



41104NE0019 0020 FOSTER

2,3168

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MAGNETOMETER and VLF SURVEYS

FOSTUNG PROPERTY

December 7, 1979

RECEIVED

DEC 20 1979

MINING LANDS SECTION

Project #3115
St. Joseph Explorations Limited

James L. Wright

INTRODUCTION

The area discussed in this report has seen a fairly extensive exploration effort over the years. Mainly skarn type mineralization has been sought such as possible massive base metal deposits or, as noted by previous workers, significant Tungsten mineralization. Indeed, several substantial Scheelite showings are found on the property. The geophysical surveys described herein were mounted to further this exploration effort. Specifically the magnetics was intended as a mapping aid and; as well, previous work indicated magnetic anomalism to be associated with some of the Tungsten mineralization. The VLF survey was run to outline more conductive shear zones or massive sulfides possibly associated with the skarn type mineralization.

It should be noted the magnetometer survey covers the full twenty-eight (28) claim block comprising the Fostung Property as such. The VLF survey, however, only covers an interior block of five (5) claims. Both surveys are grouped together in this technical report but each has a separate Declaration of Survey found in Appendix C. In addition, separate Reports of Work were filed for each survey and its associated claim coverage.

LOCATION and ACCESS

The Fostung Properties lies in Ontario immediately north of Lake Huron. Approximately 75 km west-southwest of Sudbury and 9.5 km east-southeast of Espanola, within Foster Township. Latitude, longitude and Army Map Coordinates of the properties northeast corner are as follows:

Latitude: 46°14'34"N

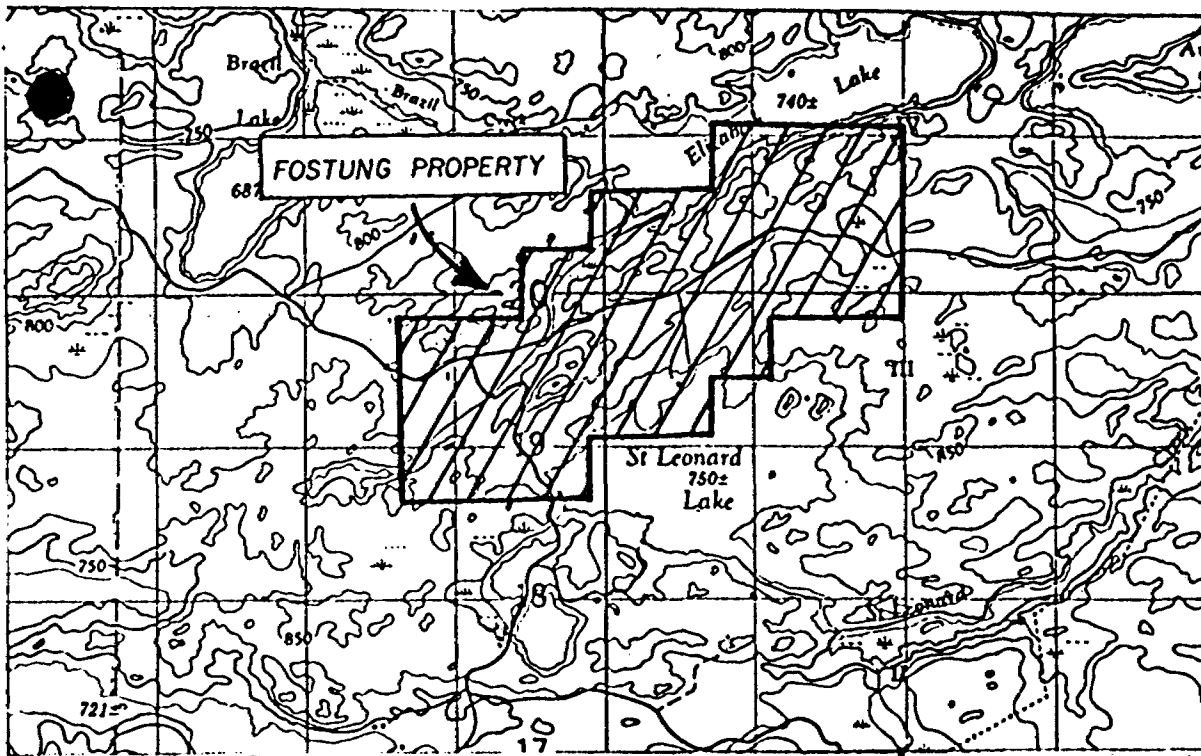
Longitude: 81°37'38"W

Army Map Coordinates: 520211

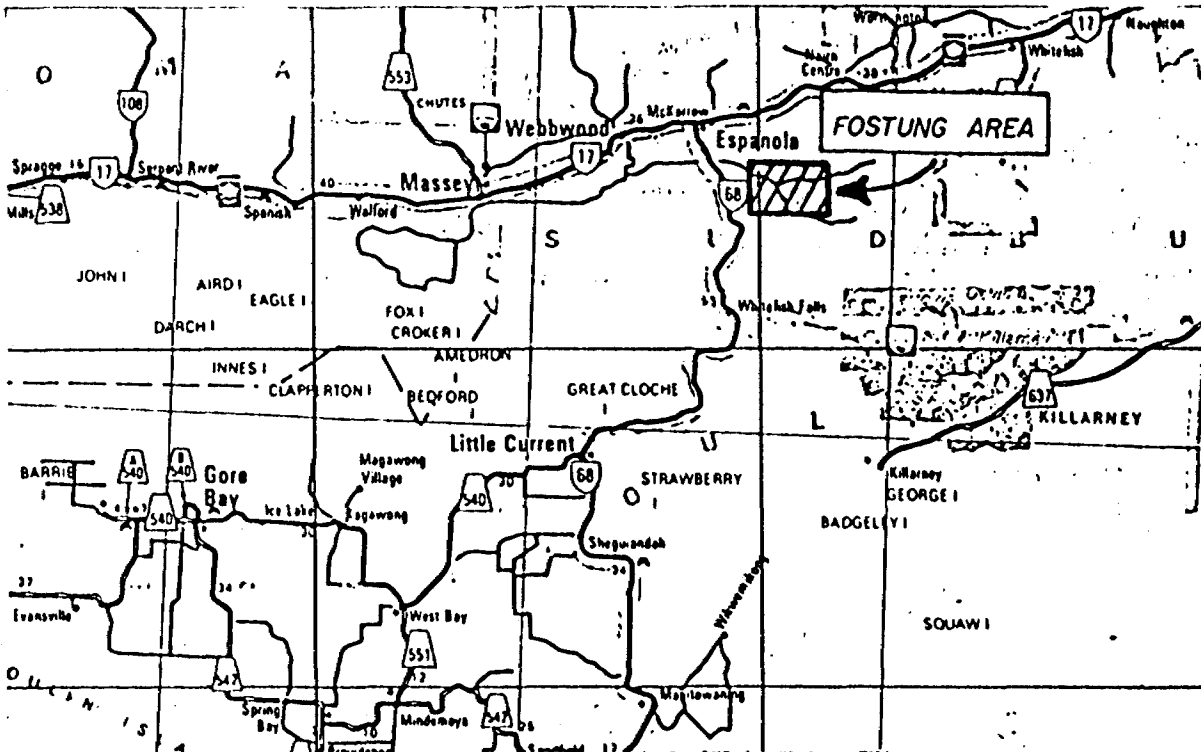
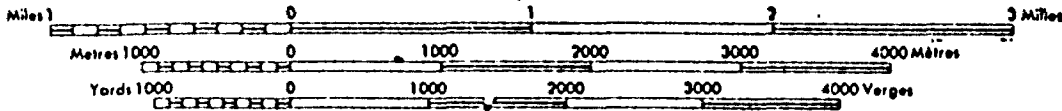
It is bounded roughly by Elizabeth Lake to the north and St. Leonard Lake southerly.

Access is via an all-weather gravel road easterly from Espanola for about 10km. This enters the property's western boundary. The area surrounding and including the grid is depicted upon the Whitefish Falls, Ontario topographic sheet, NTS 41I/4.

Further details regarding the property's location and access can be found on the accompanying location map.



Scale 1:50,000 Échelle



Scale 1:800,000



ST. JOSEPH EXPLORATIONS LIMITED		
TORONTO, CANADA		
FOSTUNG		
LOCATION MAP		
APPROX LAT & LONG OF LOWER RT COR OF SHEET	PROJECT NO. <u>315</u>	SHEET NO. <u>OF</u>
— — — — — LATITUDE	REPORT NO. _____	418 511
— — — — — LONGITUDE		

PROPERTY STATUS

The block of twenty-eight claims comprising the Fostung Property are controlled by Union Carbide Exploration Corporation, Suite 930 - 800 West Pender Street, Vancouver, British Columbia, V6C 2V6. All twenty-eight claims are presently under option by St. Joseph Explorations Limited, 90 Eglinton Ave. West, Suite 505, Toronto, Ontario, M4R 2E4. The work described herein was done by and for St. Joseph Explorations Limited. The aforementioned claims are numbered as follows:

S 398131 - S 398153 inclusive

S 471202 - S 471204 inclusive

S 471438 - S 471439 inclusive

All claims are in good standing through the date of this report. However, many claims are on extension which will be relieved upon completion of this work.

GEOLOGIC SUMMARY

Bedrock in the area is Precambrian rock which is partly mantled by unconsolidated Cenozoic deposits to the south. Formations in the area are subdivided into four groups and are from oldest to youngest the McKim, Ramsey Lake, Pecors, Mississagi, Bruce, Espanola, Serpent, Gowganda, Lorrain, and Gordon Lake Formations. These formations are folded, faulted, and intruded by Nipissing Diabase, amphibolite dikes, and a small composite ultramafic-granophyre pluton. The formations listed above range from sandstones and conglomerates, to limestones. Many metamorphic equivalents are noted as well.

In the immediate area of the grid are found; the Serpent Formation - a quartzite of variable composition; the Mississiga Formation - a sandstone, siltstone, conglomeratic mixture; and a substantial sliver of the Espanola Formation - a limestone of variable composition. Strikes are generally northeast-southwest with dips northerly on the order of 60°. Also traversing the grid is a Nipissing Diabase dike and a major fault referred to as the St. Leonard Fault.

More extensive and detailed information concerning the area's geology can be found in Geoscience Report 131, Geology of the Espanola-Whitefish Falls Area, District of Sudbury, Ontario; by K.D. Card. In addition, St. Joseph Explorations Limited personnel are to submit a detailed geologic report covering the immediate property in the near future.

PREVIOUS WORK

In the mid-1960's two prospectors staked claims in the area of the present grid to cover showings of scheelite, molybdenite, and chalcopyrite in an old pit. Undoubtedly the area had received attention before this time from local prospectors. In 1966 and 1967 Texas Gulf Sulfur Company conducted surface mapping and drilling to assess the extent of the mineralization. Cerro Mining Company of Canada Limited continued the surface exploration and drilling through 1970. Following this, Vangulf Exploration acquired the ground and did further work with the property passing on to St. Joseph Explorations Limited when Vangulf was absorbed by St. Joe Minerals Corporation. Union Carbide Exploration Corporation then entered the picture and continued surface exploration as well as drilling. It is via an option agreement that St. Joseph Explorations Limited now; again, is involved in the present effort.

Undoubtedly the above brief summary in no way exhaustively recounts the succession of exploration activity the property has received over the years. It is merely intended to outline fairly major past programs.

SURVEY PROCEDURE

The grid upon which the surveys described herein were performed is 29.9 line-miles in extent and was cut by Ike Burns Claim Staking, 1073 Stafford St., Sudbury, Ontario, P3G 3G3 in July, 1979.

Magnetometer Survey

Instrumentation was provided by Barringer GM-122 proton percussion magnetometers and diurnal control by a Scintrex MBS-2 continuously recording base station. The total magnetic field intensity was recorded to a resolution of ± 1 gamma. Diurnal control, as mentioned above, was provided by a base station located on the grid at L54E, 65N. A record of the earth's magnetic field is imprinted upon a strip chart paper and the field data subsequently adjusted to a preset datum by addition or subtraction of an adjustment value provided by the strip chart. The arbitrary datum selected at the base station site was 58,700 gammas. Further logistical details regarding the survey are listed below:

Dates: July 12-16; September 19-22, 1979
 Personnel: D.M.Windsor, K.Robertson, D.Ward
 Instrumentation: Barringer GM-122 Magnetometers
 Scintrex MBS-2 Base Station
 Base Station Value: 58,700 gammas
 Base Station Location: L54E, 65N
 Datum Subtracted: 58,000 gammas
 Line Spacing: 200' and 400'
 Reading Interval: 25' and 50'
 Production: 29.8 line-miles

Line spacing was variable at 200' and 400' as well as the reading interval of 25' and 50'. After diurnal correction the data had a datum of 58,000 gammas subtracted and were plotted on a grid map of a scale of 1" = 200'. These data were finally contoured at an interval of 1,000 gammas. The magnetic coverage was of such volume at a scale of 1" = 200' that the data is presented upon three separate sheets traversing the grid and can be found in the map pocket at the rear of the report.

Further details regarding the instrumentation specifications can be found in Appendix A.

VLF Survey

Instrumentation was provided by a Geonics EM-16 VLF receiver tuned to receive the transmitter station at Cutler, Maine, U.S.A. This particular station operates at a frequency of 17.8 kHz. A line spacing of 400' and reading interval of 50' were employed. Dip angles of the resultant field were measured and plotted on a grid map at a scale of 1" = 200' and profile scale of 1" = 50°. In addition, these data were processed with the well known Fraser filter and also plotted on a grid map at a scale of 1" = 200'. These were subsequently contoured at an interval of 20 units. The map presenting these data can be found in the map pocket at the rear of this report. Further logistical details regarding the survey appear below:

Dates: November 7 and 8, 1979
 Personnel: D.M.Windsor
 Instrumentation: Geonics EM-16
 Transmitter Station: Cutler, Main, U.S.A.
 Frequency: 17,8 kHz
 Line Spacing: 400'
 Reading Interval: 50'
 Production: 4.1 line-miles

Details regarding the equipment specifications can be found in Appendix B.

As mentioned previously, the VLF survey only covers five (5) claims in the central portion of the twenty-eight (28) claim block. These are as follows:

S 471202

S 471203

S 471204

S 471438

S 471439

A separate Declaration of Surveys for the VLF survey can be found in Appendix C.

INTERPRETATION

Magnetometer Survey

Magnetic texture is somewhat unique in that a fairly flat magnetic background has very large high frequency anomalies superimposed to produce a sporadic bubbly texture to the map. In addition, two to three linear features appear to traverse the grid. Magnetic relief in the flatter areas is on the order of 150 gammas and is best typified by the eastern and western extremes of the grid. The high frequency magnetic anomalies of short strike length are quite numerous and can attain magnitudes of over 5,000 gammas. Some of the more prominent are listed below:

L0, 600N

L10E, 950N

L20E, 950N

L27E, 50N

L35E, 200S

L39E, 250S & 450S

L41E, 1100N & 350S

L43E, 1000N

L45E, 1000N & 1050S

L49E, 450N & 550S

L53E, 750S & 900S

L69E, 50N

These likely represent local concentrations of magnetite within Diabase dikes and/or magnetite associated with skarn mineralization. Many have prominent magnetic lows associated indicating limited depth extent thus pronouncing the dipolar nature of the induced magnetization. The most obvious linear magnetic feature on the property is a fairly broad low amplitude trend entering the southeastern corner of the grid near L87E, 2100S and traversing northwesterly (grid relative) to a point near L57E, 200N. At this point it bends and continues in a roughly east-west (grid relative) fashion to an apparent dying-out near L2W, 500N. Within the structure are some of the higher frequency anomalies noted earlier.

Some splitting of the zone is found in the area of L22E to L49E at about 900N. In addition to this quite prominent feature another of shorter strike length seems to run from L37E to L55E at 400S. Both these linear trends are thought to be associated with Diabase dikes cutting the area. Higher frequency anomalies found within them or closely related would be assumed to be caused by local magnetite concentrations. Anomalies farther afield would then logically thought to be more likely related to a skarn type situation.

VLF Survey

The discussion will be confined to the more easily interpretive Fraser plot. Several quite large amplitude anomalies are noted including some thought to be swamp responses. These possible swamp anomalies are listed below:

L12E, 950N	L31E, 1250N & 1150N-1000N & 150S
L16E, 850N	L35E, 100N-200S
L20E, 1050N	L39E, 150N & 50S
	L43E, 100N
L27E, 200S	L47E, 25N
	L51E, O.B.L.
	L55E, 150S
	L59E, 100S (open southerly)

The responses on L12E, L16E, and L20E seem closely related to an apparent bonified bedrock conductor and likely represent a superposition of the two responses.

Four possible zones related to bedrock conductivity variations are noted below:

<u>Zone A</u>	(open westerly)	L35E, 1075N
	L20E, 875N	L39E, 1125N
	L24E, 950N	(open easterly)
	L27E, 1075N	
	L31E, 1075N (approx.)	
<u>Zone B</u>	L31E, 325N	
	L35E, 375N	
<u>Zone C</u>	L39E, 900N	L51E, 325N
	L43E, 700N	L55E, 225N
	L47E, 450N	(open easterly)

Zone D L43E, 375S

L51E, 500S

L47E, 350S

(open easterly)

Zones A and C seem to fall on the large formational magnetic anomaly noted earlier and, as well, Zone D falls along the lesser more southerly linear magnetic feature discussed. Zone B is not formational in character, but does, indeed, fall on a somewhat circular magnetic feature. The explanation would seem to be that the diabase dikes causing the magnetic responses are also conductive enough to yield a VLF anomaly.

RECOMMENDATIONS

Both surveys appear to have outlined several major geologic features which may have a bearing upon possible economic mineralization. Further geophysical surveys such as induced polarization may outline or further delineate known ore zones.

Respectfully submitted,

James L. Wright

JLW*MS

James L. Wright
Geophysicist

APPENDIX A

(ii) Magnetometer Instrument Data

General Description, Principle of Operation

If a proton rich fluid such as Kerosene, jet fuel, heptane, etc. is placed into a magnetic field the protons will align along the magnetic field vector. The magnetic field is induced in the sensor upon depressing the push-button. Then this field is suddenly removed. Protons which behave as elementary gyroscopes will start precessing around the remaining magnetic field that of the earth. The precession frequency is directly proportional to the magnetic field of the earth. The magnetometer counts this frequency, divides it by the appropriate constant to obtain a reading in gammas and displays the reading in the form of a 5 digit number.

GROUND MAGNETOMETER

MODEL GM-122

SPECIFICATIONS

Range: 20,000 to 99,999 in 12 ranges
Accuracy: $\pm 1 \gamma$ through operating temperature range
Sensitivity: 1γ
Gradient Tolerance: 600 γ /ft.
Power: 12 "D" cells
Power Consumption: < 50 Joules (Wsec) per reading
Polarizing Power: 0.8 A @ 13.5 V for 1.5 sec. (3 second cycle)
0.8 A @ 13.5 V for 3 sec. (6 second cycle)
Number of Readings with 1 Battery Set: 2,000 - 10,000 depending on type of batteries
Frequency of Readings: 1 every 3 seconds
1 every 6 seconds
Controls: Pushbutton switch
Range Selection switch - Slide switch for 3 and 6 sec. located on P/C Board
Output: 5 digit incandescent filament readout
Indicators: LED point
Lock Indicator - last three digits of the display blanked off when phaselock not achieved
Segment Function Indicator - all segments light up to permit visual inspection of the display function :

Mechanical:

Instrument: Dimensions - 7" X 3.5" X 11"
(18 cm X 9 cm X 28 cm)
Weight - 8 lbs (3.6 kg), including batteries
Sensor: Omnidirectional noise cancelling toroidal sensing head
Dimensions - 4 7/8" (12 cm) diameter
- 4 3/8" (11 cm) height
Weight - 3 lbs (1.4 kg)
Ambient Conditions: Operating Temperature Range -
-40°F to 131°F (-40°C to 55°C)
Relative Humidity - 0 to 100%
Environmental: Instrument and sensor case made of high impact plastic

SCINTREX

TOTAL FIELD MAGNETIC BASE STATION

MODEL MBS-2

SPECIFICATIONS:

Resolution	1 gamma
Total Field Accuracy	± 1 gamma over full operating range
Operating Range	20,000 to 100,000 gammas in 25 overlapping switch selectable steps
Gradient Tolerance	Up to 5000 gammas/metre
Sensor	Omnidirectional, shielded, noise-cancelling, dual coil
Sampling Rate	Internal control: switch selectable every 2, 4, 10, 30 seconds or 1,2,10 minutes External control: manual command or by external clock at any rate longer than 2 seconds. For external trigger, a positive transition from 0 to +4V or greater initiates one reading
Clock Accuracy and Stability	± 10 ppm over full temperature range
Visual Outputs	5 digit light emitting diode numerical display lasting 0.1 seconds in automatic recycle mode and 1.7 seconds in manual mode. Internal strip chart recorder with 65 mm chart width and 100 or 600 mm/hr chart speed. Inkless recording. Switch selectable at 10, 100 or 1000 gammas full scale
External Outputs	5 digit, 1-2-4-8 BCD DTL, TTL compatible (2 loads) with 0.5 msec, 5V pulse for synchronization of MBS-2 and external recorder. Analogue recorder output of 1V at 1 mA max. Switch selectable for 10, 100 or 1000 gammas full scale.
Time Marker	A 1.5 second pulse every 10 minutes generates a time mark on the internal or on external analogue recorders. For an external analogue recorder, a switch to ground is provided (NPN transistor, 40V max., 250 mA max). No side pen is required for continuously writing recorders as the pen returns to zero at every event mark. Intervals of less than 10 minutes are optional.

Sensor Cable

50 m length is standard

Power Requirement

The internal batterie of the MP-2, (8 "D" cells) are use o power all functions of the MBS- This power source lasts approximate., 80 hours, at 25°C and a once per minute sampling interval.

An external 10 to 32V DC supply may alternatively be used.

Current drain is approximately 0.9A during polarize time and 35 mA during standby, depending upon supply voltage.

Battery Test

Digital readout of normalized internal battery voltage activated by touching switch.

Operating Temperature Range

Console: 0 to 50°C
Sensor: -35 to 50°C

Dimensions

Console: 140 mm x 310 mm x 390 mm
Sensor: 80 mm diameter x 150 mm length
Tripod: 130 mm extended length

Weights

Console: 7.7 kg
Sensor with cable: 5.5 kg
Tripod: 1.5 kg.

Shipping Weight

Approximately 18 kg

Optional Accessories

Sensor monopod, harness, sensor backpack and 2 m sensor cable allow field portable survey use of MP-2 magnetometer. See MP-2 specification sheet.

APPENDIX B

EM-16 Specifications and Description

The VLF method uses the military and time standard VLF transmissions as primary field. Only a receiver is then used to measure the secondary fields radiating from the local conductive targets. This allows a very light, one-man instrument to do the job. Because of the almost uniform primary field, good response from deeper targets is obtained.

The EM16 system provides the in-phase and quadrature components of the secondary field with the polarities indicated.

Principle of Operation

The VLF transmitters have vertical antennas. The magnetic signal component is then horizontal and concentric around the transmitter location.

By selecting a suitable transmitter station as a source, the EM16 user can survey with the most suitable primary field azimuth.

The EM16 has two receiving coils, one for the pick-up of the horizontal (primary) field and the other for detecting any anomalous vertical secondary field. The coils are thus orthogonal, and are mounted inside the instrument "handle".

The actual measurement is done by first tilting the coil assembly to minimize the signal in the vertical (signal) coil and then further sharpening the null by using the reference signal to buck out the remaining signal. This is done by a calibrated "quadrature" dial.

The tangent of the tilt angle is the measure of the vertical in-phase component and the quadrature reading is the sign at right angles to the total field. All readings are obtained in percentages and do not depend on the absolute amplitude of the primary signals present.

The "null" condition of the measurement is detected by the drop in the audio signal emitted from the patented resonant loudspeaker. A jack is provided for those preferring the use of an earphone instead.

The power for the instrument is from 6 penlight cells. A bat-tester is provided.

Specifications

Source of primary field -	VLF transmitting stations.
Transmitting stations used -	Any desired station frequency can be supplied with the instrument in the form of plug-in tuning units. Two tuning units can be plugged in at one time. A switch selects either station.
Operating frequency range -	About 15-25 kHz.
Parameters measured -	(1) The vertical in-phase component (tangent of the tilt angle of the polarization ellipsoid). (2) The vertical out-of-phase (quadrature) component (the short axis of the polarization ellipsoid compared to the long axis).
Method of reading -	In-phase from a mechanical inclinometer and quadrature from a calibrated dial. Nulling by audio tone.
Scale range -	In-phase \pm 150%; quadrature \pm 40%.
Readability -	\pm 1%.
Reading time -	10-40 seconds depending on signal strength.
Operating temperature range -	-40 to 50° C.
Operating controls -	ON-OFF switch, battery testing push button, station selector, switch volume control, quadrature dial \pm 40%, inclinometer dial \pm 150%.
Power Supply -	6 size AA (penlight) alkaline cells. Life about 200 hours.
Dimensions -	42 x 14 x 9 cm (16 x 5.5 x 3.5 in.)
Weight -	1.6 kg (3.5 lbs.)
Instrument supplied with -	Monotonic speaker, carrying case, manual of operation, 3 station selector plug-in tuning units (additional frequencies are optional), set of batteries.
Shipping weight -	4.5 kg (10 lbs)

APPENDIX C



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 - Magnetic
Township or Area Foster Township
Claim Holder(s) Union Carbide Exploration Corp.
Suite 930 - 800 West Pender St., Vancouver, B.C.
Survey Company St. Joseph Explorations Limited
Author of Report James L. Wright
Address of Author 90 Eglinton Ave. W., Suite 505, Toronto, Ont.
Covering Dates of Survey July 1 - September 22, 1979
(line cutting to office)
Total Miles of Line Cut 48.0 line-km or 29.8 line-miles

MINING CLAIMS TRAVERSED
List numerically

Table for listing mining claims traversed with columns for prefix and number. Contains handwritten letters: S, E, A, T, C, H, I, E, D.

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED

DAYS per claim

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

ENTER 20 days for each additional survey using same grid.

- Geophysical --Electromagnetic
--Magnetometer 40
--Radiometric
--Other
Geological
Geochemical

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

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: SIGNATURE: Author of Report or Agent

Res. Geol. (L.D.) L.D. Qualifications (2.2330) 2.2330

Previous Surveys

Table with columns: File No., Type, Date, Claim Holder

TOTAL CLAIMS 28

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 3596 Number of Readings 3596
Station interval 25' and 50' Line spacing 200' and 400'
Profile scale N/A
Contour interval 1000 gammas

MAGNETIC

Instrument Barringer GM-122 Magnetometer and Scintrex MBS-2 Base Station
Accuracy – Scale constant ± 1 gamma
Diurnal correction method Continuous base station recording
Base Station check-in interval (hours) Reading every 1 minute
Base Station location and value L54E, 65N; 58,700 gammas

ELECTROMAGNETIC

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

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____
Elevation accuracy _____

INDUCE 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 _____

Claims

S 398131

S 398132

S 398133

S 398134

S 398135

S 398136

S 398137

S 398138

S 398139

S 398140

S 398141

S 398142

S 398143

S 398144

S 398145

S 398146

S 398147

S 398148

S 398149

S 398150

S 398151

S 398152

S 398153

S 471202

S 471203

S 471204

S 471438

S 471439



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 - VLF
Township or Area Foster Township
Claim Holder(s) Union Carbide Exploration Corp.
Suite 930 - 800 West Pender St., Vancouver,
Survey Company St. Joseph Explorations Limited B.C.
Author of Report James L. Wright
Address of Author 90 Eglinton Ave. W., Suite 505, Toronto Ontario.
Covering Dates of Survey July 1 - November 8, 1979
(linecutting to office)
Total Miles of Line Cut 6.6 line-km or 4.1 line-miles

MINING CLAIMS TRAVERSED
List numerically

S	471202	✓
(prefix)	(number)	
S	471203	✓
S	471204	✓
S	471438	✓
S	471439	✓

SPECIAL PROVISIONS
CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

Geophysical
- Electromagnetic
- Magnetometer
- Radiometric
- Other
Geological
Geochemical

DAYS
per claim
20

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

DATE: _____ SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

If space insufficient, attach list

TOTAL CLAIMS 5

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 459 Number of Readings 459
Station interval 50' Line spacing 400'
Profile scale 1" = 50'
Contour interval Fraser Plot - 20 units

MAGNETIC

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

ELECTROMAGNETIC

Instrument Geonics EM-16
Coil configuration Transmitter - Dipole Antenna Receiver - Dip angle alignment
Coil separation N/A
Accuracy +/- 1 degree
Method: [X] Fixed transmitter [] Shoot back [] In line [] Parallel line
Frequency 17.8 kHz Cutler, Maine, U.S.A. (specify V.L.F. station)
Parameters measured Dip of resultant field

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

Claims

- S 398131 ✓ 1/3 1/3
- S 398132 ✓
- S 398133 ✓
- S 398134 ✓
- S 398135 ✓
- S 398136 ✓
- S 398137 ✓
- S 398138 ✓ 1/2 1/2
- S 398139 ✓ 1/3 1/3
- S 398140 ✓ 1/2 1/2
- S 398141 ✓
- S 398142 ✓ 1/4 1/4
- S 398143 ✓
- S 398144 ✓ 1/4 1/4
- S 398145 ✓
- S 398146 ✓
- S 398147 ✓ 1/4 1/4
- S 398148 ✓ 1/3 1/3
- S 398149 ✓
- S 398150 ✓
- S 398151 ✓
- S 398152 ✓
- S 398153 ✓ 1/2 1/2
- S 471202 ✓
- S 471203 ✓
- S 471204 ✓
- S 471438 ✓
- S 471439 ✓

full credits except
for S398140-38-53
only 1/2 credits

FULL CREDITS
EXCEPT FOR S. 398140
- 38
- 53

-- ONLY 1/2 CREDITS

FOSTER TWP.

UNION CARBIDE EXPL

JULY-NOV/79

GP+MAG+EM

SURVEYS
+ MAPS

Foster Tp

Union Carbide Expl.

July-Nov. 1979: G.P. - Mag &

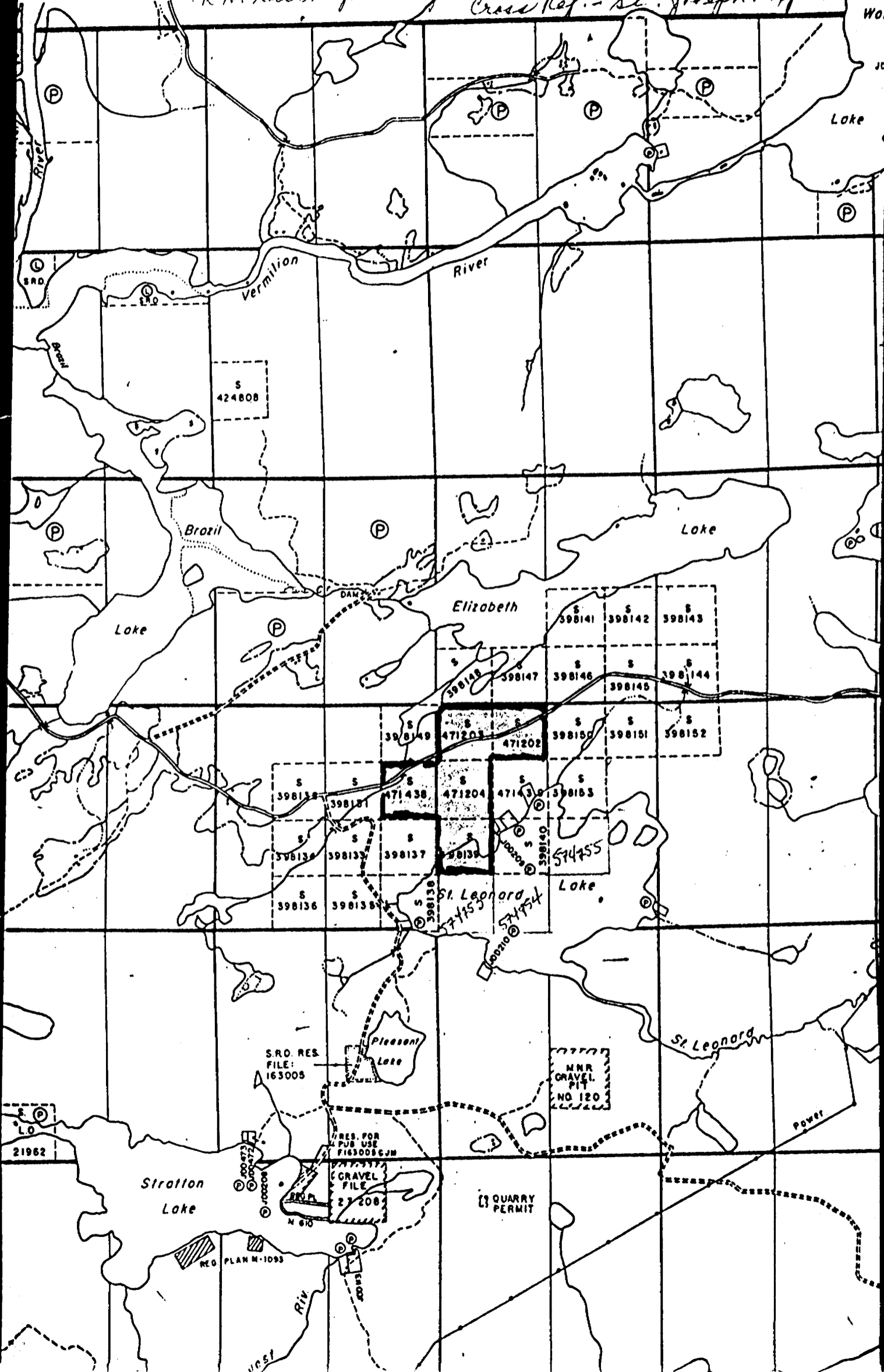
EM surveys & maps

CROSS-REF.

- ST JOSEPH EXPL. LTD.

Nairn Twp. - M.883

Cross Ref. - St. Joseph Expl. Ltd.



Noirn Twp. - M.883

THE TOWNSHIP

III

2,3168

FOSTER M. 816

DISTRICT OF
SUDBURY

SUDBURY
MINING DIVISION

SCALE 1:50,000

VI

V

IV

III

II

I

Merritt Twp. - M.863

Truman Twp. - M.1164

12

11

10

9

8

7

6

5

4

3

2

1

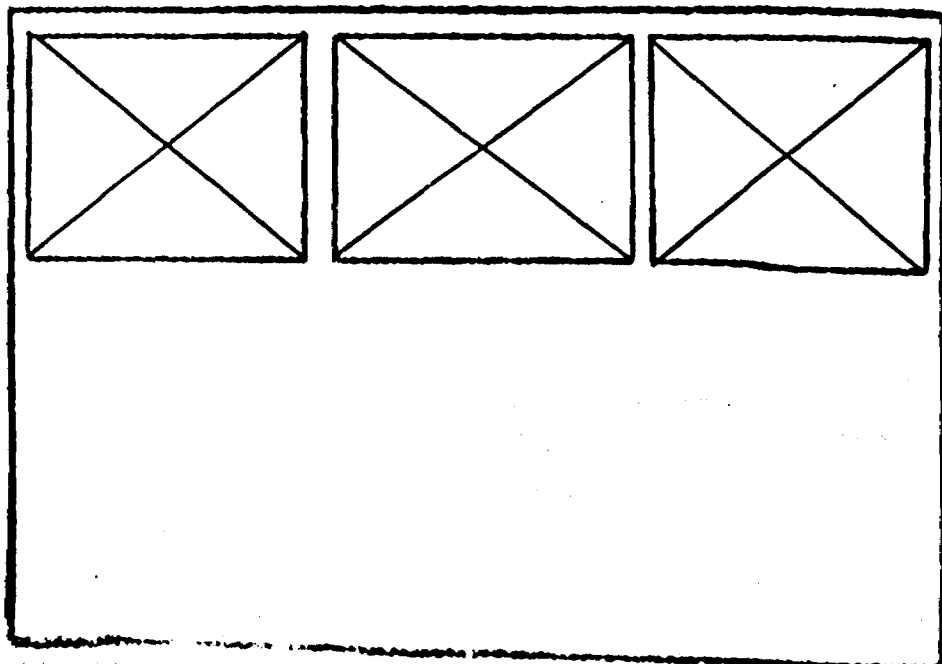
Curtin Twp. - M.745

S. & C. WITHIN THE
CANTON UNDER SEC 42
OF THE M.S. ACT
1853 - 1872

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

FOSTER-0020, #1, #2, #3

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)



FOR ADDITIONAL
INFORMATION

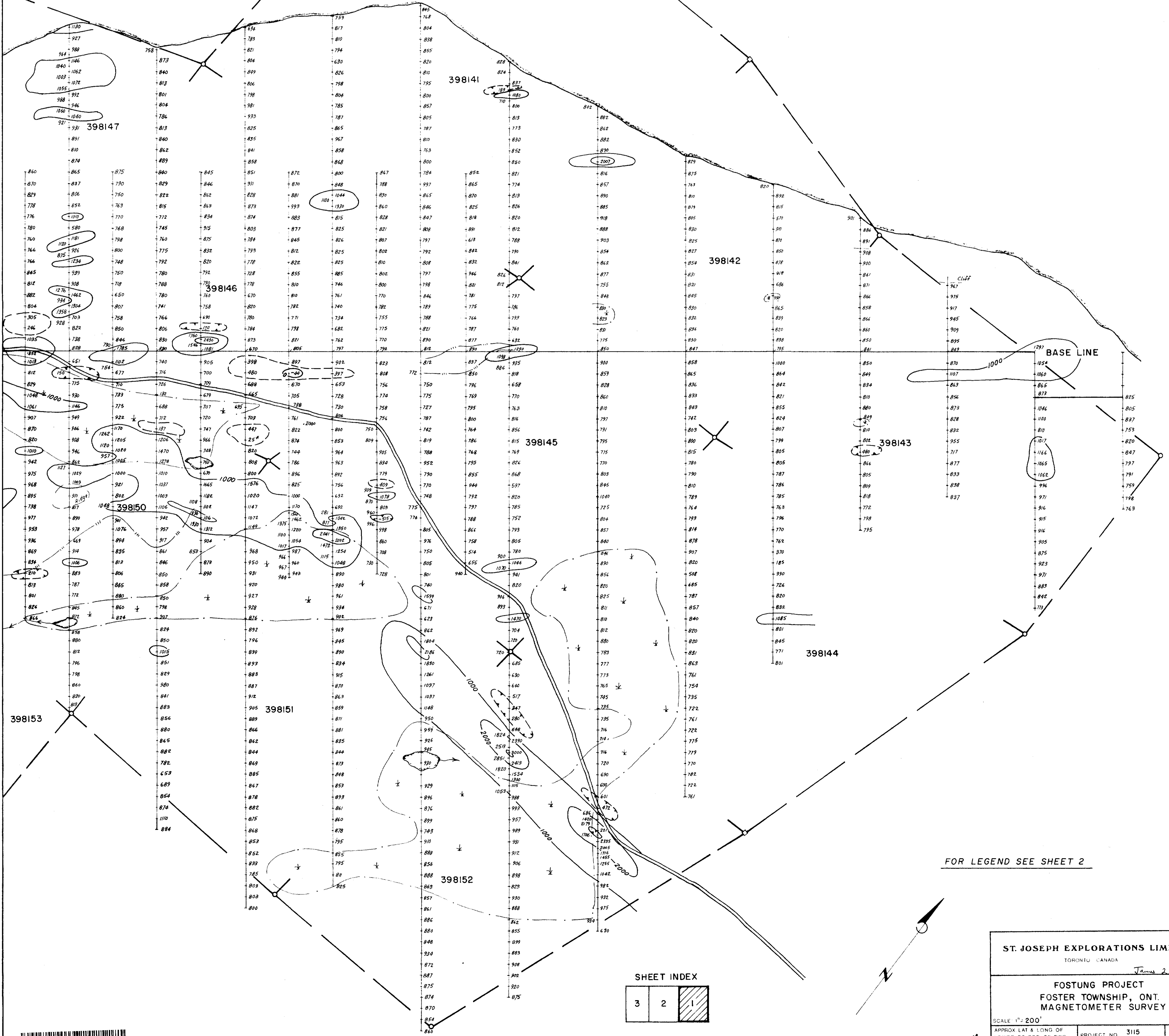
SEE MAPS:

FOSTER-0020

#4, #5

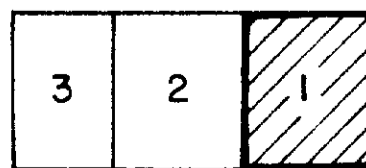
L 61E L 63E L 65E L 67E L 69E L 71E L 73E L 75E L 77E L 79E L 81E L 83E L 87E L 91E L 95E L 99E L 103E L 107E L 111E

ELIZABETH LAKE



FOR LEGEND SEE SHEET 2

SHEET INDEX



ST. JOSEPH EXPLORATIONS LIMITED
 TORONTO, CANADA
James J. Wright

FOSTUNG PROJECT
 FOSTER TOWNSHIP, ONT.
 MAGNETOMETER SURVEY

SCALE: 1" = 200'

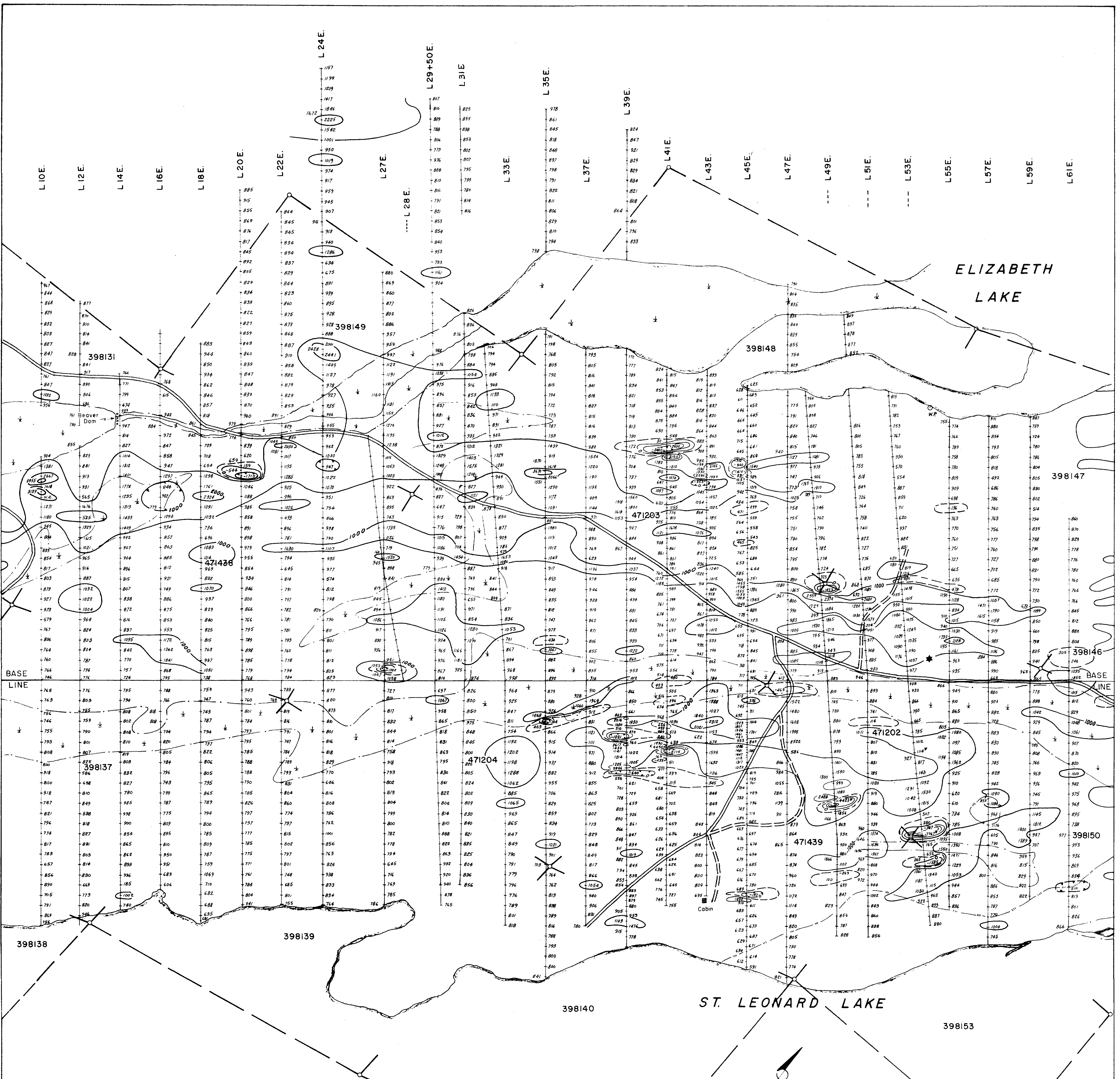
APPROX LAT & LONG OF LOWER RT COR OF DWG

PROJECT NO. 3115 SHEET NO. 1 OF 3

REPORT NO. NIS 411/5

FOSTER-CO20.3





LEGEND

Instruments: Barringer GM-122 Magnetometer
 Scintrex MBS-2, Base Station

Base Station Location: L54E, L65N *

Base Station mean trace value: 58,700 g

Datum level subtracted: 58,000 g

Contour Interval: 1000 g

Forced reading: *

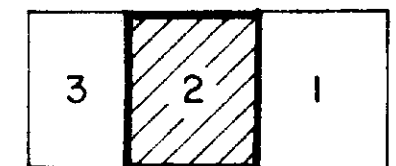
Operators: D. Windsor (Lines 47E-103E, July 12-16, 1979)
 K. Robertson (Lines 22E-45E, Sept. 19-22, 1979)
 D. Ward (Lines 0-20E, Sept. 19-22, 1979)

Dates: July 12-16, Sept. 19-22, 1979

LEGEND

- Road and trail
- Claim post; located, unlocated
- Lake
- Swamp
- Clearing

SHEET INDEX



ST. JOSEPH EXPLORATIONS LIMITED
 TORONTO, CANADA

James A. Wright

FOSTING PROJECT
FOSTER TOWNSHIP, ONT.
MAGNETOMETER SURVEY

SCALE 1"=200'

APPROX LAT & LONG OF LOWER RT COR OF DWG

PROJECT NO. 3115

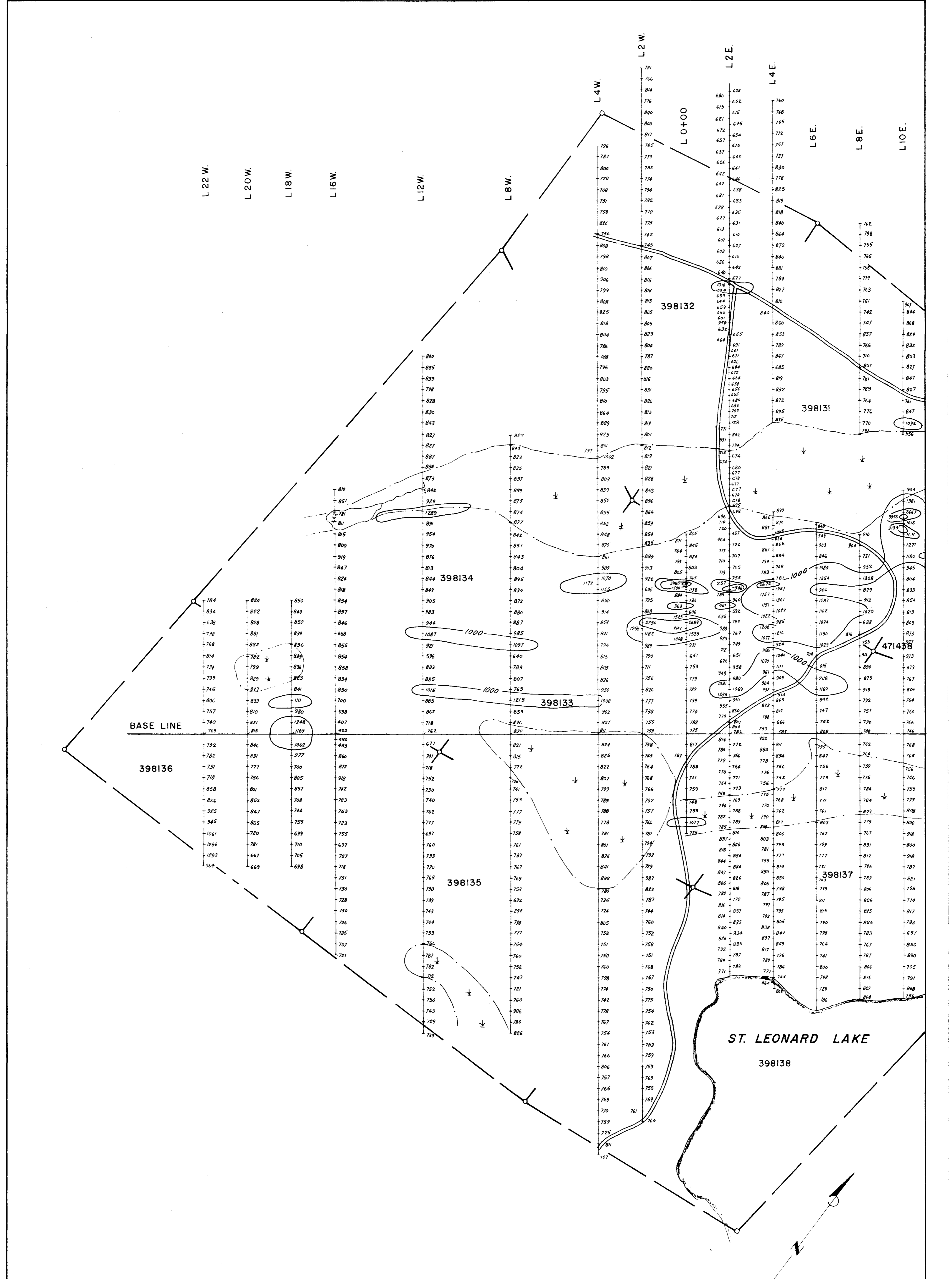
SHEET NO. 2 OF 3

REPORT NO.

N.T.S. 41175

FOSTER-0020, #2





FOR LEGEND SEE SHEET 2

SHEET INDEX

3	2	1
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FOSTER-0020, #1

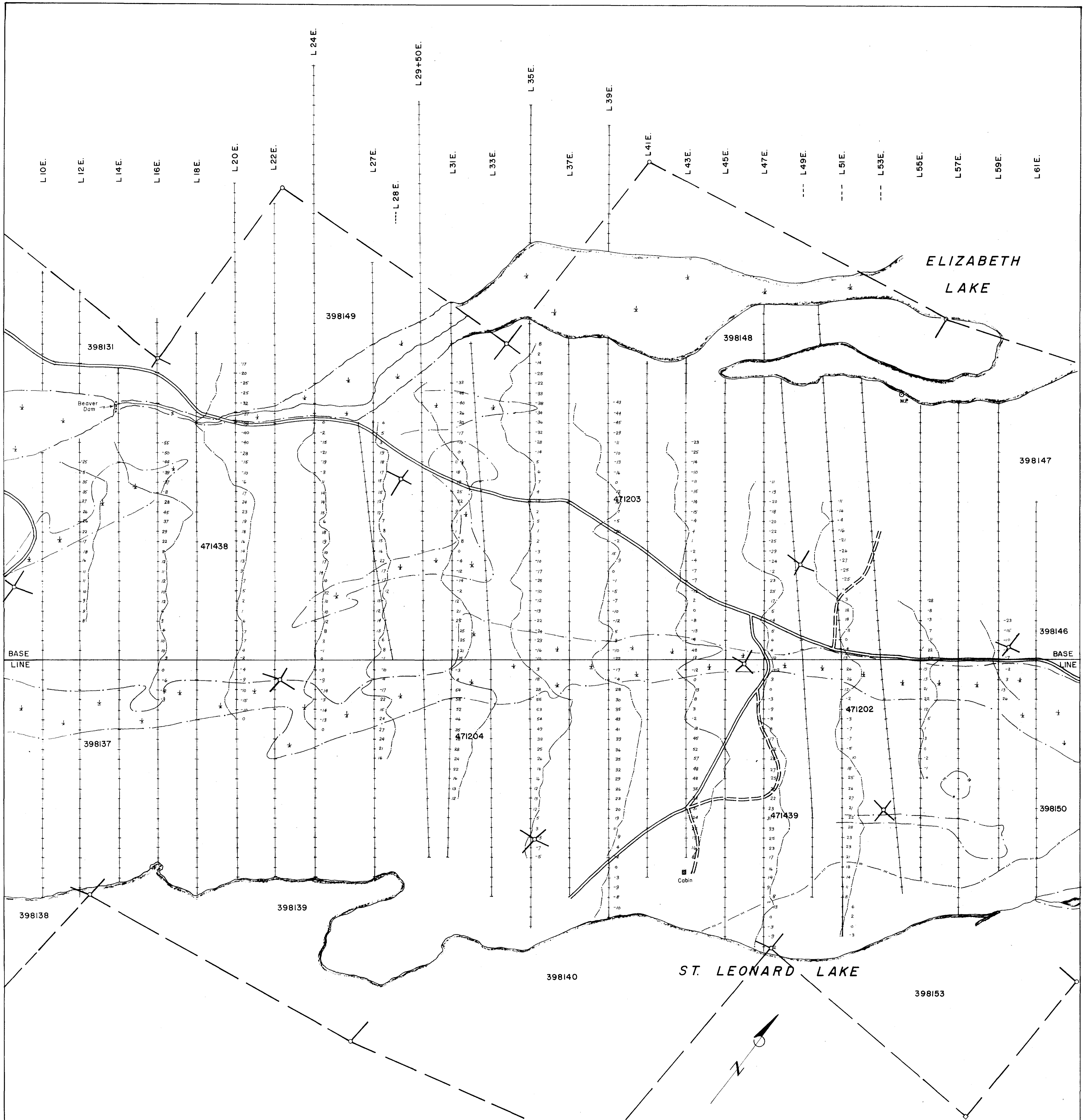
ST. JOSEPH EXPLORATIONS LIMITED
 TORONTO, CANADA
James J. White

FOSTUNG PROJECT
FOSTER TOWNSHIP, ONT.
MAGNETOMETER SURVEY

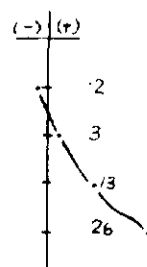
SCALE: 1" = 200'

APPROX LAT & LONG OF LOWER RT COR OF DWG	PROJECT NO. 3115	SHEET NO. 3 OF 3
LATITUDE	REPORT NO.	NTS 41/15
LONGITUDE		

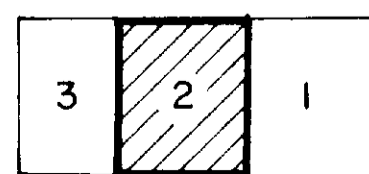




Instrument: Geonics EM 4
 Station: Galt, Maine, U.S.A.
 Profile Scale: 1" = 50', Frequency: 178 kHz
 Operator: D. Windsor
 Dates: November 7-8, 1979



SHEET INDEX



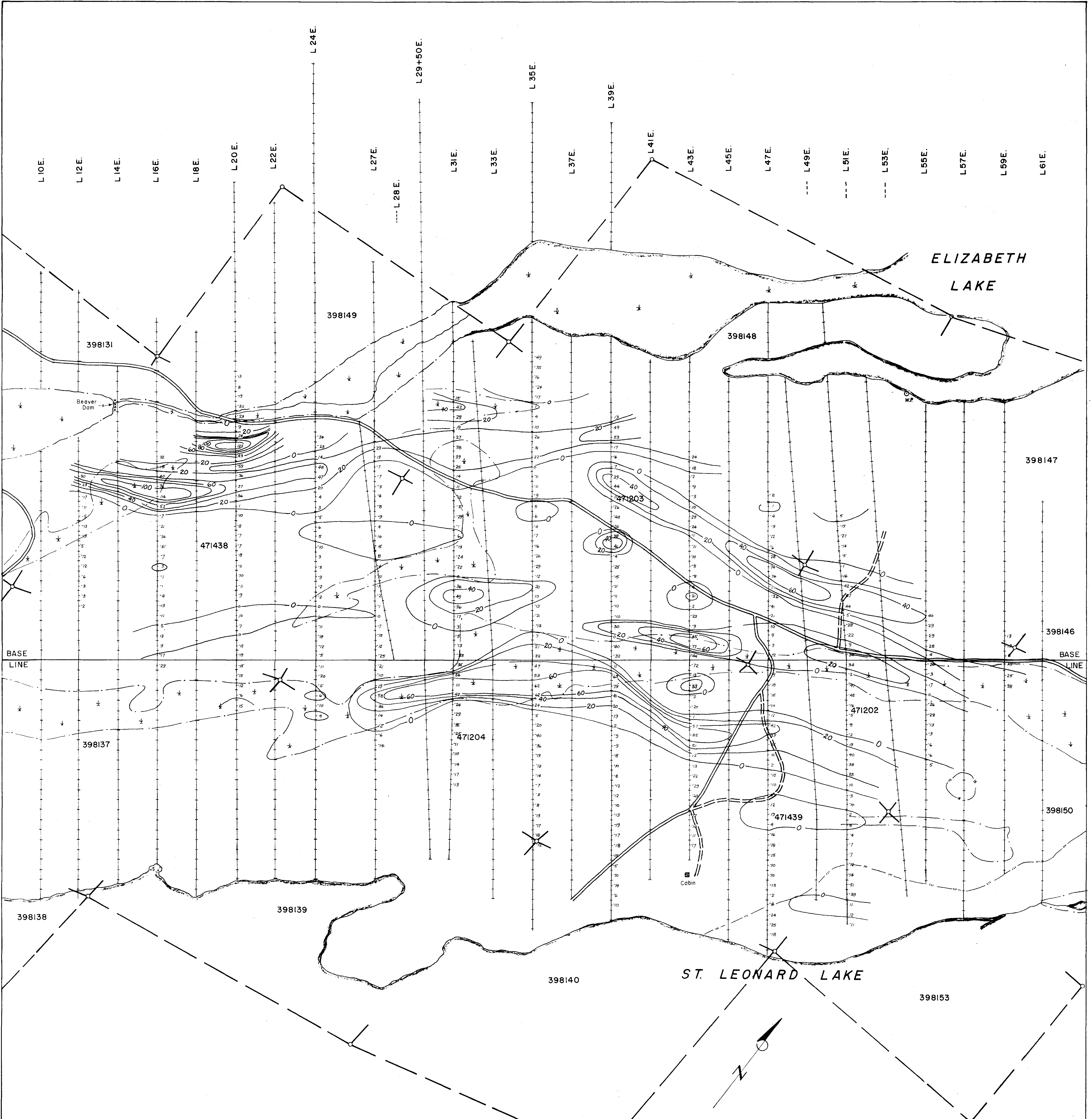
LEGEND

- Road and trail
- Claim post; located, unlocated
- Lake
- Swamp
- Clearing

ST. JOSEPH EXPLORATIONS LIMITED TORONTO, CANADA		
<i>James J. Wright</i>		
FOSTUNG PROJECT FOSTER TOWNSHIP, ONT.		
VLF DIP ANGLE		
SCALE: 1" = 200'	PROJECT NO. 3115	SHEET NO. 2 OF 3
APPROX LAT. & LONG. OF LOWER RT. COR. OF DWG.	REPORT NO.	NTS 41.1/5
LATITUDE		
LONGITUDE		

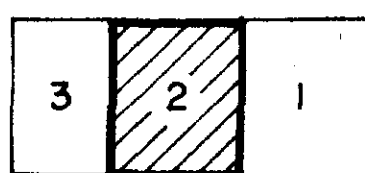
FOSTER-0020, #4





Instrument: Geonics EM 6
 Station: Oulter, Maine, U.S.A.
 Frequency: 17.8 kHz
 Contour Interval: 20 units
 Operator: D. Windsor
 Date: Nov 7-8, 1979

SHEET INDEX



LEGEND

- Road and trail
- Claim post; located, unlocated
- Lake
- Swamp
- Clearing

ST. JOSEPH EXPLORATIONS LIMITED TORONTO, CANADA		
FOSTUNG PROJECT FOSTER TOWNSHIP, ONT. V.L.F. FRASER PLOT		
SCALE: 1"=200'	PROJECT NO. 3115	SHEET NO. 2 of 3
APPROX. LAT. & LONG. OF LOWER RT. COR. OF DWG.	REPORT NO.	N.T.S. 411/5

FOSTER - 0020, # 5

