

Soweska Claim Group

N.T.S. 42 J/6

Procupine Mir

Onta

1. Introduction.

Particularly shaped and located magnetic anomalies in this region of the James Bay Lowlands have reflected carbonatite intrusives. During the winter-spring of 1965 further evidence was obtained when such a carbonatite was drilled one mile south of the Soweska Claim Group. Here a hole went to a depth in excess of 550 feet. Magnetite and various heavy minerals were located in the cuttings from the hole. These ran 15% magnetite over most of the hole. A small piece of core was blocked in the core barrel and was described as having the textures and mineral composition of a carbonatite cap rock.

The group of 93 claims was acquired in the fall of 1967 on a magnetic feature lying north of the 1965 drilling.

11. General Geology.

A limited amount of geology is known about the area. South of the Pivabiska River Archean sediments containing iron formation have been detected with aeromagnetics and drilled.

The area north of the Pivabiska River is overlain by Mesozoic clay deposits. The availability of aeromagnetics has led to investigation of magnetic anomalies. The magnetic anomaly in the southeast corner of Map No. 101-1 was drilled. The core recovery was poor but strong evidence of a carbonatite was obtained.

111. Discussion of Results.

The Geological Survey of Canada surveyed the anomaly in their regional magnetics with lines spaced at $\frac{1}{2}$ mile intervals, north-south at an altitude of 1000 feet above the ground. A Helicopter Aeromagnetic survey was carried out with the magnetometer height 150 feet above the ground. The same three zones within the broad general high were outlined but there were local highs within each of the areas.

Further study as to the depth of these anomalies should be carried out. It is estimated that in several places these anomalies lie less than 200 feet below the surface of the ground.

1v. Conclusions and Recommendations.

The helicopter aeromagnetic survey delimited the three main magnetic zones. These were shown to have local highs. The work was equivalent to a ground survey.

It is recommended that three holes be drilled as an initial programme. Provisional locations for these holes would be:

Hole #1 claim P95908

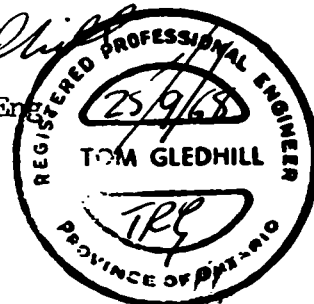
Hole #2 claim P95868

Hole #3 claim P95945

It is estimated that the drill footage for this initial programme would be a minimum of 2400 feet.

Respectively submitted

Tom Gledhill
Tom Gledhill, P. Eng.
Geophysicist



Appendix

The Airborne magnetometer

The instrument used was a Barringer AM 101B Nuclear Precession magnetometer with a cycling time of $\frac{1}{2}$ sec. This instrument measures the earths total magnetic field. The sensing head is housed in a towed bird 50 feet below the aircraft (FF-MFV, Bell Jet Range 106A).

Collection of Data

The aircraft was flown on lines spaced at 660 feet (one eighth of a mile) apart at an average elevation of 200 feet giving the magnetometer an average height above the ground of 150 feet. The flight path was recorded with a SPAR mark 7 frame 35 mm. camera aimed vertically below the aircraft. The frames and the magnetic chart (recorded on a Brush 2330 recorder) were numbered.

Presentation of results

The magnetic data was presented as contours of the magnetic profiles corrected for diurnal drift and other errors. The contour interval was chosen at 100 gammas and the peak and valley values noted. The map was prepared from a semi-controlled mosaic on which the photographic flight path was recorded.

The value of the contours are arbitrary and chosen for convenience. The scale of the map is 1" = 660 feet.

Specifications

Magnetometer	-	Barringer: AM 101B Airborne Nuclear Precession
Sensitivity		500 gammas
Noise Envelope		5 gammas
Recorder		Brush 2330

Elevation Control

Bonzer: altimeter
Calibration range 50 feet - 600 feet

Camera

SPAR
Model mark 7 serial 2772
Frame 30 frames / minute
35 mm.

Personnel

Pilot: H. Dubinsky
c/o Interprovincial Helicopturs Ltd.
220 Bay Street
Toronto, Ont.

Engineer: J. Kreke
c/o Interprovincial Helicopturs Ltd.
220 Bay Street
Toronto, Ont.

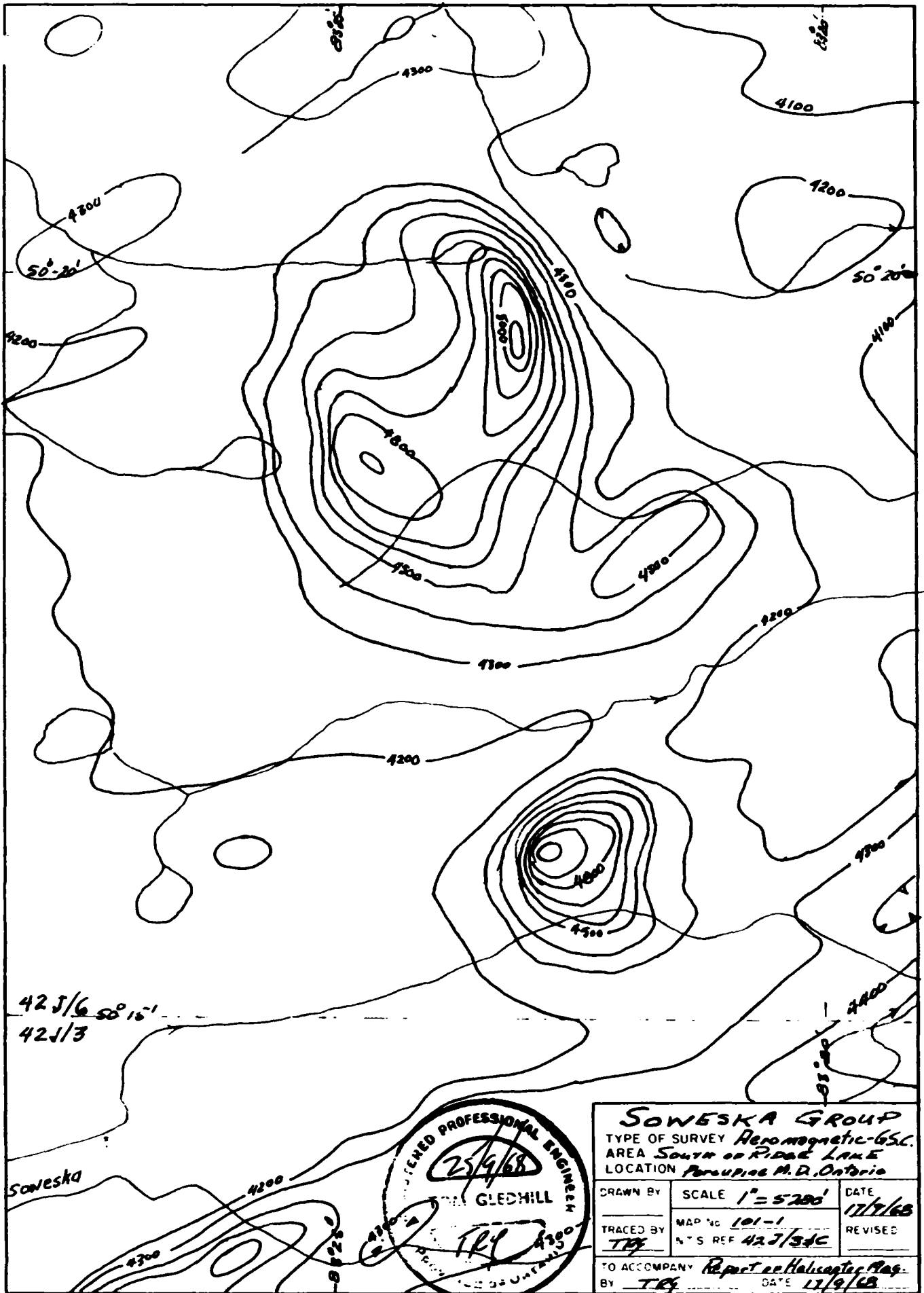
Navigator: Neil Punstall
c/o Barringer Research Ltd.
Rexdale, Ont.

Technition: W. Sassyniuk
c/o Interprovincial Helicopturs Ltd.
220 Bay Street
Toronto, Ont.

Data Reduction: Max Holler
c/o Barringer Research Ltd.
Rexdale, Ont.

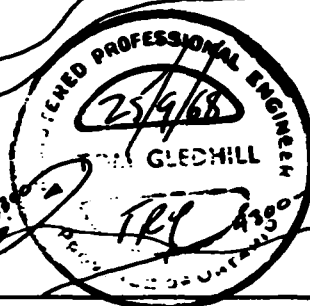
Drafting: M. Thomas
22 Kingland Cres.
Willowdale, Ont.

Consultants: W. Boyko, Oakville, Ont.
T. Gledhill, Don Mills, Ont.

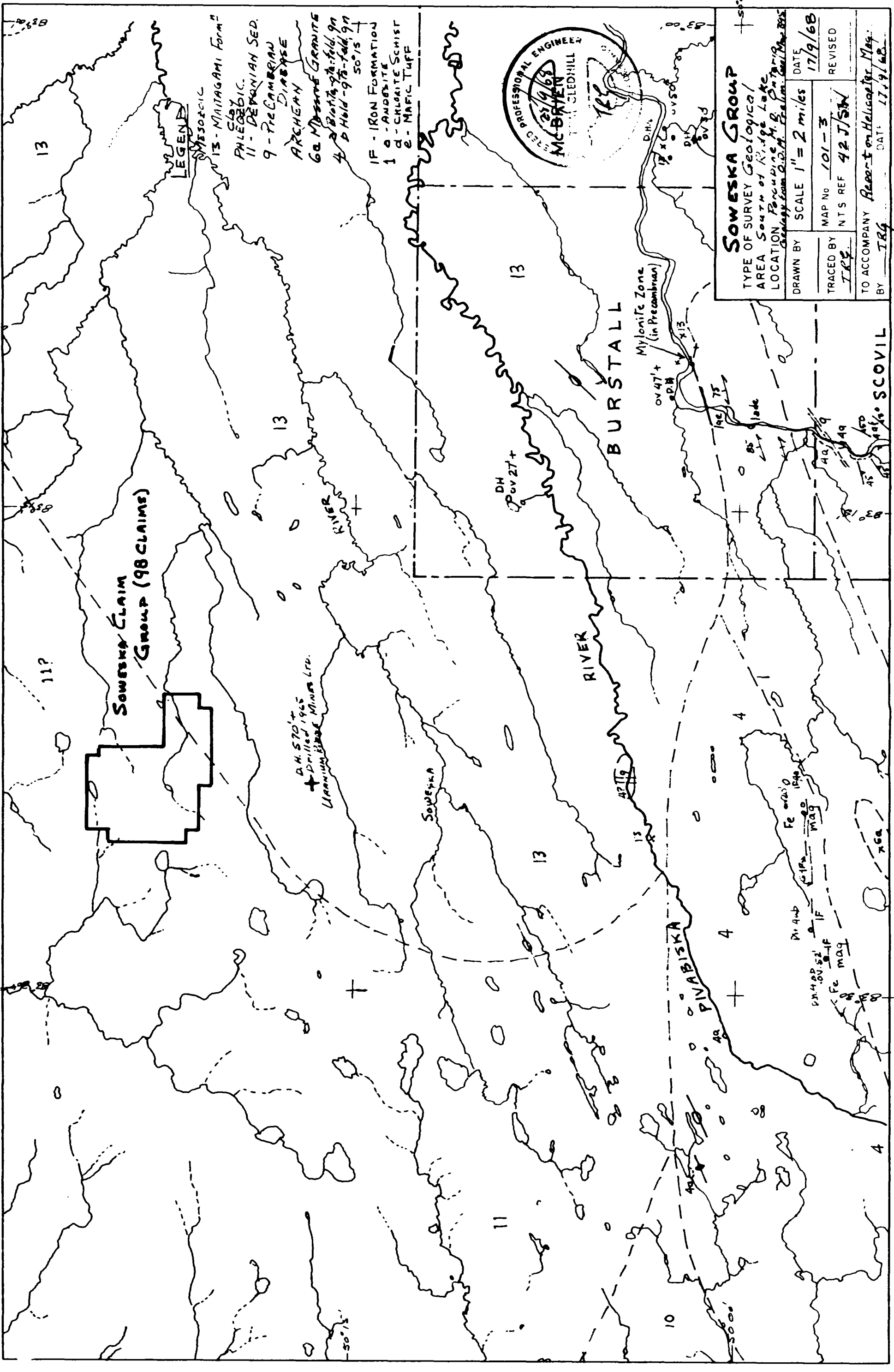


42 J/6 50° 15'
42 J/3

Soweska



SOWESKA GROUP		
TYPE OF SURVEY <i>Aeromagnetic-G.S.C.</i>		
AREA <i>South of Rideau Lake</i>		
LOCATION <i>Peruquie M.D. Ontario</i>		
DRAWN BY	SCALE <i>1" = 5200'</i>	DATE <i>17/9/68</i>
TRACED BY <i>TRF</i>	MAP No <i>101-1</i>	REVISED
TO ACCOMPANY <i>Report on Helicopter Map.</i>		
BY <i>TRF</i>		DATE <i>17/9/68</i>



SOWESKA GROUP

TYPE OF SURVEY Geological
 AREA South of Kidge Lake
 LOCATION Porcupine M. B. Ontario
 (Geology from R.D.M. 25000)

DRAWN BY SCALE 1" = 2 miles DATE 17/9/68
 TRACED BY MAP No 101-3 REVISIONS
 T.R.G. N.T.S REF 42 J/S/W

TO ACCOMPANY Report on Helicopter Mag.
 BY T.R.G. DATE 17/9/68

SCOVIL

AREA
SOUTH of
RIDGE LAKE

DISTRICT OF
COCHRANE

SAULT STE. MARIE &
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

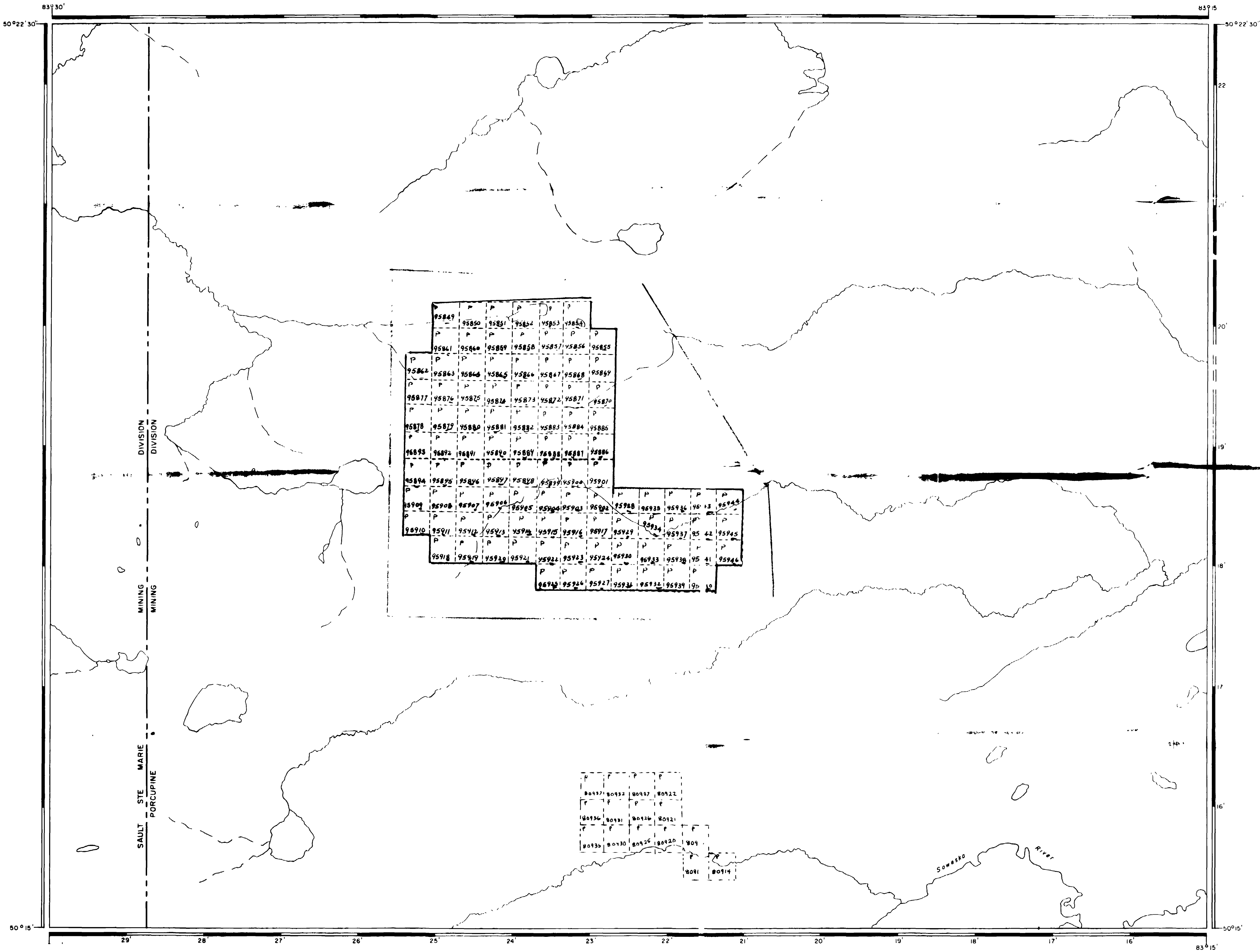
400' surface rights reservation around all lakes and rivers

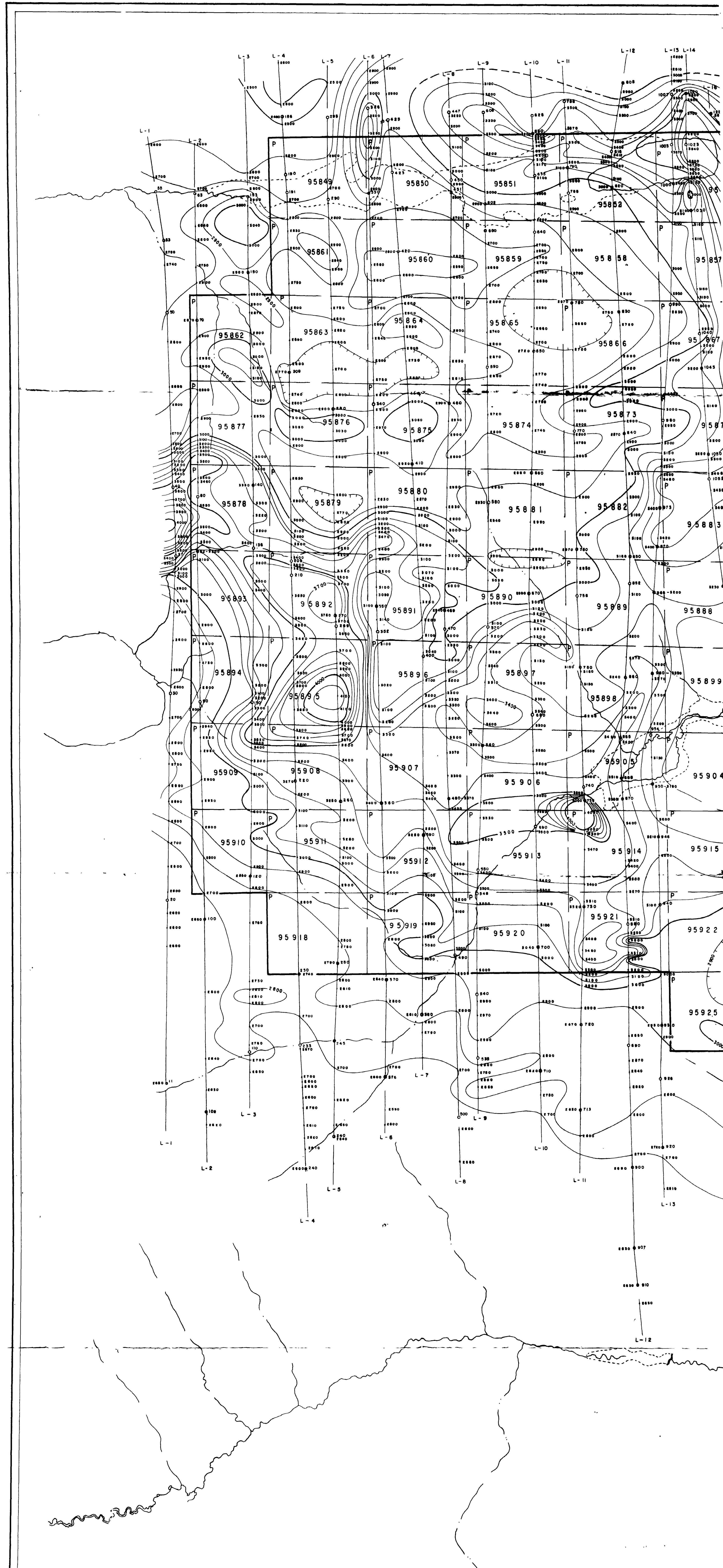
OF ISSUE
1968

ONT. DEPT. OF MINES
MINING LANDS BR.
THIS MAP FOR CHECKING
PURPOSES ONLY - MUST
NOT BE SOLD

PLAN NO. **M.2813**

DEPARTMENT OF MINES
- ONTARIO -

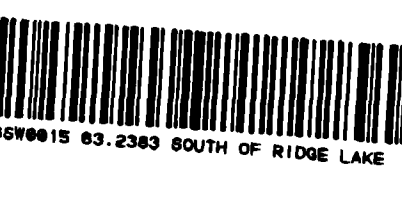
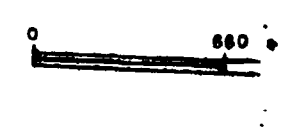


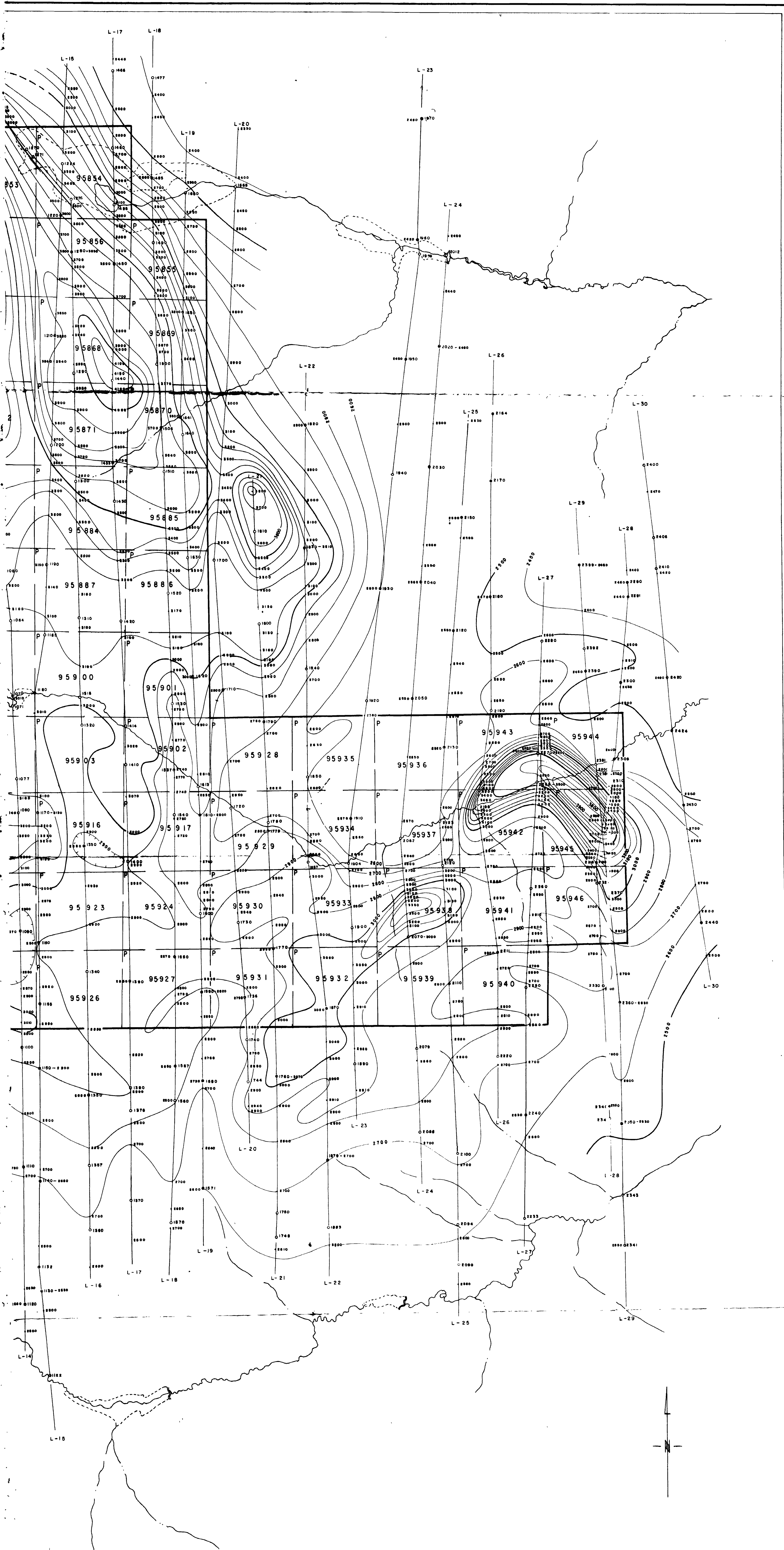


— Flight line
 230 — Fiducial
 L-4 — Line number
 3500 — 500 Gammas
 3400 — 100 Gammas

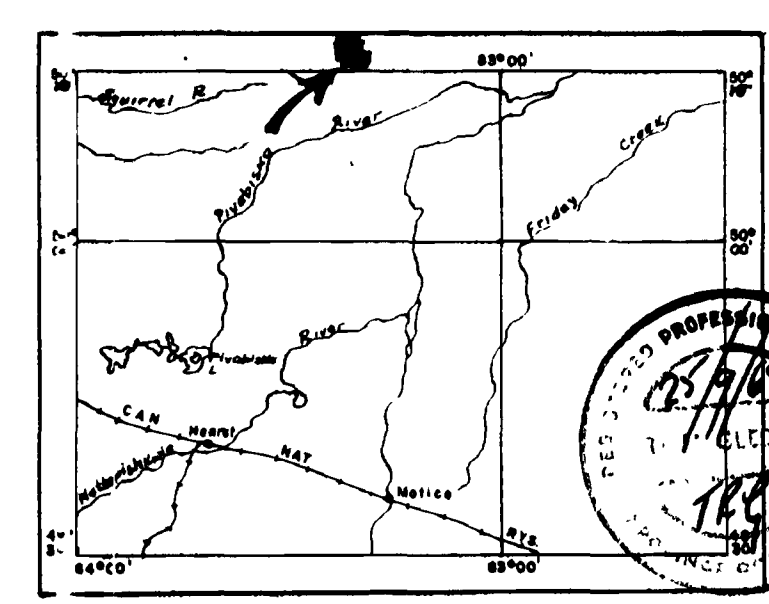
NOTE: Contour interval is 100 gammas
 Terrain clearance 150 feet

HELICOPTER MA
 PORCUPINE I





LOCATION MAP



MAGNETOMETER SURVEY
 MINING DIVISION, ONTARIO

