



COMPENSATED DENSITY / NEUTRON PE LOG

Company	INDIAN OIL COMPANY, INC.	Company	INDIAN OIL COMPANY, INC.
Well	WARREN #4-35	Well	WARREN #4-35
Field	MEAIRS	Field	MEAIRS
County	BARBER	County	BARBER
State	KANSAS	State	KANSAS
Location:	API # : 15-007-24407-0000 3040' FSL & 2380' FEL NW - SW - SW - NE	Other Services DIL/MEL SON/FF	
Permanent Datum	GROUND LEVEL	Elevation	1644
Log Measured From	KELLY BUSHING12' A.G.L.	K.B. 1656 D.F. 1654 G.L. 1644	
Drilling Measured From	KELLY BUSHING		
Date	3/13/22		
Run Number	ONE		
Depth Driller	4780		
Depth Logger	4774		
Bottom Logged Interval	4750		
Top Log Interval	2500		
Casing Driller	8 5/8"@355'		
Casing Logger	355		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 11,000 PPM	
Density / Viscosity	9.6/49		
pH / Fluid Loss	9.0/10.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.550@75F		
Rmf @ Meas. Temp	.413@75F		
Rmc @ Meas. Temp	.660@75F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.335@123F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	8:30 P.M.		
Maximum Recorded Temperature	123F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	AARON YOUNG	ANTHONY FARRAR	

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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.

15-007-24407-0000

Comments

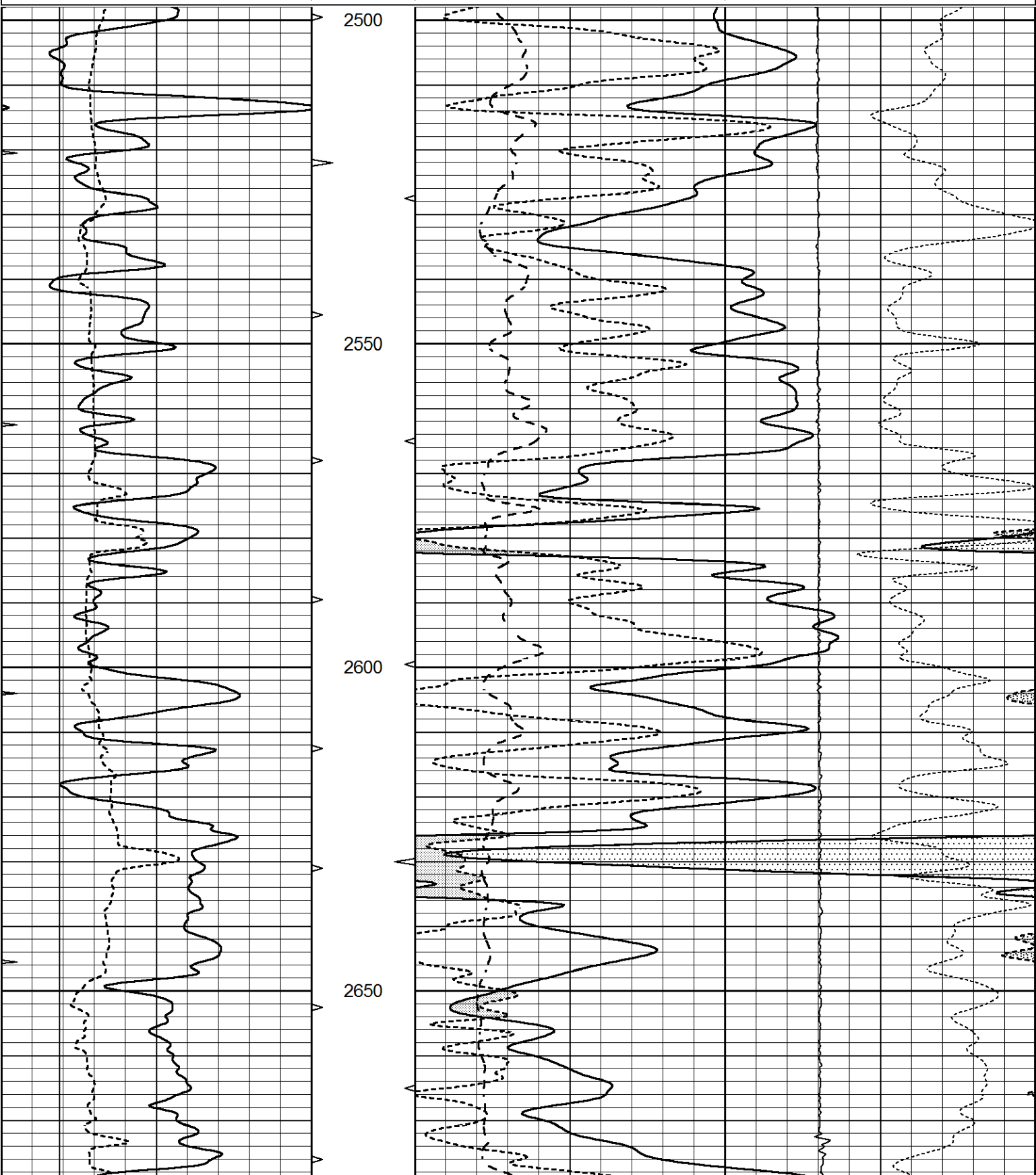
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
SAWYER, KS., S. ON HWY 281 TO "AMBER RD., 1E.

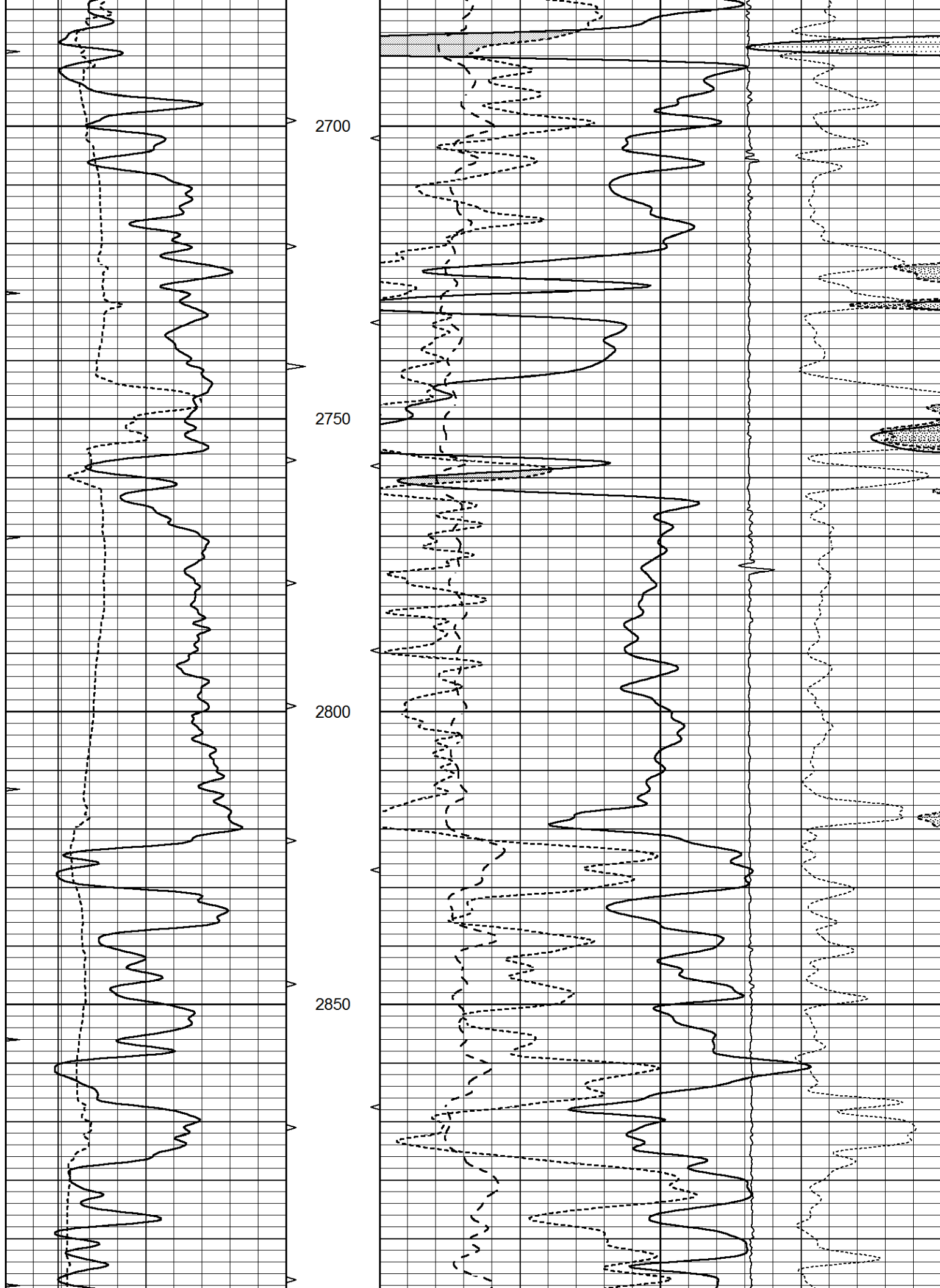


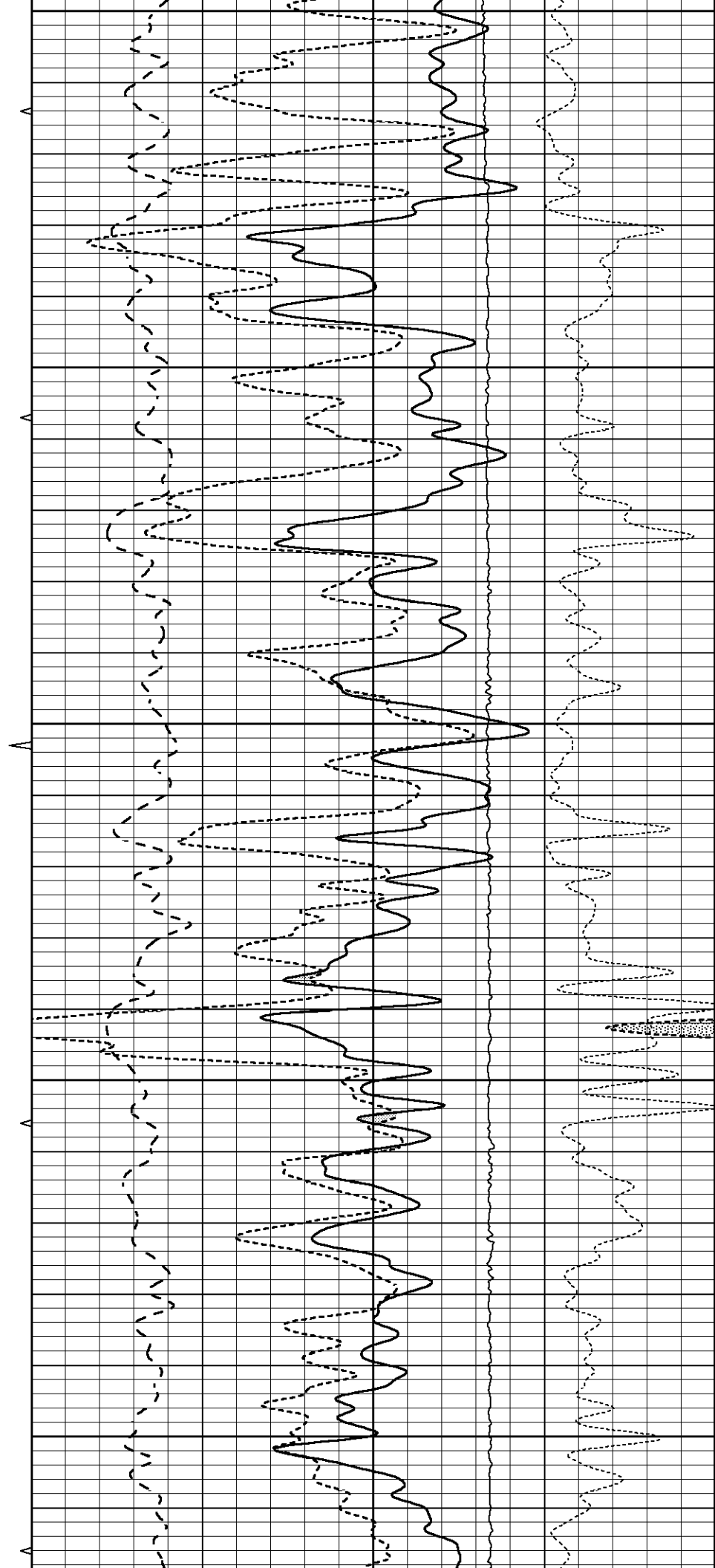
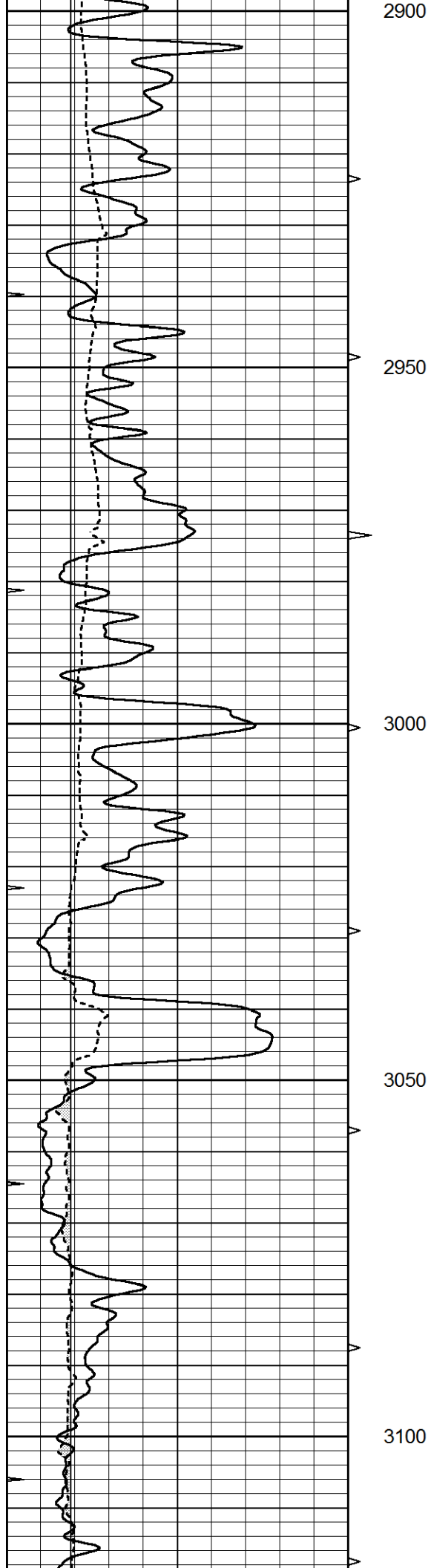
MAIN SECTION

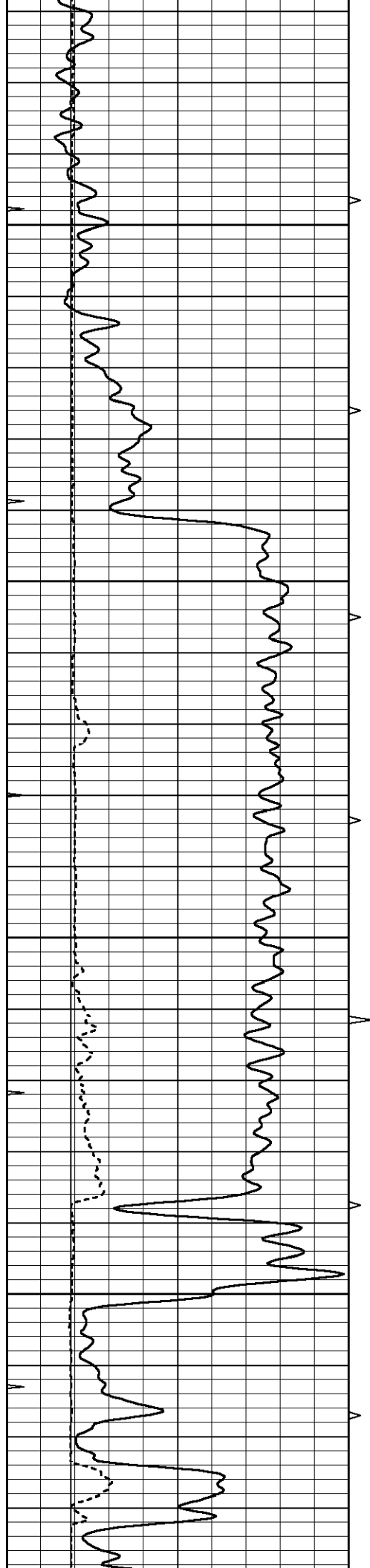
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Dataset Pathname	pass3.1M
Presentation Format	ldt_neu
Dataset Creation	Sun Mar 13 22:30:38 2022
Charted by	Depth in Feet scaled 1:240

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			0	LTEN (lb)	5000	







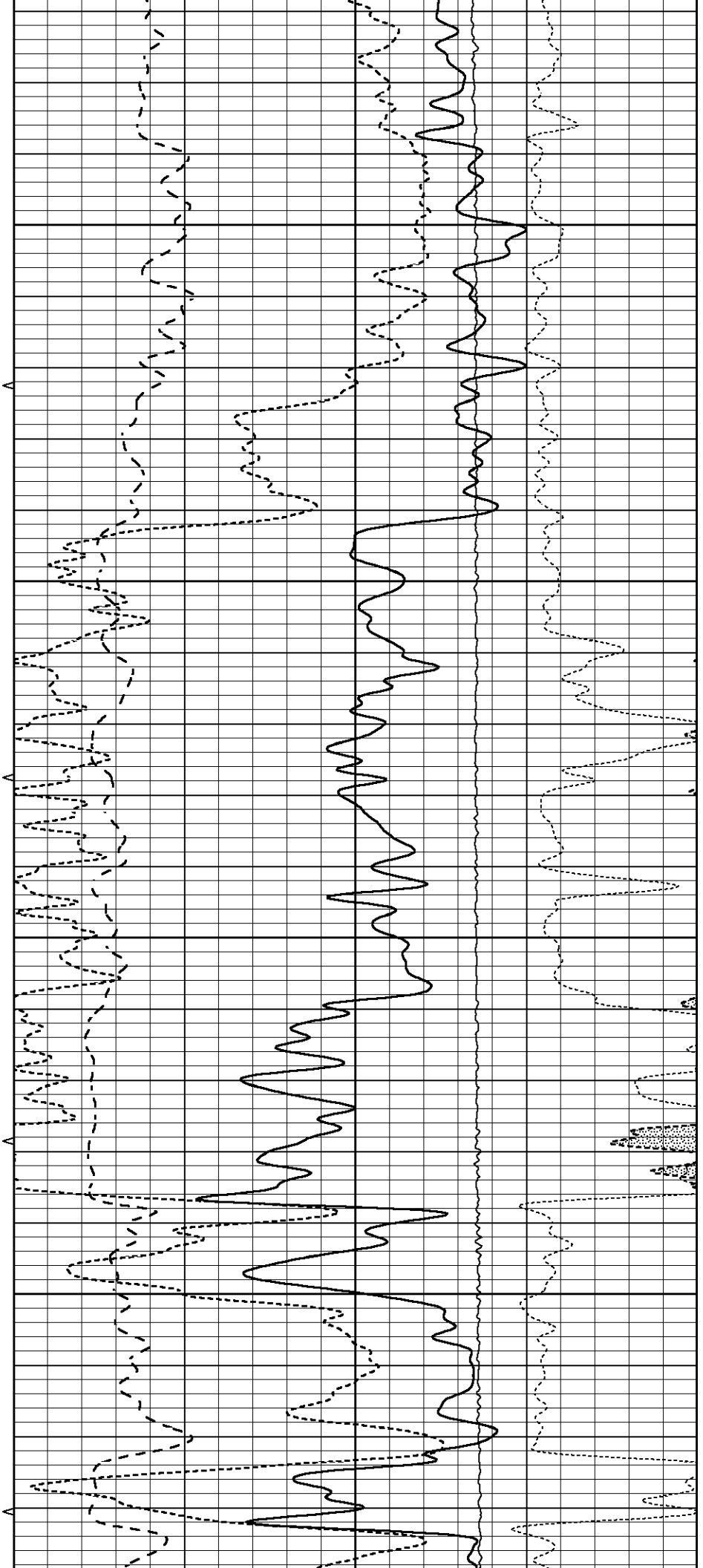


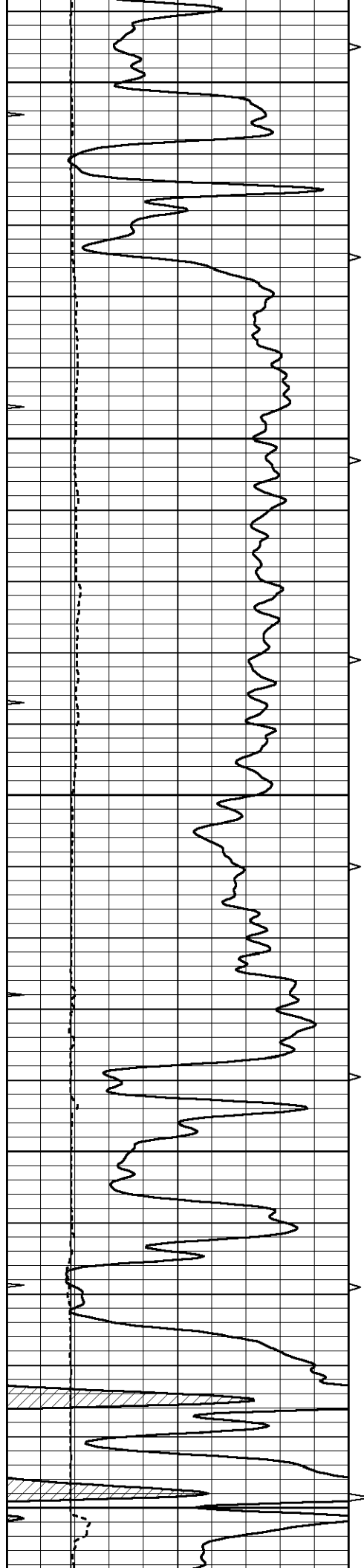
3150

3200

3250

3300





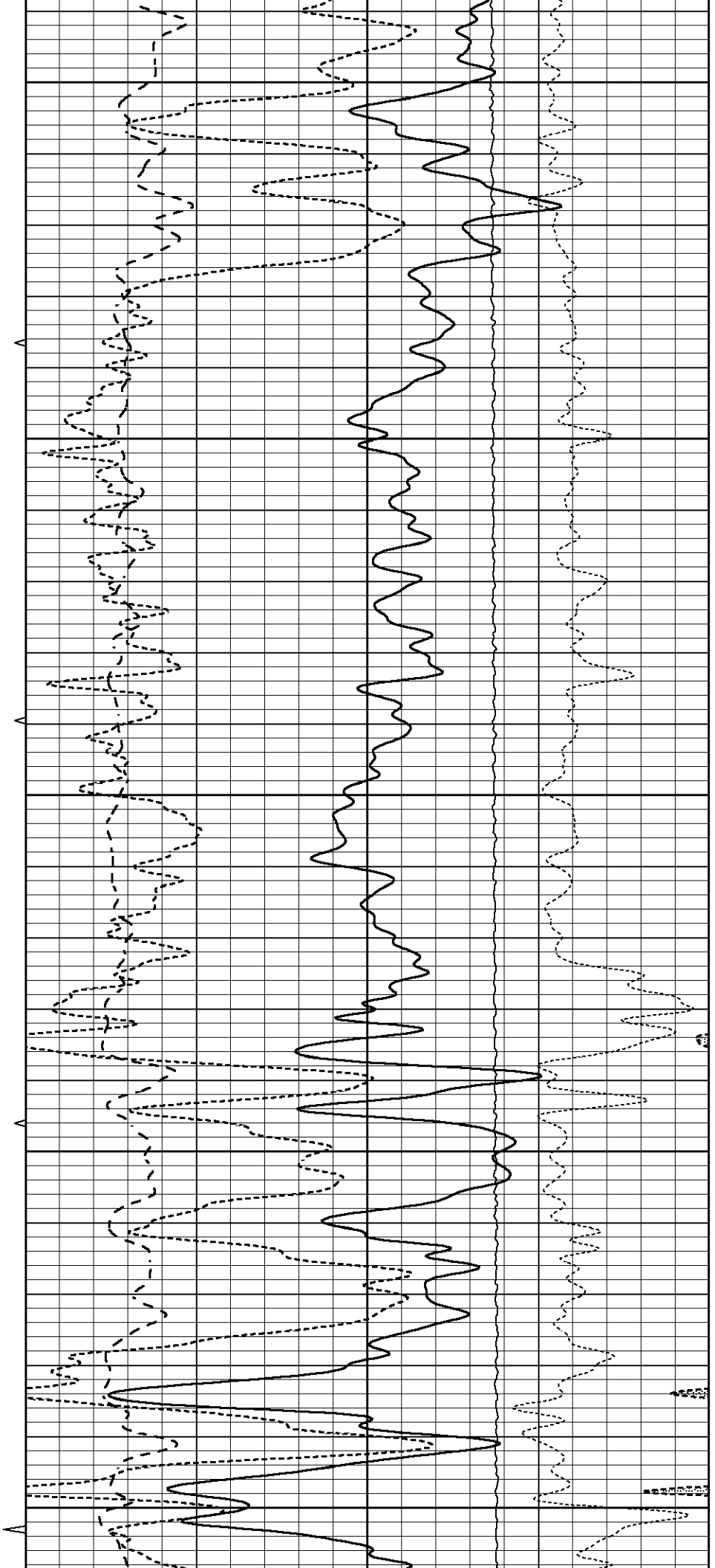
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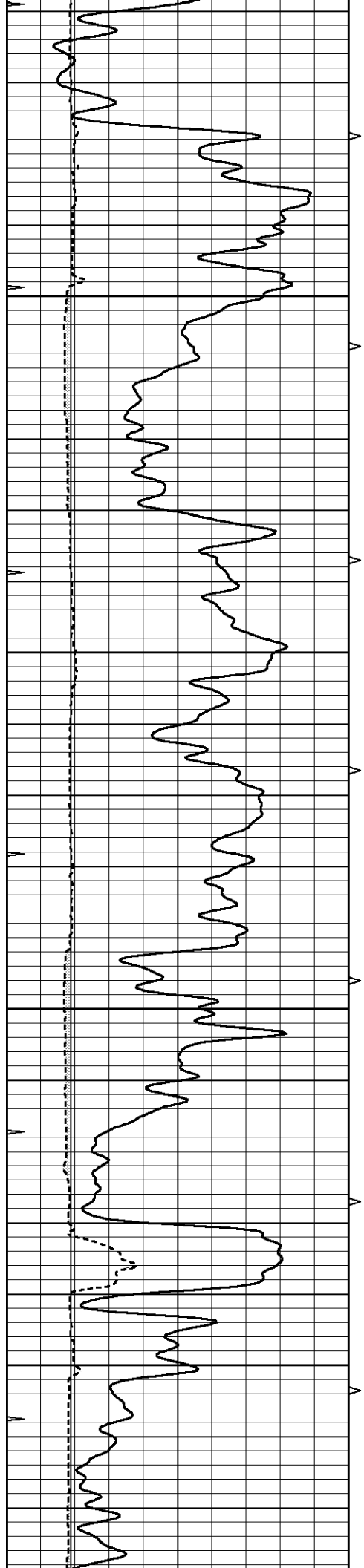
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3450

3500

3550



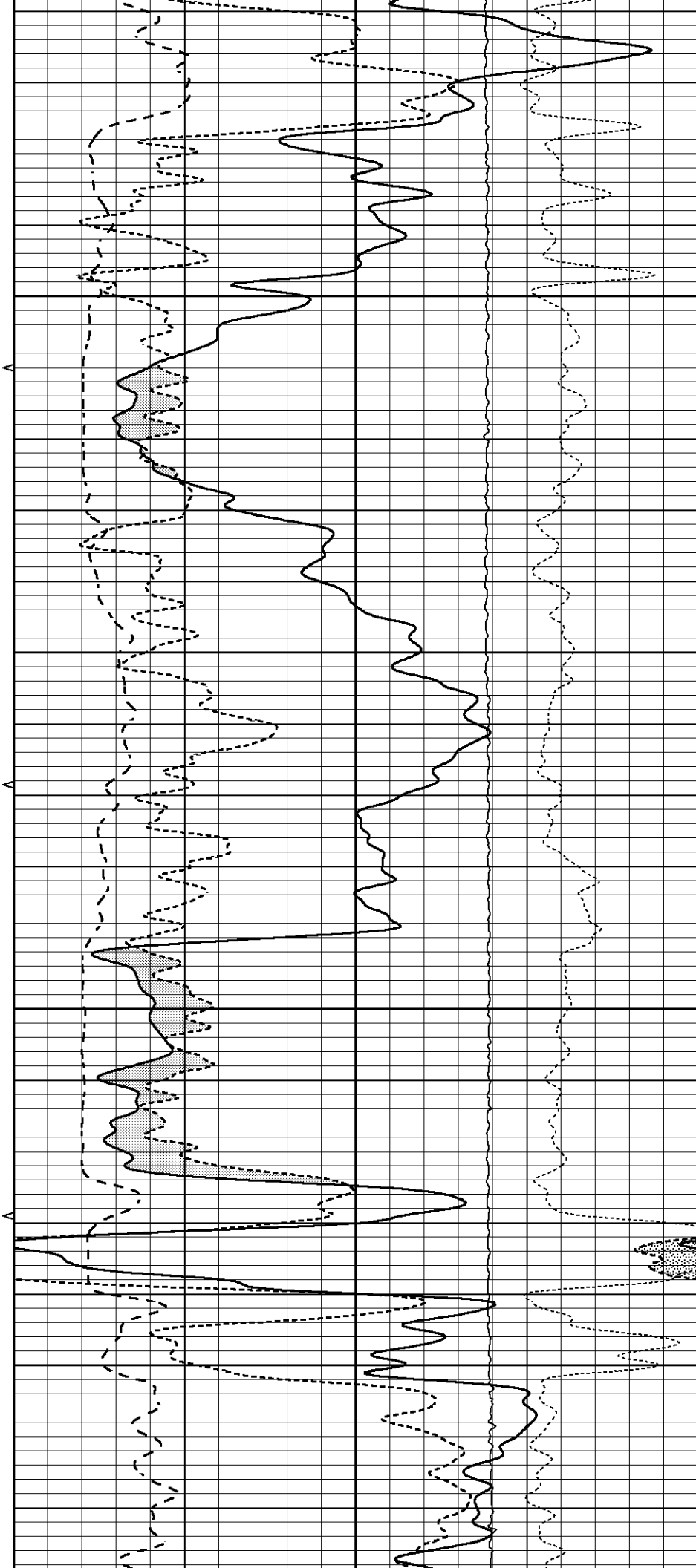


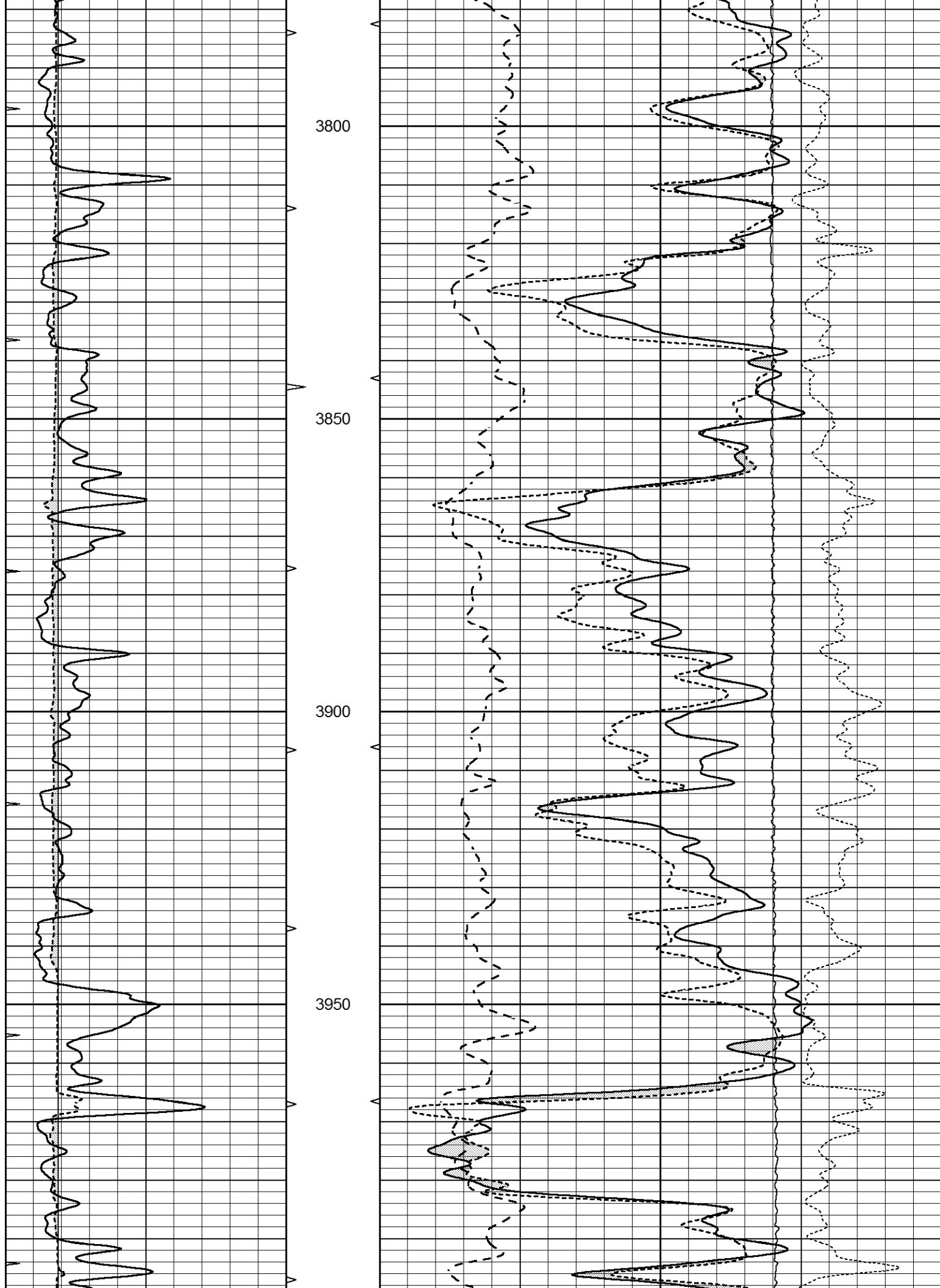
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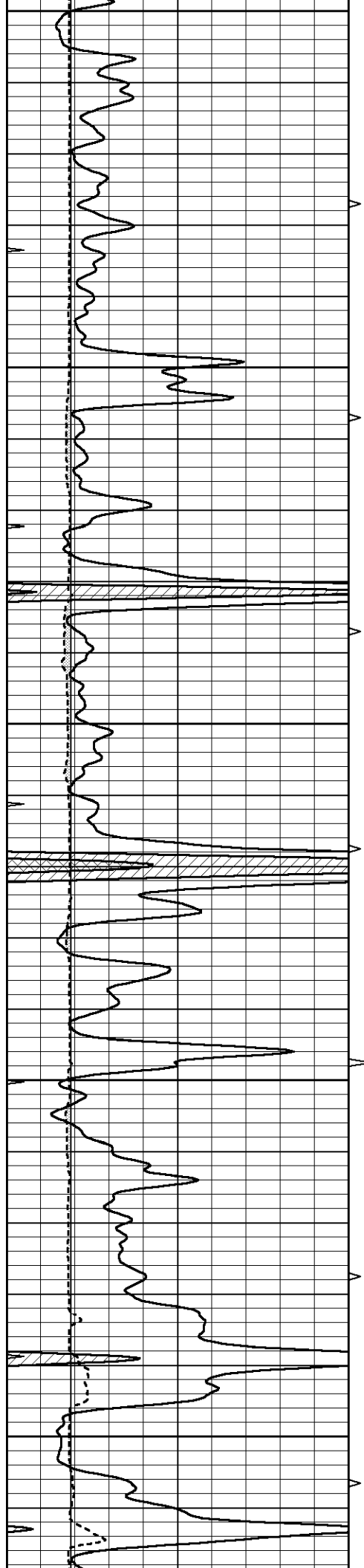
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3700

3750







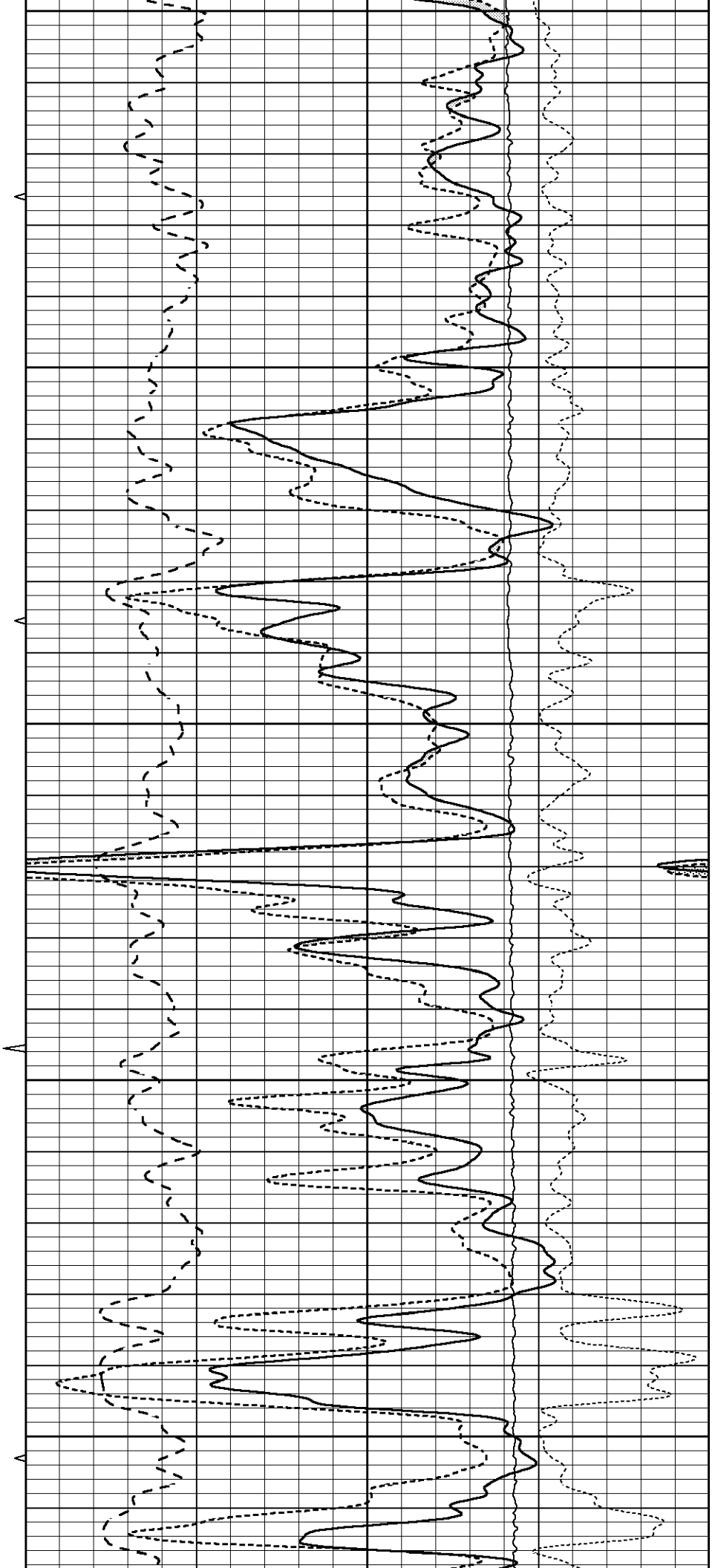
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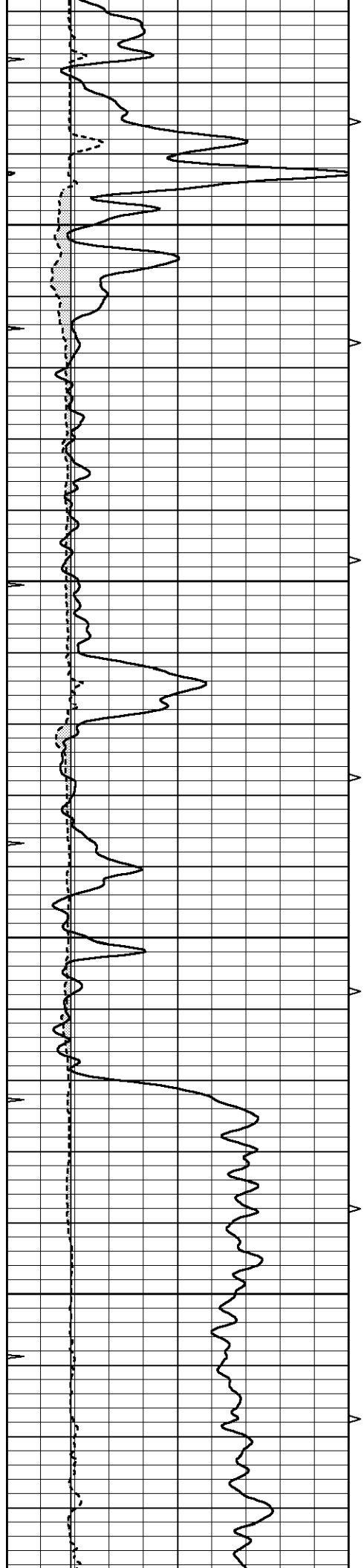
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4100

4150

4200



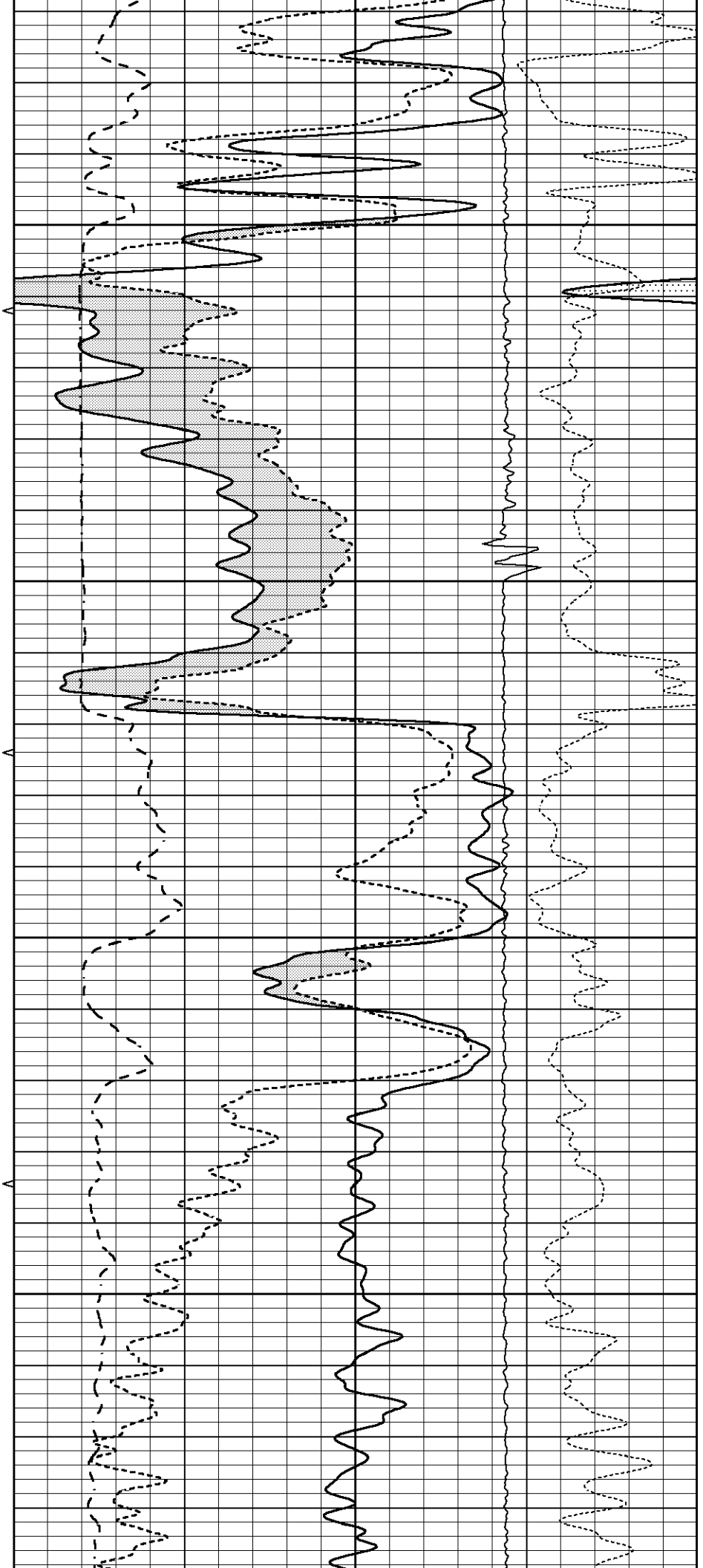


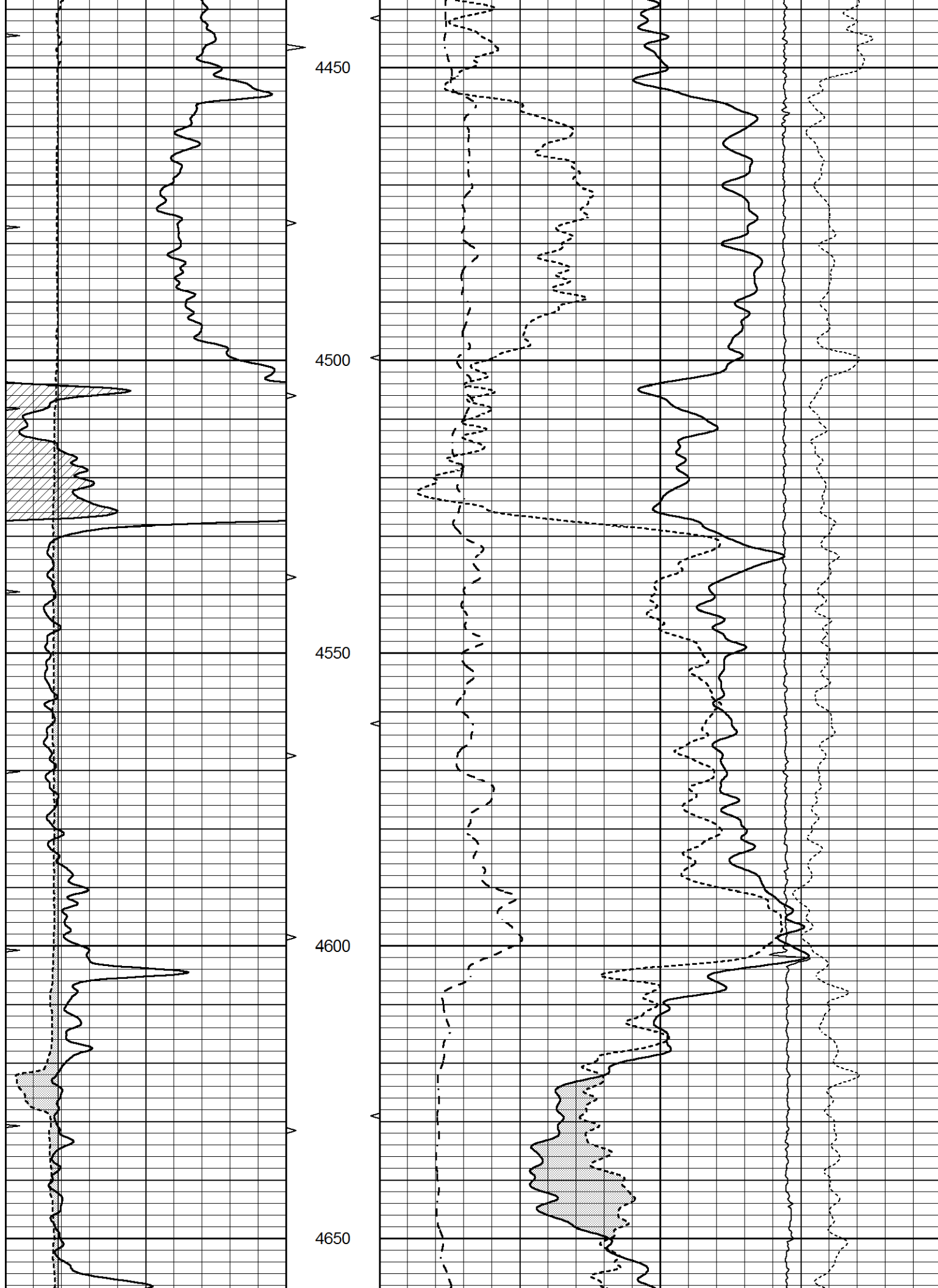
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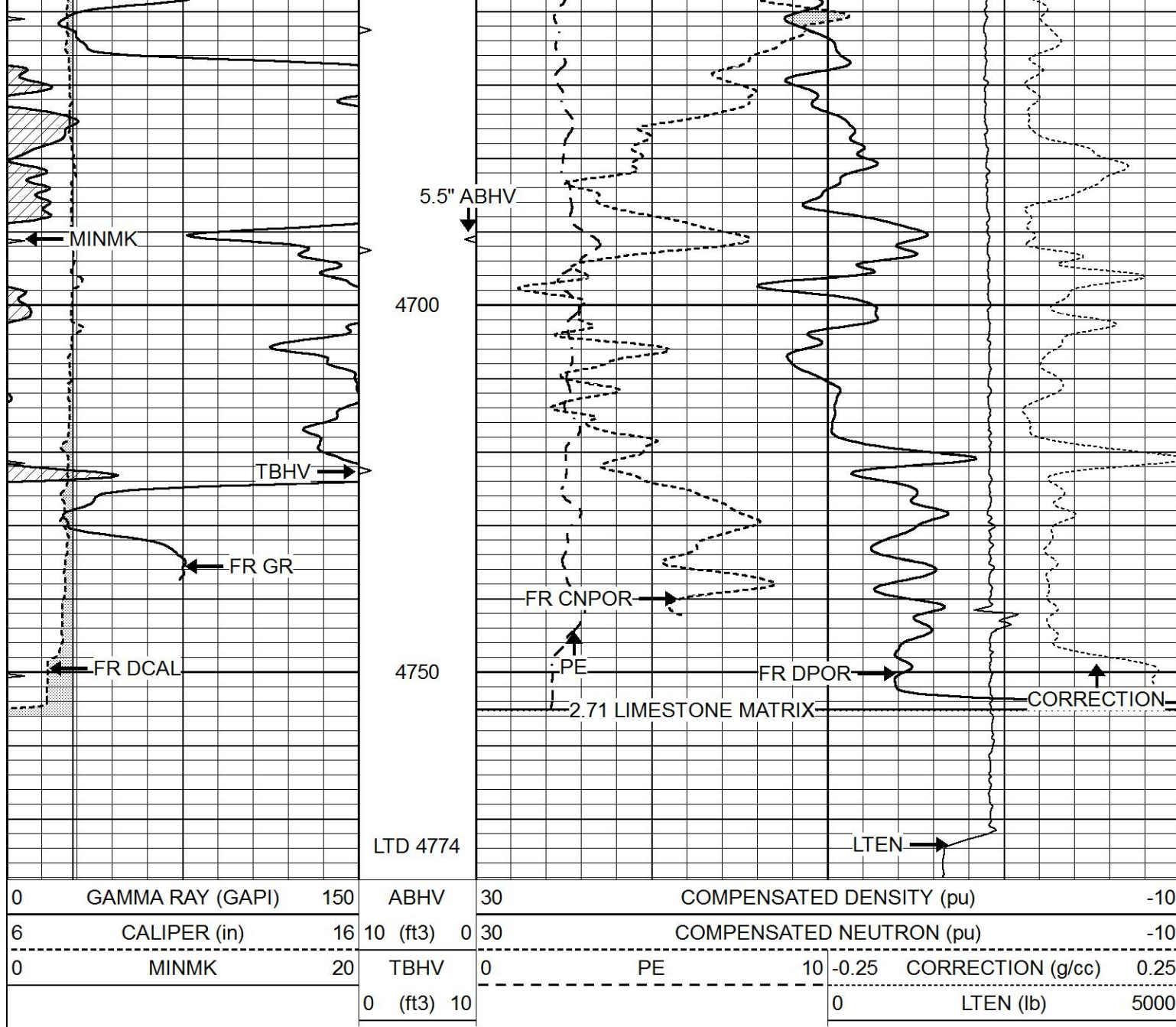
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4350

4400







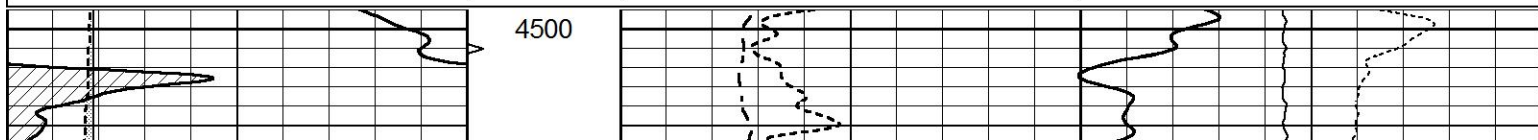
REPEAT SECTION

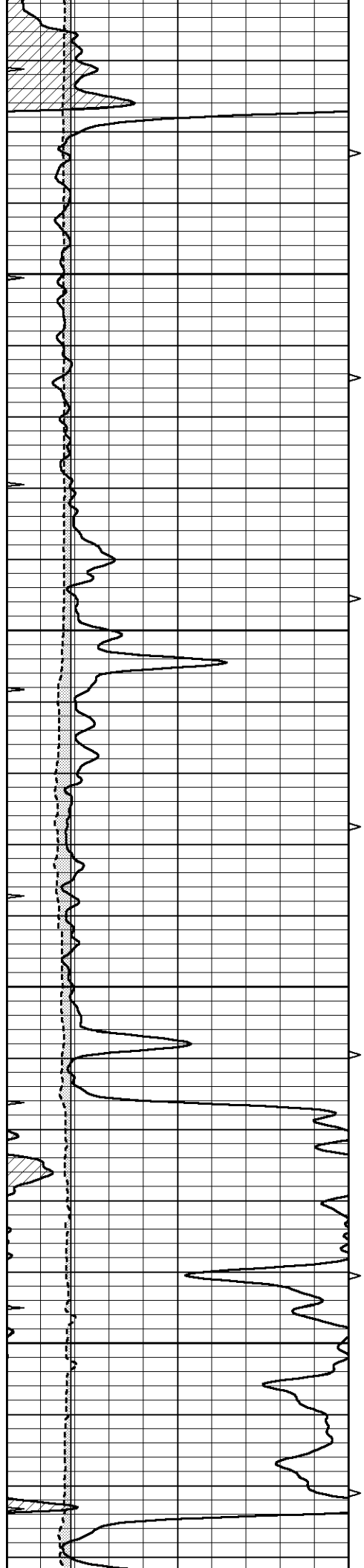
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 Dataset Pathname pass2.1R
 Presentation Format ldt_neu
 Dataset Creation Sun Mar 13 22:31:43 2022
 Charted by Depth in Feet scaled 1:240

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				0	LTEN (lb)	5000



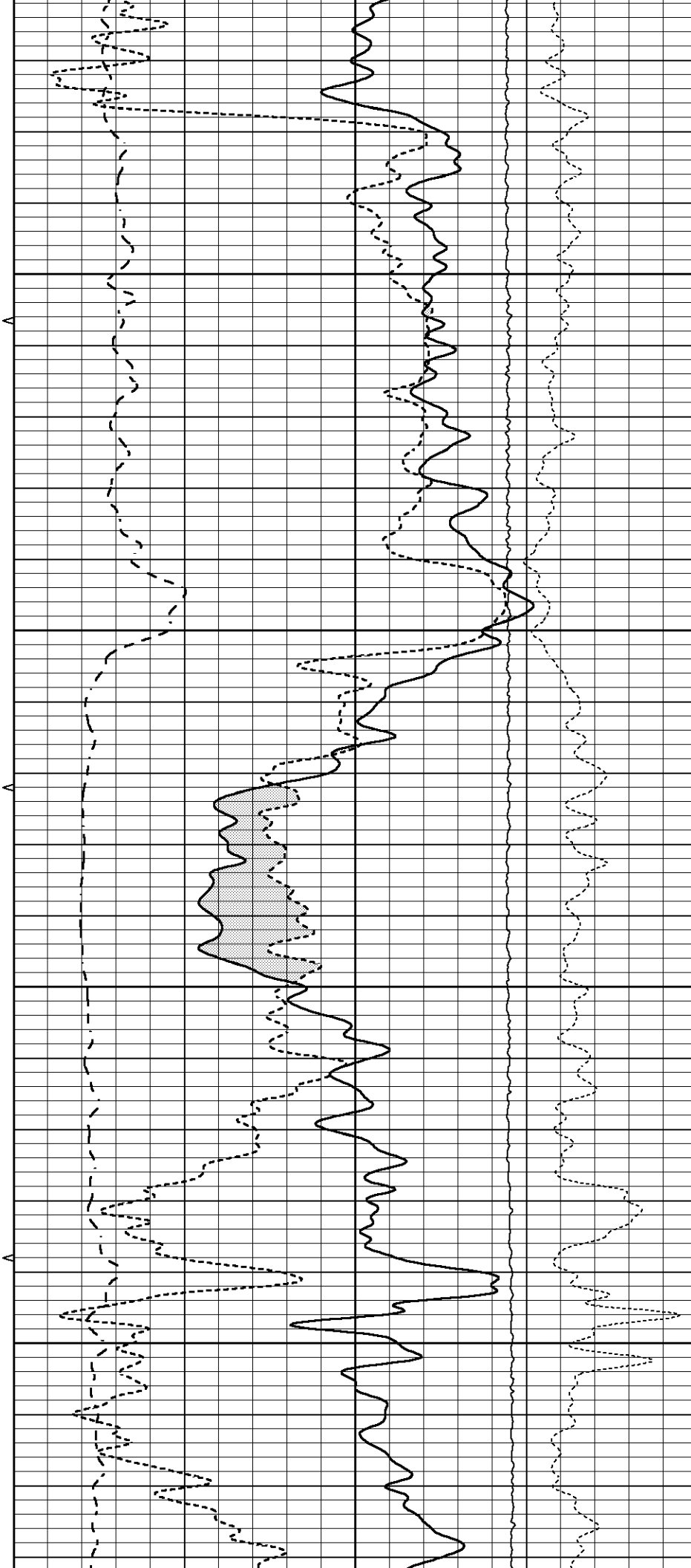


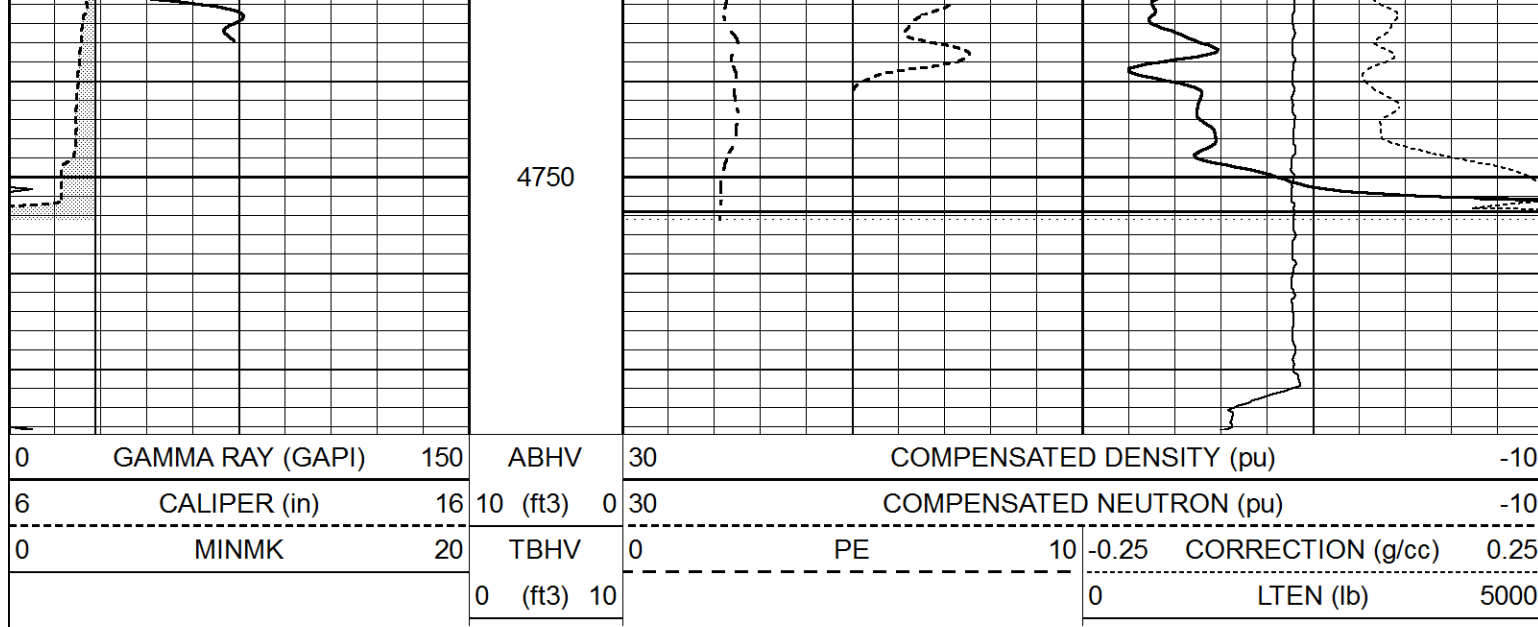
4550

4600

4650

4700





Calibration Report	
Database File	6363pe.db
Dataset Pathname	pass3.1M
Dataset Creation	Sun Mar 13 22:30:38 2022

Dual Induction Calibration Report

Serial-Model:	PROBE9-DILG
Surface Cal Performed:	Sun Mar 13 21:35:27 2022
Downhole Cal Performed:	Wed Mar 11 11:31:19 2020
After Survey Verification Performed:	Wed Mar 11 11:31:22 2020

Surface Calibration								
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	720.000	-15.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	720.000	-24.000
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: 001 Model: PRB

Master Calibration

Performed Mon May 11 11:33:29 2020

	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	1593.8	10211.9	3449.0	3132.1	cps
Window 2	1486.7	8824.2	3065.6	2829.4	cps
Window 3	1206.8	4705.7	1944.6	1871.7	cps
Window 4	361.0	367.9	364.8	363.1	cps
Long Space	0.0	7337.5	1578.9	1342.7	cps
Short Space	2.7	2543.4	1657.9	1382.7	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 44.4	Rib Slope	: 0.980	Density/Spine Ratio	: 0.552
Spine Angle	: 74.4	Spine Slope	: 3.590	Spine Intercept	: -19.2

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: 070808PMC
Tool Model: NABORS

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		

Short Space	cps		
Long Space	cps	pu	pu
Gamma Ray Calibration Report			
Serial Number:	070558		
Tool Model:	OPEN_GR		
Performed:	Wed Mar 02 14:49:46 2022		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2800	GAPI/cps	