Geophysical Survey Report

covering

Surface Pulse EM Surveys
over the
Hong Kong Grid
for
Wallbridge Mining Company Ltd.
during
December, 2004

by

CRONE GEOPHYSICS & EXPLORATION LTD.

Survey Area:	**Hong Kong Grid, near Sudbury, Ontario**
Survey Type:	**Surface Pulse EM Survey**
Survey Operators:	**Wayne Pearson**
Lines Surveyed:	**250E to 650E**
Survey Period:	**December 6th - 11th, 2004**
Report By:	**Henry Odwar**
Report Date:	**February, 2005**

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PULSE ELECTROMAGNETIC SURVEY

APPENDICES

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1.0 INTRODUCTION

Crone Geophysics and Exploration Ltd. was contracted by Wallbridge Mining Company Ltd. to conduct a Pulse Time Domain Electromagnetic (PEM) survey on their Hong Kong grid near Sudbury, Ontario. The survey was conducted during December of 2004 during which nine lines were surveyed. This report outlines the geophysical work performed on this property. The appendices to this report contain a page size contour and profile plan maps, the PEM profiles in a lin-log format, the linear profile plots and a brief description of the Crone Instrument Specifications.

2.0 PROPERTY LOCATION AND ACCESS

The Hong Kong Property is located near the city of Sudbury, Ontario. Access to the property area is achieved by numerous roads in the area particularly those roads and trails located adjacent to the survey area (Figures 1 & 2).

3.0 PERSONNEL

The personnel involved in this project included:

Survey Operator:	Wayne Pearson
Survey Helpers:	AJ Saul
Data Processing:	Kevin Ralph, Herny Odwar
Report:	Henry Odwar

4. 0 SURVEY METHODS

The Crone Pulse EM system is a time domain electromagnetic method that utilizes an alternating pulsed primary current with a controlled shut-off and measures the rate of decay of the induced secondary field across a series of time windows during the off-time. The system uses a transmit loop of any size or shape. A portable 220VDC, 11hp Motor Generator powers the PEM 4.8 kW Transmitter which provides a precise current waveform through the loop. The receiver apparatus is moved along surface lines or down boreholes.

The transmitter cycle consists of slowly increasing the current over a few milliseconds, a constant current, abrupt linear termination of the current ("Ramp Time") , and finally, zero current for a selected length of time in milliseconds ("Time Base"). The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic field will decay with time. The amplitude of the secondary field and the decay rate are dependent on the

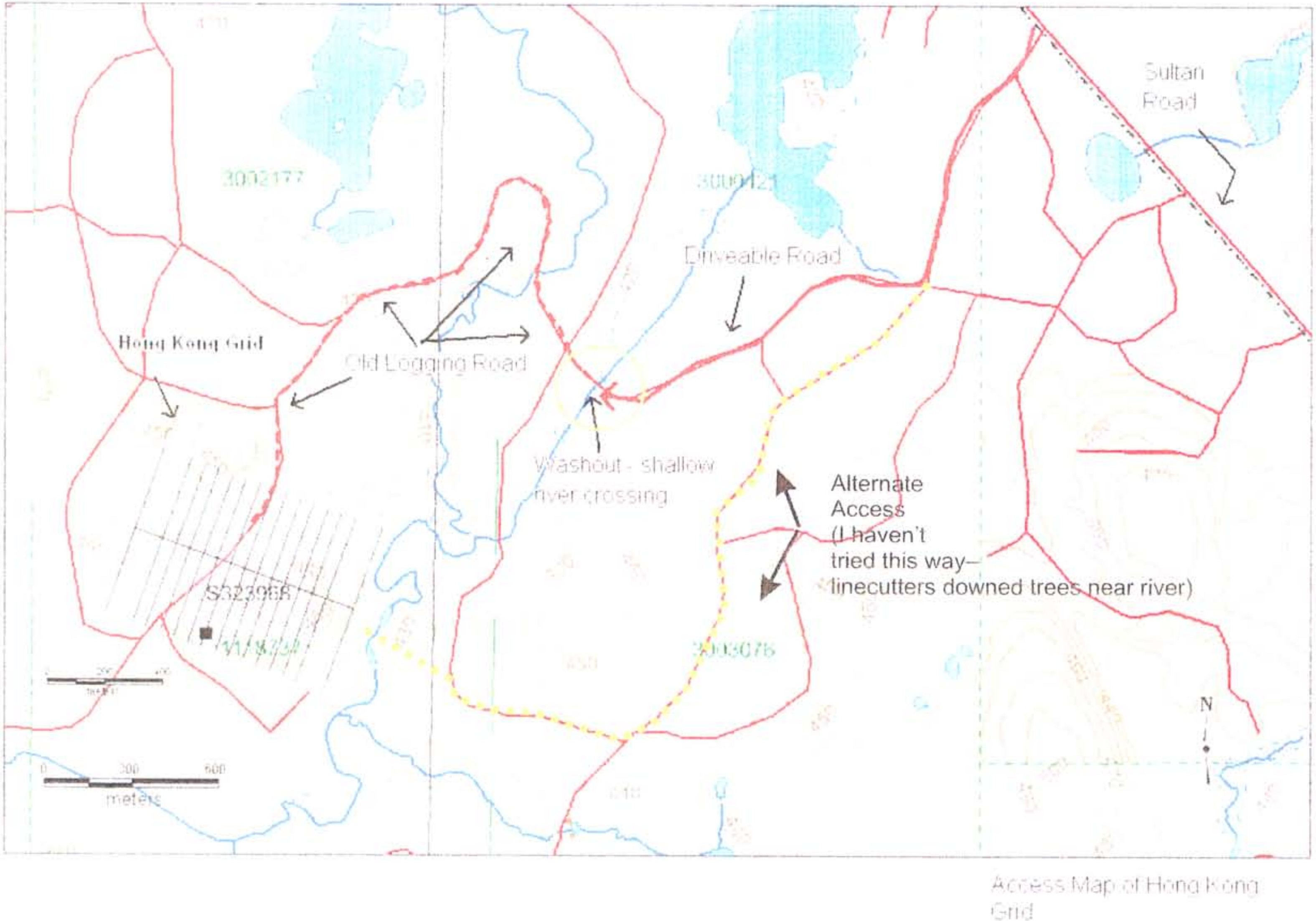


Figure 1. Grid and Access Location Map

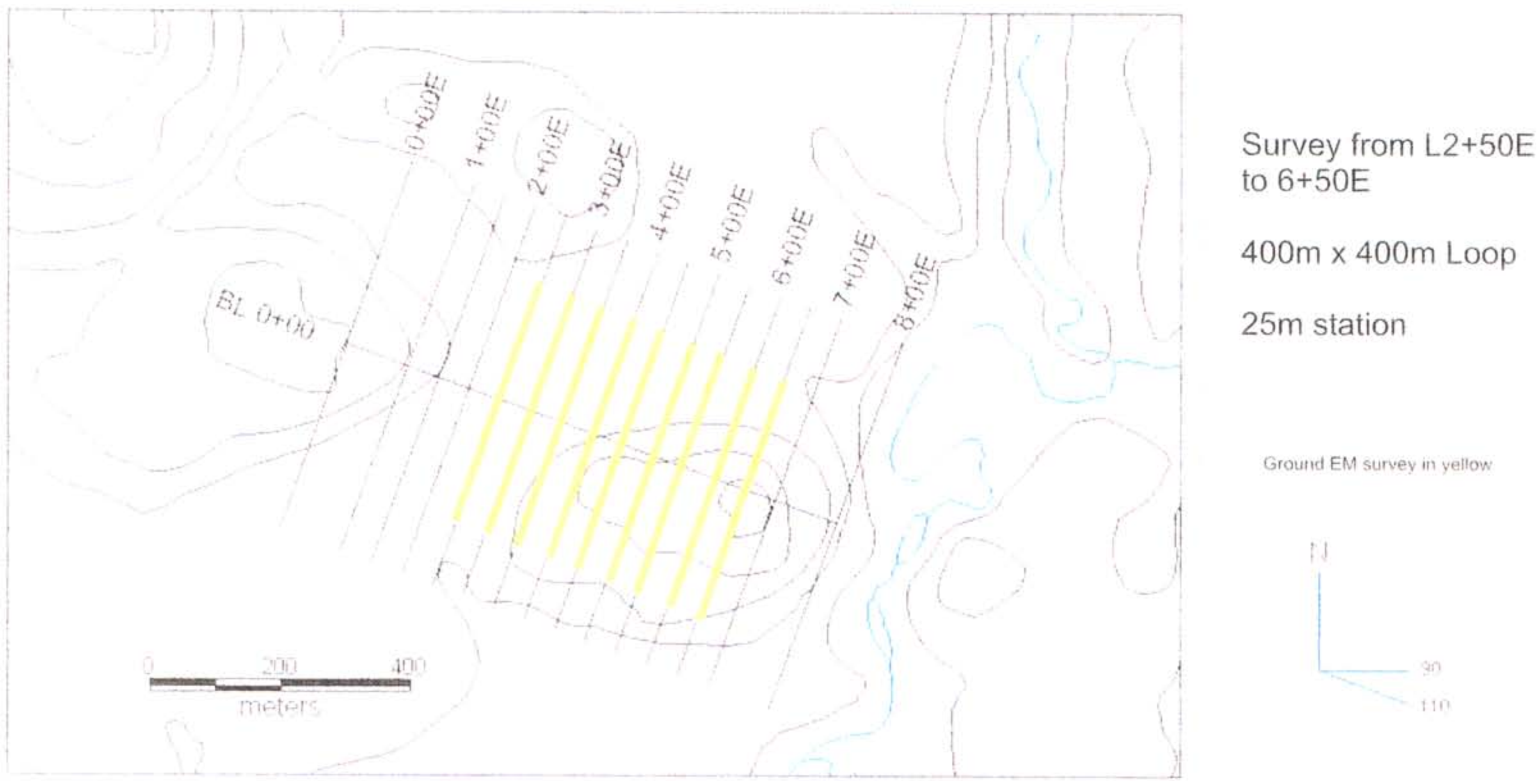


Figure 2. Grid Lines - Hong Kong Grid

quality and size of the conductor. The receiver measures this transient magnetic field where it cuts the receiver apparatus. These readings are across fixed time windows or "Channels" and are recorded with the PEM Digital Receiver. In a normal survey mode one channel is measured during the Ramp Time, i.e. PP channel, and 16 (i.e. 30 Hz survey) or 20 (15 Hz) channels are recorded in the off-time. Synchronization between the receiver and transmitter is maintained by a direct cable, radio link, or crystal clock.

In surface line profiling methods, a Receive Coil, mounted on a tripod is used to measure the induced secondary field. The coil can be orientated to measure the vertical (dBz/dt), in-line horizontal (dBx/dt), and cross-line horizontal (dBy/dt) components, though for this survey only the vertical and horizontal components were measured.. During this survey two separate coil devices were utilized, one being the SQUID detector and the other being the Induction Coil (standard survey).

The receiver measures the transient magnetic field where it cuts the receiver apparatus. These readings are taken across fixed time windows or "channels" and are recorded with the PEM digital receiver. Synchronization between the receiver and transmitter was achieved with a crystal clock for the surface data and by means of direct cable link for the borehole surveys. More detailed equipment specifications can be found in appendix IV.

The following table shows the various time gates, in ms that constitute the channel configurations set up in the Crone PEM Receiver used in the surveys discussed in this report.

Table I: Channel Configuration, 20 Channels

Channel	Start	Finish	Channel	Start	Finish
PP	-1.982e-04	-9.900e-05	1	4.950e-05	6.299e-05
2	6.299e-05	8.550e-05	3	8.550e-05	1.125e-04
4	1.125e-04	1.531e-04	5	1.531e-04	2.027e-04
6	2.027e-04	2.700e-04	7	2.700e-04	3.600e-04
8	3.600e-04	4.815e-04	9	4.815e-04	6.389e-04
10	6.389e-04	8.505e-04	11	8.505e-04	1.129e-03
12	1.129e-03	1.498e-03	13	1.498e-03	1.993e-03
14	1.993e-03	2.646e-03	15	2.646e-03	3.514e-03
16	3.514e-03	4.666e-03	17	4.666e-03	6.192e-03
18	6.192e-03	8.221e-03	19	8.221e-03	1.091e-02
20	1.091e-02	1.449e-02			

5.0 SURVEY PARAMETERS

Table II: Survey Parameters

Loop	Size (meters)	Location (approximations)	Ramp Time	Current	Time Base
Loop 1	400x400	650E, 200N 650E, 600N 250E, 600N 250E, 200N	1.5 msec	17 amps	16.66 msec

Table III: Survey Coverage

Line	Loop	Start	End	Length (m)	Components
250E	Loop 1	300S	200N	500	X, Z
300E	Loop 1	300S	200N	500	X, Z
350E	Loop 1	300S	200N	500	X, Z
400E	Loop 1	300S	200N	500	X, Z
450E	Loop 1	300S	200N	500	X, Z
500E	Loop 1	300S	175N	475	X, Z
550E	Loop 1	300S	175N	475	X, Z
600E	Loop 1	300S	175N	475	X, Z
650E	Loop 1	175S	175N	350	X, Z

6.0 PRODUCTION SUMMARY

Table IV: Production Summary

December 6th, 2004	Located grid. Laid part of loop and set up TX.
December 7th, 2004	We finished laying the loop and laid sync wire for the antenna Checked out the loop and we were able to get 16 amps through the loop.
December 8th, 2004	Read line 650E from 175N to 150S with sync wire. When we got back to the Watershed some of our gear had arrived.
December 9th, 2004	Went to Timmins and picked up an antenna and drove back to the grid, started to survey by 2:00pm and surveyed until dark 4:45pm.
December 10th, 2004	Had a very good day. Surveyed 3.125km.
December 11th, 2004	Finished up the survey.

Respectfully submitted,

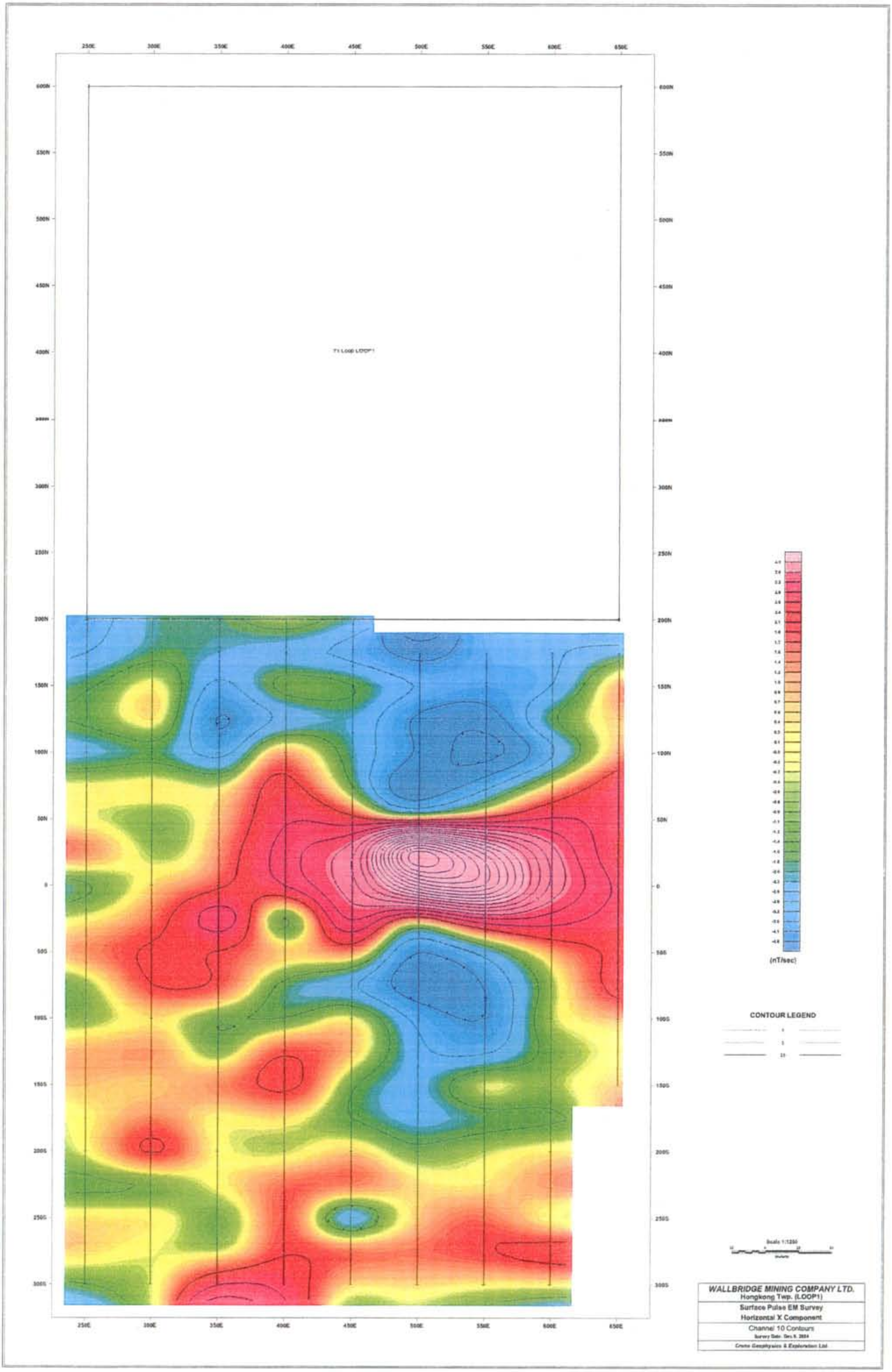
Henry Odwar
Crone Geophysics & Exploration Ltd.
February, 2005

APPENDIX I

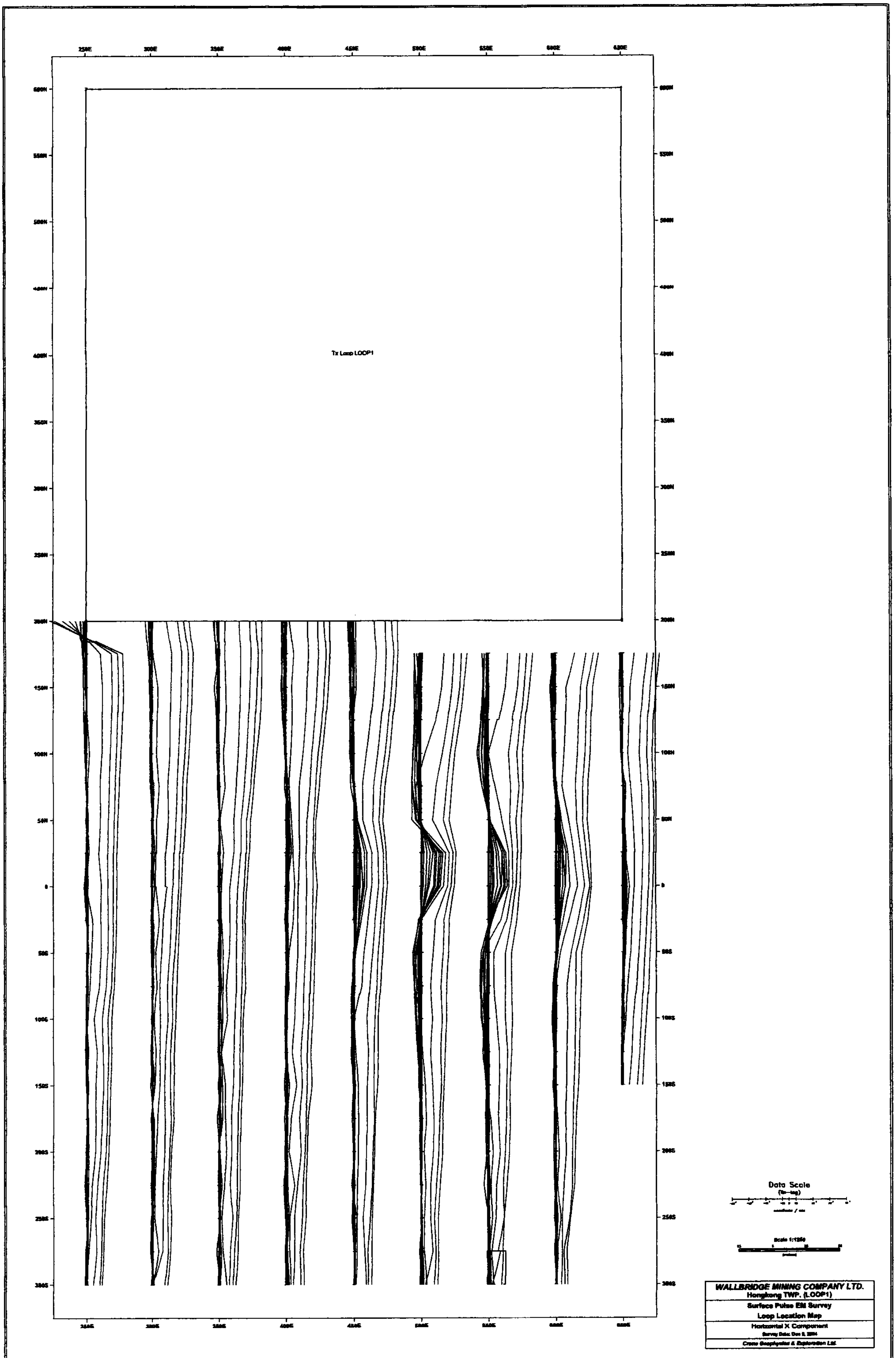
1) CONTOURS OF THE IN-LINE HORIZONTAL COMPONENT (CHANNEL 10) (Page size)

2) STACKED PROFILES OF THE IN-LINE HORIZONTAL COMPONENT (Page size)

3) STACKED PROFILES OF THE VERTICAL COMPONENT (Page size)



250E
300E
350E
400E
450E
500E
550E
600E
650E
600N
550N
500N
450N
400N
300N
250N
200N
150N
100N
50N
0
50S
100S
150S
200S
250S
300S
(nT/sec)
CONTOUR LEGEND
WALLBRIDGE MINING COMPANY LTD.
Hongkong Twp. (LOOP1)
Surface Pulse EM Survey
Horizontal X Component
Channel 10 Contours


250E
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600E
650E
600N
550N
500N
450N
400N
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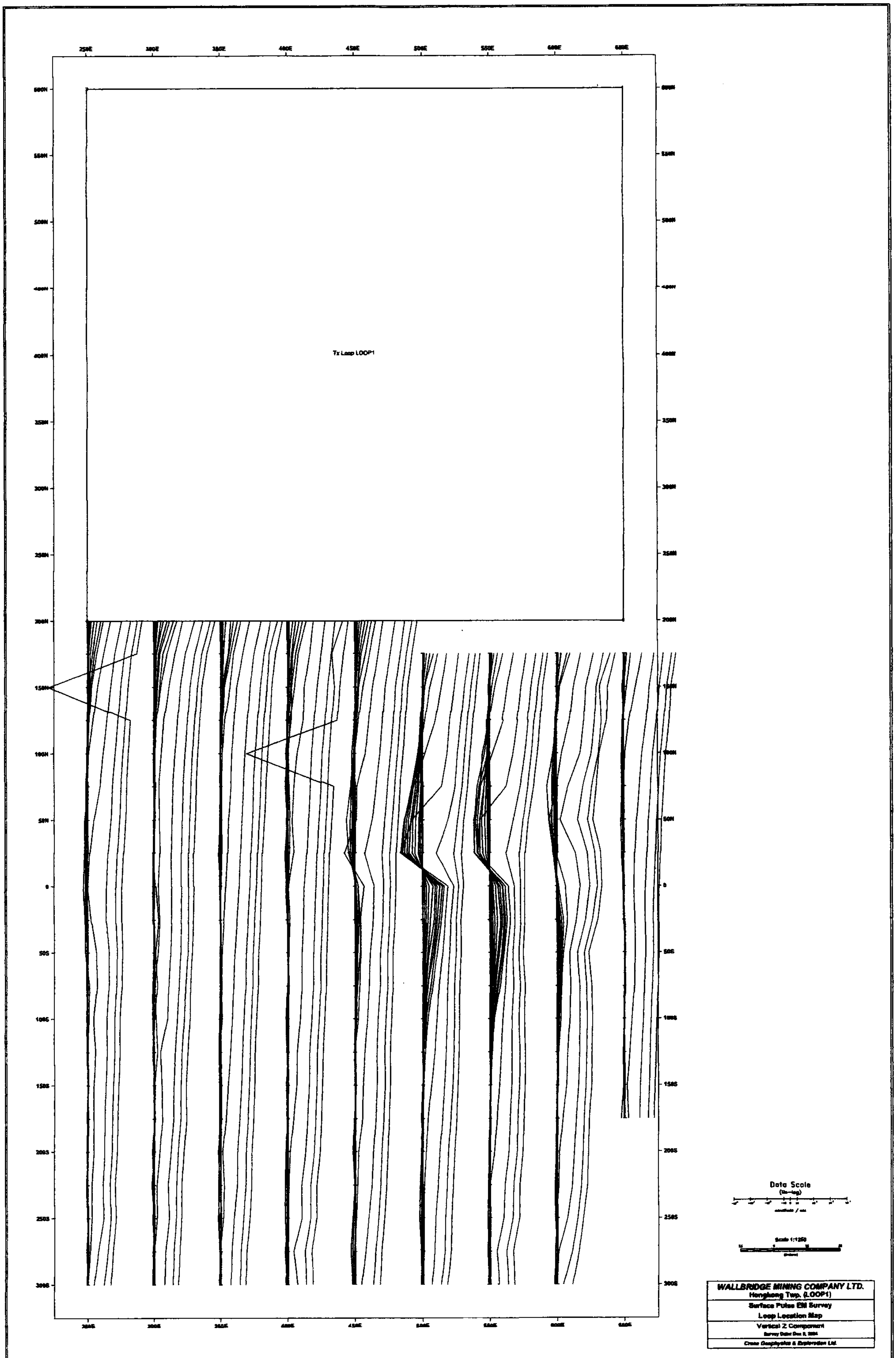
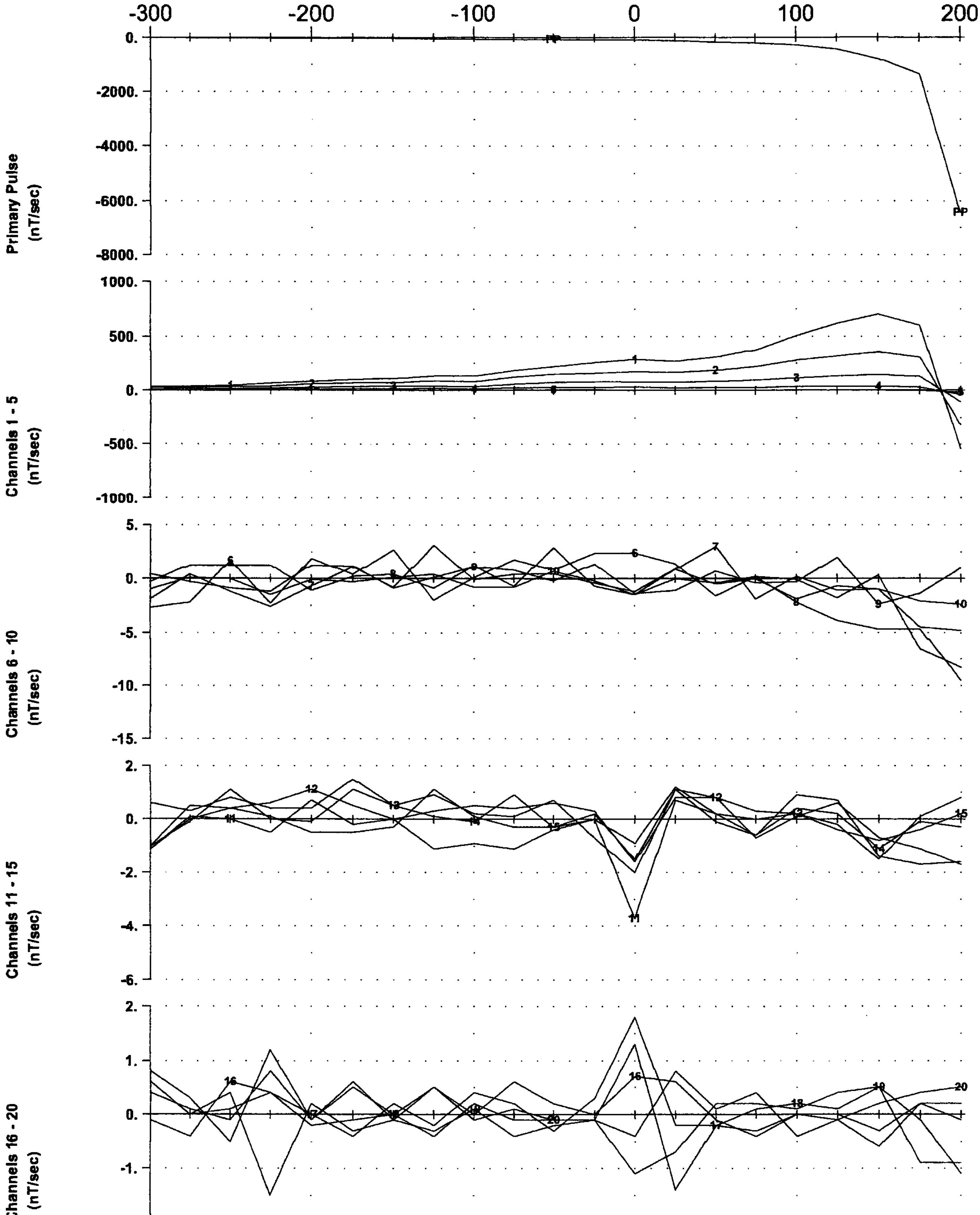
300N
250N
200N
150N
100N
50N
0
50S
100S
150S
200S
250S
300S
Tx Loop LOOP1
Data Scale
WALLBRIDGE MINING COMPANY LTD.
Hongkong TWP. (LOOP1)
Surface Pulse EM Survey
Loop Location Map
Horizontal X Component
Crone Geophysics & Exploration Ltd.



250E
300E
350E
400E
450E
500E
550E
600E
650E
600N
550N
500N
450N
400N
350N
300N
250N
200N
150N
100N
50N
0
50S
100S
150S
200S
250S
300S
Tx Loop LOOP1
Data Scale
Scale 1:1250
WALLBRIDGE MINING COMPANY LTD.
Hongkong Twp. (LOOP1)
Surface Pulse EM Survey
Loop Location Map
Vertical Z Component
Crone Geophysics & Exploration Ltd.

APPENDIX II

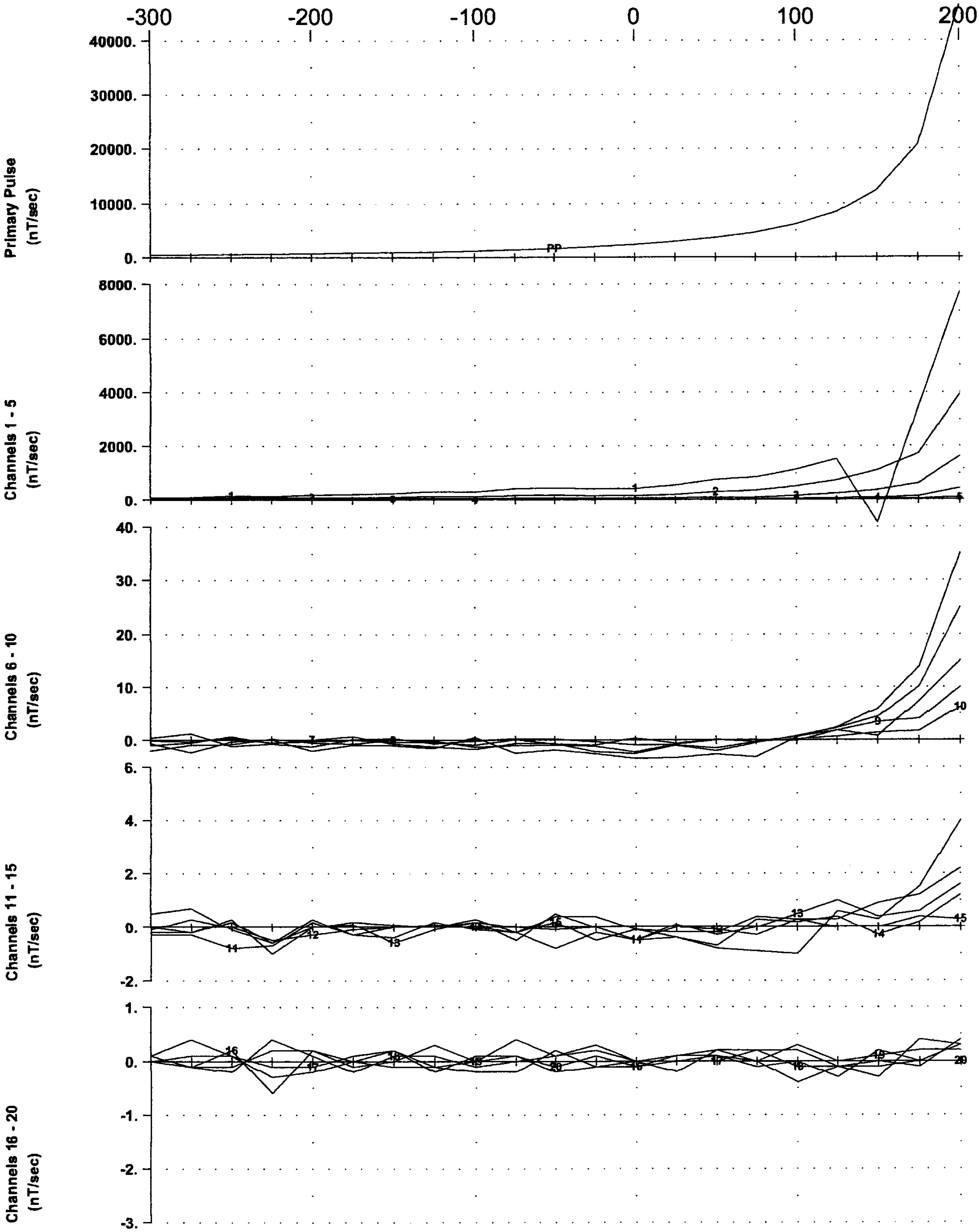
LINEAR (5-AXIS) PULSE EM DATA PROFILES



WALLBRIDGE MINING COMPANY LTD. HONGKONG

Line 250E X Component

Crone Geophysics & Exploration Ltd.



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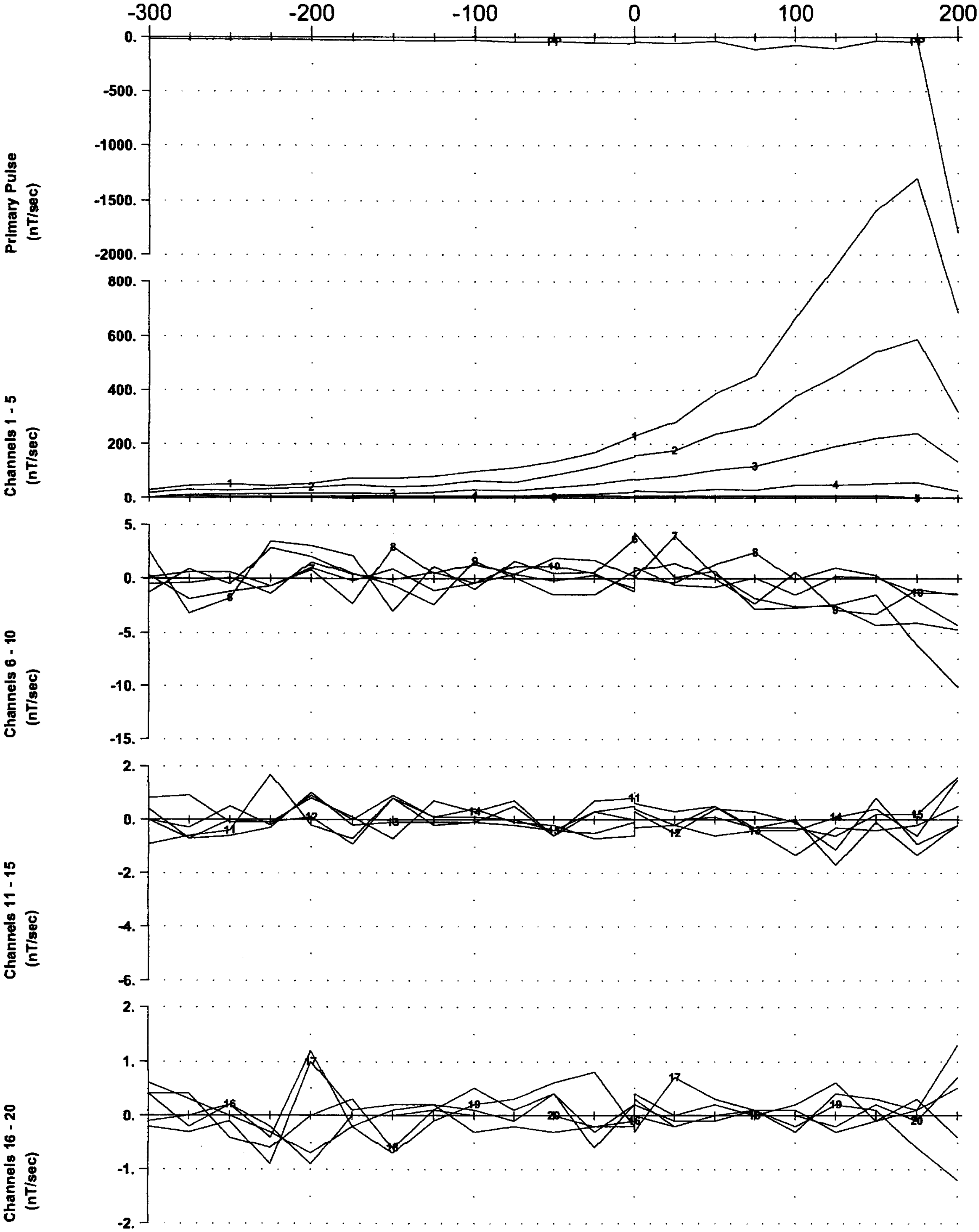
Line 250E Z Component

Crone Geop ysics & Exploration Ltd.



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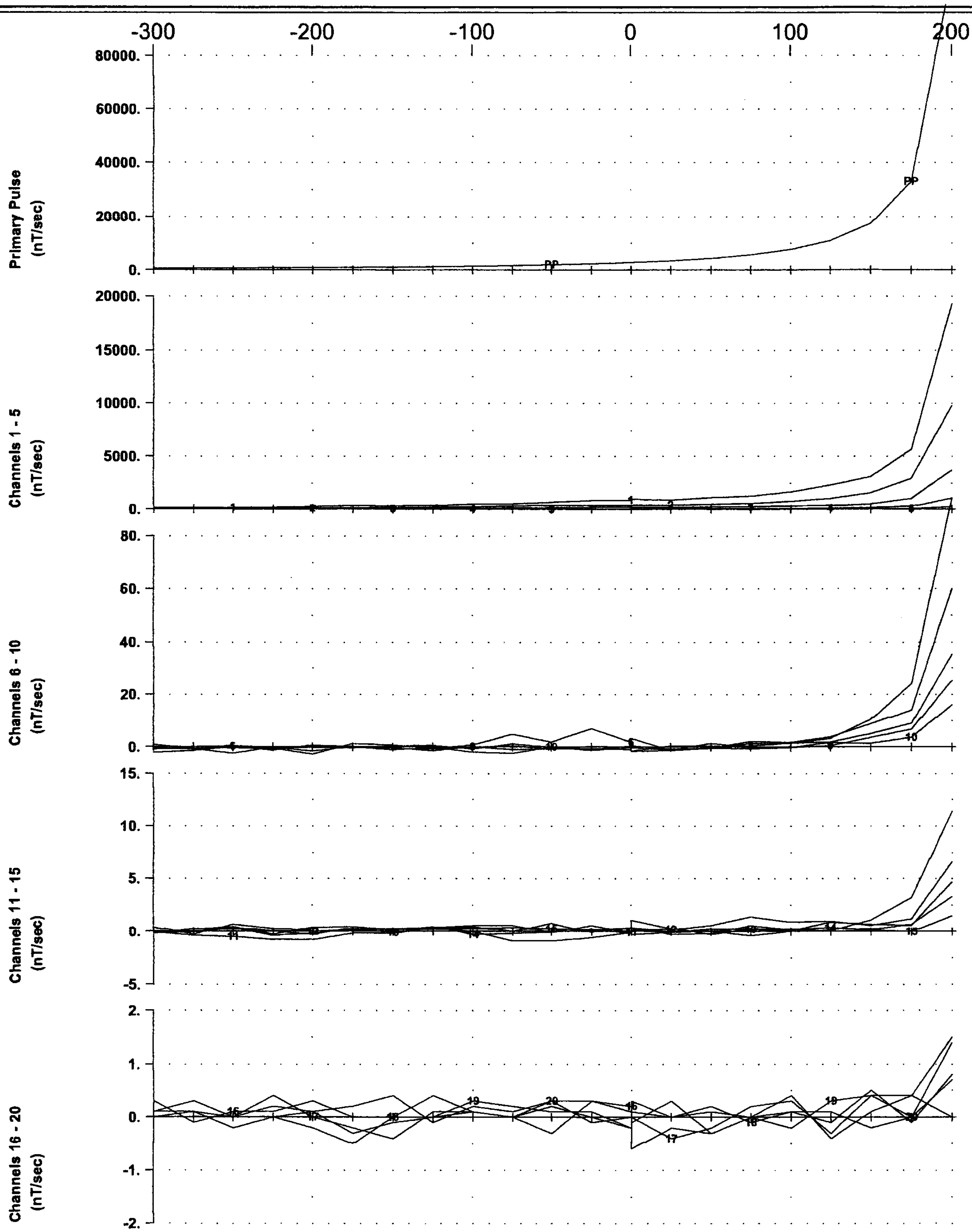

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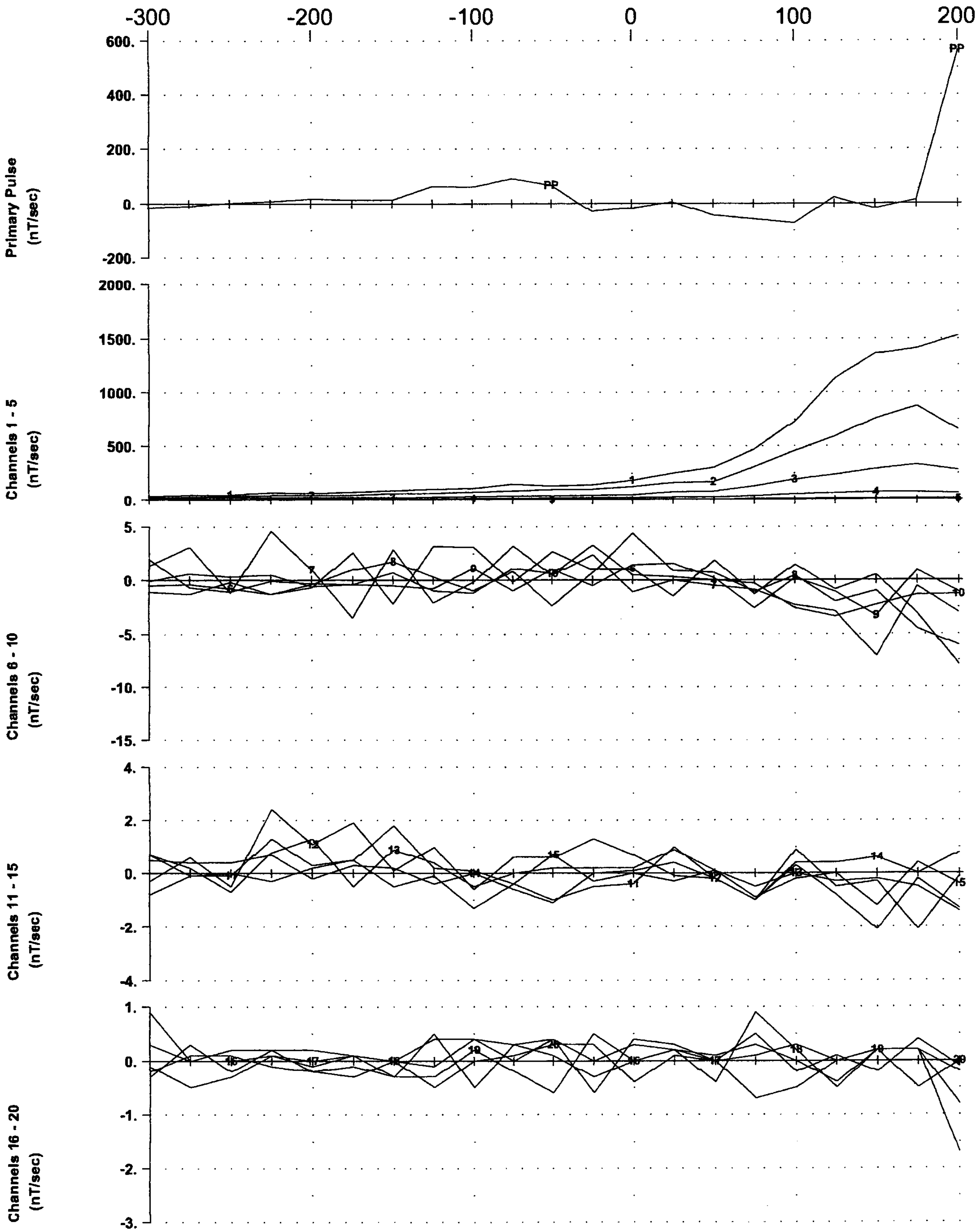

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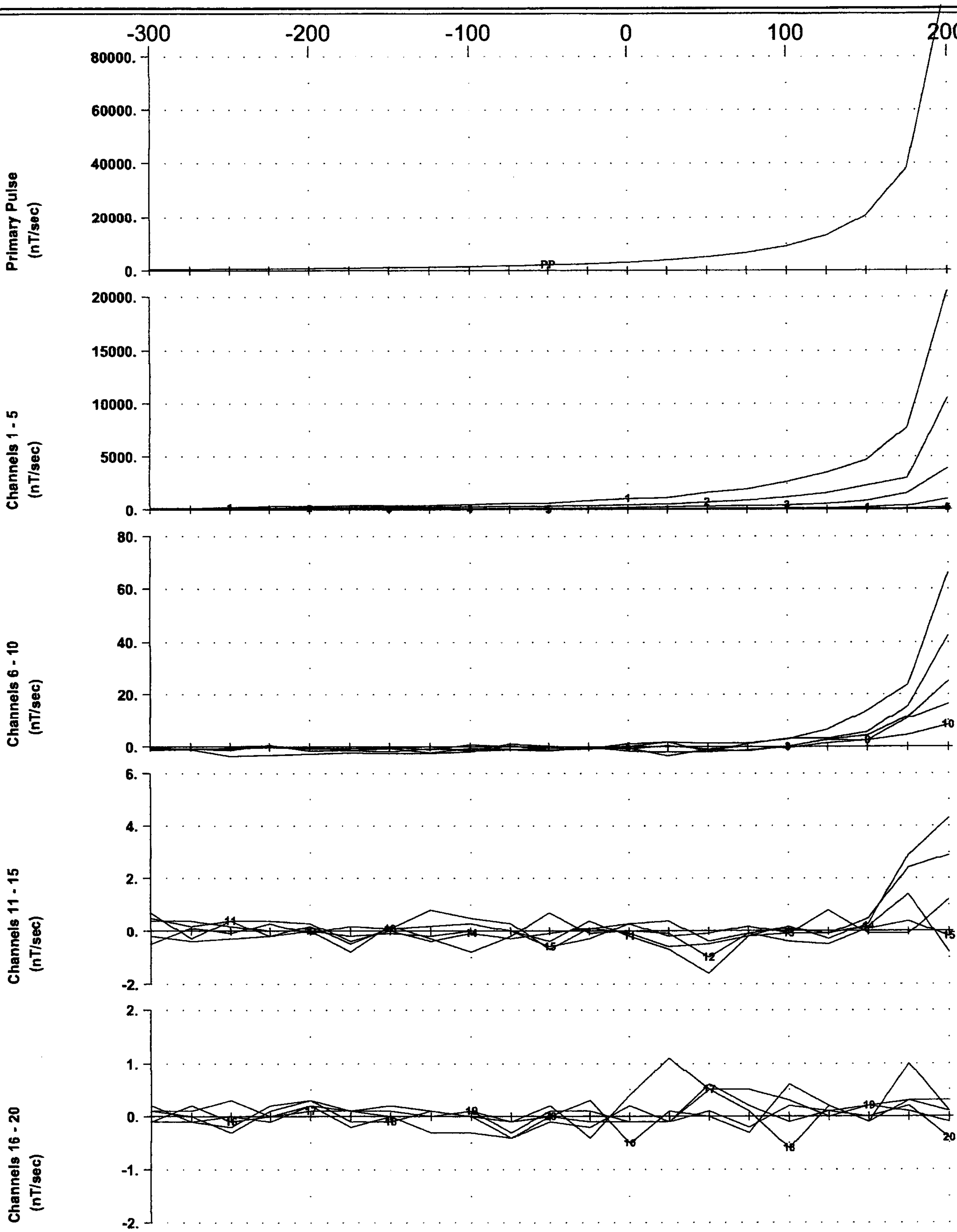

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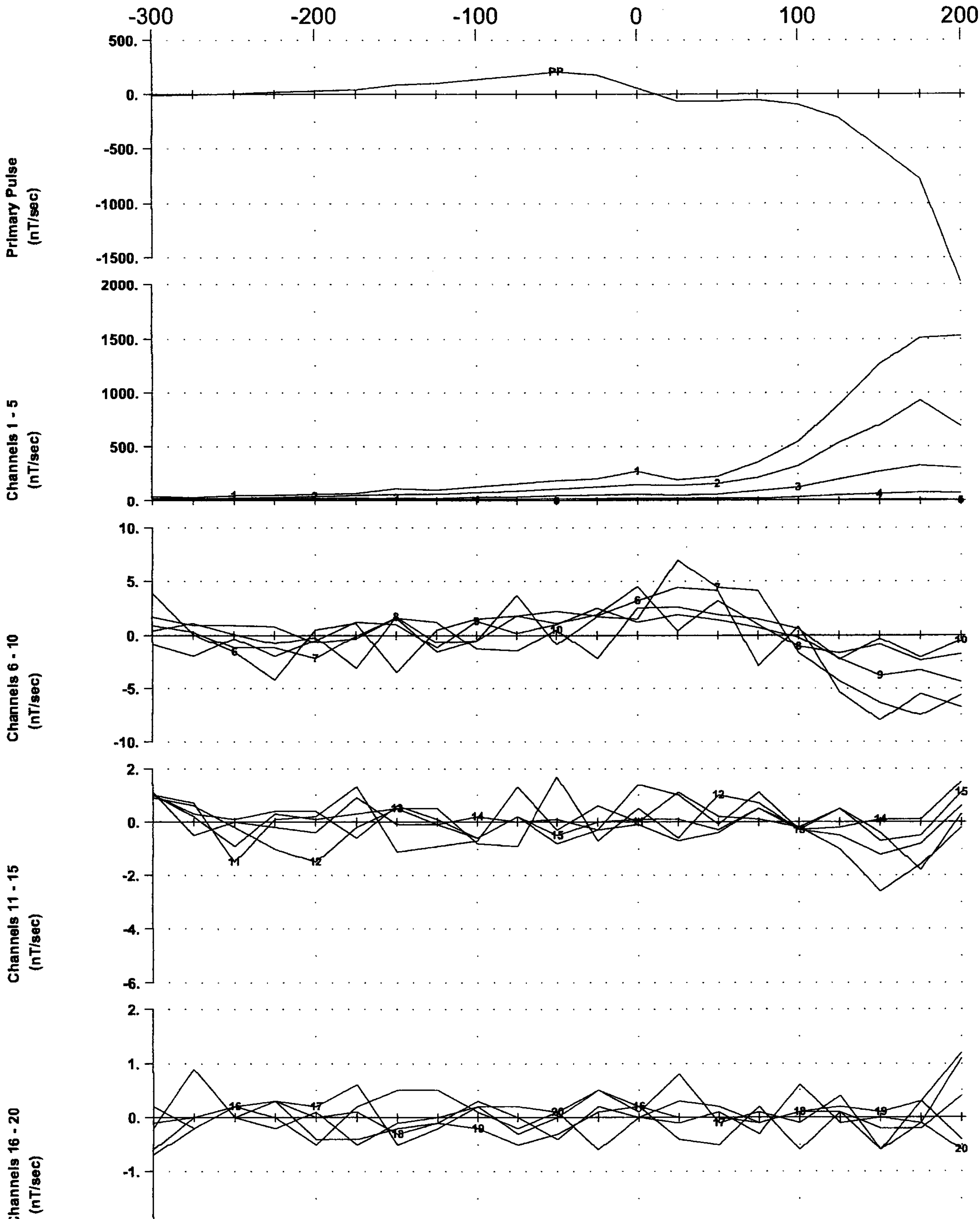

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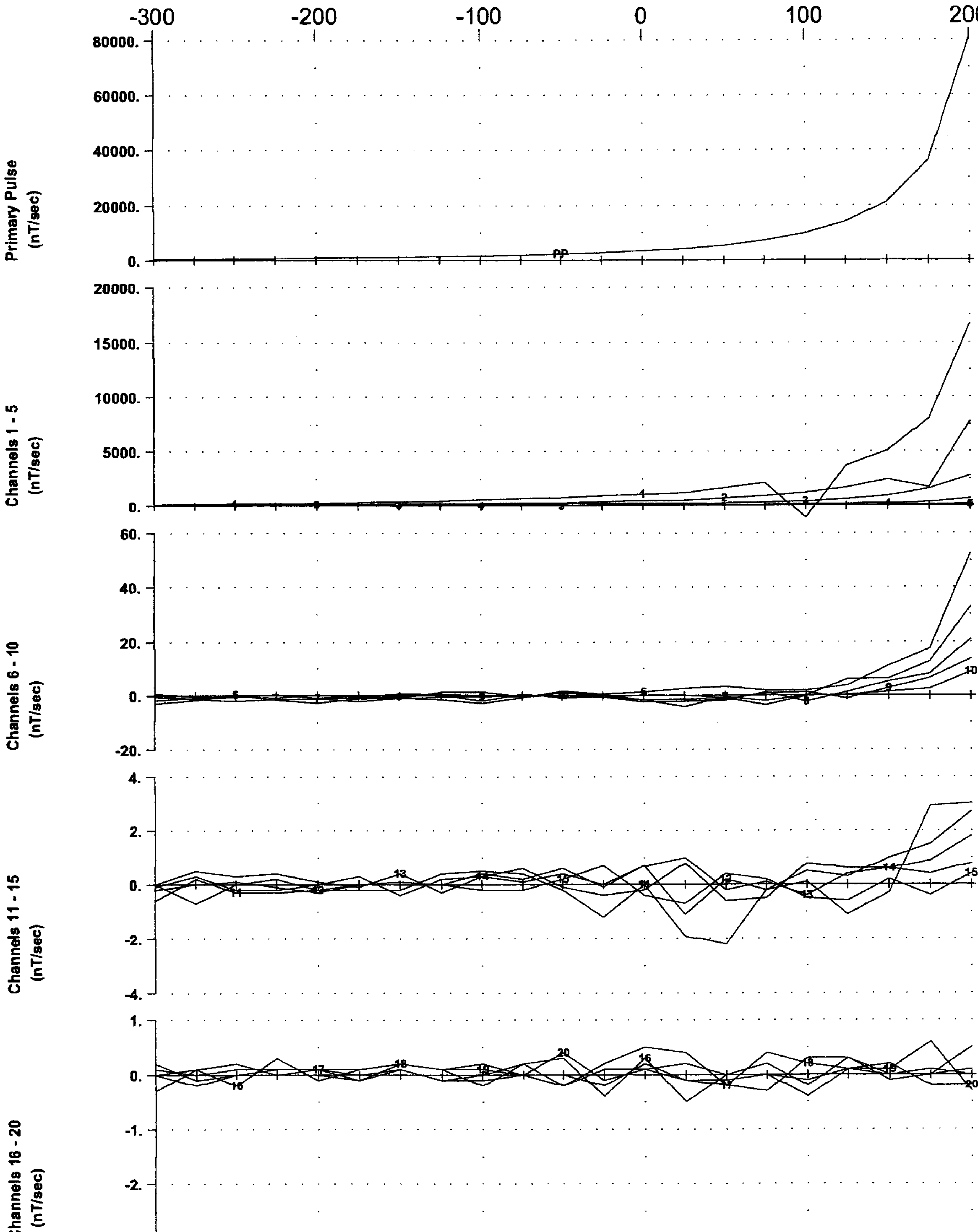

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Line 400E   Z Component

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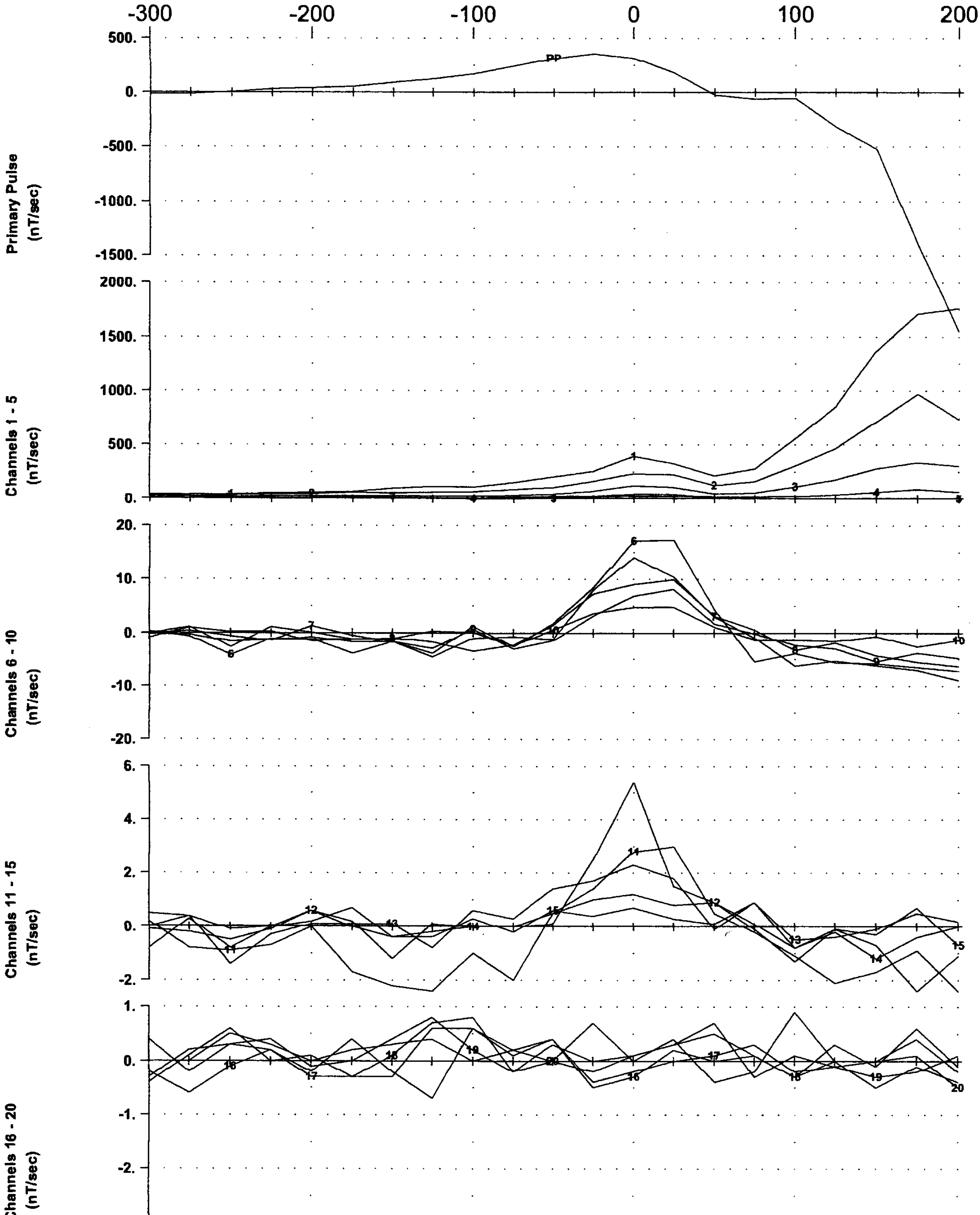

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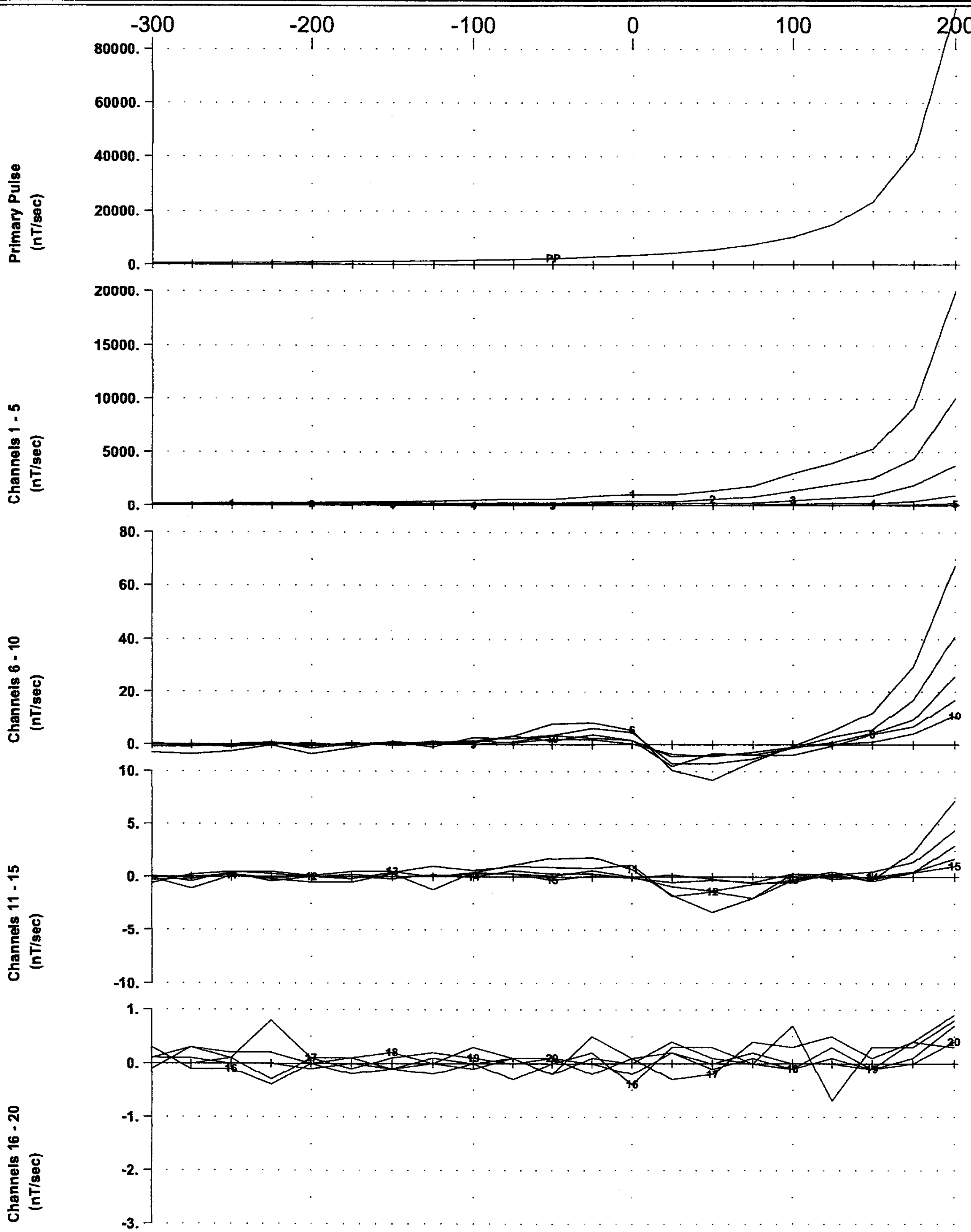

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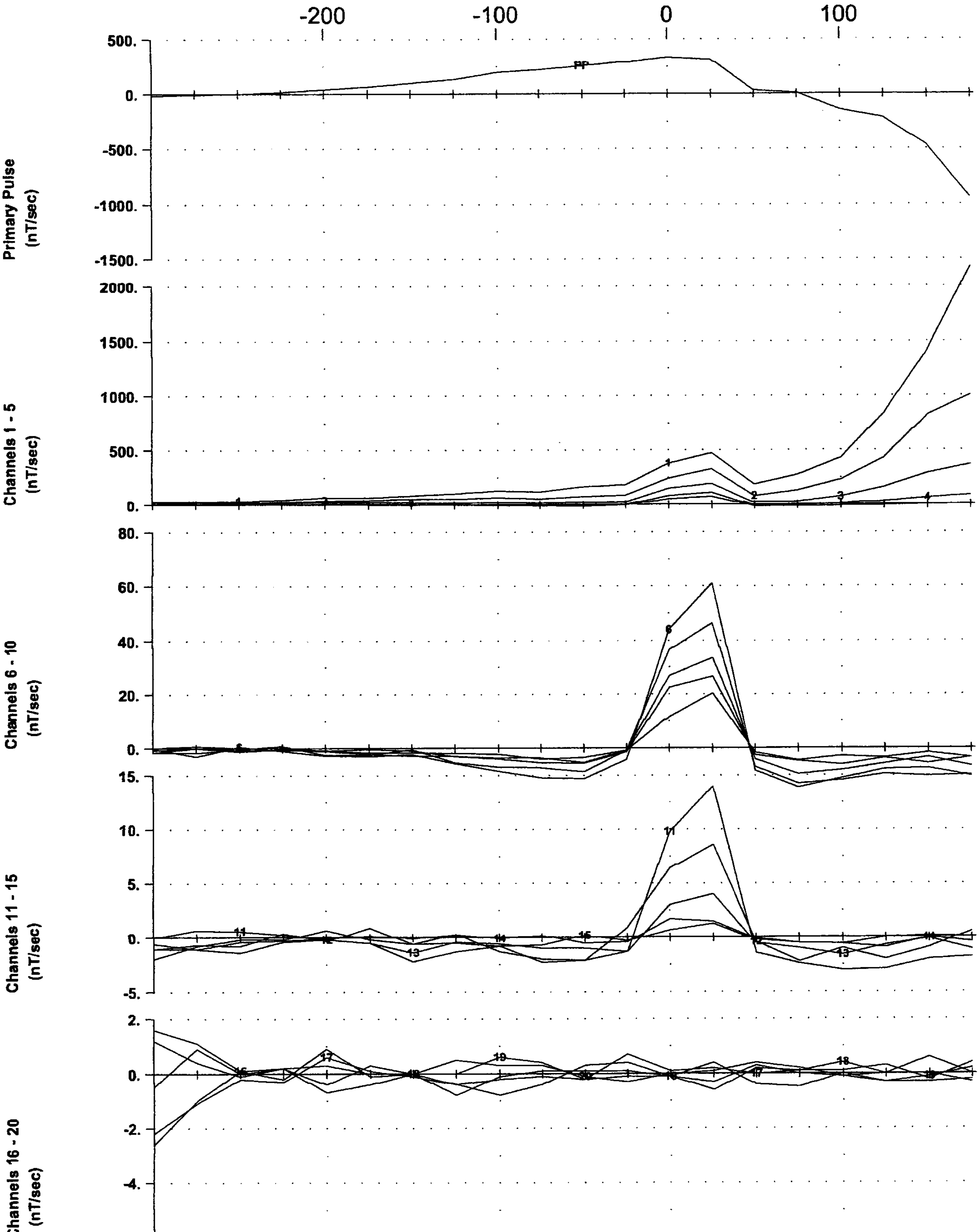

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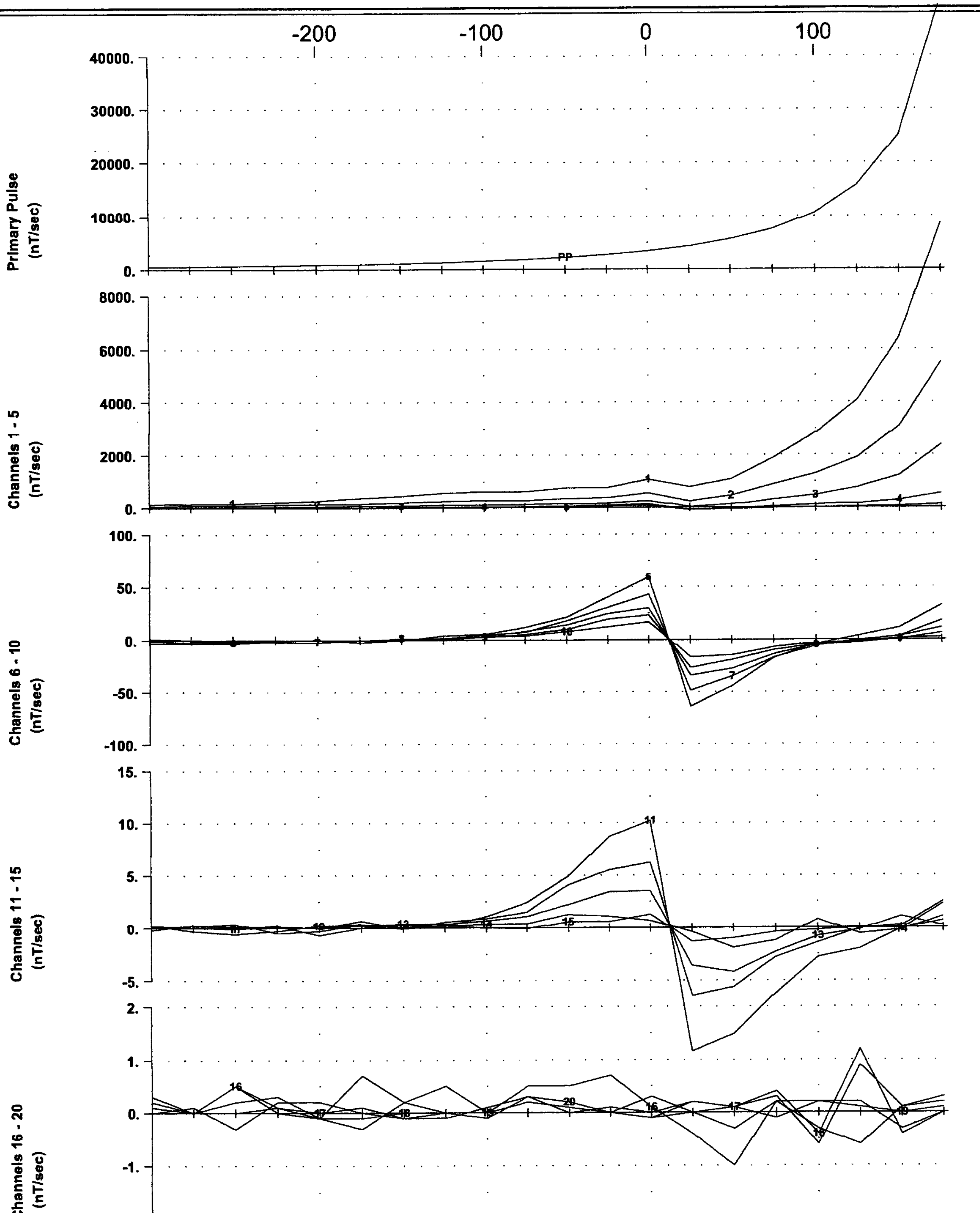

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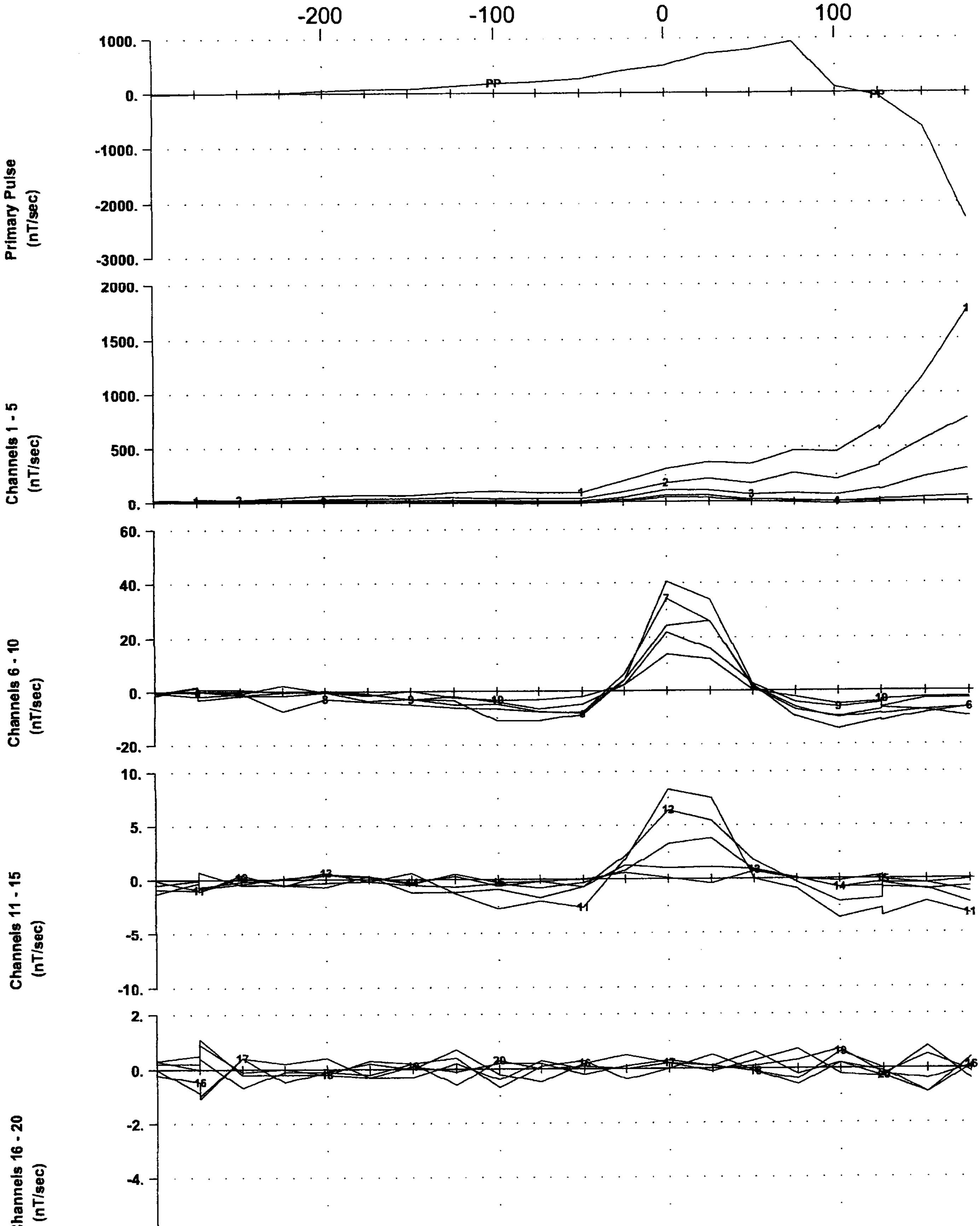

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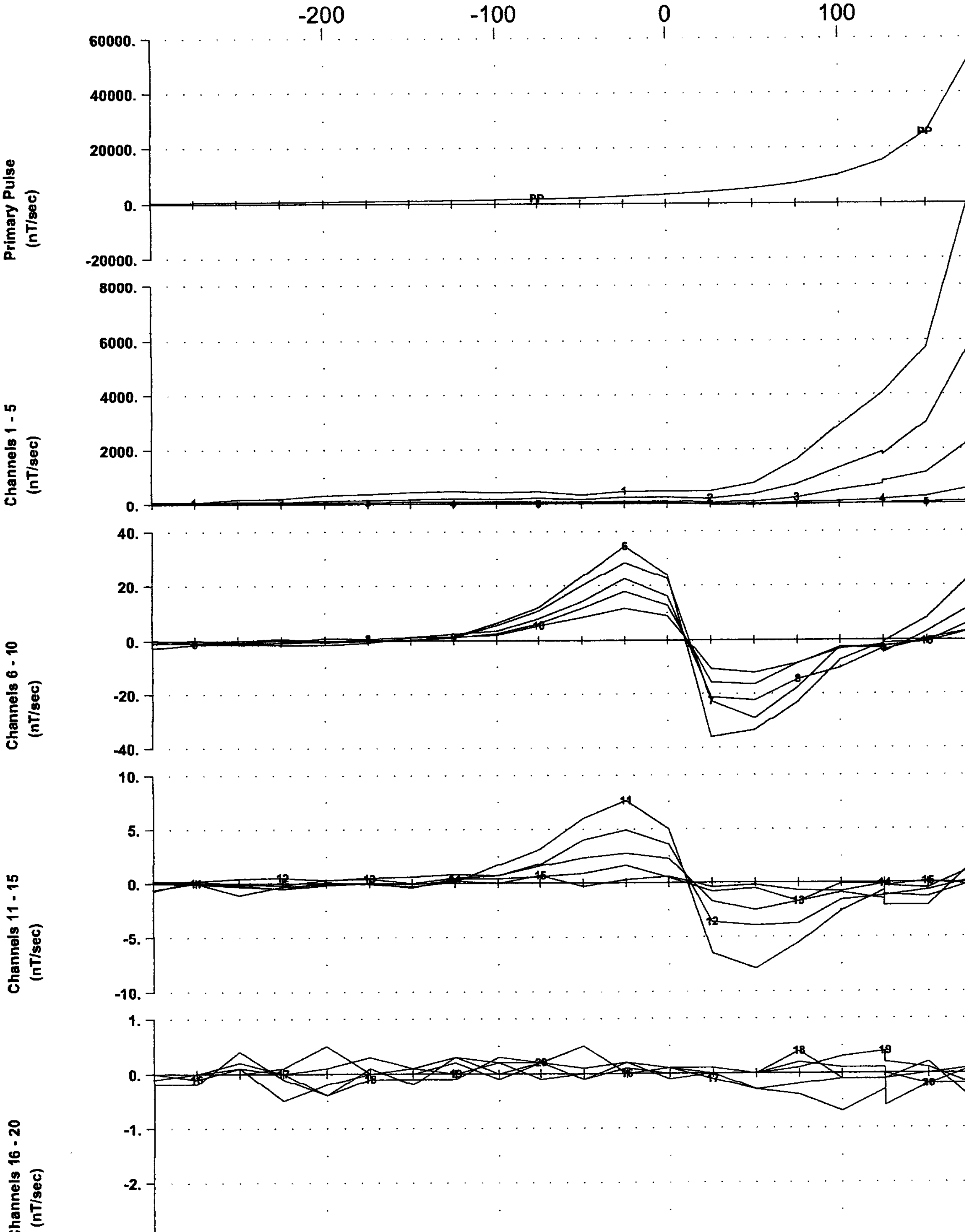

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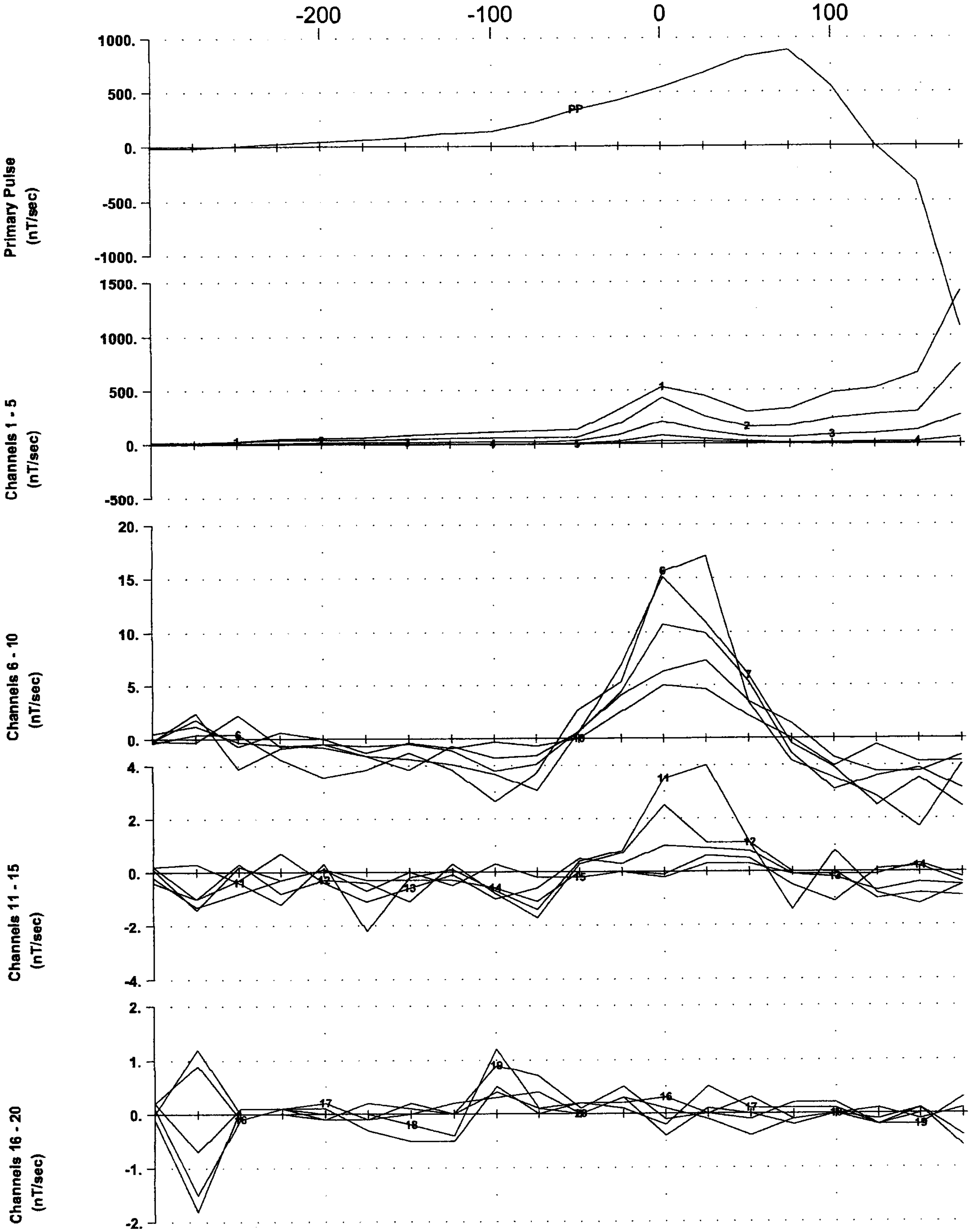

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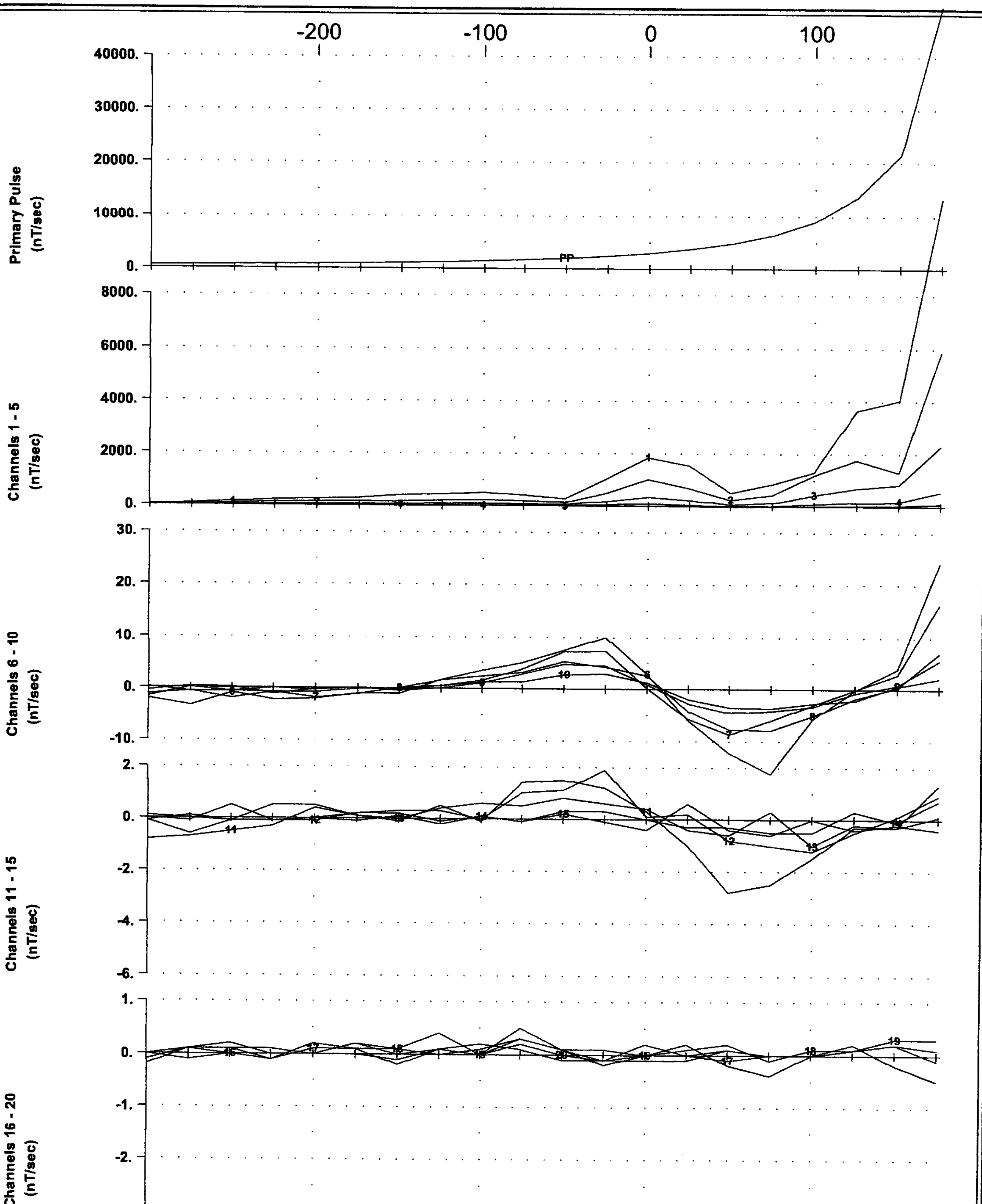

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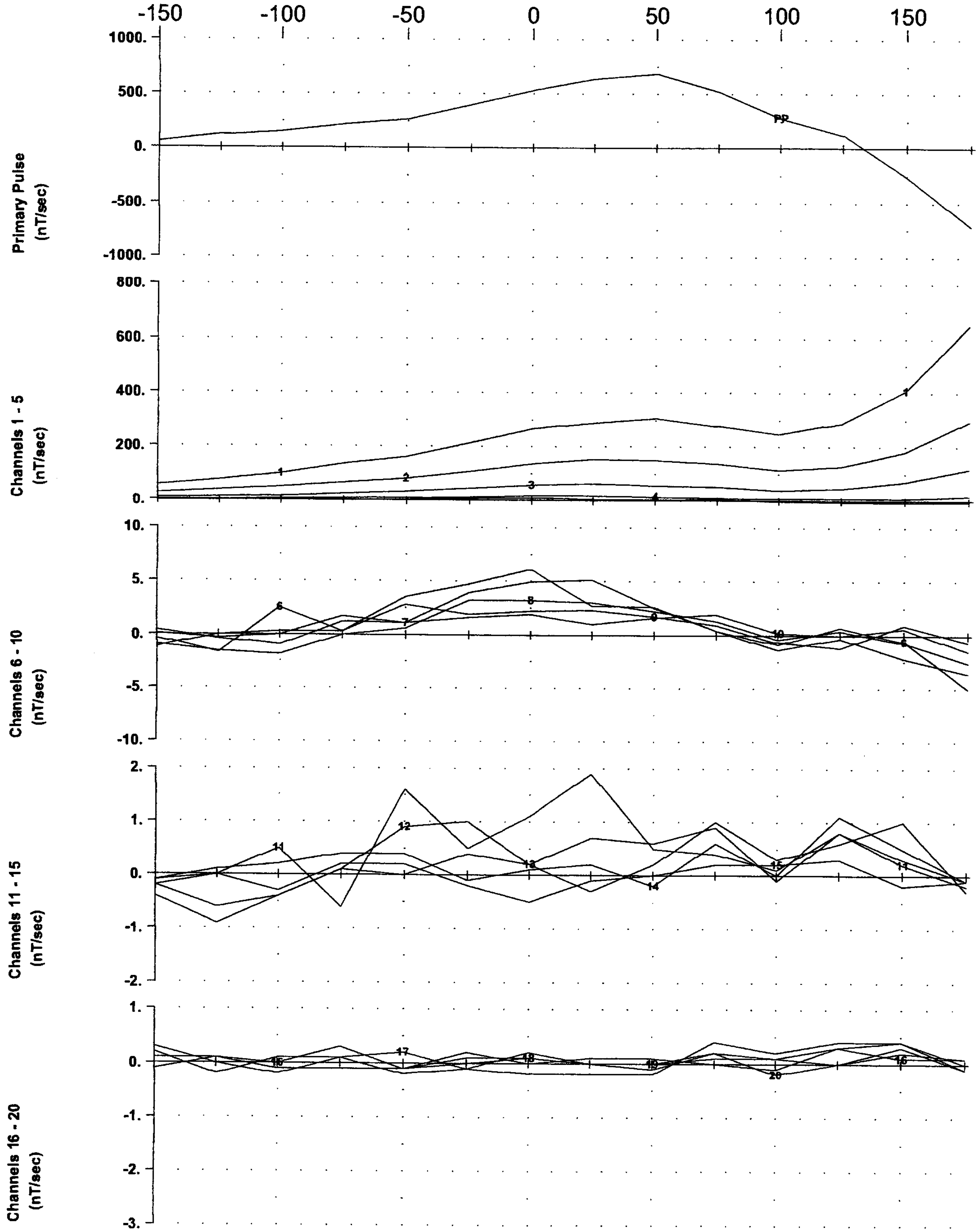

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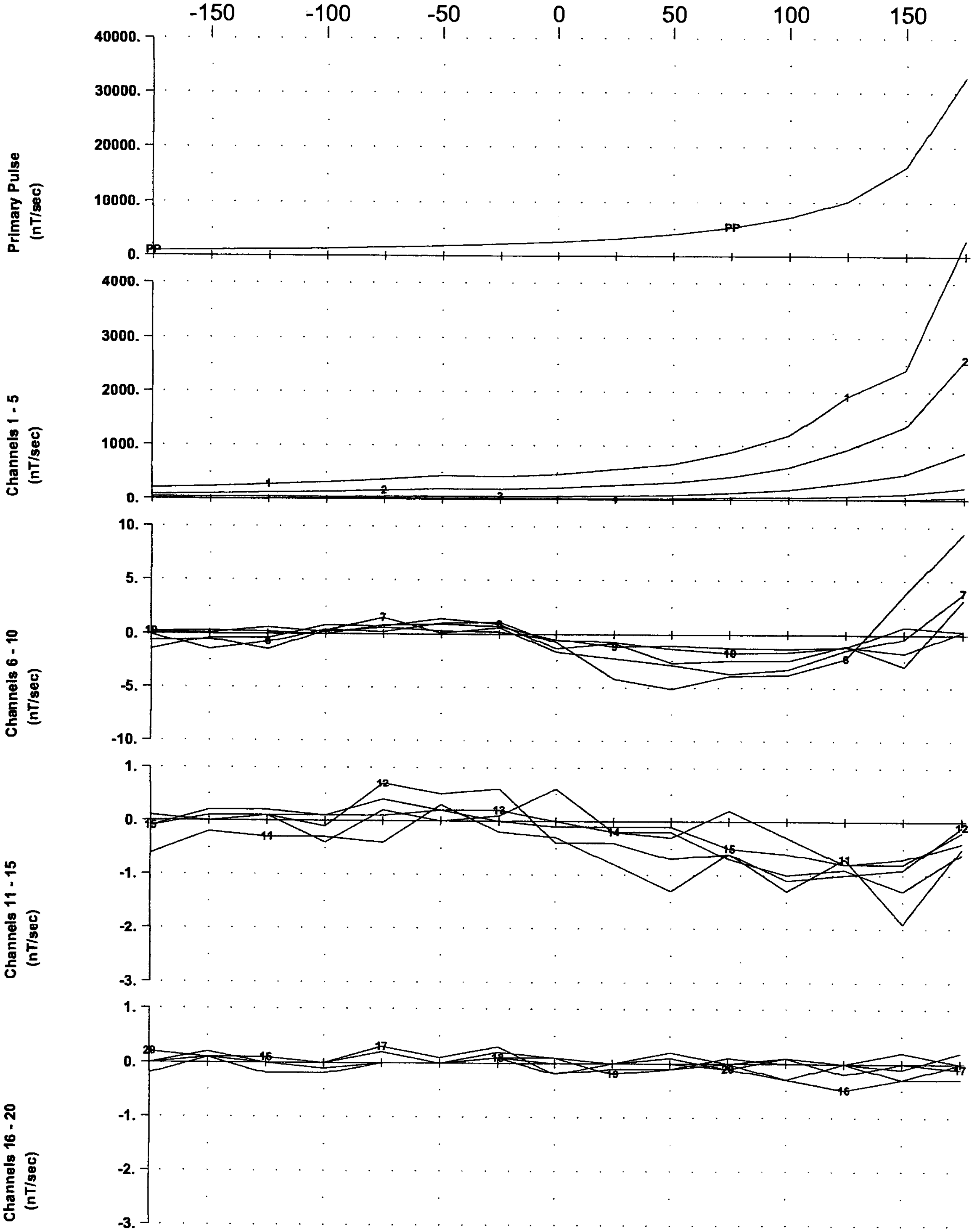


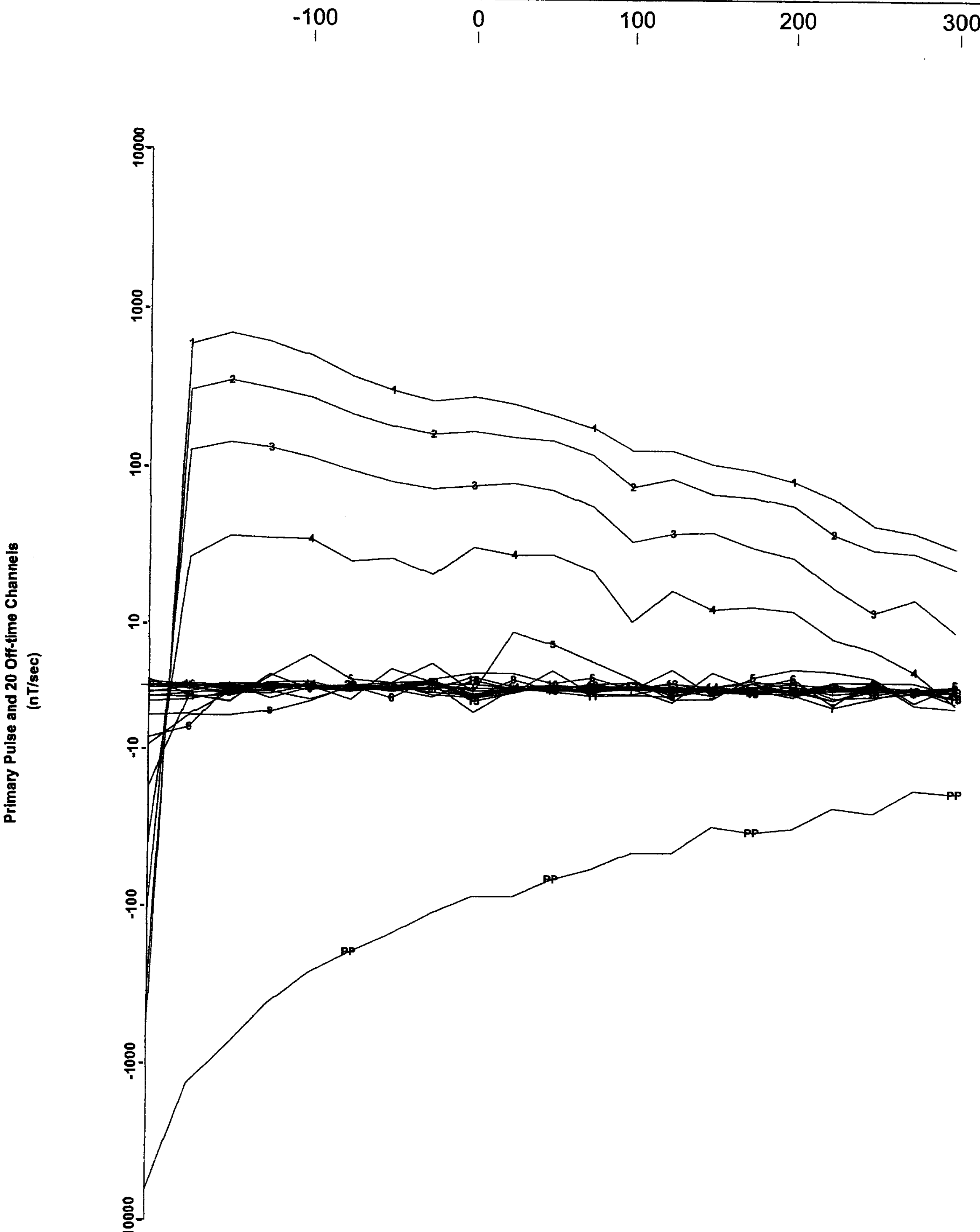
WALLBRIDGE MINING COMPANY LTD. HONGKONG

Line 650E Z Component

Crone Geophysics & Exploration Ltd.

APPENDIX III

PULSE EM DATA PROFILES (LIN-LOG SCALE)



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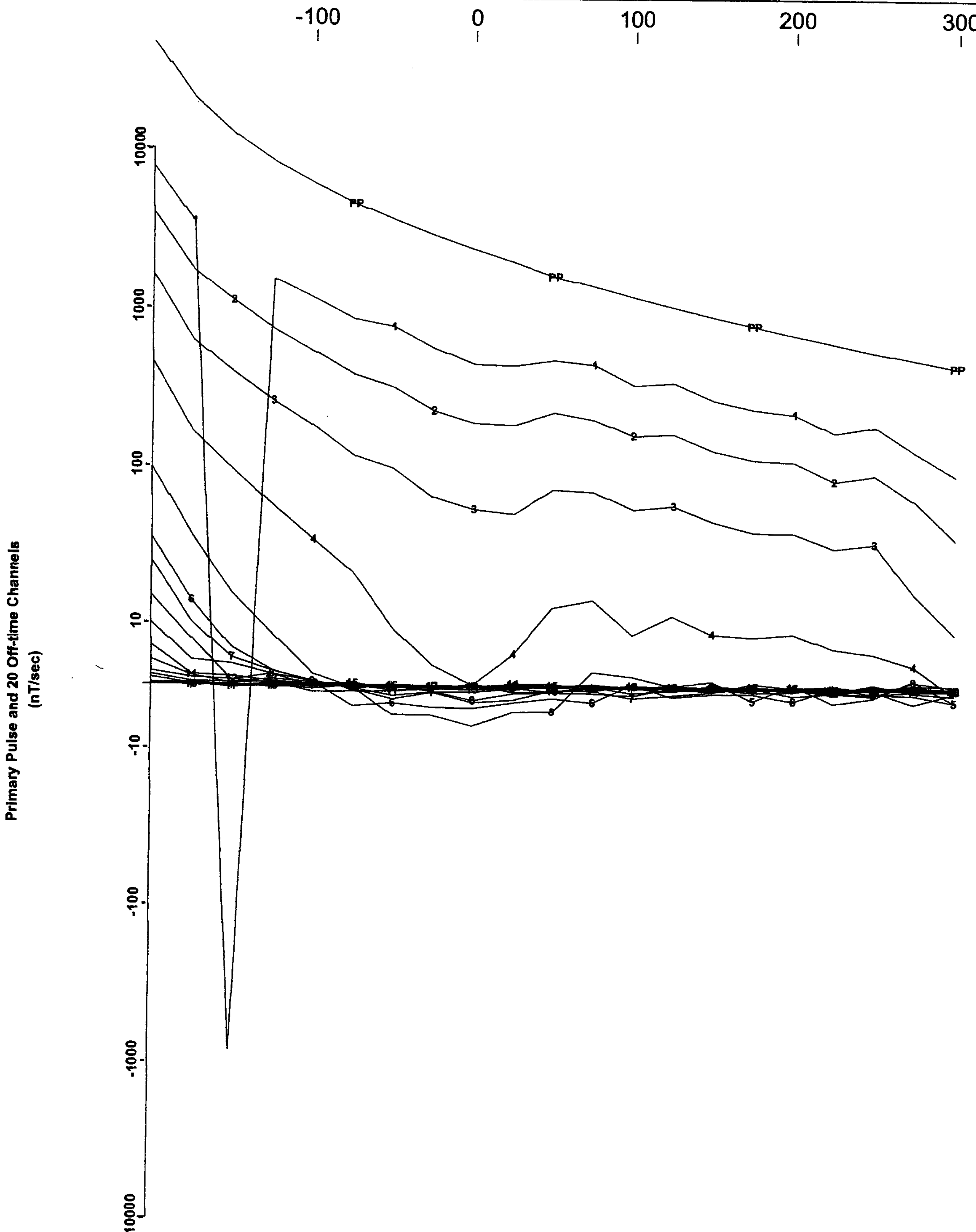

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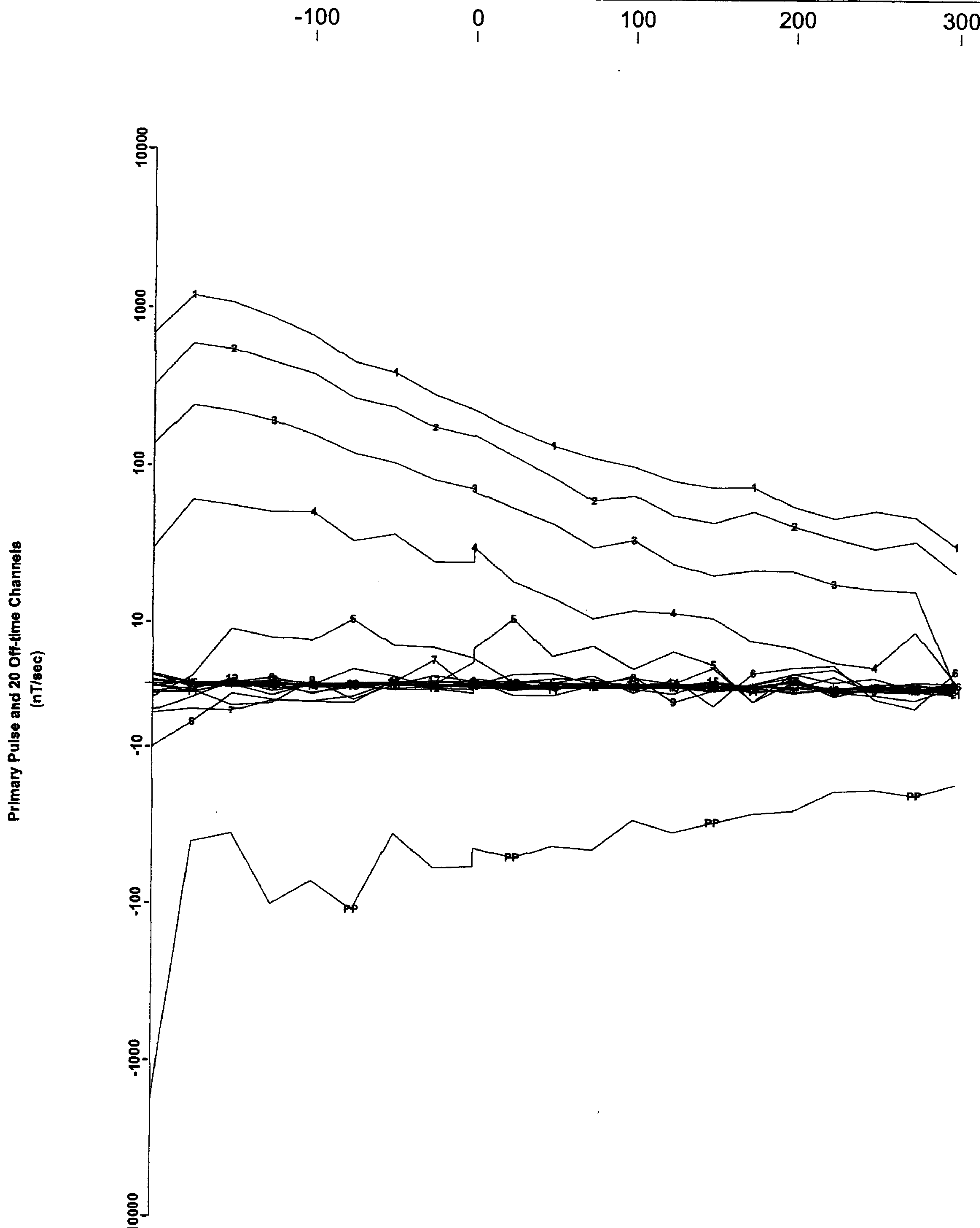

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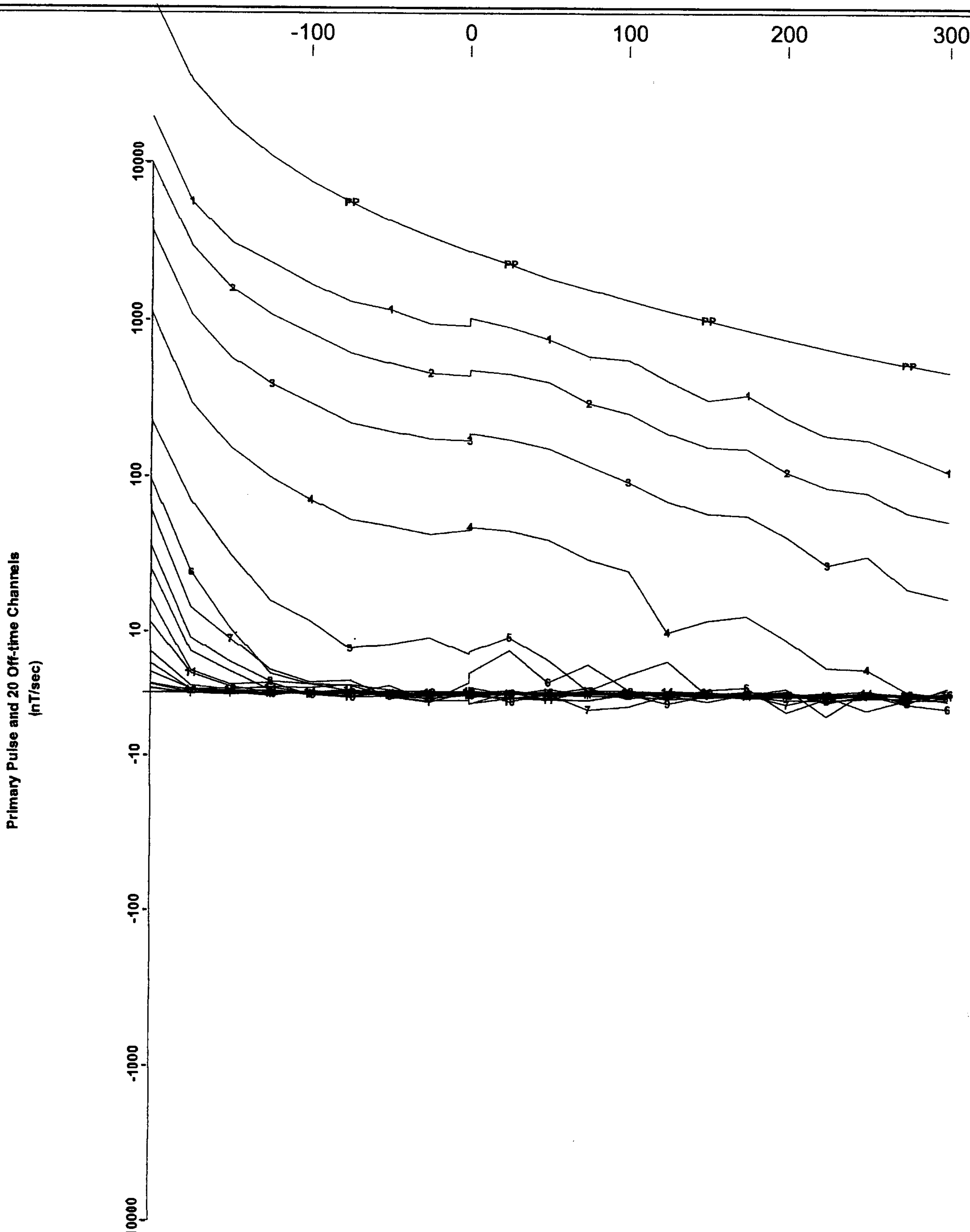

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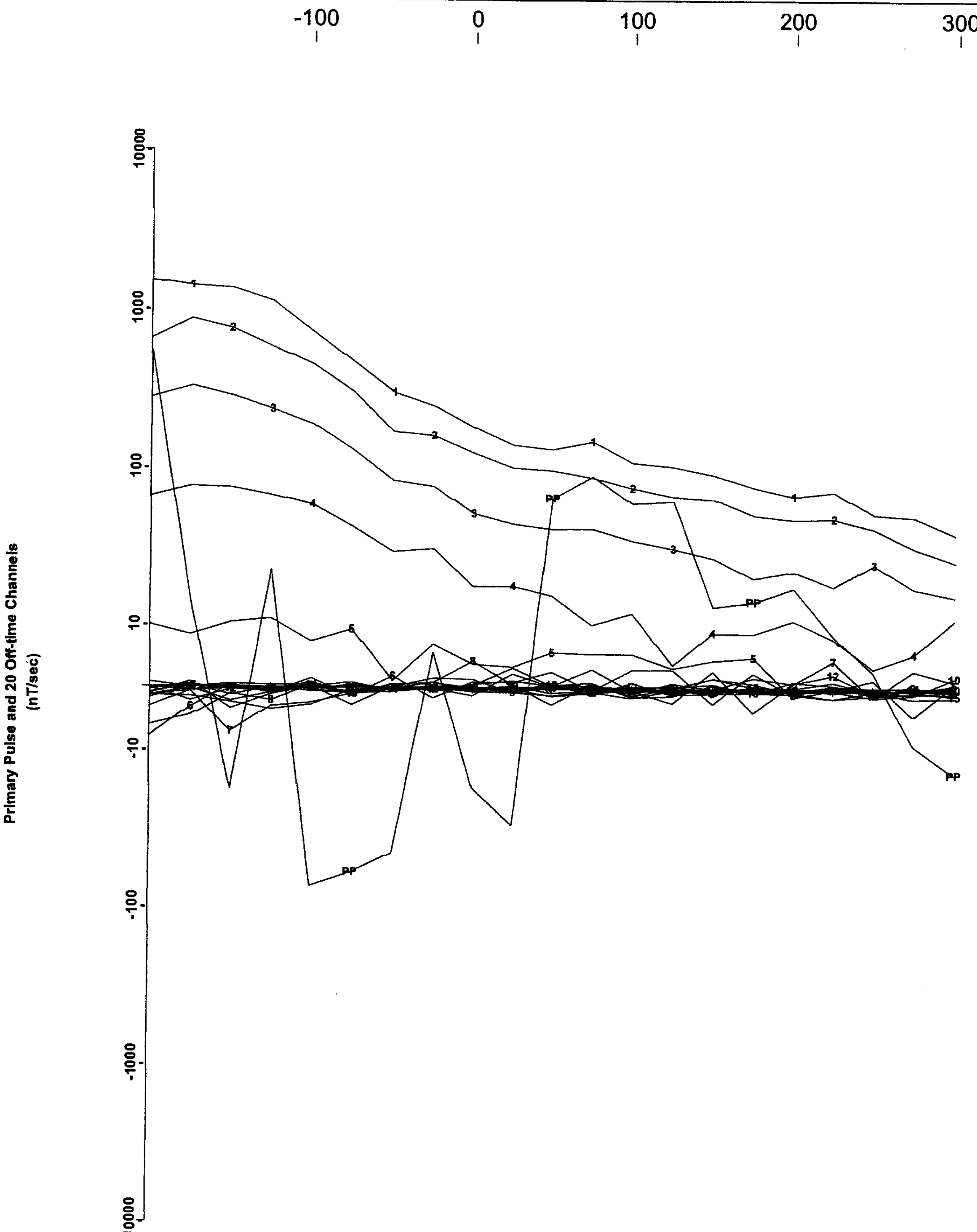

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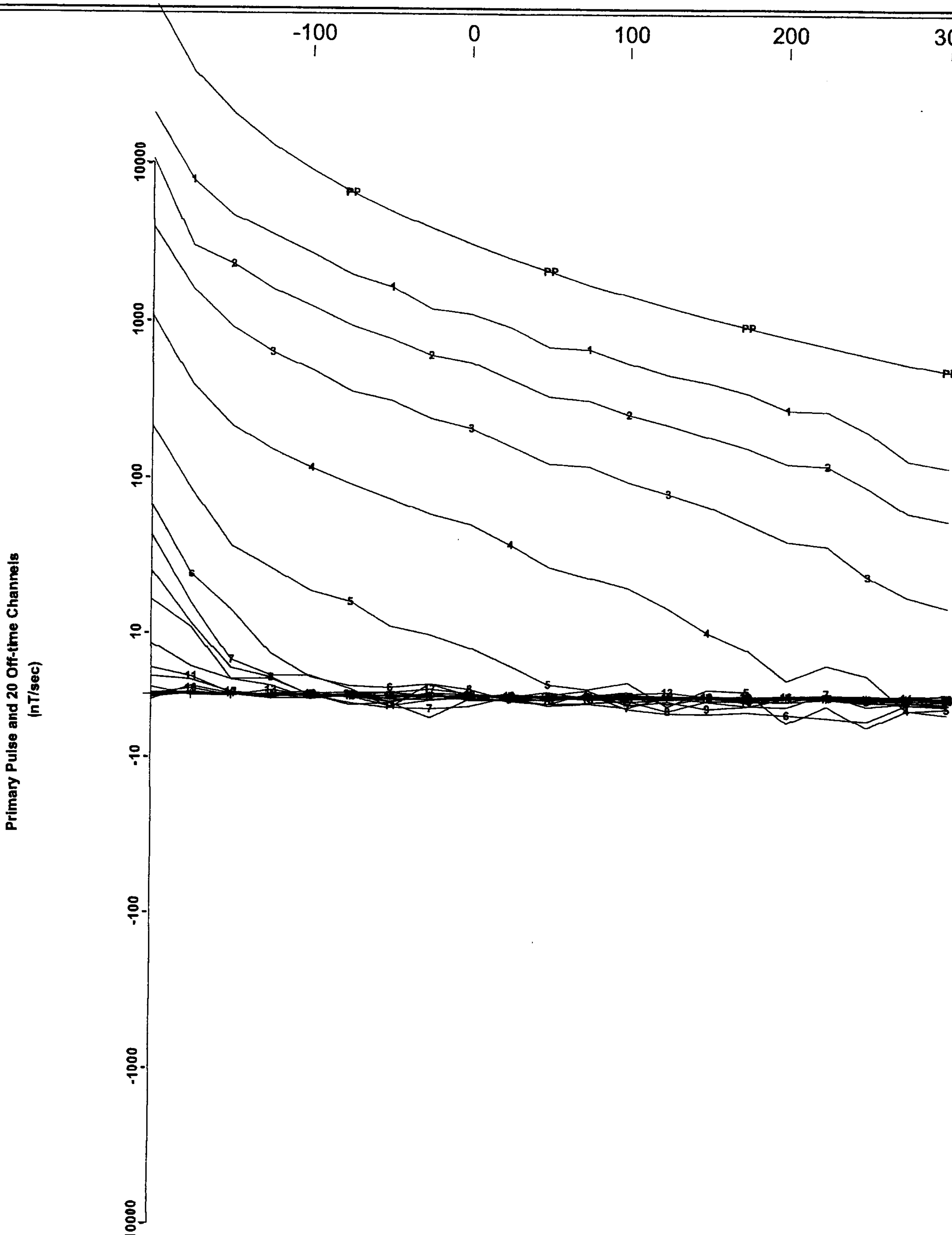

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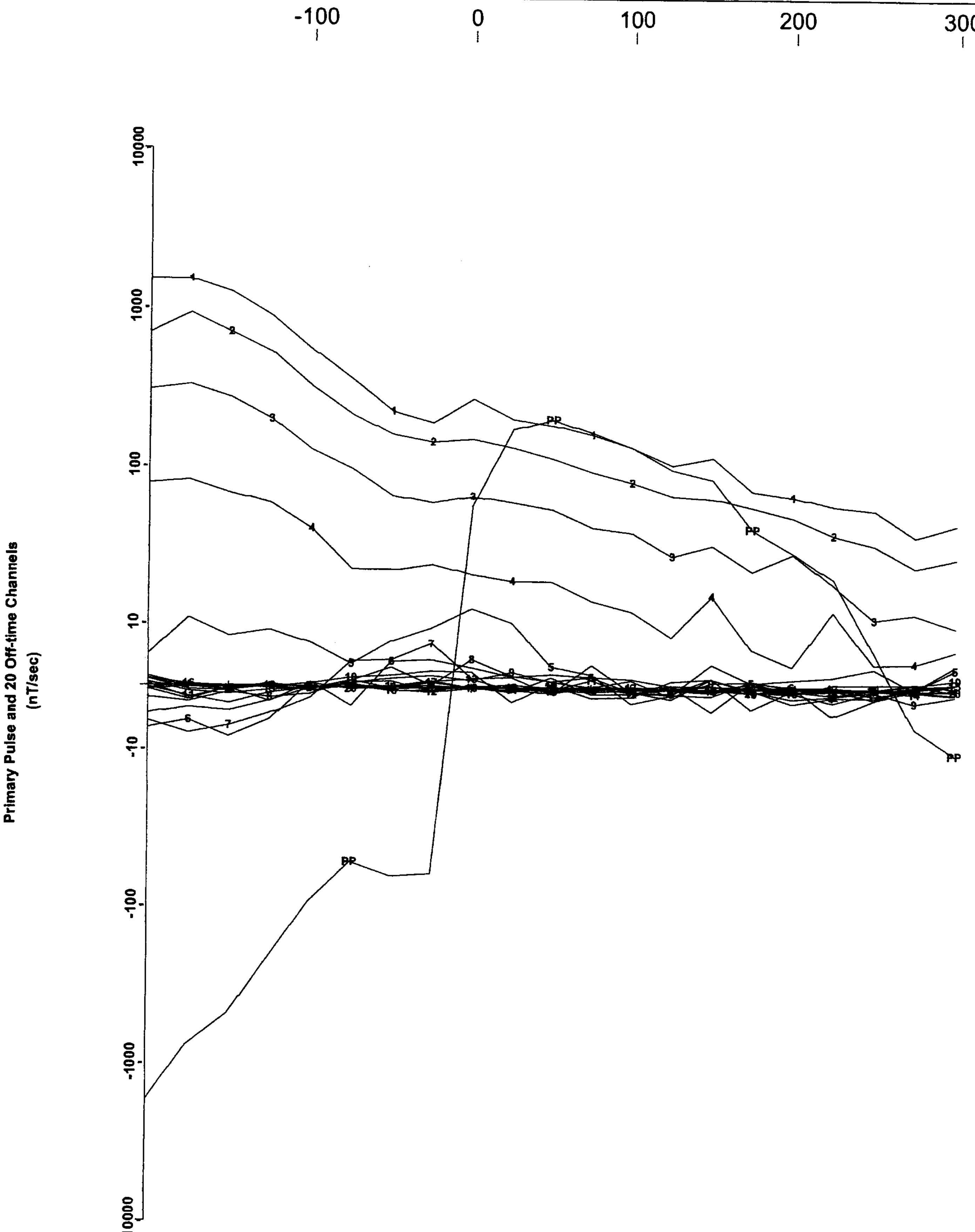

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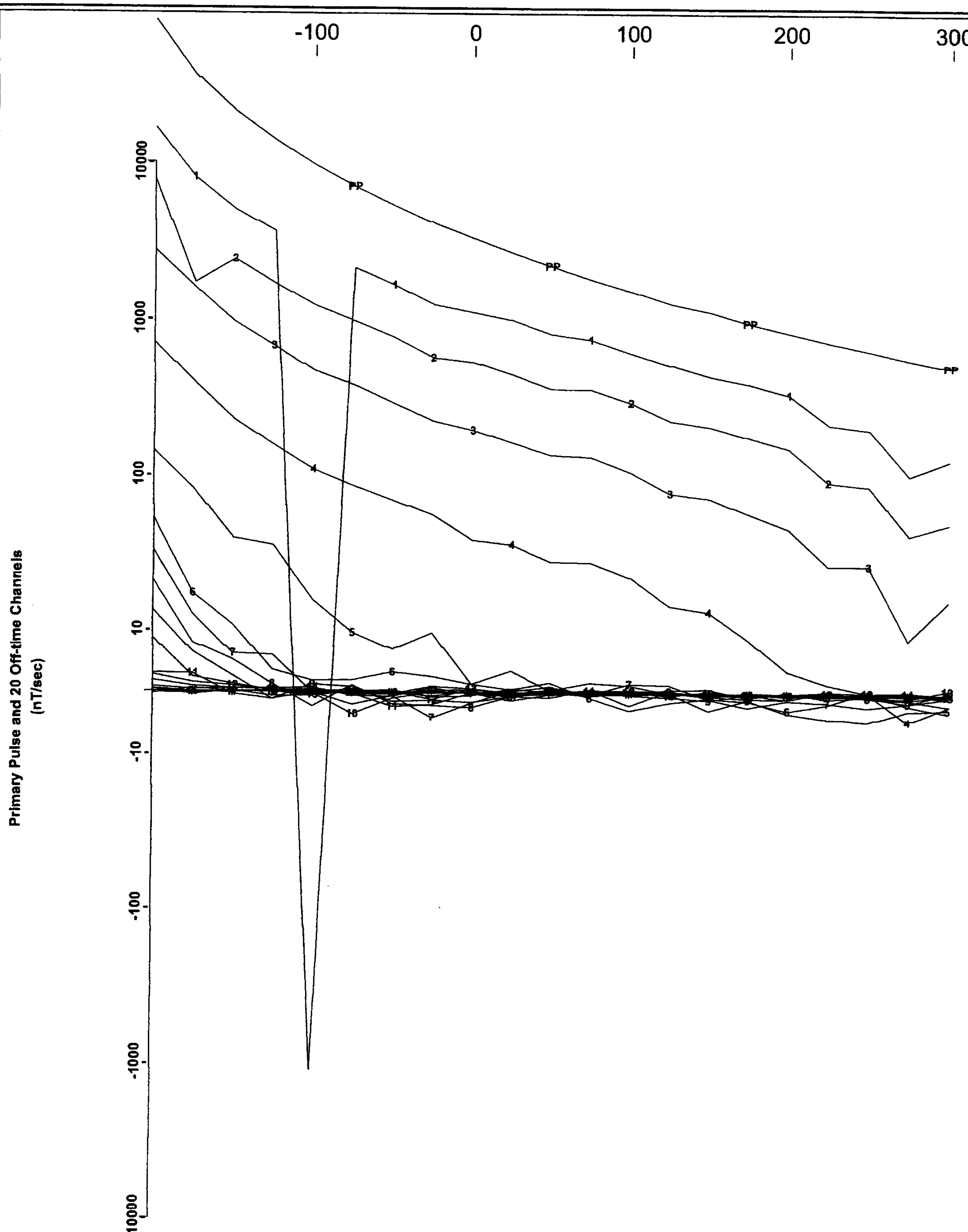

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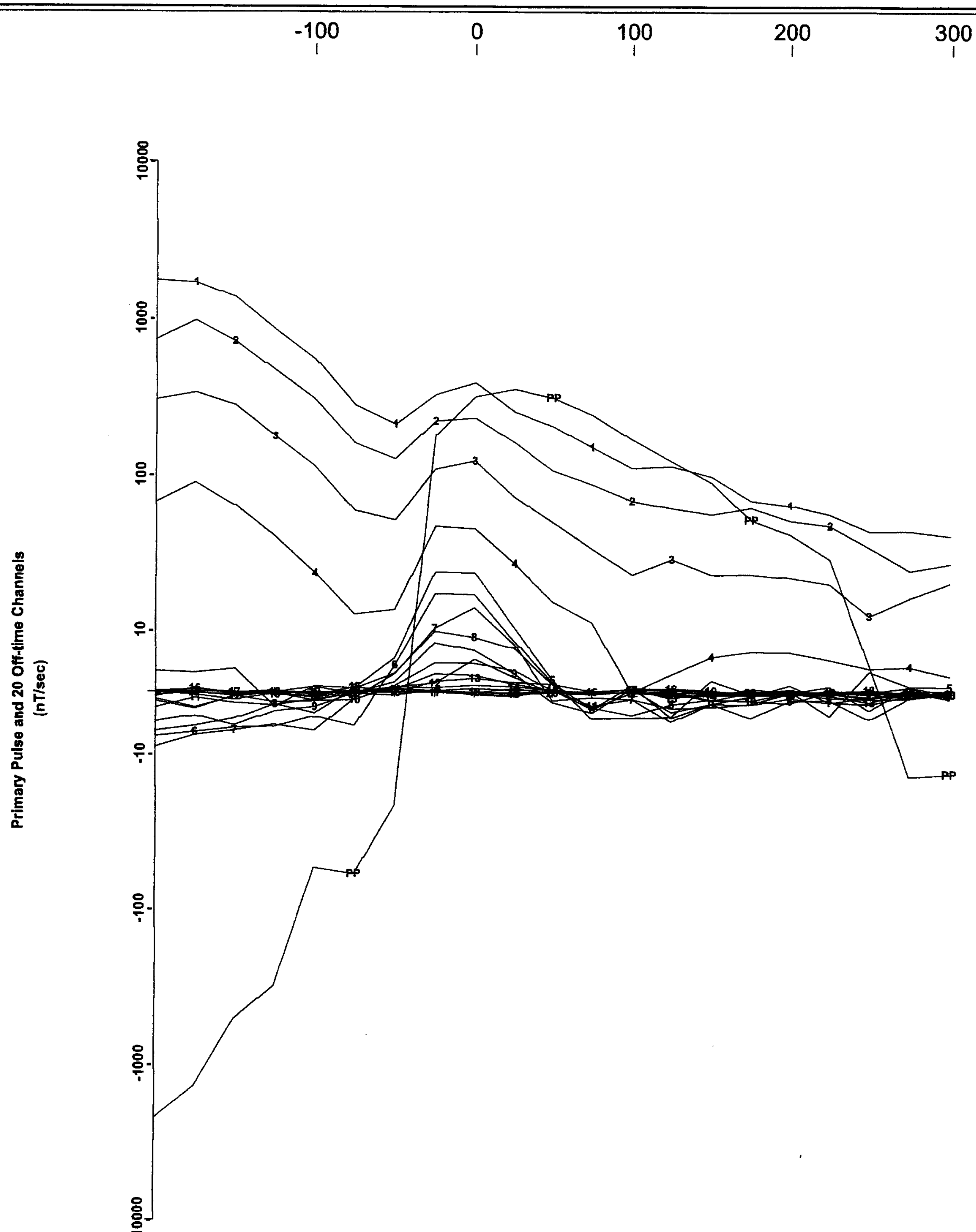

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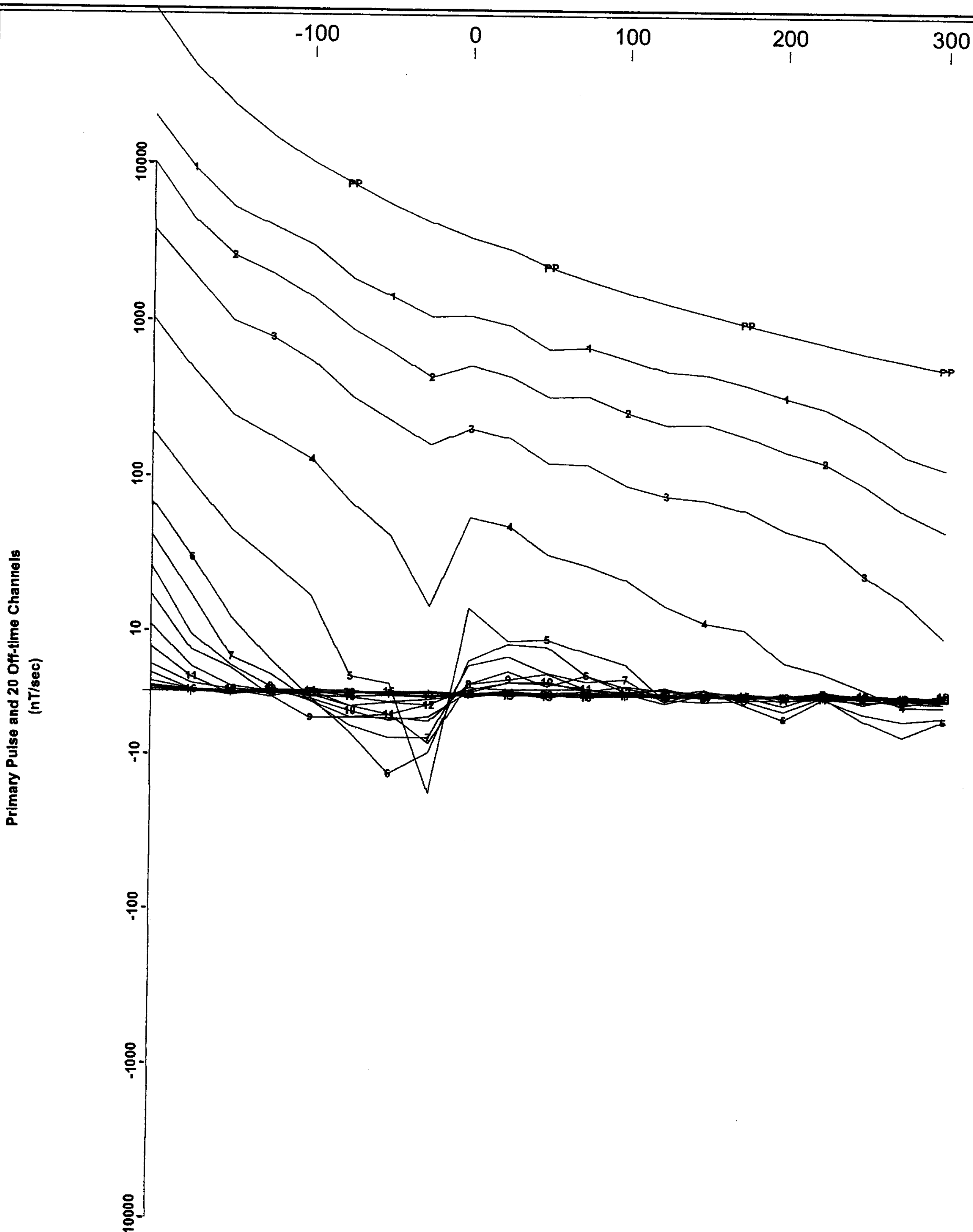

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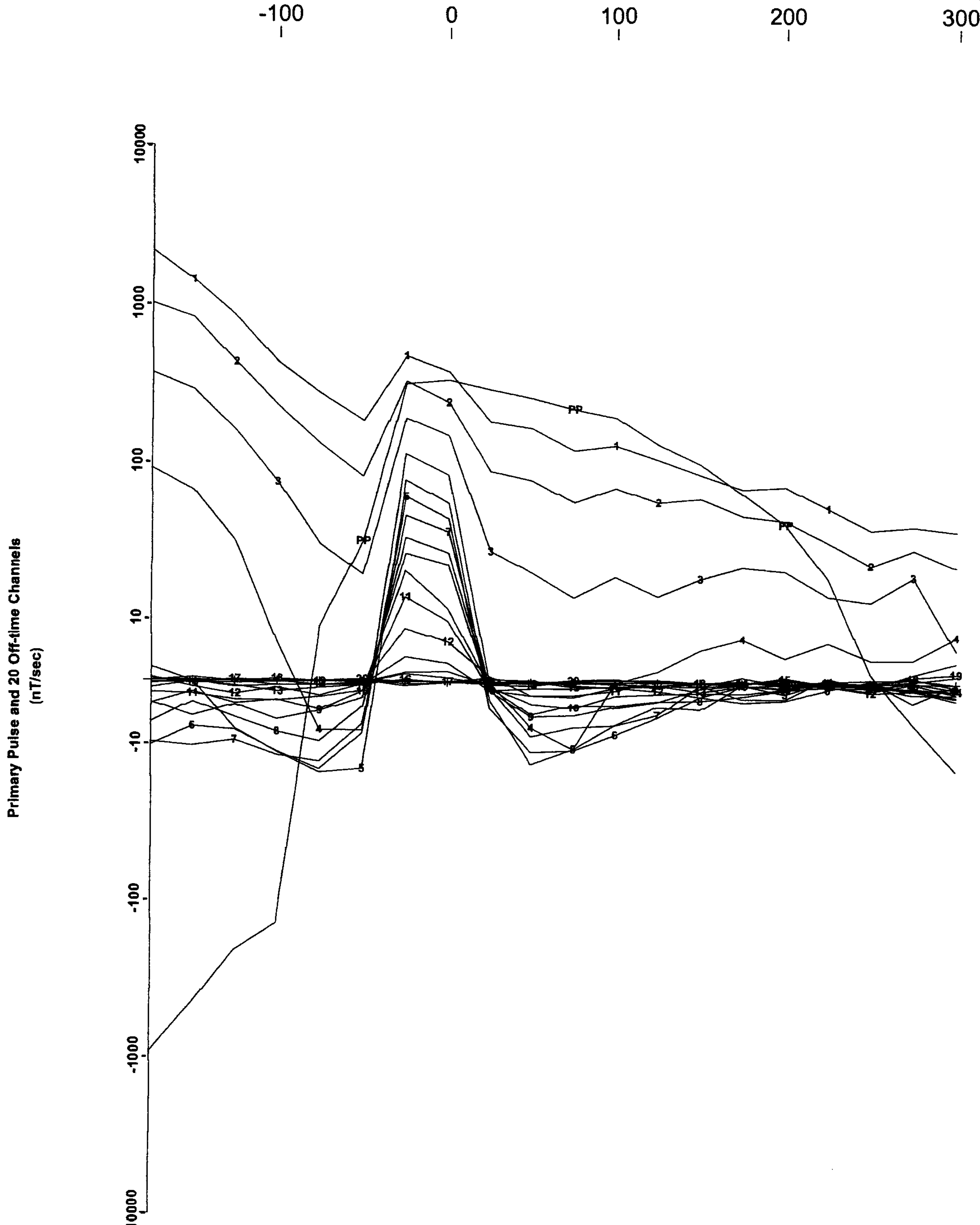

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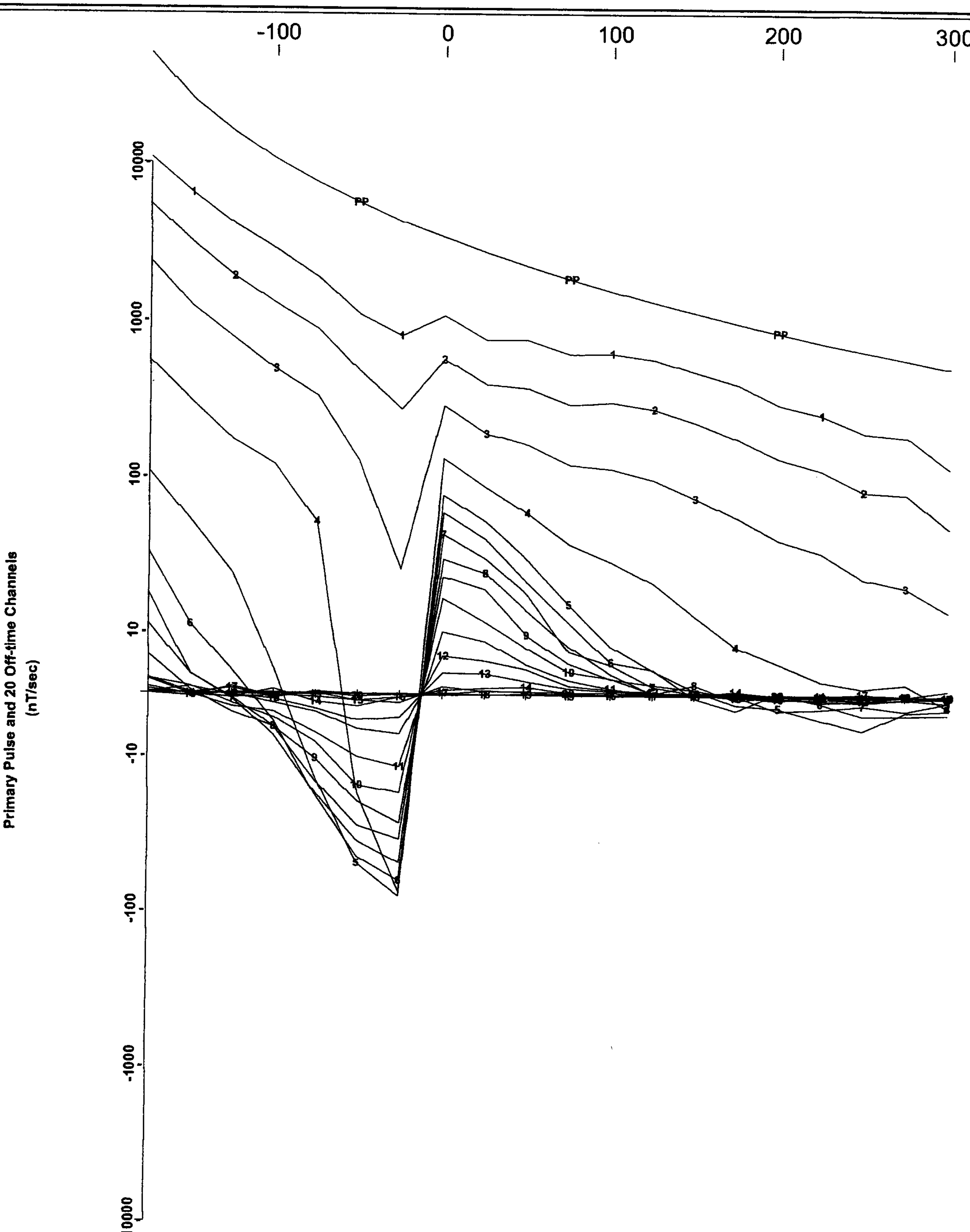

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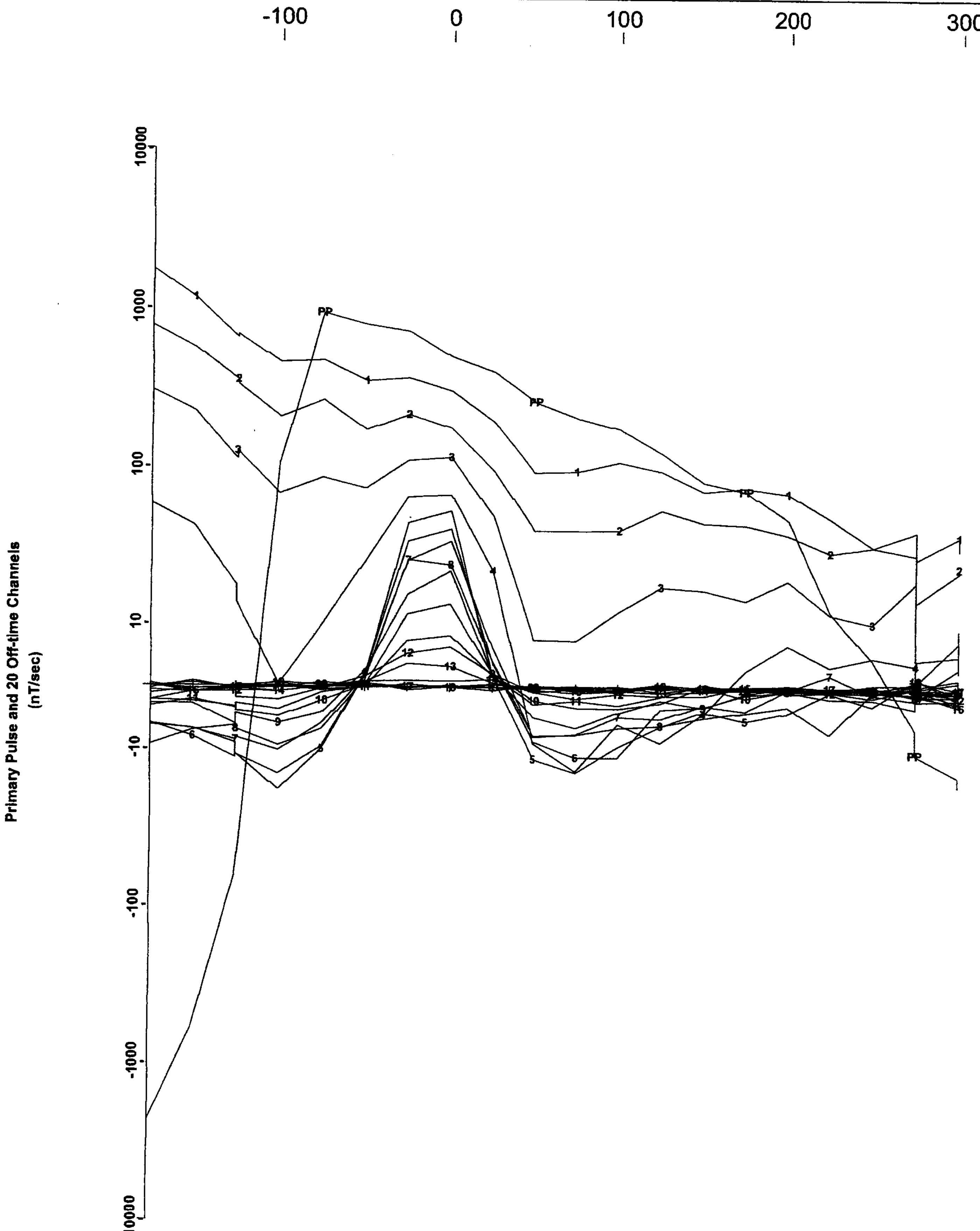
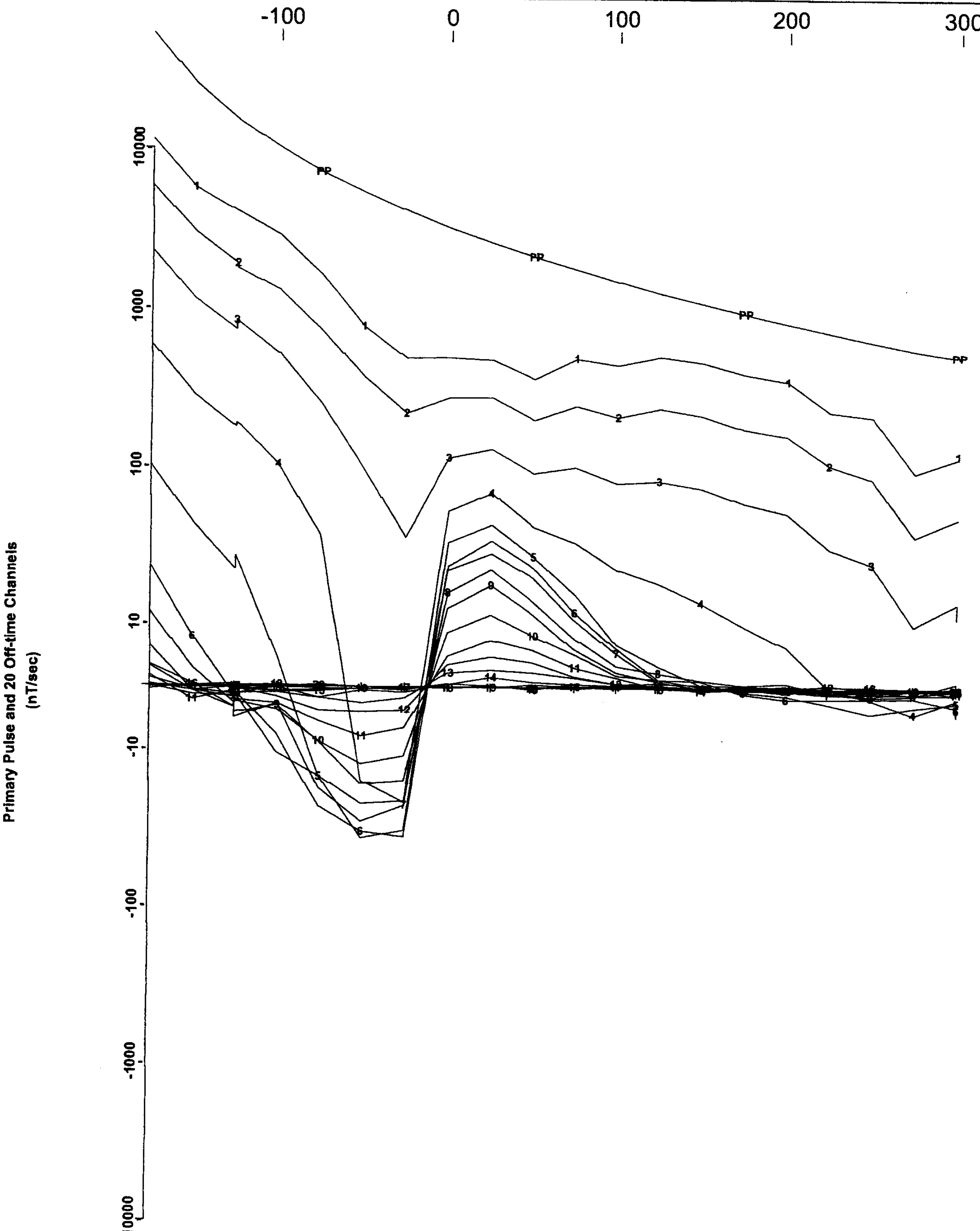


WALLBRIDGE MINING COMPANY LTD. HONKONG

Line 550E X Component

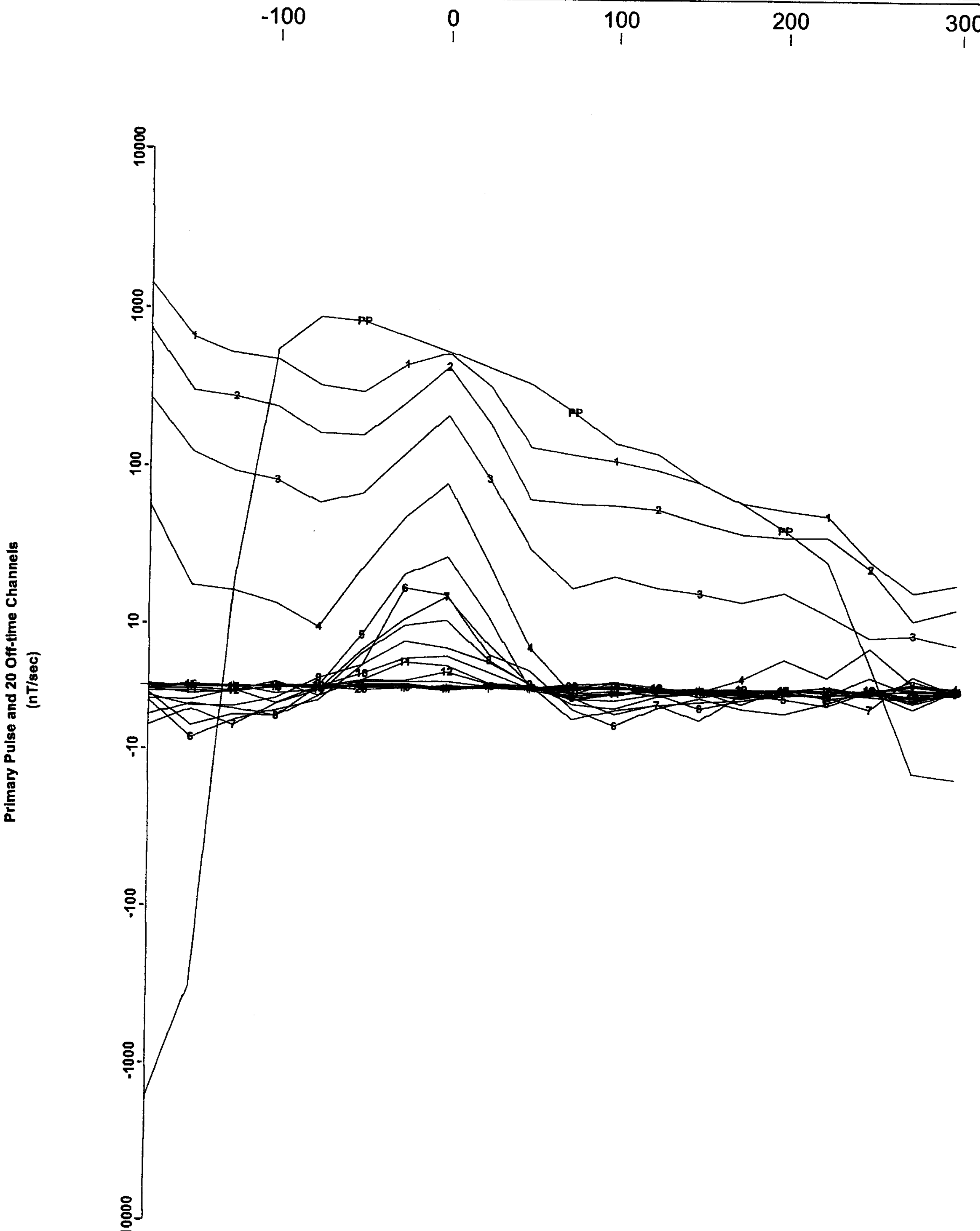
Crone Geophysics & Exploration Ltd.



WALLBRIDGE MINING COMPANY LTD.   HONKONG

Line 550E   Z Component

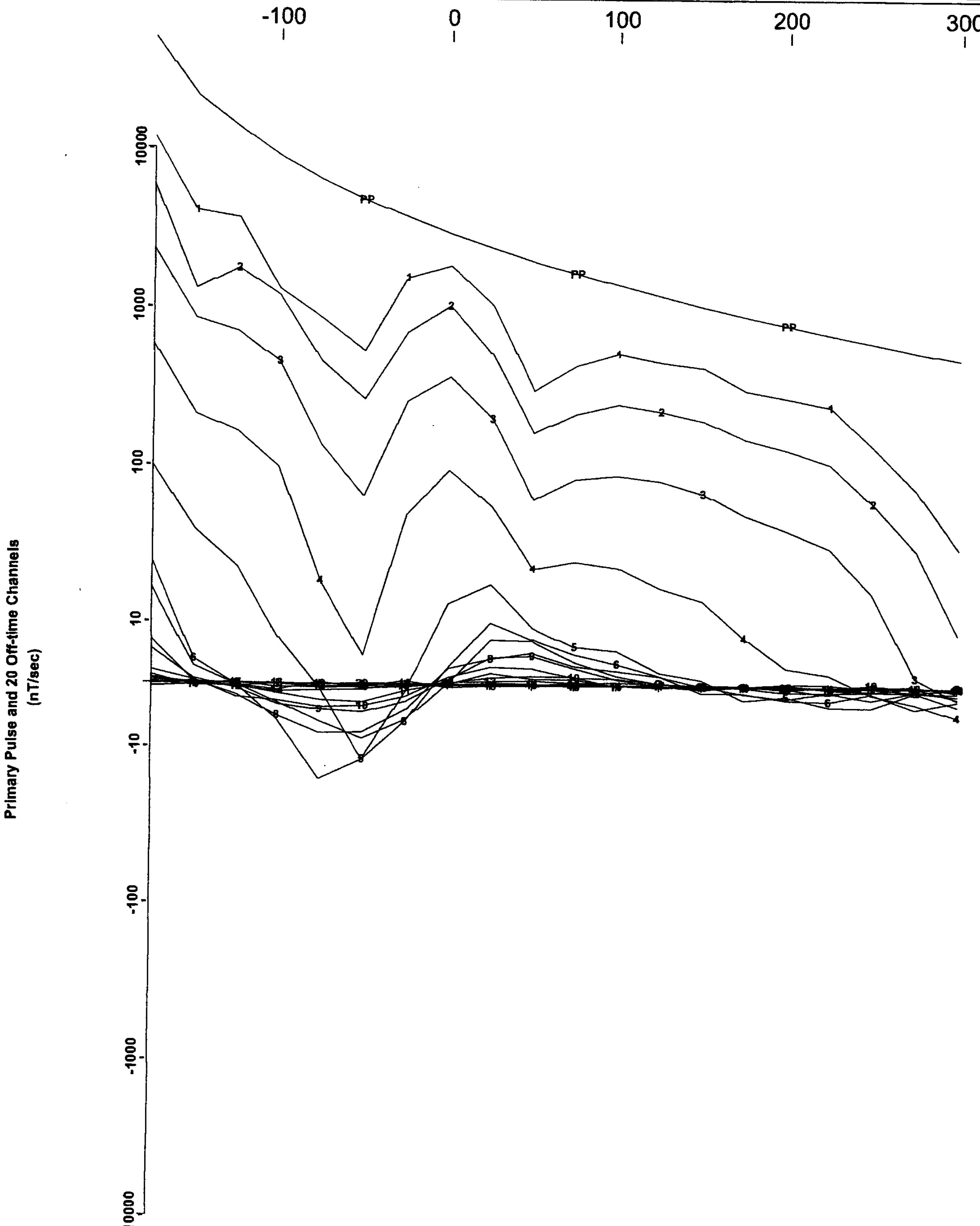
Crone Geophysics & Exploration Ltd.



WALLBRIDGE MINING COMPANY LTD. Ltd. HONKONG

Line 600E X Component

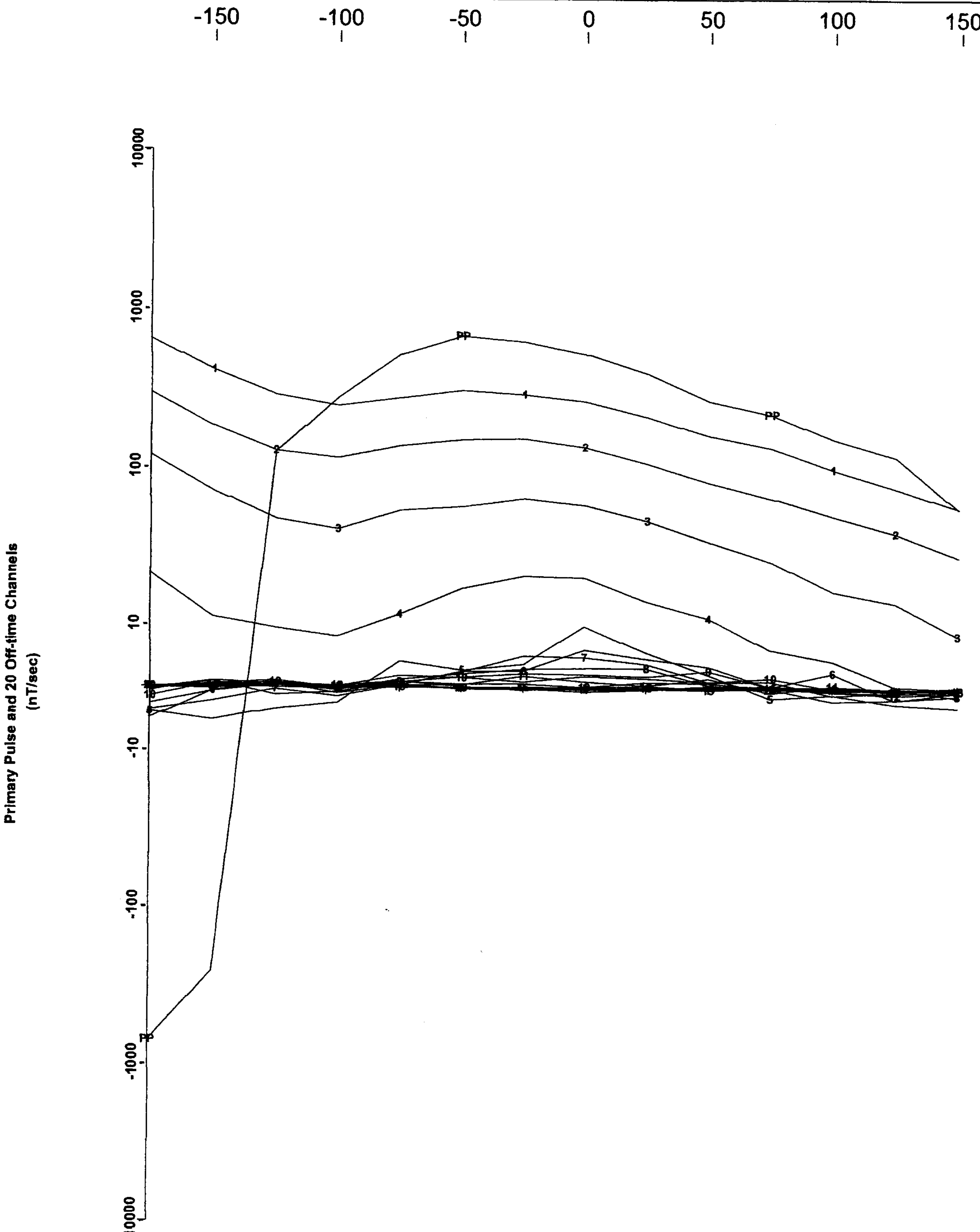
Crone Geophysics & Exploration Ltd.



WALLBRIDGE MINING COMPANY LTD. Ltd. HONKONG

Line 600E Z Component

Crone Geophysics & Exploration Ltd.



WALLBRIDGE MINING COMPANY LTD. HONGKONG

Line 650E X Component

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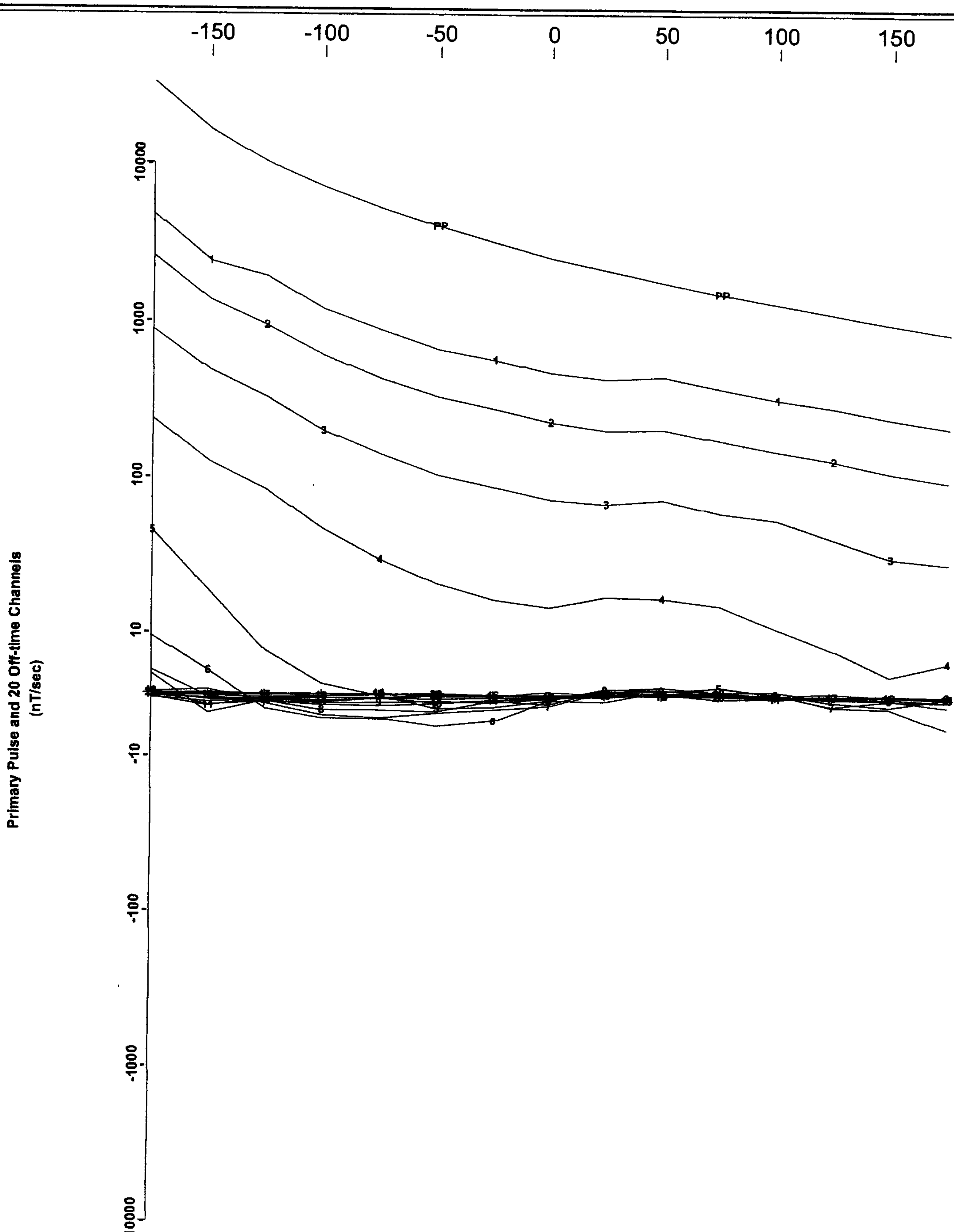

WALLBRIDGE MINING COMPANY LTD. HONGKONG

Line 650E Z Component

Crone Geophysics & Exploration Ltd.

APPENDIX IV

CRONE INSTRUMENT SPECIFICATIONS

CRONE PULSE EM SYSTEM

SYSTEM DESCRIPTION

The Crone Pulse EM system is a time domain electromagnetic method (TDEM) that utilizes an alternating pulsed primary current with a controlled shut-off and measures the rate of decay of the induced secondary field across a series of time windows during the off-time. The system uses a transmit loop of any size or shape. A portable power source feeds a transmitter which provides a precise current waveform through the loop. The receiver apparatus is moved along surface lines or down boreholes.

The transmitter cycle consists of slowly increasing the current over a few milliseconds, a constant current, abrupt linear termination of the current, and finally zero current for a selected length of time in milliseconds. The EMF created by the shutting-off of the current induces eddy currents in nearby conductive material thus setting-up a secondary magnetic field. When the primary field is terminated, this magnetic field will decay with time. The amplitude of the secondary field and the decay rate are dependent on the quality and size of the conductor. The receiver, which is synchronized to the off-time of the transmitter, measures this transient magnetic field where it cuts the surface coil or borehole probe. These readings are across fixed time windows or "channels".

SYSTEM TERMINOLOGY

Ramp Time

"Ramp time" refers to the controlled shut-off of the transmitter current. Three ramp times are selectable by the operator; 0.5ms, 1.0ms, and 1.5ms. By controlling the shut-off rather than having it depend on the loop size and current ensures that the same waveform is maintained for different loops so data can be properly compared.

The 1.5ms ramp is the normally used setting for good conductors. It keeps the early channel responses on scale and decreases the chance of overload. The faster ramp times of 1.0ms and 0.5ms will enhance the early time responses. This can be useful for weak conductors when data from the higher end of the frequency spectrum is desired.

Time Base

Time base is the length of time the transmitter current is off (it includes the ramp time). This also equals the on time of the current. Eight time bases are selectable by the operator. They include the original time bases used in the analog system as well as time bases to eliminate the effects of powerline interference. The eight time bases are as follows: compatible to analog Rx: 10.89ms, 21.79ms; 60hz powerline noise reduction: 8.33ms, 16.66ms, & 33.33ms; 50hz powerline noise reduction: 10.00ms, 20.00ms, & 40.00ms

Since readings are taken during the off cycles, the time base will have an effect on the receiver channels. Normally, a standard time base is selected for the type of system and survey being used, but this can be changed to suit a particular situation. A longer time base is preferred for conductors of greater time constants, and in surveys such as resistive soundings where more channels are desired.

Zero Time Set

The term "zero time set" or "ZTS" refers to the starting point for the receiver channel measurements. It is manually set on the receiver by the operator thus allowing adjustments for the ramp times and fine tuning for any fluctuations in the transmitter signal.

Receiver Channels

The rate of decay of the secondary field is measured across fixed time windows which occupy most of the off-time of the transmitter. These time windows are referred to as "channels". These channels are numbered in sequence with "1" being the earliest. The analog and datalogger receivers measured eight fixed channels. The digital receiver, being under software control, offers more flexibility in the channel positioning, channel width, and number of channels.

PP Channel

The PEM system monitors the primary field by taking a measurement during the current ramp and storing this information in a "PP channel". This means that data can be presented in either normalized or unnormalized formats, and additional information is available during interpretation. The PP channel data can provide useful diagnostic information and helps avoid critical errors in field polarity.

Synchronization

Since the PEM system measures the secondary field in the absence of the primary field, the receiver must be in "sync" with the transmitter to read during the off-time. There are three synchronization methods available: cable connection, radio telemetry, and crystal clock. This flexibility enhances the operational capabilities of the system.

SURVEY METHODS

The wide frequency spectrum of data produced by a Pulse EM survey can be used to provide structural geological information as well as the direct detection of conductive or conductive associated ore deposits. The various types of survey methods, from surface and borehole, have greatly improved the chances of success in deep exploration programs. There are eight basic profiling methods as well as a resistivity sounding mode.

Moving Coil

A small, multi-turn transmitter loop (13.7m diameter) is moved for each reading while the receiver remains a fixed distance away. This method is ideal for quick reconnaissance in areas of high background conductivity.

Moving Loop

Same as Moving Coil method, but with a larger transmit loop (100 to 300 meters square). This method provides deeper penetration in areas of high background conductivity, and works best for near-vertical conductors. This method can be used in conjunction with the Moving In-loop survey for increased sensitivity to horizontal conductors.

Moving In-Loop

A transmit loop of size 100 to 300 meters square is moved for each reading while the receiver remains at the center of the loop. This method provides deep penetration in areas of very high background conductivity, and works best for near-horizontal conductors. It can be used in conjunction with the Moving Loop survey.

Large In-Loop

A very large, stationary transmit loop (800m square or more) is used, and survey lines are run inside the loop. This mode provides very deep penetration (700m or more) and couples best with shallow dip conductors (<45 deg.) under the loop.

Deepem

A large, stationary transmit loop is used, and survey lines are run outside the loop. This mode provides very deep penetration, and couples best with steeply dipping conductors (>45 deg.) outside the loop.

Borehole (Z Component only)

Isolated Borehole: A drill hole is surveyed by lowering a probe down a hole and surveying it with a number of transmit loops laid out on surface. The data from multiple loops gives directional information on the conductors.

Multiple Boreholes: One large transmit loop is used to survey a number of closely spaced holes. The change in anomaly from hole to hole provides directional information.

These methods have detected conductors to depths of 2500m from surface and up to 200m from the hole.

3-D Borehole

Drill holes are surveyed with both the Z and the XY borehole probes. The X and Y components provide accurate direction information using just one transmit loop.

Since the probe rotates as it moves down the hole a correction is required for the X-Y data. This is accomplished in one of two ways. The standard approach is to use the measurement of the primary field from the "PP" channel, apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation device for the X-Y probe which is produced in co-operation with IFG Corp. This attachment uses dipmeters to calculate the probe rotation.

Underground Borehole

Underground drill holes can be surveyed in any of the above mentioned borehole methods with one or more transmit loops on the surface. Near-horizontal holes can be surveyed using a push-rod system.

Resistivity Soundings

By reading a large number of channels in the centre of a transmit loop it is possible to perform a decay curve analysis giving a best-fit layer earth model using programs such as ARRTI or TEMIX.

EQUIPMENT

Transmit Loops

The PEM system can operate with practically any size of transmit loop, from a multi-turn circular loop 13.7m in diameter, to a 1 or 2 turn loop of any shape up to 1 or 2 kilometers square using standard insulated copper wire of 10 or 12 gauge. The multi-turn loop is made in two sections with screw connectors. The 10 or 12 gauge loop wire comes on spools in either 300m or 400m lengths. The spools can be mounted on packframe winders for laying out or retrieving.

Power Supply

The PEM system normally operates with an input voltage from 24v to 120v. Modifications have recently been made to increase the power to 240 volts. The maximum current is still 20 amps. For low power surveys a 20amp/hr 24v battery can be used. The power supply requires a motor generator and a voltage regulator to control and filter the input voltage to the transmitter.

Specifications: PEM Motor Generator

- 4.5 hp Wisconsin, (2 kw) - 11 hp Honda (4 kw); 4 cycle engine
- belt drive to D.C. alternator
- cable output to regulator
- maximum output: 120v, 20amp (2 kw); 240v, 20amp (4 kw)
- fuse type overload protection
- steel frame
- external gas tank
- unit weight: 33kg (2 kw); 52kg (4 kw)
- optional packframe
- wooden shipping box
- shipping weight: 47kg (2 kw); 80kg (4 kw)

Specifications: PEM Variable Voltage Regulator

- selectable voltage between 24v and 120v or 48v and 240v
- 20amp maximum current
- fuse and internal circuit breaker protection
- cable connections to motor generator and transmitter
- anodized aluminum case
- unit weight 10kg; shipping weight 18kg
- padded wooden shipping box

Transmitter

The transmitter controls the bi-polar on-off waveform and linear current shut-off ramp. The latest 2000w PEM Transmitter has the following specifications:

Specifications: PEM Transmitter

- time bases: 10.89ms, 21.79ms, 8.88ms, 16.66ms, 33.33ms, 10ms, 20ms, 30ms
- ramp times: 0.5ms, 1.0ms, 1.5ms
- operating voltage: 24v to 120v (2 kw); 48v to 240v (4 kw)
- output current: 5amp to 20amp
- monitors for input voltage, output current, shut-off ramp, tx loop continuity, instrument temperature, and overload output current
- automatic shut-off for open loop, high instrument temperature, and overload
- fuse and circuit breaker overload protection
- three sync modes: 1) built-in radio and antenna
  2) cable sync output for direct wire link to receiver or remote radio
  3) connectors for the crystal clock
- anodized aluminum case
- optional packframe
- unit weight 12.5kg; shipping weight 22kg
- padded wooden shipping box

Receiver

The receivers measure the rate of decay of the secondary field across several time channels. Three types of receivers are available with the PEM system: Analog Rx, Datalogger Rx, and Digital Rx. The Analog Rx and Datalogger Rx read eight fixed time channels while the Digital Rx, under software control, offers a variety of channel configurations. The Digital Rx has been used in the field for contract surveys since 1987.

Specifications: Digital PEM Receiver

- operating temperature -40°C to 50°C
- optional packframe
- unit weight 15kg; shipping weight 25.5kg
- padded wooden shipping box

Menu driven operating software system offering the following functions:

- controls channel positions, channel widths, and number of channels
- time bases: 10.89ms, 21.79ms, 8.88ms, 16.66ms, 33.33ms, 10ms, 20ms, and 30ms
- ramp time selection
- sample stacking from 512 to 65536
- scrolling routines for viewing data
- graphic display of decay curve and profile with various plotting options
- routines for memory management
- control of data transmission
- provides information on instrument and operating status

Sync Equipment

There are three modes of synchronization available; radio, cable, and crystal clock. The radio sync signal can be transmitted through a booster antenna from either the PEM Transmitter internal radio or through a Remote Radio.

Specifications: Sync Cable

- 2 conductor, 24awg, Teflon coated
- approx. 900m per aluminum spool with connectors

Specifications: Remote Radio

- operating frequency 27.12mhz
- 12v rechargeable gel cell battery supply
- fuse protection
- sync wire link to transmitter
- coaxial link to booster antenna
- anodized aluminum case
- unit weight 2.7kg

Specifications: Booster Antenna

- 8m, 4 section aluminum mast
- guide rope support
- ¼ wave CB fiberglass antenna
- range up to 2km
- coaxial connection to transmitter or remote radio

Specification: Crystal Clocks

- heat stabilized crystals
- 24v rechargeable gel cell battery supply
- anodized aluminum case
- rx unit can be separate or housed in the receiver
- outlet for external supplementary battery supply

Surface PEM Receive Coil

The Surface PEM Receive Coil picks up the EM field to be measured by the receiver. The coil is mounted on a tripod that can be positioned to take readings of any component of the field.

Specifications: Surface PEM Receive Coil

- ferrite core antenna
- VLF filter
- 10khz bandwidth
- two 9v transistor battery supply
- tripod adjustable to all planes
- unit weight 4.5kg; shipping weight 13.5kg
- padded wooden shipping box

Borehole PEM Z Component Probe

The Z component probe measures the axial component of the EM field. The Z component data is not affected by probe rotation so no correction are required.

Specifications: Borehole PEM Z Component Probe

- ferrite core
- dimensions: length - 1.6m; dia - 3.02cm (3.15cm for high pressure tested probes)
- internal rechargeable ni-cad battery supply
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths 1300m, 2000m, and 2800m
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total weight 17kg

Borehole PEM XY Component Probe

The XY probe measures two orthogonal components of the EM field perpendicular to the axis of the hole. Correction for probe rotation can be achieved by two methods. The standard approach is to use the measurement of the primary field from the "PP" channel, apply a "cleaning" algorithm to remove most of the secondary field contamination, and compare this to theoretical values. The amount of probe rotation is then calculated, and the correction can be made. The second method involves the use of an optional orientation device for the X-Y probe that uses dipmeters to calculate the probe rotation.

Specifications: Borehole PEM XY Component Probe

- ferrite core
- dimensions: length - 2.01m; dia - 3.02cm
- internal rechargeable ni-cad battery supply
- selection of X or Y coils by means of a switch box on surface or automatic switching with Digital receiver
- replaceable heat shrink tubing for abrasion protection
- pressure tested for depths to 2800m
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 20kg

Orientation Device

The orientation device is an optional attachment for the XY probe which measures the rotation of the probe using two dipmeters.

Specifications: Orientation Device

- 2 axis tilt sensors
- sensitivity +/- 0.1 deg.
- operating range -89.5 to -10 deg.
- dimensions: length - 0.94m; dia - 28.5cm
- packaged in padded cover and aluminum tube
- shipped in padded wooden box; total shipping weight 11kg

Borehole Equipment

To lower the probe down a drill hole requires a cable and spool, winch assembly frame and cable counter. Borehole surveys also require equipment to "dummy probe" the hole before doing the survey.

Specifications: Borehole Cable

- two conductor shielded cable
- kevlar strengthened
- lengths are available up to 2600m on three sizes of spools.
- shipped in wooden box

Specifications: Slip Ring

- attaches to side of borehole cable spool providing a connection to the receiver while allowing the spool to turn.
- VLF filter
- pure silver contacts

Specifications: Borehole Frame

- welded aluminum frame
- removable axle
- chain driven, 3 speed gear box
- hand or optional power winding
- hand brake and lock
- two sizes: standard for up to 1300m cable; larger for longer cables
- shipped in wooden box

Specifications: Borehole Counter

- attaches to the drill hole casing
- calibrated in meters
- shipped in wooden box; total weight 13kg

Specifications: Dummy Probe and Cable

- solid steel or steel pipe
- same dimensions as borehole probe
- shear pin connection to dummy cable
- steel dummy cable on aluminum spool
- cable mounts on borehole frame
- various lengths to 2600m on 3 spool sizes.