



SUPERIOR
Hays,
Kansas

COMPENSATED
NEUTRON / DENSITY
PE LOG

Company	TENGASCO INC.	Company	TENGASCO INC.
Well	SCHNELLER #6	Well	SCHNELLER #6
Field	WORTH NORTH	Field	WORTH NORTH
County	ELLIS	County	ELLIS
State	KANSAS	State	KANSAS
Location:	API # : 15-051-26282-0000 4230' FSL & 720' FEL SE - SW - NE - NE	Other Services DIL/MEL	
Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL KELLY BUSHING 9' A.G.L. KELLY BUSHING	Elevation K.B. 2190 D.F. 2188 G.L. 2181	
Date	4/16/12		
Run Number	TWO		
Depth Driller	3990		
Depth Logger	3991		
Bottom Logged Interval	3988		
Top Log Interval	3000		
Casing Driller	8 5/8" @ 268		
Casing Logger	266		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1,700 PPM	
Density / Viscosity	9.2 / 61		
pH / Fluid Loss	10.5 / 608		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	0.50 @ 88F		
Rmf @ Meas. Temp	0.38 @ 88F		
Rmc @ Meas. Temp	0.60 @ 88F		
Source of Rmf / Rmc	MEASURED		
Rin @ BHT	0.38 @ 116F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	116F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JEFF GRONEMEG		
Witnessed By	MIKE BAIR		

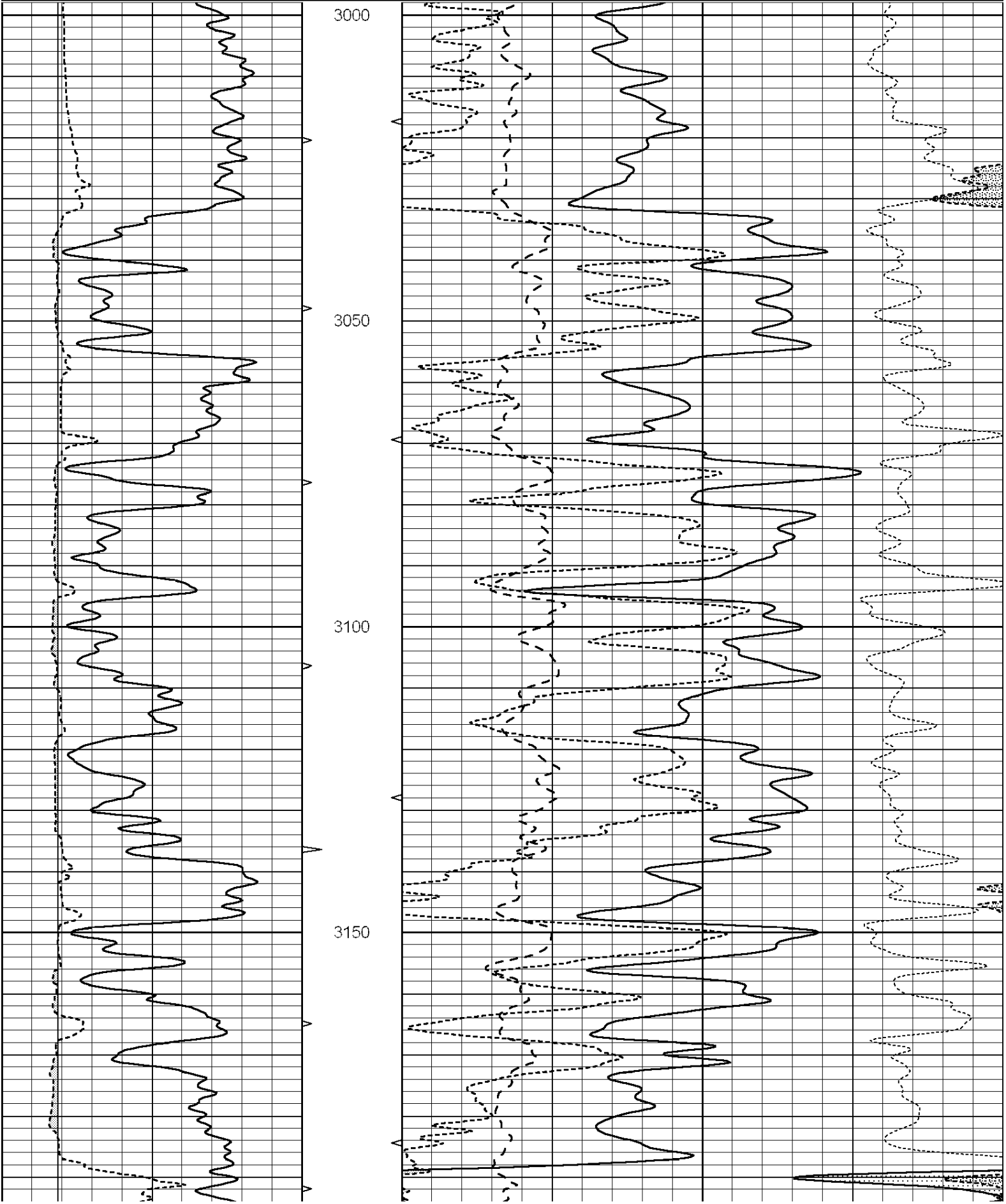
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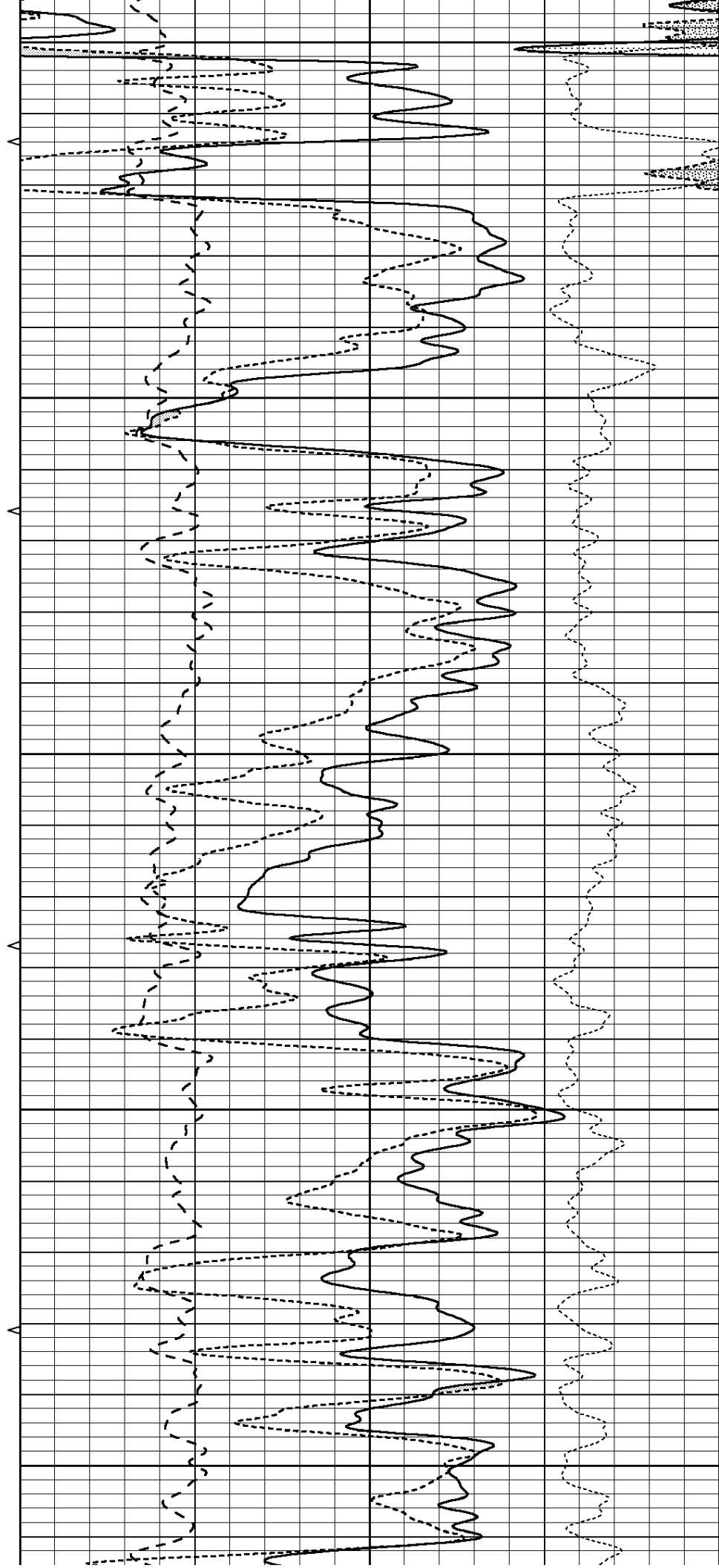
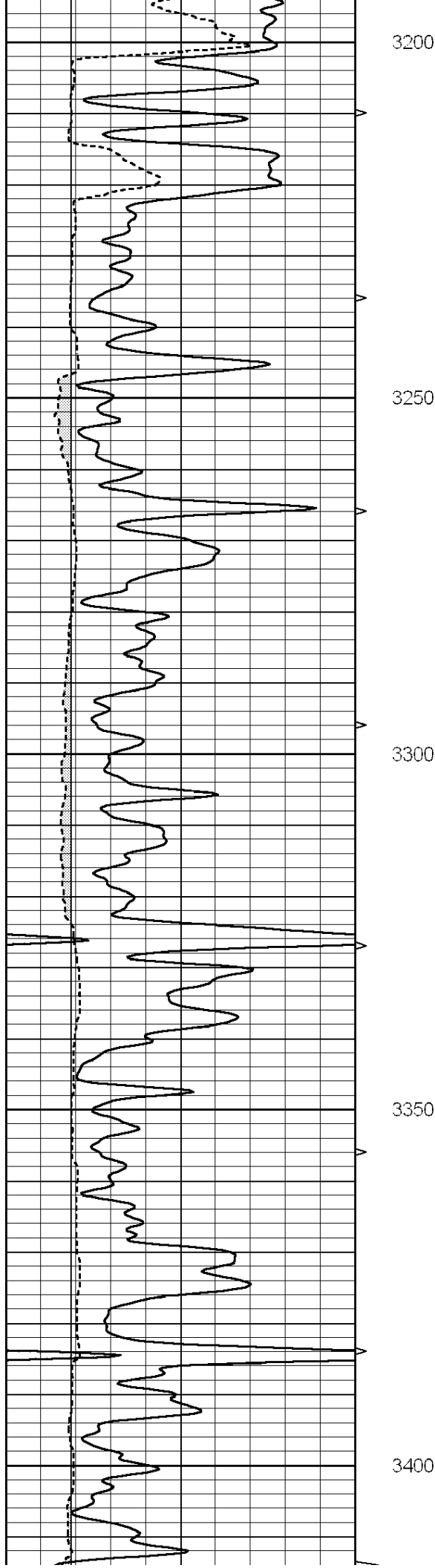
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

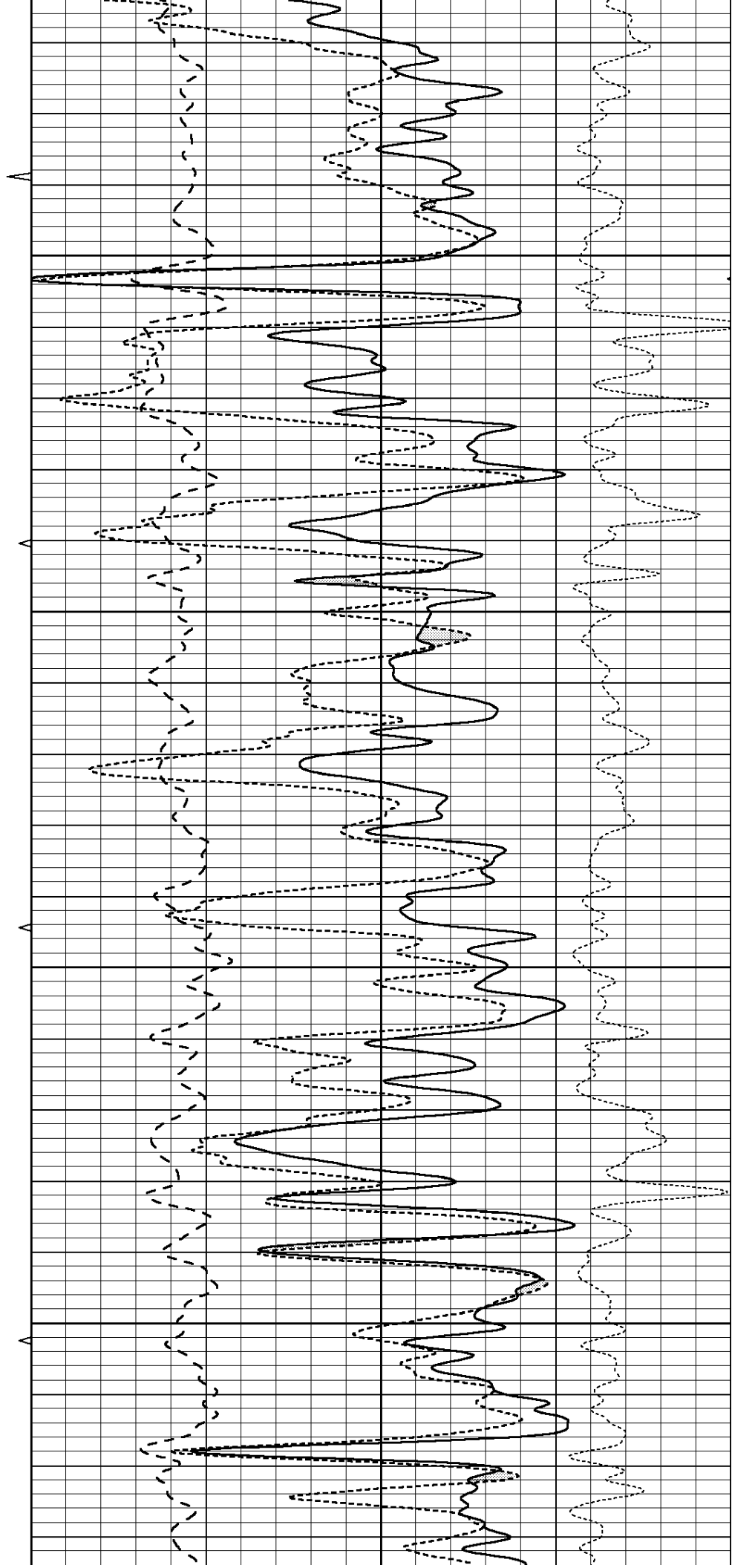
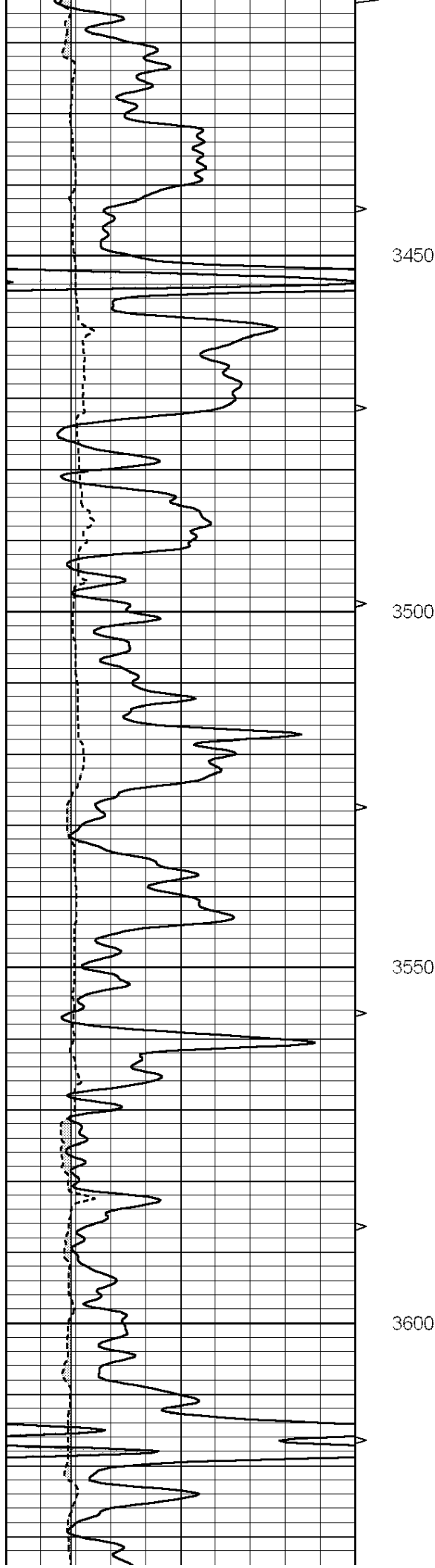
Comments

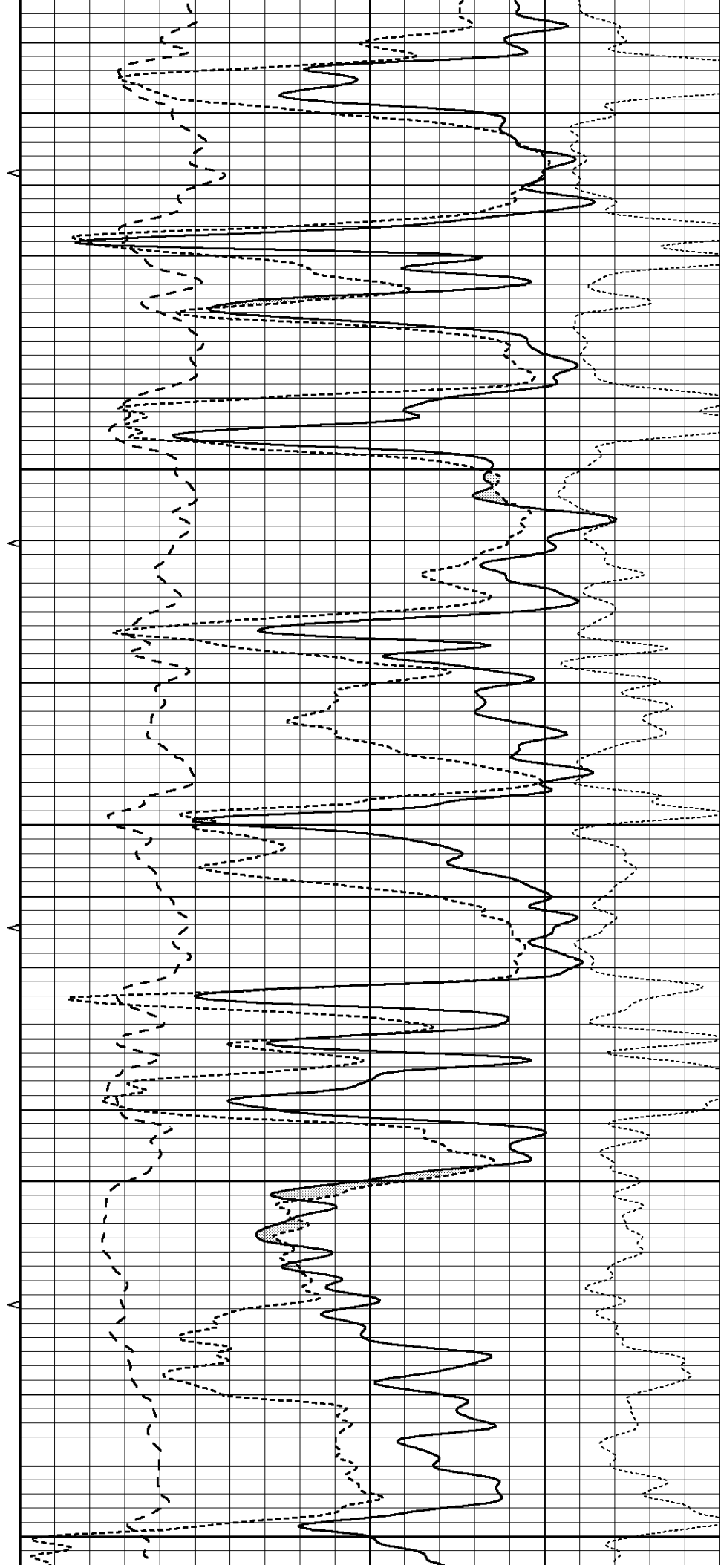
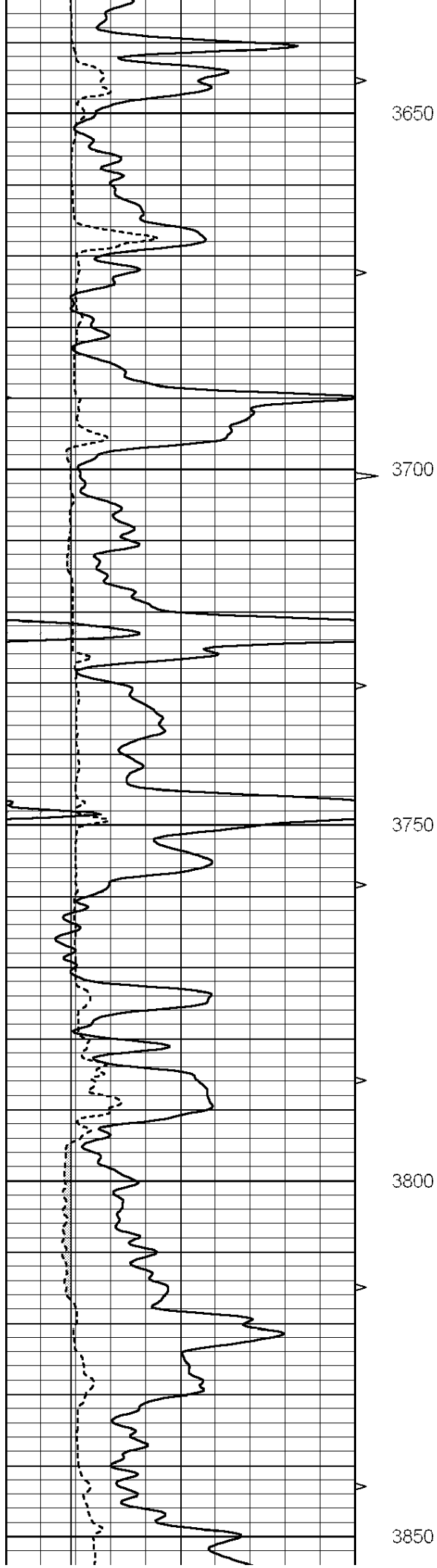
THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
ELLIS, KS - 1 MILE NORTH TO EMMERAM RD - 2 MILES EAST
1/2 MILE NORTH - WEST INTO

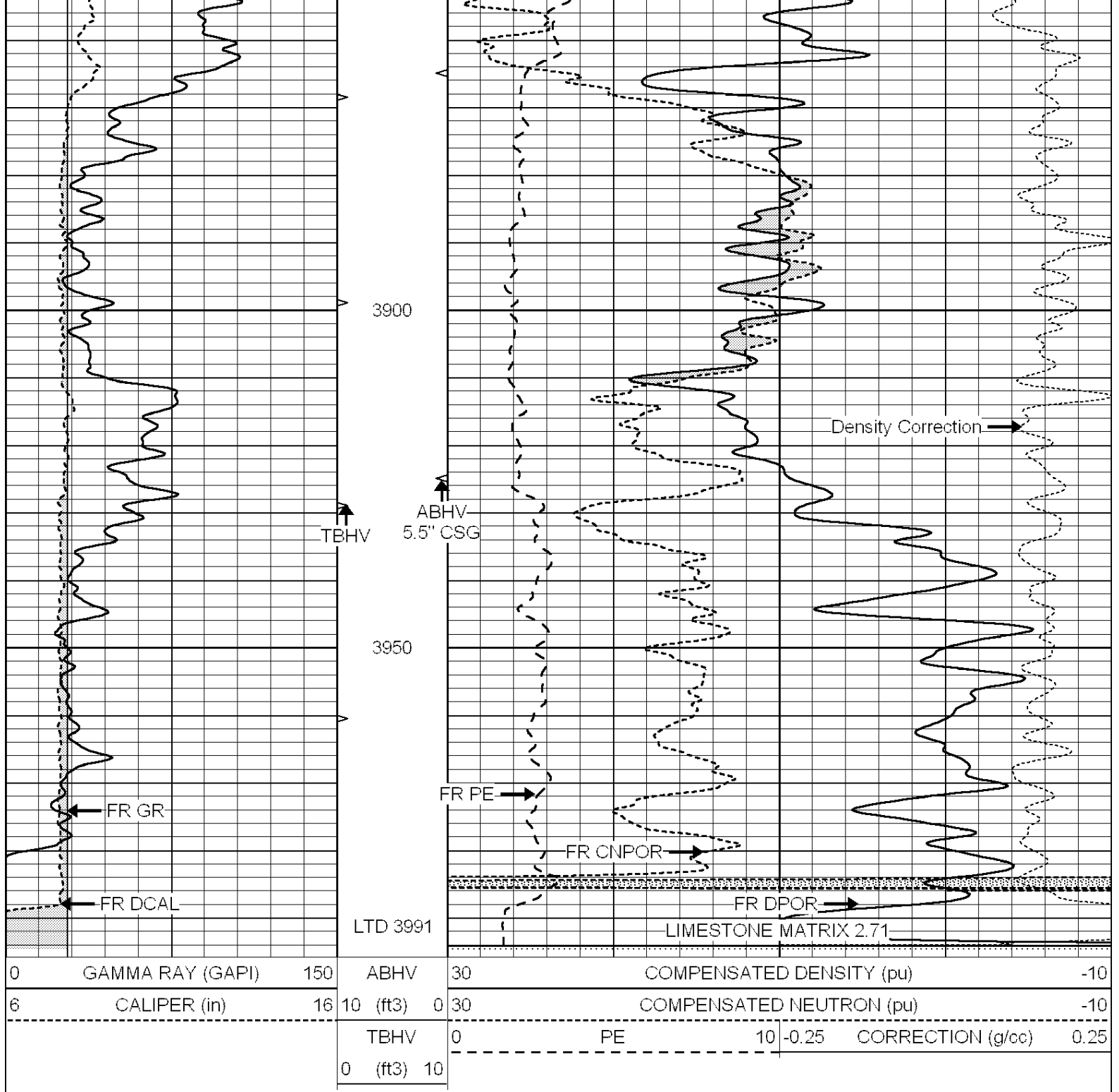
Charted by:		Depth in feet scaled 1:2.15							
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10		
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)		-10	
			TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					











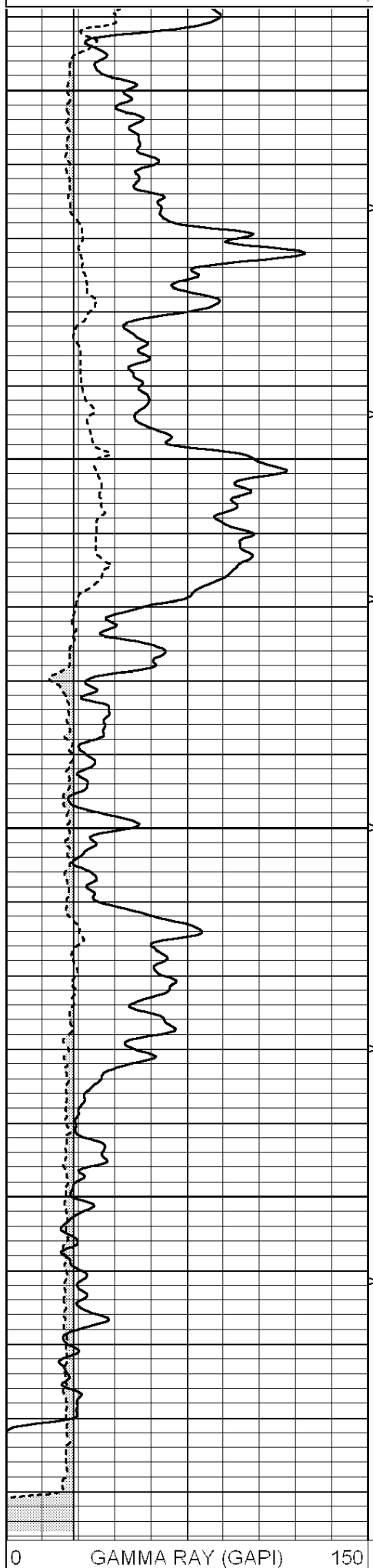
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 008842pe.db
 Dataset Pathname: pass4.3
 Presentation Format: _ldt_neu
 Dataset Creation: Mon Apr 16 15:13:47 2012 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					

0 (ft3) 10



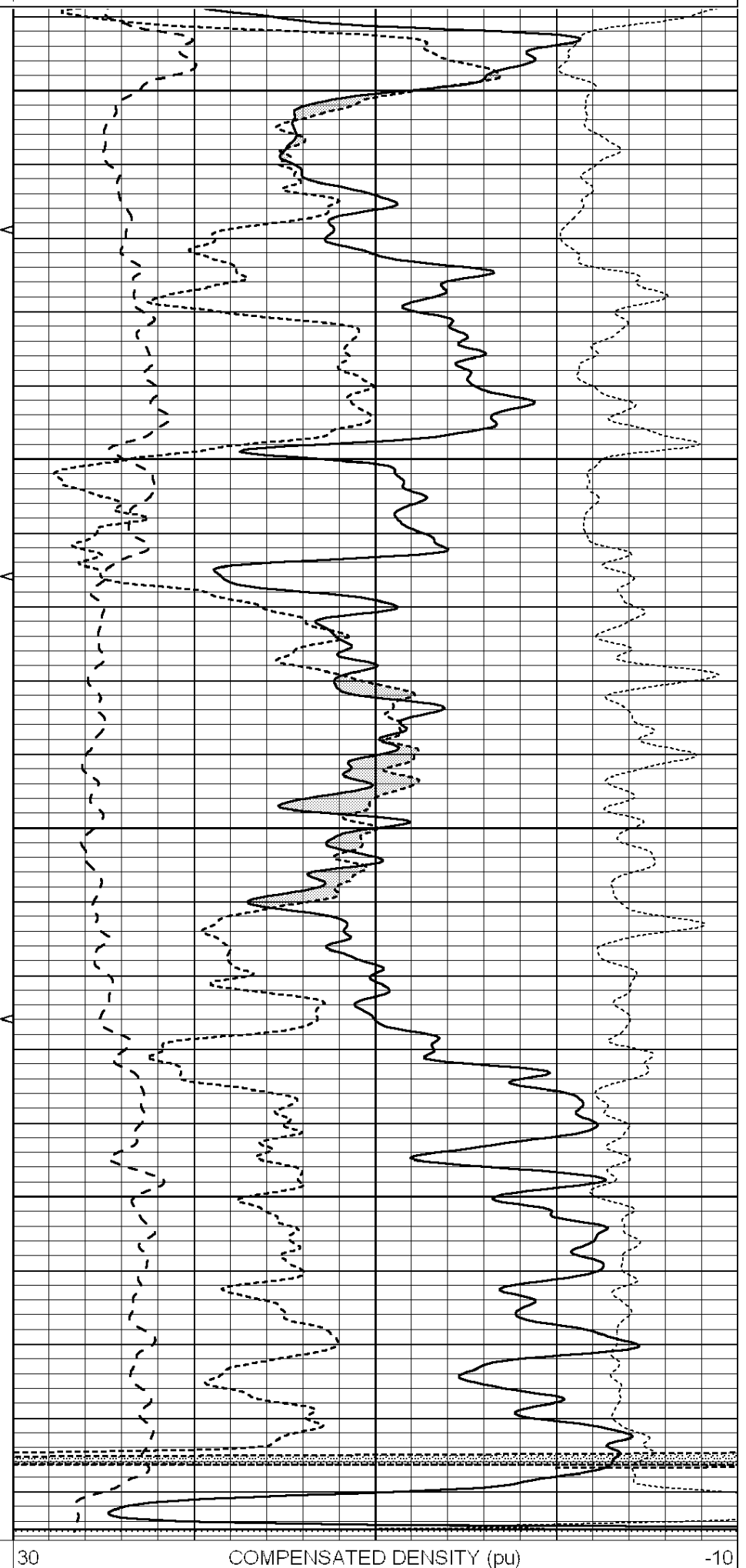
3800

3850

3900

3950

ABHV



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					

Database File: 008842pe.db		Calibration Report	
Dataset Pathname: pass5.5			
Dataset Creation: Mon Apr 16 15:08:19 2012 by Calc Open-Cased 090629			

Litho Density Calibration Report	
Serial: 002 Model: PRB	
Performed Mon Apr 02 18:34:45 2012	

Litho Density Calibration					
	Background	Magnesium	Aluminum	Sandstone	
Window 1	870.3	7347.3	2308.1	8190.4	cps
Window 2	820.7	6010.4	1961.8	6596.5	cps
Window 3	670.4	3295.4	1229.9	3546.4	cps
Window 4	200.2	200.9	202.7	203.6	cps
Long Space	0.0	5189.7	1141.2	5775.9	cps
Short Space	1.1	1012.5	681.4	1078.9	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 45.3	Rib Slope	: 1.012	Density/Spine Ratio	: 0.562
Spine Angle	: 75.3	Spine Slope	: 3.825	Spine Intercept	: -17.9

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

Compensated Neutron Calibration Report	
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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	
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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