VAL D'OR
GÉOPHYSIQUE

010

GEOPHYSICAL SURVEYS
Property of
FALCONBRIDGE LIMITED
SASS LAKE Project (PN 6270)
North Grid & South Grid
Coleman Twp
Province of Ontario
March 1995

P. Boileau P. Lortie

Qual.# 2.15146

Qual.# 2.12462

2.16290

95-1192

SERVICES EN LEVÉS GÉOPHYSIQUES - GEOPHYSICAL SERVICES
50, boul. Lamaque, VAL D'OR (Québec) Canada J9P 2H6 Tél.: (819) 825-6529 Fax: (819) 825-1342

SUMMARY

This report presents the results of magnetic and Pulse-EM (Deepem) surveys executed in March 1995 on behalf of **FALCONBRIDGE LIMITED**, on the **SASS LAKE Project (PN 6270) North Grid & South Grid** located in Coleman and Bucke Townships, in Northeastern Ontario.

The surveys detected four strong Deepem conductors, located inside a moderate to locally strong magnetic relief.

Recommendations for further work consist of detail geological mapping and complementary magnetic and Deepem surveys, followed by diamond drilling to test all zones of geologic interest.

TABLE OF CONTENTS

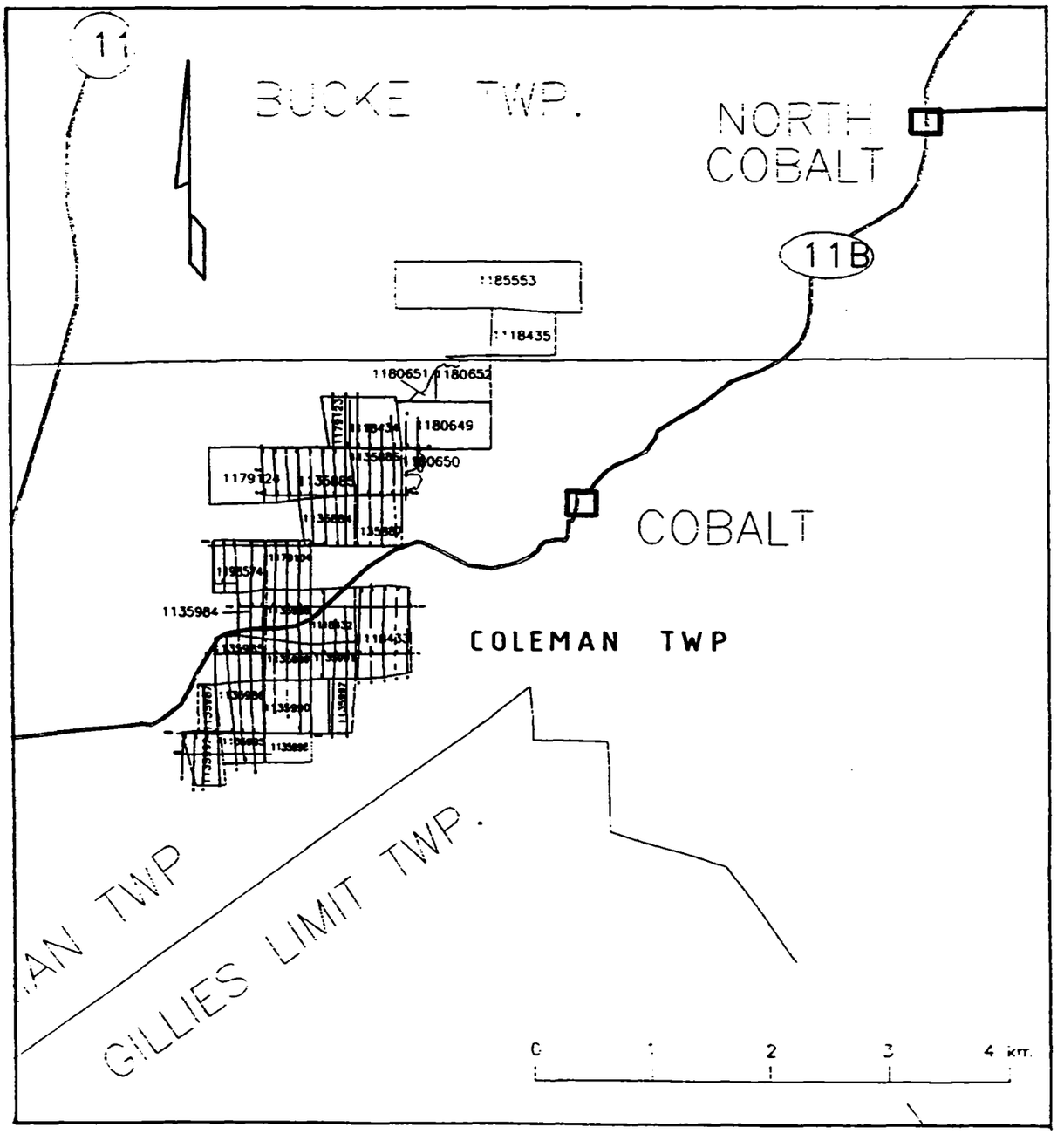
Page

LIST OF FIGURES:

LIST OF MAPS:

DRAWING NO.	MAGNETIC SURVEY
1.1	Total field contours
1.2	Total field profiles

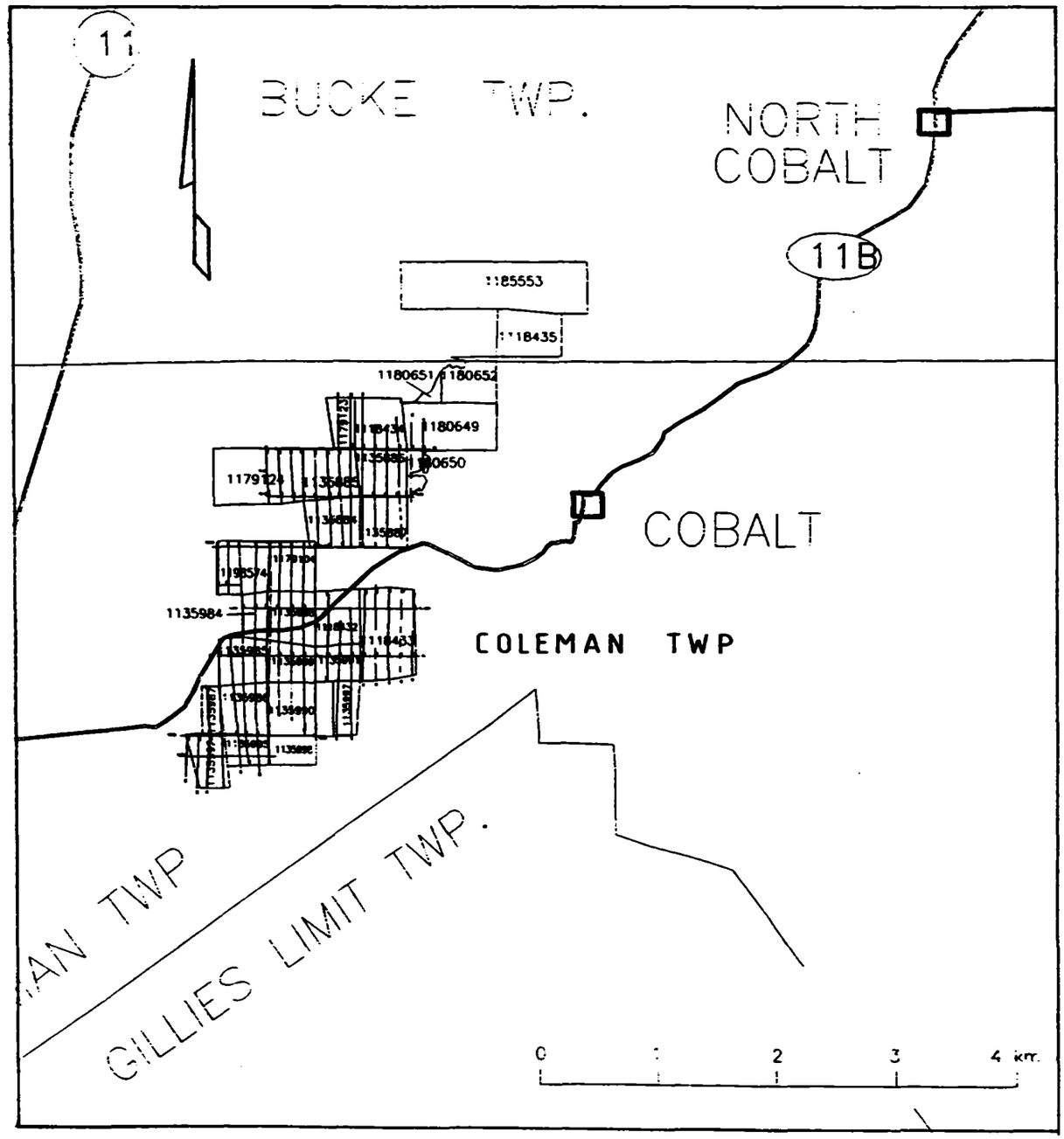
DRAWING NO.	PULSE-EM SURVEY
	HORIZONTAL COMPONENT PROFILES (X)
5.1	Loops 1 to 4 - Channels 1 to 16
	VERTICAL COMPONENT PROFILES (Z)
5.3	Loops 1 to 4 - Channels 1 to 16 & P.P.



FALCONBRIDGE LIMITED

SASS LAKE (PN 6270) North Grid & South Grid

Figure #2: Area surveyed



FALCONBRIDGE LIMITED

SASS LAKE (PN 6270) North Grid & South Grid

Figure #2: Area surveyed

INTRODUCTION

An electromagnetic Pulse EM (Deepem) survey and a magnetic survey were carried out during the month of March 1995 on a property owned by **FALCONBRIDGE LIMITED**, designated **SASS LAKE Project (PN 6270), North Grid and South Grid**, in Coleman Township, Province of Ontario.

These surveys were designed to clarify the geological image of the underlying rock formations and to locate at depth anomalies potentially caused by sulphide-rich zones as favourable hosts for base metal and/or gold deposits.

PROPERTY, LOCATION AND ACCESS

The property lies 140 km NE of Sudbury and less than 2 km west of Cobalt, in Coleman and Bucke Townships, province of Ontario. Access is easy via provincial road 11B which traverses the property near the town of Cobalt.

The property claims are wholly owned by **FALCONBRIDGE LIMITED**, and their numbers are shown in figure #1 of this report.

WORK COVERED BY THIS REPORT

From March 10th to 19th, 1995, a magnetic survey and a Pulse-EM DEEPEM survey were executed on the **SASS LAKE Project (PN 6270) North Grid and South Grid**, province of Ontario. In total, 42.7 line-km of magnetic survey and 18.9 line-km of DEEPEM survey were executed on the property.

SURVEY SPECIFICATIONS AND INSTRUMENTATION

The geophysical surveys were carried out along a network of N-S picket lines cut at 100 metres intervals. The lines were chained and stations marked at 25 metres intervals.

The magnetic survey was executed with an ENVI proton magnetometer of Scintrex Ltd. The total magnetic field was measured every 2 seconds in a continuous reading mode, with a precision of 0.1 nanoTesla (nT). The readings were systematically controlled for location every 12,5 metres. The magnetometer was operated with the sensor mounted on top of a backpack frame. The noise enveloppe is estimated at less than 5 nT after a short wavelength filter was applied to remove noisy spikes. A base station magnetometer located on the property to measure the total magnetic field every 20 seconds was used as a reference for correction of the diurnal variation.

The DEEPEM survey was executed with the Crone Geophysics Pulse-EM (PEM) system. The PULSE-EM system consists of two main components: the transmitter and the receiver. The transmitter, powered by a 4000 Watt gas generator (High-Power System) produces a rectangular wave with a linear ramp cut-off. This signal is circulated in a single-turn loop of electric wire laid out on the ground and whose dimensions are dictated by the conductivity of the surrounding medium and by the required depth penetration. A total of 4 transmitting loop positions (shown on maps 5.1 and 5.3) were alternatively used with dimensions of 425 to 500 m x 600 to 800 m.

The sudden cut-off of the current in the transmitting loop (typically 12 to 18 Amperes) causes the induction of secondary currents in any conductive structure that is located within the activation distance of the loop.

The second component of the system, the receiver, detects the variations of the magnetic field associated with these secondary currents. A sensor picks-up the signal at surface and the receiver measures the amplitude of the 16 time-windows of the decaying secondary magnetic field. The decay rate, the amplitude of the individual windows (channels), and the spatial variations of these features are all specific characteristics of the target.

Measurements for each loop position were taken every 50, and locally 25 metres, along the survey lines. The decaying secondary magnetic field is measured in two components: the vertical component (Z) and the horizontal component (X) which is parallel to the survey line. The results are presented in the form of profiles of the amplitude of the individual channel, plotted against the reading point.

RESULTS AND INTERPRETATION

A) Magnetic Survey

The areas covered by the present survey show a moderate to strong magnetic relief where total field intensities fluctuate between 57 500 and 58 200 nanoTeslas in general. This magnetic relief is characterized by a very rapid succession of low and high total field intensities along most of the profiles. These fast changes which are likely due to

very shallow and rather small size magnetic sources (pyrrhotite and/or magnetite) produce on the magnetic contour map a rather spotty appearance which reflects the heterogeneity of the underlying rock units.

An upward continuation (5 m) of the gridded data allowed, however, to define a few principal features. In the North grid, the magnetic image is dominated by the presence of two zones of magnetic highs of about 200 to 1000 nT, both flanked to the south by a zone of magnetic low. On the South Grid, the survey detected a few more or less continuous zones of magnetic highs which locally show orientations varying from E-W to N-S.

Finally, the sudden breaks or inflexions noticed along most of the anomalies suggest intense folding or faulting on the property.

B) Deepem Survey

The survey detected mainly four strong conductors showing an E.NE-W.SW to E.SE-W.NW orientation.

On the North grid, two conductors were outlined with loop #4. The first one, which also produces the strongest responses, is present from L-7W to L-2W between 100S and 250S. This conductor shows a conductance of more than 40 mhos and an extension at depth which is estimated to be more than 200 m from the latest channel (16) responses, whereas the early channels often indicate an upper limit at less than 20 m. Moreover, the strong migration noticed between the late and early channels responses seems to indicate a dip which vary

from southerly on lines 6W and 7W to northerly on lines 4W, 3W and 2W. The strong and apparently isolated response picked-up on line 1W near BL could also possibly constitute the northeast extension of this conductor shifted to the North by a fault or a tight fold. Finally, two satellite responses were detected on lines 4W and 3W near 100S and 300S; these weaker anomalies seem to indicate shallow conductors (depth < 20 m) of lower conductances (9 to 14 channels).

A second strong conductor was found with loop #4 between stations 150N and 250N. The best responses were partially detected near the extremity of lines 1W to 3E with a possible extension to the East; they seem to indicate a conductor of more than 40 mhos apparently located at shallow depth, except on line 2E where a depth of 200 m was estimated.

A third conductor was partially detected with loop #3 near the southern end of lines 5W to 3W; the profiles indicate a moderate to strong conductor (13 to 16 channels) located at a depth varying from less than 5 m to more than 100 m.

On the South Grid, a fourth conductor was delineated with loop #2 between lines 2E and 5E with a possible extension to the southeast; this conductor is located at a depth of 0 to 50 m and presents a moderate to strong conductance (14 to 16 channels). Except for the responses produced by the powerline, no definite conductor was detected with loop #1.

Finally, a few isolated and weaker responses were also outlined on the property, the principal ones being located on L-2W near 0+25S, on L-1W near 5+00S and on L-1E near 6+50S.

CONCLUSION AND RECOMMENDATIONS

The geophysical surveys executed on the North Grid and South Grid of the **SASS LAKE Project** detected four moderate to strong DEEPEM conductors located in a moderate to locally strong magnetic relief influenced by near surface magnetic sources.

It is recommended to execute, if warranted, intermediate magnetic profiles at 50 m intervals in order to obtain a more precise and complete magnetic image of the underlying rock formations.

It is also, recommended to execute complementary Deepem profiles with, in some cases, different loop locations to try to confirm or complete the interpretation of the four conductors and, overall, to try to study the spatial relation possibly existing between the northernmost conductors.

Recommendations for further work finally consist of diamond drilling to test all conductors.

Respectfully submitted
VAL D'OR GEOPHYSIQUE LTEE

By:
Pierre Boileau, P.Eng.
Consulting Geophysicist

and by:
Paul Lortie, P.Eng.
Geophysicist

CERTIFICATE

I, undersigned, Pierre Boileau, P.Eng., certify that:

I reside at 1725 Duchesne, Val d'Or, Quebec, since 1981.

I am a graduate of Ecole Polytechnique, Universite de Montreal, Quebec where I have obtained a B.Sc.A. in Geological engineering in 1971.

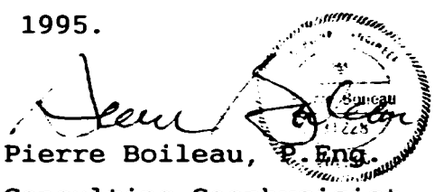
I have been engaged in Exploration Geophysics since 1968 and have been practicing as a professional engineer since 1971.

I am a member of the Ordre des Ingenieurs du Quebec, the Quebec Prospector Association, the Prospector & Developers Association of Canada, the Society of Exploration Geophysicist and the Canadian Institute of Mining & Metallurgy.

This report is based on the information contained in the survey described. The interpretation of the data was made using methods known in the literature and based on my personal experience.

I have not received, nor do I expect to receive directly or indirectly any interest in the property that belongs to **FALCONBRIDGE LIMITED.**

Signed in Val d'Or, this April 6th, 1995.



Pierre Boileau, P.Eng.
Consulting Geophysicist

CERTIFICATE

THIS IS TO CERTIFY THAT:

I reside at 681 Boullé, Beloeil, Province of Quebec, Canada, since 1990.

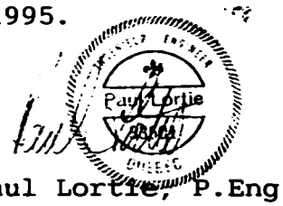
I am a graduate of Ecole Polytechnique, Université de Montréal, where I have received a B.Sc.A. in Geological Engineering in 1979.

I have been engaged in exploration geophysics since 1977 and have been practicing as a professional engineer since 1979.

I am a member of the Ordre des Ingénieurs du Québec since 1979.

I do not hold nor do I expect to receive an interest of any kind in the exploration concessions held by **FALCONBRIDGE LIMITED**, on the **SASS LAKE Project (PN 6270)**.

Signed in Val d'Or, this April 6th, 1995.



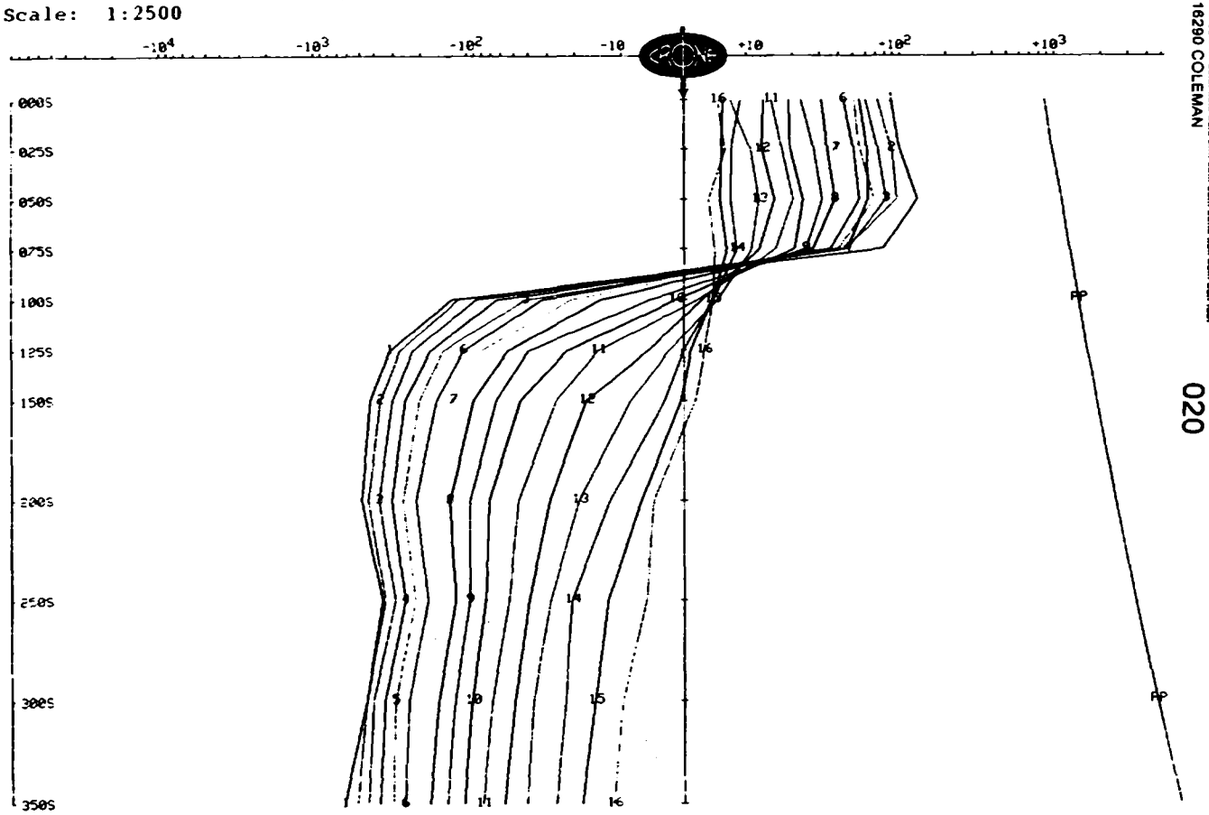
Paul Lortie, P.Eng.
Geophysicist

CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L700W
Grid	: SASS-LAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L700WT4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



020

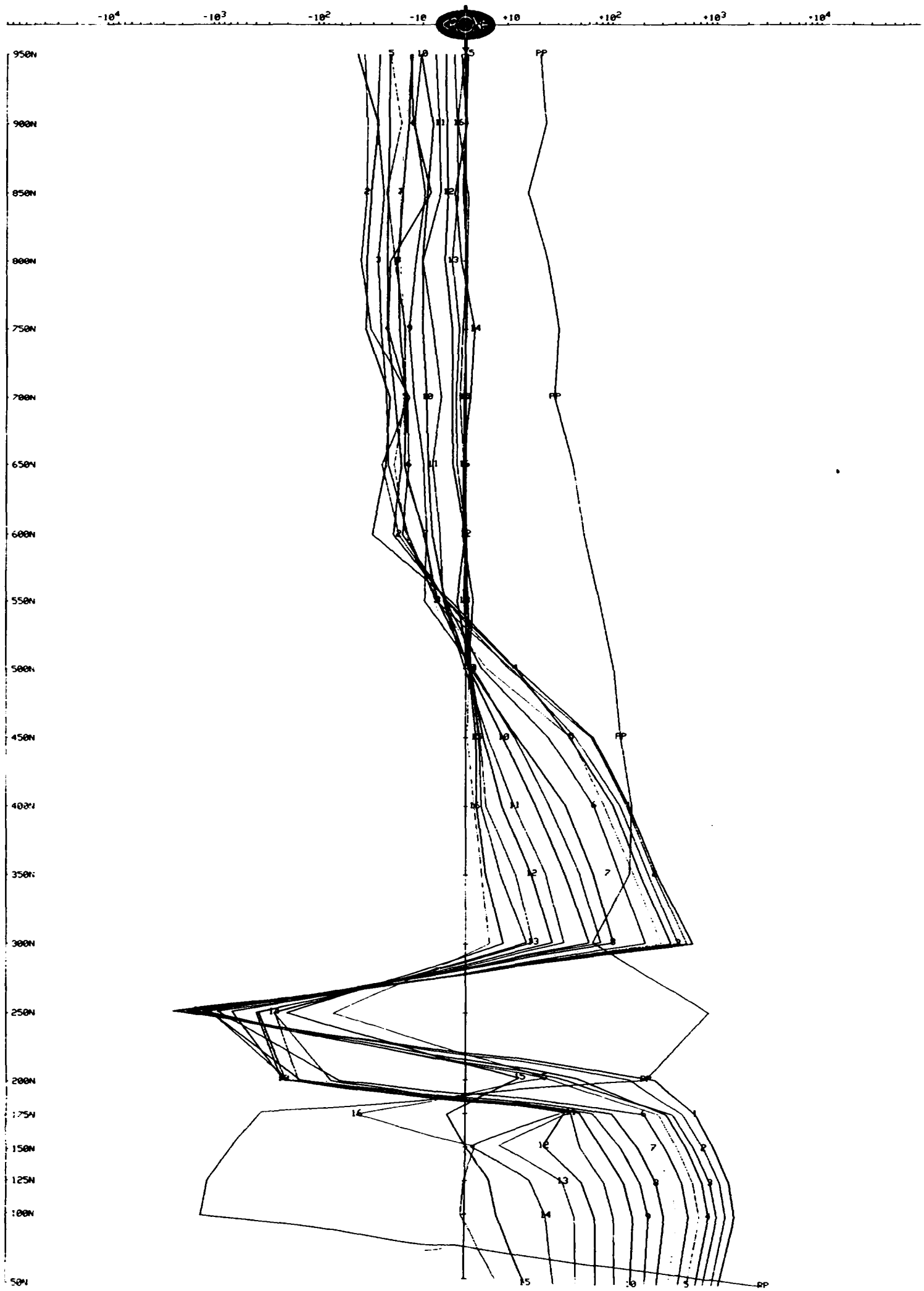
2.16290

CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 300W
Grid	: SASSLAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L300WT1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

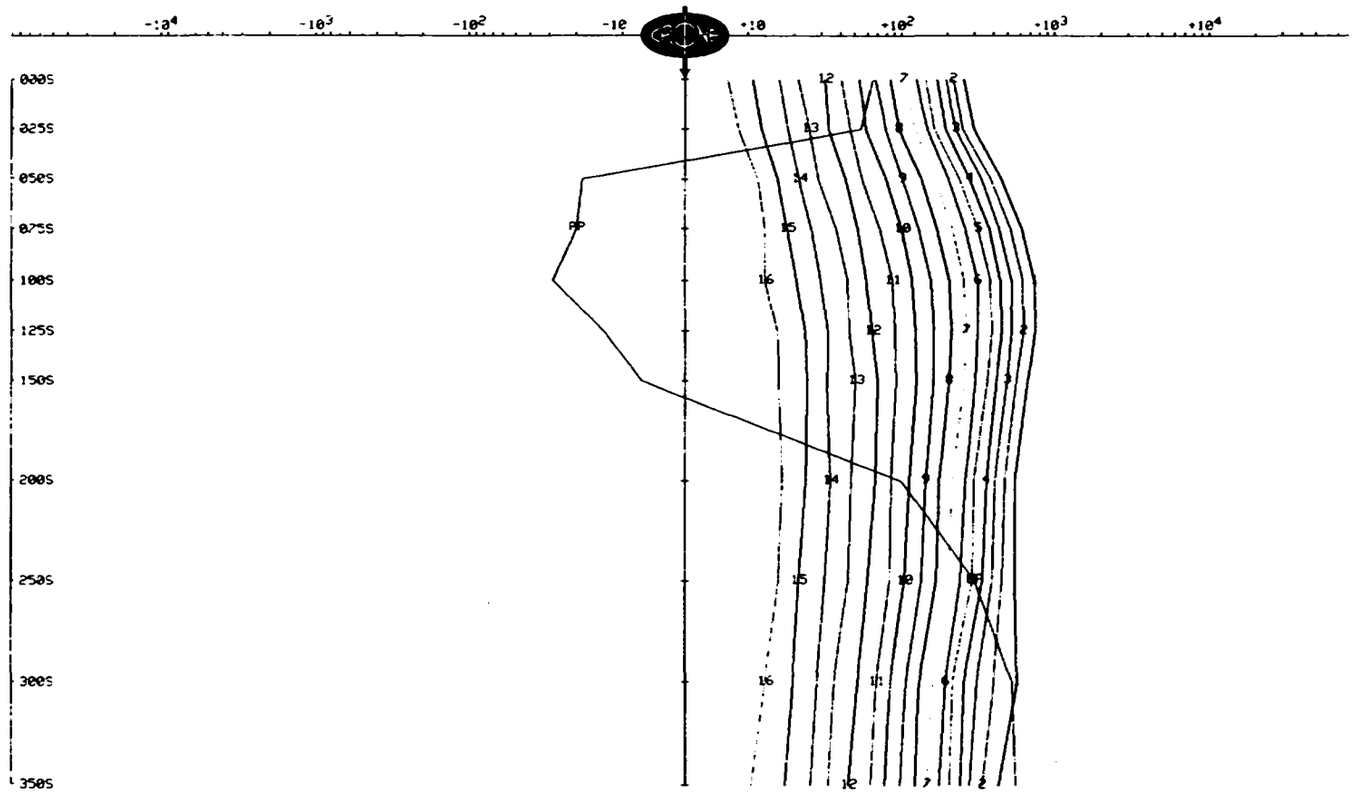


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L700W
Grid	: SASS-LAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L700WT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

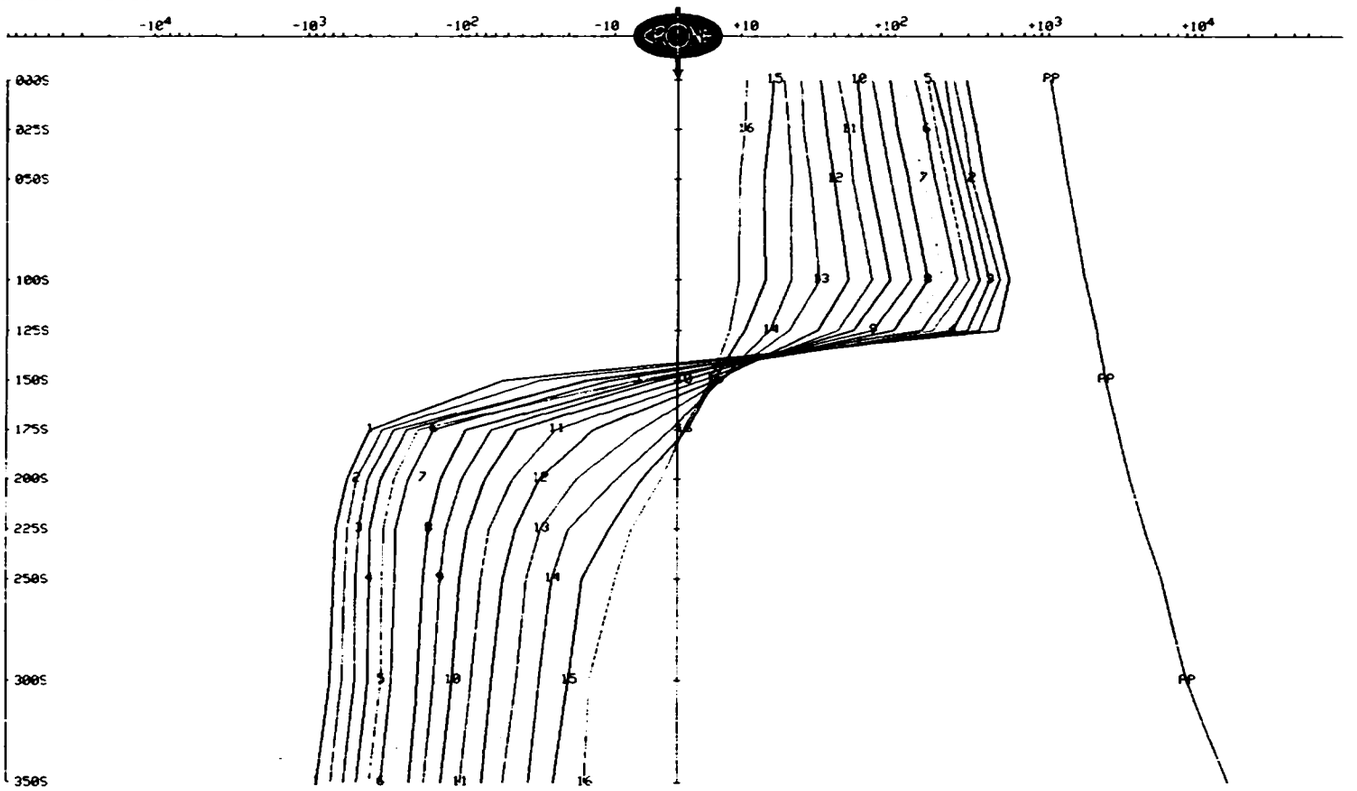


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L600W
Grid	: SASS-LAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L600WT4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

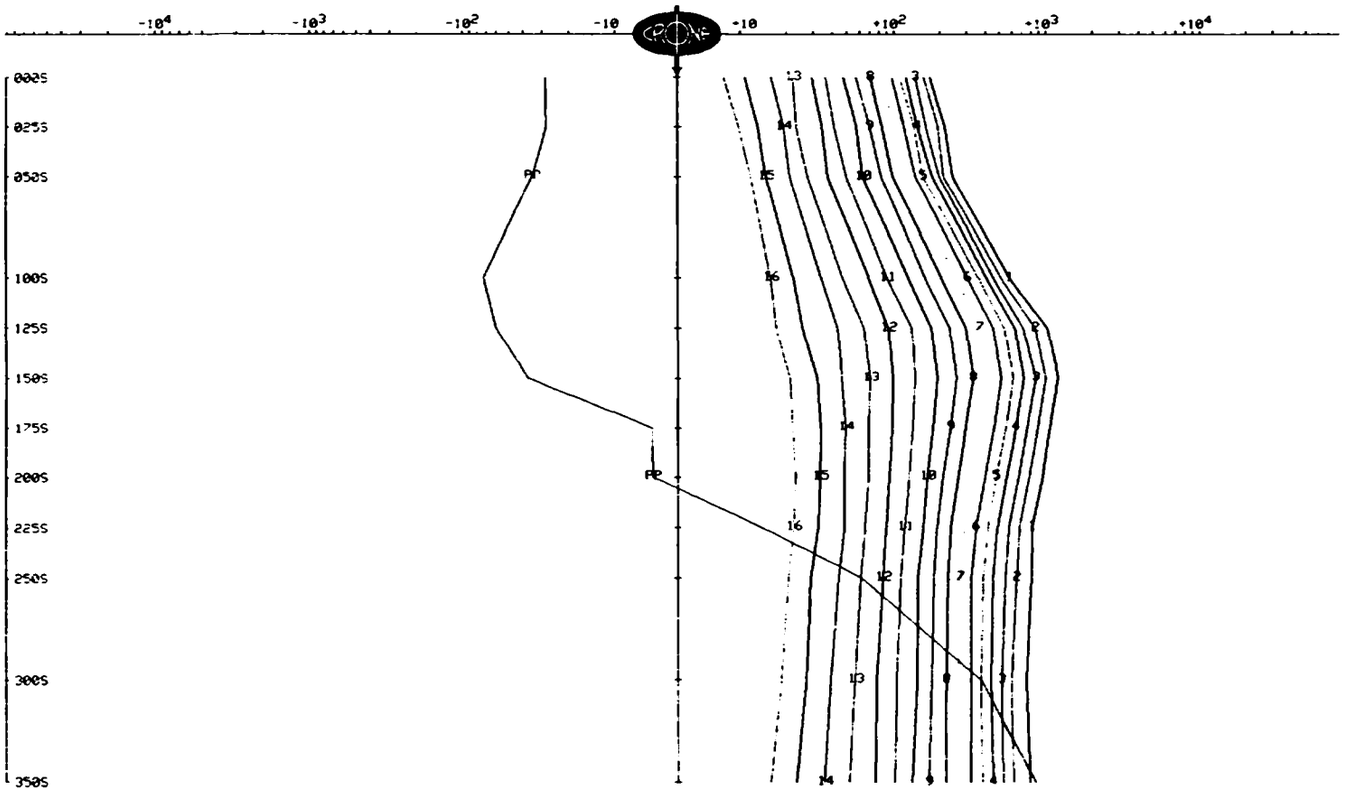


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L600W
Grid	: SASS-LAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L600WT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

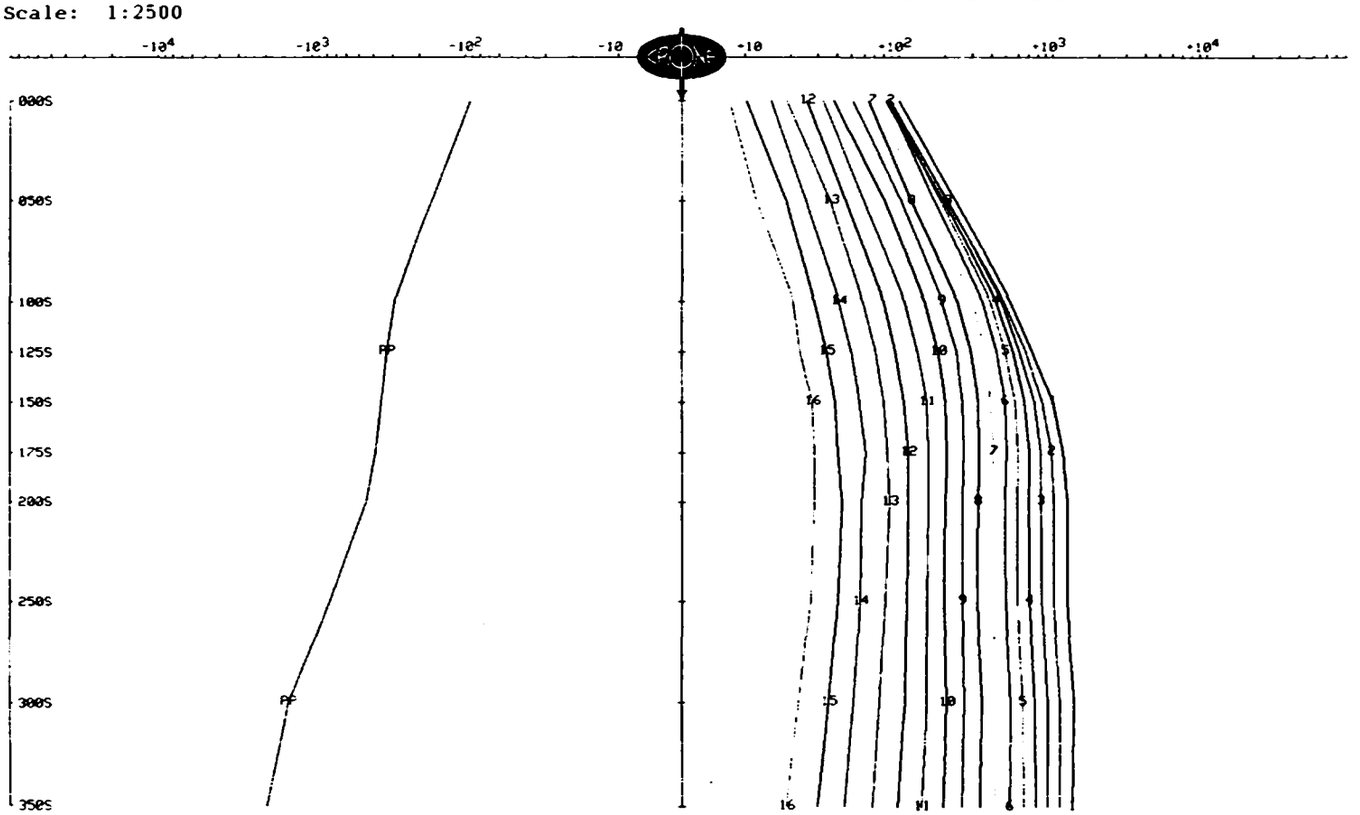


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: **FALCONBRIDGE**	Line	: **L500W**
Grid	: **SASS-LAKE**	Tx Loop	: **4**
Date	: Mar 13, 1995	File name	: L500WT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

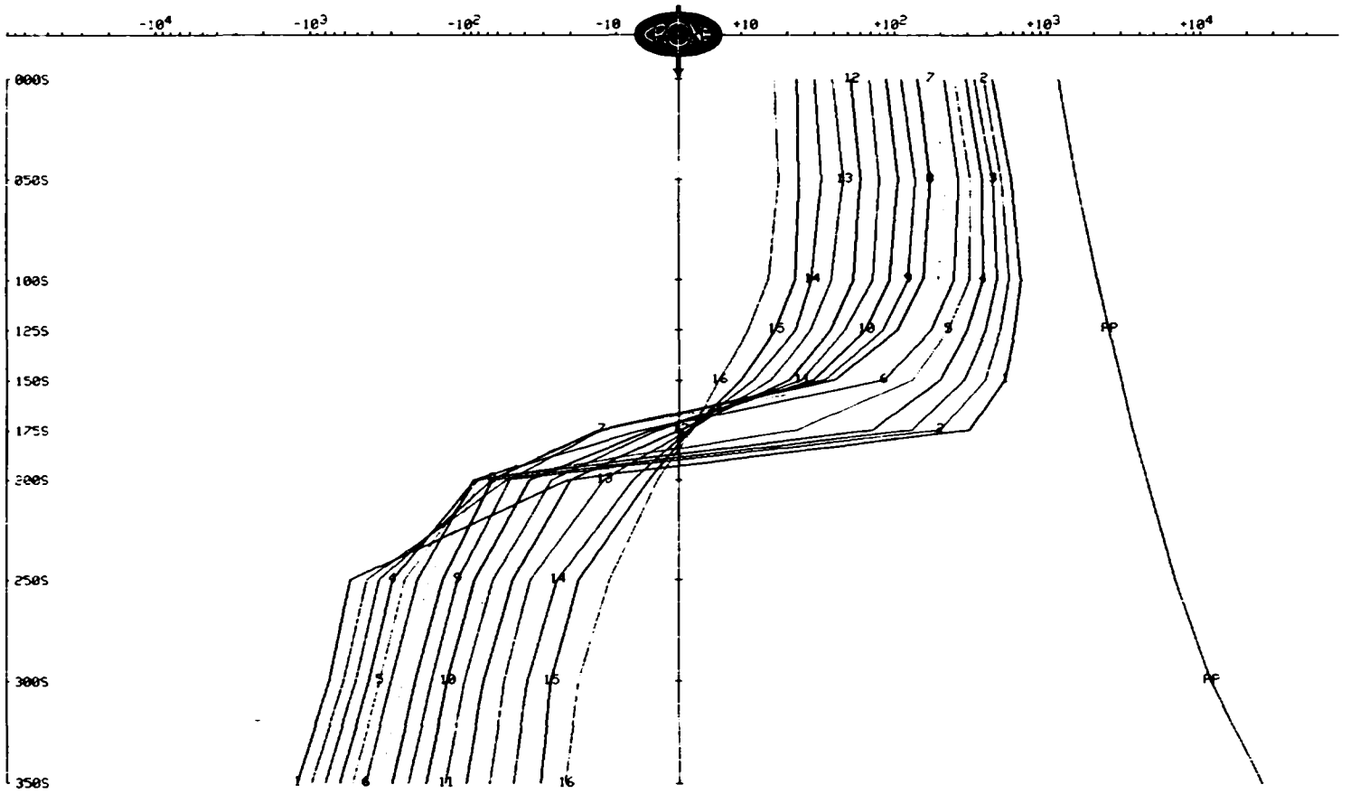


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: **FALCONBRIDGE**	Line	: **L500W**
Grid	: **SASS-LAKE**	Tx Loop	: **4**
Date	: Mar 13, 1995	File name	: **L500WT4.PEM**

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



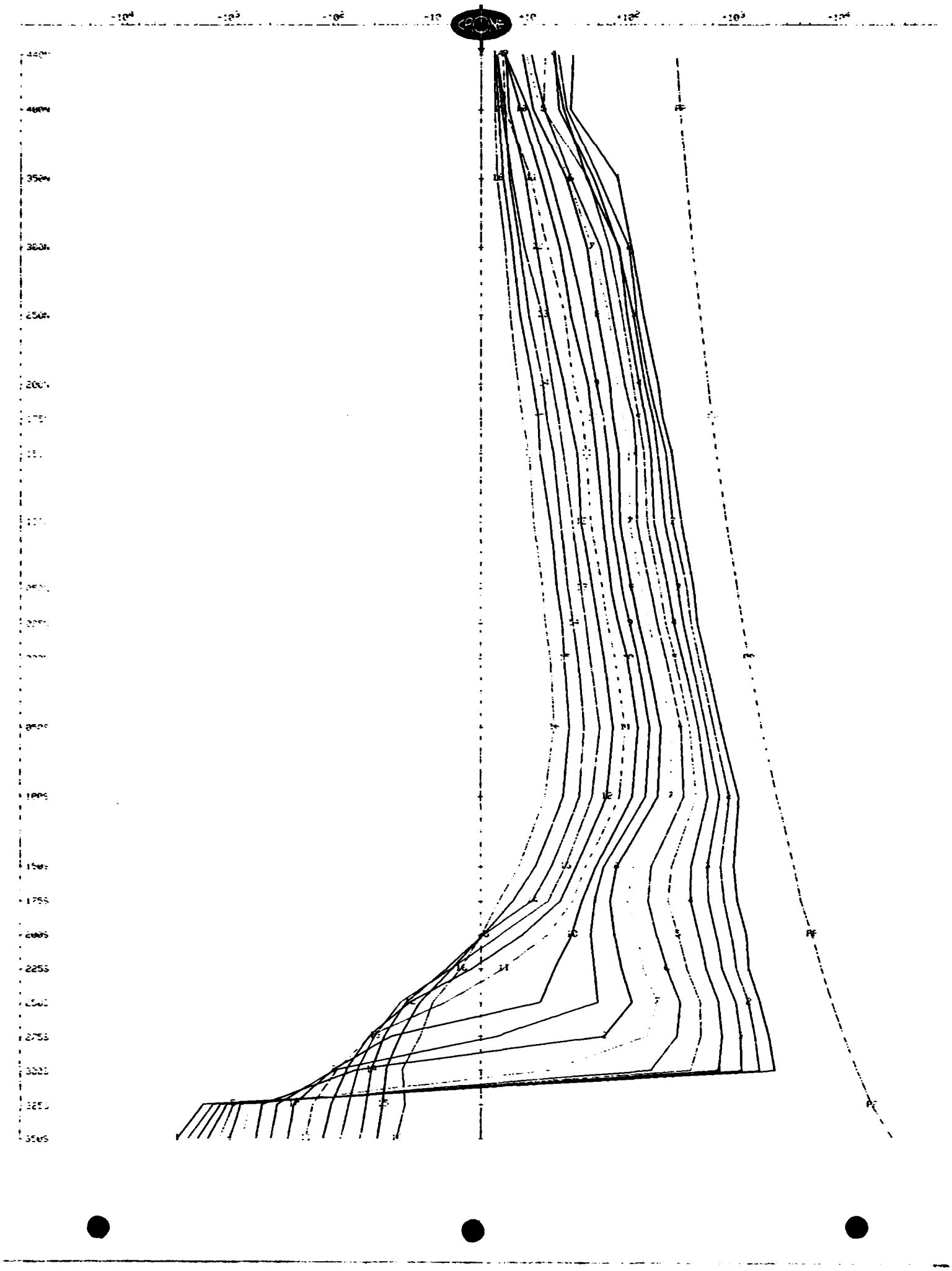
CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client : FALCONBRIDGE
Grid : SASS-LAKE
Date : Mar 13, 1995

Line : L400W
Tx Loop : 4
File name : L400WT4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

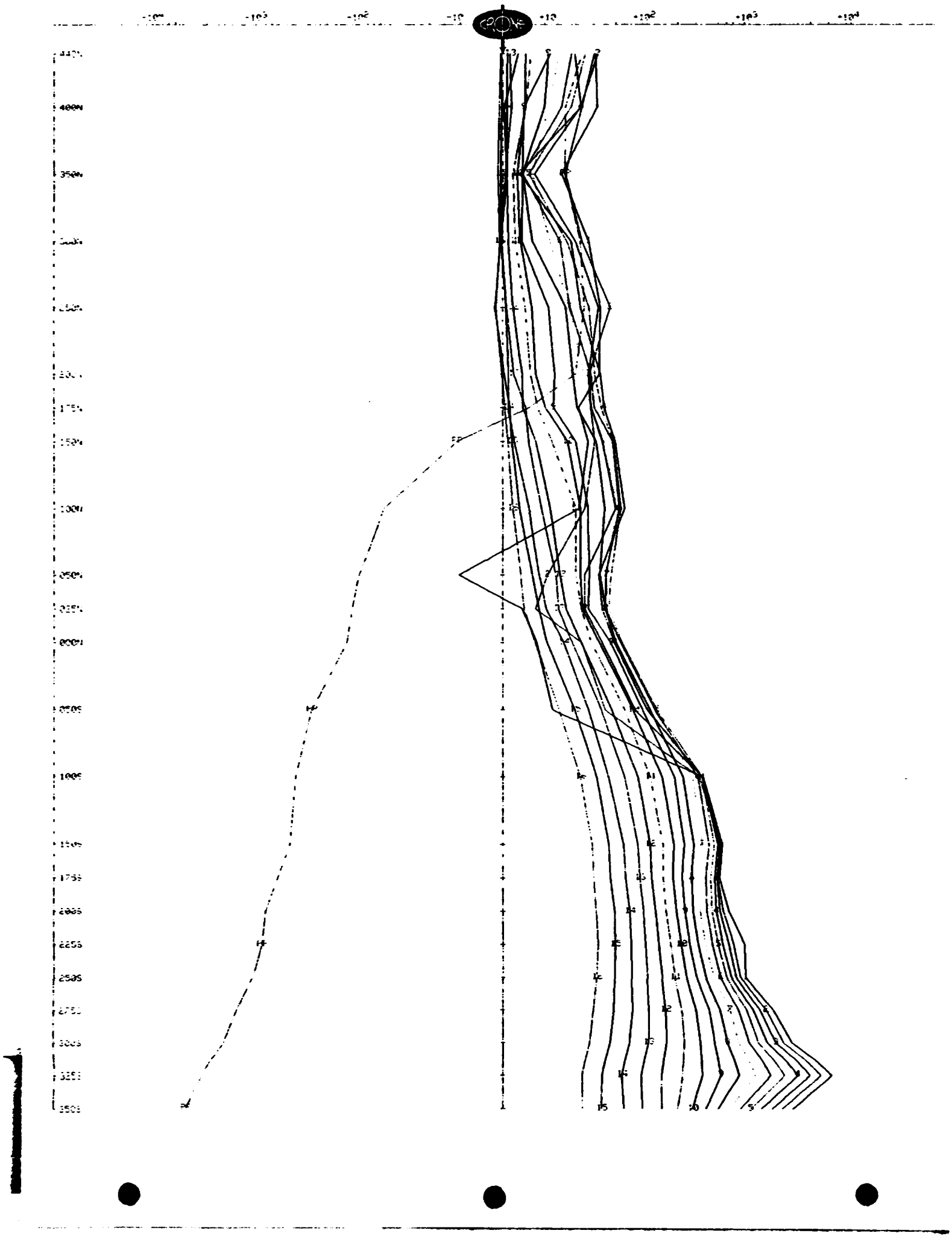


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L400W
Grid	: SASS-LAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L400WT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

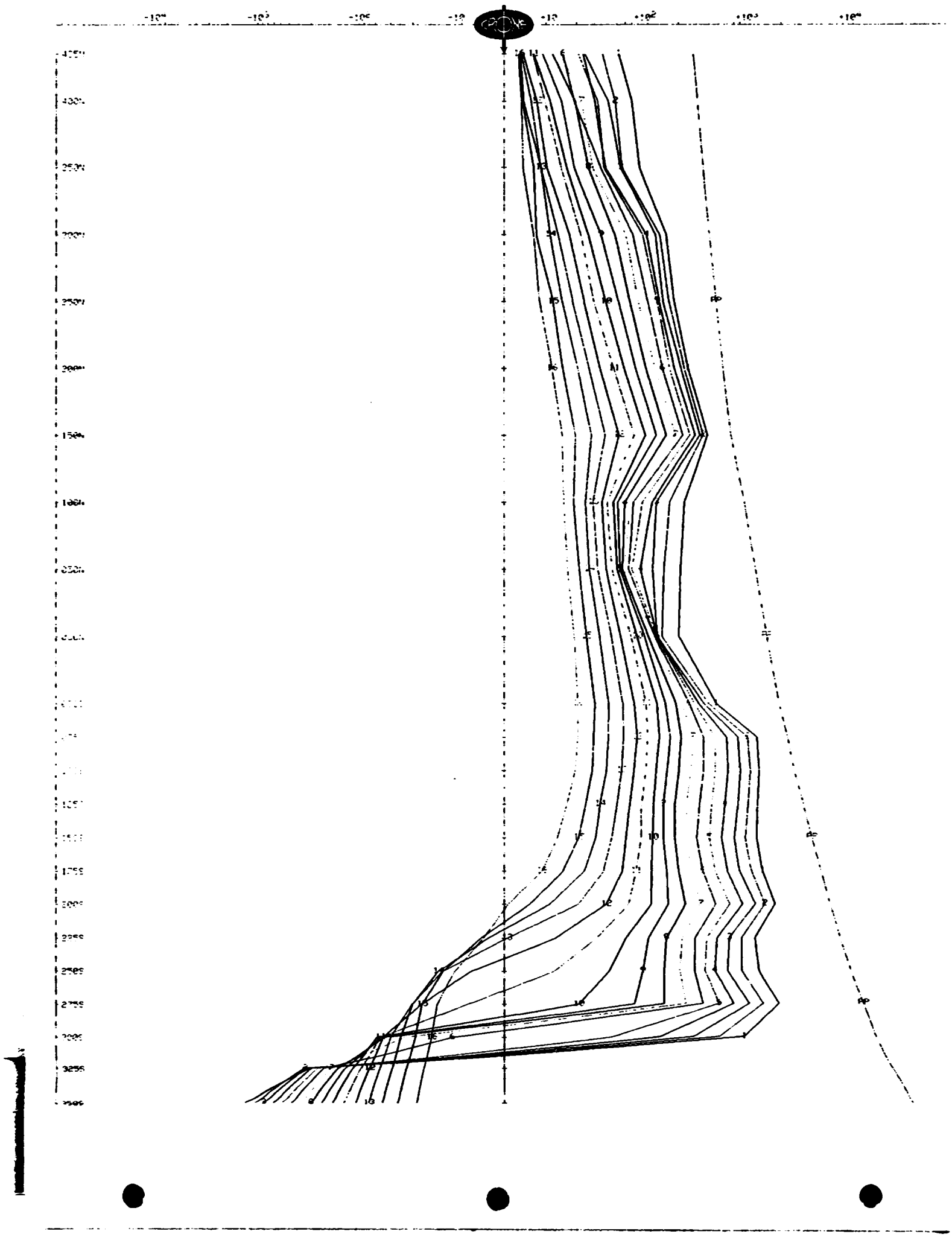


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L300W
Grid	: SASS-LAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L300ST4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

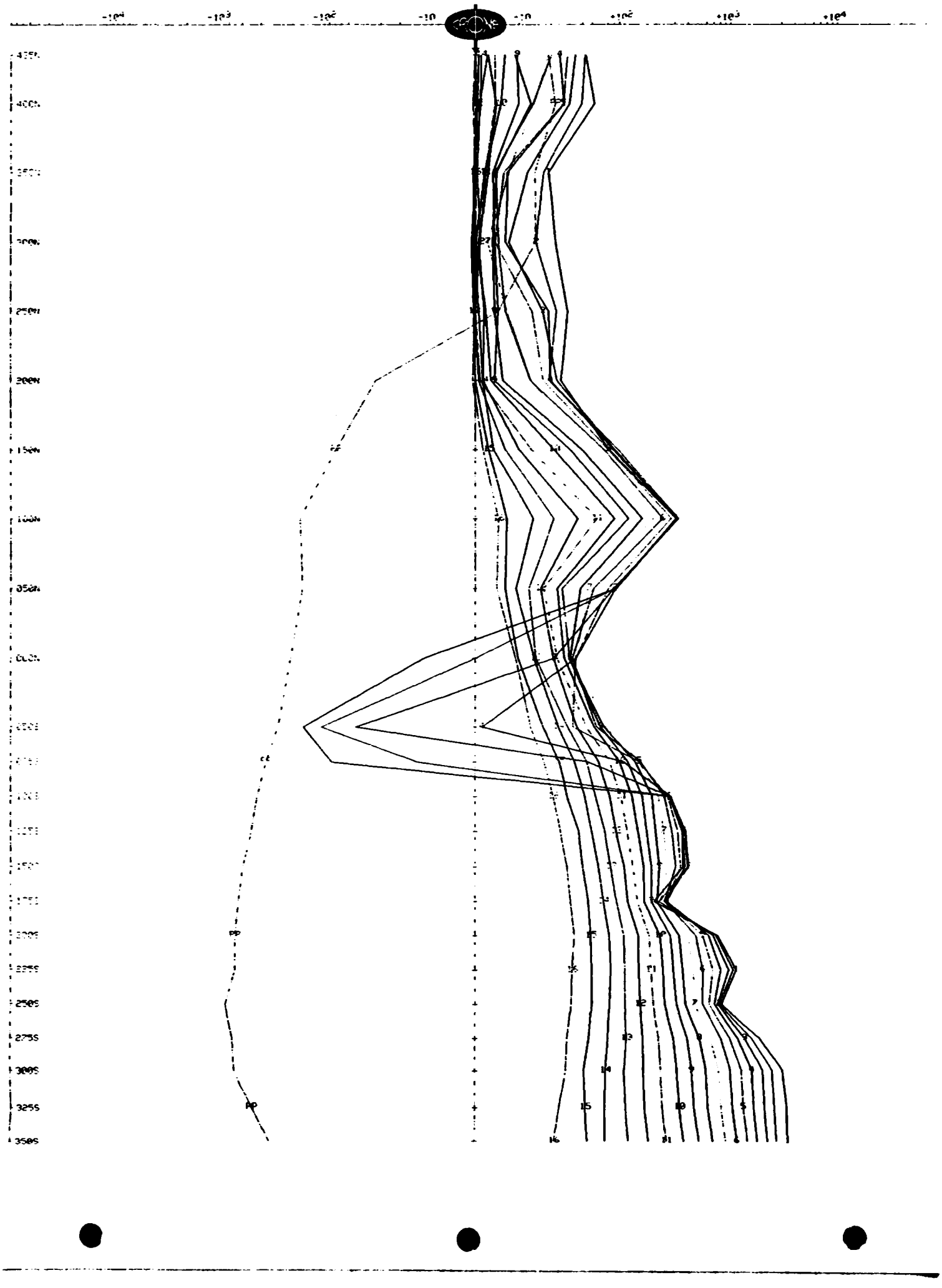


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L300W
Grid	: SASS-LAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L300WT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

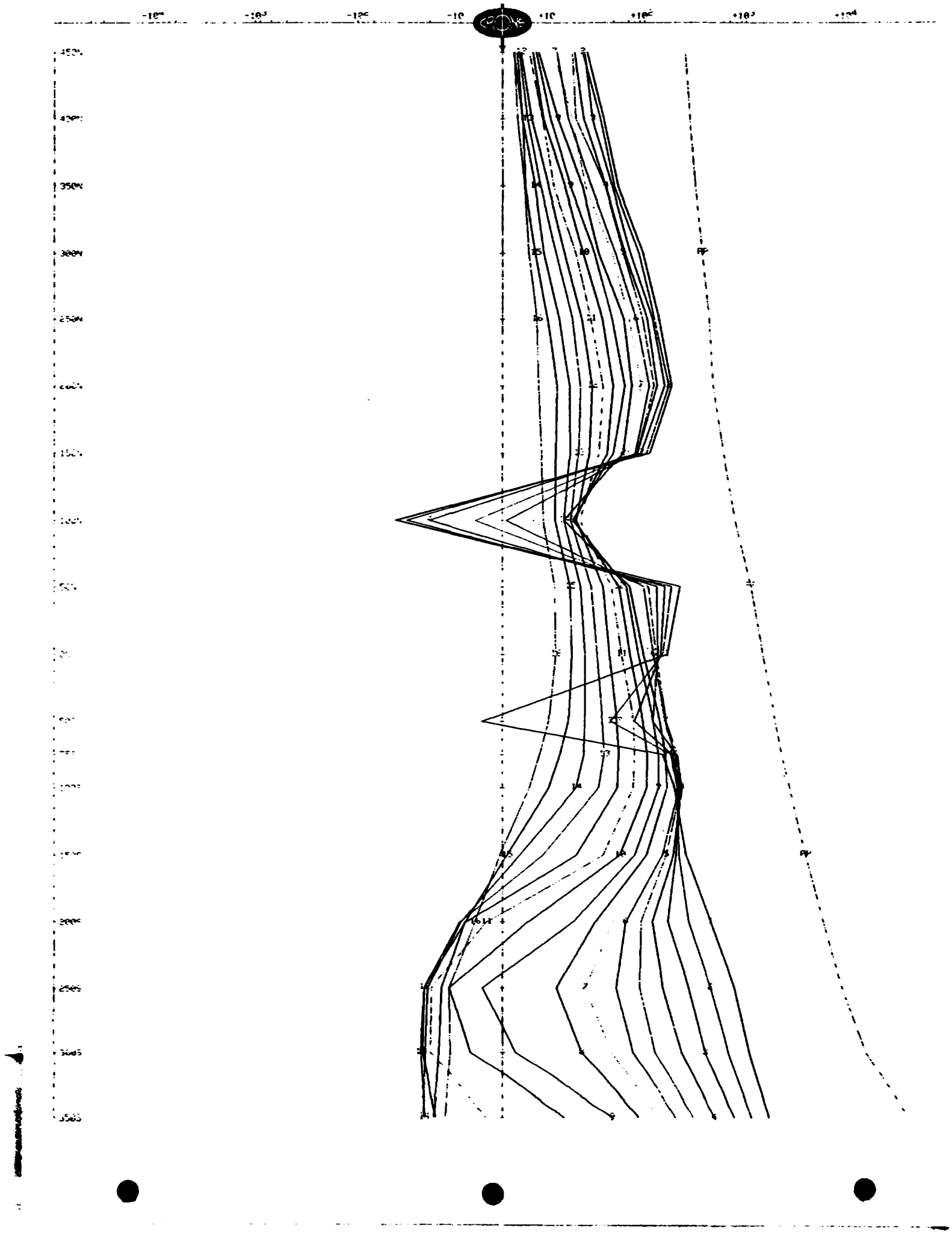


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 200W
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L200WT4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

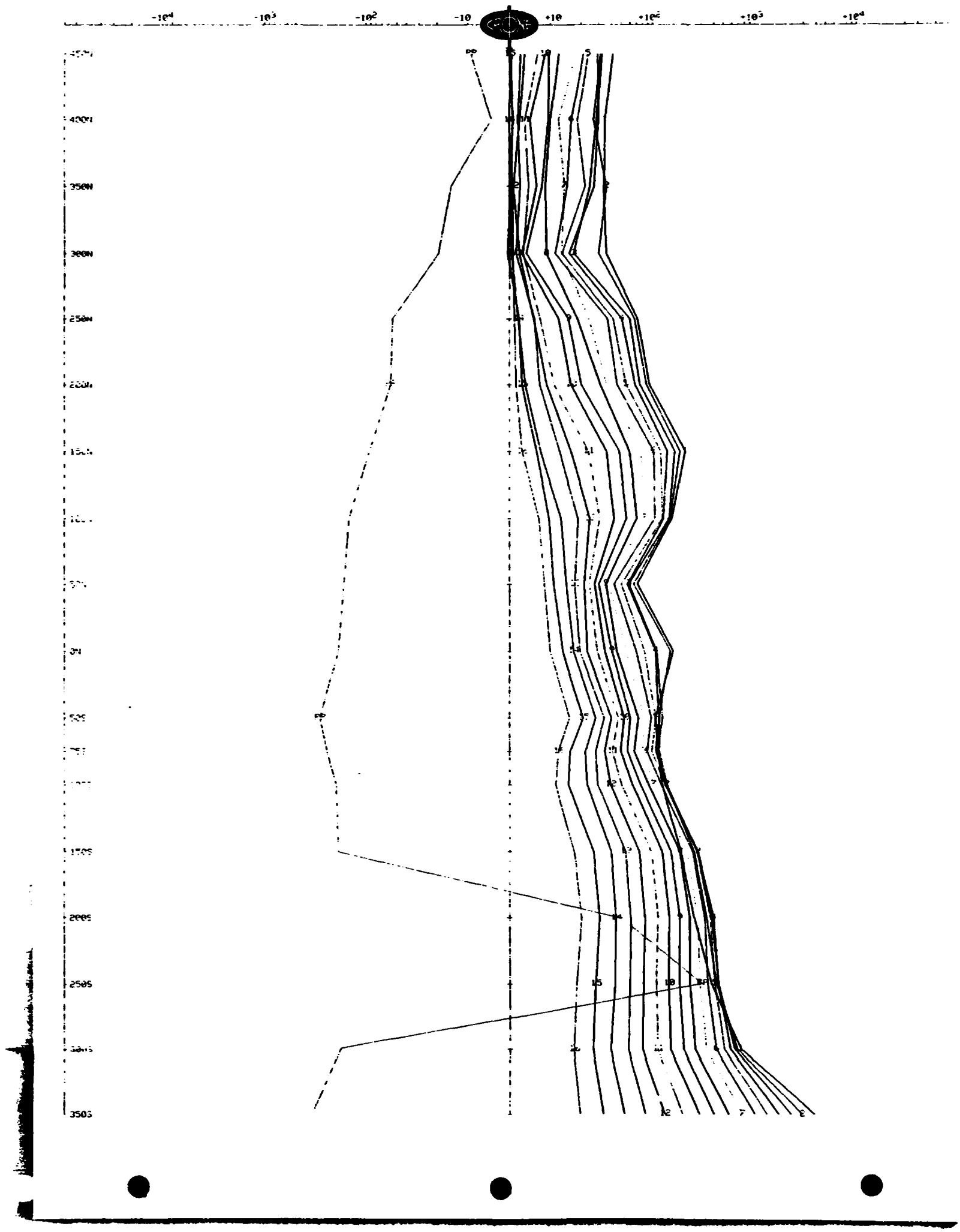


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 200W
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L200WT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

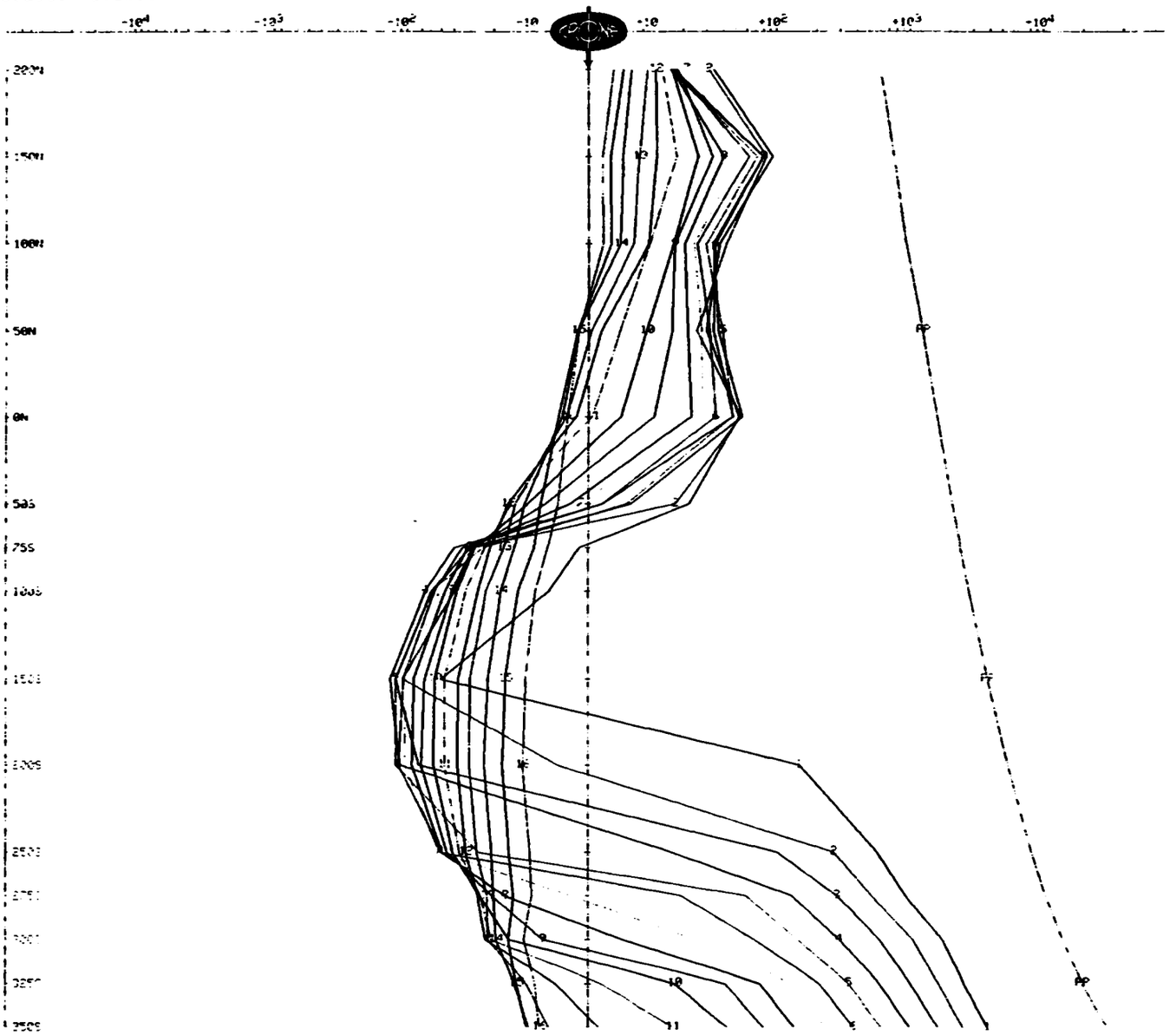


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100W
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L100WT4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

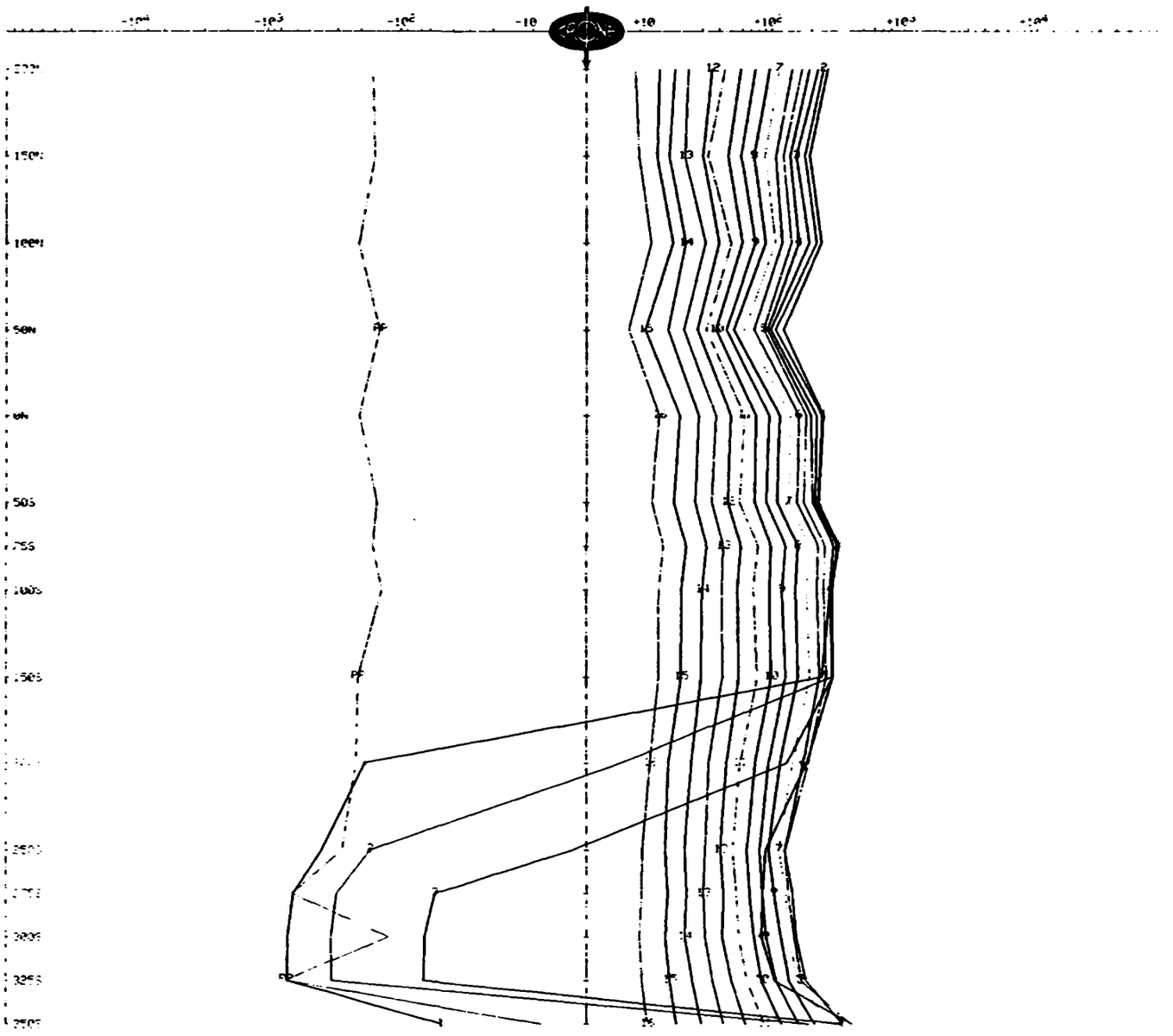


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100W
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L100WT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

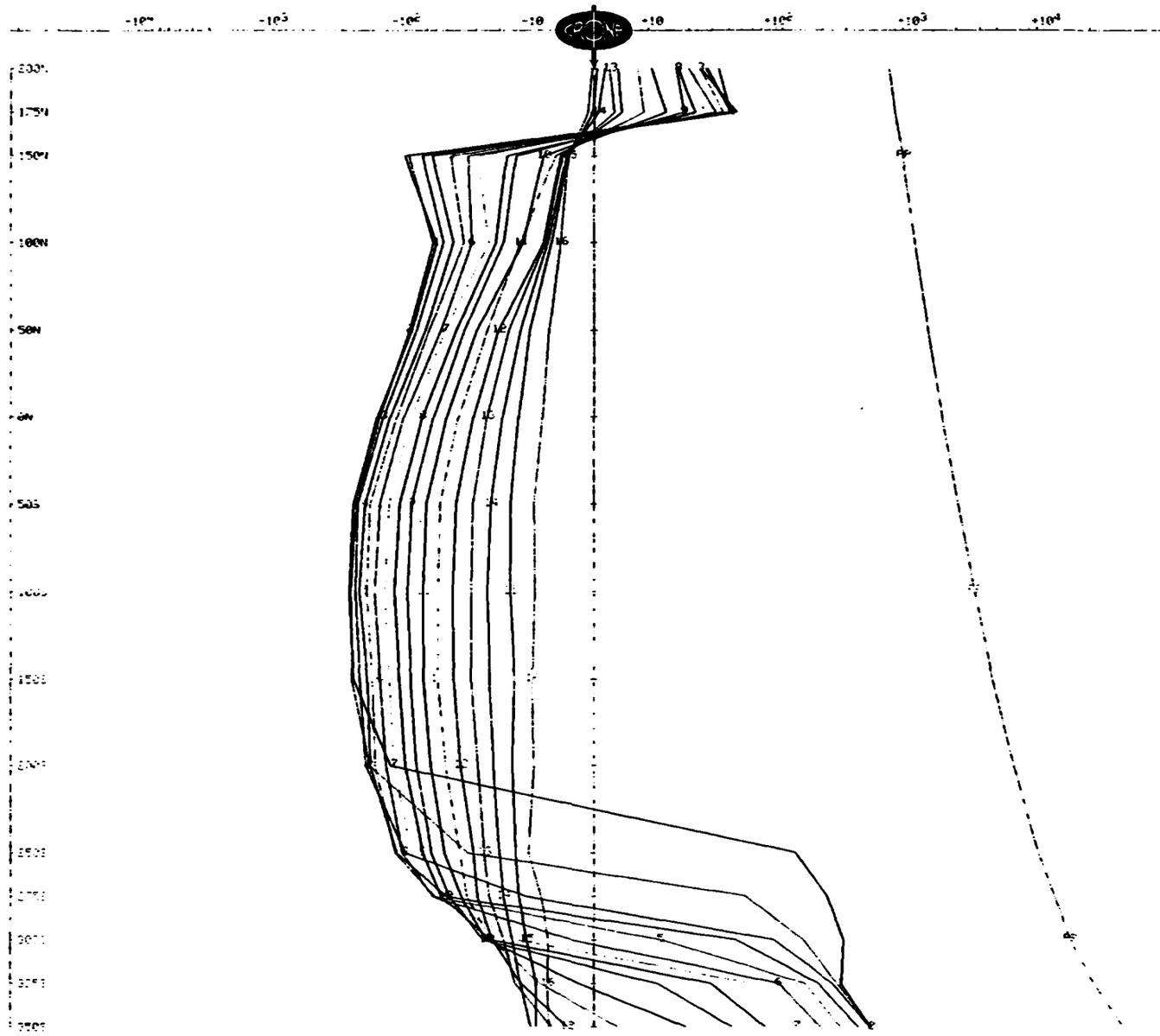


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 0E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L0ET4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

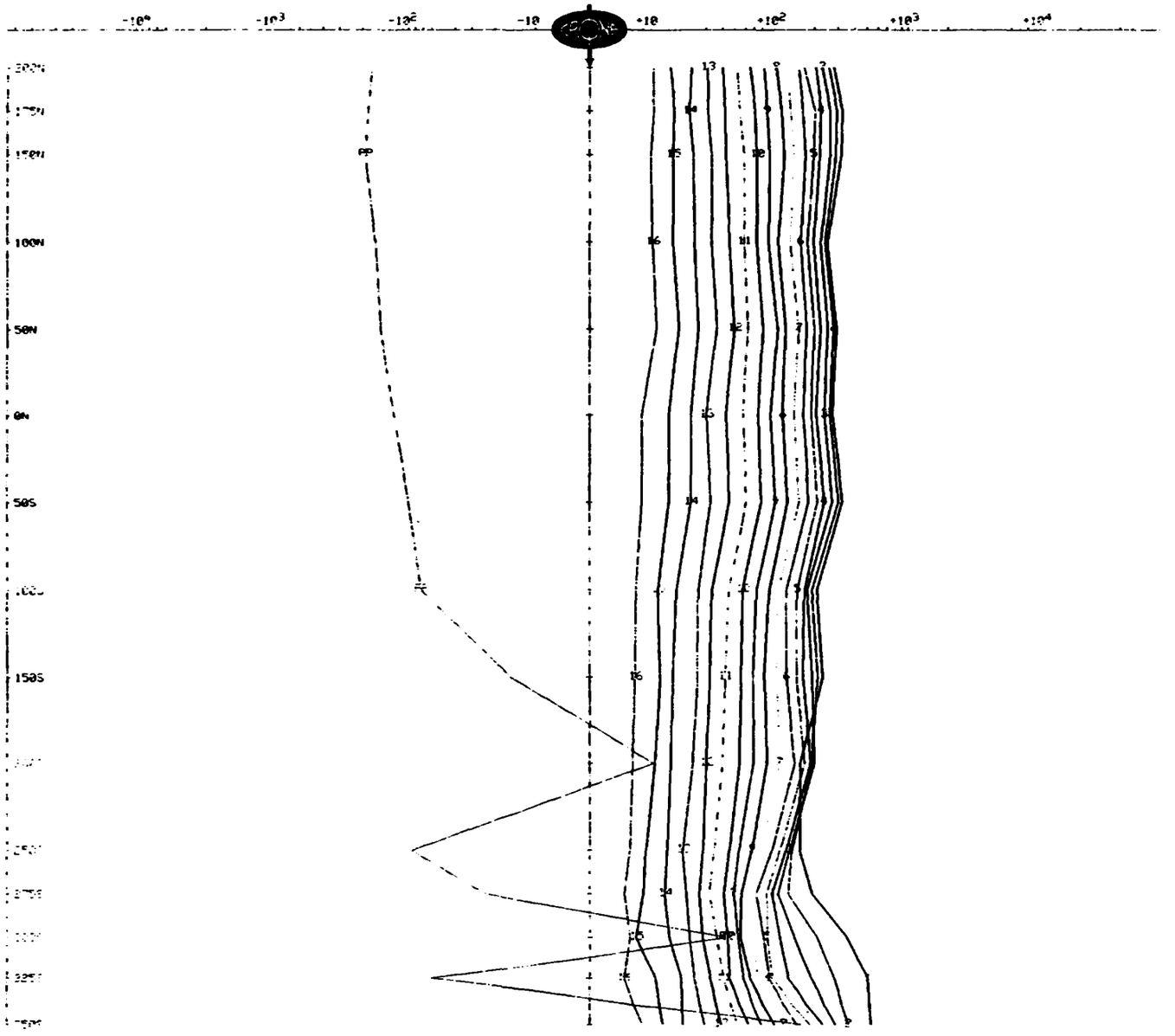


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 0E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L0ET4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt *nanoTesla/sec* - 16 channels and PP

Scale: 1:2500

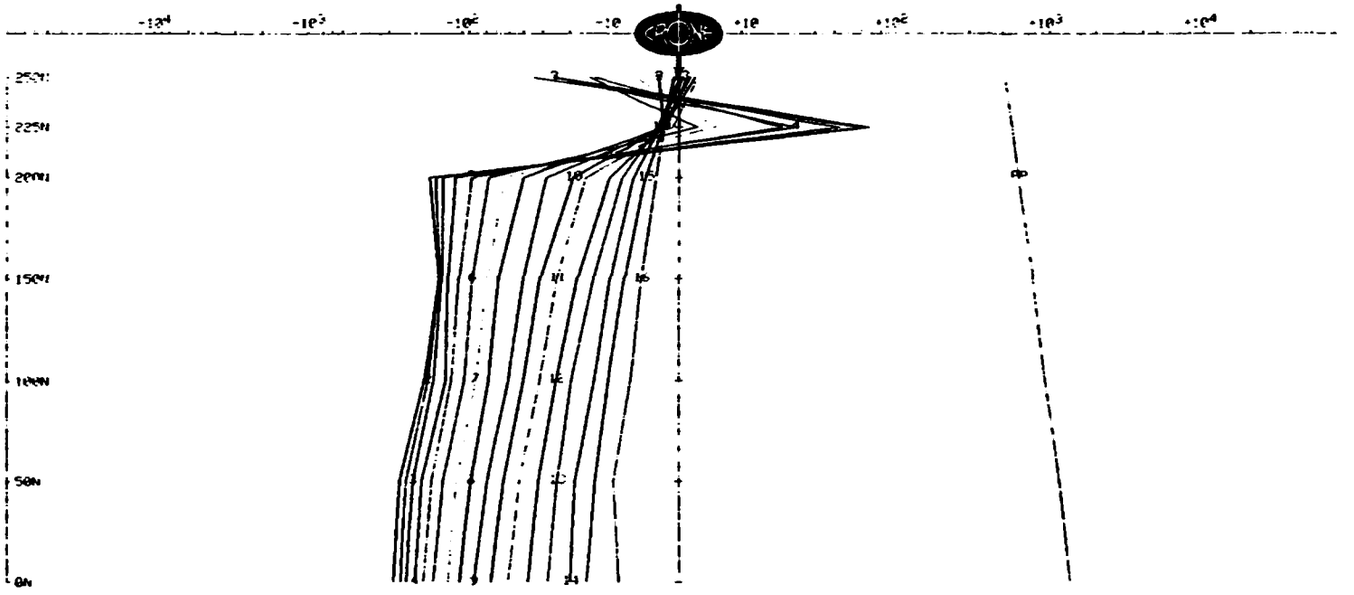


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L100ET4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

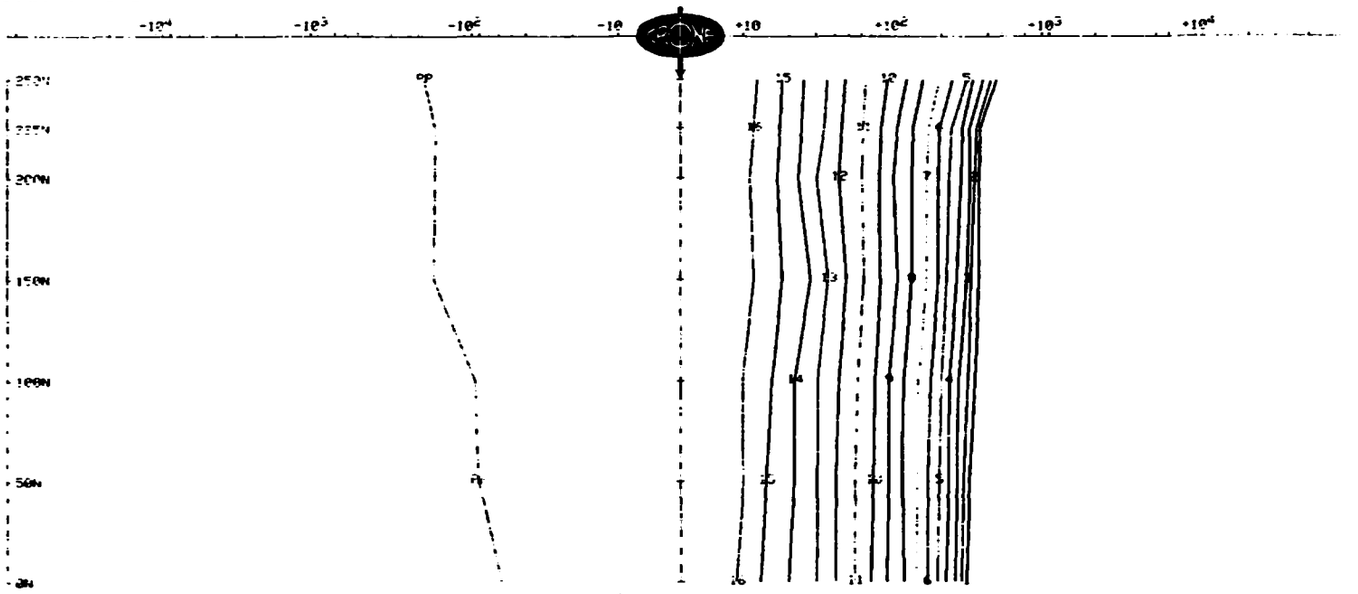


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L100FT4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

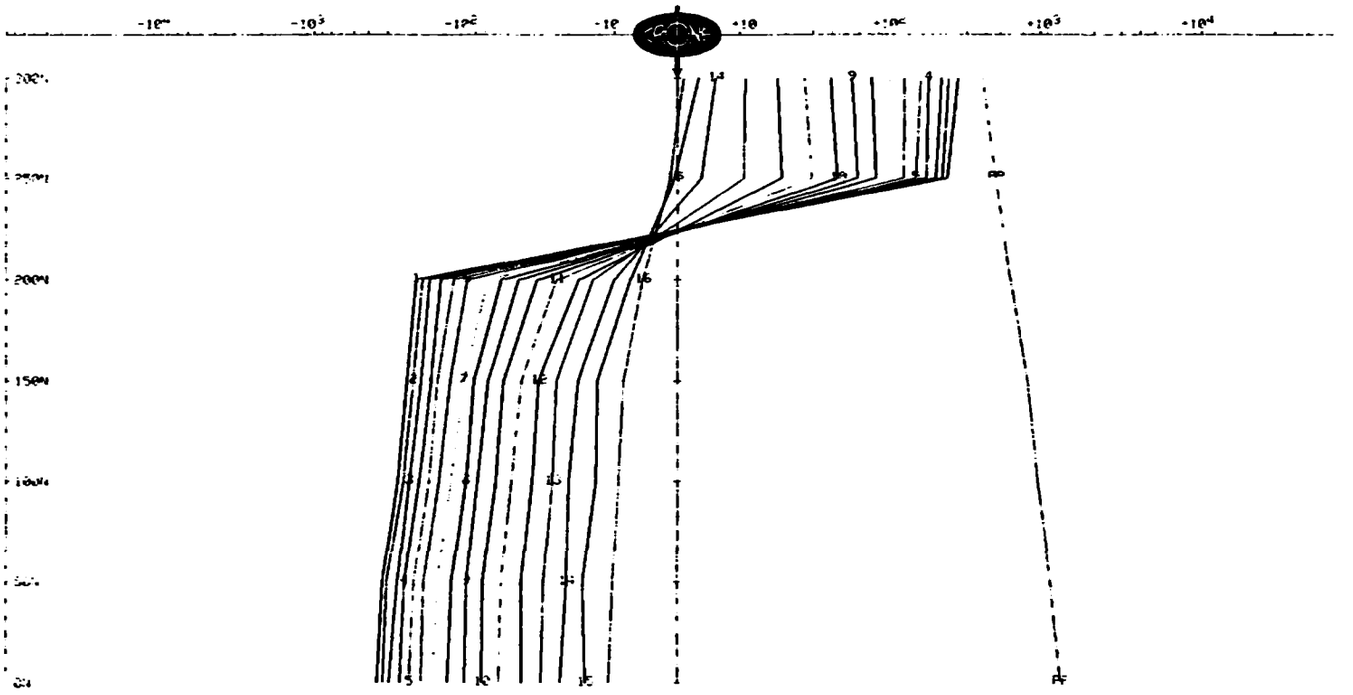


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 200E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L200ET4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

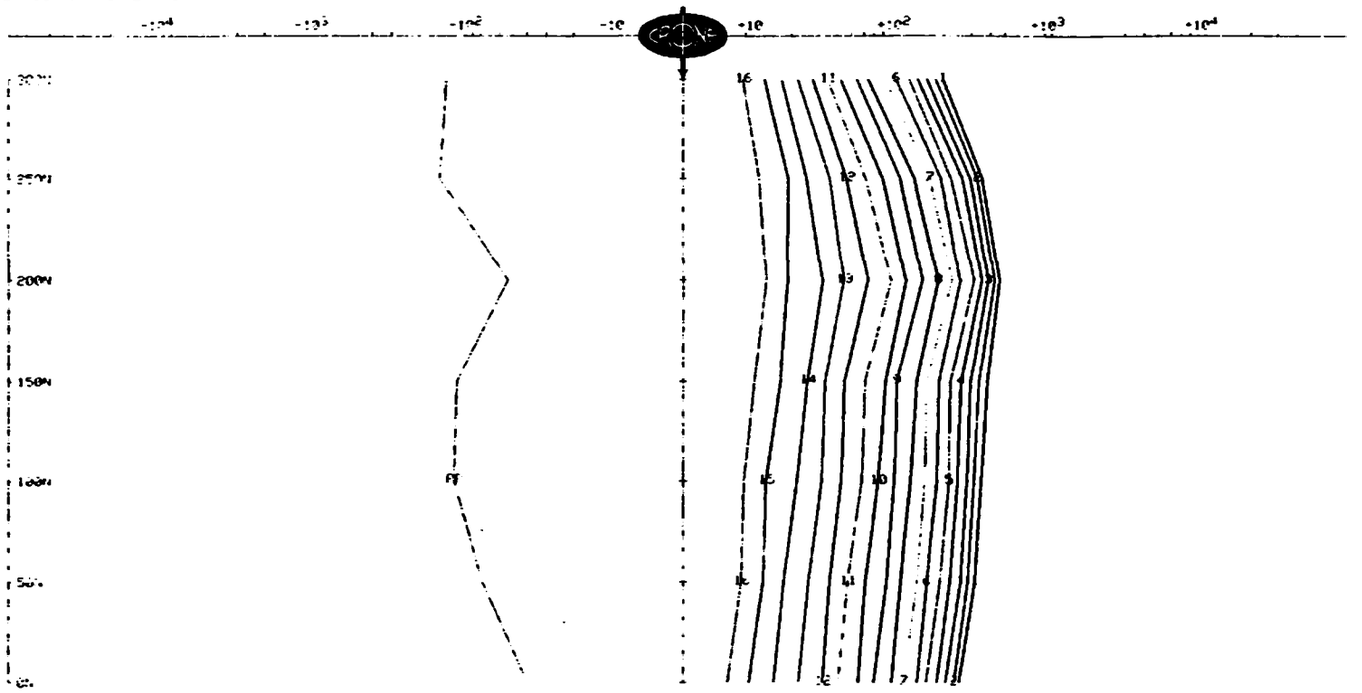


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 200E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L200ET4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

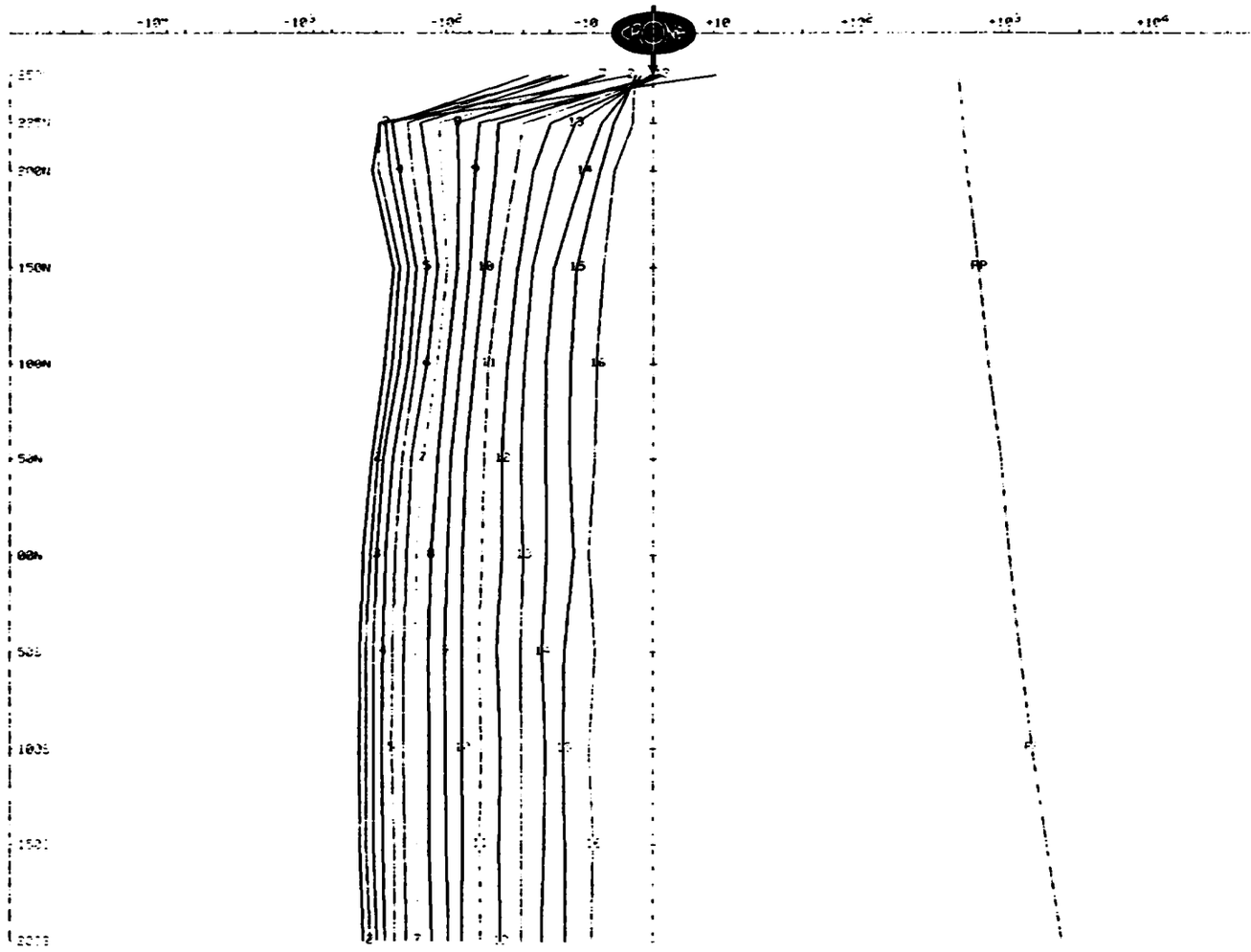


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L300E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L300ET4.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

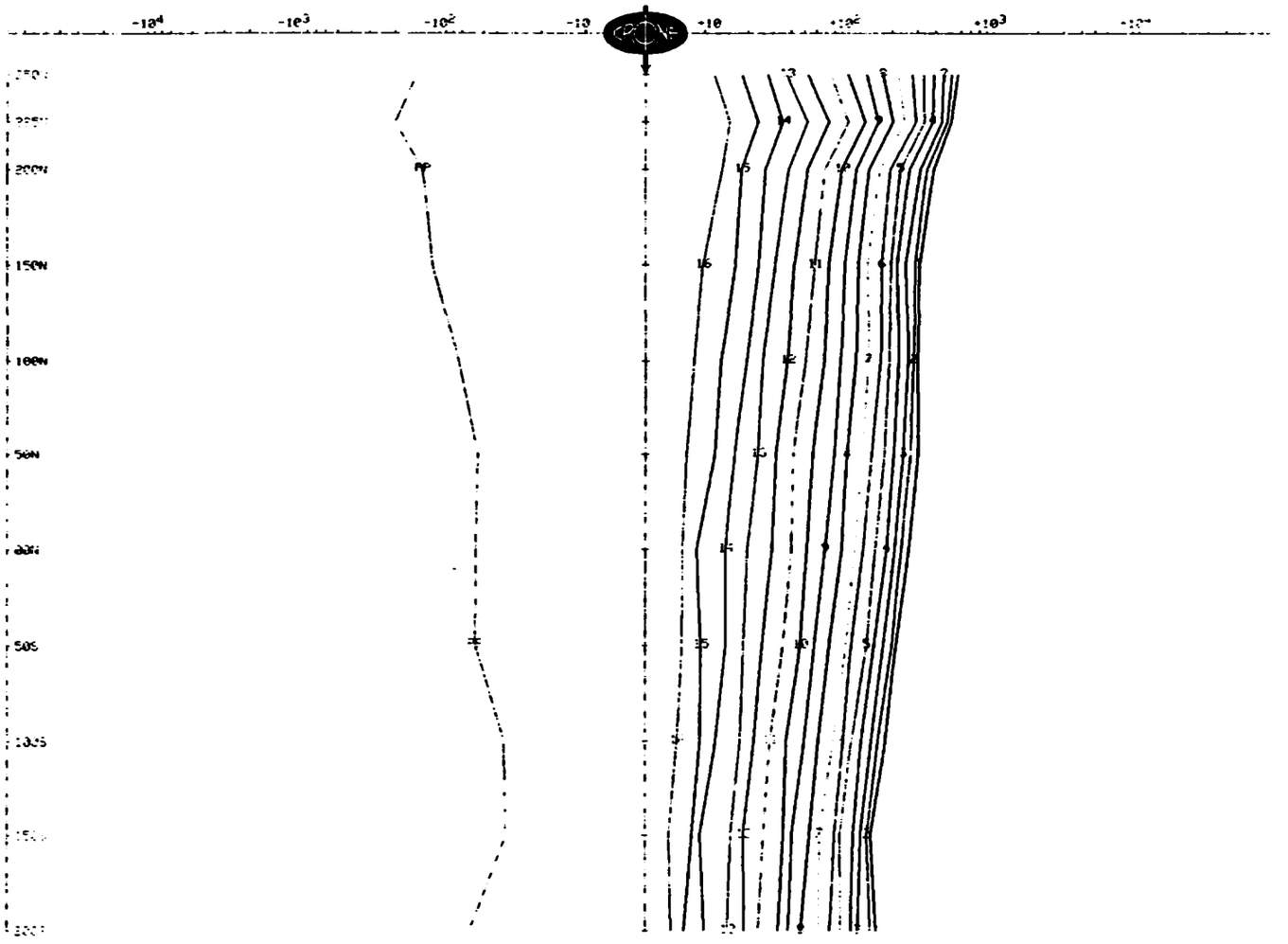


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L300E
Grid	: SAASLAKE	Tx Loop	: 4
Date	: Mar 13, 1995	File name	: L300ET4.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

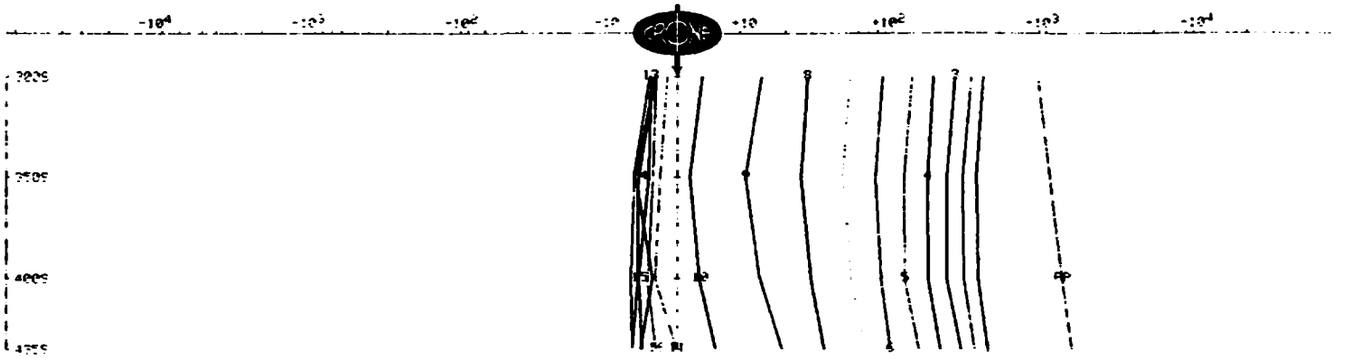


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L700W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L700WT3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

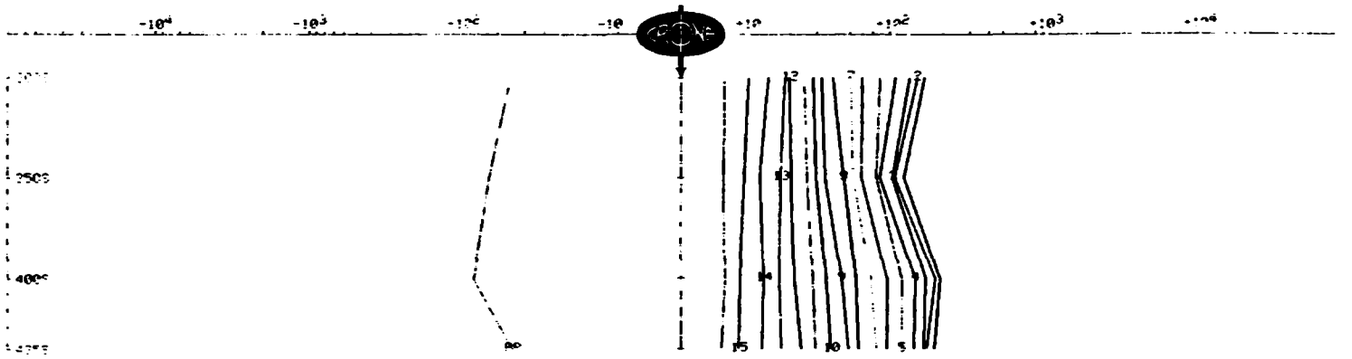


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L700W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L700WT3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

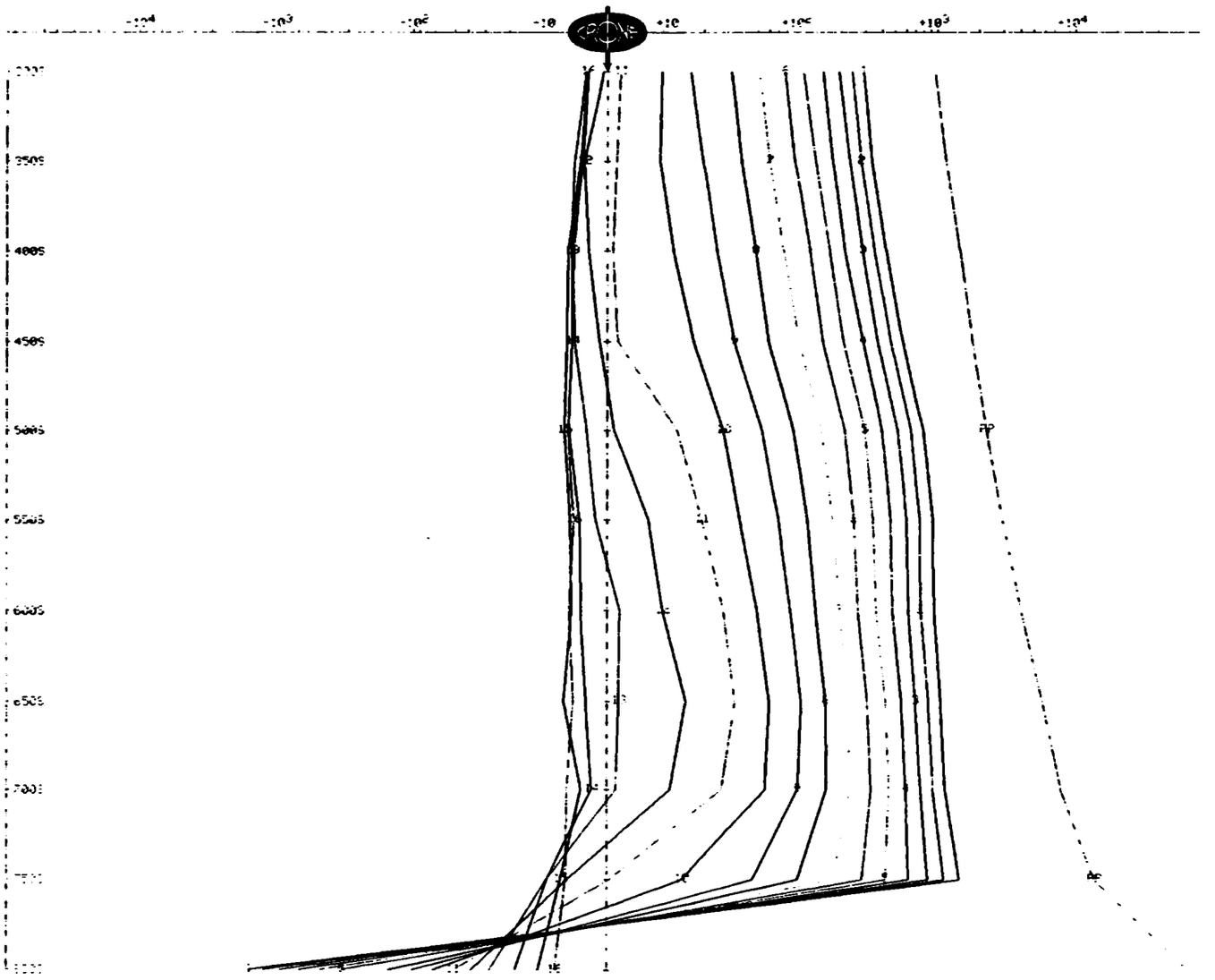


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L600W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L600WT3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

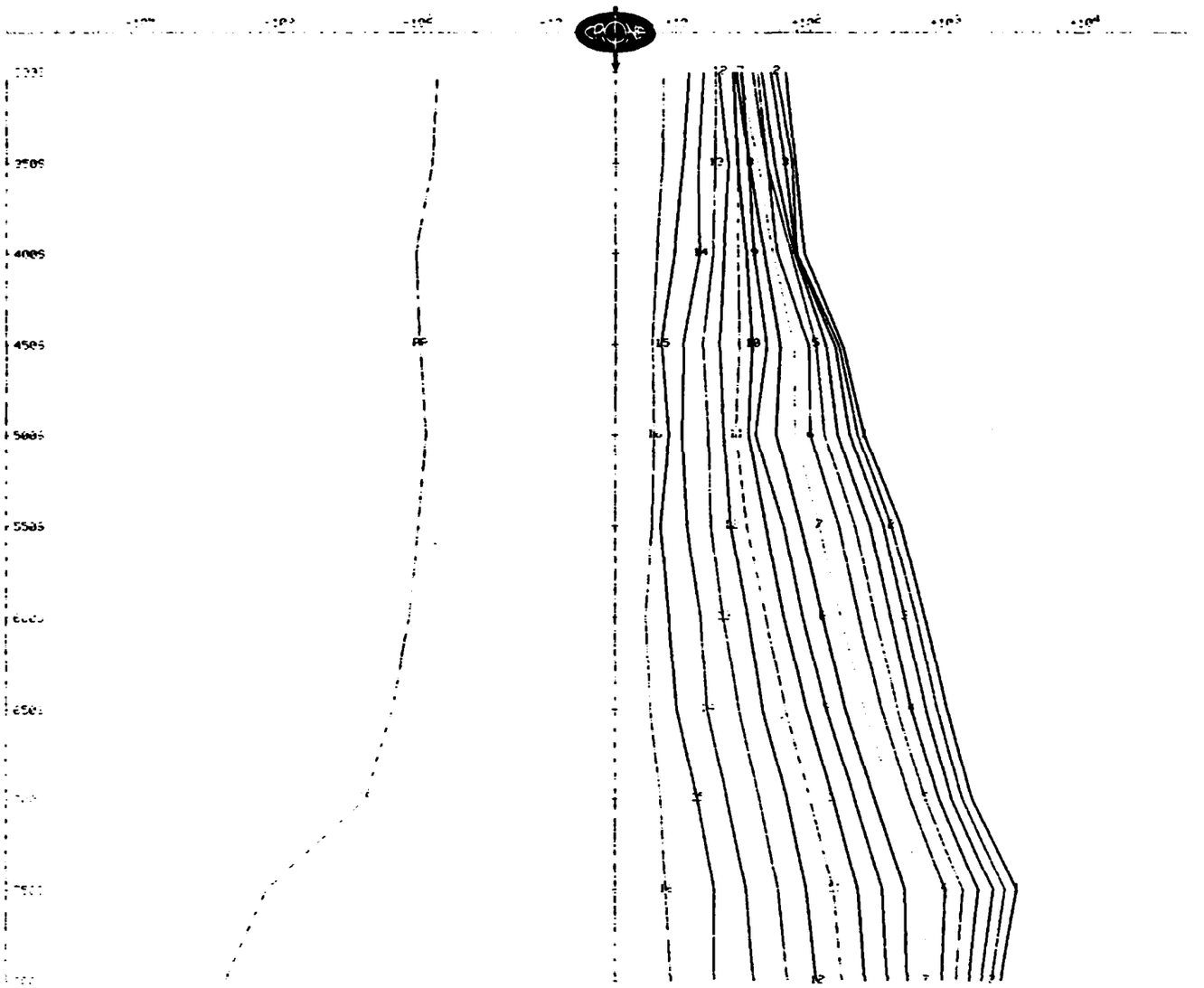


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L600W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L600WT3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

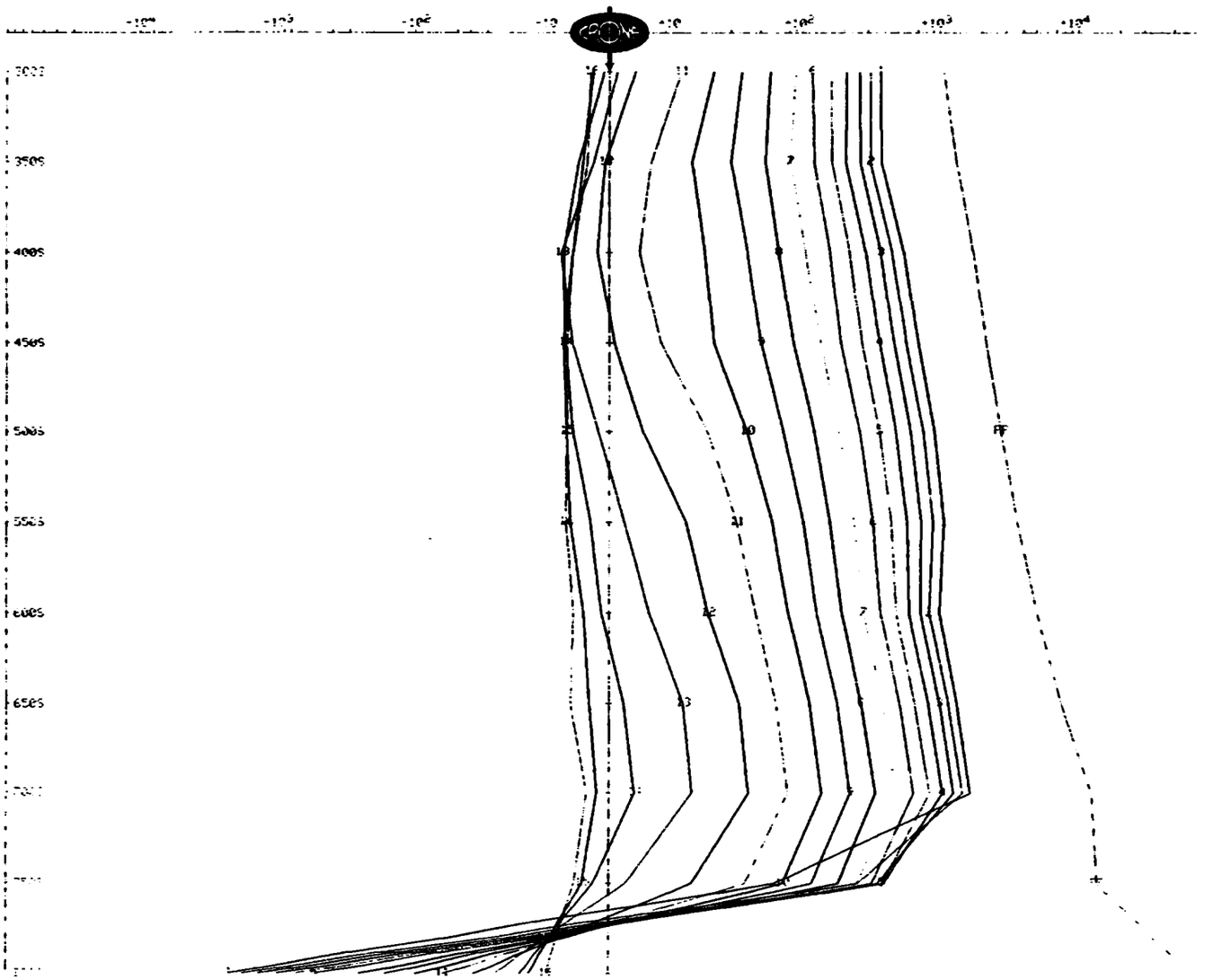


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L500W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L500WT3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

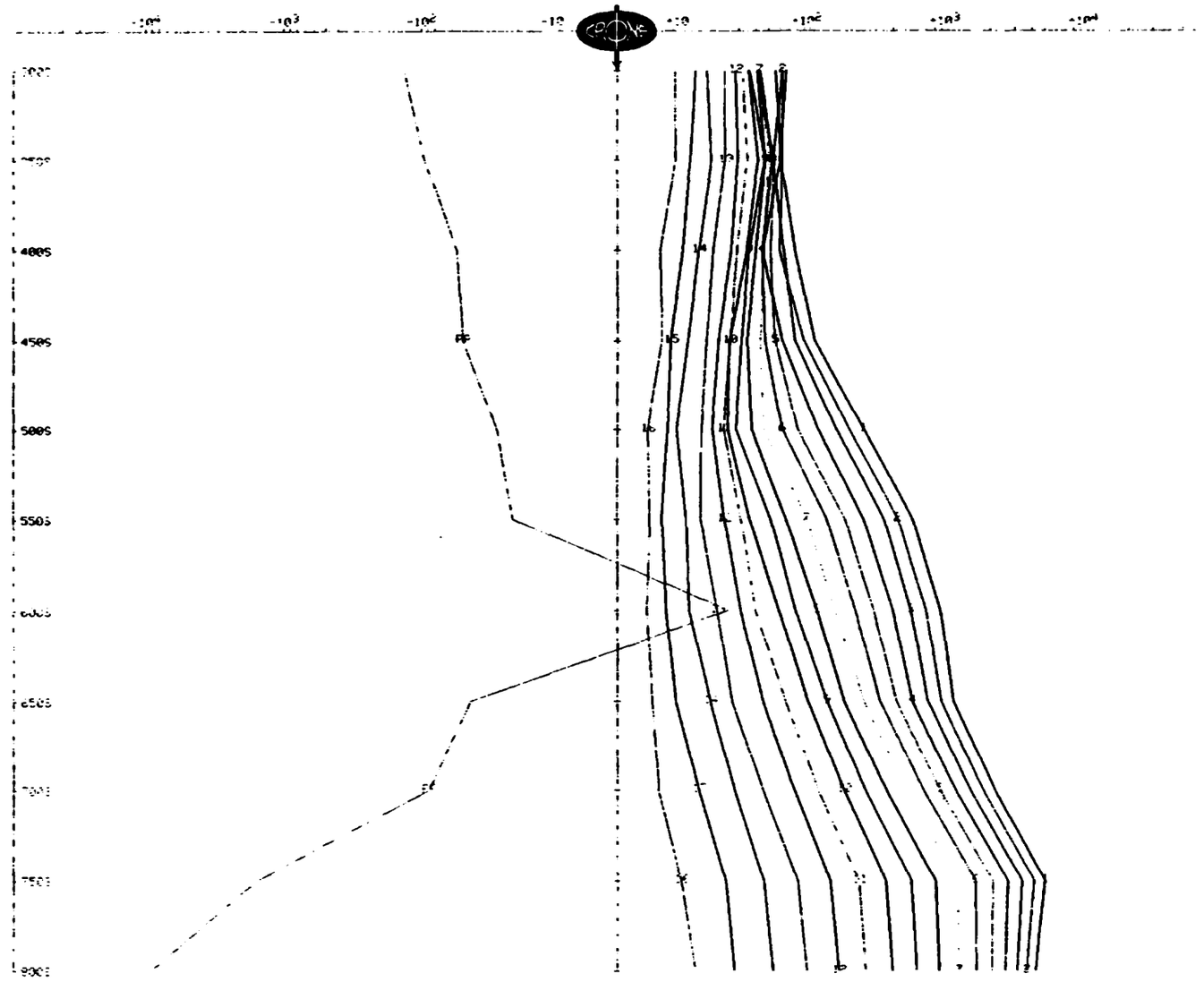


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L500W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L500WT3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

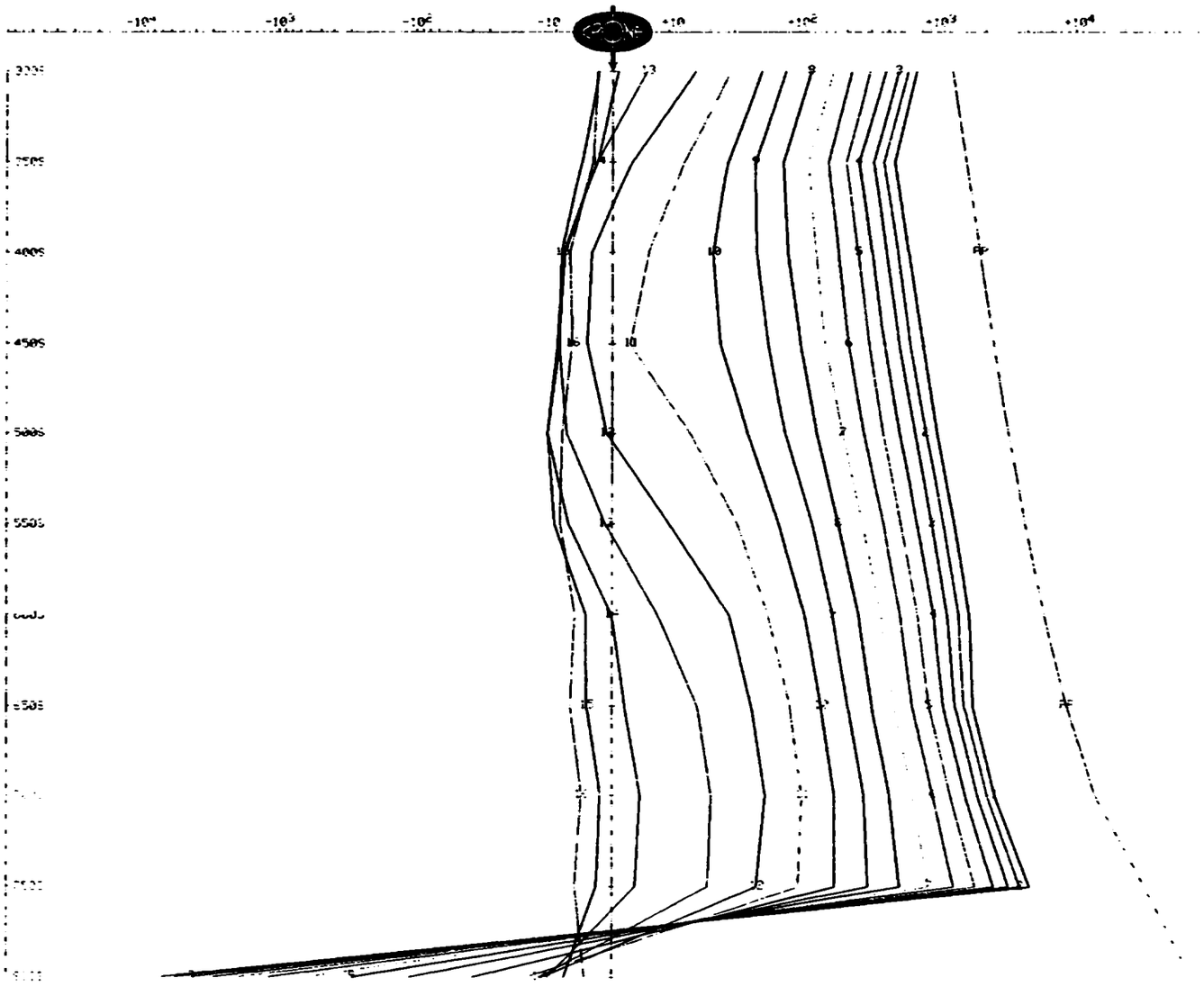


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L400W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L400WT3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

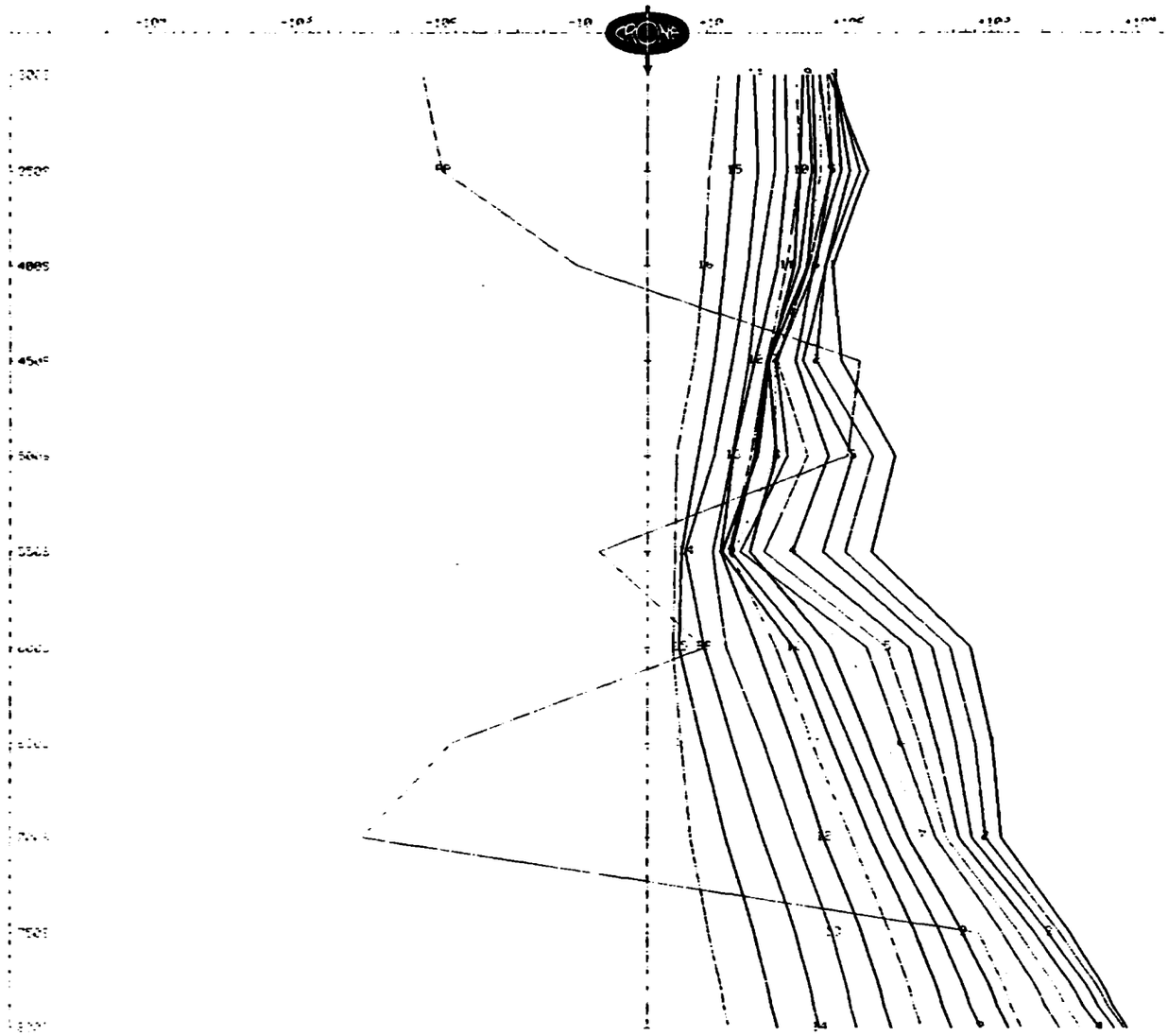


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L400W
Grid	: SASS-LAKE	Tx loop	: 3
Date	: Mar 12, 1997	File name	: L400WT3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

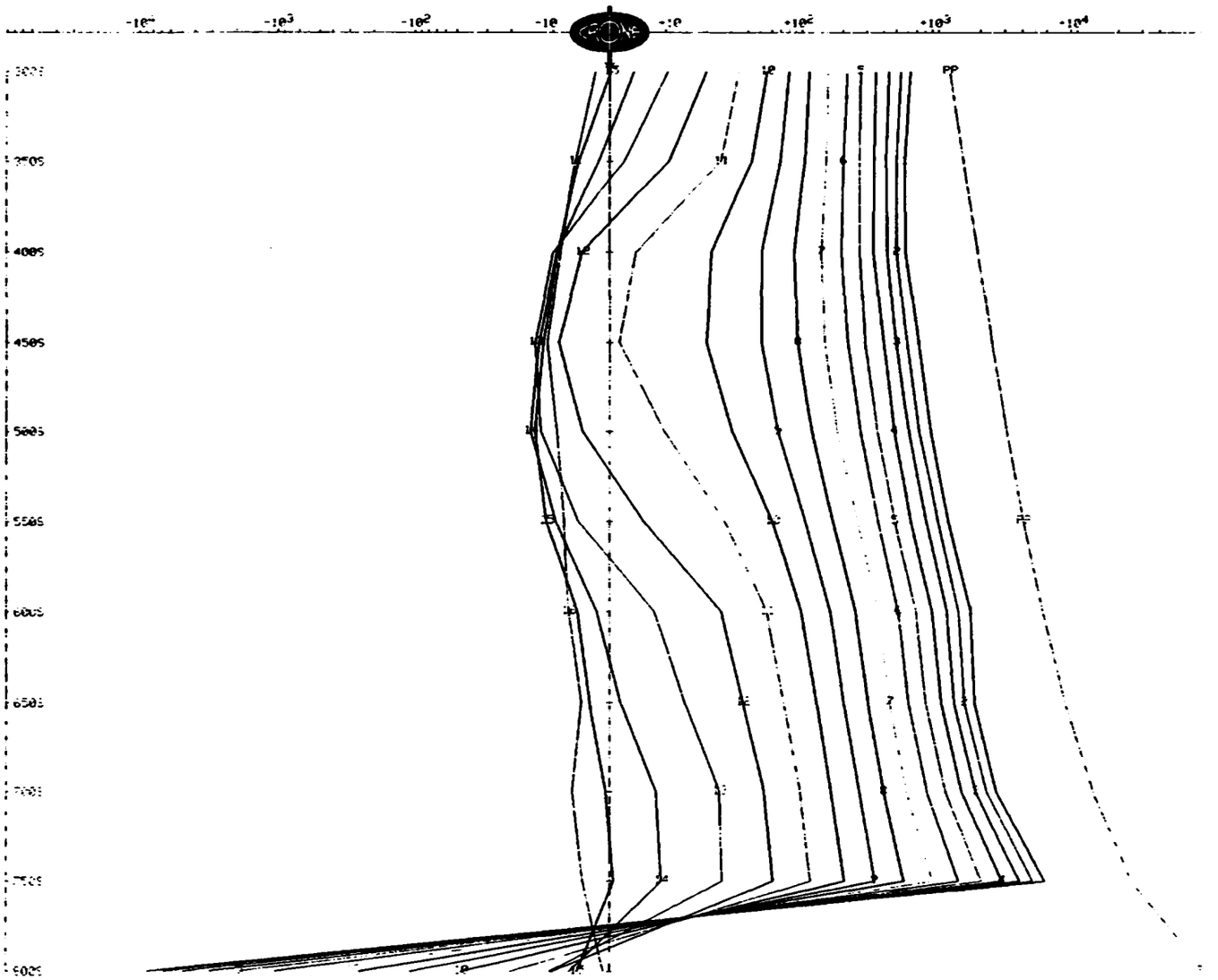


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L300W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L300WT3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

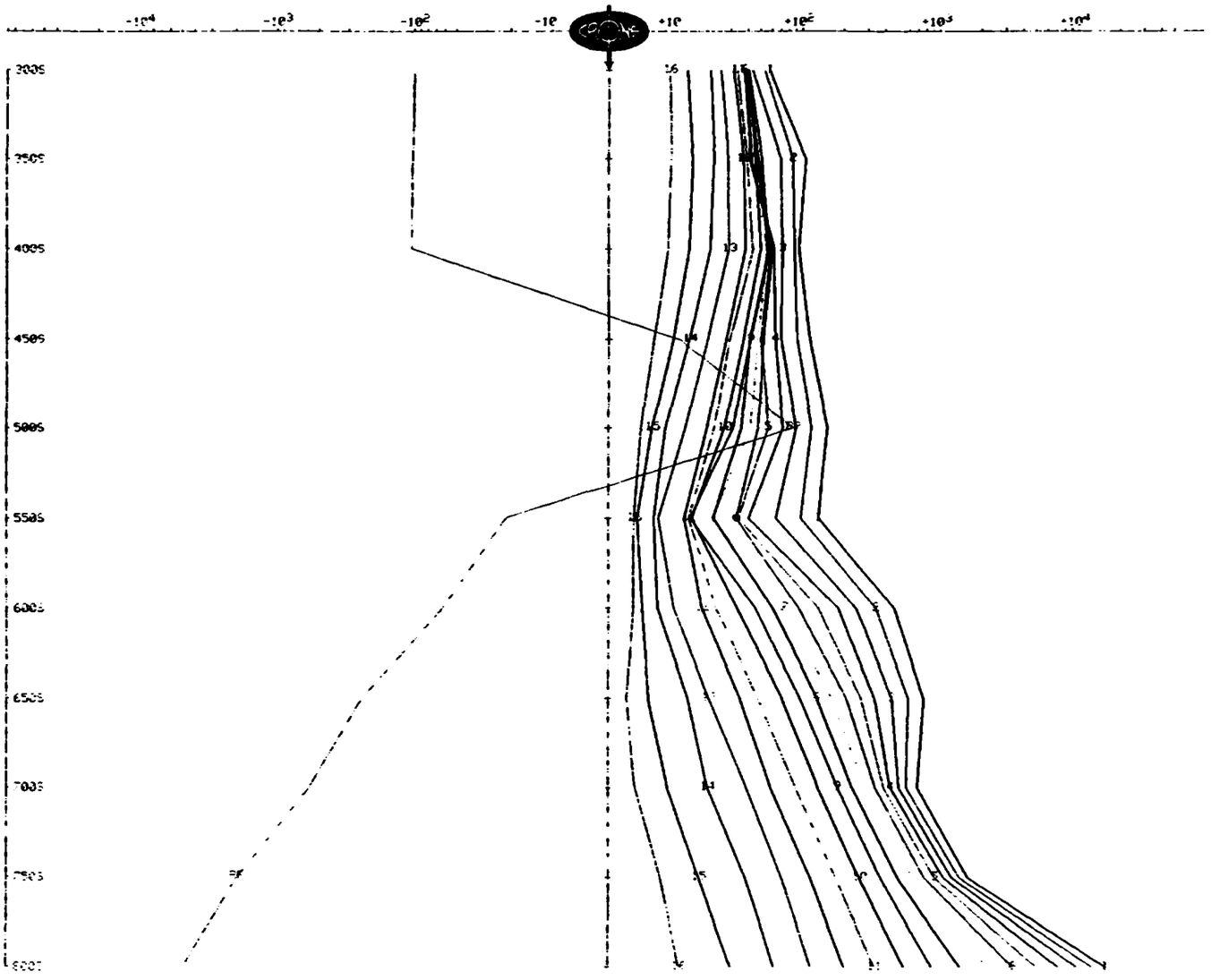


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L300W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L300WT3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

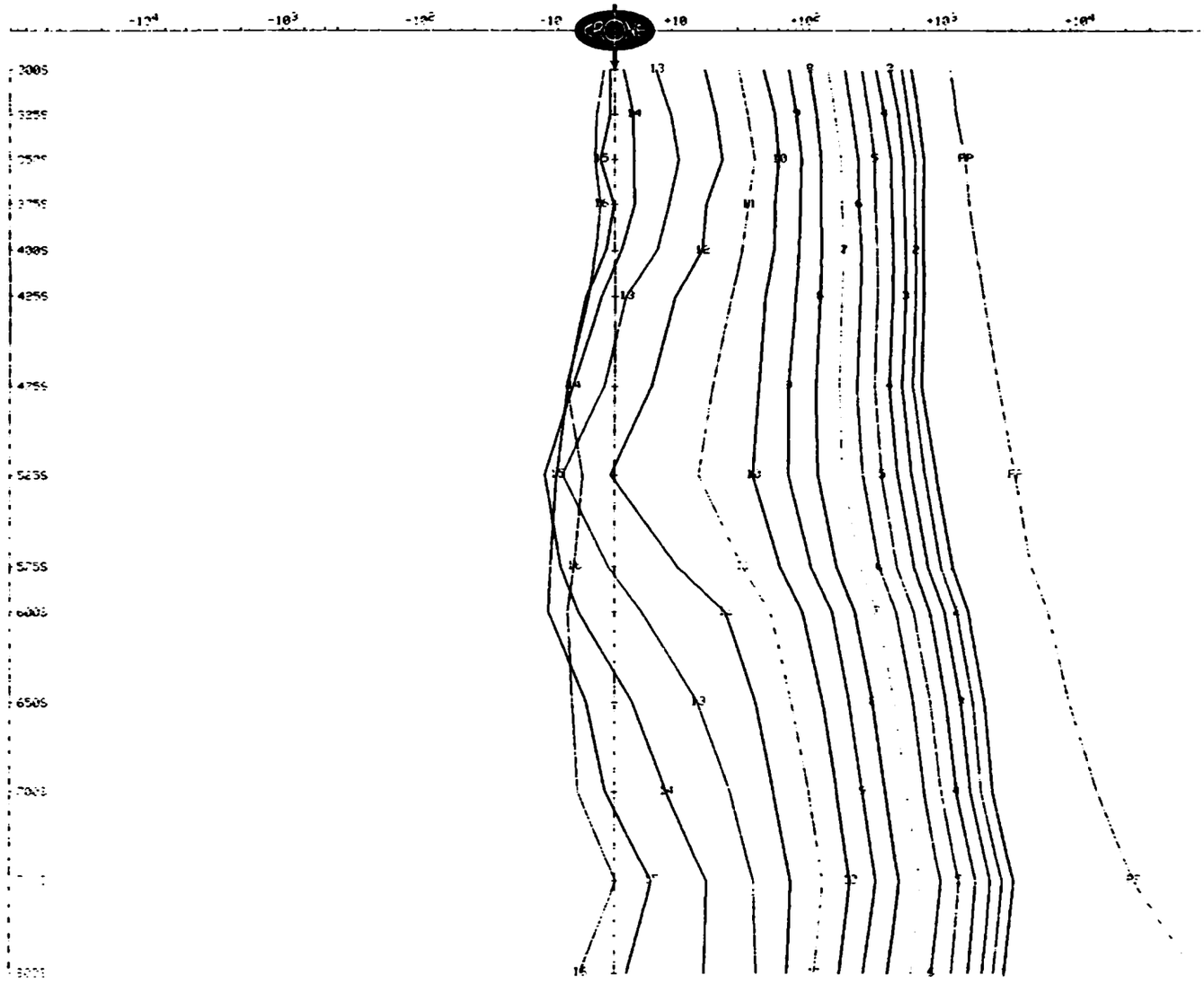


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L200W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L200WT3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

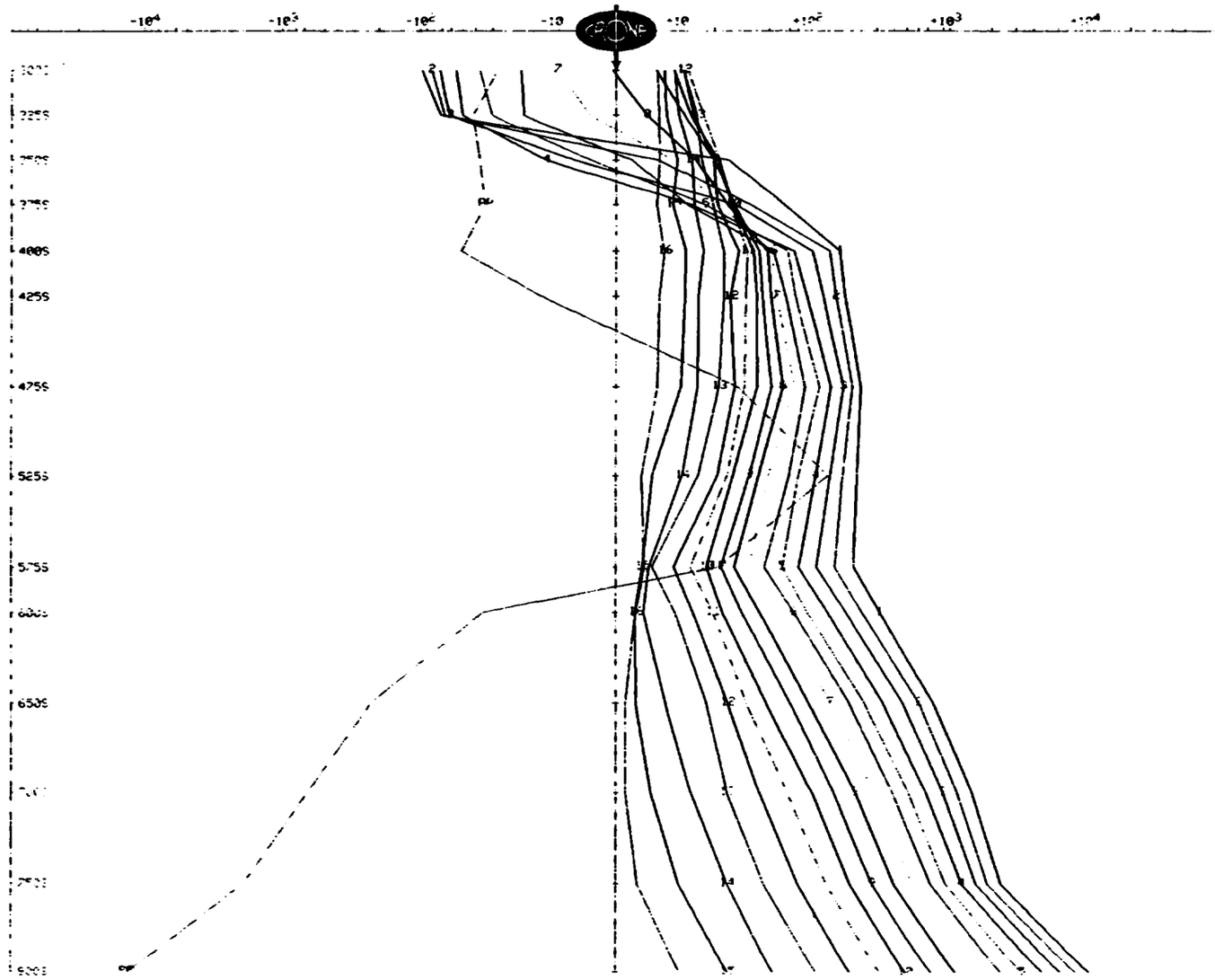


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L200W
Grid	: SASS-LAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L200WT3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

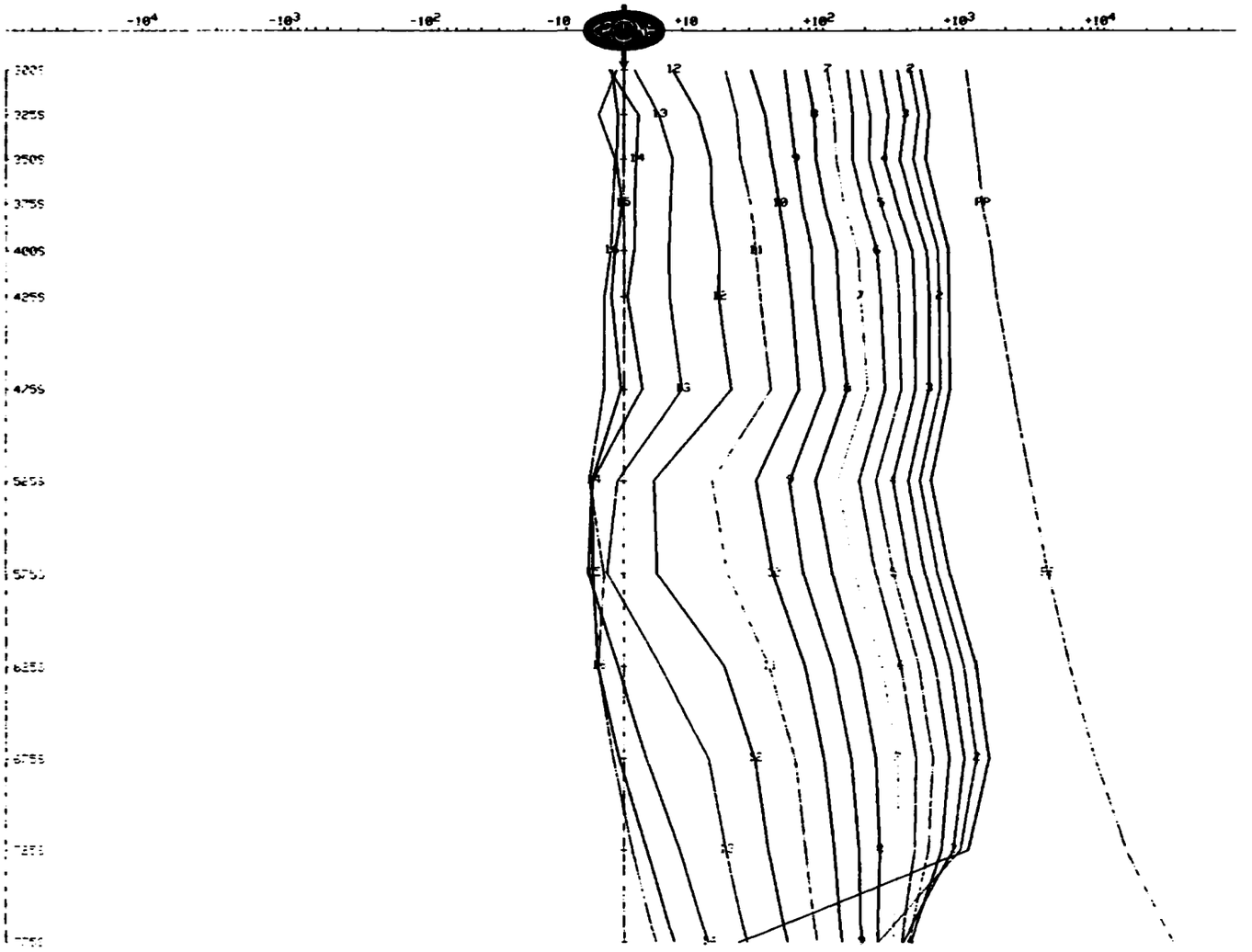


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100W
Grid	: SASSLAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L100WT3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

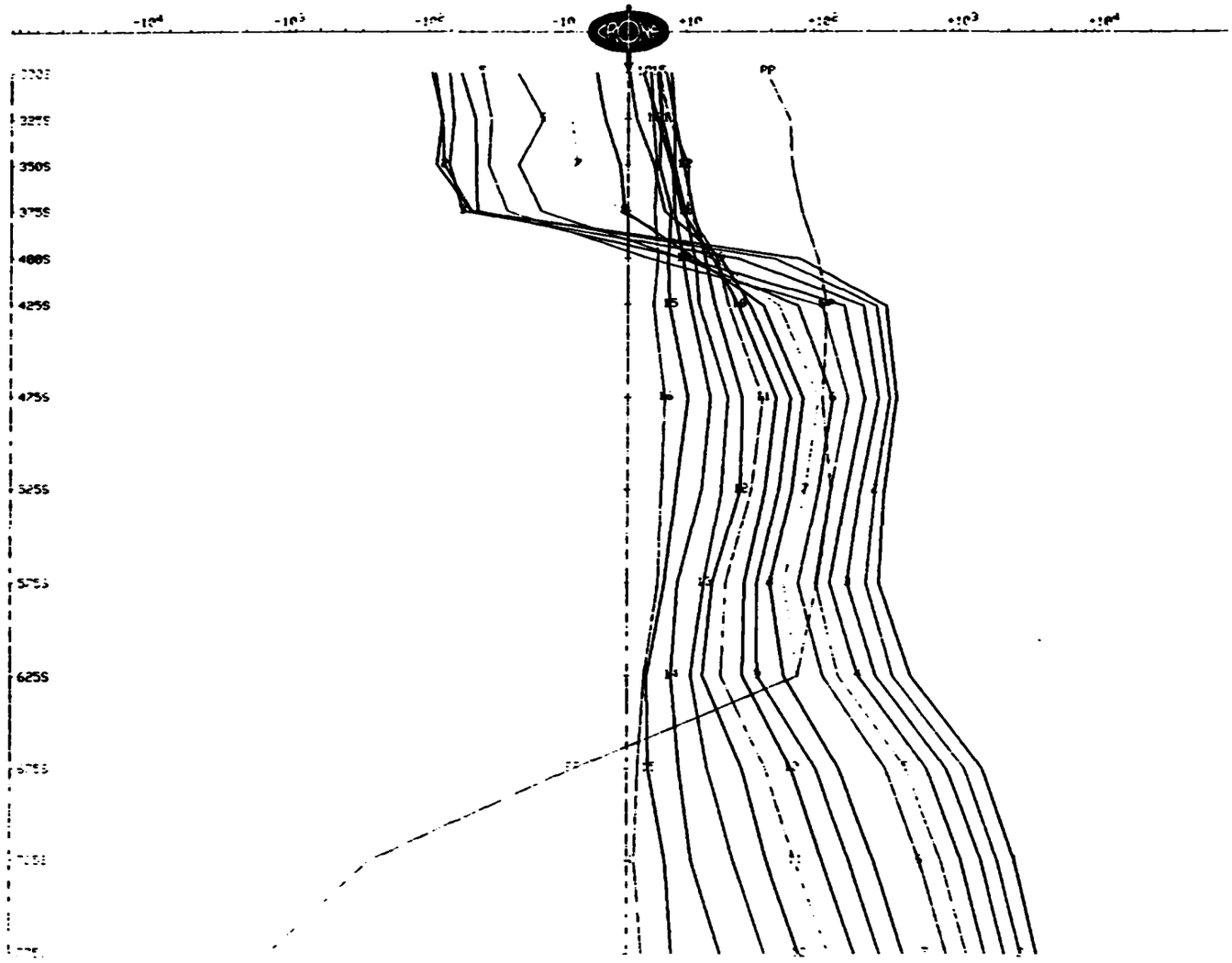


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100W
Grid	: SASSLAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L100WT3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

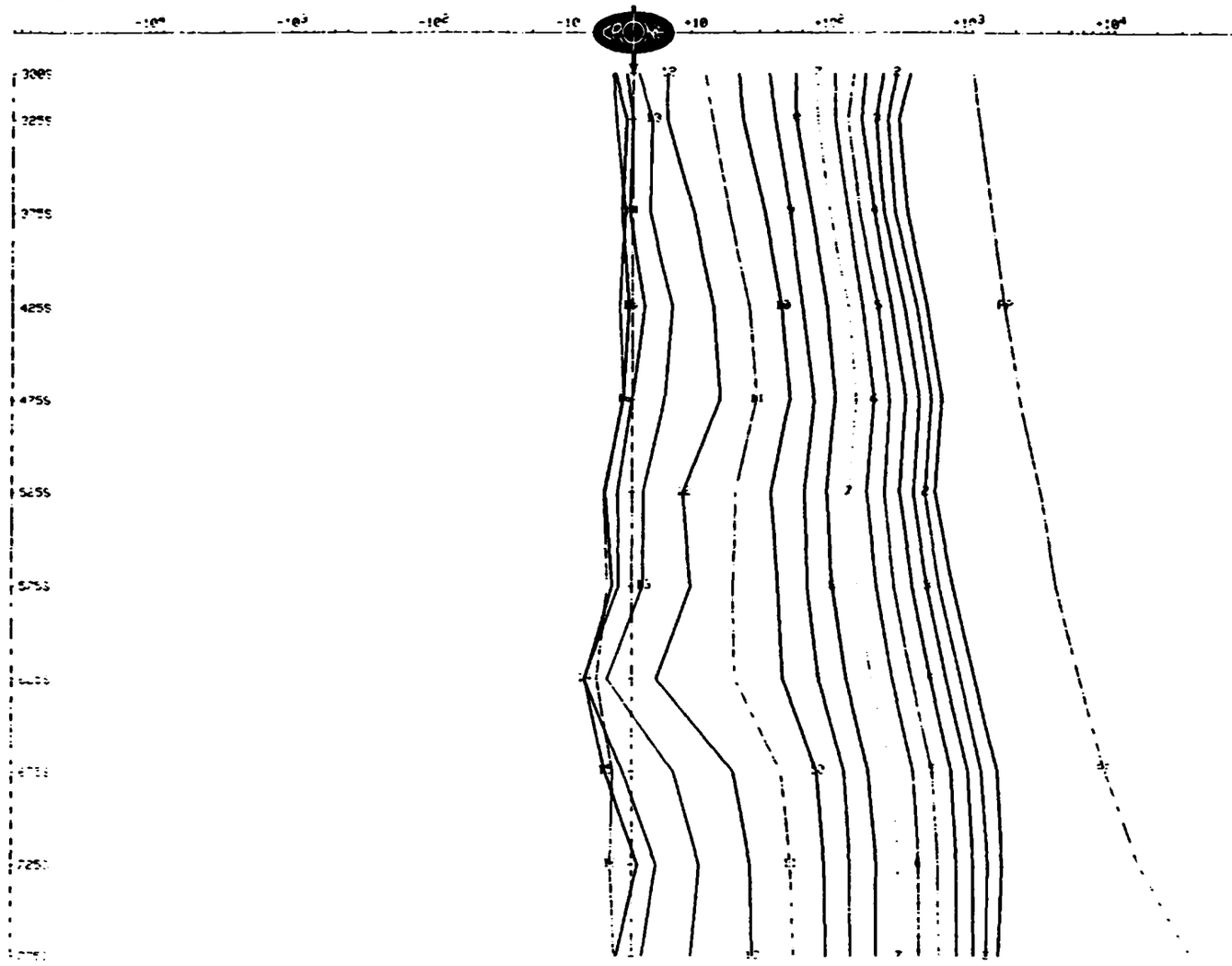


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 0E
Grid	: SASSLAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L0ET3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

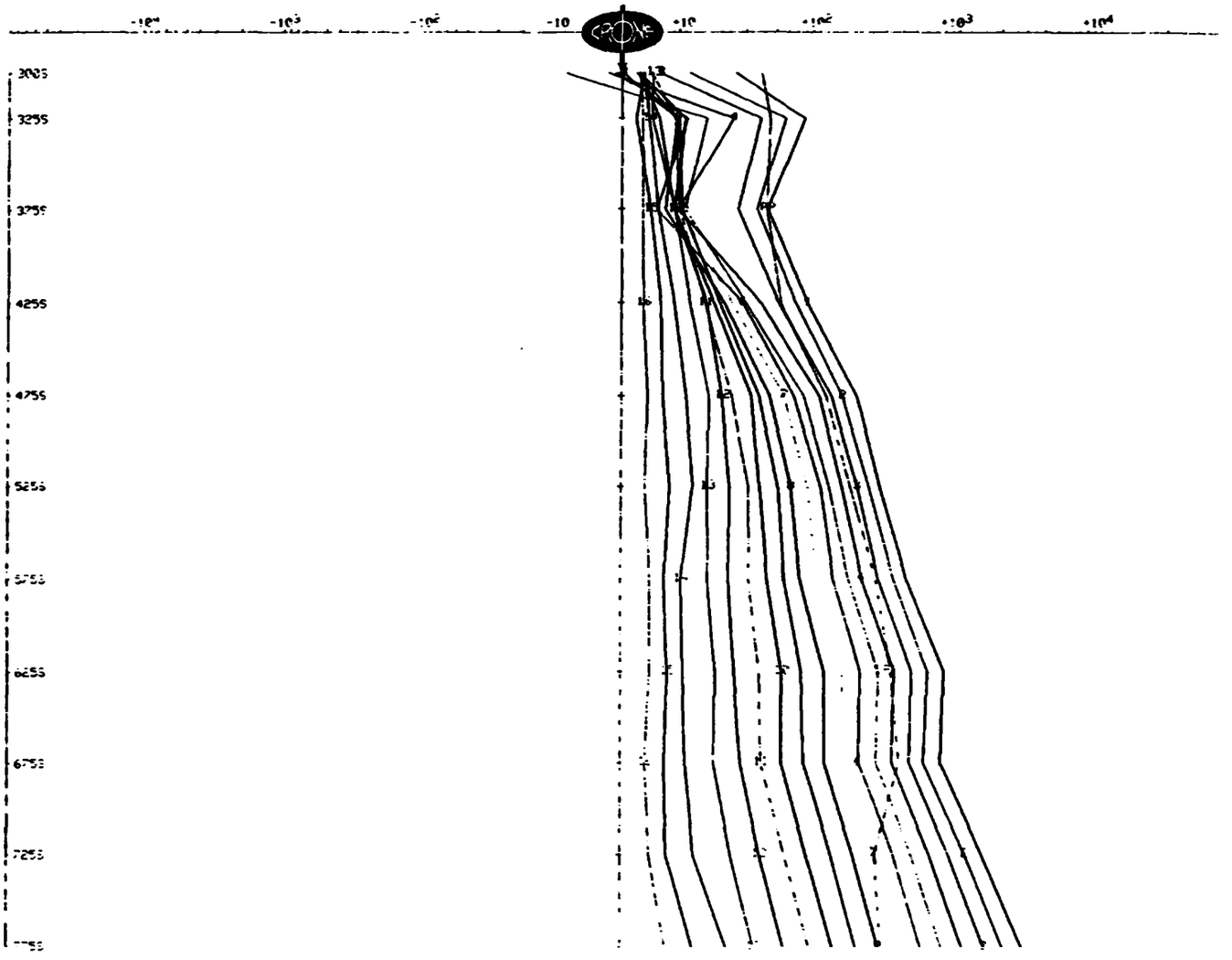


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 0E
Grid	: SASSLAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L0ET3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

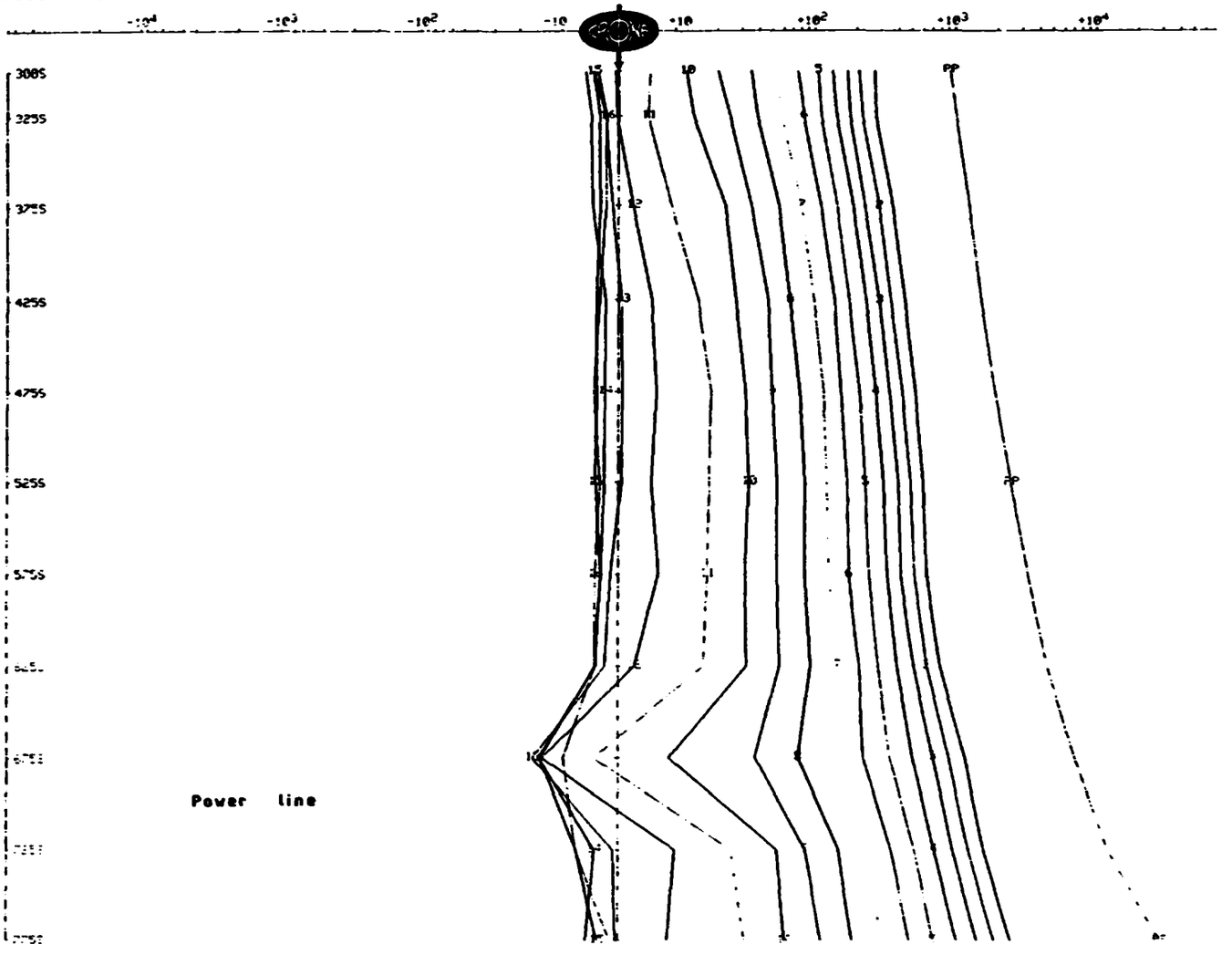


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100E
Grid	: SASSLAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L100ET3.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

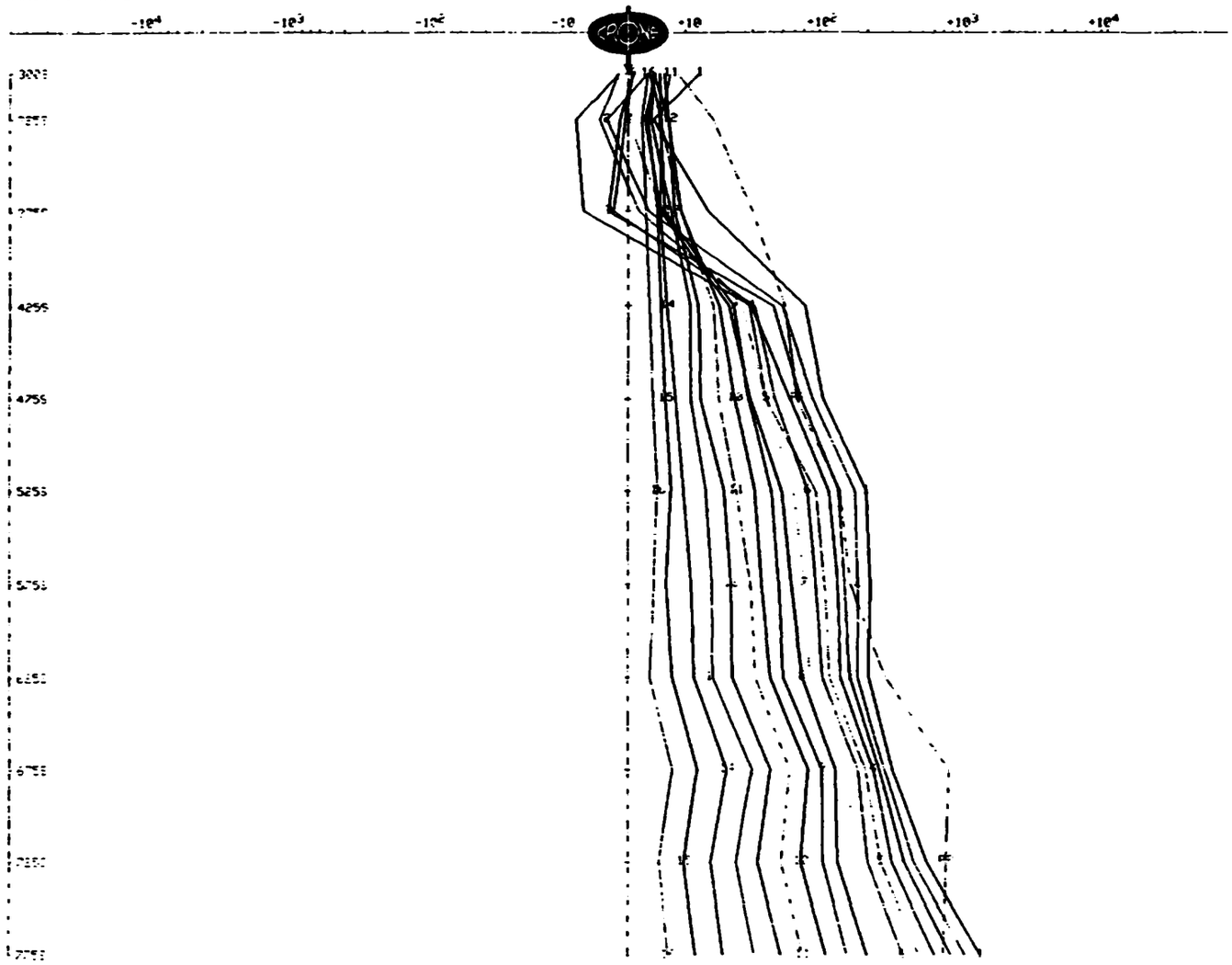


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100E
Grid	: SASSLAKE	Tx Loop	: 3
Date	: Mar 12, 1995	File name	: L100ET3.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



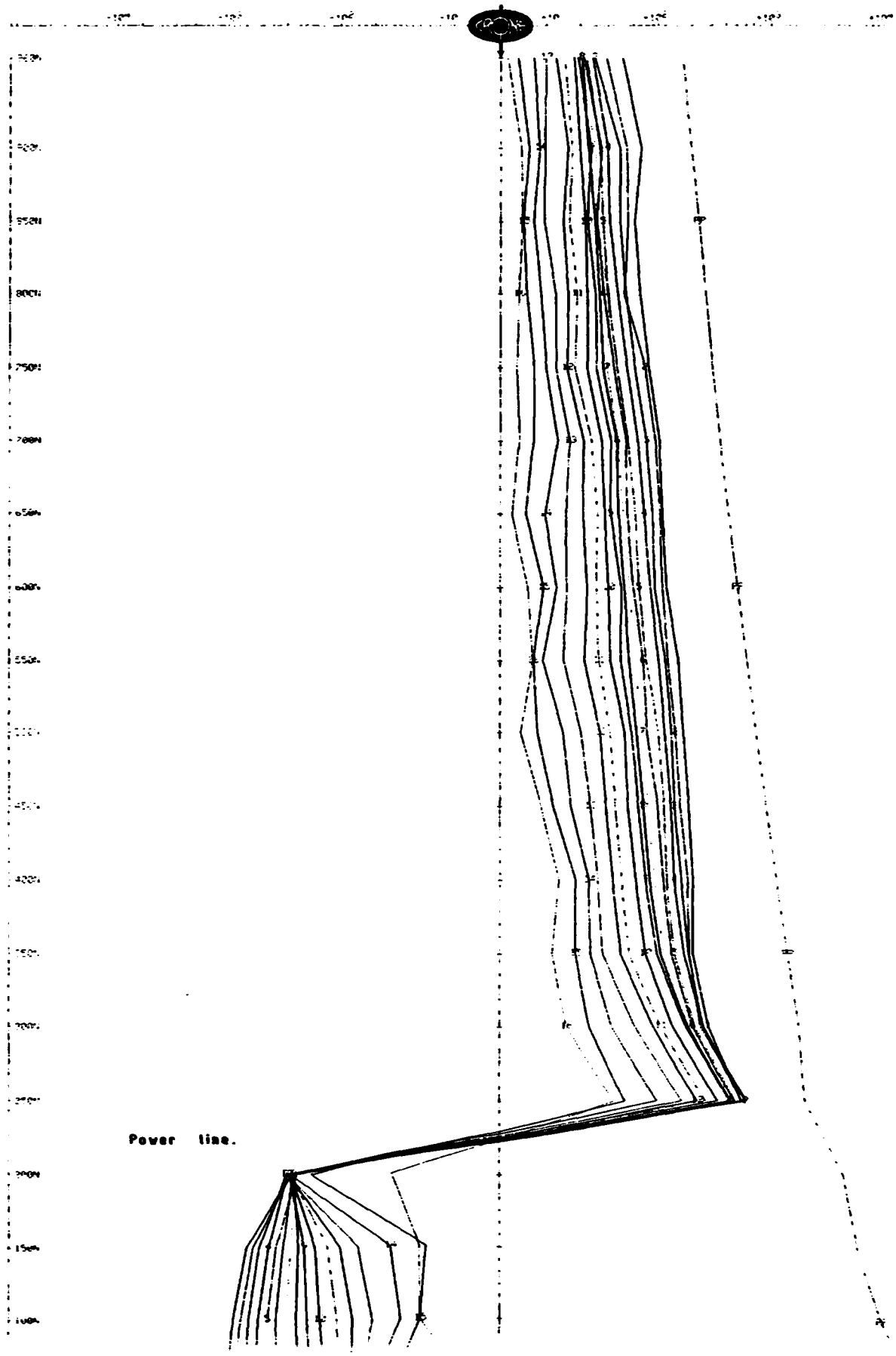
CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client : FALCONBRIDGE
Grid : SASS-LAKE
Date : Mar 14, 1995

Line : L200W
Tx Loop : 2
File name : L200WT2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



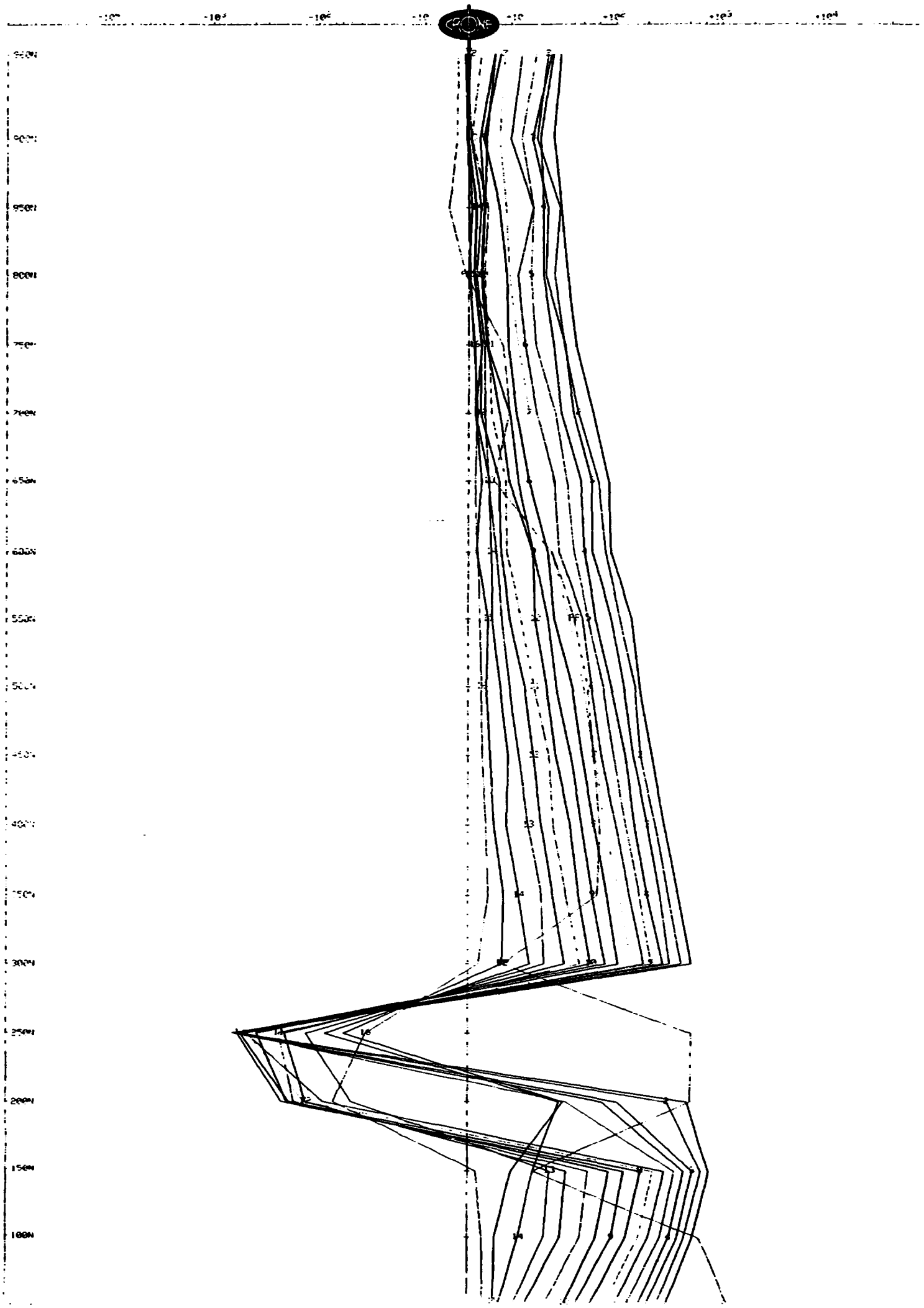
CROSS GEOPHYSICS & EXPLORATION LTD

VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L200W
Grid	: SASS-LAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L200WT2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

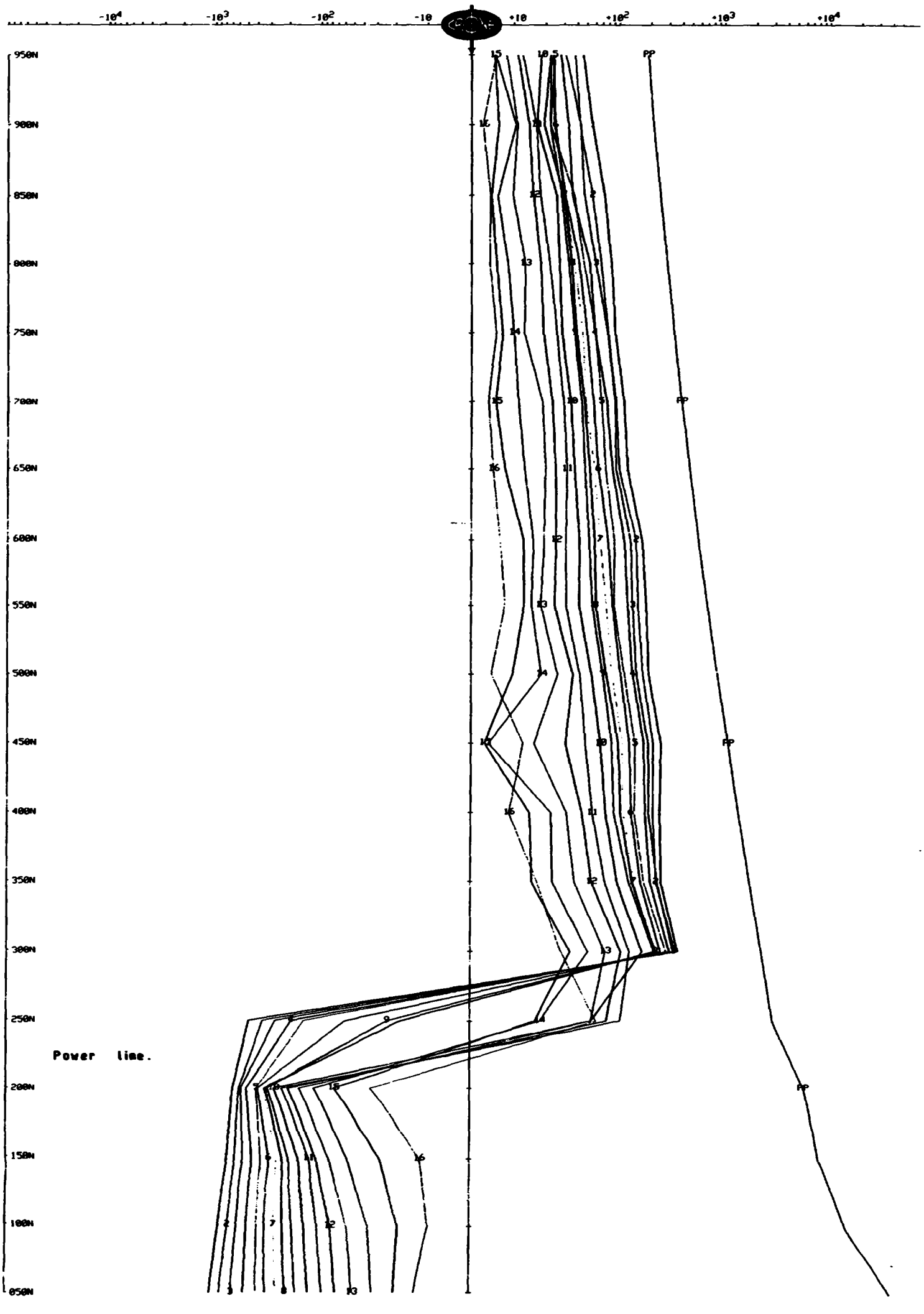


SURFACE PEM

Client	: FALCONBRIDGE	Line	: L100W
Grid	: SASS-LAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L100WT2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

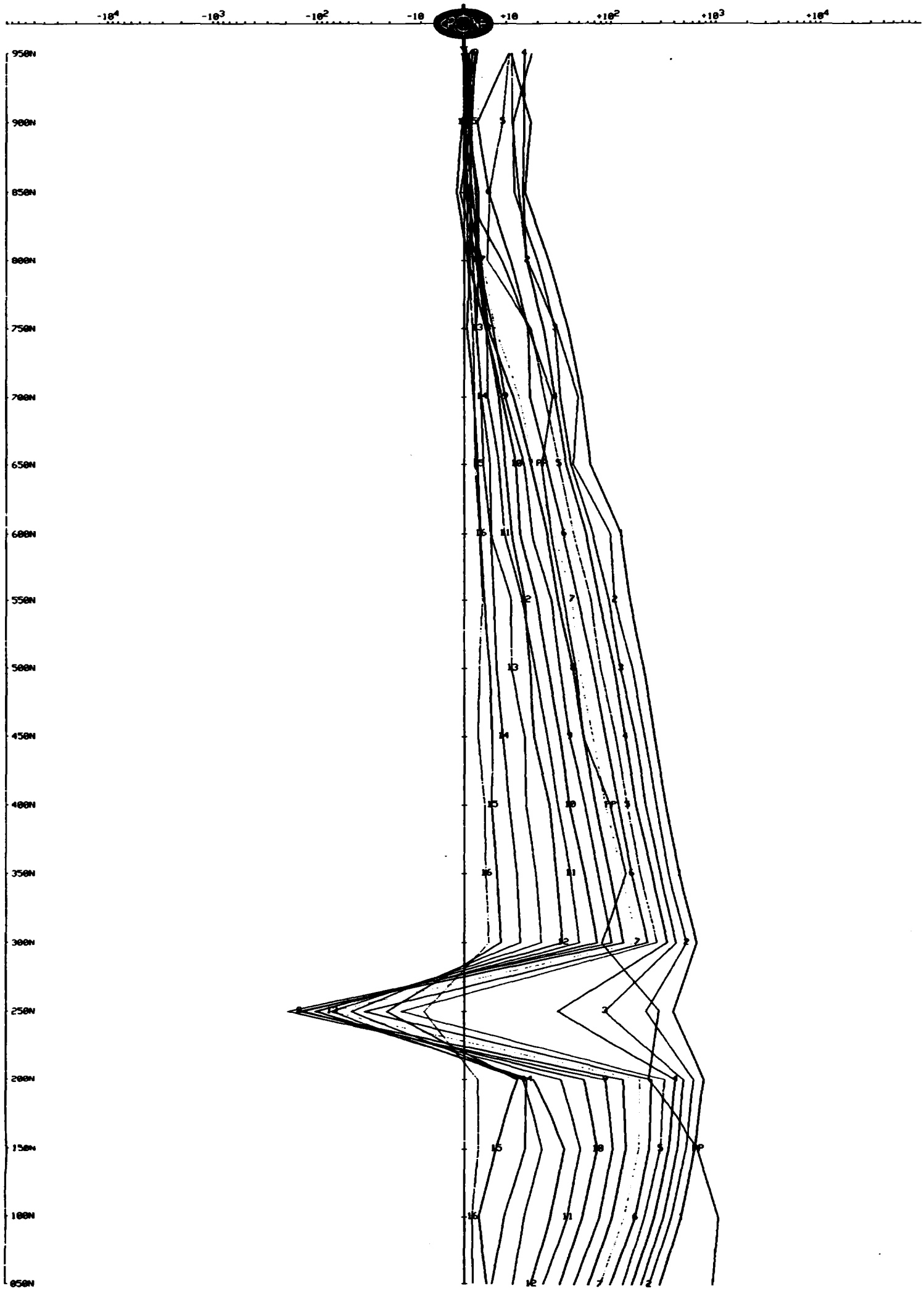


SURFACE PEM

Client	: FALCONBRIDGE	Line	: L100W
Grid	: SASS-LAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L100WT2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

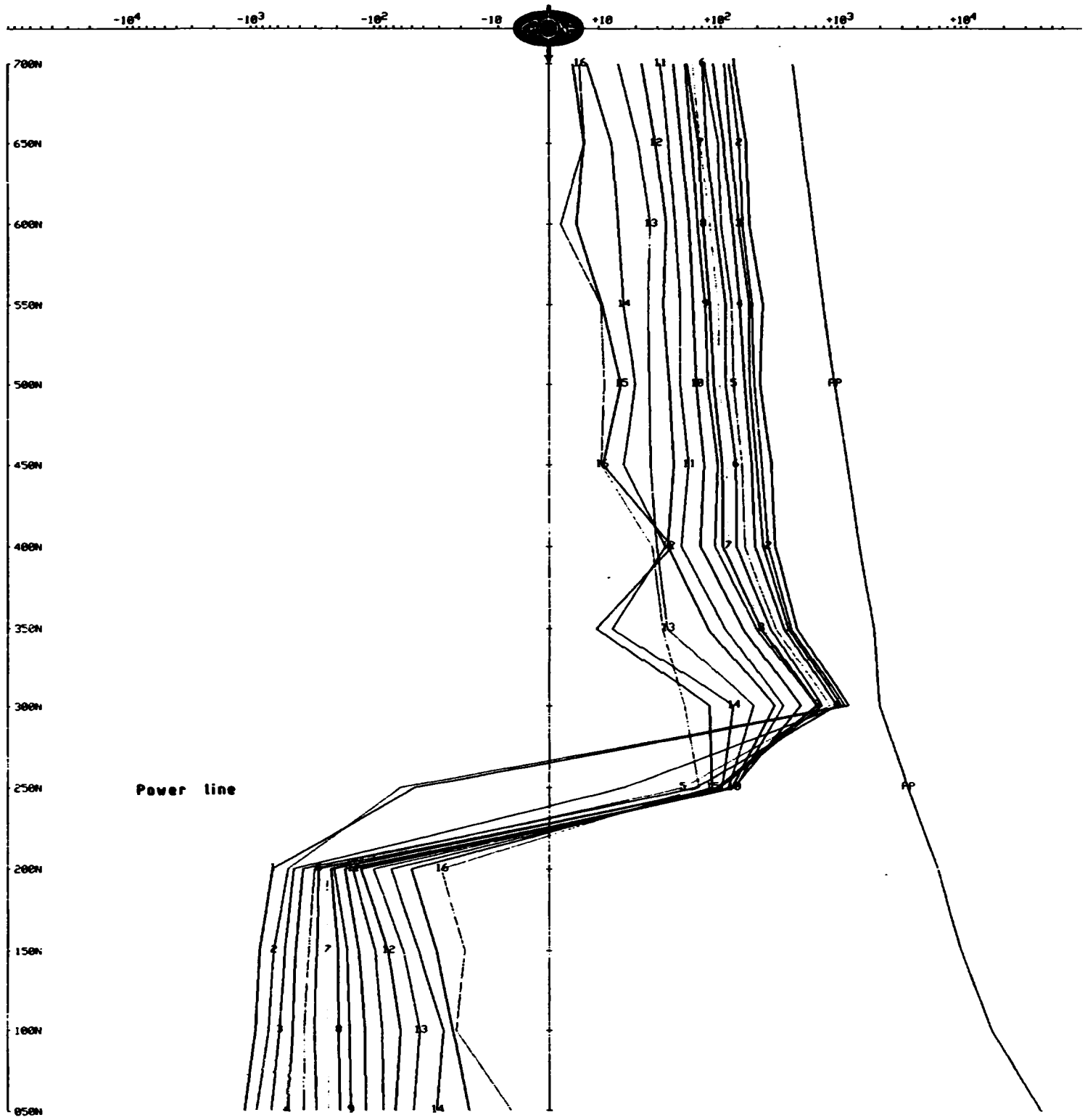


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L000W
Grid	: SASS-LAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L000WT2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

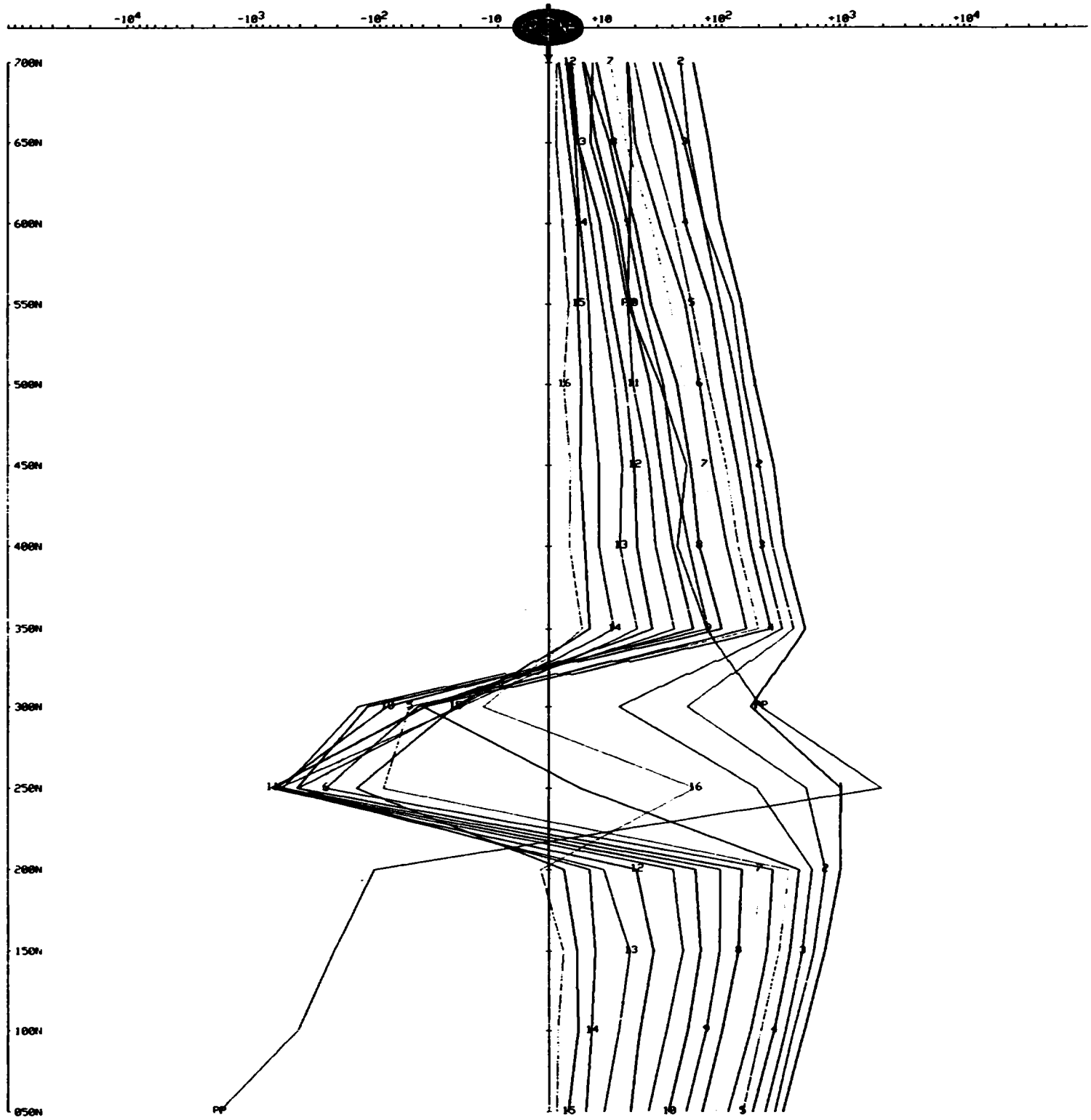


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L000W
Grid	: SASS-LAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L000WT2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

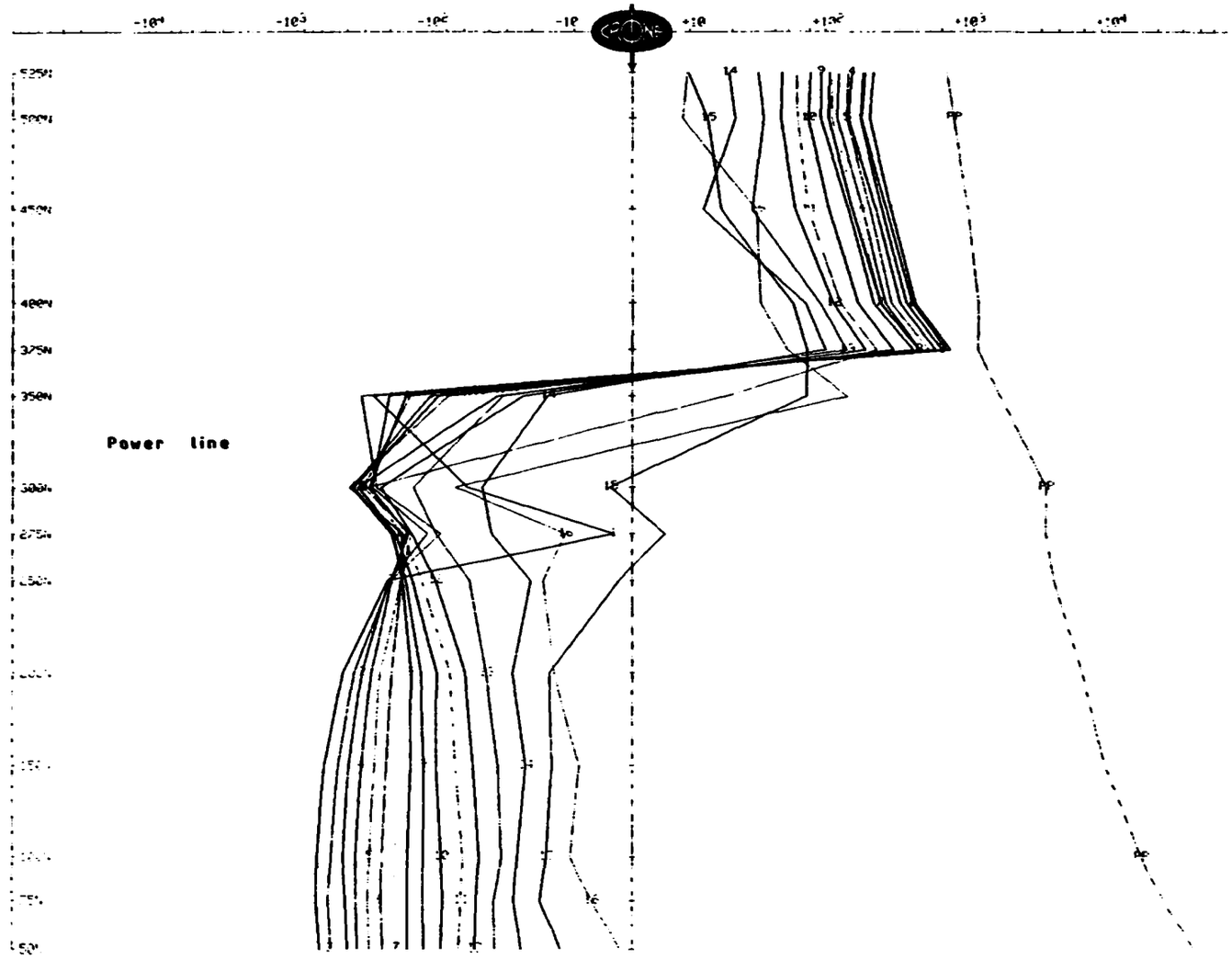


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L100ET2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

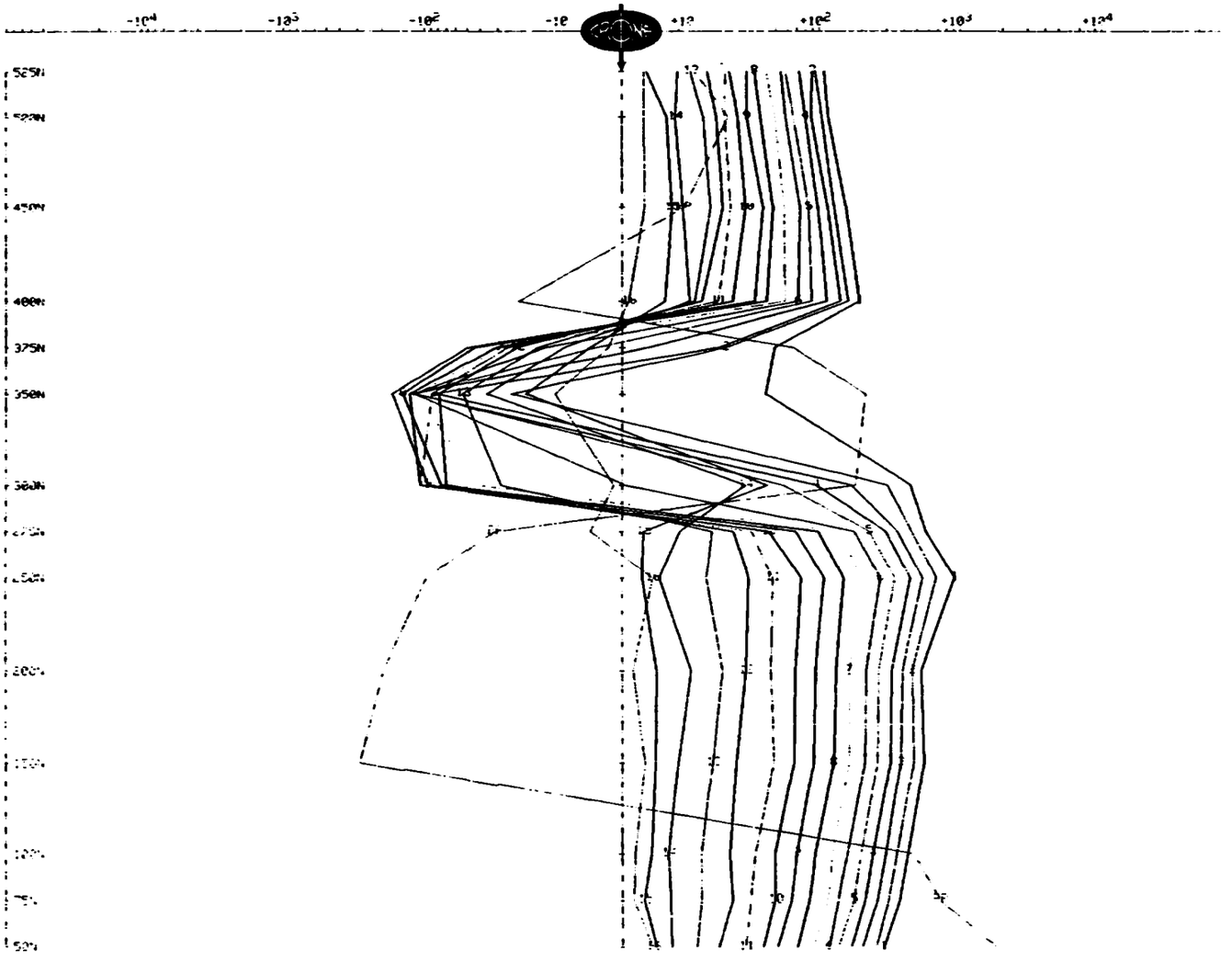


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 100E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L100ET2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

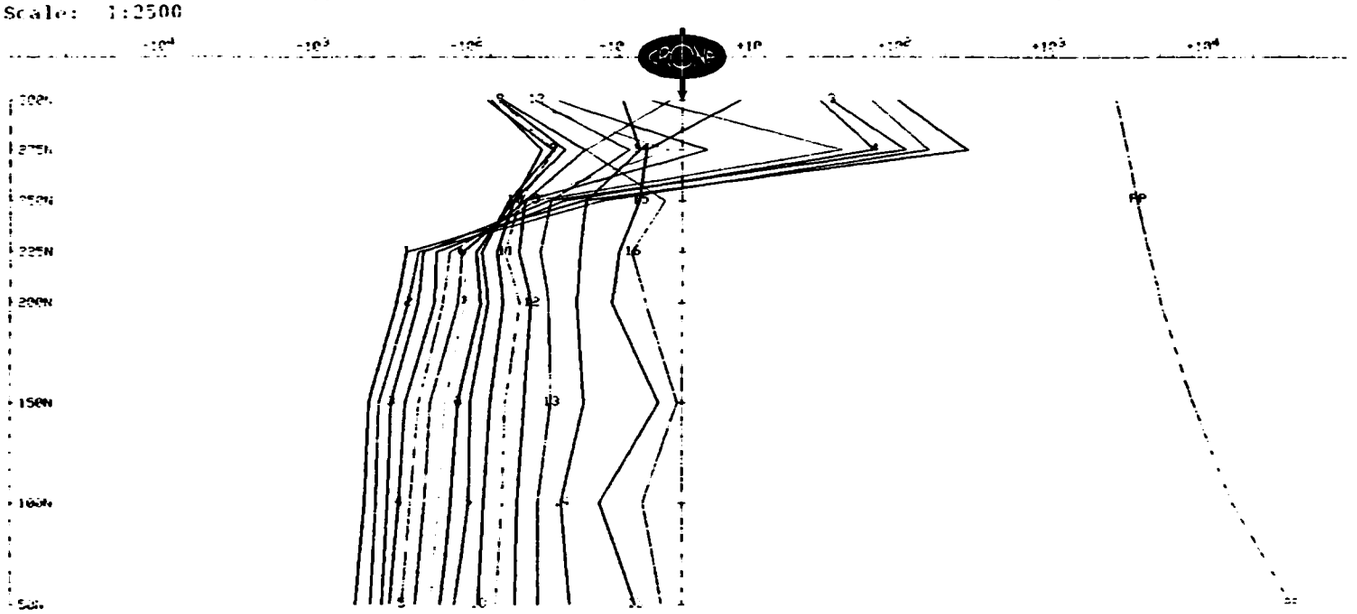


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 200E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L200FT2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

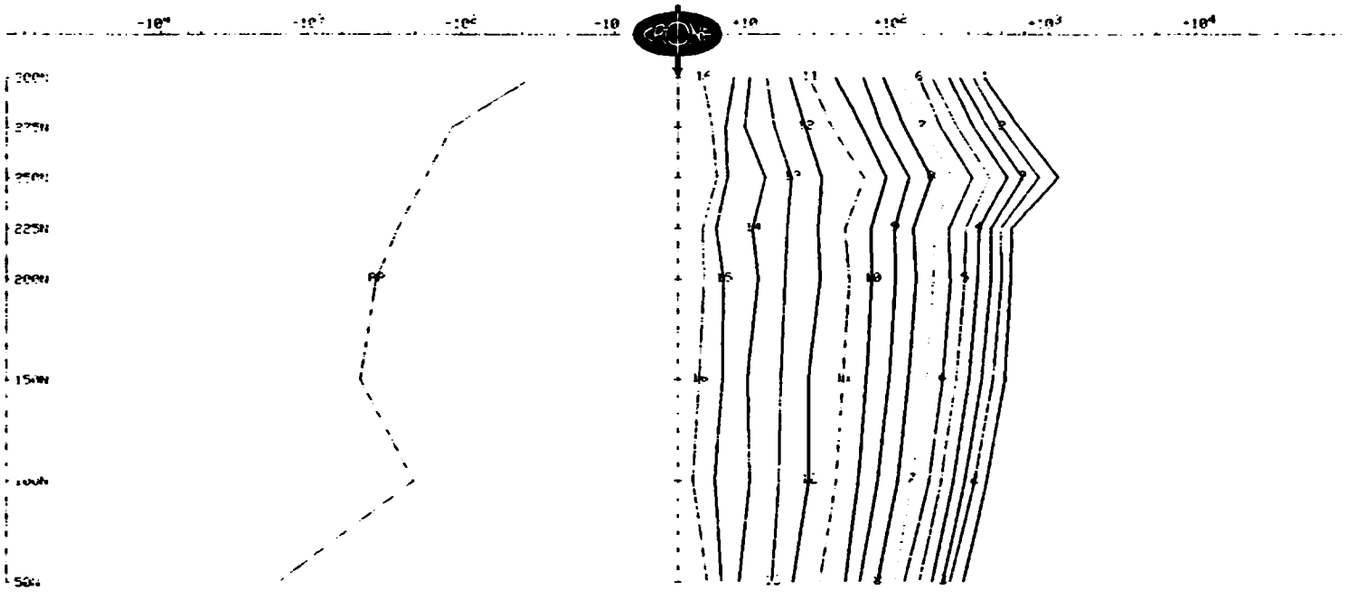


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 200E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L200ET2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

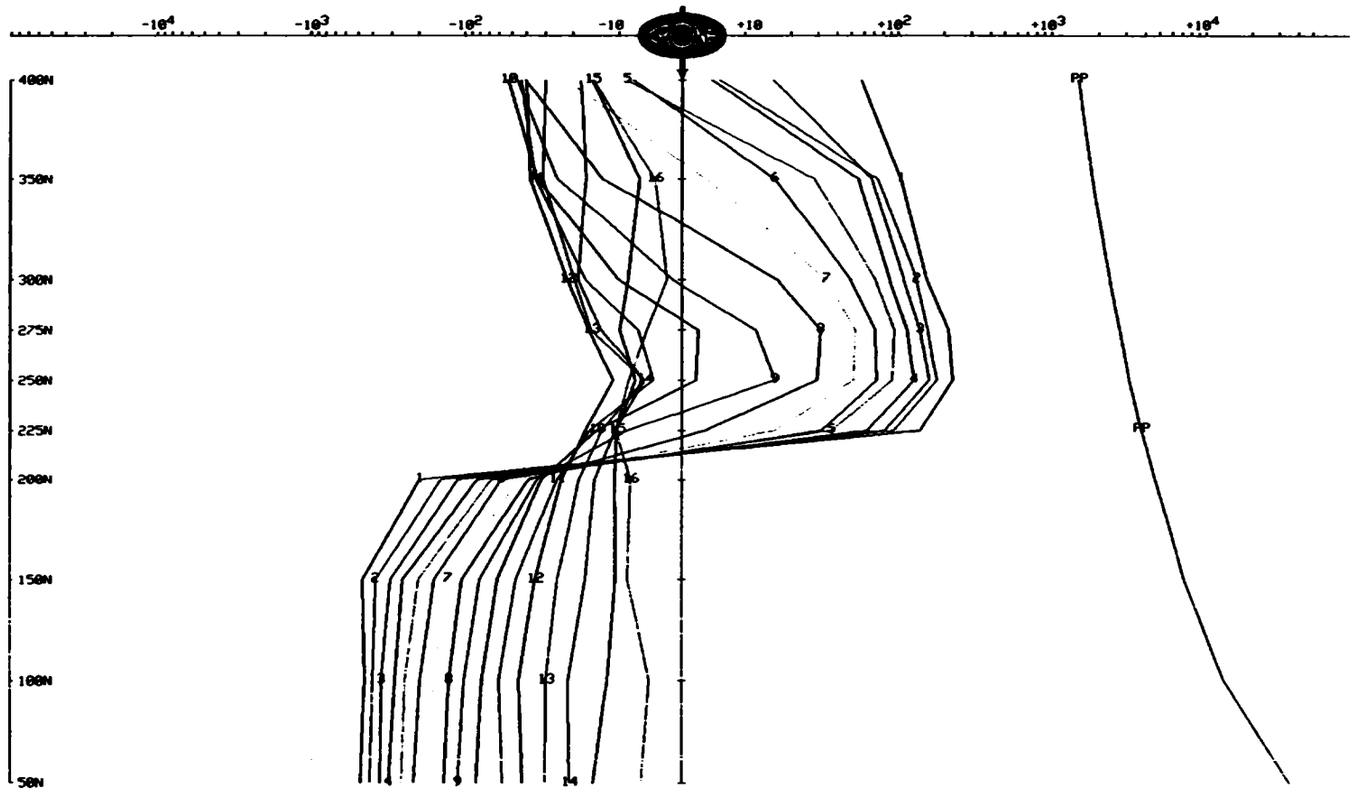


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 300E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L300ET2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

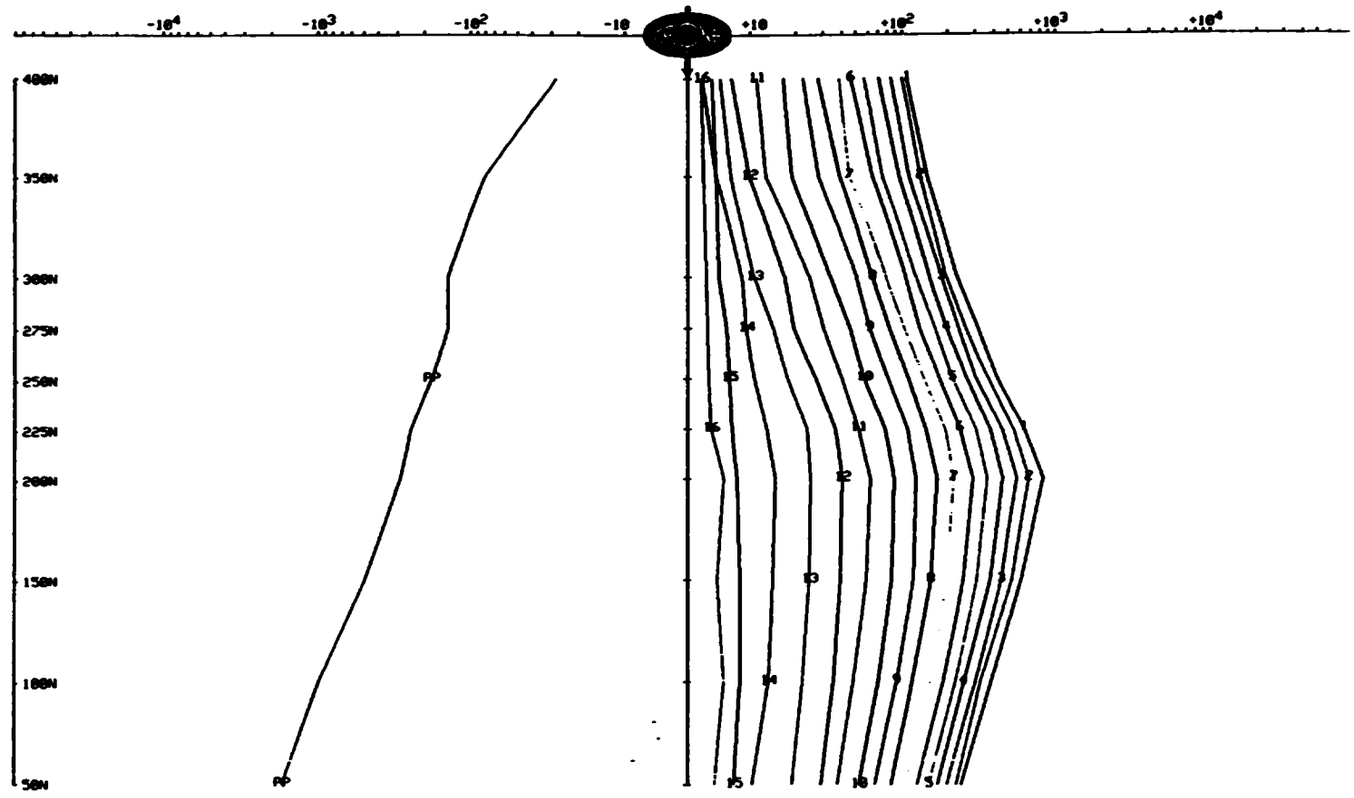


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 300E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L300ET2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



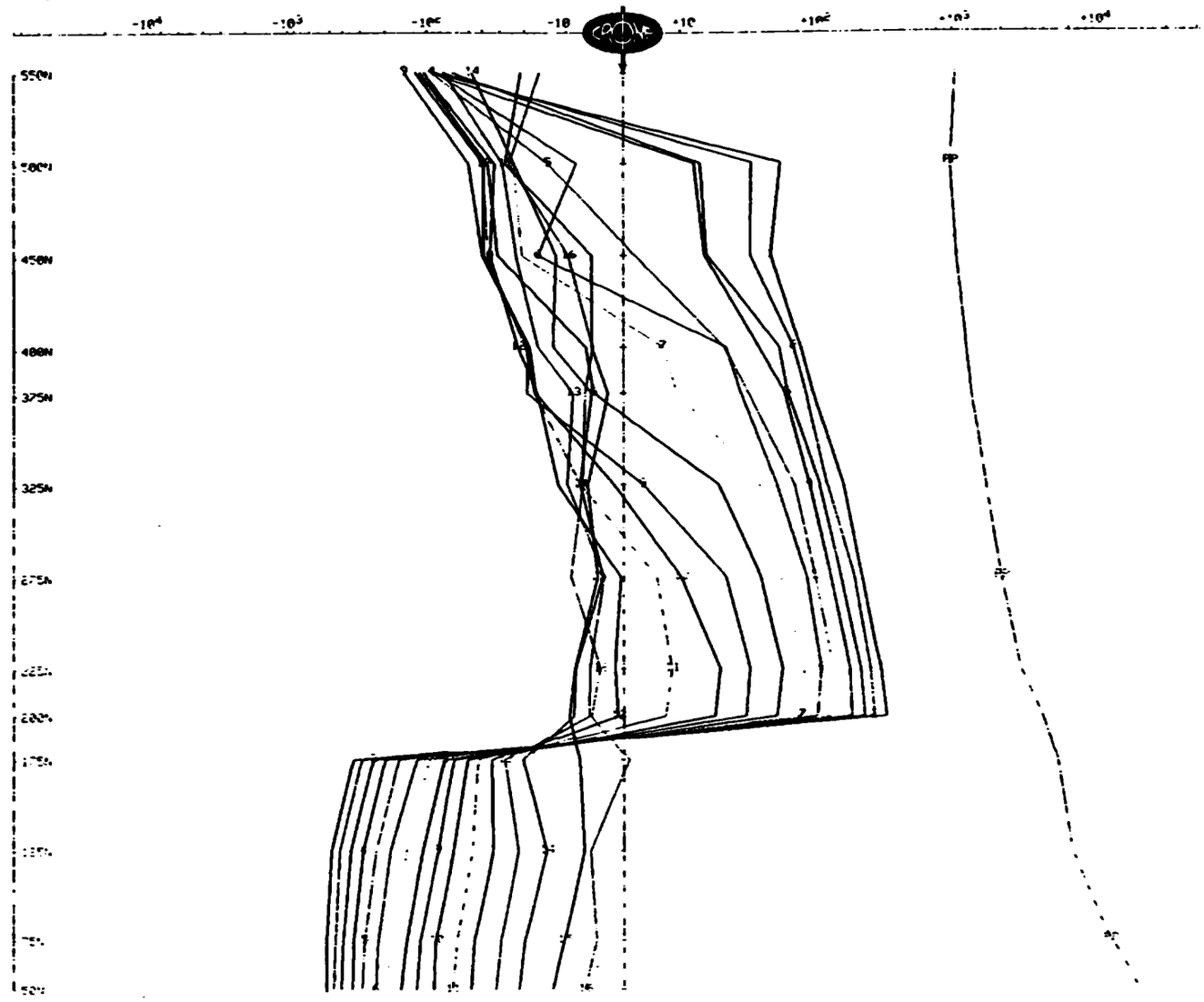
CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client : FALCONBRIDGE
Grid : SASSLAKE
Date : Mar 14, 1995

Line : 400E
Tx Loop : 2
File name : L400T2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

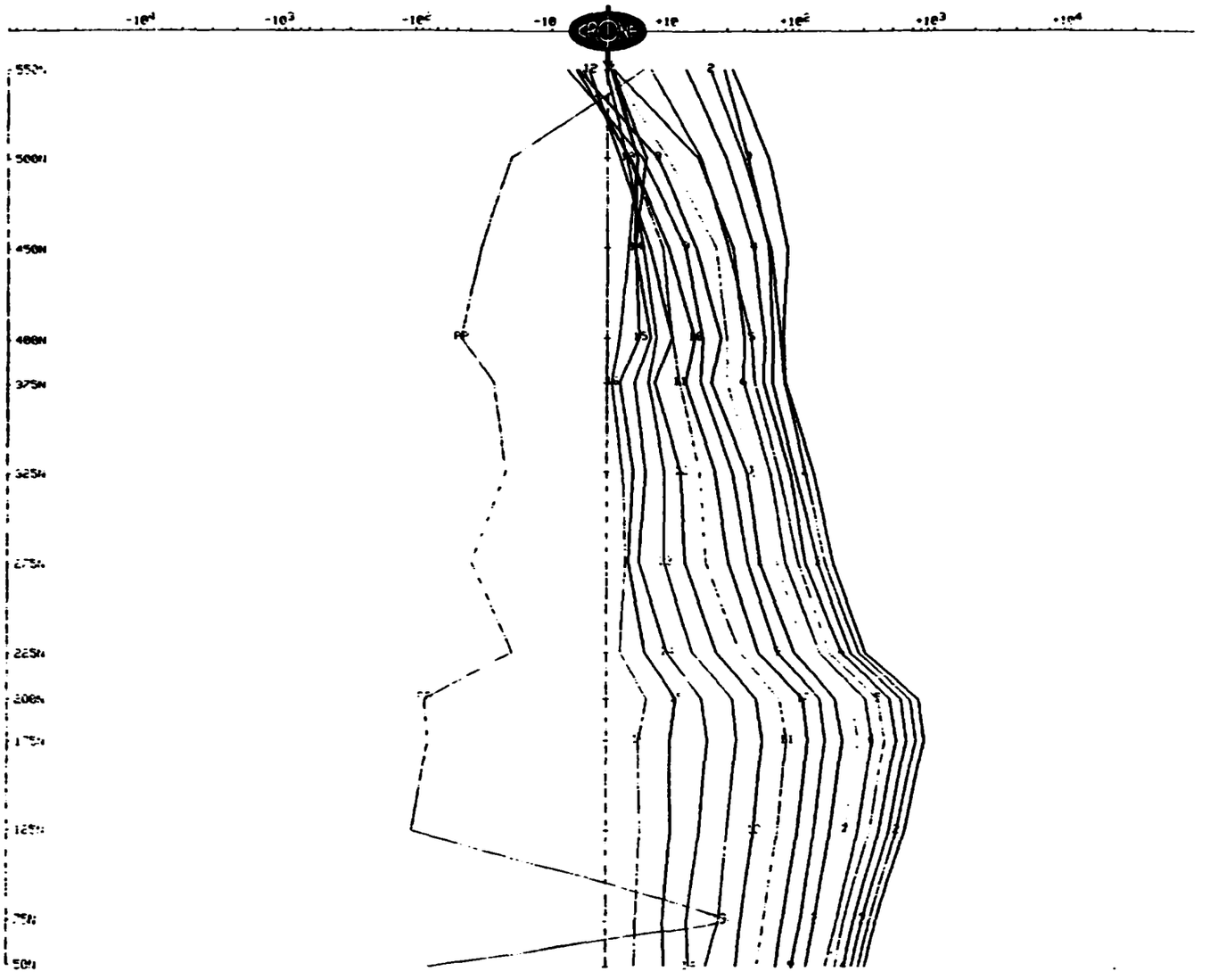


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 400E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L400ET2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

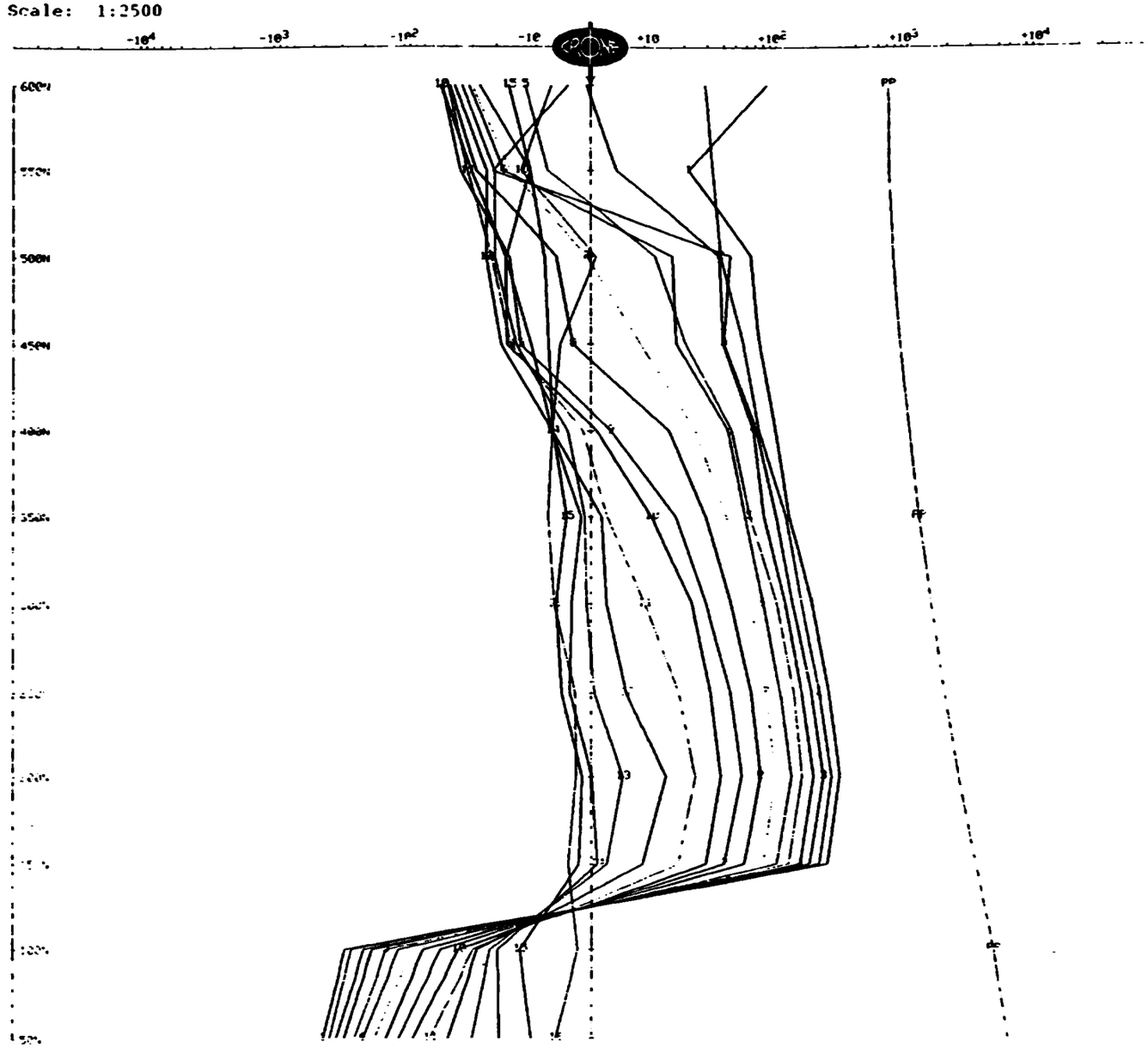


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 500E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L500ET2.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

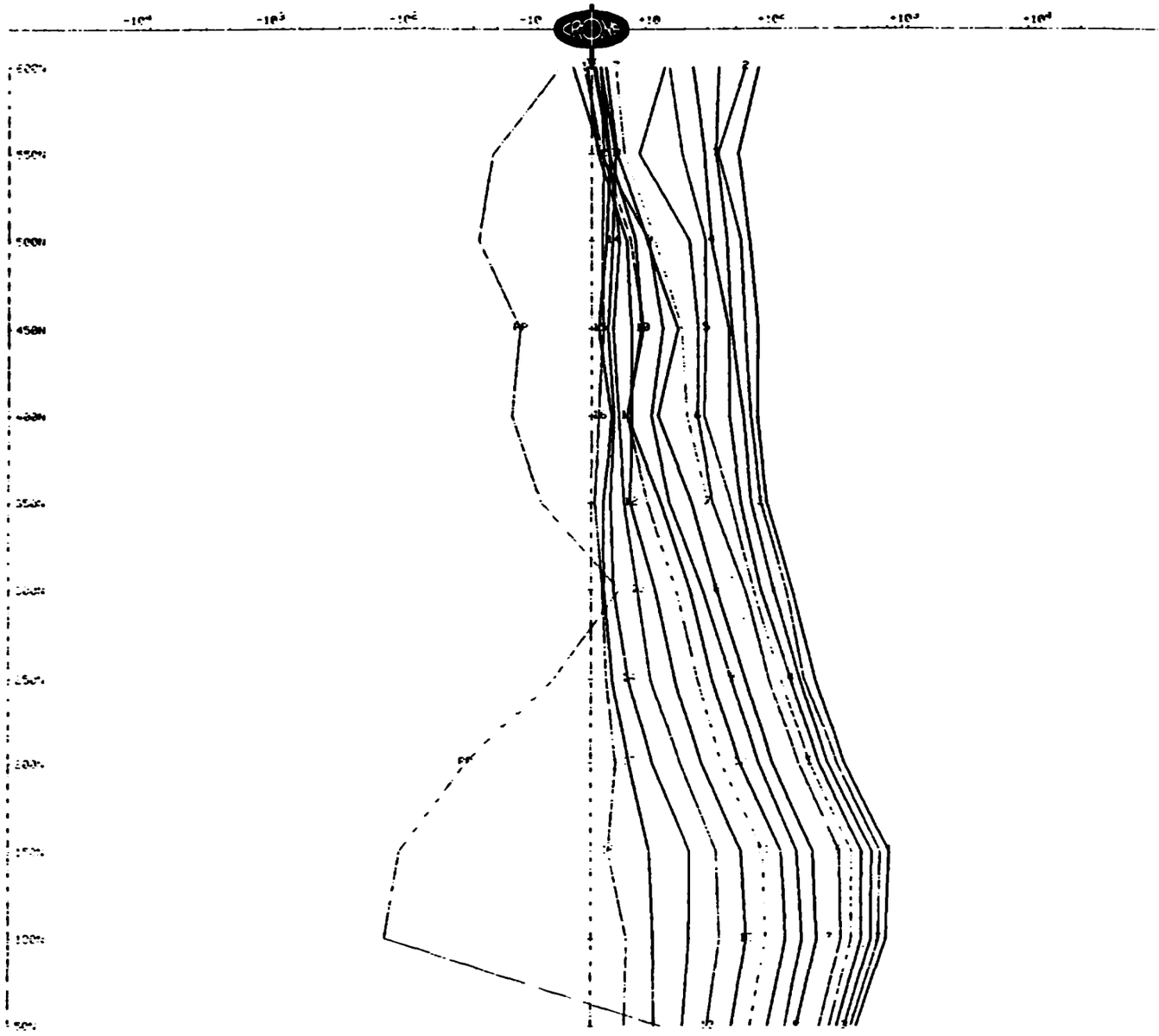


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 500E
Grid	: SASSLAKE	Tx Loop	: 2
Date	: Mar 14, 1995	File name	: L500FT2.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

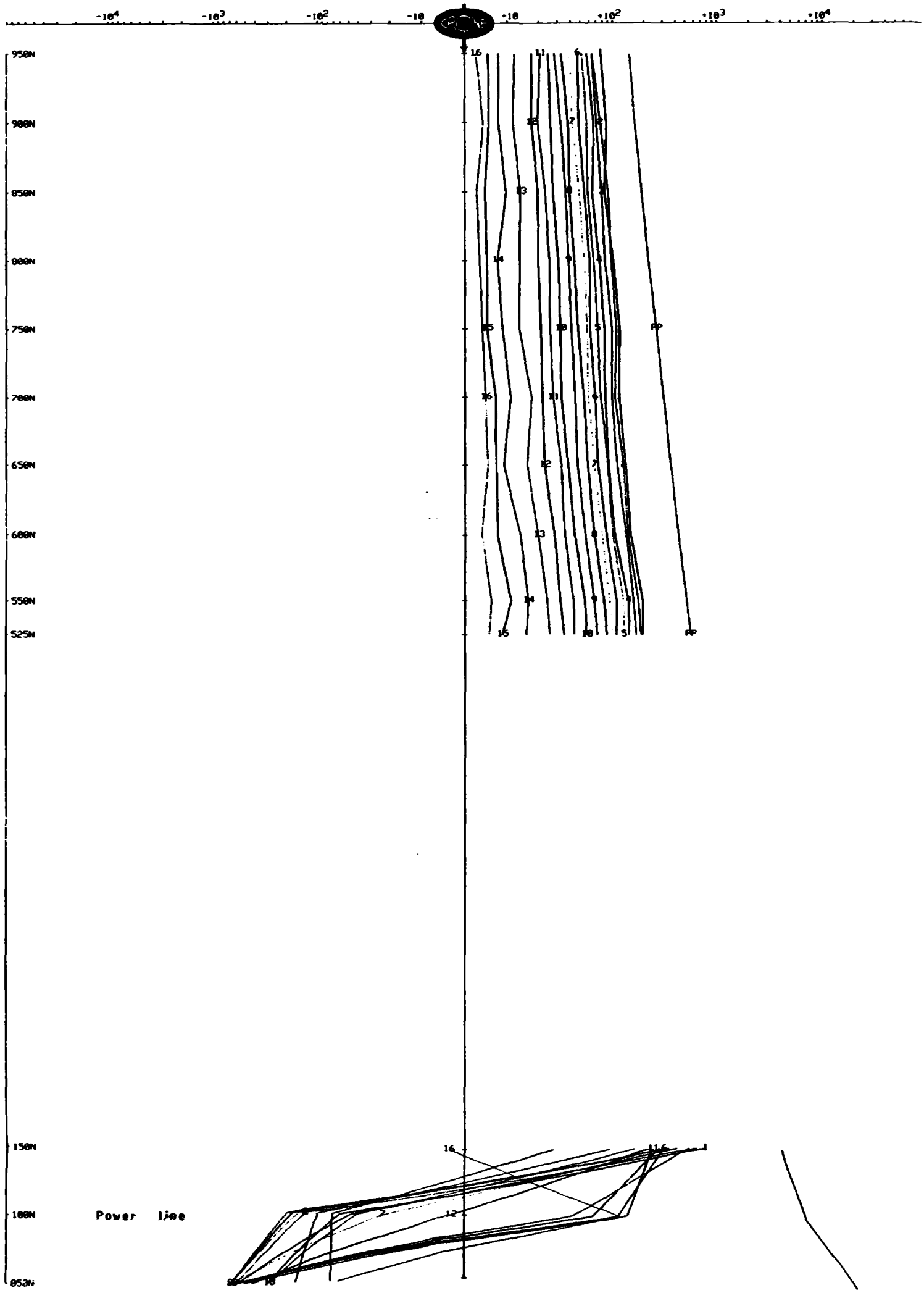


SURFACE PEM

Client	: FALCONBRIDGE	Line	: L800W
Grid	: SASS-LAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L800WT1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

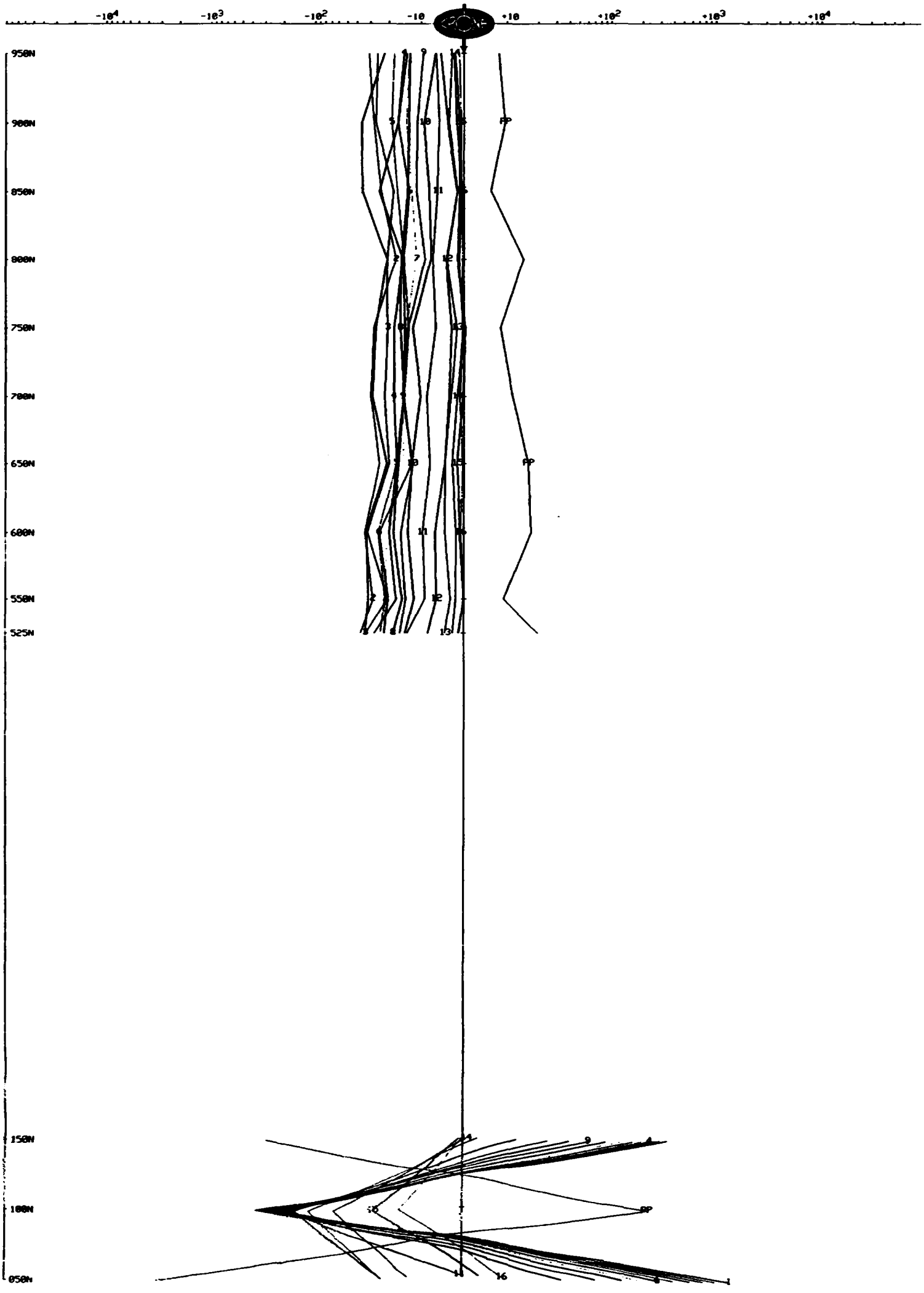


VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L800W
Grid	: SASS-LAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L800WT1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

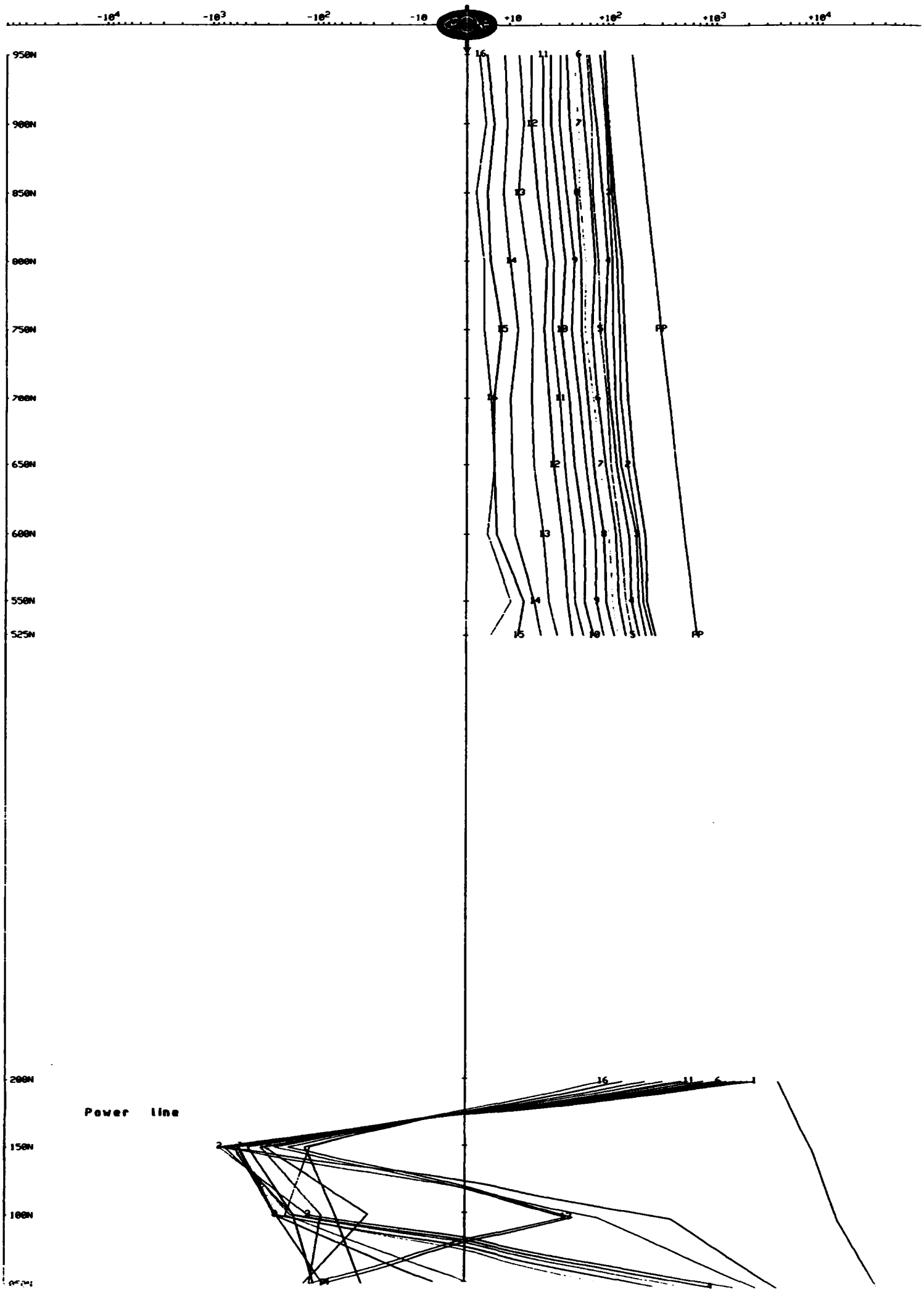


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L700W
Grid	: SASS-LAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L700WT1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

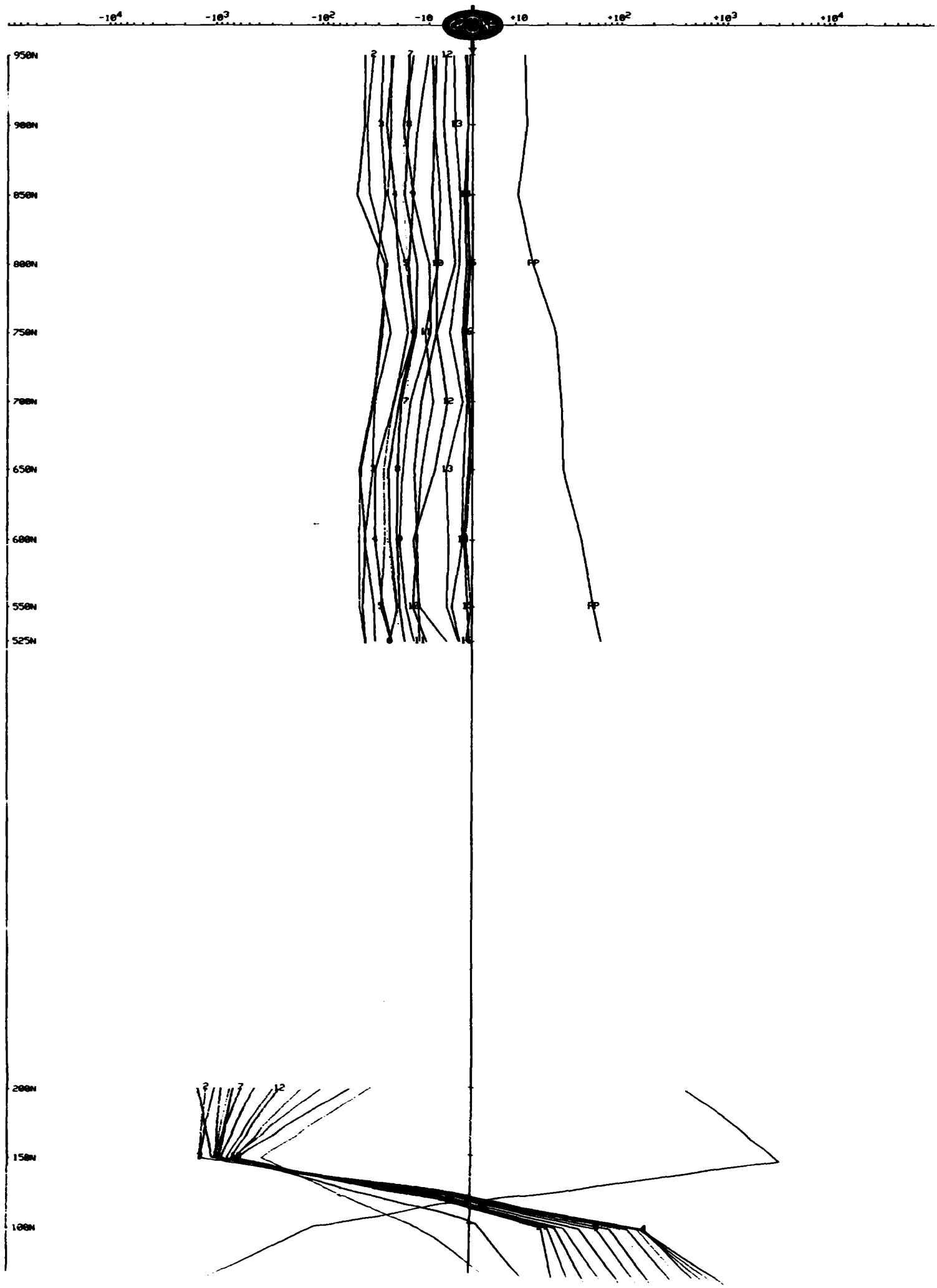


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L700W
Grid	: SASS-LAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L700WT1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



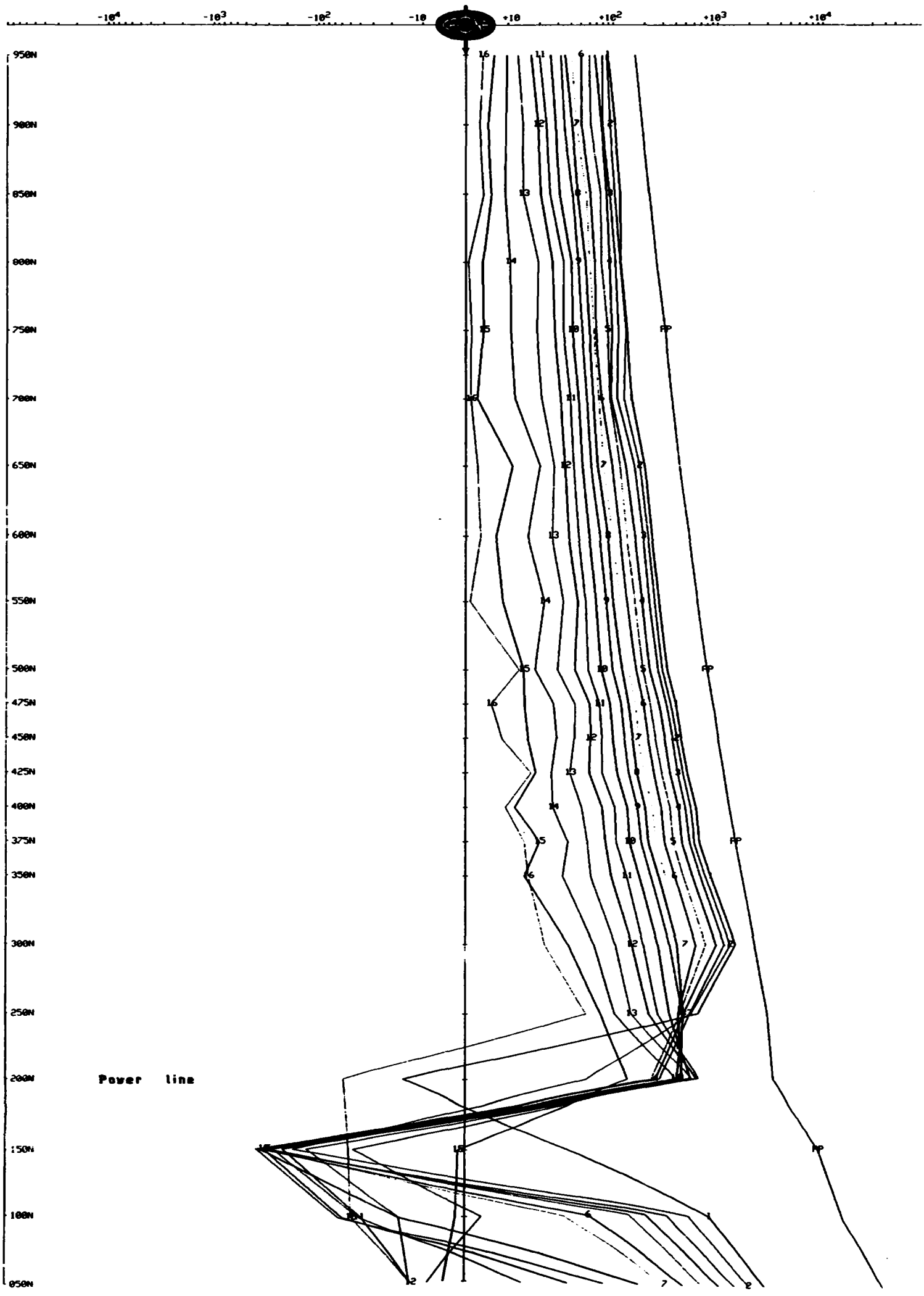
CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client : FALCONBRIDGE
Grid : SASS-LAKE
Date : Mar 15, 1995

Line : L600W
Tx Loop : 1
File name : L600WT1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

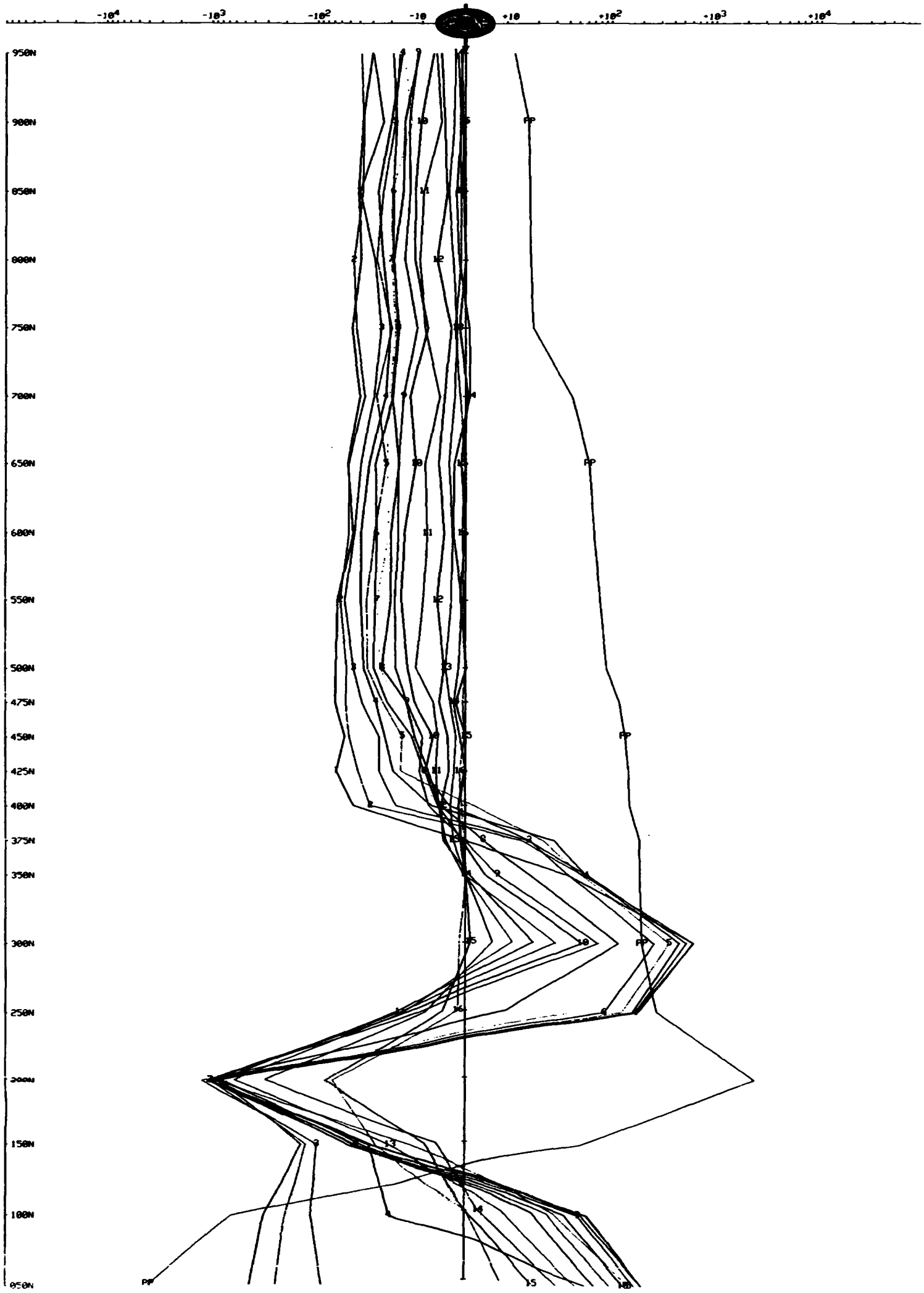


VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: L600W
Grid	: SASS-LAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L600WT1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



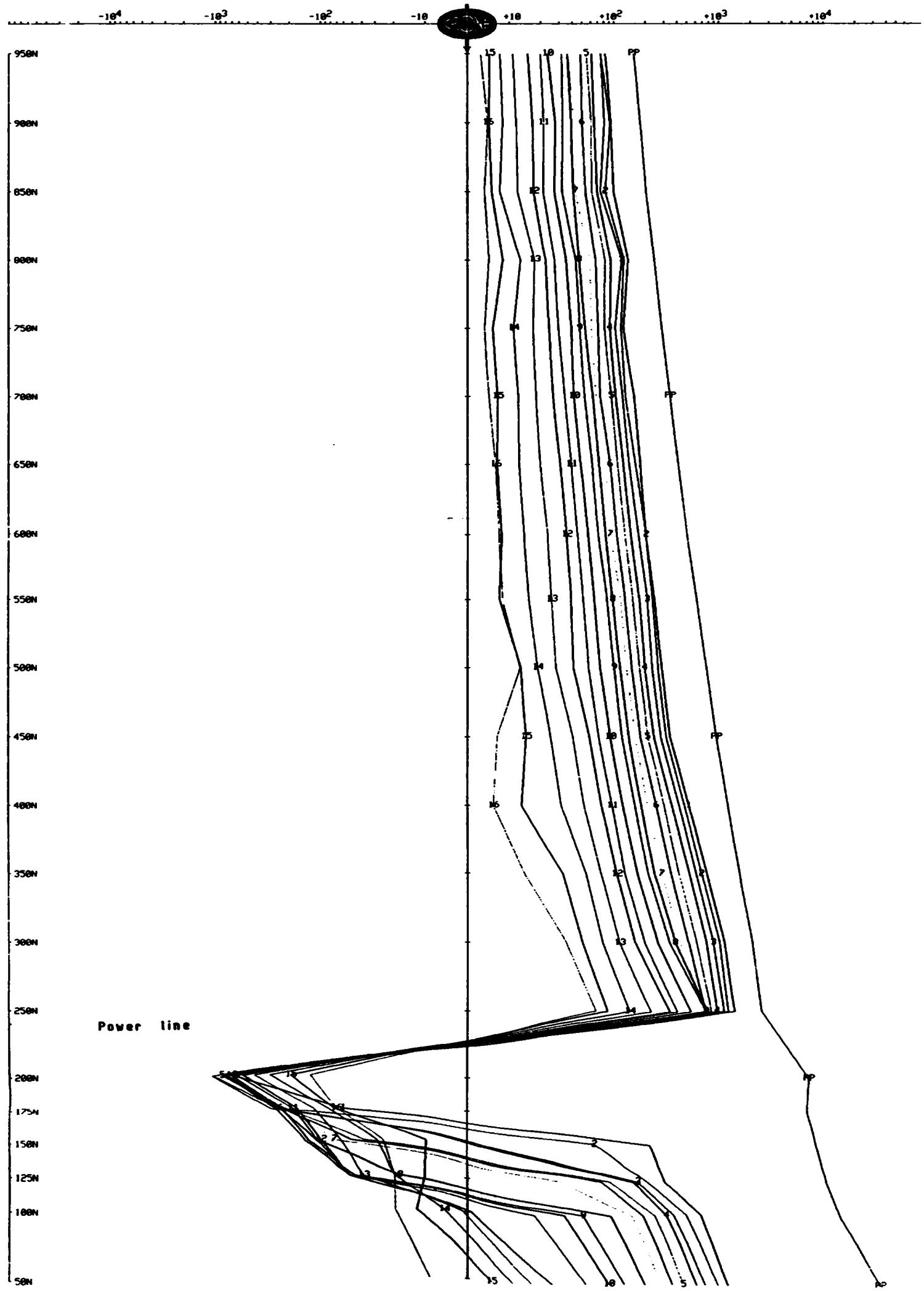
CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client : FALCONBRIDGE
Grid : SASSLAKE
Date : Mar 15, 1995

Line : 500W
Tx Loop : 1
File name : L500WT1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

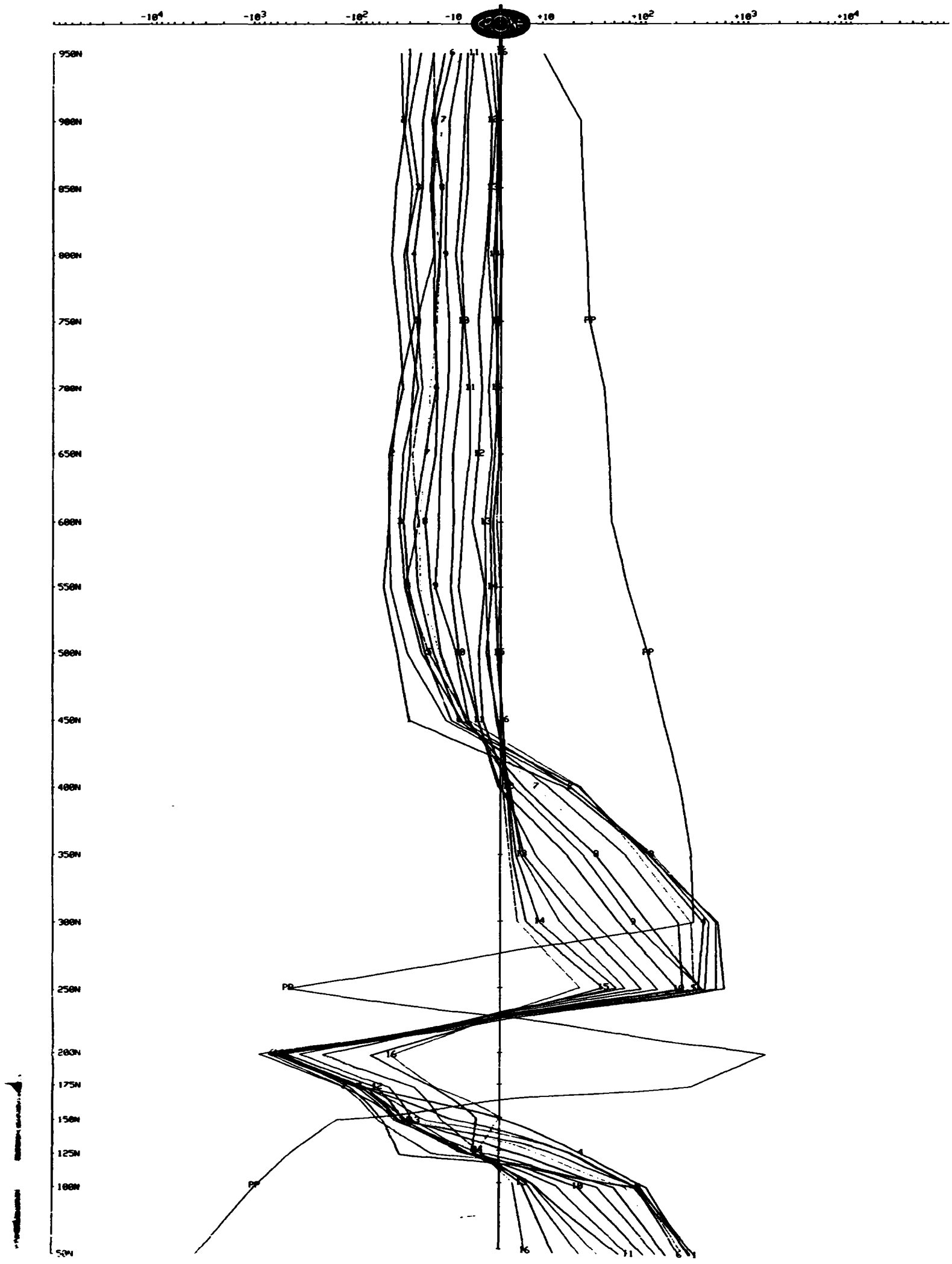


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 500W
Grid	: SASSLAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L500WT1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



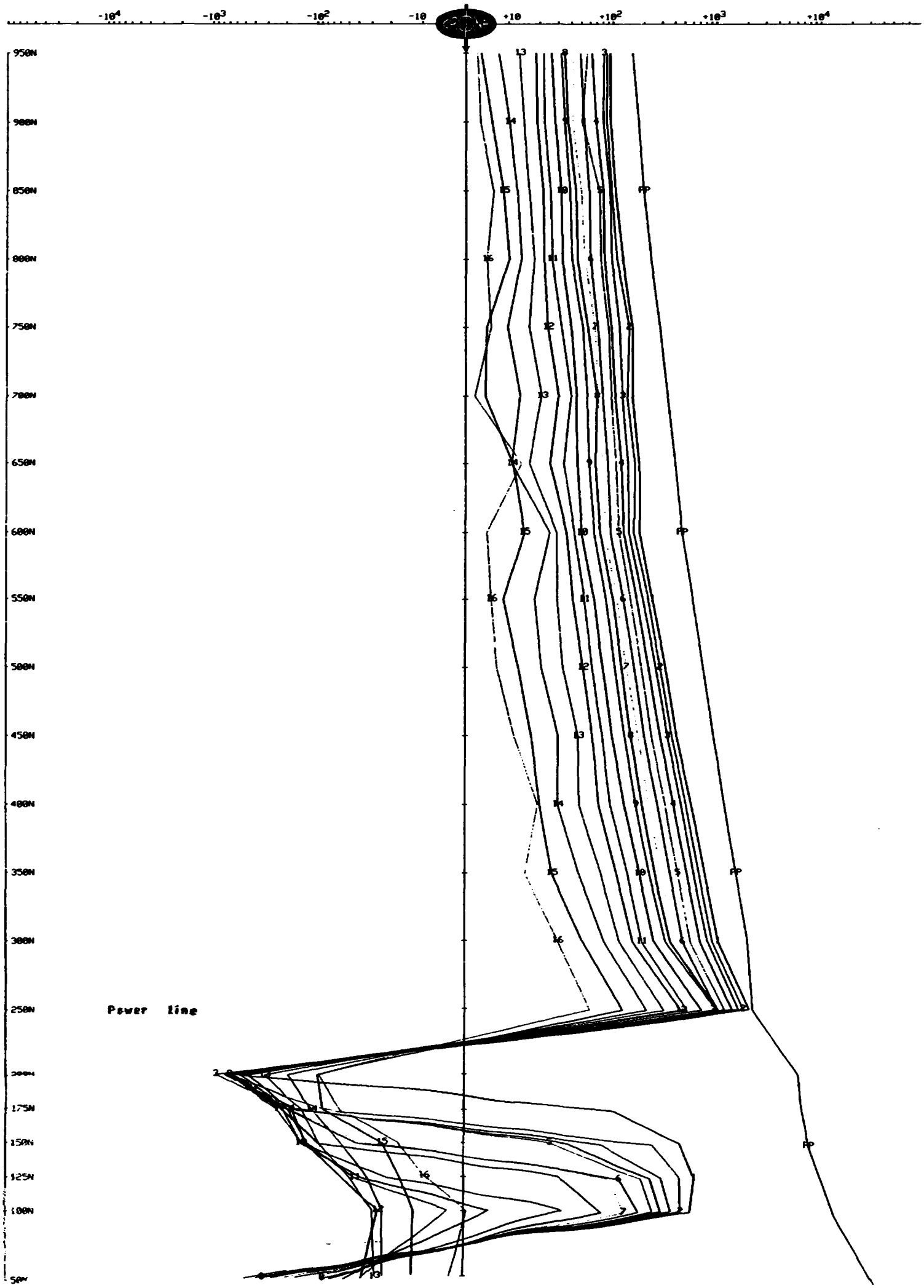
CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client : FALCONBRIDGE
Grid : SASSLAKE
Date : Mar 15, 1995

Line : 400W
Tx Loop : 1
File name : L400WT1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

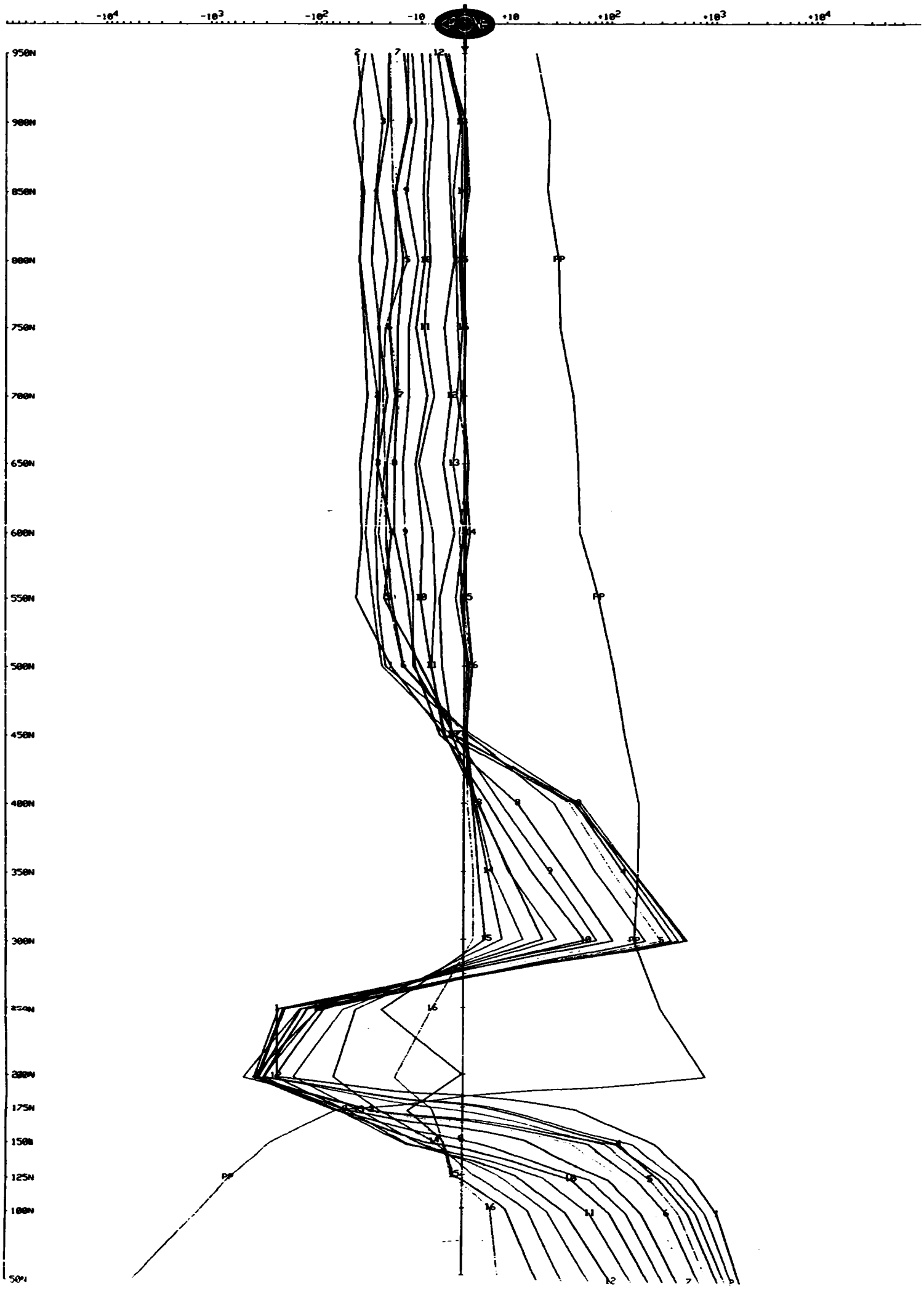


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: FALCONBRIDGE	Line	: 400W
Grid	: SASSLAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L400WT1.PEM

IN-LINE HORIZONTAL COMPONENT dBx/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500

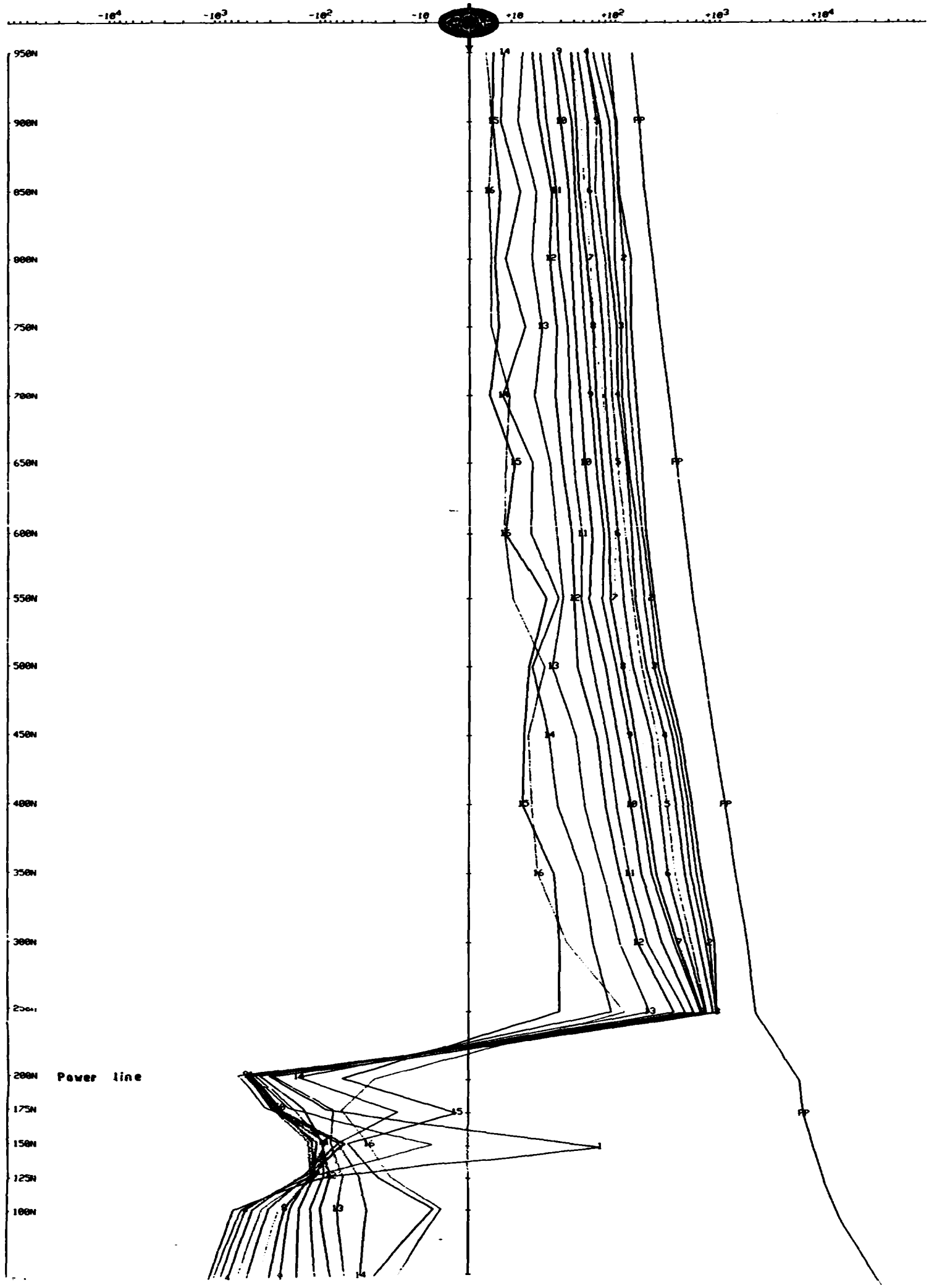


CRONE GEOPHYSICS & EXPLORATION LTD
VAL D'OR GEOPHYSIQUE LTEE
SURFACE PEM

Client	: PALCONBRIDGE	Line	: 300W
Grid	: SASSLAKE	Tx Loop	: 1
Date	: Mar 15, 1995	File name	: L300WT1.PEM

VERTICAL COMPONENT dBz/dt nanoTesla/sec - 16 channels and PP

Scale: 1:2500



Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number
L9580-00779

Res Geol Cobalt

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Street, Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.16290

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations for r Recorder.
- A separate copy of this form must be comple
- Technical reports and maps must accompan
- A sketch, showing the claims the work is ass

31M05NE0126 2 16290 COLEMAN

900

Recorded Holder(s): Falconbridge Limited M5J 2H4		Client No. 130679
Address: Suite 1200, 95 wellington st. W. Toronto		Telephone No. (705) 855-0311
Mining Division: Larder Lake	Township/Area: Coleman	M or G Plan No.
Dates Work Performed — From: March 10 1995	To: March 19 1995	

Work Performed (Check One Work Group Only)

	Work Group	Type
X	Geotechnical Survey	Geophysical report (Deep Em + Mag)
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	SECTION 18 ONLY
	Assays	
	Assignment from Reserve	

RECEIVED
DEC - 8 1995
MINING LANDS BR.

Total Assessment Work Claimed on the Attached Statement of Costs $ 16,829.00

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
Gregg Snyder	Falconbridge Exploration (Address below)
Val Dor Geophysic	50 boul Lamaque Val D'or Quebec

(attach a schedule if necessary)

Certification of Beneficial Interest * See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date: Nov 30/95	Recorded Holder or Agent (Signature)

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying: Gregg Snyder 1977 McKenzie Rd RR #2 Chelmsford ON.

Telephone No. (705) 855-0311	Date: Nov 30/95	Certified By (Signature)

For Office Use Only

Total Value Cr. Recorded	Date Recorded: Dec 5/95	Mining Recorder: ACTING	Received Stamp: RECEIVED LARDER LAKE MINING DIVISION DEC 5 1995
	Deemed Approval Date: March 4/96	Date Approved	
	Date Notice for Amendments Sent		

0241 (03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
2.16290	1118432	1	601	800		
	1118433	2	1203	1600		
	1118434	1	601	800		
	1135884	1	601	801		
	1135885	1	601	756		
	1135886	1	601	801		
	1135887	1	601	801		
	1135984	1	601	656		
	1135985	1	601	601		
	1135986	1	601	265	336	
	1135987	1	601	465	138	
	1135988	1	601	256	345	
	1135989	1	601	465	136	
	1135990	1	601	85	516	
	1135991	1	601	601		
	1135992	1	601	485	116	
	1135995	1	601	601		
	18		$ 10,819.00	$ 10,819.00	$ 1587.00	
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

RECEIVED
DEC - 8 1995
MINING LANDS

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prioritize the deletion of credits. Please mark (✓) one of the following:

1. ☑ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature: [signature] Date: Nov 30/95

(03/91)

Work Report Number for Applying Reserve	Claim Number (see Note 2)	Number of Claim Units	Value of Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1135997	1	601	281	320	
	1135998	1	601	601		
	1179104	1	601	400	201	
	1179123	1	601	400	201	
	1179124	2	601	1600		
	1186049	2	601	1128		
	1186050	1	601	400	201	
	1186051	1	601	400	201	
	1186052	1	601	400	201	
	1198574	1	601	400	201	
	12		$6010.00	$6010.00	$1526.00	
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

2.1690

RECEIVED
DEC - 8 1995
MINING LANDS BRANCH

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to prorize the deletion of credits. Please mark (✓) one of the following:

1. ☑ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respect to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the patented or leased land at the time the work was performed.

Signature: [signature] Date: NOV 30/95

41 (03/91)

CREDIT FORM

FEBRUARY 20, 1996
OUR FILE: 2.16290
TRANSACTION #:W.9580.00779

CLAIM NUMBER	VALUE OF WORK PERFORMED ON CLAIM
L.1118432	804
1118433	800
1118434	800
1135884	800
1135885	800
1135886	800
1135887	800
1135984	800
1135985	800
1135986	800
1135987	165
1135988	800
1135989	800
1135990	800
1135991	800
1135992	165
1135995	165
1135997	165
1135998	165
1179104	800
1179123	800
1179124	800
1186049	800
1186050	800
1186051	0
1186052	0
1198574	800
	16,829

Ontario

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Geoscience Approvals Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

February 20, 1996

Our File: 2.16290
Transaction #: W9580.00779

Mining Recorder
Ministry of Northern Development & Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

Subject: APPROVAL OF ASSESSMENT WORK CREDITS ON MINING CLAIMS L.1118432 ET AL IN COLEMAN TOWNSHIP

Assessment work credits have been approved as outlined on the attached credit form. Note that the credits have been rearranged to more closely reflect where the work was done.

The credits have been approved under Section 14, Geophysics (Mag & EM), Mining Act Regulations.

The approval date is February 19, 1996.

If you have any questions regarding this correspondence, please contact Lucille Jerome at (705) 670-5858.

Yours Sincerely,
ORIGINAL SIGNED BY:
Bruce Gates
for

Ron C. Gashinski
Senior Manager, Mining Lands Section
Mining and Land Management Branch
Mines and Minerals Division

LJ/JL
Enclosure:

cc: Resident Geologist
Cobalt, Ontario

Assessment Files Library
Sudbury, Ontario


BARR TOWNSHIP
FIRSTBROOK TOWNSHIP
BUCKE TOWNSHIP
KITTSON TOWNSHIP
BRIGSTOCKE TOWNSHIP
GILLIES LIMIT TOWNSHIP
LORRAIN TOWNSHIP
ZONE 17
FOR STATUS OF LANDS REFER TO KITTSON TOWNSHIP MAP
COBALT
LATCHFORD
AREA ANNEXED TO TOWN OF LATCHFORD
SNAKE ISLAND
Peterson Lake
Nipissing Lake
Coleman Lake
2.16290
Mag, Em
RECEIVED
DEC - 8 1995
MINING LANDS BRANCH
SYMBOLS
Boundary
Township, Meridian, Baseline
Road allowance, surveyed
shoreline
Lot/Concession, surveyed
unsurveyed
Parcel surveyed
unsurveyed
Right-of-way, road
railway
utility
Reservation
Cliff, Pit, Pile
Contour
Interpolated
Approximate
Depression
Control point (horizontal)
Flooded land
Mine head frame
Pipeline (above ground)
Railway, single track
double track
abandoned
Road, highway, county, township
access
trail, bush
Shoreline (original)
Transmission line
Wooded area
AREAS WITHDRAWN FROM DISPOSITION
MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights
DATE OF ISSUE
DEC 6 1995
LARDER LAKE MINING RECORDER'S OFFICE
Ministry of Natural Resources
Ministry of Northern Development and Mines
Ontario
INDEX TO LAND DISPOSITION
PLAN
G-3418
TOWNSHIP
COLEMAN
M.N.R. ADMINISTRATIVE DISTRICT
TEMAGAMI
MINING DIVISION
LARDER LAKE
LAND TITLES/REGISTRY DIVISION
TIMISKAMING
"THIS MAP SHOWS THE APPROXIMATE LOCATION OF THE BOUNDARIES OF THE AREA WHICH IS THE SUBJECT OF CURRENT LITIGATION. THE EXACT LOCATION WILL BE SHOWN FOLLOWING CONFIRMATION BY THE PARTIES TO THE ACTION."
NOTES
Scale 1:20 000
Contour Interval 10 Metres
DISPOSITION OF CROWN LANDS
Patent
Surface & Mining Rights
Surface Rights Only
Mining Rights Only
Lease
Surface & Mining Rights
Surface Rights Only
Mining Rights Only
Licence of Occupation
Order-in-Council
Cancelled
Reservation
Sand & Gravel
NOTICE OF FORESTRY ACTIVITY
THIS TOWNSHIP / AREA FALLS WITHIN THE LATCHFORD MANAGEMENT UNIT AND MAY BE SUBJECT TO FORESTRY OPERATIONS. THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT:
P.O. BOX 38
LAKESHORE DRIVE
TEMAGAMI, ON
P0H 2H0
705-569-3622
THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON
geology reference-COBALT
COPY OF THIS MYLAR ARCHIVED NOV 20/91
BECAUSE COPY ARCHIVED ON AUG 29/91 WAS NOT WHOLE MAP
COPY OF THIS MYLAR ARCHIVED AUG 29/91
Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources
The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only

COLEMAN TWP

G-3418

31M05NE0136 2.16290 COLEMAN

200

CULTURAL AND PHYSIOGRAPHIC FEATURES

- All weather road (paved, gravel)
- Secondary road
- Trail
- Buildings
- Campsite
- Power Line (major line, regular line)
- Telephone Line (usable, unusable)
- Pipeline
- Railroad Track
- Tower
- Bridge
- River (open, rapids)
- Intermittent Stream
- Lake
- Swamp
- Claim Post (located, unlocated, witness)
- Survey Pin (located, unlocated)
- Lot/Concession Corner Pin (located, government defined)
- Twp line
- Falconbridge property (ies)

BUCKE TWP.

COLEMAN TWP.

GILLIES LIMIT TWP.

Graham Lake

Sharp Lake

Starr's Pond

SASAGINAGA LAKE

Sasaginaga

Dam

CORKILL ISLAND

GREENSTONE ISLAND

COBALT

COBALT LAKE

SHORT LAKE

MOFFAT LAKE

PRETTY LAKE

CLEAR LAKE

GREEN LAKE

1185553

1118435

1180652

1180651

1180649

1179123

1179124

1180650

1179105

1118434

1135885

1135886

1135887

1135984

1135988

1135983

1135991

1135985

1135989

1135990

1135997

1135987

1135986

1135995

1135998

1135992

1179104

TL 2S

TL 4S

TL 825S

TL 400N

TL960N

TL675S

TL850S

BL

sand and gravel quarry

LOOP #1

LOOP #2

LOOP #3

LEGEND

INTERPRETATION.

- Relatively low resistivity unit with respect to immediate surroundings. Bedrock valley, thicker overburden, with or without an associated tectonic structure.
- Relatively high resistivity unit with respect to immediate surroundings. Bedrock ridge, thinner overburden, more resistive lithological unit.
- Well-defined Pulse DEEPEM bedrock conductor. Conductance higher than 40 mhos Definitely metallic causes, continuous, massive to semi-massive mineralisation.
- Low conductivity Pulse DEEPEM conductor, or lower than 20 mhos. Causes possibly metallic: Discontinuous, stringer or disseminated mineralisation. Or electrolytic: conductive tectonic structure.
- Depth, conductance and dip estimates of bedrock conductors
- Interpreted shear zone.
- Interpreted fault.

PULSE E.M. PROFILES

Horizontal component dBx/dt

First cm., Linear scale; 1 cm = 10 nTesla/s
Next cm., Log. scale; .5 cm = 1 decade nTesla/s

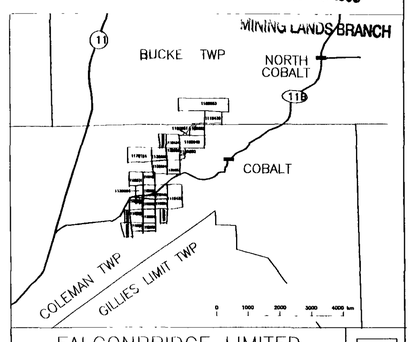
Channels 1 to 8

100000 1000 10 0 -10 -1000 -100000

Base Time. 8.33 ms
Ramp Time: 1.50 ms
Instrument: CRONE System

2.16290

RECEIVED
DEC - 8 1995
MINING LANDS BRANCH



FALCONBRIDGE LIMITED

Exploration Division — Chelmsford ONTARIO

SASS LAKE PROJECT
PULSE EM SURVEY (DEEPEM)

HORIZONTAL COMPONENT PROFILES (X)
CHANNELS 1-8 LOOPS 1, 2, 3 & 4

VAL D'OR GEOPHYSICS LTD

Interpreted by: P. Boileau, P. Eng.

TRACED	DATE	03/95	NTS 31M5	PROJECT	95-1192-5.1_1
DRAWN	DATE		MAP No	FILE	SASSGRID.DWG
SUPERVISED	DATE	03/95	SCALE 1:5000		
REVISED	DATE		0 50 100 150 200m		

CULTURAL AND PHYSIOGRAPHIC FEATURES

- All weather road (paved, gravel)
- Secondary road
- Trail
- Buildings
- Campsite
- Power Line (major line, regular line)
- Telephone Line (usable, unusable)
- Pipeline
- Railroad Track
- Tower
- Bridge
- River (open, rapids)
- Intermittent Stream
- Lake
- Swamp
- Claim Post (located, unlocated, witness)
- Survey Pin (located, unlocated)
- Lot/Concession Corner Pin (located, government defined)
- Twp line
- Falconbridge property (ies)

Graham Lake

1185553

1118435

BUCKE TWP.

COLEMAN TWP.

1180652

CORKILL ISLAND

1180651

SASAGINAGA LAKE

Sasaginaga

Sharp Lake

Starr's Pond

179123

1180649

Dam

BL

GREENSTONE ISLAND

1180650

1179124

TL 2S

TL 4S

1135886

1135885

1135884

CLEAR LAKE

LOOP #4

1135883

TL 825S

1179105

COBALT

TL960N

1198174

1179104

LOOP #3

COBALT LAKE

TL 400N

1135988

1135984

1118432

1118433

1135991

1135985

LOOP #1

1135989

LOOP #2

1135990

1135997

1135987

1135986

TL675S

1135995

TL850S

1135998

MOFFAT LAKE

1135992

sand and gravel quarry

SHORT LAKE

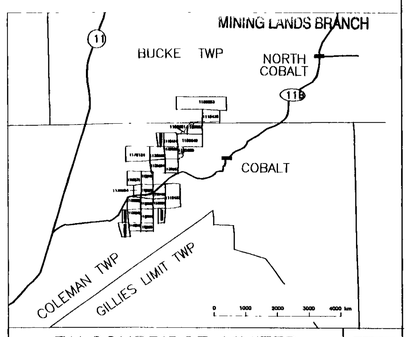
GILLIES LIMIT TWP.

2.16290

RECEIVED

DEC - 8 1995

MINING LANDS BRANCH



LEGEND

INTERPRETATION.

- L L — Relatively low resistivity unit with respect to immediate surroundings Bedrock valley, thicker overburden, with or whitout an associated tectonic structure.
- H H — Relatively high resistivity unit with respect to immediate surroundings. Bedrock ridge, thinner overburden, more resistive lithological unit.
- Well-defined Pulse DEEPEM bedrock conductor. Conductance higher than 40 mhos Definitely metallic causes, continuous, massive to semi-massive mineralisation.
- Low conductivity Pulse DEEPEM conductor, or lower than 20 mhos. Causes possibly metallic: Discontinuous, stringer or disseminated mineralisation. Or electrolytic: conductive tectonic structure
- 20 m 60 mhos — Depth, conductance and dip estimates of bedrock conductors
- Interpreted shear zone.
- Interpreted fault.

PULSE E.M. PROFILES

Horizontal component dBx/dt

First cm., Linear scale; 1 cm = 100 nTesla/s
Next cm., Log scale; 1 cm = 1 decade nTesla/s

Channels 9 to 16

10000 1000 100 0 -100 -1000 -10000

Base Time: 8.33 ms
Ramp Time: 1.50 ms
Instrument. CRONE System

FALCONBRIDGE LIMITED

Exploration Division — Chelmsford ONTARIO

SASS LAKE PROJECT
PULSE EM SURVEY (DEEPEM)

HORIZONTAL COMPONENT PROFILES (X)
CHANNELS 9-16 LOOPS 1, 2, 3 & 4

VAL D'OR GEOPHYSICS LTD

Interpreted by: P. Bolleau, P. Eng.

TRACED	DATE 03/95	NTS 31M5	PROJECT. 95-1192-5.1_2
DRAWN	DATE	MAP No	FILE SASSGRID DWG
SUPERVISED	DATE 03/95	SCALE 1:5000	0 50 100 150 200m
REVISED	DATE		

31M05NE0125 2.16290 COLEMAN

CULTURAL AND PHYSIOGRAPHIC FEATURES

- All weather road (paved, gravel)
- Secondary road
- Trail
- Buildings
- Campsite
- Power Line (major line, regular line)
- Telephone Line (usable, unusable)
- Pipeline
- Railroad Track
- Tower
- Bridge
- River (open rapids)
- Intermittent Stream
- Lake
- Swamp
- Claim Post (located, unlocated, witness)
- Survey Pin (located, unlocated)
- Lot/Concession Corner Pin (located, government defined)
- Twp line
- Falconbridge property (ies)

BD

BD

Graham Lake

1185553

1118435

BUCKE TWP.

COLEMAN TWP.

1180652

CORKILL ISLAND

1180651

SASAGINAGA LAKE

1180649

Sasaginaga

Dam

Sharp Lake

Starr's Pond

1179125

1118434

BL

1180650

GREENSTONE ISLAND

1179124

TL 2S

TL 4S

1135886

1135887

1135884

LOOP #4

1179105

COBALT

TL 960N

1135874

1179104

LOOP #3

TL 400N

1118433

1135988

1135991

1135985

1135989

LOOP #1

LOOP #2

1135990

1135997

1135987

1135986

TL675S

1135995

TL850S

1135998

MOFFAT LAKE

COBALT LAKE

SHORT LAKE

1135992

sand and gravel quarry

GILLIES LIMIT TWP.

31M05NE0126 2.16290 COLEMAN

230

LEGEND

INTERPRETATION.

L L — Relatively low resistivity unit with respect to immediate surroundings Bedrock valley, thicker overburden, with or without an associated tectonic structure

H H — Relatively high resistivity unit with respect to immediate surroundings Bedrock ridge, thinner overburden, more resistive lithological unit

Well-defined Pulse DEEPEM bedrock conductor
Conductance higher than 40 mhos Definitely metallic causes, continuous, massive to semi-massive mineralisation

Low conductivity Pulse DEEPEM conductor, or lower than 20 mhos Causes possibly metallic
Discontinuous, stringer or disseminated mineralisation
Or electrolytic. conductive tectonic structure

50 m / 16 — Depth, number of channels.

Interpreted shear zone

Interpreted fault

PULSE E.M. PROFILES

Vertical component dBz/dt

First cm, Linear scale, 1 cm = 10 nTesla/s
Next cm, Log scale, 5 cm = 1 decade nTesla/s

Channels 1 to 8
Primary Pulse

100000 1000 10 0 -10 -1000 -100000

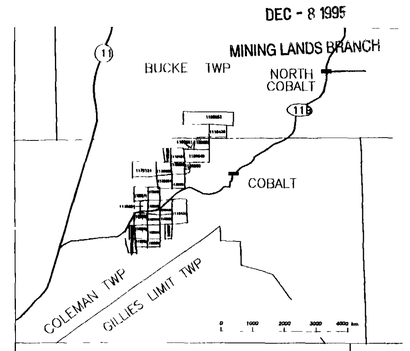
Base Time 8.33 ms
Ramp Time 1.50 ms
Instrument. CRONE System

2.16290

RECEIVED

DEC - 8 1995

MINING LANDS BRANCH



FALCONBRIDGE LIMITED

Exploration Division — Chelmsford ONTARIO

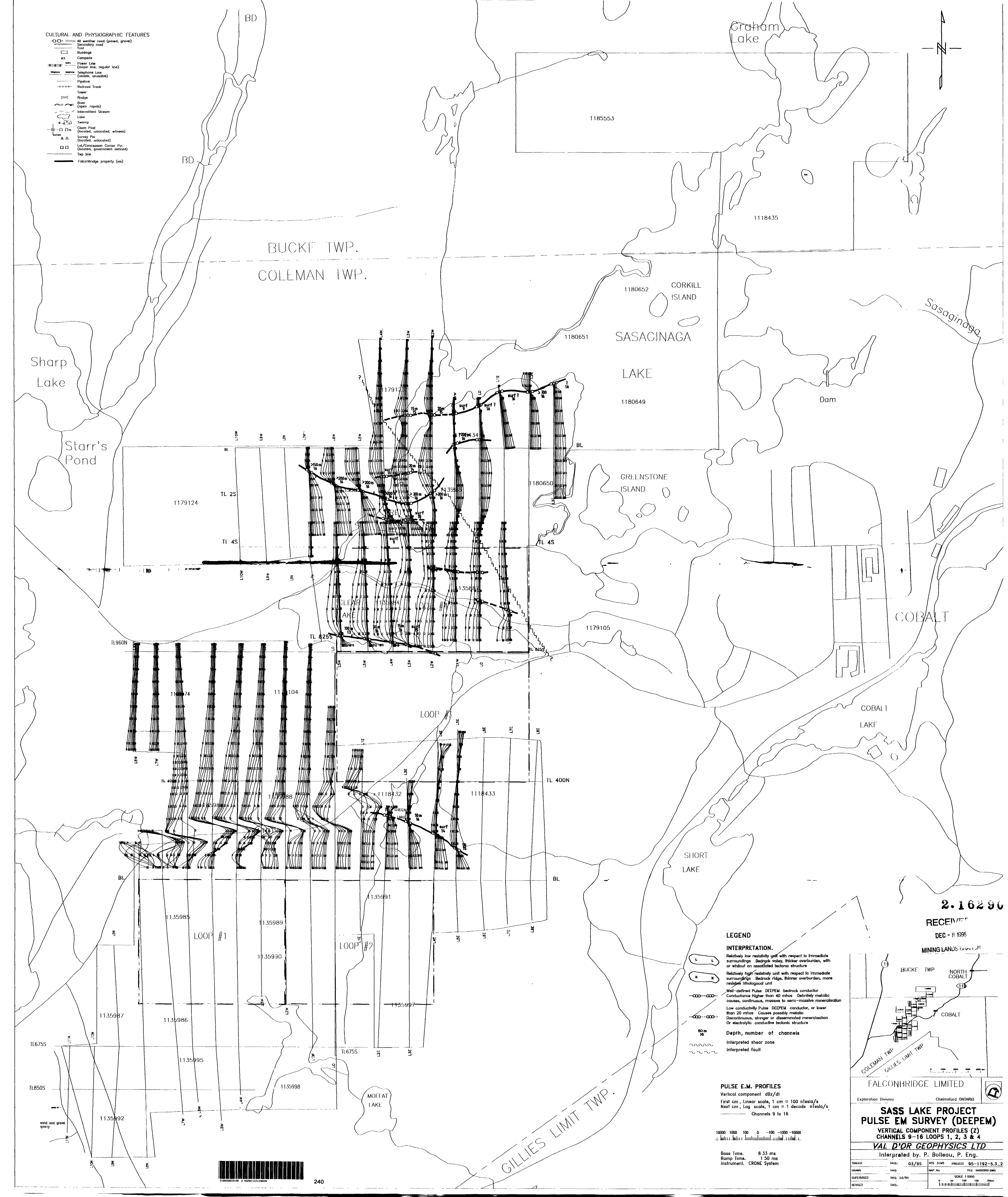
SASS LAKE PROJECT
PULSE EM SURVEY (DEEPEM)

VERTICAL COMPONENT PROFILES (Z)
CHANNELS 1-8 & P. P. LOOPS 1, 2, 3 & 4

VAL D'OR GEOPHYSICS LTD

Interpreted by: P. Boileau, P. Eng.

TRACED	DATE	03/95	NTS 31M5	PROJECT	95-1192-5 3_1
DRAWN	DATE		MAP No	FILE	SASSGRID.DWG
SUPERVISED	DATE	03/95	SCALE 1:5000		
REVISED	DATE		0 50 100 150 200m		



CULTURAL AND PHYSIOGRAPHIC FEATURES
All weather road (paved, gravel)
Secondary road
Trail
Buildings
Campsite
Power Line (major line, regular line)
Telephone Line (usable, unusable)
Pipeline
Railroad Track
Tower
Bridge
River (open rapids)
Intermittent Stream
Lake
Swamp
Claim Post (located, unlocated, witness)
Survey Pin (located, unlocated)
Lot/Concession Corner Pin (located, government defined)
Twp line
Falconbridge property (ies)
BD
Graham Lake
1185553
1118435
BUCKE TWP.
COLEMAN TWP.
1180652
CORKILL ISLAND
Sasaginaga
1180651
SASAGINAGA LAKE
1180649
Sharp Lake
Starr's Pond
Dam
GREENSTONE ISLAND
1180650
1179124
TL 2S
TL 4S
BL
CLEAR LAKE
COBALT
1179105
TL 825S
TL960N
LOOP #3
COBALT LAKE
1118432
1118433
TL 400N
SHORT LAKE
1135991
1135985
1135989
LOOP #1
LOOP #2
1135990
1135997
1135987
1135986
1135995
TL675S
TL850S
1135998
MOFFAT LAKE
1135992
sand and gravel quarry
GILLIES LIMIT TWP.
2.16290
RECEIVED
DEC - 8 1995
MINING LANDS BRANCH
LEGEND
INTERPRETATION.
Relatively low resistivity unit with respect to immediate surroundings Bedrock valley, thicker overburden, with or whitout an associated tectonic structure
Relatively high resistivity unit with respect to immediate surroundings Bedrock ridge, thinner overburden, more resistive lithologocal unit
Well-defined Pulse DEEPEM bedrock conductor Conductance higher than 40 mhos Definitely metallic causes, continuous, massive to semi-massive mineralisation
Low conductivity Pulse DEEPEM conductor, or lower than 20 mhos Causes possibly metallic Discontinuous, stringer or disseminated mineralisation Or electrolytic conductive tectonic structure
50 m 16
Depth, number of channels
Interpreted shear zone
Interpreted fault
PULSE E.M. PROFILES
Vertical component dBz/dt
First cm , Linear scale, 1 cm = 100 nTesla/s
Next cm , Log scale, 1 cm = 1 decade nTesla/s
Channels 9 to 16
10000 1000 100 0 -100 -1000 -10000
Base Time. 8 33 ms
Ramp Time. 1 50 ms
Instrument. CRONE System
BUCKE TWP
NORTH COBALT
COBALT
COLEMAN TWP
GILLIES LIMIT TWP
FALCONBRIDGE LIMITED
Exploration Division
Chelmsford ONTARIO
SASS LAKE PROJECT
PULSE EM SURVEY (DEEPEM)
VERTICAL COMPONENT PROFILES (Z)
CHANNELS 9-16 LOOPS 1, 2, 3 & 4
VAL D'OR GEOPHYSICS LTD
Interpreted by. P. Boileau, P. Eng.
TRACED DATE 03/95
DRAWN DATE
SUPERVISED DATE 03/95
REVISED DATE
NTS 31M5 PROJECT 95-1192-5.3_2
MAP No FILE SASSGRID DWG
SCALE 1 5000
0 50 100 150 200m
240

CULTURAL AND PHYSIOGRAPHIC FEATURES

- All weather road (paved, gravel)
- Secondary road
- Trail
- Buildings
- Campsite
- Power Line (major line, regular line)
- Telephone Line (usable, unusable)
- Pipeline
- Railroad Track
- Tower
- Bridge
- River (open, rapids)
- Intermittent Stream
- Lake
- Swamp
- Claim Post (located unlocated witness)
- Survey Pin (located, unlocated)
- Lot/Concession Corner Pin (located, government defined)
- Twp line
- Falconbridge property (ies)

BUCKE TWP.

COLEMAN TWP.

GILLIES LIMIT TWP.

Graham Lake

Sharp Lake

Starr's Pond

Sasaginaga Lake

Dam

SASAGINAGA LAKE

CORKILL ISLAND

GREENSTONE ISLAND

COBALT

COBALT LAKE

SHORT LAKE

MOFFAT LAKE

CLEAR LAKE

1179123 1179124 1179104 1179105

1180649 1180650 1180651 1180652

1118434 1118435 1118432 1118433

1135885 1135884 1135887 1135886 1135991 1135997 1135995 1135998 1135992

LOOP #1 LOOP #2 LOOP #3 LOOP #4

BL TL 2S TL 4S TL 825S TL 960N TL 400N TL 675S TL 850S

L10W L9W L8W L7W L6W L5W L4W L3W L2W L1W L0 L1E L2E L3E L4E L5E L6E L7E L8E

CONTOUR INTERVALS (nanoTesla)

- 10 between 57300 and 57800 nT
- 50
- 200

Readings = total field - 57600 nT

Instrument. SCINTREX, ENVI

RECEIVED

DEC - 8 1995

MINING LANDS BRANCH

BUCKE TWP NORTH COBALT COBALT COLEMAN TWP GILLIES LIMIT TWP

2.16290

FALCONBRIDGE LIMITED

Exploration Division Chelmsford ONTARIO

SASS LAKE PROJECT MAGNETIC SURVEY TOTAL FIELD CONTOURS

VAL D'OR GEOPHYSICS LTD

Interpreted by: P. Boileau, P. Eng.

TRACED	DATE	03/95	NTS 31M5	PROJECT	95-1192-
DRAWN	DATE		MAP No	FILE	SASSGRID.DWG
SUPERVISED	DATE	03/95	SCALE 1:5000		
REVISED	DATE		0 50 100 150 200m		

31M05NE0126 2.16290 COLEMAN

CULTURAL AND PHYSIOGRAPHIC FEATURES

- All weather road (paved, gravel)
- Secondary road
- Trail
- Buildings
- Campsite
- Power Line (major line regular line)
- Telephone Line (stable unusable)
- Pipeline
- Railroad Track
- Tower
- Bridge
- River (open, rapids)
- Intermittent Stream
- Lake
- Swamp
- Claim Post (located, unlocated, witness)
- Survey Pin (located, unlocated)
- Lot/Concession Corner Pin (located government defined)
- Twp line
- Falconbridge property (ies)

BD

BD

Graham Lake

1185553

1118435

BUCKE TWP.

COLEMAN TWP.

1180652
1186052

CORKILL ISLAND

1180651
1186051

SASAGINAGA LAKE

Sasaginaga

Dam

1180649
1186049

Sharp Lake

Starr's Pond

179123

1184434

BL

GREENSTONE ISLAND

1180648
1186048

11/9124

TL 2S

1135886

1135885

PRELY LAKE

TL 4S

1135887

CLEAR LAKE

1135884

LOOP #4

COBALT

1179105

TL 825S

TL960N

1196674

1179104

LOOP #3

COBALT LAKE

TL 400N

1135984

1135988

1118432

1118433

GREEN LAKE

1B

BL

SHORT LAKE

1135991

1135985

LOOP #1

1135989

LOOP #2

1135930

1135997

1135987

1135986

TL675S

1135995

TL850S

1135998

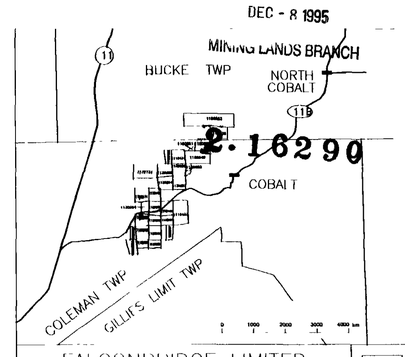
MOFFAT LAKE

sand and gravel quarry

1135992

GILLIES LIMIT TWP.

RECEIVED
DEC - 8 1995
MINING LANDS BRANCH



FALCONBRIDGE LIMITED

Exploration Division — Chelmsford ONTARIO

SASS LAKE PROJECT
MAGNETIC SURVEY
TOTAL FIELD PROFILES

VAL D'OR GEOPHYSICS LTD

Interpreted by: P. Boileau, P. Eng.

TRACED	DATE 03/95	NTS 31M5	PROJECT 95-1192-1.2
DRAWN	DATE	MAP No	FILE SASSORID DWG
SUPERVISED	DATE 03/95	SCALE 1:5000	0 50 100 150 200m
REVISED	DATE		

LEGEND

INTERPRETATION.

- Lithological unit of positive magnetic susceptibility
- Lithological unit with a negative magnetic susceptibility
- Major contact
- Depth and dip estimates for magnetic units
- Interpreted shear zone.
- Interpreted fault

MAGNETIC PROFILES.

Readings. Total field – 57600 nT

\+ 600 500 –

1 cm = 500 nT

58100 57600

Instrument Scintrex, ENVI