GEOPHYSICAL SURVEY REPORT
ON THE
PERRONS' 83 LIMITED PROPERTY
MISEMA EIGHT GRID

CATHARINE TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF TIMISKAMING, ONTARIO

FOR
ALEXANDER H. PERRON

MARCH 11, 1984

MARY GREER
GEOPHYSICAL TECHNICIAN

ILLUSTRATIONS

Accompanying Plan Maps . . . . . In Back Pockets

Scale: 1 inch to 200 feet

Date: March 1984

Misema Eight Grid

Ground VLF-EM Survey

Drawing No. 8-84-1

Misema Eight Grid

Ground Magnetometer Survey

Drawing No. 8-84-2

GEOPHYSICAL SURVEY REPORT

ON THE

PERRONS' 83 LIMITED PROPERTY

MISEMA EIGHT GRID

CATHARINE TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF TIMISKAMING, ONTARIO

INTRODUCTION

The Misema Eight Grid was recorded on April 15, 1982 and October 8, 1982.

A geophysical grid at a 400 foot line spacing was subsequently established by A.H. Perron in October 1983. During the period of October 21-23, 1983, two geophysical surveys (electromagnetic and magnetic) were completed over the entire eight claims. The instruments used for these surveys were a Phoenix VLF-2 Unit and a Geometrics G-816 Proton Precession Magnetometer.

This work was conducted by and under the active supervision of Mary Greer with Alexander Perron and John Duncan assisting.

All drafting and interpretation was completed by Mary Greer.

The purpose of this report is to briefly describe the results attained in said surveys.

The anomalies detected are shown on the accompanying maps, at a scale of one inch to 200 feet, that form an integral part of this report.

PROPERTY DESCRIPTION

The Misema Eight Grid consists of a contiguous block of eight, 40 acre, unpatented mining claims located in Catharine Township, Larder Lake Mining Division, District of Timiskaming, Ontario, and are further described as follows:

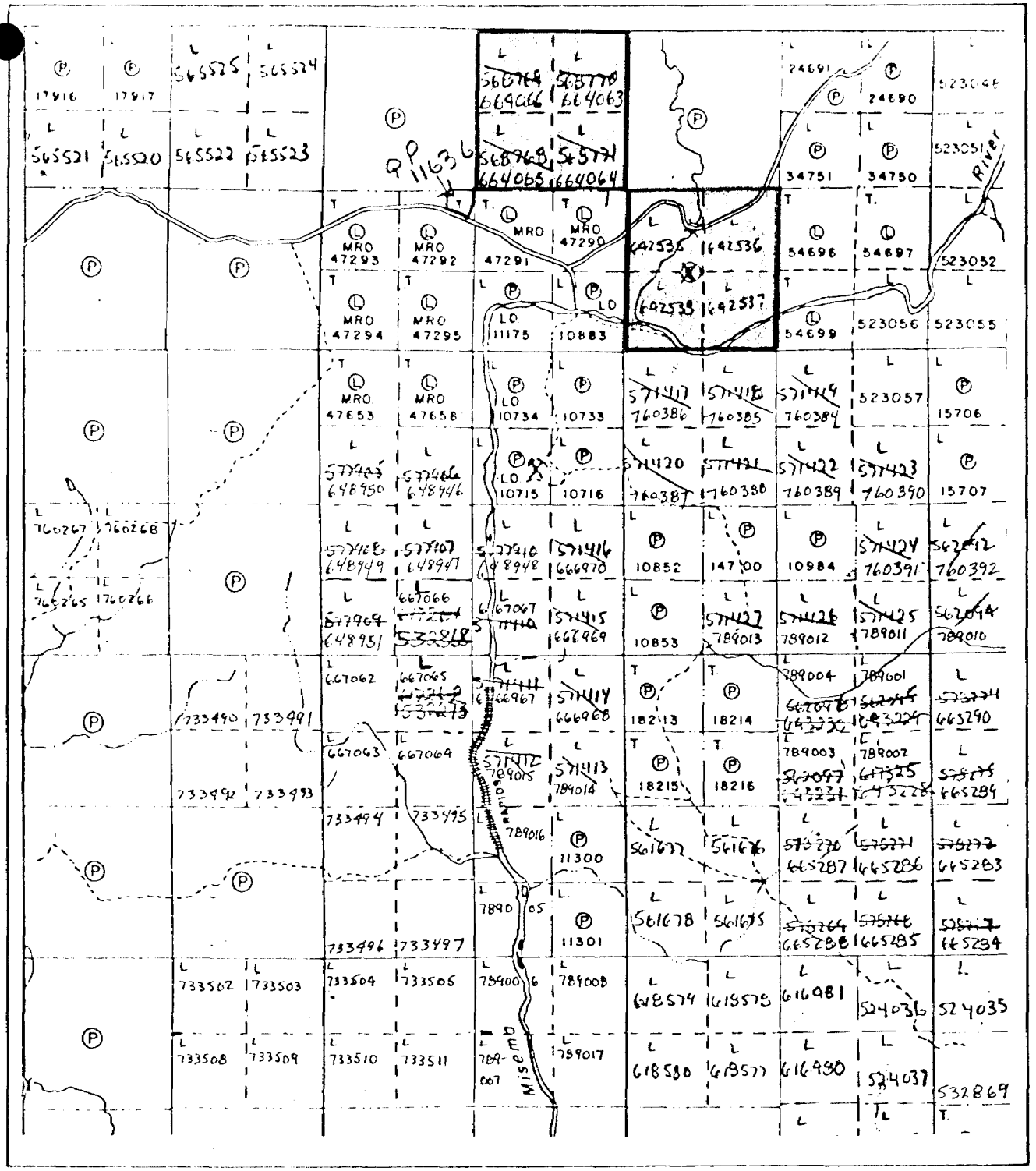
Claim No.	No. of Claims
L-642535-538 (inclusive)	4
L-664063-066 (inclusive)	4
Total number of claims	8

Mr. Alexander H. Perron of 103 Government Road East, Kirkland Lake, Ontario, is the owner of the aforementioned six claims, and was not independently ascertained by the writer. (See Figure 1b)

LOCATION AND ACCESS

The Catharine Six Group encompasses the Conc. VI, Lots 8 and 9, Catharine Township, approximately 12 miles southeast of the town of Kirkland Lake, Ontario.

This property is readily accessible via a secondary road that extends eastward approximately three miles from the village of Boston Creek. Boston Creek is located approximately 15 miles southeast of



Claim Location Map

Scale: 1 inch to 1/2 mile

(Taken from a March 1984 claim map)

Figure 1b

Kirkland Lake and may be reached via highway 112 and 564.

The aforementioned secondary road is easily travelled by standard drive in the summer and snowmobile in the winter. (See Figure 1a)

PREVIOUS WORK

Scattered old trenching can be found throughout the property, however no records of these trenches are available.

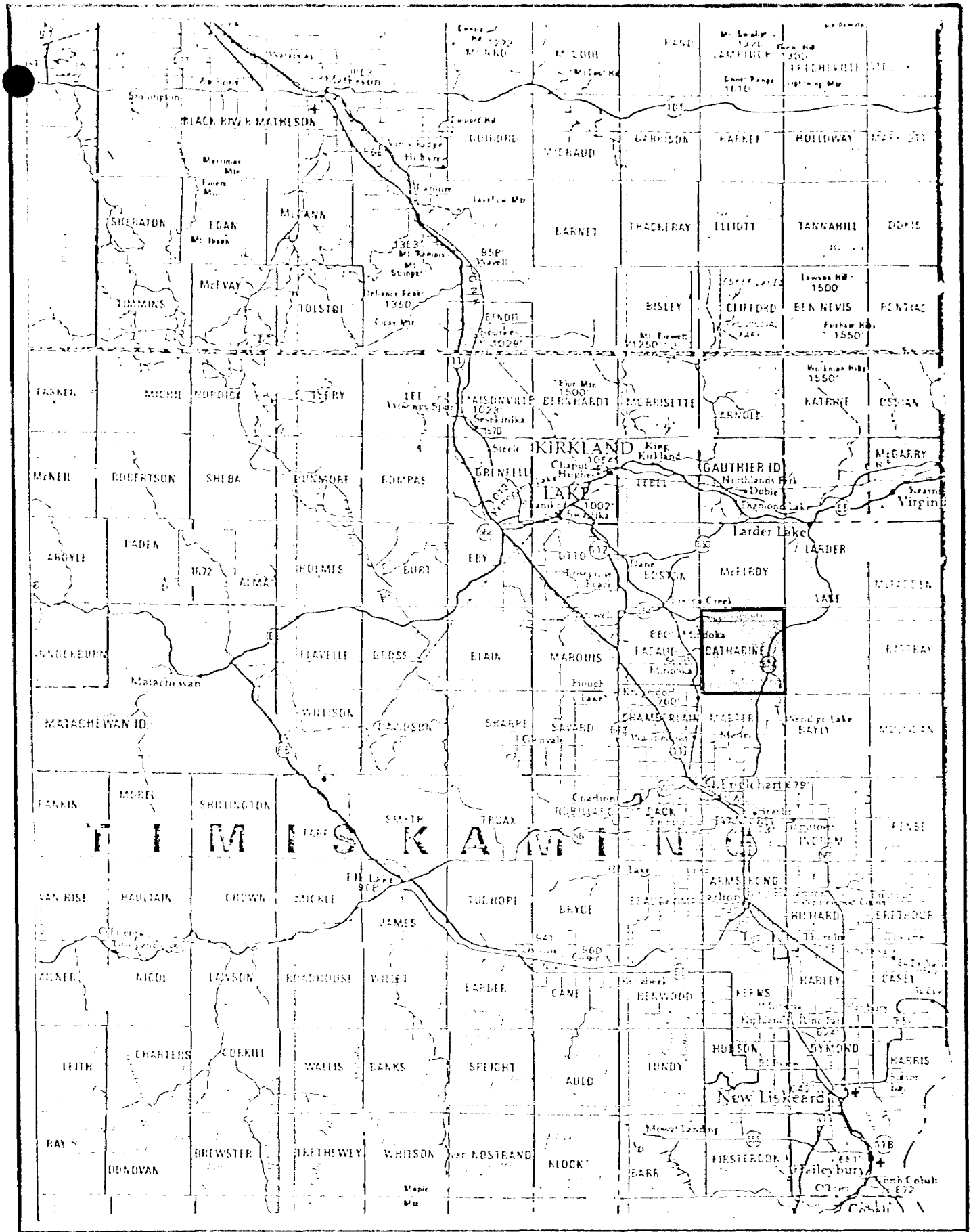
In June 1981 Amax Minerals Exploration conducted a geological survey over claims L-664063 to L-664066 (inclusive). The survey was by pace and traverse and local outcrop was located and identified. No geophysical surveys were performed, although a geophysical survey was proposed.

SURVEY PROCEDURE

A northwest-southeast baseline was established from the common post of claims L-664064 and L-642535. The baseline was cut 3,150 feet south to the Misema River and extended diagonally northwest for 3,800 feet.

A grid system of picket lines 400 feet apart with stations each 100 feet, was established at right angles to the baseline.

Readings were taken at 50 foot intervals on all picket lines and the baseline. The primary magnetic base station was set up at BL 0 + 00



Location Map

Figure 1a

with secondary check stations established at 400 foot intervals along the baseline. The time interval between each secondary base check was within fourty-five (45) minutes.

TOPOGRAPHY

The general terrain of this property varies from jack pine covered sand ridges to the southeast section of the property, to gently sloping poplar, birch and spruce spotted with small outcrops to the northwest section. The difference in elevation averages 75 feet. A slow moving creek passes through the centre of the southeast group with the Misema River flowing west along the southern boundary.

GENERAL GEOLOGY

O.D.M. Geological Map, 2043, covering Catharine and Marter townships, at a scale of one inch to one-half mile, indicates that the bedrock is underlain by Keewatin volcanics. This includes intermediate to acidic volcanics that are mainly pyroclastic. The local exposed outcrops are classified as a carbonatized fragmented andesite.

ECONOMIC GEOLOGY

Situated to the immediate northwest of the claim group, along the McElroy-Catharine township line, lies the Cathroy-Larder Mine property.

Cathroy-Larder Mines was incorporated in 1943 to succeed Yama Gold Mines. Yama Gold Mines produced 22,250 tons grading 0.14 oz. Au/ton between 1938 to 1942. A new gold zone was discovered by Cathroy-Larder

about 1000 feet south of the shaft. After considerable underground development, including surface and underground diamond drilling, ore reserves were calculated at 280,000 tons grading 0.20 oz. Au/ton.

Mirado Nickel optioned the property in 1960 conducting additional surface and underground drilling. In 1980 the property was optioned by Canamax (Amax) and further surface diamond drilling was performed as well as surface stripping over the south ore body.

The rocks within the mine area belong to the Skead-Group which are mainly dacites, andesites, rhyolite flows and pyroclastics. These rocks are cut by small dikes of syenite, lamprophyre and diorite.

The ore is stratabound within pyroclastic units. The shaft ore body is at or near the upper contact of the Skead pyroclastics. The south ore bodies are approximately 1,500 feet from the top of the Skead group.

The upper contact of the Skead group within the mine area strike about S 70° E and dip steeply north to vertical. The ore zones consist of many narrow quartz-calcite-sulphide and massive sulphide seams. The sulphides are pyrite, chalcopyrite and sphalerite, gold is found in fractures in the pyrite.

INSTRUMENTATION

i) Electromagnetic Survey:

The VLF-EM method uses as a source, one of the main submarine communications transmitters in the 15 to 25 kHz band found throughout the world. These submarine communication radio waves travel in a single mode parallel to the surface of the earth along the earth-air interface.

Without vertical conductors and travelling over flat ground, the magnetic field component of this radio or surface wave is horizontal and perpendicular to it's direction of travel.

VLF instruments are capable of picking up these structures that change the direction of the waves by measuring the tilt angle of the major axis of the polarization ellipse. This is illustrated by the tilt angle being zero on flat ground, but when a conductor is present the tilt angle will acquire a finite value. The direction of tilt indicates the direction of the conductor. Calculations of such parameters as depth, depth extent, dip and width of the conductor is very minimal.

The VLF easily illustrates the location of the upper limit of dipping structures which can be seen or plotted as VLF profiles as areas of greatest change in tilt angle per unit of distance.

The instrument used was a Phoenix VLF-2 radio EM system.

The parameters measured by this unit are the orientation and magnitude of the major and minor axes of ellipse of polarization. The meter display has two ranges: 0 to 300 or 0 to 1000, the background was set at 200. The operating frequency is made by using the internal switches which have a range of 14.0 to 29.9 kHz in 100 Hz increments. The clinometer has a $\pm$ 90°; $\pm$ 0.5° resolution with a push button release.

For the purpose of this survey the station used was Cutler, Maine, which has a frequency of 24.0 kHz.

All readings were taken perpendicular to the station and the topography was noted for further use in the interpretation of the EM results.

ii) Magnetic Survey:

This system uses a backward motion of spinning protons of a hydrogen atom within a fluid of hydrogen and carbon. These spinning magnetic protons are caused to have two opposite poles by applying a magnetic field using a current within a coil of wire. When the current is stopped, the protons precess about the earth's magnetic field and in turn generate a small current in the wire. This frequency of precession is proportional to the earth's total magnetic field.

This instrument is read directly in gammas which is the absolute value of the earth's total field for that station.

The instrument used for this survey was a Geometrics G-816 Proton Magnetometer, this instrument has a sensitivity of one gamma.

The diurnal variation was monitored by closing each loop at any secondary check station, at a gridline-baseline intersection.

Diurnal corrections were applied by linear distribution of any observed variation over the time between base stations. The corrections were calculated by using a time vs. drift graph.

PRESENTATION AND DISCUSSION OF RESULTS

i) Electromagnetic Survey:

The field data is presented on a map at a horizontal scale of one inch to 200 feet, drawing number 8-84-1 found in the back pockets of the report.

The VLF-EM data is illustrated as profiled data along the survey lines and is plotted at a vertical scale of 1 inch to 20° with the positive to the left and the negative to the right.

There were five (5) conductors located on the property. Three (3) were found in the northwest claim group and two (2) in the southeast claim group. Most of the property is fairly flat with possibly VLF-signal source noise, giving the profiles an uneven appearance.

Conductor 84-D is the only one which appears to follow a low wet area of black ash, poplar and balsam fir. The other conductors follow areas of very gently sloping poplar, spruce and white birch.

There is also some association between the conductors and the general magnetic trend.

ii) Magnetic Survey:

The field data is presented on a map at a horizontal

It is recommended that a geological survey be performed on the Misema Eight Property. There are some old trenches in the vicinity of conductor 84-C and outcrop as well and this conductor should be further studied in greater detail.

Respectfully submitted,

Mary Greer

March 11, 1984

Mary Greer
Geophysical Technician

scale of one inch to 200 feet, drawing number 8-84-2, found in the back pockets of the report.

The magnetic data is illustrated as isomagnetic contours (contour interval 50 gammas) on a map of corrected magnetic values recorded at each station.

The magnetic relief varied between 200 and 400 gammas. The lowest reading is approximately 58200 gammas and the highest reading was recorded as 58938 gammas. The low magnetic relief is probably due to small variations in the susceptibility of the bedrock. The magnetic trend appears to be in a northwest-southeast direction. The magnetic trend is not as visible in the southeast four (4) claims, this is probably due to a greater amount of overburden and some sand ridges.

CONCLUSIONS AND RECOMMENDATIONS

Conductors 84-A-B and E may possibly be associated with a conductive body close to the surface. However conductor 84-C appears to have a greater depth of approximately 200 to 300 feet below surface, and maybe a vertical conductor (illustrated by the profile of the positive and negative in-phase).

There is a magnetic high occurring in the same area as conductor 84-E and they may be associated.

C E R T I F I C A T E

I, Mary Greer, of Lynden, Ontario, do hereby certify:

1. That I am a Geophysical Technician and reside at: 49 McKelvie Avenue, Kirkland Lake, Ontario

2. That I graduated from Sir Sandford Fleming College at Lindsay, Ontario, in 1978, with a diploma as a Geological Technician.

3. That I was employed as a Geophysical Technician by H.E. Neal and Associates Limited for 18 months.

4. That I have been practising my profession for a period of four (4) years and I am qualified to write this report.

5. That I supervised and participated in this survey.

March 11/84
Date

Mary Greer
Mary Greer
Geophysical Technician

BIBLIOGRAPHY

James A. Grant

1963: Geological Report No. 18, Catharine and Marter Townships: Ontario Department of Mines

900

Mining Lands Section

File No 2.6624

Control Sheet

TYPE OF SURVEY

✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

L.D

Signature of Assessor

27/06/84

Date

Ontario Ministry of Natural Resources

The Mining Act

(Geophysical, Geological, Geochemical and Expenditures)

2.6624

(Lands Management File 4664063)

Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.
exceeds space on this form, attach a list.

Apr. 20/84 #1766

Type of Survey(s)	Township or Area
GEOPHYSICAL MAGNETOMETER & EM	CATHARINE

Claim Holder(s)	Prospector's Licence No.
ALEXANDER H. PERRON	K 19026

Address: 103 GOVERNMENT Rd E. Kirkland Lake.

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
PERRONS' 83	01 Day / 10 Mo. / 83 Yr. — 01 Day / 11 Mo. / 83 Yr.	9 miles

Name and Address of Author (of Geo-Technical report): MARY GREER 49 McKELVIE AVE. KIRKLAND LAKE

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	20
	Geophysical - Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

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

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.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	664063				
	664064				
	664065				
	664066				

RECEIVED
MAR 1 1984
MINING LANDS SECTION

LARDER LAKE MINING DIV.
RECEIVED
FEB 20 1984
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Total number of mining claims covered by this report of work: 4

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.

For Office Use Only		
Total Days Cr. Recorded: 160	Date Recorded: FEB 20 1984	Mining Recorder:
	Date Approved as Recorded: July 3/84	Branch Director:

Date	Recorded Holder or Agent (Signature)
Feb. 21/84	Mary Greer

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: MARY GREER 49 McKELVIE AVE KIRKLAND LAKE

Date Certified	Certified by (Signature)
Feb. 21/84	Mary Greer

Ontario Resources

(Geophysical, Geological, Geochemical and Expenditures) The Mining Act

Land Management Branch. (Cell 2 642535) 2.6624

Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.
exceeds space on this form, attach a list.

Type of Survey(s)	Township or Area
GEOPHYSICAL MAGNETOMETER & EM	CATHARINE

Claim Holder	Prospector's Licence No.
ALEXANDER H. PERRON	K 19026

Address: 103 GOVERNMENT Rd. E. Kirkland Lake Ont

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
PERRONS' 83	01 Day 10 Mo. 83 Yr. / 01 Day 11 Mo. 83 Yr.	9 miles.

Name and Address of Author (of Geo-Technical report): MARY GREER 49 McKELVIE AVE KIRKLAND LAKE ONT

Credits Requested per Each Claim in Columns at right

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

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	642535				
	642536				
	642537				
	642538				

RECEIVED
1984
MINING LANDS SECTION

LARDER LAKE MINING DIV.
RECEIVED
FEB 20 1984
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Total number of mining claims covered by this report of work: 4

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.

For Office Use Only		
Total Days Cr. Recorded: 240	Date Recorded: FEB 20 1984	Mining Recorder:
	Date Approved as Recorded: 84.7.10	Branch Director:

Date	Recorded Holder or Agent (Signature)
Feb 21/84	Mary Greer

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: MARY GREER 49 McKELVIE AVE KIRKLAND LAKE ONT

Date Certified	Certified by (Signature)
Feb 21/84	Mary Greer

Ministry of Natural Resources
Ontario

Geotechnical Report Approval

File 2.6624

Mining Lands Comments

☐ To: Geophysics

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Geology - Expenditures

Comments

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Geochemistry

Comments

L. D.

☐ Approved ☐ Wish to see again with corrections | Date | Signature

☐ To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

Approved Reports of Work sent out

Notice of Intent filed

Approval after Notice of Intent sent out

Duplicate sent to Resident Geologist

Duplicate sent to A.F.R.O.

1984 04 19

Your File: 75 & 76
Our File: 2.6624

Mr. George J. Koleszar
Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic and Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims L 642535 et al in the Township of Catharine.

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

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-6918

A. Barr:mc

cc: Alexander H. Perron
103 Government Road East
Kirkland Lake, Ontario
P2N 1A9

cc: Ms. Mary Greer
49 McKelvie Avenue
Kirkland Lake, Ontario
P2N 2K6

49 McKelvie Avenue,
Kirkland Lake, Ontario

REGISTERED MAIL

April 6, 1984

Mr. Fred Matthews,
Lands Administration Branch,
Mining Lands Section,
Ministry of Natural Resources,
Room 6450, Whitney Block,
Queen's Park,
Toronto, Ontario
M7A IW3

Dear Sir:

RE: Geophysical Survey Report for
Catharine Township
Larder Lake Mining Division

Enclosed herewith please find a duplicate copy of the following:

- Report dated March 11, 1984, by Mary Greer entitled:

  Geophysical Survey Report
  on the Perrons' 83 Limited Property
  Misema Eight Group
  Catharine Township
  Larder Lake Mining Division
  District of Timiskaming, Ontario

I trust this is the information required to correspond with the Report of Work filed concerning the above noted township.

Yours truly,

Mary Greer

Mary Greer,
Geological Technician

MG/p
Encls.

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) GEOPHYSICAL - ELECTROMAGNETIC - MAGNETIC

Township or Area CATHARINE

Claim Holder(s) ALEXANDER H. PERRON
103 GOV'T RD. E, KIRKLAND LAKE, ONT. P2N IA9

Survey Company PERRONS' 83 LIMITED

Author of Report MARY GREER

Address of Author 49 MCKELVIE AVENUE, KIRKLAND LAKE, ONT.

Covering Dates of Survey 01/10/83 to 30/11/83
(linecutting to office)

Total Miles of Line Cut 12 MILES (APPROXIMATELY)

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	20
–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: March 11/84 SIGNATURE: Mary Greer
Author of Report or Agent

Res. Geol. _____ Qualifications 24529

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	642535
L	642536
L	642537
L	642538
L	664063
L	664064
L	664065
L	664066

WRITER'S NOTE:

40 DAYS FOR EM SURVEY FOR CLAIMS L-642535 TO L-642538 (INCLUSIVE)

TOTAL CLAIMS 8

If space insufficient, attach list

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 337 Number of Readings MAG - 675 VLF-EM = 668

Station interval 100 FEET Line spacing 400 FEET

Profile scale 1" = 20°

Contour interval 50 GAMMAS

MAGNETIC

Instrument GEOMETRICS G-816

Accuracy – Scale constant 1 GAMMA

Diurnal correction method CLOSED LOOPS

Base Station check-in interval (hours) APPROXIMATELY 45 MINUTES

Base Station location and value BL 0 + 00 58406

ELECTROMAGNETIC

Instrument PHOENIX VLF-2

Coil configuration VERTICAL AND HORIZONTAL

Coil separation INFINITY

Accuracy ± 1%

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

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

Parameters measured INPHASE

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_____

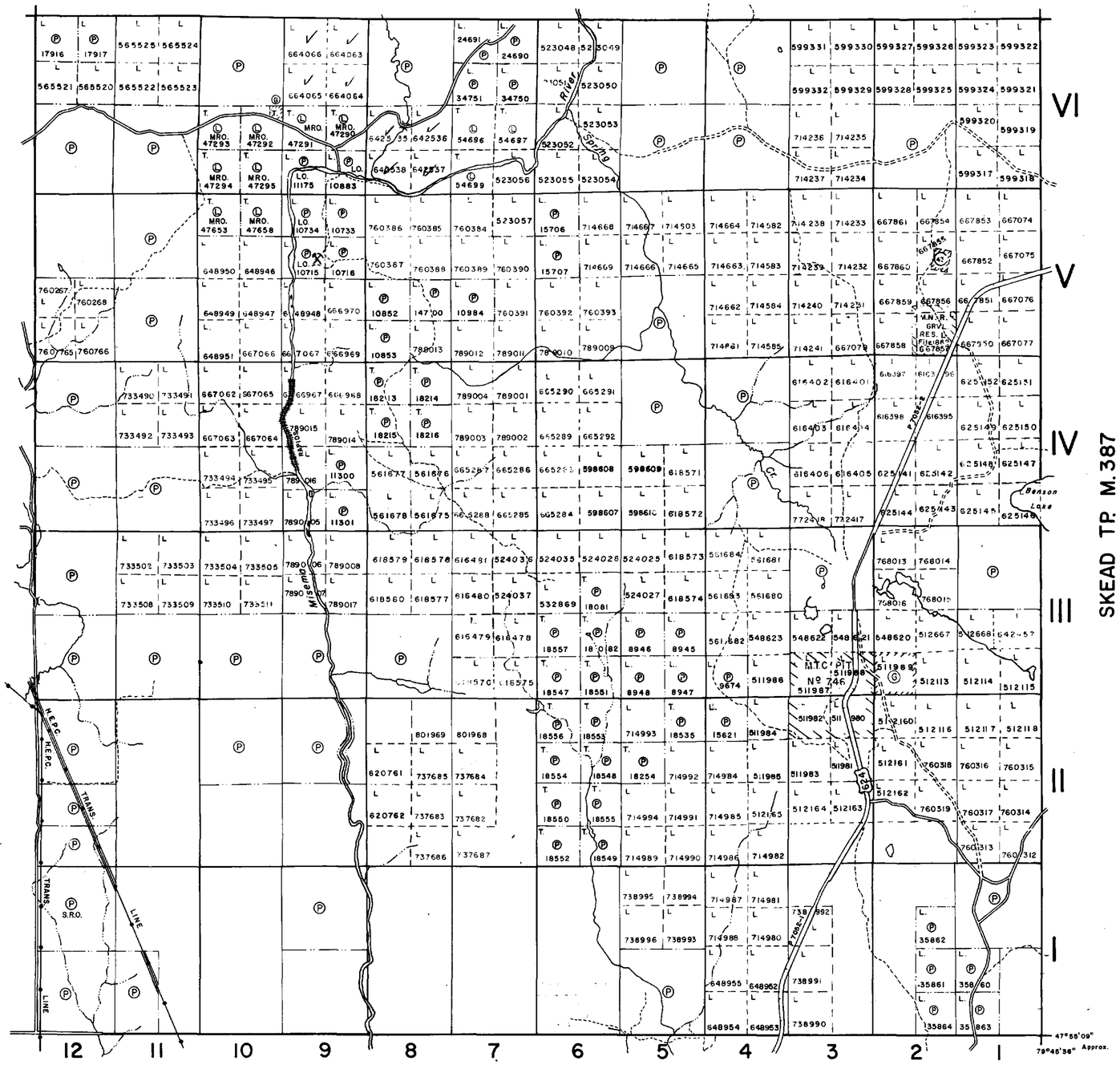
Extraction Method_____

Analytical Method_____

Reagents Used_____

General_____

McELROY TP. M.366



NOTES

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

as withdrawn from staking under Section of the Mining Act

	File	Date	Disposition
(43) W.54/74	26940	10/10/74	S.R.O.

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	
QUARRY PERMIT	

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

TOWNSHIP OF

CATHARINE

DISTRICT OF
TIMISKAMING

LARDER LAKE
MINING DIVISION

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

DR. K.K.I.
DATE JUNE '76
PLAN NO. M. 336

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

DATE OF ISSUE
JUN 27 1991
Ministry of Natural Resources
TORONTO

Township Line

McELROY TOWNSHIP

CATHARINE TOWNSHIP

L 36·00 W

L 32·00 W

L 28·00 W

L 24·00 W

L 20·00 W

L 16·00 W

L 12·00 W.

L 8·00 W

L 4·00 W.

L 4·00 E

L 8·00 E

L 12·00 E

L 16·00 E

L 20·00 E

L 24·00 E

L 28·00 E

L 32·00 E

CON. VI

L 664066

L 664063

L 664065

L 664064

L 642535

L 642536

L 642538

L 642537

Misema River

Lot 9

Lot 8

N

SYMBOLS

Base station ○

Isomagnetic contours

Claim post ■

Claim line

River, Creek

Road

INSTRUMENTATION

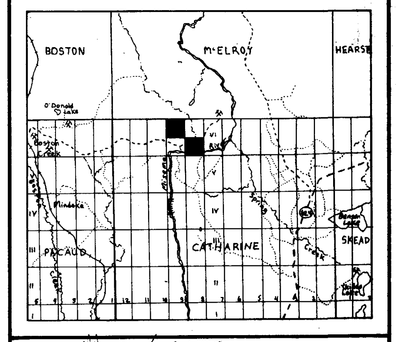
GEOMETRICS G816

PROTON MAGNETOMETER

Contour interval - 50 gammas

KEY MAP

(Scale: 1 inch to 2 miles)



MISEMA EIGHT GRID

GROUND MAGNETOMETER SURVEY

CON. VI LOTS 8 & 9

CATHARINE TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF TIMISKAMING, ONTARIO

200 0 200 400 feet

1 inch to 200 feet

26624

PERRONS' 83 LIMITED

KIRKLAND LAKE CANADA

Drawn by: Mary Greer | Drawing No.: 8-84-2 | Date: March 1984

Township Line

McELROY TOWNSHIP

CATHARINE TOWNSHIP

L 36·00 W

L 32·00 W

L 28·00 W

L 24·00 W

L 20·00 W

L 16·00 W

L 12·00 W

L 8·00 W

L 4·00 W.

L 4·00 E

L 8·00 E

L 12·00 E

L 16·00 E

L 20·00 E

L 24·00 E

L 28·00 E

L 32·00 E

CON. VI

84-E

84-D

84-C

84-B

84-A

L 664066

L 664063

L 664065

L 664064

L 642535

L 642536

L 642538

L 642537

Misema River

Lot 9

Lot 8

N

SYMBOLS

In-phase

Claim post ■

Claim line

River, Creek

Road

INSTRUMENTATION

PHOENIX VLF 2

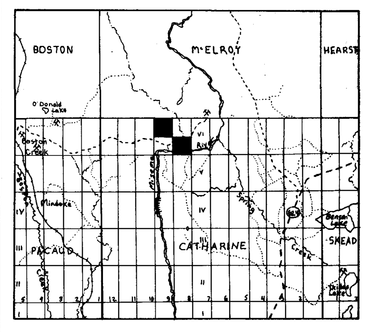
Station used: NAA Cutler, Maine

Frequency: 24.0 kHz

Vertical scale: 1 inch = ± 20%

KEY MAP

(Scale: 1 inch to 2 miles)



Mary Greer

MISEMA EIGHT GRID

GROUND VLF-EM SURVEY

CON. VI LOTS 8 & 9
CATHARINE TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF TIMISKAMING, ONTARIO

200 0 200 400 feet

1 inch to 200 feet

26624

PERRONS' 83 LIMITED
KIRKLAND LAKE CANADA

Drawn by: Mary Greer | Drawing No: 8-84-1 | Date: March 1984