



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY/NEUTRON
PE LOG

Company		MULL DRILLING COMPANY, INC.	
Well		DAVID #1-16X	
Field			
County		NESS	
State		KANSAS	
Company		MULL DRILLING COMPANY, INC.	
Well		DAVID #1-16X	
Field			
County		NESS	
State		KANSAS	
Location:		API # : 15-135-25239-0000	
Permanent Datum		GROUND LEVEL	
Log Measured From		KELLY BUSHING 5' A.G.L.	
Drilling Measured From		KELLY BUSHING	
SEC 16 TWP 17S RGE 23W		Elevation	
603' FSL & 599' FWL		DIL	
		MEL/SON	
		Other Services	
		Elevation	
		K.B. 2426	
		D.F. 2424	
		G.L. 2421	
Date	5/10/11		
Run Number	ONE		
Depth Driller	4550		
Depth Logger	4548		
Bottom Logged Interval	4524		
Top Log Interval	3600		
Casing Driller	8 5/8" @ 220'		
Casing Logger			
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 7500 PPM	
Density / Viscosity	9.3 / 54		
pH / Fluid Loss	10.0 / 11.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.65 @ 78F		
Rmf @ Meas. Temp	0.49 @ 78F		
Rmc @ Meas. Temp	0.78 @ 78F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.42 @ 121F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	121F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JEFF GRONEMEG		
Witnessed By	KEVIN KESSLER		

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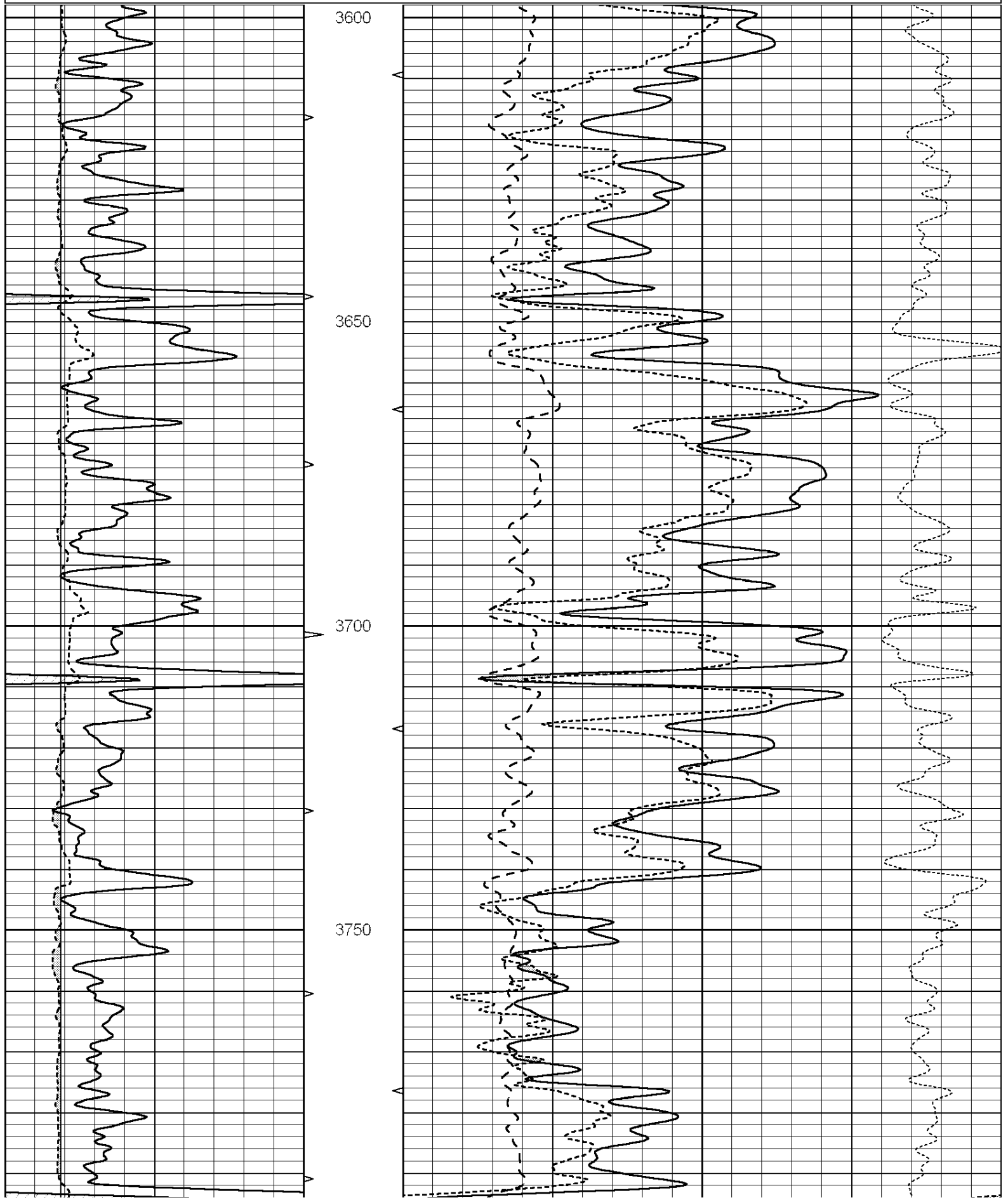
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

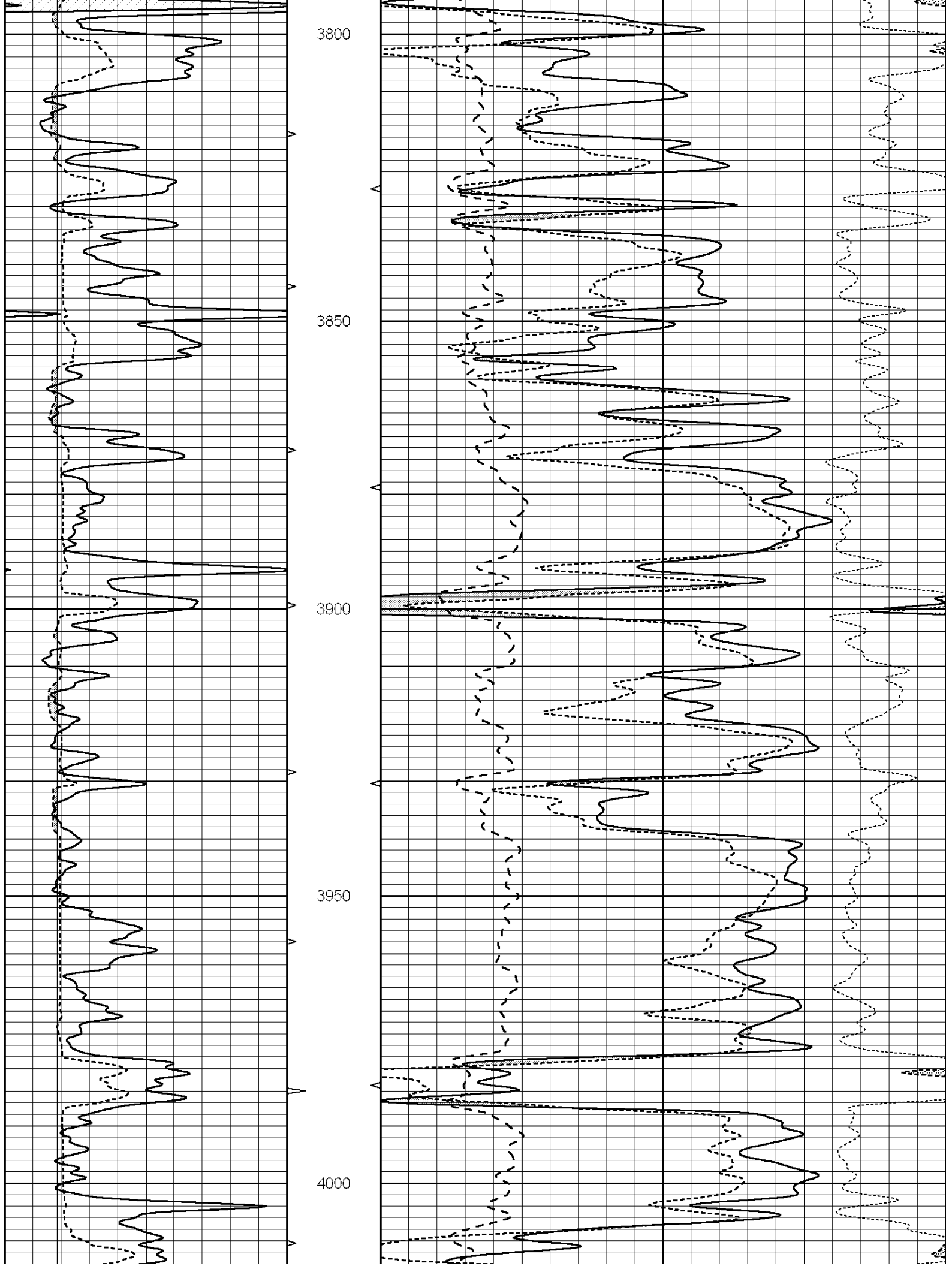
Comments

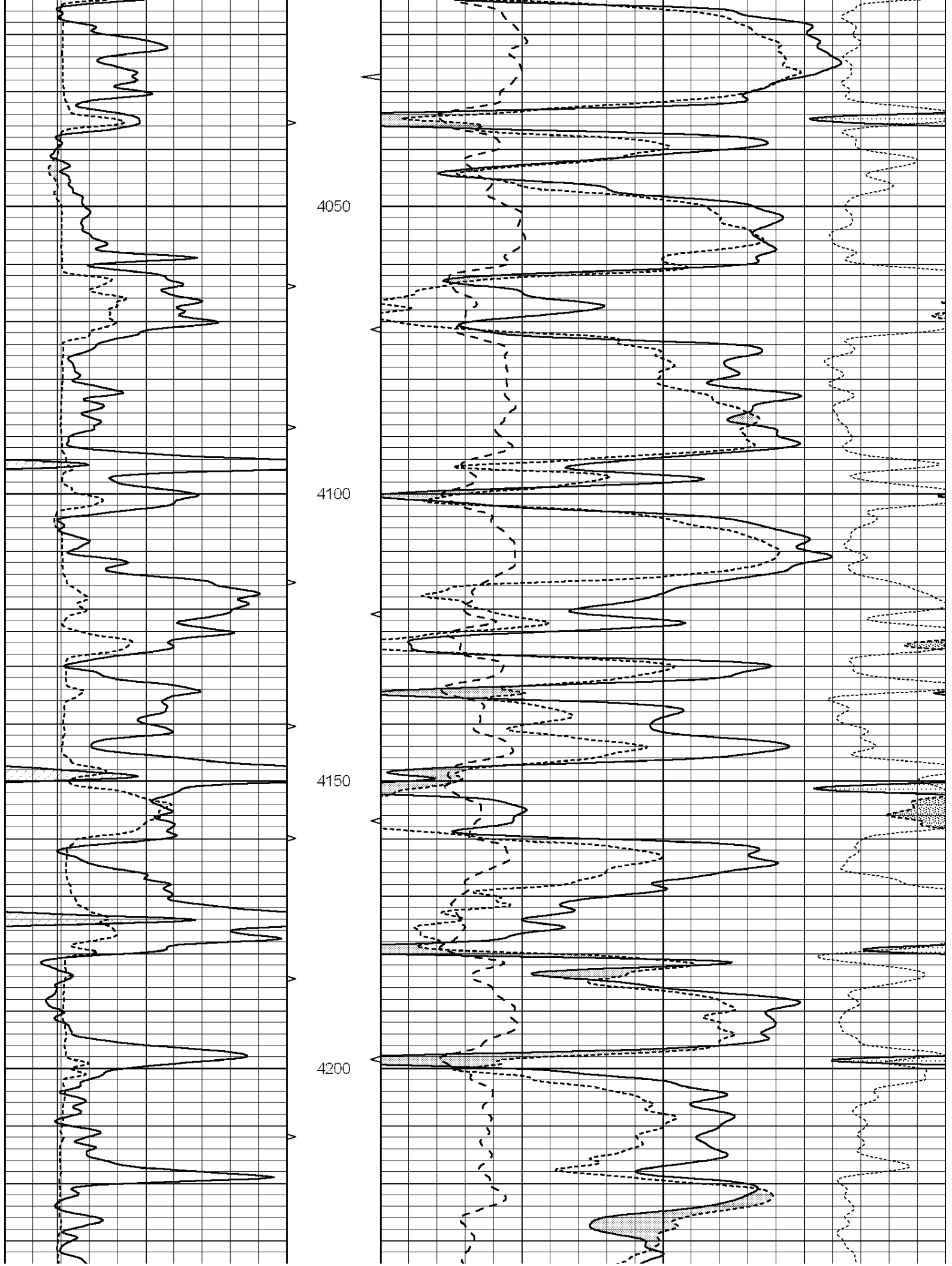
THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
INTERSECTION OF HWY 4 & 283 - 5 MILES SOUTH TO RD 210 - 1.1 MILES EAST
NORTH INTO

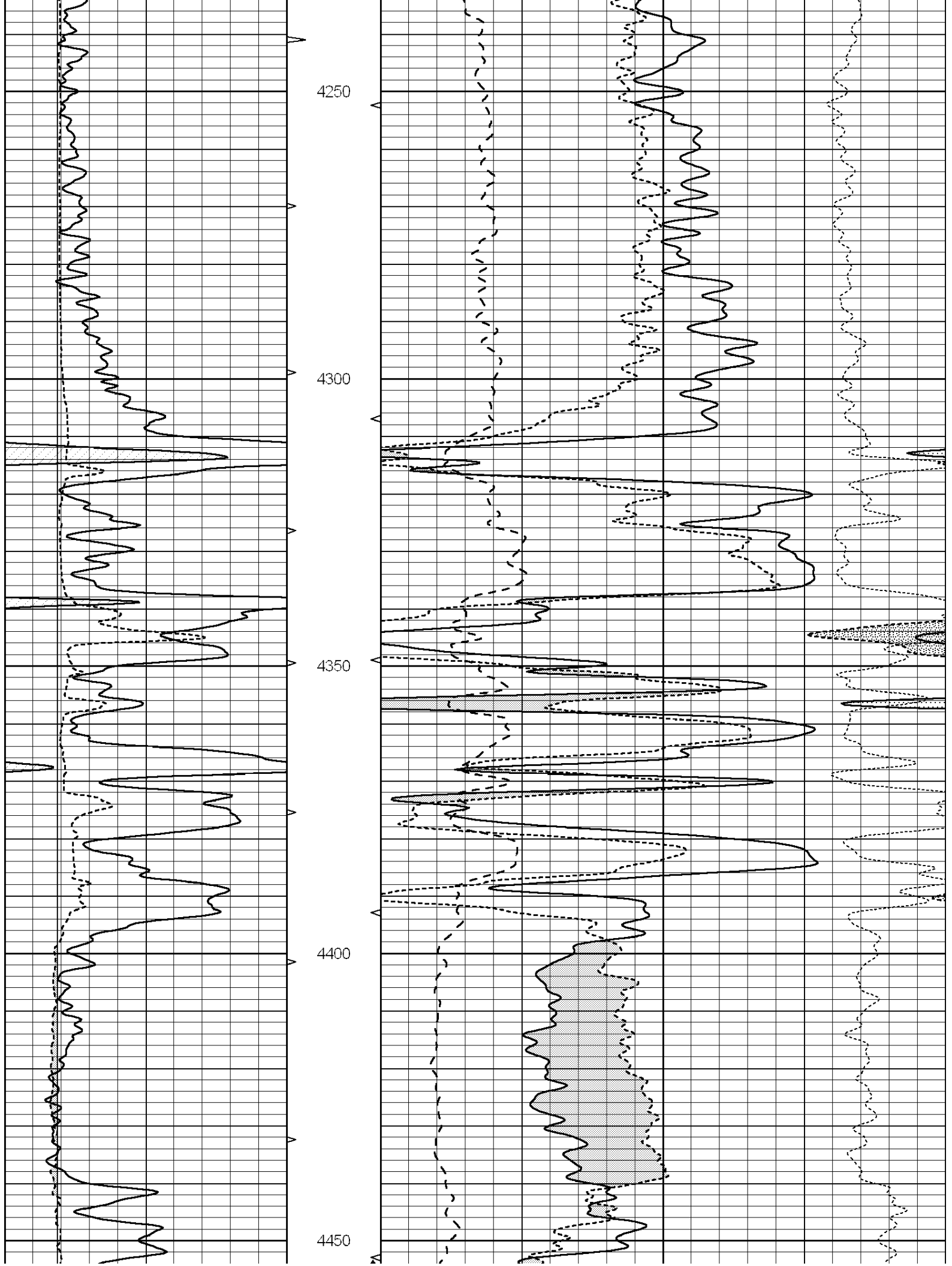
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Dataset Pathname: pass3.1
Presentation Format: _ldt_neu
Dataset Creation: Tue May 10 22:25:49 2011 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

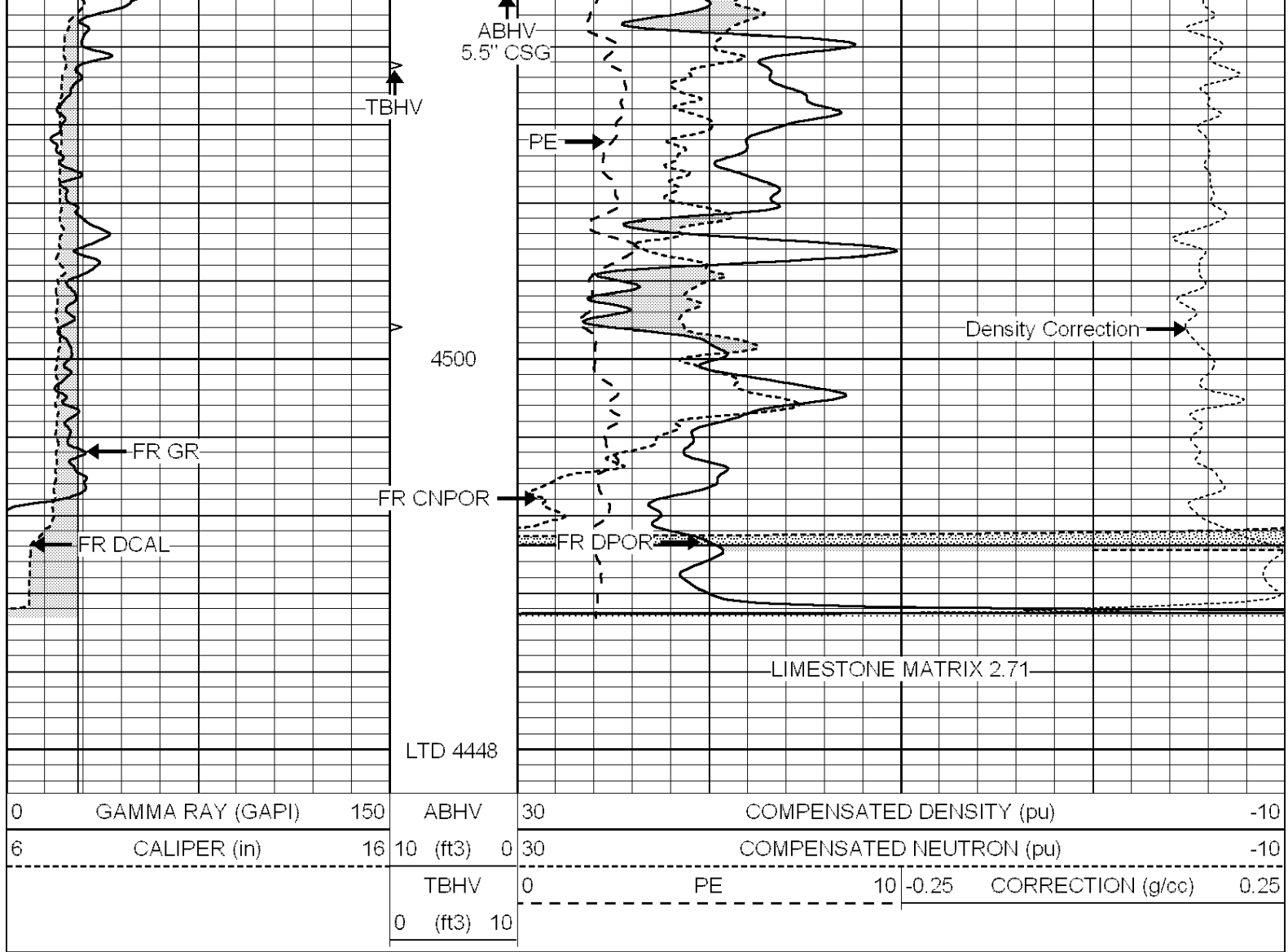
Charted by: _____		Depth in Feet scaled 1:2.15				
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
			TBHV	0	PE	10
			0 (ft3) 10	-0.25	CORRECTION (g/cc)	0.25









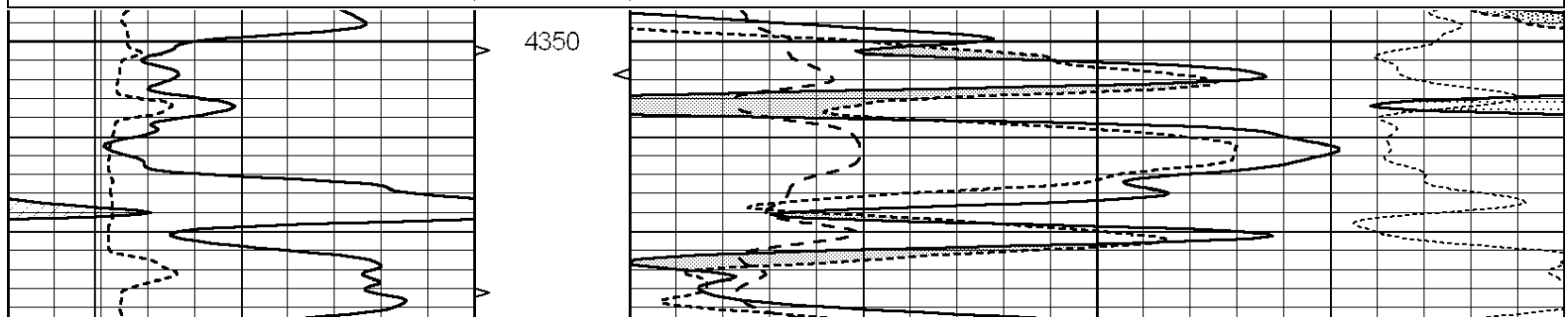


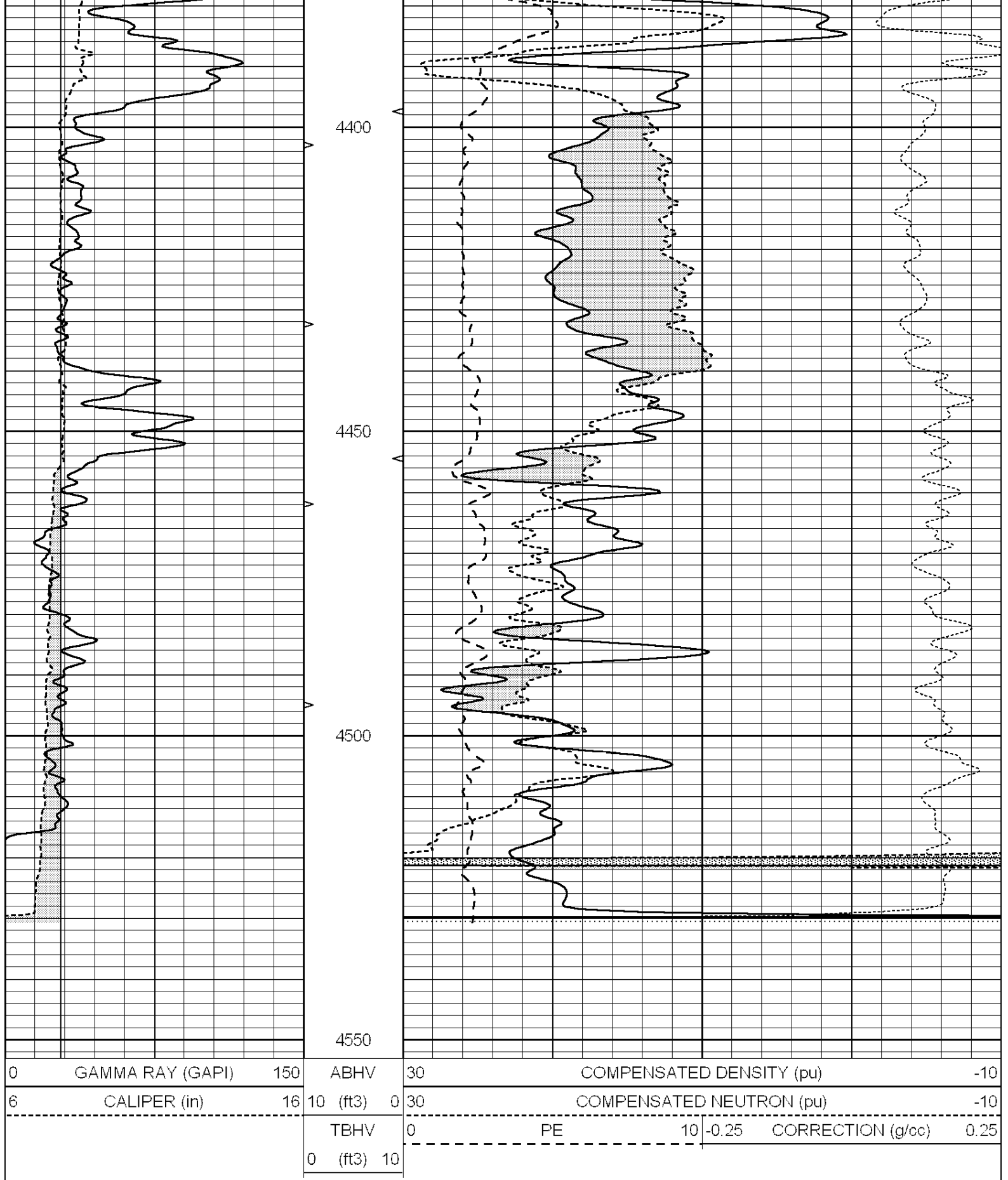
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REPEAT SECTION

Database File: 007075pe.db
 Dataset Pathname: pass2.3
 Presentation Format: _ldt_neu
 Dataset Creation: Tue May 10 23:43:07 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: 007075pe.db
Dataset Pathname: pass3.1
Dataset Creation: Tue May 10 22:25:49 2011 by Calc Open-Cased 090629

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 Report

Serial: 002 Model: PRB

Performed Mon Oct 29 15:40:49 2007

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

	Readings	Reference
Low Ref	2.8	8.0
High Ref	5.0	14.0
Gain: 2.7		Offset: -1.0

		Serial Number:		6I	
		Tool Model:		G	
CALIBRATION					
Detector		Readings		Target	
				Normalization	
Short Space		1.00	cps	1.00	cps
Long Space		1.00	cps	1.00	cps
				1.0000	
				1.0000	
Gamma Ray Calibration Report					
Serial Number:		#8			
Tool Model:		OPEN			
Performed:		Sun Apr 10 22:50:36 2011			
Calibrator Value:		150.0		GAPI	
Background Reading:		0.0		cps	
Calibrator Reading:		175.0		cps	
Sensitivity:		0.8971		GAPI/cps	