



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
LOG

Company	ATLAS OPERATING, LLC.		
Well	B & A SMITH #6-8		
Field	SPIVEY - GRABS - BASIL		
County	HARPER	State	KANSAS
Location:	API # : 15-077-21731-0000		Other Services
	2310' FNL & 890' FEL		DIL/MEL
	E/2 - SW - SE - NE		
	SEC 8 TWP 31S RGE 8W		
Permanent Datum	GROUND LEVEL	Elevation	1642
Log Measured From	KELLY BUSHING 10' A.G.L.		
Drilling Measured From	KELLY BUSHING		
Elevation			K.B. 1652 D.F. 1650 G.L. 1642
Date	1/30/11		
Run Number	ONE		
Depth Driller	4550		
Depth Logger	4552		
Bottom Logged Interval	4528		
Top Log Interval	2200		
Casing Driller	8 5/8"@237'		
Casing Logger	236		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2,000 PPM	
Density / Viscosity	9.3/45		
pH / Fluid Loss	10.5/9.0		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.850@50F		
Rmf @ Meas. Temp	.638@50F		
Rmc @ Meas. Temp	1.02@50F		
Source of Rmf / Rmc	MEASUREMENT		
Rin @ BHT	.351@121F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	10:45 P.M.		
Maximum Recorded Temperature	121F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	PAT DEENIHAN		

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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

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS

ZENDA, KS. 4E. ON HWY 42 TO "SW 50 RD.", S. TO "NW 150 RD." (SPIVEY GAS PLANT) 1E., 1/2S., W. INT

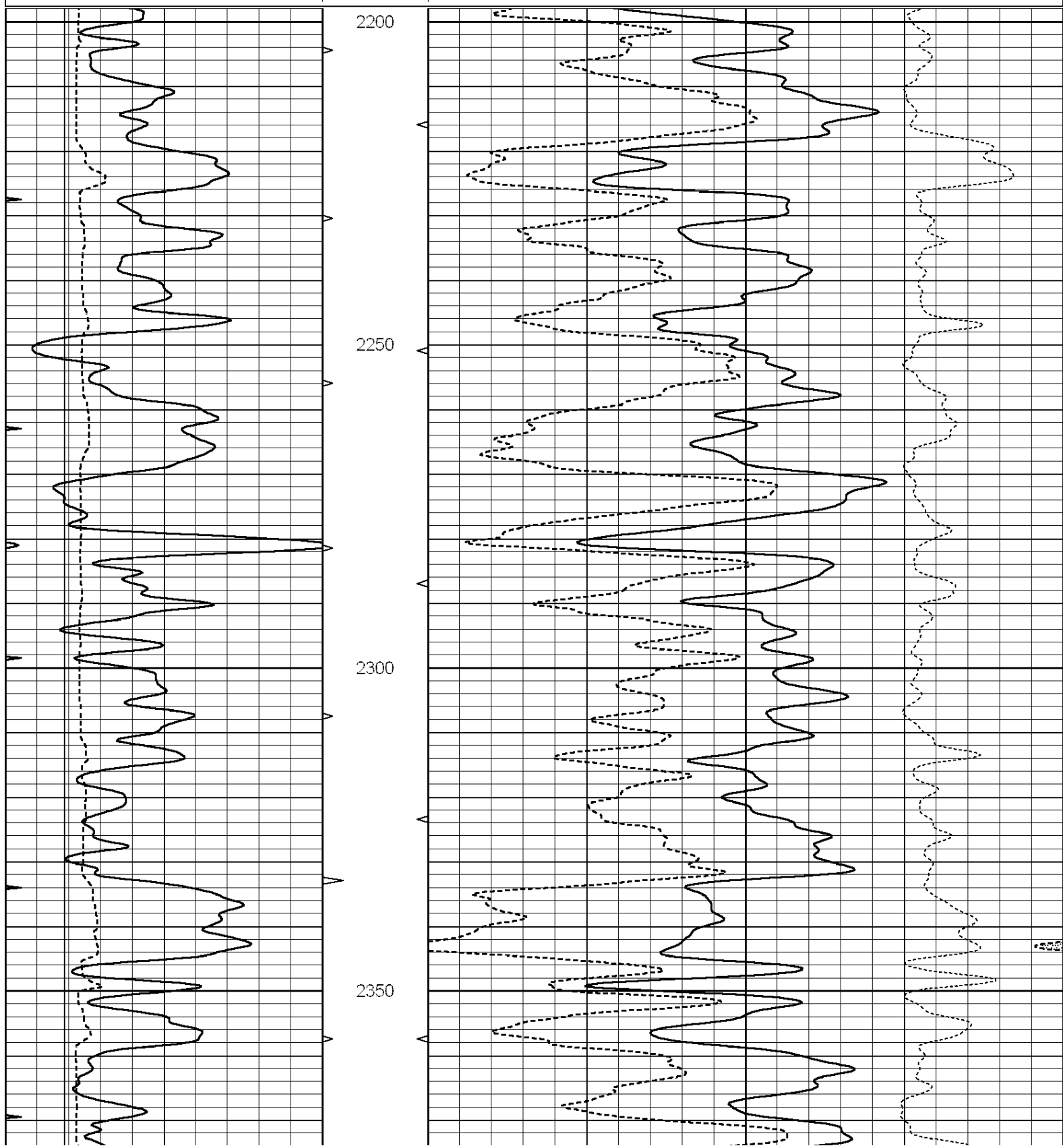


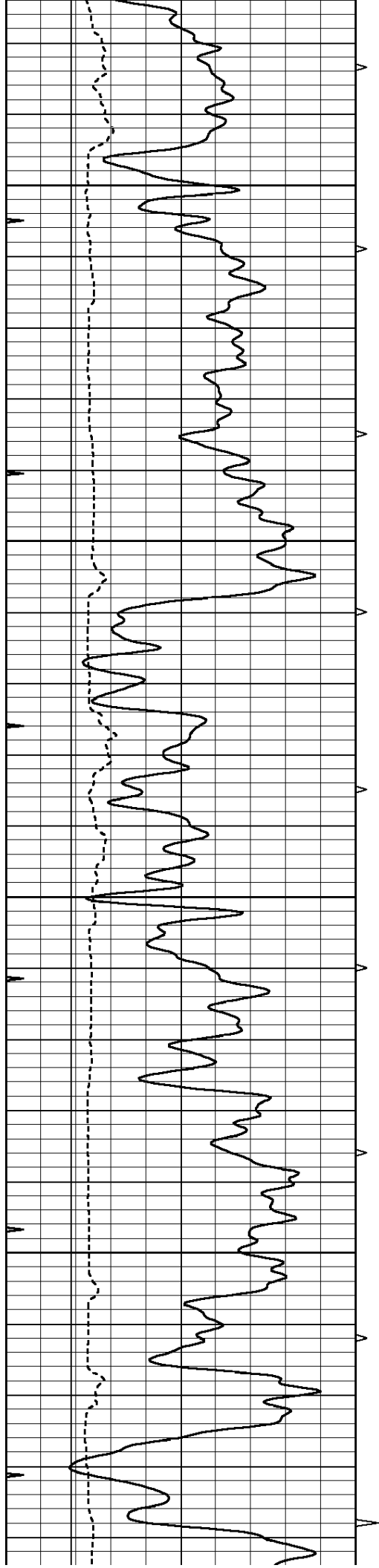
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MAIN SECTION

Database File: 006279ddn.db
Dataset Pathname: pass3.9
Presentation Format: den_neu
Dataset Creation: Mon Jan 31 00:25:01 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		



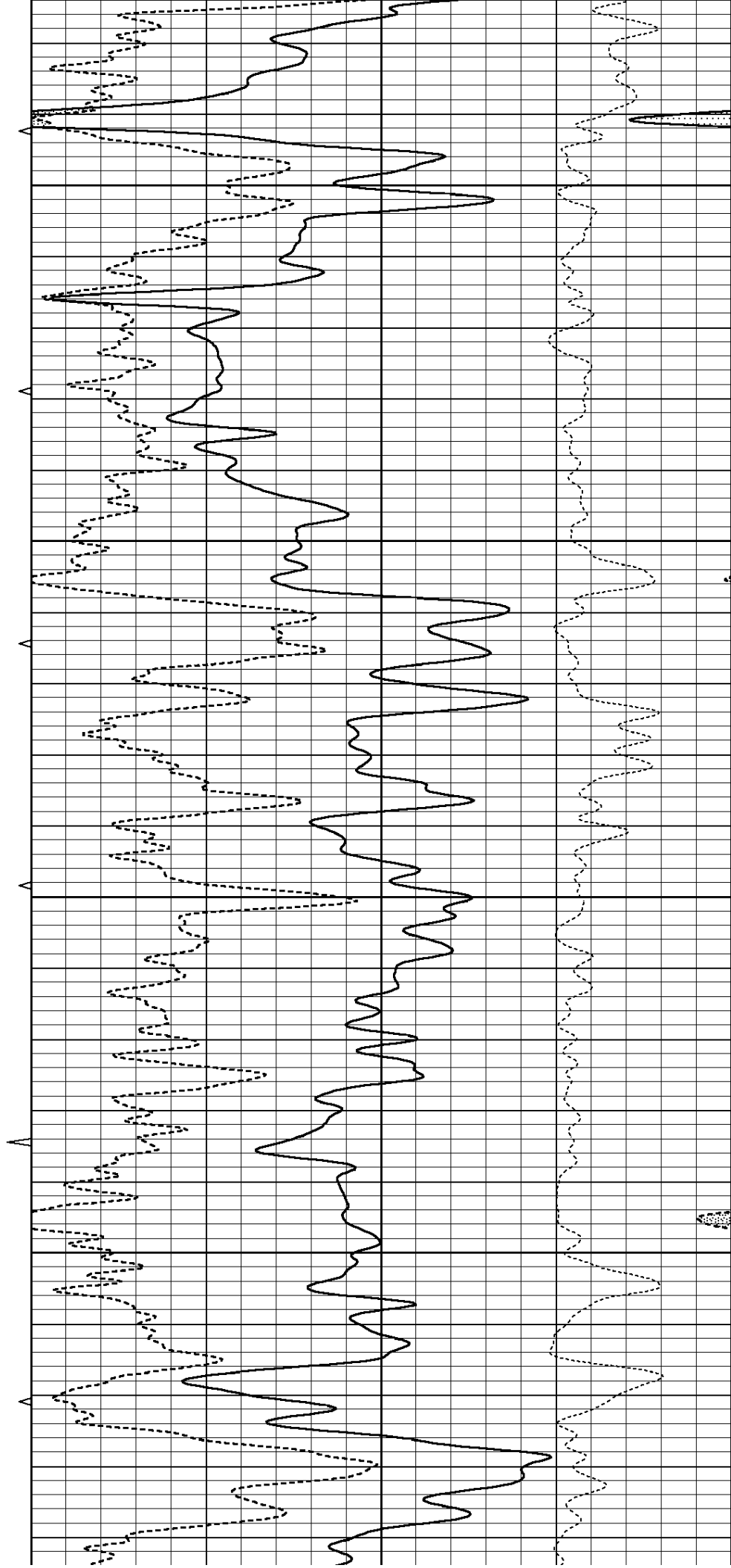


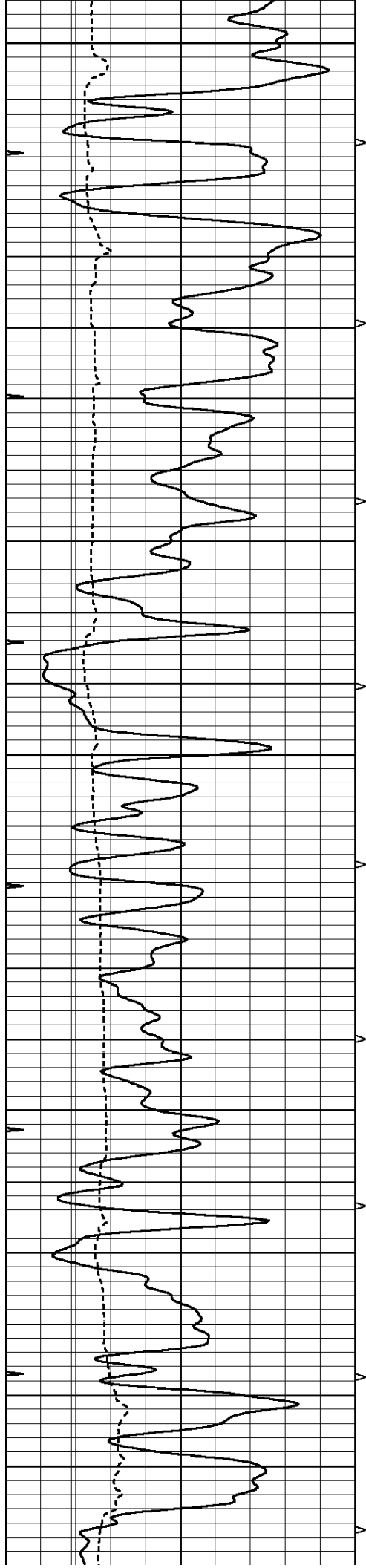
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2450

2500

2550





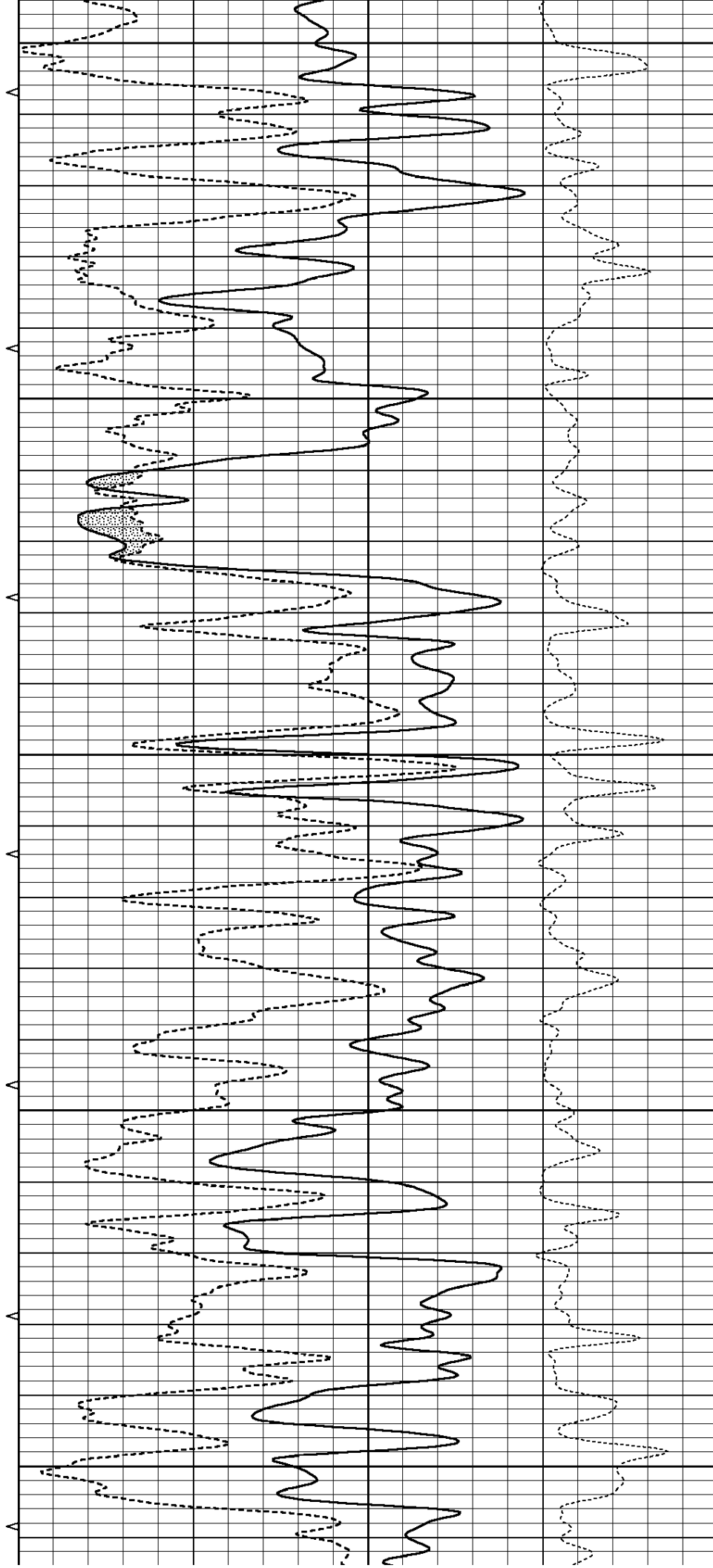
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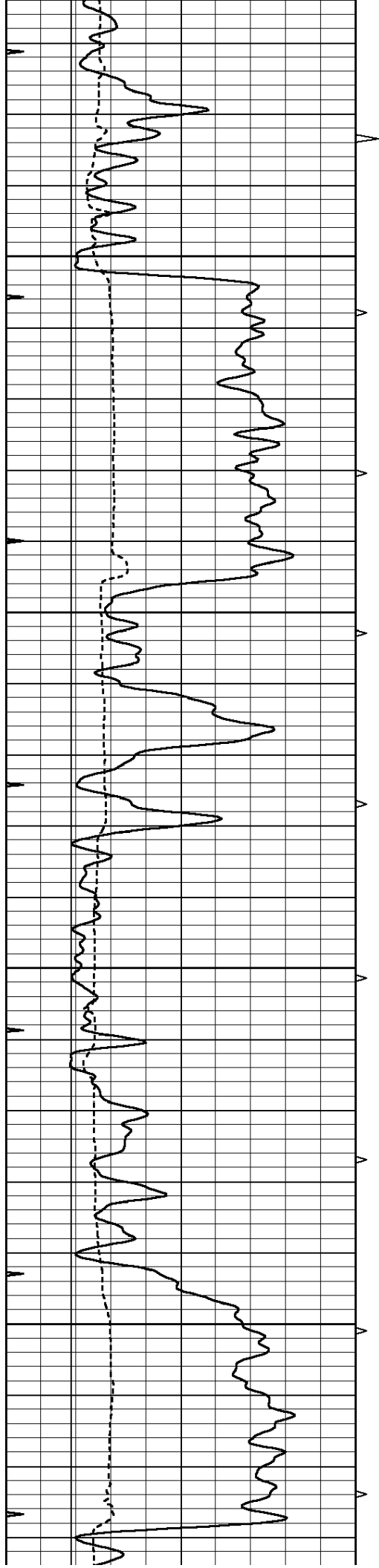
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2750

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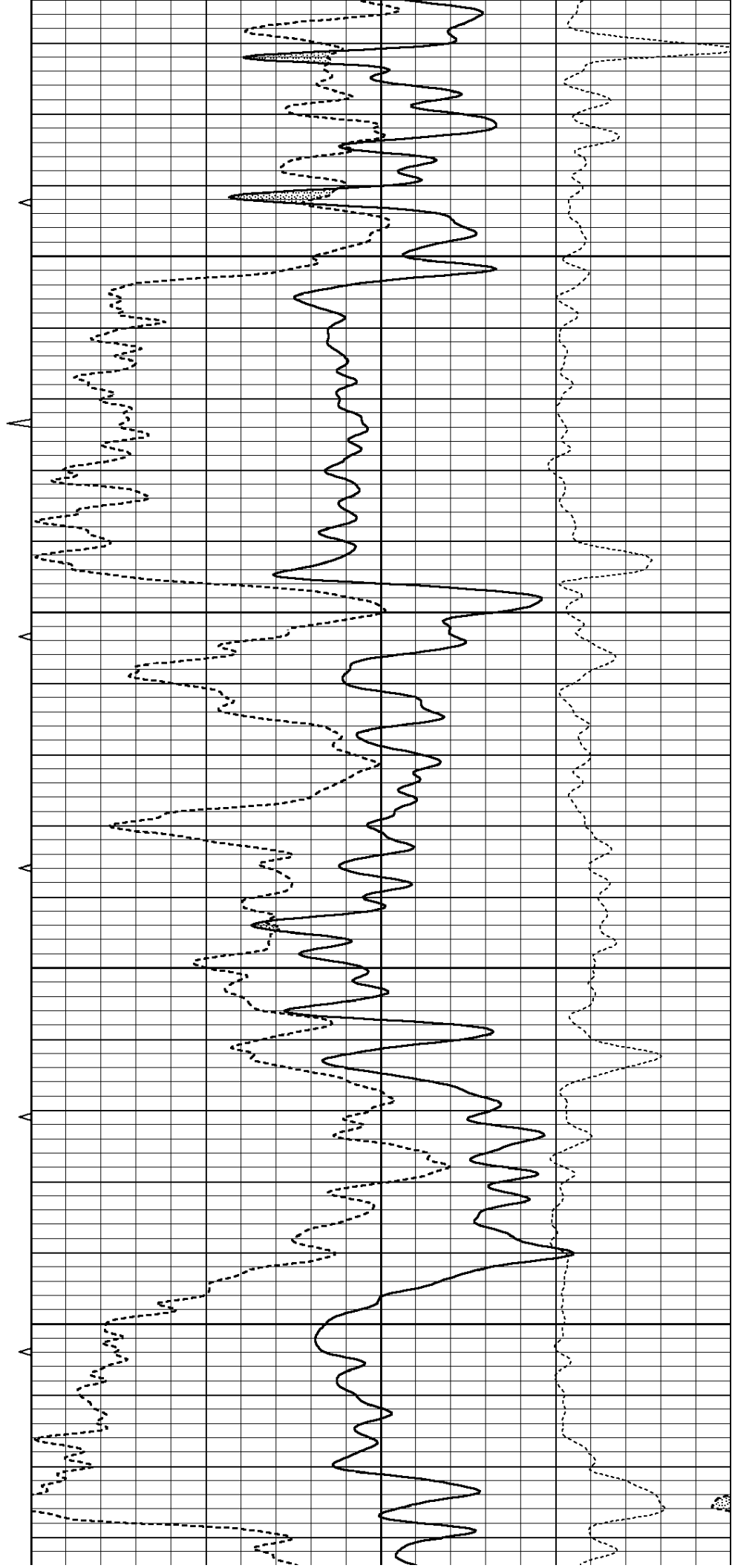


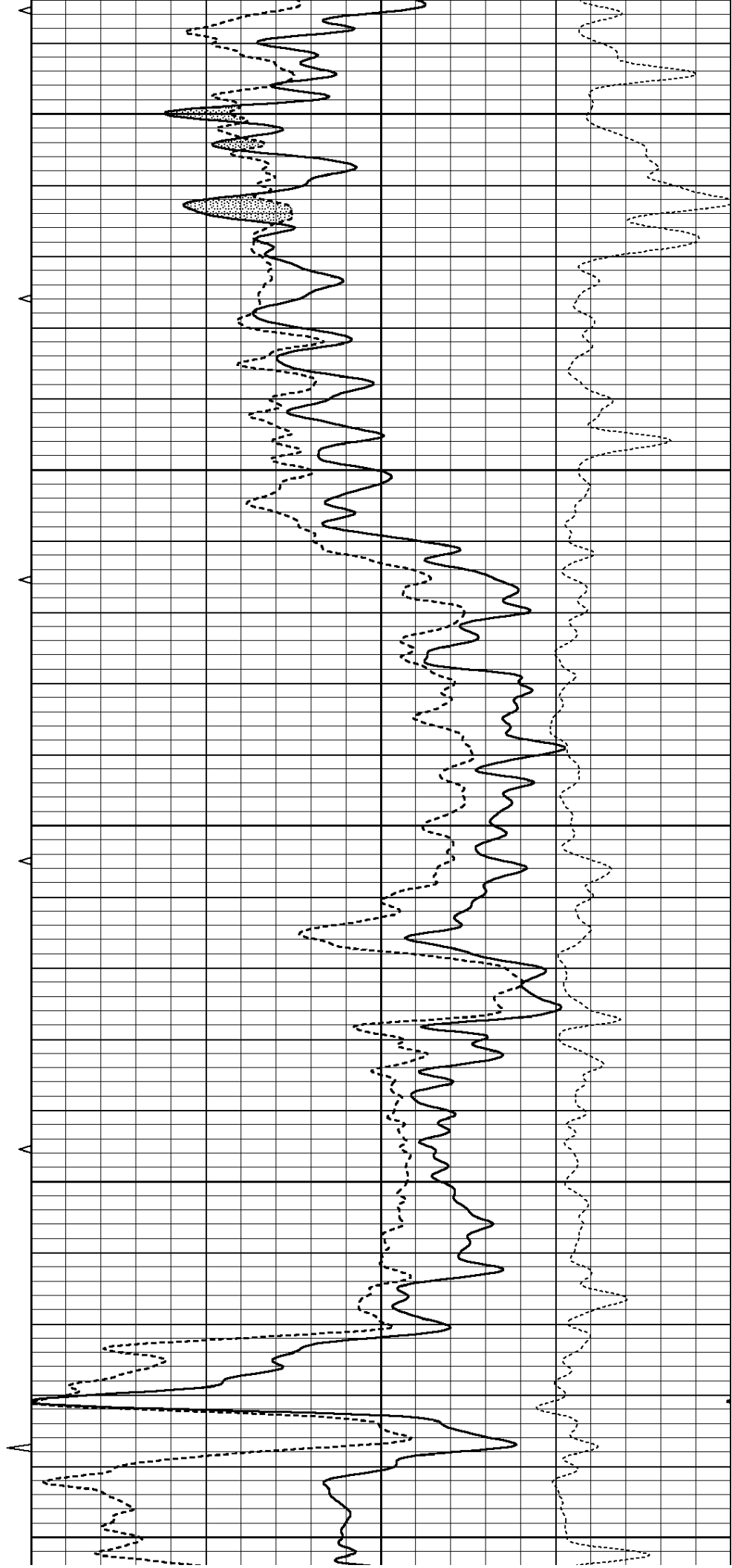
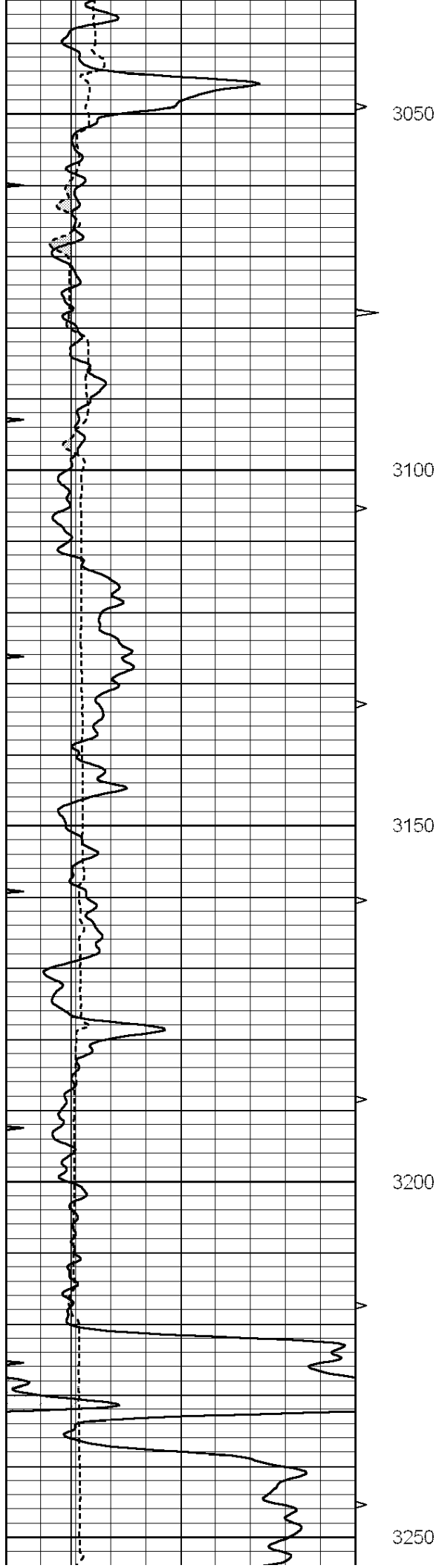
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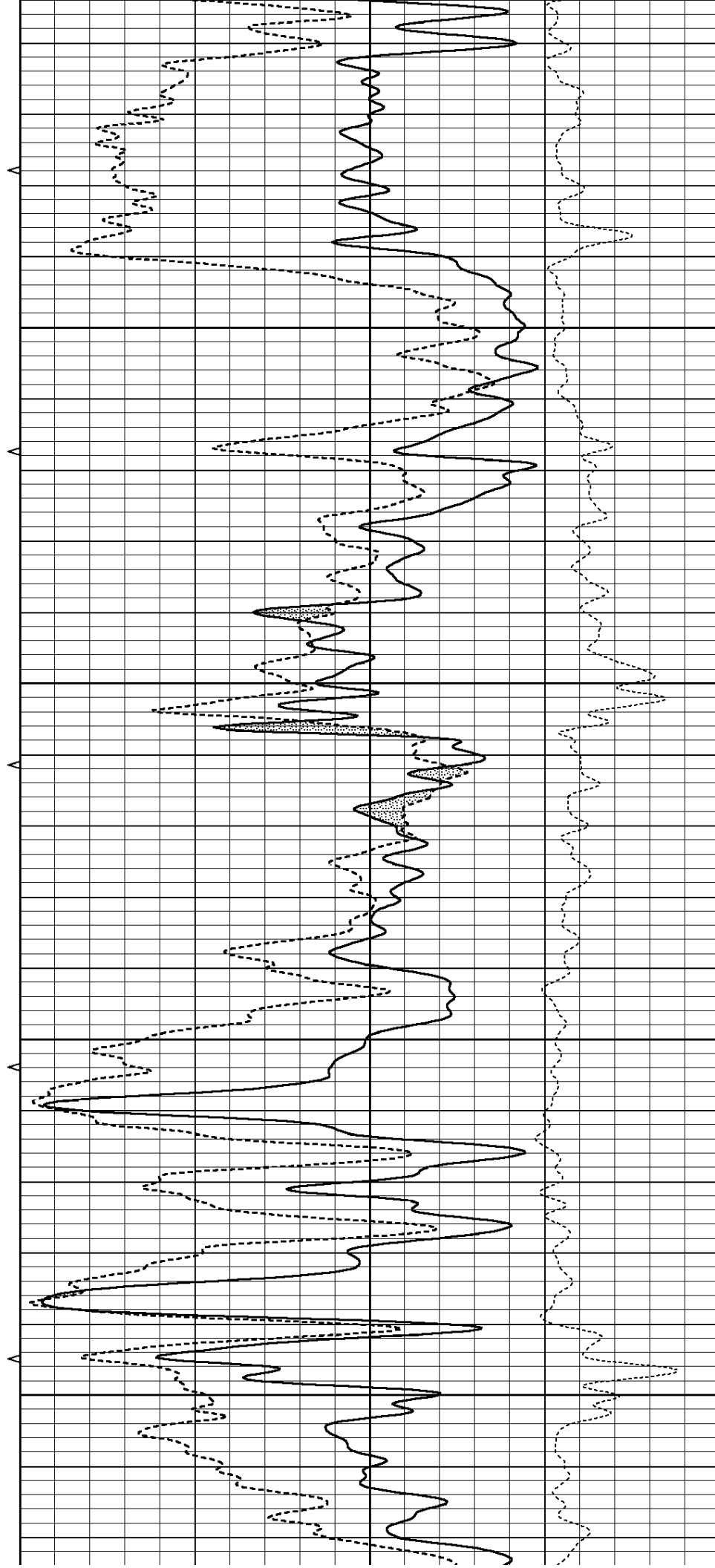
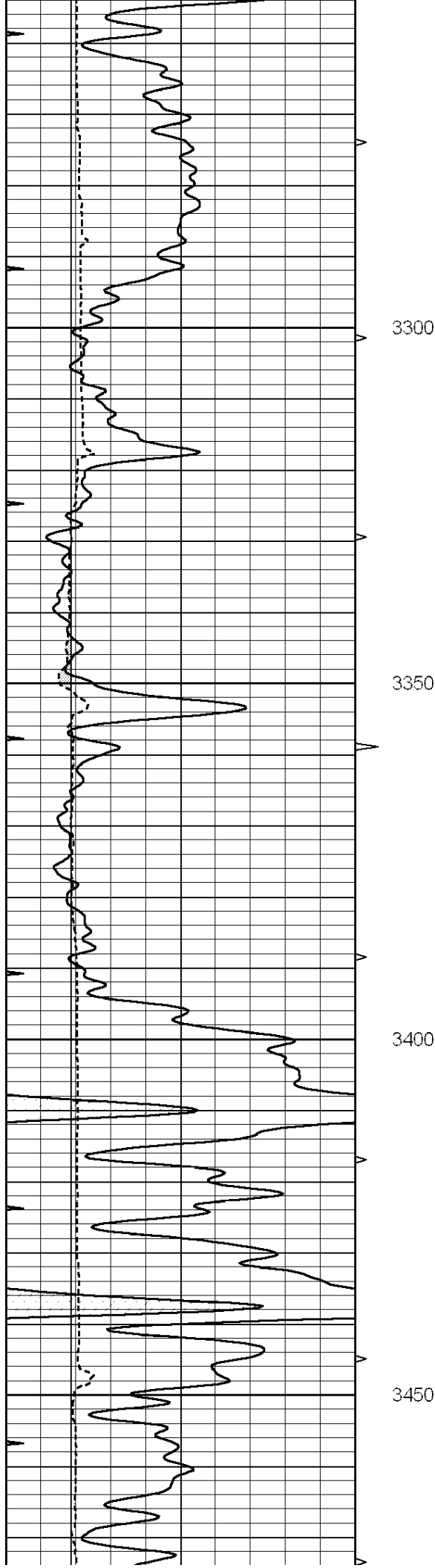
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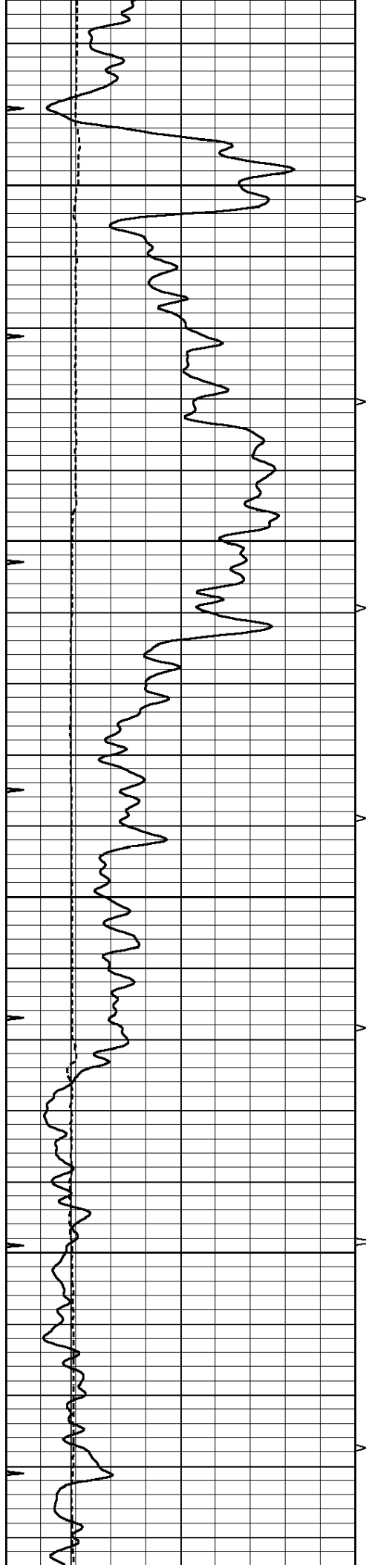
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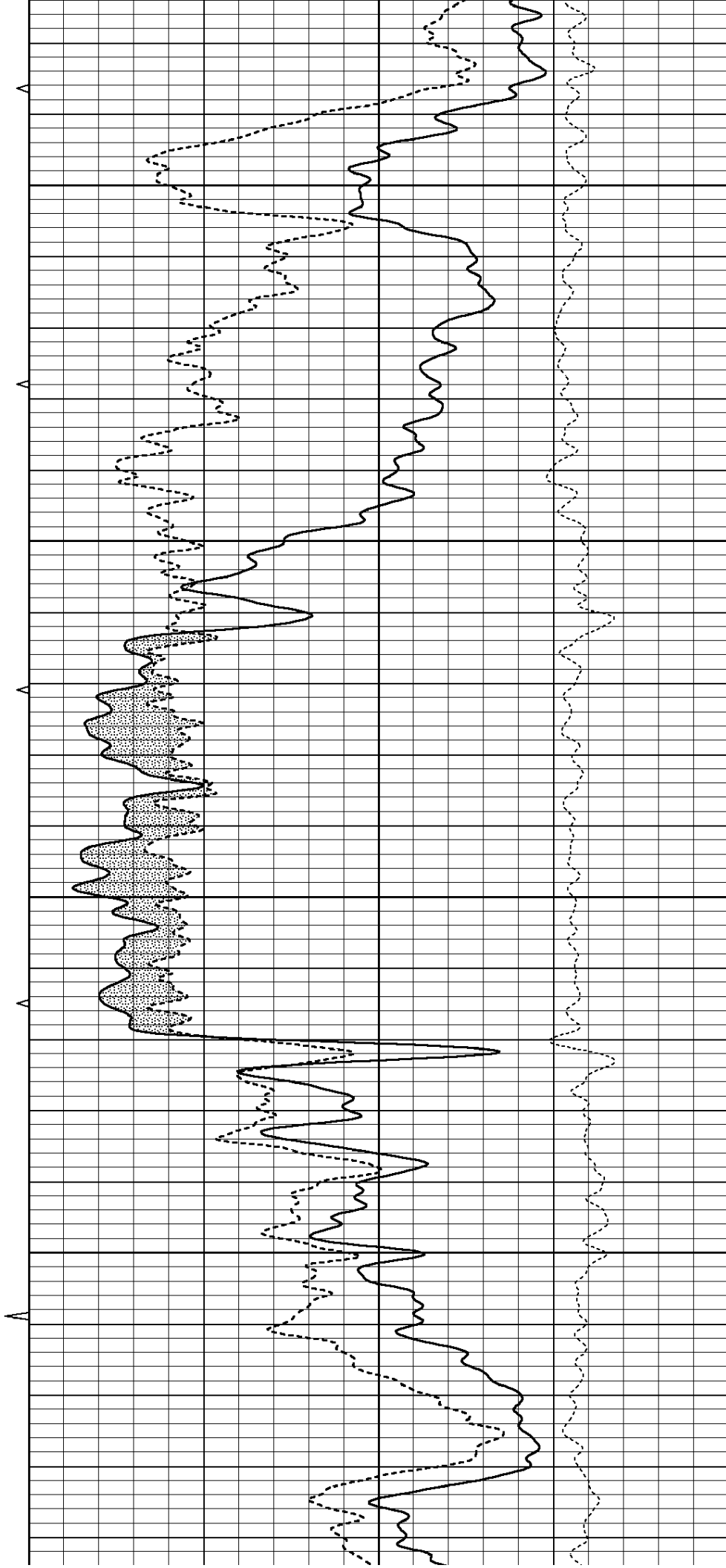


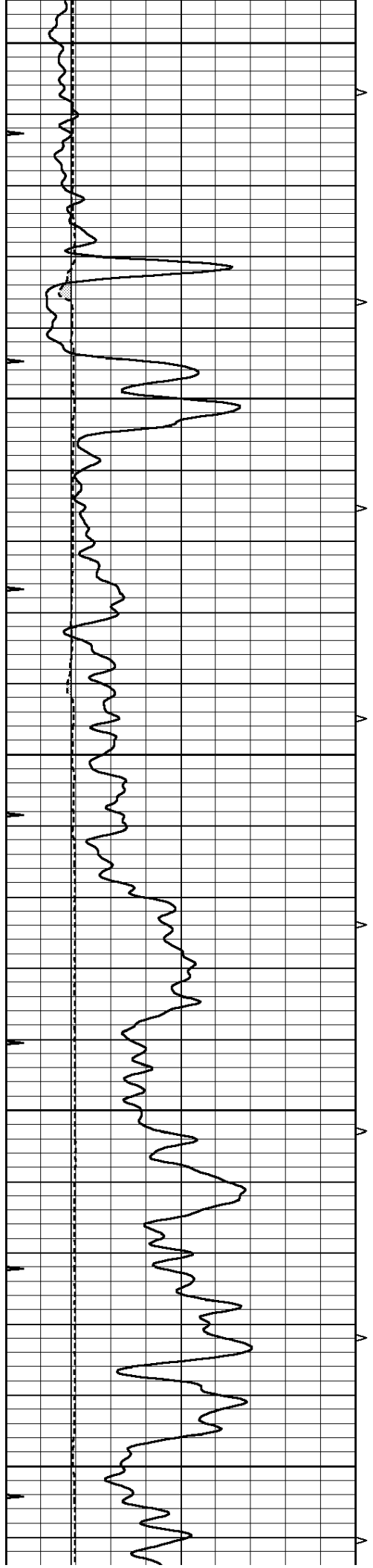
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3650





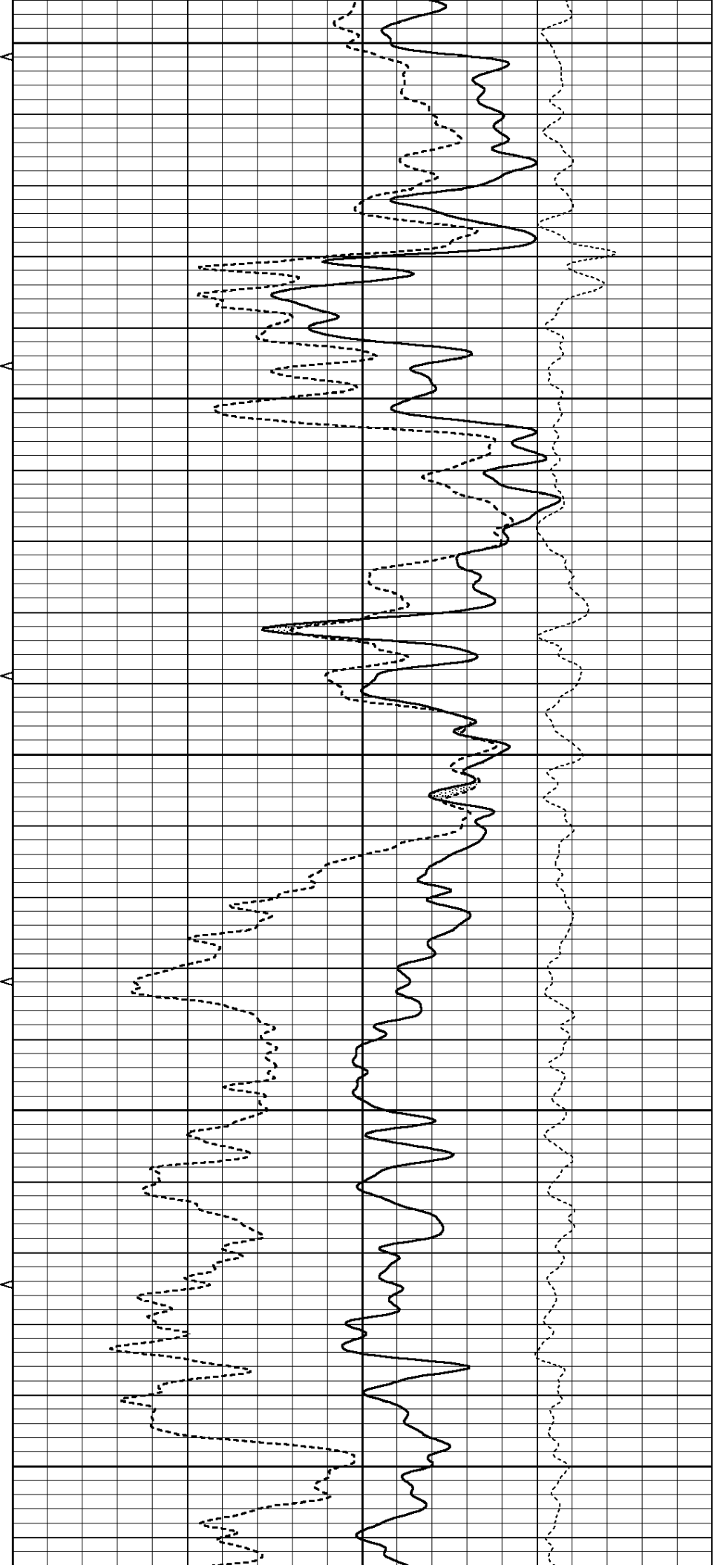
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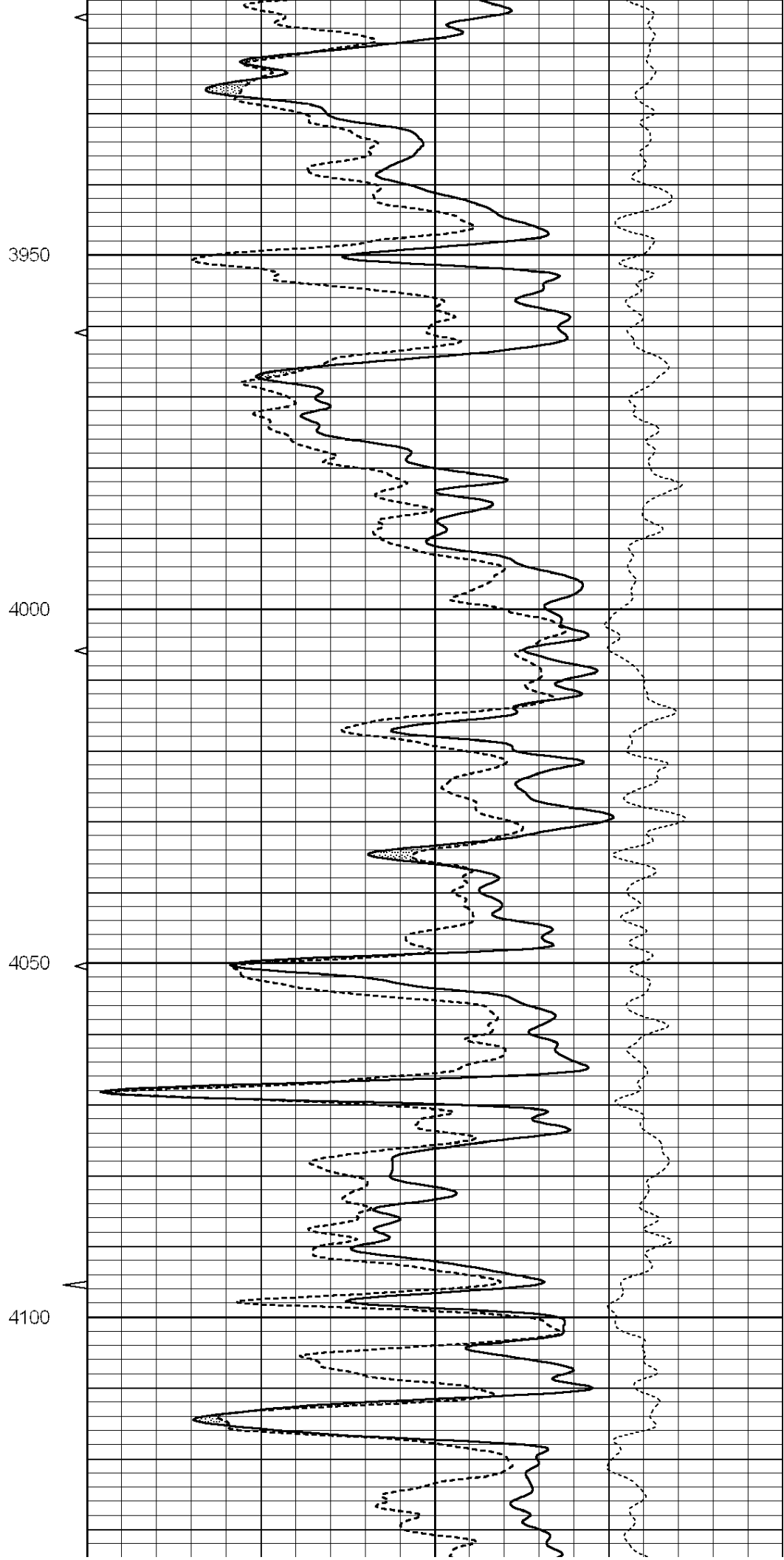
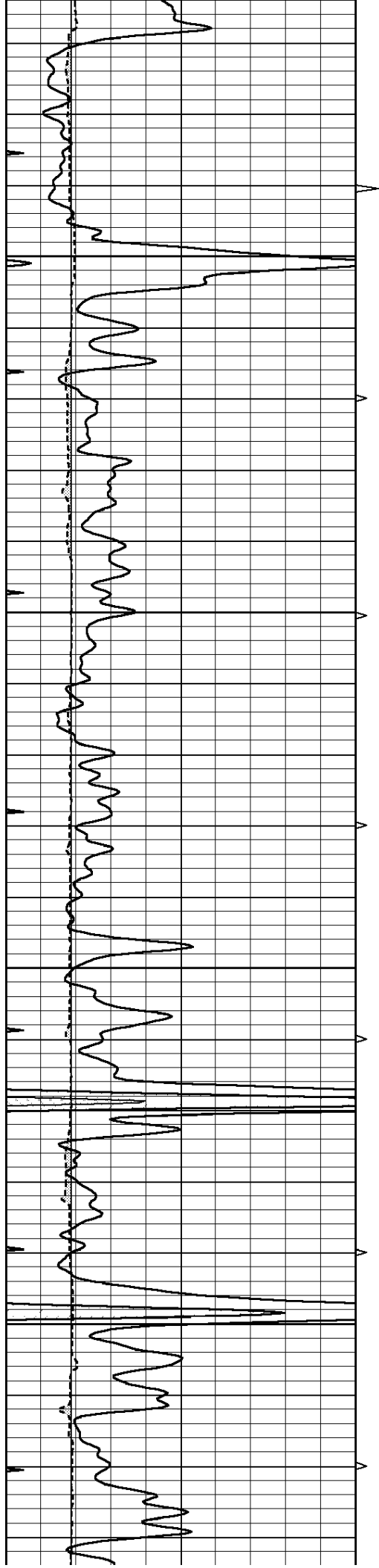
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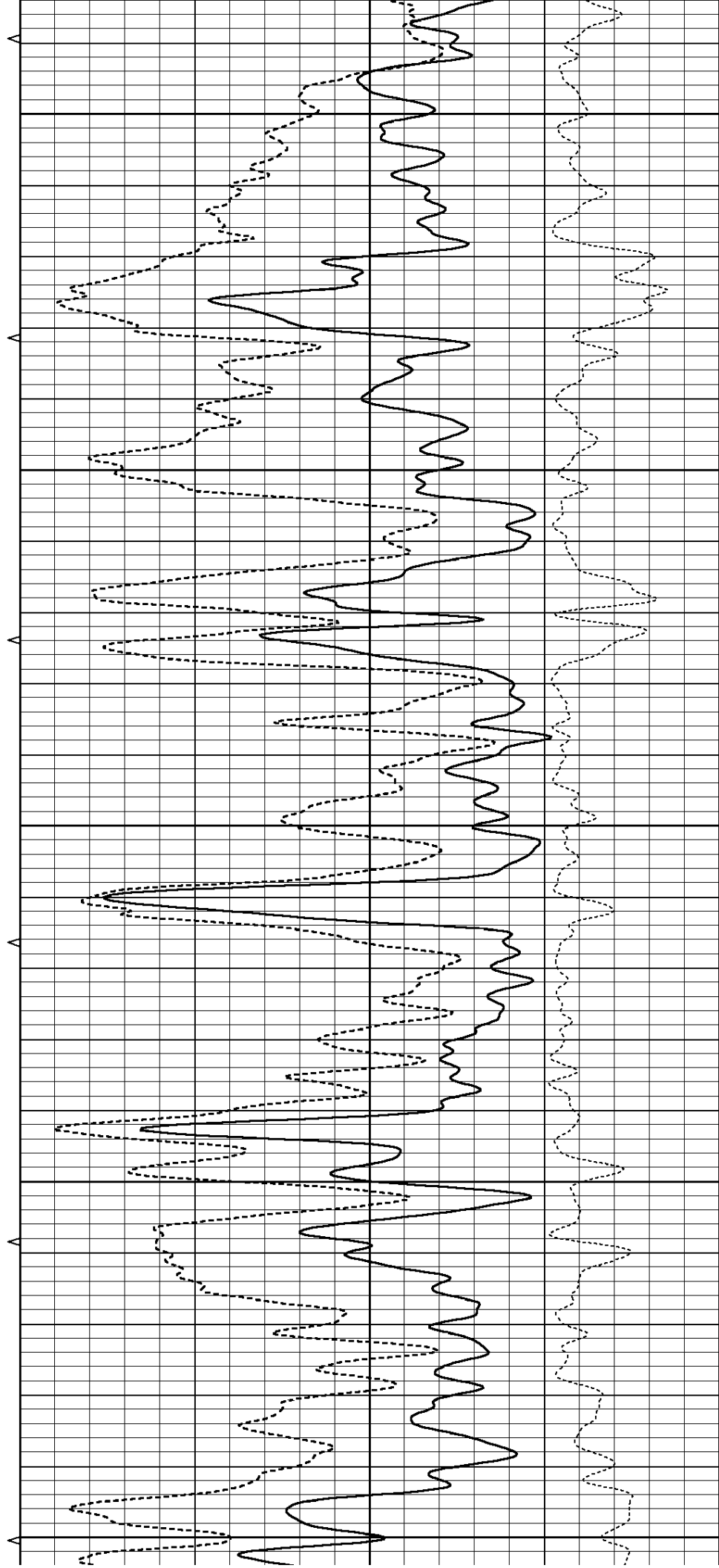
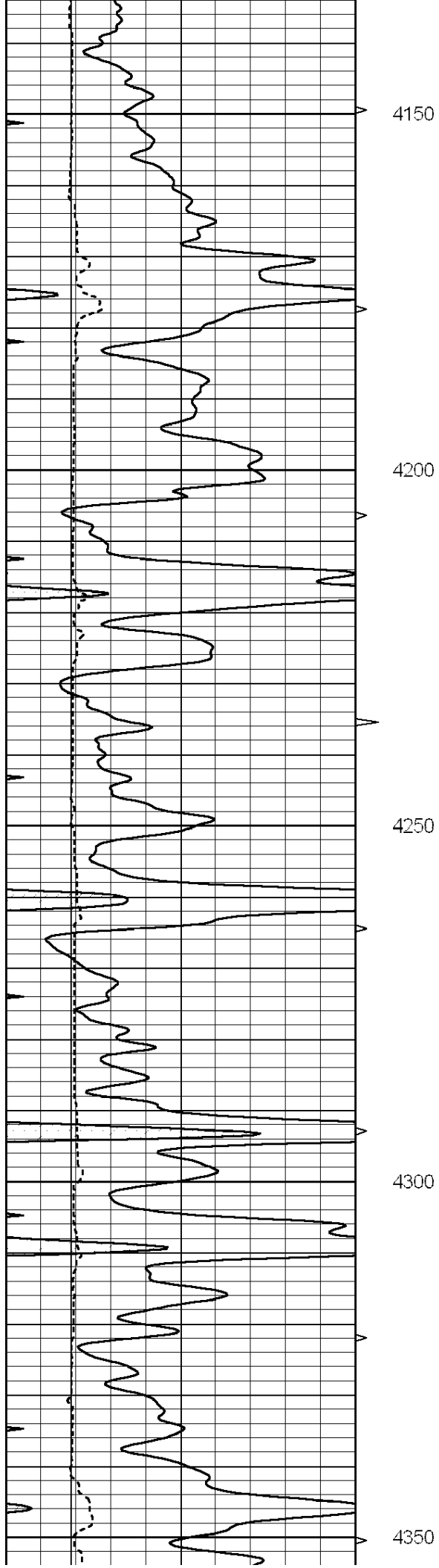
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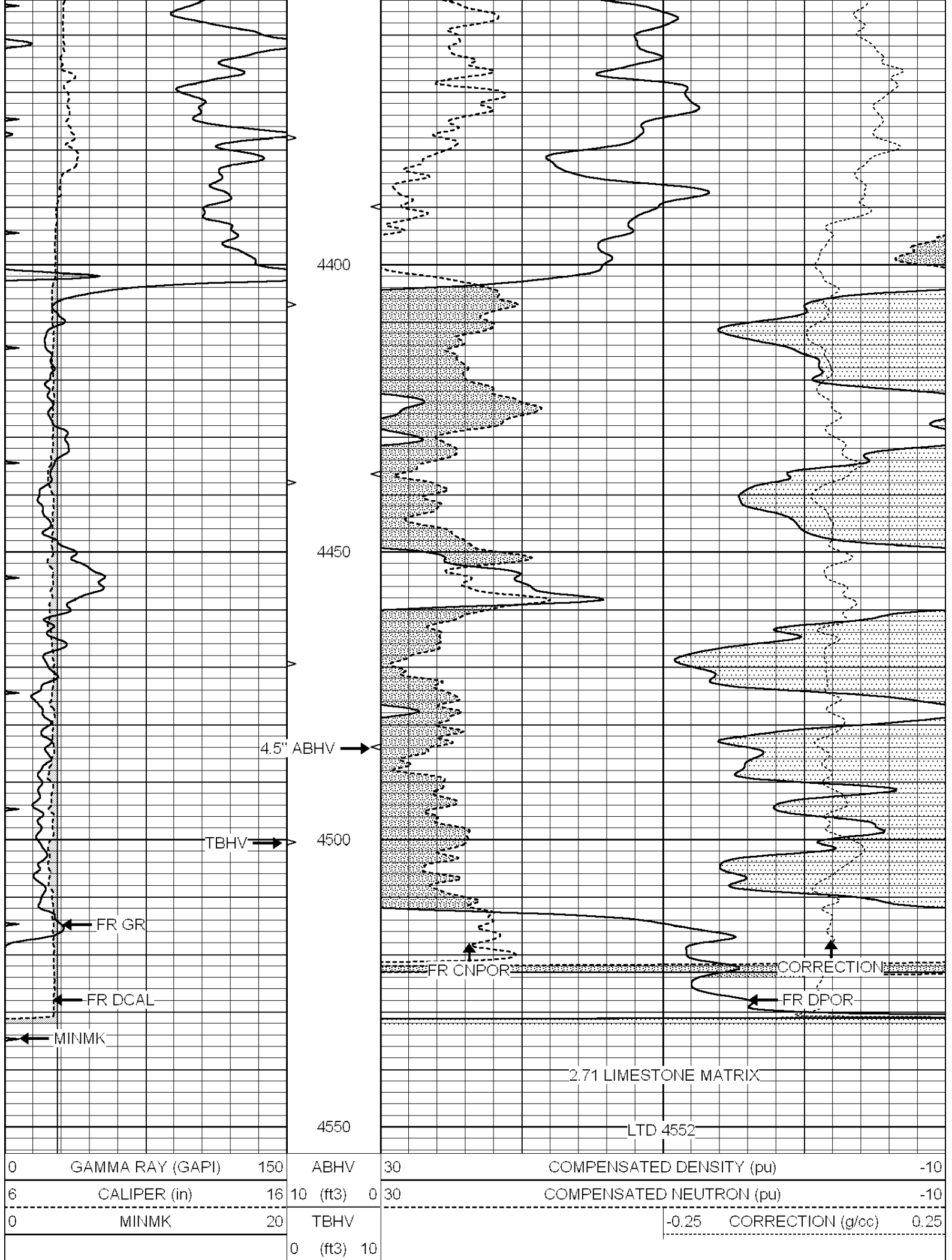
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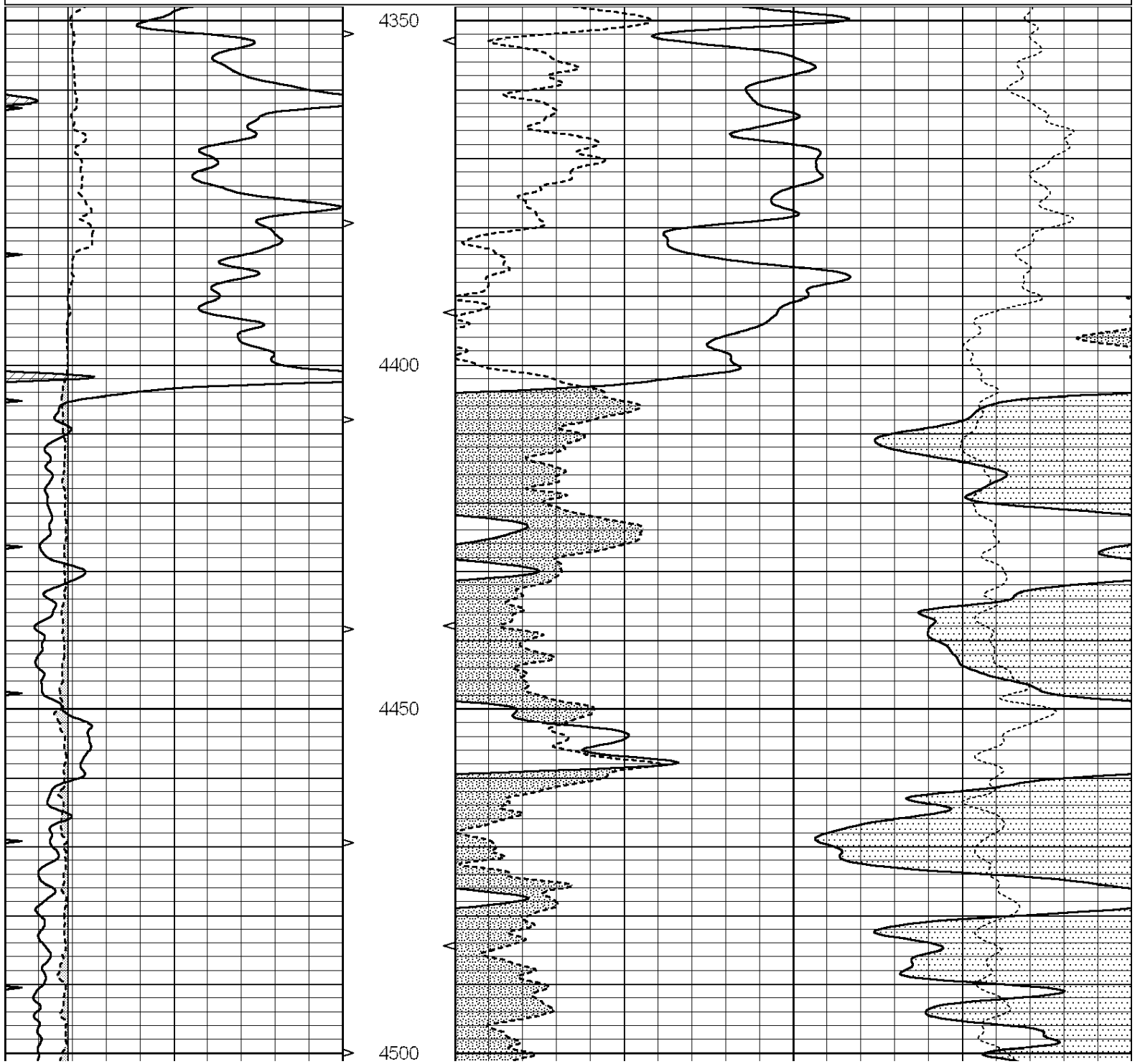


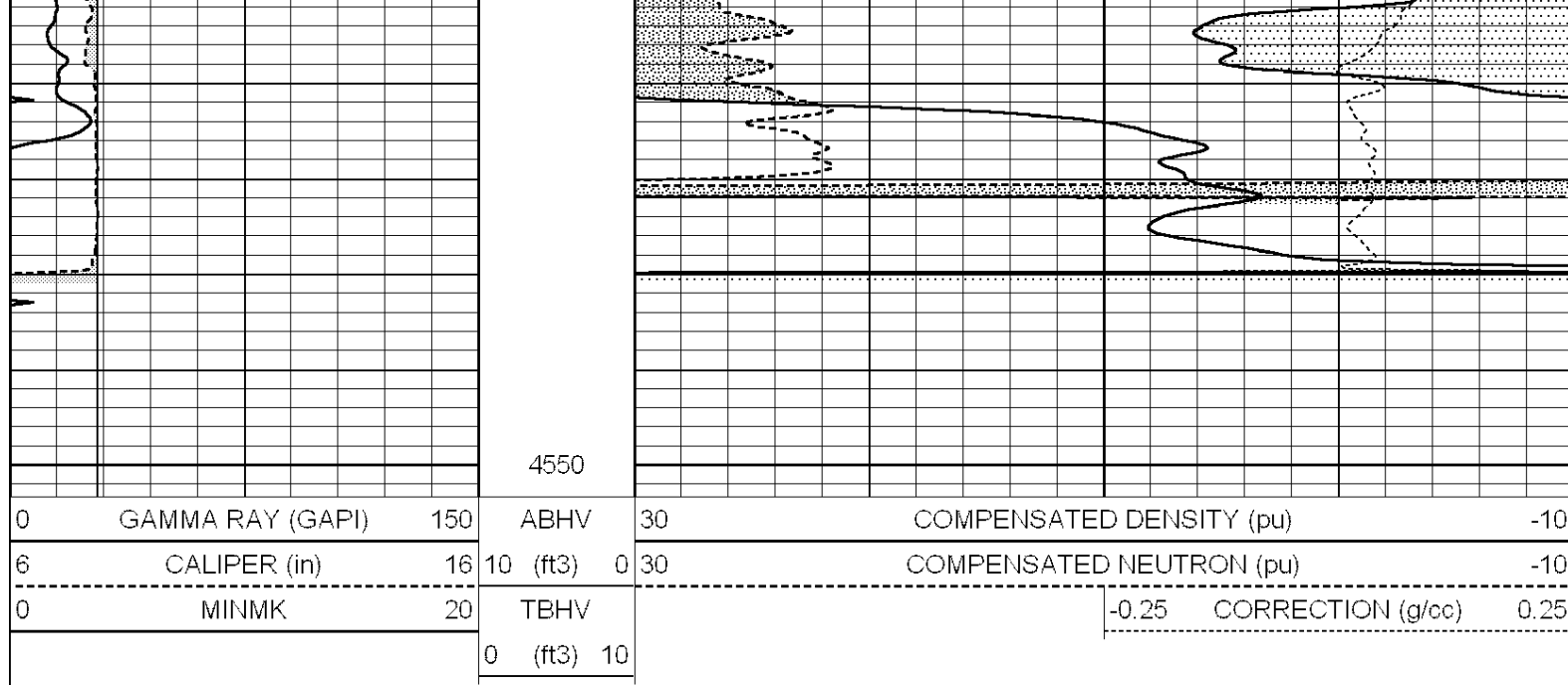
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REPEAT SECTION

Database File: 006279ddn.db
Dataset Pathname: pass2.7
Presentation Format: den_neu
Dataset Creation: Mon Jan 31 00:33:57 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





Calibration Report

Database File: 006279ddn.db
 Dataset Pathname: pass3.9
 Dataset Creation: Mon Jan 31 00:25:01 2011 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Sun Jan 30 21:59:10 2011

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	0.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-13.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555

Litho Density Calibration Report

Serial: 003N Model: PRB
 Performed Tue Sep 08 14:14:44 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
Window 2	1855.8	10134.7	3624.2	11113.1	cps
Window 3	1639.4	6760.2	2716.3	7260.3	cps
Window 4	466.4	469.2	466.1	476.5	cps
Long Space	0.0	8278.9	1768.4	9257.4	cps
Short Space	2.2	2377.3	1544.1	2574.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.549
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept	: -18.8

Caliper

Low Ref	Readings 1.8	Reference 6.0								
High Ref	4.6	14.0								
Gain: 2.9		Offset: 1.0								
Compensated Neutron Calibration Report										
		Serial Number:	NEU_3I							
		Tool Model:	G							
CALIBRATION										
Detector		Readings		Target		Normalization				
Short Space		997.00	cps	1000.00	cps	1.0000				
Long Space		986.00	cps	1000.00	cps	1.0000				
Gamma Ray Calibration Report										
Serial Number:		GR3								
Tool Model:		OPEN								
Performed:		Sun Jan 30 21:58:55 2011								
Calibrator Value:		200.0	GAPI							
Background Reading:		3.0	cps							
Calibrator Reading:		186.0	cps							
Sensitivity:		0.5000	GAPI/cps							