



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company RITCHIE EXPLORATION, INC.
Well WYCOFF UNIT #1
Field
County FORD State KANSAS

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Well WYCOFF UNIT #1
Field
County FORD
State KANSAS

Location: API #: 15-057-20797
2700' FSL & 2000' FEL
SEC 2 TWP 26S RGE 22W
Permanent Datum GROUND LEVEL Elevation 2387
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
Elevation
K.B. 2398
D.F.
G.L. 2387

Date	5-6-12
Run Number	ONE
Depth Driller	4970
Depth Logger	4969
Bottom Logged Interval	4945
Top Log Interval	3400
Casing Driller	355
Casing Logger	355
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1 / 44
pH / Fluid Loss	10.5 / 10.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.75 @ 72F
Rmf @ Meas. Temp	0.56 @ 72F
Rmc @ Meas. Temp	0.90 @ 72F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.430 @ 125F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	6:45 A.M.
Maximum Recorded Temperature	125F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	TERRY McCLEOD

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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: SPEARVILLE, 3S TO GARNETT RD., E TO 129 RD., 1/2S, W INTO.

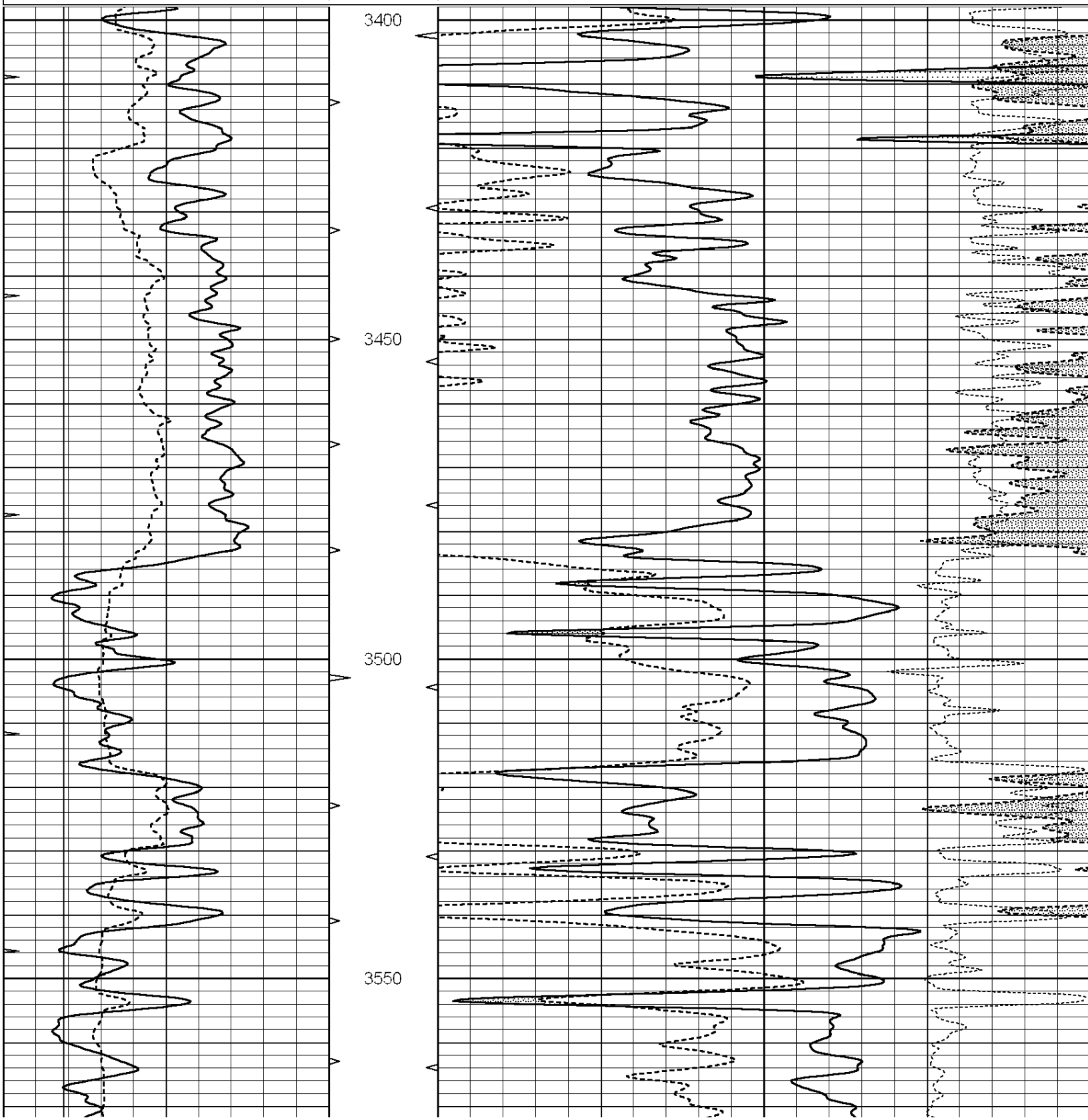


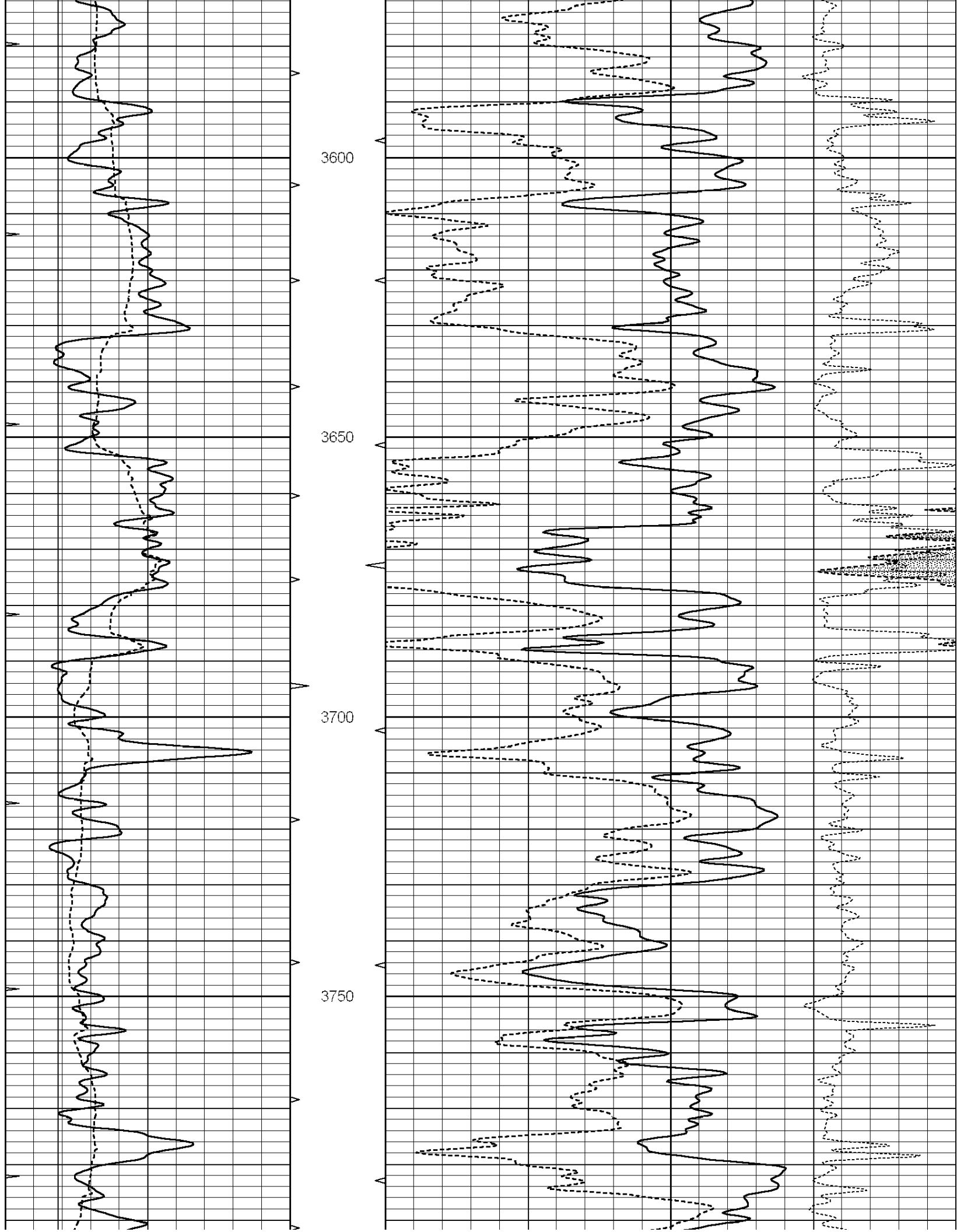
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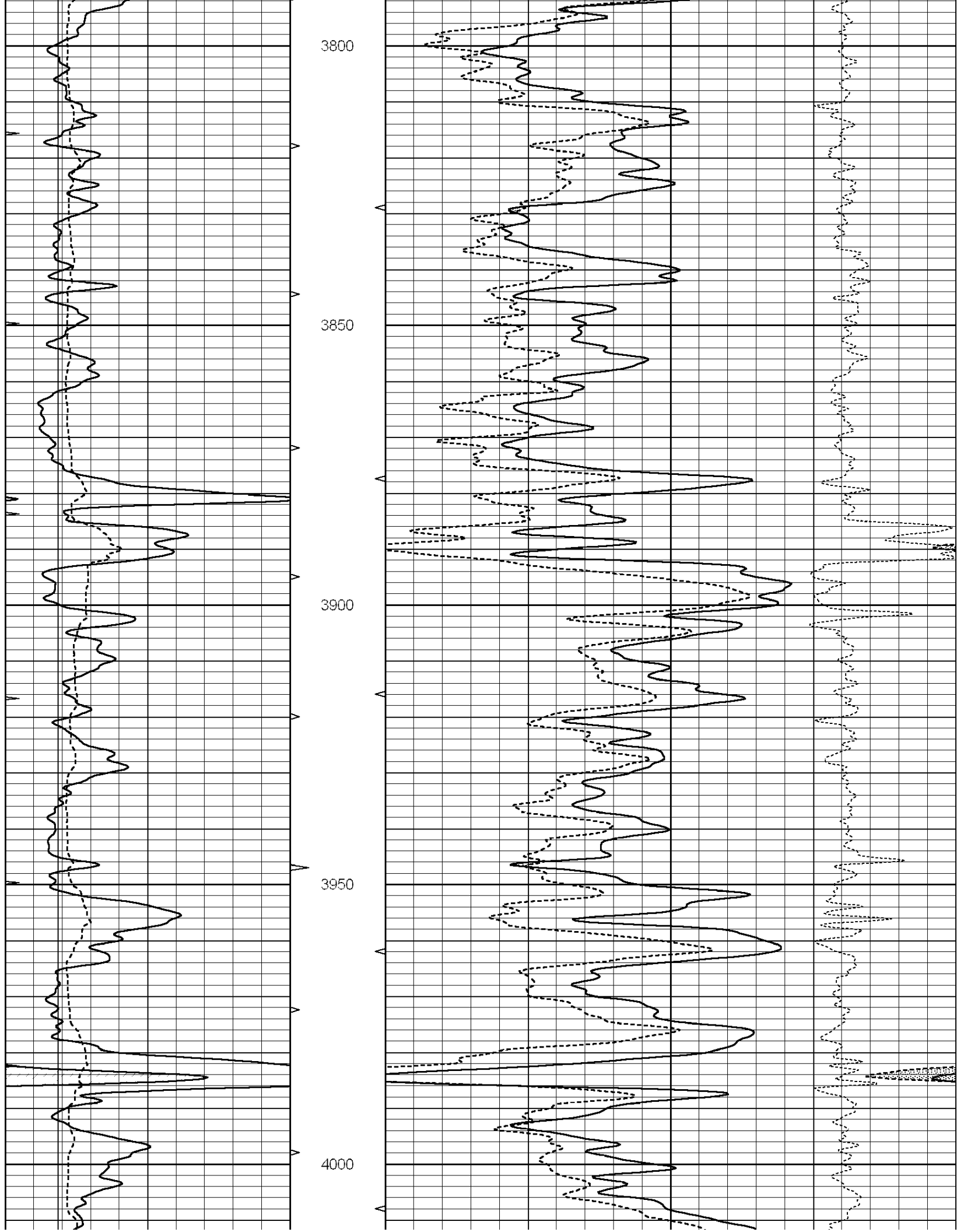
MAIN SECTION

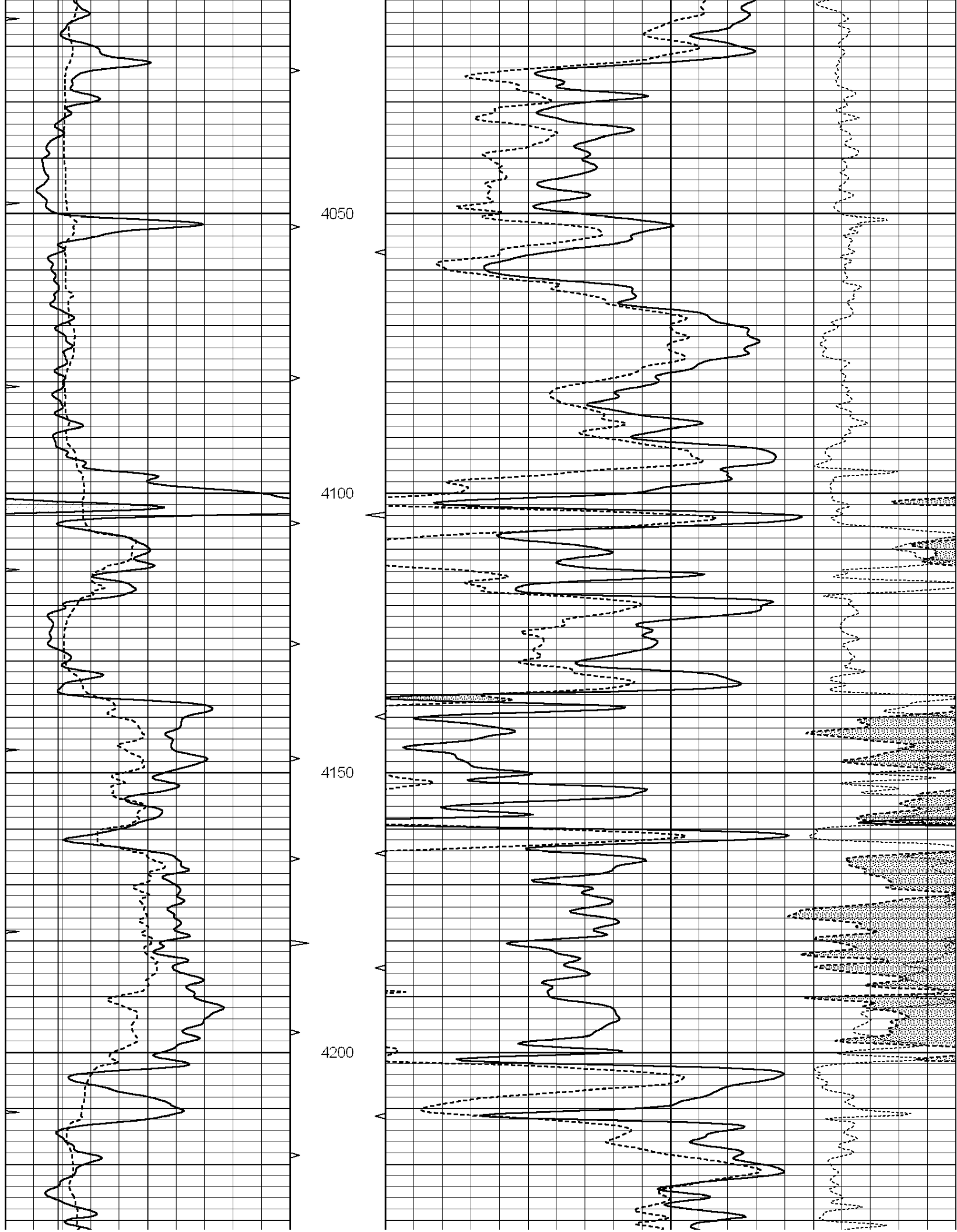
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 Presentation Format: den_neu
 Dataset Creation: Sun May 06 09:23:26 2012
 Charted by: Depth in Feet scaled 1:240

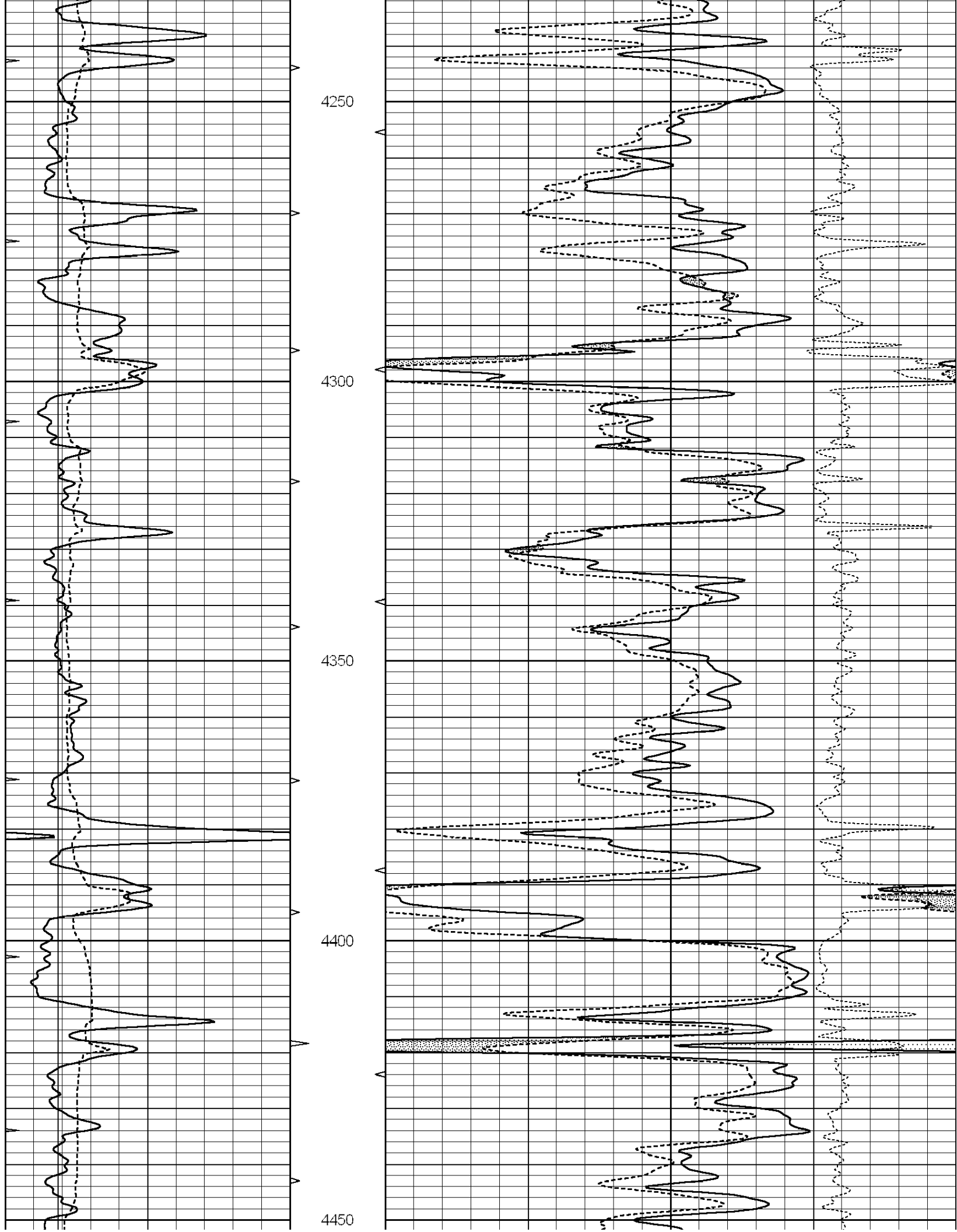
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

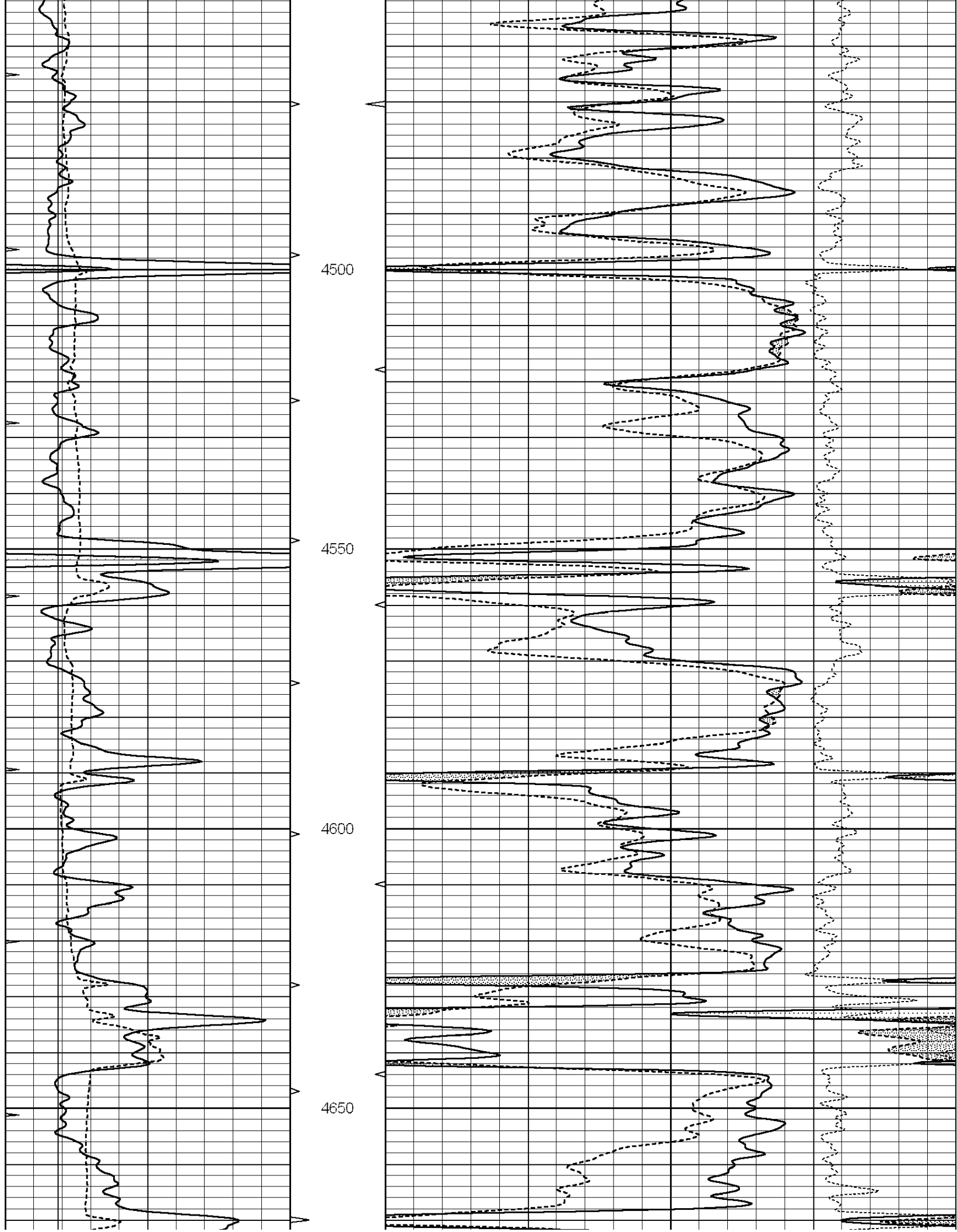


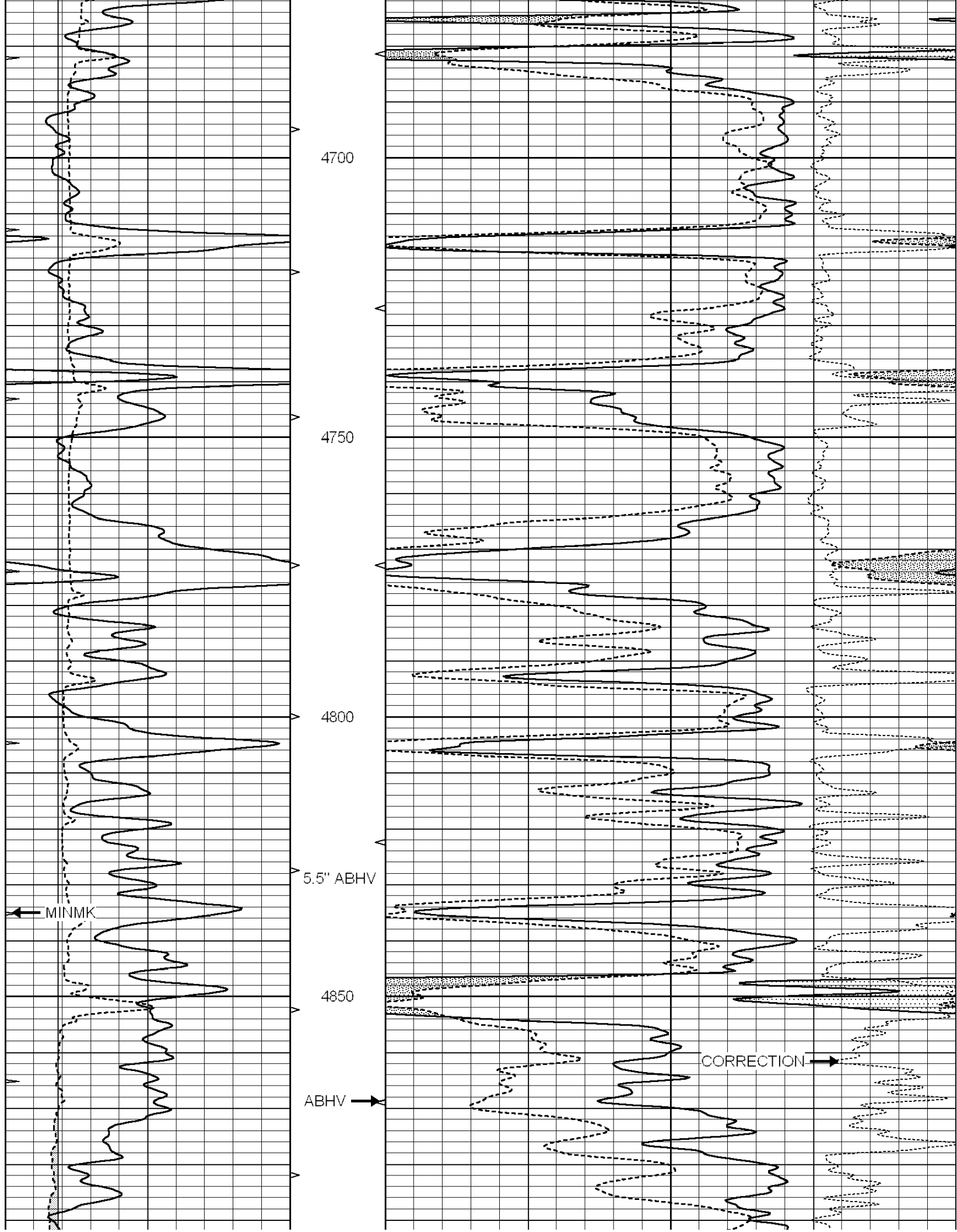


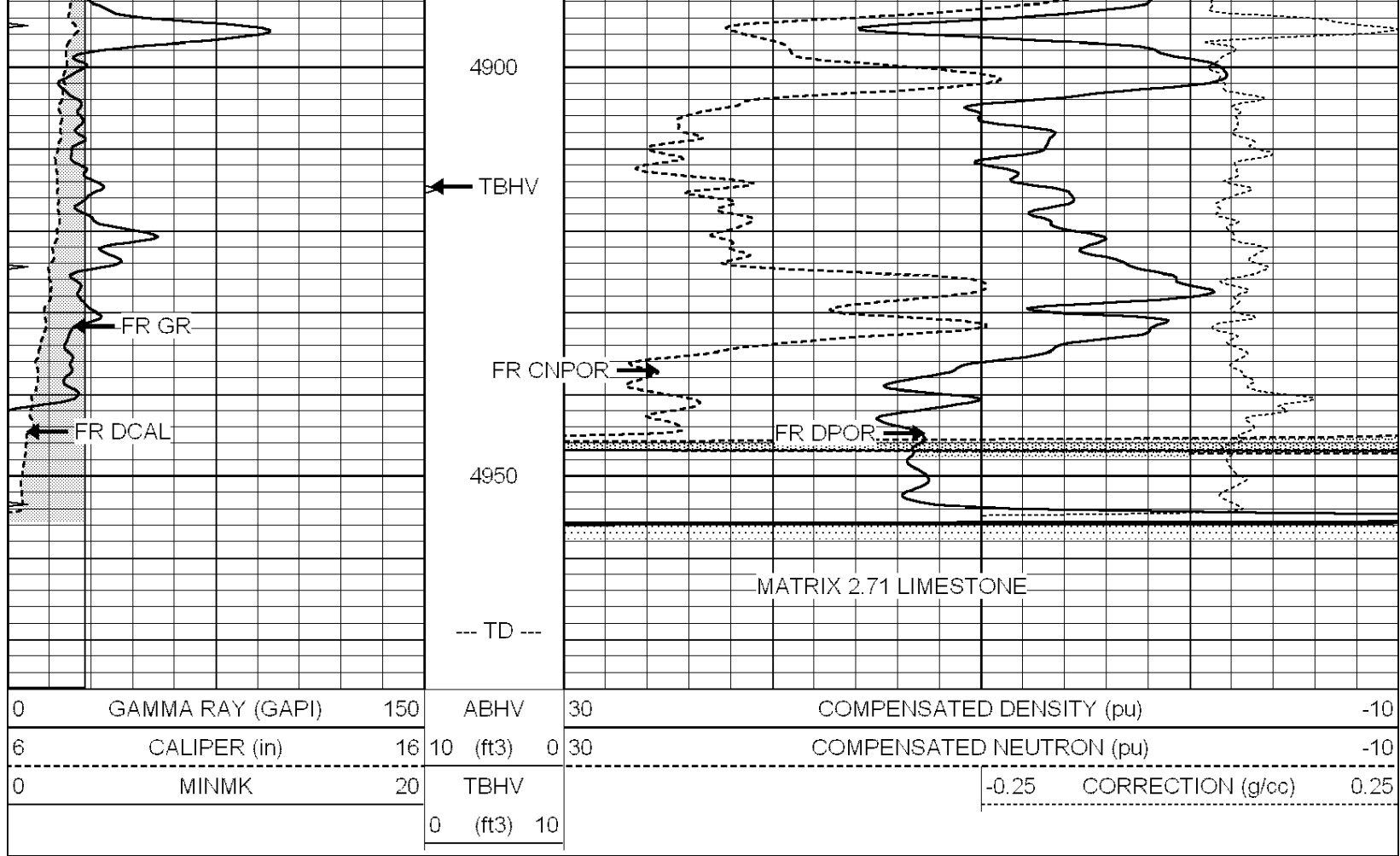










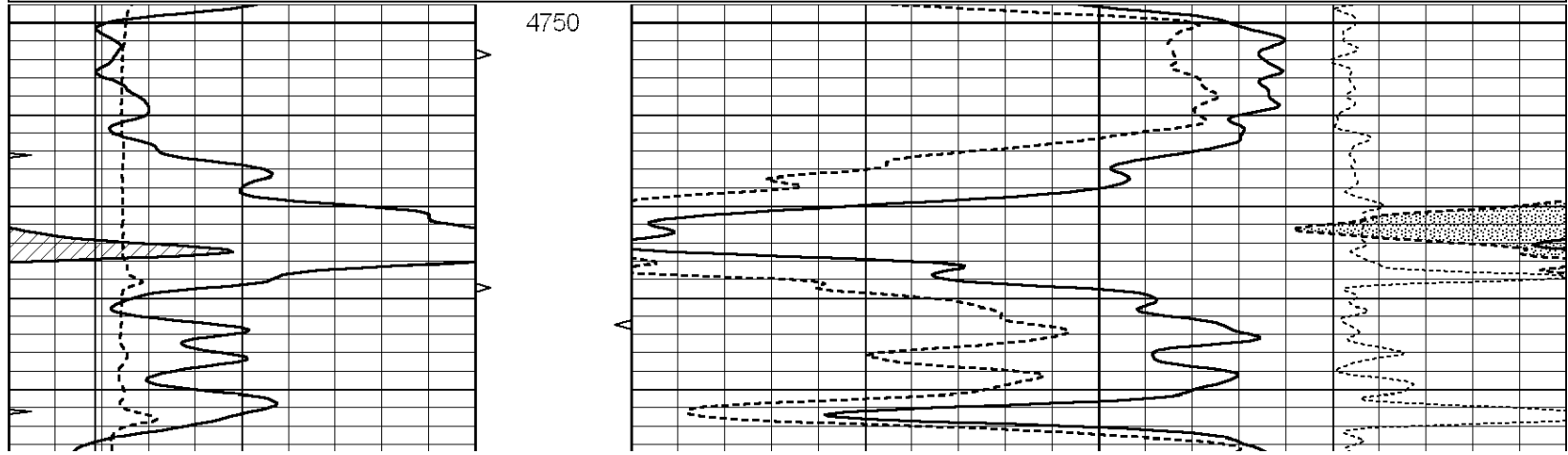


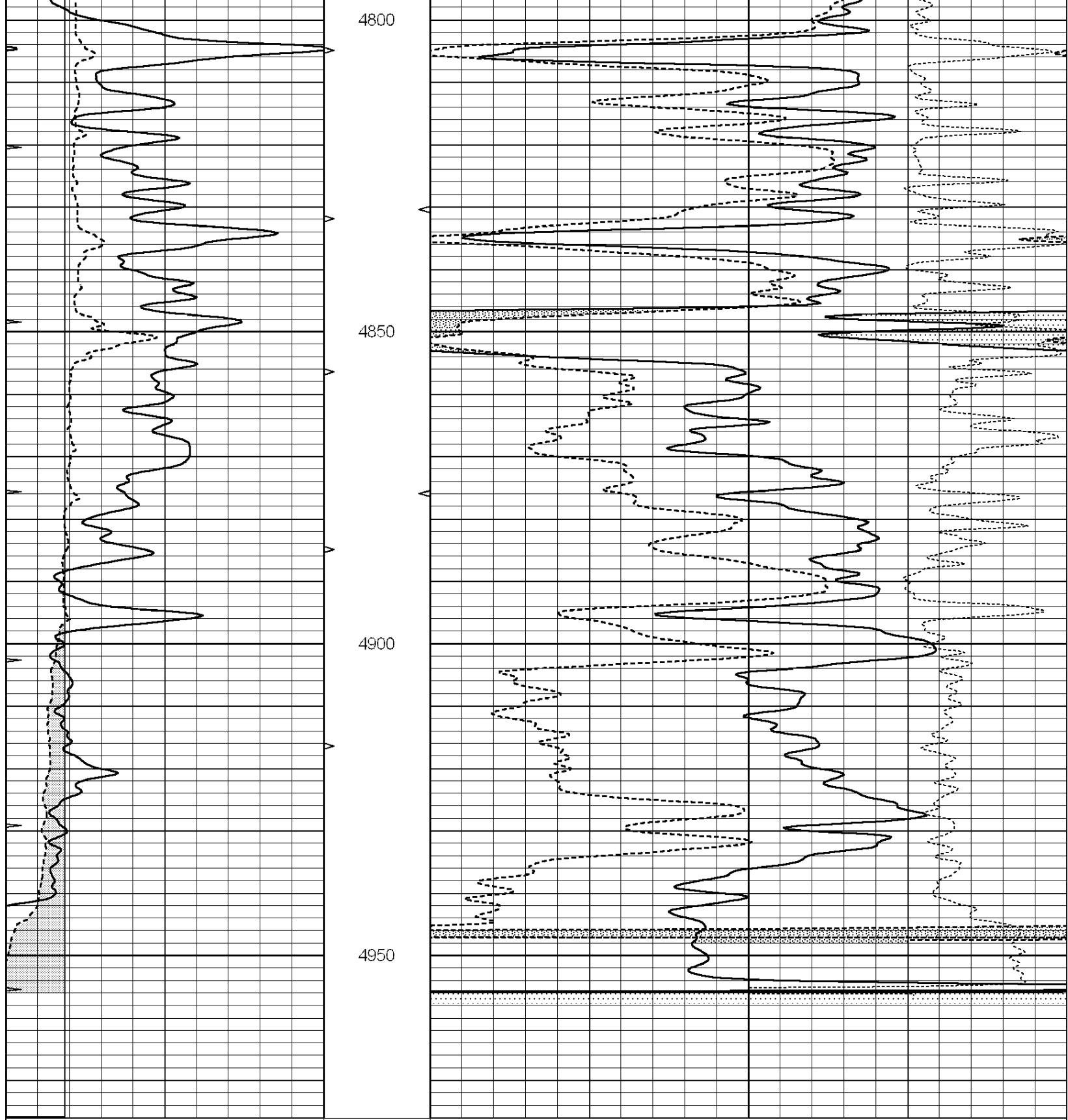
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REPEAT SECTION

Database File: 009112ddn.db
 Dataset Pathname: pass2.1A
 Presentation Format: den_neu
 Dataset Creation: Sun May 06 09:30:22 2012
 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	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25	CORRECTION (g/cc)
			0 (ft3)	10		0.25

Calibration Report

Database File: 009112ddn.db
 Dataset Pathname: pass3.1A
 Dataset Creation: Sun May 06 09:23:26 2012

Dual Induction Calibration Report

Serial-Model:	PROBE9-DILG
Surface Cal Performed:	Sun May 06 07:07:00 2012
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	550.000	-15.000	
Medium	0.039	0.728	V	0.000	464.000	mmho/m	540.000	-18.000	
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		3970.000	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:	GEAR1-GEARHART
Source / Verifier:	147 / 147
Master Calibration Performed:	Sun May 06 07:06:47 2012

Master Calibration

	Density		Far Detector	Near Detector
Magnesium	1.710	g/cc	1243.76	629.14 cps
Aluminum	2.580	g/cc	282.16	435.01 cps
Spine Angle = 76.03			Density/Spine Ratio = 0.569	
	Size		Reading	
Small Ring	10.00	in	3.50	V
Large Ring	16.00	in	5.30	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:	Sun May 06 07:34:58 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7000	GAPI/cps