



WESTERN AREAS NL
GROUND TDEM SURVEY
EAST BULL LAKE-NOVICK LAKE PROSPECT
ONTARIO, CANADA
LOGISTIC AND INTERPRETATION REPORT

09N009

APRIL 2009

1746, CH. SULLIVAN, VAL-D'OR (QUEBEC) J9P 7H1

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TABLE OF CONTENTS

ABSTRACT	1
1. THE MANDATE	2
2. THE EAST BULL LAKE-NOVICK LAKE PROSPECT.....	3
3. GROUND TDEM SURVEY.....	5
4. DATA PROCESSING AND DELIVERABLES	11
5 INTERPRETATION AND RECOMMENDATIONS	12

LIST OF FIGURES

FIGURE 1: GENERAL LOCATION OF THE EAST BULL LAKE-NOVICK LAKE PROSPECT	2
FIGURE 2: INDEX OF CLAIMS AND SURVEY GRID –EAST BULL LAKE-NOVICK LAKE PROSPECT.....	4
FIGURE 3: SKETCH OF THE FIXED LOOP LAYOUT.....	6
FIGURE 4: SKETCH OF THE MOVING LOOP LAYOUT	7
FIGURE 5: CURRENT (I) WAVEFORM IN THE TRANSMITTING LOOP	8
FIGURE 6: ELECTROMOTIVE FORCE WAVEFORM GENERATED IN THE GROUND	9

LIST OF TABLES

TABLE 1: PROTEM TIME GATES LOCATION	9
TABLE 2: DESCRIPTION OF GROUND TDEM MOVING LOOP ANOMALIES INTERPRETED ON THE EAST BULL LAKE-NOVICK LAKE PROSPECT	13

ABSTRACT

On behalf of Western Areas NL, a geophysical TDEM campaign was carried out over part of the **East Bull Lake-Novick Lake Prospect**, located within the Boon Township, province of Ontario. The objectives of the TDEM survey were to locate and define the geometry of buried conductive zones interpreted from an airborne VTEM survey.

During the months of **March 2009**, a total of **5.0 line-km** of a fixed loop and **6.0 line-km** of a moving loop TDEM survey were carried out over a part of the **East Bull Lake-Novick Lake Prospect**. Survey specifications, instrumentation control, data acquisition and processing were all successfully performed within our Quality System framework.

Three anomalies (**NL-01** to **NL-03**) of probable metallic source signature were interpreted over the survey grid. These three anomalies could represent a single conductor affected by a NW fault's network. **NL-02** represents an interesting target. Follow-up recommendations include survey extensions, numerical modelling and drilling as indicated in Table 2.

1. THE MANDATE

- | | |
|--|---|
| <input type="checkbox"/> <i>PROJECT ID</i> | East Bull Lake-Novick Lake Prospect
(Our reference: 09N009) |
| <input type="checkbox"/> <i>GENERAL LOCATION</i> | Boon Township, Province of Ontario. |
| <input type="checkbox"/> <i>CUSTOMER</i> | Western Areas NL
Suite 3, Level 1, 11 Ventor Avenue
West Perth, Australia 6005 |
| <input type="checkbox"/> <i>REPRESENTATIVE</i> | Mr. Robert Barwick
Overseas Exploration Manager
rbarwick@westernareas.com.au |
| <input type="checkbox"/> <i>SURVEY TYPE</i> | Ground TDEM Survey (Fixed and Moving Loop Configurations) |
| <input type="checkbox"/> <i>GEOPHYSICAL OBJECTIVES</i> | <ul style="list-style-type: none"> • To locate and define the geometry of buried conductive zones interpreted from an airborne VTEM survey. • To propose a follow-up program over the most promising anomalies. |

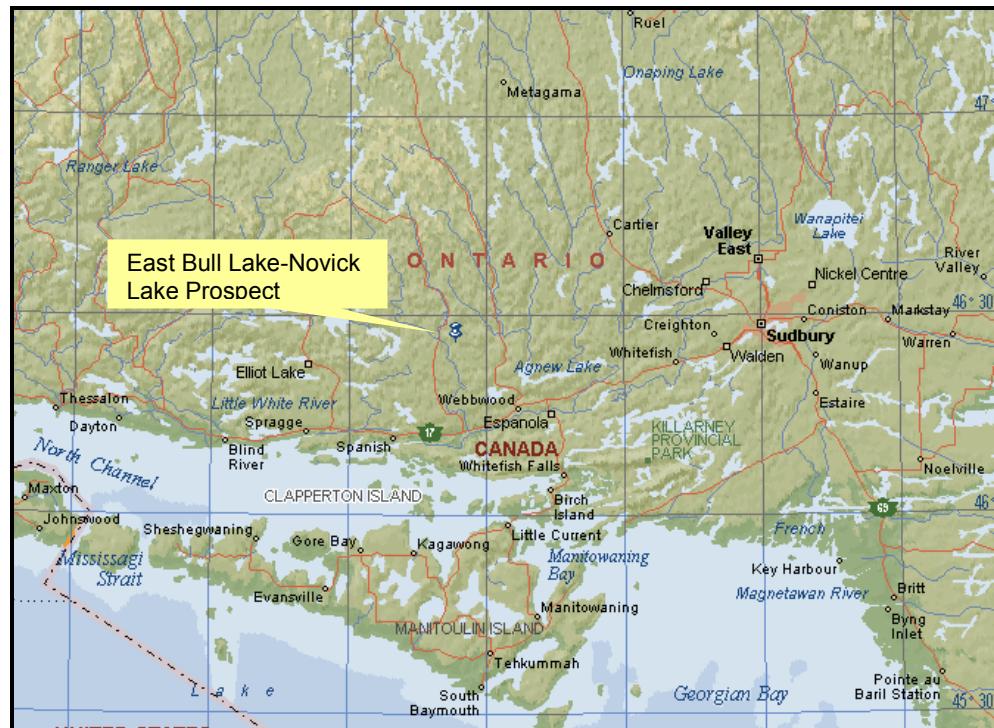


FIGURE 1: GENERAL LOCATION OF THE EAST BULL LAKE-NOVICK LAKE PROSPECT

2. THE EAST BULL LAKE-NOVICK LAKE PROSPECT

LOCATION

Boon Township, Ontario, Canada
 Centred on 46°26' N and 82°06' W
 NTS sheet: **41J/08**

NEAREST SETTLEMENTS

Massey: 25 km to the southwest.
 Sudbury : 90 km to the eastwest.

ACCESS

The East Bull Lake-Novick Lake Prospect is relatively easily accessible. Take road 553 from Massey to reach the East Bull Lake lodge. From there, a snowmobile trail was used for an additional 20 km to reach the survey grid.

GEOMORPHOLOGY

The topography offers little topographic relief but a lot of cliffs (3 to 5 m elevation) are present on this area. Almost all the survey area is tightly forested. The Novick Lake is located eastward of the survey grid.



CULTURAL FEATURES

A few logging roads cross the survey grid without any apparent effect on the data quality.

MINING LAND TENURE

The property is owned at 100% by Mustang Minerals Corp. The survey grid and claims encompassed in the present survey are illustrated on the following page.

SURVEY GRID

The survey area consists of eleven N-S survey lines (L0+00E to L10+00E) extending from 0+00N to 10+00N. The line interval is 100 m and the stations are picketed every 25 m. One tie line (TL 10+00N) and one base line (BL 0+00N) oriented E-W complete the grid.

COORDINATE SYSTEM

Projection: Universal Transverse Mercator (UTM)
 Datum: NAD27
 Zone: 17N

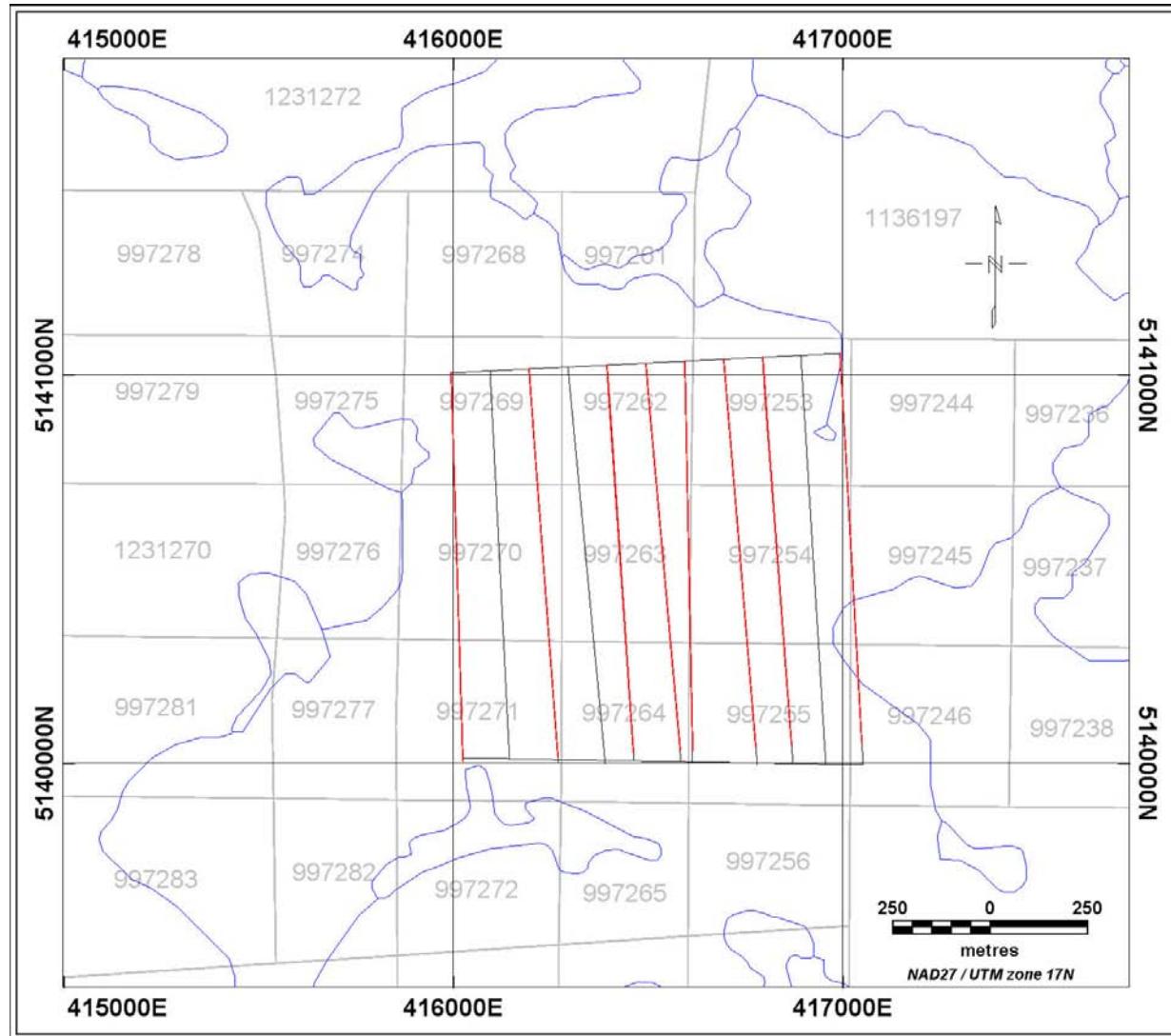


FIGURE 2: INDEX OF CLAIMS AND SURVEY GRID – EAST BULL LAKE-NOVICK LAKE PROSPECT

3. GROUND TDEM SURVEY

<input type="checkbox"/> <i>TYPE OF SURVEY</i>	TDEM (Time Domain ElectroMagnetics)
	Configurations : Moving Loop (200 X 200 m) Line interval : 200 m (from line 0+00E to 10+00E) Reading interval : 100 X 200 m
	Configurations : Fixed Loop (600 X 400 m) Line interval : 100 m (from line 4+00E to 8+00E) Reading interval: 50 X 100 m
<input type="checkbox"/> <i>MEASUREMENTS</i>	Vertical Z and horizontal / orthogonal X & Y partial derivatives $\partial\mathbf{B}/\partial t$ of the secondary magnetic field (3D-3 Surface Coil).
<input type="checkbox"/> <i>PERSONNEL</i>	Marc Nadon, Tech., Crew chief Stephane Lacasse, Field assistant Daniel Ricard, Field assistant Marc-André Gamelin, Field assistant Annie Lacasse, BSc., Data processing & plotting Martin Dubois, BSc., geo., Field work supervision, QC, data processing and report. Circé Malo Lalande, Eng., Final validation of product conformity
<input type="checkbox"/> <i>DATA ACQUISITION</i>	March 9 th to 22 nd 2009
<input type="checkbox"/> <i>SURVEY COVERAGE</i>	Fixed Loop: 5.0 line-km Moving Loop: 6.0 line-km

**TRANSMITTING LOOPS
SPECIFICATIONS**

The layout consists of a N-S loop (In-Loop and Out-of-Loop reading (Refer to map 10.0 for loop outline)).

FIXED LOOP SURVEY

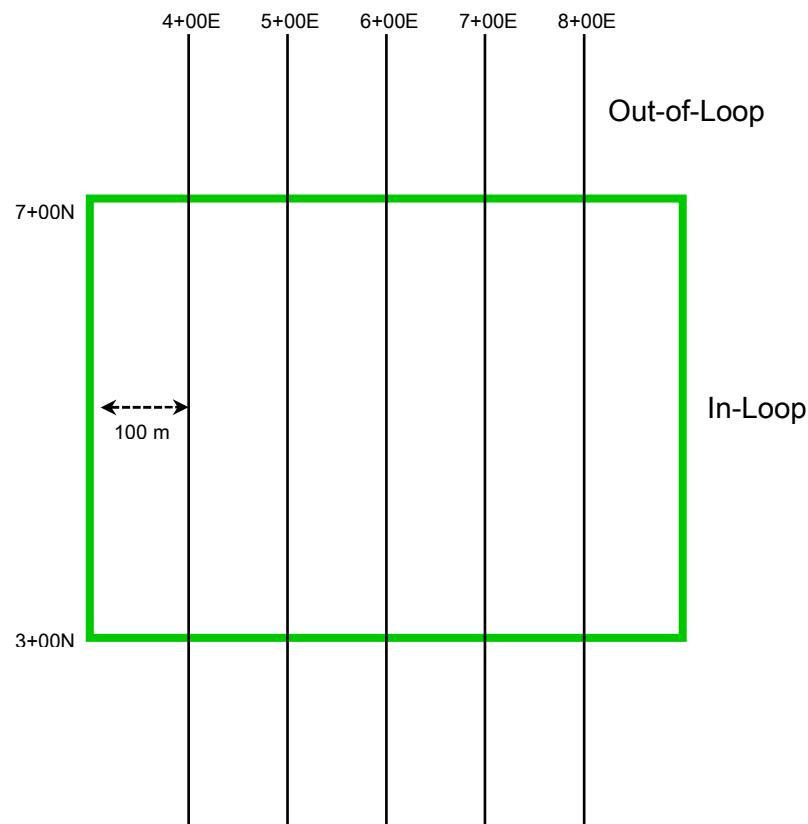


Figure 3: Sketch of the Fixed loop layout

- Loop size: 400 X 600 m.
- One turn of AWG #10 wire.
- Wire's loop resistance: ~8.0 Ω.
- Transmitting current: ~20.0 A.
- A reading was taken every 50 inside and outside the loop.
- A total of 5 survey lines (4+00E, 5+00E, 6+00E, 7+00E and 8+00E) were sampled using this configuration.

MOVING LOOP SURVEY

The layout consists of 200 X 200 m N-S moving loops

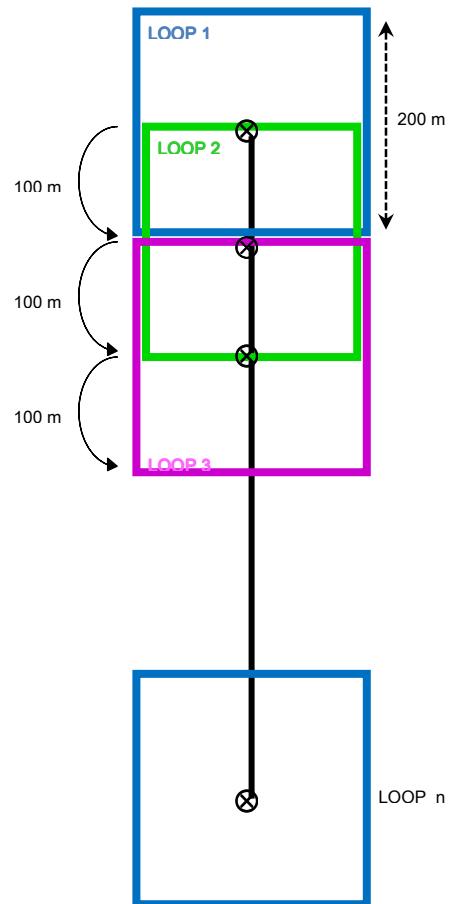


Figure 4: Sketch of the Moving Loop layout

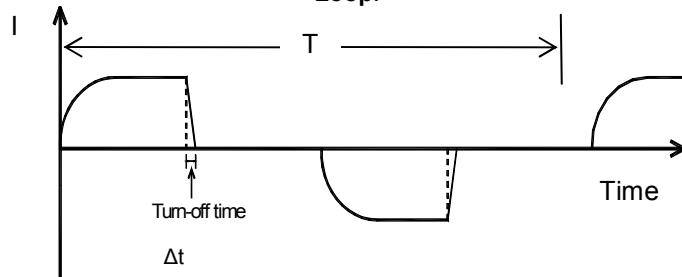
- Loop size: 200 X 200 m.
- One turn of AWG #10 wire.
- Wire loop resistance: $\sim 2.6 \Omega$.
- Transmitting current: $\sim 20.0\text{A}$.
- A single reading was taken inside and in the loop center. The loop was then moved 100 m on the survey line so that the next station would be taken at a 100 m interval.
- A total of 6 survey lines (2+00E, 4+00E, 6+00E, 8+00E and 10+00E) were sampled using this configuration.

**TDEM TRANSMITTER
(Tx)**

Geonics **TEM57-MK2**, s/n 61103Z

Power modules : Geonics **TEM67**, s/n 40603 and 50608
 Power supplies: 2.0 kW Honda motor generator, s/n 372 & 295
 Maximum output: Honda: up to 2.0 kVA, 25 A or 150 V
 Transmitted signal: Honda: bipolar wave, 50% duty cycle
 Repetition rate: 7.5 Hz ($T/4 = 83.33 \text{ ms}$)

Figure 5: Current (I) Waveform in the Transmitting Loop:



TDEM RECEIVER (Rx)

Geonics Digital **Protem 67D**, s/n 72602.

T_x synchronization : crystal

Integration time: 1 cycle of 120 seconds (7.5 Hz)

Start of integration : 800 μ s from end of trailing edge (7.5 Hz)

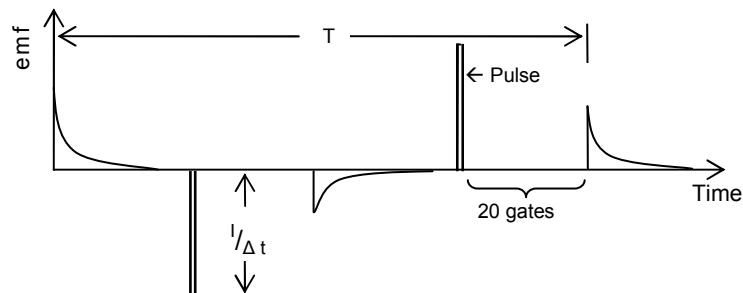
Number of gates : 20, geometrically spaced

Additional delay : 0 μ s

Table 1 : PROTEM Time Gate Locations

Gates #	7.5 Hz	
	Center (μ s)	Width (μ s)
1	881.3	162.5
2	1069	212.5
3	1313	275
4	1619	337.5
5	2006	437.5
6	2506	562.5
7	3144	712.5
8	3956	912.5
9	4994	1163
10	6313	1475
11	7994	1888
12	10140	2400
13	12870	3063
14	16360	3913
15	20810	4988
16	26480	6363
17	33730	8125
18	42970	10360
19	54750	13210
20	69780	16850

Figure 6: Electromotive Force Waveform Generated in the Ground



SURFACE COIL

Geonics **3D-3**, s/n, 303.

Simultaneous measurement of the Z, X & Y components.
Effective area: 200 m²



SIGNS CONVENTION

Z: vertical, positive upward.

X: orthogonal, positive towards grid's North.

Y: orthogonal, positive towards grid's West.

SOFTWARE

Geonics PROTEM : Rx data transfer to PC via RS232

Geonics DATEM : Quality control

EMIT Maxwell® : Data processing and plotting

QUALITY CONTROL

(RECORDS AVAILABLE UPON REQUEST)

Before the survey:

- ✓ Transmitters & motor generator were checked for maximum output using calibrated loads.
- ✓ GSC geomagnetic forecasts were consulted.

Daily and prior to data acquisition:

- ✓ Receiver was calibrated and accurately synchronized with the transmitter.
- ✓ The battery voltage of the receiver was checked.
- ✓ The polarity of the primary field was checked.
- ✓ The crystal drifts have been thoroughly monitored daily and are within quality control specifications.

At the Base of Operations:

- ✓ Field QCs were inspected & validated.
- ✓ X, Y & Z - Primary field components polarity was checked & corrected if required.

Survey noise evaluation:

- ✓ No geomagnetic activity was observed throughout the survey period.
- ✓ No abnormal instrumental noise was detected during the survey.

4. DATA PROCESSING AND DELIVERABLES

The **Geonics field measurements** were converted from [mV] to [nV/Am²] units, according to current intensity inside the loop and effective surface area of the Rx antenna.

$$\frac{nV}{Am^2} = \frac{V * 192}{A * 2^n * S/100}$$

Where V = measured voltage at the Rx coil (mV),
 n = gain of each reading,
 S = effective area of the Rx coil,
 A = current inside the loop.

- STACKED PROFILES** The ground vertical (Z) and horizontal (X, Y) partial derivatives $\partial B / \partial t$ of the secondary magnetic field are shown as distinct log-lin stacked profiles for each component at a scale of 1:5000 (refer to appendix).
- SUPPLIED MAPS** The following maps are inserted in a pouch at the end of this report. Our quality system requires every final map to be inspected by at least two qualified persons before being approved and included within a final report.

Map #	Description	Scale
Fixed loop		
5 stacked profiles	Ground TDEM <i>fixed loop</i> survey - Partial Derivatives $\partial B / \partial t$	1:5000
6.4f	<i>TDEM fixed loop</i> survey – Z Component Contours Channels 12 to 19 (nV/Am ²)	1:5000
6.5f	<i>TDEM fixed loop</i> survey – X Component Contours Channels 12 to 19 (nV/Am ²)	1:5000
Moving loop		
6 stacked profiles	Ground TDEM <i>fixed loop</i> survey - Partial Derivatives $\partial B / \partial t$	1:5000
6.4m	<i>TDEM fixed loop</i> survey – Z Component Contours Channels 12 to 19 (nV/Am ²)	1:5000
6.5m	<i>TDEM fixed loop</i> survey – X Component Contours Channels 12 to 19 (nV/Am ²)	1:5000
10.0	Geophysical Interpretation	1:5000

- DIGITAL DATA** The above-described maps are delivered in the Oasis Montaj map file format on CD-Rom. A copy of all survey acquisition data are delivered on CD-Rom. This includes Geonics raw dump files (.dmp) and AMIRA format files (.TEM) of each surveyed loops.

5 INTERPRETATION AND RECOMMENDATIONS

Three conductors (**NL-01** to **NL-03**) have been interpreted from the ground TDEM moving loop survey over the East Bull Lake-Novick Lake Prospect. These three anomalies are probably a unique conductor disrupted by a network of interpreted NW faults. All three anomalies show a metallic signature. Drilling is recommended on **NL-02** (line 8+00E). Prior to drill, numerical modelling would allow a better delineation of the source's geometry. Refer to table 2 for a full description.

Note that, **NL-02** was not detected from the TDEM fixed loop survey. According to the moving loop interpretation **NL-02**, could be located within a minimal coupling zone of the fixed loop.

Finally, the great buried depth (175 m to 275 m) of the identified anomalies is close of the limit of the detection of a conventional TDEM survey. We recommend a survey follow-up with the *InfiniTEM*® configuration. This TDEM configuration has detected conductors buried at more than 400 m from the surface.

Respectfully submitted,
Abitibi Geophysics Inc.

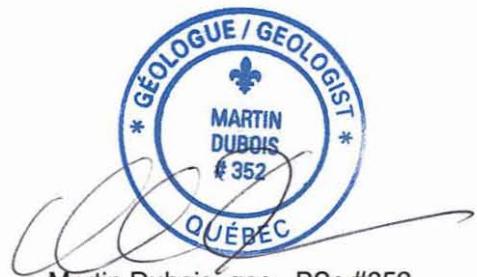
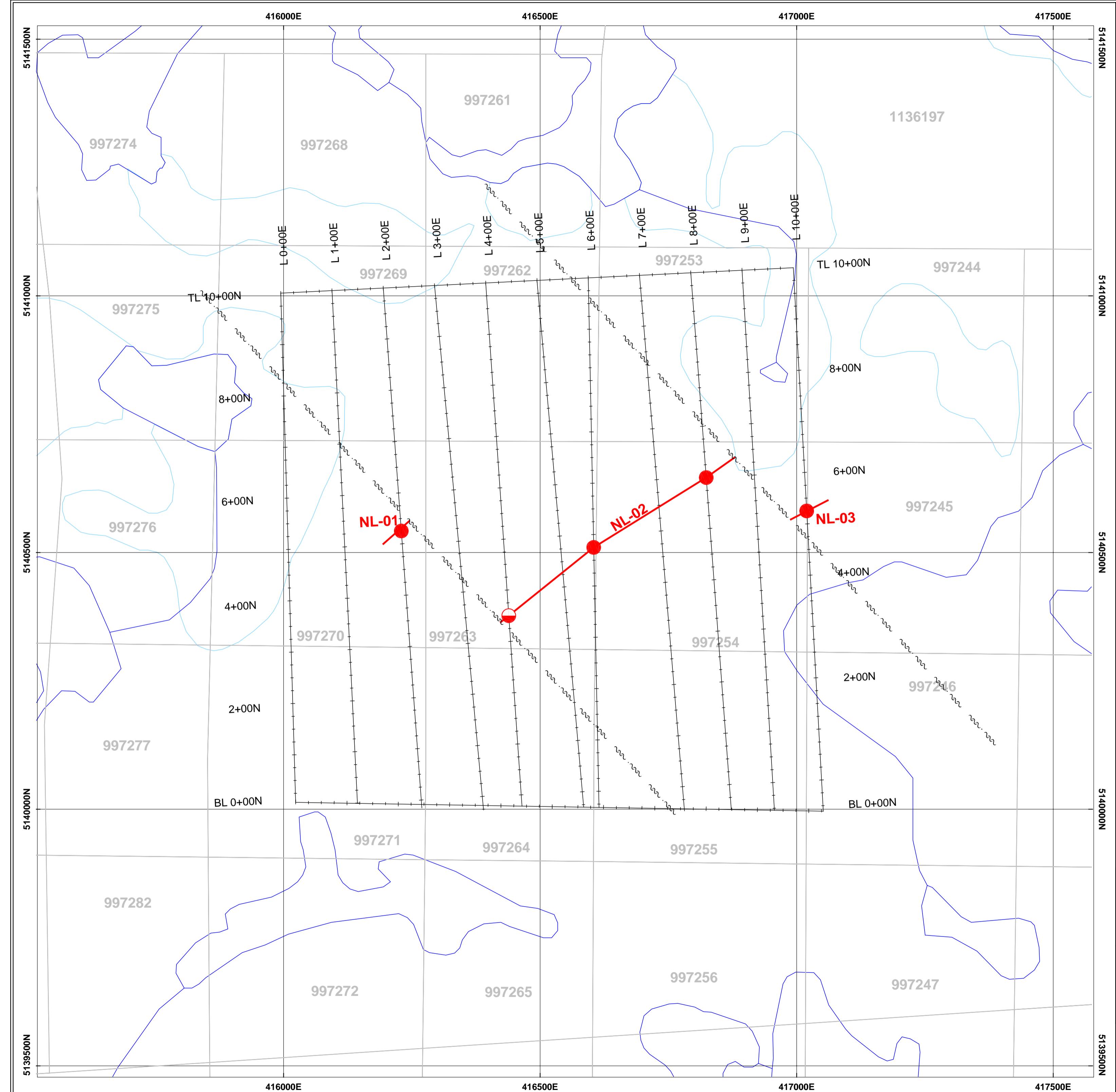


Table 2 : Description of Ground TDEM moving loop Anomalies Interpreted on the East Bull Lake-Novick Lake Prospect

Anomaly	Location		Conductor's quality	Estimated depth-to-top ($\lambda/4$)	Dip	Comments	Priority
	Line	Station					
NL-01	2+00E	5+25N	Good ($\tau \sim 3$ ms)	175 m	Sub-vertical to South	Conductor of good quality, located on only one line. Probably associated with NL-02 and NL-03. Numerical modelling is recommended to better define their geometry.	2
NL-02	4+00E	3+50N	Moderate ($\tau \sim 2$ ms)	150 m	Sub-vertical to South	Conductor of good quality, source of possible metallic origin. Oriented N055°. Probably associated with NL-01 and NL-03. Drilling is recommended on line 8+00E. Prior to drill, numerical modelling would allow a better delineation of the source's geometry.	1
	6+00E	4+75N	Good ($\tau \sim 3$ ms)	200 m	Sub-vertical to North		
	8+00E	6+00N	Good ($\tau \sim 4$ ms)	275 m	Sub-vertical to South		
NL-03	10+00E	5+25N	Good ($\tau \sim 3$ ms)	200 m	Sub-vertical to South	Conductor of good quality. Located on only one line, open-ended eastward. Probably associated with NL-01 and NL-03. Numerical modelling is recommended to better define its geometry. The extension of the survey (InfiniTEM®) is recommended.	2



LEGEND

ELECTROMAGNETIC SURVEY

- Conductor Axis**

 - - - - - Questionable Continuity
 - — — Definite Continuity
 - — — Wide Conductor

Conductor's Quality

 - Low Conductance
 - Moderate Conductance
 - High Conductance
 - ? Ambiguous response

Miscellaneous Symbols

- A scale bar and north arrow are located at the bottom of the page. The scale bar shows distances of 0, 100, and 200 metres. A north arrow points upwards.

The figure displays a cadastral map of a geographic area, likely a town or county, overlaid with a UTM coordinate grid. The map is oriented with North indicated by a compass rose in the upper right corner. The grid consists of horizontal and vertical lines representing roads and property boundaries. Several parcels are outlined in blue and labeled with their respective property IDs. A scale bar in the bottom right corner shows distances up to 250 meters. The map is annotated with the following property IDs:

- 1231272
- 997278
- 997279
- 1231270
- 997281
- 997274
- 997275
- 997276
- 997277
- 997271
- 997270
- 997268
- 997269
- 997272
- 997283
- 997282
- 997261
- 997262
- 997263
- 997264
- 997265
- 997266
- 997251
- 997253
- 997254
- 997255
- 997246
- 997245
- 997244
- 997236
- 997237
- 997238
- 1136197

The map also features labels for the UTM coordinates 15000E, 416000E, and 417000E along the top and bottom edges.

Western Areas NL

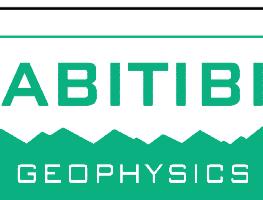
East Bull Lake - Novick Lake Prospect

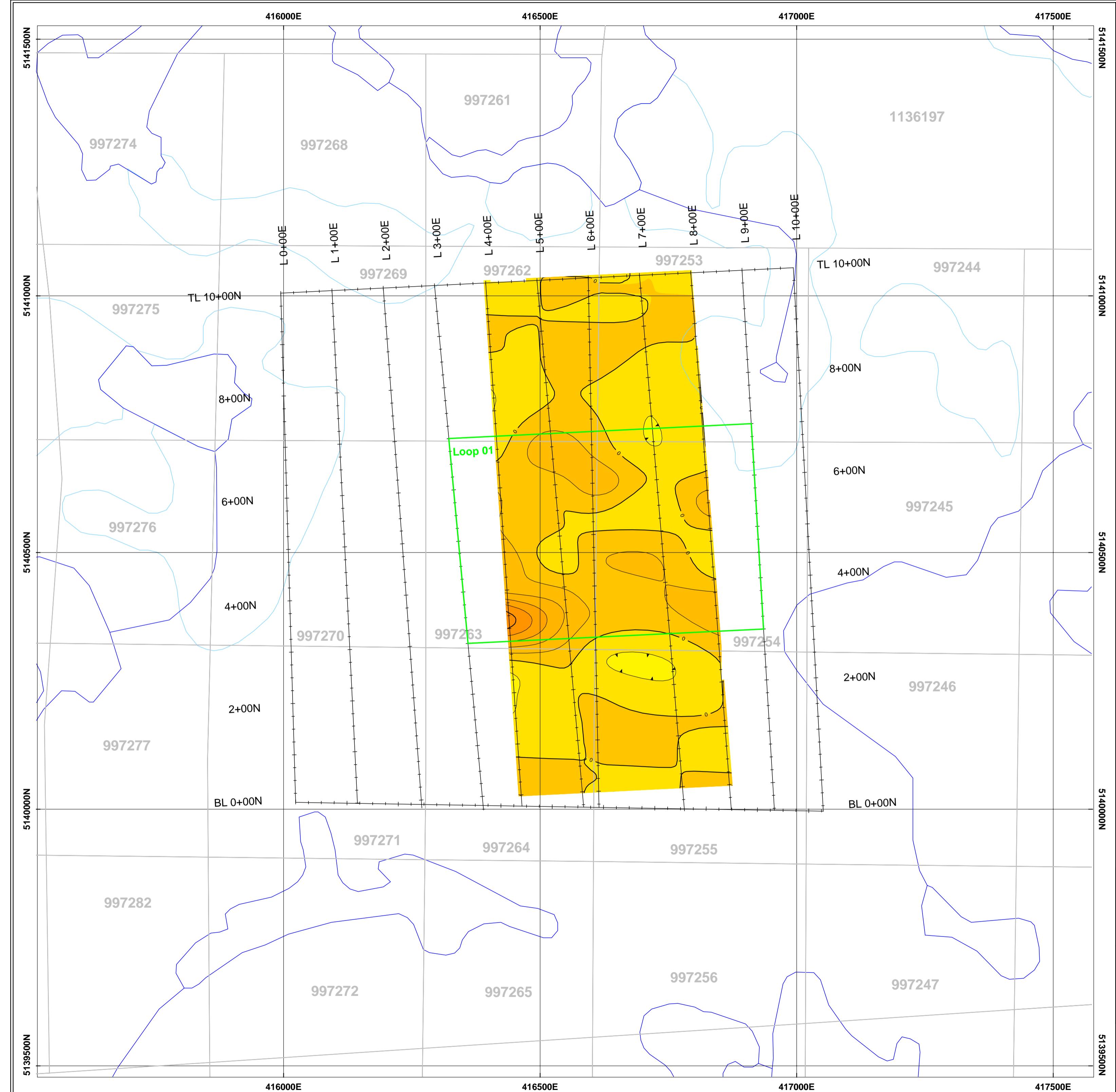
Boon Township, Ontario, Canada

TDEM Survey (Moving Loop)

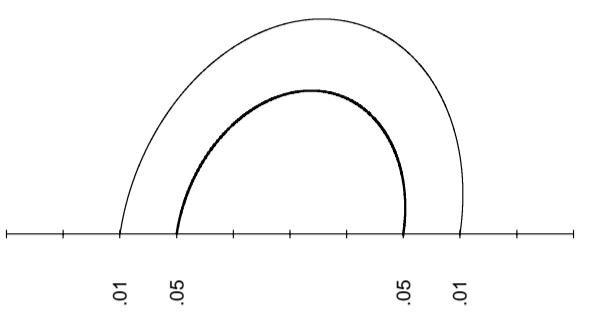
Geophysical Interpretation

Interpreted by:	M. Dubois, Geo.	2009/04
Surveyed by:	M. Nadon, Tech.	2009/03
Approved by:	C. Malo Lalande, Eng.	2009/04
Reference map:	41J/08	Scale 1:5000
Project no:	09N009	Map no: 10.0



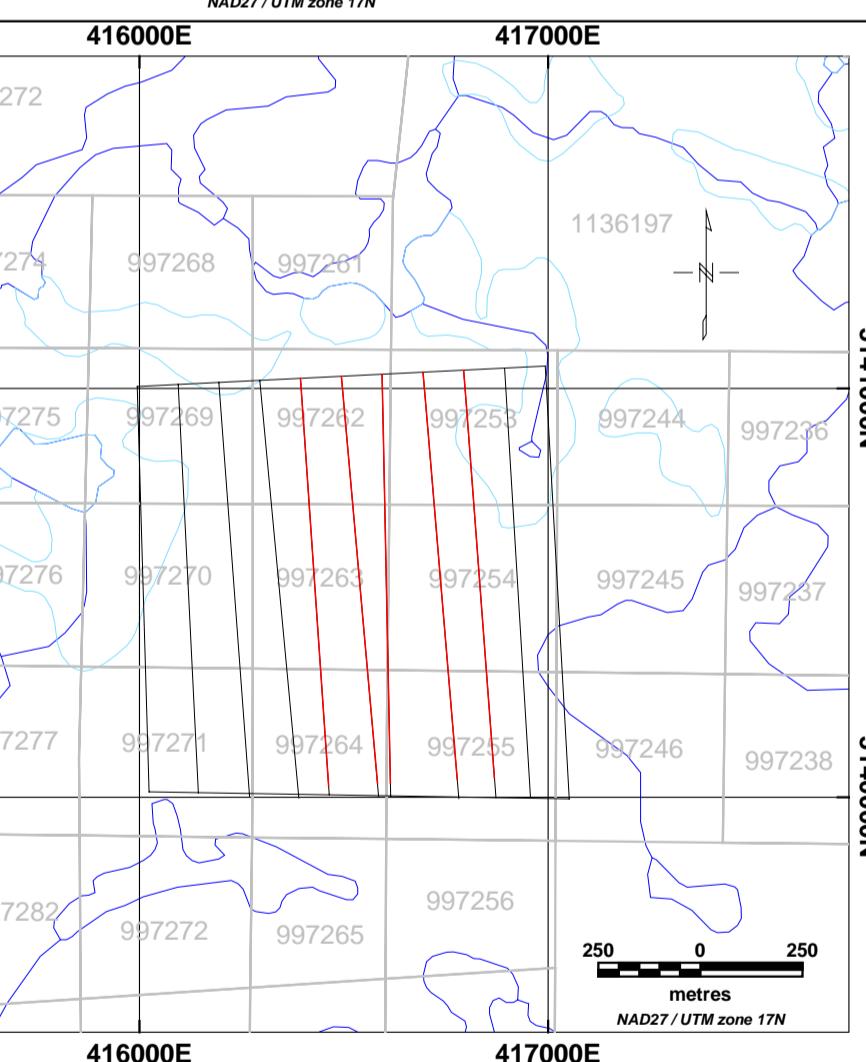


Z Component Contours



Unit: nV/Am²
Receiver: PROTEM 67D (Geonics)
Transmitter: TEM57 (Geonics)

Scale 1:5000



Western Areas NL

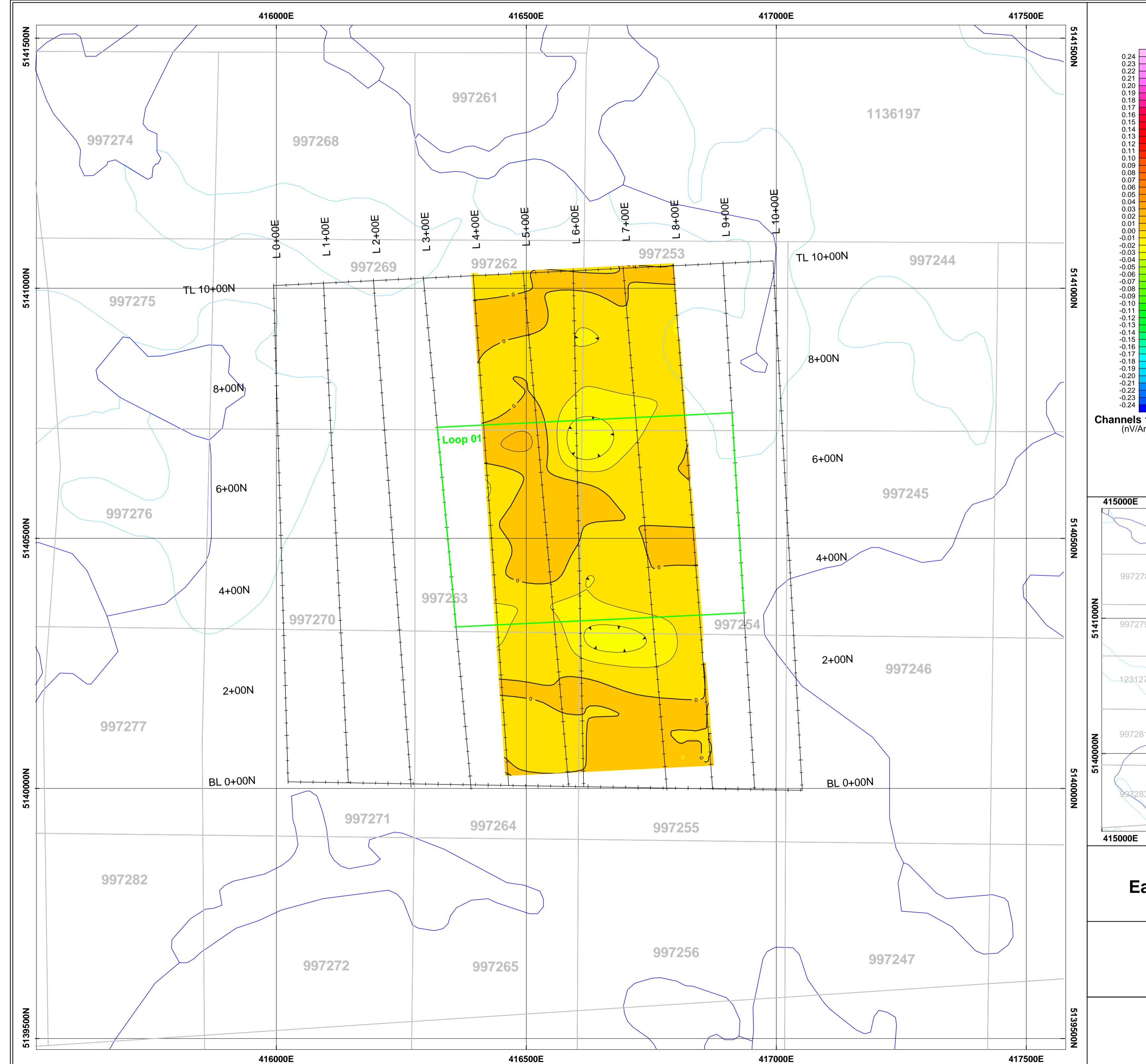
East Bull Lake - Novick Lake Prospect

Boon Township, Ontario, Canada

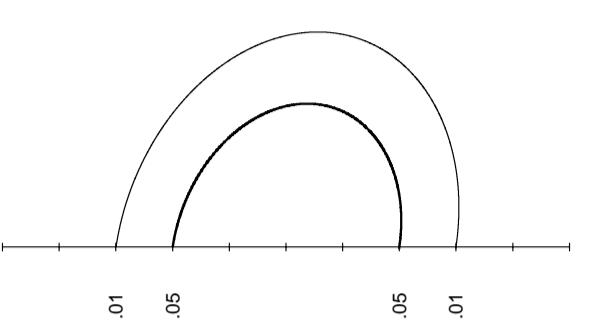
Fixed Loop Survey Z Component Contours Channels 12 to 19 (nV/Am²)

Interpreted by: M. Dubois, Geo. 2009/04
Surveyed by: M. Nadon, Tech. 2009/03
Approved by: C. Malo Lalande, Eng. 2009/04
Reference map: 41J/08 Scale 1:5000
Project no: 09N009 Map no: 6.4f





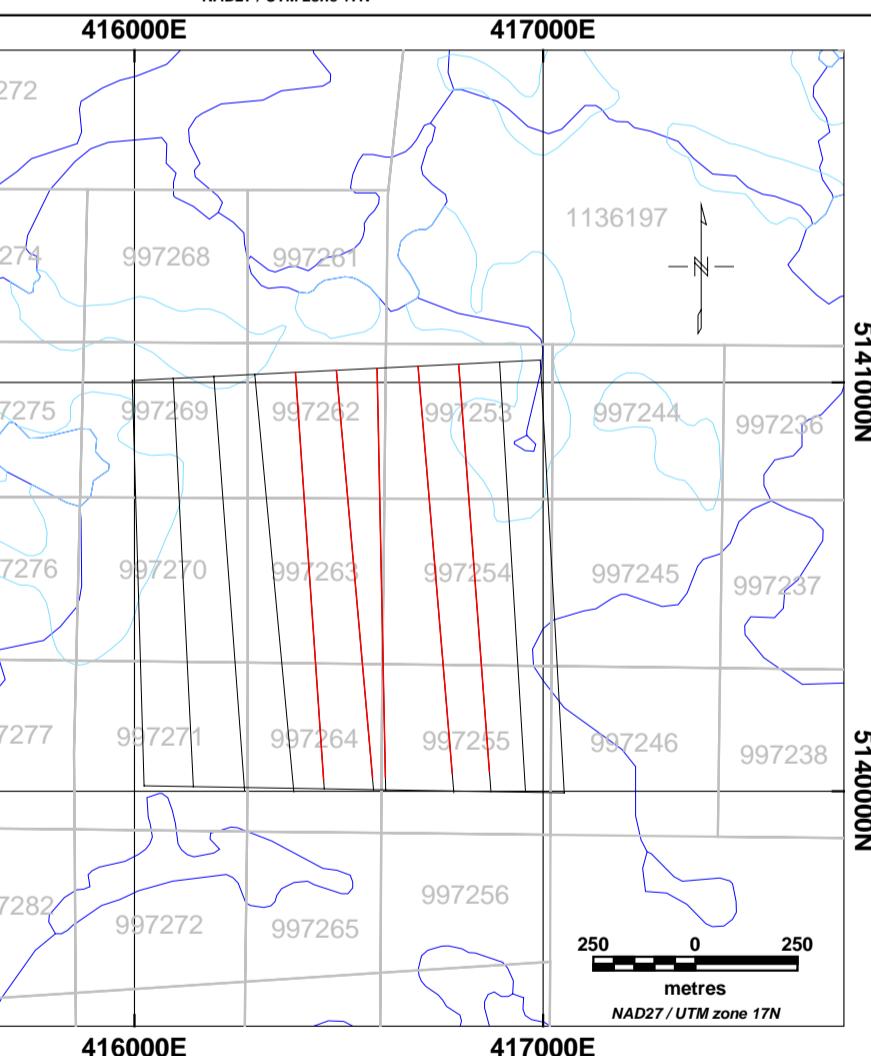
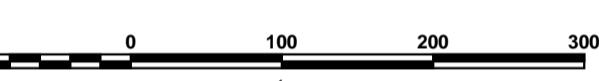
X Component Contours



Unit: nV/Am²
Receiver: PROTEM 67D (Geonics)
Transmitter: TEM57 (Geonics)

Channels 12 to 19

Scale 1:5000



Western Areas NL

East Bull Lake - Novick Lake Prospect

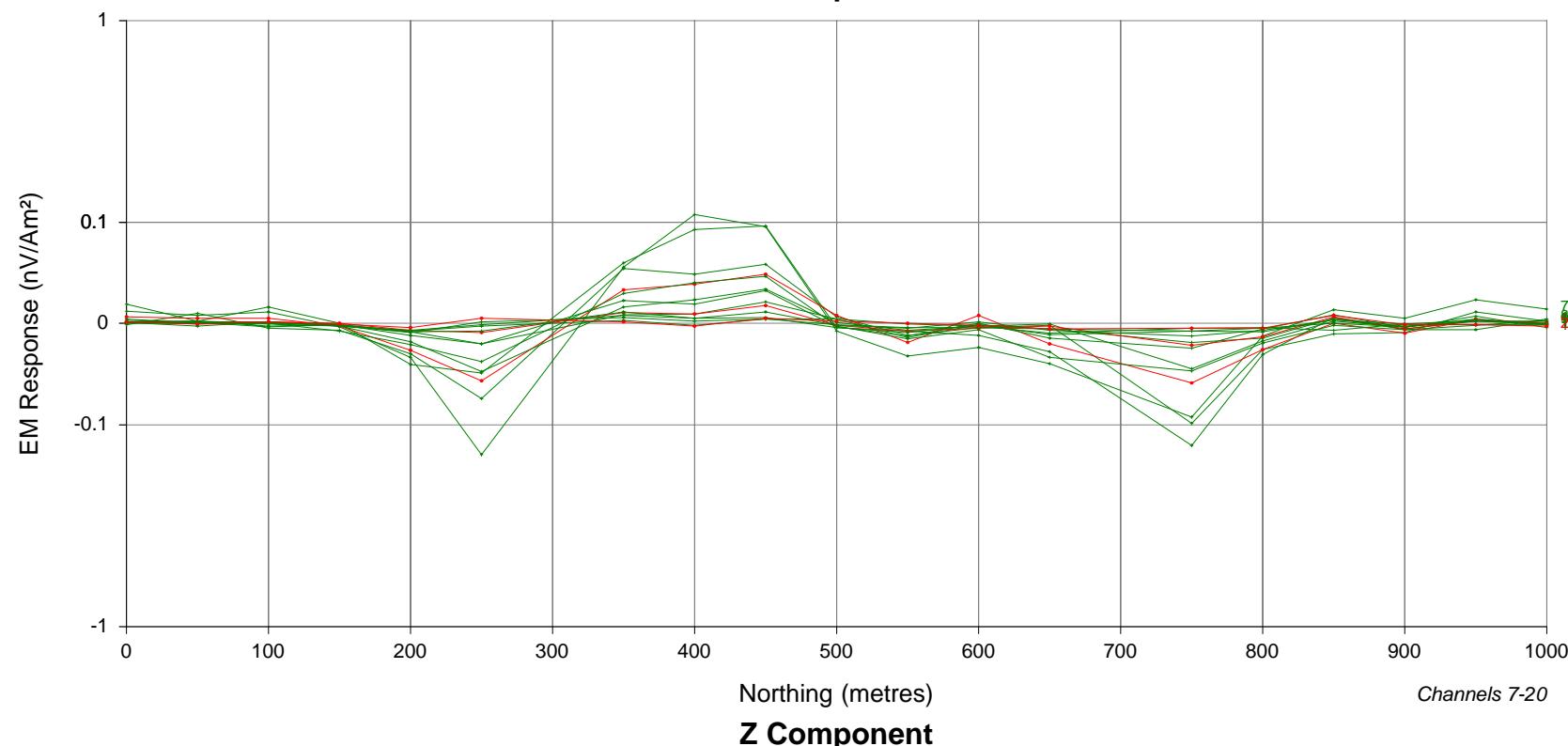
Boon Township, Ontario, Canada

Fixed Loop Survey X Component Contours Channels 12 to 19 (nV/Am²)

Interpreted by: M. Dubois, Geo. 2009/04
Surveyed by: M. Nadon, Tech. 2009/03
Approved by: C. Malo Lalande, Eng. 2009/04
Reference map: 41J/08 Scale 1:5000
Project no: 09N009 Map no: 6.5f



Z Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6725	11	:	3.518
2	:	0.7475	12	:	4.375
3	:	0.8450	13	:	5.468
4	:	0.9675	14	:	6.863
5	:	1.123	15	:	8.642
6	:	1.323	16	:	10.91
7	:	1.578	17	:	13.81
8	:	1.903	18	:	17.51
9	:	2.318	19	:	22.22
10	:	2.845	20	:	28.24

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

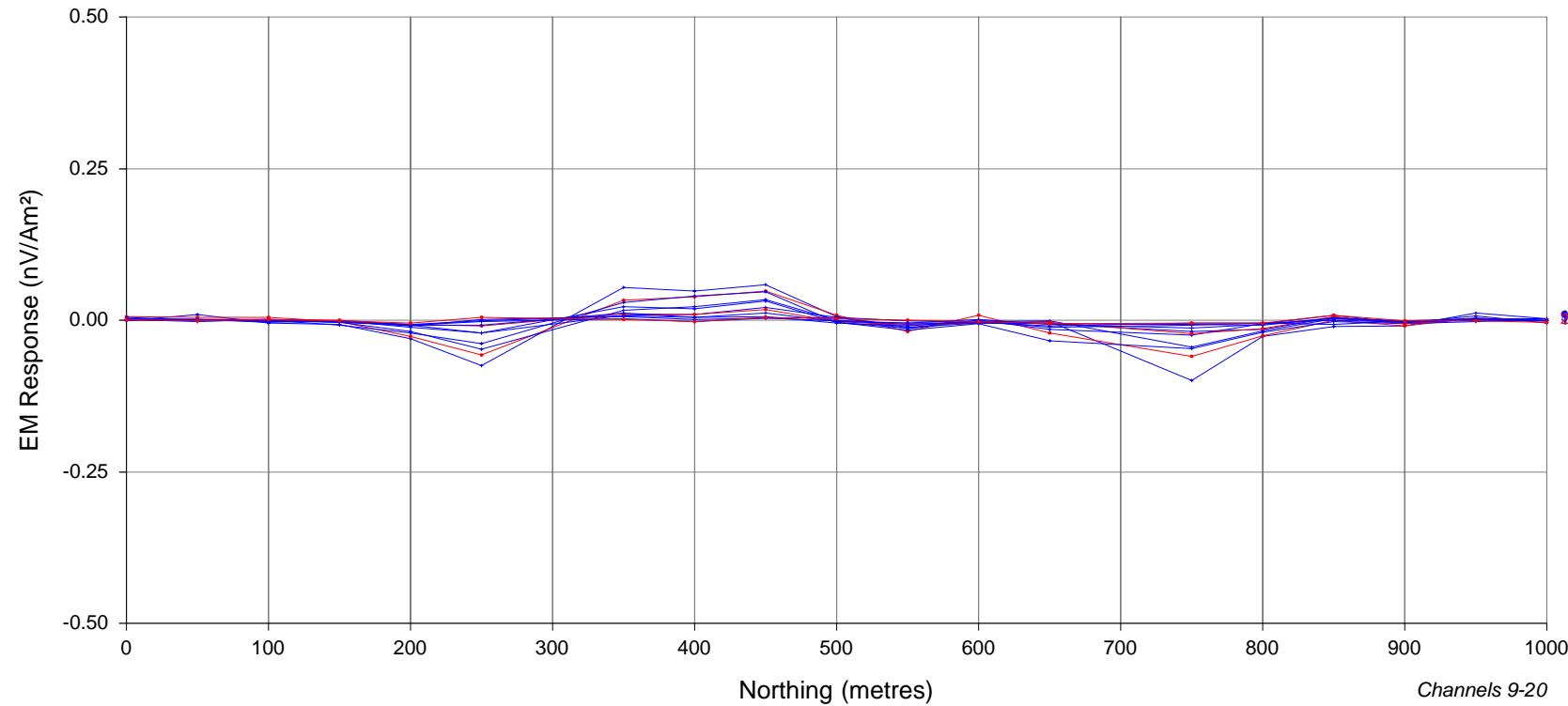
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m^2

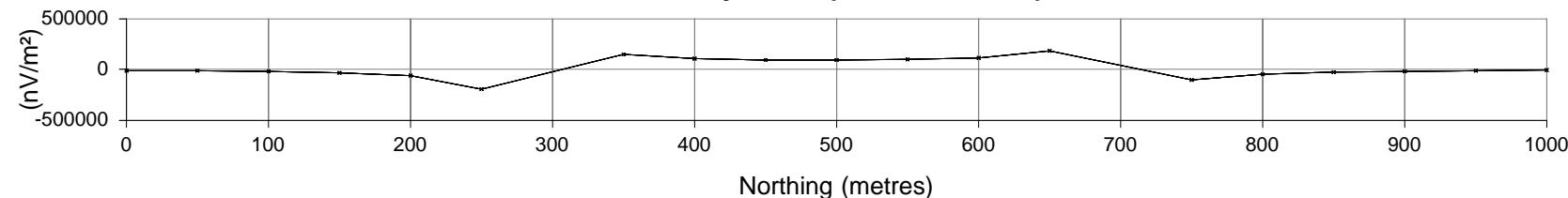
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

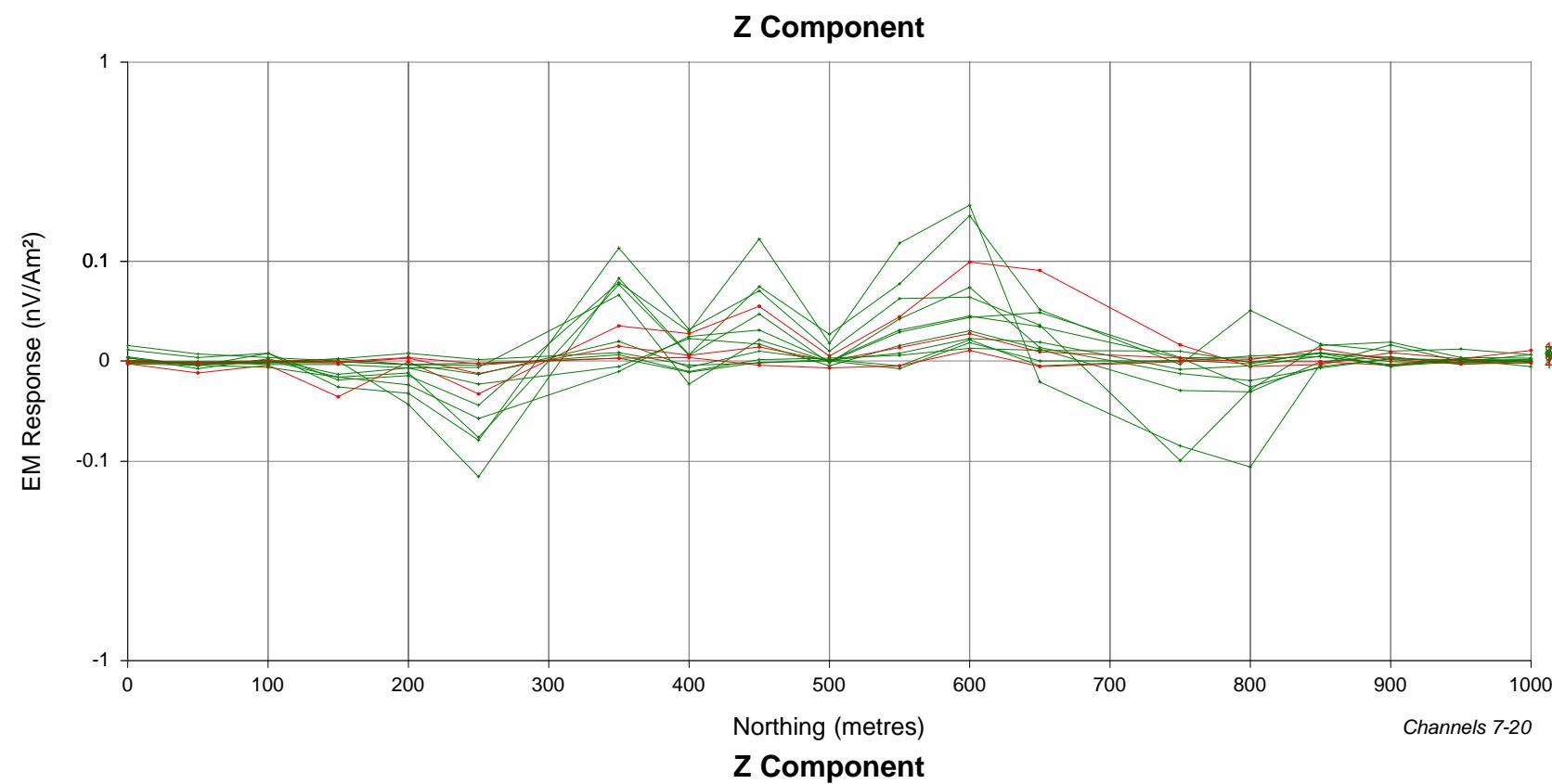
Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 700E

By : M. Dubois

Date : March 2009

Ref. : 09N009

Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1	:	0.6725	11	:	3.518
2	:	0.7475	12	:	4.375
3	:	0.8450	13	:	5.468
4	:	0.9675	14	:	6.863
5	:	1.123	15	:	8.642
6	:	1.323	16	:	10.91
7	:	1.578	17	:	13.81
8	:	1.903	18	:	17.51
9	:	2.318	19	:	22.22
10	:	2.845	20	:	28.24

SURVEY PARAMETERS

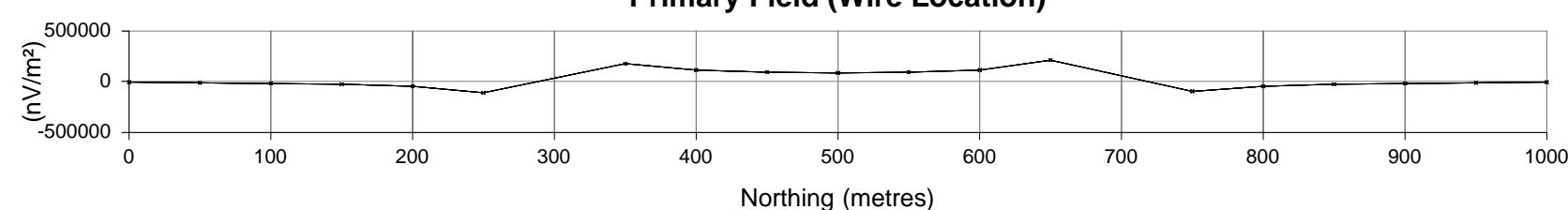
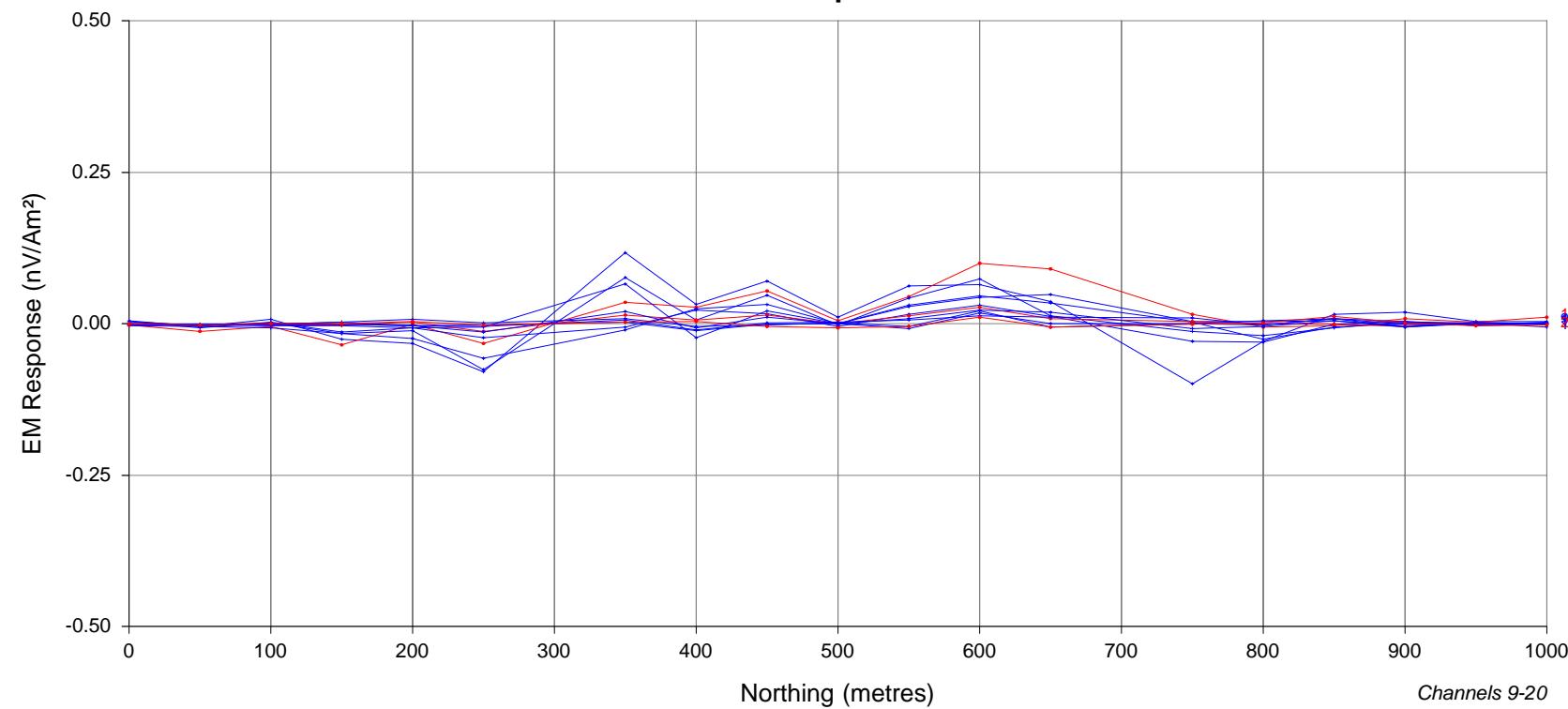
Configuration : Fixed Loop
Station Spacings : 50 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs



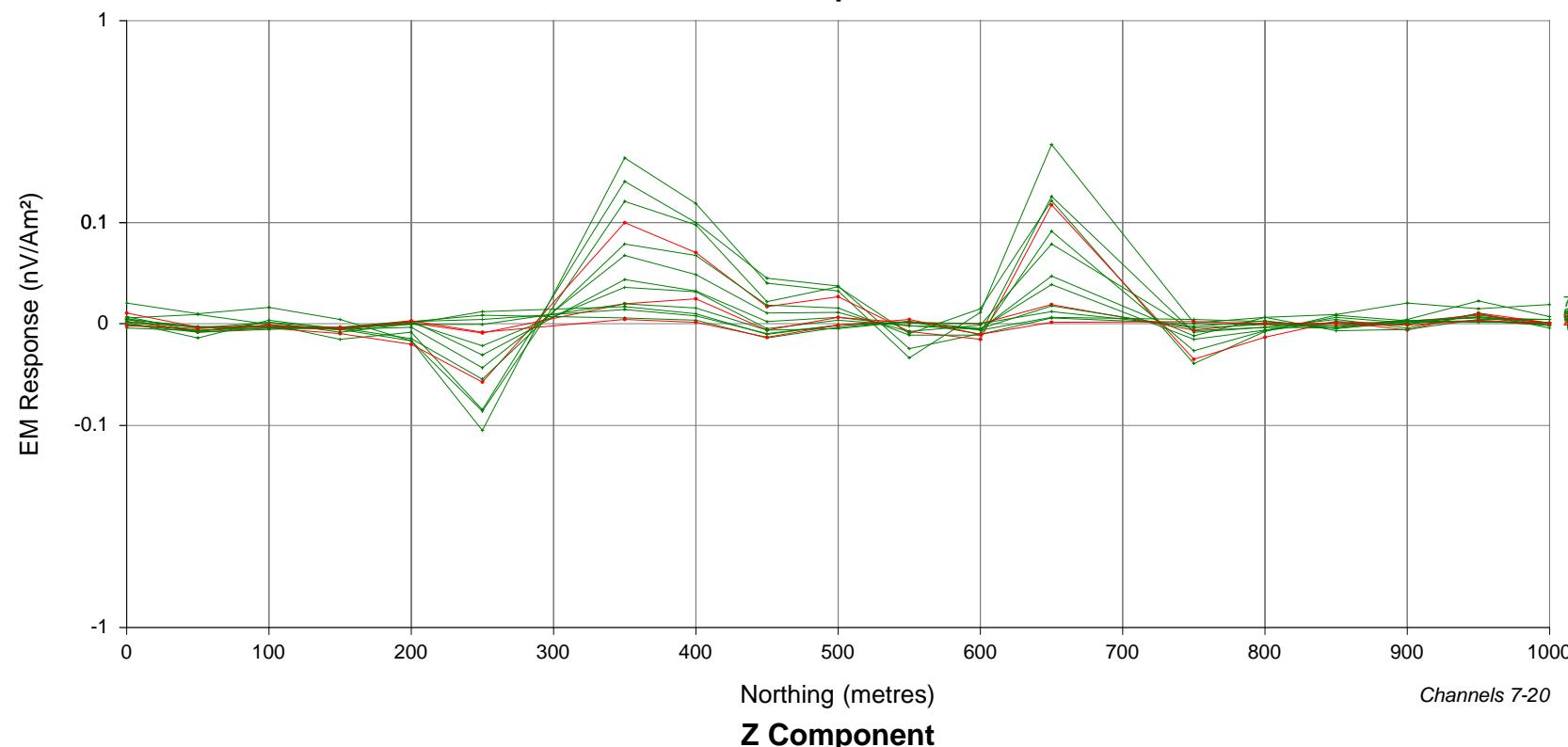
Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 600E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



Z Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6675	11	:	3.513
2	:	0.7425	12	:	4.370
3	:	0.8400	13	:	5.463
4	:	0.9625	14	:	6.858
5	:	1.118	15	:	8.638
6	:	1.318	16	:	10.91
7	:	1.573	17	:	13.81
8	:	1.898	18	:	17.50
9	:	2.313	19	:	22.22
10	:	2.840	20	:	28.23

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

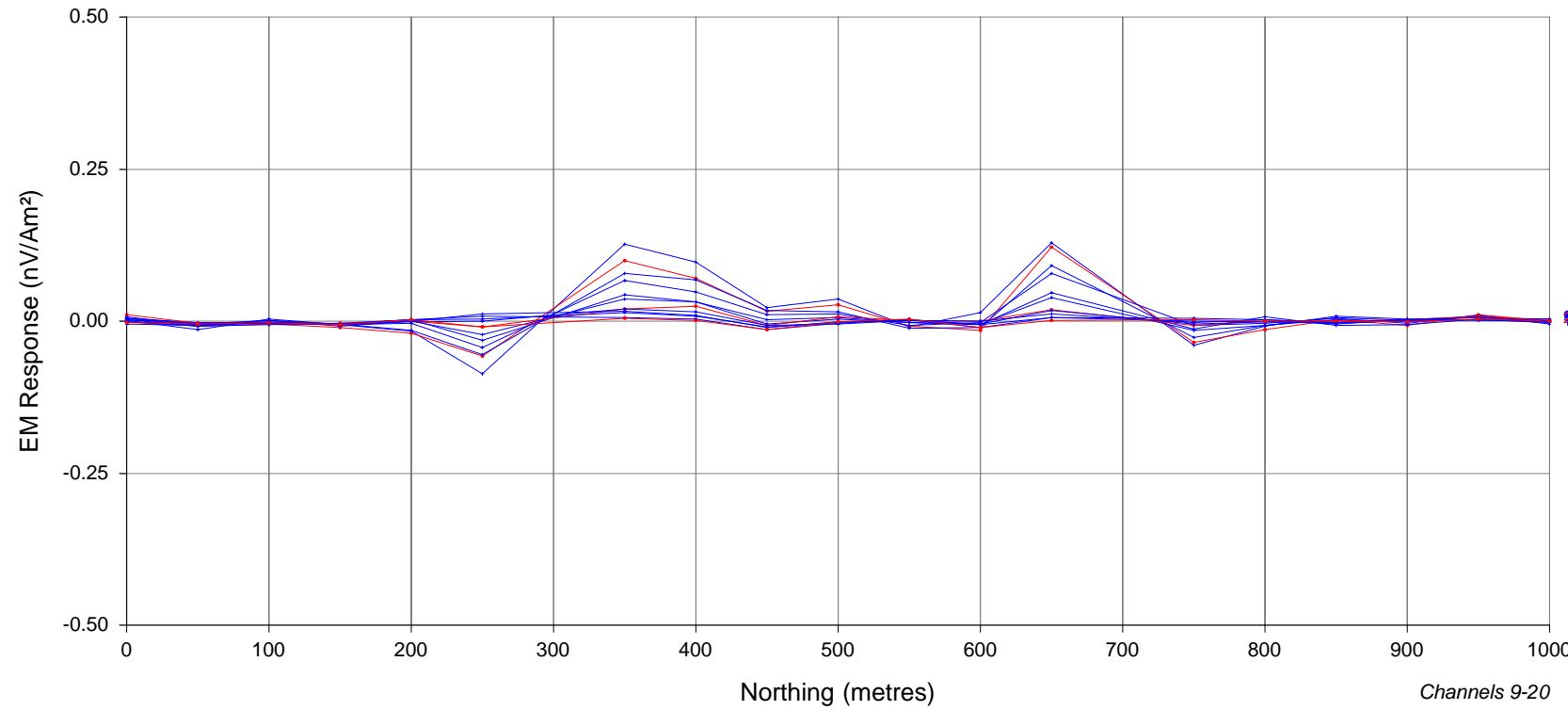
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m^2

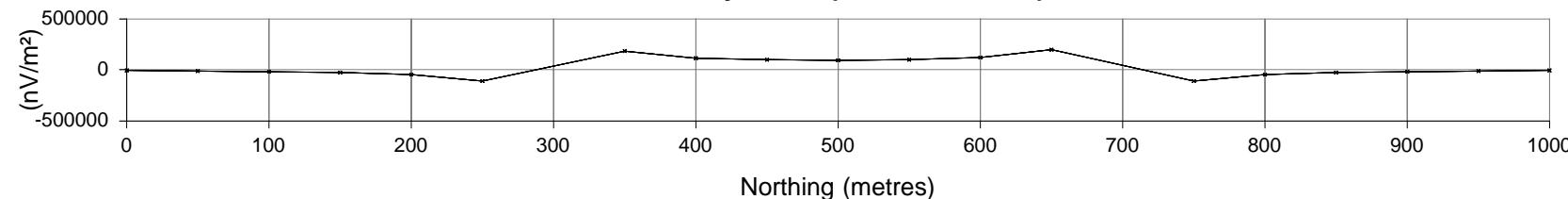
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 500E

By : M. Dubois

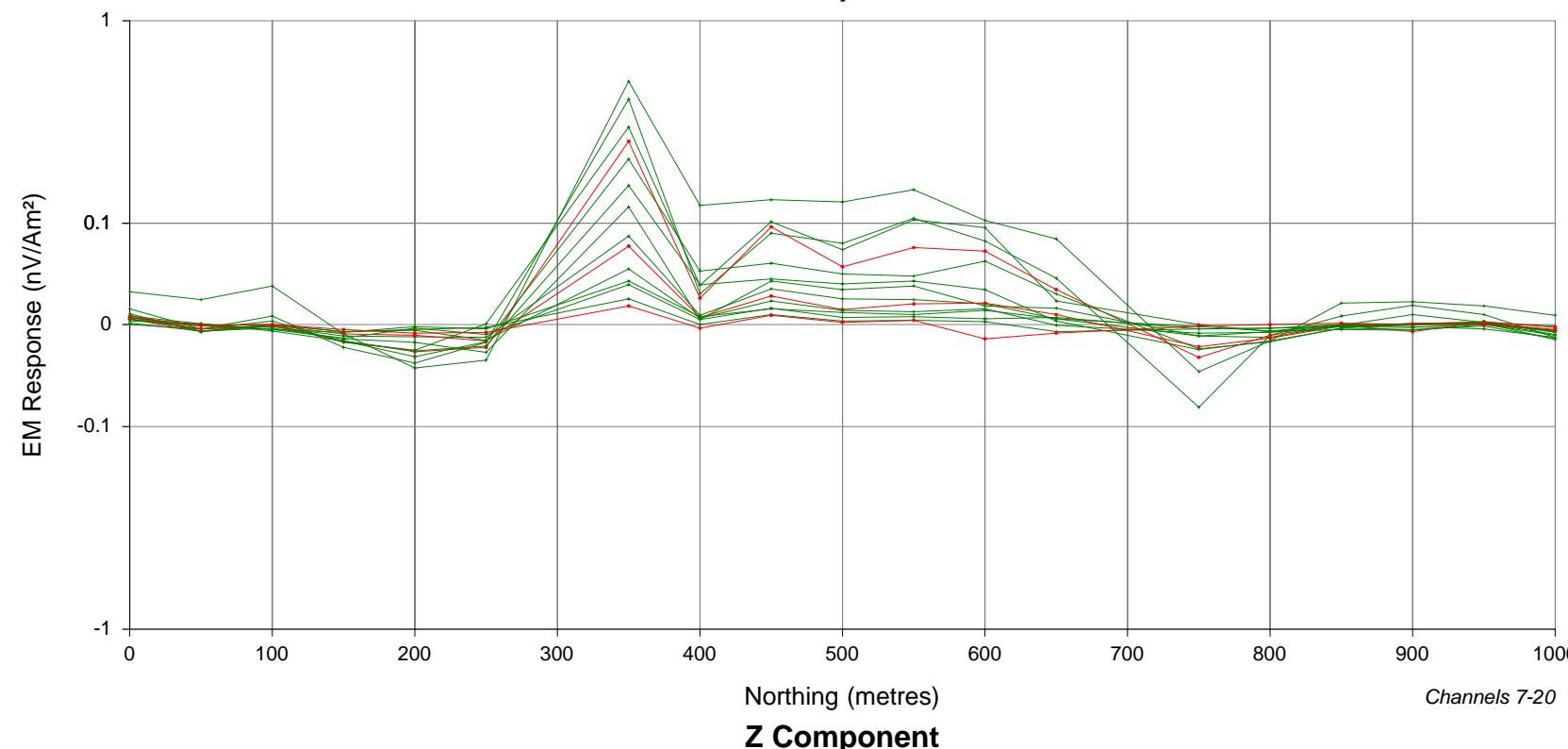
Date : March 2009

Ref. : 09N009

Scale 1:5000



Z Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6675	11	:	3.513
2	:	0.7425	12	:	4.370
3	:	0.8400	13	:	5.463
4	:	0.9625	14	:	6.858
5	:	1.118	15	:	8.638
6	:	1.318	16	:	10.91
7	:	1.573	17	:	13.81
8	:	1.898	18	:	17.50
9	:	2.313	19	:	22.22
10	:	2.840	20	:	28.23

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

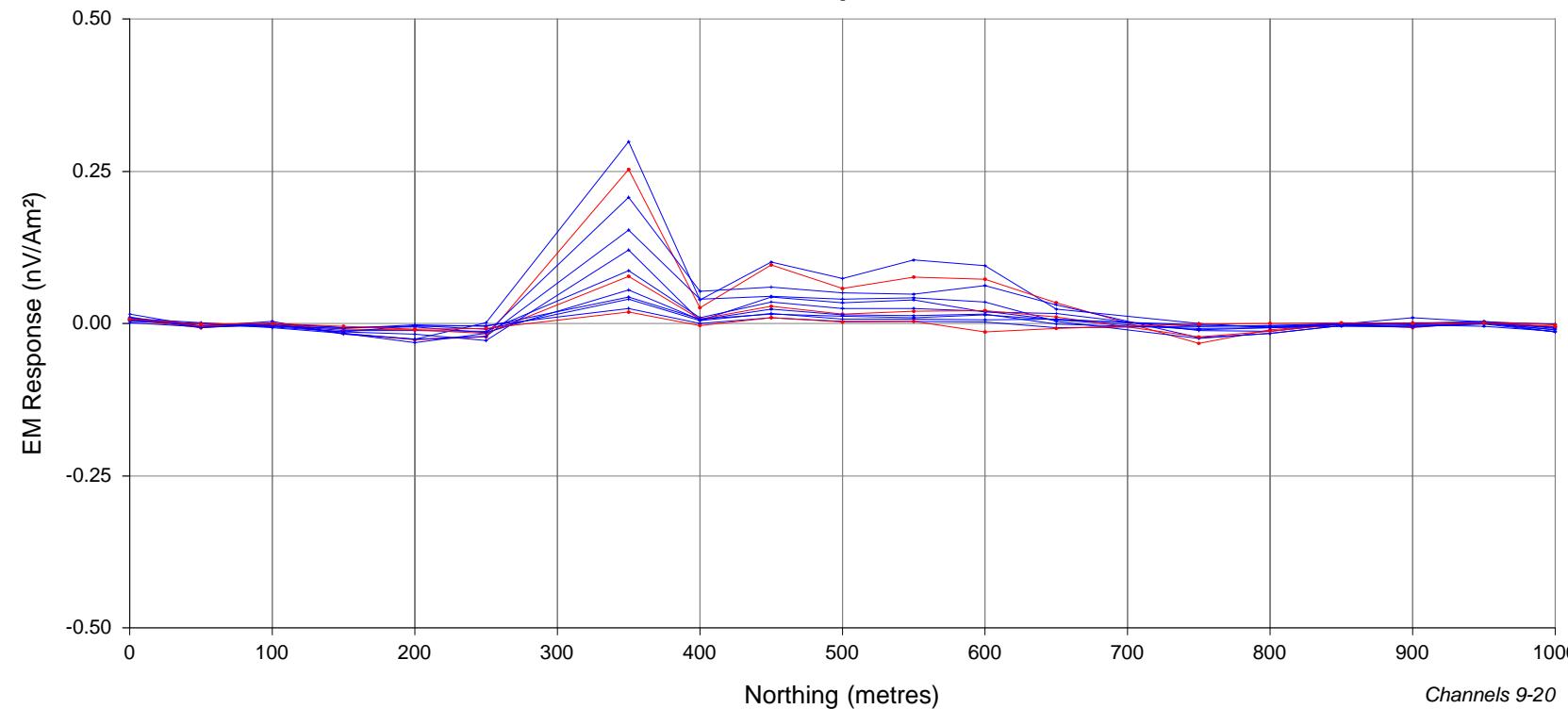
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m^2

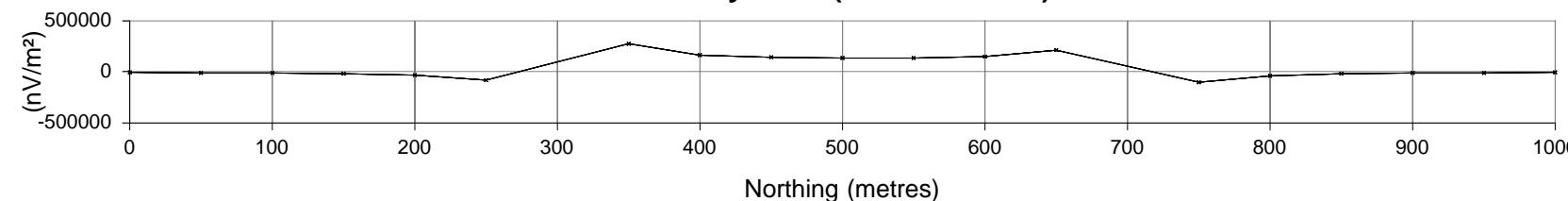
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 400E

By : M. Dubois

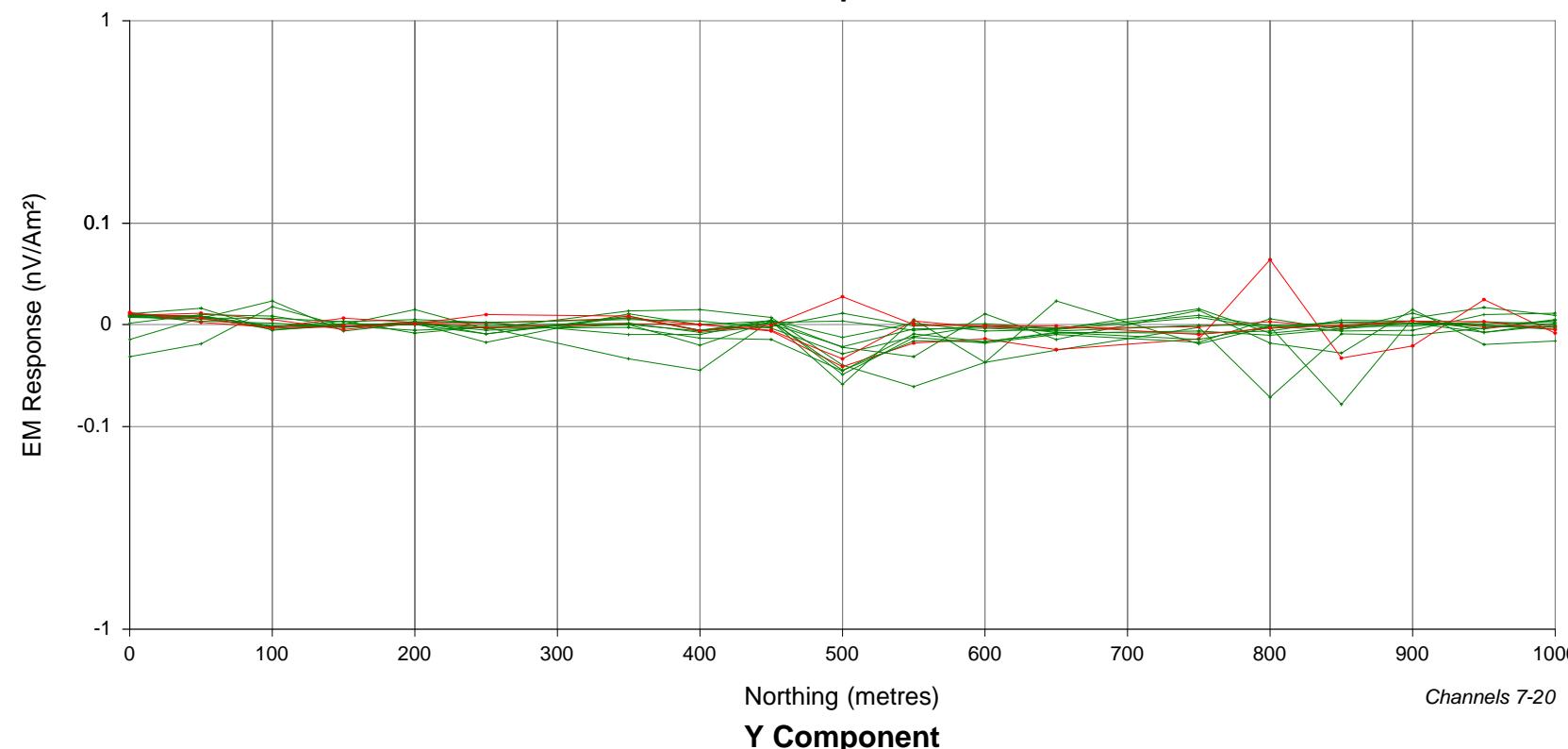
Date : March 2009

Ref. : 09N009

Scale 1:5000



Y Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6725	11	:	3.518
2	:	0.7475	12	:	4.375
3	:	0.8450	13	:	5.468
4	:	0.9675	14	:	6.863
5	:	1.123	15	:	8.642
6	:	1.323	16	:	10.91
7	:	1.578	17	:	13.81
8	:	1.903	18	:	17.51
9	:	2.318	19	:	22.22
10	:	2.845	20	:	28.24

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

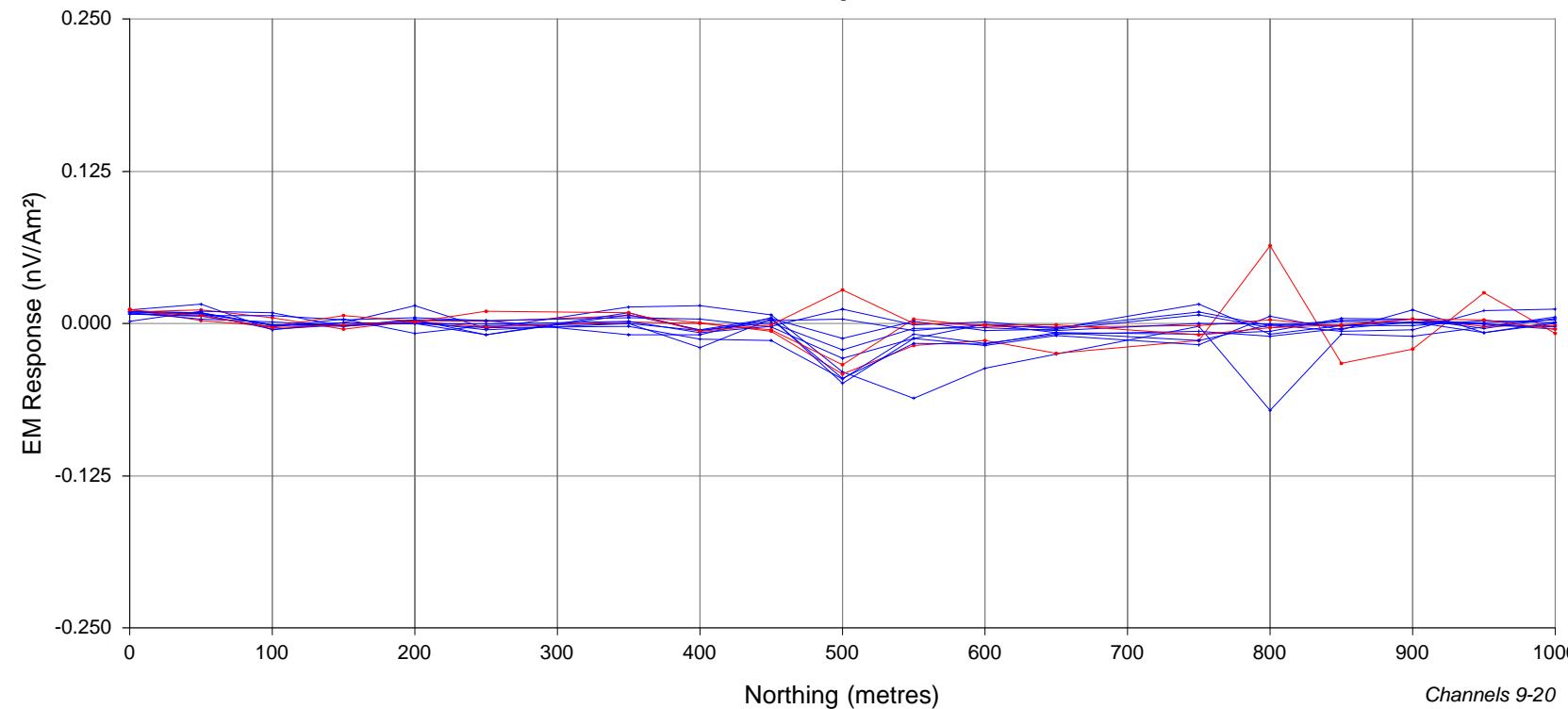
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

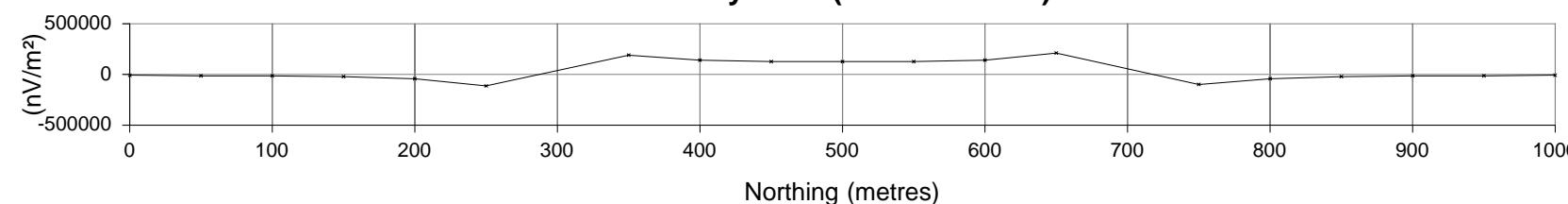
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

Y Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

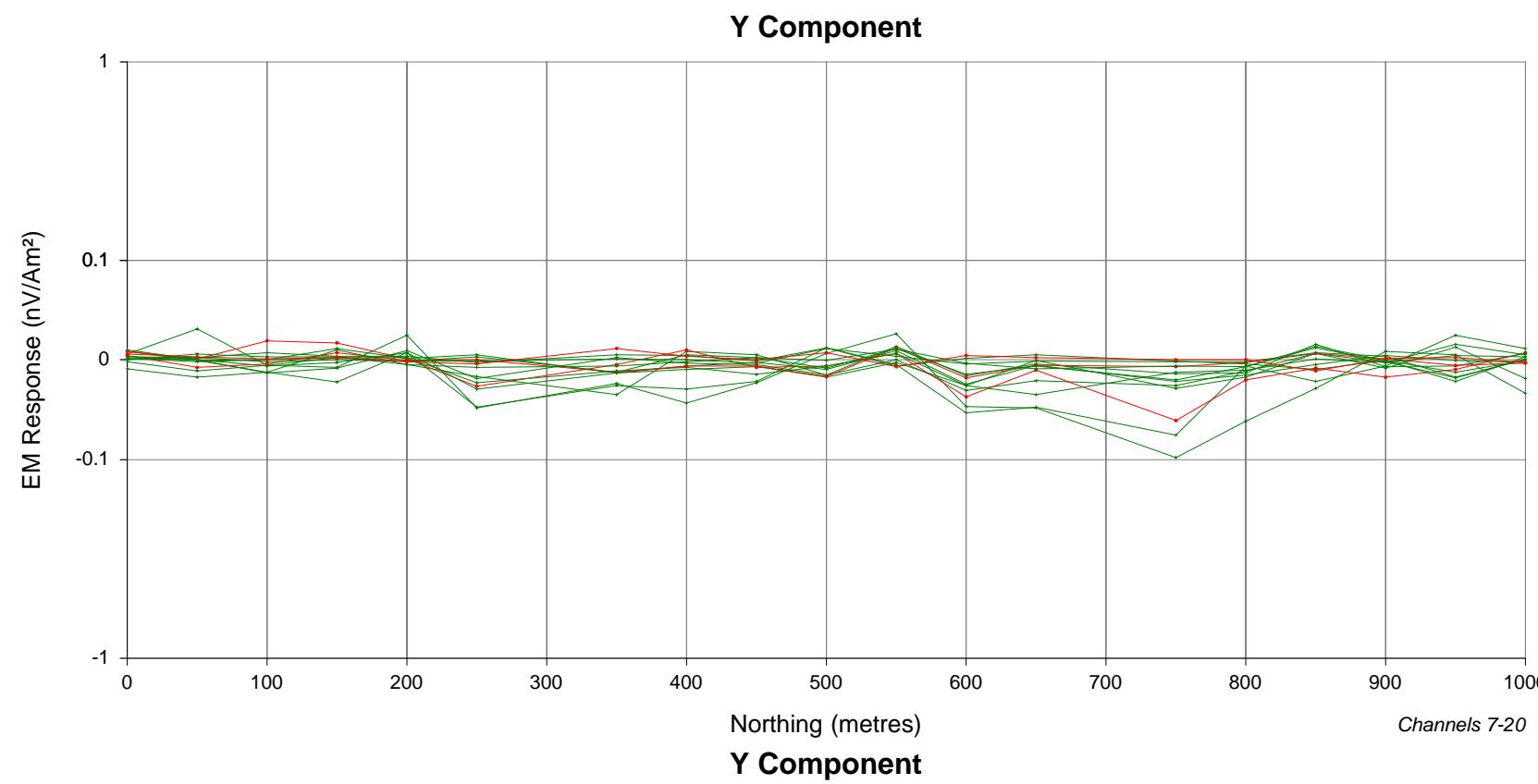
Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 800E

By : M. Dubois

Date : March 2009

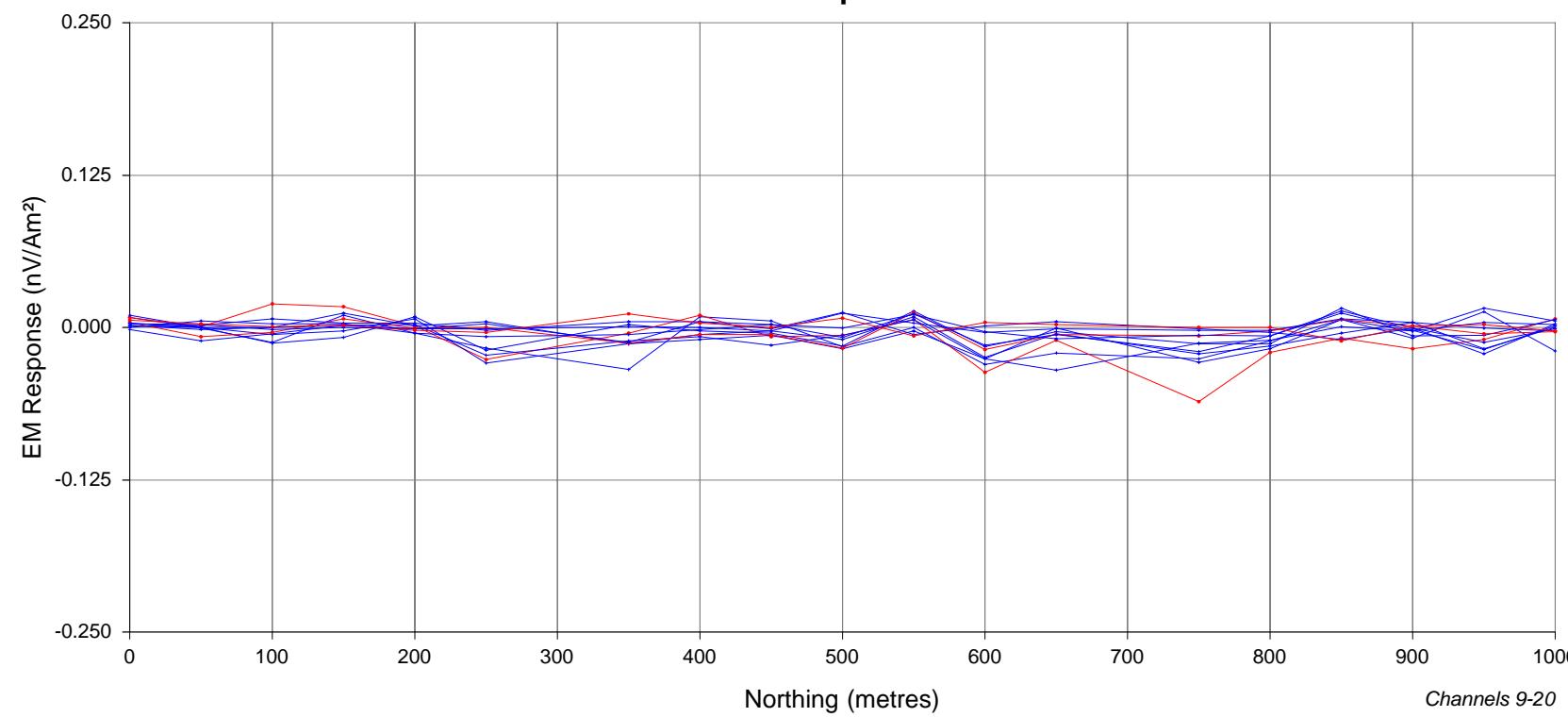
Ref. : 09N009

Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1 : 0.6725	11 : 3.518
2 : 0.7475	12 : 4.375
3 : 0.8450	13 : 5.468
4 : 0.9675	14 : 6.863
5 : 1.123	15 : 8.642
6 : 1.323	16 : 10.91
7 : 1.578	17 : 13.81
8 : 1.903	18 : 17.51
9 : 2.318	19 : 22.22
10 : 2.845	20 : 28.24



SURVEY PARAMETERS

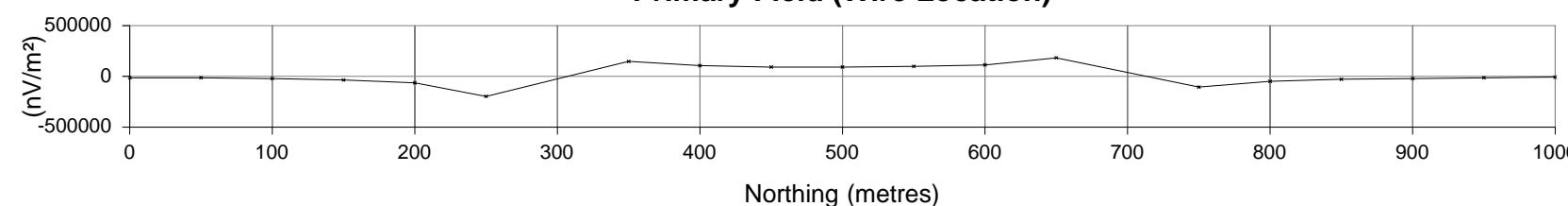
Configuration : Fixed Loop
Station Spacings : 50 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

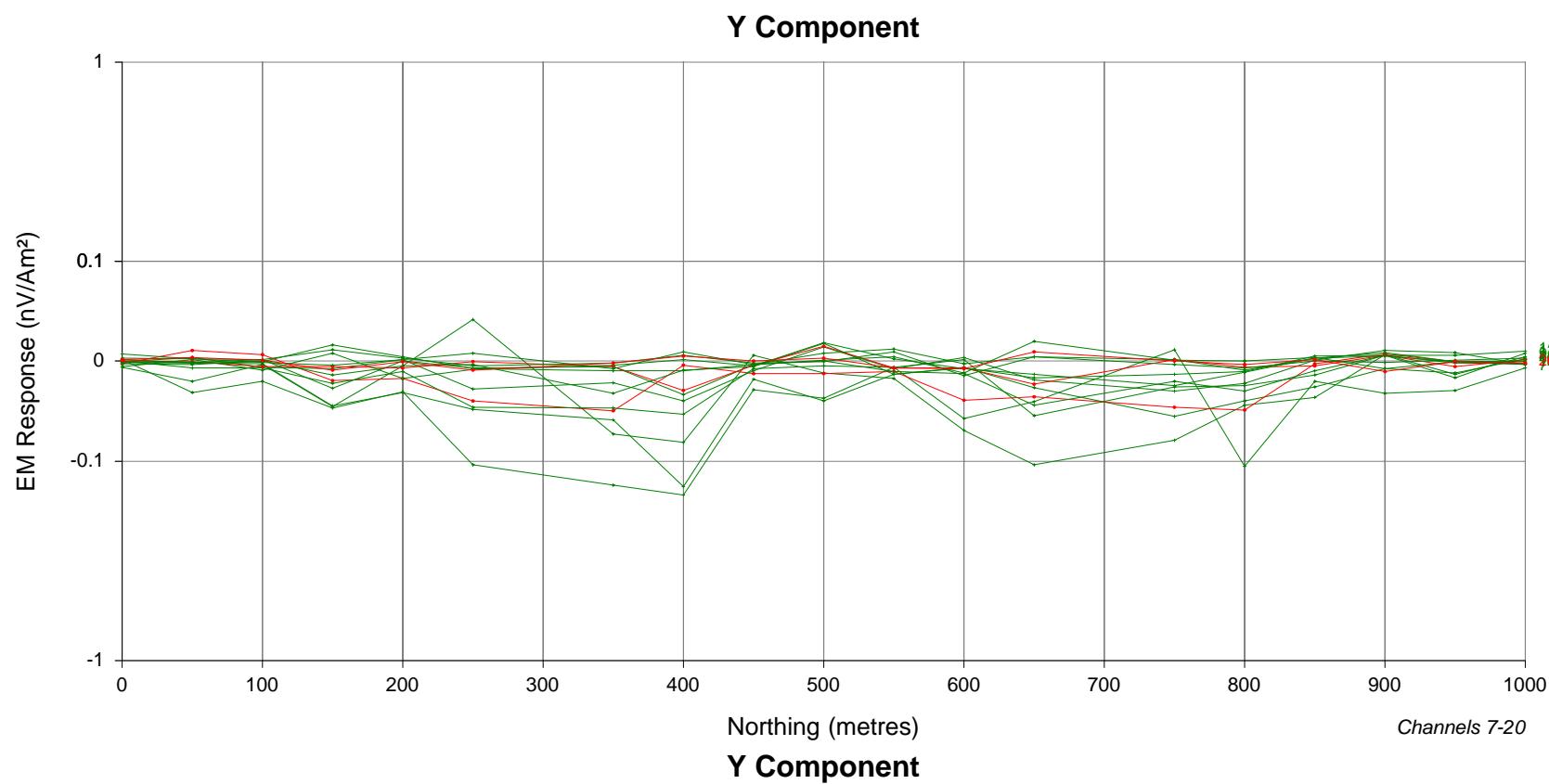
Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs



Abitibi Geophysics Inc.

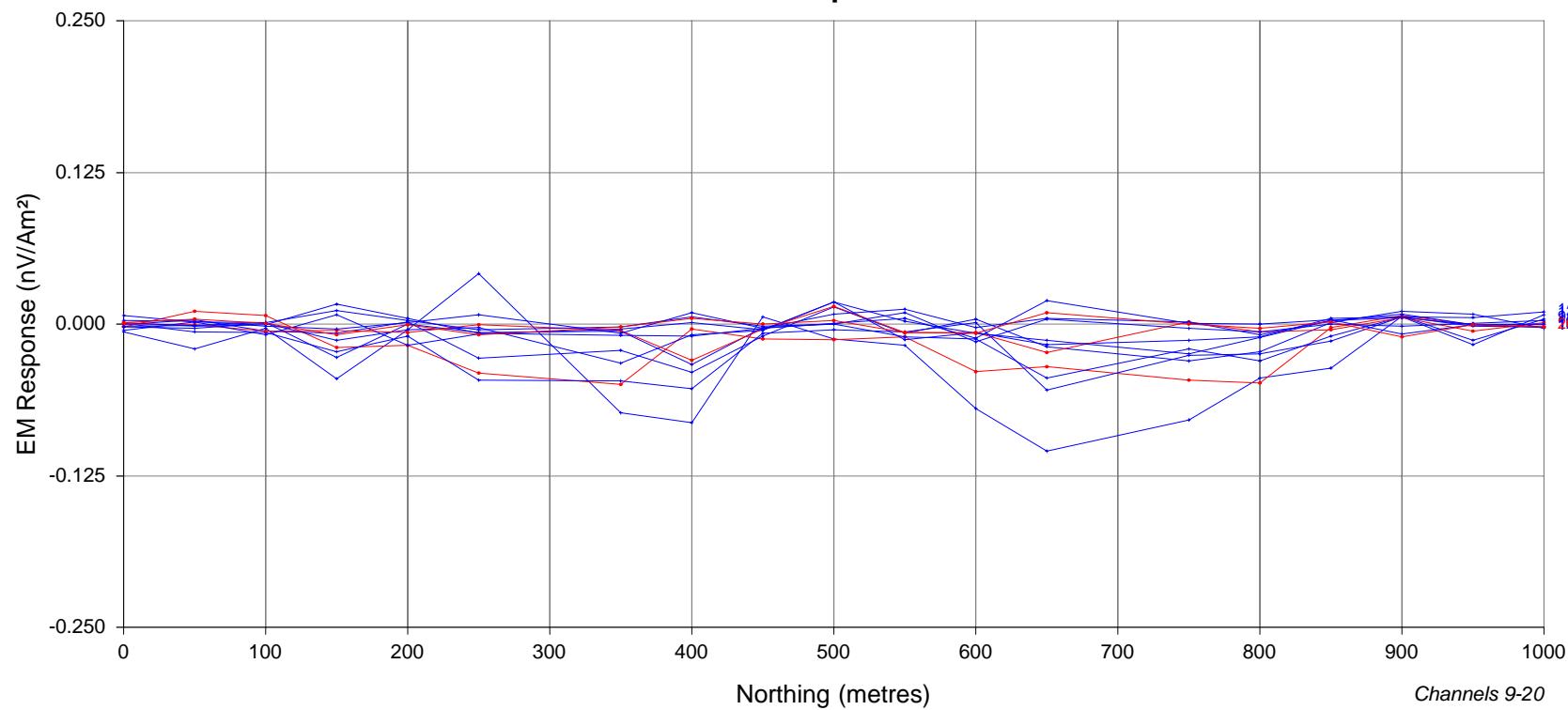
Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 700E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1 : 0.6725	11 : 3.518
2 : 0.7475	12 : 4.375
3 : 0.8450	13 : 5.468
4 : 0.9675	14 : 6.863
5 : 1.123	15 : 8.642
6 : 1.323	16 : 10.91
7 : 1.578	17 : 13.81
8 : 1.903	18 : 17.51
9 : 2.318	19 : 22.22
10 : 2.845	20 : 28.24



SURVEY PARAMETERS

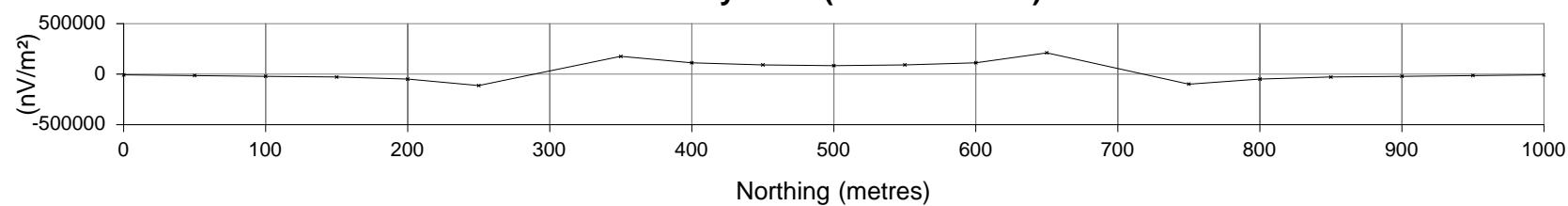
Configuration : Fixed Loop
Station Spacings : 50 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs



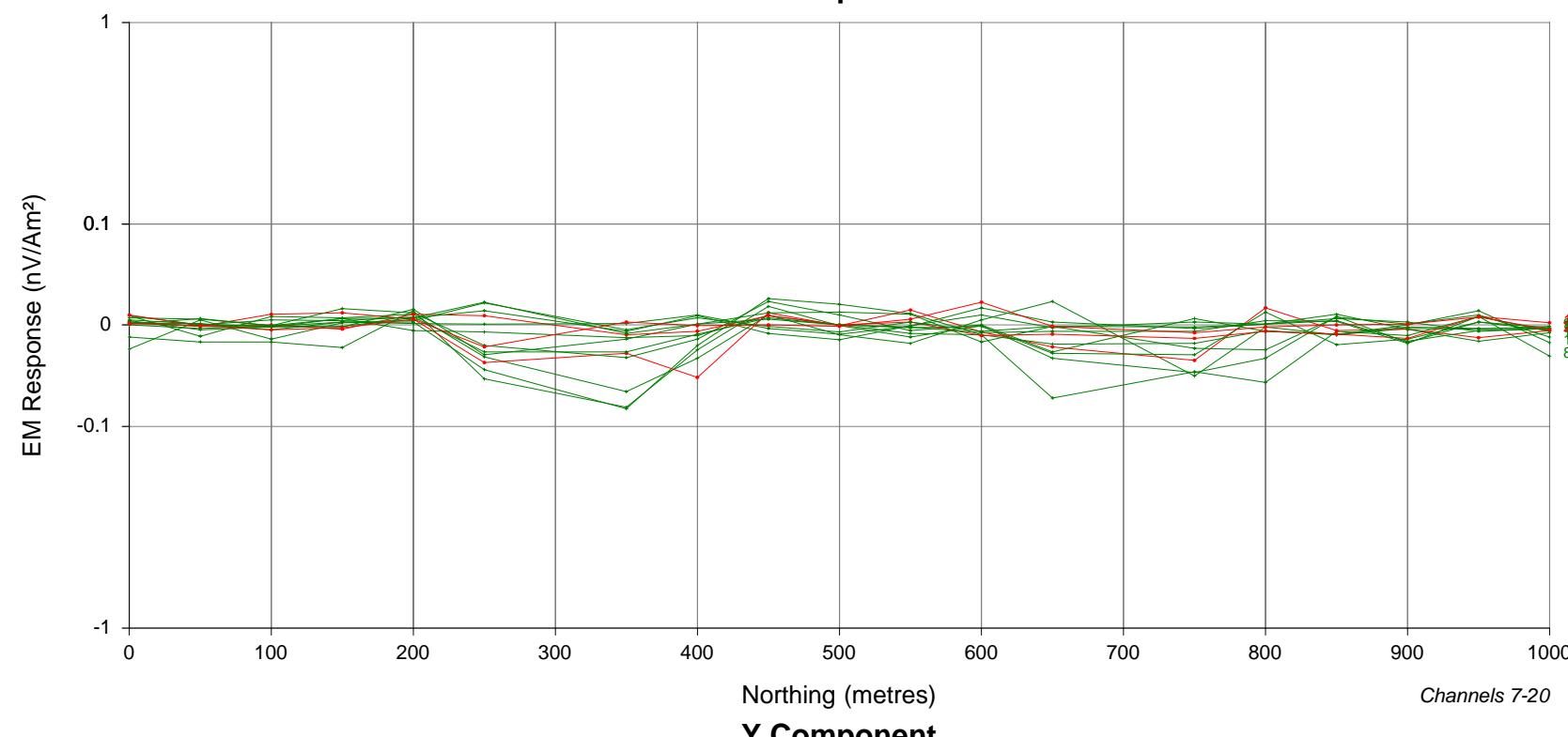
Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 600E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



Y Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6675	11	:	3.513
2	:	0.7425	12	:	4.370
3	:	0.8400	13	:	5.463
4	:	0.9625	14	:	6.858
5	:	1.118	15	:	8.638
6	:	1.318	16	:	10.91
7	:	1.573	17	:	13.81
8	:	1.898	18	:	17.50
9	:	2.313	19	:	22.22
10	:	2.840	20	:	28.23

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

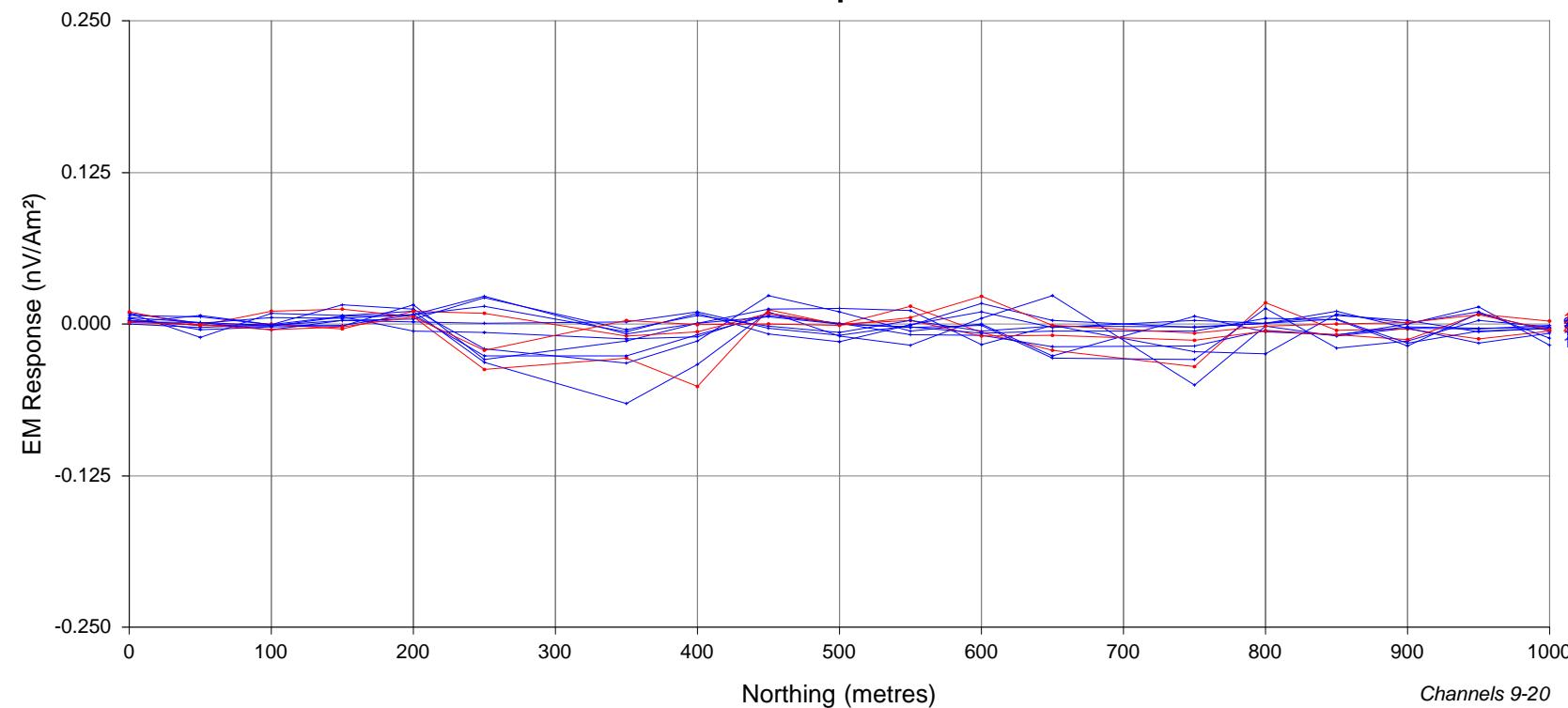
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

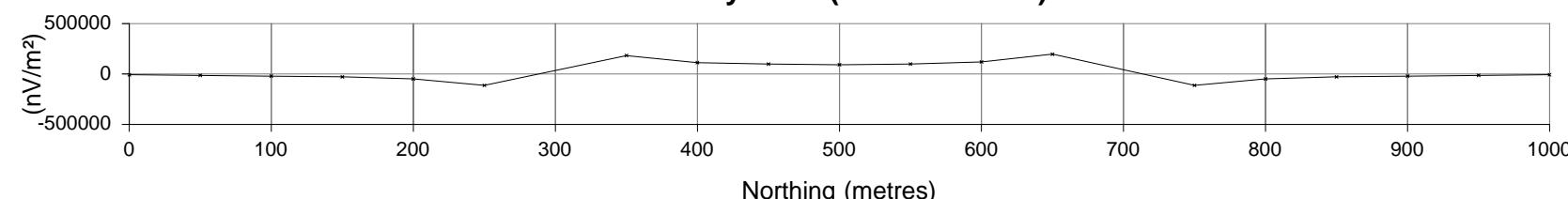
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

Y Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 500E

By : M. Dubois

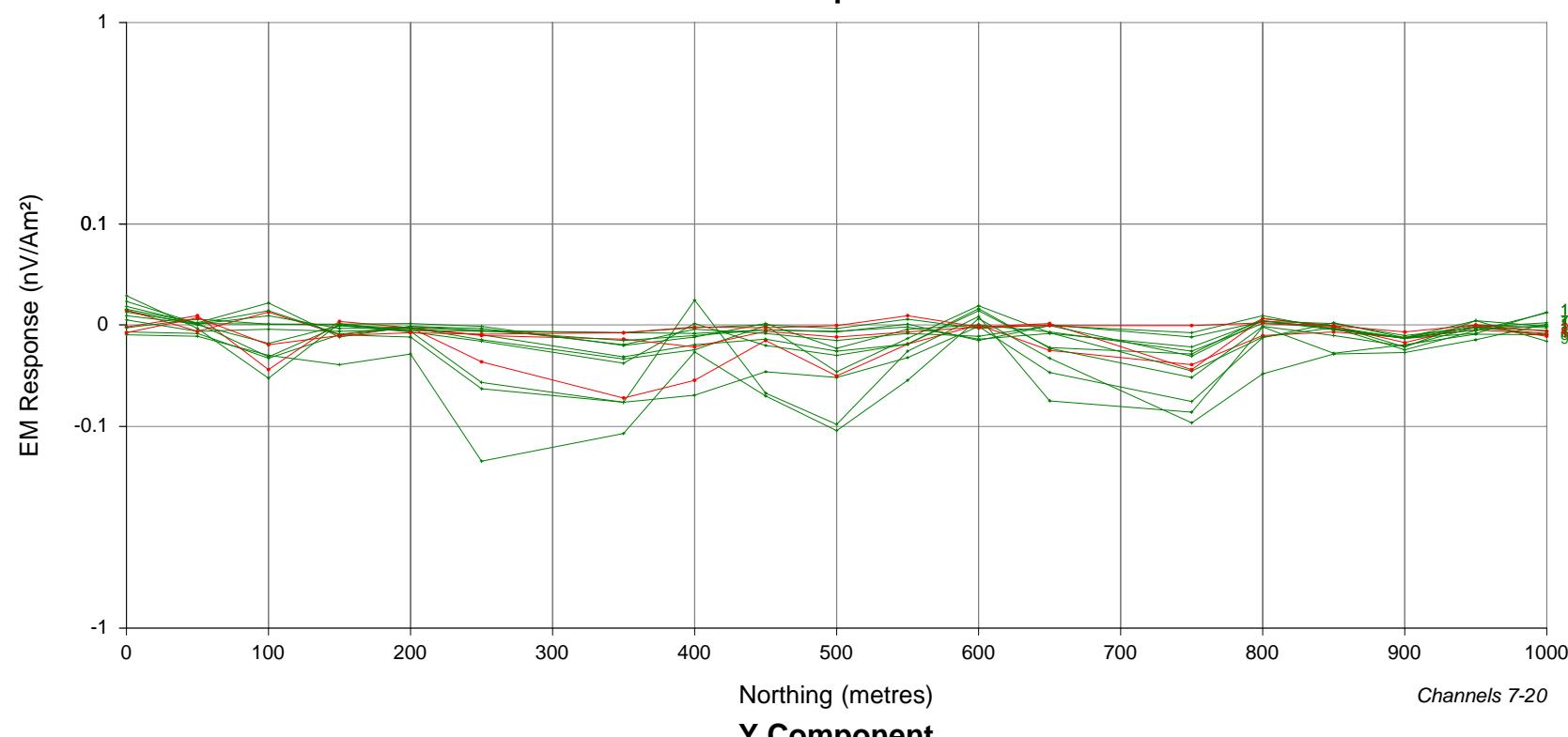
Date : March 2009

Ref. : 09N009

Scale 1:5000



Y Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6675	11	:	3.513
2	:	0.7425	12	:	4.370
3	:	0.8400	13	:	5.463
4	:	0.9625	14	:	6.858
5	:	1.118	15	:	8.638
6	:	1.318	16	:	10.91
7	:	1.573	17	:	13.81
8	:	1.898	18	:	17.50
9	:	2.313	19	:	22.22
10	:	2.840	20	:	28.23

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

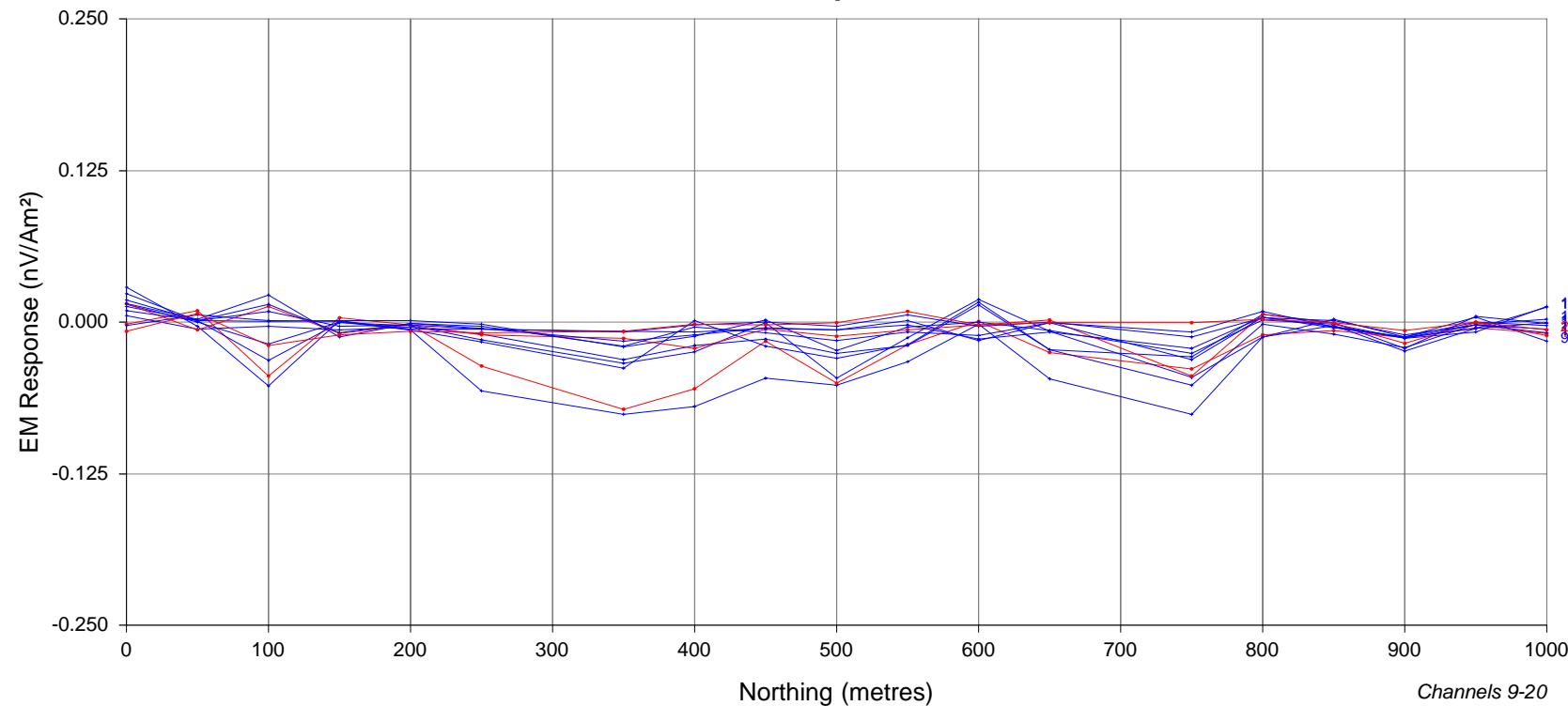
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

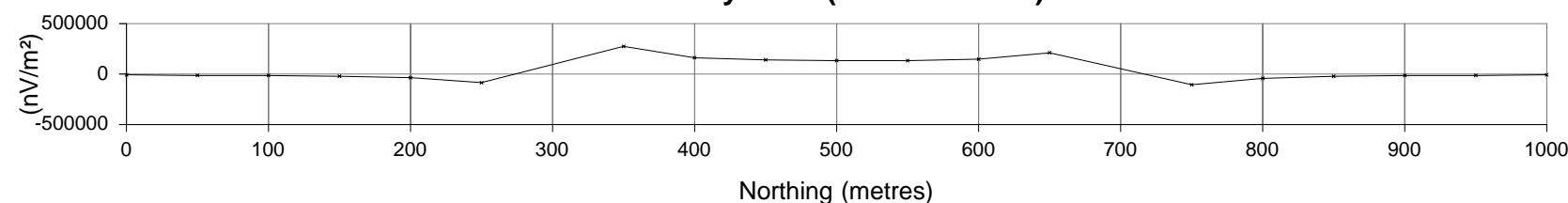
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

Y Component



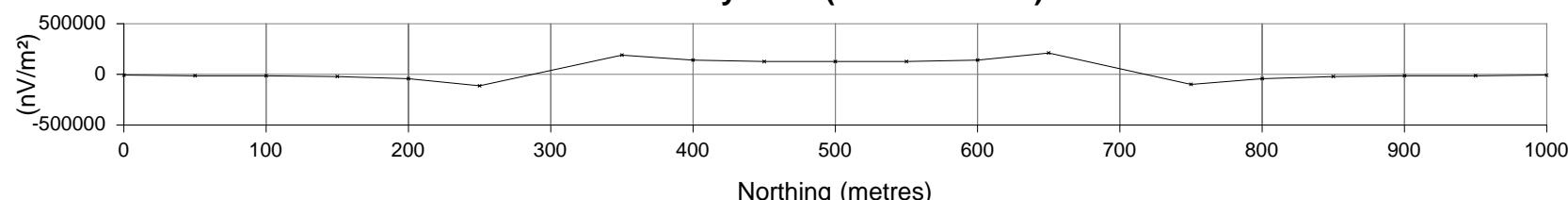
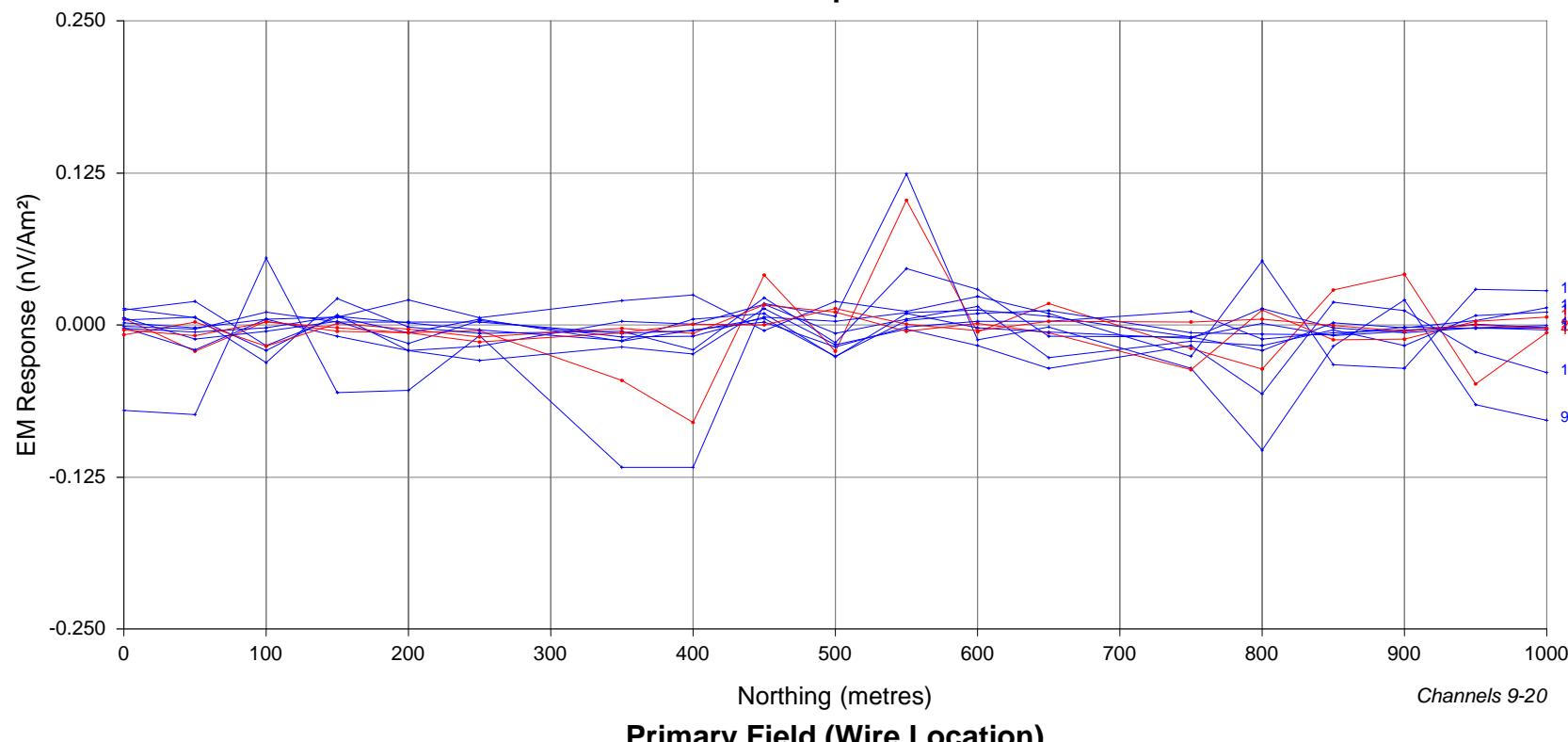
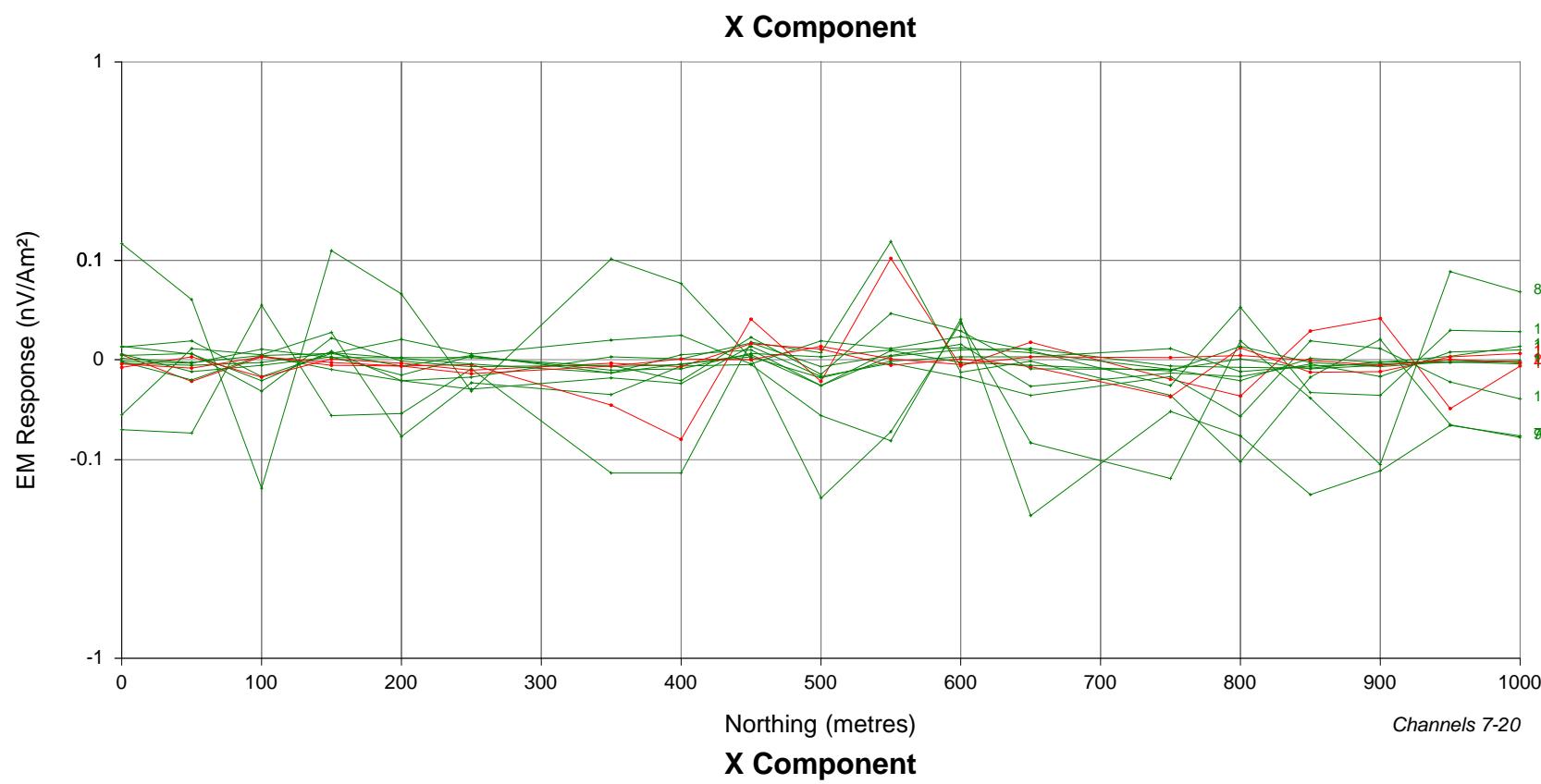
Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 400E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1	:	0.6725	11	:	3.518
2	:	0.7475	12	:	4.375
3	:	0.8450	13	:	5.468
4	:	0.9675	14	:	6.863
5	:	1.123	15	:	8.642
6	:	1.323	16	:	10.91
7	:	1.578	17	:	13.81
8	:	1.903	18	:	17.51
9	:	2.318	19	:	22.22
10	:	2.845	20	:	28.24

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

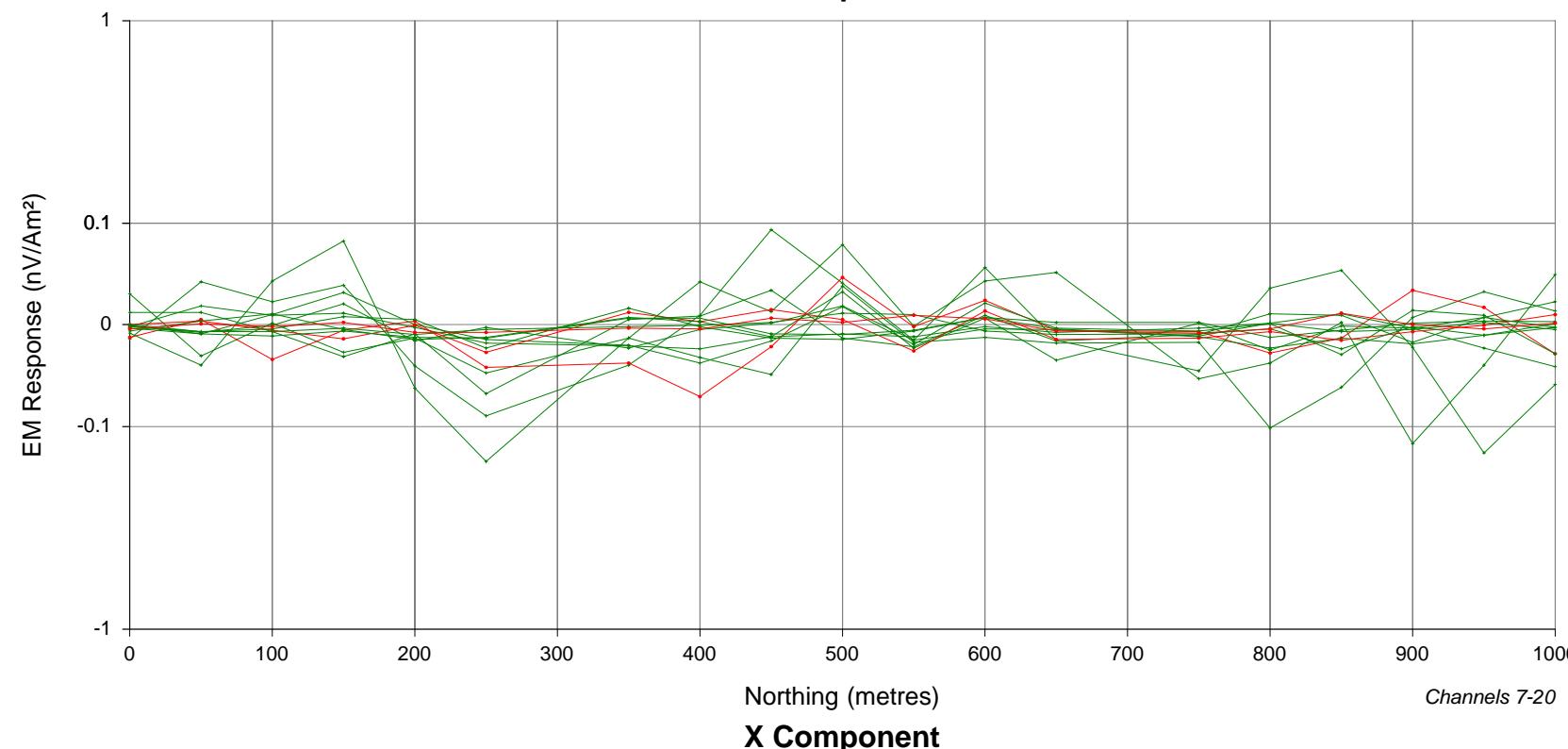
Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 800E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



X Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6725	11	:	3.518
2	:	0.7475	12	:	4.375
3	:	0.8450	13	:	5.468
4	:	0.9675	14	:	6.863
5	:	1.123	15	:	8.642
6	:	1.323	16	:	10.91
7	:	1.578	17	:	13.81
8	:	1.903	18	:	17.51
9	:	2.318	19	:	22.22
10	:	2.845	20	:	28.24

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

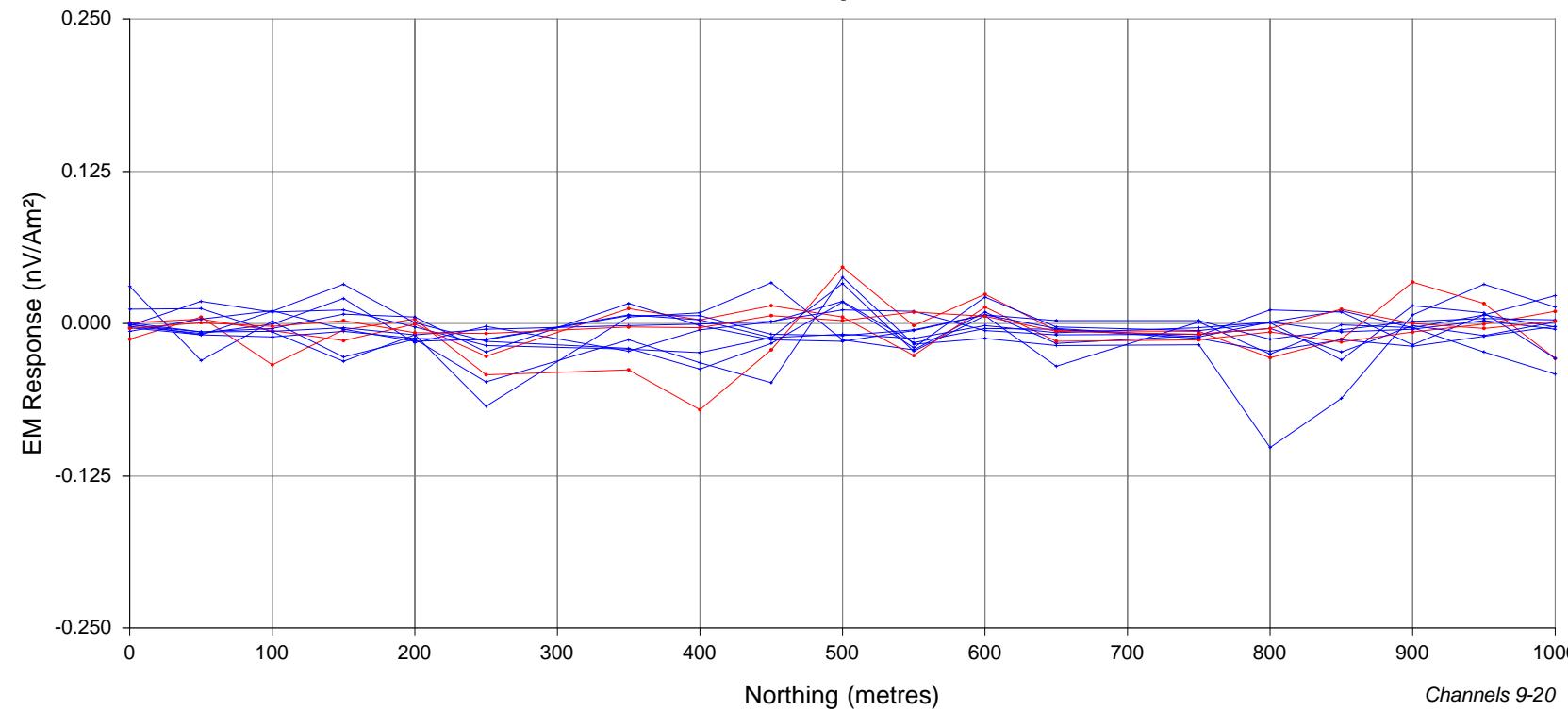
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

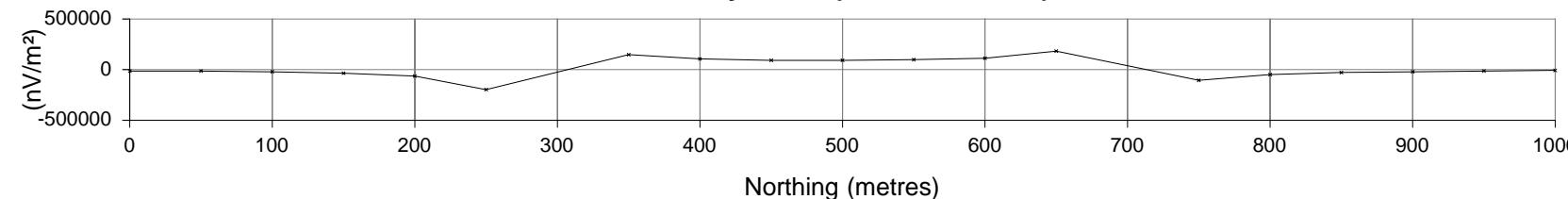
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

X Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 700E

By : M. Dubois

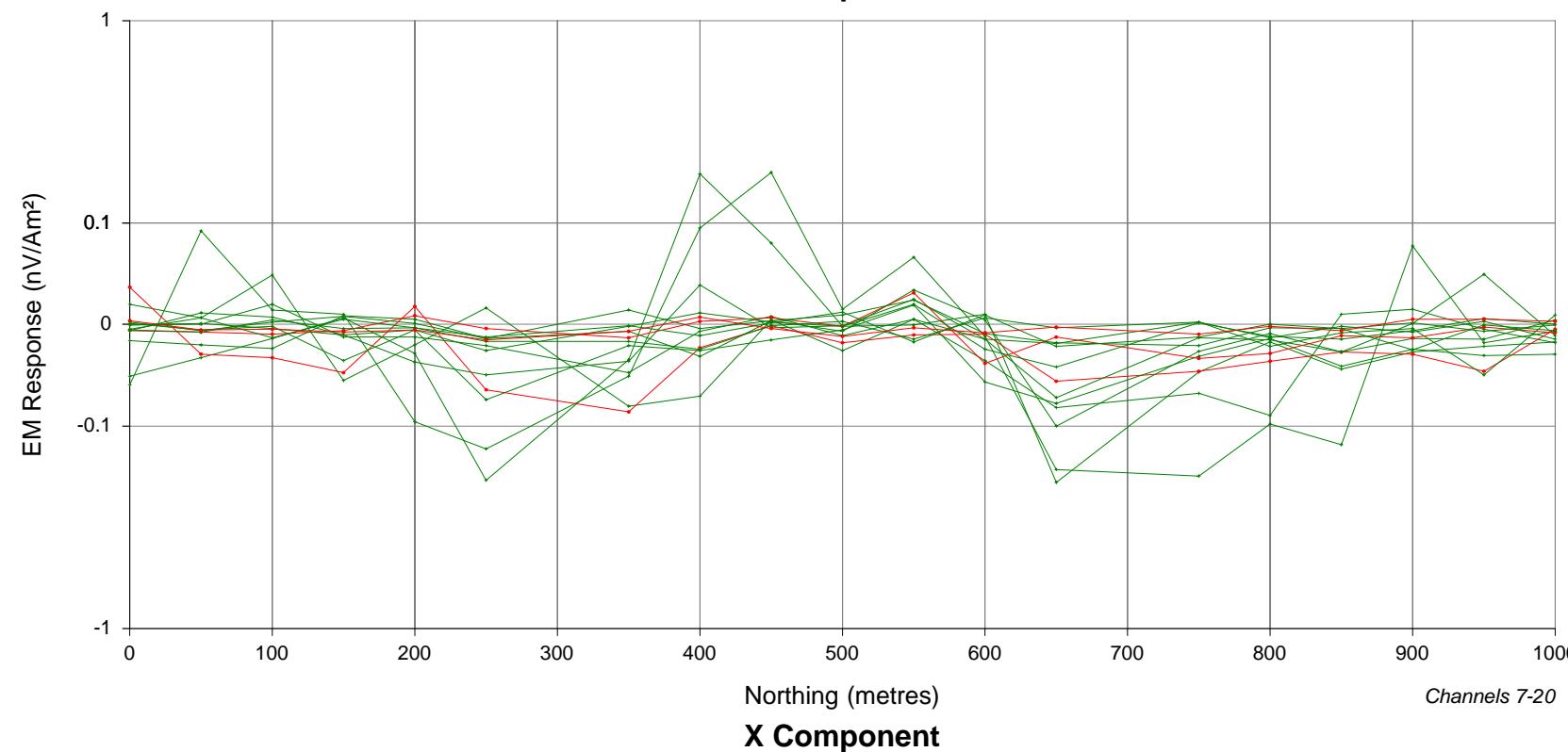
Date : March 2009

Ref. : 09N009

Scale 1:5000



X Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6725	11	:	3.518
2	:	0.7475	12	:	4.375
3	:	0.8450	13	:	5.468
4	:	0.9675	14	:	6.863
5	:	1.123	15	:	8.642
6	:	1.323	16	:	10.91
7	:	1.578	17	:	13.81
8	:	1.903	18	:	17.51
9	:	2.318	19	:	22.22
10	:	2.845	20	:	28.24

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

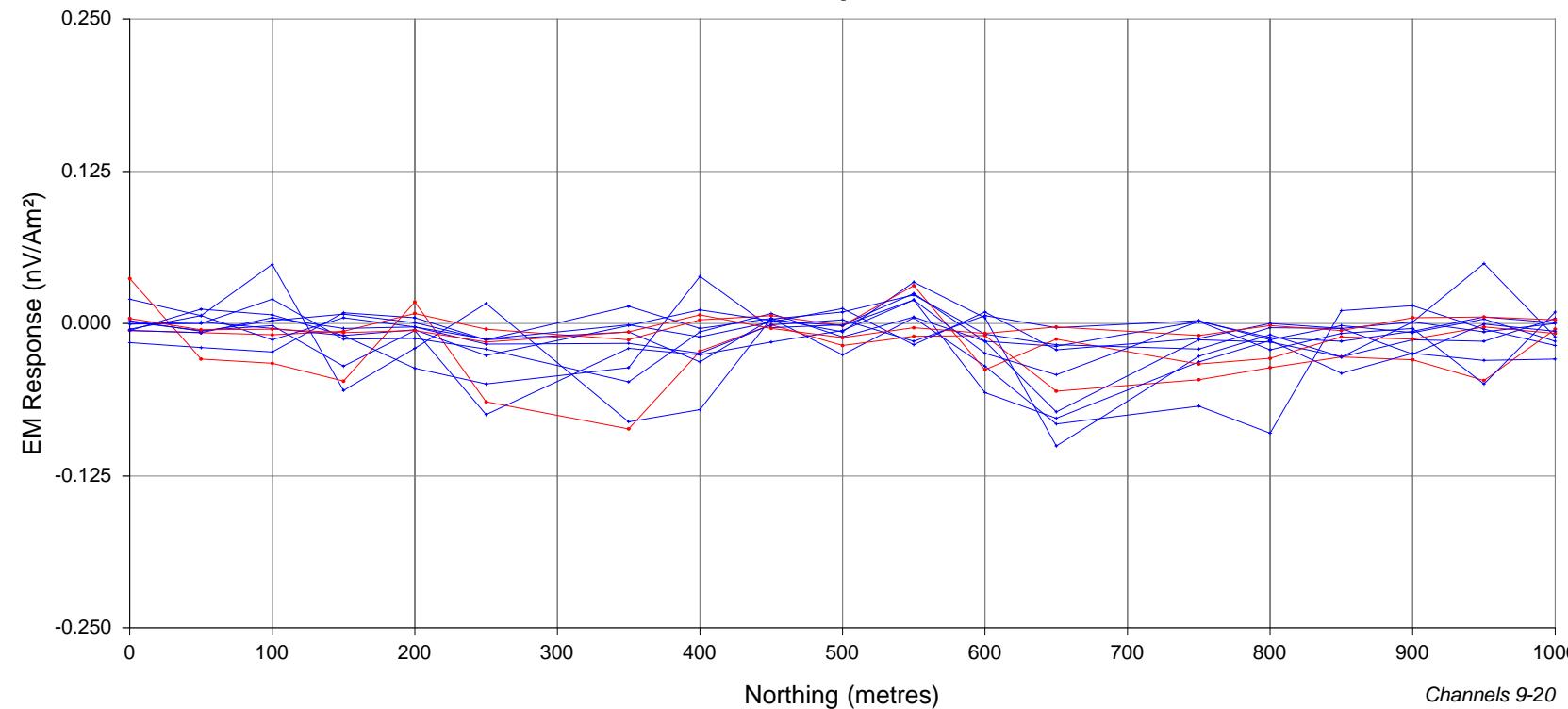
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

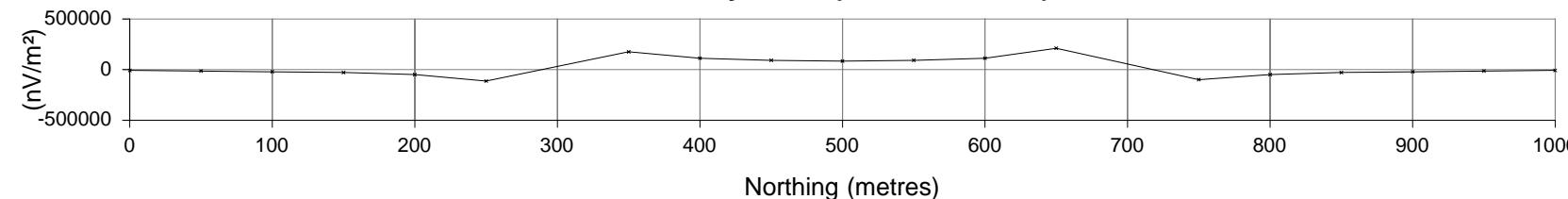
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

X Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 600E

By : M. Dubois

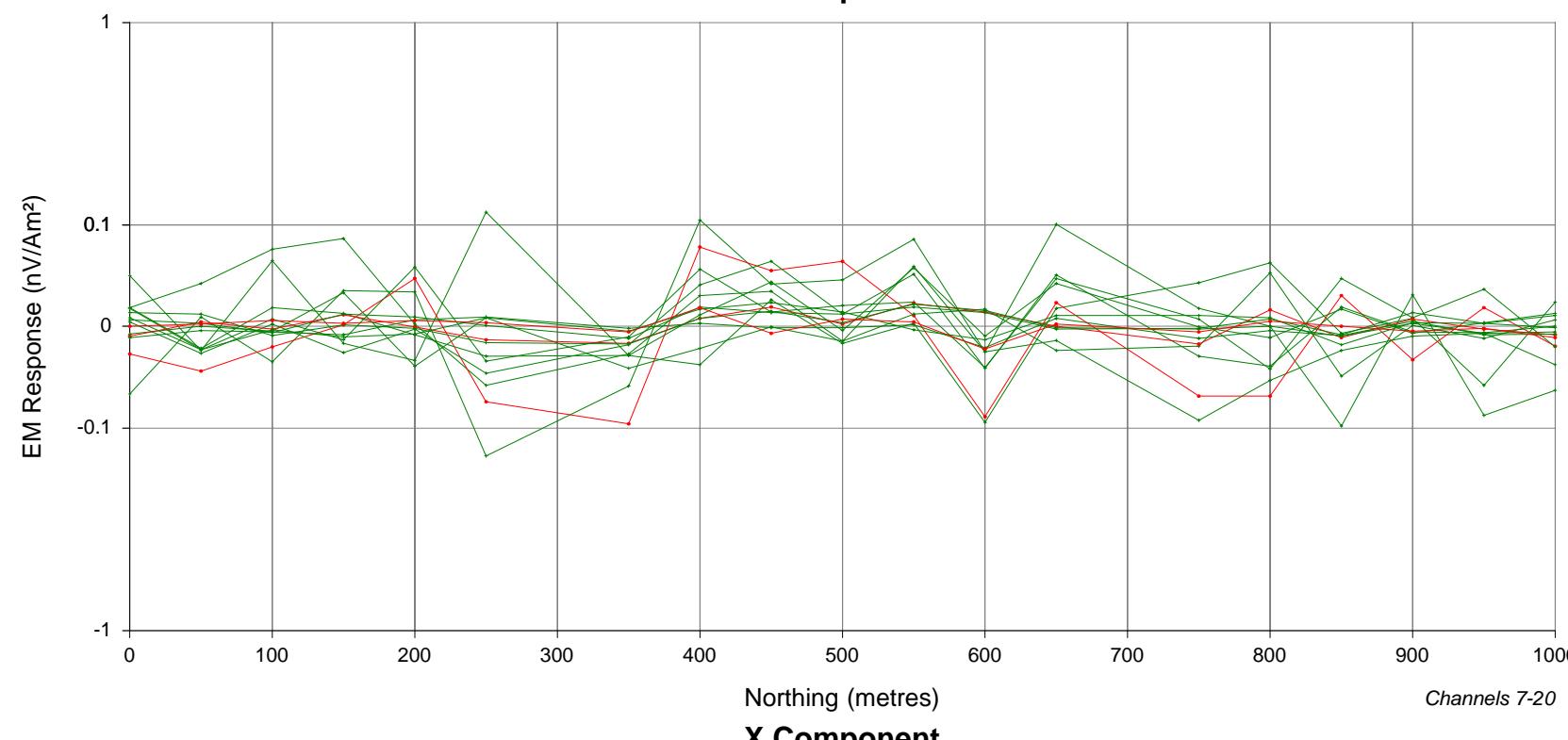
Date : March 2009

Ref. : 09N009

Scale 1:5000



X Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6675	11	:	3.513
2	:	0.7425	12	:	4.370
3	:	0.8400	13	:	5.463
4	:	0.9625	14	:	6.858
5	:	1.118	15	:	8.638
6	:	1.318	16	:	10.91
7	:	1.573	17	:	13.81
8	:	1.898	18	:	17.50
9	:	2.313	19	:	22.22
10	:	2.840	20	:	28.23

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

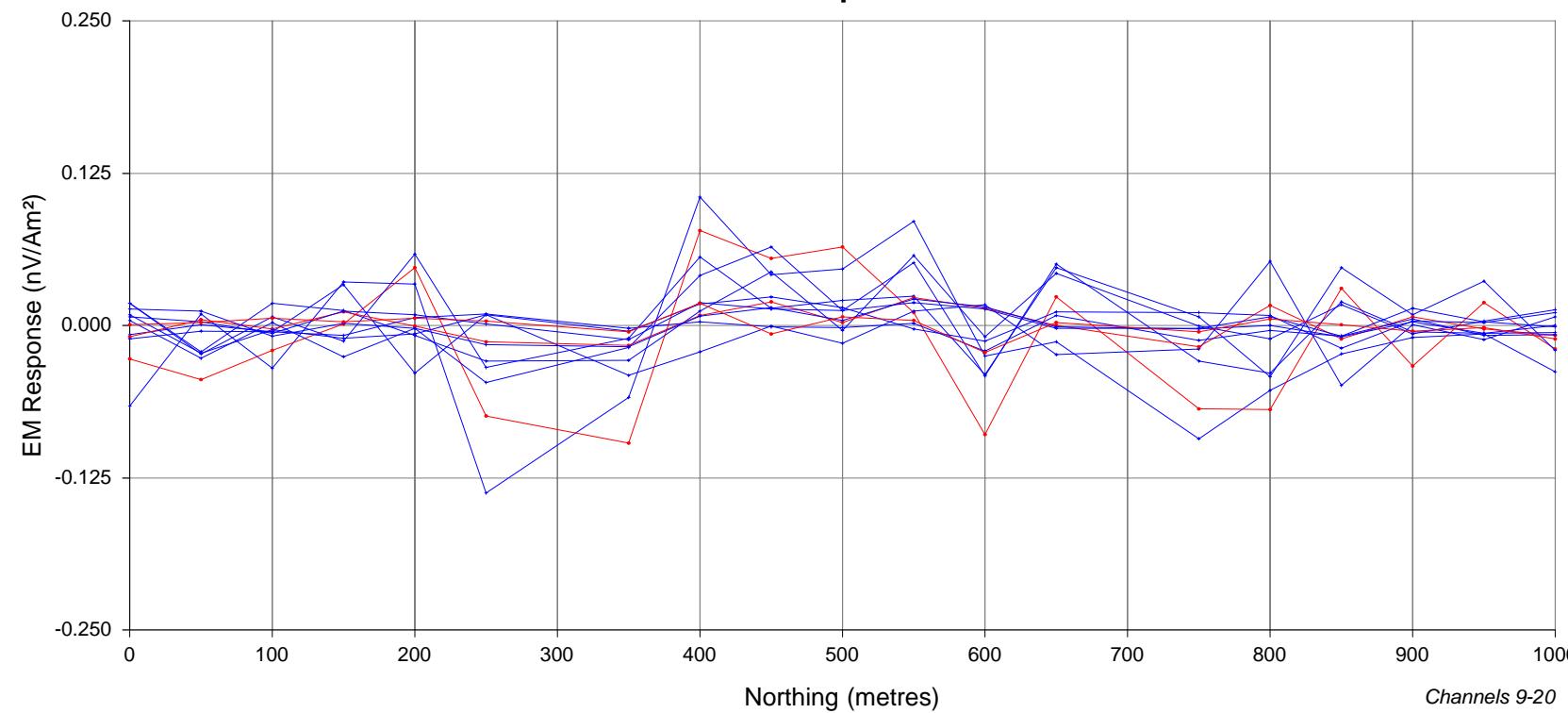
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

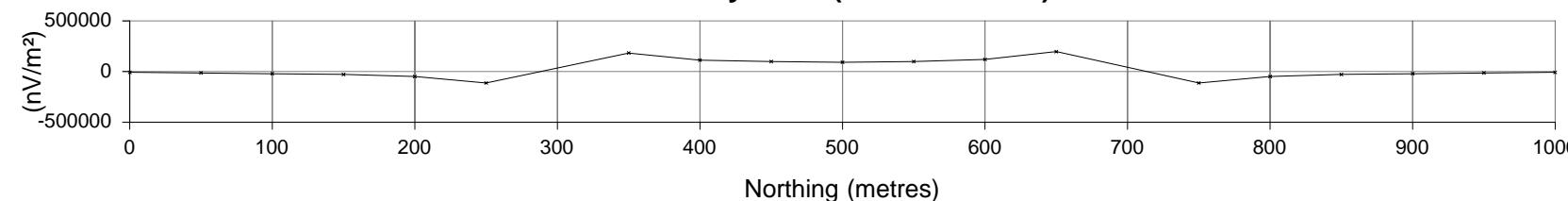
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

X Component



Primary Field (Wire Location)



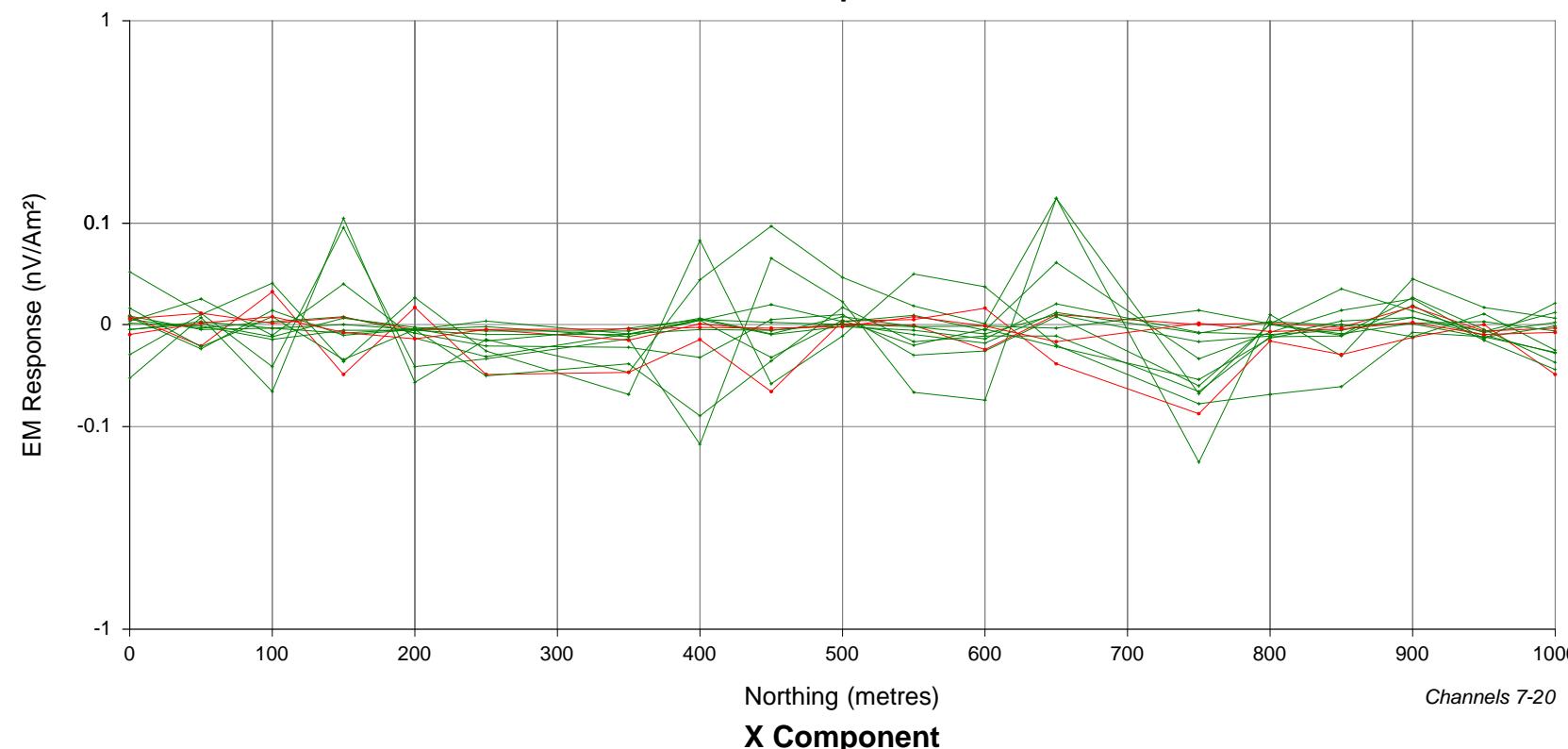
Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 500E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



X Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6675	11	:	3.513
2	:	0.7425	12	:	4.370
3	:	0.8400	13	:	5.463
4	:	0.9625	14	:	6.858
5	:	1.118	15	:	8.638
6	:	1.318	16	:	10.91
7	:	1.573	17	:	13.81
8	:	1.898	18	:	17.50
9	:	2.313	19	:	22.22
10	:	2.840	20	:	28.23

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

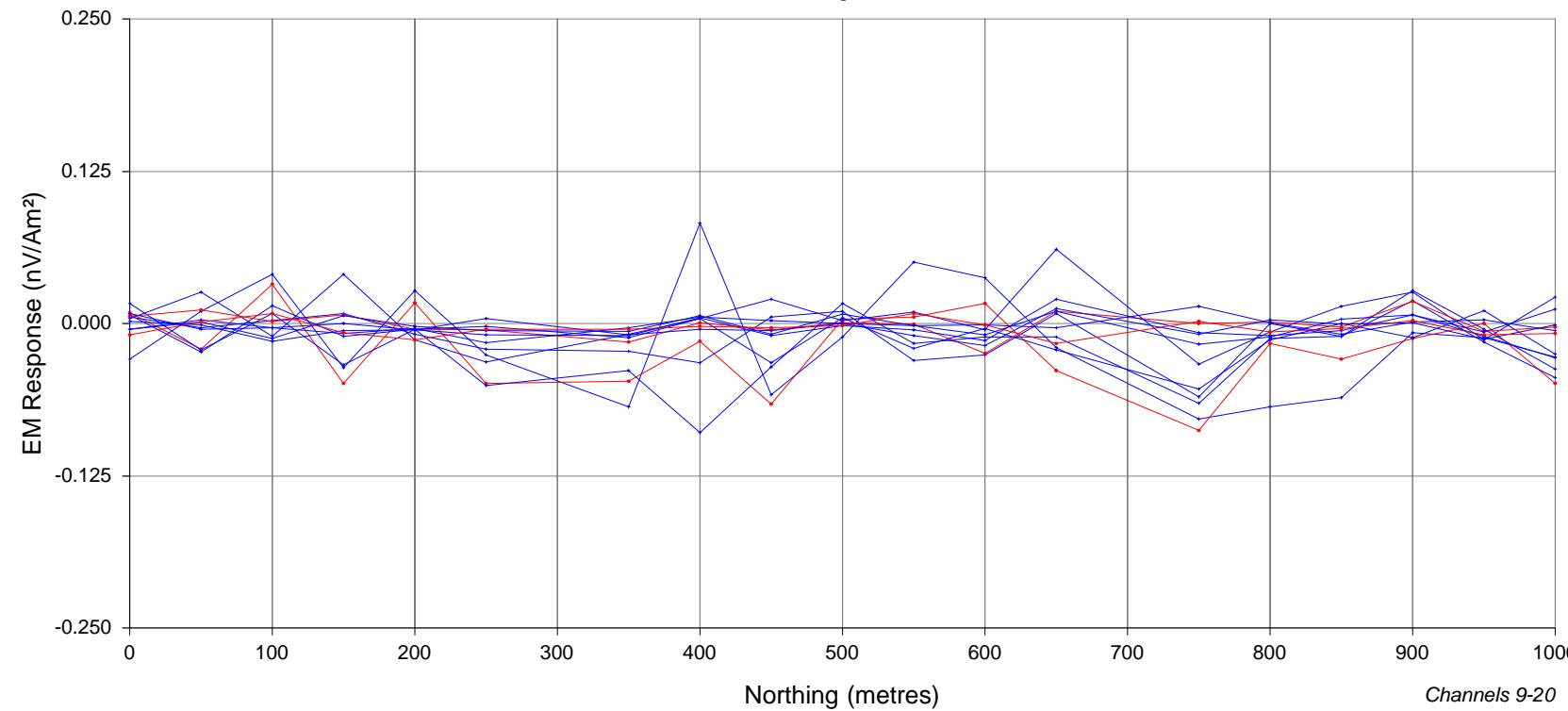
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

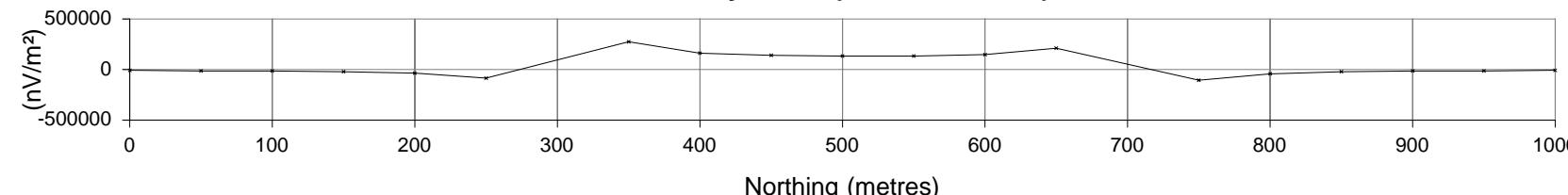
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

X Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 400E

By : M. Dubois

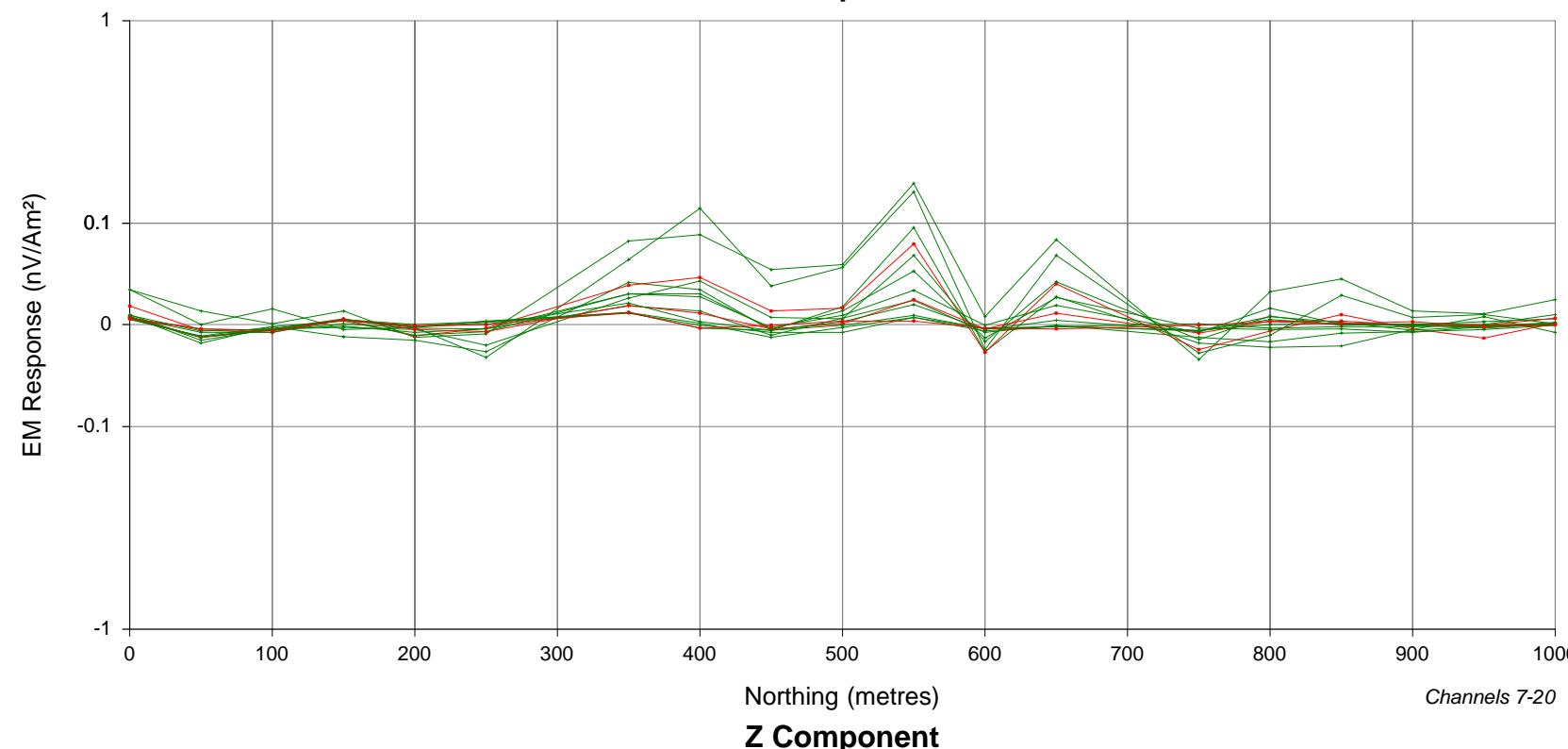
Date : March 2009

Ref. : 09N009

Scale 1:5000



Z Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.6725	11	:	3.518
2	:	0.7475	12	:	4.375
3	:	0.8450	13	:	5.468
4	:	0.9675	14	:	6.863
5	:	1.123	15	:	8.642
6	:	1.323	16	:	10.91
7	:	1.578	17	:	13.81
8	:	1.903	18	:	17.51
9	:	2.318	19	:	22.22
10	:	2.845	20	:	28.24

SURVEY PARAMETERS

Configuration : Fixed Loop
Station Spacings : 50 m

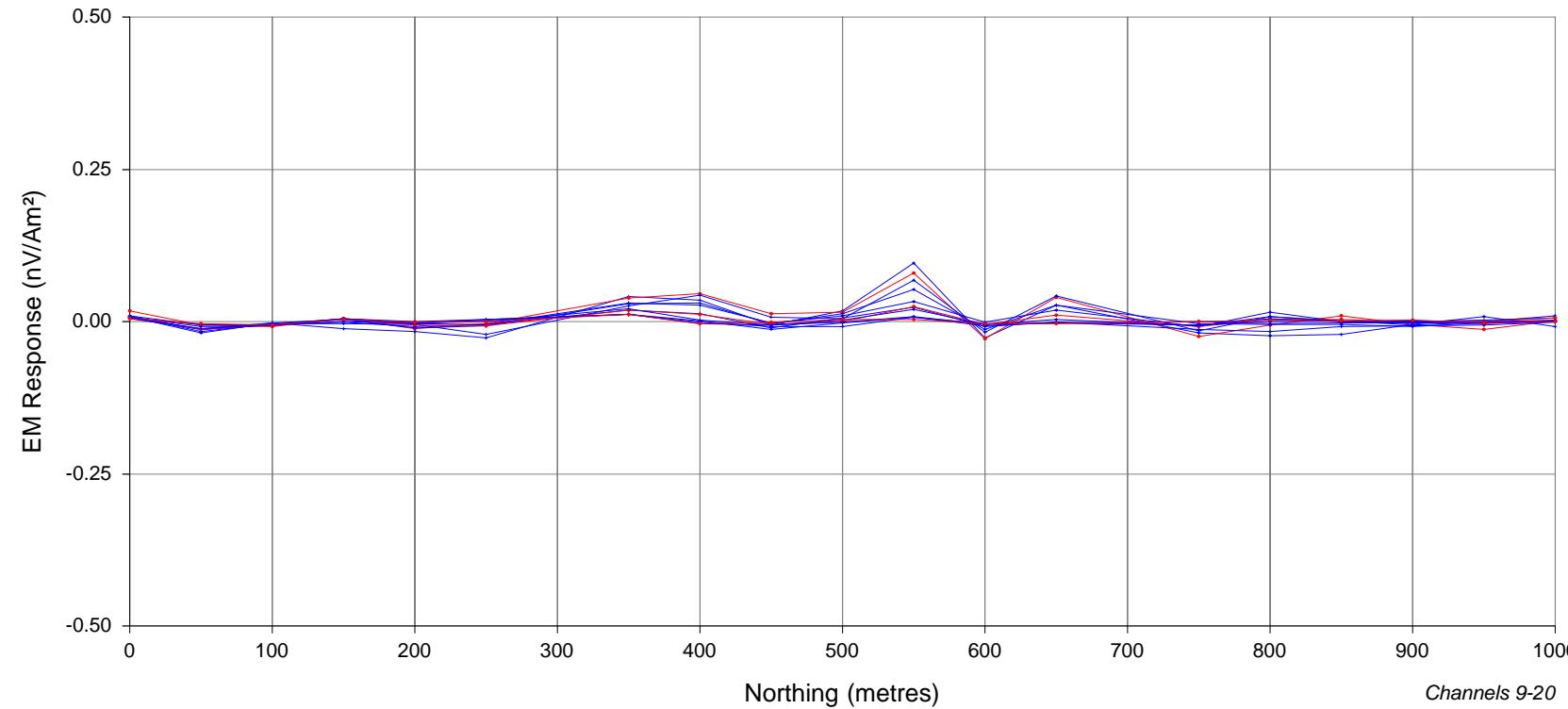
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m^2

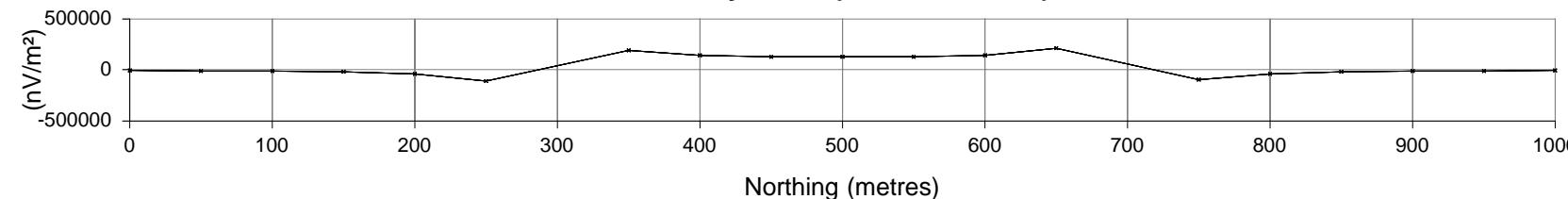
TRANSMITTER

Geonics : TEM57
Loop : Loop 01
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 320 μs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

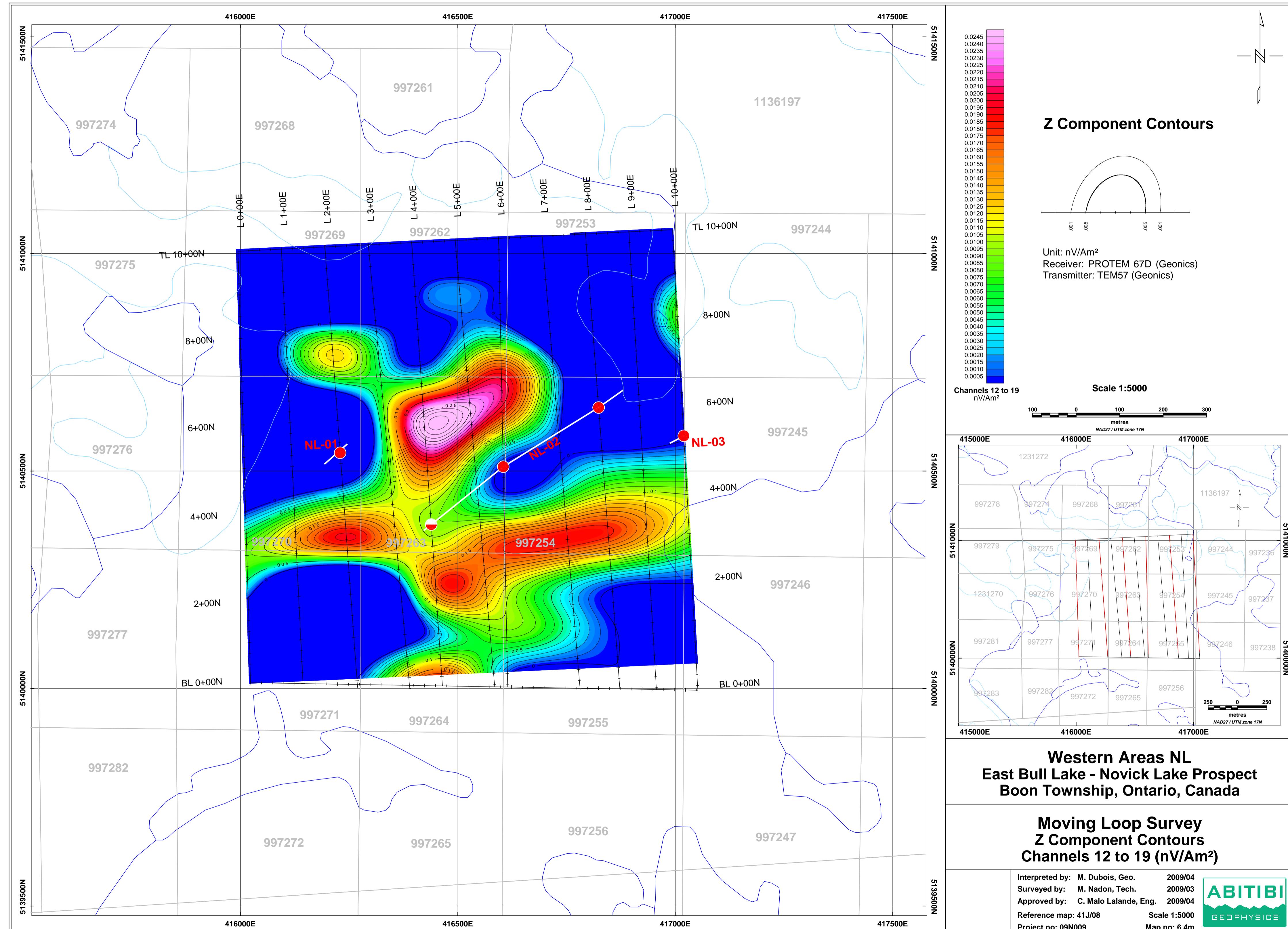
Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Fixed Loop TDEM Survey
EM Response Profiles
Line 800E

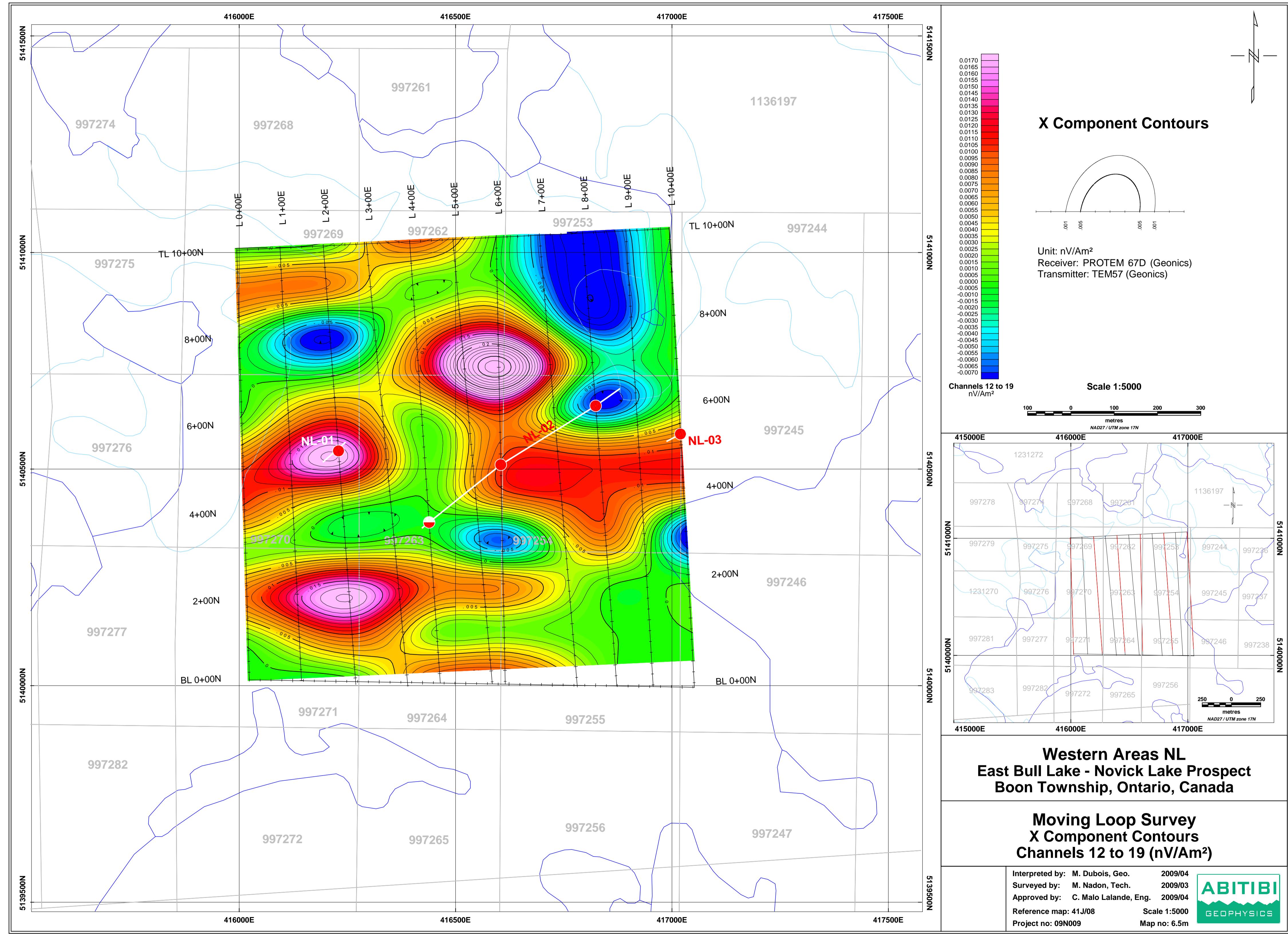
By : M. Dubois

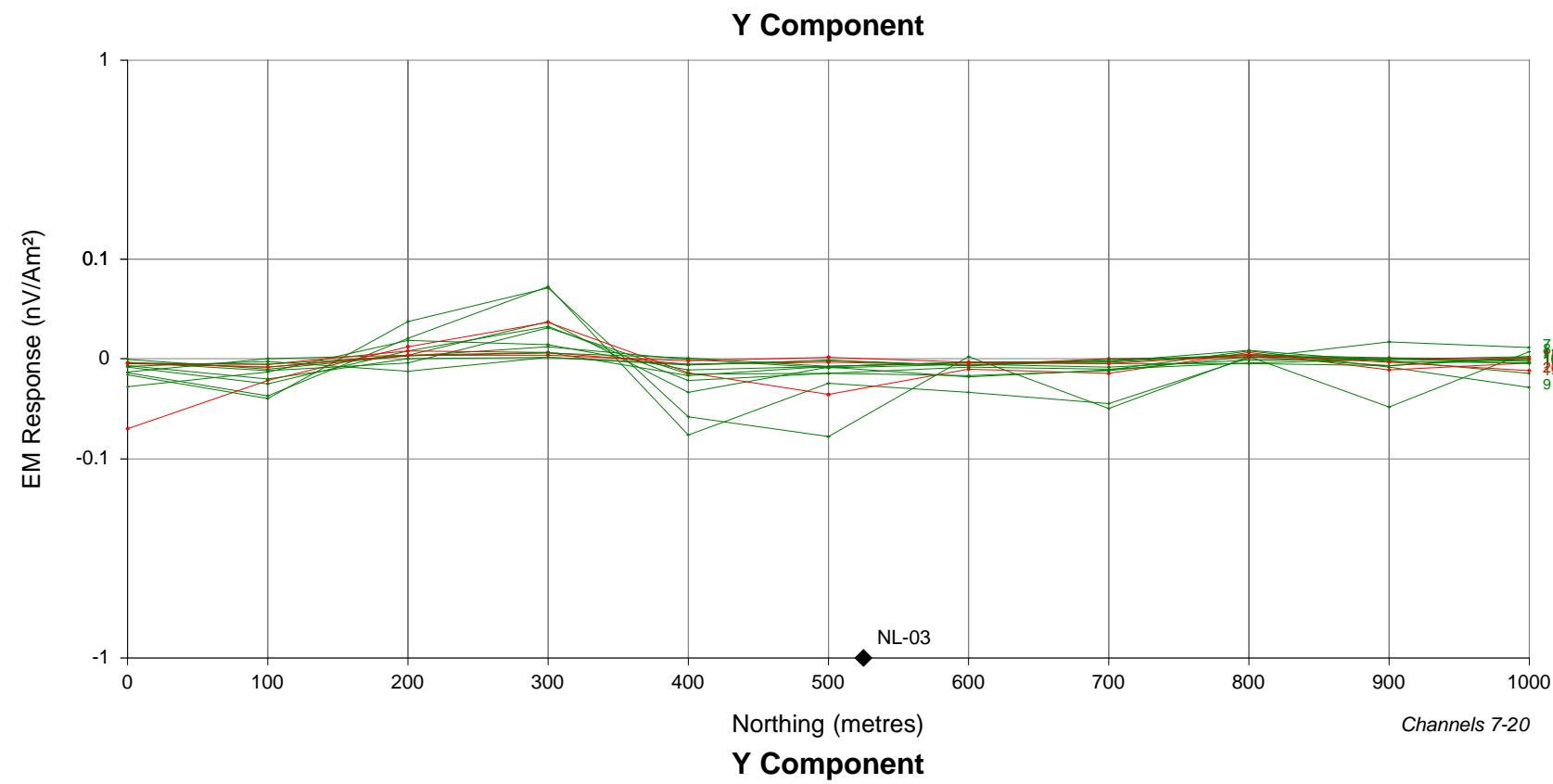
Date : March 2009

Ref. : 09N009

Scale 1:5000

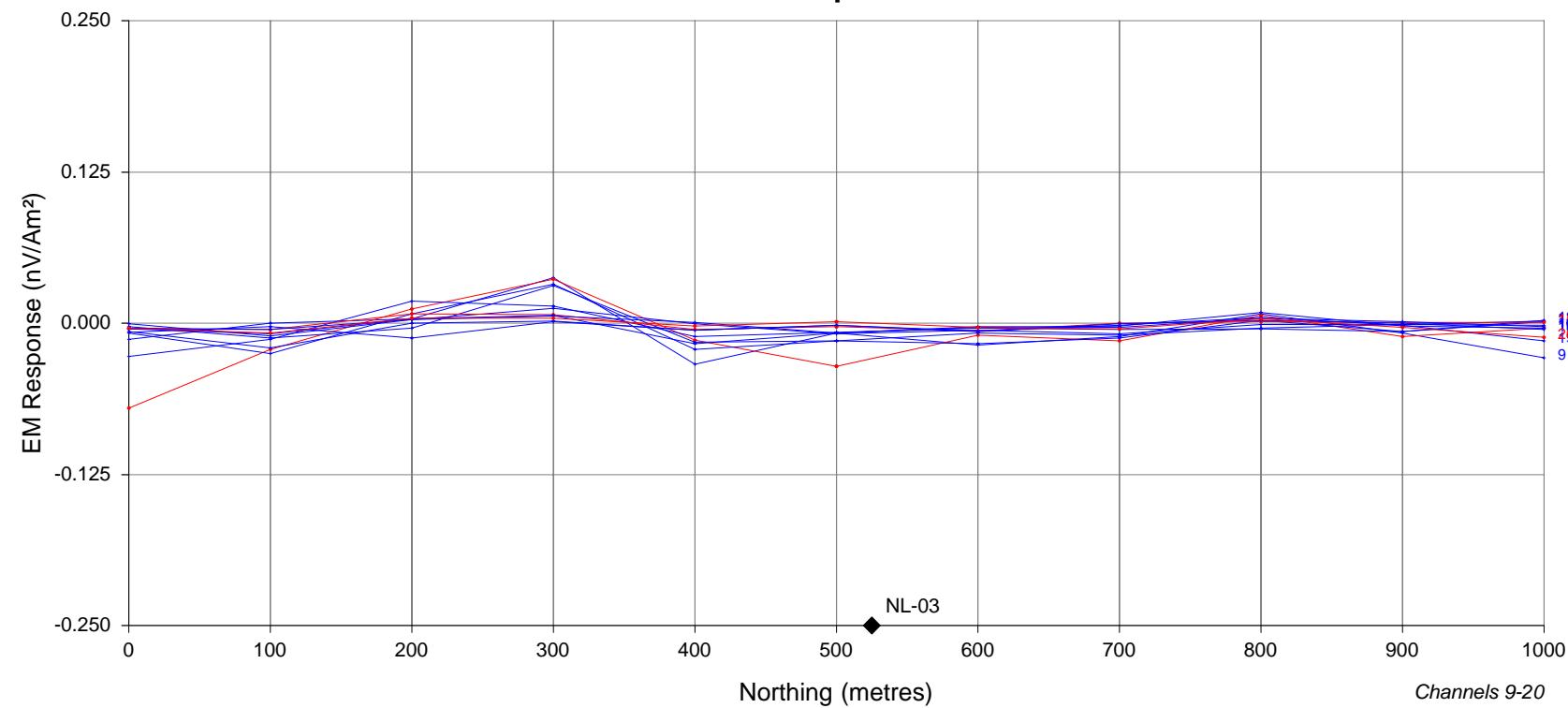






WINDOW TIMES (ms)
From the start of the Ramp

1	:	0.5725	11	:	3.417
2	:	0.6475	12	:	4.275
3	:	0.7450	13	:	5.367
4	:	0.8675	14	:	6.762
5	:	1.022	15	:	8.542
6	:	1.222	16	:	10.81
7	:	1.477	17	:	13.71
8	:	1.802	18	:	17.41
9	:	2.217	19	:	22.12
10	:	2.745	20	:	28.14



SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

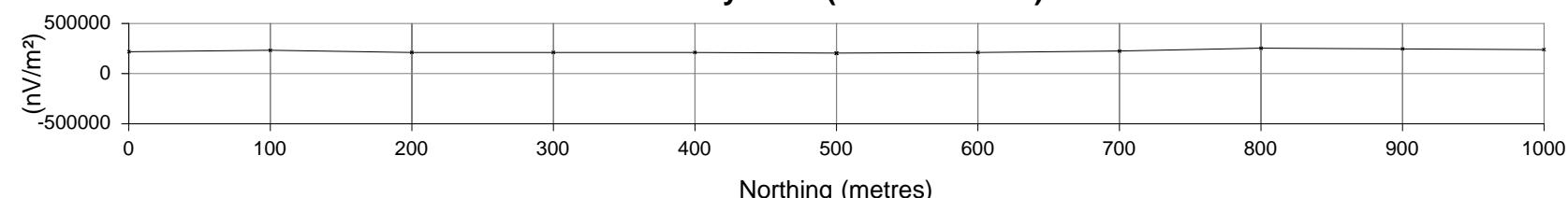
TRANSMITTER

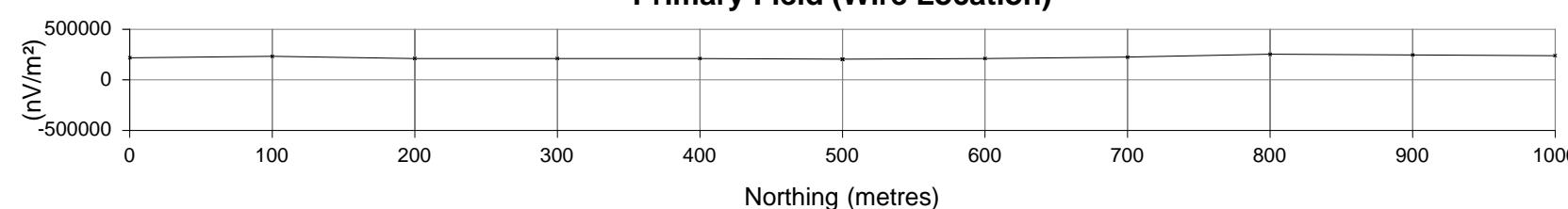
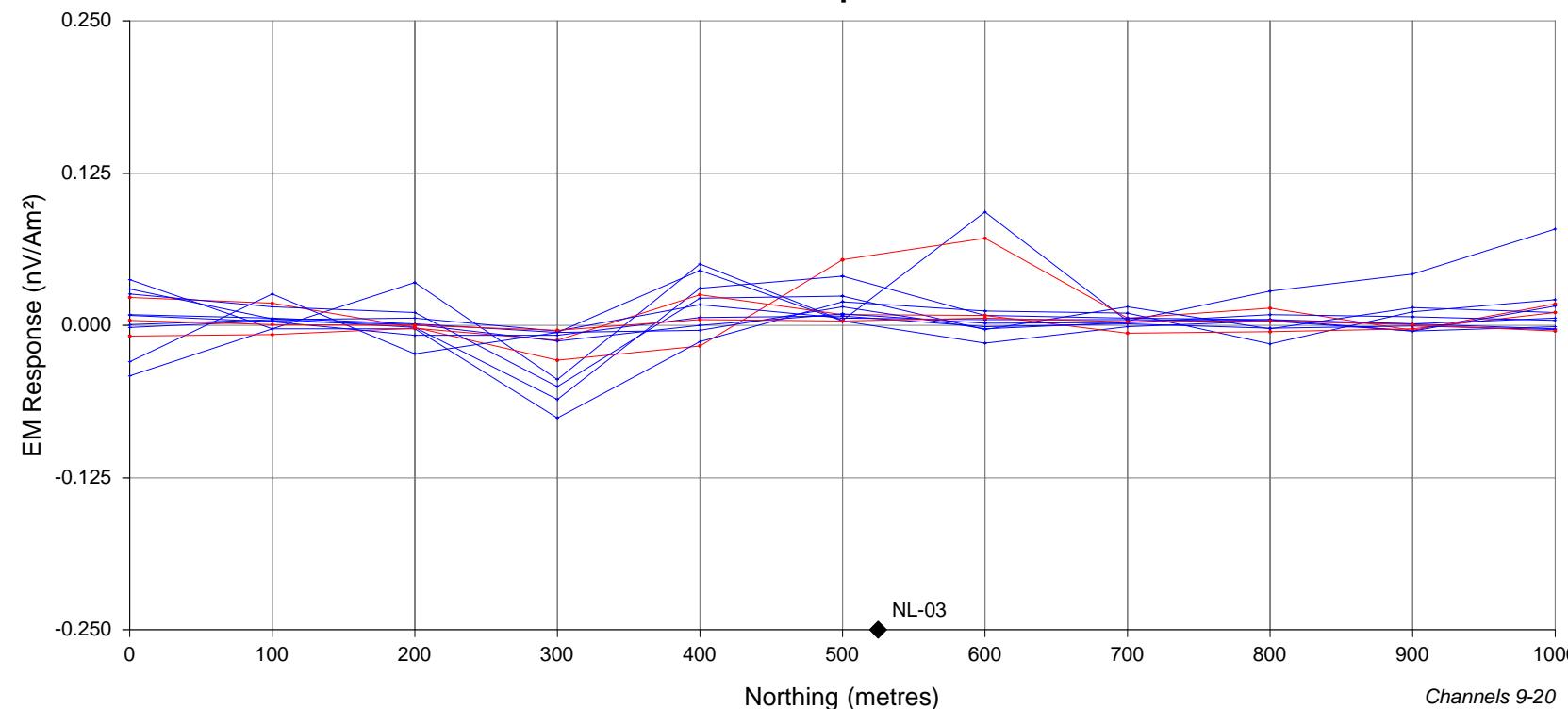
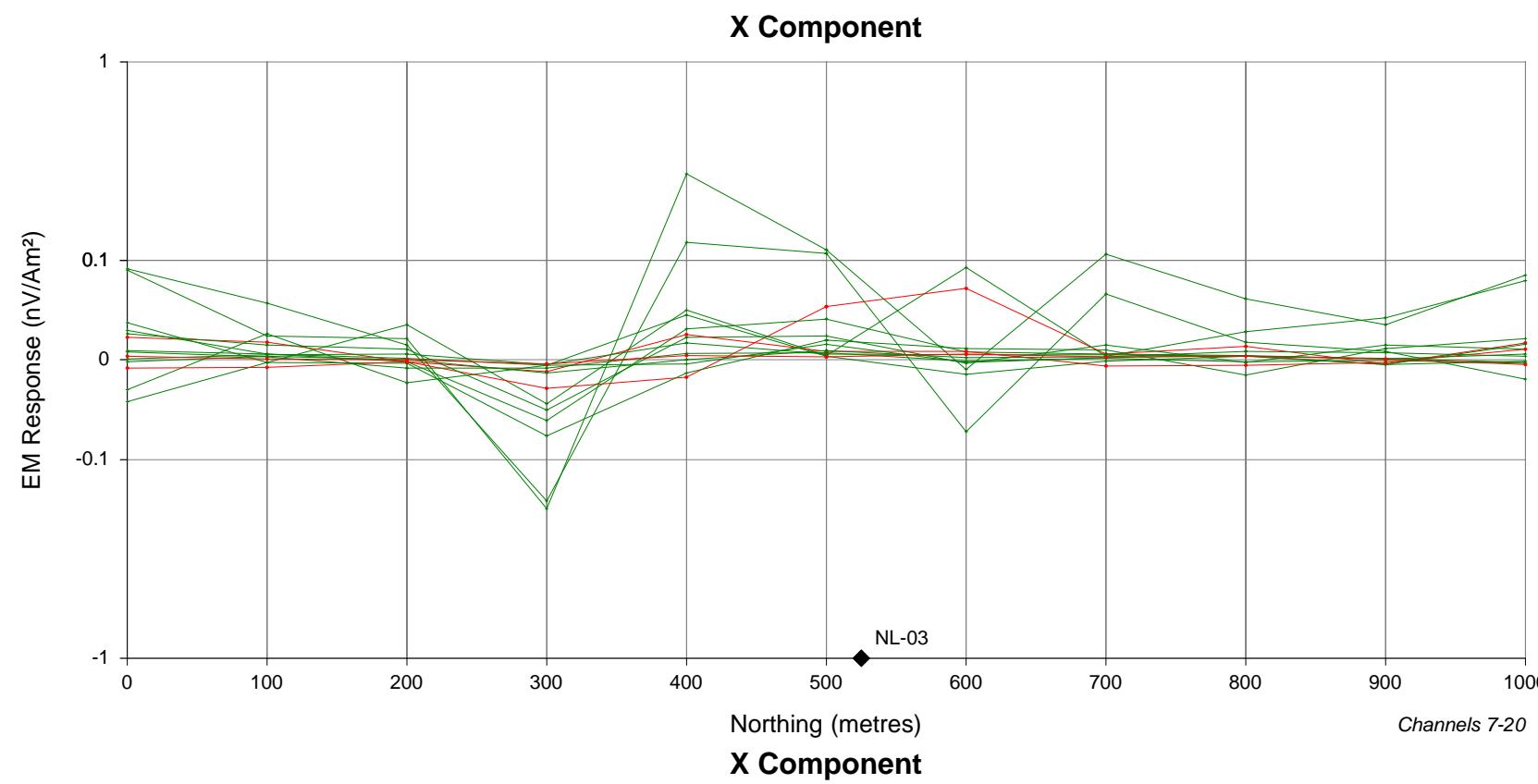
Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 1000E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000





**WINDOW TIMES (ms)
From the start of the Ramp**

1	:	0.5725	11	:	3.417
2	:	0.6475	12	:	4.275
3	:	0.7450	13	:	5.367
4	:	0.8675	14	:	6.762
5	:	1.022	15	:	8.542
6	:	1.222	16	:	10.81
7	:	1.477	17	:	13.71
8	:	1.802	18	:	17.41
9	:	2.217	19	:	22.12
10	:	2.745	20	:	28.14

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

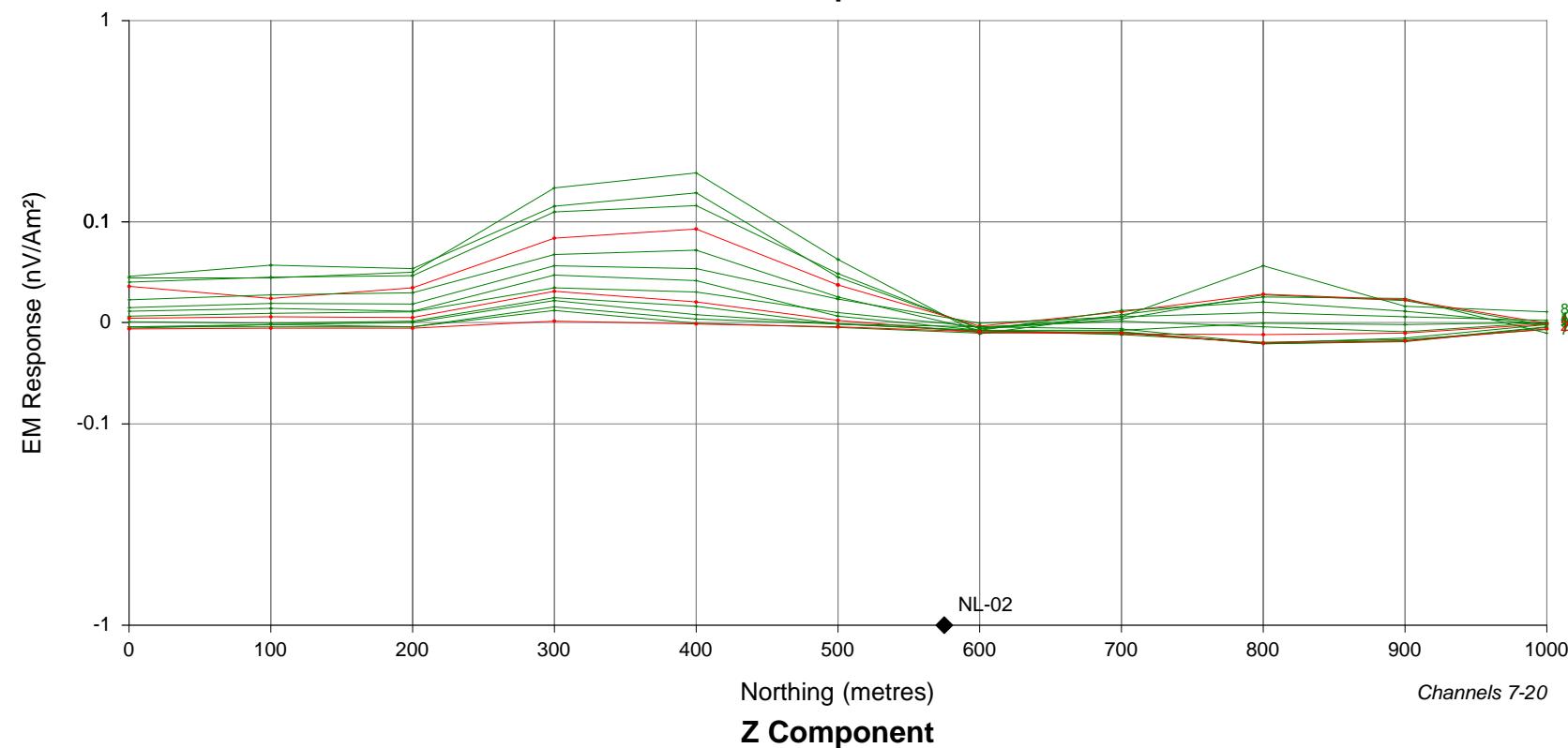
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East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 1000E

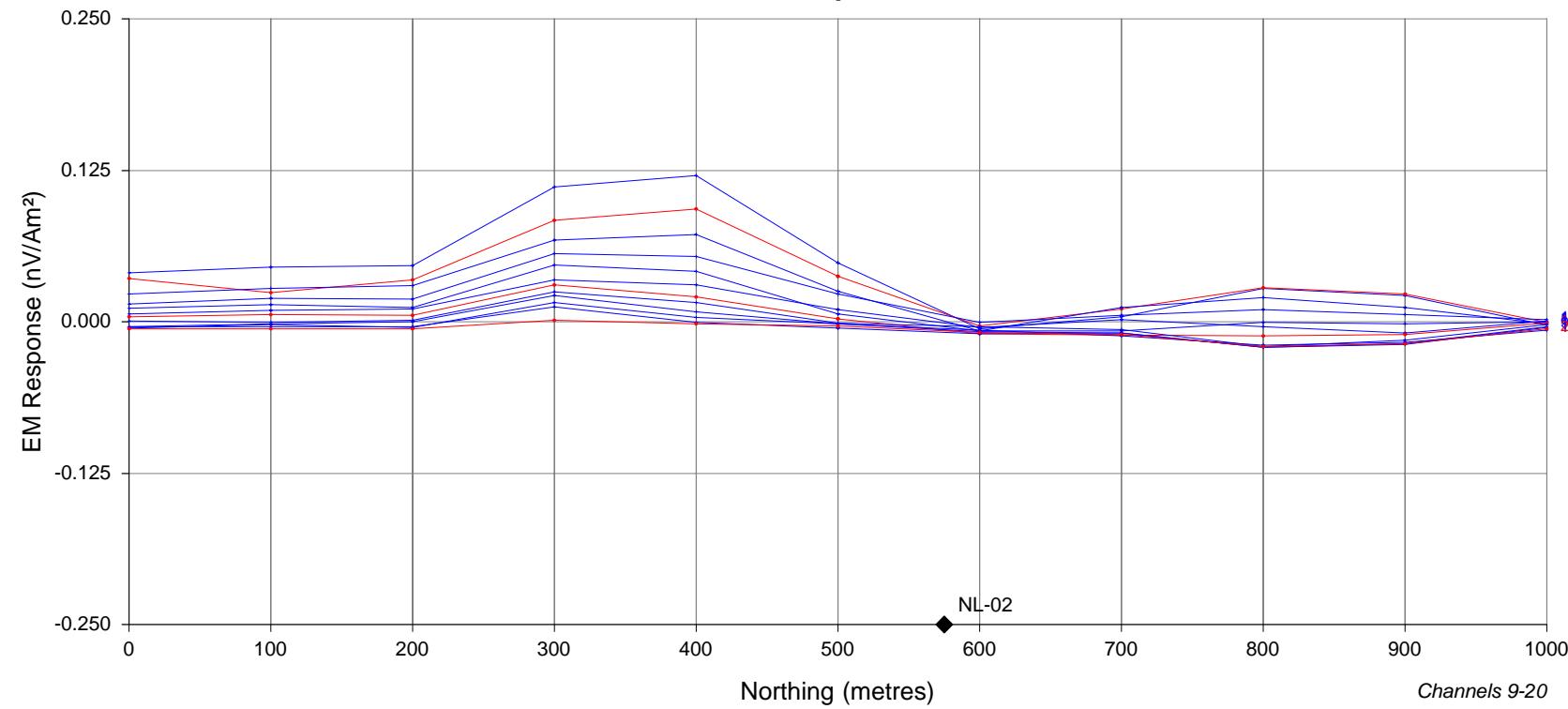
By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



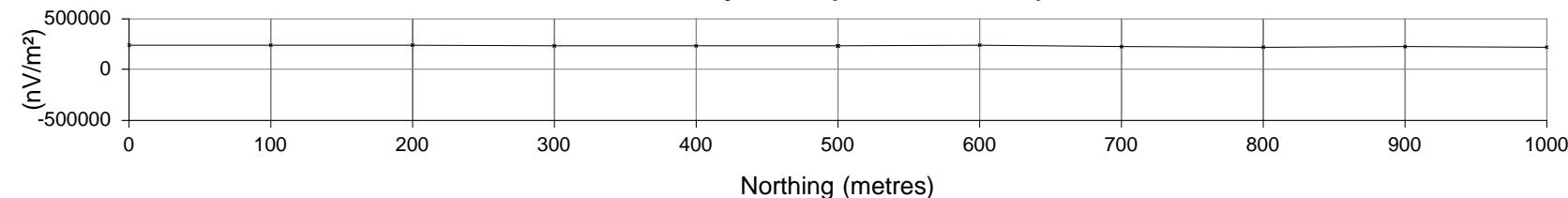
Z Component



Z Component



Primary Field (Wire Location)



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5225	11	:	3.367
2	:	0.5975	12	:	4.225
3	:	0.6950	13	:	5.317
4	:	0.8175	14	:	6.712
5	:	0.9725	15	:	8.492
6	:	1.172	16	:	10.76
7	:	1.427	17	:	13.66
8	:	1.752	18	:	17.36
9	:	2.167	19	:	22.07
10	:	2.695	20	:	28.08

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m²

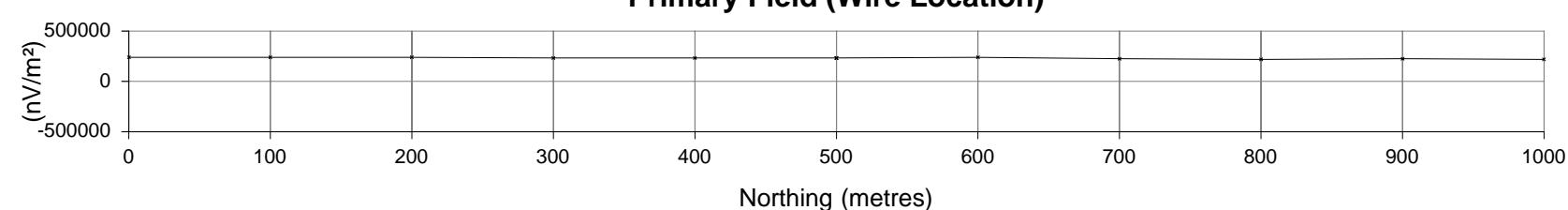
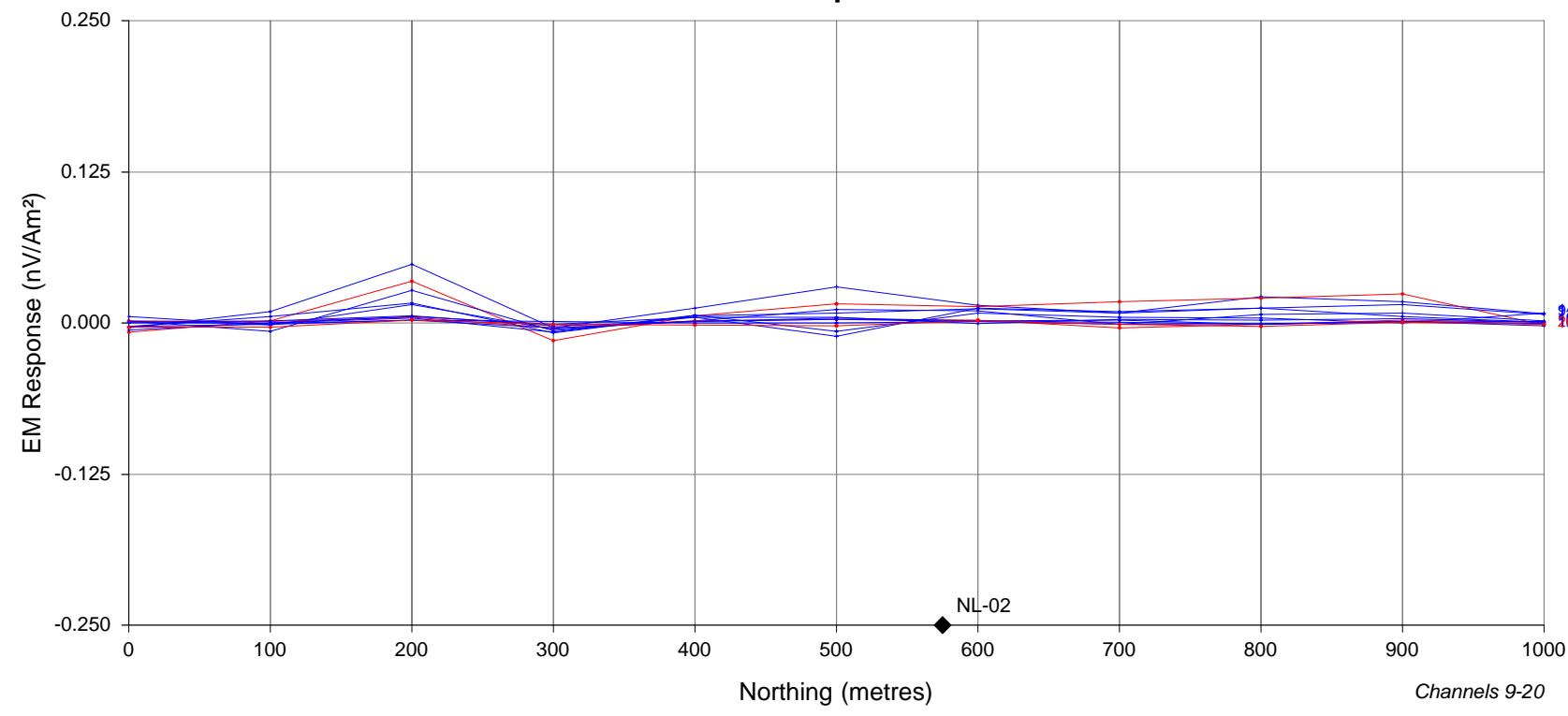
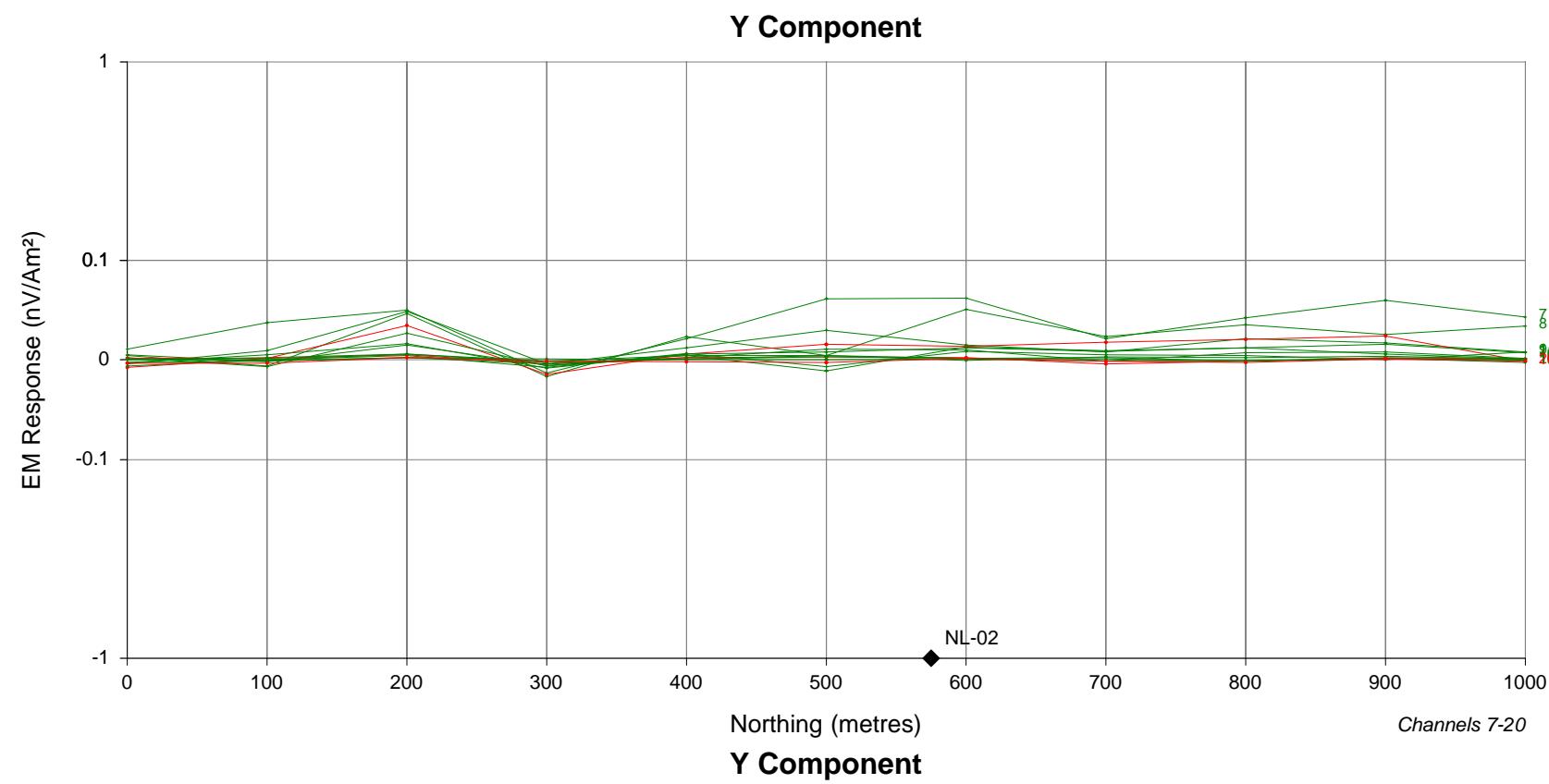
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 µs

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Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 800E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1	:	0.5225	11	:	3.367
2	:	0.5975	12	:	4.225
3	:	0.6950	13	:	5.317
4	:	0.8175	14	:	6.712
5	:	0.9725	15	:	8.492
6	:	1.172	16	:	10.76
7	:	1.427	17	:	13.66
8	:	1.752	18	:	17.36
9	:	2.167	19	:	22.07
10	:	2.695	20	:	28.08

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

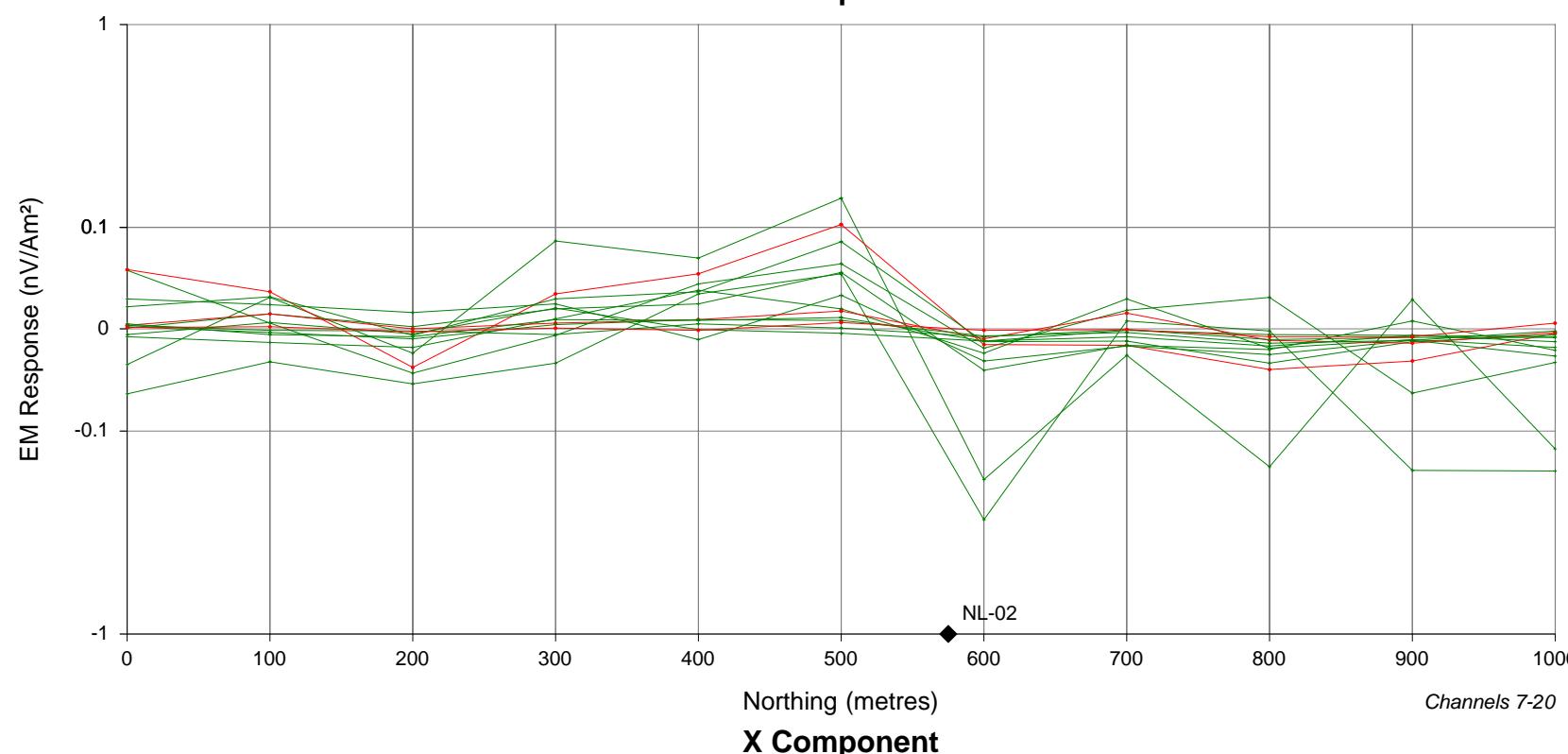
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Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 800E

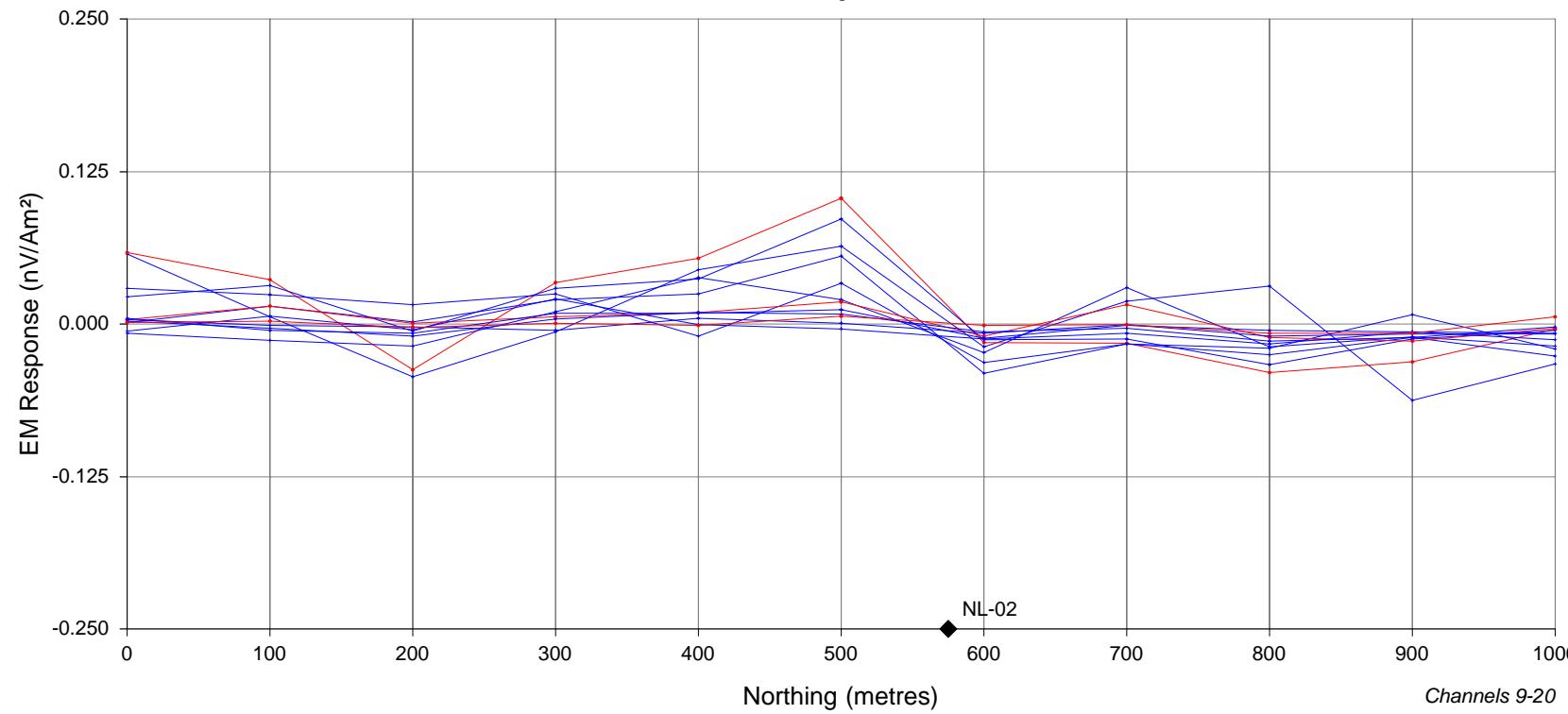
By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



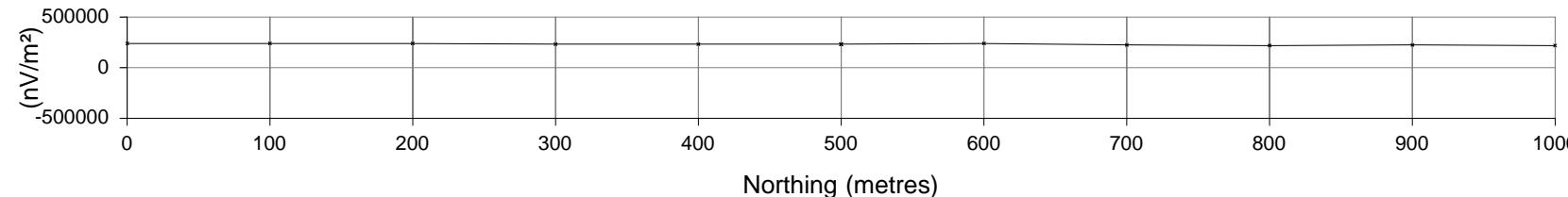
X Component



X Component



Primary Field (Wire Location)



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5225	11	:	3.367
2	:	0.5975	12	:	4.225
3	:	0.6950	13	:	5.317
4	:	0.8175	14	:	6.712
5	:	0.9725	15	:	8.492
6	:	1.172	16	:	10.76
7	:	1.427	17	:	13.66
8	:	1.752	18	:	17.36
9	:	2.167	19	:	22.07
10	:	2.695	20	:	28.08

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

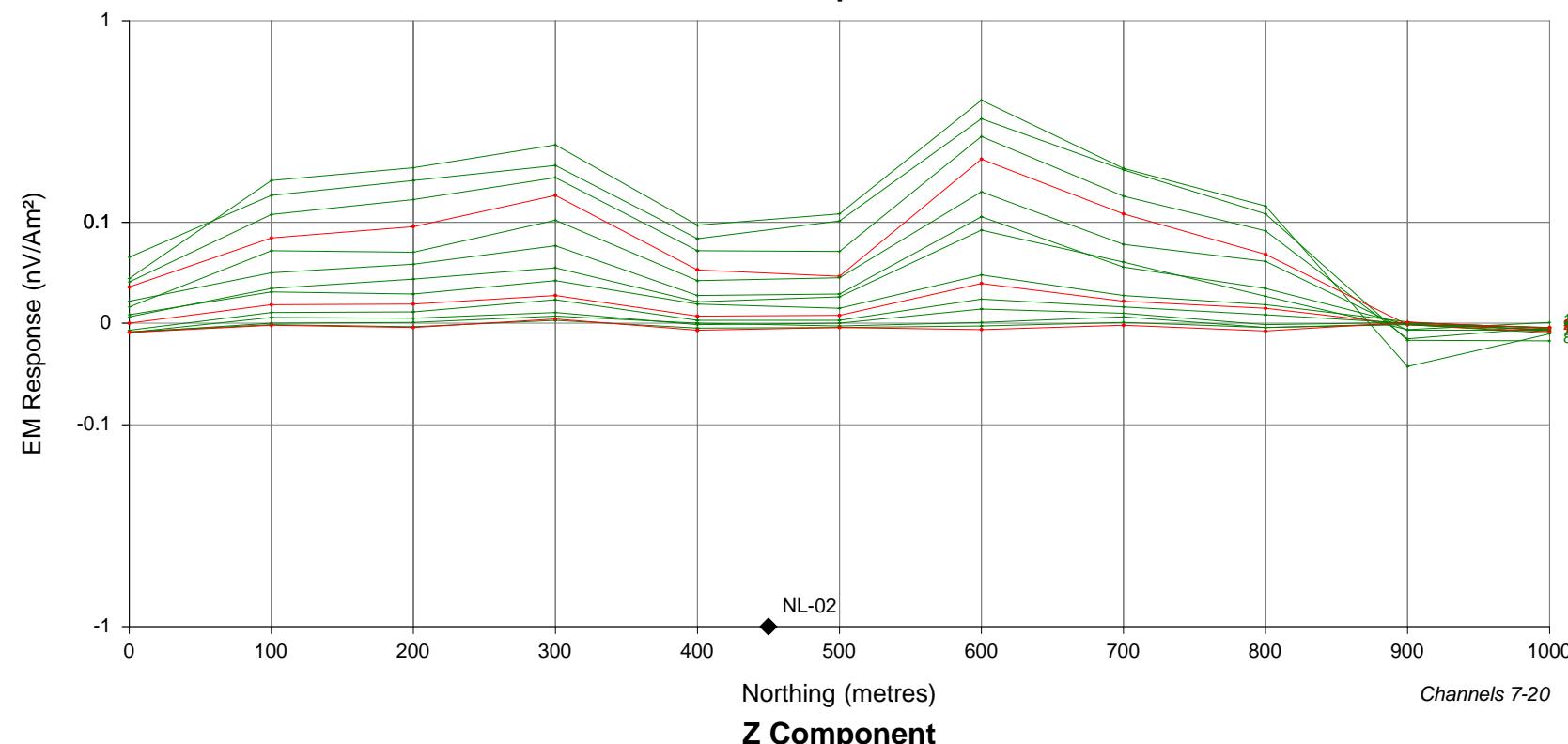
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Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 800E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



Z Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5935	11	:	3.438
2	:	0.6685	12	:	4.296
3	:	0.7660	13	:	5.388
4	:	0.8885	14	:	6.783
5	:	1.043	15	:	8.563
6	:	1.243	16	:	10.83
7	:	1.498	17	:	13.73
8	:	1.823	18	:	17.43
9	:	2.238	19	:	22.14
10	:	2.766	20	:	28.16

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

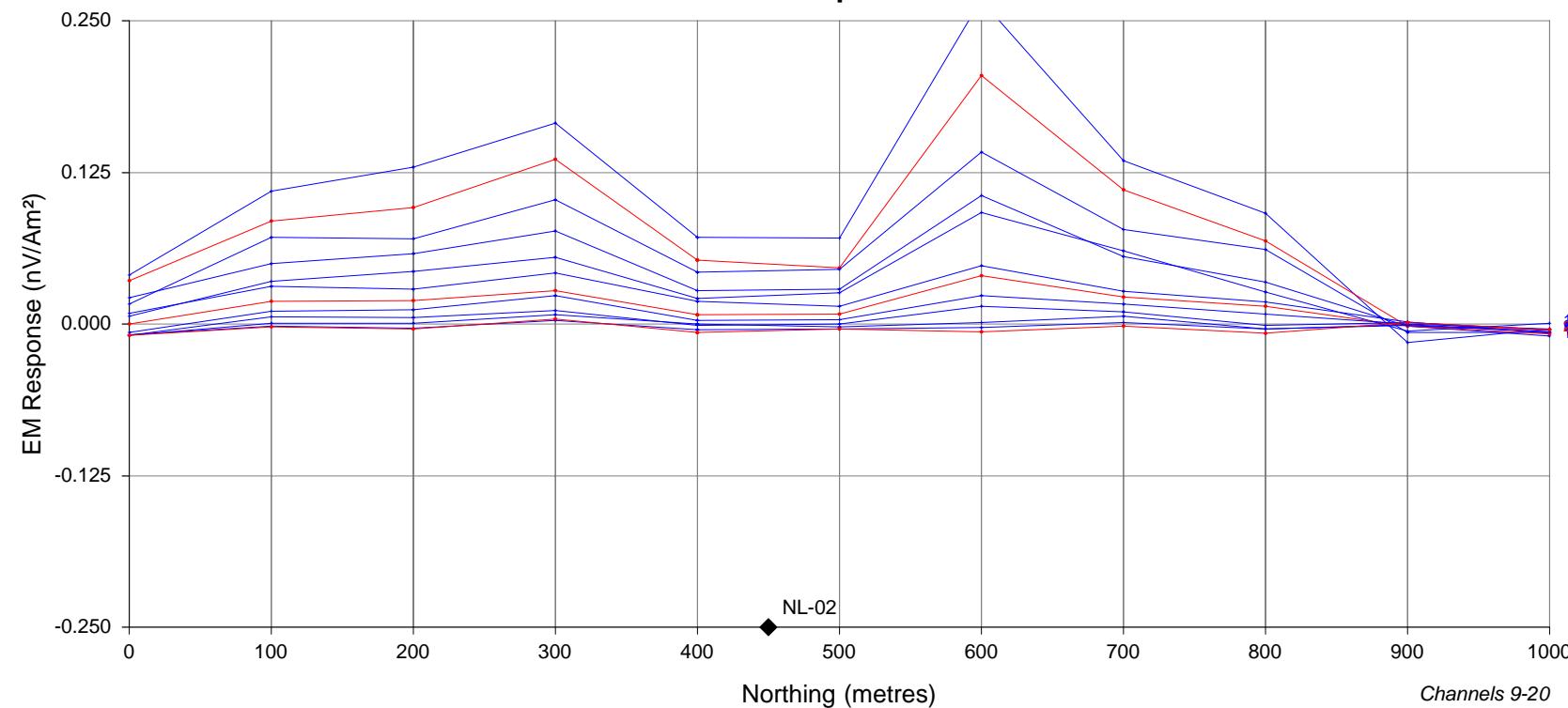
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m²

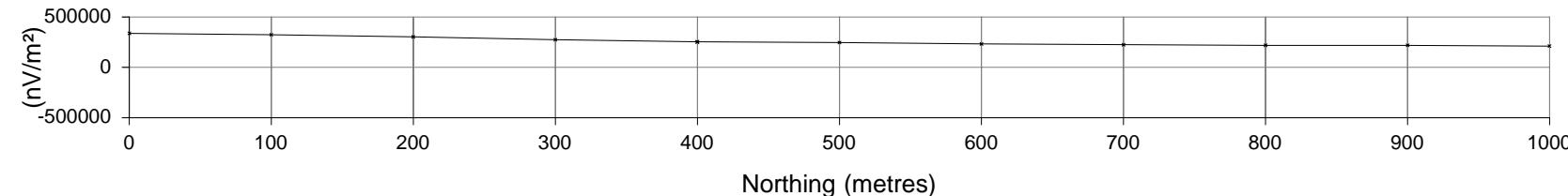
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 µs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 600E

By : M. Dubois

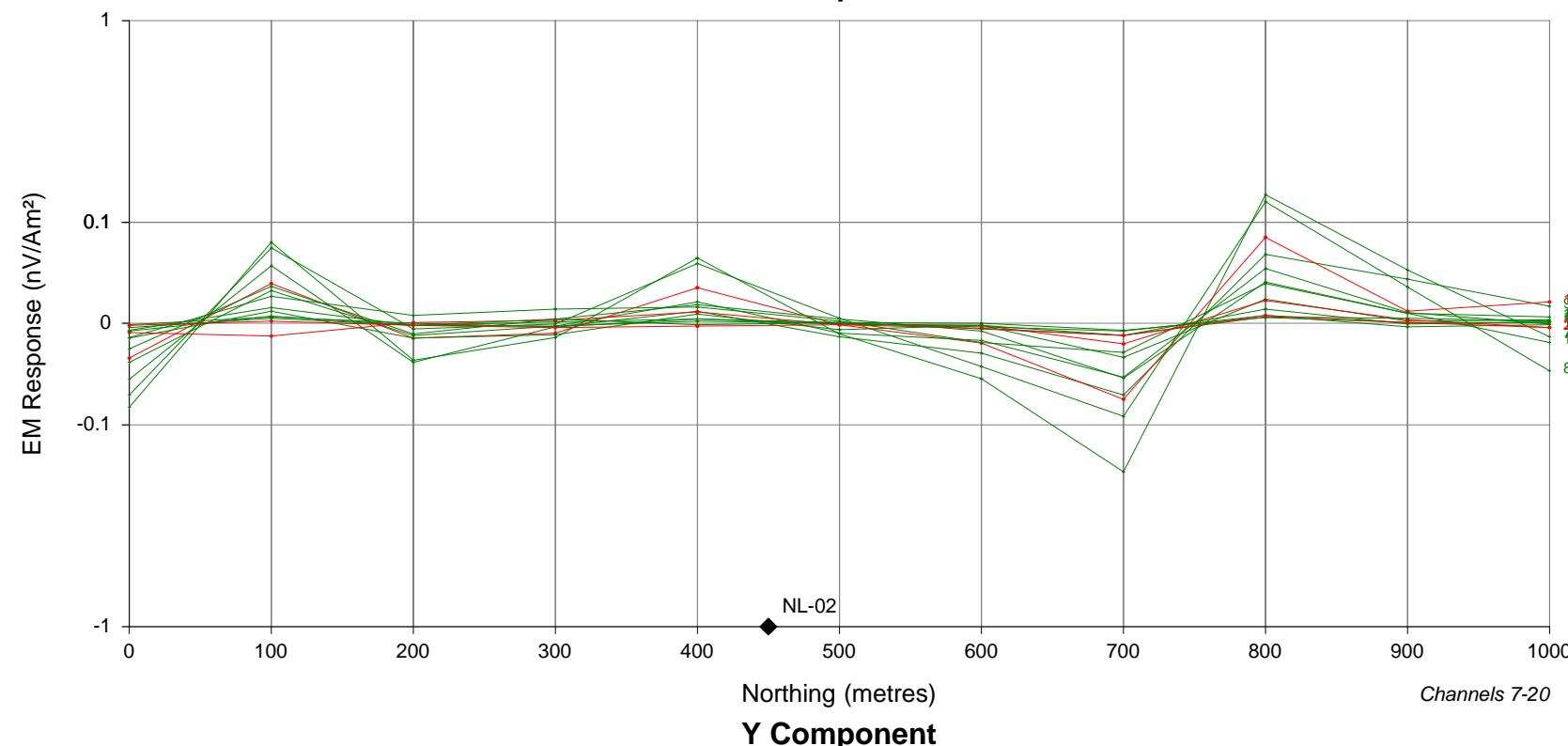
Date : March 2009

Ref. : 09N009

Scale 1:5000



Y Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5935	11	:	3.438
2	:	0.6685	12	:	4.296
3	:	0.7660	13	:	5.388
4	:	0.8885	14	:	6.783
5	:	1.043	15	:	8.563
6	:	1.243	16	:	10.83
7	:	1.498	17	:	13.73
8	:	1.823	18	:	17.43
9	:	2.238	19	:	22.14
10	:	2.766	20	:	28.16

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

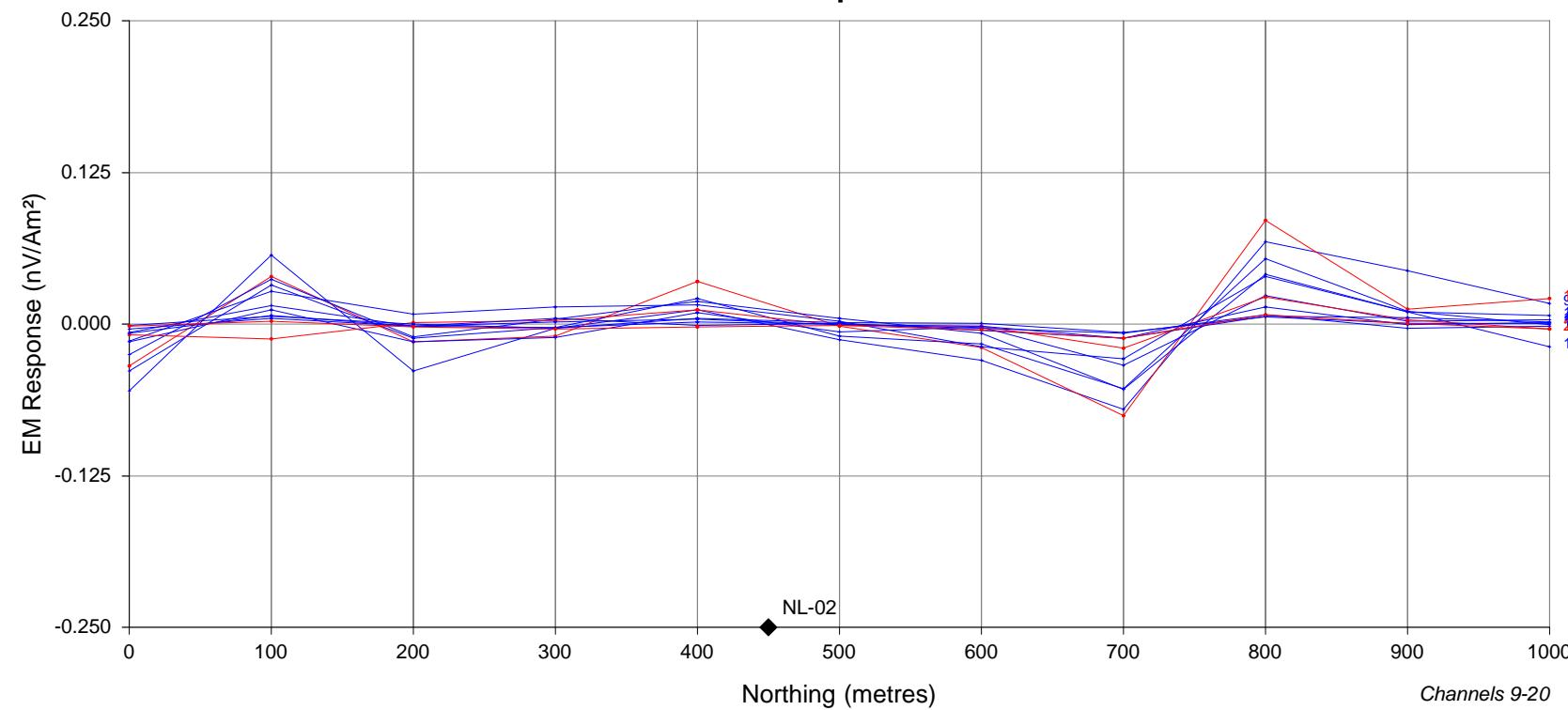
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

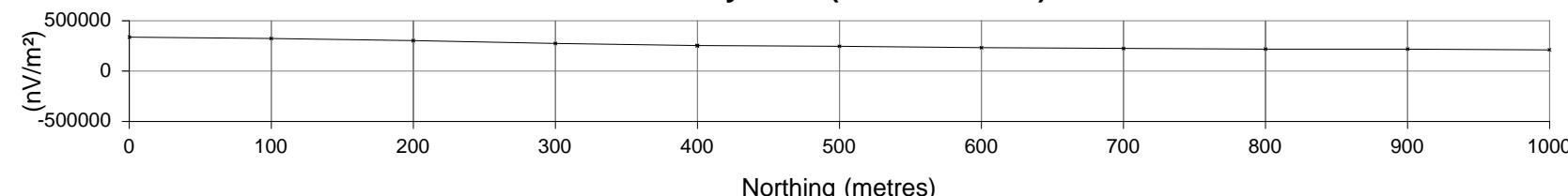
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

Y Component



Primary Field (Wire Location)



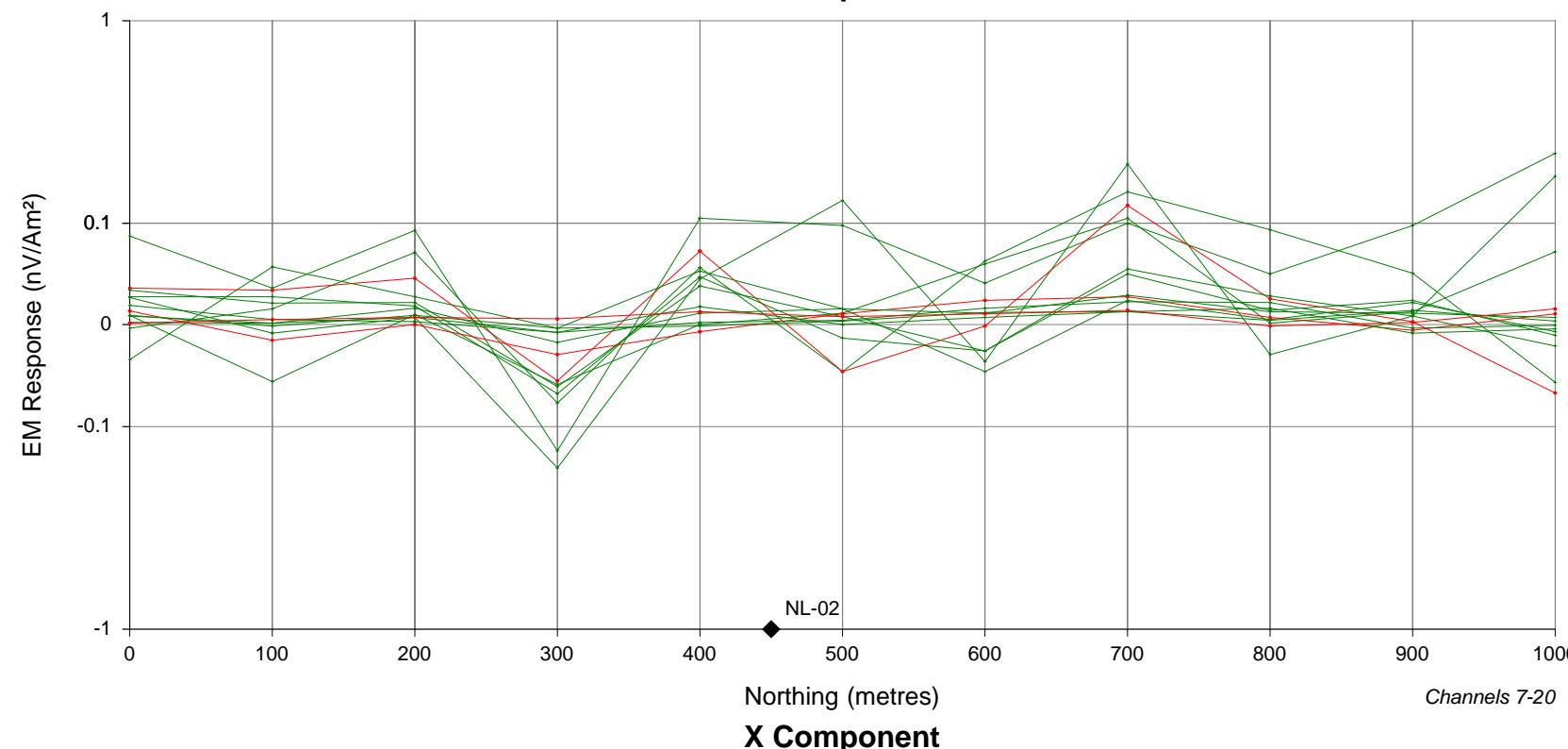
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Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 600E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



X Component



WINDOW TIMES (ms) From the start of the Ramp

1 : 0.5935	11 : 3.438
2 : 0.6685	12 : 4.296
3 : 0.7660	13 : 5.388
4 : 0.8885	14 : 6.783
5 : 1.043	15 : 8.563
6 : 1.243	16 : 10.83
7 : 1.498	17 : 13.73
8 : 1.823	18 : 17.43
9 : 2.238	19 : 22.14
10 : 2.766	20 : 28.16

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

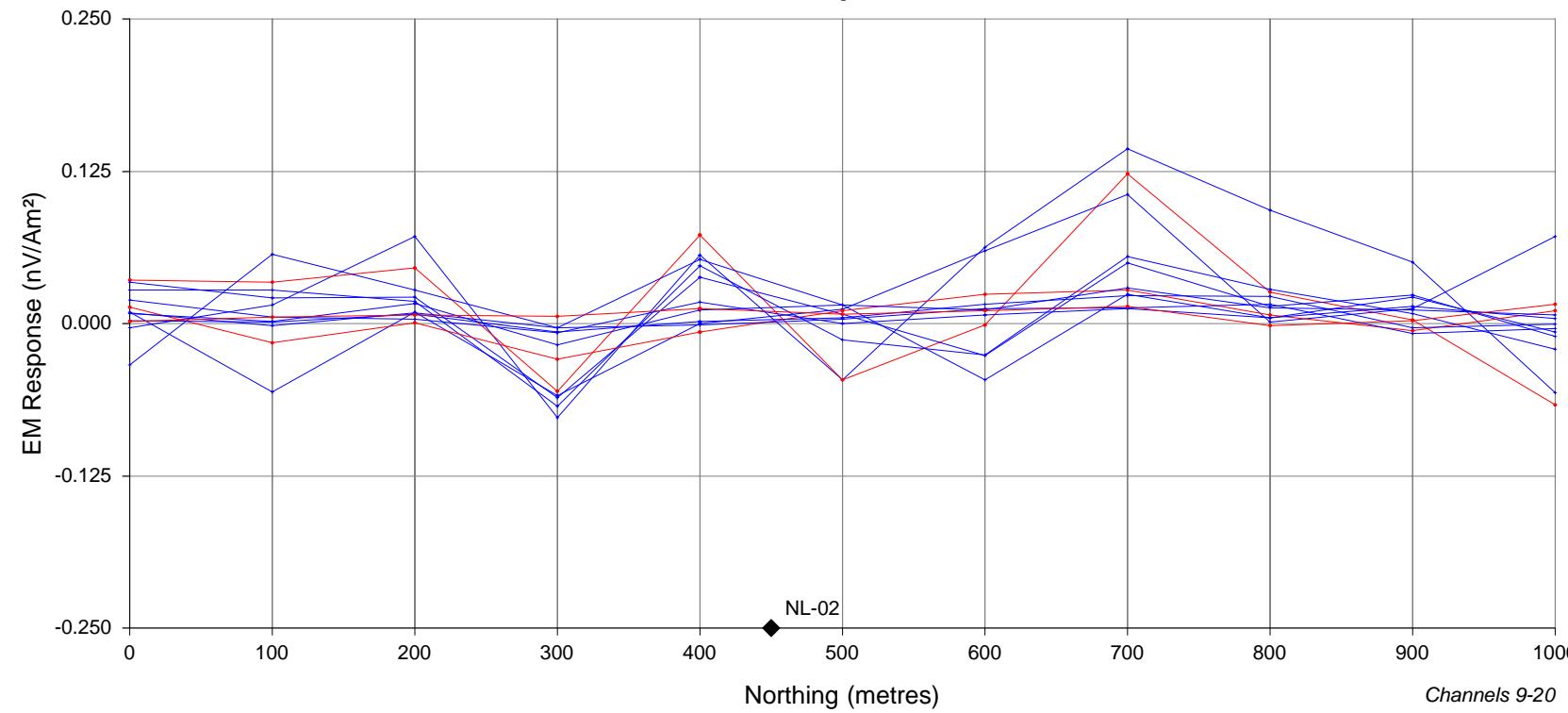
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

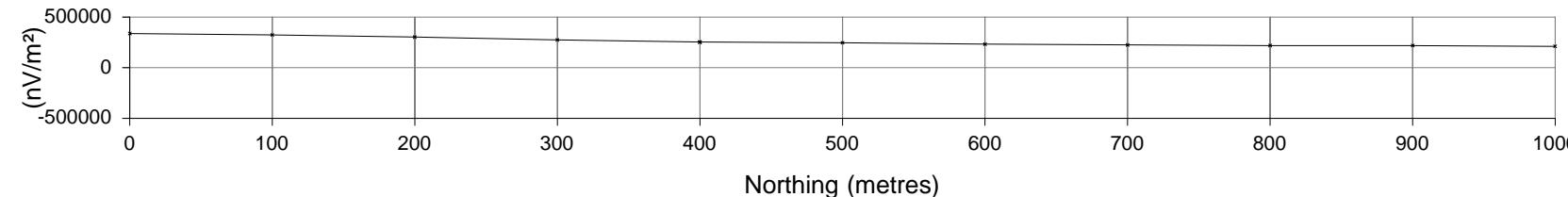
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

X Component



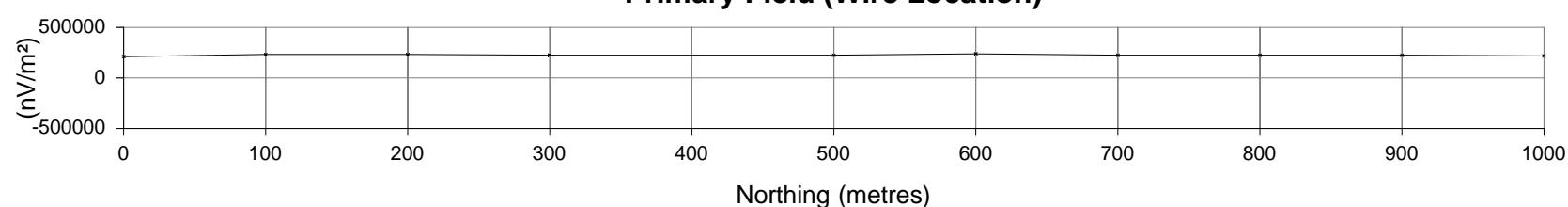
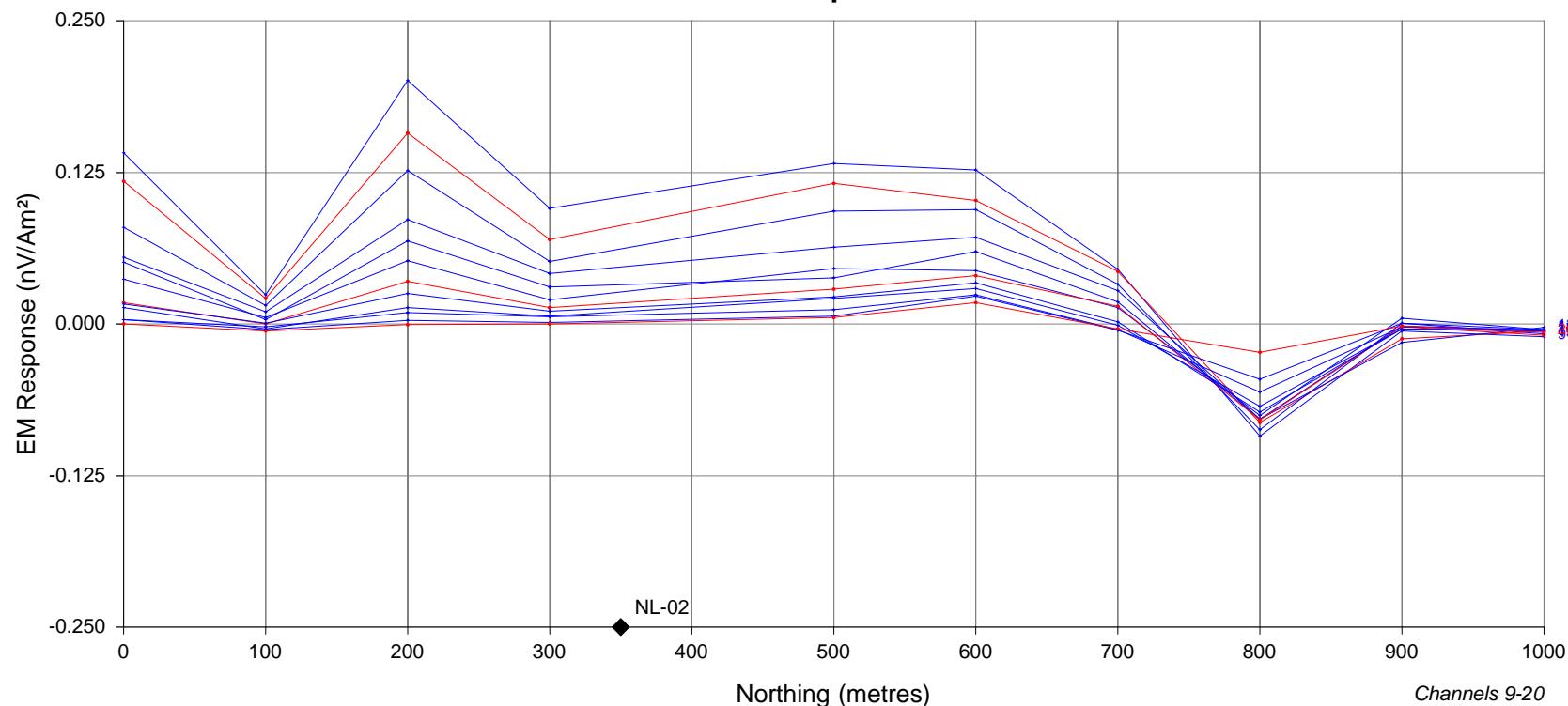
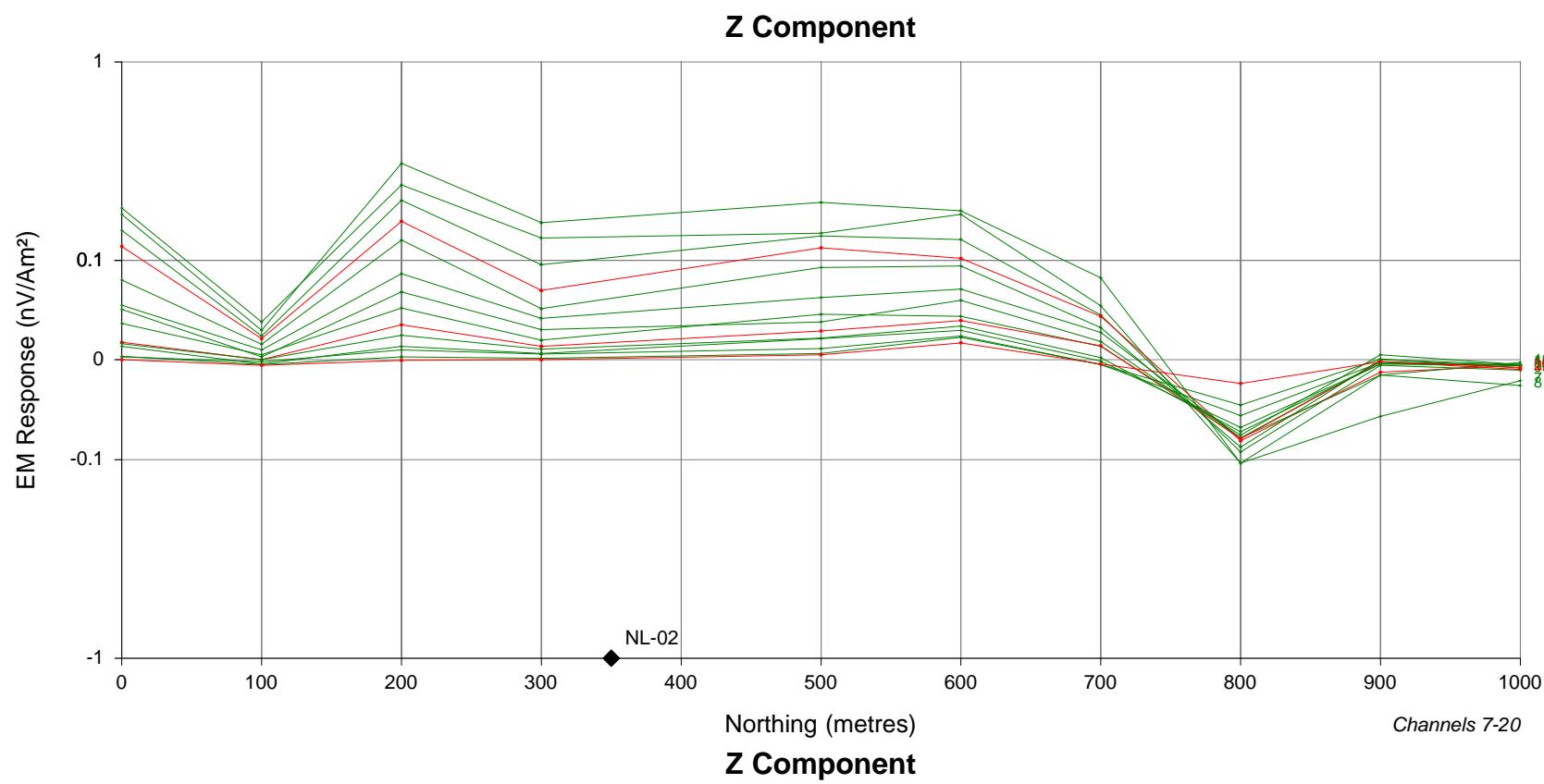
Primary Field (Wire Location)



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Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 600E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1 : 0.5005	11 : 3.346
2 : 0.5755	12 : 4.203
3 : 0.6730	13 : 5.296
4 : 0.7955	14 : 6.691
5 : 0.9505	15 : 8.471
6 : 1.151	16 : 10.74
7 : 1.406	17 : 13.64
8 : 1.731	18 : 17.34
9 : 2.146	19 : 22.05
10 : 2.673	20 : 28.06

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m^2

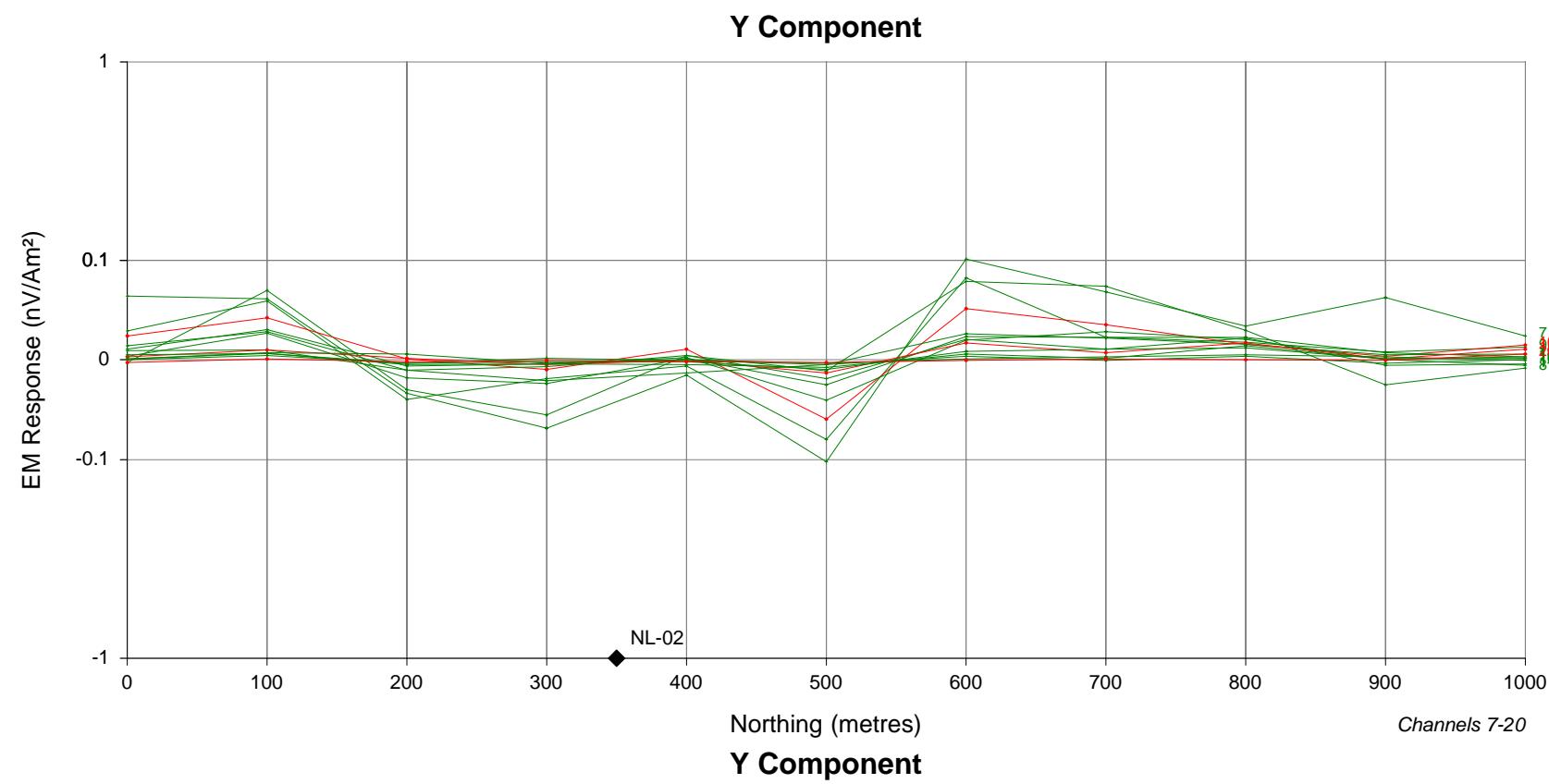
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

Abitibi Geophysics Inc.

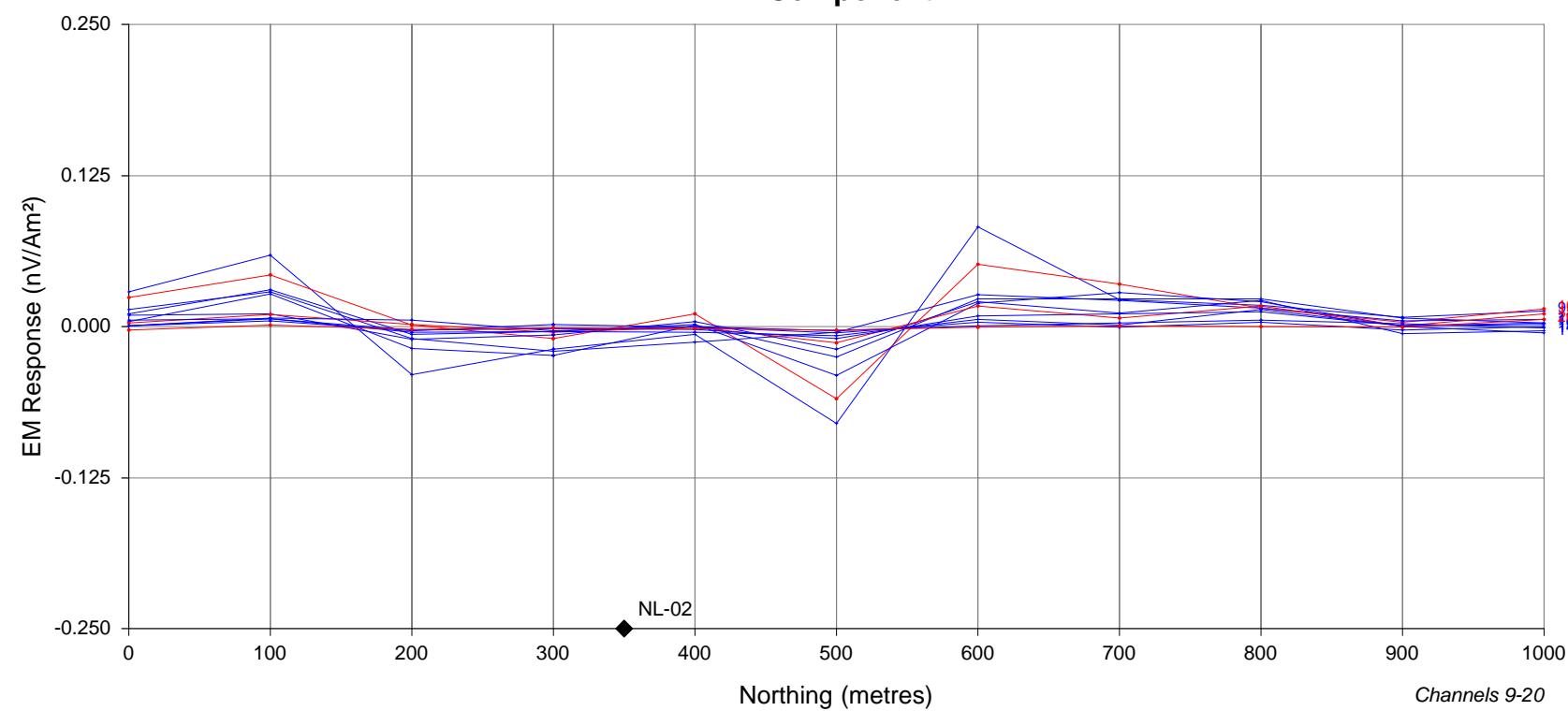
Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 400E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1	:	0.5005	11	:	3.346
2	:	0.5755	12	:	4.203
3	:	0.6730	13	:	5.296
4	:	0.7955	14	:	6.691
5	:	0.9505	15	:	8.471
6	:	1.151	16	:	10.74
7	:	1.406	17	:	13.64
8	:	1.731	18	:	17.34
9	:	2.146	19	:	22.05
10	:	2.673	20	:	28.06



SURVEY PARAMETERS

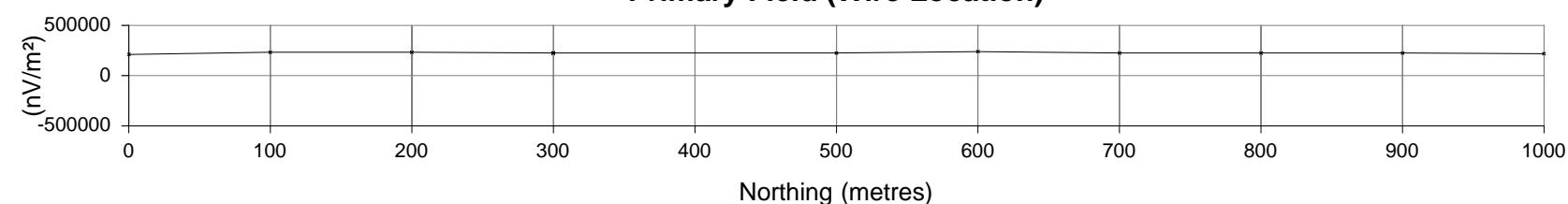
Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

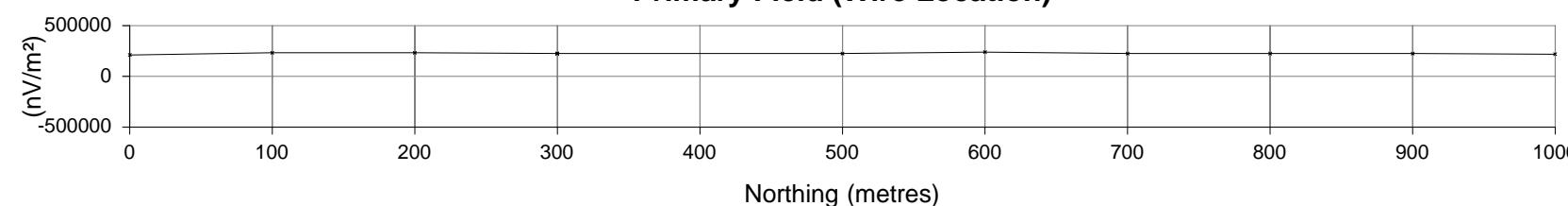
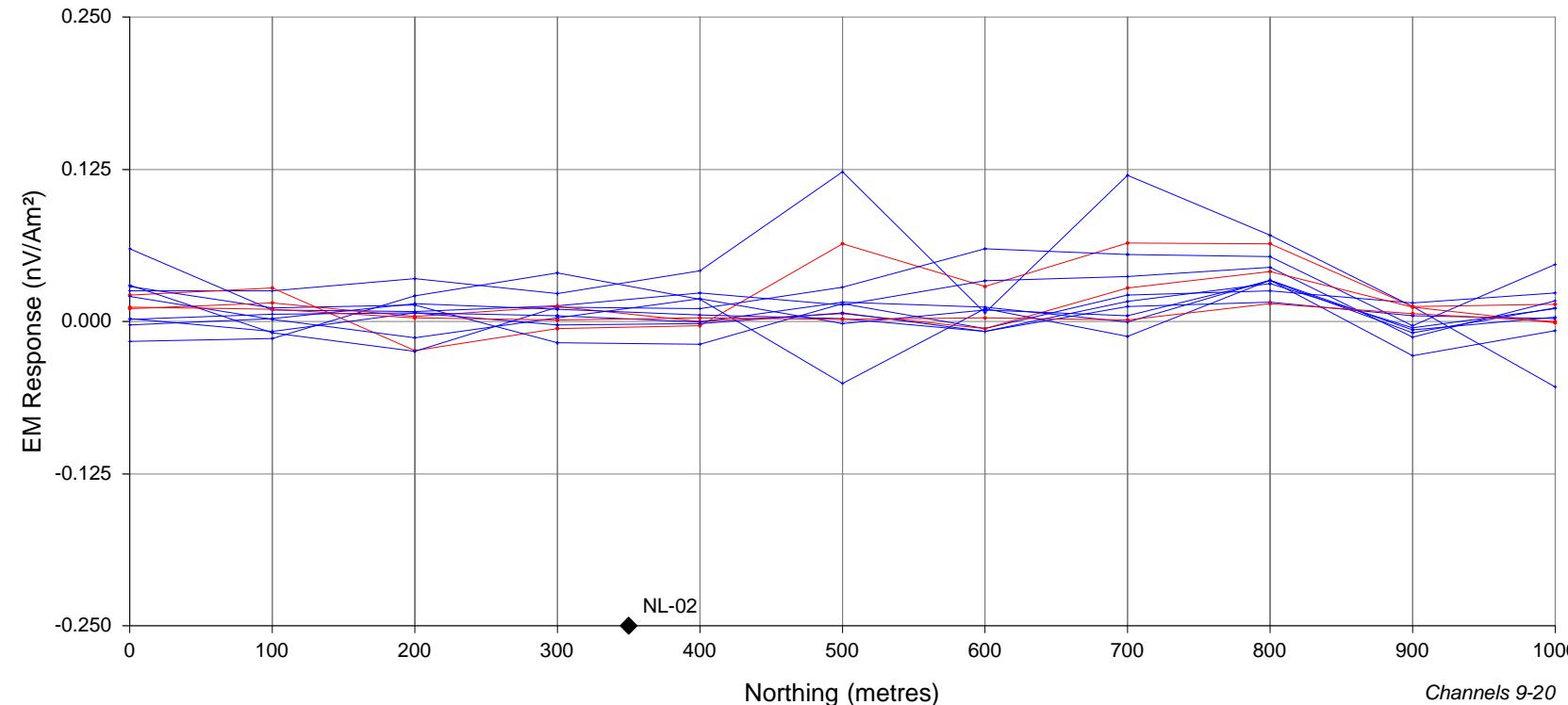
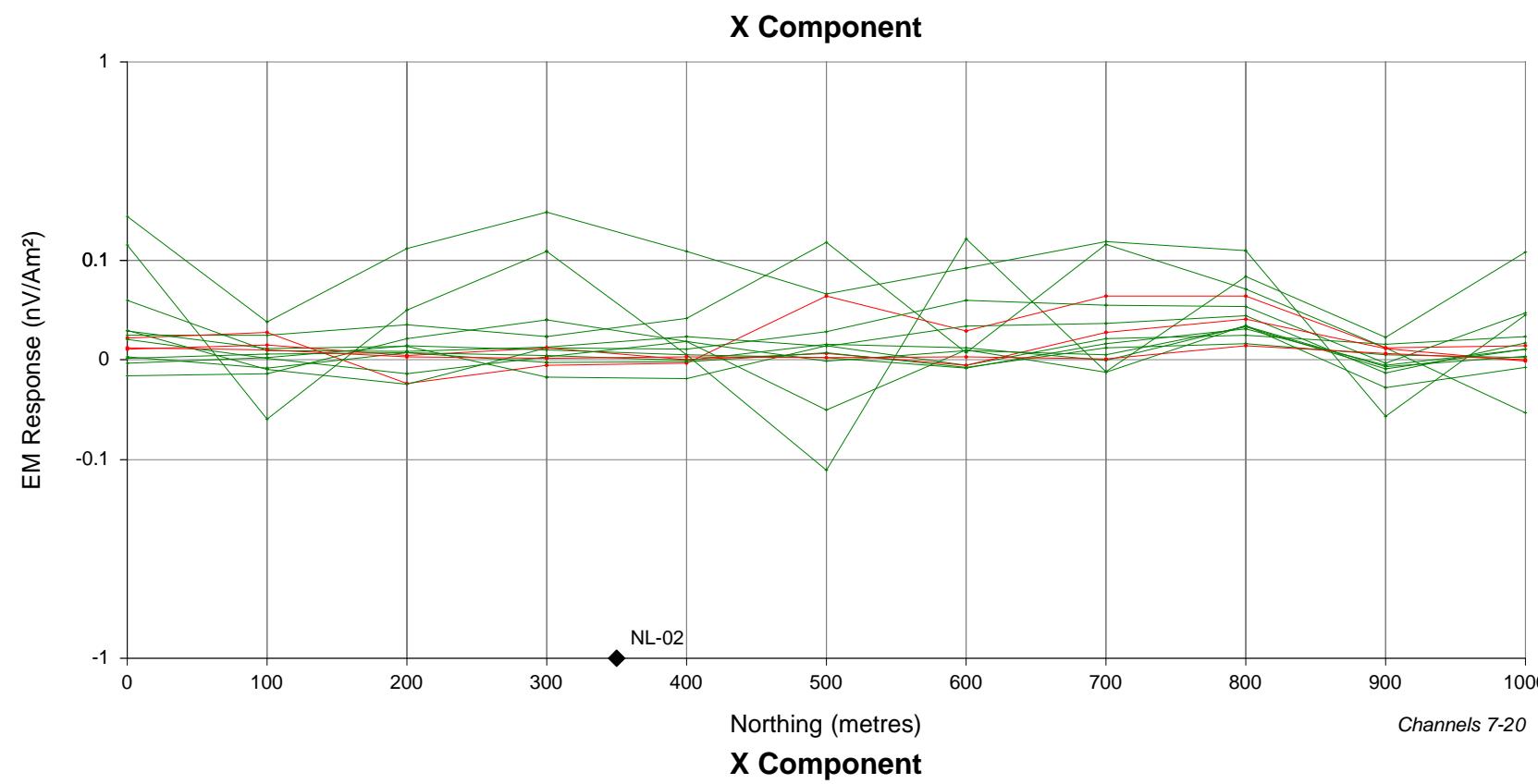
Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 400E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



**WINDOW TIMES (ms)
From the start of the Ramp**

1	:	0.5005	11	:	3.346
2	:	0.5755	12	:	4.203
3	:	0.6730	13	:	5.296
4	:	0.7955	14	:	6.691
5	:	0.9505	15	:	8.471
6	:	1.151	16	:	10.74
7	:	1.406	17	:	13.64
8	:	1.731	18	:	17.34
9	:	2.146	19	:	22.05
10	:	2.673	20	:	28.06

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

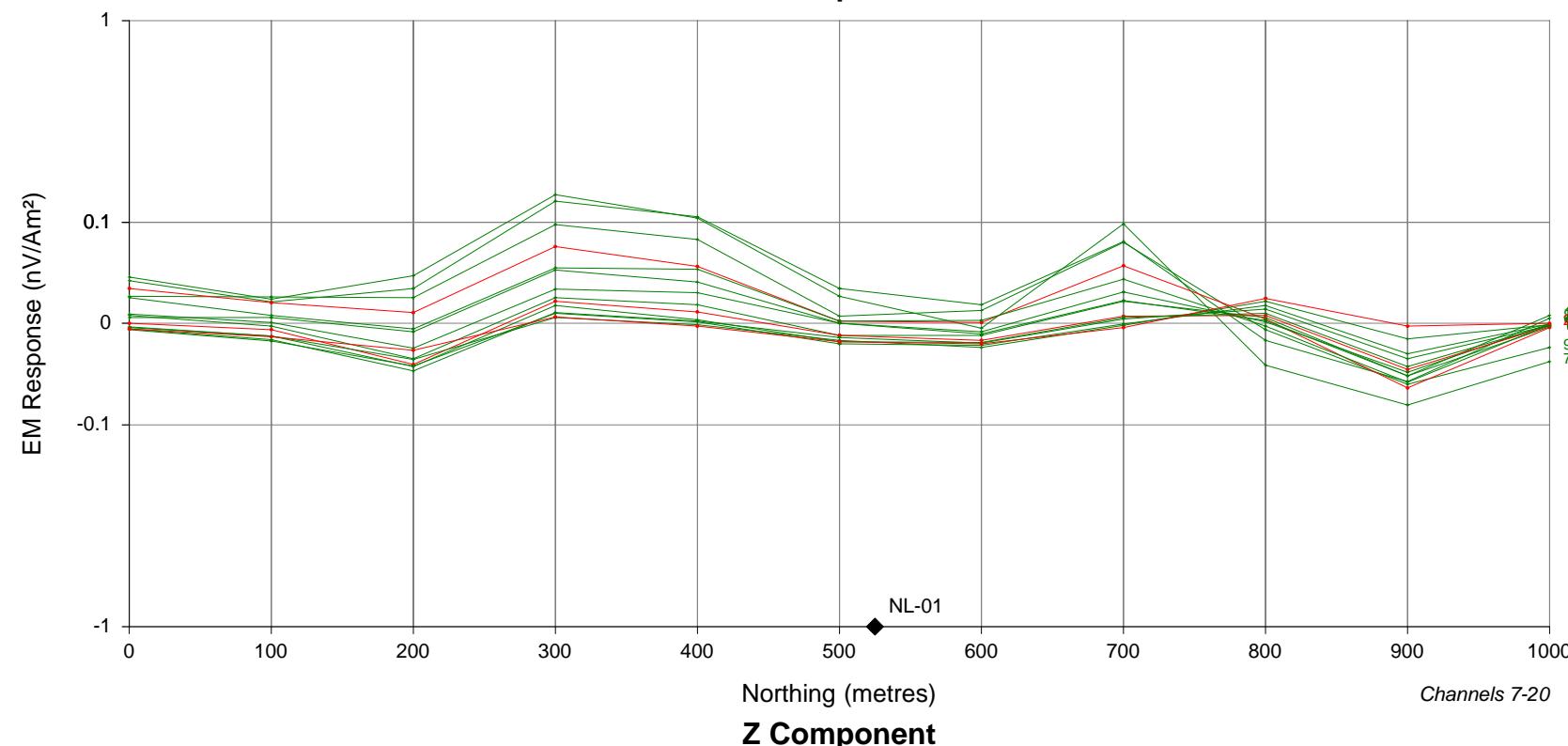
Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 400E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



Z Component



WINDOW TIMES (ms) From the start of the Ramp

1 : 0.5495	11 : 3.395
2 : 0.6245	12 : 4.252
3 : 0.7220	13 : 5.345
4 : 0.8445	14 : 6.740
5 : 0.9995	15 : 8.520
6 : 1.200	16 : 10.79
7 : 1.455	17 : 13.69
8 : 1.780	18 : 17.38
9 : 2.195	19 : 22.10
10 : 2.722	20 : 28.11

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

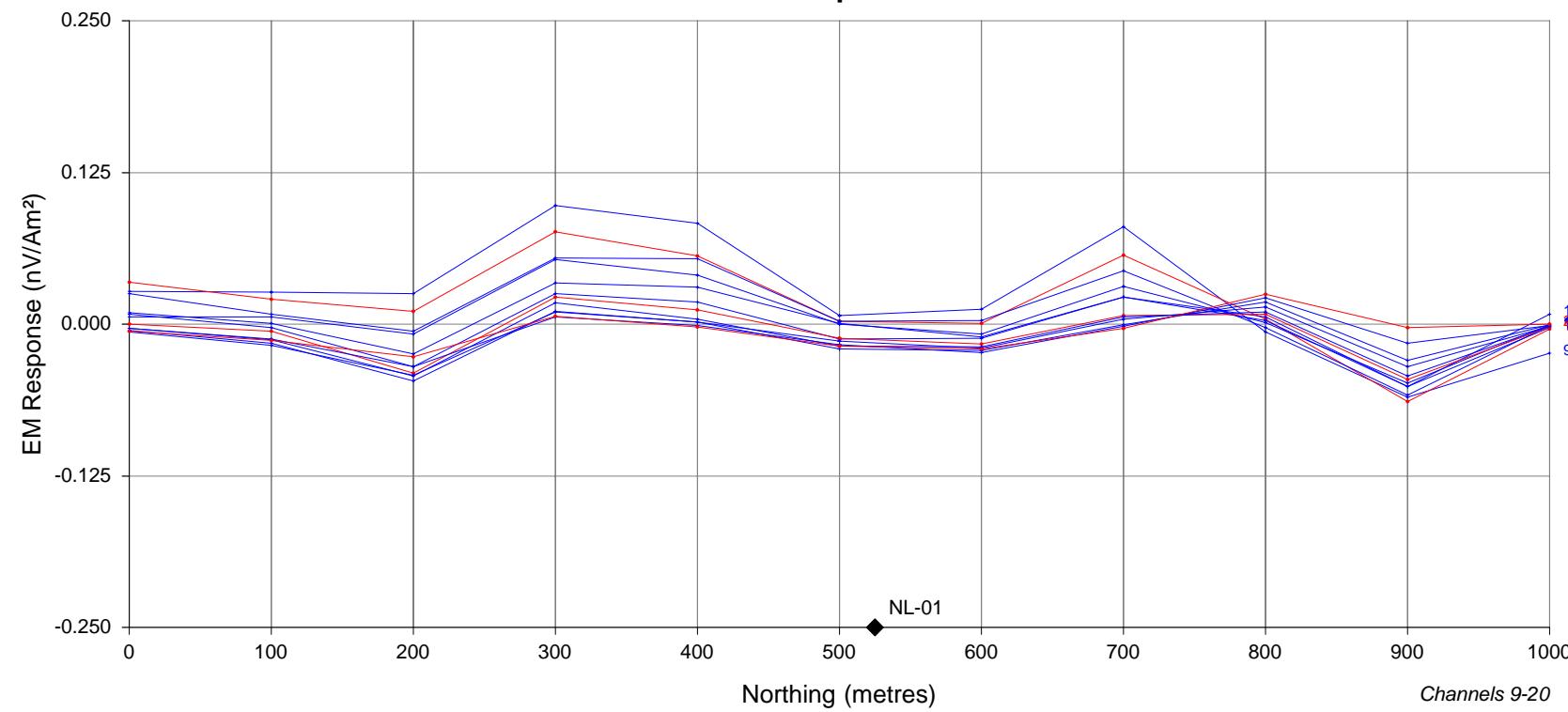
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m²

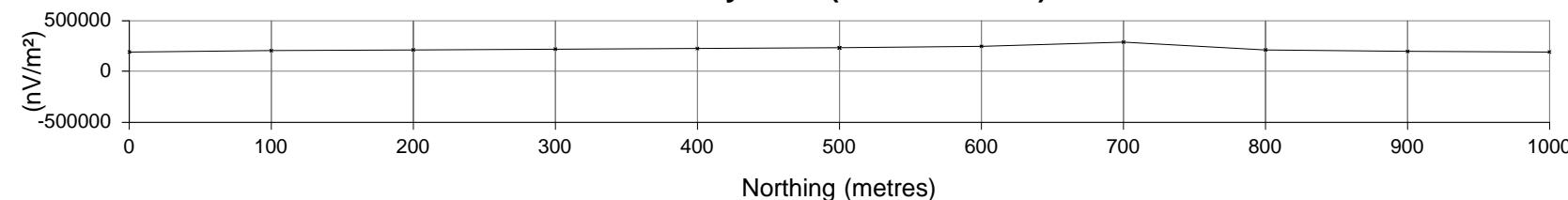
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 µs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 200E

By : M. Dubois

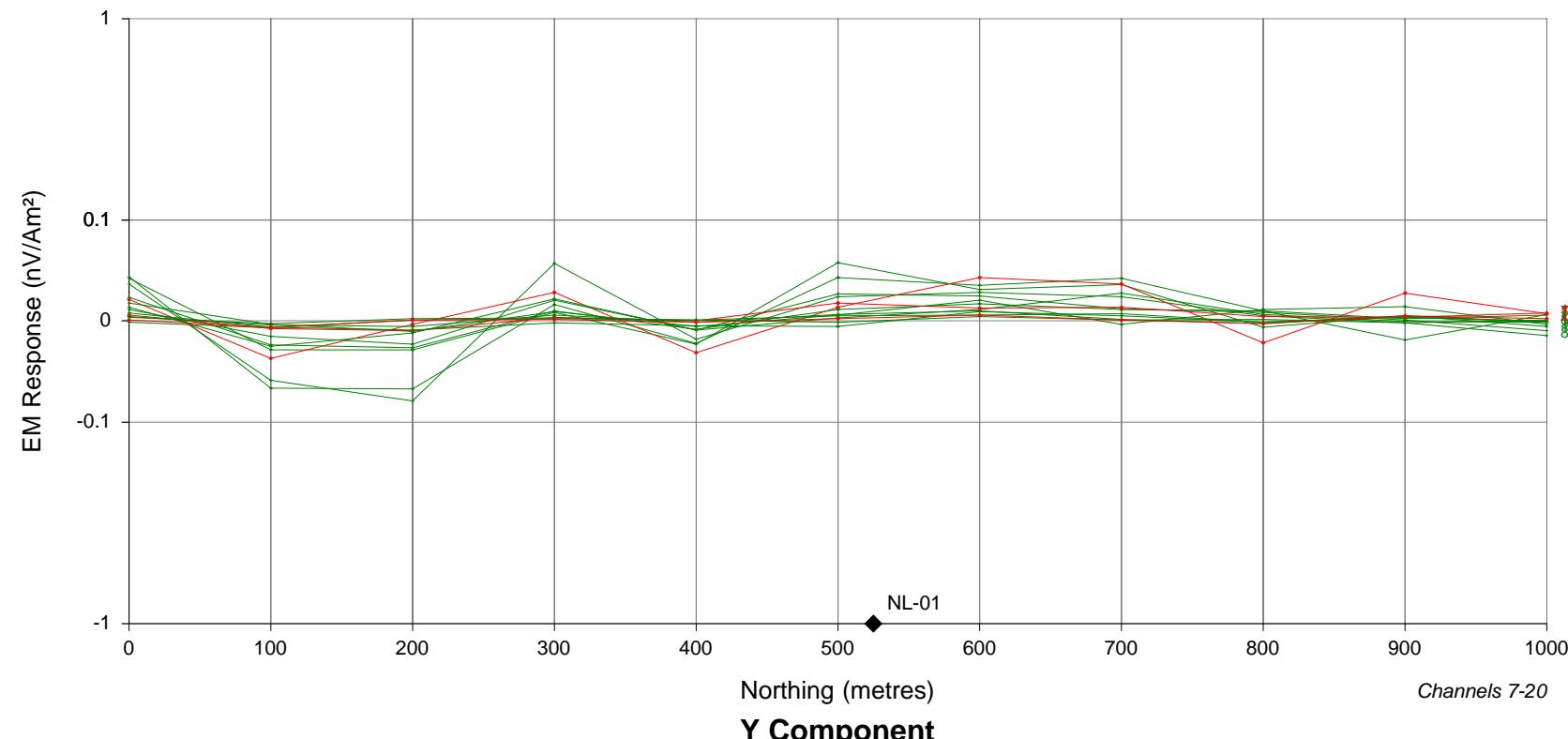
Date : March 2009

Ref. : 09N009

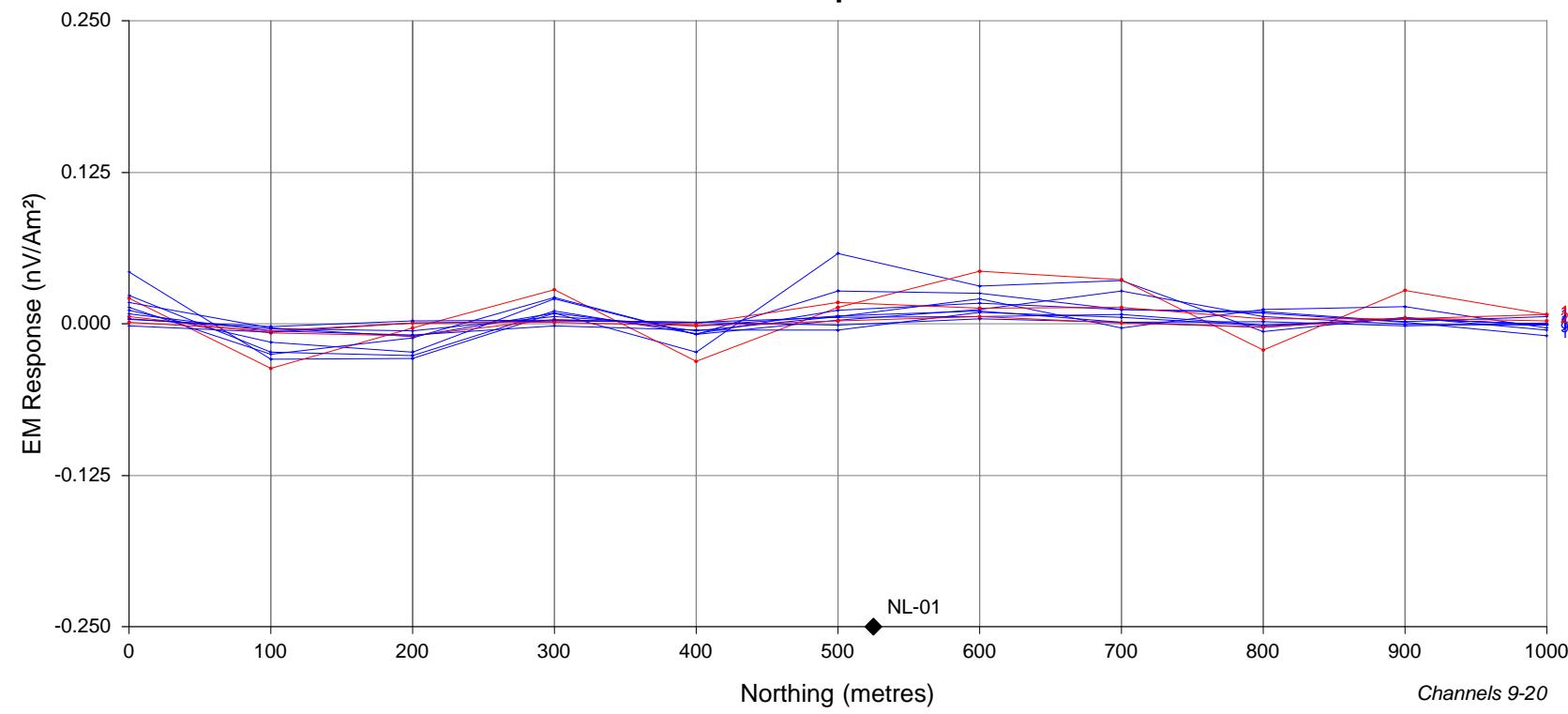
Scale 1:5000



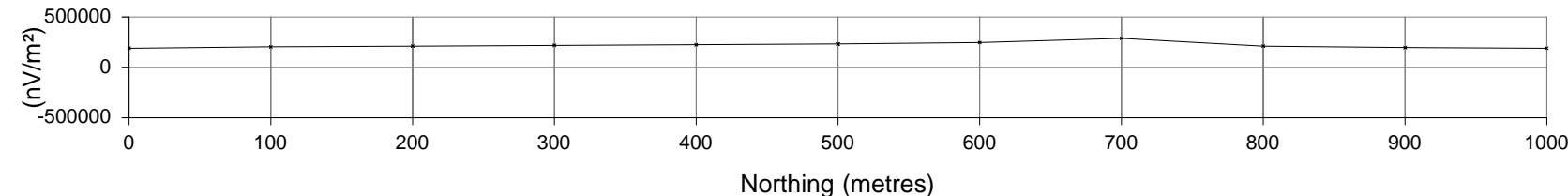
Y Component



Y Component



Primary Field (Wire Location)



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5495	11	:	3.395
2	:	0.6245	12	:	4.252
3	:	0.7220	13	:	5.345
4	:	0.8445	14	:	6.740
5	:	0.9995	15	:	8.520
6	:	1.200	16	:	10.79
7	:	1.455	17	:	13.69
8	:	1.780	18	:	17.38
9	:	2.195	19	:	22.10
10	:	2.722	20	:	28.11

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m²

TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 µs

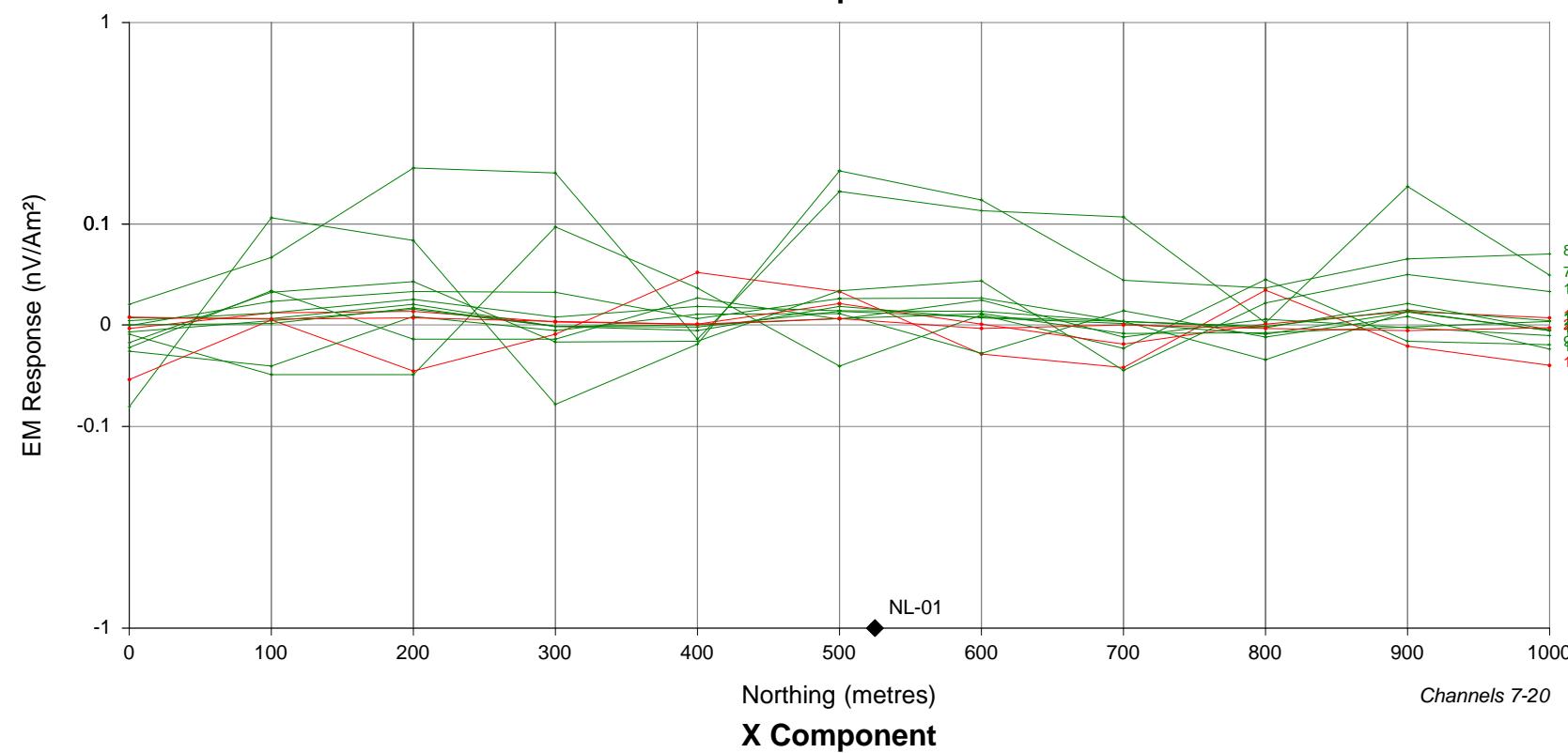
Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 200E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



X Component



WINDOW TIMES (ms)
From the start of the Ramp

1	:	0.5495	11	:	3.395
2	:	0.6245	12	:	4.252
3	:	0.7220	13	:	5.345
4	:	0.8445	14	:	6.740
5	:	0.9995	15	:	8.520
6	:	1.200	16	:	10.79
7	:	1.455	17	:	13.69
8	:	1.780	18	:	17.38
9	:	2.195	19	:	22.10
10	:	2.722	20	:	28.11

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m^2

TRANSMITTER

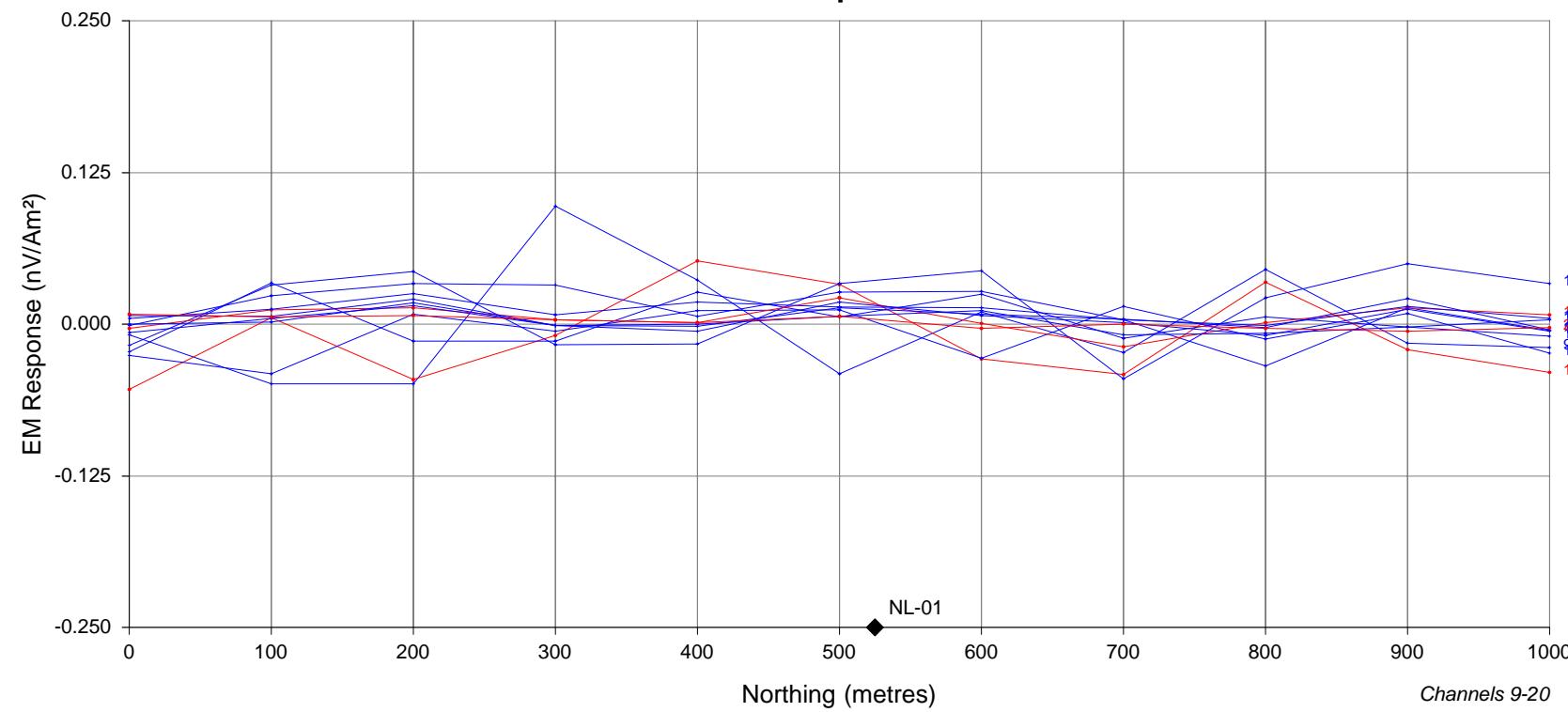
Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

Abitibi Geophysics Inc.

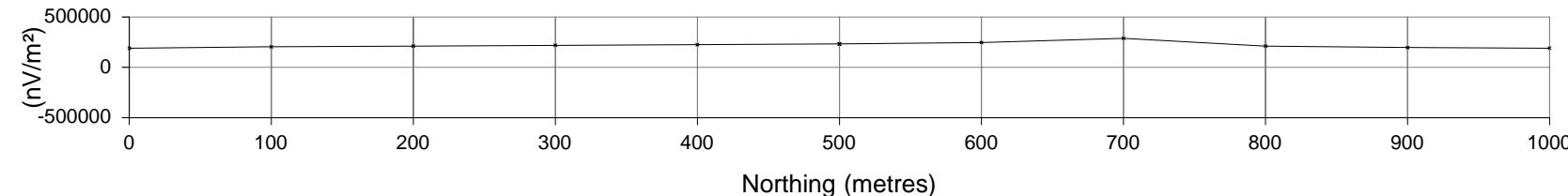
Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 200E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000

X Component

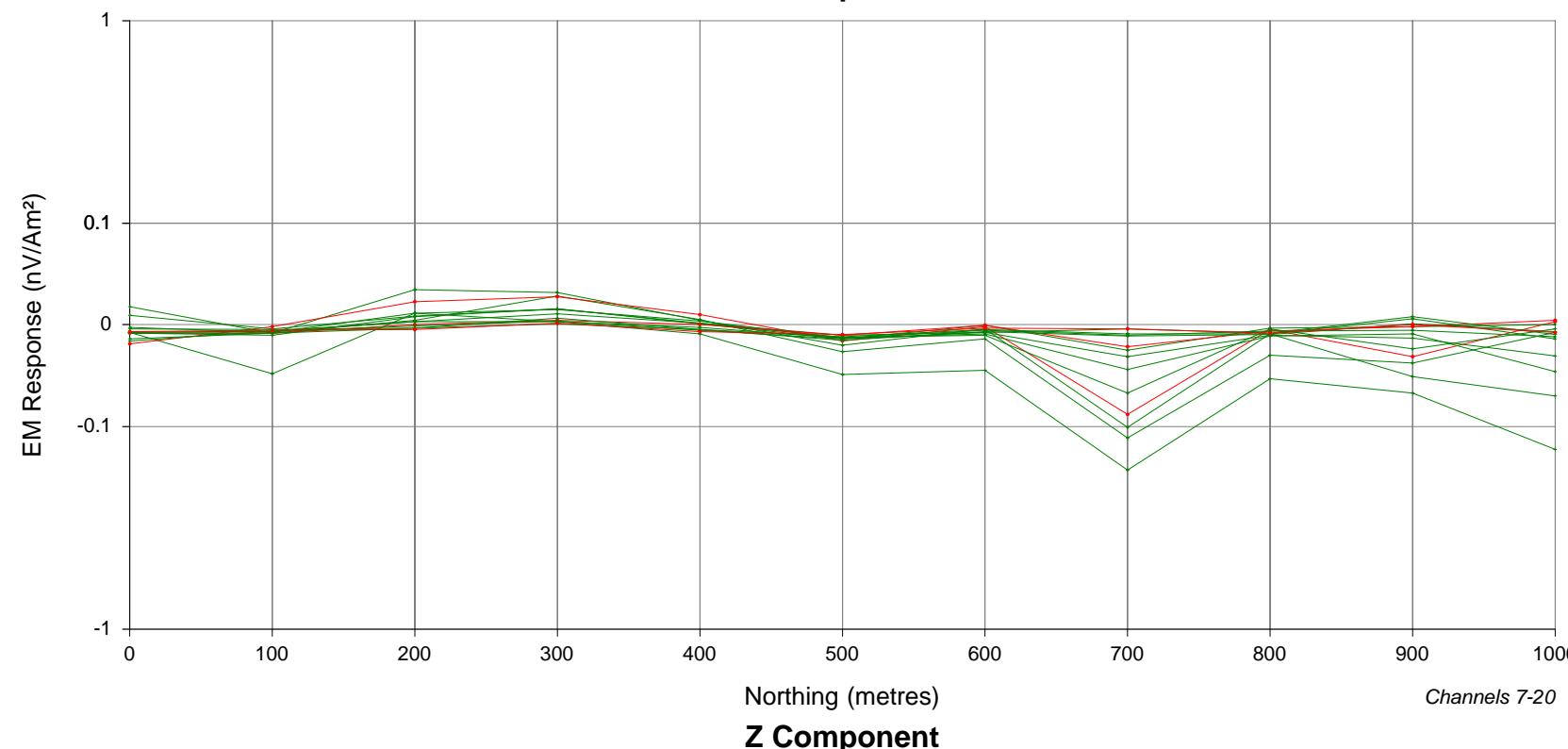


Primary Field (Wire Location)





Z Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5375	11	:	3.382
2	:	0.6125	12	:	4.240
3	:	0.7100	13	:	5.332
4	:	0.8325	14	:	6.727
5	:	0.9875	15	:	8.507
6	:	1.187	16	:	10.78
7	:	1.442	17	:	13.67
8	:	1.767	18	:	17.37
9	:	2.182	19	:	22.09
10	:	2.710	20	:	28.10

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

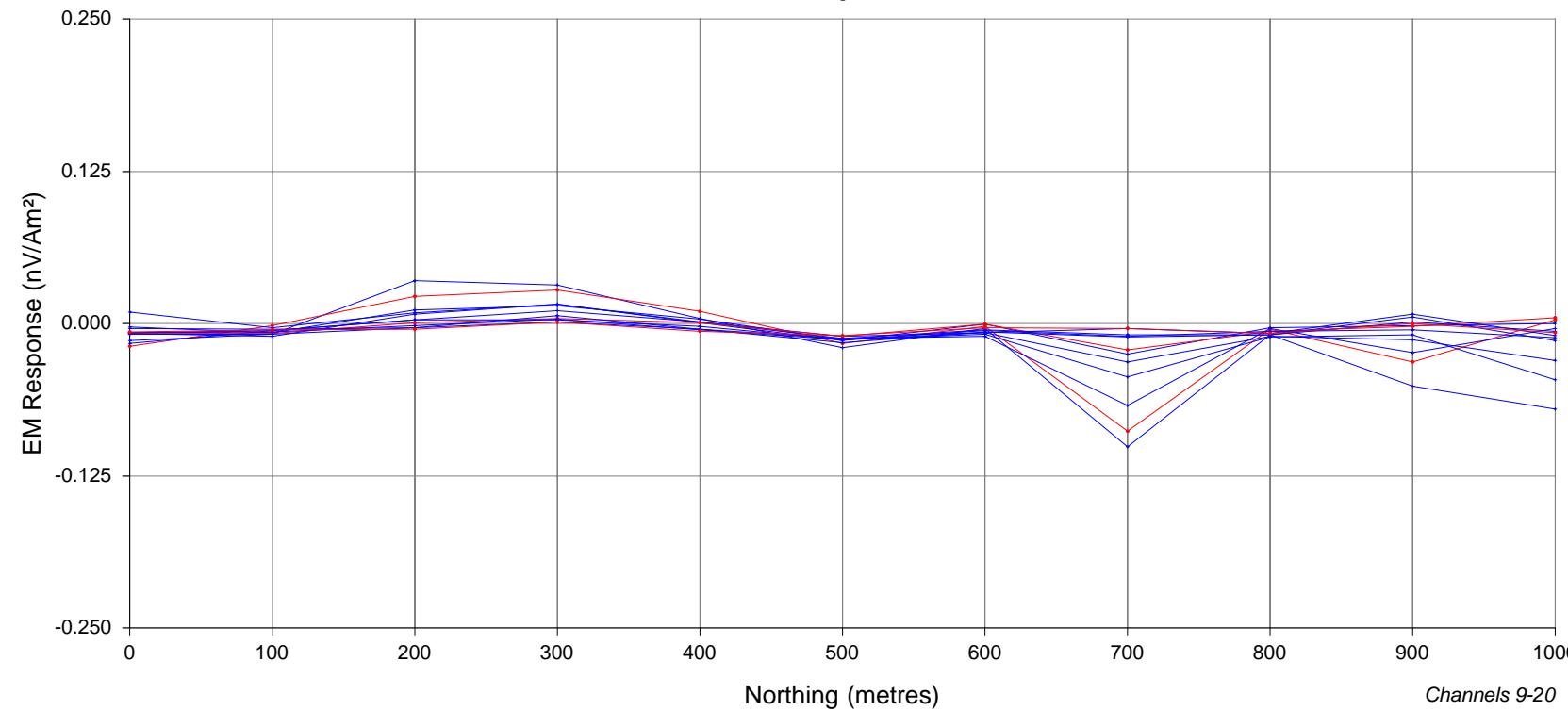
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m^2

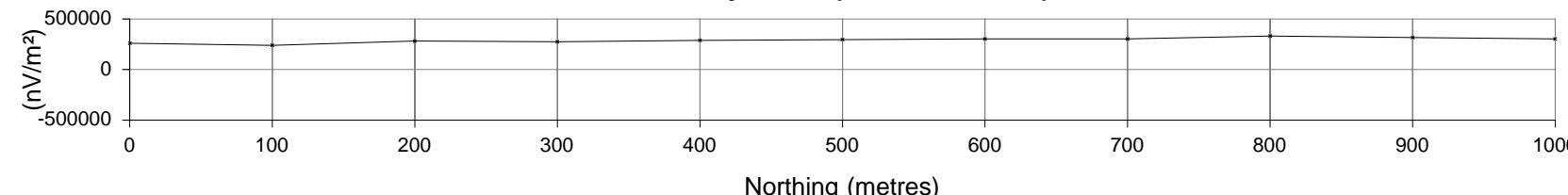
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 000E

By : M. Dubois

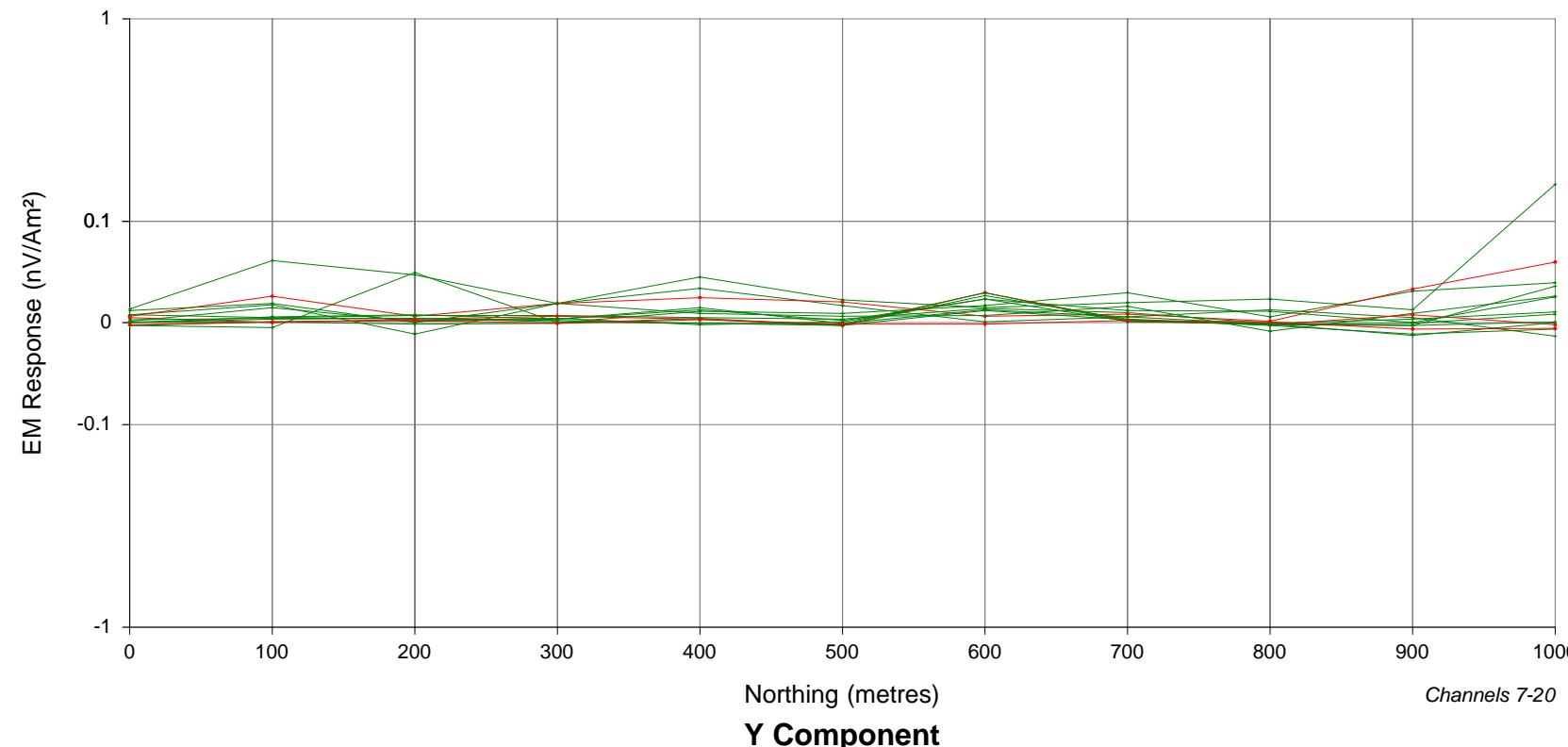
Date : March 2009

Ref. : 09N009

Scale 1:5000



Y Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5375	11	:	3.382
2	:	0.6125	12	:	4.240
3	:	0.7100	13	:	5.332
4	:	0.8325	14	:	6.727
5	:	0.9875	15	:	8.507
6	:	1.1187	16	:	10.78
7	:	1.442	17	:	13.67
8	:	1.767	18	:	17.37
9	:	2.182	19	:	22.09
10	:	2.710	20	:	28.10

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

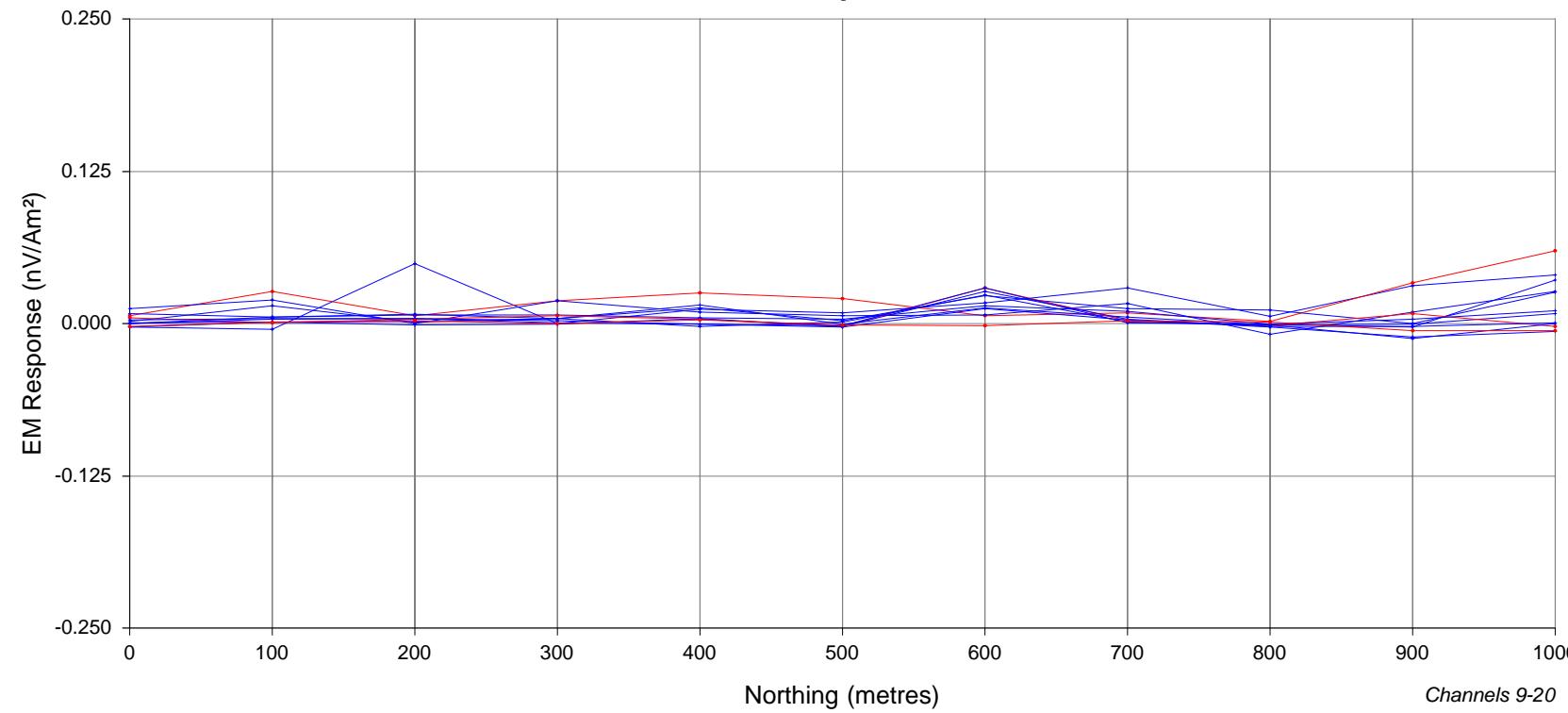
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Y
Rx Coil : 3D-3
Rx Area : 200 m^2

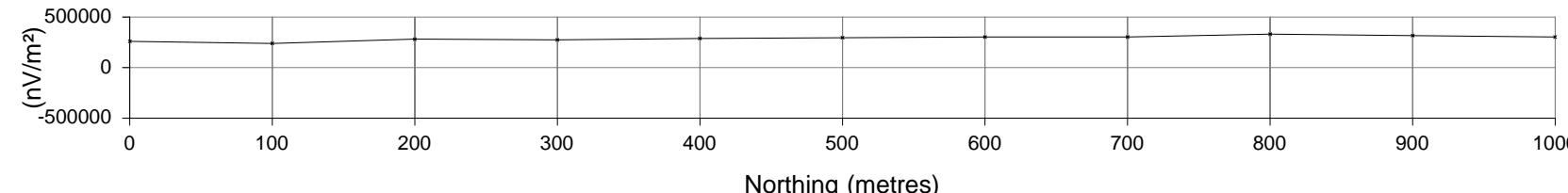
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 μs

Y Component



Primary Field (Wire Location)



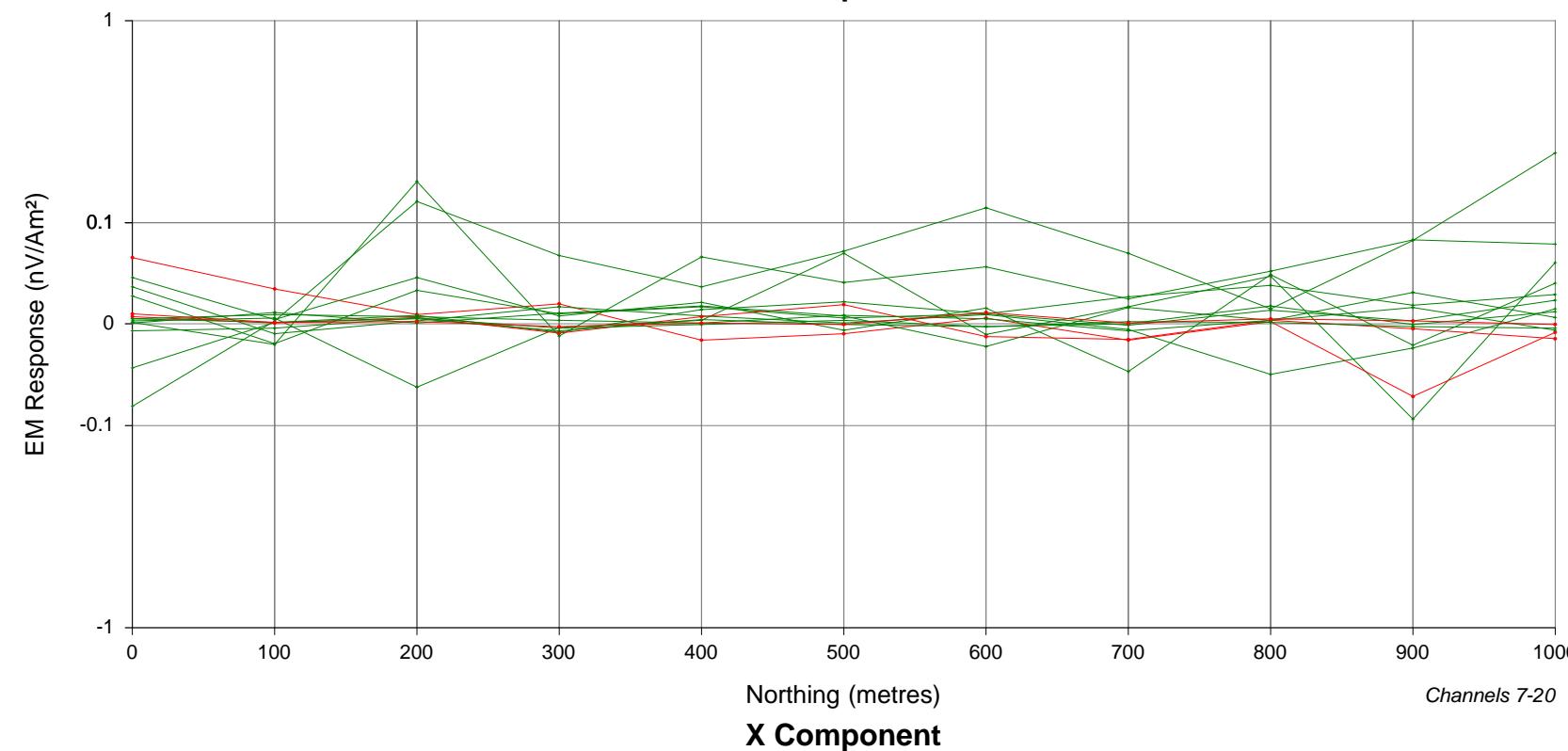
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Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 000E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000



X Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5375	11	:	3.382
2	:	0.6125	12	:	4.240
3	:	0.7100	13	:	5.332
4	:	0.8325	14	:	6.727
5	:	0.9875	15	:	8.507
6	:	1.187	16	:	10.78
7	:	1.442	17	:	13.67
8	:	1.767	18	:	17.37
9	:	2.182	19	:	22.09
10	:	2.710	20	:	28.10

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

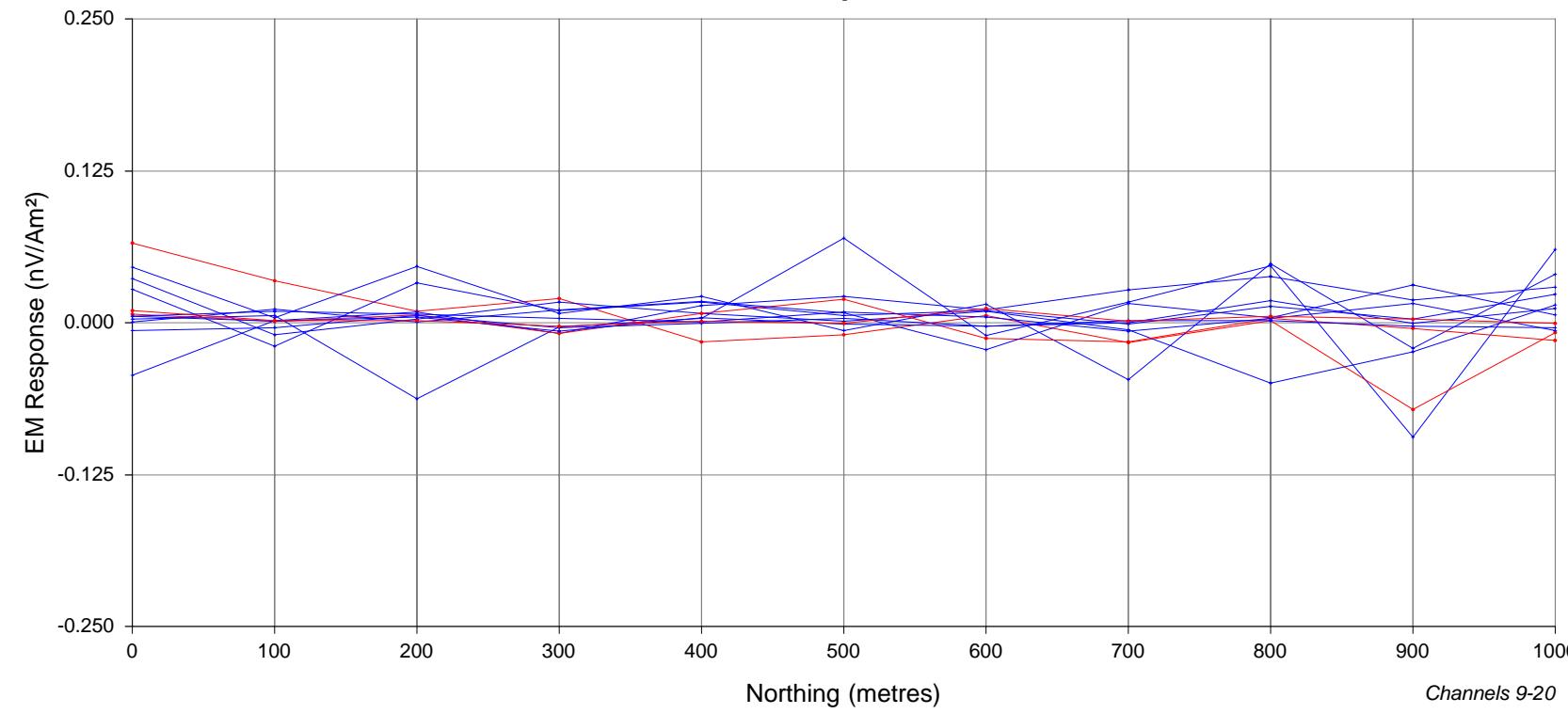
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : X
Rx Coil : 3D-3
Rx Area : 200 m²

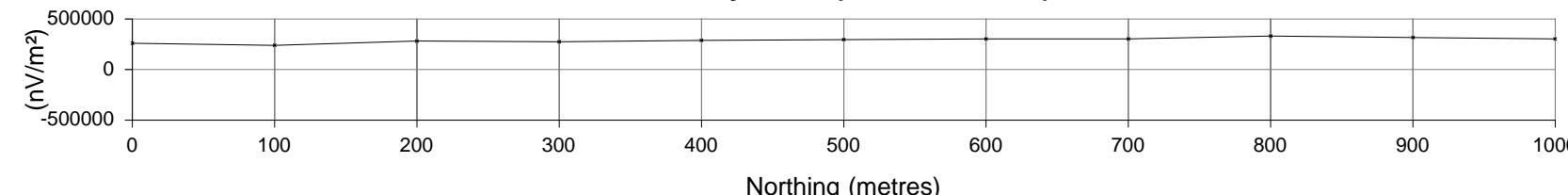
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 µs

X Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
East Bull Lake - Novick Lake Prospect
Ground Moving Loop TDEM Survey
EM Response Profiles
Line 000E

By : M. Dubois

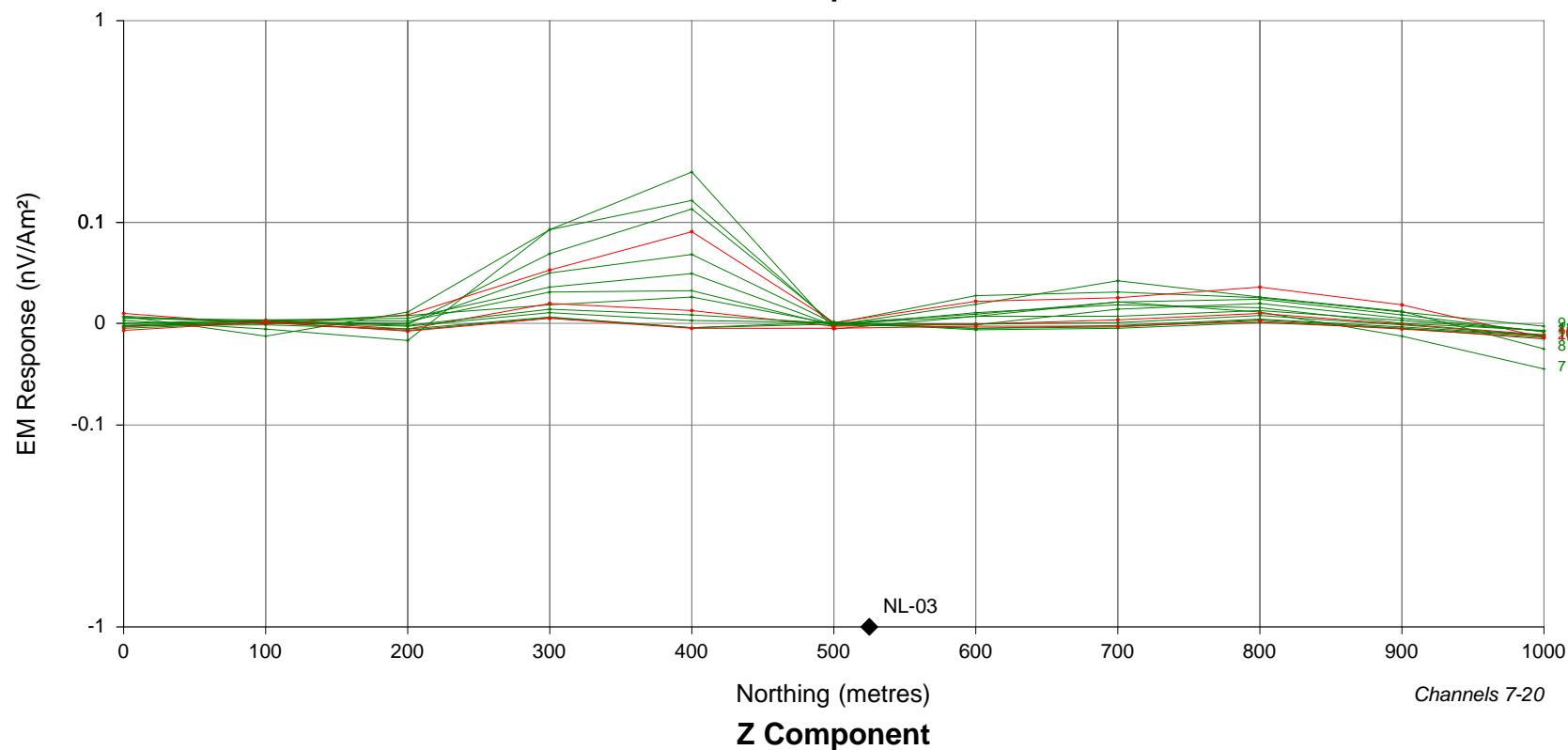
Date : March 2009

Ref. : 09N009

Scale 1:5000



Z Component



WINDOW TIMES (ms) From the start of the Ramp

1	:	0.5725	11	:	3.417
2	:	0.6475	12	:	4.275
3	:	0.7450	13	:	5.367
4	:	0.8675	14	:	6.762
5	:	1.022	15	:	8.542
6	:	1.222	16	:	10.81
7	:	1.477	17	:	13.71
8	:	1.802	18	:	17.41
9	:	2.217	19	:	22.12
10	:	2.745	20	:	28.14

SURVEY PARAMETERS

Configuration : Moving Loop
Station Spacings : 100 m

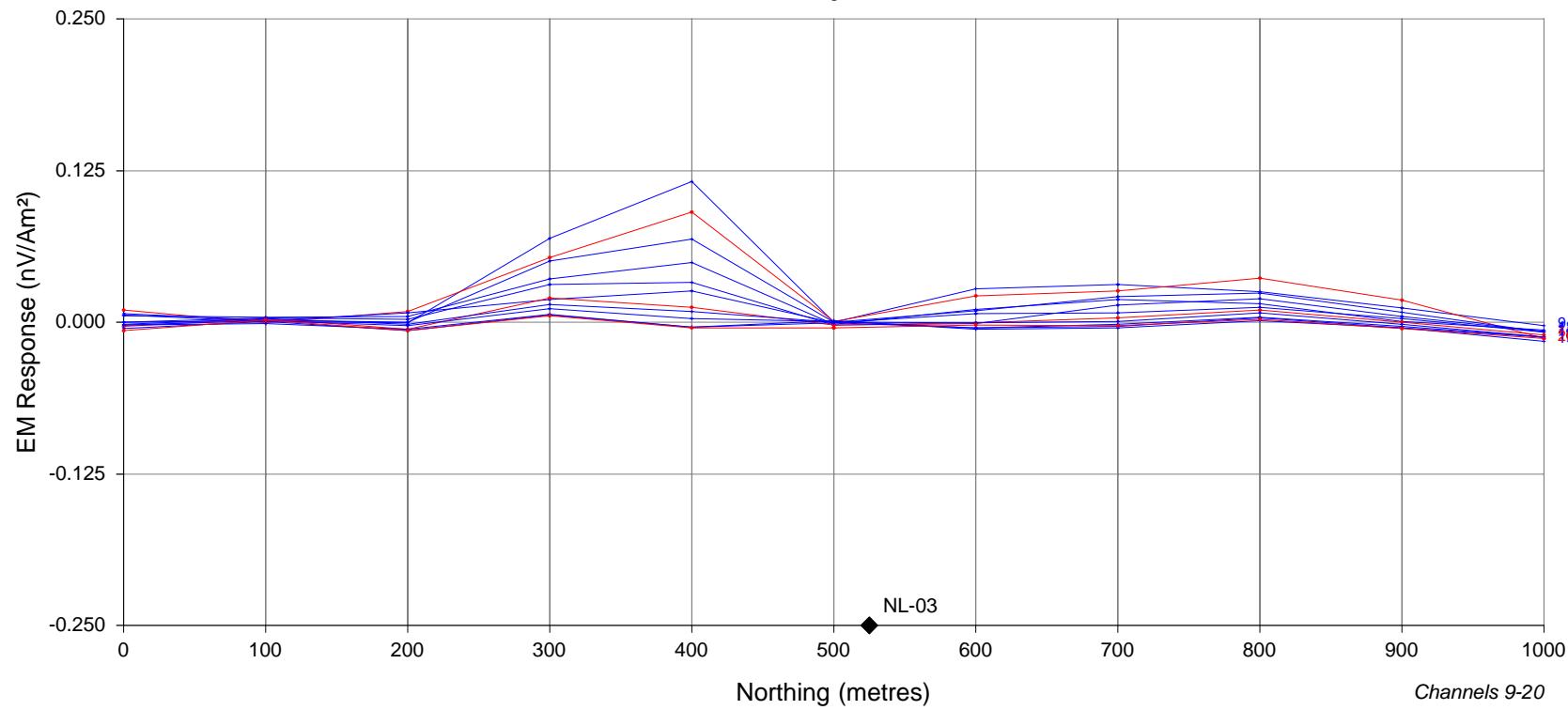
RECEIVER

Geonics : PROTEM 67D
Frequency : 7.5 Hz
Component : Z
Rx Coil : 3D-3
Rx Area : 200 m²

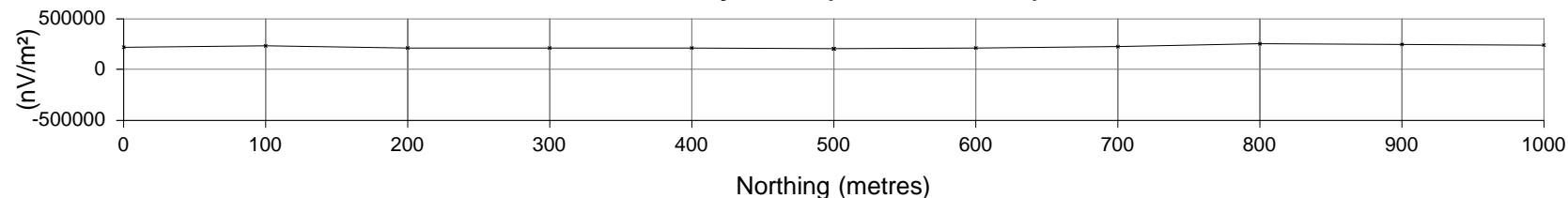
TRANSMITTER

Geonics : TEM57
Loop : 200 m X 200 m
Tx Turn : 1
Tx Current : 20.0 A
Off Time : 83.3 ms
Turn Off : 230 µs

Z Component



Primary Field (Wire Location)



Abitibi Geophysics Inc.

Western Areas NL
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Ground Moving Loop TDEM Survey
EM Response Profiles
Line 1000E

By : M. Dubois	Date : March 2009
Ref. : 09N009	Scale 1:5000