

Schlumberger

GEOFRAME
PROCESSED
INTERPRETATION

Dipole Shear
Sonic Imager

Measured Depth

*A Mark of Schlumberger

Using the following logs:

DSI-EMS-GR
PEX-AIT-LDT
VSP

N.E.B. COPY

COMPANY: APACHE CANADA LTD.

WELL: APACHE PARAMOUNT NOGHA B-23

FIELD: UNDEFINED

Province: NORTHWEST TERRITORIES

COUNTRY:

Date Logged: 13-Mar-2004 Date Processed: 17-Mar-2004

Well Location: UWID: 300B236640125450

LSD: B-23

Elevations: KB: 315.75m DF: 315.45m GL: 311.27m

API Number: WID: 1998 Job Number: 10764788

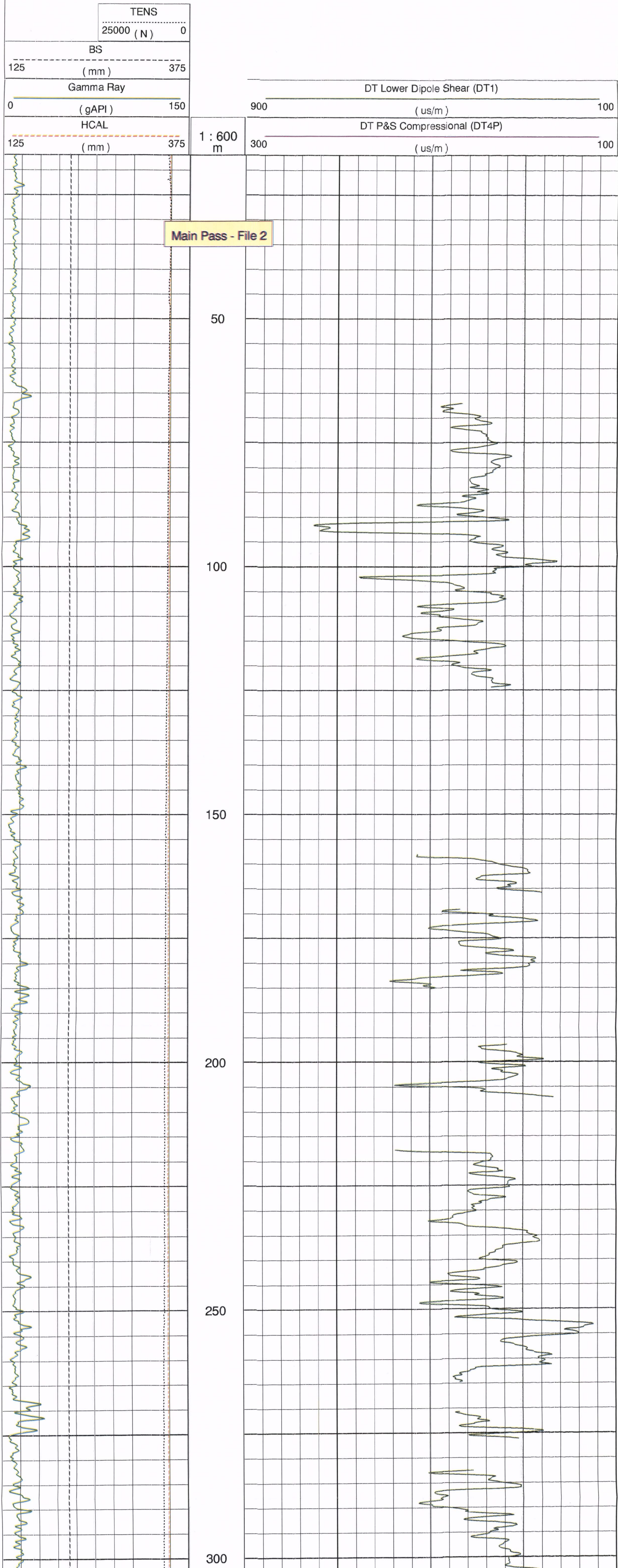
FOLD HERE: The well name, location and borehole reference data were furnished by the customer.

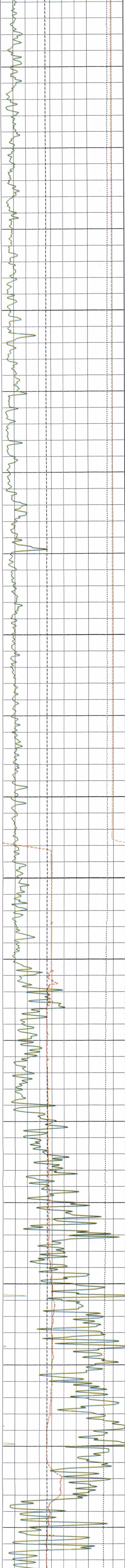
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

Field Recording:	Location: NORMAN WELLS	Software Version: 11C0-305	Engineer: KELLY RONCIN
Office Recording:	ICS Center: Calgary	Baseline: GF 3.8.1	Log Analyst: MARC DIONNE
Mud and Borehole Measurements:			
Rm @ Measured Temperature:	@	BHT: 21degC	Bitsize: 216mm
Rmf @ Measured Temperature:	@	Type Fluid in Hole:	INVERT
Rmc @ Measured Temperature:	@	Mud Density: 1200kg/m3	

Remarks:

DSI RAN CENTRALIZED WITH 2 CMEZ BELOW AND ONE ABOVE NAD EMS ABOVE
DSI RAN USING P&S AND UPPER DIPOLE MODES AS PER CLIENT REQUEST
LOWER DIPOLE RECORDED FOR LOG QUALITY PURPOSES





350

400

450

500

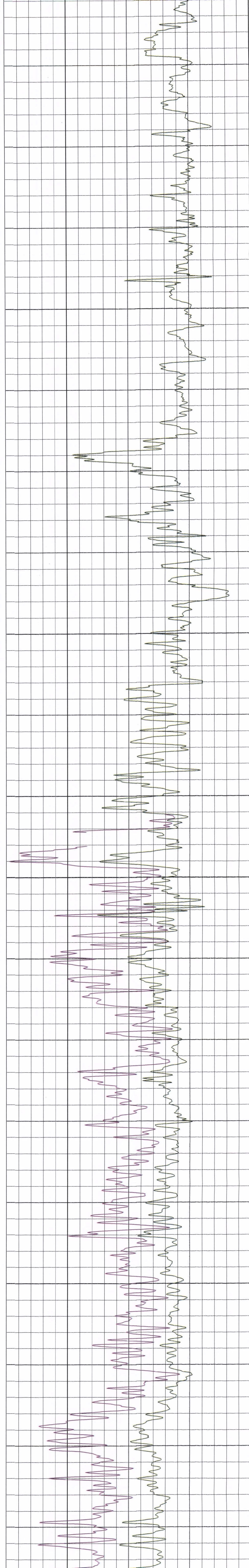
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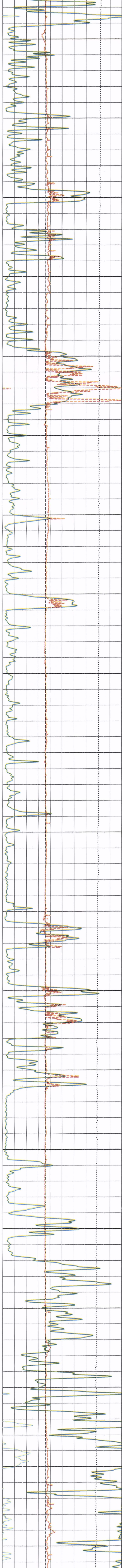
600

650

700

750





800

850

900

950

1000

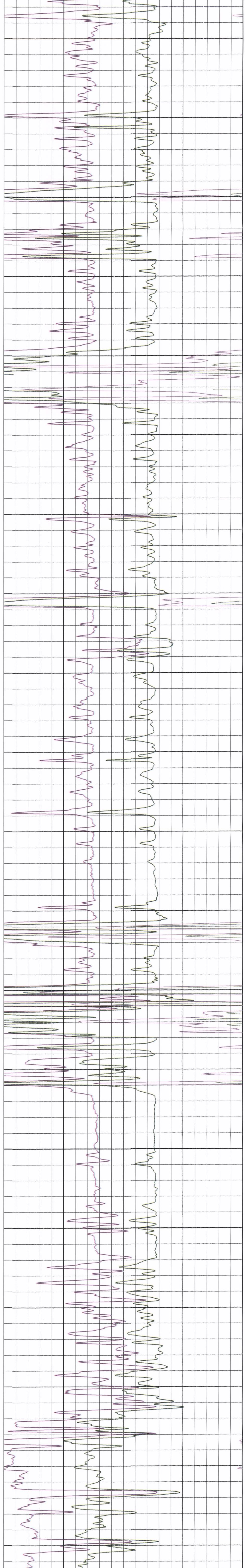
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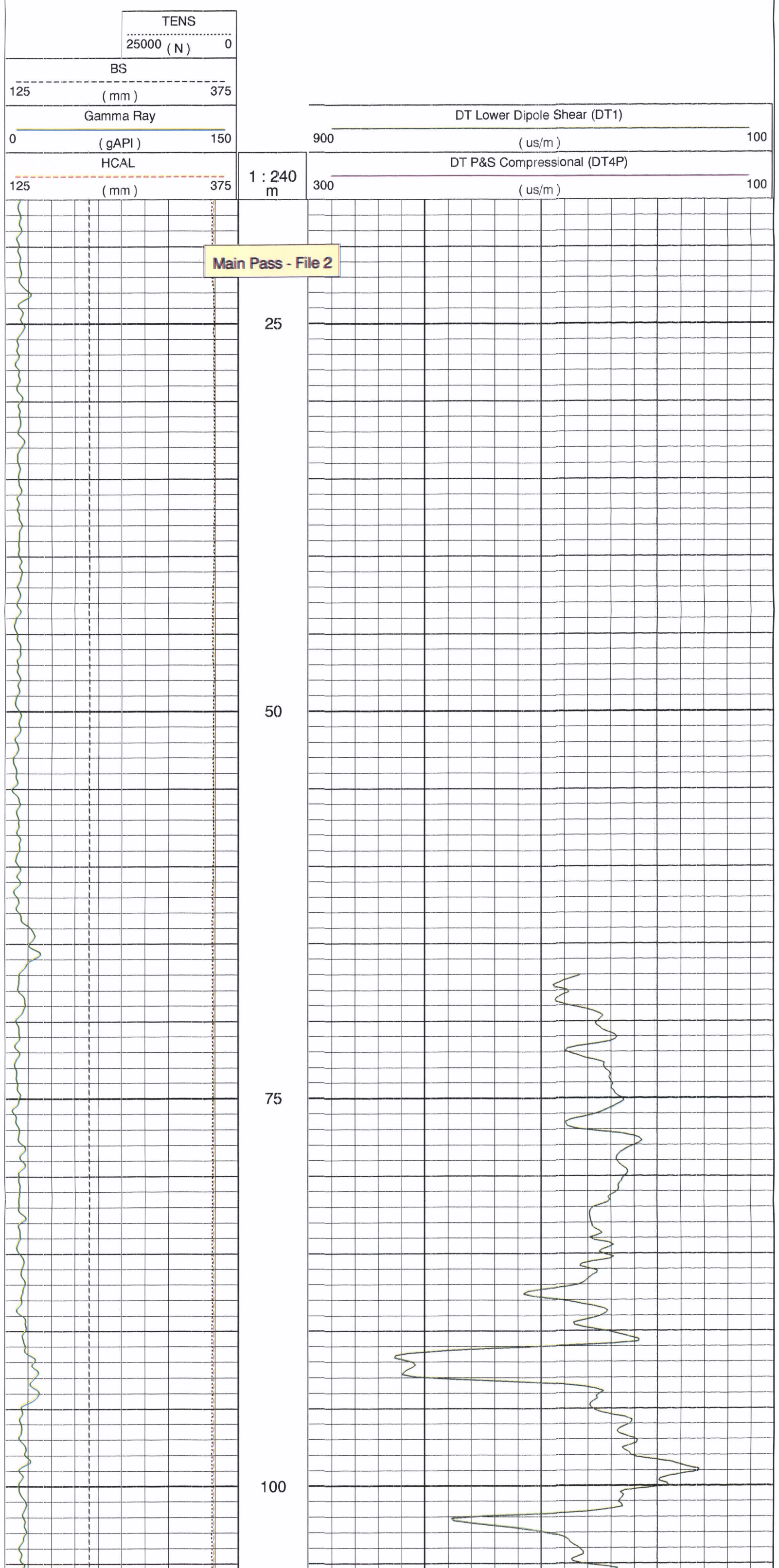
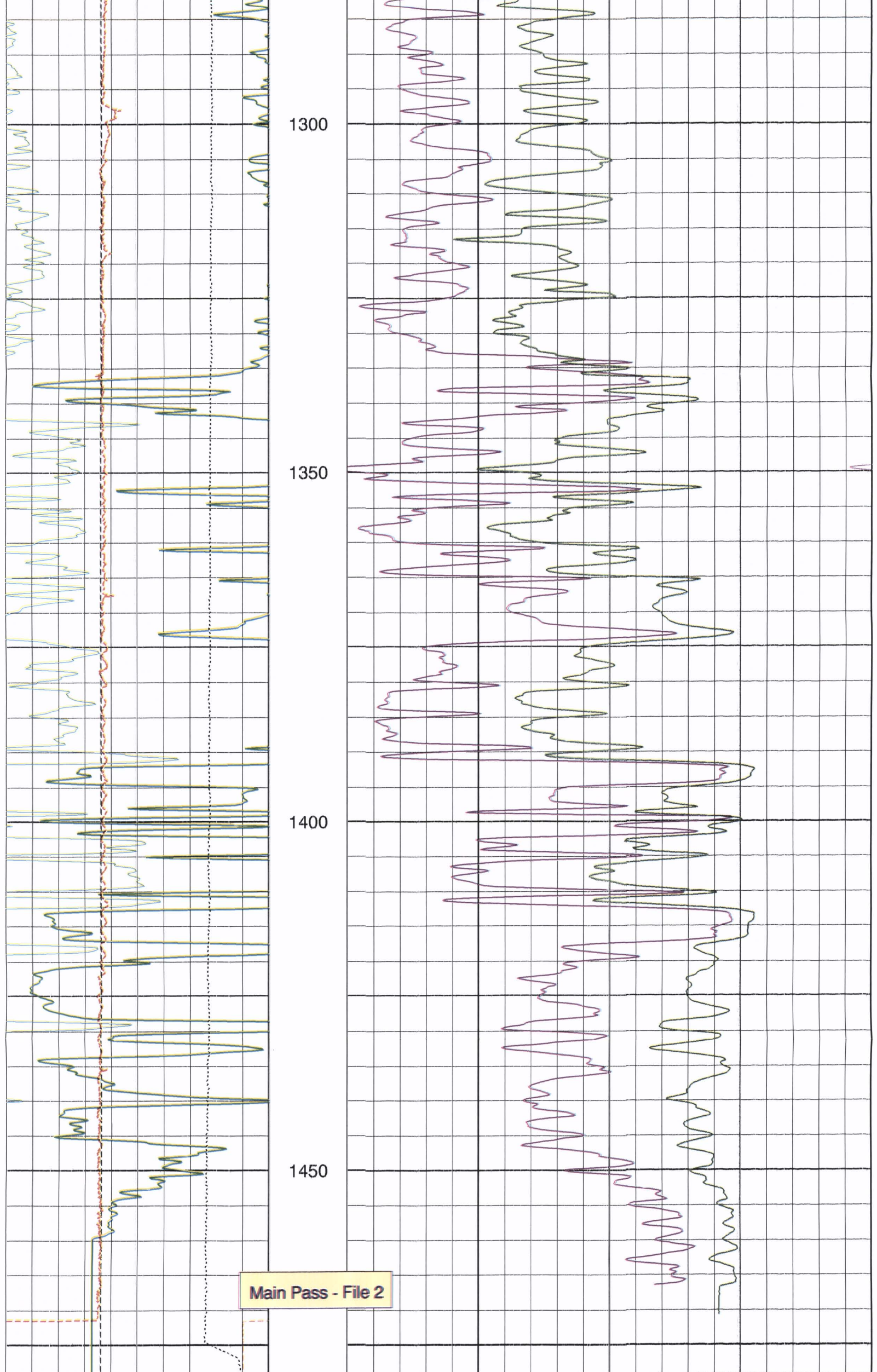
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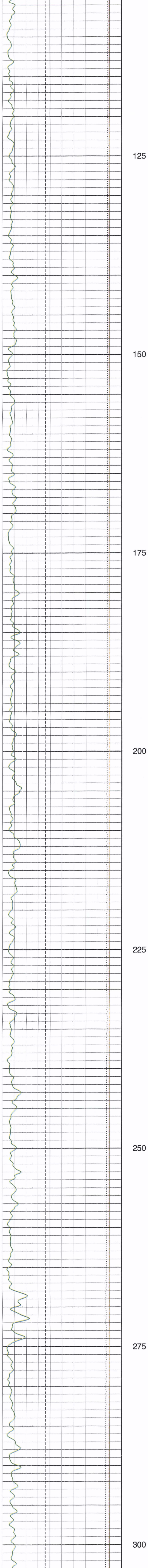
1150

1200

1250







125

150

175

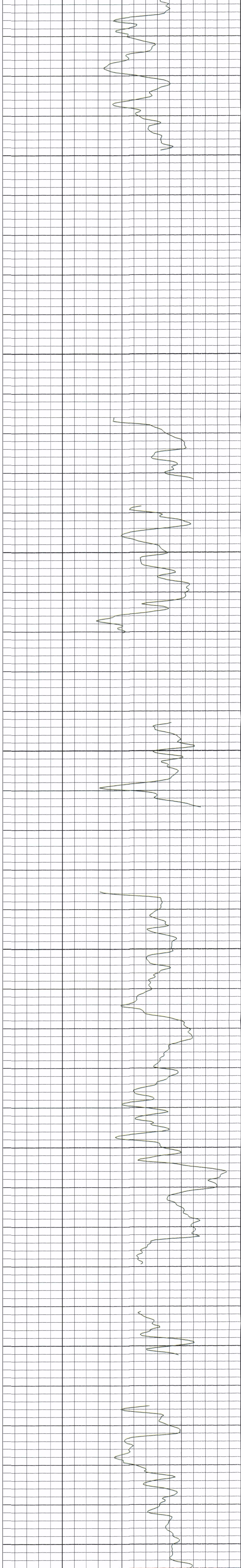
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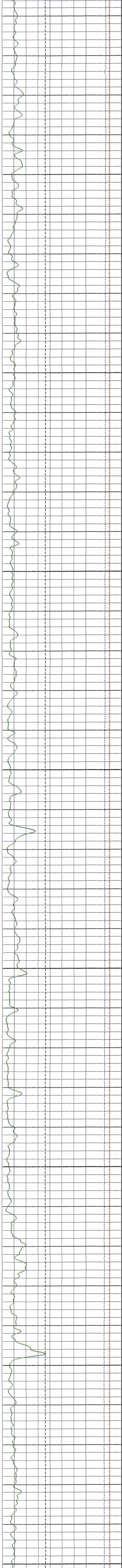
225

250

275

300





325

350

375

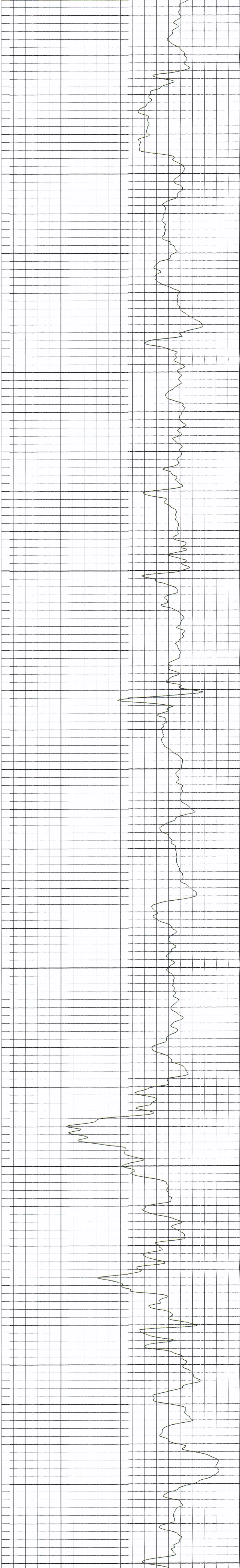
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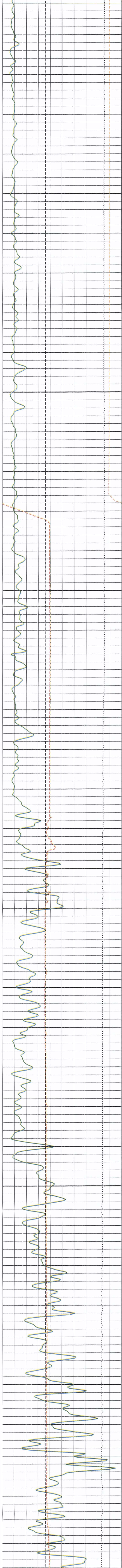
425

450

475

500





525

550

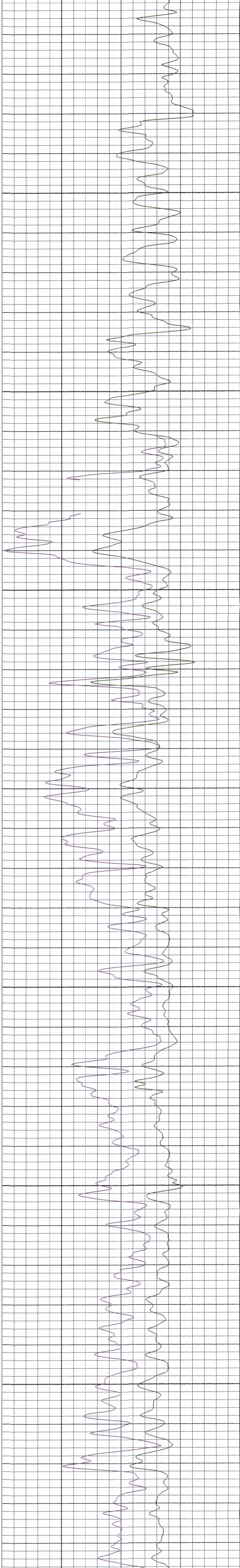
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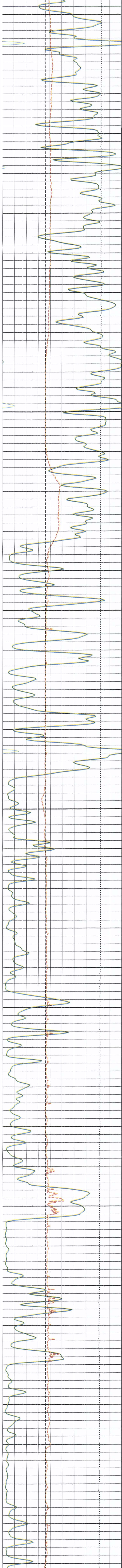
600

625

650

675





700

725

750

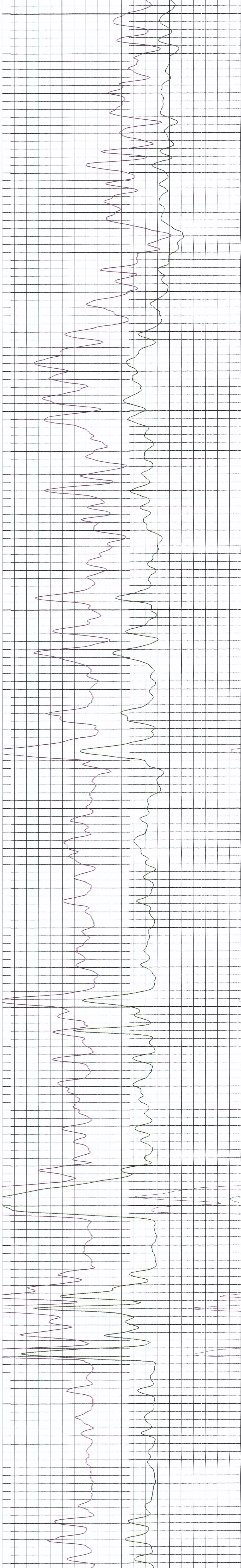
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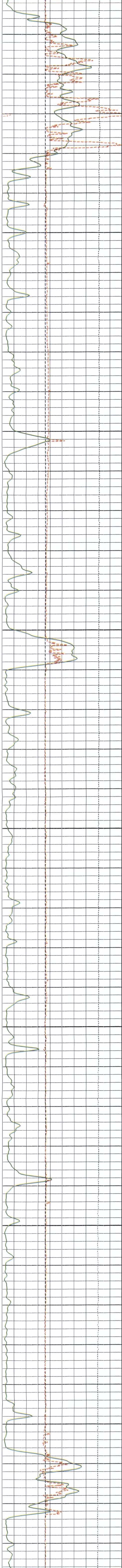
800

825

850

875





900

925

950

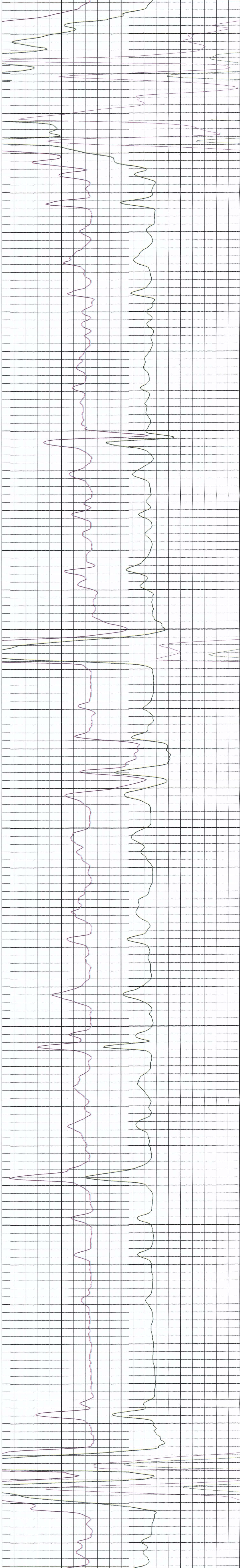
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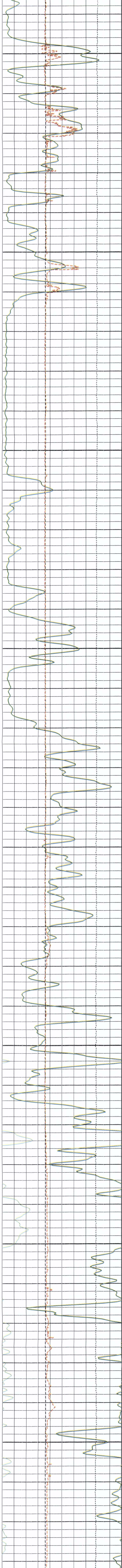
1000

1025

1050

1075





1100

1125

1150

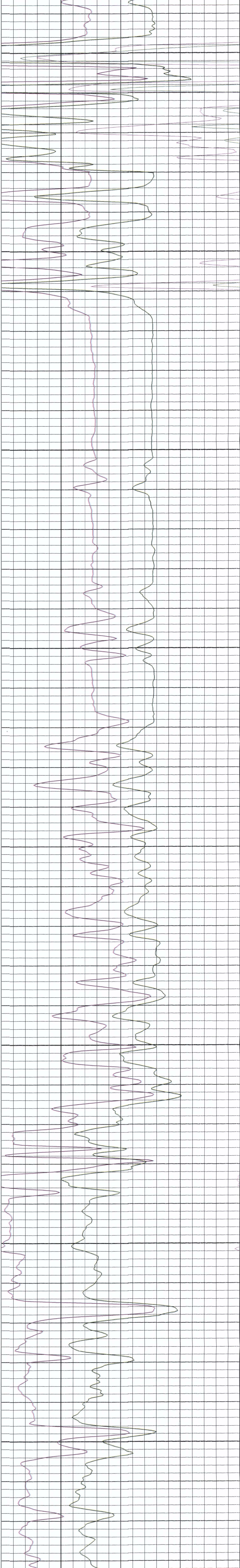
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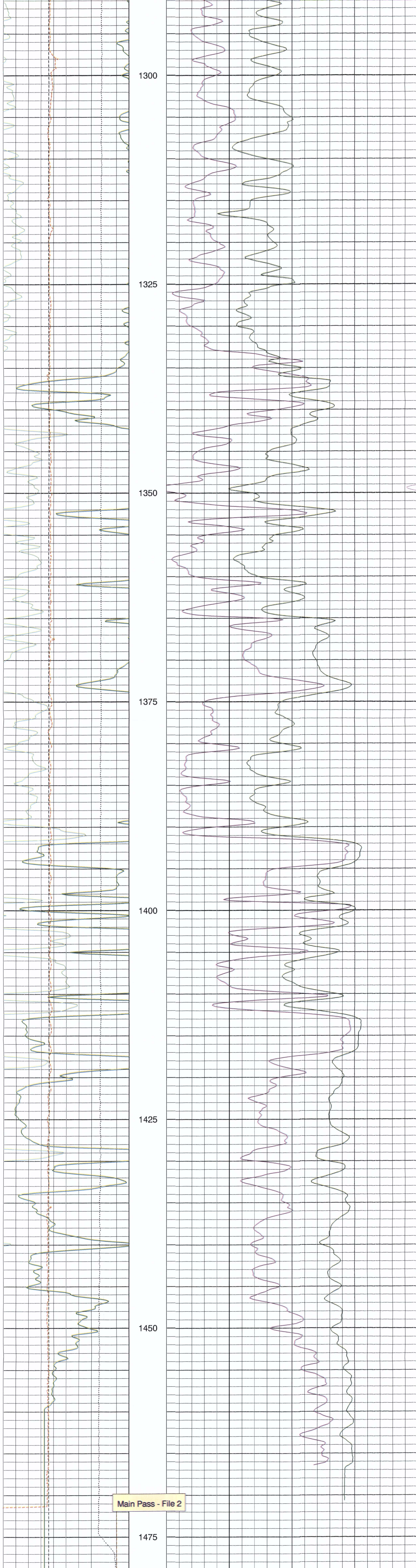
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1225

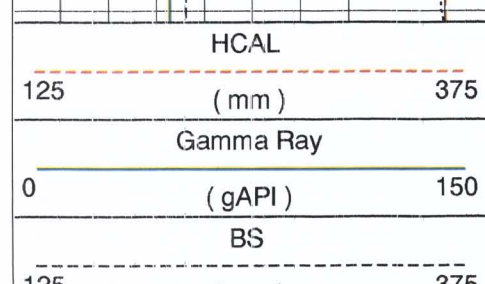
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1275

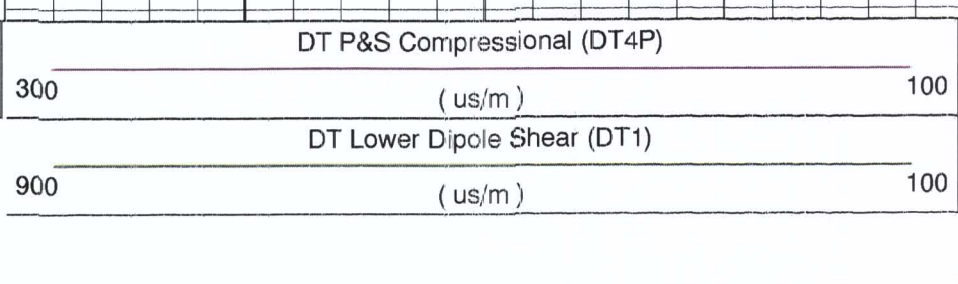




Main Pass - File 2



1 : 240
m



TENS
25000 (N) 0

TENS
25000 (N) 0

BS
125 (mm) 375

Gamma Ray
0 (gAPI) 150

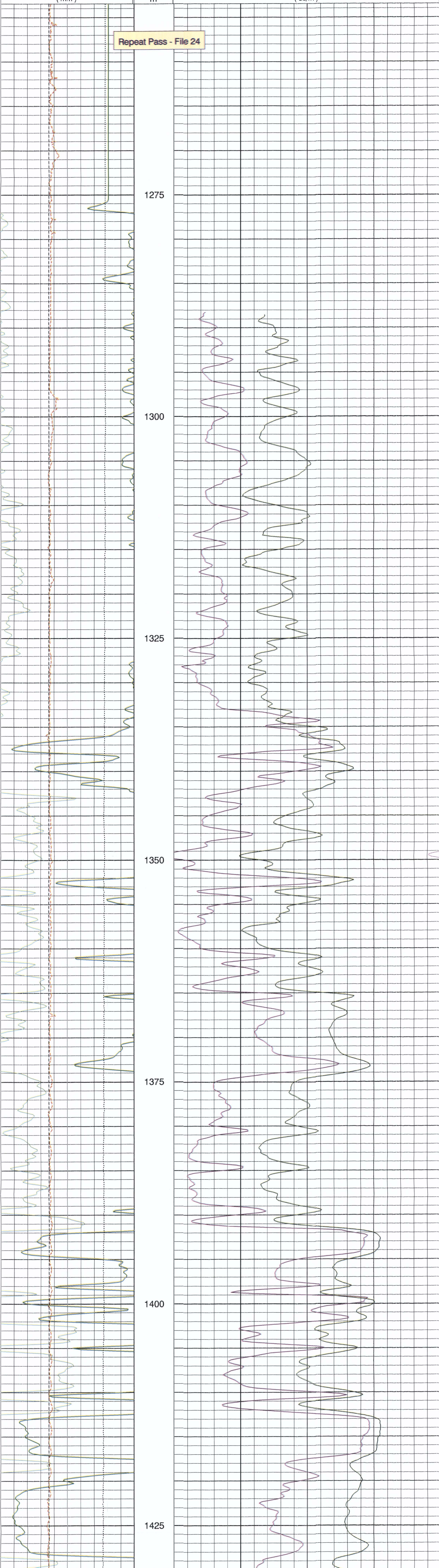
HCAL
125 (mm) 375

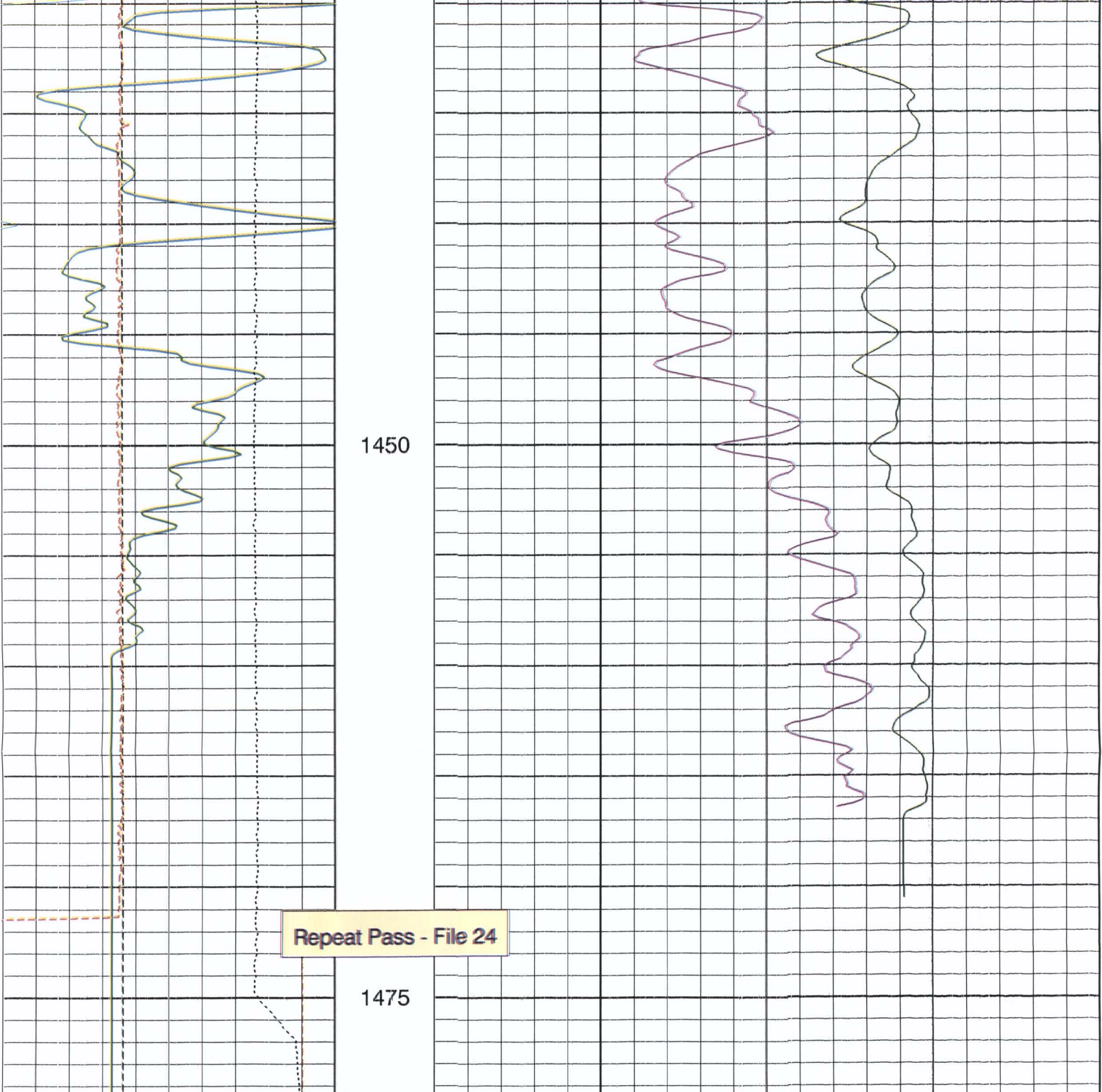
1 : 240
m

DT Lower Dipole Shear (DT1)
900 (us/m) 100

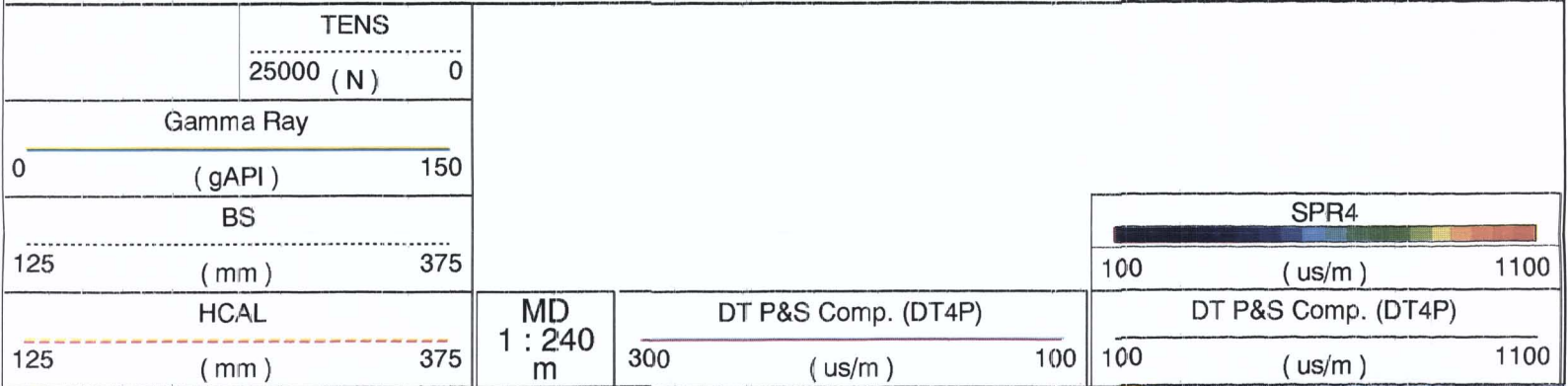
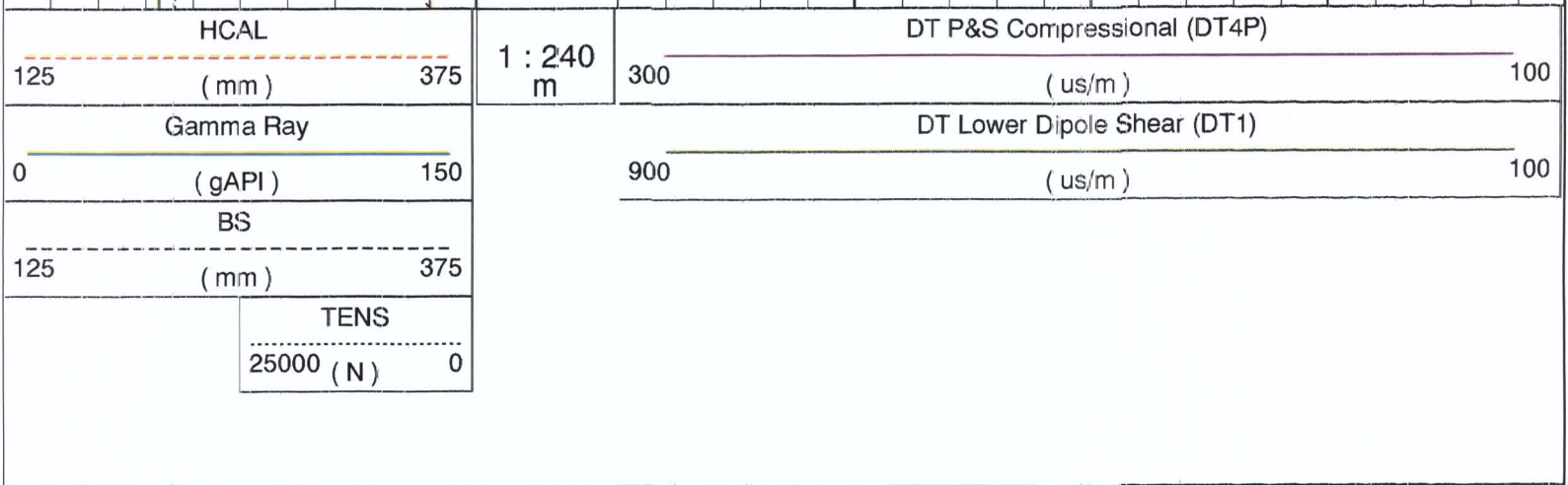
DT P&S Compressional (DT4P)
300 (us/m) 100

Repeat Pass - File 24

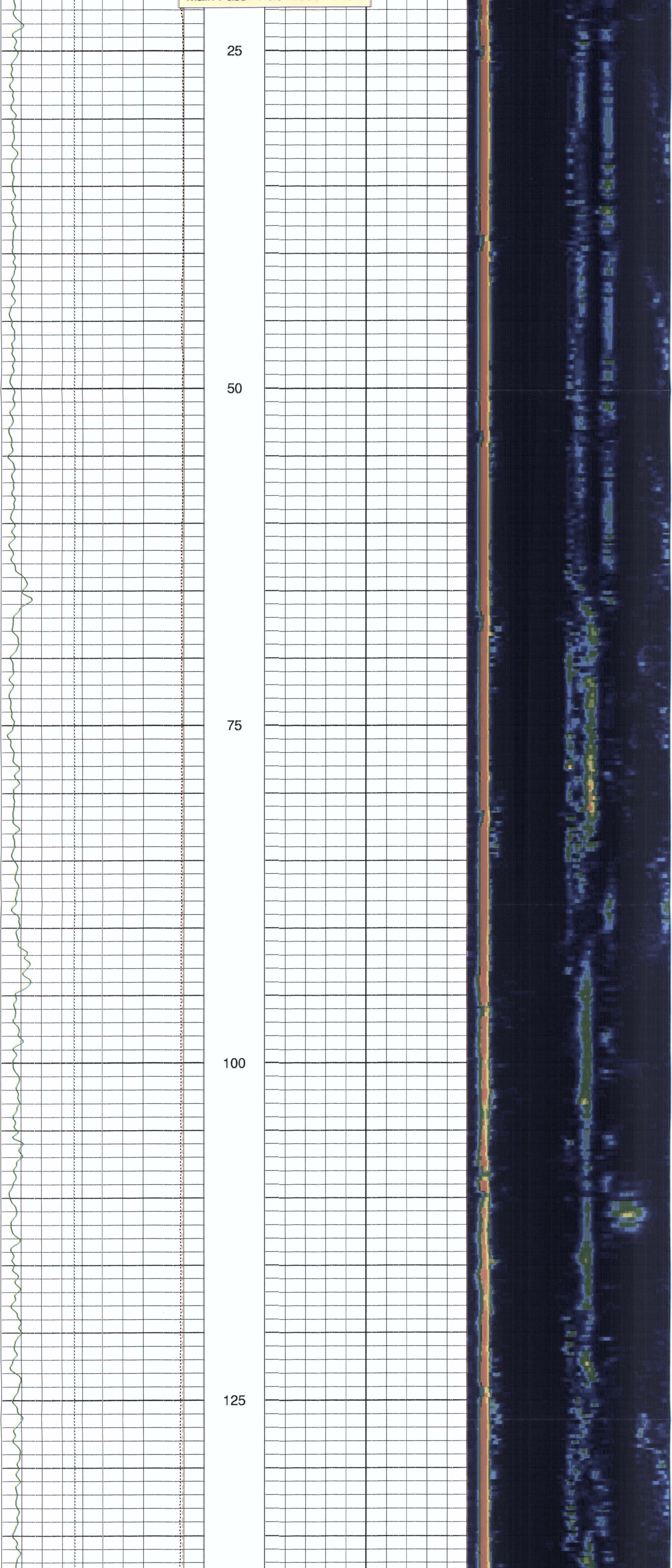


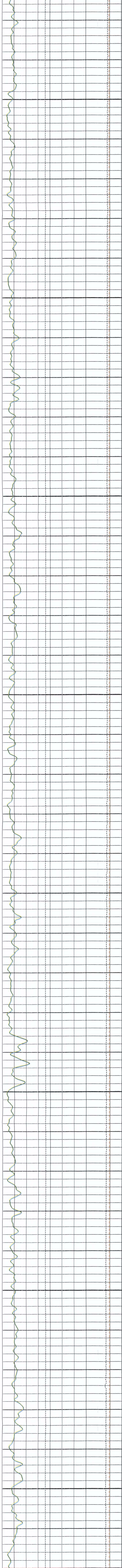


Repeat Pass - File 24



Main Pass - P&S Mode - File 2





150

175

200

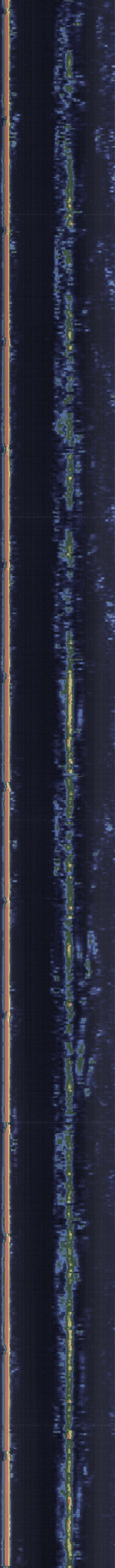
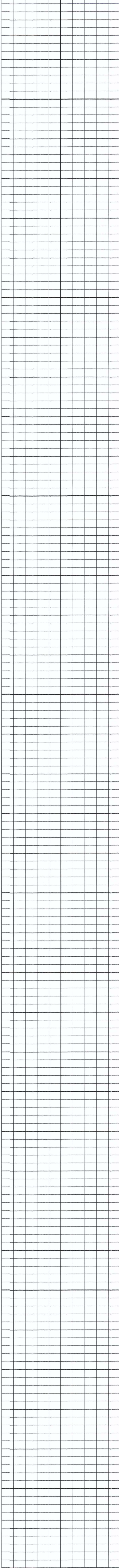
225

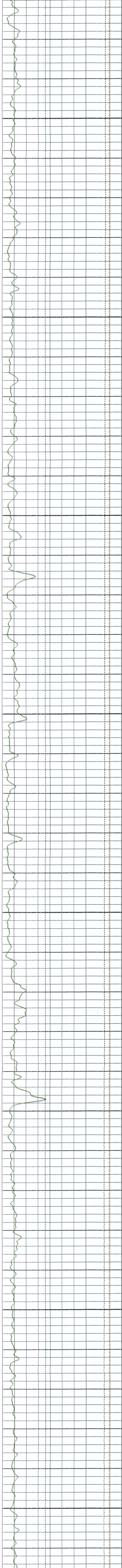
250

275

300

325





350

375

400

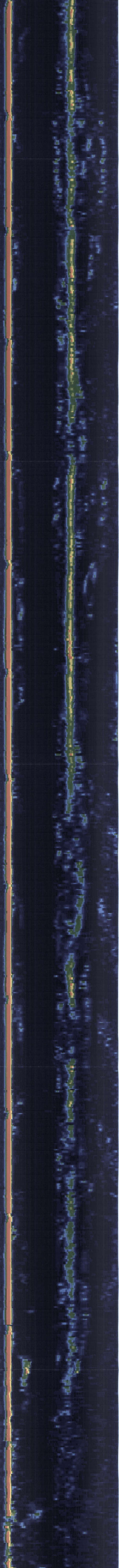
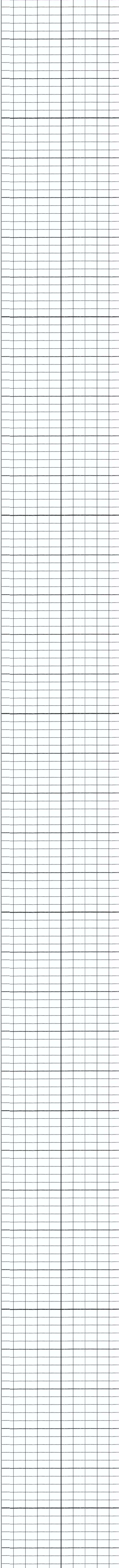
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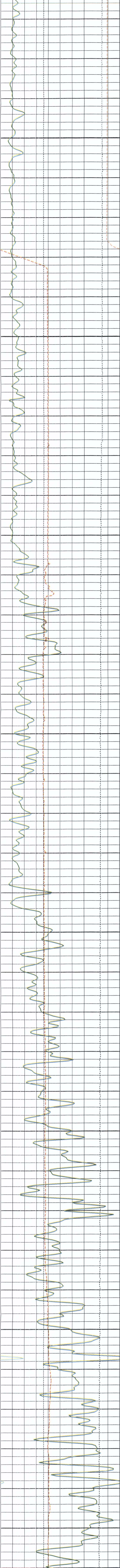
450

475

500

525





550

575

600

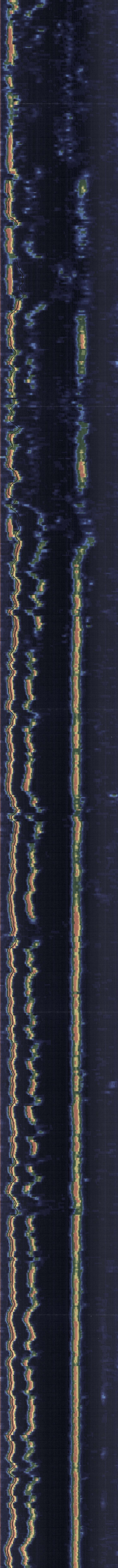
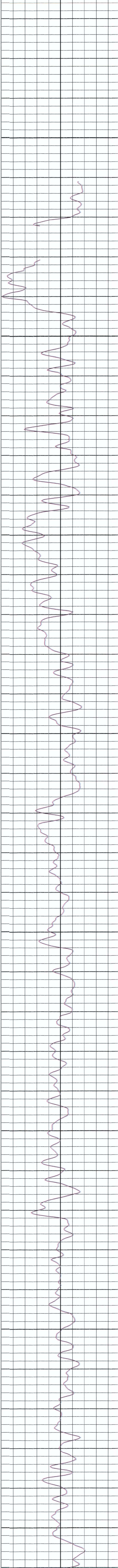
625

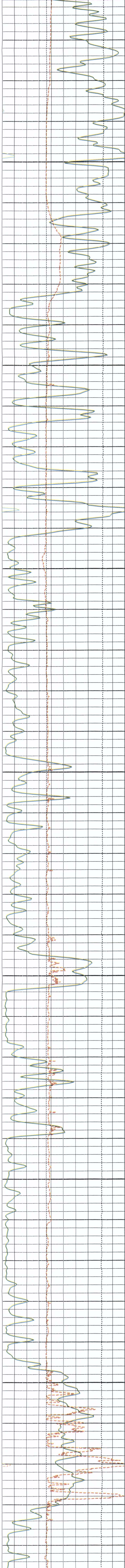
650

675

700

725





750

775

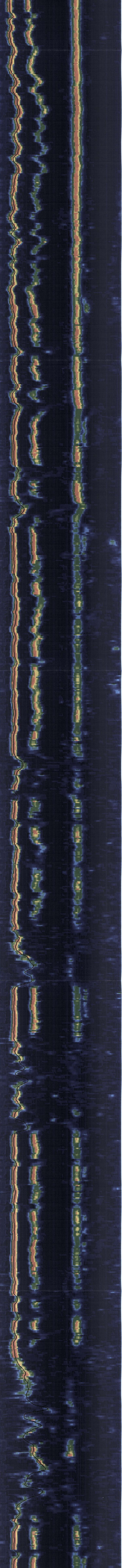
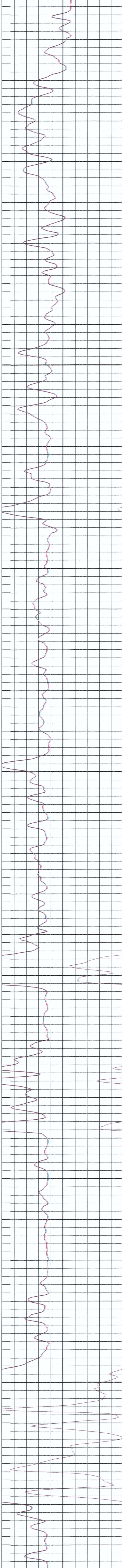
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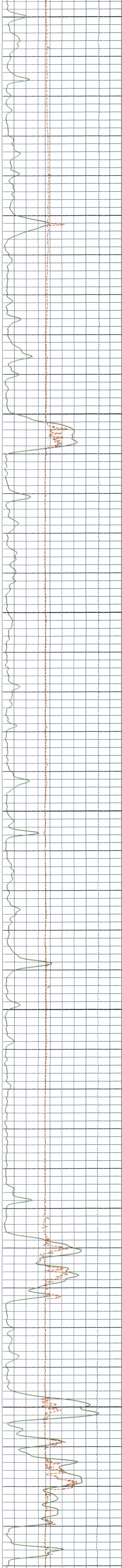
825

850

875

900





925

950

975

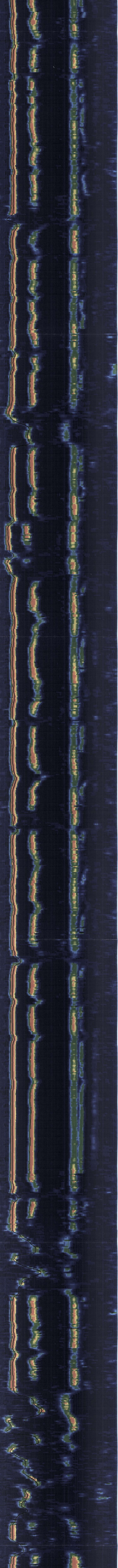
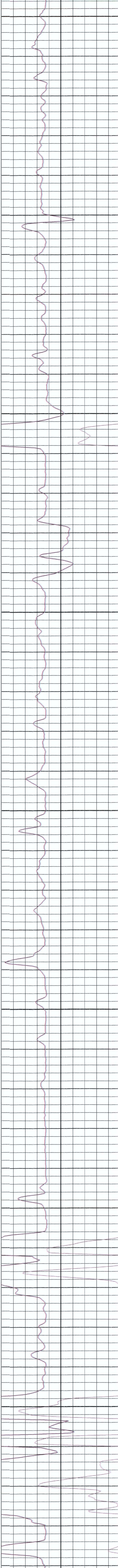
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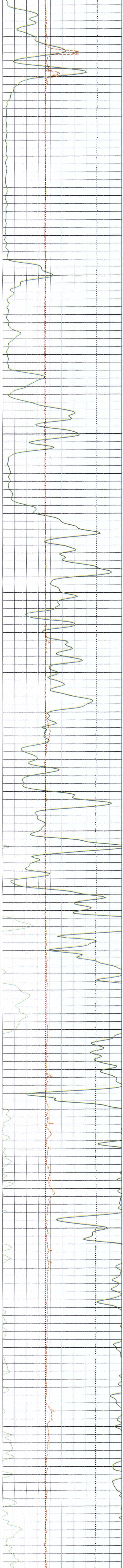
1025

1050

1075

1100





1125

1150

1175

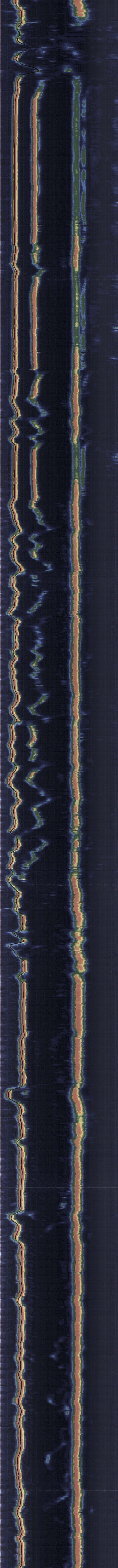
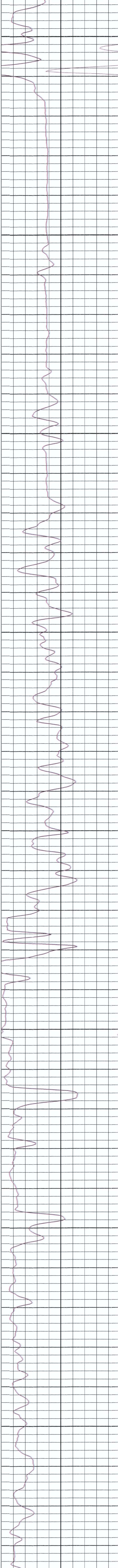
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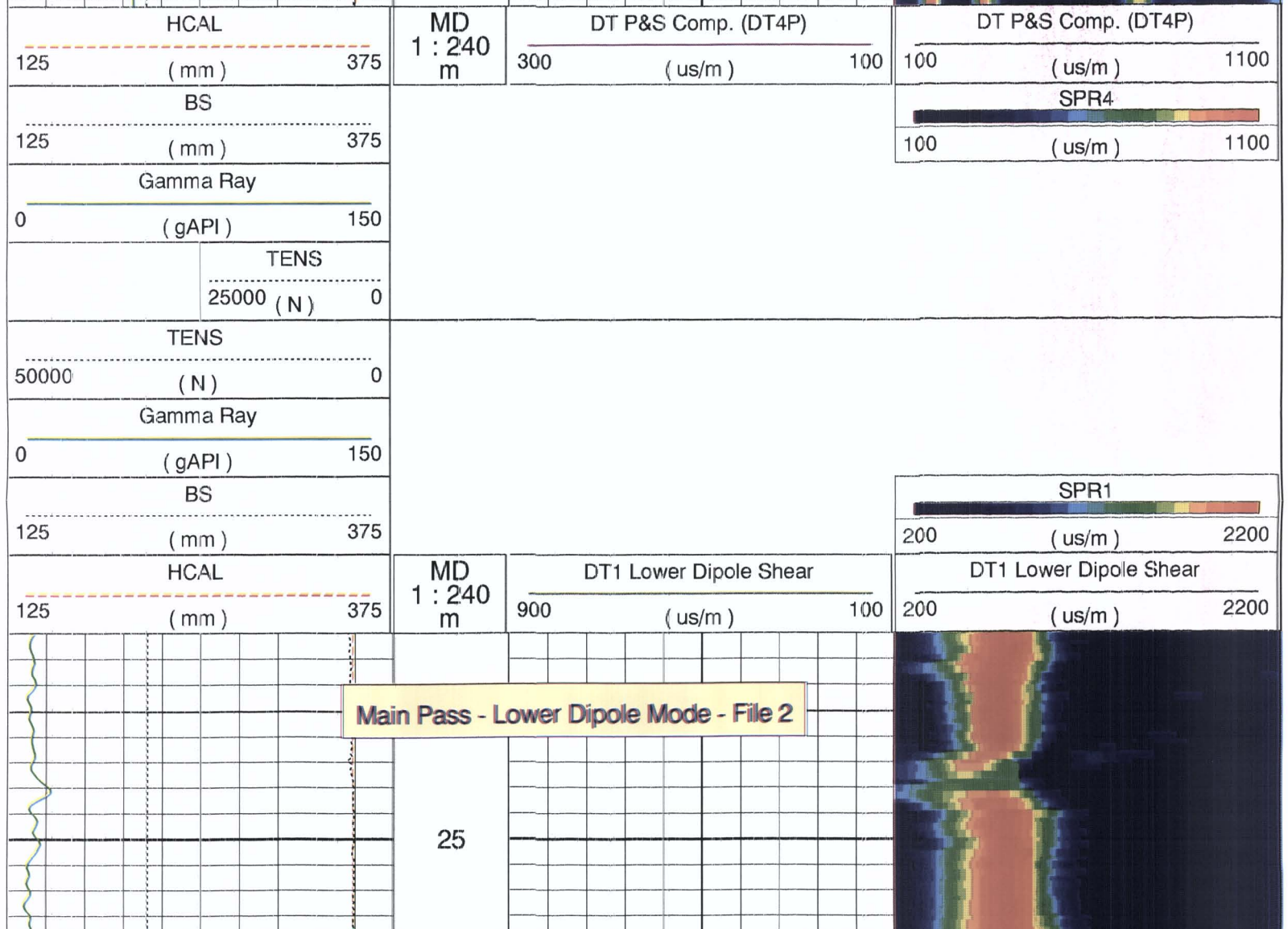
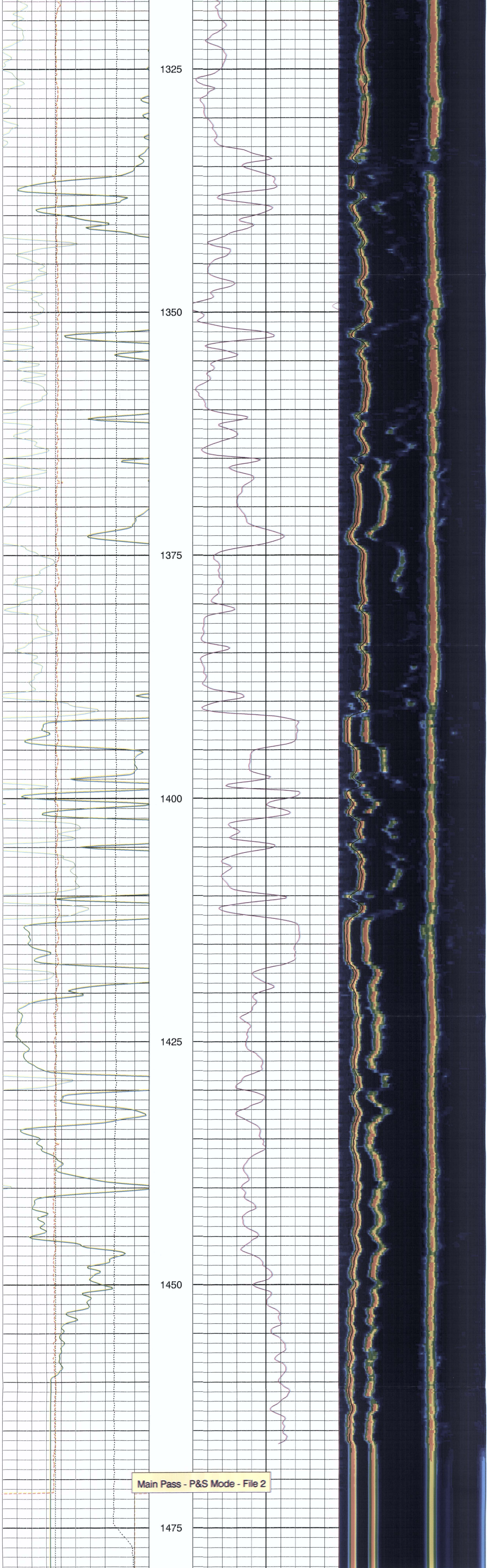
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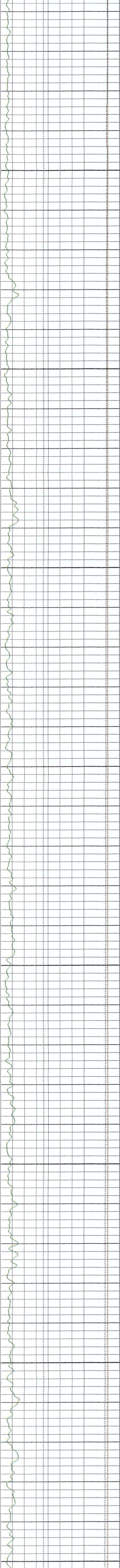
1250

1275

1300







50

75

100

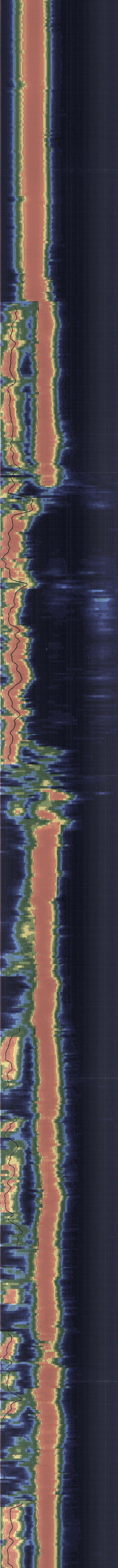
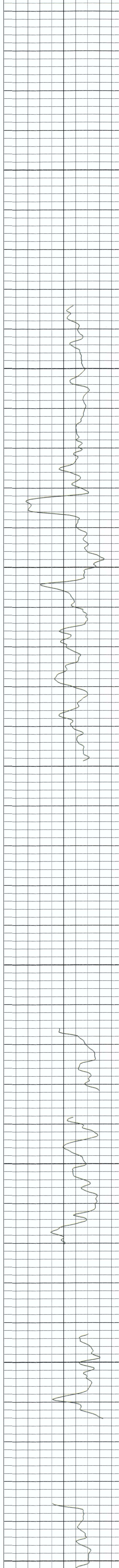
125

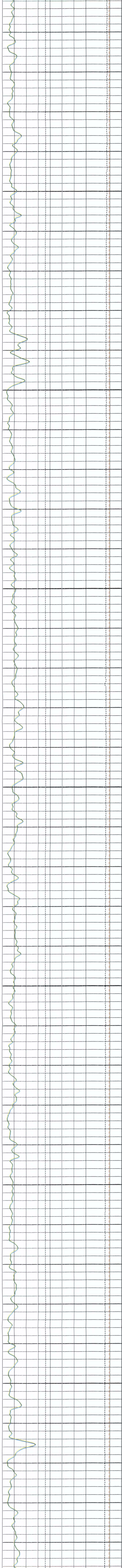
150

175

200

225





250

275

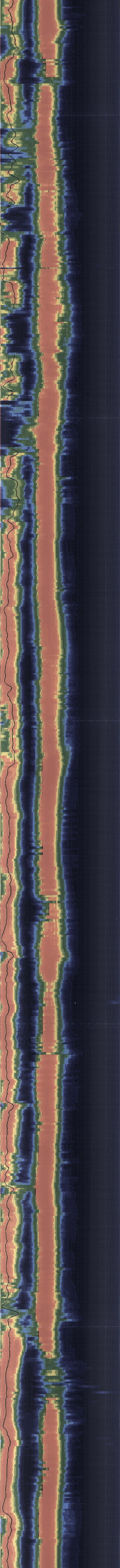
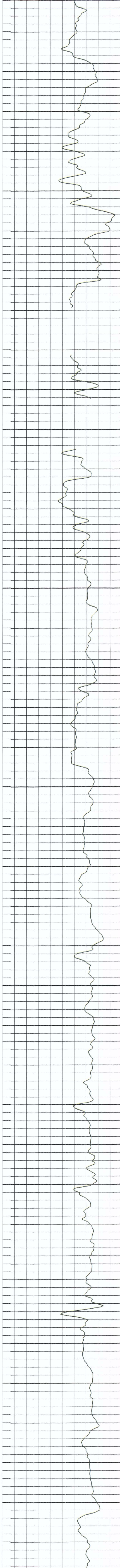
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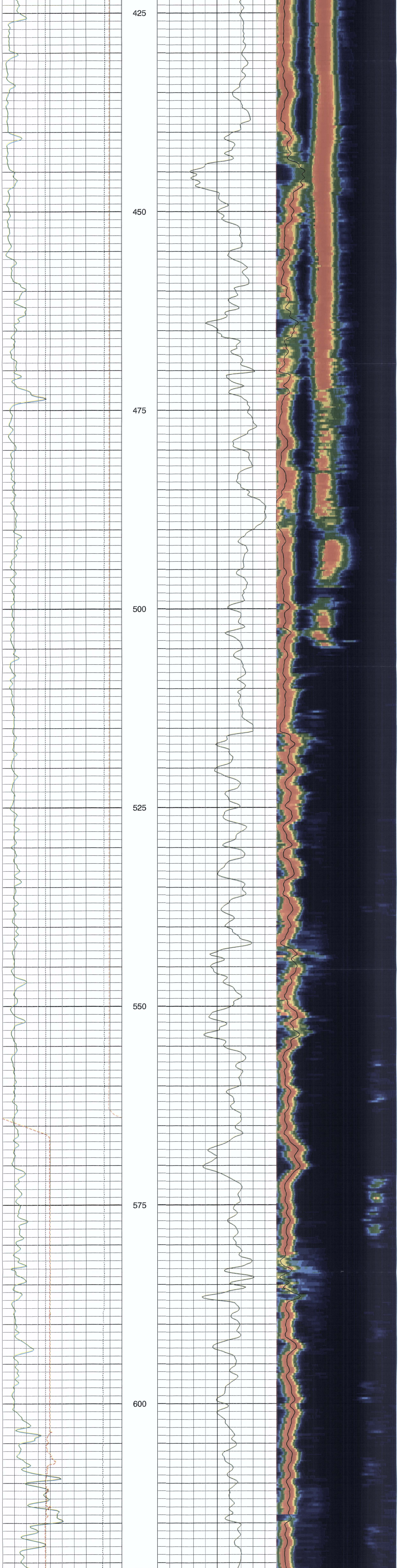
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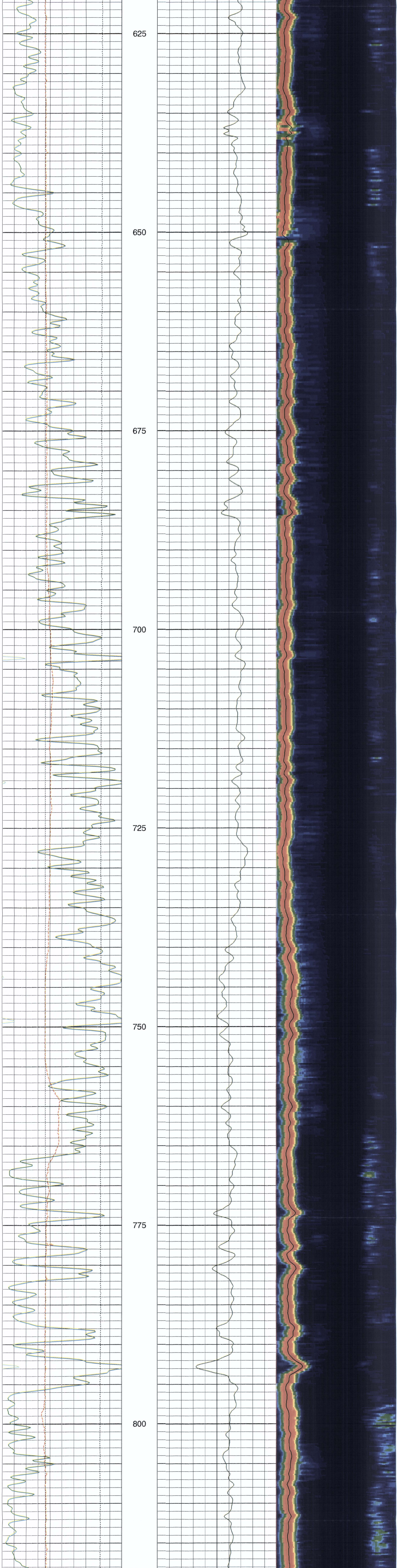
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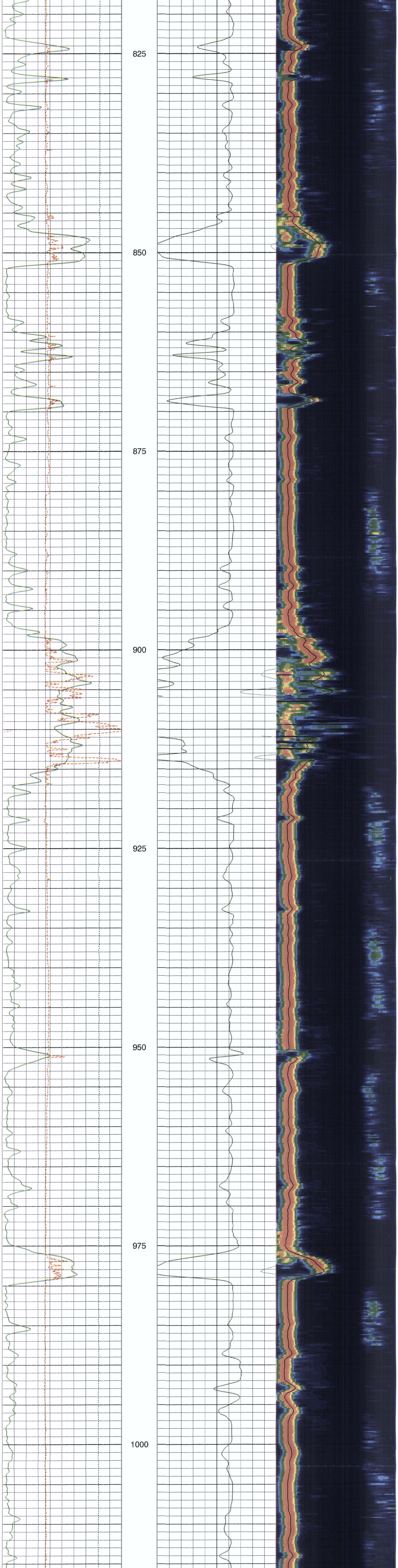
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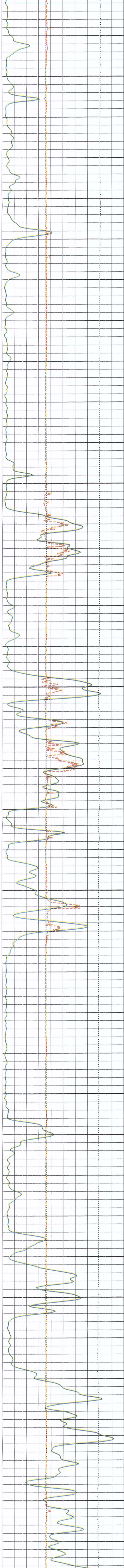
400











1025

1050

1075

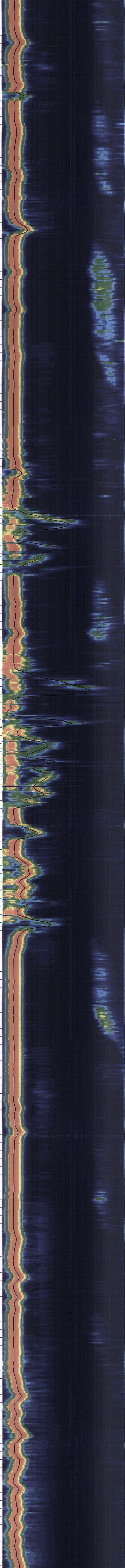
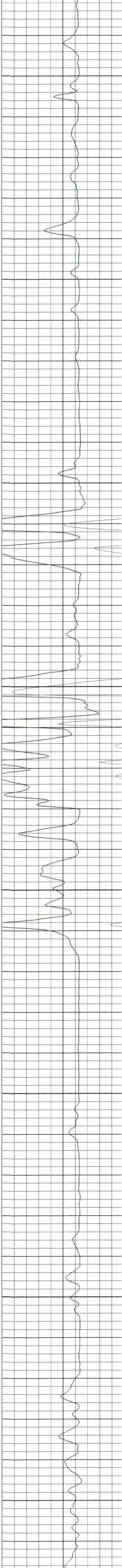
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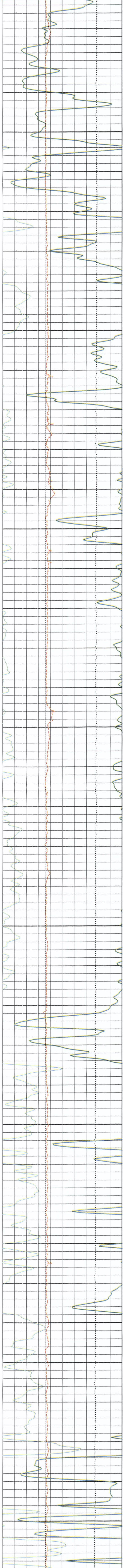
1125

1150

1175

1200





1225

1250

1275

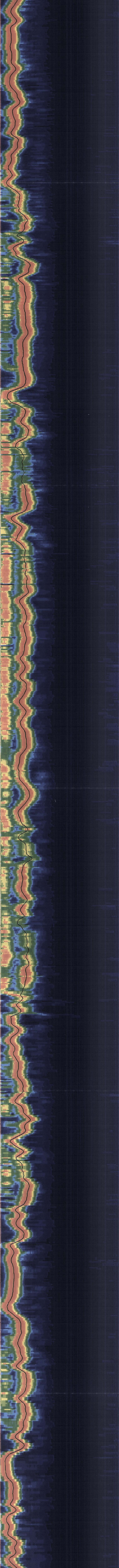
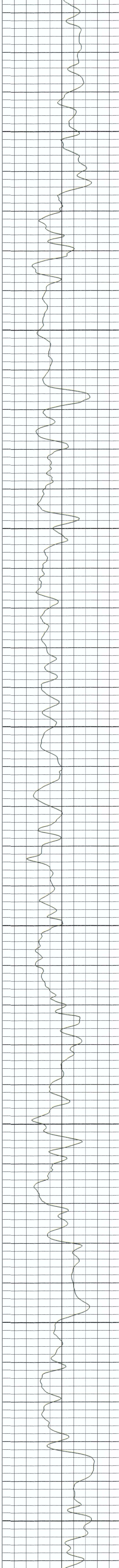
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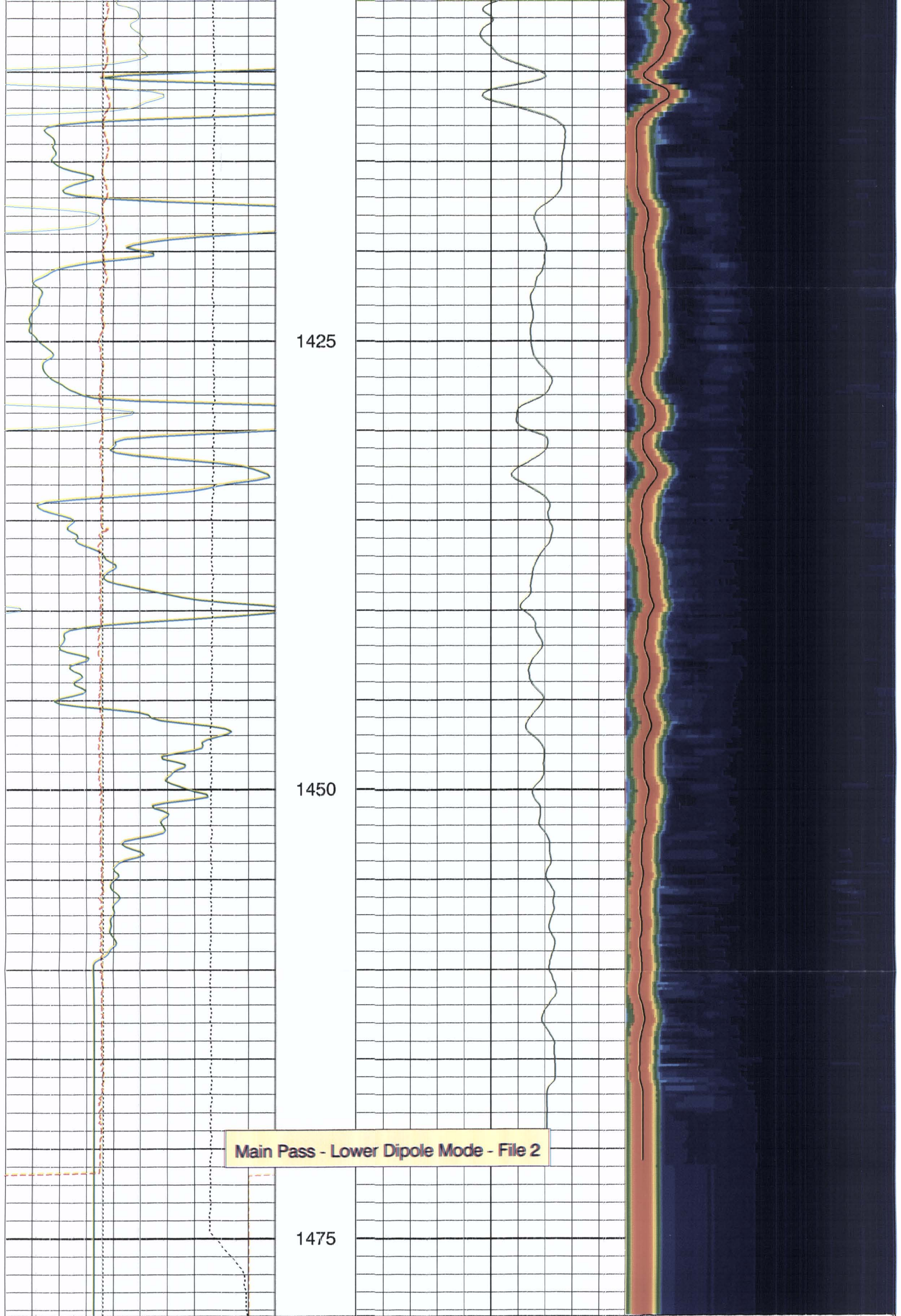
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1350

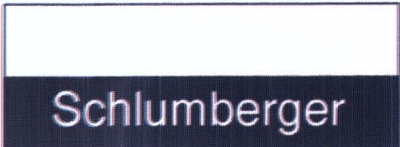
1375

1400





HCAL	MD	DT1 Lower Dipole Shear	DT1 Lower Dipole Shear
125 (mm) 375	1 : 240 m	900 (us/m) 100	200 (us/m) 2200
BS			SPR1
125 (mm) 375			200 (us/m) 2200
Gamma Ray			
0 (gAPI) 150			
TENS			
50000 (N) 0			

Company:	APACHE CANADA LTD.			
Well:	APACHE PARAMOUNT NOGHA B-23			
FIELD:	UNDEFINED			
Province:	NORTHWEST TERRITORIES			
Date Logged:	13-Mar-2004	Date Processed:	17-Mar-2004	
Well Location:	UWID: 300B236640125450 LSD: B-23			
Elevations:	KB: 315.75m	DF: 315.45m	GL: 311.27m	
API Number:	WID: 1998	Job Number:	10764788	