GEOPHYSICAL SURVEY REPORT
ON THE
PERRON PROPERTY
BARRY HOLLINGER GRID
BOSTON TOWNSHIP
LARDER LAKE MINING DIVISION
DISTRICT OF TIMISKAMING, ONTARIO

FOR

ALEXANDER H. PERRON

JULY 1, 1984

MARY GREER
GEOPHYSICAL TECHNICIAN

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ILLUSTRATIONS

Claim Location Map - (Figure 1 a) . . . . . 2 a)

Location Map - (Figure 1 b) . . . . . 2 b)

Accompanying Plan Maps. . . . . In Back Pocket

Scale: 1 inch to 200 feet

Date: July 1984

Barry Hollinger Property

Ground VLF-EM Survey

Drawing No. O'D.84-1

Barry Hollinger Property

Ground Magnetometer Survey

Drawing No. O'D.84-2

GEOPHYSICAL SURVEY REPORT

ON THE

PERRON PROPERTY

BARRY HOLLINGER GRID

BOSTON TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF TIMISKAMING, ONTARIO

INTRODUCTION

The Barry Hollinger claim was recorded by Alexander H. Perron on September 2, 1981.

A geophysical grid was subsequently established in February, 1984, on the Perron Property. During March 1984, two geophysical surveys (electromagnetic and magnetic) were completed over the entire property. The instruments used for this survey was a Geonics EM-16 VLF Unit and a Geometrics G-816 Proton Magnetometer.

This work was conducted by and under the active supervision of Mary Greer with Alexander H. Perron 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 Barry Hollinger Property consists of one unpatented mining claim in Boston township attached to three (3) patented mining claims in Pacaud township, Larder Lake Mining Division, District of Timiskaming, Ontario, and are further described as follows:

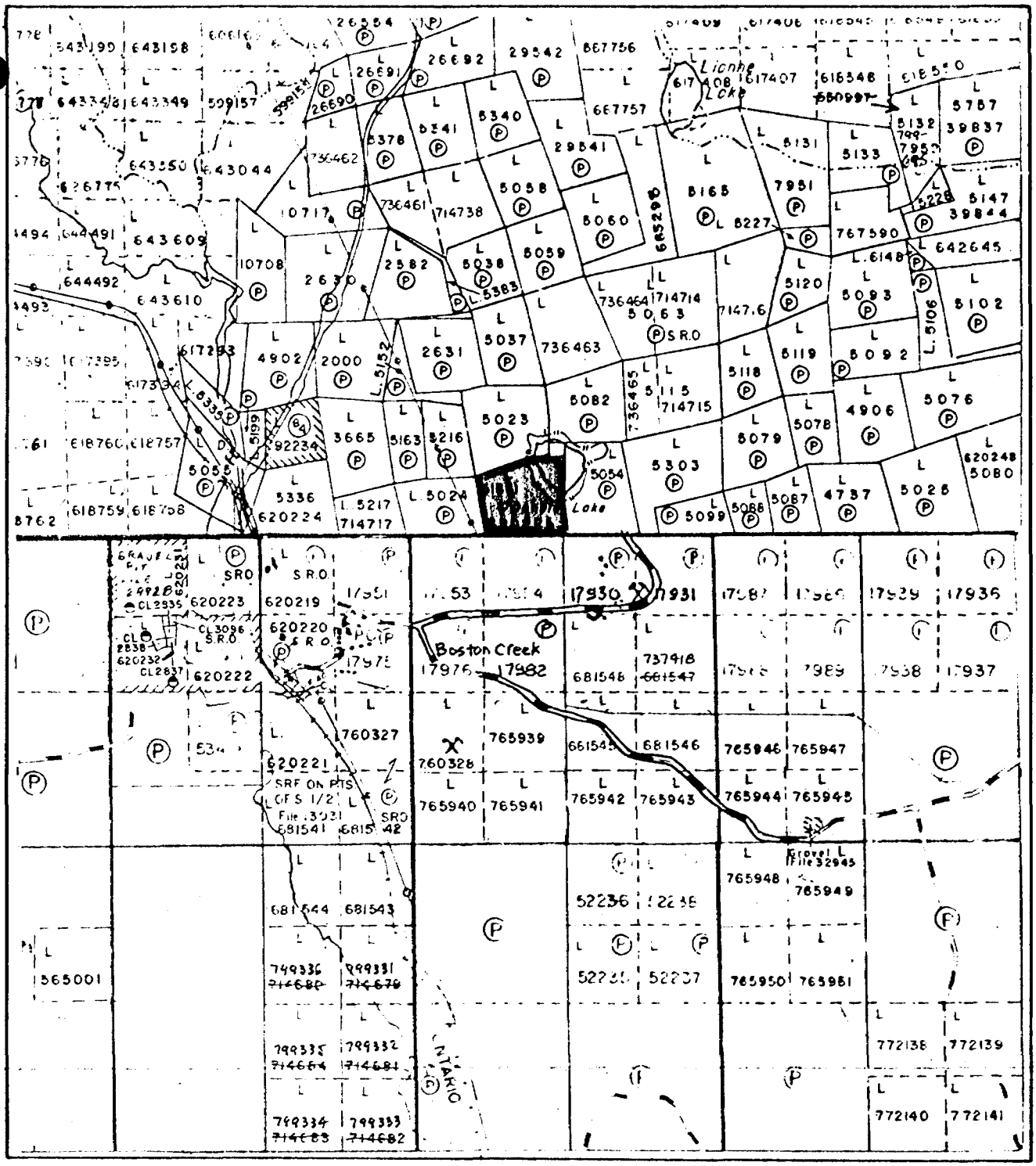
Claim No.		Township	No. of Claims
L-620225	(unpatented)	Boston	1
17930	(patented)	Pacaud	1
17931	(patented)	Pacaud	1
17982	(patented)	Pacaud	1
		Total No. of Claims	4

Ownership of the aforementioned claims have been attested to by Alexander H. Perron of 103 Government Road East, Kirkland Lake, Ontario, and was not independently ascertained by the writer. (See figure 1a).

LOCATION AND ACCESS

The Barry Hollinger property lies along the Boston - Pacaud township line approximately one and one half miles from the village of Boston Creek, which is twelve (12) miles southeast of the town of Kirkland Lake.

The property is accessible via a secondary road that extends eastward from the village of Boston Creek into the Barry Hollinger Mine site, and may be reached via highway 112 and highway 564. (See Figure 1b).

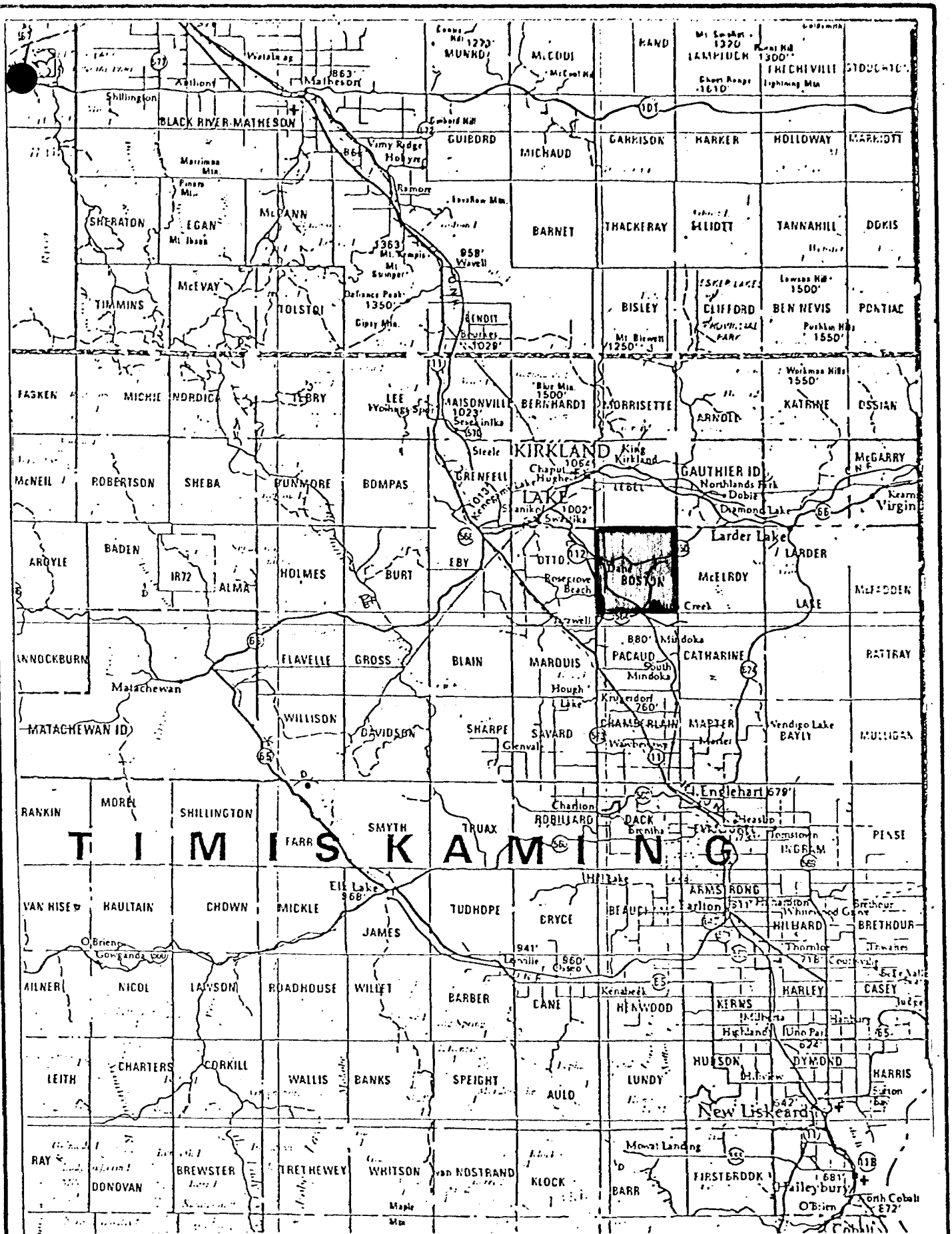


Claim Location Map

Scale: 1 inch to 1/2 mile

(Taken from a July 1984 claim map)

Figure 1a



Location Map

Figure 1b

PREVIOUS WORK

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

SURVEY PROCEDURE

A baseline was established north along the western claim line from the Boston - Pacaud township line, for 1,000 feet to the north claim line.

A grid system of picket lines 400 feet apart with stations every 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 stations were set up at BL 0+00 with secondary base stations established at each picket line - baseline intersection. The time interval between each secondary base check was within one half hour.

TOPOGRAPHY

The terrain is flat sloping ground with a small lake (O'Donald Lake) found in the northeast corner of claim L-620225.

The area is covered by birch and poplar with spruce, balsam fir and larch occurring closer to the lake. Swampy bog occurs around the edge of the lake.

GENERAL GEOLOGY

According to the O.D.M. Map No. 1957-4 the underlying bedrock consists of basic volcanic lava flows of the keewatin age. These rock types are primarily gabbroic lava flows and andesite, basalt and pillow

lava. The flows appear to be trending northwest-southeast and are facing east.

ECONOMIC GEOLOGY

The Perron claim adjoins the Barry Hollinger Gold Mines property to the southeast and directly west of the Bargnesi copper prospect.

The Barry Hollinger was originally known as the Patricia property and acquired in 1918. The mine was in operation until 1936 and 267,741 tons of ore was milled. Over $1.6 million dollars in gold and $3,800. in silver was recovered.

The property is underlain by two series of Keewatin volcanics, which lie in faulted contact. The Pacaud fault strikes southeast and separates sheared and altered tuffs and tuffaceous sediments on the southwest from basic lava flows on the northeast.

Underground operations were carried out primarily on the No. 7 vein, although twelve (12) veins were found on the property.

The No. 7 vein strikes N 57° E and dips 70° SE. The presence of gold depends largely on the quartz and is found as irregular lenses in the vein.

The mine workings are primarily in basic lavas and the shaft is in Keewatin diabase. The mine is developed to the 2,250 foot level and a two compartment shaft extends from surface to the 1000 foot level with a three compartment winze from the 1000 foot level to the 2250 foot level.

The Bargnesi property lying directly across from O'Donald Lake consists of a main showing of a quartz-carbonate vein stockwork which occurs in massive, dark green, dioritic lava. The property was worked through 1937 to 1956.

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 surface.

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 finile 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 for this EM survey was a Geonics VLF-EM16 unit. The sensitivity of this unit is $\pm$ 1% for the in-phase and $\pm$ 1%

for the quadrature. The operating frequency for the EM16 is from 15-25 kHz and the station selection is made by plug-in units.

For the purpose of this EM survey the station used was Annapolis, Maryland, which has a frequency of 21.4 kHz.

All the readings were taken facing east at 50 foot intervals and the topography was noted for future 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 O'D-84-1, found in the back pocket of this report.

The VLF-EM data is illustrated as profiled data along the survey lines and is plotted at a vertical scale of 1 inch = $\pm$ 40% with the in-phase above and the quadrature below.

One conductor was found on the claim. Trending north-south down the centre of the claim. The in-phase profile shows a very high response with a low zero quadrature to the north of the property. The positions of the profile are reversed on L 4 + 00 N and L 0 + 00.

ii) Magnetic Survey:

The field data is presented on a map at a horizontal scale of one inch to 200 feet, drawing number O'D-84-2.

The magnetic data is illustrated as isomagnetic contours (contour interval: 100 gammas) on a map of corrected magnetic values recorded at each station.

A magnetic high was found on the eastern side of the claim occurring on L 10 + 00 N at 12 + 00 E; L 8 + 00 N at 11 + 00 E and on L 4 + 00 N at 10 + 50 E, this magnetic high trend in a north northeast-south southwest direction.

CONCLUSIONS AND RECOMMENDATIONS

The VLF-EM conductor occurs slightly west of the found magnetic high. The magnetic high fades on L 4 + 00 N and L 0 + 00 and may reappear on L 0 + 00 5 + 00 E. This may indicate a fault or interference with the high. Field observations indicate the magnetic high to be a diabasic rock type, either as a diabase dyke or a diabasic lava flow. It is recommended that the area around L 4 + 00 N 10 + 50 E be stripped off to determine the source of the interference of the magnetic high.

Respectfully submitted,

Mary Greer

July 1, 1984

Mary Greer
Geophysical Technician

BIBLIOGRAPHY

Sixty-sixth Annual Report of the

Ontario Department of Mines

Volume LXVI, Part 5, 1957

Geology of Boston Township and part of

Pacaud Township by K.D. Lawton

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 (5) years and I am qualified to write this report.

5. That I supervised and participated in this survey.

Aug 13 | 84
Date

Mary Greer
Mary Greer
Geophysical Technician

Ministry of Natural Resources
Ontario

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

Lands Adjudication Toronto. File L620225

Mining Act 2.7065

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.

Sept. 7/84

Type of Survey(s): GEOPHYSICAL

Township or Area: Boston

Claim Holder(s): ALEXANDER H. PERRON

Prospector's Licence No.: K19026

Address: 103 Government Rd. E. Kirkland Lake, Ontario

Survey Company: Perrons' Inc

Date of Survey (from & to): 01 02 84 (Day Mo. Yr.) 01 03 84 (Day Mo. Yr.)

Total Miles of line Cut: 1.1

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 - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	
Airborne Credits 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	620225				

RECEIVED
JUL 17 1984
MINING LANDS SECTION

Total number of mining claims covered by this report of work: 1

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	Date Recorded	Mining Recorder
40	JUL 9 1984	
	Date Approved as Recorded: 84-8-29	Branch Director

Date: July 9/84 Recorded Holder or Agent (Signature): 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 Ontario

Date Certified: July 9/84 Certified by (Signature): Mary Greer

1362 (81/9)

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 SURVEY - ELECTROMAGNETIC - MAGNETIC

Township or Area BOSTON TOWNSHIP

Claim Holder(s) ALEXANDER H. PERRON
103 GOVERNMENT ROAD E., KIRKLAND LAKE, ONT.

Survey Company PERRONS' 83 LIMITED

Author of Report MARY GREER

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

Covering Dates of Survey APRIL 1/84 to MAY 1/84
(linecutting to office)

Total Miles of Line Cut APPROXIMATELY ONE MILE

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: Aug 13/84 SIGNATURE: Mary Greer
Author of Report or Agent

Res. Geol. _____ Qualifications 2.4529

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	620225

If space insufficient, attach list

TOTAL CLAIMS 1

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 65 Number of Readings MAG.123 VLF-EM 116

Station interval 100 FEET Line spacing 400 FEET

Profile scale ± 40%

Contour interval 100 GAMMAS

MAGNETIC

Instrument GEOMETRICS G-816 PROTON MAGNETOMETER

Accuracy – Scale constant 1 GAMMA

Diurnal correction method CLOSED LOOPS

Base Station check-in interval (hours) APPROXIMATELY EVERY 30 MINUTES

Base Station location and value BL 0+00 58790 GAMMAS

ELECTROMAGNETIC

Instrument GEONICS EM-16

Coil configuration VERTICAL AND HORIZONTAL

Coil separation INFINITY

Accuracy ± 1%

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

Frequency ANNAPOLIS, MARYLAND 21.0 kHz
(specify V.L.F. station)

Parameters measured IN-PHASE AND QUADRATURE

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 _____

Mining Lands Section

File No 2.7065

Control Sheet

TYPE OF SURVEY ✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

Doug

Signature of Assessor

27/08/84

Date

LD

1984 08 24

Your File: 314
Our File: 2.7065

Mr. George J. Koleszar
Mining Recorder
Ministry of Natural Resources
4 Government Road East
P.O. Box 984
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic & Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claim L 620225 in the Township of Boston.

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:sc

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

cc: Mary Greer
49 McKelvie Ave
Kirkland Lake, Ontario
P2N 2K6

49 McKelvie Avenue,
Kirkland Lake, Ontario
P2N 2K6

REGISTERED MAIL

August 13, 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
Boston Township
Larder Lake Mining Division

Enclosed herewith please find a duplicate copy of the following:

- Report dated July 1, 1984, by Mary Greer entitled:

  Geophysical Survey Report on the
  Perron Property
  Barry Hollinger Grid
  Boston 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.

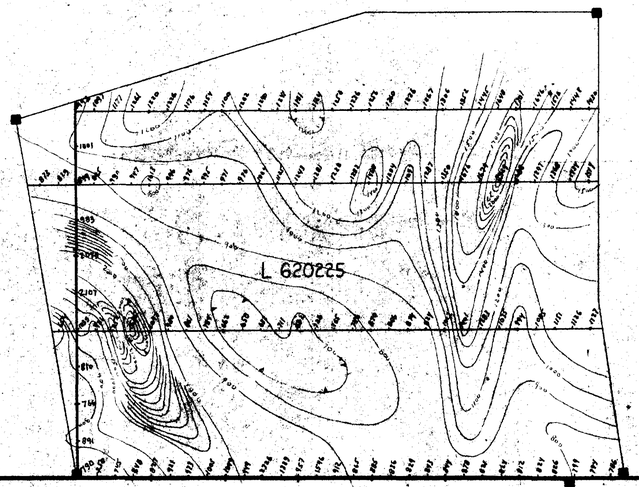
Yours truly,

Mary Greer

Mary Greer
Geophysical Technician

MG/p

Encls.



L 8·00 N

L 4·00 N

BOSTON TOWNSHIP

Township Line

Township Line

PACAUD TOWNSHIP

L- 2·00 S

L 4·00 S

L 6·00 S

L 8·00 S

L 10·00 S

L 12·00 S

Ⓟ L 17930

Ⓟ L 17931

Ⓟ L 17982

LOT 4

LOT 3

LOT 2

CON. VI

N

SYMBOLS

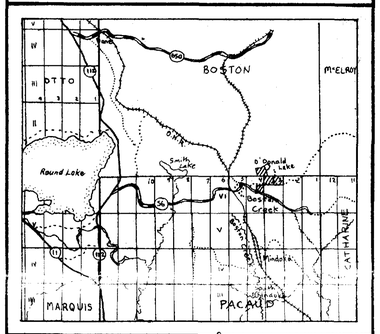
Base station
Isomagnetic contours
Claim post
Claim line

INSTRUMENTATION

GEOMETRICS G816
PROTON MAGNETOMETER
Contour interval - 100 gammas

KEY MAP

scale : 1 inch to 2 miles



Mary Grant

BARRY HOLLINGER PROPERTY

GROUND MAGNETOMETER SURVEY

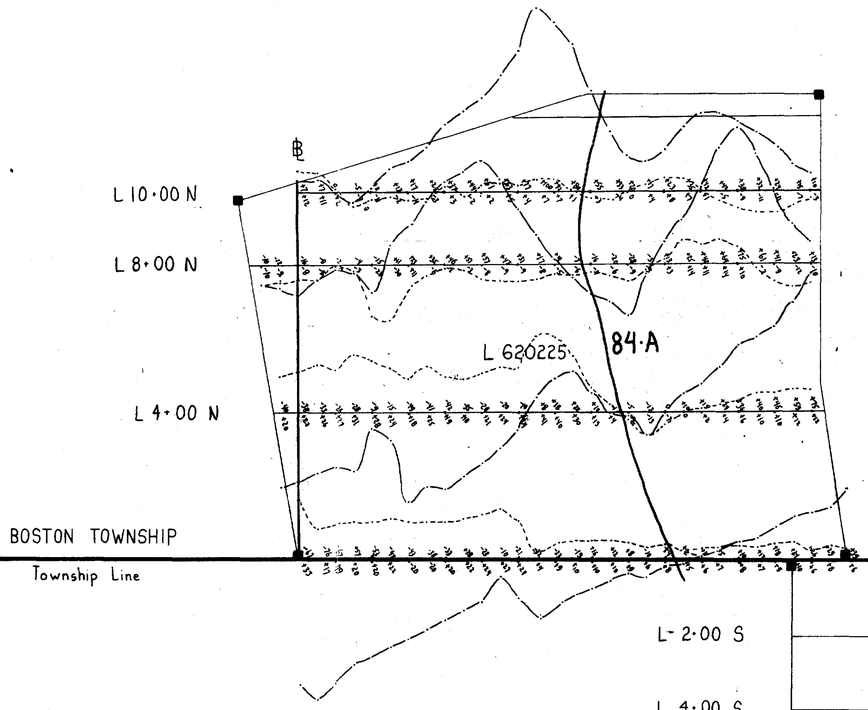
PACAUD & BOSTON
TOWNSHIPS
LARDER LAKE MINING DIVISION
DISTRICT OF TIMISKAMING, ONTARIO

1 inch to 200 feet

2.7065

PERRON & CO. LIMITED

200



BOSTON TOWNSHIP

Township Line

Township Line

PACAUD TOWNSHIP

L 2+00 S

L 4+00 S

L 6+00 S

L 8+00 S

L 10+00 S

L 12+00 S

L 17930

L 17931

CON. VI

LOT 4

LOT 3

LOT 2

N

SYMBOLS

In-phase

Quadrature

Claim post

Claim line (patent line)

Shaft

Lake

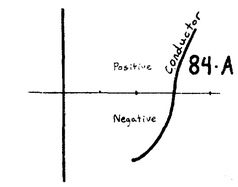
INSTRUMENTATION

GEONICS EM16 unit

Station used: Annapolis, Maryland

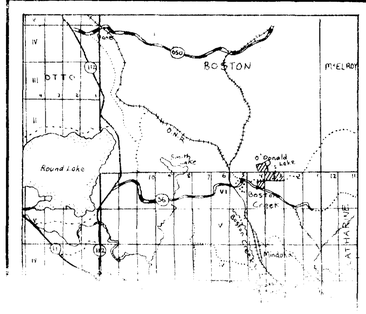
Frequency

Vertical Scale: 1 inch = ± 40%



KEY MAP

Scale: 1 inch to 2 miles



Mary Green

BARRY HOLLINGER PROPERTY

GROUND VLF-EM SURVEY

PACAUD & BOSTON
TOWNSHIPS
LARDER LAKE MINING DIVISION
DISTRICT OF TIMISKAMING, ONTARIO

200 0 200 400

1 inch to 200 feet

27065

PERRONS' 83 LIMITED

KIRKLAND LAKE

Ministry of Natural Resources
Ontario

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

Mining Act 27065

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): GEOPHYSICAL
Township or Area: Boston
Sept. 7/84

Claim Holder(s): ALEXANDER H. PERRON
Prospector's Licence No.: K19026

Address: 103 Government Rd. E. Kirkland Lake, Ontario

Survey Company: Perrons' Inc
Date of Survey (from & to): 01 07 84 (Day Mo. Yr.) 01 03 84 (Day Mo. Yr.)
Total Miles of line Cut: 1.1

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
	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - 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.
L	620225	

Mining Claim Prefix	Mining Claim Numb

32D04SW0309 2.7065 BOSTON

RECEIVED
JUL 17 1984
MINING LANDS SECTION
900

Total number of mining claims covered by this report of work: 1

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	Date Recorded	Mining Recorder
40	JUL 9 1984	
	Date Approved as Recorded	Branch Director

Date: July 9/84
Recorded Holder or Agent (Signature): 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

Date Certified:
Certified by (Signature):

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 SURVEY - ELECTROMAGNETIC - MAGNETIC

Township or Area BOSTON TOWNSHIP

Claim Holder(s) ALEXANDER H. PERRON
103 GOVERNMENT ROAD E., KIRKLAND LAKE, ONT.

Survey Company PERRONS' 83 LIMITED

Author of Report MARY GREER

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

Covering Dates of Survey APRIL 1/84 to MAY 1/84
(linecutting to office)

Total Miles of Line Cut APPROXIMATELY ONE MILE

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: Aug 13/84 SIGNATURE: Mary Greer
Author of Report or Agent

Res. Geol. _____ Qualifications 2.4529

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L	620225

If space insufficient, attach list

TOTAL CLAIMS 1

837 (5/79)

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 _____

Mining Lands Section

File No 2.7065

Control Sheet

TYPE OF SURVEY ✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

Doug

Signature of Assessor

27/08/84

Date

L D

1984 08 24

Your File: 314
Our File: 2.7065

Mr. George J. Koleszar
Mining Recorder
Ministry of Natural Resources
4 Government Road East
P.O. Box 984
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

We have received reports and maps for a Geophysical (Electromagnetic & Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claim L 620225 in the Township of Boston.

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:sc

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

cc: Mary Greer
49 McKelvie Ave
Kirkland Lake, Ontario
P2N 2K6

49 McKelvie Avenue,
Kirkland Lake, Ontario
P2N 2K6

REGISTERED MAIL

August 13, 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
Boston Township
Larder Lake Mining Division

Enclosed herewith please find a duplicate copy of the following:

- Report dated July 1, 1984, by Mary Greer entitled:

  Geophysical Survey Report on the
  Perron Property
  Barry Hollinger Grid
  Boston 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
Geophysical Technician

MG/p

Encls.

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 _____

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 65 Number of Readings MAG.123 VLF-EM 116

Station interval 100 FEET Line spacing 400 FEET

Profile scale ± 40%

Contour interval 100 GAMMAS

MAGNETIC

Instrument GEOMETRICS G-816 PROTON MAGNETOMETER

Accuracy – Scale constant 1 GAMMA

Diurnal correction method CLOSED LOOPS

Base Station check-in interval (hours) APPROXIMATELY EVERY 30 MINUTES

Base Station location and value BL 0+00 58790 GAMMAS

ELECTROMAGNETIC

Instrument GEONICS EM-16

Coil configuration VERTICAL AND HORIZONTAL

Coil separation INFINITY

Accuracy ± 1%

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

Frequency ANNAPOLIS, MARYLAND 21.0 kHz
(specify V.L.F. station)

Parameters measured IN-PHASE AND QUADRATURE

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