PAMOREX MINERALS INC.

REPORT
ON
GEOPHYSICAL WORK

DECKER PROPERTY
SEMPLE TOWNSHIP

OCTOBER, 1987

D. LONDRY
TIMMINS GEOPHYSICS LTD.

SUMMARY AND RECOMMENDATIONS

Magnetic and VLF-EM surveys were conducted on the Decker property, Semple Township during September of 1987.

Linear magnetic anomalies likely reflect folded volcanics containing disseminated magnetite, which are common adjacent to alteration zones in this area. It is recommended that east-west lines are cut over the southeast 1/4 of the grid to better define the zones of high magnetic susceptibility there.

A number of weak conductors were outlined in the VLF survey. Encouraging geological or geochemical information should be present before any are considered as drill targets. A detail IP survey along Lines 600 and 1200 West is recommended to give a better explanation of the source of the VLF anomalies.

A north-south striking fault, interpreted by Hollinger, is evident in both surveys by the termination of anomalies between 1000 and 1100 West.

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INTRODUCTION

During September, 1987 magnetic and very low frequency electromagnetic (VLF-EM) surveys were carried out for Pamorex Minerals Inc. on the Decker property. The property is located approximately 54 kilometers south of the city of Timmins in the northeast corner of Semple Township, Porcupine Mining Division (Figure 1). The surveys covered the following claims:

P 893491 - 893495 inclusive

P 893497 & 893498

The property can either be accessed by lumber roads which run south from Timmins and South Porcupine or by a road which continues from the end of Highway 566, west of Matachewan.

The field crew included S. Ryan and D. Londry.

PREVIOUS WORK

Previous authors have reported anomalous gold values associated with alteration zones in fractured intermediate volcanics (Savage, 1949 and Burke, 1959). The showings are described as carbonatized and silicified volcanics with intrusions of feldspar porhpyry, syenite porhpyry and quartz

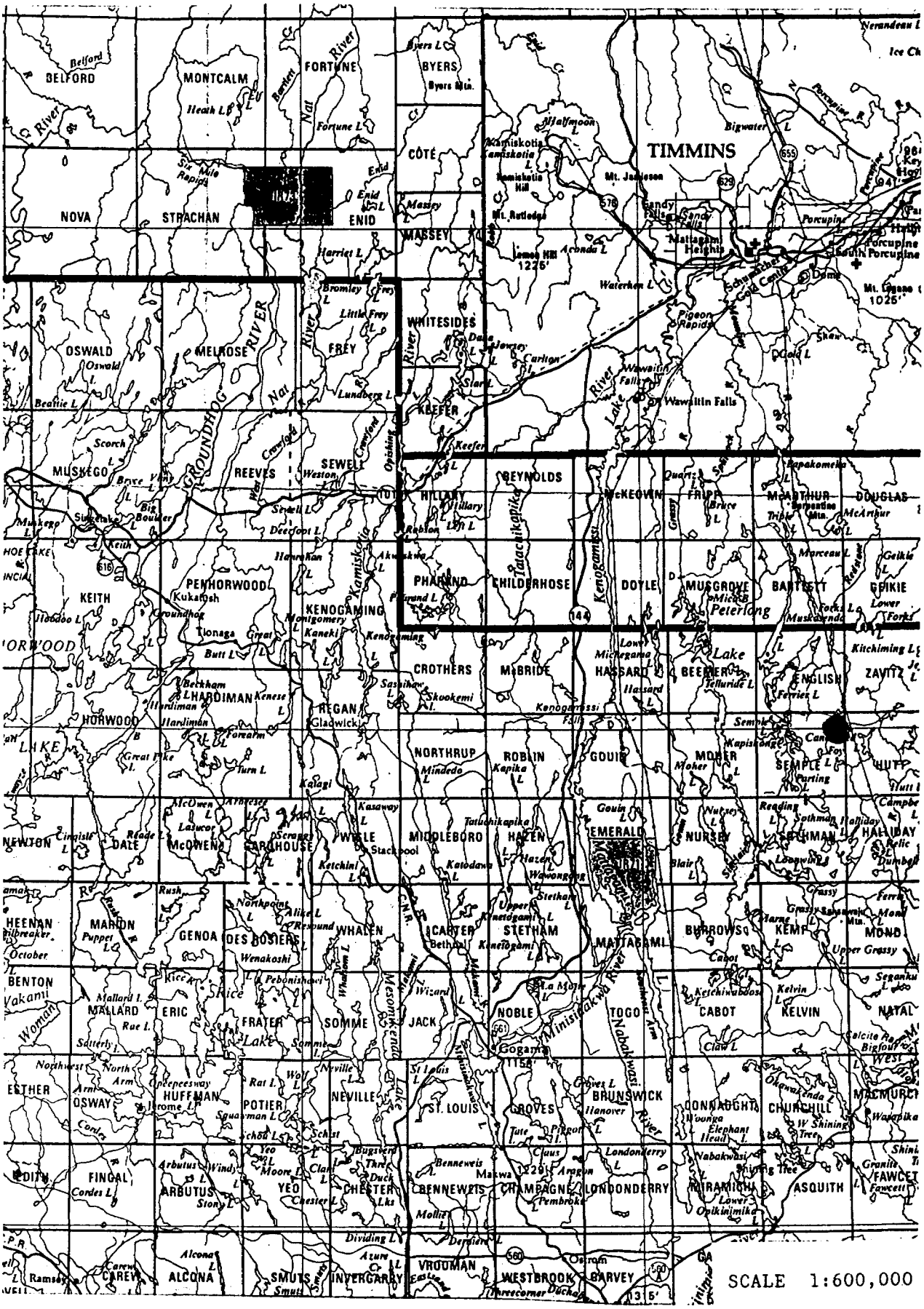

FIGURE 1: Location Map

veins. The values were obtained from samples of the quartz veins and adjacent pyritized volcanics. Magnetite is common within and adjacent to the altered zones.

The first geophysical work to be filed on the property was by Hollinger Gold Mines Ltd. In 1962 they ran magnetic and electromagnetic surveys over a large claim block in the northeast corner of Semple Township (Robinson, 1962).

Magnetic anomalies were explained by the presence of iron formations, diabase dikes and disseminated magnetite in altered intermediate volcanics.

Two holes, G1 and G2, drilled by Hollinger in the center of the present survey area, intersected intermediate volcanics with some carbonate alteration; disseminated magnetite was observed in the volcanics and in quartz calcite stringers. Mineralization in three holes (SE-1 to SE-3), drilled in the southeast corner of the present survey area, included disseminated pyrhotite and minor chalcopyrite in serpentinite and in the interstitial graphitic material of a breccia. The target of all these holes is unknown since the magnetic and EM results were not filed for this area.

On the claims directly to the south, Hollinger drilled five holes to test a graphite conductor at the contact between volcanics to the north and sediments to the south. In 1972, following a vertical loop EM survey (Clayton, 1972), Dowa Mining Co. Ltd. drilled one hole to test the same horizon.

More recently, stripping and trenching were carried out

by A. Decker in 1986 and by Pamorex Minerals Inc. in 1987.

SURVEY DESCRIPTIONS

An existing grid of north-south lines was re-established. The lines are spaced every 100 meters and picketed every 25 meters.

The magnetic readings were taken with a Scintrex IGS-2/MP-4. This instrument is a proton precession magnetometer which measures the earth's total field to an accuracy of .1 gammas. The diurnal drift was monitored every 30 seconds with a Scintrex MP-3 base station magnetometer.

The VLF survey was carried out with the Scintrex IGS-2/VLF-4. This instrument measures the horizontal field strength and the in-phase and quadrature components of the vertical field, normalized to the field strength. Cutler Maine, which transmits at a frequency of 24.0 kHz was used as the transmitter. With this station maximum coupling occurs for east-west striking conductors. In the present survey, the horizontal field strength was not corrected for diurnal changes.

RESULTS

The magnetic results are contoured every 100 gammas on map 1. On map 2 the dip angle and quadrature component of

the vertical VLF field are profiled and the horizontal field is contoured.

The magnetic results outline three areas of high magnetic susceptibility.

The first anomaly strikes east-west between Lines 1400 and 1200 West in the northwest corner of the property. The highest reading, on Line 1200 West, is approximately 1200 gammas above background. A partially defined VLF anomaly (Anomaly A) coincides with the magnetic high, suggesting that the source is weakly conductive.

The second is a linear anomaly, up to 2000 gammas above background, which strikes northeast through the middle of the property. Detail readings between Lines 1100 and 900 West indicate that the zone is tightly folded. The source of this anomaly could be identified in the stripped area.

The third area consists of a number of linear zones which strike northeast across the southeast corner of the grid. At 325 South on Line 700 West the anomaly is 6000 gammas above background. A broad low magnetic field exists to the north of the high response. This may reflect alteration, however it is more likely a dipole effect from the zone of high magnetic susceptibility to the south. VLF anomaly D strikes northeast within this area of low magnetics. A similar magnetic low is located to the north of the high magnetic anomaly described in the previous paragraph.

Two other VLF anomalies are located on the west side of

the property. Anomaly B strikes east-west along the baseline between 1100 and 1400 West. The width of the anomaly may be explained by the presence of more than one conductor as indicated on map 2. Anomaly C strikes east southeast between 1100 and 1400 West at approximately 400 South. This anomaly is the strongest response on the property and may reflect sulphide mineralization.

The high VLF readings in the southeast corner of the grid are likely from a source just south of the property. This may have been the target of holes SE-1 to SE-3 drilled by Hollinger in 1963.

DOUGLAS LONDRY
TIMMINS GEOPHYSICS LTD.

REFERENCES

Burke, D.K., 1959, Seville Property, Semple Township. Timmins Assessment File T-310.

Clayton, R.H., 1972, Geophysical Survey, Semple Township, Vertical Loop Electromagnetic Survey. Timmins Assessment File T-631.

Robinson, G.D., 1962, Magnetometer Survey, Semple-English Claim Group, Hollinger Consolidated Gold Mines Ltd. Timmins Assessment File T-617.

Savage, W.S., 1949, Alford-McCall Property, Semple Township. Timmins Assessment File T-313.

APPENDIX A

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

File _____

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

Township or Area SEMPLE TOWNSHIP

Claim Holder(s) PAMOREX MINERALS INC.

P.O. BAG 2010, TIMMINS, ONT., P4N 7X7

Survey Company TIMMINS GEOPHYSICS LTD.

Author of Report D. LONDRY

Address of Author P.O. BOX 1783, S. PORCUPINE, ONT., P0N 1H0

Covering Dates of Survey Aug. 21/87 - Oct. 8/87
(linecutting to office)

Total Miles of Line Cut 8.4 Km.

SPECIAL PROVISIONS CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	40
–Magnetometer	20
–Radiometric	
–Other	
Geological	
Geochemical	

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

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

DATE: Oct. 9/87 SIGNATURE: Douglas Londry
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	893492
	893494
	893495
	893497
	893498
	935143
	935147
	935155
	893491 GH

If space insufficient, attach list

TOTAL CLAIMS 89 GH

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 310 Number of Readings VLF: 312 MAG: 356

Station interval 25 m. Line spacing 100 m.

Profile scale VLF: 1cm=20%

Contour interval MAG: 100 GAMMAS

MAGNETIC

Instrument SCINTREX IGS-2/MP-4

Accuracy – Scale constant ± .1 GAMMA

Diurnal correction method SCINTREX MP-3 BASE STATION MAGNETOMETER

Base Station check-in interval (hours) 30 SECONDS

Base Station location and value 600 WEST 0 NORTH

58444 GAMMAS

ELECTROMAGNETIC

Instrument SCINTREX IGS-2/VLF-4

Coil configuration VERTICAL LOOP

Coil separation INFINITE

Accuracy ± .01%

Method: ☒ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency CUTLER, MAINE 24.0 KHz.
(specify V.L.F. station)

Parameters measured IN-PHASE AND QUADRATURE COMPONENTS OF THE VERTICAL FIELD AND THE HORIZONTAL FIELD STRENGTH.

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

Ministry of
Northern Development
and Mines

Ontario

Ministère du
Développement du Nord
et des Mines

January 8, 1988

Your File: 290
Our file: 2.10652

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Notice of Intent dated December 21, 1987
Geophysical (Electromagnetic and Magnetometer) Survey
on Mining Claims P 893492 et al in Semple Township

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan, Manager
Mining Lands Section
Mines and Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

RM:pl
Enclosure: Technical Assessment Work Credits

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Resident Geologist
Timmins, Ontario

Pamorex Minerals Inc.
P.O. Box 2010
Timmins, Ontario
P4N 7X7

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File: 2.10652

Date: December 21,1987

Mining Recorder's Report of Work No.: 290

Recorded Holder: Pamorex Minerals Inc.

Township or Area: ~~XXX~~ Semple

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	P 893491 to 492 inclusive 893494 to 495 inclusive 893497 to 498 inclusive
Electromagnetic 40 days	
Magnetometer 20 days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

10 Days Electromagnetic and 5 Days Magnetometer

P 935143
935155
935147

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

Ministry of Northern Affairs and Mines
Ontario

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

#290/87
2.10652

Mining Act

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.

Type of Survey(s)	Township or Area
GEOPHYSICAL	SEMPLE TOWNSHIP

Claim Holder(s)	Prospector's Licence No.
PAMOREX MINERALS INC.	T-1925

Address: P.O. BAG 2010, TIMMINS, ONTARIO, P4N 7X7

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
TIMMINS GEOPHYSICS LTD.	Day 07 Mo. 09 Yr. 87 to Day 18 Mo. 09 Yr. 87	8.4 km.

Name and Address of Author (of Geo-Technical report): D. LONDRY, BOX 1783, SOUTH PORCUPINE, ONT. P0N 1Ho

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	40
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

RECEIVED
DEC 1 1987
MINING LANDS SECTION

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P	893492	
	893494	
	893495	
	893497	
	893498	
	935143	
	935147	
	935155	
	893491	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECORDED
NOV 27 1987

Total number of mining claims covered by this report of work: 9

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

RECEIVED
NOV 27 1987
PORCUPINE MINING DIVISION

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	Recorded Holder or Agent (Signature)
OCT. 9/87	Douglas Londry

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
540	Nov. 27/87	D. White
	Date Approved as Recorded	Branch Director

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: D. LONDRY, BOX 1783, SOUTH PORCUPINE, ONTARIO P0N 1H0

Date Certified	Certified by (Signature)
Oct. 9/87	Douglas Londry

1383 (88/01)

Ontario

Ministry of Northern Development and Mines

Geophysical-Geological-Geochemical Technical Data Statement

File _____

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Type of Survey(s) GEOPHYSICAL

Township or Area SEMPLE TOWNSHIP

Claim Holder(s) PAMOREX MINERALS INC.

P.O. BAG 2010, TIMMINS, ONT., P4N 7X7

Survey Company TIMMINS GEOPHYSICS LTD.

Author of Report D. LONDRY

Address of Author P.O. BOX 1783, S. PORCUPINE, ONT.,PON 1HO

Covering Dates of Survey Aug. 21/87 - Oct. 8/87 (linecutting to office)

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ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	40
–Magnetometer	20
–Radiometric	
–Other	
Geological	
Geochemical	

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

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

DATE: Oct. 9/87 SIGNATURE: Douglas Londry
Author of Report or Agent

Res. Geol. _____ Qualifications 2.2289

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	893492
	893494
	893495
	893497
	893498
	935143
	935147
	935155
	893491

If space insufficient, attach list

TOTAL CLAIMS 89

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 310 Number of Readings VLF: 312 MAG: 356

Station interval 25 m. Line spacing 100 m.

Profile scale VLF: 1cm=20%

Contour interval MAG: 100 GAMMAS

MAGNETIC

Instrument SCINTREX IGS-2/MP-4

Accuracy – Scale constant ± .1 GAMMA

Diurnal correction method SCINTREX MP-3 BASE STATION MAGNETOMETER

Base Station check-in interval (hours) 30 SECONDS

Base Station location and value 600 WEST 0 NORTH

58444 GAMMAS

ELECTROMAGNETIC

Instrument SCINTREX IGS-2/VLF-4

Coil configuration VERTICAL LOOP

Coil separation INFINITE

Accuracy ± .01%

Method: ☒ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency CUTLER, MAINE 24.0 KHz.
(specify V.L.F. station)

Parameters measured IN-PHASE AND QUADRATURE COMPONENTS OF THE VERTICAL FIELD AND THE HORIZONTAL FIELD STRENGTH.

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 _____

ENGLISH TWP. M-787

MOHER TWP. M-868

HUTT TWP. M-943

SOTHMAN TWP. M-1121

Semple

Lake

Little Redstone Lake

Redstone L.

English L.

Foy

Lake

5M.

4M.

3M.

2M.

1M.

47°55'45" APPROX.

81°12'15"

2.10652

200

41P14NE8398 2.10652 SEMPLE

NOTES

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

Areas withdrawn from staking under Section 43 of the Mining Act, (R.S.O. 1970)

Order	File	Date	Disposition
(M) W.19/78	188543	10/4/78	S.R.O.

RECEIVED
AUG 5 1987

LEGEND

PATENTED LAND	(P) or
PATENTED FOR SURFACE RIGHTS ONLY	
LEASE	(L)
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Loc.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	(17)
ROADS -	
TRAILS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

*used only with summer resort locations or when space is limited

TOWNSHIP OF 2.10652

SEMPLE

DISTRICT OF SUDBURY

PORCUPINE

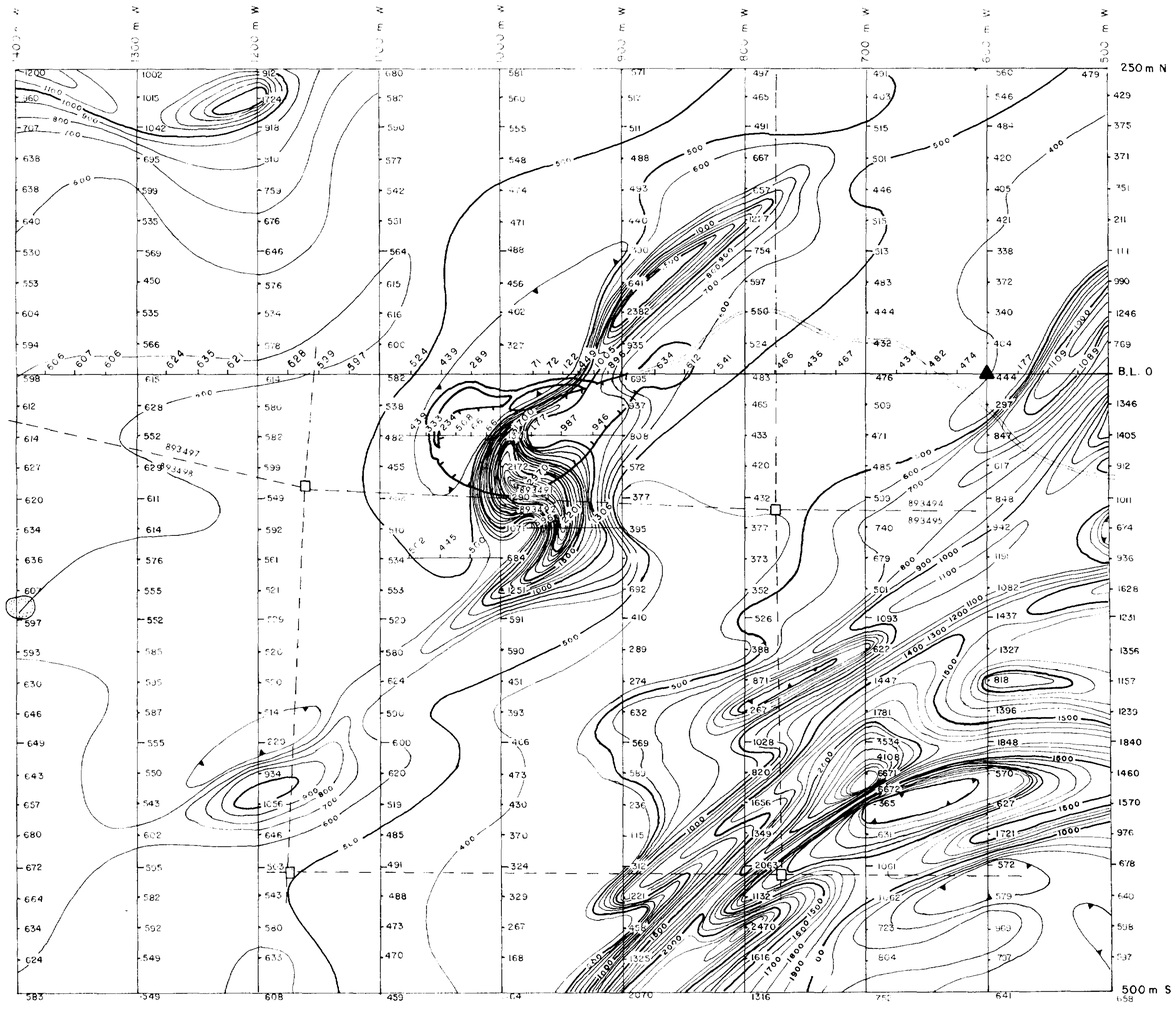
MINING DIVISION

SCALE : 1 INCH* 40 CHAINS (1/2 MILE)

DR. R.W. NOBLE	PLAN NO. M-1100
DATE APR. 22, 71	

ONTARIO

MINISTRY OF NATURAL RESOURCES

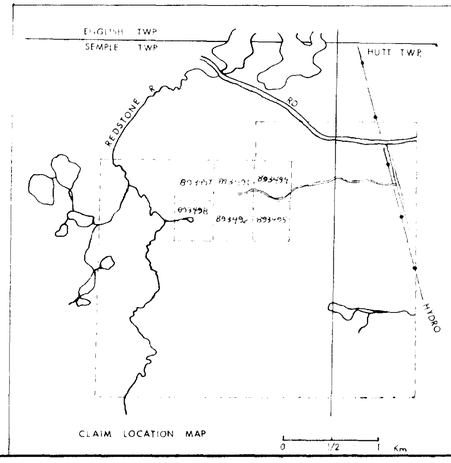


N

Instrument : Scintrex IGS-2/MP-4
Type : Total Field Proton Precession
Contour Interval : 100 Gammas
Datum Line : 58000 Gammas
▲ : Magnetic Base Station

KEY

CLAIM POST, CLAIM LINES (APPROX. LOCATION)
BUSH ROAD
POND
SURVEY LINES
STRIPPED AREA



PAMOREX MINERALS INC.

DECKER PROPERTY

SEMPLE TOWNSHIP

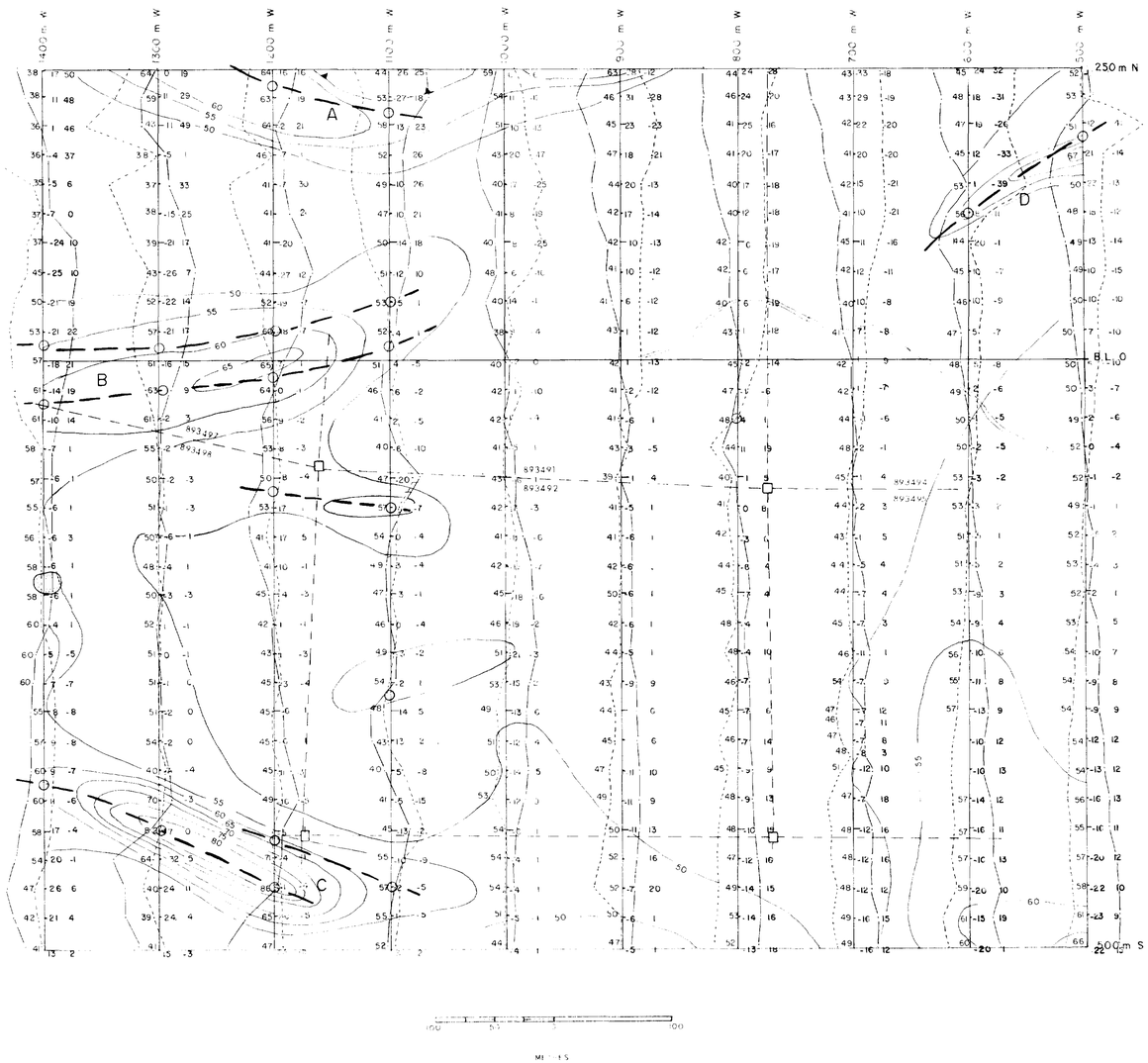
MAGNETIC SURVEY

SCALE: 1:2500 DATE: AUG. 1987

TIMMINS GEOPHYSICS LTD.
DRAWN BY: AJR

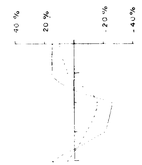
Douglas Landry

2.10652



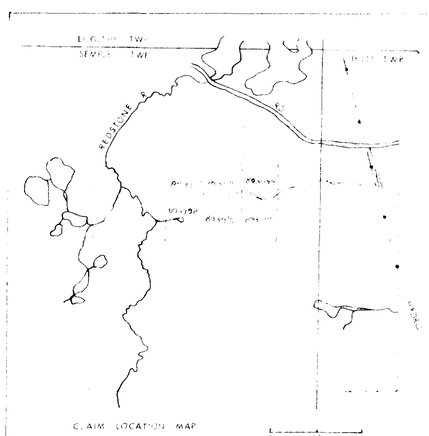
N

Instrument : Scintrex IGS-2/VLF-4
Station : Cutler, Maine
Frequency : 24.0 KHz



KEY

- CLAIM POST, CLAIM LINES (APPROX. LOCATION)
- BUSH ROAD
- POND
- SURVEY LINES
- Conductor
- Conductor Indications
- Field Strength 60



PAMOREX MINERALS INC.

DECKER PROPERTY

SEMPLE TOWNSHIP

VLF SURVEY

SCALE 1:2500 DATE AUG. 1987

TIMMINS GEOPHYSICS LTD.

DRAWN BY: AJR

Douglas Lodge

2.10652