

COMPENSATED DENSITY / NEUTRON PE LOG

Company	ABERCROMBIE ENERGY, LLC.		
Well	GM #1-32		
Field	WILDCAT		
County	LANE	State	KANSAS
Location:	API # : 15-101-22626-0000		Other Services DIL/MEL
1320' FSL & 1650' FEL E/2 - W/2 - SE SEC 32 TWP 17S RGE 27W			
Permanent Datum	GROUND LEVEL	Elevation	2682
Log Measured From	KELLY BUSHING 7' A.G.L.	K.B. 2689 D.F. 2687 G.L. 2682	
Drilling Measured From	KELLY BUSHING		
Date	4/27/19		
Run Number	ONE		
Depth Driller	4660		
Depth Logger	4664		
Bottom Logged Interval	4640		
Top Log Interval	3700		
Casing Driller	8 5/8"@343'		
Casing Logger	343		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,100 PPM	
Density / Viscosity	9.4/58		
pH / Fluid Loss	11.0/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.950@62F		
Rinf @ Meas. Temp	.713@62F		
Rinc @ Meas. Temp	1.14@62F		
Source of Rinf / Rinc	MEASUREMENT		
Rim @ BHT	.483@122F		
Time Circulation Stopped	2.5 HOURS		
Time Logger on Bottom	7:45 A.M.		
Maximum Recorded Temperature	122F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	WES HANSEN		

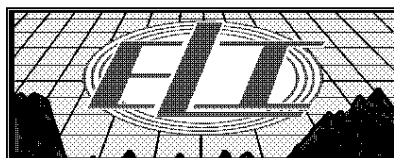
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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

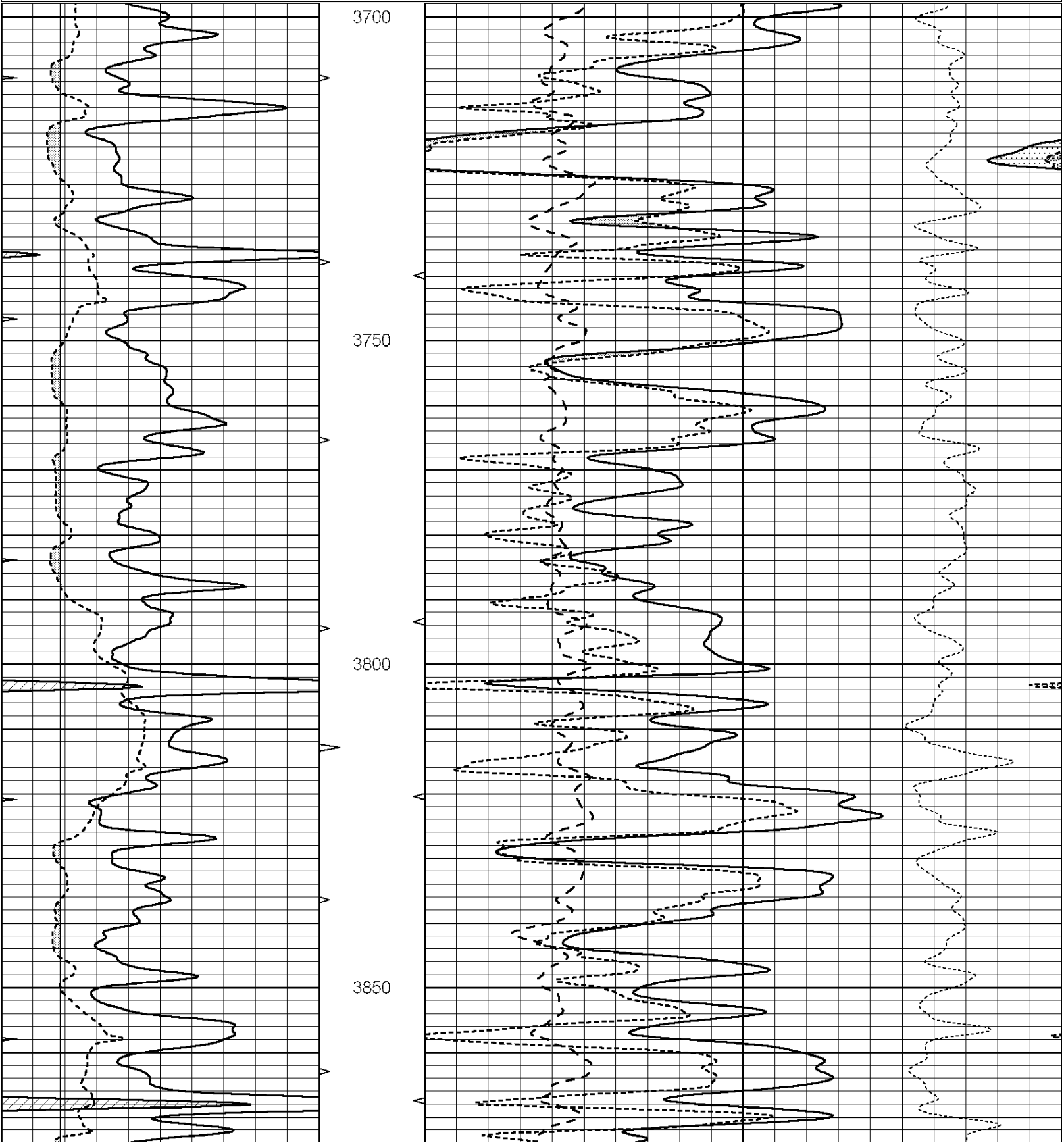
ALAMOTA, KS. (HWY 96 & TURKEY RED RD.), 3 1/2N. TO CURVE, 1W., 1/2N. TO TANK BATTERIES, W.
ON TRAIL THEN BACK S. INTO

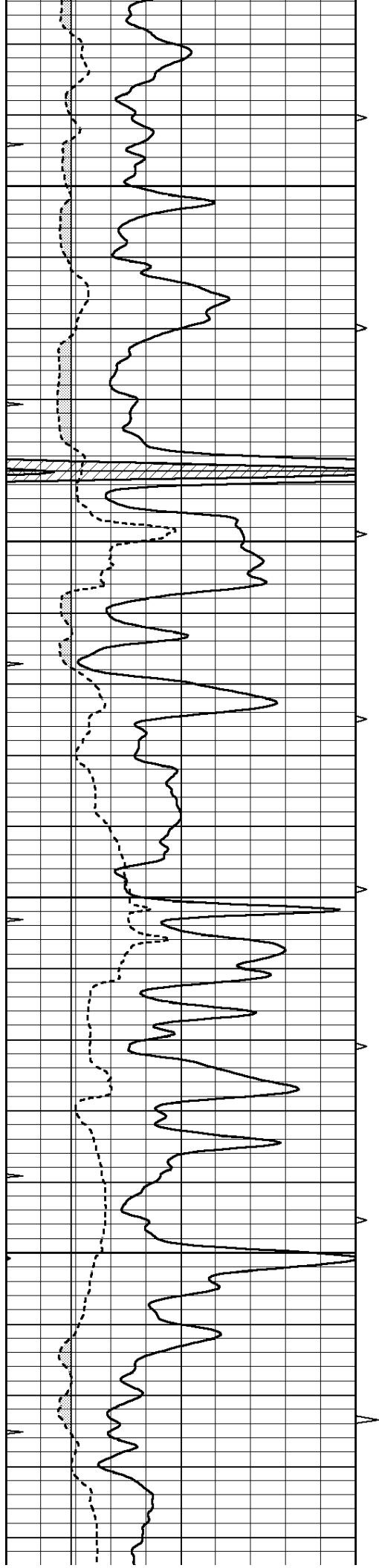


MAIN SECTION

Database File: 3616pe.db
Dataset Pathname: pass3.3
Presentation Format: ldt_neu
Dataset Creation: Sun Apr 28 09:06:09 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	30	COMPENSATED NEUTRON (pu)			-10
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0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10	-----				



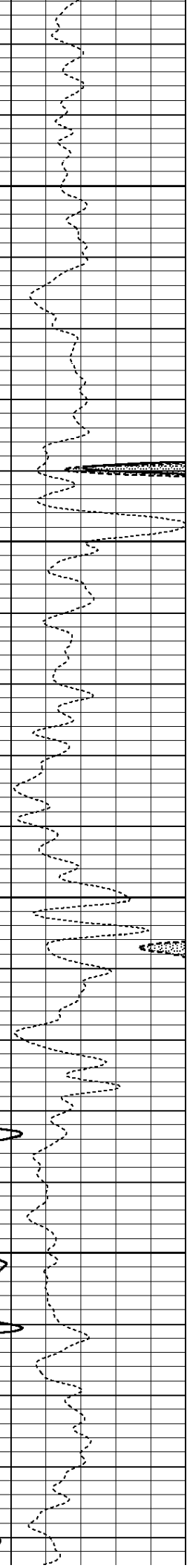
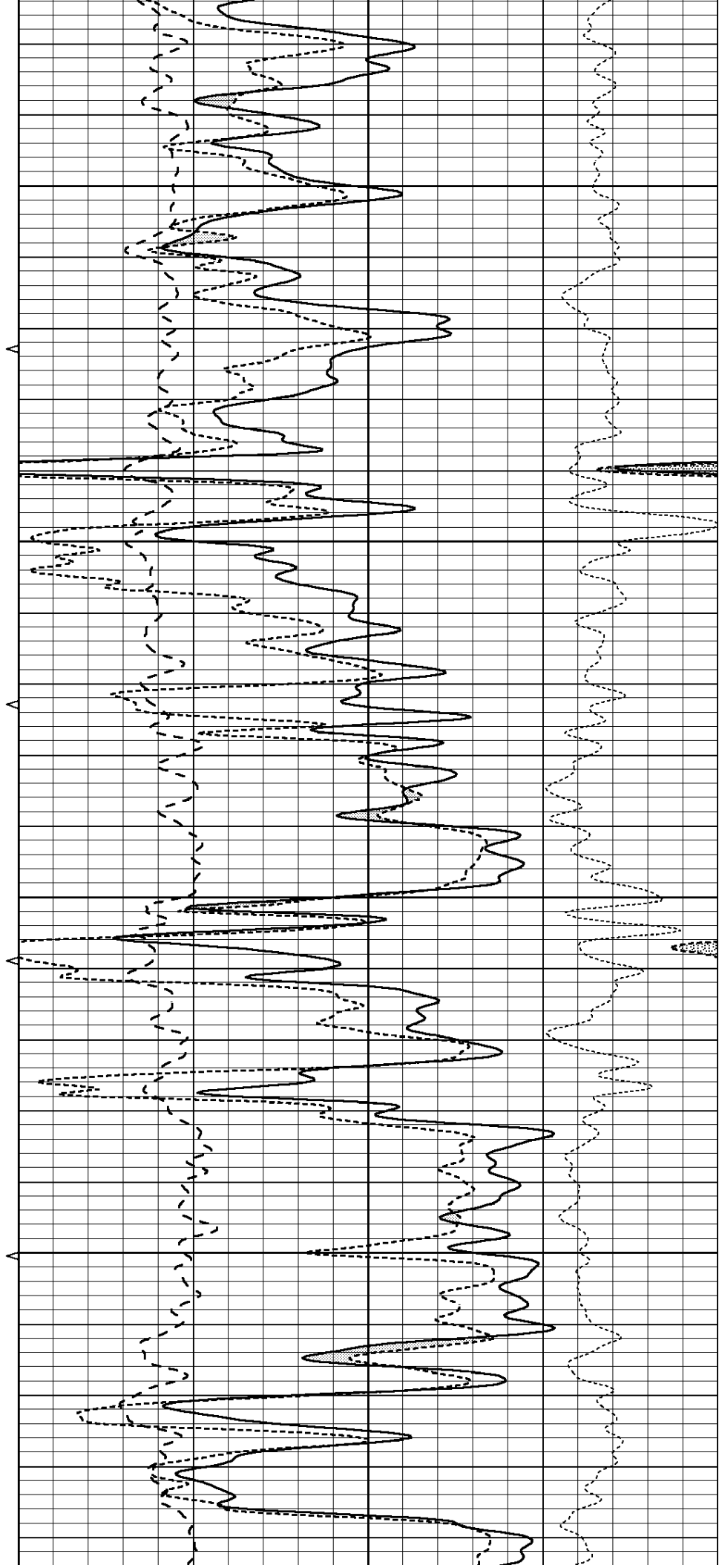


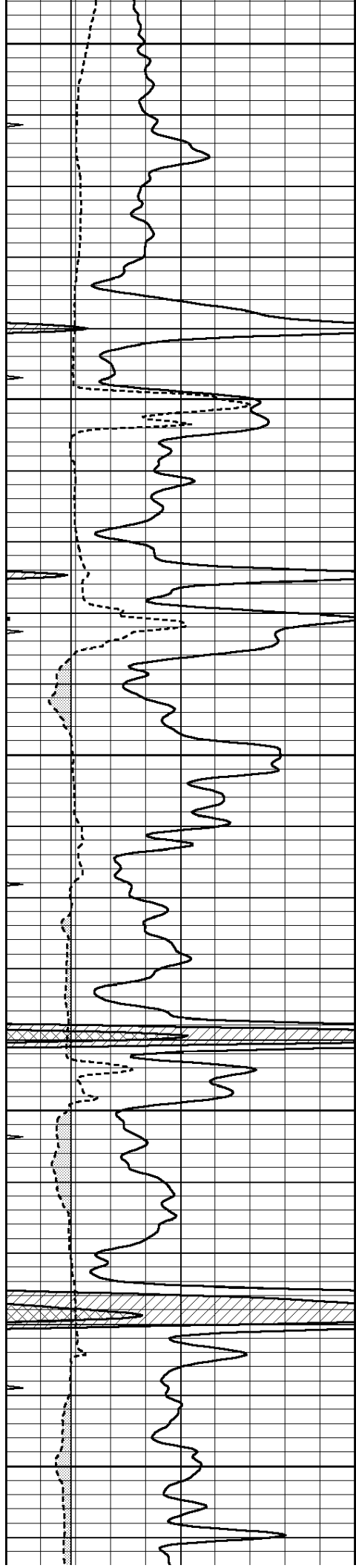
3900

3950

4000

4050





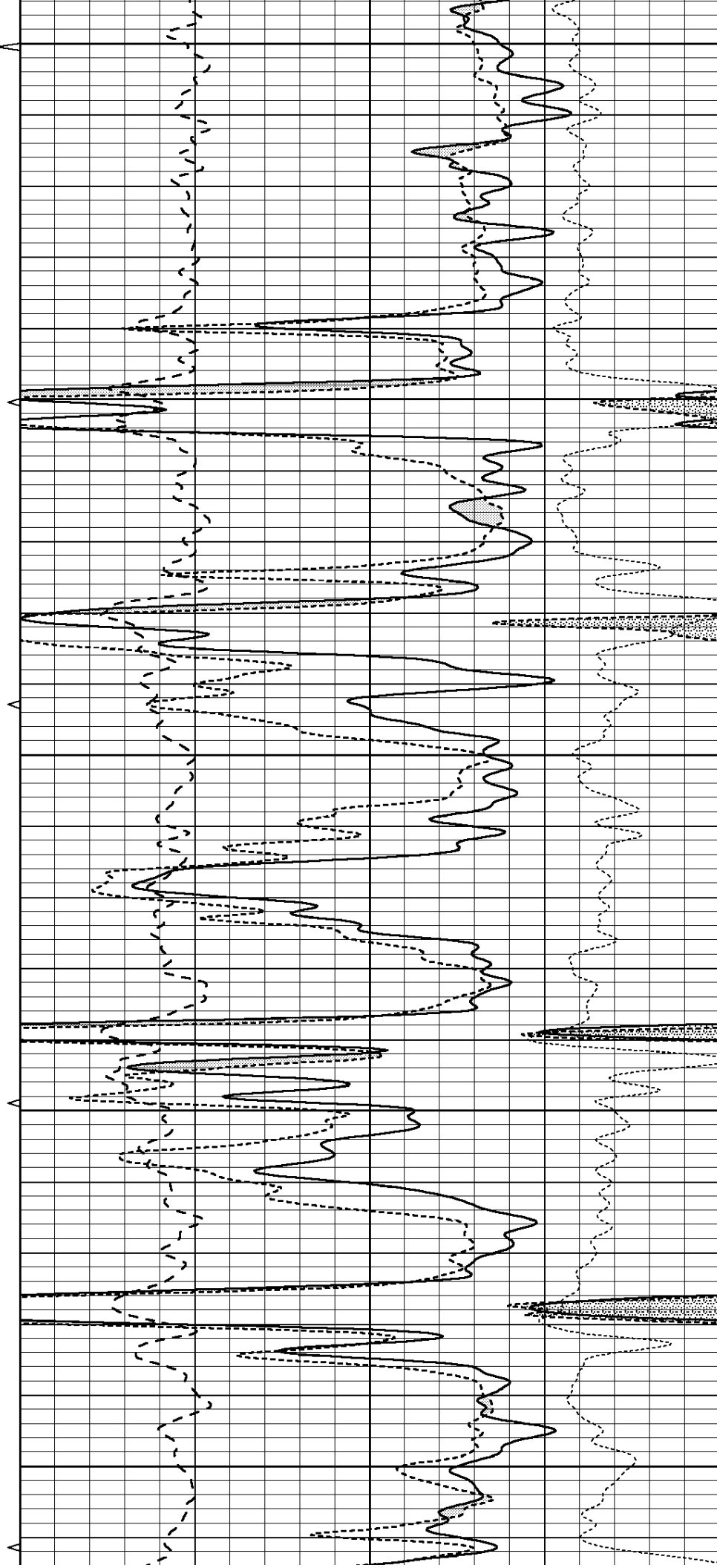
4100

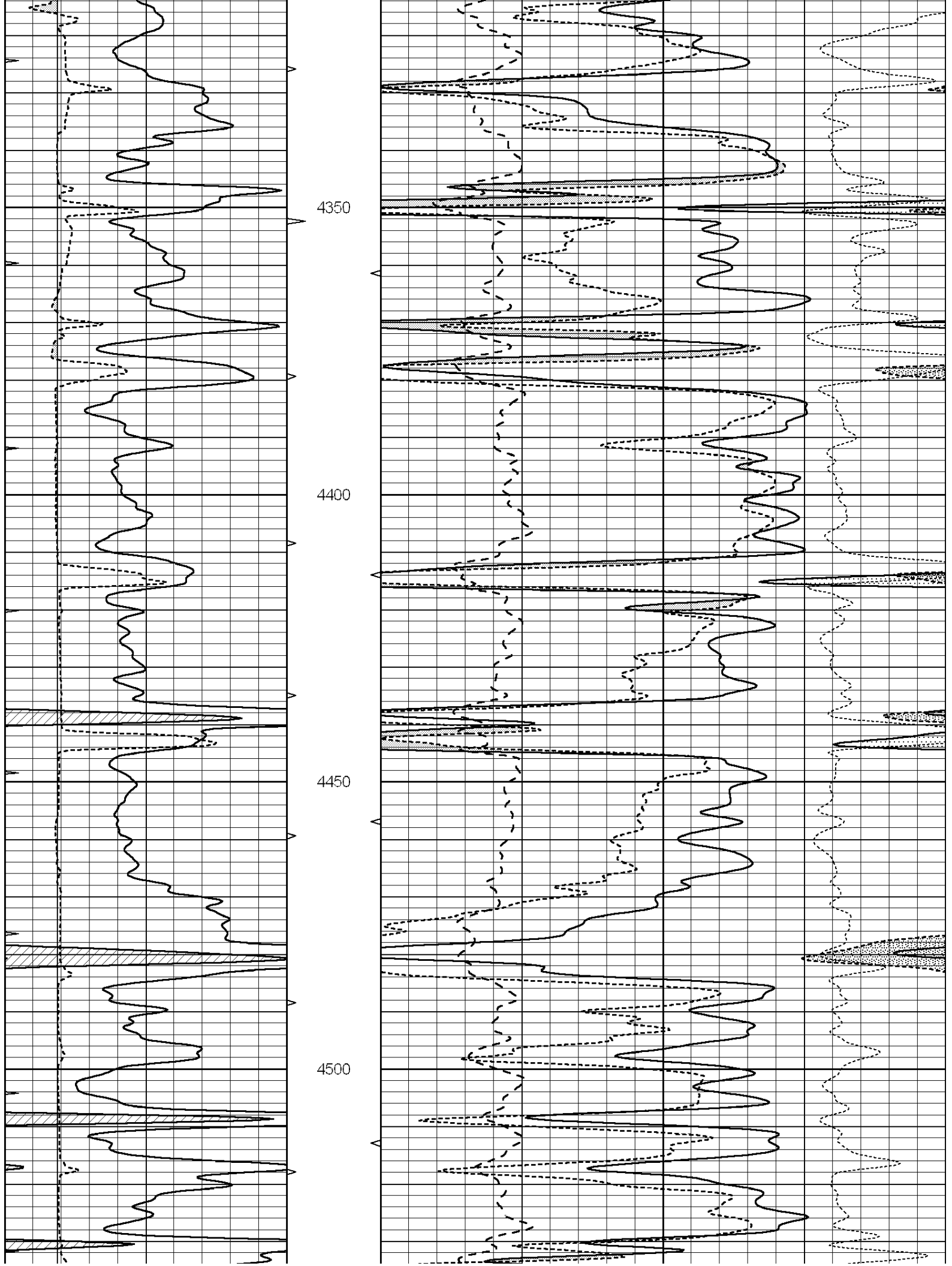
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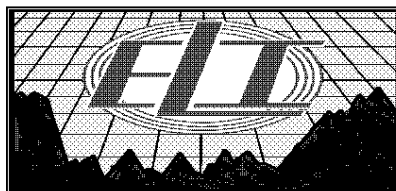
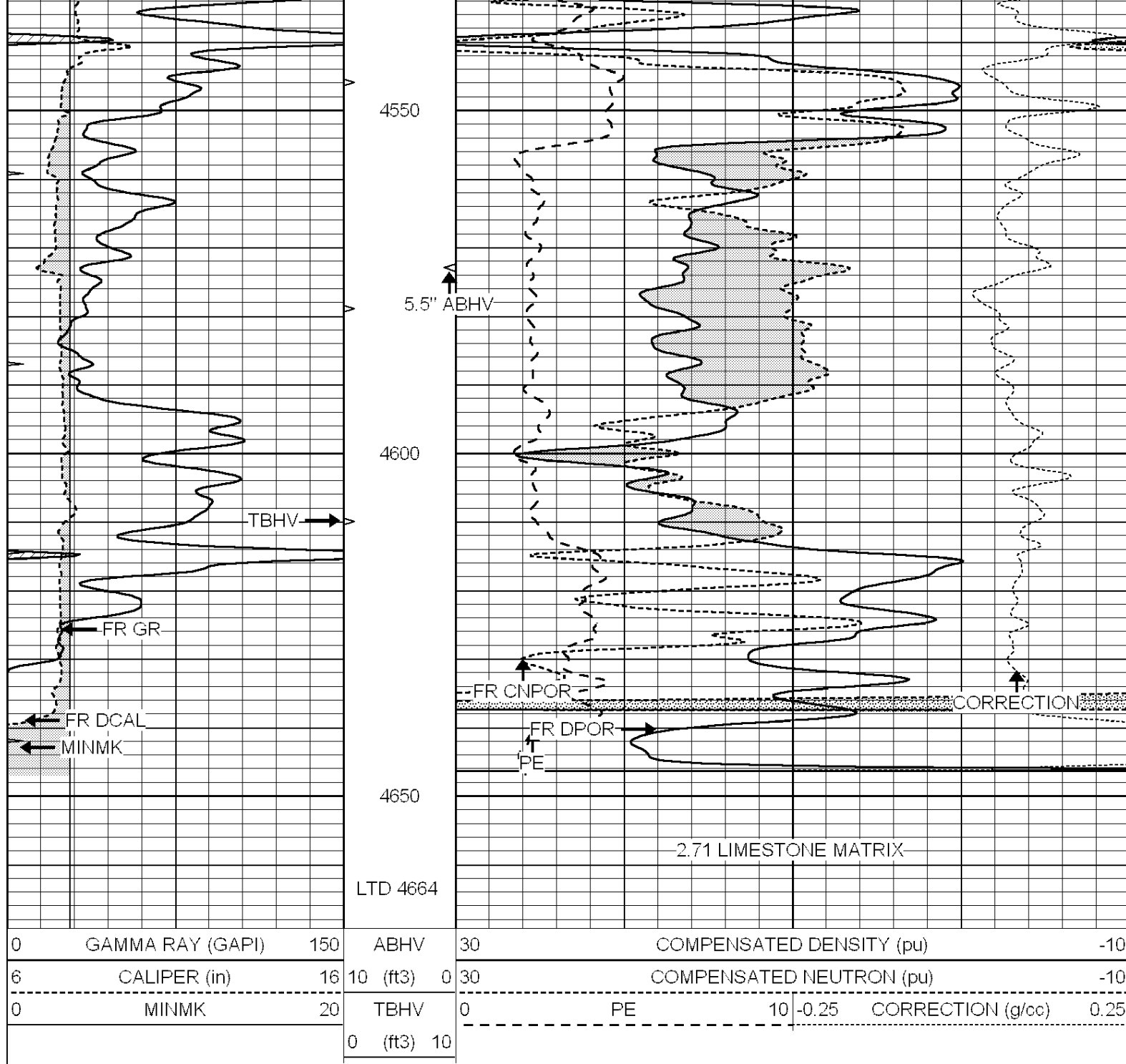
4200

4250

4300



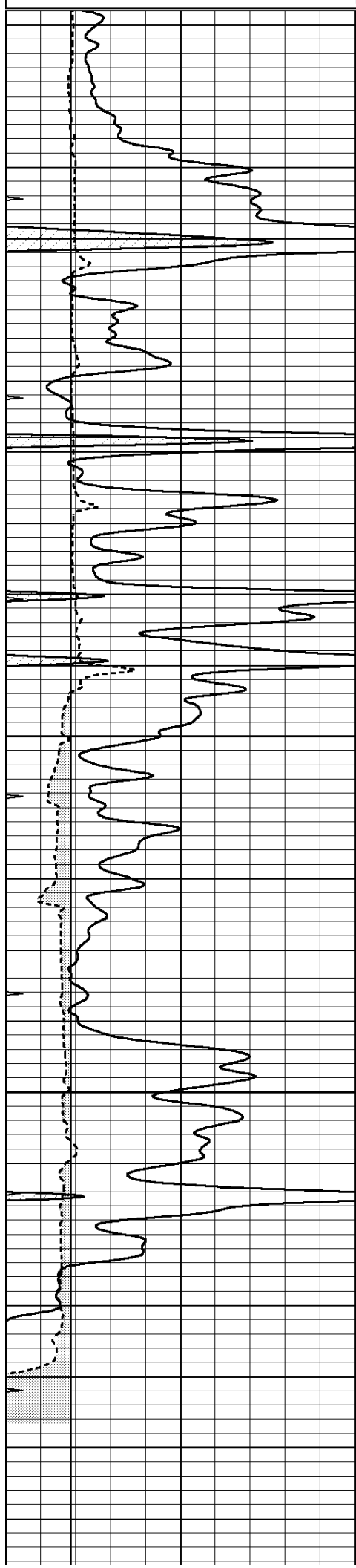




REPEAT SECTION

Database File: 3616pe.db
 Dataset Pathname: pass2.4
 Presentation Format: ldt_neu
 Dataset Creation: Sun Apr 28 09:22:44 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	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV	0	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3)	10		



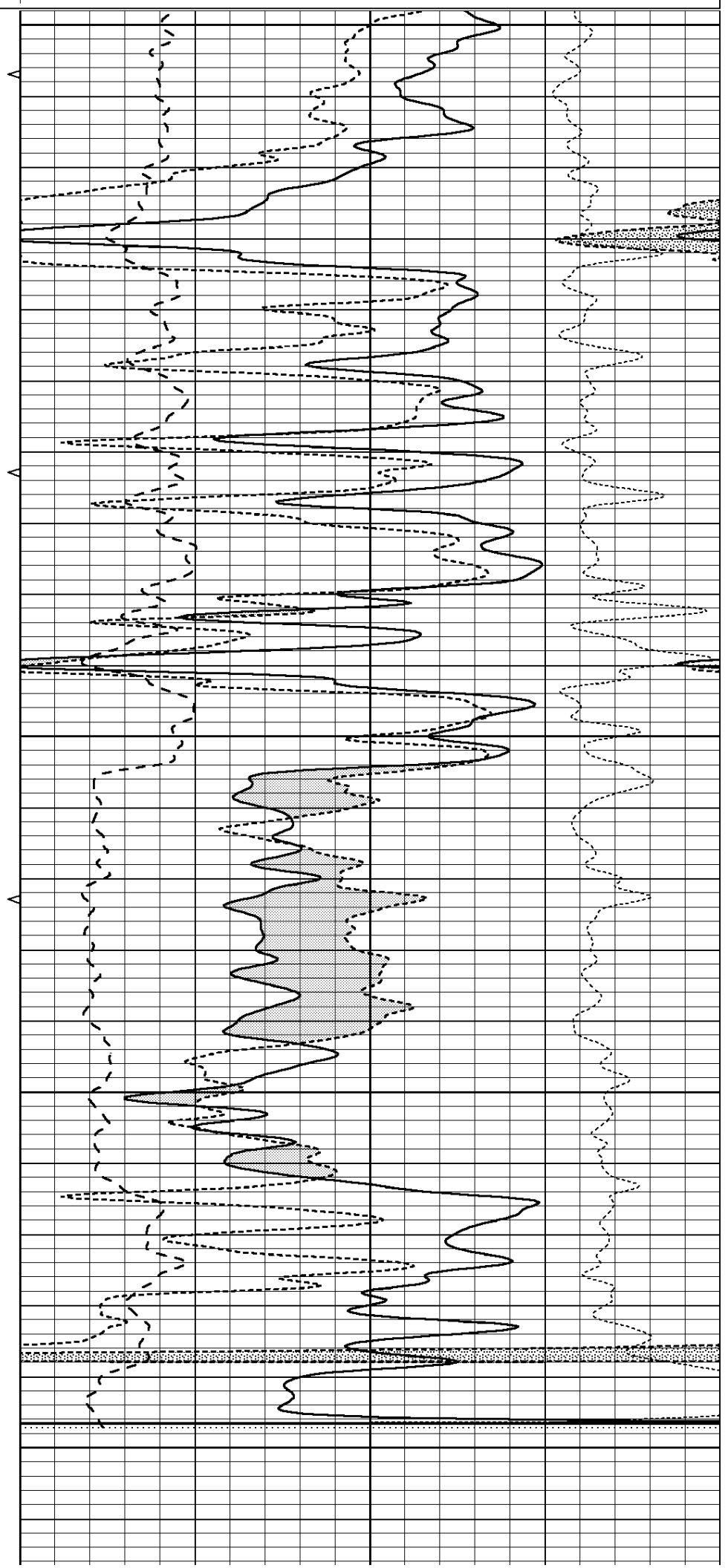
4450

4500

4550

4600

4650



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
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			

