Quantec Geoscience Ltd.
5825 King Street
Porcupine, ON P0N 1C0
Phone (705) 235-2166
Fax (705) 235-2255

Quantec Geoscience Ltd.

Geophysical Survey Logistical Report

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

QGL QGL QGL QGL QGL QGL

S.T. Coulson
May 2009
Project CA00636C

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF TABLES AND FIGURES

1. INTRODUCTION

- **QGL Project No:** CA00636C
- **Project Name:** Langmuir Property
- **Survey Period:** February 9th to May 6th, 2009
- **Survey Type**: Borehole Transient EM
- **Client:** **GOLDEN CHALICE RESOURCES INC.**
- **Client Address** 711-675 West Hastings St.
  Vancouver, BC V6B 1N2
- **Representatives:** Kevin Montgomery
- **Objectives:**

  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:** Logistics

2. GENERAL SURVEY DETAILS

2.1 Location

- **Township:** Langmuir
- **Province:** Ontario
- **Country:** Canada
- **Nearest Settlement:** South Porcupine
- **NTS Map Reference #:** 42 A/06

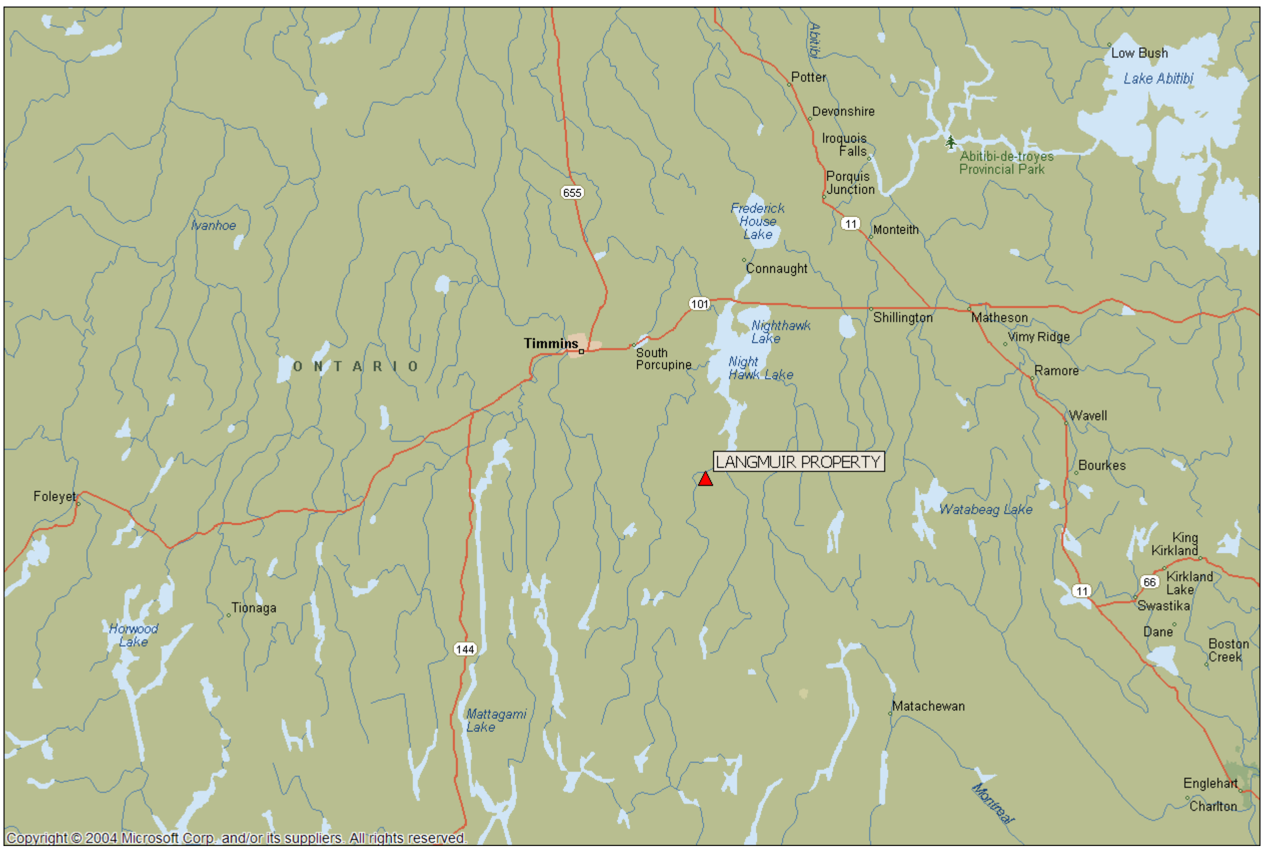


Figure 1: General Location of the Langmuir Property

2.2 ACCESS

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

2.3 SURVEY GRID

- **Coordinate Reference System:** UTM Nad83
- **Established:** na
- **Line Direction:** na
- **Line Separation:** na
- **Station Interval:** na
- **Method of Chaining:** na

3. SURVEY WORK UNDERTAKEN

3.1 GENERALITIES

- **Survey Dates:** February 9th to May 6th, 2009, 2008
- **Survey Period:** 9 days
- **Survey Days (read time):** 9
- **Down Days:** 0
- **Survey Coverage:** 2,596m

3.2 PERSONNEL

- **Project Supervisor:** Woody Coulson, Porcupine, ON
- **Project Managers:** Woody Coulson, Porcupine, ON
  Peter Cullinane, Owen Sound, ON
  David MacGillivray, New Liskeard, ON
- **Technicians:** Nick Hnotchuk, Timmins, ON
  Rylee Lamothe, South Porcupine, ON
  Josh McLaren, Timmins, ON

3.3 SURVEY SPECIFICATIONS

- **Configuration:** Borehole Profiling
- **Output Power Stage:** Low Power
- **Dimension:** 3 Component (X,Y and Z)
- **Loop Sizes:** 200m x 200m
- **Sampling Interval:** 5 and 20 meters

3.4 SURVEY COVERAGE

Hole #	Collar – UTM Nad83 (Local)	Az/Dip	Start	End	Total (m)
GCL09-01	499100E, 5349185N	325°/-70°	60	383	323
GCL09-03	499563E, 5348153N	325°/-55°	10	400	390
GCL09-04	499522E,5348216N	360°/-45°	10	240	230
GCL09-05	498847E,5349348N	360°/-70°	20	390	370
GCL09-07	499030E,5349230N	360°/-53°	60	338	278
GCL09-09	498845E,5348990N	360°/-50°	30	245	215
GCL09-10	499010E,5349250N	360°/-55°	40	370	330
GCL09-11	497971E,5349428N	360°/-65°	30	495	465

Table I: Borehole TEM Survey Coverage

3.5 INSTRUMENTATION

- **Receiver:** Geonics Digital Protem 20 or 30 channel capability
- **Coils:** BH43-3D Probe (100 m^2 effective area)
- **Transmitter:** Geonics EM-37 (2.8 kW output)
- **Power Supply:** Geonics GPU-2000 (Honda 5.5hp engine and Georator 400Hz alternator)

3.6 SURVEY PARAMETERS

Pulse repetition frequency:	30Hz
Gain:	2-6
Integration number:	15 sec
Loop Size:	200m x 200m
Current:	15 Amps
Turn-off time:	450μs
Gate positions	8-6136μs (see Appendix C)
Synchronization mode:	Crystal

Table II: System Parameters for Borehole TEM Survey

Hole #	Loop Size	UTM Coordinates
GCL09-01	200m x 200m	NW – 498960E, 5349210N NE – 499113E, 5349320N SE – 499235E, 5349157N SW – 499087E, 5349038N
GCL09-03 GCL09-04	200m x 200m	NW – 499398E, 5348192N NE – 499585E, 5348292N SE – 499694E, 5348157N SW – 499515E, 5348008N
GCL09-05	200m x 200m	NW – 498745E, 5349398N NE – 498948E, 5349400N SE – 498946E, 5349201N SW – 498746E, 5349199N
GCL09-07	200m x 200m	NW – 498982E, 5349236N NE – 499146E, 5349352N SE – 499261E, 5349188N SW – 499097E, 5349072N
GCL09-09	200m x 200m	NW – 498745E, 5349040N NE – 498946E, 5349039N SE – 498946E, 5348839N SW – 498746E, 5348840N
GCL09-10	200m x 200m	NW – 498910E, 5349350N NE – 499110E, 5349349N SE – 499110E, 5349149N SW – 498910E, 5349150N
GCL09-11	200m x 200m	NW – 497819E, 5349385N NE – 497990E, 5349505N SE – 498103E, 5349342N SW – 497934E, 5349221N

Table III: Loop Locations 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 IV: Coil Conventions for Borehole TEM Survey

- **Measured Parameters:** dB/dt, mV.
- **Data Reduction**[1]**:** nanoVolts/metre^2 (nV/m^2)

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 @ 1:2000 with variable vertical (profile) scales to best display data

[1] Equivalent to Crone units of nanoTesla/second normalized to a unit current.

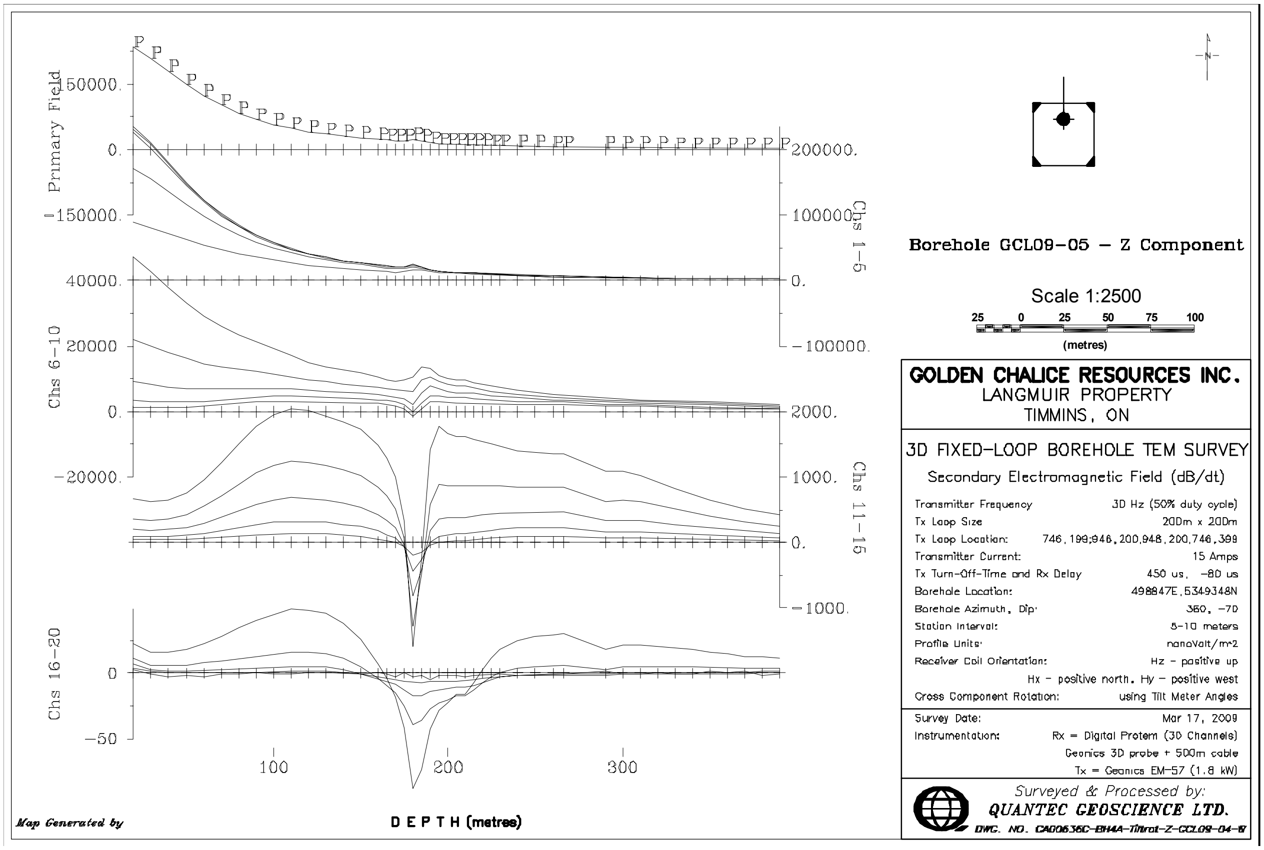


Figure 2: 4 Axis Borehole TEM Profile Format

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

  a) raw rotated data dump files, according to acquisition date, (DDMMYY.RAW) (i.e. 050608.raw). Geonics Digital Protem format (refer to Protem manual)

  b) reduced XYZ ASCII data files, according to line/hole number and component (i.e. G807kt.xyz where, k=component – Z, X, Y or T for Total Field and t gate group – e for Ch 1-10 and l for Ch 11-30).

  Column 1: N-S Line/E-W Station number
  Column 2: E-W Station/N-S Line number
  Column 3: Primary pulse (nV/m^2)
  Column 4: Channel 1 secondary rate of decay of TEM field (nanoVolt/ampere*m^2)
  Column 5: Channel 2
  ⇓
  Column 23: Channel 20 secondary rate of decay of TEM field (nanoVolt/ampere*m^2)

4. SURVEY SUMMARY

The borehole TEM surveys over the Langmuir Property progressed smoothly. Holes were logged immediately after drilling with the drill on site to insure the entire whole was completed. Access to the property during the winter was good and all holes were accessed directly by truck except holes 9, 10 and 11 where the Argo ATV was required.

RESPECTFULLY SUBMITTED
QUANTEC GEOSCIENCE LTD.

S.T. Coulson, P.Geo.
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
May 2009

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 (dBs/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.

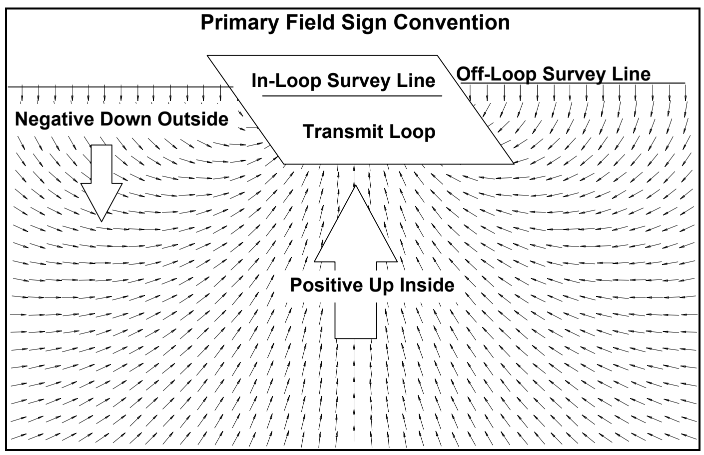


Figure B1: Primary field sign convention for TEM surveys.

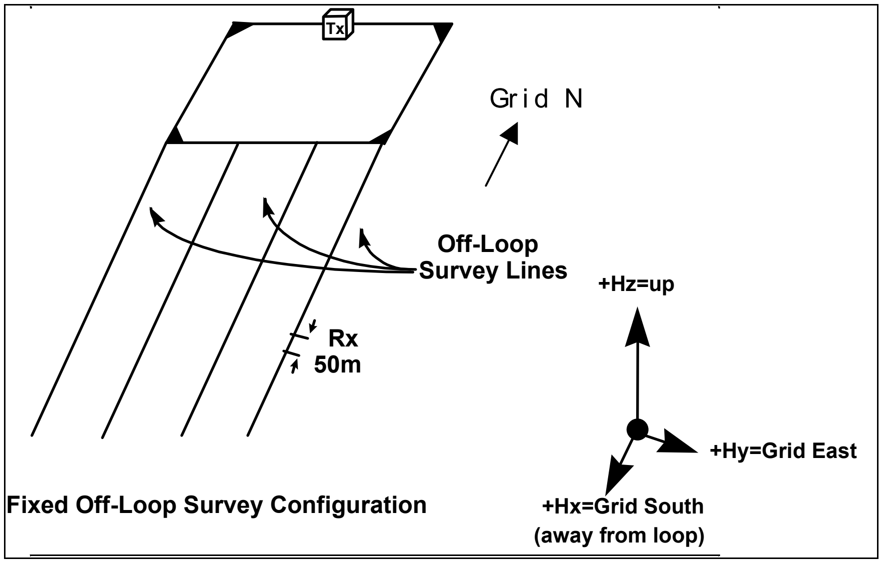


Figure B2: Loop Configuration and Polarity Conventions for Off-Loop Profiling Surveys

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 (Hx, Hy, Hz) 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.

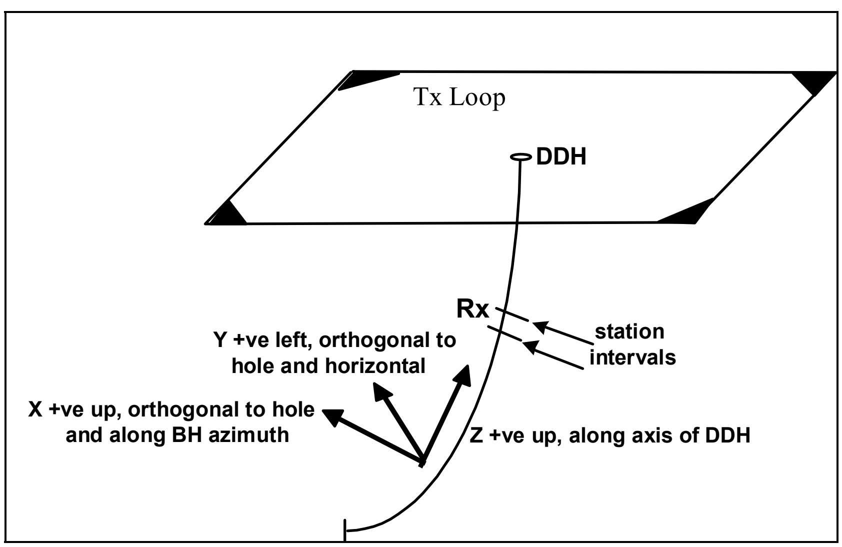


Figure B3: Loop Configuration and Polarity Conventions for 3-D Borehole Surveys

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) Hz is positive up along the axis of borehole,
b) Hx is positive perpendicular to the borehole axis and pointing upward, in a vertical plane, in the direction

of the azimuth of the hole,

c) Hy is positive 90° counterclockwise to Hx 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[1]

$$\text{Target Response to Transmitter Current Waveform:} \quad emf = \frac{1}{\tau} e^{-t/\tau}$$

$$\begin{aligned} \text{where: } t &= \text{fixed time} \\ e &= \text{exponential decay} \\ \tau &= \text{time constant of conductor} \end{aligned}$$

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 τ 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:

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

$$\begin{aligned} \text{where } \sigma &= \text{conductivity of target} \\ \mu &= \text{magnetic susceptibility} \\ t &= \text{thickness of plate} \\ h &= \text{vertical extension of plate} \end{aligned}$$

Equation 2: Transient EM Decay Time Constant

[1] From Geonics Limited, EM-37 TEM System Design Parameter, Mississauga, Ont., 1982.

$$\textit{thereby giving, for an infinite vertical sheet:}$$

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

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

$$Htot = \sqrt{Hx^2 + Hy^2 + Hz^2} \, nanoVolt / Am^2.$$

Equation 4: Transient EM Total Secondary Field

APPENDIX C

INSTRUMENT SPECIFICATIONS

Geonics Limited
Digital Protem Ground Transient Electromagnetic System
Technical Specifications

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 μsec 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 (ρ_a)
(4) Curve of apparent resistivity (ρ_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^{o}C to +50^{o}C

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

	30/25Hz			**7.5/6.25Hz**			**3/2.5Hz**		
30 gate mode	**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

Current Wave form: bipolar square wave.

Repetition Rate: 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.

Turn-off Time(t): fast linear turn-off maximum of 450 μsec. at 30 amps into a 300x600 meter loop. Decreases proportionally with current and the root of the loop area to a maximum of 20 μsec. Actual value of t read on front panel meter.

Transmitter Loop: 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.

Protection: 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.

Output voltage: 24 to 160 volts (zero to peak) maximum

Output power: 2800 watt maximum

Motor generator: 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

Transmitter Console : 20 by 42 by 32 cm, 20 kg

GPU: 44 by 32 by 21 cm, 65 kg

GEONICS LIMITED

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

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

Cable

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

APPENDIX D

PRODUCTION LOG

LANGMUIR PROJECT					
BOREHOLE TEM SURVEYS					
Date	**Description**	**Hole #**	**Start**	**End**	**Total (m)**
9-Feb-09	Mob to Langmuir property. Lay 200m loop centred over hole. Dummy lower portion of hole - blocked at 390m. Log lower portion of hole from 240m - 383m. Wait for drillers to pull rods. Dummy hole again - blockage at bottom of casing. Drillers lower rods to bottom of casing to clear obstruction. Dummy again but hole still blocked. Drillers lower rods to 190m. Dummy hole - clear to 240m. Log upper portion of hole. Retrieve loop and depart property at 7pm.	GCL09-01	60	383	323
22-Feb-09	Mob to Langmuir property. Lay 200m loop centred over hole. Dummy lower portion of hole - clear to 400m. Log lower portion of hole from 200m - 400m. Wait for drillers to pull rods. Dummy hole again - clear to 200. Log top portion of the hole.	GCL09-03	10	400	390
26-Feb-09	Mob to property. Relay same loop as hole 3. Dummy hole to bottom through rods. Lose dummy probe and 60m of cable on way back up getting caught on bit. Drillers pull rods. Re-dummy hole to bottom. Log hole, retrieve loop and demob property.	GCL09-04	10	240	230
17-Mar-09	Mob to property. Lay 200m loop. Log lower portion of the hole from 290m - 390m. Drillers pull back rods to 150m. Log from 160m - 266m. Drillers pull remaining rods and log hole from 20m - 160m. Retrieve loop and demob property.	GCL09-05	20	390	370
24-Mar-09	Mob to property. Lay 200m loop. Log lower portion of the hole from 300m - 340m. Drillers pull rods. Log from 60m - 290m. Retrieve loop and demob property.	GCL09-07	60	338	278
16-Apr-09	Cullinane and Hnotchuk mob to property. Lay 200m loop and log hole. Retrieve loop and demob.	GCL09-09	30	245	195
21-Apr-09	Cullinane and Lamothe mob to property. Lay 200m loop. Dummy and log lower portion of hole from 300m - 370m. Drillers lift rods to 200m. Dummy and log hole from 200m - 310m. Drillers pull all rods. Log upper portion of hole from 40m - 210m. Retrieve loop and demob.	GCL09-10	40	370	330
3-May-09	Coulson and McLaren mob to property. Lay 200m loop. Dummy and log lower portion of hole from 300m - 400m. Drillers pull all rods. Dummy and log upper portion of hole from 30m - 320m. Leave loop to log hole extension.	GCL09-11	30	395	365
6-May-09	Cullinane and McLaren mob to property. Dummy and log bottom portion of hole. Retrieve loop and demob property.	GCL09-11	380	495	115

APPENDIX E

LIST OF MAPS

- **LPTEM 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^2

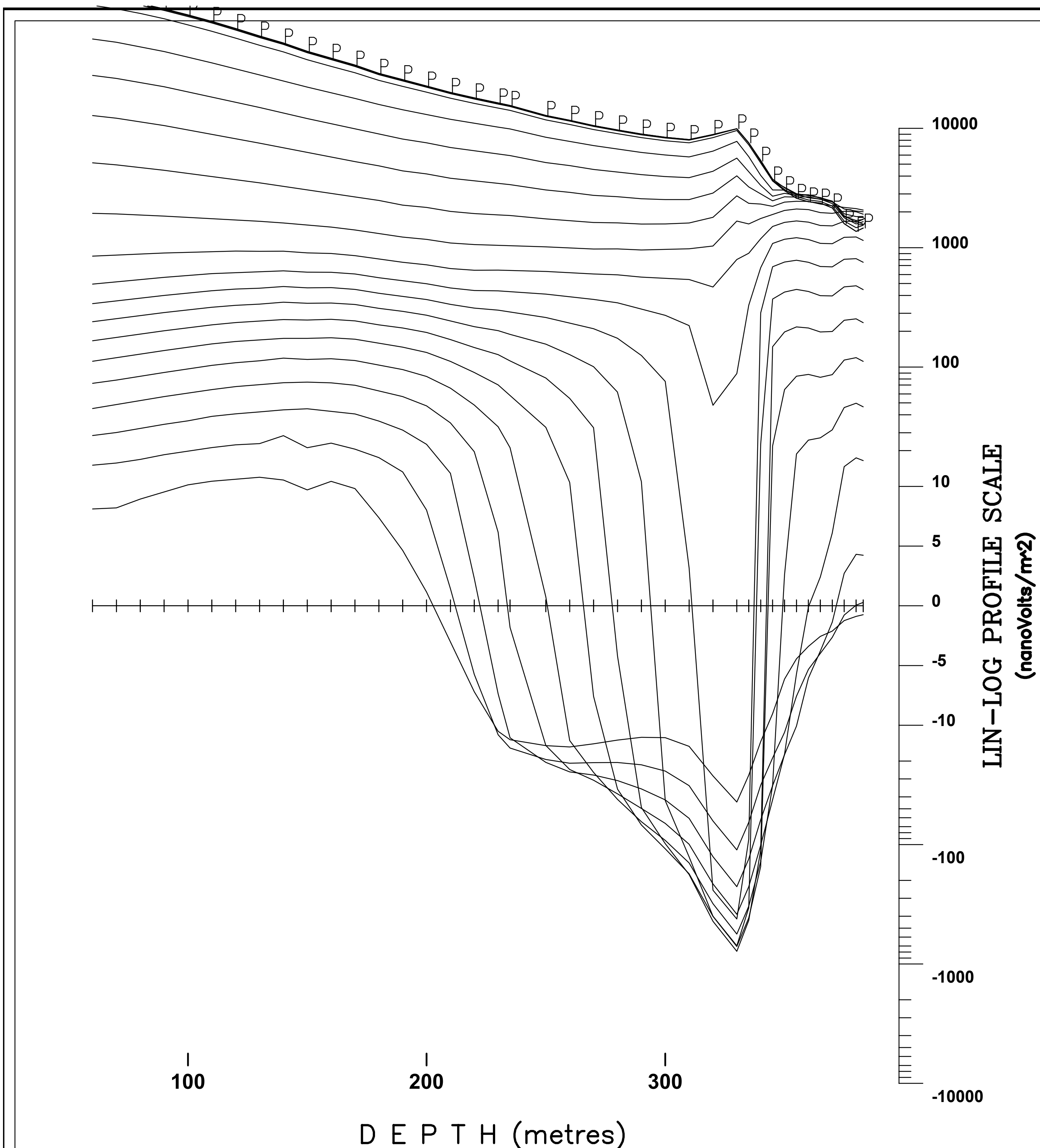
  Drawing #s: **CA00636C-BH4AXIS-TILT-K-Borehole#**, where K=Z, X, Y, TF (Total Field).
  CA00636C-BHLL-TILT-K-Borehole#, where K=Z, X, Y, TF (Total Field)

BOREHOLES	TOTAL PROFILES
GCL09-01	8
GCL09-03	8
GCL09-04	8
GCL09-05	8
GCL09-07	8
GCL09-07	8
GCL09-10	8
GCL09-11	8

Total Profiles: 64

APPENDIX F

PROFILES



Map Generated by

Borehole GCL09-01 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

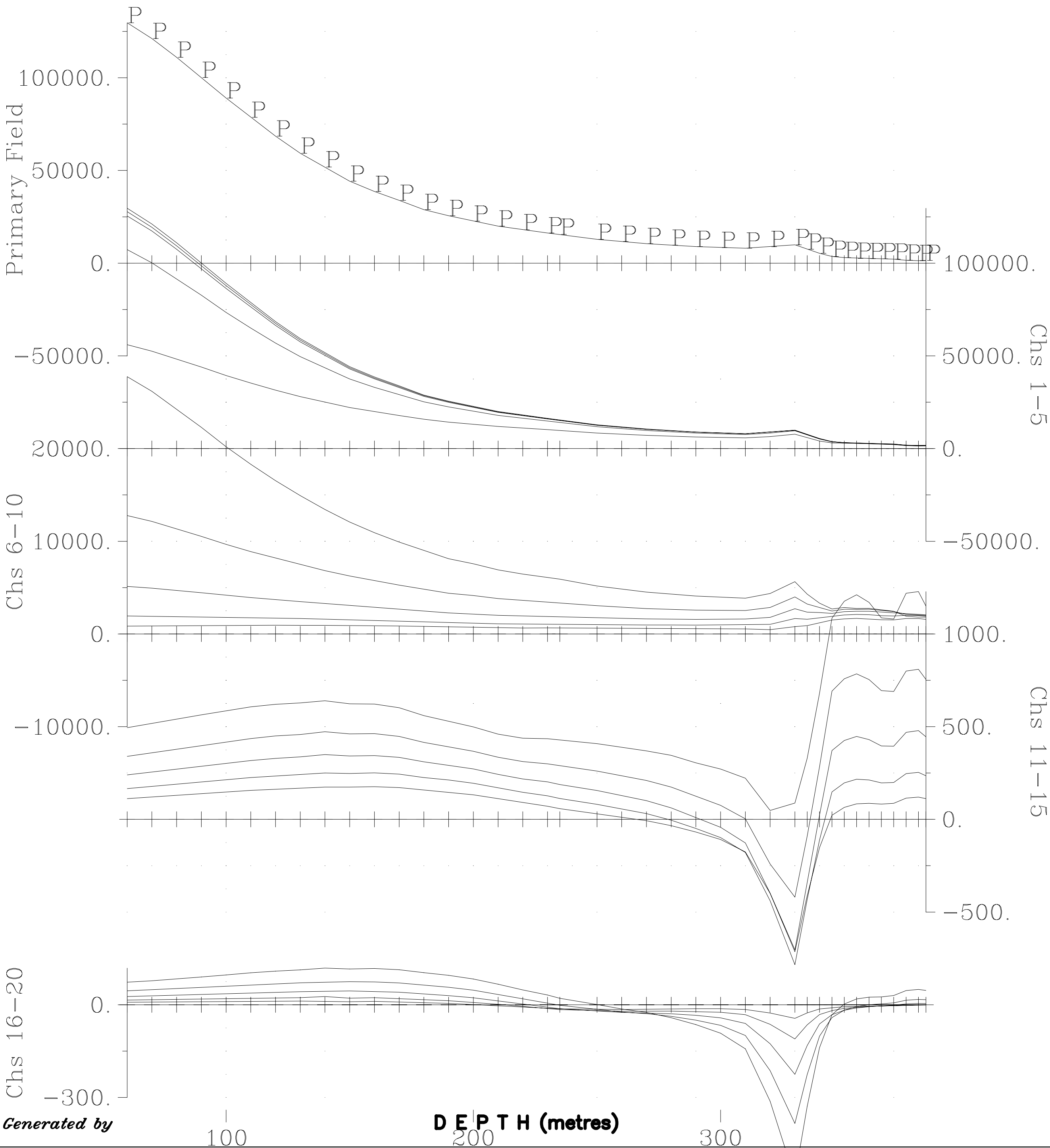
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157,9087,3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us -80 us
Borehole Location:	499100E,5349185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

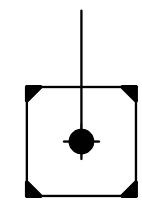
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Z-Tilt-GCL09-01-[illegible]



Map Generated by



Borehole GCL08-3W - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

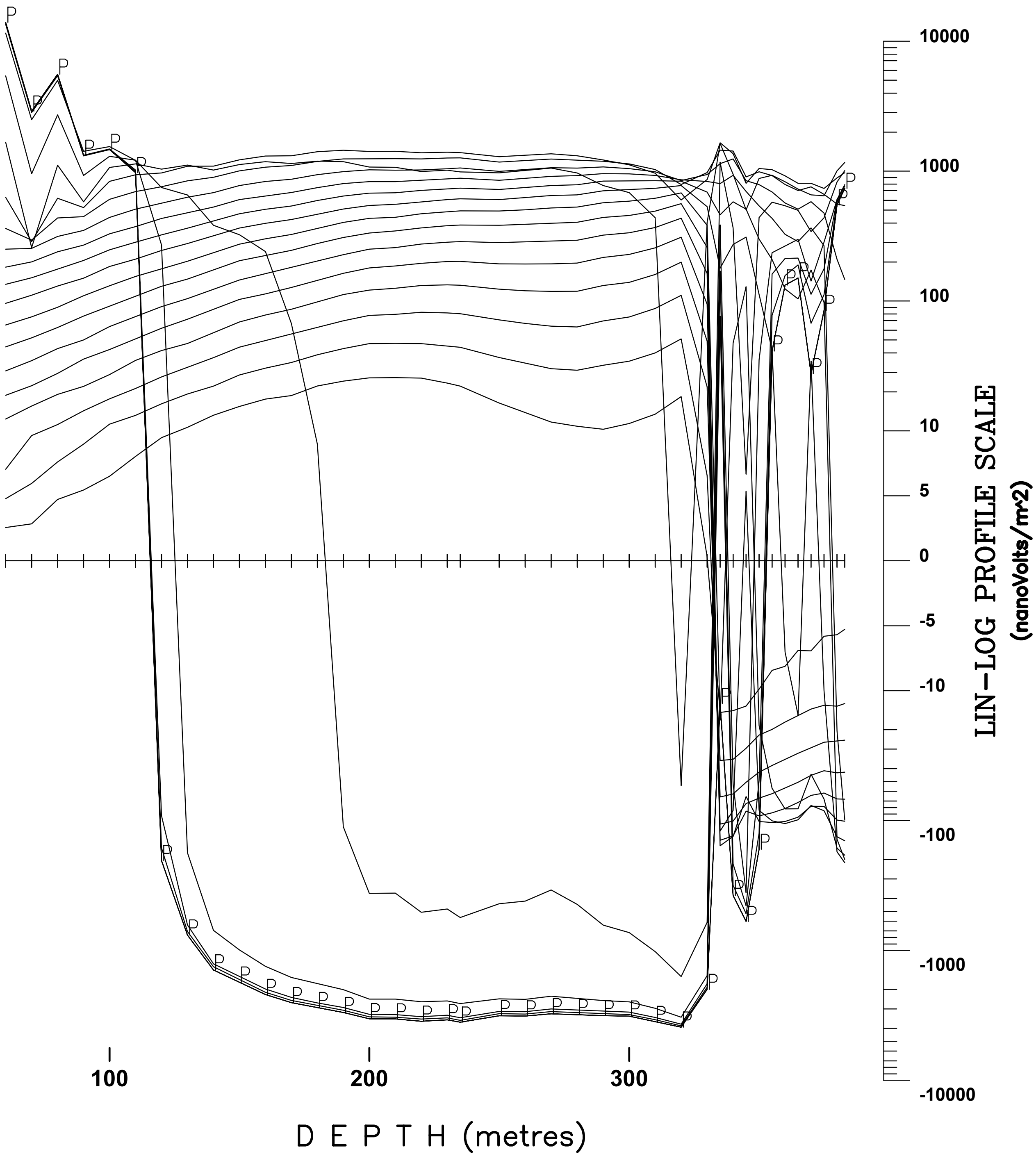
Secondary Electromagnetic Field (dB/dt)

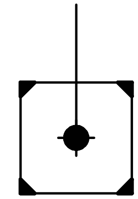
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157;9087,38
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us, -80 us
Borehole Location:	499100E,5348185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL08-3W-W





Borehole GCL09-01 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

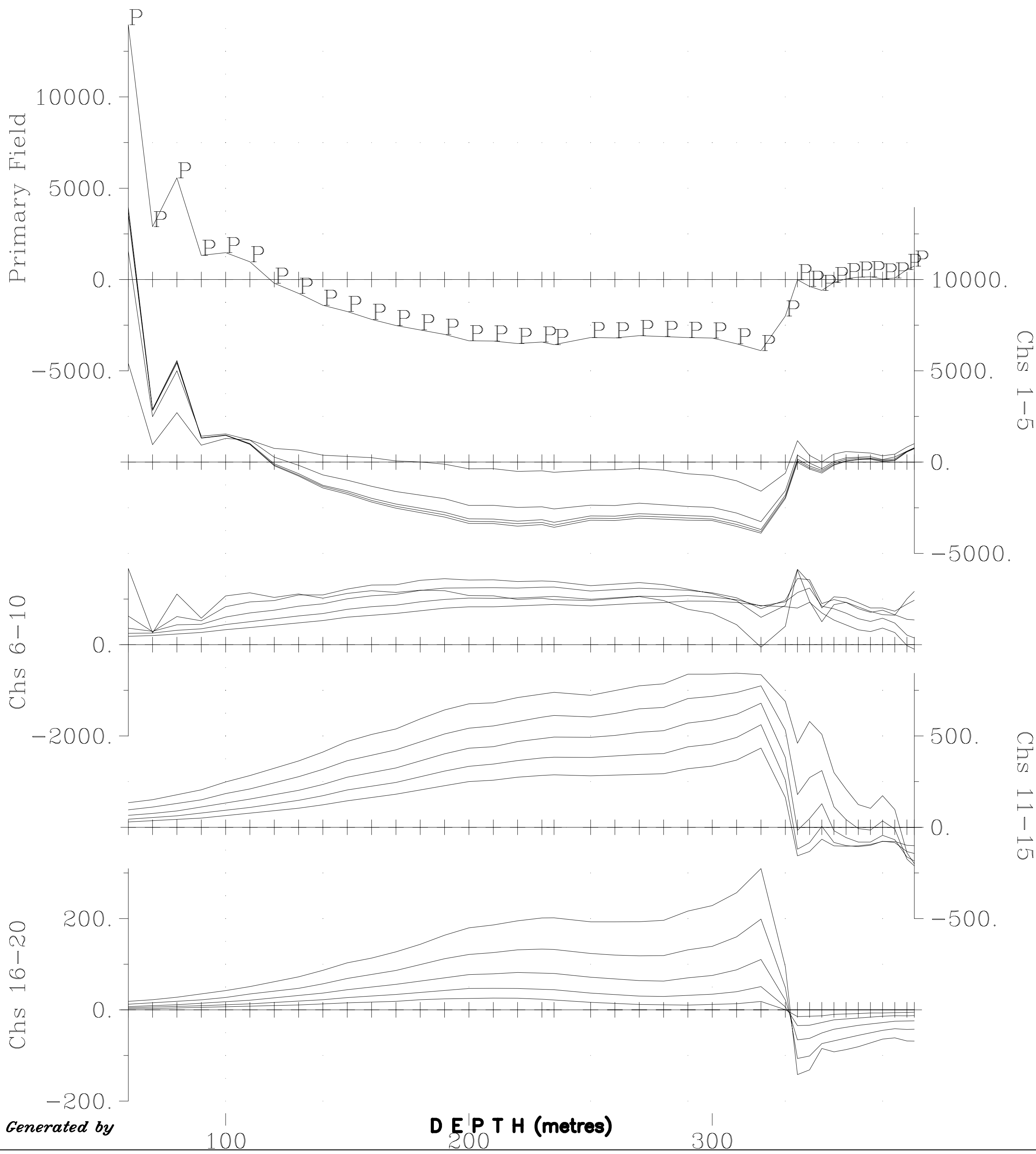
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157,9087,3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us -80 us
Borehole Location:	499100E,5349185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

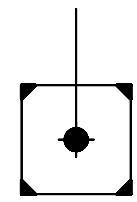
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Y-Tilt-GCL09-01-W

Map Generated by





Borehole GCL08-3W - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

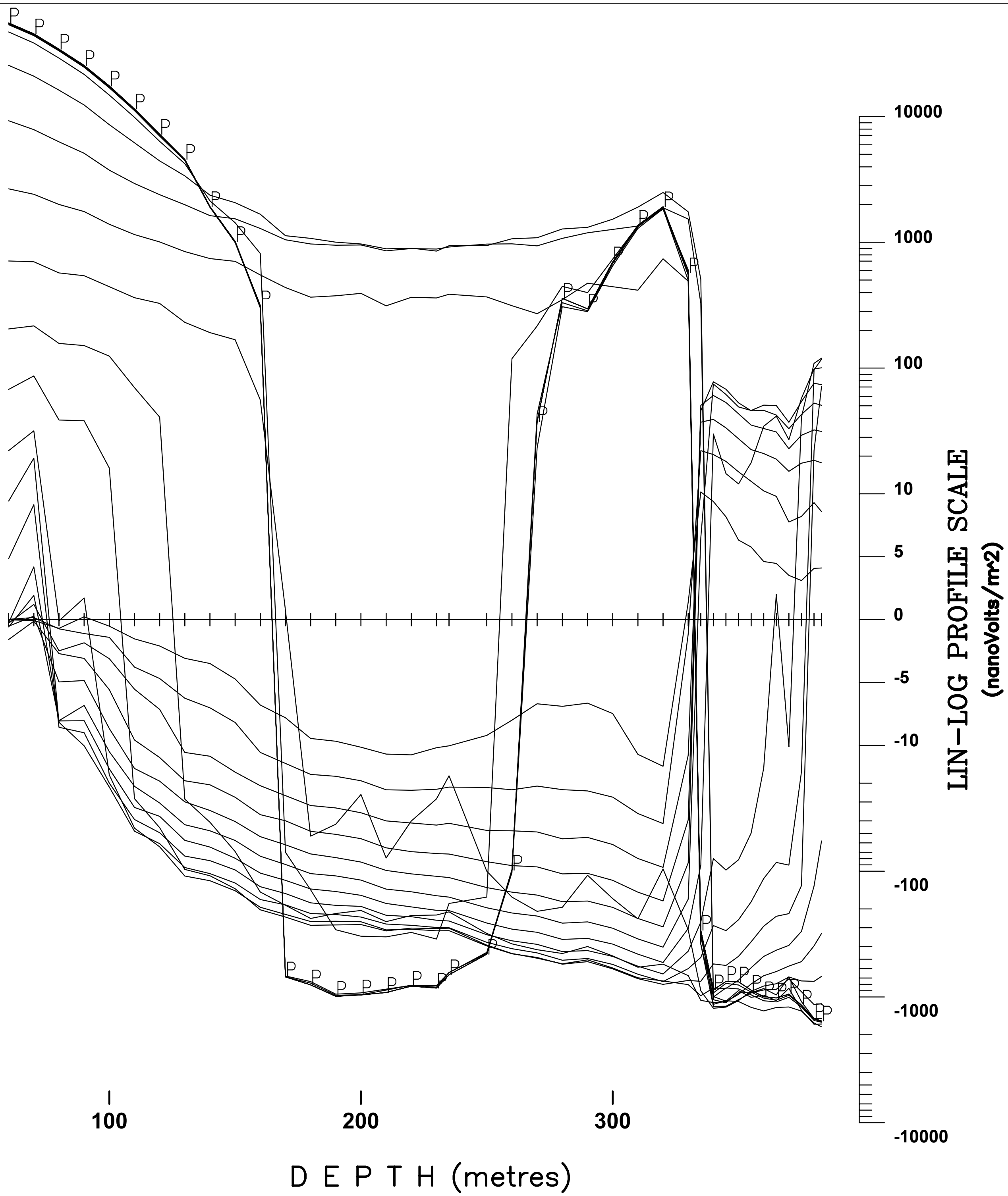
Secondary Electromagnetic Field (dB/dt)

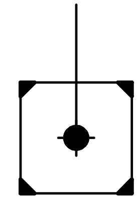
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157;9087,38
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us, -80 us
Borehole Location:	499100E,5348185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL08-3W-IV





Borehole GCL09-01 – X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

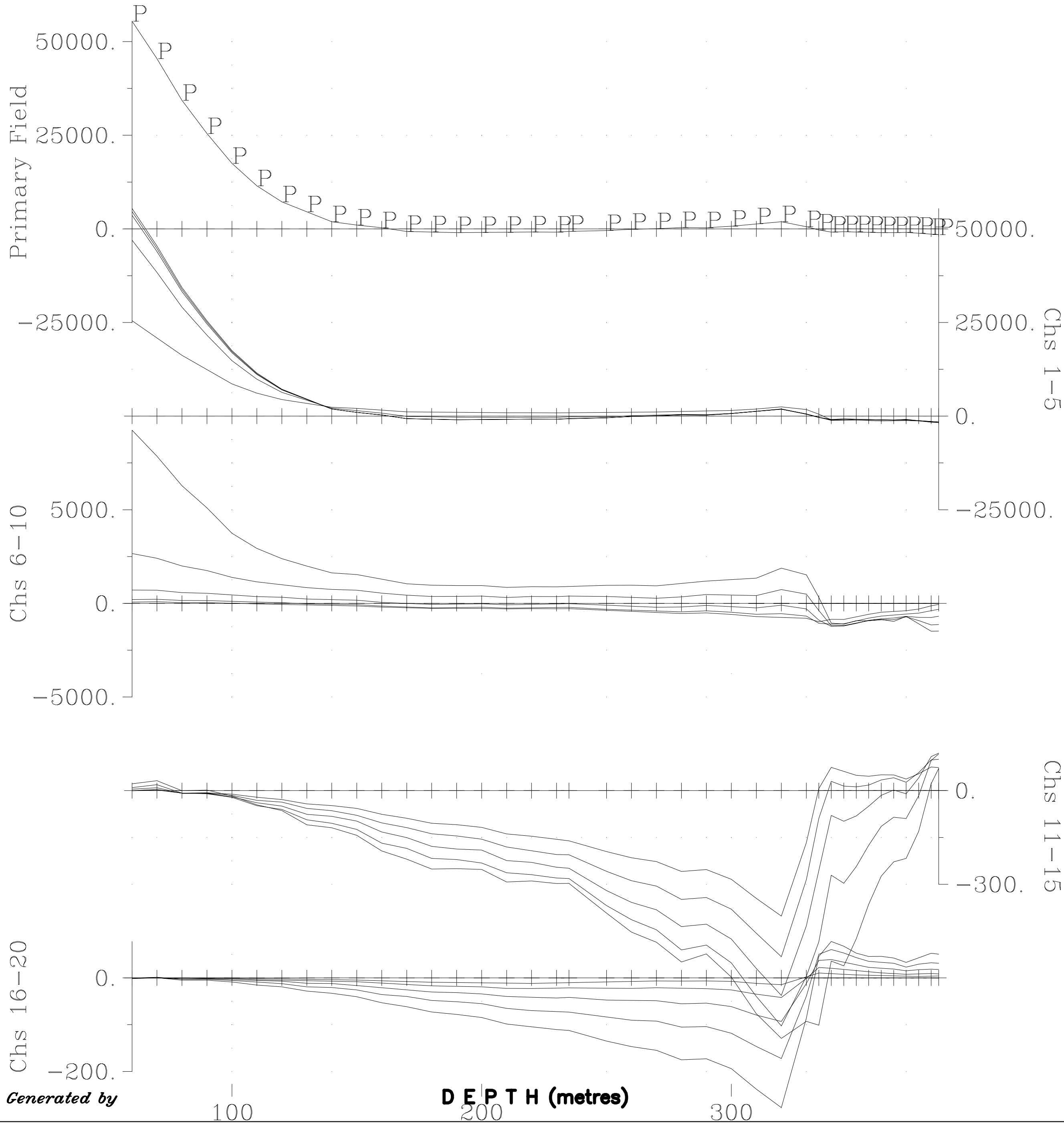
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157,9087,3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us -80 us
Borehole Location:	499100E,5349185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz – positive up
	Hx – positive north, Hy – positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-X-Tilt-GCL09-01-W

Map Generated by



Borehole GCL08-3W - X Component

Scale 1:2500

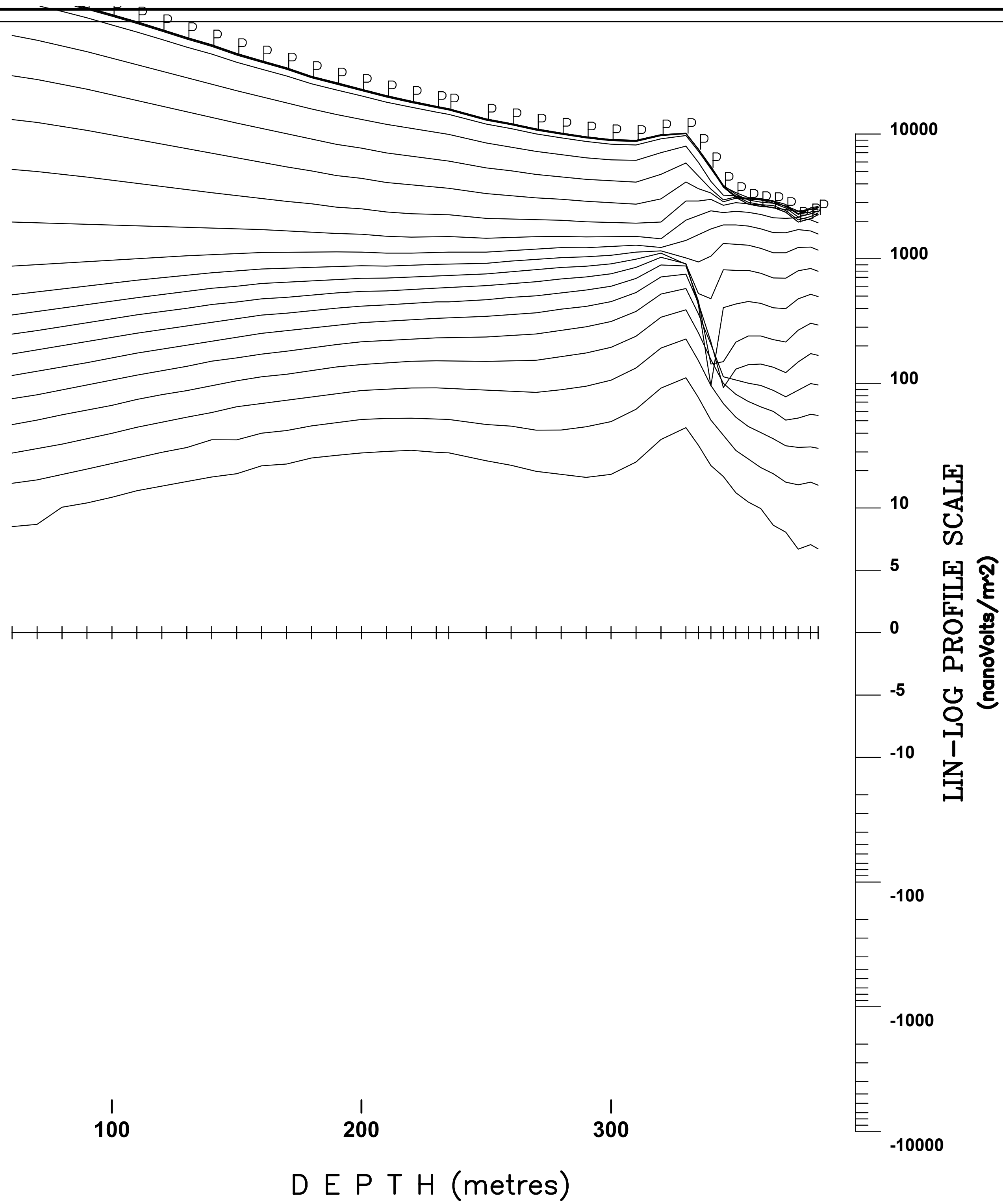
GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

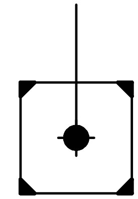
3D FIXED-LOOP BOREHOLE TEM SURVEY
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157;9087,38
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us, -80 us
Borehole Location:	499100E,5348185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. NO. CA00636C-BH4A-Tiltrot-X-GCL08-3W-E

Map Generated by





Borehole GCL09-01 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

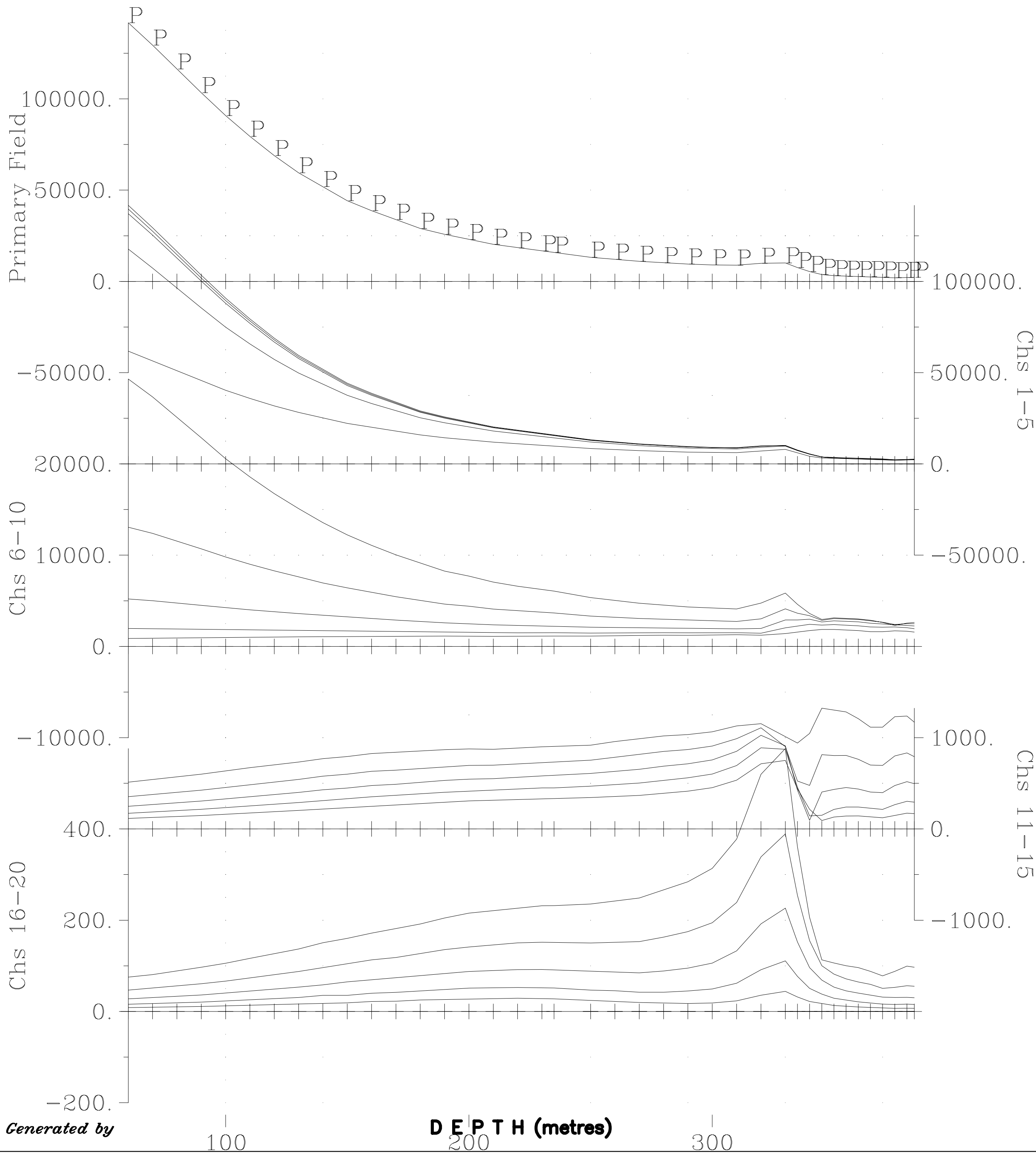
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157,9087,3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us -80 us
Borehole Location:	499100E,5349185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

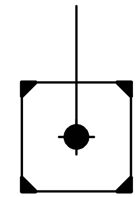
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-TF-Tilt-GCL09-01-E

Map Generated by



Map Generated by



Borehole GCL08-3W - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

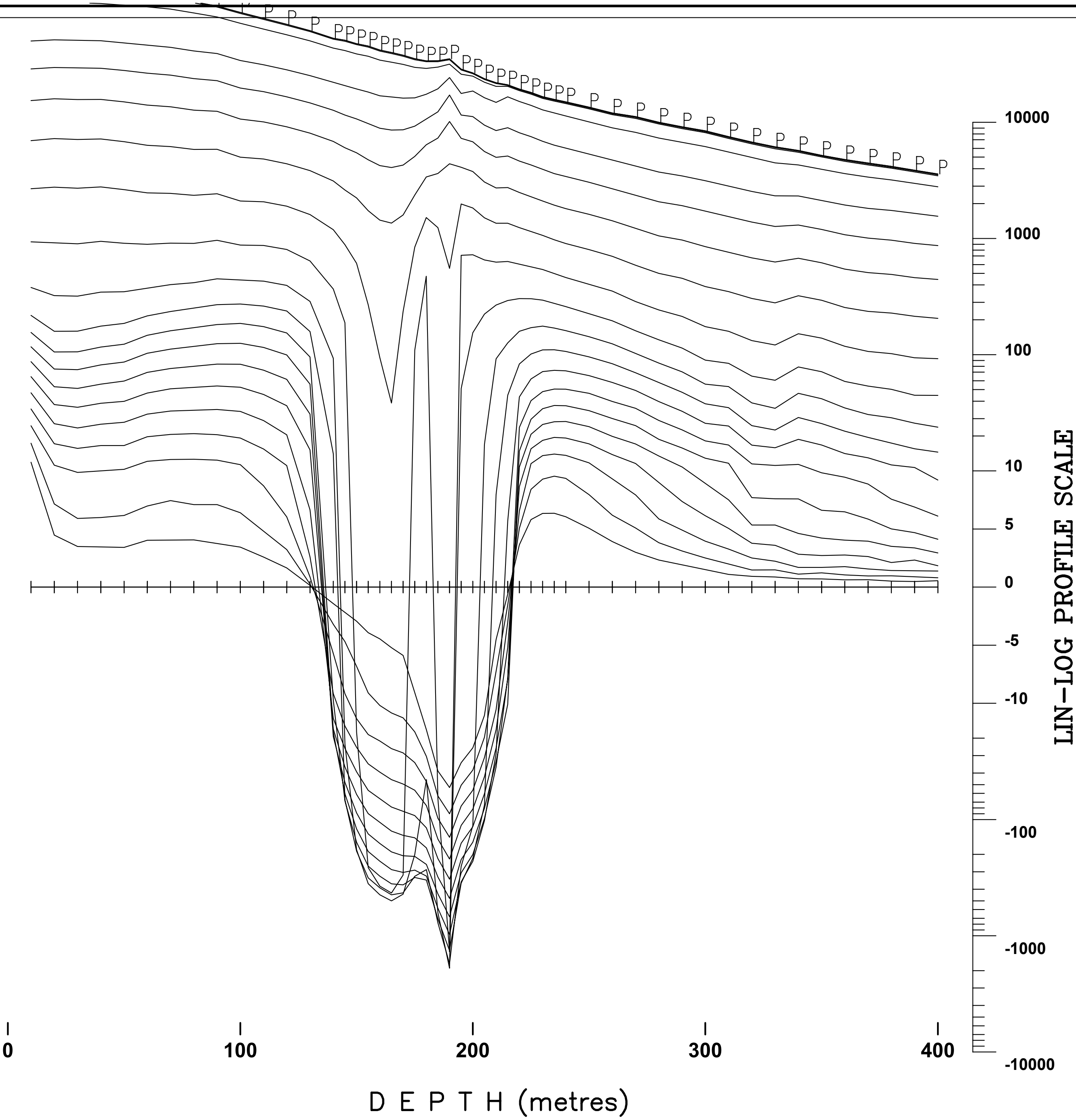
3D FIXED-LOOP BOREHOLE TEM SURVEY

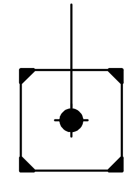
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8960,210;9113,320;9235,157;9087,38
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	463 us, -80 us
Borehole Location:	499100E,5348185N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 9, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL08-3W-E





Borehole GCL09-03 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

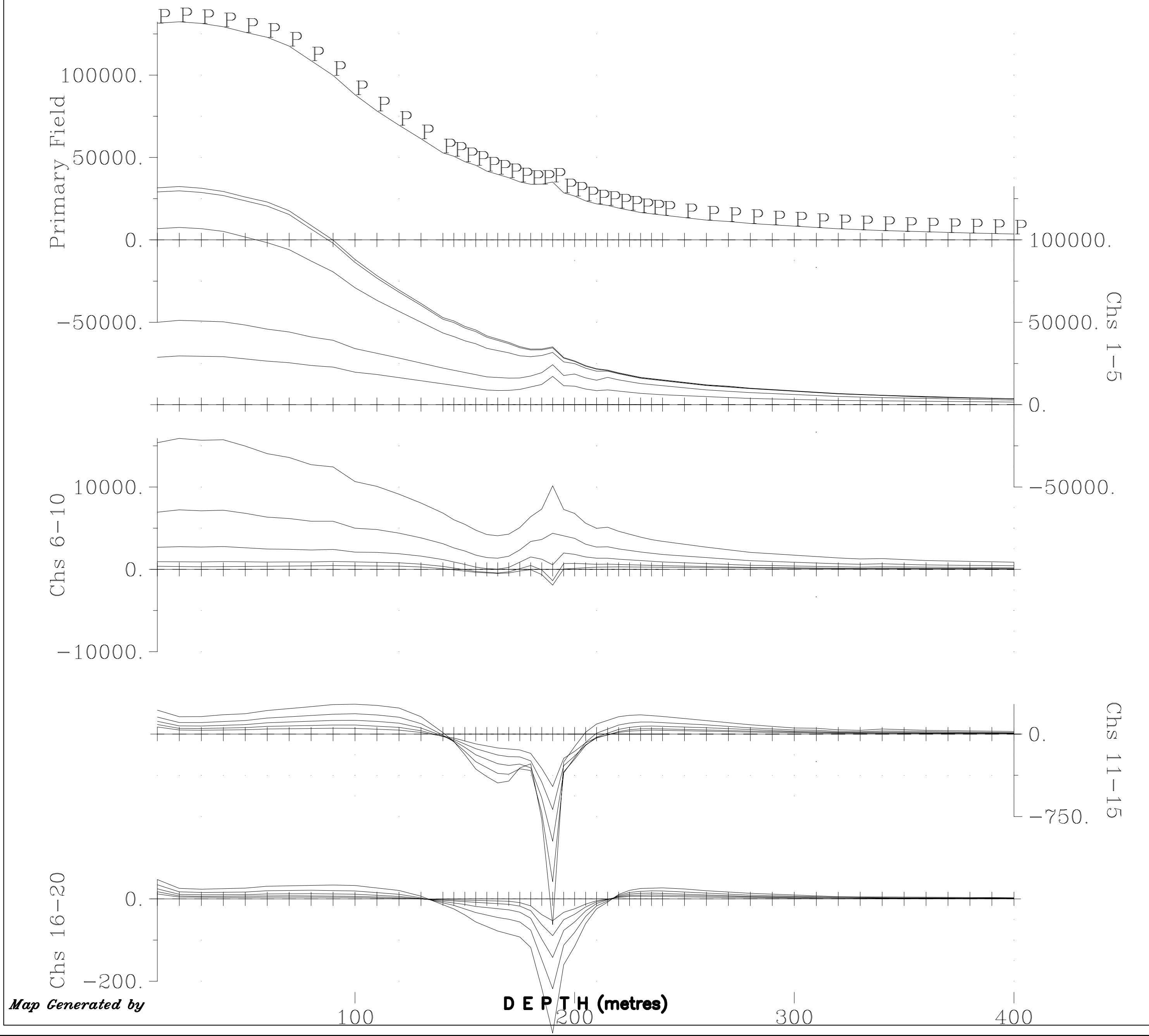
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us -80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

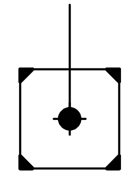
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Z-Tilt-GCL09-03-F

Map Generated by





Borehole GCL09-03 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

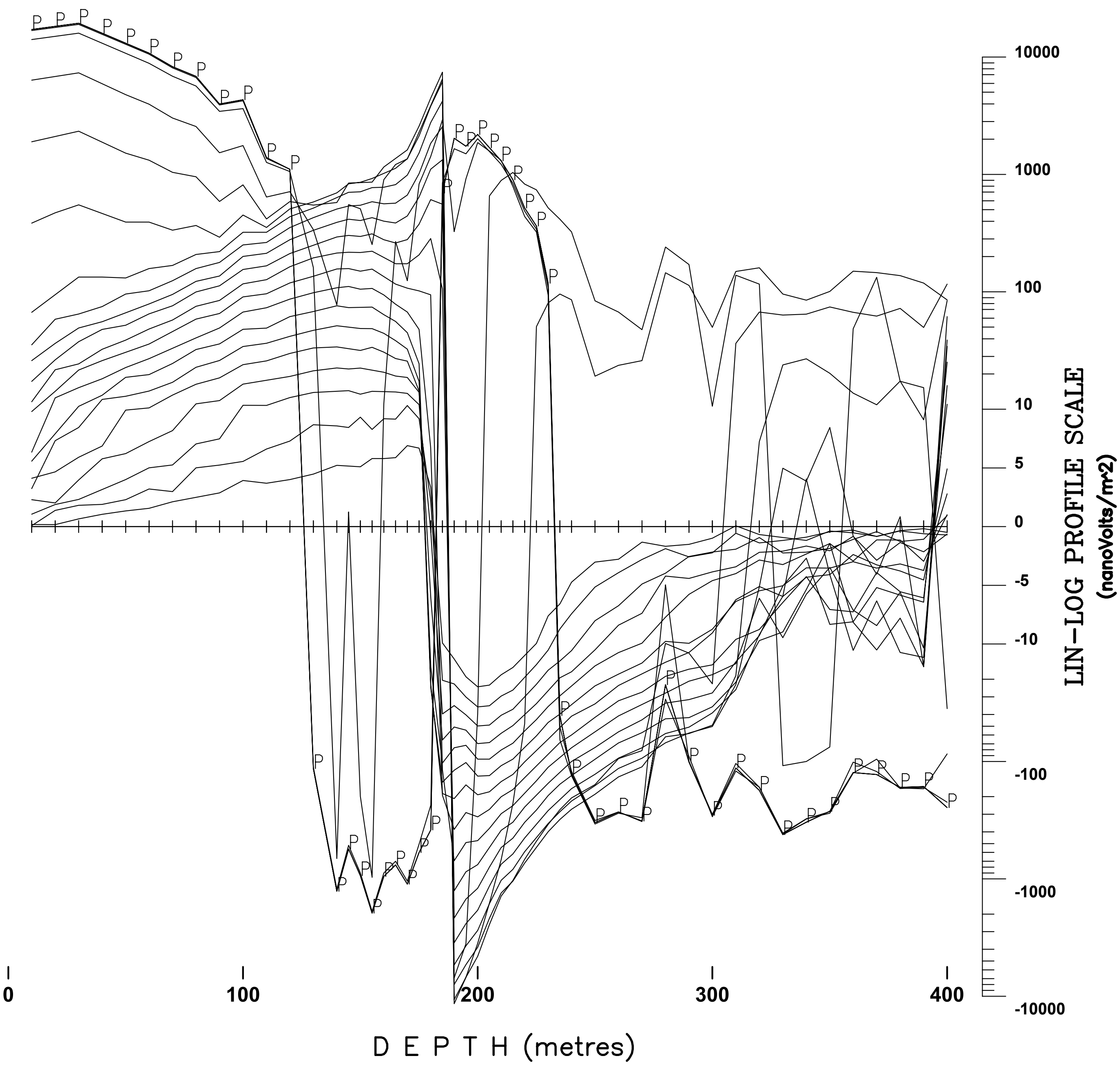
Secondary Electromagnetic Field (dB/dt)

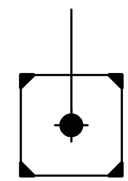
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us, -80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL09-03-W





Borehole GCL09-03 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

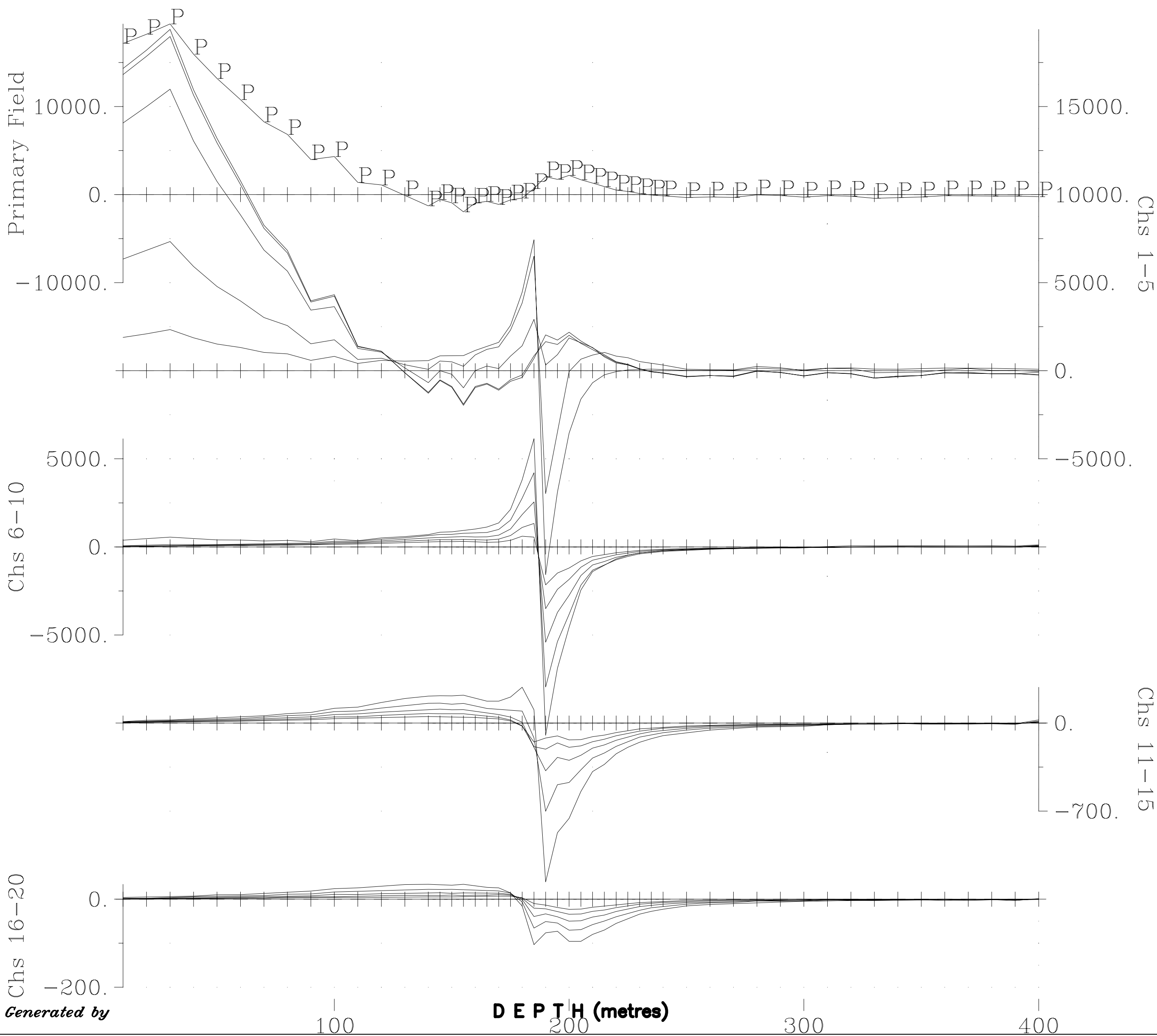
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us -80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

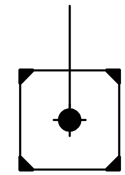
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Y-Tilt-GCL09-03-E

Map Generated by





Borehole GCL09-03 − Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

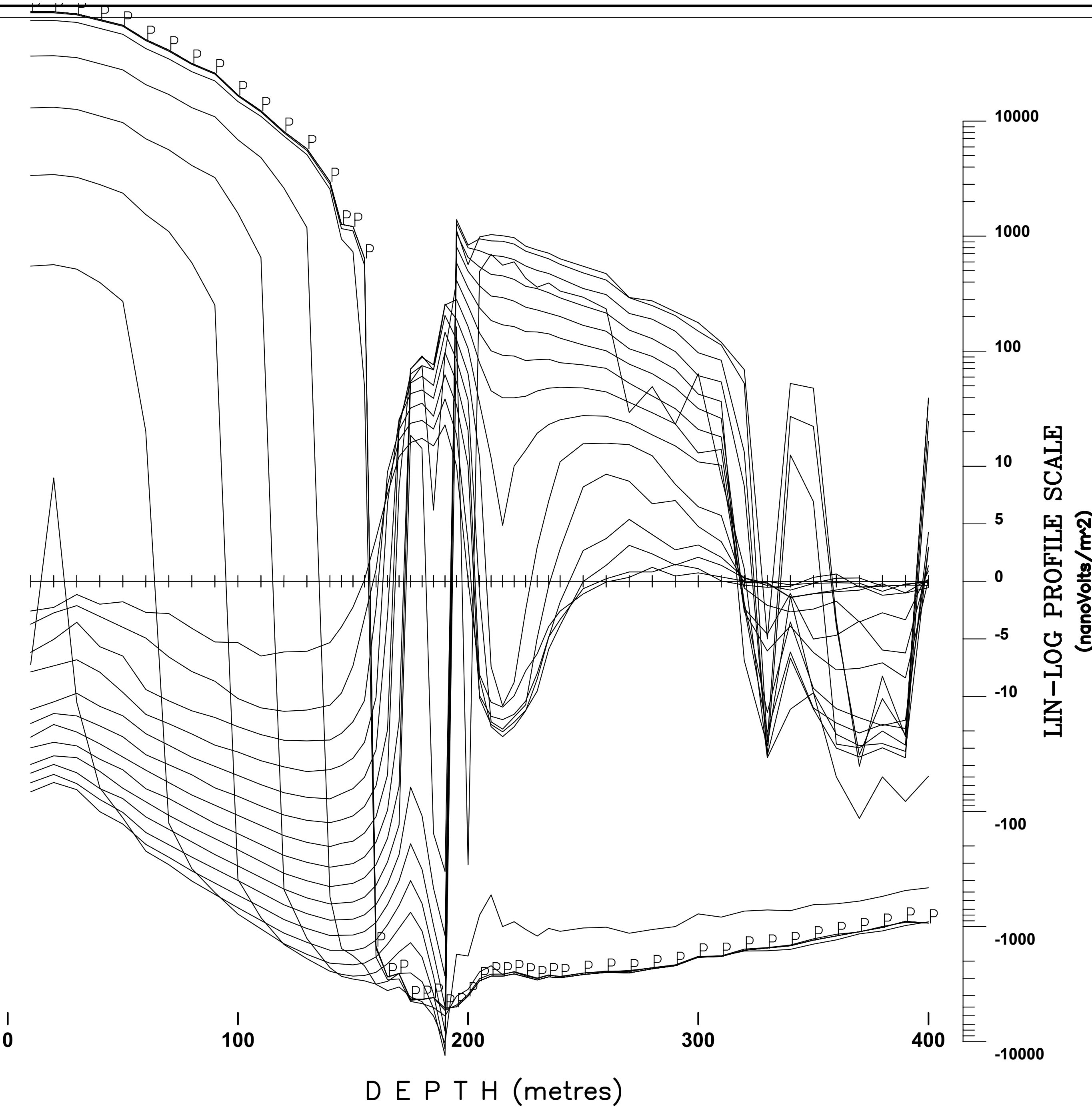
3D FIXED-LOOP BOREHOLE TEM SURVEY
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us, −80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, −55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz − positive up
	Hx − positive north, Hy − positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.

Map Generated by

DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL09-03-W



Borehole GCL09-03 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

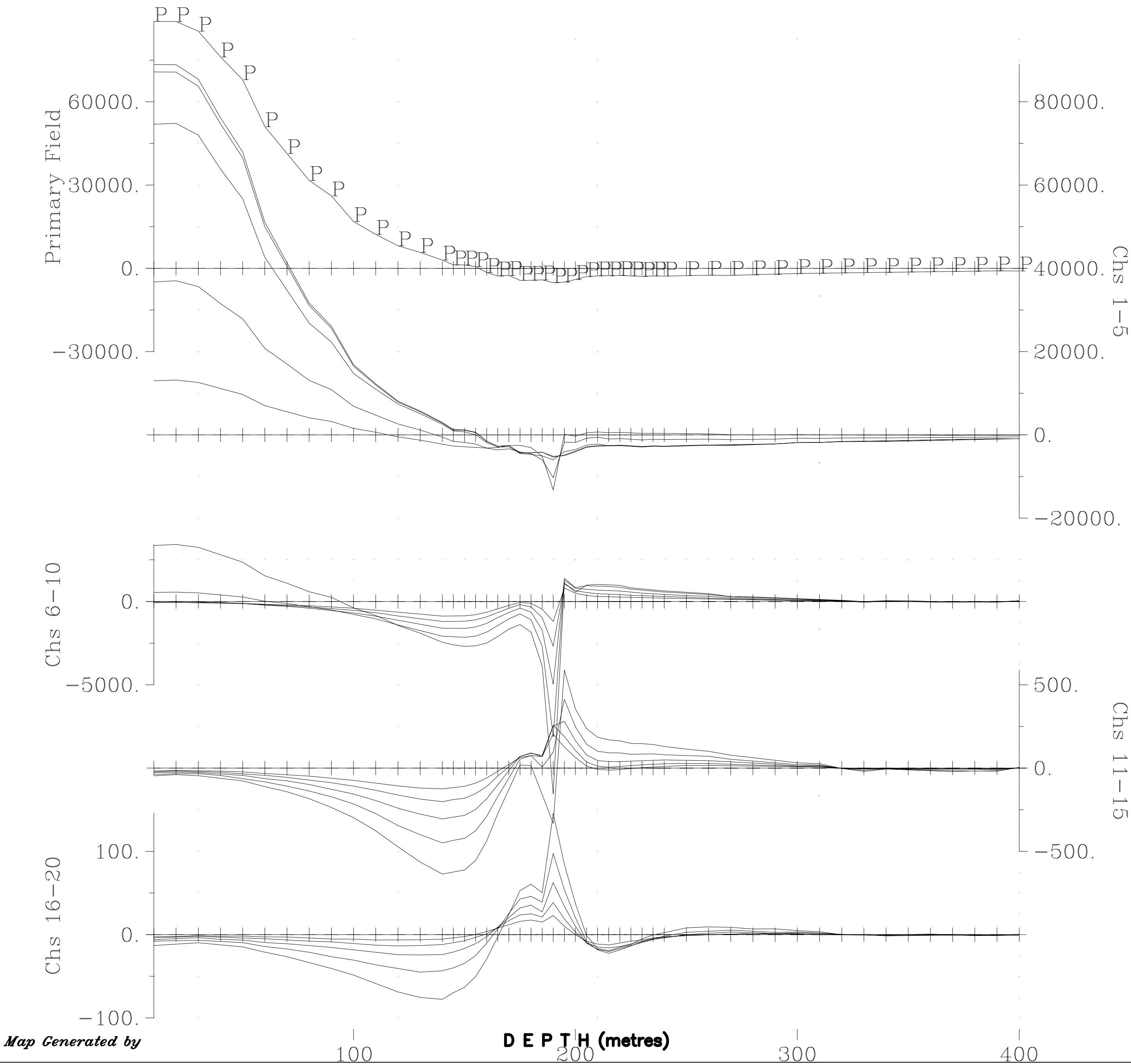
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us -80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

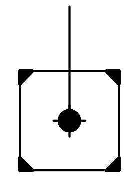
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-X-Tilt-GCL09-03-E

Map Generated by





Borehole GCL09-03 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

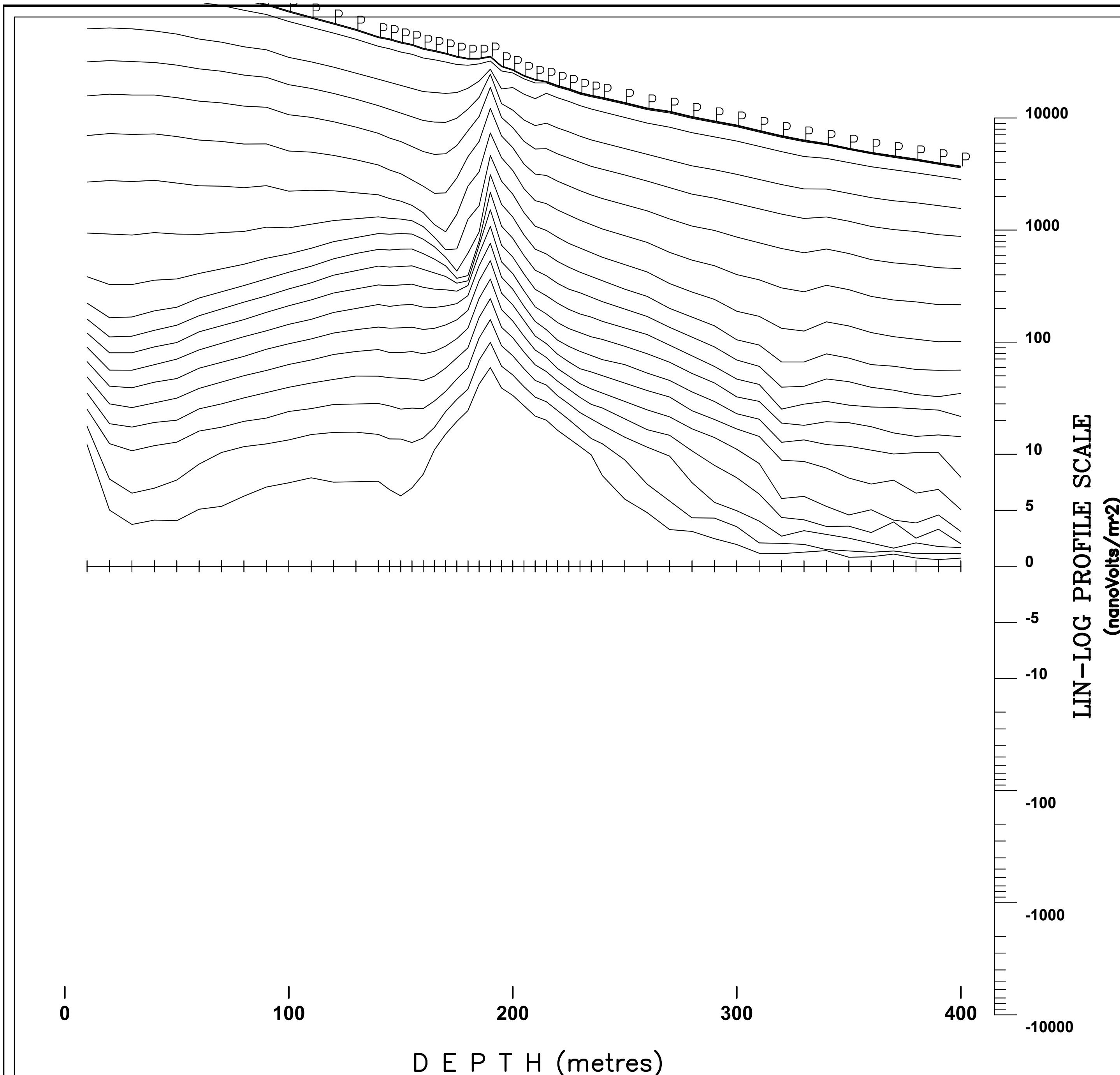
Secondary Electromagnetic Field (dB/dt)

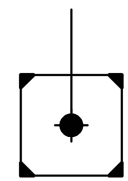
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us, -80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-X-GCL09-03-W





Borehole GCL09-03 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

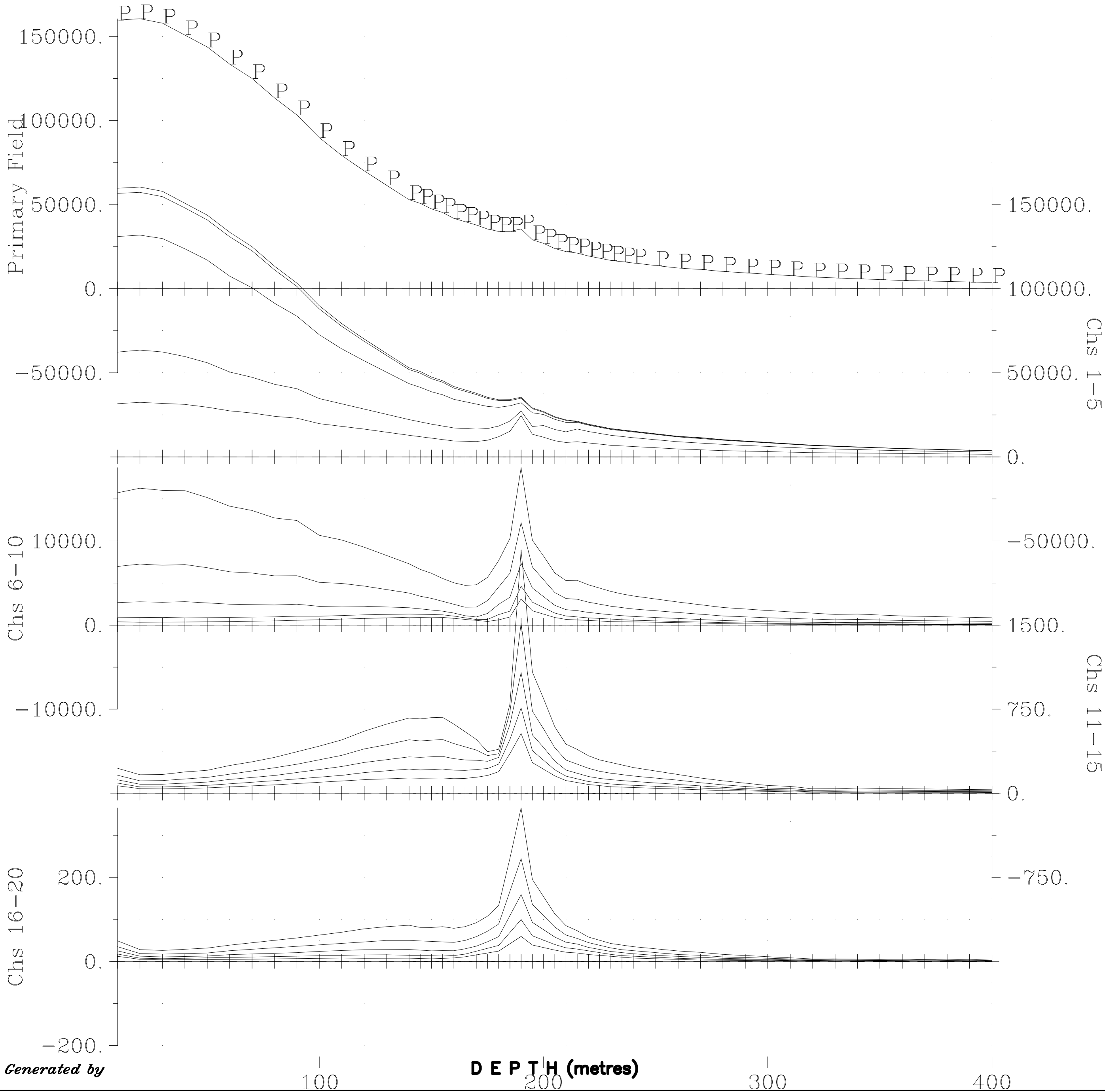
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us -80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

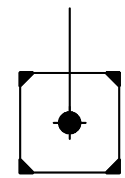
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-TF-Tilt-GCL09-03-IV

Map Generated by



Map Generated by



Borehole GCL09-03 – Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

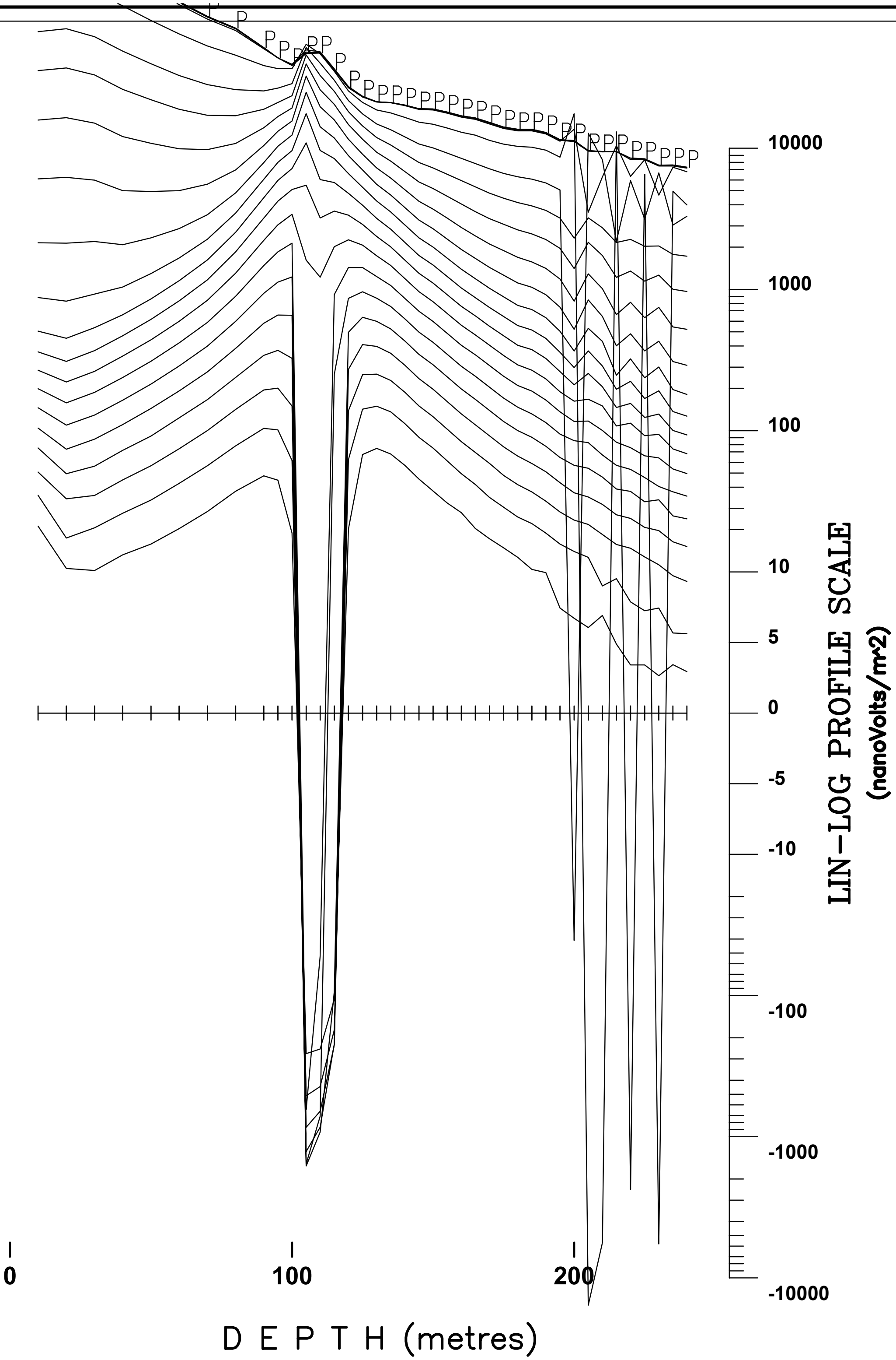
Secondary Electromagnetic Field (dB/dt)

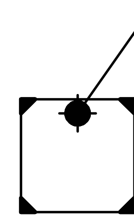
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	465 us, -80 us
Borehole Location:	499563E,5348153N
Borehole Azimuth, Dip:	325, -55
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL09-03-E





Borehole GCL09-04 – Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

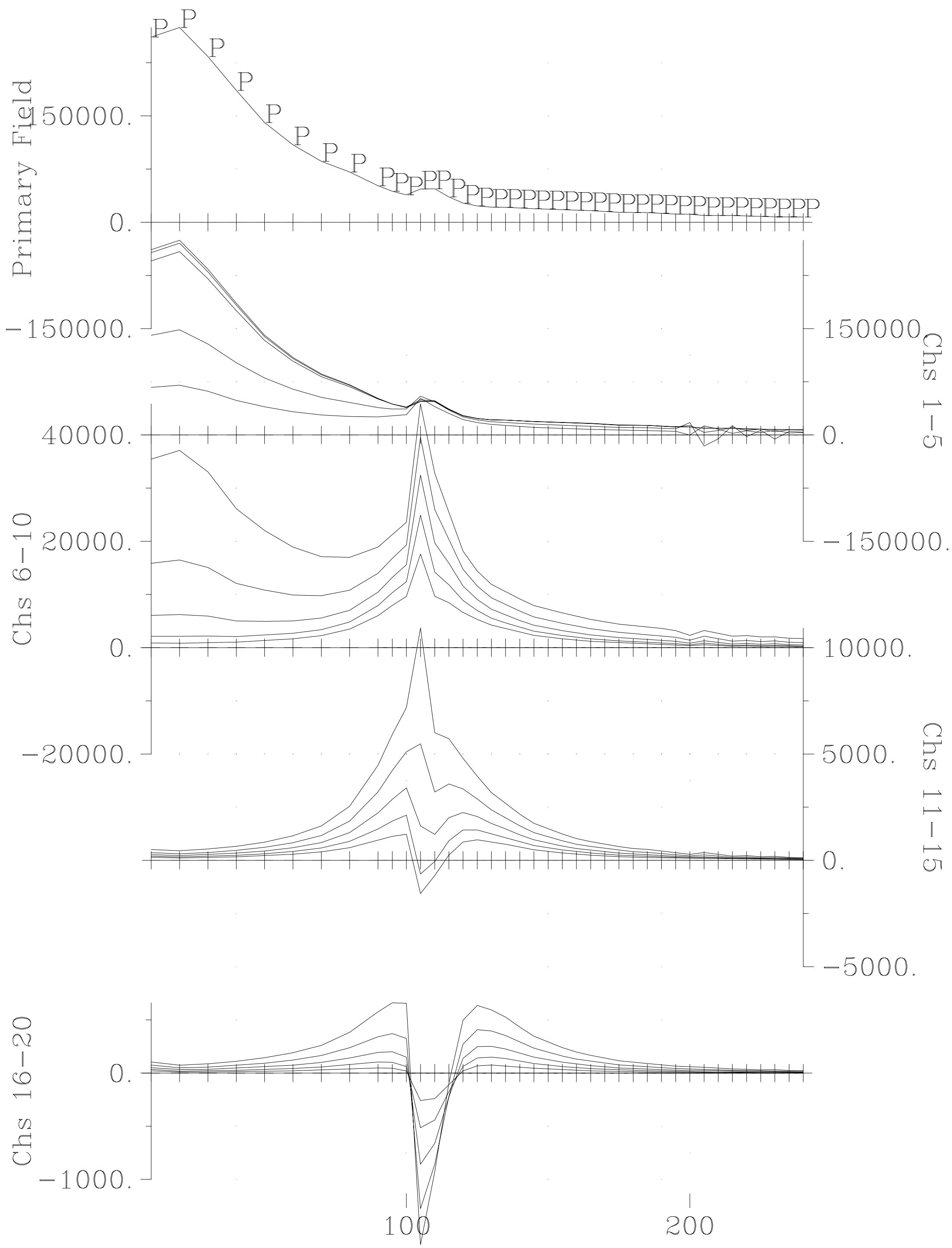
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

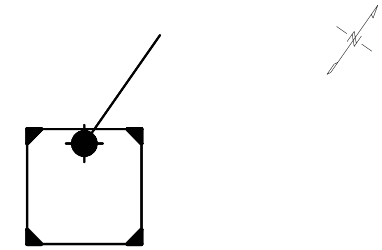
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Z-Tilt-GCL09-03-E

Map Generated by



D E P T H (metres)



Borehole GCL09-04 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

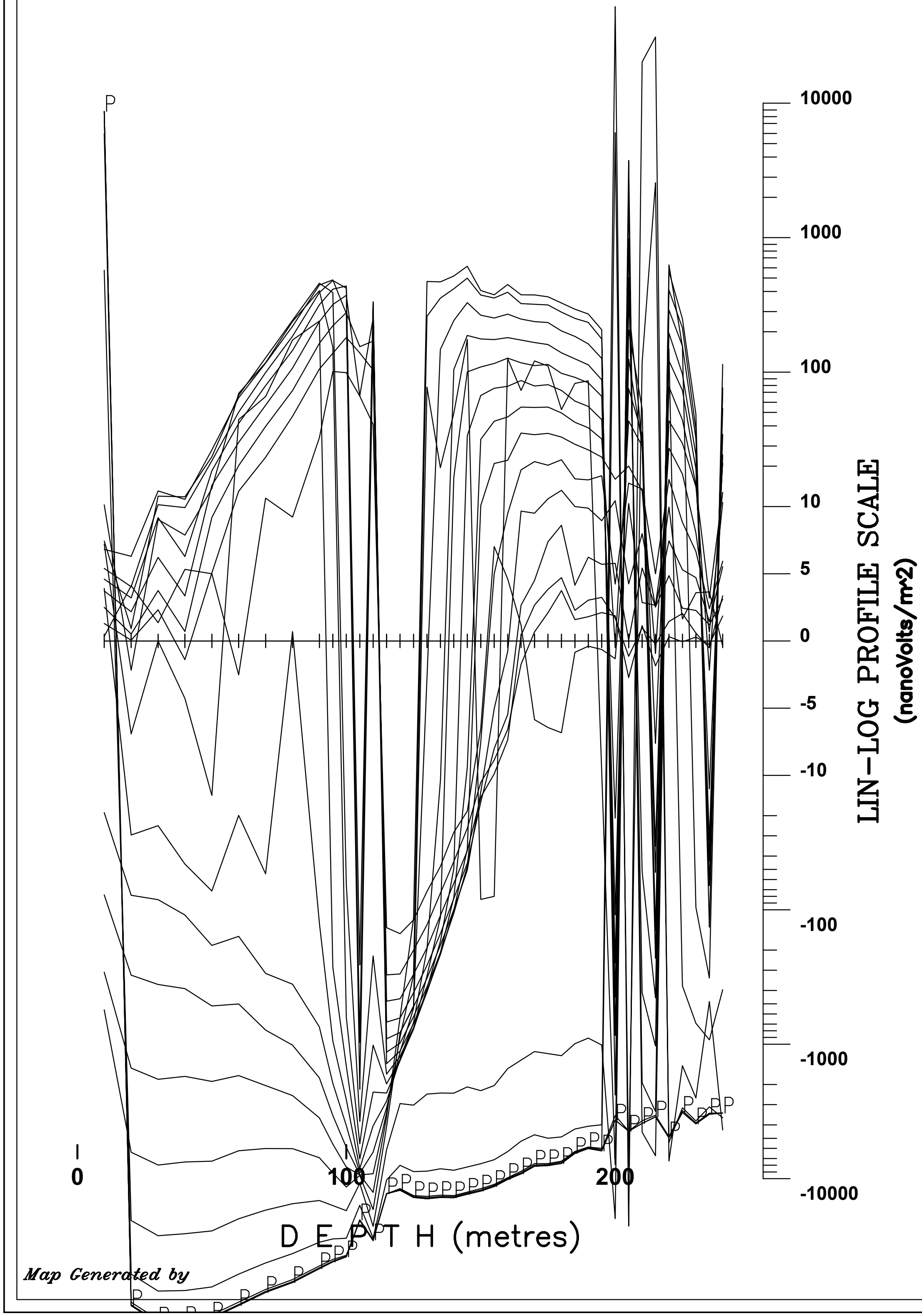
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us, -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

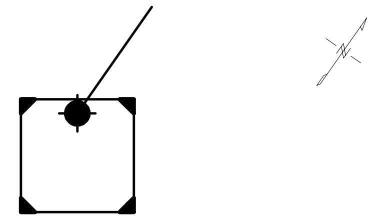
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL09-04-B

Map Generated by





Borehole GCL09-04 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

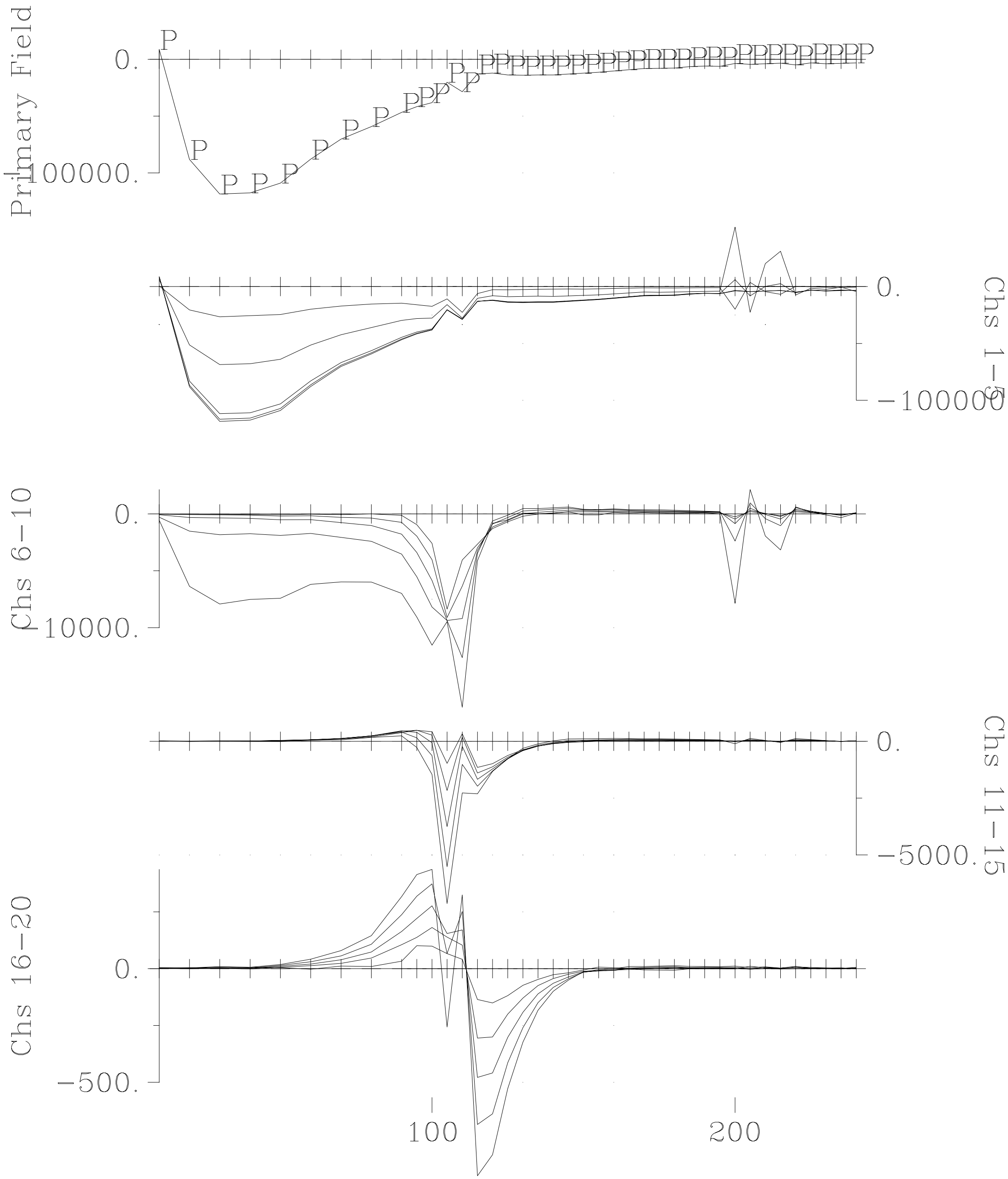
Secondary Electromagnetic Field (dB/dt)

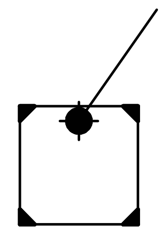
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Y-Tilt-GCL09-03-[illegible]





Borehole GCL09-04 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

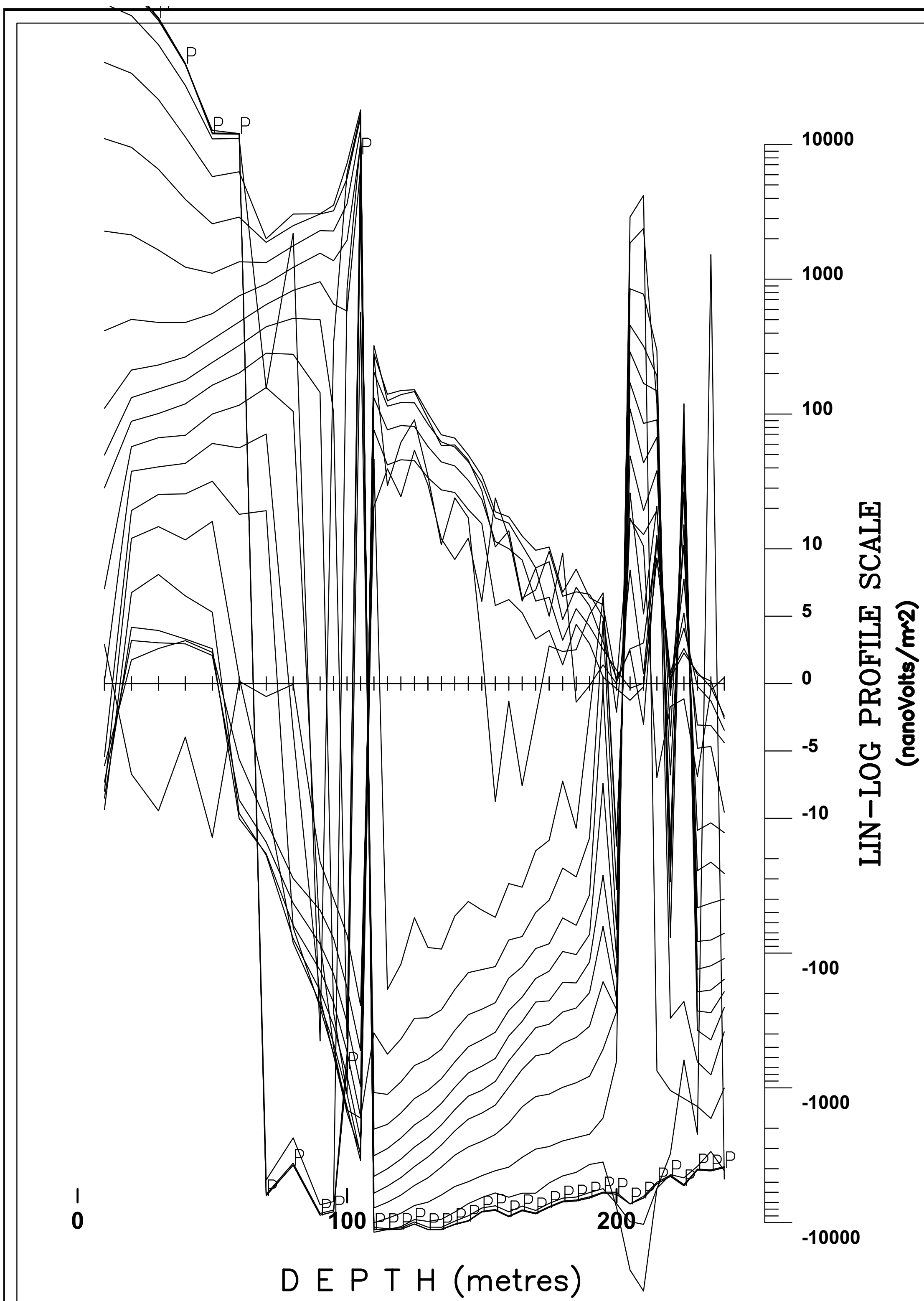
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us, -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

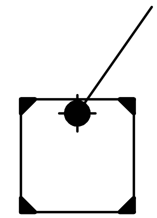
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL09-04-W

Map Generated by





Borehole GCL09-04 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

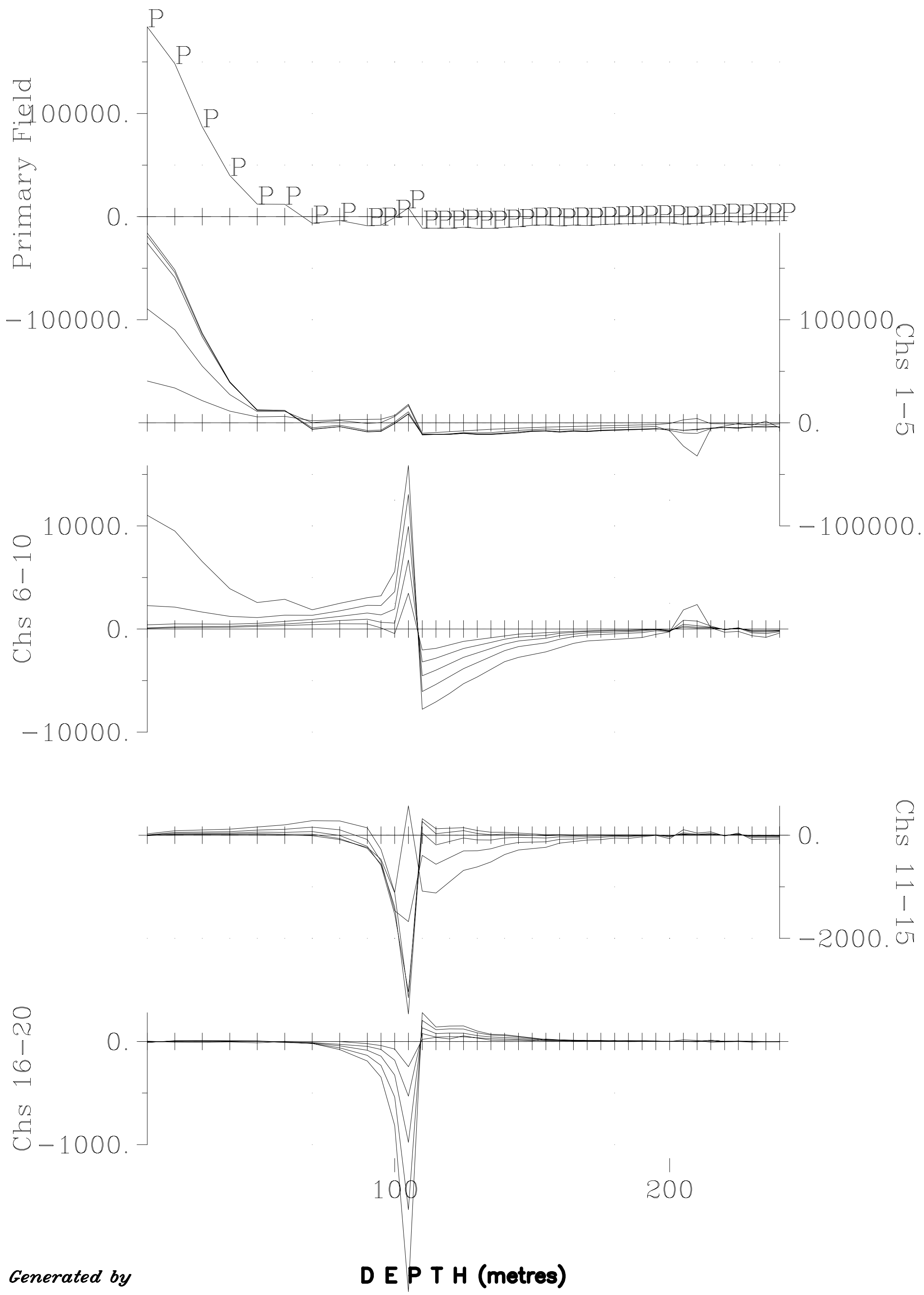
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

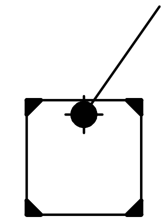
DWG. NO. CA00636C-BHLL-X-Tilt-GCL09-03-E

Map Generated by



Map Generated by

D E P T H (metres)



Borehole GCL09-04 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

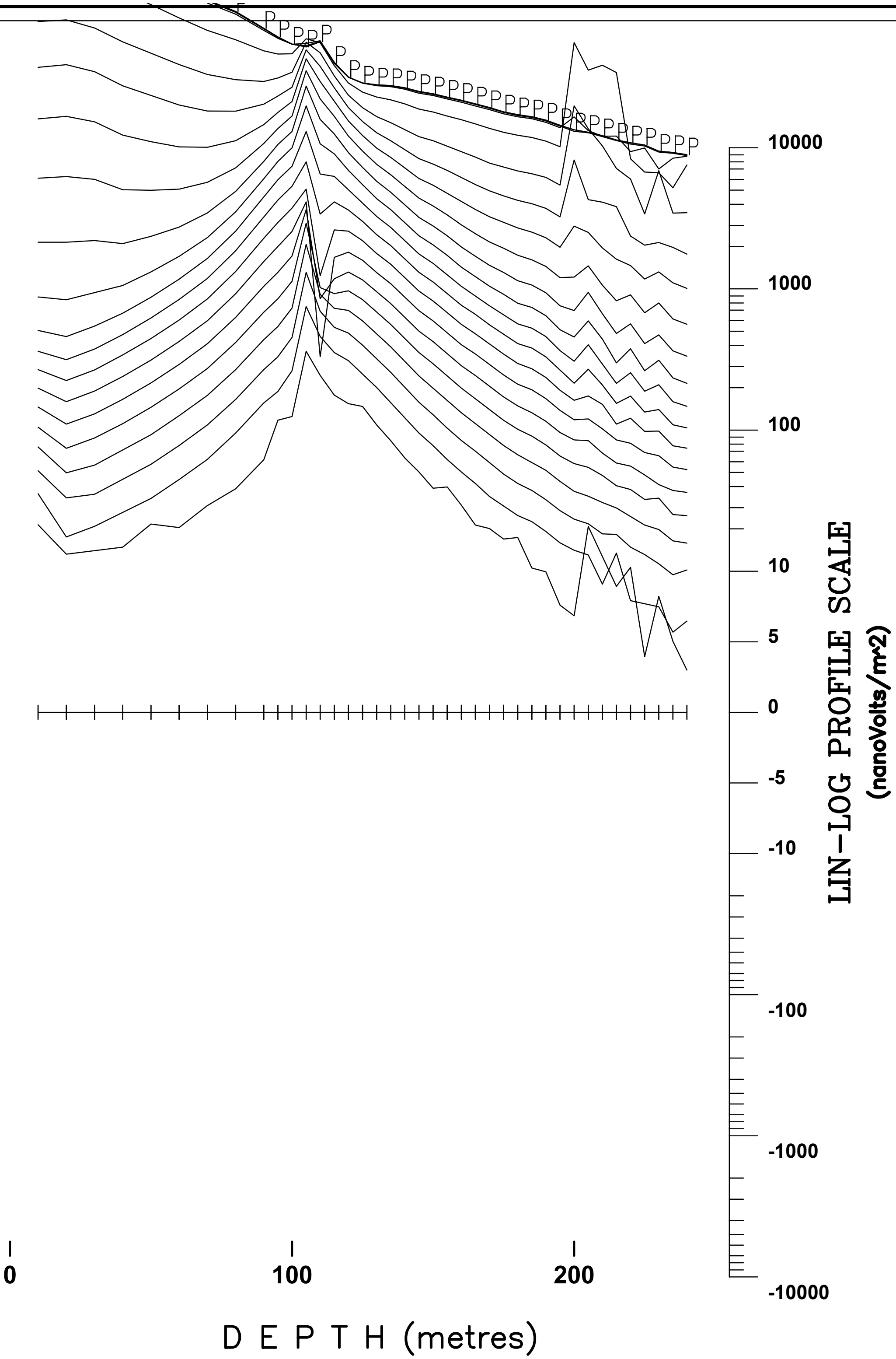
Secondary Electromagnetic Field (dB/dt)

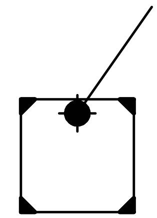
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us, -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL09-04-IV





Borehole GCL09-04 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

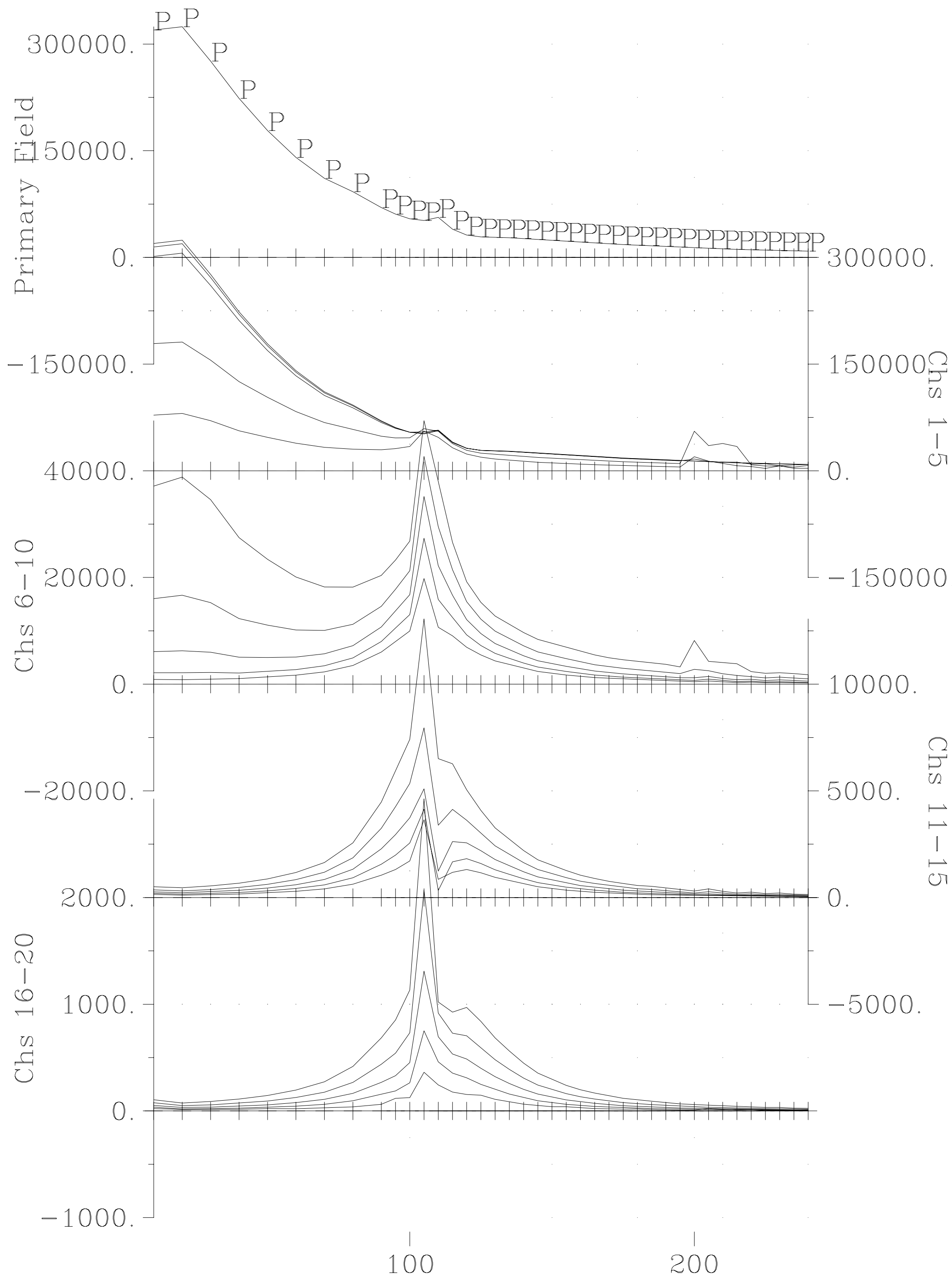
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

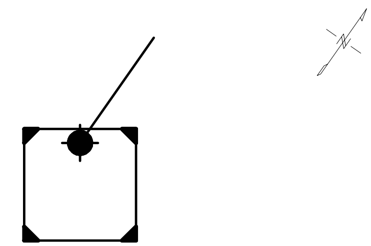
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-TF-Tilt-GCL09-03-IV

Map Generated by





Borehole GCL09-04 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

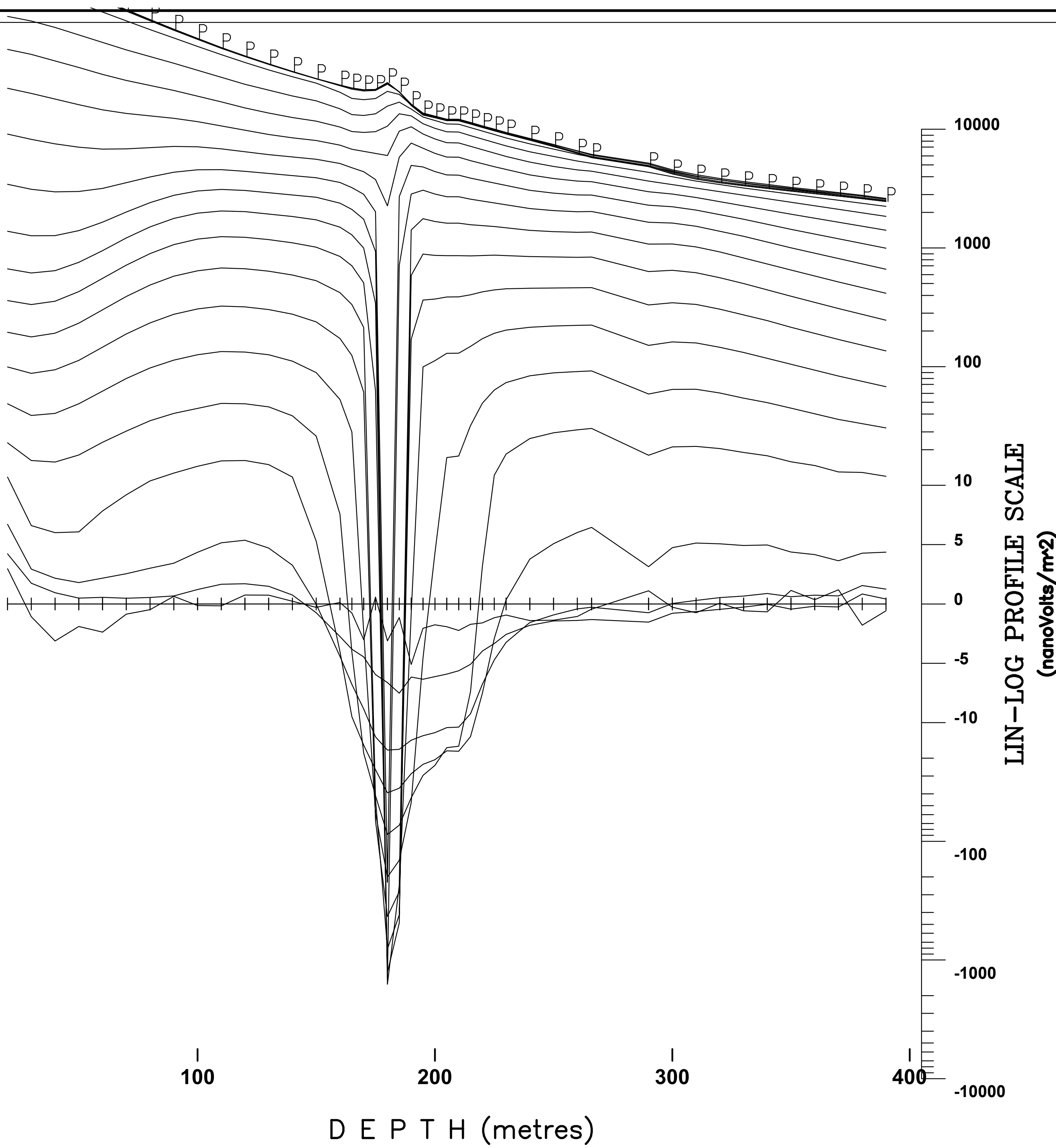
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	515,8;398,192;585,292;694,157
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	470 us, -80 us
Borehole Location:	499522E,5348216N
Borehole Azimuth, Dip:	360, -45
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Feb 26, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

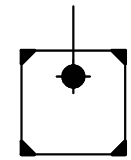
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL09-04-B

Map Generated by





Borehole GCL09-05 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

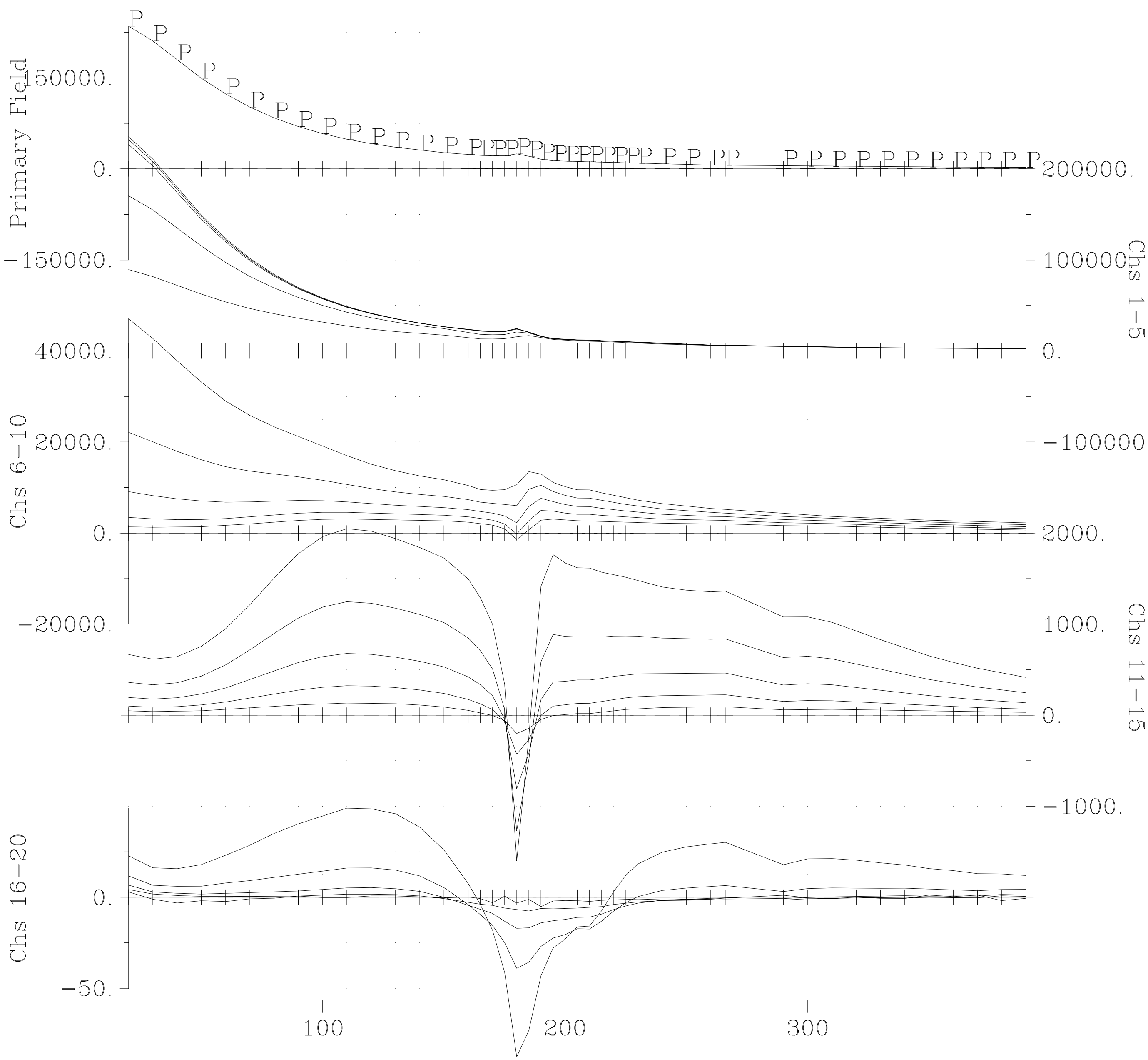
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,199;946,199;946,399;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

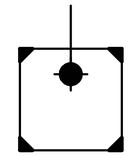
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Z-Tilt-GCL09-05-E

Map Generated by





Borehole GCL09-05 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

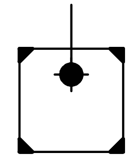
3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

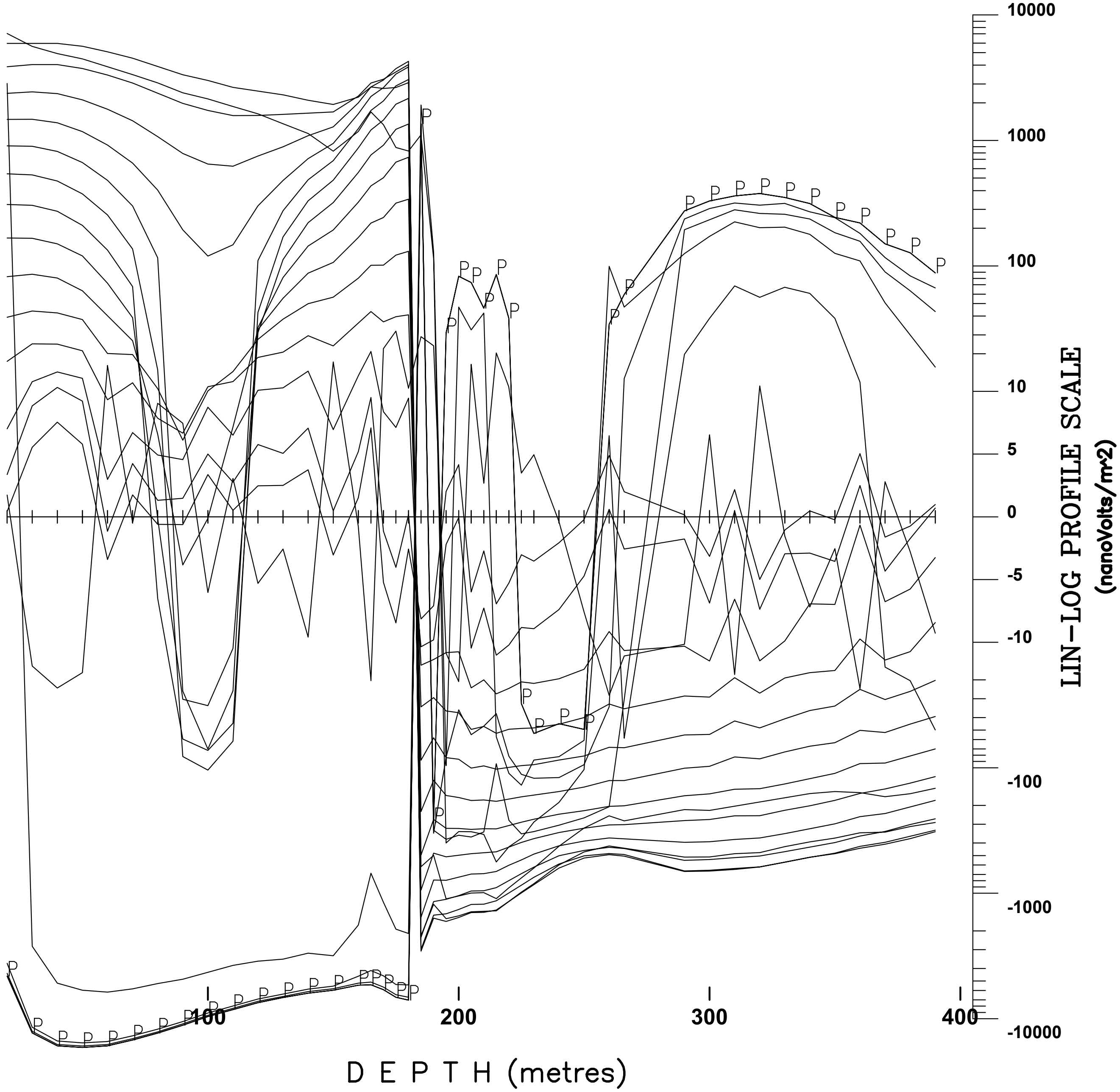
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,199;946,200;948,200;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us, -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL09-04-5

Map Generated by



Borehole GCL09-05 - Y Component



Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

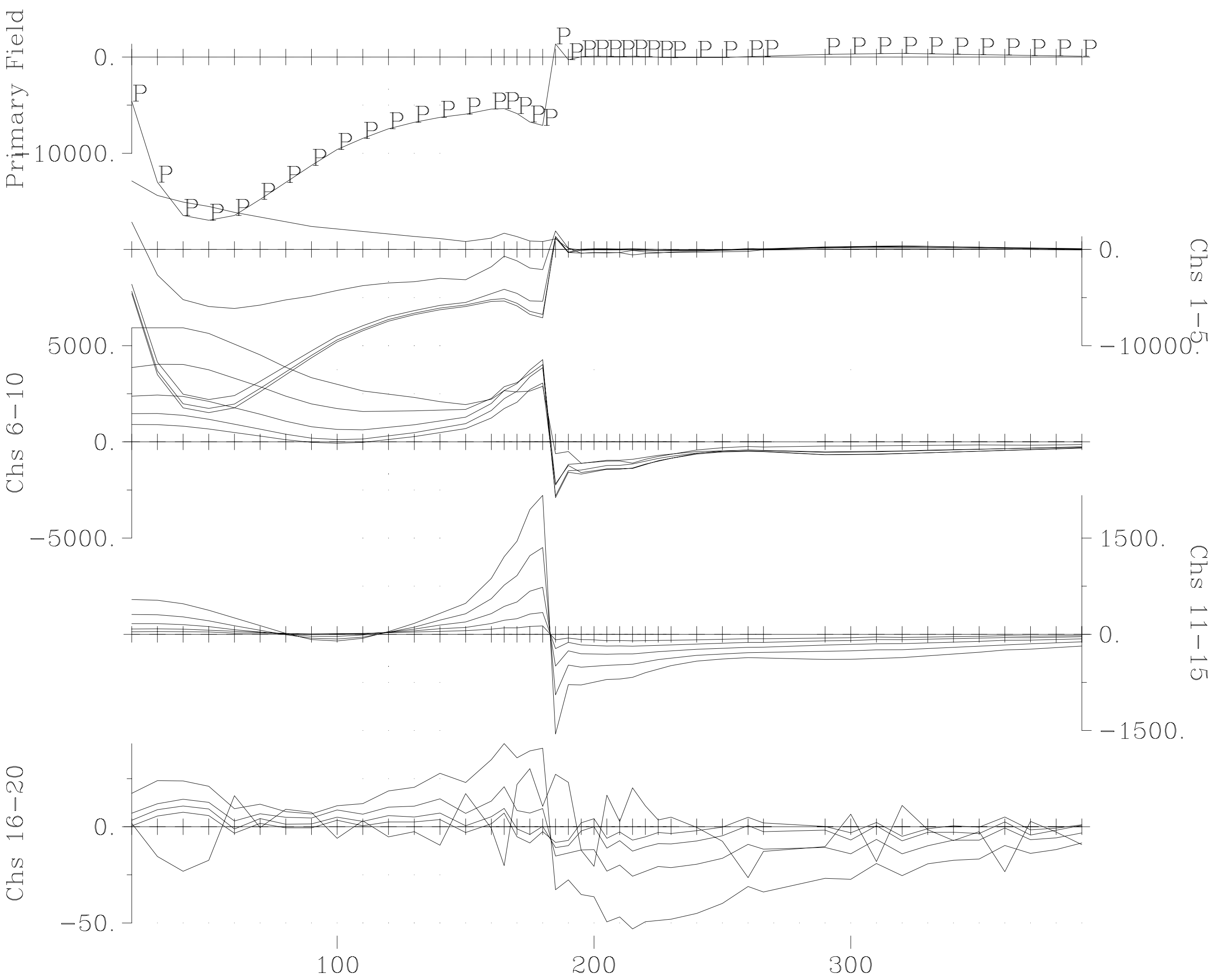
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,199;946,199;946,399;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

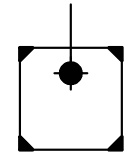
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Y-Tilt-GCL09-05-Y

Map Generated by





Borehole GCL09-05 - Y Component

Scale 1:2500

25 0 25 50 75 100

(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:	746,199;946,200;948,200;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us, -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

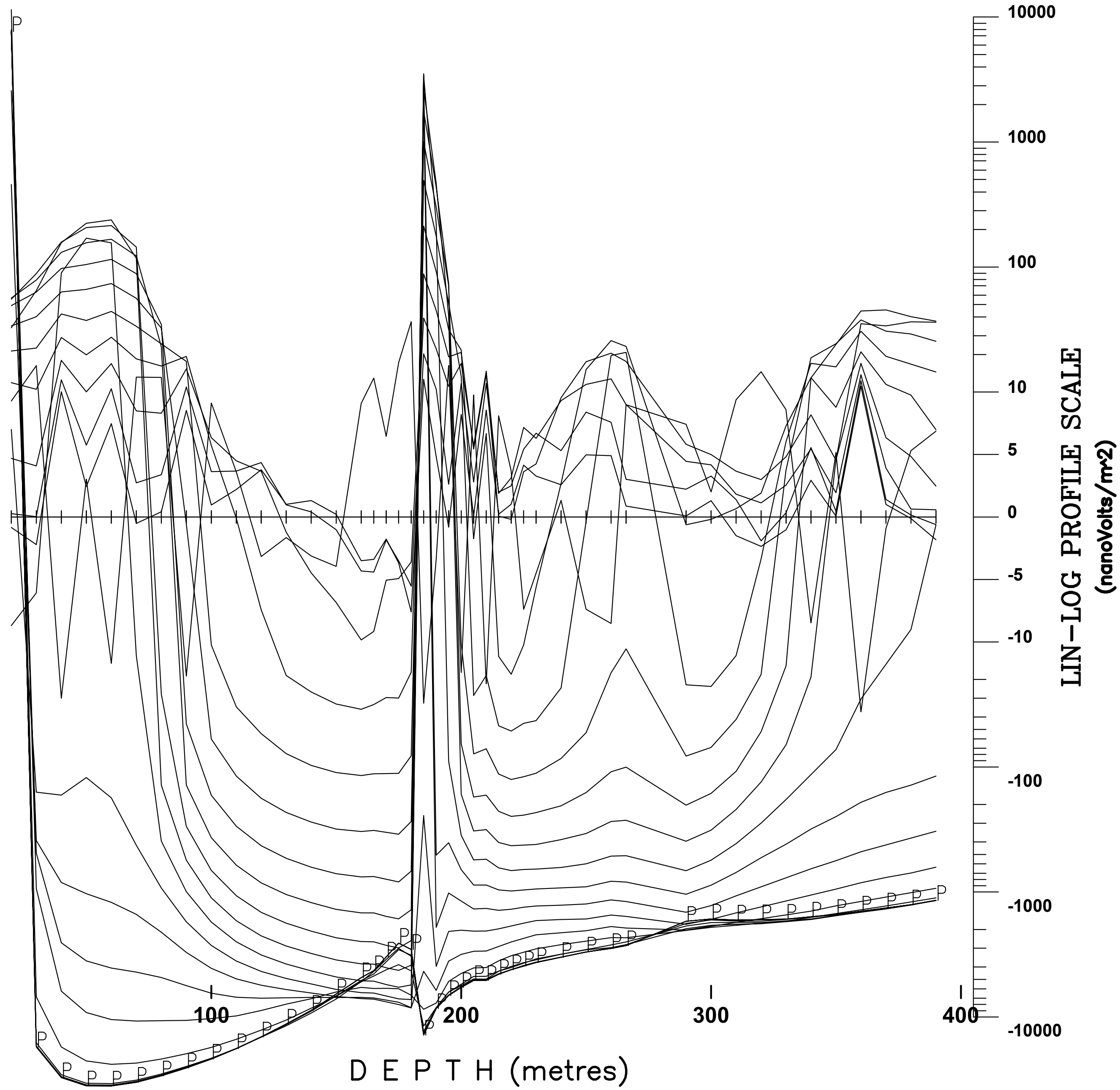
Surveyed & Processed by:

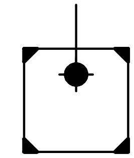
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL09-04-B

Map Generated by

D E P T H (metres)





Borehole GCL09-05 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

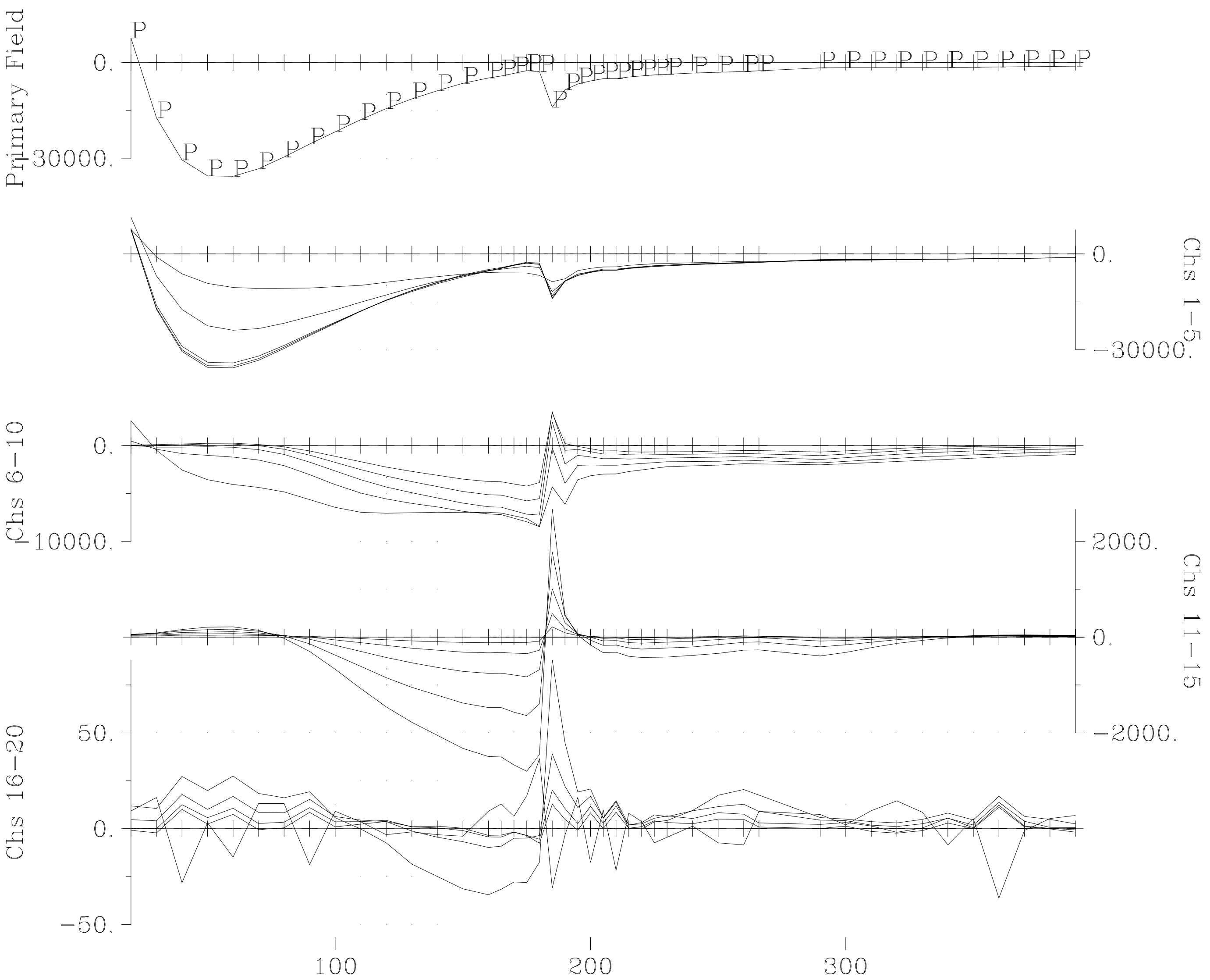
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,199;946,199;946,399;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

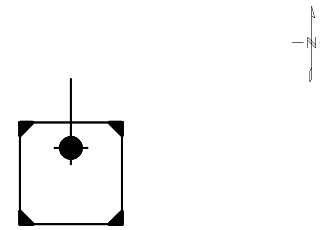
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-X-Tilt-GCL09-05-E

Map Generated by



D E P T H (metres)



Borehole GCL09-05 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

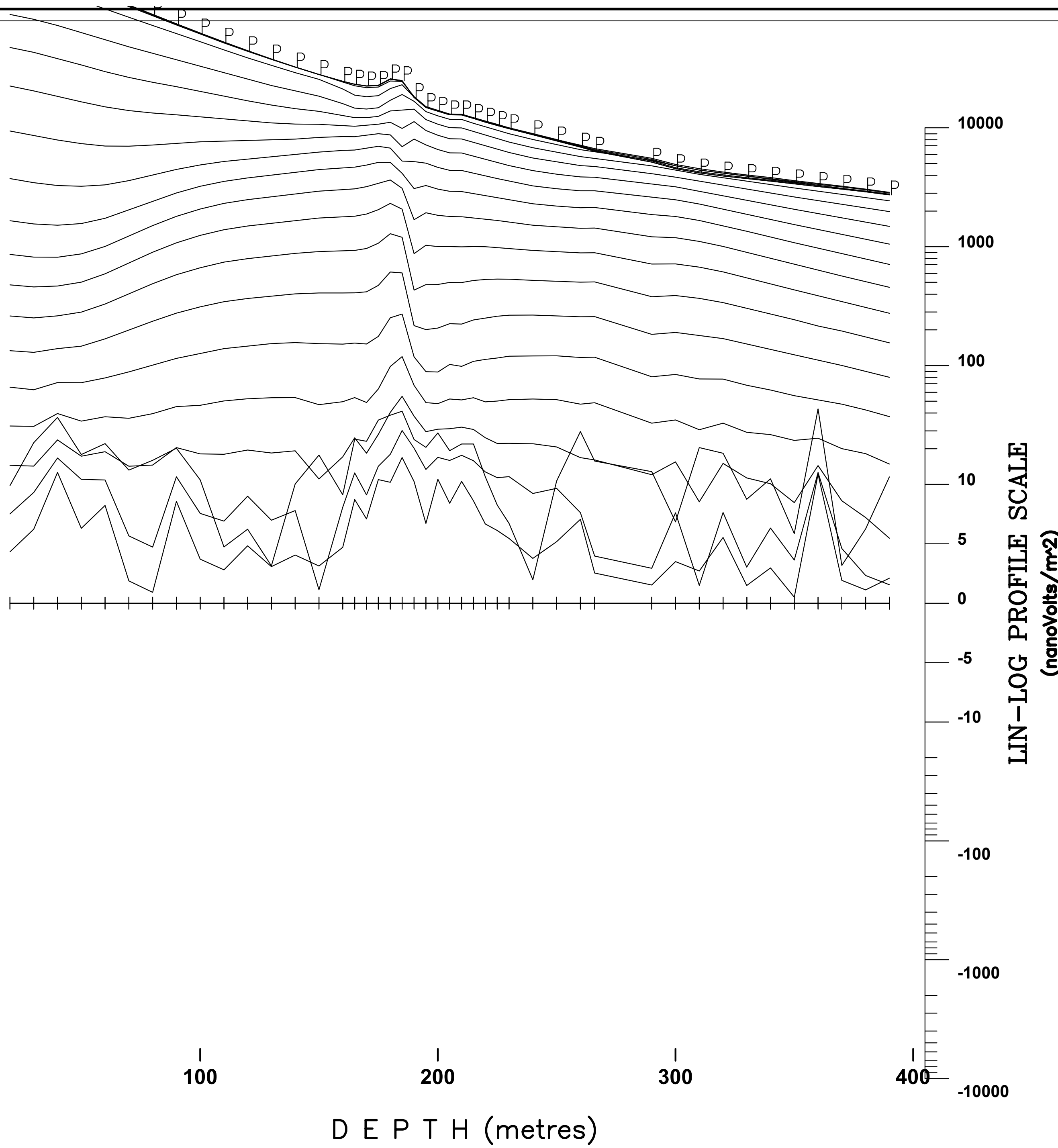
3D FIXED-LOOP BOREHOLE TEM SURVEY

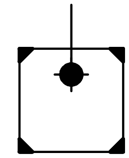
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,199;946,200;948,200;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us, -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. NO. CA00636C-BH4A-Tiltrot-X-GCL09-04-W

Map Generated by





Borehole GCL09-05 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

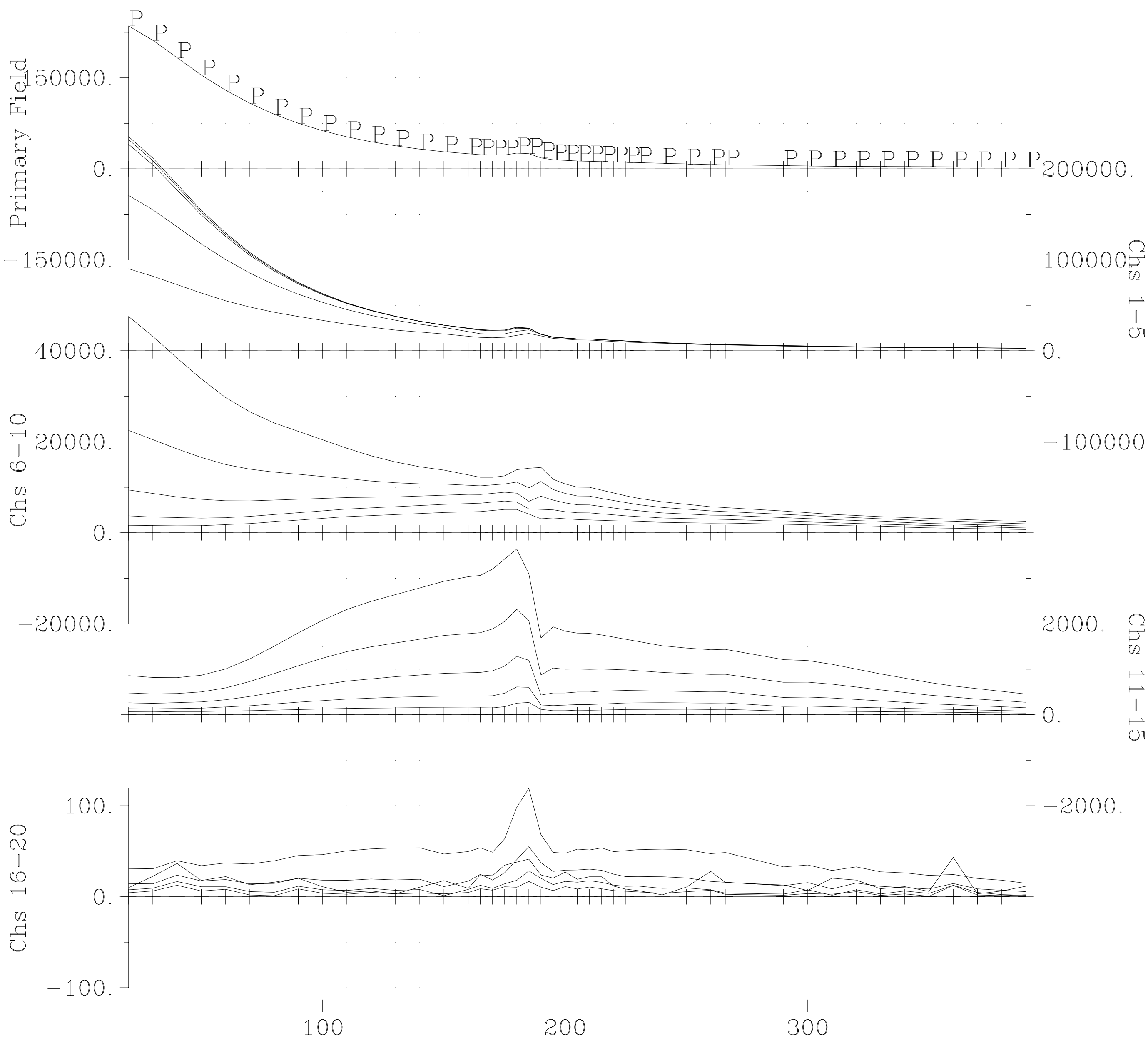
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,199;946,199;946,399;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

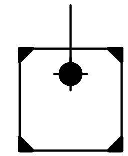
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-TF-Tilt-GCL09-05-B

Map Generated by





Borehole GCL09-05 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

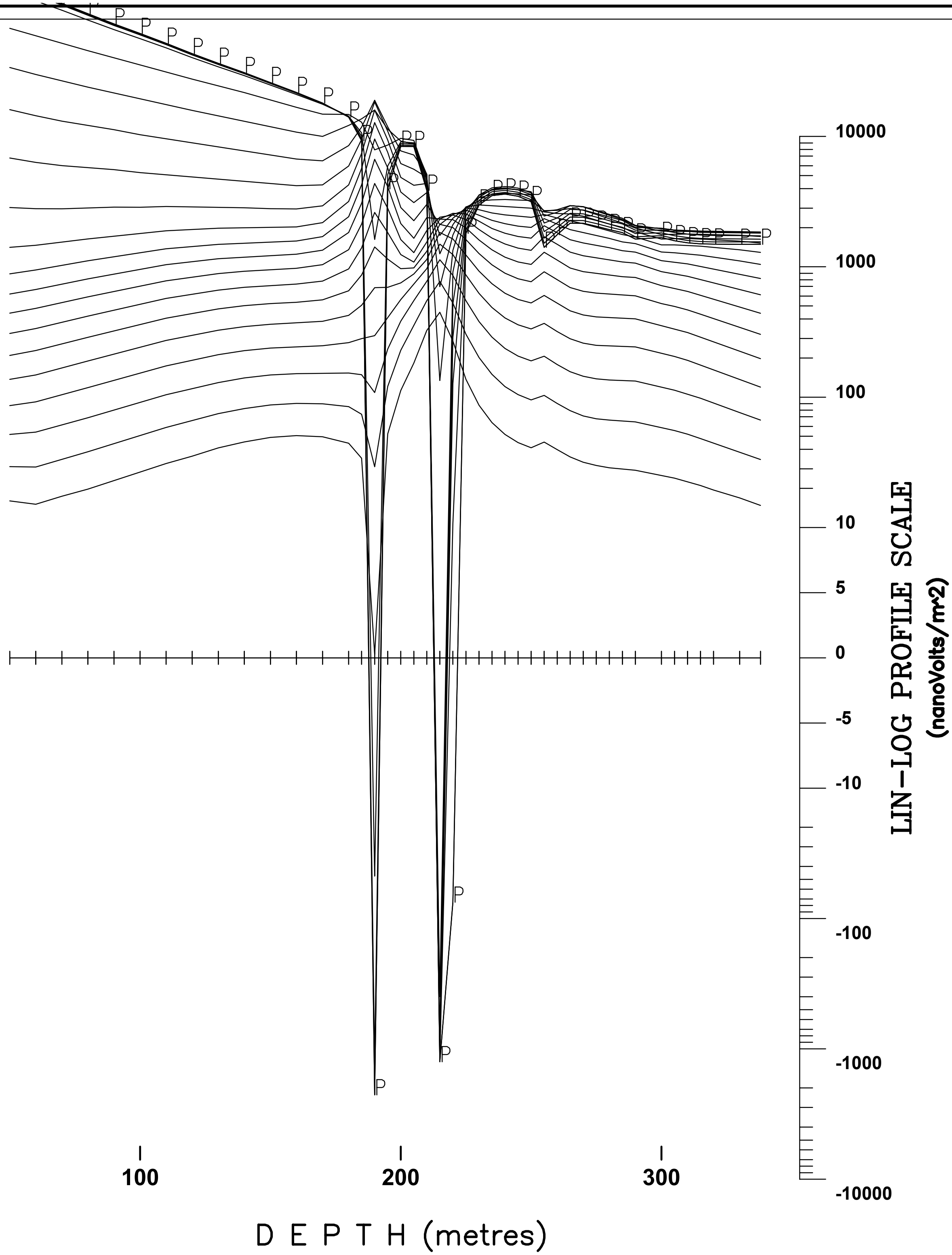
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,199;946,200;948,200;746,399
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	450 us, -80 us
Borehole Location:	498847E,5349348N
Borehole Azimuth, Dip:	360, -70
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 17, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

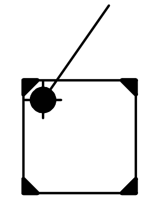
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL09-04-E

Map Generated by





Borehole GCL09-07 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

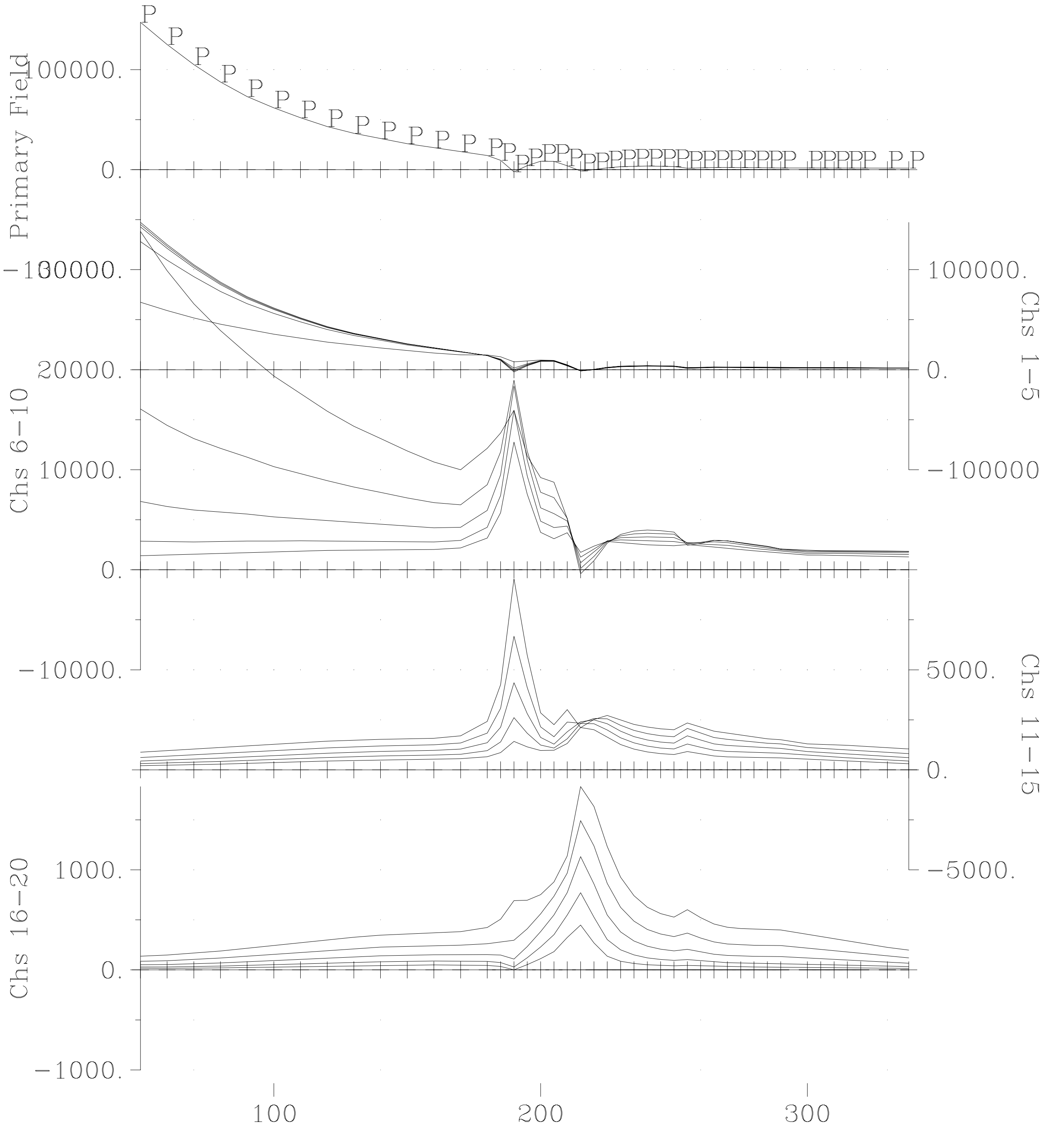
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,21
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

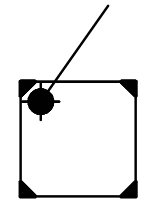
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

Map Generated by

DWG. NO. CA00636C-BHLL-Z-Tilt-GCL09-07-W





Borehole GCL09-07 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

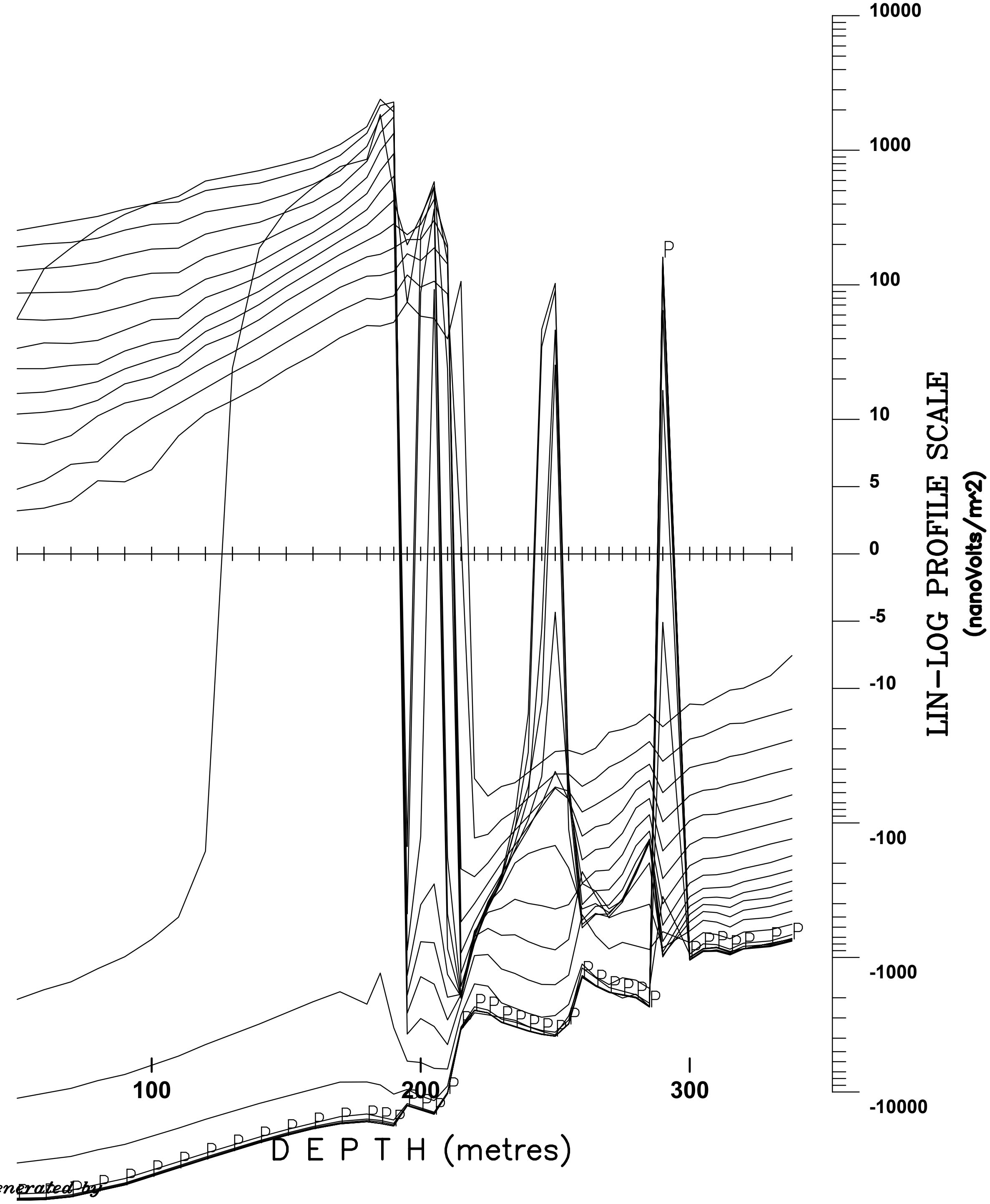
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,213
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us, -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

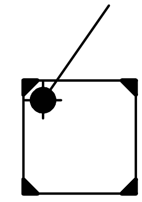
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

Map Generated by

DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL09-07-B





Borehole GCL09-07 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

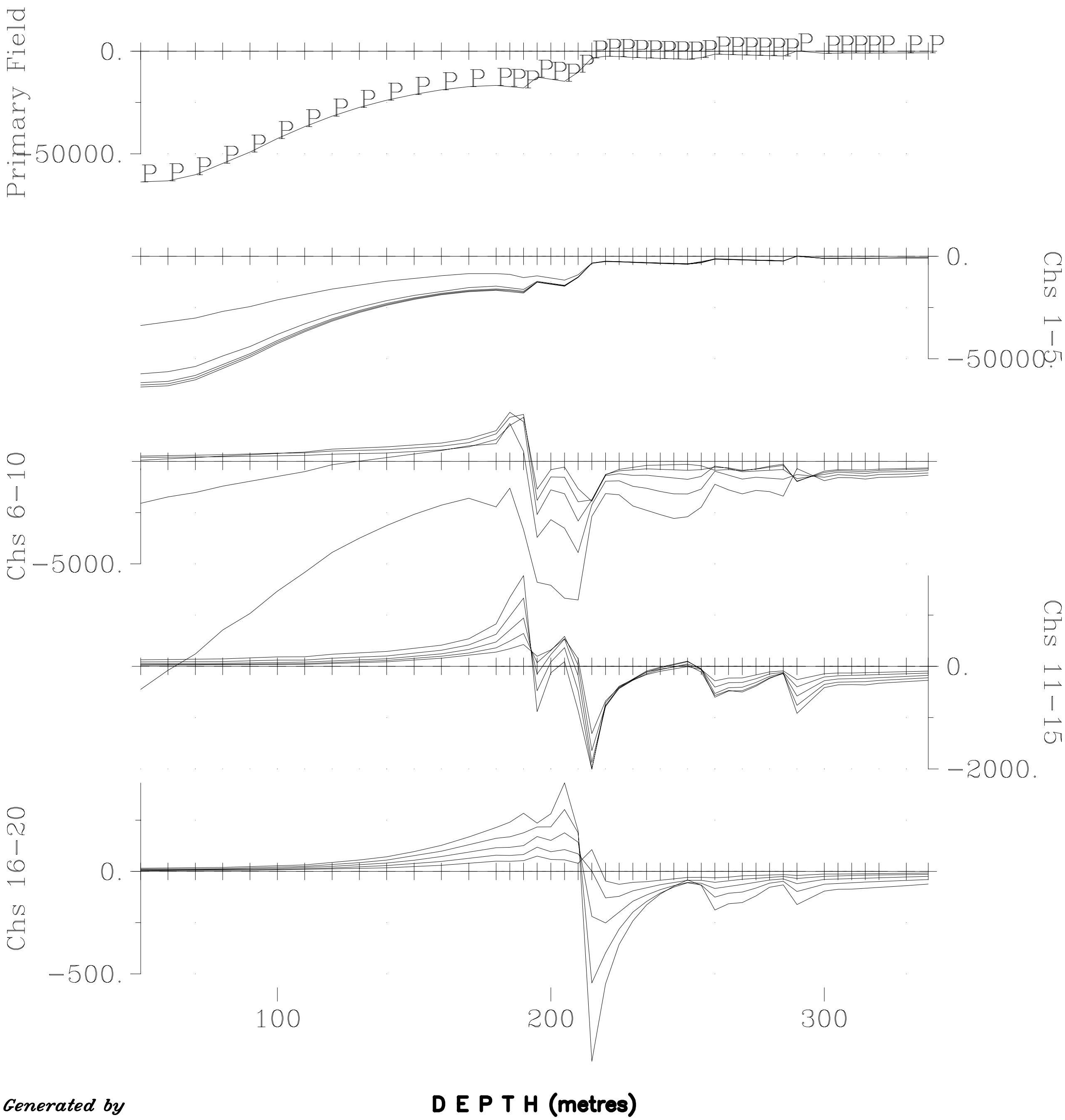
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,21
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

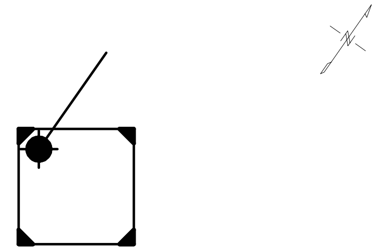
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Y-Tilt-GCL09-07-W

Map Generated by





Borehole GCL09-07 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

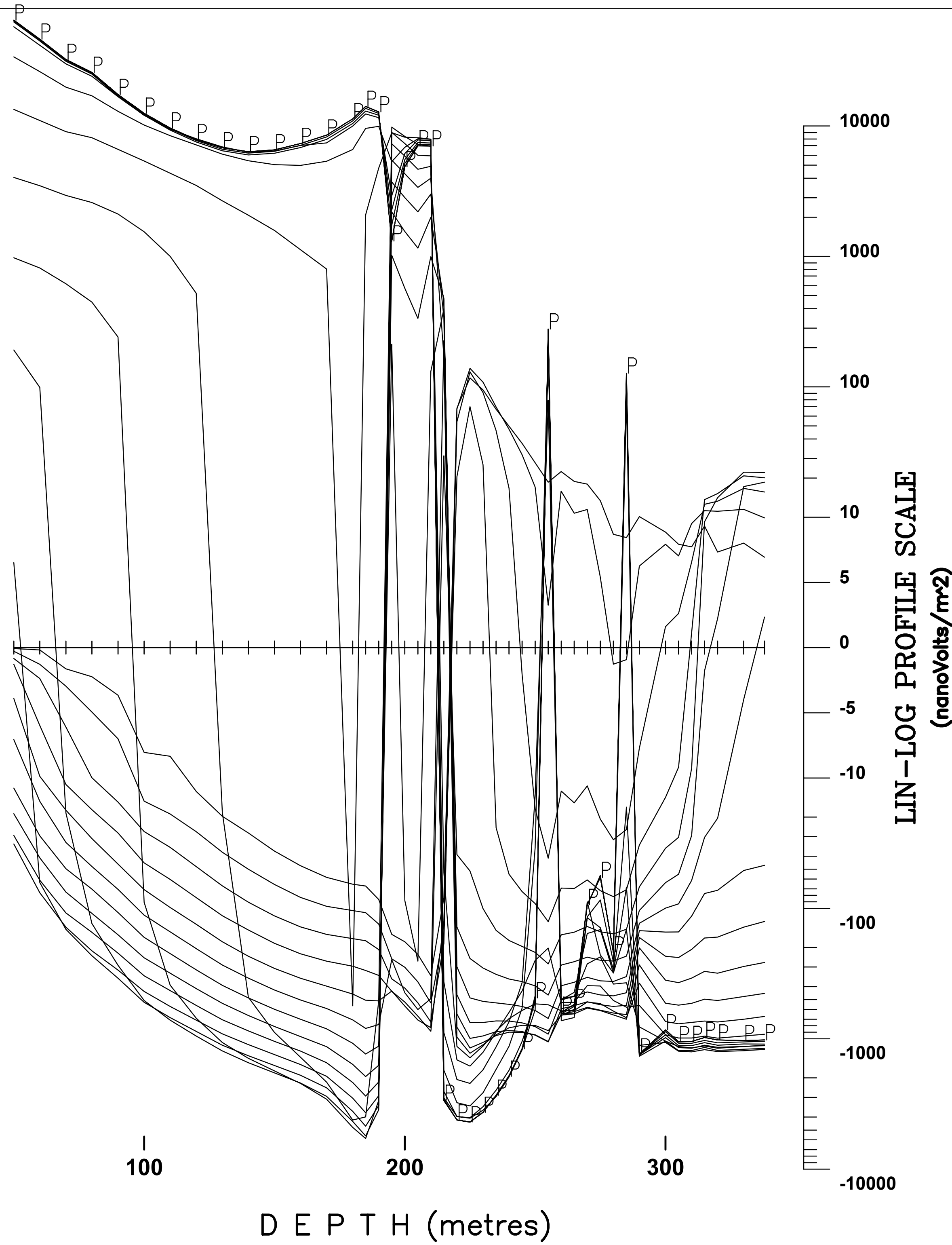
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,213
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us, -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

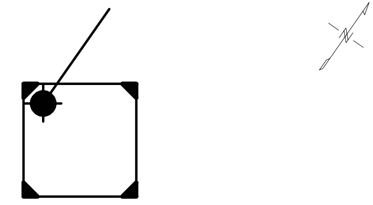
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL09-07-E

Map Generated by





Borehole GCL09-07 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

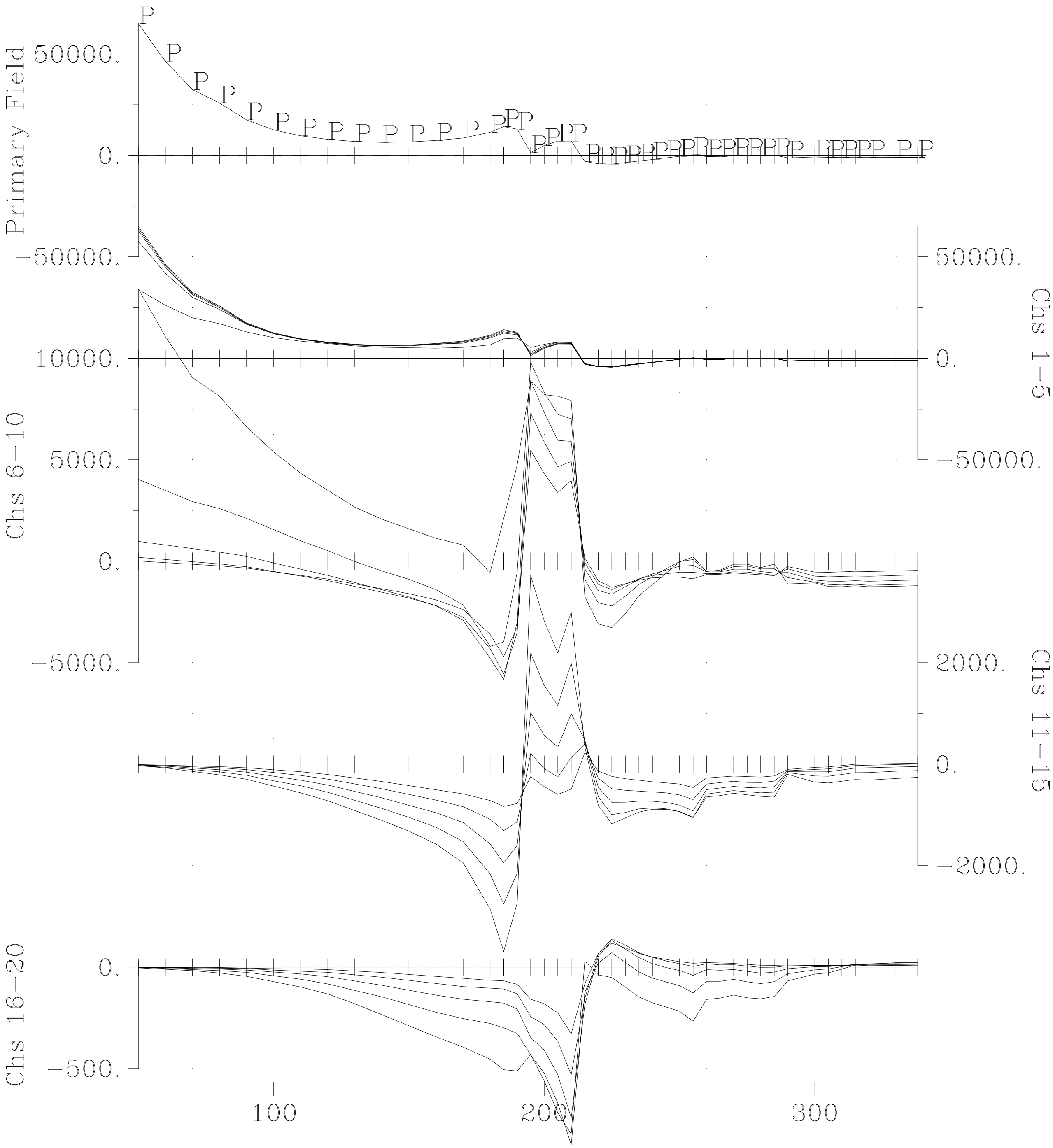
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,21
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

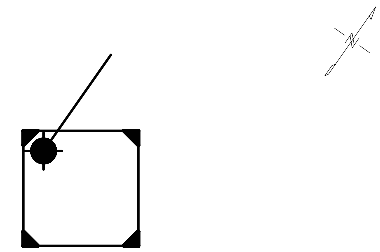
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-X-Tilt-GCL09-07-W

Map Generated by





Borehole GCL09-07 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

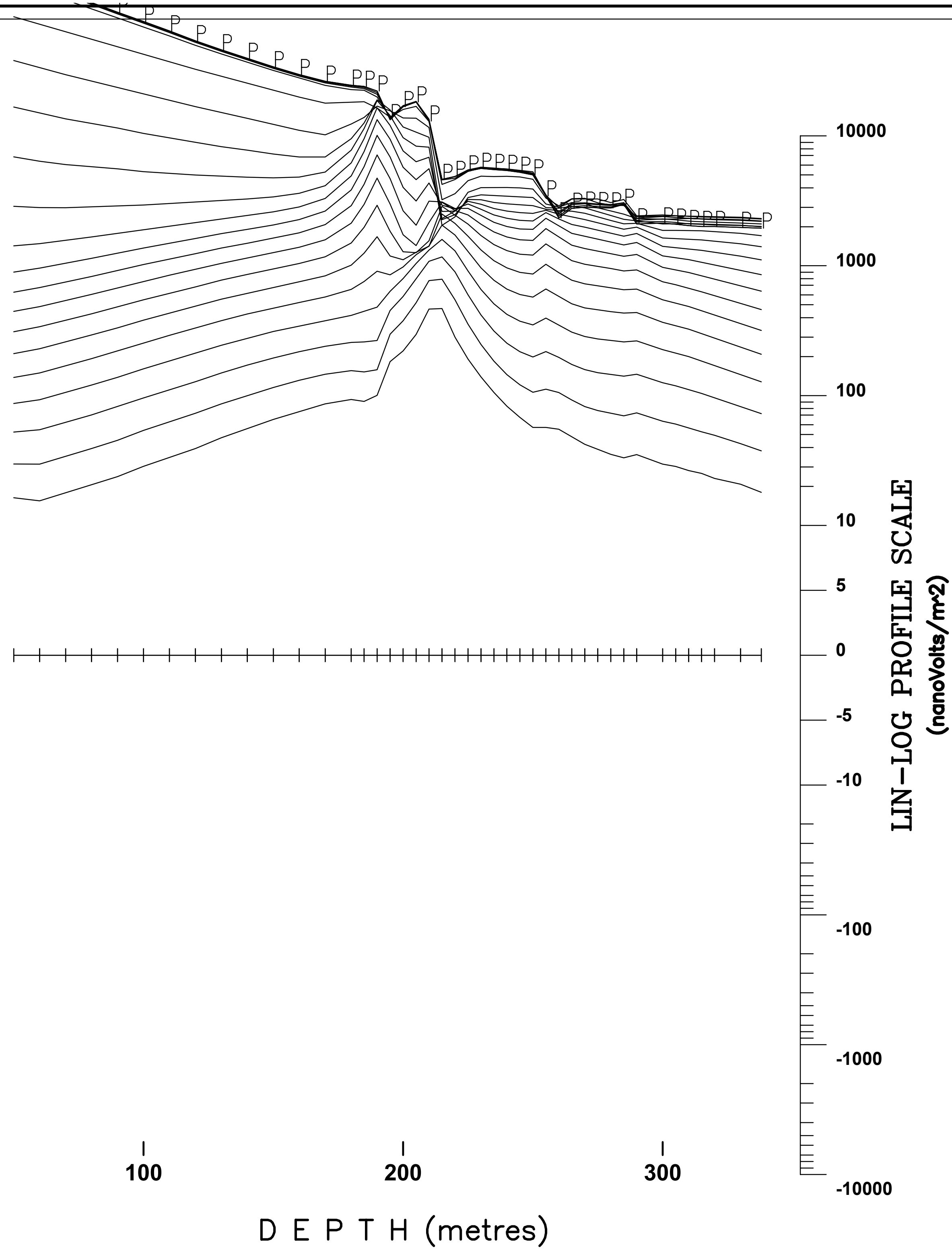
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,213
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us, -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

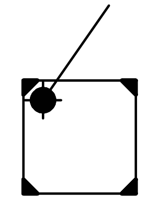
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

Map Generated by

DWG. NO. CA00636C-BH4A-Tiltrot-X-GCL09-07-E





Borehole GCL09-07 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

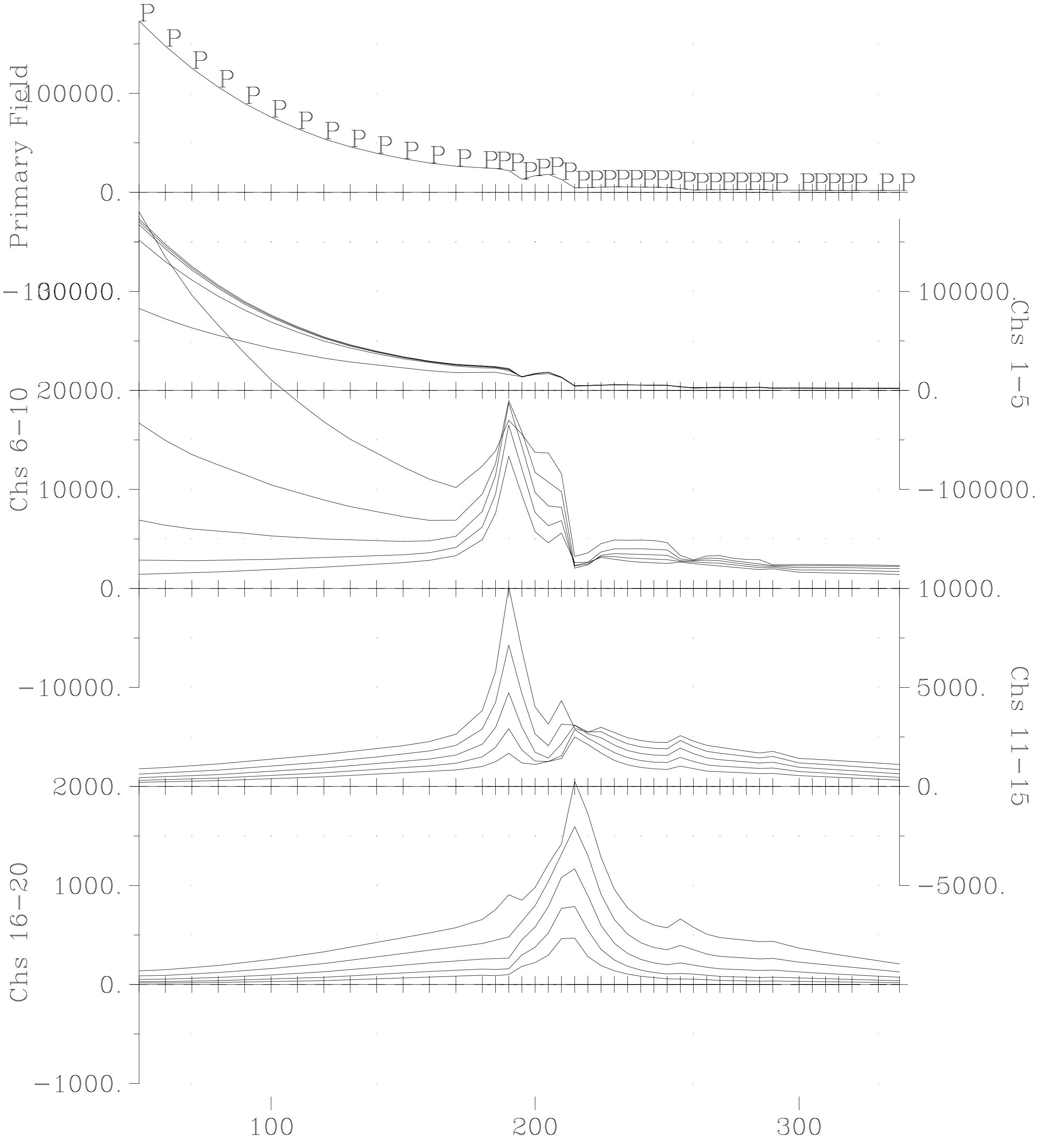
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,21
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

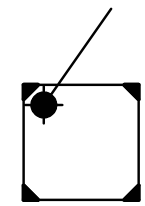
DWG. NO. CA00636C-BHLL-TF-Tilt-GCL09-07-W

Map Generated by



Map Generated by

D E P T H (metres)



Borehole GCL09-07 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

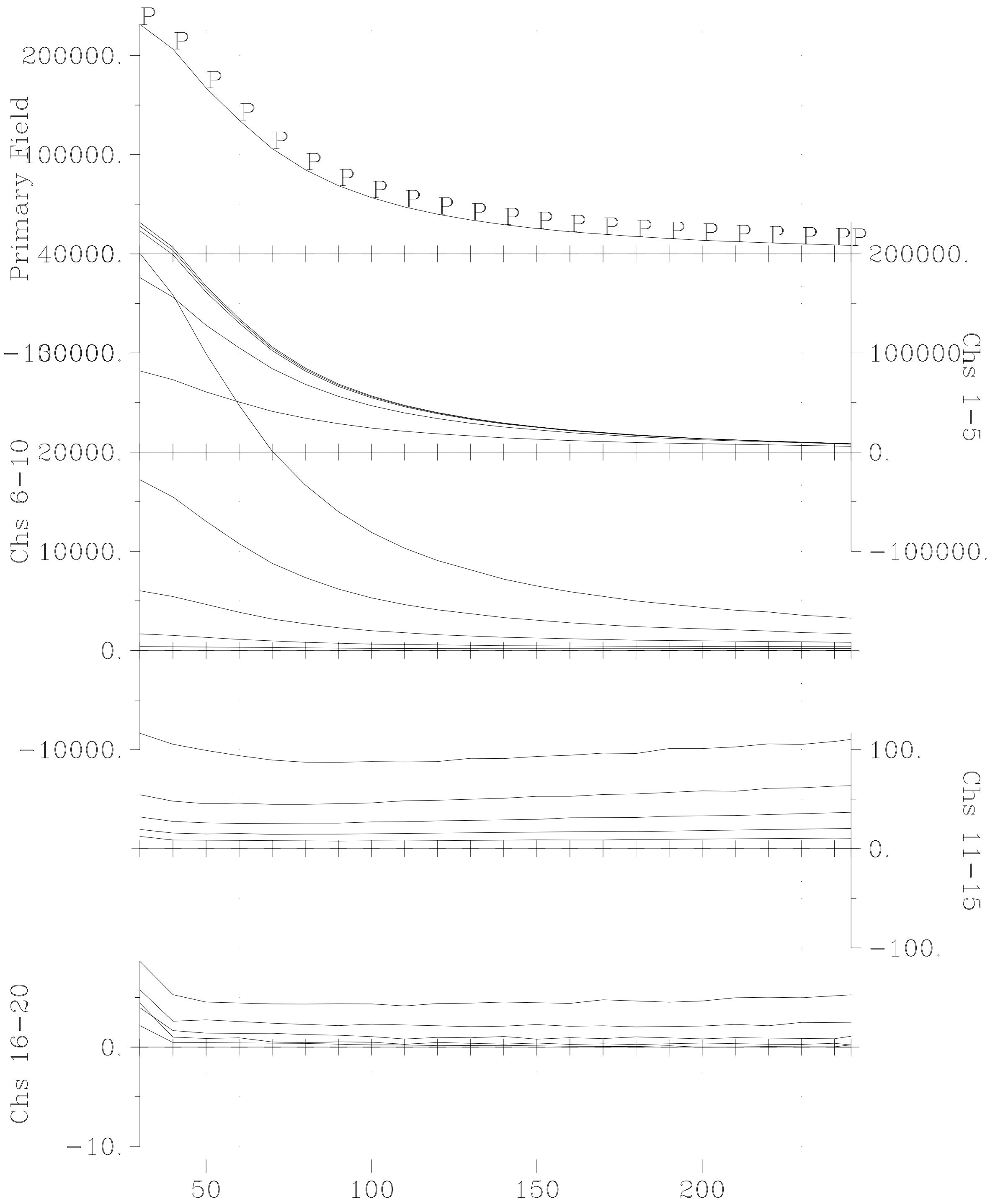
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	9083,64;8972,226;9127,352;9266,213
Transmitter Current:	14.8 Amps
Tx Turn-Off-Time and Rx Delay:	458 us, -80 us
Borehole Location:	499030E,5349230N
Borehole Azimuth, Dip:	360, -53
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Mar 24, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

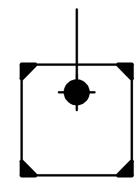
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL09-07-W



D E P T H (metres)



Borehole GCL09-09 - Z Component

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)

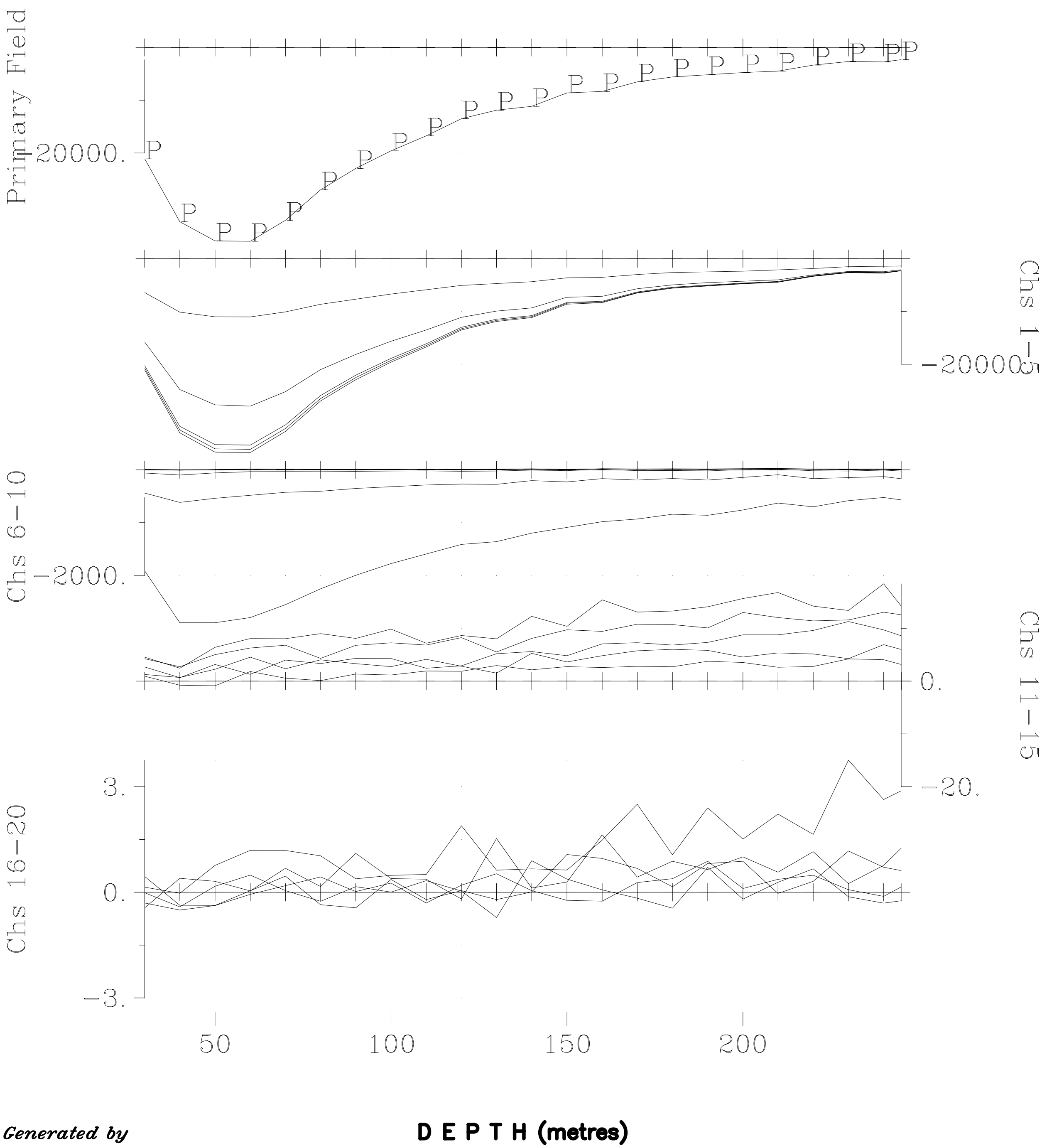
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,8840;746,9040;946,9040;946,8840
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us, -80 us
Borehole Location:	498845E,5348990N
Borehole Azimuth, Dip:	360, -50
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

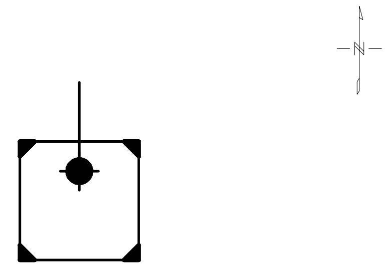
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL09-09-E

Map Generated by





Borehole GCL09-09 - Y Component

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)

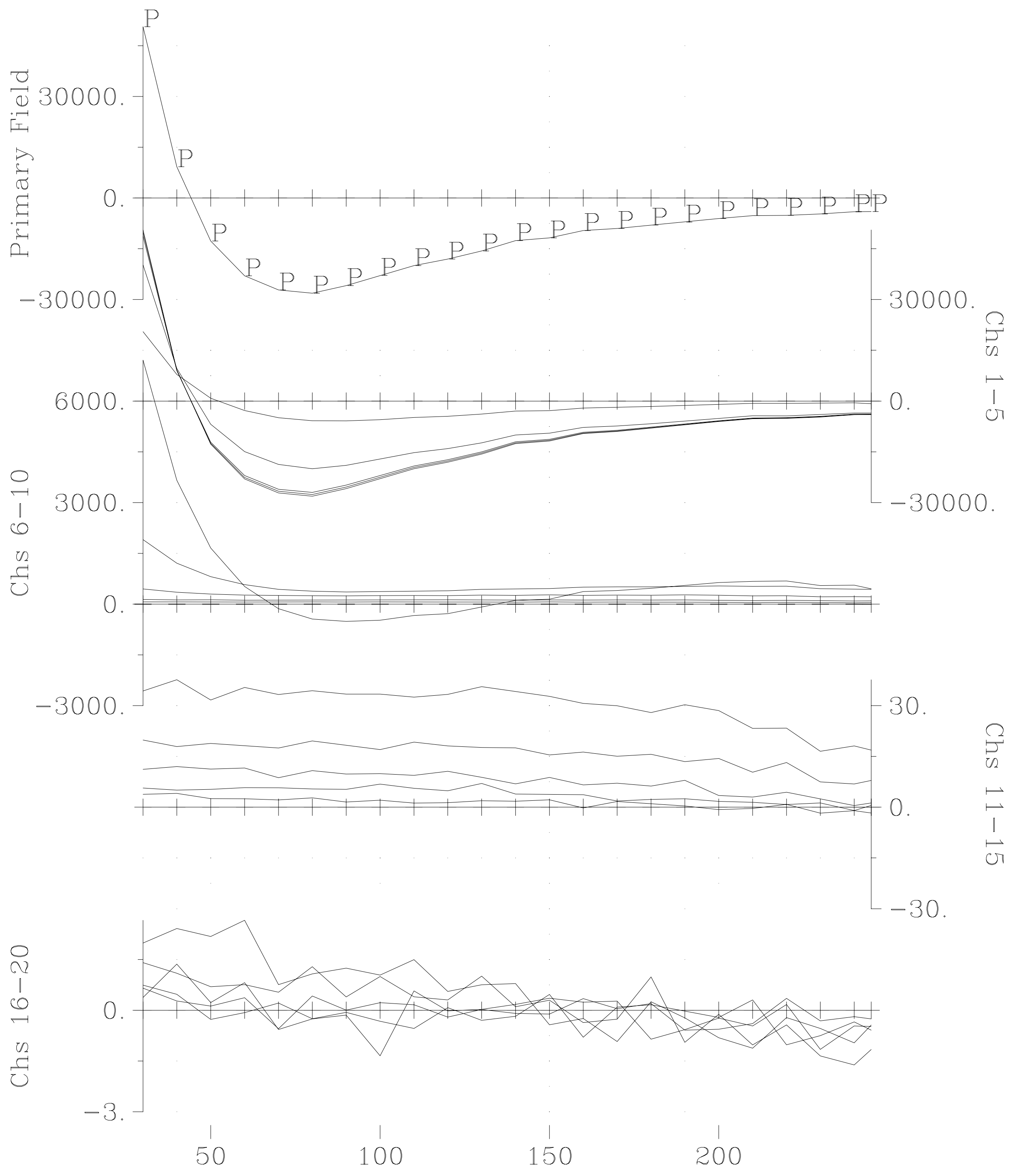
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	746,8840;746,9040;946,9040;946,8840
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us, -80 us
Borehole Location:	498845E,5348990N
Borehole Azimuth, Dip:	360, -50
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

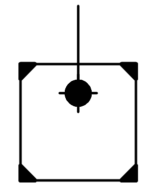
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL09-09-IV

Map Generated by





Borehole GCL09-09 - X Component

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:	746,8840;746,9040;946,9040;946,8840
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us, -80 us
Borehole Location:	498845E,5348990N
Borehole Azimuth, Dip:	360, -50
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

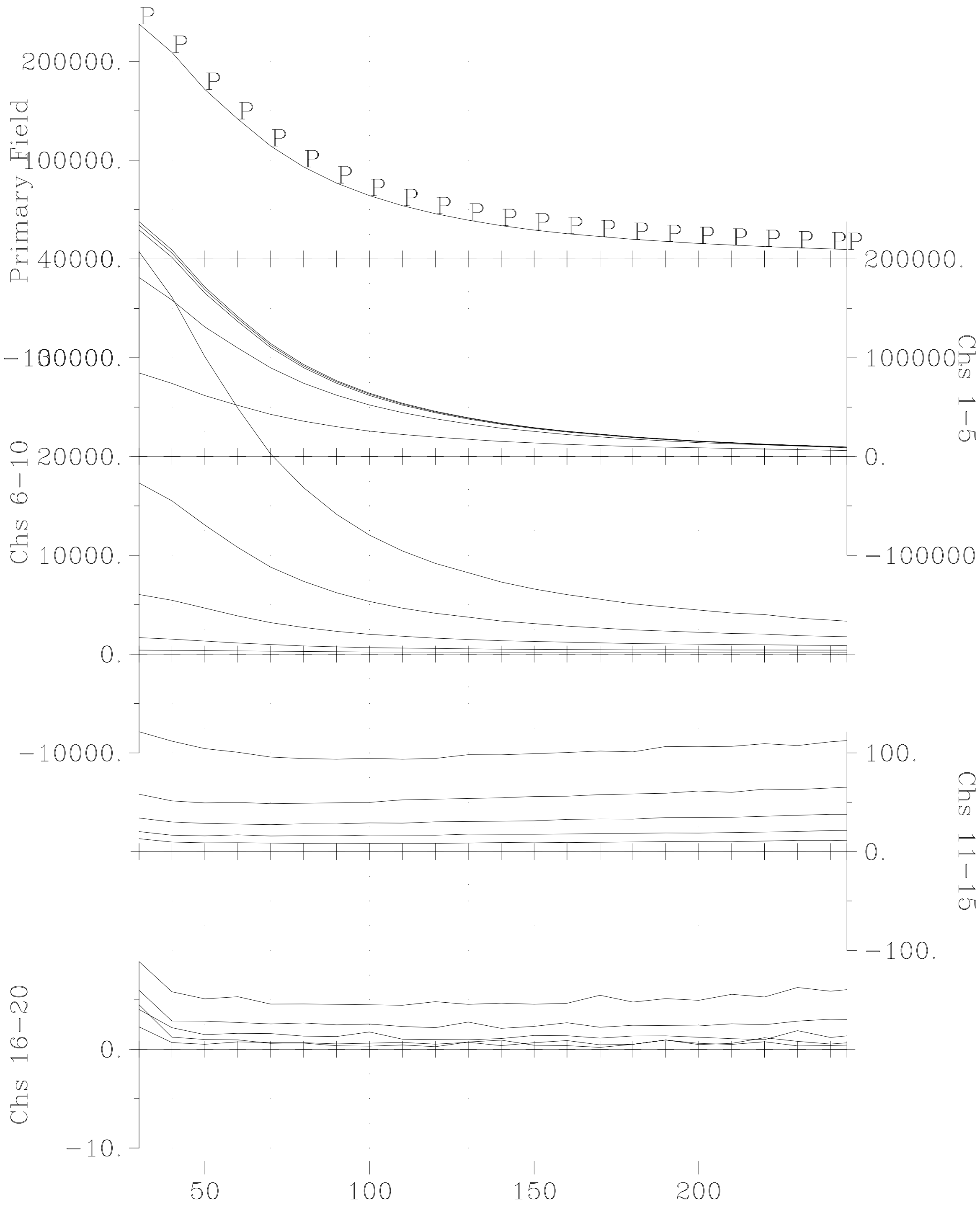
Surveyed & Processed by:

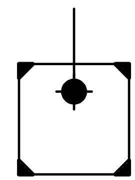
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-X-GCL09-09-X

Map Generated by

D E P T H (metres)





Borehole GCL09-09 - Total Field

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:	746,8840;746,9040;946,9040;946,8840
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us, -80 us
Borehole Location:	498845E,5348990N
Borehole Azimuth, Dip:	360, -50
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

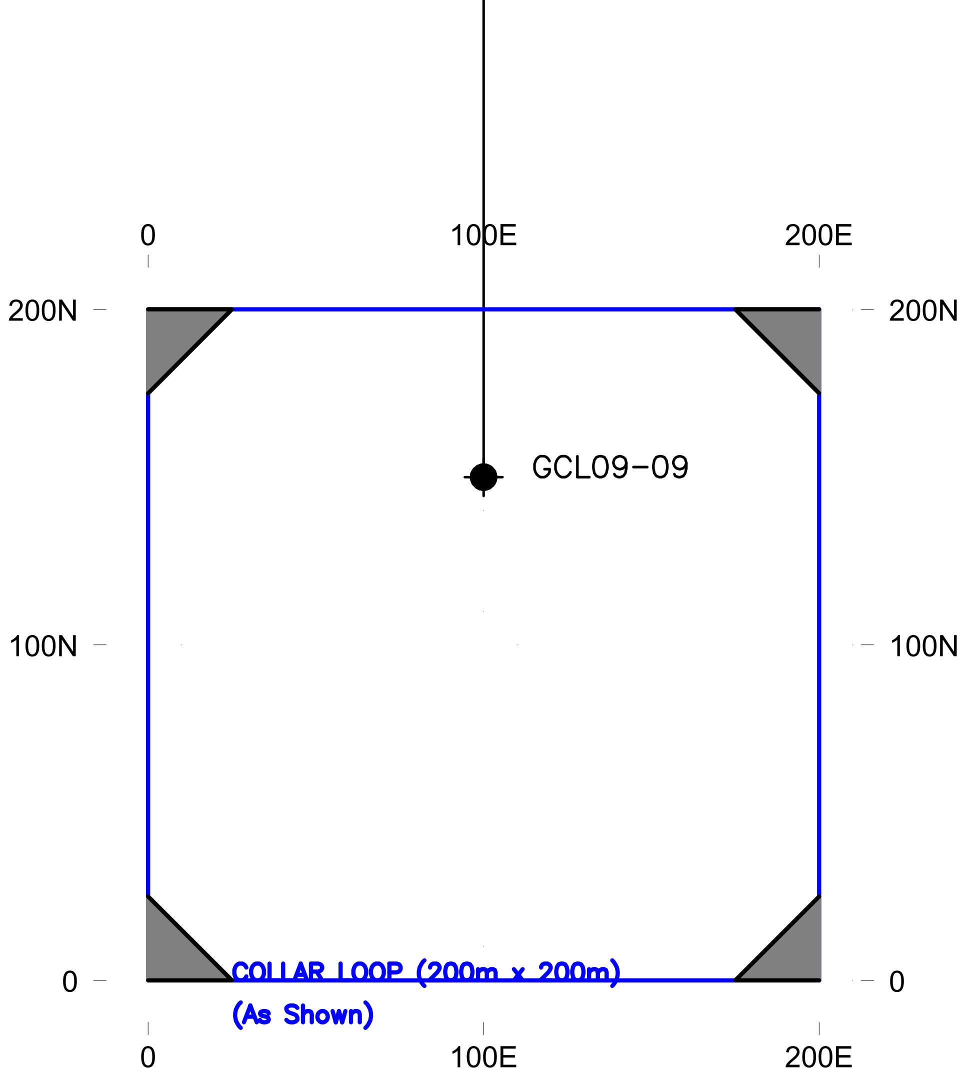
Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.

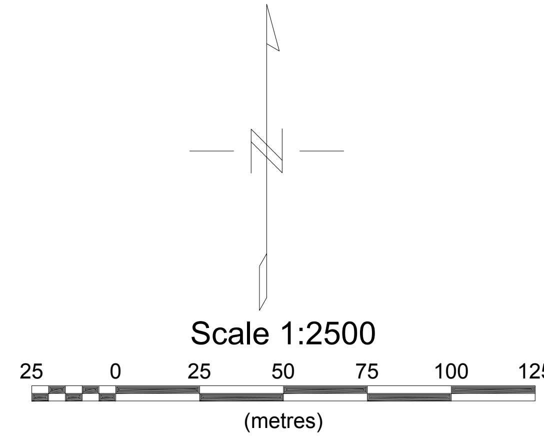
DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL09-09-N

Map Generated by

D E P T H (metres)

GCL09-09 - BOREHOLE & LOOP LOCATION MAP





GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

BOREHOLE & LOOP LOCATION MAP

GCL09-09

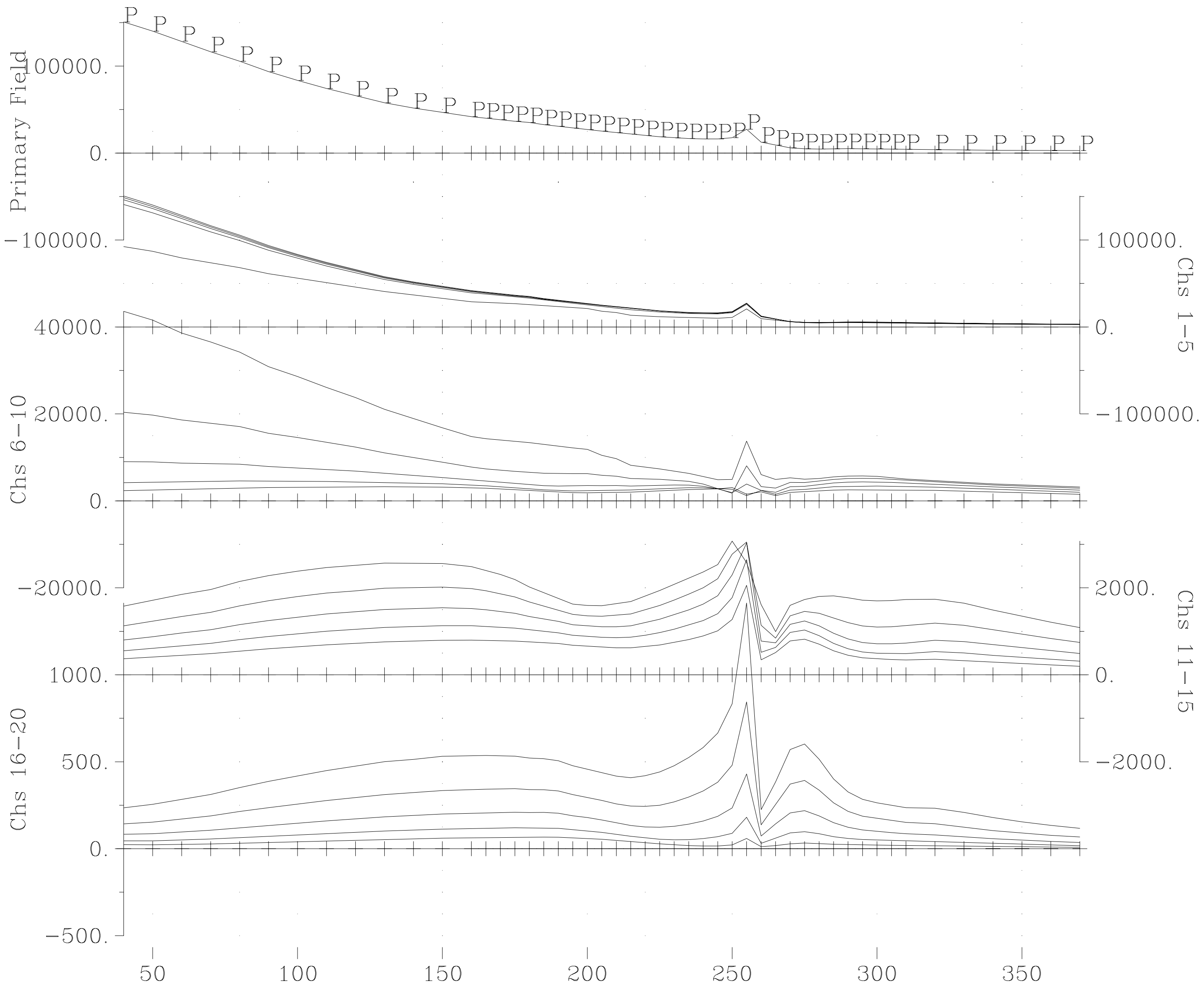
Borehole Parameters:		
	DDH #1 =	GCL09-09
	Location =	100E,150N
	Azimuth & Dip =	360, -50
	DDH #2 =	
	Location =	
	Azimuth & Dip =	
	DDH #3 =	
	Location =	
	Azimuth & Dip =	

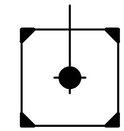
Survey Date: Apr 16, 2009

Instrumentation: Rx = Digital Protem (30 Channels)
Geonics 3D probe + 500m cable
Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. #: CA00636C-BHTEM-LOOPLOC-GCL09-09

Map Generated by





Borehole GCL09-10 – Total Field

Scale 1:2000

25 0 25 50 75

(metres)

GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

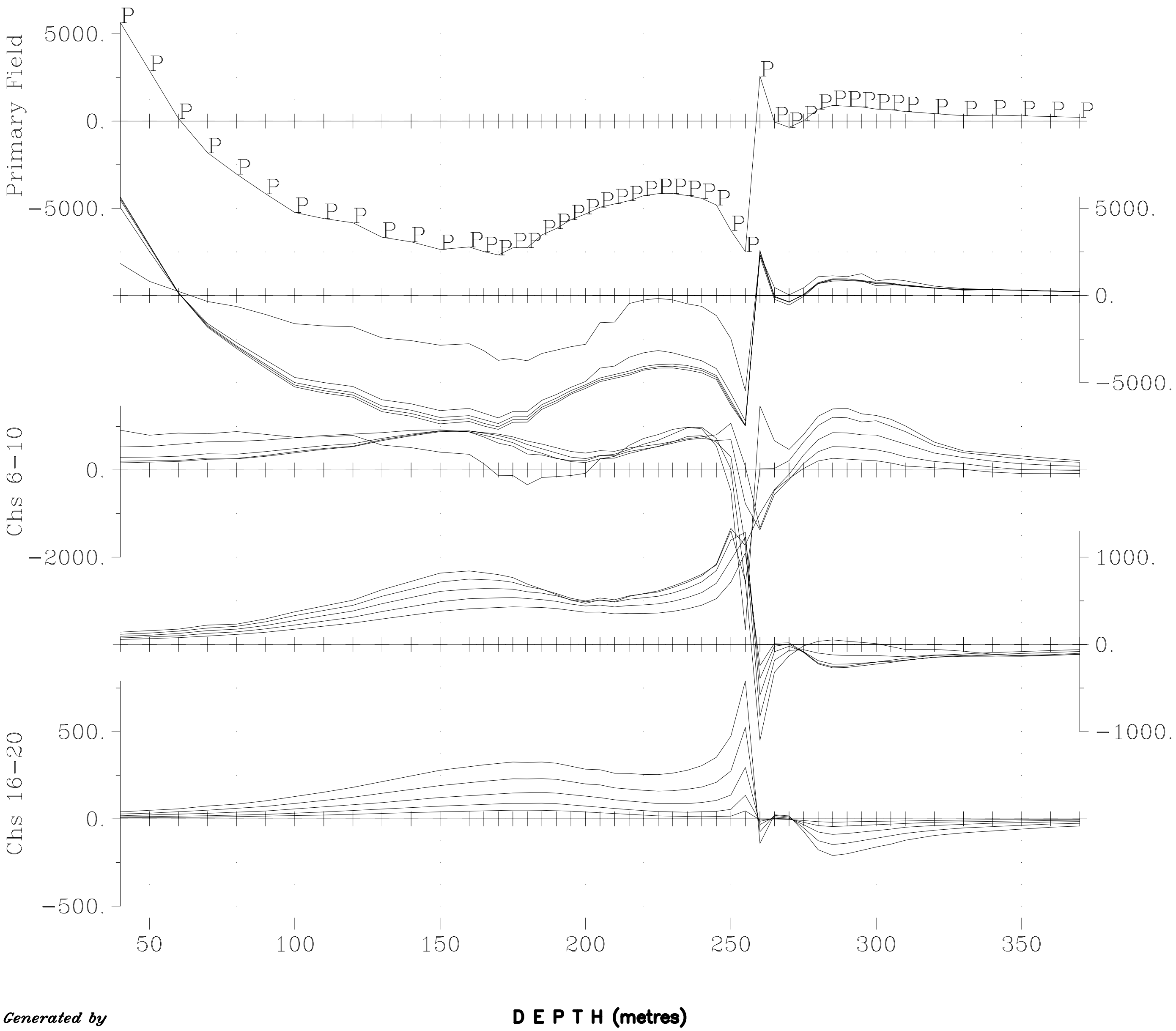
3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350;9110,350;9110,150
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us, -80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Map Generated by

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL09-10-E



Map Generated by

Borehole GCL09−10 − Y Component

Scale 1:2000

25 0 25 50 75

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED−LOOP BOREHOLE TEM SURVEY

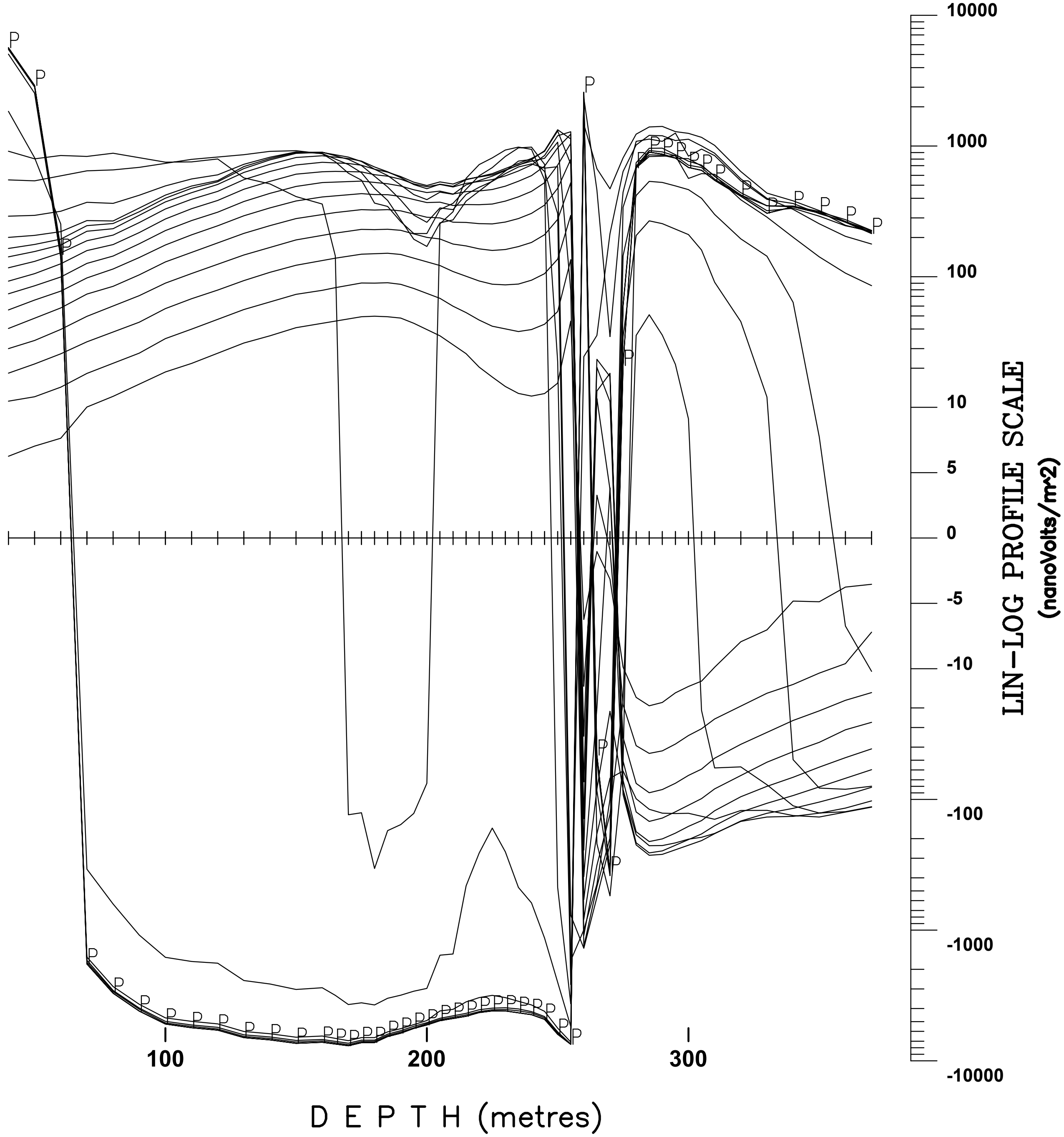
Secondary Electromagnetic Field (dB/dt)

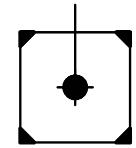
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350;9110,350;9110,150
Transmitter Current:	14.5 Amps
Tx Turn−Off−Time and Rx Delay:	440 us, −80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, −65
Station Interval:	5−10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz − positive up Hx − positive north, Hy − positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels) Geonics 3D probe + 500m cable Tx = Geonics EM−57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C−BH4A−Tiltrot−Y−GCL09−10−W





Borehole GCL09-10 - Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

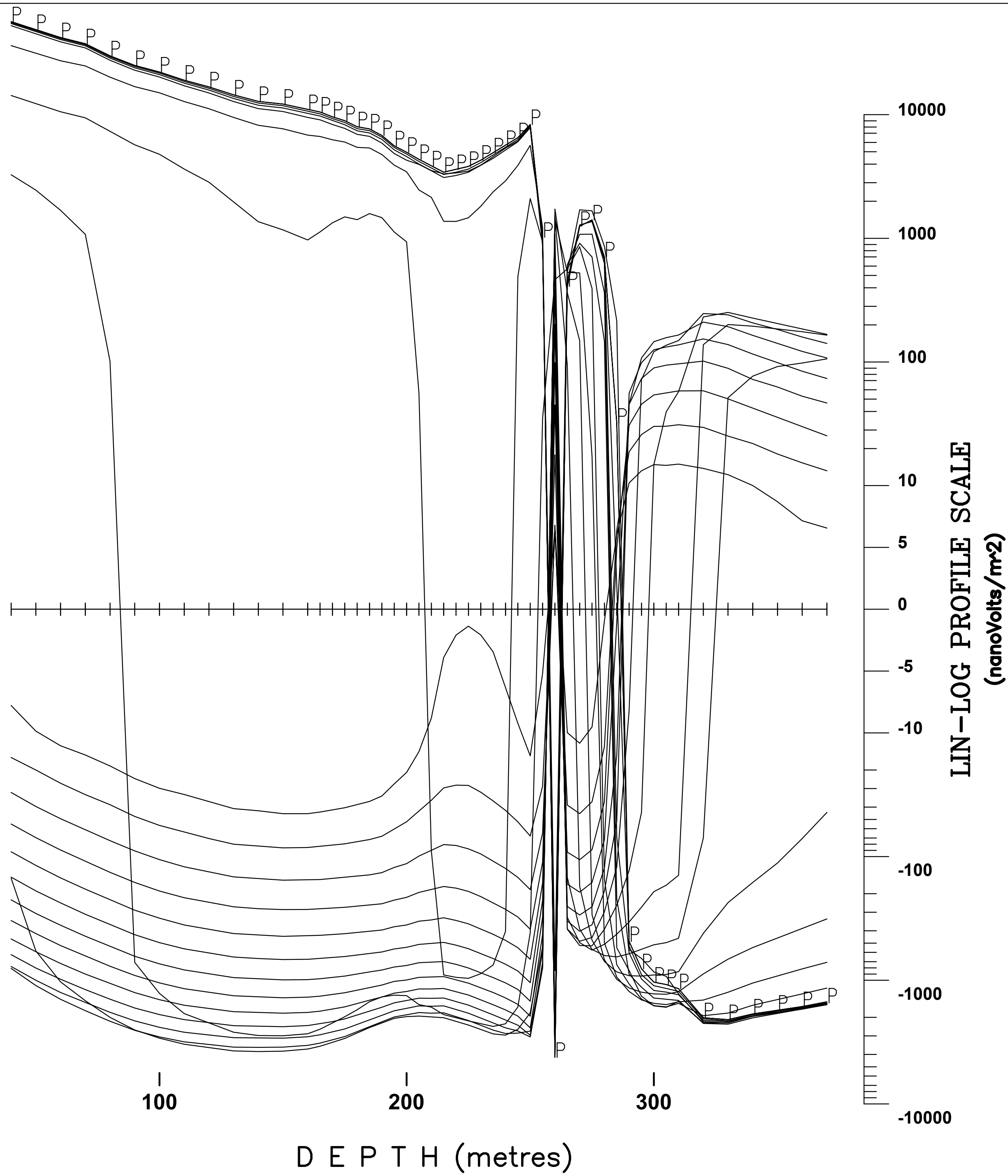
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350,9110,350;9110,1
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us -80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

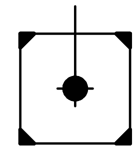
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Y-Tilt-GCL09-10-B

Map Generated by





Borehole GCL09-10 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

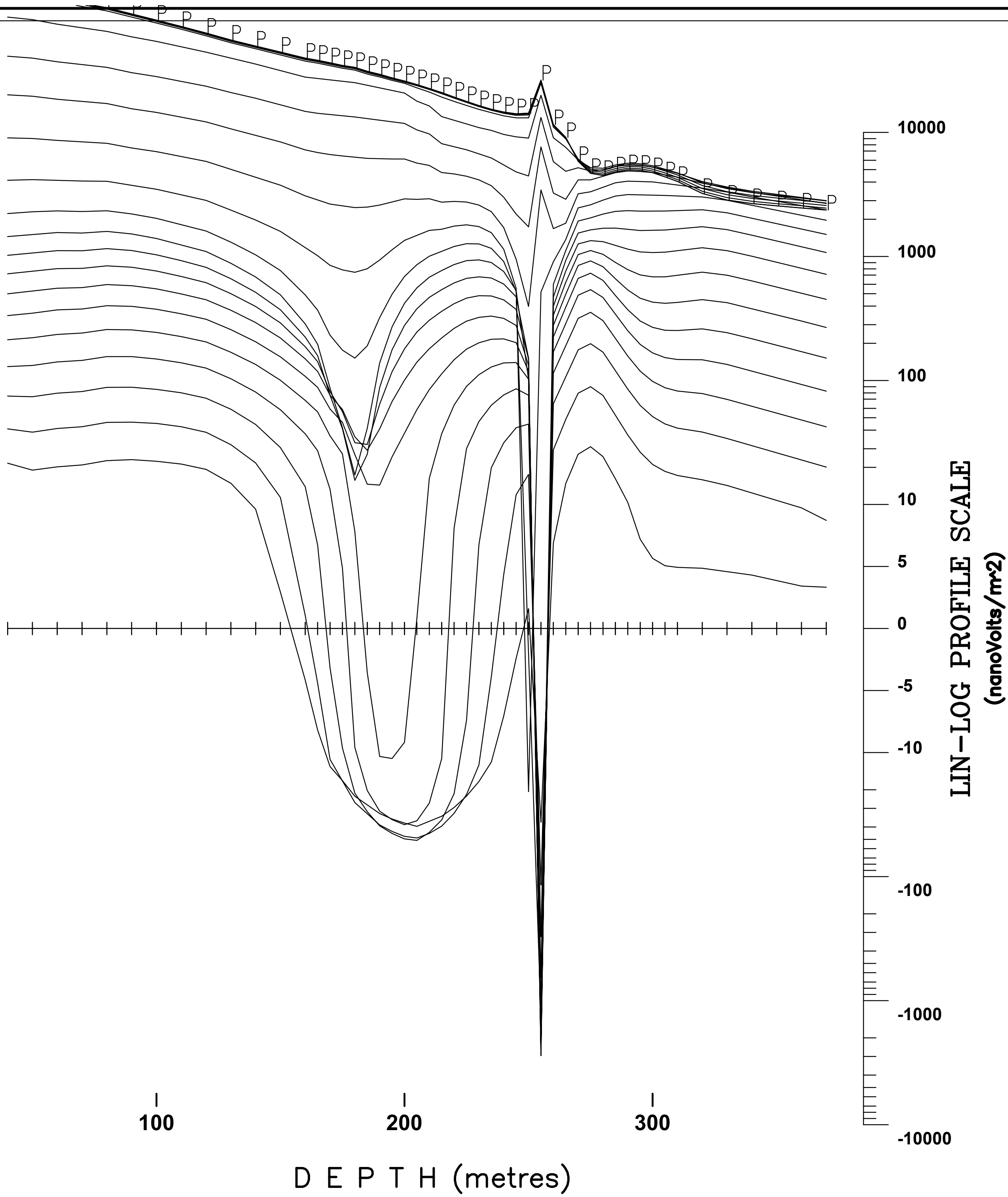
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350,9110,350;9110,1
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us -80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

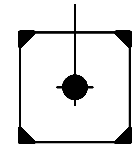
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-X-Tilt-GCL09-10-B

Map Generated by





Borehole GCL09-10 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

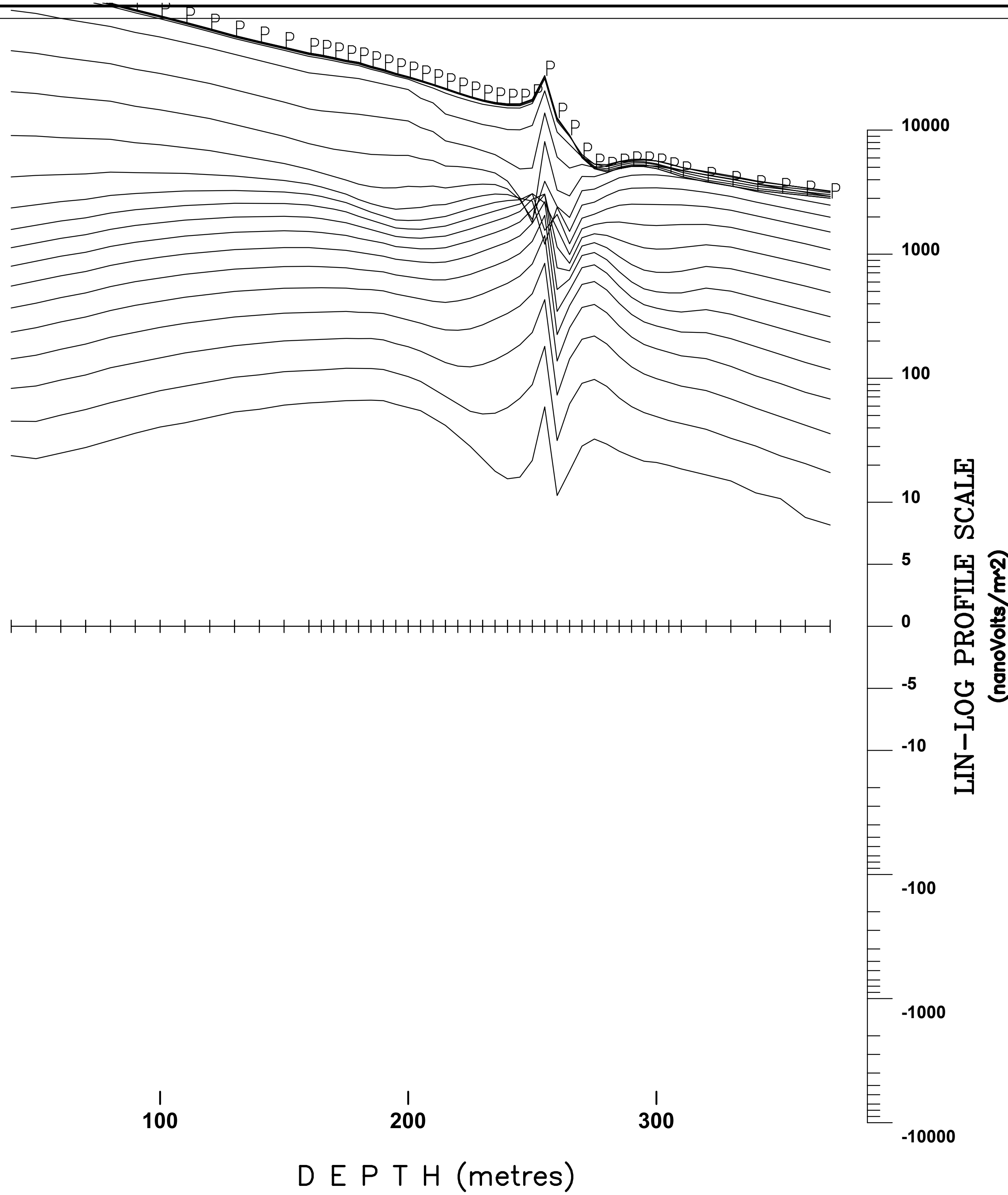
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350,9110,350;9110,1
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us -80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

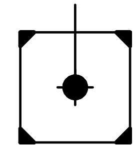
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Z-Tilt-GCL09-10-B

Map Generated by





Borehole GCL09-10 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

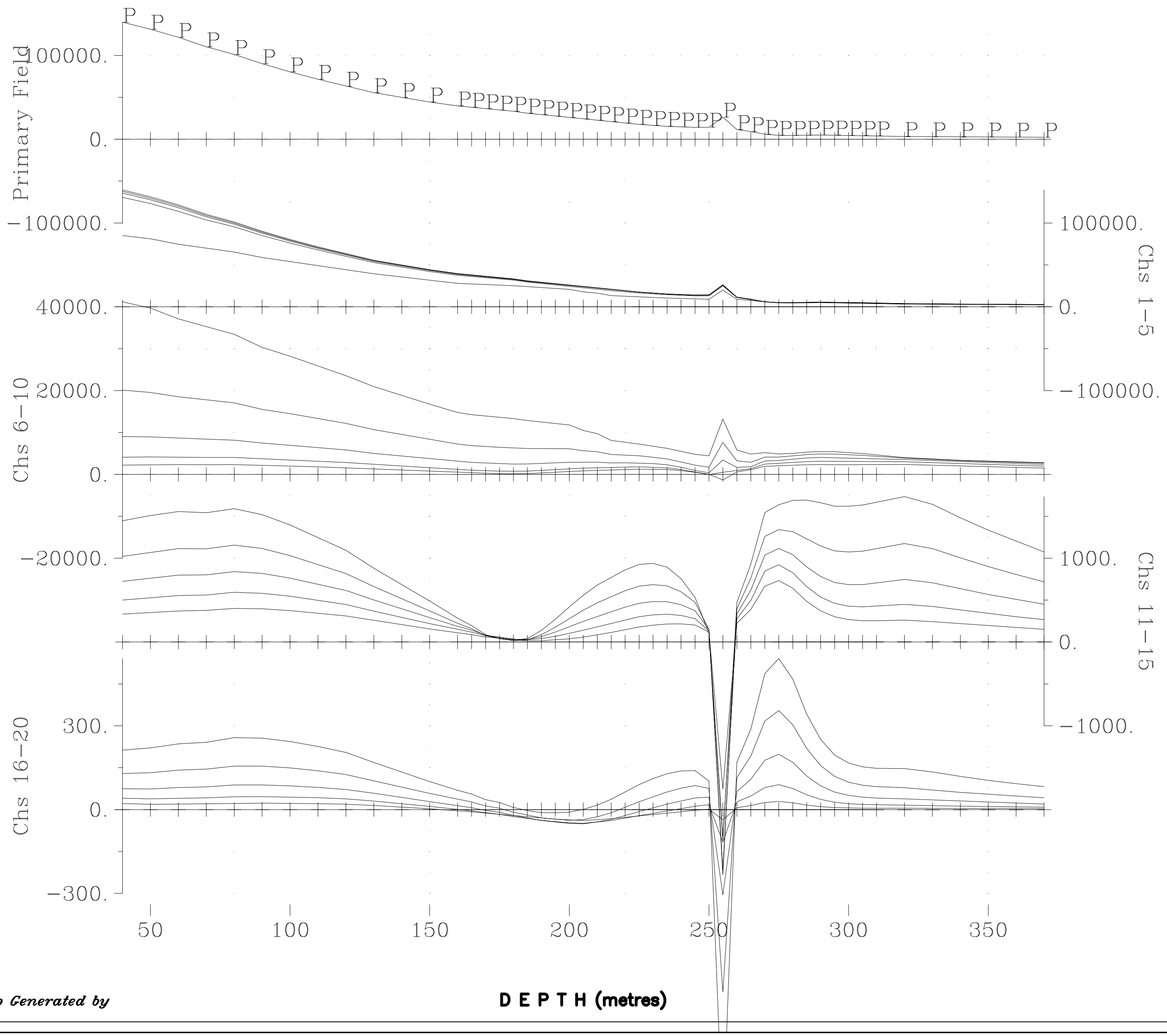
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350,9110,350;9110,1
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us -80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 22, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

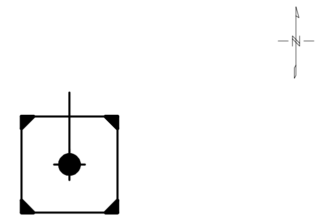
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-TF-Tilt-GCL09-10-IV

Map Generated by





Borehole GCL09-10 - Z Component

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)

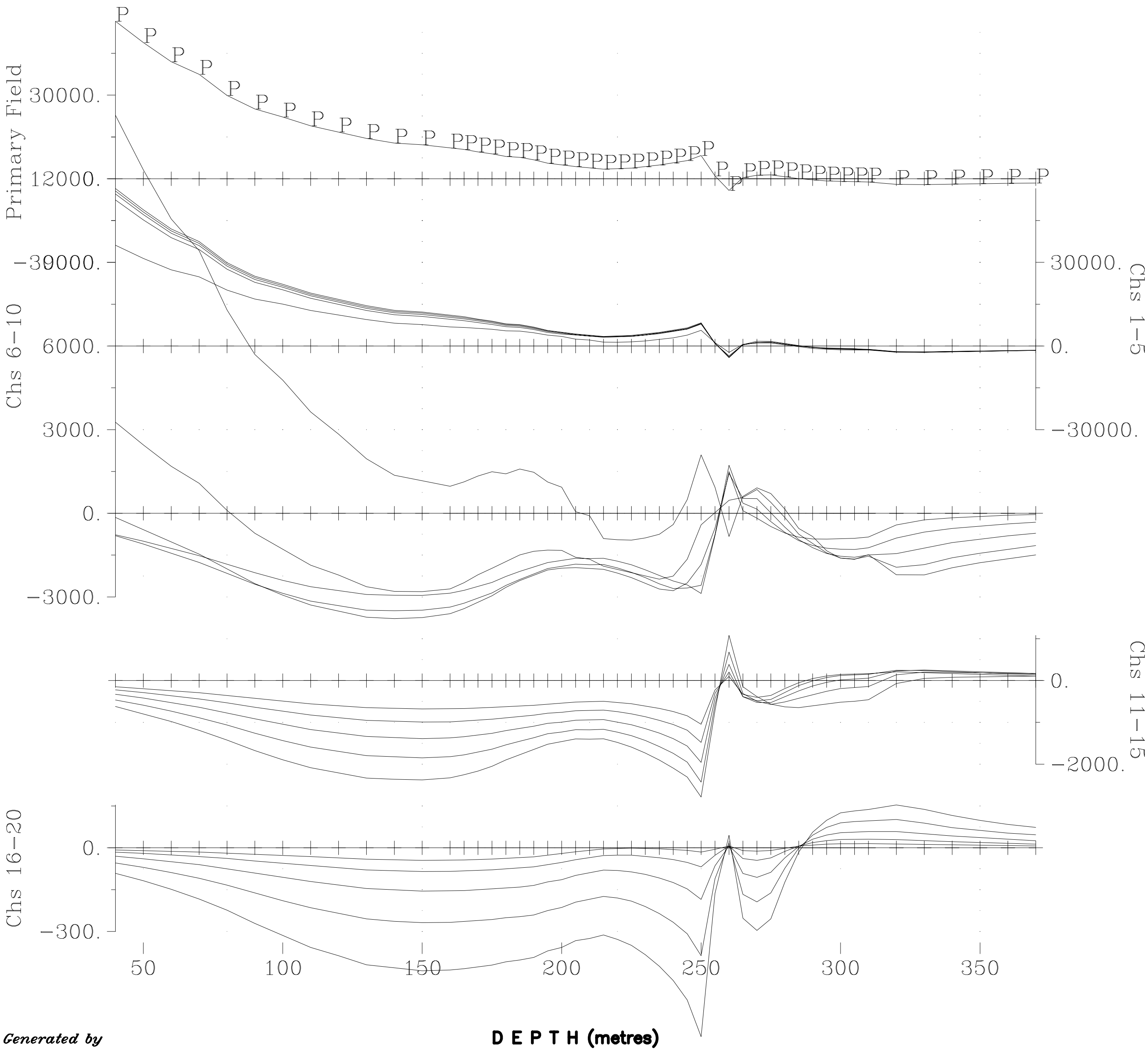
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350;9110,350;9110,150
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us, -80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

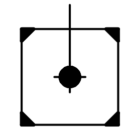
DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL09-10-IV

Map Generated by



Map Generated by

Borehole GCL09-10 - X Component



Scale 1:2000

25 0 25 50 75

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

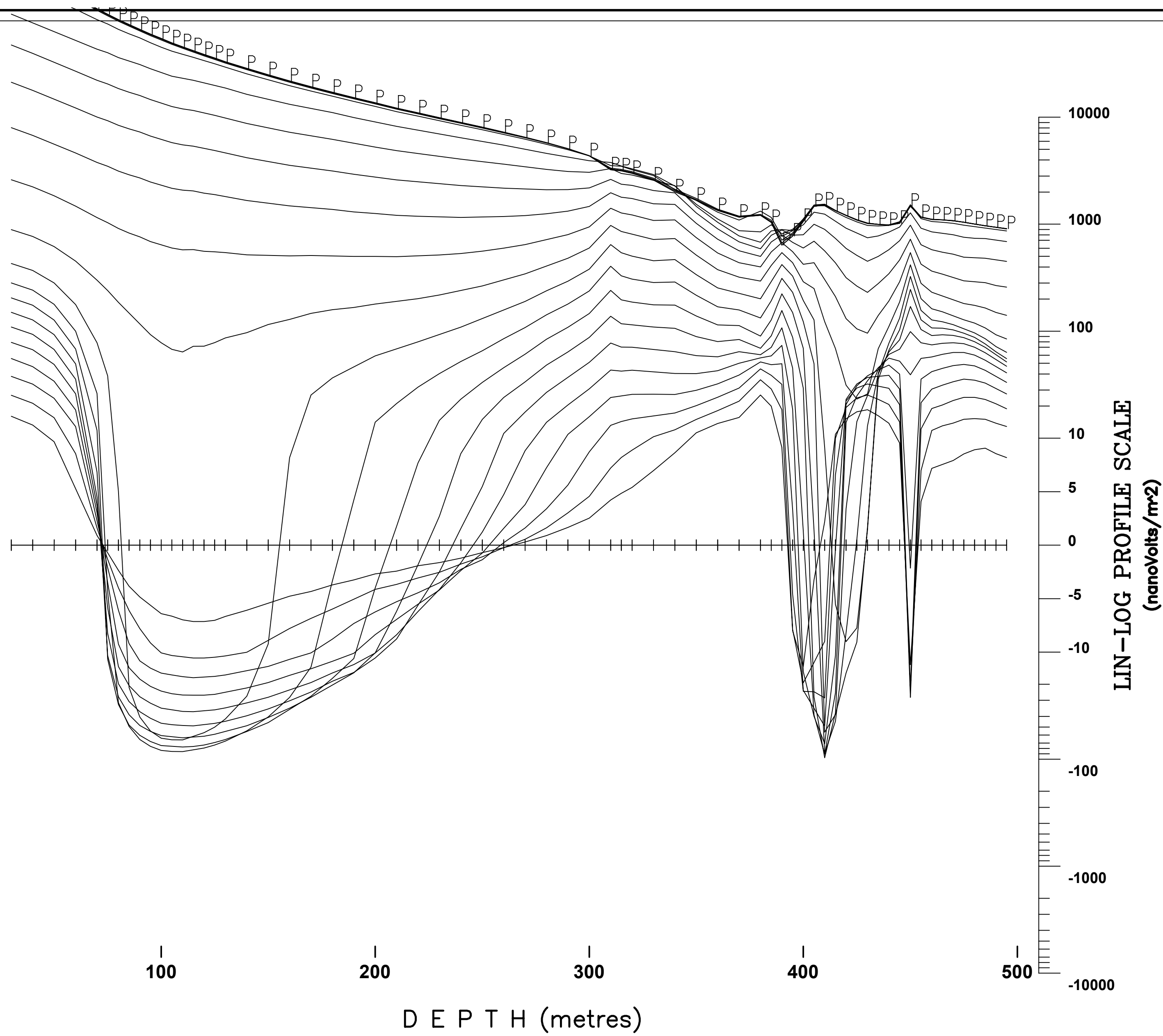
Secondary Electromagnetic Field (dB/dt)

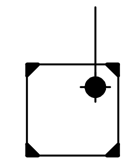
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	8910,150;8910,350;9110,350;9110,150
Transmitter Current:	14.5 Amps
Tx Turn-Off-Time and Rx Delay:	440 us, -80 us
Borehole Location:	499010E,5349250N
Borehole Azimuth, Dip:	360, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	Apr 16, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-X-GCL09-10-W





Borehole GCL09-11 - Z Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

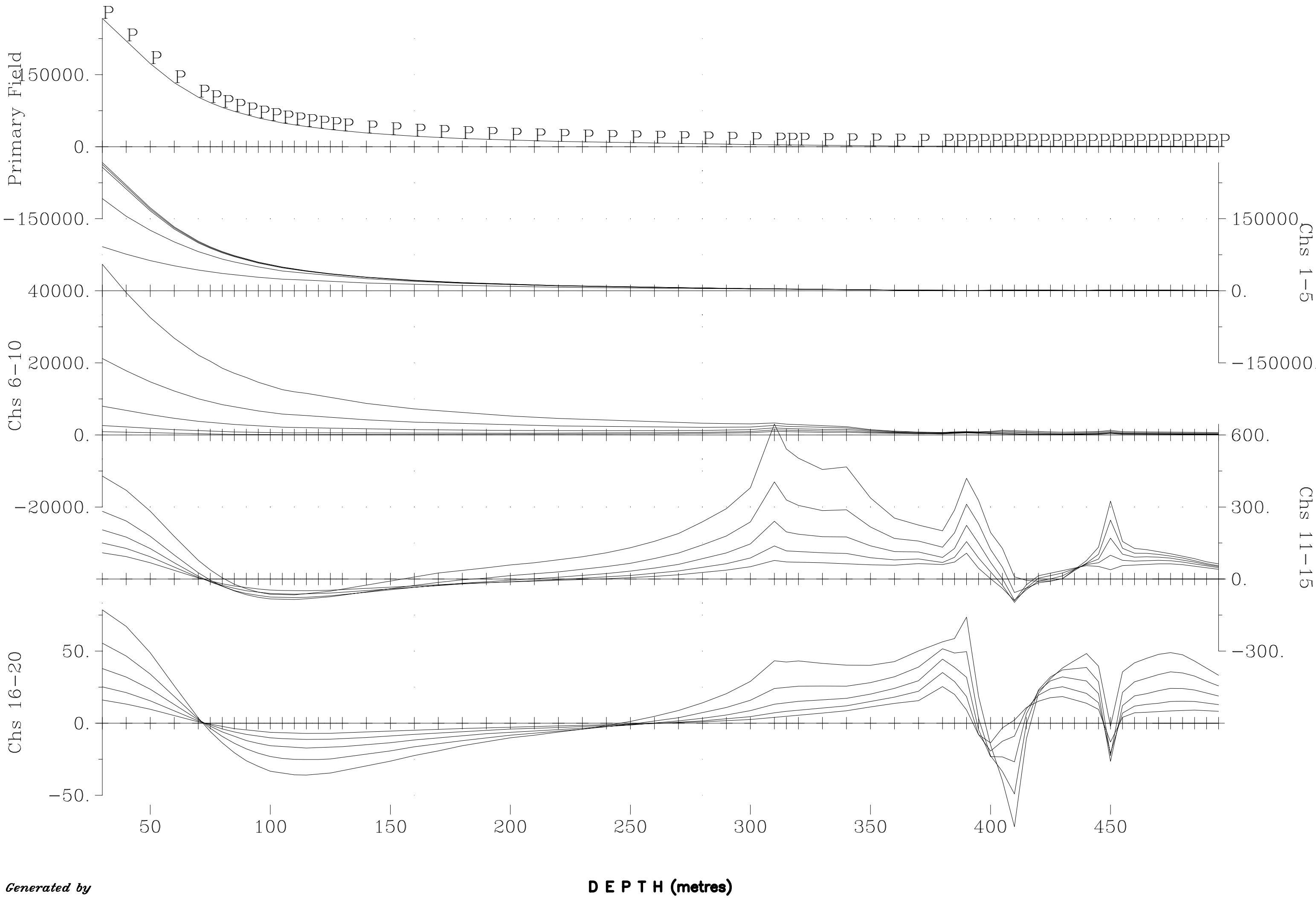
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,405;8103;3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

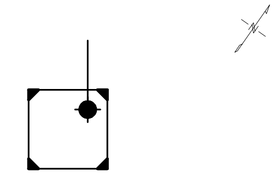
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Z-Tilt-GCL09-11-W

Map Generated by

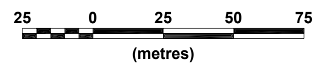




Map Generated by

Borehole GCL09-11 - Z Component

Scale 1:2000



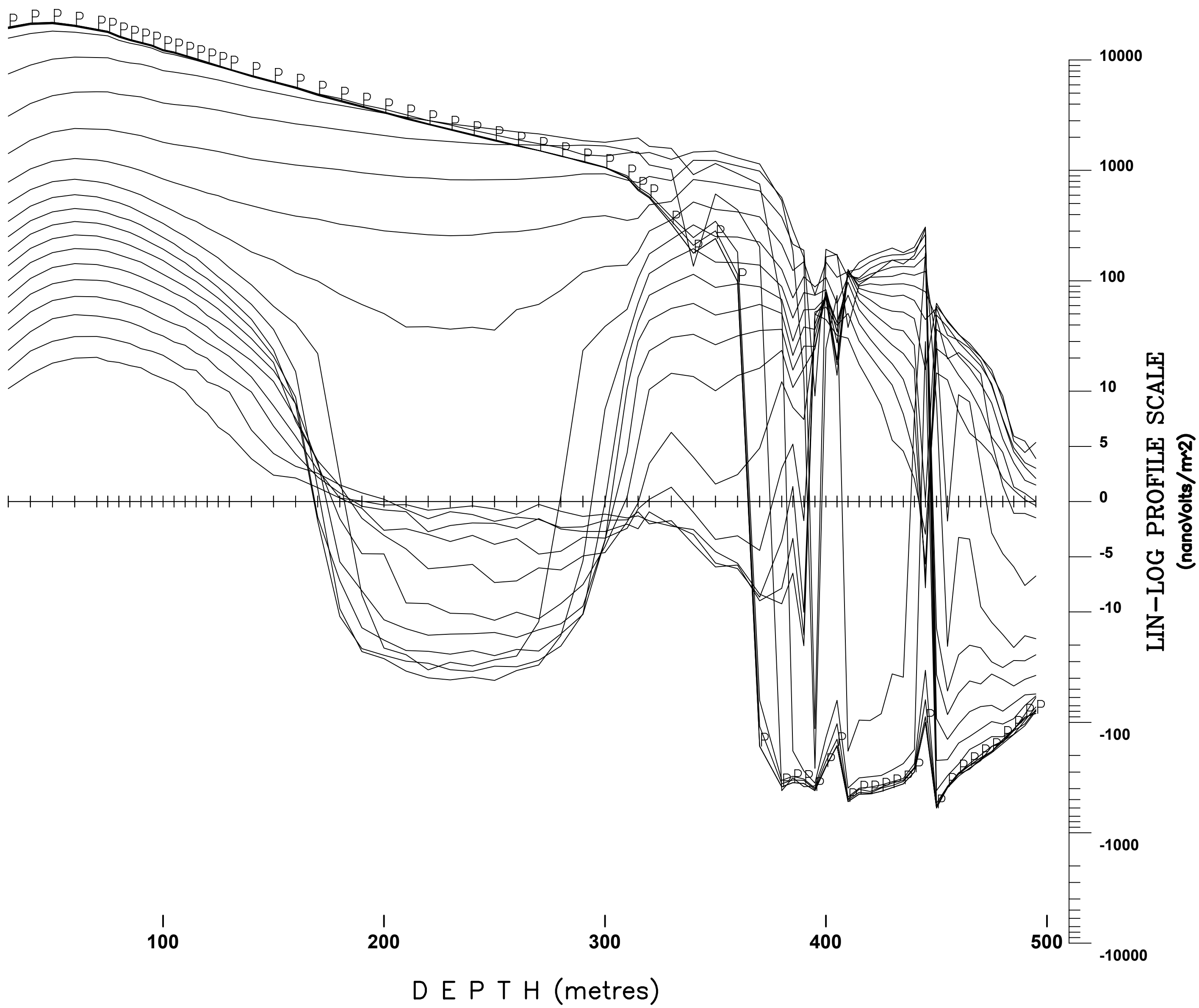
GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

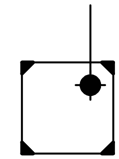
3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,505;8103,342
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us, -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. NO. CA00636C-BH4A-Tiltrot-Z-GCL09-11-E





Borehole GCL09-11 – Y Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

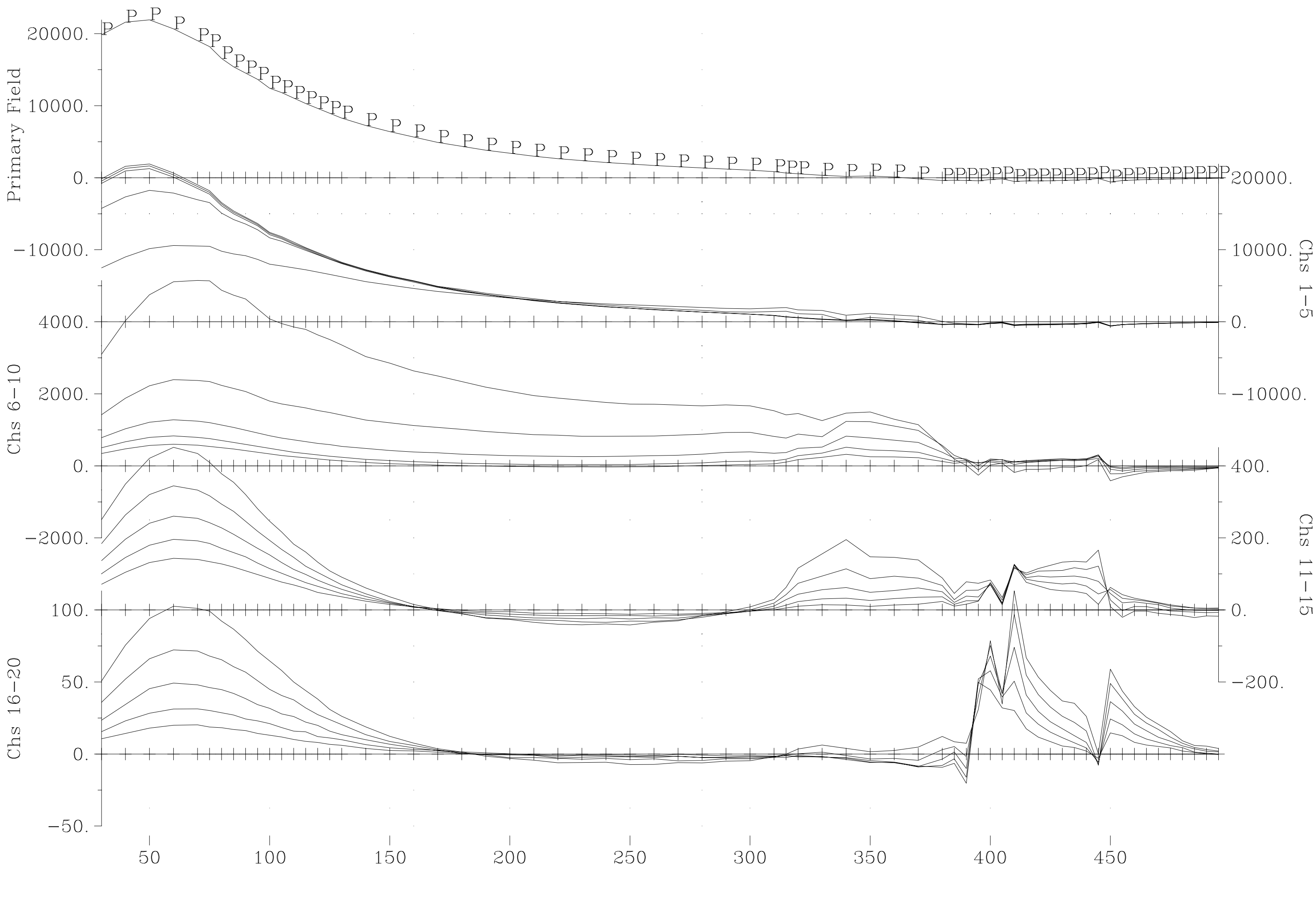
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,405;8103;3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz – positive up
	Hx – positive north, Hy – positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

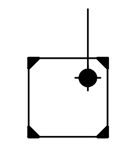
QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-Y-Tilt-GCL09-11-W

Map Generated by

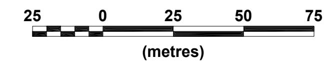


Map Generated by



Borehole GCL09-11 - Y Component

Scale 1:2000



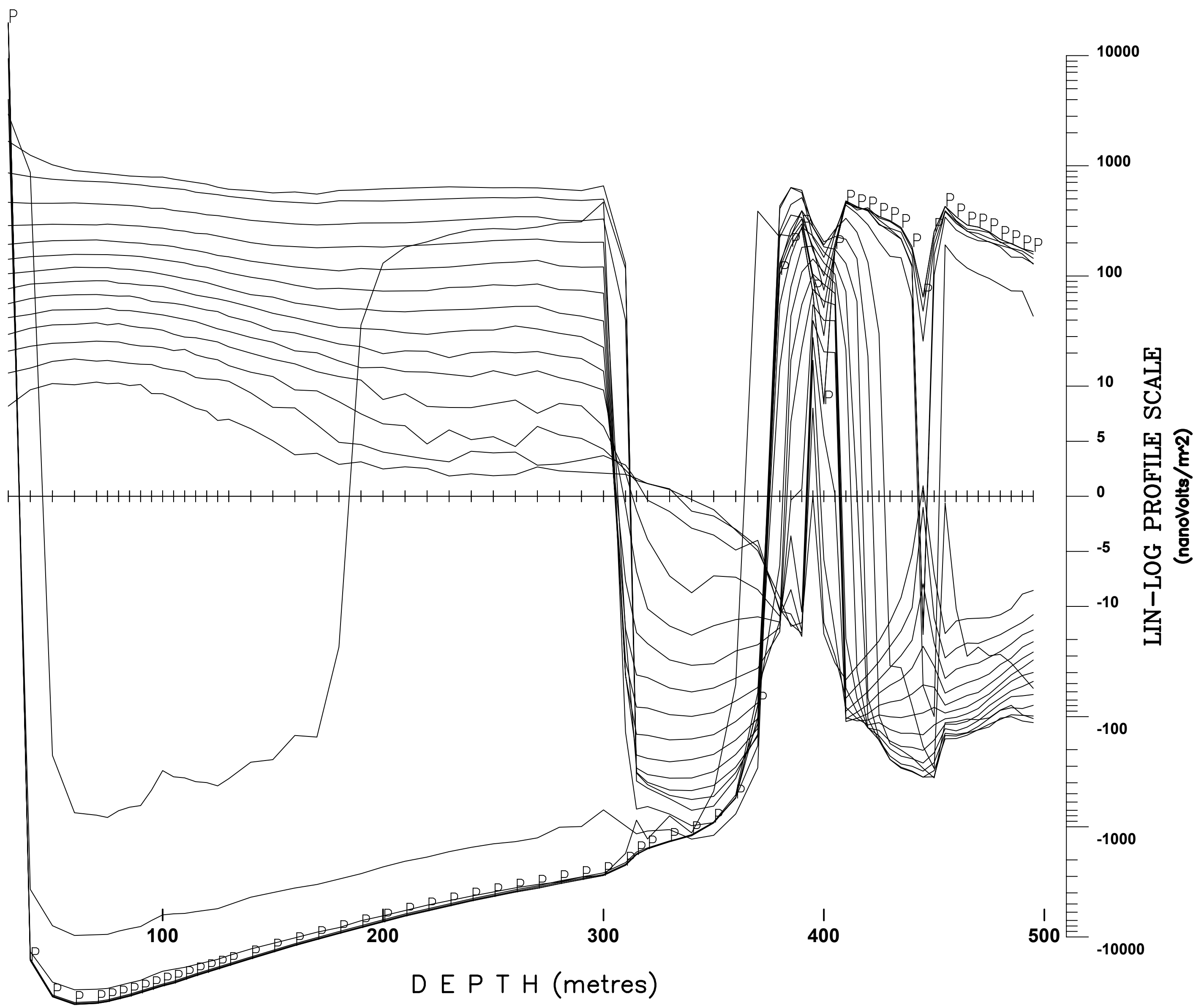
GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

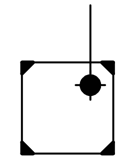
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,505;8103,342
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us, -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. NO. CA00636C-BH4A-Tiltrot-Y-GCL09-11-B



Map Generated by



Borehole GCL09-11 - X Component

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

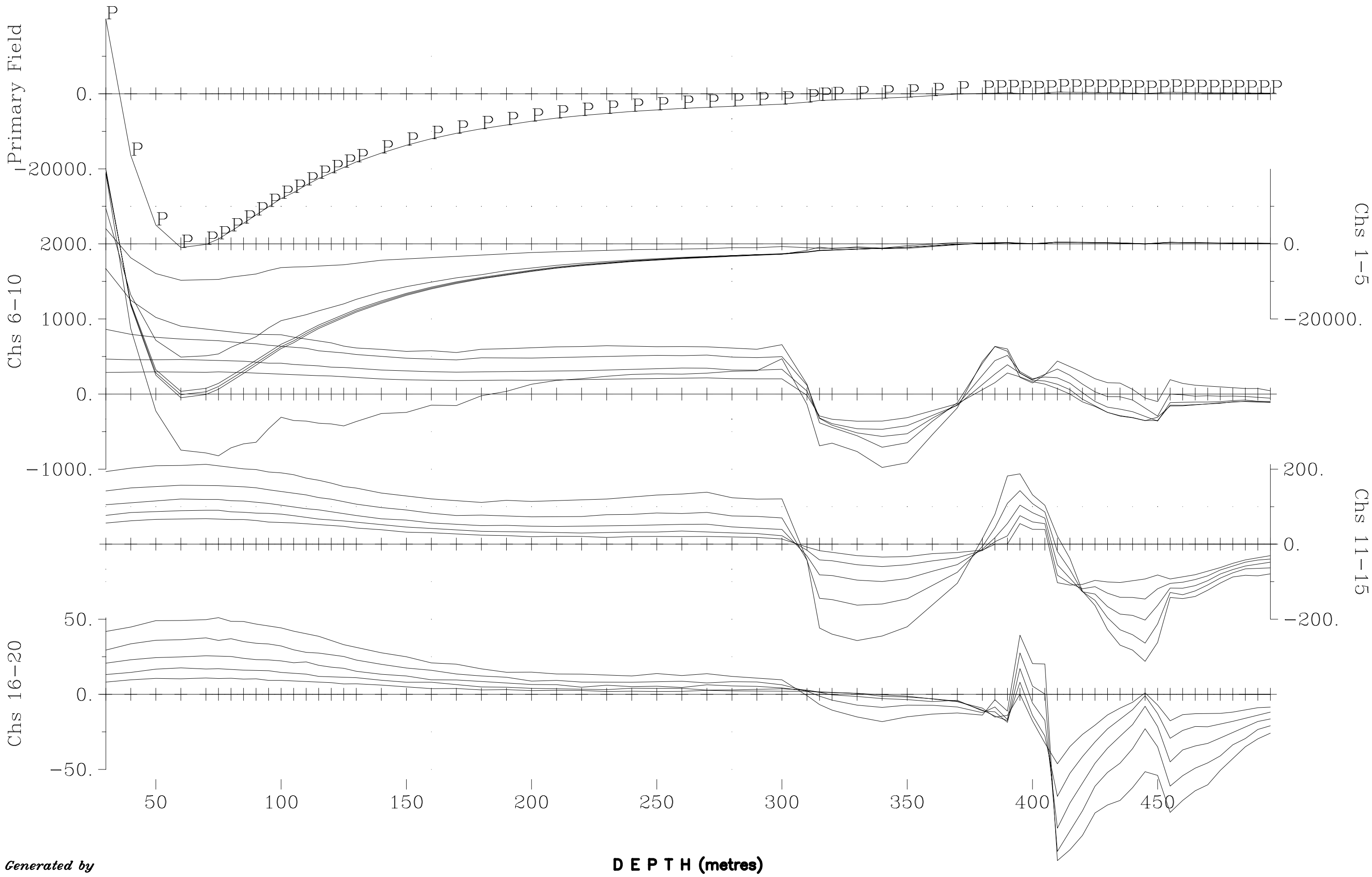
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,405;8103;3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-X-Tilt-GCL09-11-IV



Map Generated by

Borehole GCL09-11 - X Component

Scale 1:2000

25 0 25 50 75

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

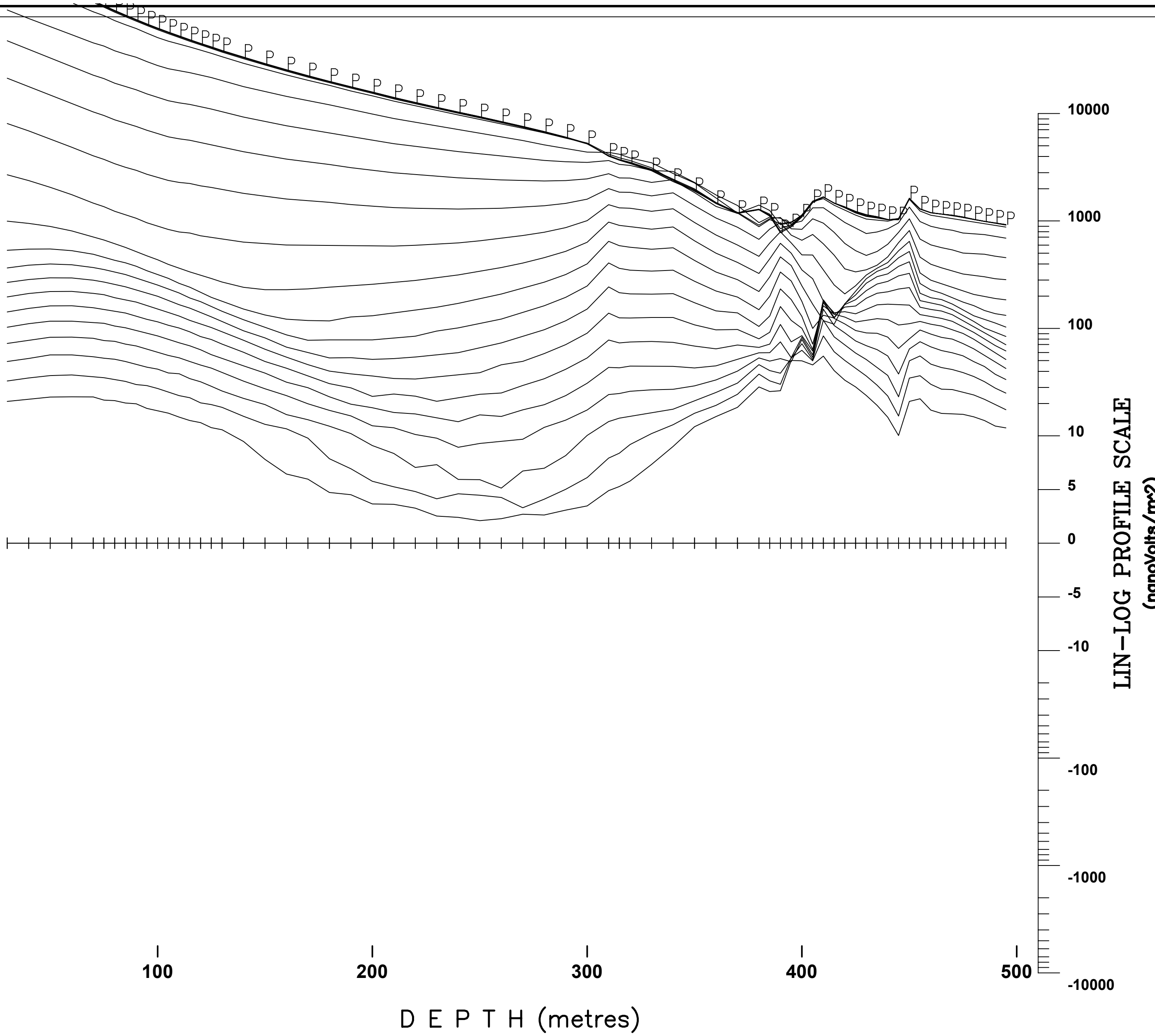
Secondary Electromagnetic Field (dB/dt)

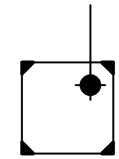
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,505;8103,342
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us, -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BH4A-Tiltrot-X-GCL09-11-E





Borehole GCL09-11 - Total Field

Scale 1:2500

25 0 25 50 75 100

(metres)

GOLDEN CHALICE RESOURCES INC.

LANGMUIR PROPERTY

TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

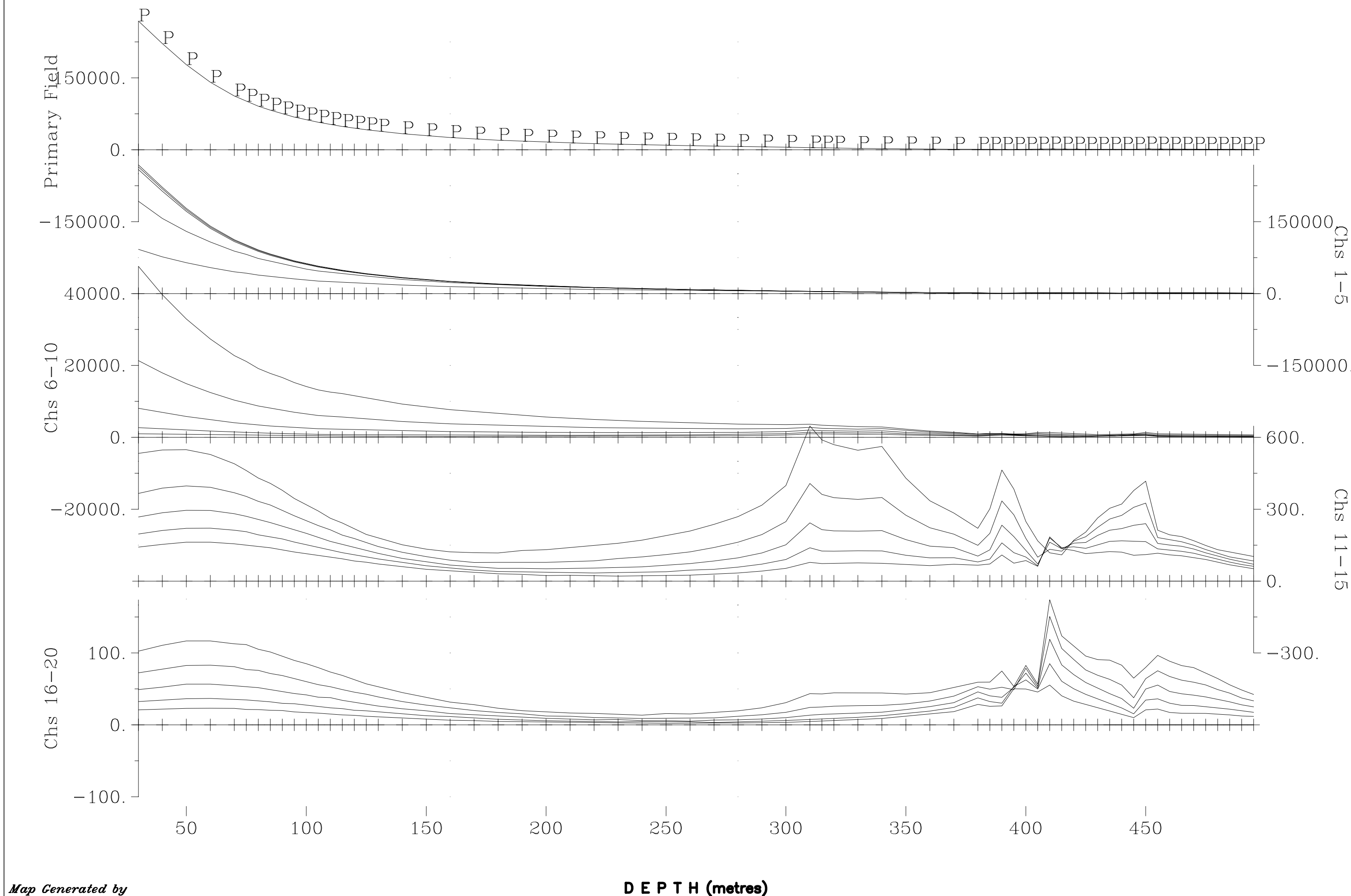
Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,405;8103;3
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

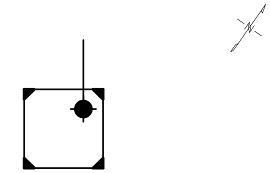
Surveyed & Processed by:

QUANTEC GEOSCIENCE LTD.

DWG. NO. CA00636C-BHLL-TF-Tilt-GCL09-11-B

Map Generated by





Borehole GCL09-11 - Total Field

Scale 1:2000

25 0 25 50 75

(metres)

GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

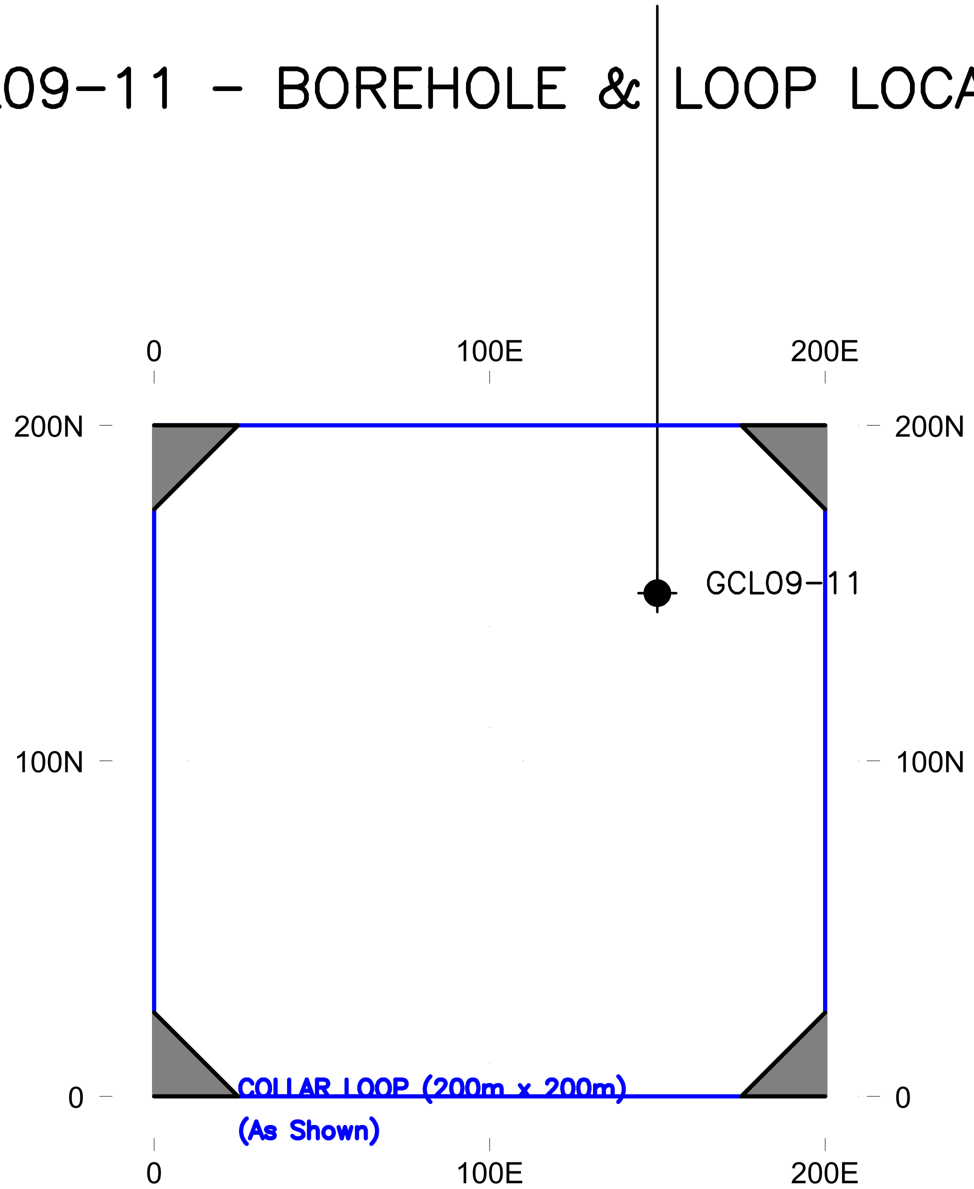
3D FIXED-LOOP BOREHOLE TEM SURVEY

Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	200m x 200m
Tx Loop Location:	7934,221;7819,385;7990,505;8103,342
Transmitter Current:	15 Amps
Tx Turn-Off-Time and Rx Delay:	455 us, -80 us
Borehole Location:	497971E,5349428N
Borehole Azimuth, Dip:	325, -65
Station Interval:	5-10 meters
Profile Units:	nanoVolt/m^2
Receiver Coil Orientation:	Hz - positive up
	Hx - positive north, Hy - positive west
Cross Component Rotation:	using Tilt Meter Angles
Survey Date:	May 4-6, 2009
Instrumentation:	Rx = Digital Protem (30 Channels)
	Geonics 3D probe + 500m cable
	Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. NO. CA00636C-BH4A-Tiltrot-TF-GCL09-11-B

GCL09-11 - BOREHOLE & LOOP LOCATION MAP



Scale 1:2500

25 0 25 50 75 100 125

(metres)

GOLDEN CHALICE RESOURCES INC.
LANGMUIR PROPERTY
TIMMINS, ON

3D FIXED-LOOP BOREHOLE TEM SURVEY

BOREHOLE & LOOP LOCATION MAP

GCL09-11

Borehole Parameters:		
	DDH #1 =	GCL09-11
	Location =	150E,150N
	Azimuth & Dip =	325, -65
	DDH #2 =	
	Location =	
	Azimuth & Dip =	
	DDH #3 =	
	Location =	
	Azimuth & Dip =	

Survey Date: May 4,6, 2009

Instrumentation: Rx = Digital Protem (30 Channels)
Geonics 3D probe + 500m cable
Tx = Geonics EM-57 (1.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE LTD.
DWG. #: CA00636C-BHTEM-LOOPLOC-GCL09-11

Map Generated by