

**GEOPHYSICAL SURVEY REPORT**

on the

**CHESTER PROPERTY  
EMERALD ISLE GRID**

**CHESTER TOWNSHIP  
DISTRICT OF SUDBURY  
ONTARIO**

2-43510

FOR

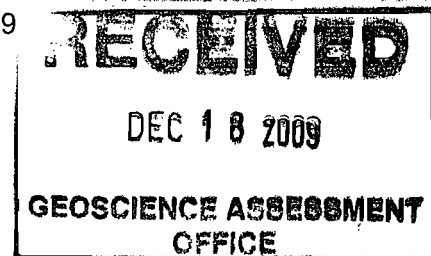
**TRELAWNEY MINING  
AND EXPLORATION INC.**

prepared by:

Dan Patrie Exploration Ltd.

L.D.S. Winter, P.Geo.

3 November 2009



## TABLE OF CONTENTS

	PAGE
1. Introduction	4
2. Property	4
2.1 Grid Area Description	4
2.2 Location and Access	5
3. Regional Geology	5
4. Instrumentation and Work Done	6
5. Results, Emerald Isle Grid	8
5.1 Magnetic Survey	8
5.2 Induced Polarization (IP) Survey	9
6. Summary and Conclusions	11
7. Recommendations	12
8. Personnel	13
9. Reference	13
Certificate of Qualification	14

## LIST OF TABLES

Table 1:	Emerald Isle Grid Claims, Chester Township	4
Table 2:	Induced Polarization (IP) – Anomalous Areas	10

## LIST OF FIGURES

- Figure 1: Location Map
- Figure 2: Grid Area Map
- Figure 3: Regional Geology

## LIST OF MAPS

### EMERALD ISLE GRID

- Map 1: Magnetometer Survey Map Scale 1:5000; Total Magnetic Intensity, Profiles and Data Values
- Map 2: Magnetometer Survey Map Scale 1:5000; Total Magnetic Intensity Profiles  
14 Induced Polarization (IP) Pseudo Sections Scale: 1:2500
- Map 3: Induced Polarization (IP) Map Scale 1:5000  
N=1, Apparent Chargeability Contours and Plotted Values
- Map 4: Induced Polarization (IP) Map: Scale:1:5000  
N=1, Apparent Resistivity Contours and Plotted Values

## 1. INTRODUCTION

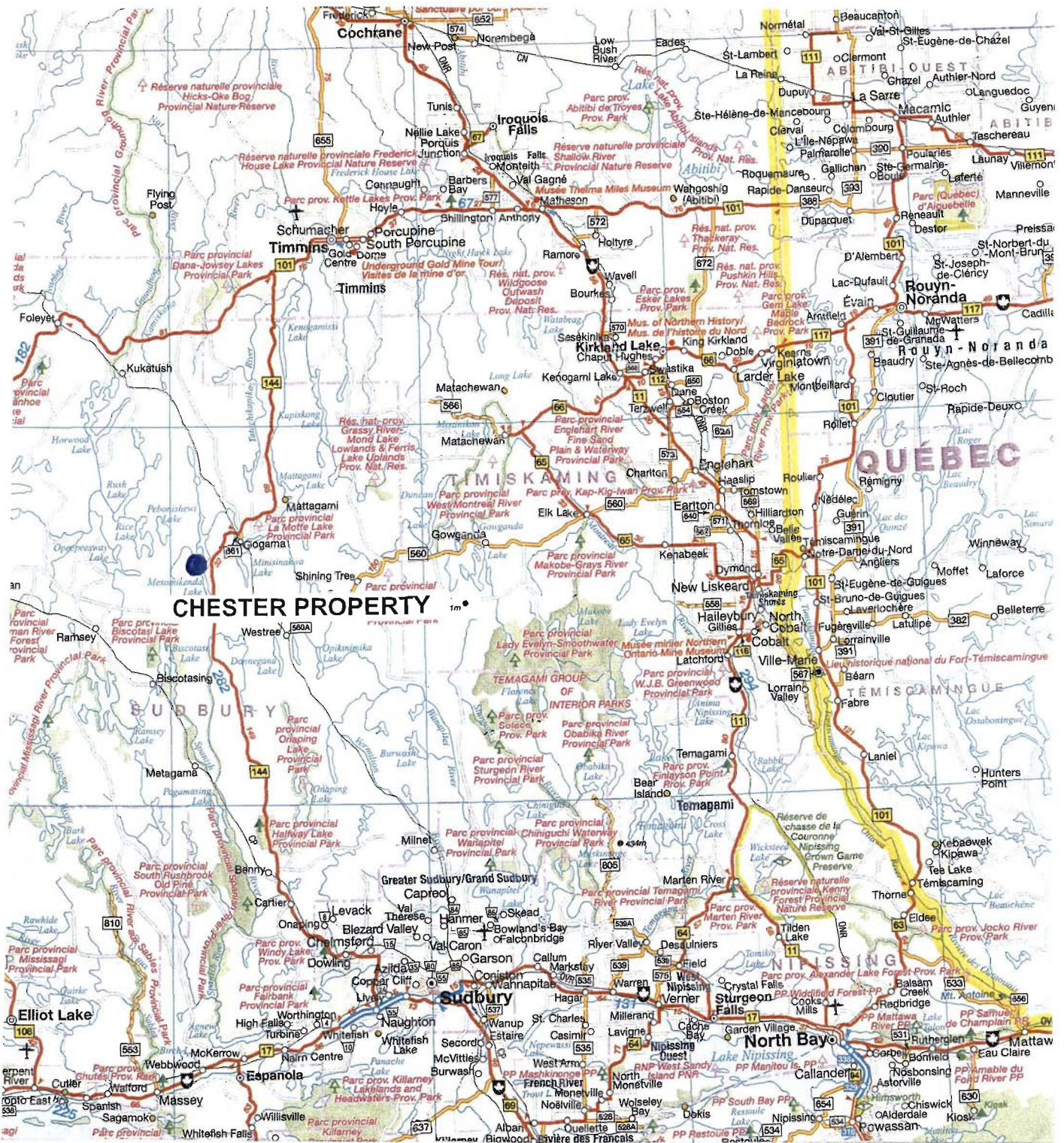
Trelawney Mining and Exploration Inc. ("Trelawney" or the "Company") holds a group of claims in Chester township (G-3223), District of Sudbury, Ontario at 81°-56'W longitude, 47°-34'N latitude (Figure 1). The claims were acquired for their potential to host gold mineralization of economic interest. At the request of the Company, Dan Patrie Exploration Ltd., Massey, Ontario carried out geophysical surveys on the Emerald Isle grid which covers all or parts of 13 mining claims. The following report describes the work carried out on the grid and the results obtained. The work was carried out over the period 1 October 2009 to 24 October 2009.

## 2. PROPERTY

### 2.1 GRID AREA DESCRIPTION

The Emerald Isle Grid covers all or part of 13 mining claims as illustrated in Figure 2. The Property is located within Chester township (G-3223) and NTS 41P/12, District of Sudbury, Ontario. Work was carried out on the 13 claims listed in Table 1.

<b>Claim Number</b>	<b>Units</b>	<b>Area</b>
S19995	1	16
681825	1	16
720647	1	16
720675	1	16
734211	1	16
734213	1	16
734214	1	16
1213793	1	16
1213796	3	48
S19971	1	16
S20096	1	16
S20655	1	16
681824	1	16
<b>TOTAL</b>	<b>13</b>	<b>240</b>

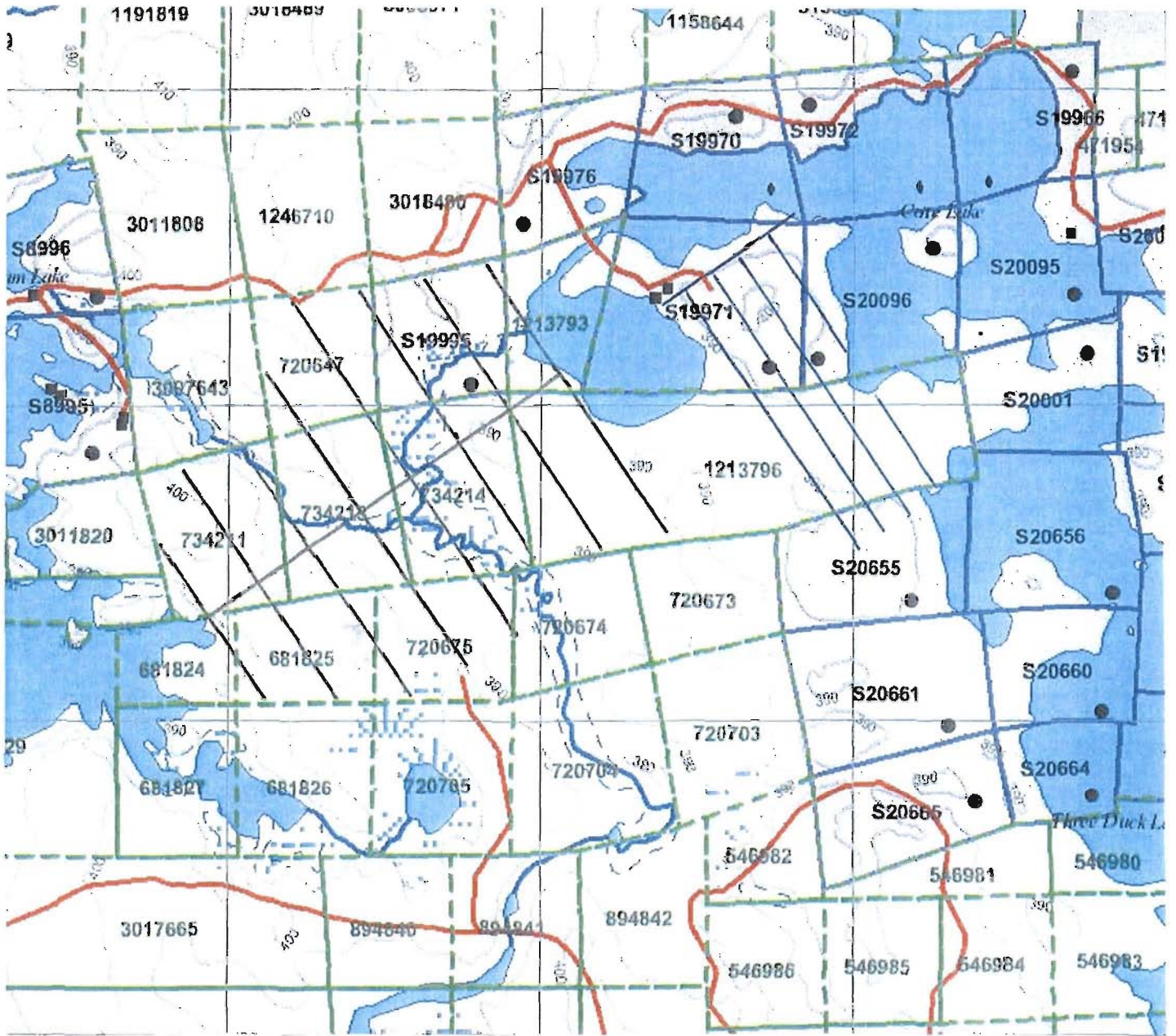


**FIGURE 1**  
**TRELAWNEY MINING & EXPLORATION INC.**  
**CHESTER PROPERTY**  
**Location Map**

November 2009

Scale 1 cm = 17.25 km

**CHESTER PROPERTY**



**FIGURE 2**  
**TRELAWNEY MINING & EXPLORATION INC.**

**CHESTER PROPERTY**  
**EMERALD ISLE GRID & CLAIMS**

After Claim Map G-3223

November 2009

Scale 1:20 000

## **2.2 LOCATION AND ACCESS**

The Property is located approximately midway between Timmins to the north and Sudbury to the south, in Northern Ontario at 81°-56'W longitude, 47°-34'N latitude. The area surveyed is located in Chester township (G-3223). District of Sudbury and Porcupine Mining Division, Ontario.

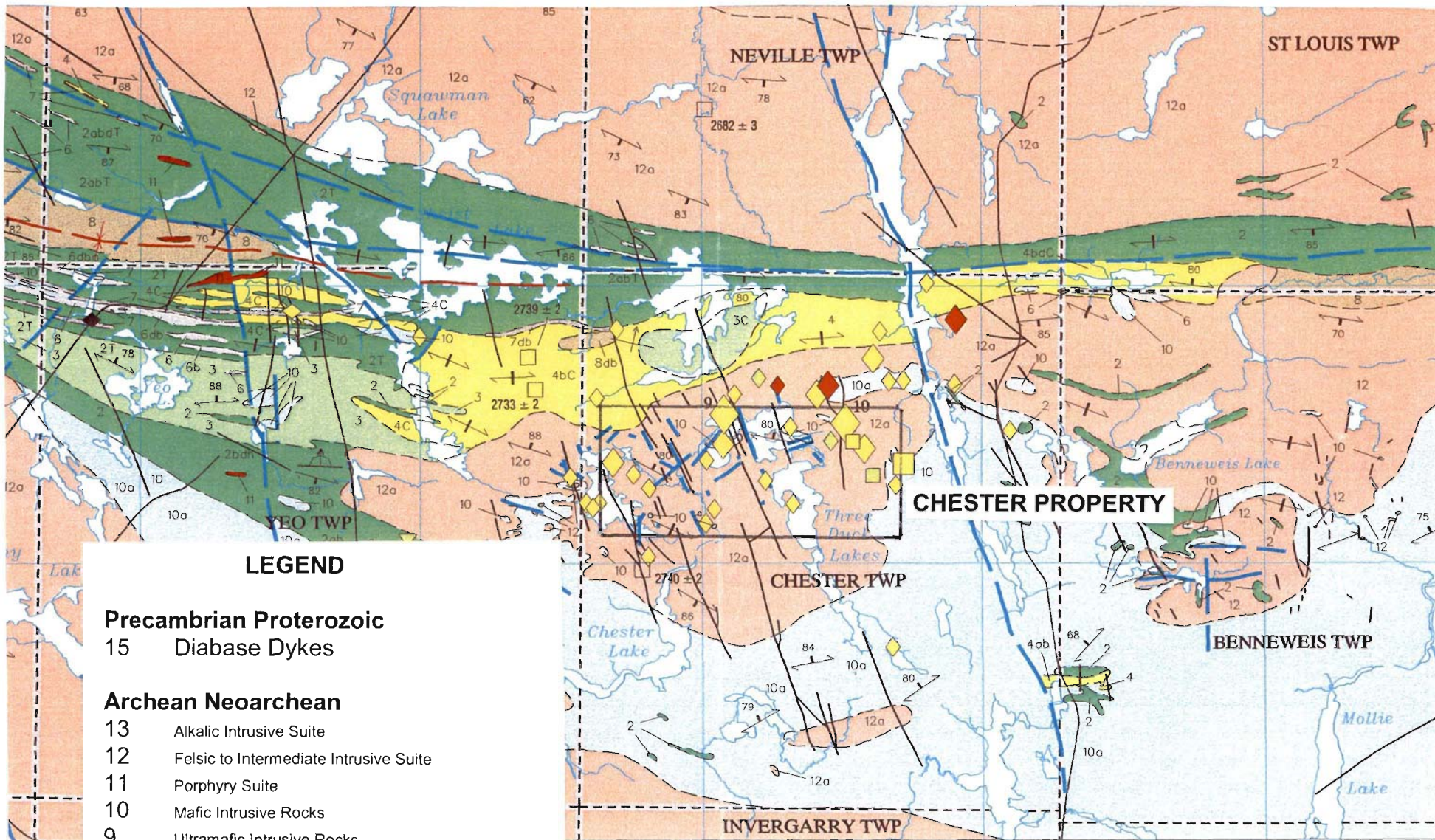
Access to the Property is by road. Provincial highway 144 connects Timmins and Sudbury. The intersection of the Gowganda highway (560) / Sultan – Chapleau road (Halfway Restaurant) is approximately 150 km from both Timmins and Sudbury. Six kilometres north of the Watershed Restaurant, a forest access road, over a distance of approximately 8 km leads west to and across the Property.

## **3. REGIONAL GEOLOGY**

The Chester property is located within the Superior Province of the Canadian Shield at the eastern end of the Swayze Area, Abitibi Greenstone Belt (Figure 3). This area is crossed by two broadly parallel Early Precambrian (Archean) belts of locally pillowed tholeiitic basalt trending west-northwest and dipping subvertically. The southern basaltic belt is exposed south of Yeo Lake in Yeo township and in local areas in the eastern part of this township. Close to the western boundary of Chester township, this belt merges with rocks of gabbroic to dioritic composition and with migmatite.

The area between the two basaltic belts is underlain by pyroclastic metavolcanics which may be broadly classed as intermediate in composition owing to the nature and proportions of clasts and matrix.

Regional granitic rocks flank the northern and southern basaltic belts and are exposed in all but a narrow strip of southern Potier and Neville townships and in the southwestern half of Yeo township. Central Chester township is underlain by granitic rocks which, in the central part of the township, are relatively free from metavolcanic



**LEGEND**

**Precambrian Proterozoic**

15 Diabase Dykes

**Archean Neoproterozoic**

- 13 Alkalic Intrusive Suite
- 12 Felsic to Intermediate Intrusive Suite
- 11 Porphyry Suite
- 10 Mafic Intrusive Rocks
- 9 Ultramafic Intrusive Rocks
- 8 Timiskaming-Type Clastic Metasedimentary Rocks
- 7 Chemical Metasedimentary Rocks
- 6 Clastic Metasedimentary Rocks
- 5 Alkalic to Calc-Alkalic Metavolcanic Rocks/Intrusions
- 4 Felsic (to Intermediate) Metavolcanic Rocks/Intrusions
- 3 Intermediate (to Felsic) Metavolcanic Rocks/Intrusions
- 2 Mafic (to Intermediate) Metavolcanic Rocks/Intrusions
- 1 Ultramafic (to Mafic) Metavolcanic Rocks/Intrusions

After OGS Map P. 3511

Scale 1:100 000

**FIGURE 3**

**TRELAWNEY MINING & EXPLORATION INC.  
CHESTER PROPERTY  
Regional Geology**

**November 2009**



xenoliths and/or inclusions and are markedly leucocratic in character. This is the felsic to intermediate suite of Ayer and Trowell (2002). These rocks are dominantly trondhjemitic in composition and form a broadly oval, west-trending body which intrudes the core of the synclinally folded metavolcanics and extends westward into the Ash Lake area of Yeo township. This body is bordered to the south by hornblende diorite, gabbro and migmatite which underlie southern Chester township and extend beyond the southern margin of the present map area. To the north the trondhjemitic body is in contact with the pyroclastic metavolcanics. Lamprophyre (minette) dykelets occur at one locality cutting the granitic rocks and north-northwest trending diabase dykes are commonly found throughout the map area cutting the supracrustal and granitic rocks (Siragusa, G.M., 1981).

#### **4. INSTRUMENTATION AND WORK DONE**

Line cutting and the magnetometer and induced polarization (IP) survey on the Emerald Isle Grid were carried out between 1 October and 24 October 2009 (inclusive). Lines were spaced at 50 m to 100 m with a total of 24 line-km being cut.

The total field magnetometer survey with readings being taken at 25 m intervals was carried out on 24 km of line. Subsequently, pole-dipole induced polarization (IP) surveys with an a-spacing of 25 m and n-spacings of 1 to 6 were completed on the grids. Eleven point one (11.1) line-kilometres were covered on the Emerald Isle grid by the IP survey.

The magnetometer survey was carried out using an Envi Magnetometer made by Scintrex Ltd. The Envi Mag has the capability to measure the total field combined with an Envi Magnetometer as a base station for correcting magnetic diurnal drift. These are total field magnetometers which measure the magnetic field through the use of proton precessional effects caused by the interaction of a magnetic field with a spin aligned, proton rich fluid.

An instrument accuracy precision and resolution of 0.1 nt may be obtained with

these instruments under ideal conditions. While in gradient mode which was not done at this time, the unit has the means of measuring both the total field and the gradient of the total field with two sensors simultaneously. In gradient mode, the instrument sharply defines the magnetic responses determined by the total field. It individually delineates closely spaced anomalies rather than collectively identifying them under one broad magnetic response. Also, when doing a gradient survey the instrument enables one to conduct a gradient survey during a magnetic storm because the technique of simultaneously measuring with the two sensors cancels out the effects of diurnal magnetic variations.

Microprocessors contained in these instruments allow for the collection of the readings along with the time and its position in digital form suitable for downloading to a computer for data processing.

A total of 24 km of magnetic readings were taken in the Emerald Isle grid along lines both 50 m and 100 m apart with 25 m station intervals. The field measurements were corrected for diurnal variations of the earth's magnetic field by direct subtraction of the base station readings from the reading taken at the same moment in the field units. The corrected data was downloaded to a computer for plotting.

A total of 11.1 km of induced polarization readings were taken on the Emerald Isle grid with an "a" spacing of 25 m and with 6 levels being read ( $N = 6$ ). The IP survey was a time domain pole-dipole survey and it was carried out with a Walcer 9000 transmitter in combination with a Honda 18 HP motor generator and a Scintrex IPR-12 receiver. The motor generator and transmitter were stationary on the end of the line being read with the current being transmitted through a wire with an electrode into the ground for contact. A second wire and electrode (the live electrode) was moved along the line being surveyed as per the survey protocol. At all times, the transmitter man, live electrode man and receiver personnel were in radio contact. Ahead of the live current electrode was a crew of men with electrodes at 25 m intervals. These electrodes are connected to the receiver where the

receiver operator obtains and records the readings. The data is downloaded from the receiver at the end of the day to a computer where the resistivity and chargeability are calculated and plotted using pseudosections and/or maps using Geosoft software.

The geophysical surveys were carried out by Dan Patrie Exploration Ltd., Massey, Ontario an experienced geophysical contractor. The survey personnel are listed in Section 7.

## **5. RESULTS, EMERALD ISLE GRID**

### **5.1 MAGNETIC SURVEY**

A total of 24.0 line-km of survey was completed along lines spaced at both 50 m and 100 m with the values plotted in Maps 1 and 2. The general background readings fall in the range of approximately 56400 nT and less and these are considered to represent the underlying felsic to intermediate intrusive suite.

Anomalous magnetic values occur in the range from 56400 nT to over 58000 nT. A review of the geology of the Property (Siragusa, 1981) shows a number of NNW-trending diabase dykes with offshoots from, and connecting dykes between the main NNW-trending dykes. The anomalous magnetic values show this same pattern, linear NNW-trending anomalies with more or less east-west connecting anomalies and offshoots. It is considered that the magnetic anomalies are caused by the diabase dykes.

In summary, it is considered that there are two levels of magnetic intensity indicated by the magnetometer survey. The readings below 56400 nT are considered to represent the felsic to intermediate intrusive suite while the anomalous values with a linear NNW pattern as well as irregular offshoots and connecting east-west zones are due to diabase dykes that are later and intrude the felsic to intermediate intrusive suite.

## 5.2 INDUCED POLARIZATION (IP) SURVEY

A total of 11.1 line-km were surveyed during the IP survey with the results for each pseudo section being reviewed in Table 2. In Maps 3 and 4, the apparent chargeability and apparent resistivity results for the first level (N = 1) are plotted. Two areas of increased apparent chargeability have been identified;

1. In the northern part of the grid from line 88+00E to 94+00E and from approximately 104+00N to the northern edge of the grid (Area A) and,
2. From line 92+50E to 95+00E and from approximately 96+00N to 101+00N (Area B).

Both Areas A and B show broad zones of increased chargeability, within which there are discreet zones with values 2 to 4 times background. Some of these appear from the geophysics to be pipe-like in form. Generally, the areas of increased chargeability show the higher levels of apparent resistivity. Area A in general has an ENE trend, however, more discreet sections appear to trend close to east-west. For Area B the overall trend appears to be ESE.

**TABLE 2**  
**TRELAWNEY MINING AND EXPLORATION INC.**  
**INDUCED POLARIZATION (IP) - ANOMALOUS AREAS**  
**EMERALD ISLE GRID**

LINE	STATION	CHARGEABILITY VALUES		COMMENTS
		BACKGROUND mV/V	ANOMALY mV/V	
88+00E	102N -103N	2 - 6	6 - 10	Weak increase in chargeability on levels 3 to 6; no significant change in resistivity.
89+00E	103 + 50N - 105 + 50N	2 - 6	6 - 7.8	Weak increase in chargeability on levels 1 to 6 across 200 m, decrease in resistivity on levels 1, 2 and 3 between 104+50N and 105+50N.
90+00E	104N - 105 + 50N	2 - 6	8 - 15	Increase in chargeability between 104N to 105+50N with main zone of increased values (up +15 mV/V) between 104+50N and 105+50N. No significant change in resistivity in this section, however, there is a decrease in resistivity between 101N and 104N with no chargeability increase.
91+00E	103 + 50N - 105 + 50N	5 - 8	8 - 12	Anomalous values form a subhorizontal zone with an additional upturn to north (105+50N). No significant change in resistivity.
91 + 50E	103 + 50N - 105 + 50N	5 - 8	8 - 11	Anomalous area from 104N to 105+50N with higher values in discreet zone. No significant change in resistivity.
92+00E	No significant anomalies.			
92 + 50E	99 +00N - 100 + 50N	<2 - 6	6 - 8.7	Weakly anomalous chargeability from 99+00N to 100+50N generally associated with higher resistivity area.
93 + 00E	99 + 75N - 100 +25N	<2 - 5	5 - 9.5	Broad, weakly anomalous area with generally higher resistivities.

93 + 50E	97 + 25N - 100 + 50N	<2 - 6	6 - 12	Three narrow zones of increased chargeability between 97+25N and 100+00N, in broad zone of increased chargeability. No significant change in resistivity.
	104 + 50N - 105 +00N	>6 - 9	10 - 16	Anomalous chargeability at end of line with lower resistivity.
94 + 00E	97 + 25N - 100 + 00N	<3 - 6	6 - 15	Similar to line 93+50E. Three narrow zones of increased chargeability in broader zone between 97+25N and 100+00N. Resistivity shows mixed values.
94+50E	No significant chargeability anomalies, however, resistivity shows narrow zones of decreased resistivity between 96+50N and 101+00N. This pattern is similar to the chargeability patterns for lines 93+50E and 94+00E.			
95 + 00E	96 + 00N - 98 + 50N	>2 - 6	6 - 8	Three zones of slightly increased chargeability in broad area from 96+00N to 98+50N. Resistivity generally shows lower values in this same interval.
95 + 50E	No significant chargeability anomalies, however, resistivity generally lower.			
96 + 00E	No significant chargeability, however, resistivity generally lower.			

## 6. SUMMARY AND CONCLUSIONS

A total field magnetic survey was carried out on the Chester Property Emerald Isle Grid. The background values of 56400 nT and less are considered to represent the underlying felsic to intermediate intrusive suite. Anomalous values of 56400 nT to over 58000 nT are considered to be due to later diabase dykes trending NNW and approximately east-west offshoots from these dykes.

The IP survey showed two (2) areas of enhanced chargeability, Area A in the northern part of the grid and Area B in the southeastern part. Within these two (2) broad areas of increased chargeability are discreet zones with chargeabilities 2 to 4 times background.

Siragusa (1981) reports that gold mineralization in the area is commonly associated with sulphides, mainly pyrite with some chalcopyrite and that silicified fractures in the felsic to intermediate intrusive suite are favourable sites for gold mineralization.

It is considered that the areas of increased chargeability identified by the IP survey, probably represent areas of increased pyrite (and chalcopyrite) mineralization that may be gold-bearing. The more discreet zones of increased chargeability are considered to represent mineralized fractures or sections of mineralized fractures.

## **7. RECOMMENDATIONS**

To further evaluate the Emerald Isle grid as well as the surrounding portions of the Chester Property it is recommended that;

1. the magnetometer and IP surveys be completed over the balance of the Property and,
2. three dimensional models be constructed of the IP chargeability data so that the zones can be better visualized and,
3. as weather permits, geological mapping with particular emphasis on structural/mineralizing trends.

## 8. PERSONNEL

The magnetometer and IP surveys were carried out by Dan Patrie Exploration Ltd., Massey, Ontario using the following personnel.

Dan Patrie, Massey, Ontario  
Brent Patrie, Val Therese, Ontario  
Gab Roy, Elliot Lake, Ontario  
Bronson Ede, Sudbury, Ontario  
Tyler Gagan, Espanola, Ontario  
Jeremy Faulkner, Walford, Ontario  
Michael Faulkner, Walford, Ontario  
Stephen Faulkner, Walford, Ontario  
Andrew Desjardins, Espanola, Ontario  
Matt Mandigo, Massey, Ontario

## 9. REFERENCE

1. Ayer, J.A. and Trowell, N.F., 2002  
Geological compilation of the Swayze area, Abitibi greenstone belt; Ont.  
Geol. Survey, Prel. Map P3511, scale 1:100 000.
2. Siragusa, G.M., 1981  
Precambrian Geology of Chester & Yeo Twps and parts of Neville and  
Potier Twps, Sudbury District, Ont. Geol. Survey, Prel. Map, P. 2449,  
Geol. Series, Scale 1" = ¾ mi; 1:15 840.

*L.D.S. Winter*

L.D.S. Winter, P.Geol.

3 November 2009





**L.D.S. Winter**  
**1849 Oriole Drive, Sudbury, ON P3E 2W5**  
**(705) 560-6967**  
**(705) 560-6997 (fax)**  
**email: winbourne@bellnet.ca**

**CERTIFICATE OF AUTHOR**

I, Lionel Donald Stewart Winter, P. Geo. do hereby certify that:

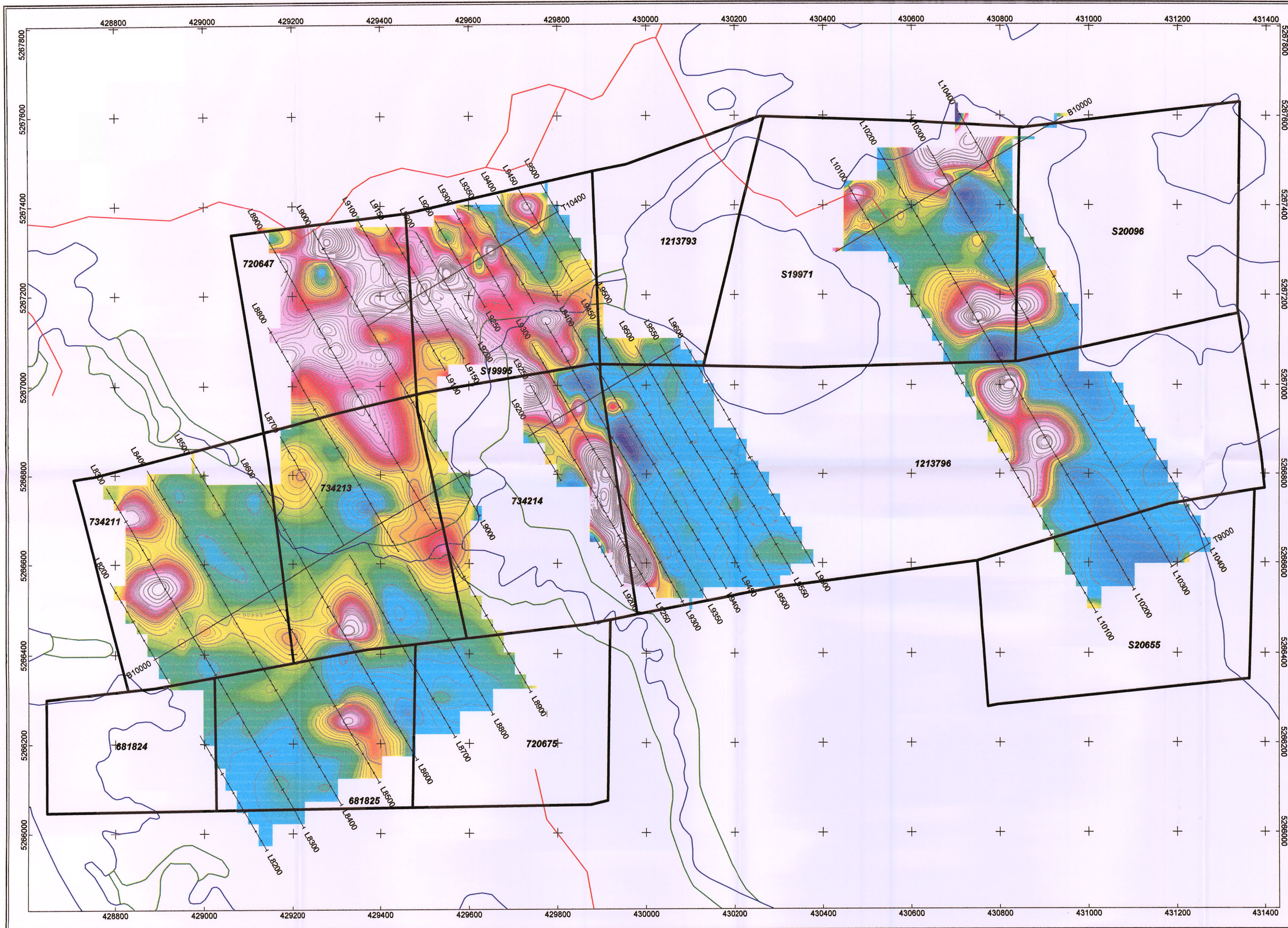
1. I am currently an independent consulting geologist.
2. I graduated with a degree in Mining Engineering (B.A.Sc.) from the University of Toronto in 1957. In addition, I have obtained a Master of Science (Applied) (M.Sc. App.) from McGill University, Montreal, QC.
3. I am a Life Member of the Canadian Institute of Mining, a Life Member of the Prospectors and Developers Association of Canada and a Registered Geoscientist in Ontario and British Columbia (P.Geo.).
4. I have worked as a geologist for a total of 52 years since my graduation from university.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am the author responsible for the preparation of the Geophysical Survey Report titled "Geophysical Survey Report on the Chester Property, Emerald Isle Grid, Chester Township, District of Sudbury, Ontario" and dated November 3 November 2009 (the "Technical Report").

Dated this 3<sup>rd</sup> Day of November, 2009

L.D.S. Winter

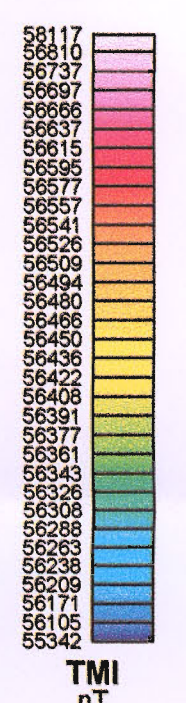


L.D.S. Winter, P.Geo.

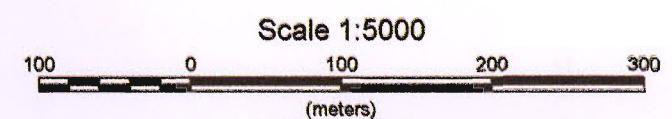
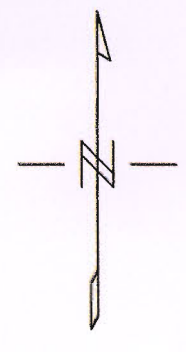


- Legend**
- Lakes
  - Wetlands
  - Rivers, streams
  - Roads
  - L4050N Survey grid line
  - Claim / Disposition boundary
  - claim / disposition number posted

**Notes:**  
 Field Magnetometer: Scintrex ENVI  
 Base Station Magnetometer: Scintrex ENVI  
 Line spacing: 50 and 100m  
 Station spacing: 12.5m



Contour intervals: 25, 100, 500, 1000 nT



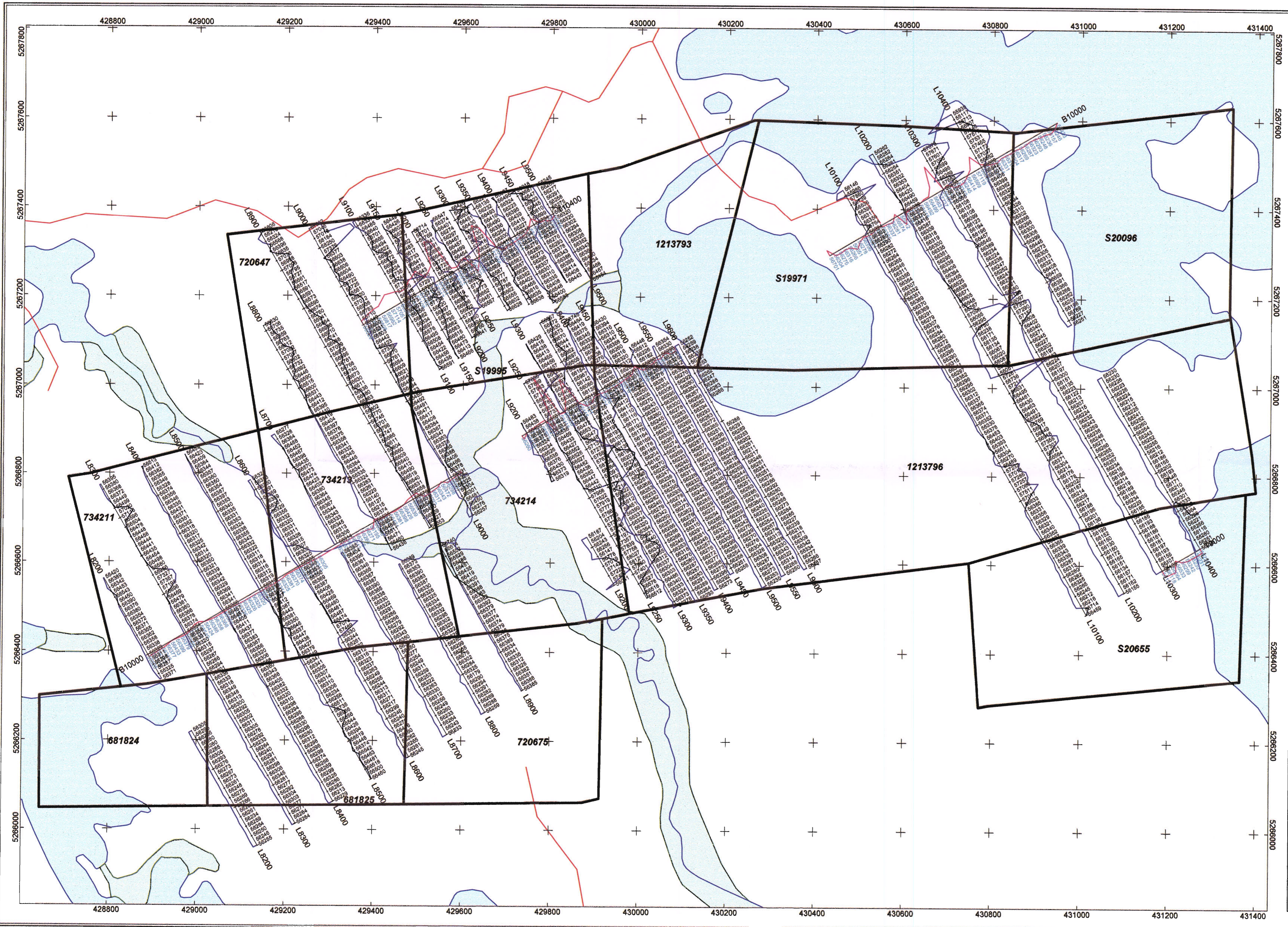
**TRELAWNEY MINING and EXPLORATION INC.**

**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

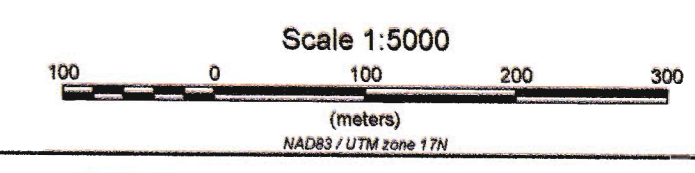
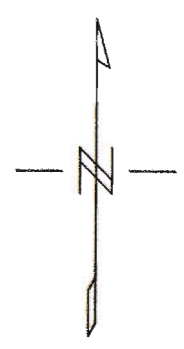
**Total Magnetic Intensity Survey Contours**

surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Soft-Ex



- Legend**
- Lakes
  - Wetlands
  - Rivers, streams
  - Roads
  - Survey grid line
  - Claim / Disposition boundary  
-claim / disposition number posted
  - Magnetic profile for grid cross-lines  
Profile scale 1cm = 1000nT
  - Magnetic profile for grid tie-lines  
Profile scale 1cm = 1000nT
- Notes:**
- Field Magnetometer: Scintrex ENVI
  - Base Station Magnetometer: Scintrex ENVI
  - Line spacing: 50 and 100m
  - Station spacing: 12.5m



**TRELAWNEY MINING  
and  
EXPLORATION INC.**

---

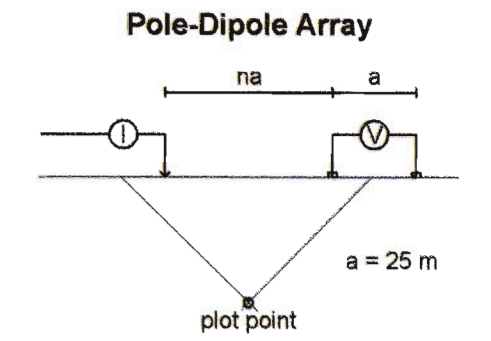
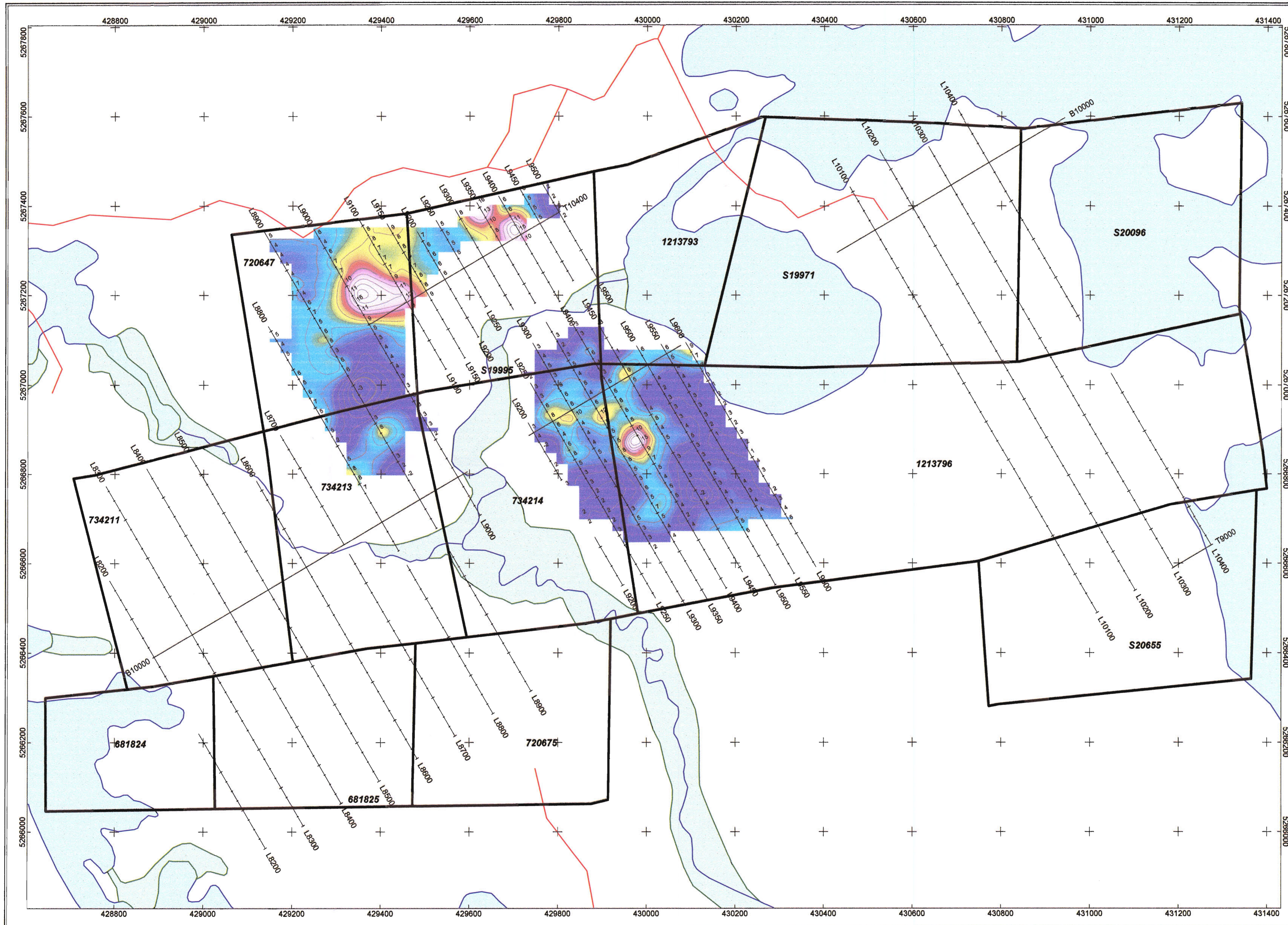
**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

---

Total Magnetic Intensity Survey  
Profiles with Data Values Posted

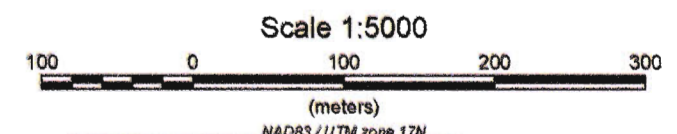
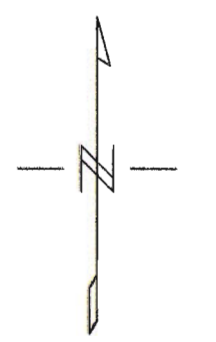
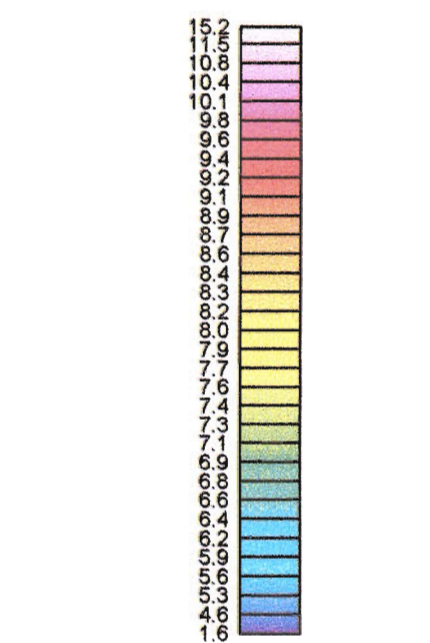
---

surveyed October 2009 by: Dan Petrie Exploration Ltd.  
processed October 2009 by: Geo-Digital-Ex



**Notes:**  
 Tx: Walzer 9000  
 Rx: Scintrex IPR-12  
 Array: pole-dipole, a=25m, n=1 to 8  
 Waveform: 0.125 Hz square wave at 50% duty cycle  
 2 sec on 2 sec off  
 Mx time interval: 590 to 820 ms

- Legend**
- Lakes
  - Wetlands
  - Rivers, streams
  - Roads
  - L4050N Survey grid line
  - Claim / Disposition boundary
  - claim / disposition number posted

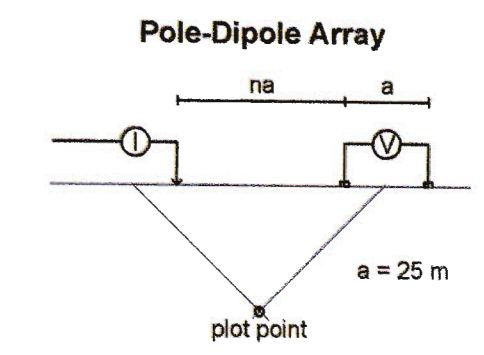
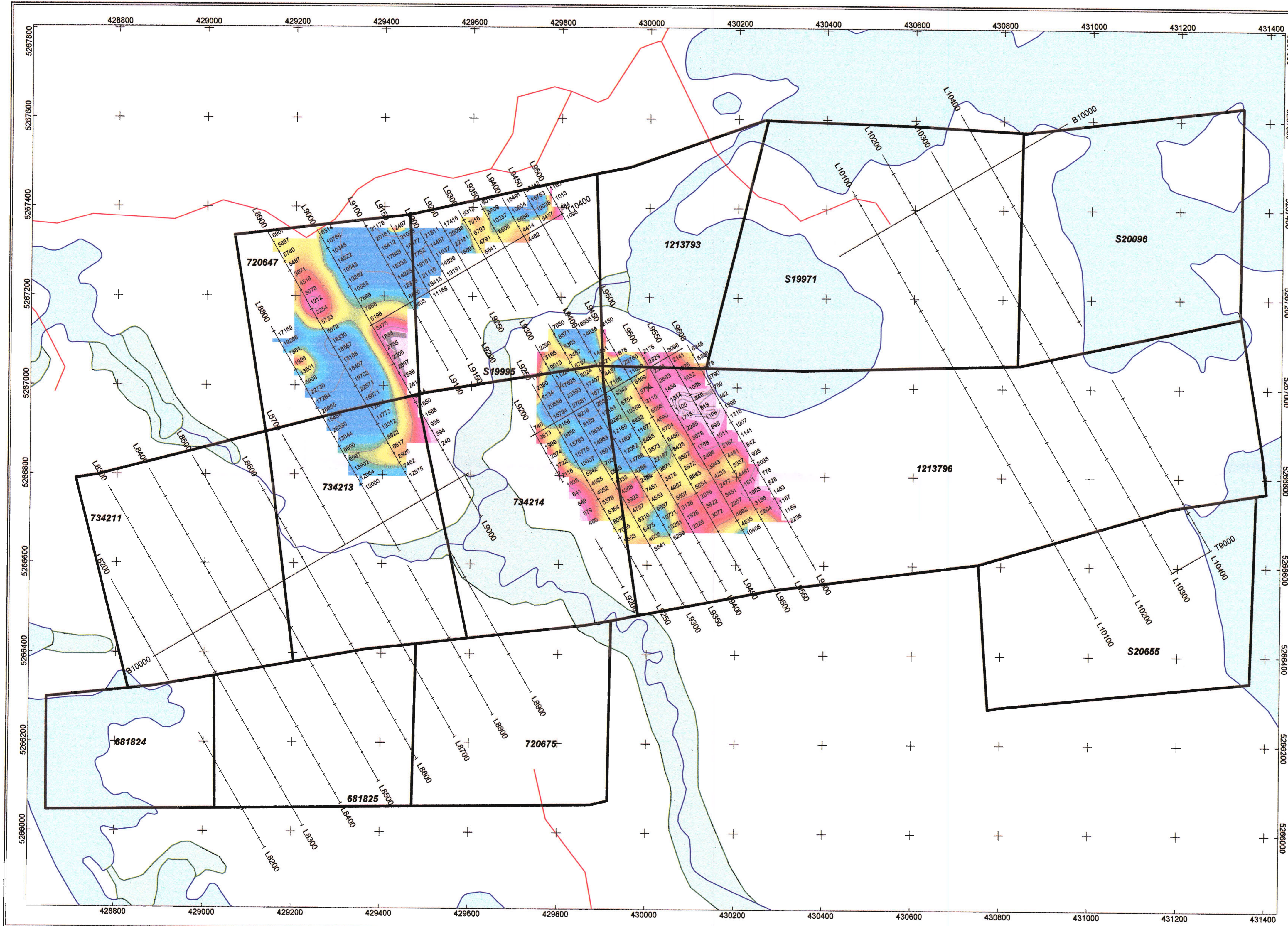


**TRELAWNEY MINING**  
 and  
**EXPLORATION INC.**

**EMERALD ISLE PROPERTY**  
 Emerald Isle Grid

**Pole-Dipole Induced Polarization and Resistivity Survey**  
 N=1 Apparent Chargeability Contours and Posted Values

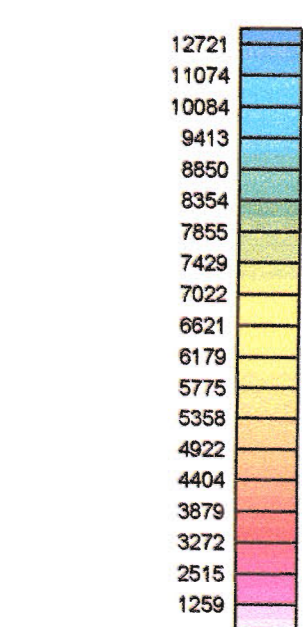
surveyed October 2009 by: Dan Petrie Exploration Ltd.  
 processed October 2009 by: Geo-Digit Ex



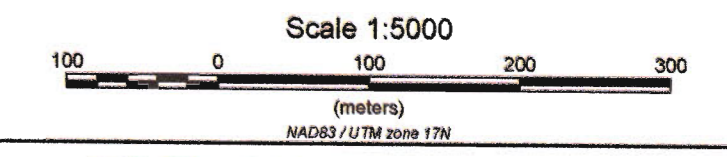
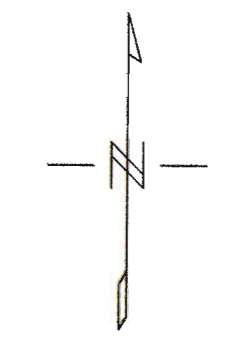
**Notes:**  
 Tx: Walcer 9000  
 Rx: Scintrex IPR-12  
 Array: pole-dipole, a=25m, n=1 to 6  
 Waveform: 0.125 Hz square wave at 50% duty cycle  
 2 sec on 2 sec off  
 Mx time interval: 590 to 620 ms

- Legend**
- Lakes
  - Wetlands
  - Rivers, streams
  - Roads
  - Survey grid line

**32165** Claim / Disposition boundary  
 -claim / disposition number posted



**Apparent Resistivity**  
 ohm-m  
 Contour intervals:  
 linear: 500, 600, 700, 800, 900, 1000 ohm-m  
 exponential: 2000, 4000, 8000, 16000 ohm-m



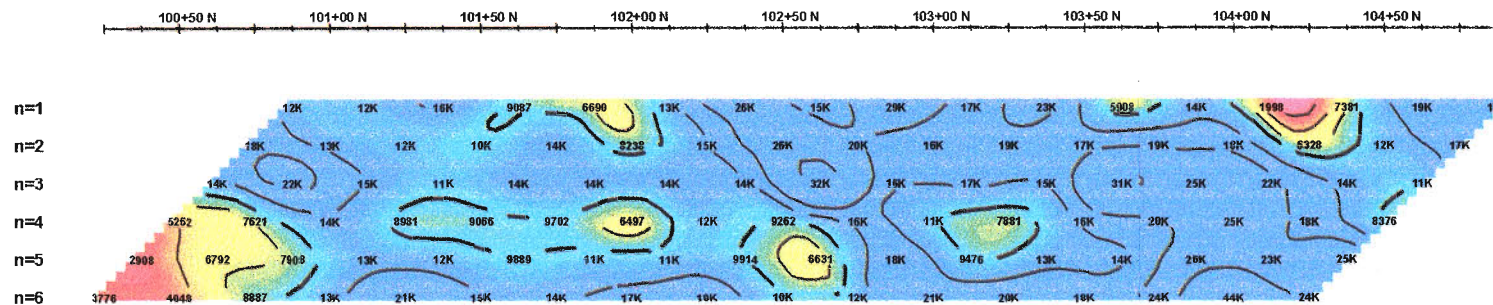
**TRELAWNEY MINING**  
 and  
**EXPLORATION INC.**

**EMERALD ISLE PROPERTY**  
 Emerald Isle Grid

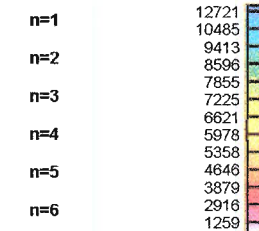
**Pole-Dipole Induced Polarization and Resistivity Survey**  
 N=1 Apparent Resistivity Contours and Posted Values

surveyed October 2009 by: Dan Patric Exploration Ltd.  
 processed October 2009 by: Geo-Digit-Ex

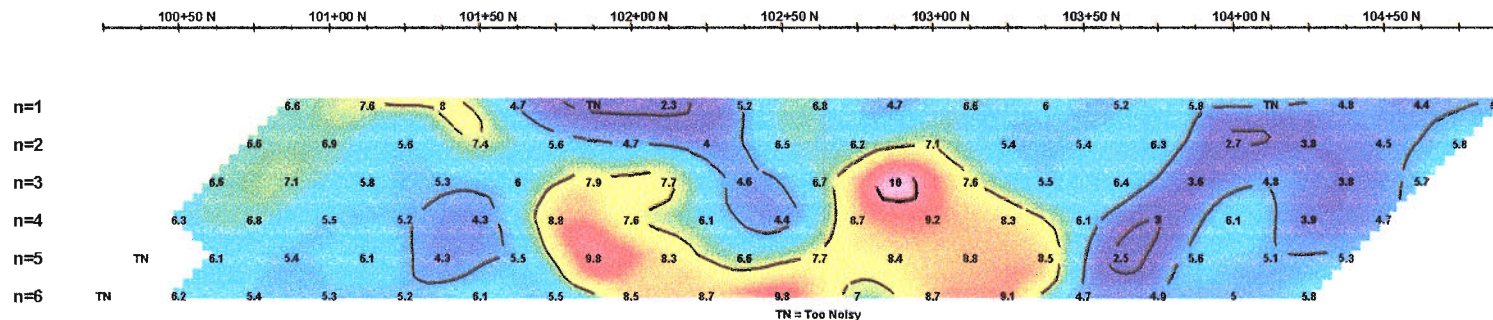
Apparent Resistivity  
(ohm-m)



Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



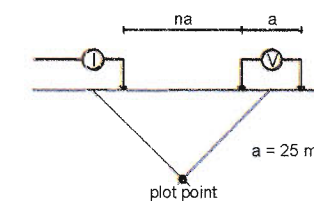
Apparent Chargeability



Notes:

Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 820 ms

Pole-Dipole Array



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

**EMERALD ISLE PROPERTY**

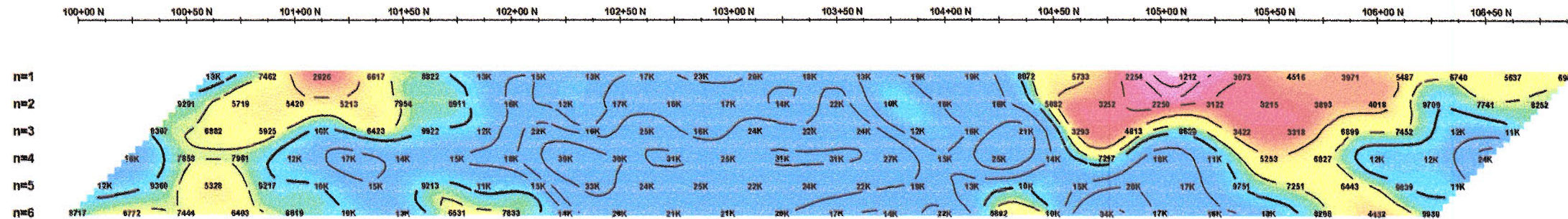
**Emerald Isle Grid**

**Pole-Dipole  
Resistivity and Induced Polarization Survey  
Pseudosection  
Line 8800E**

surveyed October 2009 by: Dan Patrie Exploration Ltd.

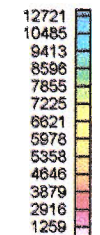
processed October 2009 by: Geo-Digit-Ex

Apparent Resistivity  
(ohm-m)

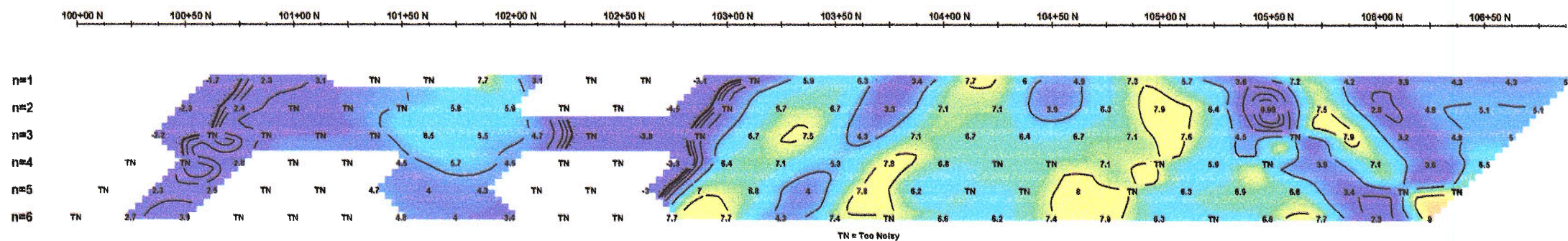


Apparent Resistivity  
(ohm-m)

n=1  
n=2  
n=3  
n=4  
n=5  
n=6

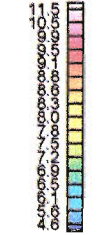


Apparent Chargeability  
(mV/V)



Apparent Chargeability  
(mV/V)

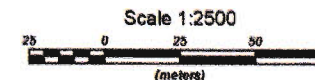
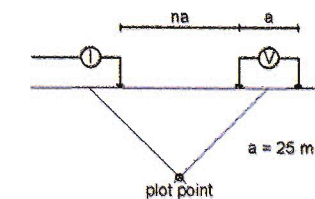
n=1  
n=2  
n=3  
n=4  
n=5  
n=6



Notes:

Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 820 ms

Pole-Dipole Array



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

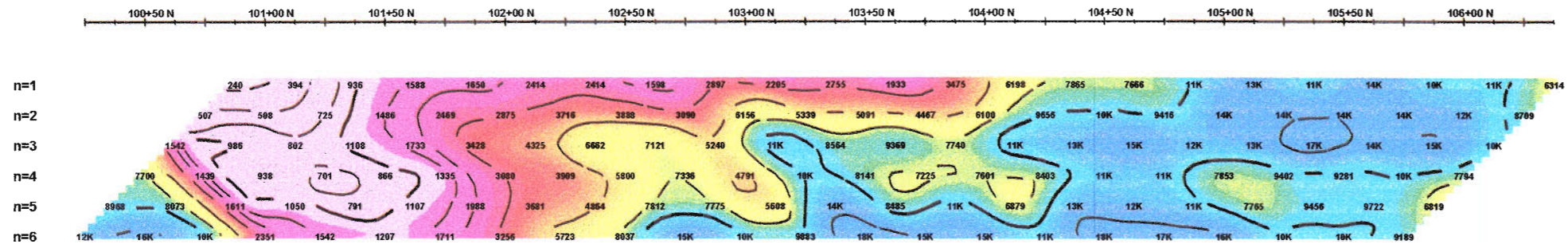
**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 8900E**

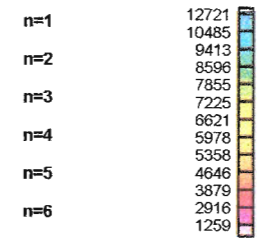
surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Digit-Ex

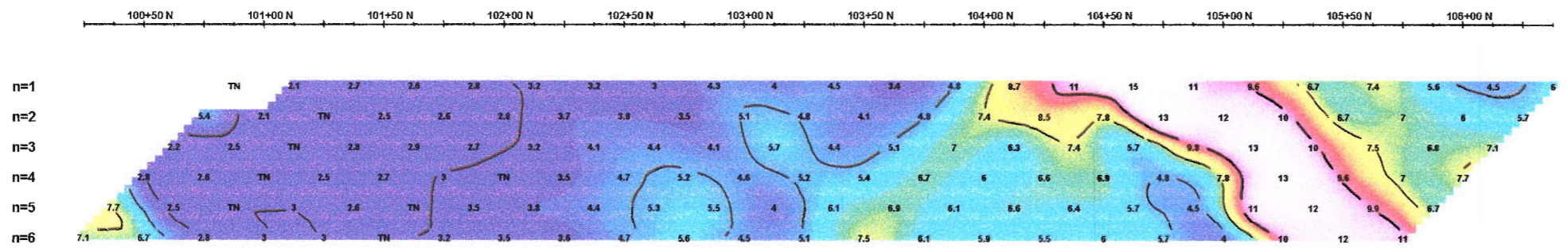
Apparent Resistivity  
(ohm-m)



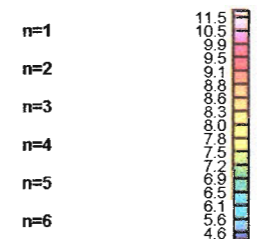
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)

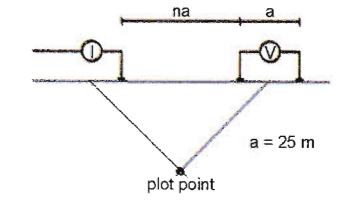


Apparent Chargeability  
(mV/V)



Notes:  
Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 820 ms

Pole-Dipole Array



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

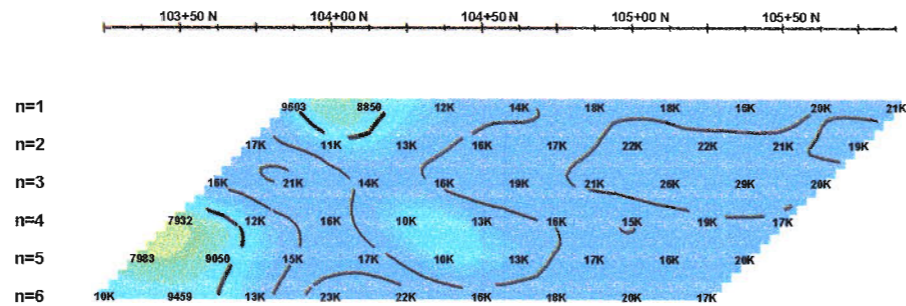
**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 9000E**

surveyed October 2009 by: Dan Patrie Exploration Ltd.

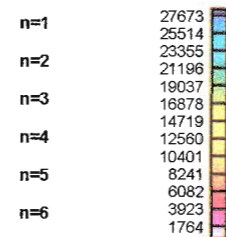
processed October 2009 by: Geo-Digit-Ex



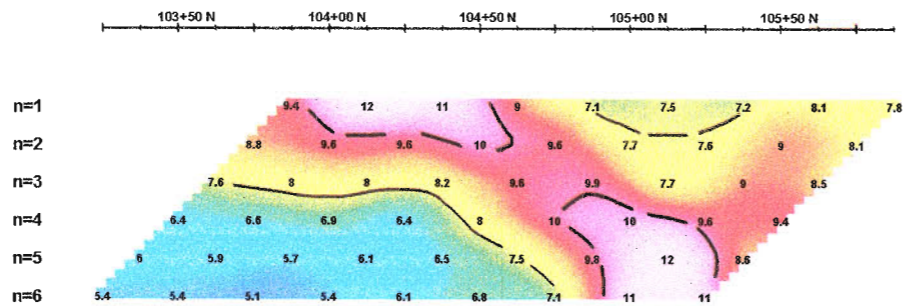
Apparent Resistivity  
(ohm-m)



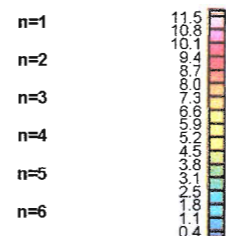
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



Apparent Chargeability  
(mV/V)

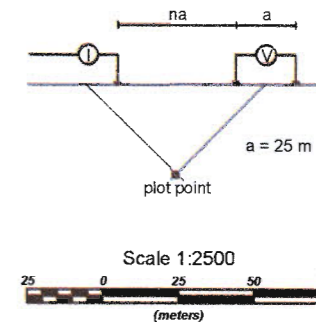


Notes:

Tx: Walcer 9000  
 Rx: Scintrex IPR-12  
 Array: pole-dipole, a=25m, n=1 to 6  
 Waveform: 0.125 Hz square wave at 50% duty cycle  
 2 sec on 2 sec off  
 Mx time interval: 590 to 820 ms

TN = Too Noisy

Pole-Dipole Array



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

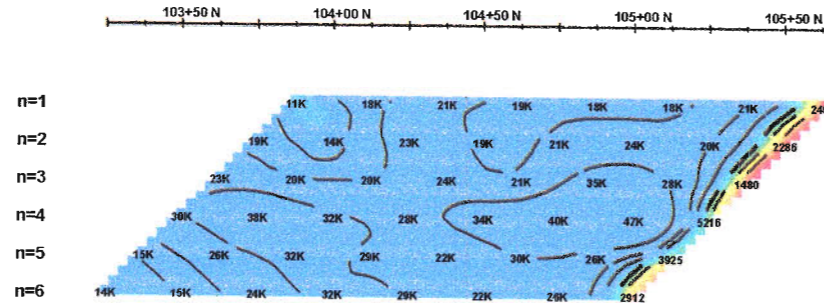
**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 9100E**

surveyed October 2009 by: Dan Patrie Exploration Ltd.

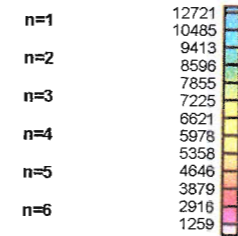
processed October 2009 by:



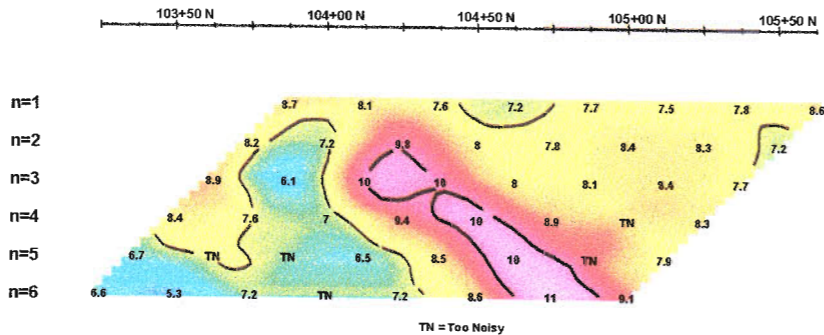
Apparent Resistivity  
(ohm-m)



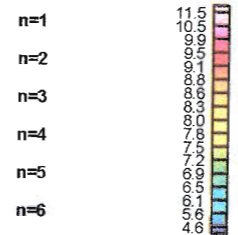
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



Apparent Chargeability  
(mV/V)

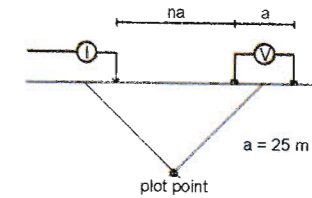


Notes:

Tx: Walcer 9000  
 Rx: Scintrex IPR-12  
 Array: pole-dipole, a=25m, n=1 to 6  
 Waveform: 0.125 Hz square wave at 50% duty cycle  
 2 sec on 2 sec off  
 Mx time interval: 590 to 820 ms

TN = Too Noisy

Pole-Dipole Array



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

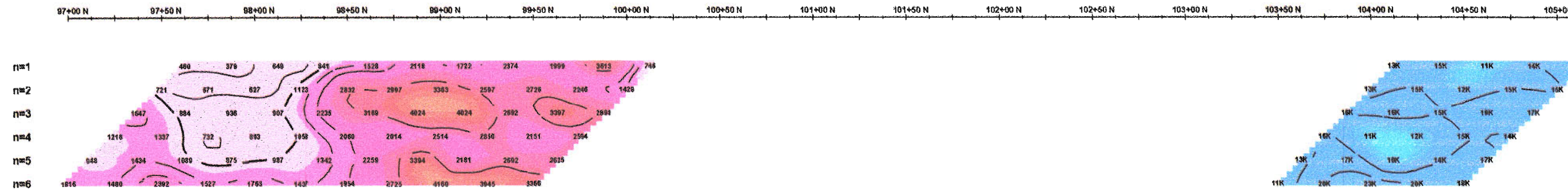
**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 9150E**

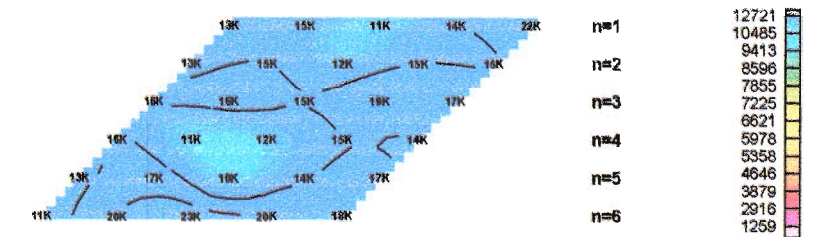
surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Digit-Ex

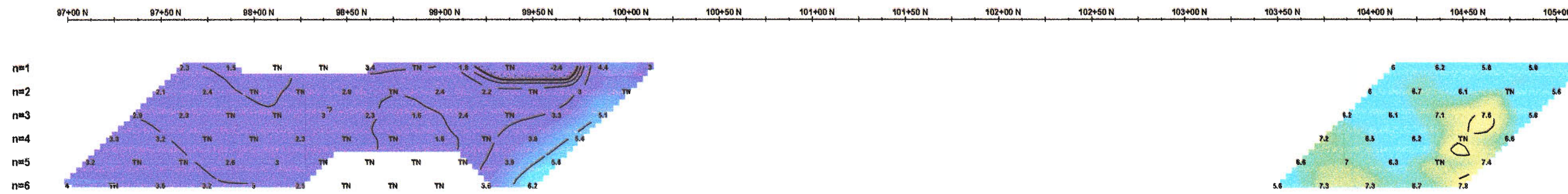
Apparent Resistivity  
(ohm-m)



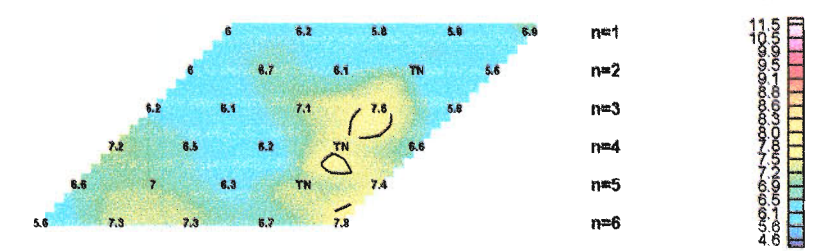
Apparent Resistivity  
(ohm-m)



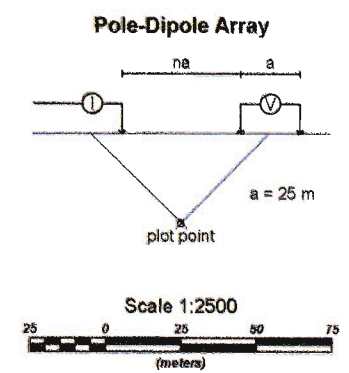
Apparent Chargeability  
(mV/V)



Apparent Chargeability  
(mV/V)



Notes:  
Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 820 ms



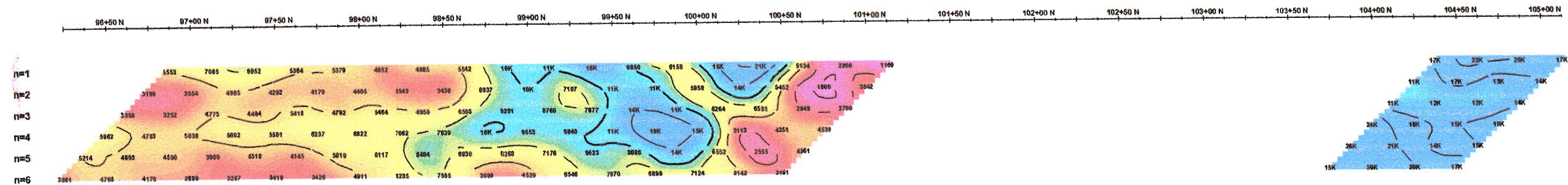
**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

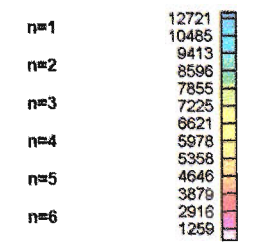
**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Line 9200E**

surveyed October 2009 by: Dan Patrie Exploration Ltd.  
processed October 2009 by: Geo-Digit-Ex

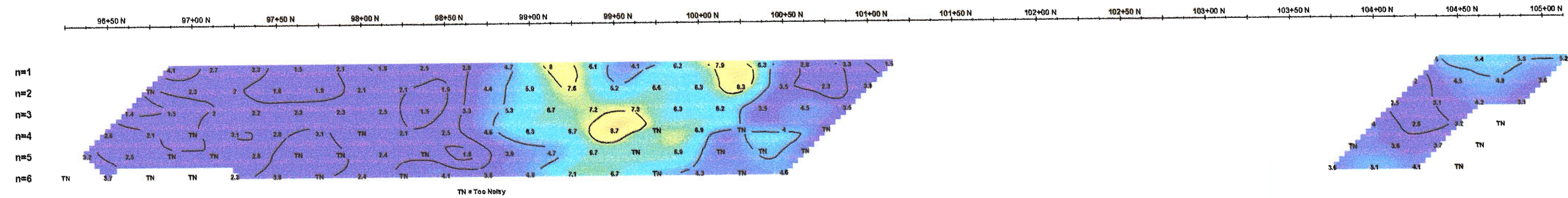
Apparent Resistivity  
(ohm-m)



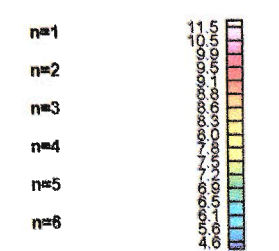
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)

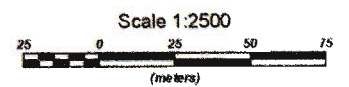
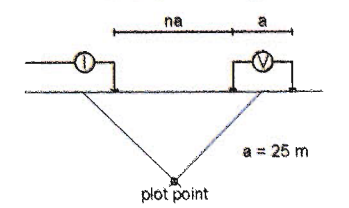


Apparent Chargeability  
(mV/V)



Notes:  
Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 820 ms

Pole-Dipole Array



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

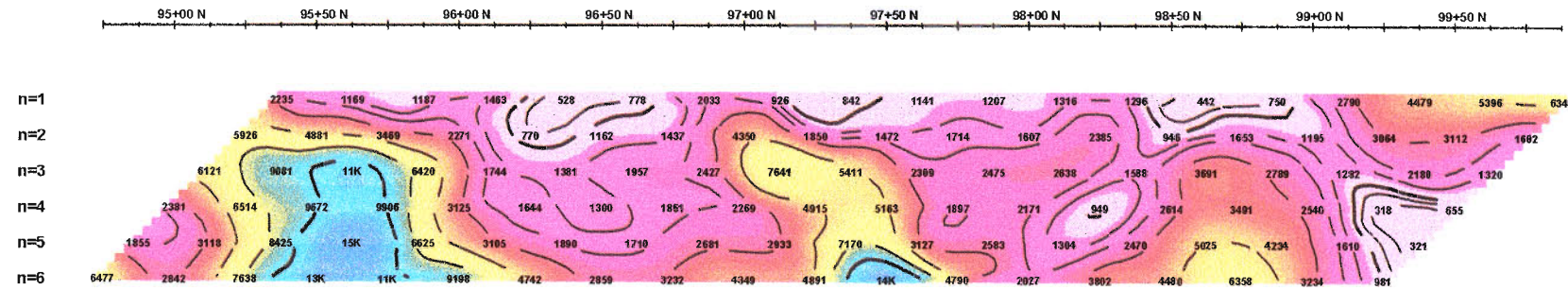
**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 9250E**

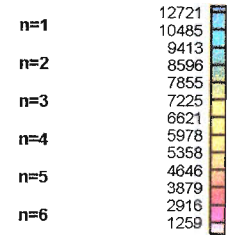
surveyed October 2009 by: Dan Petrie Exploration Ltd.

processed October 2009 by: Geo-Digit-Ex

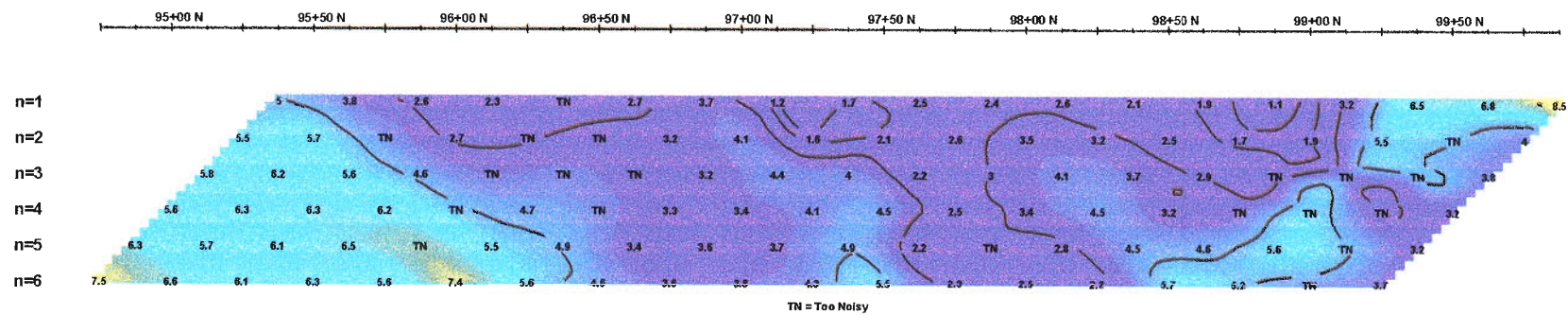
Apparent Resistivity  
(ohm-m)



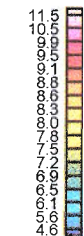
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



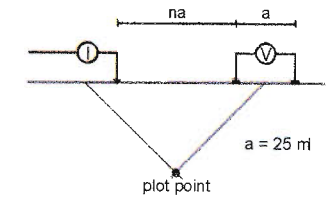
Apparent Chargeability  
(mV/V)



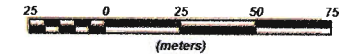
Notes:

Tx: Walcer 9000  
 Rx: Scintrex IPR-12  
 Array: pole-dipole, a=25m, n=1 to 6  
 Waveform: 0.125 Hz square wave at 50% duty cycle  
 2 sec on 2 sec off  
 Mx time interval: 590 to 820 ms

Pole-Dipole Array



Scale 1:2500



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

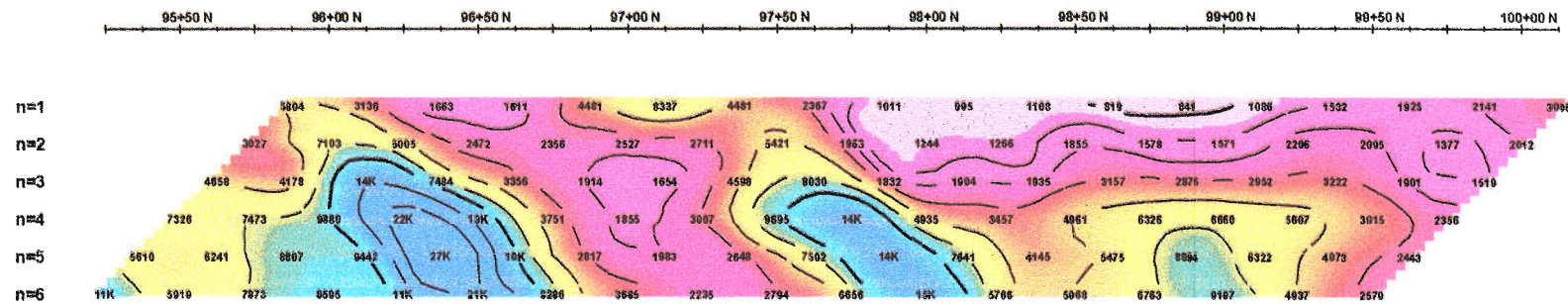
**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 9600E**

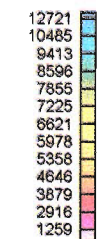
surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Digit-Ex

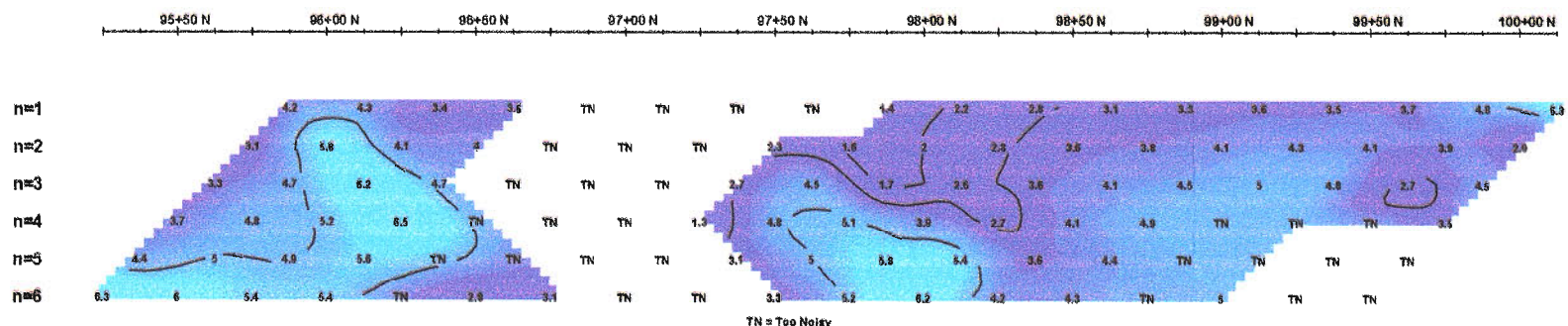
Apparent Resistivity  
(ohm-m)



Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



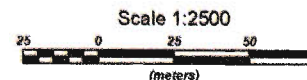
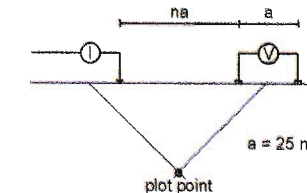
Apparent Chargeability  
(mV/V)



Notes:

Tx: Welcer 9000  
 Rx: Scintrex IPR-12  
 Array: pole-dipole, a=25m, n=1 to 6  
 Waveform: 0.125 Hz square wave at 50% duty cycle  
 2 sec on 2 sec off  
 Mx time interval: 590 to 820 ms

Pole-Dipole Array



TRELAWNEY MINING  
and  
EXPLORATION INC.

EMERALD ISLE PROPERTY  
Emerald Isle Grid

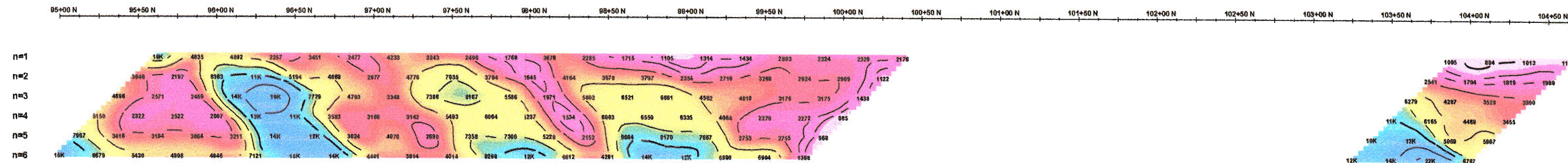
Pole-Dipole  
Resistivity and Induced Polarization Survey  
Pseudosection  
Line 9550E

surveyed October 2009 by: Dan Patrie Exploration Ltd.

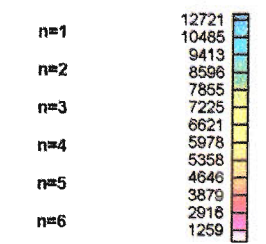
processed October 2009 by:



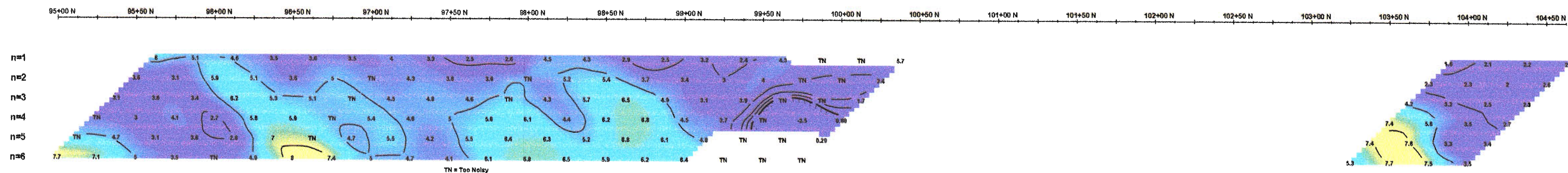
Apparent Resistivity  
(ohm-m)



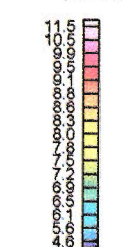
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



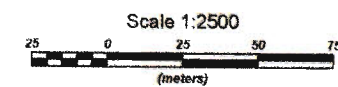
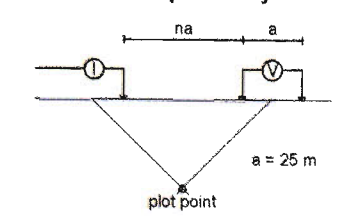
Apparent Chargeability  
(mV/V)



IS:

falcor 9000  
cintrex IPR-12  
: pole-dipole, a=25m, n=1 to 6  
form: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
ne interval: 590 to 820 ms

Pole-Dipole Array



**TRELAWNEY MINING  
and  
EXPLORATION INC.**

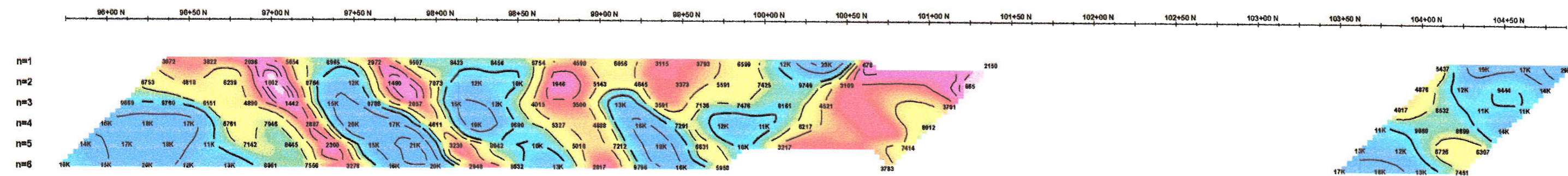
**EMERALD ISLE PROPERTY  
Emerald Isle Grid**

**Pole-Dipole  
Resistivity and Induced Polarization Survey  
Pseudosection  
Line 9500E**

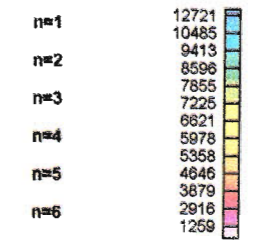
surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Digit-Ex

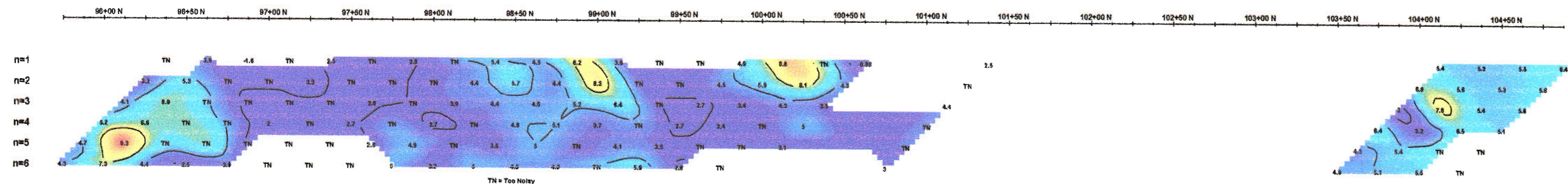
Apparent Resistivity  
(ohm-m)



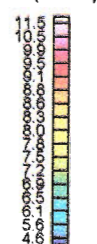
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)

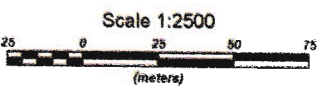
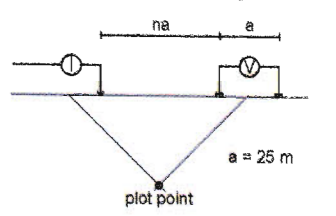


Apparent Chargeability  
(mV/V)



Notes:  
Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 620 ms

Pole-Dipole Array



**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

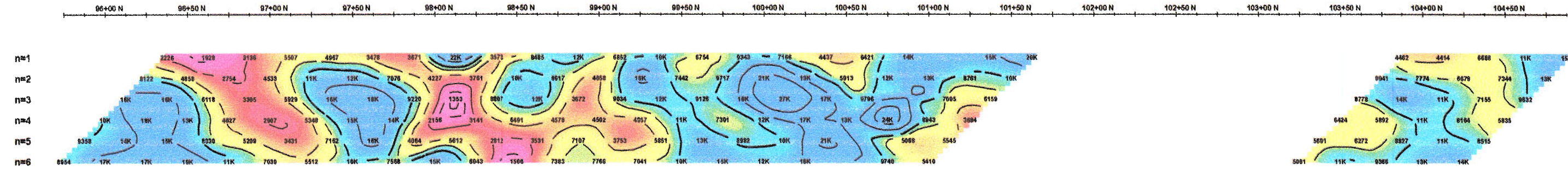
**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 9450E**

surveyed October 2009 by: Dan Patrie Exploration Ltd.

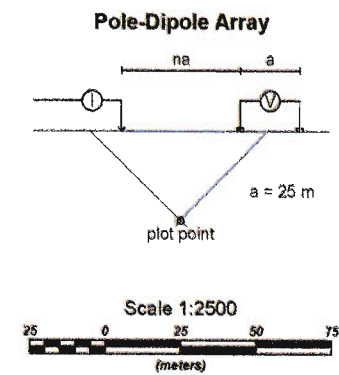
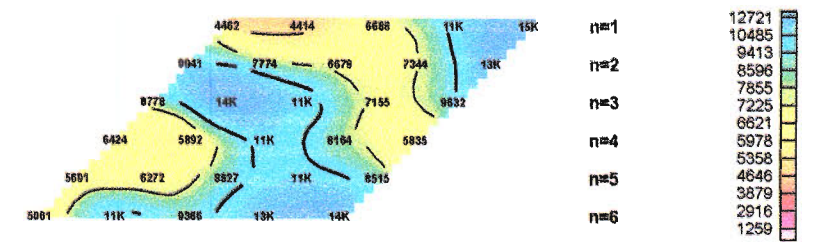
processed October 2009 by: Geo-Digit-Ex



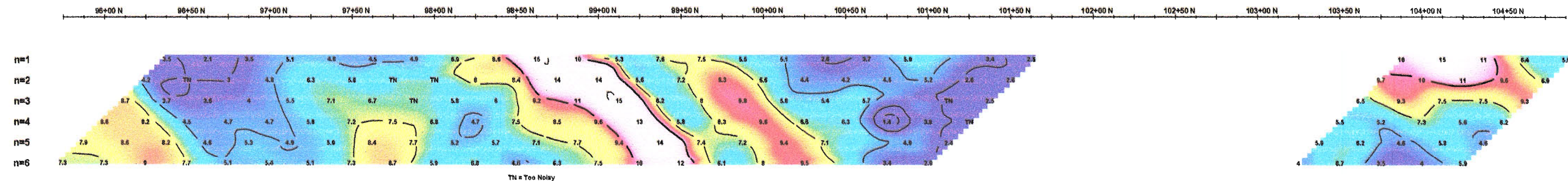
Apparent Resistivity  
(ohm-m)



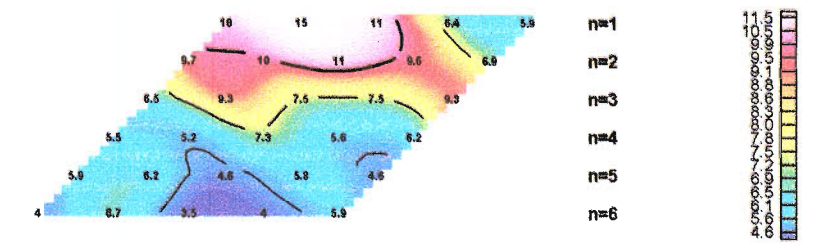
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



Apparent Chargeability  
(mV/V)



Notes:

Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 60% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 820 ms

**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

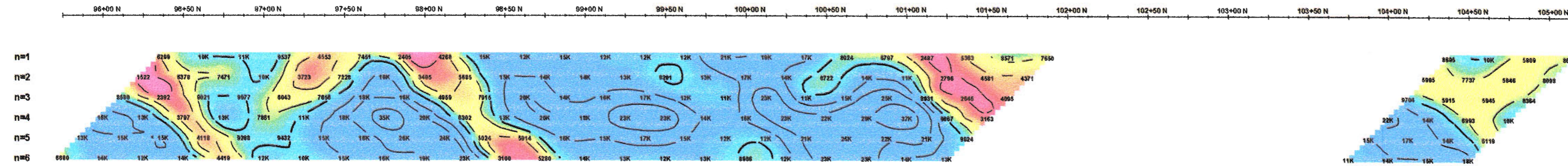
**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

Pole-Dipole  
Resistivity and Induced Polarization Survey  
Pseudosection  
**Line 9400E**

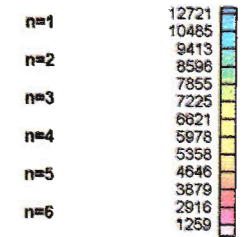
surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Diqt-Ex.

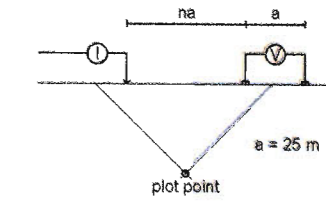
Apparent Resistivity  
(ohm-m)



Apparent Resistivity  
(ohm-m)



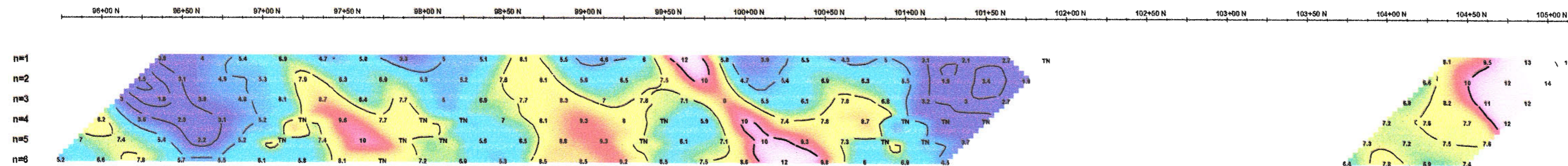
Pole-Dipole Array



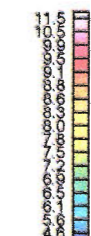
Scale 1:2500



Apparent Chargeability  
(mV/V)



Apparent Chargeability  
(mV/V)



TN = Too Noisy

Notes:

Tx: Walcer 9000  
 Rx: Scintrex IPR-12  
 Array: pole-dipole, a=25m, n=1 to 6  
 Waveform: 0.125 Hz square wave at 50% duty cycle  
 2 sec on 2 sec off  
 Mx time interval: 590 to 820 ms

**TRELAWNEY MINING**  
and  
**EXPLORATION INC.**

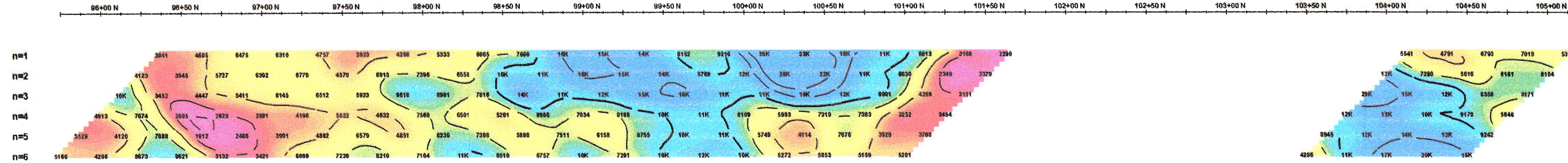
**EMERALD ISLE PROPERTY**  
Emerald Isle Grid

**Pole-Dipole**  
**Resistivity and Induced Polarization Survey**  
**Pseudosection**  
**Line 9350E**

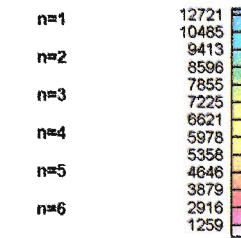
surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Digit-Ex

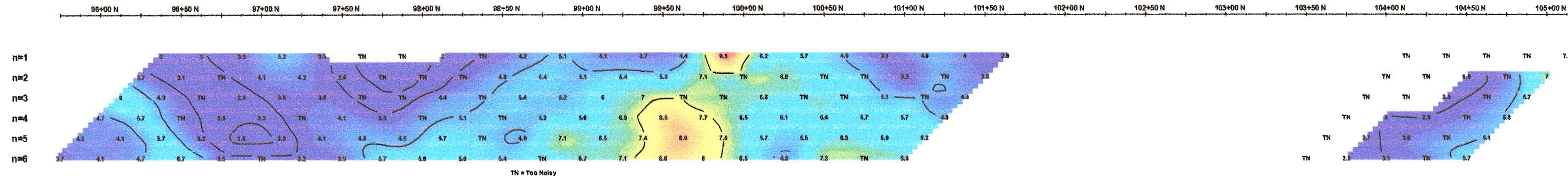
Apparent Resistivity  
(ohm-m)



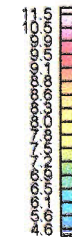
Apparent Resistivity  
(ohm-m)



Apparent Chargeability  
(mV/V)



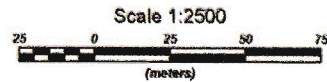
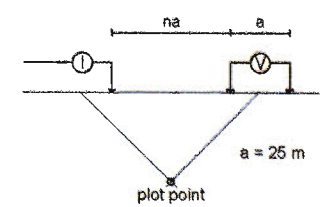
Apparent Chargeability  
(mV/V)



Notes:

Tx: Walcer 9000  
Rx: Scintrex IPR-12  
Array: pole-dipole, a=25m, n=1 to 6  
Waveform: 0.125 Hz square wave at 50% duty cycle  
2 sec on 2 sec off  
Mx time interval: 590 to 820 ms

Pole-Dipole Array



TRELAWNEY MINING  
and  
EXPLORATION INC.

EMERALD ISLE PROPERTY  
Emerald Isle Grid

Pole-Dipole  
Resistivity and Induced Polarization Survey  
Pseudosection  
Line 9300E

surveyed October 2009 by: Dan Patrie Exploration Ltd.

processed October 2009 by: Geo-Digit-Ex