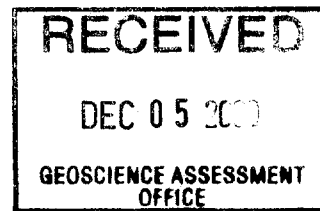




42A12SE2015 2.20754 ROBB

010



LOGISTICS AND INTERPRETATION REPORT  
**ON IP & PICSAMT SURVEYS**  
**AT HALFMOON PROJECT (8152)**  
ROBB TOWNSHIP  
ONTARIO, CANADA  
ON BEHALF OF  
**EXPLORERS ALLIANCE CORPORATION**  
00-N458A APRIL 2000



42A12SE2015 2.20754 ROBB

010C



## TABLE OF CONTENTS

ABSTRACT ..... II

1. INTRODUCTION ..... 1

2. THE HALFMOON PROPERTY ..... 2

3. CONTROLLED SOURCE EM SURVEY ..... 4

4. RESISTIVITY / INDUCED POLARISATION SURVEY ..... 6

5. SURVEY PRODUCTS..... 8

6. INTERPRETATION ..... 9

## LIST OF FIGURES

GENERAL LOCATION OF THE HALFMOON PROJECT ..... 1

INDEX OF CLAIMS AND SURVEY GRID AT HALFMOON ..... 3

THE POLE-DIPOLE ARRAY ..... 6

ELREC-10 TIMES GATES..... 7

TRANSMITTED SIGNAL AT  $C_1 - C_2$ ..... 7

DRILL TARGET DDH-2A..... 10

DRILL TARGET DDH-2B..... 11

**ABSTRACT**

*THIS GEOPHYSICAL CAMPAIGN IS PART OF AN ONGOING BASE METAL AND GOLD EXPLORATION PROGRAM BY EXPLORERS ALLIANCE CORPORATION ON THEIR HALFMOON PROPERTY LOCATED 25 KM NORTH-WEST OF TIMMINS, ONTARIO. HALFMOON IS ABOUT 3 KM WEST OF THE PAST PRODUCING KAM KOTIA MINES.*

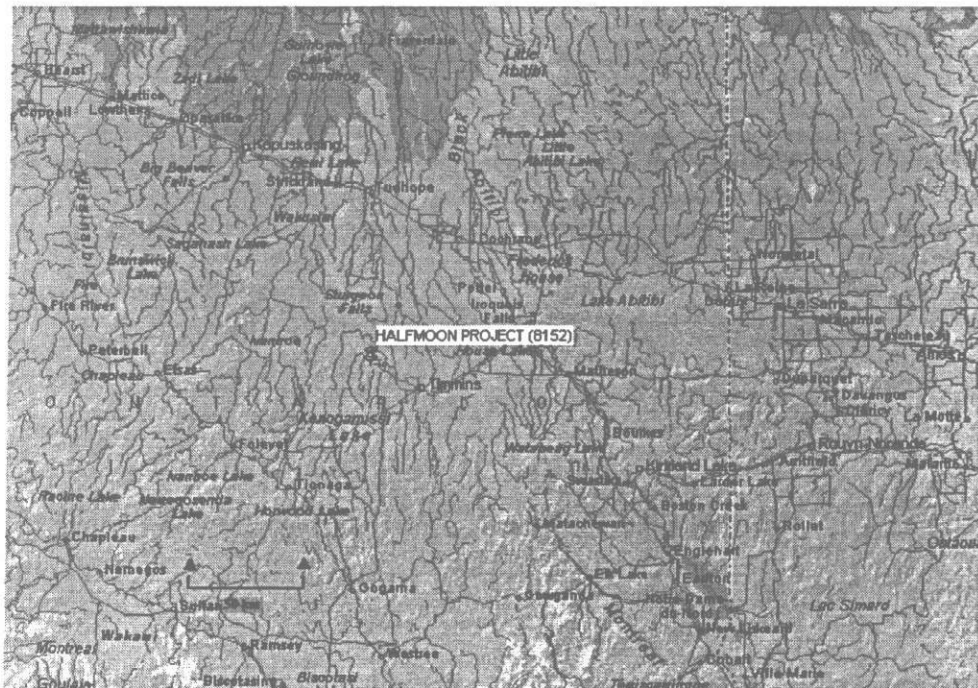
*IP (5.1 KM OF TD POLE-DIPOLE, A = 50 M, N = 1 TO 8) AND PICSAMT (3.1 KM, FREQUENCY RANGE FROM 8.75 TO 4480 HZ) WERE CARRIED OUT IN APRIL 2000 BY VAL D'OR SAGAX CREWS. SURVEY SPECIFICATIONS, INSTRUMENTATION CONTROL, DATA ACQUISITION, PROCESSING AND INTERPRETATION WERE ALL SUCCESSFULLY PERFORMED WITHIN OUR ISO9001 QUALITY SYSTEM FRAMEWORK.*

*THE SURVEYS WERE DESIGNED TO TEST THE SENSITIVITY OF THE IP AND CSEM METHOD TO THE TYPE OF ZINC-RICH SULFIDE MINERALISATION ENCOUNTERED ON HALFMOON. ALTHOUGH THE CSEM TECHNIQUE DID NOT SHOW ANY DEFINITE RESPONSE, THE IP CHARGEABILITY RESULTS ACCURATELY DETECTED THE MINERALISED ZONE INTERSECTED BY SEVERAL DRILL HOLES IN THE AREA. AN ADDITIONAL CHARGEABILITY RESPONSE (PD-2) WAS DETECTED AT DEPTH AND AT THE NORTH END OF THE SURVEYED AREA. ALTHOUGH A LARGER IP COVERAGE WOULD BE RECOMMENDED TO BETTER DEFINE THE EXTENSION OF THOSE ANOMALIES, THIS DEEPER NORTHERN ANOMALY COULD BE DRILL TESTED.*

# 1. INTRODUCTION

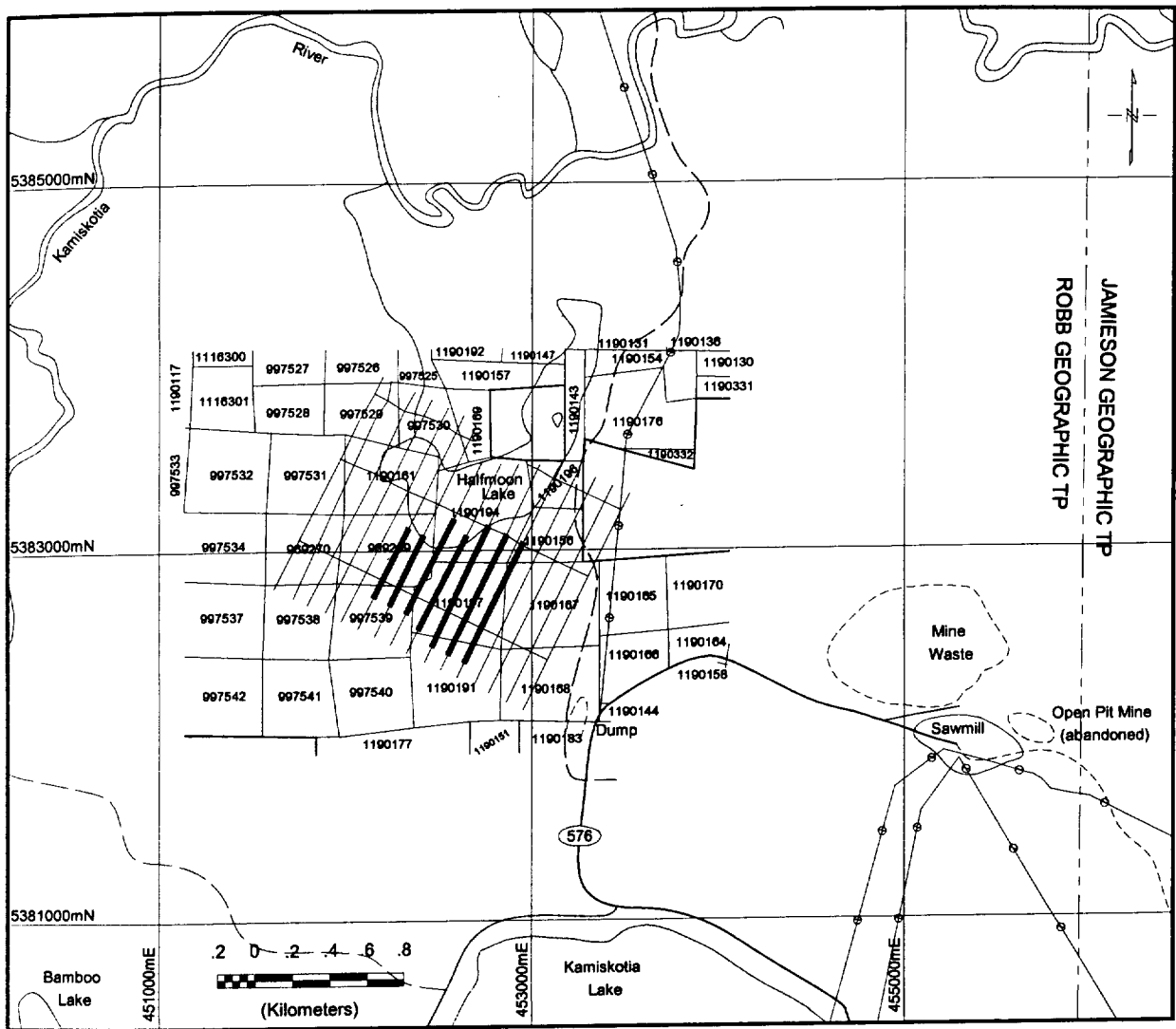
- *PROJECT ID* **Halfmoon (8152)**  
(Val d'Or Sagax Reference : 00-N458a)
- *GENERAL LOCATION* In the Abitibi Greenstone Belt,  
25 km north-west of Timmins, Ontario
- *CLIENT* **Explorers Alliance Corporation**  
168 Algonquin Boulevard East  
Timmins, Ontario  
Canada P4N 1A9  
Telephone: (705) 267-3511
- *REPRESENTATIVE* **Mr Lionel Bonhomme**  
[bonhomme@vianet.on.ca](mailto:bonhomme@vianet.on.ca)
- *SURVEY TYPES* Time Domain **Induced Polarisation**  
Controlled Source **Electromagnetic (PICSAMT)**
- *SURVEY PERIOD* From April 11<sup>th</sup> to 18<sup>th</sup>, 2000
- *GEOPHYSICAL OBJECTIVES*

  1. Delineate base metal sulphide mineralised zone (zinc-bearing).
  2. Provide effective exploration through thick overburden.
  3. Determine the IP and CSEM responses over known mineralised zones.



## 2. THE HALFMOON PROPERTY

- *LOCATION*                                   **Robb Township,**  
North-eastern Ontario, Canada  
Centred on 48° 36' N and 81° 39' W  
NTS map number: 42A/12
  
- *NEAREST SETTLEMENT*               Timmins: 25 km north-west on Highway 101
  
- *ACCESS*                                     By Highway 101 then road 576 to the north toward Halfmoon.
  
- *GEOMORPHOLOGY*                       The ground is flat and low, mostly wooded.
  
- *ARTIFICIAL FEATURE*                   None
  
- *MINING CLAIMS*                        The present survey line grid covers 7 claim blocks of the  
Halfmoon property owned by Explorers Alliance Corporation , in  
the Robb Township.  
The claim numbers encompassed in the present surveys are  
depicted on page 3.
  
- *SURVEY GRID*                            A **base line** (100+00N) was established with a N 115° azimuth.  
Seven (7) cross lines (50+00E to 56+00E) are at 100m  
intervals and picketed every 25m.
  
- *GEOLOGICAL SETTINGS*                The Property is located in the Abitibi Greenstone Belt with felsic  
volcanic rocks containing base metal sulphide mineralisation.  
It is located about 3 km west of the past producing Kam Kotia  
Mines.



Index of Claims and Survey Grid at Halfmoon

### 3. CONTROLLED SOURCE EM SURVEY

- *TYPE OF SURVEY*                                    **Frequency Domain Fixed Loop Electromagnetic**
  
- *PERSONNEL*    **Martin Dubois, Geologist, Crew Leader, Rx operator**  
**Herbert Pribil, Tx operator**  
**Mario Chouinard, Field Assistant**  
**Gilles Bacon, T.Sc., Logistics & Instrumentation Control**  
**Carole Picard, T.Sc., Data Processing & Plotting**  
**Pierre Bérubé, P. Eng., QC & Interpretation**
  
- *SURVEY COVERAGE*                                    **3.1 line-km**  
**Line 50+00E to 56+00E**
  
- *SURVEY PERIOD*    **April 15<sup>th</sup> and 18<sup>th</sup>, 2000**  
**Four (4) survey days.**  
**No breakdown or weather day.**
  
- *RECEIVER (RX)*    **IRIS Magnetotelluric Receiver serial #027**  
**Two magnetic inputs**  
  
**Antennas: 2 CM5 coils (H<sub>z</sub> and H<sub>y</sub>)**  
**Sensitivity: 50 mV/nT**  
**Spectrum: 1 - 10 000 Hz**  
  
**Typical Noise at 1000 Hz : 2 x 10<sup>-8</sup> A/m**
  
- *TRANSMITTER (TX)*    **IRIS Tx-3000 serial #011**  
**Power Supply : Honda 220V/5000W Motor Generator**  
**Maximum Output : up to 3.0 kW, or 20 A or 800V**  
**Loop : 200m x 300m, double turn, 12 Ω**  
**Centred at 53+00E, 108+00N**  
**Output Current at 4480 Hz: 3.5 A**  
**Output Current from 8.75 Hz to 560 Hz: 14 A**
  
- *FREQUENCIES USED (Hz)*                                    **8.75, 17.5, 35, 70, 140, 280, 560, 1120, 2240, 4480**

□ *APPARENT RESISTIVITY  
CALCULATION*

$$\rho_a^P = K_P \left( \frac{H_r}{H_z} \right)^P$$

$$\rho_a^Q = K_Q \left( \frac{H_r}{H_z} \right)^Q$$

$P$  = real (in-phase) component

$Q$  = quadrature (out-of-phase) component

$K$  = is a function of the frequency and the distance from the loop

□ *ISO 9001 QUALITY  
CONTROL EVIDENCES  
(QUALITY RECORDS  
AVAILABLE UPON REQUEST)*

Before the survey :

- ✓ Maximum output capabilities of the Transmitter & Motor Generator were checked in VDS calibrated loads.
- ✓ Receiver and antennas were calibrated over the 8,75 to 4480 Hz frequency range.

During data acquisition :

- ✓ Quadrature readings showing a >10% error were repeated. (average error is **3 %**)
- ✓ Enough pulses were stacked. (average is **6 pulses**)

At the Base of Operations :

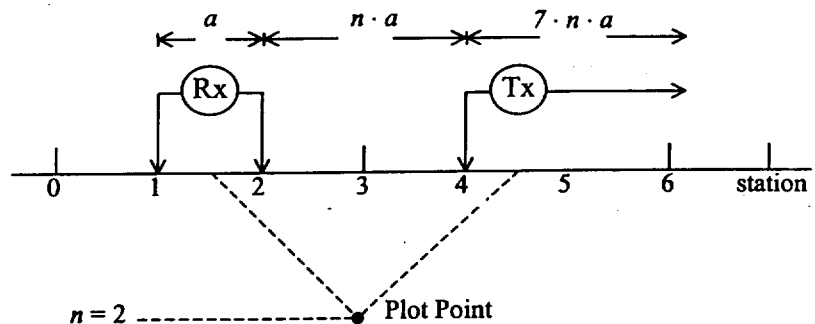
- ✓ Field QCs were inspected & validated
- ✓ In-phase readings were calculated, corrected for source-receiver geometry and some spurious values discarded



## 4. RESISTIVITY / INDUCED POLARISATION SURVEY

□ *TYPE OF SURVEY*

**Time Domain** Resistivity/Induced Polarisation  
**Pole-Dipole** array, " $a$ " = 50m, " $n$ " = 1 to 8  
 Location of  $C_{\alpha}$ : L40+00E, Station 70+00N (> 3.0 km distant)



□ *PERSONNEL*

**Michel Coulombe**, Geophysical Operator, Crew Leader  
 Gabriel Pilon, Field Assistant  
 Marcel Nault, Field Assistant  
 Michel Guimont, Field Assistant  
 Roger Desforges, Field Assistant  
**Martin Dubois**, Geologist, Fieldwork Supervisor  
**Gilles Bacon**, T.Sc., Logistics & Instrumentation Control  
**Carole Picard**, T.Sc., Data Processing & Plotting  
**Dominique Bérubé**, Geophysicist, QC & Interpretation

□ *SURVEY COVERAGE*

5.1 line-km

□ *SURVEY PERIOD*

April 11<sup>th</sup> and 12<sup>th</sup>, 2000  
 Two (2) survey days.  
 No breakdown.

□ *SPECIAL FEATURES*

Results were processed on a daily basis using our proprietary *Refusilo*<sup>TM</sup> package in order to monitor both the efficiency of the survey parameters and the data quality.  
 Spectral IP processing using the Australian Geophysical Research (AGR) Spectral processing package.

□ *IP RECEIVER (R<sub>x</sub>)*

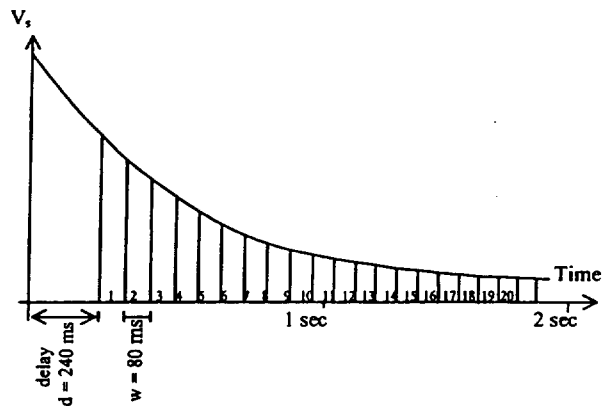
IRIS **Elrec-10** serial #111 (10 input channels)  
Electrodes: stainless steel stakes

**V<sub>p</sub>** Primary voltage measurement :

- ◇ Input impedance : 10 M $\Omega$
- ◇ Resolution : 0.001 mV
- ◇ Typical accuracy : **0.3%**

**M<sub>a</sub>** Apparent chargeability measurement :

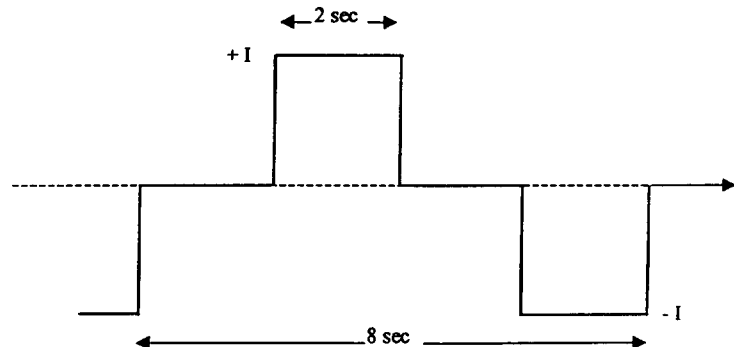
- ◇ Resolution : 0.1 mV/V
- ◇ Typical accuracy : **0.6%**
- ◇ Arithmetic sampling mode, 20 time slices (M<sub>1</sub> to M<sub>20</sub>)



- ◇ All windows are normalised with respect to a standard decay curve for QC in the field.

□ *IP TRANSMITTER (T<sub>x</sub>)*

GDD Instruments **TxII** serial #207  
Power supply : Kodiak 1800 W Motor Generator  
Maximum output : up to 1.4kW or **10 A** or 2000 V  
Electrodes : stainless steel stakes  
Resolution on output current display **I** : 1 mA  
Waveform : bipolar square wave at 50% duty cycle  
Pulse duration : 2 seconds



□ *APPARENT RESISTIVITY CALCULATION*

$$\rho_a = 2\pi \cdot \frac{V_p}{I} \cdot n(n+1) \cdot a \quad (\text{in } \Omega \cdot \text{m})$$

Cumulative error: **5% max**, mainly related to chaining accuracy

- *ISO 9001 QUALITY CONTROL EVIDENCES (QUALITY RECORDS AVAILABLE UPON REQUEST)*

Before the survey :

- ✓ Transmitter & Motor Generator were checked for maximum output in VDS calibrated loads.
- ✓ Receiver was checked with VDS SIMP™ certified calibrated V<sub>p</sub> & M signal simulator.

During data acquisition :

- ✓ R<sub>x</sub> & T<sub>x</sub> cable insulation were verified every morning.
- ✓ Output current was always sufficient (average is **928 mA**, minimum 310 mA)
- ✓ Contact resistance at Rx was always acceptable (average is **0.4 K $\Omega$** , maximum 4.4 K $\Omega$ )
- ✓ V<sub>p</sub> level at Rx was high enough (n=8 average is **62.9 mV**, minimum 27.0 mV)
- ✓ Enough pulses were stacked. (kept constant at **5 pulses** for Spectral IP)

At the Base of Operations :

- ✓ Field QCs were inspected & validated
- ✓ Each IP decay curve was analysed with *Refusilo™*:
  - **99.5%** of observed gates were found to fit on a pure electrode polarisation relaxation curve.
  - Rejected gates were not included in the computation of the plotted M<sub>a</sub>.
- ✓ The average error on M<sub>a</sub> at n=8 is **0.25 mV/V**

## 5. SURVEY PRODUCTS

The following colour plates are bounded at the end of this report or inserted into pockets. Our ISO9001 Quality System requires that every final map is inspected by at least two qualified persons before being approved and included within a final report. Moreover, the author have to submit his interpretation concept to the Engineering Committee for review and approval before completing the interpretation and writing the final report.

| Plate Number             | Description   | Scale     |
|--------------------------|---|-----------|
| L50+00E<br>to<br>L56+00E | PICSAMT (CSEM) Survey<br>In-Phase and Out-of-Phase Apparent Resistivity Frequency<br>Pseudosections (7 plates bounded at the end)   | 1 : 5 000 |
| L50+00E<br>to<br>L56+00E | Colour Apparent Resistivity & Chargeability Pseudosections and<br><i>image2D™</i> True-depth Sections with four spectral parameters and<br>Interpretation (7 plates bounded at the end) | 1 : 5 000 |
| 8.2                      | Colour <i>image2D™</i> Resistivity at 125m Depth  | 1 : 5 000 |
| 8.3                      | Colour <i>image2D™</i> Chargeability at 125m Depth  | 1 : 5 000 |
| 10                       | Geophysical Interpretation  | 1 : 5 000 |

## 6. INTERPRETATION

### *A WORD ABOUT THE CSEM TECHNIQUE*

CSEM is a fixed-loop deep penetrating system that is quite sensitive to a wide range of mineral targets because

- It operates in the mid-range induction spectrum as opposed to HLEM (low-induction) and VLF-EM (high induction).
- It uses a relatively small transmitter loop (200m x 300m in this case) for best coupling with targets the size of a mineral deposit.
- Being a purely inductive technique, it is also free of static shift effects as encountered in magnetotellurics (CSAMT for instance).

In the profiling-sounding mode, readings are taken at about 10 frequencies to detect conductive targets up to 500 m depth. In-phase and Out-of-phase field ratios (Hr/Hz) are normalised by the Tx-Rx distance and the frequency to derive a set of two apparent resistivity pseudosections. These are interpreted with the help of numerical models.

### *CSEM TEST-SURVEY RESULTS*

This survey was intended as a test of the CSEM sensitivity to the presence of zinc-rich sulfide occurrences like those discovered at Halfmoon. Unfortunately, the quadrature (out-of-phase) results which are the most sensitive to poorly conductive targets are devoided of anomalous signatures along all pseudosections. The shift in the colour spectrum to warmer shades in the northern direction is related to an increase in overburden thickness toward the lake.

The results therefore appear as discouraging as those of the other types of EM surveys tested in the area. The overall picture is quite similar to the galvanic apparent resistivity results from the IP survey.

Measurements done on core samples confirm the absence of resistivity contrast between the mineralisations and the host rocks, fully explaining the failure of all EM techniques to react to these targets.

### *RESISTIVITY & IP RESPONSES*

The resistivity values show little variation throughout the whole surveyed grid. Ranging from values of about 200 to 400  $\Omega$ .m on the first separations (near surface) to values of about 1000 to 2000  $\Omega$ .m on the last separations (at depth). This resistivity increase at depth indicates that the bedrock was reached by the present survey.

The chargeability values generally show a low range of variation with anomalous areas reaching 1.5 to 4 mV/V over a background of about 0.5 mV/V. Two chargeability anomalies were identified on the Halfmoon grid and were labelled PD-1 and PD-2. They are shown along the survey lines on the Geophysical Interpretation Map and on the Pseudosections Plates. The characteristic of the IP anomalies are tabulated in the table on page 11.

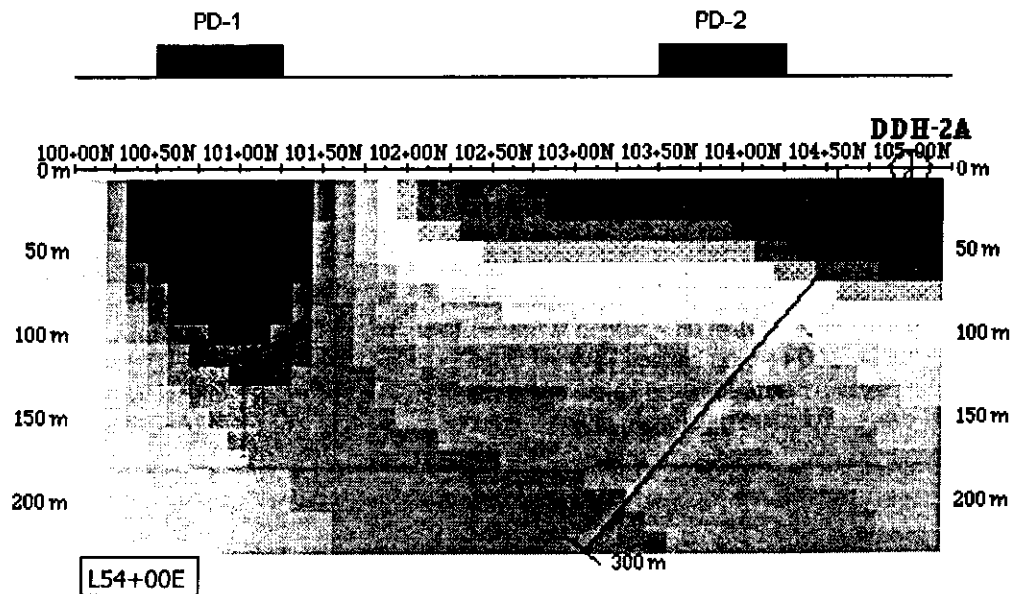
The spectral parameters show no variation throughout the surveyed area probably indicating little variation in the rock characteristics (grain size and distribution).

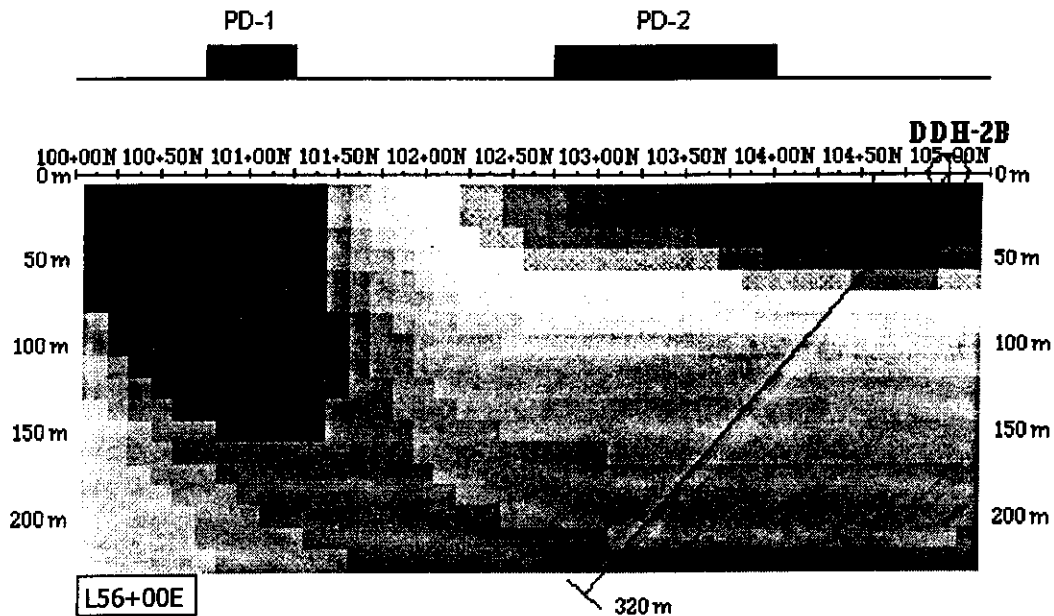
*EXPLORATION PROSPECTS*

**Anomaly PD-1** corresponds very well with the mineralisation that was intersected by some of the drill holes just north of 101+00N. This anomaly shows a well defined response from line 52+00E to line 56+00E and is therefore open to the east. It can be trace very well with the chargeability response as well as the drill hole results, to name a few, HM99-32 intersects some semi-massive sulfides at 101+30N, R44-11 intersects some sulfides at about 101+25N, and especially on line 54+00E with holes EAL98-01 and HM98-19 that intersected some massive and semi-massive sulfide around 101+20N. There seems to be a very weak response on line 51+00E and no response on line 50+00E, but the IP coverage on this area is too limited to allow a confident conclusion about the extension of the mineralisation to the west. Drill hole HM99-35, on line 51+50E, did intersect some sulfide mineralisation just north of 101+00N, therefore the length of the lines in this area should be extended to the north and south as well as the survey area extended to the west to better determine the possible extension of this anomaly.

**Anomaly PD-2** is located just north of PD-1, north of 103+00N. It is not always very well defined being located at the edge of the survey area and at depth. It seems to originate from a larger source at depth and with a signature sometime affected by the PD-1 response, it is therefore more problematic to pin point an accurate target. Two drill hole targets are recommended on this anomaly but any additional geoscientific information should be evaluated to better identify reliable targets.

A first target is recommended on line 54+00E with a second target recommended on line 56+00E, although the IP coverage should be extended to the north and east before this last is investigated by DDH.





**Description of the IP anomalies at Halfmoon**

| Anomaly | Location |           | Contrast |      | Comments  |
|---------|----------|-----------|----------|------|---|
|         | Line     | Station   | IP       | Res. |   |
| PD-1    | 52+00E   | 101+63N   | 1        | -    | - Chargeability response that corresponds to the sulfide mineralisation located by previous DDHs.<br>- Its extension is open to the east and weak to the west but possibly extending further west.<br>- Additional IP coverage is recommended to the east and west with line extending further north and south. Line of over 1 km in length are preferable. |
|         | 53+00E   | 101+38N   | 1        | -    |   |
|         | 54+00E   | 100+88N   | 1        | -    |   |
|         | 55+00E   | 101+13N   | 2        | -    |   |
|         | 56+00E   | 101+00N   | 1        | -    |   |
| PD-2    | 51+00E   | North End | ?        | -    | - Chargeability anomaly located on the northern edge of the IP coverage.<br>- Located at depth (~ 50 to 100 metres to top of source).<br>- <b>Could be drill tested on 54+00E.</b> Although additional IP coverage would be preferable to better define more accurate targets. Pending results, could also be drill tested on 56+00E.                       |
|         | 52+00E   | 103+00N   | 1        | -    |   |
|         | 53+00E   | North End | 1        | -    |   |
|         | 54+00E   | 103+88N   | 1        | -    |   |
|         | 55+00E   | 103+88N   | 1        | -    |   |
|         | 56+00E   | 103+38N   | 1        | -    |   |



The interpretation of the IP survey data embodied in this report is essentially a geophysical appraisal of the Halfmoon Property. As such, it incorporates only as much geoscientific information as the author has on hand at the time. Geologists thoroughly familiar with the area are in a better position to evaluate the geological significance of the various geophysical signatures. Moreover, as time passes and information provided by follow-up programs are compiled, exploration targets recognised in this study might be down- or up-graded.

Respectfully submitted,  
Val d'Or Sagax inc.

A handwritten signature in black ink, appearing to read 'D. Bérubé', written in a cursive style.

Dominique Bérubé, B.Sc.  
Geophysicist

A handwritten signature in black ink, appearing to read 'P. Bérubé', written in a cursive style.

Pierre Bérubé, Eng.  
Geophysicist

DB/PB/ag

Transaction Number (office use)  
 W-0060-00491  
 Assessment Files Research Imaging



42A12SE2015 2.20754 ROBB

900

of Subsections 65(2) and 68(3) of the Mining Act. Under section 8 of the Mining Act, this assessment work and correspond with the mining land holder. Questions about this collection department and Mines, 3rd Floor, 503 Rattway Lane West, Sudbury, Ontario, P3S 8E5

*Revised Copy*

re recording a claim, use form O240.

2.20754

Recorded holder(s) (Attach a list if necessary)

|   |  |
|---|--|
| name<br><i>under (optional) Explorers Alliance Corp</i>   | Client Number<br><i>303065</i>           |
| address<br><i>1168 Algona Road, East Timmins, Ontario P4N 1A7</i>                               | Telephone Number<br><i>705-267-3511</i>  |
|   | Fax Number<br><i>705-267-3121</i>        |
| name<br><i>Falconbridge Limited / John P. Hunt</i>  | Client Number<br><i>130679 / 1146892</i> |
| address<br><i>95 Wellington Street West, Suite 306, Market Square, Toronto, Ontario M5T 2V4</i> | Telephone Number<br><i>705-267-6464</i>  |
|   | Fax Number<br><i>705-264-3260</i>        |

Phone 416-456-5786  
 Fax 416-956-5749

Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

|   |  |   |
|---|--|---|
| <input checked="" type="checkbox"/> Geotechnical: prospecting, surveys, assays and work under section 18 (regs) | <input type="checkbox"/> Physical: drilling stripping, trenching and associated assays | <input type="checkbox"/> Rehabilitation |
| Work Type: <i>CSEM / IP</i>   |  |   |
| Office Use  |  |   |
| Commodity   |  |   |
| Total \$ Value of Work Claimed  |  | <i>8742</i>                             |
| NTS Reference   |  |   |
| Mining Division   |  | <i>Porcupine</i>                        |
| Resident Geologist District   |  | <i>Timmins</i>                          |

- obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form O212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

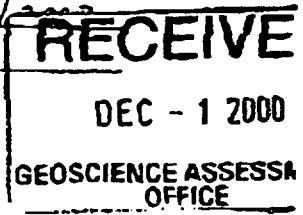
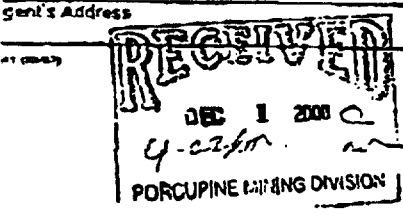
Person or companies who prepared the technical report (Attach a list if necessary)

|   |   |
|---|---|
| name<br><i>VALDOR SAFAX</i>                           | Telephone Number<br><i>819-874-2001</i> |
| address<br><i>50 Lamont Blvd, Val d'Or PQ J9P 2M6</i> | Fax Number<br><i>819 874 2002</i>       |
| name  | Telephone Number                        |
| address   | Fax Number                              |
| name  | Telephone Number                        |
| address   | Fax Number                              |

Certification by Recorded Holder or Agent

*Paul Blund* do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: *[Signature]* Date: *Nov 30/2000*



DEC 04 '00 15:16

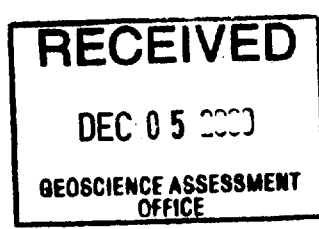
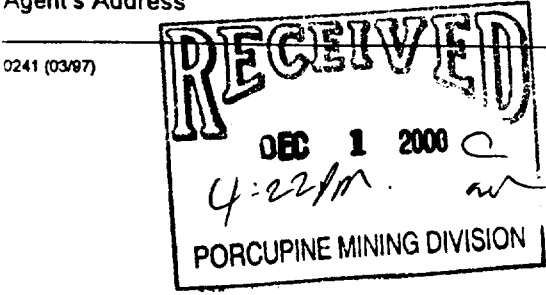
2673131

ROBE 00

4. Certification by Recorded Holder or Agent

*Paul Blund* do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: *[Signature]* Date: *Nov 30/2000*





land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

(Location: 0049)

2.20754

| Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map. | Number of Claim Units. For other mining land, list hectares. | Value of work performed on this claim or other mining land. | Value of work applied to this claim. | Value of work assigned to other mining claims. | Bank. Value of work to be distributed at a future date |
|---|--|---|--------------------------------------|--|--|
| eg TB 7827  | 16 ha  | \$26,825  | N/A                                  | \$24,000                                       | \$2,825  |
| eg 1234567  | 12   | 0   | \$24,000                             | 0  | 0  |
| eg 1234568  | 2  | \$ 8,892  | \$ 4,000                             | 0  | \$4,892  |
| 1 997539  | 1  | 880   |                                      | 360  | 520  |
| 2 969269  | 1  | 2135  |                                      |  | 2135   |
| 3 1190194   | 1  | 1033  |                                      |  | 1033   |
| 4 1190197   | 1  | 3814  |                                      |  | 3814   |
| 5 1190191   | 1  | 680   |                                      | 680  | 0  |
| 6 1190156   | 1  | 100   |                                      | 100  | 0  |
| 7 1190167   | 1  | 100   |                                      | 100  | 0  |
| 8 1212932   | 13   |   | 1240                                 |  |  |
| 9   |  |   |                                      |  |  |
| 10  |  |   |                                      |  |  |
| 11  |  |   |                                      |  |  |
| 12  |  |   |                                      |  |  |
| 13  |  |   |                                      |  |  |
| 14  |  |   |                                      |  |  |
| 15  |  |   |                                      |  |  |
| Column Totals   |  | 8742  | 1240                                 | 1240   | 7502   |

I, Liam Barlament (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: [Signature] Date: Dec 30/2000

**6. Instructions for cutting back credits that are not approved.**

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

**For Office Use Only**

Received Stamp

0241 (03/97)

DEC 1 2000  
4:22 PM  
PORCUPINE MINING DIVISION

|   |                                |
|---|--------------------------------|
| Deemed Approved Date                                  | Date Notification Sent         |
| Date Approved   | Total Value of Credit Approved |
| Approved for Recording by Mining Recorder (Signature) |                                |

**RECEIVED**  
DEC 05 2000  
GEOSCIENCE ASSESSMENT OFFICE

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 133 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

| Work Type  | Units of Work<br><small>Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.</small> | Cost Per Unit of work | Total Cost  |
|--|---|-----------------------|-------------|
| CSEM.  | 3Km   | 1250/Km.              | 3750        |
| IP.  | 4.175   | 855/Km.               | 3570        |
| Reurbish lines   |   | FLAT RATE             | 850         |
| Associated Costs (e.g. supplies, mobilization and demobilization). |   |                       |             |
|  |   |                       |             |
|  |   |                       |             |
| Transportation Costs   |   |                       |             |
|  |   |                       |             |
| Food and Lodging Costs   |   |                       |             |
|  |   |                       | 8170        |
|  |   |                       | 572         |
| <b>Total Value of Assessment Work</b>                              |   |                       | <b>8742</b> |

**RECEIVED**  
DEC 1 2000  
4:22 PM  
FORCING DIVISION

**RECEIVED**  
DEC 05 2000  
GEOSCIENCE ASSESSMENT OFFICE

If work is paid after two years and up to two years after performance, it can only be included in the Value of Assessment Work. If this situation applies to your claim, use the calculation below:

Value of Assessment Work x 0.50 = Total \$ amount of work

**Note:**  
 - Work older than 5 years is not eligible for credit.  
 - A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

Certification verifying costs:  
 I, Paul Belmont, do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Agent I am authorized to make this certification.  
(please print full name)  
(recorded holder, agent, or state company position with signing authority)

Signature: [Signature] Date: Nov 30 / 2000

Geoscience Assessment Office  
933 Ramsey Lake Road  
6th Floor  
Sudbury, Ontario  
P3E 6B5

Telephone: (888) 415-9845  
Fax: (877) 670-1555

January 3, 2001

FALCONBRIDGE LIMITED  
SUITE 1200, 95 WELLINGTON STREET WEST  
TORONTO, ONTARIO  
M5J-2V4

Visit our website at:  
[www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm](http://www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm)

Dear Sir or Madam:

**Submission Number:** 2.20754

**Status**

**Subject: Transaction Number(s):** W0060.00491 Approval

---

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact JIM MCAULEY by e-mail at [james.mcauley@ndm.gov.on.ca](mailto:james.mcauley@ndm.gov.on.ca) or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY  
Lucille Jerome  
Acting Supervisor, Geoscience Assessment Office  
Mining Lands Section

# Work Report Assessment Results

---

Submission Number: 2.20754

Date Correspondence Sent: January 03, 2001

Assessor: JIM MCAULEY

---

| Transaction Number | First Claim Number | Township(s) / Area(s) | Status   | Approval Date    |
|--------------------|--------------------|-----------------------|----------|------------------|
| W0060.00491        | 997539             | ROBB                  | Approval | January 03, 2001 |

**Section:**

14 Geophysical EM  
14 Geophysical IP

**Correspondence to:**

Resident Geologist  
South Porcupine, ON

Assessment Files Library  
Sudbury, ON

**Recorded Holder(s) and/or Agent(s):**

Lionel Bonhomme  
TIMMINS, ONTARIO, CANADA

FALCONBRIDGE LIMITED  
TORONTO, ONTARIO

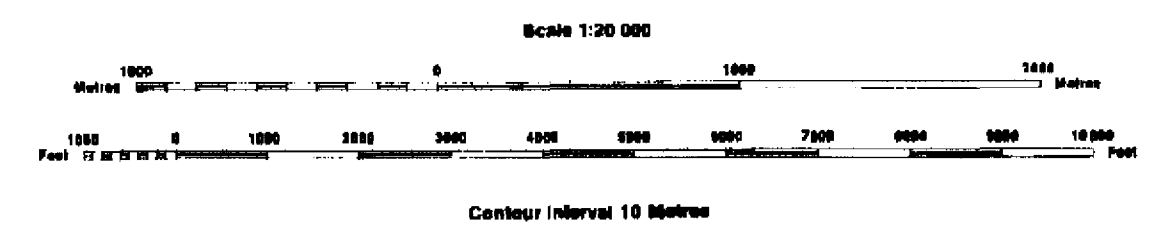
JOHN PETER HUOT  
TIMMINS, ONTARIO

---

**INDEX TO LAND DISPOSITION**

PLAN  
**G-3968**  
 TOWNSHIP  
**ROBB**

M.N.R. ADMINISTRATIVE DISTRICT  
**TIMMINS**  
 MINING DIVISION  
**PORCUPINE**  
 LAND TITLER/REGISTRY DIVISION  
**COCHRANE**



**AREAS WITHDRAWN FROM DISPOSITION**

- MRO - Mining Rights Only
- SRO - Surface Rights Only
- M+S - Mining and Surface Rights

**SYMBOLS**

- Boundary
- Township, Meridian, Baseline
- Road allowance, surveyed
- Lot/Concession, surveyed
- Parcel, surveyed
- Right-of-way, road
- Reservation
- Chf. Pt. File
- Contour
- Control point (horizontal)
- Flooded land
- Pipeline (above ground)
- Road, highway, county, township
- Shoreline (original)
- Transmission line
- Wooded area

- Ⓜ M.N.R. RESERVE
- Ⓜ THIS TWP IS SUBJECT TO FOREST ACTIVITY IN 1984/85. FURTHER INFORMATION AVAILABLE ON FILE.
- Ⓜ PLANS OF SUBDIVISION - NOT OPEN FOR STAKING
- Ⓜ PROPOSED SURFACE RIGHTS DISPOSITION UNDER THE P.L.A. - NOTICE RECEIVED MARCH 7, 1981
- Ⓜ THIS TWP IS SUBJECT TO FOREST ACTIVITY IN 1984/85. FURTHER INFORMATION ON FILE.
- Ⓜ MINE AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 38 OF THE MINING ACT, R.S.O. 1980. ORDER NO. W.P. 4/87 NER DATED APR. 28/87
- Ⓜ MINE AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 38 OF THE MINING ACT, R.S.O. 1980. ORDER NO. W.P. 4/87 NER DATED APR. 28/87
- Ⓜ MINE AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 38 OF THE MINING ACT, R.S.O. 1980. ORDER NO. W.P. 4/87 NER DATED APR. 28/87
- Ⓜ MINE AND SURFACE RIGHTS WITHDRAWN UNDER SECTION 38 OF THE MINING ACT, R.S.O. 1980. ORDER NO. W.P. 4/87 NER DATED APR. 28/87

**DISPOSITION OF CROWN LANDS**

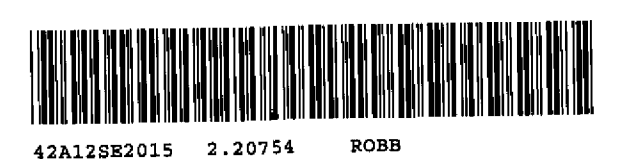
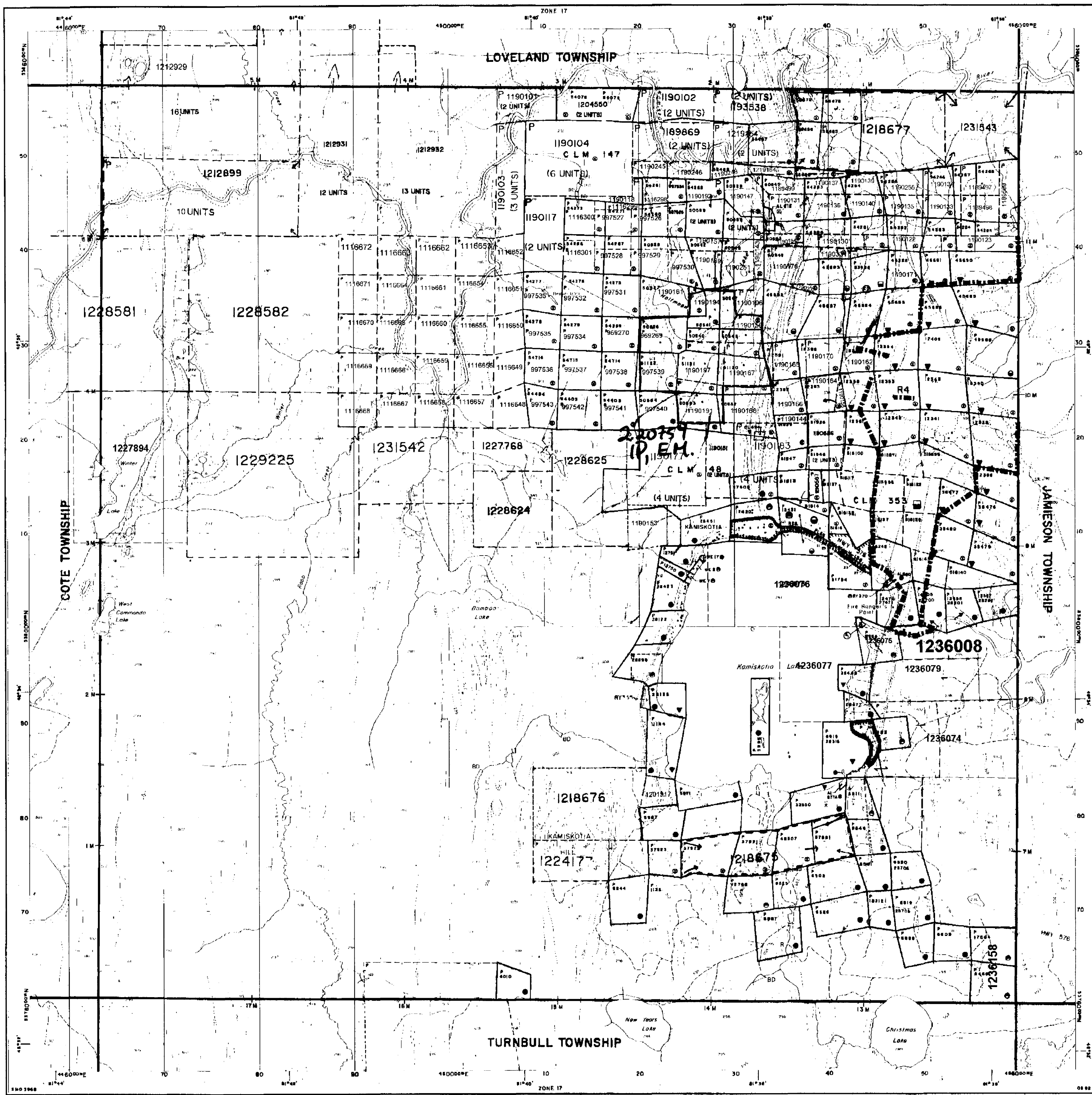
- Patent
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only
- Lease
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only
- Licence of Occupation
- Order-in-Council
- Cancelled
- Reservation
- Band & Gravel

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

ACTIVATED AUGUST 13, 1982  
 BY D.C.  
 CHECKED BY G.W.

Map base and land disposal on drafting by Surveys and Mapping Branch, Ministry of Natural Resources

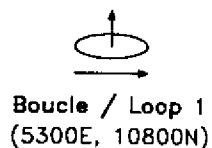
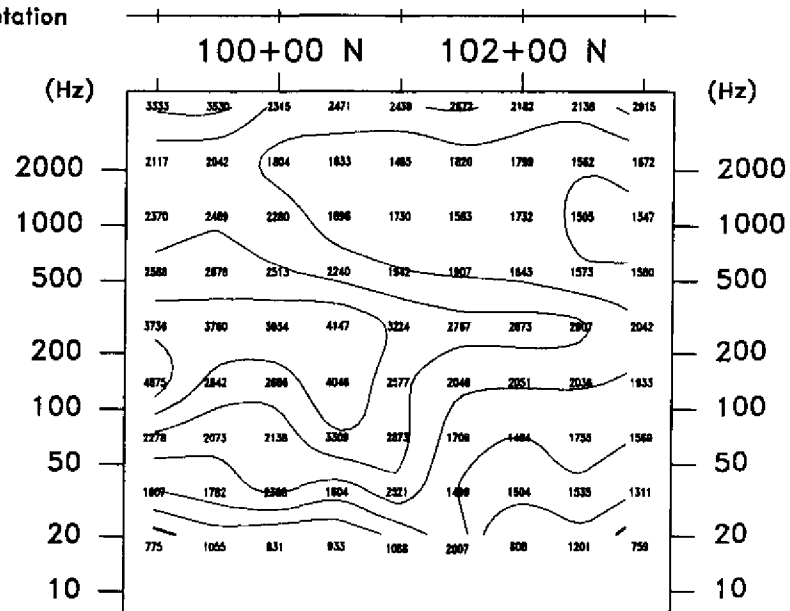
The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only



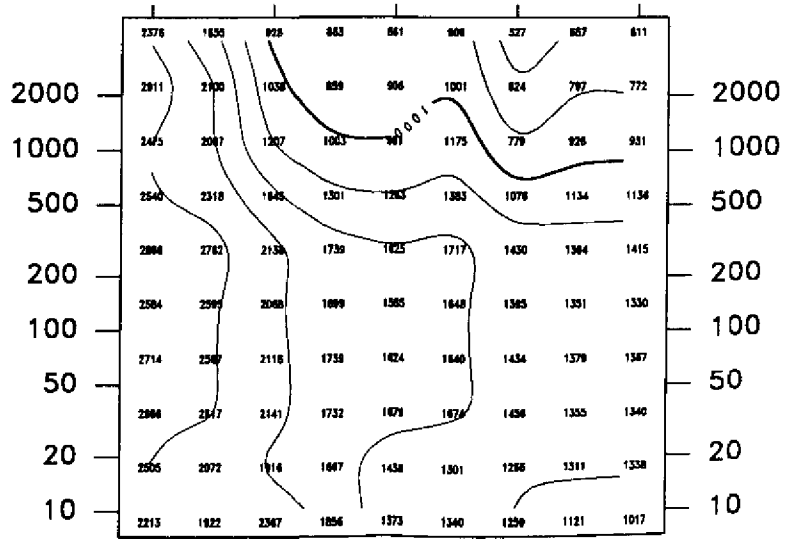
# LINE 50+00E

Interpretation

IN-PHASE

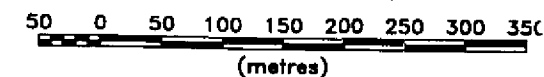


OUT-OF-PHASE



Instrumentation: 3 kW IRIS  
Log Contours

Scale 1: 5000



**EXPLORERS ALLIANCE CORP.**  
HALFMOON PROJECT (8152)  
ROBB Township, Ontario

**PICSAMT (CSEM) SURVEY**  
Apparent Resistivity  
Frequency Pseudosection

Interpretation: P. Berube, P.Eng.  
Survey by: Val d'Or Sagax Inc.  
Survey Date: April 2000  
Project 00-N458A



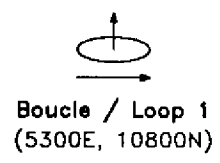
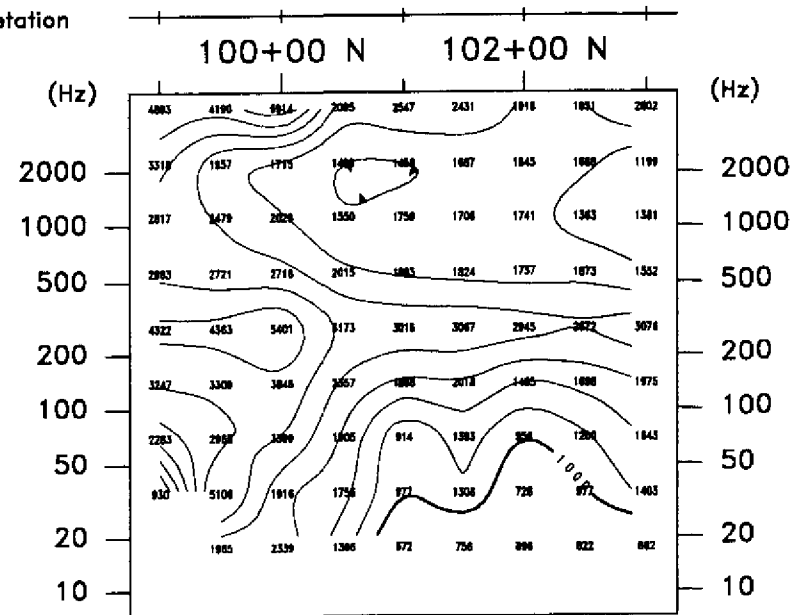
210

ROBB

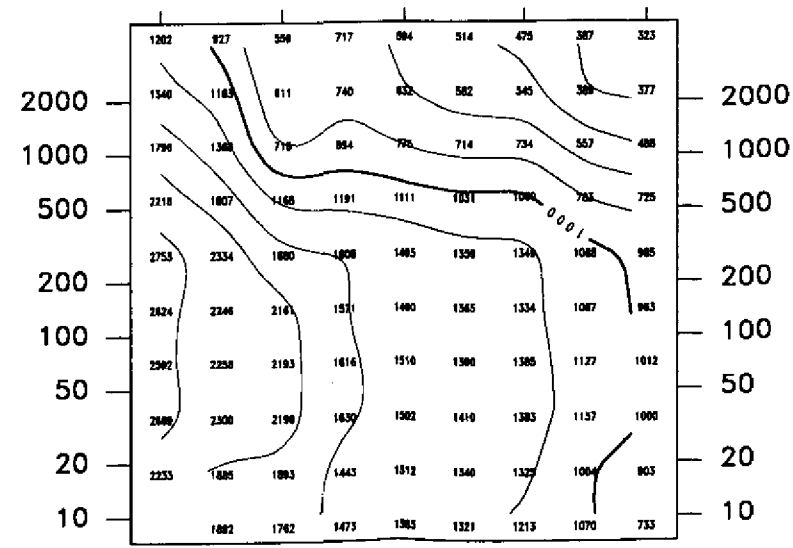
42A12SE2015 2.20754

# LINE 51+00E

Interpretation

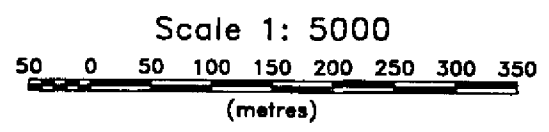


IN-PHASE



OUT-OF-PHASE

Instrumentation: 3 kW IRIS  
Log Contours



**EXPLORERS ALLIANCE CORP.**  
HALFMOON PROJECT (8152)  
ROBB Township, Ontario

**PICSAMT (CSEM) SURVEY**  
Apparent Resistivity  
Frequency Pseudosection

Interpretation: P. Berube, P.Eng.  
Survey by: Val d'Or Sagax Inc.  
Survey Date: April 2000  
Project 00-N458A



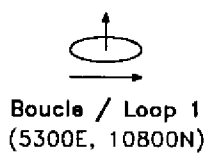
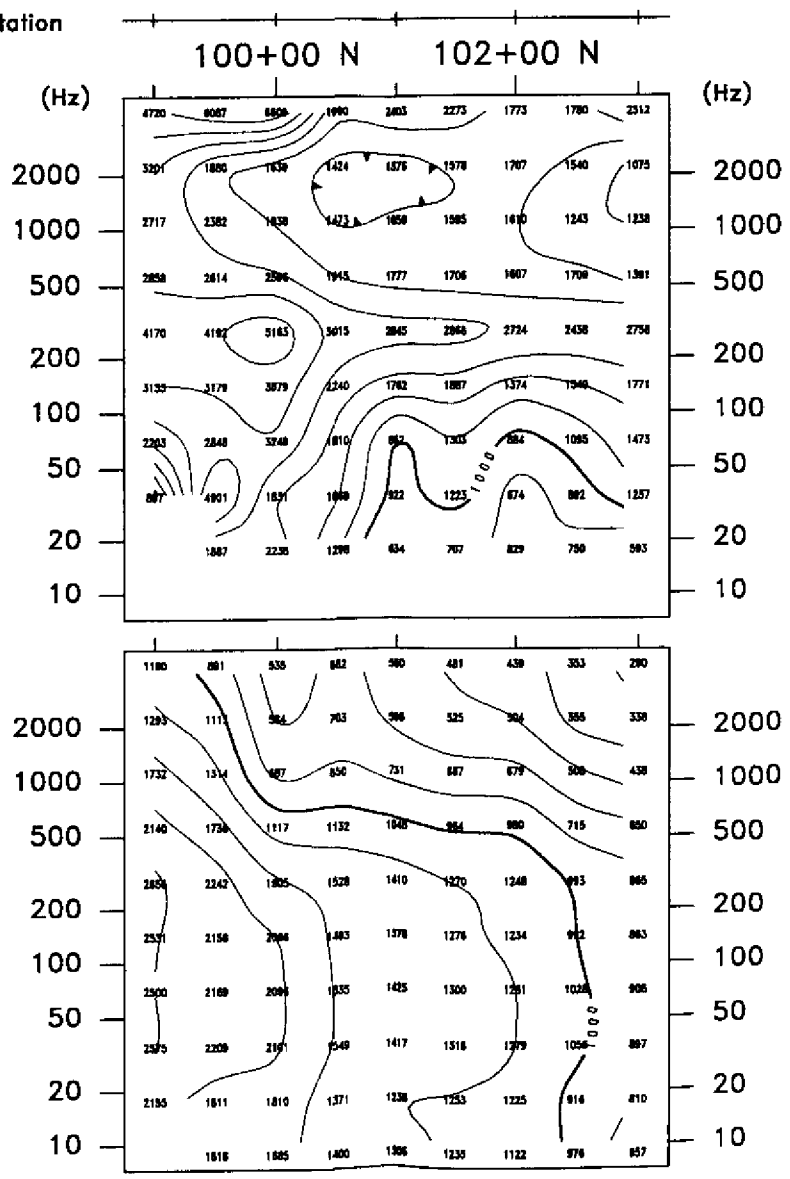


42A12SE2015 2.20754 ROBB

230

IN-PHASE  
OUT-OF-PHASE

Interpretation



# LINE 52+00E

Instrumentation: 3 kW IRIS  
Log Contours

Scale 1: 5000

50 0 50 100 150 200 250 300 350  
(metres)

**EXPLORERS ALLIANCE CORP.**  
HALFMOON PROJECT (8152)  
ROBB Township, Ontario

**PICSAMT (CSEM) SURVEY**  
Apparent Resistivity  
Frequency Pseudosection

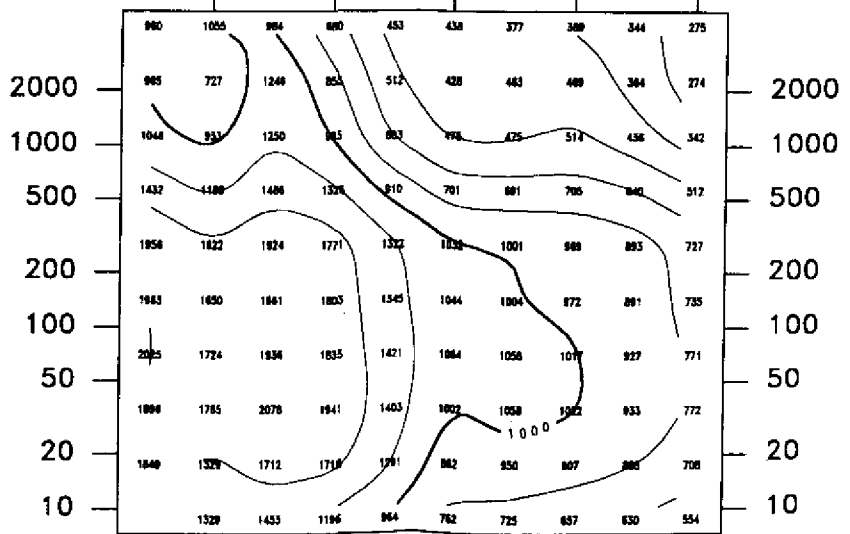
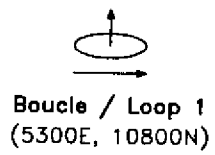
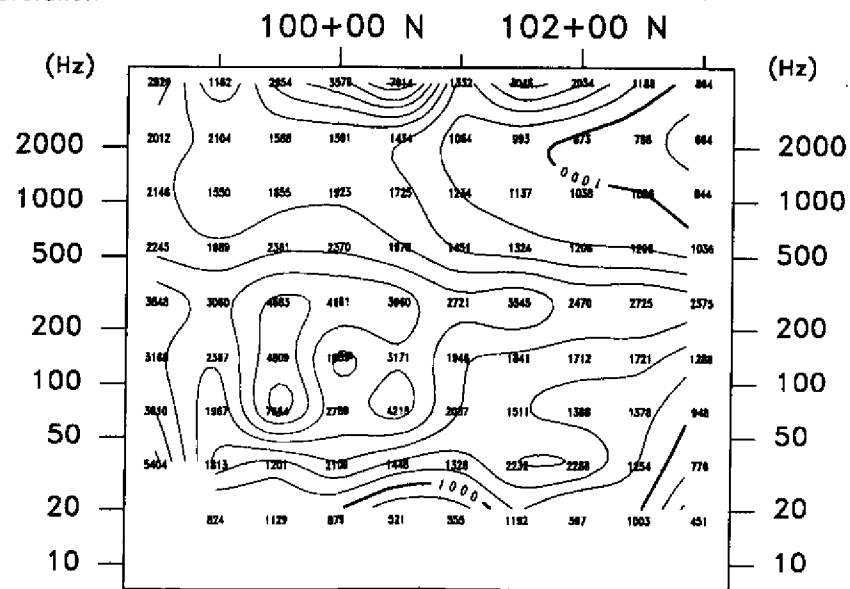
Interpretation: P. Berube, P.Eng.  
Survey by: Val d'Or Sagax Inc.  
Survey Date: April 2000  
Project 00-N458A



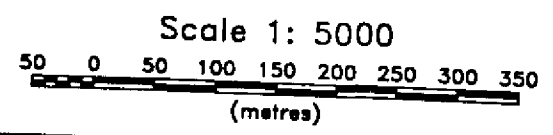


# LINE 53+00E

Interpretation



Instrumentation: 3 kW IRIS  
Log Contours



**EXPLORERS ALLIANCE CORP.**  
HALFMOON PROJECT (8152)  
ROBB Township, Ontario

**PICSAMT (CSEM) SURVEY**  
Apparent Resistivity  
Frequency Pseudosection

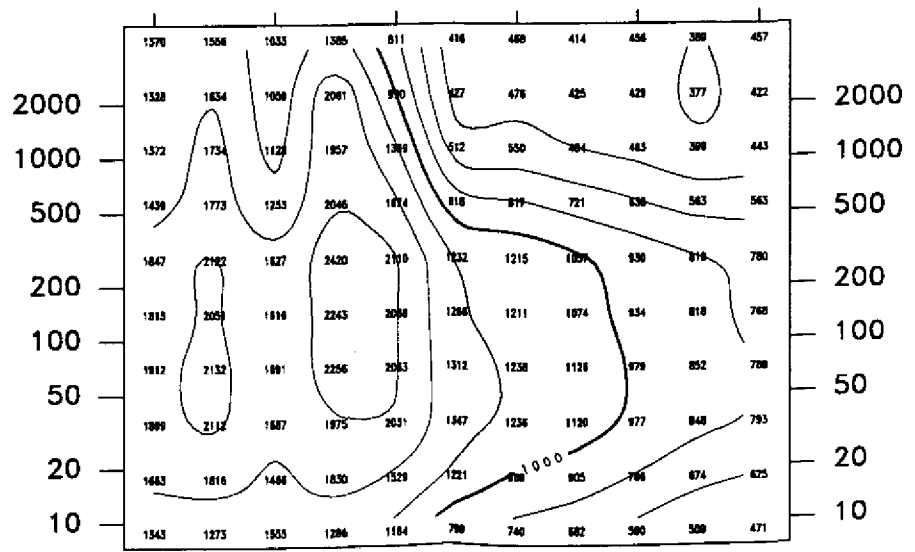
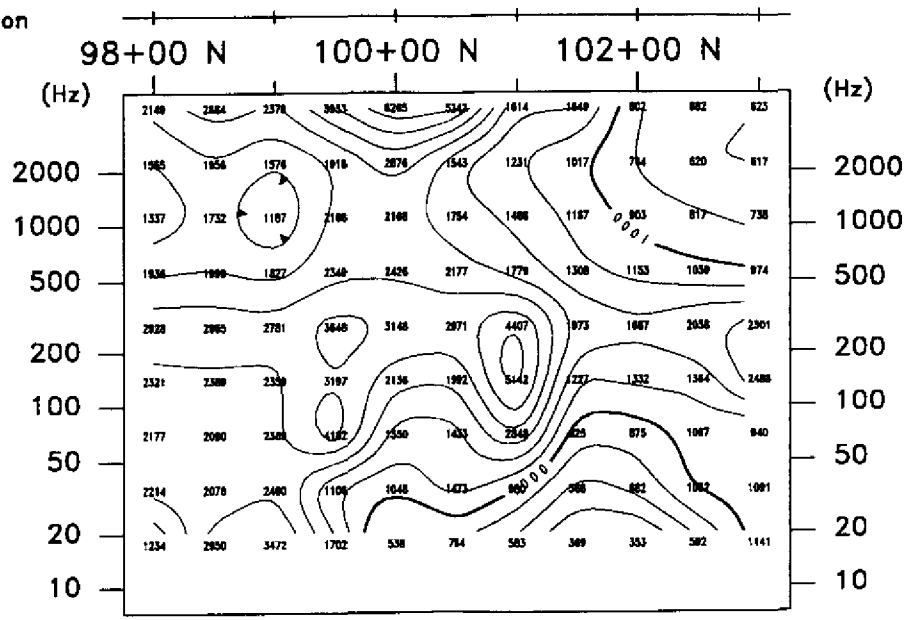
Interpretation: P. Berube, P.Eng.  
Survey by: Val d'Or Sagax Inc.  
Survey Date: April 2000  
Project 00-N458A



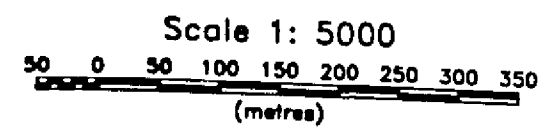
42A12SE2015 2.20754 ROBB 240

# LINE 54+00E

Interpretation



Instrumentation: 3 kW IRIS  
Log Contours



**EXPLORERS ALLIANCE CORP.**  
HALFMOON PROJECT (B152)  
ROBB Township, Ontario

**PICSAMT (CSEM) SURVEY**  
Apparent Resistivity  
Frequency Pseudosection

Interpretation: P. Berube, P.Eng.  
Survey by Val d'Or Sogax Inc.  
Survey Date: April 2000  
Project 00-1458A

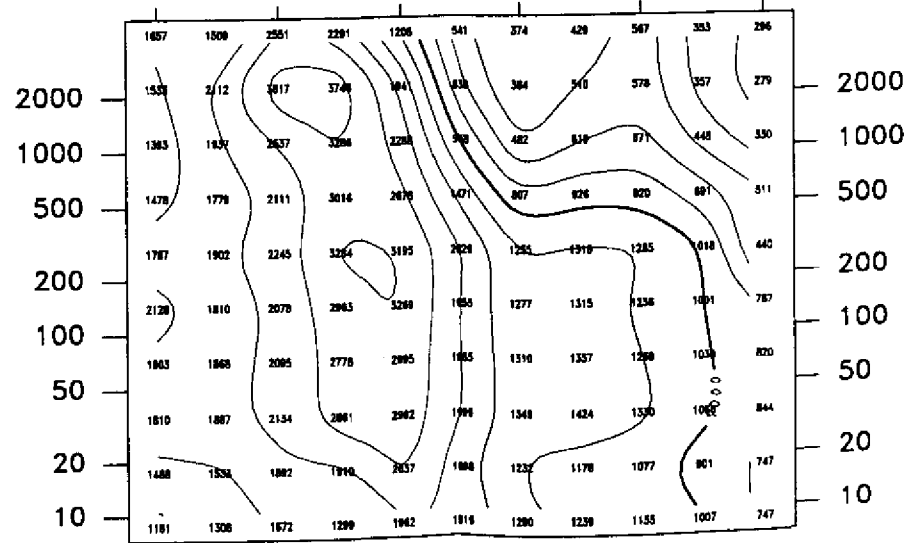
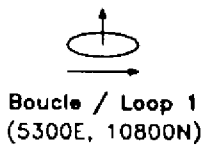
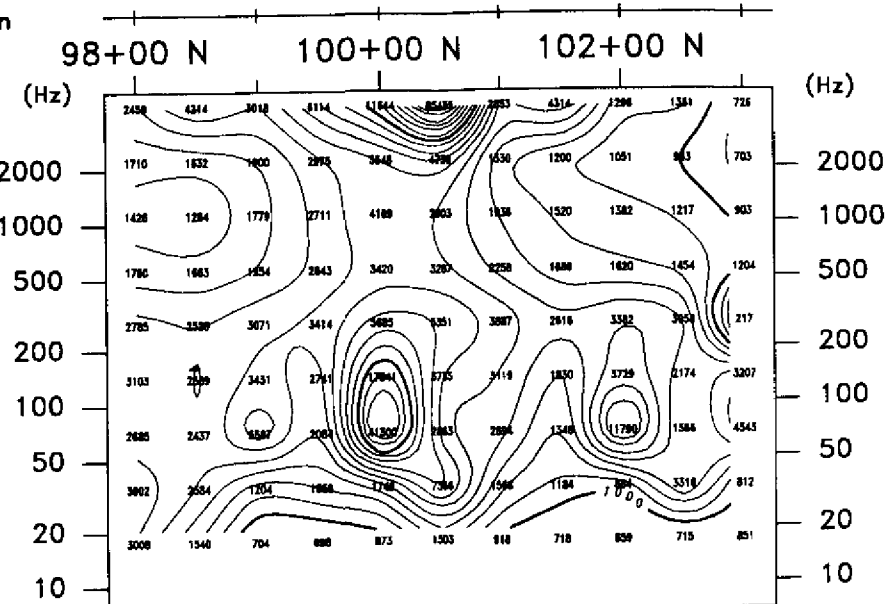
**VAL D'OR SAGAX**



42A12SE2015 2.20754 ROBB 250

# LINE 55+00E

Interpretation



Instrumentation: 3 kW IRIS  
Log Contours

Scale 1: 5000



**EXPLORERS ALLIANCE CORP.**  
HALFMOON PROJECT (8152)  
ROBB Township, Ontario

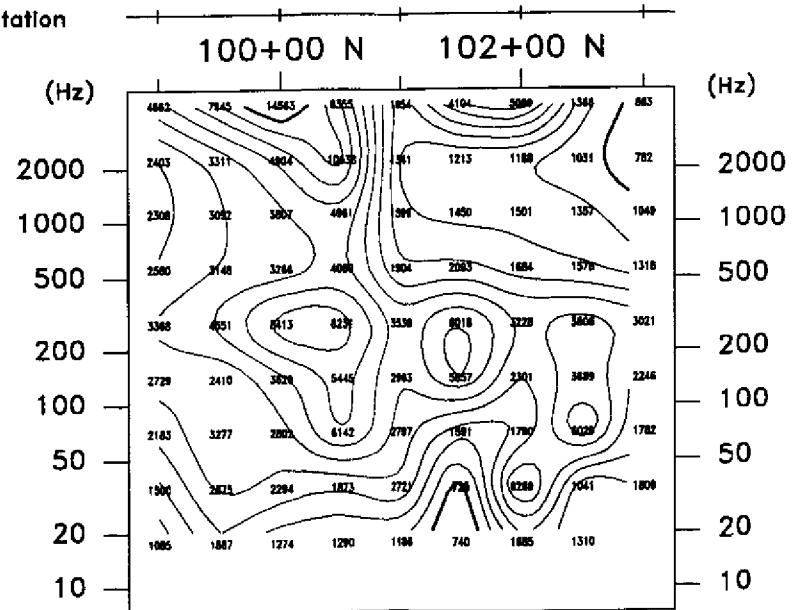
**PICSAMT (CSEM) SURVEY**  
Apparent Resistivity  
Frequency Pseudosection

Interpretation: P. Berube, P.Eng.  
Survey by: Val d'Or Sagax Inc.  
Survey Date: April 2000  
Project 00-N458A

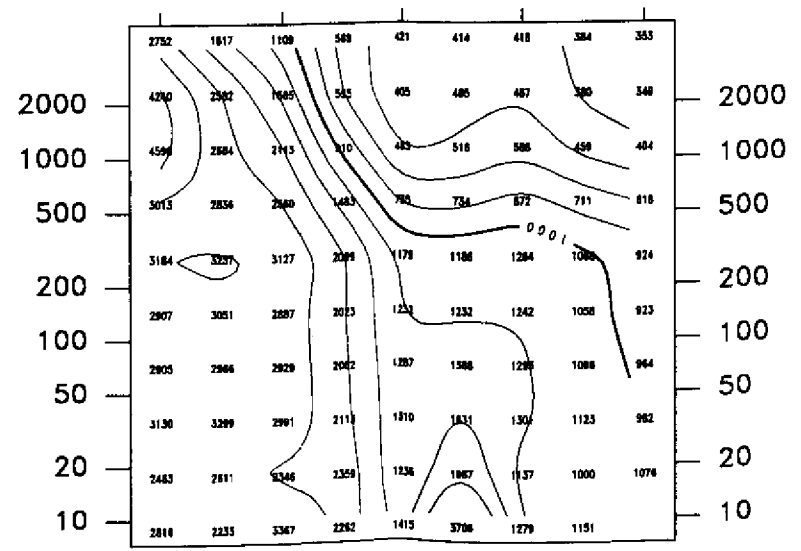


# LINE 56+00E

Interpretation

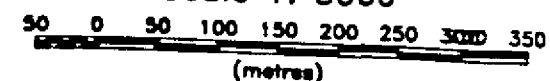


OUT-OF-PHASE



Instrumentation: 3 kW IRIS  
Log Contours

Scale 1: 5000



**EXPLORERS ALLIANCE CORP.**  
HALFMOON PROJECT (8152)  
ROBB Township, Ontario

**PICSAMT (CSEM) SURVEY**  
Apparent Resistivity  
Frequency Pseudosection

Interpretation: P. Barube, P.Eng.  
Survey by: Val d'Or Sagax Inc.  
Survey Date: April 2000  
Project: 00-1400A



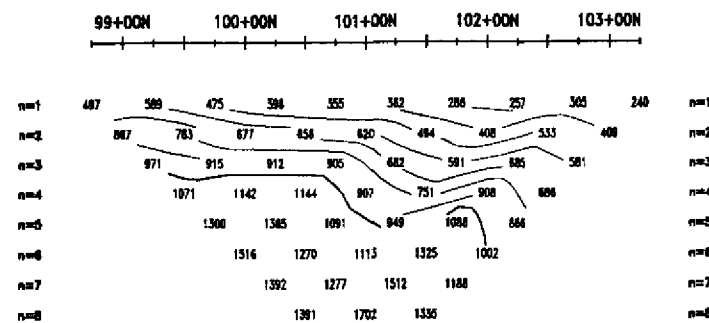
270

42A12SE2015 2.20754 ROBB



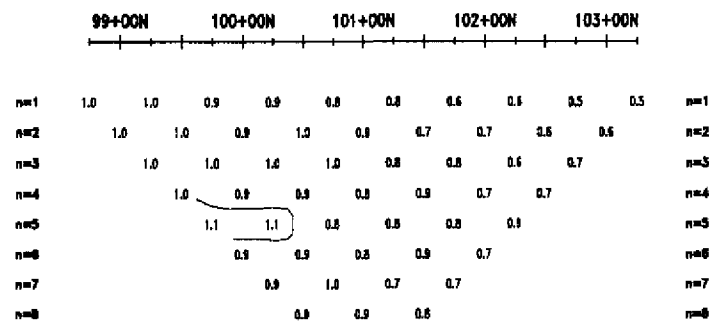
### APPARENT RESISTIVITY PSEUDO SECTION

Contours: Logarithmic



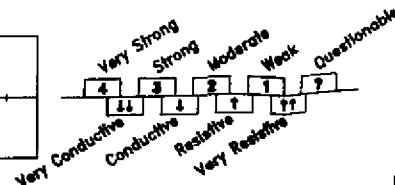
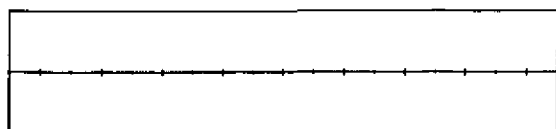
### APPARENT CHARGEABILITY PSEUDO SECTION

Contours: 0.5

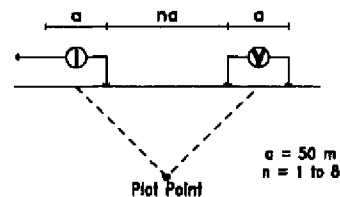


### INTERPRETATION

chargeability  
resistivity

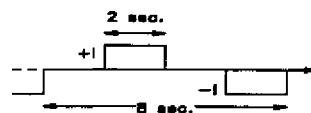


### INDUCED POLARIZATION SURVEY Pole-Dipole Array

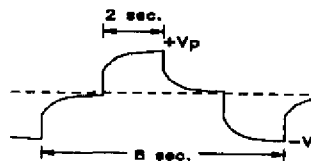


a = 50 m  
n = 1 to 8

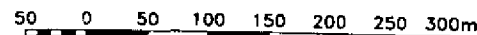
Transmitter: TX-II (GDD), 1.4 kW



Receiver: Elrec-10 (IRIS)



Scale 1 : 5000



## Explorers Alliance Corporation

Halfmoon Project (8152)  
Robb Township  
Ontario, Canada

## Line 5000E

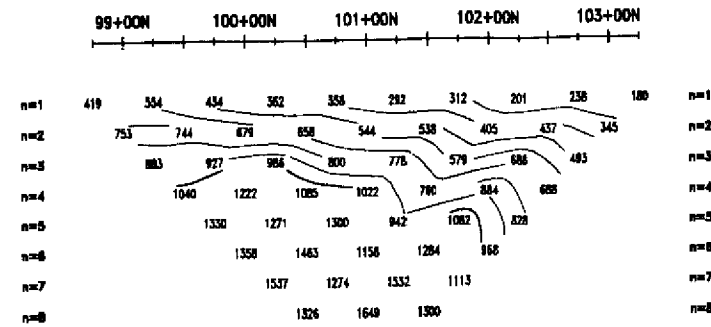
Interpreted by: Dominique Bérubé, B.Sc.  
 Verified by: Martin Dubois, B.Sc.  
 Date of survey: April 2000  
 Surveyed by: Michel Coulombe  
 Reference: 00N458A

## VAL D'OR SAG AX



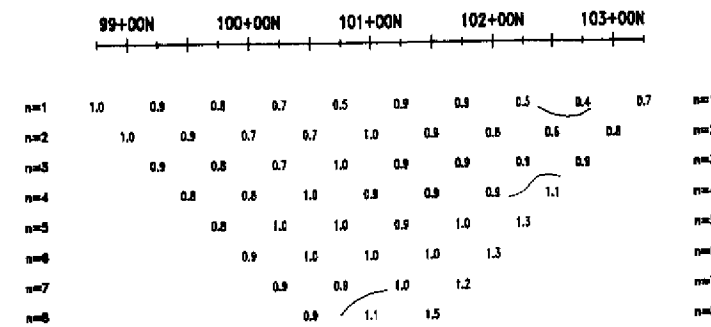
### APPARENT RESISTIVITY PSEUDO SECTION

Contours: Logarithmic

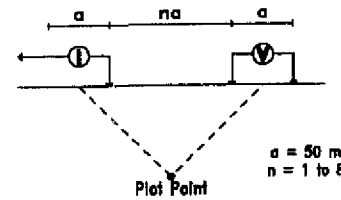


### APPARENT CHARGEABILITY PSEUDO SECTION

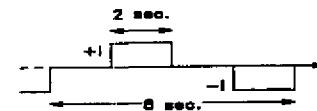
Contours: 0.5



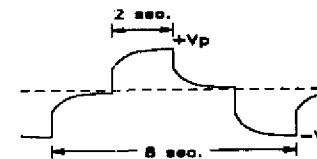
### INDUCED POLARIZATION SURVEY Pole-Dipole Array



Transmitter: TX-II (GDD), 1.4 kW



Receiver: Elrec-10 (IRIS)



Scale 1 : 5000



## Explorers Alliance Corporation

Halfmoon Project (8152)  
Robb Township  
Ontario, Canada

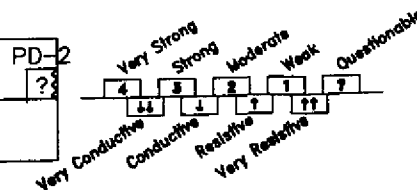
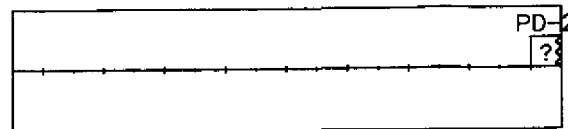
## Line 5100E

Interpreted by: Dominique Bérubé, B.Sc.  
 Verified by: Martin Dubois, B.Sc.  
 Date of survey: April 2000  
 Surveyed by: Michel Coulombe  
 Reference: 00N458A



INTERPRETATION

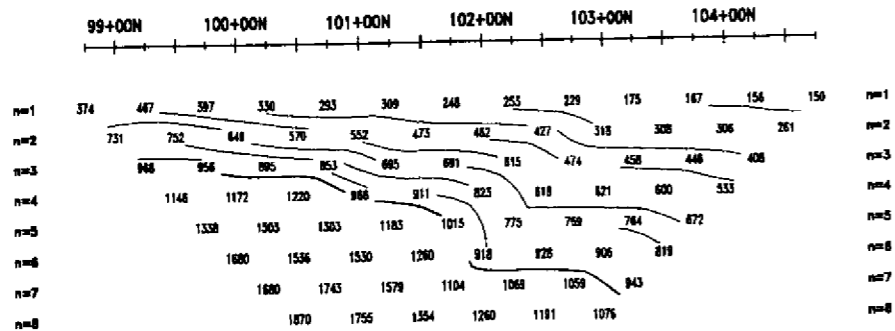
chargeability  
resistivity





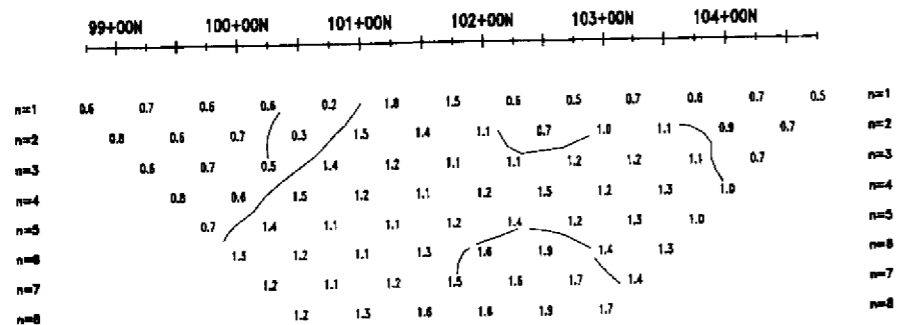
### APPARENT RESISTIVITY PSEUDO SECTION

Contours: Logarithmic



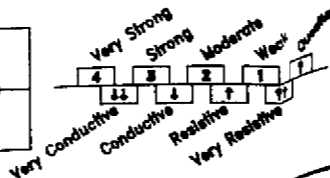
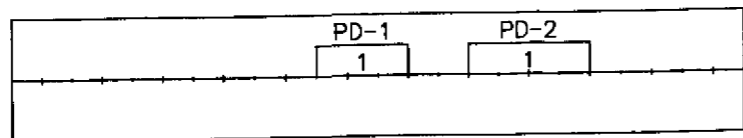
### APPARENT CHARGEABILITY PSEUDO SECTION

Contours: 0.5

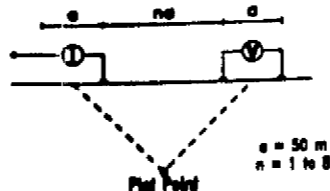


### INTERPRETATION

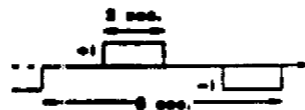
chargeability  
resistivity



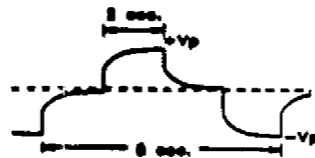
### INDUCED POLARIZATION SURVEY Pole-Dipole Array



Transmitter: T1-B (000), 1.4 kW



Receiver: ETee-10 (001)



Scale 1 : 5000



## Explorers Alliance Corporation

Halfmoon Project (8152)  
Robb Township  
Ontario, Canada

## Line 5200E

Interpreted by  
Verified by  
Date of survey  
Surveyed by  
Reference

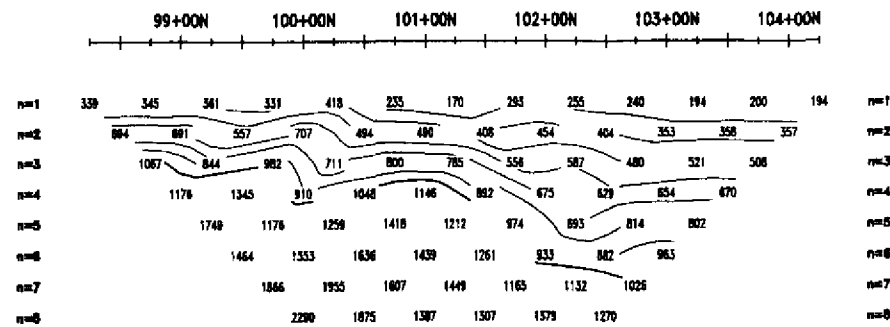
Geophysical Services, S.L.  
March 2003  
André Robb  
Geophysical Services, S.L.

## VAL D'OR SAGAX



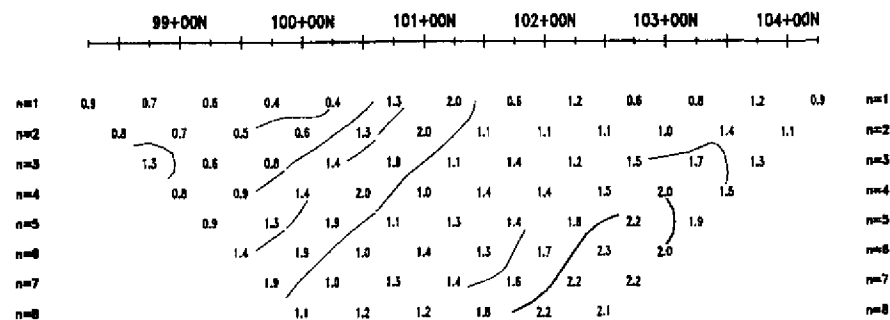
### APPARENT RESISTIVITY PSEUDO SECTION

Contours: Logarithmic



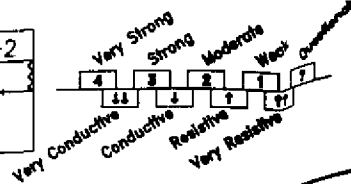
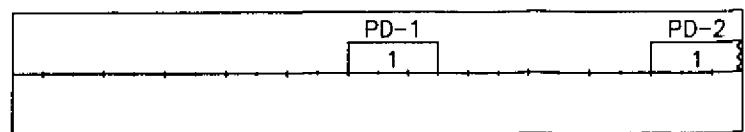
### APPARENT CHARGEABILITY PSEUDO SECTION

Contours: 0.5

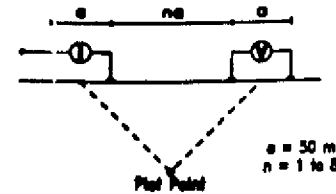


### INTERPRETATION

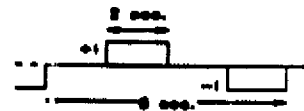
chargeability  
resistivity



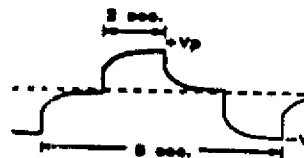
### INDUCED POLARIZATION SURVEY Pole-Dipole Array



Transmitter: TX-N (GDD), 1.4 kW



Receiver: EIR-10 (MRS)



Scale 1 : 5000



## Explorers Alliance Corporation

Halfmoon Project (8152)  
Robb Township  
Ontario, Canada

## Line 5300E

Interpreted by  
Verified by  
Date of survey  
Surveyed by  
Reference

Geophysical Services, Ltd.  
Geophysical Services, Ltd.  
Geophysical Services, Ltd.  
Geophysical Services, Ltd.  
Geophysical Services, Ltd.

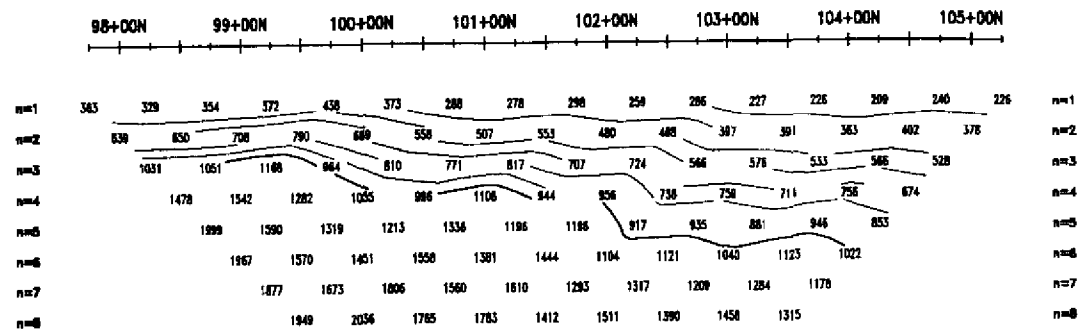
## VAL D'OR SAGAX





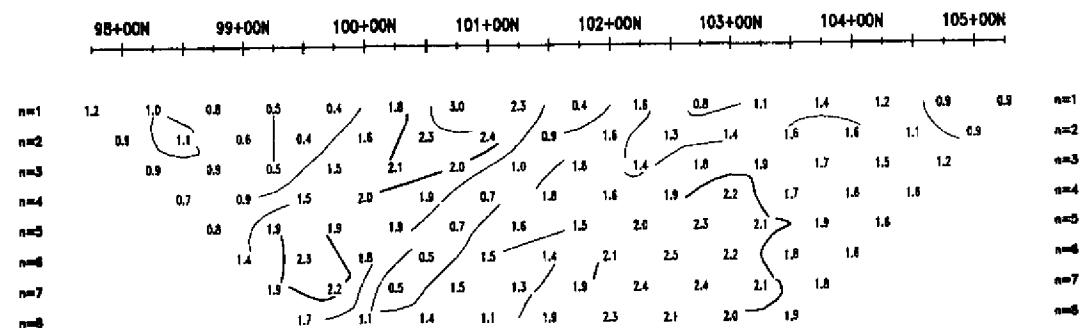
### APPARENT RESISTIVITY PSEUDO SECTION

Contours: Logarithmic



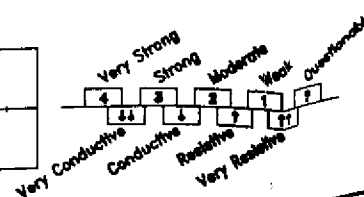
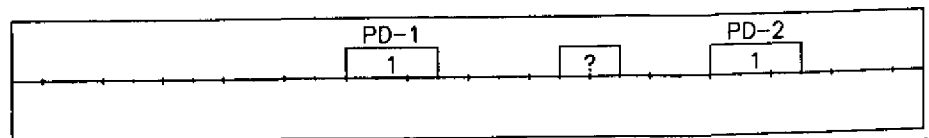
### APPARENT CHARGEABILITY PSEUDO SECTION

Contours: 0.5

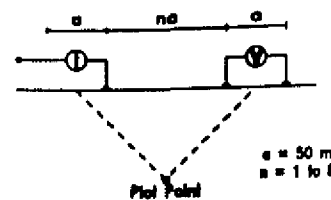


### INTERPRETATION

chargeability  
resistivity

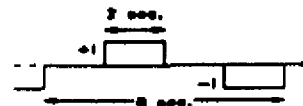


### INDUCED POLARIZATION SURVEY Pole-Dipole Array

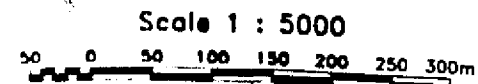
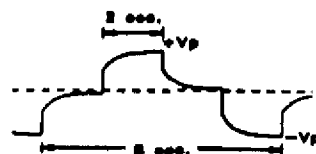


a = 50 m  
a = 1 to 8

Transmitter: TX-II (GDD), 1.4 kW



Receiver: Cires-10 (IRIS)



## Explorers Alliance Corporation

Halfmoon Project (8152)  
Robb Township  
Ontario, Canada

## Line 5400E

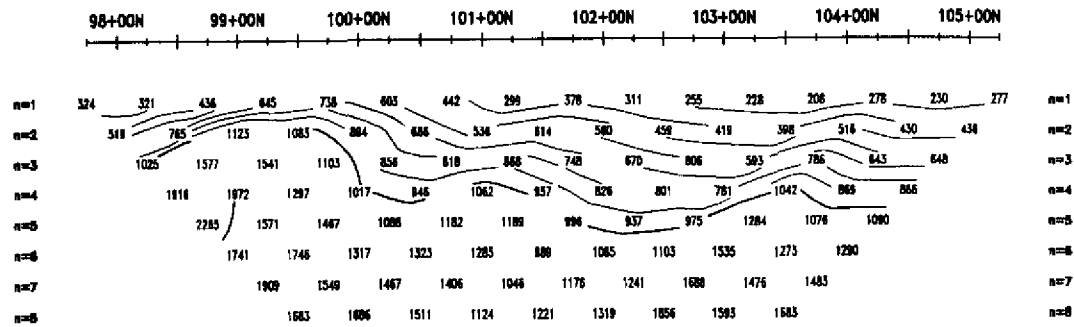
Interpreted by: **Sandwich Sound, S.S.**  
Verified by: **Marlin Rubin, S.S.**  
Date of survey: **April 2009**  
Surveyed by: **Shelagh Coleman**  
Reference: **020409**

### VAL D'OR SAGAX



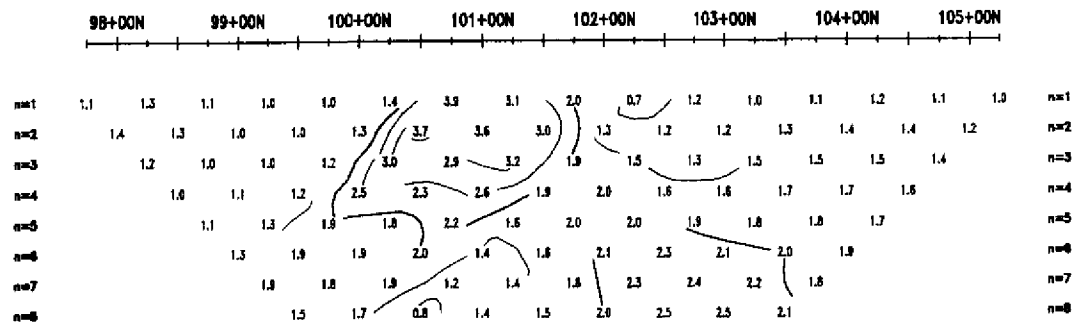
### APPARENT RESISTIVITY PSEUDO SECTION

Contours: Logarithmic

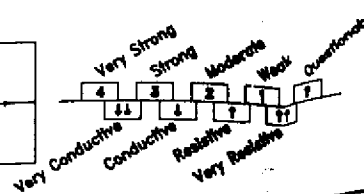
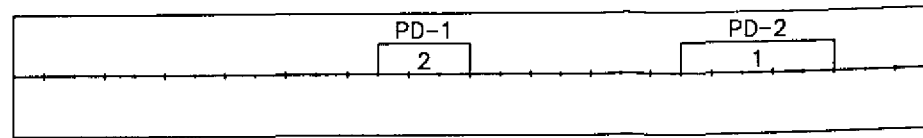


### APPARENT CHARGEABILITY PSEUDO SECTION

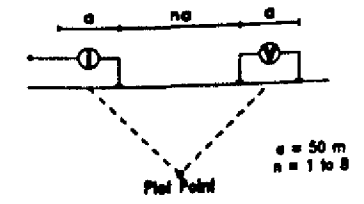
Contours: 0.5



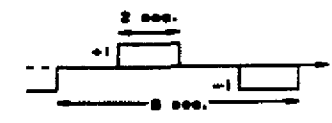
INTERPRETATION chargeability resistivity



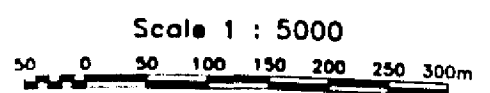
### INDUCED POLARIZATION SURVEY Pole-Dipole Array



Transmitter: TX-II (GDD), 1.4 kW



Receiver: Etree-10 (IRIS)



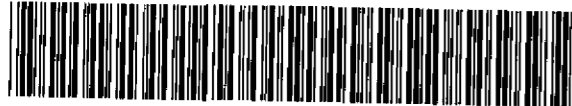
## Explorers Alliance Corporation

Halfmoon Project (B152)  
Robb Township  
Ontario, Canada

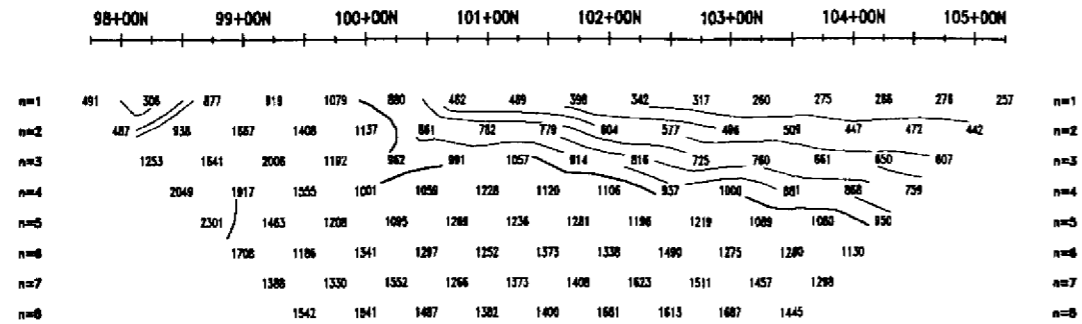
## Line 5500E

Interpreted by: **Dominique Strubel, B.Sc.**  
 Verified by: **Martin Subota, B.Sc.**  
 Date of survey: **April 2008**  
 Surveyed by: **Michael Conkoma**  
 Reference: **004-024**

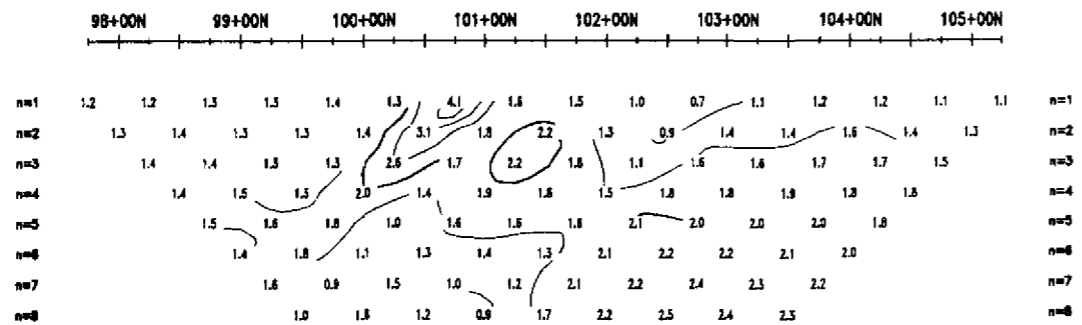




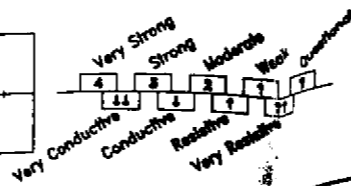
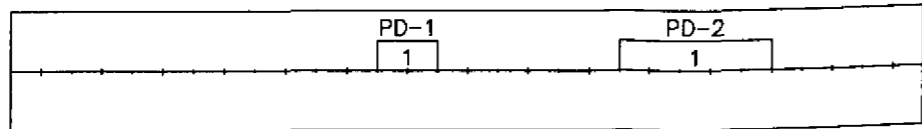
**APPARENT RESISTIVITY PSEUDO SECTION**  
Contours: Logarithmic



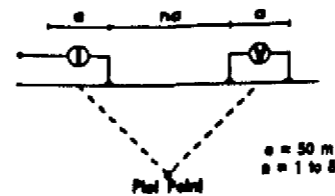
**APPARENT CHARGEABILITY PSEUDO SECTION**  
Contours: 0.5



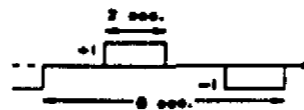
**INTERPRETATION**



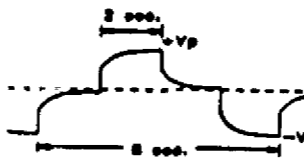
**INDUCED POLARIZATION SURVEY Pole-Dipole Array**



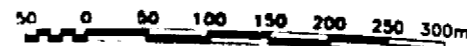
Transmitter: TX-N (000), 1.4 kW



Receiver: Etree-10 (IRIS)



Scale 1 : 5000



**Explorers Alliance Corporation**

**Halfmoon Project (8152)  
Robb Township  
Ontario, Canada**

**Line 5600E**

Interpreted by: **Geological Survey, U.S.**  
Verified by: **North Dakota, U.S.**  
Date of survey: **April 2000**  
Surveyed by: **Michael G. ...**  
Reference: **...**

**VAL D'OR SAGAX**