



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

COMPENSATED DENSITY/NEUTRON LOG

Company		RED OAK ENERGY	
Well		ELISSA ANN #1-11	
Field		CAPSTONE SOUTH	
County		SCOTT	
State		KANSAS	
Location:		APL # : 15-171-21104-0000	
Permanent Datum		GROUND LEVEL Elevation 3094	
Log Measured From		KELLY BUSHING 16' A.G.L.	
Drilling Measured From		KELLY BUSHING	
SEC 11 TWP 17S RGE 34W		Other Services	
		DIL	
Date	10/26/14		
Run Number	ONE		
Depth Driller	4950		
Depth Logger	4951		
Bottom Logged Interval	4927		
Top Log Interval	3800		
Casing Driller	8 5/8" @ 269		
Casing Logger	266		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.4/55		
pH / Fluid Loss	9.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.75 @ 74F		
Rmt @ Meas. Temp	.56 @ 74F		
Rmc @ Meas. Temp	.90 @ 74F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.44 @ 125F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	125F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	PAT DEENIHAN		

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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:
SCOTT CITY, KS. - NORTH TO THE HWY 4 INTERSECTION - 6 WEST - WEST & SOUTH INTO

Database File:

26217ddn.db

Dataset Pathname:

pass3.1

Presentation Format:

den_neu

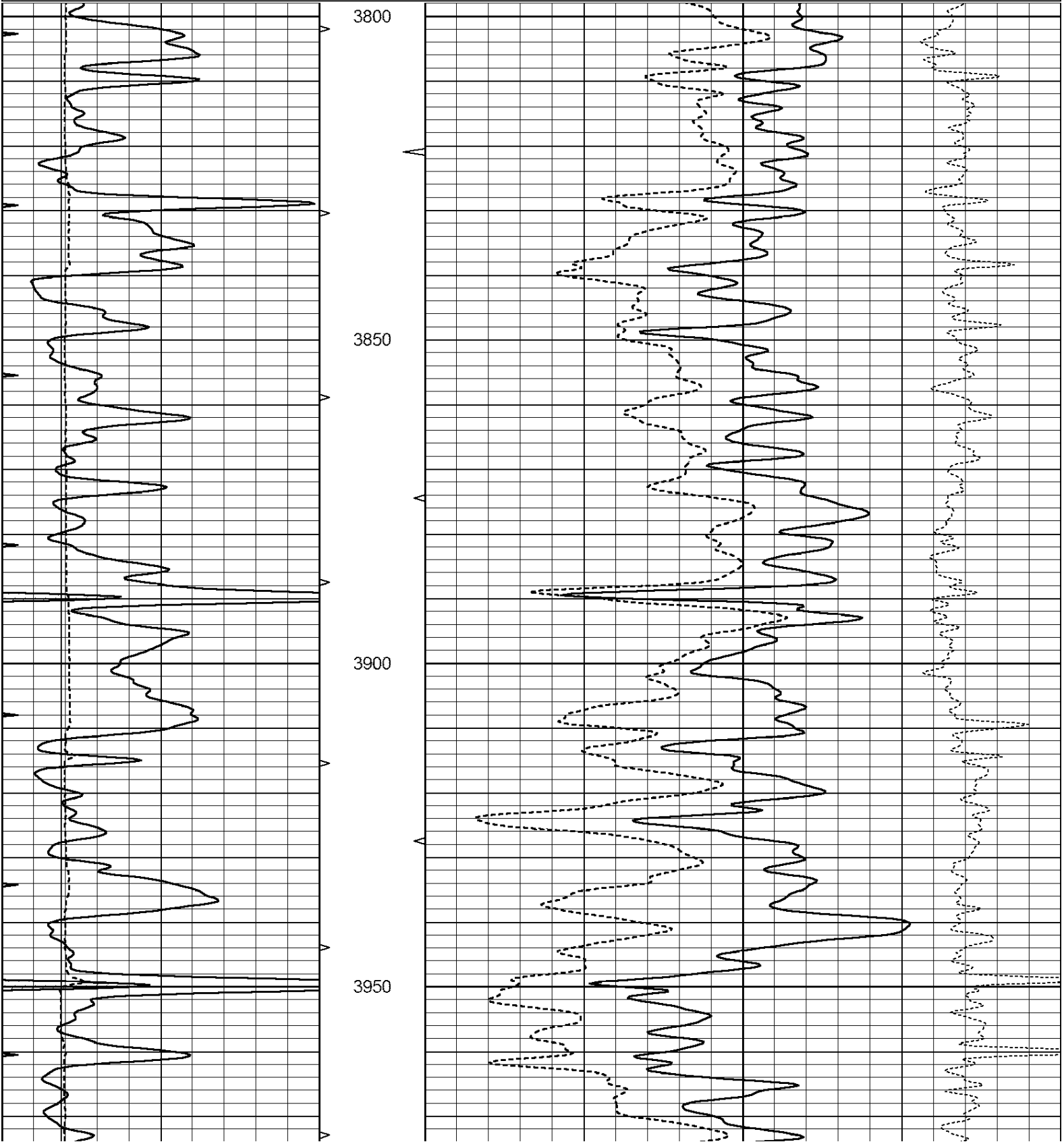
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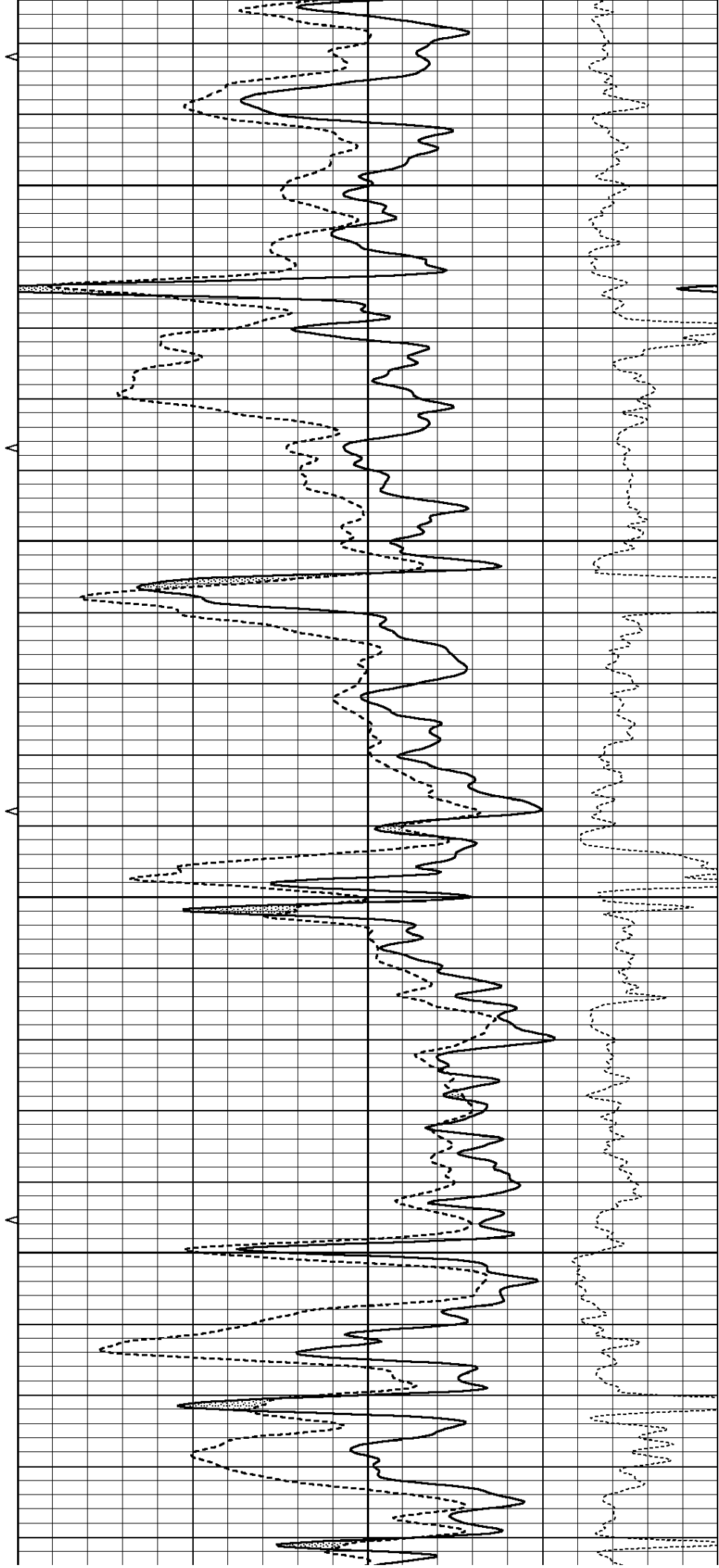
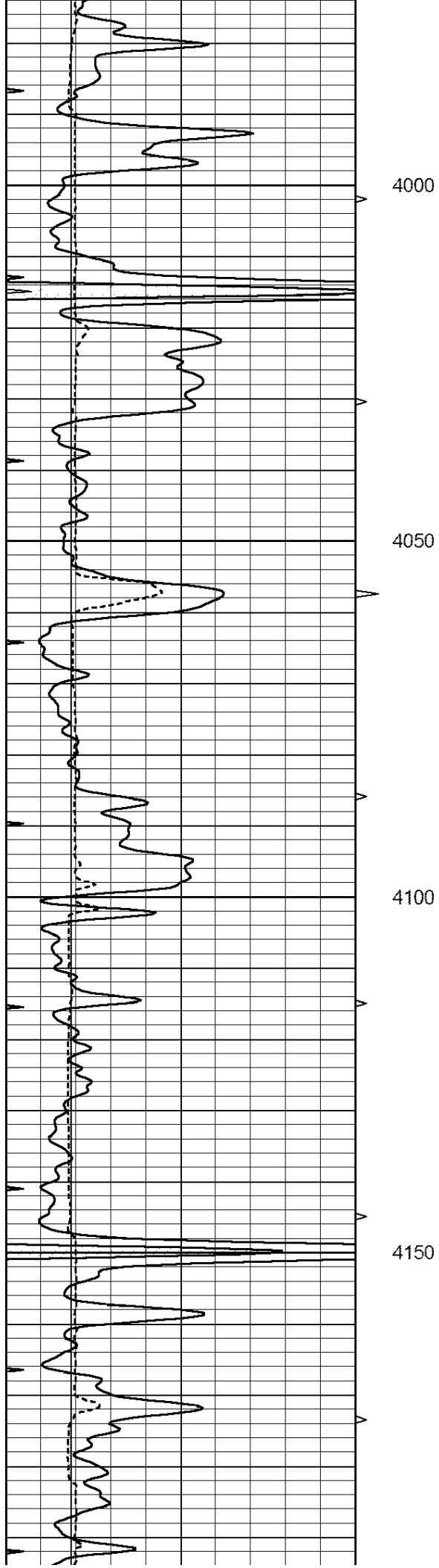
Sun Oct 26 12:49:06 2014 by Calc Open-Cased 090629

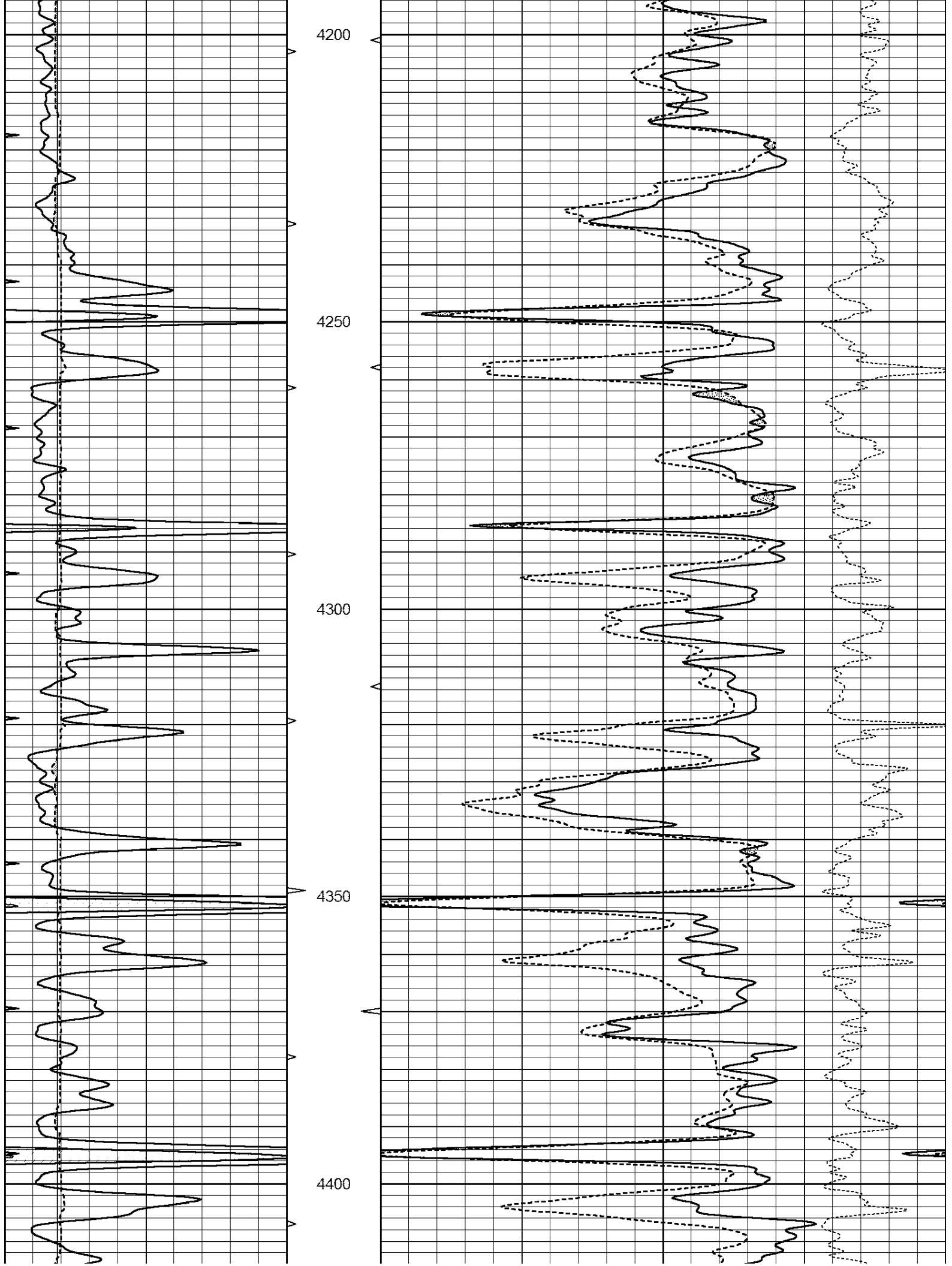
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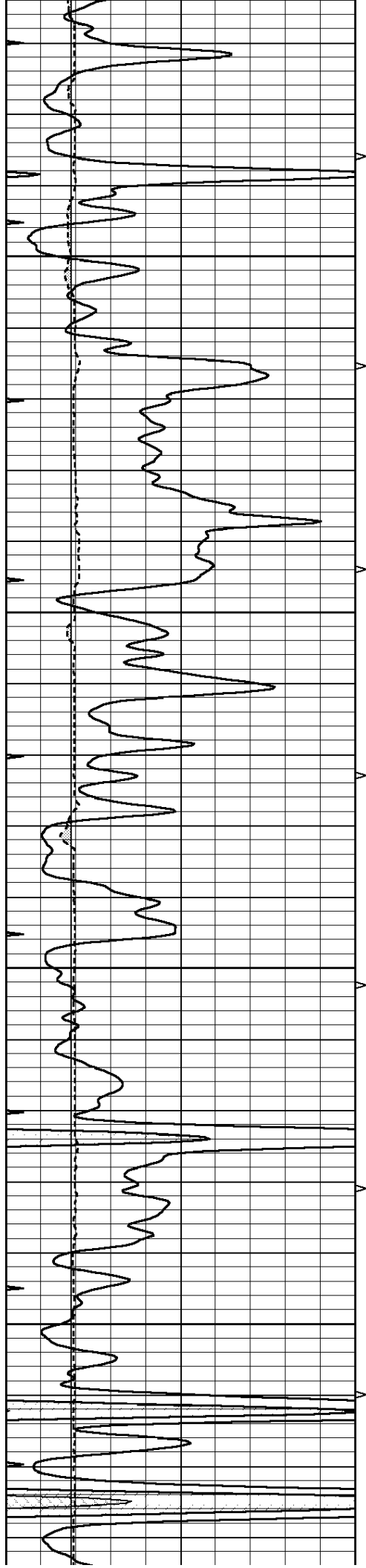
Depth in Feet scaled 1:240

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		







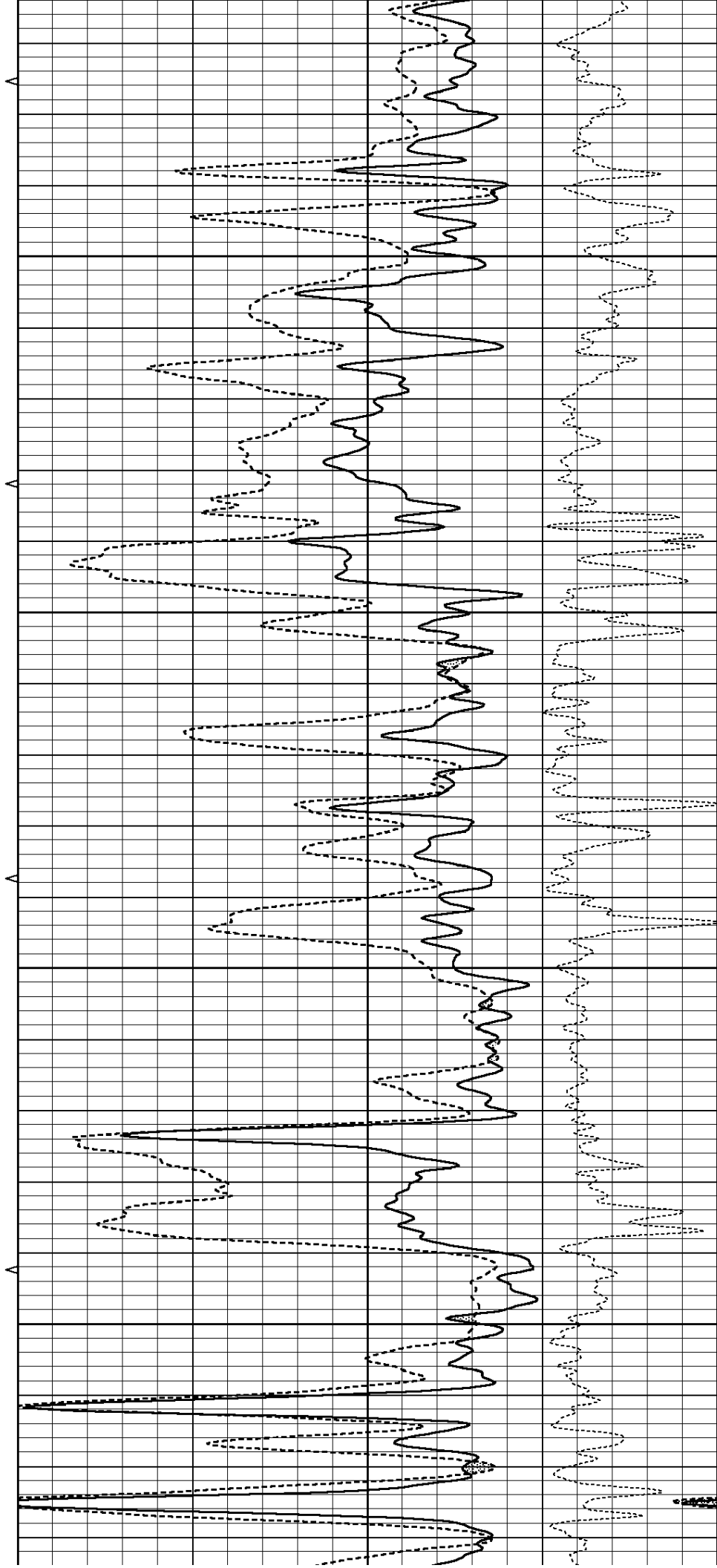


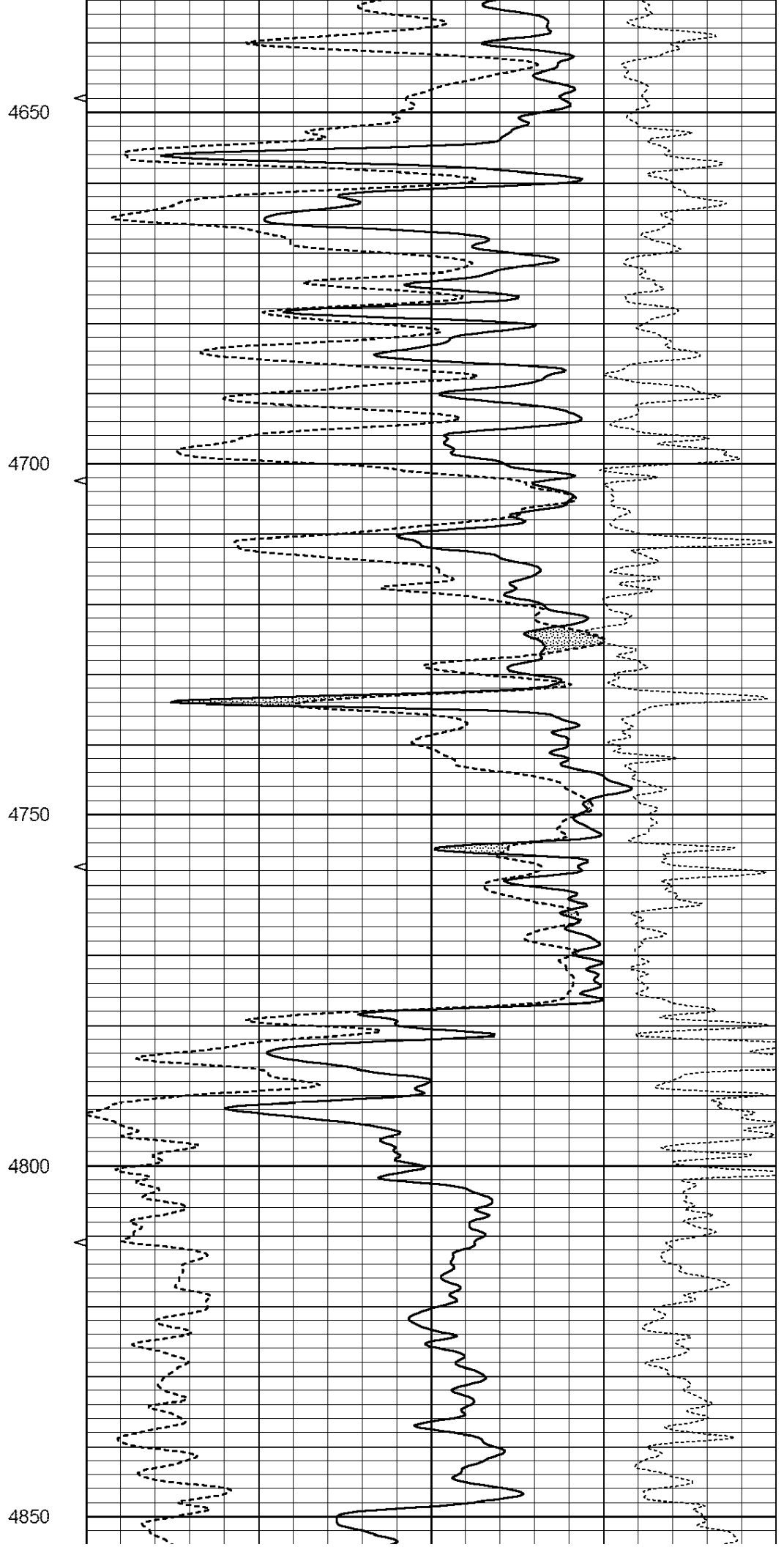
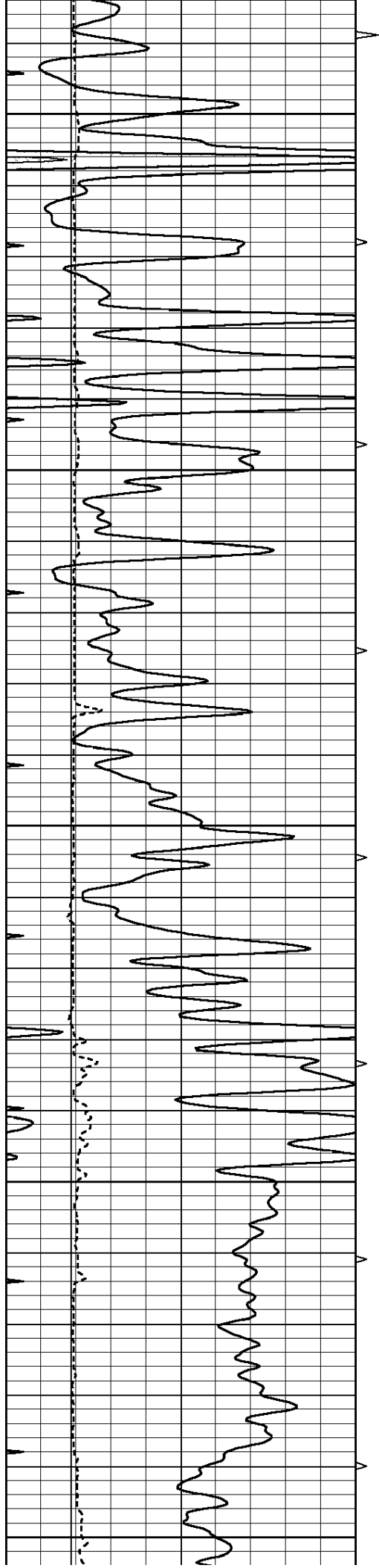
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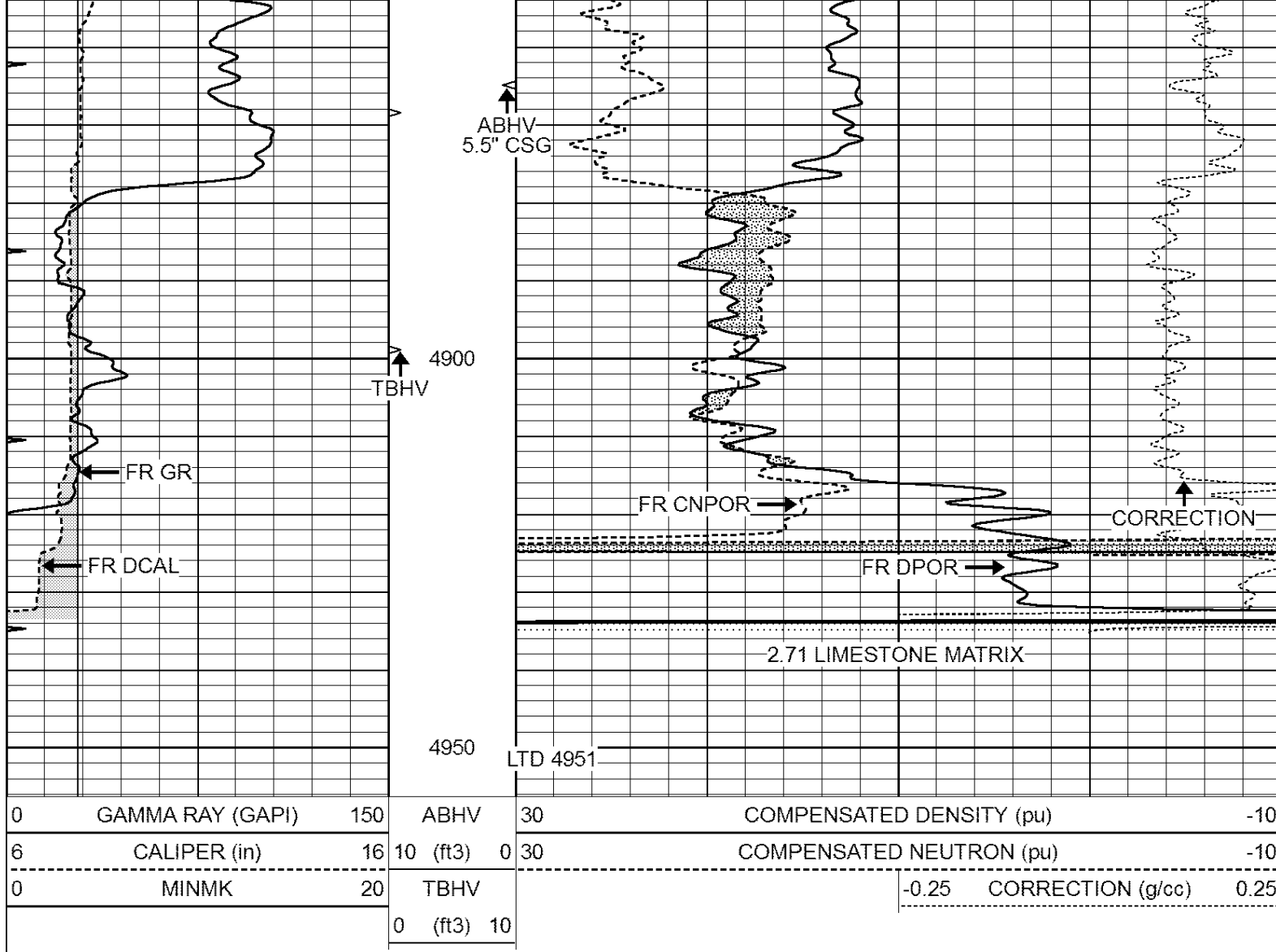
4500

4550

4600





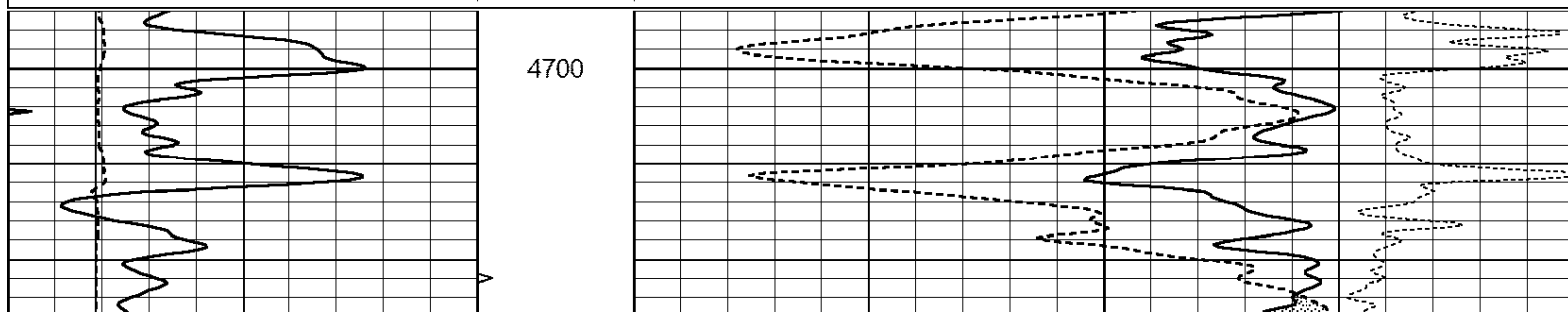


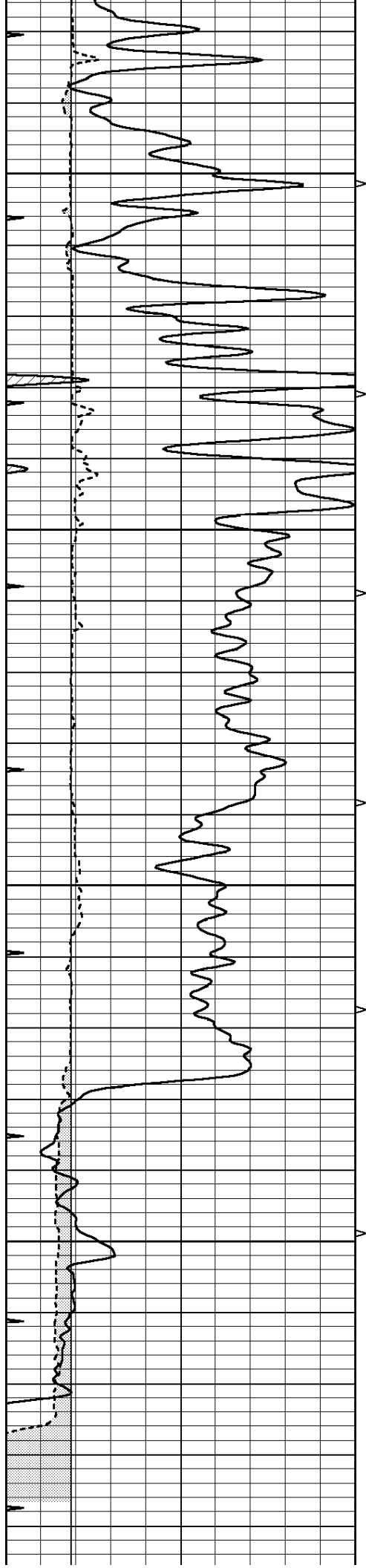
REPEAT SECTION

Database File: 26217ddn.db
 Dataset Pathname: pass2.1
 Presentation Format: den_neu
 Dataset Creation: Sun Oct 26 12:50:05 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			



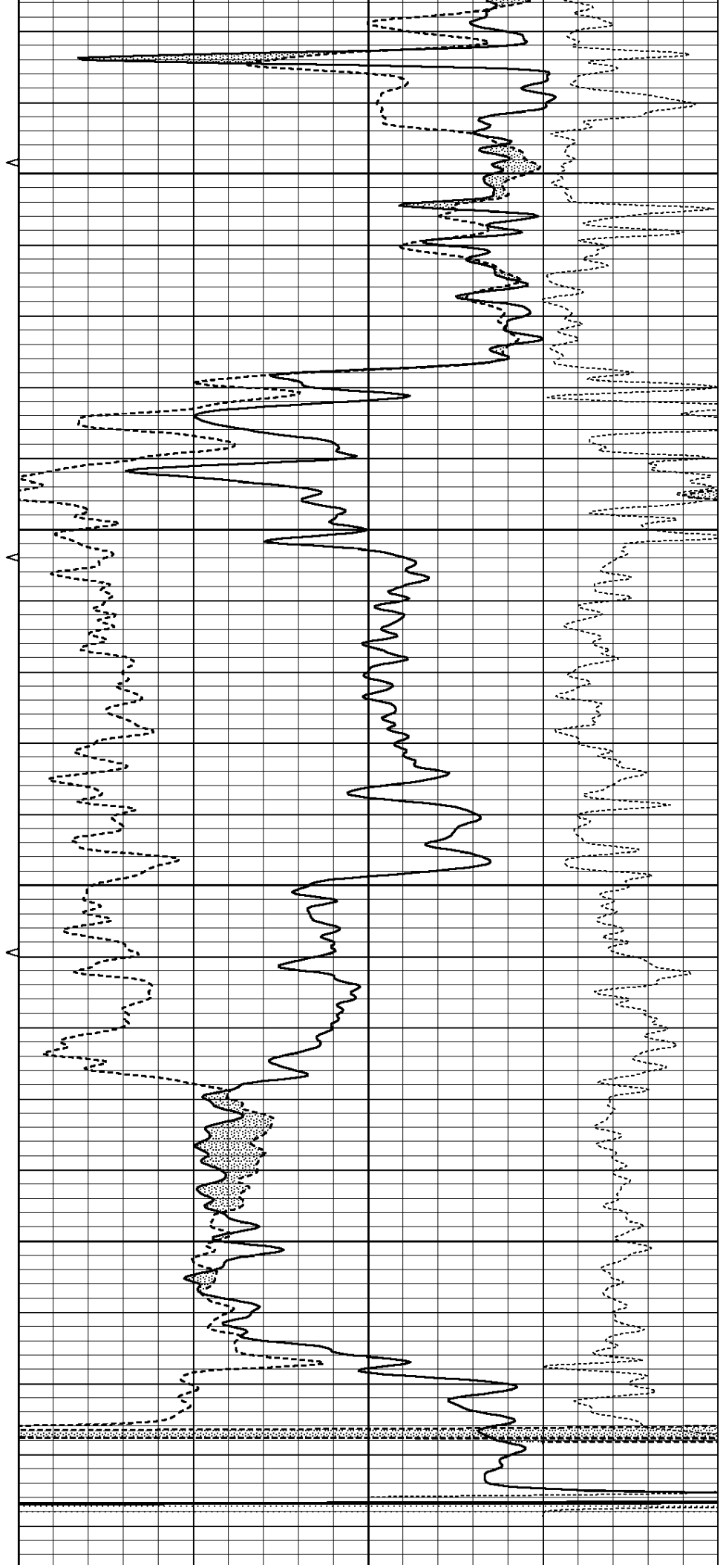


4750

4800

4850

4900



Master Calibration

	Density			Far Detector		Near Detector	
Magnesium	1.710	g/cc		935.36		501.55	cps
Aluminum	2.620	g/cc		209.32		357.01	cps
Spine Angle = 77.21				Density/Spine Ratio = 0.593			
	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	
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Tool Model:	OPEN
Performed:	Sun Aug 17 15:23:09 2014

Calibrator Value:	150.0	GAPI
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Background Reading:	0.0	cps
Calibrator Reading:	276.0	cps

Sensitivity:	0.7000	GAPI/cps
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