MINE

INSTRUMENTS GEOMETRICS G816

FAULT

SURVEY CONDUCTED FOR: COMSTATE RESOURCES LTD.	
SURVEY TYPE: PROTON MAGNETOMETER	
LOCATION: DELORO TWP, ONTARIO	AREA REFERENCE: 42A/6
PROPERTY	DATE: SEPT, 1983
PROJECT NO. 6 114 · MAP SHEET 2 OF 3	MAP NO
SCALE: 0 100 200 400 feet	
SURVEY CONDUCTED BY: WOLLEX EXPLORATION	

1A

220

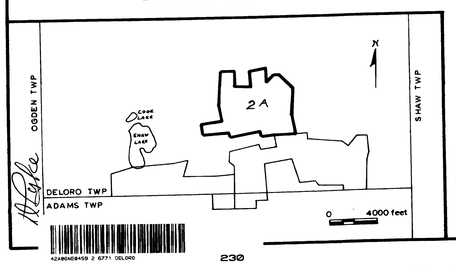
104N
100N
96N
92N
88N
84N
80N
76N
72 N
68N
64N
60N
56N
52N

P633243
P633242
P633241
P591193
P591194
P633237
P633236
P633238
P633239
P633240
P633235
P633234
P591140
P591141
P591142
P591143
P591138
P591139
P610310
P610311

24W 20W 16W 12W 8W 00 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E

100N 96N 92N 88N 84N 80N 76N 72N 68N 64N 60N 56N 52N

LOCATION MAP



26771

LEGEND

20% 0 -20%
IN-PHASE QUADRATURE

CLAIM POST

STATION CUTLER MAINE
INSTRUMENT ORIENTATION NORTH
INSTRUMENT GEONICS EM16

N
CUTLER

SURVEY CONDUCTED FOR
COMSTATE RESOURCES LTD.

SURVEY TYPE: VLF EM

LOCATION: DELORO TWP, ONTARIO
AREA REFERENCE: 42A/6

PROPERTY:
DATE: SEPT., 1983

PROJECT NO. 6114
MAP SHEET 2 of 3
MAP NO.

SCALE
0 100 200 400 feet

18

SURVEY CONDUCTED BY
WOLLEX EXPLORATION

230

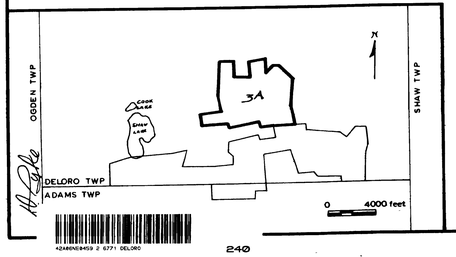
104N
100N
96N
92N
88N
84N
80N
76N
72 N
68N
64N
60N
56N
52N

P633243
P633237
P633236
P591140
P591138
P633242
P633238
P633241
P633239
P633235
P591139
P591141
P591193
P633240
P633234
P610310
P591142
P591194
P591143
P610311

24W 20W 16W 12W 8W 4W 00 4E 8E 12E 16E 20E 24E 28E 32E 36E 40E

100N 96N 92N 88N 84N 80N 76N 72N 68N 64N 60N 56N 52N

LOCATION MAP



2.6771

LEGEND

7 FRASER FILTER VALUE
FRASER CONTOUR: INTERVAL-10

CLAIM POST

STATION: CUTLER, MAINE
INSTRUMENT: GEONICS EM16

SURVEY CONDUCTED FOR
COMSTATE RESOURCES LTD.

SURVEY TYPE: VLF EM

LOCATION: DELORO TWP ONTARIO
AREA REFERENCE: 42A/6

PROPERTY
DATE: SEPT, 1983.

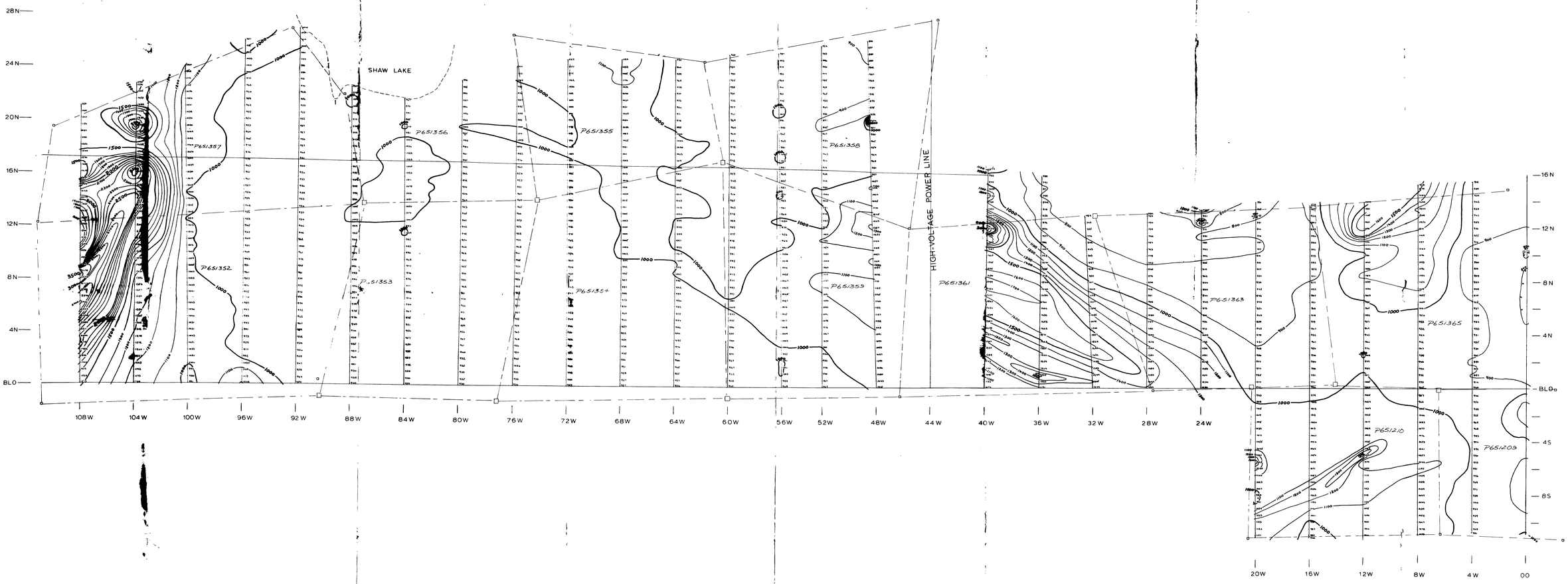
PROJECT NO. 6114
MAP SHEET: 2 of 3
MAP NO.

SCALE
0 100 200 400 feet

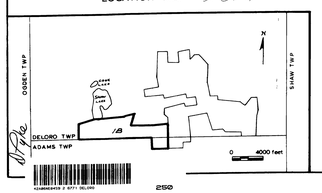
3A

SURVEY CONDUCTED BY: WOLLEX EXPLORATION

240



LOCATION MAP 26771



250

LEGEND

- TOTAL MAGNETIC FIELD IN GAMMAS
- MAGNETIC CONTOUR
- 100 GAMMAS
- 500 GAMMAS
- MAGNETIC LOW
- CLAIM POST

MAGNETIC DIURNAL WAS CORRECTED BY MEANS OF A BASE STATION LOCATED AT 16W, 2N
READINGS WERE ADJUSTED TO TIE-IN WITH GOVT BASE STATION M-71-S-K, KENILWORTH MINE
INSTRUMENTS GEOMETRICS G 816

SURVEY CONDUCTED FOR:
COMSTATE RESOURCES LTD.

SURVEY TYPE:
PROTON MAGNETOMETER

LOCATION: DELORO TWP ONTARIO
AREA REFERENCE: 42A/6

PROPERTY:
DATE: SEPT. 1983

PROJECT NO. 6114
MAP SHEET: 1 of 3
MAP NO.

SCALE
0 100 200 400 feet

SURVEY CONDUCTED BY:
WOLLEX EXPLORATION

28N
24N
20N
16N
12N
8N
4N
BLO

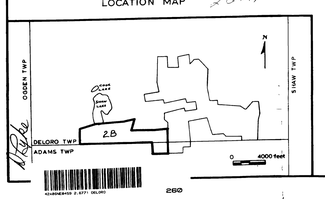
SHAW LAKE

P65/357
P65/356
P65/355
P65/358
HIGH-VOLTAGE POWER LINE
P65/352
P65/353
P65/354
P65/359
P65/361
P65/363
P65/365
P65/210
P65/209

108W 104W 100W 96W 92W 88W 84W 80W 76W 72W 68W 64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W 00

16N
12N
8N
4N
BLO
4S
8S

LOCATION MAP 26771



LEGEND

20% 0 -20%
IN-PHASE QUADRATURE
CLAIM POST
STATION CUTLER, MAINE
INSTRUMENT ORIENTATION: NORTH
INSTRUMENT: GEONICS EM16

SURVEY CONDUCTED FOR:
COMSTATE RESOURCES LTD.
SURVEY TYPE:
VLF EM
LOCATION: DELORO TWP. ONTARIO
AREA REFERENCE: 42A/6
PROPERTY:
DATE: SEPT. 1983
PROJECT NO.: 6114
MAP SHEET: 1 of 1
MAP NO.:
SCALE: 0 100 200 400 feet
SURVEY CONDUCTED BY: WOLLEX EXPLORATION

28 N
24 N
20 N
16 N
12 N
8 N
4 N
BLO

SHAW LAKE

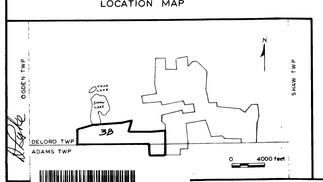
P651357
P651356
P651355
P651358
P651352
P651353
P651354
P651359
P651361
P651363
P651365
P651210
P651209

HIGH-VOLTAGE POWER LINE

108W 104W 100W 96W 92W 88W 84W 80W 76W 72W 68W 64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4W 00

16 N
12 N
8 N
4 N
BLO
4S
8S

LOCATION MAP 2677I



270

LEGEND

- FRASER FILTER VALUE
- FRASER CONTOUR INTERVAL-10
- CLAIM POST

STATION CUTLER, MAINE
INSTRUMENT GEONICS EM16

SURVEY CONDUCTED FOR
COMSTATE RESOURCES LTD.

SURVEY TYPE:
VLF EM

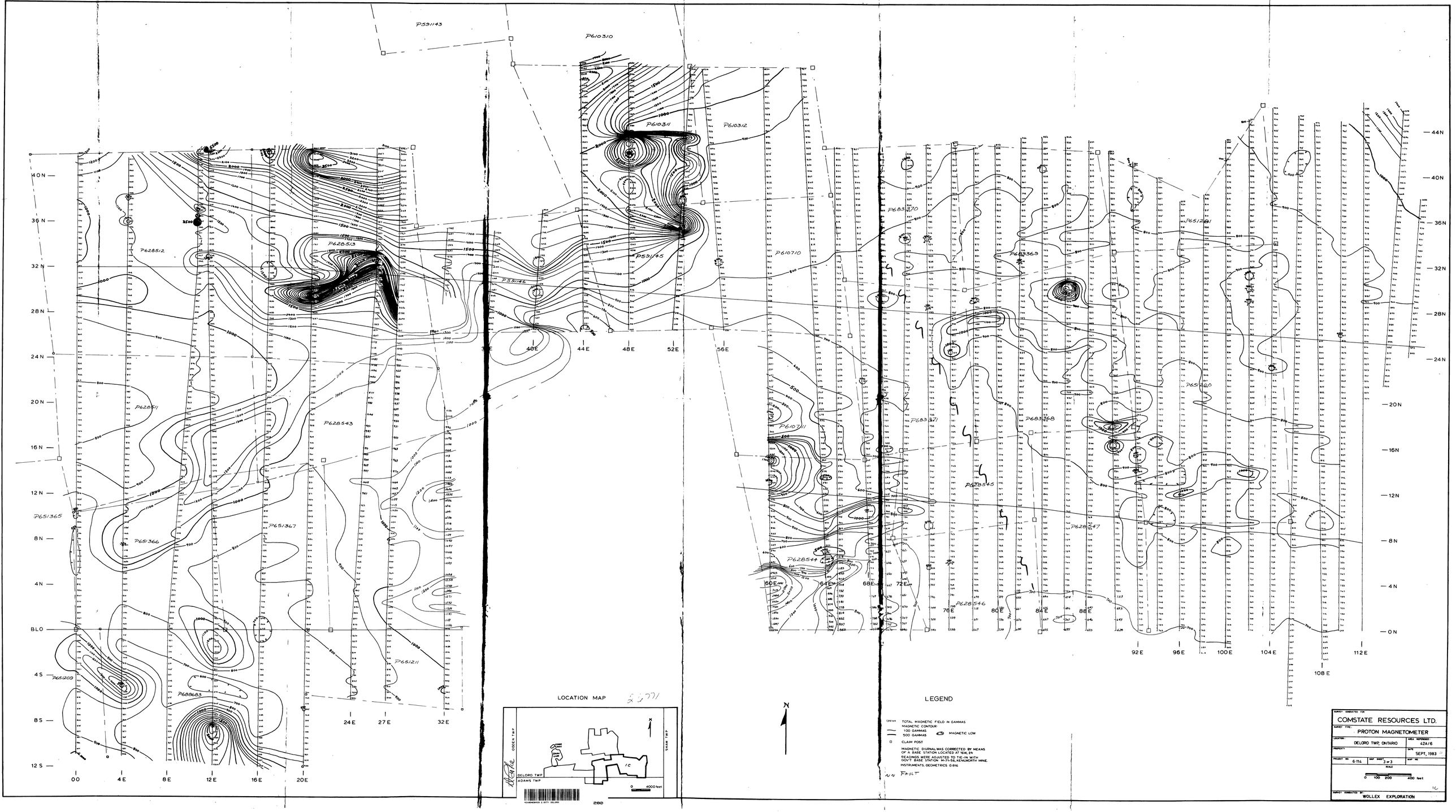
LOCATION: DELORO TWP, ONTARIO
AREA REFERENCE: 42A/6

PROPERTY:
DATE: SEPT. 1983

PROJECT NO. 6114 | MAP SHEET 1 of 3 | MAP NO.

SCALE
0 100 200 400 feet

SURVEY CONDUCTED BY WOLLEX EXPLORATION



LOCATION MAP

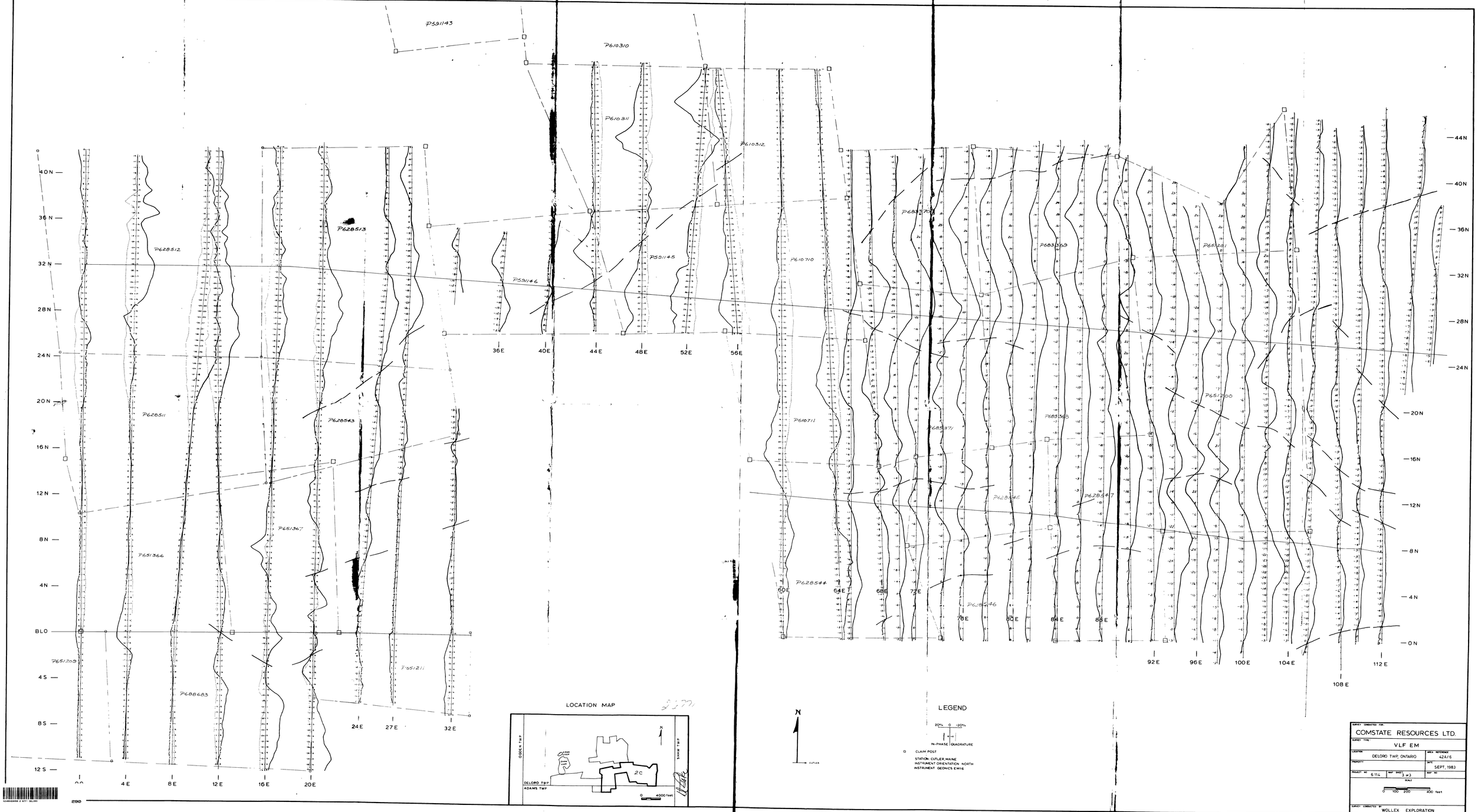
LEGEND

- TOTAL MAGNETIC FIELD IN GAMMAS
- MAGNETIC CONTOUR: 100 GAMMAS, 500 GAMMAS
- MAGNETIC LOW
- CLAIM POST

MAGNETIC DIURNAL WAS CORRECTED BY MEANS OF A BASE STATION LOCATED AT N/A, E/A. READINGS WERE ADJUSTED TO TIE-IN WITH GOVT BASE STATION M-71-56, KENILWORTH MINE.
INSTRUMENTS, GEOMETRICS G 816

FAULT

SURVEY CONDUCTED FOR: COMSTATE RESOURCES LTD.
SURVEY TYPE: PROTON MAGNETOMETER
LOCATION: DELORO TWP, ONTARIO
AREA REFERENCE: 42A/6
PROPERTY:
DATE: SEPT, 1983
PROJECT NO.: 6-114
MAP SHEET: 3 of 3
MAP NO.:
SCALE: 0 100 200 400 feet
SURVEY CONDUCTED BY: WOLLEX EXPLORATION



LOCATION MAP

LEGEND

20% 0 -20%

IN-PHASE | QUADRATURE

CLAIM POST

STATION: CUTLER, MAINE
INSTRUMENT ORIENTATION: NORTH
INSTRUMENT: GEONICS EM16

SURVEY CONDUCTED FOR:
COMSTATE RESOURCES LTD.

SURVEY TYPE:
VLF EM

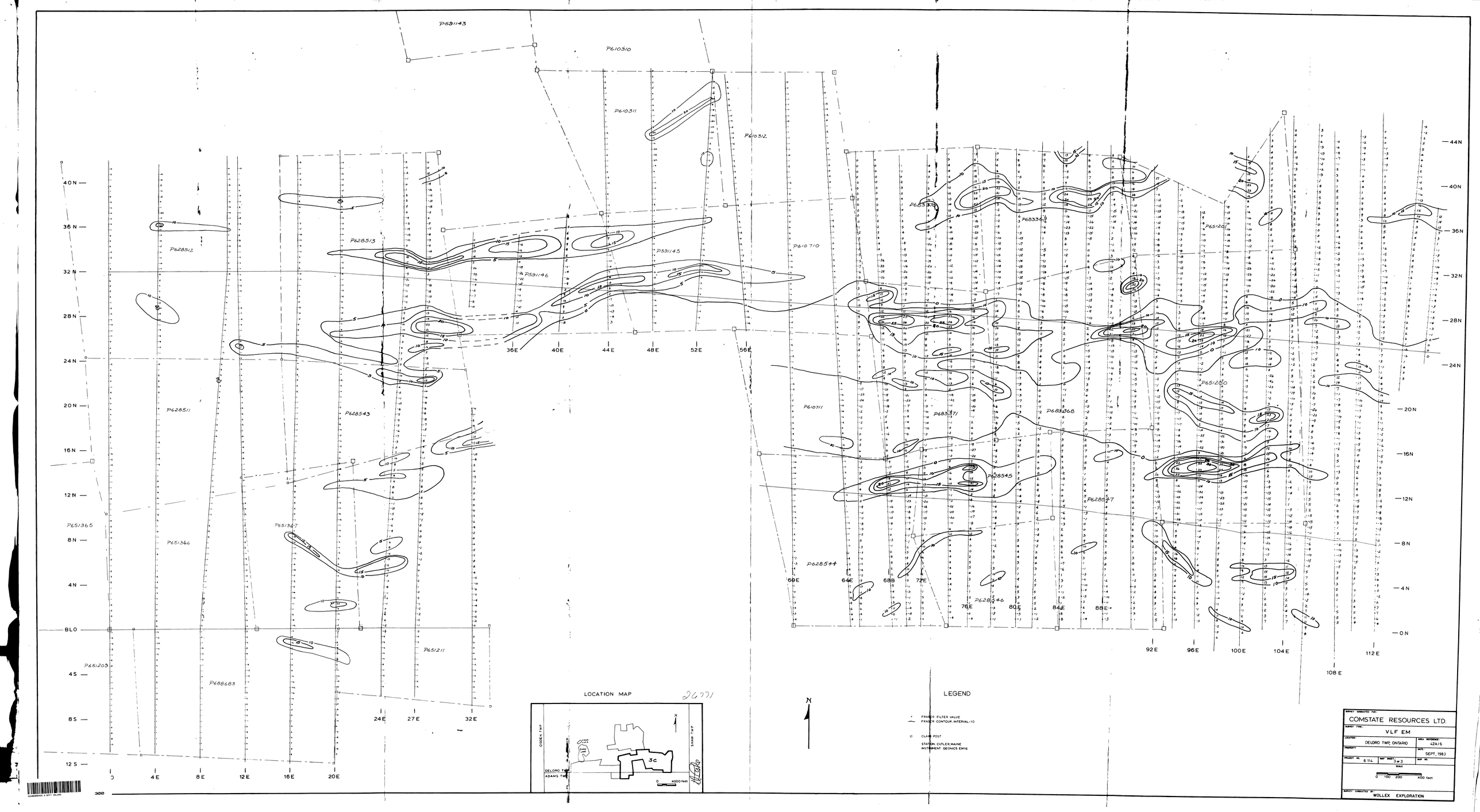
LOCATION: DELORO TWP, ONTARIO
AREA REFERENCE: 42A/6

PROPERTY:
DATE: SEPT, 1983

PROJECT NO: 6114
MAP SHEET: 3 of 3
MAP NO:

SCALE
0 100 200 400 feet

SURVEY CONDUCTED BY:
WOLLEX EXPLORATION



LOCATION MAP

26771

LEGEND

- FRASER FILTER VALUE
- FRASER CONTOUR INTERVAL=10
- CLAIM POST

STATION: CUTLER, MAINE
INSTRUMENT: GEONICS EM16

SURVEY CONDUCTED FOR:
COMSTATE RESOURCES LTD

SURVEY TYPE:
VLF EM

LOCATION: DELORO TWP. ONTARIO
AREA REFERENCE: 42A/16

PROPERTY:
DATE: SEPT. 1983

PROJECT NO. 6 114
MAP SHEET NO. 3 of 3
MAP NO.

SCALE
0 100 200 400 feet

SURVEY CONDUCTED BY:
WOLLEX EXPLORATION