



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
LOG

Company	RITCHIE EXPLORATION, INC.		
Well	DERSTEIN 10BC #1		
Field			
County	FORD	State	KANSAS
Location:	API # : 15-057-20752-0000 1930' FNL & 550' FWL 50N & 110W OF SW - NW SEC 10 TWP 28S RGE 22W		Other Services DIL MEL/SON
Permanent Datum	GROUND LEVEL	Elevation	2380
Log Measured From	KELLY BUSHING 11' A.G.L.		
Drilling Measured From	KELLY BUSHING	Elevation	K.B. 2391 D.F. 2389 G.L. 2380
Date	10-6-11		
Run Number	ONE		
Depth Driller	5200		
Depth Logger	5201		
Bottom Logged Interval	5177		
Top Log Interval	2500		
Casing Driller	370		
Casing Logger	368		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES: 6200ppm	
Density / Viscosity	9.1 / 53		
pH / Fluid Loss	10.5 / 8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.45 @ 78F		
Rmf @ Meas. Temp	0.34 @ 78F		
Rmc @ Meas. Temp	0.54 @ 78F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.28 @ 127F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	127F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	JEFF GRONEWEG		
Witnessed By	DAVE WILLIAMS		

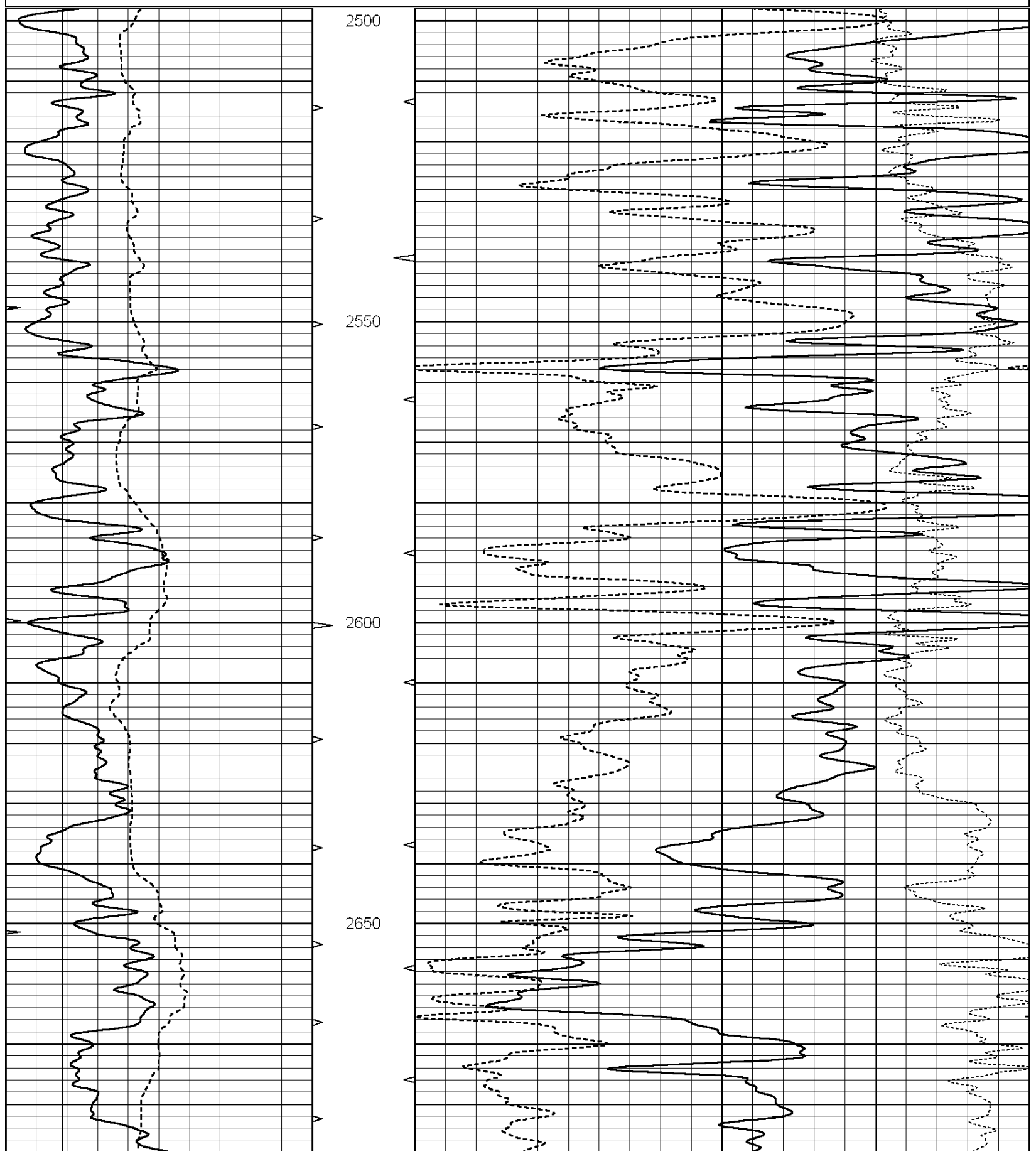
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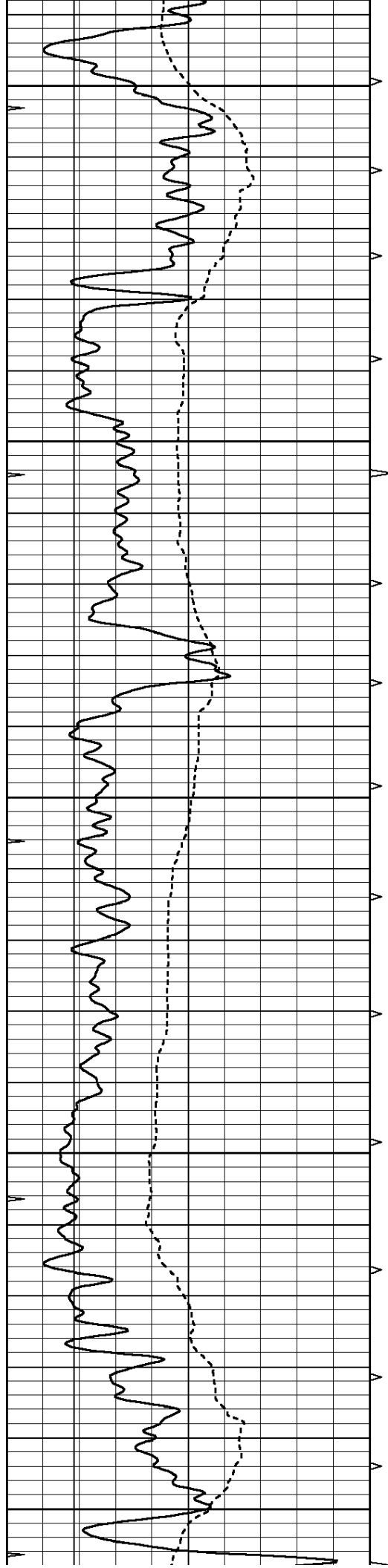
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: FORD, KS - SOUTH ON HWY400 1/2 MILE TO TILLMAN RD.
1.3 MILES EAST - SOUTH INTO

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





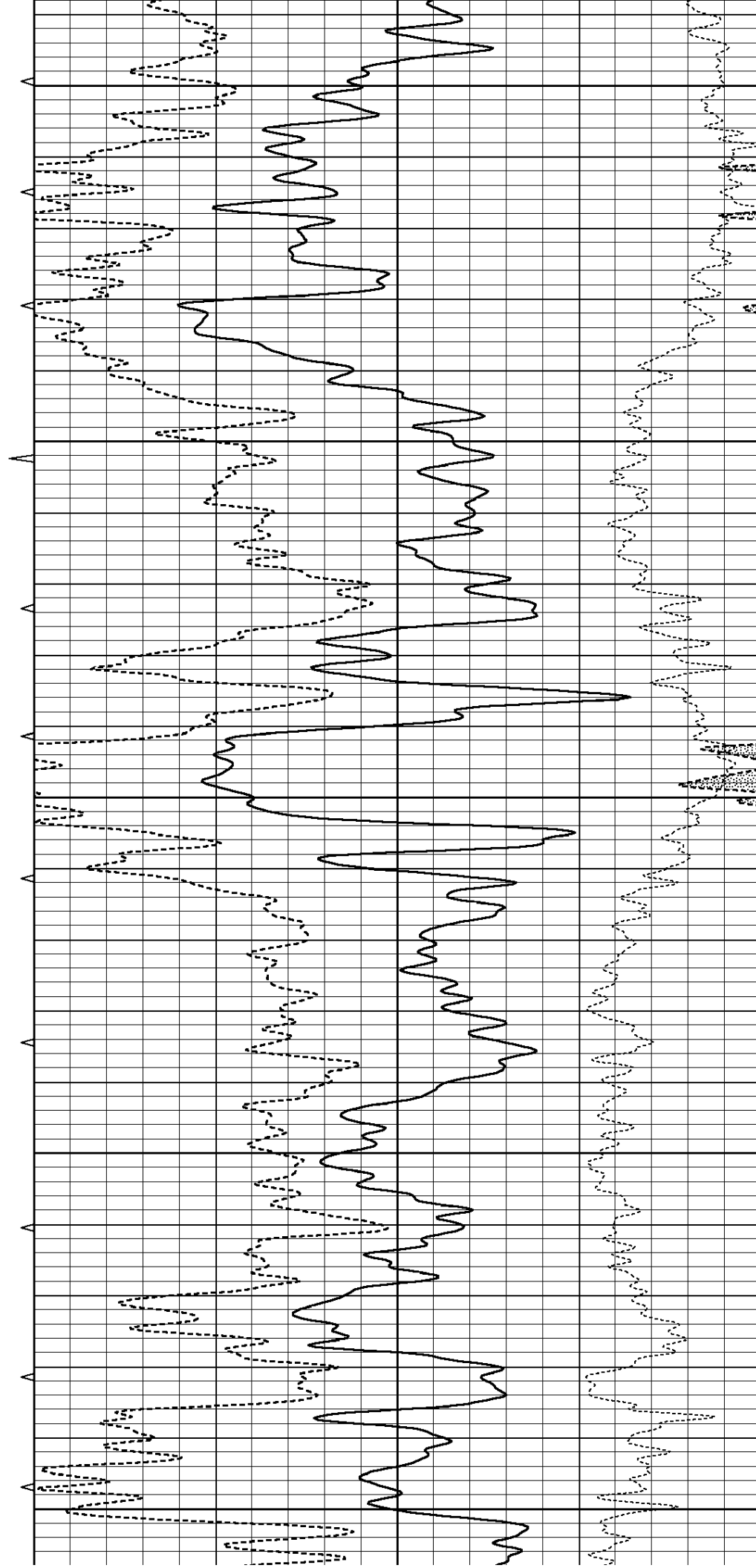
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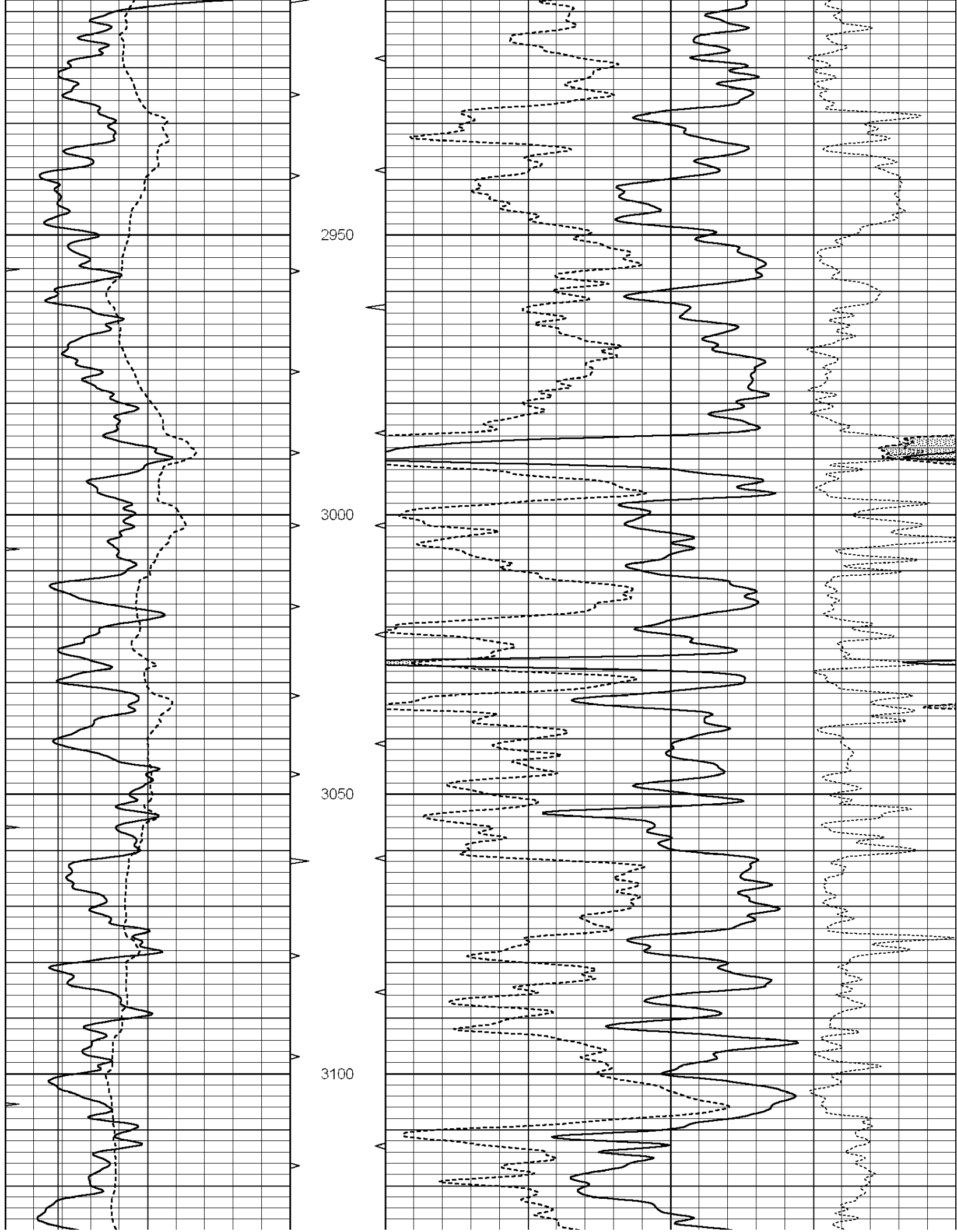
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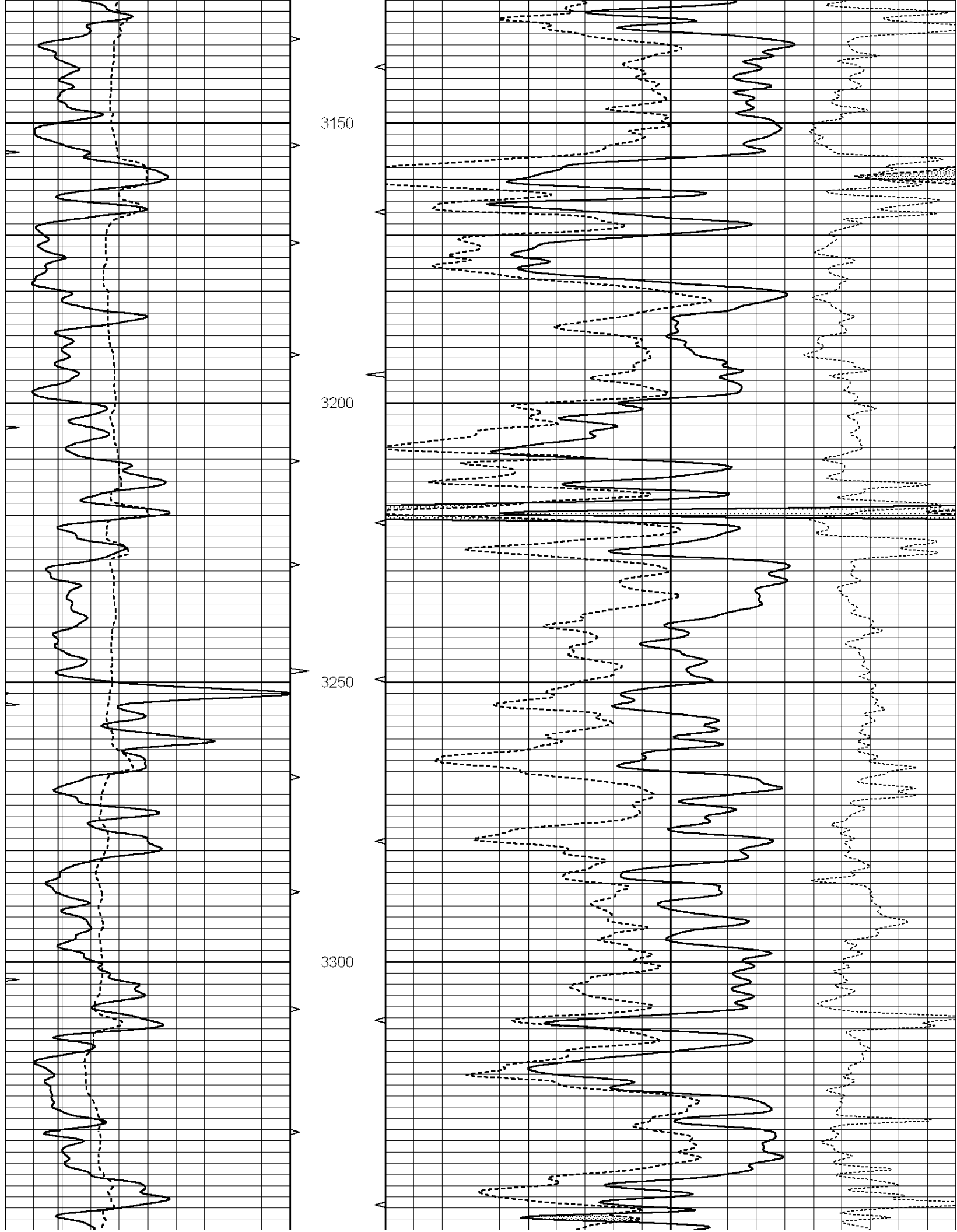
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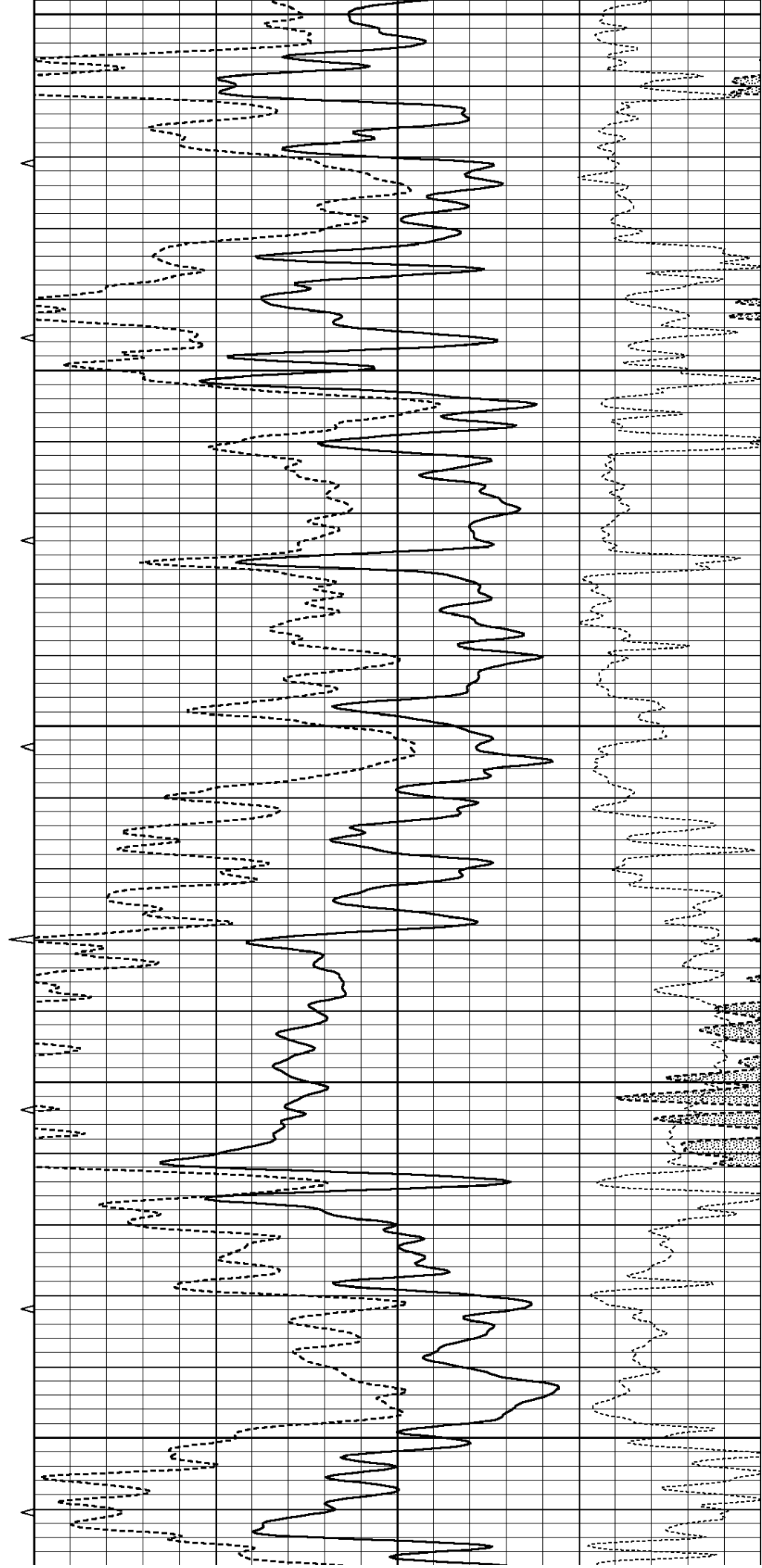
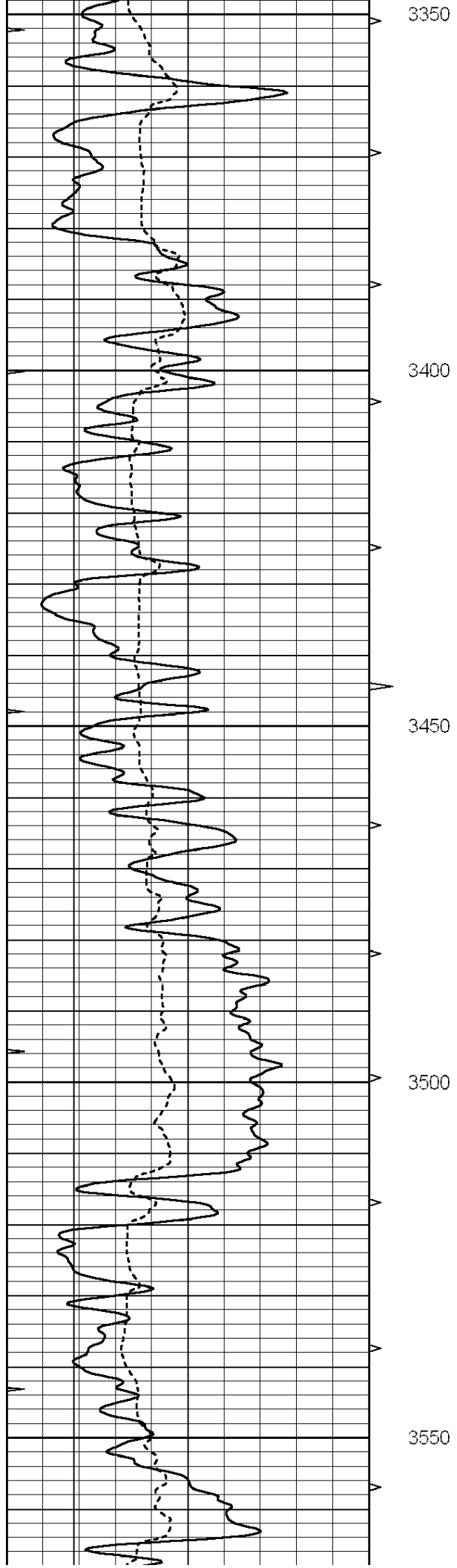
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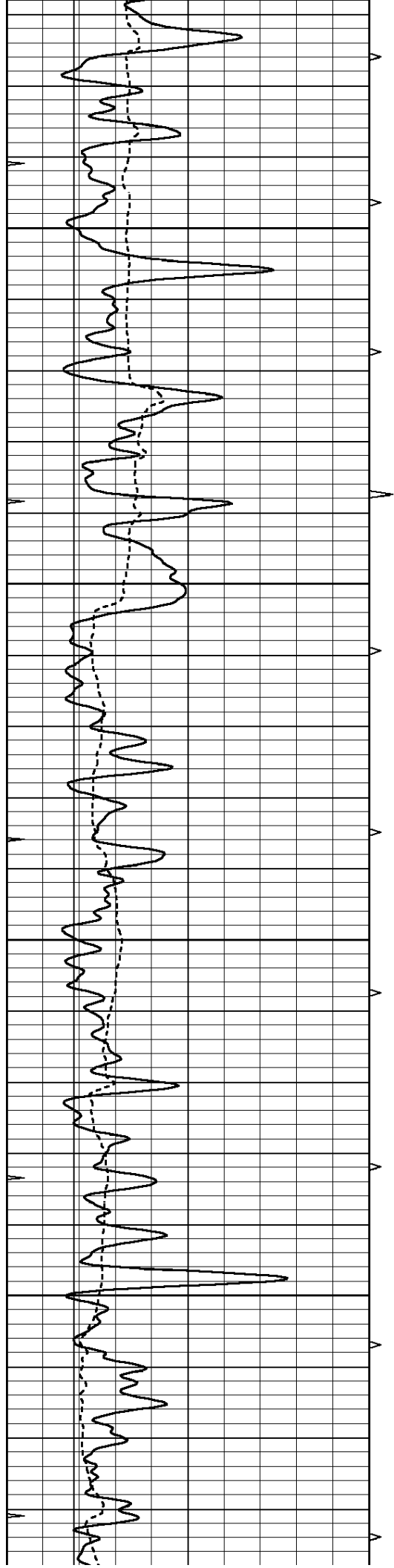
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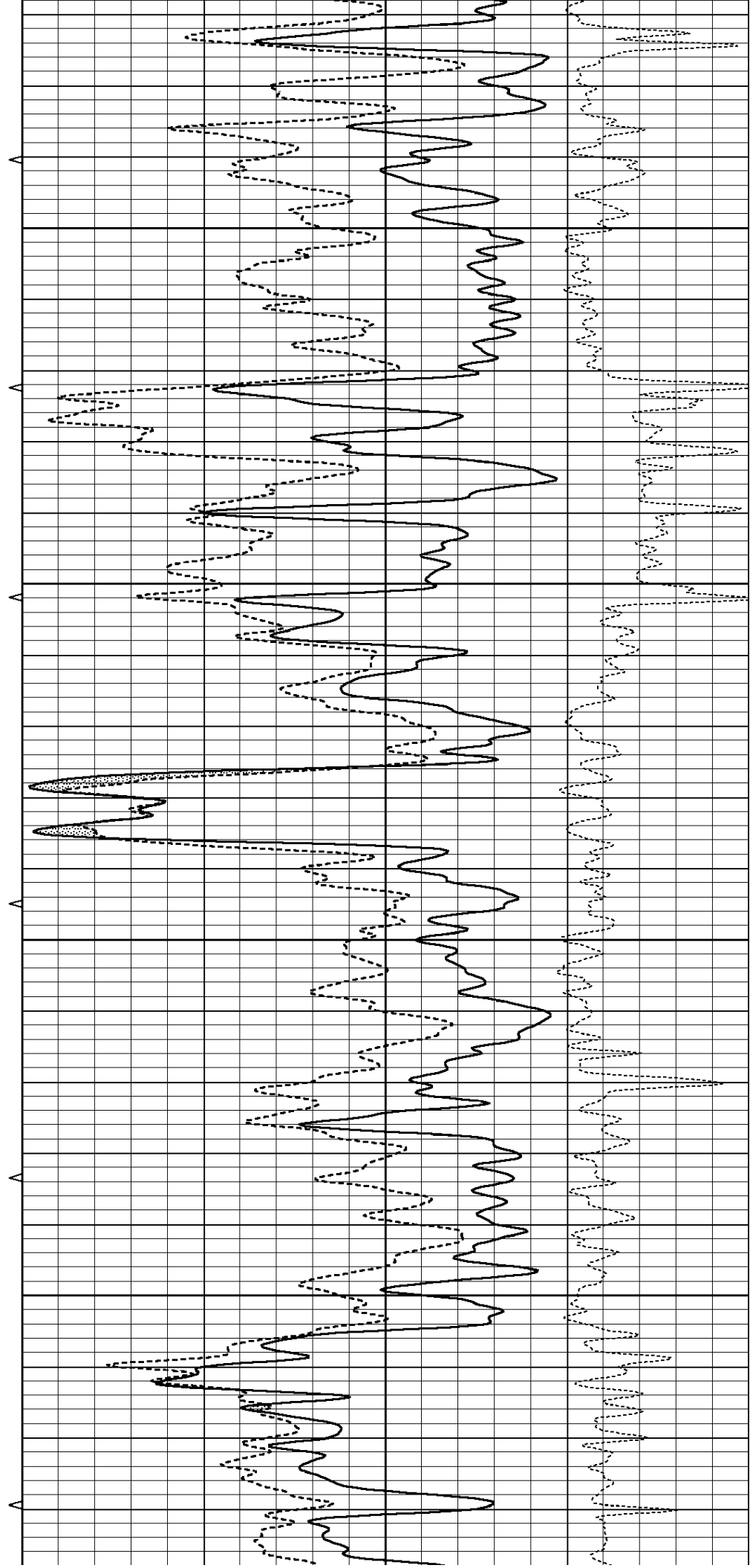


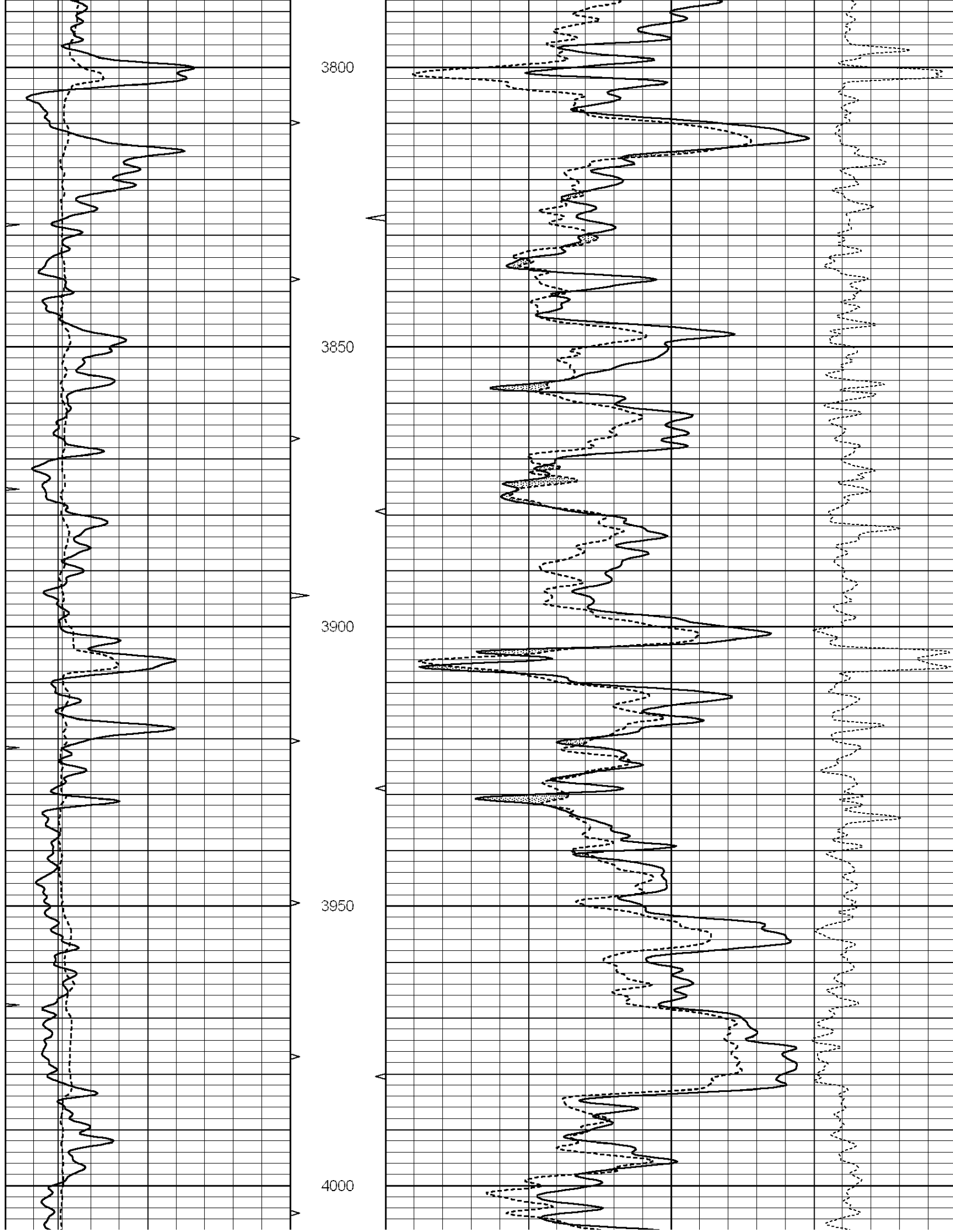
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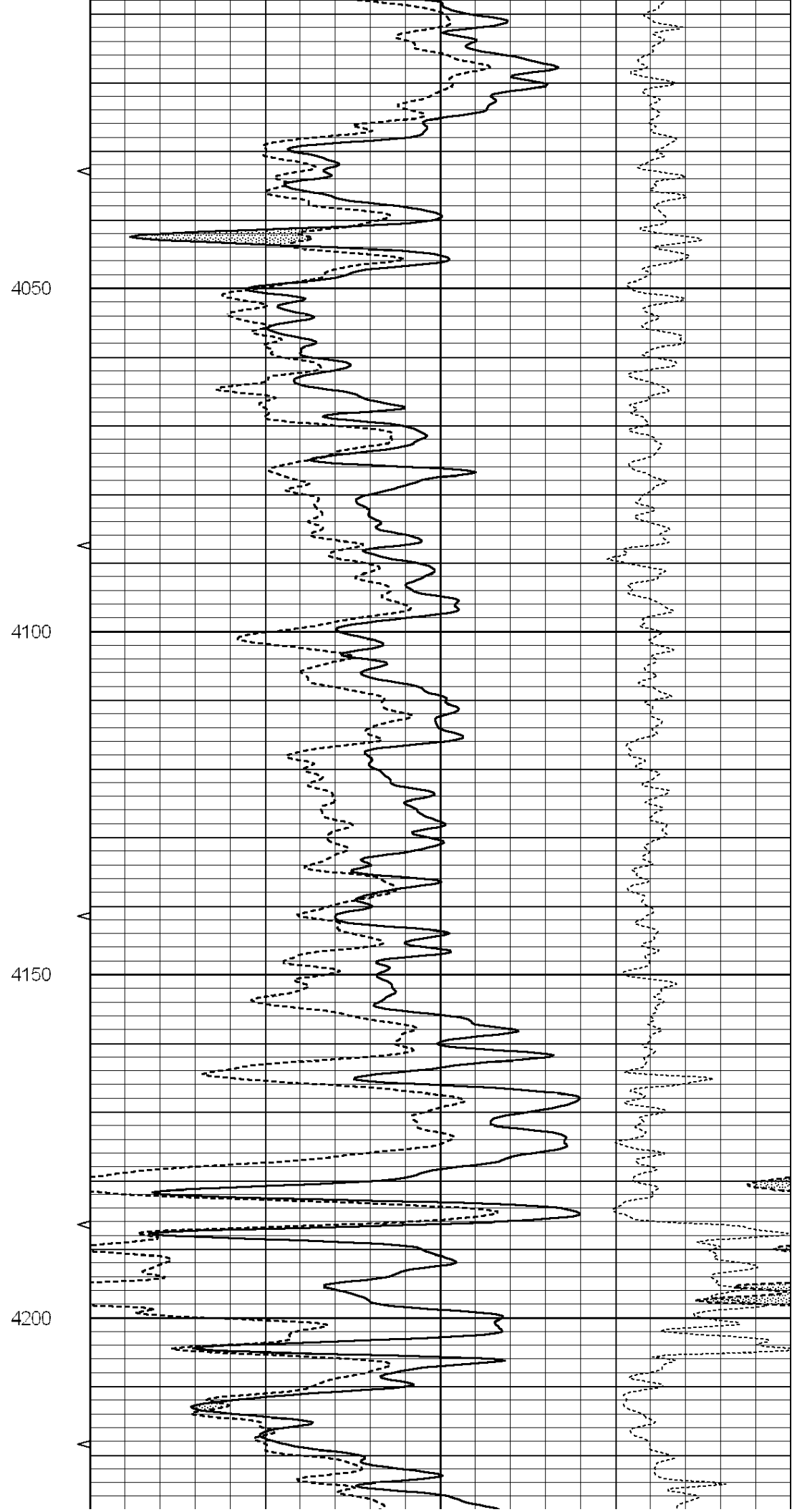
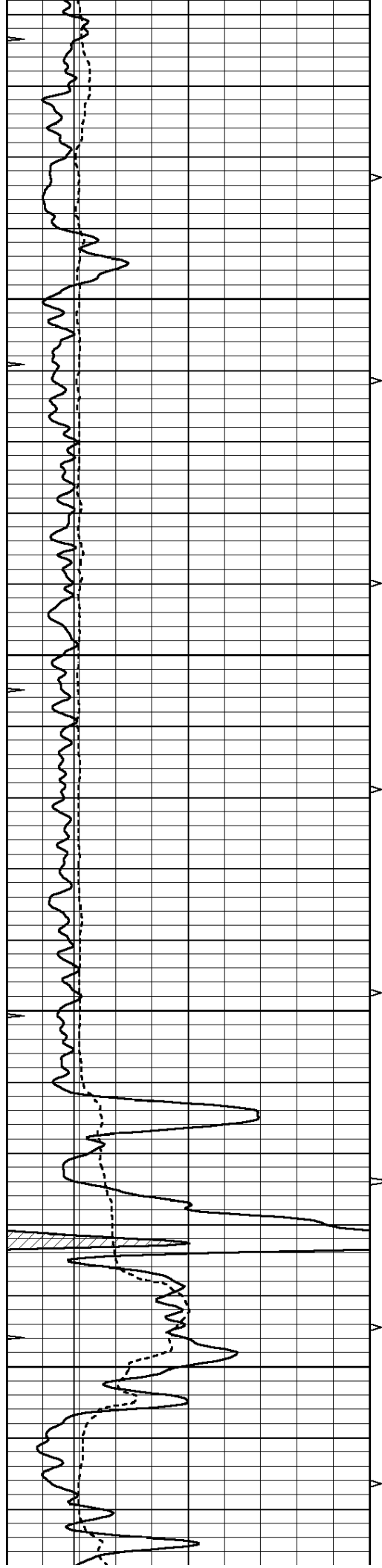
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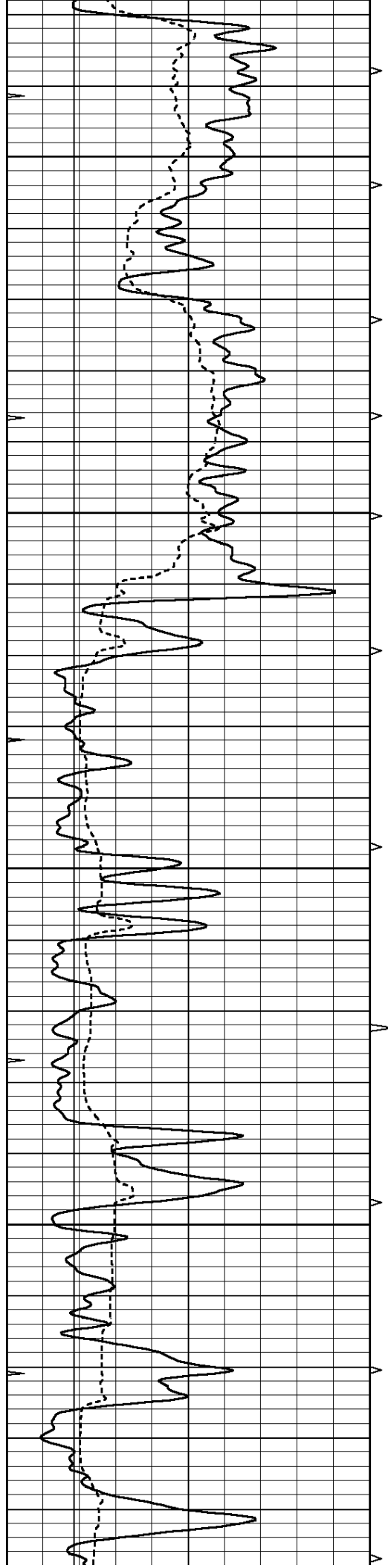
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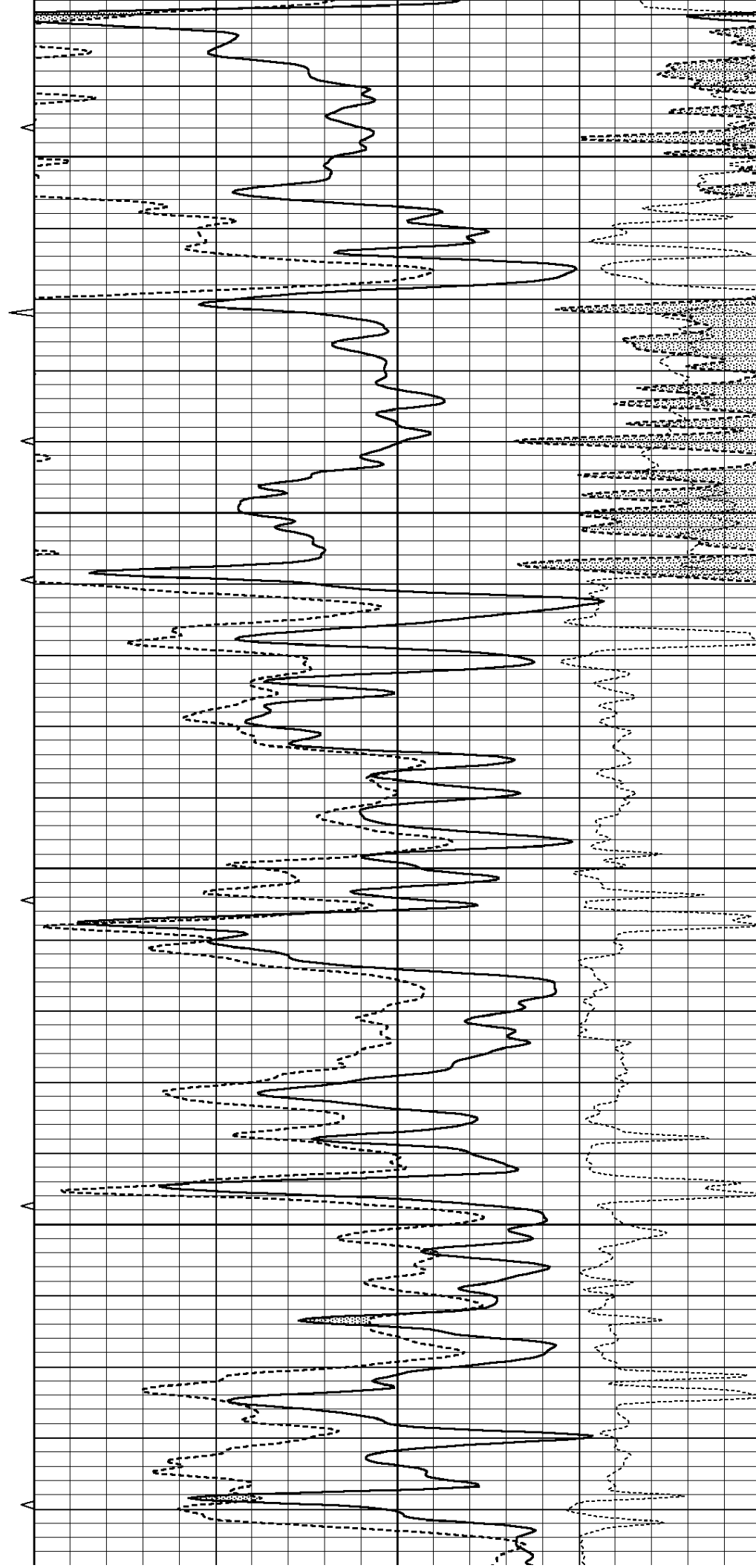


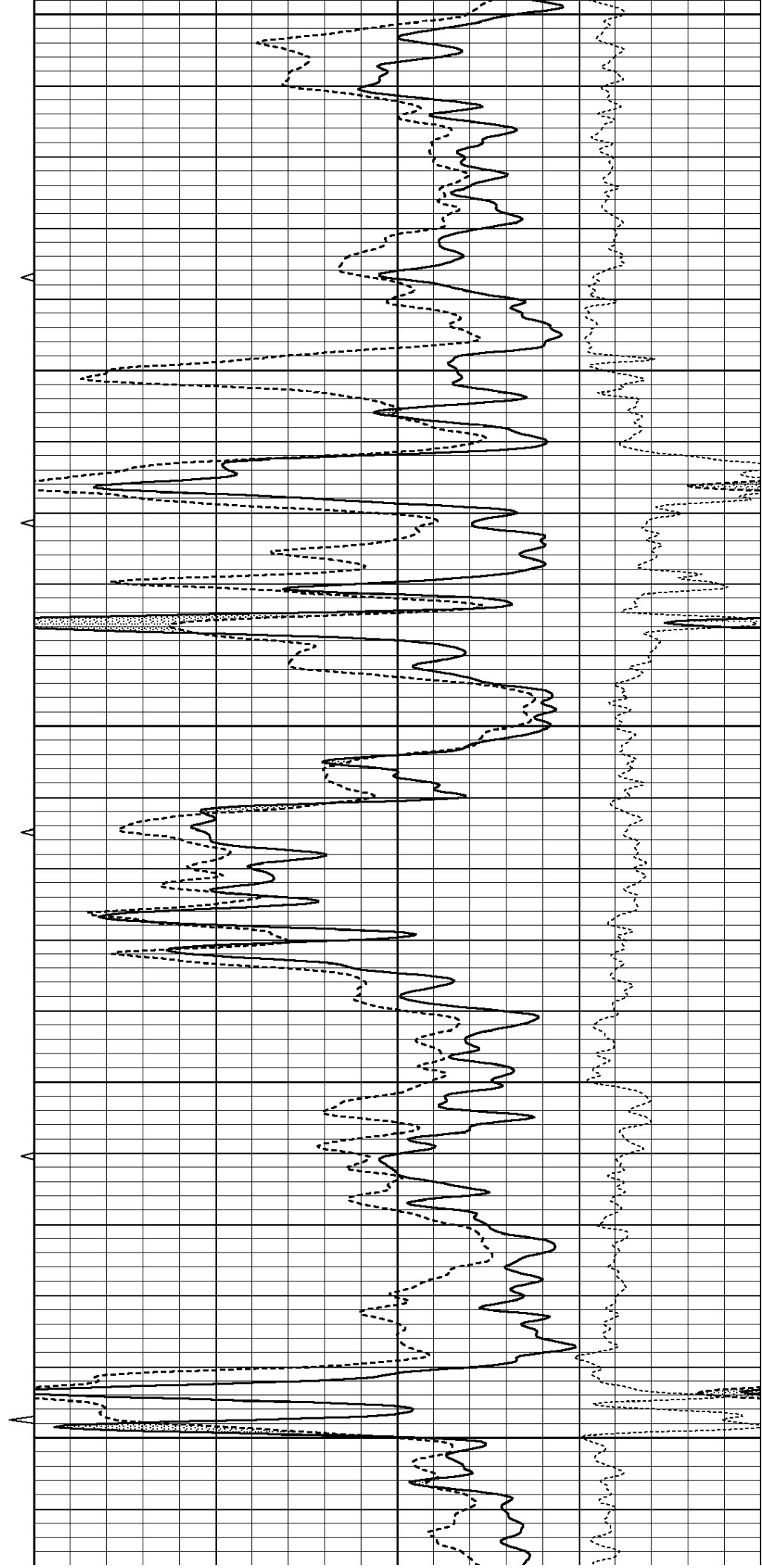
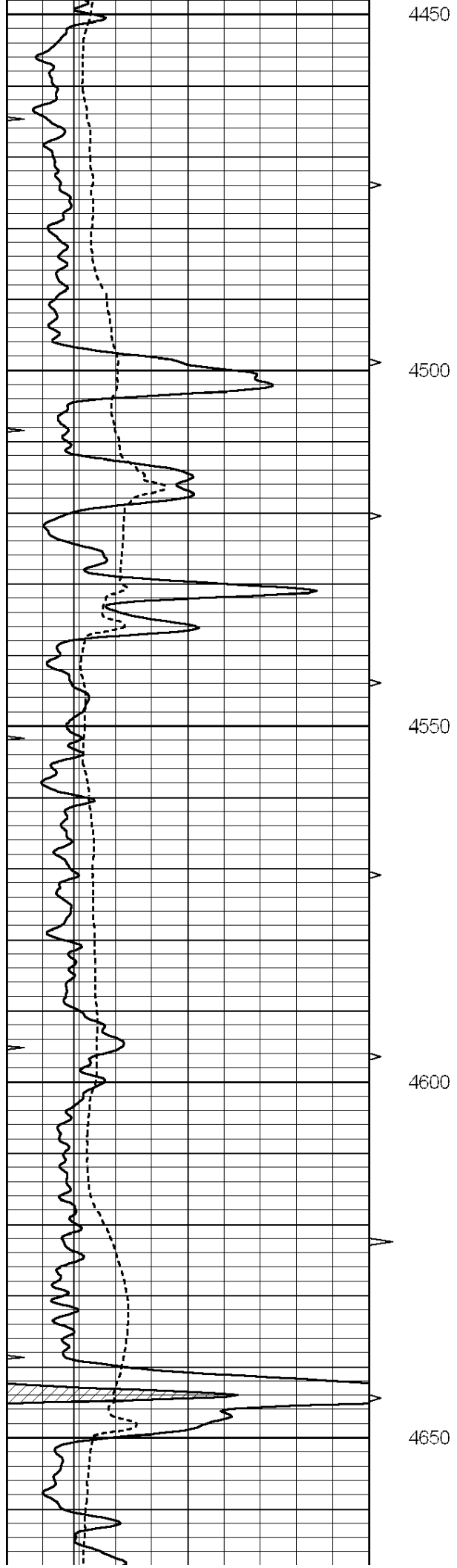
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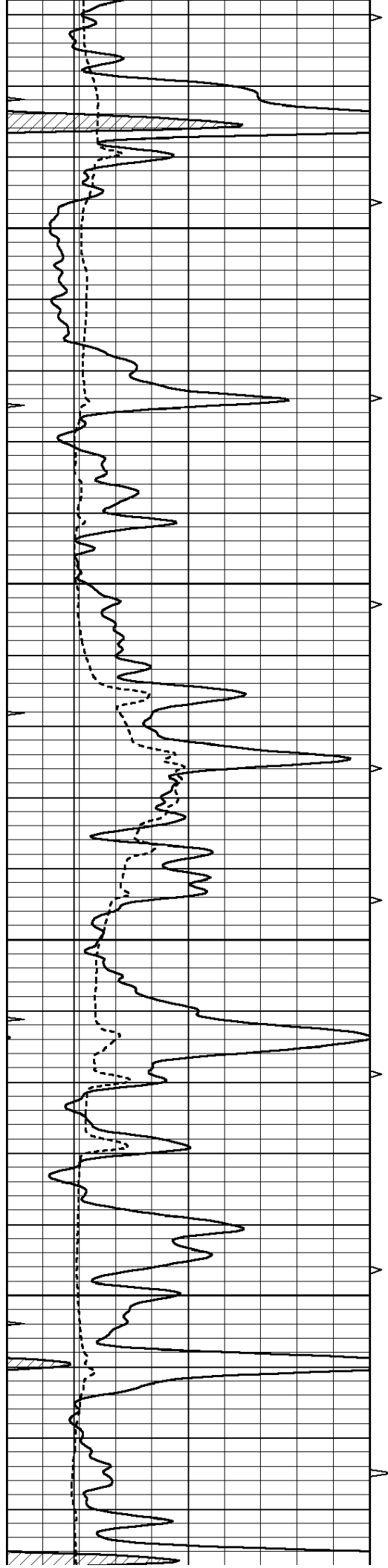
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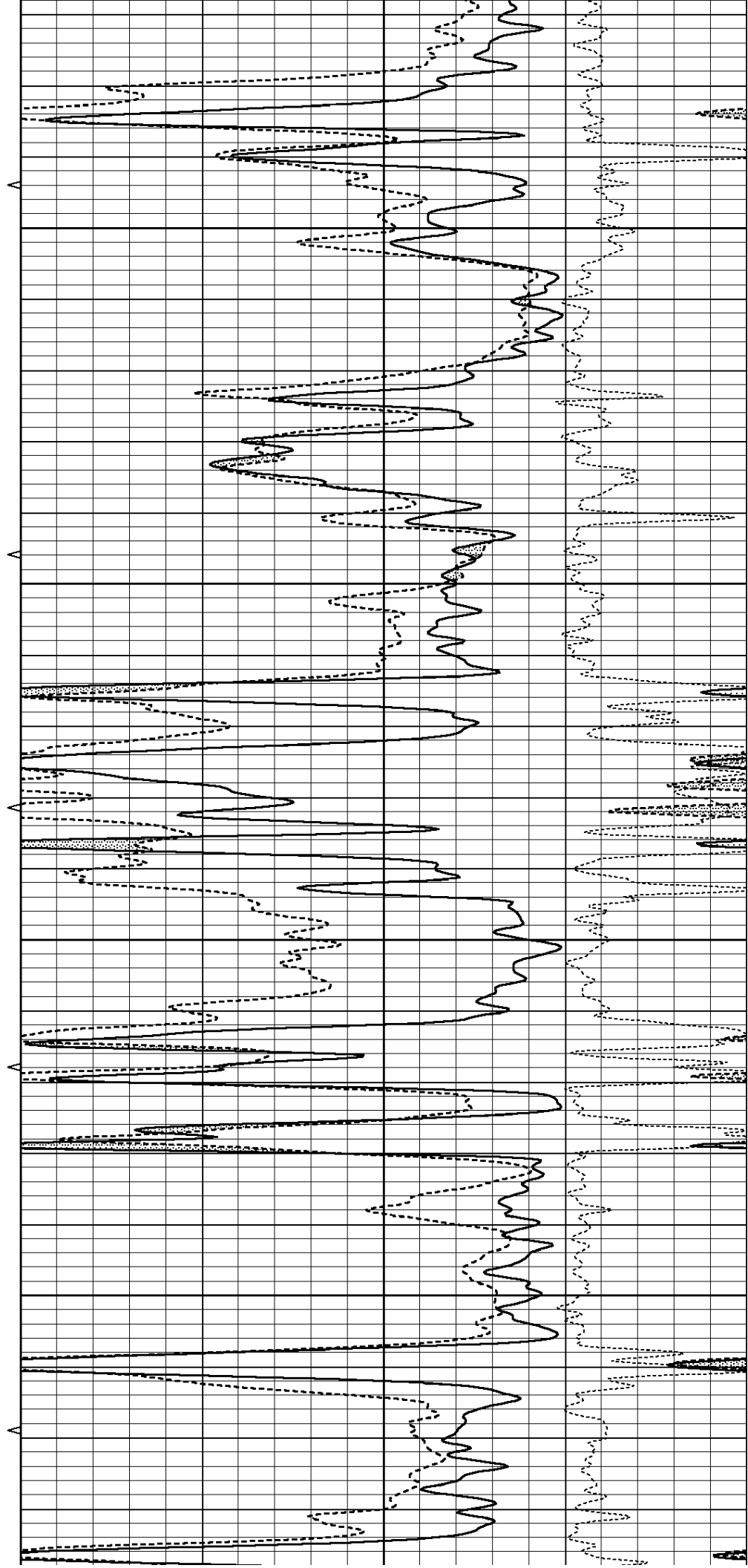


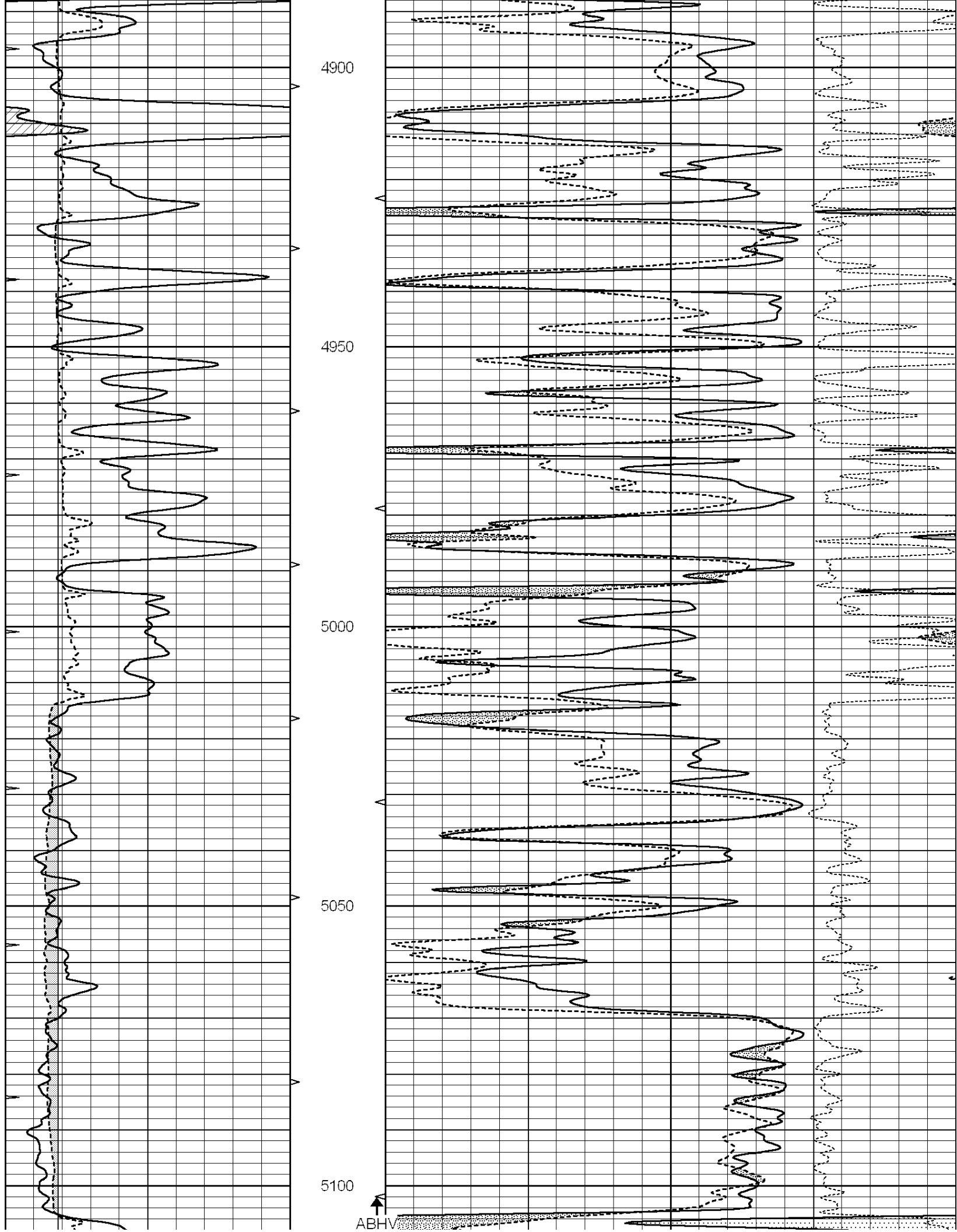
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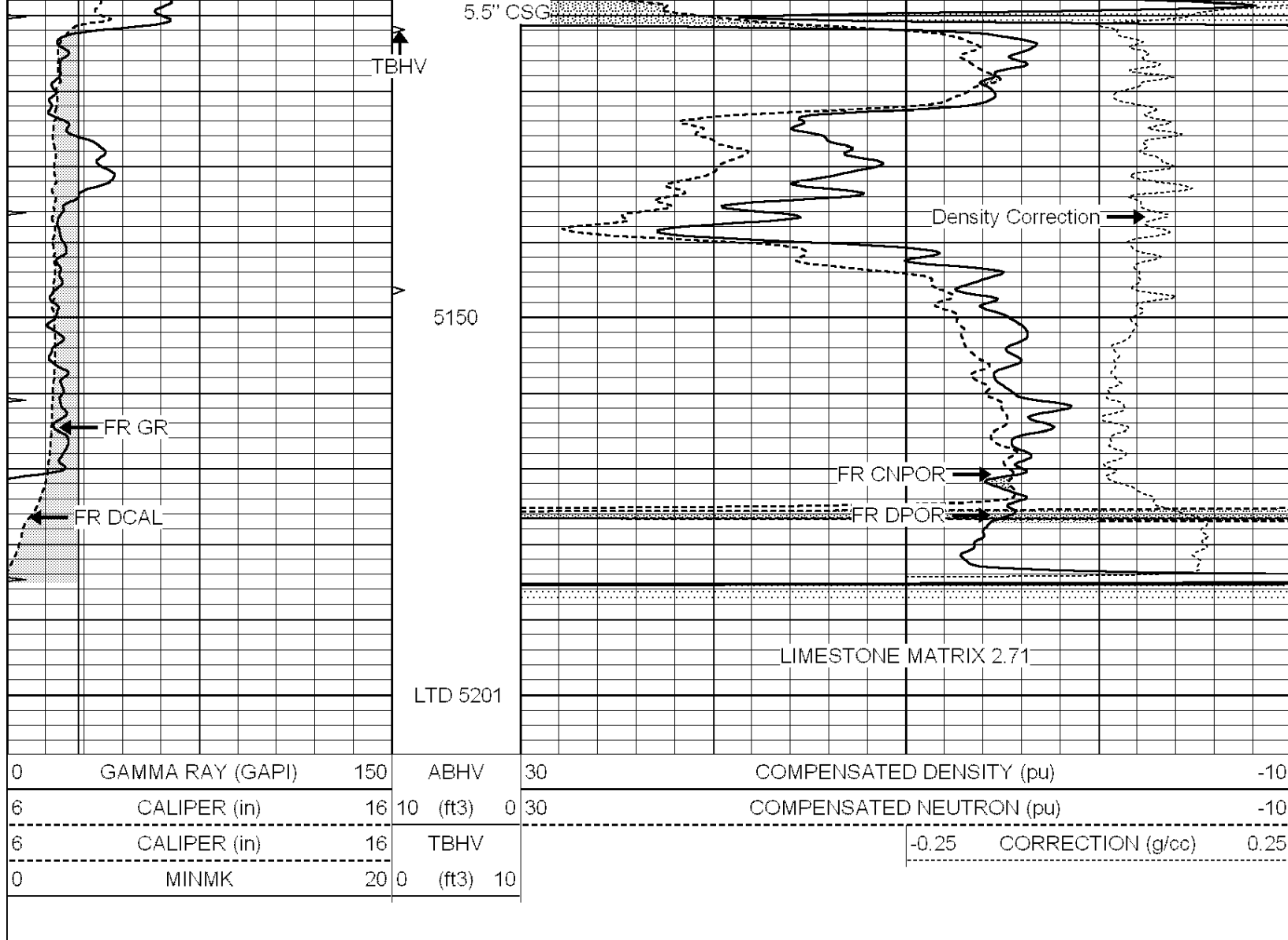
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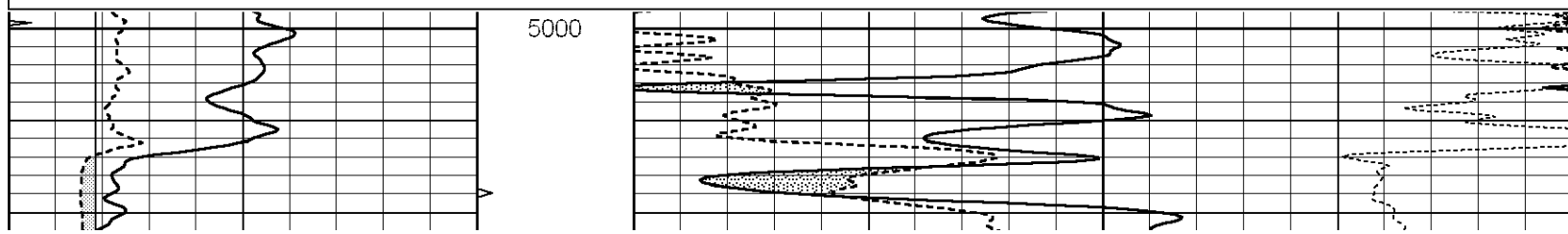


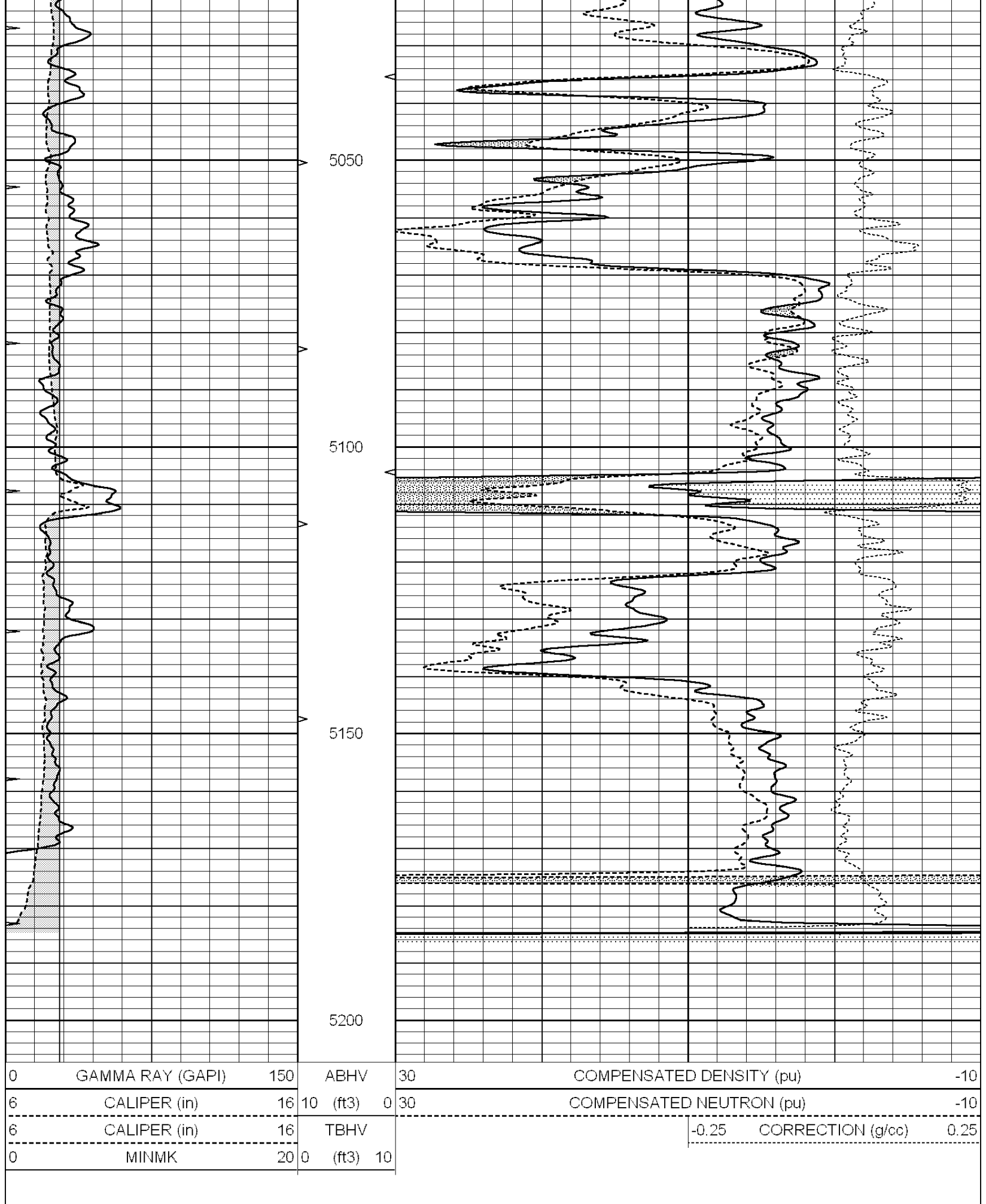
SUPERIOR
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REPEAT SECTION

Database File: 007755ddn.db
 Dataset Pathname: pass2.3
 Presentation Format: den_neu
 Dataset Creation: Thu Oct 06 05:23:18 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
6	CALIPER (in)	16	TBHV			-0.25	CORRECTION (g/cc)	0.25
0	MINMK	20	0 (ft3) 10					





Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
Performed: Tue Oct 04 16:34:29 2011

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	540.000	-22.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	550.000	-20.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
Source / Verifier: 147 / 147
Master Calibration Performed: Tue Oct 04 16:10:13 2011

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1243.76	629.14	cps
Aluminum	2.590	g/cc	282.16	435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.576		
	Size		Reading		
Small Ring	9.10	in	3.44	V	
Large Ring	14.00	in	5.20	V	

Compensated Neutron Calibration Report

Serial Number: NUE_2I
Tool Model: G

CALIBRATION

Detector	Readings		Target	Normalization	
Short Space	1.00	cps	1.00	cps	1.0000
Long Space	1.00	cps	1.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR5
Tool Model: OPEN
Performed: Tue Oct 04 16:09:50 2011

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.6700 GAPI/cps