

42A14SW0010 2.4629 LUCAS

2.4629

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REPORT
ON
MAXMIN 11 ELECTROMAGNETIC AND MAGNETOMETER SURVEYS
GROUP 2

LUCAS TOWNSHIP
PORCUPINE MINING DIVISION
NORTHEASTERN ONTARIO


FOR
HOME OIL COMPANY LIMITED

RECEIVED

MAR 17 1982

MINING LANDS SECTION

Timmins, Ontario
June, 1981


John C. Grant
Exsics Exploration Ltd.



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INTRODUCTION

This report deals with the results of a, Pulse electromagnetic survey on Group 2 in Lucas township conducted by Exsics Exploration Limited for Home Oil Company Limited.

Complete coverage was done on the claims, as listed below in Lucas Township.

P567110
P567111

P567112
P567113

The grid plans show all eight samples of the survey plotted as well as the contoured magnetometer results. These are presented with this report as individual line plots in the back pocket.

LOCATION AND ACCESS

Group 2 is located in Lot 5, Concession 2 of Lucas Twp. east of the west Buskegou River. Access to the property was by truck along highway 655 to a dirt road opposite Abitibi's camp 40 road just north of the Crawford, Carnegie Township lines. An argo was used to travel this dirt road, east, to a north south power line then north along the power line to a second road and east $1\frac{1}{2}$ miles to group 2, north boundary. (see figures 1 and 2)

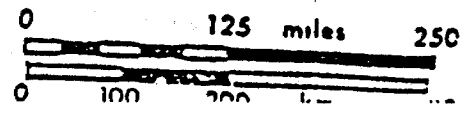
LINECUTTING

A total of 8.0 kilometers of grid and baselines were cut. The baseline runs at an azimuth of 090 degrees with lines cut at 100 meter intervals in a north-south direction. The cross lines were chained with stations at 25 meter intervals.



Home Oil

FIGURE 1
LOCATION MAP



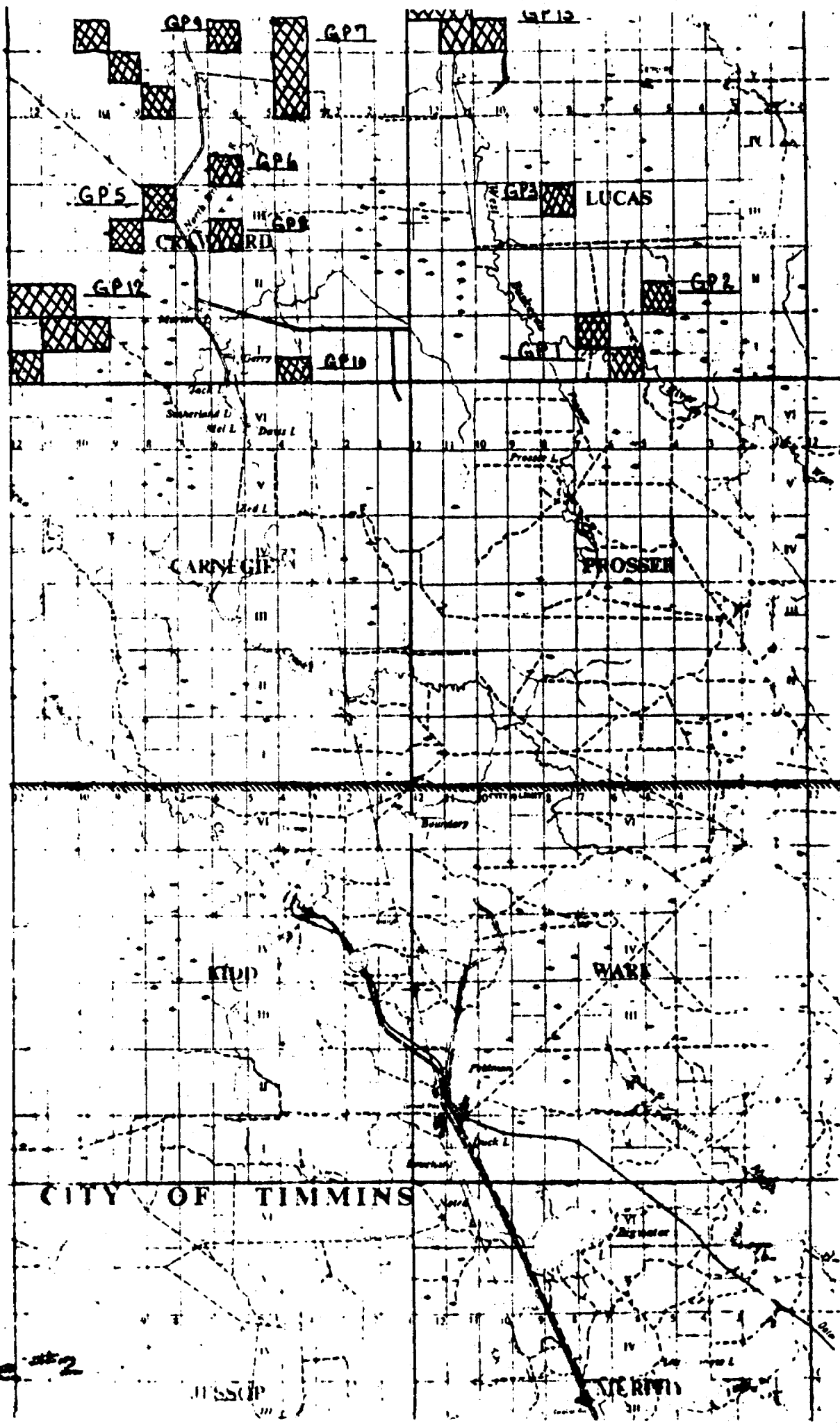


Figure #2

GEOPHYSICAL SURVEYS

1. Electromagnetic Survey

This survey was completed using a Crone, Pulse electromagnetic, low powered unit. A 100 meter Rx. to Tx. coil separation was used with eight operating frequencies from 2000hz to 16hz, throughout the survey. Technical and operating specifications of the Pulse EM unit are included in Appendix B of this report.

The results of the EM survey are presented as Map 1 (showing the contoured magnetic results with location map) and all eight samples of each line plotted individually. They are all included in the back pocket of this report. The results are summarized below.

2. Magnetometer Survey

A geometrics G-816 proton precession mag was used throughout the survey. Corrections for diurnal variations was by reference to a Recording Base Station Magnetometer G-826A manufactured by Exploranium Geometrics Limited.

3. Survey Results

The Pulse survey noted four zones called A,B,C and D.
These are discussed seperately below.

4. Conductor Characteristics

Zone A

LC to L100ME

General Characteristics: -Strike length of 100m+ at an
AZ of 240 degrees.
-Depth to source of 50 meters.
-Conductivity value of 35 MHOS.
-Dipping is south to vertical.

Magnetics

There is no definite magnetic trend with this zone.

Zone B

L0+00 to L800ME

General Characteristics: -Strike lenght of 800m at an
AZ of 105 degrees.
-Depth to source ranges from
45 to 65 meters
-Conductivity value ranges from
15 to 50 meters.
-Dipping near vertical.

L100ME

-Depth to source of 60m
-Conductivity of 40MHOS

L200ME

-Depth to source of 60m
-Conductivity of 40-45MHOS

L300ME

-Depth to source of 60m
-Conductivity of 38MHOS

L400ME	- Depth to source of 50m - Conductivity of 50MHOS
L500ME	- Depth to source of 45m - Conductivity of 20-50MHOS
L600ME	- Depth to source of 55-60m - Conductivity of 20MHOS
L800ME	- Depth to source of 50m - Conductivity of 15MHOS

Magnetics

There is no significant magnetic trend with the conductive zone.

ZONE C

L500ME to L800ME

General Characteristics: - Strike length of 300m at an AZ of 240 degrees.
- Depth to source ranges from 50-55m.
- Conductivity of 12 to 15MHOS

Note: Conductive zones B and C are too close together to interpret on lines 6, 7 and 8. However it still is legitimate on all three lines.

Magnetics

There is a very weak magnetic trend associated with zone C. A magnetic "low" parallels the zone on the immediate north.

ZONE D

L200ME to L400ME

General Characteristics: This zone could be a stringer of zone B, however it parallels zone B for 200m at 105 degrees, 75 meters south.

Magnetics

There is a flanking magnetic high on L400ME just north of the zone.

CONCLUSIONS

Further detailed geophysics is recommended on zones A, B, C, & D for better definition.

PREVIOUS WORK

TEXASGULF

- (1964) -Cut a grid consisting of a 2600ft baseline to cover the claim blocks but there is no record of the geophysics done.
- One Diamond Drill hole was attempted on some claim as Home Oil P567112. It was drilled at 050 degrees, bearing 210 degrees for 115ft where it was lost in clay and quicksand.

SHELL OIL

- (1977) -Geox did a proton Mag survey with a baseline of 130 degrees. The results showed no magnetic trend.

CERTIFICATE

I, John Grant, hereby certify that:

- 1) I am a 1975 graduate of the three year program in Geological Technology at the Cambrian College of Applied Arts and Technology and I have worked subsequently as Chief Geophysicist for Teck Exploration (5 years) and Exsics Exploration Ltd.
- 2) The field work described in the attached report was carried out under my supervision and the interpretation and conclusions contained therein are based on my training and professional experience.

John Grant

John Grant,

Exsics Exploration Ltd.



42A14SW0010 2.4629 LUCAS

900

1983 09 02

2.4629

Resident Geologist
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 3W2

Dear Sir:

RE: Geophysical (Magnetometer and Electromagnetic) Survey
on Mining Claims P 567110 et al in Lucas Township

Additional information was requested from the claim holder on the above-mentioned survey and not submitted. This data has therefore, not been assessed.

Enclosed is a copy of report for your information.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-1380

S. Hurst:mc

cc: Mining Recorder
Timmins, Ontario

7561.1V2

2.4629

1983 09 02

Mr. William L. Good
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

Home Oil Company Limited recorded 20 days Electromagnetic and 40 days Magnetometer assessment work credits on each of Mining Claims P 567110 to 113 inclusive on March 16, 1982.

Additional information has been requested from the claim holder and has not been submitted.

You are hereby authorized to delete the work credits recorded on March 16, 1982 from each of the claim record sheets. Please inform the recorded holder accordingly.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-1380

S. Hurst:mc

cc: Home Oil Company Limited
2300 Home Oil Tower
324-8th Avenue South West
Calgary, Alberta
T2P 2Z5

MNR CC TOR

HOME OIL CGY

NR 00003 830721 1426
C6174 NV6164

RECEIVED	
Land Management Branch	
CIRCULATE	<input type="checkbox"/>
COMMENTS PLEASE	<input type="checkbox"/>
BY	
JUL 22 1983	
E. E. ANDERSON	
R. MORTON	
D. C. SMITH	
G. SHERMAN	
D. M. SMALL	
RETURN TO R.6450	

RECEIVED

JUL 23 1983

MINING LANDS SECTION

TO: ARTHUR BAR

ONTARIO MINISTRY OF NATURAL RESOURCES
WHITNEY BLOCK, ROOM 6450
QUEEN'S PARK
TORONTO, ONTARIO
M7A-1W3

FURTHER TO OUR TELEPHONE DISCUSSION OF JULY 20, THIS IS OUR
FORMAL REQUEST FOR AN EXTENSION UNTIL AUGUST 22, 1983 TO FILE
HOME OIL'S ADDITIONAL INFORMATION FOR WORK CREDITS.

YOUR FILE NO'S 2.4666, 2.4462, 2.9664, 2.4627, 2.4663, 2.4670,
2.4669, 2.4629, 2.4628, 2.4667, 2.4665

S.J. STEFANOWSKI

MNR CC TOR

HOME OIL CGY

1983 01 17

2.4629

Home Oil Company Limited
2300 Home Oil Tower
324- 8th Avenue South West
Calgary, Alberta
T2P 2Z5

Dear Sirs:

RE: Geophysical (Electromagnetic & Magnetometer) Survey
submitted on Mining Claims P. 567110 et al in the
Township of Lucas.

Enclosed are the plans (in duplicate) for the above mentioned survey. Please show all claim lines and claim numbers on these maps and return them to this office.

For further information, please contact Mr. F.W. Matthews at 416/965-1380.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

A. Barr:sc

Encls!

cc: Mining Recorder
Timmins, Ontario

REGISTERED

July 14, 1983

2.4629

Home Oil Company Limited
2300 Home Oil Tower
324-8th Avenue South West
Calgary, Alberta
T2P 2Z5

Dear Sir:

RE: Geophysical (Electromagnetic and Magnetometer) Survey
submitted on mining claims P567110 et al in the Township
of Lucas

Enclosed is a copy of our letter dated January 17, 1983,
requesting additional information for the above-mentioned
survey.

Unless you can provide the required data by July 28, 1983,
the mining recorder will be directed to cancel the work
credits recorded on March 16, 1982.

For further information, please contact Mr. F.W. Matthews
at (416)965-1380.

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: (416)965-1380

S. Hurst:mc

Encl.

cc: Mining Recorder
Timmins, Ontario

cc: John Grant
Timmins, Ontario

Mining Lands Comments

Handwritten notes in the top section of the Mining Lands Comments area.

To: Geophysics *Ms Barlow*

Comments

Approved Wish to see again with corrections
Date *Oct 29/82* Signature *Ryan Barlow*

To: Geology - Expenditures

Comments

Approved Wish to see again with corrections
Date Signature

To: Geochemistry

Comments *LD*

Approved Wish to see again with corrections
Date Signature

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1360)



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

24629

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.

The Mining Act (GP 2)

Type of Survey(s) <i>ELECTROMAGNETIC, PROTON MAG.</i>	Township or Area <i>LUCAS TWP</i>
Claim Holder(s) <i>HOME OIL COMPANY LIMITED</i>	Prospector's Licence No. <i>T-1014</i>
Address <i>2300 HOME OIL TOWER, 324-8TH AVE S.W. CALGARY ALBERTA. T2P 2T5</i>	
Survey Company <i>EXSIS EXPLORATION LIMITED</i>	Date of Survey (from & to) <i>03 09 81 01 09 81</i>
Name and Address of Author (of Geo-Technical report) <i>JOHN C GRANT P.O. Box 1880 TIMMINES, ONTARIO</i>	Total Miles of line Cut <i>8.0 KM</i>

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	20
	- Magnetometer	40
	- Radiometric	
	- Other	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	Days per Claim
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	567110	60			
	567111	60			
	567112	60			
	567113	60			
RECEIVED					
APR 20 1982					
MINING LANDS SECTION					
RECORDED					
MAR 16 1982					
Receipt No.					

PORCUPINE MINING DIVISION
RECEIVED
MAR 15 1982
AM 7:8 9:10:11:12:1:2:3:4:5:6 PM

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 *15/3/82* Recorded Holder or Agent (Signature) *John C Grant*

For Office Use Only

Total Days Cr. Recorded *240* Date Recorded *March 16/82* Mining Recorder *[Signature]*

Date Approved as Recorded _____ Branch Registrar Mining Recorder

Total number of mining claims covered by this report of work.

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
JOHN C GRANT P.O. Box 1880 TIMMINES, ONT.

Date Certified *Mar 15/82* Certified by (Signature) *John C Grant*

1982 03 19

2.4629

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

Dear Sir:

We have received reports and maps for a Geophysical (Electro-magnetic and Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on mining claims P. 567110 et al in the Township of Lucas.

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

Yours very truly,

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1316

J. Skura/amc

cc: Home Oil Company Limited
Calgary, Alberta

cc: Mr. J. Grant
Timmins, 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) Electromagnetic, Magnetometer
Township or Area Lucas Twp.
Claim Holder(s) Home Oil Company Limited
2300 Home Oil Tower 324-8th
CALGARY, ALBERTA AVE. S.W.
Survey Company EXSTEC Exploration Ltd.
Author of Report John Grant
Address of Author P.O. Box 1880 Timmins, Ont
Covering Dates of Survey Aug to Sept/81 ^{P4N-711}
(linecutting to office) done in April
Total Miles of Line Cut 8.0 KM

Group 2

MINING CLAIMS TRAVERSED
List numerically

P	567110
(prefix)	(number)
P	567111
P	567112
P	567113

<u>SPECIAL PROVISIONS</u>		DAYS
<u>CREDITS REQUESTED</u>		per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical	
	-Electromagnetic	<u>20</u>
	-Magnetometer	<u>40</u>
	-Radiometric	_____
	-Other	_____
ENTER 20 days for each additional survey using same grid.	Geological	_____
	Geochemical	_____

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

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

DATE: Sept 10/81 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. _____ Qualifications _____

<u>Previous Surveys</u>			
File No.	Type	Date	Claim Holder

TOTAL CLAIMS 7

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 Mag. 256 Rem ²²⁴ ~~196~~ Number of Readings Mag. 256 Rem, 1992
Station interval 25 Meters Line spacing 100 Meters
Profile scale Rem 1CM = ± 10%
Contour interval Mag = 50 gamma

MAGNETIC

Instrument GEOMETRICS G-816 PROTON PRECESSION MAGNETOMETER AND G-826A RECORDING BASE STATION ± GAMMA
Accuracy - Scale constant _____
Diurnal correction method RECORDING BASE STATION
Base Station check-in interval (hours) CONTINUOUS MONITOR DURING SURVEY
Base Station location and value LOT 11, CON. 2 MOUNTJOY TWP. 59,000 GAMMAS

ELECTROMAGNETIC

Instrument CRONE PULSE EM UNIT (Low Power)
Coil configuration Horizontal
Coil separation 100 Meters
Accuracy ± 1%
Method: Fixed transmitter Shoot back In line Parallel line
Frequency 2000 Hz to 16 Hz through 8 Samples
(specify V.L.F. station)

Parameters measured Measured the primary pulse of the current ramp and 18 samples of the secondary field are measured

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 _____

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

Corrections made _____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

Additional information (for understanding results) _____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD



Numbers of claims from which samples taken _____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

Drainage Development _____

Estimated Range of Overburden Thickness _____

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

General _____

ANALYTICAL METHODS

Values expressed in: per cent
p. p. m.
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

