



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY/NEUTRON
PE LOG

Company EMPIRE ENERGY E&P, LLC.
Well WOKATY #7
Field MAX
County STAFFORD
State KANSAS

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Well WOKATY #7
Field MAX
County STAFFORD State KANSAS

Location: 2300' FNL & 1300' FVL
NE - SE - SW - NW
APL # : 15-185-23701-0000
SEC 12 TWP 22S RGE 12W
Permanent Datum GROUND LEVEL Elevation 1822
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL/MEL
SONIC
Elevation
K.B. 1833
D.F. 1831
G.L. 1822

Date	10/28/11		
Run Number	ONE		
Depth Driller	3700		
Depth Logger	3702		
Bottom Logged Interval	3678		
Top Log Interval	2700		
Casing Driller	8 5/8" @ 598		
Casing Logger	610		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6100 PPM	
Density / Viscosity	9.4/52		
pH / Fluid Loss	10.5/9.6		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.85 @ 79F		
Rmf @ Meas. Temp	.63 @ 79F		
Rmc @ Meas. Temp	1.02 @ 79F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	.59 @ 113F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	113F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	JOSH AUSTIN	RICK POPP	

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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 SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
GREAT BEND, KS. - S. ON 281 TO HWY 19 - 8 E. TO STAFFORD BLKTOP
1/4 S. - E. INTO

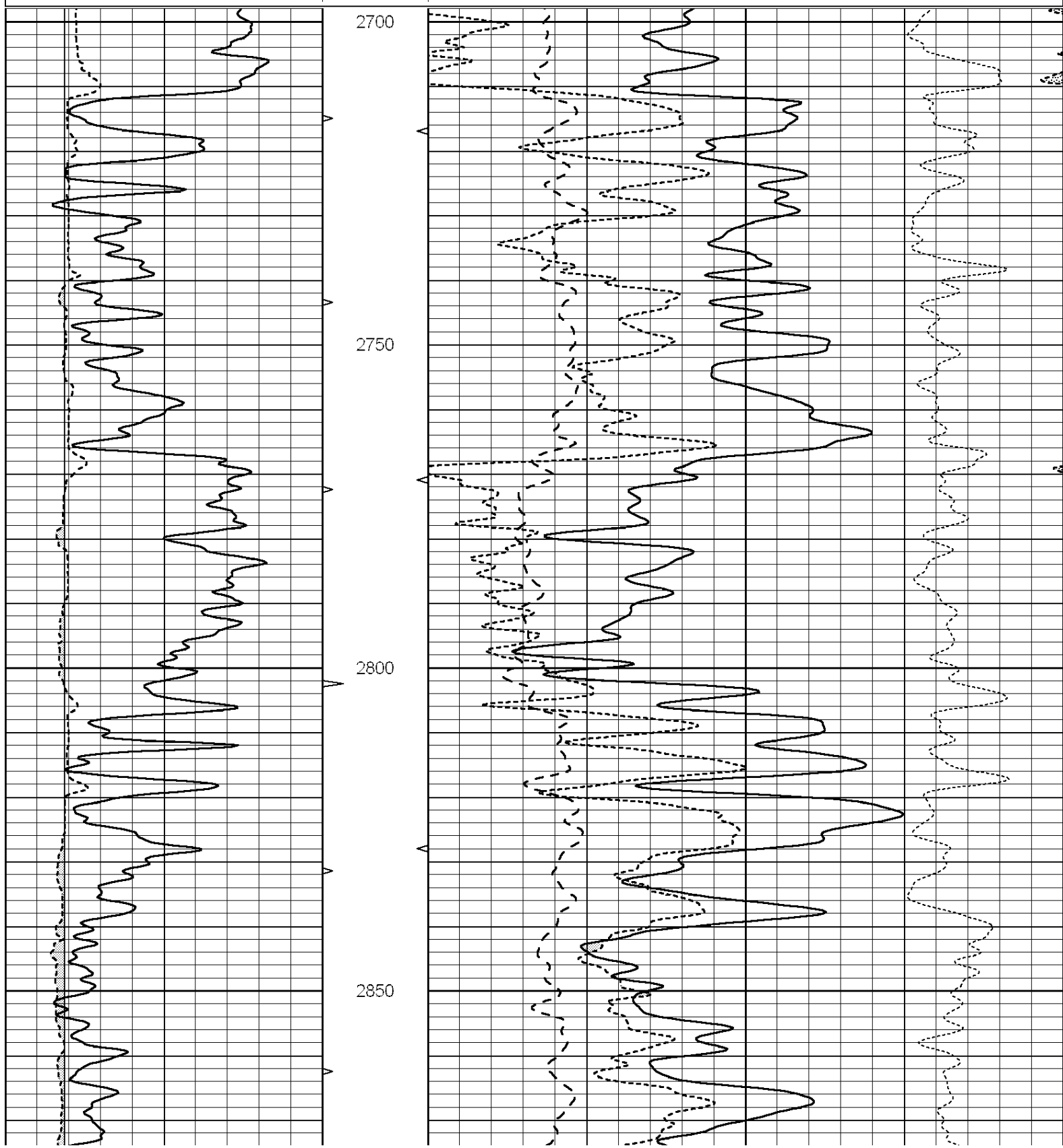


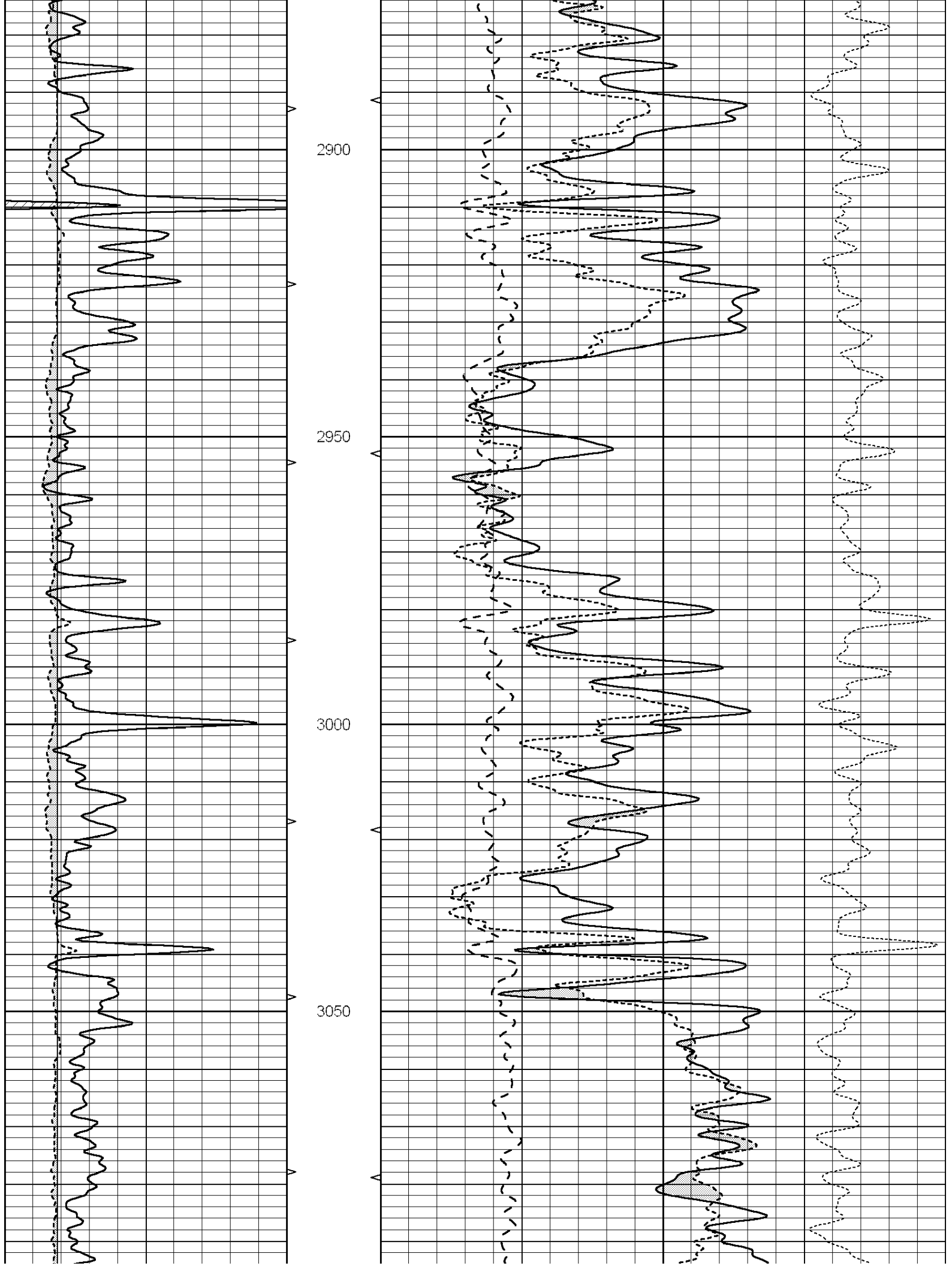
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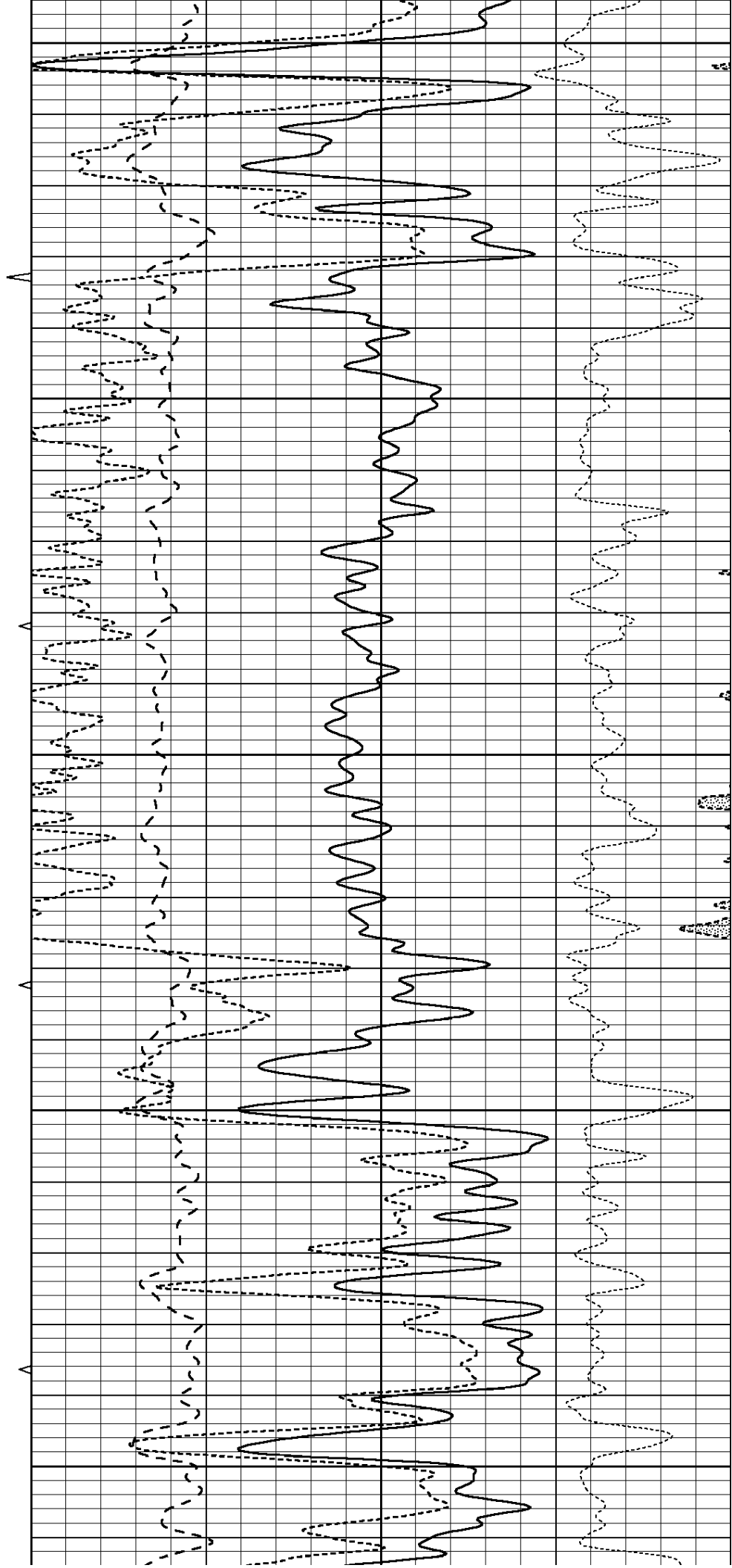
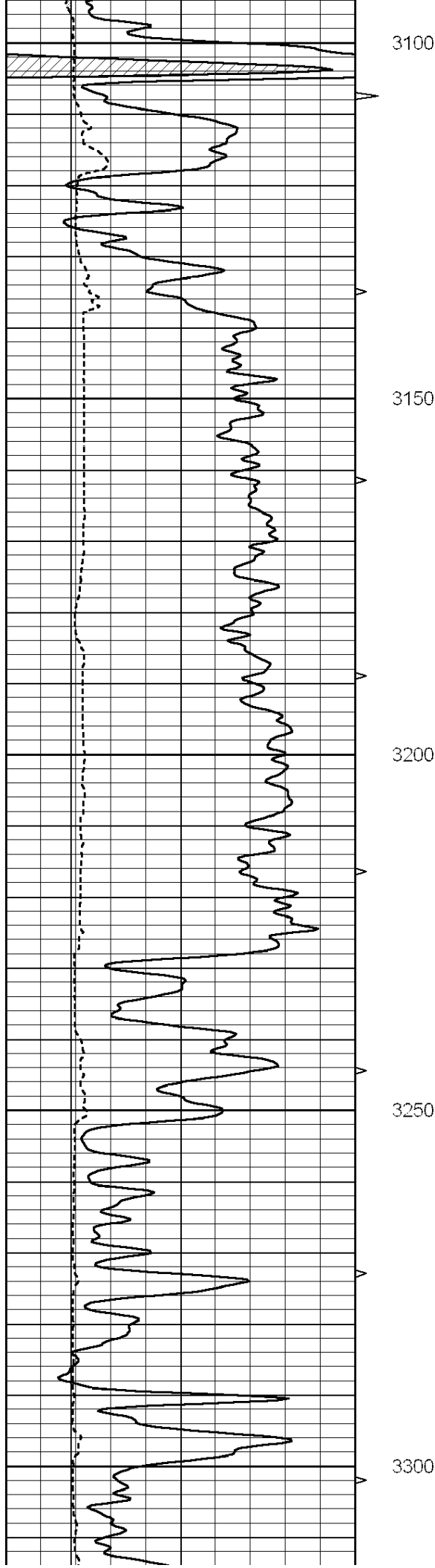
MAIN SECTION

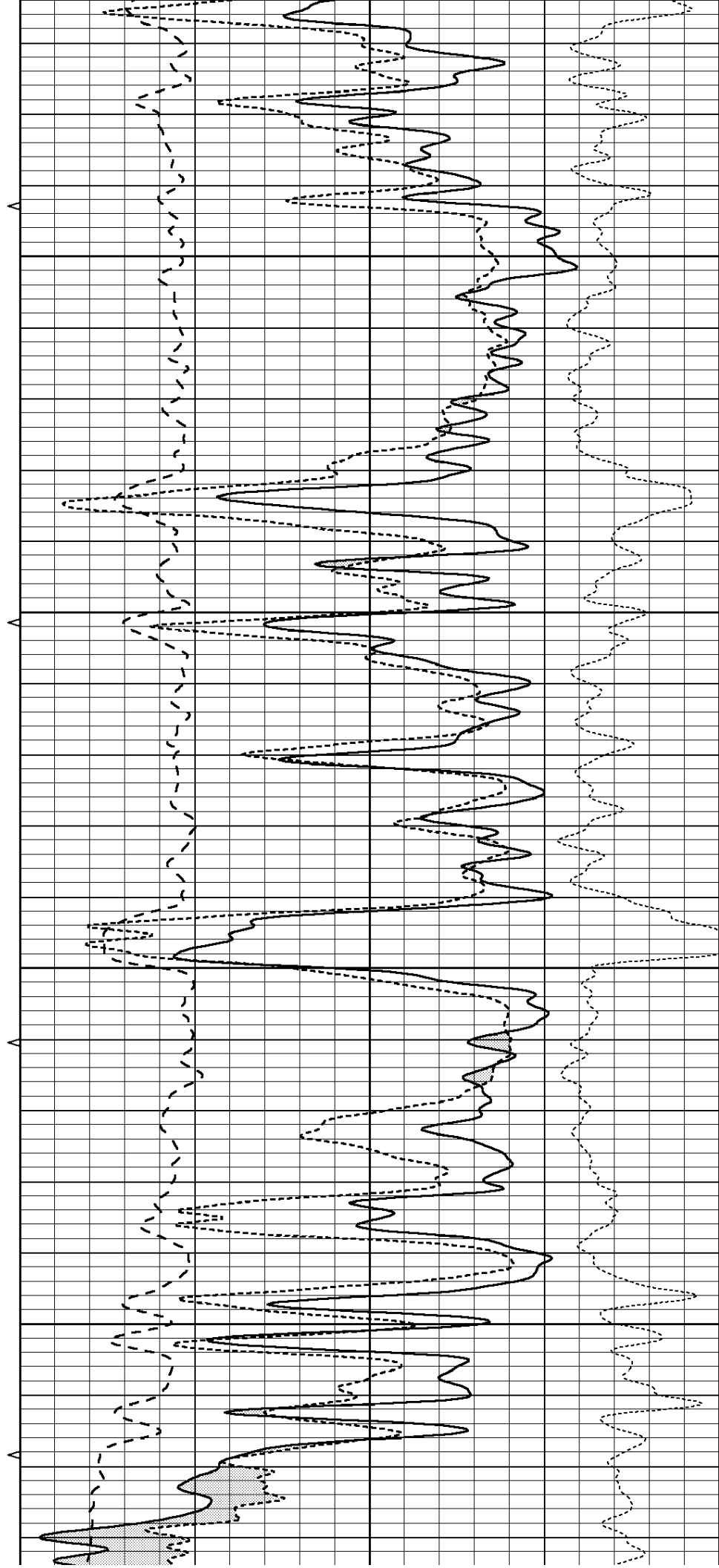
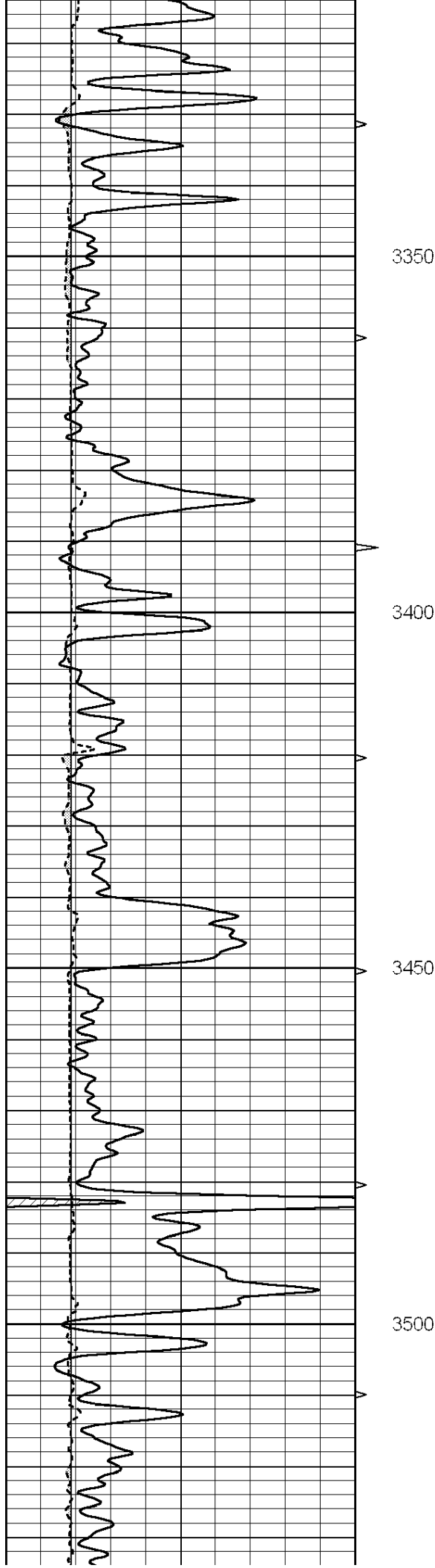
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Dataset Pathname: pass3.1
Presentation Format: _ldt_neu
Dataset Creation: Fri Oct 28 23:47:52 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

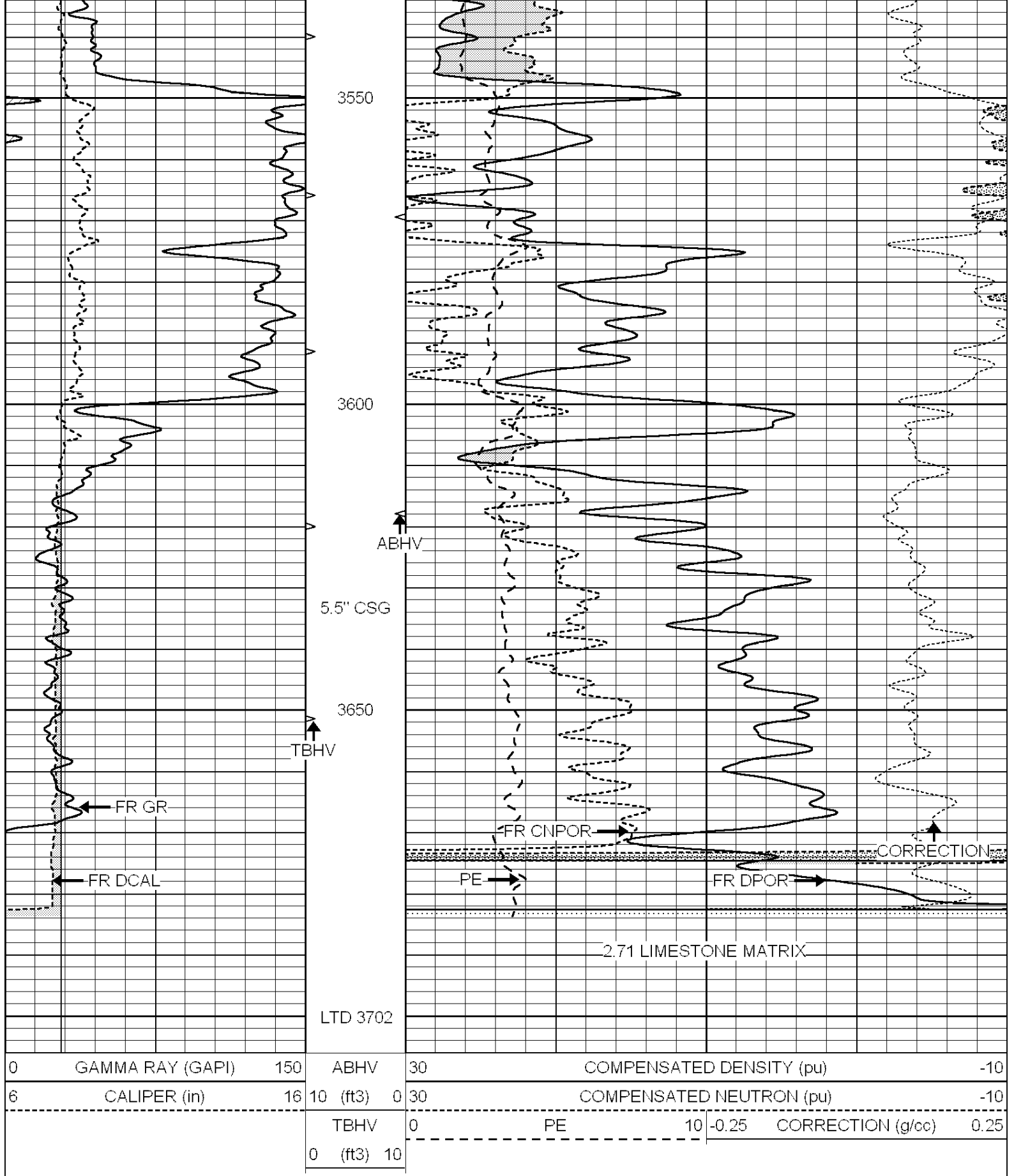
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)				-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)				-10
			TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10						









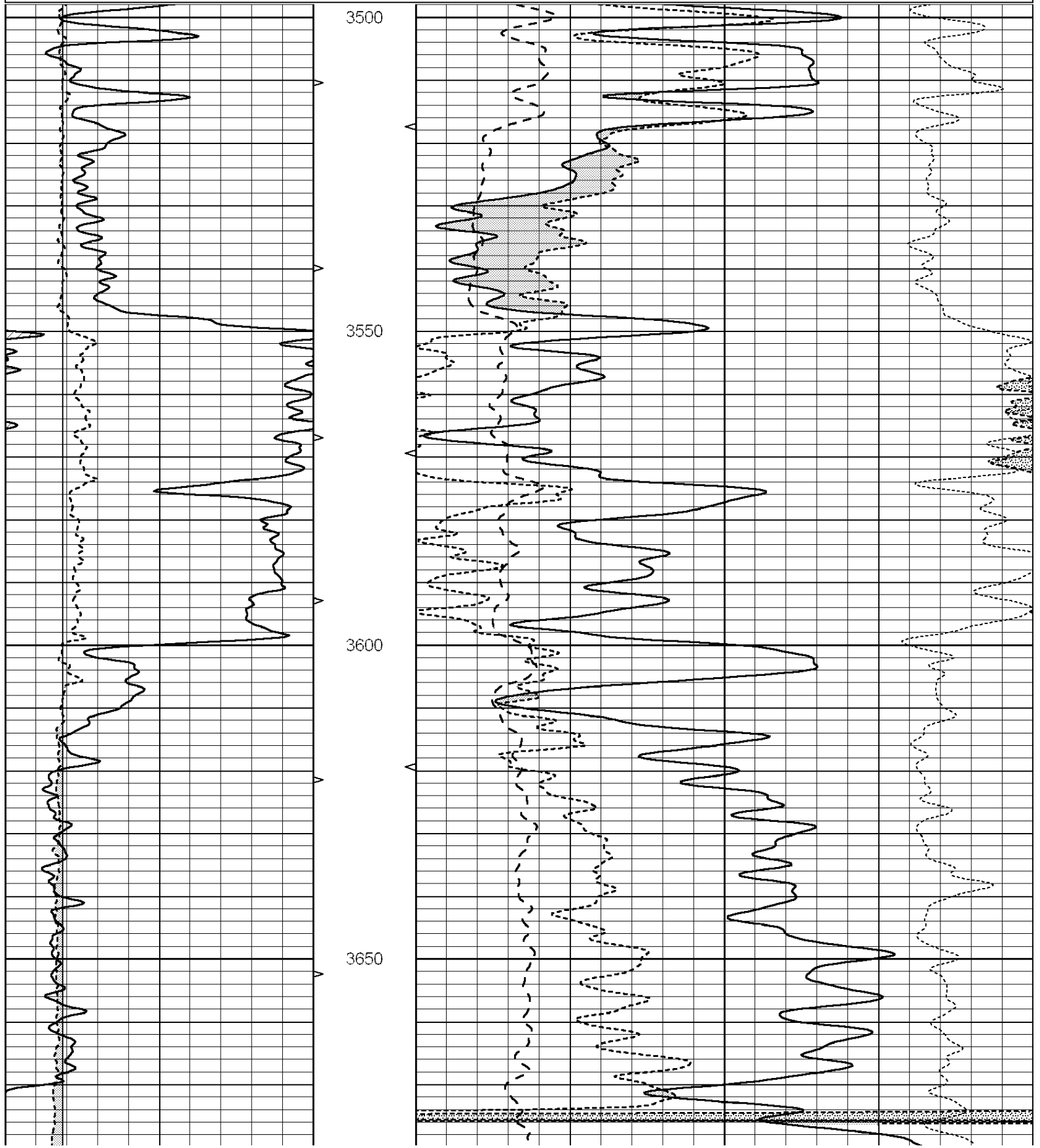


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REPEAT SECTION

Database File: 007894pe.db
Dataset Pathname: pass2.1
Presentation Format: _ldt_neu
Dataset Creation: Fri Oct 28 23:36:45 2011 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)	-10
			TBHV	0	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3) 10			



Calibration Report									
Database File:		007894pe.db							
Dataset Pathname:		pass2.1							
Dataset Creation:		Fri Oct 28 23:36:45 2011 by Calc Open-Cased 090629							
Dual Induction Calibration Report									
Serial-Model:		PROBE7-DILG							
Surface Cal Performed:		Wed Jul 30 06:14:24 2008							
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	621.923	8.759	
Medium	0.039	0.728	V	0.000	464.000	mmho/m	673.322	-26.058	
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

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1056.3	9118.0	2809.7	10378.4	cps
Window 2	969.9	7671.9	2431.6	8565.8	cps
Window 3	683.8	2939.8	1161.0	3161.8	cps
Window 4	231.4	231.6	226.7	230.8	cps
Long Space	0.0	6702.0	1461.7	7595.9	cps
Short Space	1.2	1433.6	959.4	1568.6	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 45.2	Rib Slope	: 1.008	Density/Spine Ratio	: 0.559
Spine Angle	: 75.2	Spine Slope	: 3.791	Spine Intercept	: -18.7

Caliper				
Low Ref	Readings	Reference		
High Ref	3.7	8.0		
	6.1	14.0		
	Gain: 2.5		Offset: -1.3	

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	

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			