



**SUPERIOR  
Hays,  
Kansas**

**COMPENSATED  
DENSITY / NEUTRON  
LOG**

Company RITCHIE EXPLORATION, INC.  
Well #1 WILSON 10A  
Field  
County GOVE State KANSAS

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Location: API #: 15-063-21909  
1425' FNL 1890' FEL  
SEC 10 TWP 12S RGE 31W  
Permanent Datum GROUND LEVEL Elevation 2955  
Log Measured From KELLY BUSHING 10' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services  
DIL  
Elevation  
K.B. 2965  
D.F.  
G.L. 2955

Date	5-19-11
Run Number	ONE
Depth Driller	4710
Depth Logger	4710
Bottom Logged Interval	4686
Top Log Interval	3600
Casing Driller	219
Casing Logger	219
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1 / 51
pH / Fluid Loss	10.5 / 6.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.40 @ 90F
Rmf @ Meas. Temp	1.05 @ 90F
Rmc @ Meas. Temp	1.68 @ 90F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	1.03 @ 122F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	2:00 A.M.
Maximum Recorded Temperature	122F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	TED JOCHEM

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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

SUPERIOR WELL SERVICES  
785-628-6395  
THANK YOU FOR YOUR BUSINESS  
DIRECTIONS: I-70 & CAMPUS RD., 5 1/2S, 1/2W, S INTO.

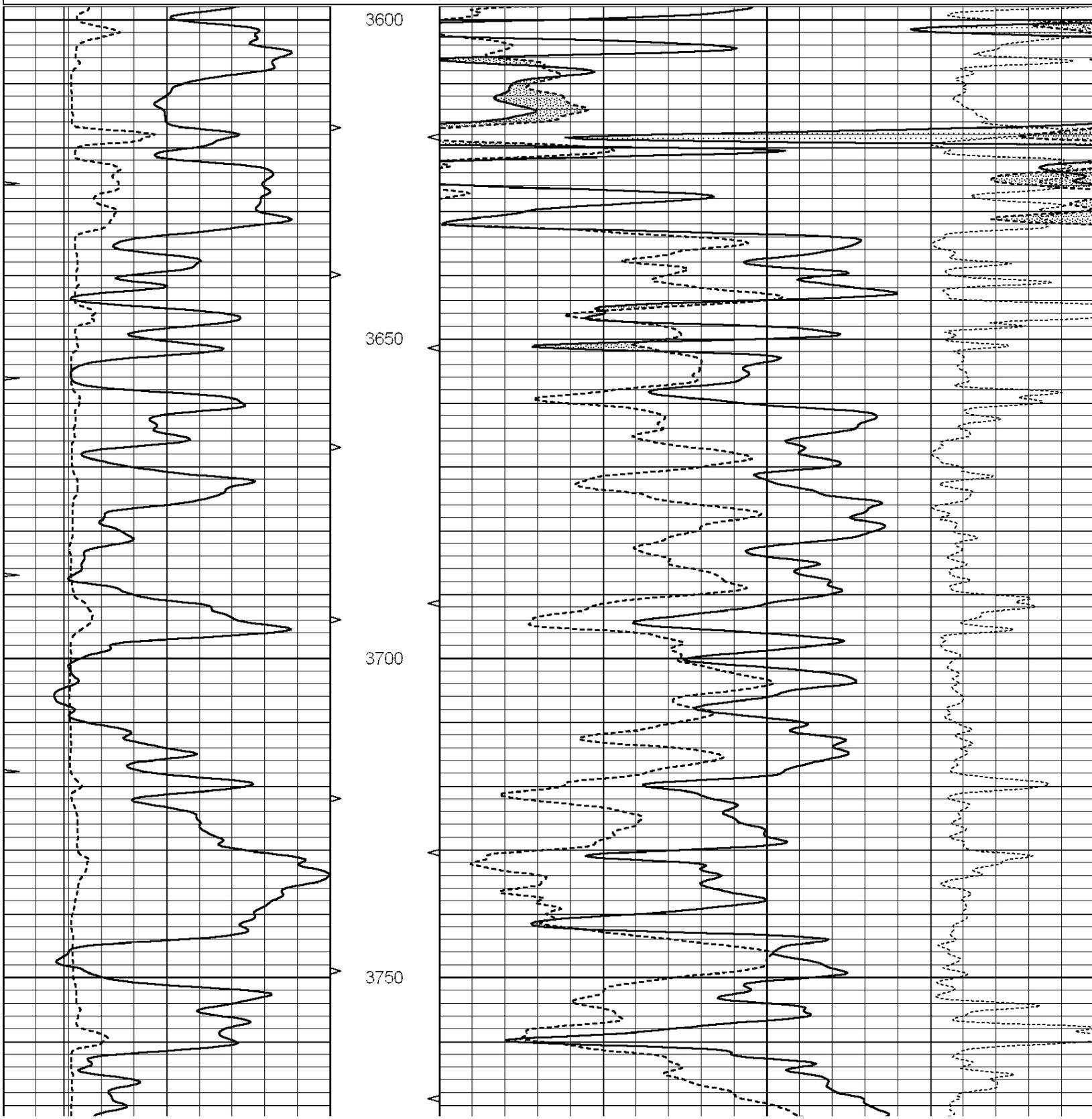


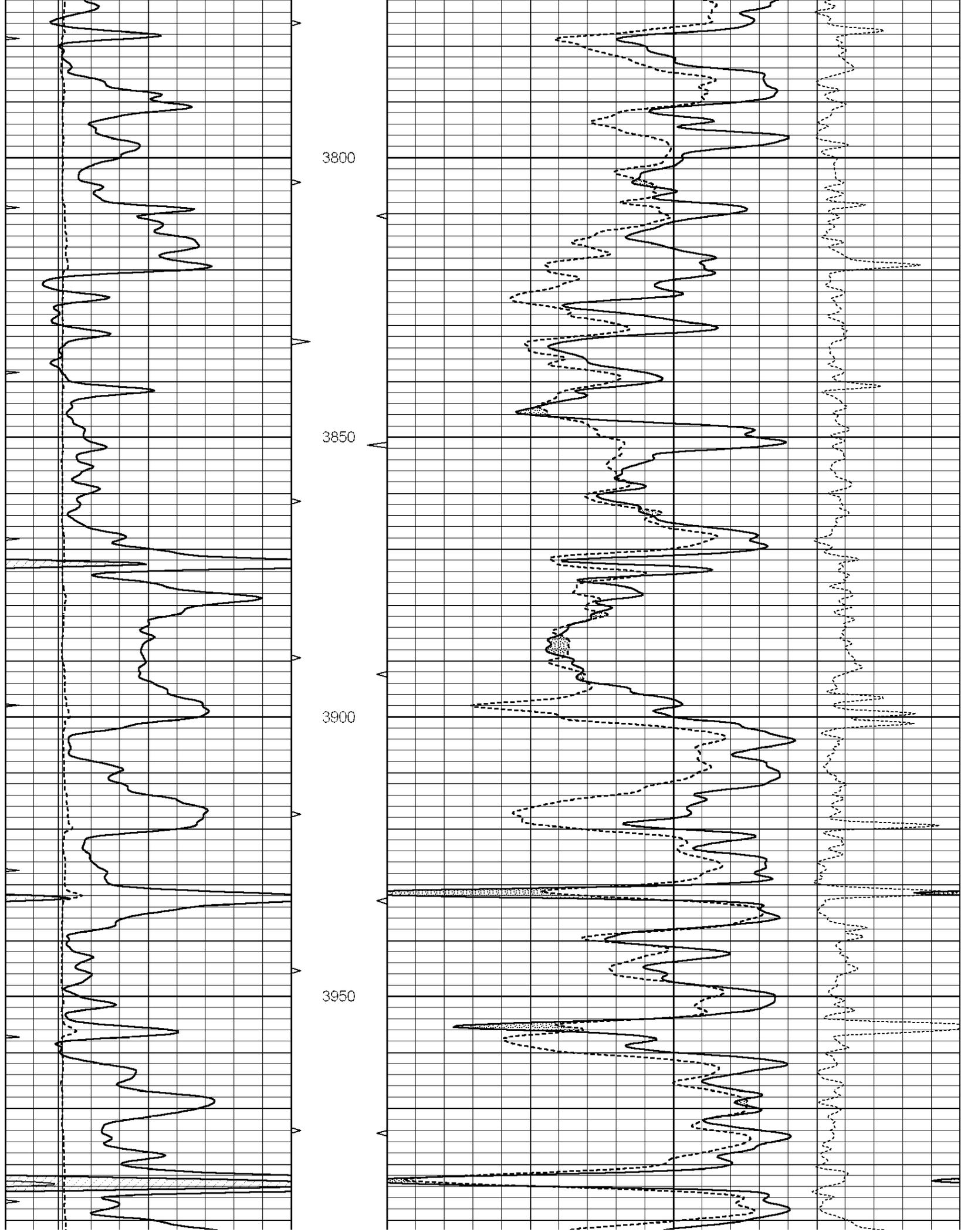
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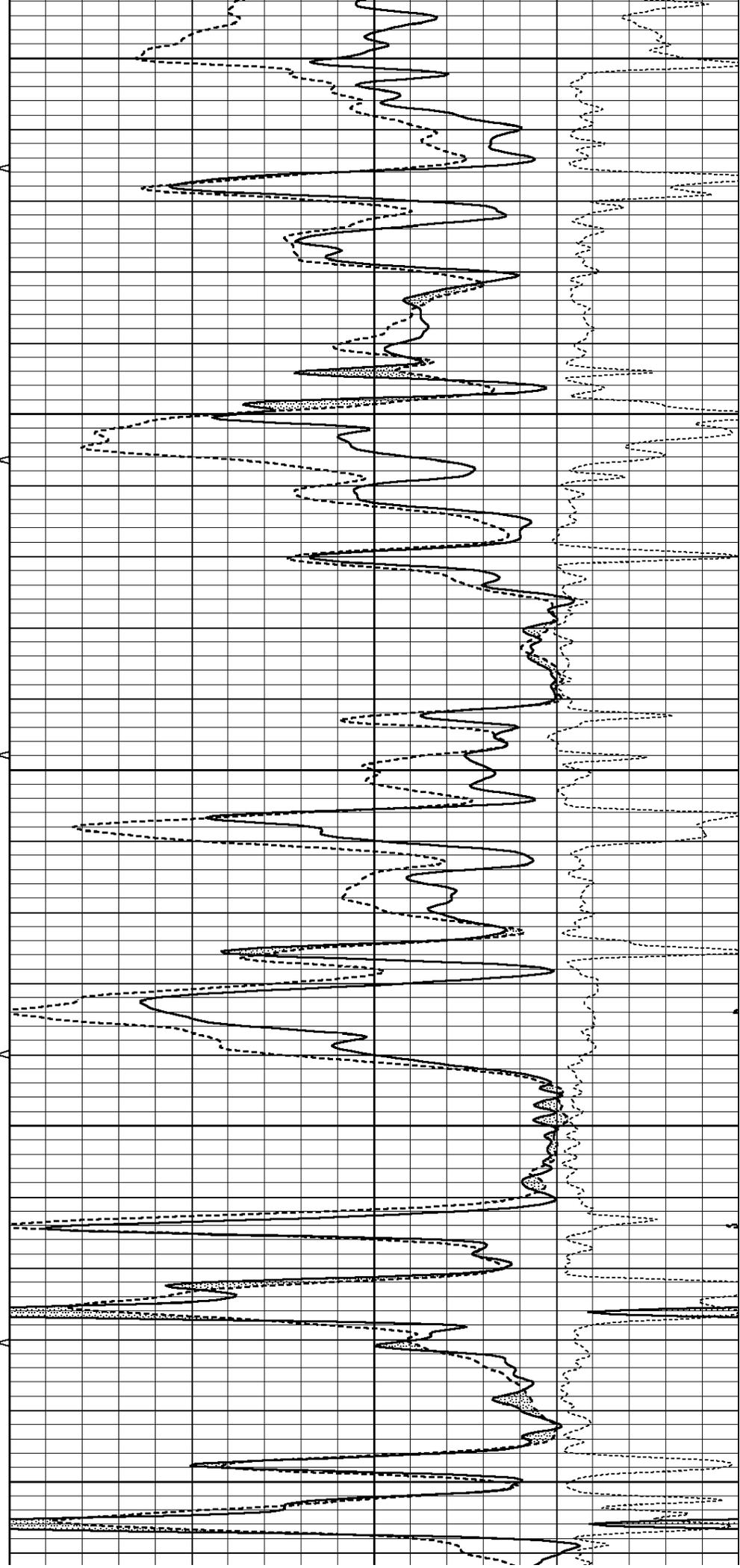
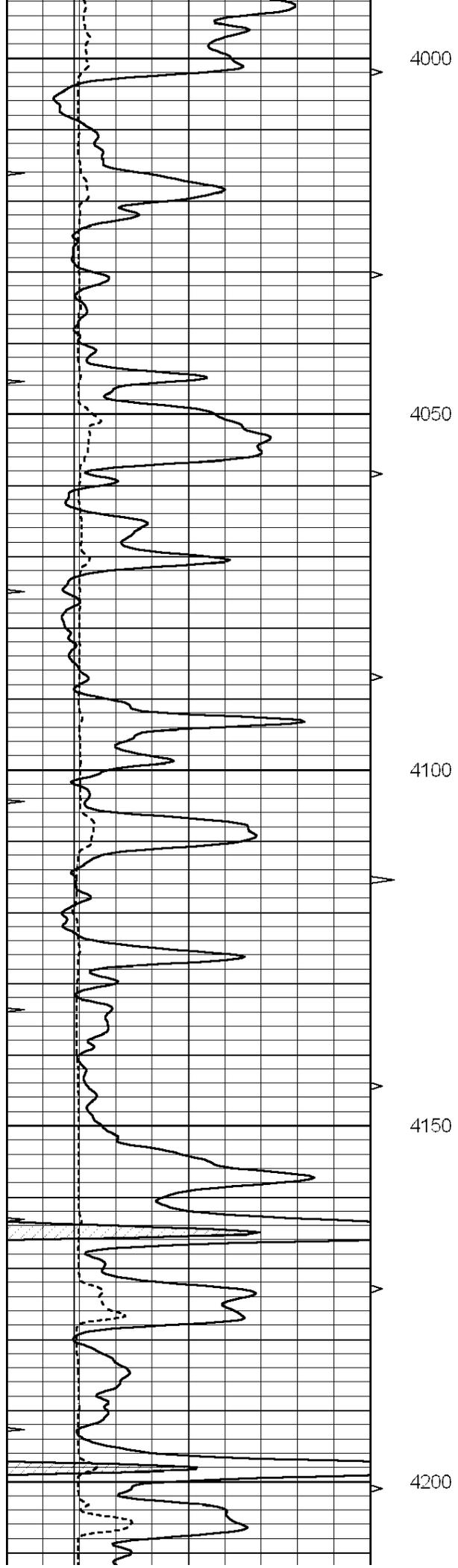
**MAIN SECTION**

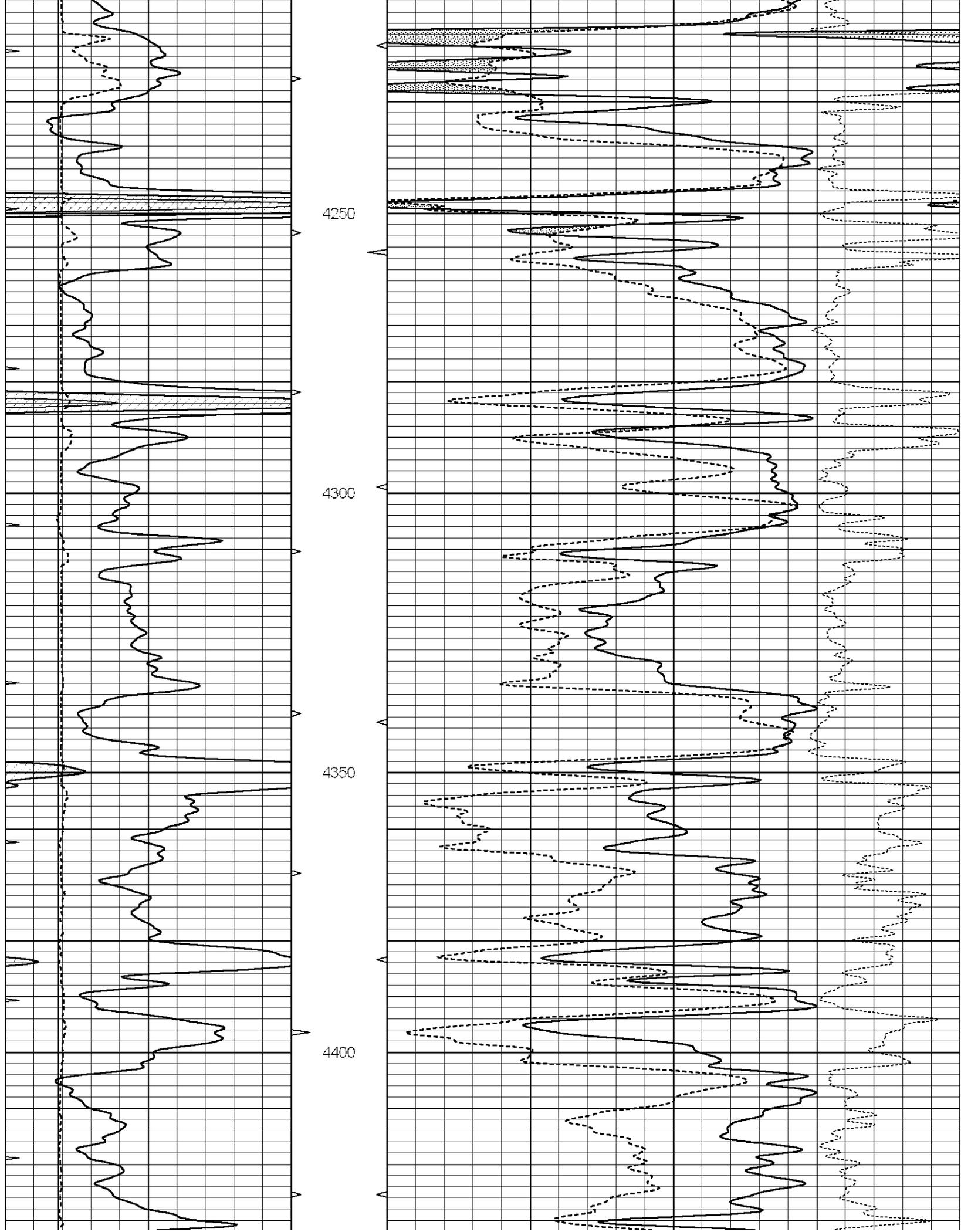
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 Presentation Format: den\_neu  
 Dataset Creation: Thu May 19 04:46:18 2011  
 Charted by: Depth in Feet scaled 1:240

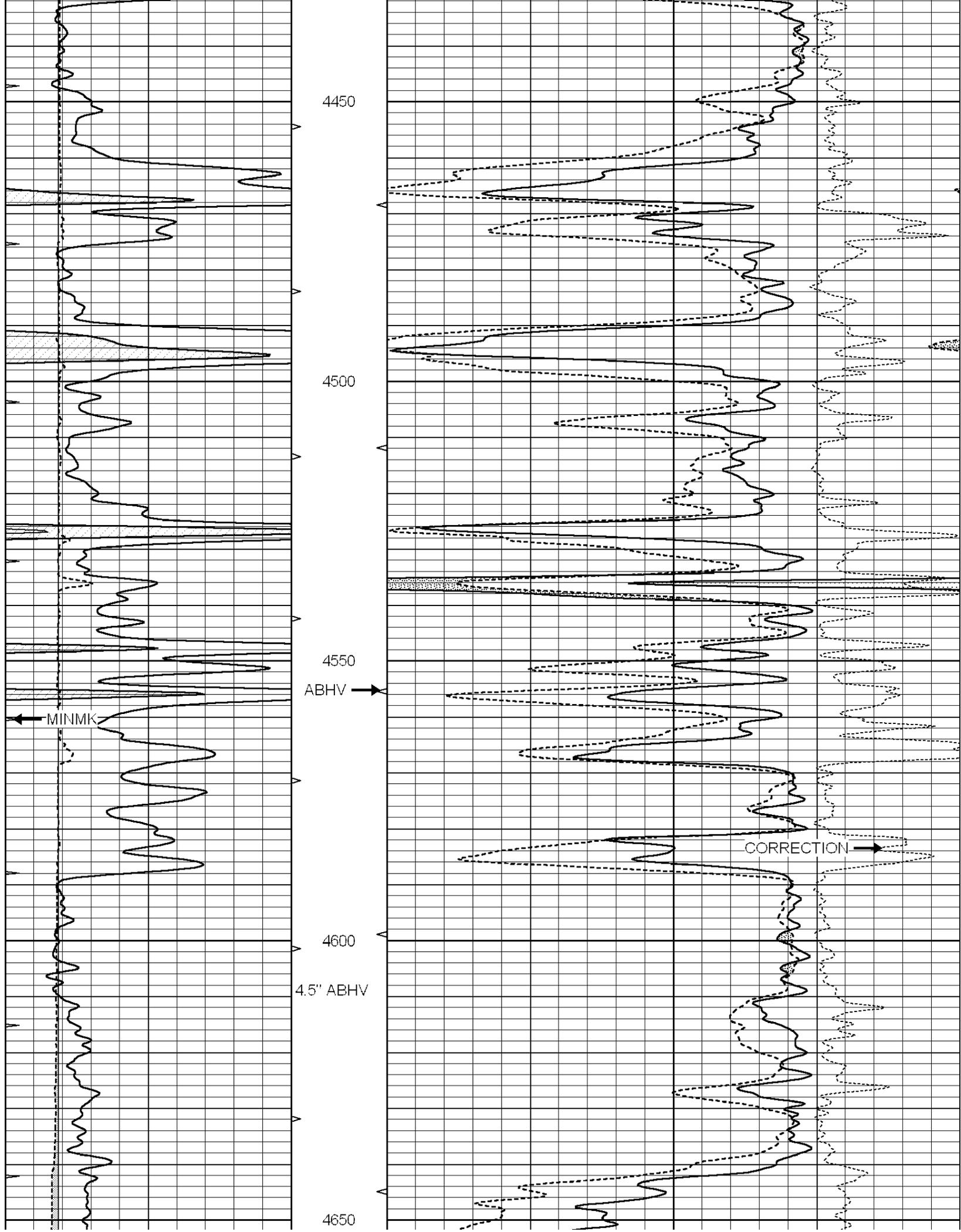
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

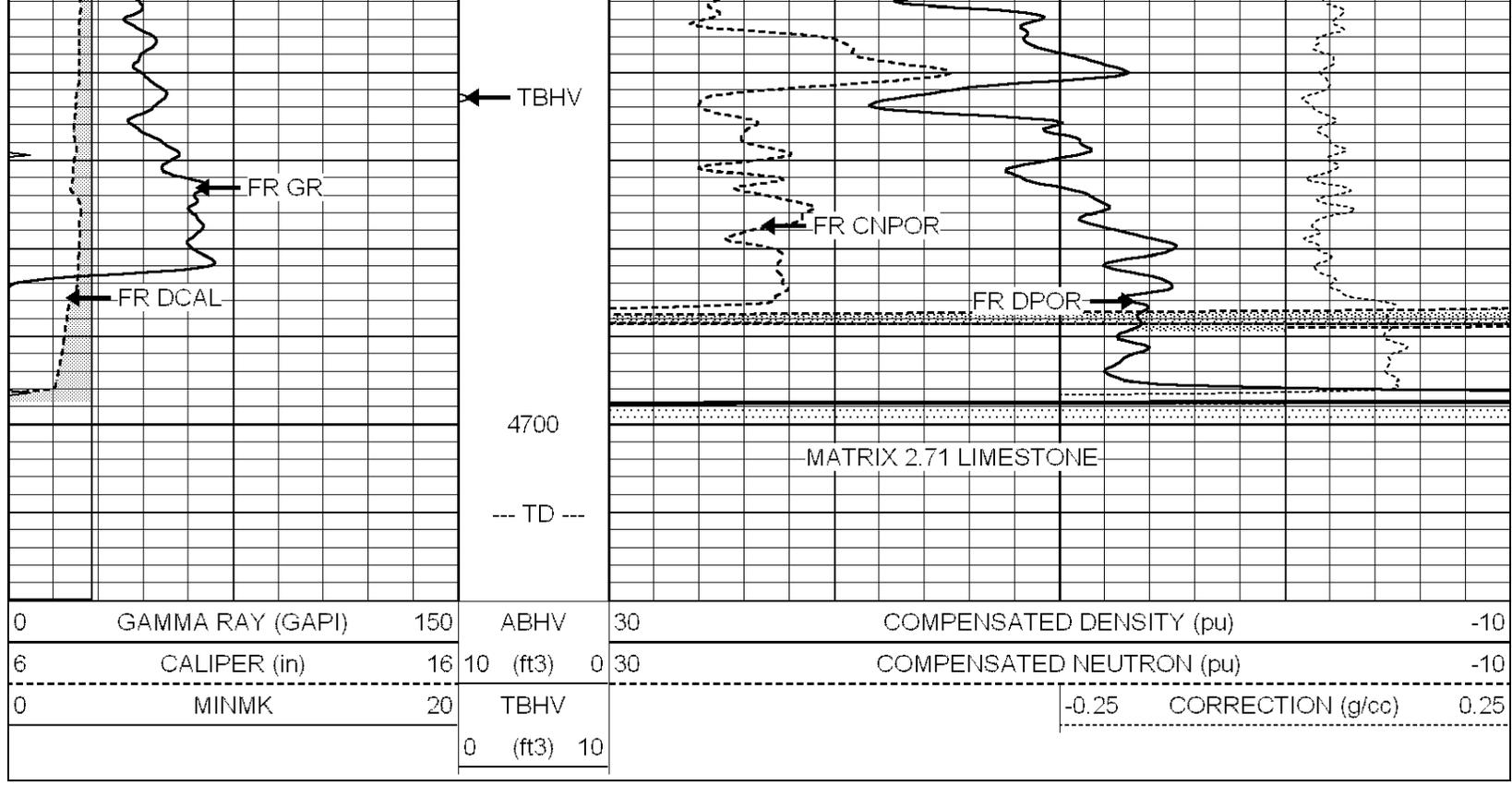










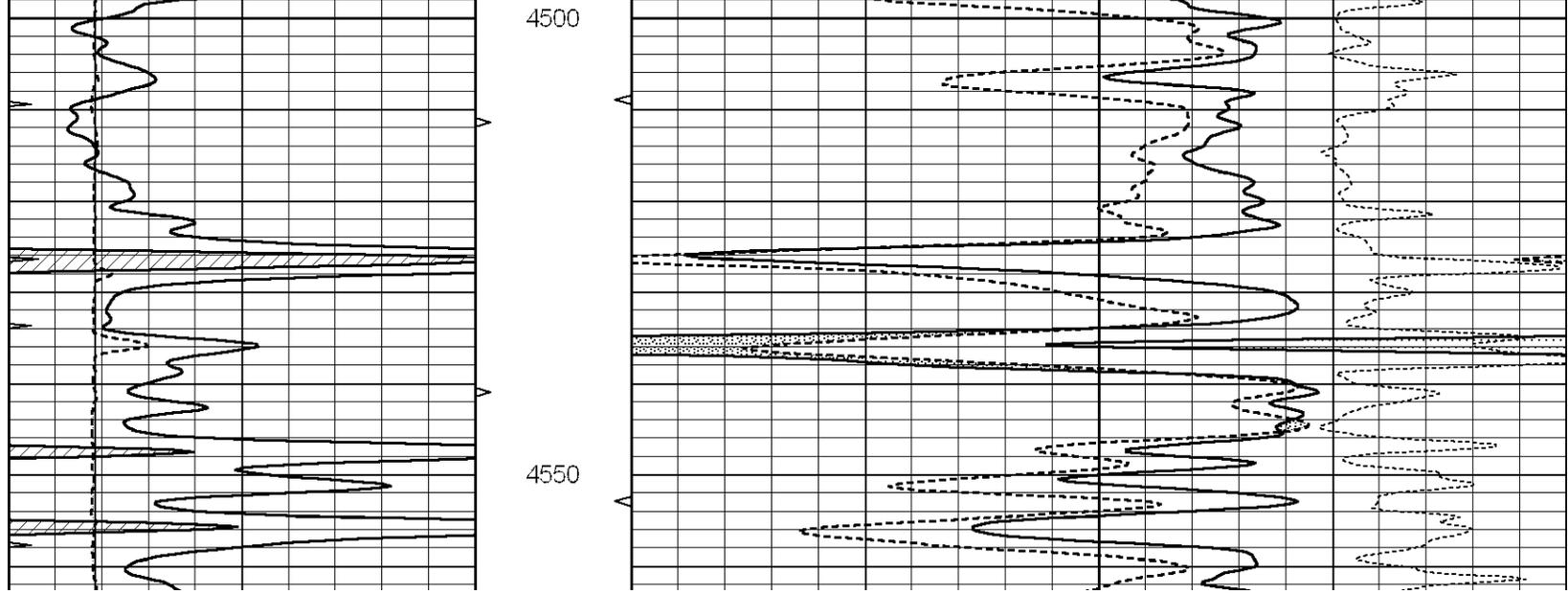


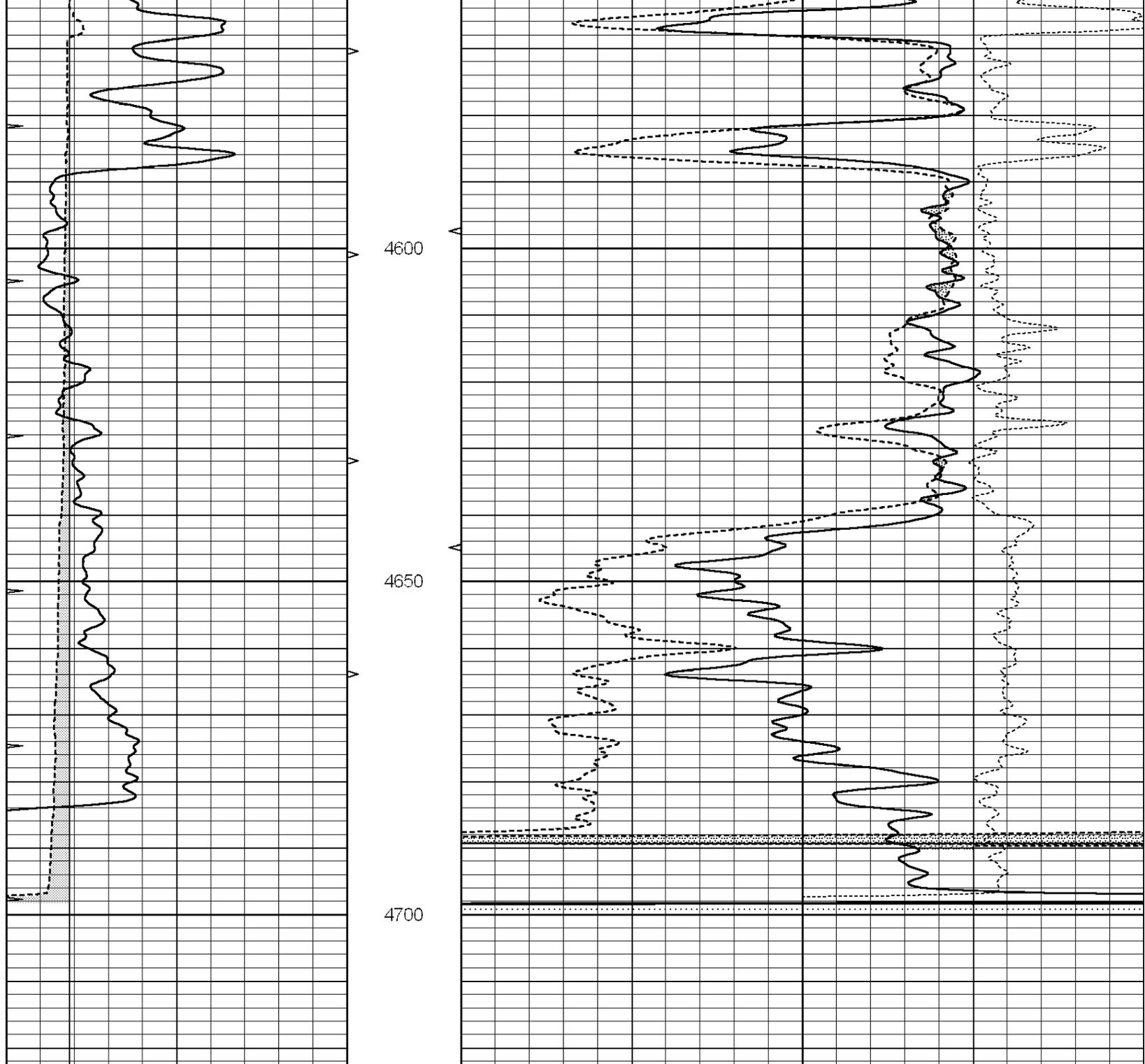
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# REPEAT SECTION

Database File: 006921ddn.db  
 Dataset Pathname: pass2.1A  
 Presentation Format: den\_neu  
 Dataset Creation: Thu May 19 04:49:50 2011  
 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			





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: 006921ddn.db  
 Dataset Pathname: pass3.1A  
 Dataset Creation: Thu May 19 04:46:18 2011

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR  
 Performed: Wed May 18 09:04:19 2011

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	570.000	-3.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	560.000	-14.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

### Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART  
 Source / Verifier: 147 / 147  
 Master Calibration Performed: Wed May 18 08:23:19 2011

#### Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1243.76	629.14	cps
Aluminum	2.590	g/cc	282.16	435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.576		
	Size		Reading		
Small Ring	8.90	in	3.82	V	
Large Ring	14.20	in	6.37	V	

### Compensated Neutron Calibration Report

Serial Number: NUE\_2I  
 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: GR5  
 Tool Model: OPEN  
 Performed: Thu May 19 03:55:48 2011

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps

Sensitivity: 0.6500 GAPI/cps