



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY / NEUTRON
PE LOG

Company LOTUS OPERATING COMPANY, LLC.	
Well #3 MOLZ "L"	
Field STRANATHAN	
County BARBER	
State KANSAS	
Location: API # : 15-007-23692-0000	
1650' FSL & 330' FEL	
SEC 1 TWP 35S RGE 12W	
Permanent Datum GROUND LEVEL	Elevation 1397
Log Measured From KELLY BUSHING 13' A.G.L.	
Drilling Measured From KELLY BUSHING	
Other Services DIL/MEL SONIC	
Elevation K.B. 1410 D.F. 1408 G.L. 1397	
Date 9/28/11	
Run Number ONE	
Depth Driller 5560	
Depth Logger 5566	
Bottom Logged Interval 5542	
Top Log Interval 3700	
Casing Driller 10 3/4"@252'	
Casing Logger 252	
Bit Size 7 7/8"	
Type Fluid in Hole CHEMICAL MUD	CHLORIDES 2,000 PPM
Density / Viscosity 9.3/49	
pH / Fluid Loss 10.0/8.8	
Source of Sample FLOWLINE	
Rm @ Meas. Temp .850@82F	
Rmt @ Meas. Temp .636@82F	
Rmc @ Meas. Temp 1.02@82F	
Source of Rmt / Rmc MEASUREMENT	
Rm @ BHT .536@130F	
Time Circulation Stopped 3 HOURS	
Time Logger on Bottom 6:45 A.M.	
Maximum Recorded Temperature 130F	
Equipment Number 4010	
Location HAYS, KANSAS	
Recorded By JEFF LUEBBERS	
Witnessed By TIM HELLMAN	

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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

MEDICINE LODGE, KS. (JUNCTION OF HWY 160 & 281) 17S. ON HWY 281 PAST "DRIFTWOOD RD.", W.
INTO CATTLE GUARD THEN BACK NORTH

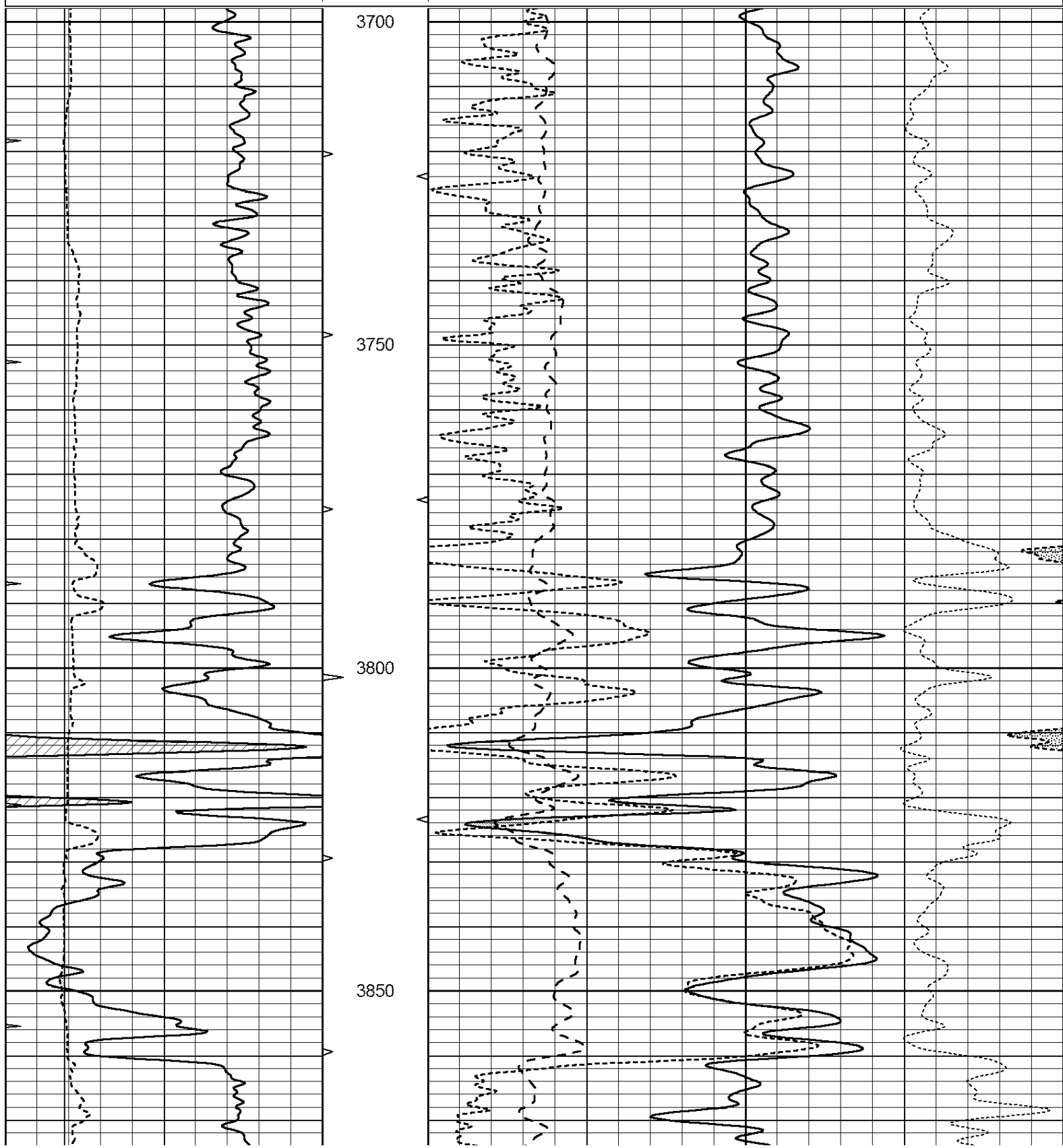


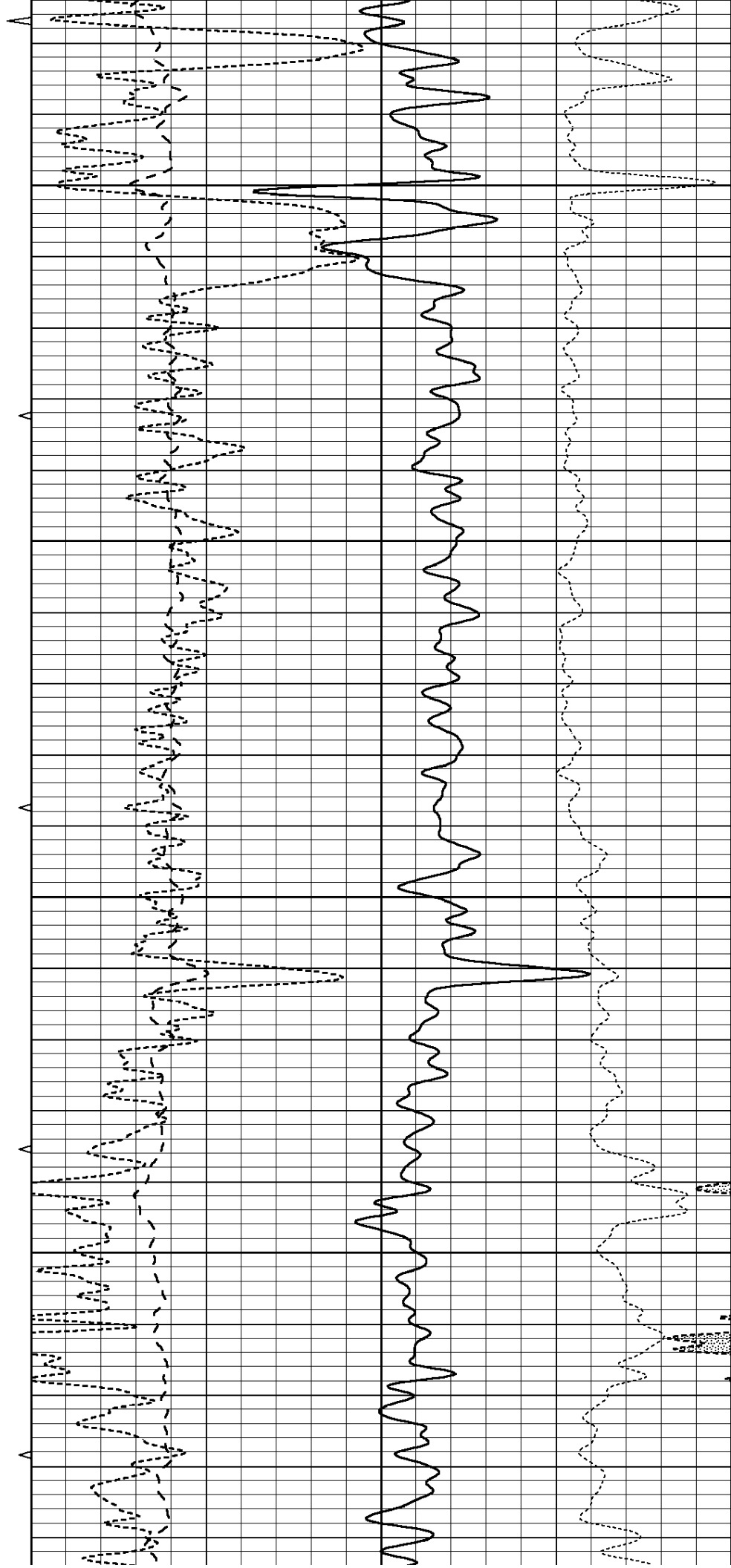
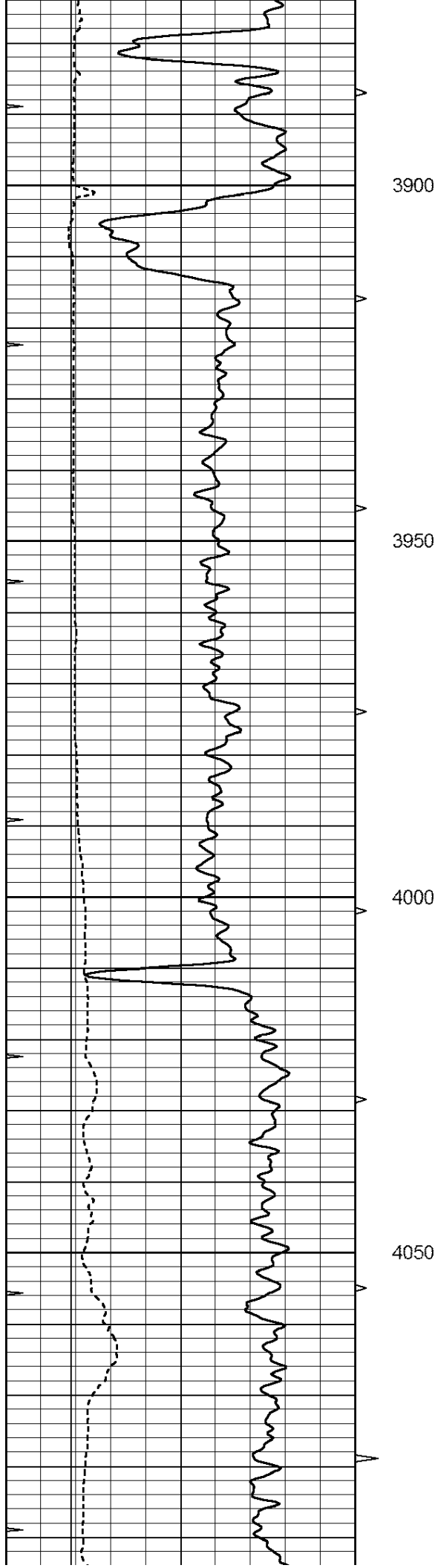
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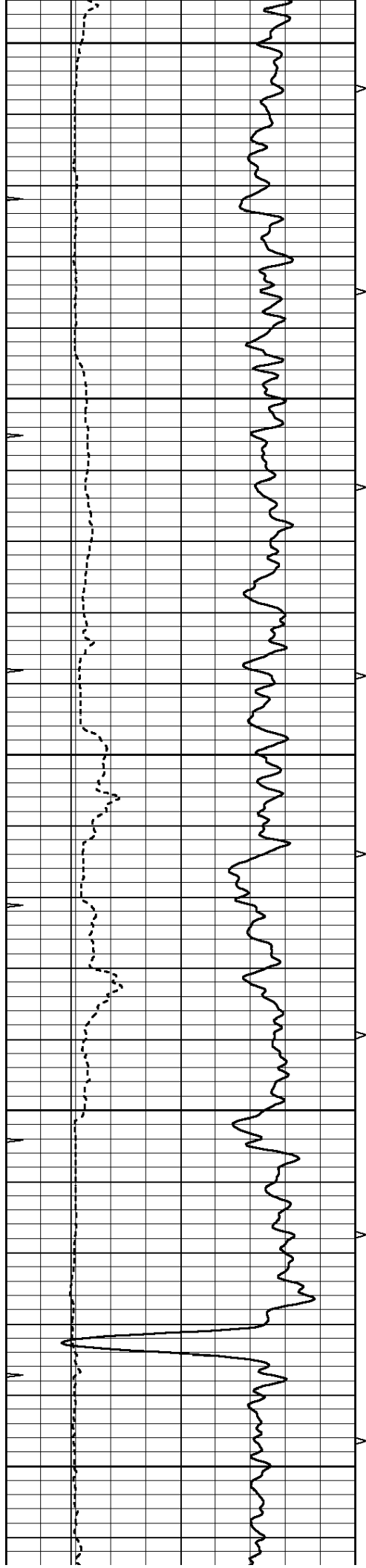
MAIN SECTION

Database File: 007456pe.db
Dataset Pathname: pass3.10
Presentation Format: ldt_neu
Dataset Creation: Wed Sep 28 09:42:42 2011
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	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3) 10			







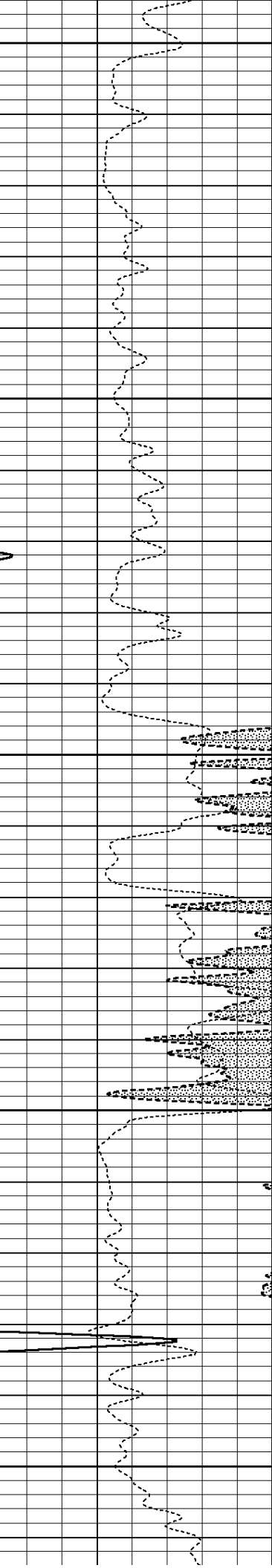
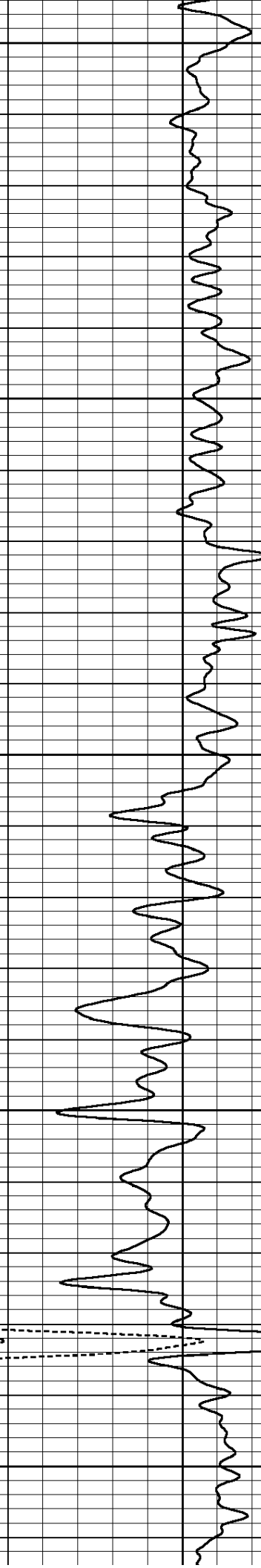
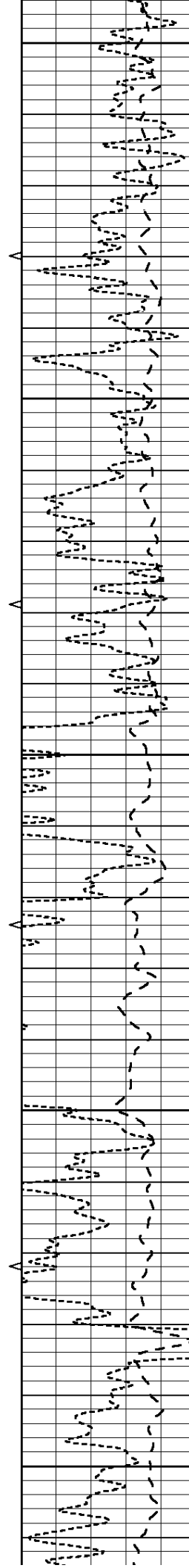
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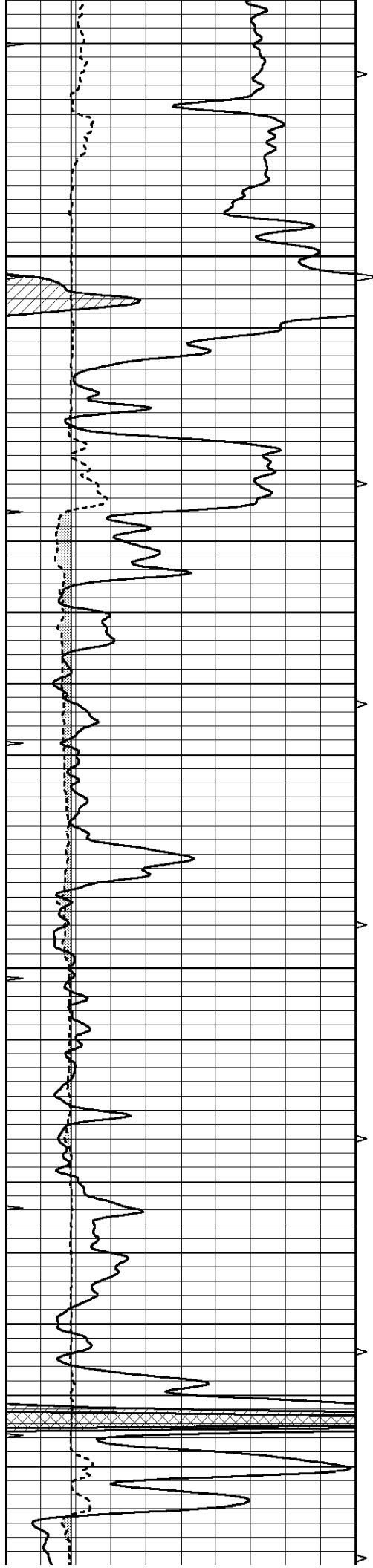
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4200

4250

4300



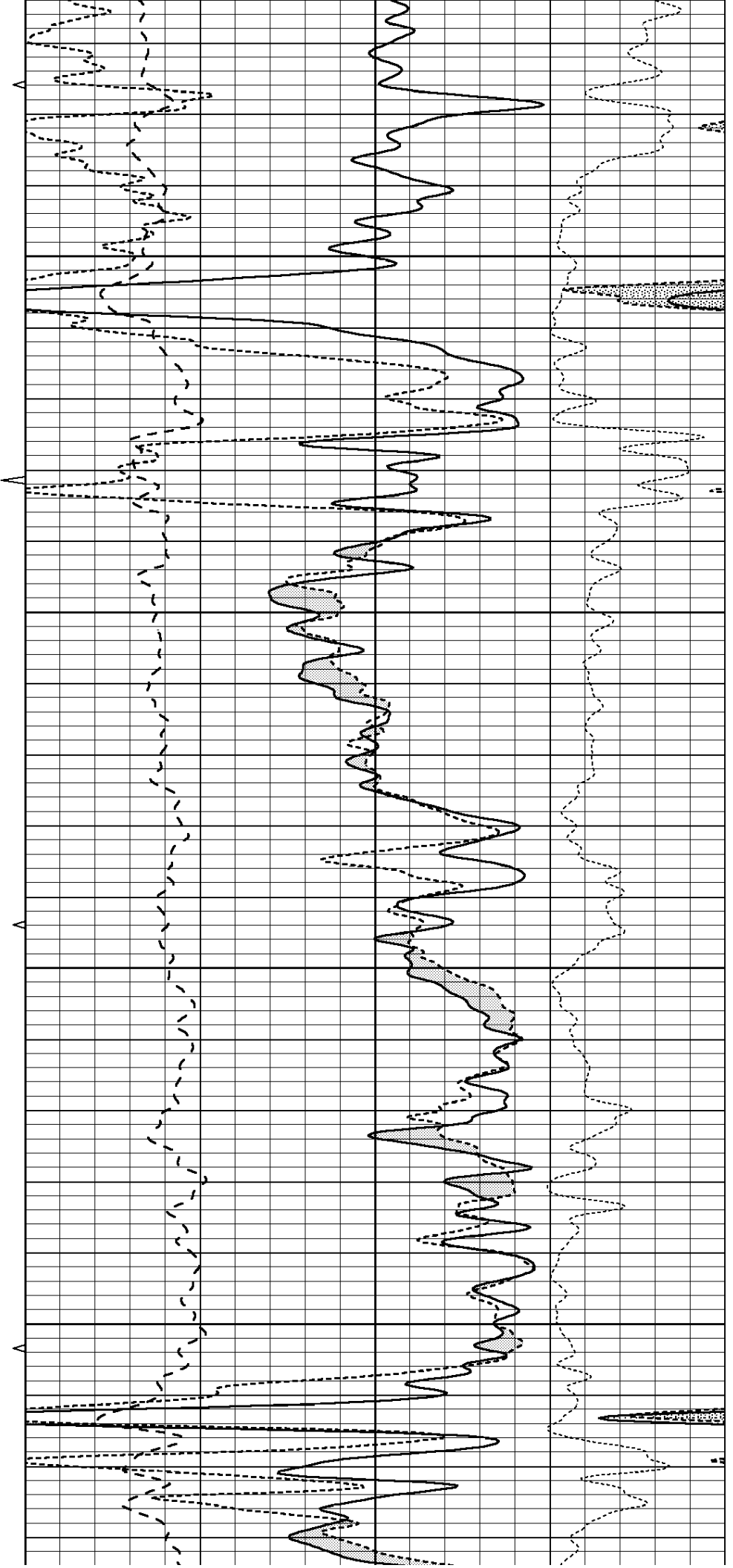


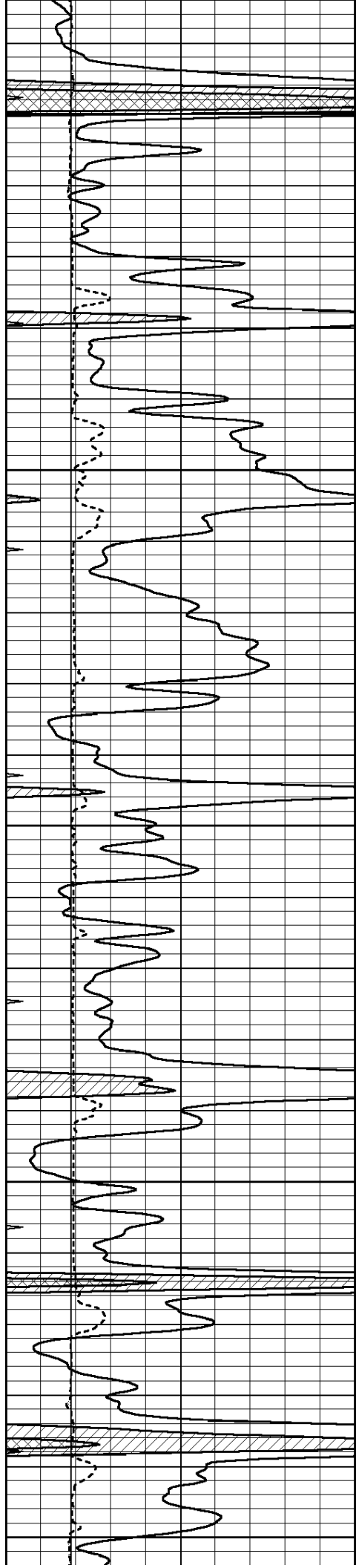
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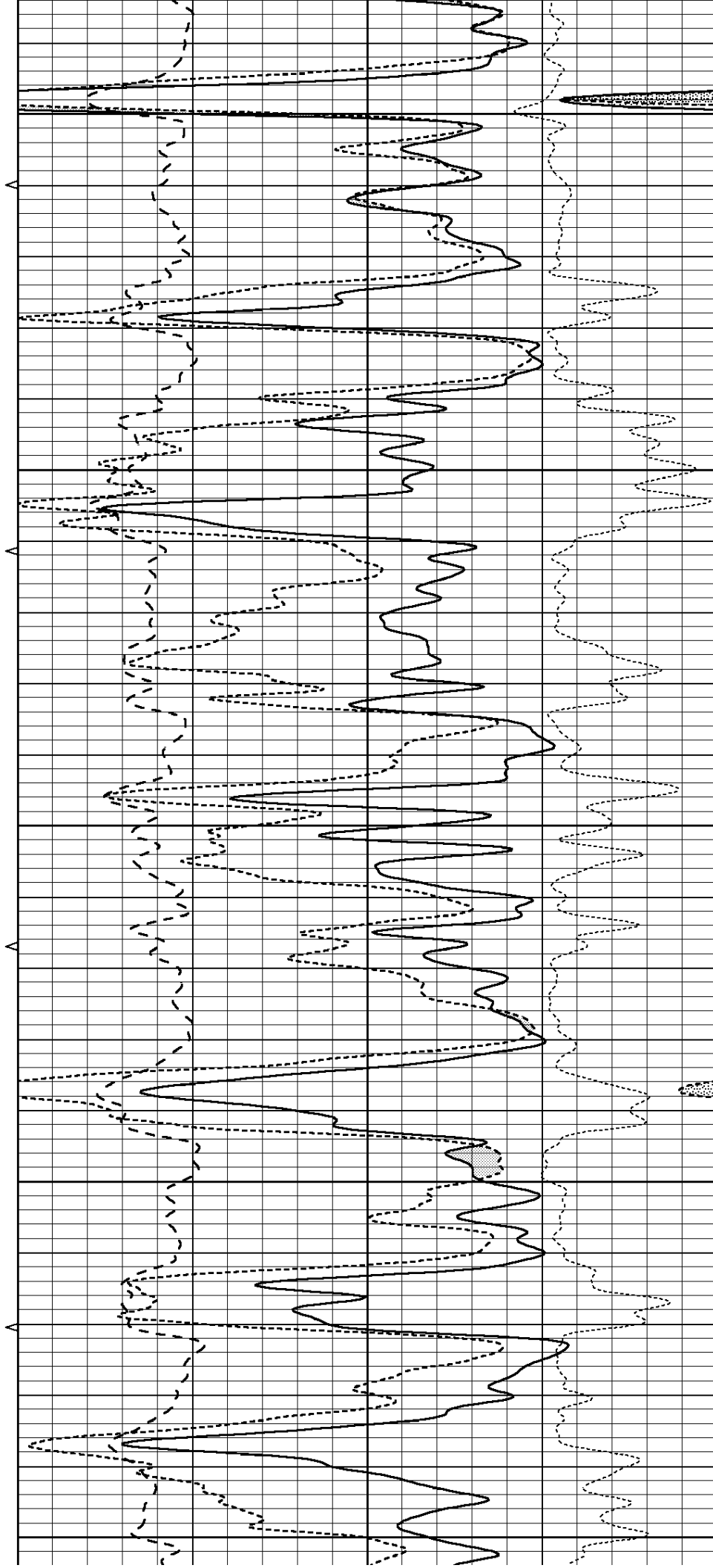
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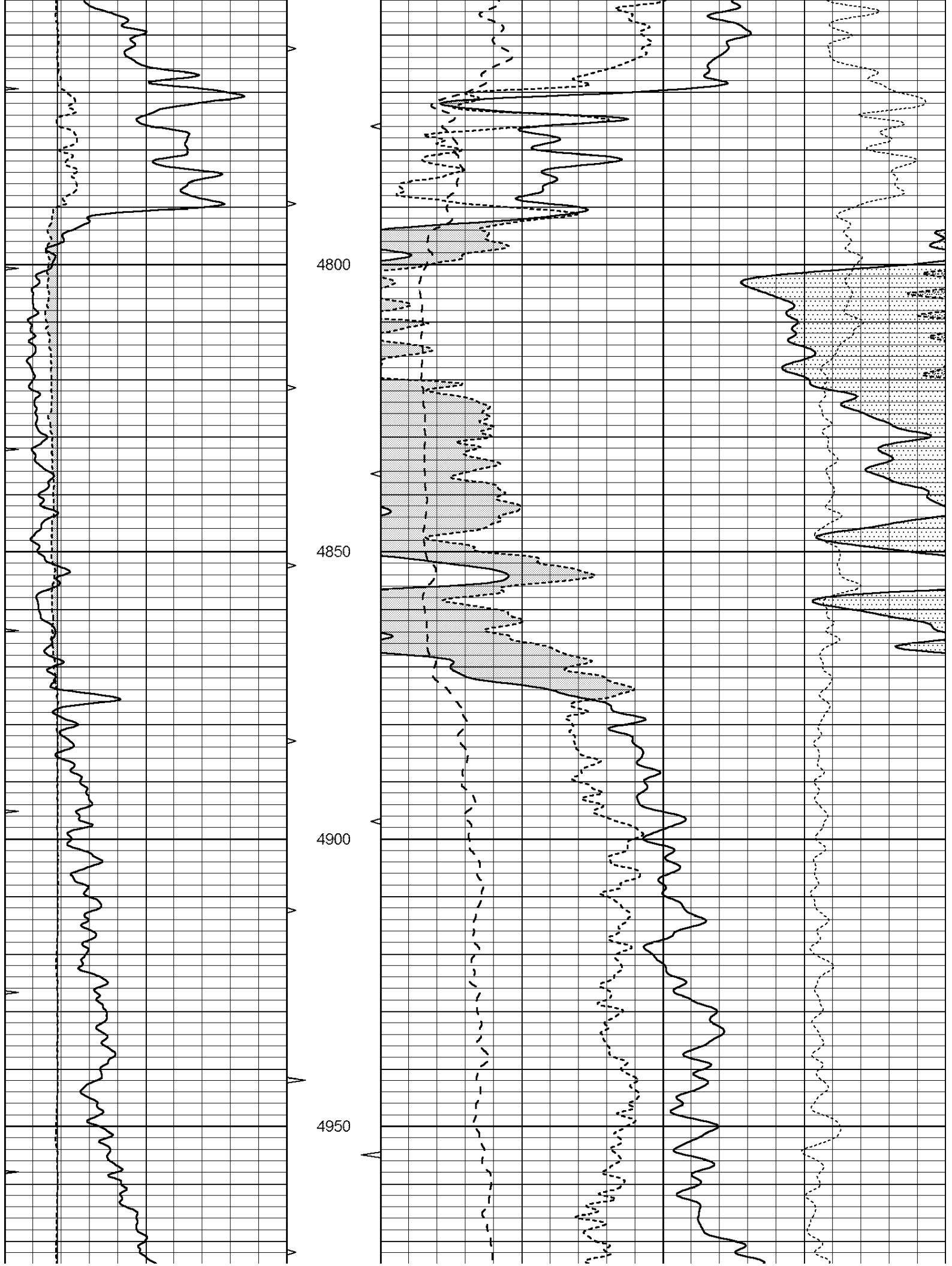
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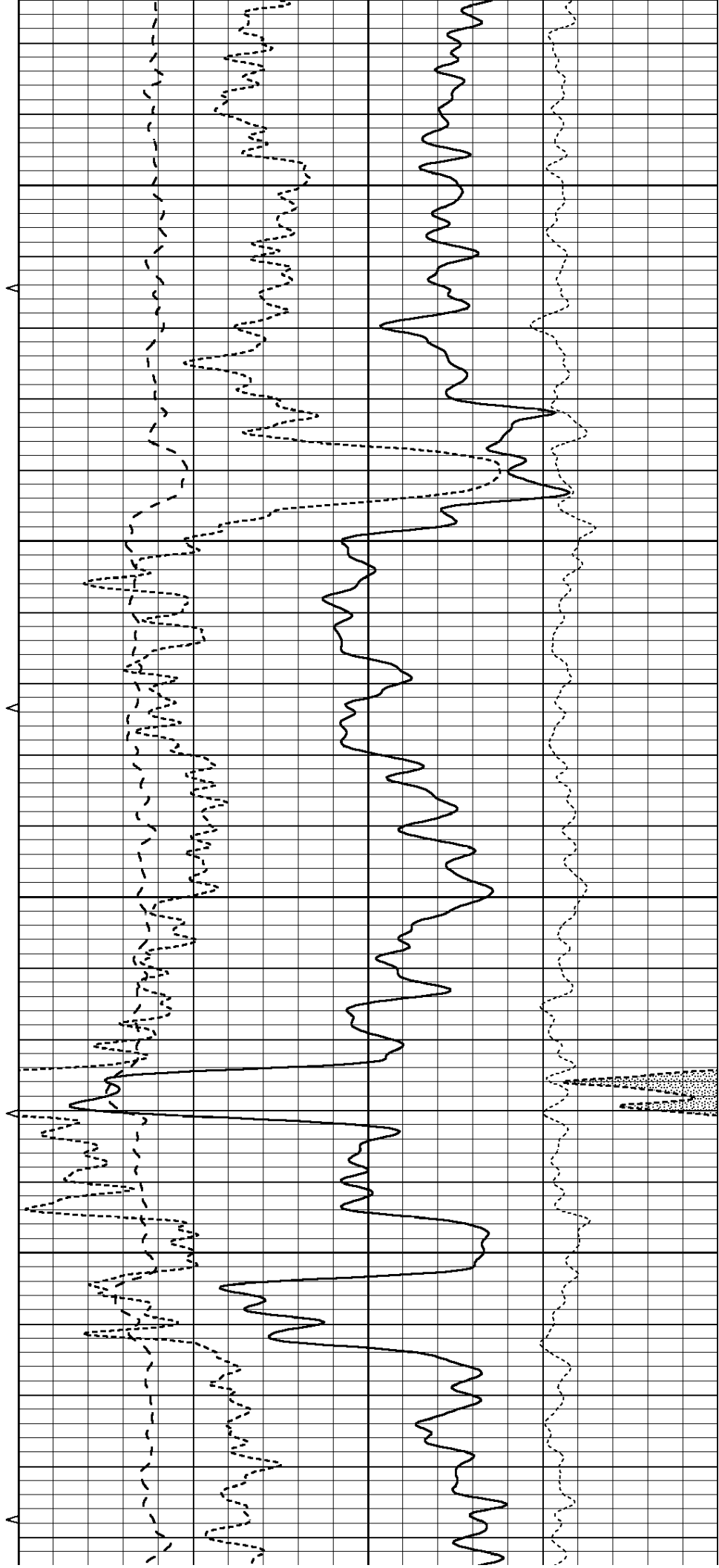
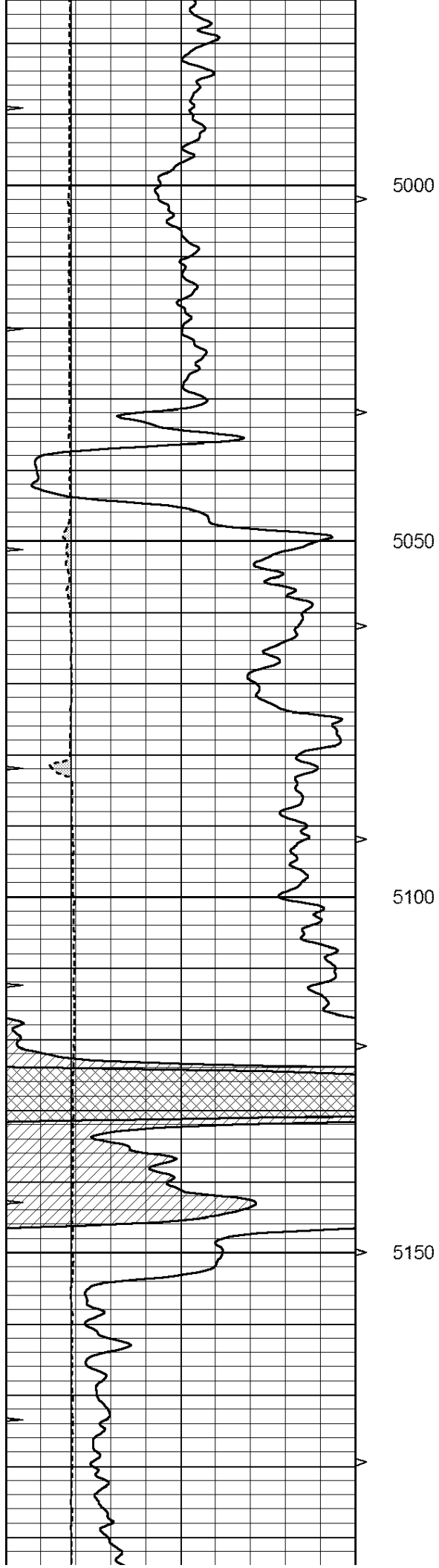
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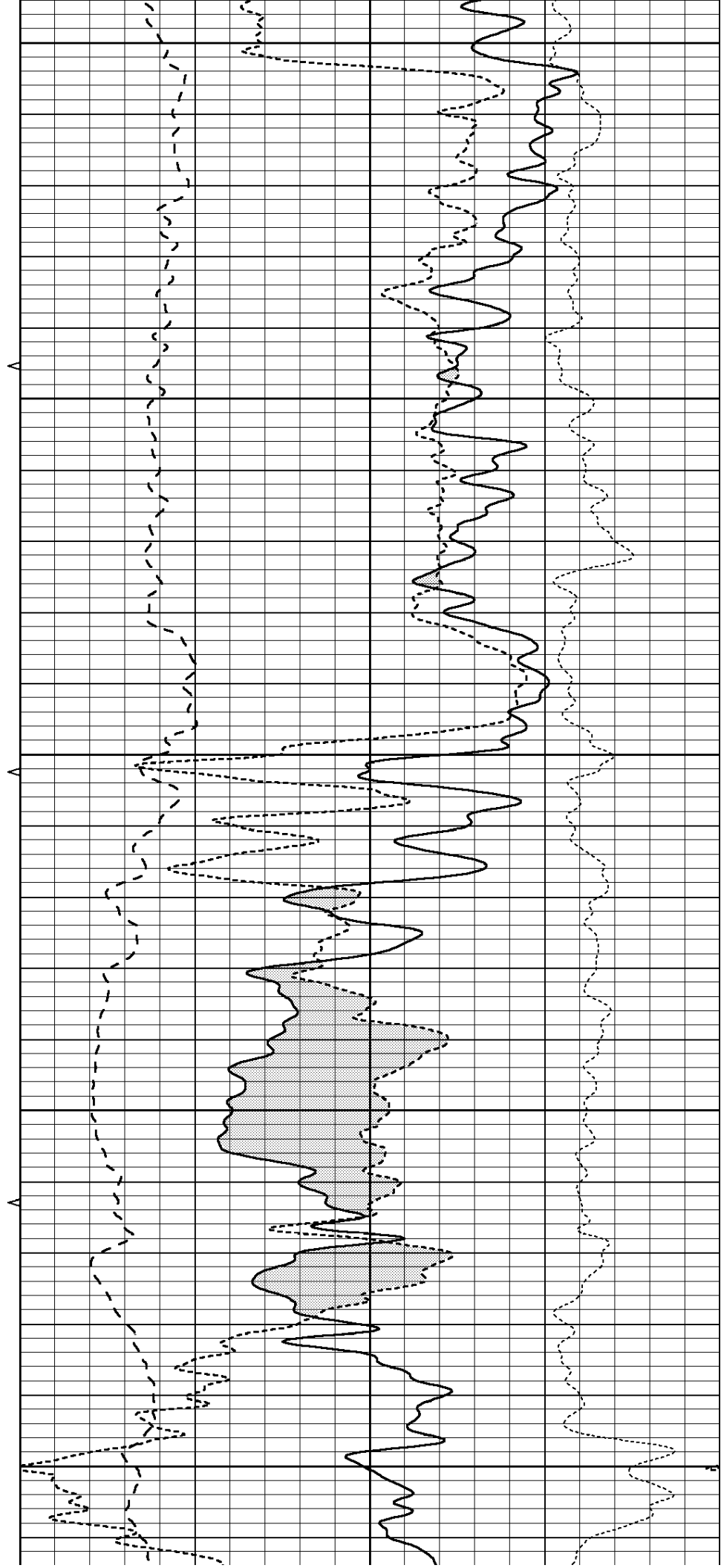
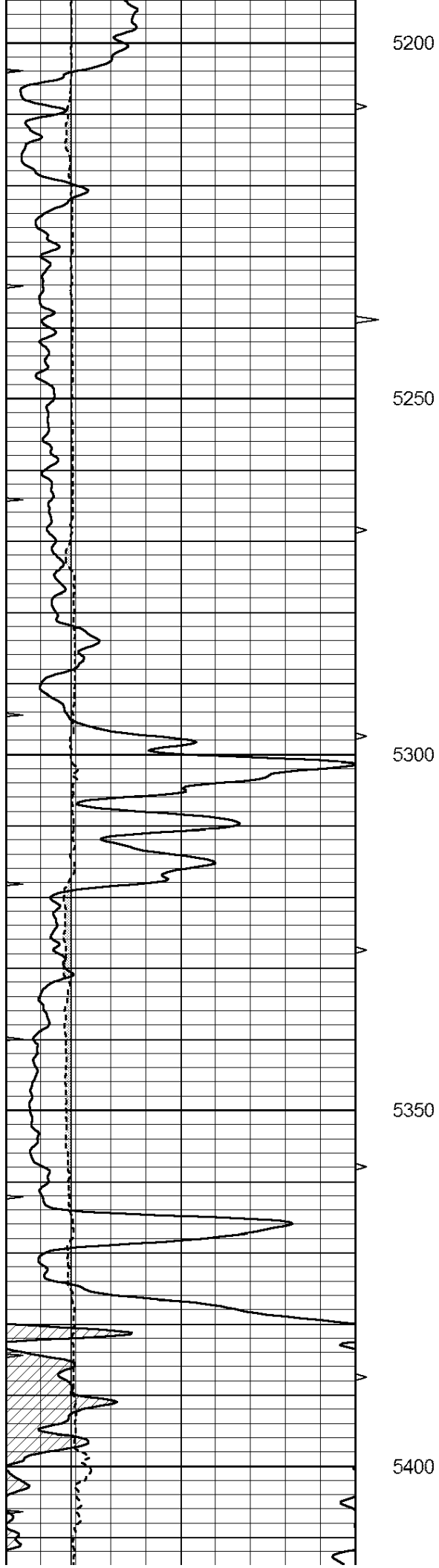
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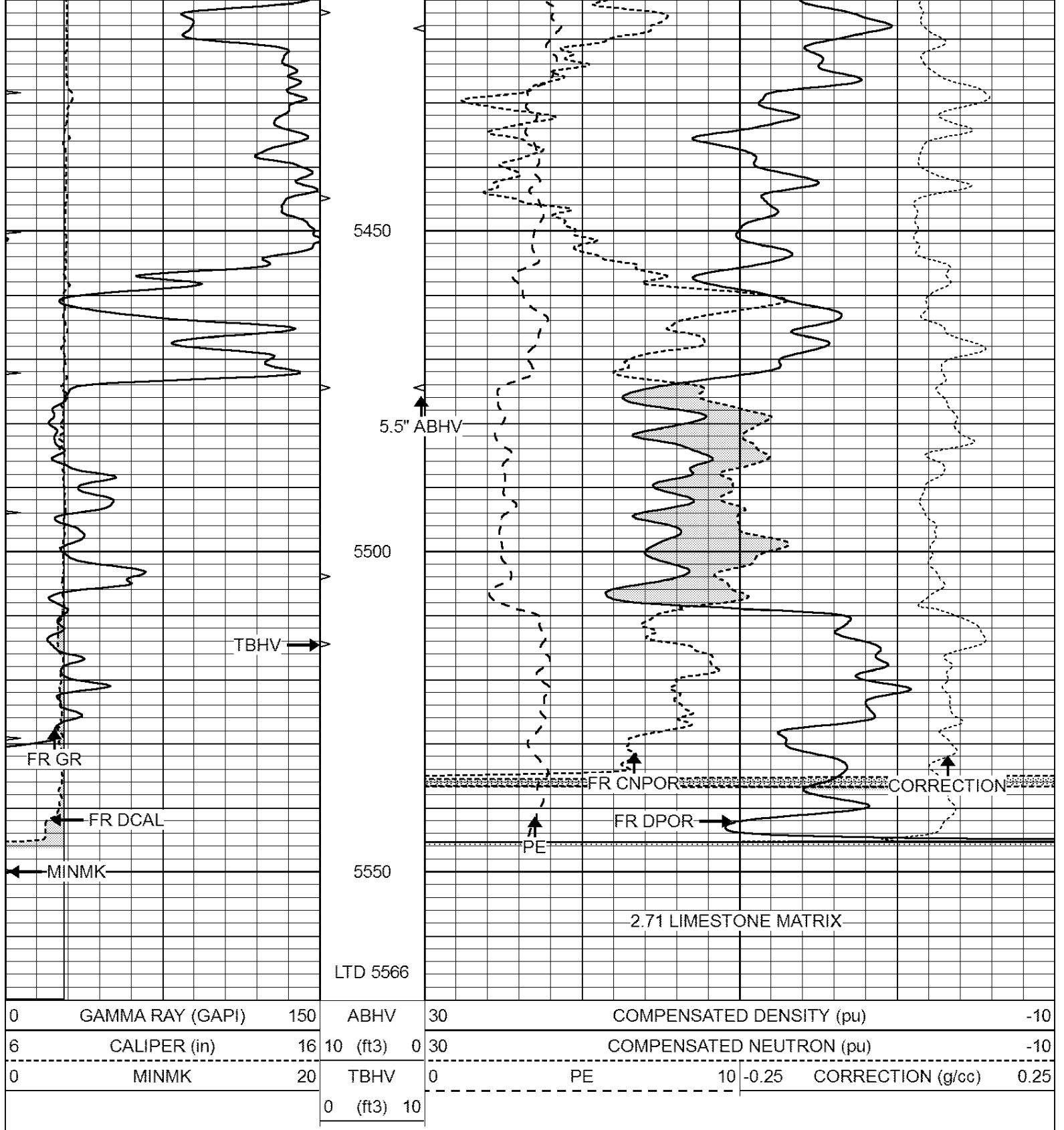
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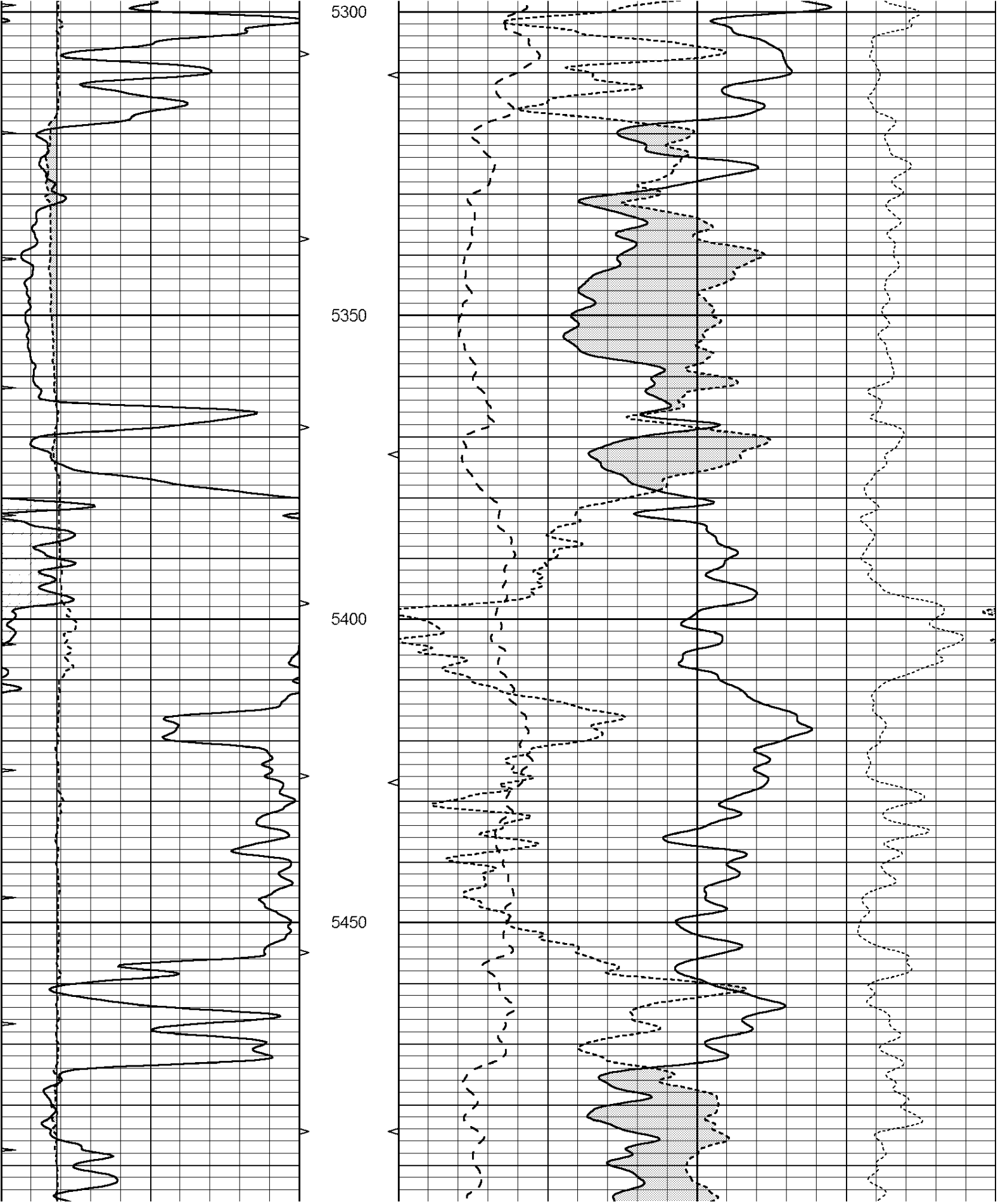


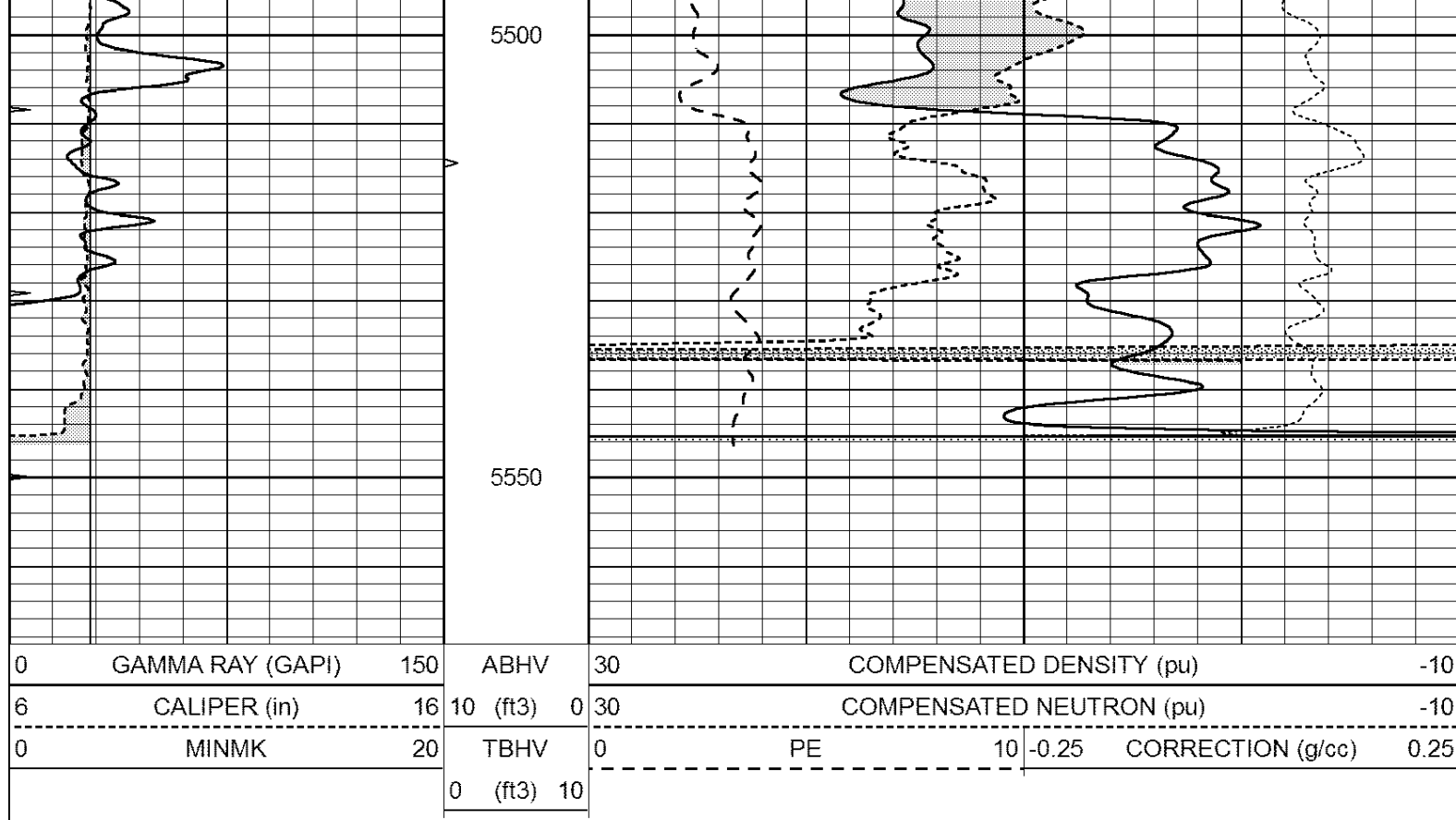
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REPEAT SECTION

Database File: 007456pe.db
 Dataset Pathname: pass2.6
 Presentation Format: ldt_neu
 Dataset Creation: Wed Sep 28 08:16:15 2011 by Calc Open-Cased 110302
 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	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3) 10			





Calibration Report

Database File: 007456pe.db
 Dataset Pathname: pass3.10
 Dataset Creation: Wed Sep 28 09:42:42 2011

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Wed Sep 28 08:01:26 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	6.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-8.000
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: 006 Model: PRB
 Performed Sun Aug 15 09:48:41 2010

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1686.6	11612.8	3932.0	12718.8	cps
Window 2	1531.4	9204.7	3267.8	9851.9	cps
Window 3	1198.3	4733.6	1952.5	4920.6	cps
Window 4	317.3	321.2	325.9	303.6	cps
Long Space	0.0	7673.3	1736.4	8320.4	cps
Short Space	1.7	2548.5	1657.2	2628.8	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 43.8	Rib Slope	: 0.961	Density/Spine Ratio	: 0.569
Spine Angle	: 73.8	Spine Slope	: 3.453	Spine Intercept	: -18.1
Caliper					
Low Ref	Readings 3.9	Reference 8.1			
High Ref	6.0	15.0			
	Gain: 3.2		Offset: -4.6		
Compensated Neutron Calibration Report					
		Serial Number:	NEU_1I		
		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:		GR1			
Tool Model:		OPEN			
Performed:		Wed Sep 28 07:13:31 2011			
Calibrator Value:		200.0	GAPI		
Background Reading:		3.0	cps		
Calibrator Reading:		186.0	cps		
Sensitivity:		0.2500	GAPI/cps		