

COMPENSATED
DENSITY / NEUTRON
PE LOG

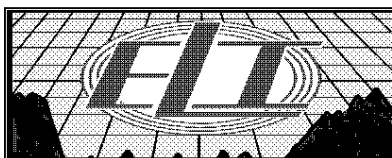
Company LOTUS OPERATING COMPANY, LLC.		Company LOTUS OPERATING COMPANY, LLC.	
Well #4 GOOD		Well #4 GOOD	
Field HARDTNER		Field HARDTNER	
County BARBER		County BARBER	
State KANSAS		State KANSAS	
Location: 330' FNL & 450' FWL		API # : 15-007-24362-0000	
SEC 1 TWP 35S RGE 13W		Other Services DIL/MEL SONIC	
Permanent Datum	GROUND LEVEL	Elevation	1448
Log Measured From	KELLY BUSHING 13' A.G.L.	K.B. 1461	
Drilling Measured From	KELLY BUSHING	D.F. 1559	
		G.L. 1448	
Date	10/29/19		
Run Number	ONE		
Depth Driller	5650		
Depth Logger	5652		
Bottom Logged Interval	5628		
Top Log Interval	3800		
Casing Driller	8 5/8"@265'		
Casing Logger	264		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,500 PPM	
Density / Viscosity	9.4/60		
pH / Fluid Loss	10.0/8.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.650@80F		
Rmf @ Meas. Temp	.488@80F		
Rmc @ Meas. Temp	.780@80F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.397@131F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	10:15 P.M.		
Maximum Recorded Temperature	131F		
Equipment Number	922339		
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

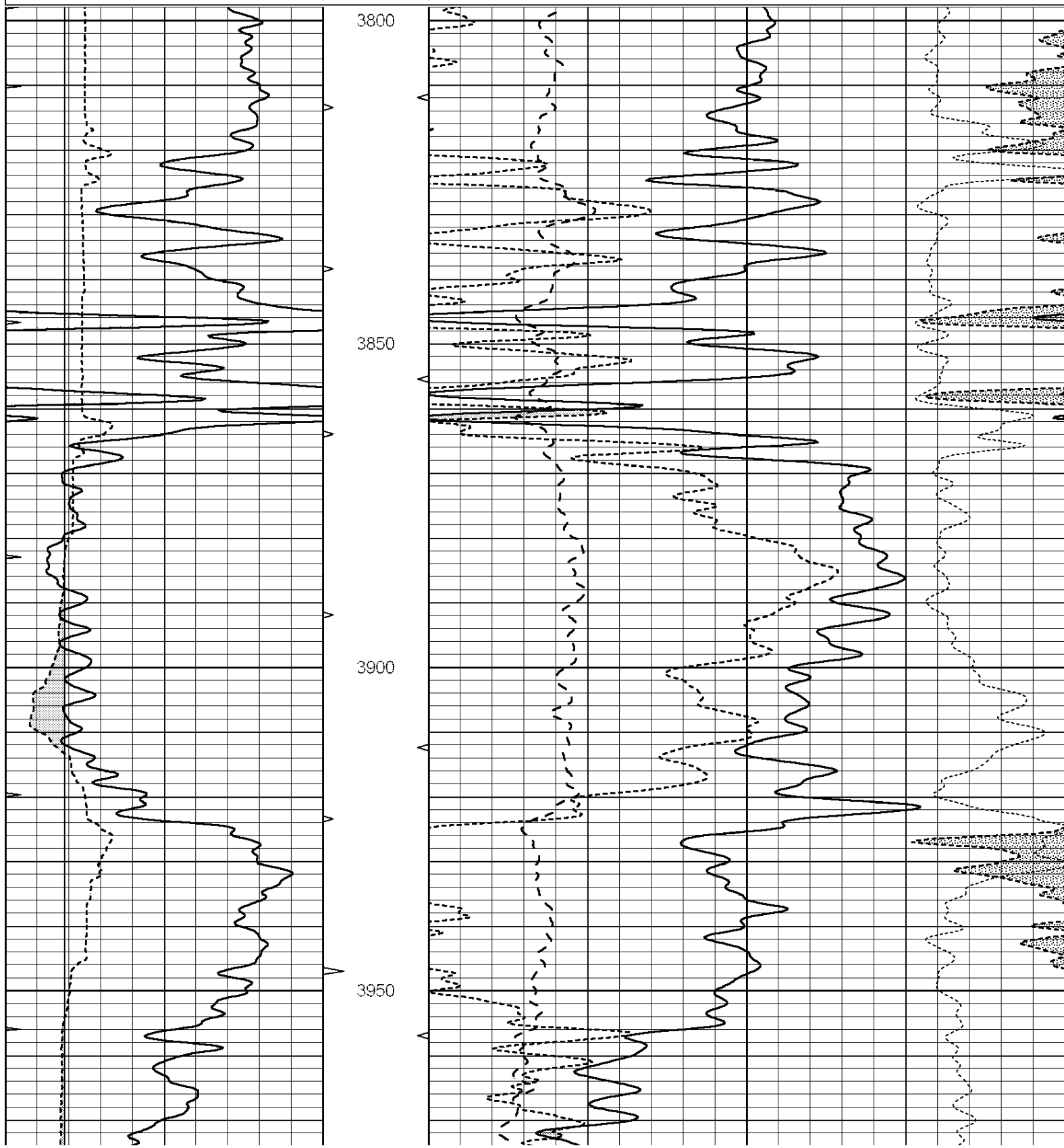
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
HARDTNER, KS., 2 1/2 W. ON "HACKBERRY RD." TO "GYF HILL RD.", 1 1/2 N. E. INTO

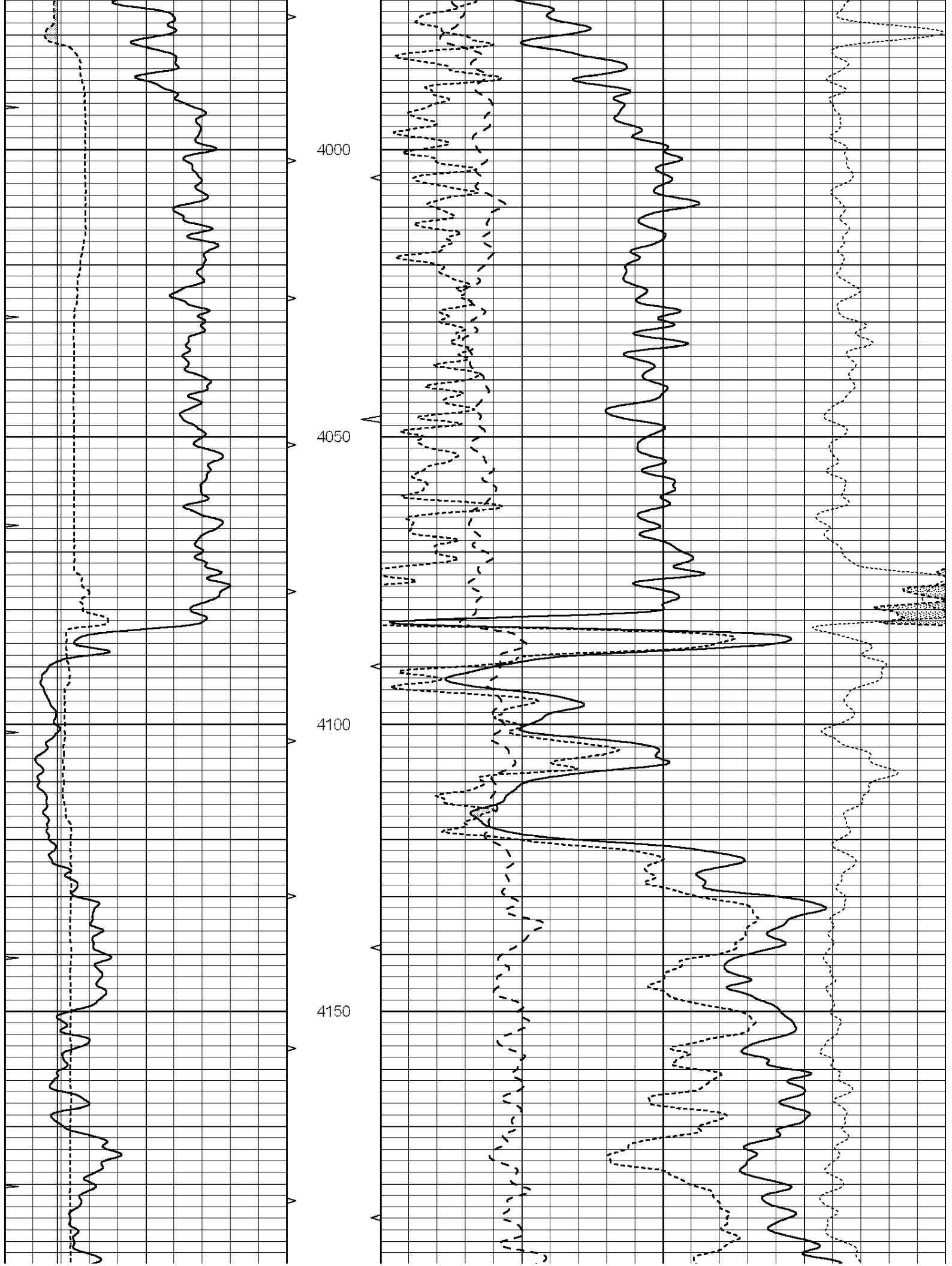


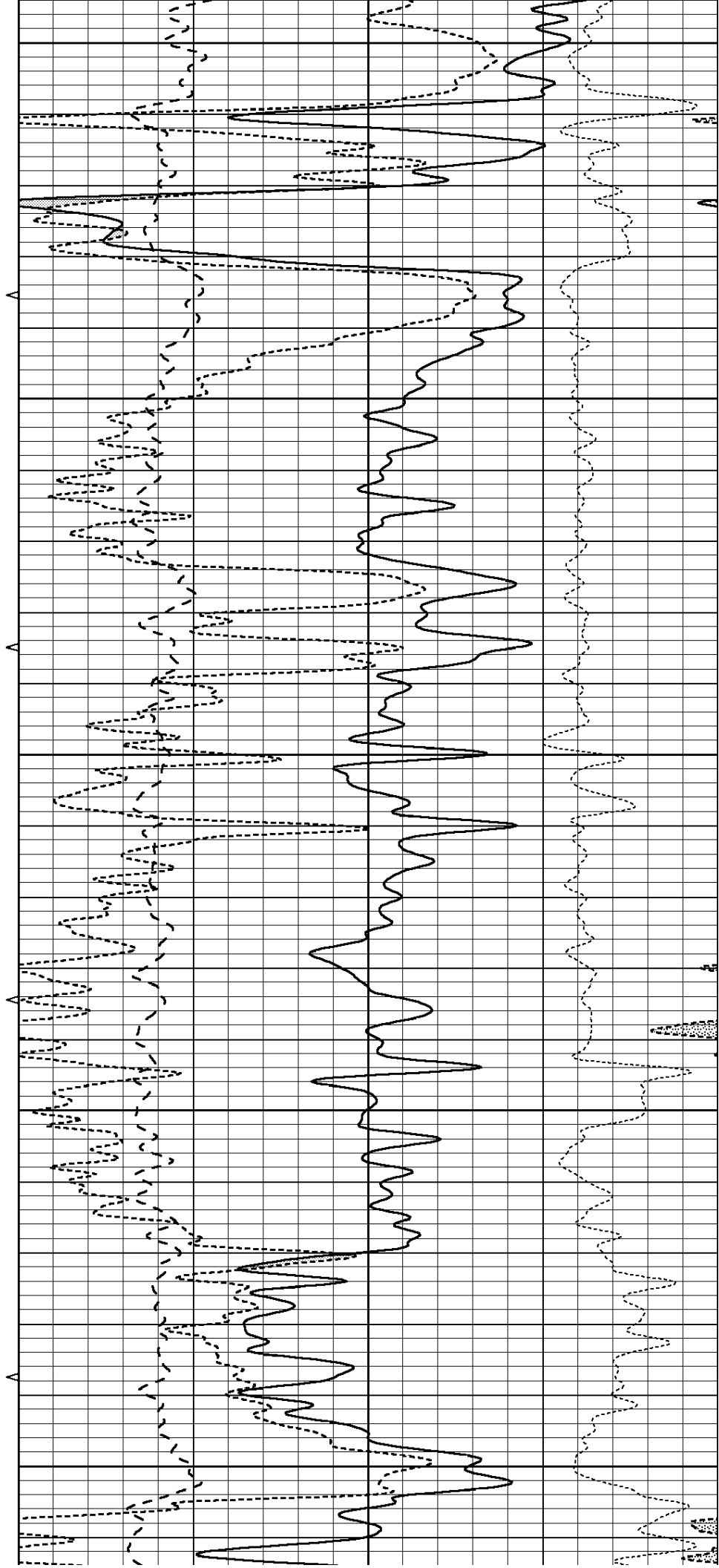
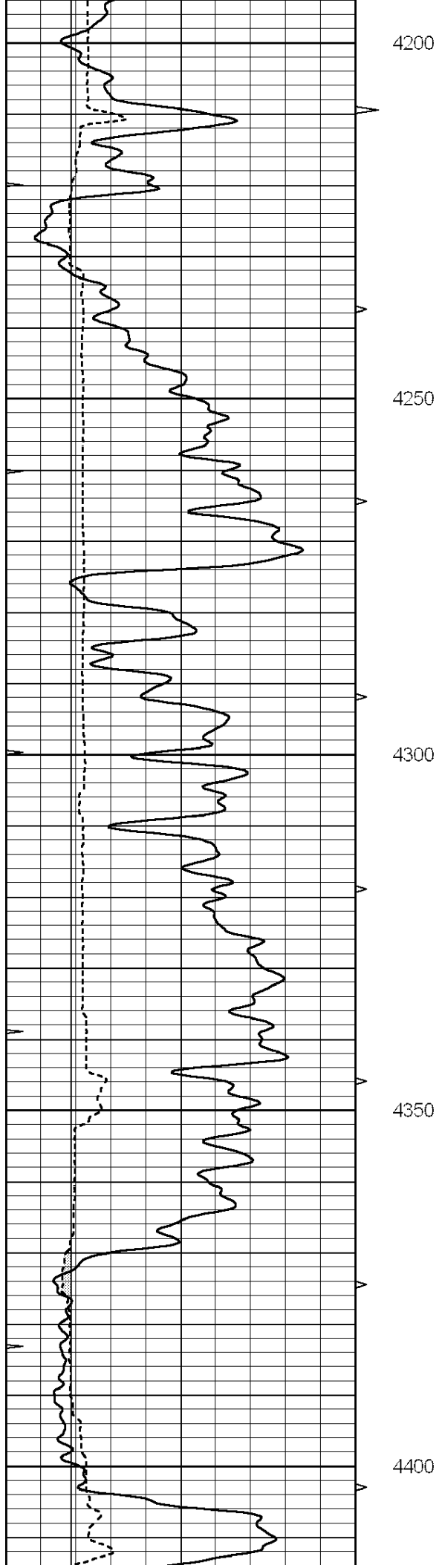
MAIN SECTION

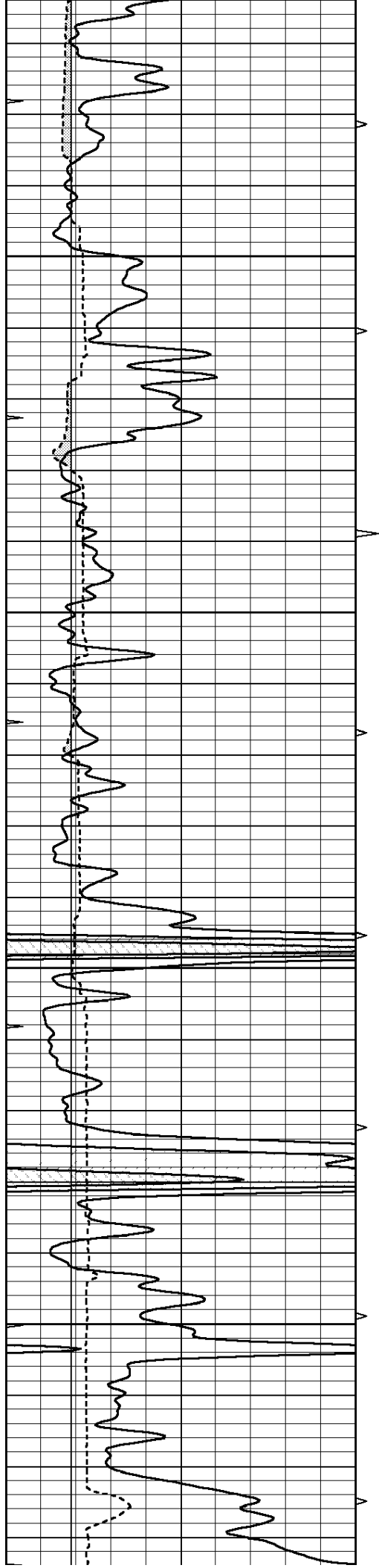
Database File: 4376pe.db
 Dataset Pathname: pass3.7
 Presentation Format: ldt_neu
 Dataset Creation: Tue Oct 29 23:57:28 2019
 Charted by: Depth in Feet scaled 1:240

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					







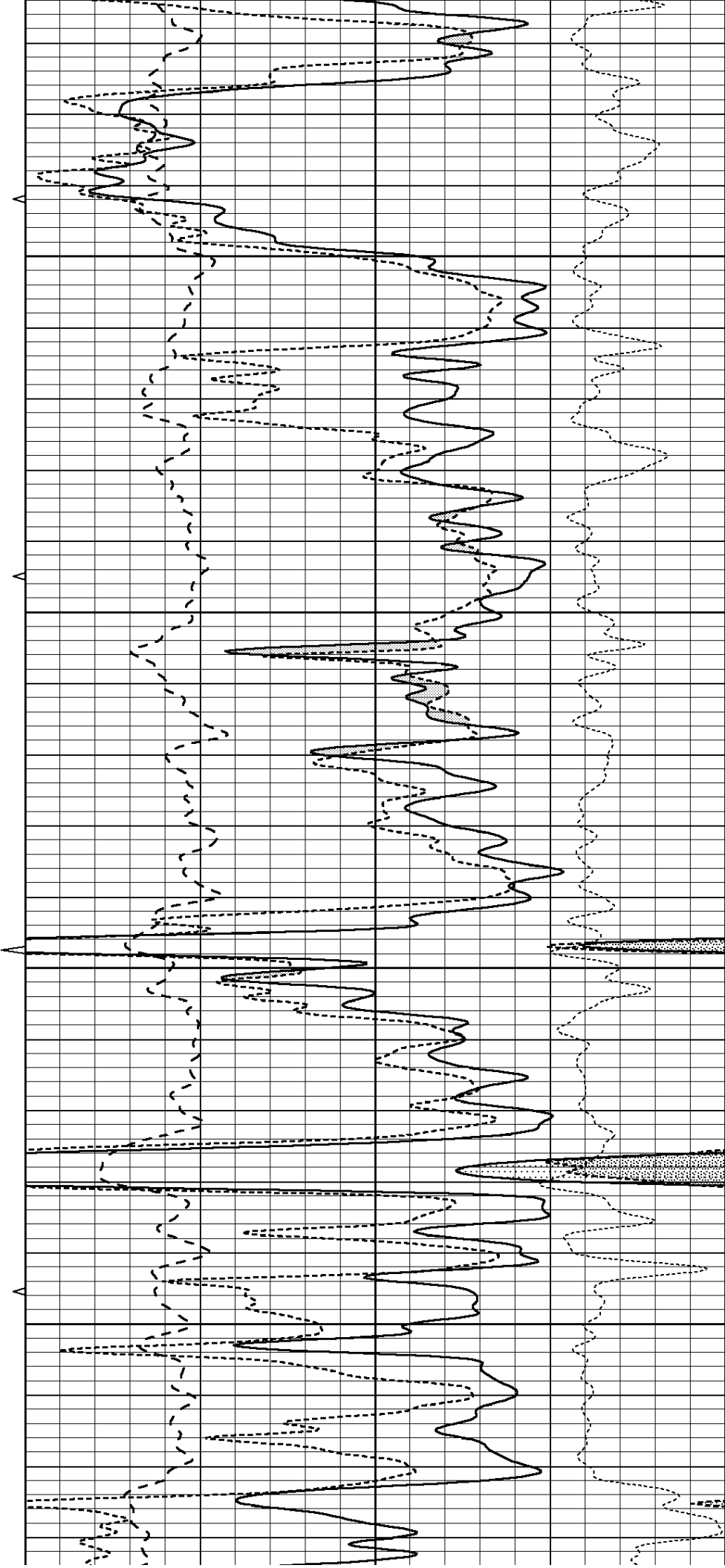


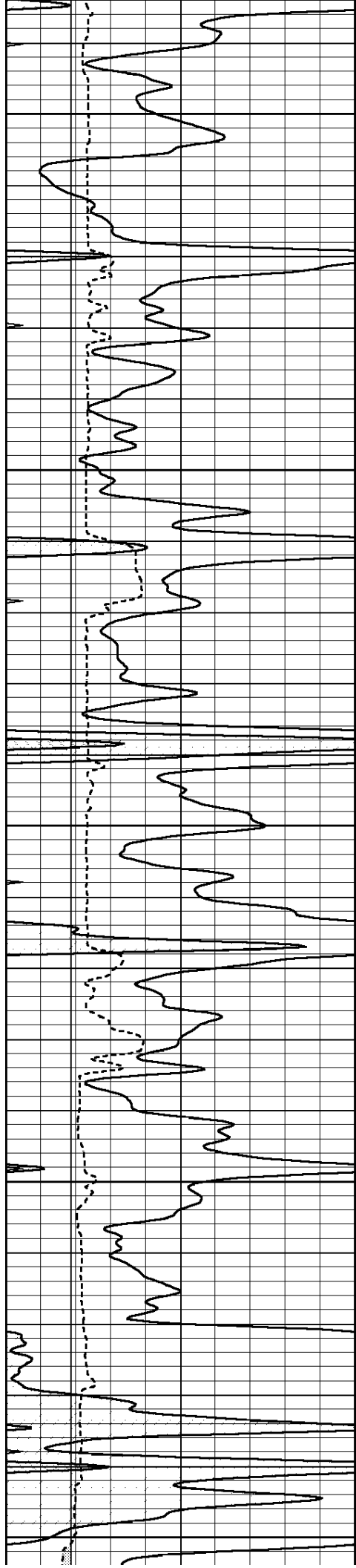
4450

4500

4550

4600





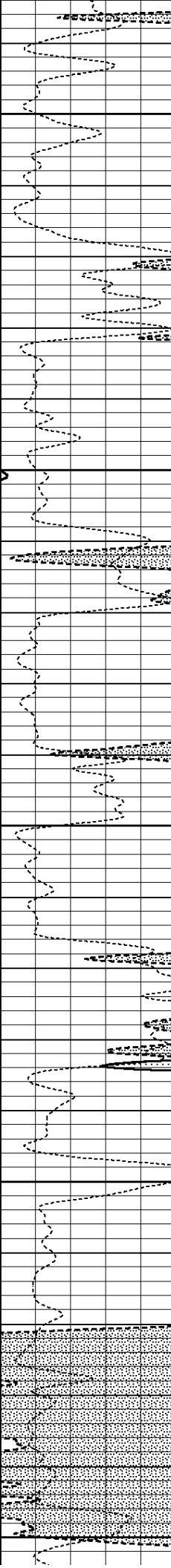
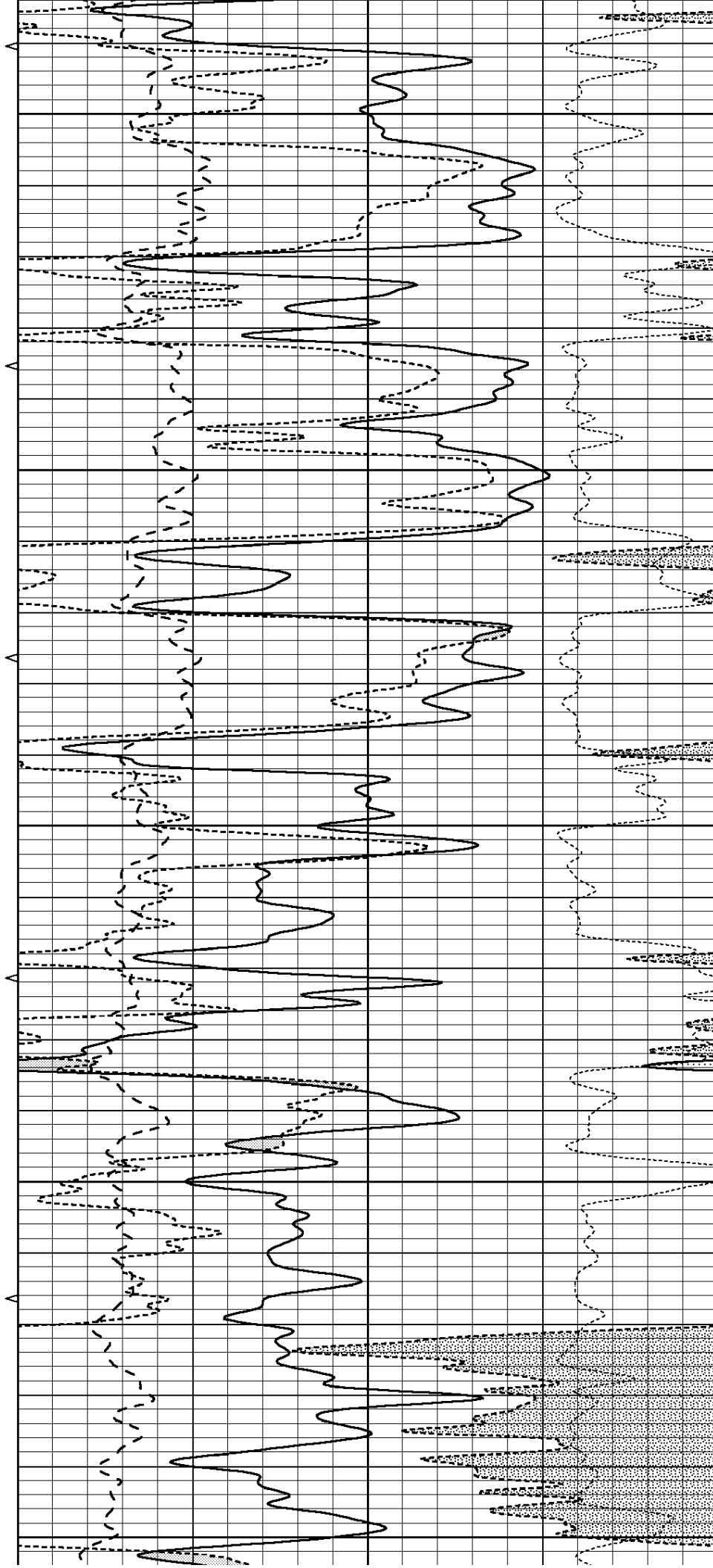
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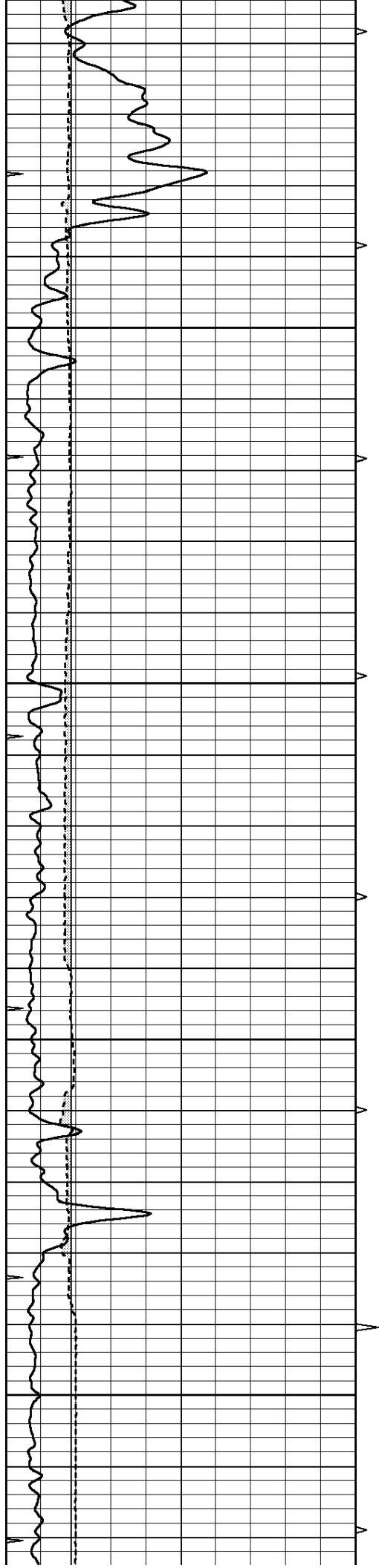
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4750

4800

4850



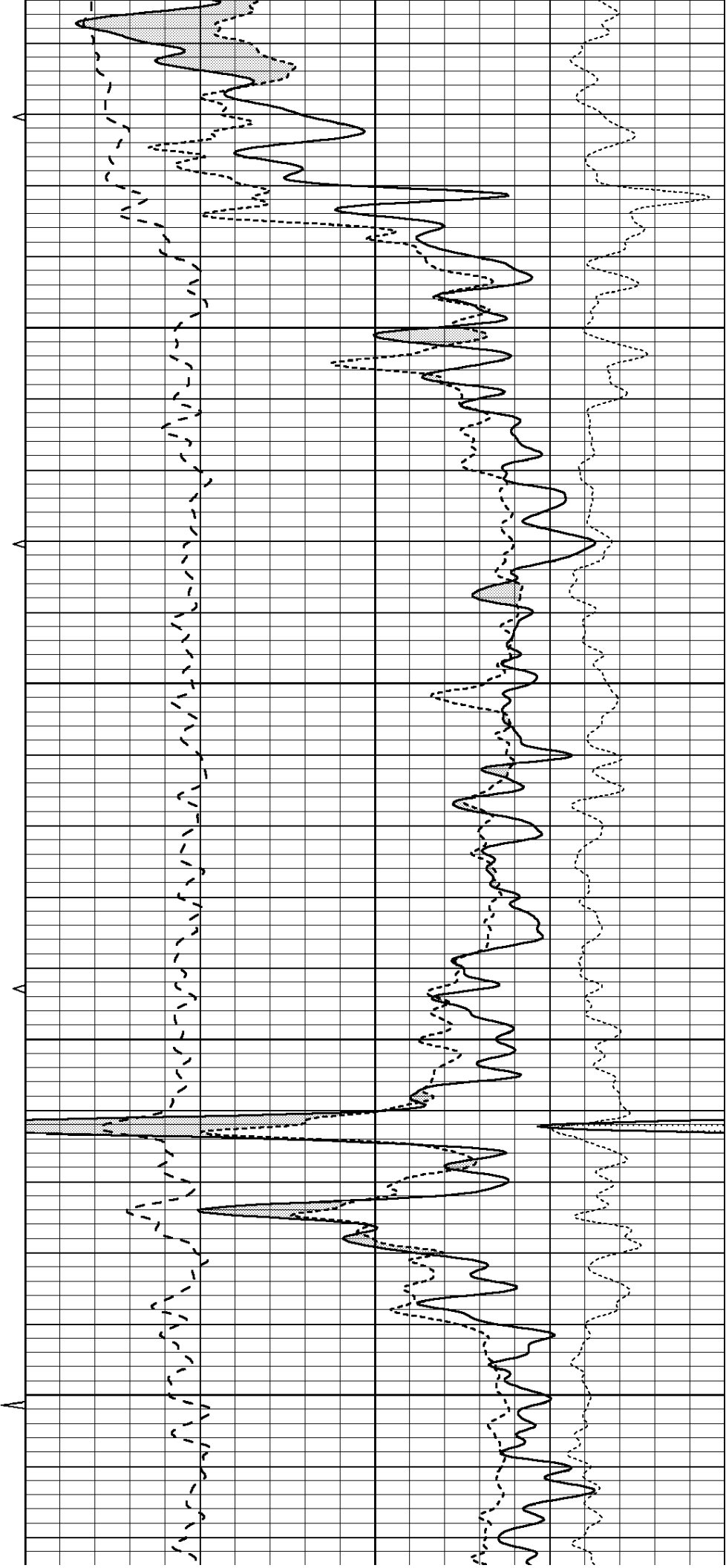


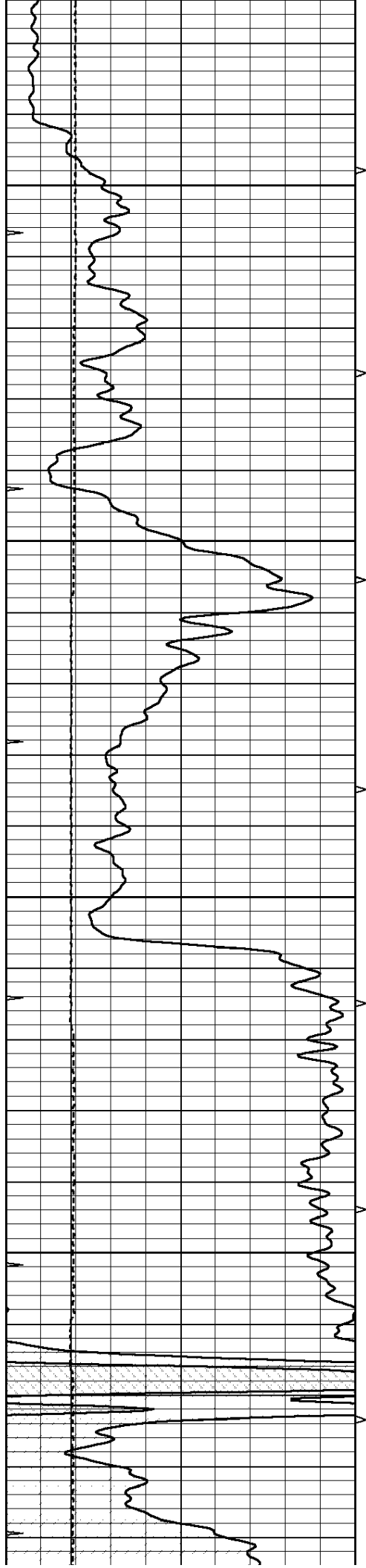
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4950

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5050



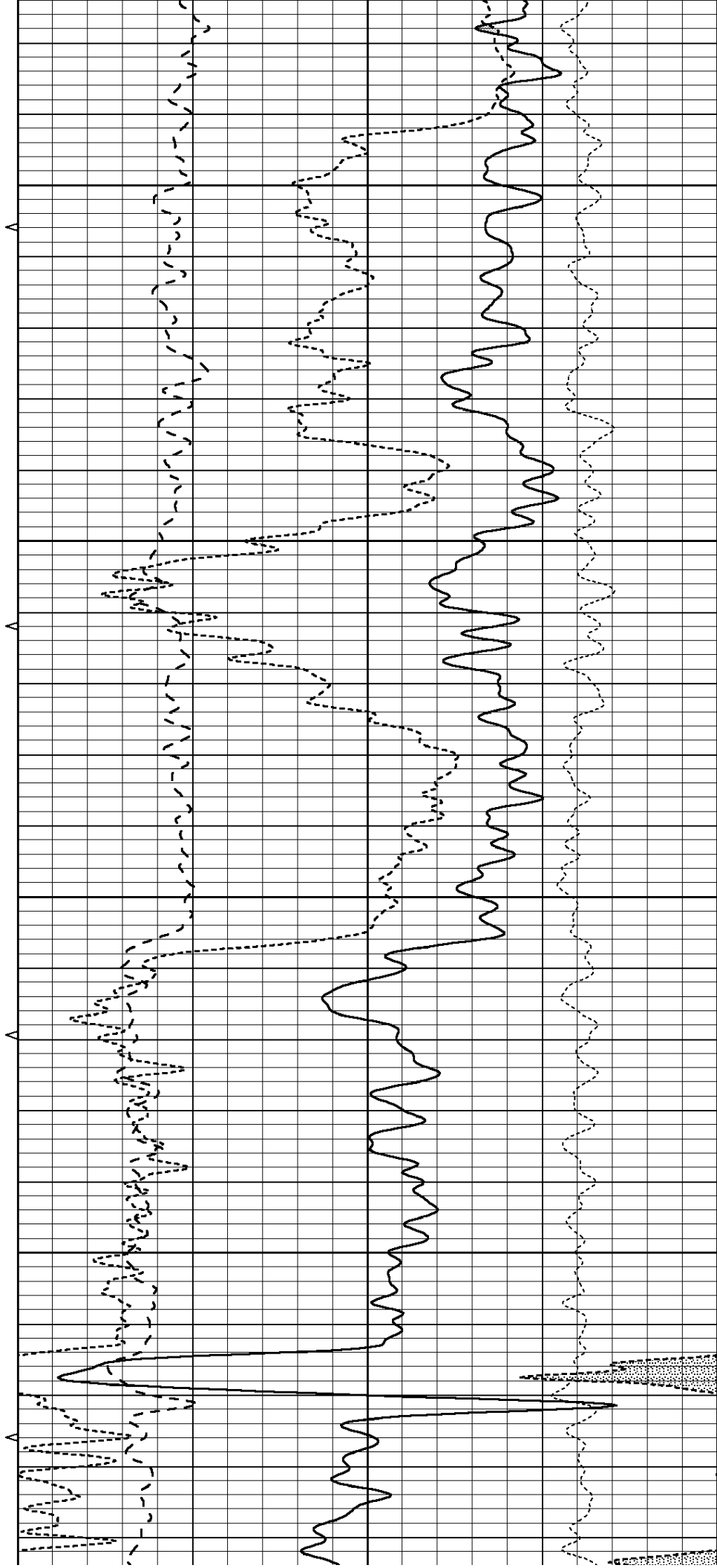


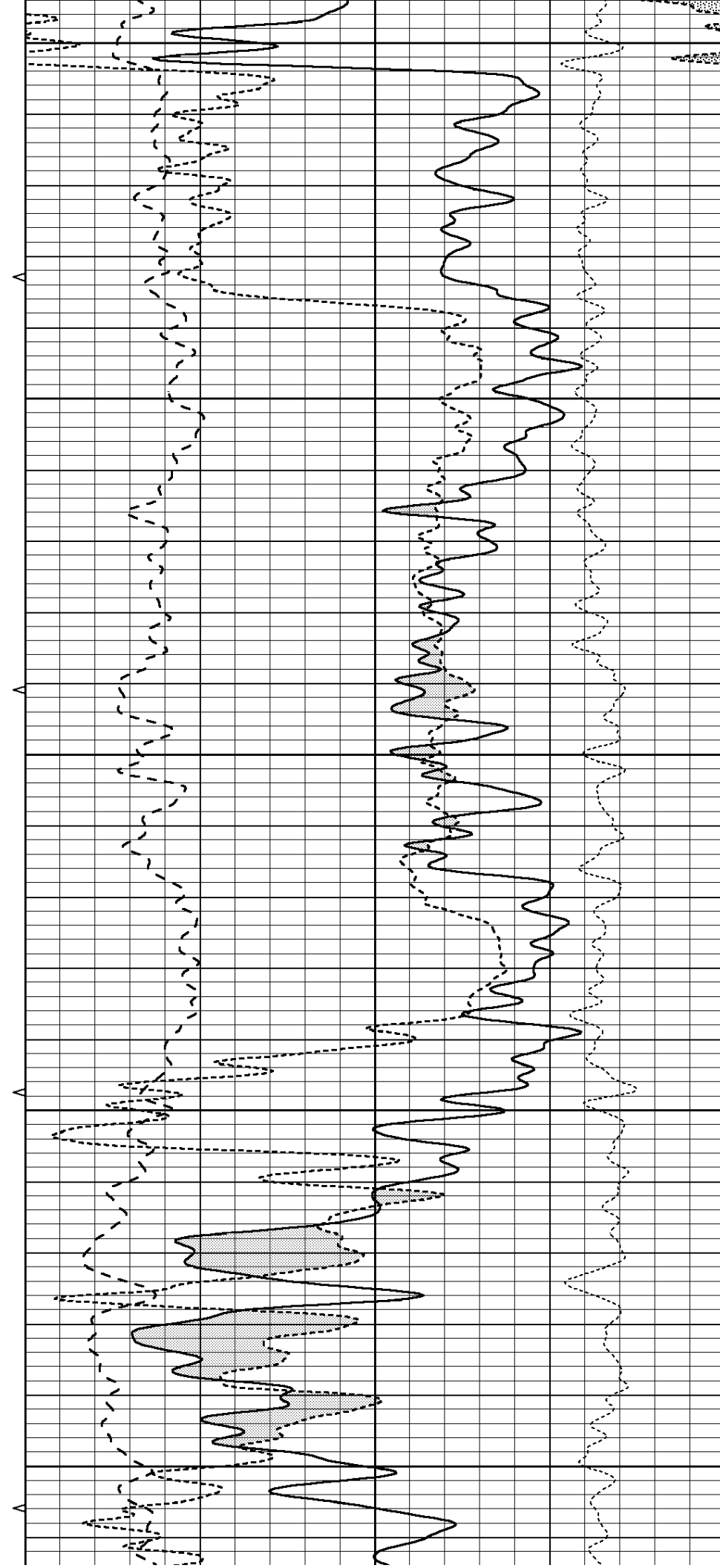
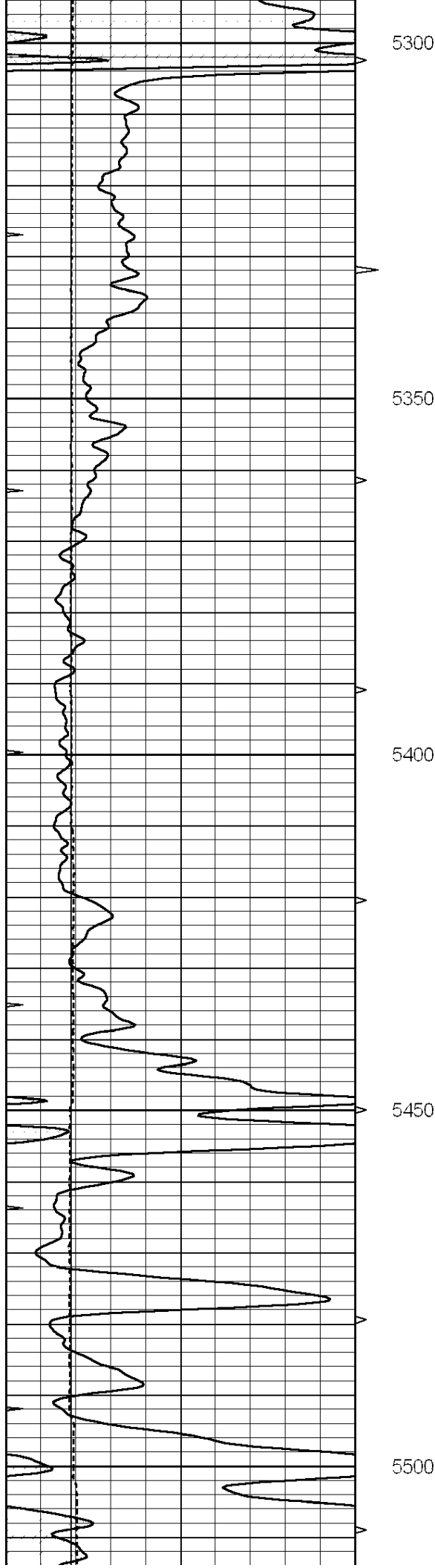
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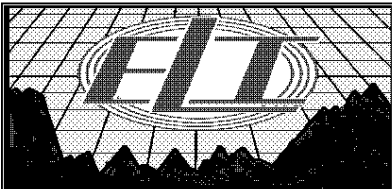
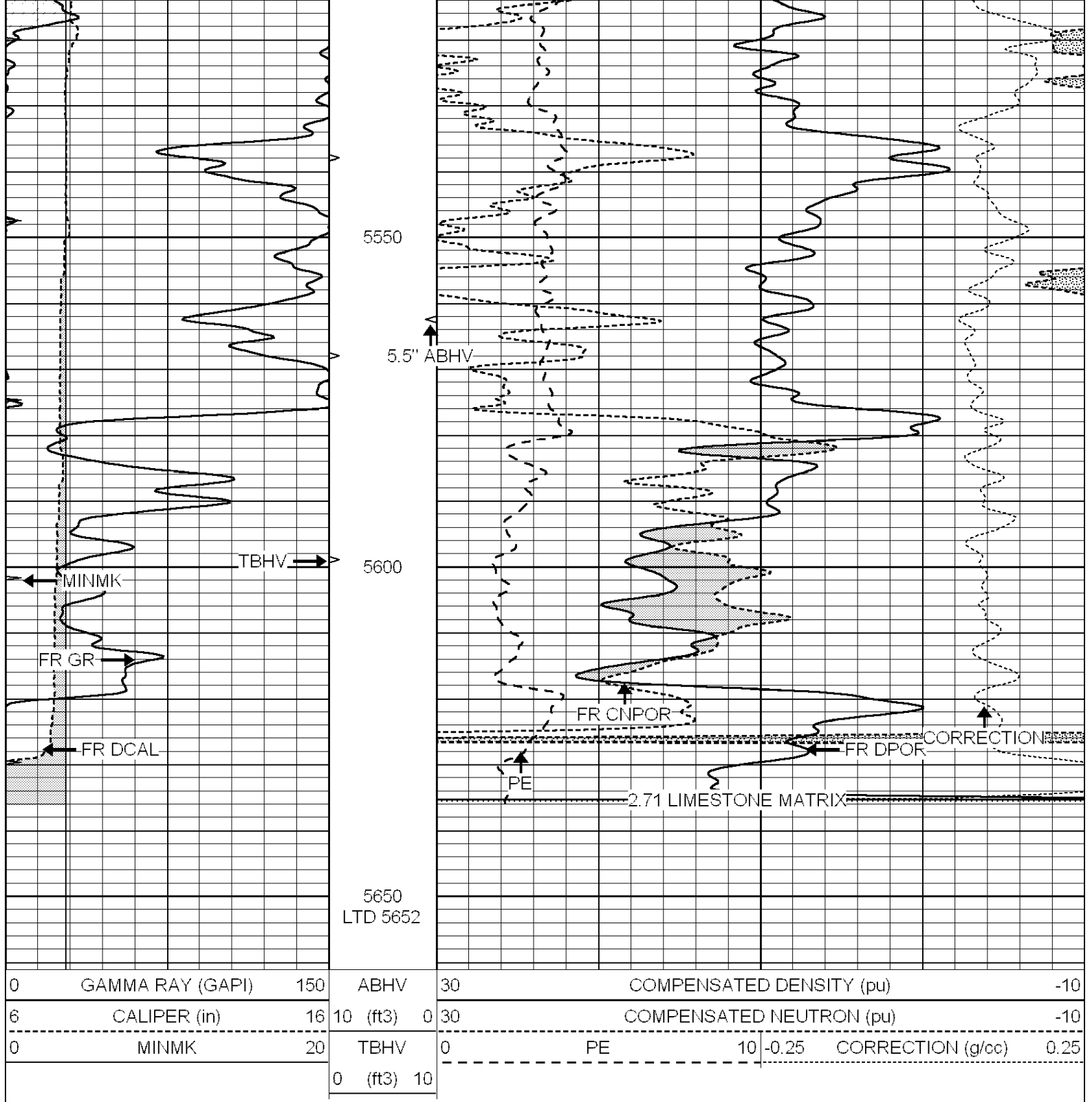
5150

5200

5250





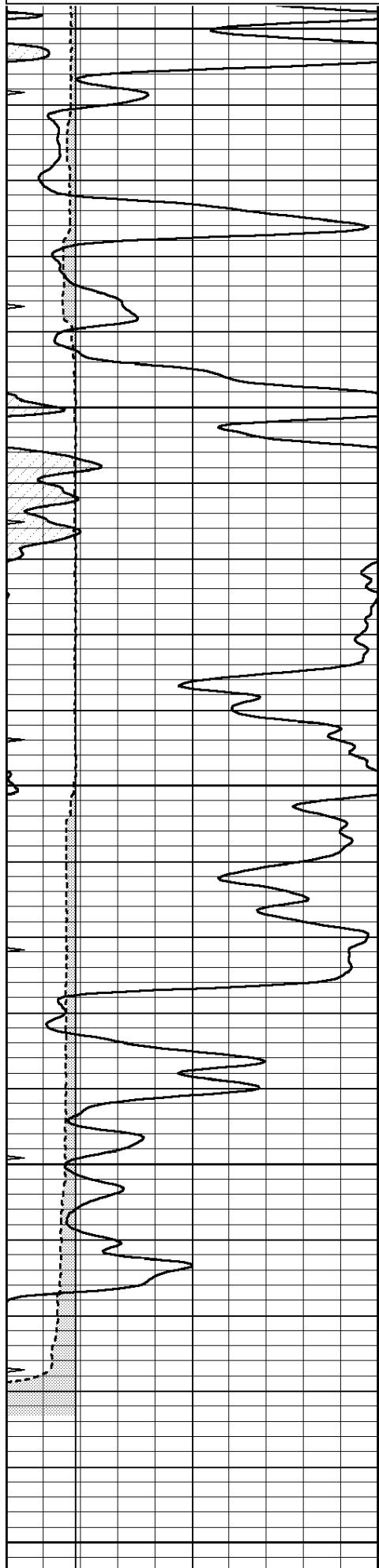


REPEAT SECTION

Database File: 4376pe.db
 Dataset Pathname: pass2.5
 Presentation Format: ldt_neu
 Dataset Creation: Tue Oct 29 23:25:11 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		

CALIPER (in)			COMPACTED NEUTRON (pd)		
0	20	TBHV	0	10	-0.25 CORRECTION (g/cc) 0.25
		0 (ft3) 10			



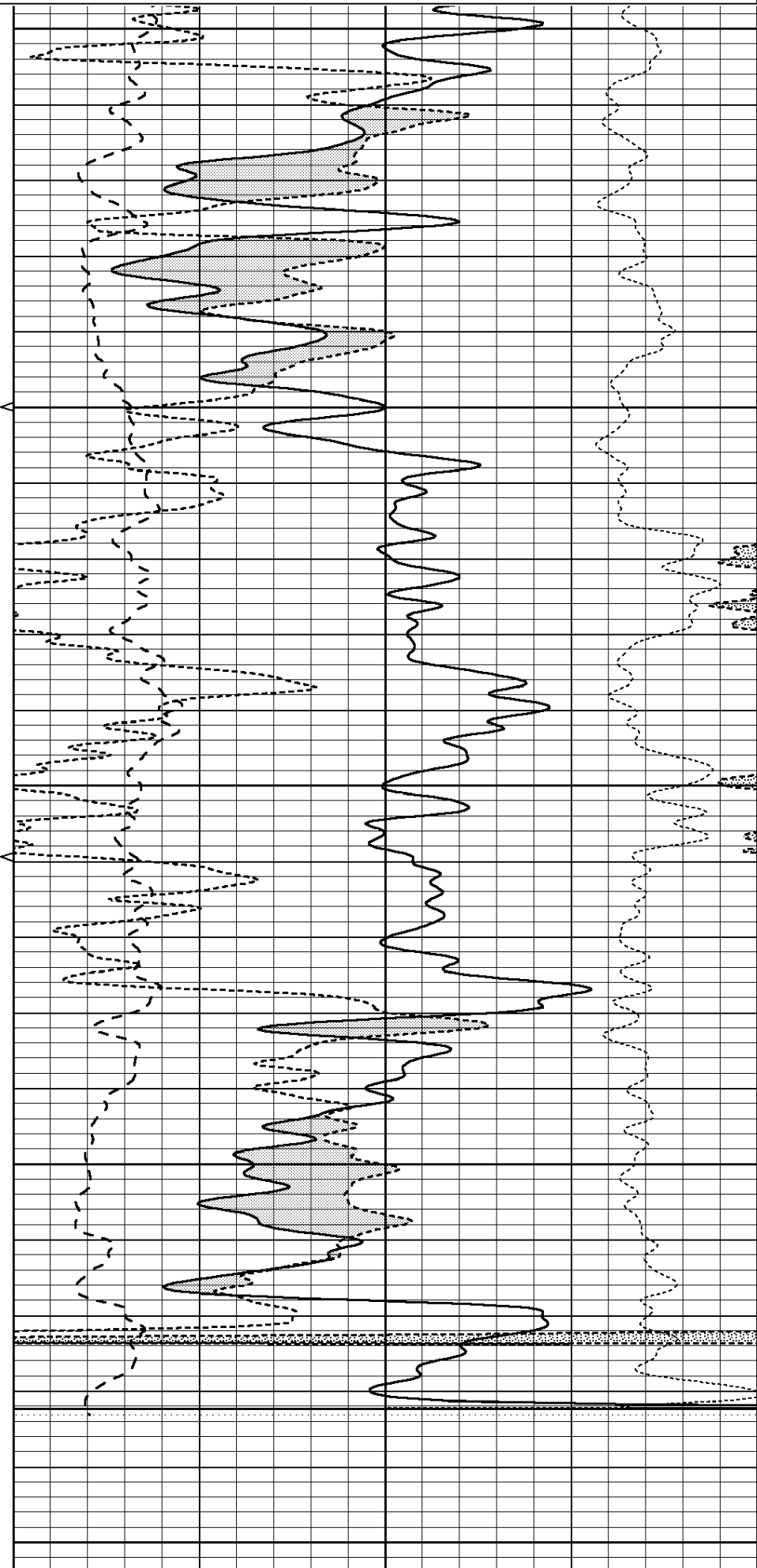
5450

5500

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5650



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:	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									
Readings				References			Results		
Loop:	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
Blank		1.7100	0.5000	1.0000					

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		