



**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY/NEUTRON
LOG**

Company	RAYMOND OIL COMPANY, INC.	Company	RAYMOND OIL COMPANY, INC.
Well	DOWD #1	Well	DOWD #1
Field	ALAMOTA	Field	ALAMOTA
County	LANE	County	LANE
State	KANSAS	State	KANSAS
Location:	API # : 15-101-22515-00-00 1996' FSL & 1216' FWL	Other Services	DIL/MEL
Permanent Datum	GROUND LEVEL	Elevation	2685
Log Measured From	KELLY BUSHING 5' A.G.L.	K.B.	2690
Drilling Measured From	KELLY BUSHING	D.F.	2688
		G.L.	2685

Date	6/15/14
Run Number	ONE
Depth Driller	4720
Depth Logger	4720
Bottom Logged Interval	4696
Top Log Interval	3400
Casing Driller	8 5/8" @ 261
Casing Logger	256
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3/50
pH / Fluid Loss	11.0/7.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.95 @ 86F
Rmt @ Meas. Temp	0.71 @ 86F
Rmc @ Meas. Temp	1.14 @ 86F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	0.67 @ 122F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	122F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	IAN MABB
Witnessed By	KIM SHOEMAKER

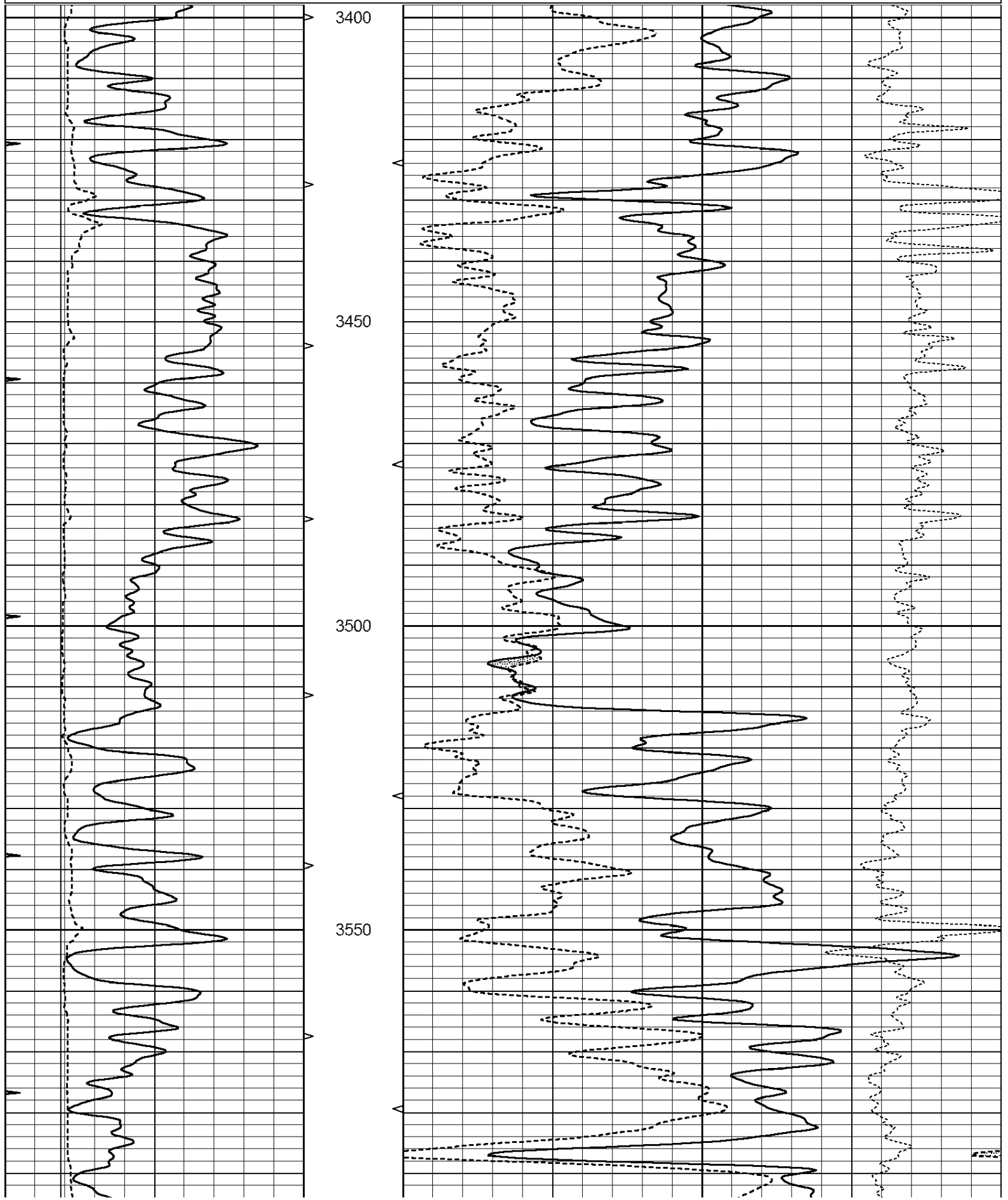
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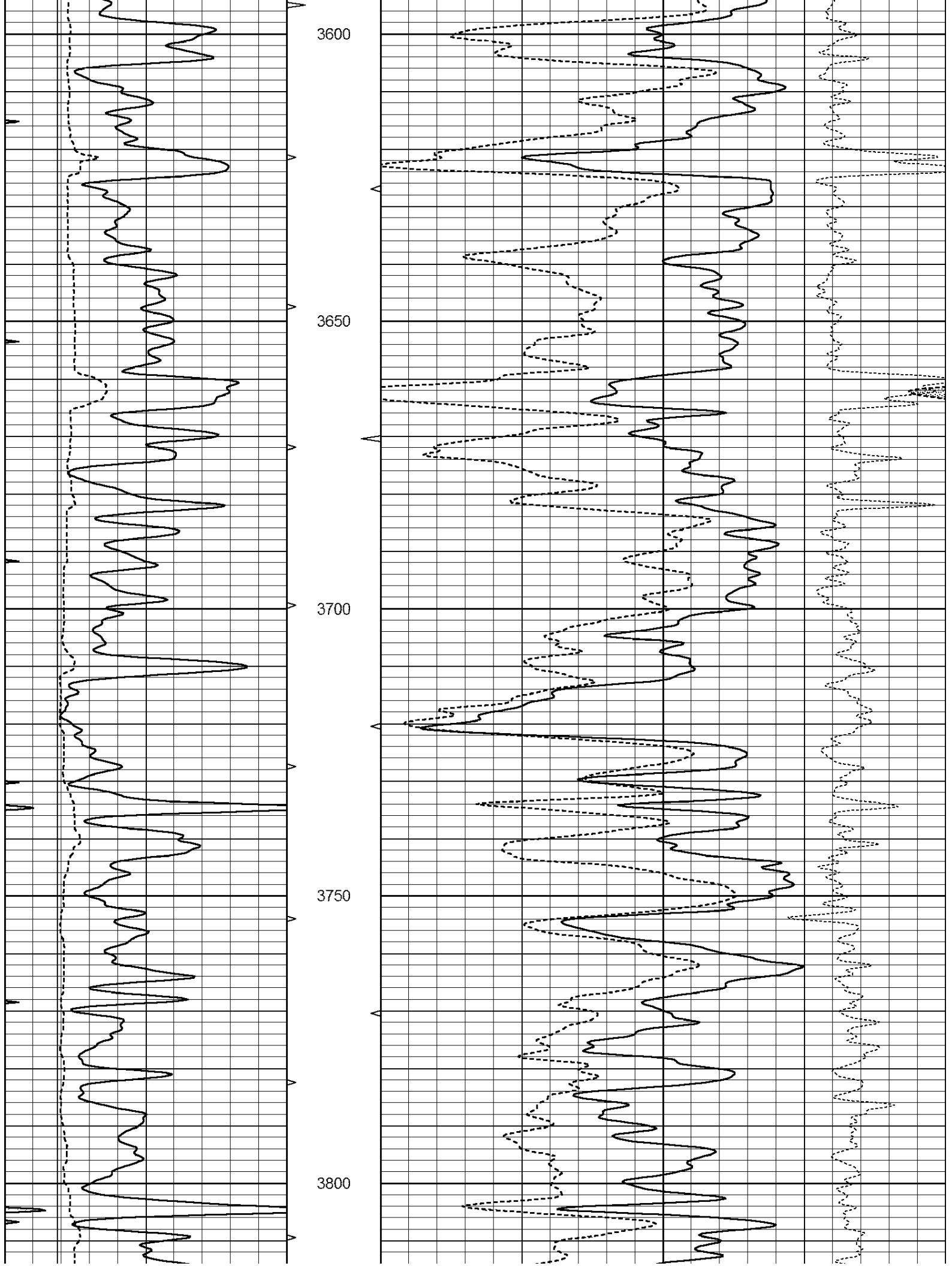
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

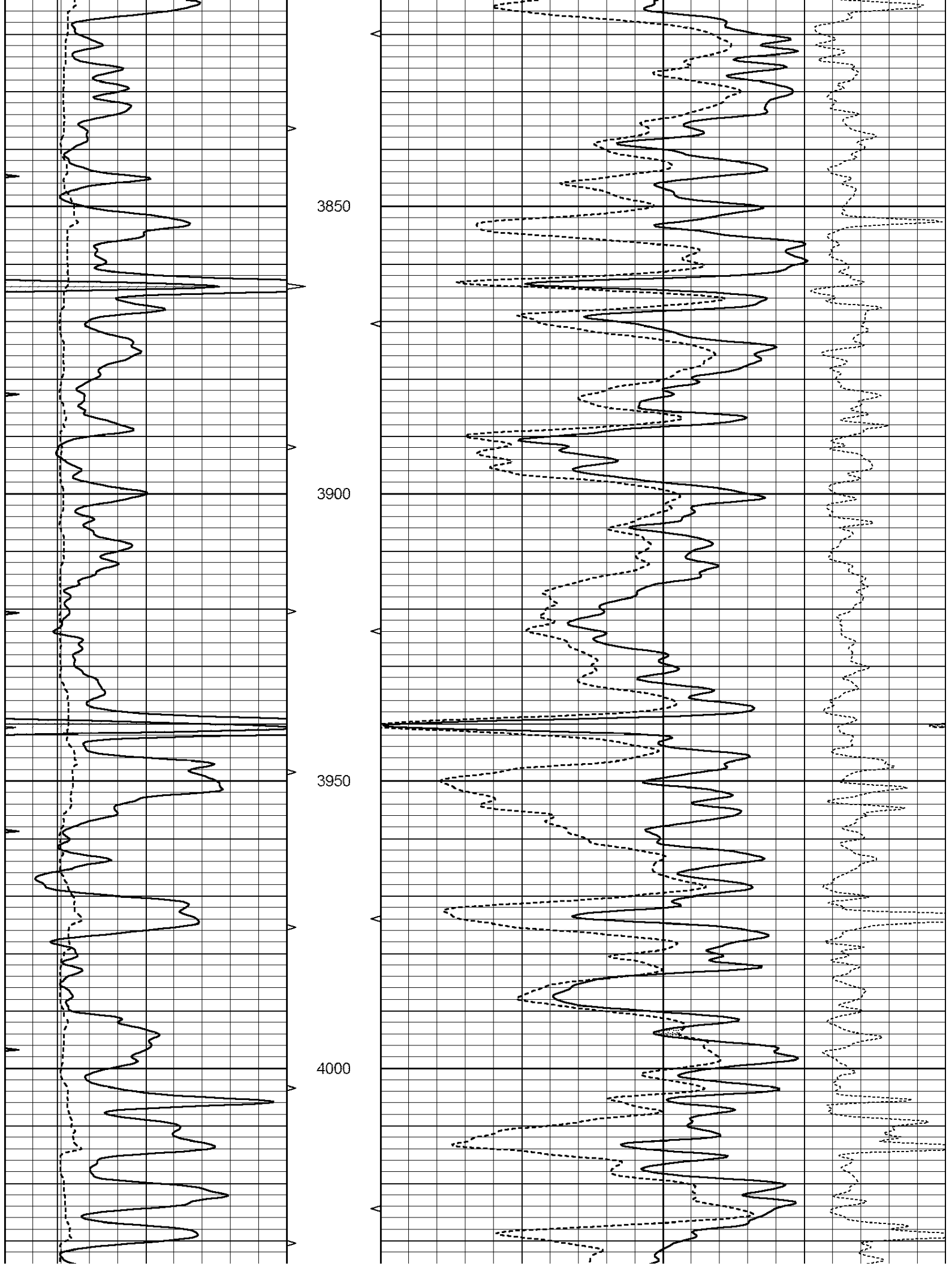
Comments

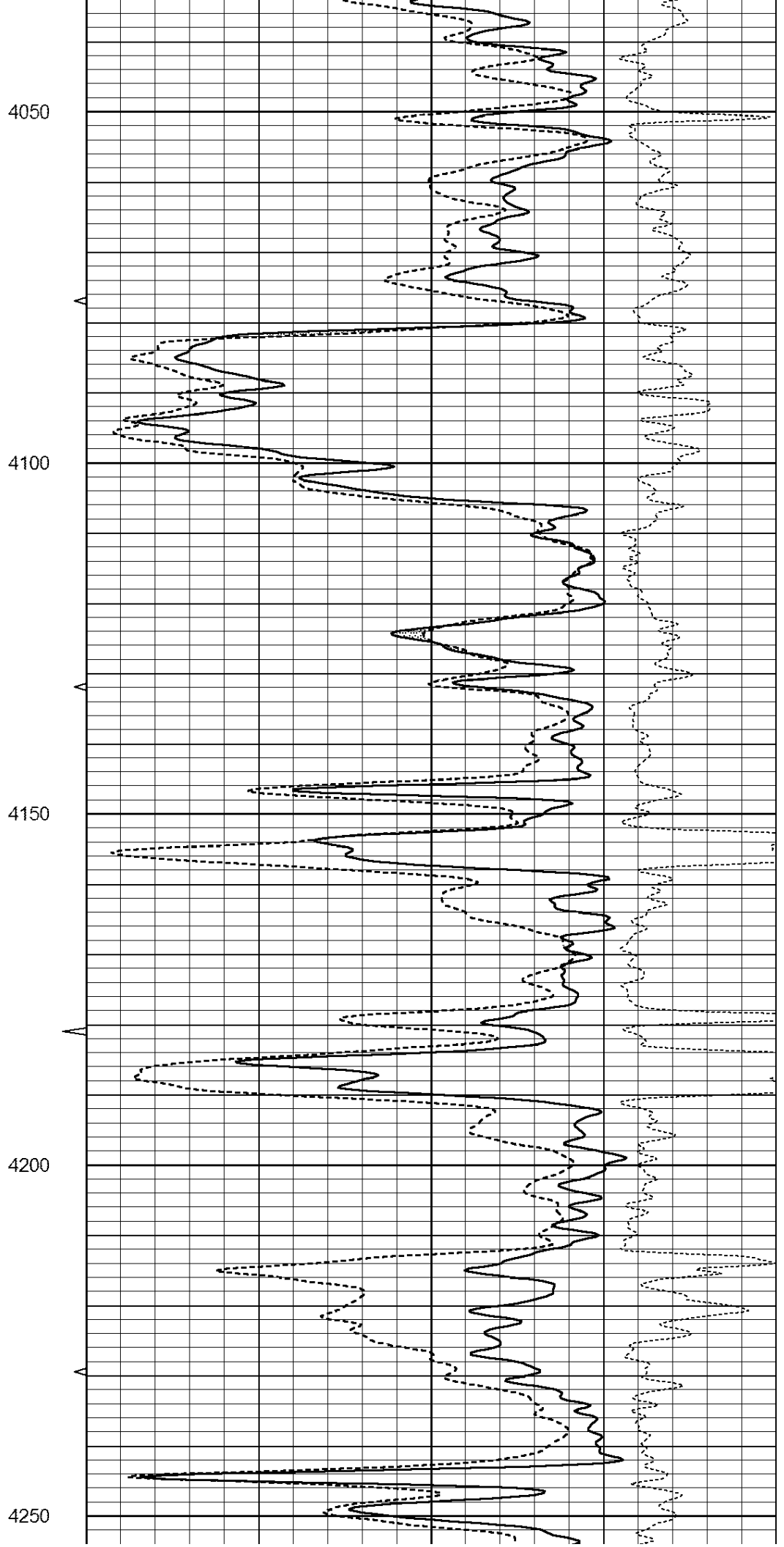
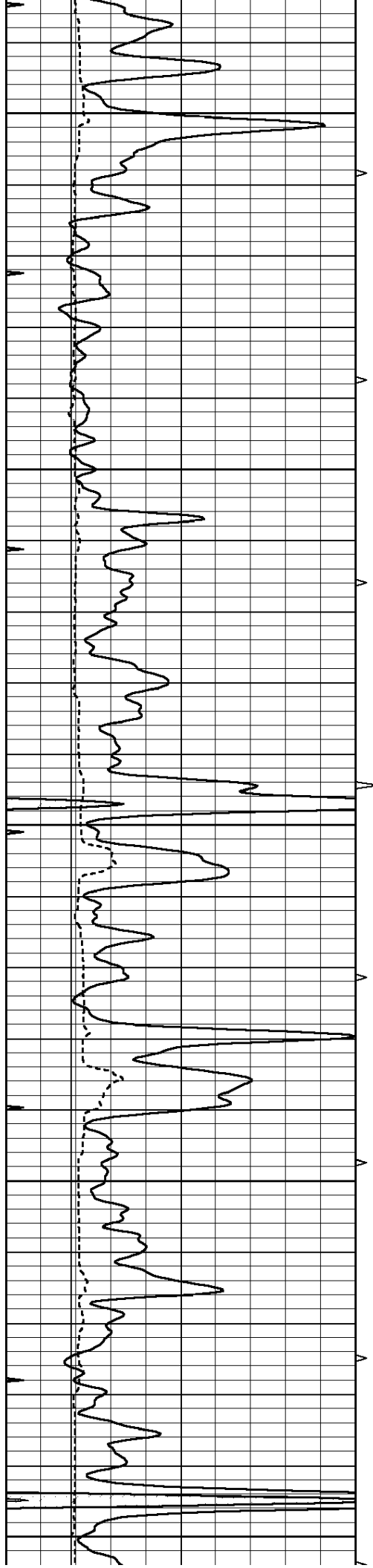
THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
 DIRECTIONS:
 DIGHTON, KS. - 8 MILES EAST TO TURKEY RED RD. - NORTH 1/2 MILE - EAST INTO

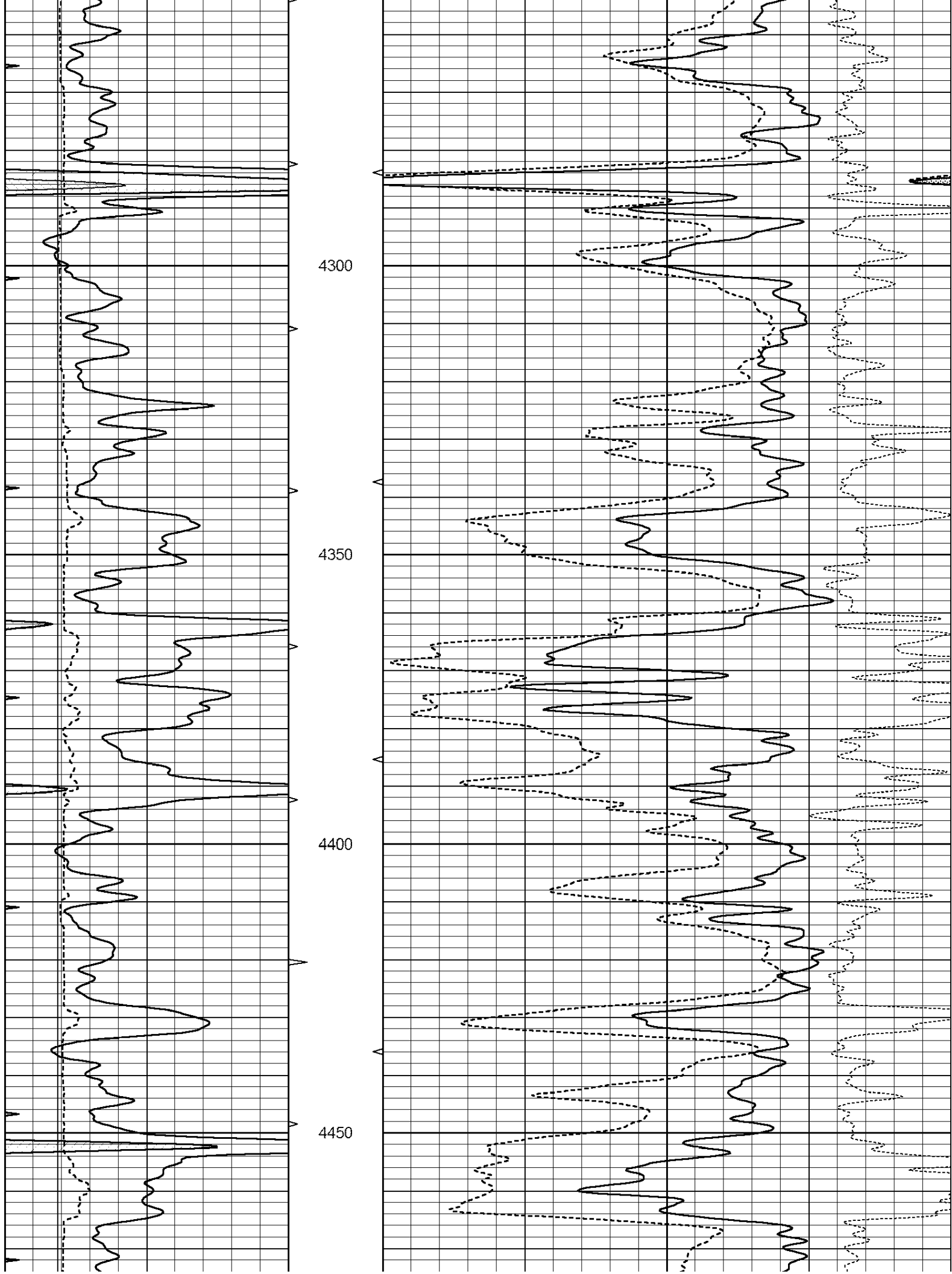
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

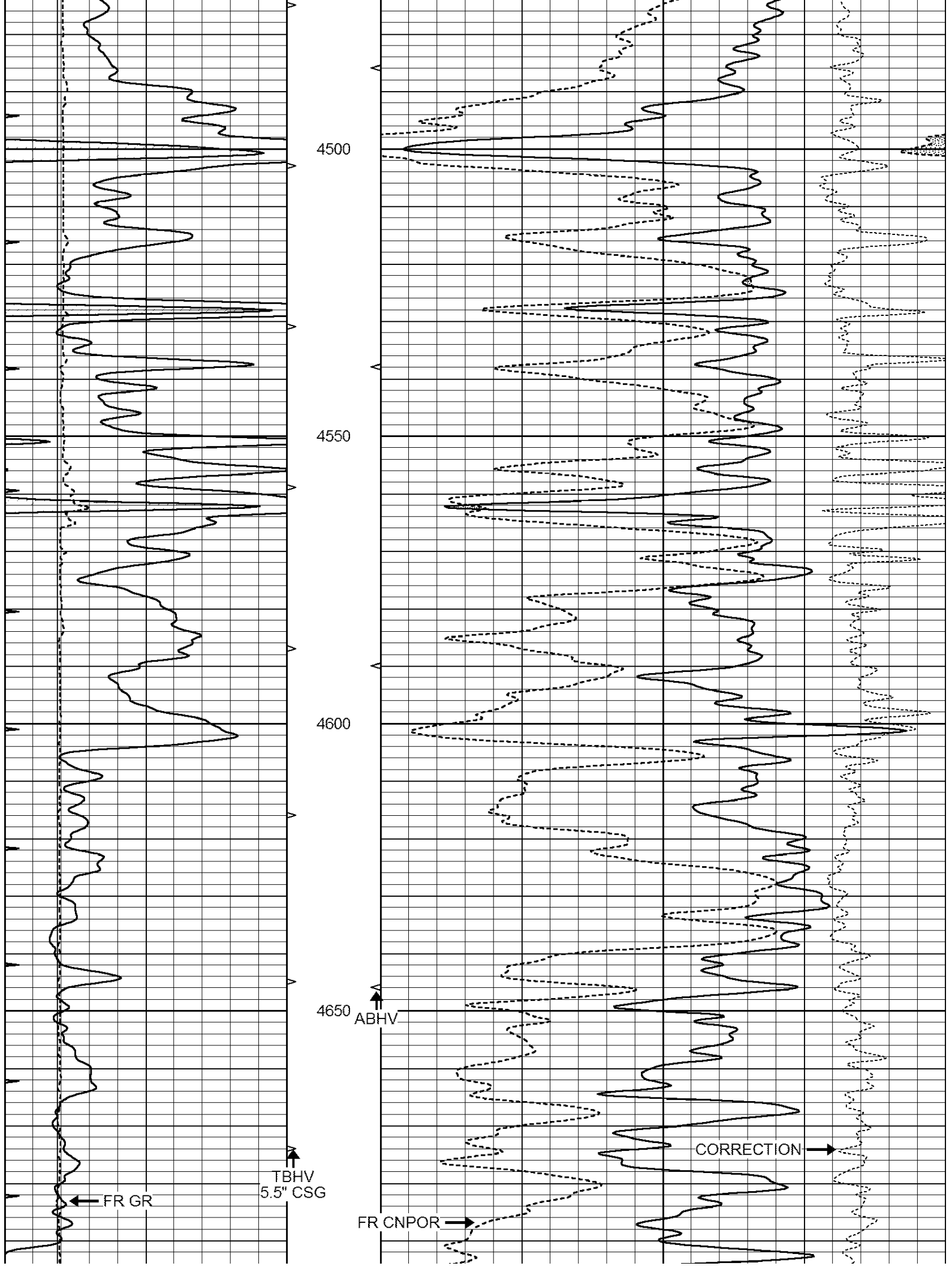


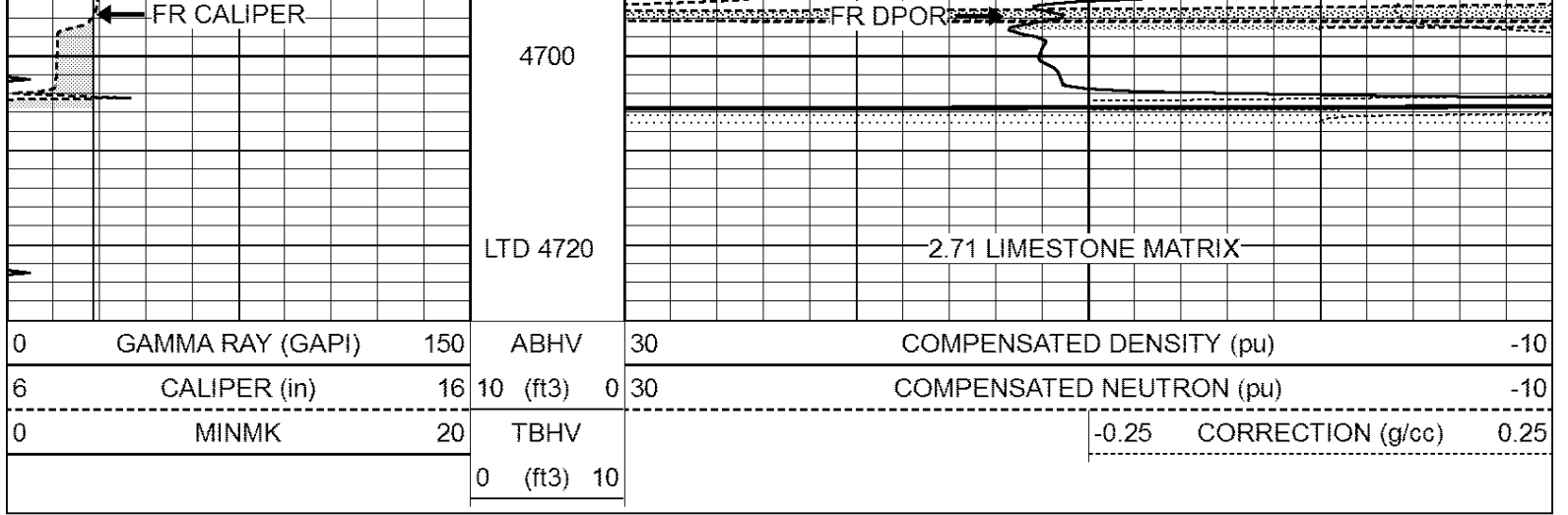








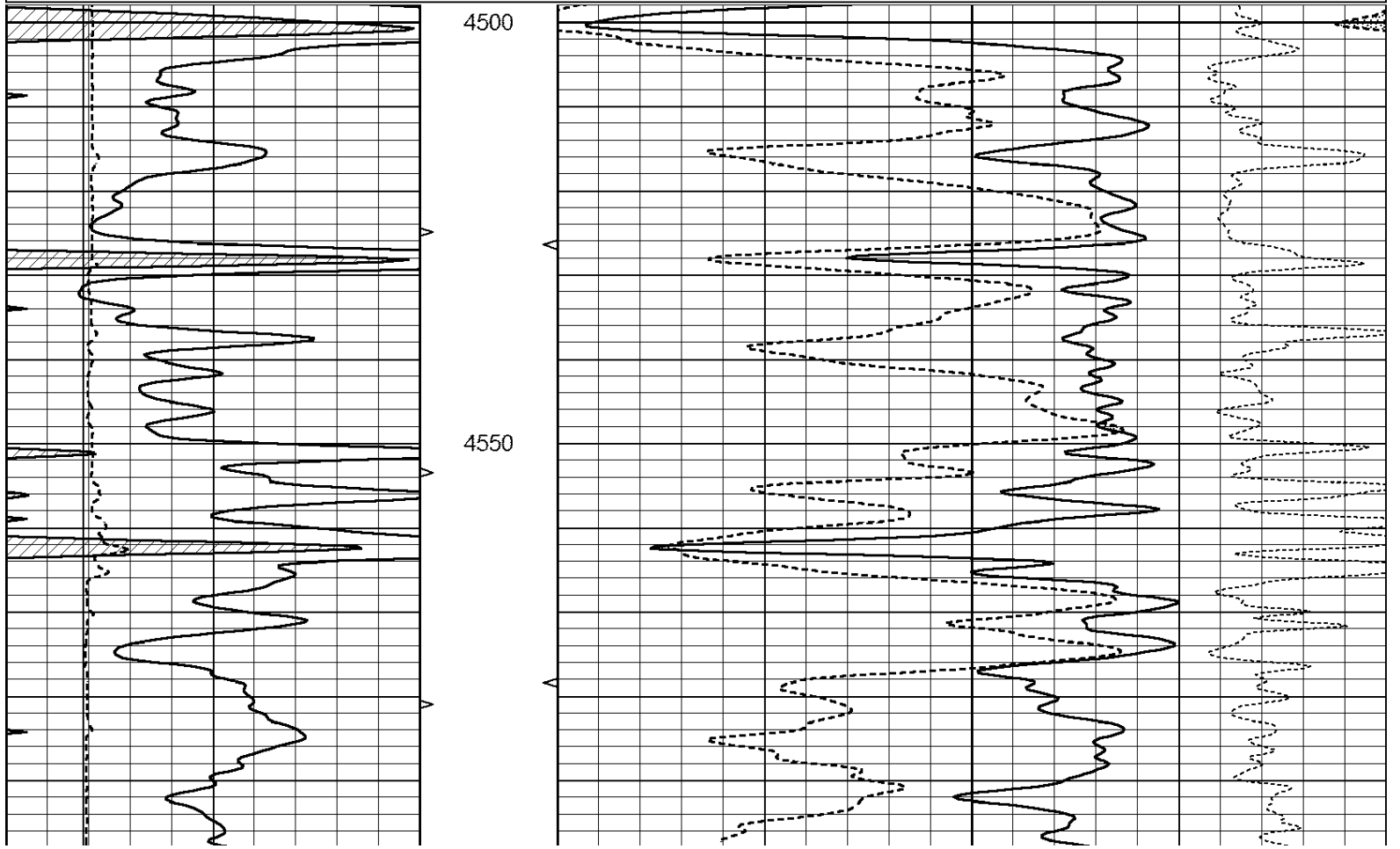


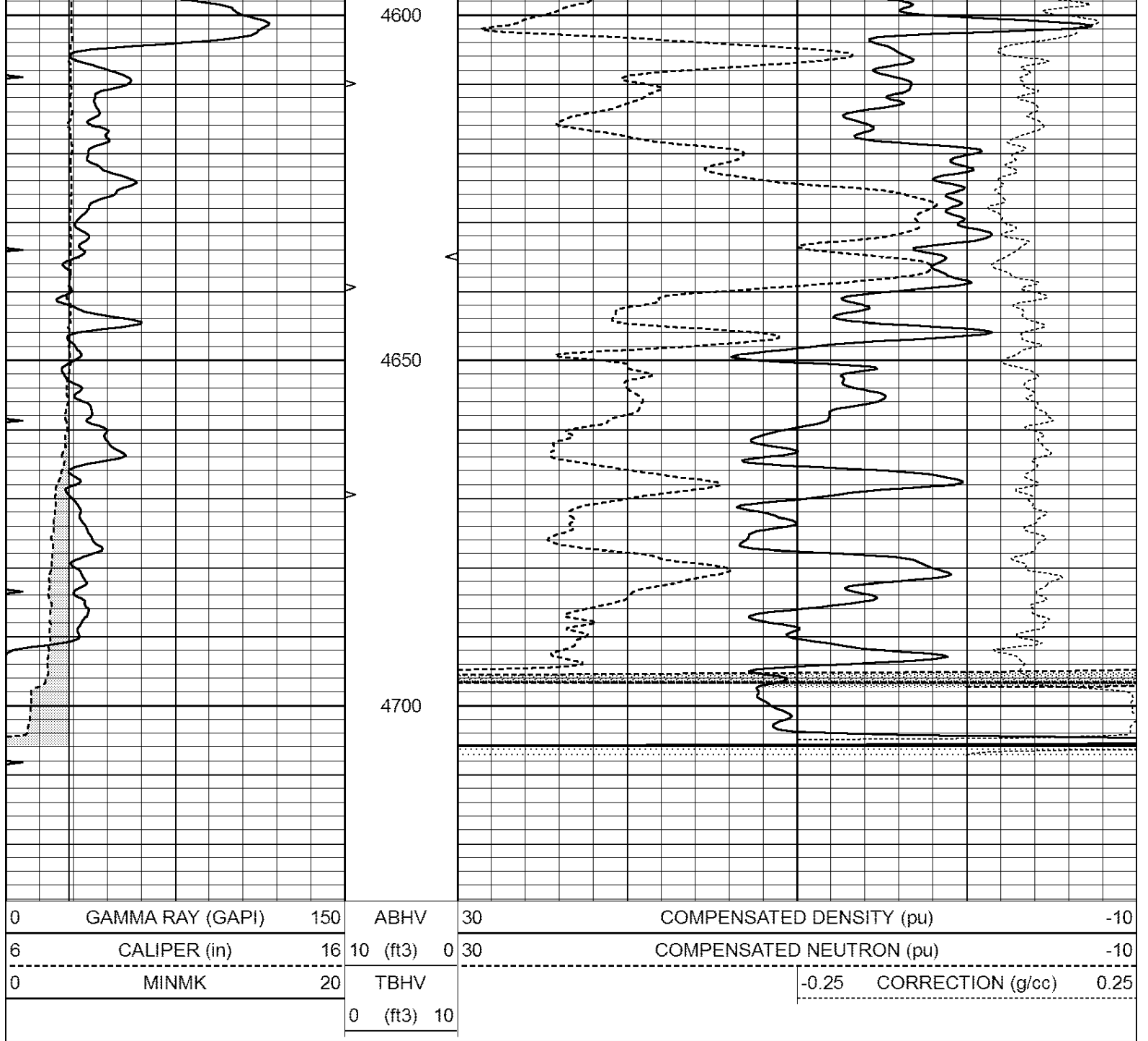


REPEAT SECTION

Database File: 24634ddn.db
 Dataset Pathname: pass3.1
 Presentation Format: den_neu
 Dataset Creation: Sun Jun 15 11:42:05 2014 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
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





Calibration Report

Database File: 24634ddn.db
 Dataset Pathname: pass4.1
 Dataset Creation: Sun Jun 15 12:30:31 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Loop:	Readings			V	References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.015	0.648		0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796		0.000	464.000	mmho/m	605.049	-17.680

Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	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		

Compensated Density Calibration Report

Serial-Model: GEAR3-GEARHART
 Source / Verifier: 143 / 143
 Master Calibration Performed: Fri Jan 04 15:48:16 2013
 Before Survey Verification Performed:
 After Survey Verification Performed:

Master Calibration								
	Density			Far Detector	Near Detector			
Magnesium	1.710	g/cc		935.36	501.55	cps		
Aluminum	2.580	g/cc		209.32	357.01	cps		
Spine Angle = 77.21				Density/Spine Ratio = 0.567				
	Size			Reading				
Small Ring	8.00	in		4.29	V			
Large Ring	14.00	in		6.24	V			

Before Survey Verification								
	Target			Measured				
		g/cc				g/cc		
		g/cc				g/cc		
		g/cc				g/cc		

After Survey Verification								
	Target			Measured				
		g/cc				g/cc		
		g/cc				g/cc		
		g/cc				g/cc		

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

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	pu
3)	Short Space	cps		
	Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	GR6
Tool Model:	OPEN
Performed:	Sat May 31 01:22:06 2014
Calibrator Value:	150.0 GAPI
Background Reading:	0.0 cps
Calibrator Reading:	276.0 cps
Sensitivity:	0.7535 GAPI/cps