

COMPENSATED DENSITY / NEUTRON PE LOG

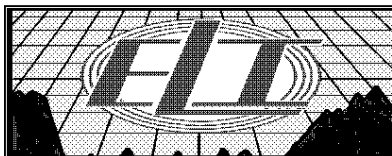
Company	ENERGY PARTNERS, LLC.		
Well	VANZANT #1		
Field	MIRT EAST		
County	SUMNER	State	KANSAS
Location:	API # : 15-191-22812-0000		Other Services DIL/MEL SONIC
Well	VANZANT #1		
Field	MIRT EAST		
County	SUMNER	State	KANSAS
Permanent Datum	GROUND LEVEL	Elevation	1152
Log Measured From	KELLY BUSHING 9' A.G.L.	Elevation	1152
Drilling Measured From	KELLY BUSHING	Elevation	1152
Date	4/16/19		
Run Number	ONE		
Depth Driller	4450		
Depth Logger	4450		
Bottom Logged Interval	4426		
Top Log Interval	2700		
Casing Driller	8 5/8"@223'		
Casing Logger	223		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 15,000 PPM	
Density / Viscosity	9.0/40		
pH / Fluid Loss	9.0/20		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.300@80F		
Rmf @ Meas. Temp	.225@80F		
Rmc @ Meas. Temp	.360@80F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.200@120F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	11:15 A.M.		
Maximum Recorded Temperature	120F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	BRAD RINE	JAY ABLAH	

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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

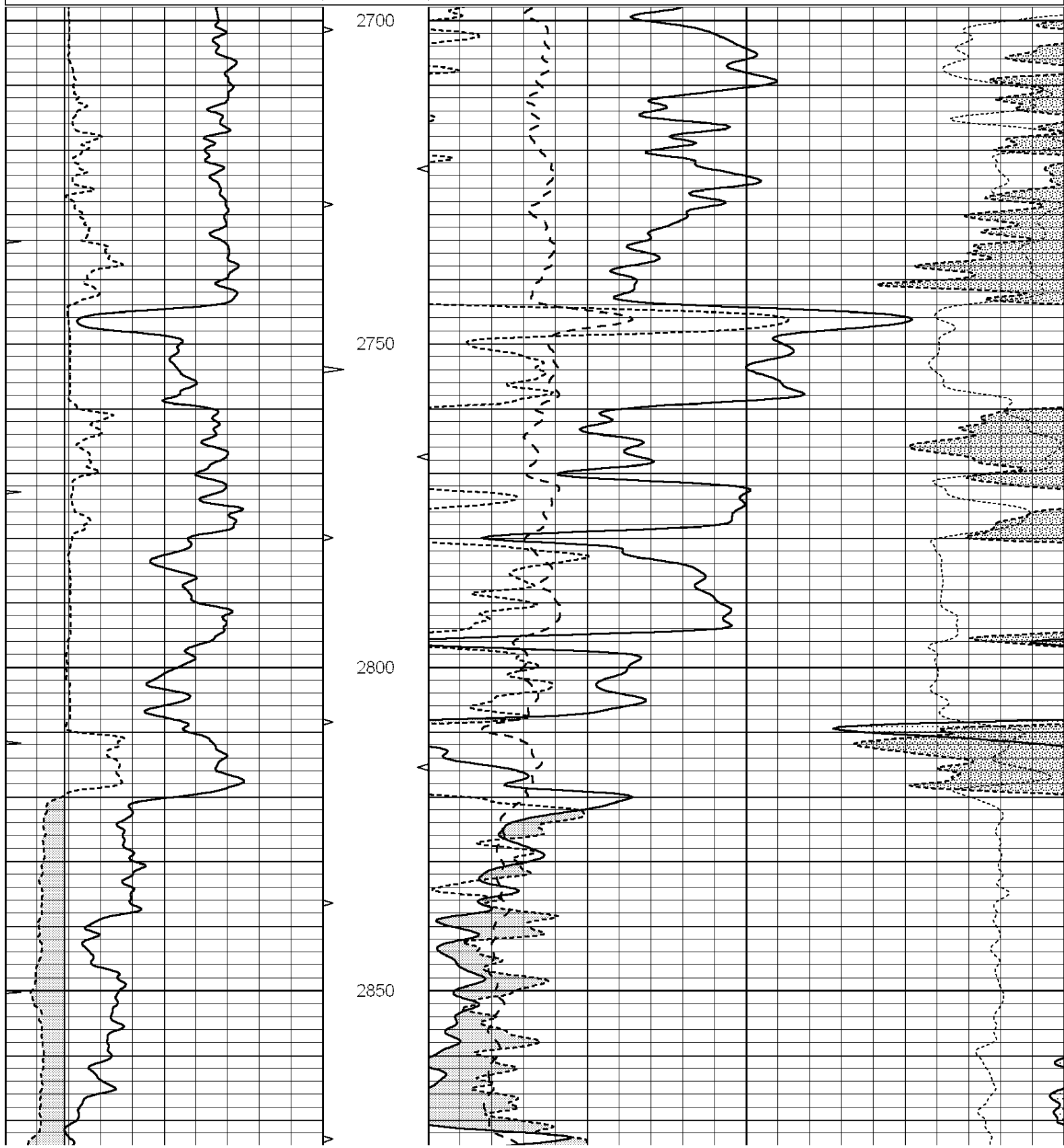
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
WELLINGTON, KS., 12S. ON HWY 81 TO "140 RD.", 1/2E., S. INTO

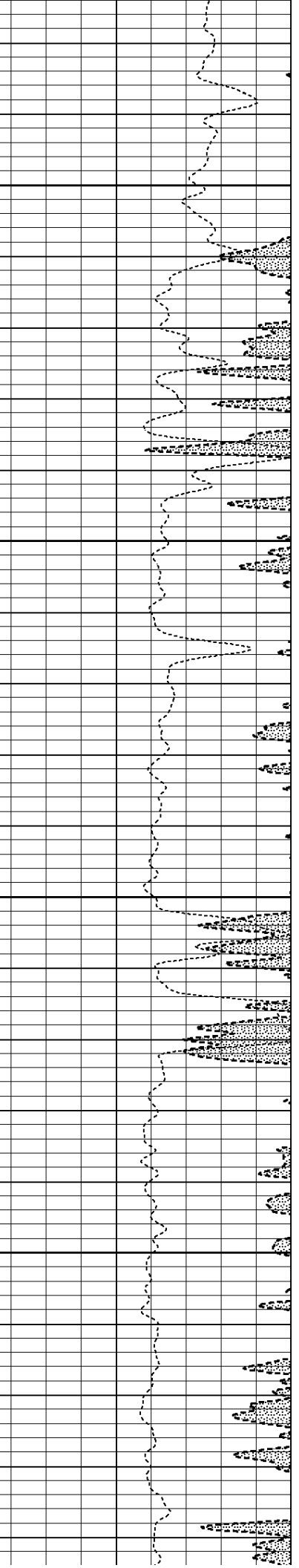
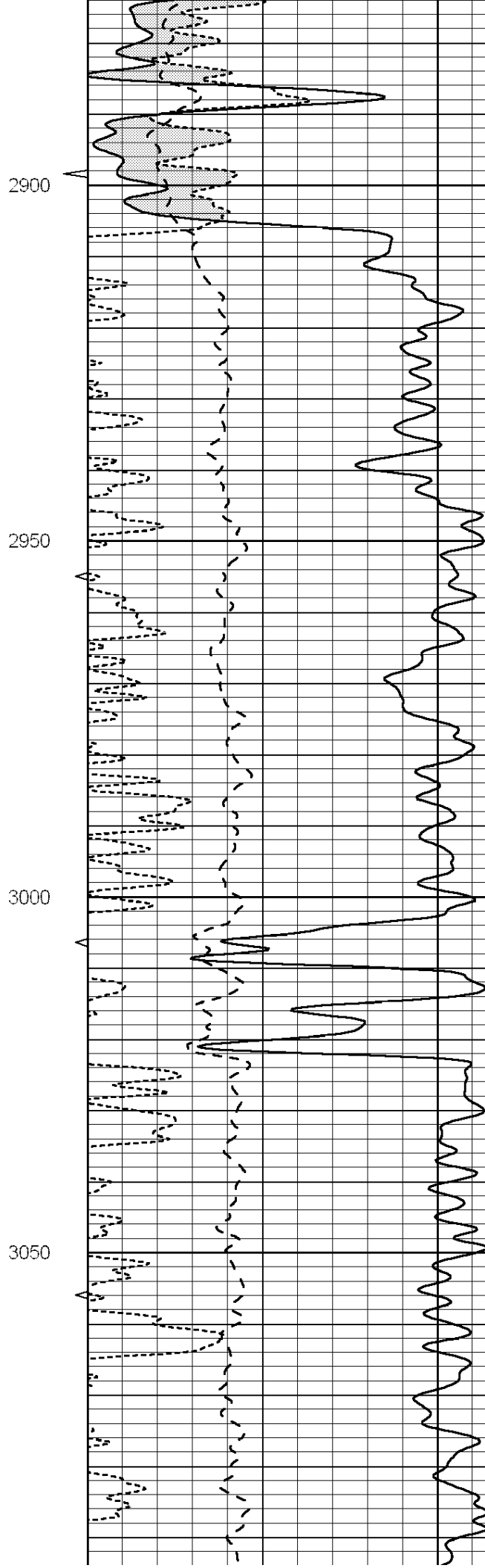
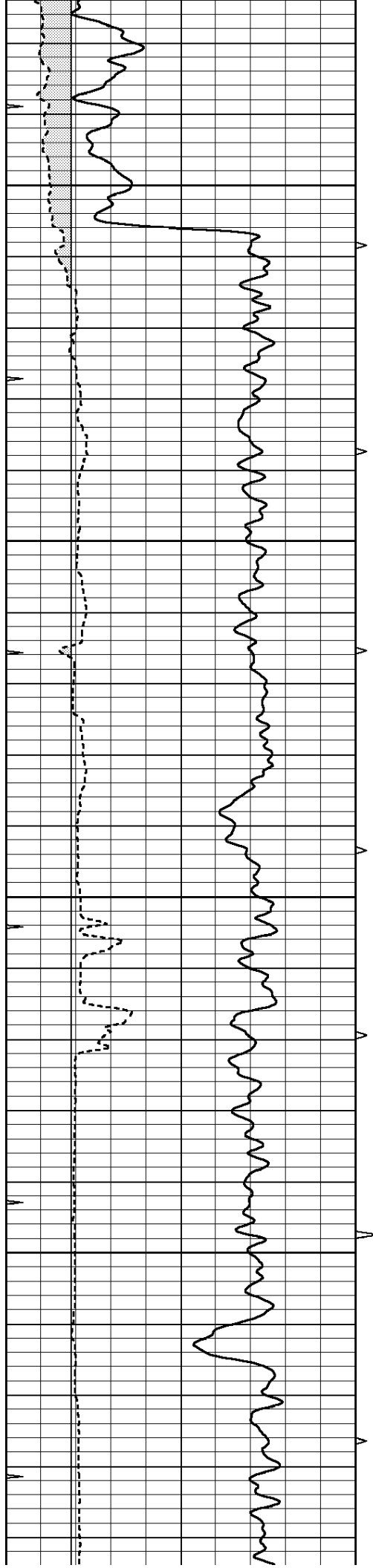


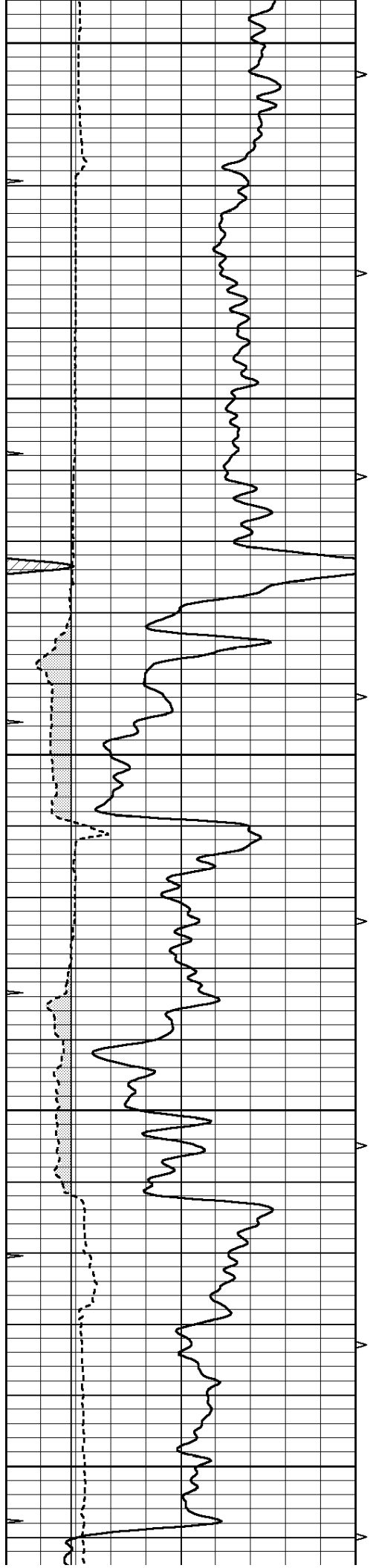
MAIN SECTION

Database File: 3613pe.db
Dataset Pathname: pass3.6
Presentation Format: ldt_neu
Dataset Creation: Wed Apr 17 12:32:02 2019 by Calc SOC 120430
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	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3)	10		







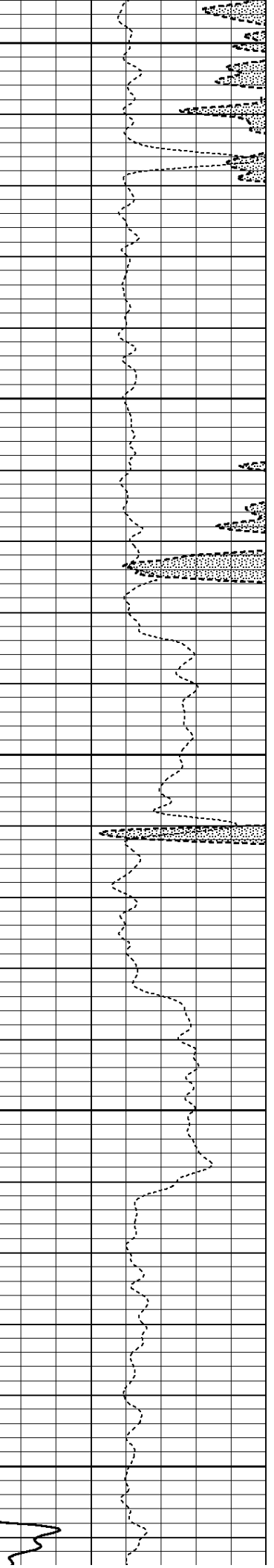
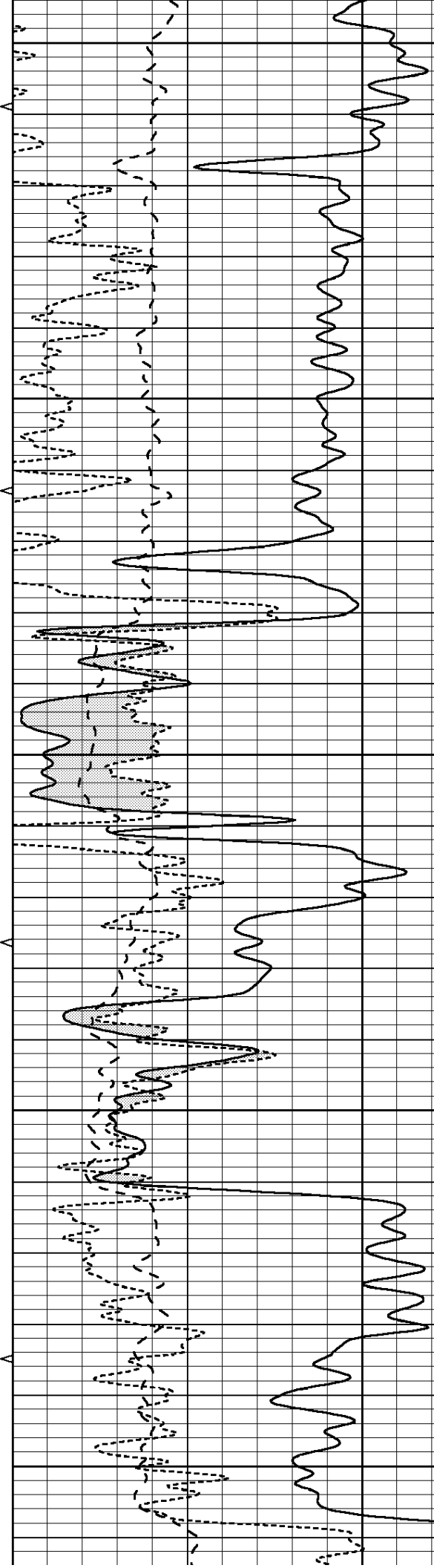
3100

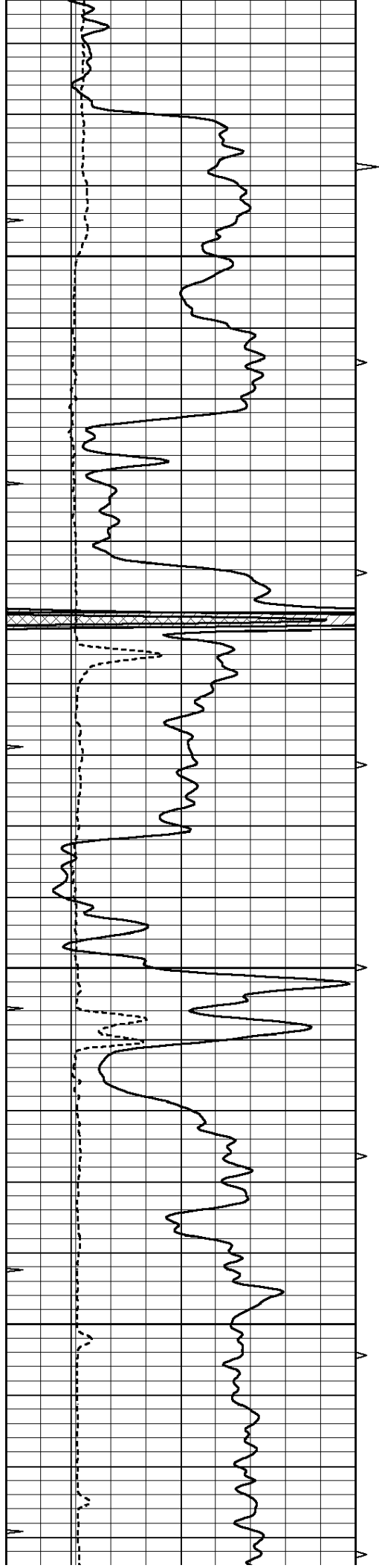
3150

3200

3250

3300



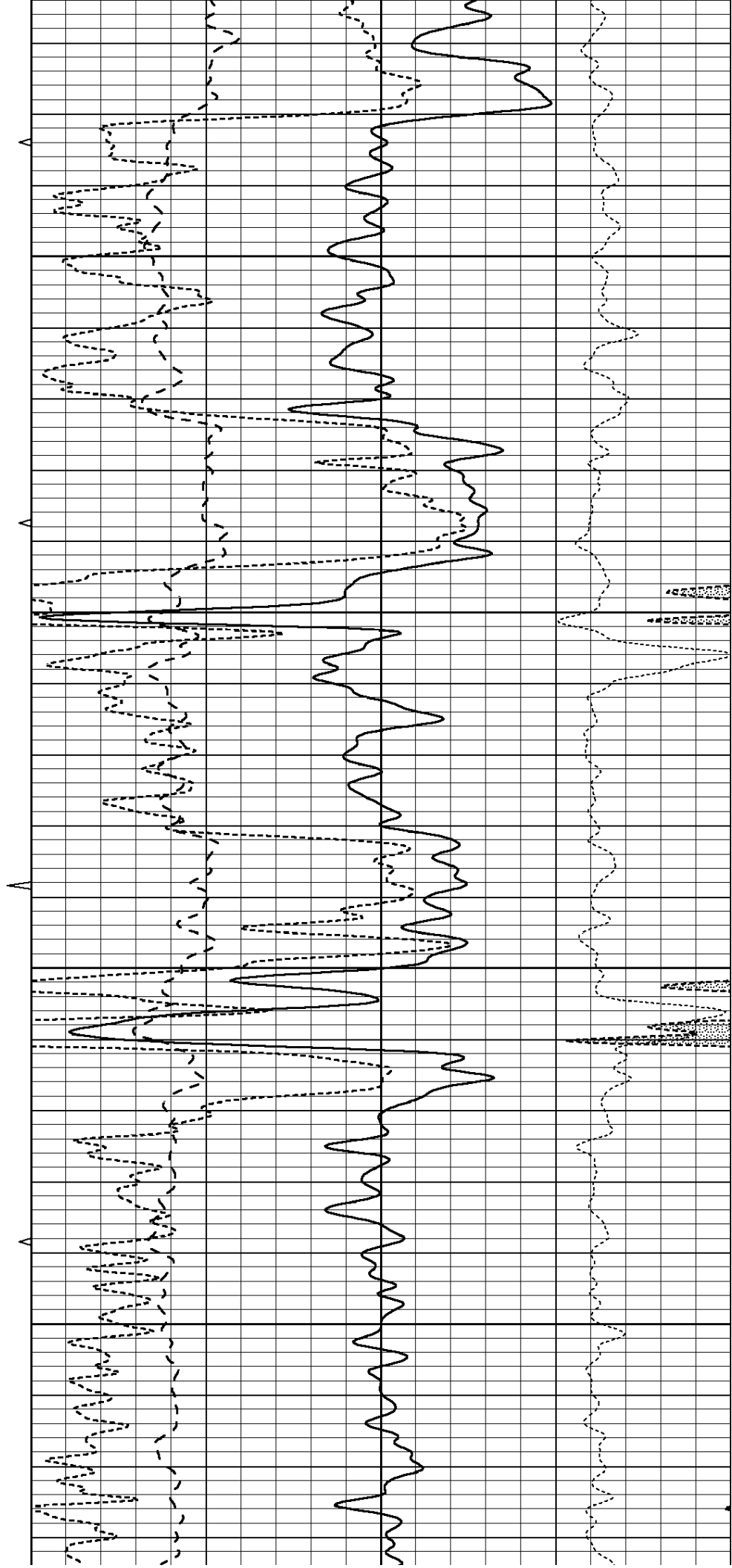


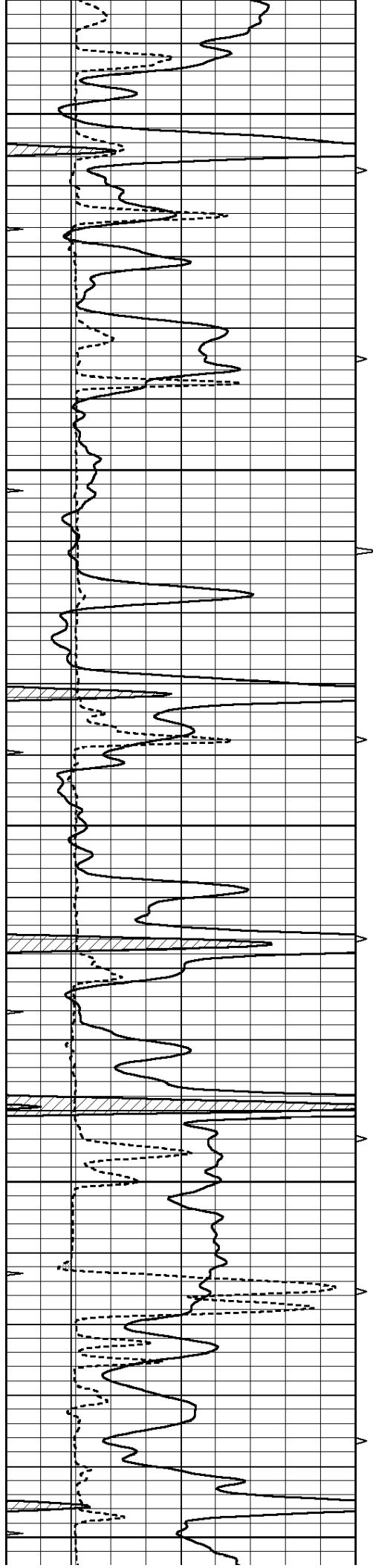
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3400

3450

3500





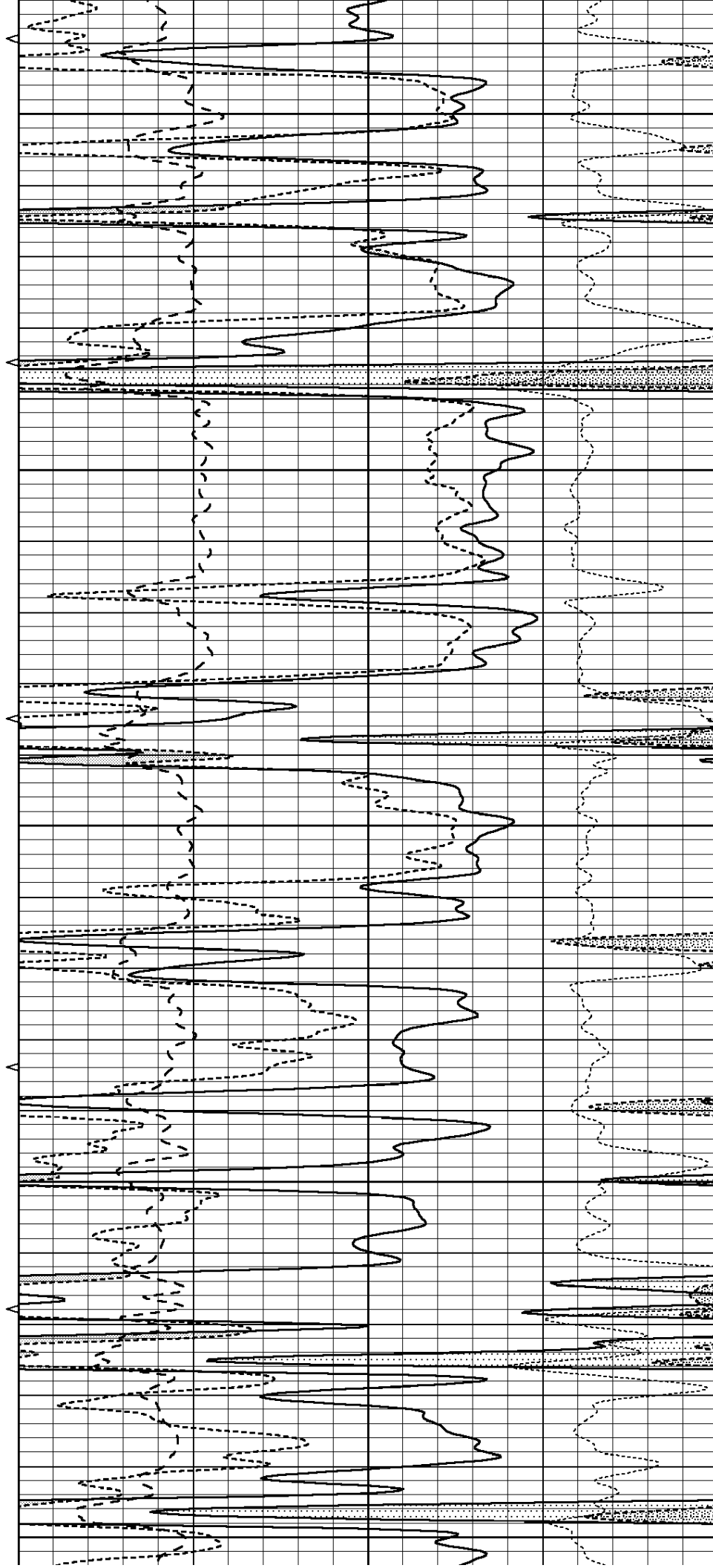
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3600

3650

3700

3750



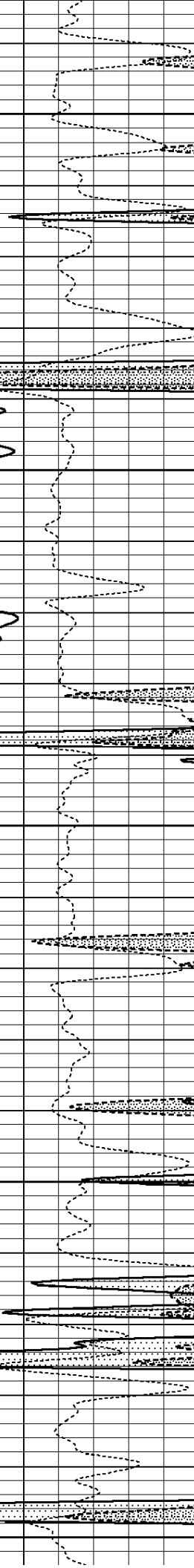
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3700

3750



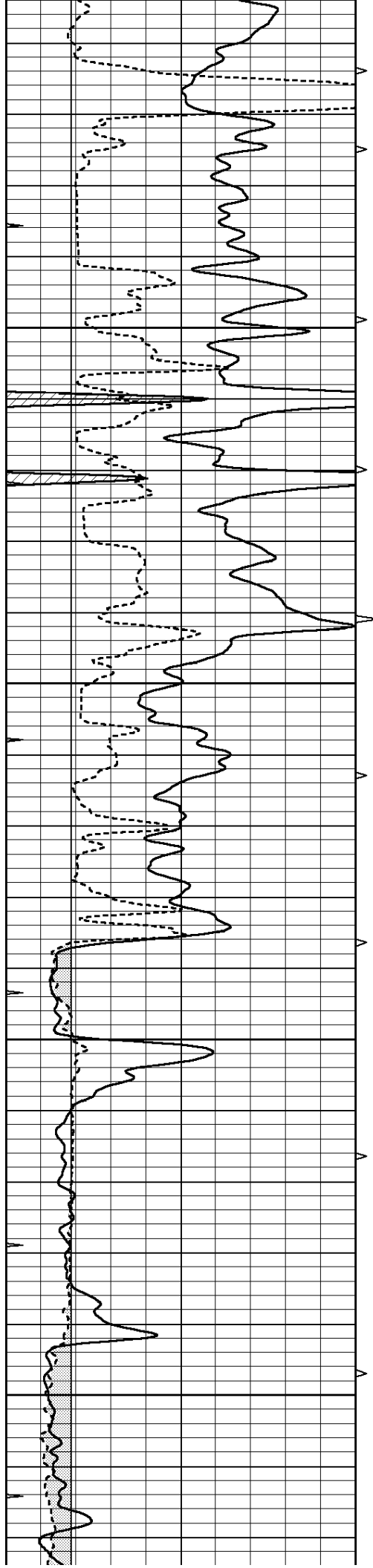
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3600

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3700

3750

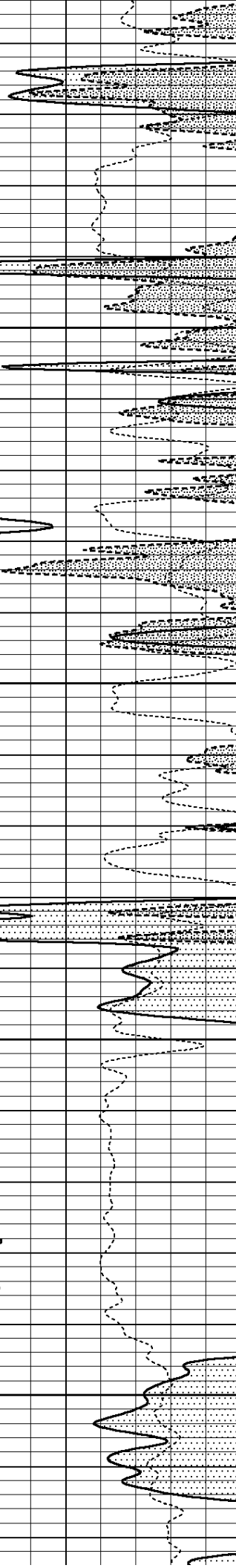
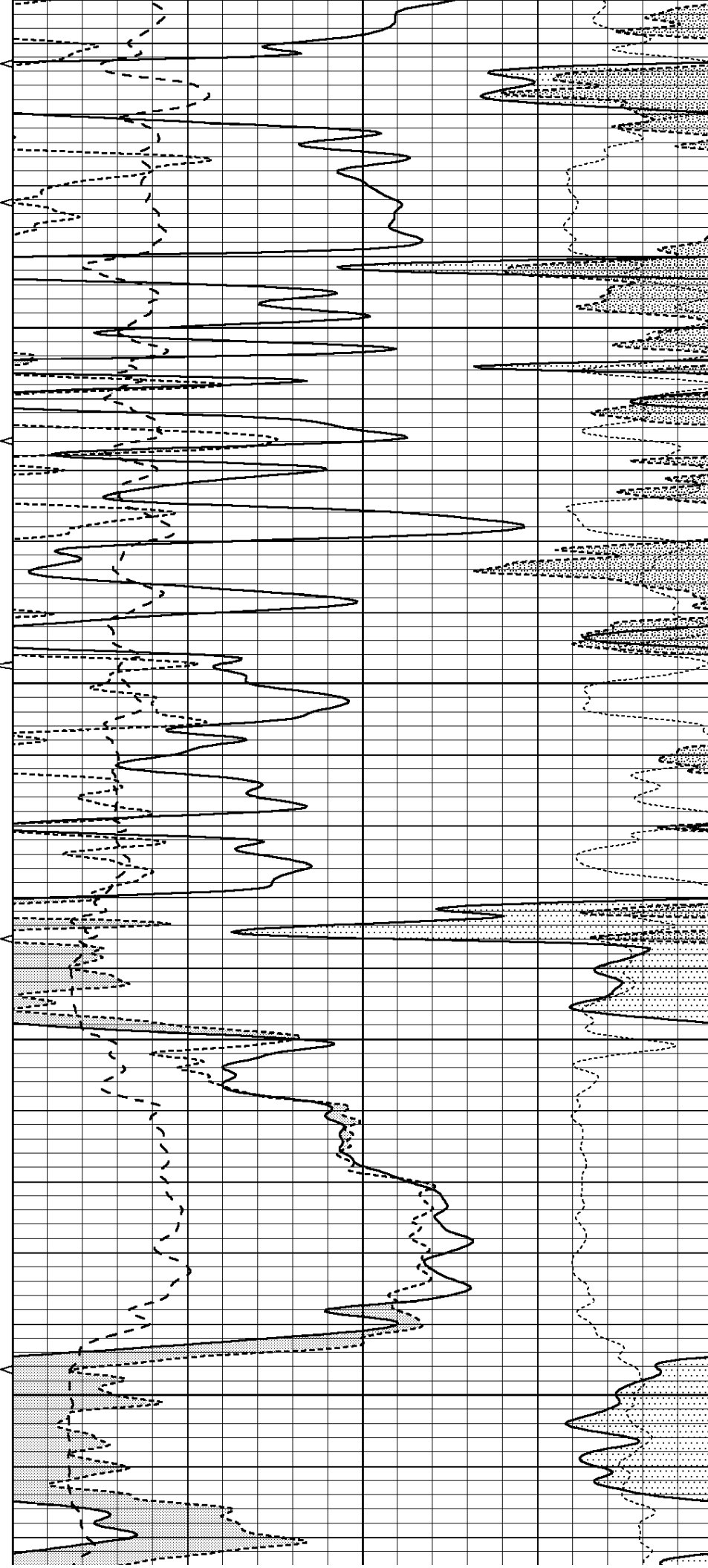


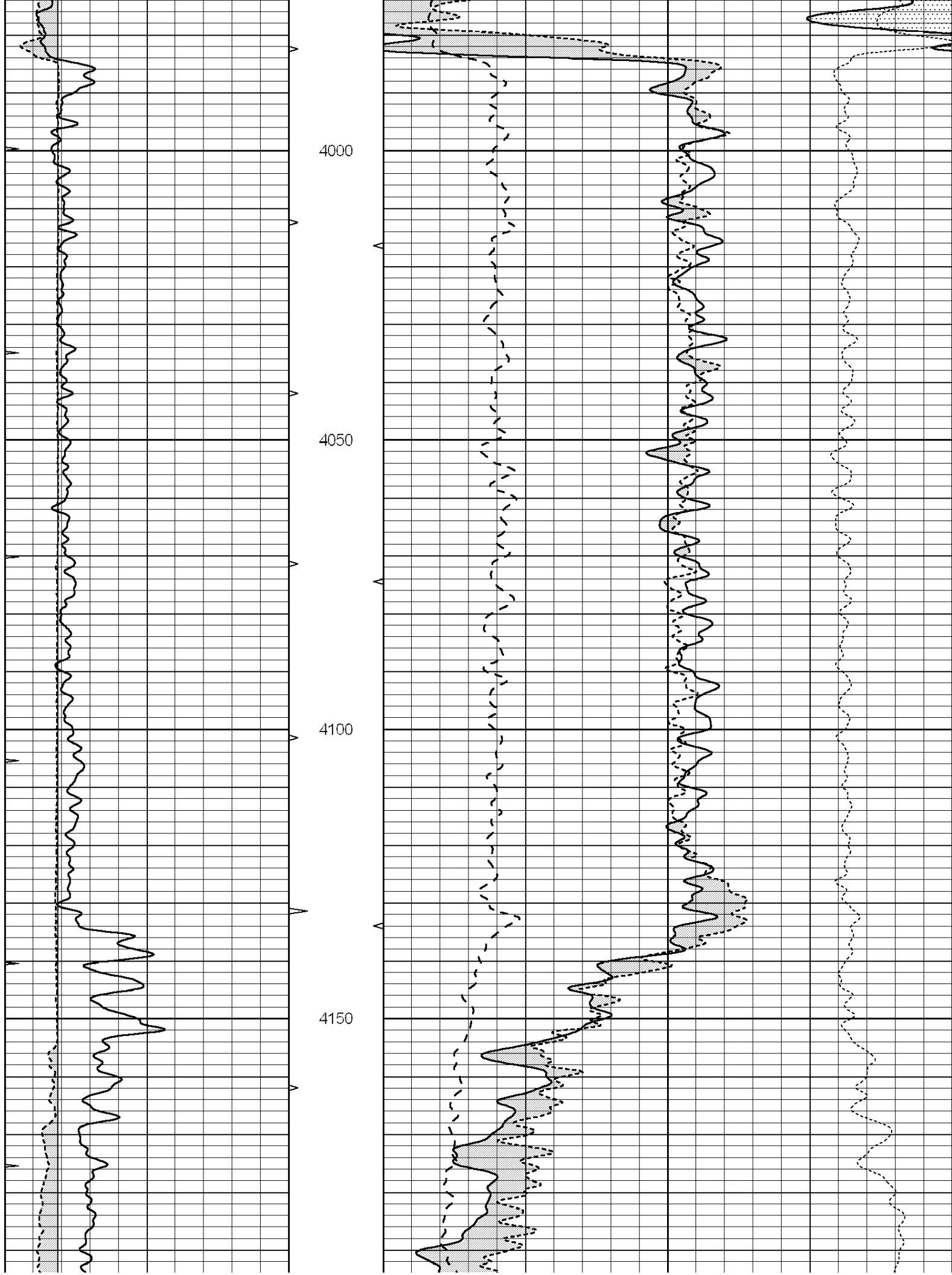
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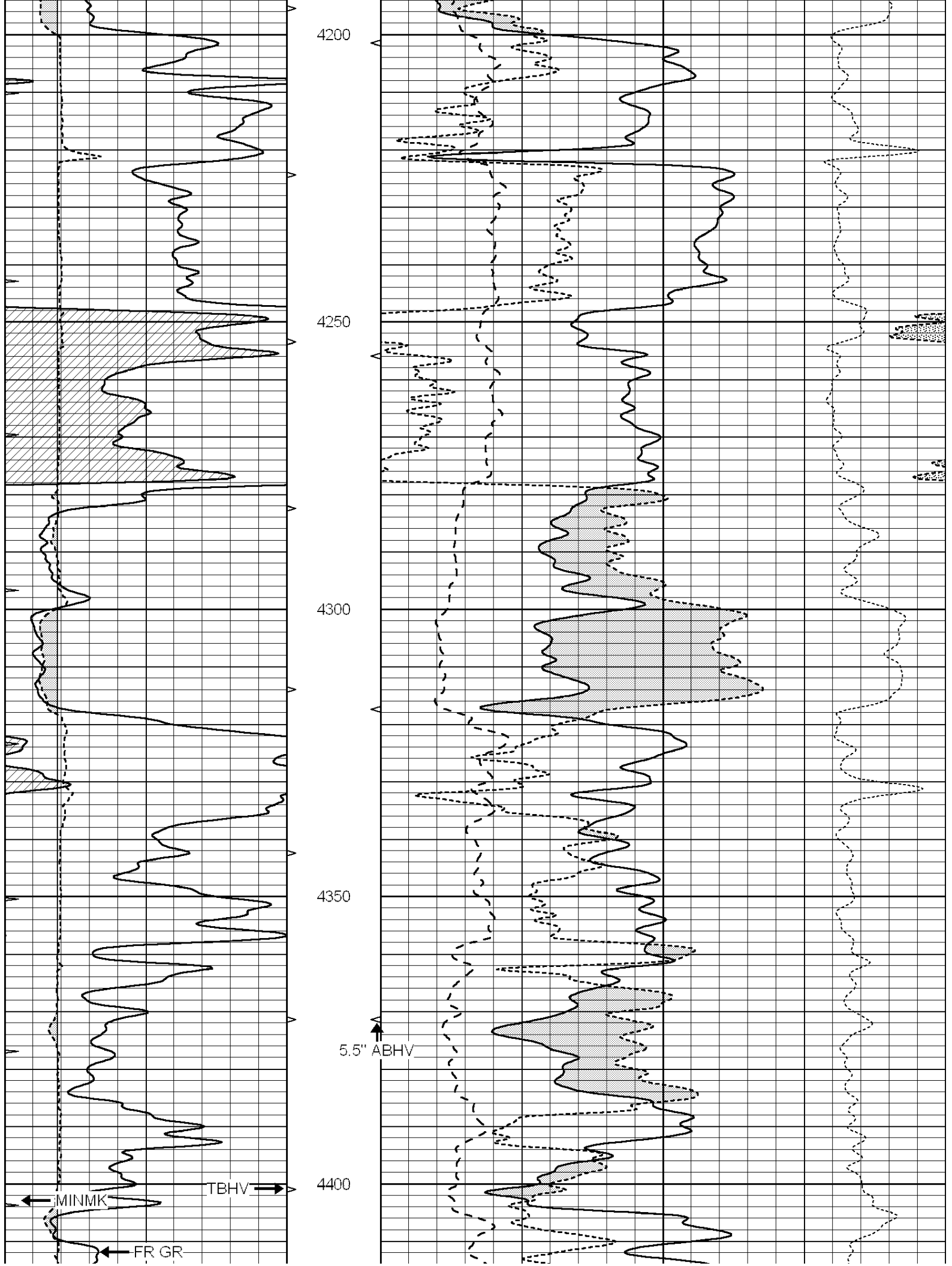
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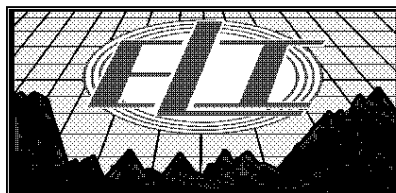
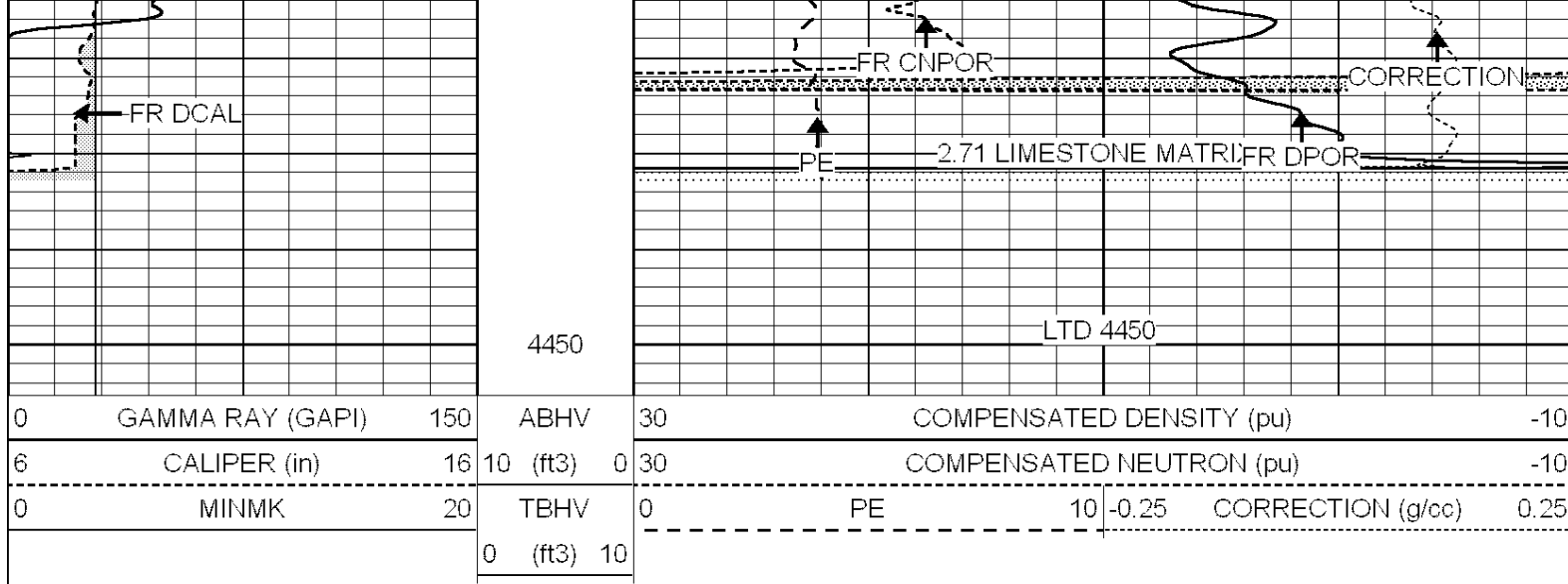
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3950



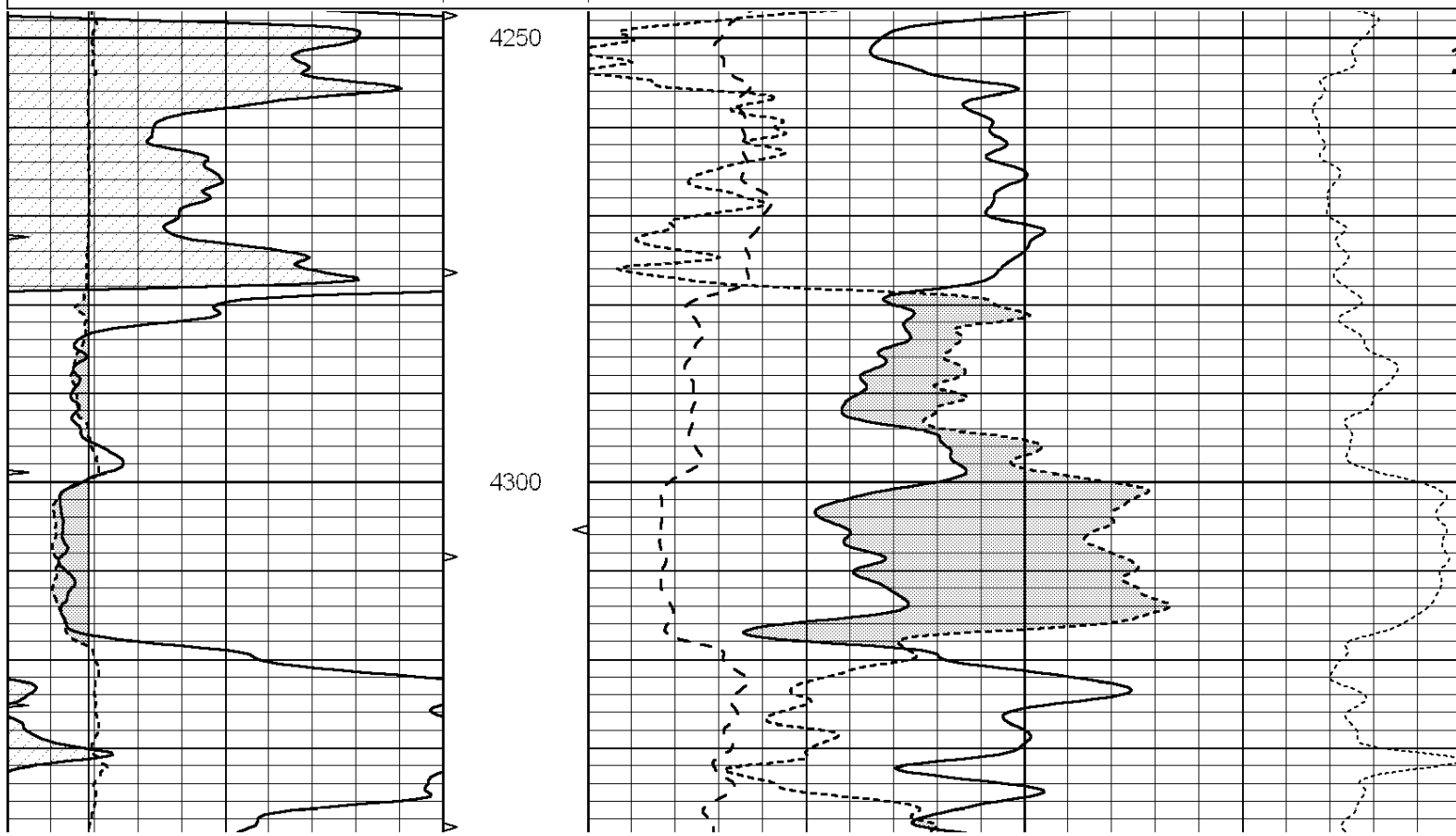
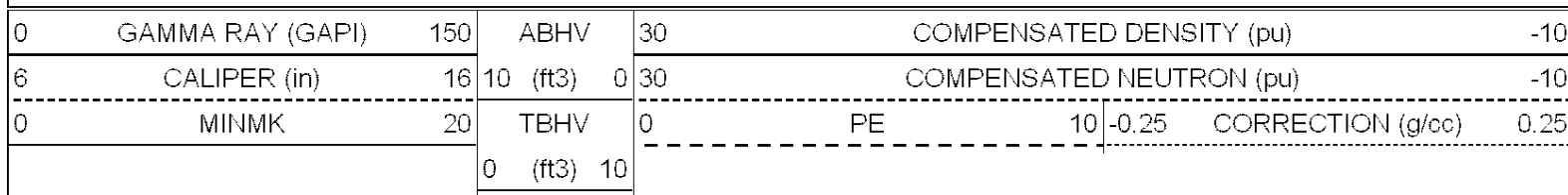


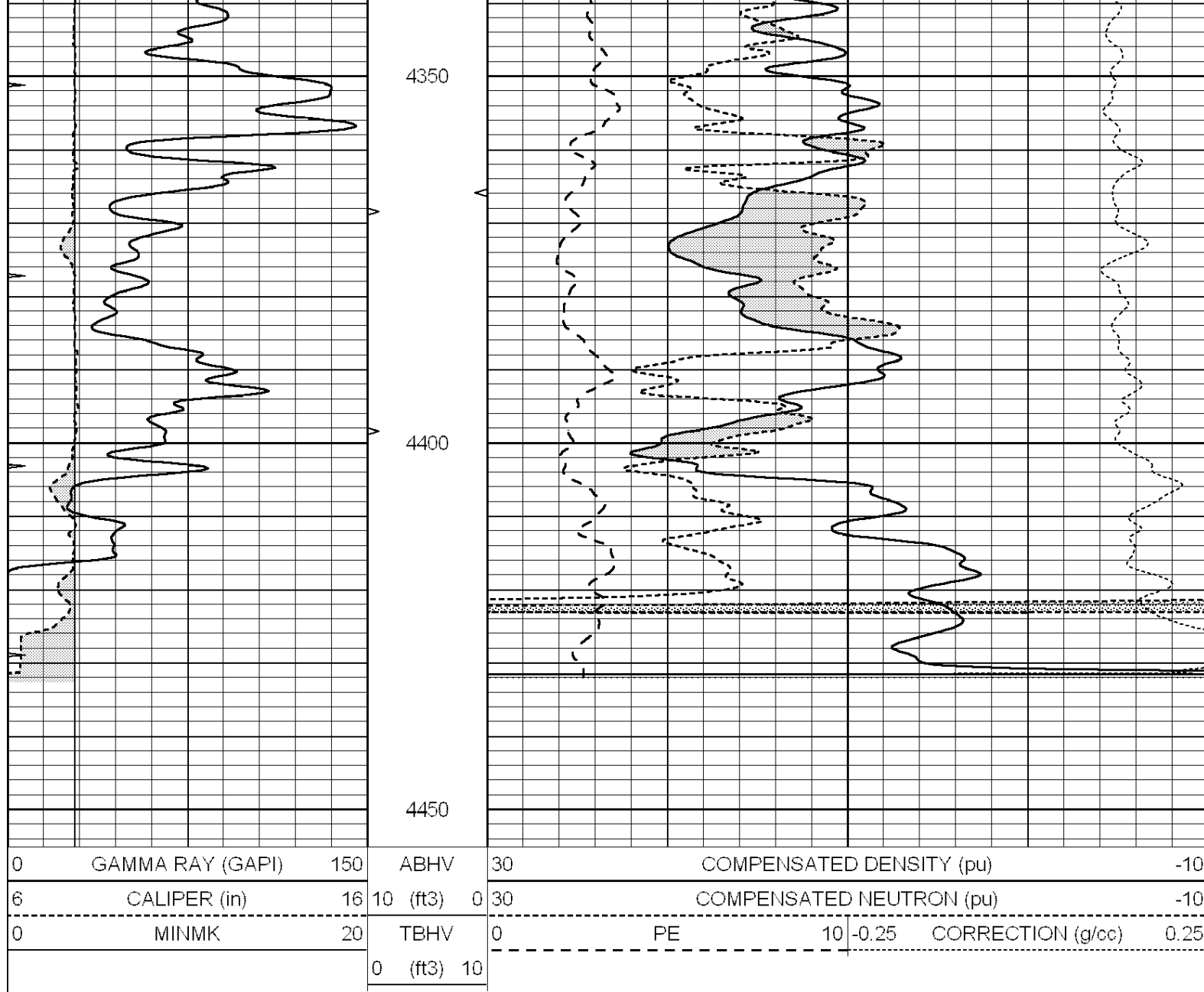




REPEAT SECTION

Database File: 3613pe.db
 Dataset Pathname: pass2.6
 Presentation Format: ldt_neu
 Dataset Creation: Wed Apr 17 12:33:26 2019 by Calc SOC 120430
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: 1598ddn.db
Dataset Pathname: pass4
Dataset Creation: Wed Aug 30 02:13:00 2017 by Log SOC 120430

Dual Induction Calibration Report

Serial-Model: PROBE7-DILG
Surface Cal Performed: Wed Aug 30 00:06:33 2017
Downhole Cal Performed: Mon Jul 28 12:02:56 2008
After Survey Verification Performed: Mon Jul 28 12:02:56 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	620.000	0.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	675.000	-44.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report								
Serial: 002			Model: PRB					

Master Calibration					Performed Mon Aug 21 11:27:42 2017			
	Background	Magnesium	Aluminum	Sandstone				
Window 1	837.1	10632.5	2945.1	12110.1	cps			
Window 2	772.0	9117.4	2570.1	10197.3	cps			
Window 3	631.7	4669.0	1481.9	5042.9	cps			
Window 4	187.0	187.5	185.9	189.9	cps			
Long Space	0.0	8345.4	1798.1	9425.3	cps			
Short Space	1.1	1927.9	1285.9	2050.2	cps			
Rho		1.7100	2.5960	1.3800	g/cc			
Pe		0.0000	2.5700	1.5500				
Rib Angle	: 45.2	Rib Slope	: 1.008	Density/Spine Ratio	: 0.558			
Spine Angle	: 75.2	Spine Slope	: 3.790	Spine Intercept	: -19.6			

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps			
Window 2	0.0	0.0	0.0	0.0	cps			
Window 3	0.0	0.0	0.0	0.0	cps			
Window 4	0.0	0.0	0.0	0.0	cps			
Long Space	0.0	0.0	0.0	0.0	cps			
Short Space	0.0	0.0	0.0	0.0	cps			
Measured Rho		0.0000	0.0000	0.0000	g/cc			
Measured Correction		0.0000	0.0000	0.0000	g/cc			
Measured Pe			0.0000	0.0000				

After Survey Verification					Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps			
Window 2	0.0	0.0	0.0	0.0	cps			
Window 3	0.0	0.0	0.0	0.0	cps			
Window 4	0.0	0.0	0.0	0.0	cps			
Long Space	0.0	0.0	0.0	0.0	cps			
Short Space	0.0	0.0	0.0	0.0	cps			
Measured Rho		0.0000	0.0000	0.0000	g/cc			
Measured Correction		0.0000	0.0000	0.0000	g/cc			

Measured Pe	0.0000	0.0000
Compensated Neutron Calibration Report		
Serial Number:	070808	
Tool Model:	Probe	
PRE-SURVEY VERIFICATION		
Detector	Readings	Measured Target
Short Space	cps	
Long Space	cps	pu pu
POST-SURVEY VERIFICATION		
Detector	Readings	Measured Target
Short Space	cps	
Long Space	cps	pu pu
Gamma Ray Calibration Report		
Serial Number:	070558	
Tool Model:	OPEN_GR	
Performed:	Wed May 31 00:09:32 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2800	GAPI/cps