



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company		EDISON OPERATING COMPANY, LLC.	
Well	#1-27 PAGE OWWO		
Field	ST. JOHN		
County	STAFFORD		
State	KANSAS		
Company		EDISON OPERATING COMPANY, LLC.	
Well	#1-27 PAGE OWWO		
Field	ST. JOHN		
County	STAFFORD		
State	KANSAS		
Location:	APL # : 15-185-20563-0001		Other Services
Permanent Datum		GROUND LEVEL	Elevation
Log Measured From		KELLY BUSHING 5' A.G.L.	1925
Drilling Measured From		KELLY BUSHING	Elevation
			K.B. 1930
			D.F. 1928
			G.L. 1925
Date	10/5/14		
Run Number	ONE		
Depth Driller	4218		
Depth Logger	4218		
Bottom Logged Interval	4194		
Top Log Interval	2900		
Casing Driller	8 5/8"@320'		
Casing Logger	318		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD		CHLORIDES 84,000 PPM
Density / Viscosity	9.0/40		
pH / Fluid Loss	7.0/N/A		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.100@70F		
Rmf @ Meas. Temp	.075@70F		
Rmc @ Meas. Temp	.120@70F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.059@118F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	11:45 P.M.		
Maximum Recorded Temperature	118F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	MARK ELSON		

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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
(HWY 50 & 281 JUNCTION) S. OF ST. JOHN, KS., 2S. ON HWY 281, 7/8E., N. INTO



NABORS

**COMPLETION
& PRODUCTION**

MAIN SECTION

Database File:

25890pe.db

Dataset Pathname:

pass3.5

Presentation Format:

ldt_neu

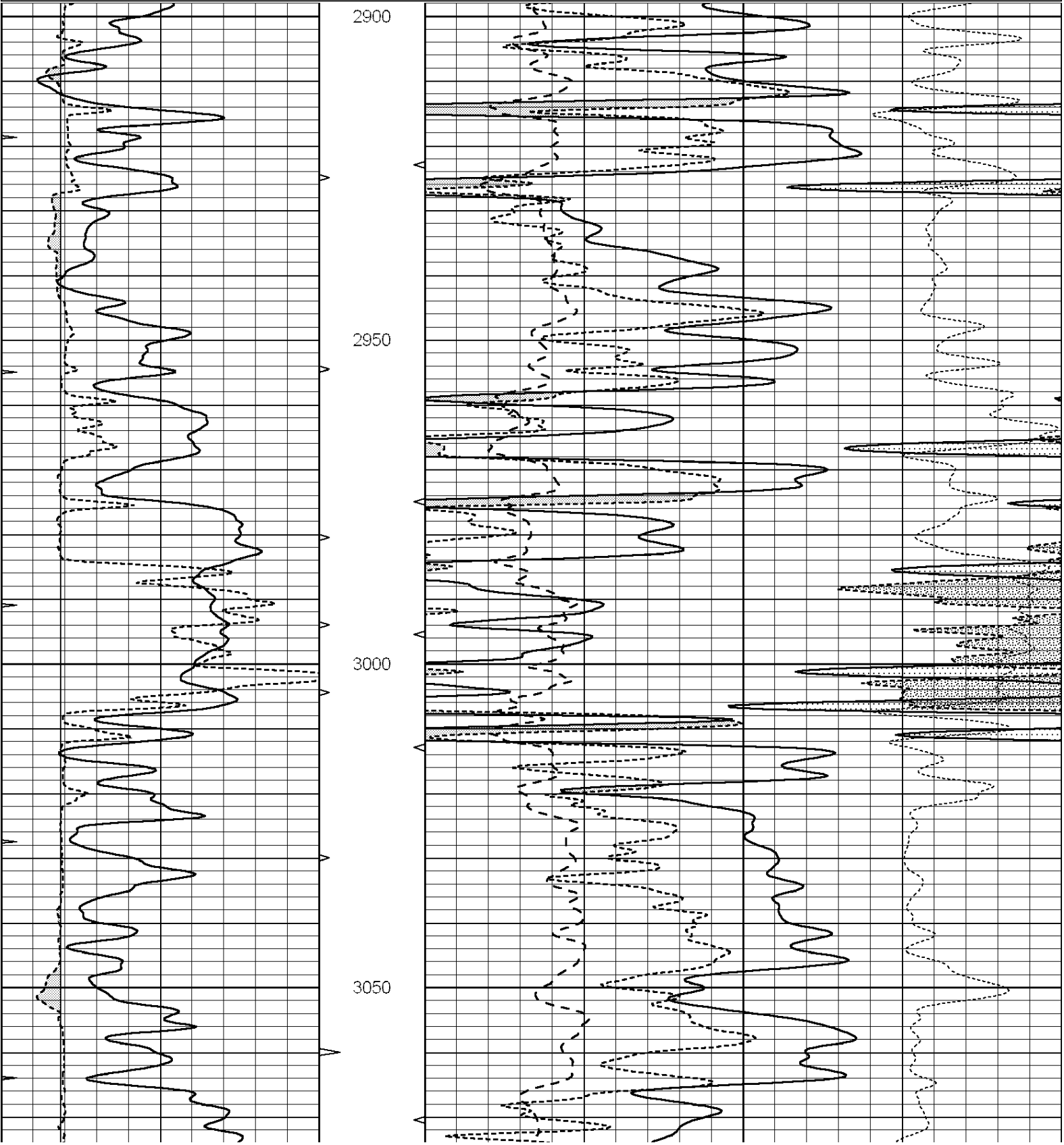
Dataset Creation:

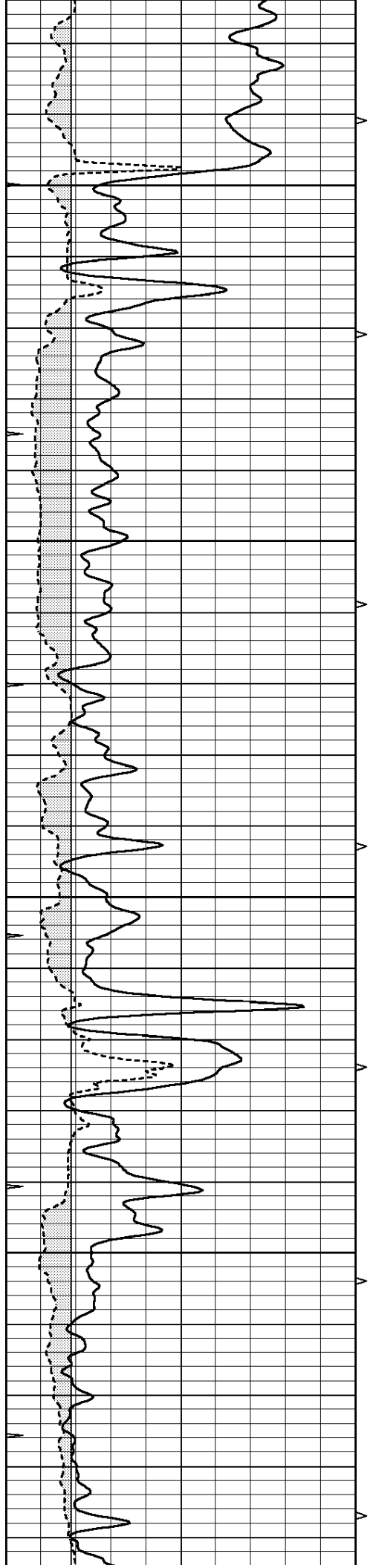
Mon Oct 06 01:31:20 2014 by Calc SOC 120430

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	30	COMPENSATED NEUTRON (pu)				-10
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10						



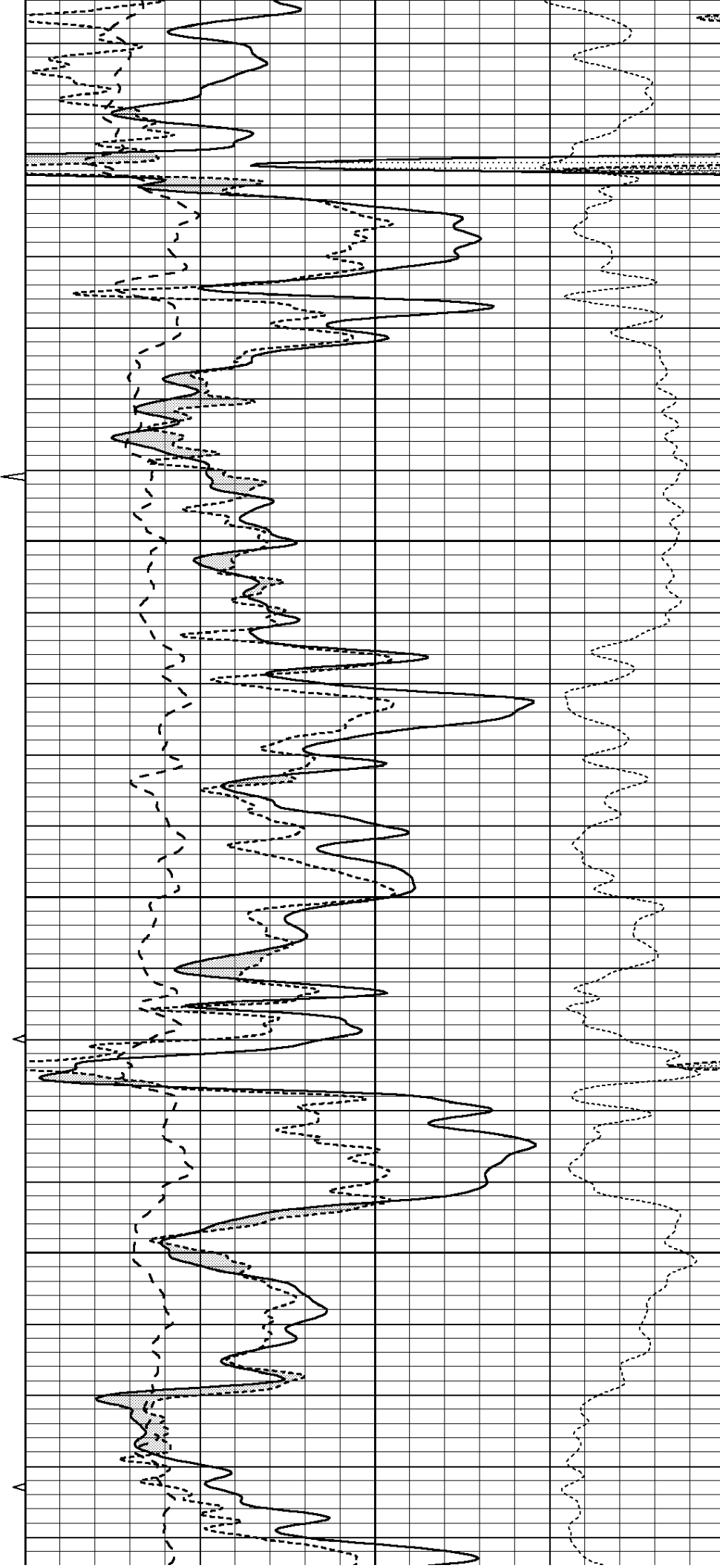


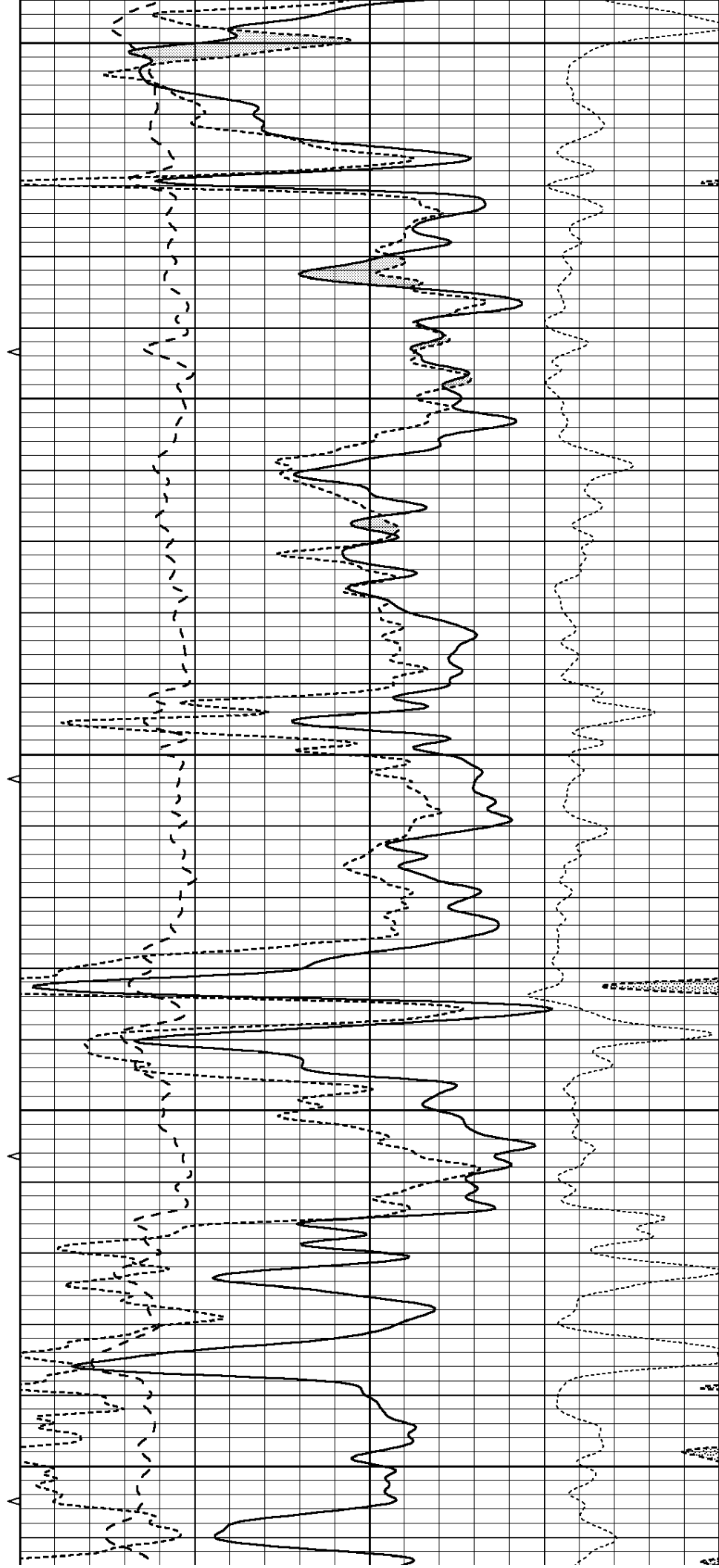
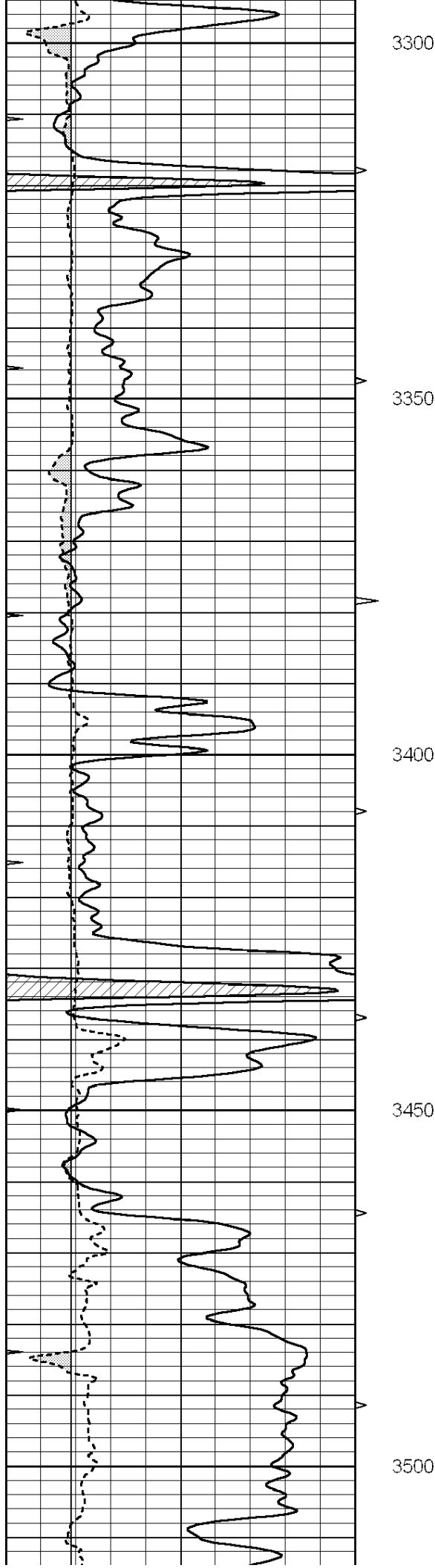
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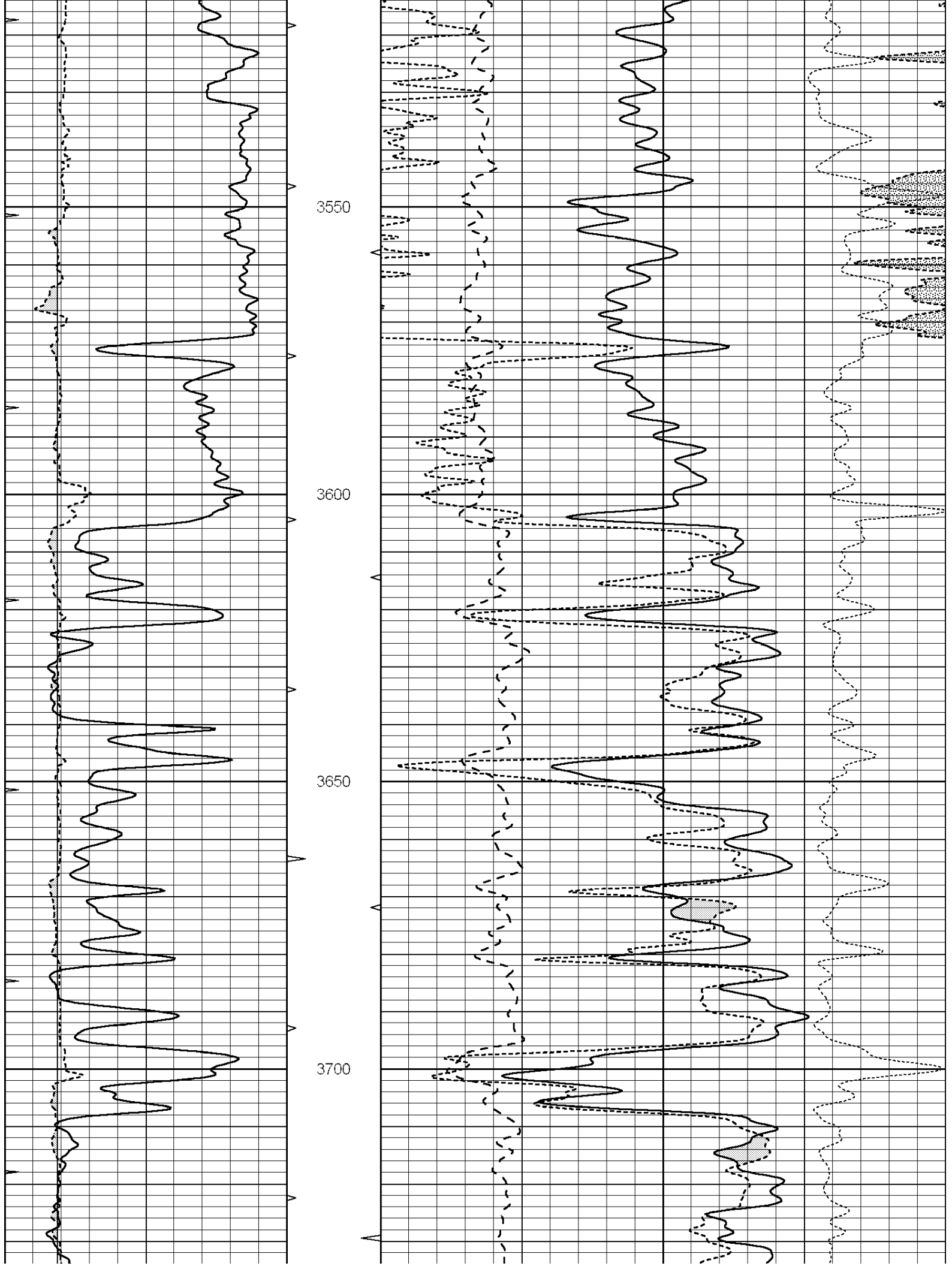
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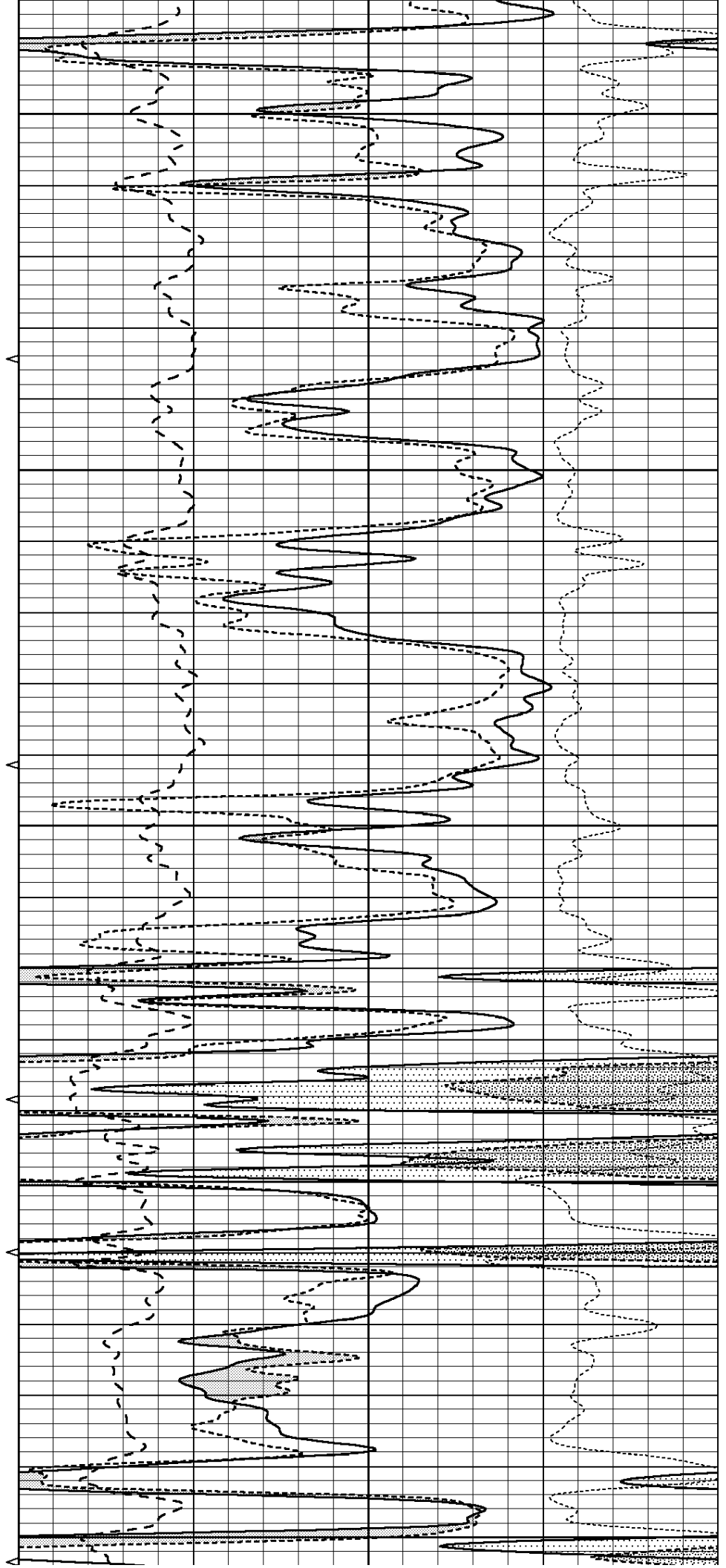
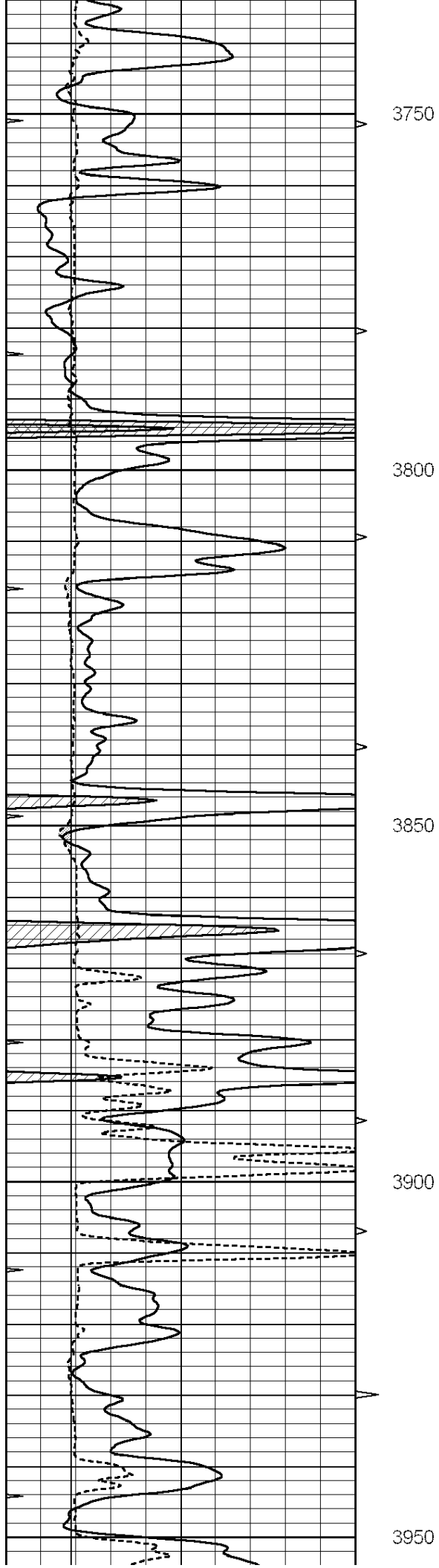
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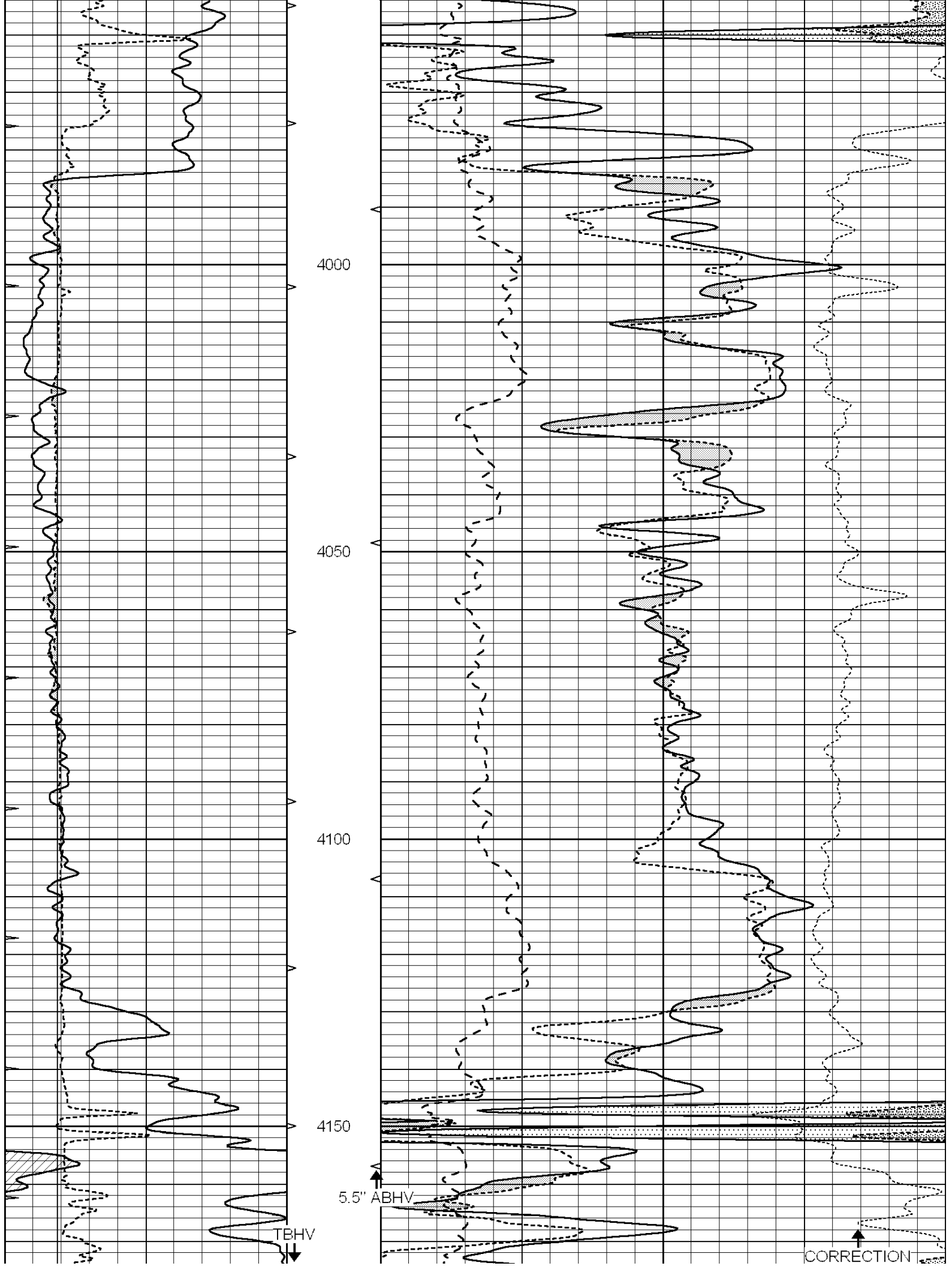
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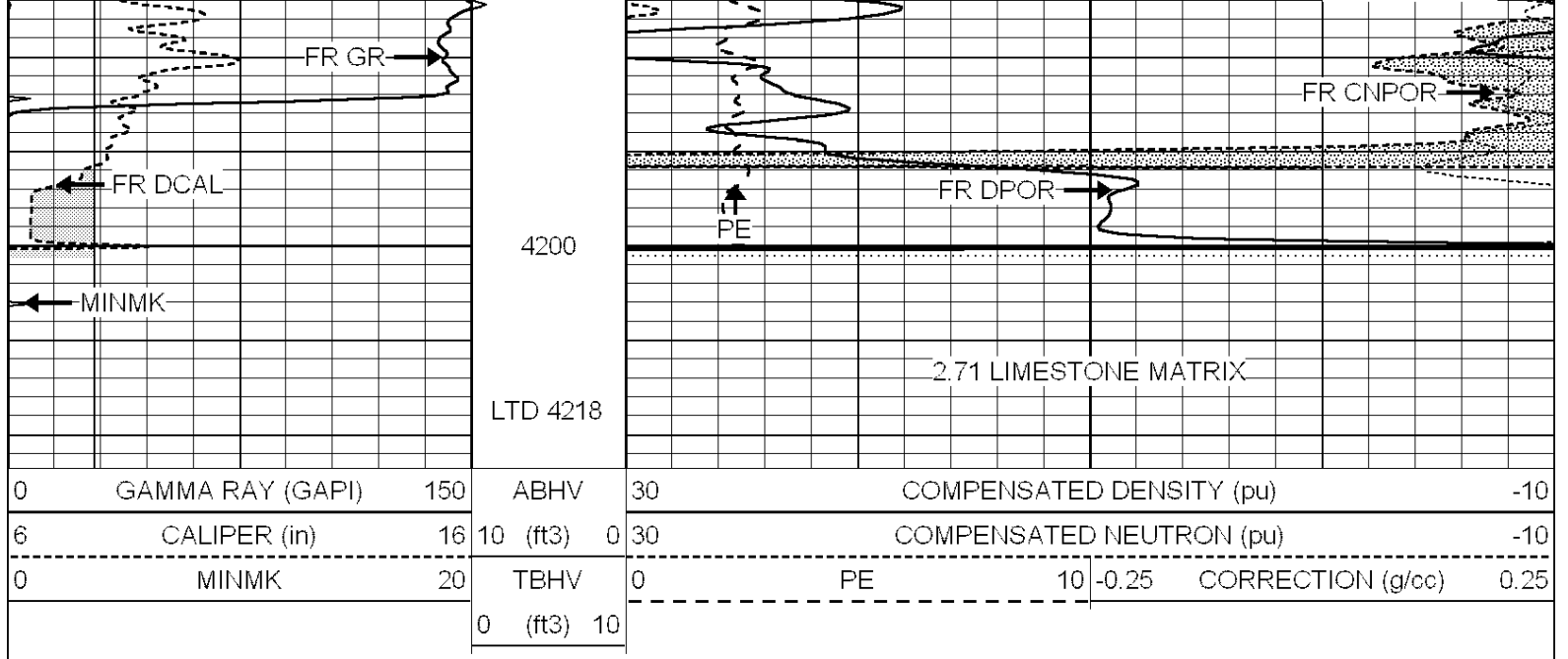










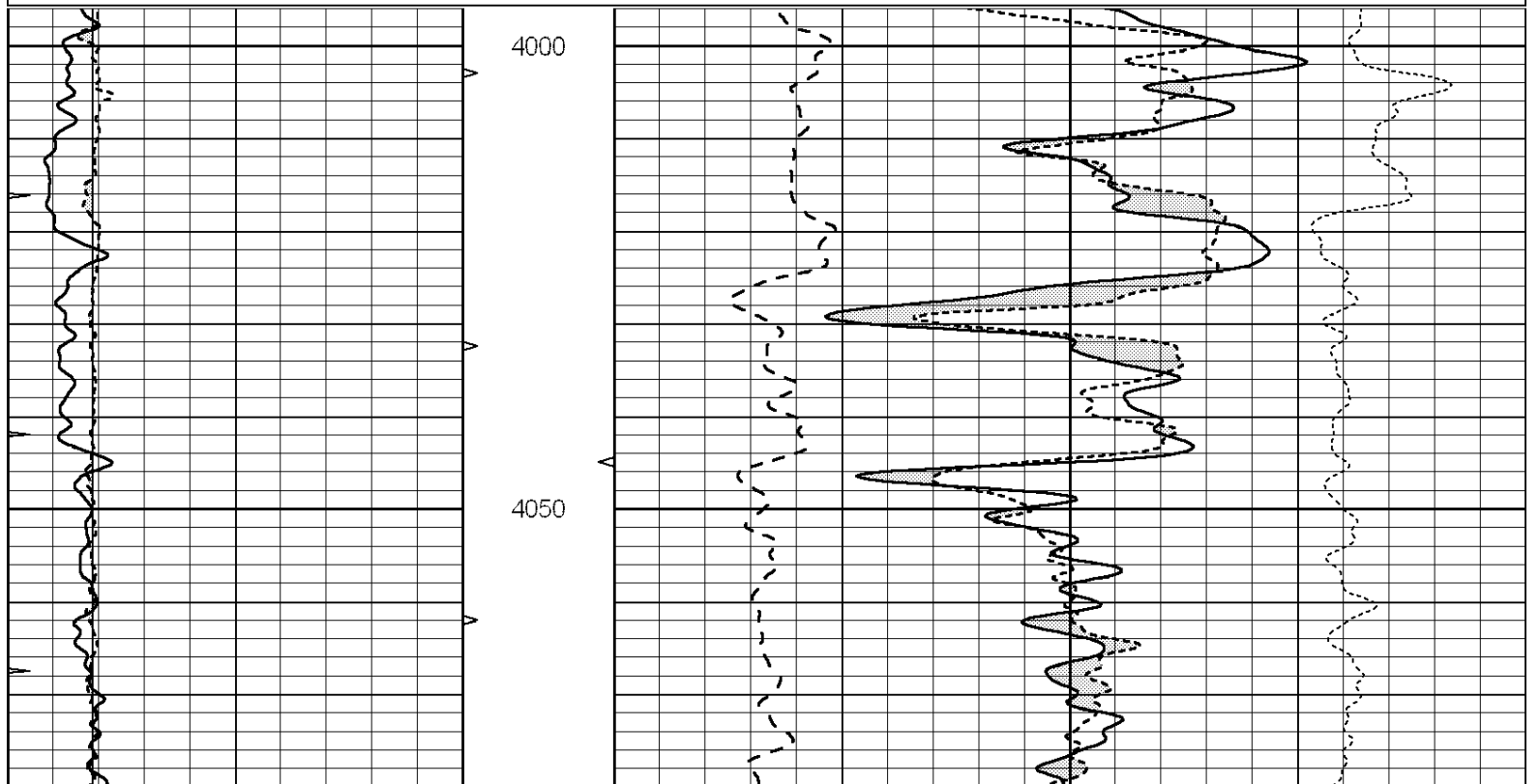


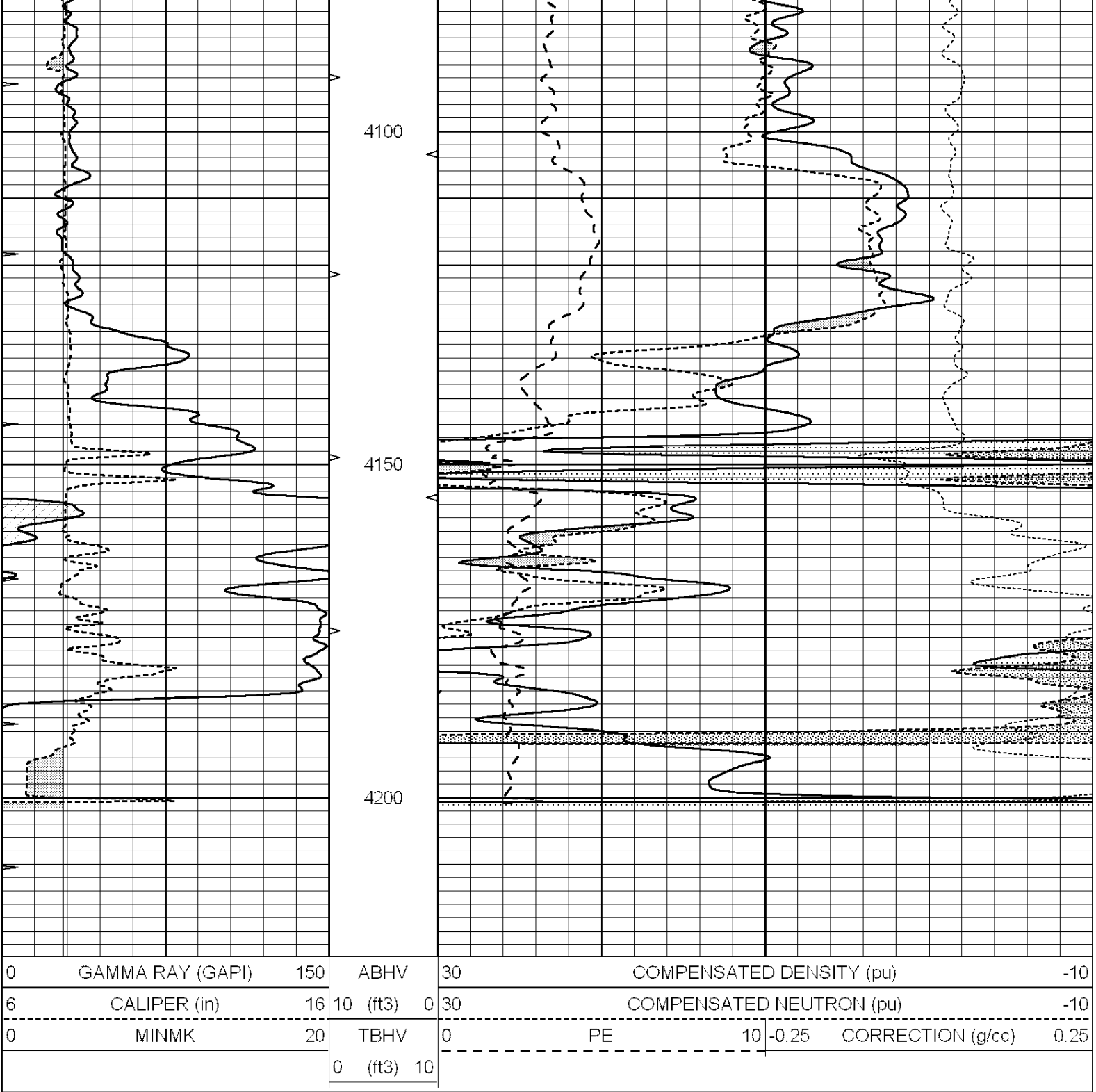
REPEAT SECTION

**COMPLETION
& PRODUCTION
SERVICES CO.**

Database File: 25890pe.db
 Dataset Pathname: pass2.3
 Presentation Format: ldt_neu
 Dataset Creation: Mon Oct 06 01:43:00 2014 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 (ft3)	10	-0.25	CORRECTION (g/cc) 0.25





Calibration Report					
Database File:		25890pe.db			
Dataset Pathname:		pass3.5			
Dataset Creation:		Mon Oct 06 01:31:20 2014 by Calc SOC 120430			
Dual Induction Calibration Report					
Serial-Model:		PROBE9-DILG			
Surface Cal Performed:		Fri Sep 26 22:43:29 2014			
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

Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	670.000	-13.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	670.000	-27.000
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: 003N Model: PRB								

Master Calibration				Performed Tue Sep 08 14:14:44 2009				
	Background	Magnesium		Aluminum		Sandstone		
Window 1	2042.6	12312.8		4225.8		13758.4		cps
Window 2	1855.8	10134.7		3624.2		11113.1		cps
Window 3	1639.4	6760.2		2716.3		7260.3		cps
Window 4	466.4	469.2		466.1		476.5		cps
Long Space	0.0	8278.9		1768.4		9257.4		cps
Short Space	2.2	2377.3		1544.1		2574.2		cps
Rho		1.7100		2.5900		1.3800		g/cc
Pe		0.0000		2.5700		1.5500		
Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio			: 0.549	
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept			: -18.8	

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				
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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
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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:	Mon Jun 30 21:53:39 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2800	GAPI/cps