



**COMPLETION
& PRODUCTION
SERVICES CO.**

**RADIATION
GUARD LOG**

Company	PICKRELL DRILLING COMPANY, INC.	
Well	SALMANS-HOPKINS UNIT #1	
Field	ARNOLD SW	
County	NESS	
State	KANSAS	
Location:	API # : 15-135-25713-00-00 2338' FSL & 1980' FEL	
Other Services		
SEC 7	TWP 17S	RGE 25W
Permanent Datum	GROUND LEVEL	Elevation 2535
Log Measured From	KELLY BUSHING 10' A.G.L.	K.B. 2545 D.F. 2543 G.L. 2535
Drilling Measured From	KELLY BUSHING	
Date	1-22-14	
Run Number	ONE	
Depth Driller	4502	
Depth Logger	4504	
Bottom Logged Interval	4502	
Top Log Interval	3600	
Casing Driller	8 5/8 @ 223	
Casing Logger	221	
Bit Size	7.875	
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2,800 PPM
Density / Viscosity	9.3 / 75	
pH / Fluid Loss	9.5 / 8.8	
Source of Sample	FLOWLINE	
Rim @ Meas. Temp	1.80 @ 44F	
Rmf @ Meas. Temp	1.35 @ 44F	
Rmc @ Meas. Temp	2.16 @ 44F	
Source of Rmf / Rmc	MEASURED	
Rim @ BHT	0.66 @ 120F	
Time Circulation Stopped	2 HOURS	
Time Logger on Bottom		
Maximum Recorded Temperature	120F	
Equipment Number	860	
Location	HAYS, KS.	
Recorded By	MABB	
Witnessed By	JERRY A. SMITH	

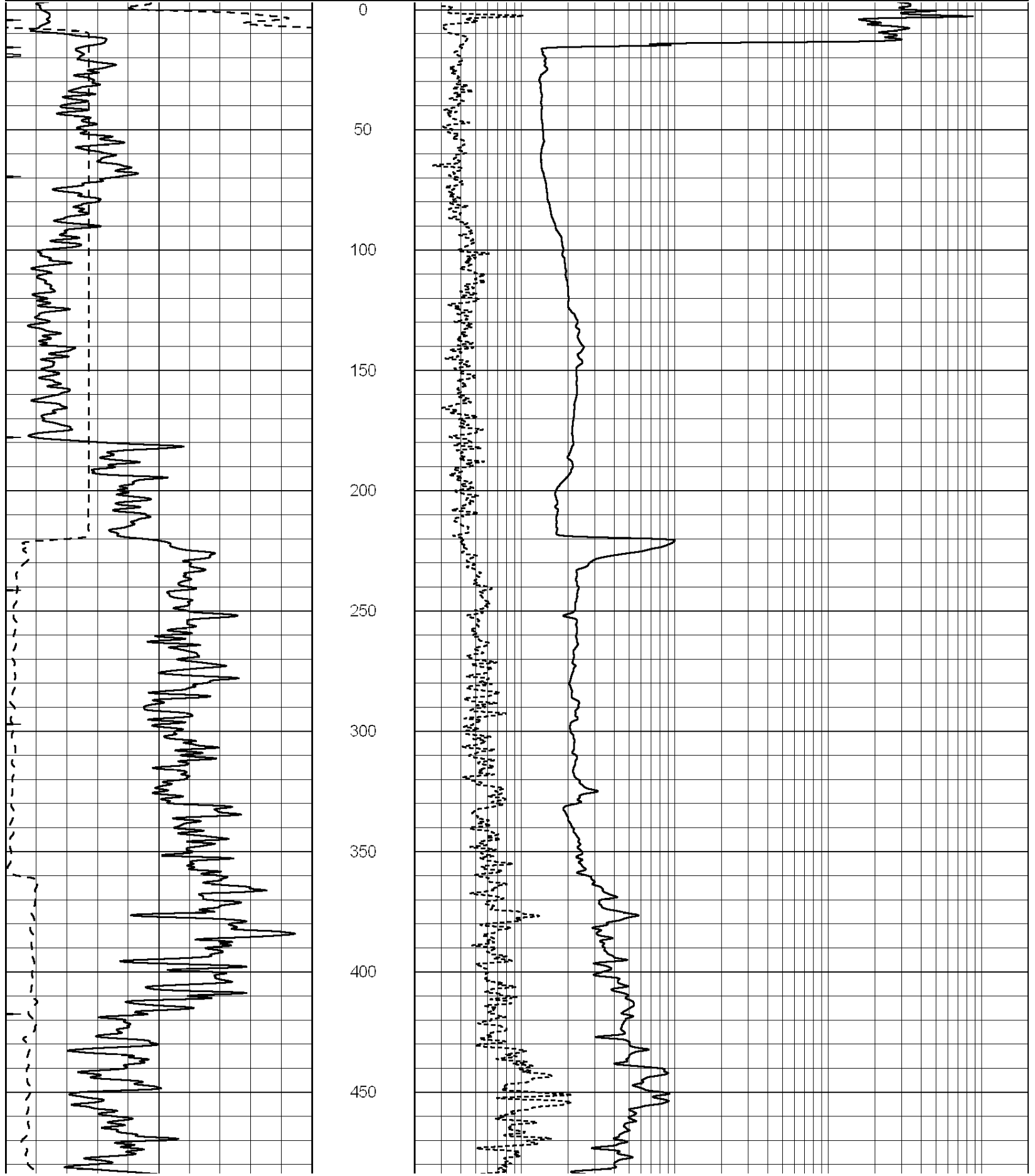
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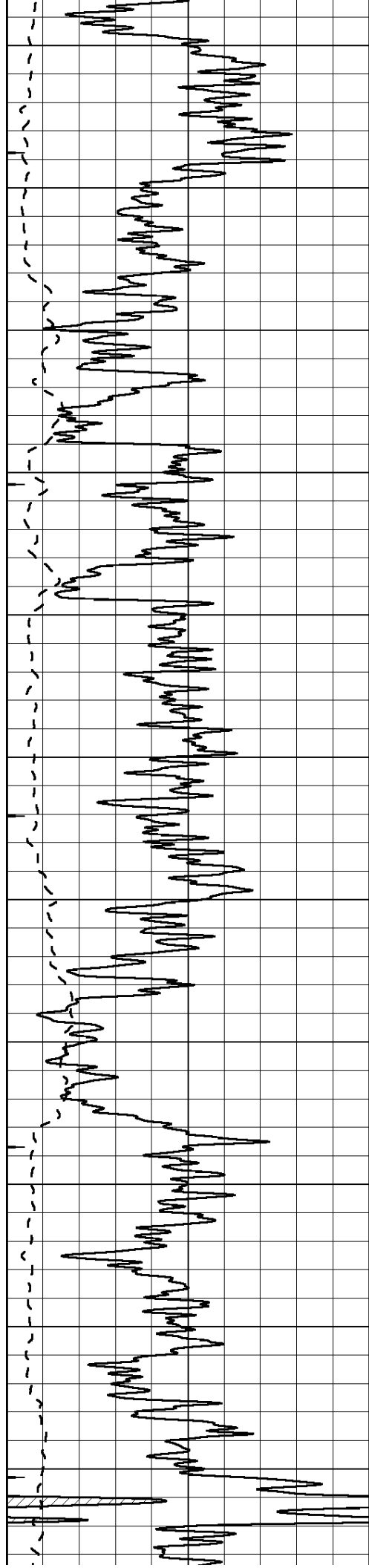
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

Comments

NABORS COMPLETION & PRODUCTION SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: ARNOLD, KS. - WEST 5 MILES - SOUTH 3 MILES WEST INTO THEN NORTH

Charted by:			Depth in Feet scaled 1:600			
0	GAMMA RAY (GAPI)	150	ABHV (ft3)	0.2	GUARD (Ohm-m)	2000
-100	SP (mV)	100		0	NEUTRON (NAPI)	1000
-----			TBHV (ft3)	-----		





500

550

600

650

700

750

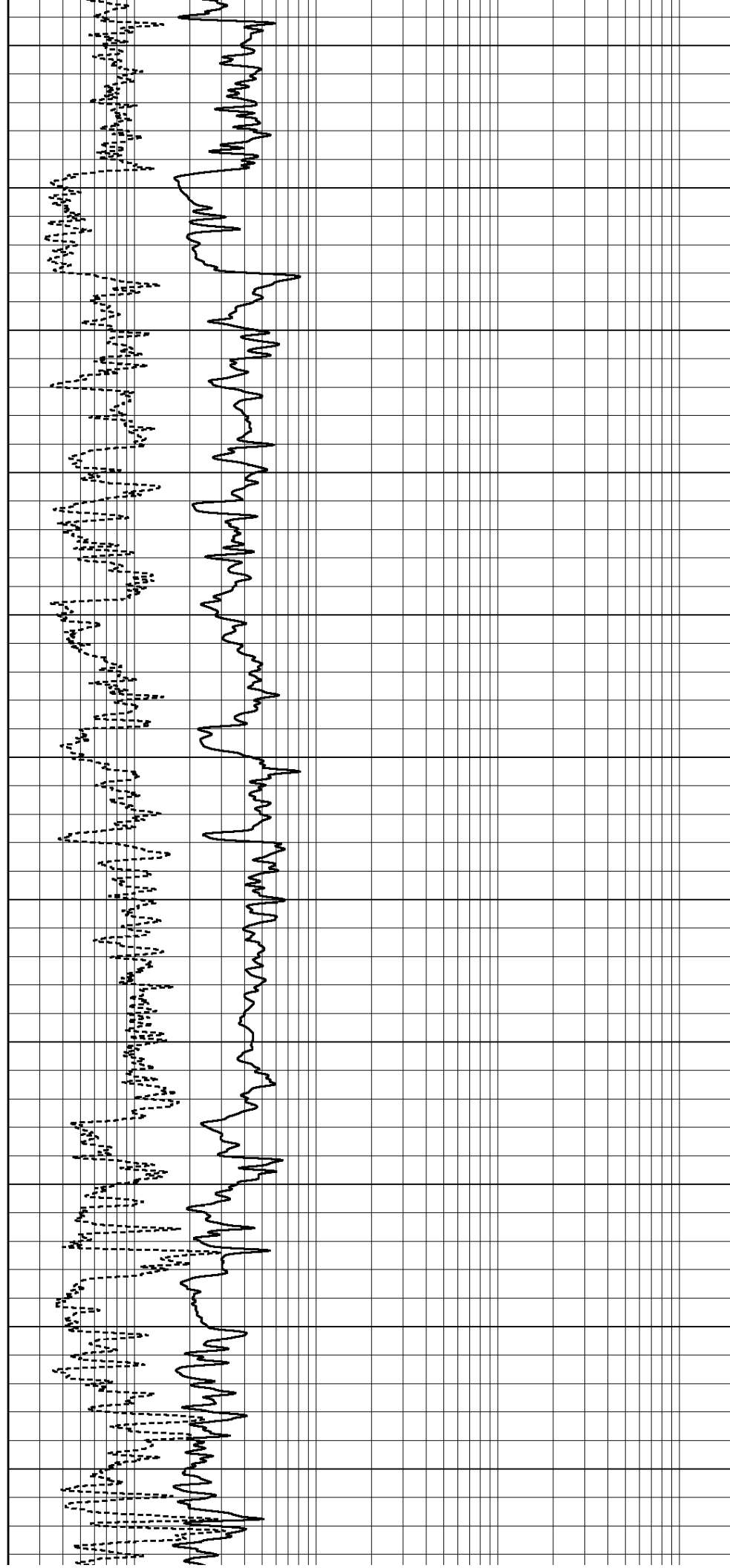
800

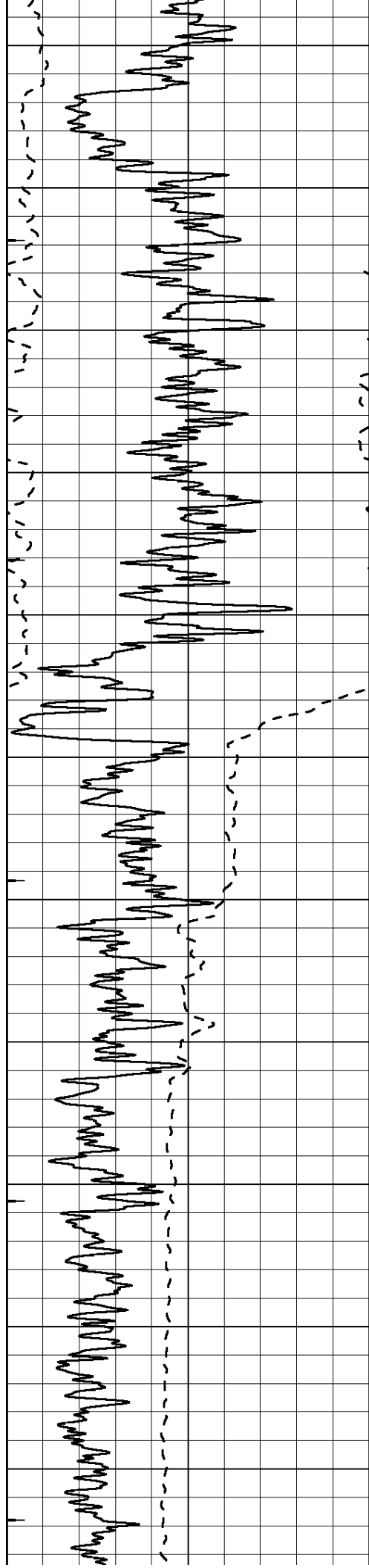
850

900

950

1000





1050

1100

1150

1200

1250

1300

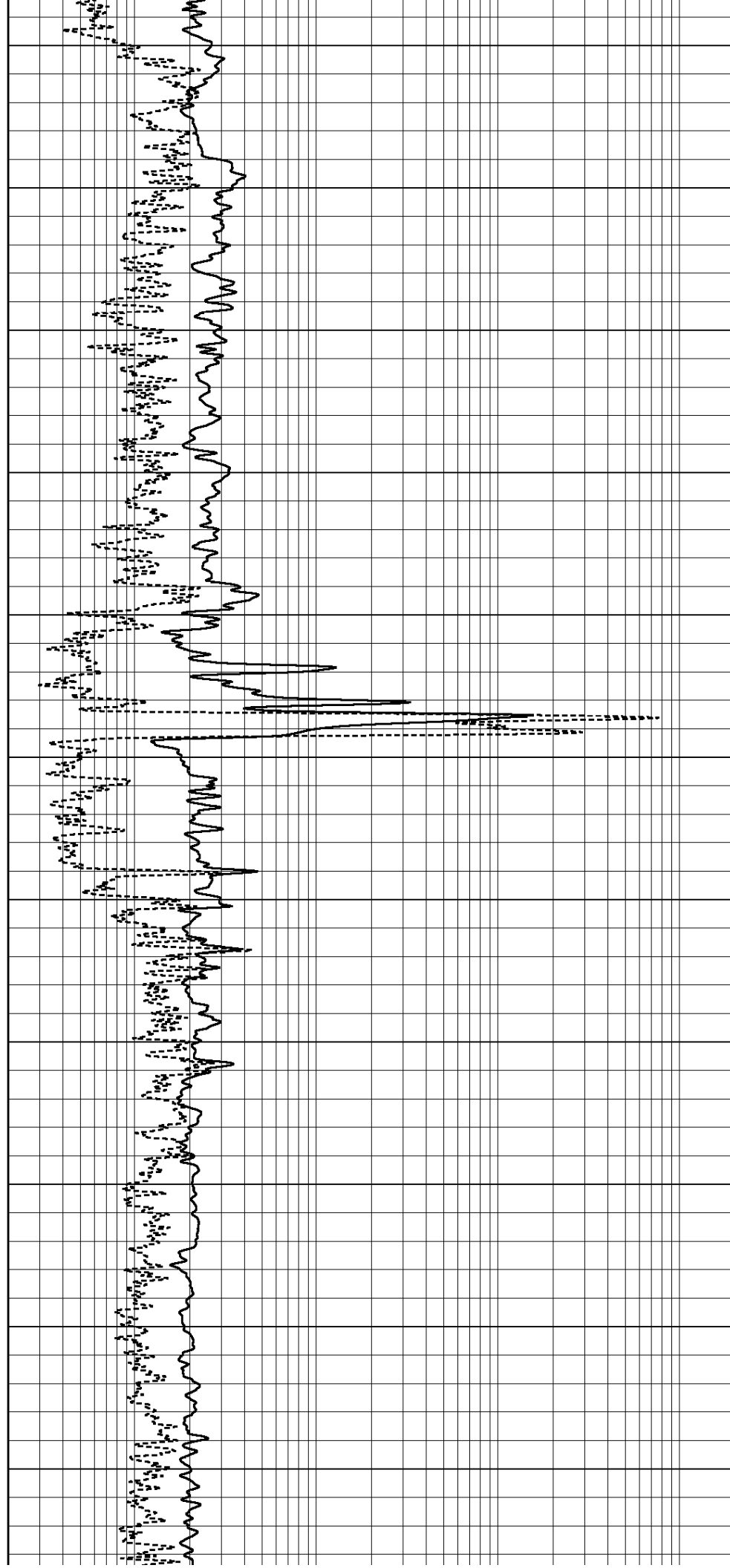
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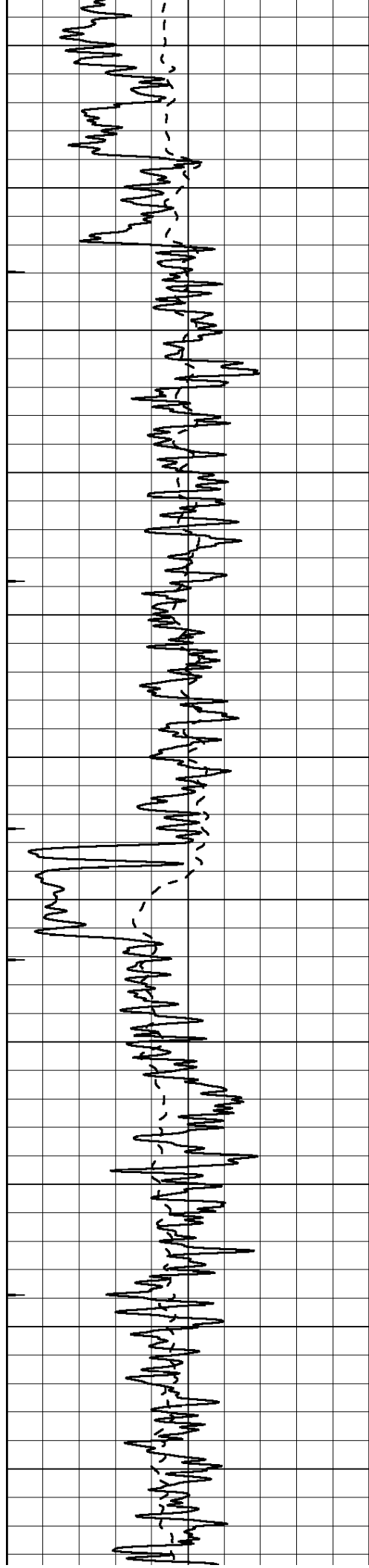
1400

1450

1500

1550





1600

1650

1700

1750

1800

1850

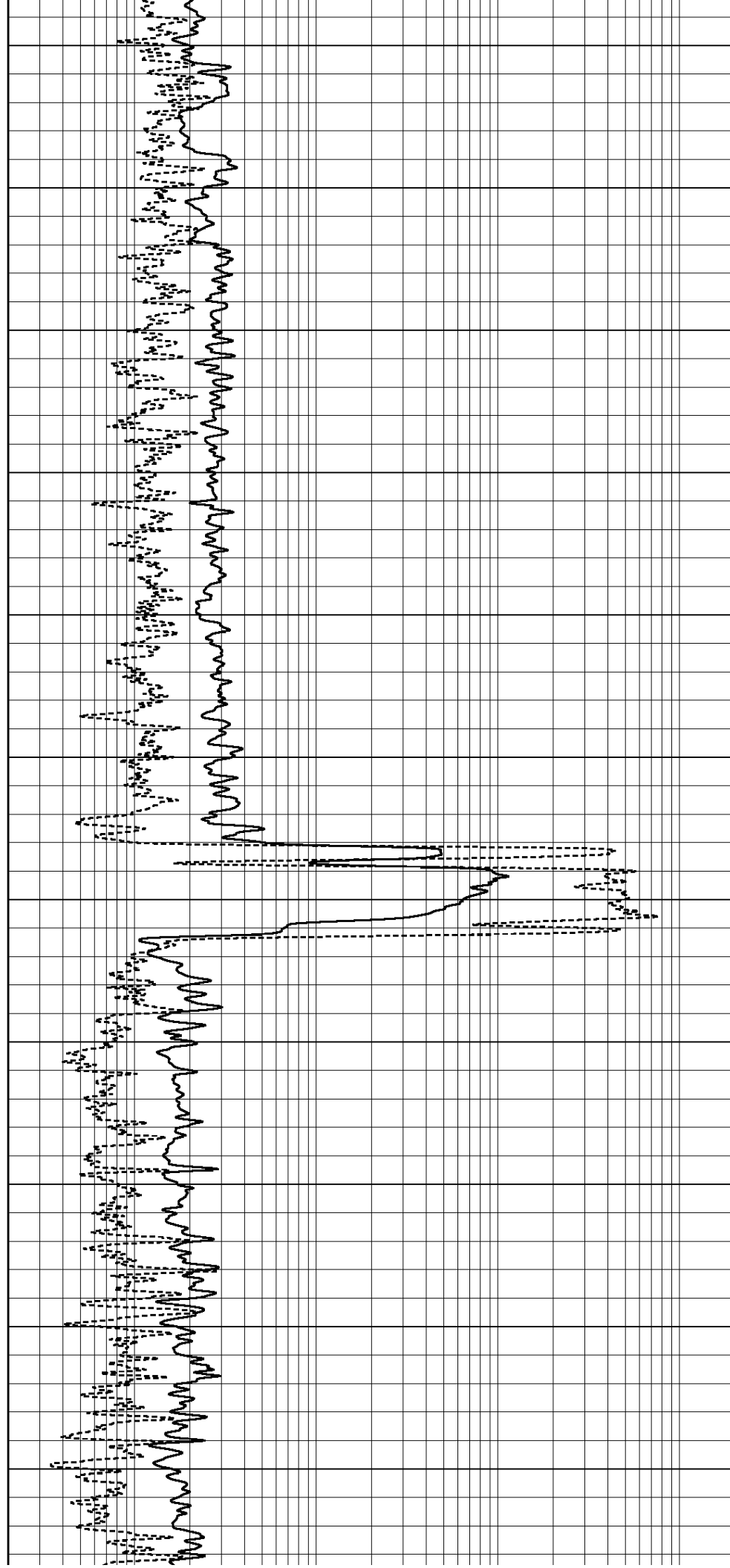
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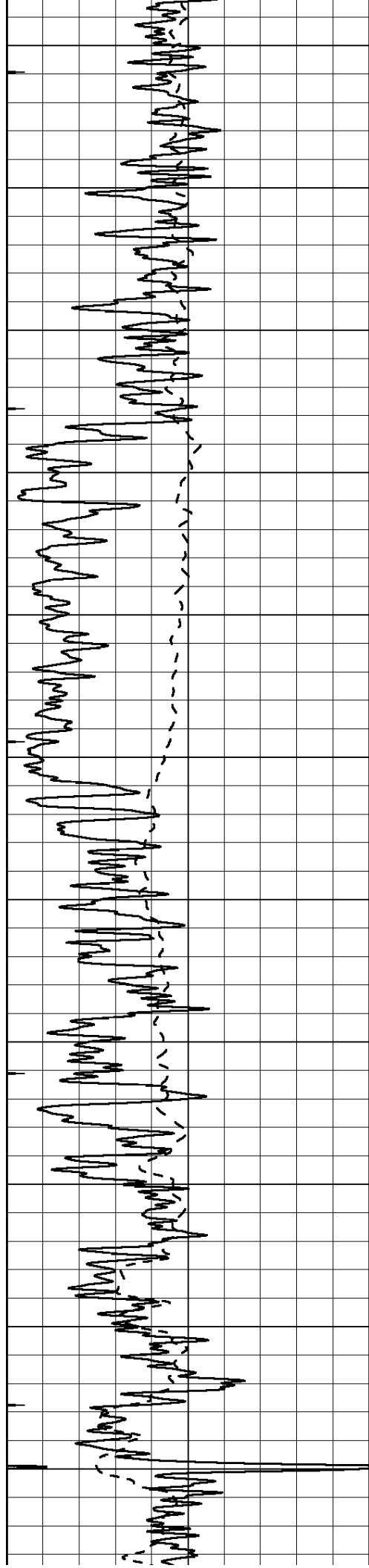
1950

2000

2050

2100





2150

2200

2250

2300

2350

2400

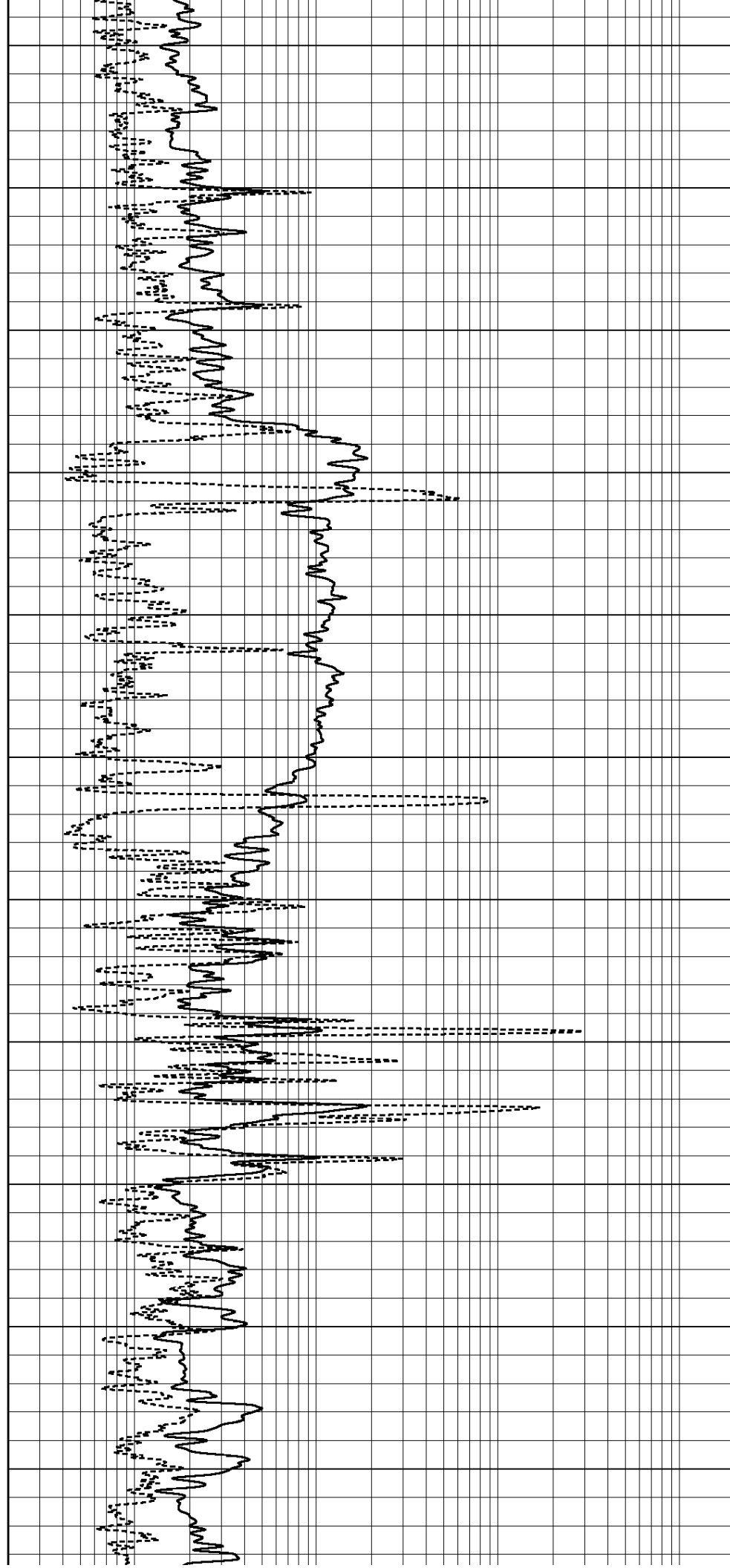
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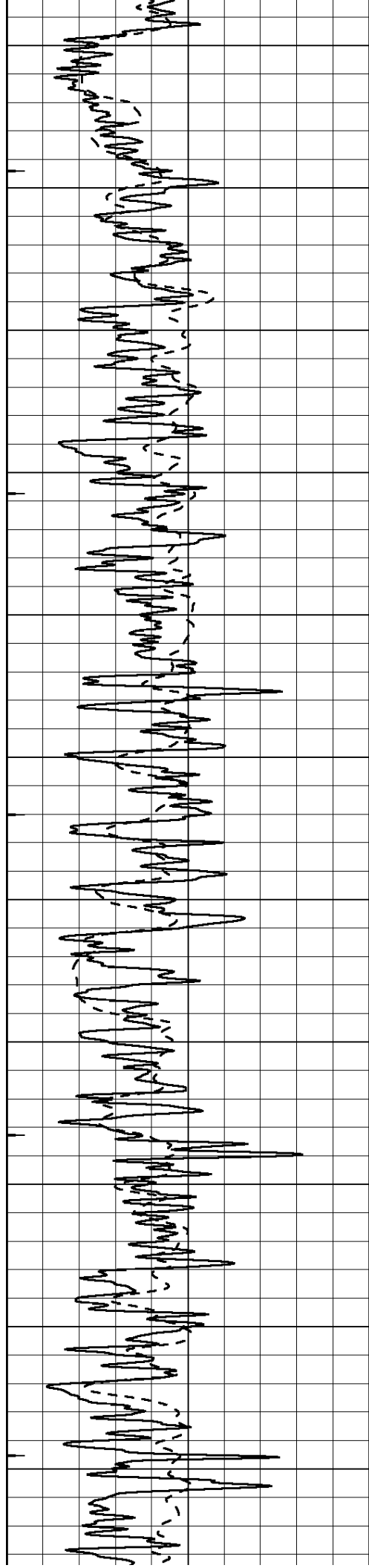
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2550

2600

2650





2700

2750

2800

2850

2900

2950

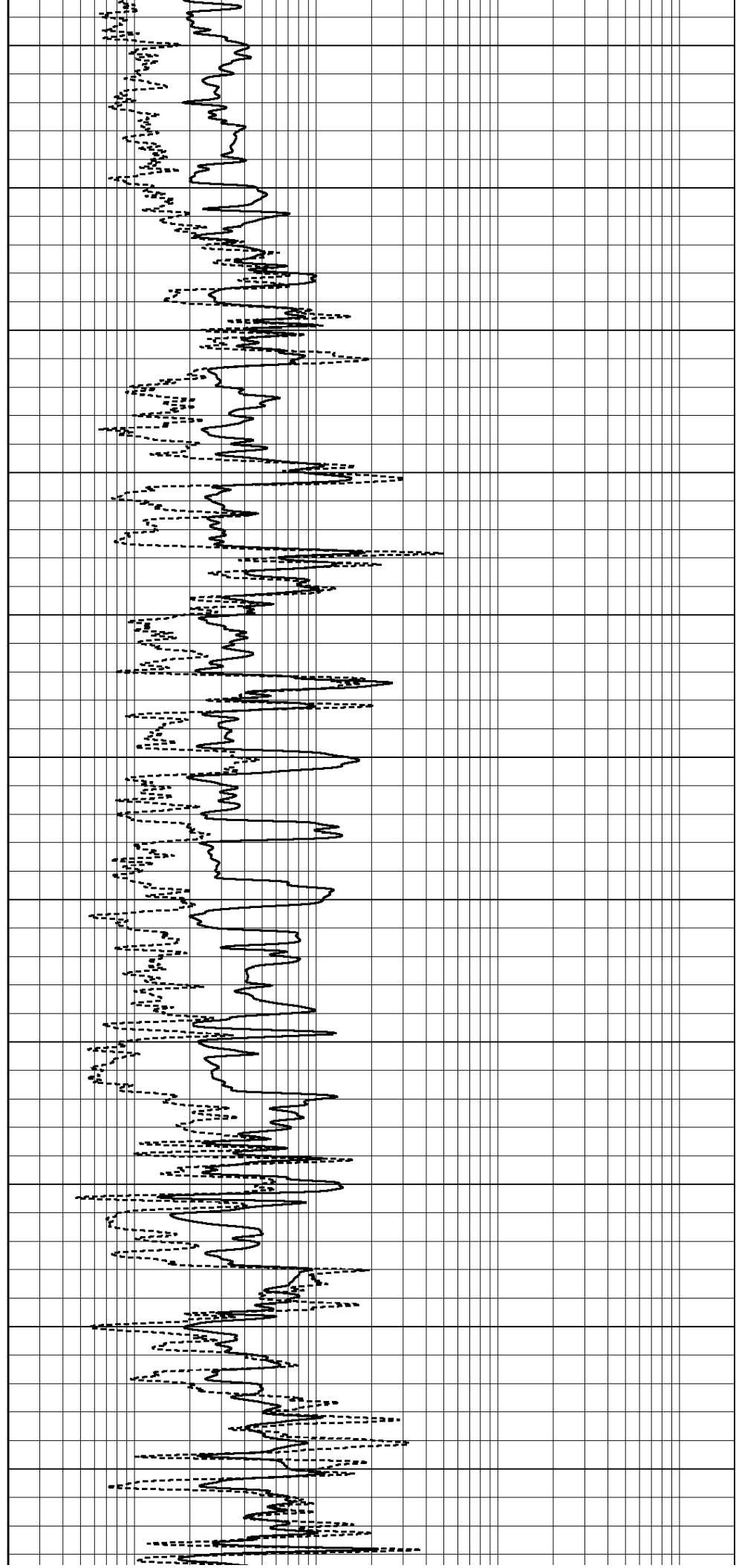
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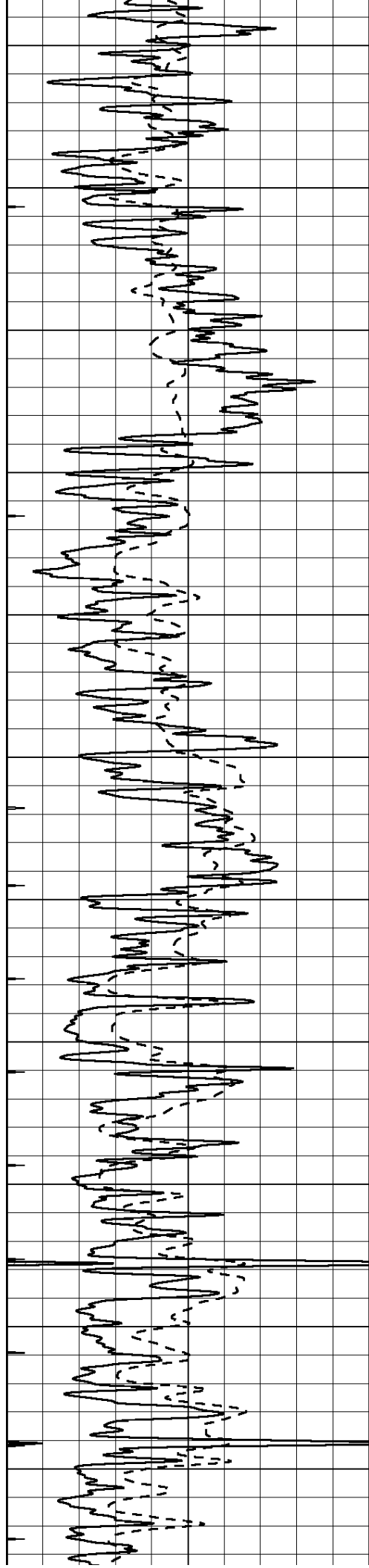
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3100

3150

3200





3250

3300

3350

3400

3450

3500

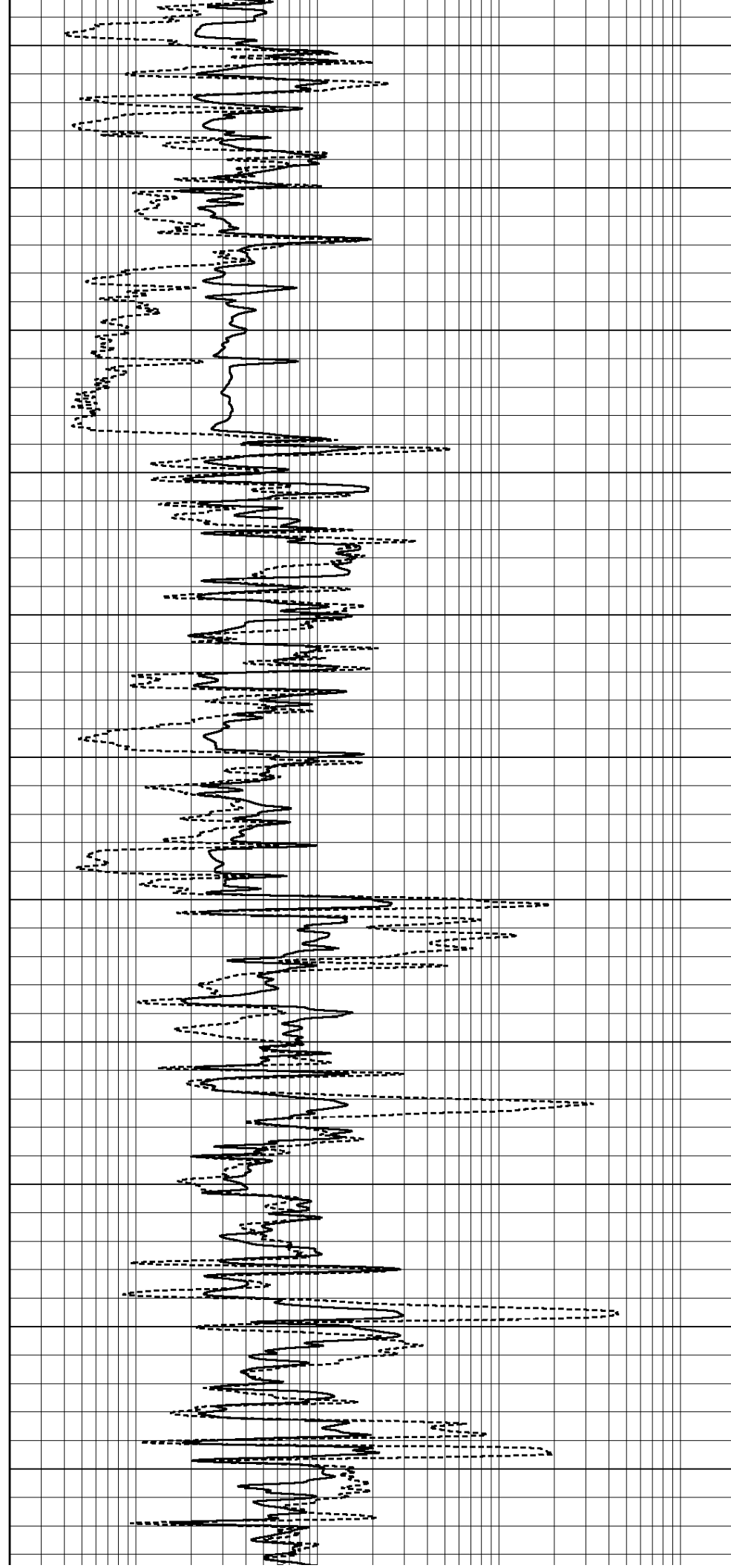
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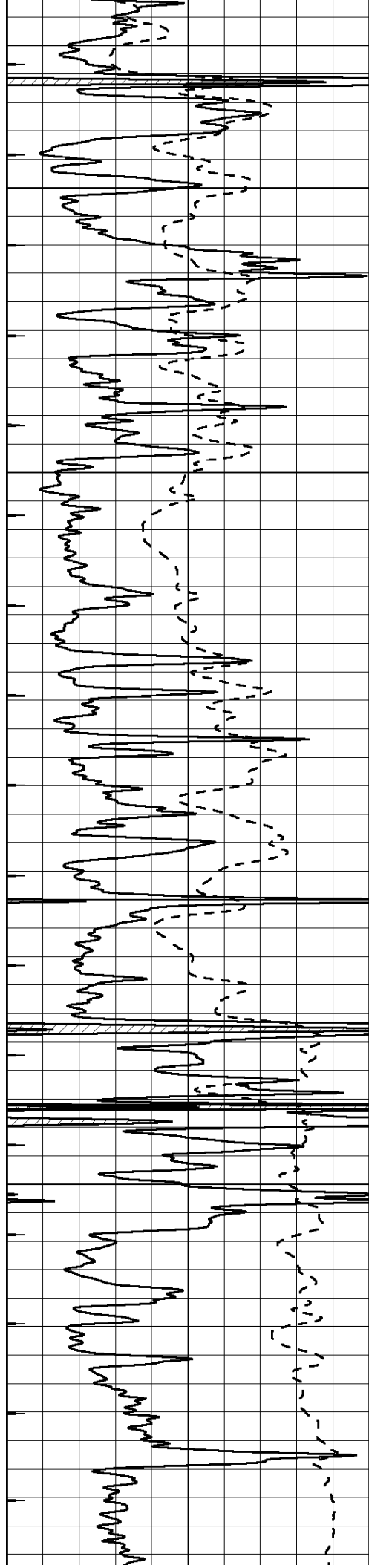
3600

3650

3700

3750





3800

3850

3900

3950

4000

4050

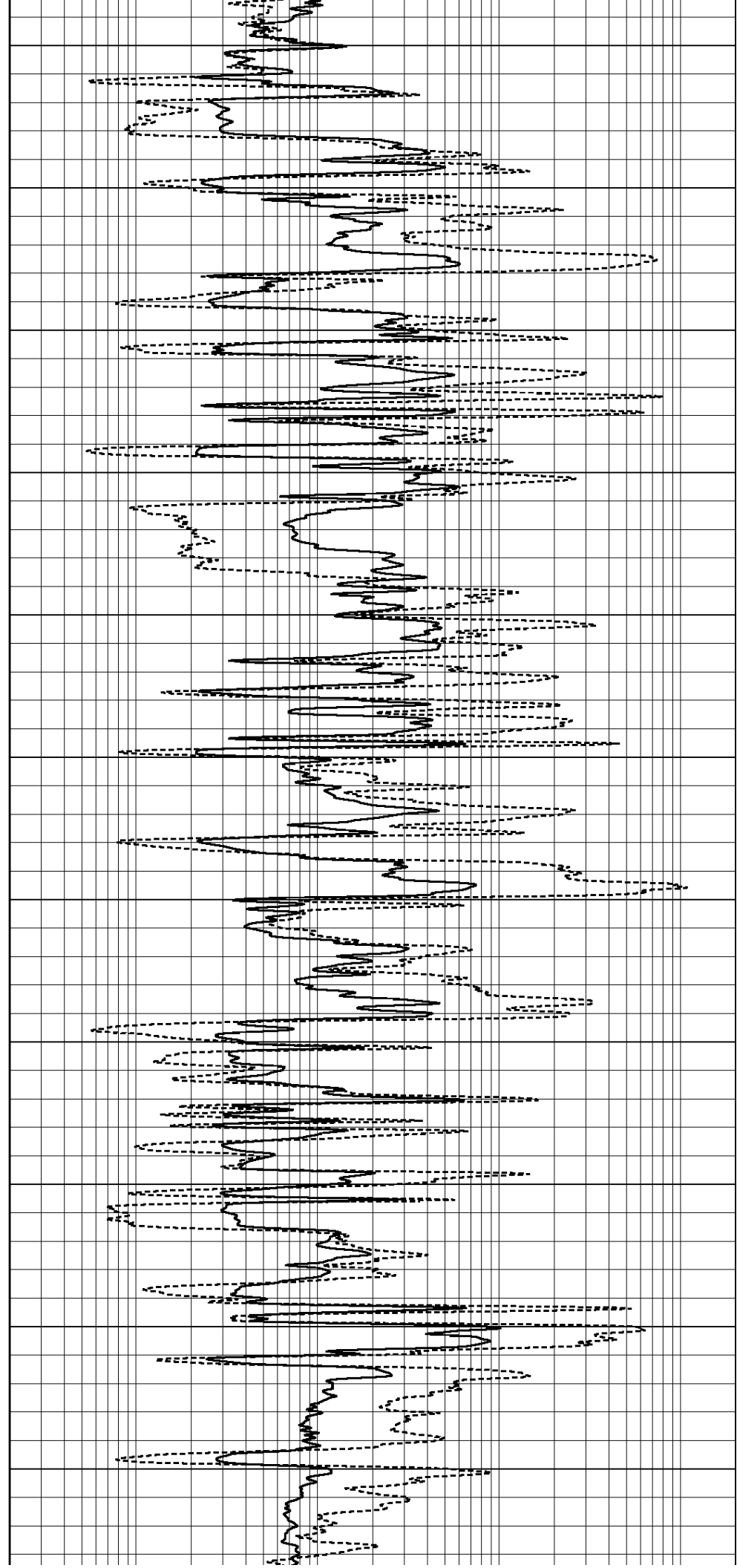
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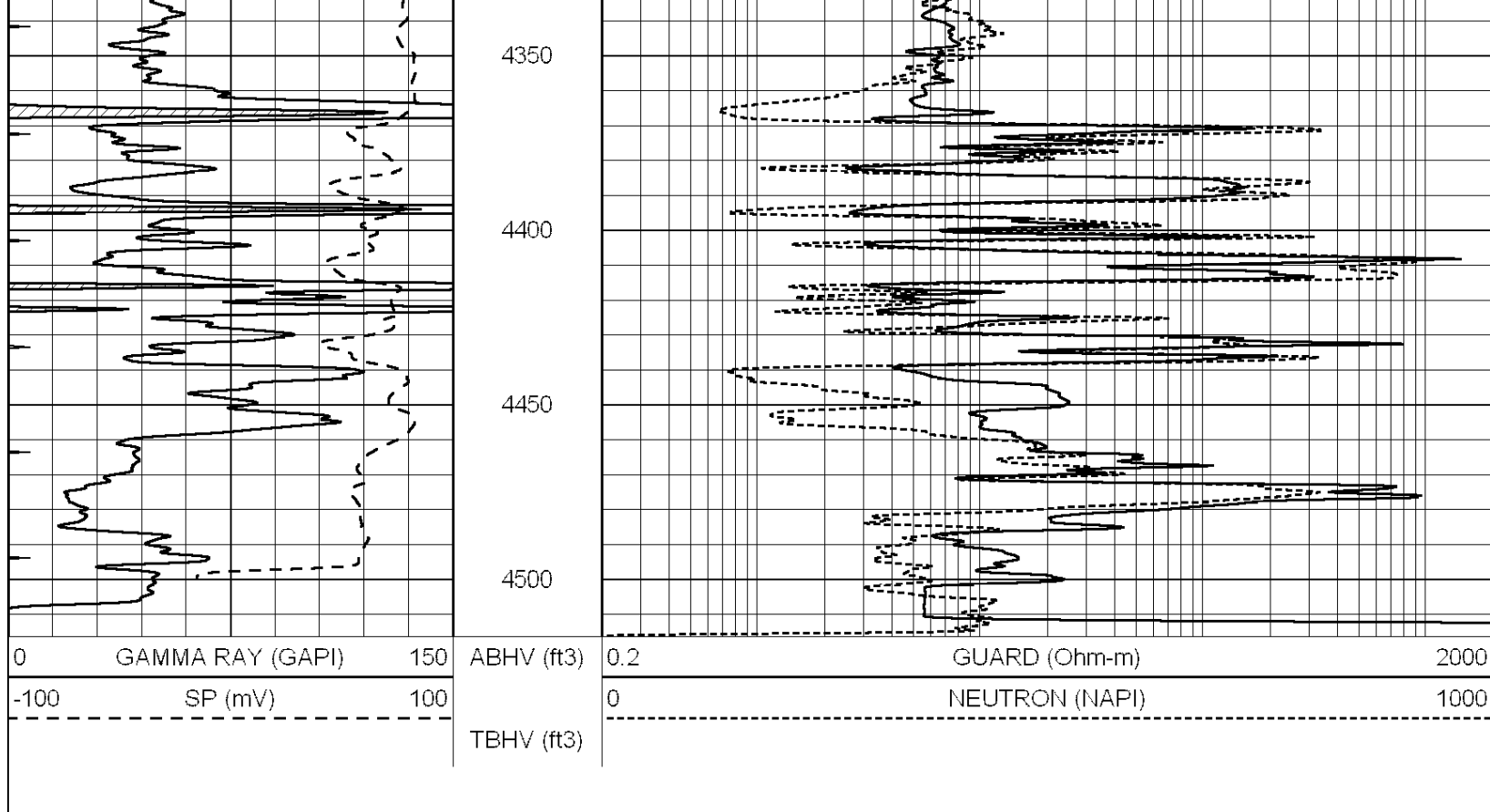
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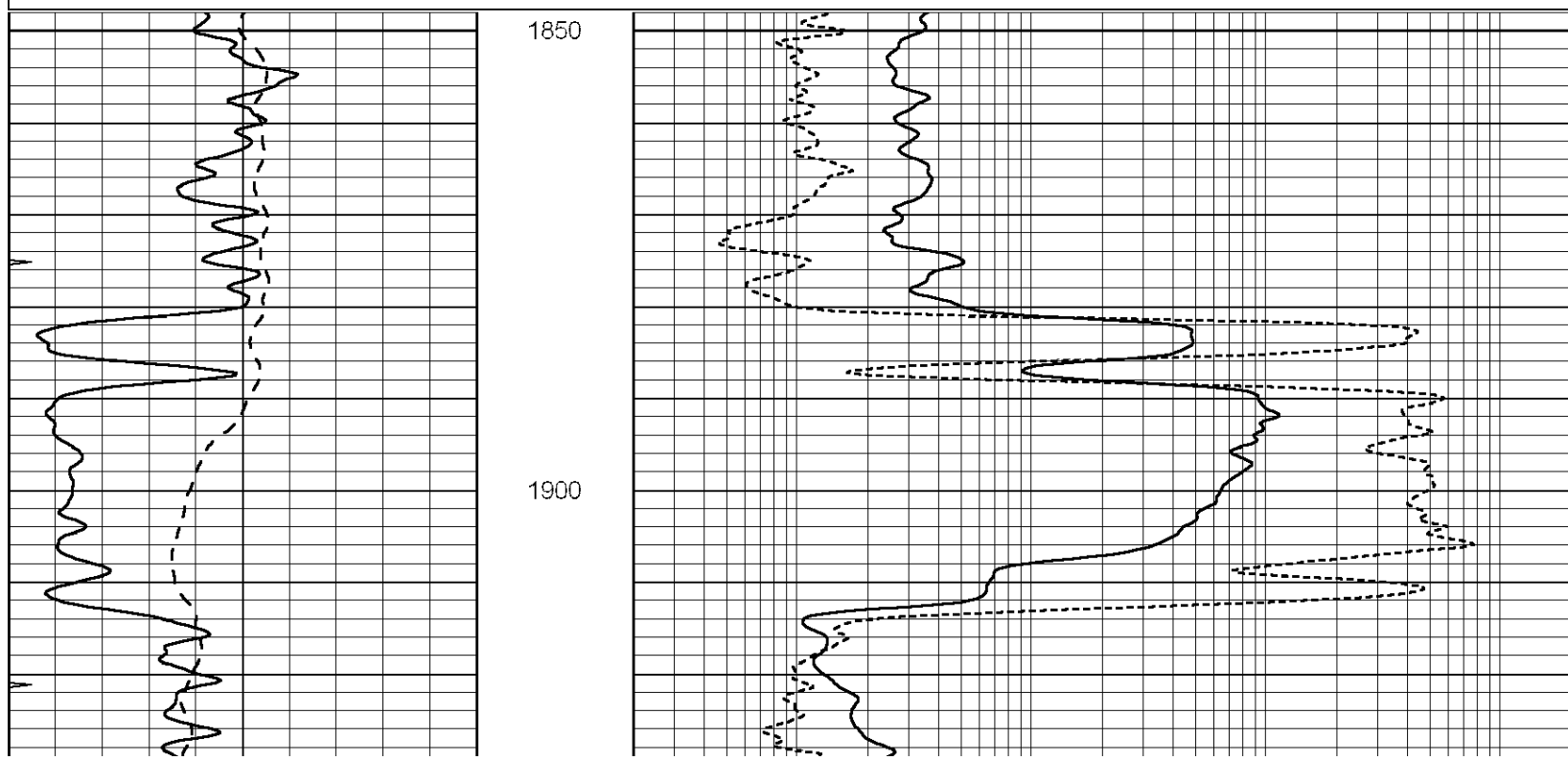
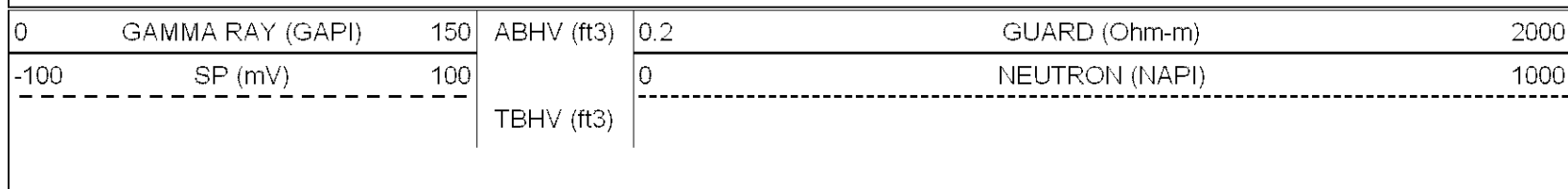
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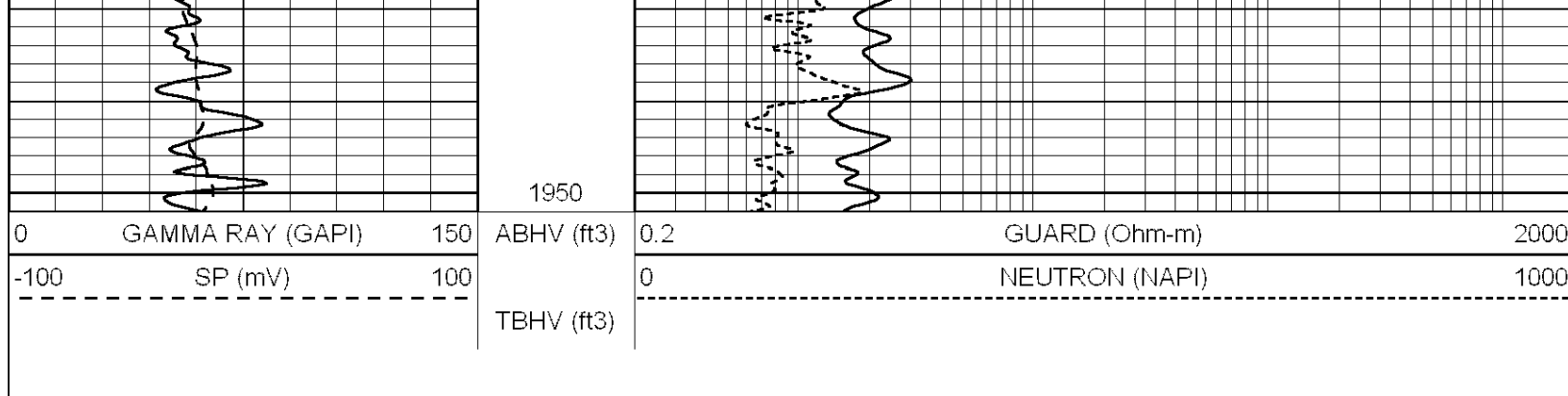
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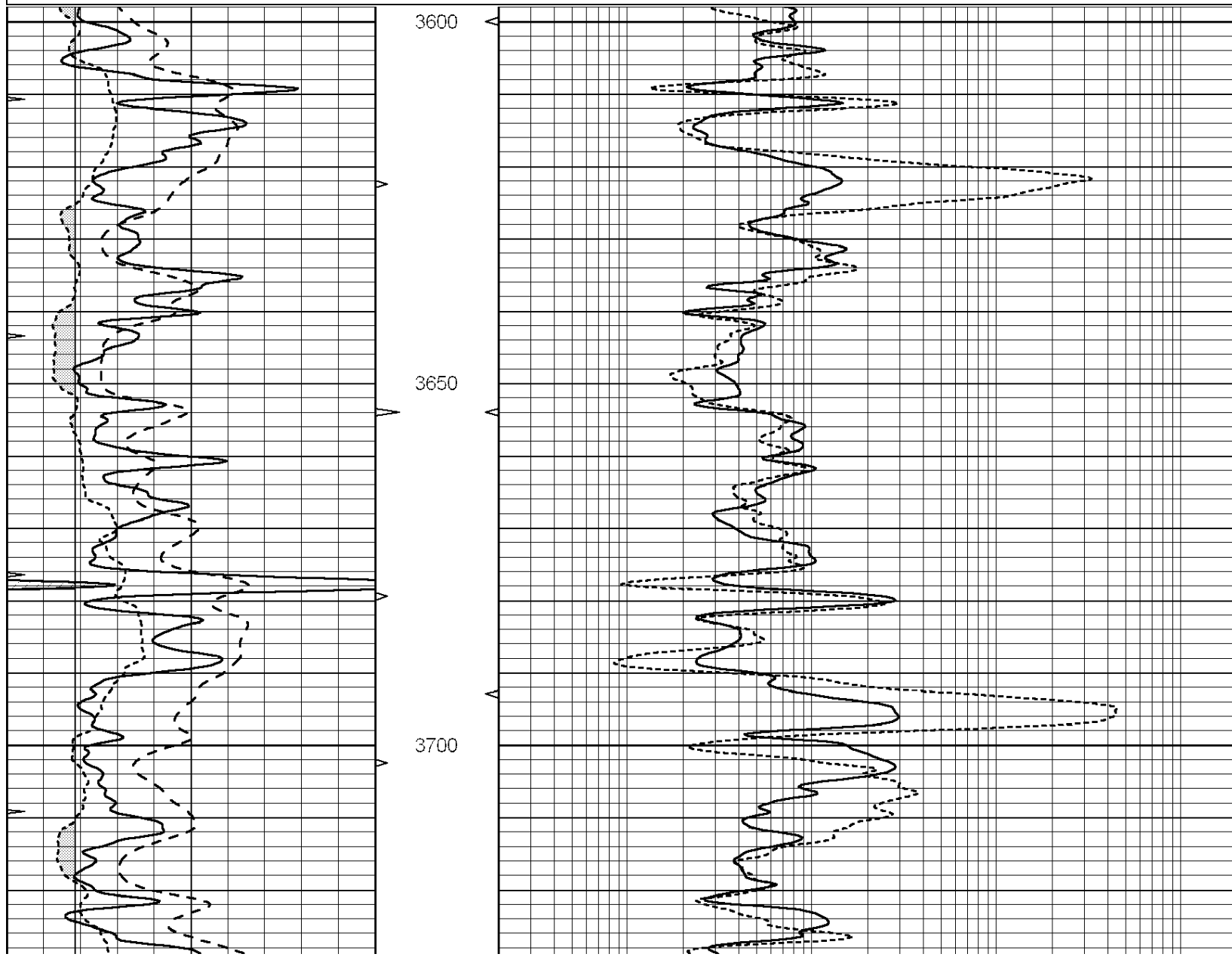
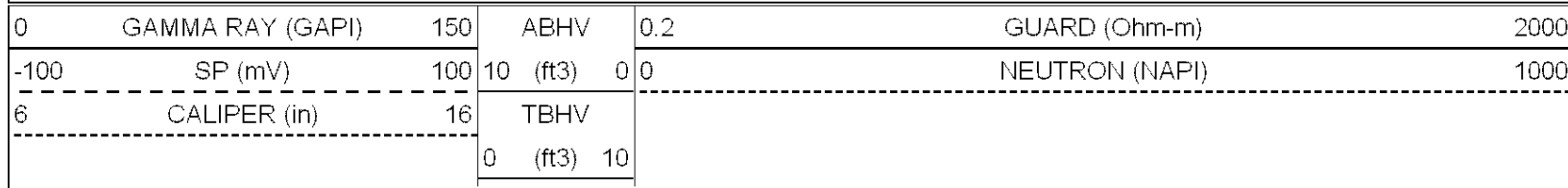


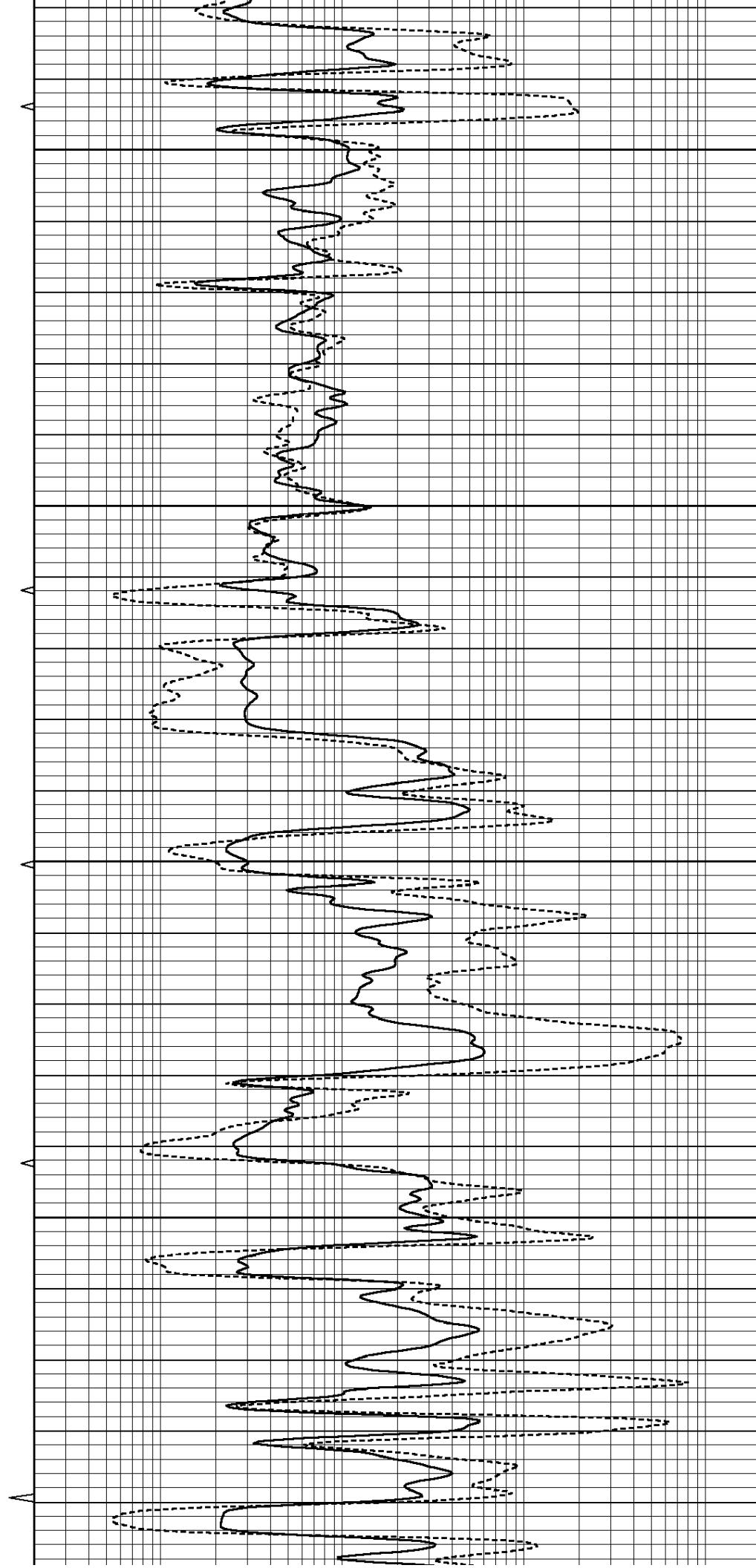
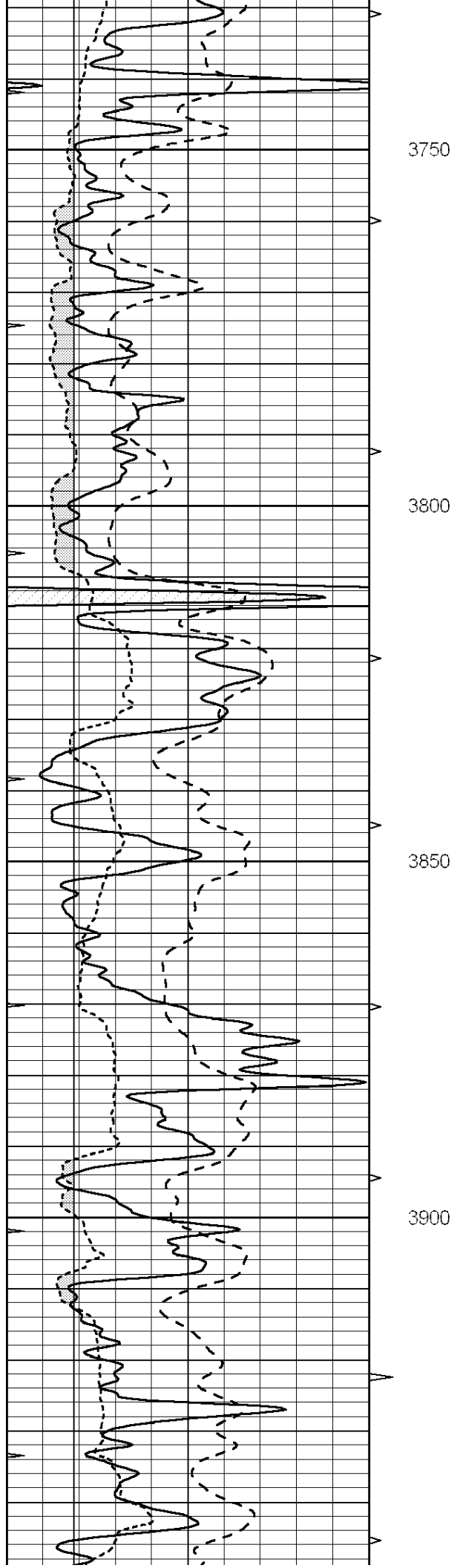
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Presentation Format: rag2
Dataset Creation: Wed Jan 22 10:06:02 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

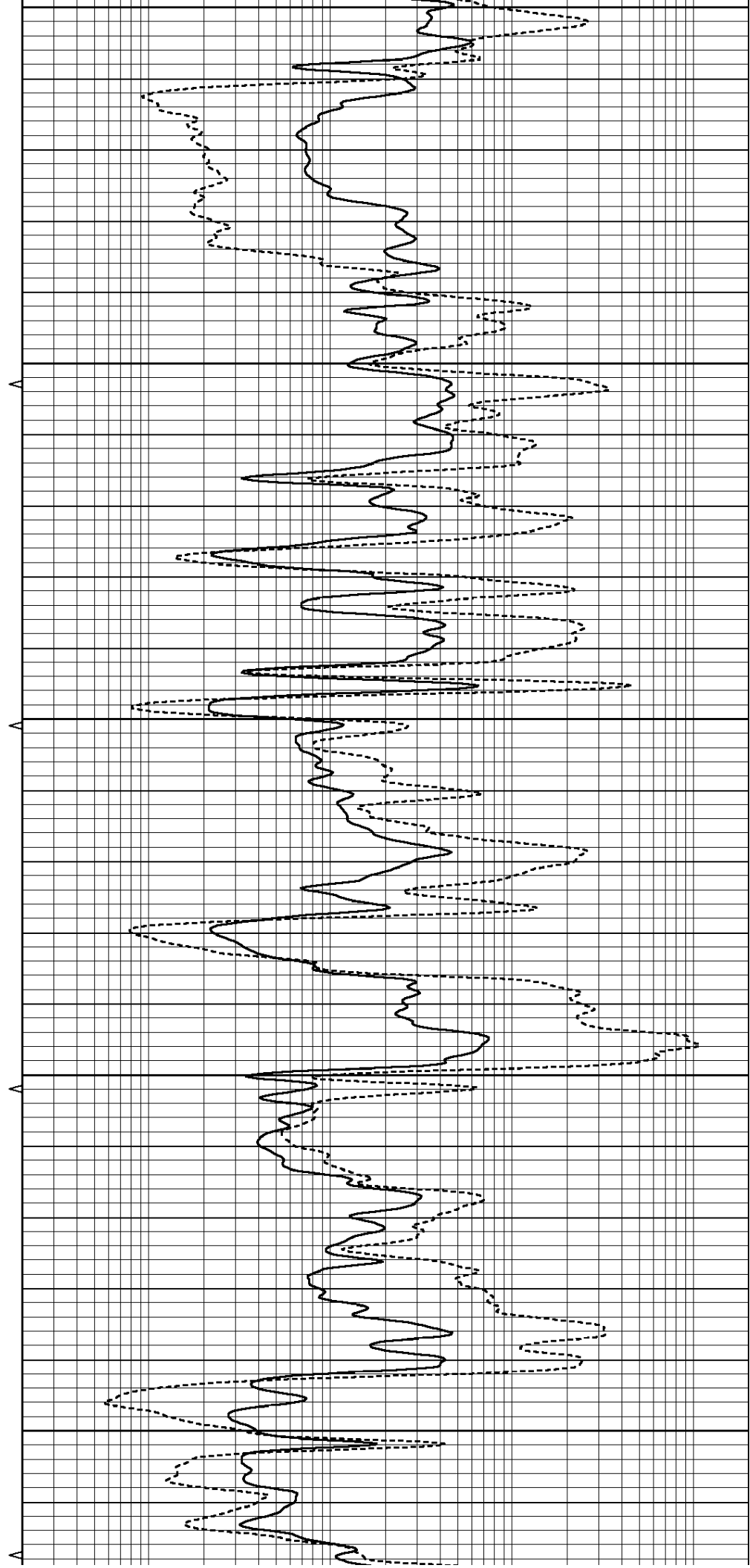
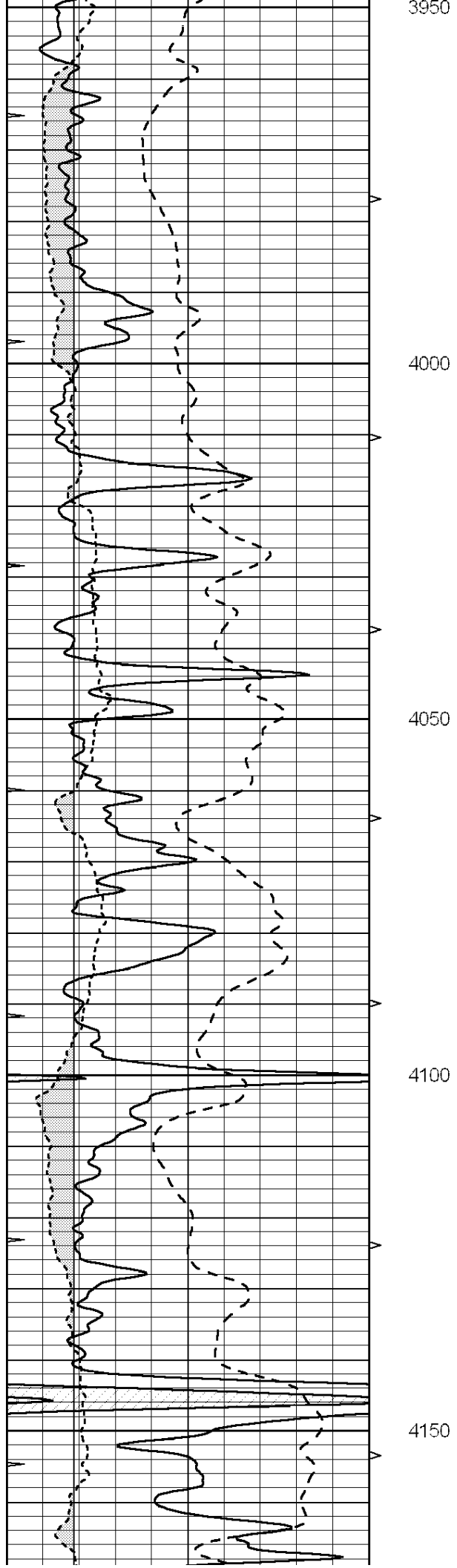


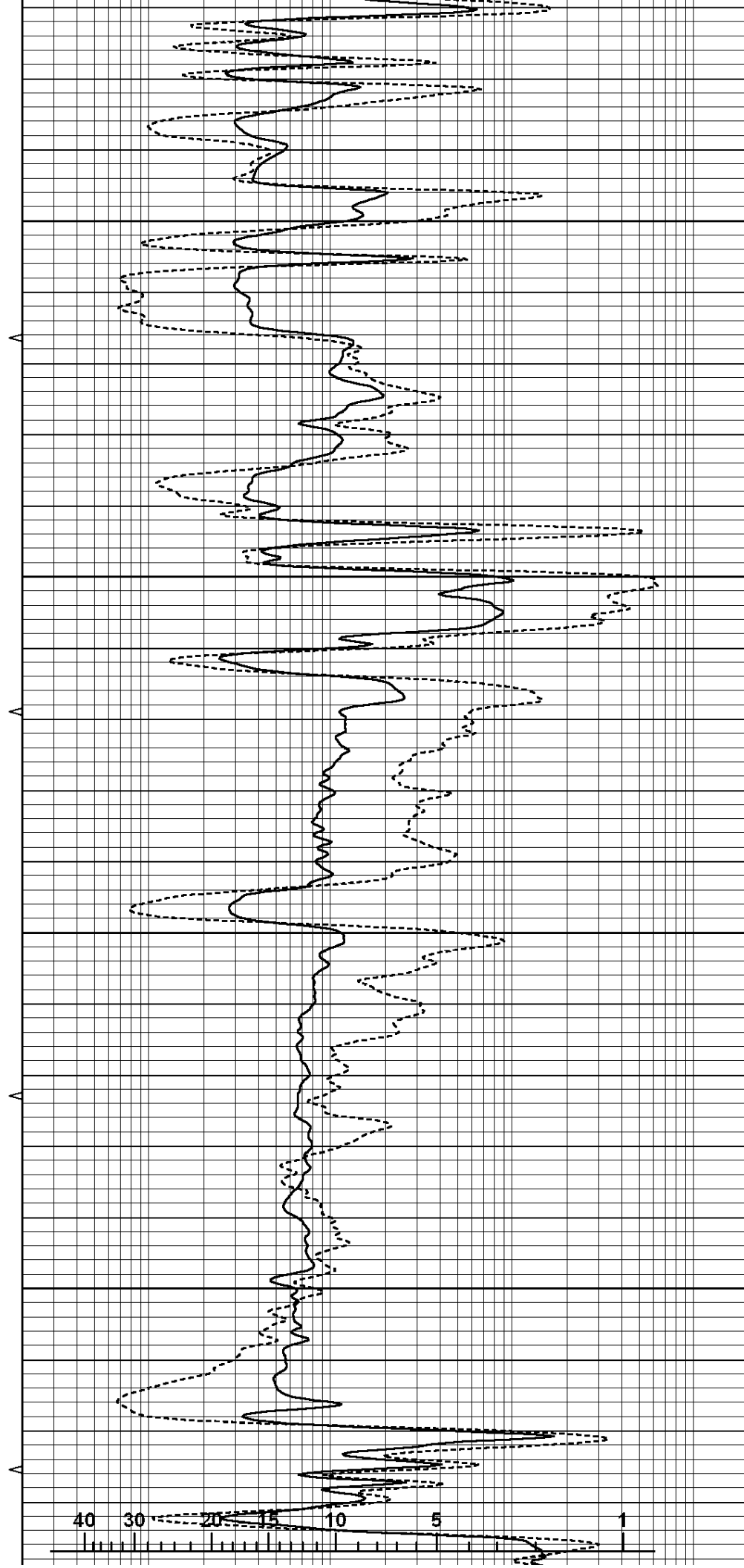
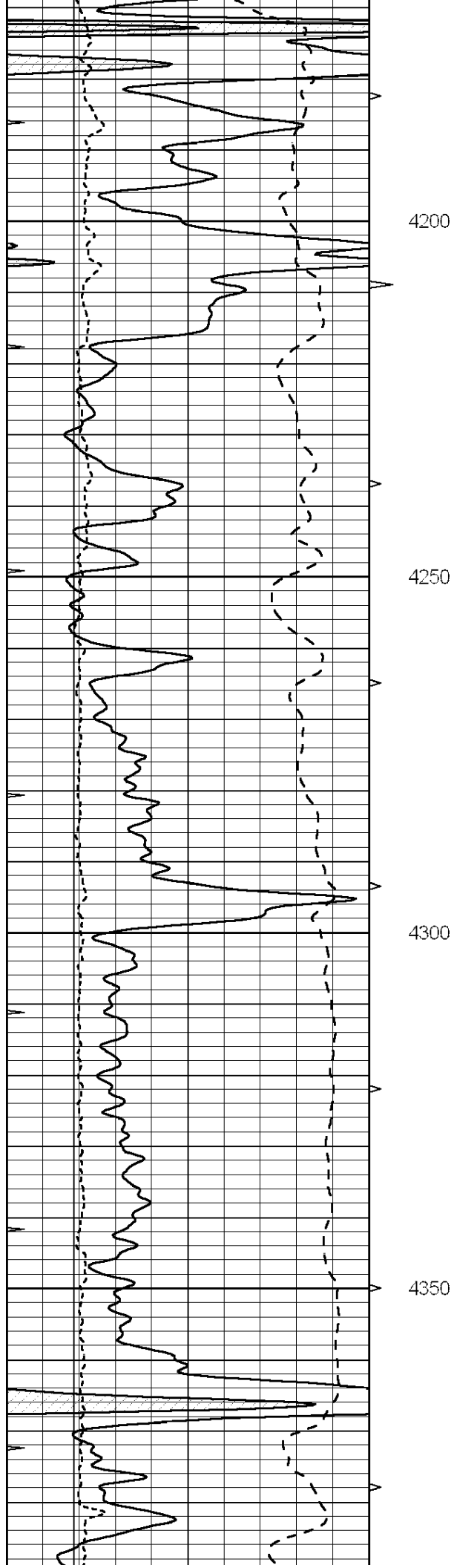


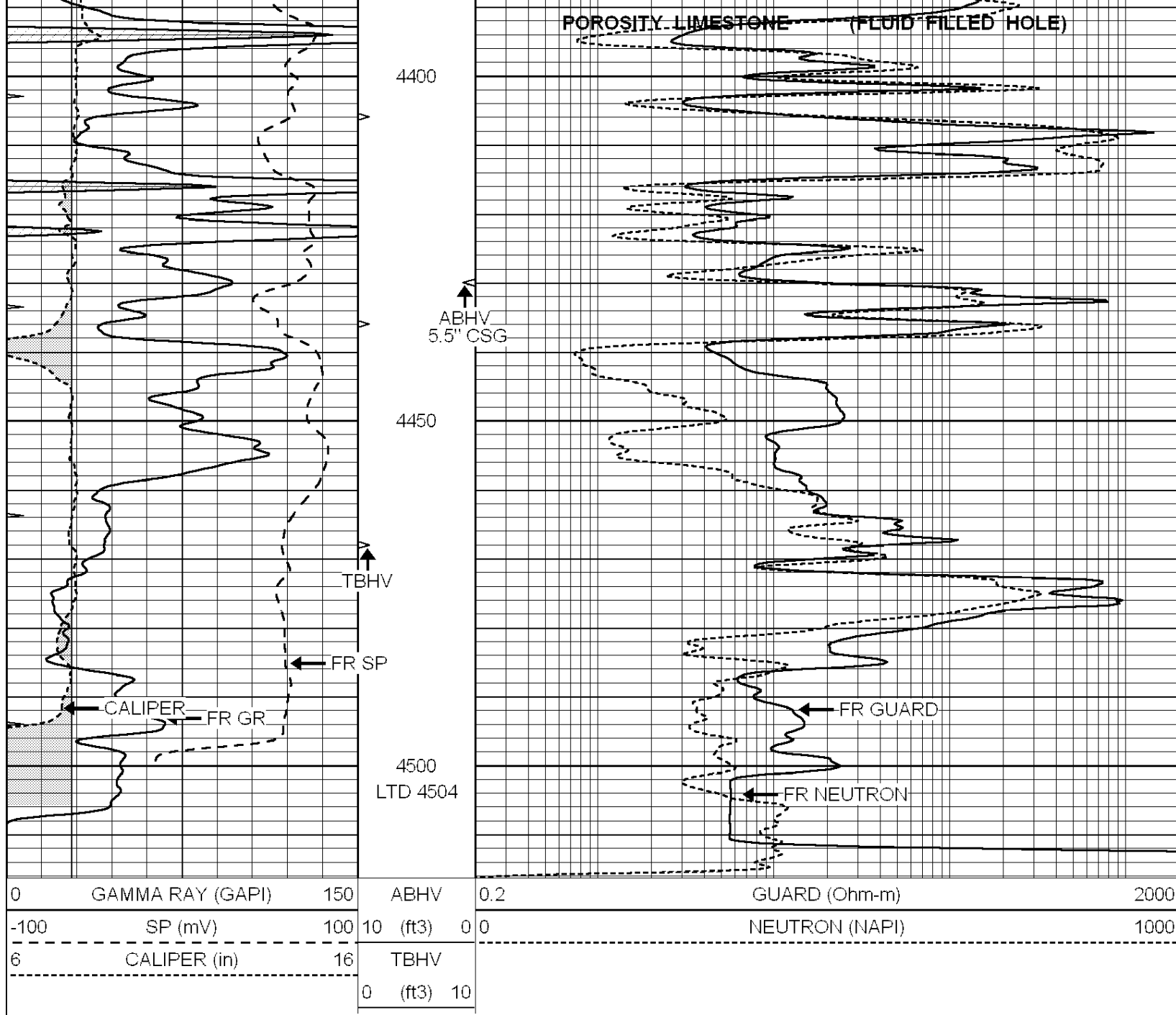
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Dataset Pathname: pass3.1
Presentation Format: _rag
Dataset Creation: Wed Jan 22 10:06:02 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240







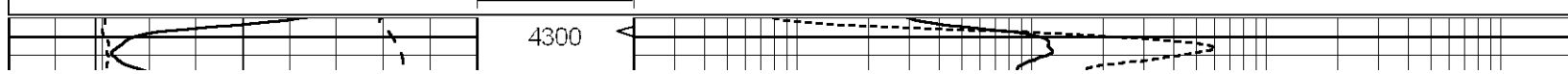


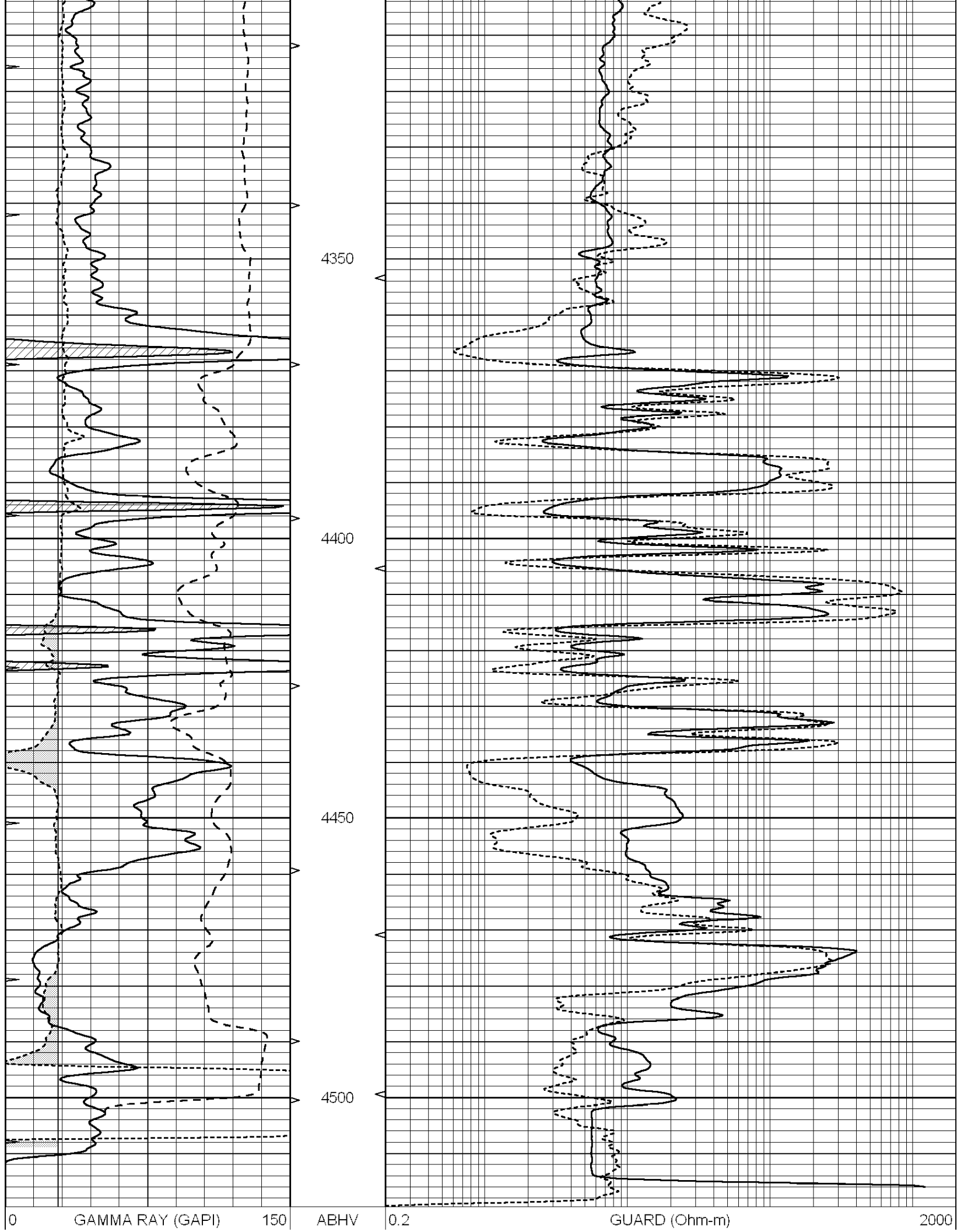


REPEAT SECTION

Database File: 22221rag.db
 Dataset Pathname: pass2.3.2
 Presentation Format: _rag
 Dataset Creation: Wed Jan 22 08:53:39 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	0.2	GUARD (Ohm-m)	2000
-100	SP (mV)	100	10 (ft3)	0 0	NEUTRON (NAPI)	1000
6	CALIPER (in)	16	TBHV			
			0 (ft3)	10		





Calibration Report								
Database File:		22221rag.db						
Dataset Pathname:		pass3.1						
Dataset Creation:		Wed Jan 22 10:06:02 2014 by Calc Open-Cased 090629						
Neutron Calibration Report								
Serial Number:		RAG1						
Tool Model:		RAG						
Performed:		Mon Oct 21 02:52:16 2013						
Calibrator Values:		0	1	NAPI				
Calibrator Readings:		0	1	cps				
Sensitivity:		0.9	NAPI/cps					
Micro Spherically Focused Log Calibration Report								
Serial-Model:		RAG1-A						
Performed:		Fri Nov 15 17:09:52 2013						
	Readings			References			Results	
	<u>Low</u>	<u>High</u>		<u>Low</u>	<u>High</u>		<u>m</u>	<u>b</u>
Conductivity	0.0110	0.9000	V	10.0000	1000.0000	mmho	2000.0000	0.2000
Caliper	0.2723	0.3535	V	7.8000	14.0000	in	76.3942	-12.8000
Gamma Ray Calibration Report								
Serial Number:		RAG1						
Tool Model:		RAG						
Performed:		Mon Oct 21 02:12:09 2013						
Calibrator Value:		1.0	GAPI					
Background Reading:		0.9	cps					
Calibrator Reading:		1.0	cps					
Sensitivity:		0.7500	GAPI/cps					