



31M04SW0142 2.2360 STRATHCONA

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PROJECTS UNIT

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MINING LANDS SECTION

REPORT ON HORIZONTAL-LOOP

ELECTROMAGNETIC SURVEY

LOWELL LAKE PROPERTY

April 1, 1977
Toronto, Ontario

Wallace Ng-See-Quan
St. Joseph Explorations Ltd.

INTRODUCTION

The Lowell Lake Property consists of 47 contiguous claims optioned from L. Savard of Val d'or, P.Q.

A ground horizontal loop electromagnetic survey was done on the Lowell Lake property to determine whether any bedrock conductors, within the depth penetration limits of the system, were present.

All anomalies except three noted in the survey could either be explained by the powerlines or pipeline which run through the property.

Several areas of the property could not be covered because of Highway 11's right of way, commercial properties i.e. gas station, inaccessible ground (steep cliffs) during the survey period, open water on some of the lakes, and poor grid control especially in the vicinity of the 8+25E baseline.

LOCATION AND ACCESS

The Lowell Lake property is located in Strathcona Township, N.T.S. 31M-4, in the Sudbury Mining Division. This property is about 5-6 kilometres south of the town of Temagami.

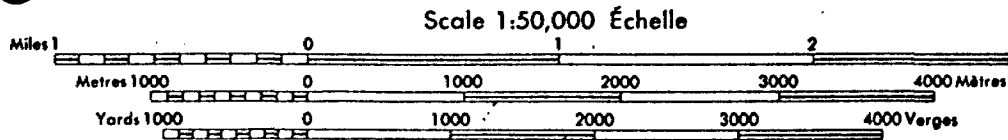
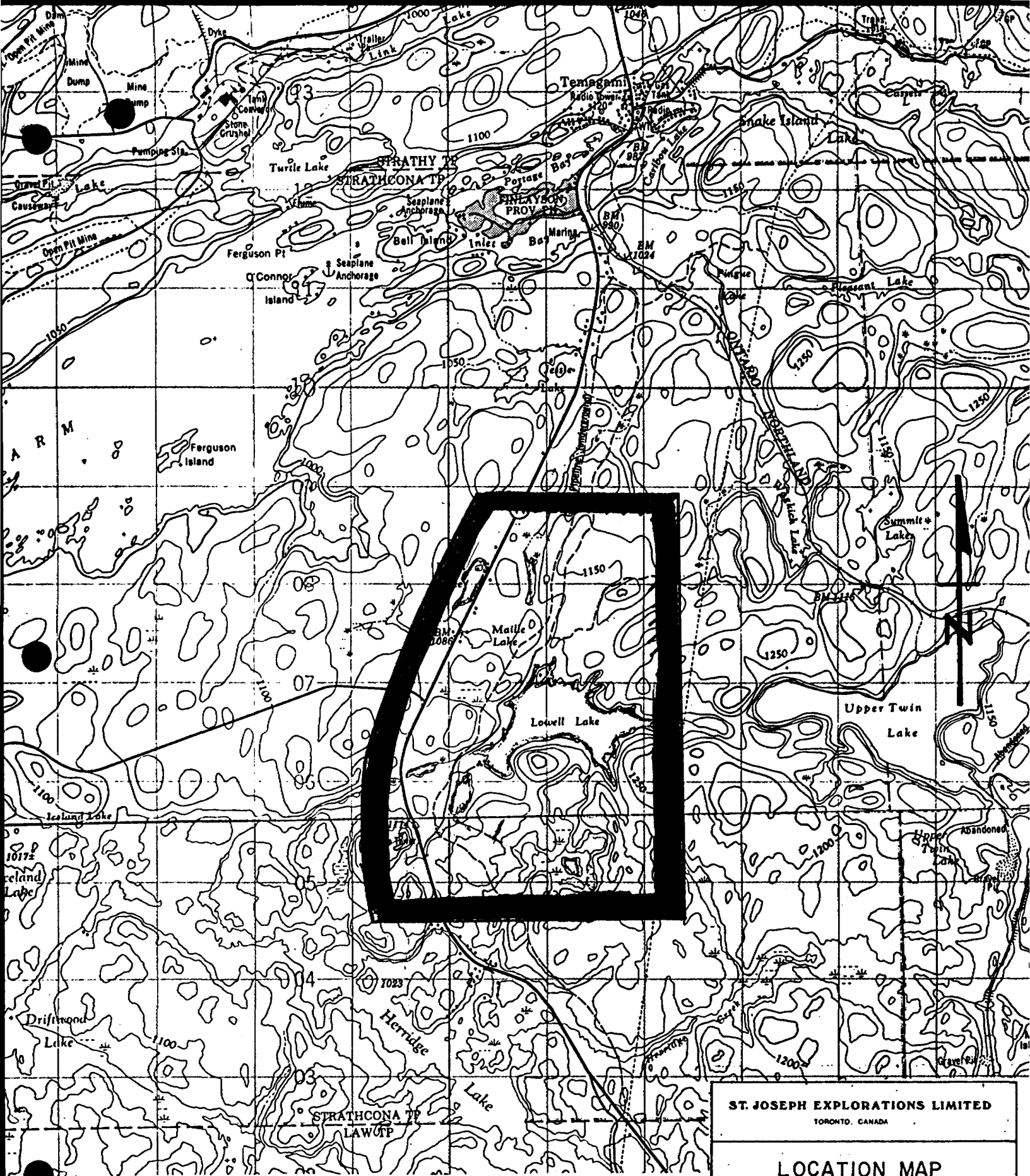
Access to the property is via the Lowell Lake road which runs through the property (see location map). Highway 11 runs through some of the claims along the west side of the property.

HISTORY

Work has been carried out on ground covered by this property since 1955. Below is a summary of previous work:

1955 - Sylvante GML - trenching and sampling of area north of Lowell Lake.

Newkirk Mining Corporation: ground magnetic and EM resistivity and 5 short holes (269') drilled in Maille Lake area.



ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

LOCATION MAP

SCALE: 1"=

APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.

PROJECT NO	189	SHEET NO	
REPORT NO		OF	
		NTS	31M4

- 1956 - Trembor ML: ground EM and "radiograph" surveys and geological mapping. 5 holes (1434') were drilled at south end of small lake about 305 metres SW of Lowell Lake. Only minor sulphides were encountered.
 - E. McWilliam: 3 holes (168') were drilled in area just south of ground held by Trembor ML.
- 1969 - Vinnie ML: geological mapping, soil geochemistry (Hg) survey and magnetic survey in Maille Lake area.
- 1971 - Riocanex: Examination of property, samples analysed for SiO_2 , TiO_2 , K_2O , Na_2O , Au, Cu, Zn.
- 1972 - Manbar ML: VLF and magnetic surveys in area S and SW of Lowell Lake.
- 1974 - Copperfields (Teck): VLF EM and magnetic surveys on SW part of Lowell Lake.
- 1975 - Umex: examination of property and several samples assayed.

GENERAL GEOLOGY

The Lowell Lake Property is underlain by a belt of Archean volcanics which strike North-South with dips of 30° to 50° to the east.

The volcanics are mainly mafic in composition. Intrusions of feldspar porphyries and diorite-gabbro are present. The feldspar porphyries intrude the volcanics near the showings. To the east the volcanics are overlain by Gowganda Formation and a large granitic body lies to the west.

Previous geological mapping shows that the showings occur in more felsic volcanics.

Detailed geological mapping will be done during the summer of 1977.

GEOPHYSICAL SURVEY

9.8 kilometres of baselines and 105.5 kilometres of grid and tie lines were cut on the property. Grid lines were spaced 100 metres apart in most of the area with 50 metre lines between 7S and 16N on that part of the grid that lies east of the Lowell Lake Road. Pickets were placed every 25 metres on all the lines that were cut on the property.

A horizontal loop EM survey was done on the property. A Maxmin II EM unit was used with coil separation of 100 metres and frequency of 1777 Hz. Readings were taken every 25 metres. This unit was especially adequate because of the very rough topography of this property.

In areas of extremely rough topography, no readings were obtained. These locations are the following:

L24N	-	1+50E to 2+25E
L13N	-	1+50E to 2+50E
L20N	-	8+75E to 10+00E
L19N	-	9+00E to 10+00E
L13N	-	13+75E to 14+50E
L7N	-	0+50E to 1+50E
L4N	-	2+75E to 4+00E
L 0+00	-	B.L. to 1+00E

Line 12E, 10S to 13S was not cut and hence no readings were obtained.

The west ends of lines 8N, 9N, 10N, were not surveyed because of Highway 11's right of way.

The west ends of lines 14N, 15N and 16N were not surveyed because of a gas station and other buildings just east of Highway 11 in that area.

The other areas which were not covered was because of open water at the time the survey was being done in those areas.

RESULTS AND INTERPRETATION

The results of the survey are plotted on maps 1, 2, 3 and 4 (see pockets).

The rugged topography resulted in numerous short-cable readings, as noted in the spurious high positive in-phase readings. The out-of-phase readings are not as seriously affected by the short-cable separations.

The buried pipeline that runs through the property has been well delineated by the survey.

Locations of axes of anomalous responses are:

I	-	L14N	-	0+50E
II	-	L4E	-	12+25S
III	-	L6E	-	11+00S

These anomalies may be attributed to a bedrock source as no culture was noted in these areas.

Anomaly I is probably due to a near surface source. Here there might be parallel conductors whose separation is much less than that of the coils of the EM system.

Anomalies II and III are also probably due to near surface conductors similar to that of anomaly I.

CONCLUSIONS AND RECOMMENDATIONS

The three anomalies warrant further investigation. Detailed geological mapping planned for the summer of 1977 will aid the interpretation of the geophysical anomalies.

Respectfully submitted,

Wallace Ng-See-Quan

Wallace Ng-See-Quan

MINING CLAIMS TRAVERSED

S437824 ✓
S437825 ✓
S437826 1/2 ✓
S437827 1/2 ✓
S437828 ✓
S437829 1/3 ✓
S437830 ✓
S437831 ✓
S437832 ✓
S437833 ✓
S437694 ✓
S437697 ✓
S437698 ✓
S437699 ✓
S437700 ✓
S437701 ✓
S437702 ✓
S437703 1/2 ✓
S437704 ✓
S437895 1/3 ✓
S437896 ✓
S437897 1/2 ✓
S437898 ✓
S437899 ✓
S437937 1/3 ✓
S437946 ✓

S446576 ✓
S446577 1/3 ✓
S446578 ✓
S446579 ✓
S446580 ✓
S446581 ✓
S446582 ✓
S446583 ✓
S446584 ✓
S446585 ✓
S438464 ✓
S438465 ✓
S438466 ✓
S438467 ✓
S438468 ✓
S438469 ✓
S438470 1/3 ✓
S438471 ✓
S438472 1/3 ✓
S438473 ✓
S438474 ✓

TOTAL CLAIMS = 47

*Group of claims not covered = 4
47 x 40 = 1880 ÷ (47 + 4) = 36 44/51 or 37 days*

400' surface rights reservation along the shores of all lakes and rivers.

SAND and GRAVEL

- ① Gravel File 132830
- ② Gravel File 146693

Sand and gravel in this township reserved until further notice.

AREAS WITHDRAWN FROM STAKING

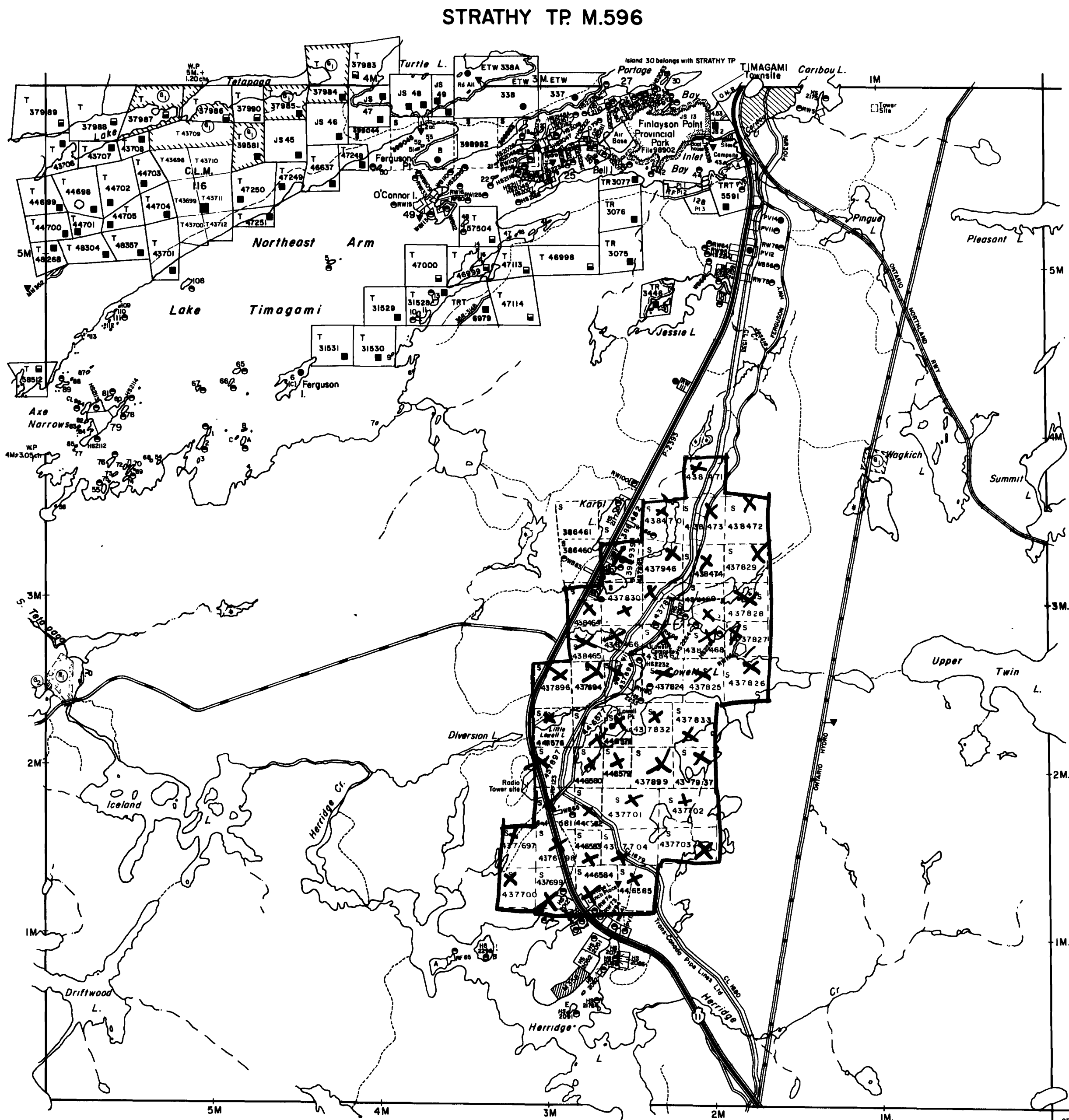
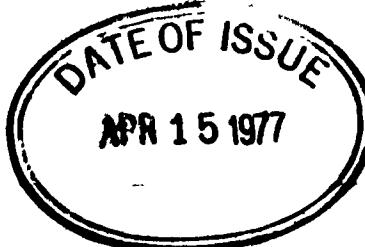
S.R. - SURFACE RIGHTS M.R.-MINING RIGHTS

Section	Order No	Date	Disposition	File
43 (R 80 1970)	W 70/76	13/12/76	S R	146693

Island 25 (Bell Id.) - all Crown land reserved. File 68120
 " 27 " " " " " " " " " " " " 181119
 " 49 (O'Connor) - " " " " " " " " " " " " 181200

Islands in Lake Timagami NOT OPENED FOR STAKING.

This Township lies within THE CORPORATION OF THE IMPROVEMENT DISTRICT OF TEMAGAMI. File 176049.

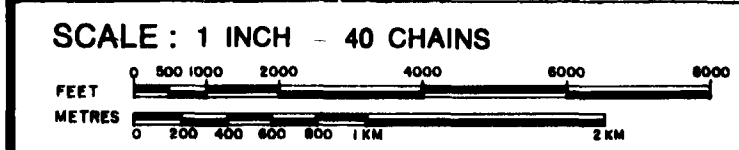


SE CORNER co-ordinates
 LAT 46°58'20" APPROX
 DEP 79°45'20"

- 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. ORIGINAL SHORELINE. MARSH OR MUSKEG. MINES.

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	▼
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	Ⓜ
CANCELLED	ⓧ
SAND & GRAVEL	Ⓞ



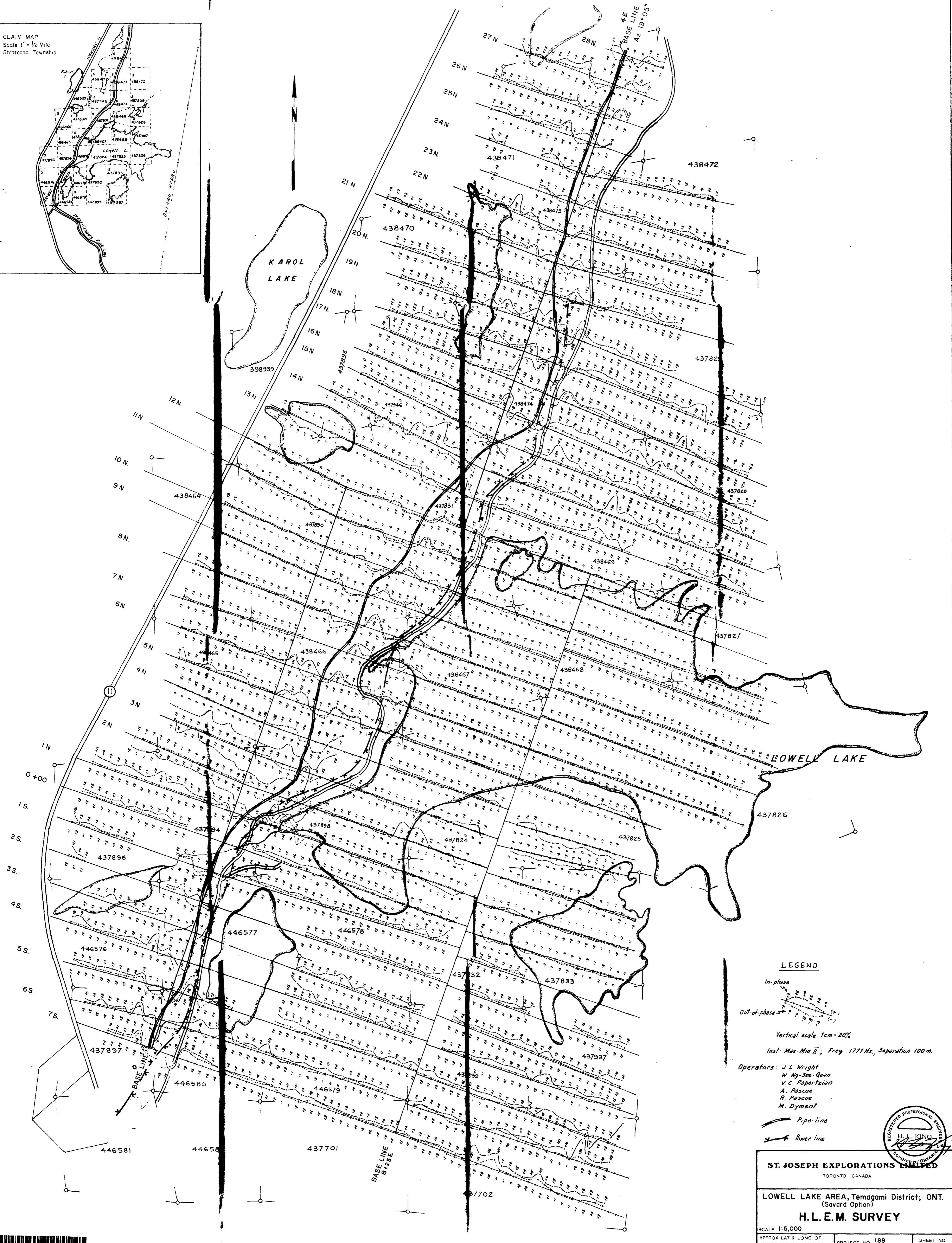
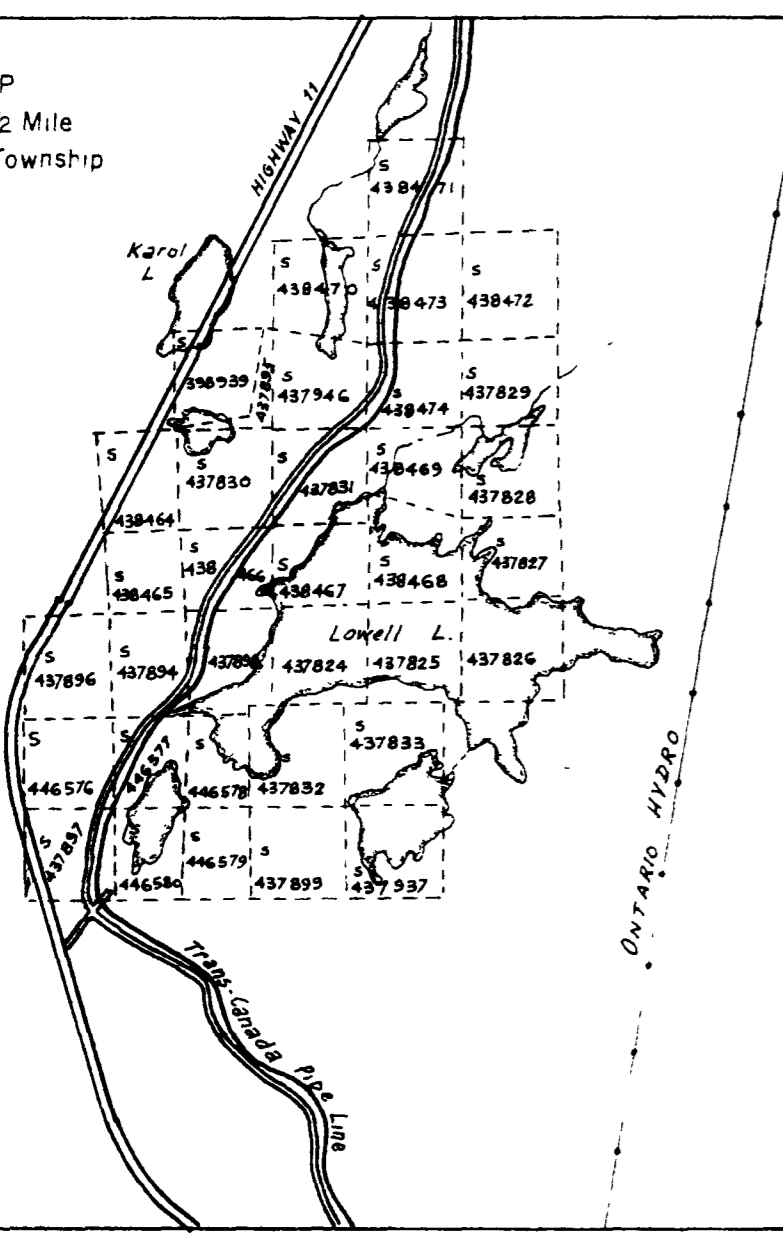
ACRES	HECTARES
40	16

TOWNSHIP 2.2360
STRATHCONA
 DISTRICT NIPISSING
 MINING DIVISION SUDBURY

Ministry of Natural Resources
 Ontario Surveys and Mapping Branch
 Date MAY 1974 Plan No. **M.595**
 Whitney Block Queen's Park, Toronto



CLAIM MAP
Scale 1" = 1/2 Mile
Stratcona Township



LEGEND

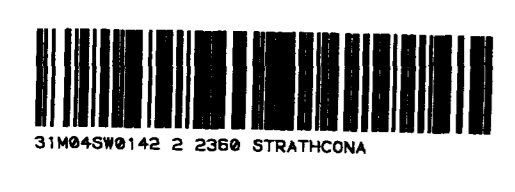
- In-phase
- Out-of-phase
- Vertical scale 1cm = 20%
- Inst: Max-Min II; Freq: 1777 Hz; Separation 100m.
- Operators: J. L. Wright
W. Ng-Sze-Guan
V. C. Papartzian
A. Pascoe
R. Pascoe
M. Dymant
- Pipe-line
- River line

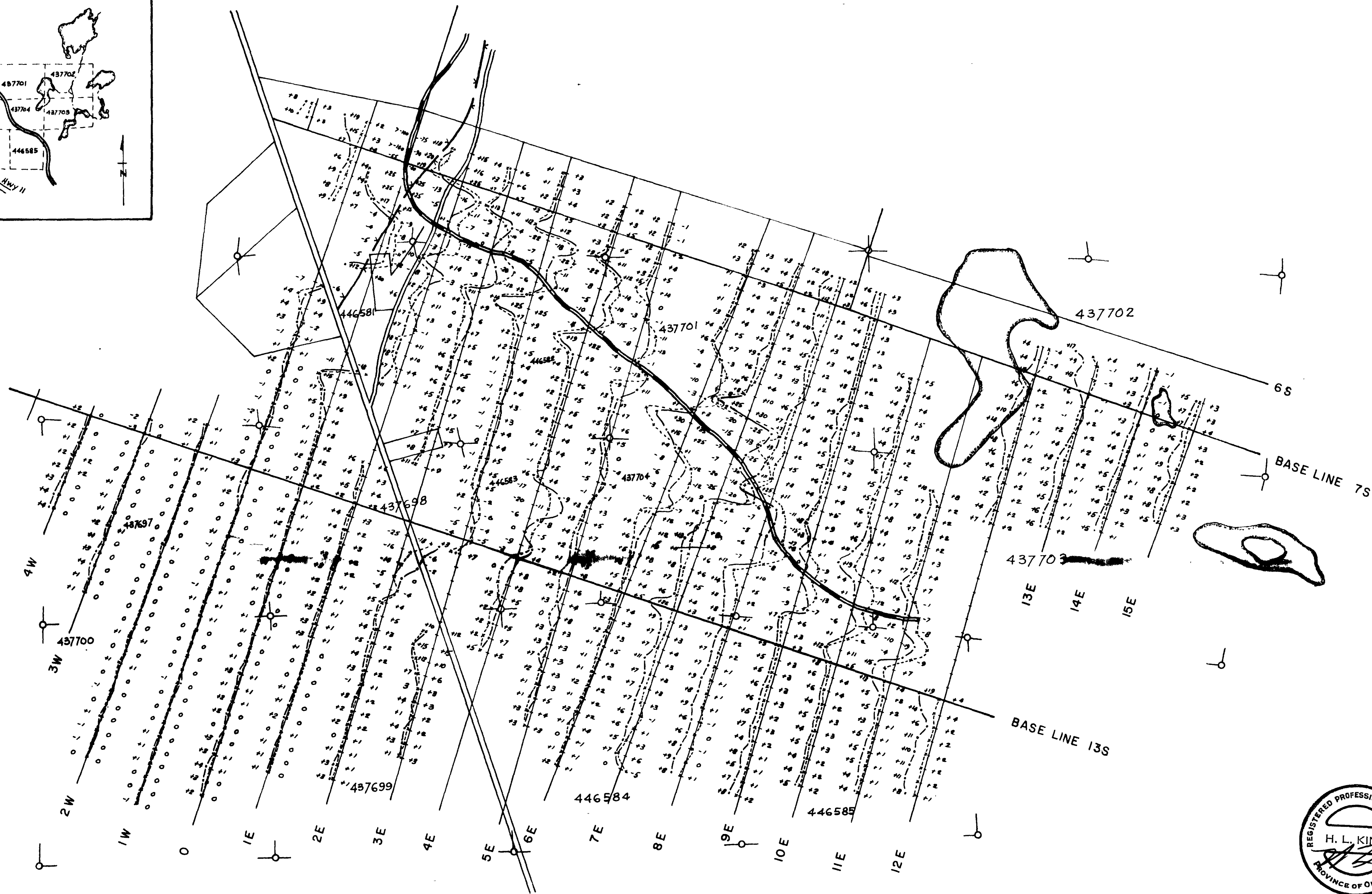
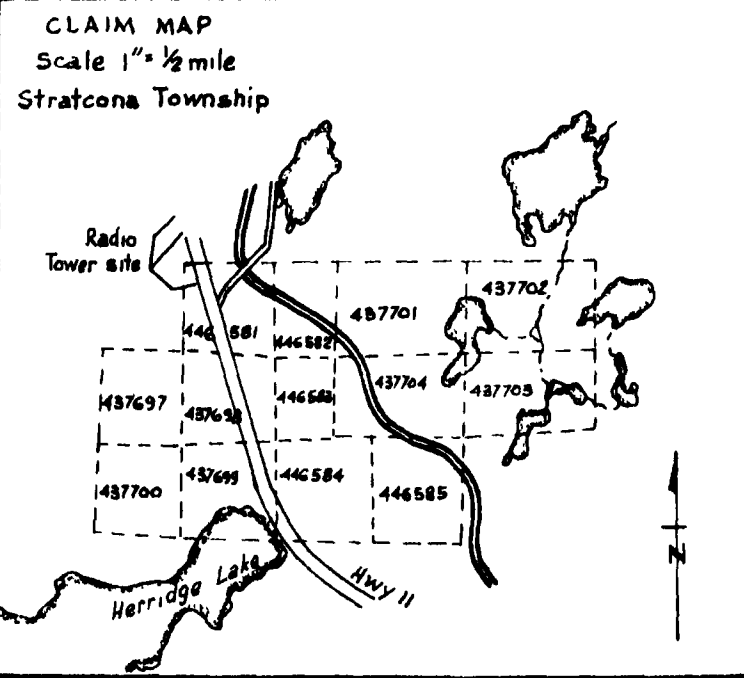


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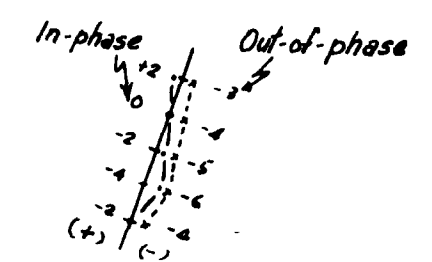
LOWELL LAKE AREA, Temagami District; ONT.
(Savard Option)
H.L.E.M. SURVEY

SCALE 1:5,000	PROJECT NO 189	SHEET NO 1 OF 4
APPROX LAT & LONG OF LOWER RT COR OF DWG	REPORT NO	NTS 31M/4
LATITUDE		
LONGITUDE		

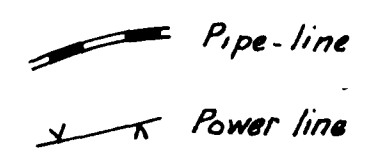




LEGEND



Vertical scale 1cm = 20%
Inst Max-Min II; Freq 1777 Hz., Separation 100m.



Operators: J. L. Wright
W. Ng-See-Quan
V. C. Papertziari
A. Pascoe
R. Pascoe
M. Dymant

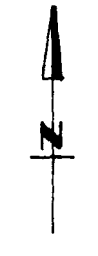
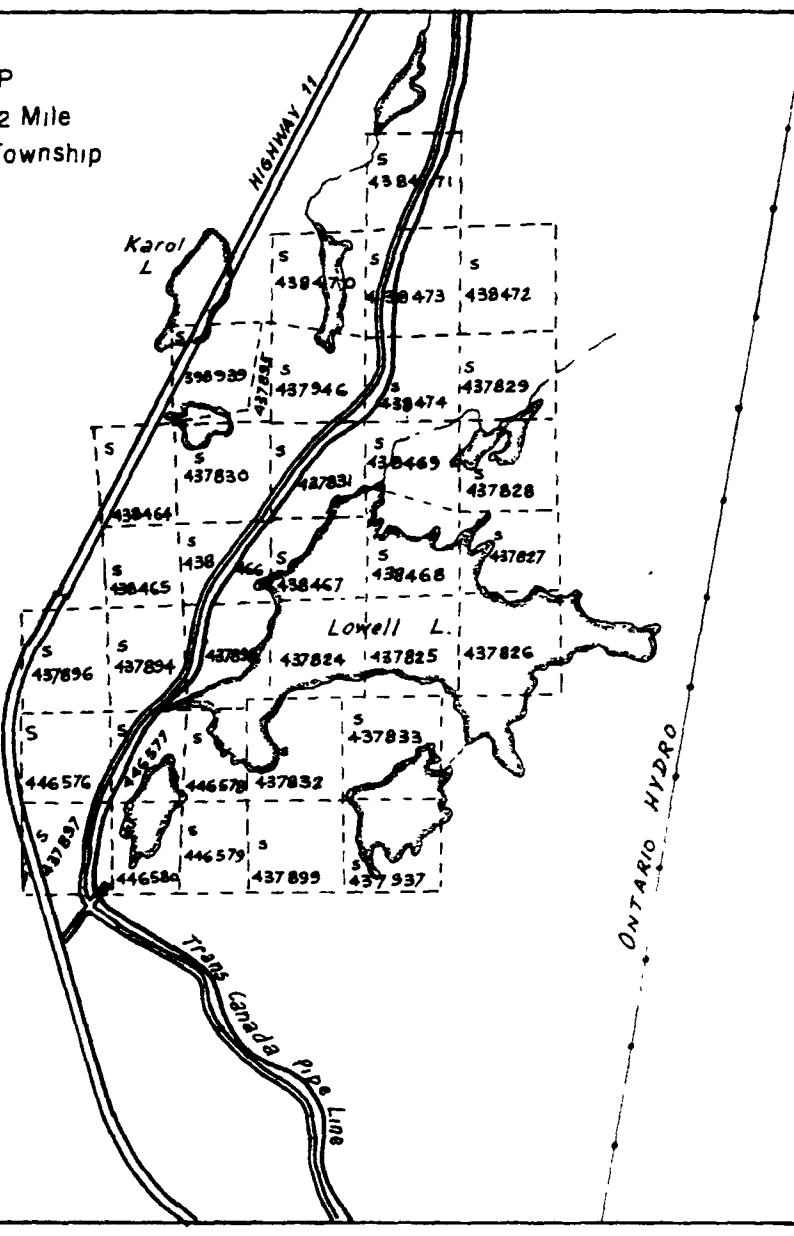
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LOWELL LAKE AREA, Temagami District; ONT.
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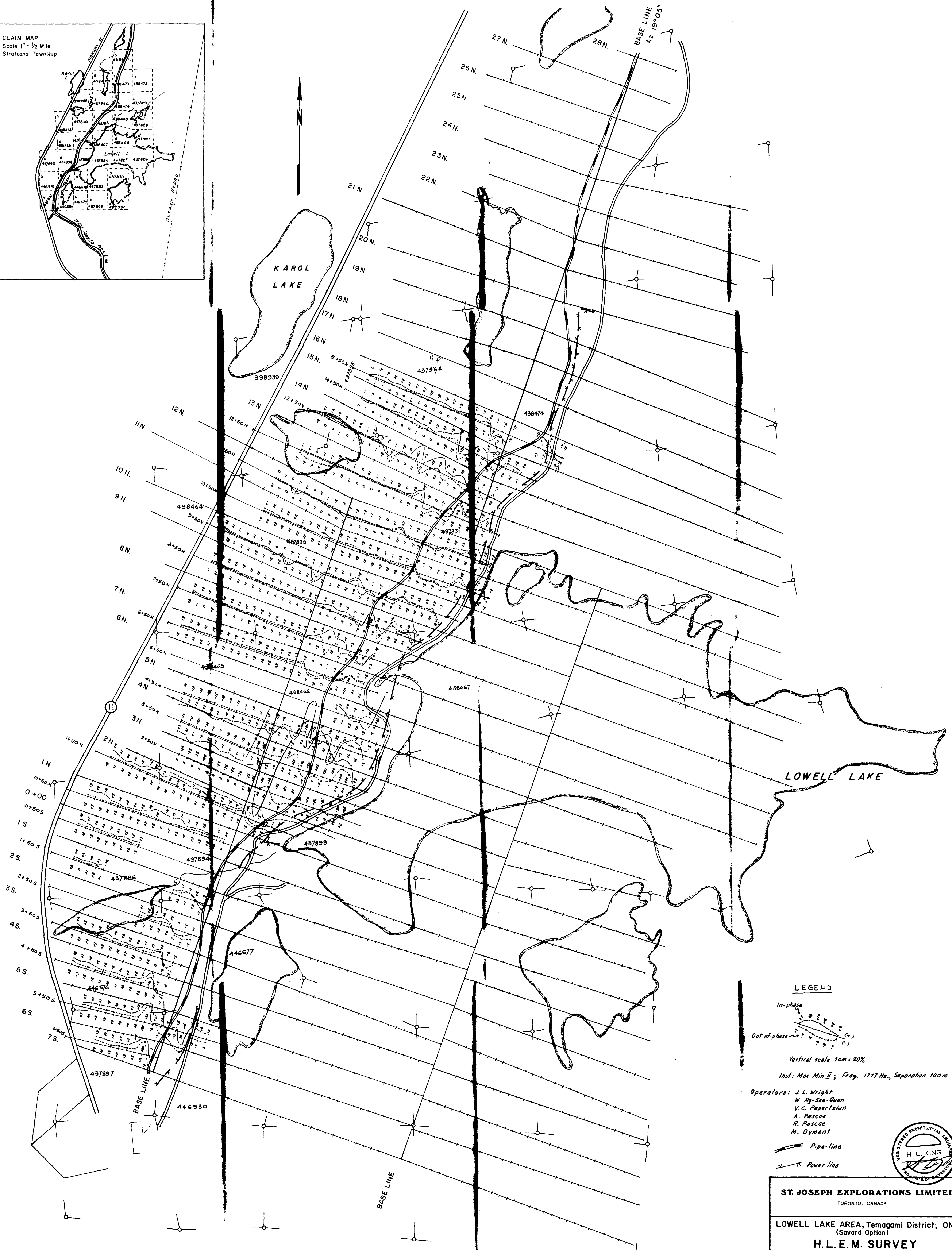
SCALE 1 5,000	PROJECT NO. 189	SHEET NO. 2 OF 4
APPROX LAT & LONG OF LOWER RT COR OF DWG	REPORT NO.	N1S 31M/4
--- LATITUDE		
--- LONGITUDE		



CLAIM MAP
Scale 1" = 1/2 Mile
Stratcona Township



BASE LINE
Az 19° 05'



LOWELL LAKE

LEGEND

- In-phase
- Out-of-phase
- Vertical scale 1cm = 20%
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- Pipe-line
- Power line

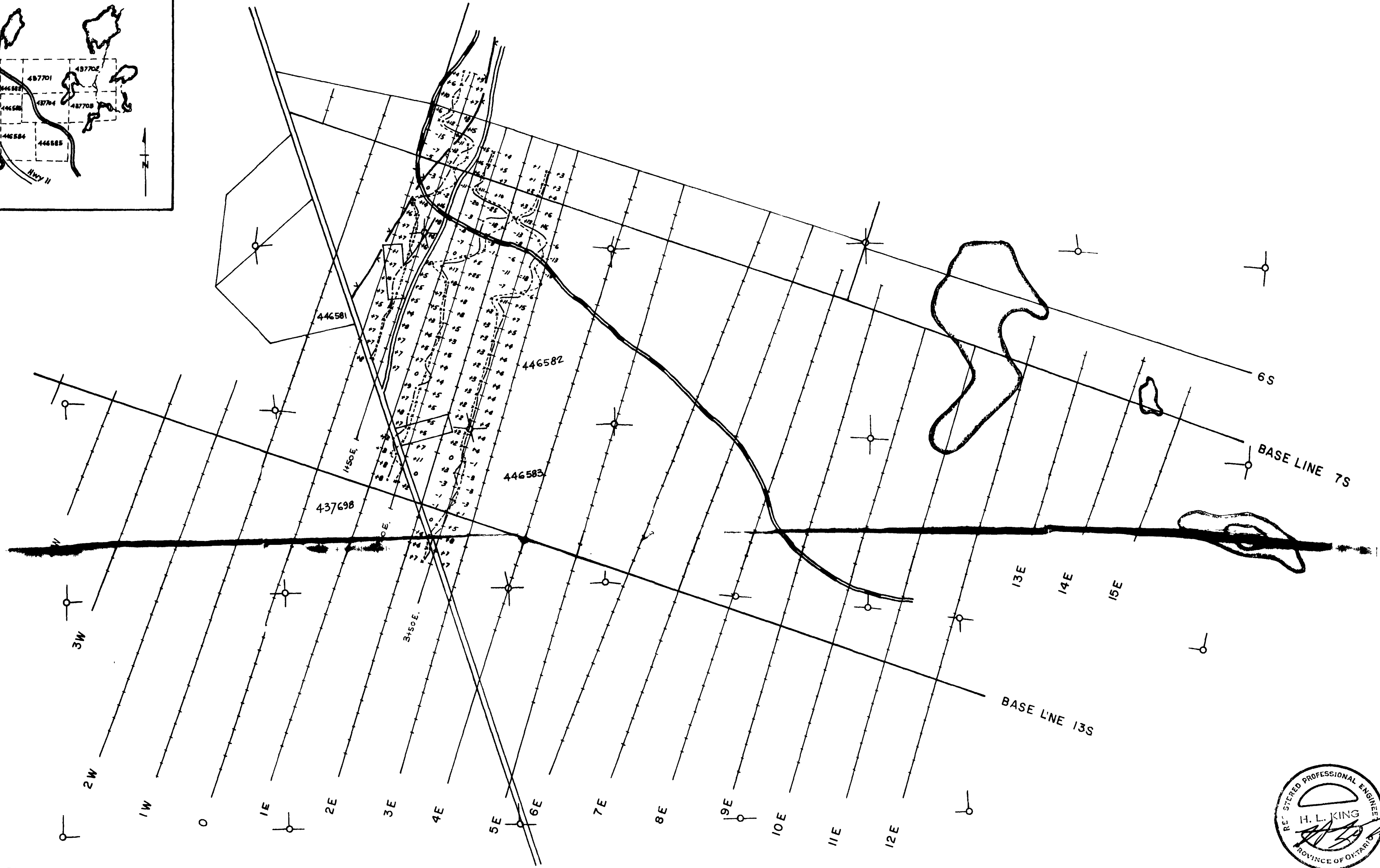
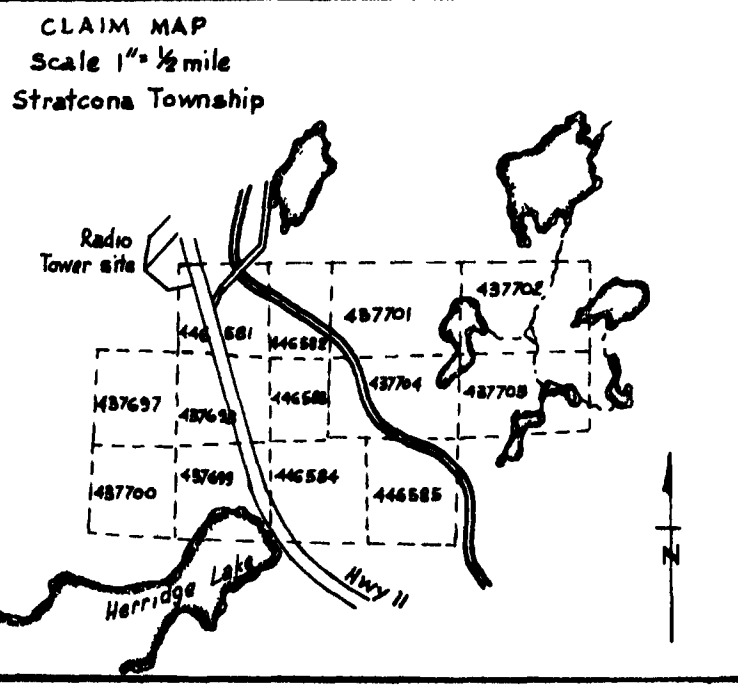


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TORONTO, CANADA

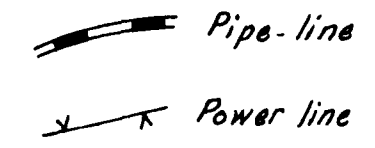
LOWELL LAKE AREA, Temagami District; ONT.
(Savard Option)
H. L. E. M. SURVEY

APPROX LAT & LONG OF LOWER RT COR OF DWG	PROJECT NO 189	SHEET NO 3 OF 4
LONGITUDE	REPORT NO	NTS 31M/4

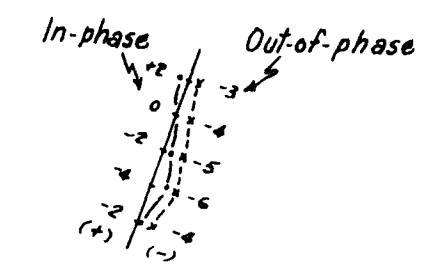




LEGEND



Operators: J. L. Wright
W. Ng-See-Quan
V. C. Papertzian
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M. Dymant



Vertical scale 1cm = 20%
Inst: Max-Min II; Freq. 1777 Hz., Separation 100m

ST. JOSEPH EXPLORATIONS LIMITED
TORONTO, CANADA

LOWELL LAKE AREA, Temagami District; ONT.
(Savard Option)

H. L. E. M. SURVEY

SCALE 1:5,000

APPROX LAT & LONG OF LOWER RT COR OF DWG	PROJECT NO 189	SHEET NO 4 OF 4
APPROX LATITUDE	REPORT NO	NTS 31M/4
APPROX LONGITUDE		

