



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company	LOTUS OPERATING CO., LLC.		
Well	#1 PIESTER D		
Field	SOLDIER CREEK		
County	KIOWA	State	KANSAS
Location:	API # : 15-097-21774-00-00		Other Services DIL MEL/SON
SEC 25 TWP 29S RGE 16W		Elevation	
Permanent Datum	GROUND LEVEL	Elevation	1978
Log Measured From	KELLY BUSHING 13' A.G.L.	K.B.	1991
Drilling Measured From	KELLY BUSHING	D.F.	1989
		G.L.	1978
Date	11/16/13		
Run Number	ONE		
Depth Driller	5025		
Depth Logger	5029		
Bottom Logged Interval	5027		
Top Log Interval	3800		
Casing Driller	10 3/4"@274'		
Casing Logger	272		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,000 PPM	
Density / Viscosity	9.4/48		
pH / Fluid Loss	10.5/9.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.5@80F		
Rmf @ Meas. Temp	1.13@80F		
Rmc @ Meas. Temp	1.8@80F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	0.32@125F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	125F		
Equipment Number	860		
Location	HAYS, KANSAS		
Recorded By	IAN MABB		
Witnessed By	TIM HELLMAN		

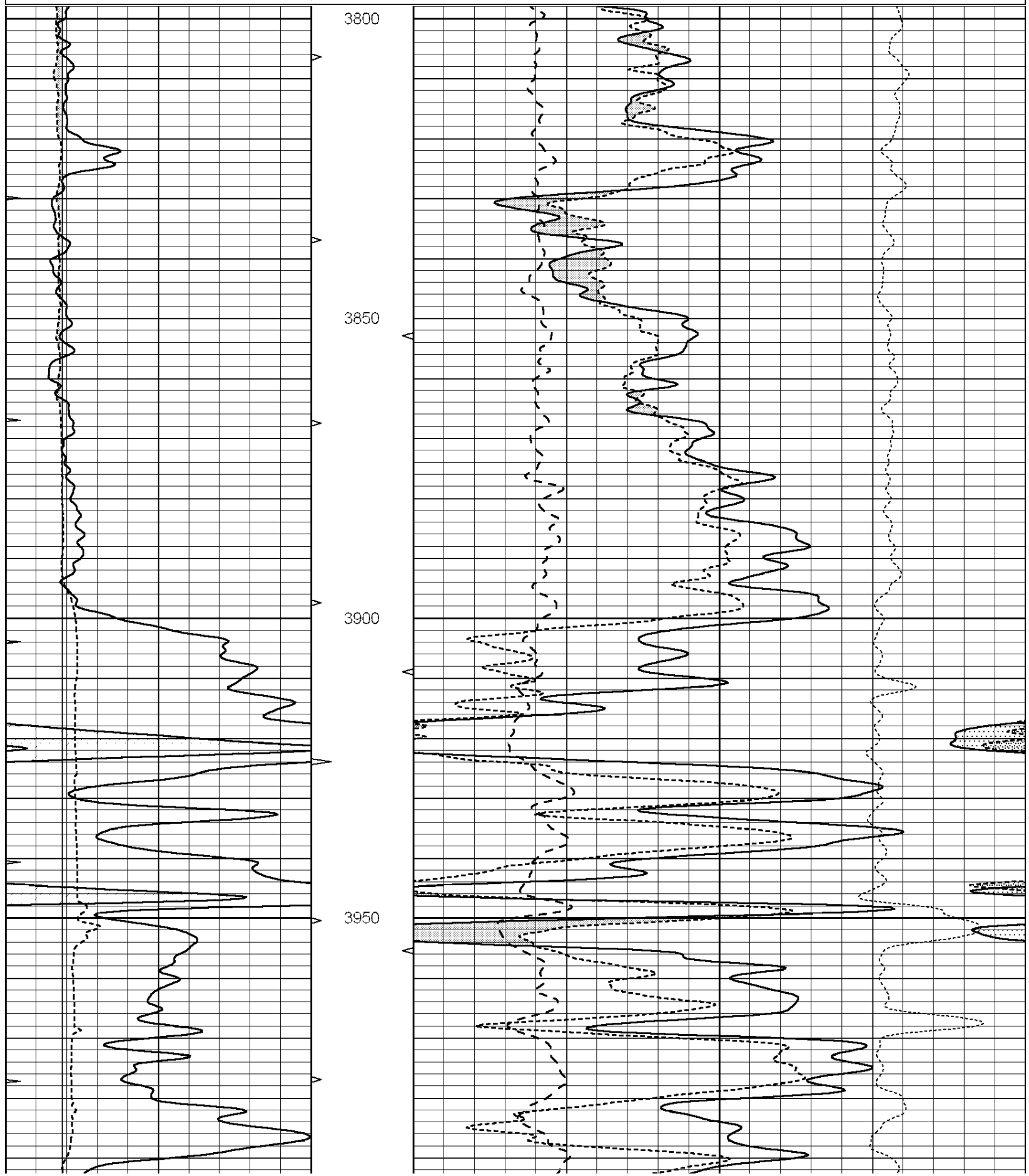
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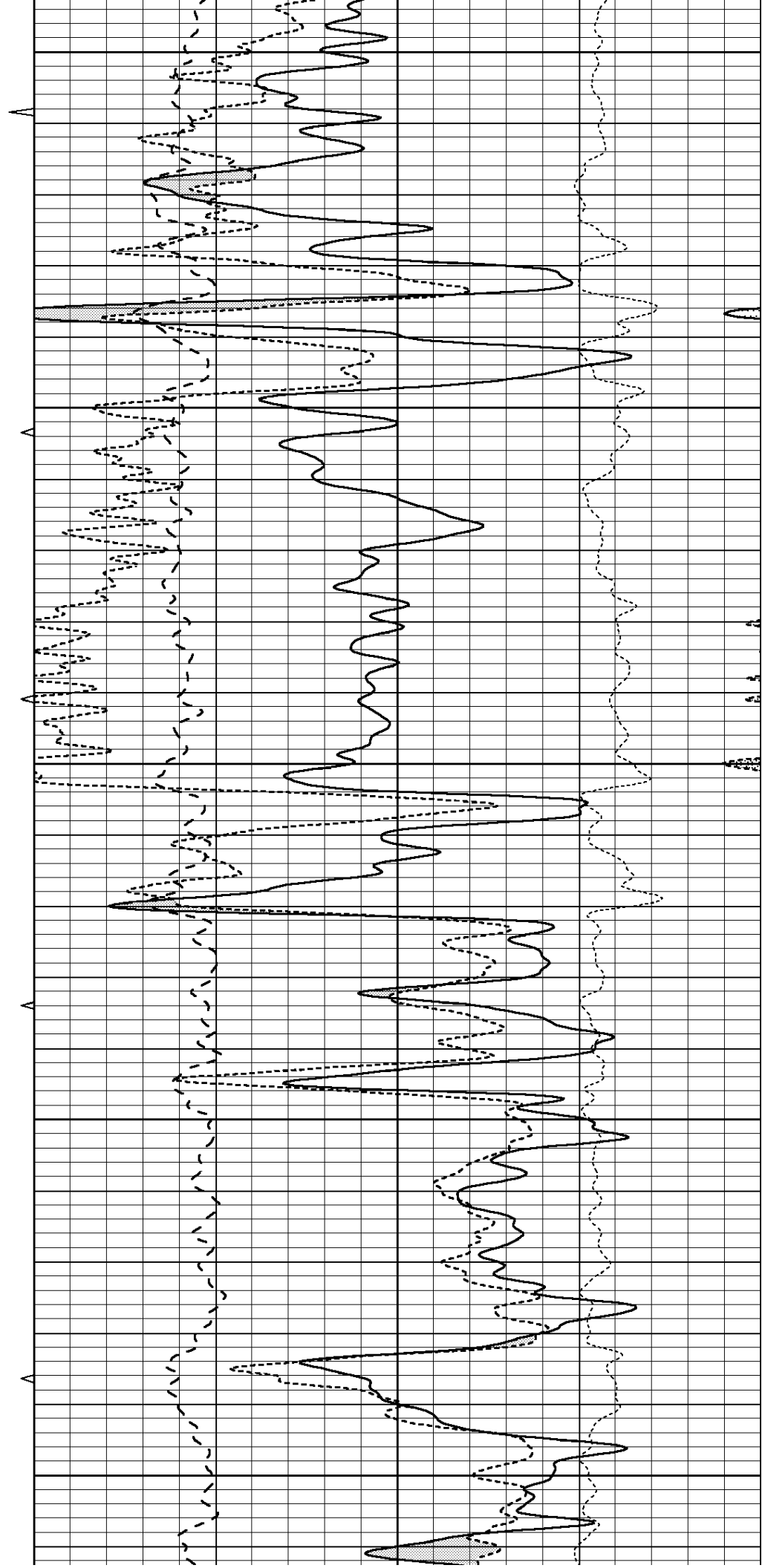
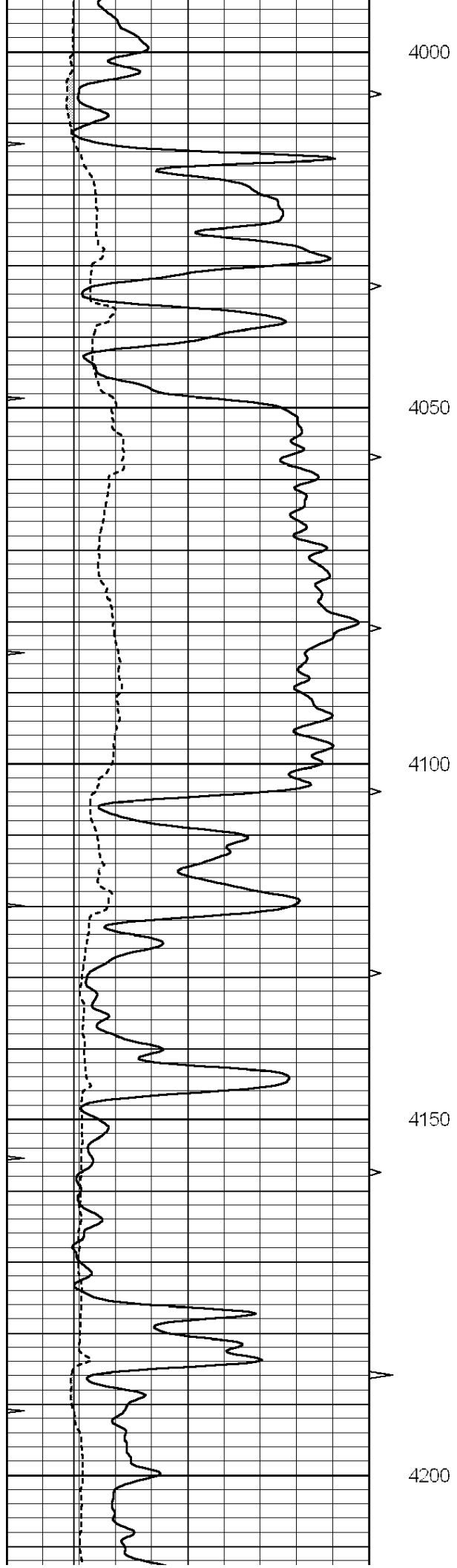
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

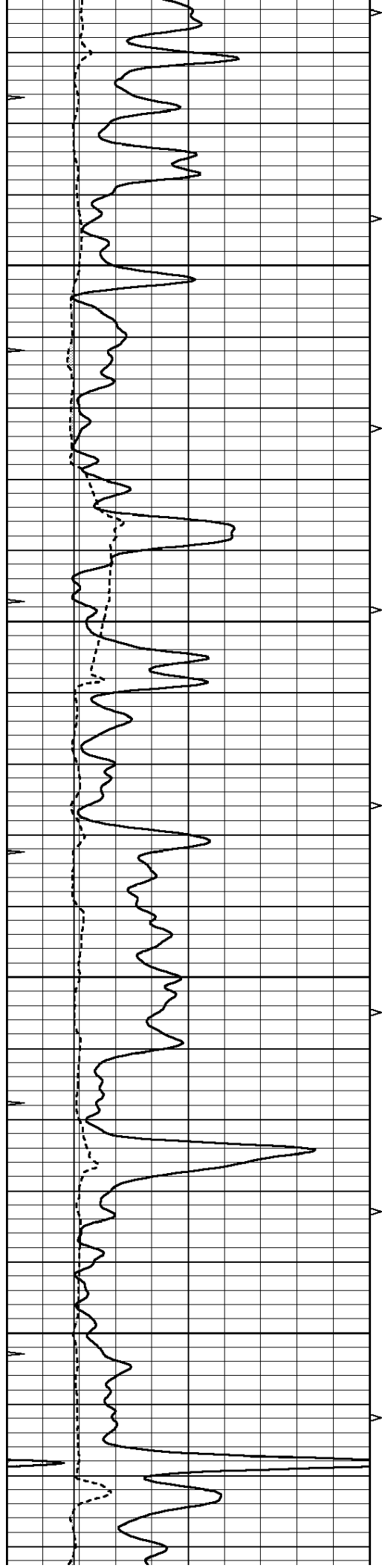
Comments

THANK YOU FOR USING "NABORS" HAYS, KANSAS (785) 628-6395
DIRECTIONS
CROFT, KS. - JUST NORTH OF GRAIN ELAVATORS 2 WEST SOUTH INTO

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			





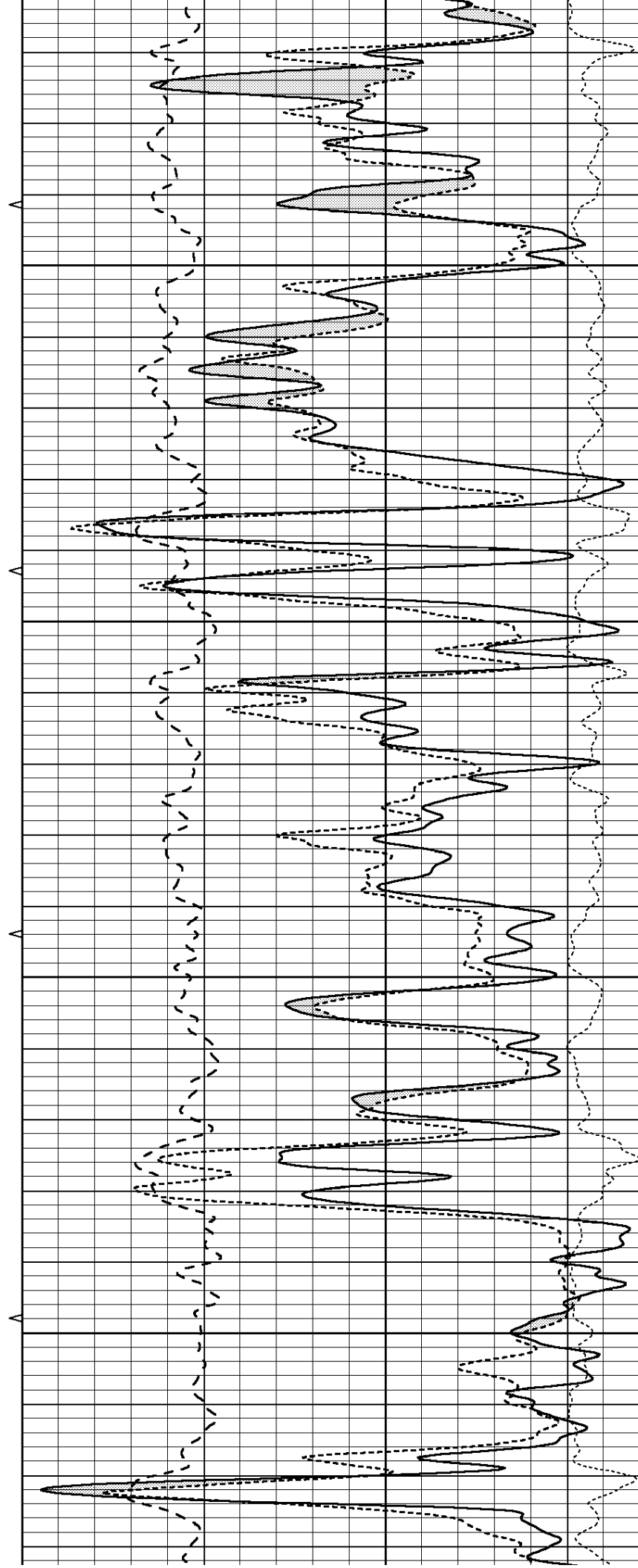


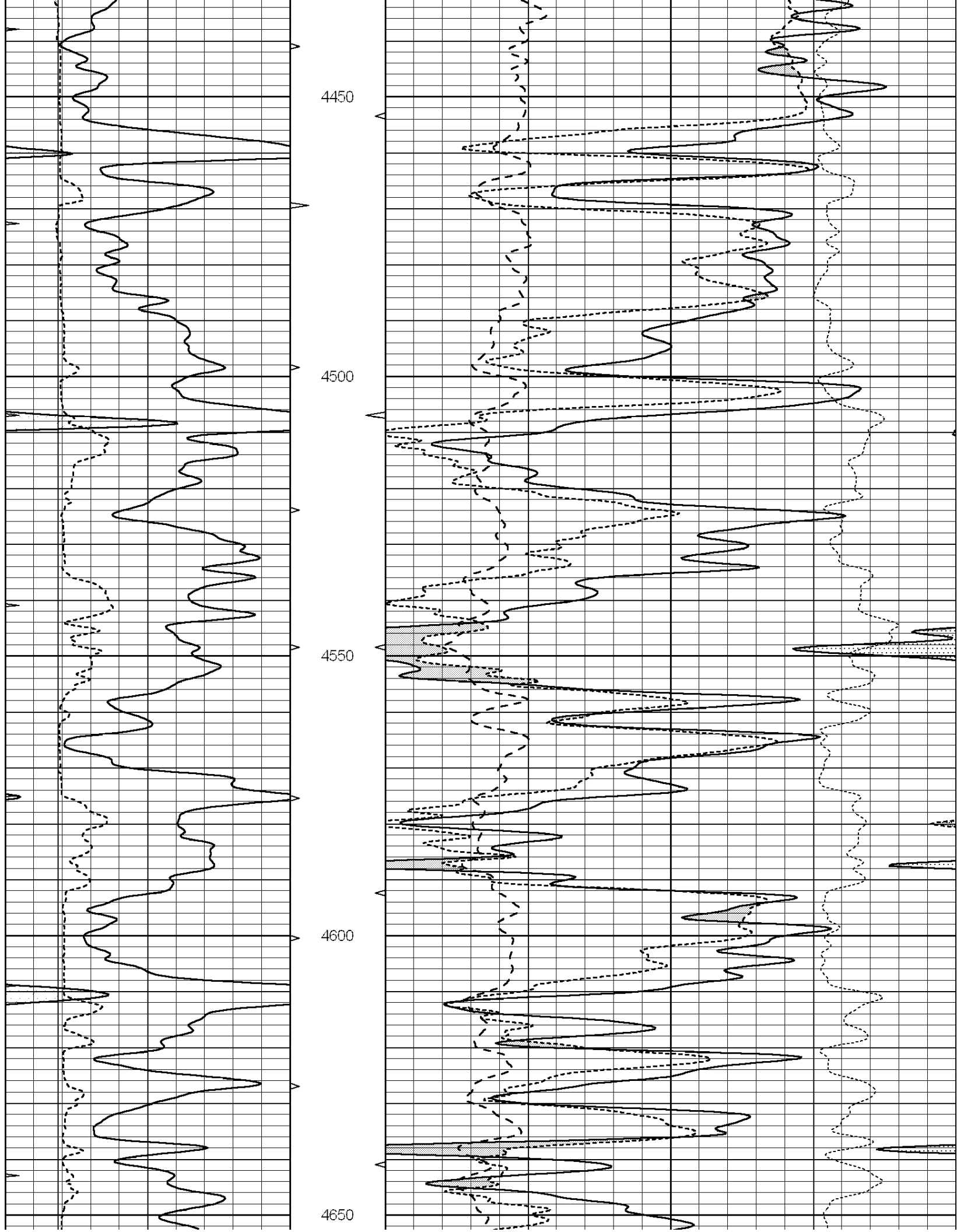
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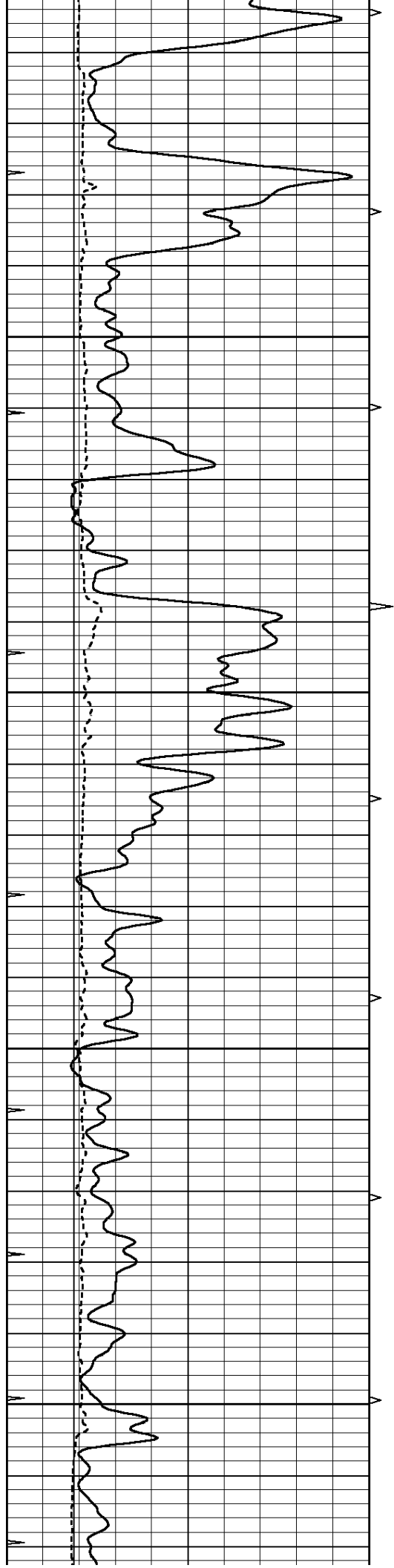
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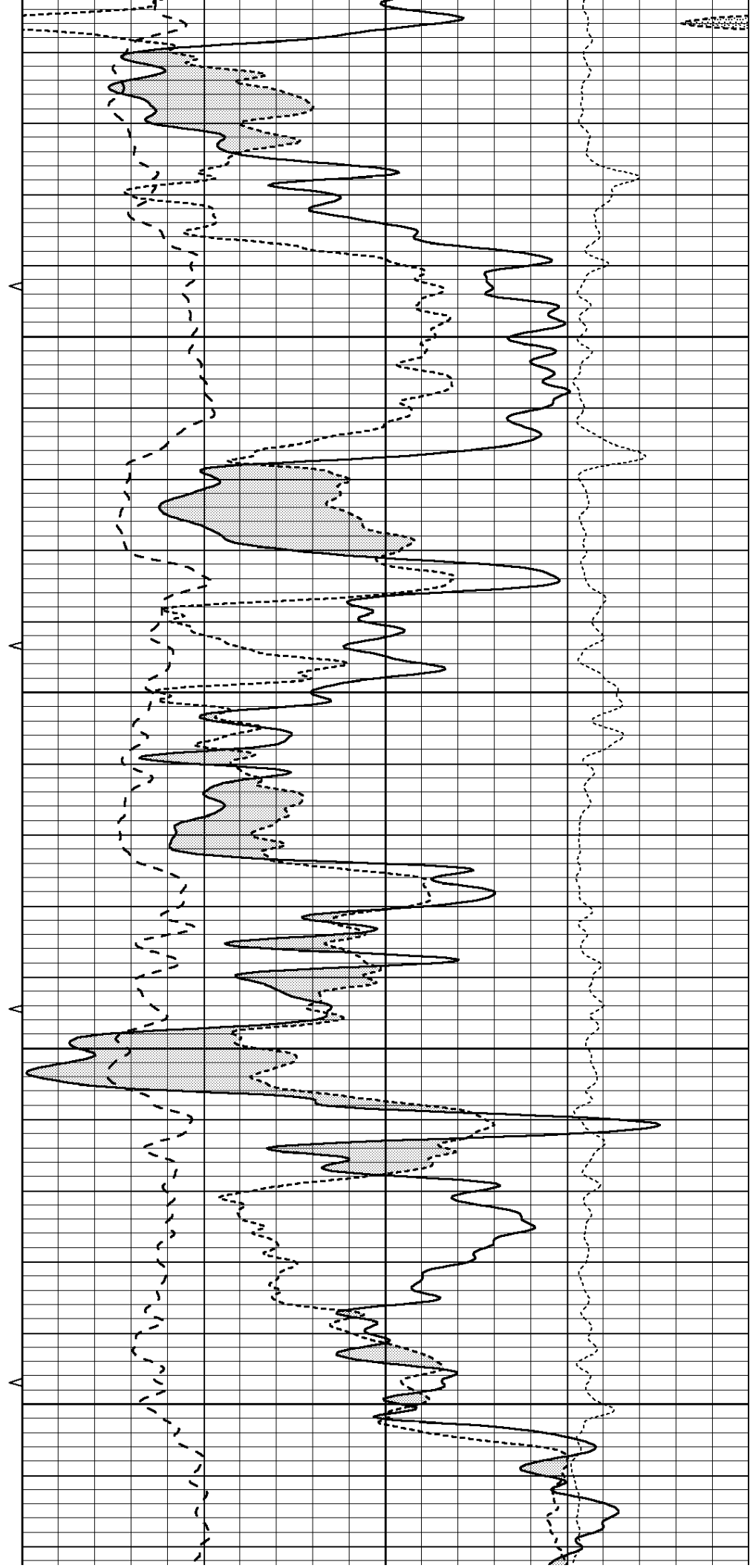


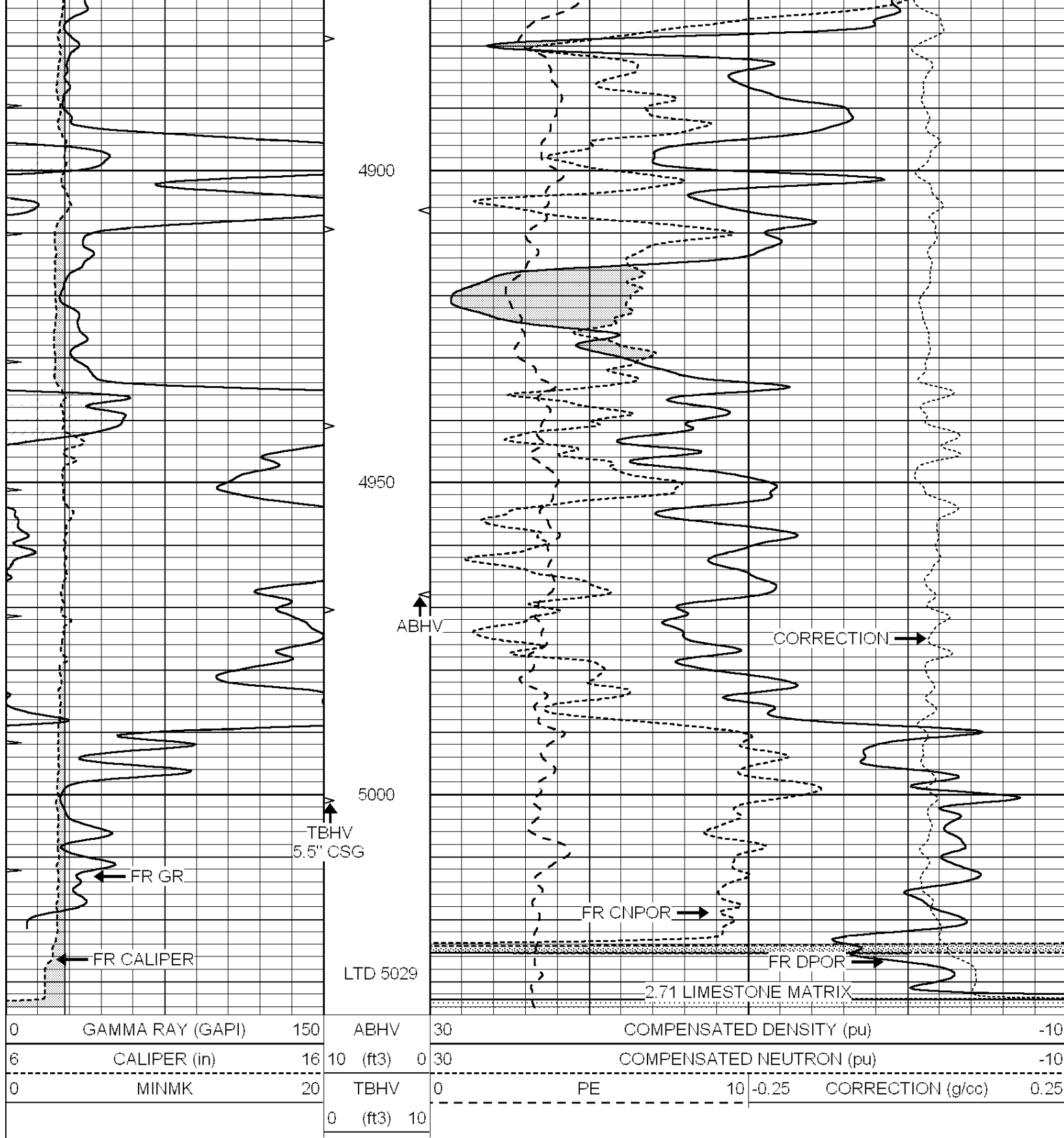
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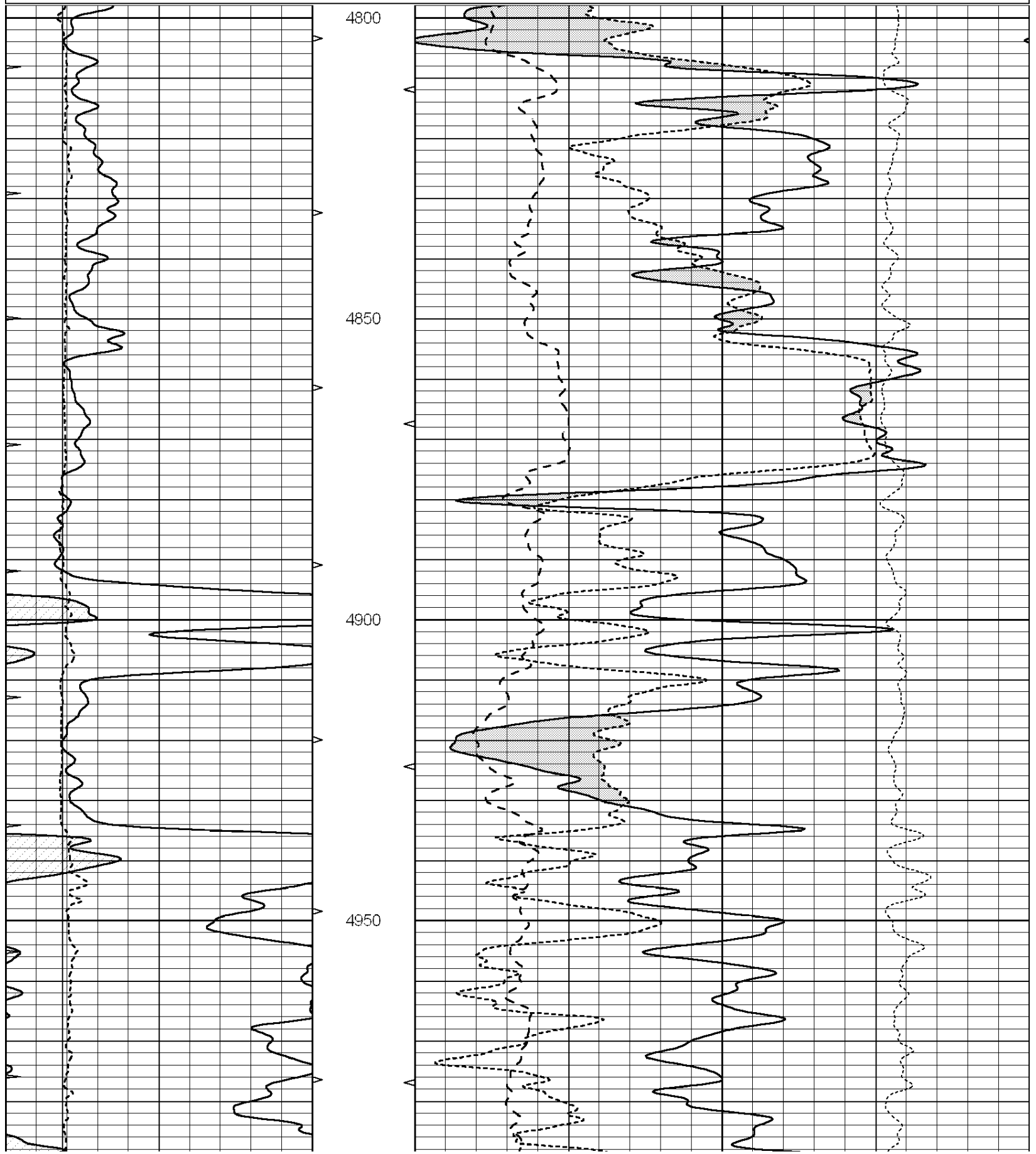
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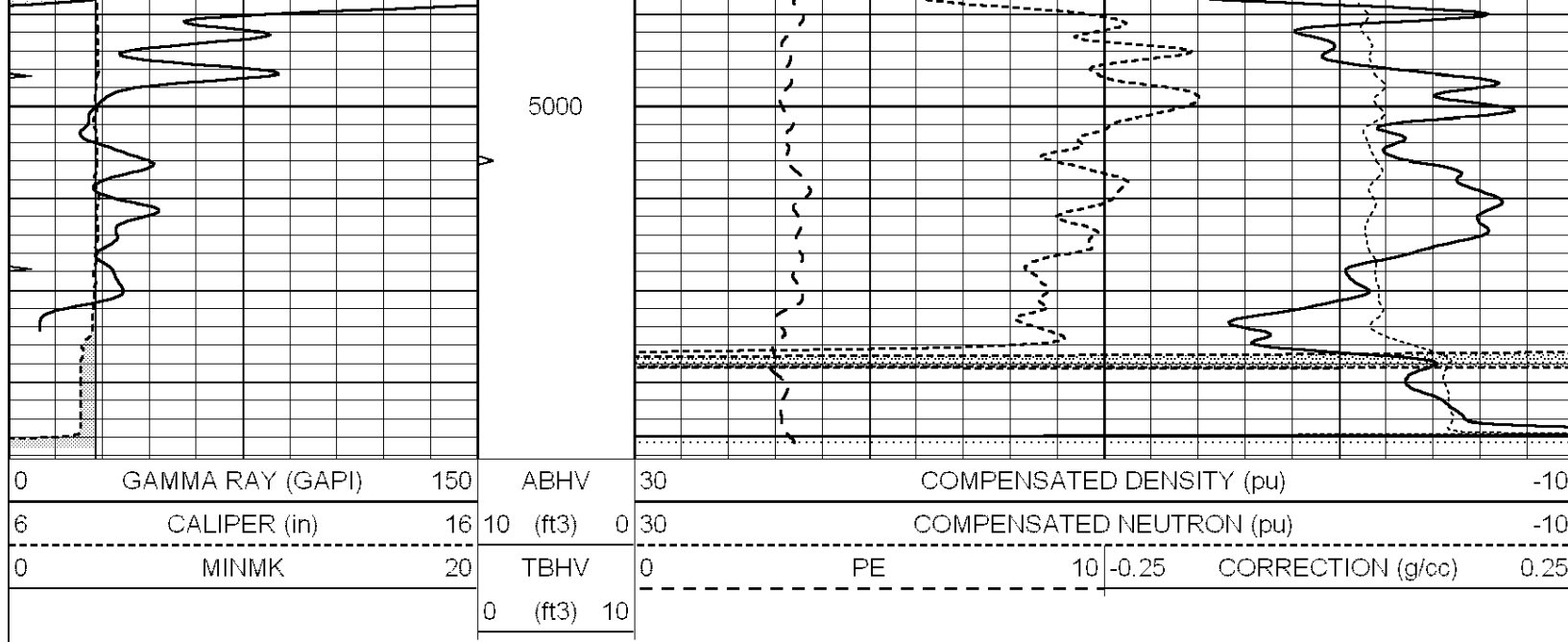
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Calibration Report

Database File: 012038pe.db
 Dataset Pathname: pass9.1
 Dataset Creation: Sat Nov 16 09:26:10 2013 by Calc Open-Cased 090629

Litho Density Calibration Report
 Serial: 001 Model: PRB
 Performed Tue Jul 03 11:37:32 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2170.6	9915.1	3855.3	11241.6	cps
Window 2	2029.2	8716.5	3483.5	9750.8	cps
Window 3	1665.0	4929.7	2356.8	5332.0	cps
Window 4	493.3	492.1	490.0	486.8	cps
Long Space	0.0	6687.3	1454.3	7721.6	cps
Short Space	1.9	2149.3	1403.9	2354.5	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.556
Spine Angle	: 74.4	Spine Slope	: 3.583	Spine Intercept	: -18.7

Caliper	Readings	Reference	
Low Ref	3.5	8.3	
High Ref	5.4	14.0	
	Gain: 2.7		Offset: -0.2

Compensated Neutron Calibration Report

Serial Number: NEU_4I
 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:	GR5
Tool Model:	OPEN
Performed:	Sat Nov 09 00:52:29 2013

Calibrator Value:	1.0	GAPI
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Background Reading:	0.0	cps
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Calibrator Reading:	1.0	cps
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Sensitivity:	0.8000	GAPI/cps
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