

41P11SW0270 2.2014 ASQUITH

010

GEOPHYSICAL SURVEY

GEOPHYSICAL SURVEY  
KAYAK EXPLORATIONS LIMITED  
ASQUITH TOWNSHIP  
WEST SHININGTREE AREA  
ONTARIO

SUMMARY

A program of geophysical work consisting of both electromagnetic and magnetometer surveys, was conducted over a group of 14 mining claims located in the central part of Asquith Township, Larder Lake Mining Division, Ontario. The work was carried out during the period September 27th to November 4, 1975. East-west lines were cut at 400-foot intervals to provide control and the instruments used were a Geonics EM-16 V.L.F. unit and a Scintrex MF-1 magnetometer. Only one conductor of any significance was indicated.

PROPERTY, LOCATION AND ACCESS

The property covered by this report, includes a group of 14 mining claims comprising approximately 300 acres and located in Asquith Township, District of Sudbury, Larder Lake Mining Division, Ontario. Most of the claims are much under sized probably because the recent staking followed the surveyed boundaries of the old claims. The claims included in the group are further described as follows:

- |        |        |
|--------|--------|
| 393501 | 393510 |
| 393502 | 393511 |
| 393503 | 393512 |
| 393504 | 393514 |
| 393505 | 393515 |
| 393506 | 393517 |
| 393509 | 393518 |

The property is readily accessible as Provincial Highway 560 passes through the north part of the ground. The northeast corner of the claims group is only 1/4 mile west of the village of Shiningtree which in turn is 70 miles west of New Liskeard and 60 miles south of Timmins, Ontario.

NOVEMBER 4, 1975

TOPOGRAPHY

The area of the claims group is fairly flat lying with a few localized low outcrop hills. With the exception of these outcrop areas, the ground is covered with overburden and a dense growth of both large and small timber. A wet marsh with a small beaver pond is located in the southeast part of the property and is drained by a creek which flows north through the central part of the claims group. The extreme southwest part of the ground, underlies Jessie James Lake.

GENERAL GEOLOGY

The geology of Asquith Township is shown on the Makwa-Churchill Area sheet, Map No. 43c, published by the Ontario Department of Mines in 1934. This map is on the scale of one inch to one mile and accompanies Volume XLIII, Part 3, by H.C. Laird.

Asquith Township is located within a very extensive greenstone belt underlying much of the area of northeastern Ontario and northwestern Quebec. Most of the known gold, silver and base metal occurrences in these regions, are associated with this greenstone horizon.

The rock formations underlying the claims group discussed in this report, are largely of volcanic origin and include both flows and fragmentals. They consist for the most part, of andesitic types with some acid phases and are frequently intruded by narrow dikes of quartz-feldspar porphyry

Gold is commonly associated with quartz veining in the Shining-tree area and sometimes occurs as coarse free gold. It was showings of this type that created the intense prospecting interest in the general area in 1911. These quartz veins are often closely related to quartz-feldspar intrusions usually in the form of narrow dikes.

In addition to the quartz vein type of occurrence, gold is sometimes encountered in this area in silicified shear zones, under which conditions it usually accompanies sulphide mineralization such as pyrite, pyrrhotite and chalcopyrite.

Two zones of quartz veining and one of sulphide mineralization associated with silicification, were observed by the writer on this claims group. One quartz zone is located in the northeast corner of the property and consists of an east-west quartz vein exposed in the wall of a very old shaft, about 5 feet by six feet and inclined to the south at 70 degrees. The vein is poorly exposed and the shaft is flooded to about eight feet below the collar. The dump material, which suggests a depth of fifty to seventy five feet, contains a considerable amount of quartz material. A 2-foot quartz vein dipping steep south and exposed in a trench about 30 feet long, 5 feet wide and 4 feet deep and located on the east boundary of claim 393503 could represent the eastward extension of the shaft vein. This trench is 700 feet east of the shaft. Several samples of quartz from the shaft dump as well as three chipped across the vein in the trench, returned assays varying from traces of gold to 0.08 ounces to the ton.

The second area of quartz veining, is located in the east part of claim 393515 and consists of a series of quartz veins and stringers occupying zones of fracturing and shearing exposed in a rock trench, up to 8 feet deep in places and continuous for a length of 265 feet on a strike of north 55° west. Shears and slips paralleling the strike of the trench, dip southwest at -65° and numerous cross shears, slips and fractures strike south 30° to 40° west and dip southeast at -70°. The quartz is largely associated with the southwest striking structures.

Most of the work on this trench was done in the early 1930's, when E.B. James, the then owner of the ground, removed a small pocket of free gold from the trench which is reliably reported to have amounted to approximately 250 ounces. There is a considerable amount of quartz material on the dump and several samples taken by the writer both of dump rock and material in place, returned assays varying from traces of gold to 0.09 ounces per ton. It is only logical however, that any exposed rock of obvious significance from the point of view of gold content, would have been previously removed.

The zone of sulphide mineralization observed by the writer on this property, is located in the extreme southeast corner of the claims group. It consists of narrow stringers and disseminated blebs of pyrite and pyrrhotite associated with a silicified zone and exposed as a small area of rock located at the junction of two trenches in overburden. The main trench is 40 feet long in a direction of north 23° east and the second branches from it near the south end on a strike of west 15° north for a distance of fifteen feet. Both trenches are in overburden except at the junction, where a small area of bedrock is exposed.

The country rock is basic lava but the sulphide mineralization occurs in a zone of silicification and quartz stringers. The strike appears to be approximately north-south and the main occurrence is 18 inches wide with stringers of massive sulphides cutting into the silicified wall rock. The full extent of the zone could not be determined from the trench exposure. A sample taken by the writer across the 18 inch exposure, returned an assay of 3.14% copper and a trace of gold. The nature of the terrain is such that it would be difficult to check this showing further by trenching.

Heavy shearing is exposed in a shallow cut in a twelve foot scarp on the east shore of Jessie James Lake in claim 393512. The zone is at least four feet wide and strikes due east. The rock is highly decomposed, contains some gossan but no visible quartz. As the zone parallels the traverse lines, it was not detected by the geophysical work recently carried out on the property.

#### GEOPHYSICAL SURVEYS

An electromagnetic survey using a Geonics EM-16 V.L.F. instrument and a magnetometer survey using a Scintrex MF-1 Fluxgate magnetometer, were conducted over the group of fourteen mining claims covered by this report. This work was carried out during the period September 27th to November 4th, 1975. East-west picket lines were cut at 400-foot intervals to provide control for the surveys, and the observations were made at stations spaced at 100-foot intervals along these east-west lines. A total of 11.6 miles of line were cut and chained including base lines, 8.4 miles were surveyed by the electromagnetic method and 9.3 miles with the magnetometer.

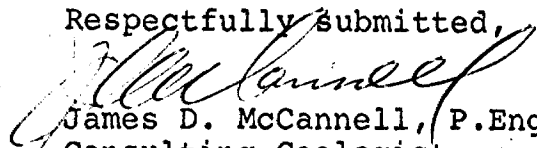
The only conductivity of any consequence indicated by the E.M. survey on the property, was a north-south striking anomaly in the extreme southeast corner of the claims group. This conductor was indicated to extend for 600 feet and conforms with a mineralized zone exposed in old trenching. In the extreme north part of the group, the electromagnetic readings were considerably influenced by a high voltage hydro line.

The magnetometer readings over the entire property proved to be quite uniform and the magnetic properties of the underlying formations were noted to be quite low.

CONCLUSIONS AND RECOMMENDATIONS

The results of the geophysical work did not provide much information to assist in the further investigation of this claims group. The anomaly in the southeast corner does however, add further significance to the copper mineralization exposed in the old trenching. A program of diamond drilling to consist of a minimum of 1,000 lineal feet in four or five short holes is recommended to check the known quartz veining and the conducting zone in the vicinity of the copper mineralization exposed in the trench in the south part of claim 393509. The estimated cost for this 1,000 feet of drilling is fifteen thousand dollars.

Respectfully submitted,

  
James D. McCannell, P.Eng.,  
Consulting Geologist

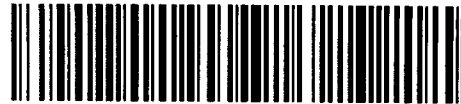
Toronto, Ontario  
November 4, 1975





Ministry of Natur

GEOPHYSICAL - GEOLOGIC TECHNICAL DATA



41P11SW0270 2.2014 ASQUITH

900

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.

RECEIVED
JAN 9 1976

PROJECTS UNIT

Type of Survey(s) Electromagnetic and Magnetometer
Township or Area Asquith Township
Claim Holder(s) Stewart Saville
Shiningtree, Ontario
Survey Company Exchange Mining Holdings Ltd.
Author of Report J.D. McCannell
Address of Author 326 Adelaide St. W. Toronto, Ont.
Covering Dates of Survey Sept. 27 - Nov. 4, 1975
Total Miles of Line Cut 11.6

MINING CLAIMS TRAVERSED

List numerically EM

- List of mining claim numbers from 393501 to 393518 with checkmarks and handwritten notes like 'May', 'Null', '1/3 N.C.'

SPECIAL PROVISIONS CREDITS REQUESTED

- Geophysical: Electromagnetic, Magnetometer, Radiometric, Other
Geological
Geochemical

DAYS per claim

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

ENTER 20 days for each additional survey using same grid.

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

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: Jan. 7, 1976 SIGNATURE [Signature] Author of Report or Agent

Res. Geol. L.D. Qualifications 63-2502

Previous Surveys

Table with columns: File No., Type, Date, Claim Holder. Row 1: 2.900, Mag. & E.M., 1972, different lines Harry Krovit

TOTAL CLAIMS 14

If space insufficient, attach list

OFFICE USE ONLY



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations E.M. - 440, Mag. 490 Number of Readings E.M.-440, Mag-490
Station interval 100 feet Line spacing 400 feet
Profile scale 1" = 40%
Contour interval 1,000 lambda

MAGNETIC

Instrument Scintrex MF-1
Accuracy - Scale constant + or - 20 lambda
Diurnal correction method Base stations hourly
Base Station check-in interval (hours) 1 hr.
Base Station location and value Base Line at lines 6+00 S, 12+00 S, 20+00 S, 28+00 S and 36+00 S.

ELECTROMAGNETIC

Instrument Geonics EM-16
Coil configuration
Coil separation
Accuracy + or - 1%
Method: [X] Fixed transmitter [ ] Shoot back [ ] In line [ ] Parallel line
Frequency 24.00 kHz, 150 kw. Balboa, Canal Zone
Parameters measured In Phase, Out of Phase

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

Re File #

RECEIVED

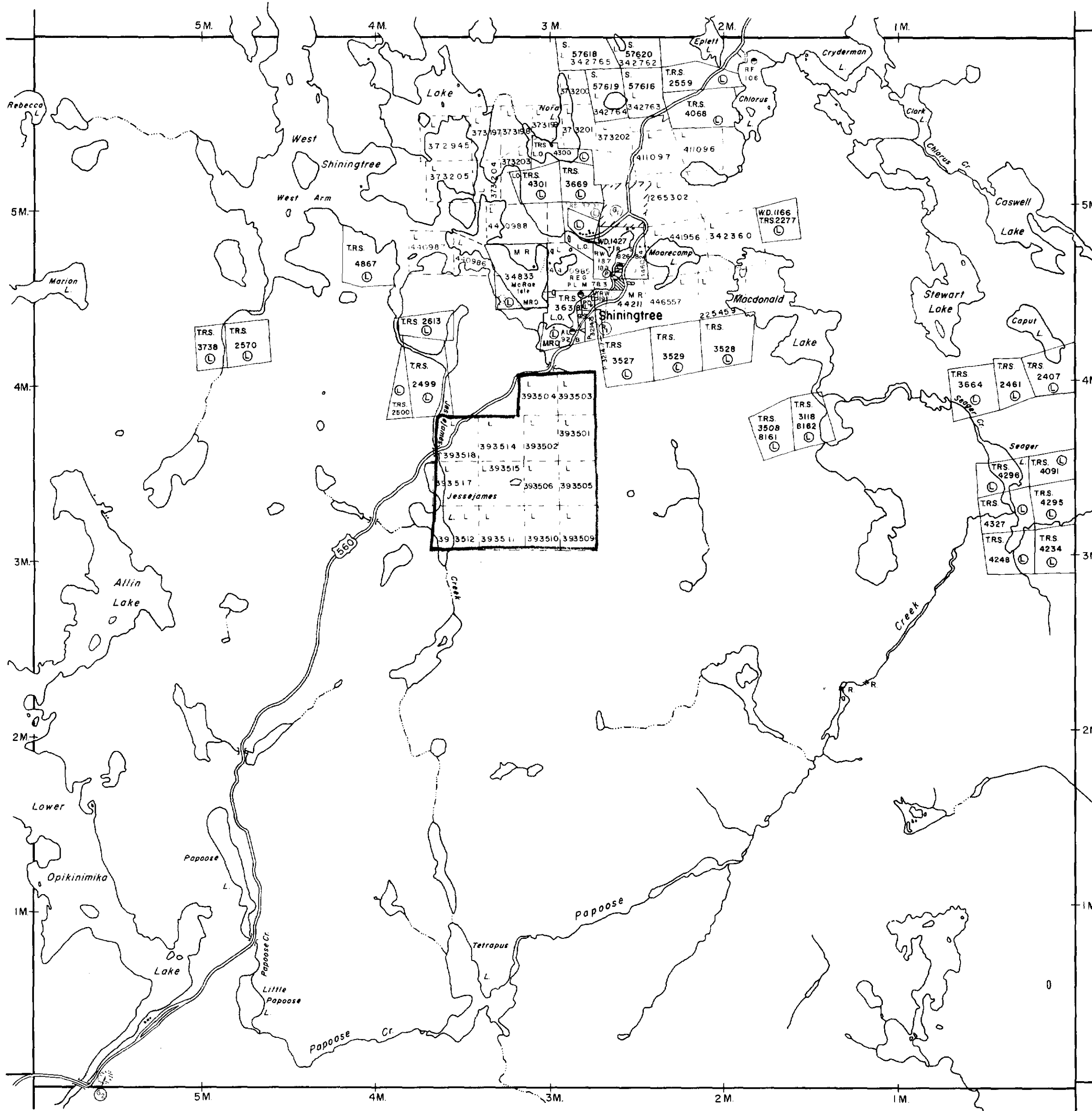
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PROJECTS UNIT.

*[Handwritten Signature]*

Churchill Twp. - M.719



Miramichi Twp. - M.865

Fawcett Twp. - M.803

Sheard Twp. - M.1107

THE TOWNSHIP OF

ASQUITH

DISTRICT OF SUDBURY

LARDER LAKE 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	C.
PATENTED FOR S.R.O.	⊙

NOTES

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

SAND and GRAVEL	RESERVES
Ⓜ MTC Pit 489	Ⓜ MNR SRO Reserve File 163003
Ⓜ MTC Gravel Pit No. 214	

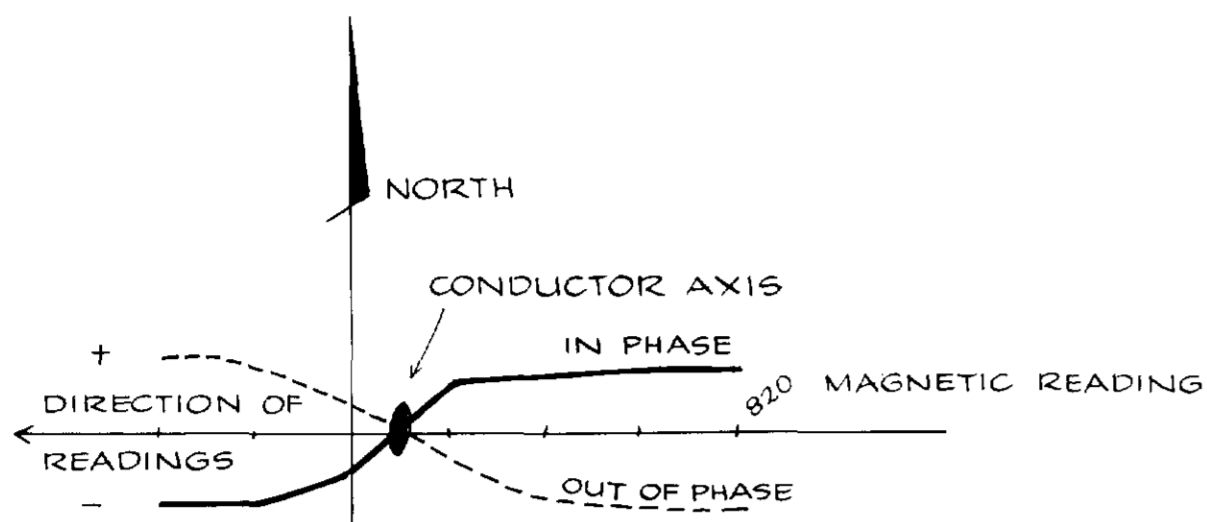
DATE OF ISSUE  
**JAN 9 1976**  
 SURVEYS AND MAPPING  
 BRANCH

PLAN NO. - **M.637**

ONTARIO  
 MINISTRY OF NATURAL RESOURCES  
 SURVEYS AND MAPPING BRANCH

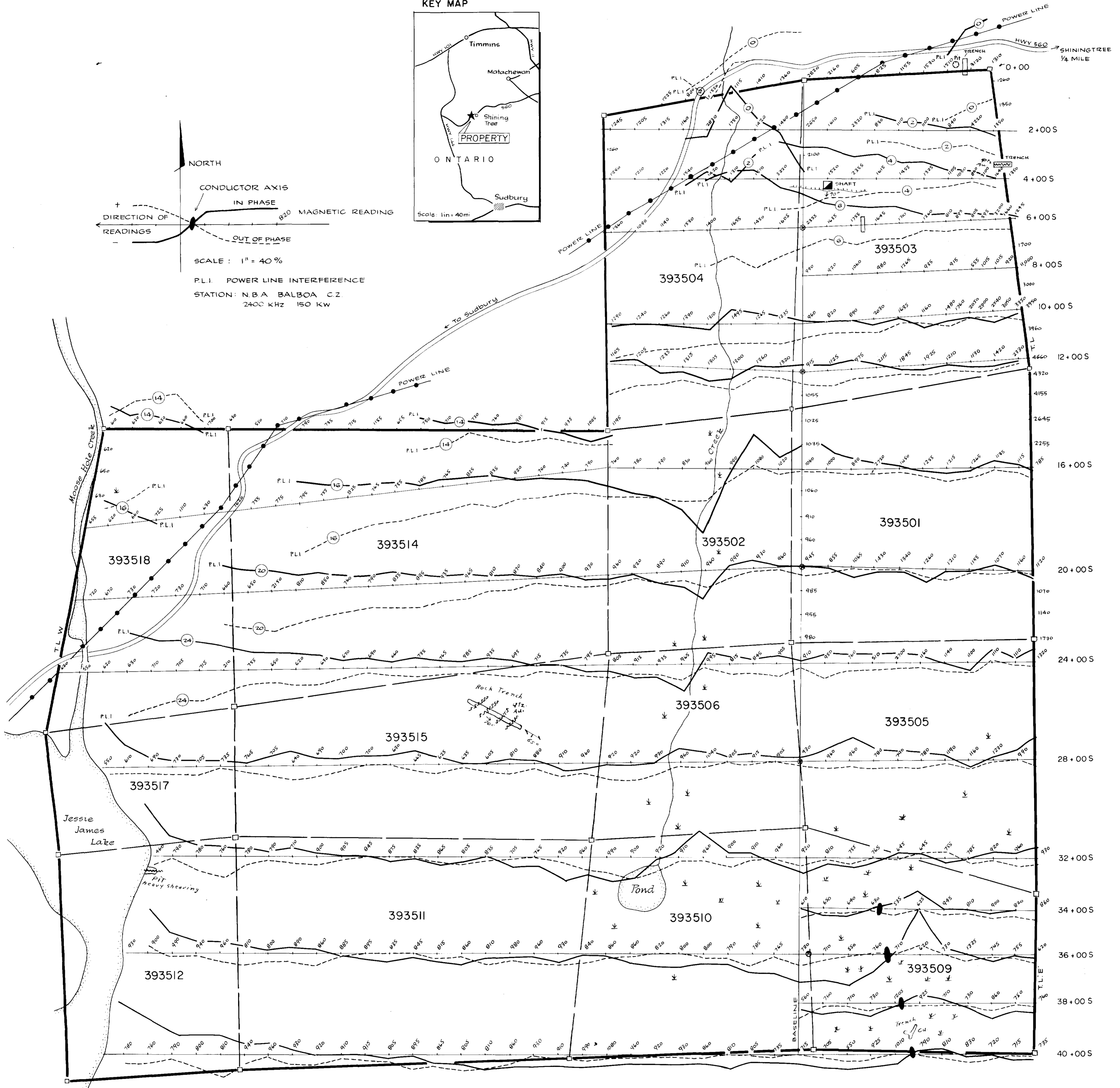


KEY MAP



SCALE: 1" = 40%

P.L.I. POWER LINE INTERFERENCE  
STATION: N.B.A BALBOA C.Z.  
2400 KHZ 150 KW

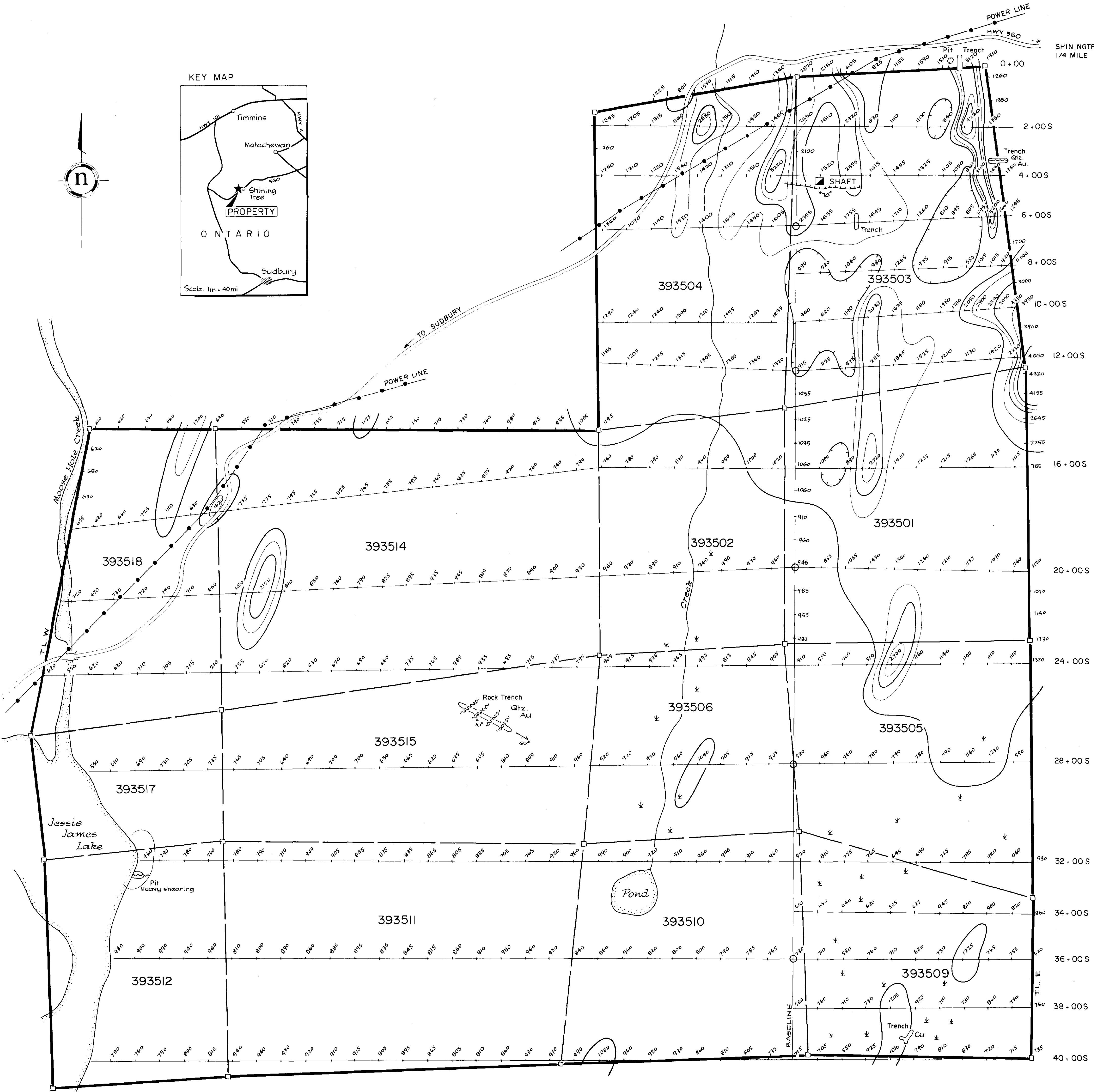
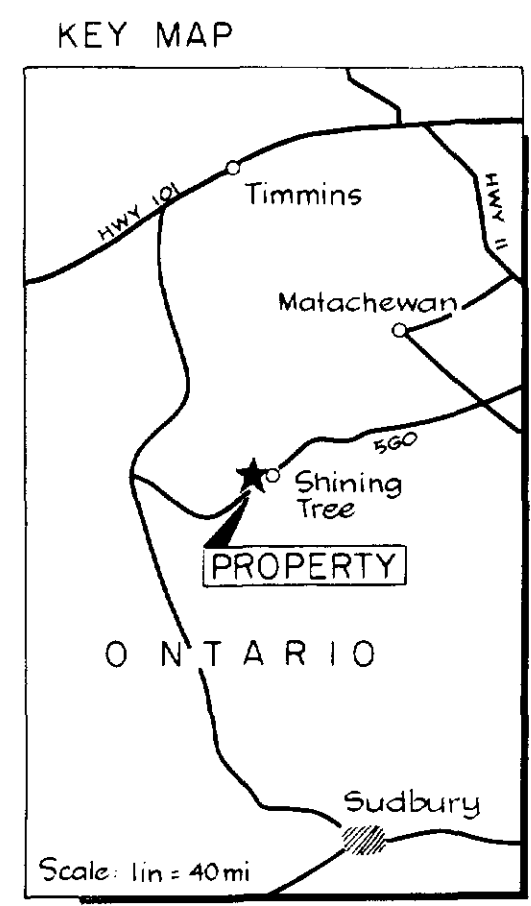
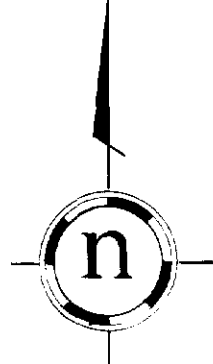


KAYAK EXPLORATIONS LIMITED

ASQUITH TOWNSHIP - ONTARIO

ELECTROMAGNETIC (E.M.-16)  
AND MAGNETOMETER SURVEYS





- LEGEND
- 825 Magnetic Reading
  - Magnetic contours - interval 500 gammas
  - Magnetic low
  - Base Station

**KAYAK EXPLORATIONS LIMITED**  
ASQUITH TOWNSHIP - ONTARIO

**MAGNETOMETER SURVEY**

