



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY/NEUTRON
PE LOG**

Company	WHITE EXPLORATION, INC.	Company	WHITE EXPLORATION, INC.
Well	RALPH #1	Well	RALPH #1
Field		Field	
County	BARBER	County	BARBER
State	KANSAS	State	KANSAS
Location:	API # : 15-007-23993-0000	Other Services DIL/MEL SON	
	1853' FNL & 337' FWL		
	SEC 6 TWP 31S RGE 11W		
Permanent Datum	GROUND LEVEL	Elevation	1669
Log Measured From	KELLY BUSHING 10' A.G.L.	K.B. 1679	
Drilling Measured From	KELLY BUSHING	D.F. 1677	
		G.L. 1669	
Date	3/14/13		
Run Number	ONE		
Depth Driller	4778		
Depth Logger	4780		
Bottom Logged Interval	4756		
Top Log Interval	3000		
Casing Driller	8 5/8" @ 310'		
Casing Logger	310		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6000 PPM	
Density / Viscosity	9.4/58		
pH / Fluid Loss	9.5/10.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.60 @ 89F		
Rmt @ Meas. Temp	.45 @ 89F		
Rmc @ Meas. Temp	.72 @ 89F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.43 @ 123F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	123F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	DAVE GOLDAK		

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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 NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
SAWYER, KS. - S. TO 99 SPRINGS RD. (RESORT RD.) - E. ACROSS BRIDGE
TO GAILLARDIA RD. - 1 1/2 S. TO FORK - STAY RIGHT INTO

Database File:

010859pe.db

Dataset Pathname:

pass3.1

Presentation Format:

_ldt_neu

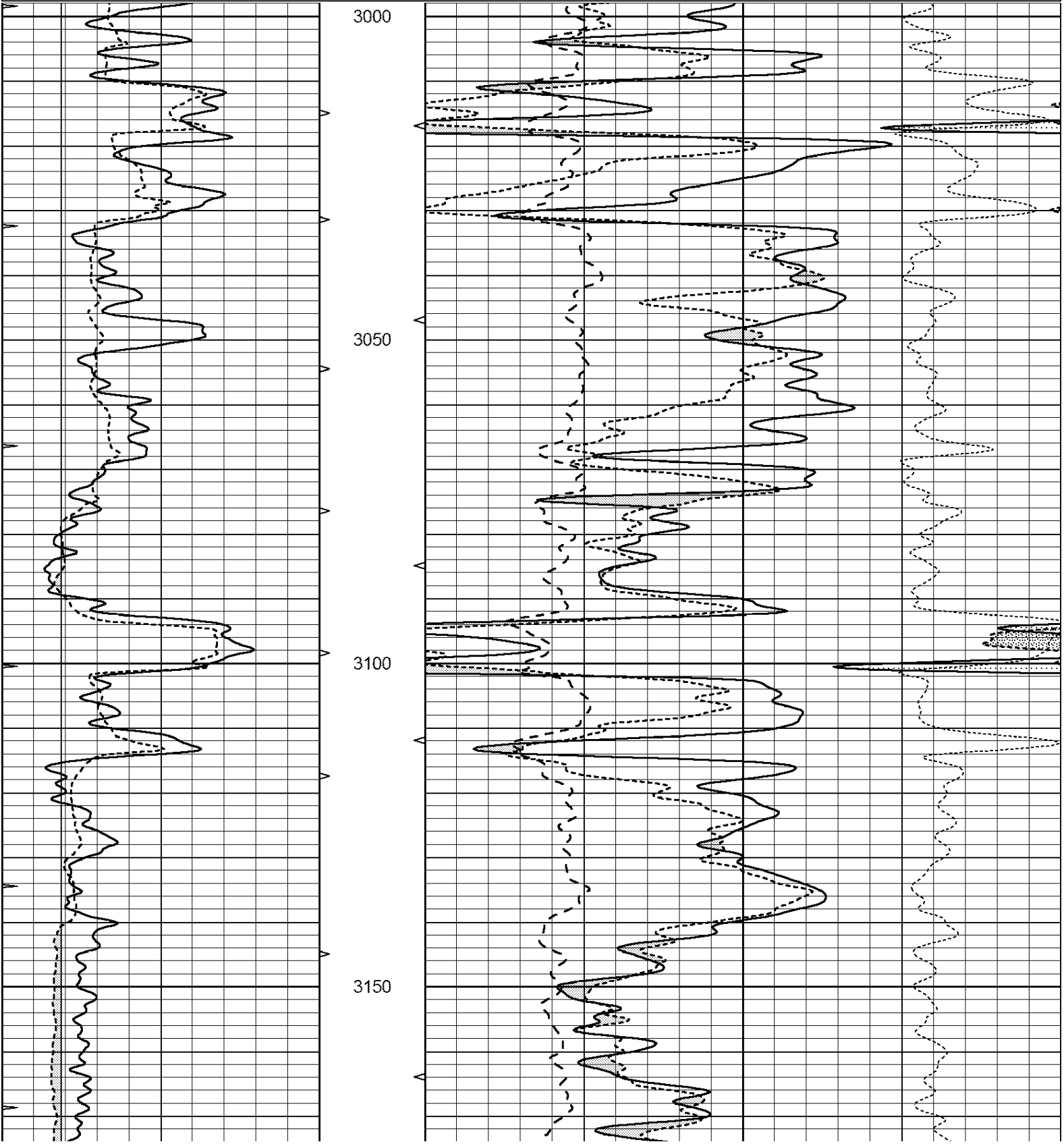
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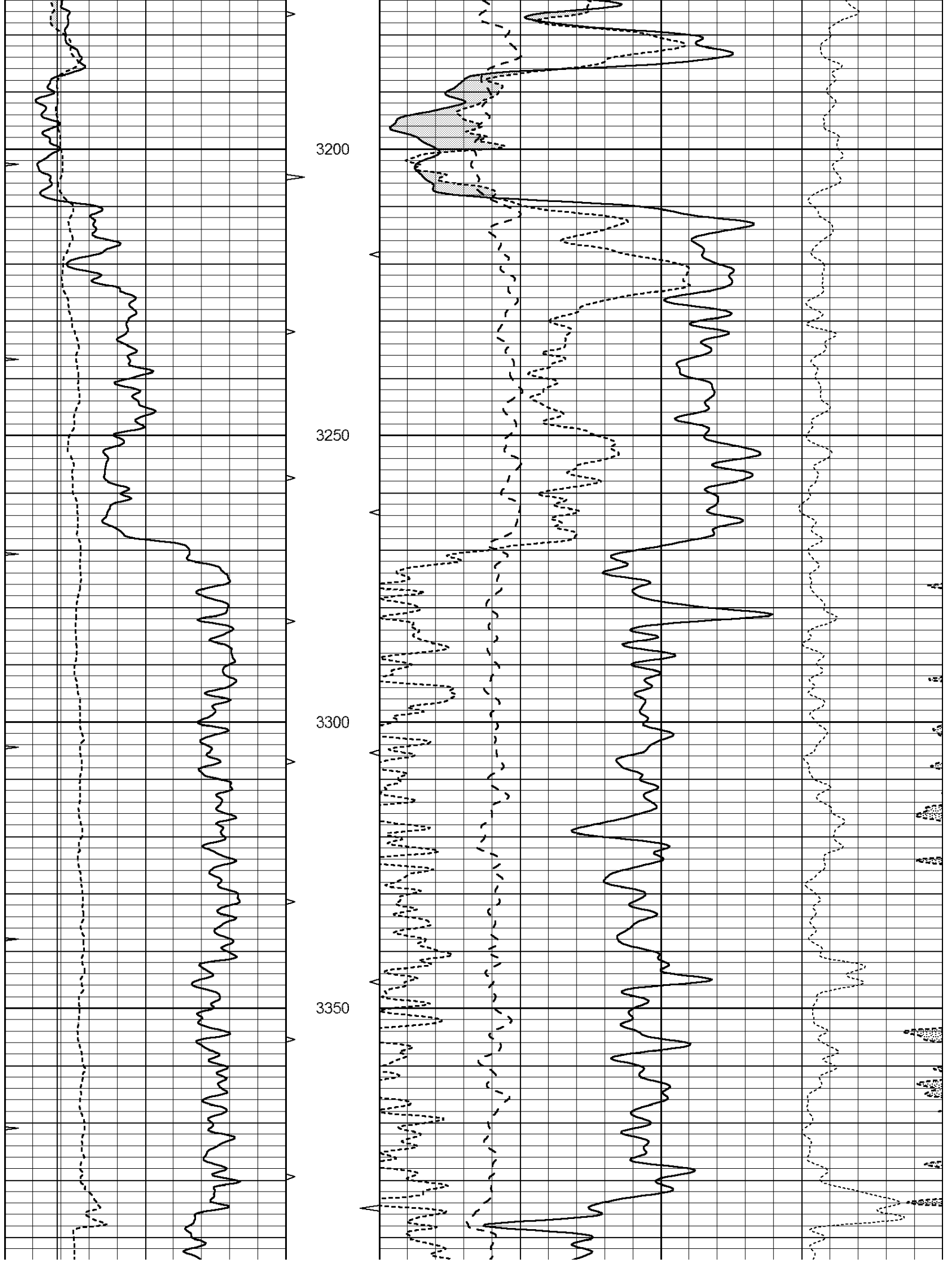
Thu Mar 14 15:39:11 2013 by Calc Open-Cased 090629

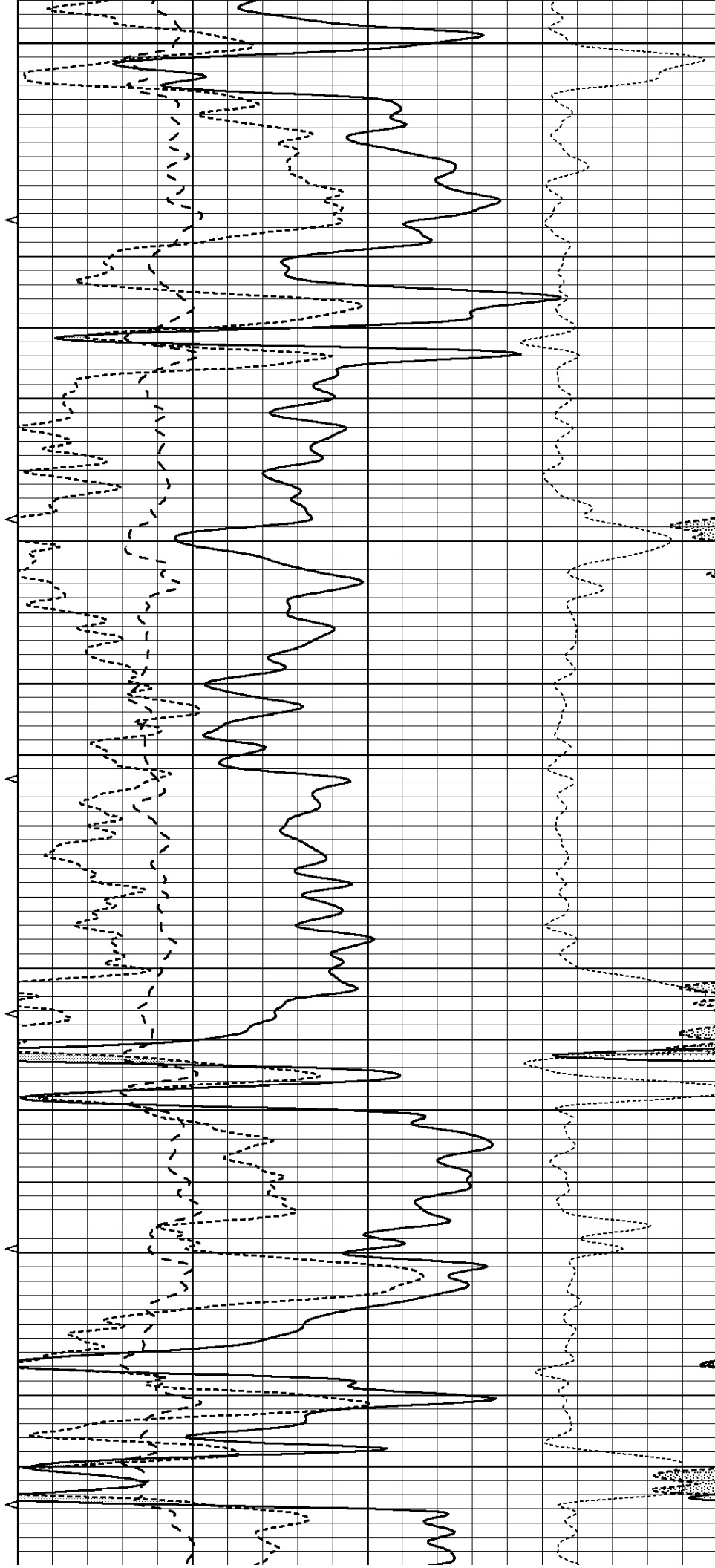
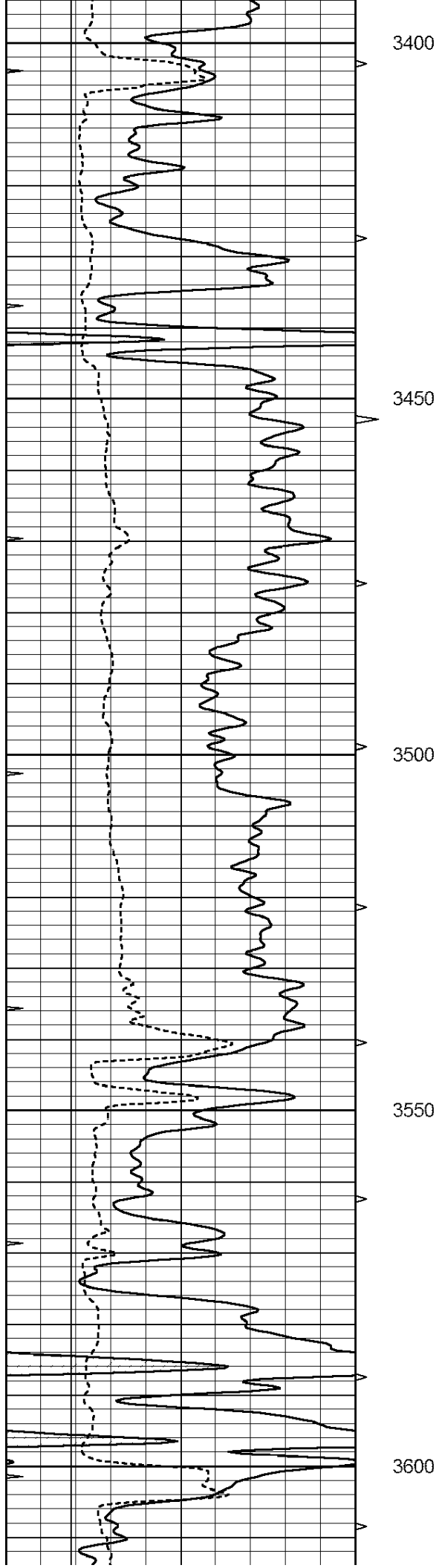
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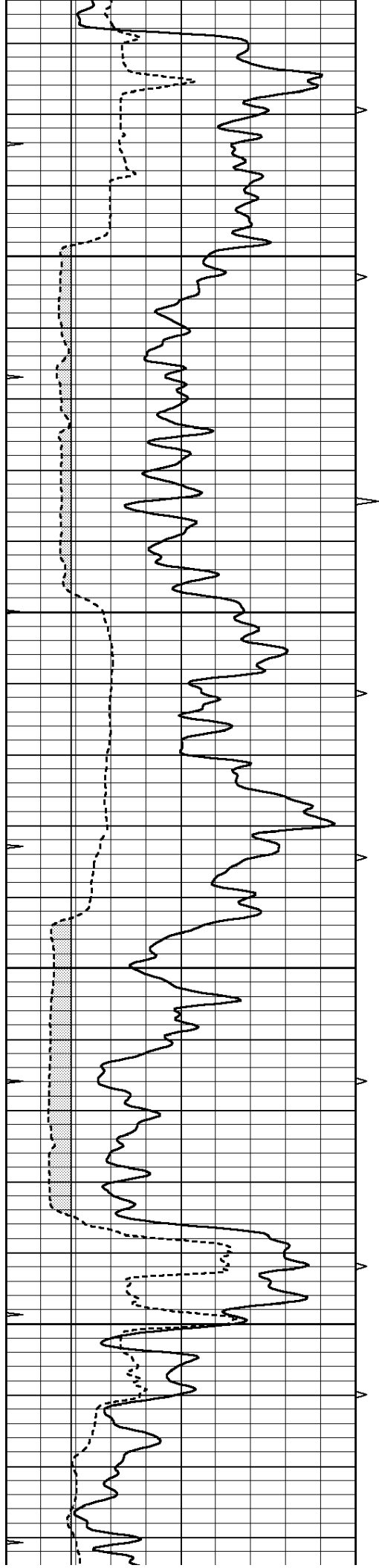
Depth in Feet scaled 1:240

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						







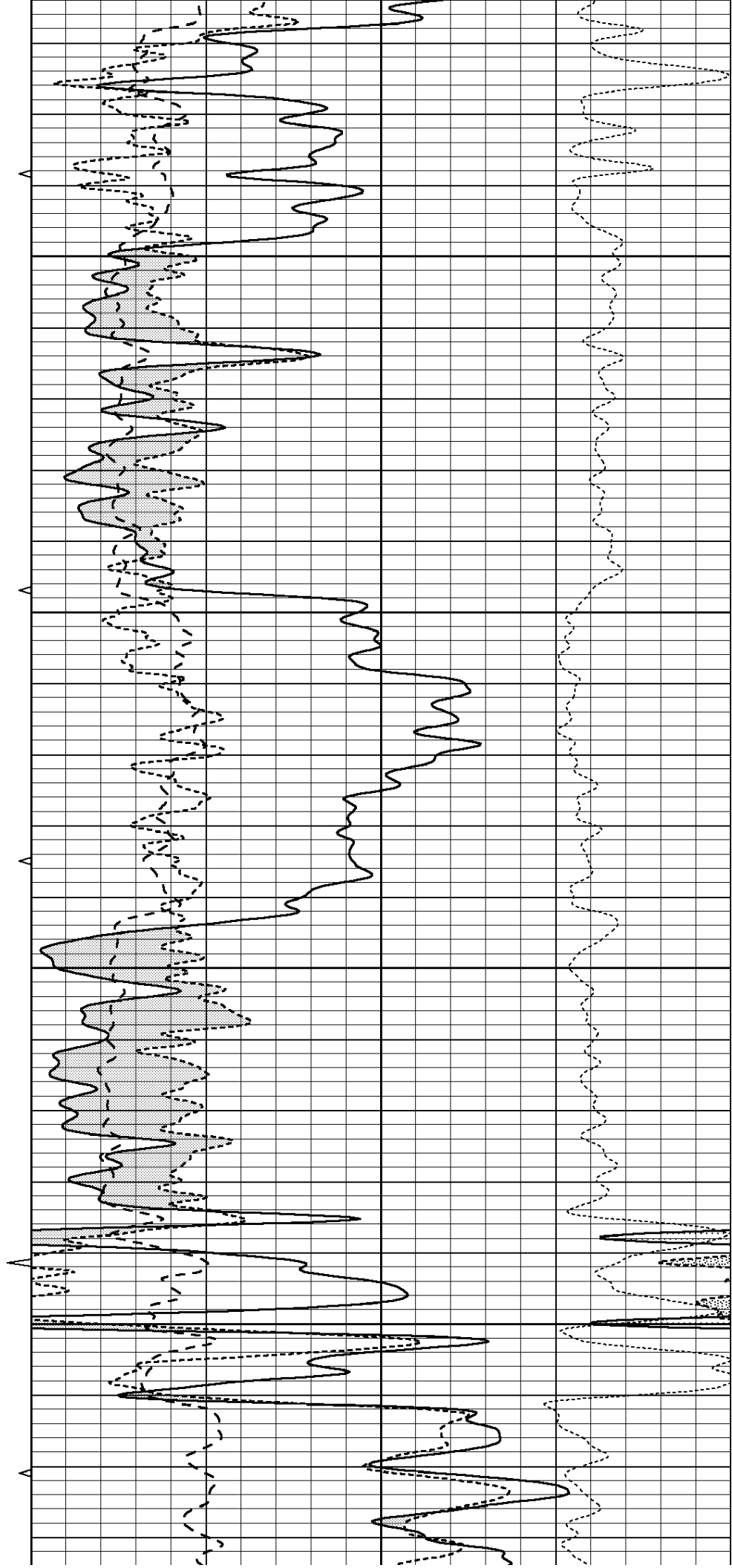


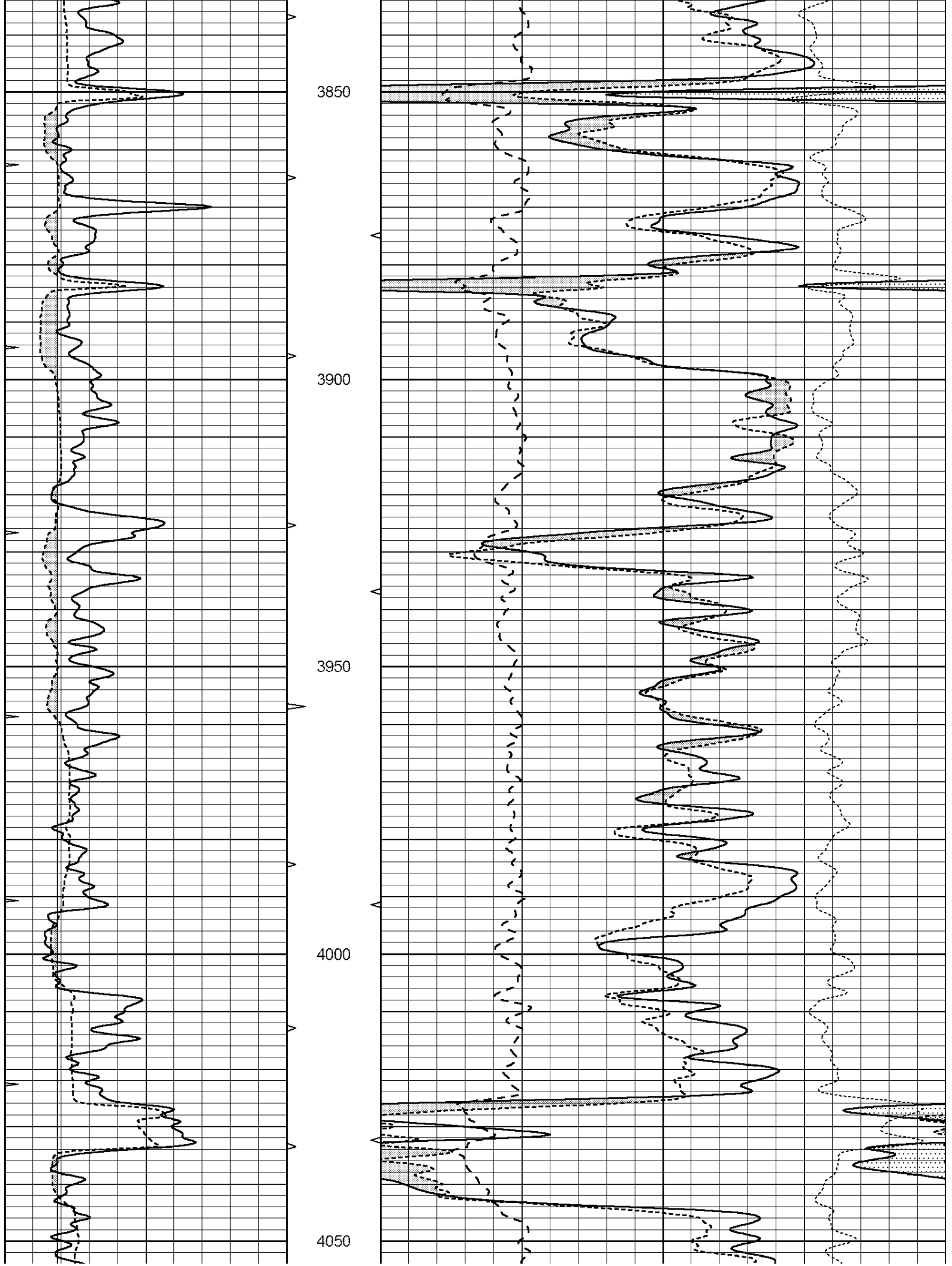
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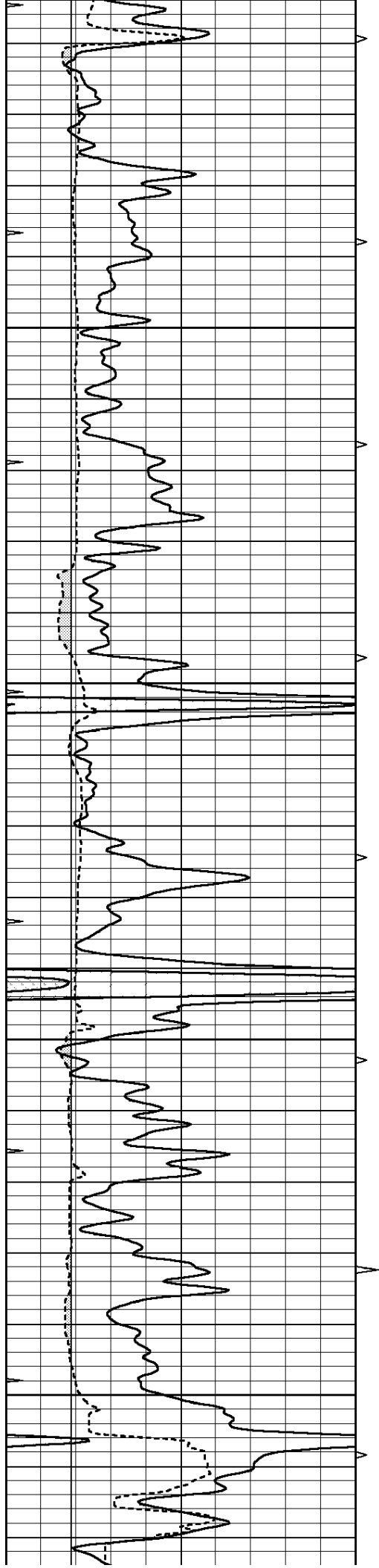
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3750

3800





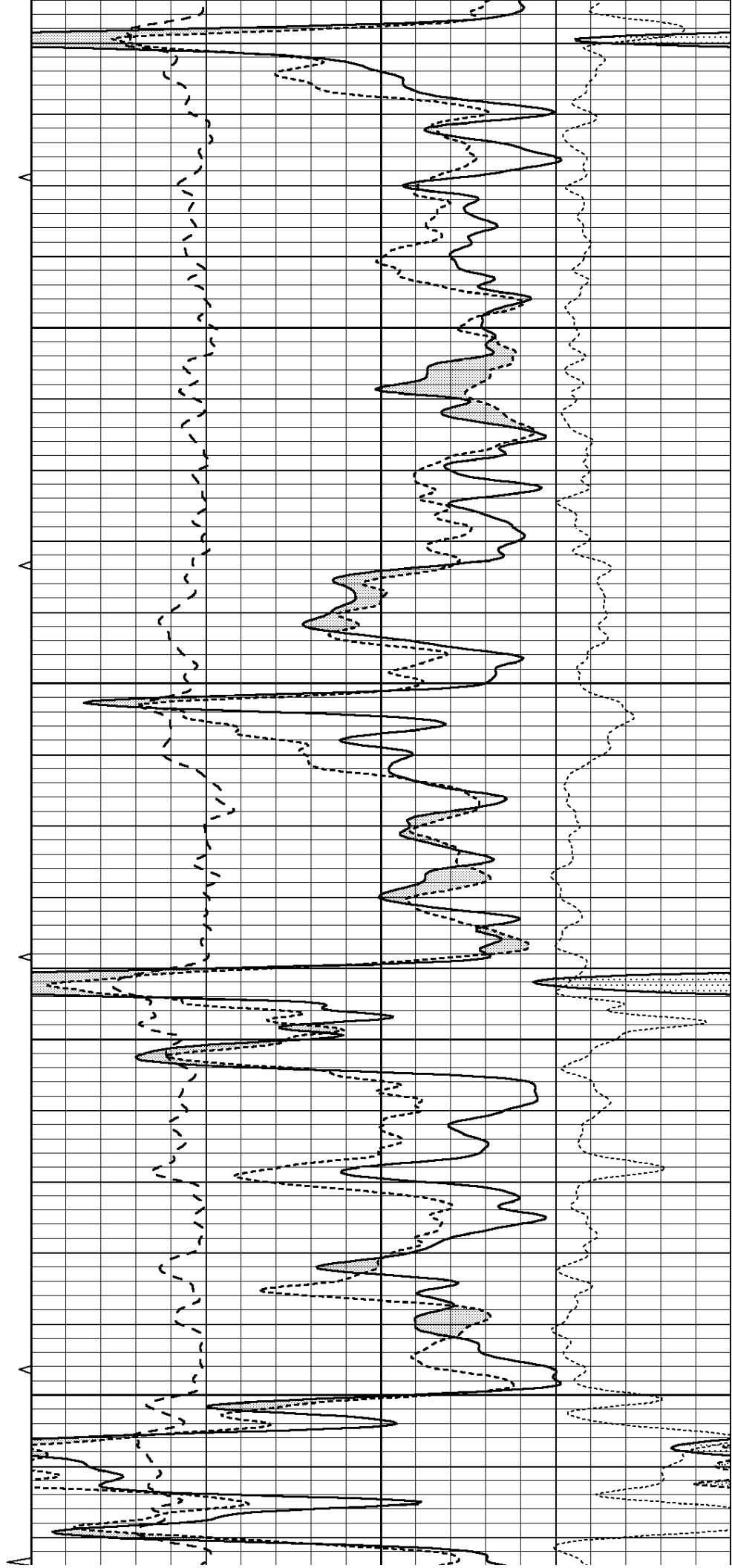


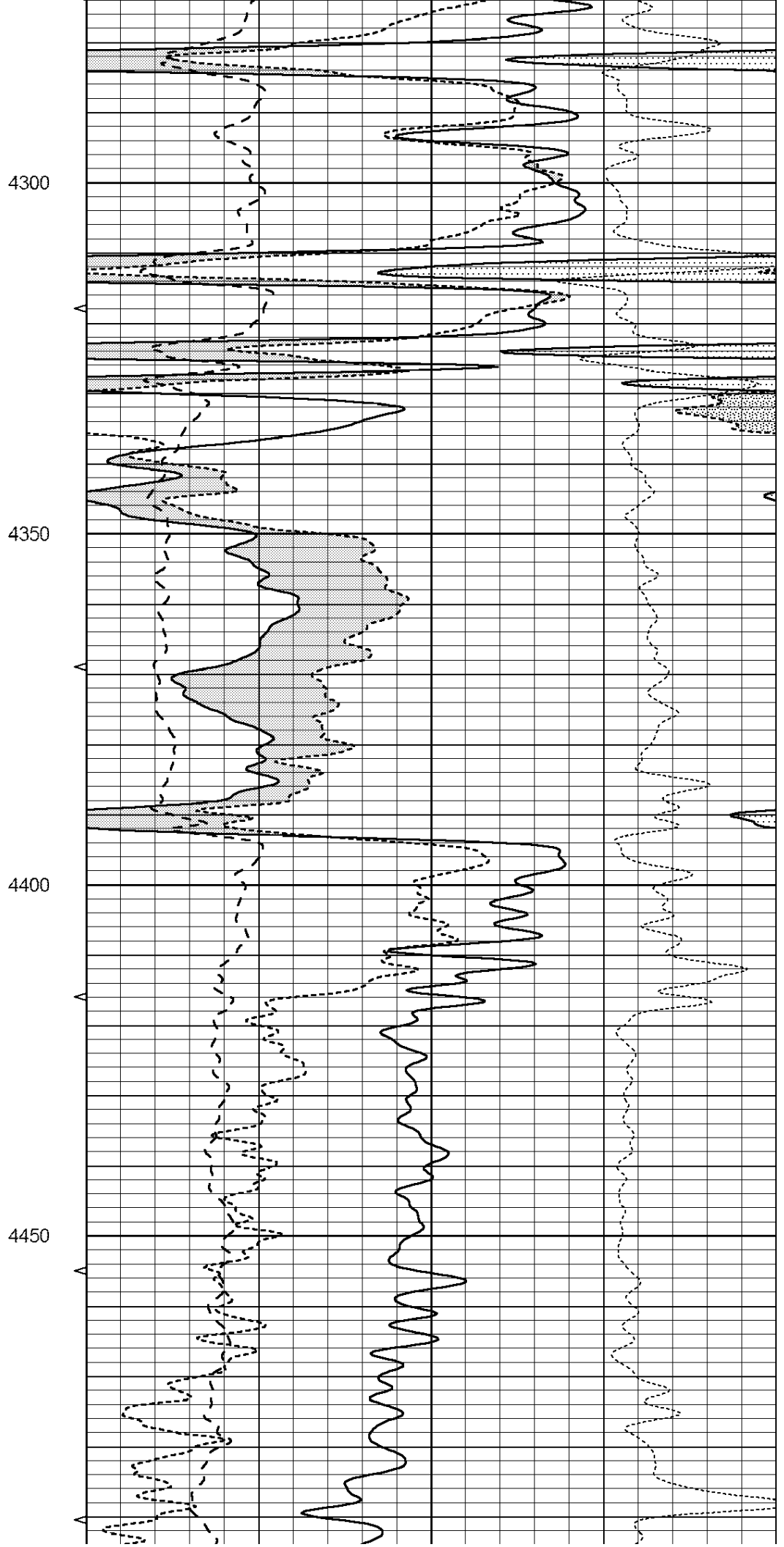
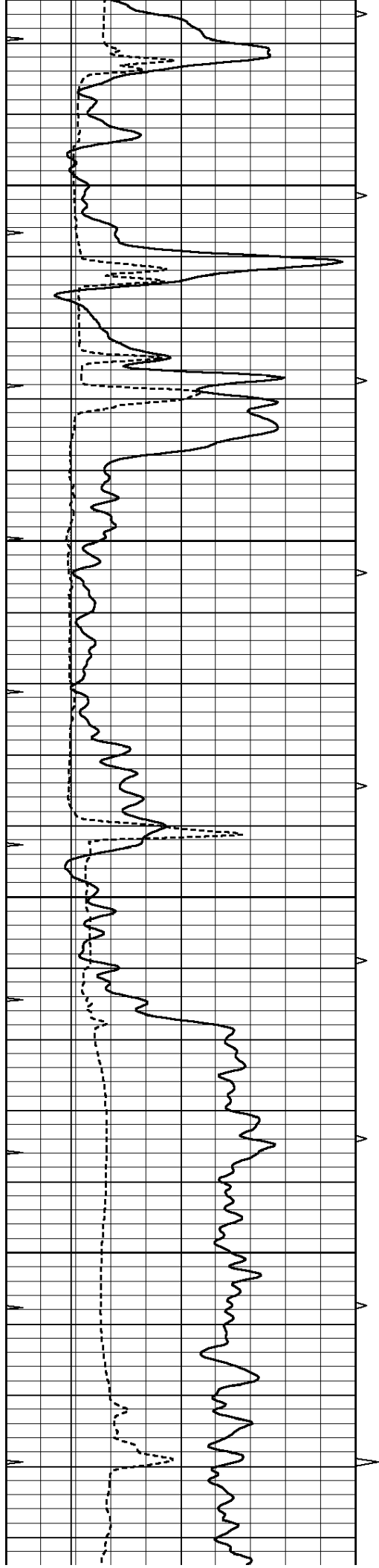
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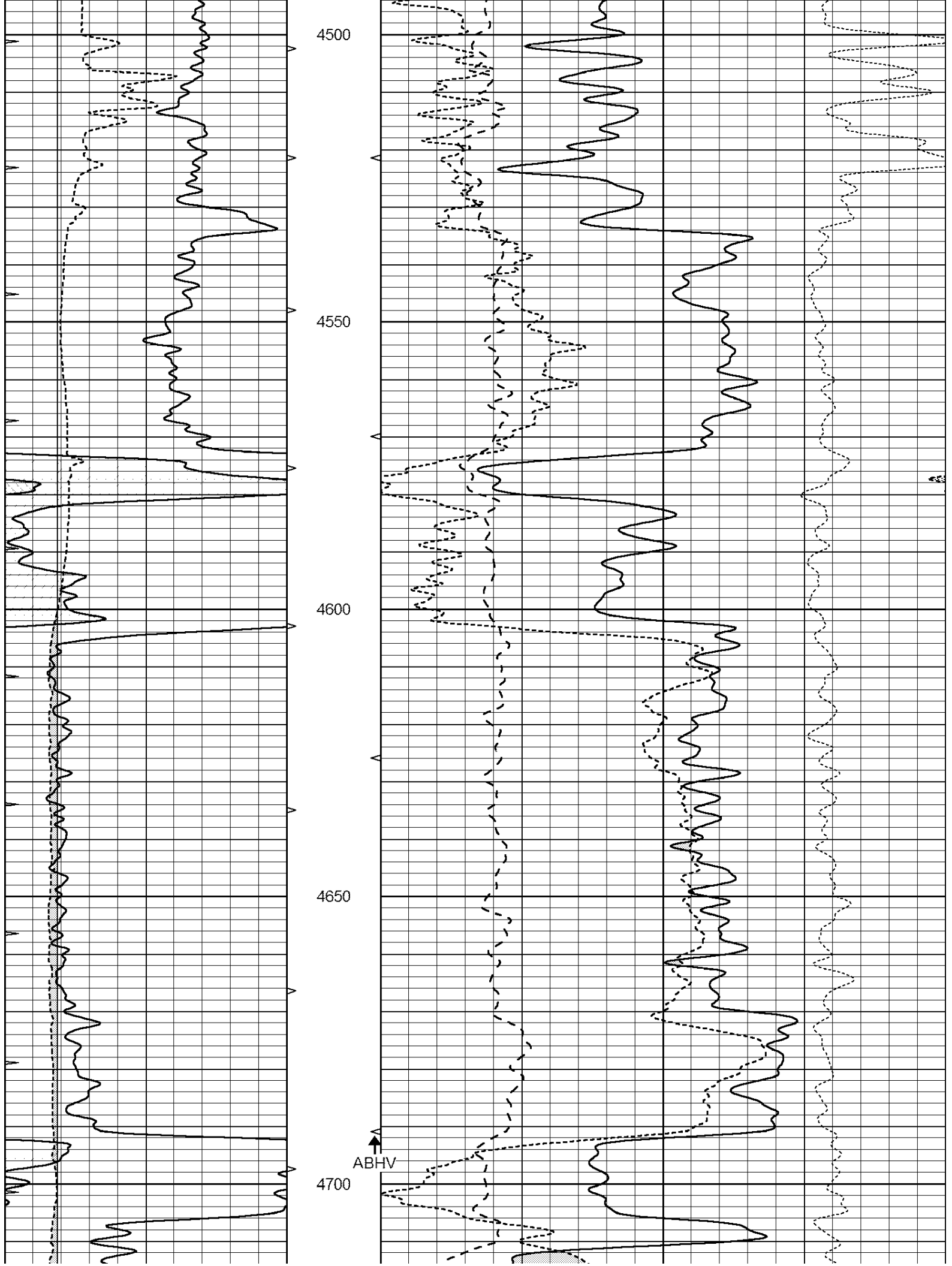
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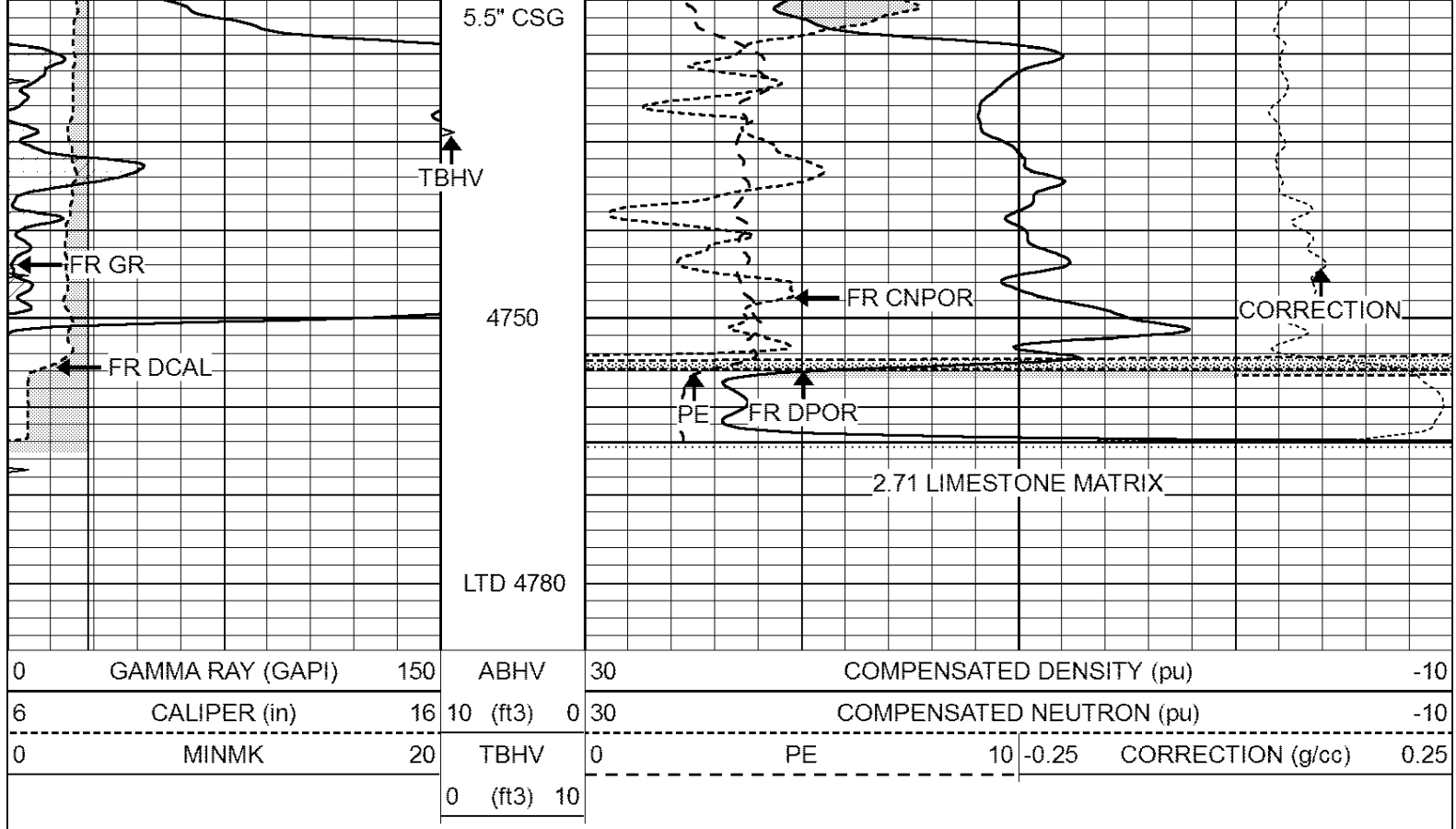
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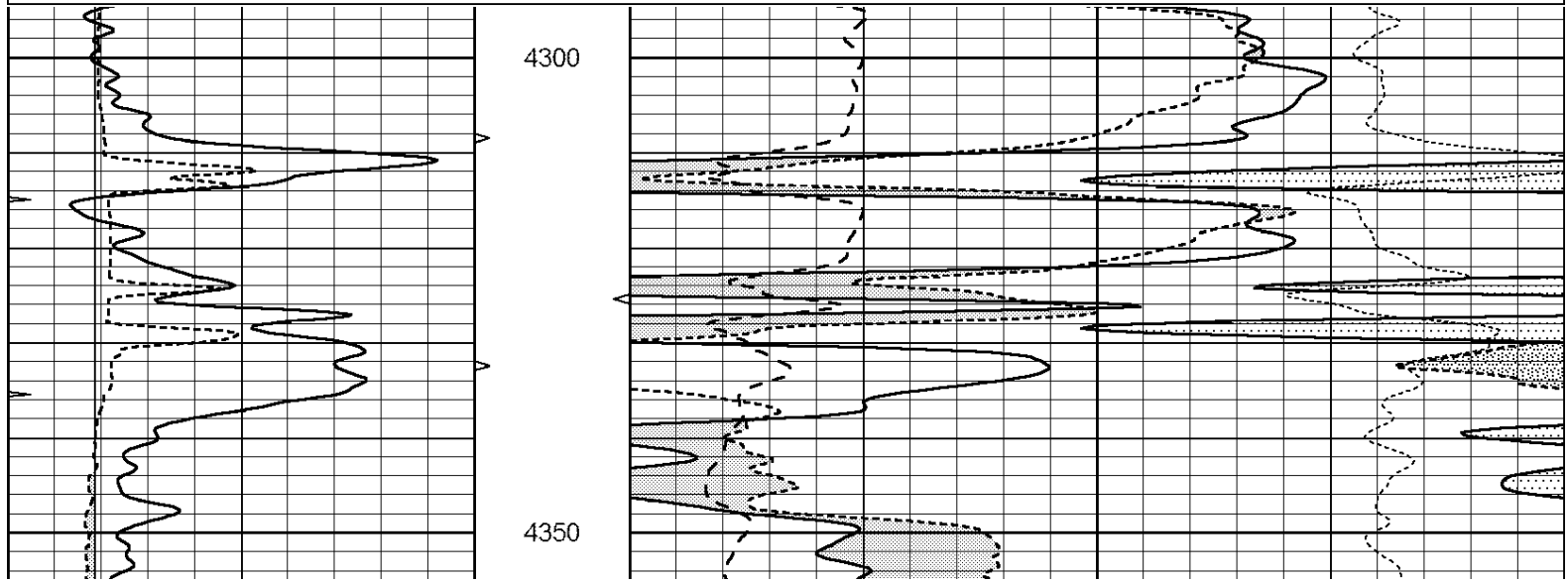


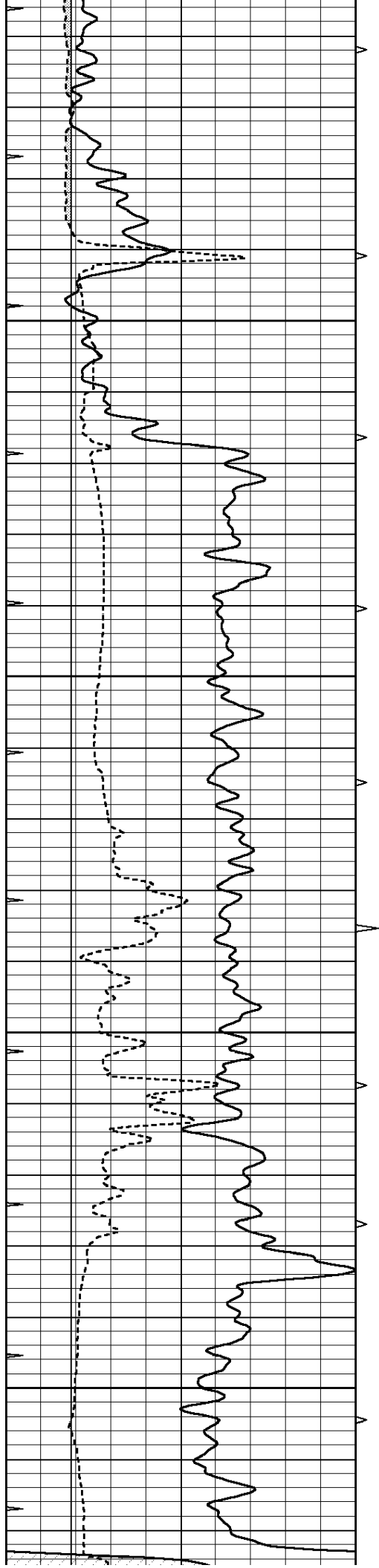


REPEAT SECTION

Database File: 010859pe.db
 Dataset Pathname: pass2.1
 Presentation Format: _ldt_neu
 Dataset Creation: Thu Mar 14 15:21:19 2013 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)	
0	MINMK	20	TBHV	0	10	-0.25	CORRECTION (g/cc)
			0 (ft3)	10			0.25



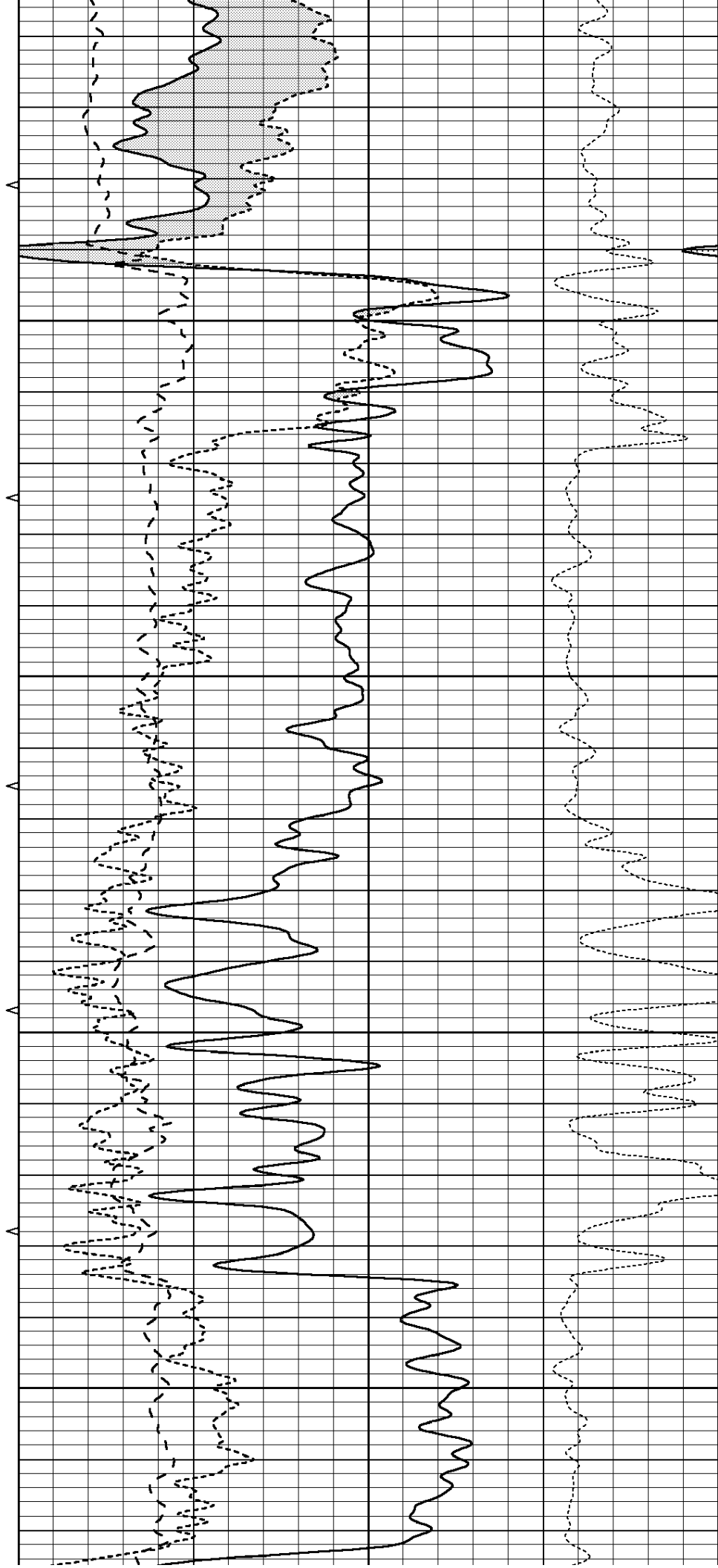


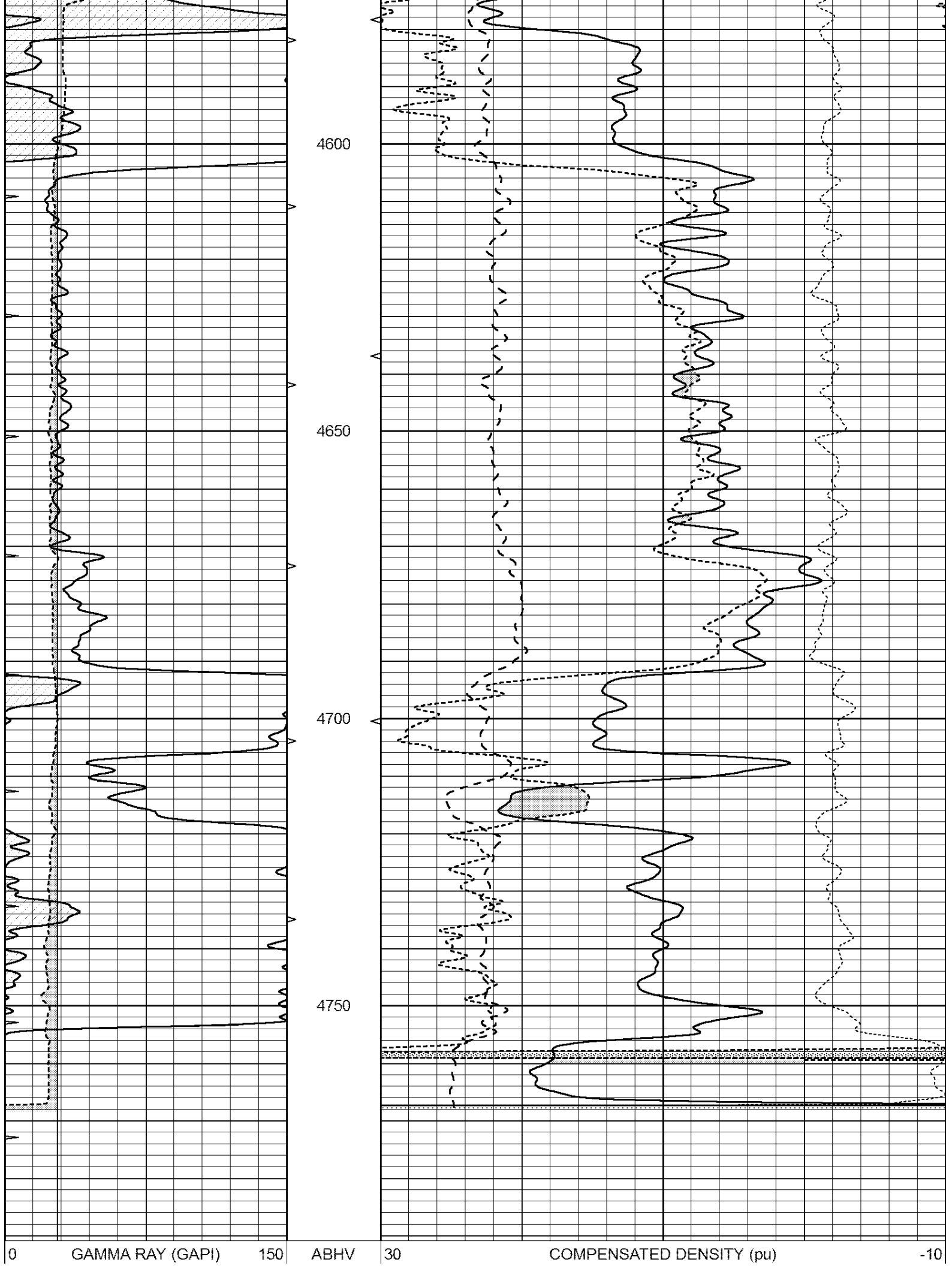
4400

4450

4500

4550





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:	010859pe.db								
Dataset Pathname:	pass2.1								
Dataset Creation:	Thu Mar 14 15:21:19 2013 by Calc Open-Cased 090629								

Dual Induction Calibration Report									
Serial-Model:					PROBE8-DILG				
Surface Cal Performed:					Fri Aug 01 06:33:19 2008				
Downhole Cal Performed:					Mon Jul 28 11:08:27 2008				
After Survey Verification Performed:					Mon Jul 28 11:08:27 2008				

Surface Calibration									
			Readings		References			Results	
Loop:	Air	Loop			Air	Loop		m	b
Deep	0.015	0.648	V		0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V		0.000	464.000	mmho/m	605.049	-17.680
Internal:	Zero	Cal			Zero	Cal		m	b
Deep	0.017	0.657	V		0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V		0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration									
			Readings		References			Results	
	Zero	Cal			Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m		2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m		7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V			1500.000	Ohm-m		
		0.000	V			20.000	Ohm-m		
		-7.200	V			3800.000	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 Thu Sep 17 09:57:21 2009				
	Background		Magnesium		Aluminum		Sandstone		
Window 1	2056.0		9796.8		3673.1		10821.3		cps
Window 2	1920.0		8541.1		3303.5		9307.2		cps
Window 3	1563.1		4735.7		2212.8		5017.5		cps
Window 4	466.0		466.1		465.6		471.5		cps
Long Space	0.0		6621.1		1383.5		7387.2		cps
Short Space	2.5		2361.7		1523.2		2534.0		cps
Rho			1.7100		2.5900		1.3800		g/cc
Pe			0.0000		2.5700		1.5500		

Rib Angle	: 44.4	Rib Slope	: 0.978	Density/Spine Ratio	: 0.541
Spine Angle	: 74.4	Spine Slope	: 3.570	Spine Intercept	: -18.9
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: 6I
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

PRE-SURVEY VERIFICATION				
	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	

POST-SURVEY VERIFICATION				
	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	pu

3)	Short Space Long Space	cps cps	pu	pu
Gamma Ray Calibration Report				
	Serial Number:	#8		
	Tool Model:	OPEN		
	Performed:	Mon Jun 13 16:56:43 2011		
	Calibrator Value:	150.0	GAPI	
	Background Reading:	0.0	cps	
	Calibrator Reading:	175.0	cps	
	Sensitivity:	0.8371	GAPI/cps	