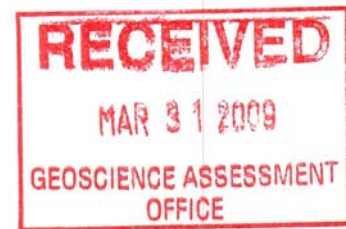


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# **Geophysical Survey Interpretation Report**

2.41138



***Regarding the BOREHOLE and SURFACE TRANSIENT  
ELECTROMAGNETIC SURVEYS  
over the  
LANGMUIR PROJECT,  
near Timmins, ON,  
on behalf of  
GOLDEN CHALICE RESOURCES INC.  
Vancouver, BC***

***QGL QGL QGL QGL QGL QGL***

S.T. Coulson  
October, 2007  
Project CA00500C

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## 1. INTRODUCTION

- **QGL Project No:** CA00500C
- **Project Name:** Langmuir Project
- **Survey Period:** May 24<sup>th</sup> to September 24<sup>th</sup>, 2007
- **Survey Type:** Surface and Borehole Fixed Loop Transient EM
- **Client:** **GOLDEN CHALICE RESOURCES INC.**
- **Client Address** 711-675 West Hastings St.  
Vancouver BC V6B 1N2
- **Representatives:** John Keating, Peter Caldbick, Kevin Montgomery
- **Objectives:**

Surface TEM Survey:

The objective of the surface TEM survey is to outline any conductive targets, as a follow up to airborne EM surveys and determine their depth and strike to facilitate drill targeting.

Borehole TEM Survey:

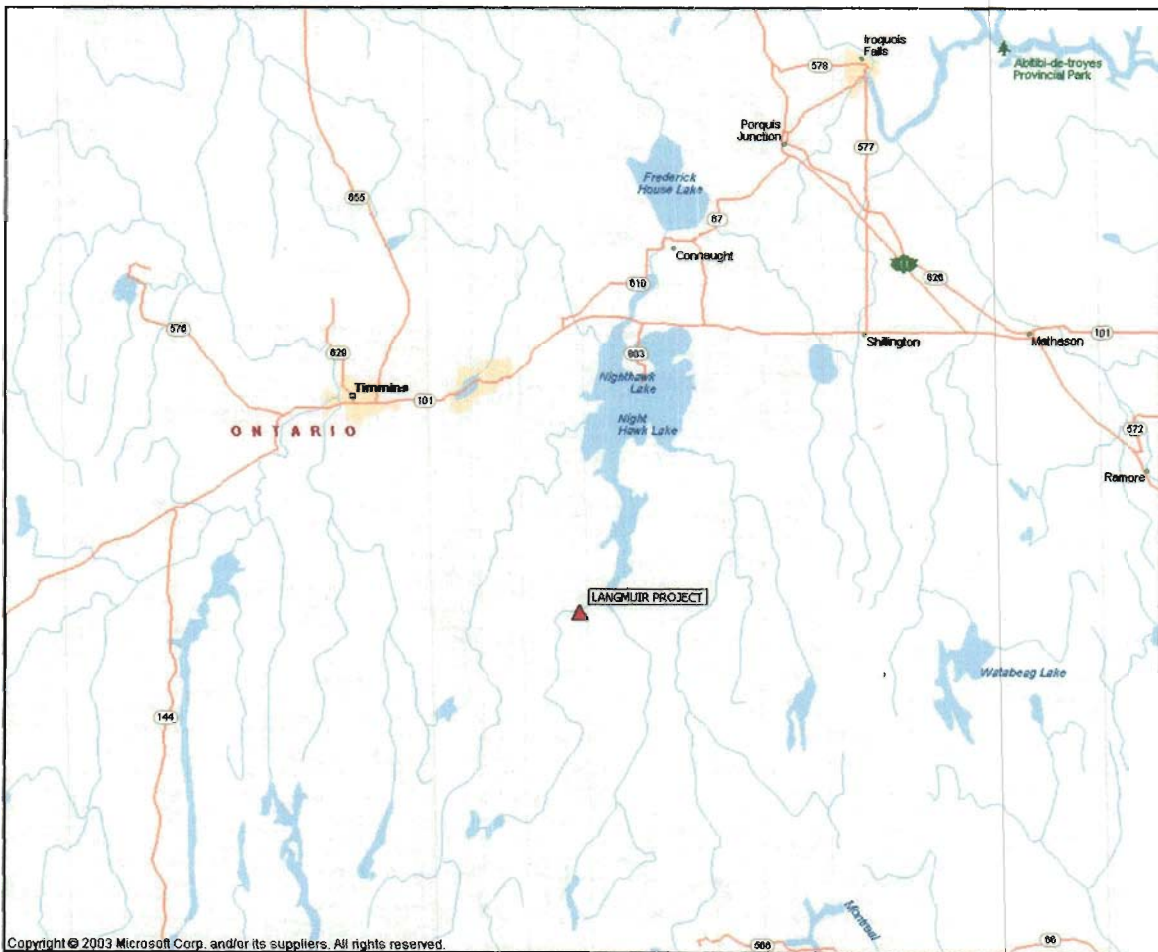
The objective of the borehole TEM survey is to determine the extent of sulphide mineralization intersected in drill holes and the existence of other conductive mineralization up to 50 meters radius of the holes.

- **Survey Type:** Interpretation

## 2. GENERAL SURVEY DETAILS

### 2.1 LOCATION

- **Township:** Langmuir
- **Province:** Ontario
- **Country:** Canada
- **Nearest Settlement:** South Porcupine
- **NTS Map Reference #:** 42 A/6



***Figure 1: General Location of the Langmuir Project.***

## 2.2 ACCESS

- **Base of Operations:** QGL office, Porcupine, ON
- **Mode of Access:** Truck to drill road then Argo ATV to grid

## 2.3 SURVEY GRID

- **Coordinate Reference System:** Local exploration grid (UTM Ref. NAD 83)
- **Established:** By Golden Chalice prior to survey execution
- **Line Direction:** 325°
- **Line Separation:** 50 meters
- **Station Interval:** 25 meters
- **Method of Chaining:** Metric, slope distance
- **Claims Surveyed:** 3017518, 4203498, 4202748

### 3. SURVEY WORK UNDERTAKEN

#### 3.1 GENERALITIES

- **Survey Dates:** May 24<sup>th</sup> to September 24<sup>th</sup>, 2007
- **Survey Period:** 27 days
- **Survey Days (read time):** 17 Surface TEM  
10 Borehole TEM
- **Survey Coverage:** Surface TEM – 11.05 km  
Borehole TEM – 3,411 m

#### 3.2 PERSONNEL

- **Project Supervisor:** Woody Coulson, Porcupine, ON
- **Project Managers:** Woody Coulson, Porcupine, ON  
Kevin MacKenzie, Sydney, NS
- **Technicians:** Nick Hnotchuck, Timmins, ON  
Peter Cullinane, Owen Sound, ON  
Jason Heilman, Thunder Bay, ON

#### 3.3 SURVEY SPECIFICATIONS

##### 3.3.1 Surface TEM Surveys

- **Configuration:** In/Off loop profiling
- **Output Power Stage:** Low Power (3.5 kW)
- **Dimension:** 3 Component (X,Y and Z)
- **Loop Sizes and Locations:** 550m x 300m
- **Line Interval:** 50 meters
- **Sampling Interval:** 12.5 meters

##### 3.3.2 Borehole TEM Surveys

- **Configuration:** Borehole Profiling
- **Output Power Stage:** Low Power
- **Dimension:** 3 Component (X,Y and Z)

- **Loop Sizes and Locations:** 200m x 200m, 300m x 550m
- **Sampling Interval:** 5 and 10 meters

### 3.4 SURVEY COVERAGE

#### 3.4.1 Surface TEM Survey

| LINE# | START | END   | TOTAL(m) |
|-------|-------|-------|----------|
| 3+00W | 0+00  | 3+75N | 375      |
| 2+50W | 2+00S | 4+00N | 600      |
| 2+00W | 2+00S | 3+75N | 575      |
| 1+50W | 2+00S | 3+50N | 550      |
| 1+00W | 2+00S | 3+50N | 550      |
| 0+50W | 2+50S | 3+25N | 575      |
| 0+00  | 2+00S | 2+50N | 450      |
| 0+50E | 2+00S | 3+00N | 500      |
| 1+00E | 2+00S | 2+75N | 475      |
| 1+50E | 2+00S | 2+00N | 400      |
| 2+00E | 2+00S | 1+50N | 350      |
| 2+50E | 0+00  | 1+25N | 125      |

**Table I: Surface TEM Survey Coverage**

#### 3.4.2 Borehole TEM Survey

| HOLE #   | COLLAR (NAD83)    | AZIMUTH/DIP | MIN. EXTENT (m) | MAX. EXTENT (m) | TOTAL (m) |
|----------|-------------------|-------------|-----------------|-----------------|-----------|
| GCL07-01 | 500094E, 5348163N | 325° / -55° | 10              | 249             | 239       |
| GCL07-02 | 500598E, 5347683N | 145° / -55° | Blocked at 150m |                 |           |
| GCL07-03 | 499025E, 5349193N | 325° / -55° | Blocked at 50m  |                 |           |
| GCL07-04 | 498137E, 5349441N | 325° / -55° | 30              | 260             | 230       |
| GCL07-05 | 497234E, 5349380N | 340° / -50° | Blocked at 5m   |                 |           |
| GCL07-06 | 497523E, 5349401N | 325° / -55° | 10              | 223             | 213       |
| GCL07-10 | 497523E, 5349401N | 325° / -45° | 10              | 249             | 239       |
| GCL07-11 | 497566E, 5349340N | 325° / -45° | 15              | 397             | 282       |
| GCL07-12 | 497544E, 5349387N | 325° / -45° | 15              | 300             | 285       |
| GCL07-13 | 497544E, 5349387N | 325° / -60° | 15              | 457             | 432       |
| GCL07-14 | 497502E, 5349387N | 325° / -45° | 15              | 400             | 385       |
| GCL07-23 | 497634E, 5349373N | 325° / -45° | 15              | 400             | 385       |
| GCL07-25 | 497610E, 5349325N | 325° / -50° | 25              | 500             | 375       |

**Table II: Borehole TEM Survey Coverage**

### 3.5 INSTRUMENTATION

#### 3.5.1 Surface TEM Surveys

- **Receiver:** Geonics Digital Protem 20 or 30 channel capability
- **Coils:** 3D-3 coil (200 m<sup>2</sup> effective area)
- **Transmitter:** Geonics EM-57/67 (3.5 kW output)
- **Power Supply:** Kubota 4500W motor generator

### 3.6 SURVEY PARAMETERS

#### 3.6.1 Surface TEM Surveys

|                             |                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------|
| Pulse repetition frequency: | 3Hz and 30Hz                                                                                           |
| Gain:                       | 1-6                                                                                                    |
| Integration number:         | 120 sec                                                                                                |
| Loop Sizes:                 | 300 x 550 meters                                                                                       |
| Current:                    | 22.0 Amps (see Appendix F)                                                                             |
| Turn-off time:              | 310 us (see Appendix F)                                                                                |
| Gate positions              | 3Hz – 80 – 61360µs (30 channels - see Appendix C)<br>30Hz – 80 – 6136µs (30 channels - see Appendix C) |
| Synchronization mode:       | Crystal                                                                                                |

**Table III: System Parameters for Surface TEM Survey**

- **Coil Conventions:** (see Appendix C)

| COMPONENT | COIL ORIENTATION    |
|-----------|---------------------|
| Z         | Positive Up         |
| X         | Positive grid north |
| Y         | Positive grid west  |

**Table IV: Coil Conventions for Surface TEM Survey**

- **Measured Parameters:** dB/dt, mV
- **Data Reduction<sup>1</sup>:** nanoVolts/Ampere-metre<sup>2</sup> (nV/Am<sup>2</sup>)

#### 3.6.2 Borehole TEM Surveys

- **Receiver:** Geonics Digital Protem 20 or 30 channel capability
- **Coil:** Geonics BH43-3D probe (500m cable)
- **Transmitter:** Geonics EM-57/67 (3.5 kW output) with turnoff time regulator
- **Power Supply:** Kubota 4500W Motor Generator

<sup>1</sup> Equivalent to Crone units of nanoTesla/second normalized to a unit current.



|                             |                                              |
|-----------------------------|----------------------------------------------|
| Pulse repetition frequency: | 30Hz                                         |
| Gain:                       | 1-6                                          |
| Integration number:         | 15 sec                                       |
| Loop Sizes:                 | 200m x 200m<br>300m x 550m (holes 23 and 25) |
| Currents:                   | 12.8 – 22 Amps (see Appendix F)              |
| Turn-off time:              | 390 – 600µs (see Appendix F)                 |
| Gate positions              | 80-6136µs (see Appendix C)                   |
| Synchronization mode:       | Crystal                                      |

**Table V: System Parameters for Borehole TEM Survey**

- **Coil Conventions:** (see Appendix C)

| COMPONENT | COIL ORIENTATION                                           |
|-----------|------------------------------------------------------------|
| Z         | Positive Axially Up                                        |
| X         | Positive Orthogonal Up along DDH azimuth (north)           |
| Y         | Positive Orthogonal Horizontal and left of DDH axis (west) |

**Table VI: Coil Conventions for Borehole TEM Survey**

- **Measured Parameters:** dE/dt, mV.
- **Data Reduction<sup>2</sup>:** nanoVolts/metre<sup>2</sup> (nV/m<sup>2</sup>)

### 3.7 MEASUREMENT ACCURACY AND REPEATABILITY

- **Number of Repeats per Station:** 0-1
- **Number of Repeats per Day:** 0-3
- **Average Repeatability:** 1-2% in early channels
- **Worst Repeatability:** 3% in early channels

### 3.8 DATA PRESENTATION

- **Profiles:** X,Y,Z components, and Total EM Field @ 1:5000 for Surface and 1:2000 for Borehole with variable vertical (profile) scales to best display data.

<sup>2</sup> Equivalent to Crone units of nanoTesla/second normalized to a unit current.

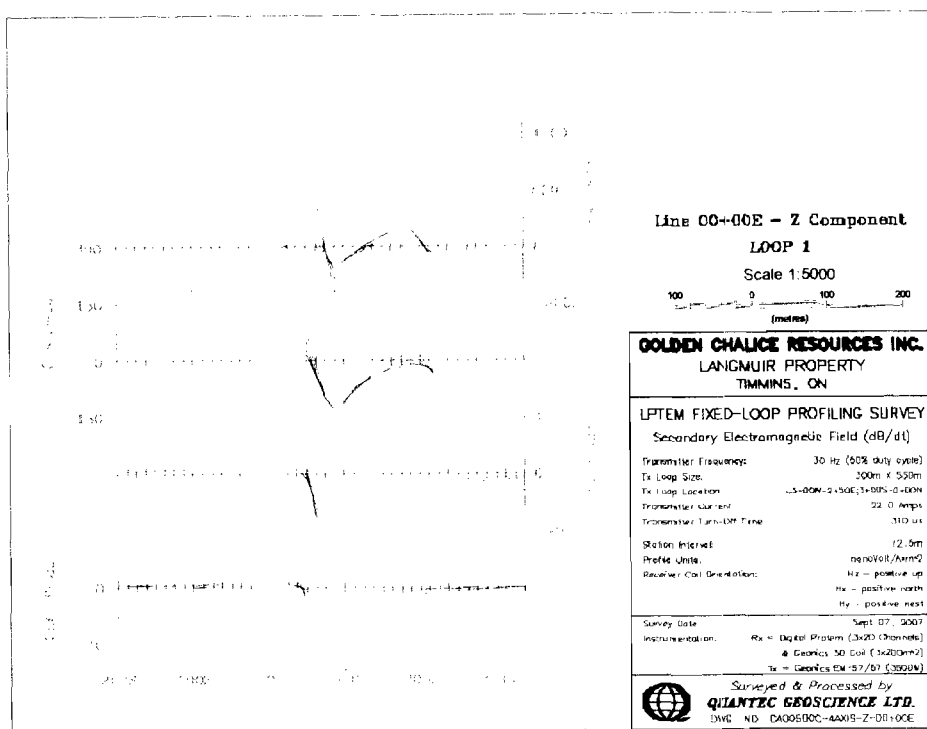


Figure 2: 4-Axis Surface TEM Profile Format

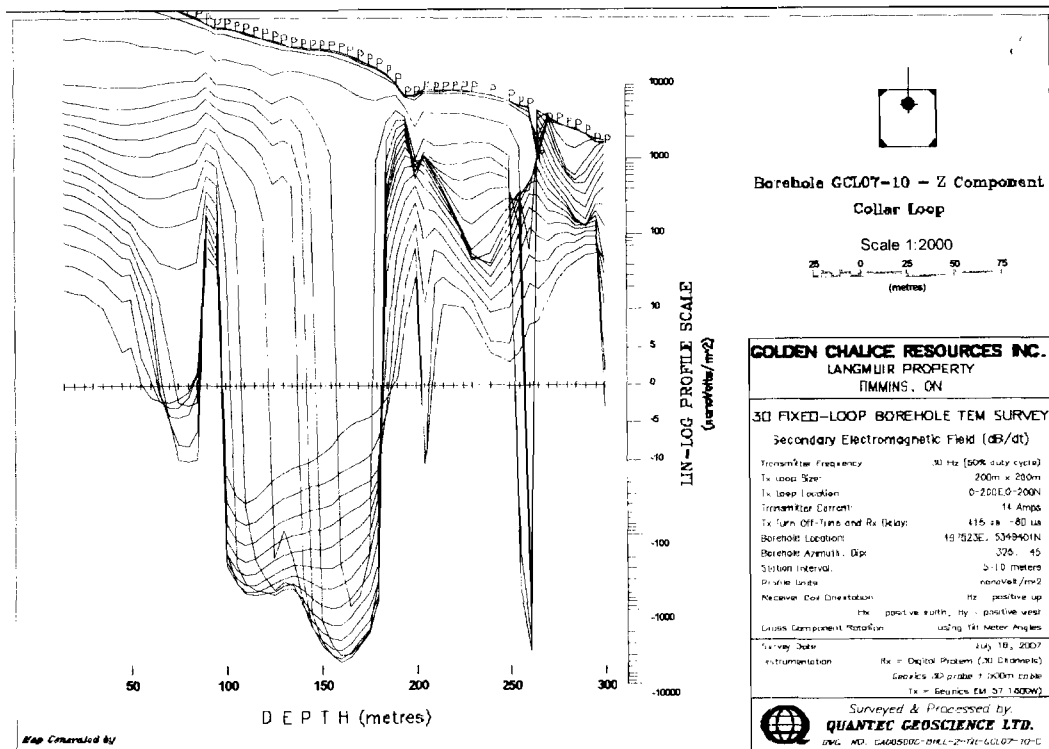


Figure 3: Lin-Log Borehole TEM Profile Format

- **Digital Data:** Daily raw files and processed data (Geosoft .XYZ format) on CD

a) raw data dump files, according to acquisition date, (DDMMYY.RAW ) (i.e. 050604.raw). Geonics Digital Protem format (refer to Protem manual)

b) reduced XYZ ASCII data files, according to line/hole number and component (i.e. l1900ek.xyz where, k=component – Z, X, Y or T for Total Field).

Column 1: N-S Line/E-W Station number

Column 2: E-W Station/N-S Line number

Column 3: Primary pulse (nV/m<sup>2</sup>)

Column 4: Channel 1 secondary rate of decay of TEM field (nanoVolt/ampere\*m<sup>2</sup>)

Column 5: Channel 2

⇓

Column 23: Channel 20 secondary rate of decay of TEM field (nanoVolt/ampere\*m<sup>2</sup>)

## 4. SURVEY RESULTS

The survey work over the Langmuir property started with Borehole TEM surveys in drill holes GCL07-01, 04 and 06. Holes 02, 03 and 05 were not logged due to blockages in the holes. These holes were all drilled as direct follow-up to airborne EM (VTEM) surveys over specific targets. Subsequent to encouraging mineralization (Ni-Cu) in drill hole 06, additional holes (10 through 25) were drilled in the vicinity of this hole. Only holes 06, 10, 11, 12, 13, 14, 23 and 25 have been logged with Borehole TEM. Later, a 50m by 50m local exploration grid was cut and Surface TEM and IP (not performed by Quantec) surveys were conducted. This report provides an interpretation of the results of the Borehole and Surface TEM surveys only.

Details concerning the bedrock geology and the full extent of exploration on the property are limited by the present author and, as such, this interpretation is based solely on the TEM survey results. Maxwell<sup>3</sup> modeling of the TEM results has been conducted to assist in determining conductor size, depth, dip, orientation and conductivity thickness. These results are presented as 3D models for both the surface and borehole survey results. Due to the complexity of the responses, both from surface and in the drill holes, it is difficult to obtain perfect matches between the field and model data.

### 4.1.1 Surface TEM Survey

The objective of the Surface TEM survey over the Langmuir Property was to verify conductors on the ground outlined from the airborne TEM (VTEM) surveys as well as provide direction to continued drilling in the immediate vicinity of drill hole GCL07-06. The survey was conducted using the 30hz and 3Hz pulse repetition frequencies to cover both weak and very strong conductors (Po-Ni rich).

The Surface TEM survey was successful in delineating a number of conductors across the survey grid labeled A through D. A line by line interpretation is outlined in the table below and on the interpretation plan map and Maxwell models at the back of the report.

#### Conductor A:

Conductor A was traced from line 300W at 212N to line 150E at 25N. The responses on lines 150W through 300W diminish from east to west and are interpreted to be off the end of the actual conductor axis. In the east end, the conductor appears to terminate at line 150E. The conductor strikes east-west (grid NW-SE) from line 100W at 125 N to line 0 at 50N where it turns and continues NE (grid E-W) to line 150E at 37N. From modeling, the conductor ranges in depth to the top from 30m on line 100E to 50m on line 50W where it appears to plunge to the west to a depth of approximately 85m on line 150W. The conductor is strongest on lines 50W, 0 and 50E where it dips moderately (62°) to the north with a conductivity thickness of 400 Siemens (40 Siemens \* 10m thickness). Conductor A is a high priority geophysical target.

A late time (30 channels) response in the 3Hz data was detected on line 100W at 137N. The Hz and Hy responses are better resolved with little response in the Hx. This response is within the overall response from Conductor however based on the wavelength and late time response, this conductor has a much smaller surface area/depth extent and is within 25m of surface. This may indicate a small but high conductance zone worth further investigation.

#### Conductor B

Conductor B parallels Conductor A roughly 100m to 150m to grid north. This is a moderate strength conductor (max. 18 channels) traced from line 100W at 275N to line 200E at 125N. It

<sup>3</sup> Maxwell 4.9.25 Forward/Inverse Modeling, Presentation and Visualization software developed by Electromagnetic Imaging Technology, Australia

may continue to the east beyond 200E however indications on line 250E suggest it may be terminated. The conductor is well defined in early to mid time however there is a strong influence from Conductor A to the south. Depth to the top of the conductor is consistent in the 30m range. Based on modeling, Conductor B dips steeply north (75°) with a conductivity thickness of approximately 50 Siemens.

### Conductor C

Conductor C is short strike length conductor defined on line 150W at 50N. It may continue to the east but the character of the response is different and in general, poorly resolved on lines 200E and 250E. Modeling utilized a 10m thick plate measuring 30m strike length by 70m depth extent, at 20m depth, a steep north dip (75°) and a conductivity thickness of 300 Siemens (30 Siemens \* 10m). Even with multiple conductor responses (A and B) on this line, this conductor is still well resolved and is considered a high priority target.

### Conductor D

Conductor D is a strong, near surface conductor located in the northwest corner of the grid on line 250W at 337N. Although adjacent responses exist on lines 300W and 200W, the conductor probably ends a short distance east and west of 250W. The conductor was modeled using a vertically dipping, 30m thick plate at a depth of 15m measuring 75m strike length by 50m depth extent. The conductivity thickness is 1200 Siemens (40 Siemens \* 30m). This is a high priority target even though it has limited strike extent.

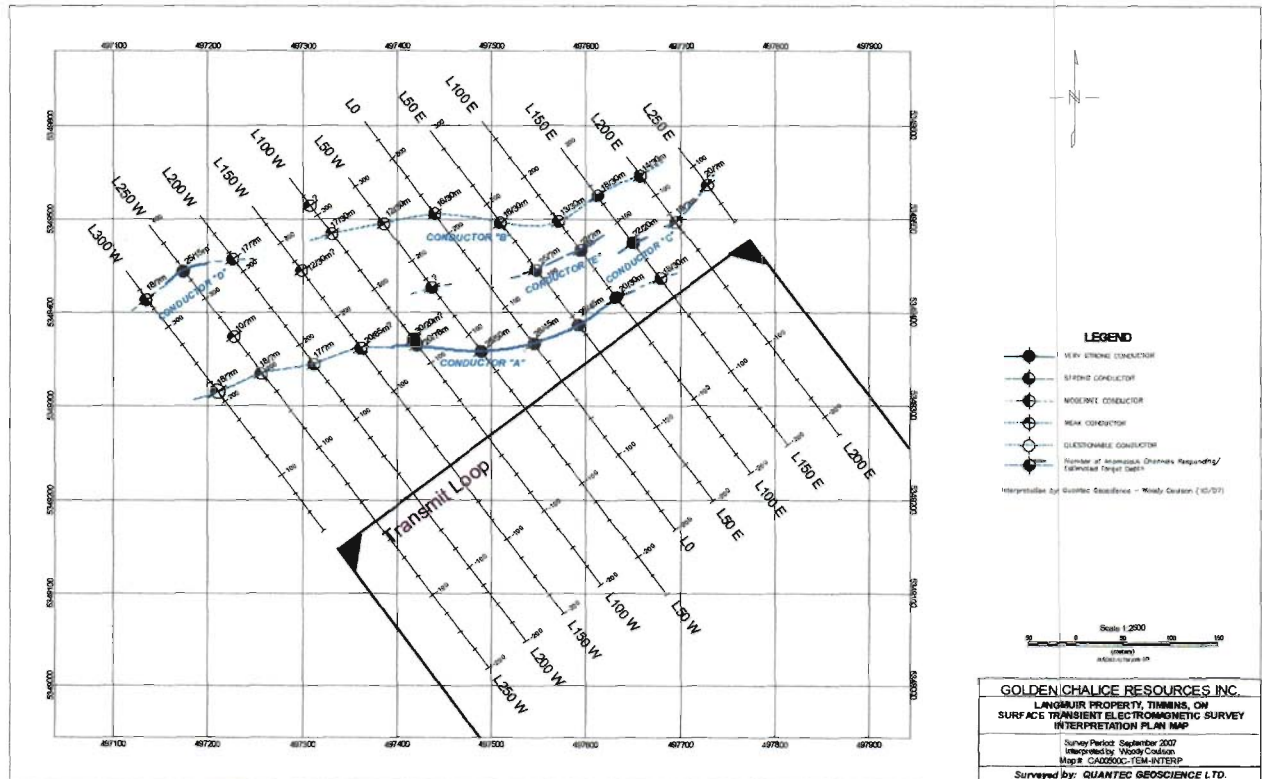
### Conductor E

Conductor E is a short strike length conductor detected on lines 50E and 100E at 112N and 100N respectively. The responses are short wavelength, only evident in the 3Hz data and for the most part are not well resolved. The short wavelength indicates the source is near surface (<25m) and small surface area i.e. limited depth extent, but are probably high conductance. Due to the poor resolution this conductor is considered a medium priority target.

| LINE | ANOMALY LOCATION | # CHANNELS RESPONDING | QUALITY      | DEPTH (m) | COMMENTS                                                                                                                           |
|------|------------------|-----------------------|--------------|-----------|------------------------------------------------------------------------------------------------------------------------------------|
| 300W | 212N             | 16                    | Good         | ?         | <u>Conductor D</u> - Little Hz response – may be off west end of conductor.                                                        |
|      | 237N             | 10                    | Weak         | ?         | Weak conductor possibly related to poor mineralization or overburden.                                                              |
|      | 362N             | 18                    | Good         | ?         | Incomplete response.                                                                                                               |
| 250W | 200N             | 18                    | Good         | 100?      | <u>Conductor A</u> - Long wavelength Hz with no crossover. Possible off end response from conductor to east or conductor at depth. |
|      | 250N             | 8                     | Weak         | ?         | Possible near surface weak conductor.                                                                                              |
|      | 337N             | 25                    | Very Good    | 15        | <u>Conductor D</u> - Response suggests flat dip – possible wide, limited depth extent conductor.                                   |
| 200W | 175N             | 17                    | Good         | ?         | <u>Conductor A</u> - Amplitude increasing to east. Possible deep response (100m?) or off end response.                             |
|      | 325N             | 17                    | Good         | ?         | <u>Conductor D</u> - Near surface response related to conductor on L250W. Possible off east end of conductor.                      |
| 150W | 150N             | 20                    | Good         | 85?       | <u>Conductor A</u> - Well defined late time Hx response – no crossover in Hz. Possible deep or off end response.                   |
|      | 262N             | 12                    | Weak         | 30?       | Possible contact mineralization.                                                                                                   |
| 100W | 125N             | 20                    | Good         | 78        | <u>Conductor A</u> - Well defined Hx but no Hz crossover.                                                                          |
|      | 137N             | 30                    | Very Good    | 20?       | Short wavelength response evident at 3Hz – possible high conductance zone above conductor at 125N.                                 |
|      | 275N             | 17                    | Moderate     | 30        | <u>Conductor B</u> – Well defined early time response                                                                              |
|      | 312N             | 16                    | Questionable | ?         | Possible near surface conductor.                                                                                                   |

|      |      |    |                  |    |                                                                                         |
|------|------|----|------------------|----|-----------------------------------------------------------------------------------------|
| 50W  | 87N  | 28 | Good             | 50 | Conductor A - Well defined Hx and Hz responses. North dip.                              |
|      | 137N |    | Questionable     | ?  | Short wavelength response on 3Hz.                                                       |
|      | 250N | 12 | Weak to Moderate | 30 | Conductor B - Well defined mid time response.                                           |
| 0    | 50N  | 28 | Very Good        | 45 | Conductor A - High amplitude Hx - probable conductor centre. Probable north dip.        |
|      | 225N | 16 | Moderate to Good | 30 | Conductor B - Well defined mid time response. Strong influence from conductor to south. |
| 50E  | 37N  | 28 | Very Good        | 45 | Conductor A - High amplitude Hx. Probable north dip.                                    |
|      | 112N | 25 | Good             | ?  | Conductor E - Short wavelength response on 3Hz.                                         |
|      | 175N | 16 | Moderate to Good | 30 | Conductor B - Well defined mid time response. Strong influence from conductor to south. |
| 100E | 37N  | 20 | Very Good        | 30 | Conductor A - High amplitude Hx. Probable north dip.                                    |
|      | 100N | 22 | Good             | ?  | Conductor E - Short wavelength response on 3Hz.                                         |
|      | 137N | 13 | Moderate         | 30 | Conductor B - Well defined mid time response. Strong influence from conductor to south. |
| 150E | 25N  | 18 | Moderate         | 30 | Conductor A - Conductor weakening to east.                                              |
|      | 75N  | 22 | Good             | 20 | Conductor C - Late time response only suggests possible high conductance zone.          |
|      | 137N | 18 | Moderate to Good | 30 | Conductor B - Well defined mid time response. High amplitude early to mid times.        |
| 200E | 62N  | 19 | Moderate to Good | ?  | Long wavelength, late time response. May be related to conductor at 75N on L150E.       |
|      | 125N | 14 | Moderate         | 30 | Well defined mid time response.                                                         |
| 250E | 75N  | 20 | Moderate         | ?  | Conductor C - Incomplete response. Possibly off east end of conductor.                  |

**Table VII: Anomaly Table for Surface TEM Surveys**



**Figure 4: Surface TEM Interpretation Plan Map**

#### 4.1.2 Borehole TEM Survey

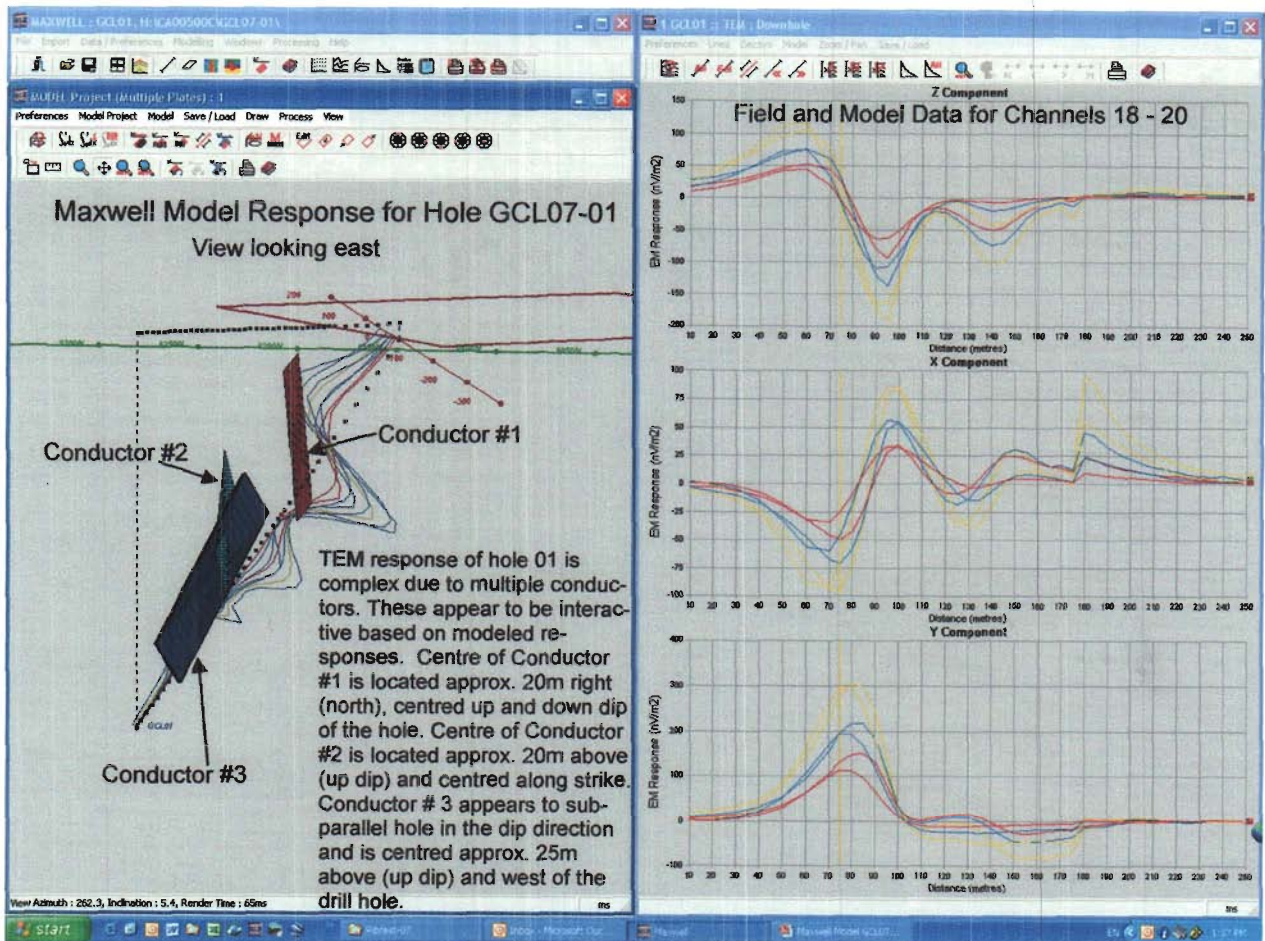
The objective of the Borehole TEM survey was to determine the quality and extent of mineralization tested in the drill holes and to determine if conductors exist off the hole within a 50m to 100m radius.

##### Hole GCL07-01

Hole GCL07-01 was logged from a single 200m by 200m transmit loop. The TEM log of identified both in-hole and off-hole conductors which are highlighted in the table below. The sources of these responses have been interpreted from Maxwell modeling (Fig. 5 below) due to their complexity. The upper off-hole conductor at 75m is interpreted to dip sub-vertical, strike ESE and lie approximately 20m right (northeast) and centred up and down dip of the hole. This conductor is untested.

The off-hole conductor at 140m is interpreted as a moderate area, strong conductor located approximately 20m above (up dip) the hole, striking roughly east-west and dipping to the south. This conductor is untested.

The edge of the conductor at 175m appears to have been tested at this depth however the bulk of the conductor still lies off the hole. This conductor appears to sub-parallel the hole, dipping approximately 65° to the northwest. The centre is interpreted to lie approximately 25m above (up dip) the hole. The lack of a stronger response from this conductor may be in part be due to the weaker nature compared to the other conductors and possibly the poorer coupling with the primary field due the orientation of the conductor. A review of the drill core near 175m may provide evidence of the nature of this conductor.

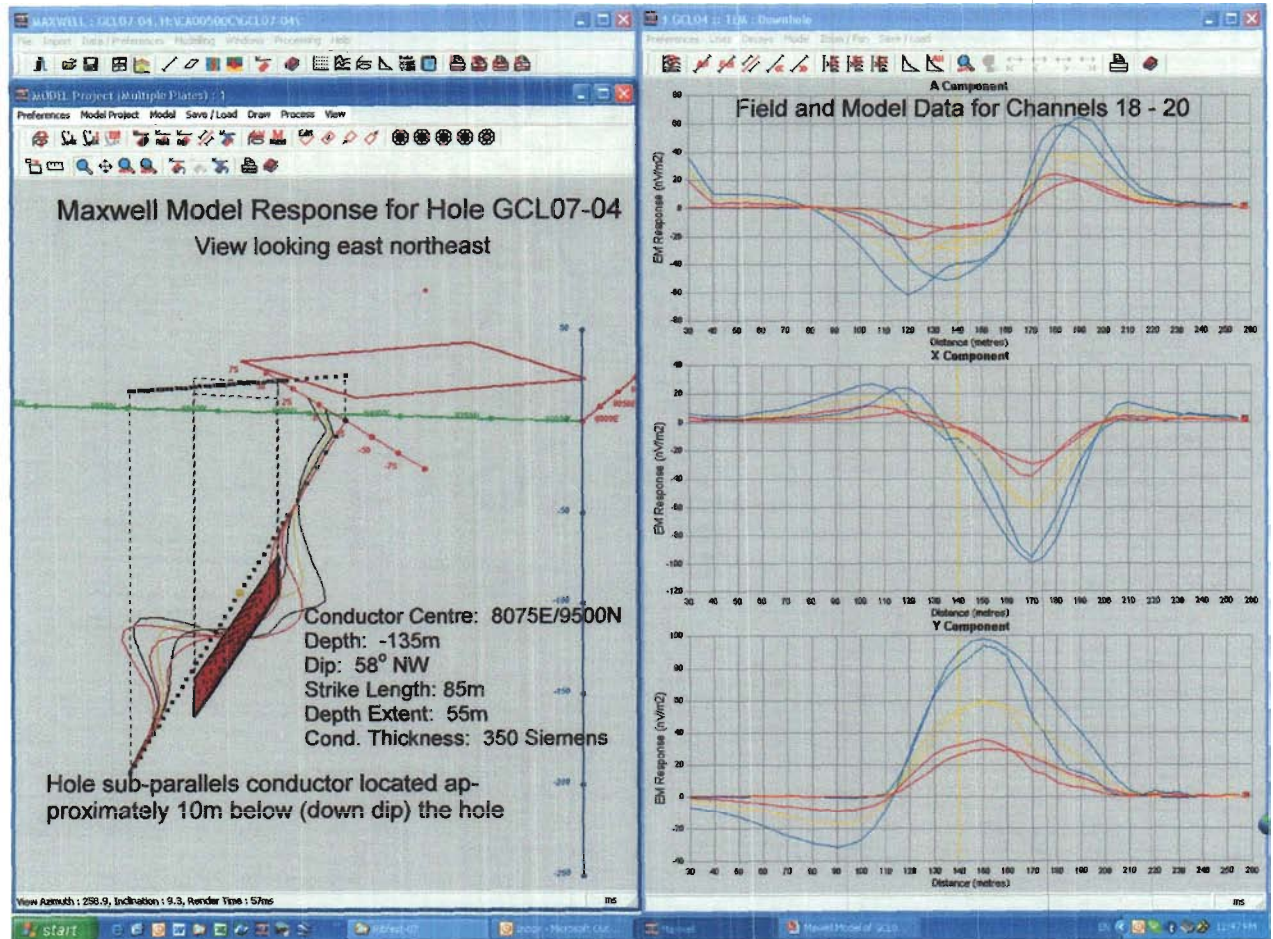


**Figure 5: Maxwell Model Response for Hole GCL07-01**

**Hole GCL07-04**

Hole GCL07-04 was logged from a single 200m by 200m transmit loop. The results of the TEM log indicate the presence of a conductor located off the hole at 165m depth (Fig. 6 below). The nature of the response suggests the hole is sub-parallel a strong conductor from approximately 120m to 185m down the hole. From modeling the conductor centre is located approximately 10m – 15m below (down dip) and 10m -15m left (southwest) of the drill hole.





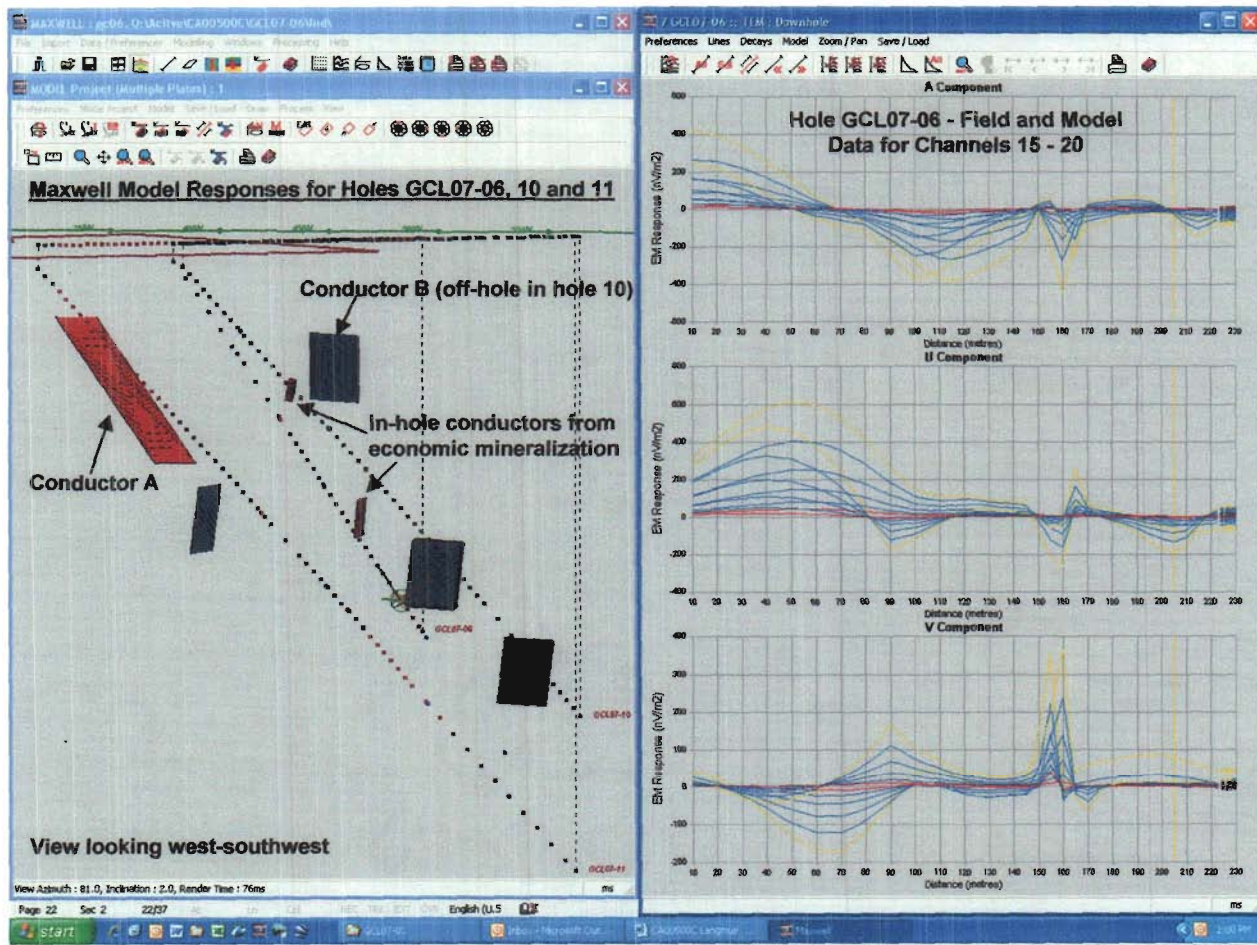
**Figure 6: Maxwell Model Response for Hole GCL07-04**

**Hole GCL07-06**

Hole GCL07-06 was logged from a single 200m by 200m transmit. The TEM response in the hole indicates both off-hole and in-hole conductors. The main off-hole conductor occurs at 70m down the hole. The nature of the response indicates the conductor is sub-parallel and behind (south or down dip) the hole, centred near 70m. The up and down dip extents are 30m and 115m respectively. From modeling, the conductor extends east and west of the hole some 50 – 100 meters in both directions. The conductor dips moderately ( $62^\circ$ ) to the north and strikes roughly east-west. This conductor is interpreted as Conductor A from the surface TEM survey.

The next off-hole conductor is located at 110m in the hole. This source is modeled as a moderate area, strong (500 Siemens) conductor located within 20m – 25m above (up dip) and right (NE) of the hole. The centre of the conductor is located approximately 62m vertically below line 0, 200N (local grid coordinates) and dips sub-vertically.

Two (2) in-hole responses were detected at 150m and 160m down the hole. Both correspond to sulphides intersected in the drill hole. Modeling indicates both are high conductance bodies (1000 Siemens) but small area (10m by 20m) and are probably related or the same unit i.e. thick conductor. Any improvement in these conductors lies above (up dip) and right (NE) of the hole.



**Figure 7: Maxwell Model Response for Hole GCL07-06**

**Hole GCL07-10**

Hole GCL07-10 was logged from the same 200m by 200m loop as drill hole 06. It is also located at the same location as hole 06 but drilled at  $-45^\circ$  vs  $-55^\circ$  for hole 06. A blockage at 300m restricted logging past this point. The results of the TEM survey outlined numerous conductors in the hole. In-hole conductors were defined at 90m, 135m, 200m and 260m. Off-hole conductors were defined at 70m, 110m and 160m. A building response at the end of the hole (300m) suggests a possible conductor beyond the logged portion of the hole. A graphite unit noted in the geologic log may be the source of this building response.

The off-hole response at 70m is interpreted as the same conductor detected in hole 06 at 70 i.e. the hole is sub-parallel to a large area, strong conductor located behind (south or down dip) the hole. As in hole 06 this is interpreted as Conductor A identified in the surface TEM survey.

The off-hole conductor at 110m is interpreted as the same conductor identified in hole 06 at 115m. The conductor is still located above (up dip) and right (NE) of the drill hole, albeit closer, within 10m -15m. The centre of the conductor is located approximately 62m vertically below line 0, 200N (local grid coordinates) and dips sub-vertically.

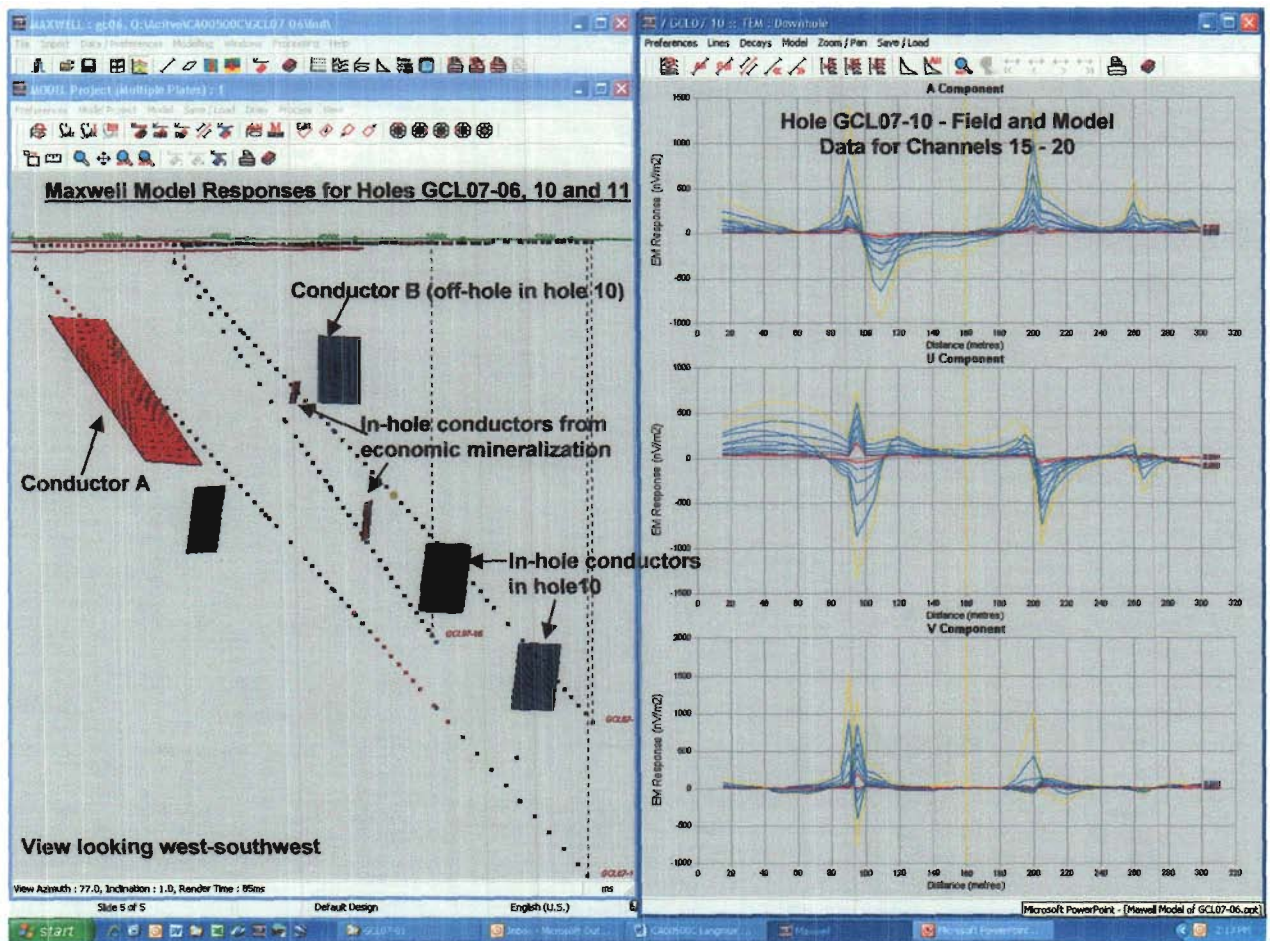
The off-hole conductor at 160m is characterized by a moderate strength (15 channels) re-

sponse. The source is interpreted to lie approximately 25m above (up dip) and right (NE) of the drill hole. This may be the source of Conductor B outlined in the surface survey.

The in-hole response at 90m corresponds to sulphides tested in the hole. This is a short wavelength, high amplitude response indicating the conductor is limited in size (10m x 10m) but high conductance (1000 Siemens). The conductor is expected to continue up and down dip and along strike in both directions for a limited distance.

The in-hole conductor at 200m indicates the hole has tested a moderate area (50m x 30m), strong (500 Siemens) conductor which corresponds to a graphitic unit in the geologic log. Any improvement or continuation of this conductor will be below (down dip) and left (SW) of the hole.

The in-hole conductor at 260m indicates the hole has tested the centre region of a moderate area (50m x 30m) strong (300 Siemens) conductor which corresponds to a graphitic unit in the geologic log. Any improvement or continuation of this conductor will be below (down dip) the hole.



**Figure 8: Maxwell Model Response for Hole GCL07-10**

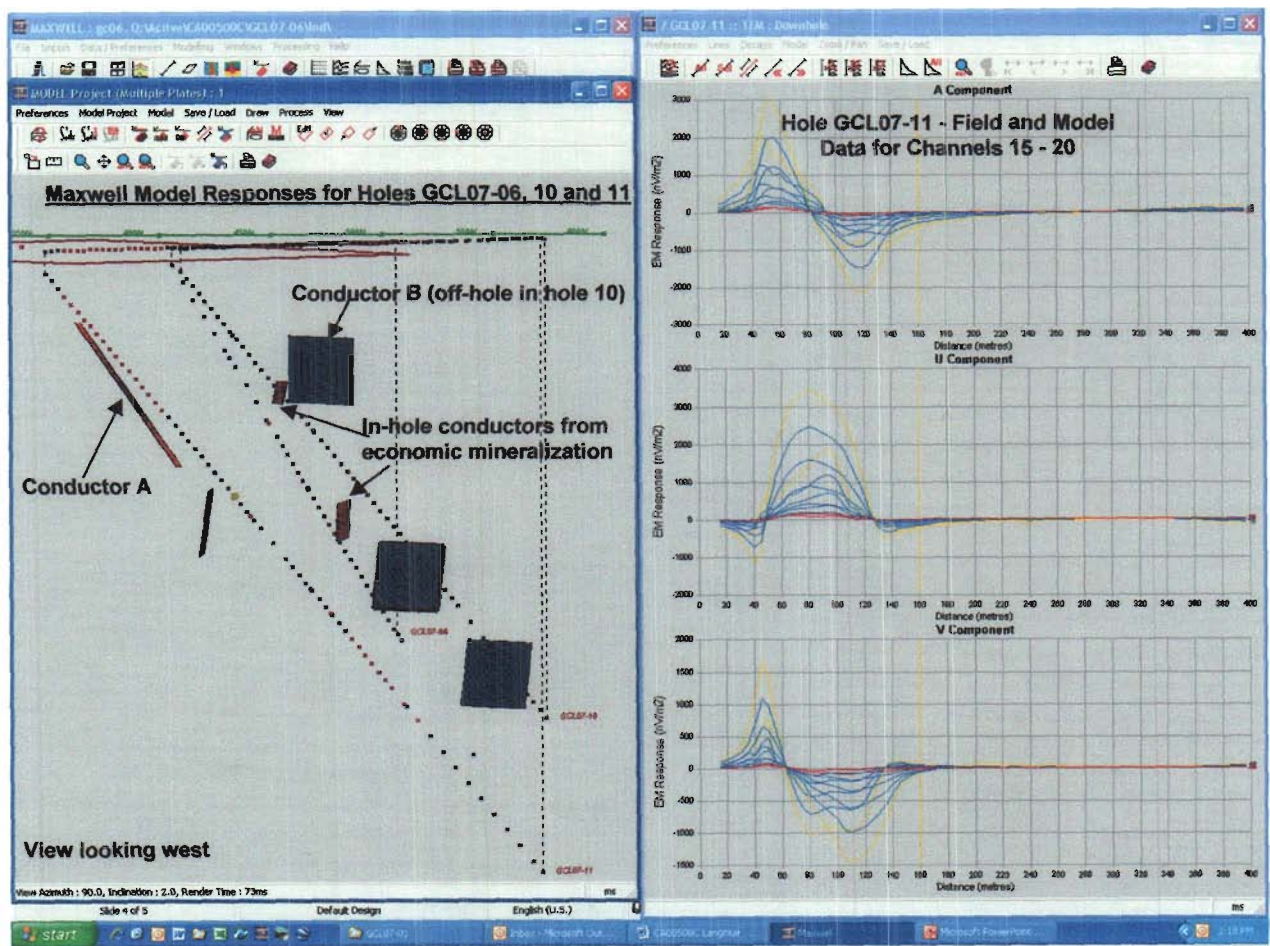
**Hole GCL07-11**

Hole GCL07-11 was logged from the same 200m by 200m loop as hole 06 and 10. It is located approximately 75m grid south of holes 06 and 10 and drilled at -45°. The results of the CA00500C – October 2007

TEM survey outlined in-hole conductors at 45m, 65m and 245m and off-hole conductors at 95m and 140m. The in-hole conductors at 45m and 65m are probably the same conductor source, that being the upper edge of Conductor A outlined in the surface survey and detected as an off-hole conductor in holes 06 and 10 at 70m. This conductor corresponds to predominantly graphitic mineralization noted in the geologic log between 35m and 65m down the hole. The off-hole conductor at 95m is interpreted as the proposed centre of this conductor which continues to approximately 135m down hole.

The off-hole conductor detected at 140m is difficult to model due to the influence from the large conductor (Conductor A) above. However, this could reflect the lower edge of Conductor A or a separate smaller conductor. The source of this conductor is interpreted to be located below (down dip) and left (SW) of the hole, possibly 20m away.

The in-hole conductor at 245m corresponds to graphite unit noted in the geologic log. This is interpreted as a small surface area, moderate strength (16 channels) conductor. Any improvement will be located above (up dip) and left (SW) of the drill hole.



**Figure 9: Maxwell Model Response for Hole GCL07-10**

### **Hole GCL07-12**

Hole GCL07-12 was logged from the same 200m by 200m loop as holes 06, 10 and 11. Holes 12 and 13 are drilled from the same location however the dip of hole 12 is  $-45^{\circ}$  and hole 13 is  $-60^{\circ}$ . The hole has tested the edge of conductors at 45m and 95m. The conductor at 45m is interpreted as a small surface, strong conductor which corresponds to graphite noted in the geologic log. Any improvement in this conductor will lie above (up dip) and right (NE) of the hole. This conductor may be the source of a conductor detected in the surface survey on line 50E at 112N.

The conductor at 95m is similar i.e. small area, high conductance, and corresponds to graphite and sulphides in the geologic log. Any improvement in this conductor lies predominantly left (SW) of the hole.

A crossover in the Hz component at 130m suggests a possible off-hole conductor. This is interpreted as the response from Conductor A from the surface survey also detected in holes 06 and 10 to the west. Due to the strong edge responses at 45m and 95m the true location of the crossover has probably been shifted down the hole only making it appear there is significant change in the response. Therefore, the Hz negative peak at 150m still indicates the lower edge of the conductor which sub-parallel the hole to the south.

A rapidly changing response in all the three (3) components at the bottom of the hole suggests a possible conductor beyond the end of the hole.

### **Hole GCL07-13**

As mentioned above, hole 13 is drilled at the same location as hole 12 but a  $-60^{\circ}$  dip. The TEM log outlined an edge conductor at 125m and off-hole conductors at 45m, 90m and 205m. The edge conductor at 125m is interpreted as the same conductor outlined at 95m in hole 12. Any improvement will be above (up dip) and left (SW) of the hole.

The off-hole conductor at 45m is interpreted as an in-hole conductor at 45m in hole 12 indicating this conductor has limited depth extent (max. 40m -45m vertically). The conductor lies above (up dip) and right (NE) of the hole within 10m – 15m.

The off-hole conductor at 90m is interpreted as Conductor A located behind the hole and identified in holes 06, 10, and 12.

The off-hole conductor at 205m is characterized by a mid time (16 channels) response. The source is interpreted to lie approximately 30m above (up dip) and right (NE) of the hole. The fact that there is no response in hole 12 above, suggests this conductor may be limited in size i.e. both holes have straddled the conductor.

### **Hole GCL07-14**

Hole GCL07-14 was logged from the same 200m by 200m as for holes 06, 10, 11, 12 and 13. The TEM log identified an off-hole conductor at 65m and in-hole or edge responses at 230m, 290m and 380m. The off-hole conductor at 65m is interpreted as Conductor A from the surface survey located approximately 30m – 40m behind (southeast) the hole and dipping to the north.

The in-hole conductor at 230m is a weak (5 channels), small surface area conductor which corresponds to sulphides noted in the geologic log. Any improvement lies below (down dip) the hole. This may be the down dip source of Conductor B identified in the surface survey.

The response at 290 indicates the hole has tested the edge of a small surface area, moderate strength conductor. The lack of definitive response in the cross components makes it difficult to define a direction of improvement. The conductor also corresponds to sulphides noted in the geologic log.

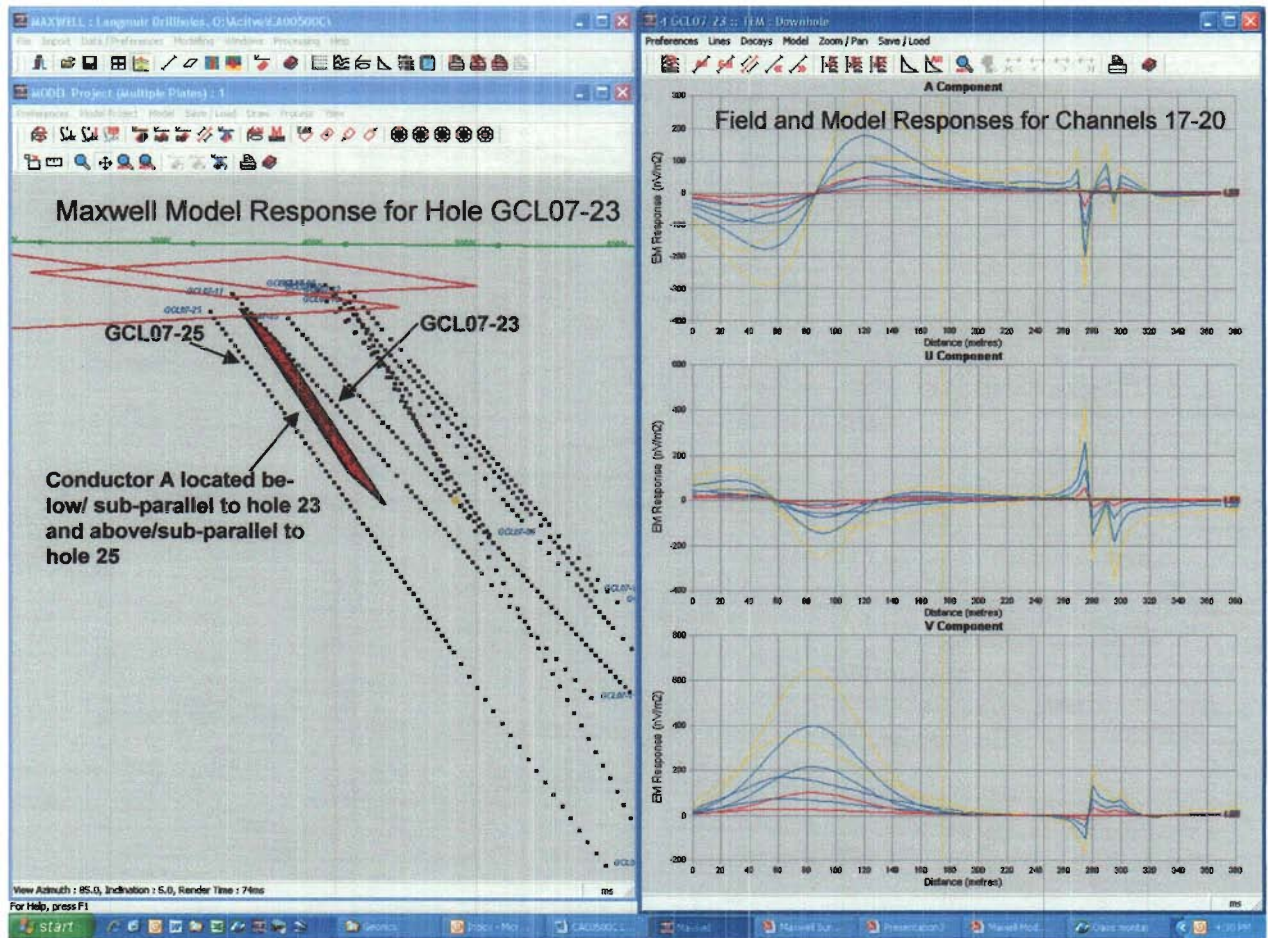
The edge response at 380m indicates the hole has tested the upper edge of a small surface area, strong conductor. Any improvement lies below (down dip) and right (NE) of the hole. This conductor corresponds to graphite noted in the geologic log.

### Hole GCL07-23

Hole GCL07-23 was logged from the surface TEM loop. The TEM log has identified off-hole and in-hole conductors. The off-hole conductor at 100m -115m (Hz crossover) is interpreted as Conductor A from the surface survey. Even though the hole has past over the conductor, as have the other holes (06, 10, 14), the polarity of the response is opposite i.e. Hz negative to positive vs. positive to negative. This is due to the location of the hole relative to the eastern edge of the conductor. This is verified by the strong positive  $H_y$  response. Therefore the centre of the conductor is located grid west and below /behind (down dip) the hole.

The in-hole response at 265m indicates the hole has tested a small area moderate strength conductor, however there is no significant mineralization noted in the geologic log. A geologic unit from 252m to 282m mentions graphite in the log may explain this elevated response.

In-hole responses at 305m and 325m correspond to graphite noted in the geologic log. Any improvement in both these conductors occurs below (down dip) and left (SW) of the hole.



**Figure 10: Maxwell Model Response for Hole GCL07-23**

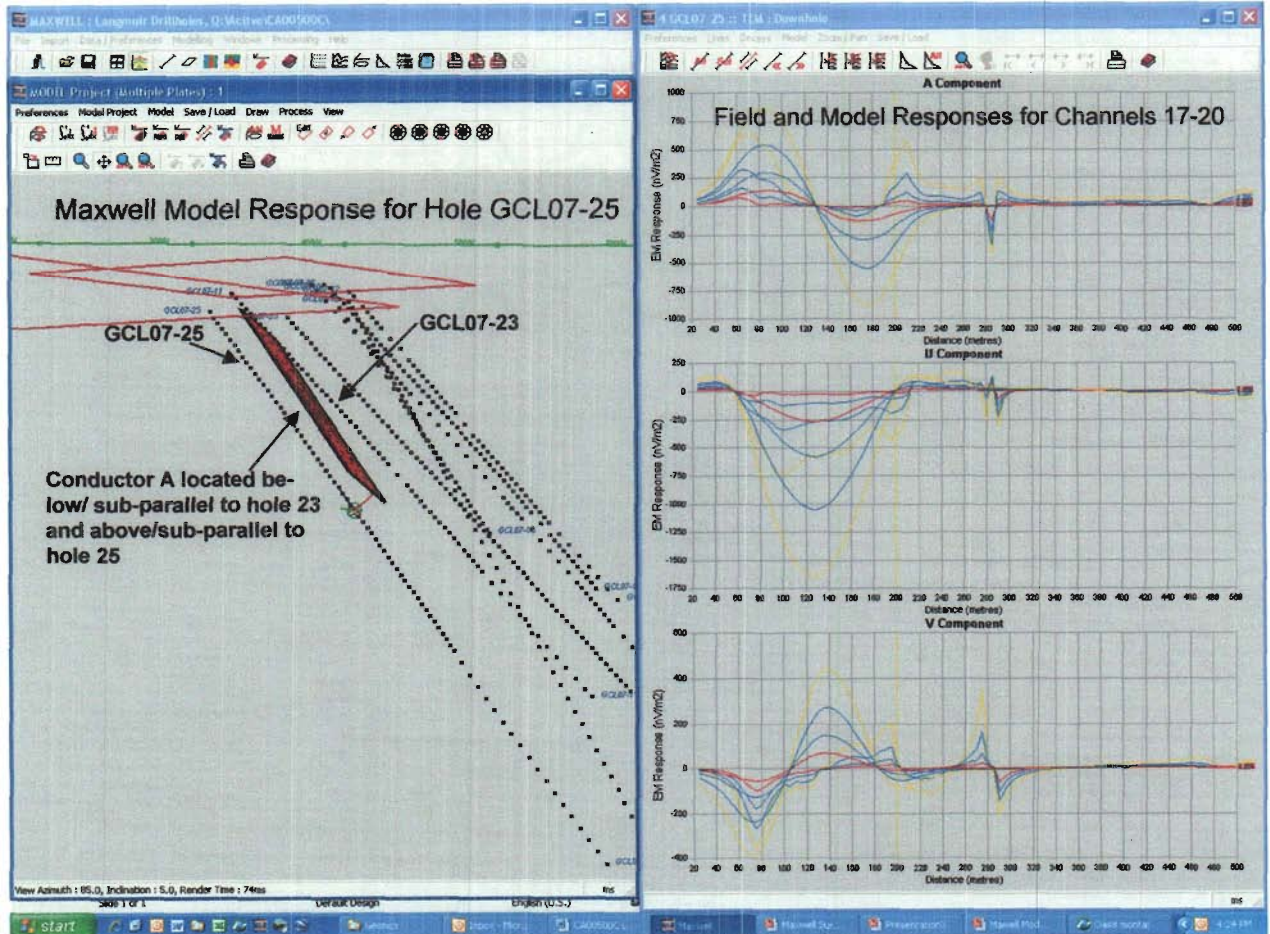
**Hole GCL07-25**

Hole GCL07-25 was also logged from the surface TEM loop. The TEM log has identified off-hole and in-hole conductors. The off-hole conductor at 125 defines Conductor A from the surface survey. The hole has passed beneath (located up dip) the conductor and sub-parallel to it to approximately 165m depth where it is interpreted to end.

The response at 210m indicates the hole has tested the centre region of a moderate to large area conductor. Any improvement in this conductor will be above (up dip) and right (NE) of the hole. This conductor corresponds to graphite and sulphides noted in the geologic log.

The edge response at 285m indicates the hole has tested the eastern edge of a strong, moderate area conductor. Any improvement lies left (SW) of the hole. This conductor corresponds to graphite noted in the geologic log.

An off-hole response at 480m indicates the hole has passed above a small to moderate area conductor. The centre is interpreted to lie approximately 15m below (down dip) and right (NE) of the hole.



**Figure 11: Maxwell Model Response for Hole GCL07-25**

| HOLE     | ANOMALY DEPTH | ANOMALY TYPE | # CHANNELS RESPONDING | ANOMALY POLARITY                                                                   | COMMENTS                                                                                                                                                                                                                                                                                         |
|----------|---------------|--------------|-----------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GCL07-01 | 75 – 80       | Off-hole     | 20                    | H <sub>z</sub> : +ve to –ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : +ve | Strong, small to moderate surface area conductor. Centre lies mainly right (NE) approximately 20m and above (up dip) the hole.                                                                                                                                                                   |
|          | 125           | In-hole      | 13                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : +ve to –ve<br>H <sub>y</sub> : +ve to –ve | Moderate strength, small to moderate surface area conductor tested by hole. There should be evidence of the conductor in the core. Any improvement will lie below (down dip) and right of the hole.                                                                                              |
|          | 140 – 145     | Off-hole     | 20                    | H <sub>z</sub> : –ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : +ve to –ve | Strong, moderate surface area conductor located above (up dip) the hole within 20m.                                                                                                                                                                                                              |
|          | 175           | Edge         | 20                    | H <sub>z</sub> : –ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : –ve to +ve | Hole has tested lower edge of moderate area strong conductor. This small response is part of a larger crossover type H <sub>z</sub> response suggesting the conductor is sub-parallel to the hole. Based on modeling, the centre is interpreted to lie above (up dip) and left (SW) of the hole. |
| GCL07-04 | 165           | Off-hole     | 20                    | H <sub>z</sub> : –ve to +ve<br>H <sub>x</sub> : –ve<br>H <sub>y</sub> : +ve to –ve | Hole has passed above strong, moderate area conductor which sub-parallel the hole. The centre is located approx. 10m below (down dip) and left of the hole.                                                                                                                                      |
| GCL07-06 | 70            | Off-hole     | 20                    | H <sub>z</sub> : +ve to –ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : –ve        | Hole has passed above strong, moderate area conductor. Centre is located approx. 35 – 40 m behind (down dip) the hole.                                                                                                                                                                           |
|          | 110           | Off-hole     | 20                    | H <sub>z</sub> : –ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : –ve to +ve | Small area, strong conductor located approx. 25m above (up dip) and right (NE) of the hole.                                                                                                                                                                                                      |
|          | 150           | In-hole      | 20                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : +ve to –ve<br>H <sub>y</sub> : –ve to +ve | Small area conductor – probably high conductance – late time H <sub>z</sub> goes to 0. Corresponds to sulphides in the hole.                                                                                                                                                                     |
|          | 160           | Edge         | 20                    | H <sub>z</sub> : –ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : +ve to –ve | Strong, small surface area conductor. Corresponds to sulphides in the hole. Any improvement will be above (up dip) and right (NE) of the hole.                                                                                                                                                   |
| GCL07-10 | 70            | Off-hole     | 20                    | H <sub>z</sub> : +ve to –ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : –ve        | Hole has passed above strong, moderate area conductor. Centre is located approx. 35 – 40 m behind (down dip) the hole.                                                                                                                                                                           |
|          | 90            | In-hole      | >20                   | H <sub>z</sub> : +ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : +ve               | Hole has tested centre region of small area, strong conductor. Corresponds to sulphides in the hole. Conductor is interpreted to continue up and down dip in along strike in both directions.                                                                                                    |
|          | 110           | Off-hole     | 20                    | H <sub>z</sub> : –ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : +ve to –ve | Strong conductor located approx. 10m above (up dip) and right (NE) of the hole.                                                                                                                                                                                                                  |
|          | 135           | In-hole?     | 13                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : –ve to +ve<br>H: +ve?                     | Weak, small area conductor tested by hole.                                                                                                                                                                                                                                                       |
|          | 160           | Off-hole     | 15                    | H <sub>z</sub> : –ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : +ve to –ve | Moderate strength, moderate surface area conductor located above (up dip) and right (NE) of the hole 25m.                                                                                                                                                                                        |
|          | 200           | In-hole      | 20                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : +ve to –ve<br>H <sub>y</sub> : +ve to –ve | Strong, moderate area conductor tested by hole. Corresponds to graphite in the hole. Any improvement will be above (up dip) and right (NE) of the hole.                                                                                                                                          |
|          | 260           | In-hole      | 20                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : +ve to –ve<br>H <sub>y</sub> : +ve to –ve | Strong, moderate area conductor tested by hole. Corresponds to graphite in the hole. Any improvement will be above (up dip) and right (NE) of the hole.                                                                                                                                          |
|          | >300          |              |                       |                                                                                    | Building response at end of logged portion of the hole indicates probable conductor below 300m.                                                                                                                                                                                                  |
| GCL07-11 | 45            | In-hole      | 20                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : –ve to +ve<br>H <sub>y</sub> : –ve +ve    | Moderate strength conductor tested by hole. Corresponds to graphite and sulphides in the hole.                                                                                                                                                                                                   |
|          | 65            | In-hole      | 14                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : ?<br>H <sub>y</sub> : –ve to +ve          | Moderate strength, conductor tested by hole. Corresponds to graphite and sulphides in the hole.                                                                                                                                                                                                  |



| HOLE     | ANOMALY DEPTH | ANOMALY TYPE | # CHANNELS RESPONDING | ANOMALY POLARITY                                                                       | COMMENTS                                                                                                                                                      |
|----------|---------------|--------------|-----------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GCL07-11 | 95            | Off-hole     | 20                    | H <sub>z</sub> : +ve to -ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : -ve            | Large surface area conductor sub-parallel hole located below (down dip) and centred along strike. Probably down dip extent of conductor at 45m.               |
|          | 140           | Off-hole     | 17                    | H <sub>z</sub> : -ve<br>H <sub>x</sub> : +ve to -ve<br>H <sub>y</sub> : -ve to +ve     | Small surface area, moderate strength conductor located below (down dip) and probably left (SW) of the hole.                                                  |
|          | 245           | In-hole      | 16                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : -ve to +ve<br>H <sub>y</sub> : +ve            | Small surface area, moderate strength conductor. Corresponds to graphite in the hole.                                                                         |
| GCL07-12 | 45            | Edge         | 20                    | H <sub>z</sub> : +ve/-ve<br>H <sub>x</sub> : -ve to +ve<br>H <sub>y</sub> : +ve to -ve | Small area, strong conductor tested by hole. Corresponds to graphite in the hole. Any improvement lies above (up dip) and right (NE) of the hole.             |
|          | 95            | Edge         | 20                    | H <sub>z</sub> : +ve/-ve<br>H <sub>x</sub> : -ve to +ve<br>H <sub>y</sub> : +ve to -ve | Small area, strong conductor tested by hole. Corresponds to graphite in the hole. Any improvement lies left (SW) of the hole.                                 |
|          | 130           | Off-hole?    | 20                    | H <sub>z</sub> : +ve to -ve<br>H <sub>x</sub> :<br>H <sub>y</sub> : +ve to -ve         | Possible off hole conductor located below (down dip) of the hole.                                                                                             |
|          | >300          |              |                       |                                                                                        | Possible conductor beyond the end of the hole.                                                                                                                |
| GCL07-13 | 45            | Off-hole     | 20                    | H <sub>z</sub> : -ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : +ve to -ve            | Small area, strong conductor located above (up dip) and right (NE) of the hole. Probably related to in-hole conductor in hole 12 at 45m.                      |
|          | 90            | Off-hole     | 20                    | H <sub>z</sub> : +ve to -ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : -ve            | Large surface area conductor sub-parallel hole located below (down dip) and centred along strike. Probably down dip extent of conductor at 45m.               |
|          | 125           | Edge         | 20                    | H <sub>z</sub> : +ve/-ve<br>H <sub>x</sub> : -ve to +ve<br>H <sub>y</sub> : -ve to +ve | Small area, strong conductor tested by hole. Probably related to in-hole conductor in hole 12 at 95m.                                                         |
|          | 205           | Off-hole     | 16                    | H <sub>z</sub> : -ve<br>H <sub>x</sub> : -ve to +ve<br>H <sub>y</sub> : +ve to -ve     | Moderate surface are moderate strength conductor located above (up dip) and right (NE) of the hole. Probably related to in-hole conductor in hole 12 at 130m. |
| GCL07-14 | 65            | Off-hole     | 20                    | H <sub>z</sub> : +ve to -ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : +ve to -ve     | Hole has passed above strong, moderate area conductor. Centre is located approx. 35 – 40 m behind (down dip) the hole. Probably Conductor A.                  |
|          | 230           | In-hole      | 5                     |                                                                                        | Weak in-hole. Corresponds to sulphides in the hole.                                                                                                           |
|          | 290           | Edge         | 20                    | H <sub>z</sub> : -ve<br>H <sub>x</sub> : +ve<br>H <sub>y</sub> : -ve                   | Small area conductor. Corresponds to sulphides in the hole.                                                                                                   |
|          | 380           | Edge         | 20                    | H <sub>z</sub> : -ve<br>H <sub>x</sub> : +ve to -ve<br>H <sub>y</sub> : +ve to -ve     | Small area strong conductor tested by hole. Any improvement will be below (down dip) and right (NE) of the hole. Corresponds to graphite in the hole.         |
| GCL07-23 | 100-115       | Off-hole     | 20                    | H <sub>z</sub> : -ve to +ve<br>H <sub>x</sub> : +ve to -ve<br>H <sub>y</sub> : +ve     | Complex response due to location and attitude of conductor relative to hole. Conductor centre is located below/behind (down dip) and left (SW) of the hole.   |
|          | 265           | In-hole      | 17                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : -ve to +ve<br>H <sub>y</sub> : +ve to -ve     | Hole has tested weak conductor. Poorly resolve H <sub>x</sub> and H <sub>y</sub> .                                                                            |
|          | 305           | Edge         | 20                    | H <sub>z</sub> : +ve/-ve<br>H <sub>x</sub> : +ve to -ve<br>H <sub>y</sub> : -ve to +ve | Hole has test upper edge of strong conductor. Any improvement lies below (down dip) and left (SW) of the hole. Corresponds to graphite in the hole.           |
|          | 325           | Edge         | 20                    | H <sub>z</sub> : +ve/-ve<br>H <sub>x</sub> : +ve to -ve<br>H <sub>y</sub> : +ve to -ve | Hole has test upper edge of strong conductor. Any improvement lies below (down dip) and right (NE) of the hole. Corresponds to graphite in the hole.          |
|          | 350           | Off-hole?    | 20                    | H <sub>z</sub> : +ve to -ve<br>H <sub>x</sub> ?<br>H <sub>y</sub> : -ve                | Possible strong conductor sub-parallel and left of the hole. Very little supporting cross component response.                                                 |
| GCL07-25 | 125           | Off-hole     | 20                    | H <sub>z</sub> : +ve to -ve<br>H <sub>x</sub> : +ve to -ve<br>H <sub>y</sub> : -ve     | Complex anomaly. Large area, strong conductor located sub-parallel, above (up dip) and left (SW) of the drill hole. Conductor A                               |

| HOLE     | ANOMALY DEPTH | ANOMALY TYPE | # CHANNELS RESPONDING | ANOMALY POLARITY                                                                   | COMMENTS                                                                                                                                                                             |
|----------|---------------|--------------|-----------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GCL07-25 | 210           | In-hole      | 20                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : -ve to +ve<br>H <sub>y</sub> : +ve to -ve | Hole has tested centre of strong, moderate area conductor. Any improvements lies above (up dip) and right (NE) of the drill hole. Corresponds to graphite and sulphides in the hole. |
|          | 265           | In-hole      | 12                    | H <sub>z</sub> : +ve<br>H <sub>x</sub> : $\zeta$<br>H <sub>y</sub> : $\zeta$       | Possible weak in-hole conductor.                                                                                                                                                     |
|          | 285           | Edge         | 20                    | H <sub>z</sub> : +ve/-ve<br>H <sub>x</sub> : -ve<br>H <sub>y</sub> : +ve to -ve    | Hole has tested edge of strong, moderate area conductor. Any improvement lies right (NE) of the hole. Corresponds to graphite in the hole.                                           |
|          | 480           | Off-hole     | 20                    | H <sub>z</sub> : -ve<br>H <sub>x</sub> : +ve to -ve<br>H <sub>y</sub> : +ve to -ve | Hole has passed above strong, small to moderate area conductor. Centre lies within 15m below (down dip) and right (NE) of the drill hole.                                            |

**Table VIII: Anomaly Table for Borehole TEM Surveys**

## 5. CONCLUSIONS AND RECOMMENDATIONS

### **Surface and Borehole TEM Surveys in the Vicinity of Holes GCL07-06 to 25**

The surface TEM survey over the Langmuir property was successful in delineating several zones of conductivity. The most significant is Conductor A and based on the results of the borehole TEM survey, it has not been properly tested. Drill hole GCL07-11 appears to have tested the upper edge of the conductor however most of the other holes (06, 10, 12, 13, 14, 23) except 25 have been drilled north of and down dip, and have "overshot" the conductor. The only hole drilled underneath the conductor and logged, is hole GCL07-25 and it also missed. To properly test Conductor A, it is recommended that a hole be drilled grid south to intersect the conductor approximately 75m vertically below line 0, 140N.

Conductor B has not been test tested as well, based on the results of the borehole TEM surveys. Hole GCL07-10 appears to have drilled underneath the conductor based on the off-hole response detected above (up dip) the hole at 160m. This indicates that Conductor B has a limited depth extent and does not extend much below 100m vertical depth. Therefore, if Conductor B is considered geologically favourable, it is recommended that a hole be drilled grid north to intersect the conductor approximately 75m vertically below line 0, 225N.

Conductor C has not been tested based on the holes logged to date. Although this conductor has a short strike length, it has a high conductance and may have a sulphide source. If considered geologically favourable, a hole is recommended to test the conductor approximately 30m vertically below line 150E, 75N.

Hole GCL07-05 was drilled to the test an airborne conductor which corresponds to surface Conductor D. Unfortunately, the hole was not logged due to a blockage and it could not be determined if the conductor had been tested or not. Based on the orientation of the hole (340°), it appears that the hole has passed grid east of the strongest part of the conductor. Therefore, if still considered geologically favourable, a hole is recommended drilling grid north, to test the conductor approximately 25m vertically below line 250W, 337N.

Conductor E appears to have been tested by hole GCL07-12 at 45m. Since hole 13 detected an off-hole conductor located above the hole at 45m it can be concluded that Conductor E has limited depth extent (<40m vertical). Unless considered geologically favourable, further testing of this conductor is not recommended.

In general, the predominant borehole TEM response in holes GCL07-06, 10, 11, 12, 13, 14, 23 and 25 is from Conductor A. All other responses in the holes depict conductors of limited size and varying conductances from moderate to high. In some ways, this confirms the results of the surface survey in that, other than Conductors A and B which remain untested, the remaining conductors, C, D and E model as short strike length, limited depth extent bodies. The sources of the conductors detected in the holes, both in-hole and off-hole and other than Conductor A, also model this style of body. Even the sources of the economic mineralization (holes 06 at 150m and 10 at 90m) produce responses depicting small sources albeit high conductance ones. This may reflect the sporadic nature of continuous massive sulphide or stringer mineralization which should produce larger responses, both in and off-hole.

### **Borehole TEM Surveys in Holes GCL07-01 and 04**

Based on the borehole TEM survey results in hole GCL07-01, the probable source of the airborne response (off-hole conductor at 75m) appears untested. Therefore, a second hole is recommended, drilling north (360°) to intersect the conductor 60m vertically below 500081E, 5348217N (NAD 83). Continuing the hole to approximately 200m depth may very well test the source of the interpreted off-hole conductor at 140m as well. If the possible explanation for the lower conductor (edge response at 175m) is still geologically favourable, then another hole, drilled north to south will be required to properly test the centre of this source. The collar should be set to test the conductor 125m vertically below 500023E, 5348253N (NAD 83).

Based on the borehole TEM survey results in hole GCL07-04, the source of the airborne response (off-hole conductor at 165m) appears untested. Therefore, if considered geologically favourable, a second hole drilled southeast ( $135^{\circ}$ ) should be set to test the conductor 135m vertically below 498074E, 5349505N (NAD 83).

Borehole TEM should continue to be employed to characterize mineralization intersected by drill holes and to determine if other conductors exist off hole within a 50 to 100m radius.

RESPECTFULLY SUBMITTED  
QUANTEC GEOSCIENCE LTD.



A handwritten signature in black ink, appearing to read "S.T. Coulson".

S.T. Coulson, P.Ge.  
Senior Geophysicist

## APPENDIX A


### STATEMENT OF QUALIFICATIONS

I, Sherwood T. Coulson, hereby declare that:

1. I am a consulting geophysicist with residence in Porcupine, Ontario and am presently employed in this capacity with Quantec Geoscience Inc. of Porcupine, Ontario.
2. I am a graduate of Cambrian College, Sudbury, Ontario in 1974 with an Honours Diploma in Geophysical Engineering Technology.
3. I am a practicing member of the Association of Professional Geoscientists of Ontario (Member #0944) since 2003.
4. I have practiced my profession in Europe and North and South America continuously since graduation.
5. I am a member of the Canadian Society of Exploration Geophysicists and the Prospectors and Developers Association.
6. I have no interest nor do I expect to receive any interest, direct or indirect, in the properties or securities of **GOLDEN CHALICE RESOURCES INC.**
7. I supervised the survey execution and reviewed the data as it was collected. I am the author of this report and I interpreted the data. The statements made by me represent my best opinion and judgment based on the information available to me at the time of the writing.



Porcupine, ON  
October 2007

  
S.T. Coulson, P. Geo.  
Senior Geophysicist

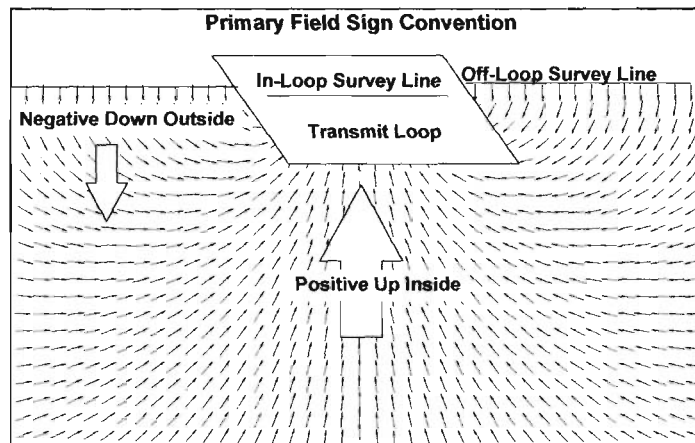
## APPENDIX B

### THEORETICAL BASIS AND SURVEY PROCEDURES

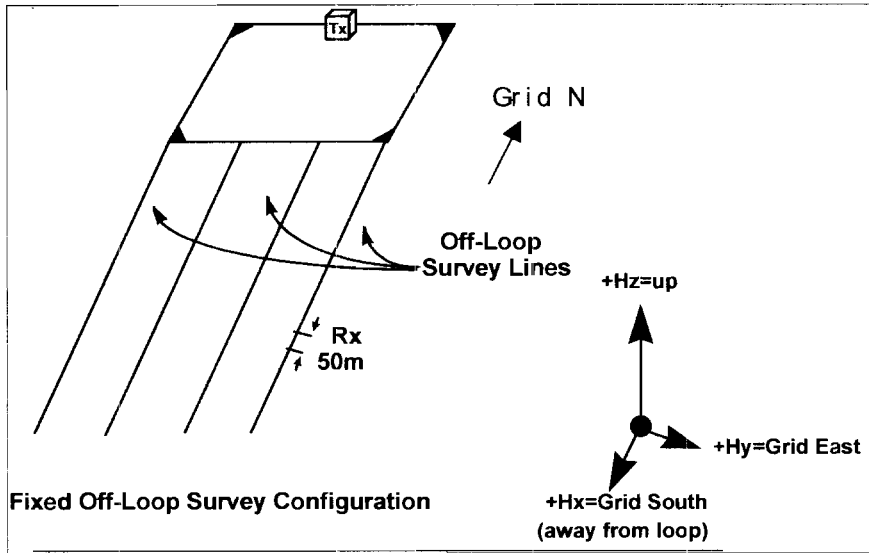
#### TEM SURFACE AND BOREHOLE PROFILING

TEM profiling is conducted on lines either adjacent to (Off-Loop mode) or surrounded by (In-Loop mode) a large fixed rectangular transmit loop. Current is passed through the loop which following the Turn-Off, produces a primary magnetic field (H) both inside and outside (Figure B1). This primary field induces vortex current patterns, which energize conductors and which in turn create their own secondary magnetic field (Bs). The rate of change of the decaying secondary magnetic flux ( $dB_s/dt$ ) is measured as the vertical (Hz), in-line horizontal (Hx) and/or cross line horizontal (Hy) vector components on surface using an air-core sensor coil. These measurements of the TEM decay (20 log-time slices) are taken during the "Off-Time", using a 30 cycle/sec, base repetition rate.

In keeping with the industry standard, the primary field is always considered positive up inside the loop and negative down outside. Similarly, for secondary EM fields, the receiver coil is oriented positive vertical up for the Hz component. The convention for In-Loop surveys, has the in-line component, Hx oriented either positive east (for grid EW lines) or north (for grid NS lines). The Off-Loop survey convention differs, with the receiver coil orientation for Hx pointing positive away from the transmit loop (for EW or NS lines). Finally, the sign convention in all cases, has the Hy component pointing positive orthogonal to the left of the Hx, according to the right-hand-rule.



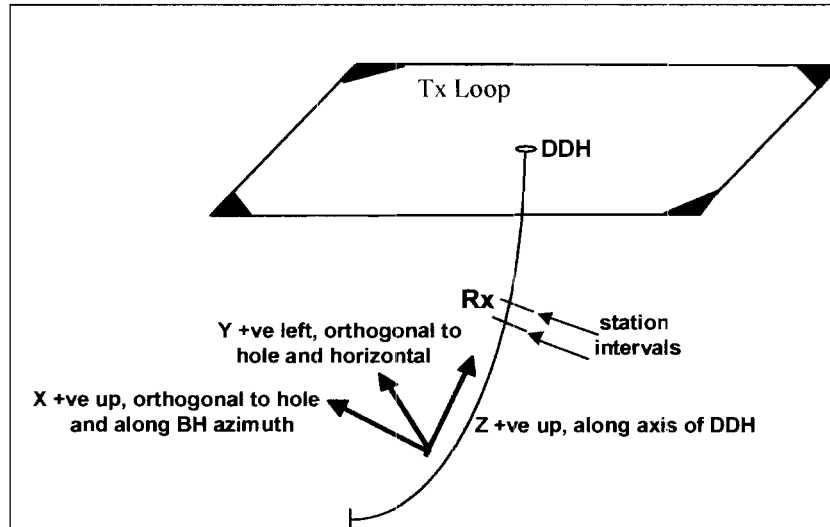
***Figure B1: Primary field sign convention for TEM surveys.***



**Figure B2: Loop Configuration and Polarity Conventions for Off-Loop Profiling Surveys**

The borehole survey is particularly useful to determine the geometrical relationship between a conductor or a complex swarm of conductors around the drill hole. Of particular importance is its application in cases where the drilling is believed to have missed the target of interest. A 3-D borehole survey can effectively determine the direction and distance from the drill hole to the conductor by measuring two orthogonal secondary field components in addition to the axial component. Additionally, conductors located below the end of a drill hole, which either may be too deep and/or have gone previously undetected from surface, may be discovered during the course of a borehole survey.

The probe is manually lowered down the borehole at the end of a cable and, at successive depths, measurements of three (3-D) orthogonal components of the TEM field ( $H_x$ ,  $H_y$ ,  $H_z$ ) are individually obtained in succession by electronically switching the sensor coils in the borehole antenna through the use of a relay/switching system from surface, via the borehole-cable shield. As the probe is free to rotate on its vertical axis, a correction is later applied to the 3-D data in order to rotate the components into their respective coordinate axis.



**Figure B3: Loop Configuration and Polarity Conventions for 3-D Borehole Surveys**

The secondary fields induced decay at a rate proportional to the conductivity-thickness and are then measured and profiled by the borehole sensor-probe.

- a)  $H_z$  is positive up along the axis of borehole,

- b) H<sub>x</sub> is positive perpendicular to the borehole axis and pointing upward, in a vertical plane, in the direction of the azimuth of the hole.
- c) H<sub>y</sub> is positive 90° counterclockwise to H<sub>x</sub> and horizontal, according to the right-hand rule.

At the end of each survey day, the stored data are transferred to a microcomputer where they corrected for the turn-off time, loop area, system gain and current, and converted from millivolts to nanoVolts per ampere meter squared or nanoVolts per meter squared. The data are then transferred to disk for storage and processing. Report quality field plots are generated on site, using a 24-pin printer in order to monitor the data characteristics and to provide a preliminary interpretation capability.

The following equations govern the transient EM response for buried plate-like conductive bodies<sup>1</sup>

$$emf = \frac{1}{\tau} e^{-t/\tau}$$

**Target Response to Transmitter Current Waveform: where:  $t$  = fixed time**

**$e$  = exponential decay**

**$\tau$  = time constant of conductor**

**Equation 1: Conductor Response to the Transient EM Waveform**

The time constant of the response is alternatively defined as the slope of the lin-log decay curve (Geonics) or, more exactly, as the time channel where the amplitude of the decay collapses to 37% (1/e) of its maximum value. Both  $\tau$  and the analogous decay strength (i.e., the number of anomalous channels above background), are commonly used as indicators of conductor quality. This relationship between decay-strength and the conductivity-thickness can easily be demonstrated in the following equation for a vertically dipping conductive sheet:

$$\tau = \frac{\sigma\mu h}{\pi^2} \text{ for a thin plate}$$

**where  $\sigma$  = conductivity of target**

**$\mu$  = magnetic susceptibility**

**$t$  = thickness of plate**

**$h$  = vertical extension of plate**

**Equation 2: Transient EM Decay Time Constant**

<sup>1</sup> From Geonics Limited, EM-37 TEM System Design Parameter, Mississauga, Ont., 1982.



*thereby giving, for an infinite vertical sheet:*

$$\sigma t = \frac{\pi^2}{\mu h} \tau \approx \tau / 0.31 \text{ mhos / metre (siemens)}$$

**Equation 3 Conductivity Thickness**

From these equations and relationships, it therefore becomes obvious of the common use of the anomaly strength of decay as a simple, rule-of thumb indicator of the relative conductivity-thickness product for TEM surveys.

In addition, the total secondary field is calculated using the three components (Hx, Hy and Hz) in the following formula

$$H_{tot} = \sqrt{H_x^2 + H_y^2 + H_z^2} \text{ nanoVolt / Am}^2$$

**Equation 4: Transient EM Total Secondary Field**

## APPENDIX C

### INSTRUMENT SPECIFICATIONS

**Geonics Limited**  
**Digital Protem Ground Transient Electromagnetic System**  
**Technical Specifications**

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#### Receiver

**Measured Quantity:** Time rate of decay of magnetic flux along 3 axes

**Sensors:**

1. (L.F.): Air-cored coil of bandwidth 60 kHz; 100 cm diameter
2. (H.F.): Air-cored coil of bandwidth 850 kHz; 100 cm diameter
3. (3D-3): Three orthogonal component sensor; simultaneous operation
4. (3D-1): Three orthogonal component sensor; sequential operation

**Time channels:** 20 geometrically spaced time gates for each base frequency gives range from 6  $\mu$ sec to 800 msec.

**Repetition Rate:** 0.3 Hz, 0.75, 3, 7.4, 30, 75 or 285 Hz for 60 Hz power-line networks (Base Frequency)

**Synchronization:** 1) reference cable.  
2) high stability (oven controlled) quartz crystals. (Switch selectable)

**Integration time:** 2, 4, 8, 15, 30, 60, 120, 240 sec.

**Calibration:** Internal self-calibration  
External Q coil calibration (optional)

**Keyboards:** Two 3 x 4 matrix sealed key pads with positive tactile feedback

**Gain:** Automatic or manual control

**Dynamic Range:** 23 bits (132 dB)

**Display Quantity:**

- (1) Table of time rate of decay of magnetic flux (dB/dt)
- (2) Curve of rate of decay of magnetic flux (dB/dt)
- (3) Table of apparent resistivity ( $\rho_a$ )
- (4) Curve of apparent resistivity ( $\rho_a$ )
- (5) Profile of dB/dt
- (6) Real time noise monitor
- (7) Calibration curve
- (8) Data acquisition statistics (real time)

**Storage:** Solid state memory with capacity for over 3000 data sets

**Display:** 8 lines by 40 character (240 x 64 dot) graphic LCD

**Data Transfer:** Standard RS-232 communications port.

**Processor:** CMOS 68HC000 8 MHz CPU

**Receiver Battery:** 12 volts rechargeable battery for 8 hours continuous operation. 6 hours in XTAL mode

Receiver Size: 34 x 38 x 27 cm

Receiver Weight: 15 kg

Operating Temp.: -40°C to +50°C

Transmitters:  
(1) Geonics TEM47  
(2) Geonics TEM57  
(3) Geonics TEM37

| 30 gate mode | 30/25Hz |        |       | 7.5/6.25Hz |        |       | 3/2.5Hz |        |       |
|--------------|---------|--------|-------|------------|--------|-------|---------|--------|-------|
|              | start   | center | width | start      | center | width | start   | center | width |
| 1            | 5.800   | 6.800  | 2.000 | 32.00      | 36.00  | 8.000 | 80.00   | 90.00  | 20.00 |
| 2            | 7.800   | 9.110  | 2.625 | 40.00      | 45.25  | 10.50 | 100.0   | 113.1  | 26.25 |
| 3            | 10.40   | 12.00  | 3.250 | 50.50      | 57.00  | 13.00 | 126.3   | 142.5  | 32.50 |
| 4            | 13.70   | 15.90  | 4.375 | 63.50      | 72.25  | 17.50 | 158.8   | 180.6  | 43.75 |
| 5            | 18.00   | 20.80  | 5.500 | 81.00      | 92.00  | 22.00 | 202.5   | 230.0  | 55.00 |
| 6            | 23.50   | 27.00  | 7.000 | 103.0      | 117.0  | 28.00 | 257.5   | 292.5  | 70.00 |
| 7            | 30.50   | 34.80  | 8.500 | 131.0      | 148.0  | 34.00 | 327.5   | 370.0  | 85.00 |
| 8            | 39.00   | 44.40  | 10.75 | 165.0      | 186.5  | 43.00 | 412.5   | 466.3  | 107.5 |
| 9            | 49.80   | 56.30  | 13.00 | 208.0      | 234.0  | 52.00 | 520.0   | 585.0  | 130.0 |
| 10           | 62.80   | 70.30  | 15.00 | 260.0      | 290.0  | 60.00 | 650.0   | 725.0  | 150.0 |
| 11           | 77.80   | 85.90  | 16.25 | 320.0      | 352.5  | 65.00 | 800.0   | 881.3  | 162.5 |
| 12           | 94.10   | 104.7  | 21.25 | 385.0      | 427.5  | 85.00 | 963.0   | 1069   | 212.5 |
| 13           | 115.3   | 129.1  | 27.50 | 470.0      | 525.0  | 110.0 | 1175    | 1313   | 275.0 |
| 14           | 142.8   | 159.7  | 33.75 | 580.0      | 647.5  | 135.0 | 1450    | 1619   | 337.5 |
| 15           | 176.6   | 198.4  | 43.75 | 715.0      | 802.5  | 175.0 | 1788    | 2006   | 437.5 |
| 16           | 220.3   | 248.6  | 56.25 | 890.0      | 1002.5 | 225.0 | 2225    | 2506   | 562.5 |
| 17           | 276.6   | 312.3  | 71.25 | 1115       | 1257.5 | 285.0 | 2790    | 3144   | 712.5 |
| 18           | 347.8   | 393.5  | 91.25 | 1400       | 1582.5 | 365.0 | 3500    | 3957   | 912.5 |
| 19           | 439.0   | 497.1  | 116.2 | 1765       | 1997.5 | 465.0 | 4413    | 4994   | 1162  |
| 20           | 555.3   | 629.0  | 147.5 | 2230       | 2525.0 | 590.0 | 5575    | 6313   | 1475  |
| 21           | 702.8   | 797.3  | 188.7 | 2820       | 3197.5 | 755.0 | 7050    | 7994   | 1887  |
| 22           | 891.5   | 1012   | 240.0 | 3575       | 4055.0 | 960.0 | 8940    | 10138  | 2400  |
| 23           | 1131    | 1285   | 306.2 | 4535       | 5147.5 | 1225  | 11338   | 12870  | 3062  |
| 24           | 1438    | 1634   | 391.2 | 5760       | 6542.5 | 1565  | 14400   | 16350  | 3913  |
| 25           | 1829    | 2079   | 498.7 | 7325       | 8322.5 | 1995  | 18310   | 20806  | 4987  |
| 26           | 2328    | 2645   | 636.2 | 9320       | 10592  | 2545  | 23300   | 26475  | 6363  |
| 27           | 2964    | 3370   | 812.5 | 11865      | 13490  | 3250  | 29663   | 33725  | 8125  |
| 28           | 3776    | 4295   | 1036  | 15115      | 17187  | 4145  | 37800   | 42975  | 10362 |
| 29           | 4813    | 5473   | 1321  | 19260      | 21902  | 5285  | 48150   | 54750  | 13212 |
| 30           | 6134    | 6978   | 1685  | 24545      | 27915  | 6740  | 61360   | 69800  | 16850 |
|              | 7819    |        |       | 31285      |        |       | 78200   |        |       |

Note: All times in microseconds

**Table C1: Digital Protem Gate Locations**

This Table applies to both synchronization modes regardless of which of TEM37, TEM47 and TEM57 transmitters is used, provided that correct Tx model is selected in Header (2.4).

Note: 7.5/6.25 and 0.75/0.625 Hz proportional to 75/62.5 Hz  
3/2.5 and 0.3/0.25 Hz proportional to 30/25 Hz

**Geonics Limited**  
**EM-37 Transient Electromagnetic Transmitter**  
**Technical Specifications**

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|                           |                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Current Wave form:</b> | bipolar square wave.                                                                                                                                                                                                                                                                                            |
| <b>Repetition Rate:</b>   | 3Hz, 7.5Hz or 30Hz in countries using 60Hz power line frequency; 2.5Hz, 6.25Hz or 25Hz in countries using 50Hz power line frequency; all six base frequencies are switch selectable.                                                                                                                            |
| <b>Turn-off Time(t):</b>  | fast linear turn-off maximum of 450 $\mu$ sec. at 30 amps into a 300x600 meter loop. Decreases proportionally with current and the root of the loop area to a maximum of 20 $\mu$ sec. Actual value of t read on front panel meter.                                                                             |
| <b>Transmitter Loop:</b>  | any dimensions from 40x40 meters to 300x600 meters maximum at 30 amps. Larger dimensions at reduced current. Transmitter output voltage switch adjustable for smaller loops. Value of loop resistance read from front panel meter; resistance must be greater than 1 ohm on lowest setting to prevent overload. |
| <b>Protection:</b>        | circuit breaker protection against input over voltage; instantaneous solid state protection against output short circuit; automatically resets on removal of short circuit. Input voltage output voltage and current indicated on front panel meter.                                                            |
| <b>Output voltage:</b>    | 24 to 160 volts (zero to peak) maximum                                                                                                                                                                                                                                                                          |
| <b>Output power:</b>      | 2800 watt maximum                                                                                                                                                                                                                                                                                               |
| <b>Motor generator:</b>   | 5 HP Honda gasoline engine coupled to a 120 volt, three phase, 400 Hz alternator. Approximately 8 hours continuous operation from built-in fuel tank.                                                                                                                                                           |

**Component Dimensions and Weights**

|                              |                          |
|------------------------------|--------------------------|
| <b>Transmitter Console :</b> | 20 by 42 by 32 cm, 20 kg |
| <b>GPU:</b>                  | 44 by 32 by 21 cm, 65 kg |

**GEONICS LIMITED**

**BH-43 3-D Borehole Probe with Tilt Sensors  
Technical Specifications**

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|                                                |                                                                                     |
|------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Measured Quantity:</b>                      | Time derivative of axial and radial magnetic field                                  |
| <b>Sensors:</b>                                | Three orthogonal coils (one axial, two radial)                                      |
| <b>Overall Length:</b>                         | 334 cm                                                                              |
| <b>Maximum Diameter:</b>                       | 3.8 cm                                                                              |
| <b>Weight:</b>                                 | 9.5 kg                                                                              |
| <b>Sensor-Preamplifier Resonant Frequency:</b> | 10 kHz                                                                              |
| <b>Sensor Areas:</b>                           | 100 m <sup>2</sup>                                                                  |
| <b>Operating Temperature:</b>                  | -30 degrees C to +80 degrees C                                                      |
| <b>Probe Rotation Correction:</b>              | Two orthogonal tilt meters with range $\pm 1^\circ$ to $\pm 80^\circ$ from vertical |
| <b>Battery:</b>                                | Rechargeable NiCd sealed pack for 15 hours continuous operation                     |

**Cable**

|                  |                                                          |
|------------------|----------------------------------------------------------|
| <b>Type:</b>     | Two-conductor shield polyurethane jacket Kevlar membrane |
| <b>Diameter:</b> | 5.6 mm                                                   |
| <b>Weight:</b>   | 40 kg/km                                                 |
| <b>Length:</b>   | 540m                                                     |

**APPENDIX D**

**PRODUCTION LOG**

| Date      | Description                                                                                                                                                                                                                                      | Line/Hole #      | Start          | End            | Total (m)  |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|----------------|------------|
| 24-May-07 | Located holes 5 and 6. Dummy probed hole 5 but blocked at 5m due to mud in the casing - it appears casing came apart. Move to hole 6 and dummied clear to bottom. Laid 200m loop around hole ready to survey tomorrow.                           |                  |                |                |            |
| 25-May-07 | Logged hole 6. Moved all gear to hole 4.                                                                                                                                                                                                         | GCL07-06         | 10             | 223            | 213        |
| 26-May-07 | Dummy probed hole 4 to 260m where is was blocked. Layed 200m loop and logged hole. Moved gear back to road to hole 3.                                                                                                                            | GCL07-04         | 30             | 260            | 230        |
| 28-May-07 | Moved all gear into hole 3. Dummy probed but hole blocked at 50m. Moved all gear to hole 2. Dummy probed clear to 250m. Layed 200m loop ready to log tomorrow.                                                                                   |                  |                |                |            |
| 29-May-07 | Logged hole 1 then moved to hole 2. Dummy probed to bottom but hit obstructions at 60m and 150m on way down. Dummy probe jammed at 150 on the way back up and had to shear pin. Decided not to log hole - too dangerous.                         | GCL07-01         | 10             | 249            | 239        |
| 17-Jul-07 | Mob to property. Set up 200m x 200m. Dummy holes 12 and 13. Log hole 12.                                                                                                                                                                         | GCL07-12         | 15             | 300            | 285        |
| 18-Jul-07 | Logged hole 13, moved dummied (blocked at 300m) and logged hole 10.                                                                                                                                                                              | GCL07-13         | 15             | 457            | 432        |
| 19-Jul-07 | Dummy and log holes 11 and 14 to bottom. Pack up gear and loop and remove from property.                                                                                                                                                         | GCL07-14         | 15             | 400            | 385        |
|           |                                                                                                                                                                                                                                                  | GCL07-11         | 15             | 397            | 382        |
| 05-Sep-07 | Locate grid. Met with drillers to discuss safety issues. Install a 300 x 550m loop from L3W to L2+50E. Hang wire above drillers machines. No survey                                                                                              |                  |                |                |            |
| 06-Sep-07 | Start TEM Surface Survey (30Hz high frequency). Use 2min integration and 12.5m station spacing.                                                                                                                                                  | L0+00<br>L0+50E  | 2+00S<br>2+00S | 200<br>3+00N   | 200<br>500 |
| 07-Sep-07 | TEM Survey (high frequency) Transmitter failed in early afternoon. Return to Timmins for repairs.                                                                                                                                                | L0+00            | 0+00           | 2+50N          | 250        |
| 08-Sep-07 | Heavy rain all day. Attempted to access grid at 8:00am and again at 11:00am but too much rain to survey.                                                                                                                                         |                  |                |                |            |
| 09-Sep-07 | TEM Survey (high frequency)                                                                                                                                                                                                                      | L1+00E<br>L1+50E | 2+00S<br>2+00S | 2+75N<br>2+00N | 475<br>400 |
| 10-Sep-07 | TEM Survey (high frequency)                                                                                                                                                                                                                      | L2+00E<br>L2+50E | 2+00S<br>0+00  | 1+50N<br>1+25N | 350<br>125 |
| 11-Sep-07 | TEM Survey (high frequency)                                                                                                                                                                                                                      | L0+50W<br>1+00W  | 2+50S<br>0+00  | 3+25N<br>3+50N | 575<br>350 |
| 12-Sep-07 | TEM Survey (high frequency)                                                                                                                                                                                                                      | L1+00W<br>L2+00W | 2+00S<br>2+00S | 0+00<br>3+75N  | 200<br>575 |
| 13-Sep-07 | TEM Survey (high frequency)                                                                                                                                                                                                                      | L1+50W<br>L2+50W | 2+00S<br>2+00S | 3+50N<br>0+00  | 550<br>200 |
| 14-Sep-07 | TEM Survey (high frequency)                                                                                                                                                                                                                      | L2+50W<br>L3+00W | 0+00<br>0+00   | 4+00N<br>3+75N | 400<br>375 |
| 15-Sep-07 | Tested new fluxgate and induction coils at 3Hz. Obvious problems with data are unresolved.                                                                                                                                                       |                  |                |                |            |
| 16-Sep-07 | Used 2 receivers to compare coils and attempt to resolve data issues. After discussions with Woody conclude there are software issues with receiver in 30 channel mode using the 3D-3 coil. Induction Coil - 3Hz. Data will have to be repeated. |                  |                |                |            |
| 17-Sep-07 | Used 2 receivers. Induction Coil - 3Hz                                                                                                                                                                                                           | L0+00            | 2+00S          | 3+50N          | 550        |
|           | TEM Survey Induction Coil - 3Hz                                                                                                                                                                                                                  | L0+50W           | 2+50S          | 3+25N          | 575        |
|           | TEM Survey Induction Coil - 3Hz                                                                                                                                                                                                                  | L0+50E           | 2+00S          | 3+00N          | 500        |
|           | More tests with fluxgate coil.                                                                                                                                                                                                                   |                  |                |                |            |
| 18-Sep-07 | Stopped using fluxgate coil due to questionable data. Continue using Induction Coil for remainder of 3Hz survey.                                                                                                                                 | L1+50W<br>L2+00W | 2+00S<br>2+00S | 3+50N<br>2+75N | 550<br>475 |
| 19-Sep-07 | Continue survey with 2 receivers and Induction Coils at 3Hz.                                                                                                                                                                                     | L2+50W<br>L1+00W | 2+00S<br>2+00S | 4+00N<br>3+50N | 600<br>550 |
| 20-Sep-07 | Lost half day due to transmitter problems but used 2 receivers to                                                                                                                                                                                | L3+00W           | 0+00           | 3+75N          | 375        |

|           |                                                          |          |       |       |     |
|-----------|----------------------------------------------------------|----------|-------|-------|-----|
|           | compensate.                                              |          |       |       |     |
|           |                                                          | L1+00E   | 2+00S | 2+75N | 475 |
| 21-Sep-07 | Use 2 receivers to complete survey. Induction Coil - 3Hz | L2+50E   | 0+00  | 1+25N | 125 |
|           |                                                          | L2+00E   | 2+00S | 1+50N | 350 |
|           |                                                          | L1+50E   | 2+00S | 2+00N | 400 |
| 22-Sep-07 | BHTEM Survey (30 gates- 30Hz) using surface loop.        | GCR25-07 | 25    | 500   | 475 |
| 23-Sep-07 | BH-TEM Survey (30 gates- 30Hz) using surface loop.       | GCR23-07 | 15    | 400   | 385 |
| 24-Sep-07 | Recover loop and equipment and demob to Timmins          |          |       |       |     |

**APPENDIX E**

**LIST OF MAPS**

- **LPTM Surface Profiles:** Multi-Channel 4-Axis Profile Plots: showing time rate of decay of the secondary electromagnetic field, for X, Y and Z, 1:5000 scale, ch. 1-20 divided according to 4 vertical (linear) axes, nV/Am<sup>2</sup>
- **LPTM Borehole Profiles:** Multi-Channel 4-Axis and LinLog Profile Plots: showing time rate of decay of the secondary electromagnetic field, for X, Y, Z and Total Field components, 1:2000 scale, ch. 1-20 divided according to 4 vertical (linear) axes and ch 1-20 from a single axis, nV/m<sup>2</sup>

Drawing #s: **CA00500C-4AXIS-K-Line#**, where K=Z, X, Y  
**CA00500C-BH4AXIS-TILT-K-Borehole#**, where K=Z, X, Y, TF (Total Field).  
**CA00500C-BHLL-TILT-K-Borehole#**, where K=Z, X, Y, TF (Total Field)

| LINES/BOREHOLES                   | TOTAL PROFILES |
|-----------------------------------|----------------|
| Lines 300W to 250E (30Hz and 3Hz) | 72             |
| GCL07-06                          | 8              |
| GCL07-10                          | 8              |
| GCL07-11                          | 8              |
| GCL07-12                          | 8              |
| GCL07-13                          | 8              |
| GCL07-14                          | 8              |
| GCL07-23                          | 8              |
| GCL07-25                          | 8              |

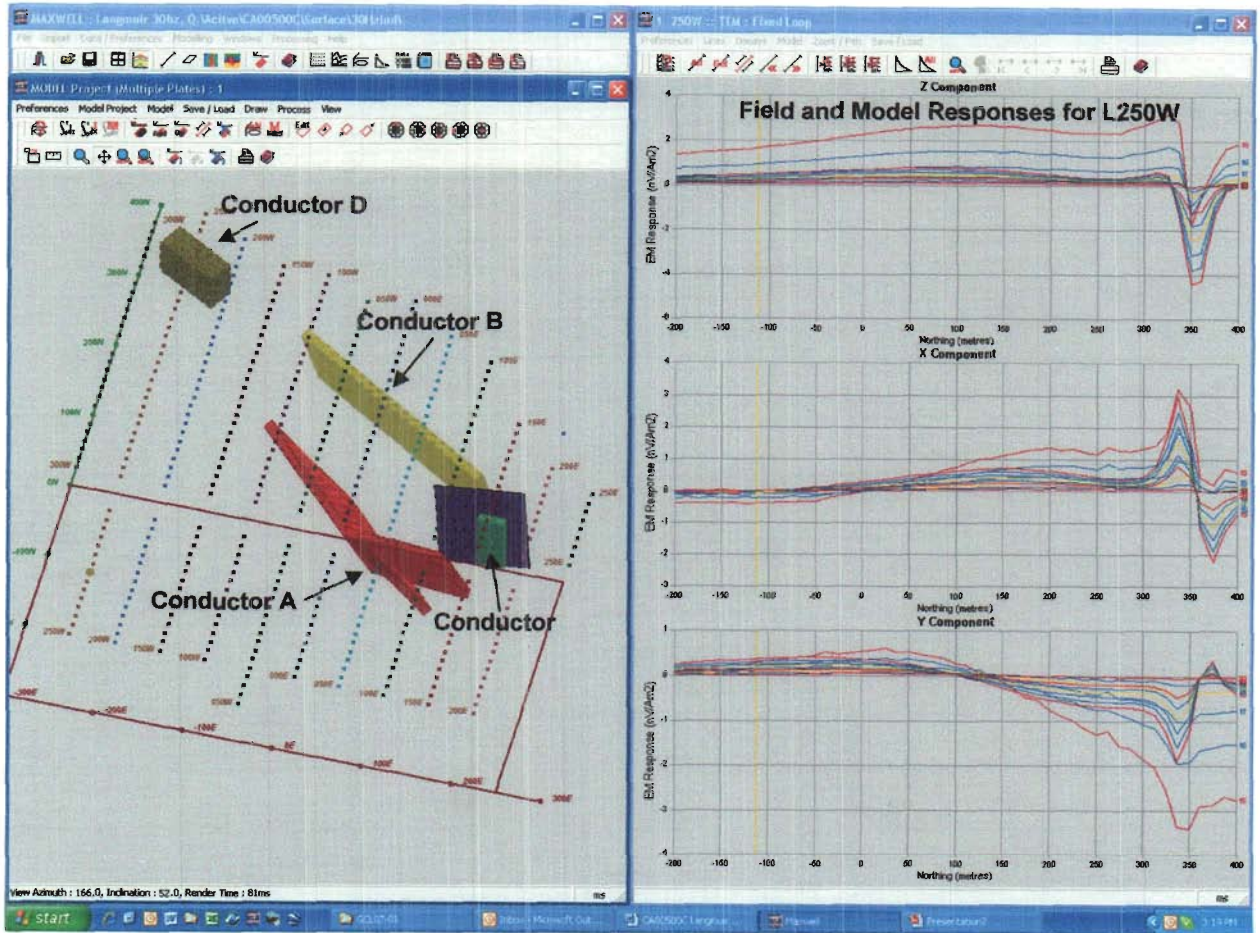
- **Plan Map -** Interpretation Plan Map: showing conductor axes  
Drawing #: **CA00500C -TEM-INTERP**

**Total Profiles: 112**  
**Total Plans: 1**

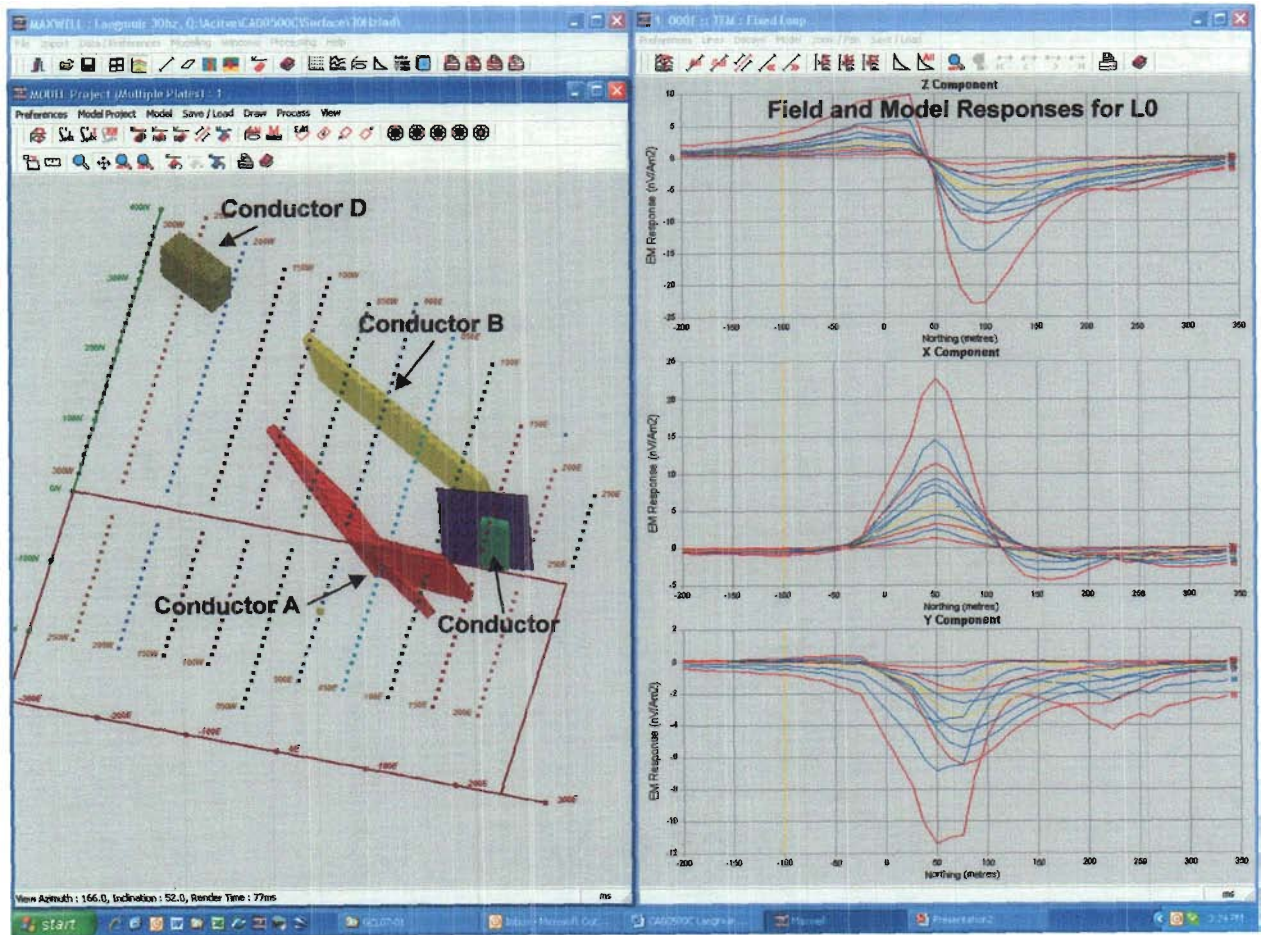


**APPENDIX F**

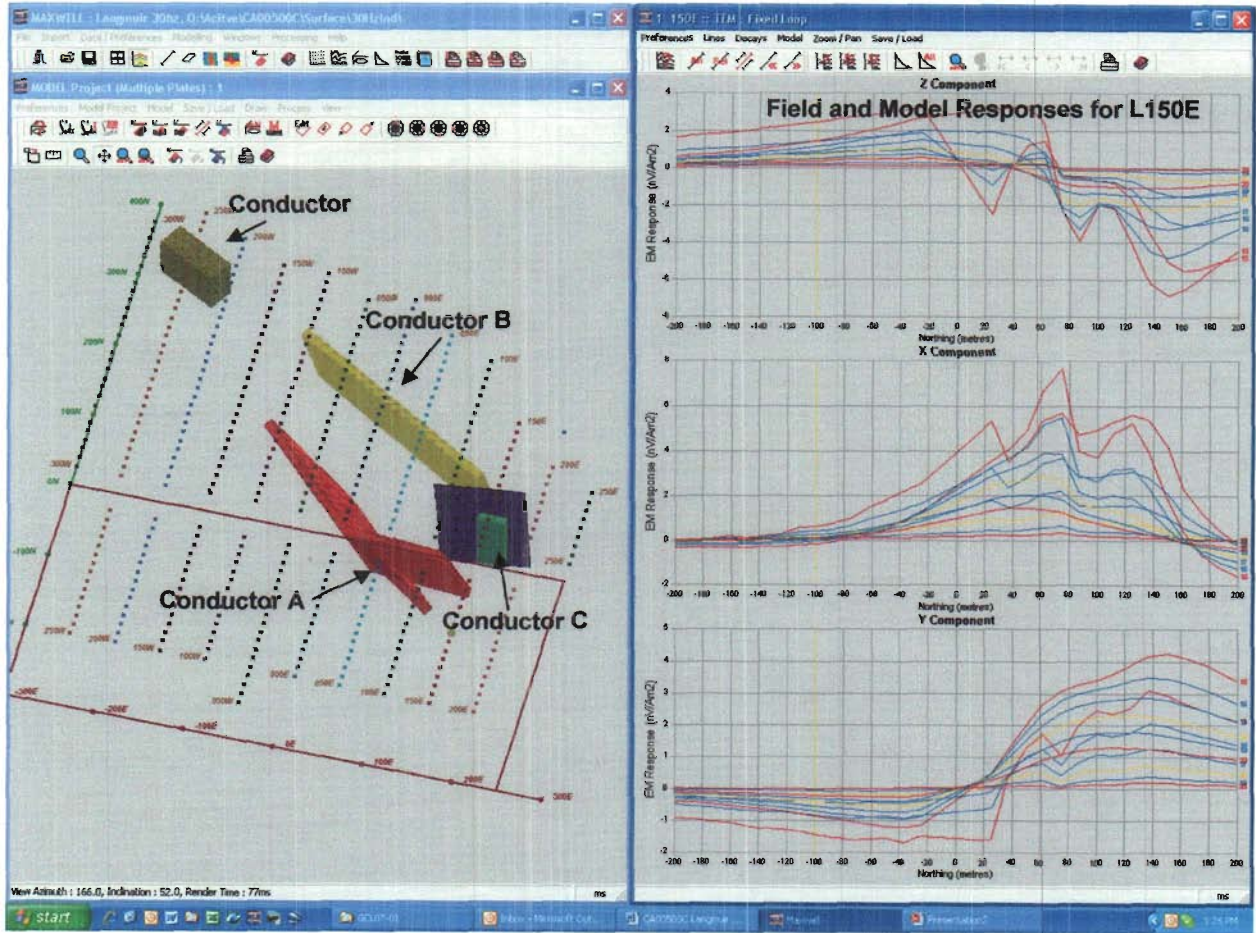
**MODELS, PROFILES, PLAN MAPS**



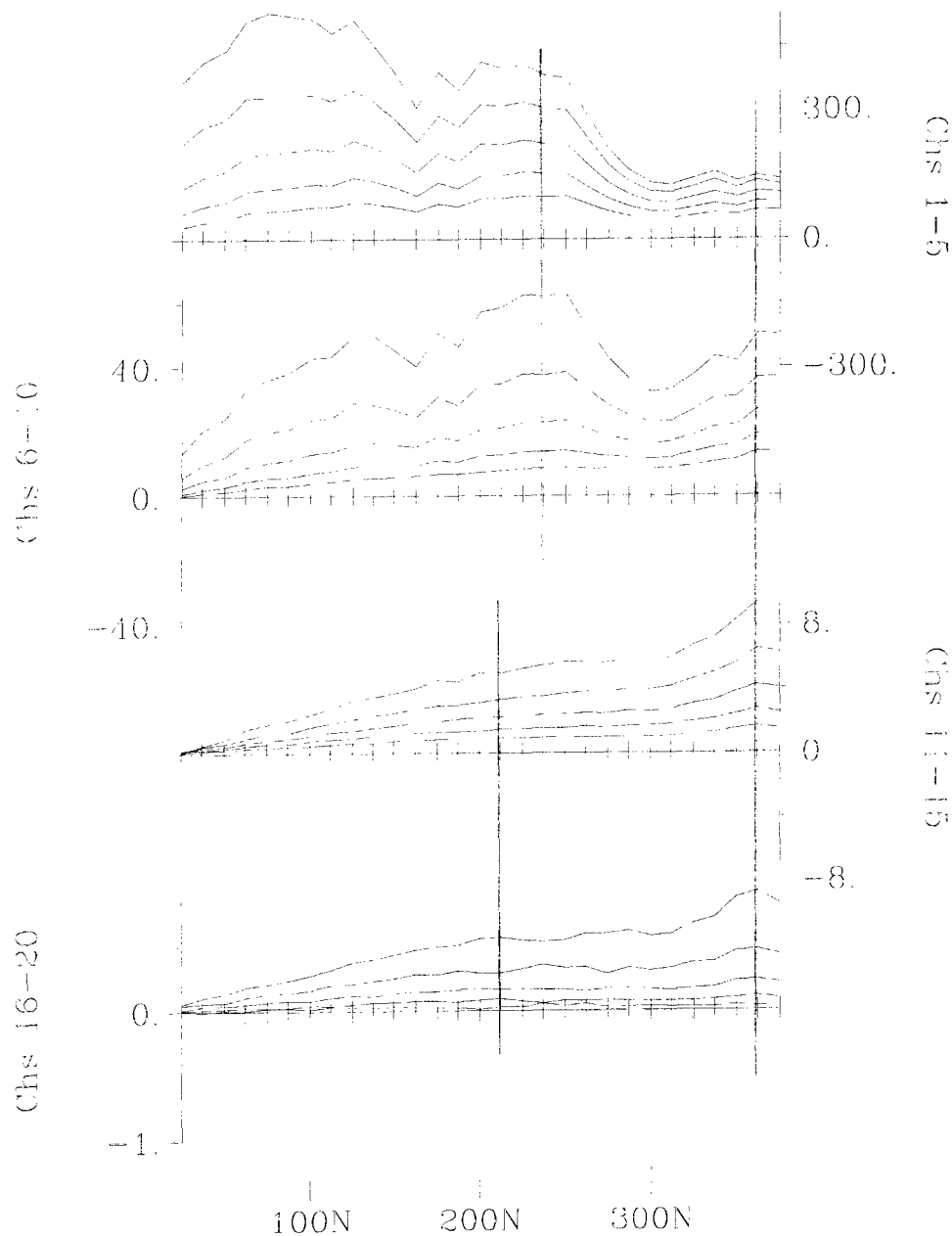
MAXWELL MODEL RESULTS FOR LINE 250W



MAXWELL MODEL RESULTS FOR LINE 0

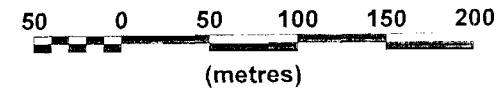


MAXWELL MODEL RESULTS FOR LINE 150E



**Line 300W - X Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

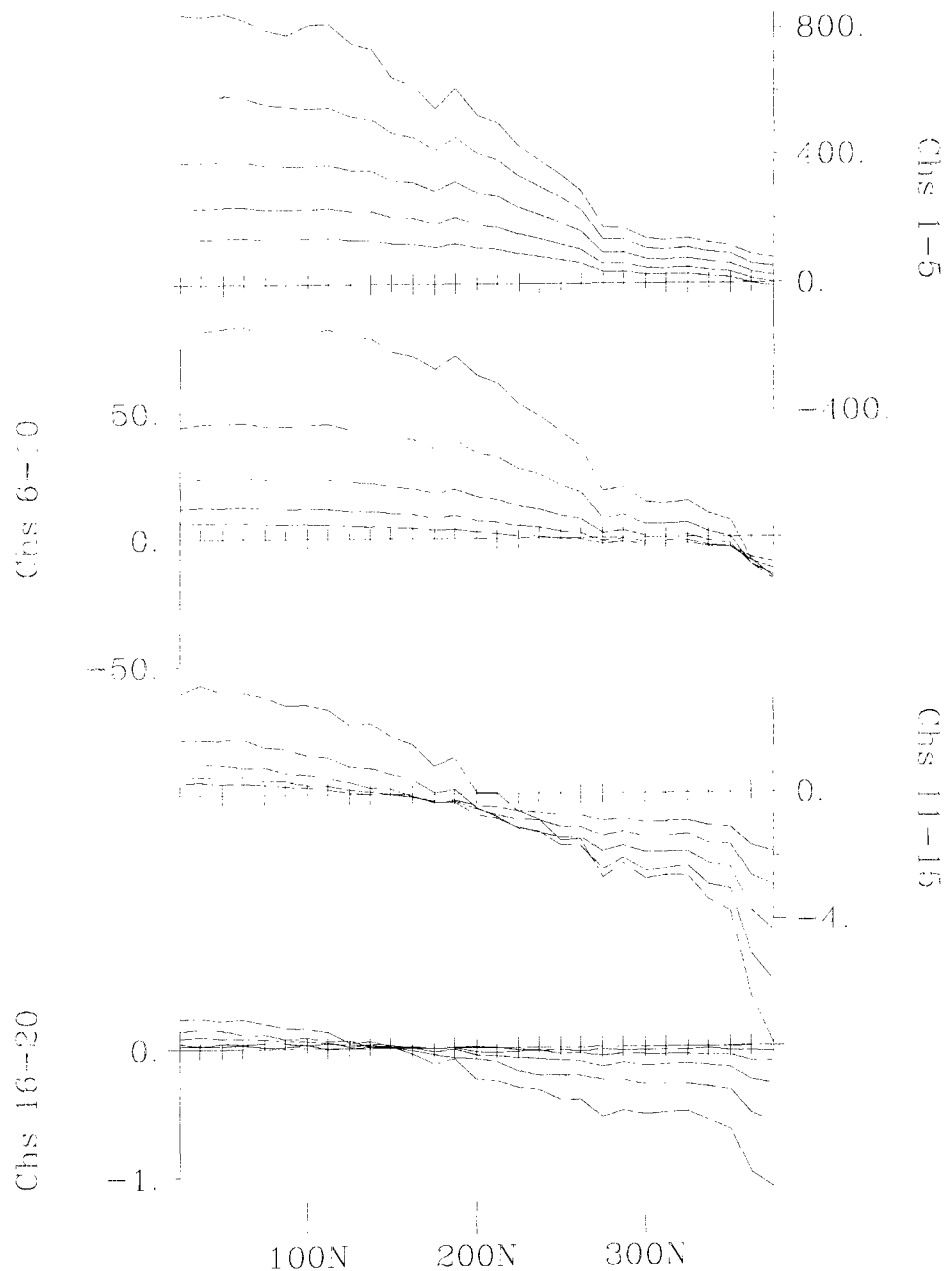
|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W @ 0+00 ; L2+50E @ 3+00S                                |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 14, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



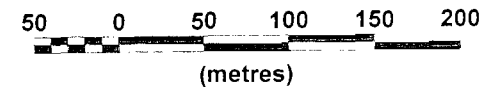
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-300W



Line 300W - Y Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

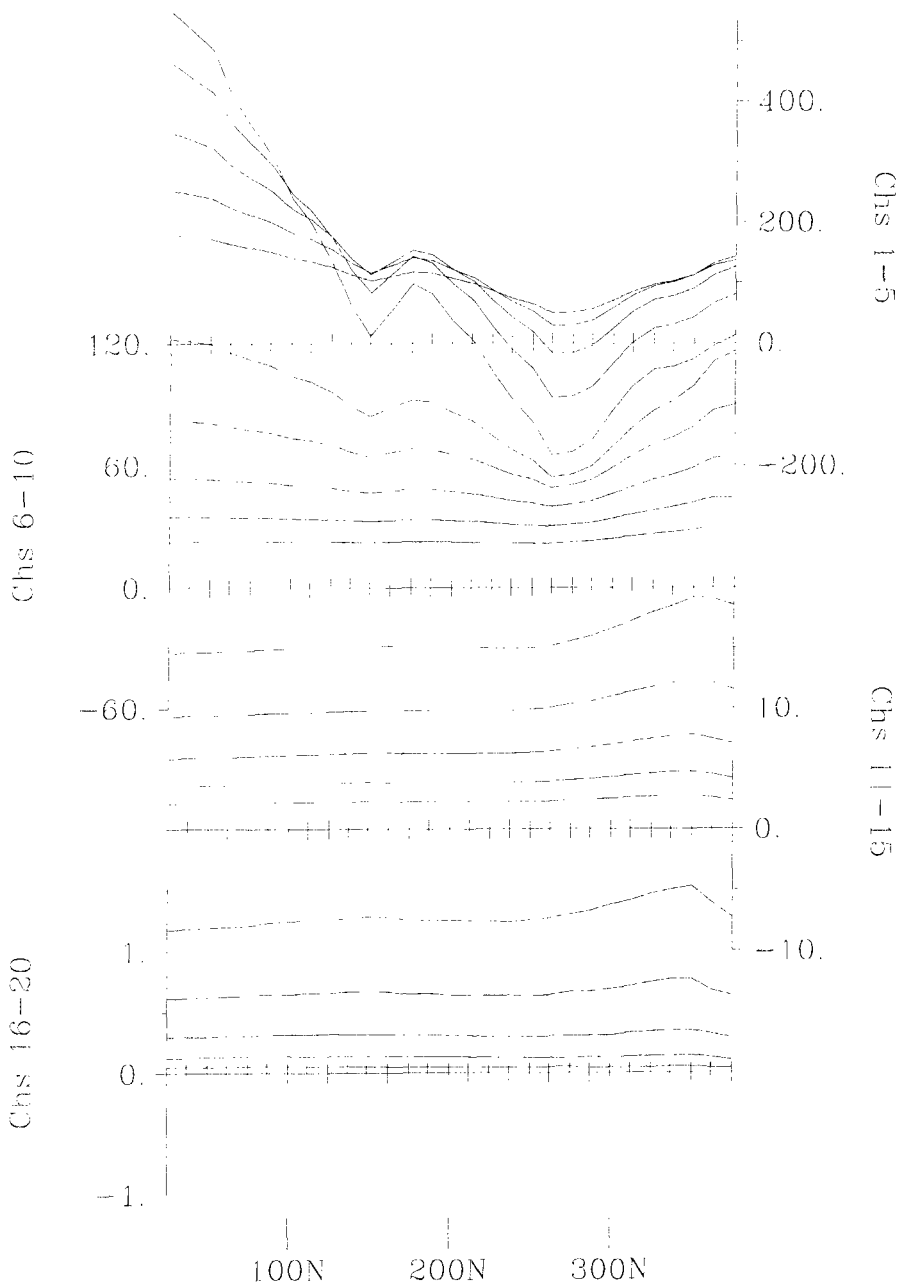
|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W @ 0+00 ; L2+50E @ 3+00S                                |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A•m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 14, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

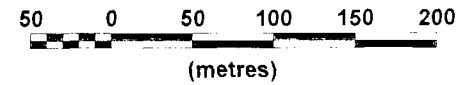
DWG. NO. CA00500C-4AXIS-Y-300W



**Line 300W - Z Component**

**LOOP 1**

**Scale 1:5000**



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**LANGMUIR PROPERTY**  
**TIMMINS, ON**

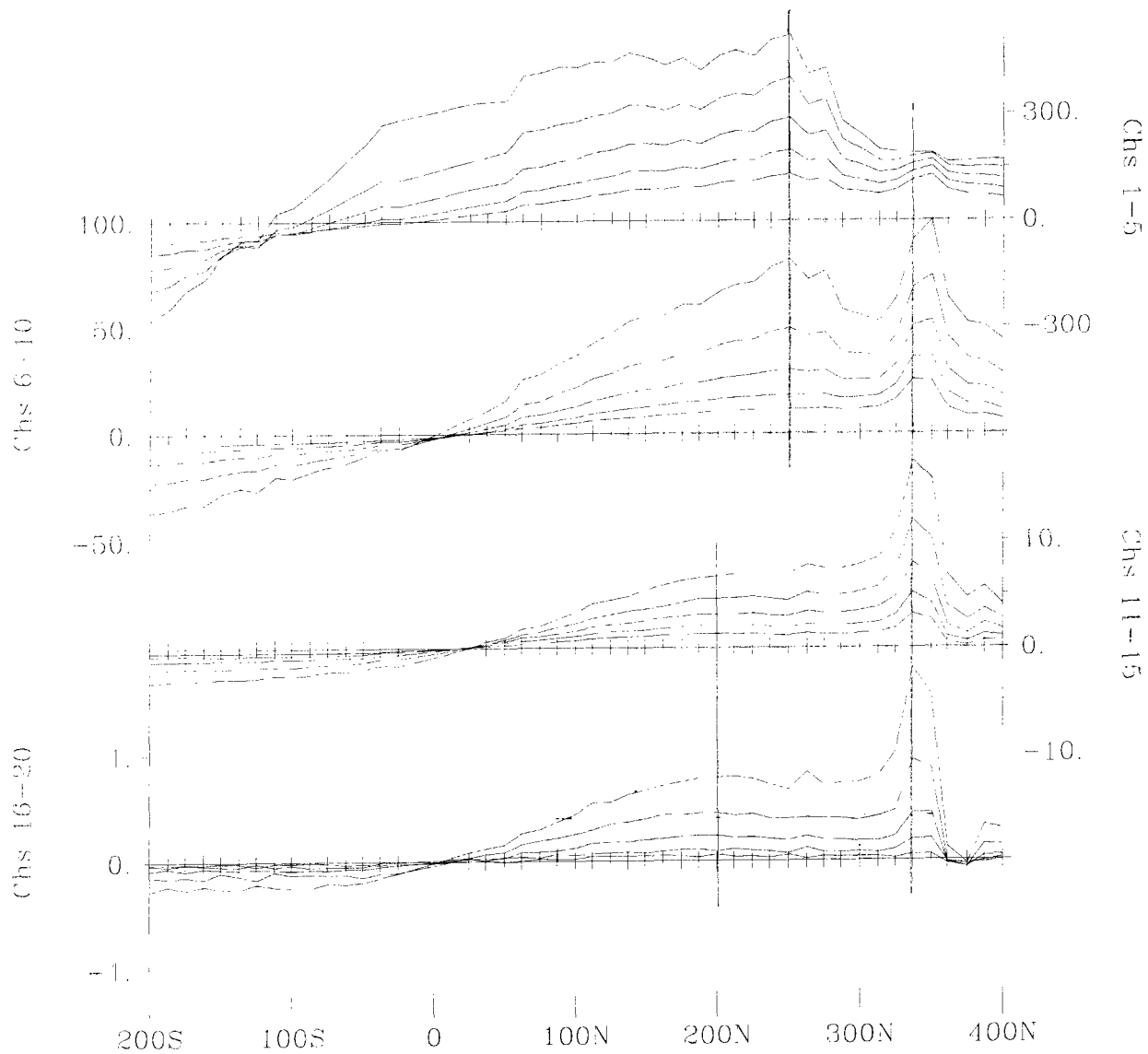
**LPTM FIXED-LOOP PROFILING SURVEY**  
**Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A·m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 14, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

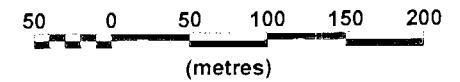
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-300W





Line 250+00W - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**

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**LPTEM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

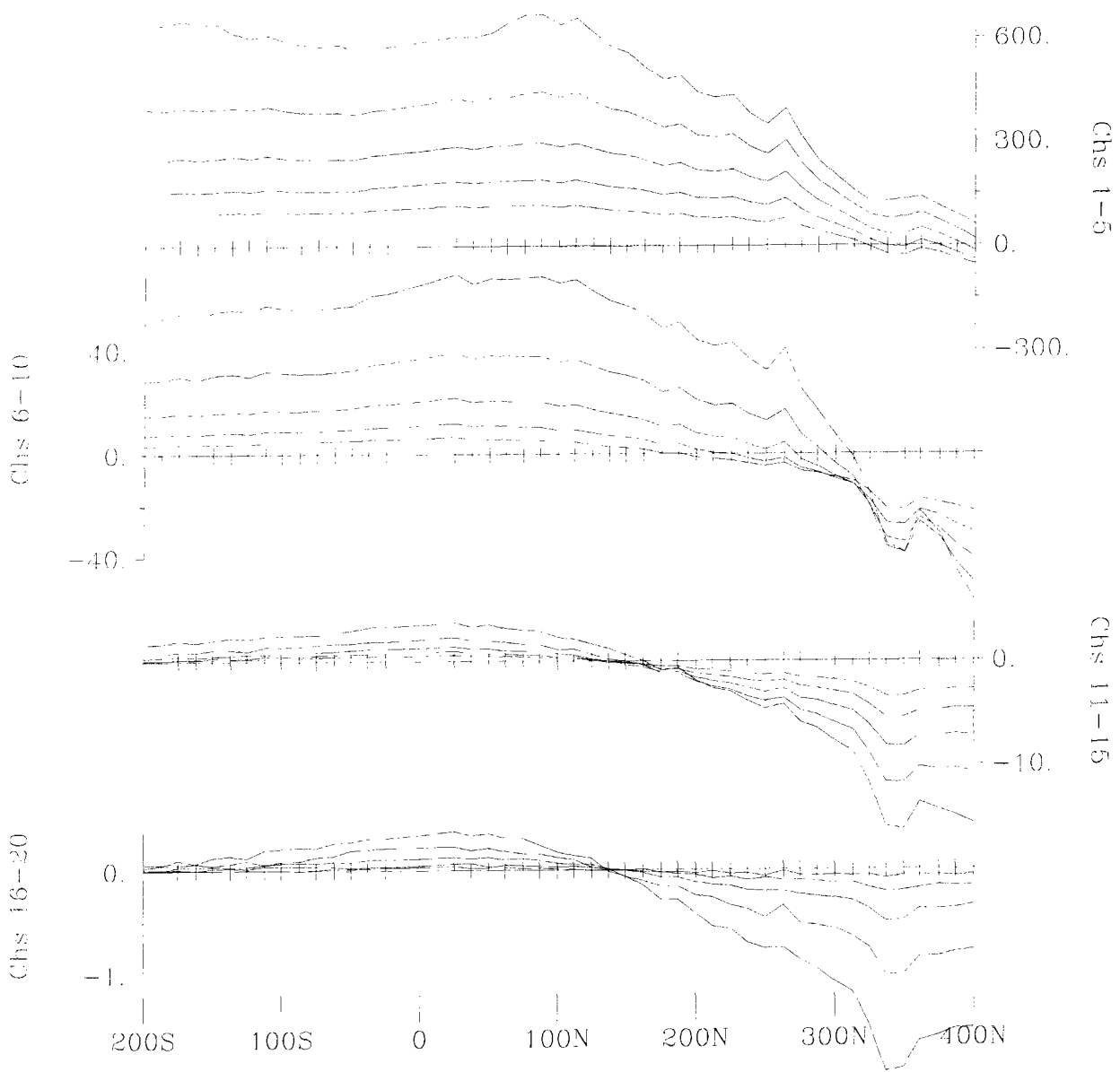
|                            |                           |
|----------------------------|---------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)    |
| Tx Loop Size:              | 300m X 550m               |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N  |
| Transmitter Current:       | 22.0 Amps                 |
| Transmitter Turn-Off Time: | 310 us                    |
| Station Interval:          | 12.5m                     |
| Profile Units:             | nanoVolt/A·m <sup>2</sup> |
| Receiver Coil Orientation: | Hz - positive up          |
|                            | Hx - positive north       |
|                            | Hy - positive west        |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 12, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



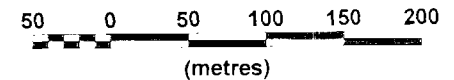
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-X-250+00W





Line 250+00W - Y Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

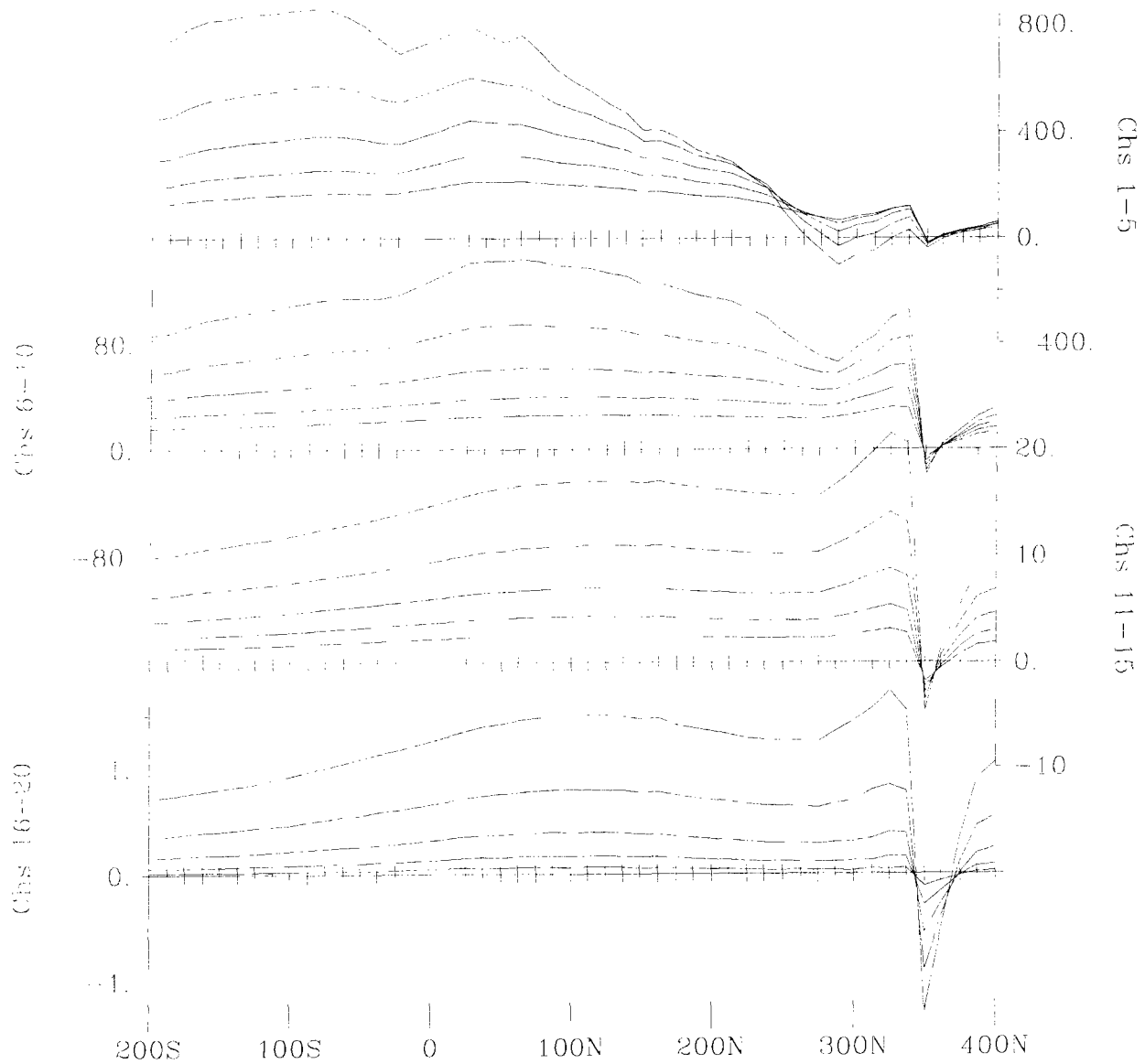
**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 12, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



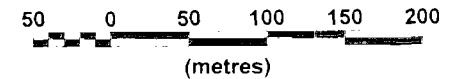
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Y-250+00W



Line 250+00W - Z Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**

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**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

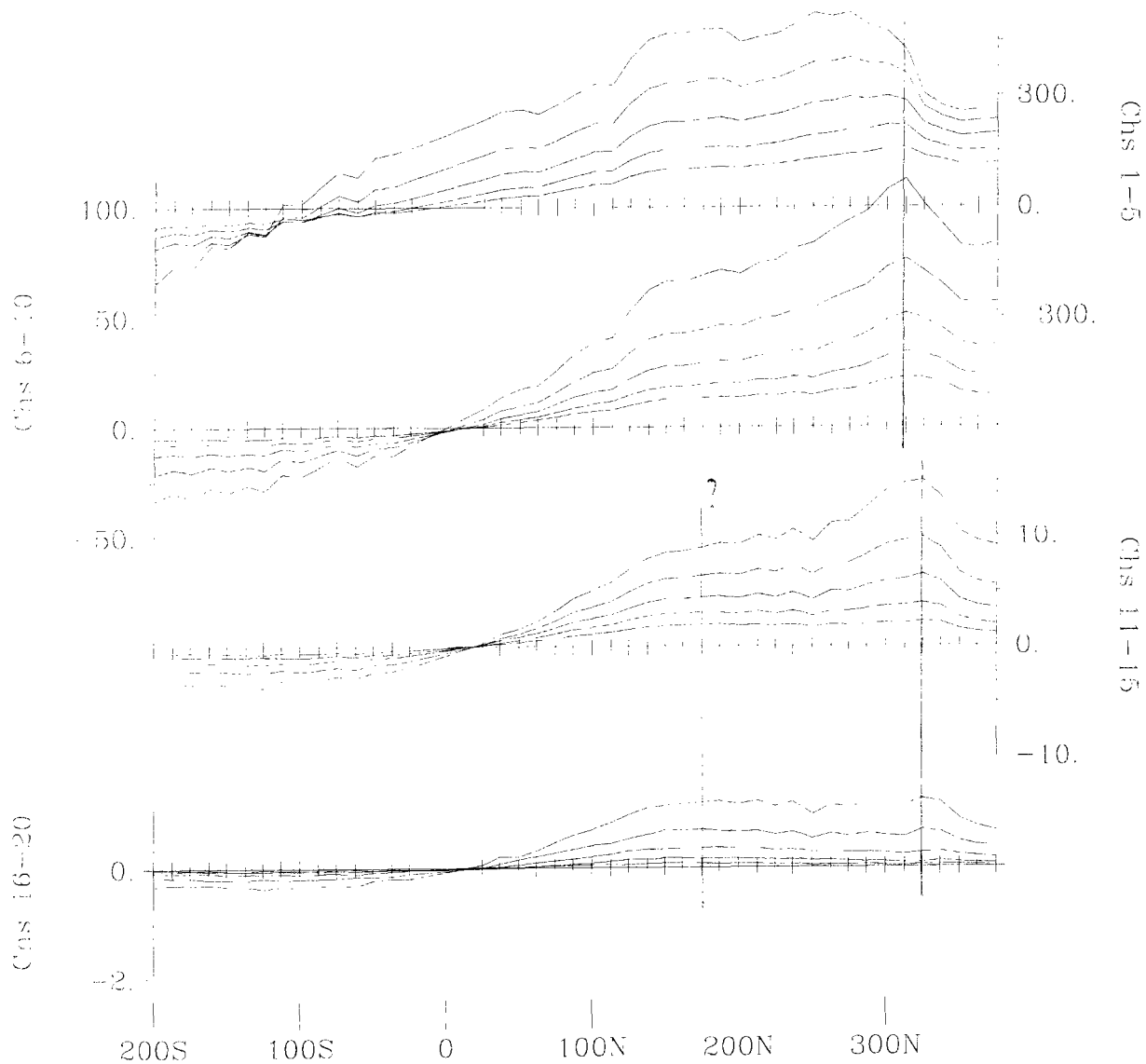
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 12, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

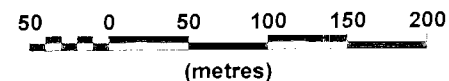


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-250+00W



Line 200+00W - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

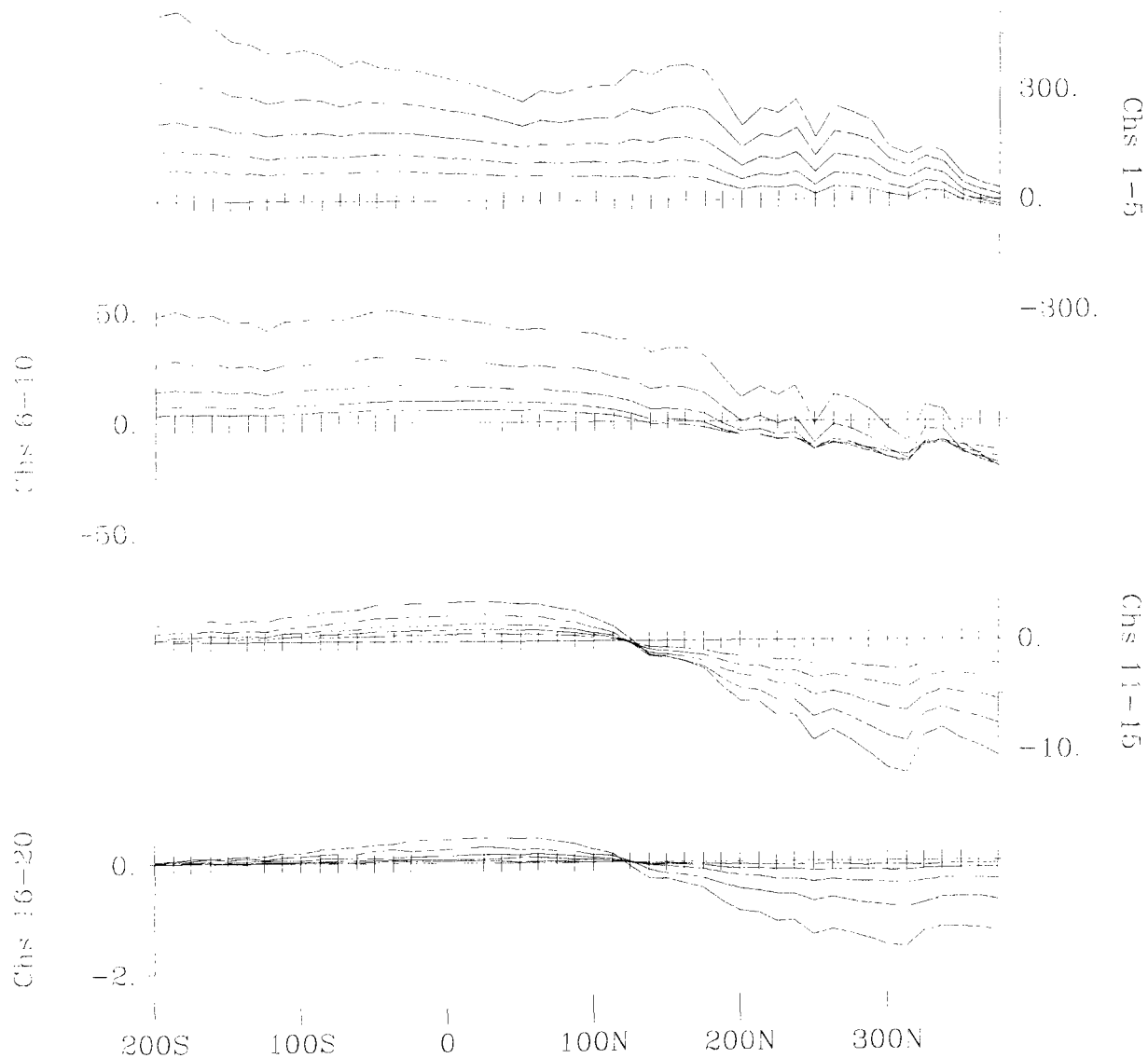
Station Interval: 12.5m  
Profile Units: nanoVolt/A·m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 12, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



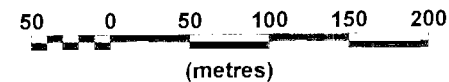
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-200+00W



**Line 200+00W - Y Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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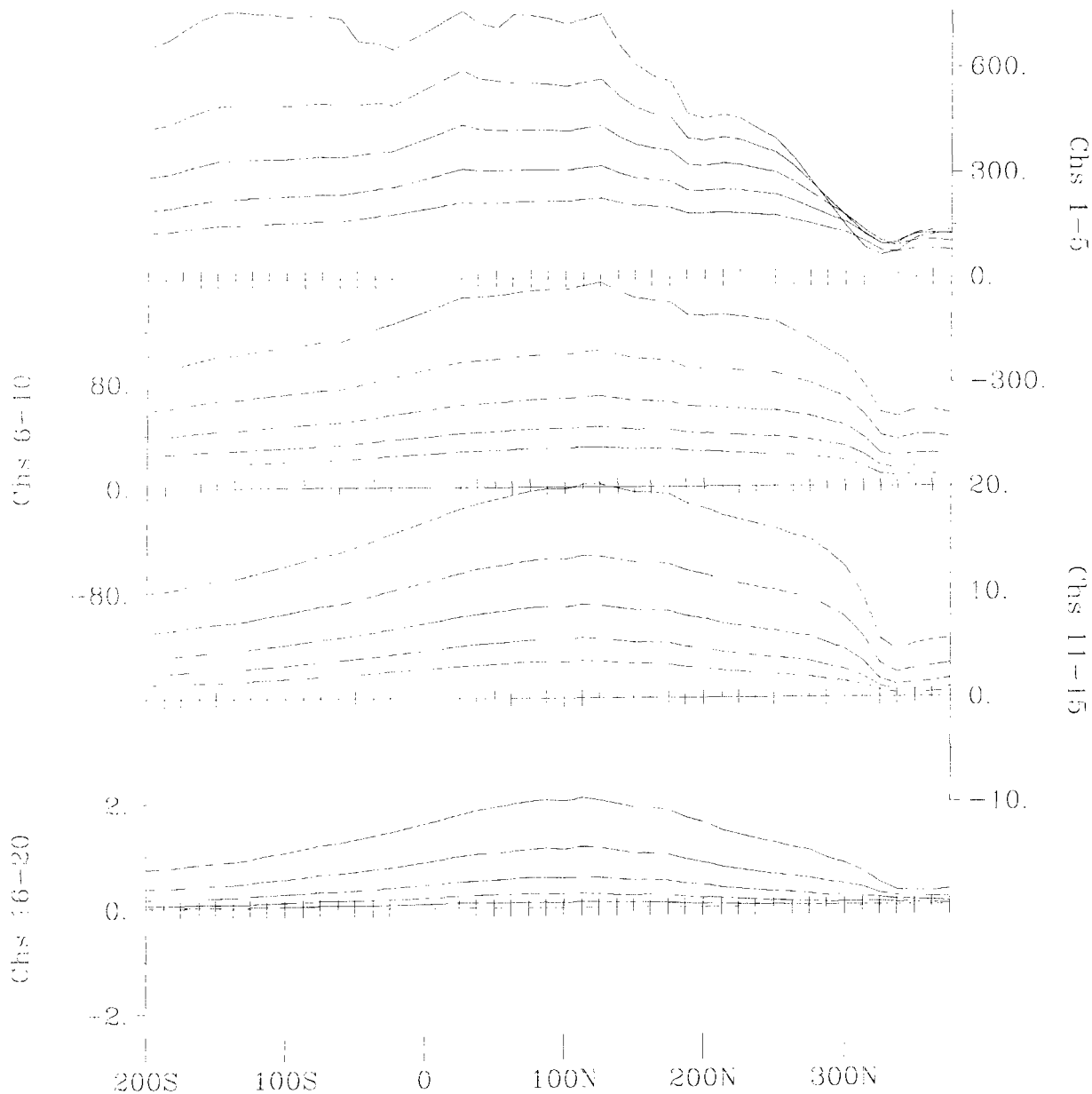
**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E,3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 12, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |

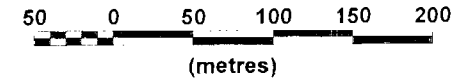


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Y-200+00W



Line 200+00W - Z Component  
**LOOP 1**

Scale 1:5000



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**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

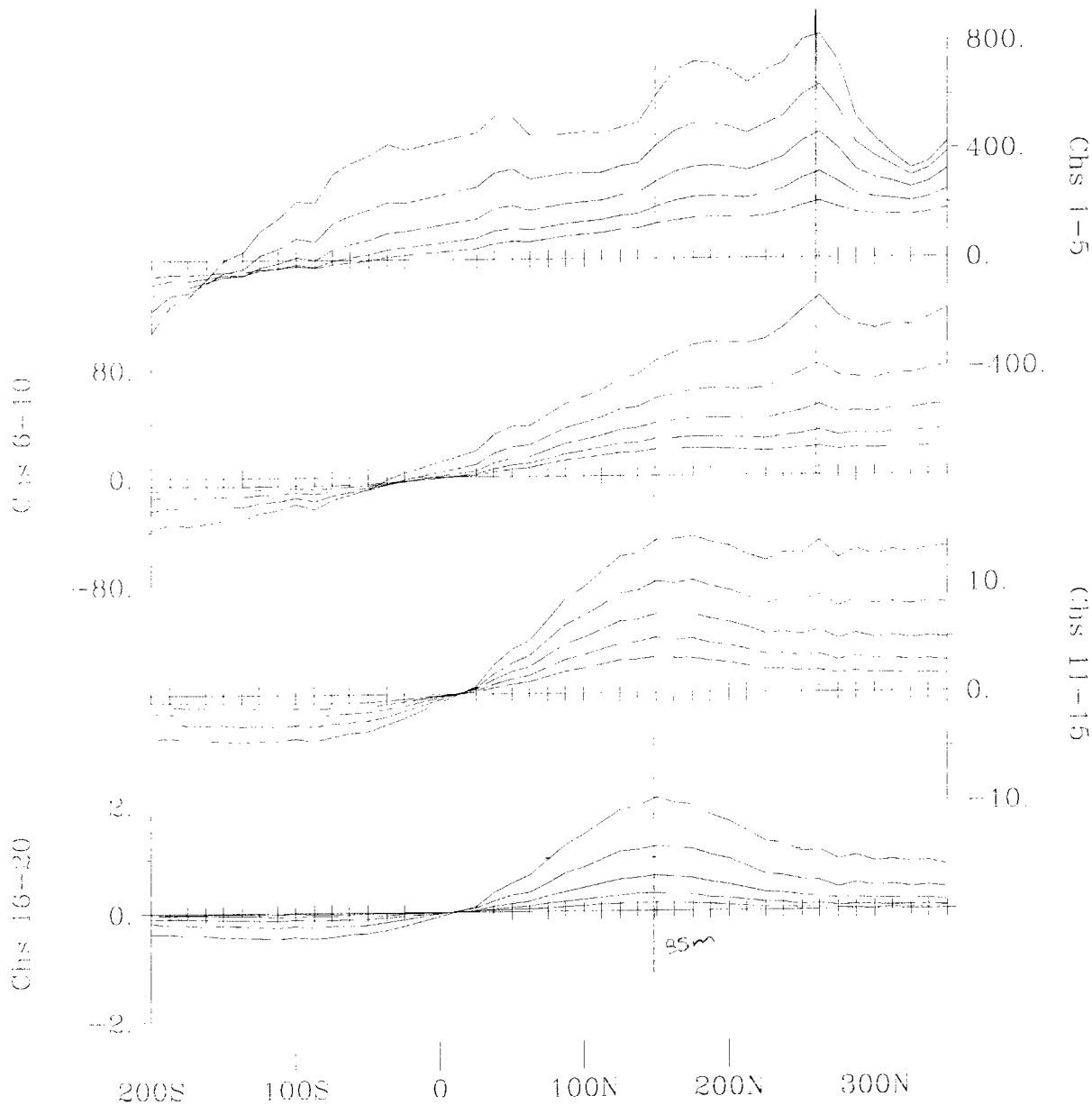
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hx - positive up  
 Hy - positive west

Survey Date: Sept. 12, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

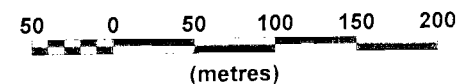
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-200+00W





**Line 150+00W - X Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

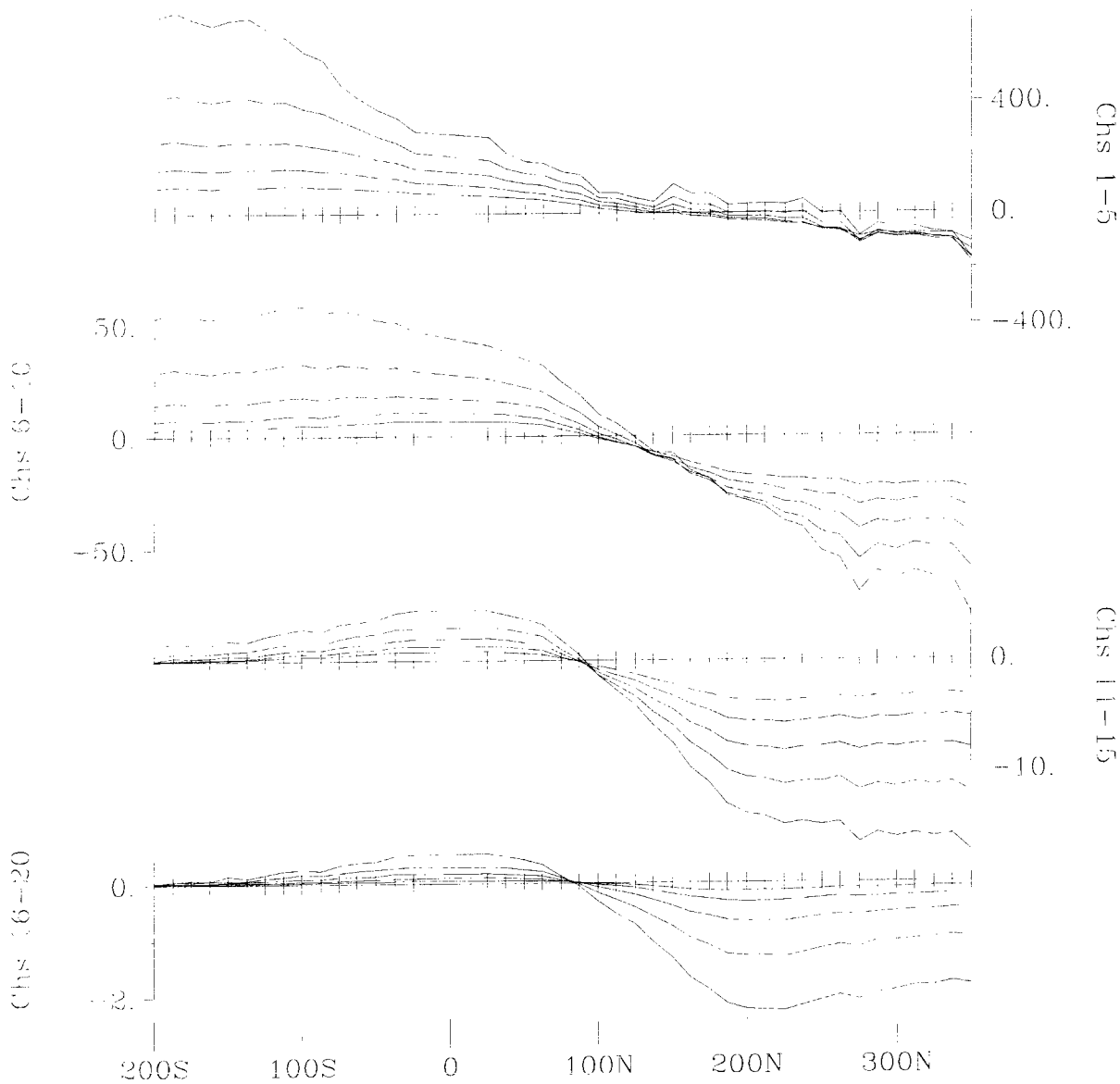
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 12, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



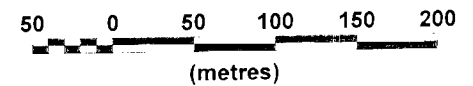
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-150+00W



**Line 150+00W - Y Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

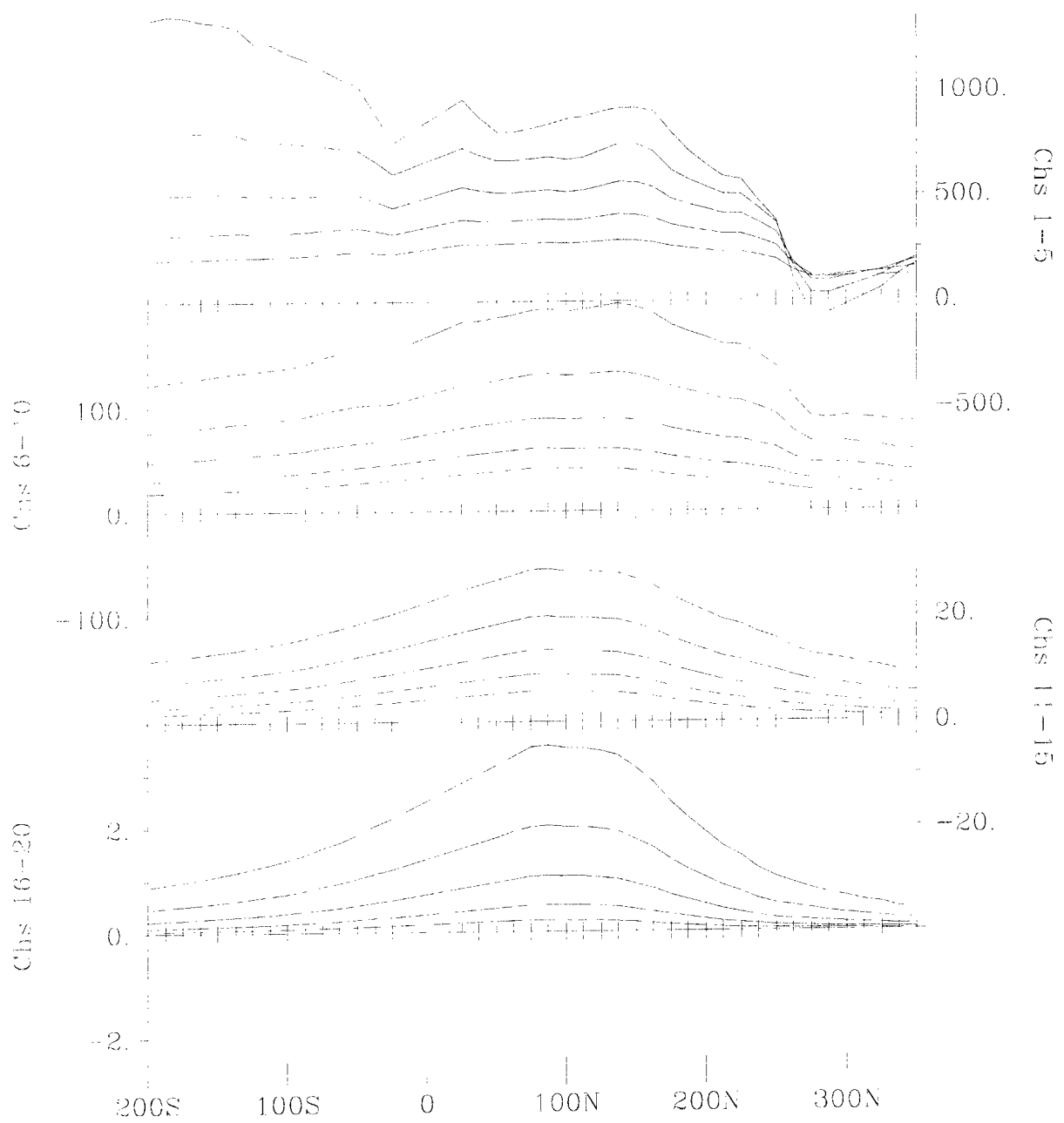
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E,3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 12, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

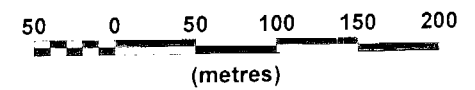


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Y-150+00W



**Line 150+00W - Z Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

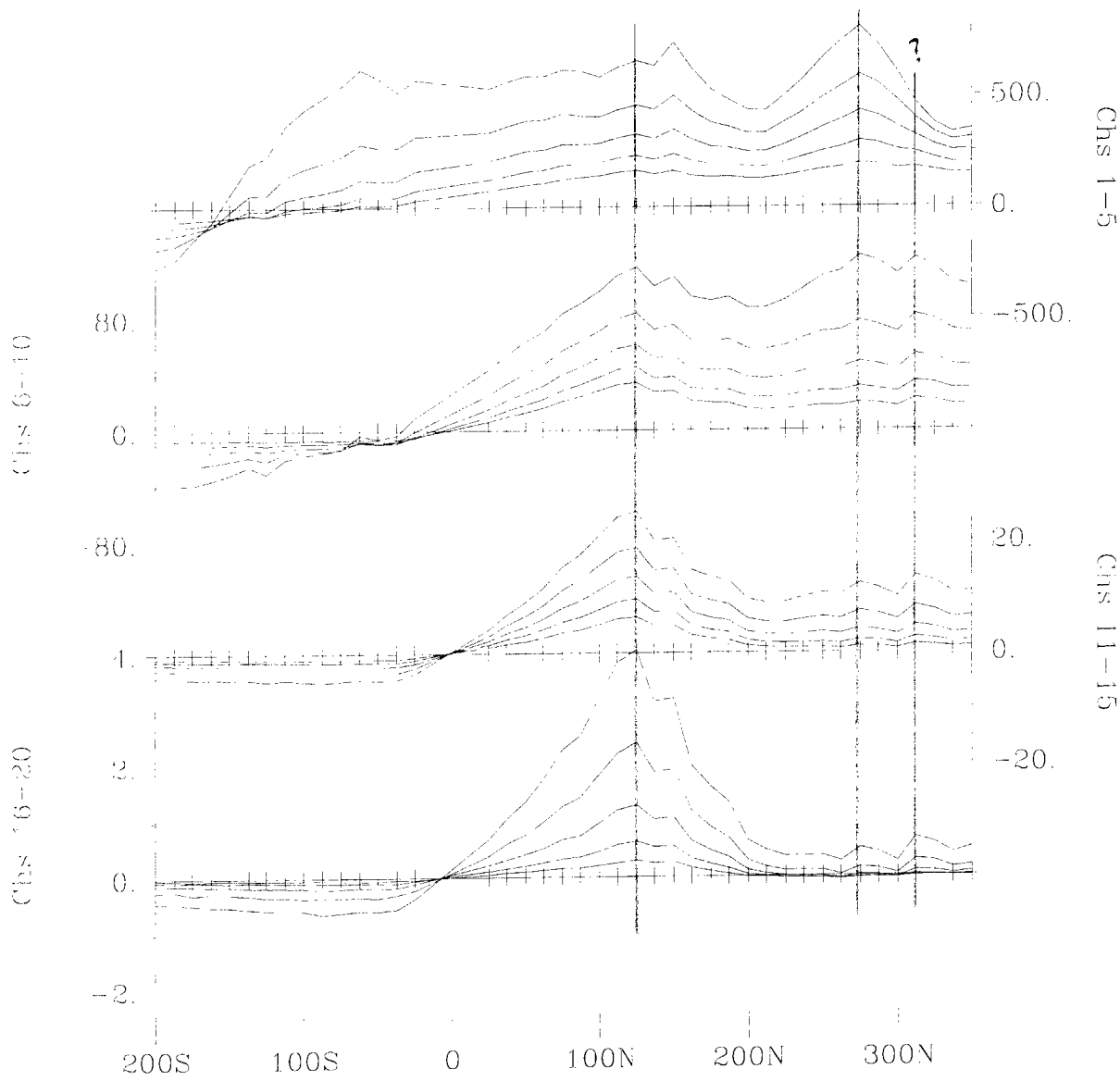
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 12, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-150+00W

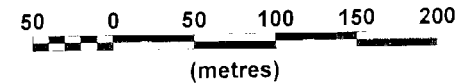






**Line 100+00W - X Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

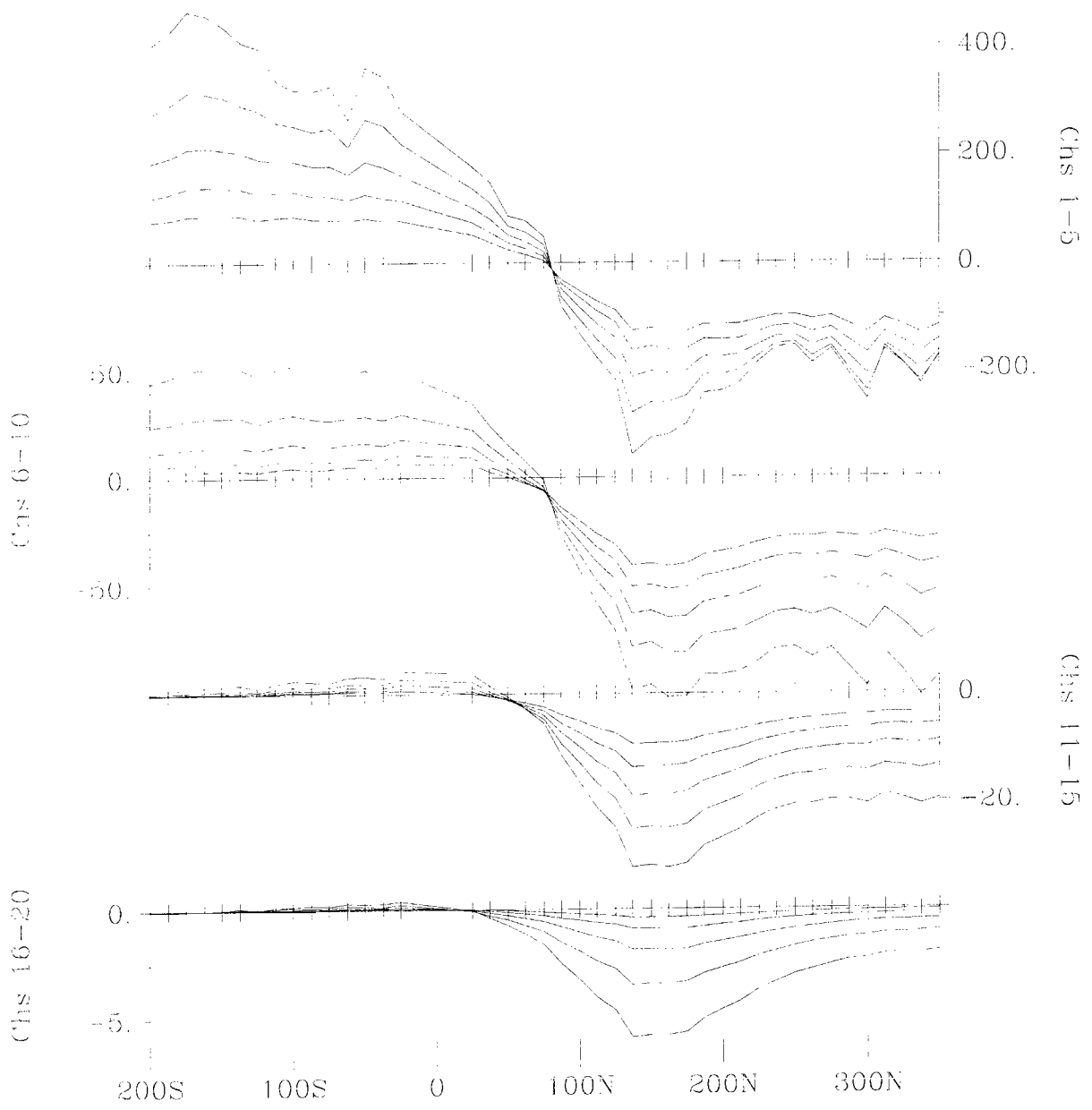
Station Interval: 12.5m  
Profile Units: nanoVolt/A·m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 12, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



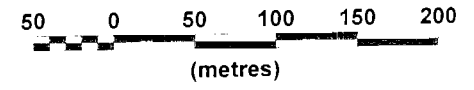
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-100+00W



**Line 100+00W - Y Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

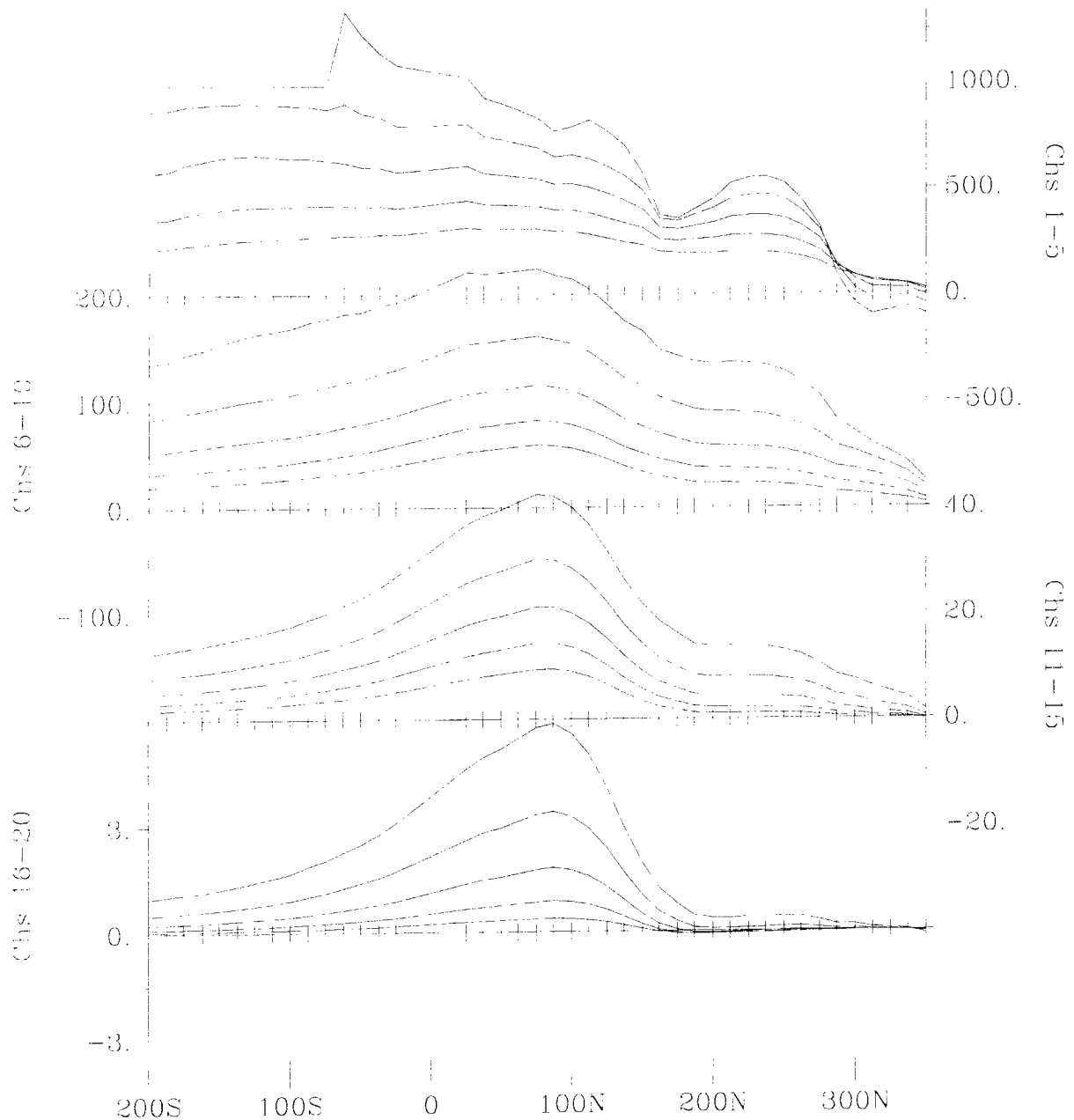
**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 12, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

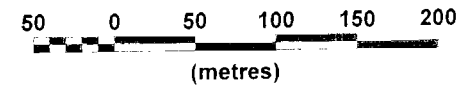
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Y-100+00W





**Line 100+00W - Z Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

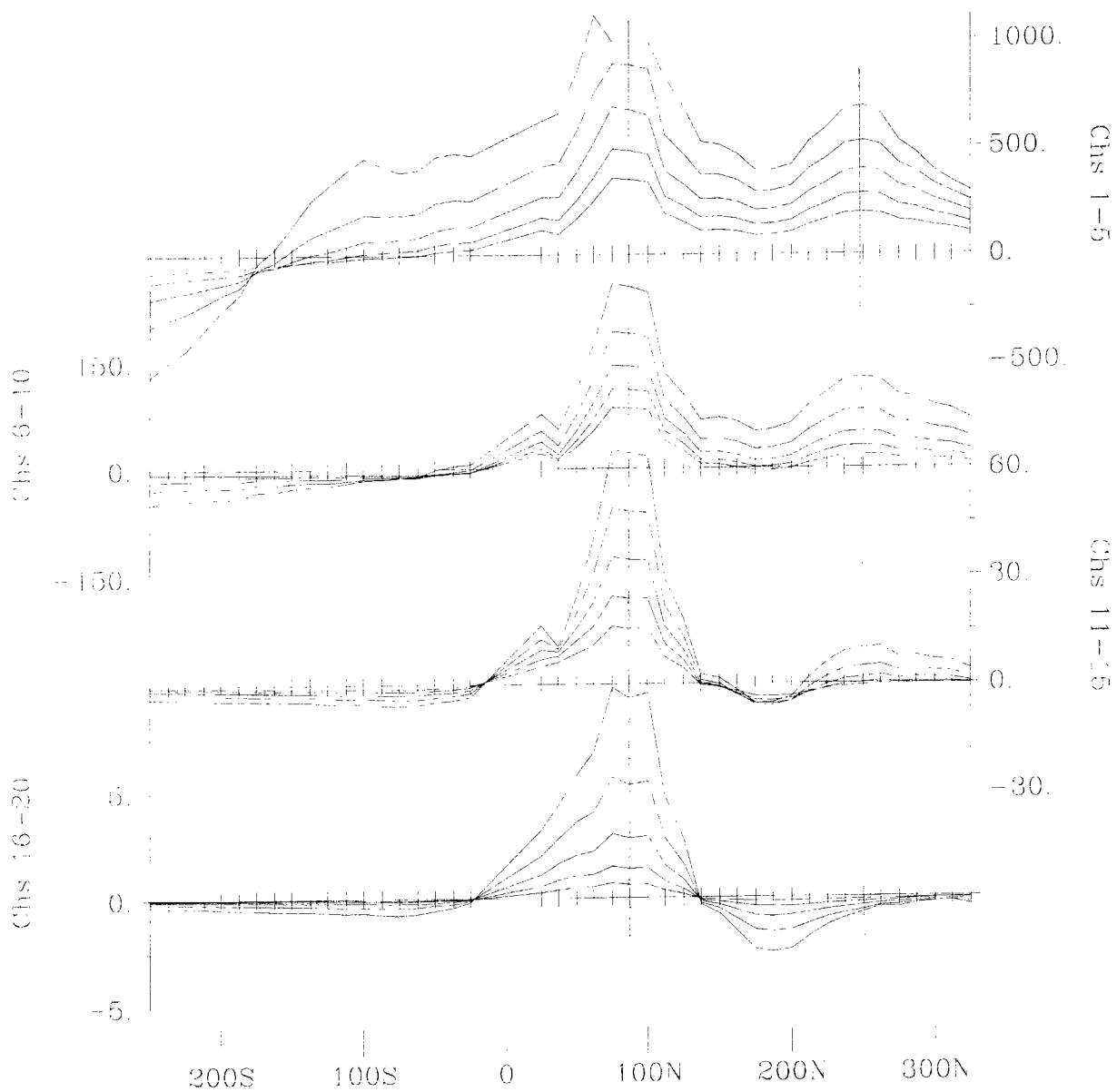
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 12, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



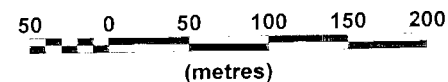
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Z-100+00W



Line 50+00W - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

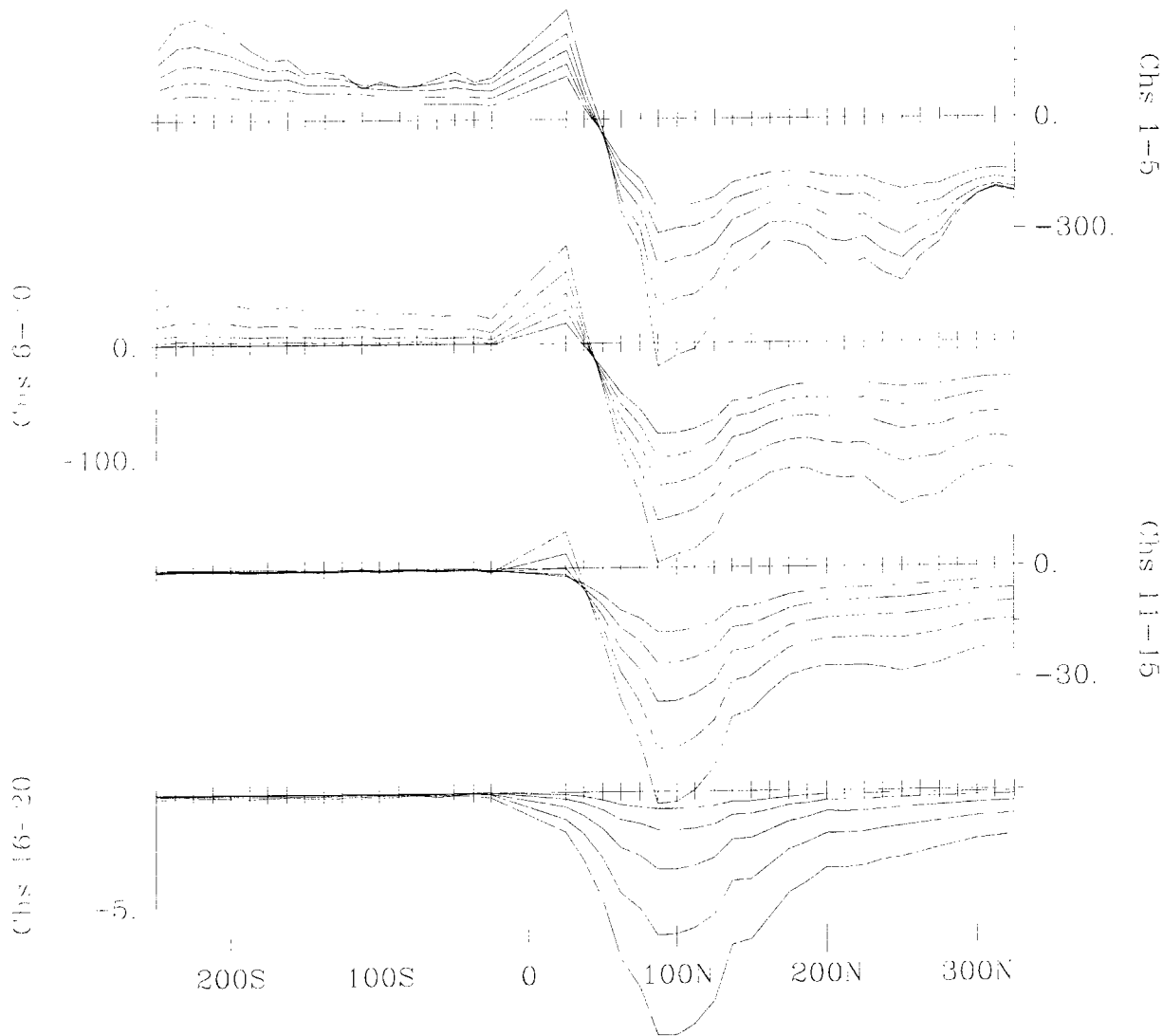
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 11, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

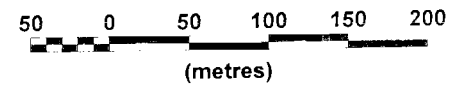
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-X-50+00W





Line 50+00W - Y Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E.3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

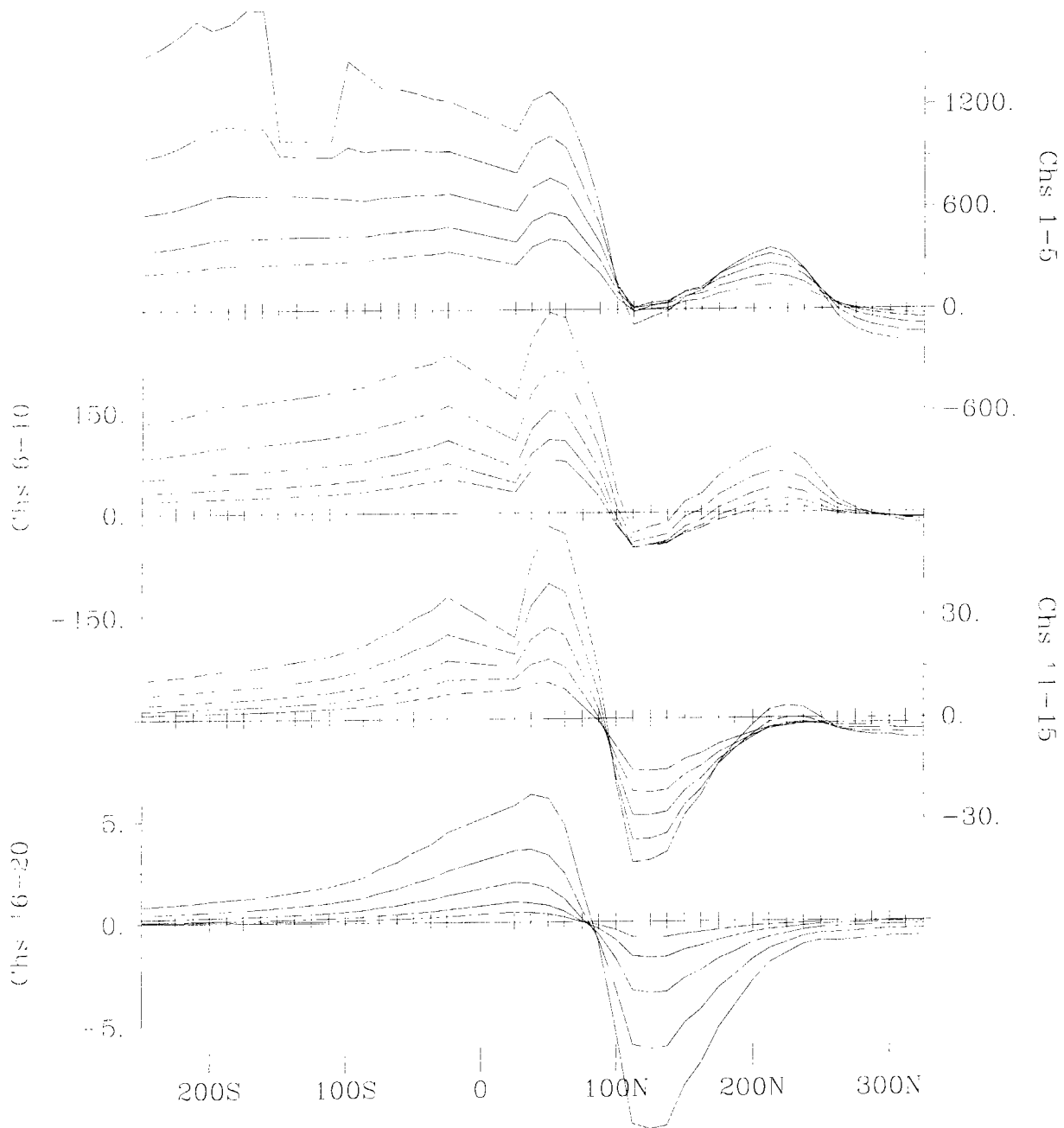
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 11, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



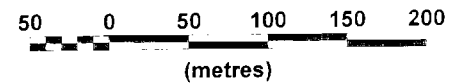
Surveyed & Processed by:  
**QUATEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-50+00W



**Line 50+00W - Z Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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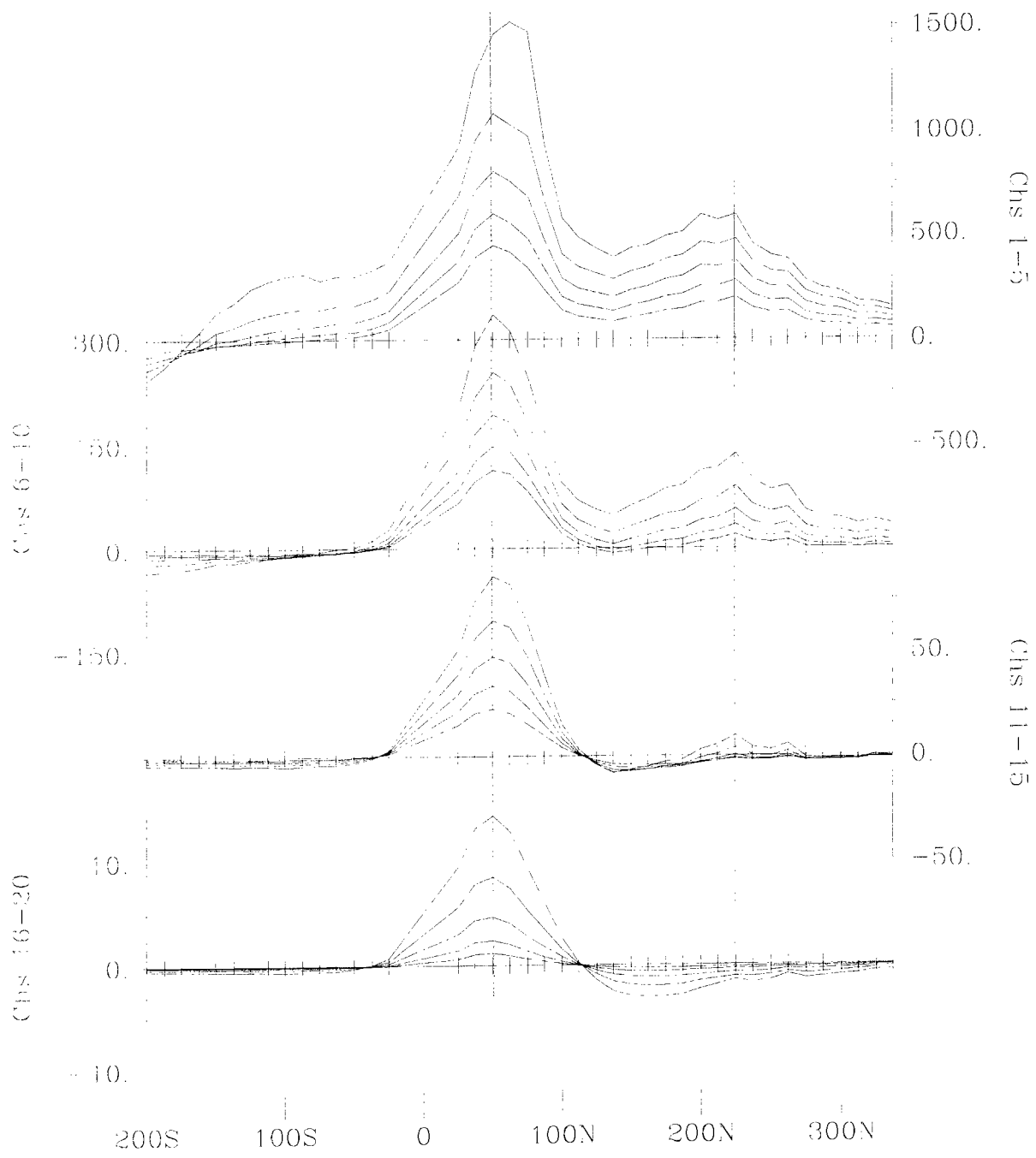
**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 11, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/57 (3500W)

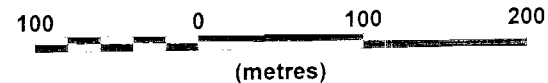


Surveyed & Processed by:  
**QUATEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-50+00W



Line 00+00E - X Component  
 LOOP 1

Scale 1:5000



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LPTM FIXED-LOOP PROFILING SURVEY  
 Secondary Electromagnetic Field (dB/dt)

|                            |                           |
|----------------------------|---------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)    |
| Tx Loop Size:              | 300m X 550m               |
| Tx Loop Location:          | L3+00W-2+50E:3+00S-0+00N  |
| Transmitter Current:       | 22.0 Amps                 |
| Transmitter Turn-Off Time: | 310 us                    |
| Station Interval:          | 12.5m                     |
| Profile Units:             | nanoVolt/A*m <sup>2</sup> |
| Receiver Coil Orientation: | Hz - positive up          |
|                            | Hx - positive north       |
|                            | Hy - positive west        |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 07, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |

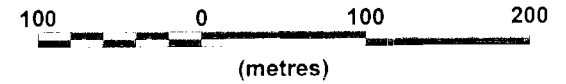
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-X-00+00E



Line 00+00E - Y Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**

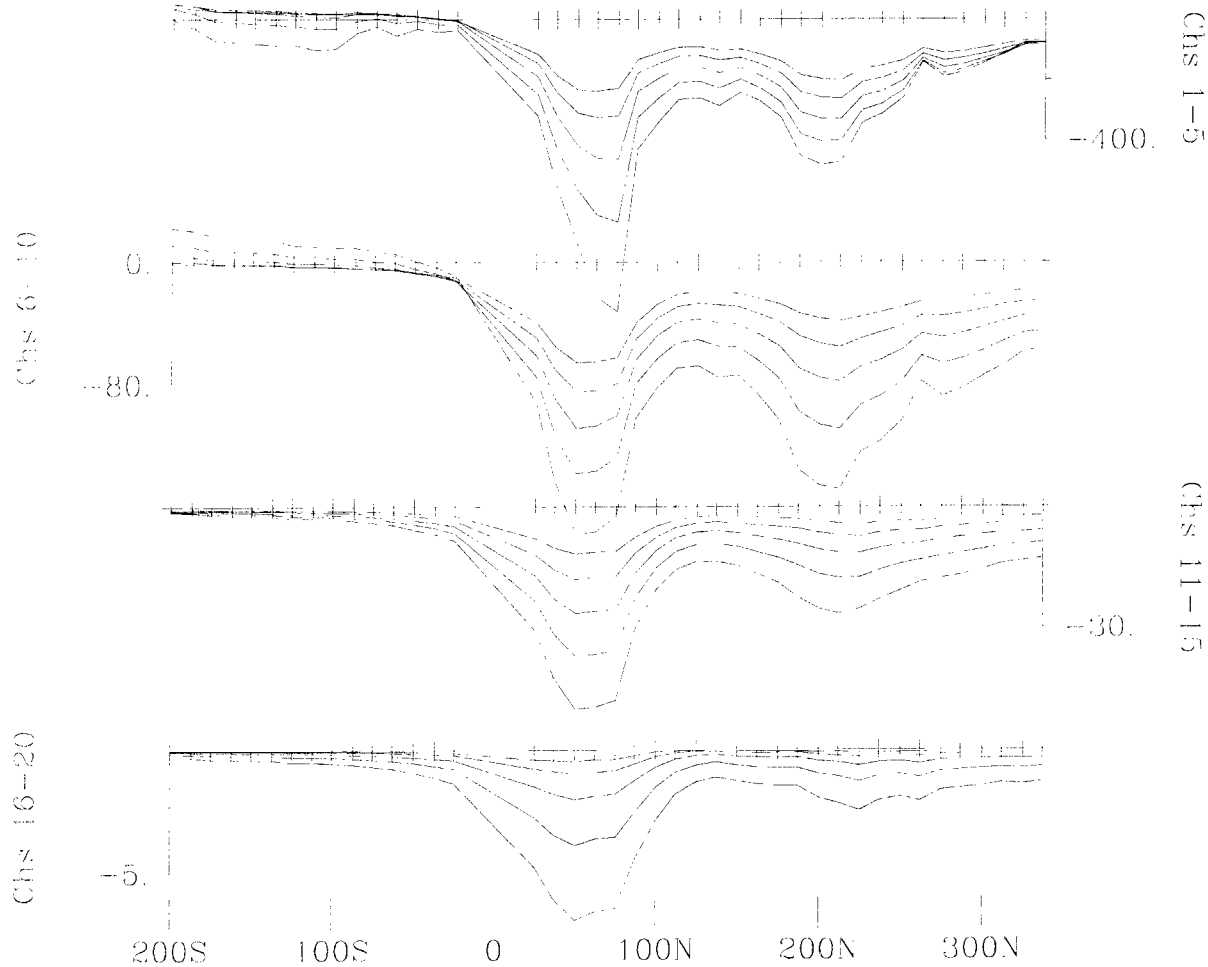
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E,3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us  
Station Interval: 12.5m  
Profile Units: nanoVolt/A•m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

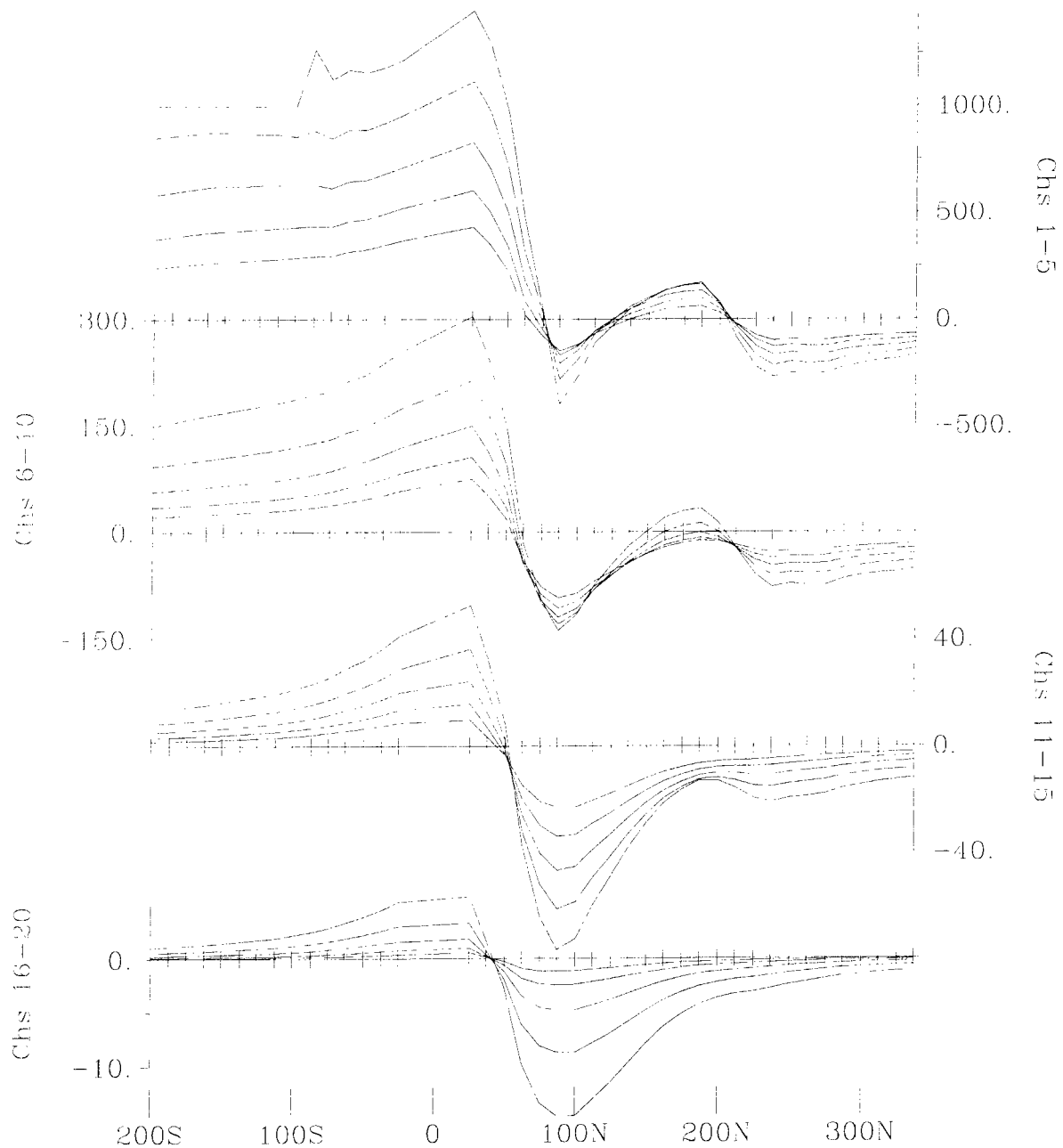
Survey Date: Sept. 07, 2007  
Instrumentation: Rx = Digital Protom (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



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DWG. NO. CA00500C-4AXIS-Y-00+00E







Line 00+00E - Z Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

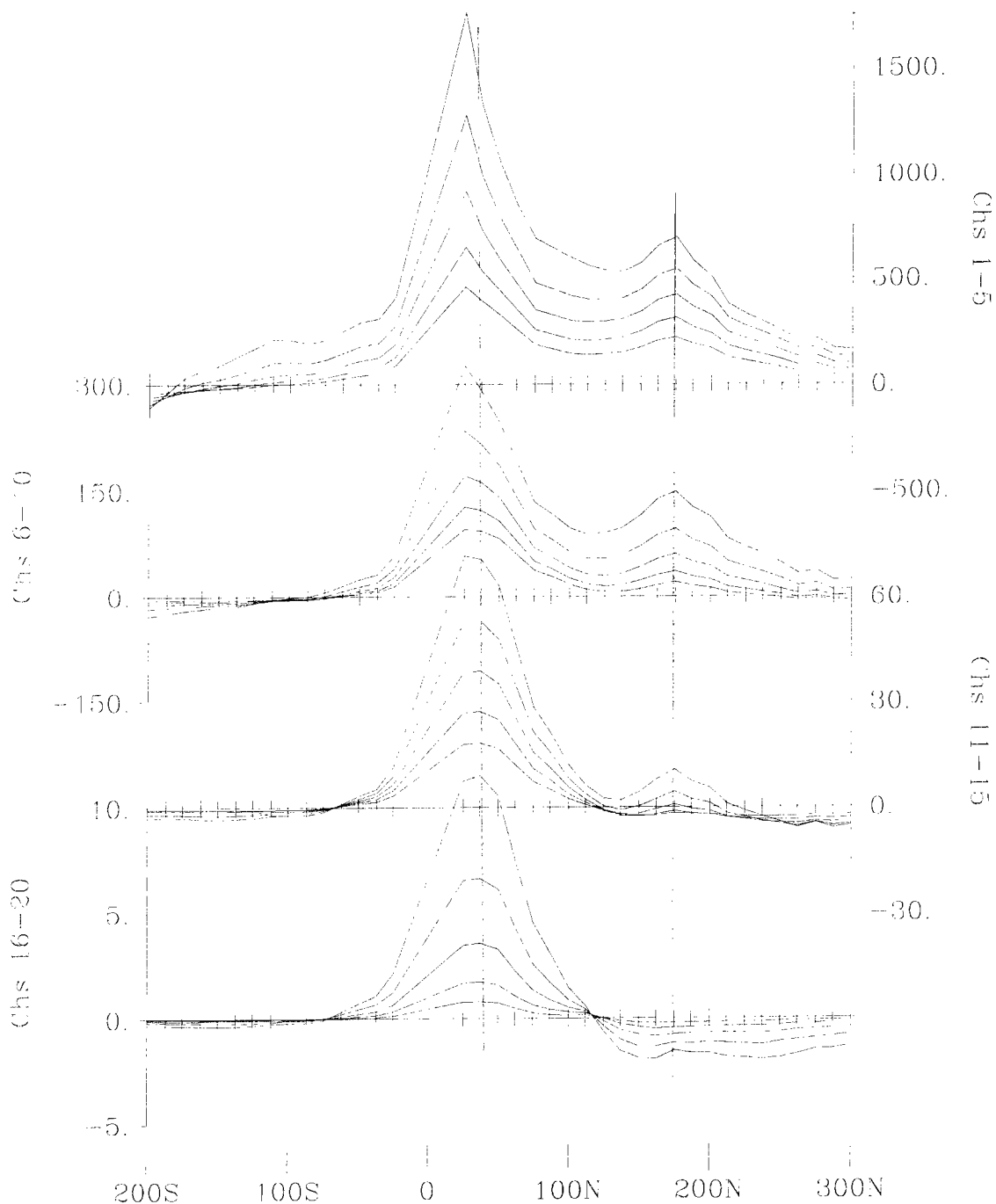
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hx - positive up  
 Hy - positive north  
 Hz - positive west

Survey Date: Sept. 07, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

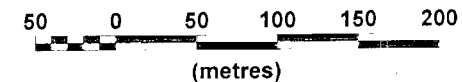


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-00+00E



**Line 50+00E - X Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

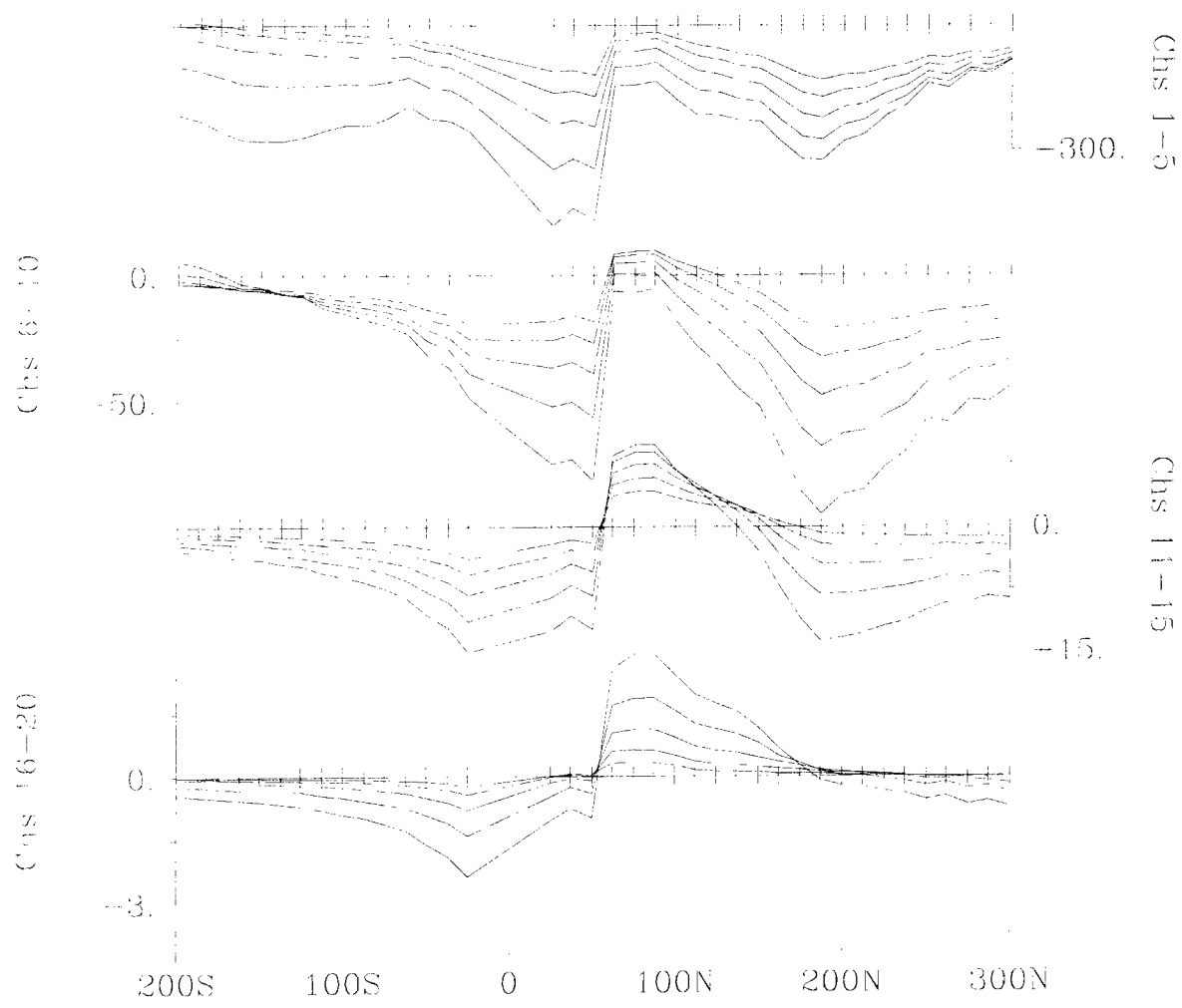
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hx - positive up  
Hy - positive north  
Hz - positive west

Survey Date: Sept. 06, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-X-50+00E

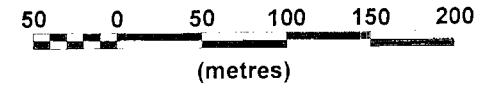




# Line 50+00E - Y Component

## LOOP 1

Scale 1:5000



### GOLDEN CHALICE RESOURCES INC.

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TIMMINS, ON

### LPTM FIXED-LOOP PROFILING SURVEY

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E:3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn Off Time: 310 us

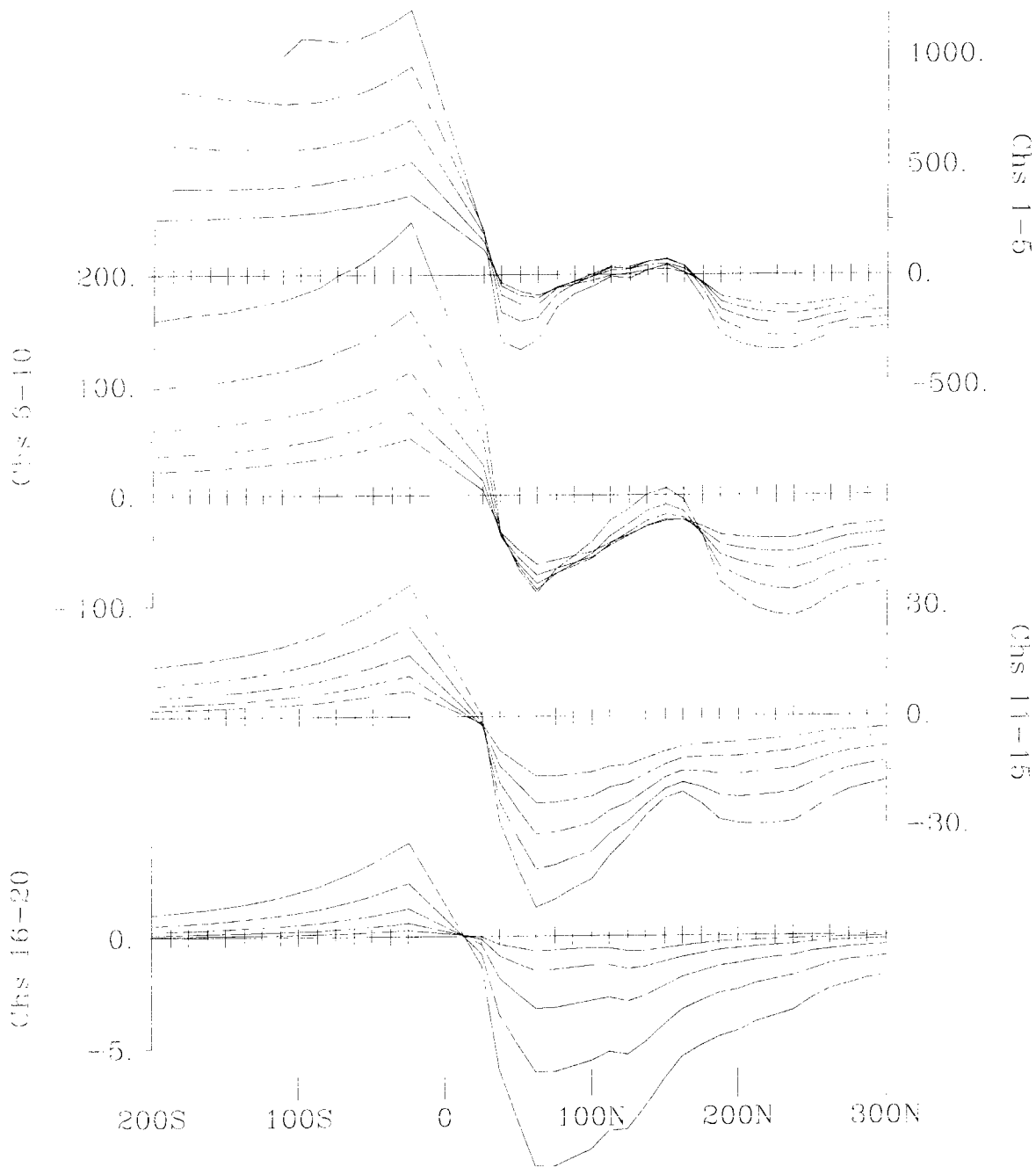
Station Interval: 12.5m  
 Profile Units: nanoVolt/A·m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 06, 2007  
 Instrumentation: Rx = Digital Pratem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



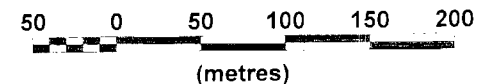
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-50+00E



**Line 50+00E - Z Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

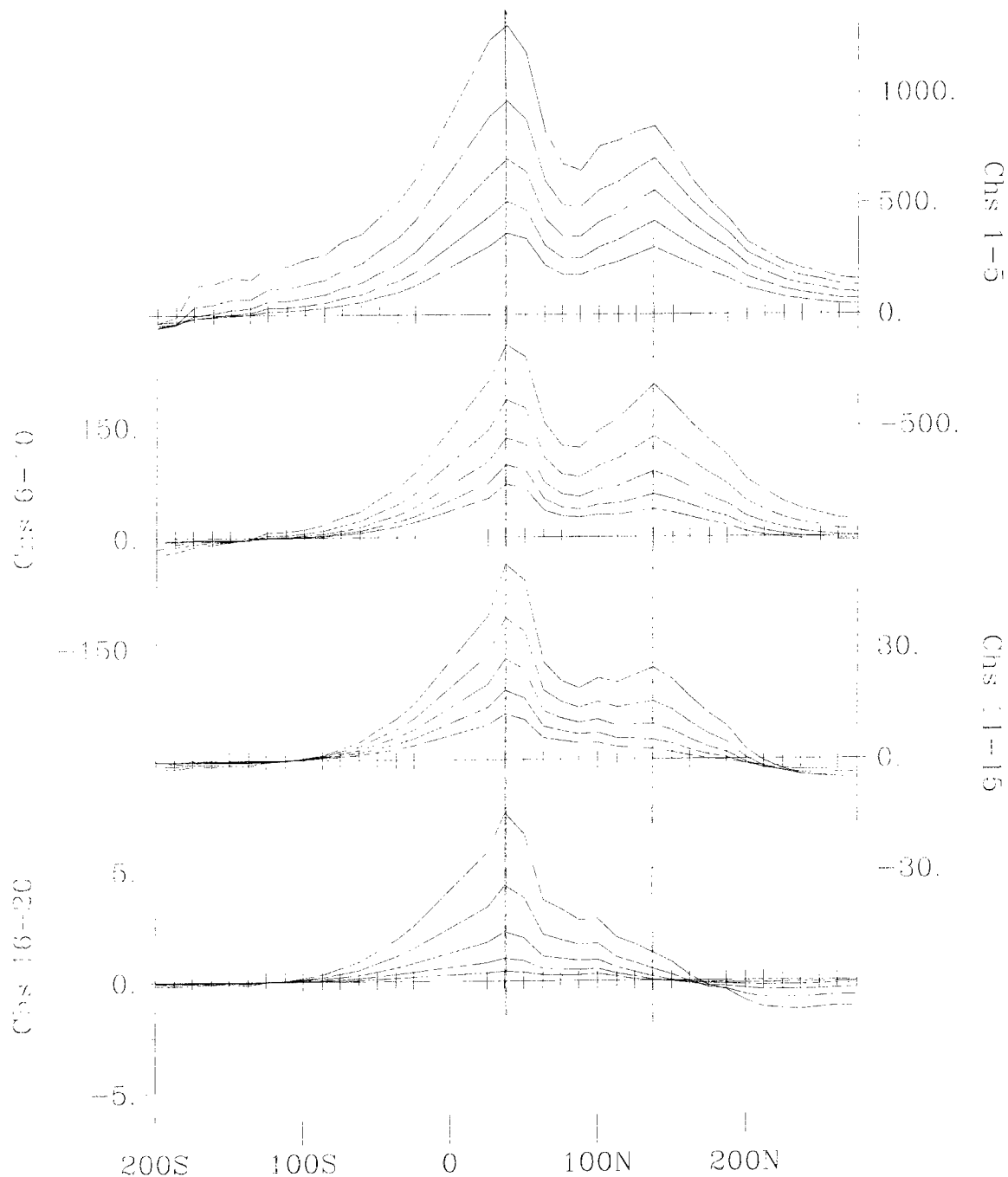
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 06, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

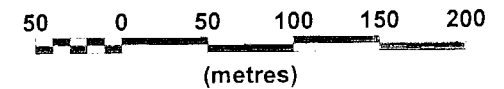


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**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-50+00E



**Line 100+00E - X Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hx - positive up<br>Hy - positive north<br>Hz - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 08, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |

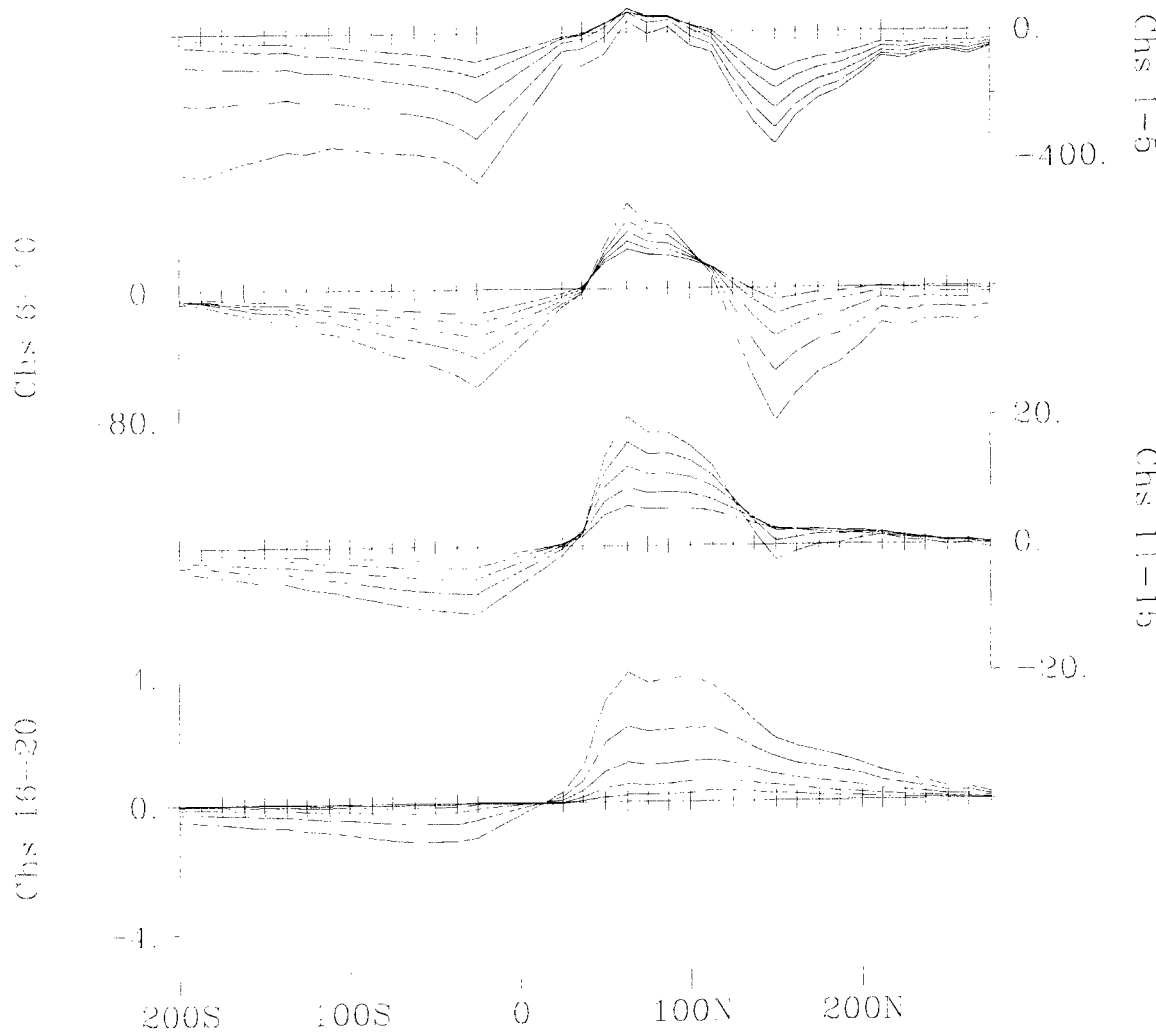
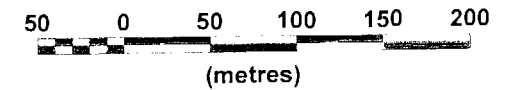


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-100+00E

Line 100+00E - Y Component  
**LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

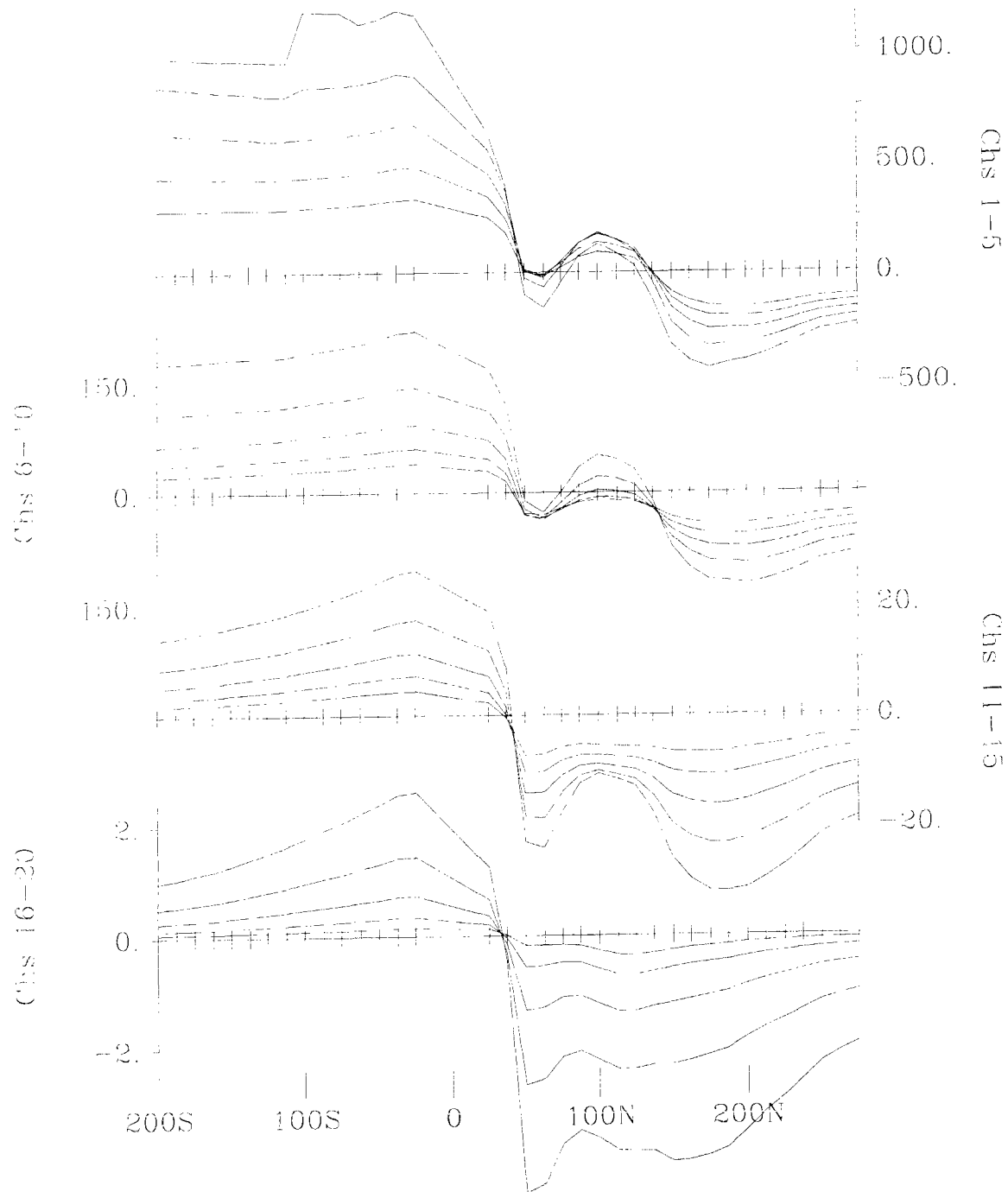
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 08, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

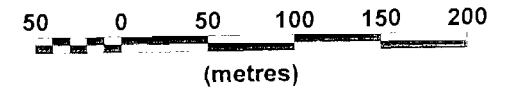


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Y-100+00E



Line 100+00E - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

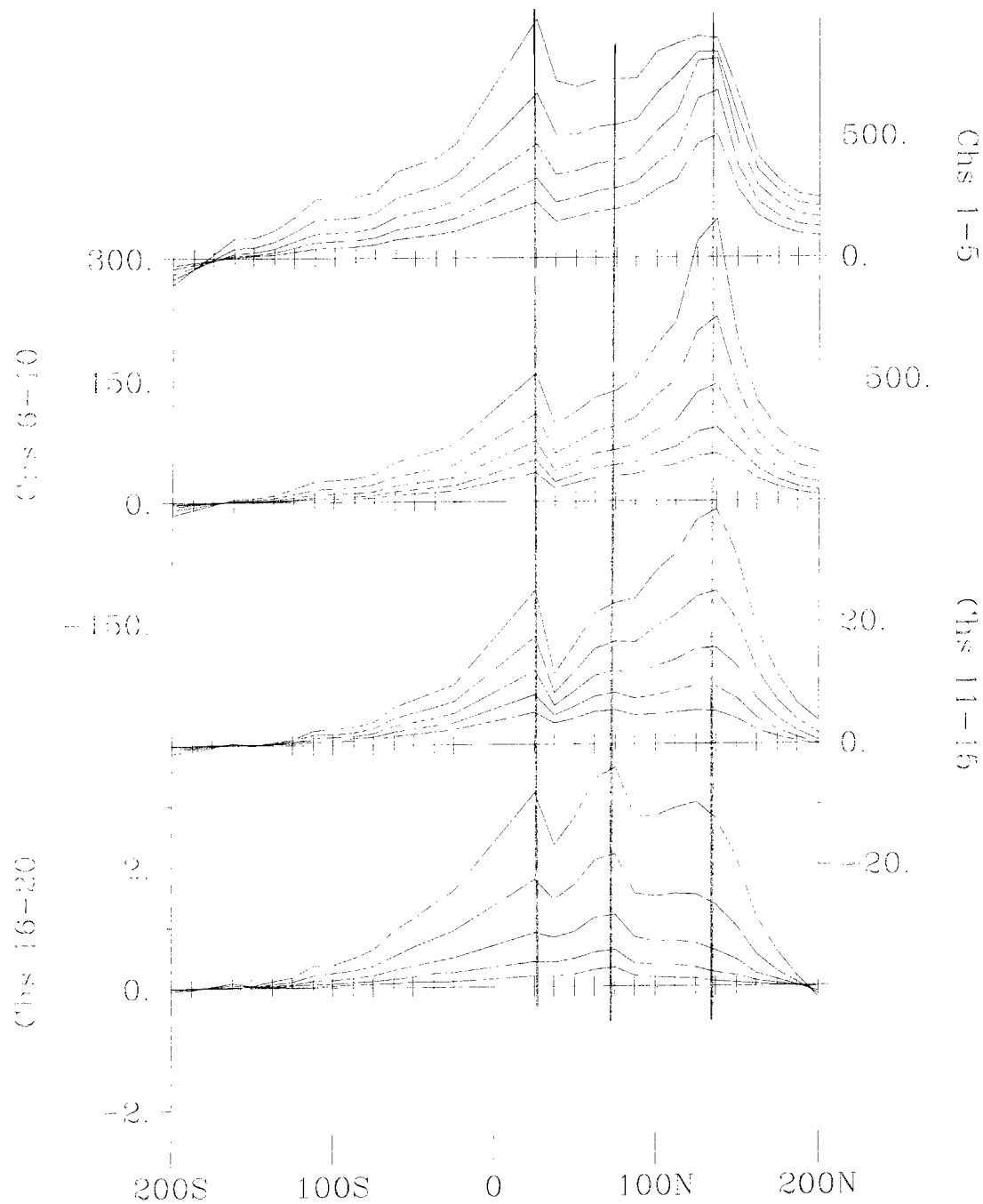
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 08, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

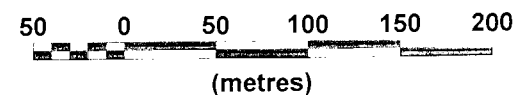


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-100+00E



Line 150+00E - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 08, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

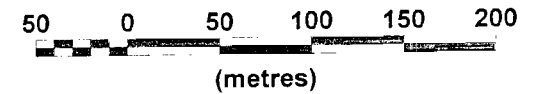
DWG. NO. CA00500C-4AXIS-X-150+00E



# Line 150+00E - Y Component

## LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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### LPTM FIXED-LOOP PROFILING SURVEY

Secondary Electromagnetic Field (dB/dt)

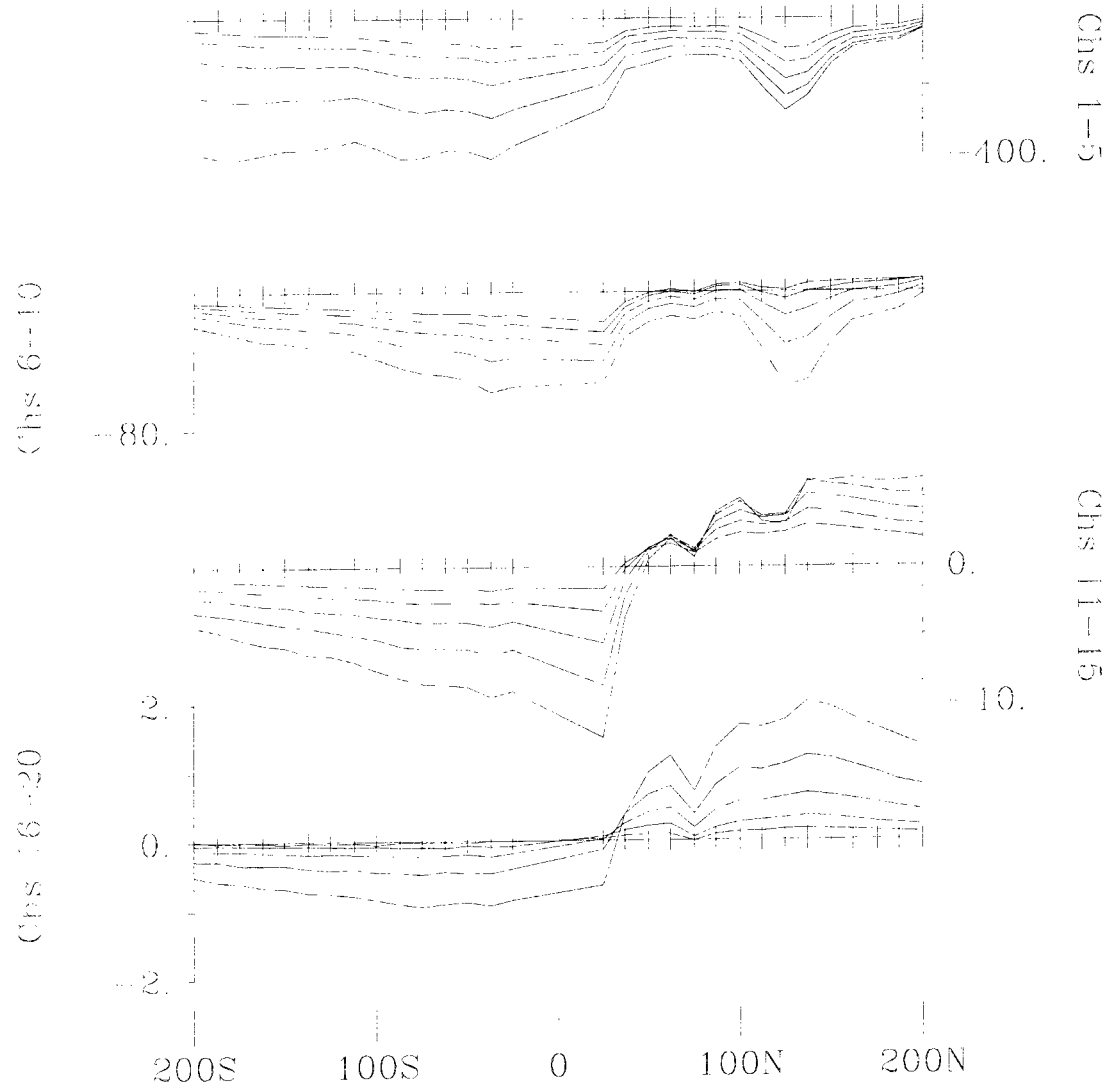
|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

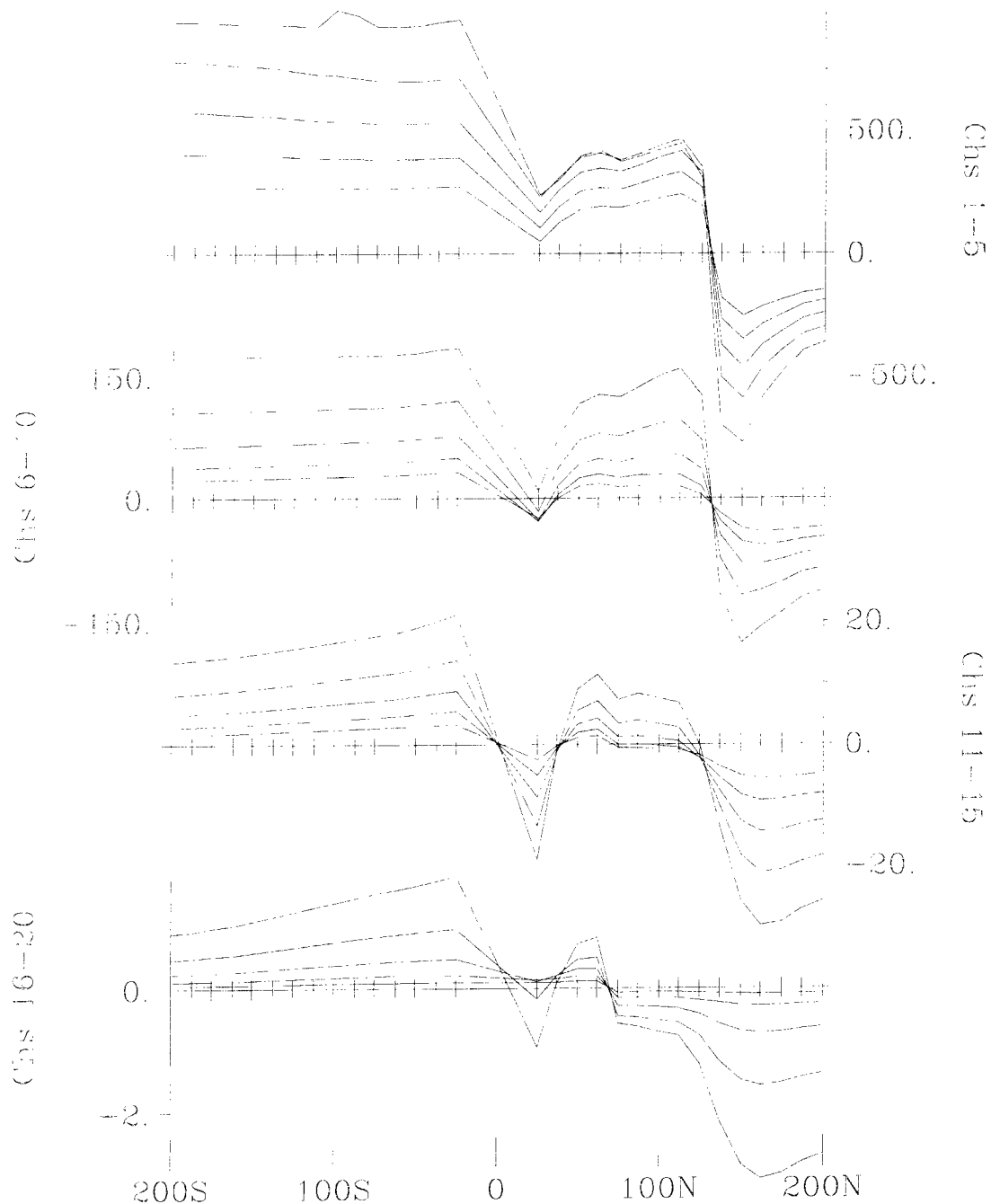
|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 08, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-150+00E

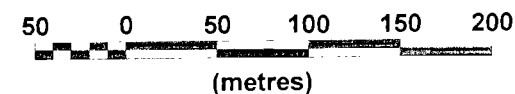




## Line 150+00E - Z Component

### LOOP 1

Scale 1:5000



## **GOLDEN CHALICE RESOURCES INC.**

LANGMUIR PROPERTY

TIMMINS, ON

## LPTM FIXED-LOOP PROFILING SURVEY

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

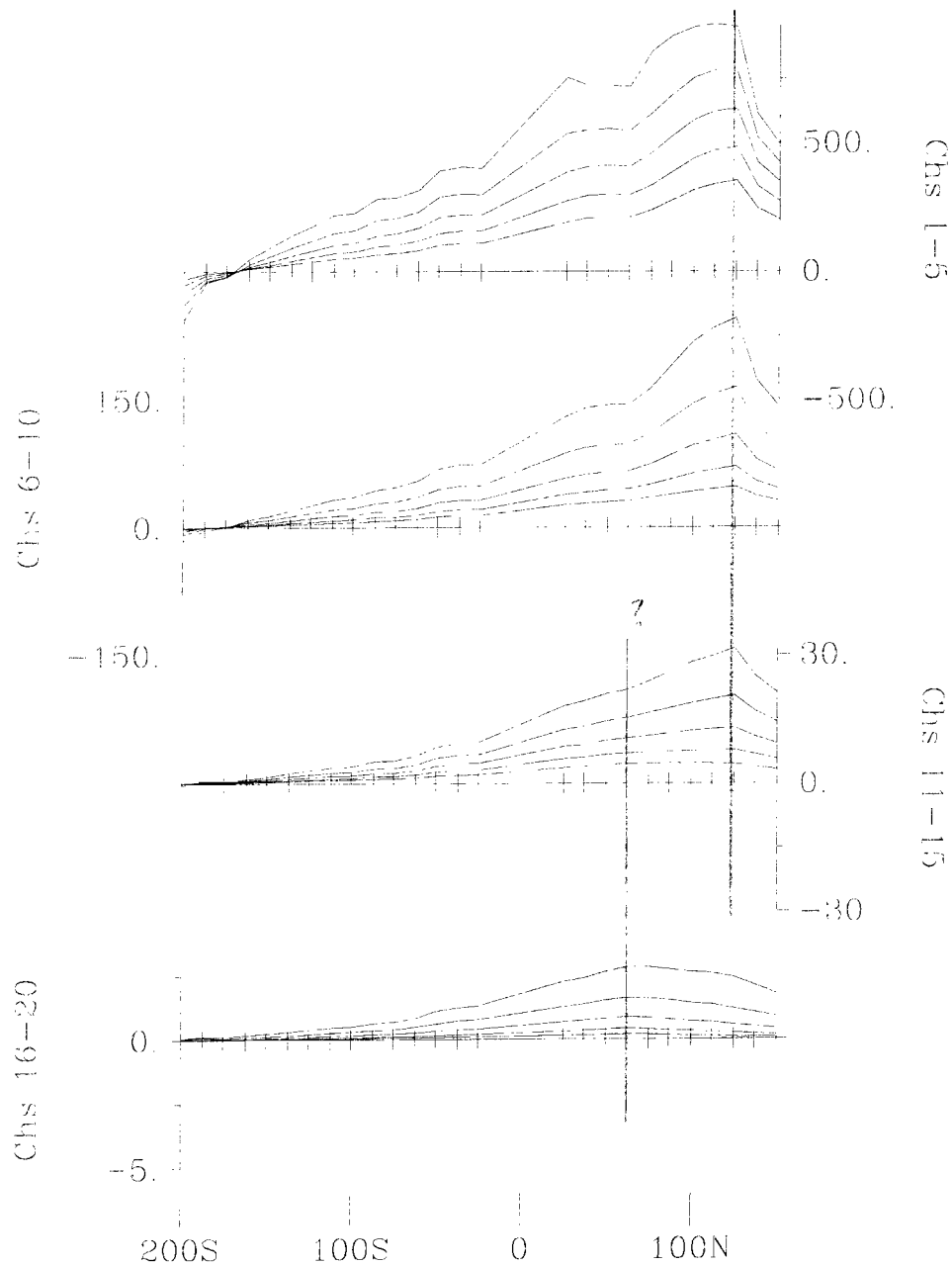
Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 08, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



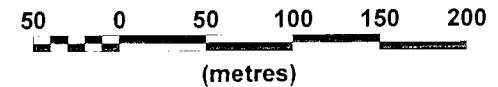
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Z-150+00E



Line 200+00E - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 10, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

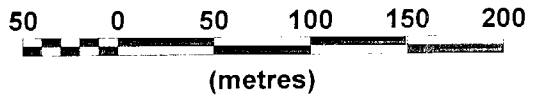
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-X-200+00E



# Line 200+00E - Y Component

## LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

### LPTM FIXED-LOOP PROFILING SURVEY

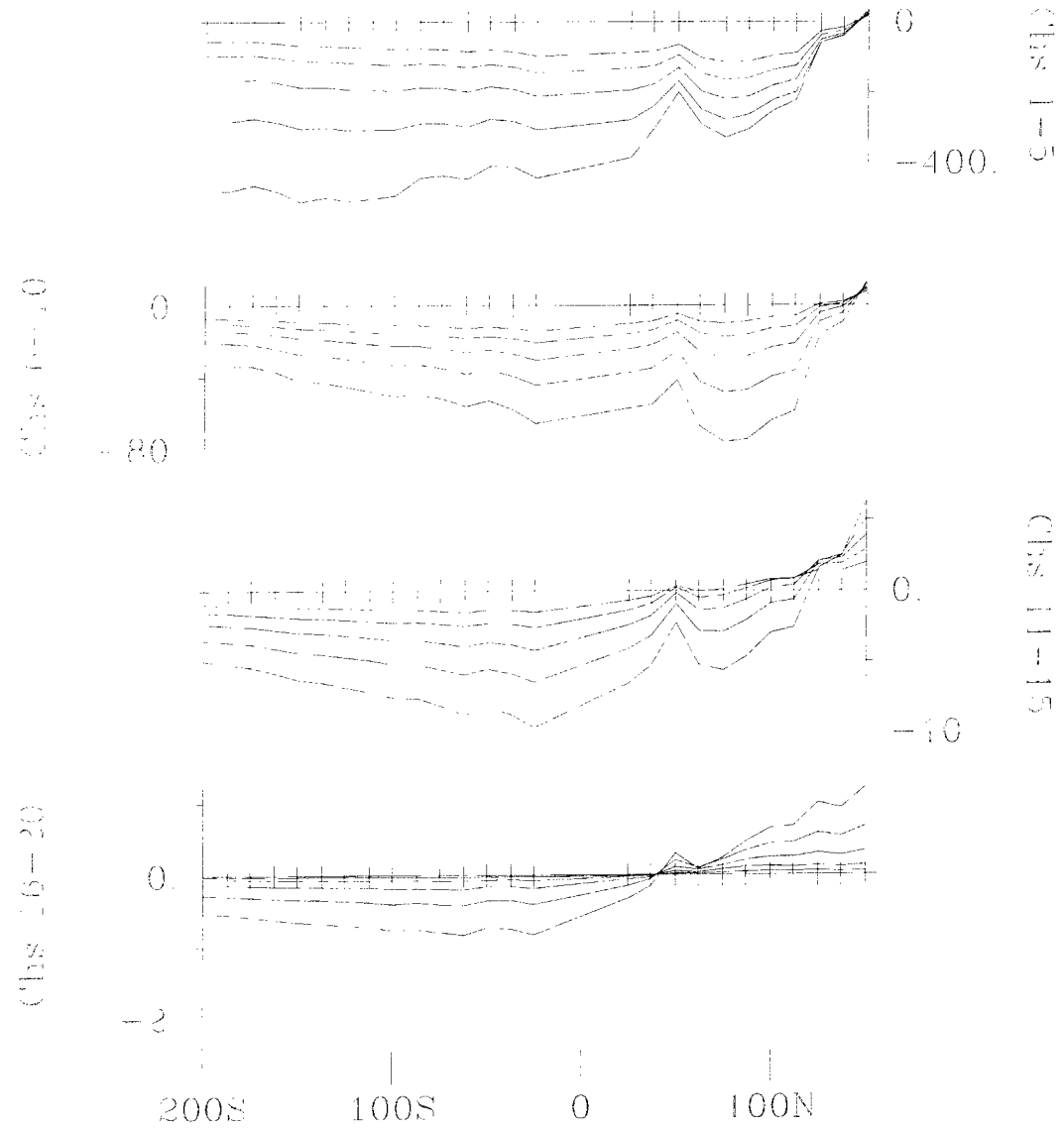
Secondary Electromagnetic Field (dB/dt)

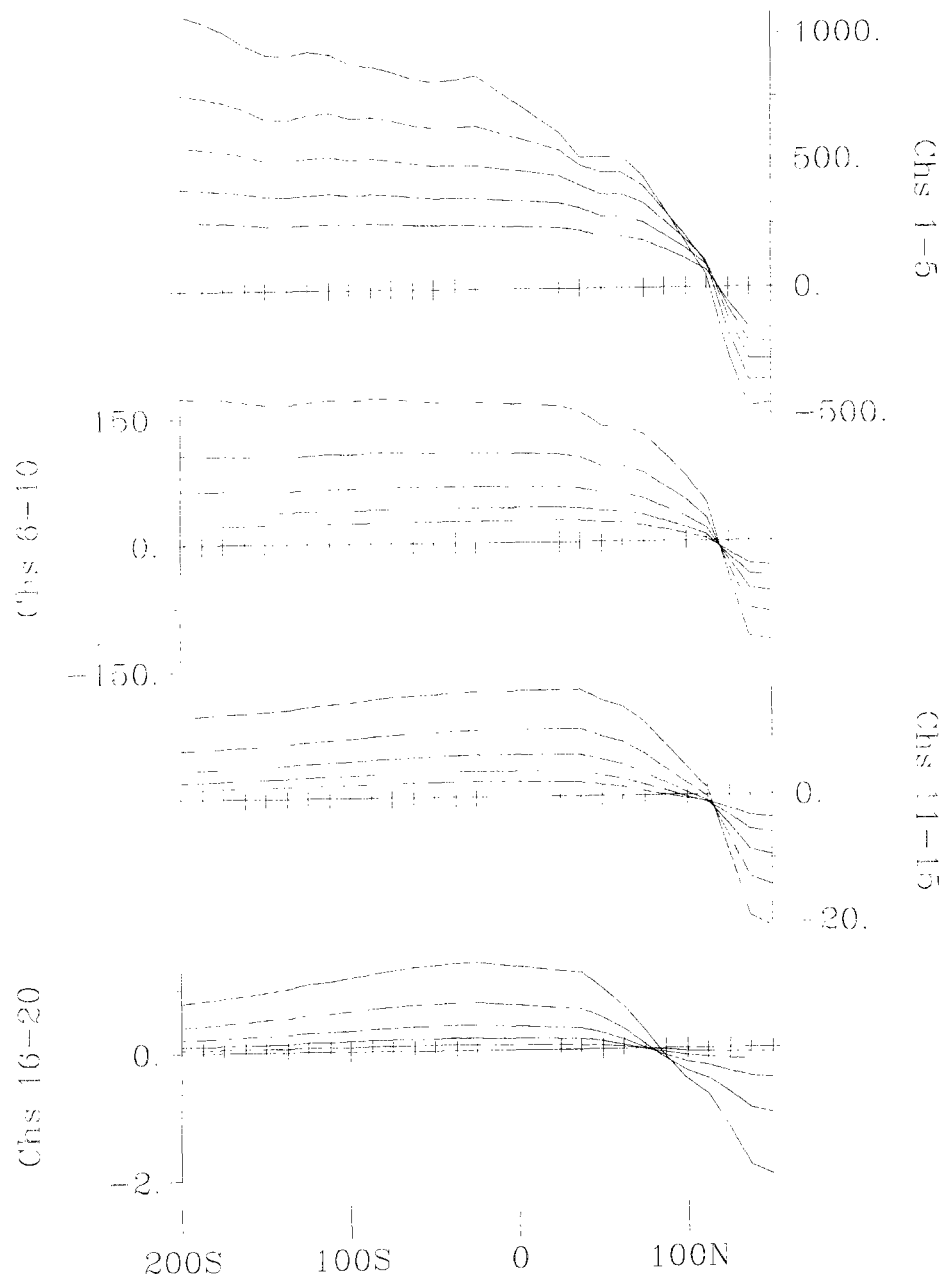
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 10, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

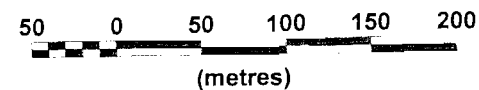
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Y-200+00E





Line 200+00E - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

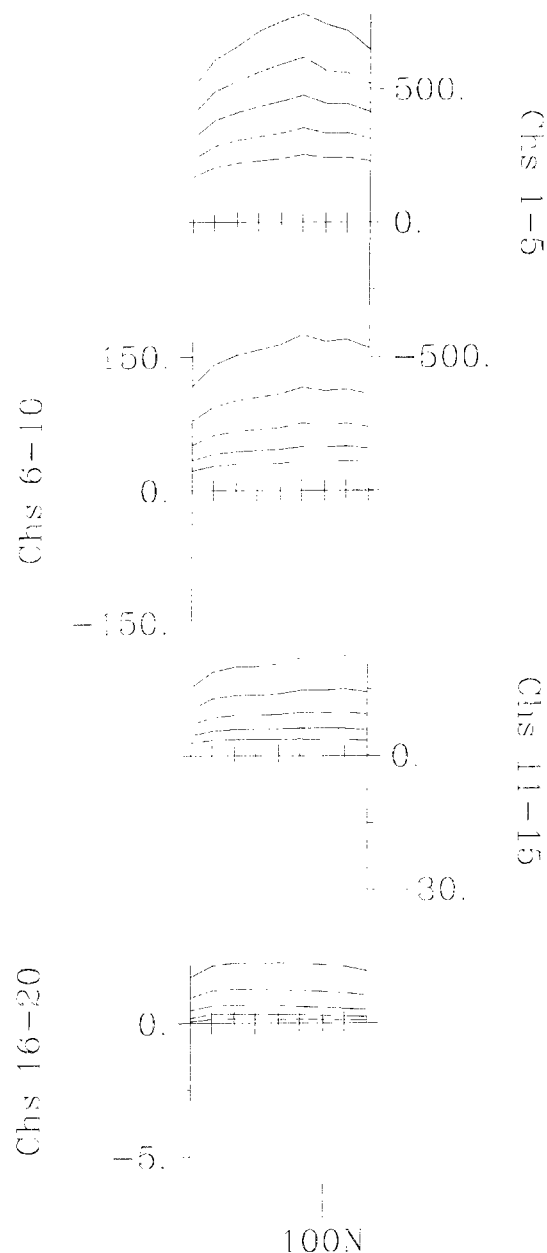
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 10, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

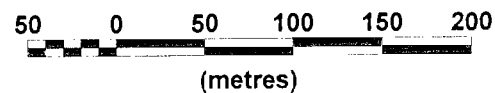
DWG. NO. CA00500C-4AXIS-Z-200+00E



Line 250+00E - X Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**

LANGMUIR PROPERTY

TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 10, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



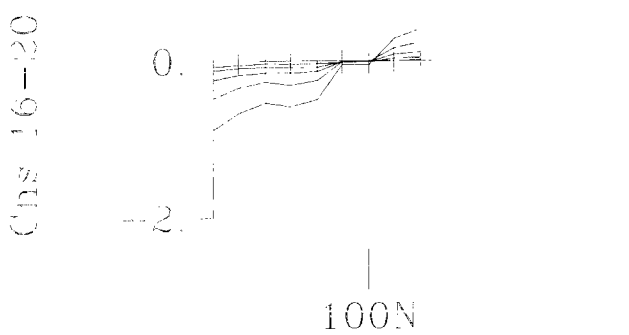
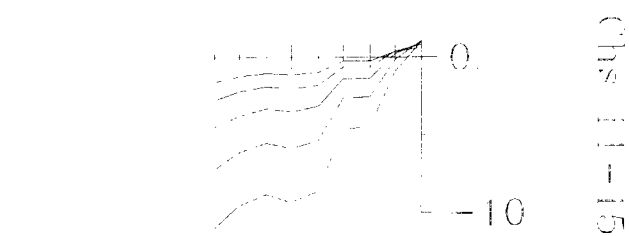
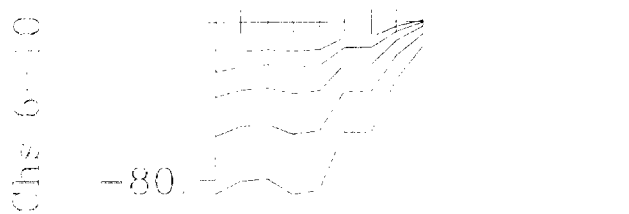
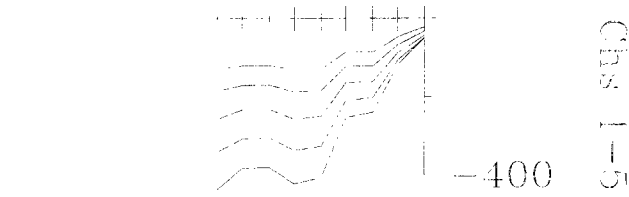
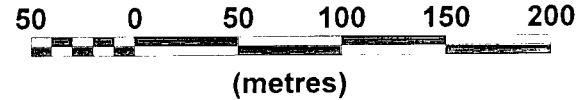
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-250+00E

# Line 250+00E - Y Component

## LOOP 1

Scale 1:5000



### **GOLDEN CHALICE RESOURCES INC.** LANGMUIR PROPERTY TIMMINS, ON

#### LPTM FIXED-LOOP PROFILING SURVEY Secondary Electromagnetic Field (dB/dt)

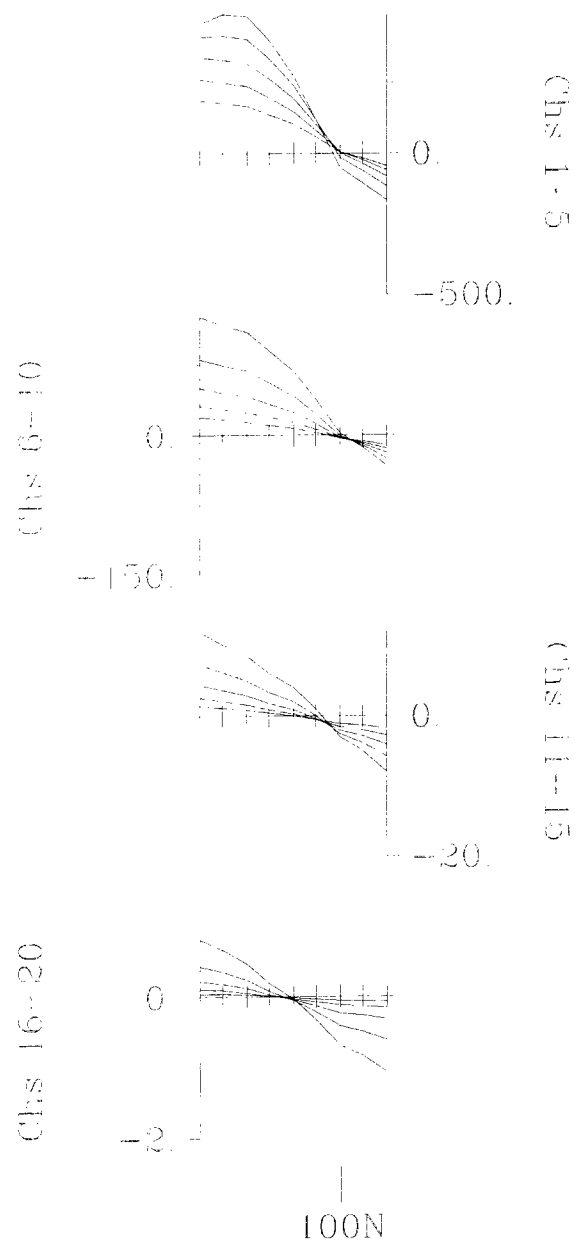
|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 30 Hz (50% duty cycle)                                        |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 10, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



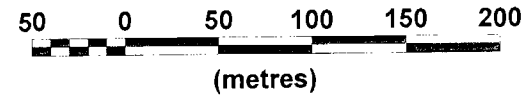
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-250+00E



Line 250+00E - Z Component  
**LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

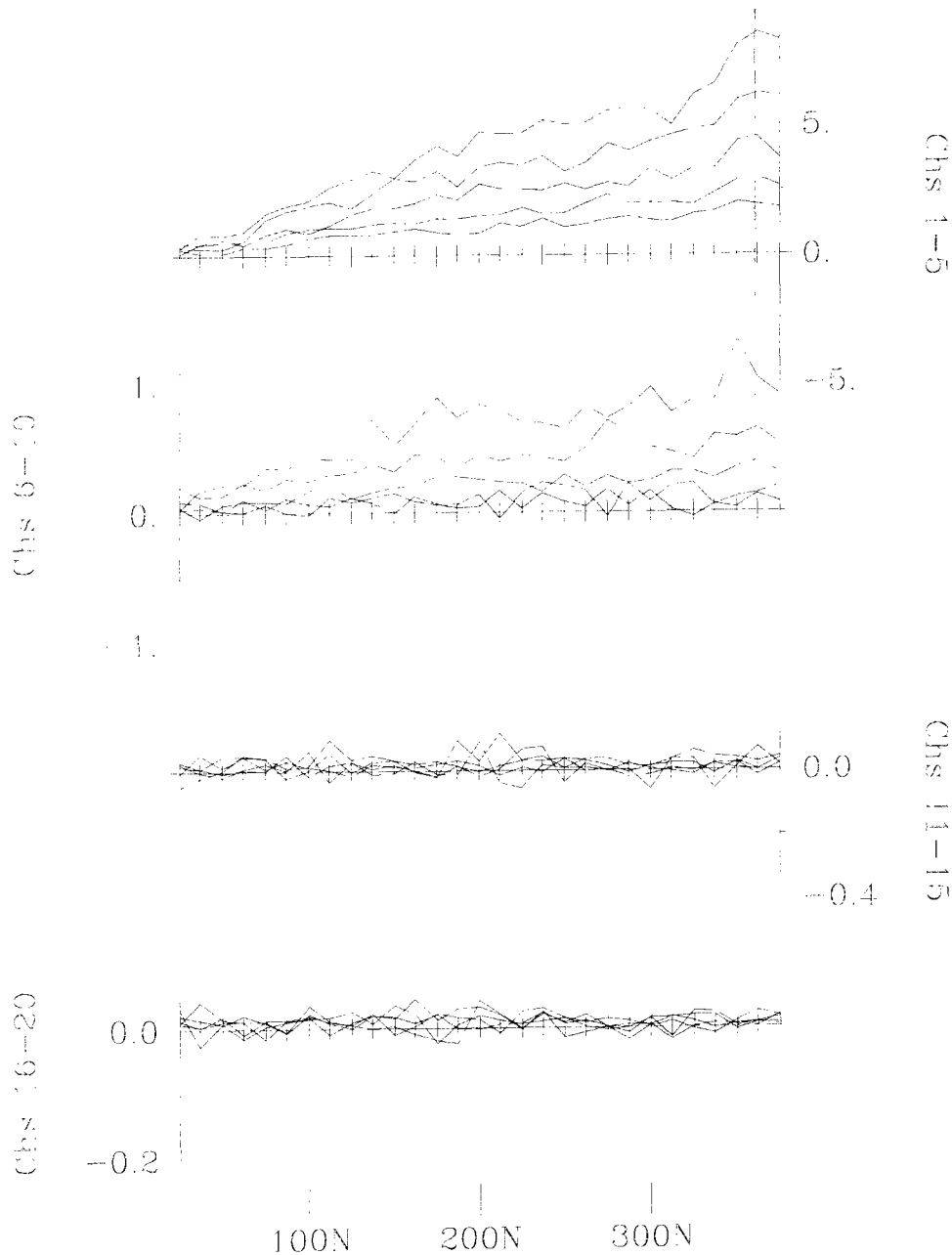
Survey Date: Sept. 10, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

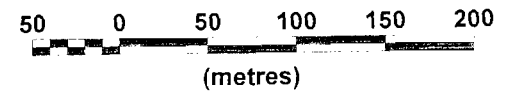
DWG. NO. CA00500C-4AXIS-Z-250+00E





Line 300+00W - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

**LPTEM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

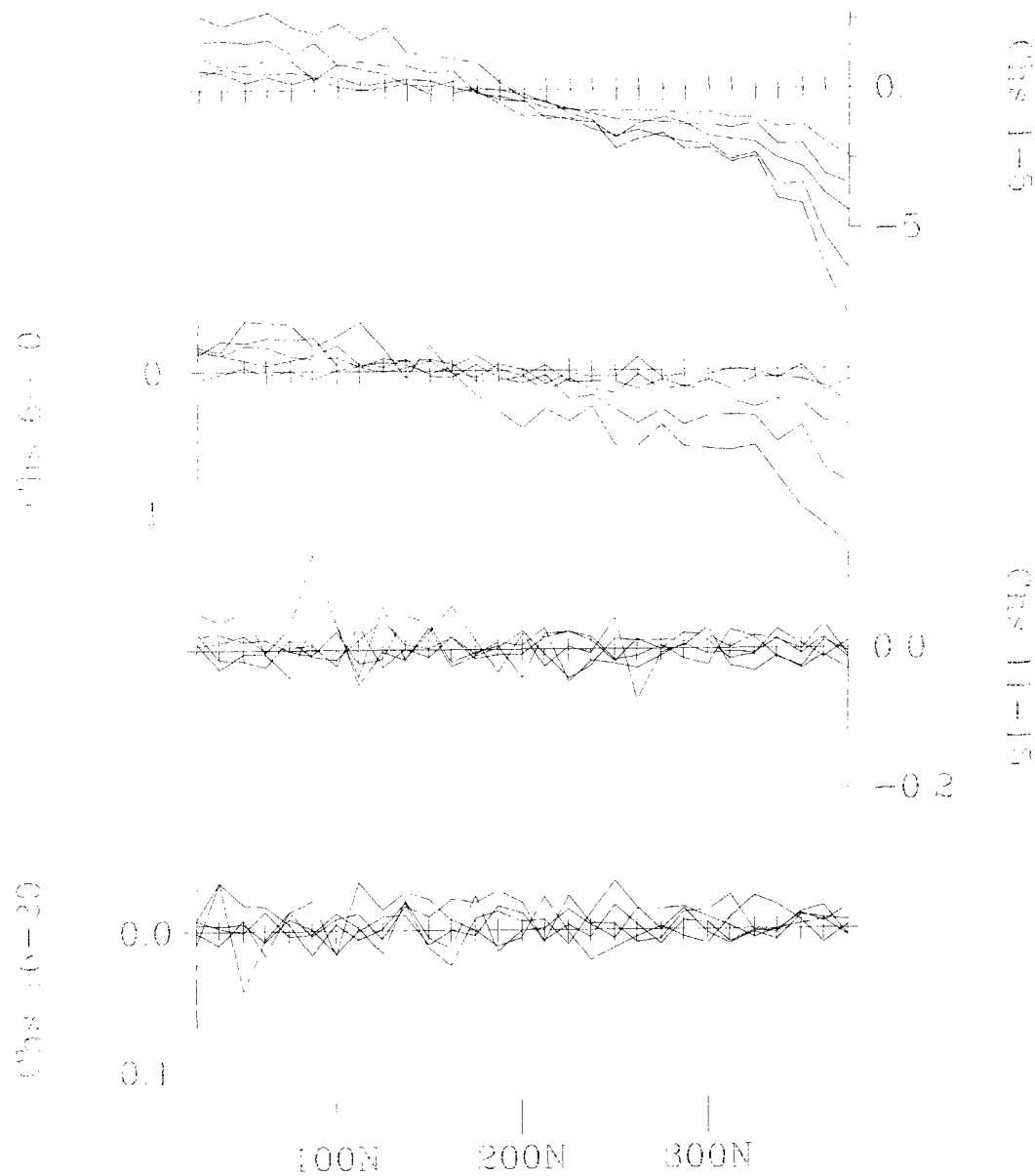
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us  
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 20, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



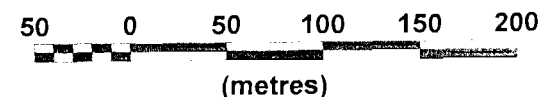
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-300+00W



Line 300+00W - Y Component  
 LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

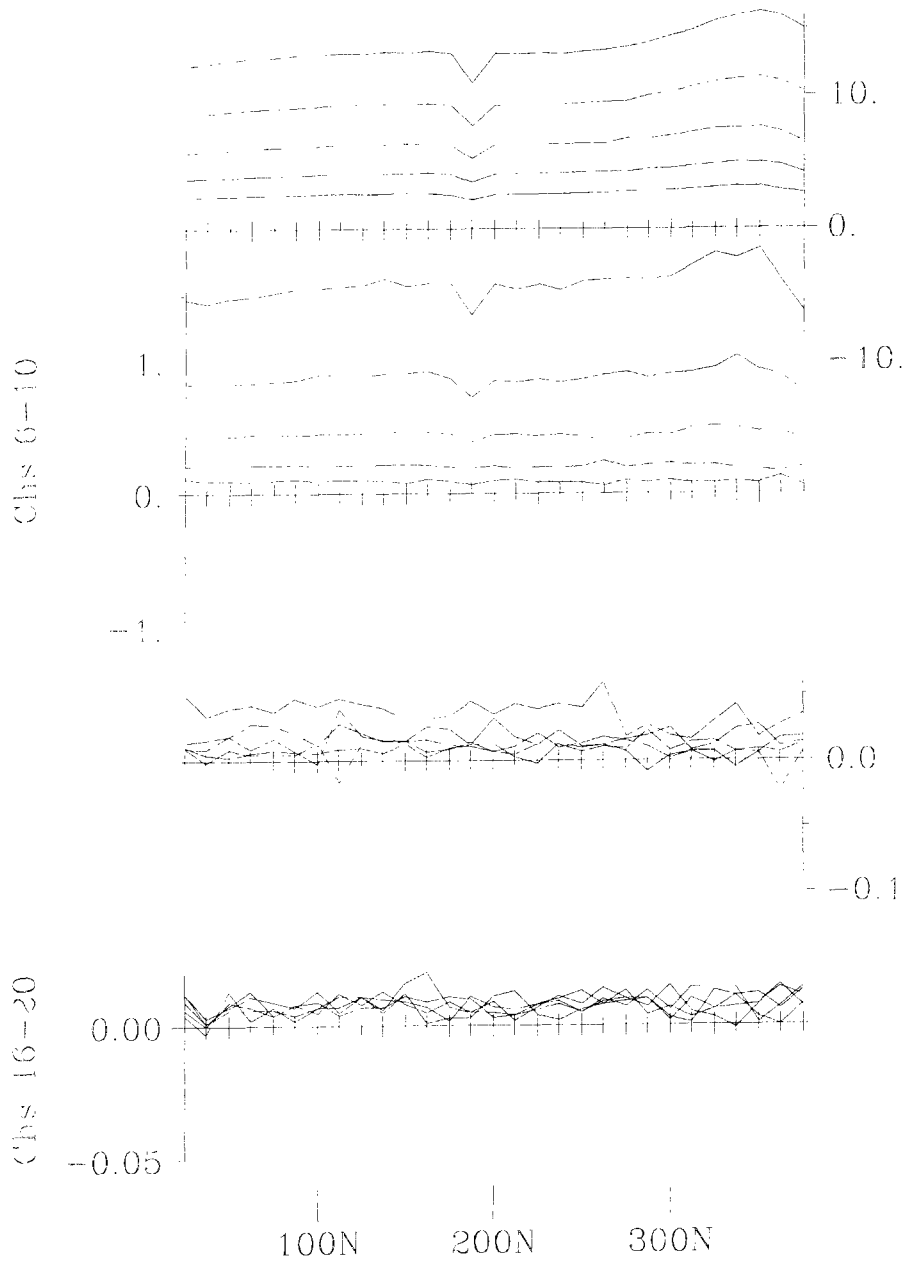
**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 3 Hz (50% duty cycle)                                         |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W @ 0+00 ; L2+50E @ 3+00S                                |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 20, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |

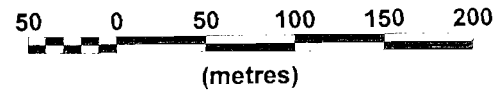
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Y-300+00W





Line 300+00W - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

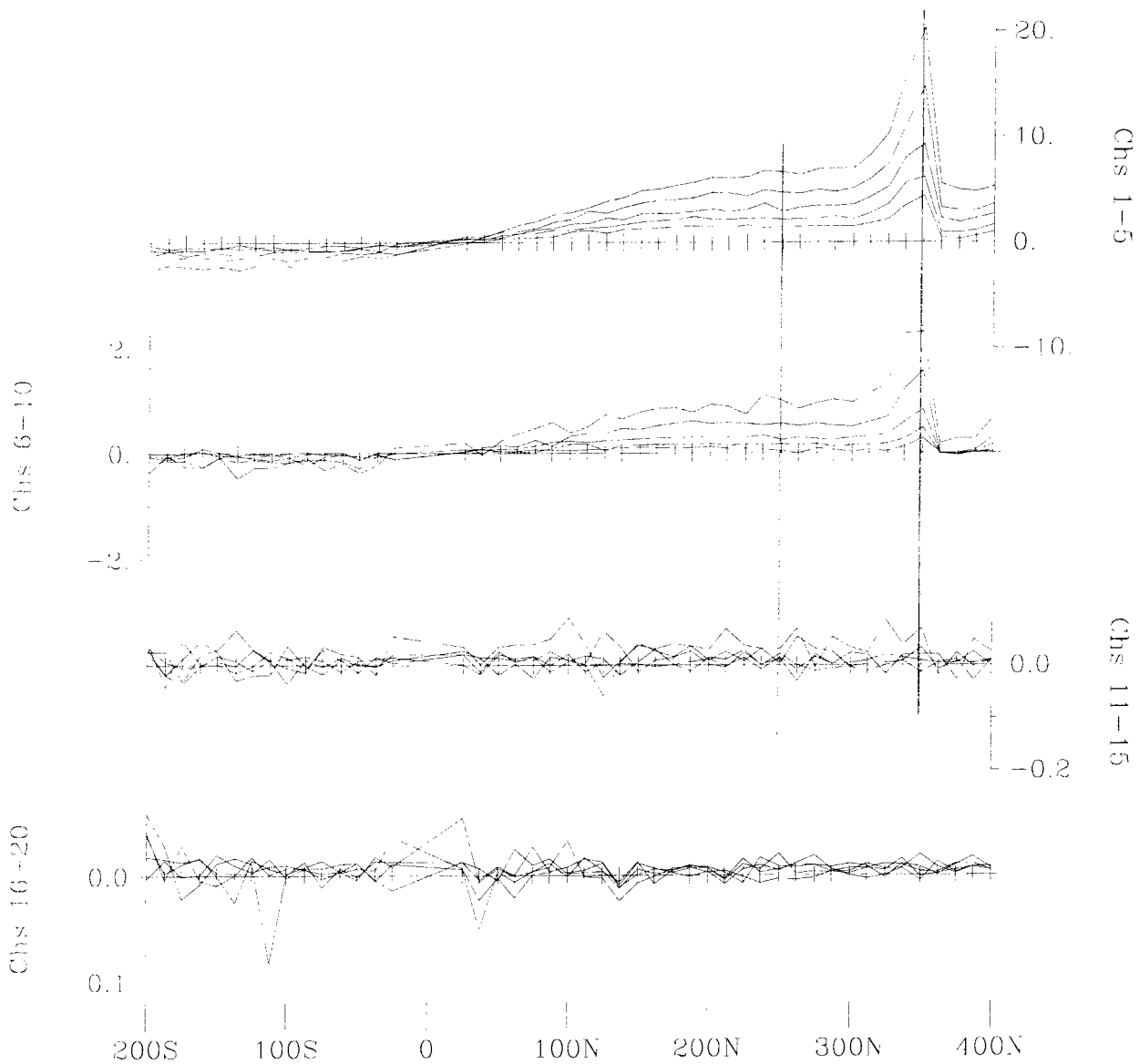
Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 20, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

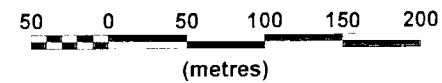
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-300+00W





Line 250+00W - X Component  
 LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

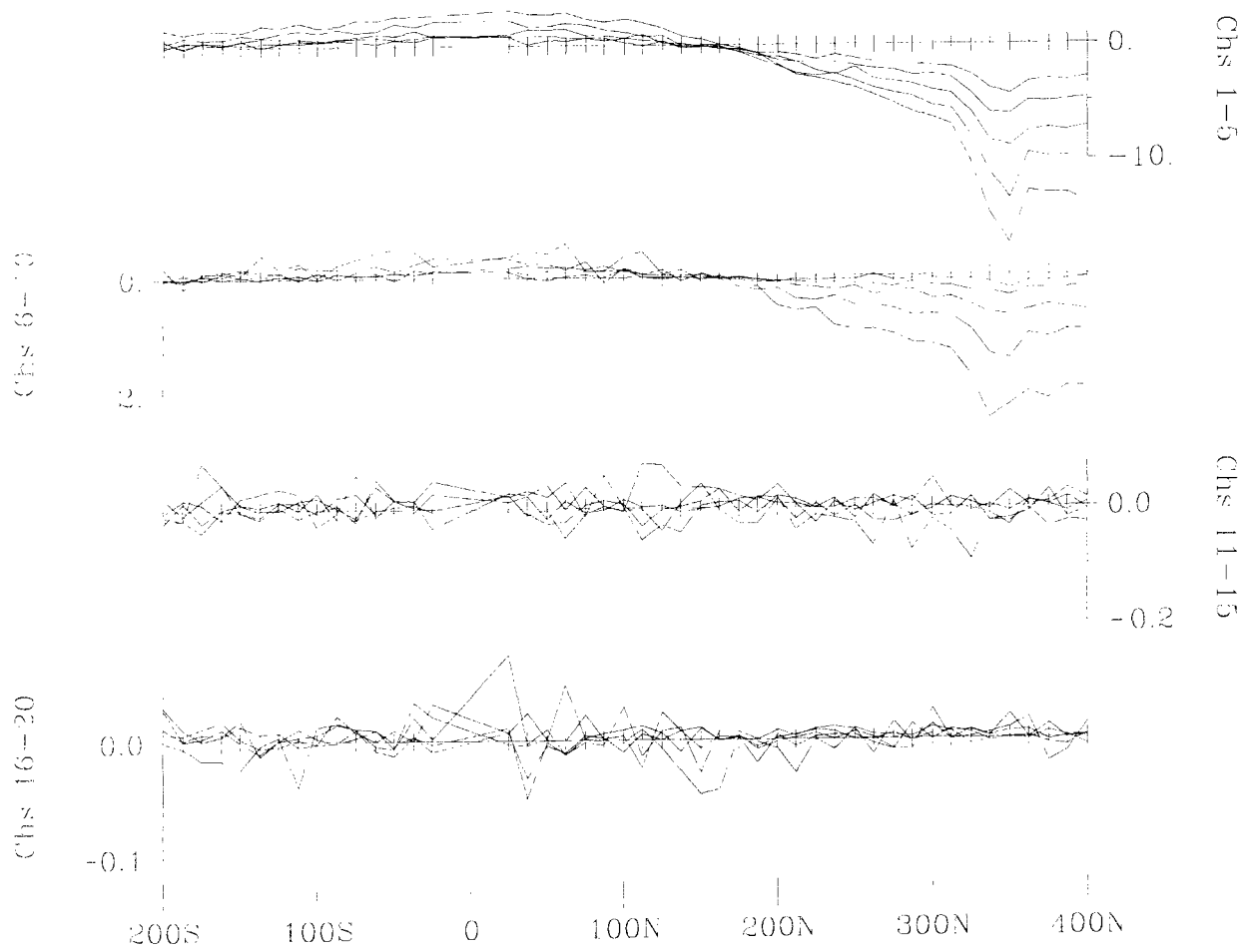
**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m x 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A·m<sup>2</sup>  
 Receiver Coil Orientation: Hx - positive up  
 Hy - positive north  
 Hz - positive west

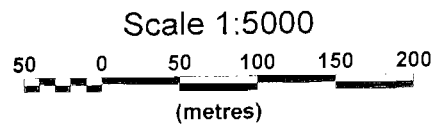
Survey Date: Sept. 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-X-250+00W





Line 250+00W - Y Component  
LOOP 1



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

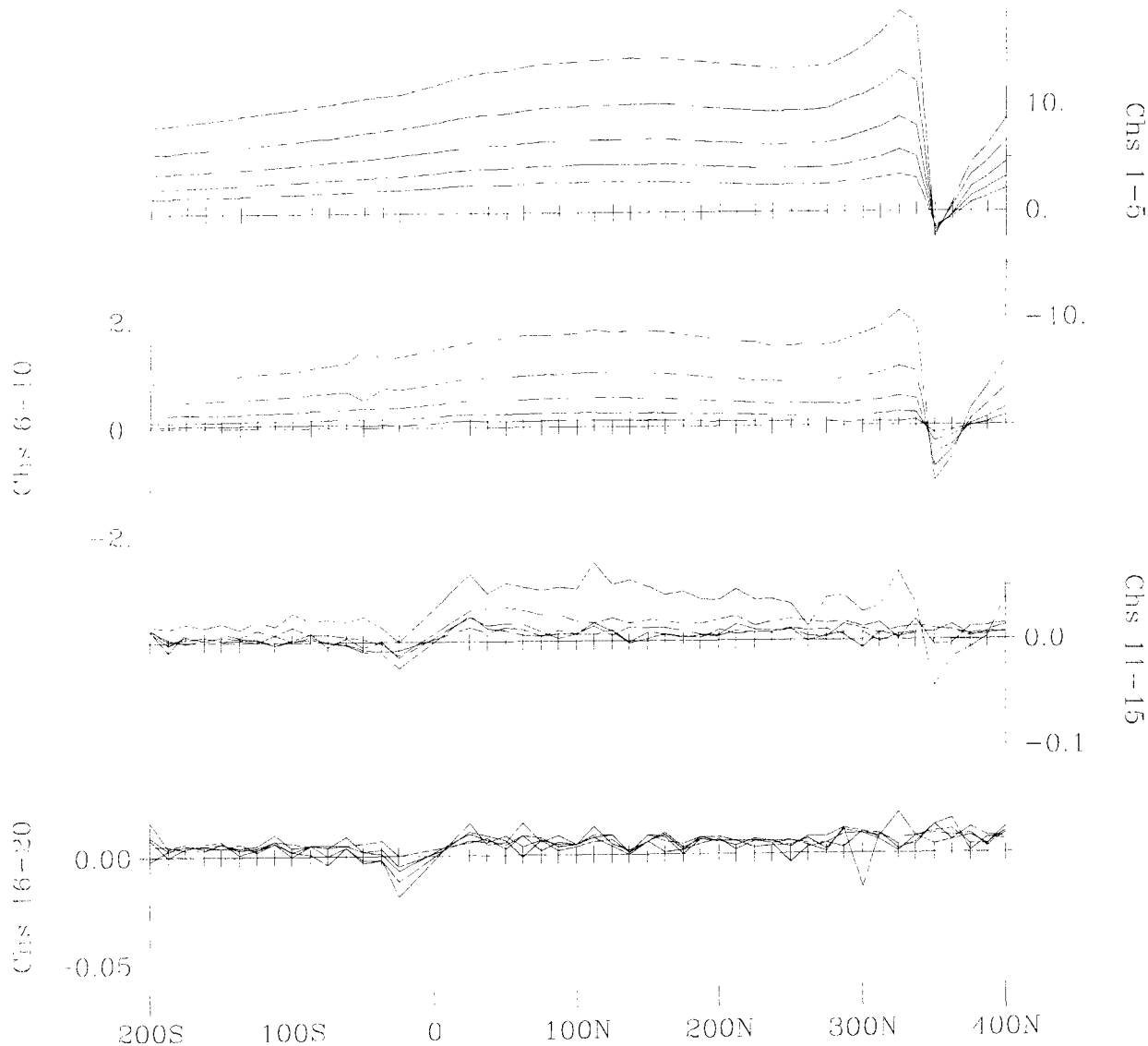
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m x 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 19, 2007  
Instrumentation: Rx = Digital Pratem (30 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

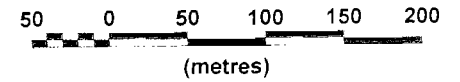
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Y-250+00W





Line 250+00W - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY  
Secondary Electromagnetic Field (dB/dt)

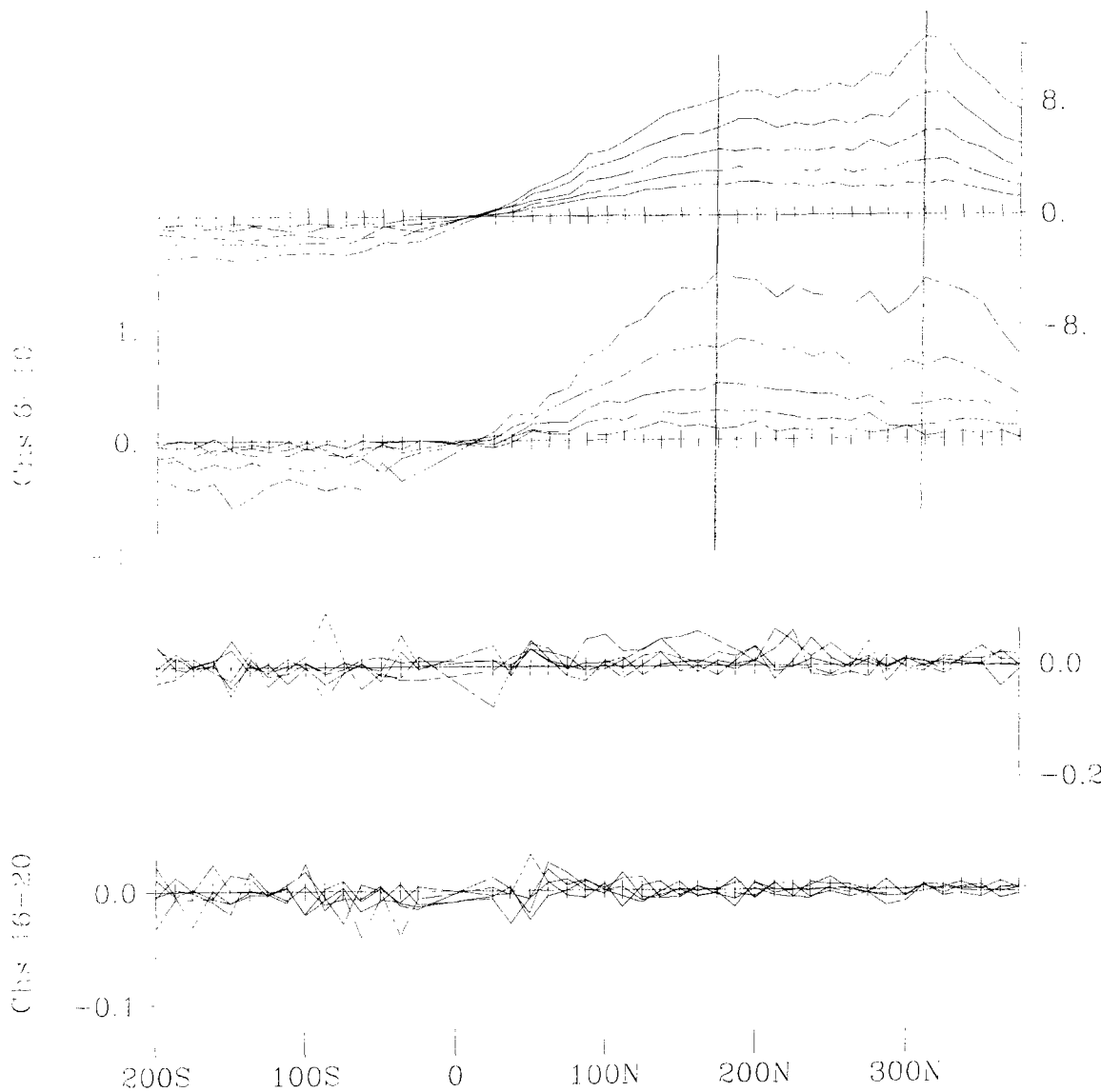
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E,3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A.m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-250+00W

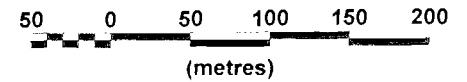


Chs 1-5

Chs 11-15

**Line 200+00W - X Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

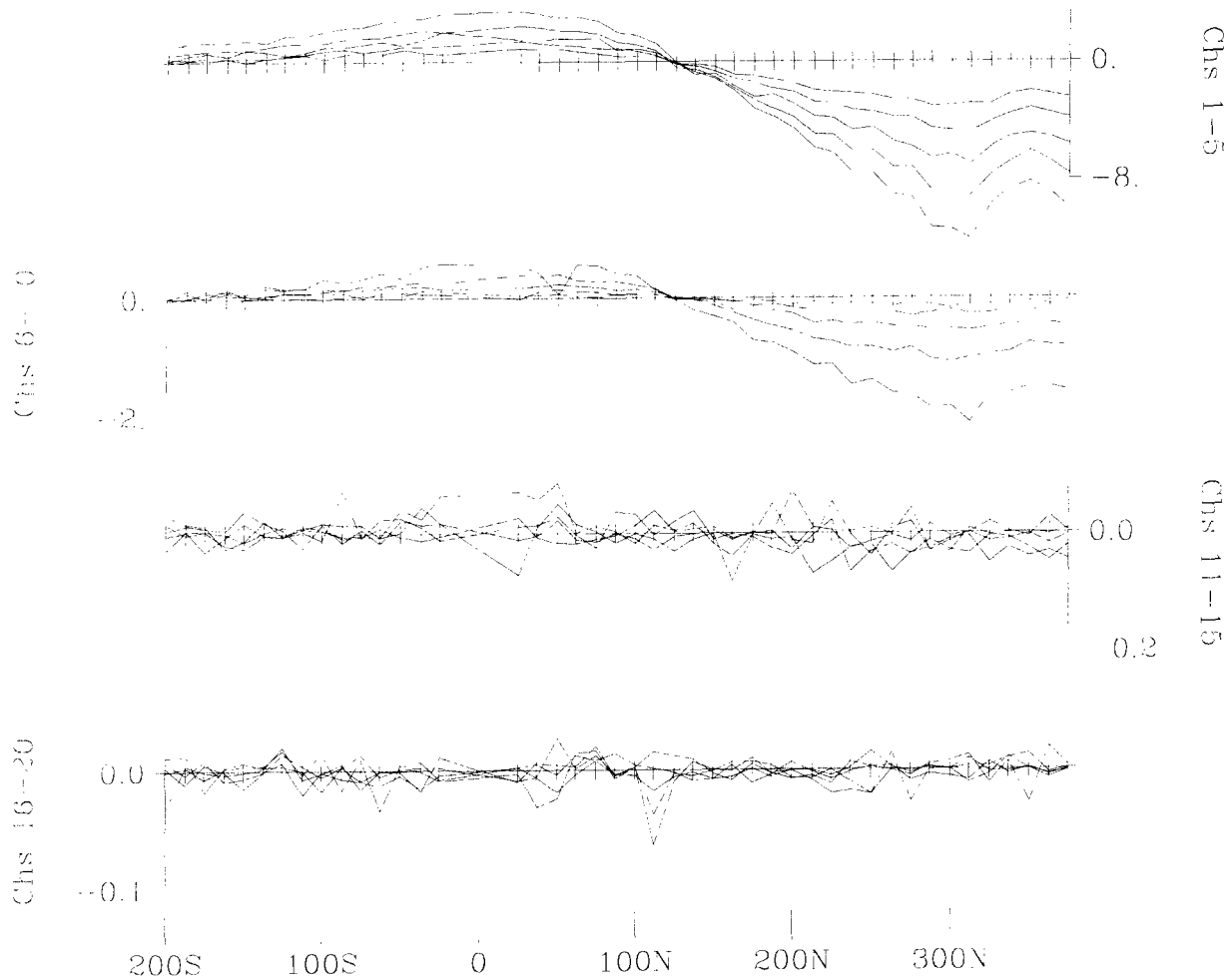
Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E:3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A.m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 19, 2007  
 Instrumentation: Rx =  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



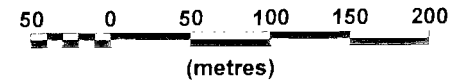
Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-X-200+00W



Line 200+00W - Y Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
**LANGMUIR PROPERTY**  
 TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

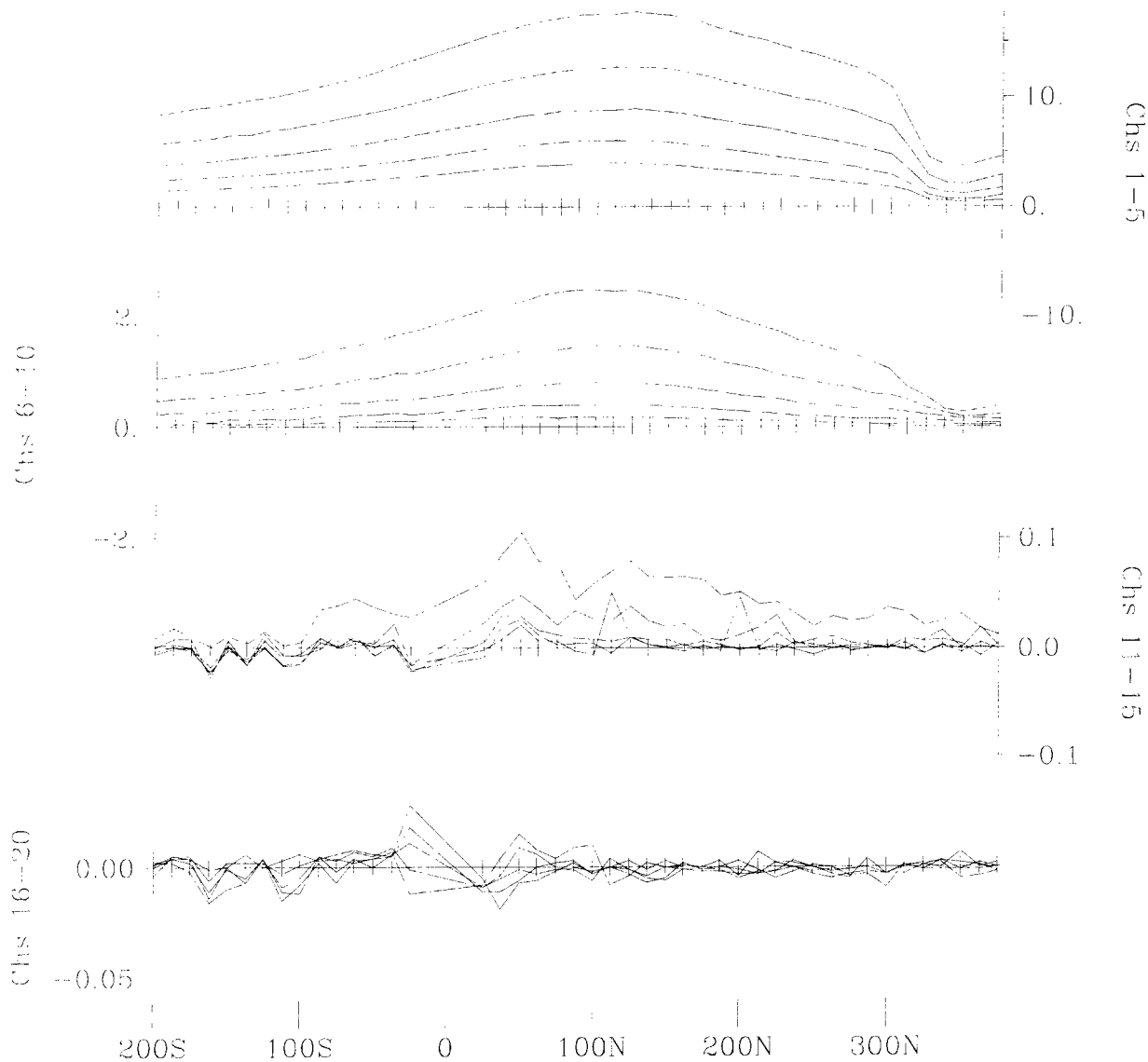
Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 19, 2007  
 Instrumentation: Rx =  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



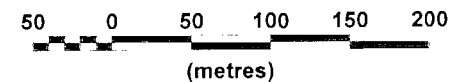
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Y-200+00W





Line 200+00W - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

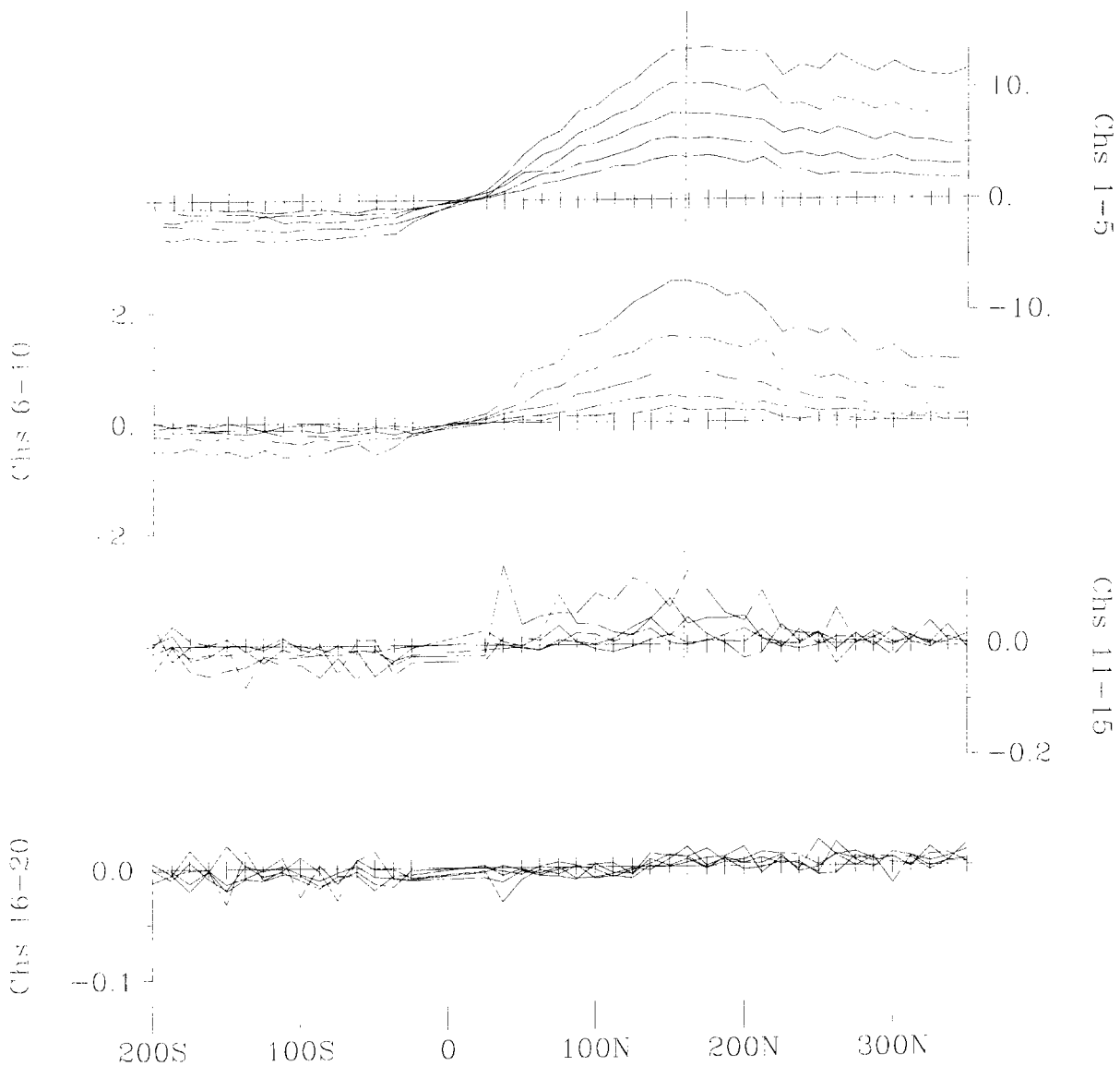
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E,3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 19, 2007  
Instrumentation: Rx =  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



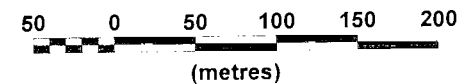
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-200+00W



**Line 150+00W – X Component**

**LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
**LANGMUIR PROPERTY**  
**TIMMINS, ON**

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

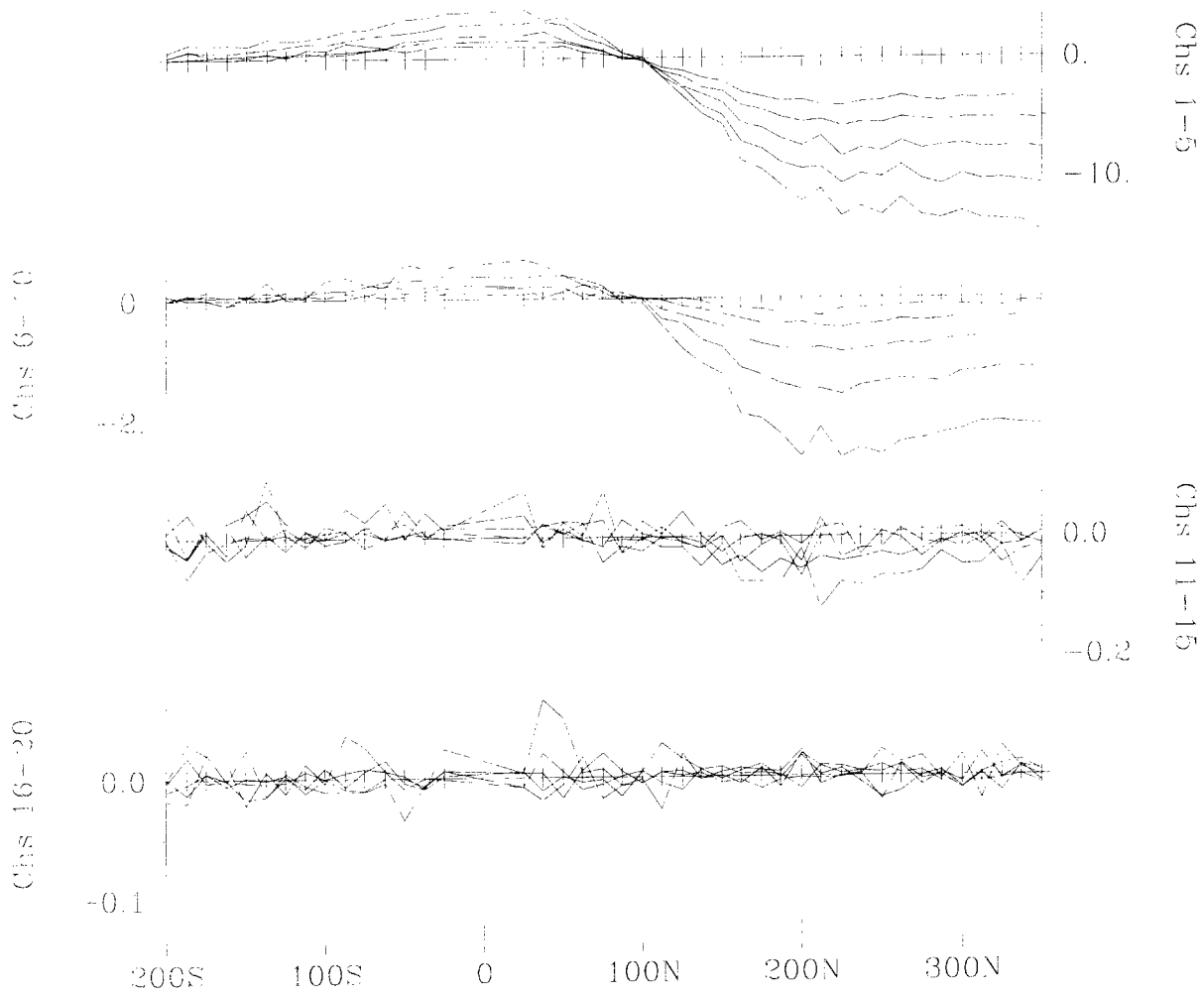
Station Interval: 12.5m  
 Profile Units: nanoVolt/A•m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

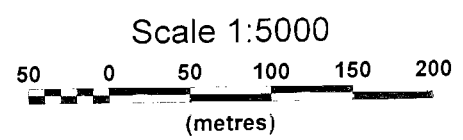


Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-150+00W



Line 150+00W - Y Component  
**LOOP 1**



**GOLDEN CHALICE RESOURCES INC.**  
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 TIMMINS, ON

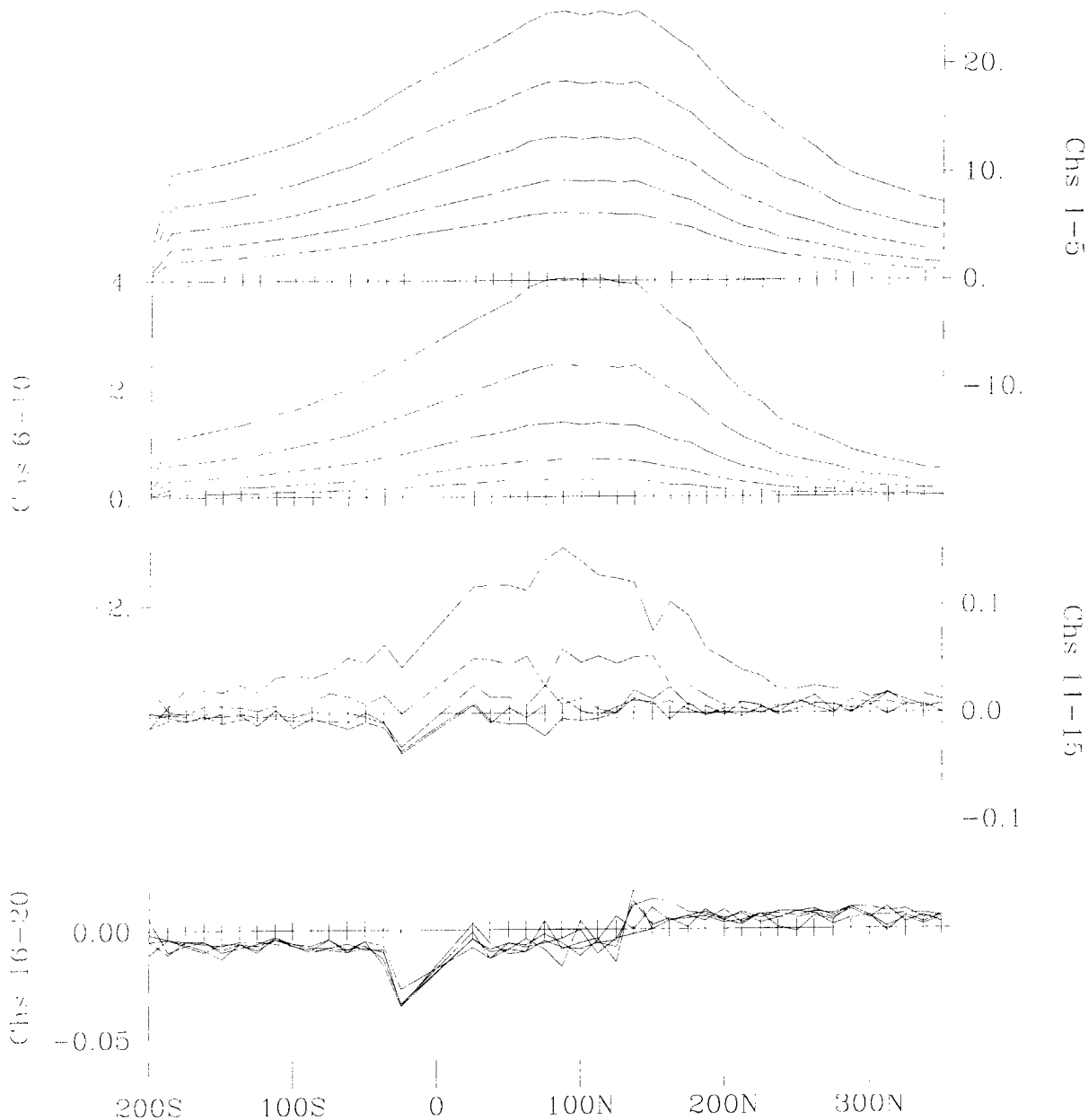
**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

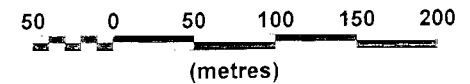
Survey Date: Sept. 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Y-150+00W



**Line 150+00W - Z Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

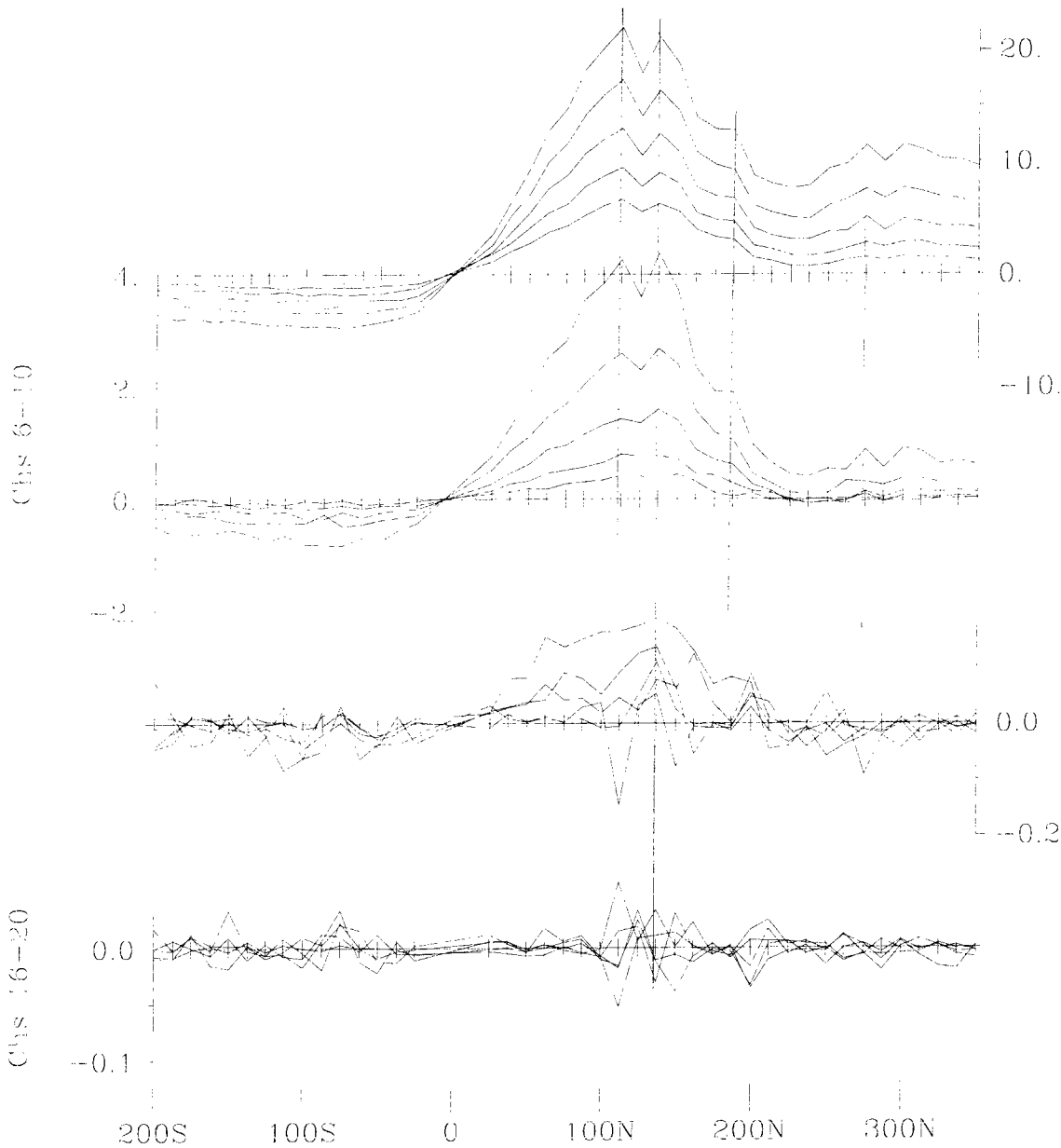
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

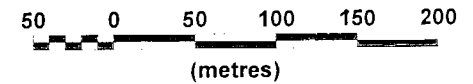
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-150+00W





Line 100+00W - X Component  
 LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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 TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY  
 Secondary Electromagnetic Field (dB/dt)

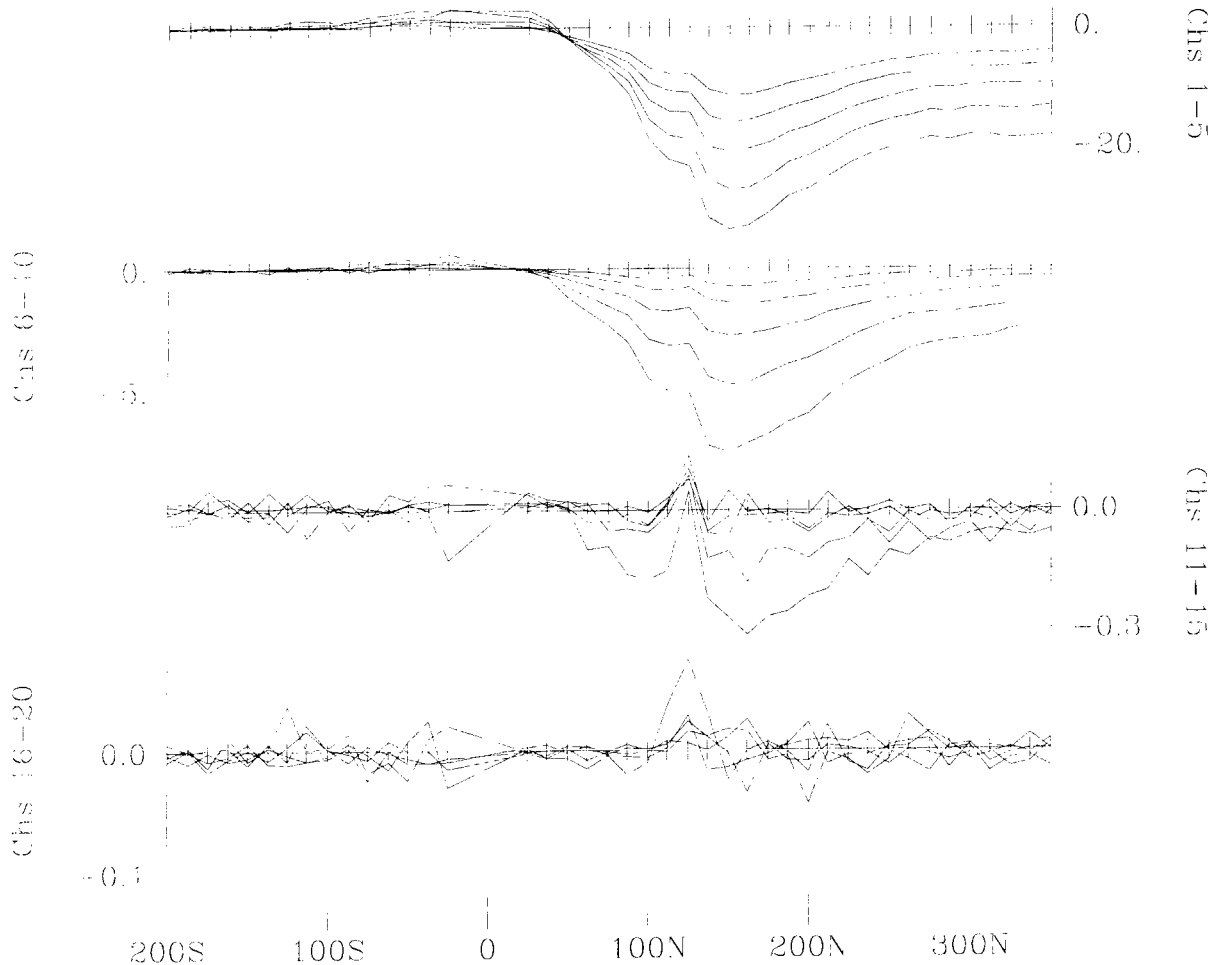
Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 19, 2007  
 Instrumentation: Rx =  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

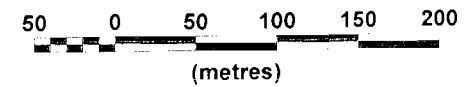


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-X-100+00W



Line 100+00W - Y Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY  
Secondary Electromagnetic Field (dB/dt)

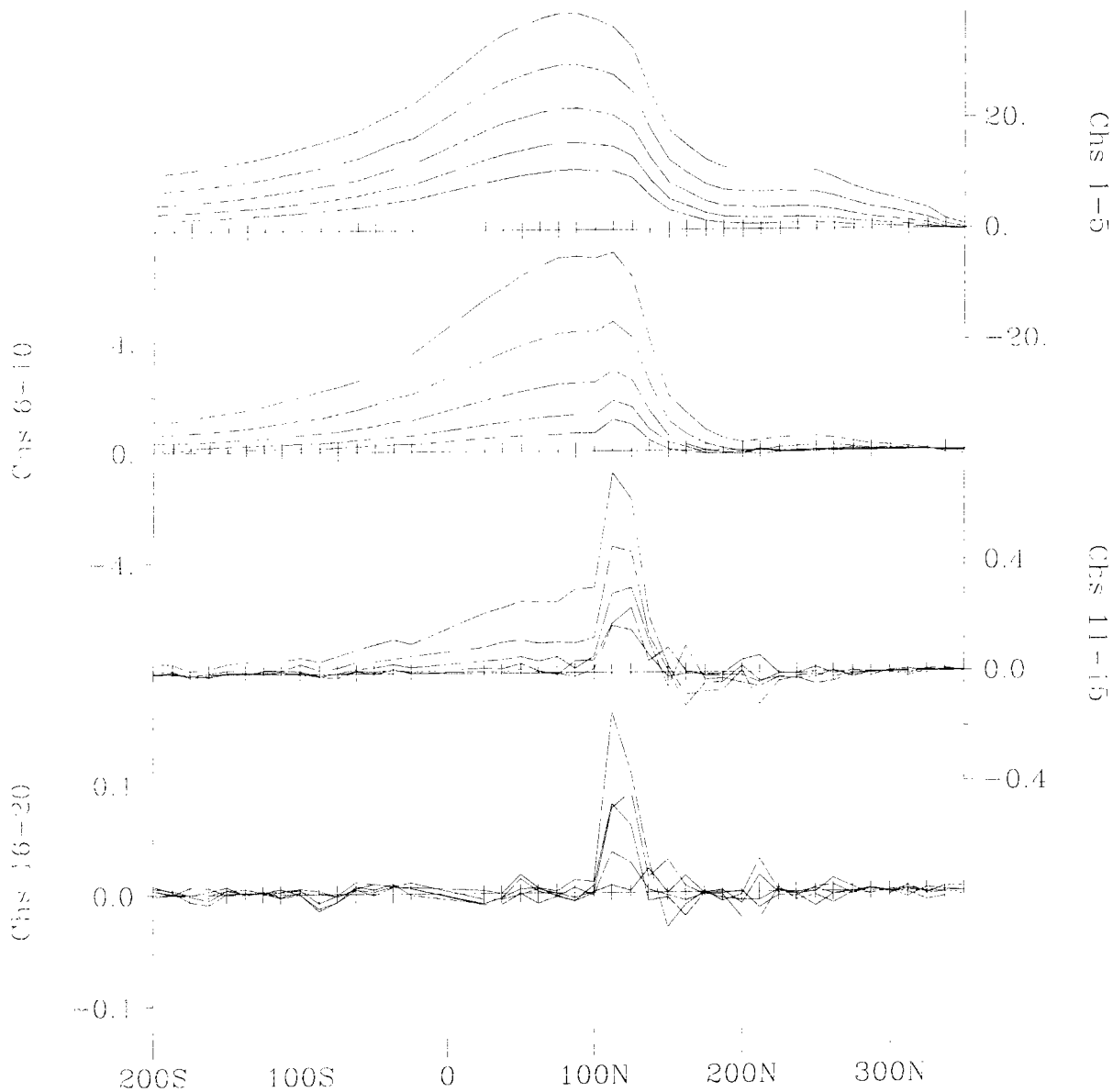
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 19, 2007  
Instrumentation: Rx =  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

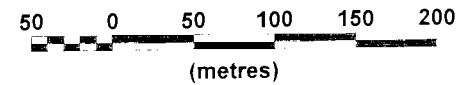


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Y-100+00W



Line 100+00W - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY  
Secondary Electromagnetic Field (dB/dt)

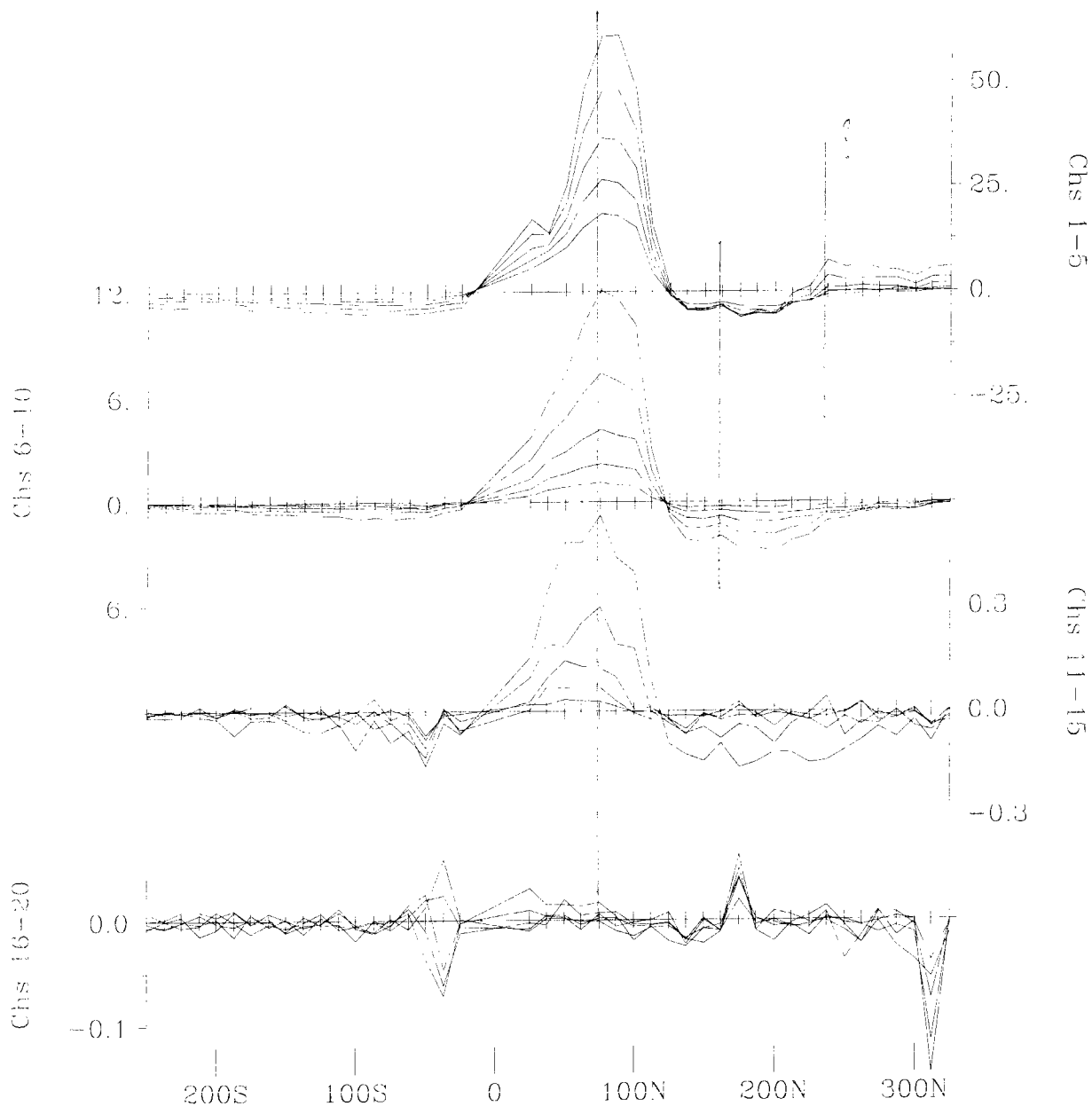
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 19, 2007  
Instrumentation: Rx =  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

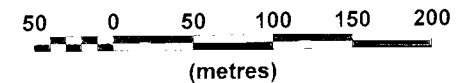


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-100+00W



**Line 50+00W - X Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY  
Secondary Electromagnetic Field (dB/dt)

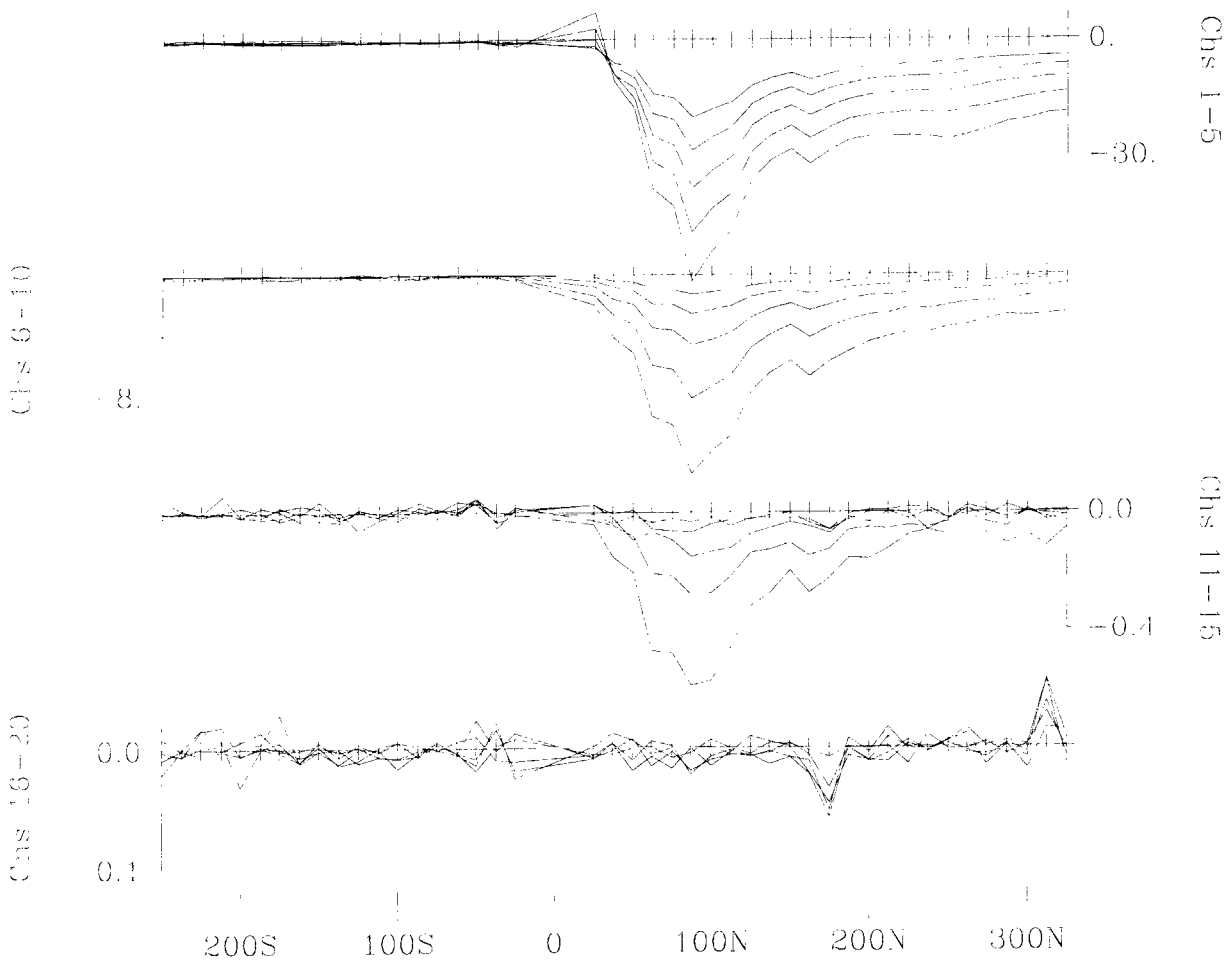
|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 3 Hz (50% duty cycle)                                         |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                   |
|------------------|-----------------------------------------------------------------------------------|
| Survey Date:     | Sept. 17, 2007                                                                    |
| Instrumentation: | Rx =<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



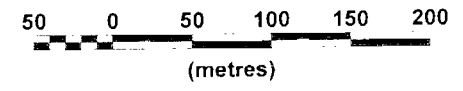
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-X-50+00W





Line 50+00W - Y Component  
**LOOP 1**

Scale 1:5000



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 TIMMINS, ON

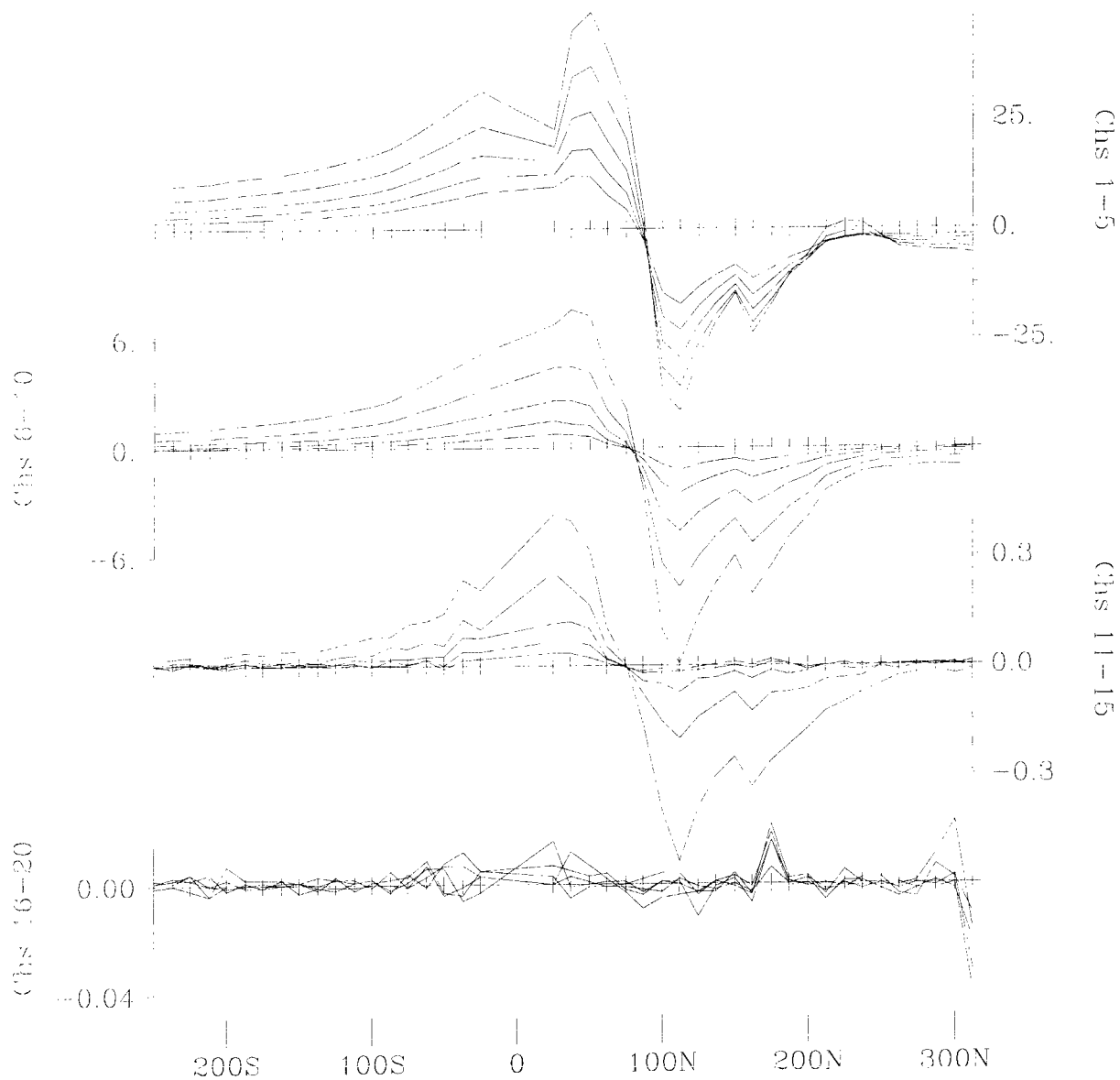
**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A·m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 17, 2007  
 Instrumentation: Rx =  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

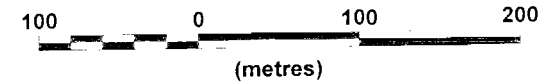
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Y-50+00W





**Line 50+00W - Z Component  
LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

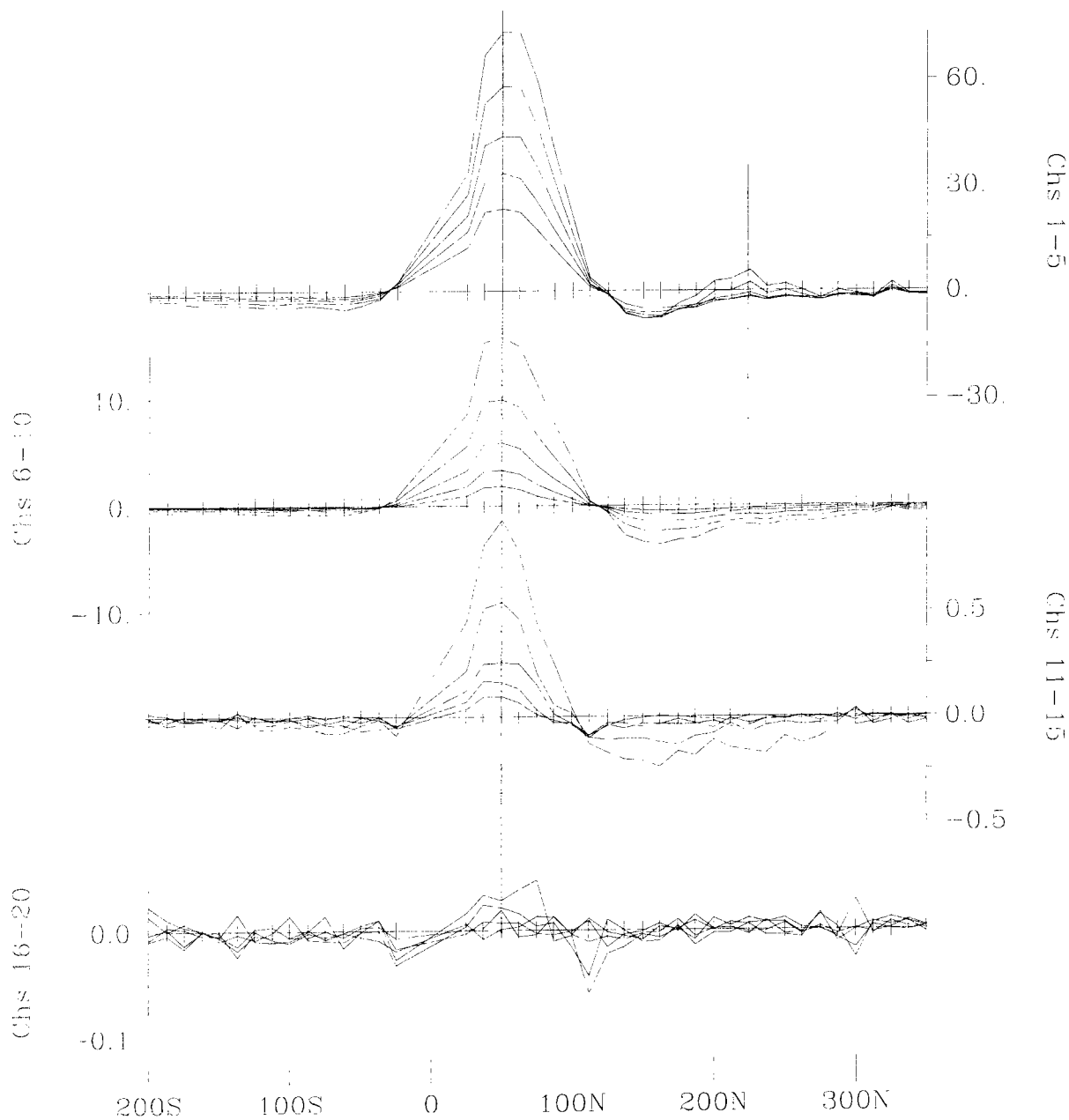
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 17, 2007  
Instrumentation: Rx =  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

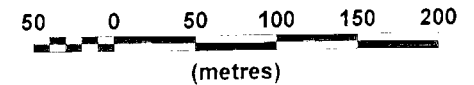


Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-50+00W



Line 0+00E - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

LPTTEM FIXED-LOOP PROFILING SURVEY  
Secondary Electromagnetic Field (dB/dt)

|                            |                           |
|----------------------------|---------------------------|
| Transmitter Frequency:     | 3 Hz (50% duty cycle)     |
| Tx Loop Size:              | 300m X 550m               |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N  |
| Transmitter Current:       | 22.0 Amps                 |
| Transmitter Turn-Off Time: | 310 us                    |
| Station Interval:          | 12.5m                     |
| Profile Units:             | nanoVolt/A*m <sup>2</sup> |
| Receiver Coil Orientation: | Hz - positive up          |
|                            | Hx - positive north       |
|                            | Hy - positive west        |

|                  |                                                                                   |
|------------------|-----------------------------------------------------------------------------------|
| Survey Date:     | Sept. 17, 2007                                                                    |
| Instrumentation: | Rx =<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



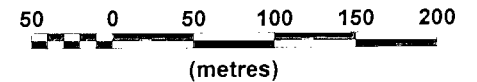
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-0+00E

Line 0+00E - Y Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY

Secondary Electromagnetic Field (dB/dt)

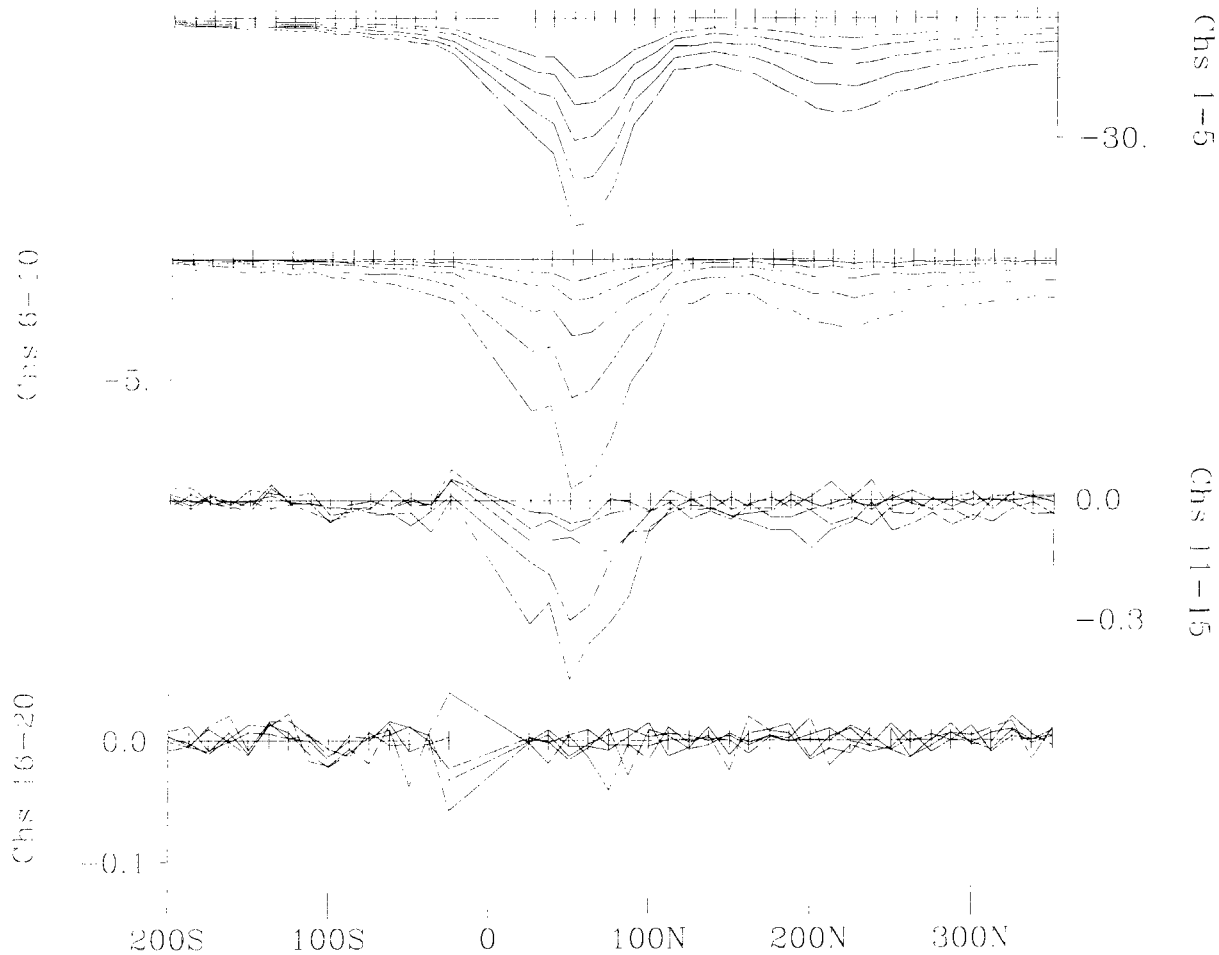
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E:3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us  
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

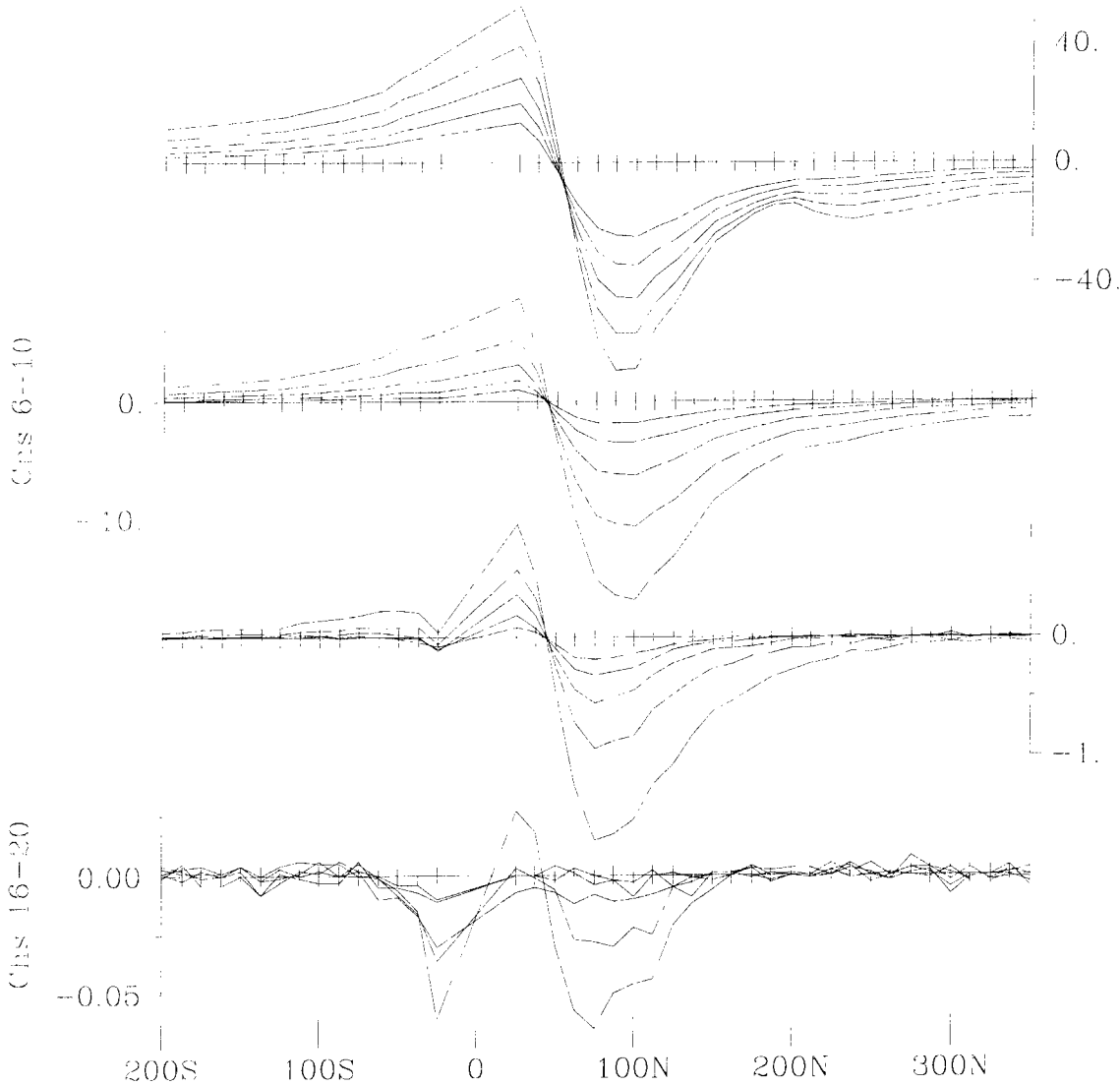
Survey Date: Sept. 17, 2007  
Instrumentation: Rx =  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-0+00E

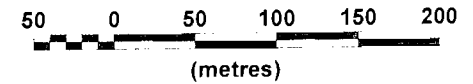




Line 0+00 - Z Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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LPTM FIXED-LOOP PROFILING SURVEY  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50F,3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

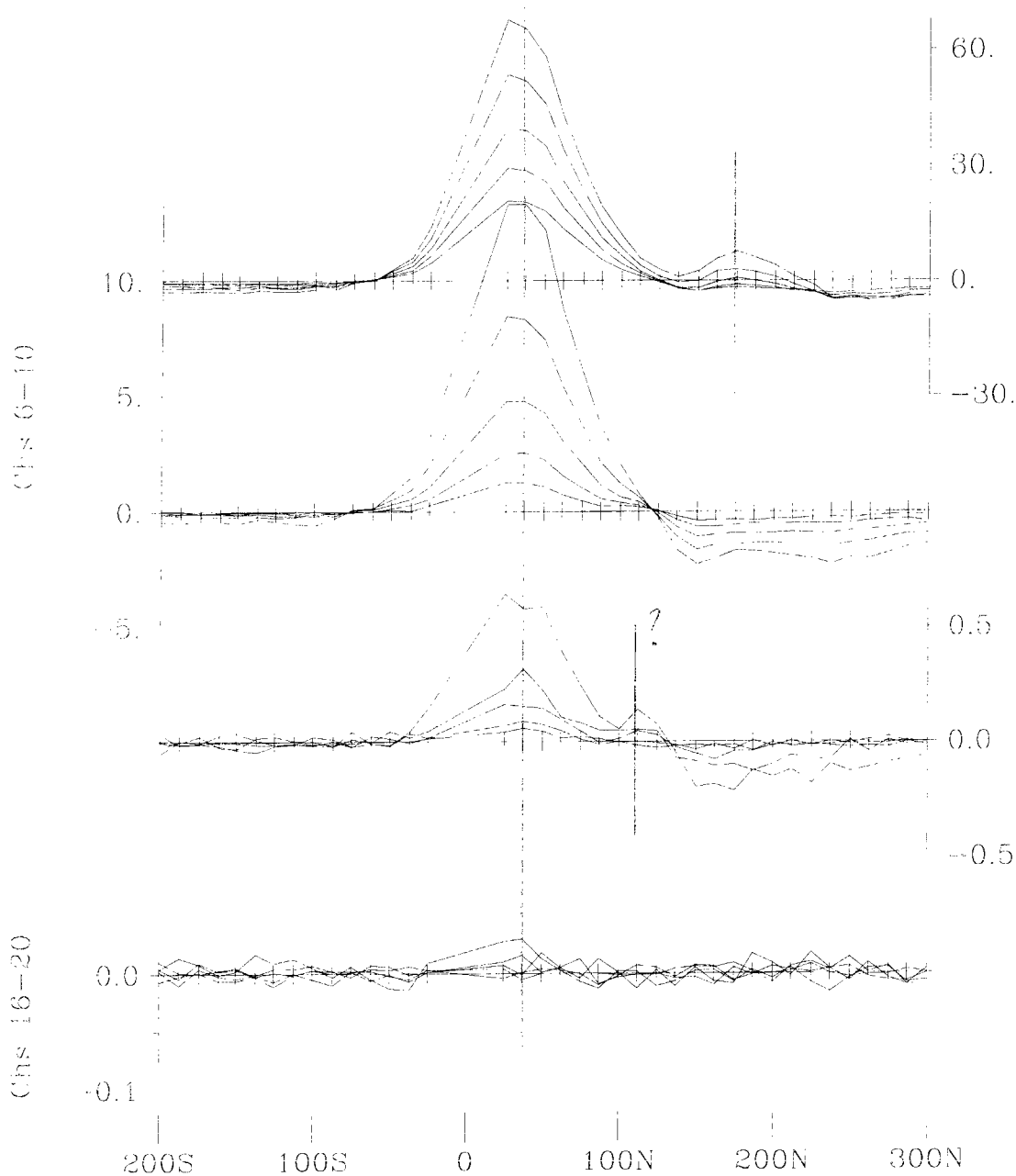
Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 17, 2007  
 Instrumentation: Rx =  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

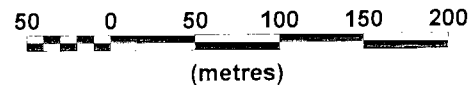
DWG. NO. CA00500C-4AXIS-Z-0+00



**Line 0+50E - X Component**

**LOOP 1**

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**

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**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

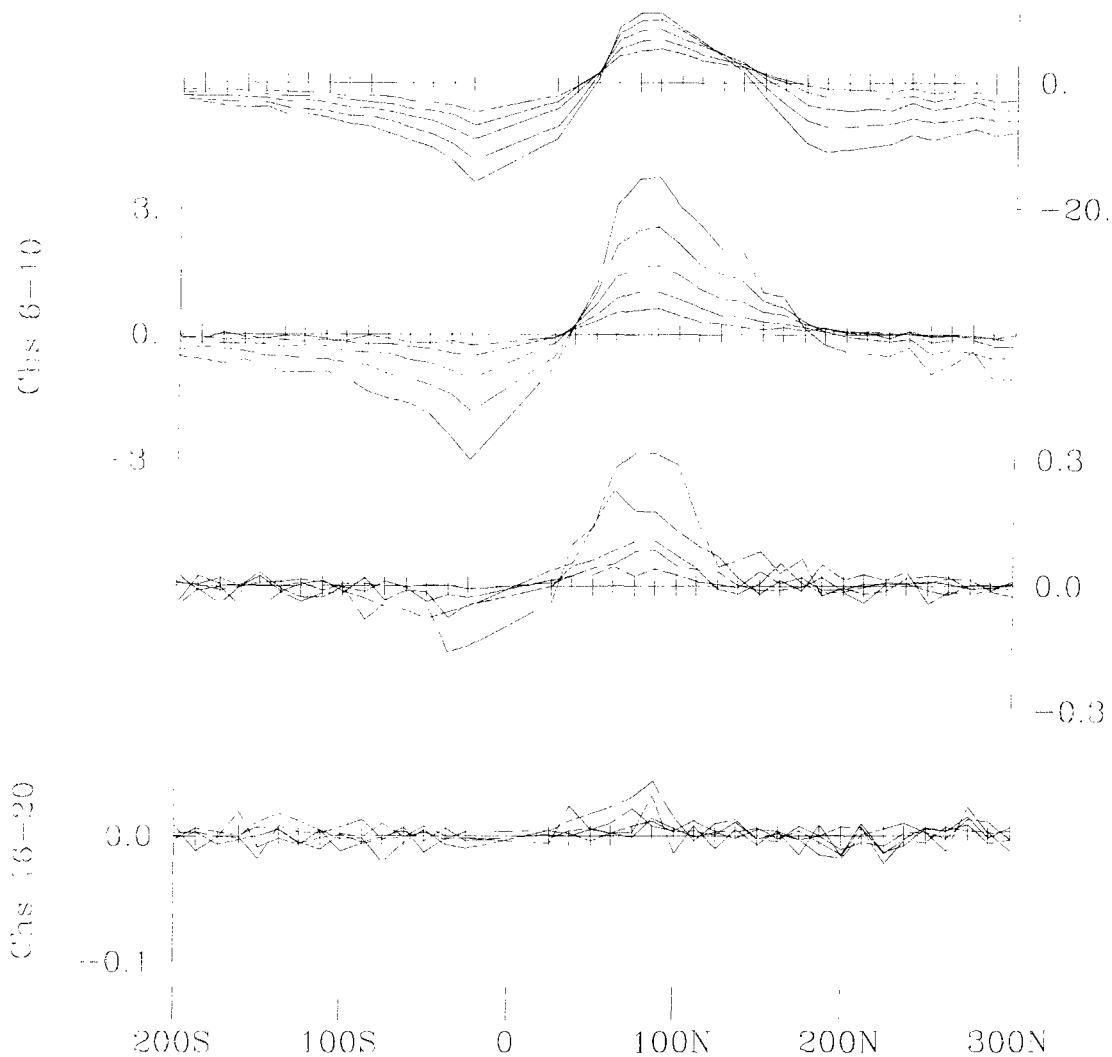
Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hx - positive up  
 Hy - positive west

Survey Date: Sept. 16, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



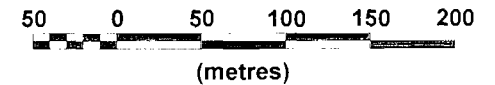
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-0+50E



Line 0+50E - Y Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

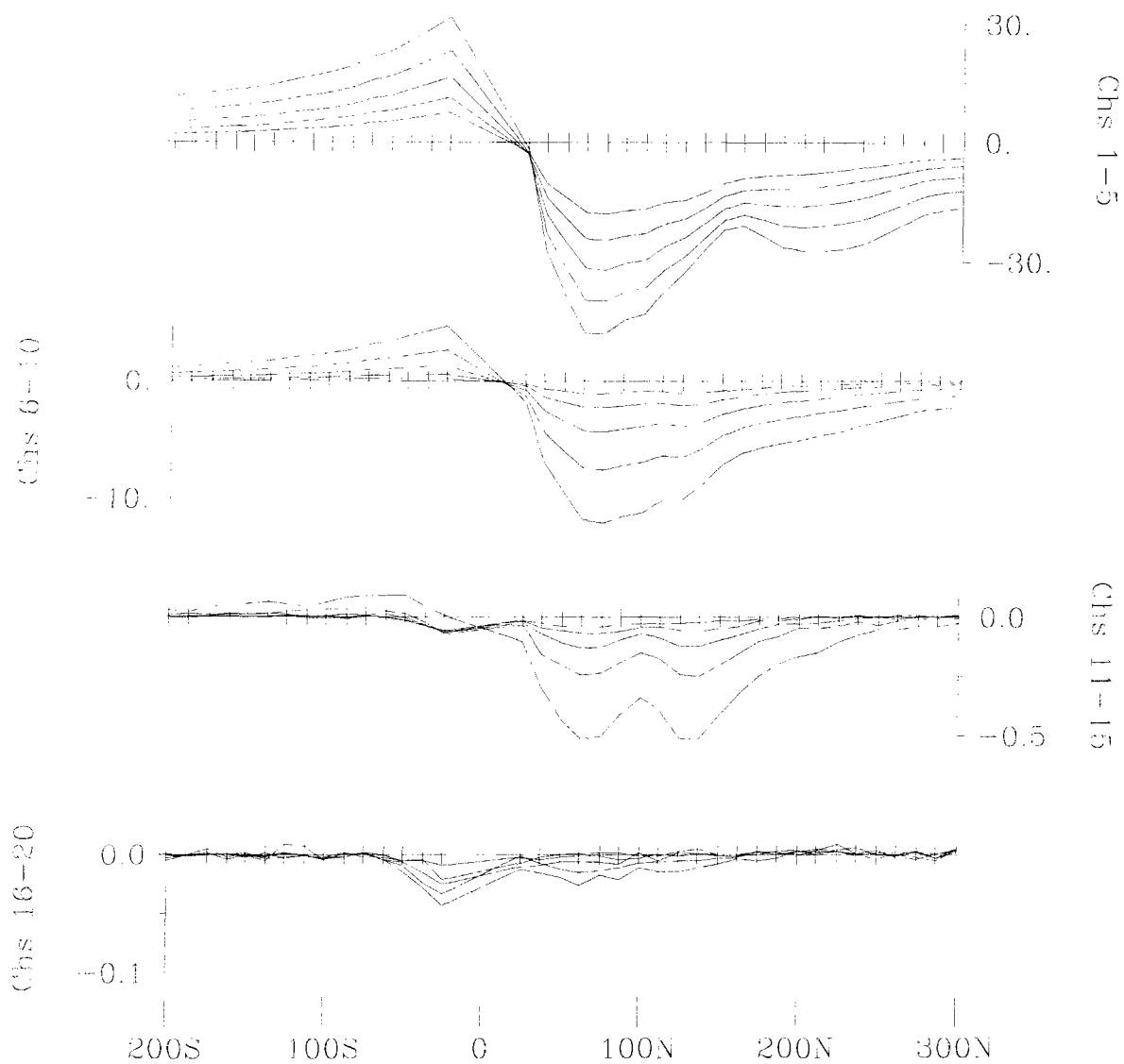
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E,3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us  
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 16, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

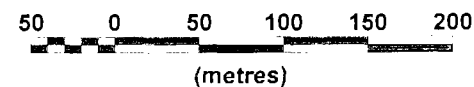
DWG. NO. CA00500C-4AXIS-Y-0+50E



Line 0+50E - Z Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

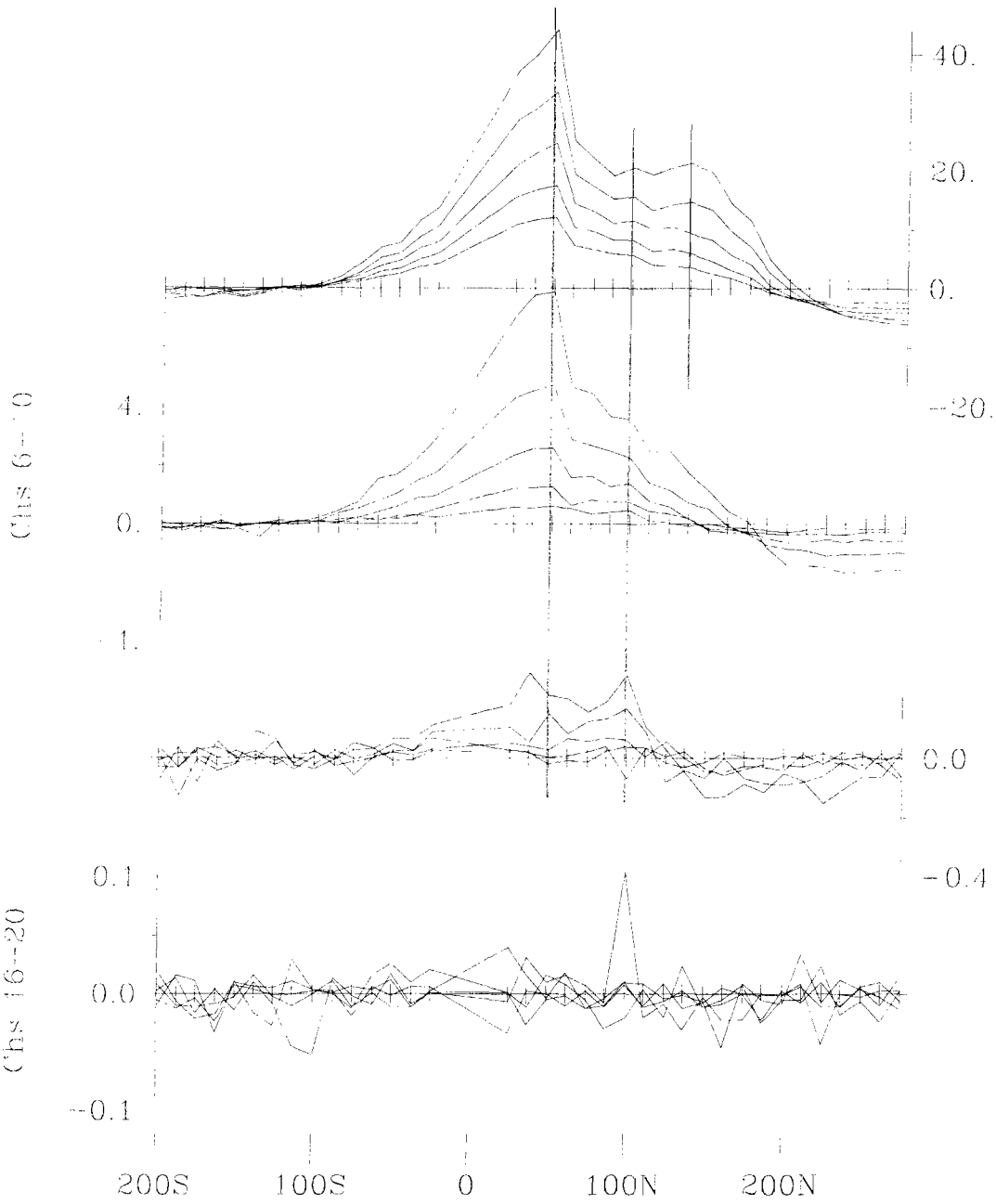
Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 16, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-Z-0+50E

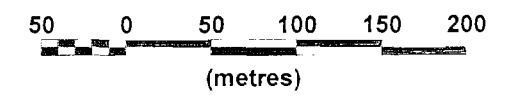






Line 100+00E - X Component  
 LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

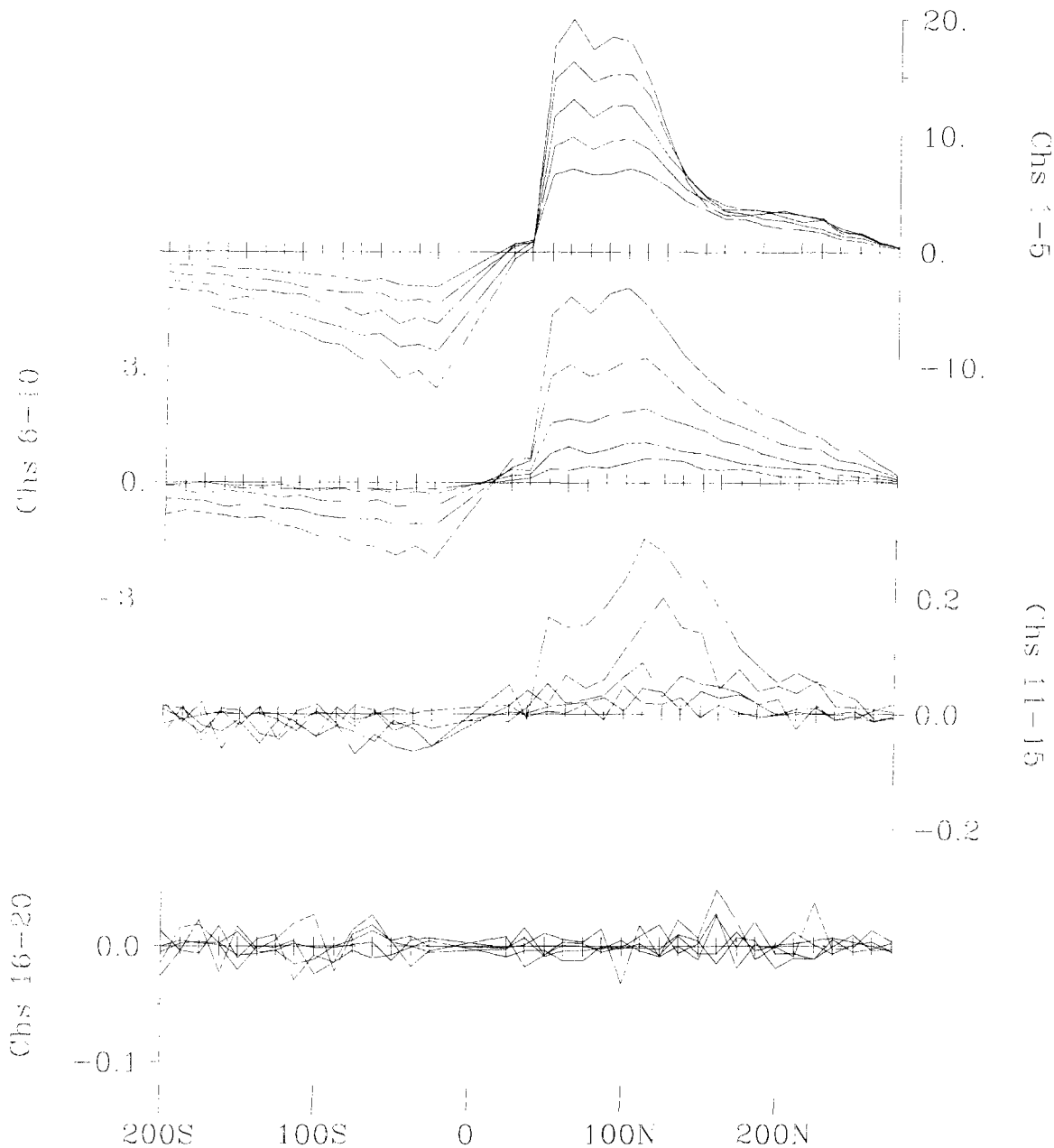
**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 20, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)

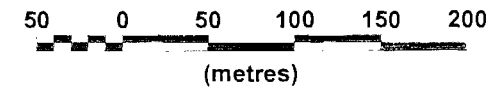
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-4AXIS-X-100+00E





Line 100+00E - Y Component  
 LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

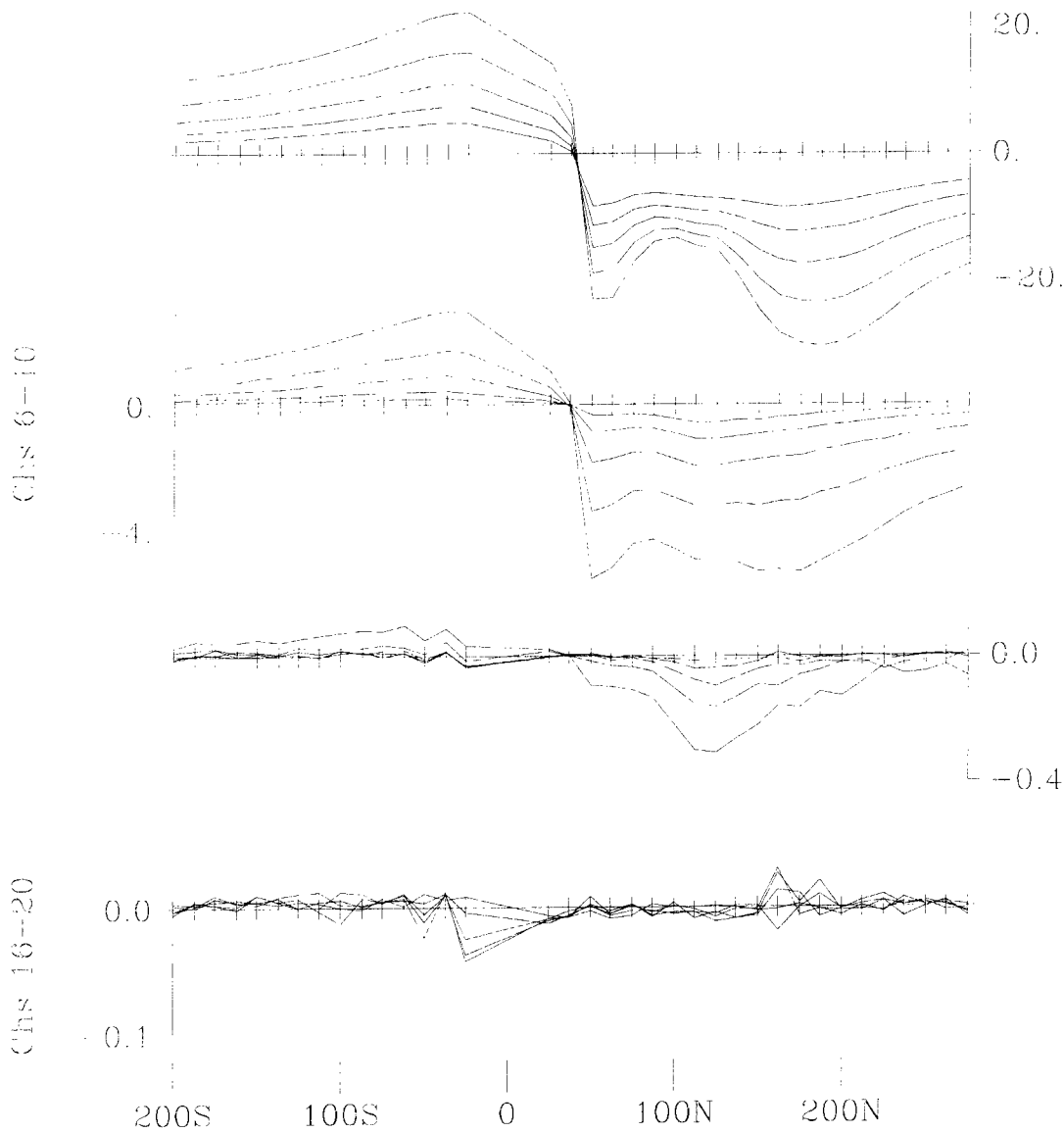
Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m x 550m  
 Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us  
 Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 20, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics FM-57/67 (3500W)



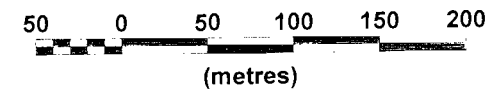
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-100+00E



Line 100+00E - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

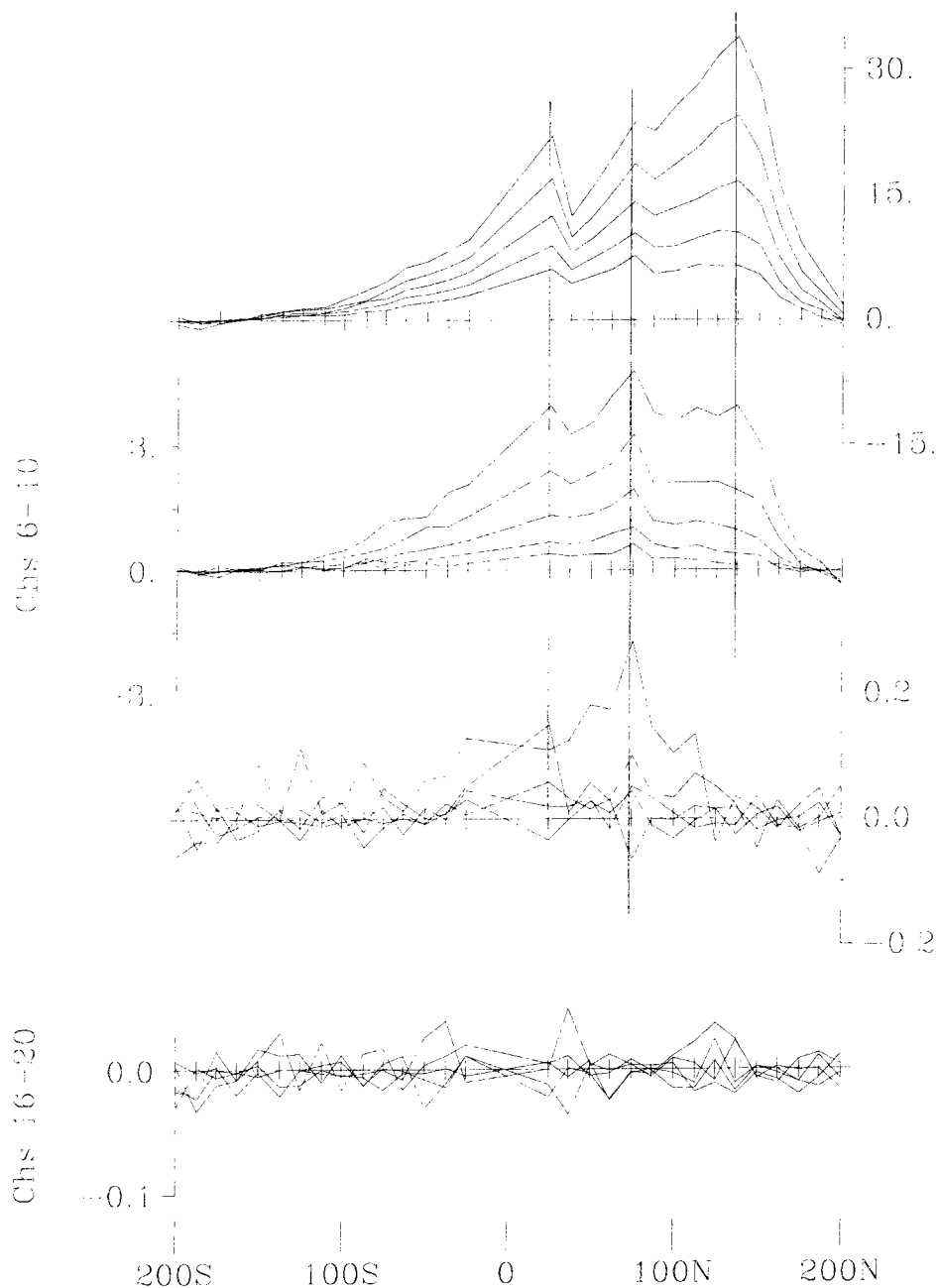
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hx - positive up  
Hy - positive north  
Hz - positive west

Survey Date: Sept. 20, 2007  
Instrumentation: Rx = Digital Protem (3x20 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)

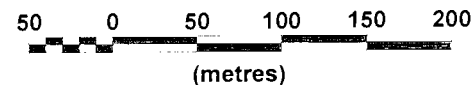


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-Z-100+00E



Line 1+50E - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

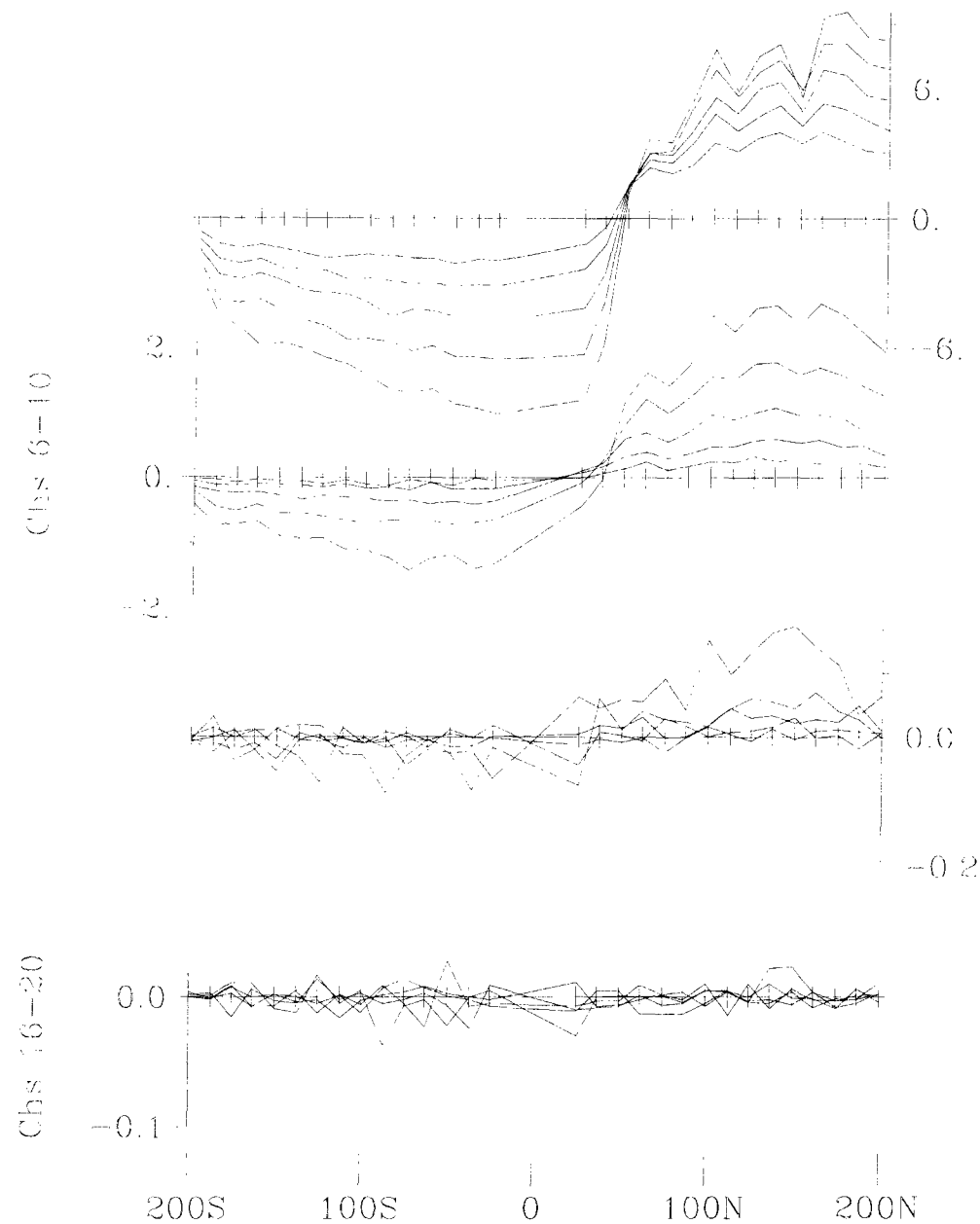
**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 3 Hz (50% duty cycle)                                         |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W-2+50E;3+00S-0+00N                                      |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                   |
|------------------|-----------------------------------------------------------------------------------|
| Survey Date:     | Sept. 21, 2007                                                                    |
| Instrumentation: | Rx =<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |

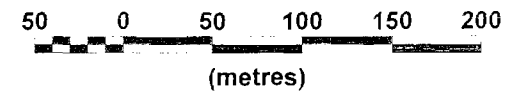


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-4AXIS-X-1+50E



Line 1+50E - Y Component  
LOOP 1

Scale 1:5000



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**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

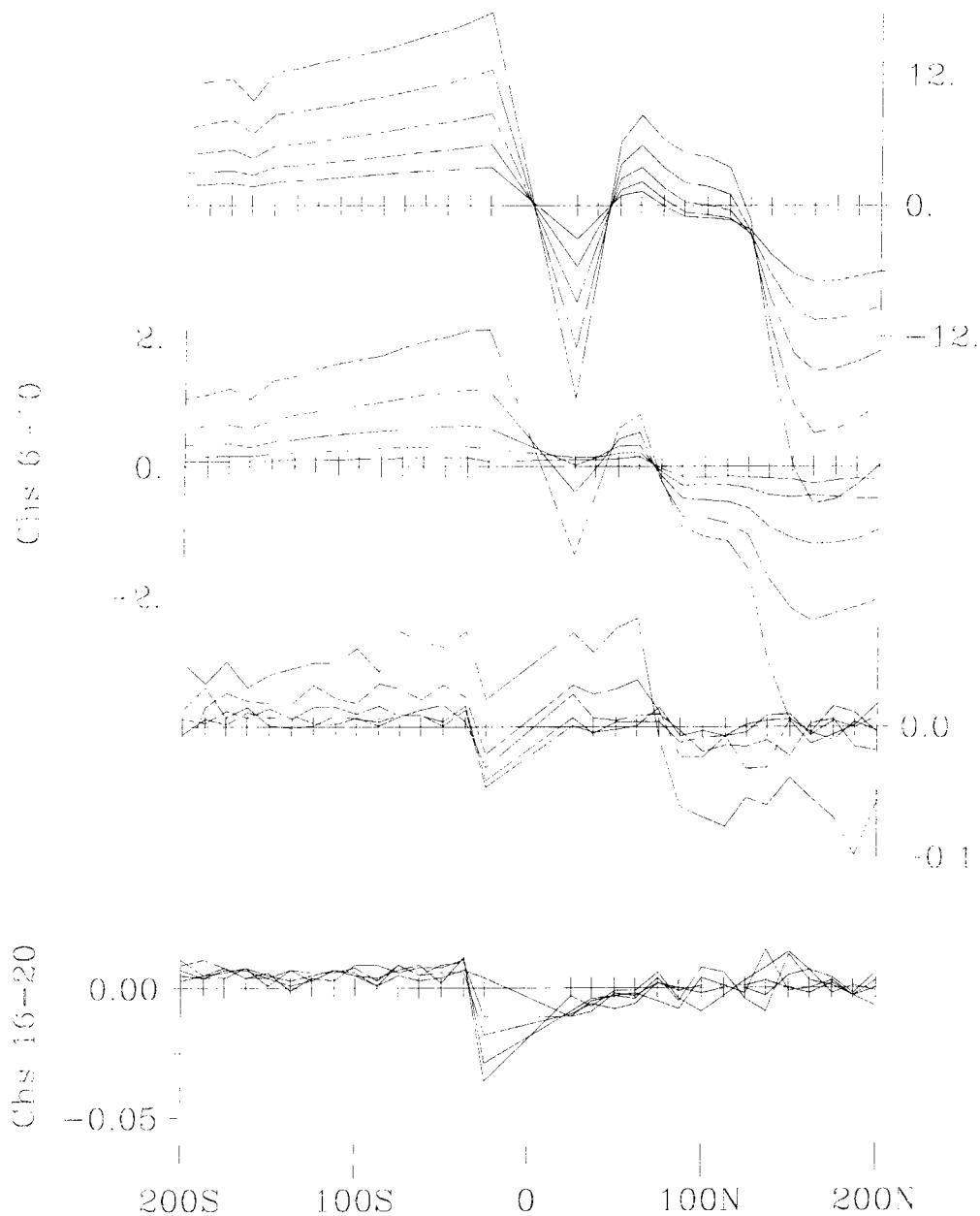
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 21, 2007  
Instrumentation: Rx =  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



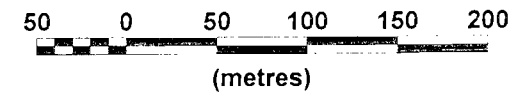
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-1+50E



**Line 1+50E - Z Component  
LOOP 1**

Scale 1:5000



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**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us  
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

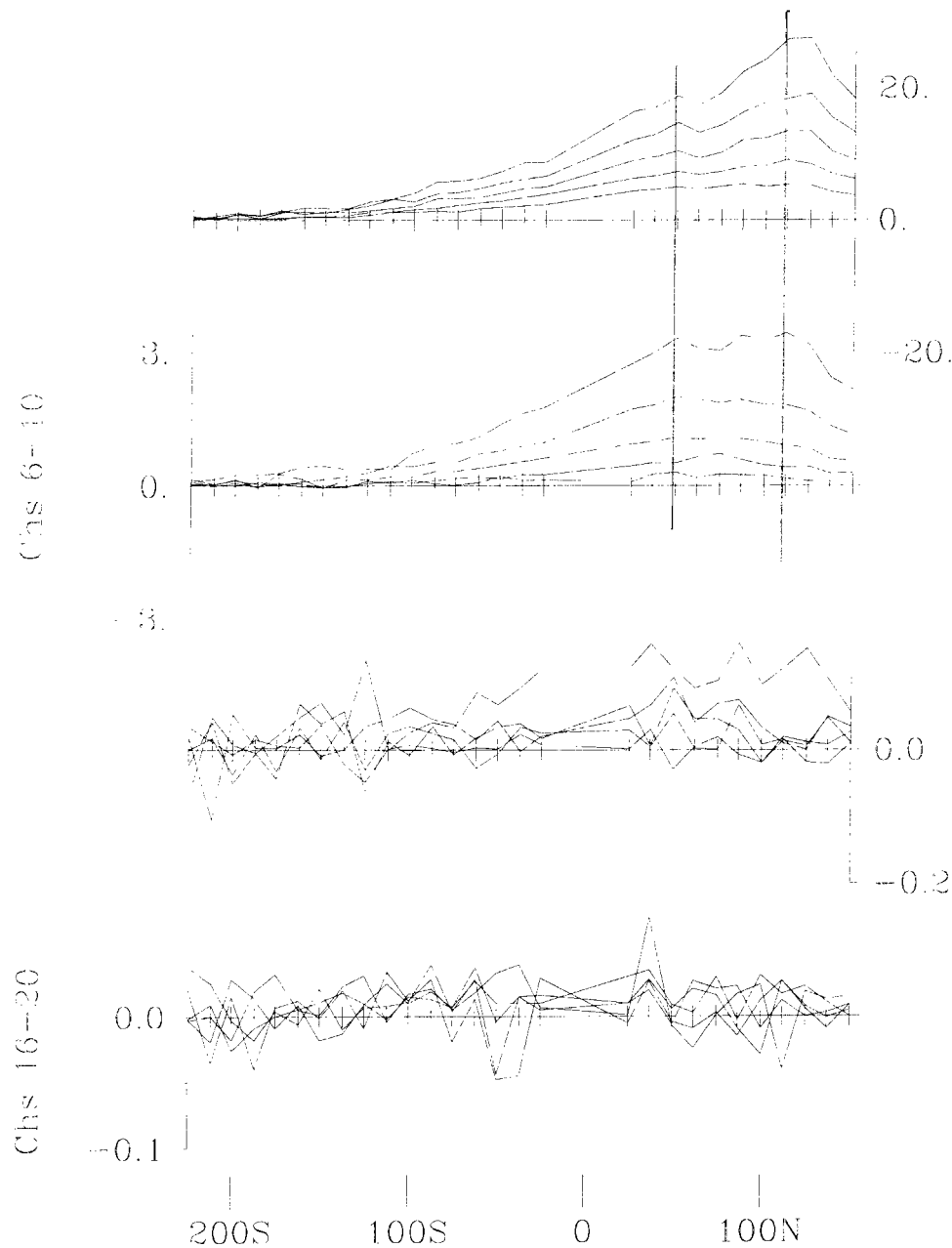
Survey Date: Sept. 21, 2007  
Instrumentation: Rx =  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

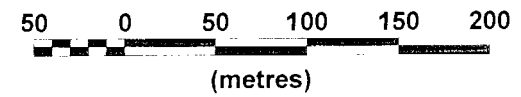
DWG. NO. CA00500C-4AXIS-Z-1+50E

Sheet 25m N?



Line 2+00E - X Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

LPTM FIXED-LOOP PROFILING SURVEY  
Secondary Electromagnetic Field (dB/dt)

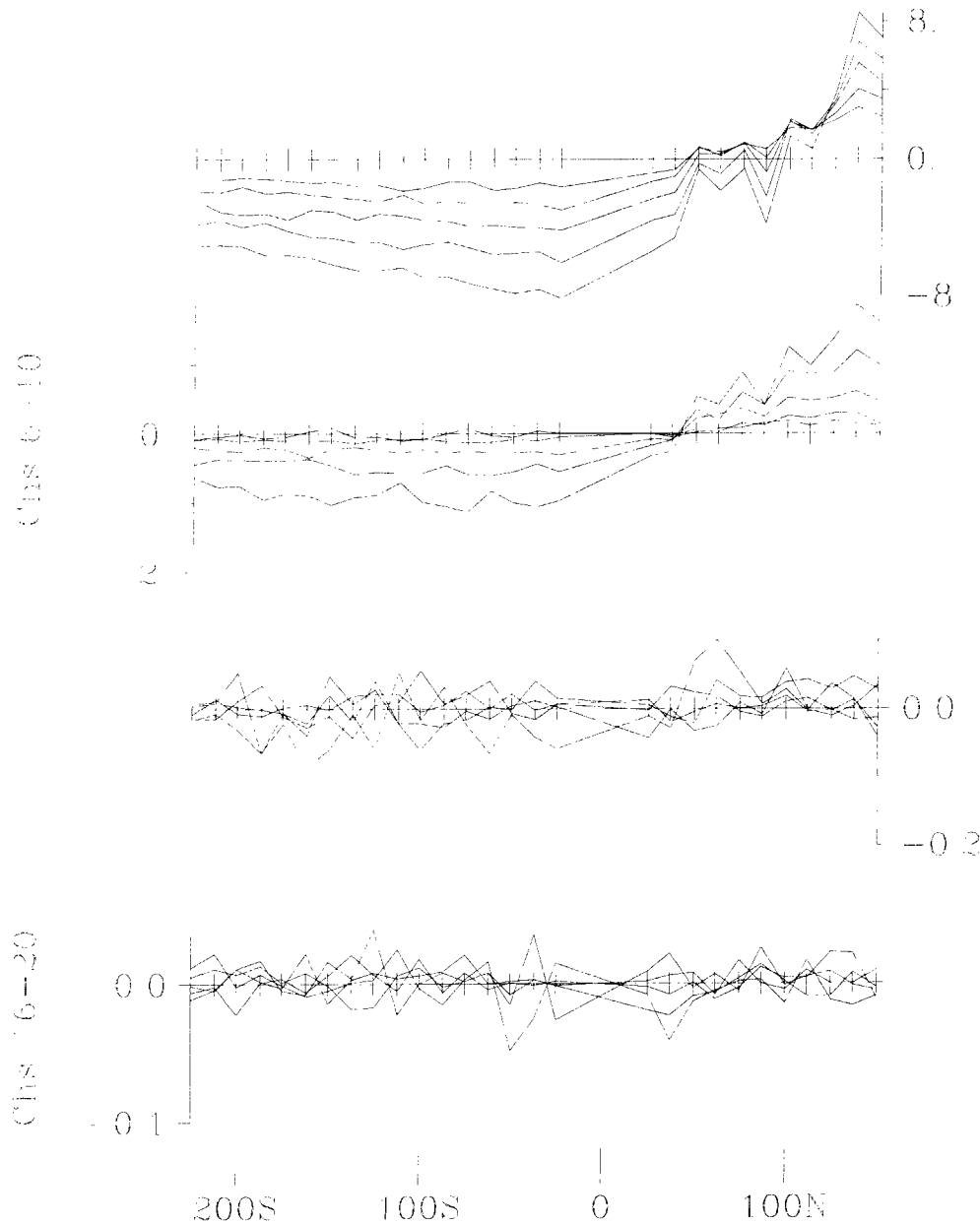
Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us  
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 21, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

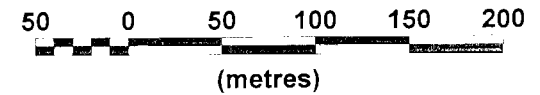
DWG. NO. CA00500C-4AXIS-X-2+00E



## Line 200+00E - Y Component

### LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

### LPTM FIXED-LOOP PROFILING SURVEY

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

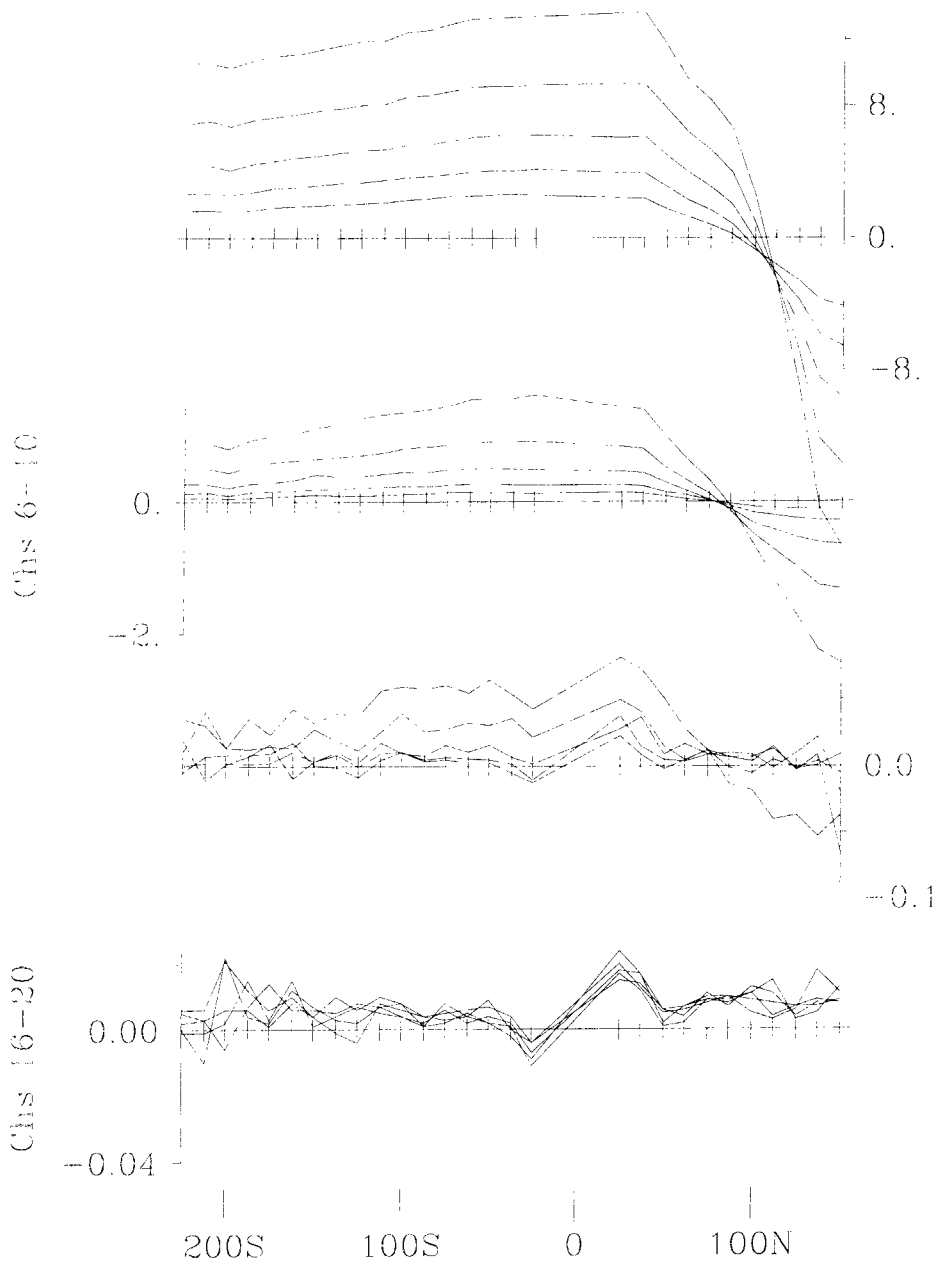
Survey Date: Sept. 21, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



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**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-200+00E

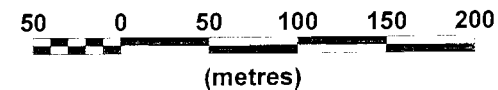




## Line 2+00E - Z Component

### LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
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### LPTM FIXED-LOOP PROFILING SURVEY

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
Tx Loop Size: 300m X 550m  
Tx Loop Location: L3+00W-2+50E;3+00S-0+00N  
Transmitter Current: 22.0 Amps  
Transmitter Turn-Off Time: 310 us

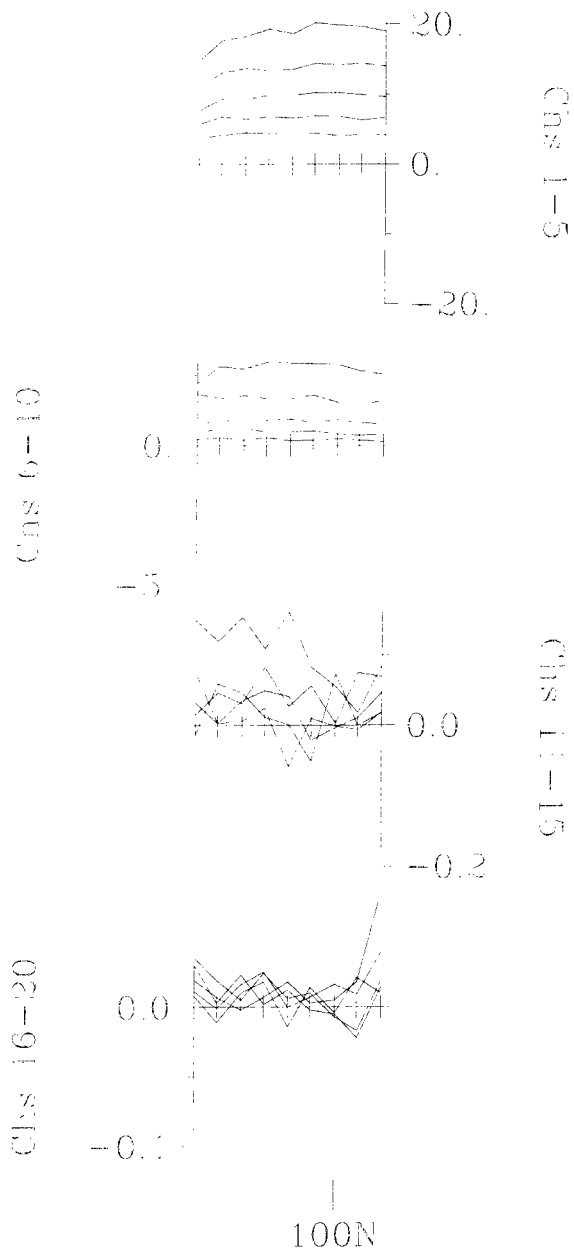
Station Interval: 12.5m  
Profile Units: nanoVolt/A\*m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north  
Hy - positive west

Survey Date: Sept. 21, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
& Geonics 3D Coil (3x200m<sup>2</sup>)  
Tx = Geonics EM-57/67 (3500W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

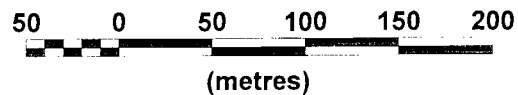
DWG. NO. CA00500C-4AXIS-Z-2+00E



Line 250+00E - X Component

LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 3 Hz (50% duty cycle)  
 Tx Loop Size: 300m X 550m  
 Tx Loop Location: L3+00W @ 0+00 ; L2+50E @ 3+00S  
 Transmitter Current: 22.0 Amps  
 Transmitter Turn-Off Time: 310 us

Station Interval: 12.5m  
 Profile Units: nanoVolt/A\*m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north  
 Hy - positive west

Survey Date: Sept. 21, 2007  
 Instrumentation: Rx = Digital Protem (3x20 Channels)  
 & Geonics 3D Coil (3x200m<sup>2</sup>)  
 Tx = Geonics EM-57/67 (3500W)



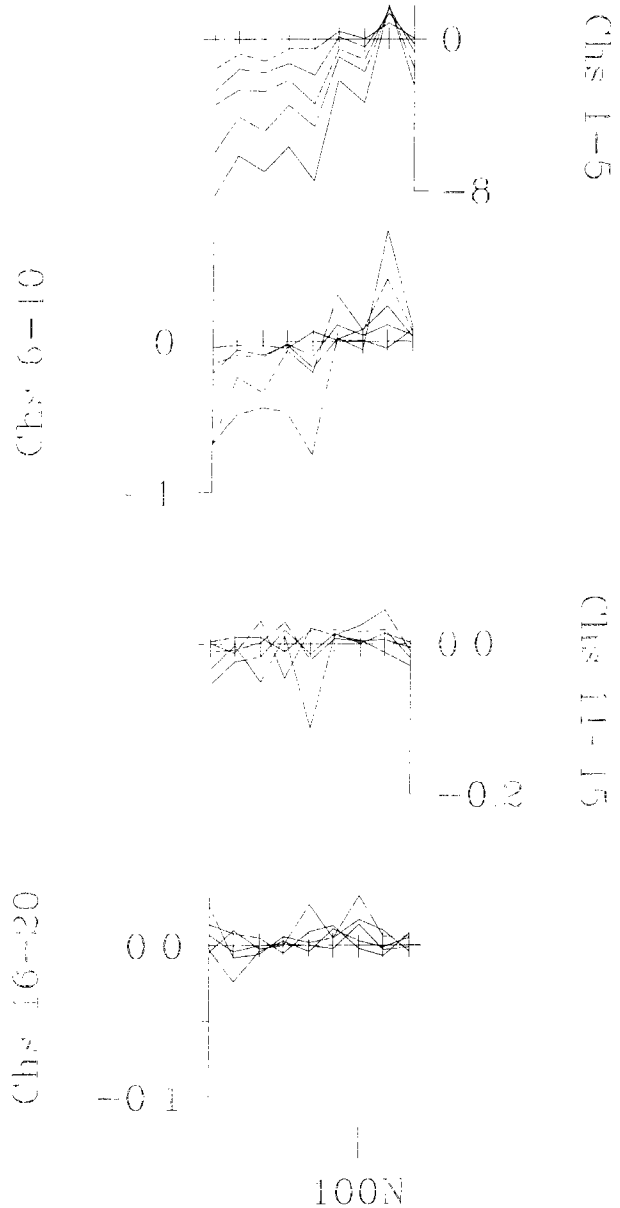
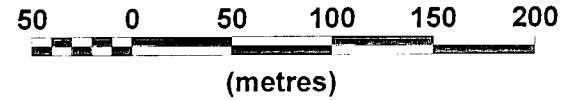
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-X-250+00E

# Line 250+00E – Y Component

## LOOP 1

Scale 1:5000



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### LPTM FIXED-LOOP PROFILING SURVEY

#### Secondary Electromagnetic Field (dB/dt)

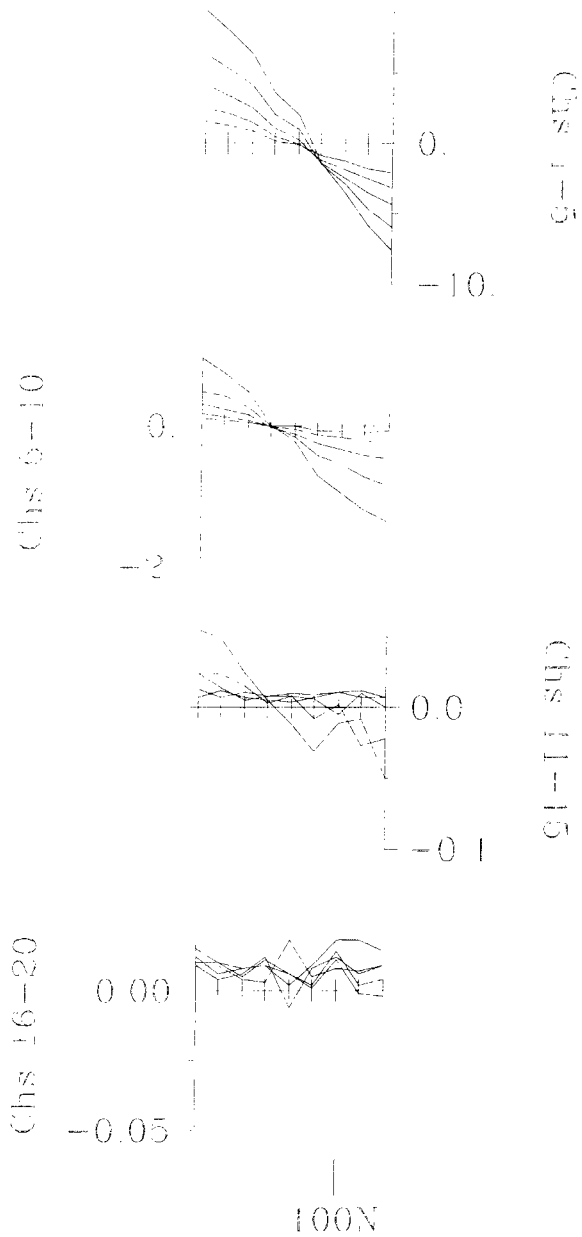
|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 3 Hz (50% duty cycle)                                         |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Location:          | L3+00W @ 0+00 ; L2+50E @ 3+00S                                |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 21, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



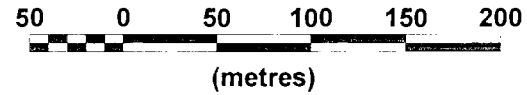
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Y-250+00E



Line 250+00E - Z Component  
LOOP 1

Scale 1:5000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**LPTM FIXED-LOOP PROFILING SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Transmitter Frequency:     | 3 Hz (50% duty cycle)                                         |
| Tx Loop Size:              | 300m X 550m                                                   |
| Tx Loop Locotion:          | L3+00W @ 0+00 ; L2+50E @ 3+00S                                |
| Transmitter Current:       | 22.0 Amps                                                     |
| Transmitter Turn-Off Time: | 310 us                                                        |
| Station Interval:          | 12.5m                                                         |
| Profile Units:             | nanoVolt/A*m <sup>2</sup>                                     |
| Receiver Coil Orientation: | Hz - positive up<br>Hx - positive north<br>Hy - positive west |

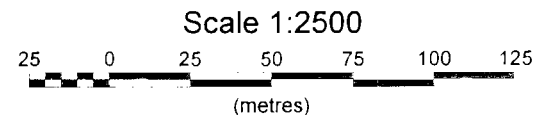
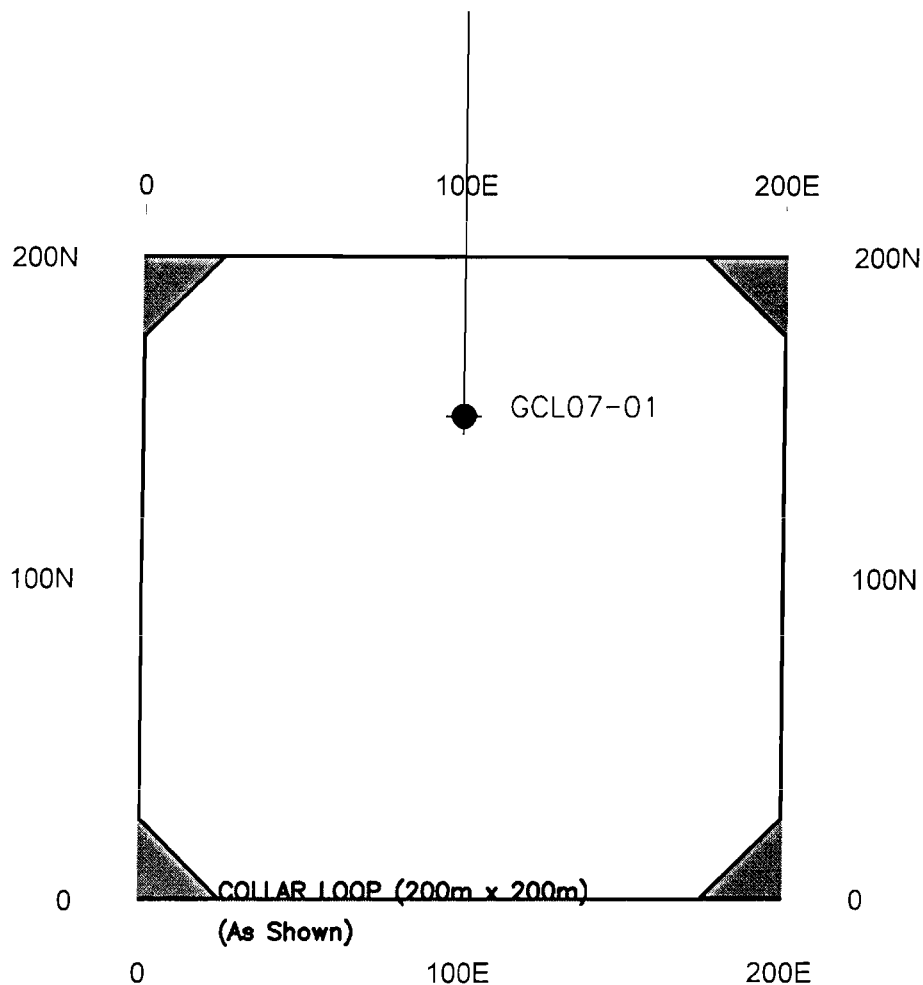
|                  |                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept. 21, 2007                                                                                                   |
| Instrumentation: | Rx = Digital Protem (3x20 Channels)<br>& Geonics 3D Coil (3x200m <sup>2</sup> )<br>Tx = Geonics EM-57/67 (3500W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-4AXIS-Z-250+00E

# GCL07-01 - BOREHOLE & LOOP LOCATION MAP



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3D FIXED-LOOP BOREHOLE TEM SURVEY  
**BOREHOLE & LOOP LOCATION MAP**  
GCL07-01

Borehole Parameters: DDH #1 = GCL07-01  
Location = 100E, 150N  
Azimuth & Dip = 325, -55

DDH #2 =  
Location =  
Azimuth & Dip =

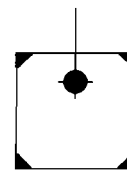
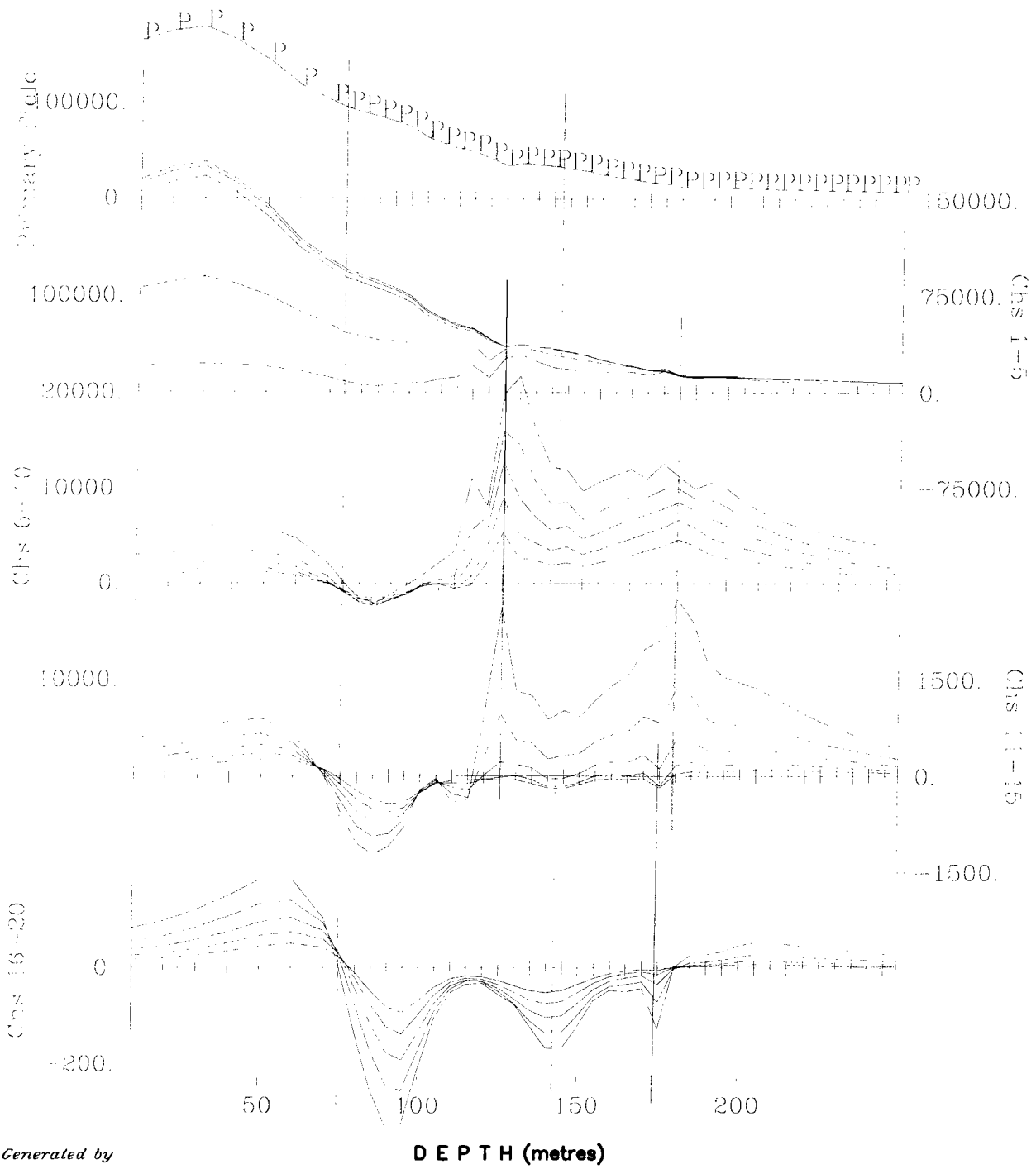
DDH #3 =  
Location =  
Azimuth & Dip =

Survey Date: May 29, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800 W)



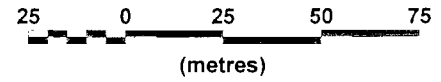
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-01



**Borehole GCL07-01 - Z Component  
Collar Loop**

Scale 1:2000



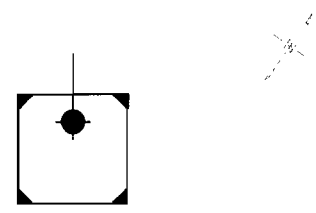
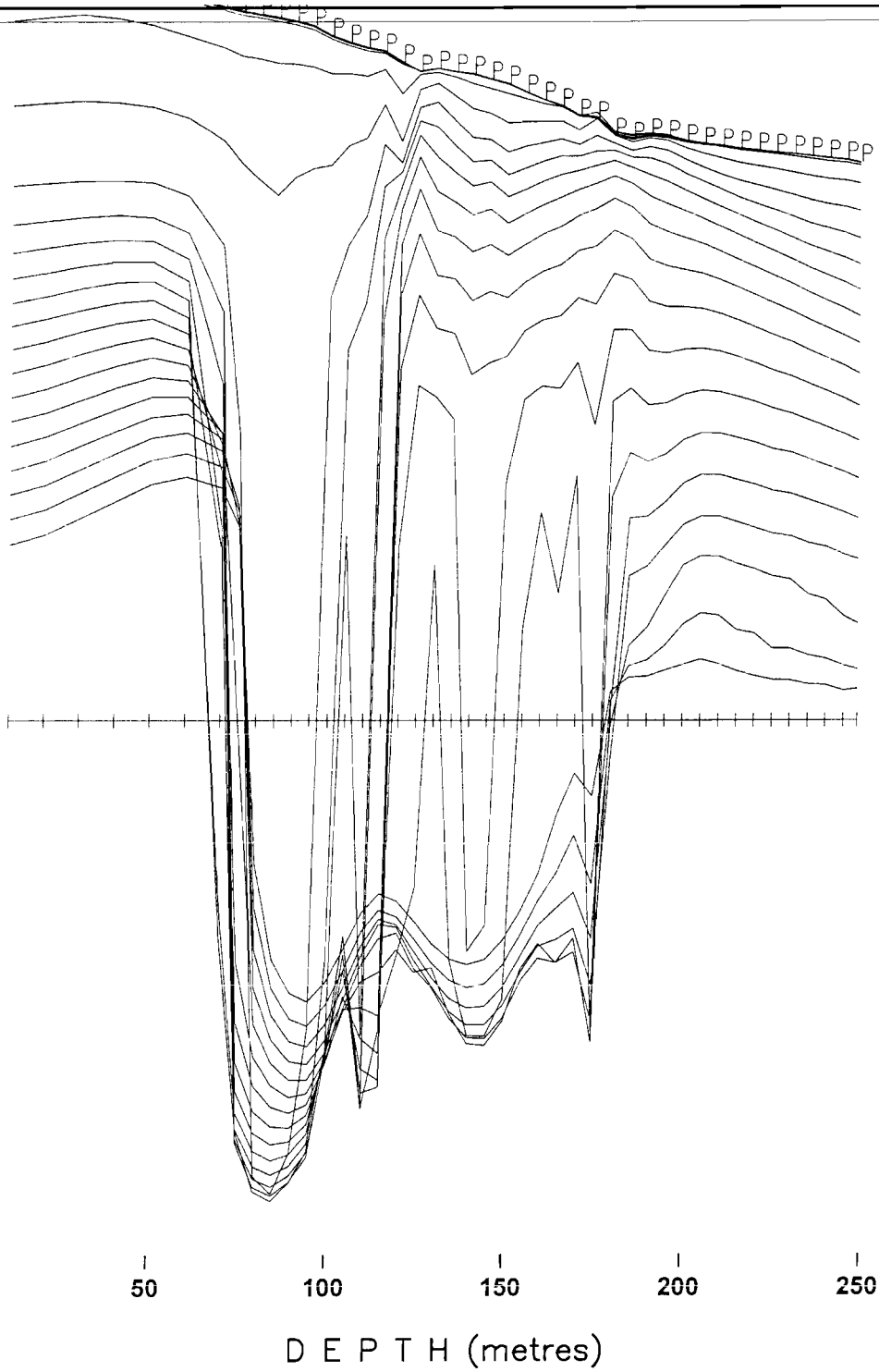
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

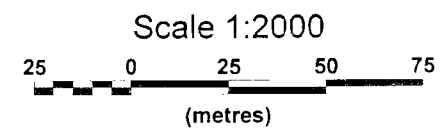
|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E;0-200N                                               |
| Transmitter Current:           | 12.9 Amps                                                   |
| Tx Turn-Off-Time and Rx Delay: | 400 us, -80 us                                              |
| Borehole Location:             | 500094E, 5348163N                                           |
| Borehole Azimuth, Dip:         | 325, -55                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Survey Date:     | Moy 29, 2006                                                                                      |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 (1800 W) |

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-Z-GCL07-01-C



**Borehole GCL07-01 - Z Component  
Collar Loop**



**GOLDEN CHALICE RESOURCES INC.**  
LANGUIR PROPERTY  
TIMMINS, ON

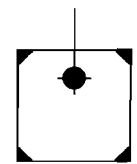
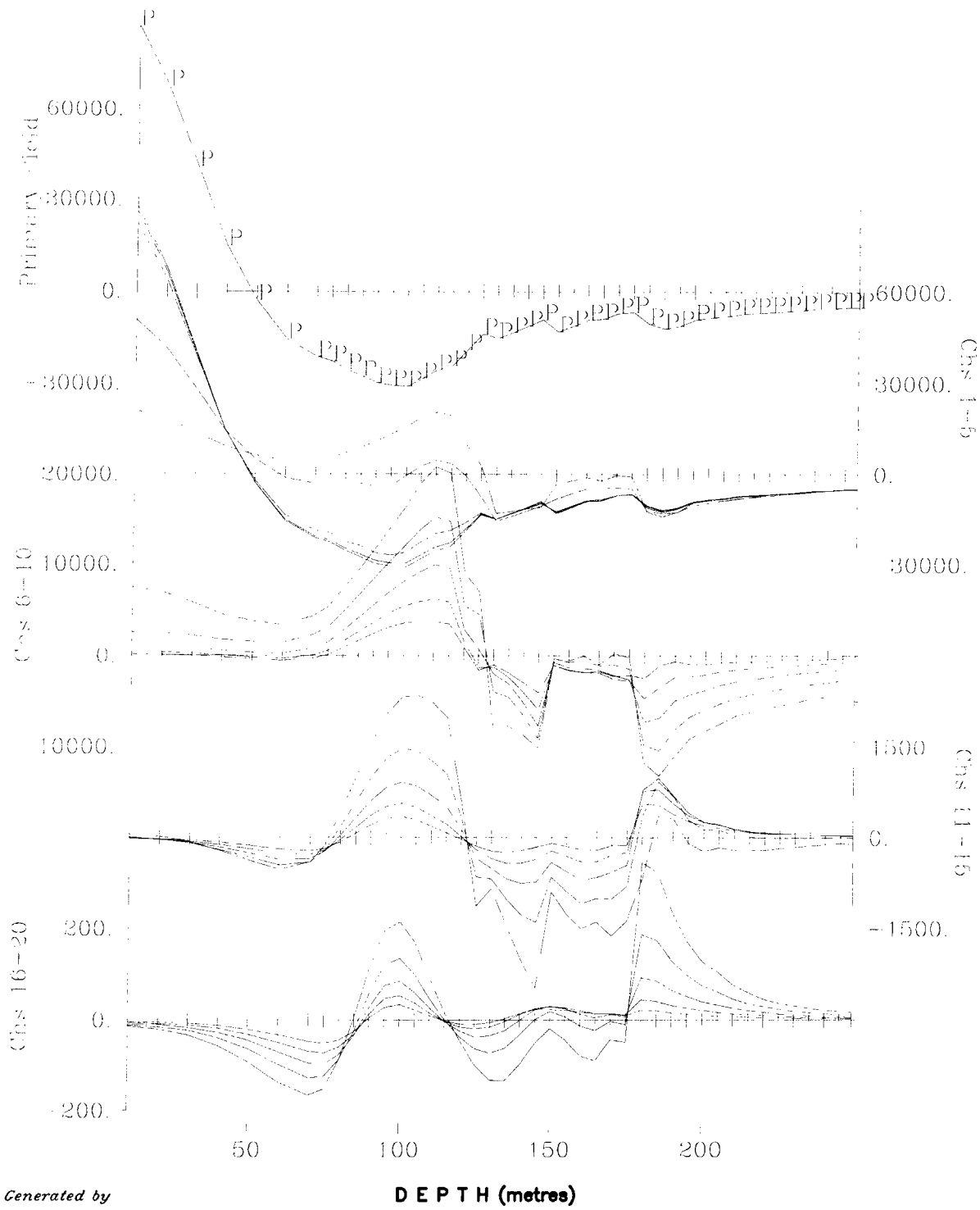
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 12.9 Amps  
 Tx Turn-Off-Time and Rx Delay: 400 us -80 us  
 Borehole Location: 500094E, 5348163N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 29, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Z-Tilt-GCL07-01-C



Borehole GCL07-01 - X Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

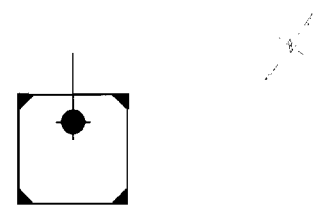
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 12.9 Amps  
 Tx Turn-Off-Time and Rx Delay: 400 us, -80 us  
 Borehole Location: 500094E, 5348163N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 29, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800 W)

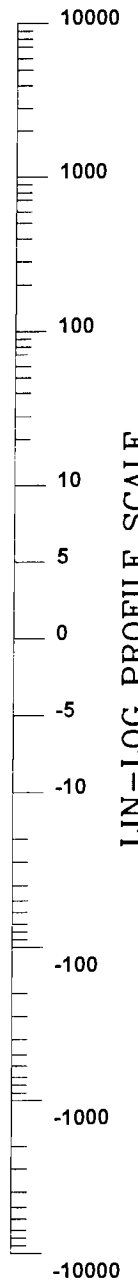
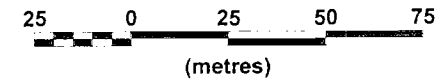
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-01-C



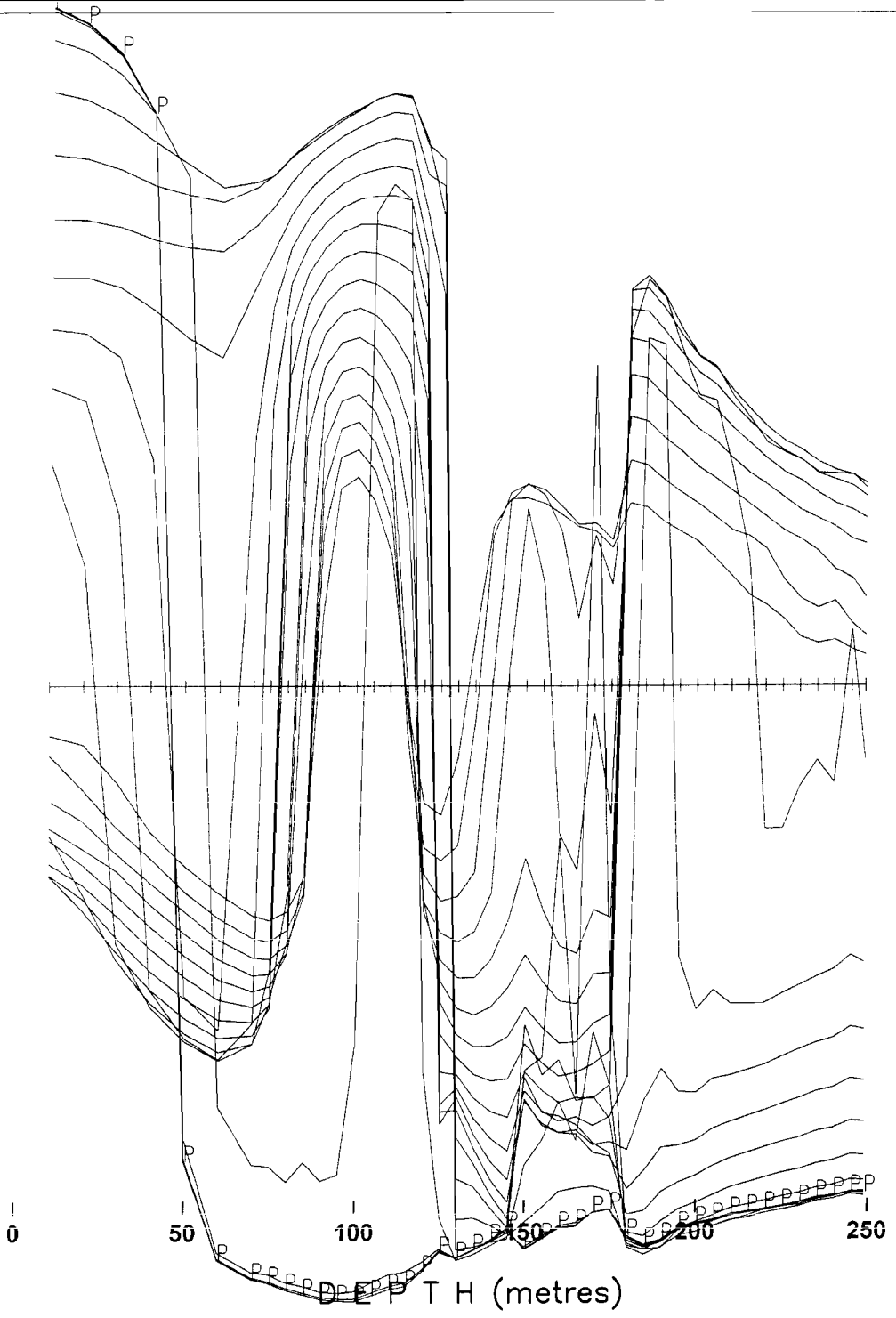


Borehole GCL07-01 - X Component  
Collar Loop

Scale 1:2000



LIN-LOG PROFILE SCALE  
(nanoVolts/m<sup>2</sup>)



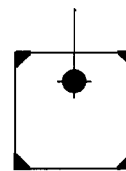
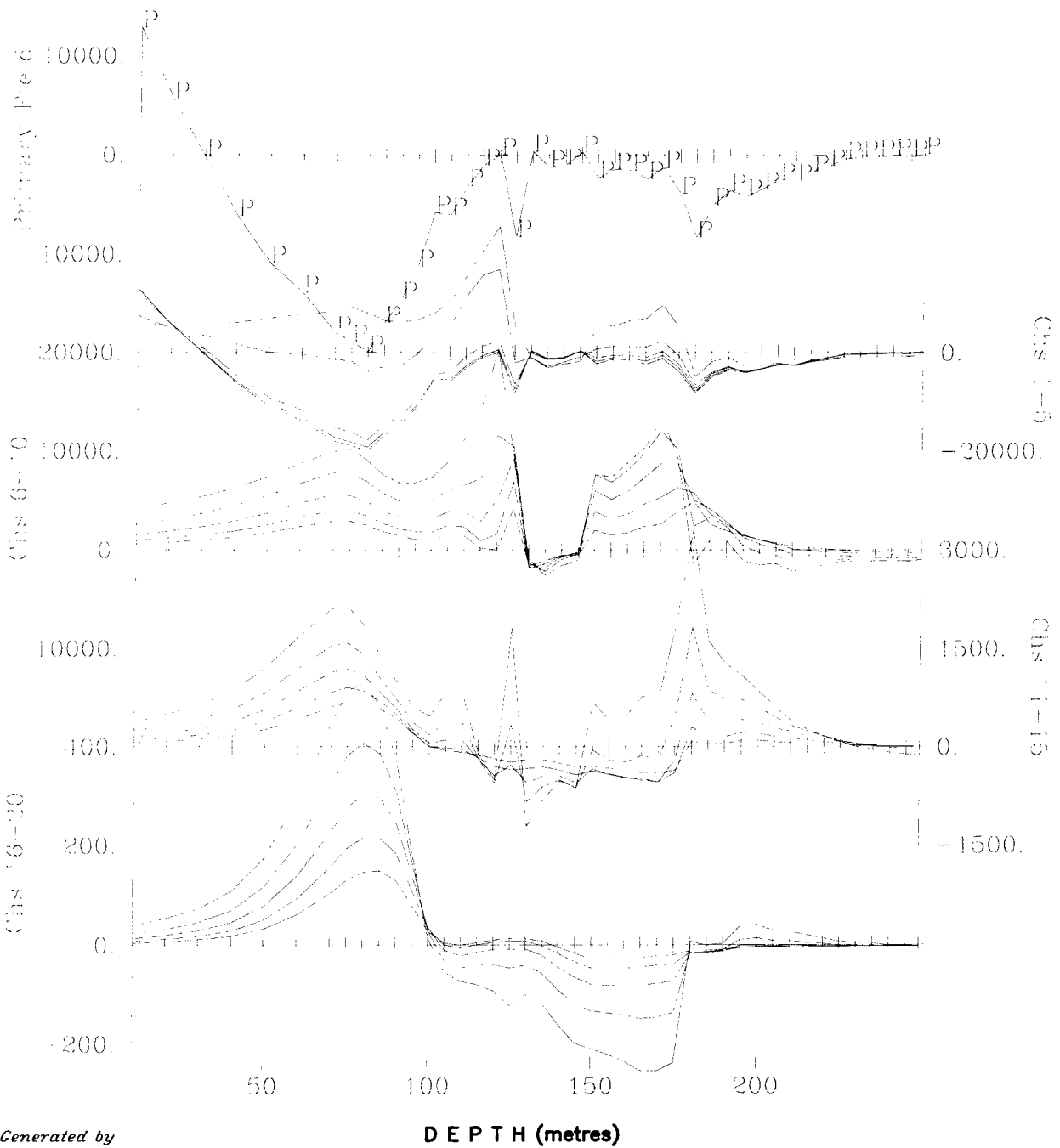
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 12.9 Amps  
Tx Turn-Off-Time and Rx Delay: 400 us -80 us  
Borehole Location: 500094E, 5348163N  
Borehole Azimuth, Dip: 325, -55  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

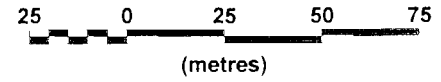
Survey Date: May 29, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-X-Tilt-GCL07-01-C



**Borehole GCL07-01 - Y Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

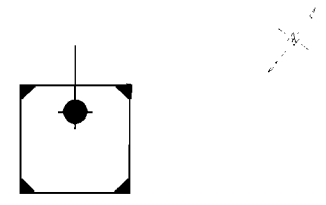
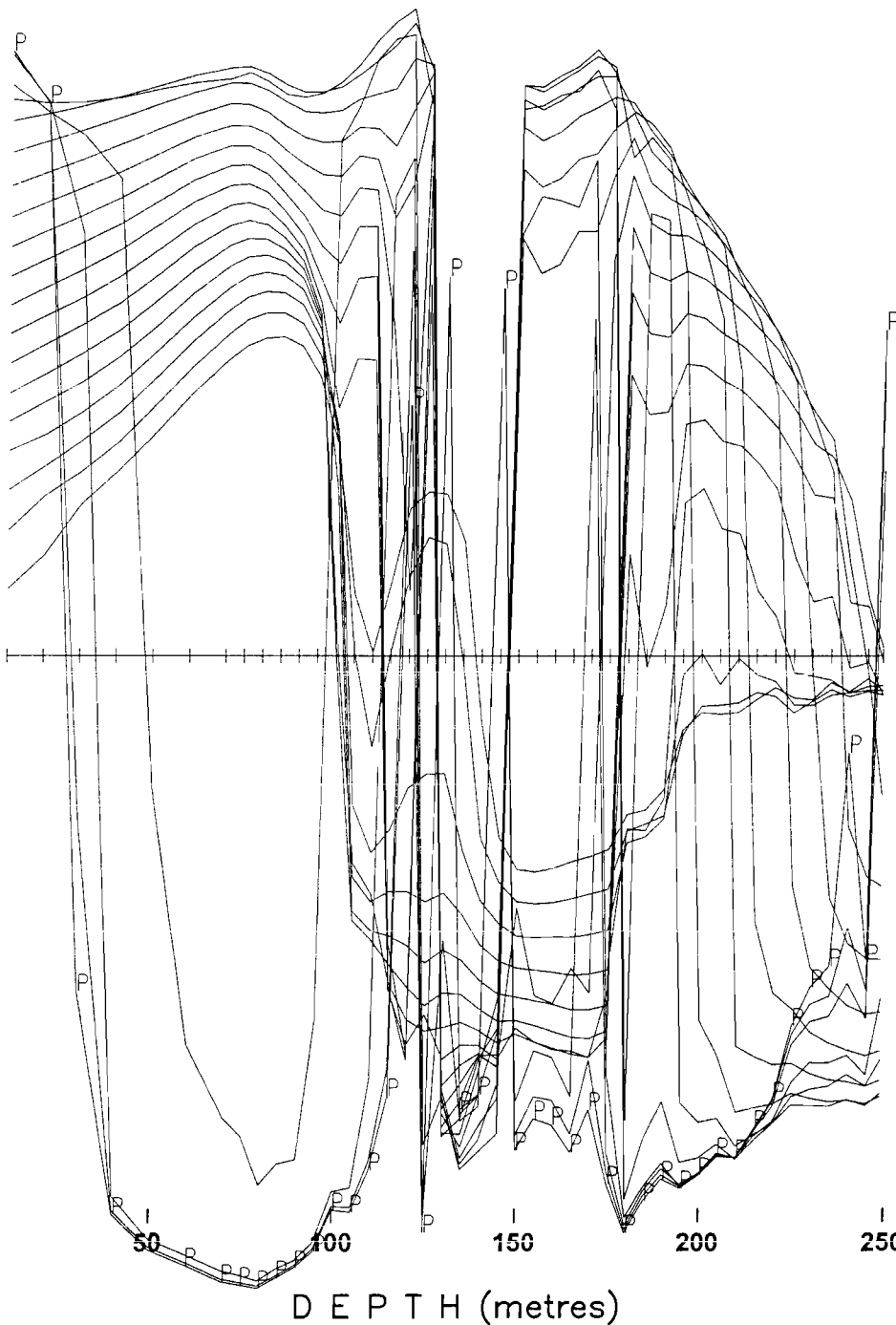
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

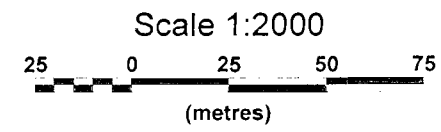
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 12.9 Amps  
 Tx Turn-Off-Time and Rx Delay: 400 us, -80 us  
 Borehole Location: 500094E, 5348163N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 29, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800 W)

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-01-C



**Borehole GCL07-01 - Y Component  
Collar Loop**



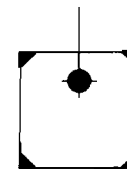
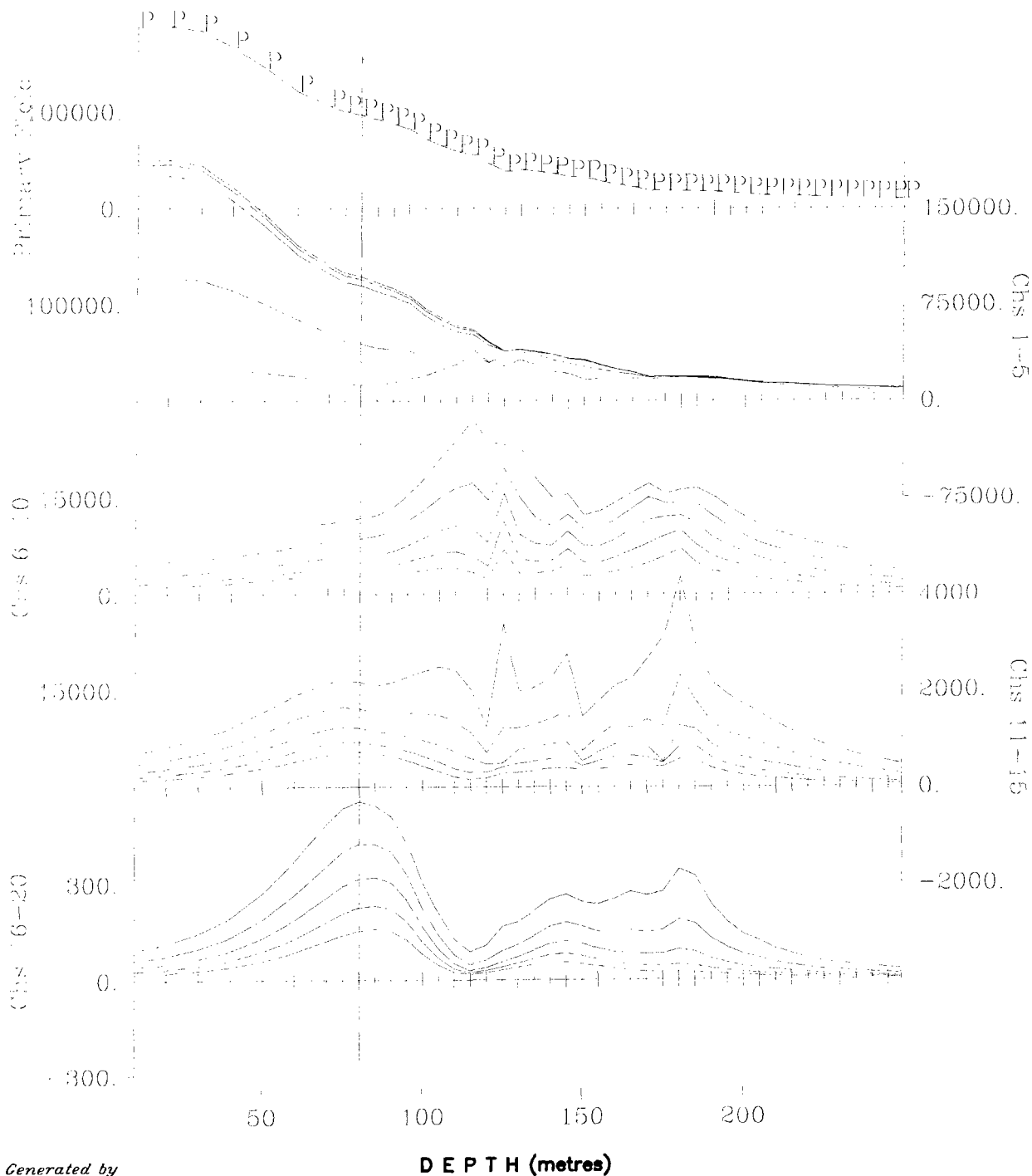
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 12.9 Amps  
 Tx Turn-Off-Time and Rx Delay: 400 us -80 us  
 Borehole Location: 500094E, 5348163N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

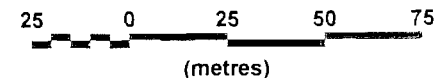
Survey Date: May 29, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Y-Tilt-GCL07-01-C



Borehole GCL07-01 – Total Field  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 12.9 Amps  
 Tx Turn-Off-Time and Rx Delay: 400 us, -80 us  
 Borehole Location: 500094E, 5348163N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

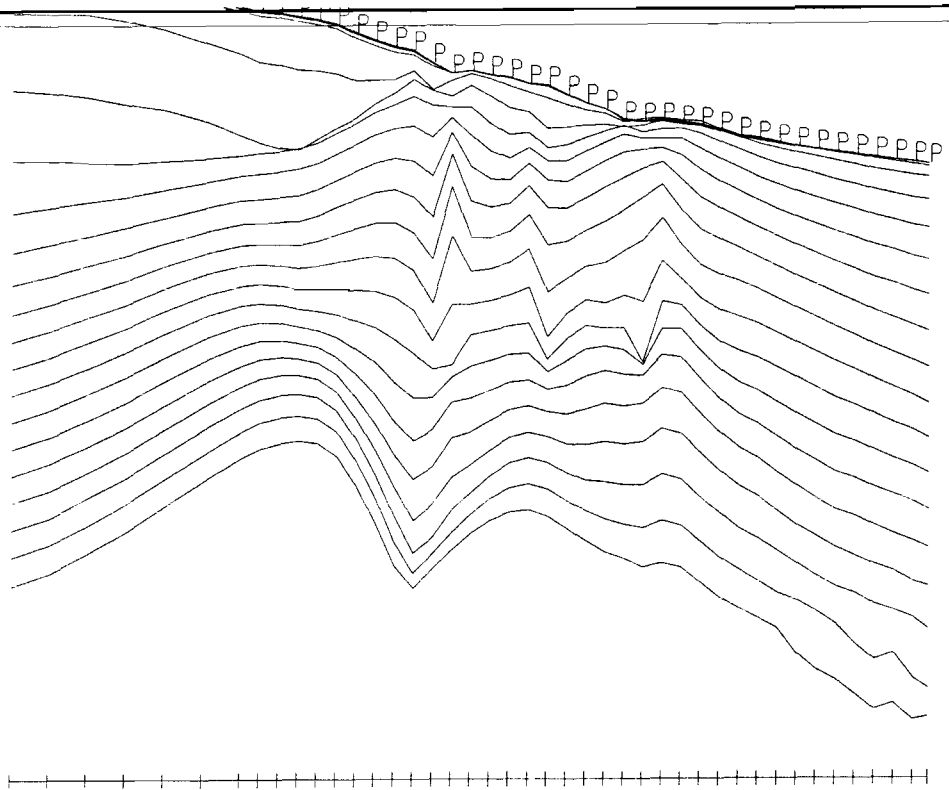
Survey Date: May 29, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800 W)



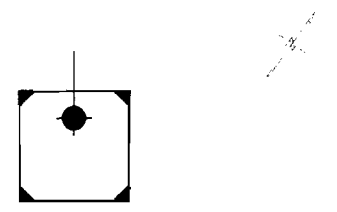
Surveyed & Processed by:

**QUANTEQ GEOSCIENCE LTD.**

DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-01-C

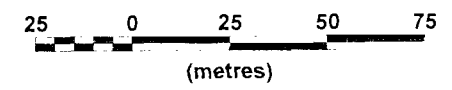


LIN-LOG PROFILE SCALE  
(nanoVolts/mr<sup>2</sup>)



Borehole GCL07-01 - Total Field  
Collar Loop

Scale 1:2000



0 50 100 150 200 250  
DEPTH (metres)

**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

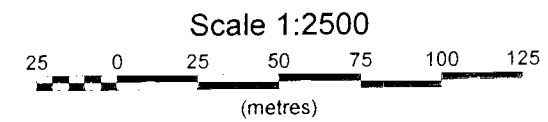
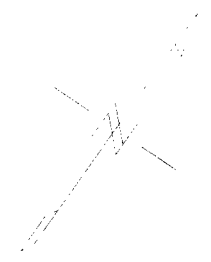
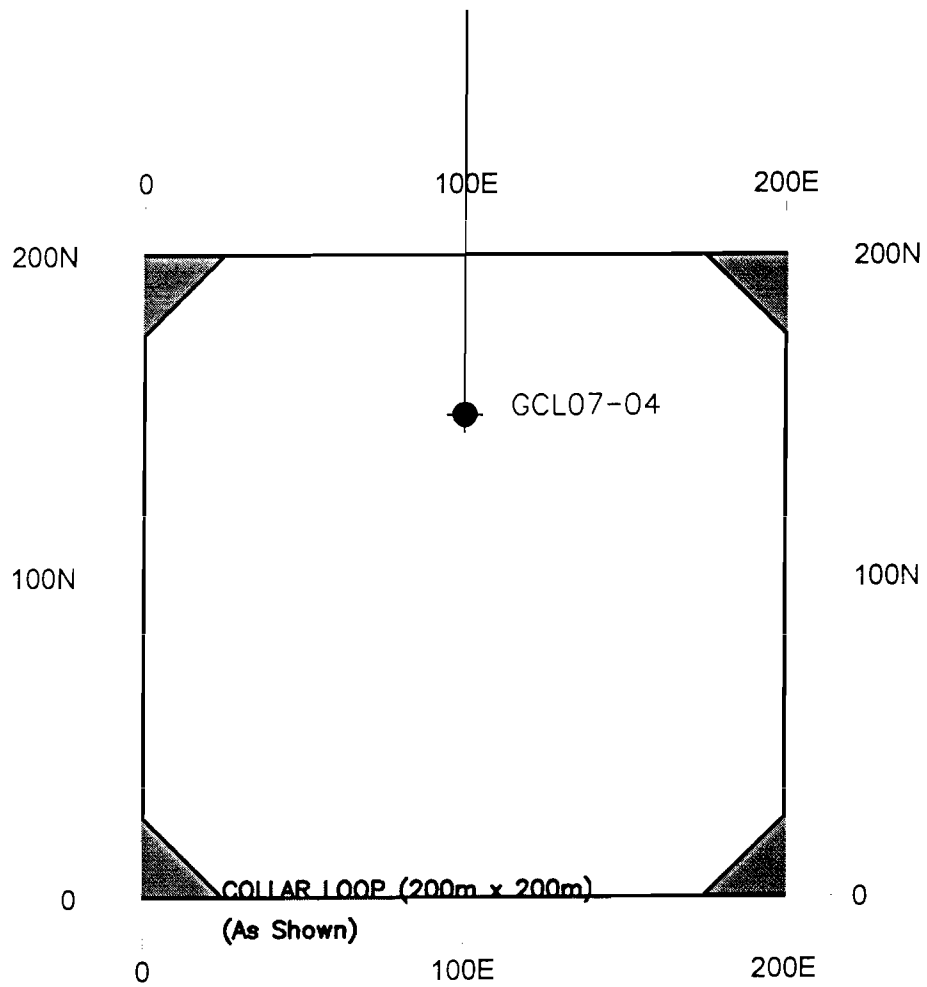
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 12.9 Amps  
Tx Turn-Off-Time and Rx Delay: 400 us -80 us  
Borehole Location: 500094E, 5348163N  
Borehole Azimuth, Dip: 325, -55  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/mr<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 29, 2007  
Instrumentation: Rx = Digital Protern (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-TF-TILT-GCL07-01-C

# GCL07-04 - BOREHOLE & LOOP LOCATION MAP



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY  
**BOREHOLE & LOOP LOCATION MAP**  
 GCL07-04

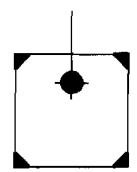
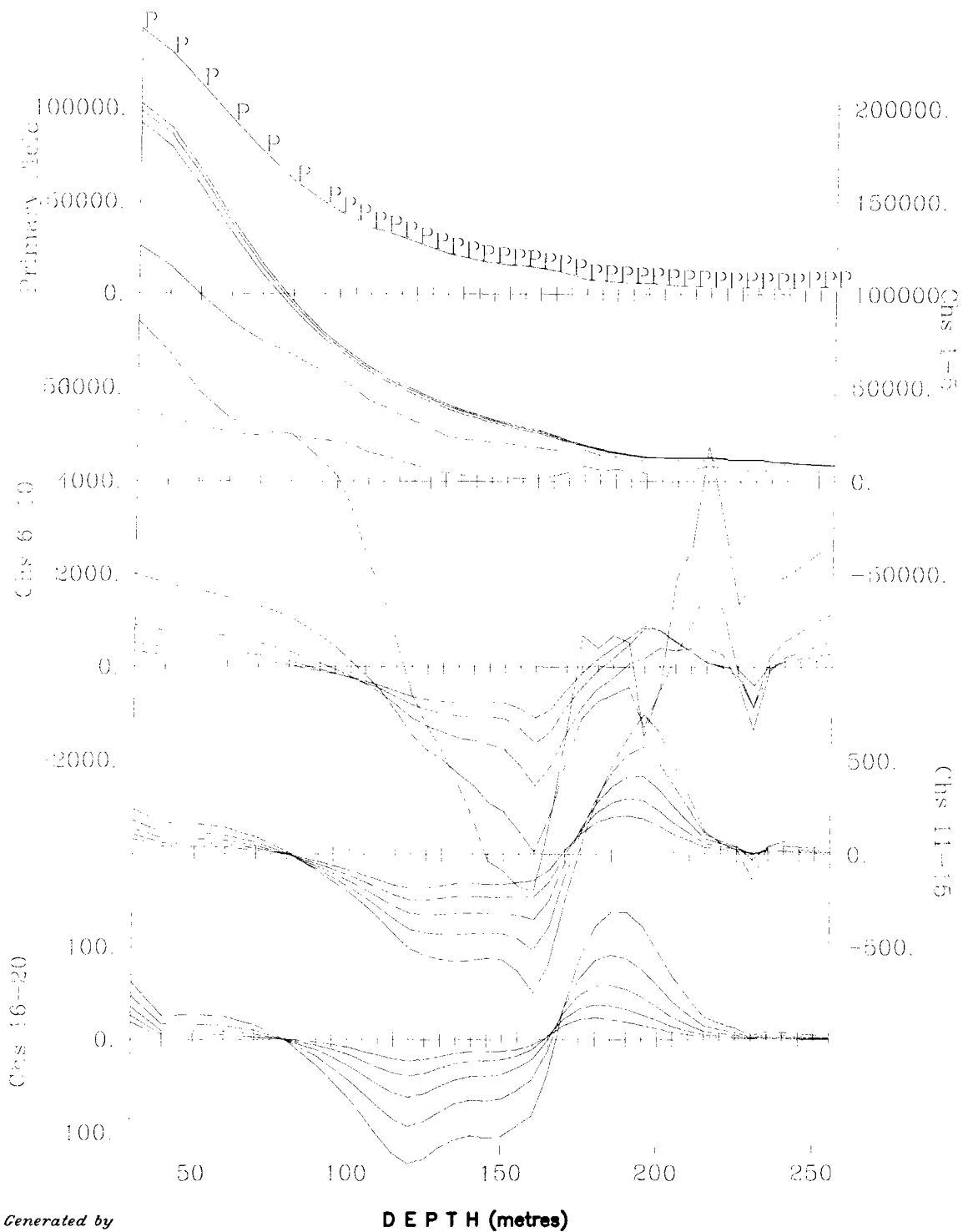
Borehole Parameters: DDH #1 = GCL07-04  
 Location = 100E, 150N  
 Azimuth & Dip = 325, -55

DDH #2 =  
 Location =  
 Azimuth & Dip =

DDH #3 =  
 Location =  
 Azimuth & Dip =

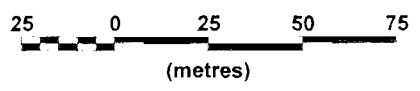
Survey Date: May 26, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-04



**Borehole GCL07-04 - Z Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

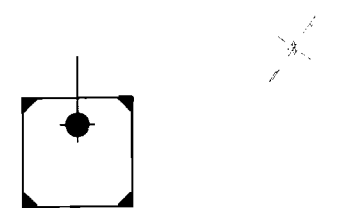
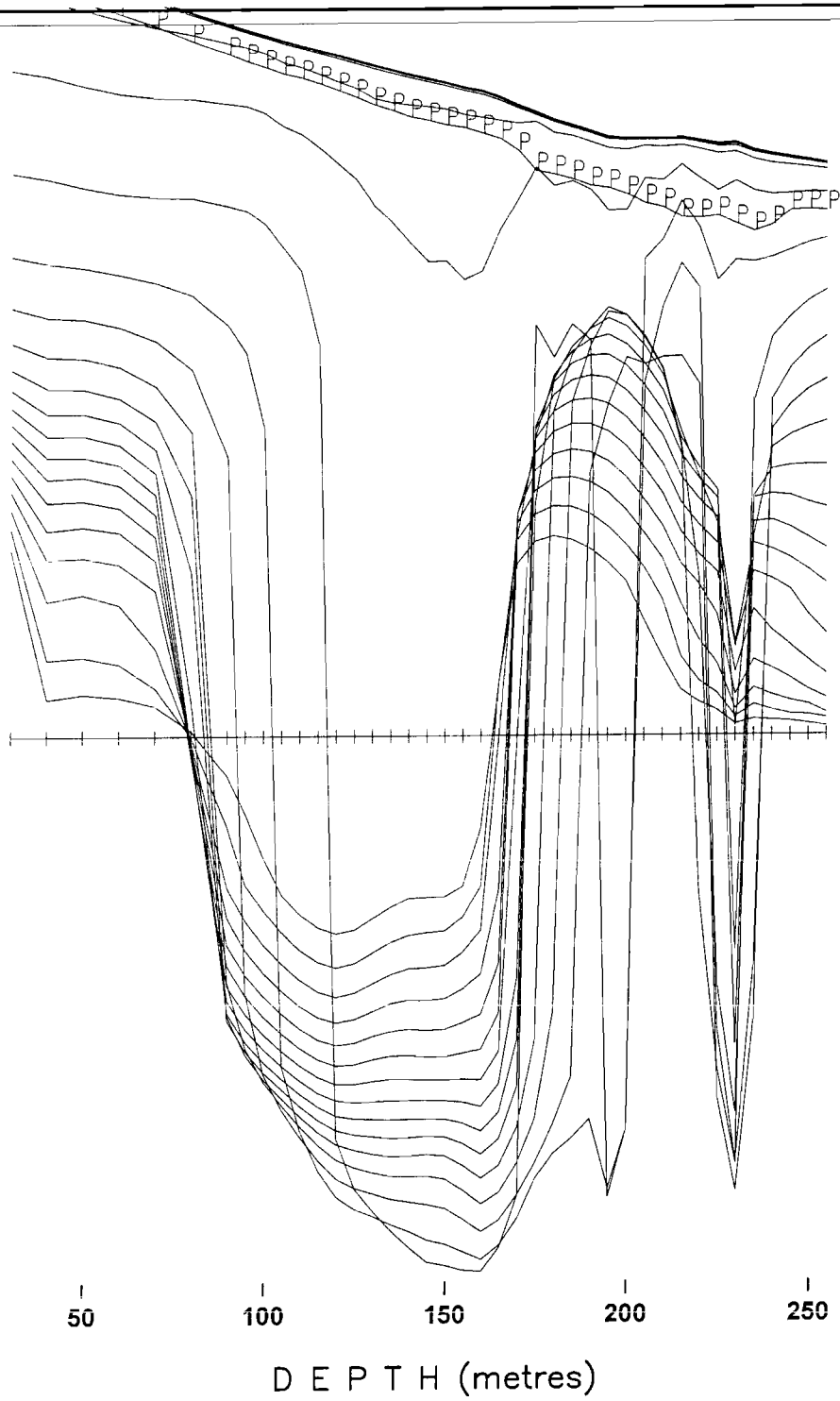
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 13.6 Amps  
 Tx Turn-Off-Time and Rx Delay: 410 us, -80 us  
 Borehole Location: 498137E, 5349441N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

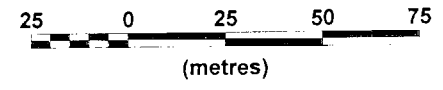
Survey Date: May 26, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-Z-GCL07-04-C



**Borehole GCL07-04 - Z Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

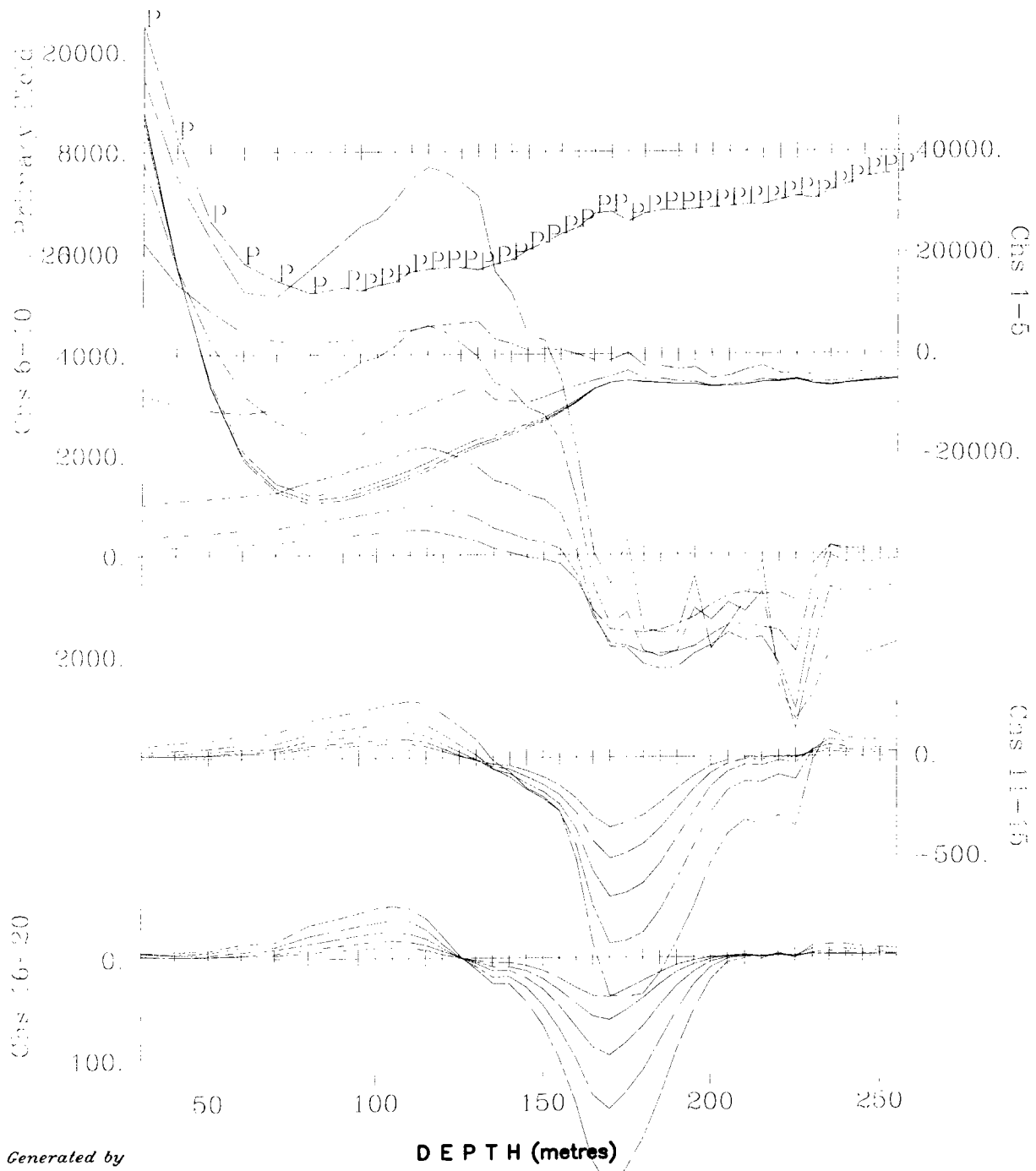
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 13.6 Amps  
 Tx Turn-Off-Time and Rx Delay: 410 us -80 us  
 Borehole Location: 498137E, 5349441N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

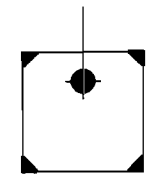
Survey Date: May 26, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Z-Tilt-GCL07-04-C



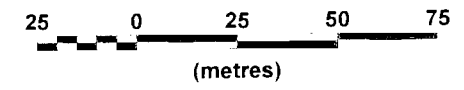


Map Generated by



**Borehole GCL07-04 - X Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

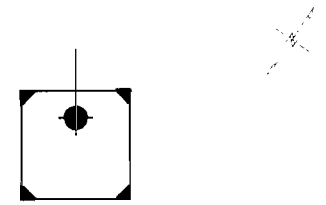
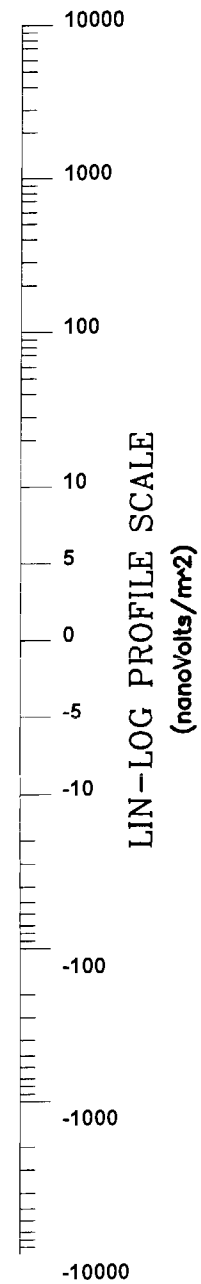
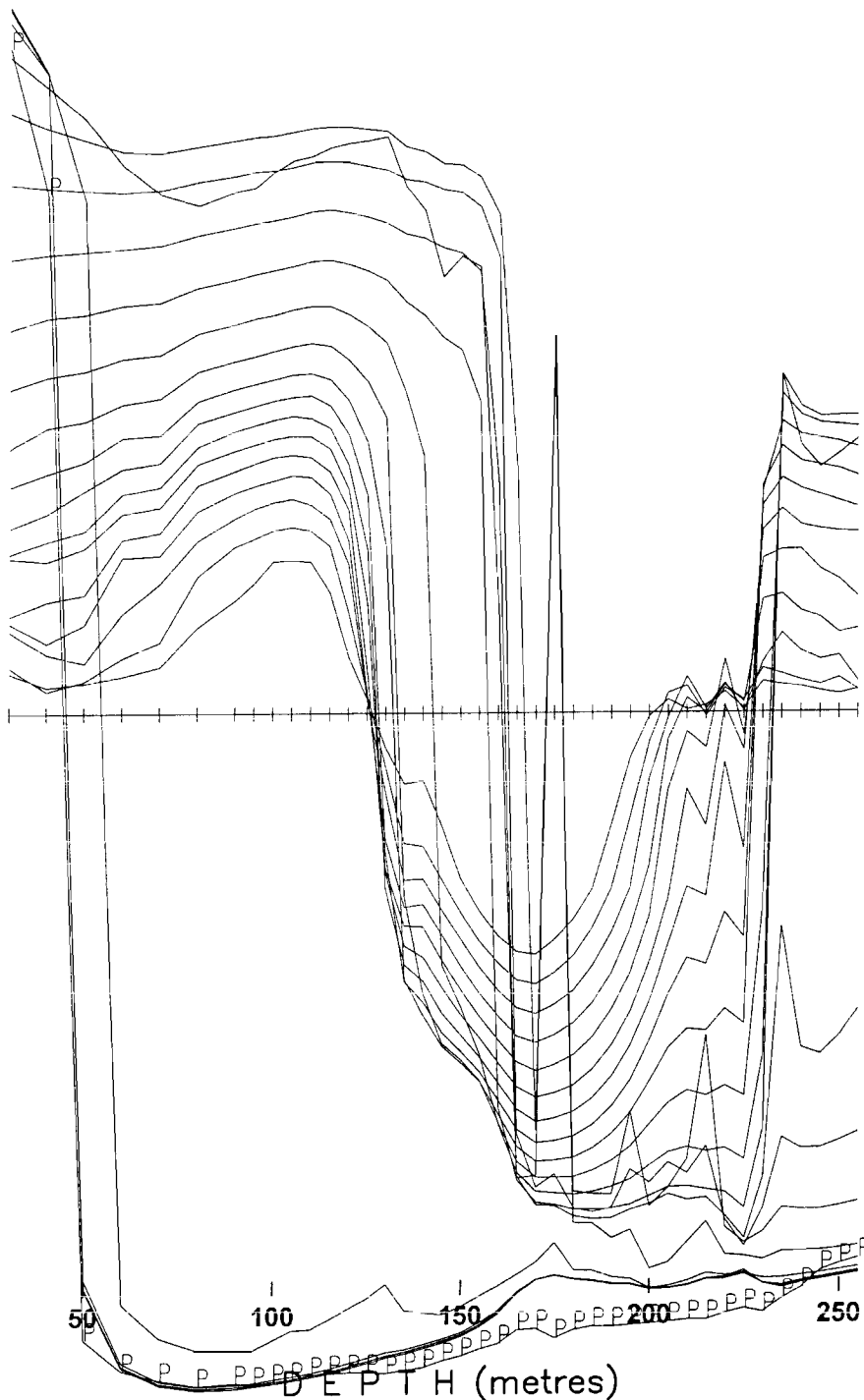
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 13.6 Amps  
 Tx Turn-Off-Time and Rx Delay: 410 us, -80 us  
 Borehole Location: 498137E, 5349441N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

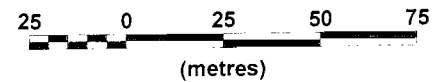
Survey Date: May 26, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-04-C



Borehole GCL07-04 - X Component  
Collar Loop

Scale 1:2000



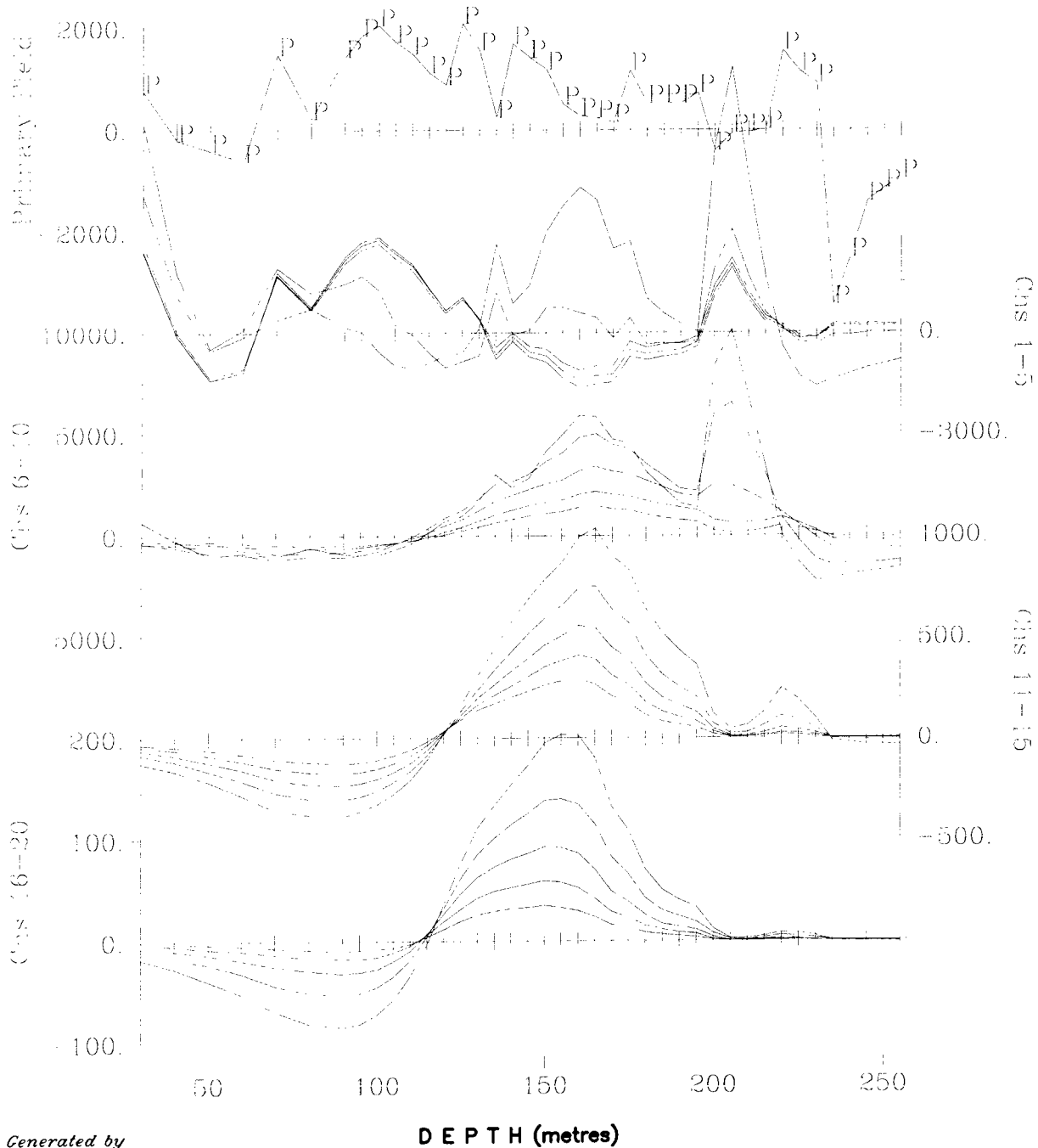
**GOLDEN CHALICE RESOURCES INC.**  
LANGUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 13.6 Amps  
Tx Turn-Off-Time and Rx Delay: 410 us -80 us  
Borehole Location: 498137E, 5349441N  
Borehole Azimuth, Dip: 325, -55  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

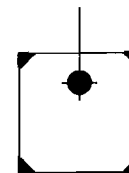
Survey Date: May 26, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-X-Tilt-GCL07-04-C



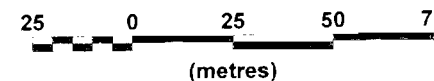
Map Generated by

DEPTH (metres)



**Borehole GCL07-04 - Y Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

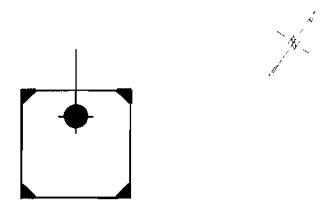
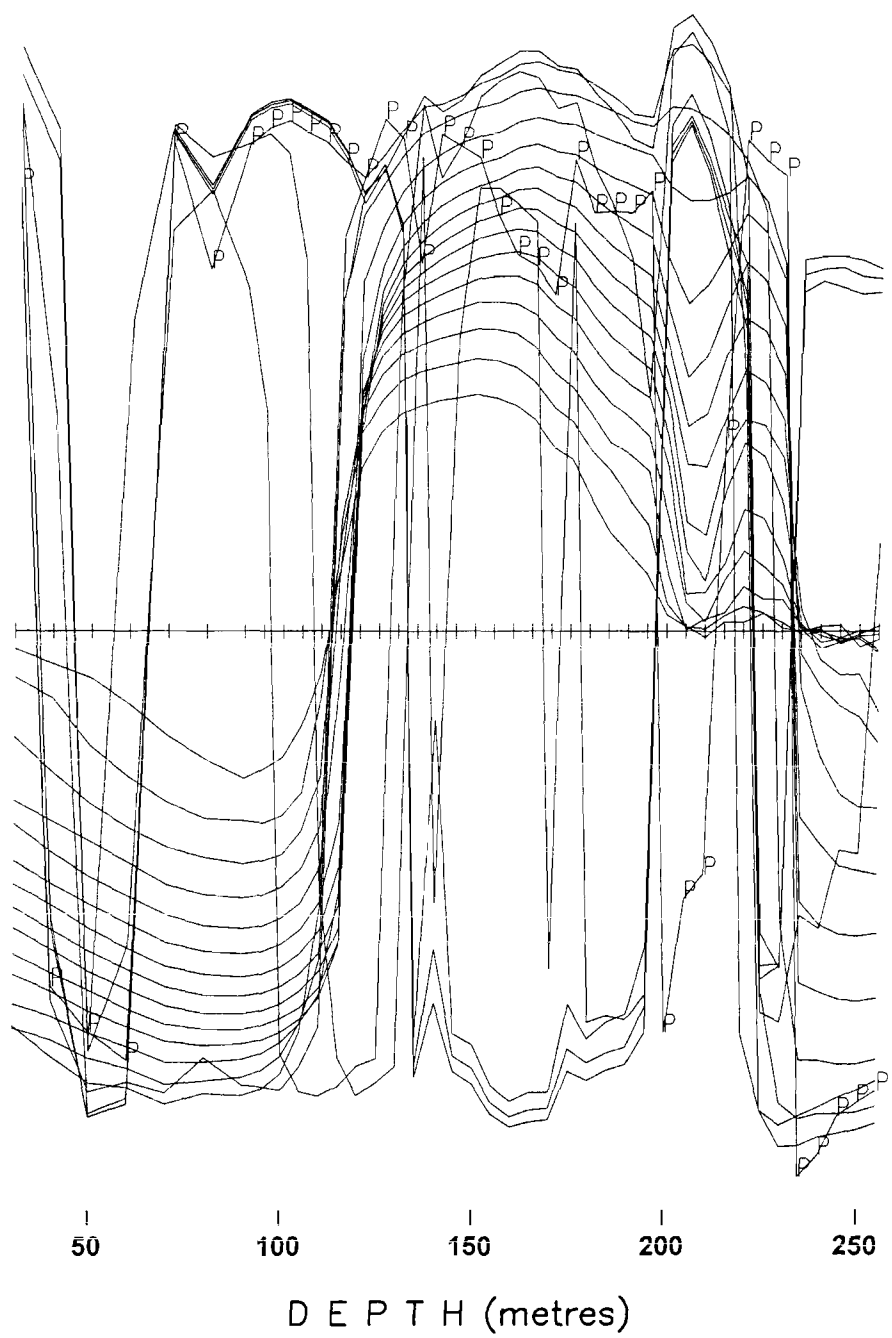
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 13.6 Amps  
 Tx Turn-Off-Time and Rx Delay: 410 us, -80 us  
 Borehole Location: 498137E, 5349441N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 26, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 18600 W)

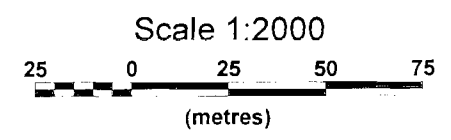


Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**

DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-04-C



**Borehole GCL07-04 - Y Component  
Collar Loop**



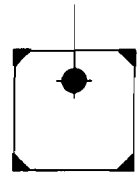
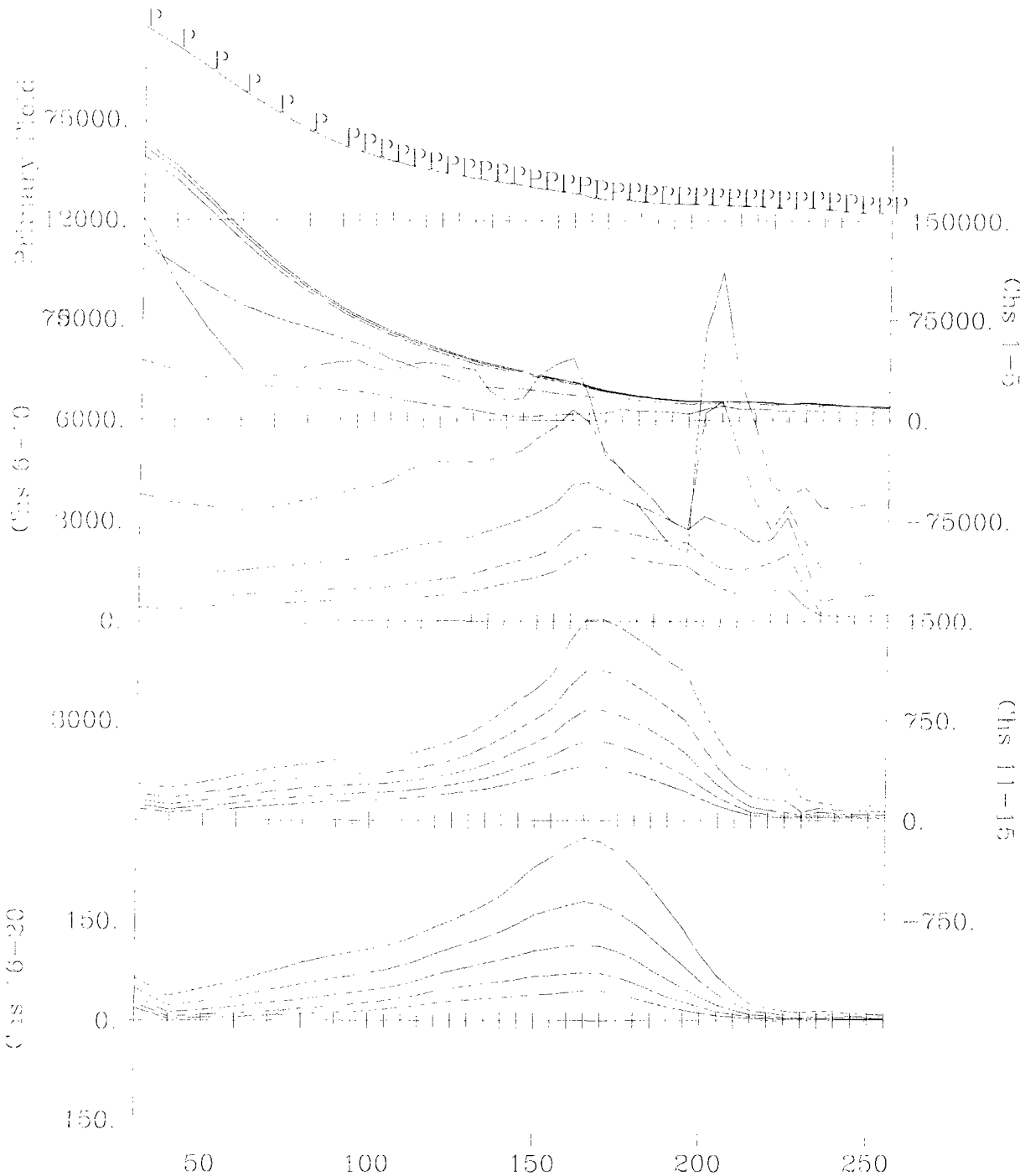
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 13.6 Amps  
 Tx Turn-Off-Time and Rx Delay: 410 us -80 us  
 Borehole Location: 498137E, 5349441N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

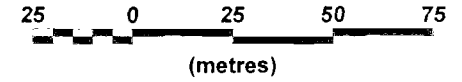
Survey Date: May 26, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Y-Tilt-GCL07-04-C



**Borehole GCL07-04 – Total Field  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

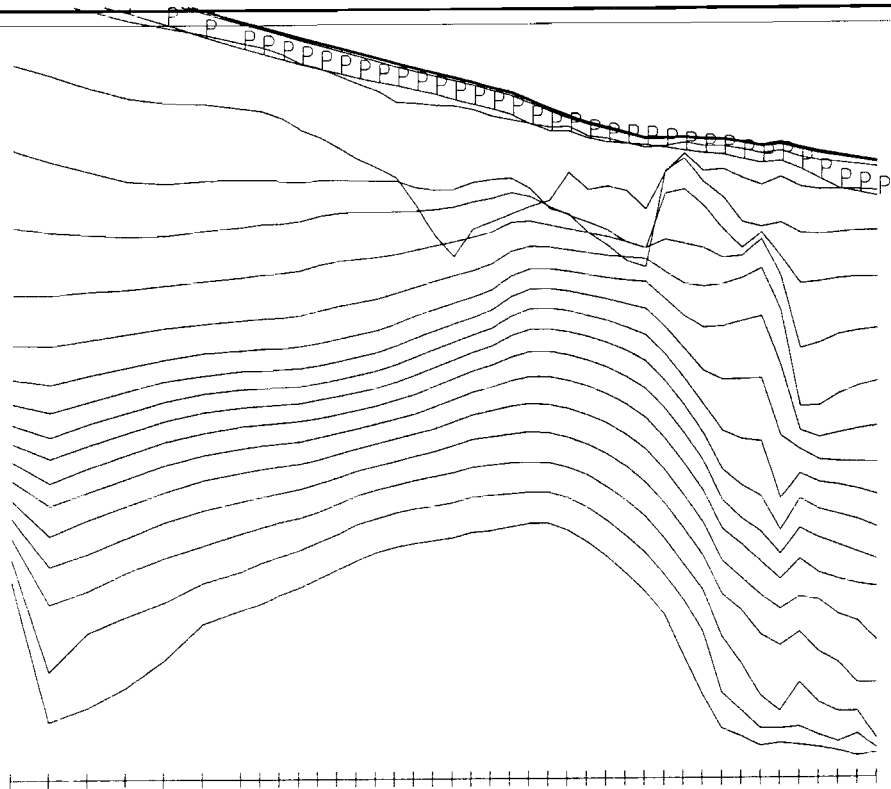
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

**Secondary Electromagnetic Field (dB/dt)**

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size:                  | 200m x 200m                             |
| Tx Loop Location:              | 0-200E,0-200N                           |
| Transmitter Current:           | 13.6 Amps                               |
| Tx Turn-Off-Time and Rx Delay: | 410 us, -80 us                          |
| Borehole Location:             | 498137E, 5349441N                       |
| Borehole Azimuth, Dip:         | 325, -55                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:     | Hz - positive up                        |
|                                | Hz - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                 |

|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Survey Date:     | May 26, 2006                                                                                      |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 18600 W) |

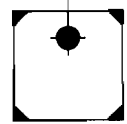
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-04-C



LIN-LOG PROFILE SCALE  
(nanoVolts/m<sup>2</sup>)

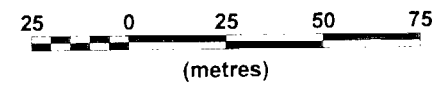
50      100      150      200      250

DEPTH (metres)



Borehole GCL07-04 - TF Component  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

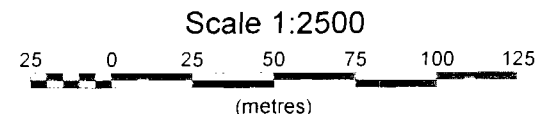
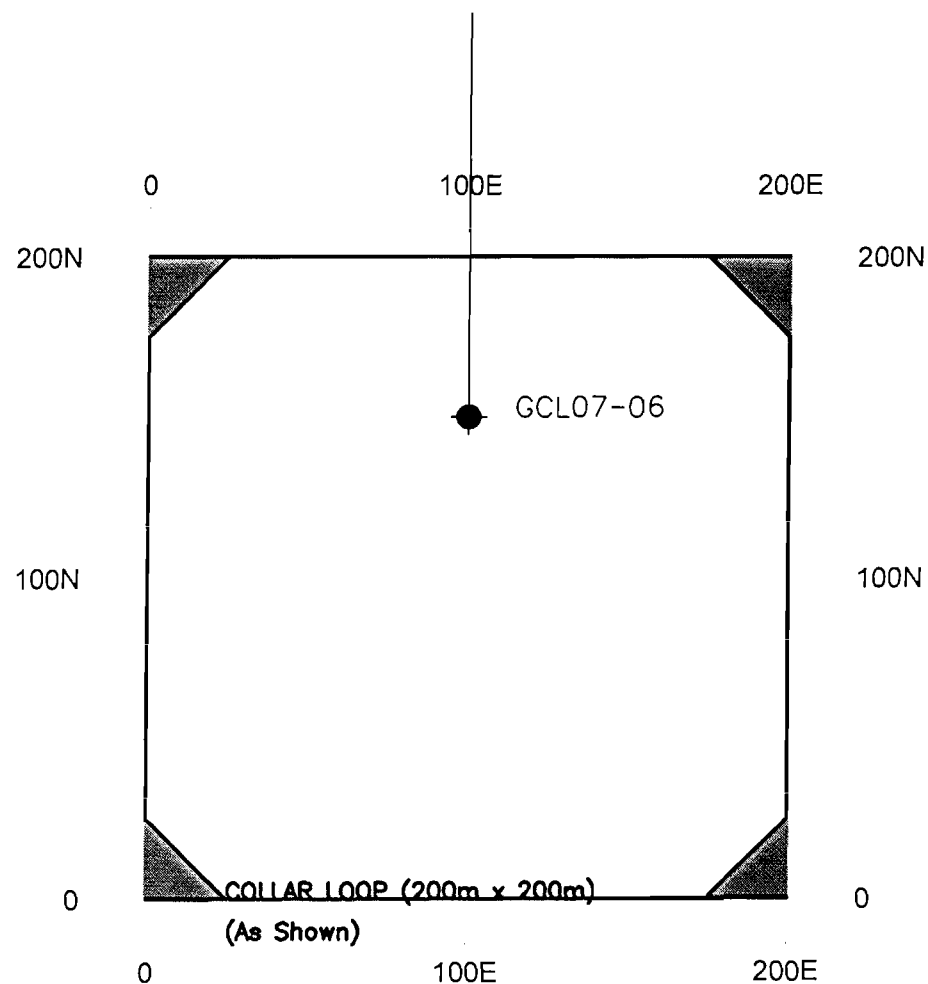
|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E, 0-200N                                              |
| Transmitter Current:           | 13.6 Amps                                                   |
| Tx Turn-Off-Time and Rx Delay: | 410 us -80 us                                               |
| Borehole Location:             | 498137E, 5349441N                                           |
| Borehole Azimuth, Dip:         | 325, -55                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Survey Date:     | May 26, 2007                                                                                      |
| Instrumentation: | Rx = Digital Protem (30 Channeis)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-5/ 18600 W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-TF-Tilt-GCL07-04-C

# GCL07-06 - BOREHOLE & LOOP LOCATION MAP



**GOLDEN CHALICE RESOURCES INC.**  
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3D FIXED-LOOP BOREHOLE TEM SURVEY  
**BOREHOLE & LOOP LOCATION MAP**  
GCL07-06

Borehole Parameters: DDH #1 = GCL07-06  
Location = 100E, 150N  
Azimuth & Dip = 325, -55

DDH #2 =  
Location =  
Azimuth & Dip =

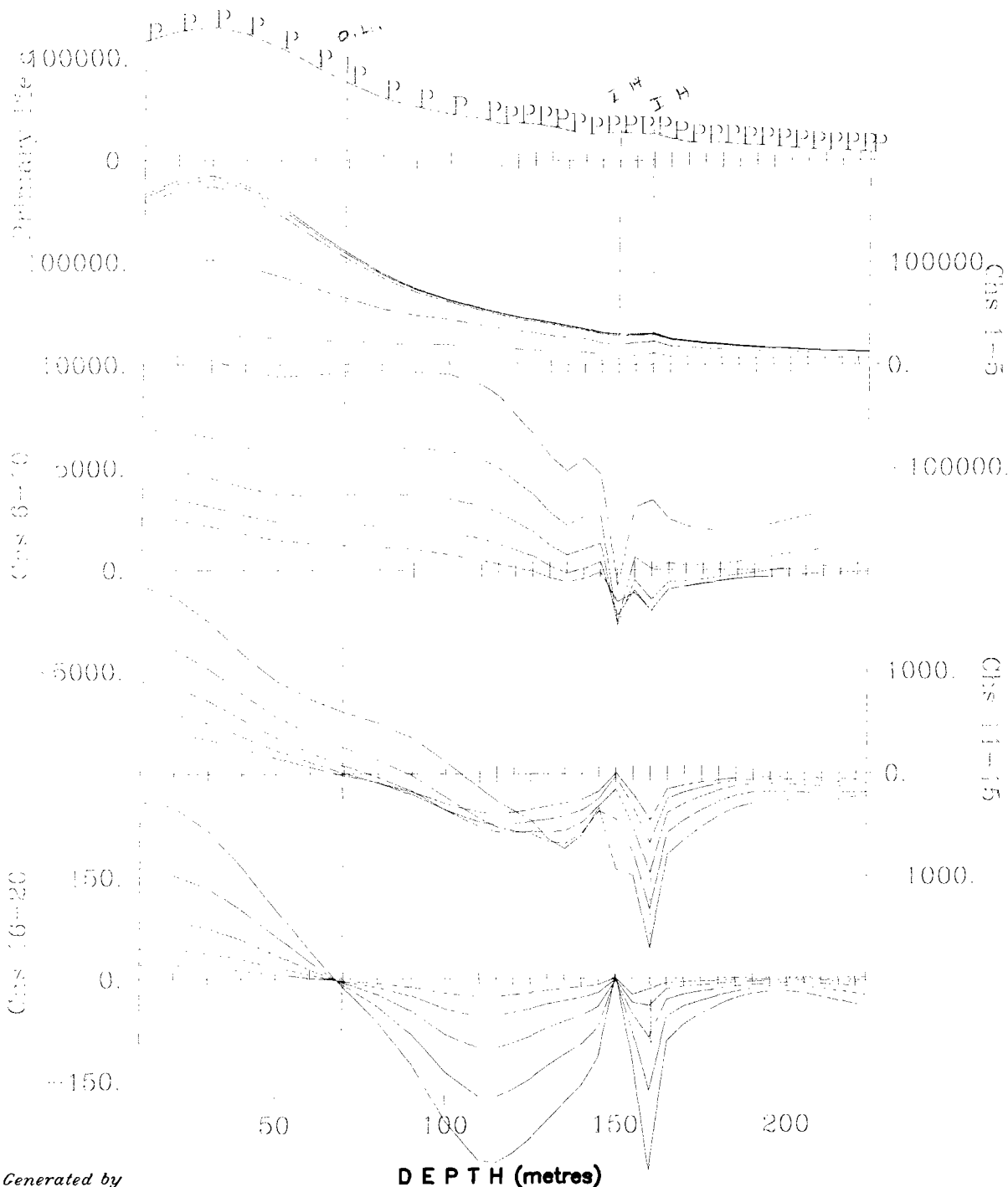
DDH #3 =  
Location =  
Azimuth & Dip =

---

Survey Date: May 25, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 18600 W)

---

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-06



Borehole GCL07-06 - Z Component  
Collar Loop  
Scale 1:2000

25 0 25 50 75  
(metres)

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3D FIXED-LOOP BOREHOLE TEM SURVEY  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 12.8 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
Borehole Location: 497523E, 5349401N  
Borehole Azimuth, Dip: 325, -55  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

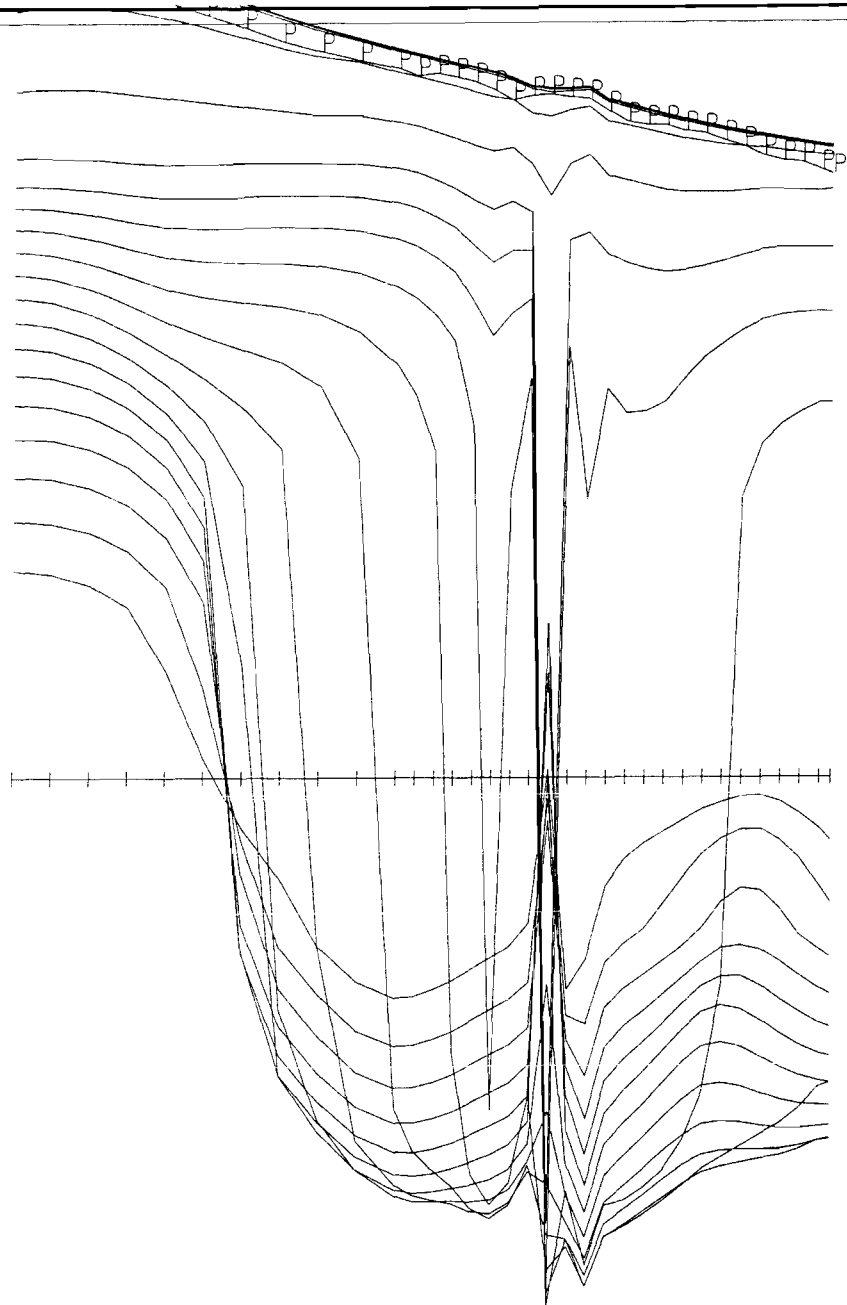
Survey Date: May 25, 2006  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800 W)



Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**

DWG. NO. CA00500C-BH4A-Tiltrot-Z-GCL07-06-C

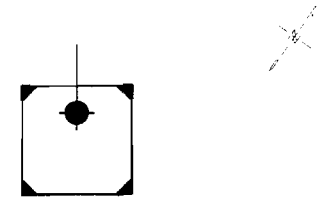




0 50 100 150 200

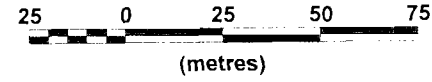
DEPTH (metres)

Map Generated by



Borehole GCL07-06 - Z Component  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

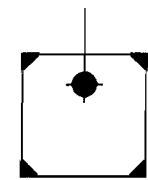
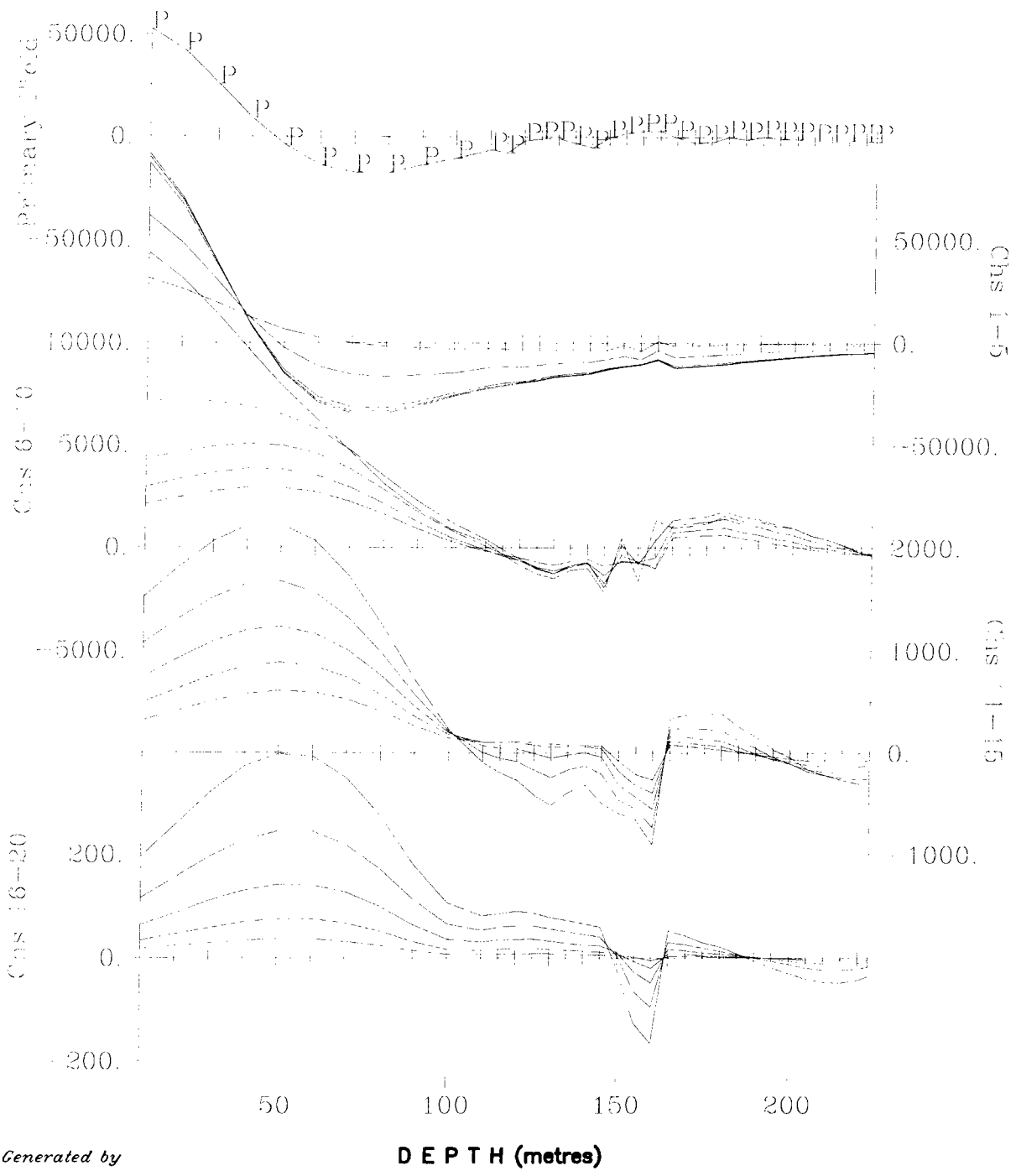
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 12.8 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us -80 us  
Borehole Location: 497523E, 5349401N  
Borehole Azimuth, Dip: 325, -55  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 25, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-Z-Tilt-GCL07-06-C





Borehole GCL07-06 - X Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

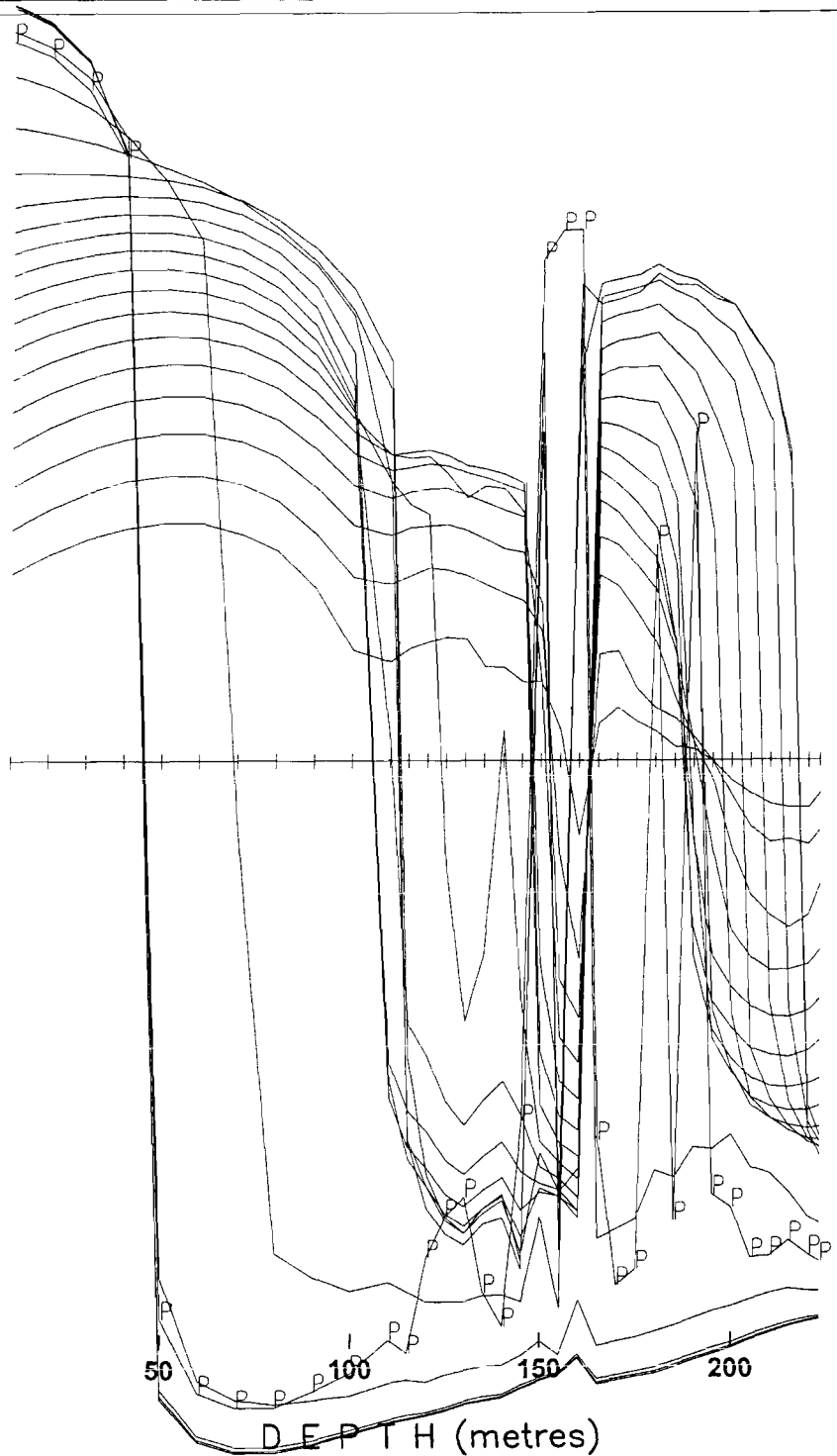
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 12.8 Amps  
 Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
 Borehole Location: 497523E, 5349401N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 25, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-06-C



0

50

100

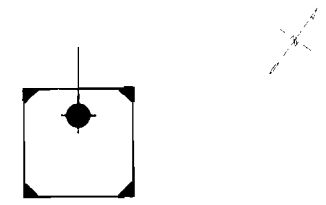
150

200

DEPTH (metres)

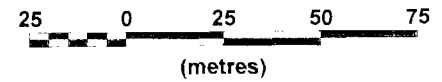
10000  
1000  
100  
10  
5  
0  
-5  
-10  
-100  
-1000  
-10000

LIN-LOG PROFILE SCALE  
(nanoVolts/m<sup>2</sup>)



Borehole GCL07-06 - X Component  
Collar Loop

Scale 1:2000



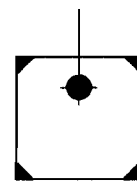
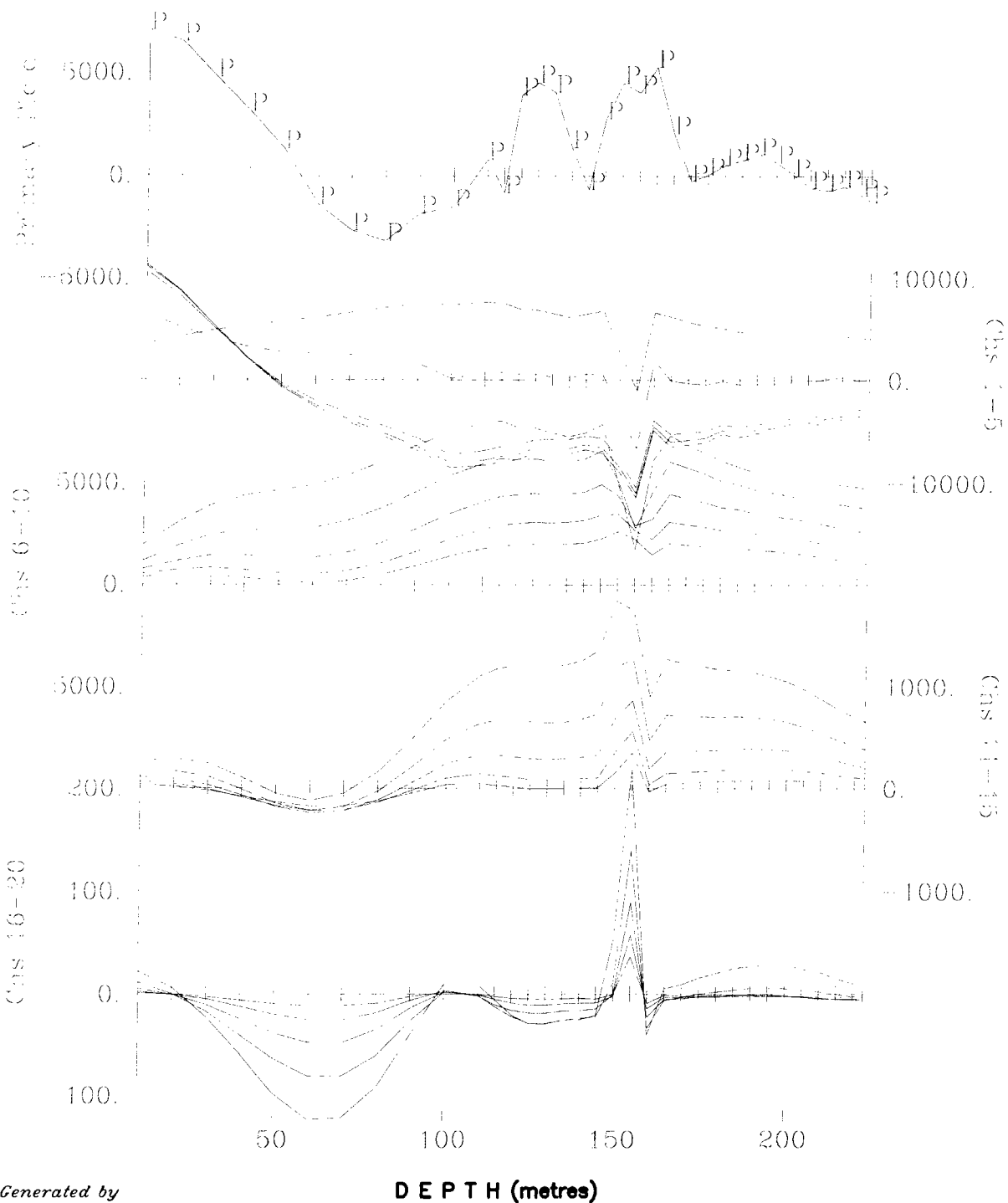
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E, 0-200N                                              |
| Transmitter Current:           | 12.8 Amps                                                   |
| Tx Turn-Off-Time and Rx Delay: | 390 us -80 us                                               |
| Borehole Location:             | 497523E, 5349401N                                           |
| Borehole Azimuth, Dip:         | 325, -55                                                    |
| Station Interval:              | 5-10 metres                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

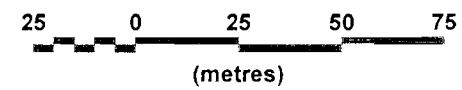
|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Survey Date:     | May 25, 2007                                                                                      |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 18600 W) |

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-X-Tilt-GCL07-06-C



**Borehole GCL07-06 – Y Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

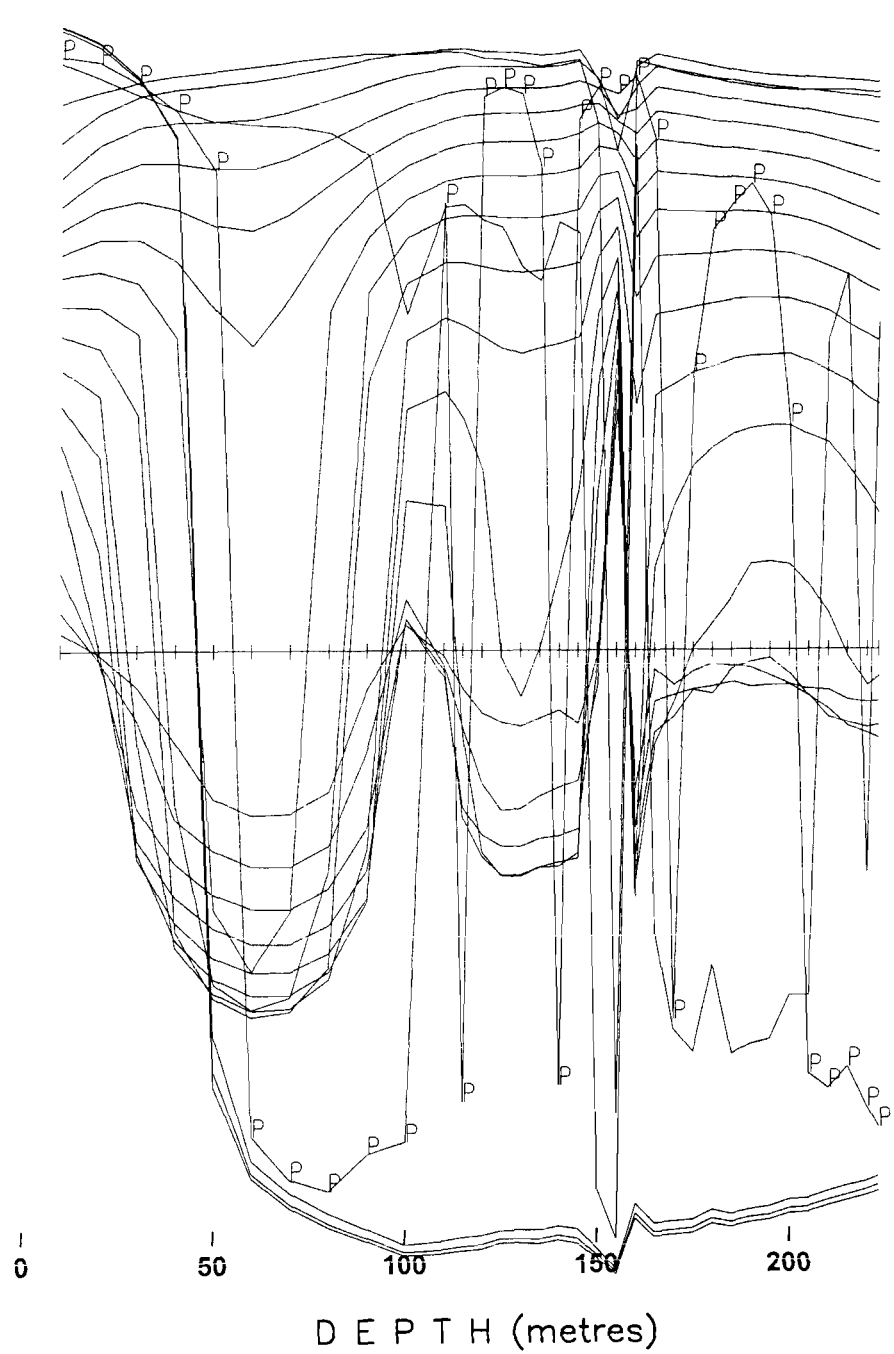
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

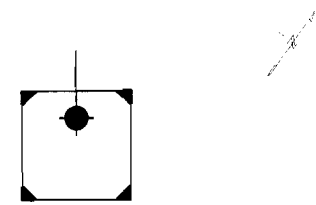
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 12.8 Amps  
 Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
 Borehole Location: 497523E, 5349401N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 25, 2006  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM 57 (1800 W)

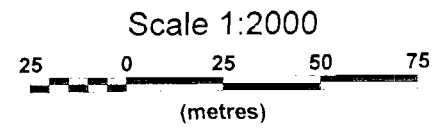
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-06-C



Map Generated by



**Borehole GCL07-06 - Y Component  
Collar Loop**



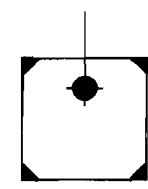
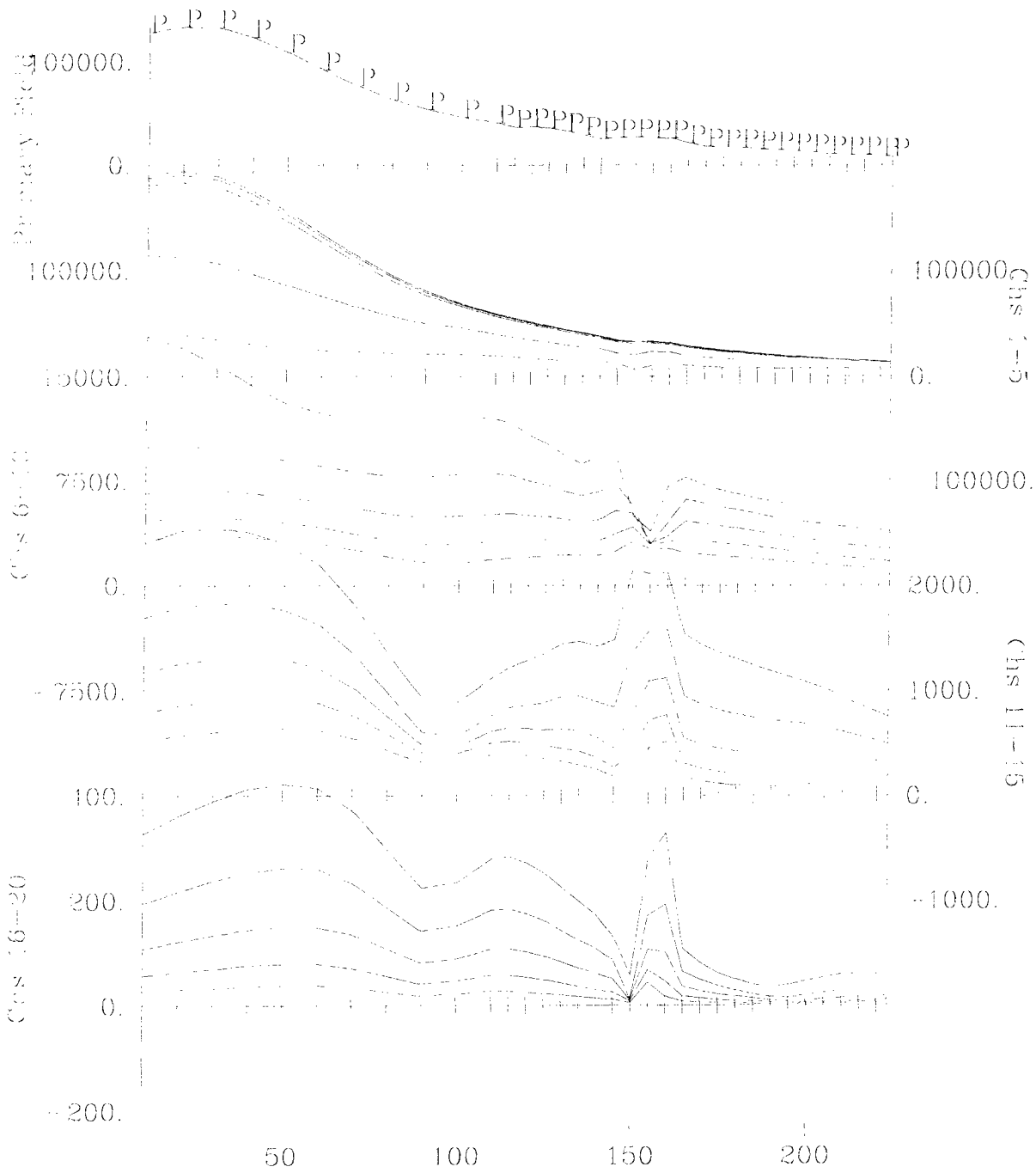
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 12.8 Amps  
 Tx Turn-Off Time and Rx Delay: 390 us -80 us  
 Borehole Location: 497523E, 5349401N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m²  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

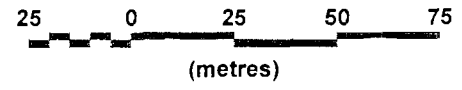
Survey Date: May 25, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Y-Tilt-GCL07-06-C



Borehole GCL07-06 - Total Field  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

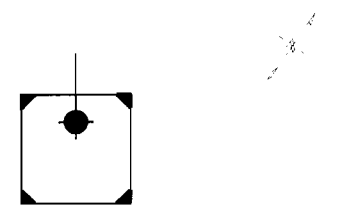
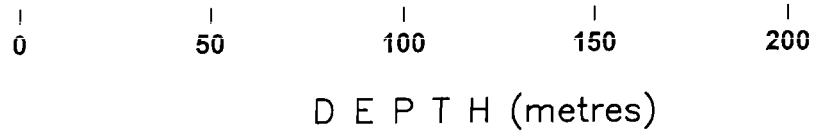
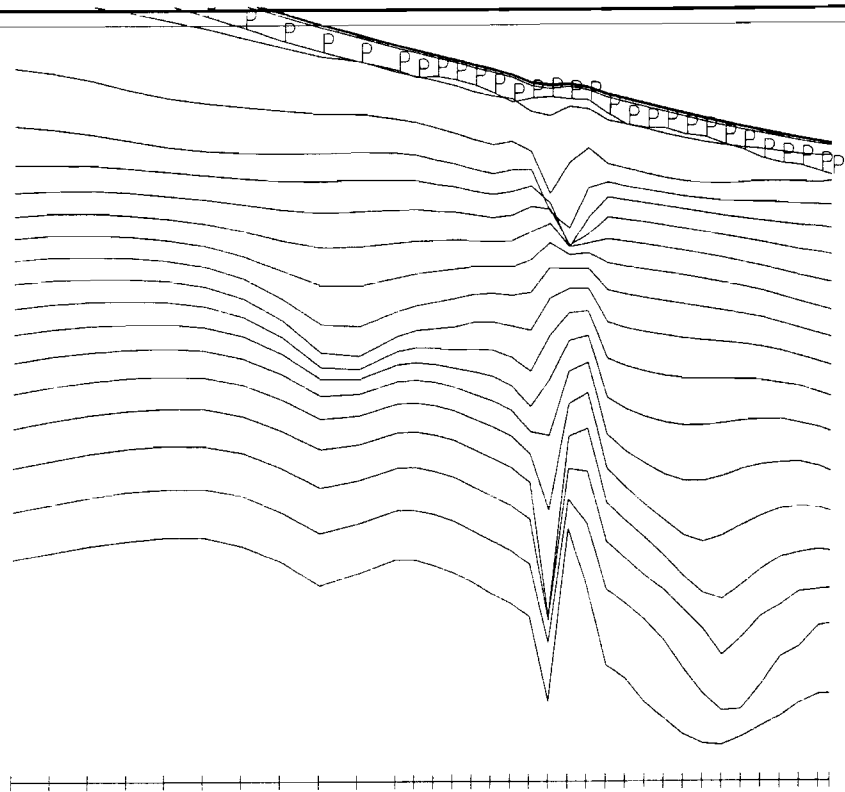
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 12.8 Amps  
 Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
 Borehole Location: 497523E, 5349401N  
 Borehole Azimuth, Dip: 325, -55  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hx - positive up  
 Hy - positive north, H<sub>y</sub> - positive west  
 Cross Component Rotation: using Tilt Meter Angles

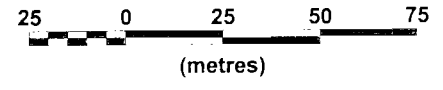
Survey Date: Moy 25, 2006  
 Instrumentation: Rx = Digital Protom (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx - Geonics EM-57 (1800 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-06-C



Borehole GCL07-06 - Total Field  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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3D FIXED-LOOP BOREHOLE TEM SURVEY  
Secondary Electromagnetic Field (dB/dt)

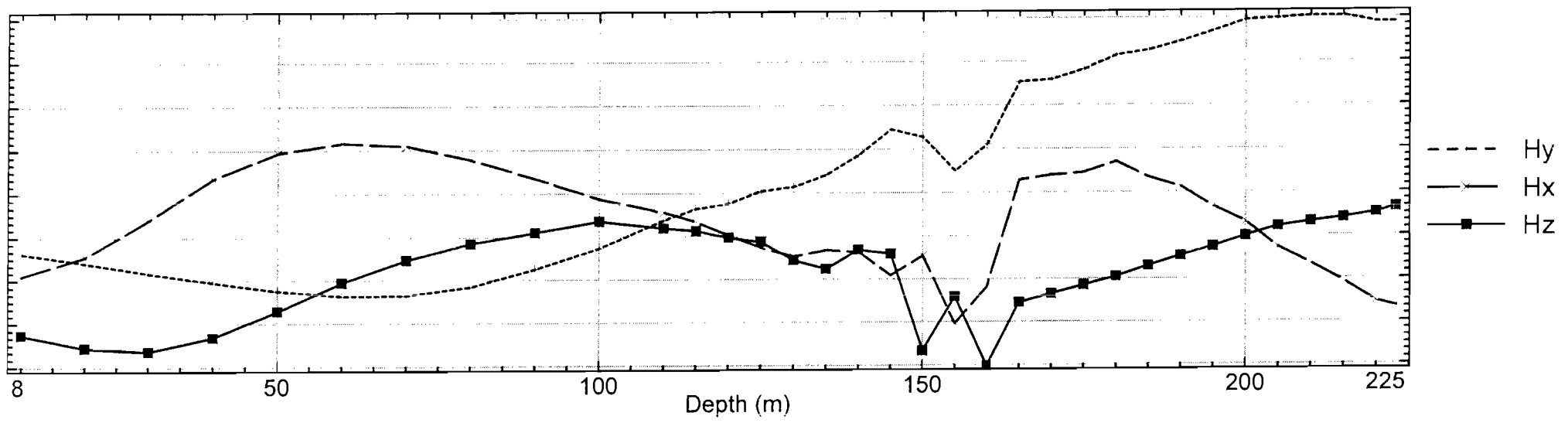
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 12.8 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us -80 us  
Borehole Location: 497523E, 5349401N  
Borehole Azimuth, Dip: 325, -55  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: May 25, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 18600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-TF-Tilt-GCL07-06-C

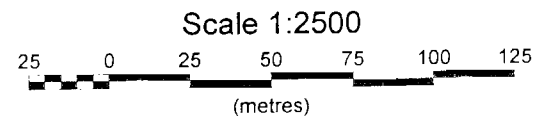
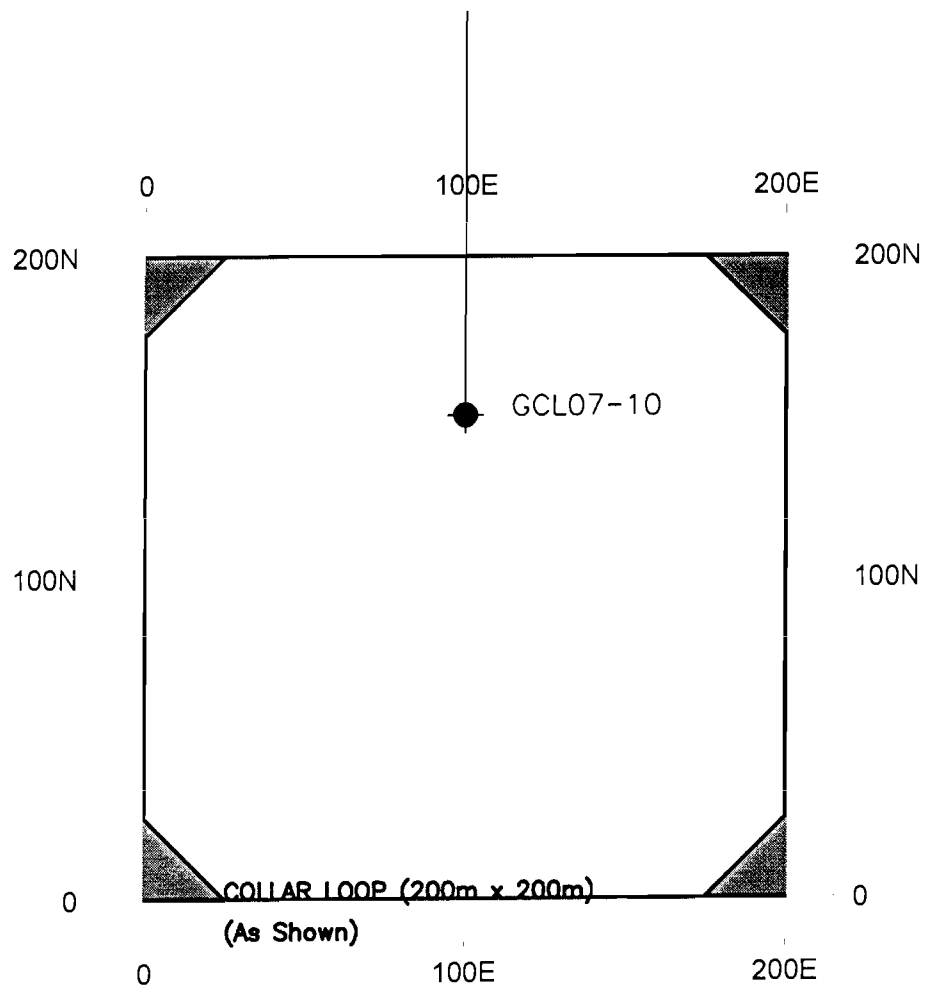
Map Generated by

# STEP RESPONSE FOR HOLE GCL07-06





# GCL07-10 - BOREHOLE & LOOP LOCATION MAP



**GOLDEN CHALICE RESOURCES INC.**  
**LANGMUIR PROPERTY**  
 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
**BOREHOLE & LOOP LOCATION MAP**  
**GCL07-10**

Borehole Parameters: DDH #1 = GCL07-10  
 Location = 100E, 150N  
 Azimuth & Dip = 325, -45

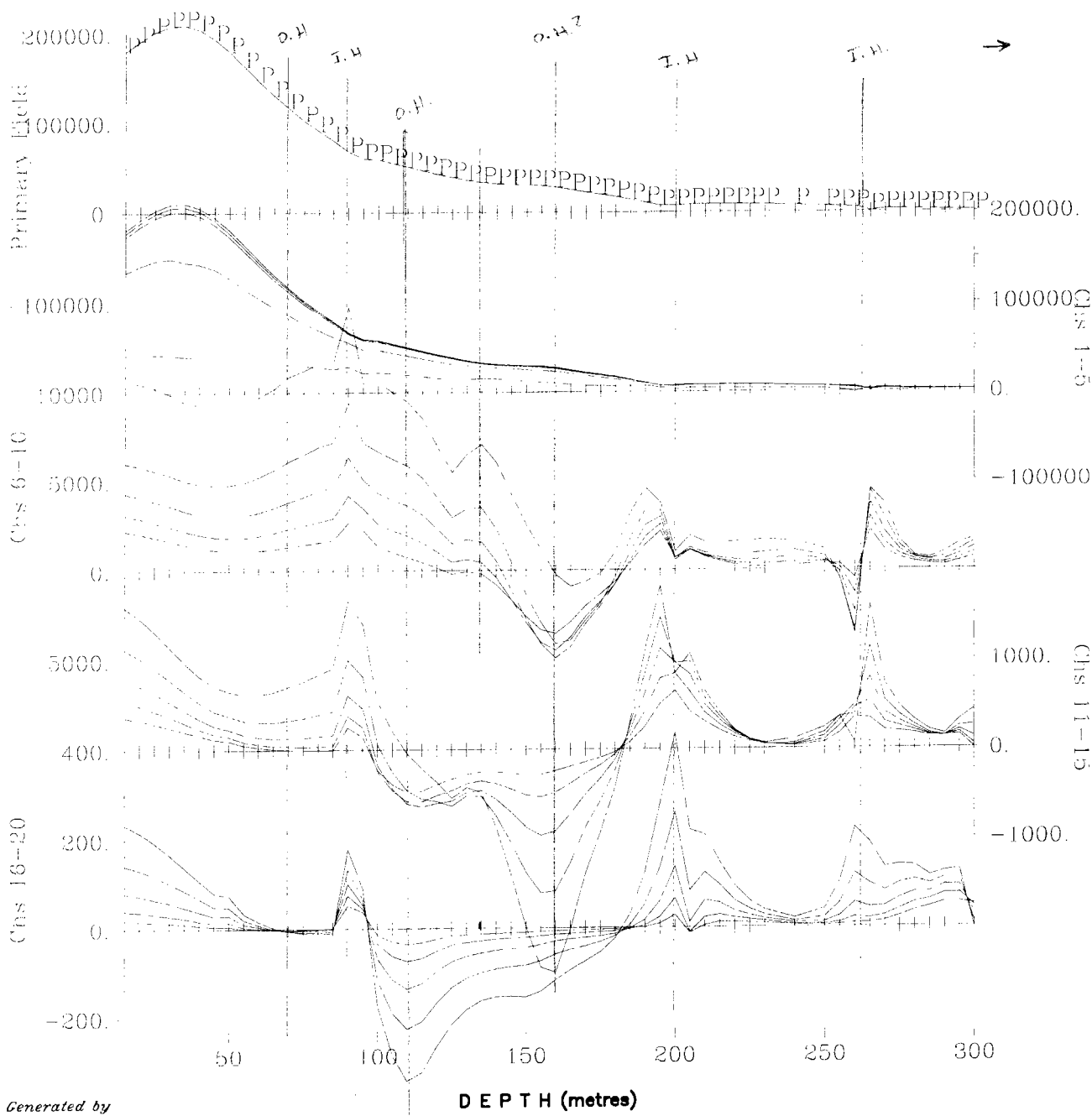
DDH #2 =  
 Location =  
 Azimuth & Dip =

DDH #3 =  
 Location =  
 Azimuth & Dip =

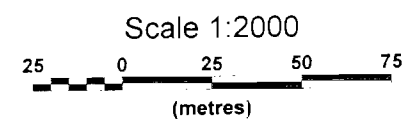
Survey Date: July 18, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 1800W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-10



**Borehole GCL07-10 - Z Component  
Collar Loop**



**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

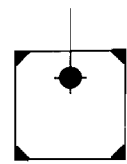
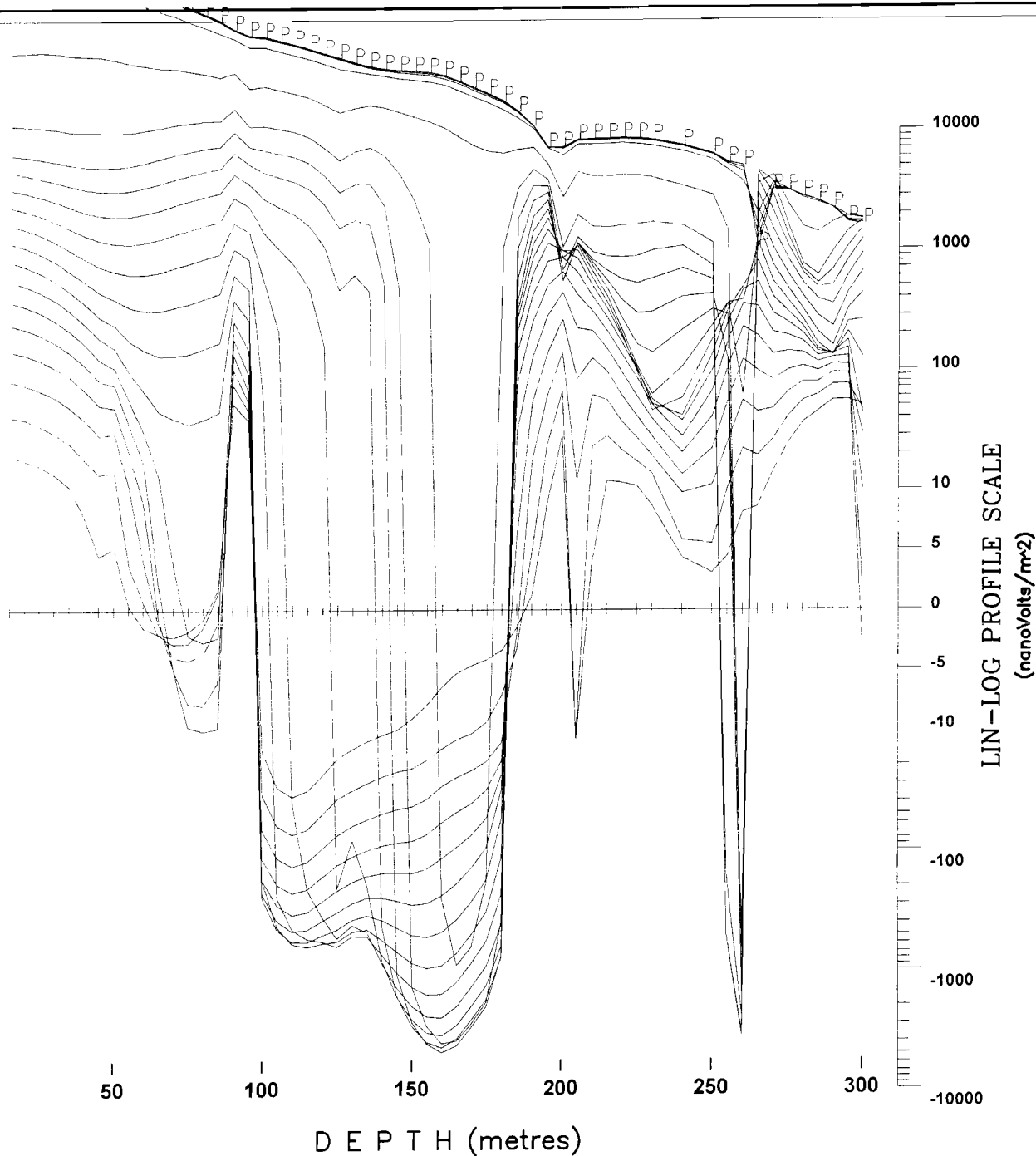
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E, 0-200N                                              |
| Transmitter Current:           | 12.8 Amps                                                   |
| Tx Turn-Off-Time and Rx Delay: | 390 us, -80 us                                              |
| Borehole Location:             | 497523E, 5349401N                                           |
| Borehole Azimuth, Dip:         | 325, -45                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

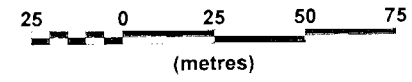
|                  |                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------|
| Survey Date:     | July 18, 2007                                                                                   |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57, 1800W |

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-Z-GCL07-10-C



Borehole GCL07-10 - Z Component  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

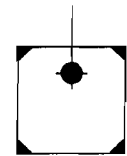
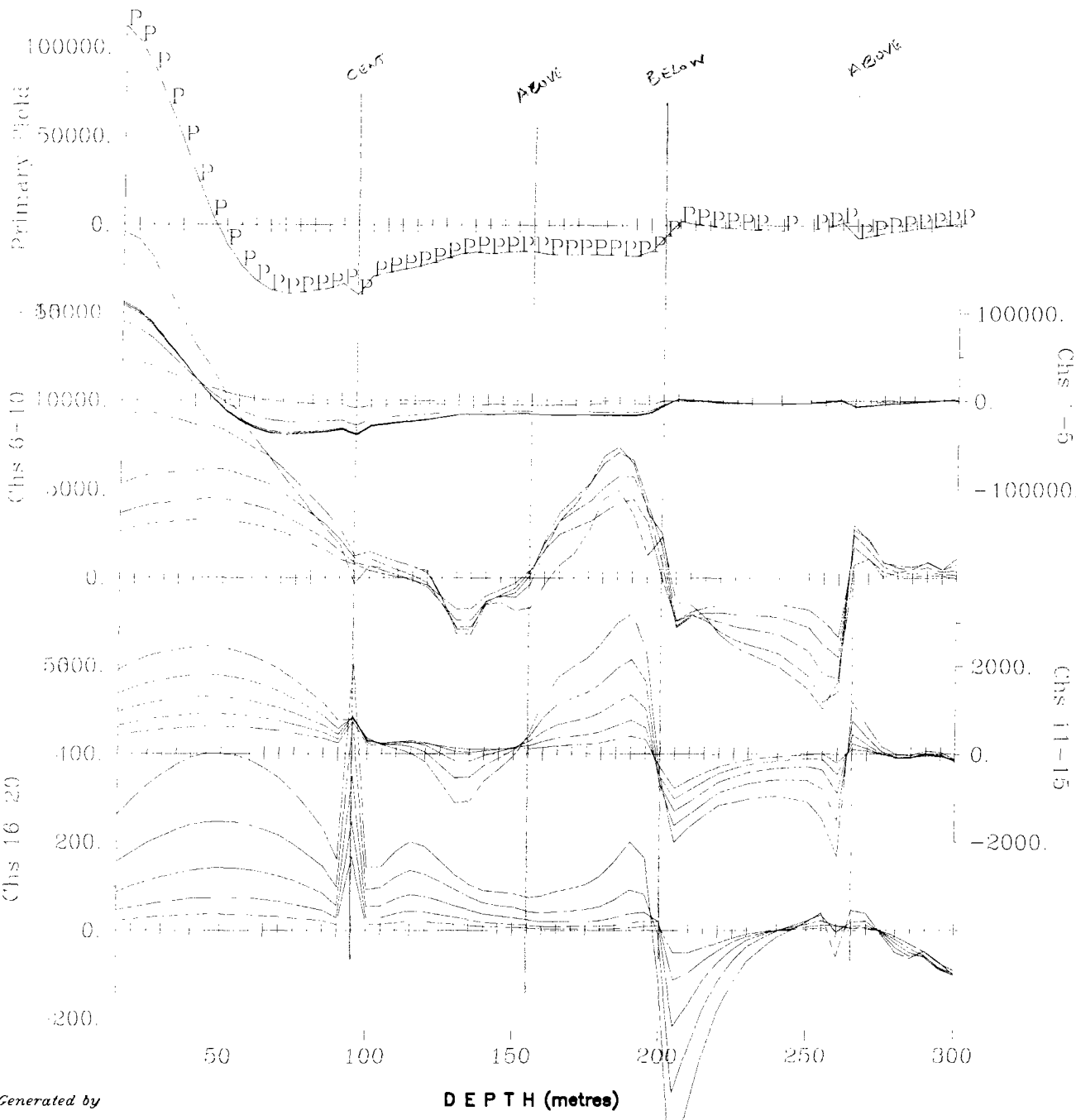
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E,0-200N                                               |
| Transmitter Current:           | 14 Amps                                                     |
| Tx Turn-Off-Time and Rx Delay: | 415 us -80 us                                               |
| Borehole Location:             | 497523E, 5349401N                                           |
| Borehole Azimuth, Dip:         | 325, -45                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------|
| Survey Date:     | July 18, 2007                                                                                   |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 1800W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-Z-Tilt-GCL07-10-C



Borehole GCL07-10 - X Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

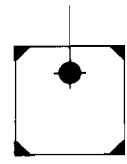
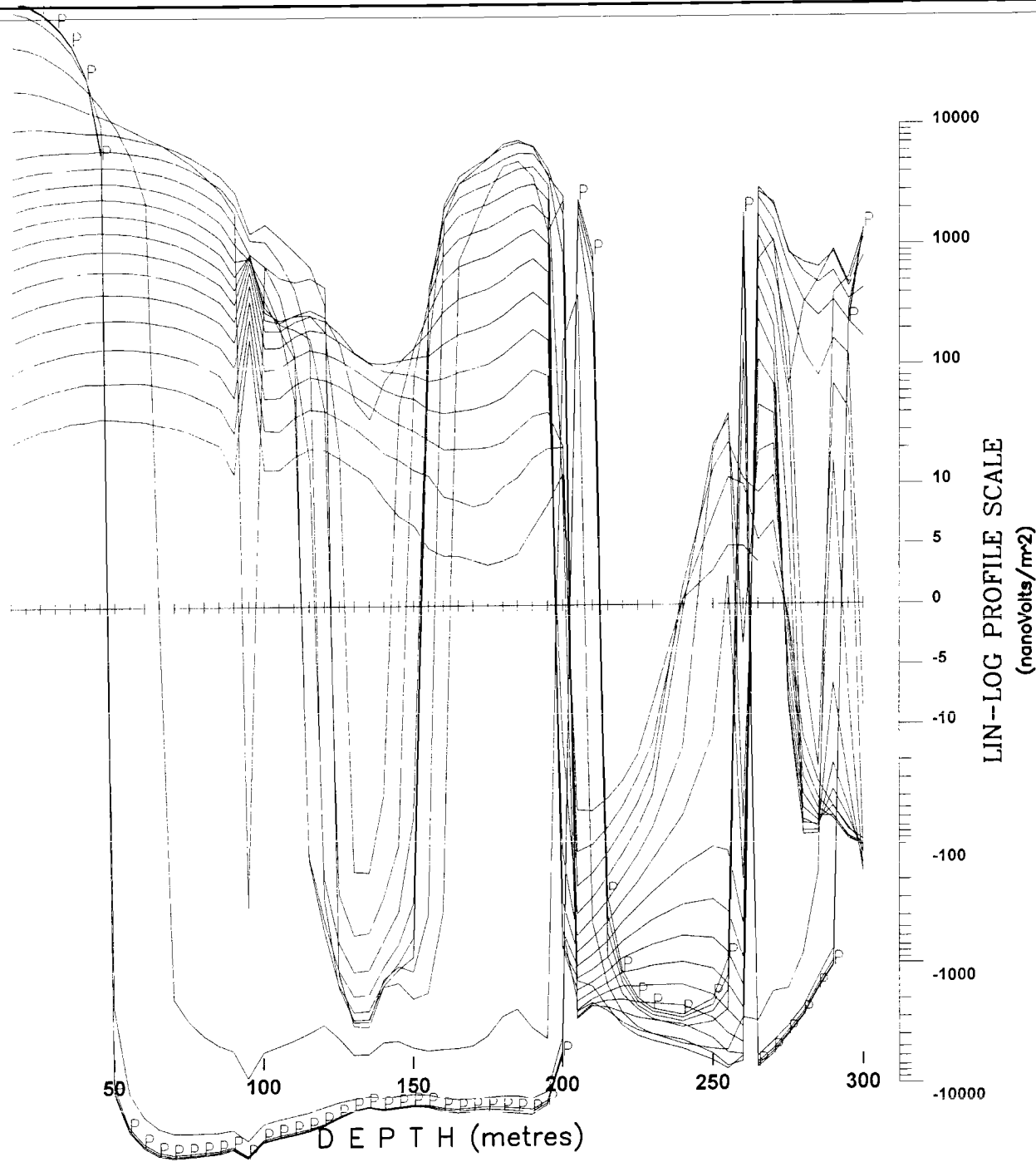
**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 12.8 Amps  
 Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
 Borehole Location: 497523E, 5349401N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north; Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

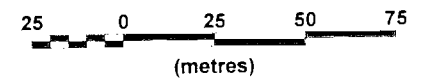
Survey Date: July 18, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-10-C



Borehole GCL07-10 - X Component  
Collar Loop

Scale 1:2000



LIN--LOG PROFILE SCALE  
(nanoVolts/m²)

**GOLDEN CHALICE RESOURCES INC.**  
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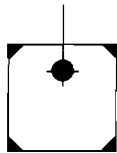
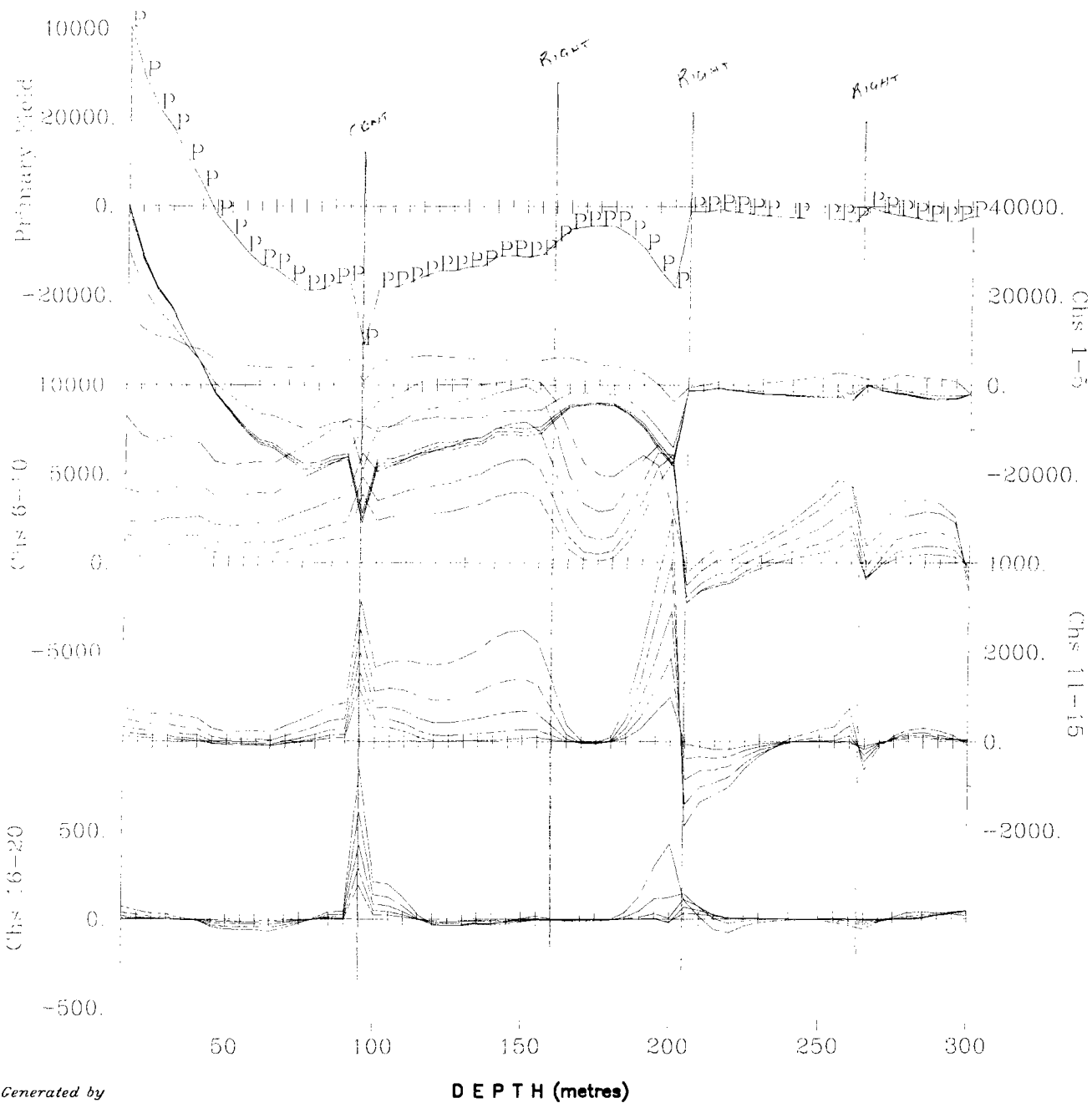
3D FIXED-LOOP BOREHOLE TEM SURVEY  
Secondary Electromagnetic Field (dB/dt)

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E,0-200N                                               |
| Transmitter Current:           | 14 Amps                                                     |
| Tx Turn-Off-Time and Rx Delay: | 415 us -80 us                                               |
| Borehole Location:             | 497523E, 5349401N                                           |
| Borehole Azimuth, Dip:         | 325, -45                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m²                                                 |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------|
| Survey Date:     | July 18, 2007                                                                                   |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 1800W) |

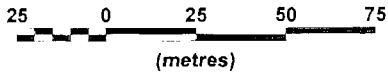


Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-X-Tilt-GCL07-10-C



**Borehole GCL07-10 - Y Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

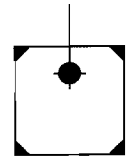
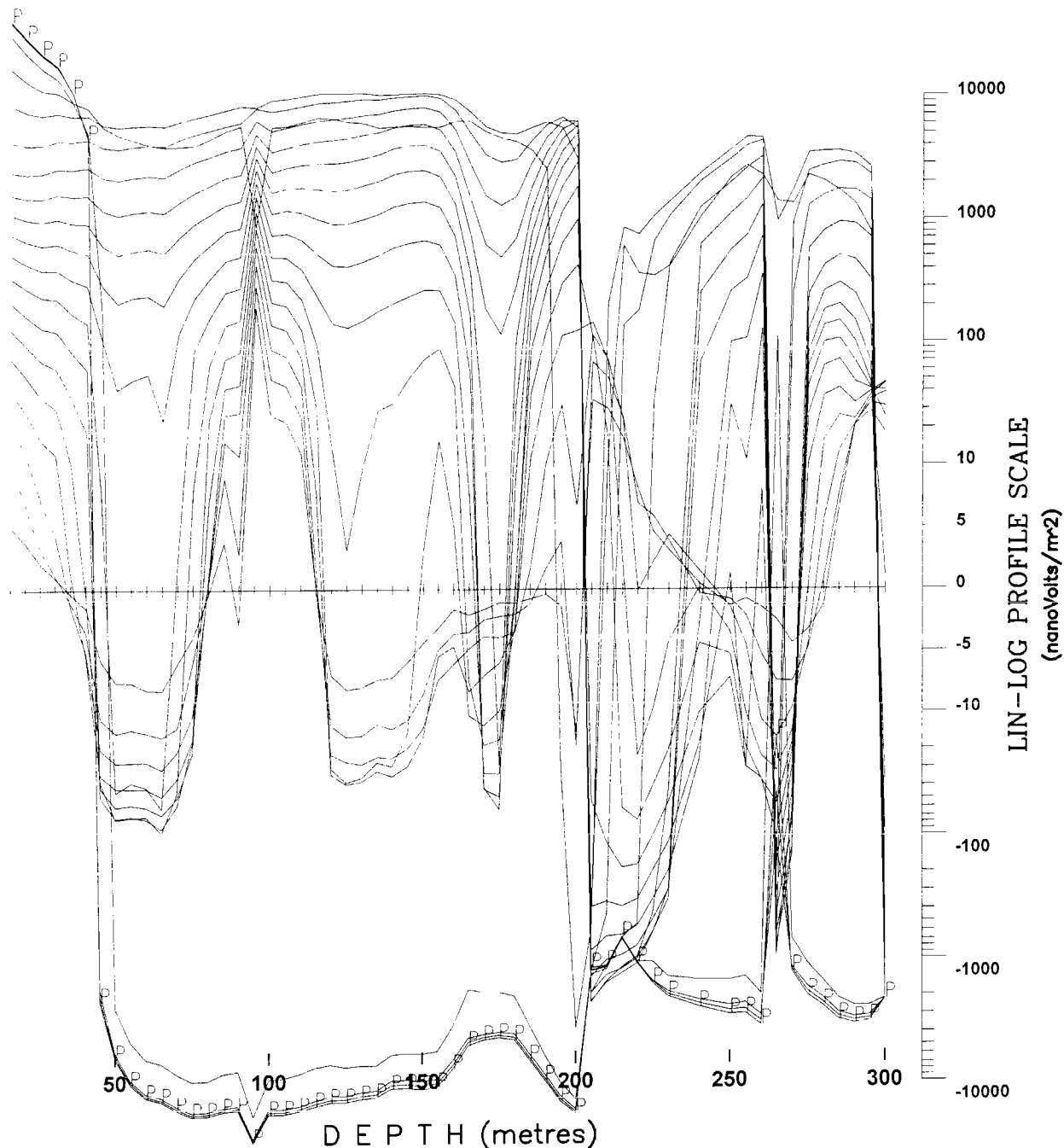
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 12.8 Amps  
 Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
 Borehole Location: 497523E, 5349401N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hx - positive up  
 Hy - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 18, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-10-C

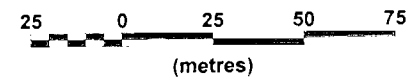
Map Generated by

DEPTH (metres)



Borehole GCL07-10 - Y Component  
Collar Loop

Scale 1:2000



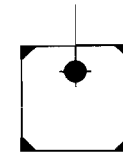
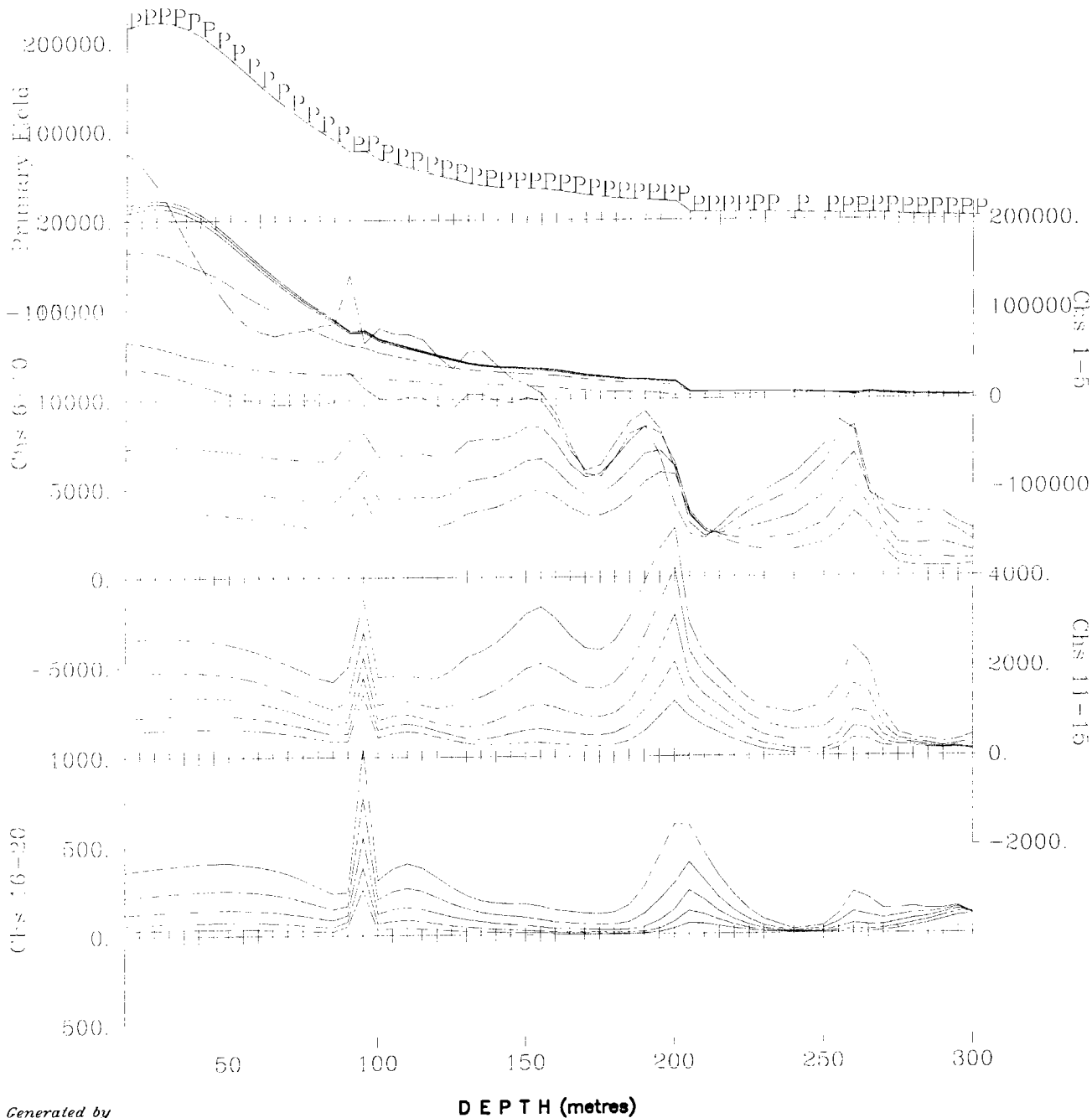
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
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3D FIXED-LOOP BOREHOLE TEM SURVEY  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
Borehole Location: 497523E, 5349401N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m²  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

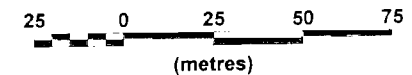
Survey Date: July 18, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-Y-Tilt-GCL07-10-C



Borehole GCL07-10 - Total Field  
Collar Loop

Scale 1:2000



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 12.8 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
Borehole Location: 497523E, 5349401N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

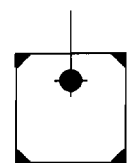
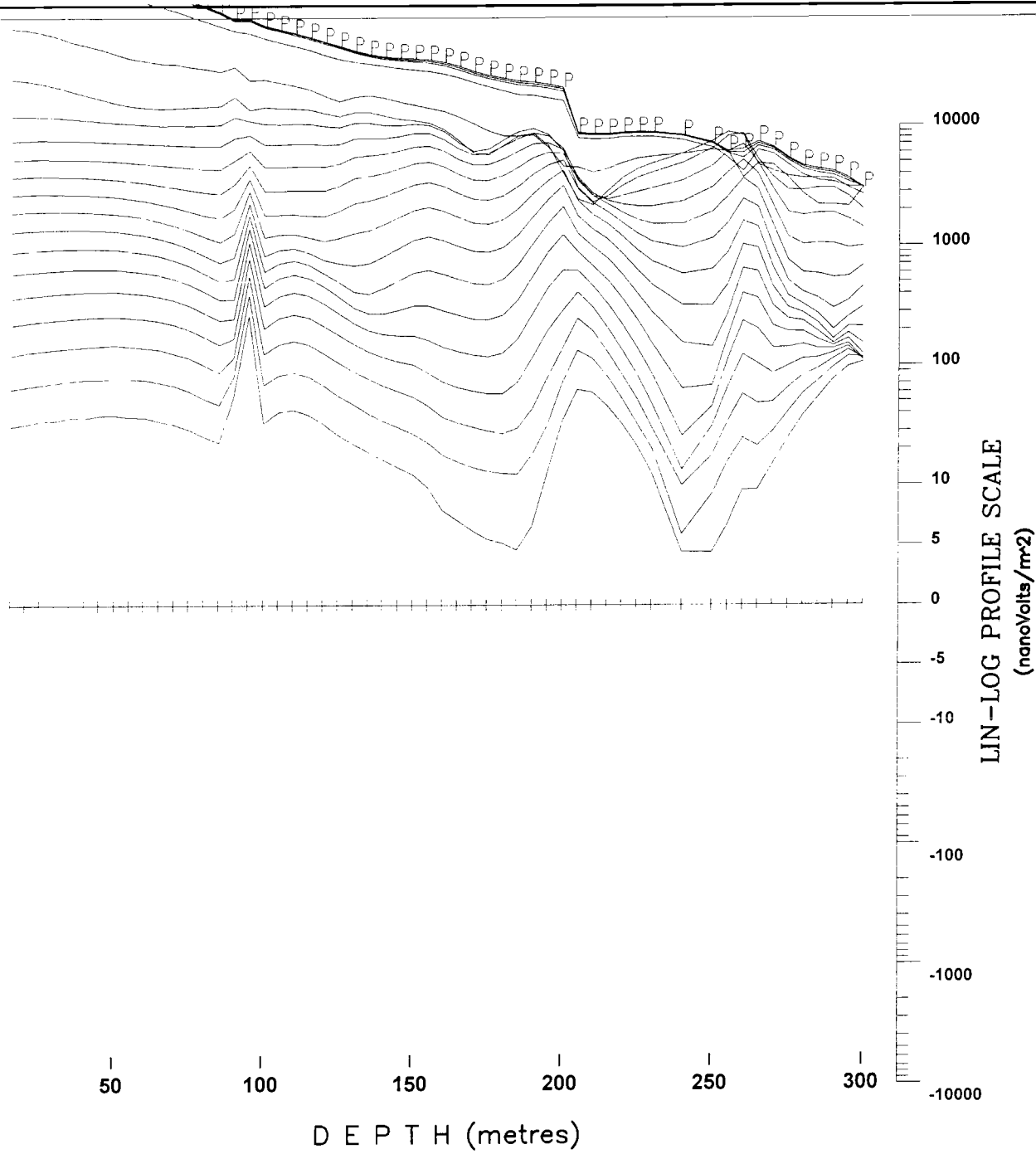
Survey Date: July 18, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 1800W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

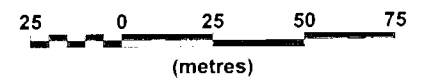
DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-10-C





Borehole GCL07-10 - Z Component  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

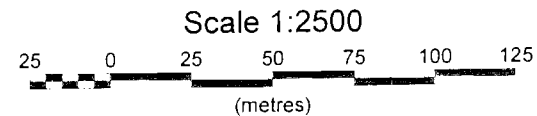
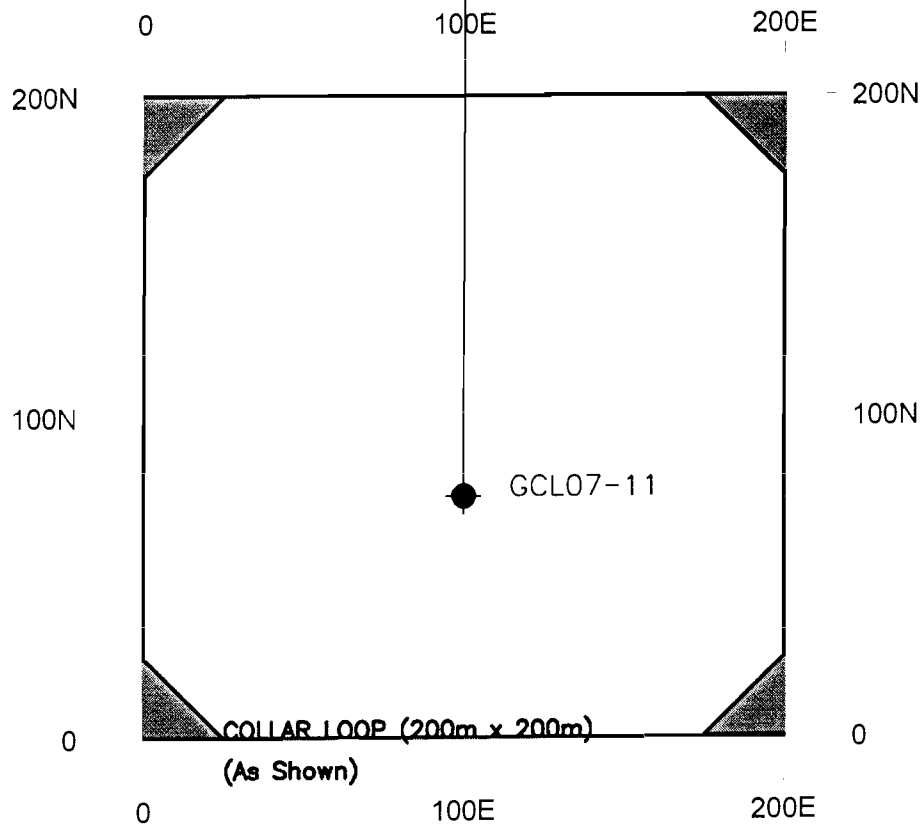
|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E,0-200N                                               |
| Transmitter Current:           | 14 Amps                                                     |
| Tx Turn-Off-Time and Rx Delay: | 415 us -80 us                                               |
| Borehole Location:             | 497523E, 5349401N                                           |
| Borehole Azimuth, Dip:         | 325, -45                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------|
| Survey Date:     | July 18, 2007                                                                                   |
| Instrumentation: | Rx = Digital Pratem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 1800W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-Z-Tilt-GCL07-10-C

# GCL07-11 - BOREHOLE & LOOP LOCATION MAP



**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
**BOREHOLE & LOOP LOCATION MAP**  
**GCL07-11**

Borehole Parameters: DDH #1 = GCL07-11  
 Location = 100E, 75N  
 Azimuth & Dip = 325, -45

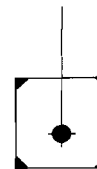
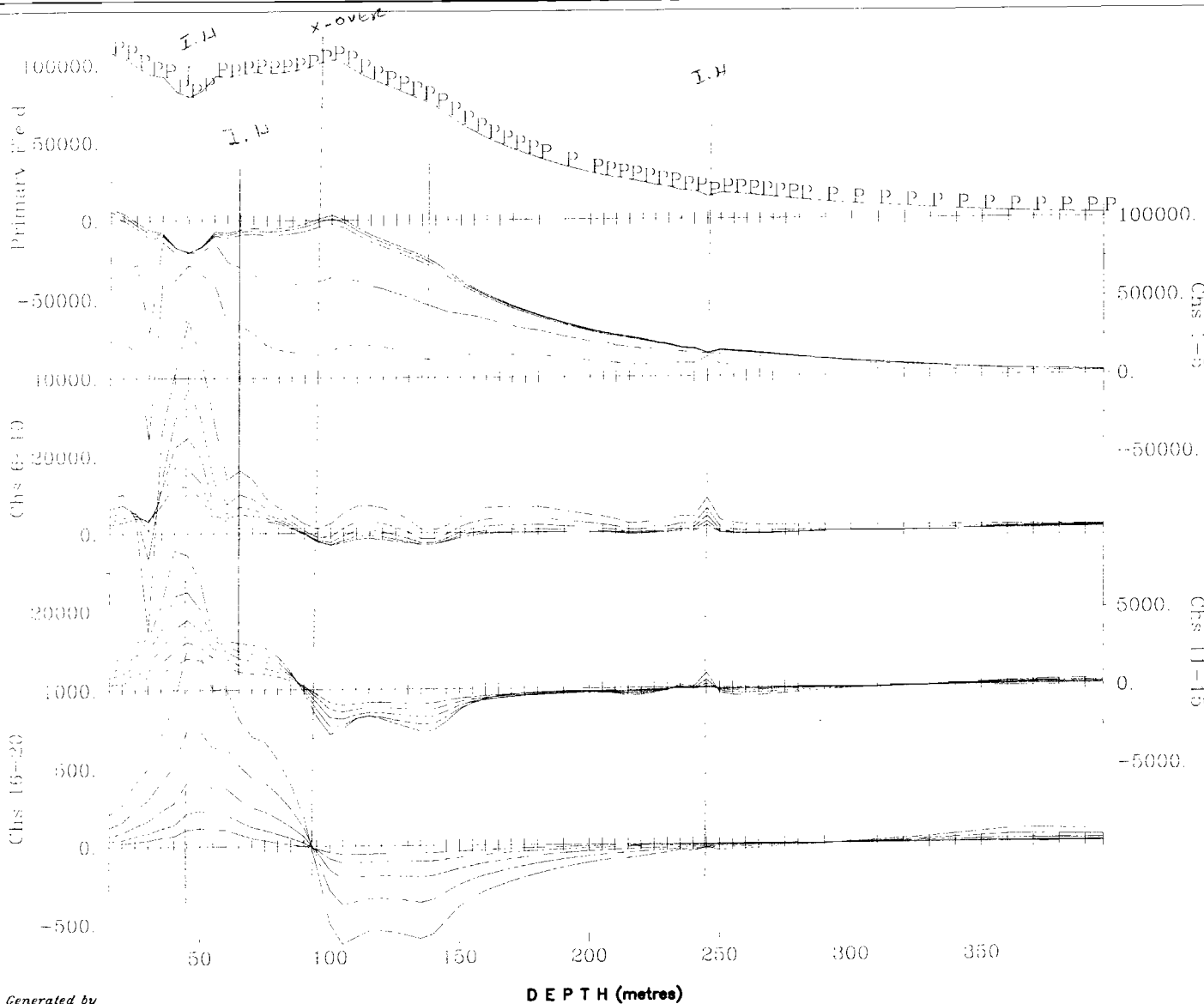
DDH #2 =  
 Location =  
 Azimuth & Dip =

DDH #3 =  
 Location =  
 Azimuth & Dip =

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digital Protem (3D Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)

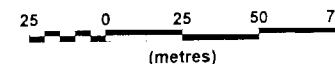


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-11



**Borehole GCL07-11 - Z Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

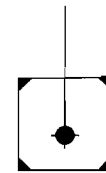
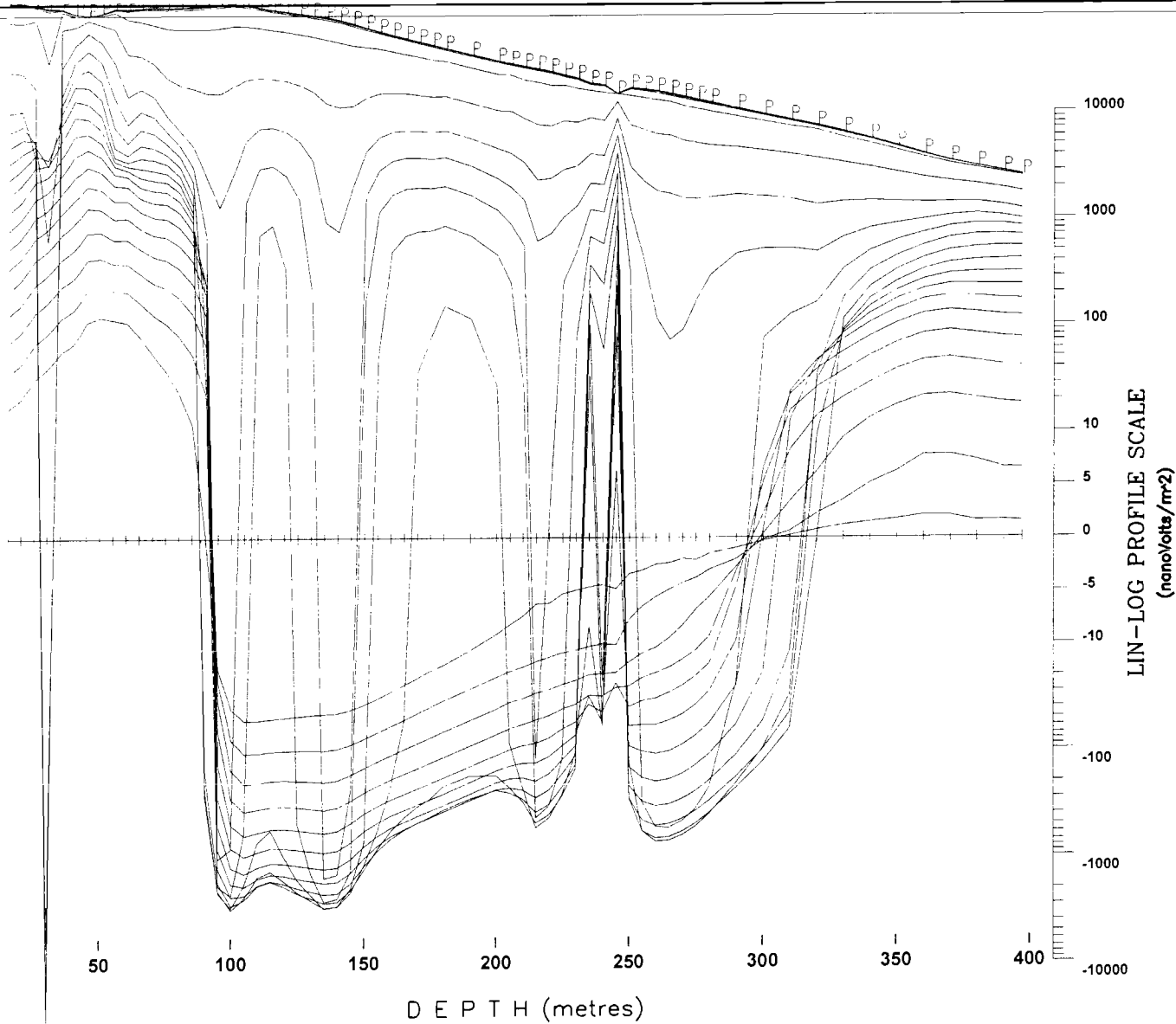
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0 200E; 0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
Borehole Location: 497566E, 5349340N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 metres  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)

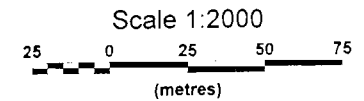


Surveyed & Processed by  
**QUANTEQ GEOSCIENCE LTD.**

DWG. NO. CA00500C-BH4A-Tiltrot-Z-GCL07-11-C



Borehole GCL07-11 - Z Component  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

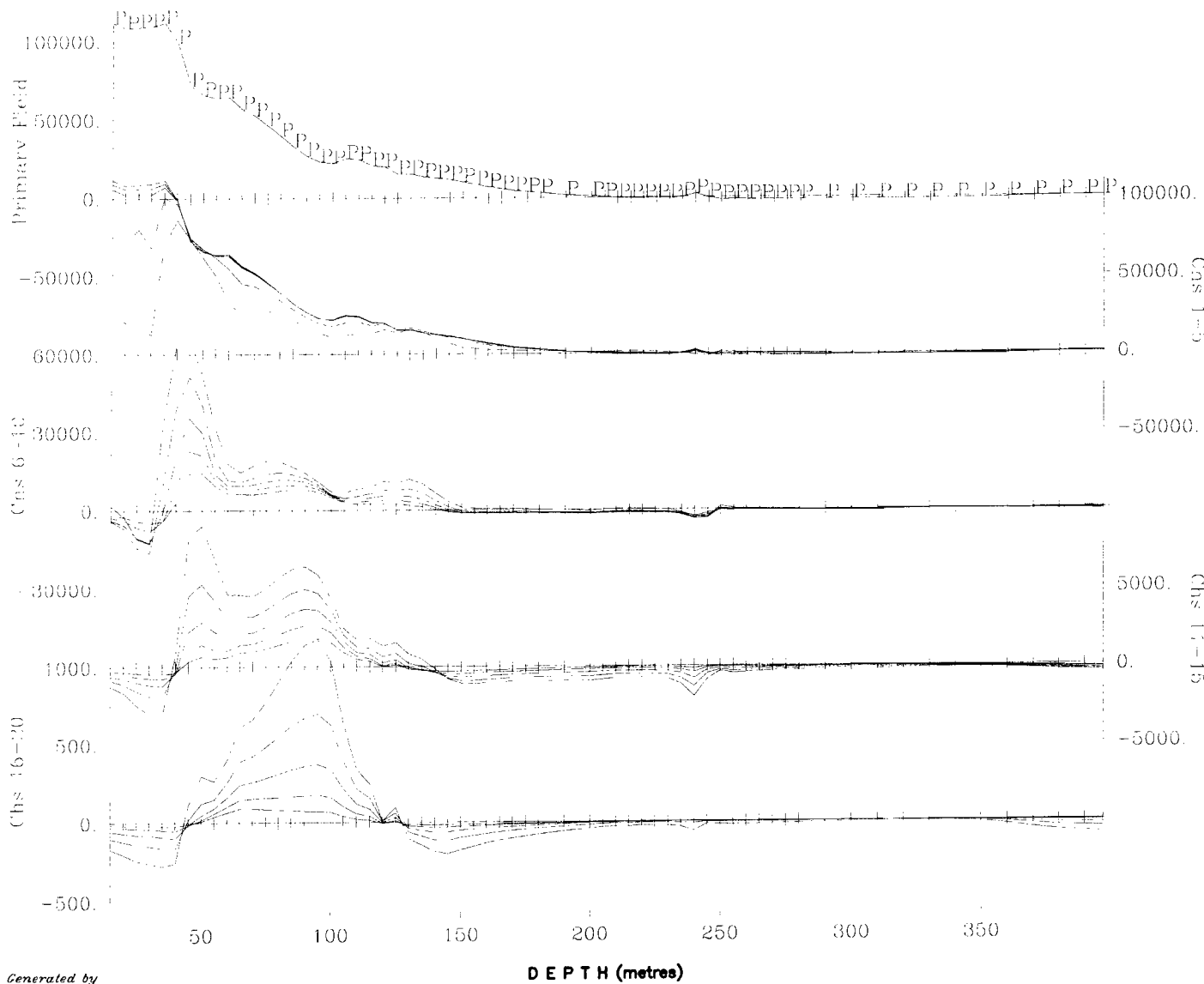
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E,0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
Borehole Location: 497566E, 5349340N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 0-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

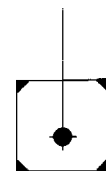
Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-Z-Tilt-GCL07-11-C



Map Generated by



Borehole GCL07-11 - X Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
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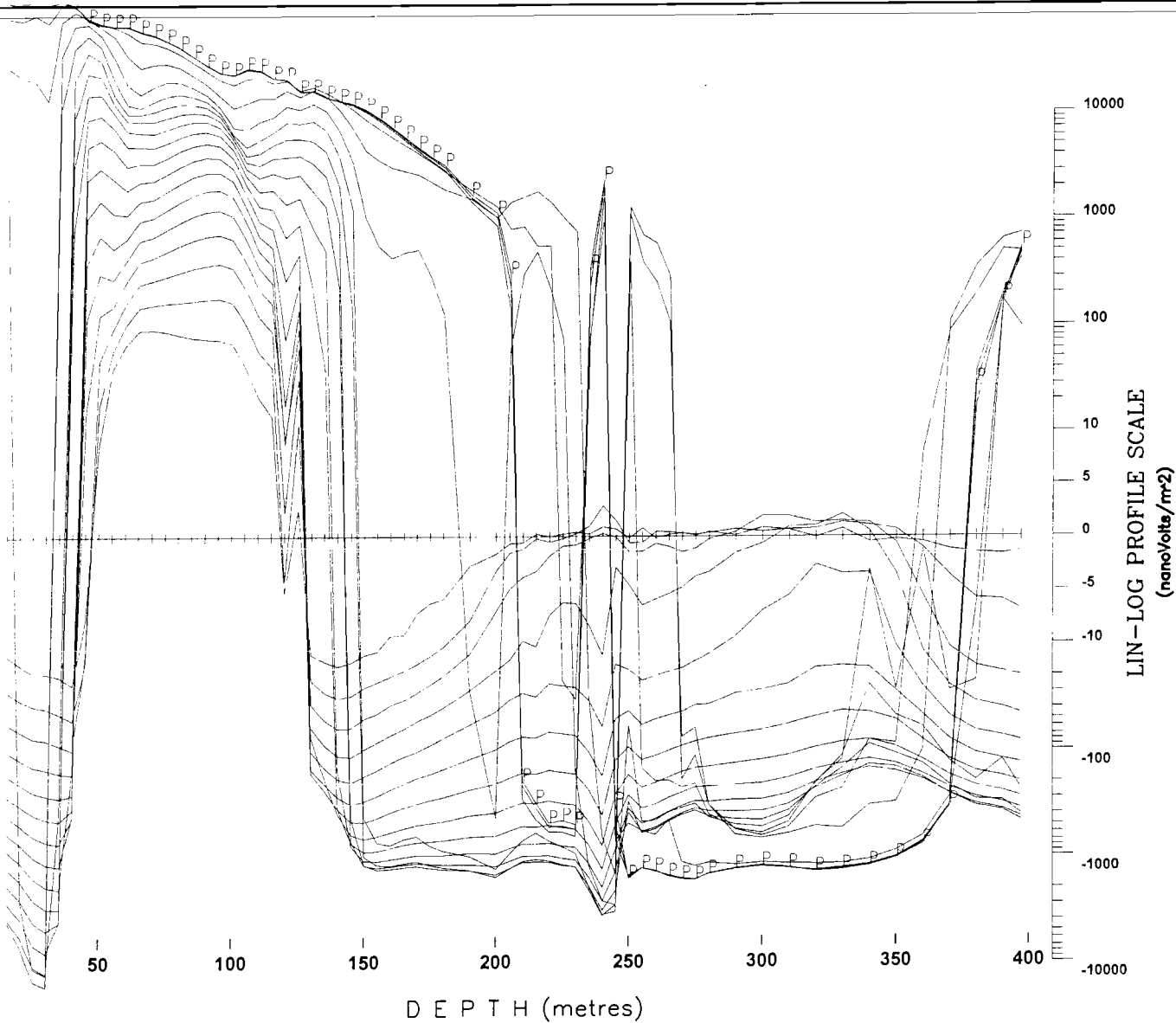
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

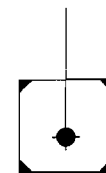
|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency          | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E, 0-200N                                              |
| Transmitter Current:           | 14 Amps                                                     |
| Tx Turn-Off-Time and Rx Delay: | 390 us, -80 us                                              |
| Borehole Location:             | 497566E, 5349340N                                           |
| Borehole Azimuth, Dip:         | 325, -45                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units                  | nanovolt/ms <sup>2</sup>                                    |
| Receiver Coil Orientation:     | Hx - positive up<br>Hy - positive north, Hx - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| Survey Date:     | July 19, 2007                                                                                    |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 (1800W) |

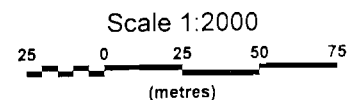
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-11-C



Map Generated by



Borehole GCL07-11 - X Component  
Collar Loop



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

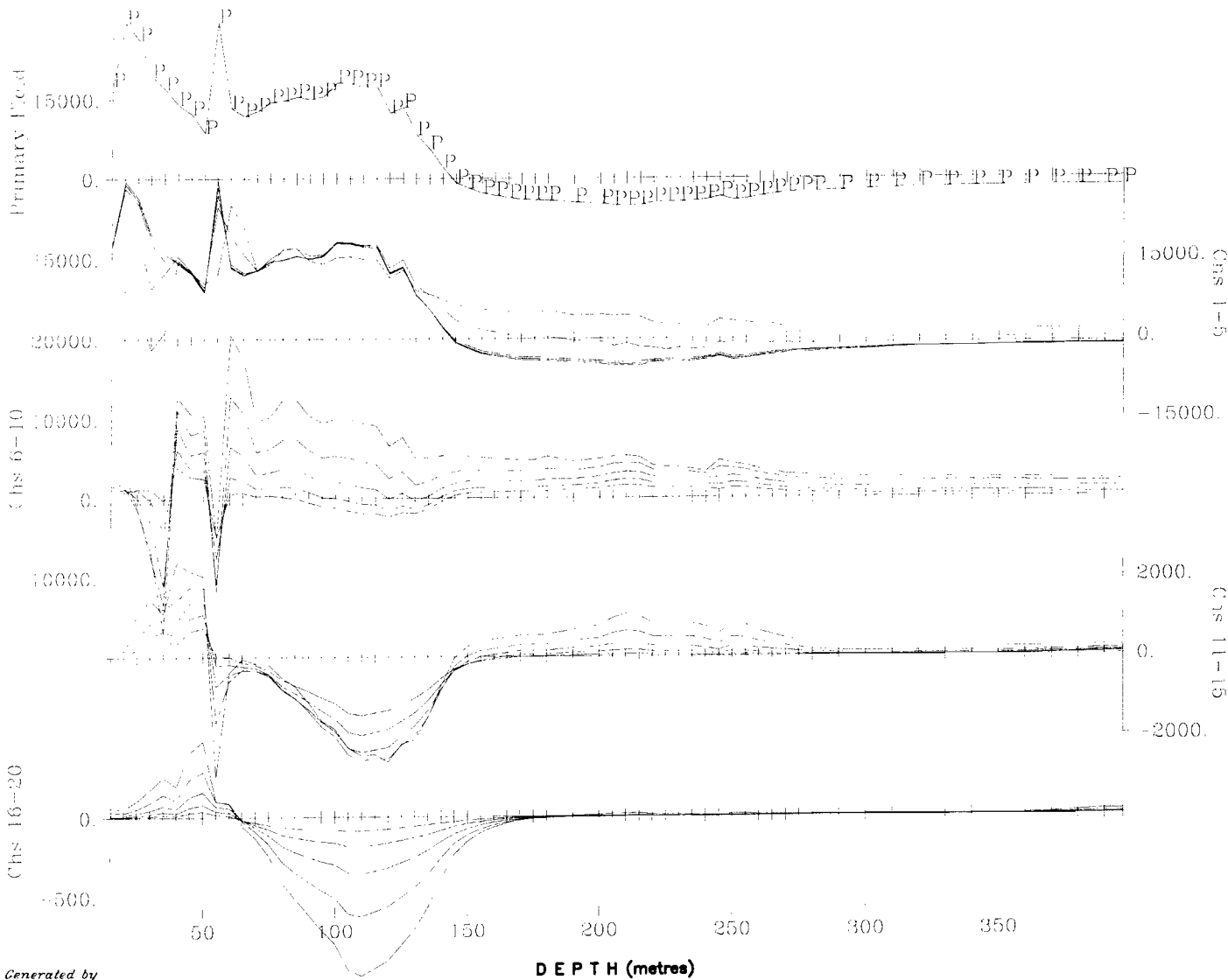
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 415 us - 80 us  
Borehole Location: 497566E, 5349340N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tit Meter Angles

Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)

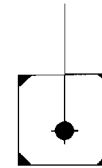


Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**

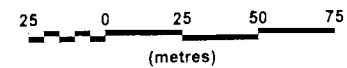
DWG. NO. CA00500C-BHLL-X-TIR-GCL07-11-C



Map Generated by



Borehole GCL07-11 - Y Component  
Collar Loop  
Scale 1:2000



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LANGMUIR PROPERTY  
TIMMINS, ON

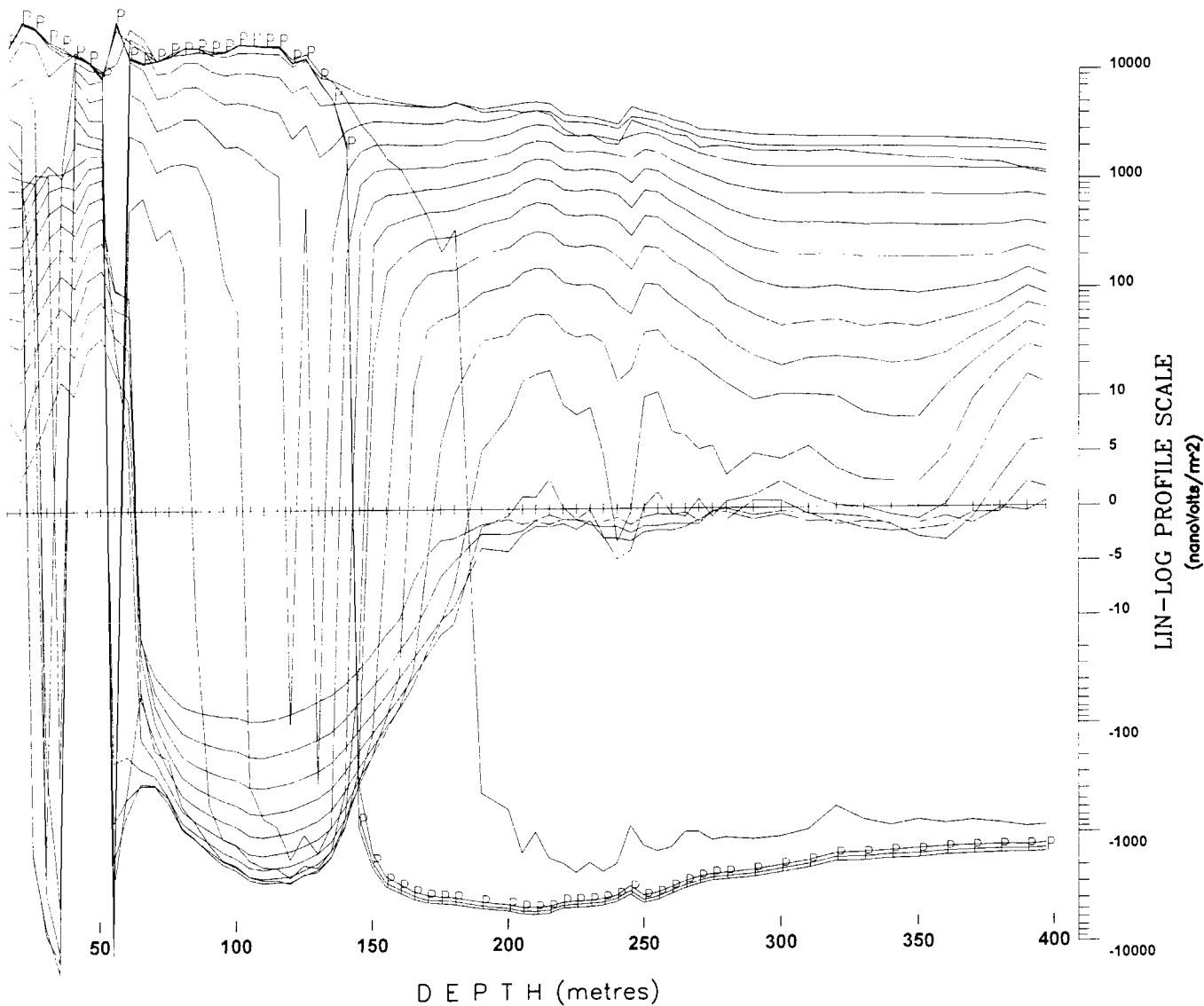
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

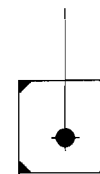
|                                |                         |
|--------------------------------|-------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)  |
| Tx Loop Size:                  | 200m x 200m             |
| Tx Loop Location:              | 0-200E, 0-200N          |
| Transmitter Current:           | 14 Amperes              |
| Tx Turn-Off-Time and Rx Delay: | 390 us, -80 us          |
| Borehole Location:             | 497566E, 5349340N       |
| Borehole Azimuth, Dip:         | 325, -45                |
| Station Interval:              | 5-10 meters             |
| Profile Units:                 | nanoVolt/m <sup>2</sup> |
| Receiver Coil Orientation:     | Hx - positive up        |
|                                | Hy - positive west      |
| Cross Component Rotation:      | using Tilt Meter Angles |

|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 19, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |

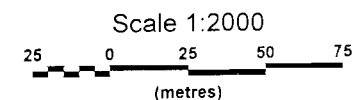
Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-11-C



Map Generated by



Borehole GCL07-11 - Y Component  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

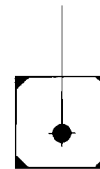
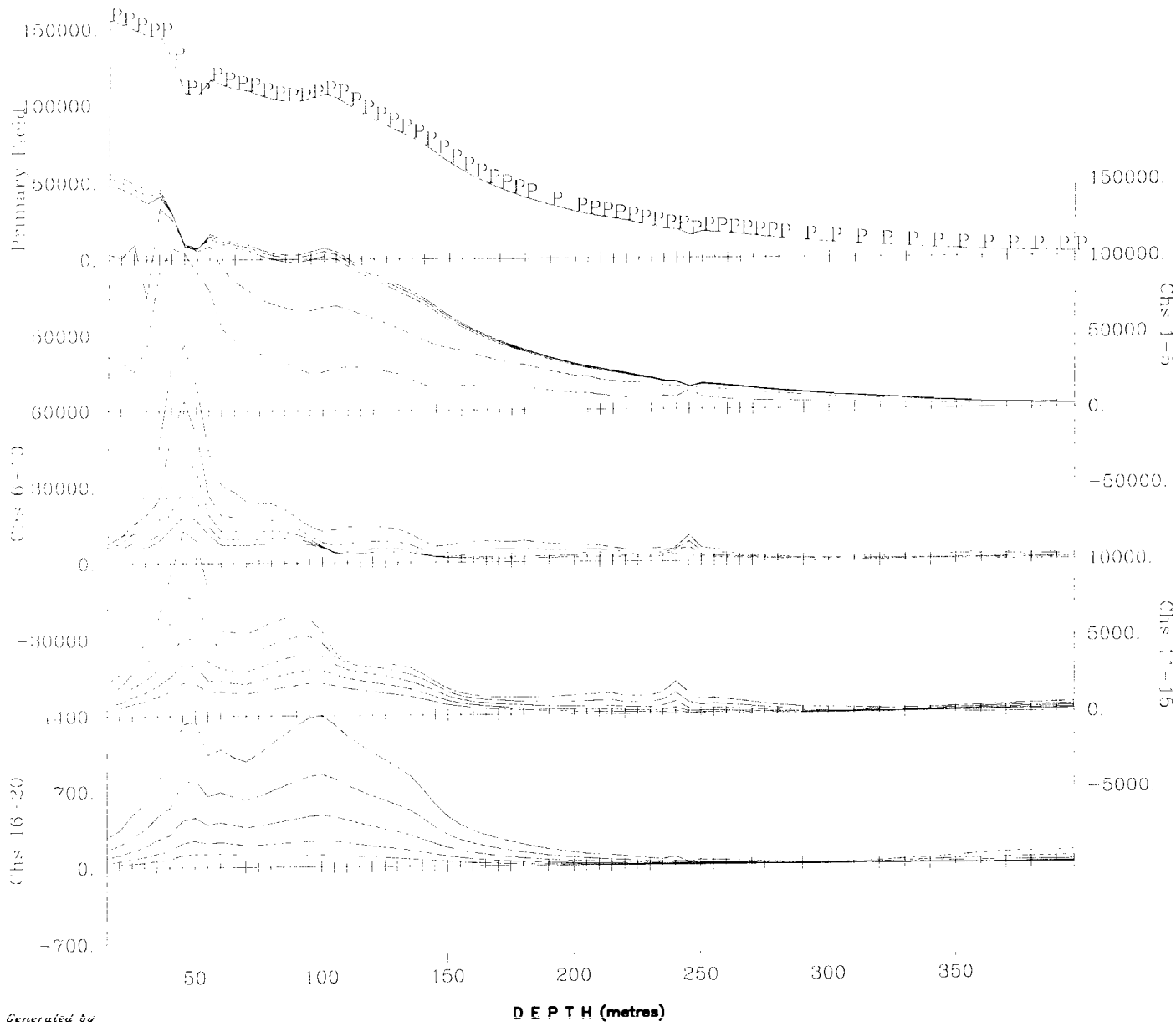
|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E; 0-200N                                              |
| Transmitter Current:           | 14 Amps                                                     |
| Tx Turn-Off-Time and Rx Delay: | 415 us - 80 us                                              |
| Borehole Location:             | 497566E, 5349340N                                           |
| Borehole Azimuth, Dip:         | 325, -45                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hz - positive up<br>Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| Survey Date:     | July 19, 2007                                                                                    |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 (1800W) |



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DWG. NO. CA00500C-BHLL-Y-Tilt-GCL07-11-C





Borehole GCL07-11 - Total Field  
Collar Loop  
Scale 1:2000

25 0 25 50 75  
(metres)

**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

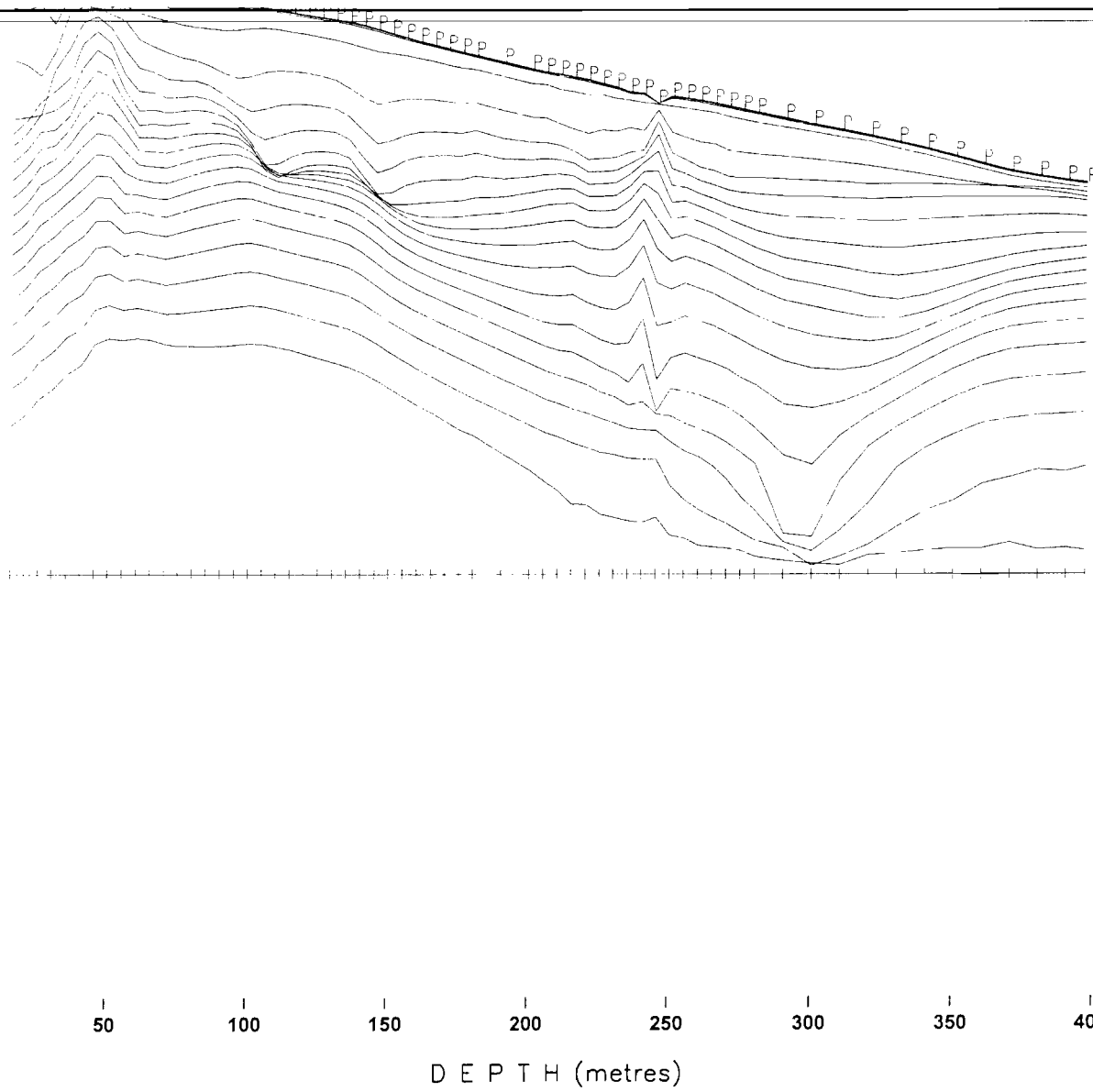
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
Borehole Location: 49°56'6E, 53°49'34N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)

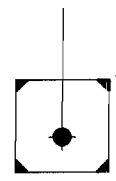


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

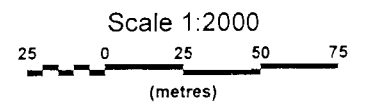
DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-11-C



LIN-LOG PROFILE SCALE  
 (nanoVolts/mr<sup>2</sup>)



Borehole GCL07-11 - Total Field  
Collar Loop




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 LANGMUIR PROPERTY  
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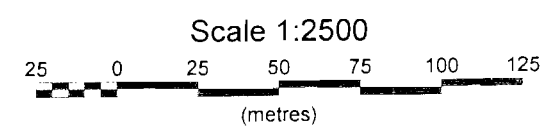
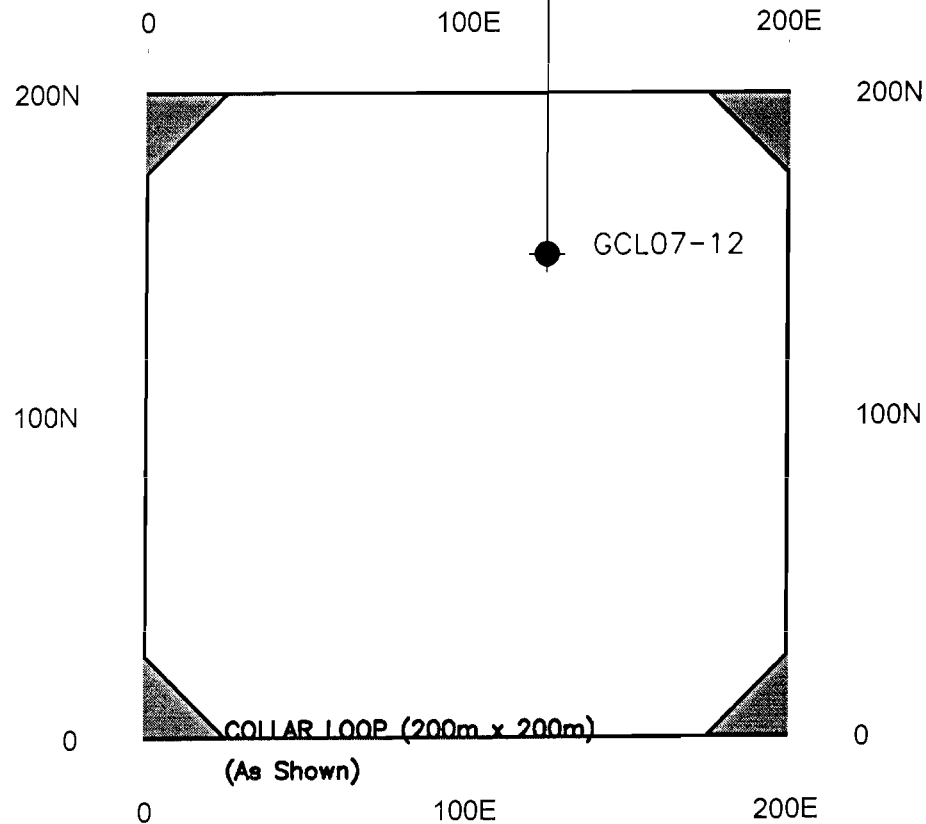
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 14 Amps  
 Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
 Borehole Location: 497566E, 5349340N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digita! Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)


 Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-TF-Tilt-GCL07-11-C

# GCL07-12 - BOREHOLE & LOOP LOCATION MAP



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---

3D FIXED-LOOP BOREHOLE TEM SURVEY  
**BOREHOLE & LOOP LOCATION MAP**  
**GCL07-12**

Borehole Parameters: DDH #1 = GCL07-12  
 Location = 125E, 150N  
 Azimuth & Dip = 325, -45

DDH #2 =  
 Location =  
 Azimuth & Dip =

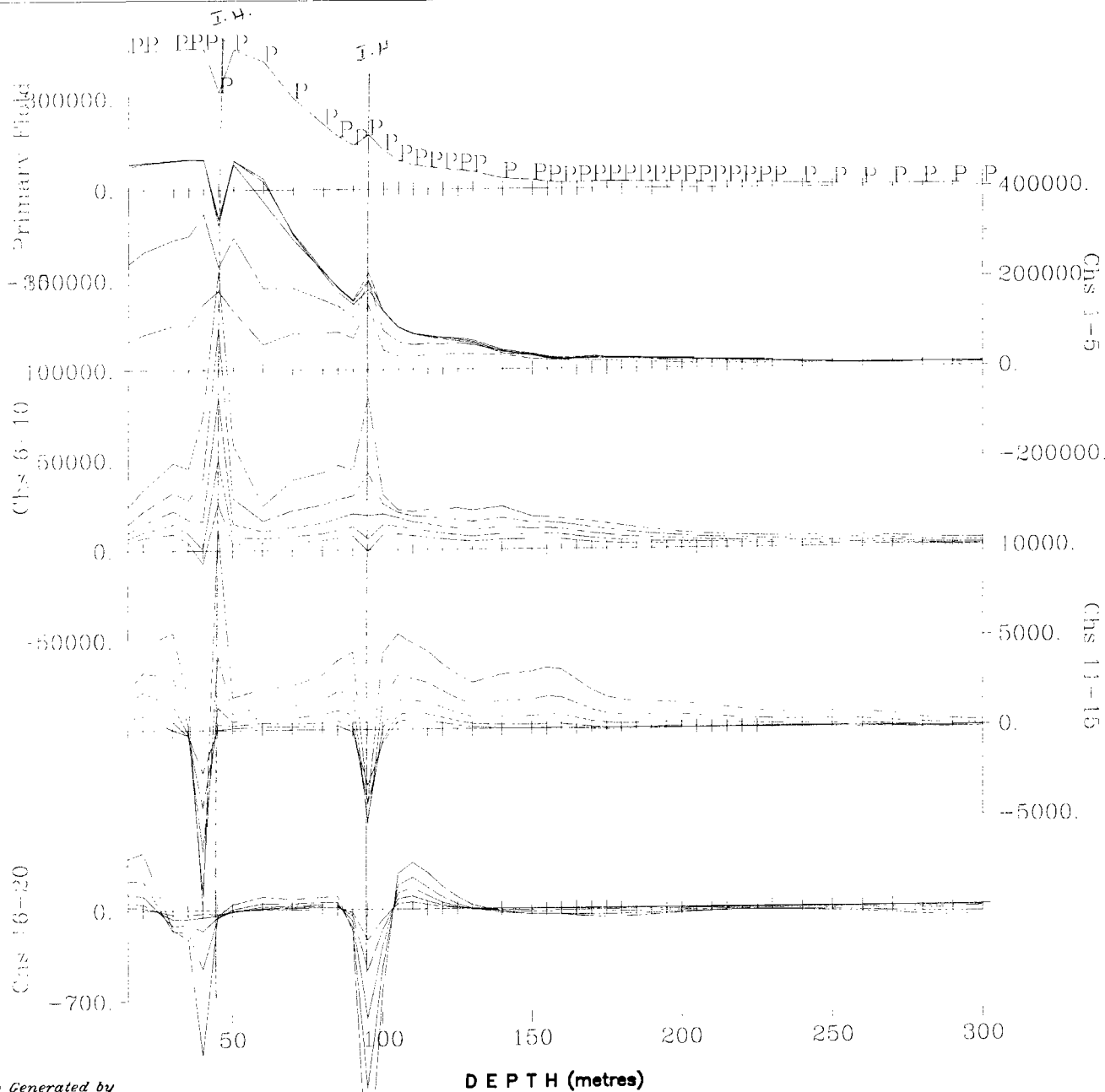
DDH #3 =  
 Location =  
 Azimuth & Dip =

---

Survey Date: July 17, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)

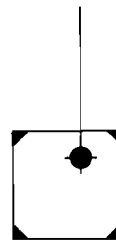
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Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-12



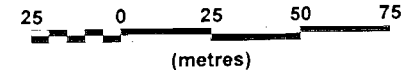
Map Generated by

DEPTH (metres)



Borehole GCL07-12 - Z Component  
Collar Loop

Scale 1:2000



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

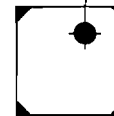
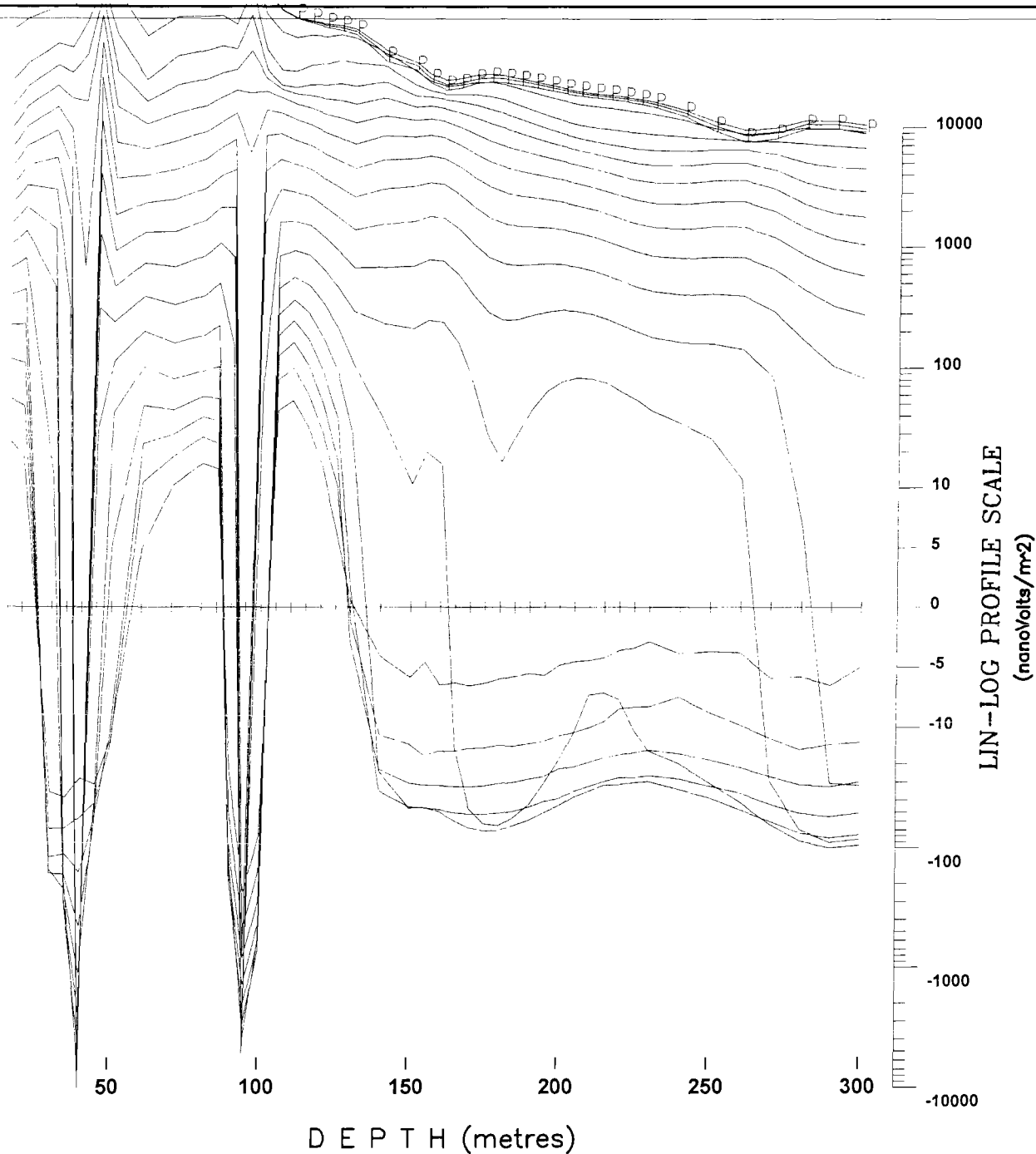
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E:0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
Borehole Location: 497544E, 5349415N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hx - positive up  
Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 17, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)



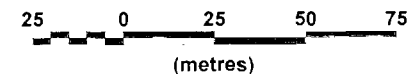
Surveyed & Processed by:  
**QUATEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-BH4A-Tiltrot-Z-GCL07-12-C



Borehole GCL07-12 - Z Component  
Collar Loop

Scale 1:2000



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

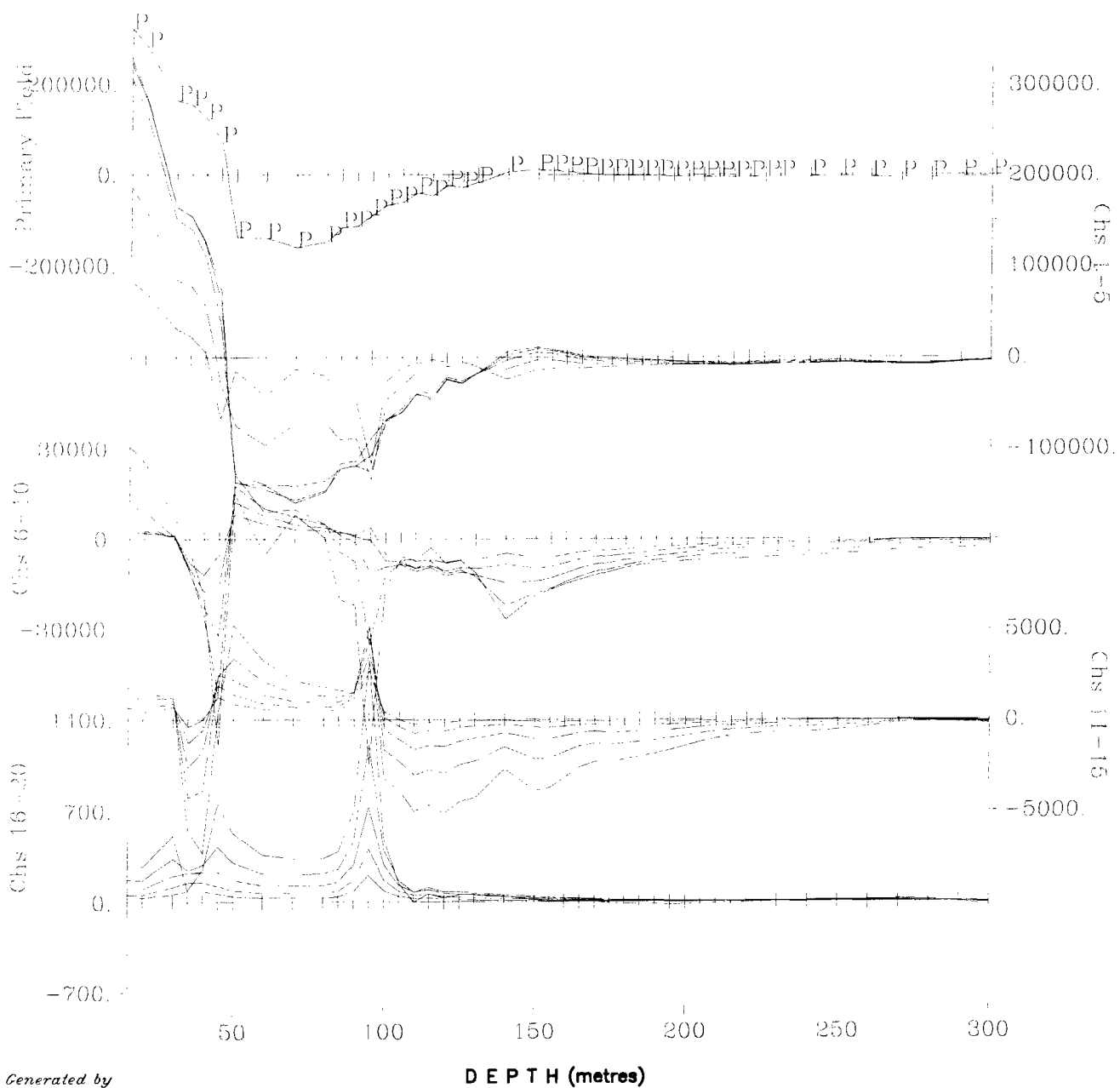
|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                      |
| Tx Loop Size:                  | 200m x 200m                                                 |
| Tx Loop Location:              | 0-200E,0-200N                                               |
| Transmitter Current:           | 14 Amps                                                     |
| Tx Turn-Off-Time and Rx Delay: | 415 us -80 us                                               |
| Borehole Location:             | 497544E, 5349415N                                           |
| Borehole Azimuth, Dip:         | 325, -45                                                    |
| Station Interval:              | 5-10 meters                                                 |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                     |
| Receiver Coil Orientation:     | Hx - positive up<br>Hy - positive north, Hz - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                                     |

|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| Survey Date:     | July 19, 2007                                                                                    |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 (1800W) |

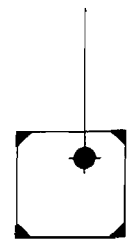


Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**

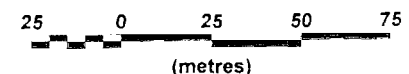
DWG. NO. CA00500C-BHLL-Z-TIL-GCL07-12-C



Map Generated by



Borehole GCL07-12 - X Component  
Collar Loop  
Scale 1:2000



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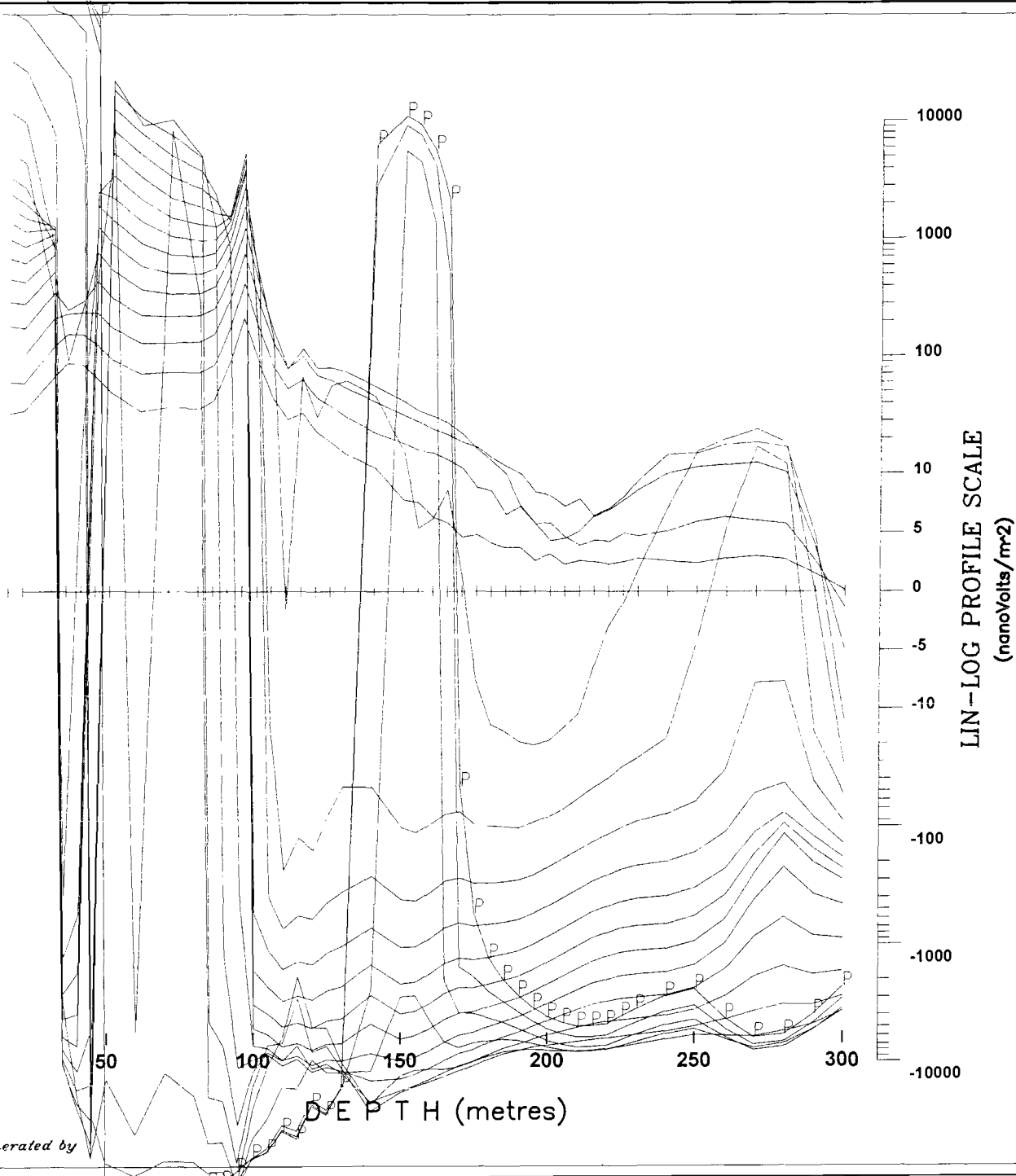
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

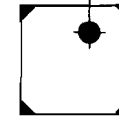
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
Borehole Location: 497544E, 5349415N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hx - positive up  
Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 17, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-12-C

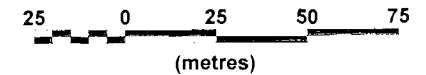


Map Generated by



Borehole GCL07-12 - X Component  
Collar Loop

Scale 1:2000



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TIMMINS, ON

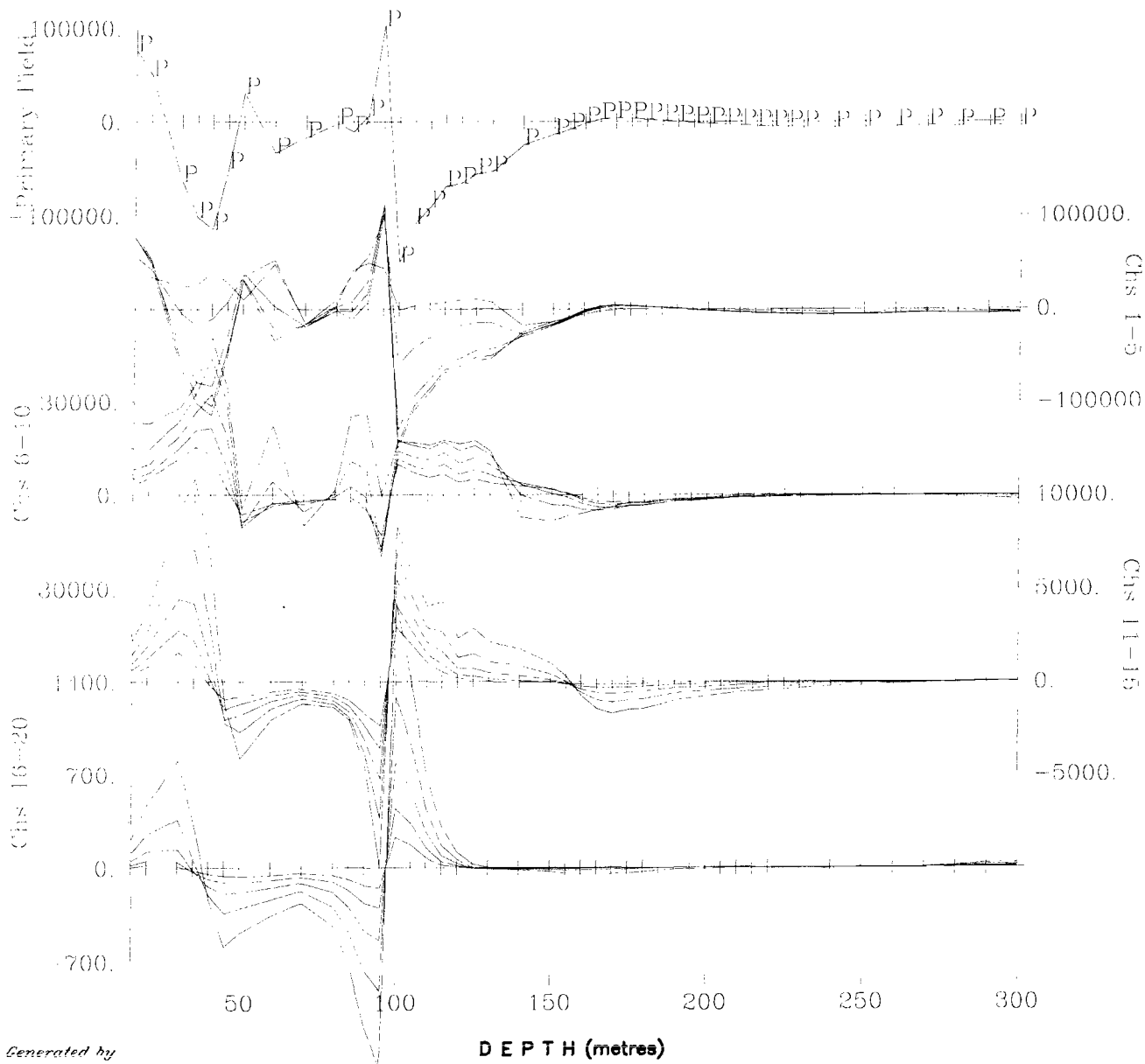
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

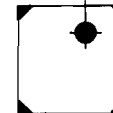
|                                |                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                                                                           |
| Tx Loop Size:                  | 200m x 200m                                                                                      |
| Tx Loop Location:              | 0-200E, 0-200N                                                                                   |
| Transmitter Current:           | 14 Amps                                                                                          |
| Tx Turn-Off-Time and Rx Delay: | 415 us -80 us                                                                                    |
| Borehole Location:             | 497544E, 5349415N                                                                                |
| Borehole Azimuth, Dip:         | 325, -45                                                                                         |
| Station Interval:              | 5-10 meters                                                                                      |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                                                                          |
| Receiver Coil Orientation:     | Hx - positive up<br>Hy - positive north, Hz - positive west                                      |
| Cross Component Rotation:      | using Tilt Meter Angles                                                                          |
| Survey Date:                   | July 19, 2007                                                                                    |
| Instrumentation:               | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 (1800W) |



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BHLL-X-TIR-GCL07-12-C

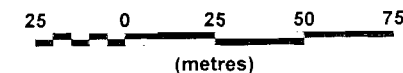


Map Generated by



**Borehole GCL07-12 - Y Component  
Collar Loop**

Scale 1:2000



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size:                  | 200m x 200m                             |
| Tx Loop Location:              | 0-200E,0-200N                           |
| Transmitter Current:           | 14 Amps                                 |
| Tx Turn-Off-Time and Rx Delay: | 390 us, -80 us                          |
| Borehole Location:             | 497544E, 5349415N                       |
| Borehole Azimuth, Dip:         | 325, -45                                |
| Station Interval:              | 5-10 metres                             |
| Profile Units:                 | nanovolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:     | Hz - positive up                        |
|                                | Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                 |

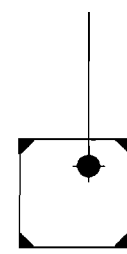
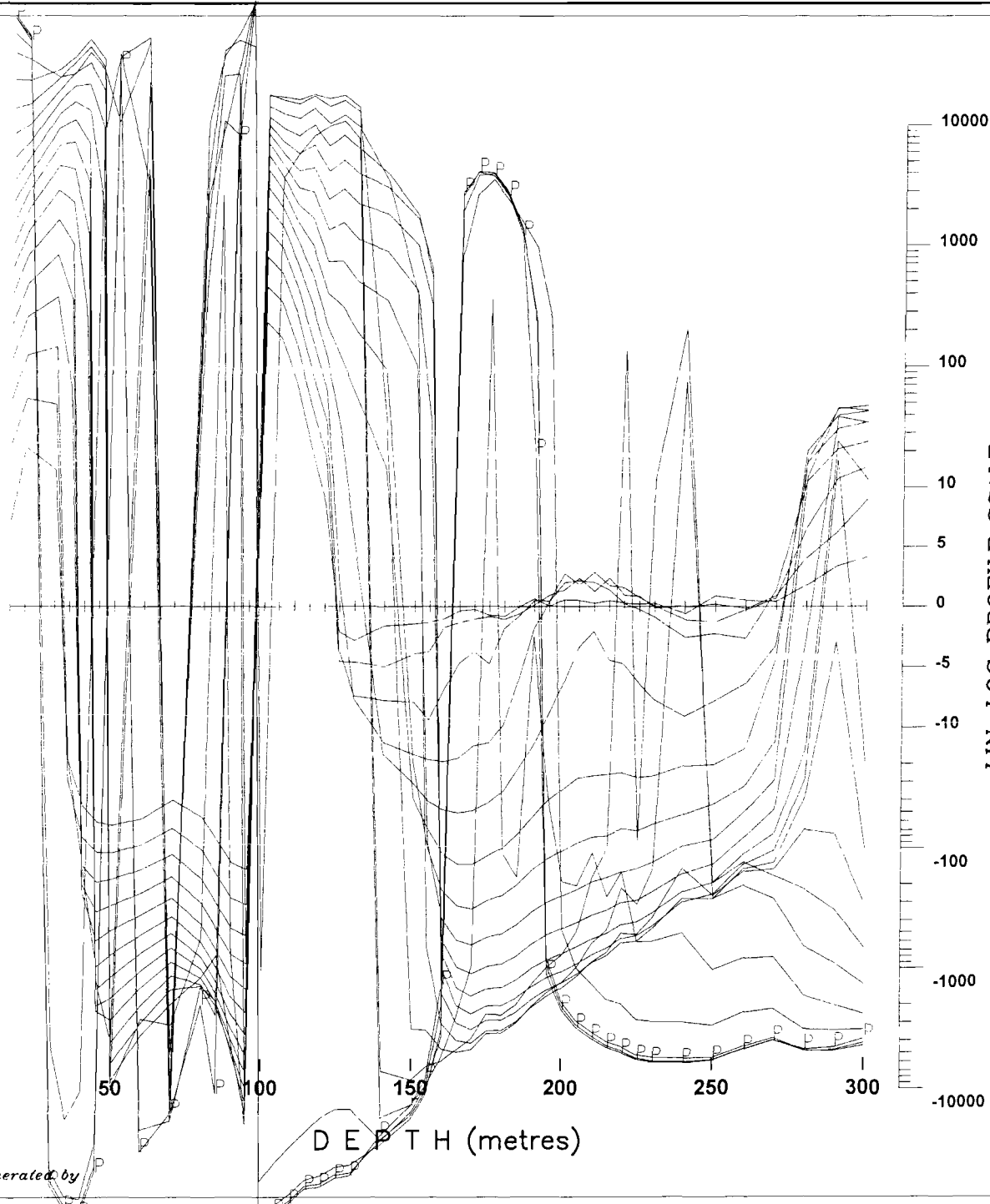
|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 17, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |



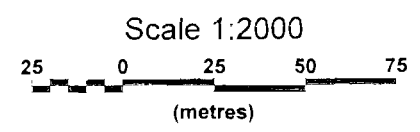
Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**

DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-12-C





Borehole GCL07-12 - Y Component  
Collar Loop



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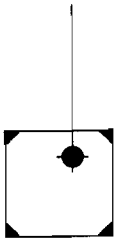
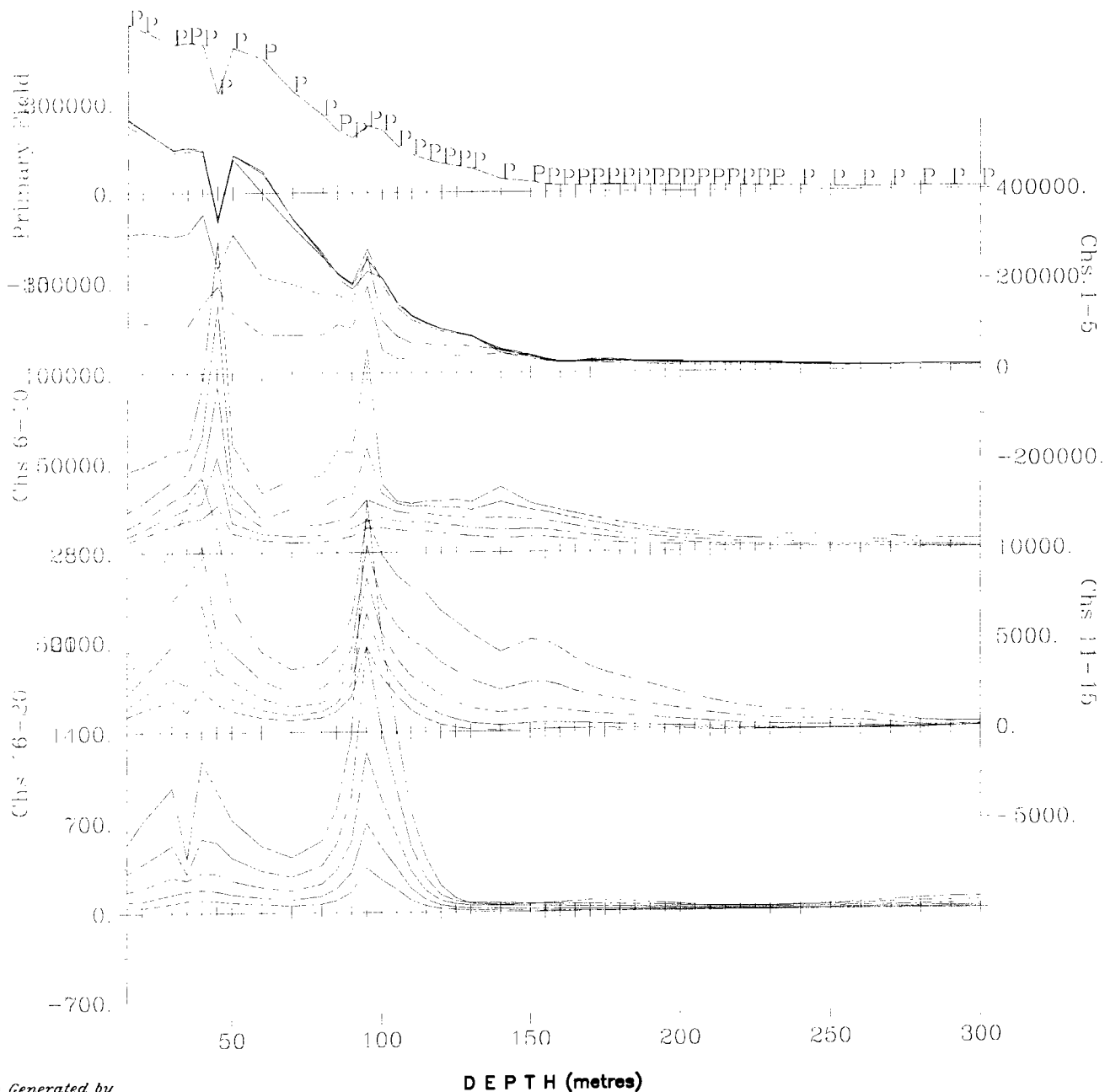
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 14 Amps  
 Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
 Borehole Location: 497544E, 5349415N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Y-Tilt-GCL07-12-C

Map Generated by



Borehole GCL07-12 - Total Field  
Collar Loop  
Scale 1:2000  
25 0 25 50 75  
(metres)

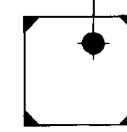
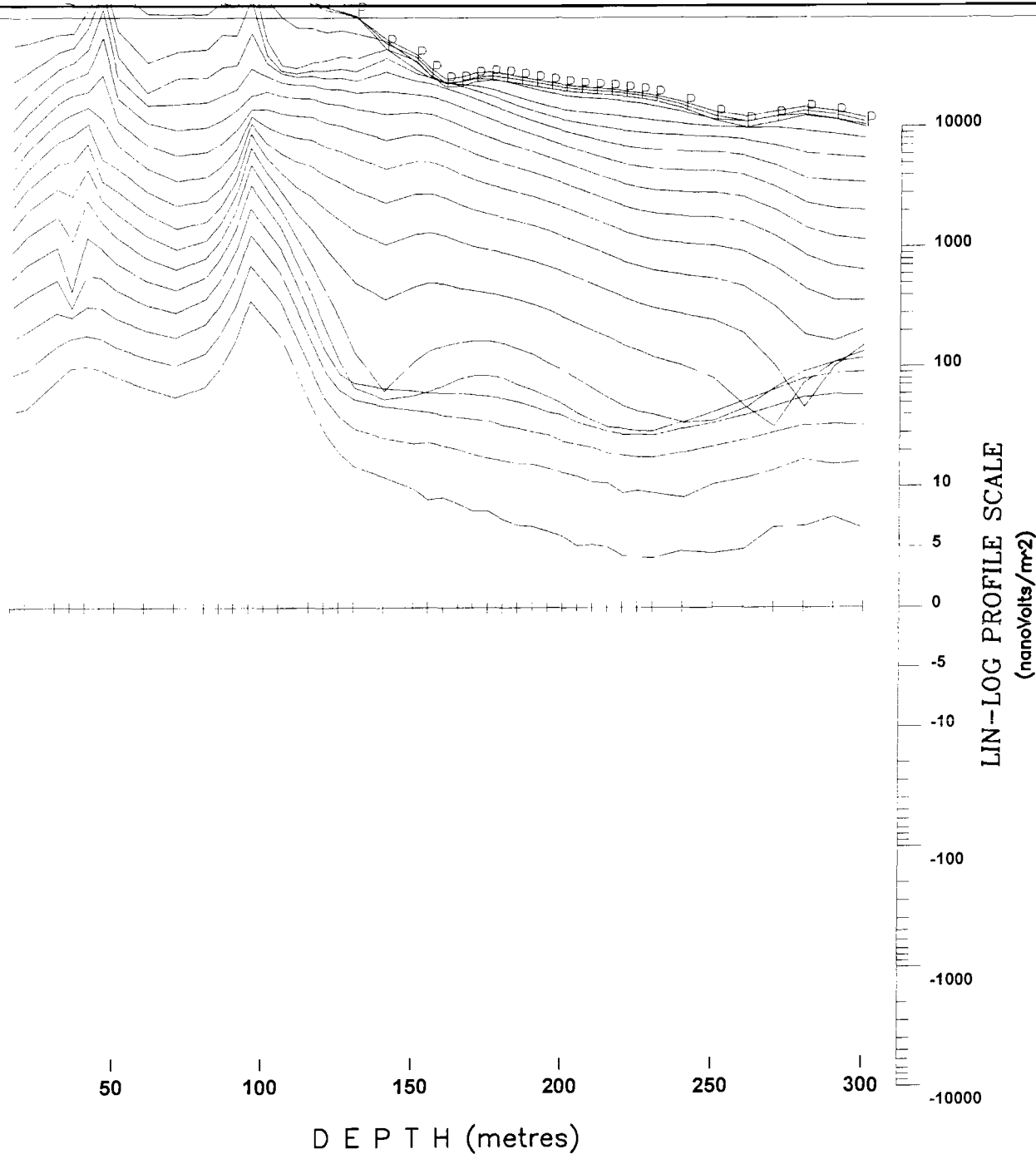
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 390 us, -80 us  
Borehole Location: 497544E, 5349415N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

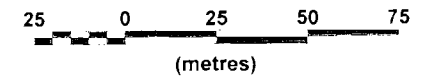
Survey Date: July 17, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-12-C



Borehole GCL07-12 - Total Field  
Collar Loop

Scale 1:2000



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
Borehole Location: 497544E, 5349415N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m²  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

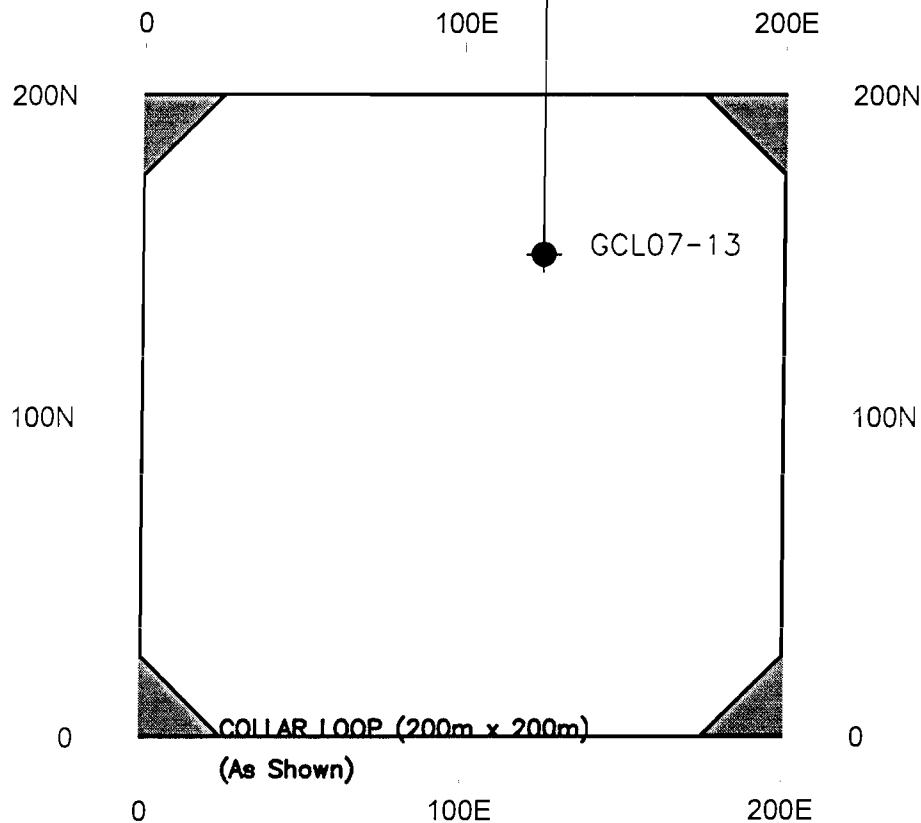
Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)



Surveyed & Processed by:  
**QUATEC GEOSCIENCE LTD.**

DWG. NO. CA00500C-BHLL-TF-TM-GCL07-12-C

# GCL07-13 - BOREHOLE & LOOP LOCATION MAP



**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
**BOREHOLE & LOOP LOCATION MAP**  
**GCL07-13**

Borehole Parameters: DDH #1 = GCL07-13  
 Location = 125E, 150N  
 Azimuth & Dip = 325, -60

DDH #2 =  
 Location =  
 Azimuth & Dip =

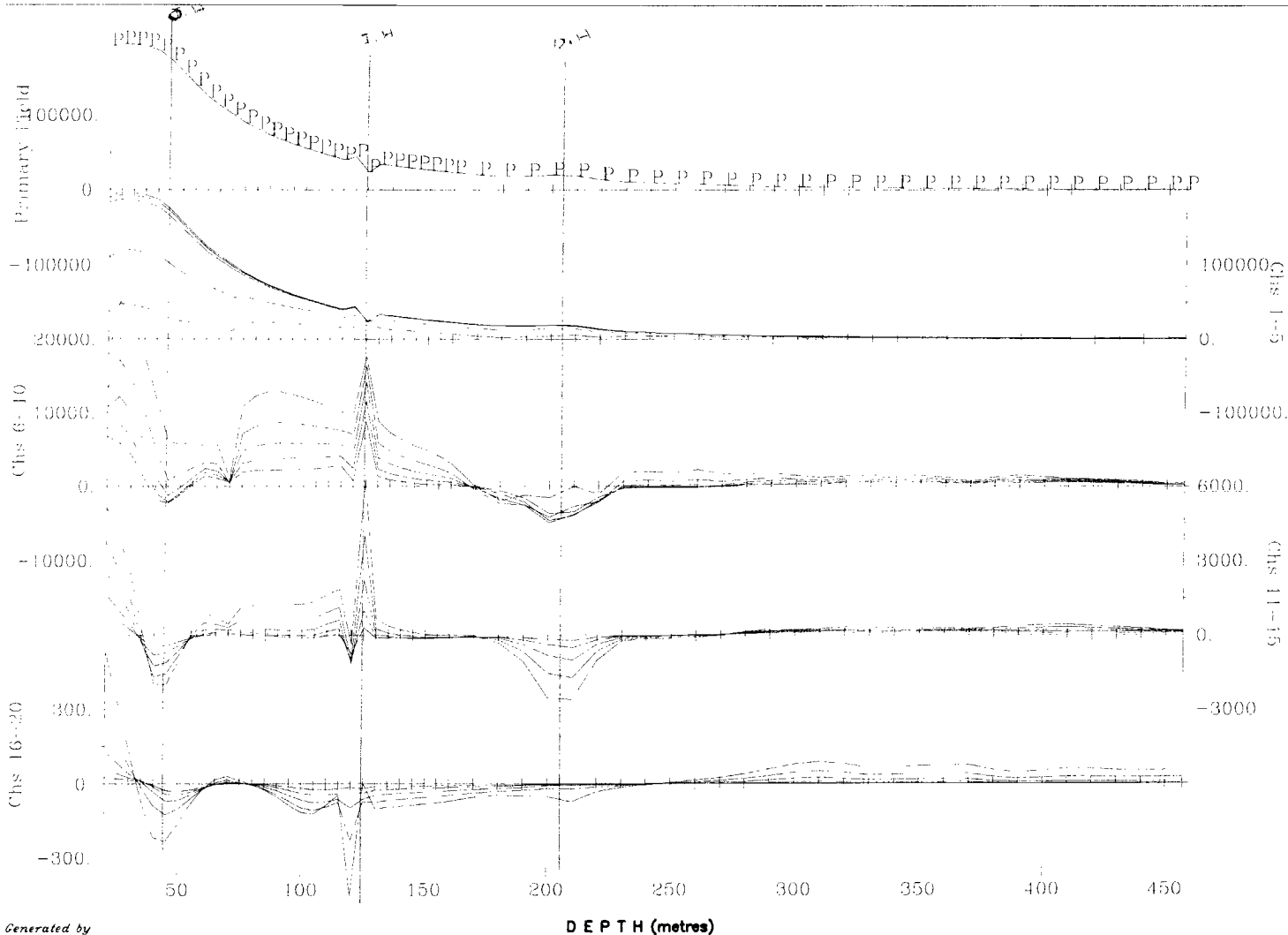
DDH #3 =  
 Location =  
 Azimuth & Dip =

Survey Date: July 18, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)

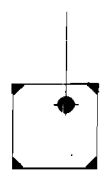


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-13



Map Generated by



Borehole GCL07-13 - Z Component  
Collar Loop  
Scale 1:2000  
25 0 25 50 75  
(metres)

**GOLDEN CHALICE RESOURCES INC.**  
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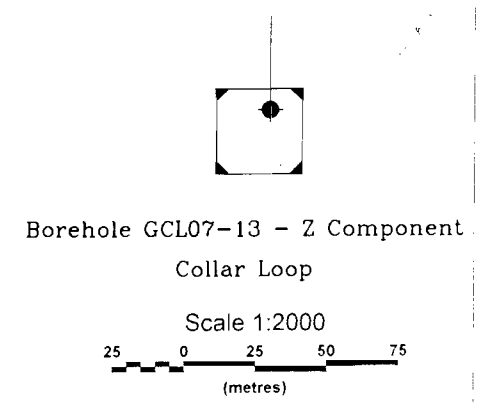
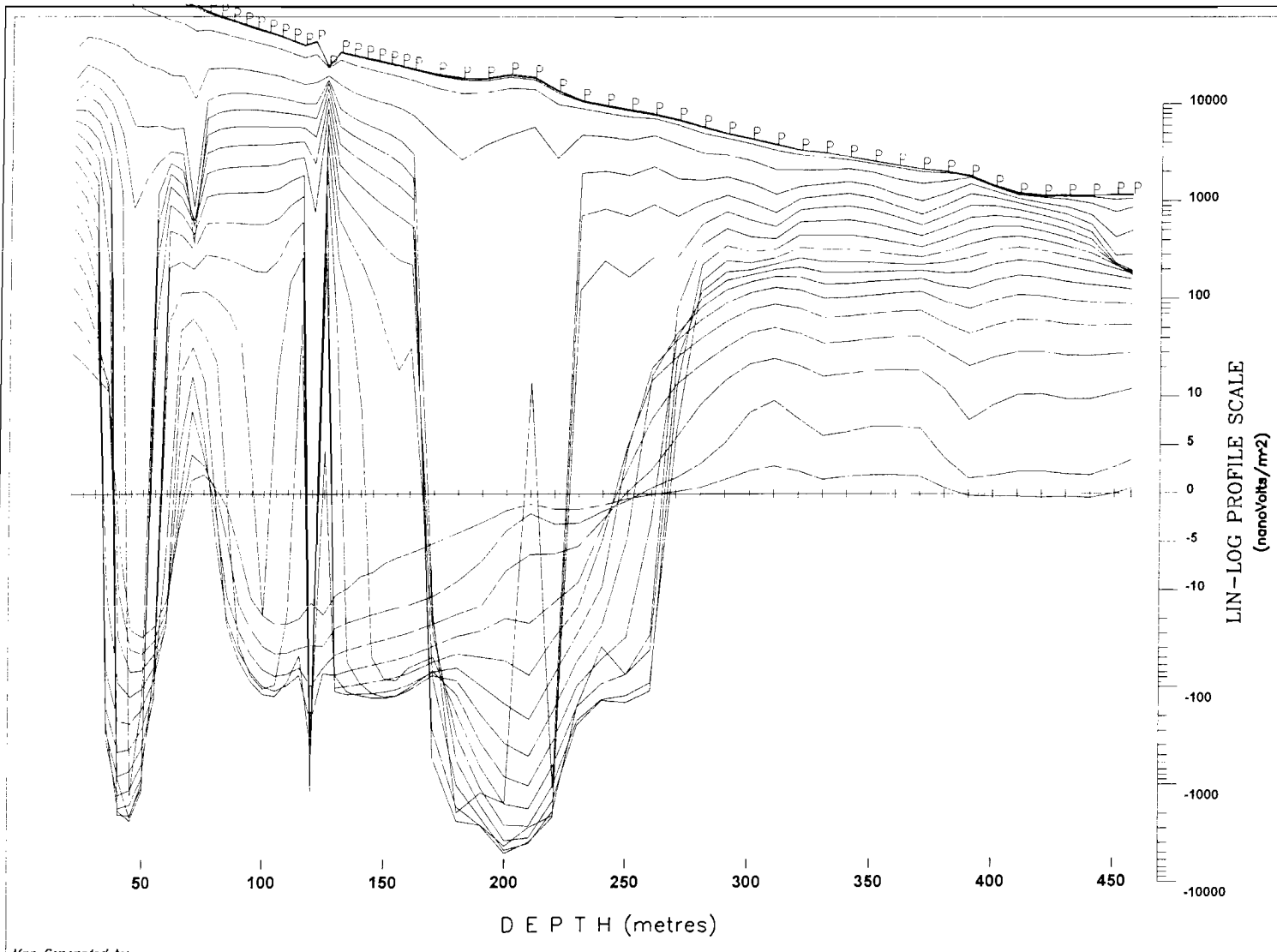
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E:0-200N  
 Transmitter Current: 14 Amps  
 Tx Turn-Off-Time and Rx Delay: 415 us, -80 us  
 Borehole Location: 497544E, 5349415N  
 Borehole Azimuth, Dip: 325, -60  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)

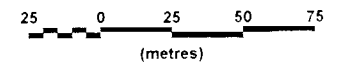
Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Timrot-Z-GCL07-13-C



Borehole GCL07-13 - Z Component

Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

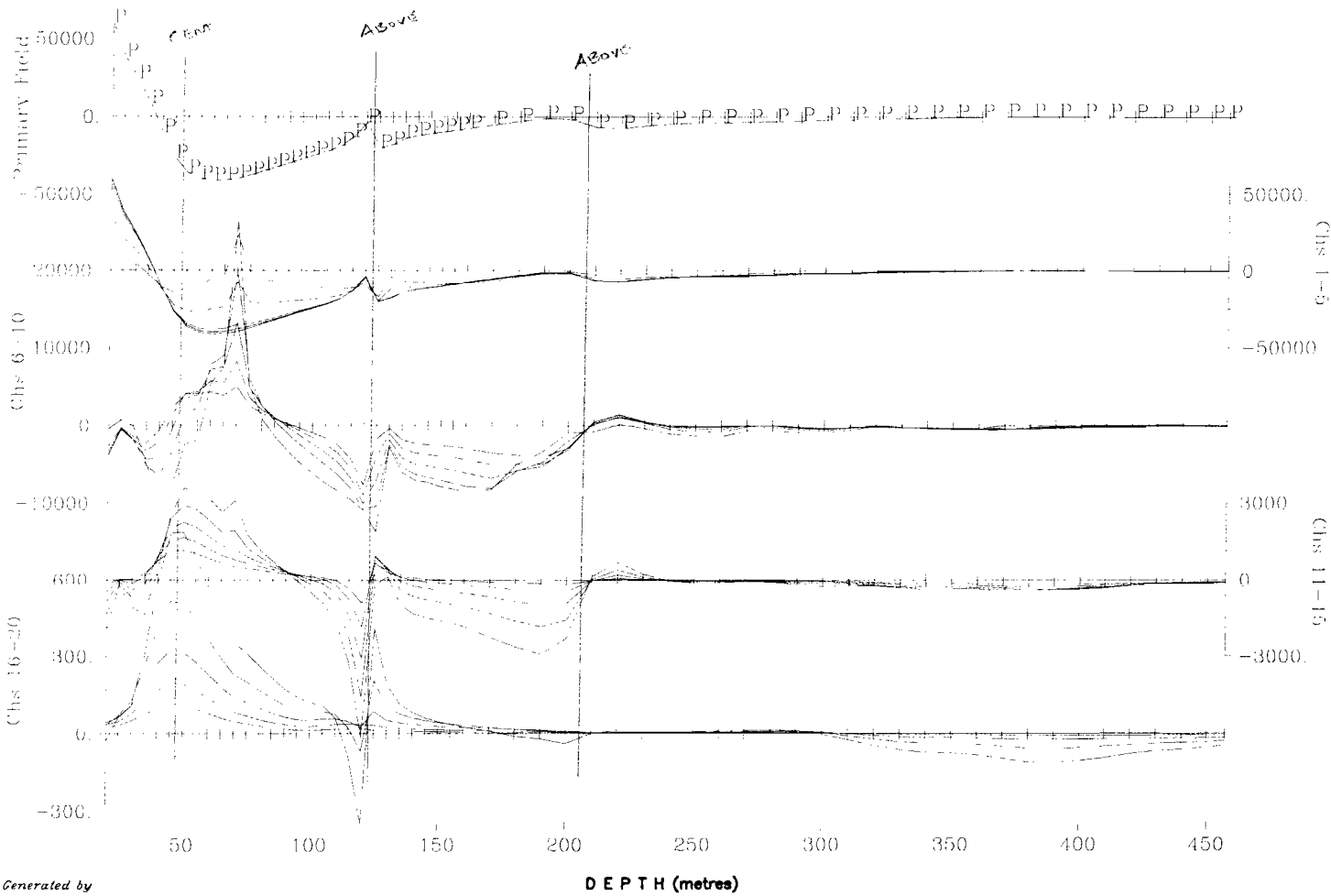
Secondary Electromagnetic Field (dB/dt)

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency          | 30 Hz (50% duty cycle)                  |
| Tx Loop Size                   | 200m x 200m                             |
| Tx Loop Location               | 0-200E,0-200N                           |
| Transmitter Current            | 14 Amper                                |
| Tx Turn-Off-Time and Rx Delay: | 415 us -80 us                           |
| Borehole Location:             | 497544E, 5349415N                       |
| Borehole Azimuth, Dip.         | 325, -60                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:     | Hz - positive up                        |
|                                | Hx - positive north, Hy - positive west |
| Cross Component Rotation       | using Tilt Meter Angles                 |

|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 19, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |

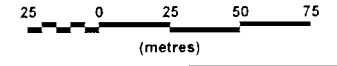
Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Z-TM-GCL07-13-C

Map Generated by



**Borehole GCL07-13 - X Component  
Collar Loop**

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

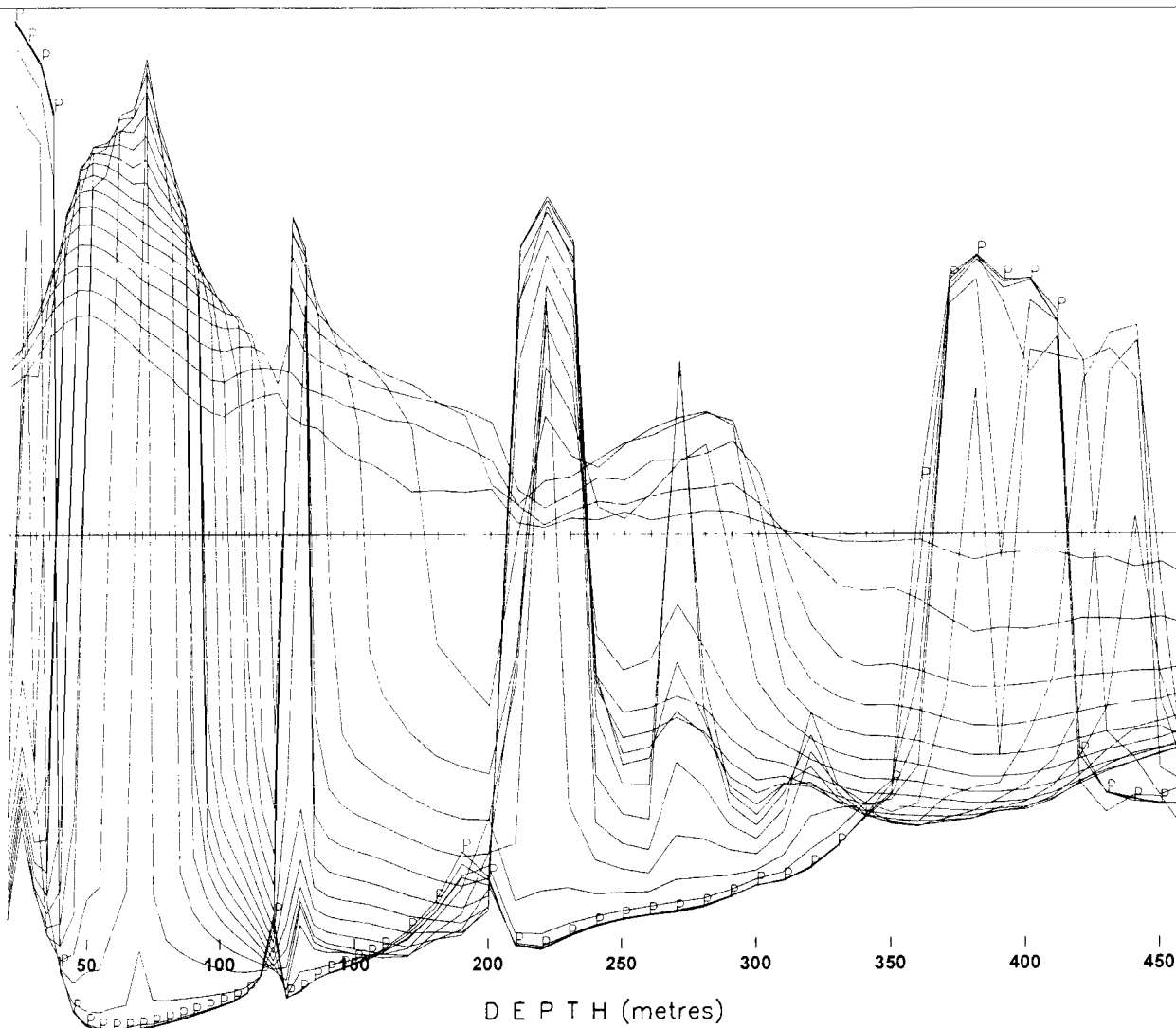
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

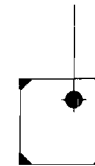
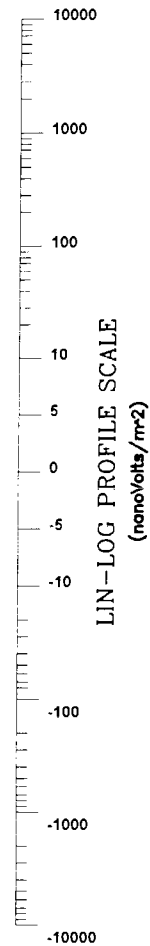
|                               |                                         |
|-------------------------------|-----------------------------------------|
| Transmitter Frequency:        | 30 Hz (50% duty cycle)                  |
| Tx Loop Size                  | 200m x 200m                             |
| Tx Loop Location              | 0-200E 0-200N                           |
| Transmitter Current           | 14 Amps                                 |
| Tx Turn-Off-Time and Rx Delay | 415 us, -80 us                          |
| Borehole Location:            | 497544E, 534941N                        |
| Borehole Azimuth, Dip.        | 325, -60                                |
| Station Interval.             | 5-10 meters                             |
| Profile Units                 | nanVolt/m <sup>2</sup>                  |
| Receiver Coil Orientation:    | MZ - positive up                        |
|                               | Hx - positive north, Hy - positive west |
| Cross Component Rotation:     | using Tit Meter Angles                  |

|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 19, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |

Surveyed & Processed by  
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DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-13-C

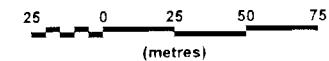


Map Generated by



Borehole GCL07-13 - X Component  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

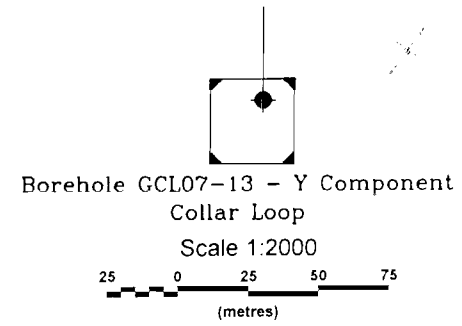
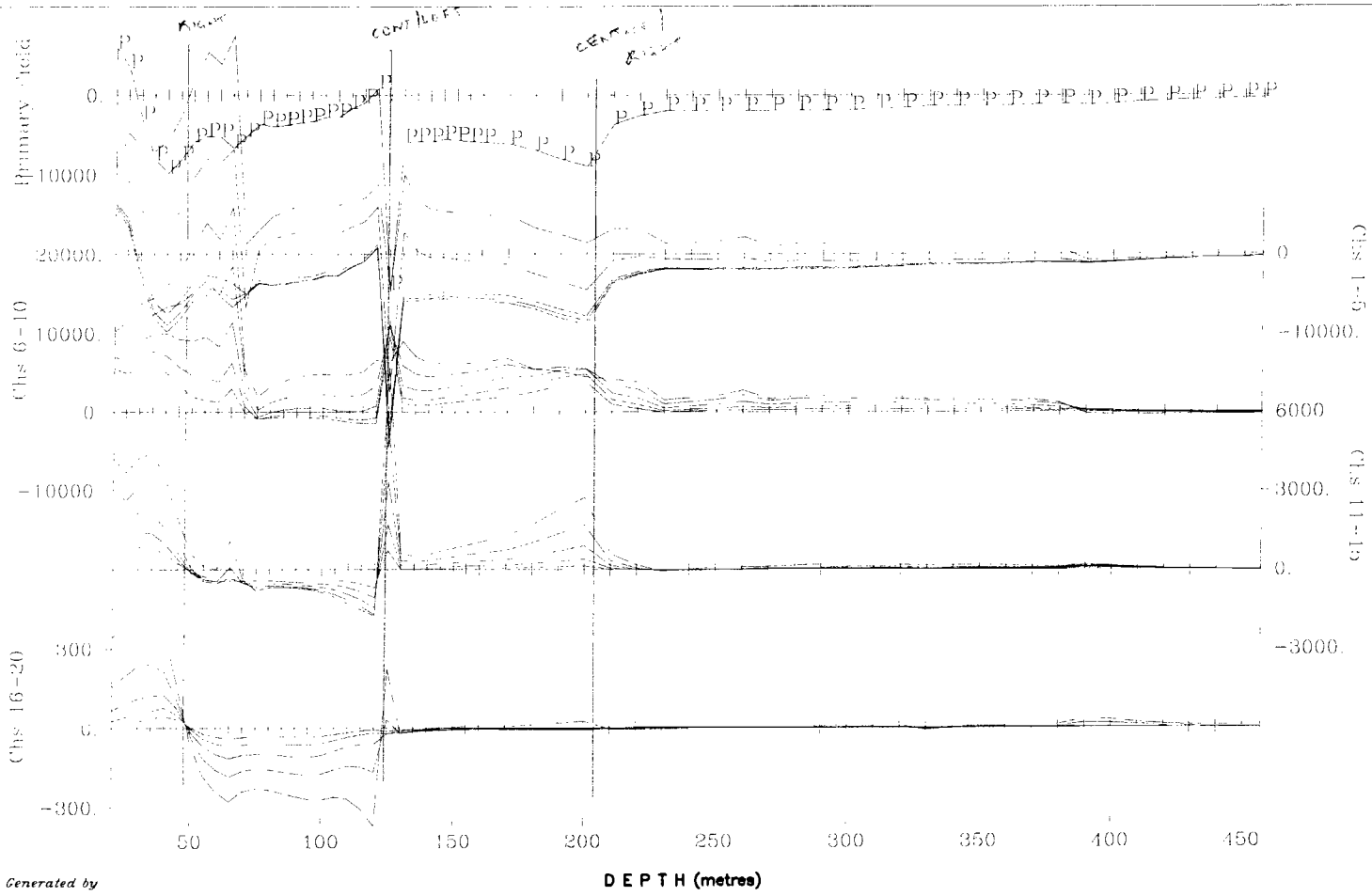
|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency          | 30 Hz (50% duty cycle)                  |
| Tx Loop Size                   | 200m x 200m                             |
| Tx Loop Location               | 0-200E, 0 200N                          |
| Transmitter Current:           | 14 Amps                                 |
| Tx Turn-Off-Time and Rx Delay: | 415 us -80 us                           |
| Borehole Location:             | 497544E, 5349415N                       |
| Borehole Azimuth, Dip:         | 325, -60                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanoVolt/mr <sup>2</sup>                |
| Receiver Coil Orientation:     | Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                 |

|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 19, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |



Surveyed & Processed by  
**QUANTEQ GEOSCIENCE LTD.**  
DWG NO. CA00500C-BHLL-X-Tilt-GCL07-13-C





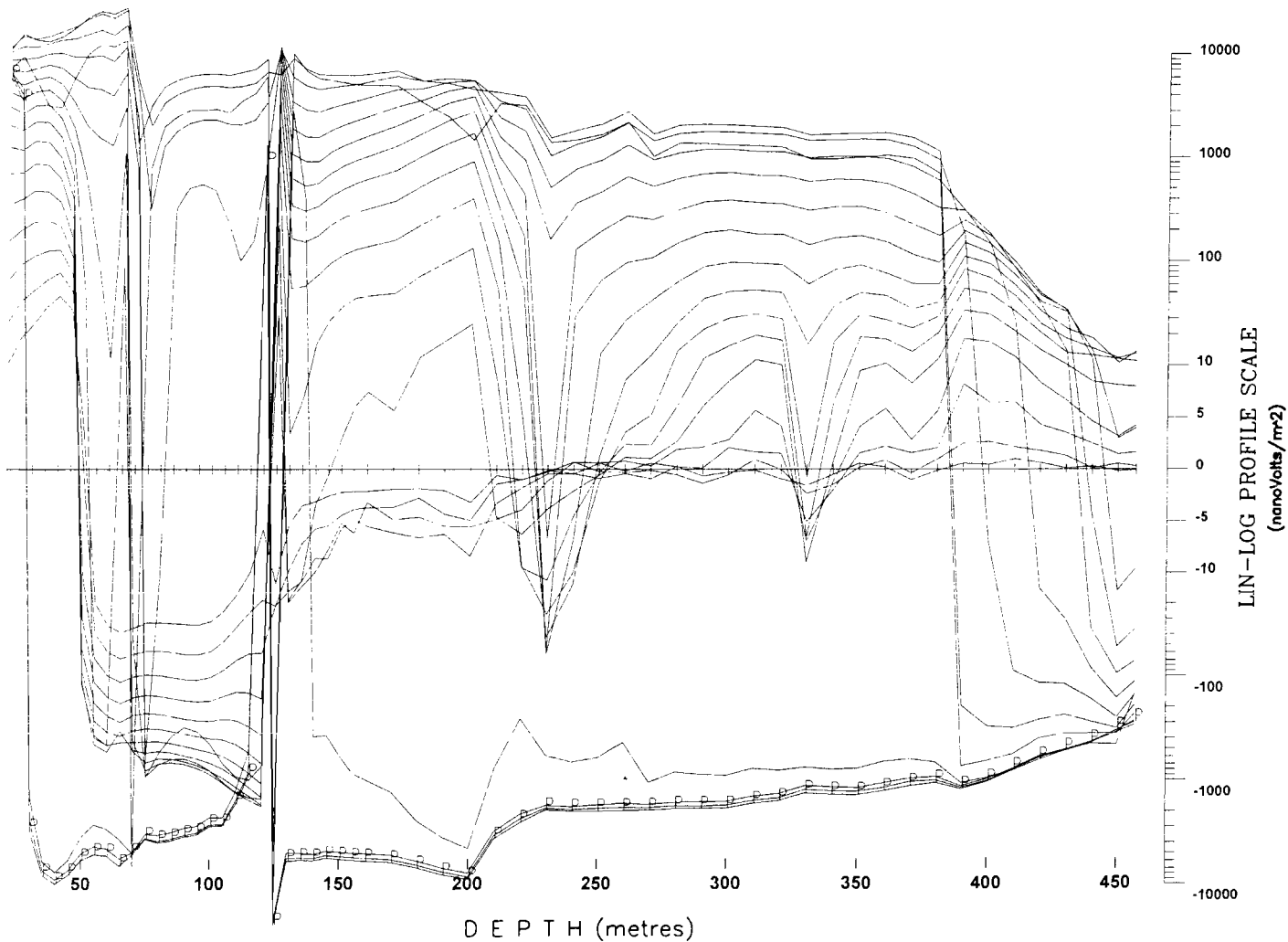
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

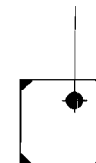
Secondary Electromagnetic Field (dB/dt)

|                               |                                         |
|-------------------------------|-----------------------------------------|
| Transmitter Frequency:        | 30 Hz (50% duty cycle)                  |
| Tx Loop Size                  | 200m x 200m                             |
| Tx Loop Location              | 0-200E,0-200N                           |
| Transmitter Current:          | 14 Amps                                 |
| Tx Turn-Off-Time and Rx Delay | 415 us, -80 us                          |
| Borehole Location:            | 497544E, 5349415N                       |
| Borehole Azimuth, Dip:        | 325, -60                                |
| Station Interval:             | 5-10 meters                             |
| Profile Units                 | nanoVolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:    | Hz - positive up                        |
|                               | Hx - positive north, Hy - positive west |
| Cross Component Rotation:     | Using Tilt Meter Angles                 |
| Survey Date:                  | July 19, 2007                           |
| Instrumentation:              | Rx = Digital Protem (30 Channels)       |
|                               | Geonics 3D probe + 500m cable           |
|                               | Tx = Geonics EM-57 (1800W)              |

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO CA00500C-BH4A-Tiltrot-Y-GCL07-13-C

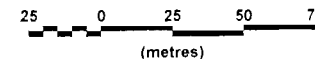


Map Generated by



Borehole GCL07-13 - Y Component  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

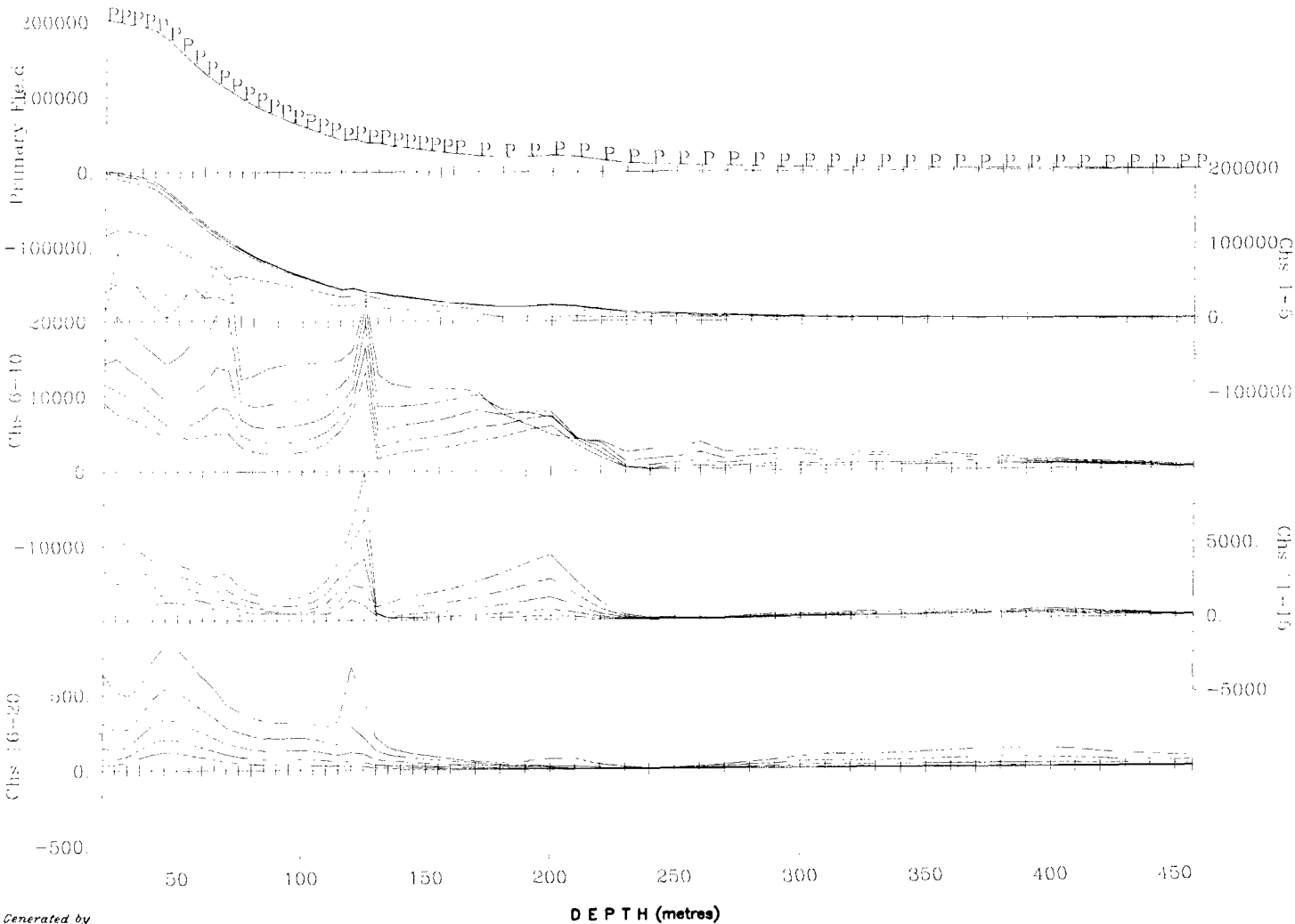
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

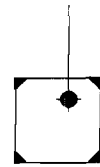
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E, 0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
Borehole Location: 497544E, 5349415N  
Borehole Azimuth, Dip: 325, -60  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/mr2  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO CA00500C-BHLL-Y-Tilt-GCL07-13-C

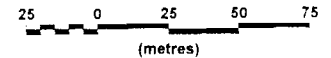


Map Generated by



Borehole GCL07-13 - Total Field  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

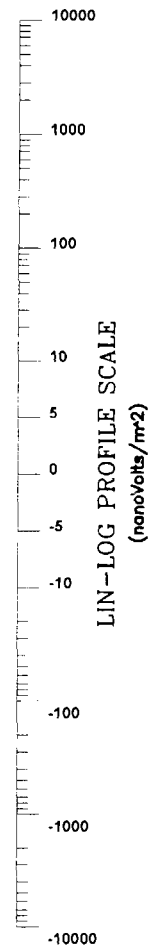
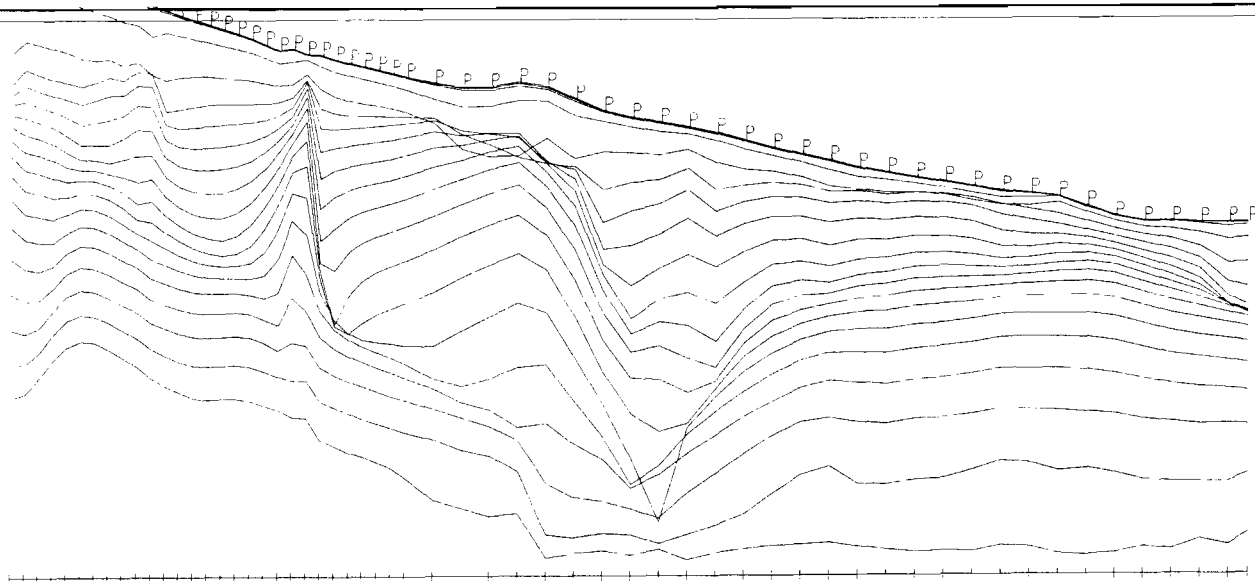
|                               |                                         |
|-------------------------------|-----------------------------------------|
| Transmitter Frequency         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size                  | 200m x 200m                             |
| Tx Loop Location              | 0-200E, 0-200N                          |
| Transmitter Current           | 14 Amps                                 |
| Tx Turn-Off-Time and Rx Delay | 415 us, -80 us                          |
| Borehole Location             | 497544E, 5349415N                       |
| Borehole Azimuth, Dip         | 325, -60                                |
| Station Interval              | 5-10 meters                             |
| Profile Units                 | nanovolt/m <sup>2</sup>                 |
| Receiver Coil Orientation     | Hz - positive up                        |
|                               | Hx - positive north, Hy - positive west |
| Cross Component Rotation      | using Tilt Meter Angles                 |

|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 19, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |

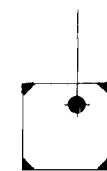


Surveyed & Processed by  
**QUANTEQ GEOSCIENCE LTD.**

DWG NO CA00500C-BH4A-Tiltrot-TF-GCL07-13-C

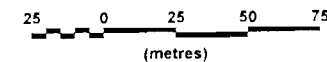


50 100 150 200 250 300 350 400 450  
 D E P T H (metres)



Borehole GCL07-13 - Total Field  
 Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

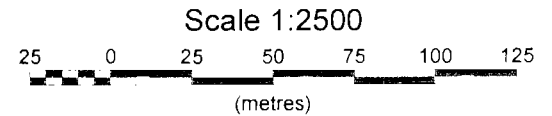
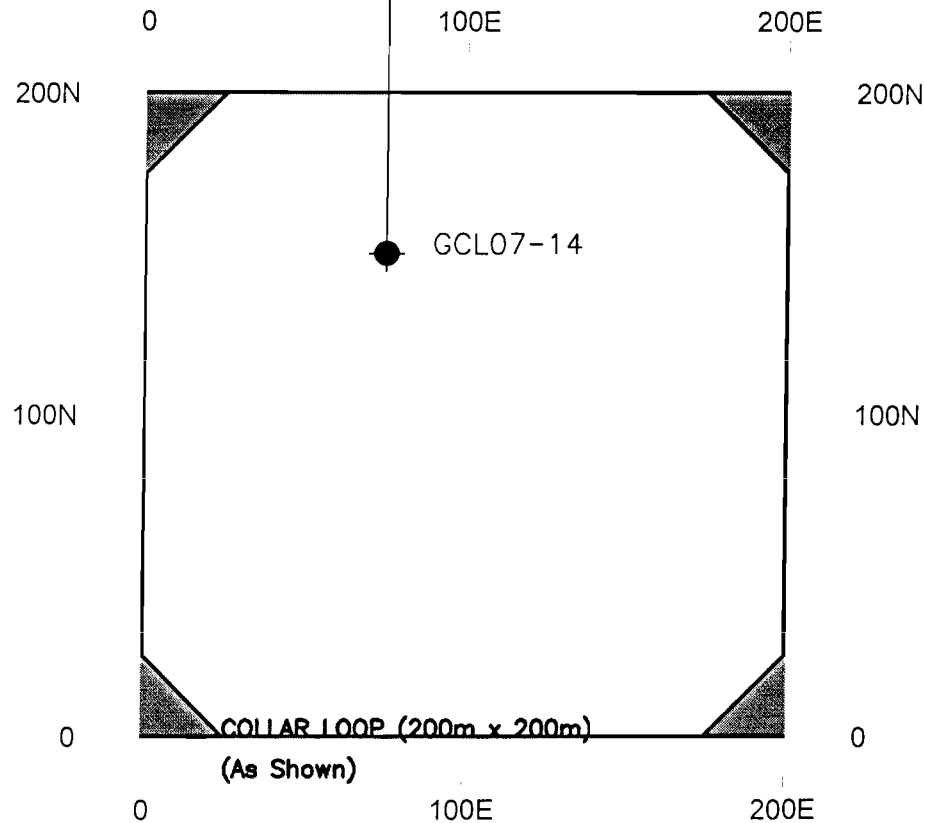
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0 200E, 0-200N  
 Transmitter Current: 14 Amps  
 Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
 Borehole Location: 497544E, 5349415N  
 Borehole Azimuth, Dip: 325, -60  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)



Surveyed & Processed by  
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 DWG. NO. CA00500C-BHLL-TF-Tilt-GCL07-13-C

# GCL07-14 - BOREHOLE & LOOP LOCATION MAP



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
**BOREHOLE & LOOP LOCATION MAP**  
**GCL07-14**

Borehole Parameters: DDH #1 = GCL07-14  
 Location = 75E, 150N  
 Azimuth & Dip = 325, -45

DDH #2 =  
 Location =  
 Azimuth & Dip =

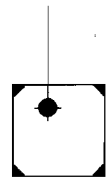
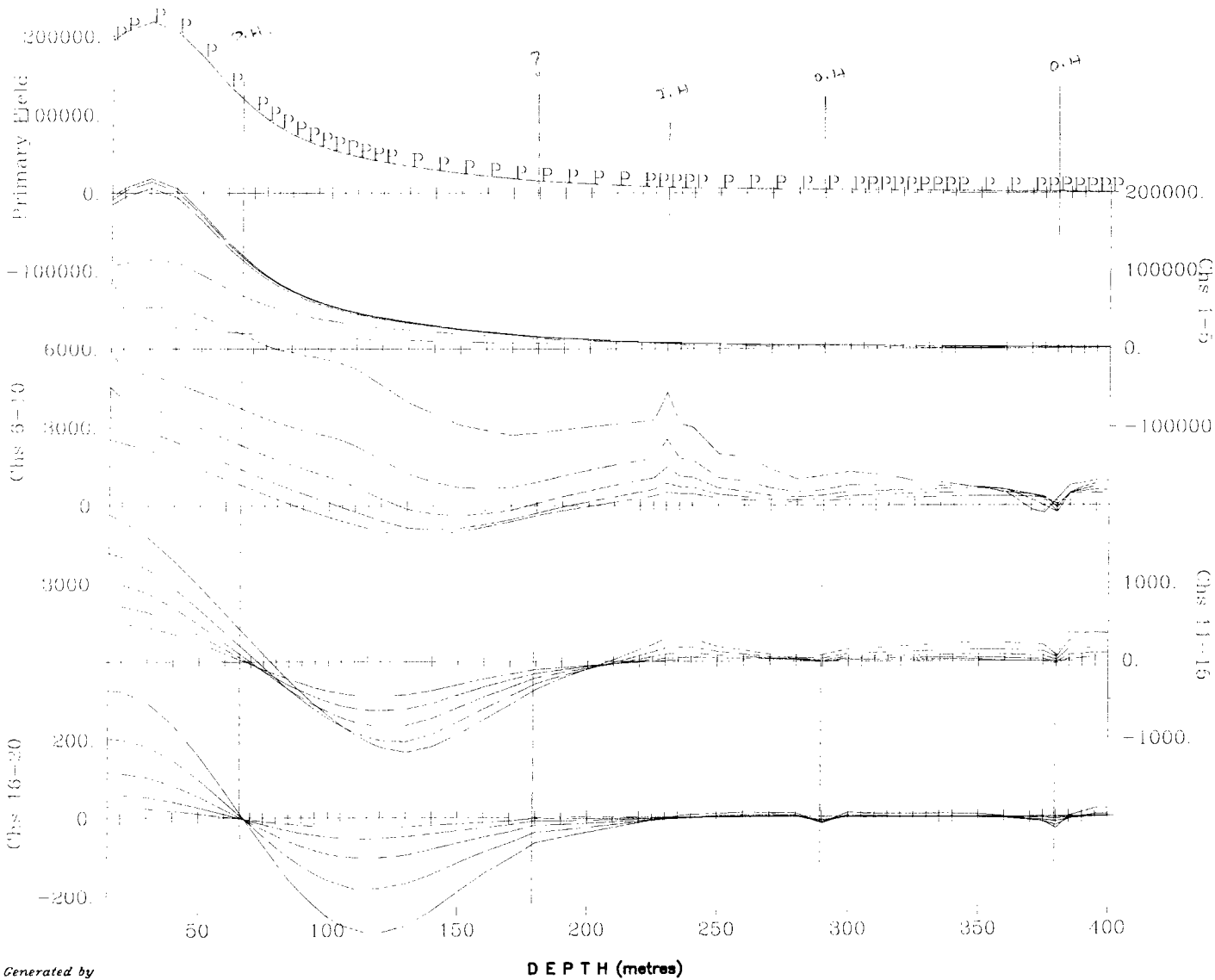
DDH #3 =  
 Location =  
 Azimuth & Dip =

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)



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**QUANTEC GEOSCIENCE LTD.**

DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-14



Borehole GCL07-14 - Z Component  
 Collar Loop  
 Scale 1:2000  
  
 (metres)

**GOLDEN CHALICE RESOURCES INC.**  
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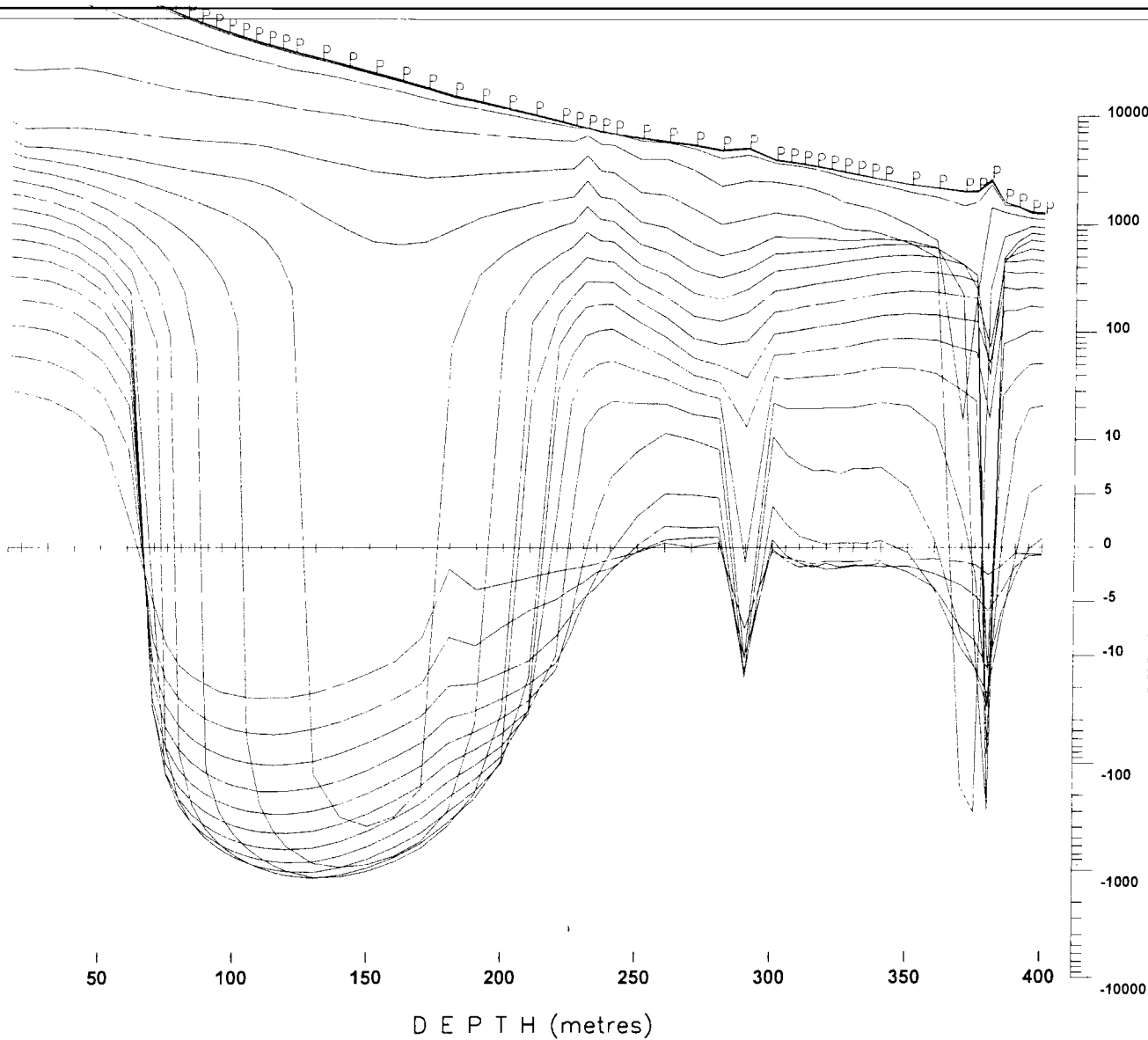
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

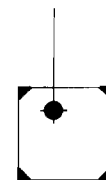
|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size:                  | 200m x 200m                             |
| Tx Loop Location:              | 0-200E, 0-200N                          |
| Transmitter Current:           | 14 Amps                                 |
| Tx Turn-Off-Time and Rx Delay: | 415 us, -80 us                          |
| Borehole Location:             | 497502E, 5349387N                       |
| Borehole Azimuth, Dip:         | 325, -60                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:     | Hz - positive up                        |
|                                | Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                 |

|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 19, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO CA00500C-BH4A-Tiltrot-Z-GCL07-14-C

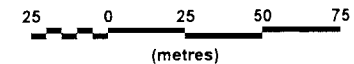


Map Generated by



Borehole GCL07-14 - Z Component  
Collar Loop

Scale 1:2000



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

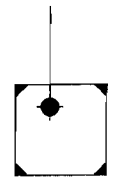
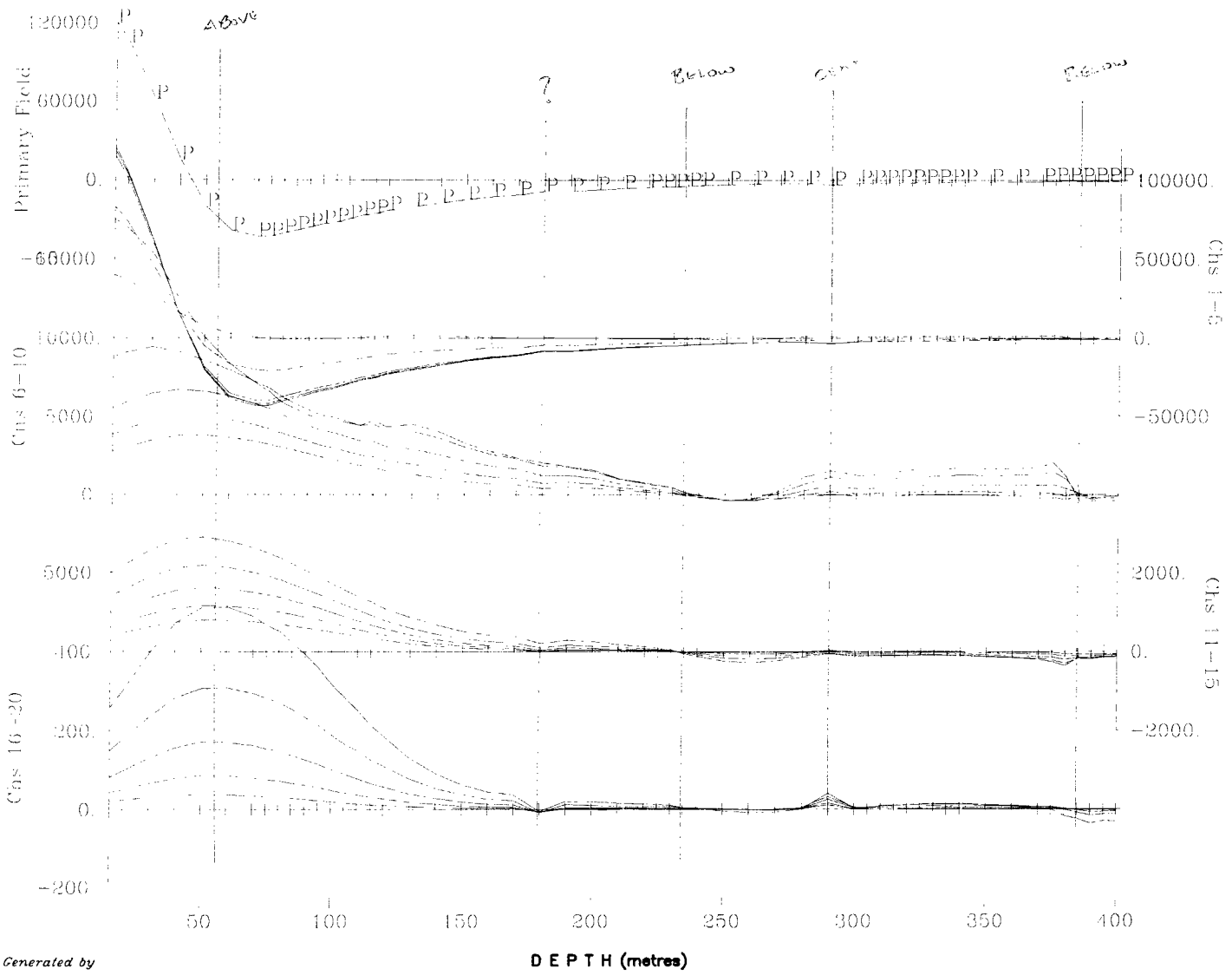
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 41b us -80 us  
Borehole Location: 497502E, 5349387N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/mr<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)



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DWG. NO. CA00500C-BHLL-Z-Tilt-GCL07-14-C



Borehole GCL07-14 - X Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

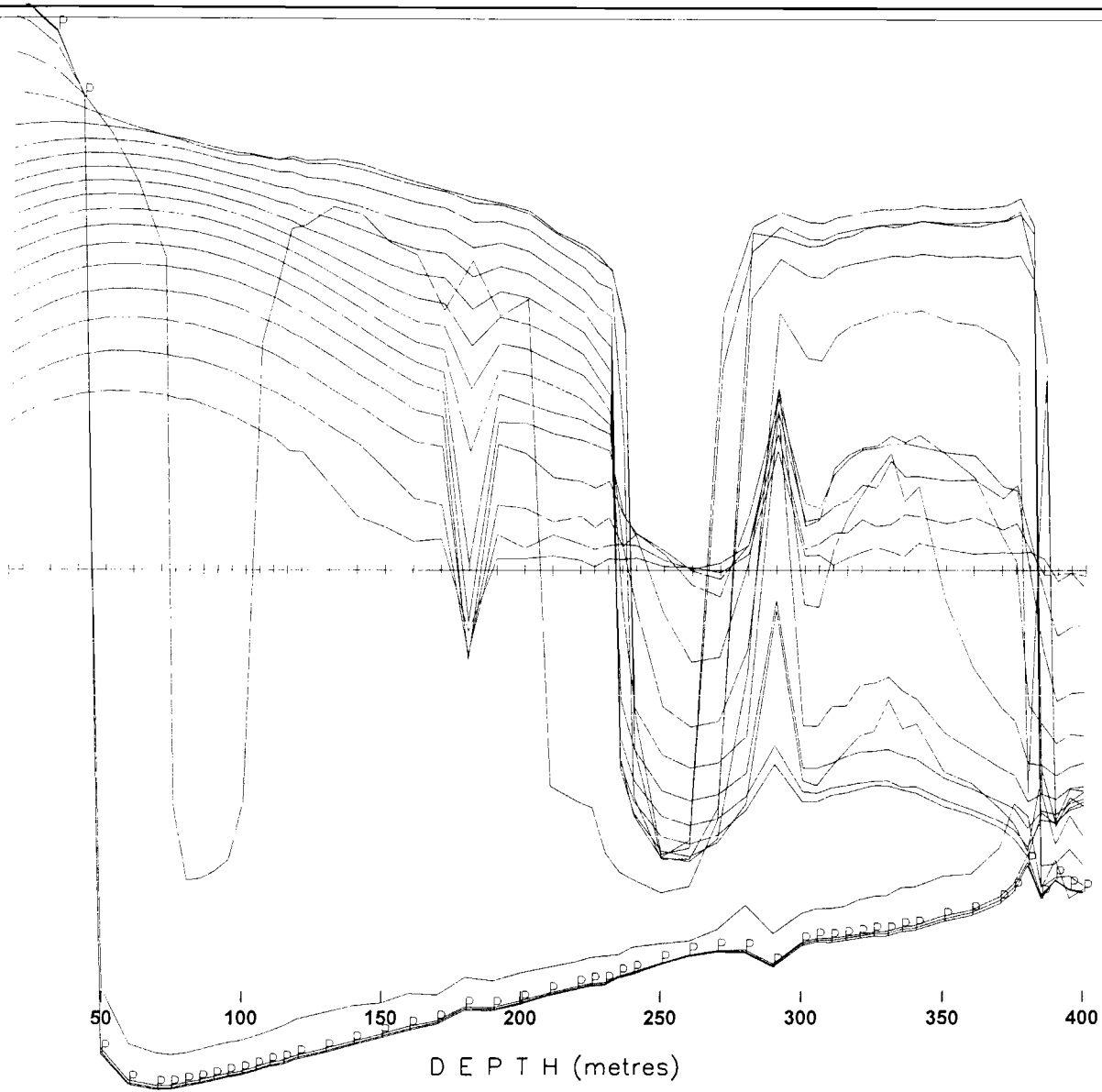
Secondary Electromagnetic Field (dB/dt)

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size:                  | 200m x 200m                             |
| Tx Loop Location:              | 0-200E, 0-200N                          |
| Transmitter Current:           | 14 Amps                                 |
| Tx Turn-Off-Time and Rx Delay: | 415 us, -80 us                          |
| Borehole Location:             | 497502E, 5349387N                       |
| Borehole Azimuth, Dip:         | 325, -60                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanoVolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:     | Hx - positive up                        |
|                                | Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                 |

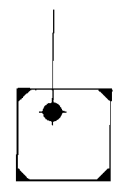
|                  |                                   |
|------------------|-----------------------------------|
| Survey Date:     | July 19, 2007                     |
| Instrumentation: | Rx = Digital Protem (30 Channels) |
|                  | Geonics 3D probe + 500m cable     |
|                  | Tx = Geonics EM-57 (1800W)        |

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-14-C

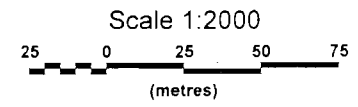




Map Generated by



Borehole GCL07-14 - X Component  
Collar Loop



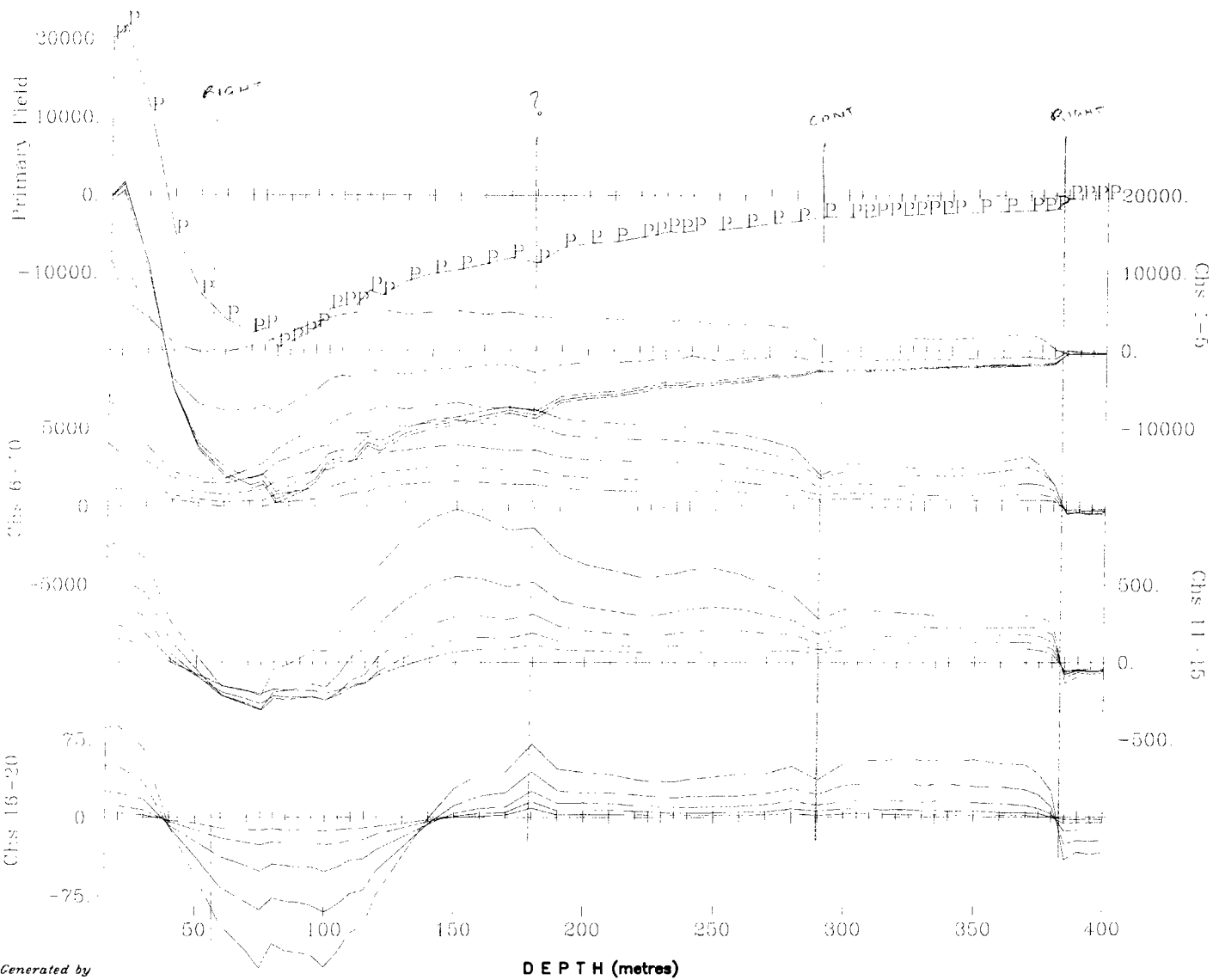
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 14 Amps  
 Tx Turn-Off-Time and Rx Delay: 415 us -80 us  
 Borehole Location: 497502E, 5349387N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-X-TIH-GCL07-14-C



Borehole GCL07-14 - Y Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

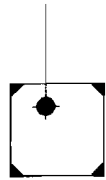
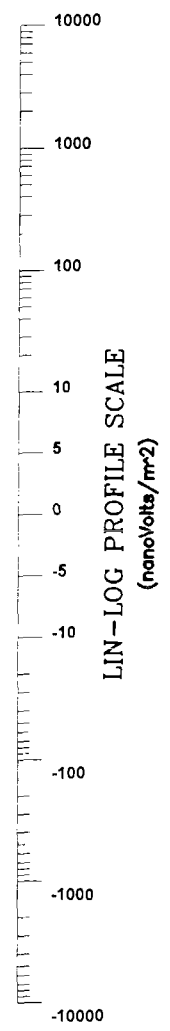
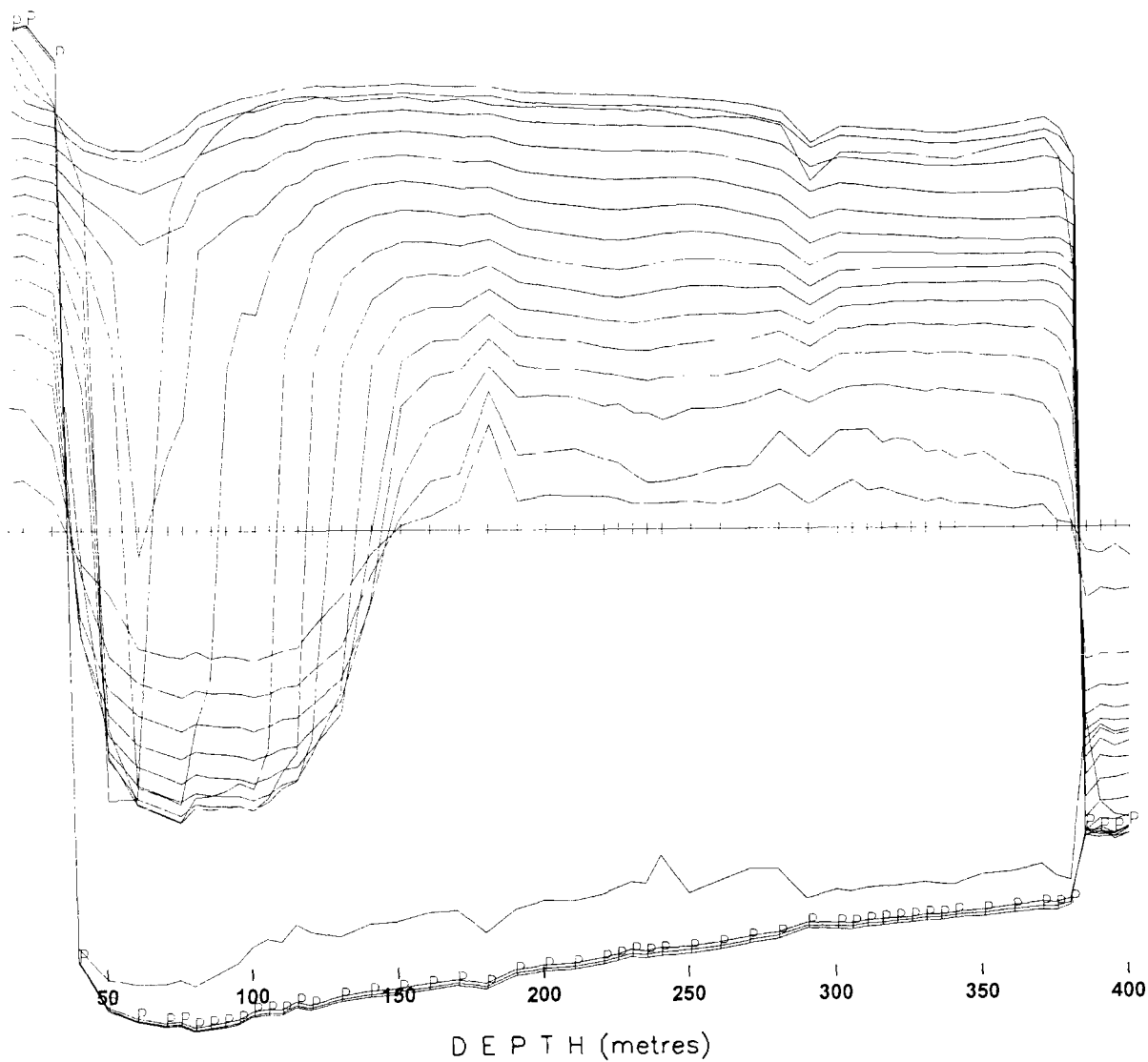
Secondary Electromagnetic Field (dB/dt)

|                                |                         |
|--------------------------------|-------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)  |
| Tx Loop Size:                  | 200m x 200m             |
| Tx Loop Location:              | G-200E, 0-200N          |
| Transmitter Current:           | 14 Amps                 |
| Tx Turn-Off-Time and Rx Delay: | 415 us, -80 us          |
| Borehole Location:             | 497502E, 5349387N       |
| Borehole Azimuth, Dip:         | 325, -60                |
| Station Interval:              | 5-10 meters             |
| Profile Units:                 | nanoVolt/m <sup>2</sup> |
| Receiver Coil Orientation:     | Hx - positive up        |
|                                | Hy - positive west      |
| Cross Component Rotation:      | using Tilt Meter Angles |

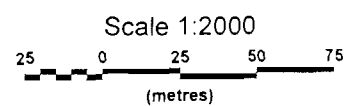
|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| Survey Date:     | July 19, 2007                                                                                    |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>Geonics 3D probe + 500m cable<br>Tx = Geonics EM-57 (1800W) |

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-14-C

Map Generated by



Borehole GCL07-14 - Y Component  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

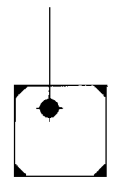
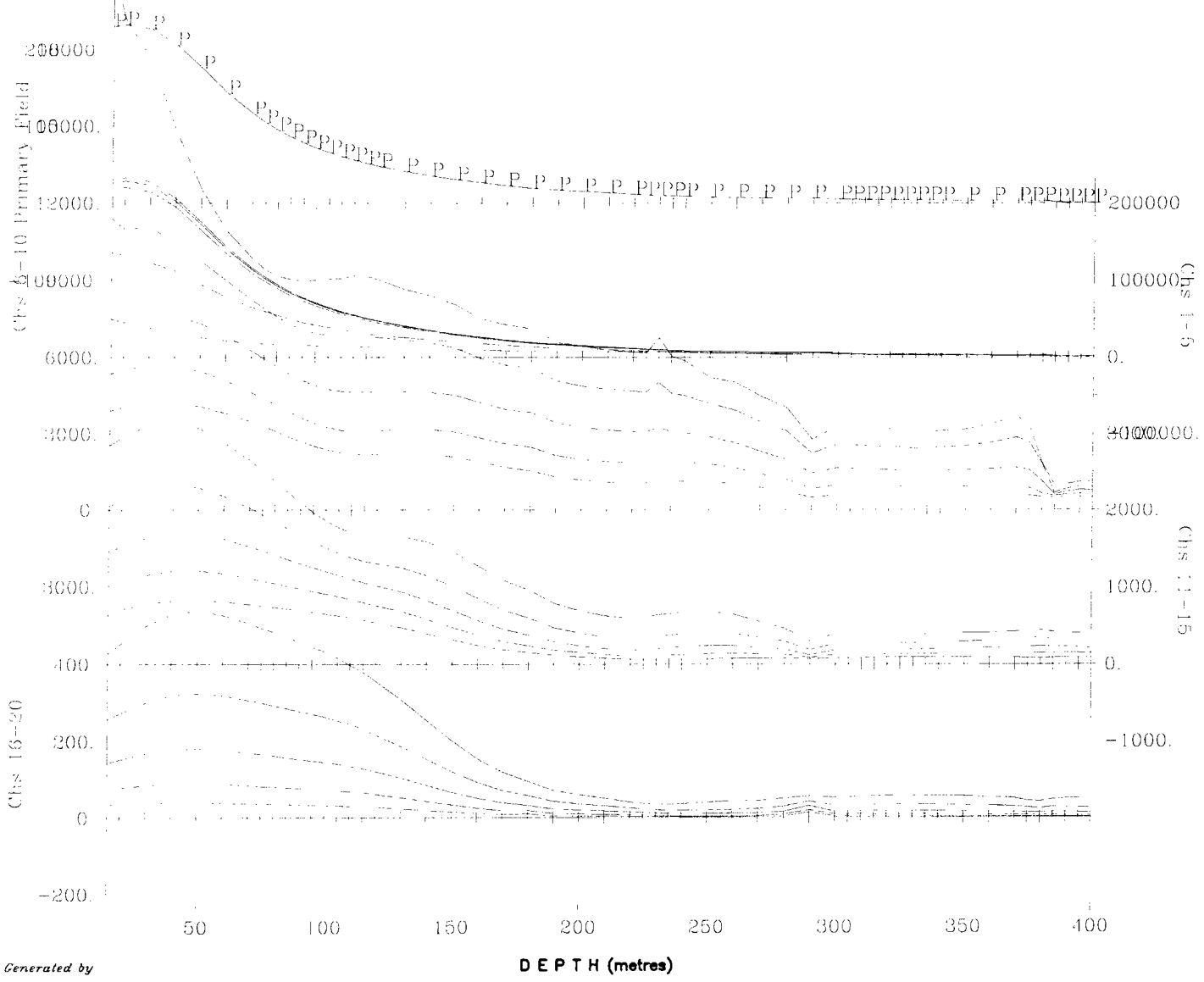
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E, 0-200N  
 Transmitter Current: 14 Amps  
 Tx Turn-Off-Time and Rx Delay: 415 us -50 us  
 Borehole Location: 497502E, 5349387N  
 Borehole Azimuth, Dip: 325 -45  
 Station Interval: 5-10 metres  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: July 19, 2007  
 Instrumentation: Rx = Digita Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Y-Tilt-GCL07-14-C

Map Generated by



Borehole GCL07-14 - Total Field  
Collar Loop  
Scale 1:2000  
25 0 25 50 75  
(metres)

**GOLDEN CHALICE RESOURCES INC.**  
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TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

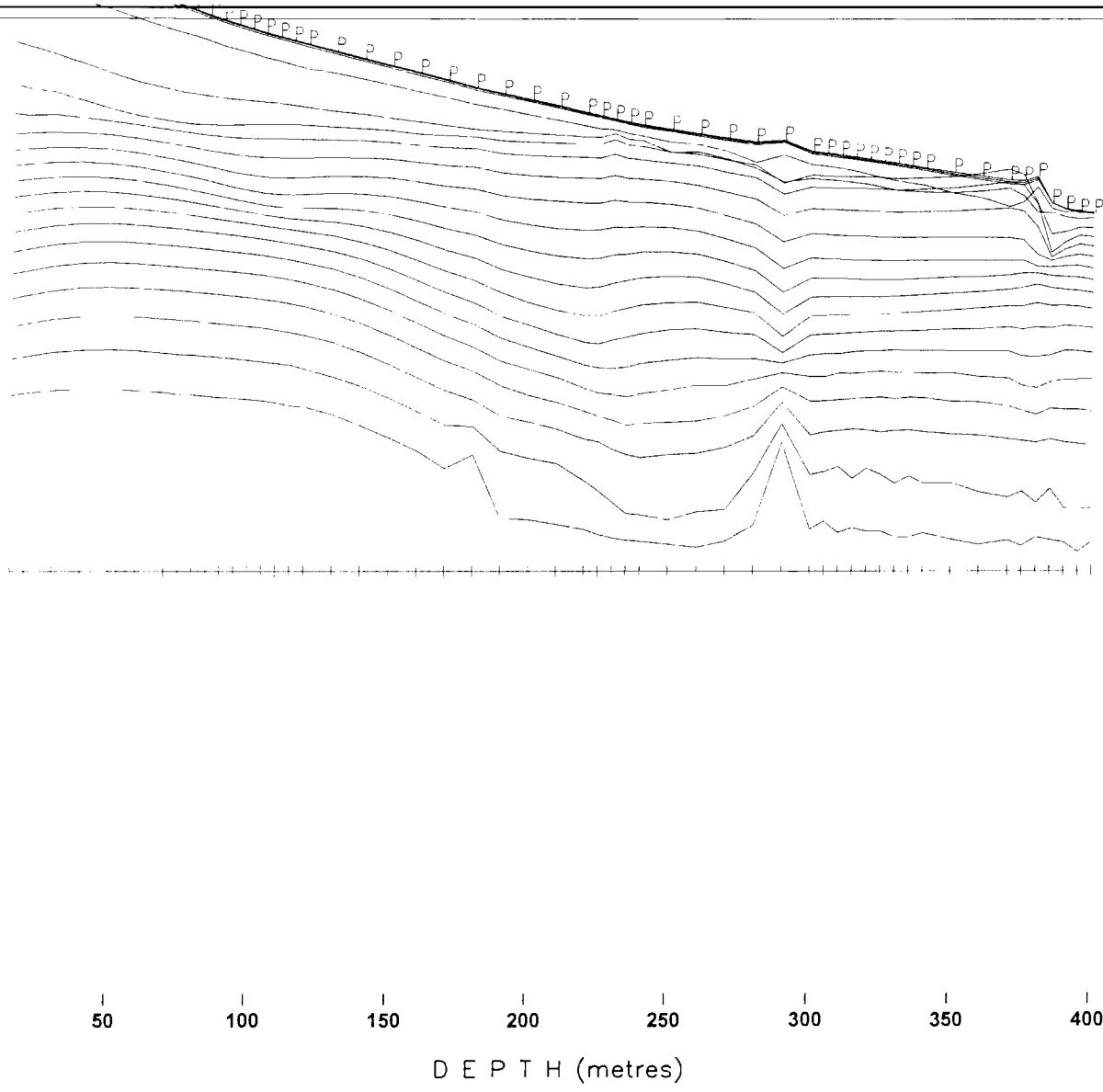
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 200m x 200m  
Tx Loop Location: 0-200E;0-200N  
Transmitter Current: 14 Amps  
Tx Turn-Off-Time and Rx Delay: 415 us, -80 us  
Borehole Location: 497502E, 5349387N  
Borehole Azimuth, Dip: 325, -60  
Station Interval: 5-10 meters  
Profile Units: nanovolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

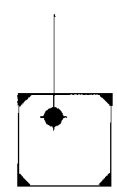
Survey Date: July 19, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
Geonics 3D probe + 500m cable  
Tx = Geonics EM-57 (1800W)

 Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-14-C

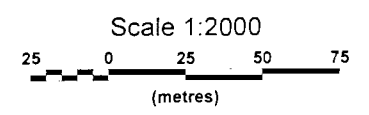
Map Generated by



LIN-LOG PROFILE SCALE  
 (nanoVolts/m<sup>2</sup>)



Borehole GCL07-14 - Total Field  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
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 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 200m x 200m  
 Tx Loop Location: 0-200E;0-200N  
 Transmitter Current: 14 Amps  
 Tx Turn-Off-Time and Rx Delay: 415 us - 80 us  
 Borehole Location: 497502E, 5349387N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

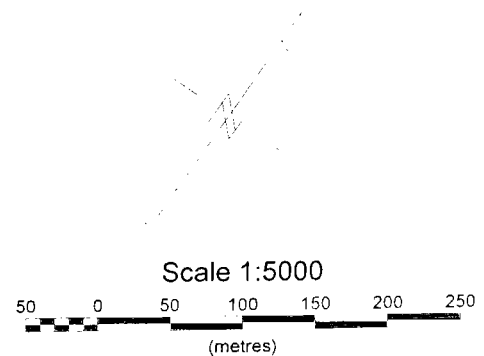
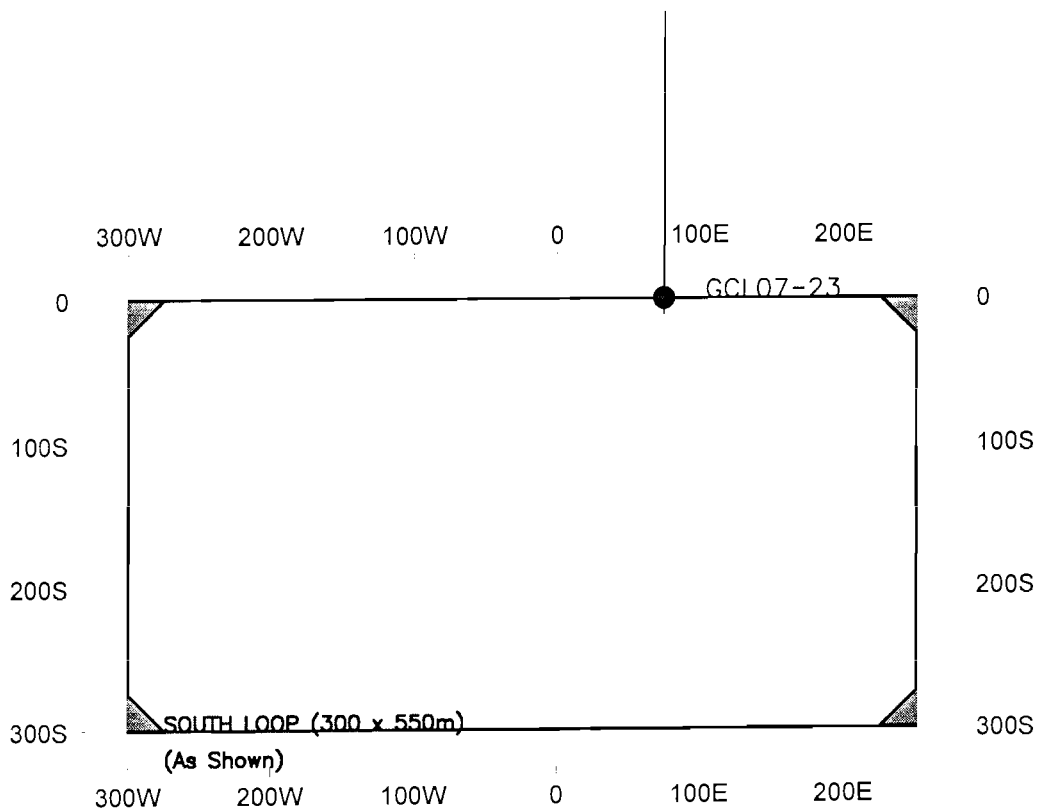
Survey Date: July 19, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 Geonics 3D probe + 500m cable  
 Tx = Geonics EM-57 (1800W)



Surveyed & Processed by:  
**QUANTEQ GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-TF-Tilt-GCL07-14-C

Map Generated by

# GCL07-23 - BOREHOLE & LOOP LOCATION MAP



**GOLDEN CHALICE RESOURCES**  
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 TIMMINS, ON

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3D FIXED-LOOP BOREHOLE TEM SURVEY  
**BOREHOLE & LOOP LOCATION MAP**  
 GCL07-23

Borehole Parameters: DDH #1 = GCL07-23  
 Location = 0+75E, 0+00  
 Azimuth & Dip = 325, -45degN

DDH #2 =  
 Location =  
 Azimuth & Dip =

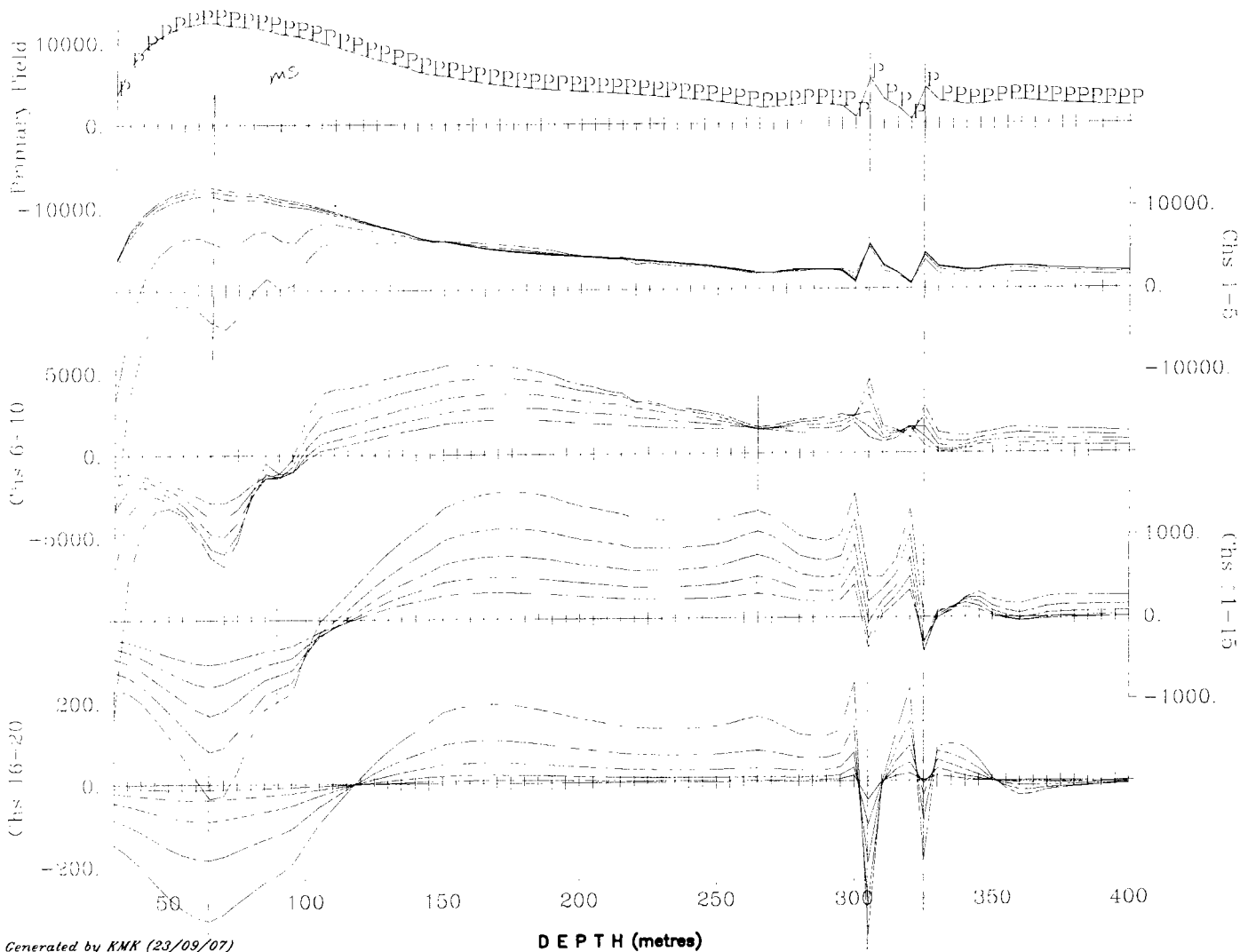
DDH #3 =  
 Location =  
 Azimuth & Dip =

---

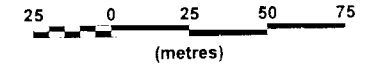
Survey Date: Sept. 23, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D probe+600m cable  
 Tx = Geonics EM-57 (3600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. #: CA00500C-BHTEM-LOOPLOC-GCL07-23

Map Generated by KMK (23/09/07)



Borehole GCL07-23 - Z Component  
 Collar Loop  
 Scale 1:2000



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

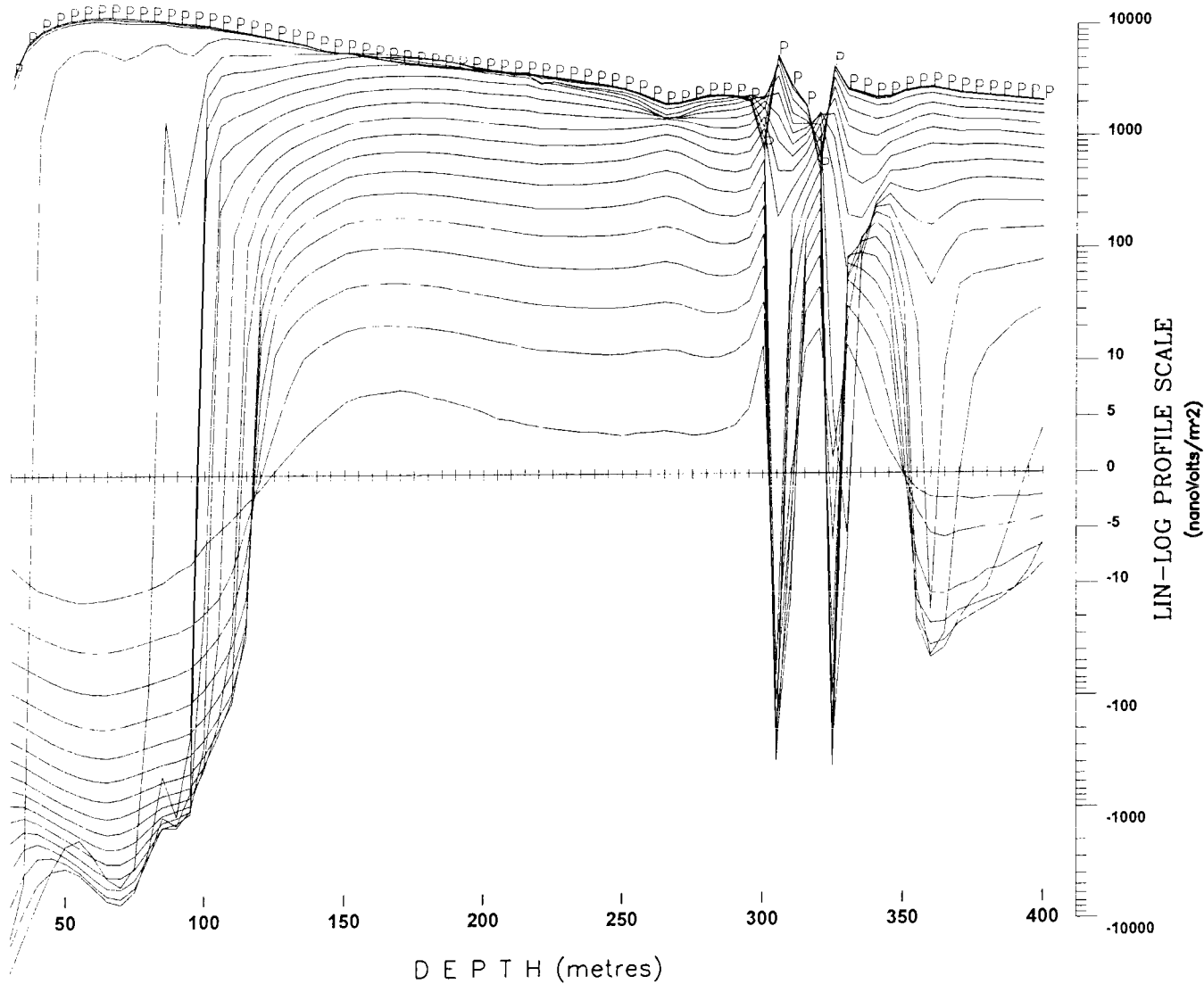
Secondary Electromagnetic Field (dB/dt)

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size:                  | 300m x 550m                             |
| Tx Loop Location:              | 300W-250E;300S-0                        |
| Transmitter Current:           | 21.5 Amps                               |
| Tx Turn-Off-Time and Rx Delay: | 600 us, -80 us                          |
| Borehole Location:             | 75E, 0N                                 |
| Borehole Azimuth, Dip:         | 325, -45                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanovolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:     | Hz = positive up                        |
|                                | Hx = positive north, Hy = positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                 |

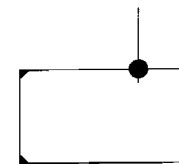
|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept 23, 2007                                                                                     |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>& Geonics 3D probe+600m cable<br>Tx = Geonics EM-57 (3600 W) |

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG NO. CA00500C-BH4A-Tiltrot-Z-GCL07-23-C

Map Generated by KMK (23/09/07)

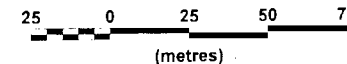


Map Generated by KMK (23/09/07)



Borehole GCL07-23 - Z Component  
Collar Loop

Scale 1:2000



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3D FIXED-LOOP BOREHOLE TEM SURVEY  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m x 550m  
Tx Loop Location: 300W-250E,300S-0  
Transmitter Current: 21.5 Amps  
Tx Turn-Off-Time and Rx Delay: 600 us -80 us  
Borehole Location: 75E, 0N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

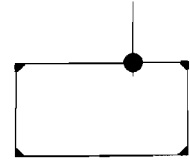
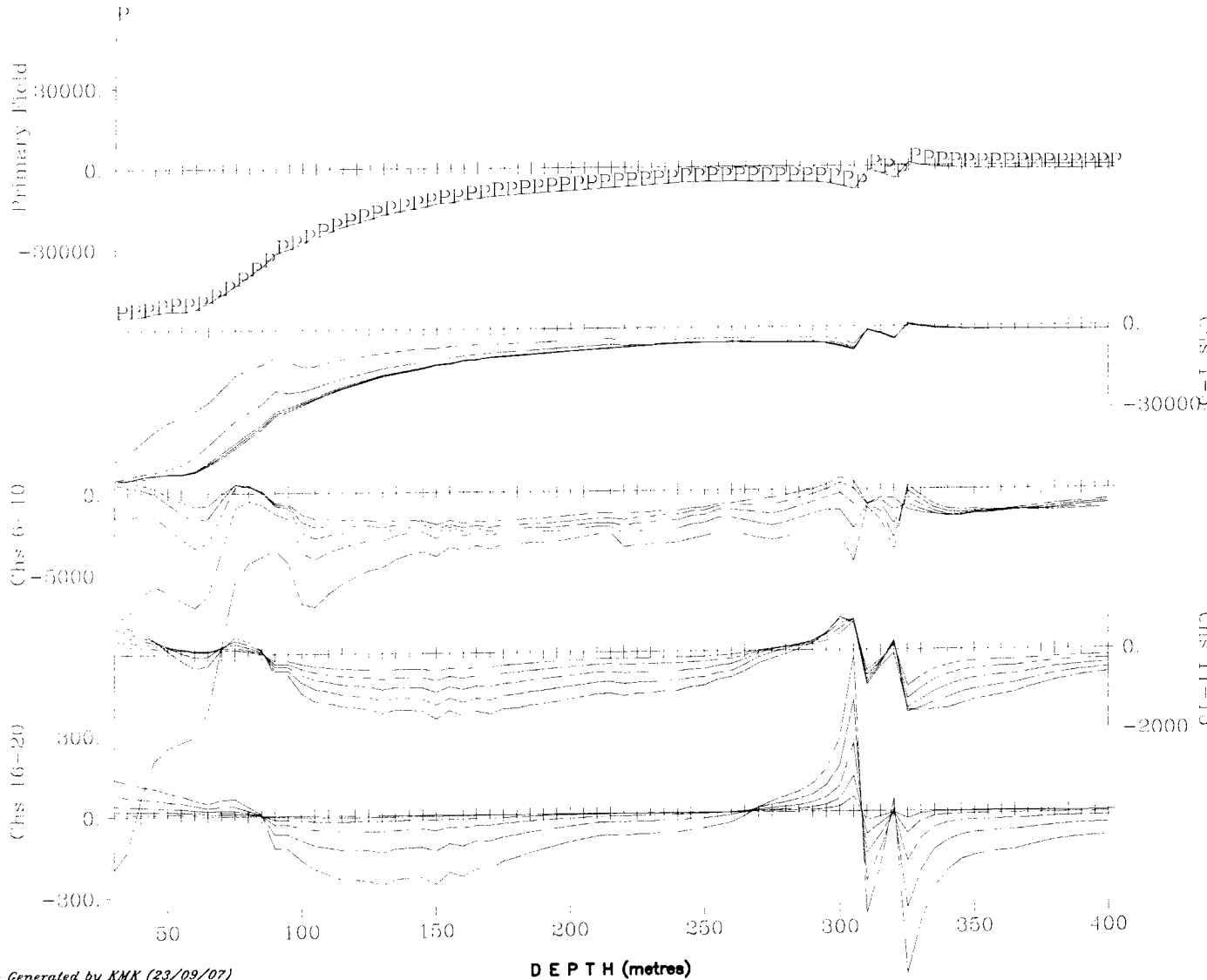
Survey Date: Sept 23, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
& Geonics 3D probe+600m cable  
Tx = Geonics EM-57 (3600 W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

DWG NO: CA00500C-BHLL-Z-Tilt-GCL07-23-C





Borehole GCL07-23 - X Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

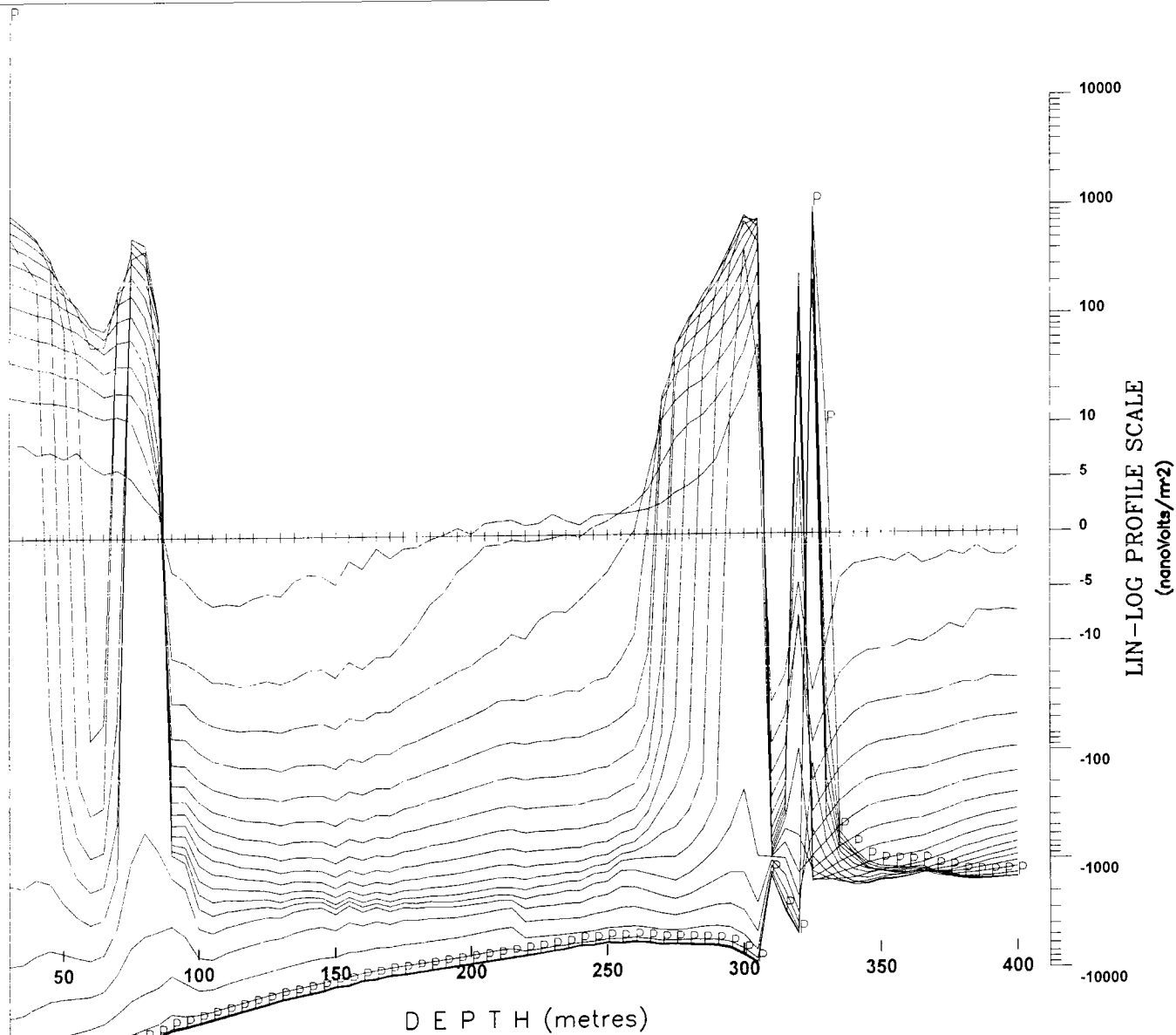
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m x 550m  
 Tx Loop Location: 300W-250E;300S-0  
 Transmitter Current: 21.5 Amps  
 Tx Turn-Off-Time and Rx Delay: 600 us, -80 us  
 Borehole Location: 75E, 0N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 metres  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

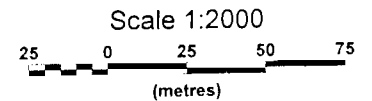
Survey Date: Sept 23, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D probe+600m cable  
 Tx = Geonics EM-57 (3600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH4A-Tiltrot-X-GCL07-23-C

Map Generated by KMK (23/09/07)



Borehole GCL07-23 - X Component  
Collar Loop



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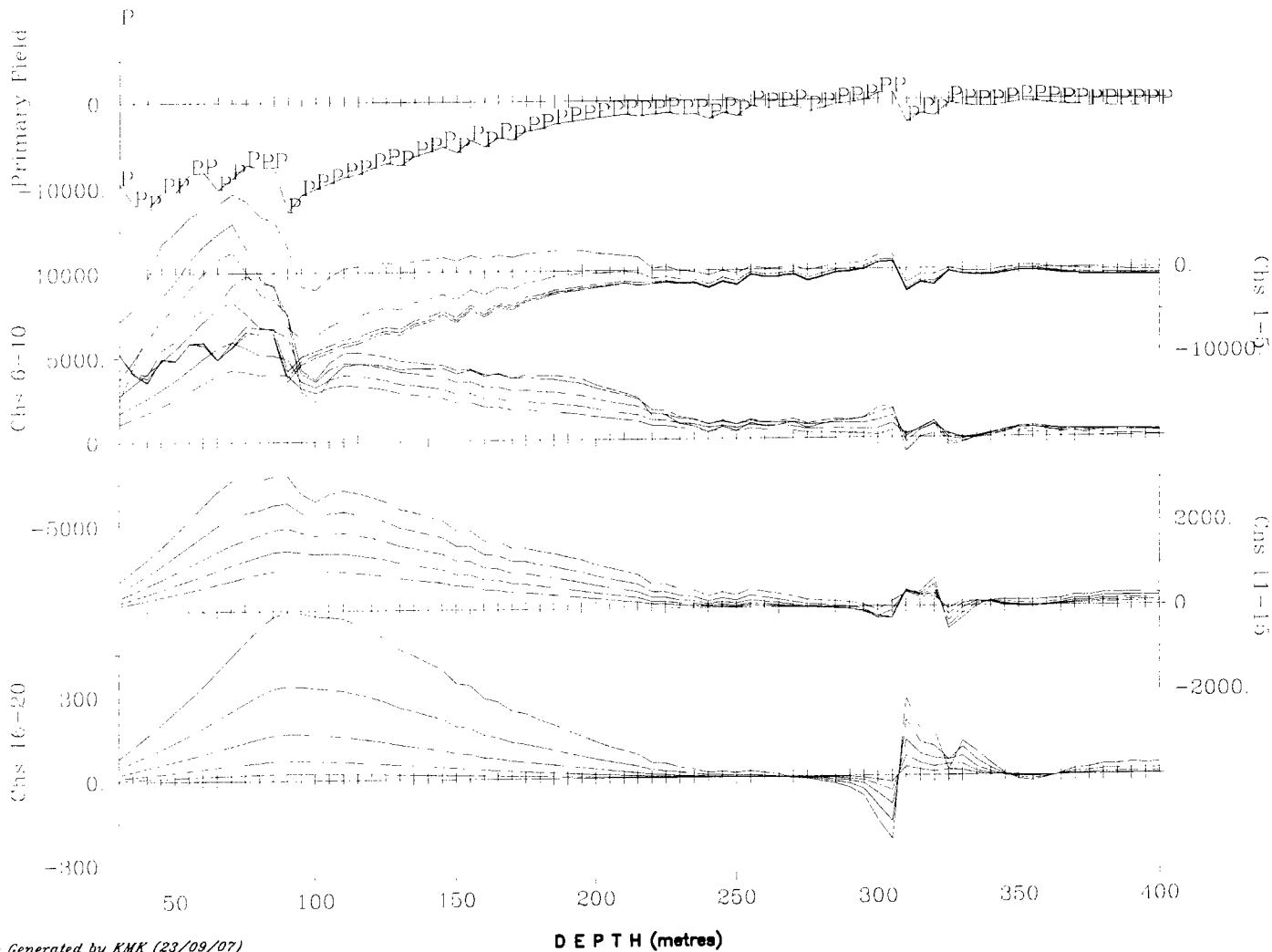
3D FIXED-LOOP BOREHOLE TEM SURVEY  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m x 550m  
Tx Loop Location: 300W-250E;300S-0  
Transmitter Current: 21.5 Amps  
Tx Turn-Off-Time and Rx Delay: 600 us -80 us  
Borehole Location: 75E, 0N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 metres  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

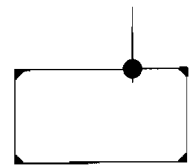
Survey Date: Sept 23, 2007  
Instrumentation: Rx = Digiata Protem (30 Channels)  
& Geonics 3D probe+600m cable  
Tx = Geonics EM-57 (3600 W)



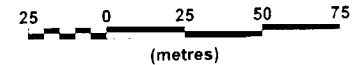
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG NO CA00500C-BHLL-X-Tilt-GCL07-23-C



Map Generated by KMK (23/09/07)



Borehole GCL07-23 - Y Component  
Collar Loop  
Scale 1:2000



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**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

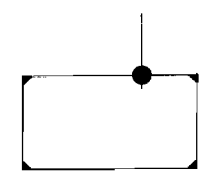
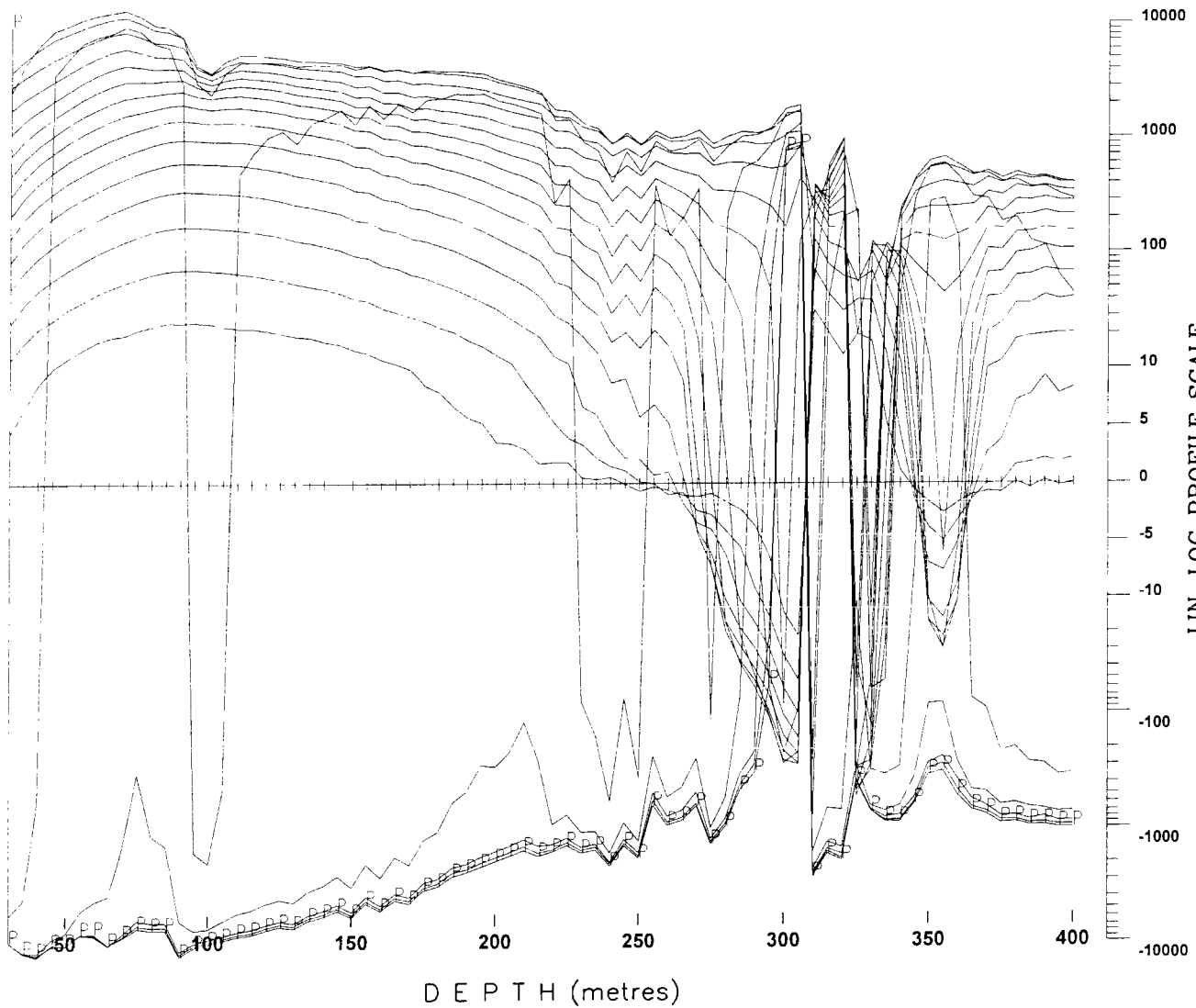
Transmitter Frequency: 30 Hz (50% duty cycle)  
Tx Loop Size: 300m x 550m  
Tx Loop Location: 300W-250E, 300S-0  
Transmitter Current: 21.5 Amps  
Tx Turn-Off-Time and Rx Delay: 600 us, -80 us  
Borehole Location: 75E, 0N  
Borehole Azimuth, Dip: 325, -45  
Station Interval: 5-10 meters  
Profile Units: nanoVolt/m<sup>2</sup>  
Receiver Coil Orientation: Hz - positive up  
Hx - positive north, Hy - positive west  
Cross Component Rotation: using Tilt Meter Angles

Survey Date: Sept 23, 2007  
Instrumentation: Rx = Digital Protem (30 Channels)  
& Geonics 3D probe+600m cable  
Tx = Geonics EM-57 (3600 W)



Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**

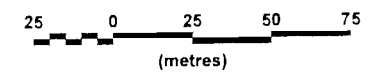
DWG. NO. CA00500C-BH4A-Tiltrot-Y-GCL07-23-C



Borehole GCL07-23 - Y Component

Collar Loop

Scale 1:2000



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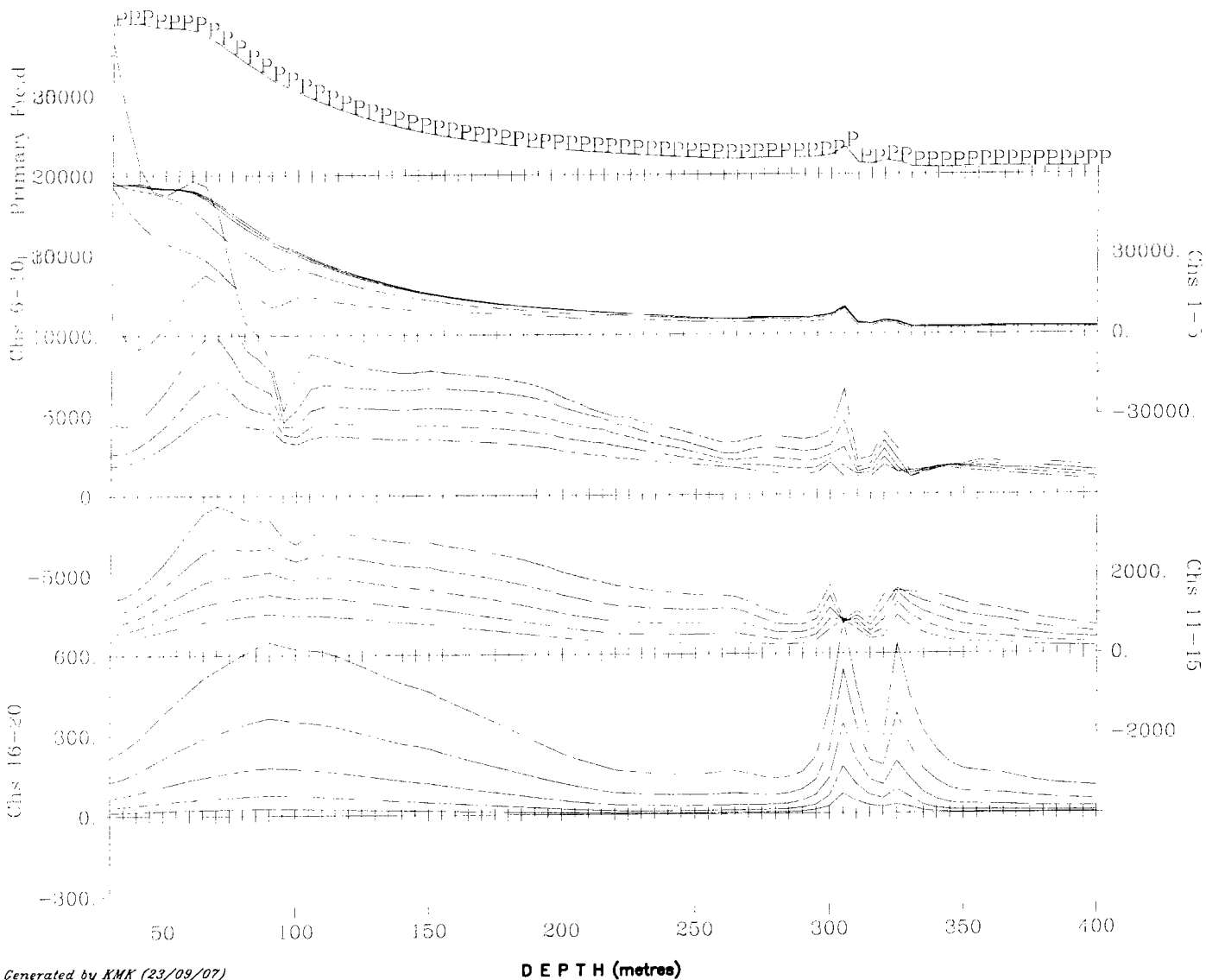
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m x 550m  
 Tx Loop Location: 300W-250E,300S-0  
 Transmitter Current: 21.5 Amps  
 Tx Turn-Off-Time and Rx Delay: 600 us -80 us  
 Borehole Location: 75E, 0N  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m²  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: Sept 23, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D probe+600m cable  
 Tx = Geonics EM-57 (3600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BHLL-Y-TM-GCL07-23-C

Map Generated by KMK (23/09/07)



Borehole GCL07-23 - Total Field  
Collar Loop  
Scale 1:2000

(metres)

**GOLDEN CHALICE RESOURCES INC.**  
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**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

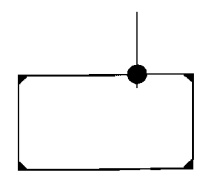
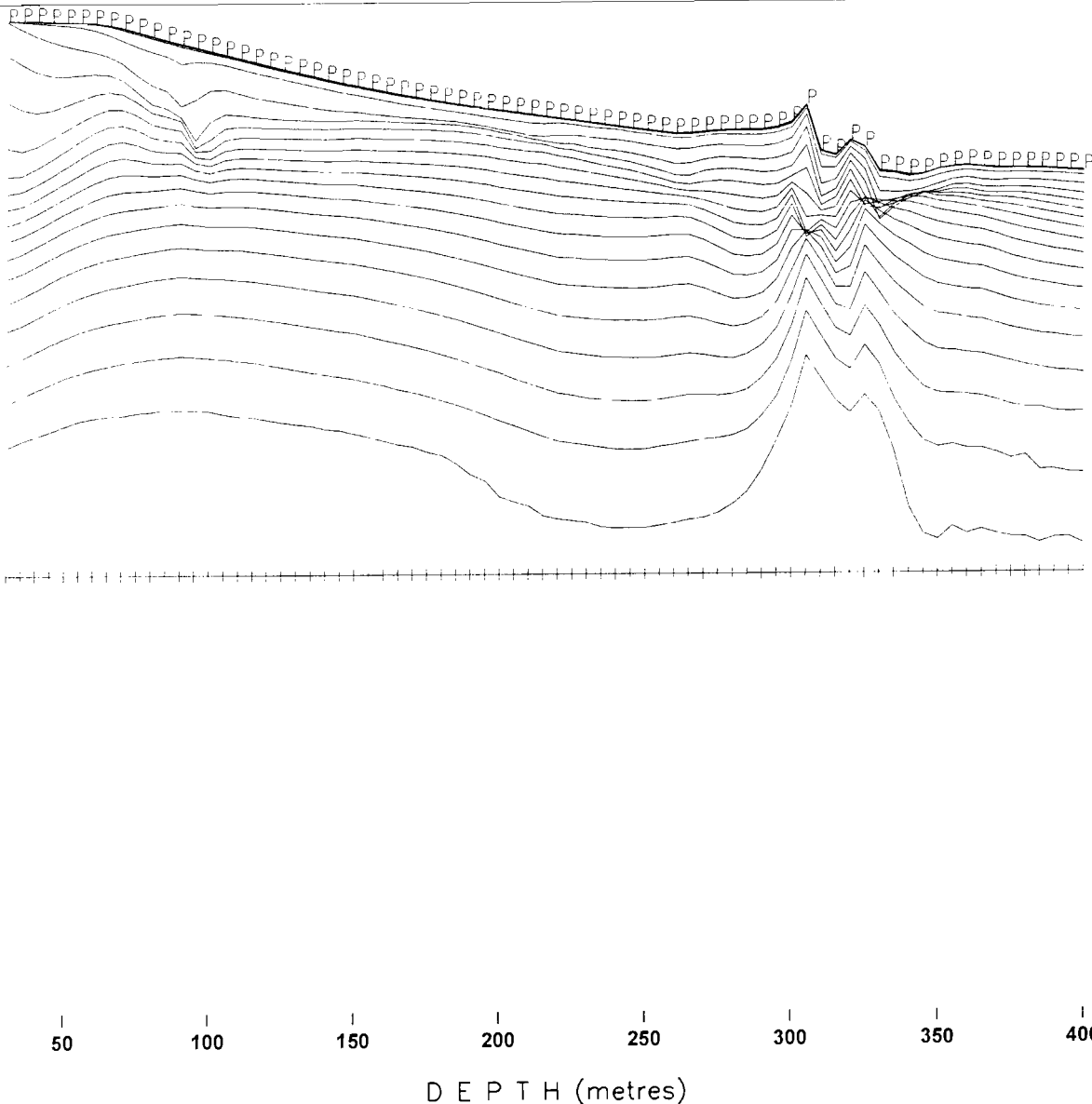
|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size:                  | 300m x 550m                             |
| Tx Loop Location:              | 300W-250E,300S-0                        |
| Transmitter Current:           | 21.5 Amperes                            |
| Tx Turn-Off-Time and Rx Delay: | 600 us, -80 us                          |
| Borehole Location:             | 75E, 0N                                 |
| Borehole Azimuth, Dip:         | 325, -45                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanovolt/m <sup>2</sup>                 |
| Receiver Coil Orientation:     | Hz - positive up                        |
|                                | Hx - positive north, Hy - positive west |
| Cross Component Rotation:      | using Tilt Meter Angles                 |

|                  |                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept 23, 2007                                                                                      |
| Instrumentation: | Rx = Digital Protern (30 Channels)<br>& Geonics 3D probe+600m cable<br>Tx = Geonics EM-57 (3600 W) |

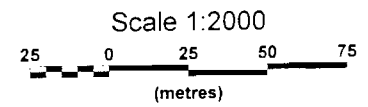
Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. CA00500C-BH4A-Tiltrot-TF-GCL07-23-C

Map Generated by KMK (23/09/07)

DEPTH (metres)



Borehole GCL07-23 - Total Field  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

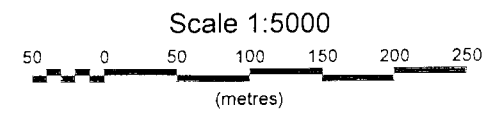
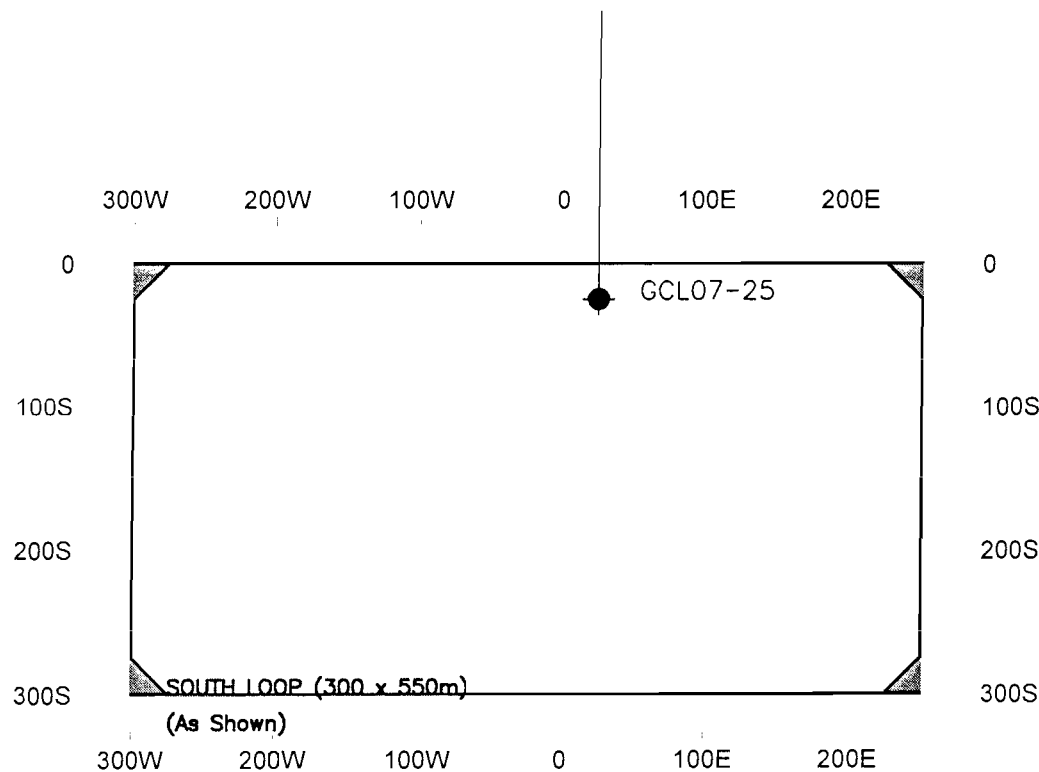
Transmitter Frequency: 30 Hz (50% duty cycle)  
 Tx Loop Size: 300m x 550m  
 Tx Loop Location: 300W-250E;300S-0  
 Transmitter Current: 21.5 Amps  
 Tx Turn-Off-Time and Rx Delay: 600 us -80 us  
 Borehole Location: 75E, ON  
 Borehole Azimuth, Dip: 325, -45  
 Station Interval: 5-10 meters  
 Profile Units: nanoVolt/m<sup>2</sup>  
 Receiver Coil Orientation: Hz - positive up  
 Hx - positive north, Hy - positive west  
 Cross Component Rotation: using Tilt Meter Angles

Survey Date: Sept 23, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D probe+600m cable  
 Tx = Geonics EM-57 (3600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. NO. CA00500C-BH11-TF-Tilt-GCL07-23-C

Map Generated by KMK (23/09/07)

# GCL07-25 - BOREHOLE & LOOP LOCATION MAP



**GOLDEN CHALICE RESOURCES INC.**  
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 TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY  
**BOREHOLE & LOOP LOCATION MAP**  
 GCL07-25

Borehole Parameters: DDH #1 = GCL07-25  
 Location = 0+25E, 0+25S  
 Azimuth & Dip = 325, -50degN

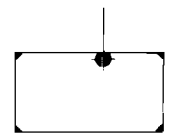
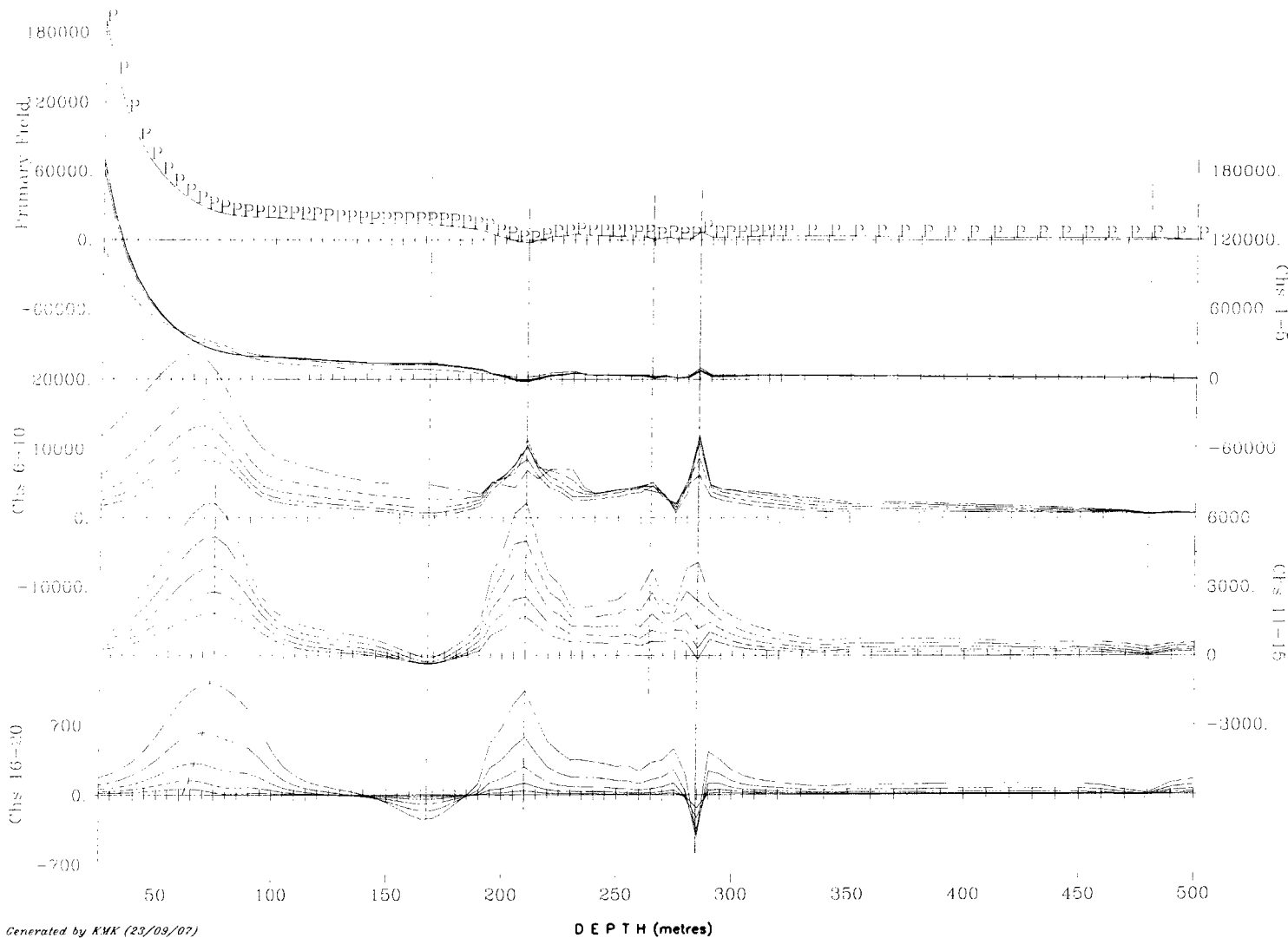
DDH #2 =  
 Location =  
 Azimuth & Dip =

DDH #3 =  
 Location =  
 Azimuth & Dip =

Survey Date: Sept. 22, 2007  
 Instrumentation: Rx = Digital Protem (30 Channels)  
 & Geonics 3D probe+600m cable  
 Tx = Geonics EM-57 (3600 W)

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG. #: CA00500C-BHEM-LOOPLOC-GCL07-25

Map Generated by KMK (23/09/07)



Borehole GCL07-25 - Z Component  
Collar Loop  
Scale 1:2000  
25 0 25 50 75  
(metres)

**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

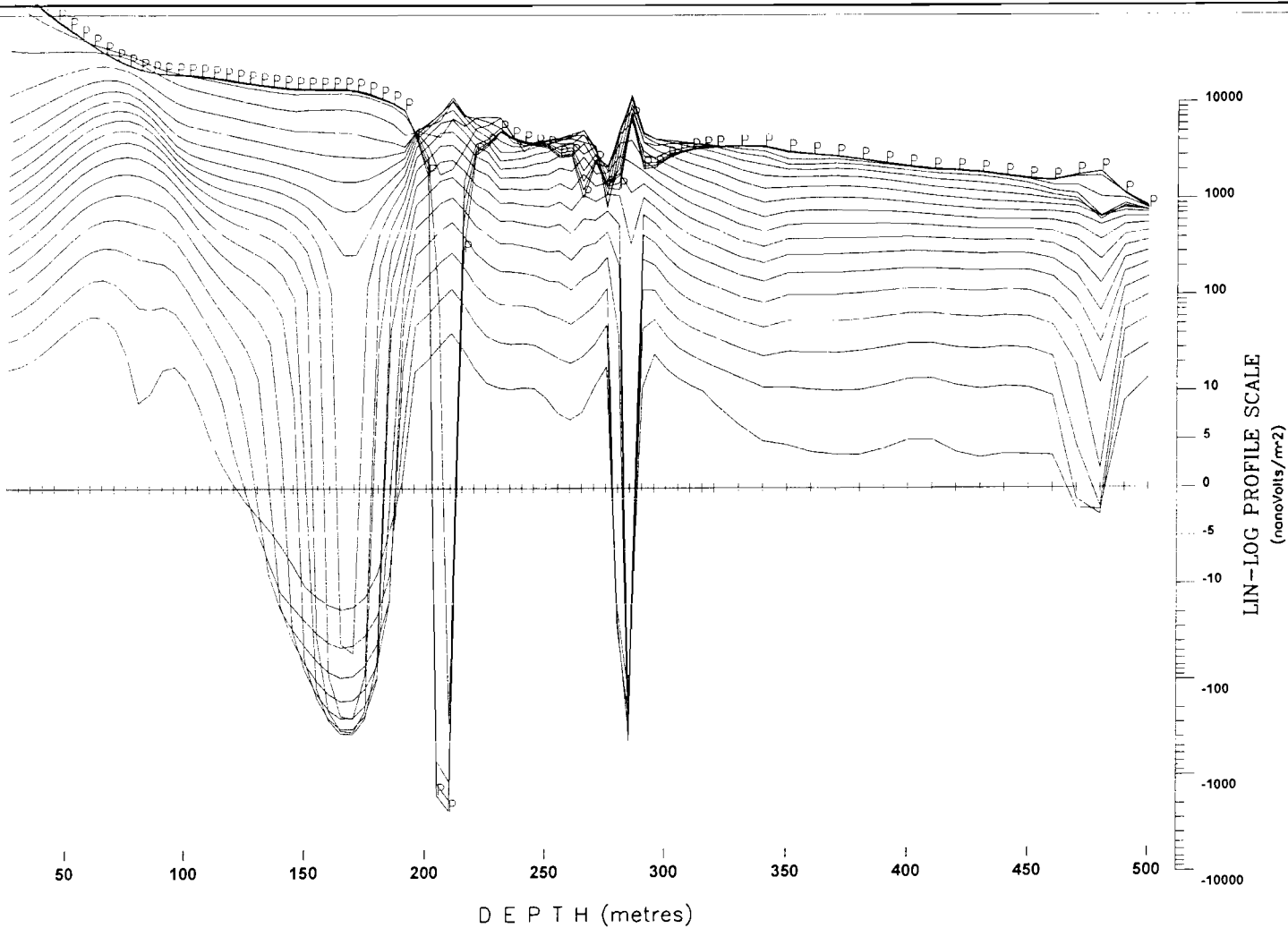
|                               |                                         |
|-------------------------------|-----------------------------------------|
| Transmitter Frequency         | 30 Hz (5000 duty cycle)                 |
| Tx Loop Size                  | 300m x 450m                             |
| Tx Loop Location              | 300W-200E-200N-100E                     |
| Transmitter Current           | 21.5 Amper                              |
| Tx Turn-Off-Time and Rx Delay | 500 us / 100 us                         |
| Borehole Location             | 255.27N                                 |
| Borehole Azimuth, Dip         | 325.0 / 0.0                             |
| Station Interval              | 5-10 metres                             |
| Profile Units                 | nanotesla/m <sup>2</sup>                |
| Receiver Coil Orientation:    | Hx = positive north, Hy = positive west |
| Cross Component Rotation      | using Tilt Meter Angles                 |

Survey Date: Sept 23, 2007  
Instrumentation: Rx = Digital Protem (50 Channels) & Geonics 3D probe+500m cable  
Tx = Geonics EM 57 (3600 W)

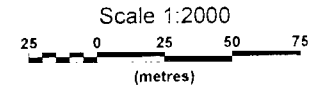
Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG NO CADD500C-BH4A-Tiltrot-Z-GCL07-25-C

Map Generated by KMK (23/09/07)





Borehole GCL07-25 - Z Component  
Collar Loop



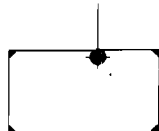
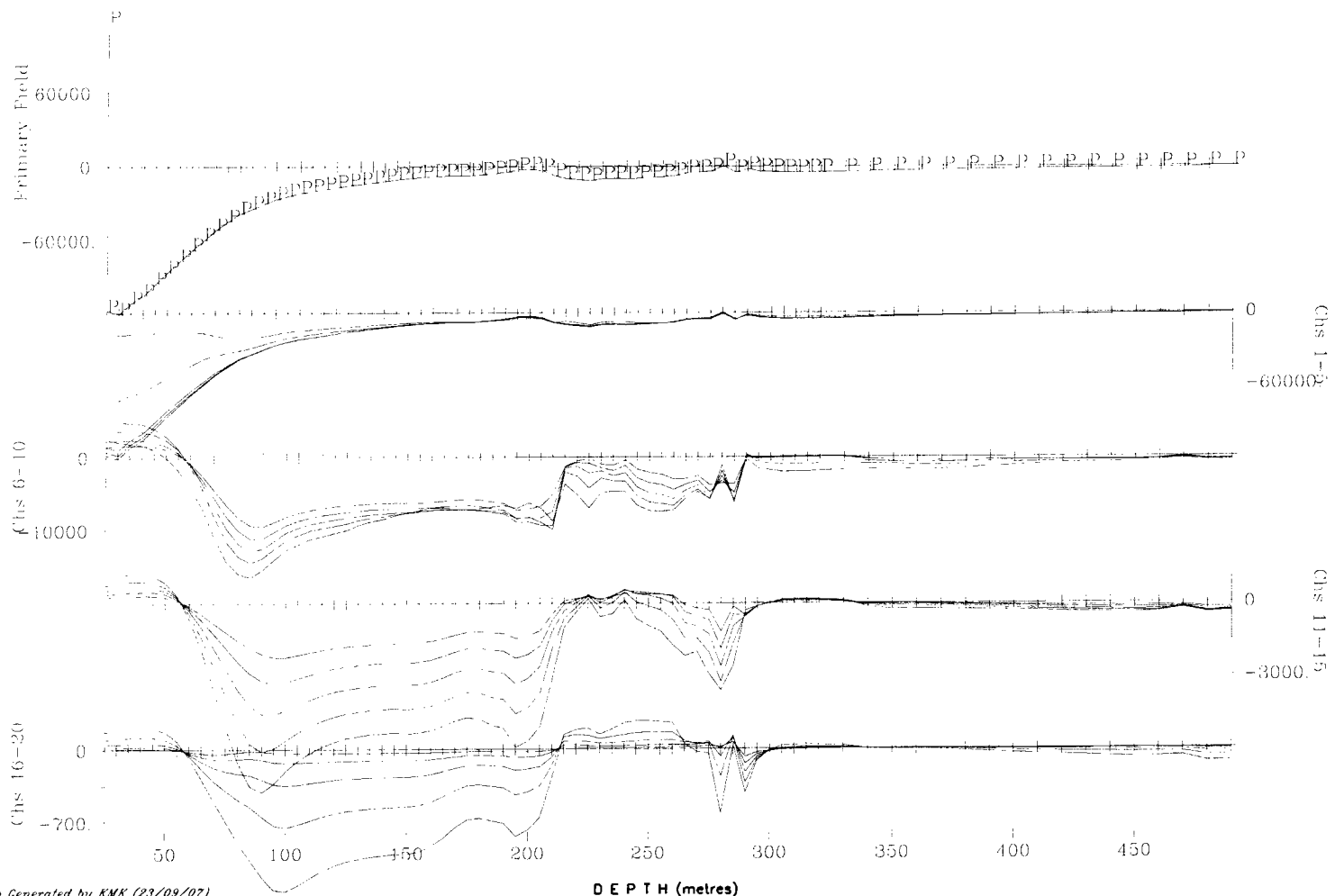
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Transmitter Frequency:         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size:                  | 100m x 550m                             |
| Tx Loop Location:              | 100W-250E, 200S-100N                    |
| Transmitter Current:           | 1.5 Amperes                             |
| Tx Turn-Off-Time and Rx Delay: | 600 us + 80 us                          |
| Borehole Location:             | 25E - 25S                               |
| Borehole Azimuth, Dip:         | 32S, +50                                |
| Station Interval:              | 5-10 meters                             |
| Profile Units:                 | nanoVolts/m^2                           |
| Receiver Coil Orientation:     | Hx - positive up                        |
|                                | Hv - positive north, Hv - positive west |
| Cross Component Rotation:      | Using Tilt Meter Angles                 |

|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept 23 - 2007                                                                                    |
| Instrumentation: | Rx = Digital Proton (10 Channels)<br>& Geonics 3D probe+600m cable<br>Tx = Geonics EM-57 (3500 W) |

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWS NO. GAO05000 (B4) - 2-TIM-GCL07-25-L



Borehole GCL07-25 - X Component  
 Collar Loop  
 Scale 1:2000  
 25 0 25 50 75  
 (metres)

**GOLDEN CHALICE RESOURCES INC.**  
 LANGMUIR PROPERTY  
 TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

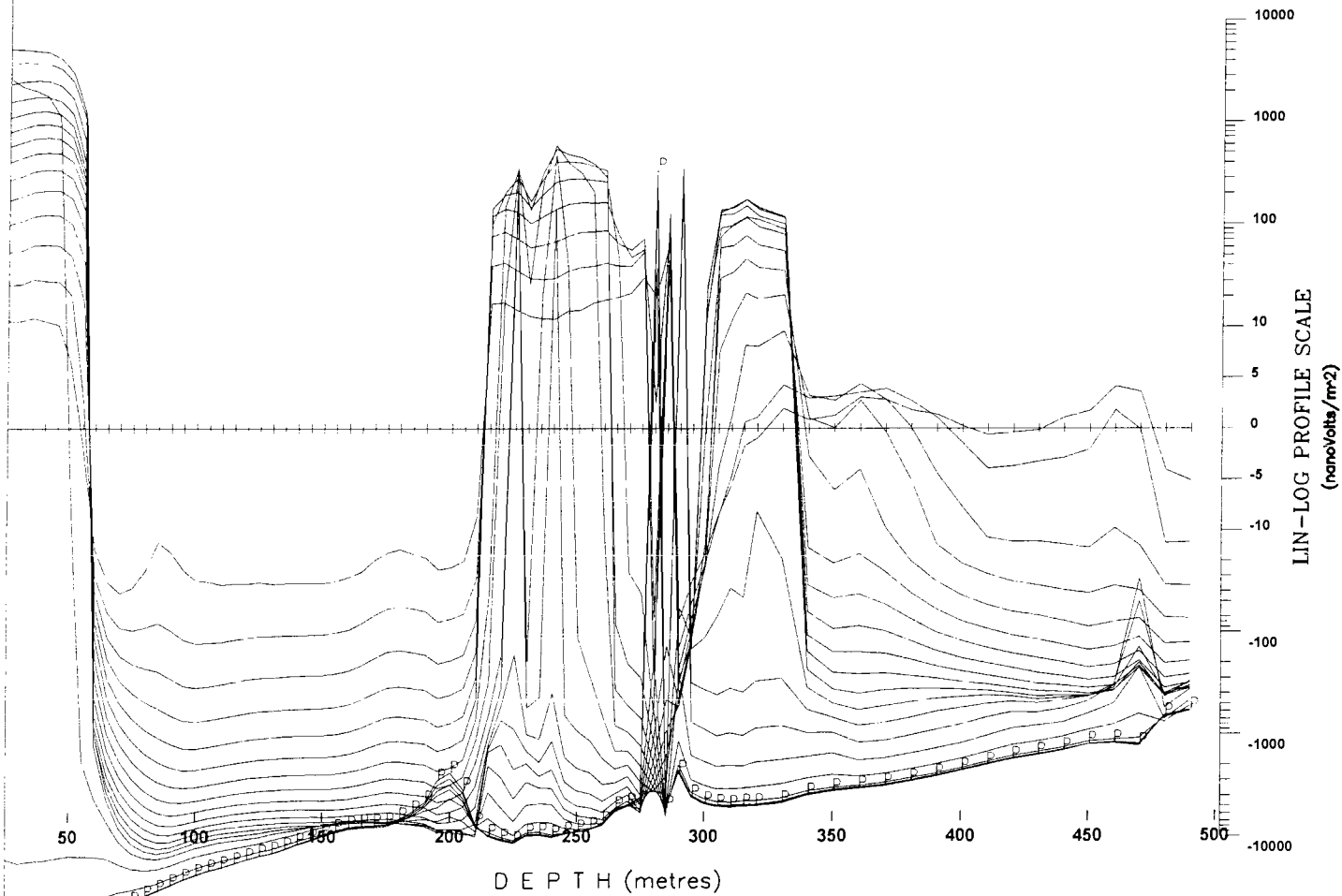
|                               |                                                                   |
|-------------------------------|-------------------------------------------------------------------|
| Transmitter Frequency         | 30 Hz (50% duty cycle)                                            |
| Tx Loop Size                  | 100m x 550m                                                       |
| Tx Loop Location              | 600W-20.0E330.0S-11                                               |
| Transmitter Current           | 2.5 amps                                                          |
| Tx Turn-Off-Time and Rx Delay | min. 1s. 5.0s                                                     |
| Borehole Location             | 25E 26N                                                           |
| Borehole Azimuth, Dip         | 325 10                                                            |
| Station Interval              | 5-10 meters                                                       |
| Profile Units                 | nanotesla/m <sup>2</sup>                                          |
| Receiver Coil Orientation     | 12 positive up                                                    |
| Cross Component Rotation      | Hx - positive north, Hy - positive west<br>using Tri-Meter Angles |

Survey Date Sept 23, 2007  
 Instrumentation Rx = Digital Protem (30 Channels)  
 & Geonics 3D probe-600m cable  
 Tx = Geonics EM-57 (3500 W)

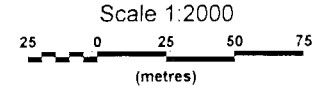


Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
 DWG NO. CA00500C-BH4A-Timrot-X-GCL07-25-C

Map Generated by KNK (23/09/07)



Borehole GCL07-25 - X Component  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

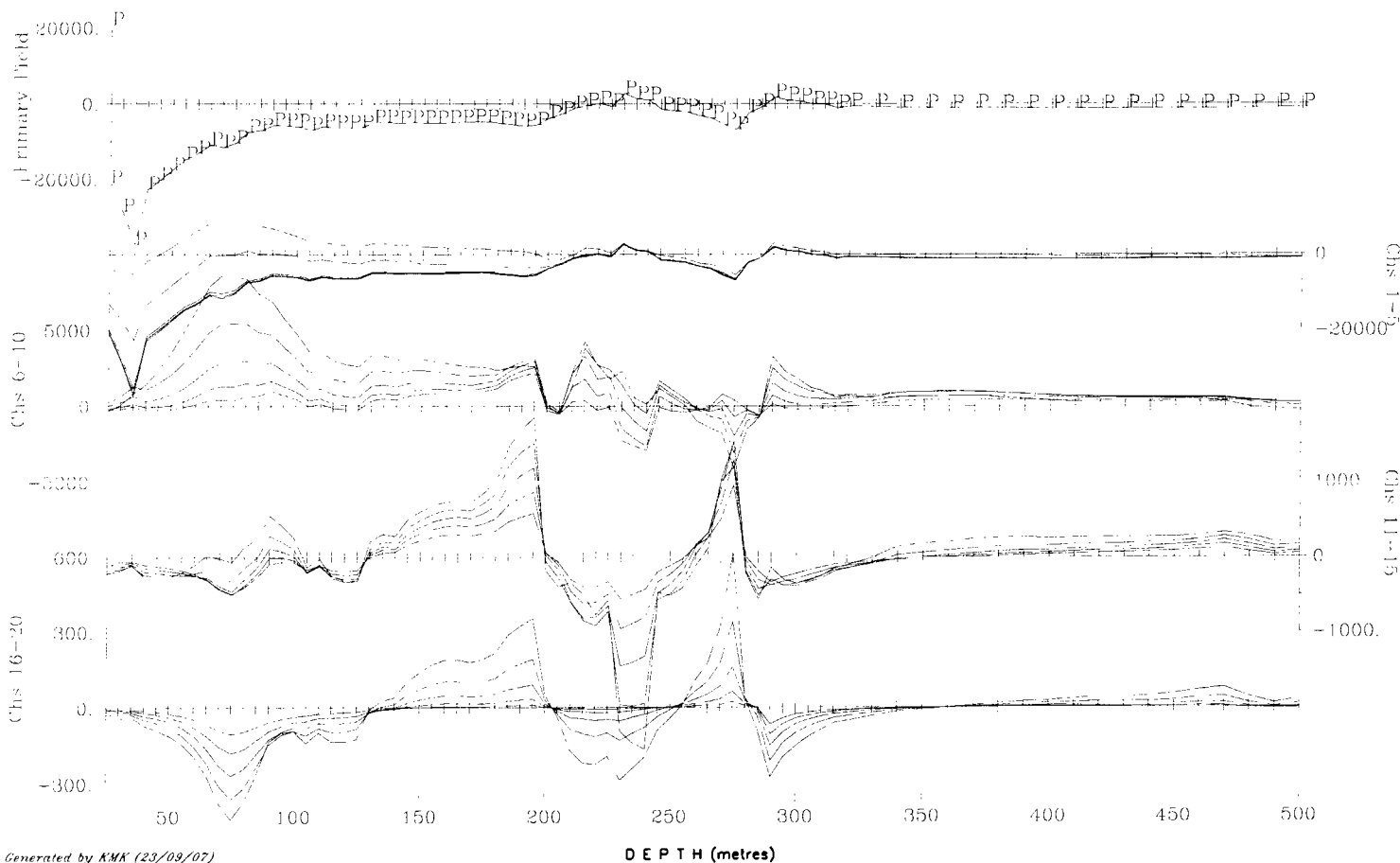
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

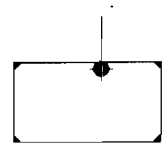
|                               |                                                                                                   |
|-------------------------------|---------------------------------------------------------------------------------------------------|
| Transmitter Frequency         | 30 Hz (50% duty cycle)                                                                            |
| Tx Loop Size                  | 300m x 500m                                                                                       |
| Tx Loop Location              | 490W-250E 300S-4                                                                                  |
| Transmitter Current           | 21.5 Amps                                                                                         |
| Tx Turn-Off-Time and Rx Delay | 600 us - 80 us                                                                                    |
| Borehole Location             | 29E 26S                                                                                           |
| Borehole Azimuth, Dip         | 325 - 89                                                                                          |
| Station Interval              | 5-10 meters                                                                                       |
| Profile Units                 | nanovolt/m^2                                                                                      |
| Receiver Coil Orientation     | Hx - positive east                                                                                |
|                               | Hy - positive north                                                                               |
| Cross Component Rotation      | using TH Meter Angles                                                                             |
| Survey Date                   | Sept 23, 2007                                                                                     |
| Instrumentation               | Rx = Digital Protem (30 Channels)<br>& Geonics 30 probe+600m cable<br>Tx = Geonics EM-57 (3600 W) |

Surveyed & Processed by:  
**QUANTEC GEOSCIENCE LTD.**  
DWG NO CAG05000-BHL-X-TR-3027-25-2

Map Generated by AMK (23/09/07)

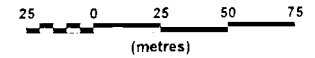


Map Generated by KMK (23/09/07)



Borehole GCL07-25 - Y Component  
Collar Loop

Scale 1:2000



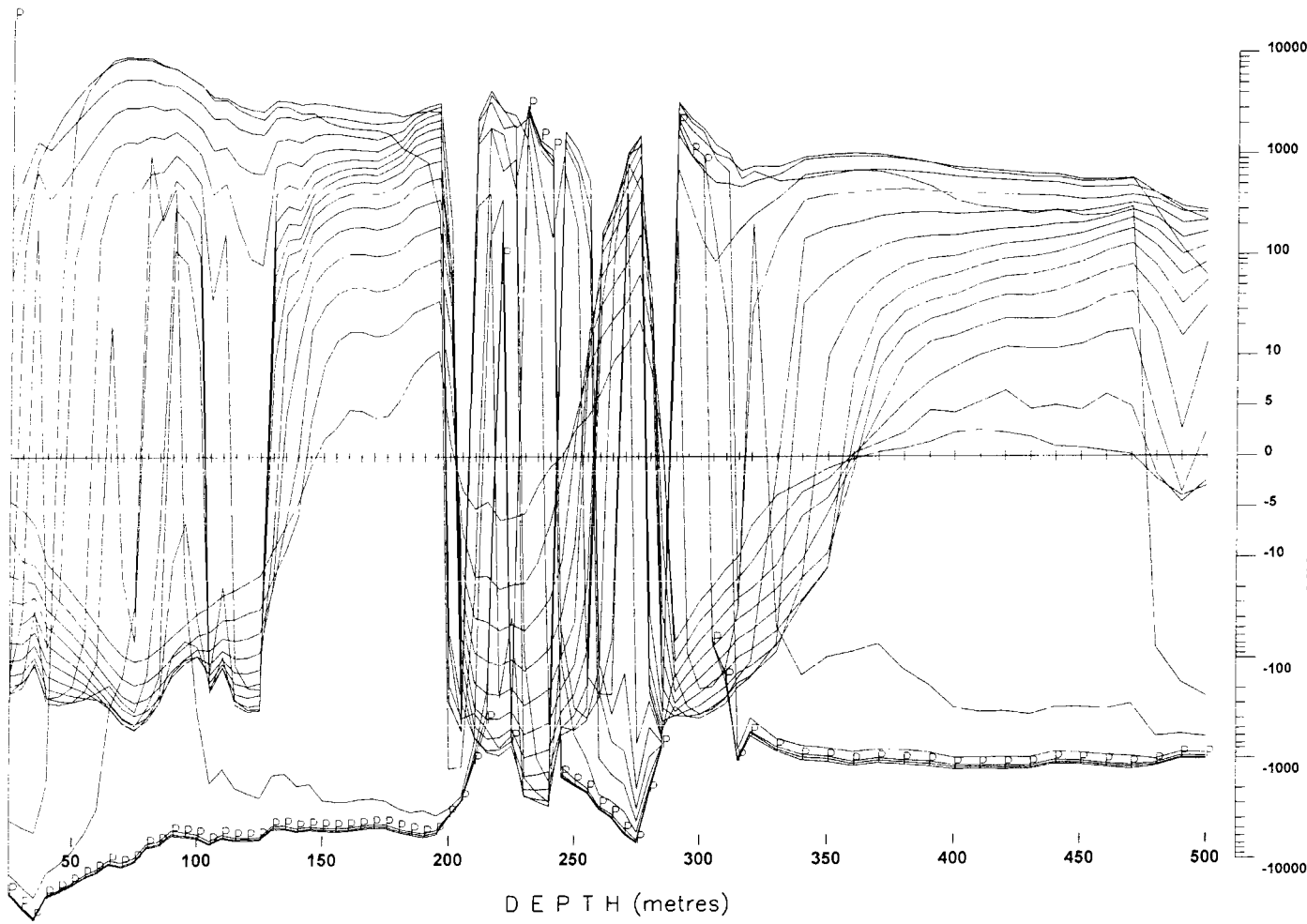
**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

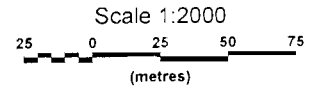
|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| Transmitter Frequency        | 30 Hz (30000 Hz)                                            |
| Tx Loop Size                 | 300m x 300m                                                 |
| Tx Loop Location             | 300W-250E, 300S-0                                           |
| Transmitter Current          | 21.5 Amper                                                  |
| Tx Turn-Off-Time and Rx Del. | 600 us, 40 us                                               |
| Borehole Location            | 251.17W                                                     |
| Borehole Azimuth (d)         | 325.0                                                       |
| Station Interval             | 1.00 meters                                                 |
| Profile Units                | nanotesla/m2                                                |
| Receiver Coil Orientation    | Hx = positive up<br>Ry = positive north, Rz = positive west |
| Cross Component Rotation     | 0 us, 0.11 Meter Angles                                     |

|                 |                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------|
| Survey Date     | Sept 23, 2007                                                                                     |
| Instrumentation | Rx = Digital Protem (30 Channels)<br>& Geonics 3D probe+600m cable<br>Tx = Geonics EM-57 (3600 W) |

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWC NO. CAN05000-B444-Timer-Y-3220-1-0



Borehole GCL07-25 - Y Component  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

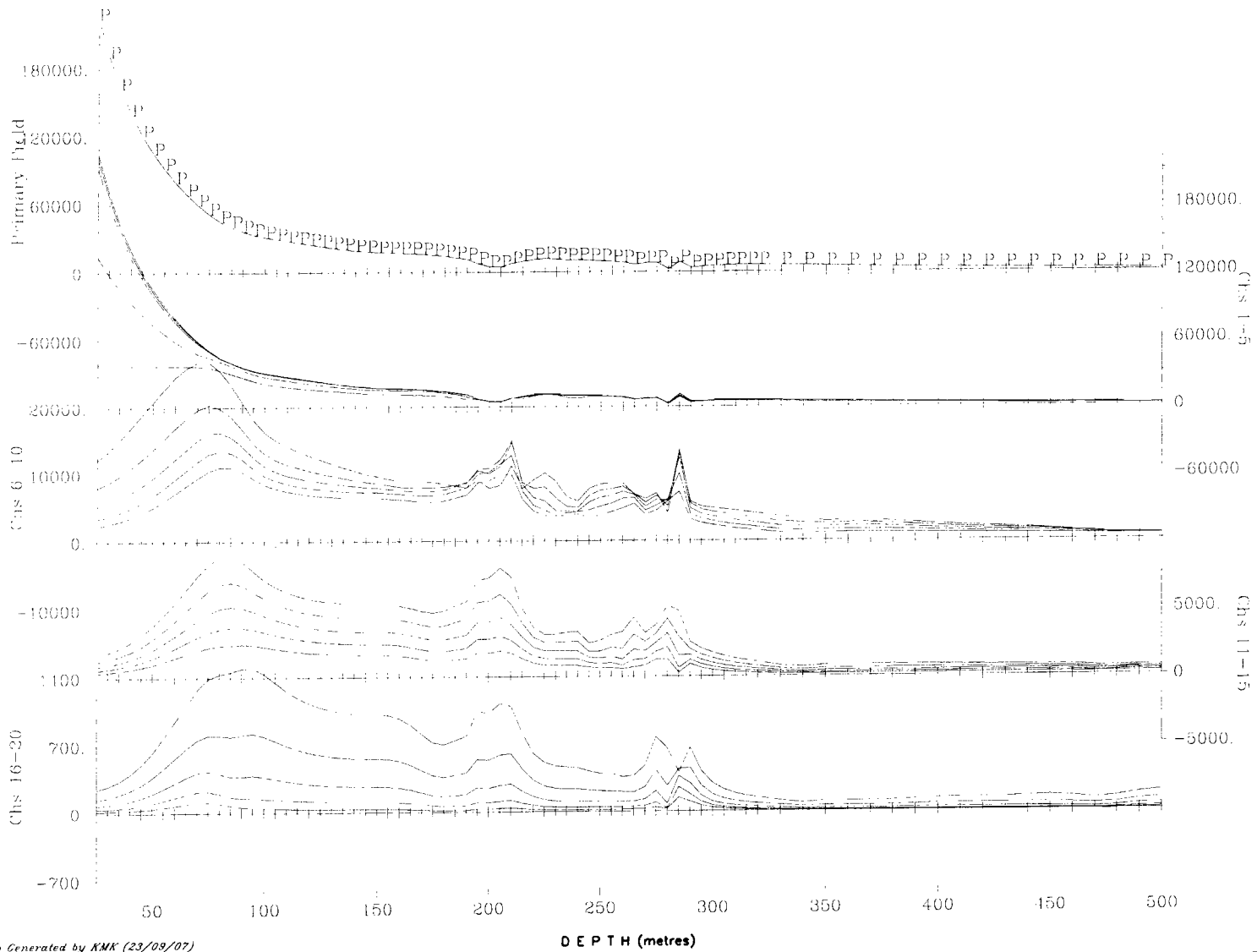
**3D FIXED-LOOP BOREHOLE TEM SURVEY**  
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz - 50% duty cycle  
Tx Loop Size: 200m x 650m  
Tx Loop Location: 300W-250E; 300N-100E  
Transmitter Current: 21.6 Amps  
Tx Turn-Off-Time and Rx Delay: 6.0 us - 8.0 us  
Borehole Location: 248 - 255  
Borehole Azimuth, Dip: 325, -15  
Station Interval: 5-10 meters  
Profile Units: nanoVolts/mr2  
Receiver Coil Orientation: Hz - positive up  
Rx - positive north, Ry - positive west  
Cross-Component Rotation: using Till Meter Angles

Survey Date: Sept 23, 2007  
Instrumentation: Rx = Digital Proton (30 Channels) & Geonics 4D probe-600m cable  
Tx = Geonics EM-57 13600 W

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. GAC00001-01-01-00-17-15

Map Generated by AMK (23/09/07)



Borehole GCL07-25 - Total Field  
Collar Loop  
Scale 1:2000  
25 0 25 50 75  
(metres)

**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

**3D FIXED-LOOP BOREHOLE TEM SURVEY**

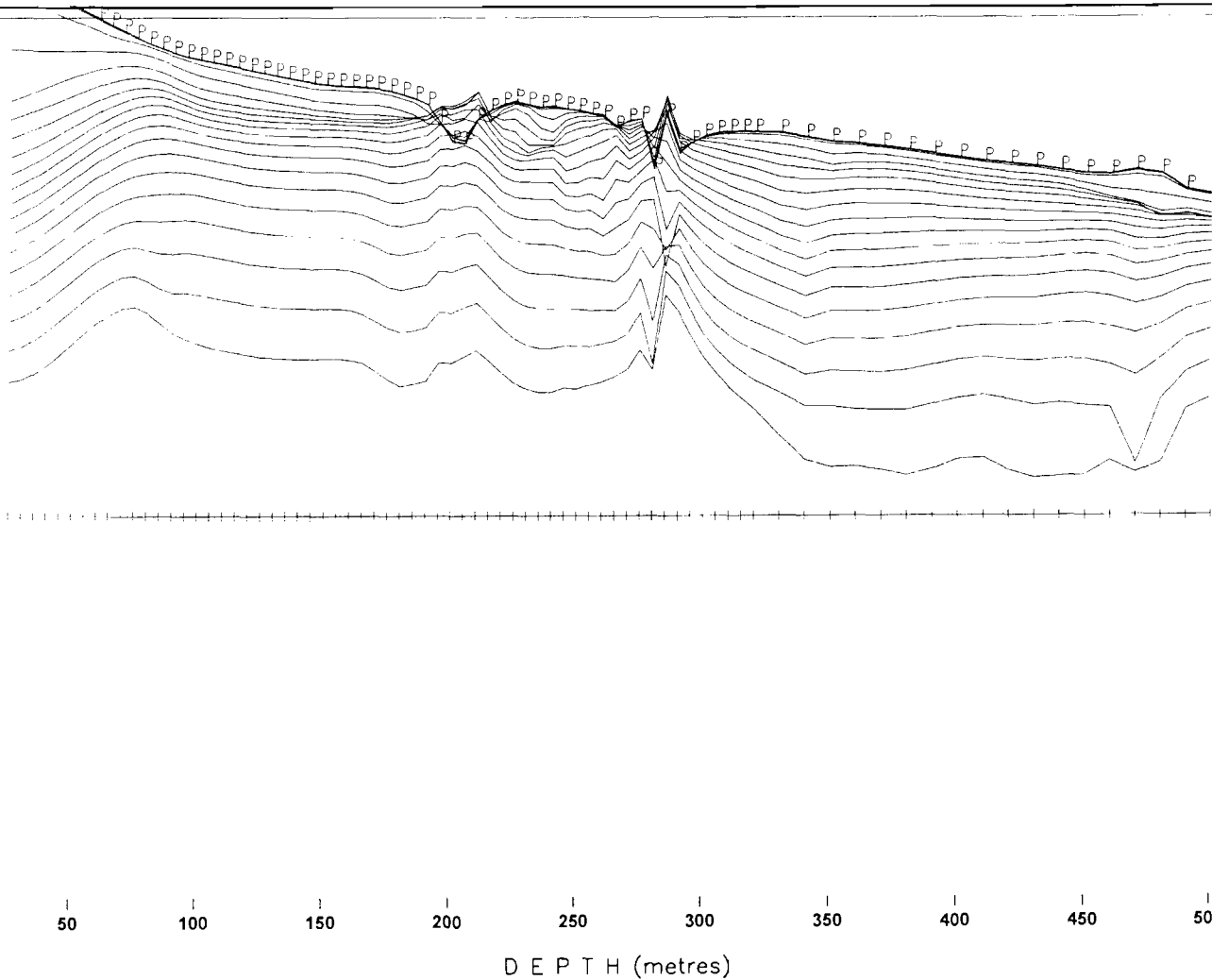
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency 10 Hz (50% duty cycle)  
Tx Loop Size 30m x 30m  
Tx Loop Location 300W-250E, 300S N  
Transmitter Current 21.5 Amps  
Tx Turn-Off-Time and Rx Delay 600 us, 180 us  
Borehole Location 25E, 25S  
Borehole Azimuth, Dip 326, 51  
Station Interval 4-10 meters  
Profile Units mV/dt/m?  
Receiver Coil Orientation 42 - positive up  
Rx - positive north, Ry - positive west  
Cross Component Rotation using Tilt Meter Angles

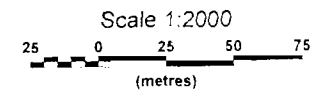
Survey Date Sept 27, 2007  
Instrumentation Rx = Datal Preter-730 Channels  
& Geonics 3D cable+600m cable  
Tx = Geonics EM-57 (3600 W)

Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG NO CA00500C-BH4A-Tiltrot-IF-GCL07 2F-C

Map Generated by RMK (23/09/07)



Borehole GCL07-25 - Total Field  
Collar Loop



**GOLDEN CHALICE RESOURCES INC.**  
LANGMUIR PROPERTY  
TIMMINS, ON

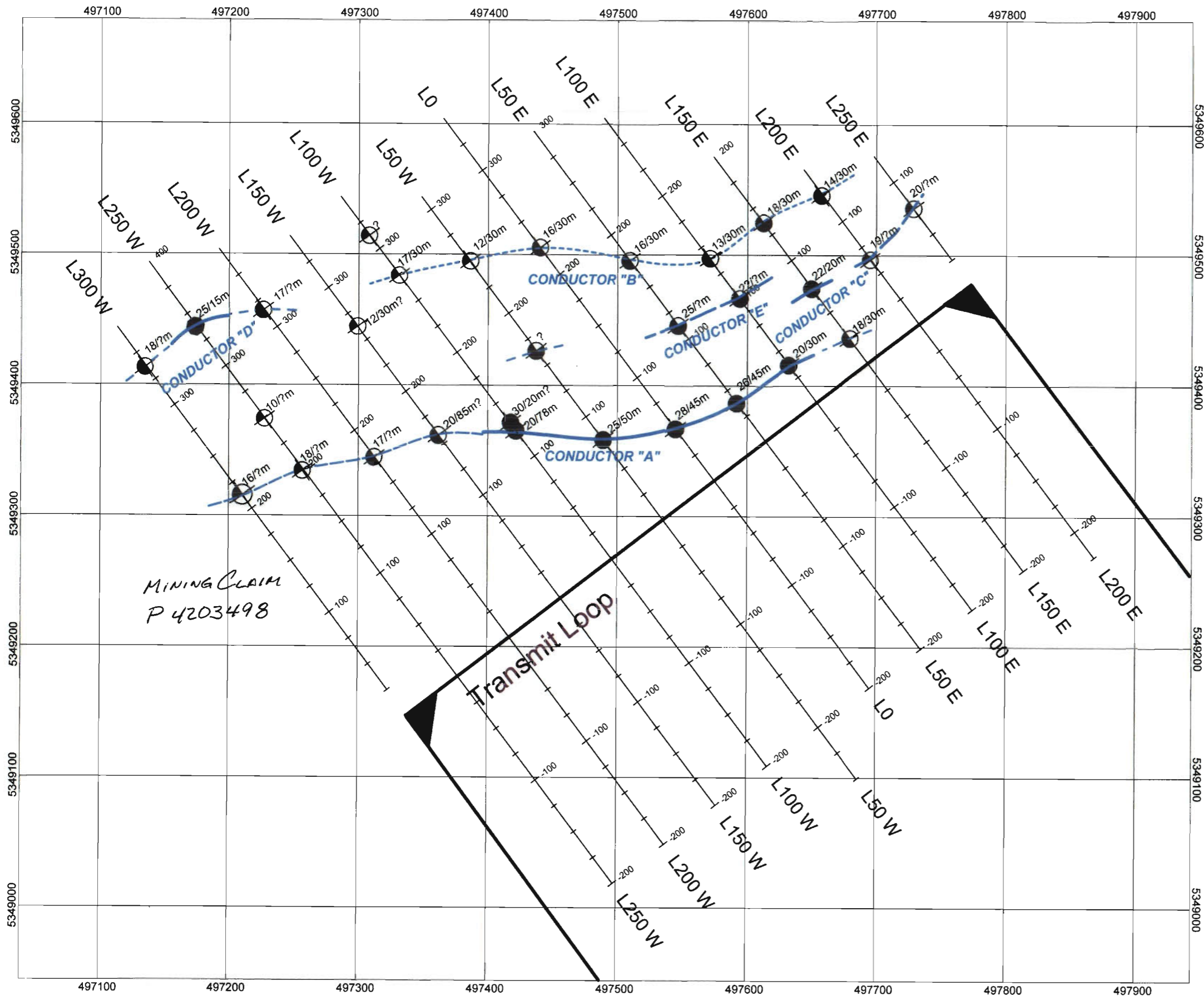
**3D FIXED-LOOP BOREHOLE TEM SURVEY**

Secondary Electromagnetic Field (dB/dt)

|                               |                                         |
|-------------------------------|-----------------------------------------|
| Transmitter Frequency         | 30 Hz (50% duty cycle)                  |
| Tx Loop Size                  | 300m x 300m                             |
| Tx Loop Location              | 300W-250E, 300S 0                       |
| Transmitter Current           | 21.5 Amps                               |
| Tx Turn-Off Time and Rx Delay | 400 us - 80 us                          |
| Borehole Location             | 25E, 25S                                |
| Borehole Azimuth, Dip         | 32E, -5D                                |
| Station Interval              | 5-10 metres                             |
| Profile Units                 | nanoV/mr²                               |
| Receiver Coil Orientation     | Hx = positive up                        |
|                               | Hx = positive north, Hy = positive west |
| Cross Component Rotation      | Using Tilt Meter Angles                 |

|                  |                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------|
| Survey Date:     | Sept 23, 2007                                                                                     |
| Instrumentation: | Rx = Digital Protem (30 Channels)<br>& Geonics 3D probe+600m cable<br>Tx = Geonics FM-57 (3600 W) |

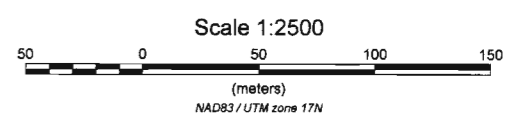
Surveyed & Processed by  
**QUANTEC GEOSCIENCE LTD.**  
DWG. NO. G400500C-R+L-TE-TM GCL07-25-1



**LEGEND**

- VERY STRONG CONDUCTOR
- STRONG CONDUCTOR
- MODERATE CONDUCTOR
- WEAK CONDUCTOR
- QUESTIONABLE CONDUCTOR
- Number of Anomalous Channels Responding/  
Estimated Target Depth

Interpretation by: Quantec Geoscience - Woody Coulson (10/07)



|                                                                                                                |
|----------------------------------------------------------------------------------------------------------------|
| <b>GOLDEN CHALICE RESOURCES INC.</b>                                                                           |
| <b>LANGMUIR PROPERTY, TIMMINS, ON<br/>SURFACE TRANSIENT ELECTROMAGNETIC SURVEY<br/>INTERPRETATION PLAN MAP</b> |
| Survey Period: September 2007<br>Interpreted by: Woody Coulson<br>Map #: CA00500C-TEM-INTERP                   |
| <b>Surveyed by: QUANTEC GEOSCIENCE LTD.</b>                                                                    |