

CR 8792

**GEOTEM DATA RELEASE
MARINER PROJECT, NT**

D STEPHENS

NOVEMBER 1996

Tenements held by:

**BHP MINERALS PTY LTD
Level 3
3 Plain Street
EAST PERTH WA 6004**

and

**ASHTON MINING LIMITED
21 Wynyard Street
BELMONT WA 6104**

CR 8792/025

SUMMARY

This report contains GEOTEM data which is being released for the whole Mariner GEOTEM survey. The survey was flown in the central western portion of the Batten Trough, NT.

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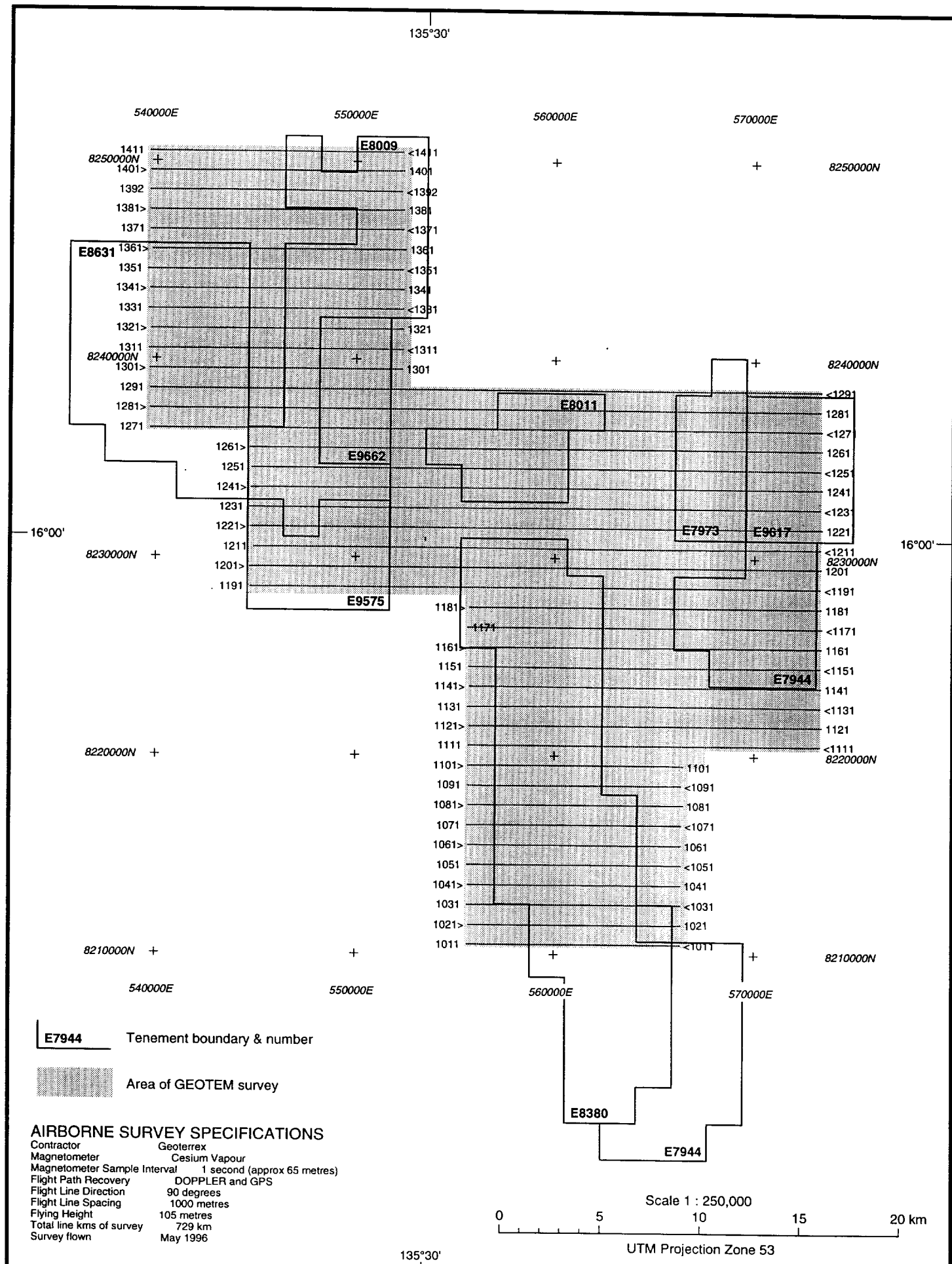
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Prepared : D.Stephens

Drawn : R.J.Clark

Date : 6.12.96

Revised :



NORTHERN PLATFORMS PROGRAM - MARINER GEOTEM SURVEY
GEOTEM SURVEY LOCATION AND FLIGHT LINES

Exploration - BHP Minerals
 BHP Minerals Pty. Ltd., A.C.N. 008 694 782

Centre : Perth

Drg. No. : A4-6162

FIGURE 1

1. INTRODUCTION

The Mariner GEOTEM survey was flown in May 1996 to search for base metal related conductors in mid-Proterozoic sediments of the McArthur Group. The survey is located in the central- western part of the Batten Trough, a region known informally as the Mariner-Gordon's area.

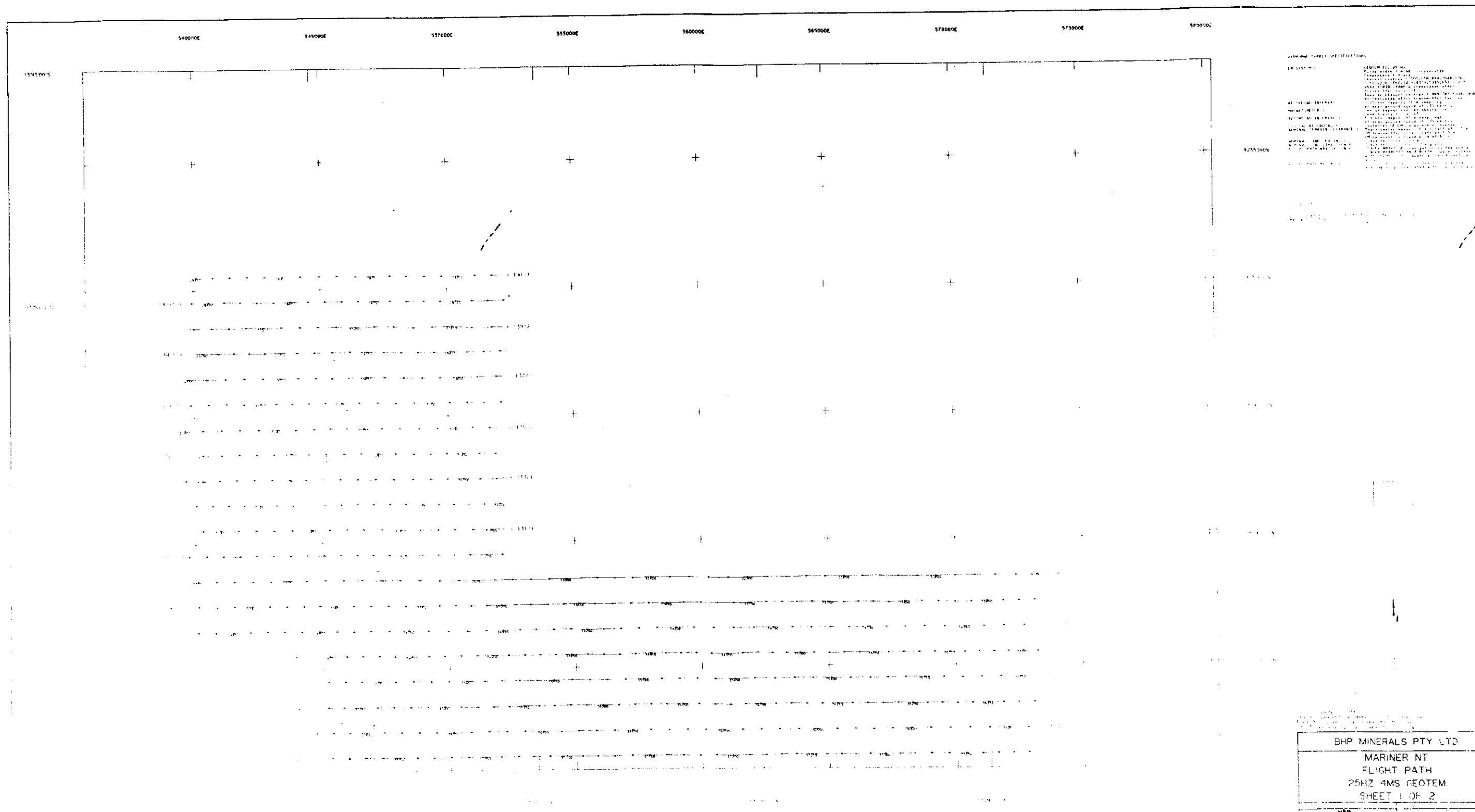
Lines were flown in an east-west orientation with a line spacing of 1 km. Figure 1 shows the boundaries of the survey along with the position of the flight lines. EM profile data appears in Appendix 1 as a microfiche copy. Survey specifications are presented on Table 1.

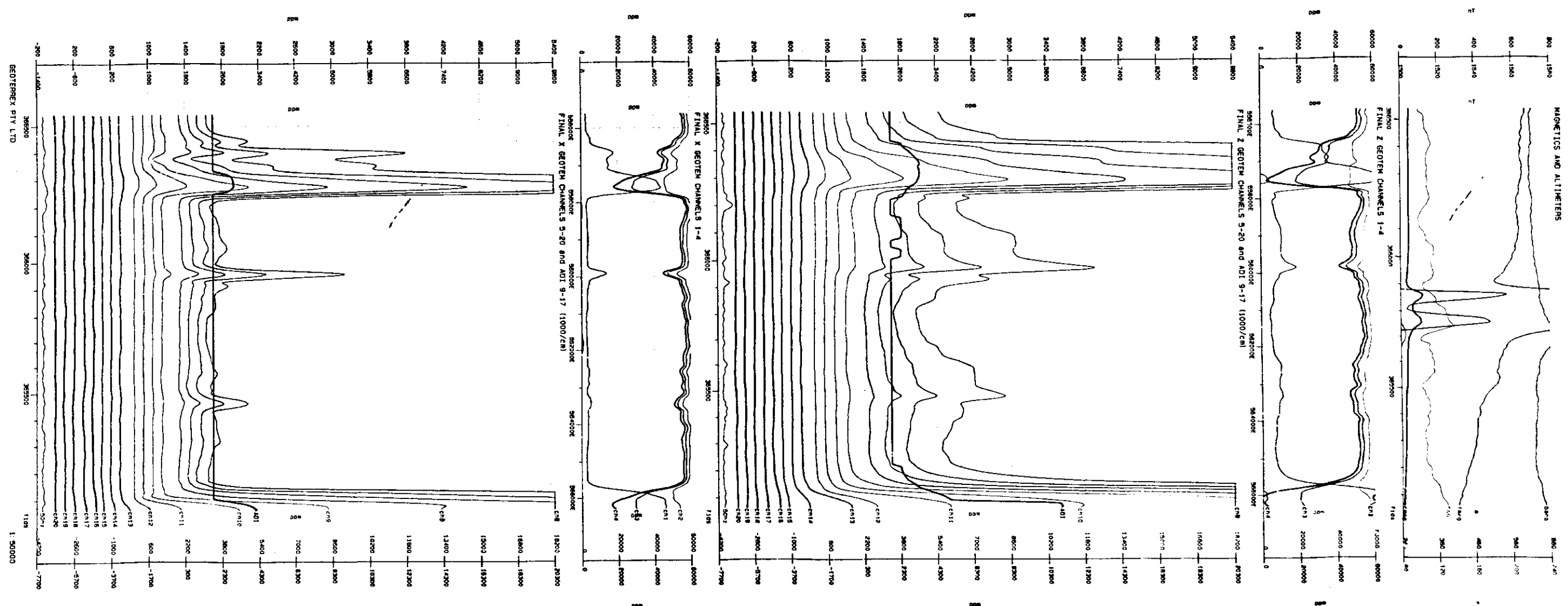
TABLE 1
GEOTEM SPECIFICATIONS

Aircraft	-	CASA C212-200 Turbo Prop							
Magnetometer	-	Scintrex Cesium Vapour Optical Absorption							
Resolution	-	0.01 nT							
Cycle Rate	-	1.0 second							
Sample Interval	-	60 metres							
Electromagnetic System	-	GEOTEM III Time Domain EM							
Transmitter Base Frequency	-	25 Hz							
Receiver	-	x and z, dual axis receiver coil in towed bird							
Cycle Rate	-	4 msec							
Sample Interval	-	9 metres							
Window mean times (msec)	-								
em1	0.4609	em2	0.4766	em3	0.4922	em4	0.5156	em5	0.5469
em6	0.5859	em7	0.6328	em8	0.6875	em9	0.7578	em10	0.8438
em11	0.9453	em12	1.0625	em13	1.2031	em14	1.3750	em15	1.5938
em16	1.8594	em17	0.0469	em18	0.0781	em19	0.1094	em20	0.1406
Data Acquisition	-	RMS GR33 Thermal Dot Matrix Recorder							
	-	GEODAS Digital Acquisition System							
Flight Line Direction	-	090 - 270 degrees							
Flight Line Spacing	-	1,000 metres							
Mean Terrain Clearance	-	105 metres							
Navigation	-	GPS satellite positioning / Doppler							

APPENDIX 1

GEOTEM PROFILES (MICROFICHE)

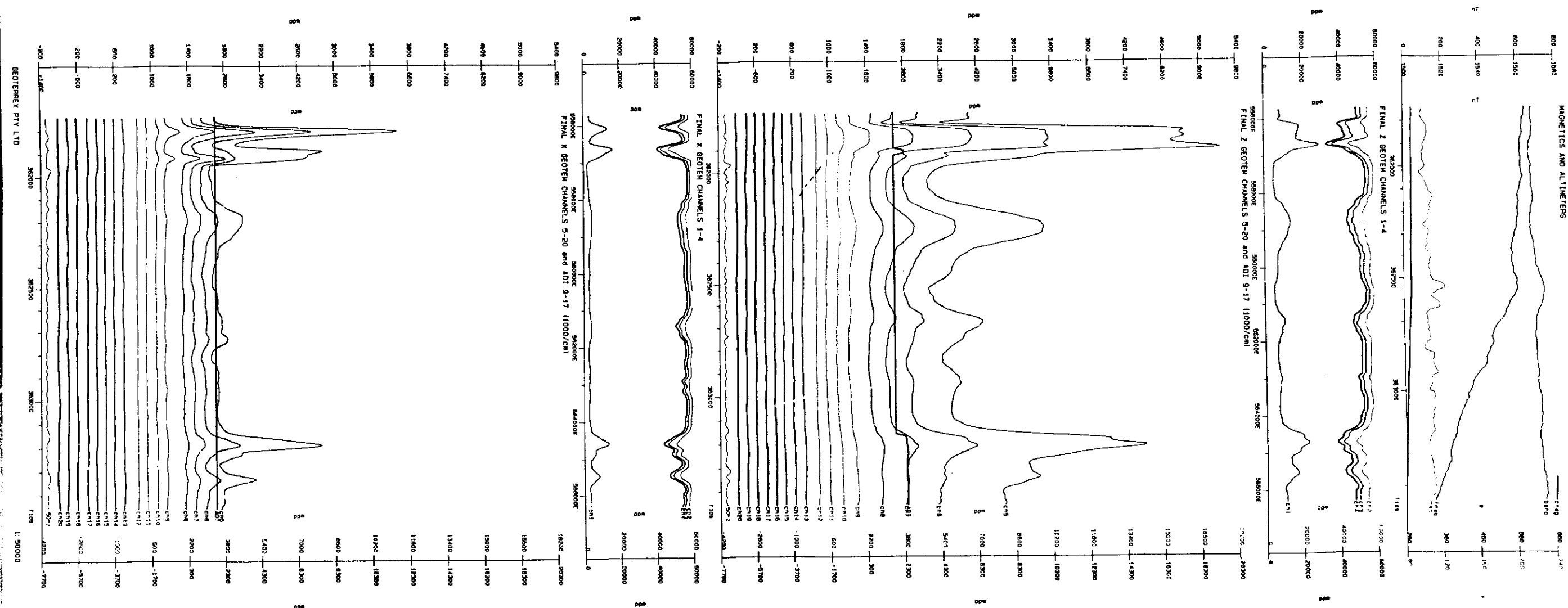




LINE 101/1
AVERAGE NORTHING - 9210508N

2-734 MARINER 25hz 4ms GEOTEM SURVEY

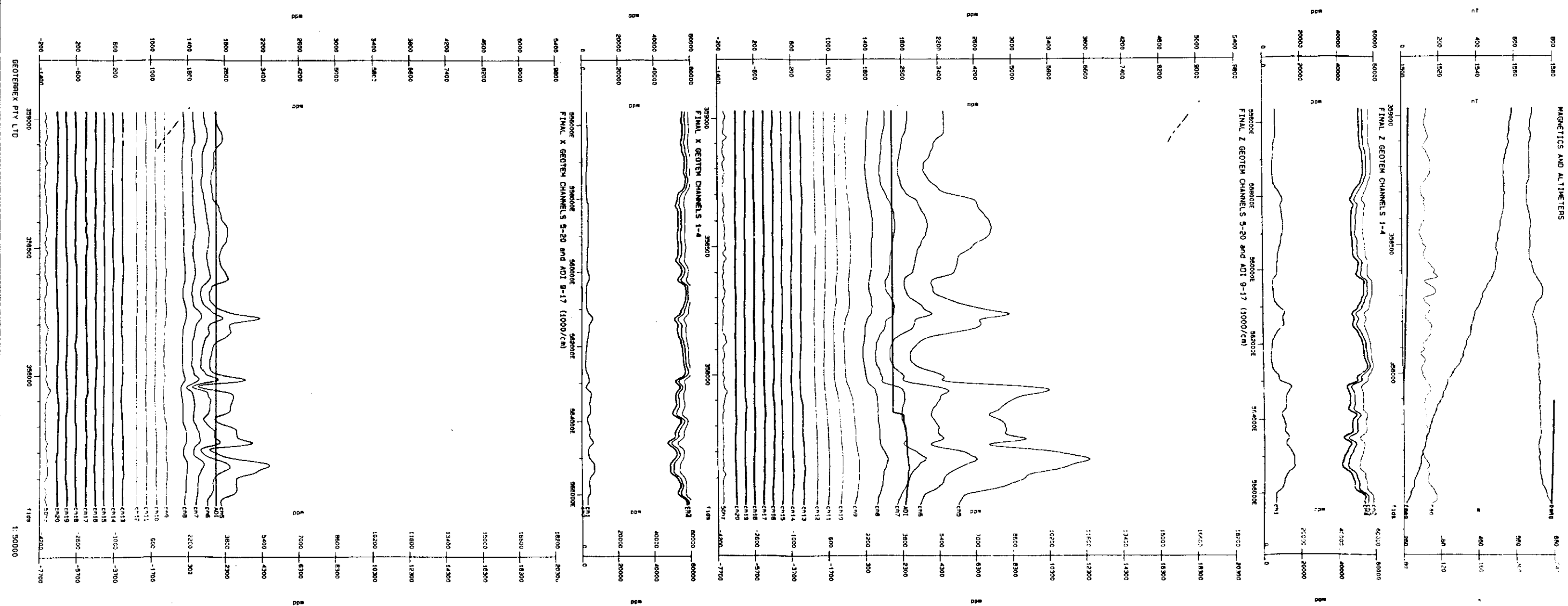
BHP MINERALS PTY LTD MAY 1996



LINE 102/1
AVERAGE NORTHING = 8211499M

2-734 MARINER 25hz 4ms GEOTEM SURVEY

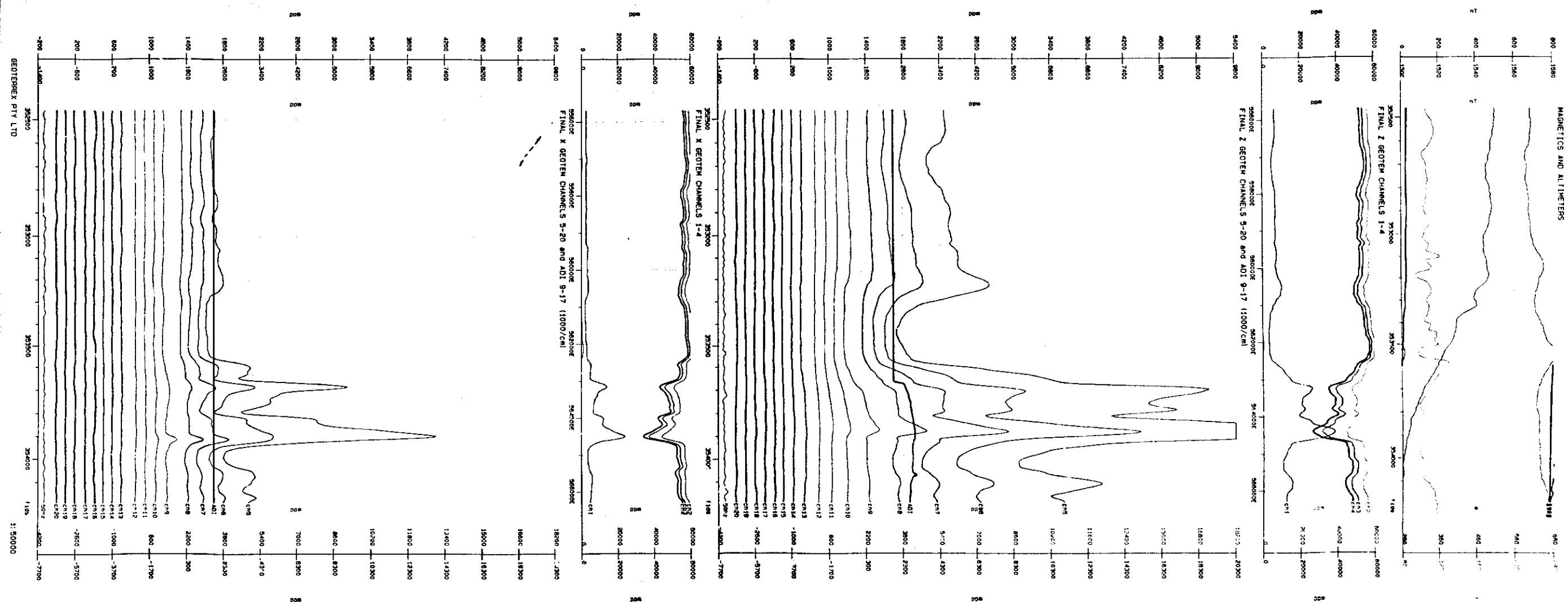
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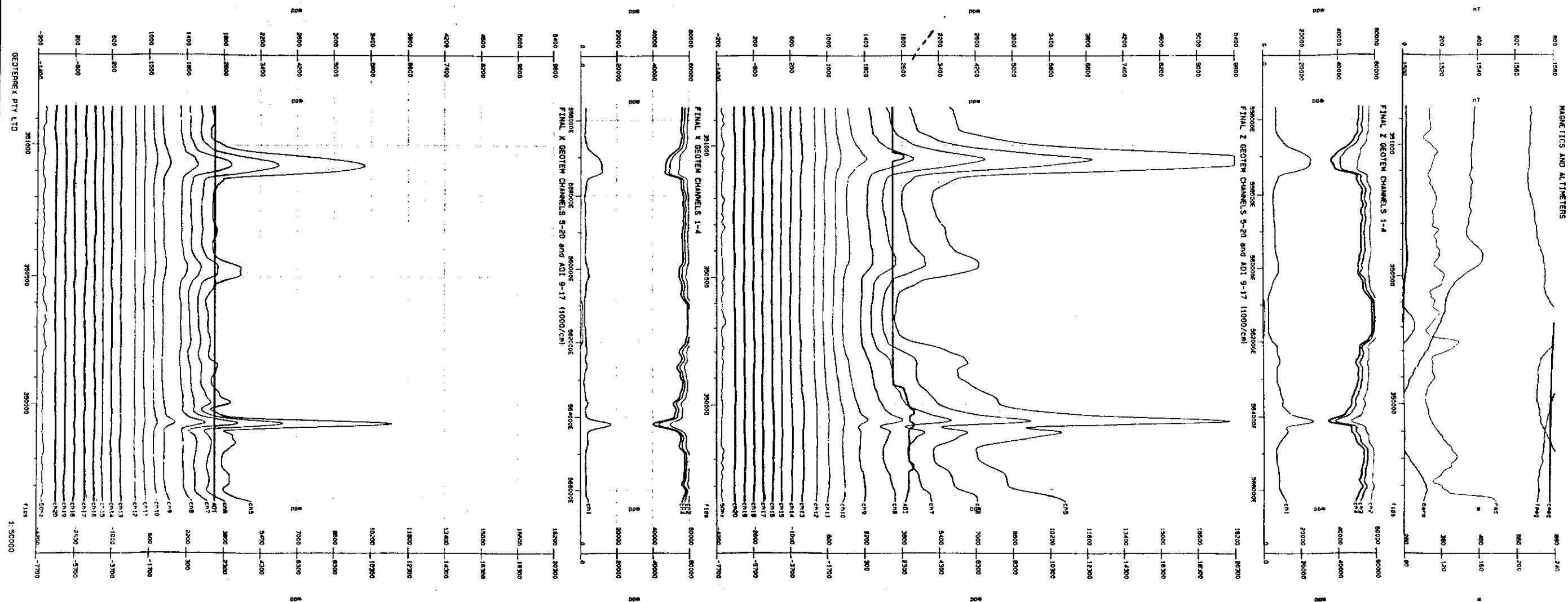
BHP MINERALS PTY LTD MAY 1996



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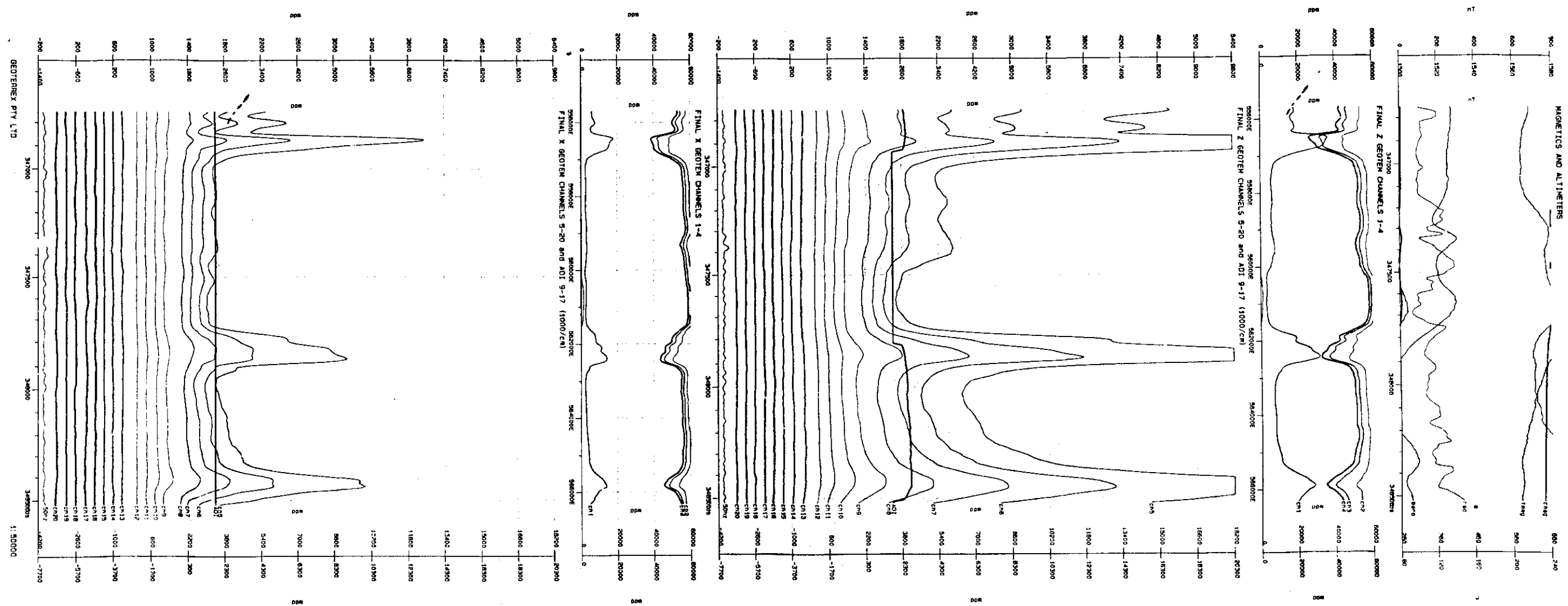
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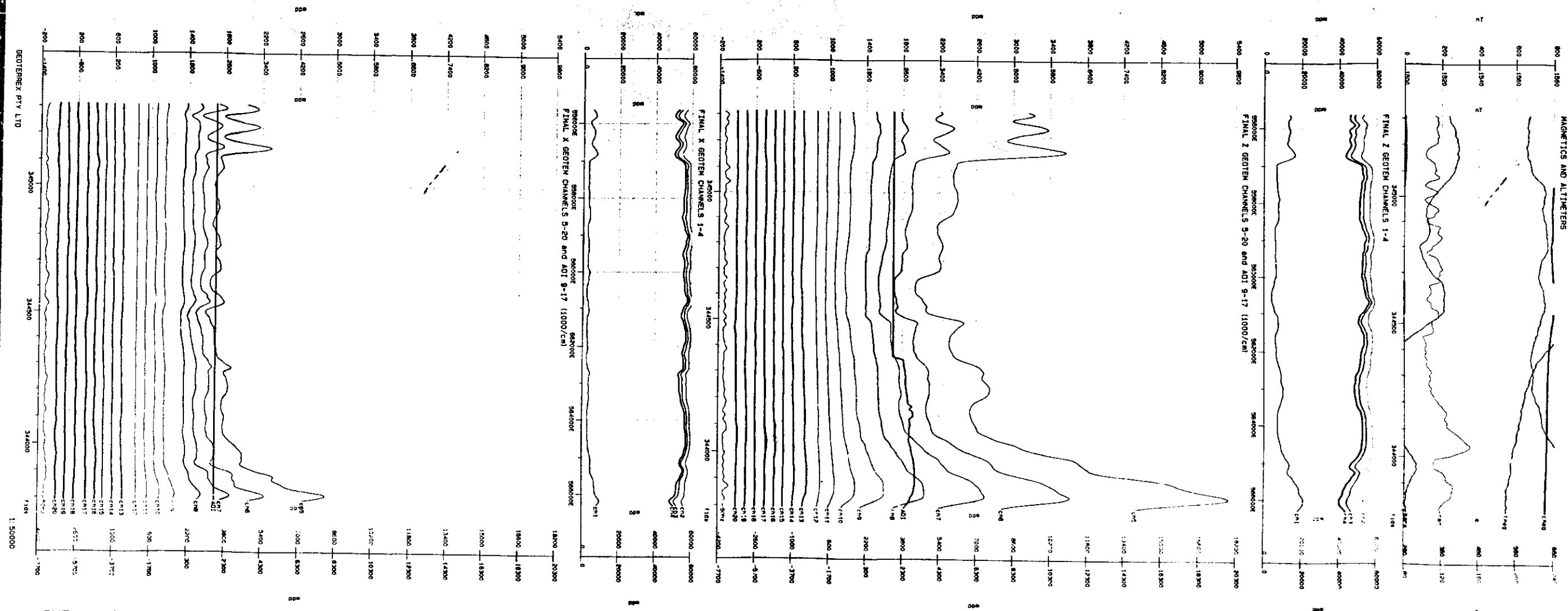
BHP MINERALS PTY LTD MAY 1996



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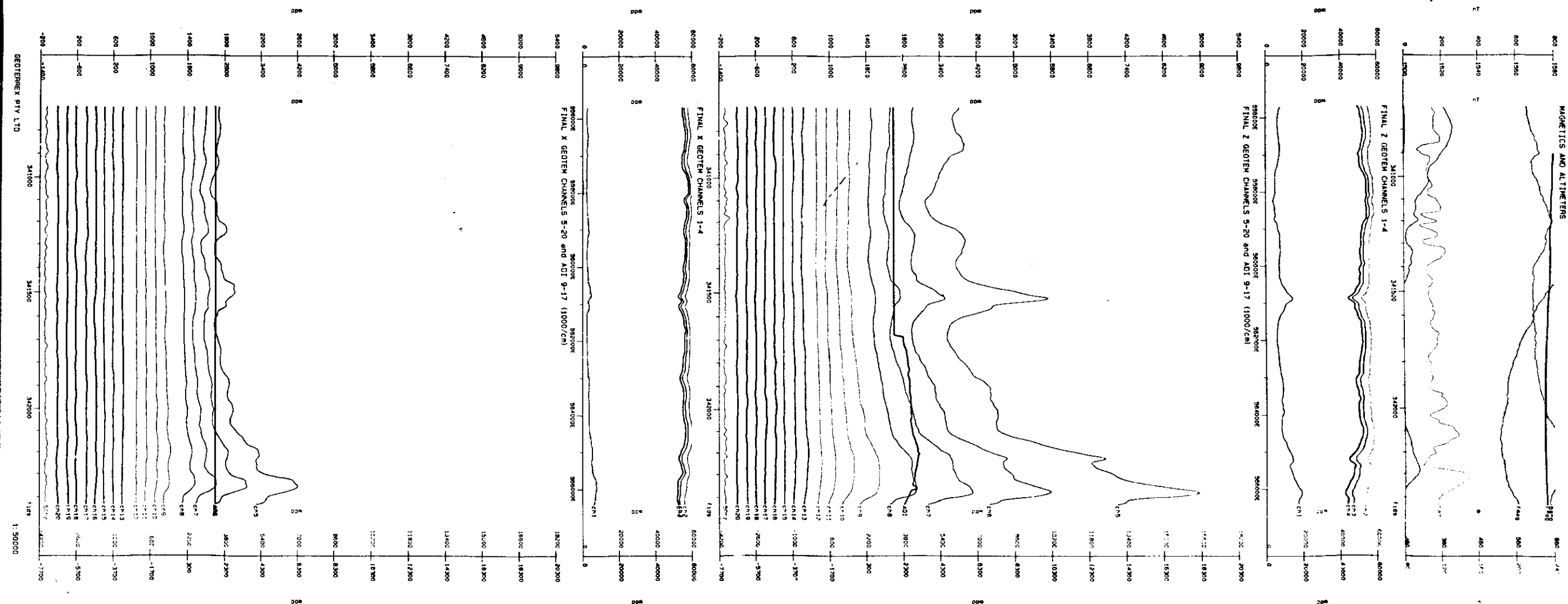
BHP MINERALS PTY LTD MAY 1996



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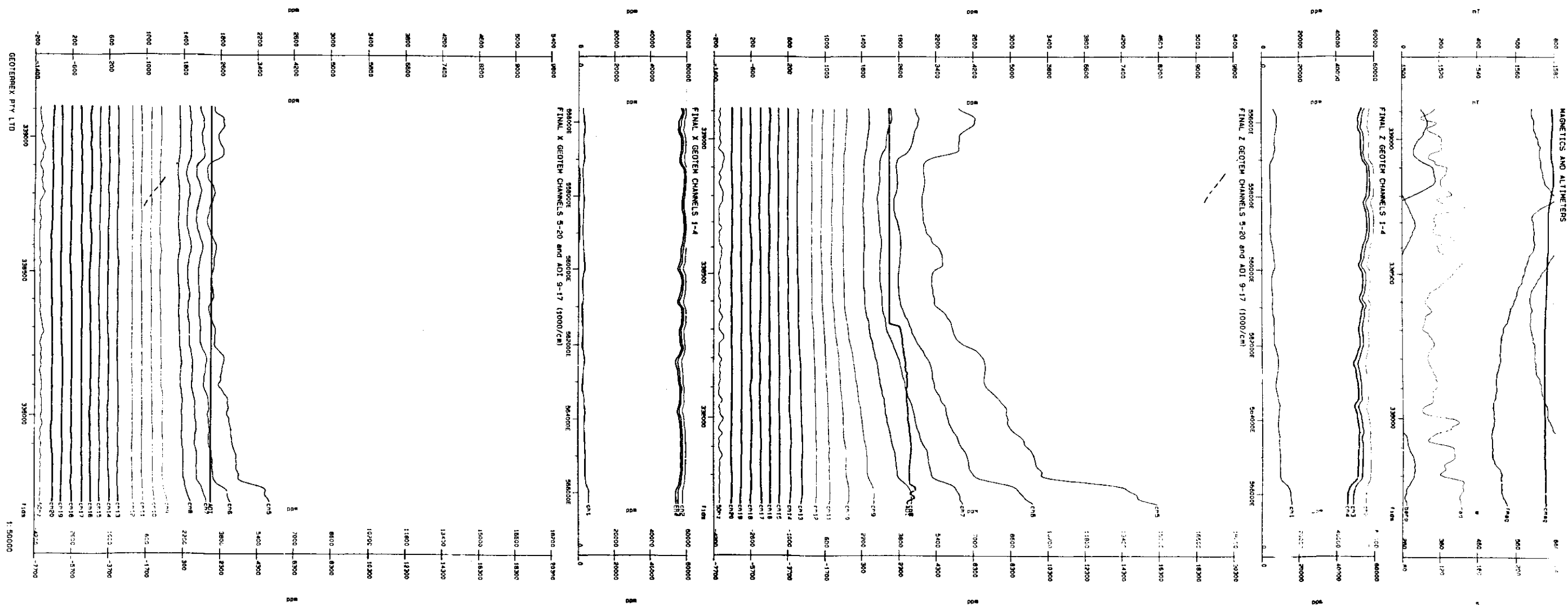
BHP MINERALS PTY LTD MAY 1996



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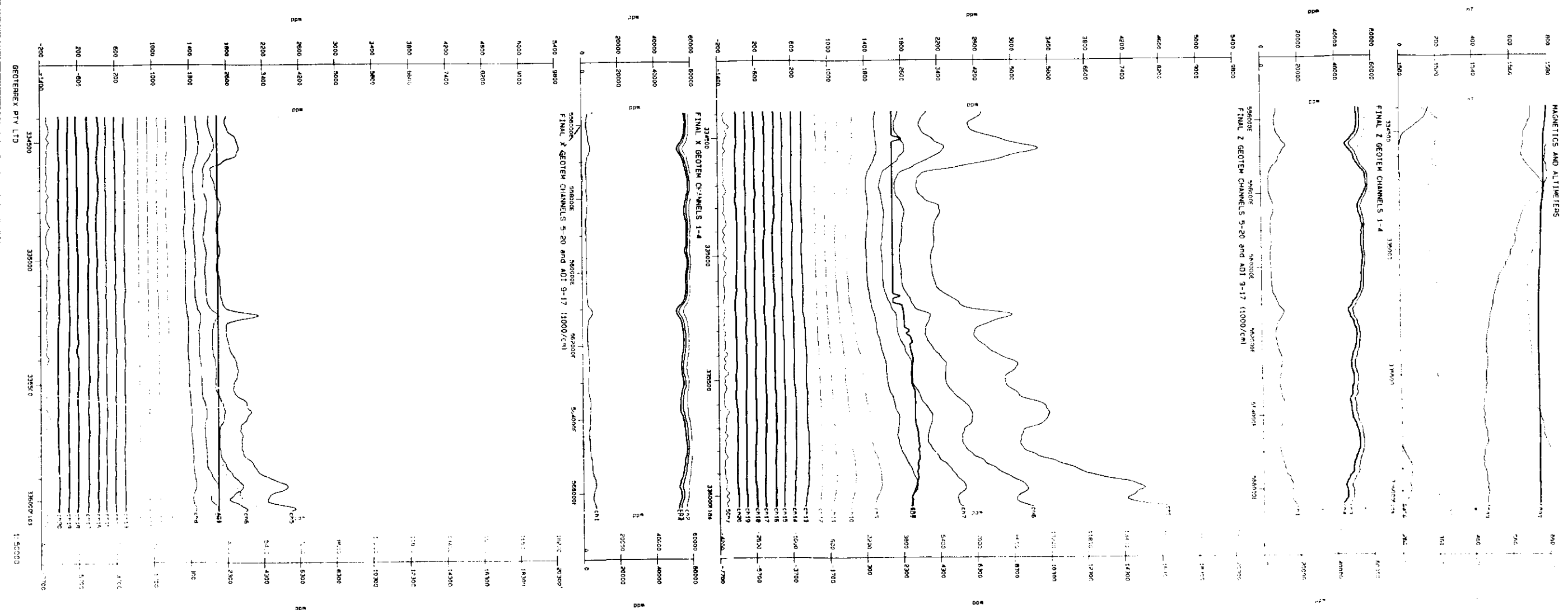
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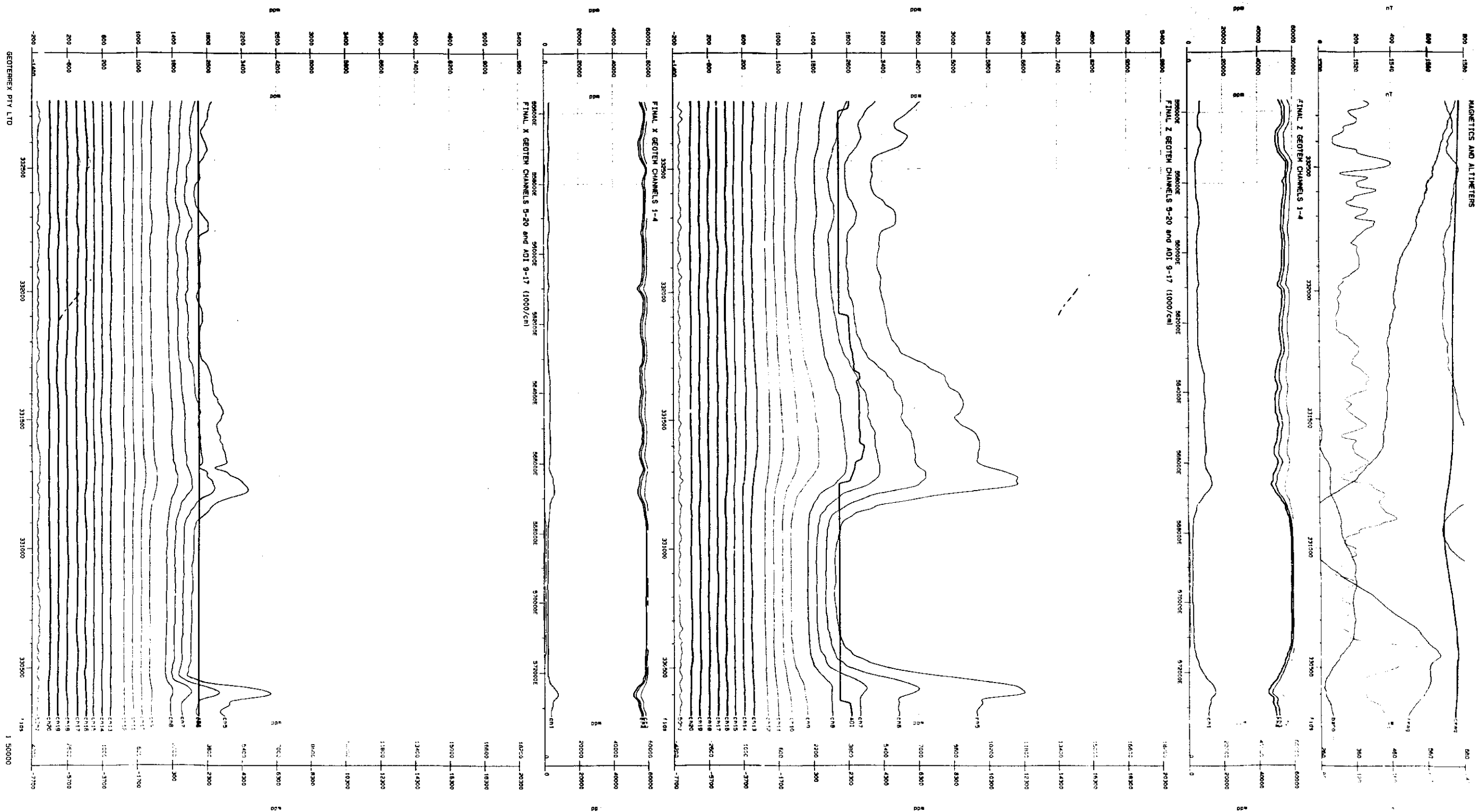
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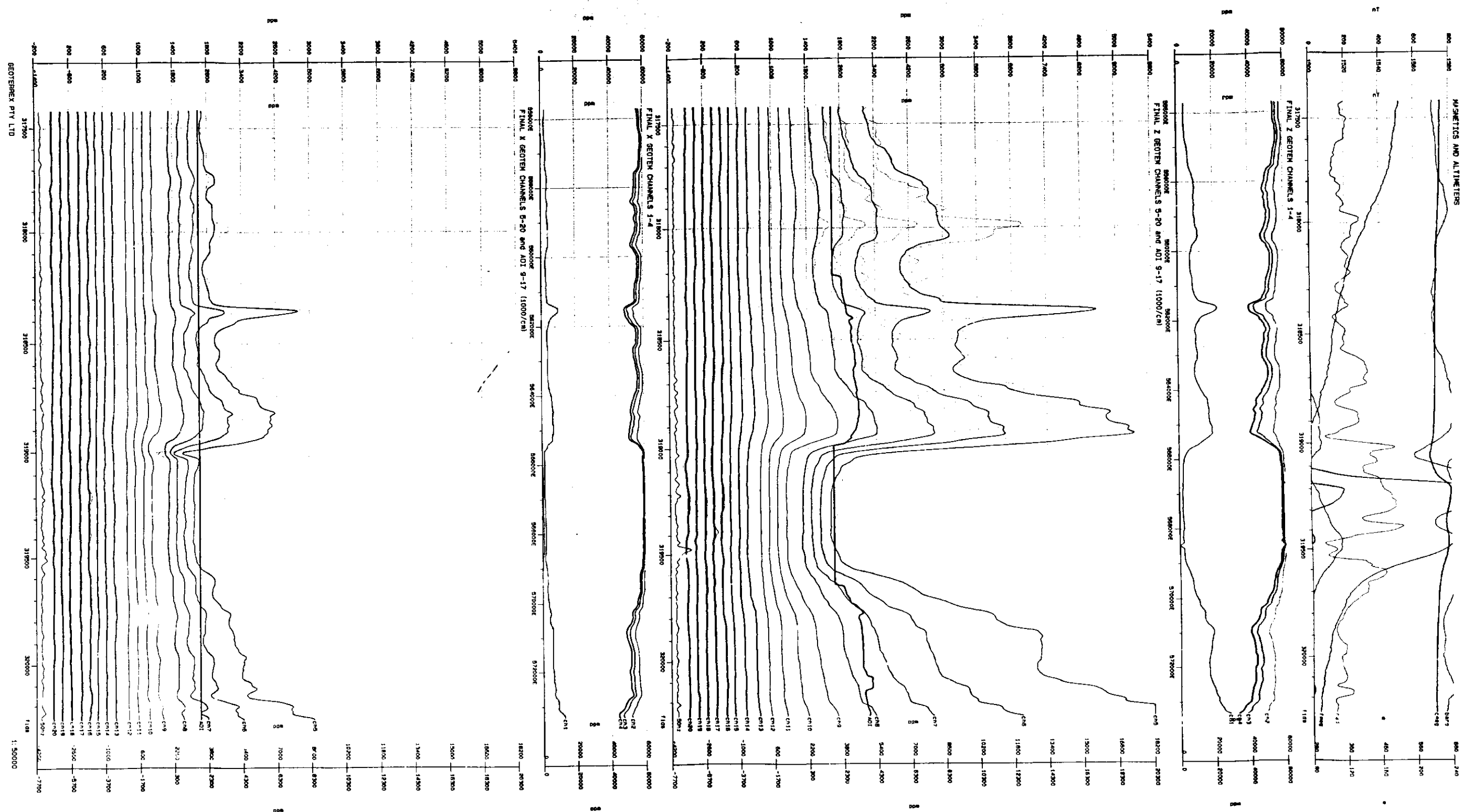
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BHP MINERALS PTY LTD MAY 1996



LINE 111/1
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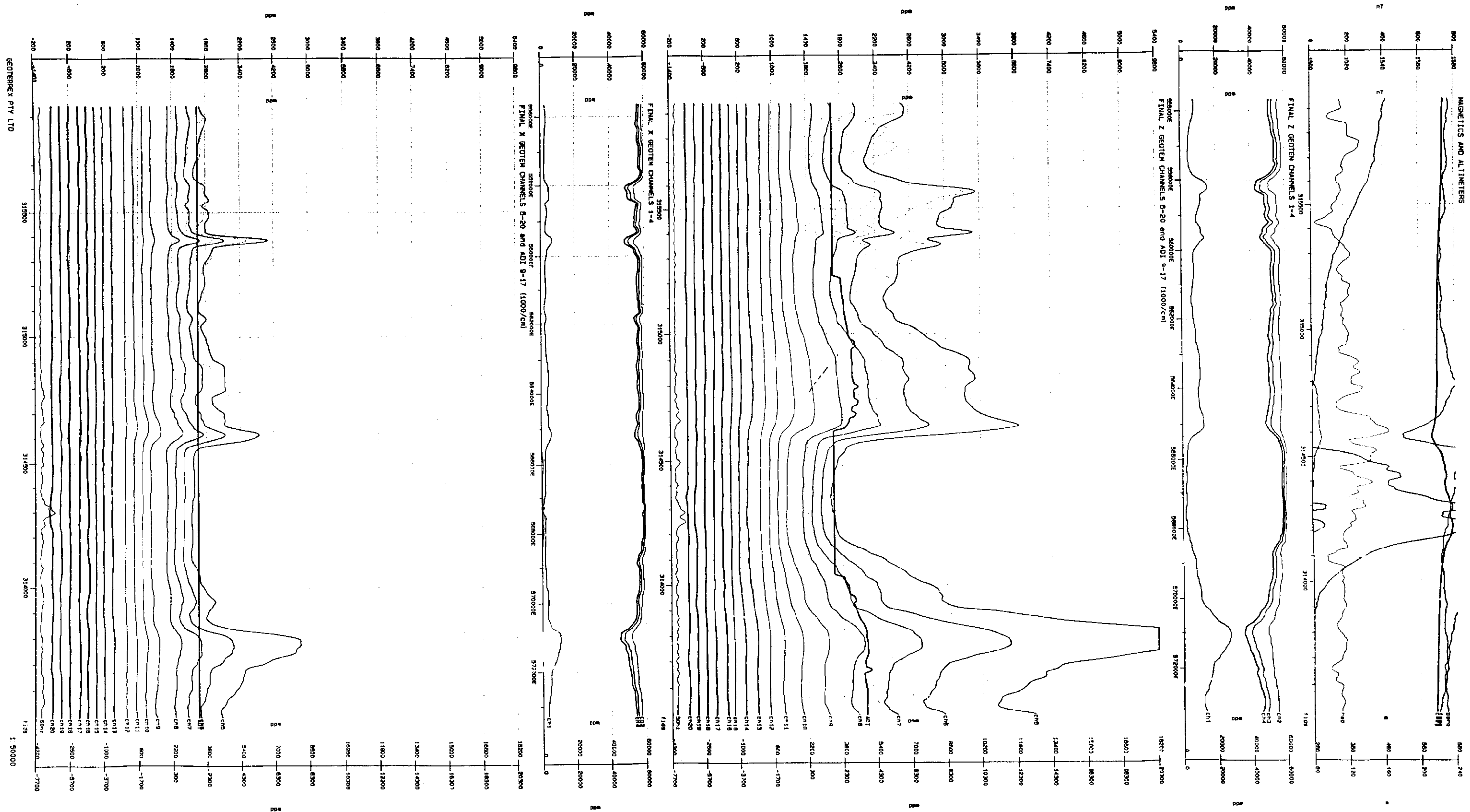
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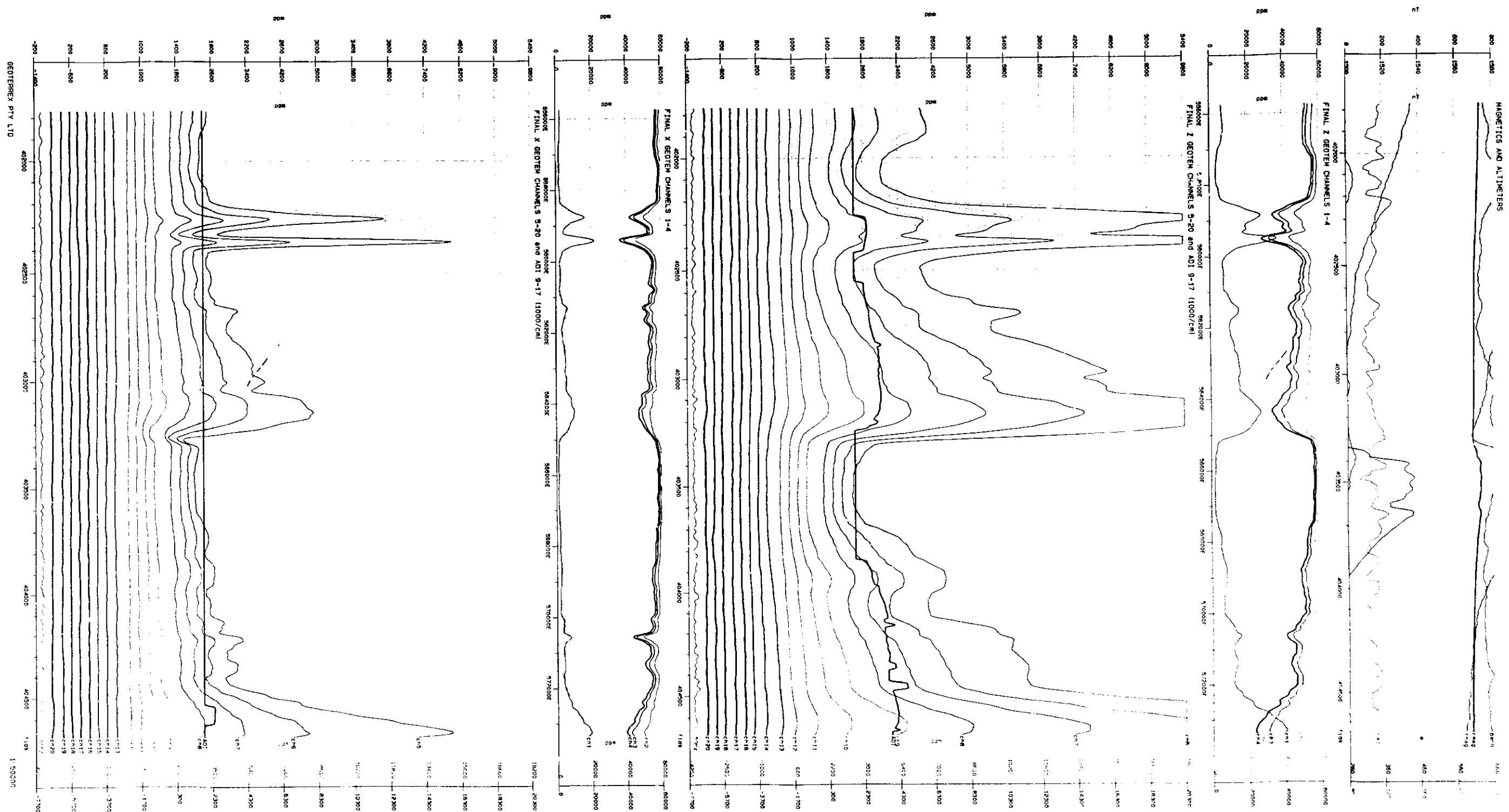
BHP MINERALS PTY LTD MAY 1996



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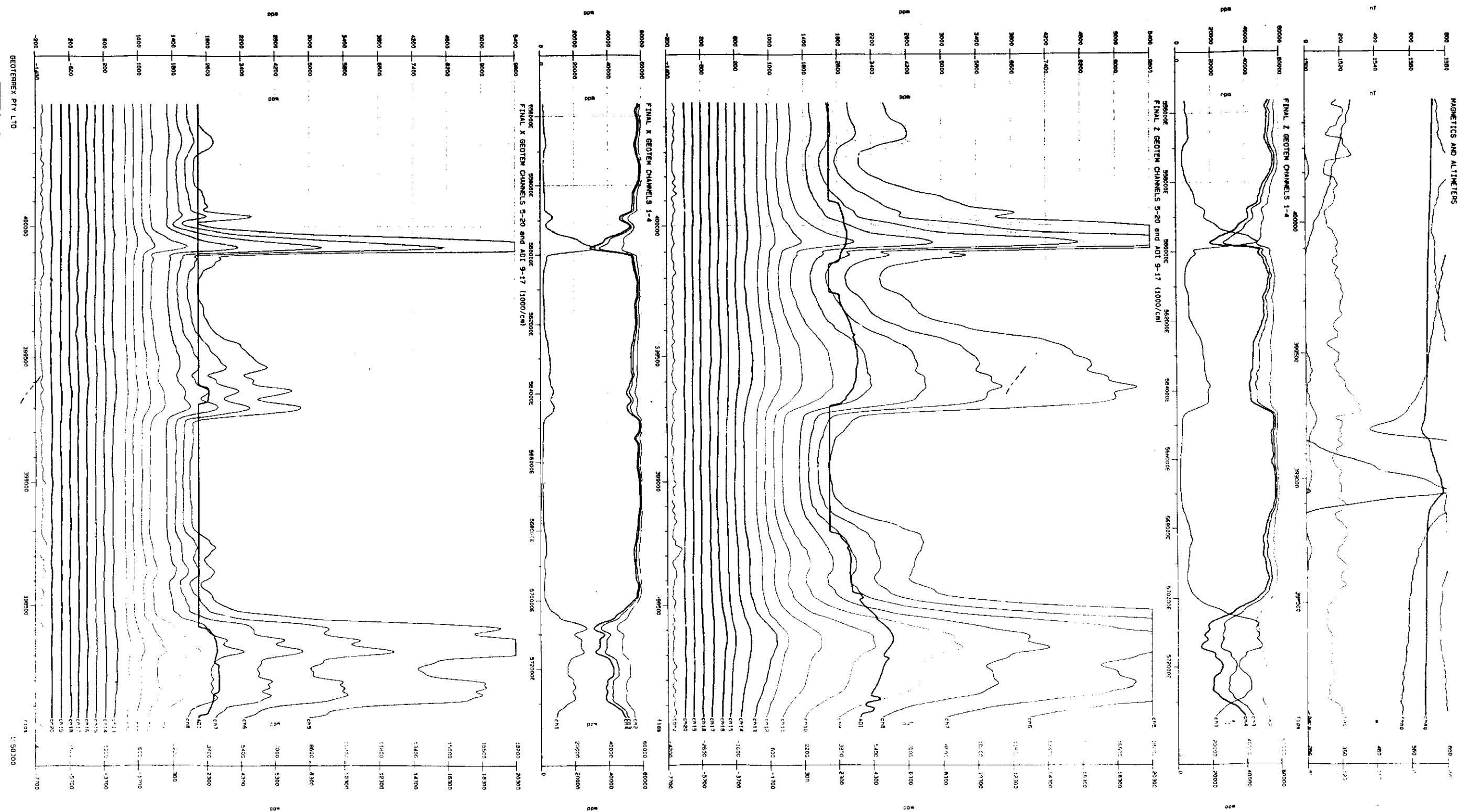
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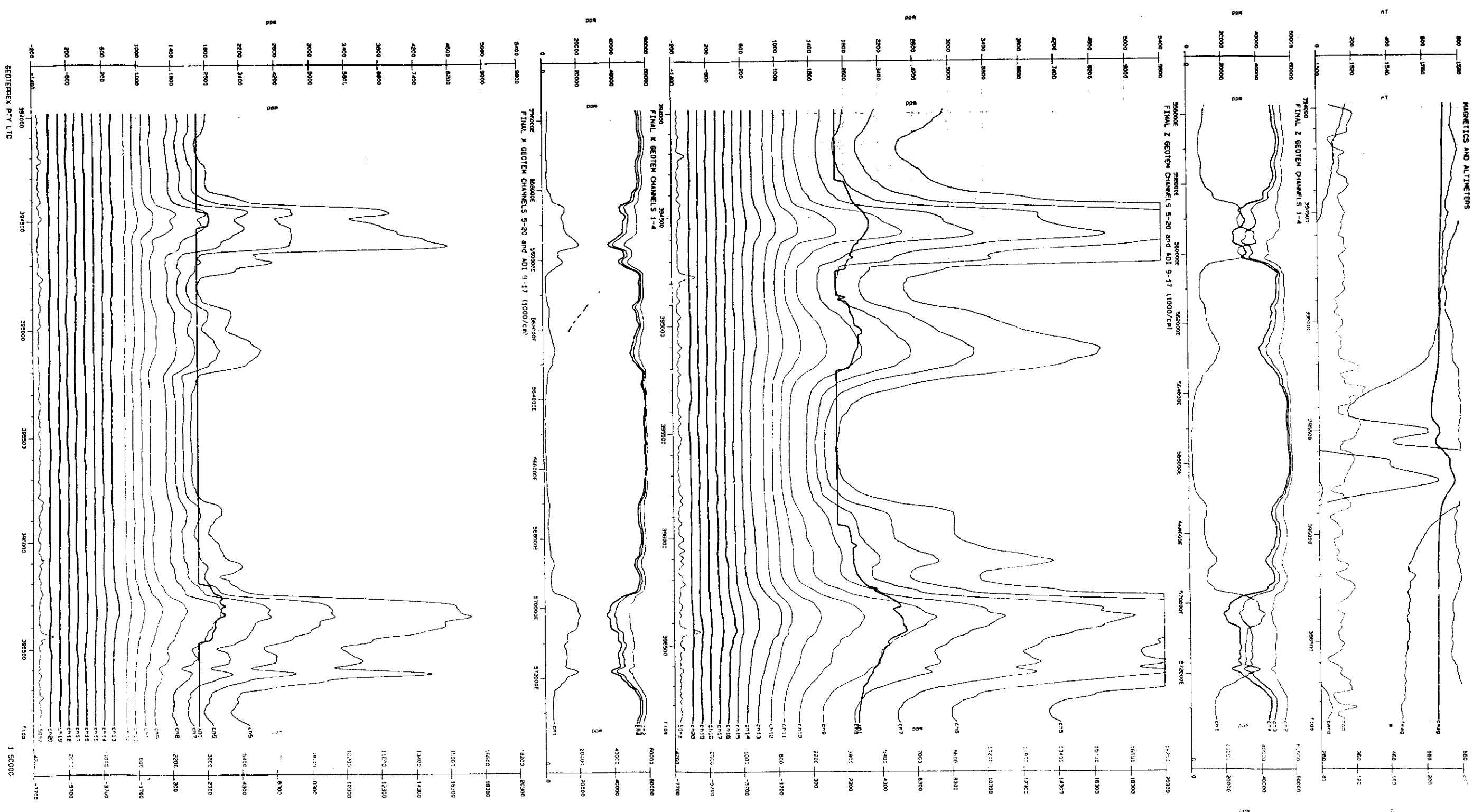
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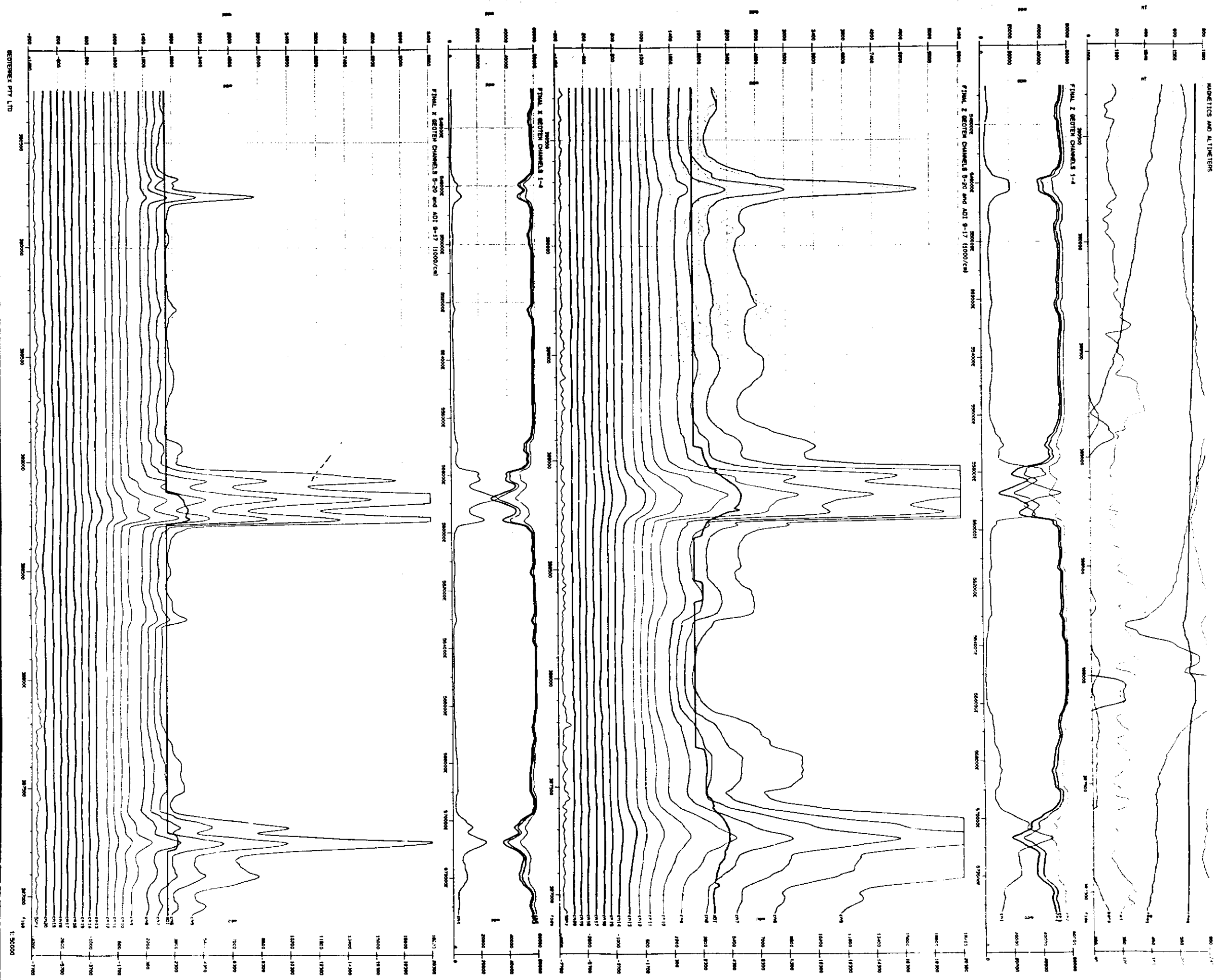
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BHP MINERALS PTY LTD MAY 1996



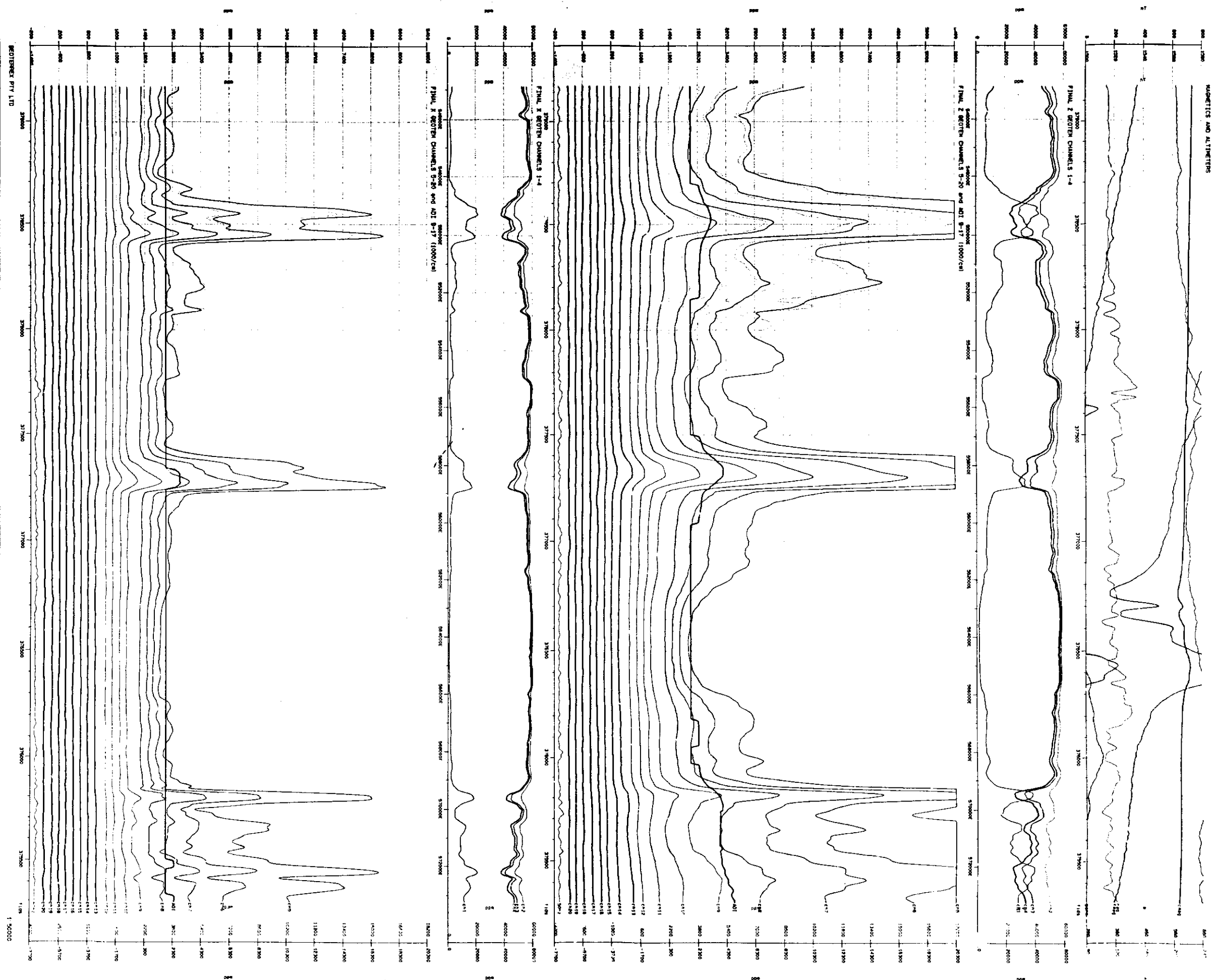
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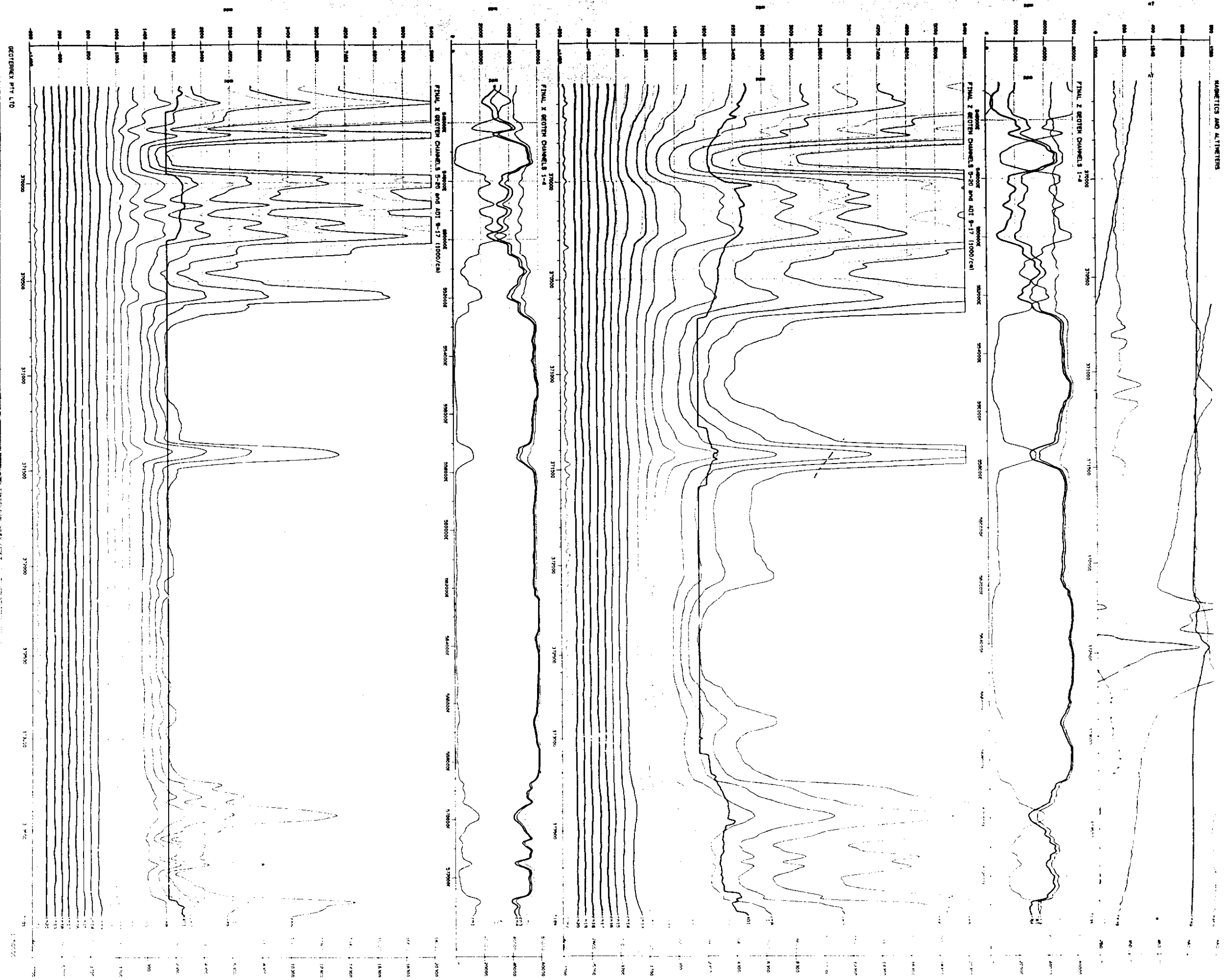
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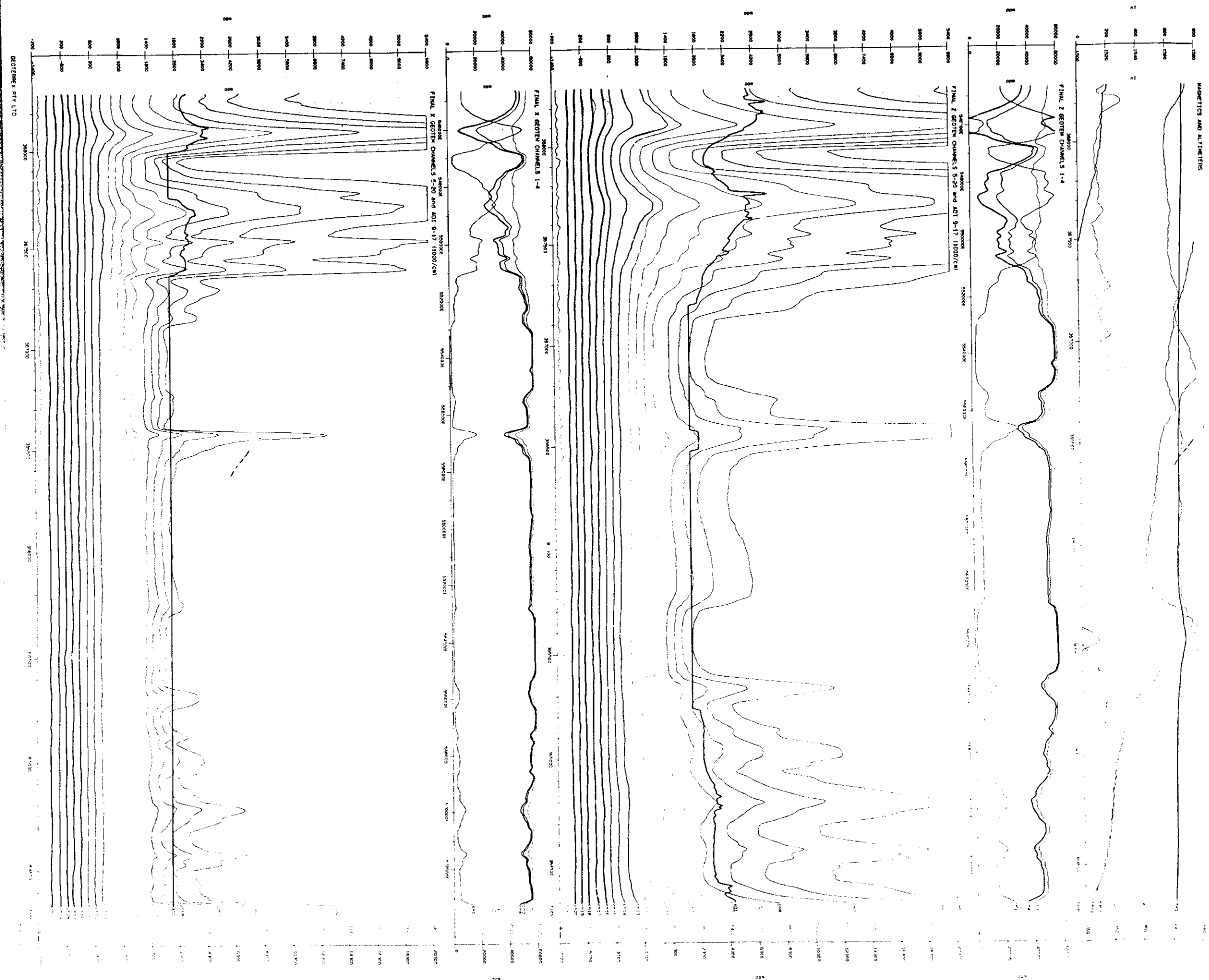
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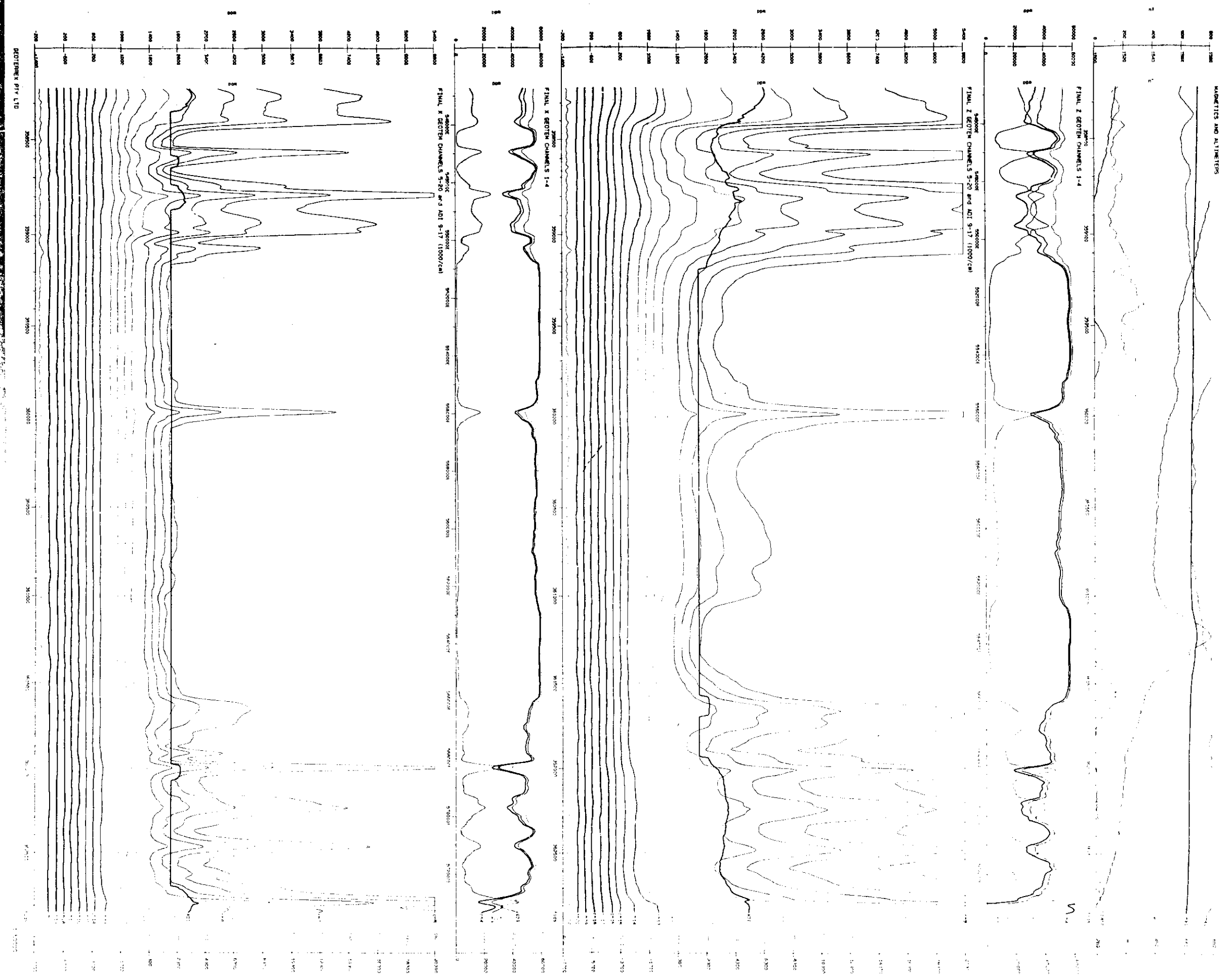


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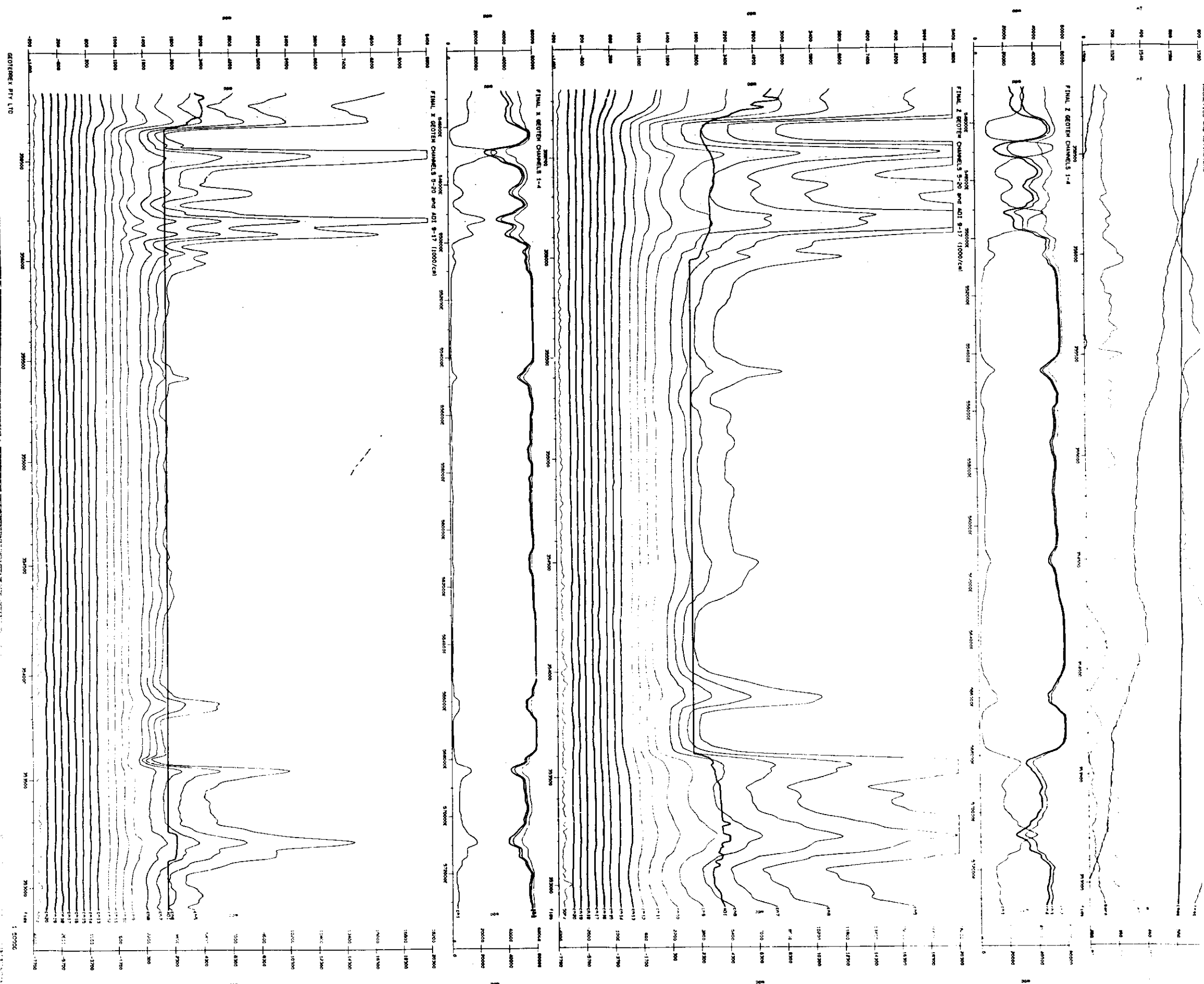
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BHP MINERALS PTY LTD MAY 1996

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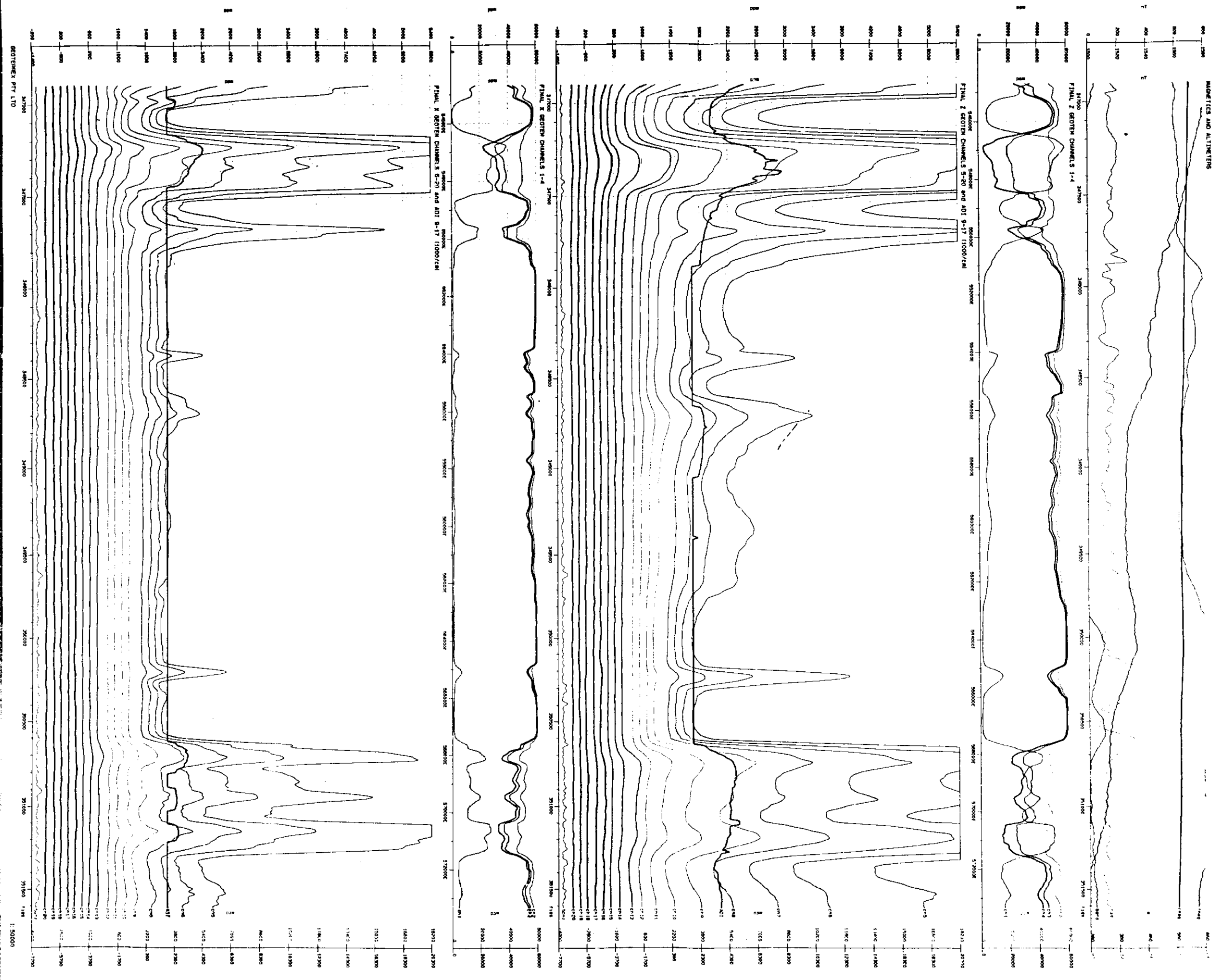
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2-734 MARINER 25hz 4ms GEOTEM SURVEY



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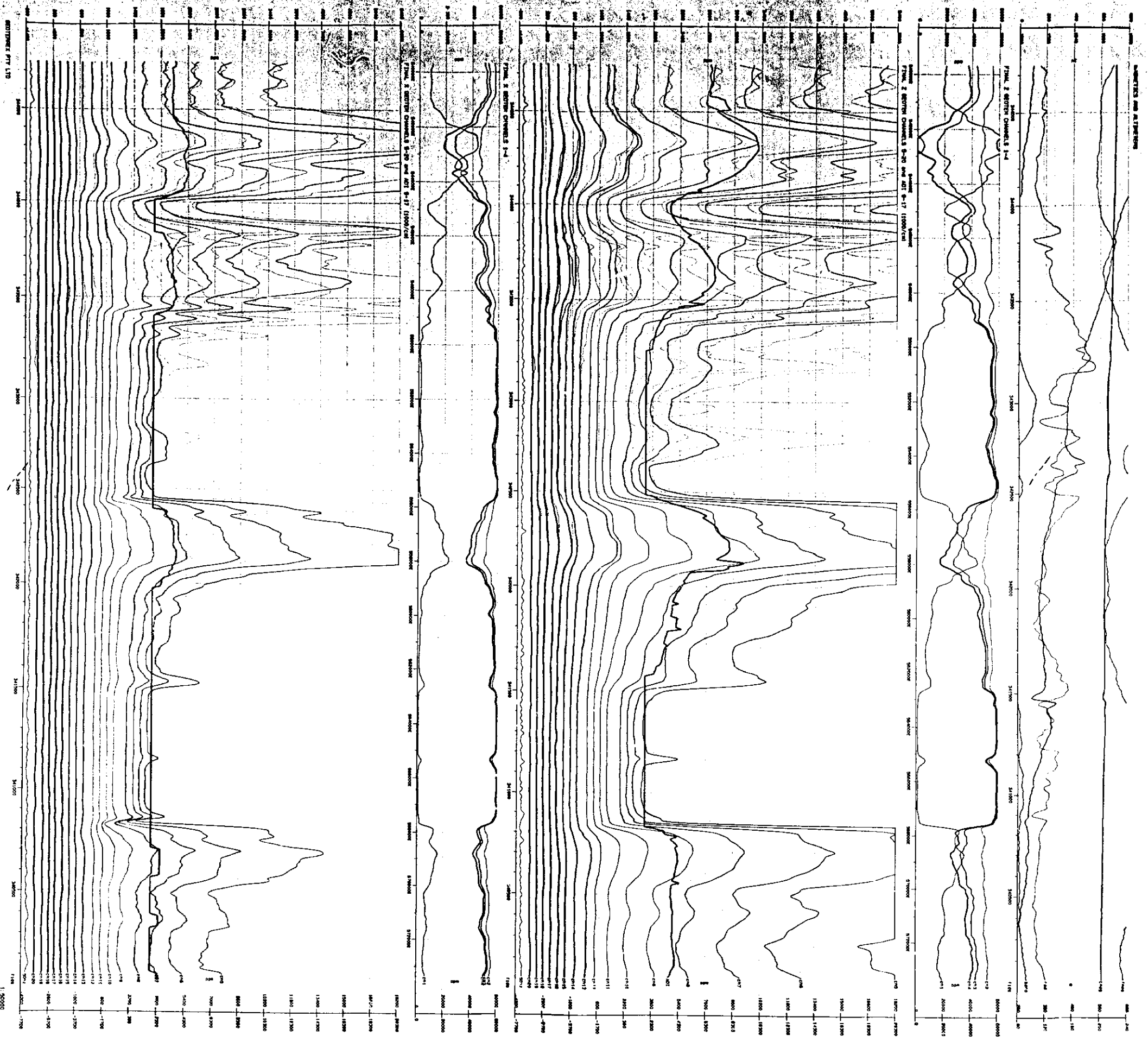
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BHP MINERALS PTY LTD MAY 1996

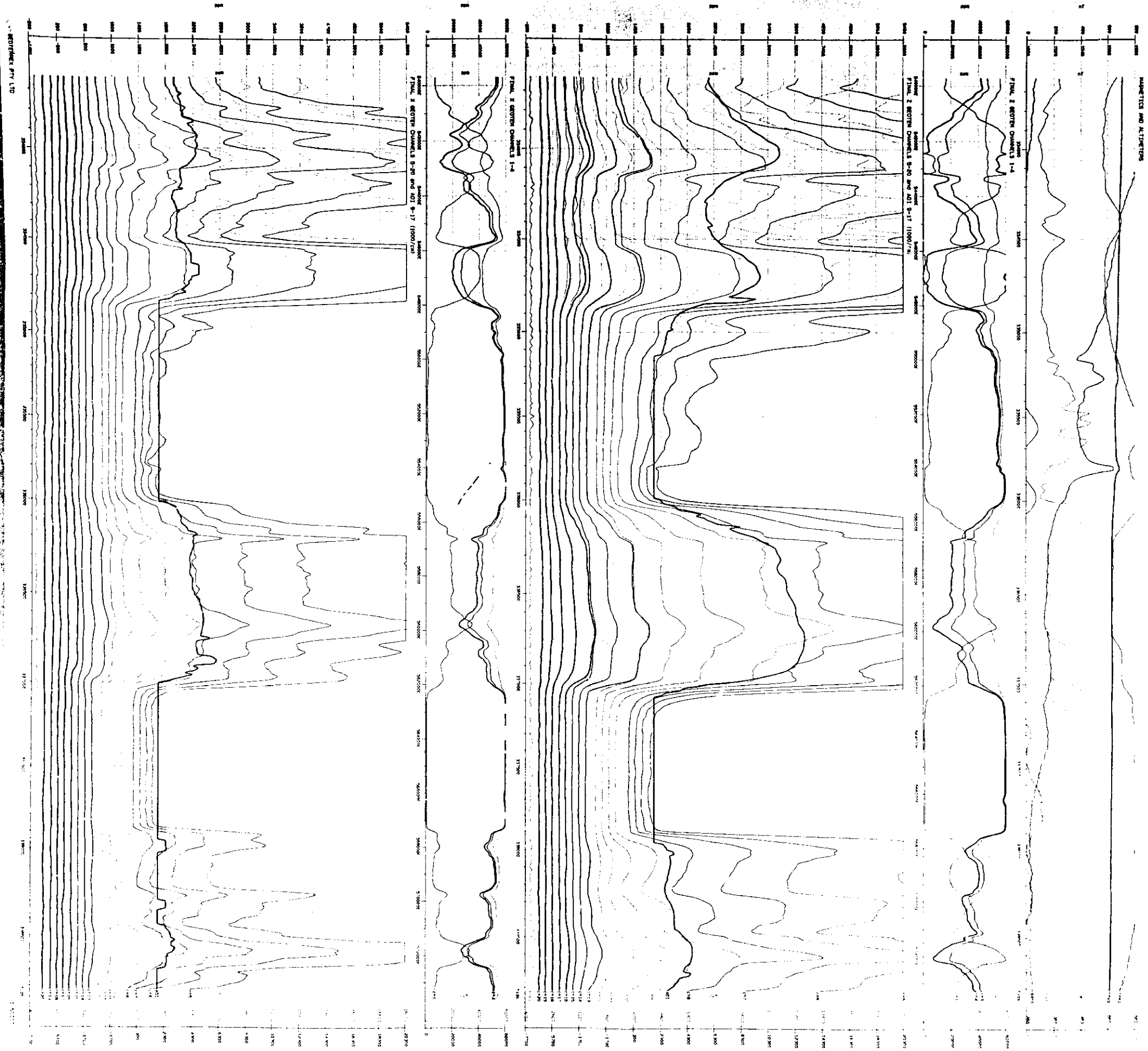


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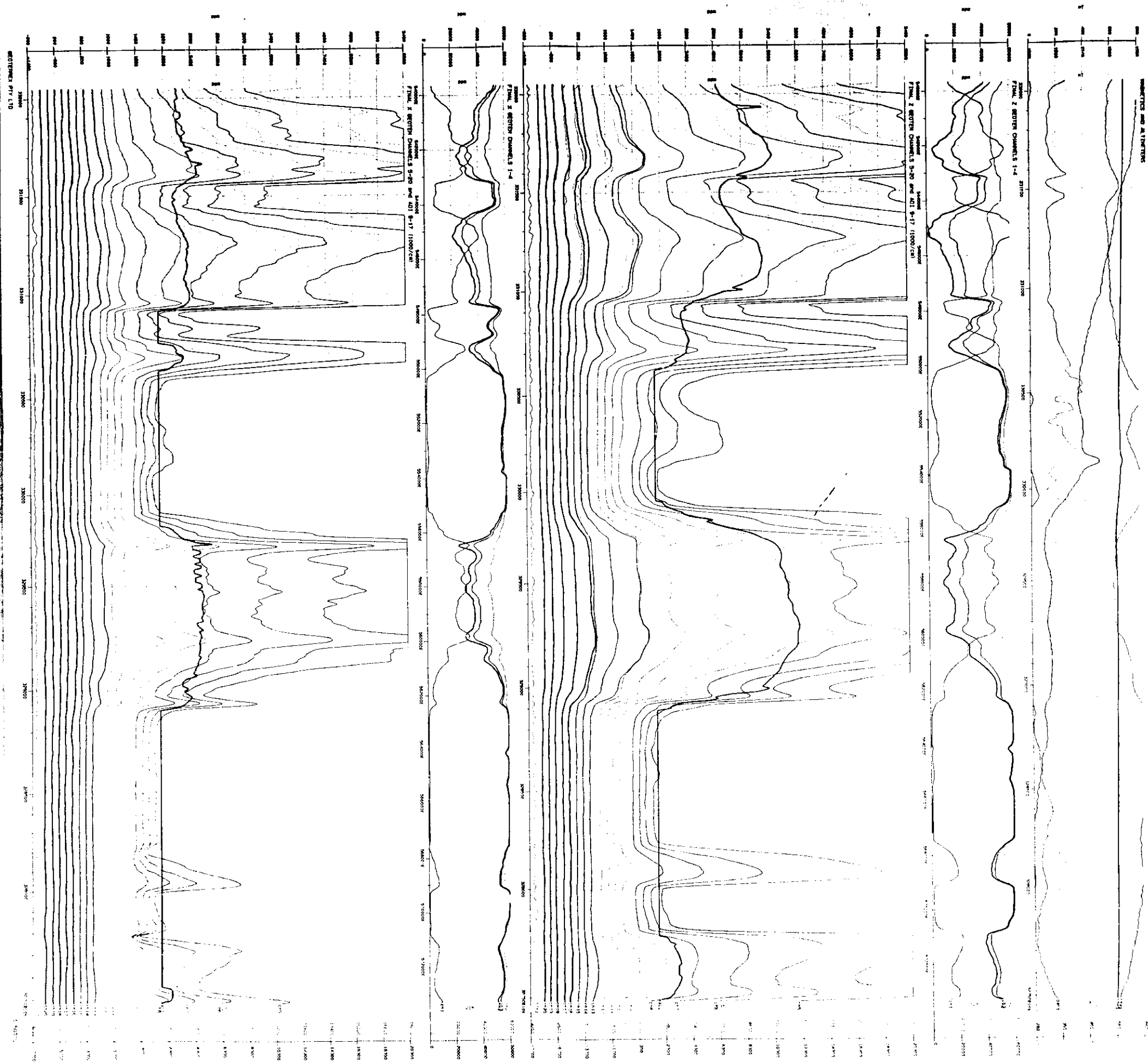


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2-734 MARINER 25hz 4ms GEOTEM SURVEY



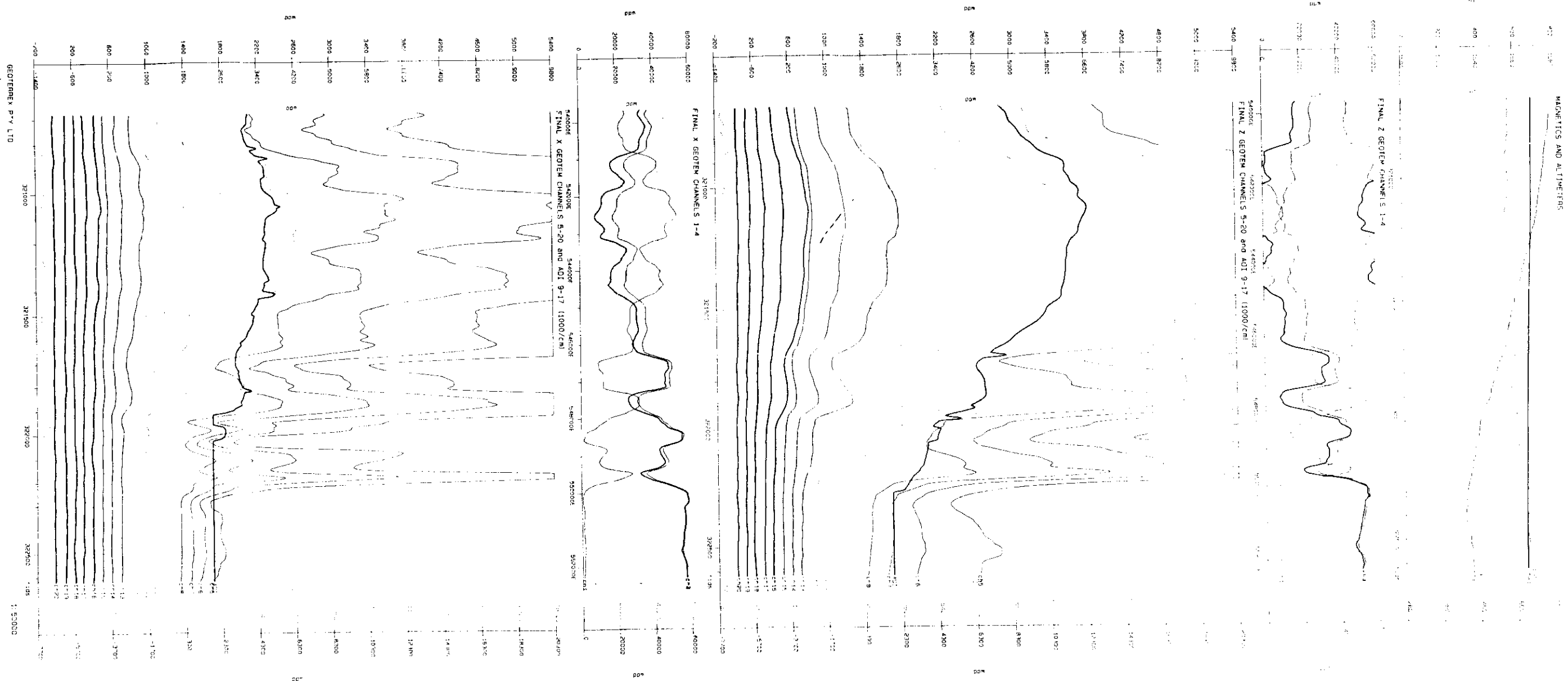
LINE 128/1
AVERAGE NORTHING = 8237502N

2-734 MARINER 25hz 4ms GEOTECH SURVEY



LINE 129/1
 SURFACE NORTHING 9130000

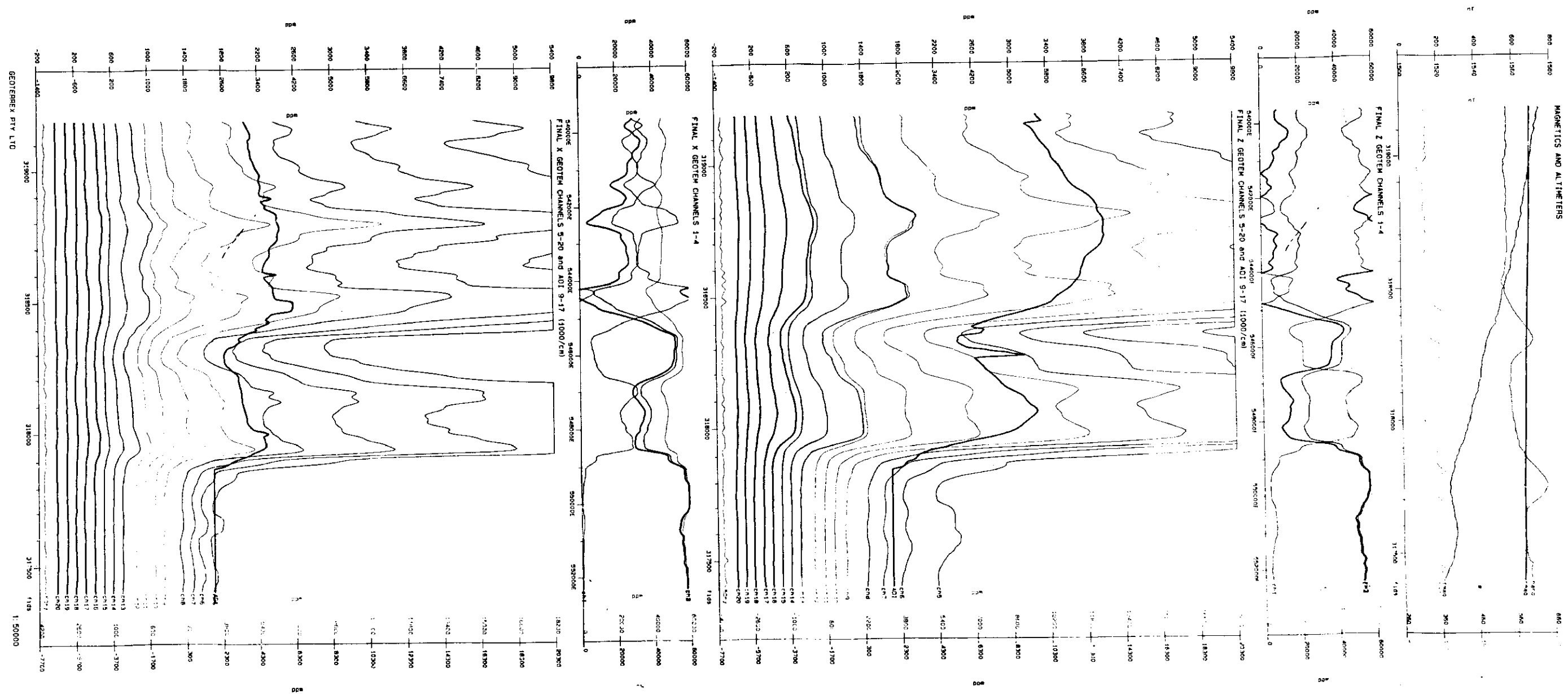
2-734 MARINER 25hz 4ms GEOTEM SURVEY



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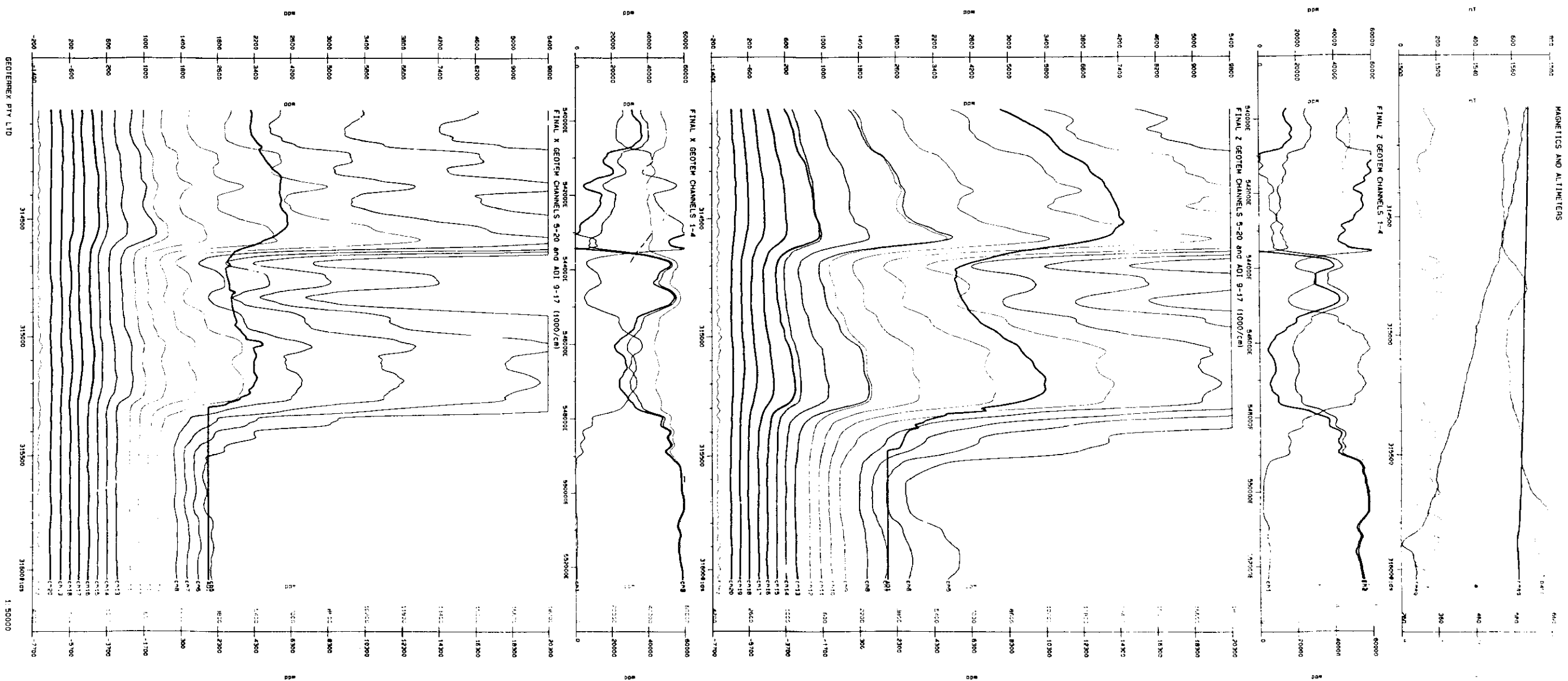
BHP MINERALS PTY LTD MAY 1996



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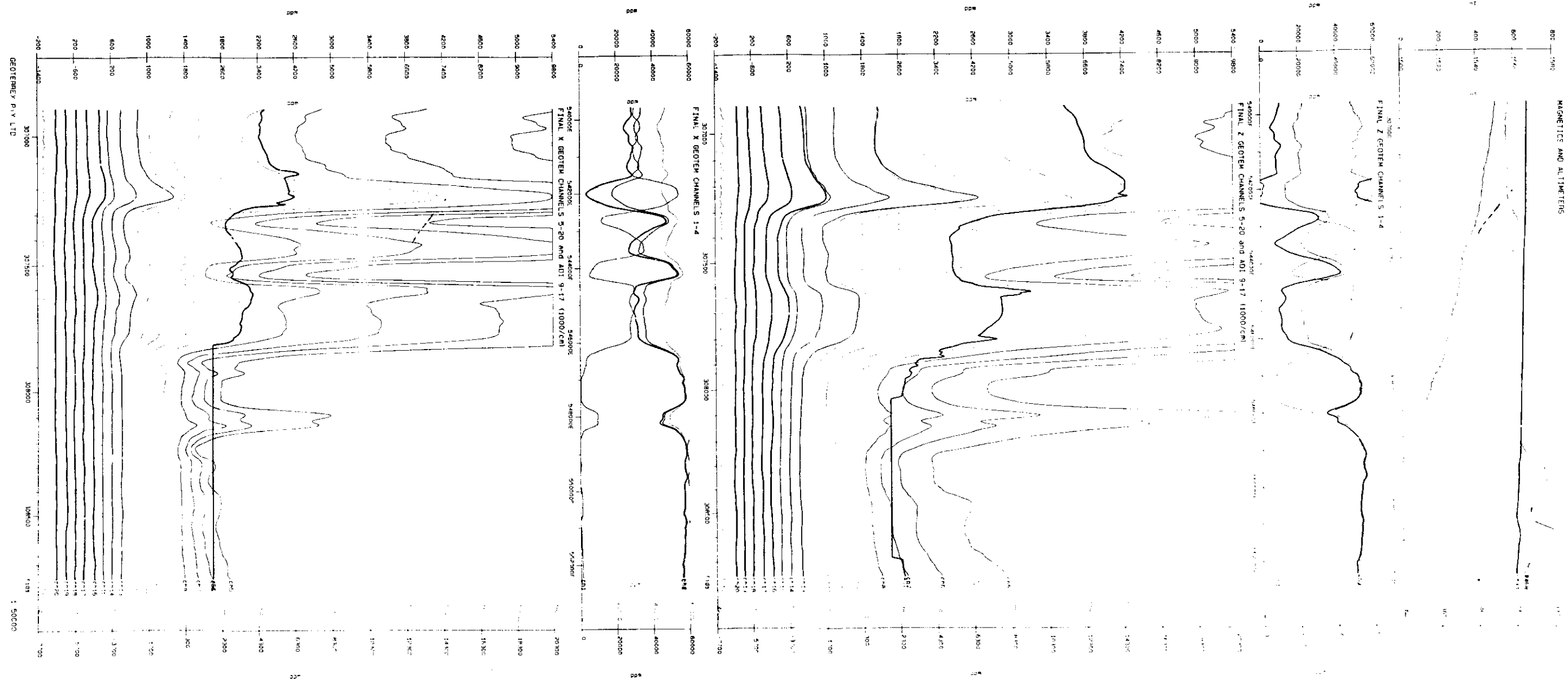
BHP MINERALS PTY LTD MAY 1996



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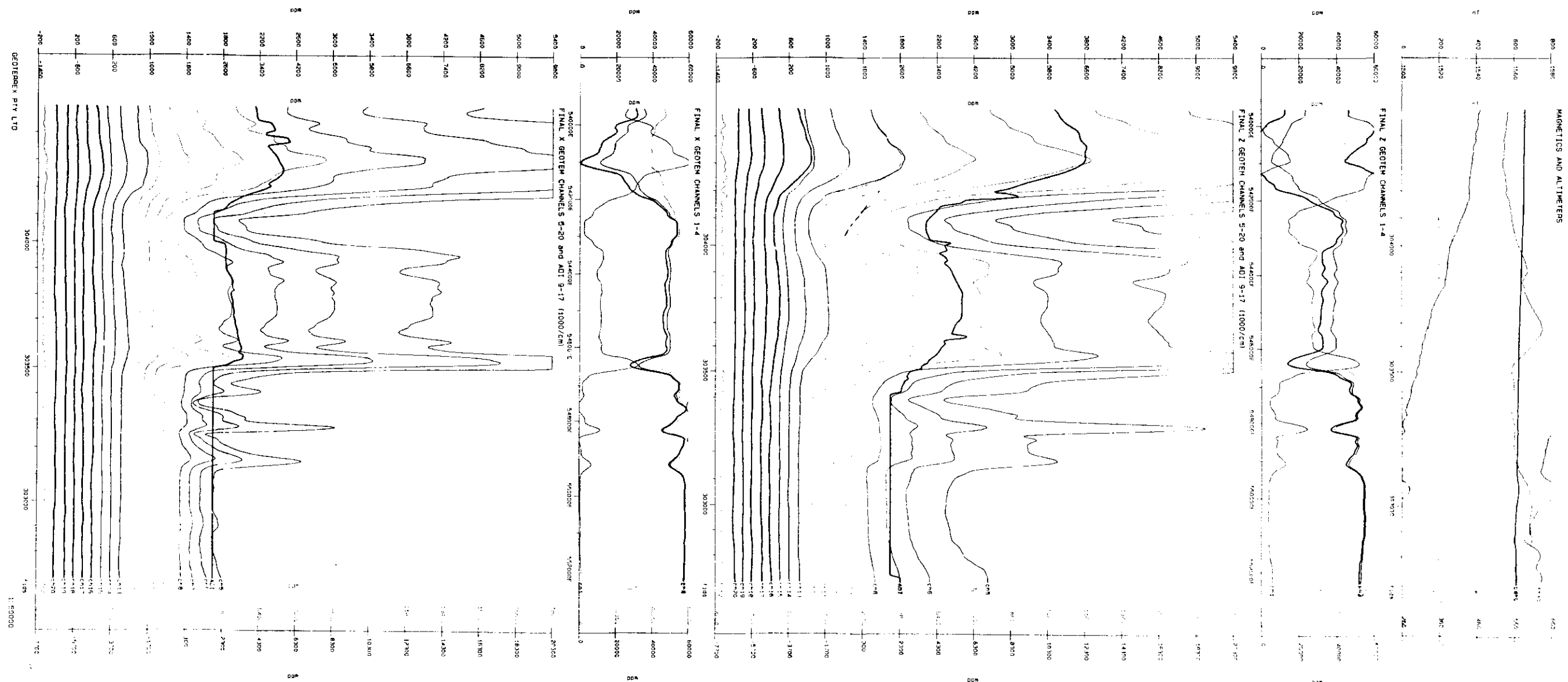
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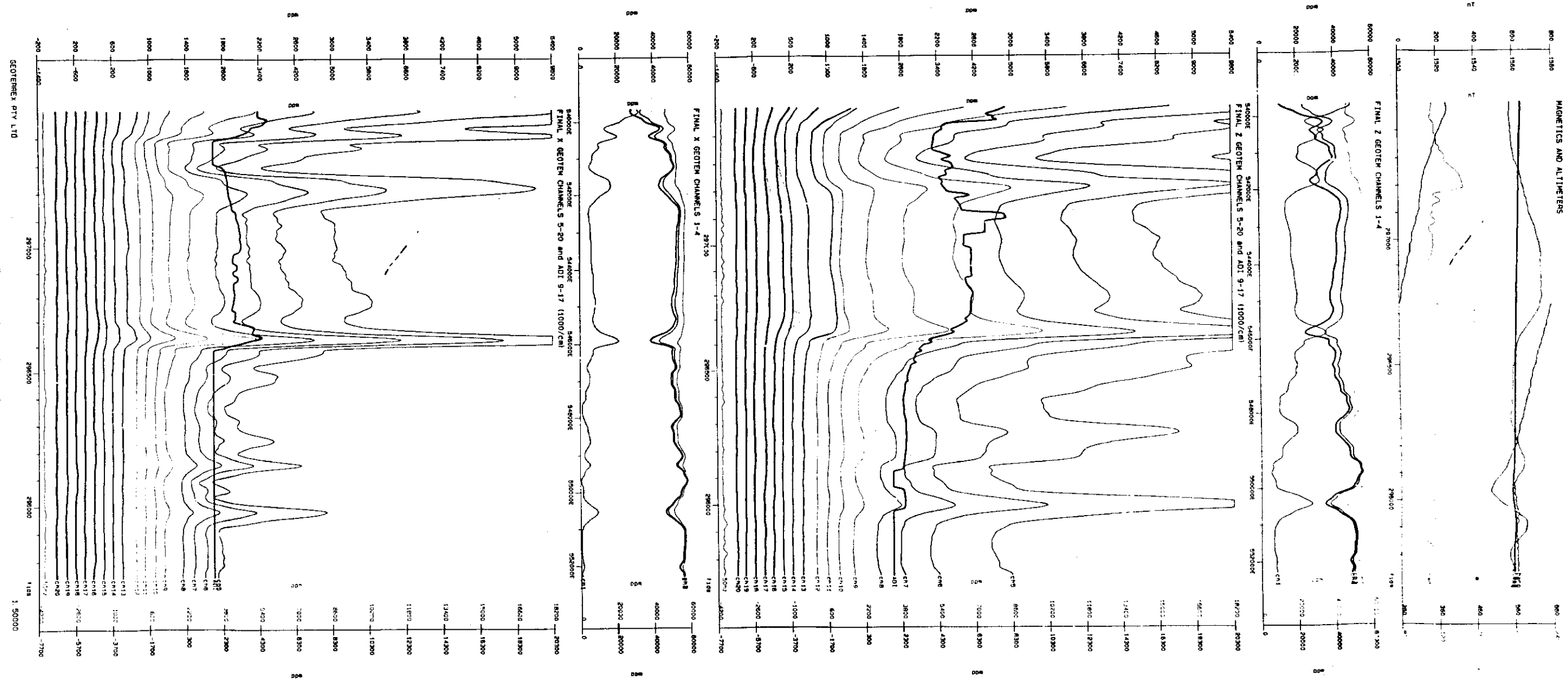
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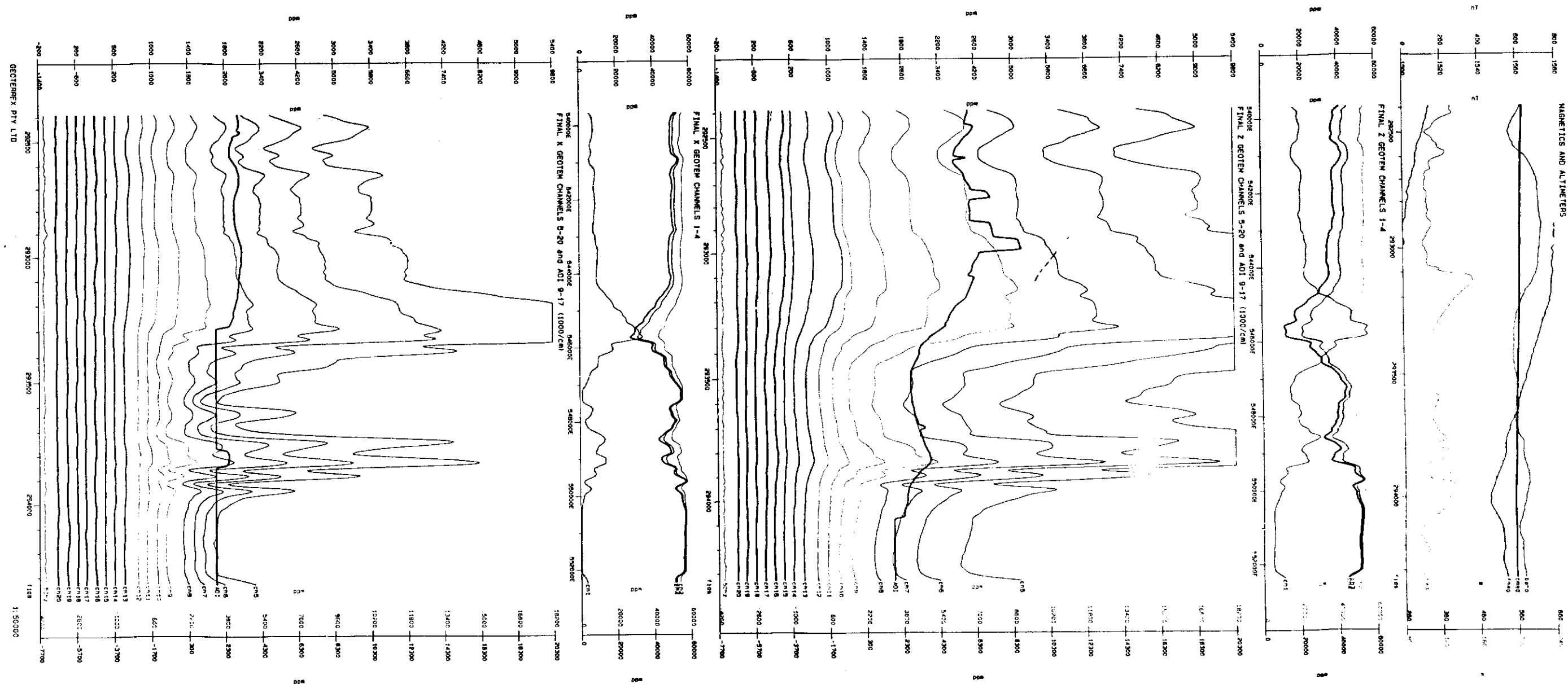
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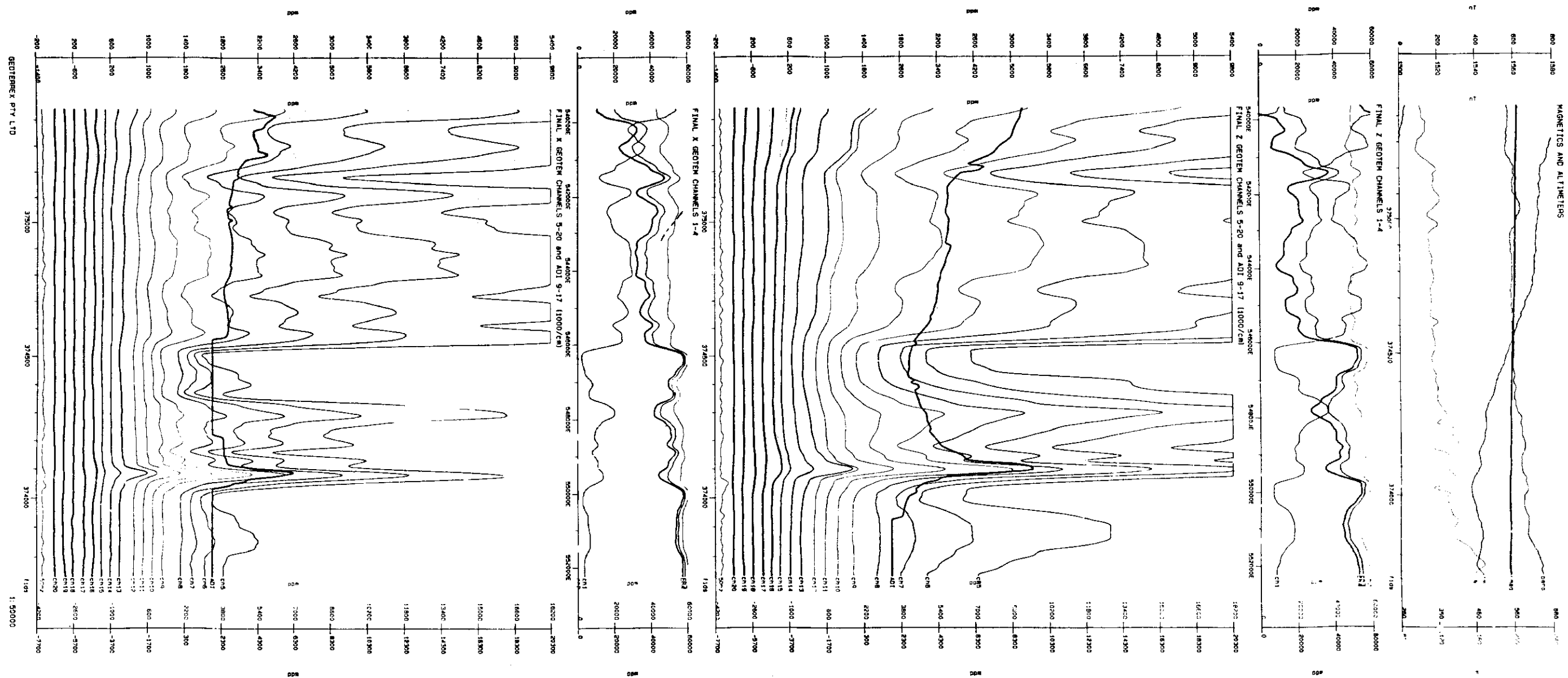
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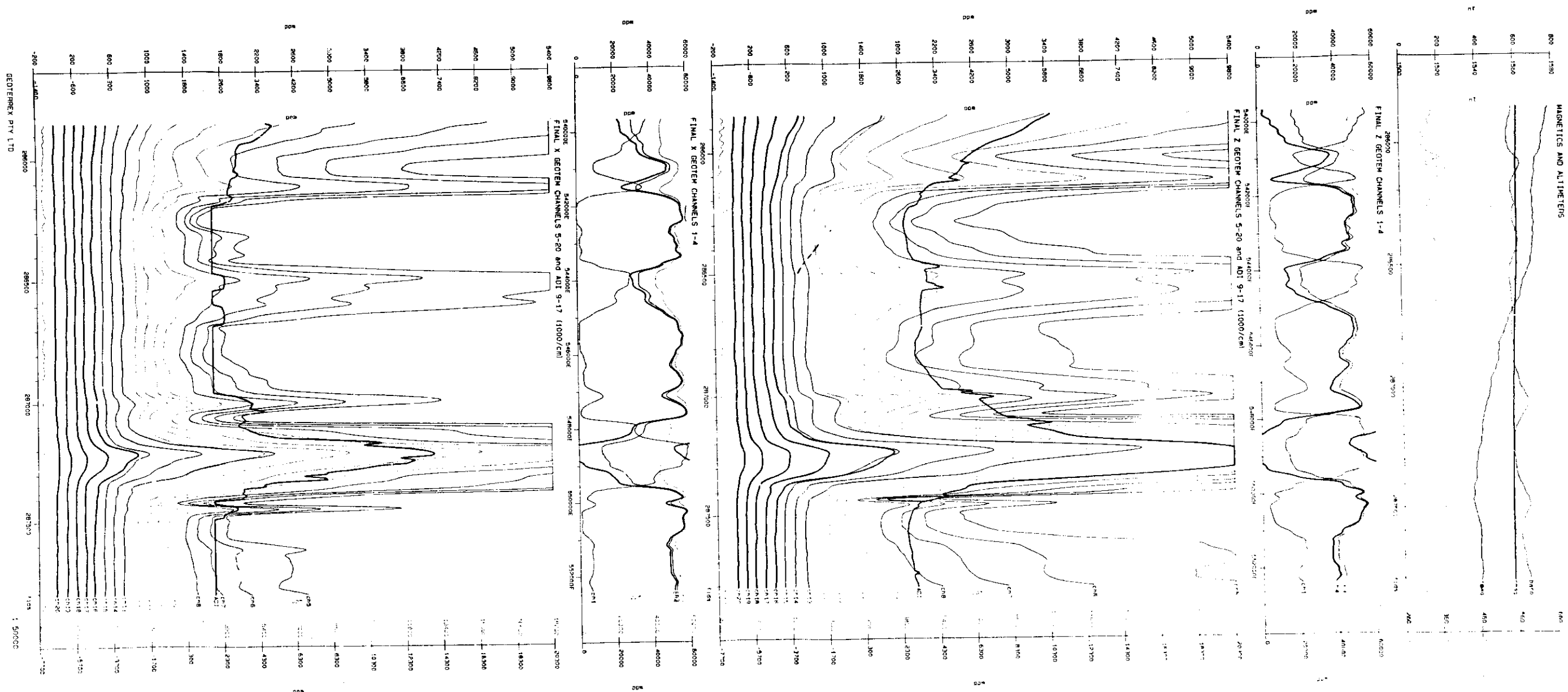
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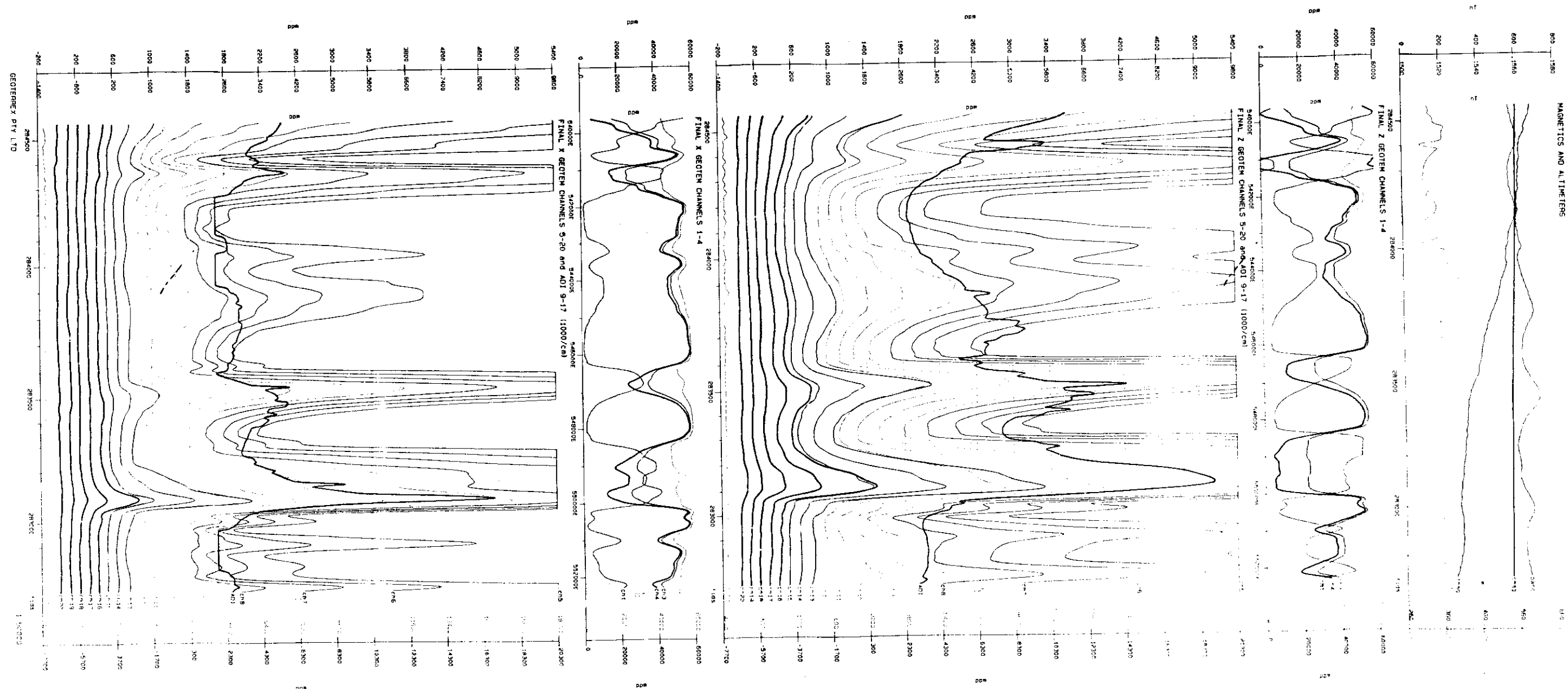
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BHP MINERALS PTY LTD MAY 1996



LINE 141/1
AVERAGE NORTHING = 9750497N

2-734 MARINER 25hz 4ms GEOTEM SURVEY

BHP MINERALS PTY LTD MAY 1996