



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY/NEUTRON
LOG**

Company RITCHIE EXPLORATION, INC.
Well MAVERICK #1
Field WILDCAT
County FORD
State KANSAS

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County FORD State KANSAS

Location: API # : 15-057-20647-0000
721' FNL & 870' FWL
SEC 21 TWP 27S RGE 23W
Permanent Datum GROUND LEVEL Elevation 2408
Log Measured From KELLY BUSHING 12' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
Elevation
K.B. 2420
D.F. 2418
G.L. 2408

Date	12-04-09
Run Number	ONE
Depth Driller	5105
Depth Logger	5104
Bottom Logged Interval	5080
Top Log Interval	2500
Casing Driller	8 5/8" @ 437
Casing Logger	436
Bit Size	7 7/8
Type Fluid In Hole	CHEMICAL MUD
Density / Viscosity	9.3/65
pH / Fluid Loss	9.5/9.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.2 @ 45F
Rmf @ Meas. Temp	.9 @ 45F
Rmc @ Meas. Temp	1.92 @ 45F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.425 @ 125F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	125F
Equipment Number	680
Location	HAYS, KANSAS
Recorded By	JASON CAPPELLUCCI
Witnessed By	MIKE ENGELBRECHT
	JEFF GRONWEG

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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.

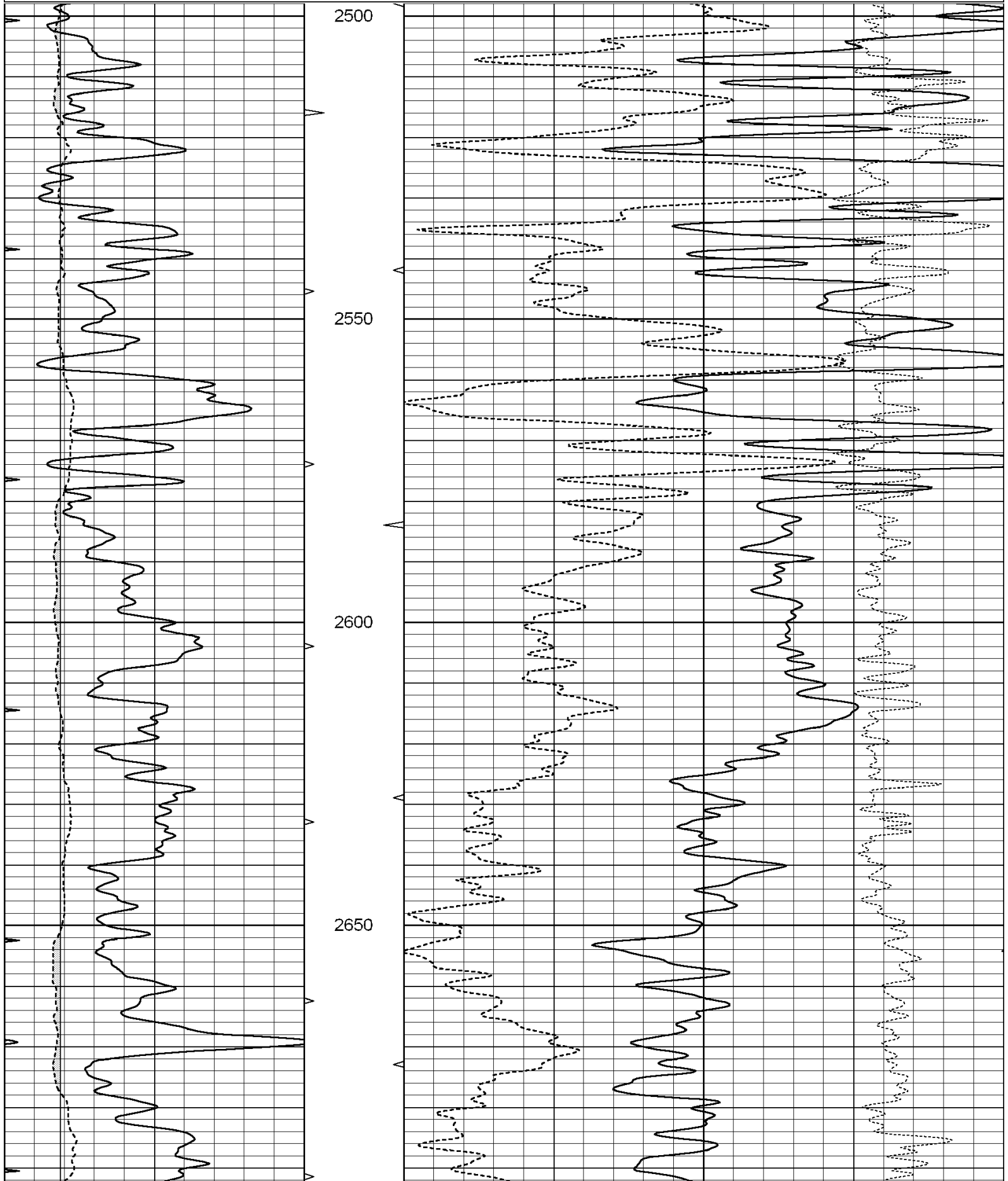
Comments

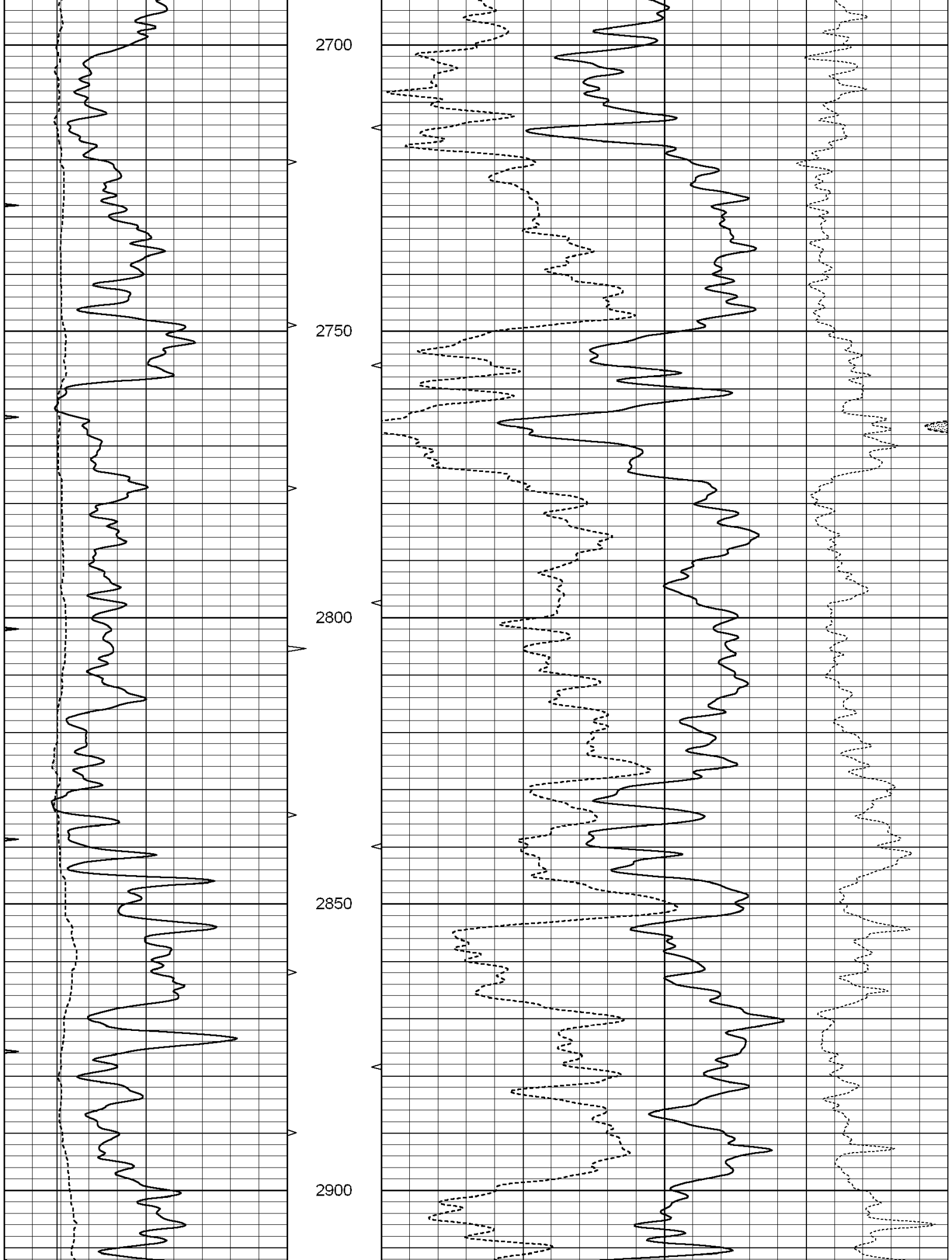
THANK YOU FOR USING SUPERIOR WELL SERVICES HAYS, KANSAS (785) 628-6395
DIRECTIONS
WRIGHT KS. S. ON 117 RD, STRAIGHT ACROSS HWY 400 - 1 1/2 S
TO ELEVATOR RD. - 3 E. - N. TO TANK BATTERY - N. & E. INTO

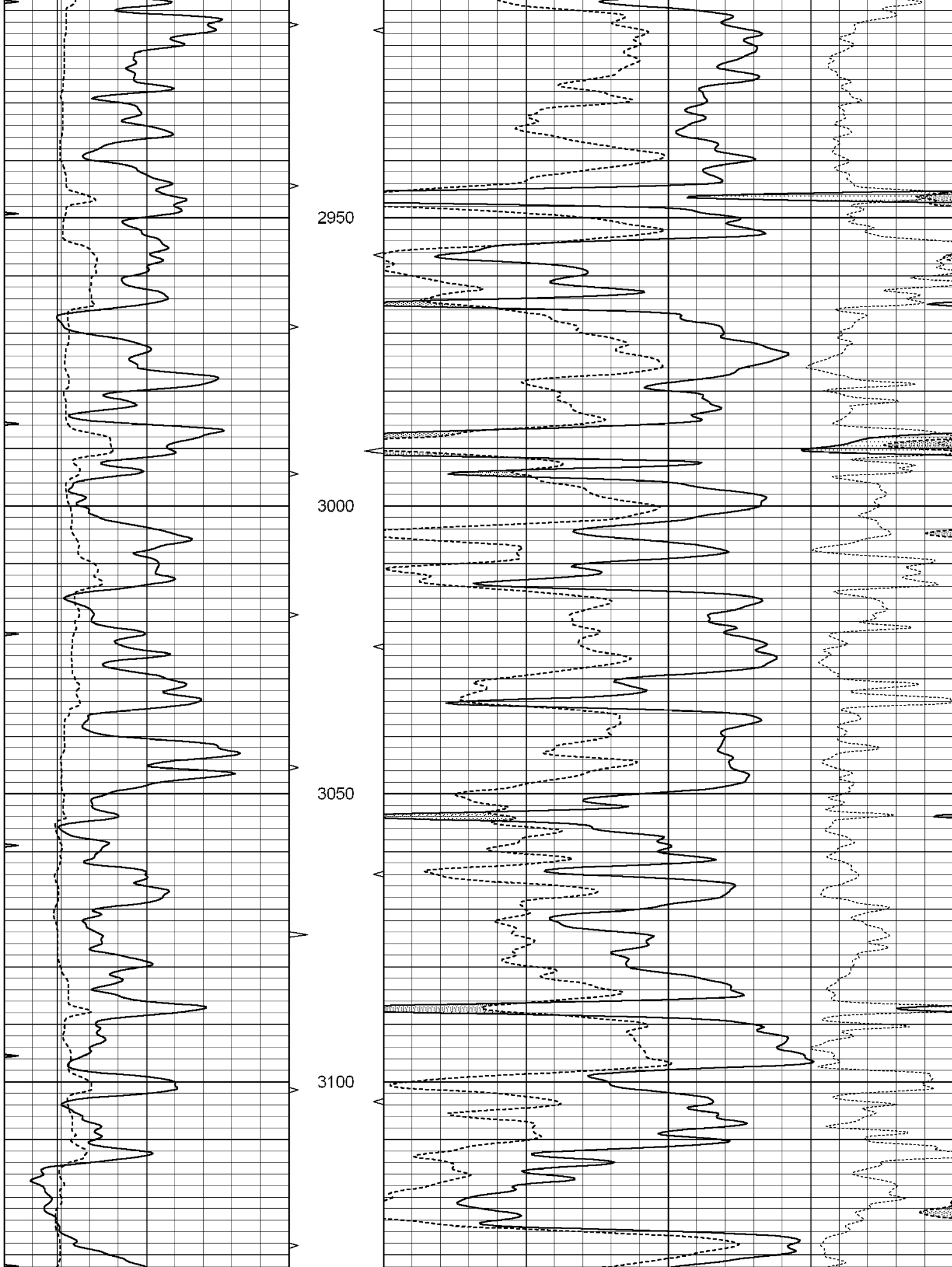
Charted by:

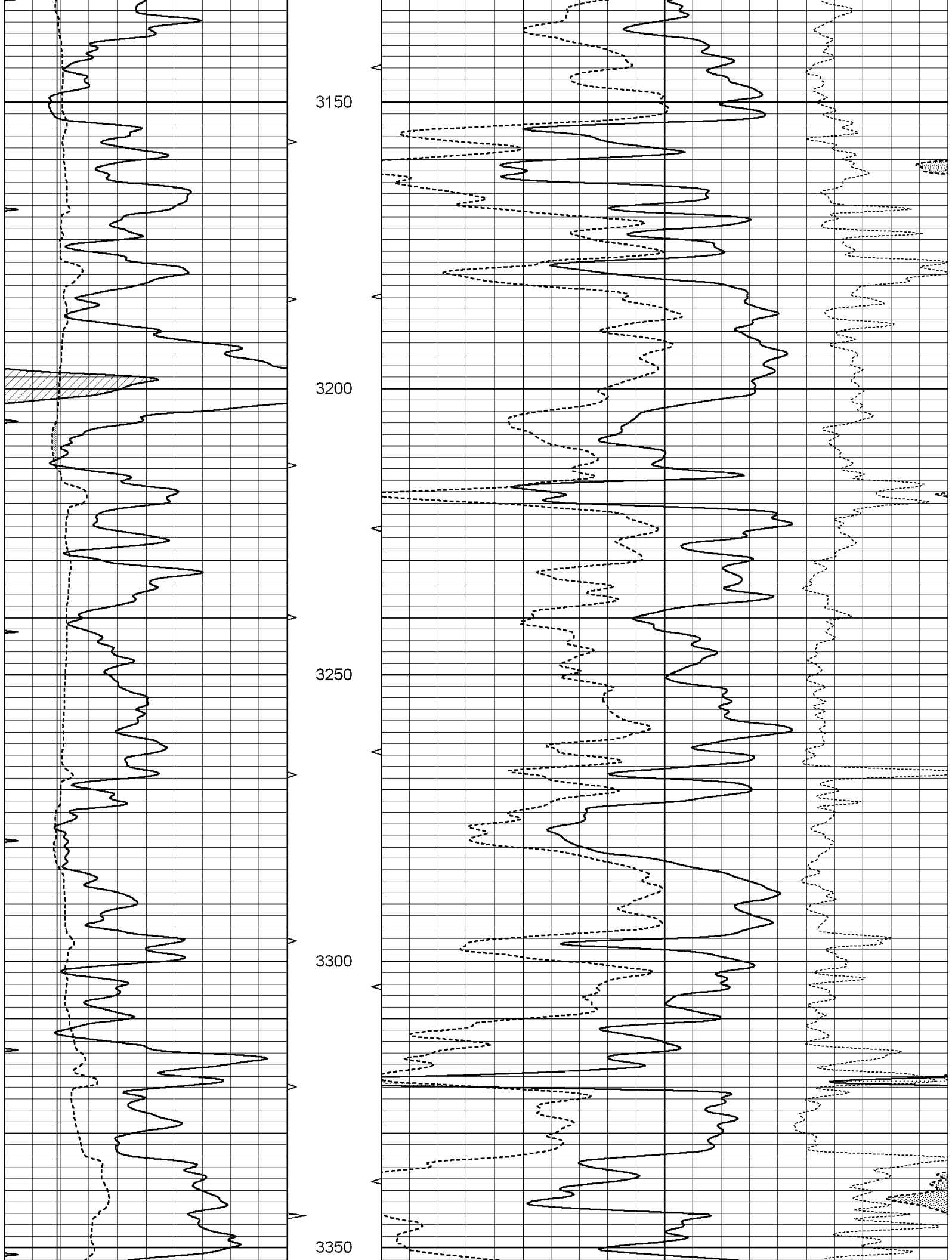
Depth in Feet scaled 1:240

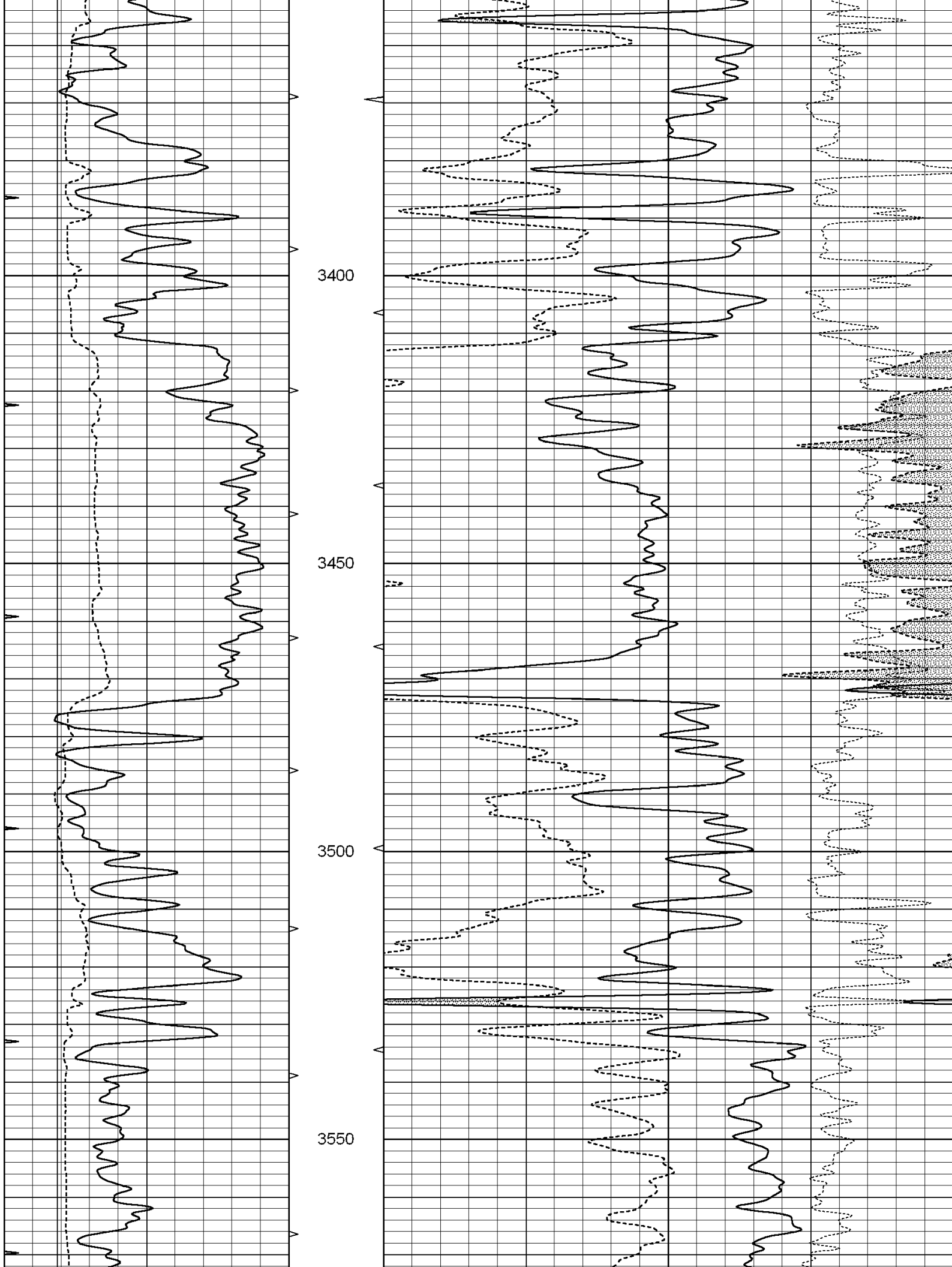
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

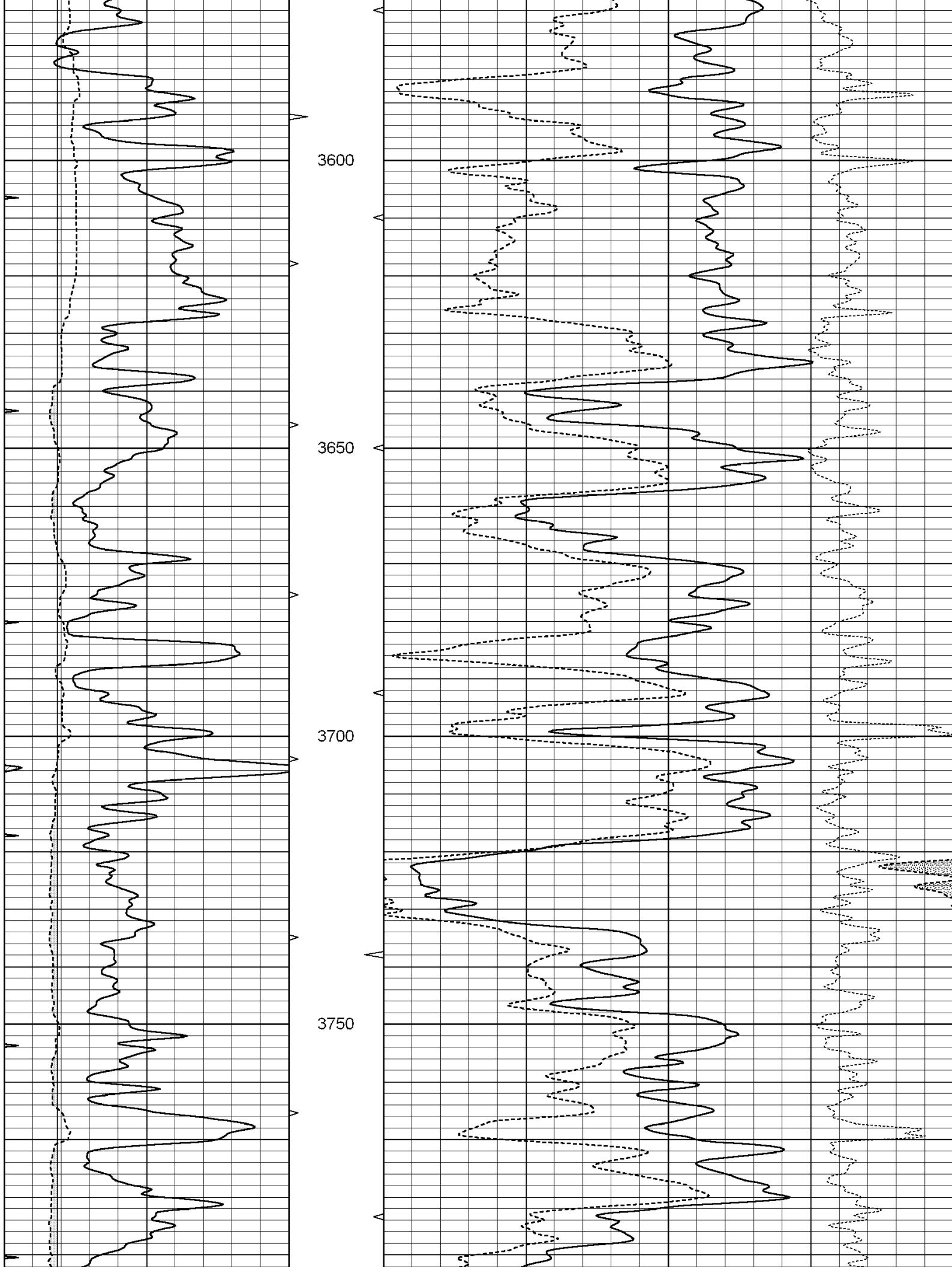


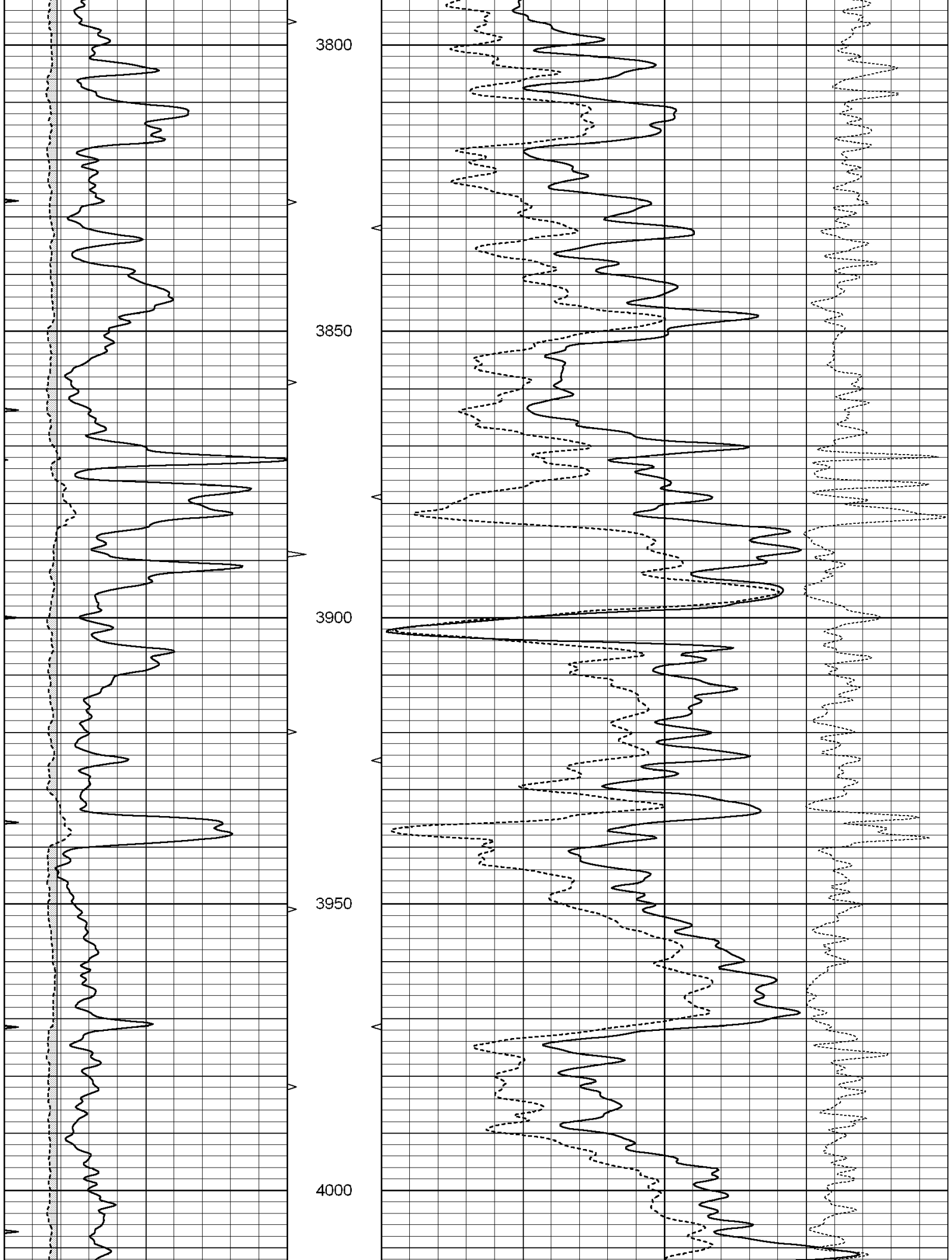


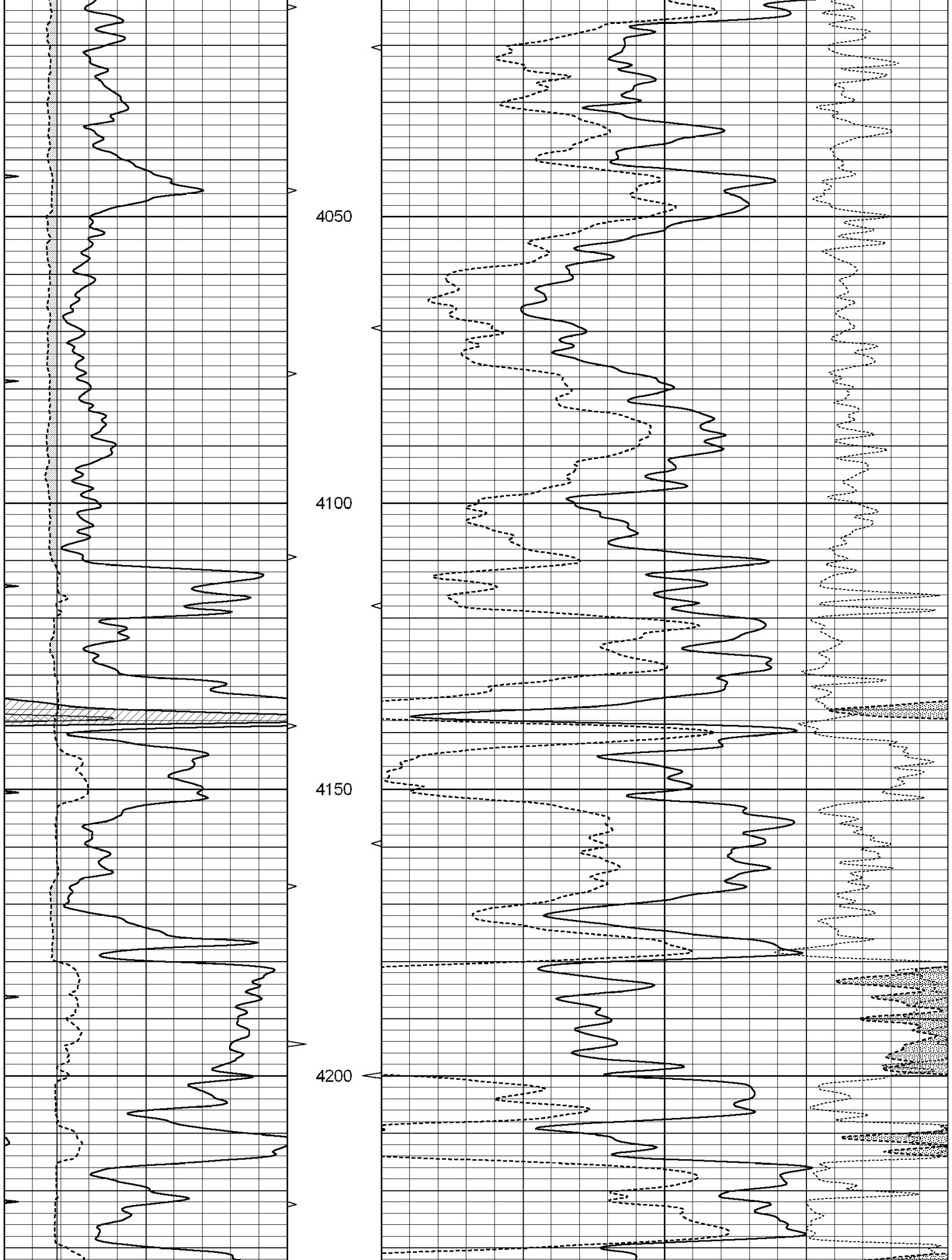


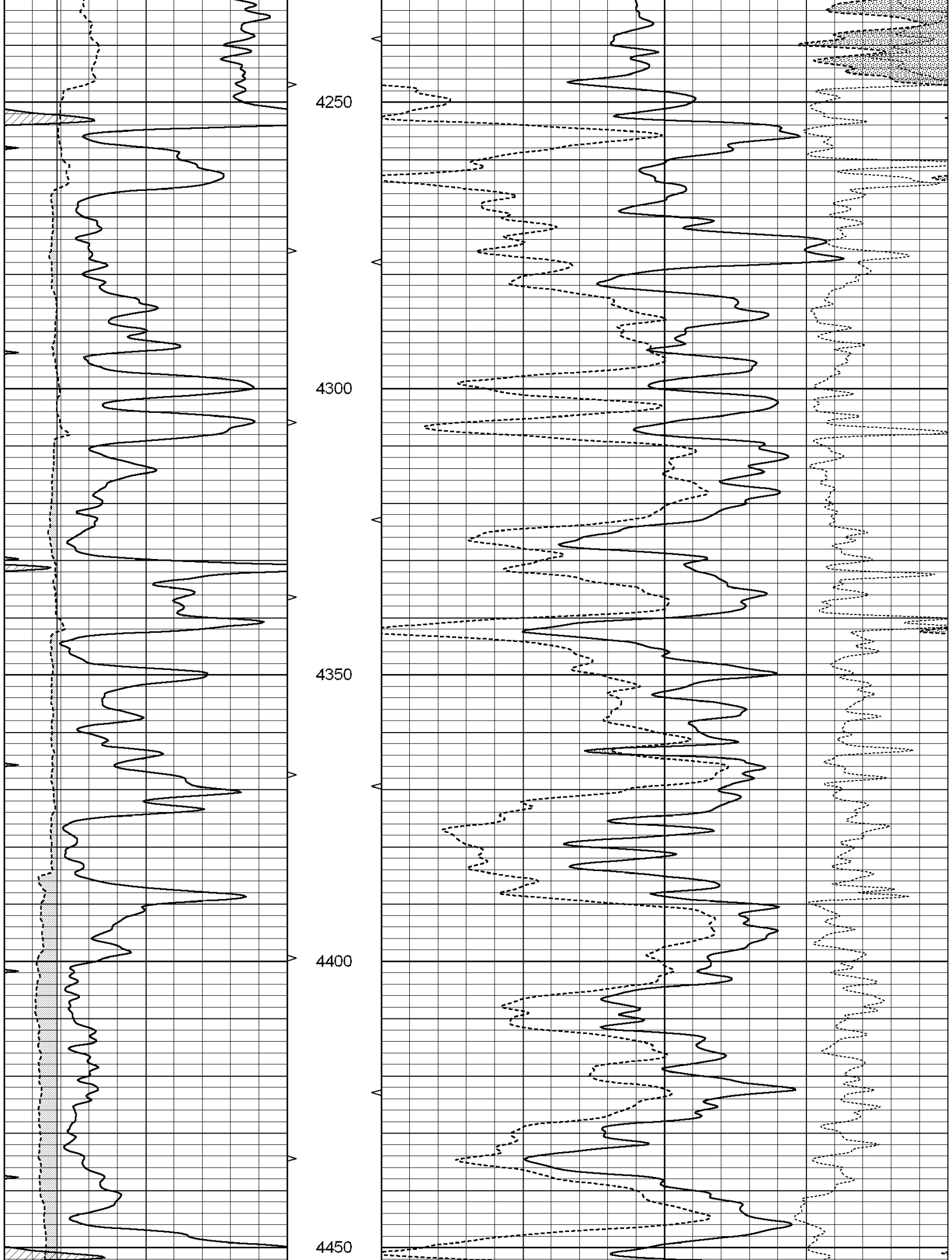


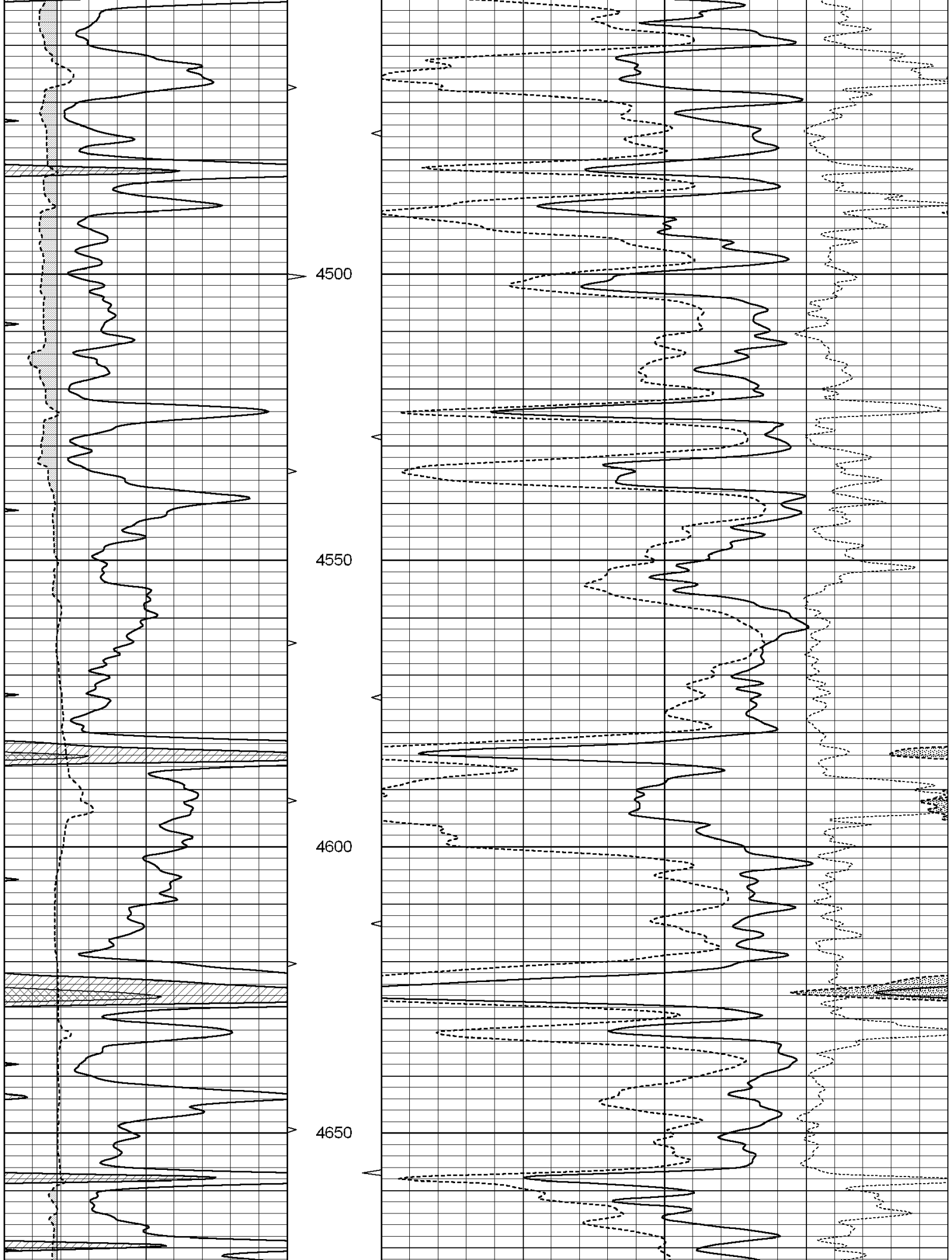


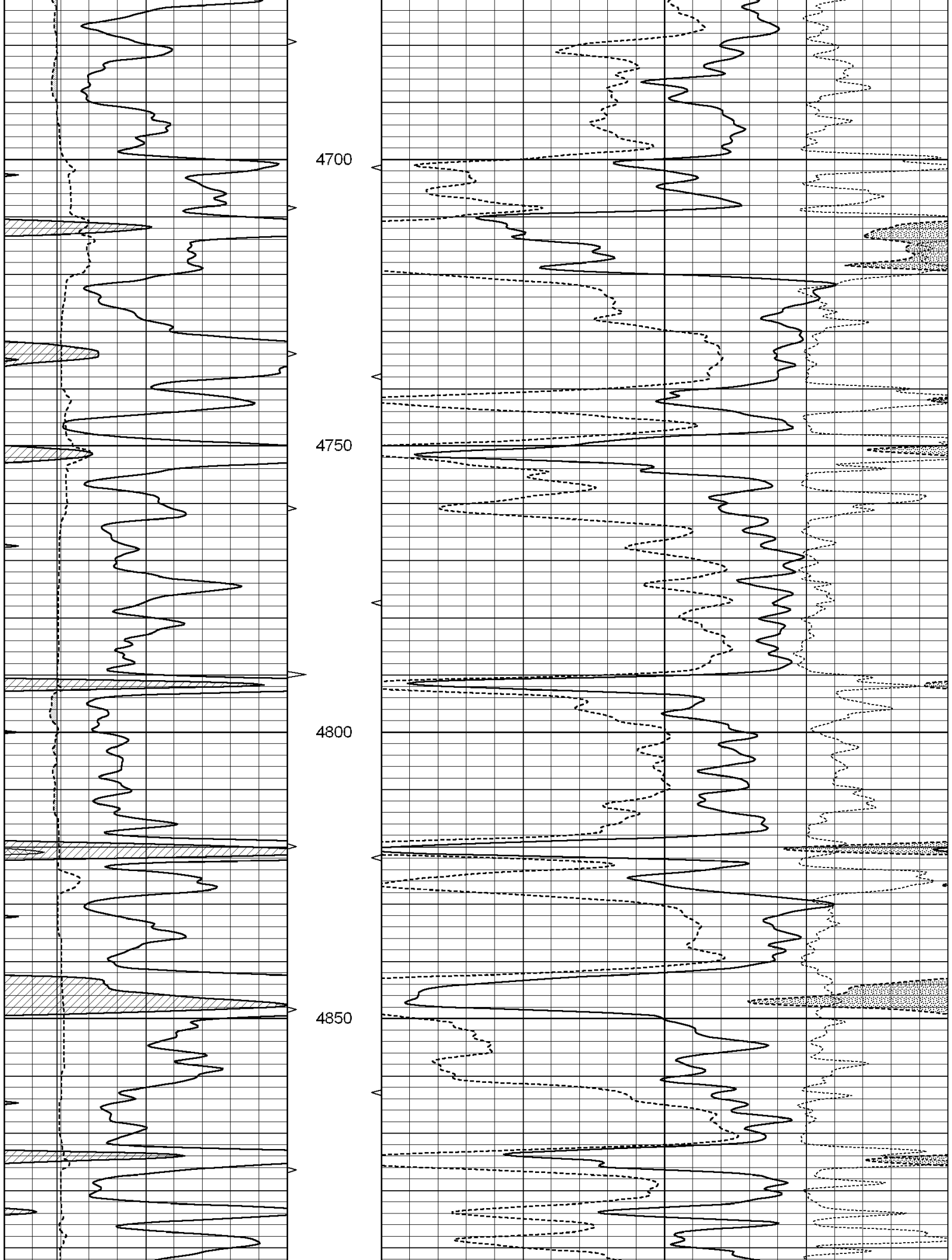


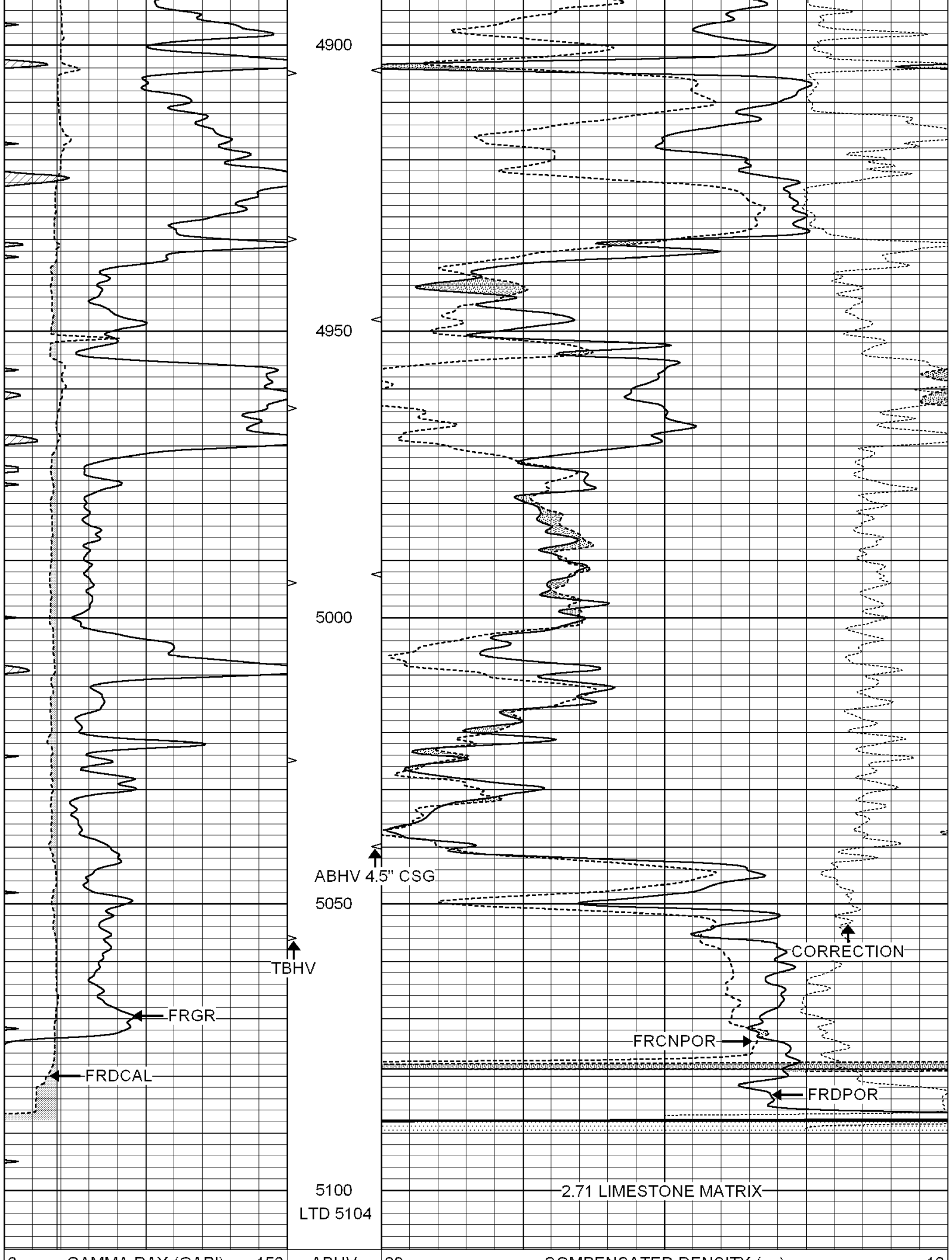












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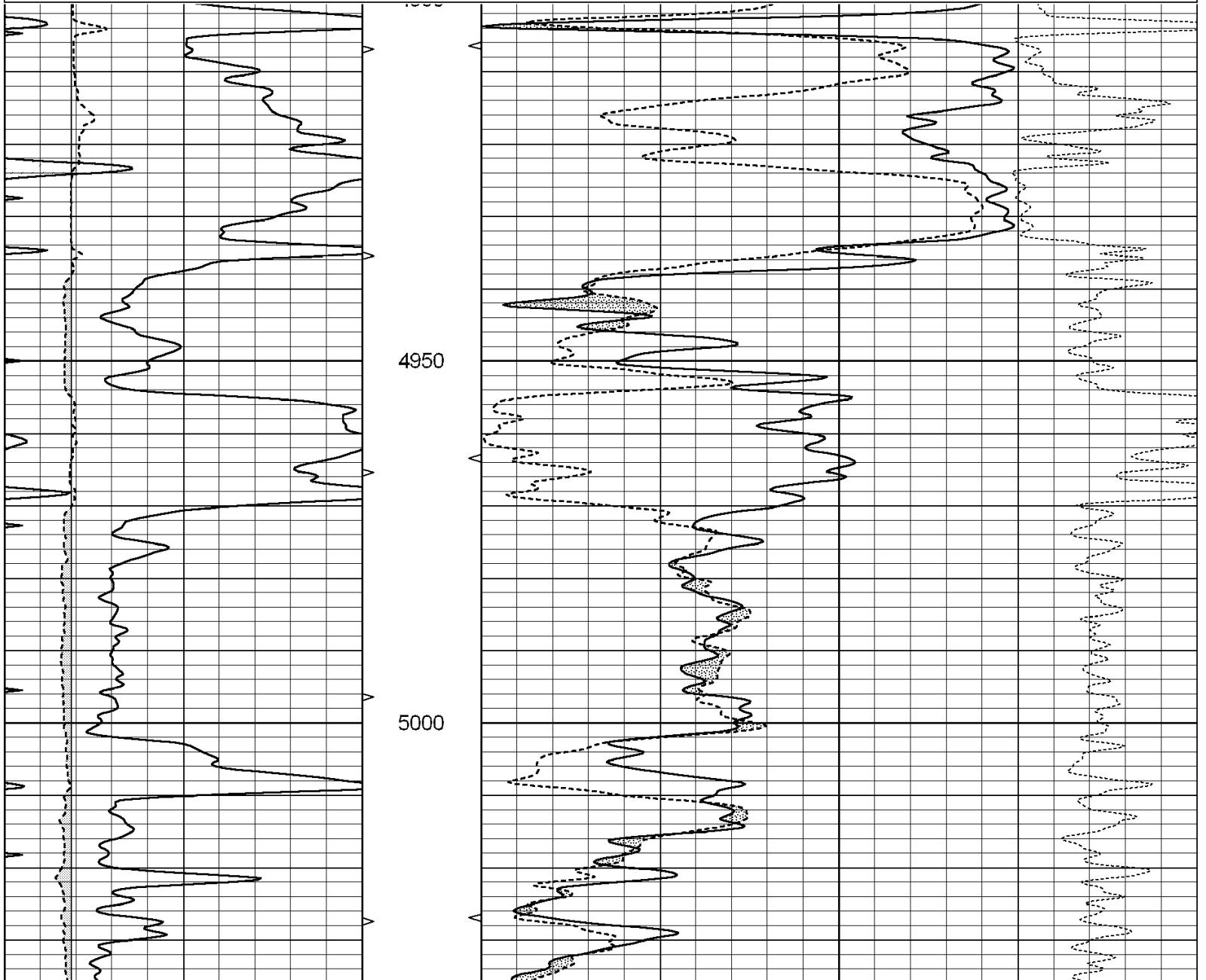


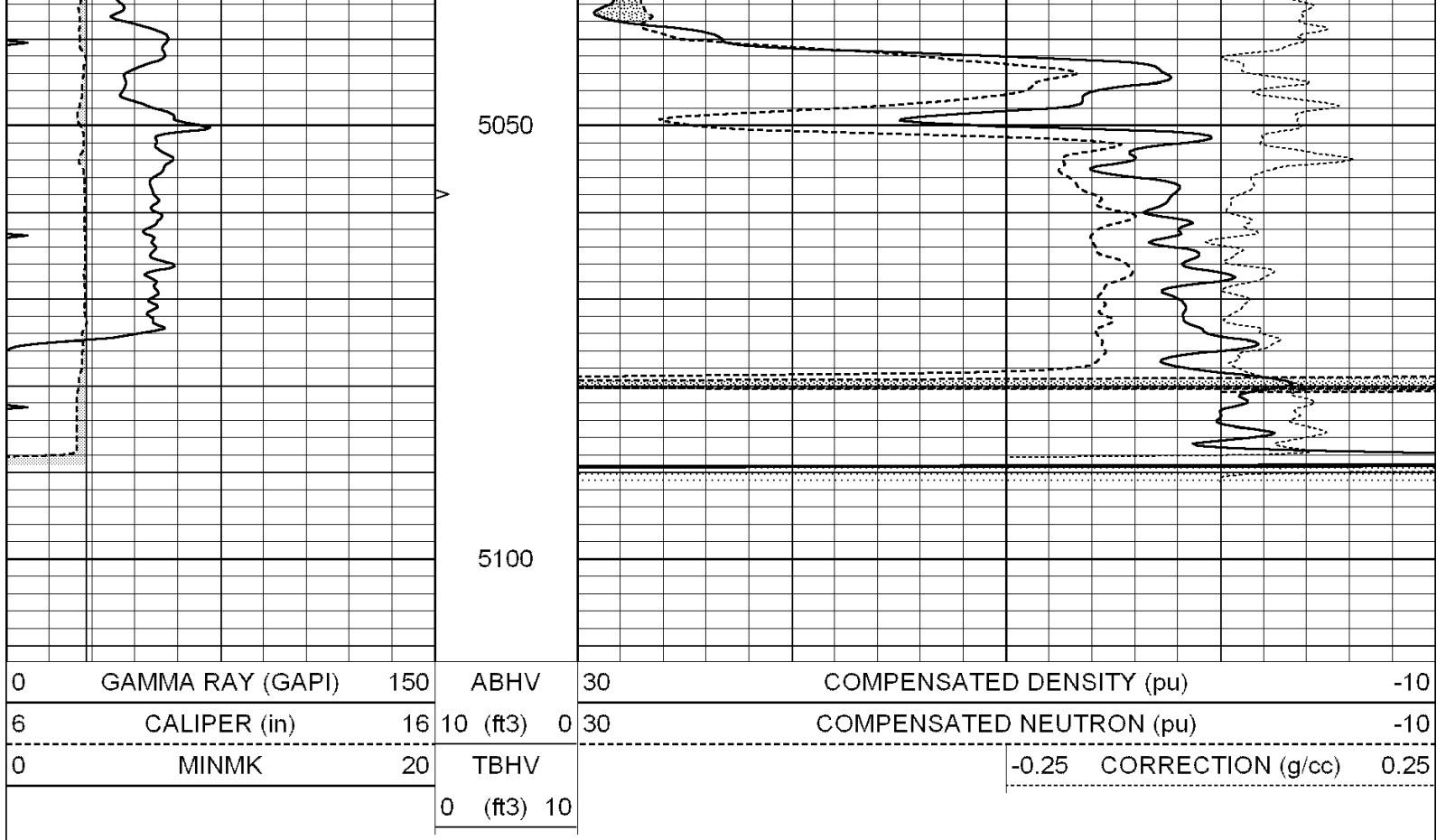
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 004655ddn.db
 Dataset Pathname: pass3.1
 Presentation Format: _den_neu
 Dataset Creation: Fri Dec 04 03:43:58 2009 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: 004655ddn.db
 Dataset Pathname: pass3.1
 Dataset Creation: Fri Dec 04 03:43:58 2009 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			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	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		
		-6.500	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: GEAR4-GEARHART
 Source / Verifier: 143 / 143
 Master Calibration Performed: Fri Jan 16 10:06:35 2009

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1358.55	649.93	cps
Aluminum	2.580	g/cc	325.11	479.52	cps
Spine Angle = 78.00			Density/Spine Ratio = 0.595		
	Size		Reading		
Small Ring	8.00	in	3.56	V	
Large Ring	14.00	in	6.65	V	

Compensated Neutron Calibration Report

Serial Number: 5I
 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: GR6
 Tool Model: OPEN
 Performed: Tue Nov 10 08:32:36 2009

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 276.0 cps

Sensitivity: 0.5535 GAPI/cps