SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company CAPTIVA ENERGY, LLC.
Well CARVER TRUST #1-15
Field IUKA - CARMI
County PRATT
State KANSAS

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Well CARVER TRUST #1-15
Field IUKA - CARMI
County PRATT
State KANSAS

Location: API # : 15-151-22319-0000

1493' FSL & 1783' FEL

SEC 15 TWP 27S RGE 13W

Other Services
CDL/CNL/PE
MEL/SONIC

Permanent Datum GROUND LEVEL Elevation 1946
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1959
D.F. 1957
G.L. 1946

Date	12/18/08		
Run Number	ONE		
Depth Driller	4600		
Depth Logger	4600		
Bottom Logged Interval	4598		
Top Log Interval	00		
Casing Driller	13 3/8"@267'		
Casing Logger	267		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 10,000PPM	
Density / Viscosity	9.0/75		
pH / Fluid Loss	11.0/6.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.600@59F		
Rmf @ Meas. Temp	.450@59F		
Rmc @ Meas. Temp	.720@59F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.293@121F		
Time Circulation Stopped	6 HOURS		
Time Logger on Bottom	8:15 A.M.		
Maximum Recorded Temperature	121F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	BRUCE ARD		

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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 SERVICE HAYS, KANSAS (785)628-6395

DIRECTIONS

PRATT, KS. 1 MILE S. OF AIRPORT ON HWY 281 TO 30TH AVE., 1E., 1/2N., W. INTO

MAIN SECTION

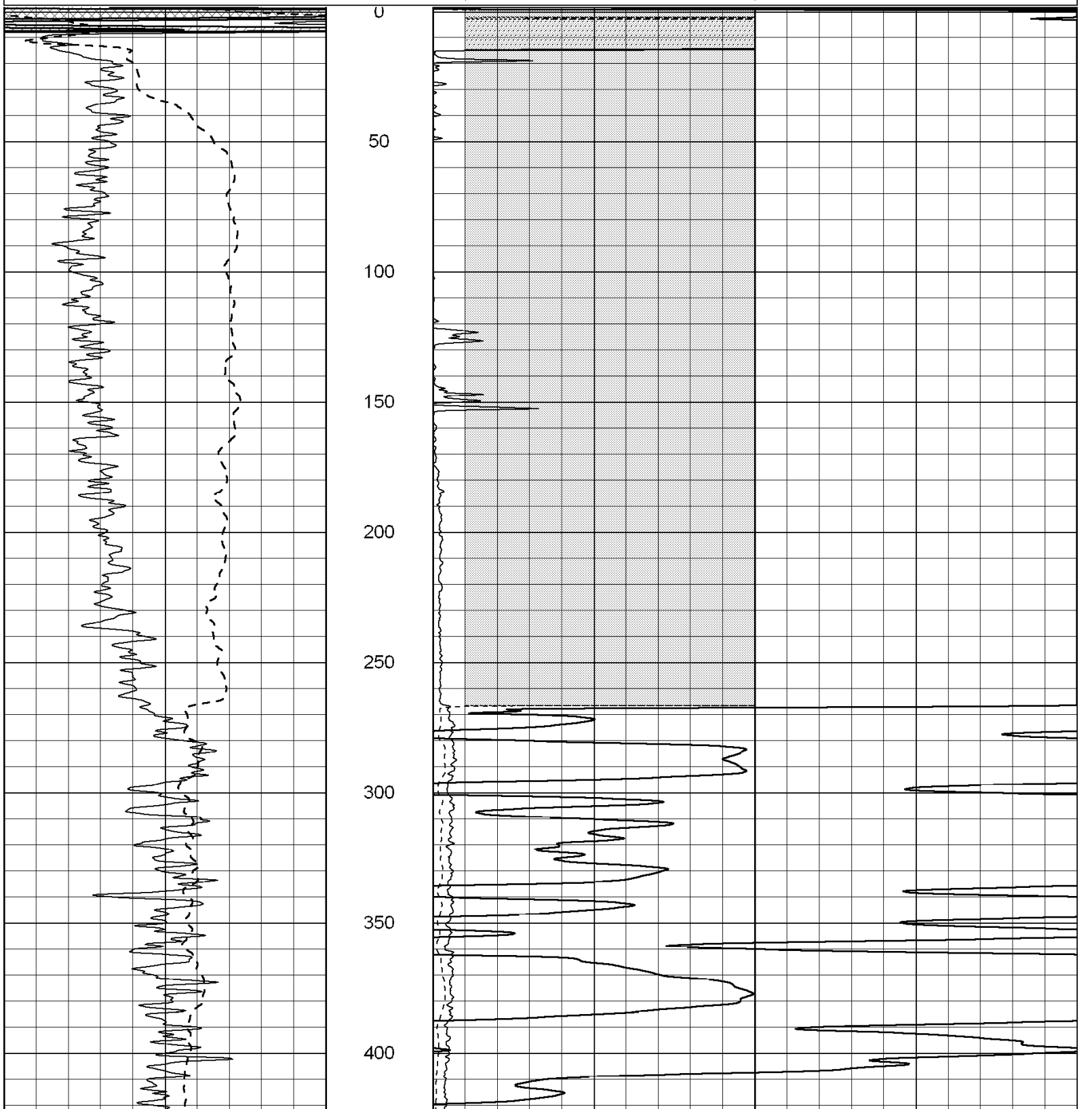
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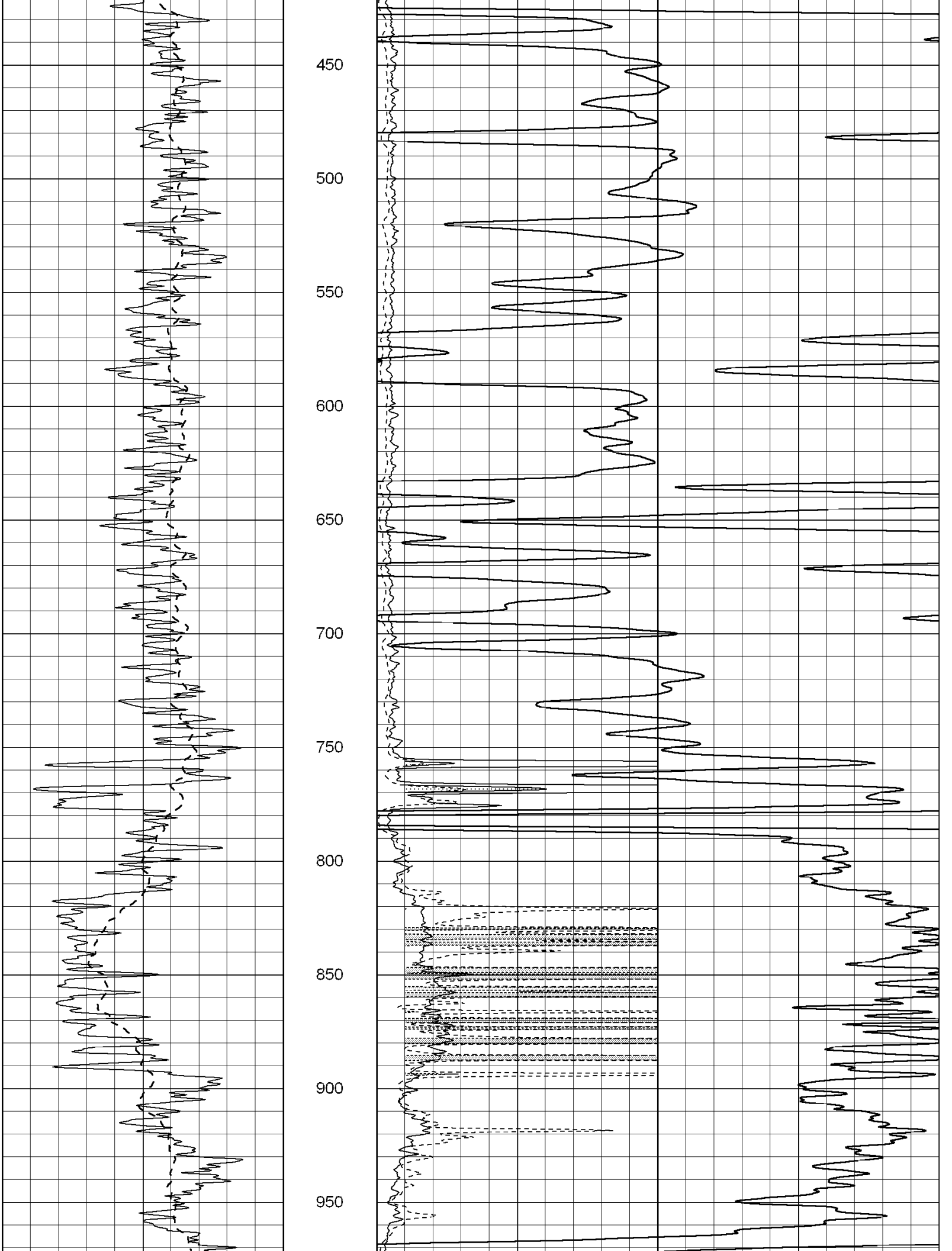
SUPERIOR WELL SERVICES

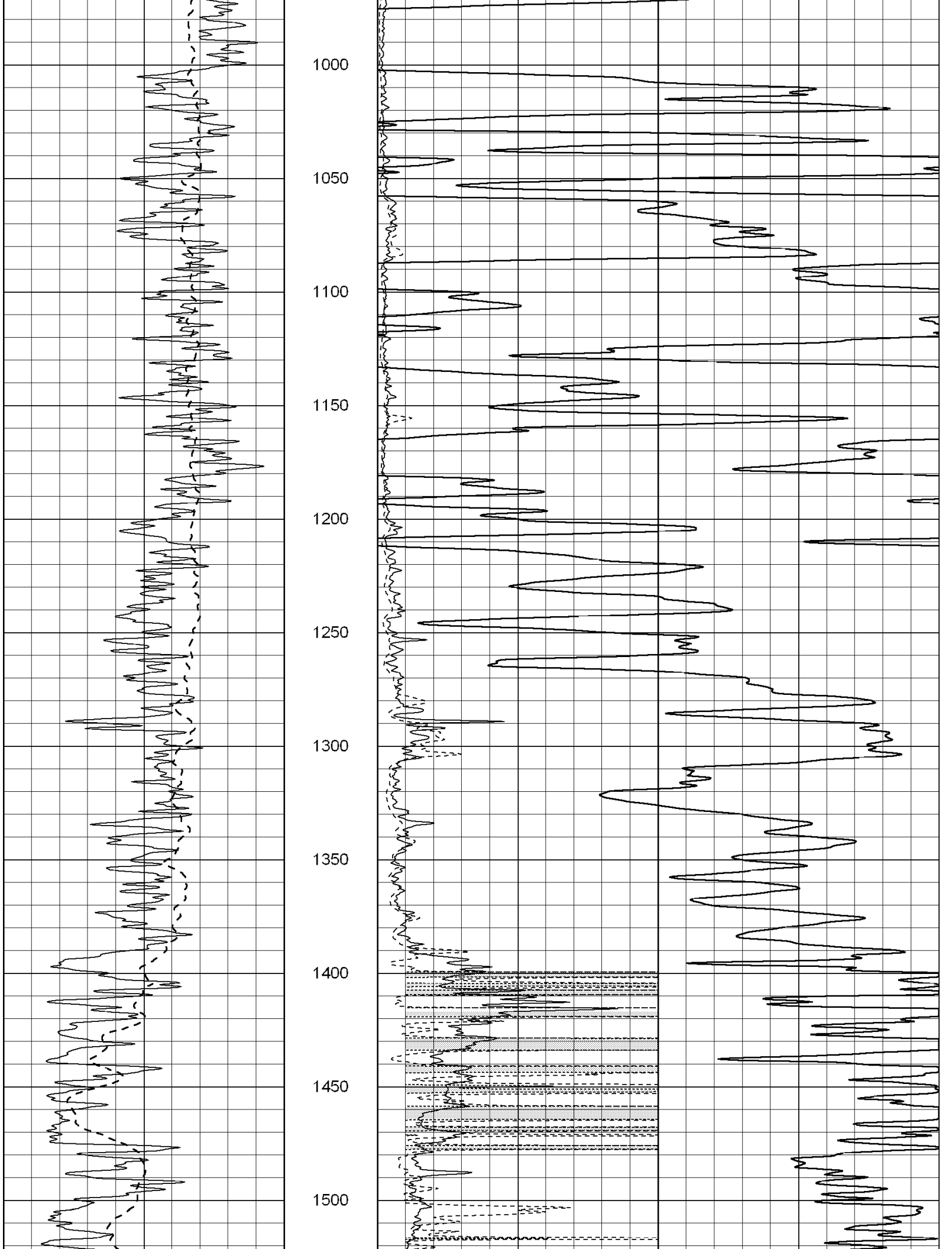
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Charted by: Depth in Feet scaled 1:600

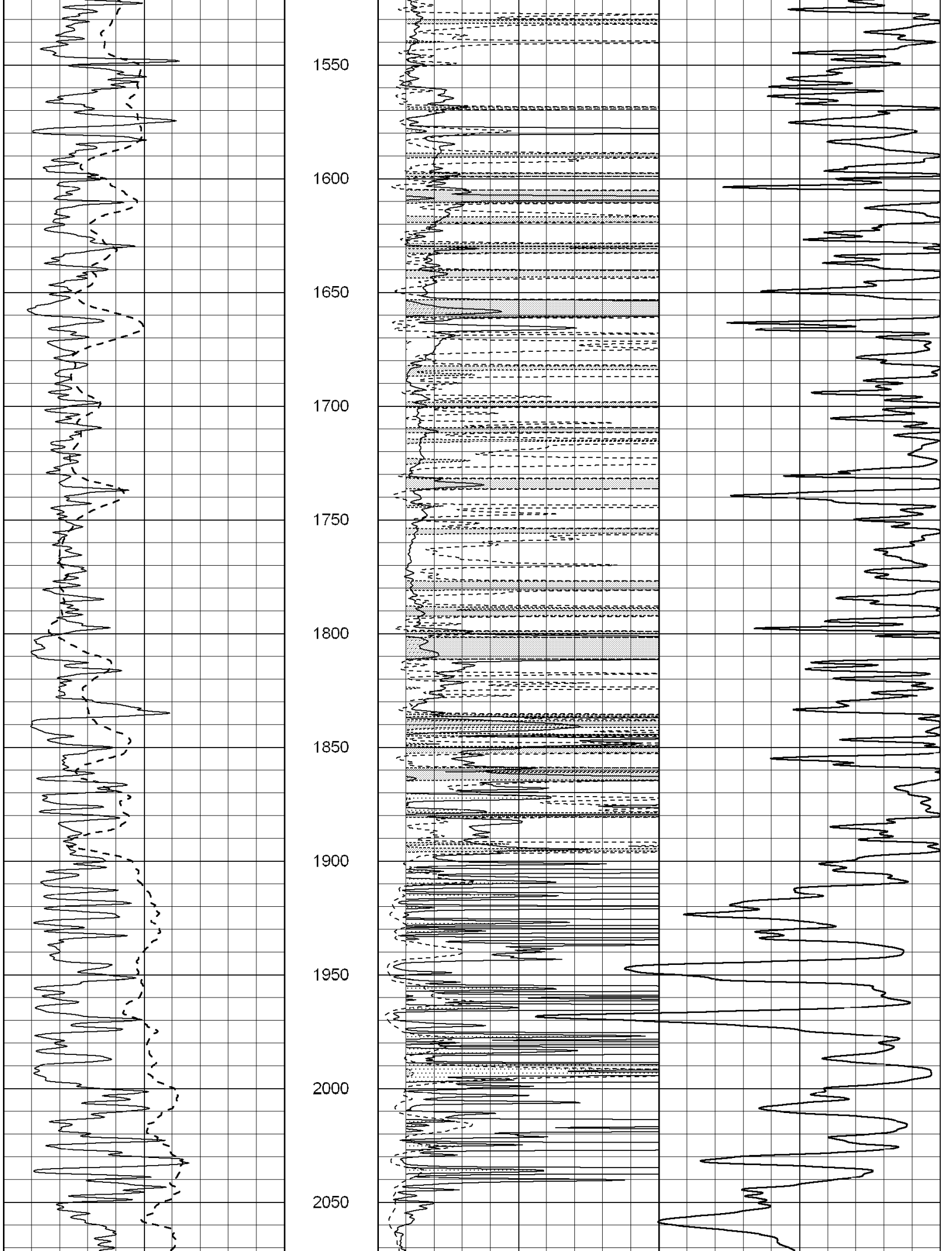
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-100	SP (mV)	100

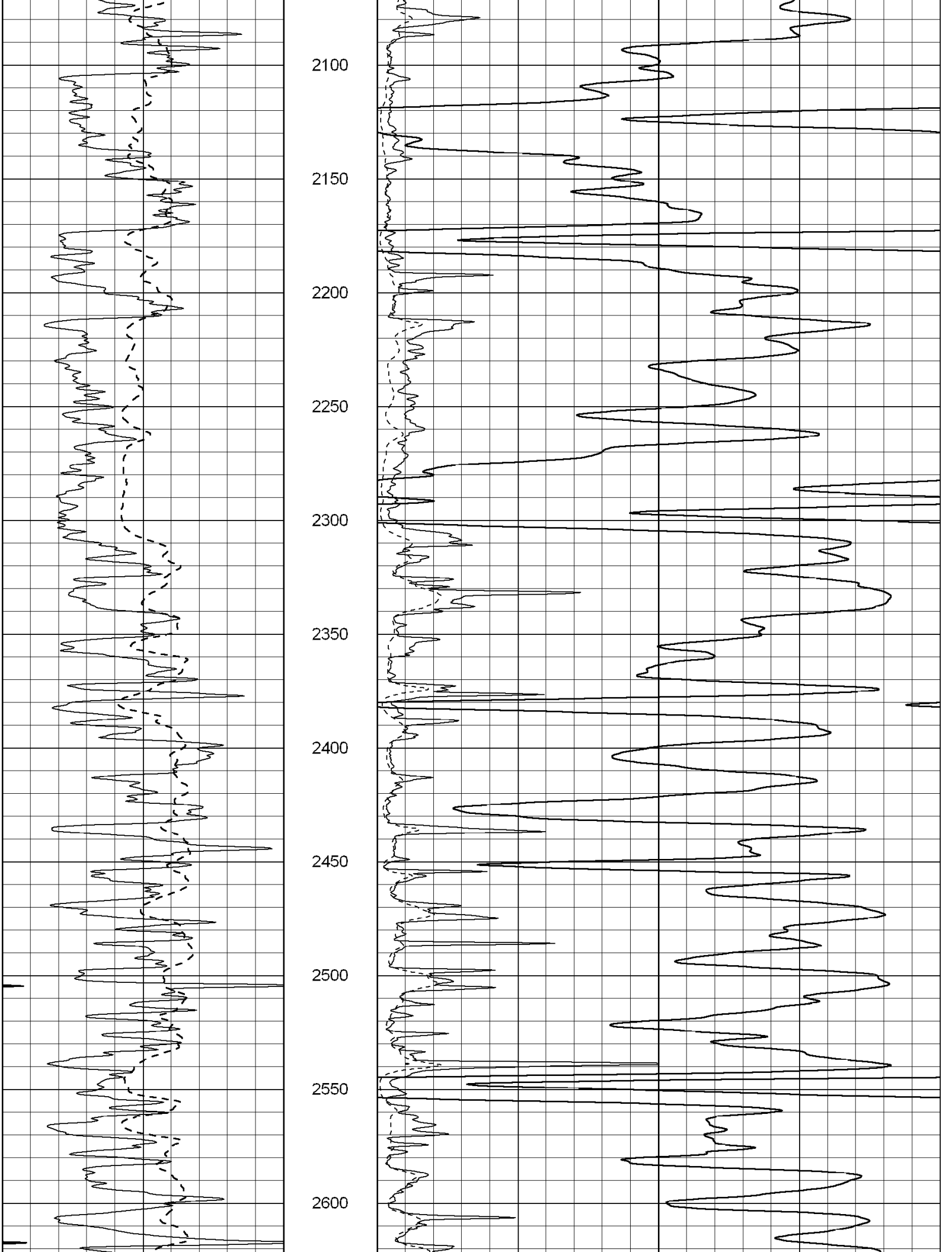
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
1000	CILD (mmho-m)	0
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

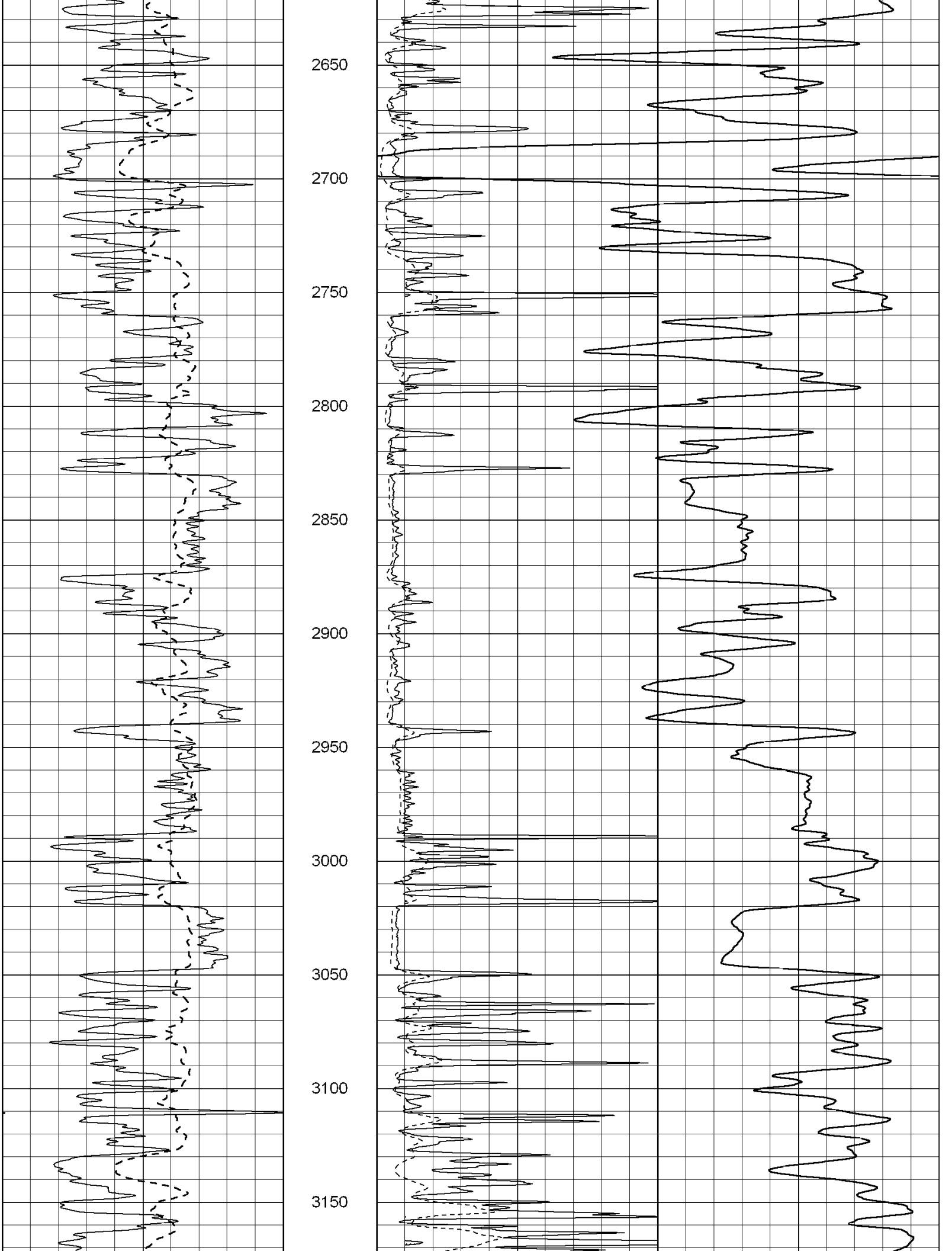


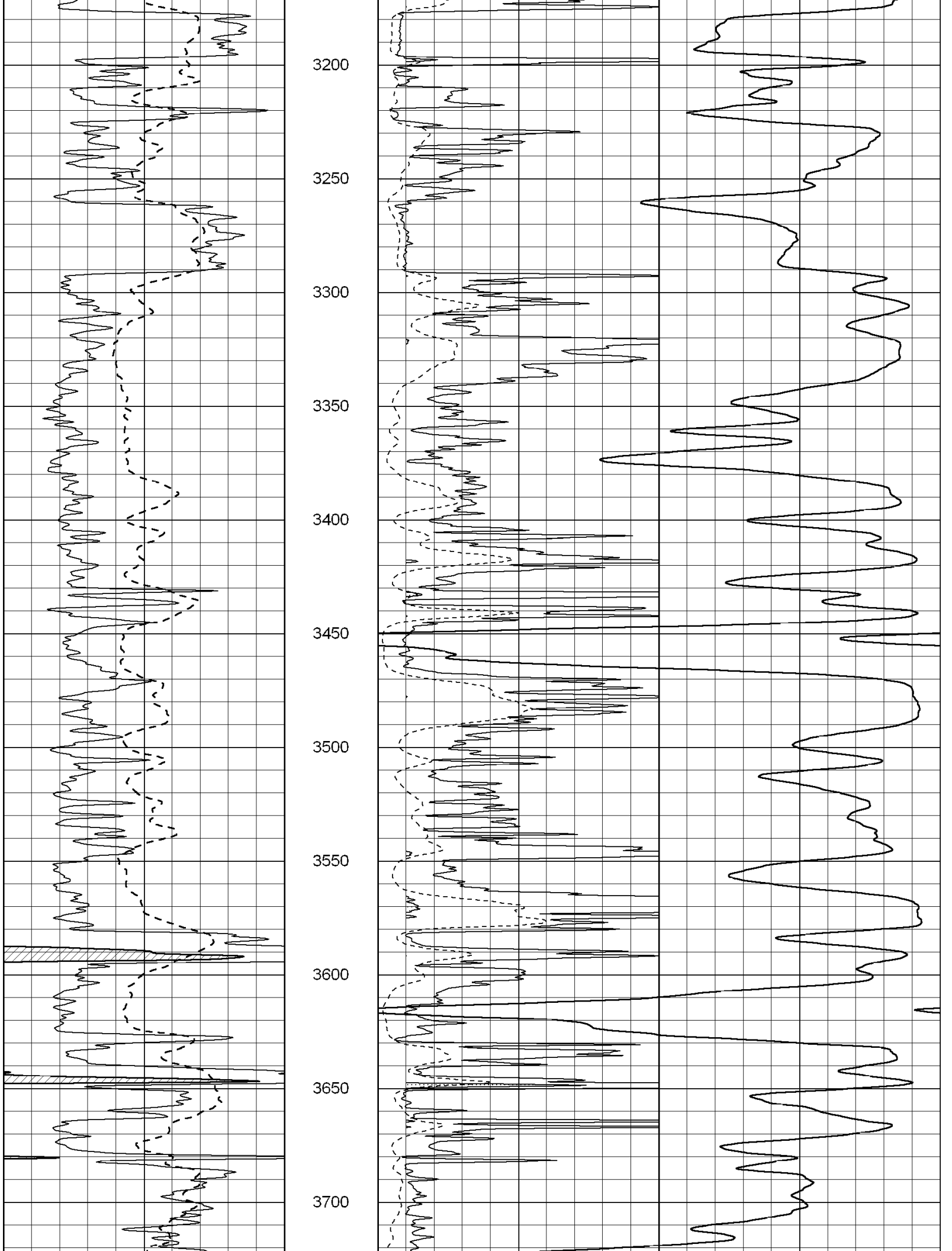

450
500
550
600
650
700
750
800
850
900
950

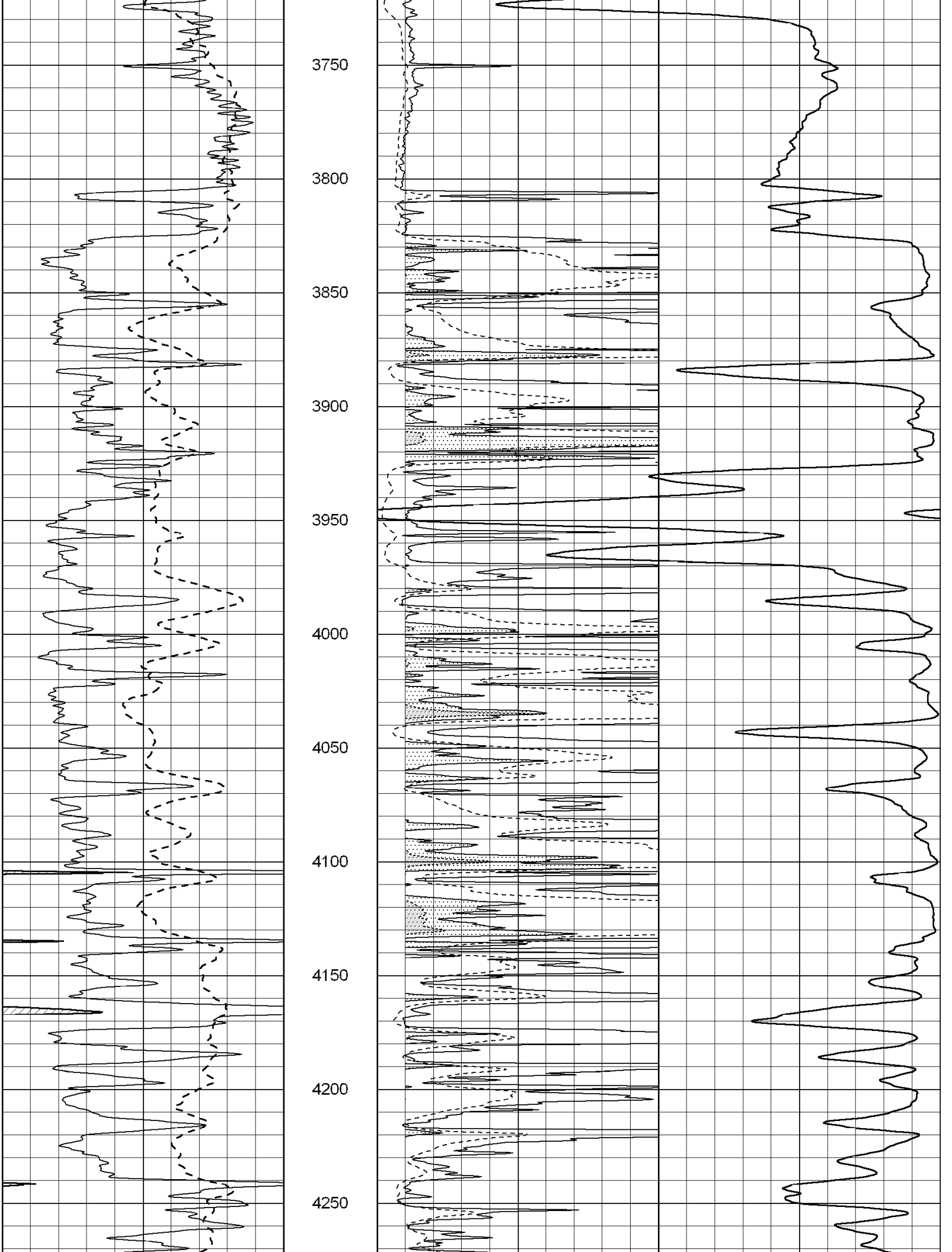

1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500

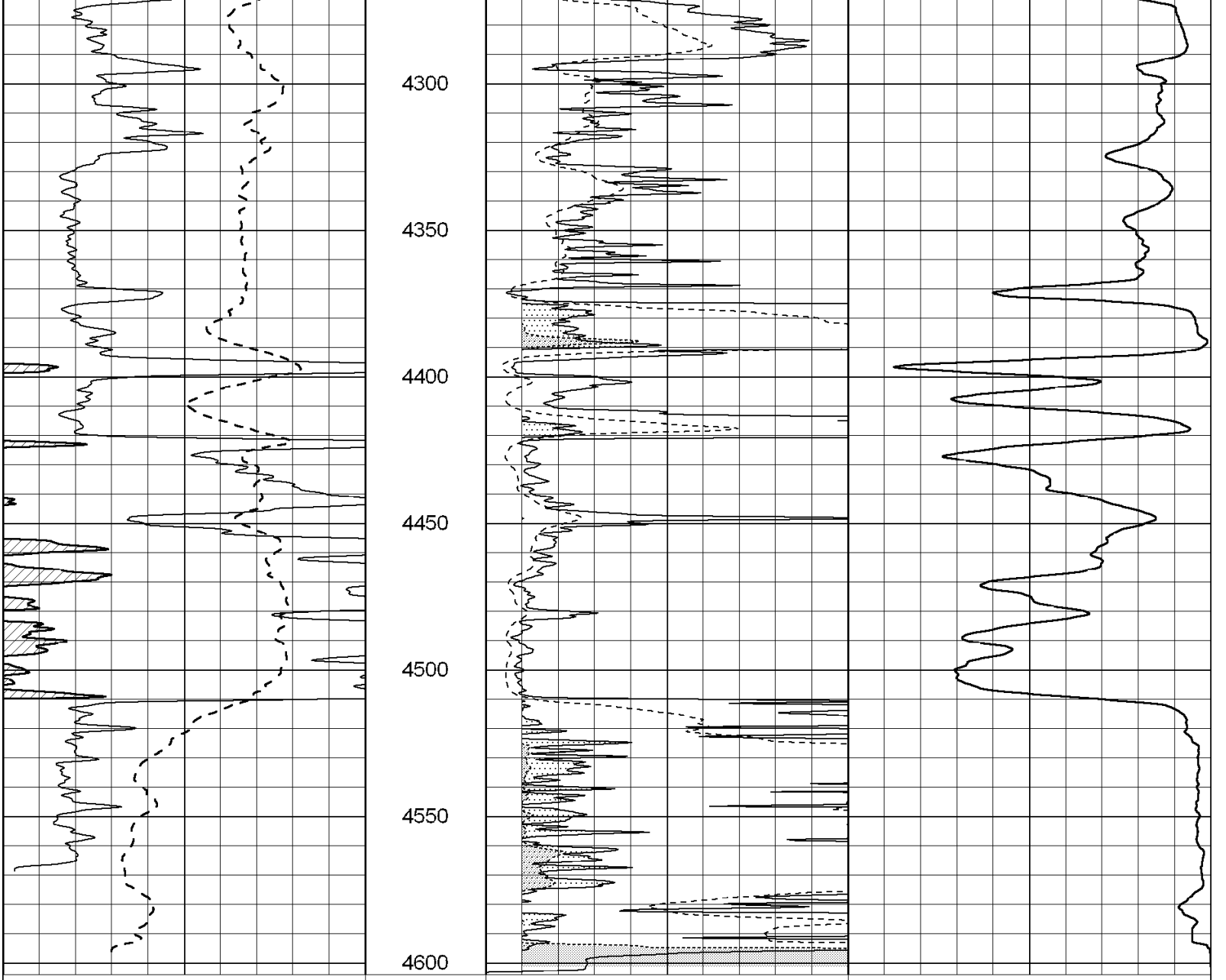

1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050


2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600


2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150


3200
3250
3300
3350
3400
3450
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3750
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4000
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4100
4150
4200
4250



SUPERIOR WELL SERVICES

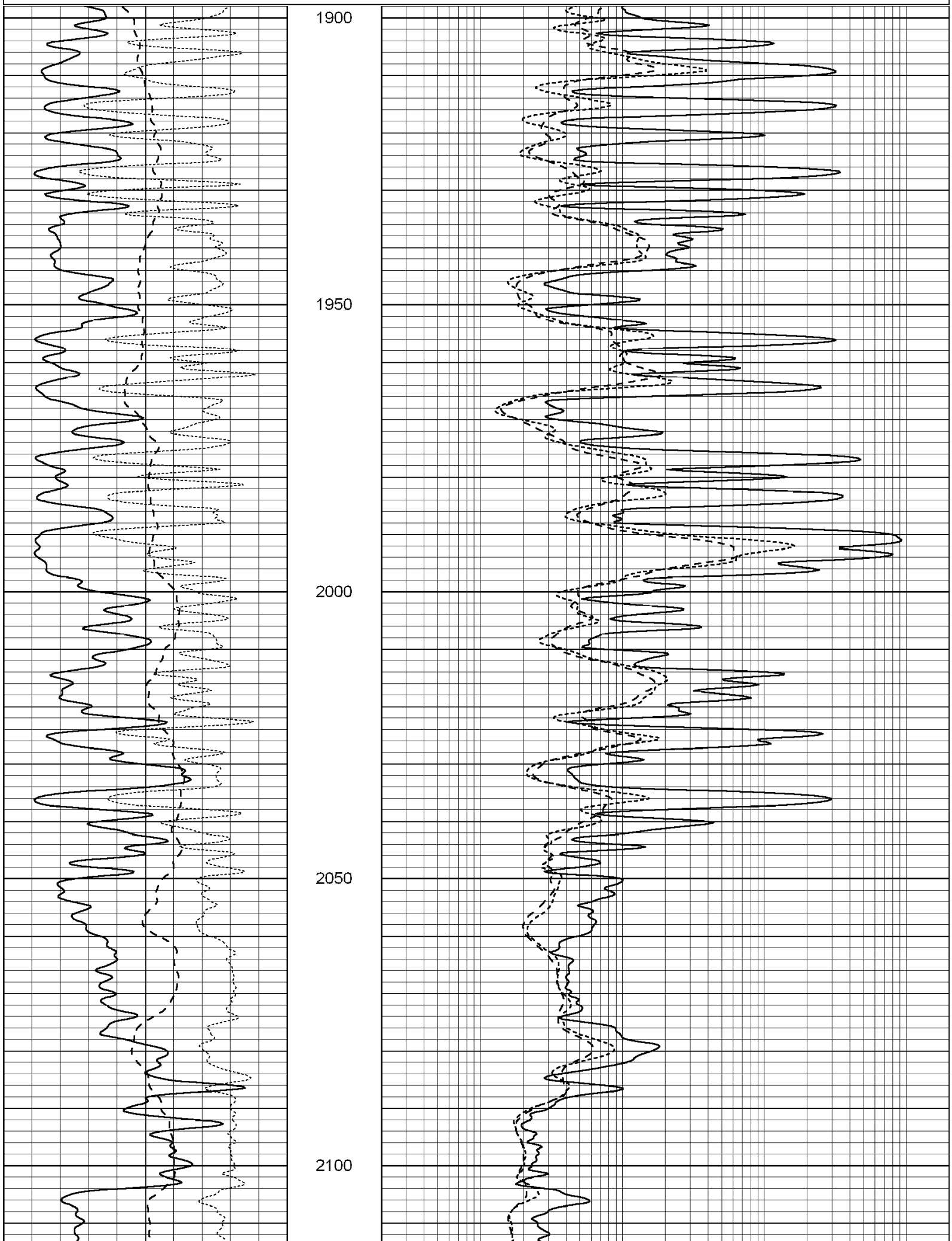
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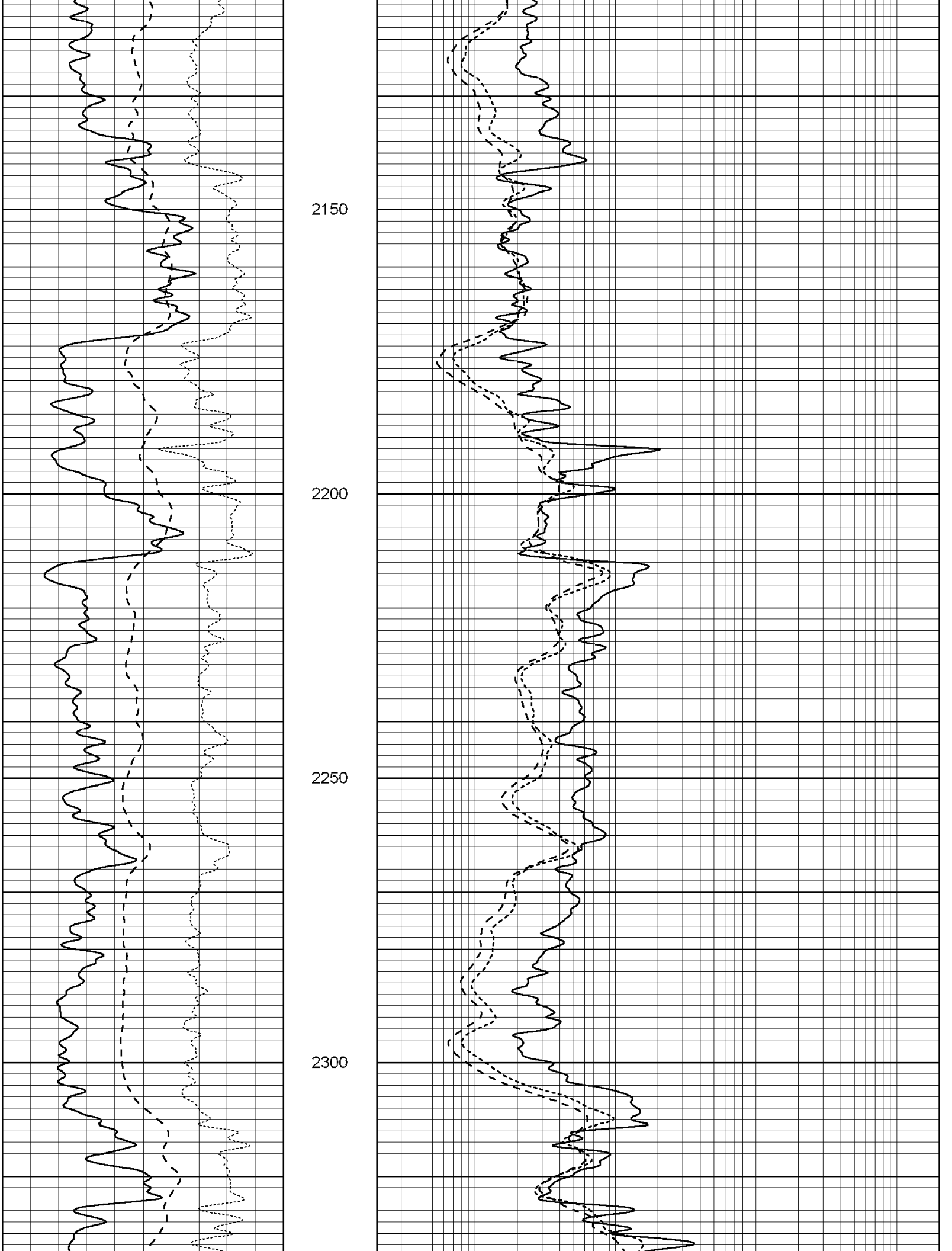
MAIN SECTION

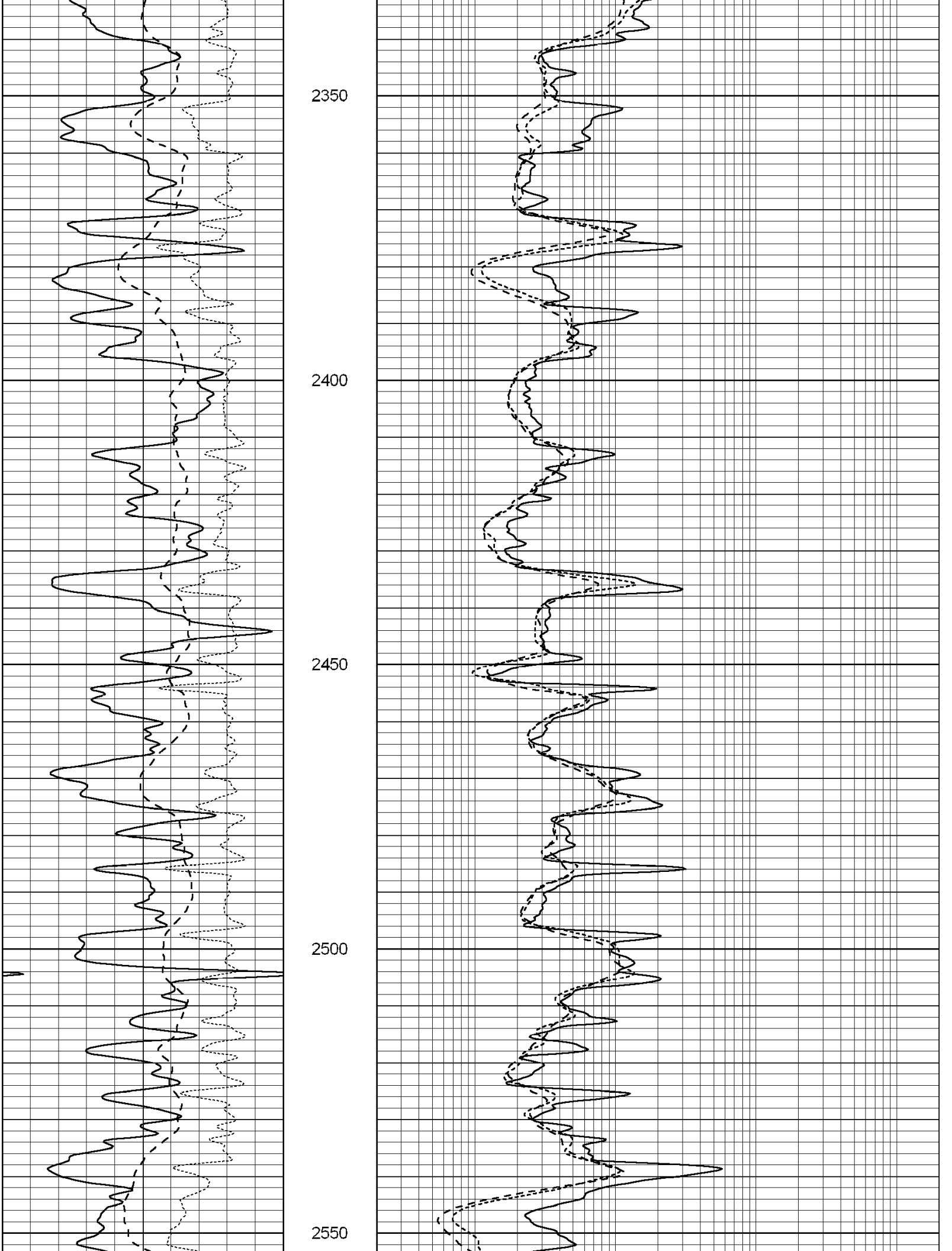
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Presentation Format:	dil
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Charted by:	Depth in Feet scaled 1:240

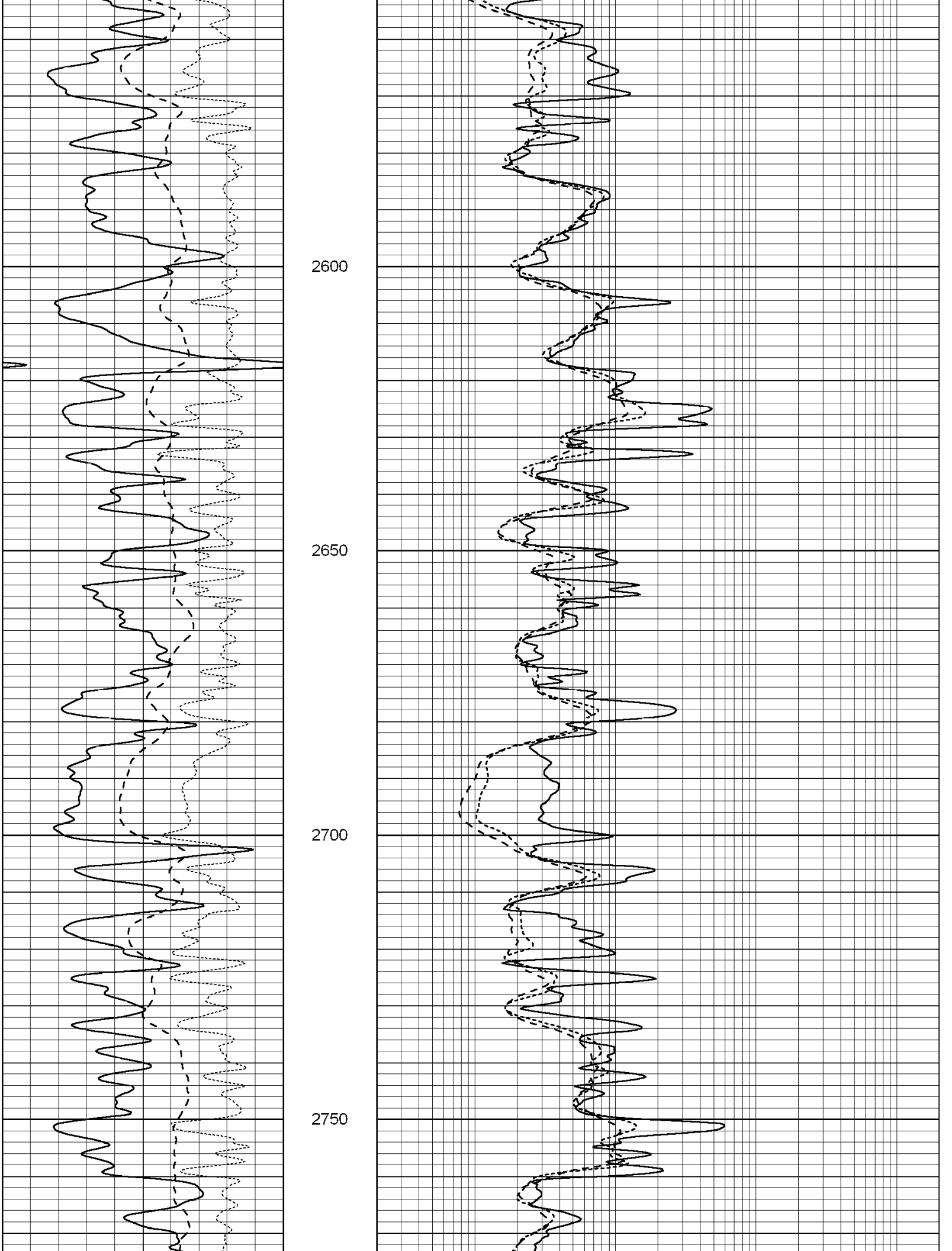
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

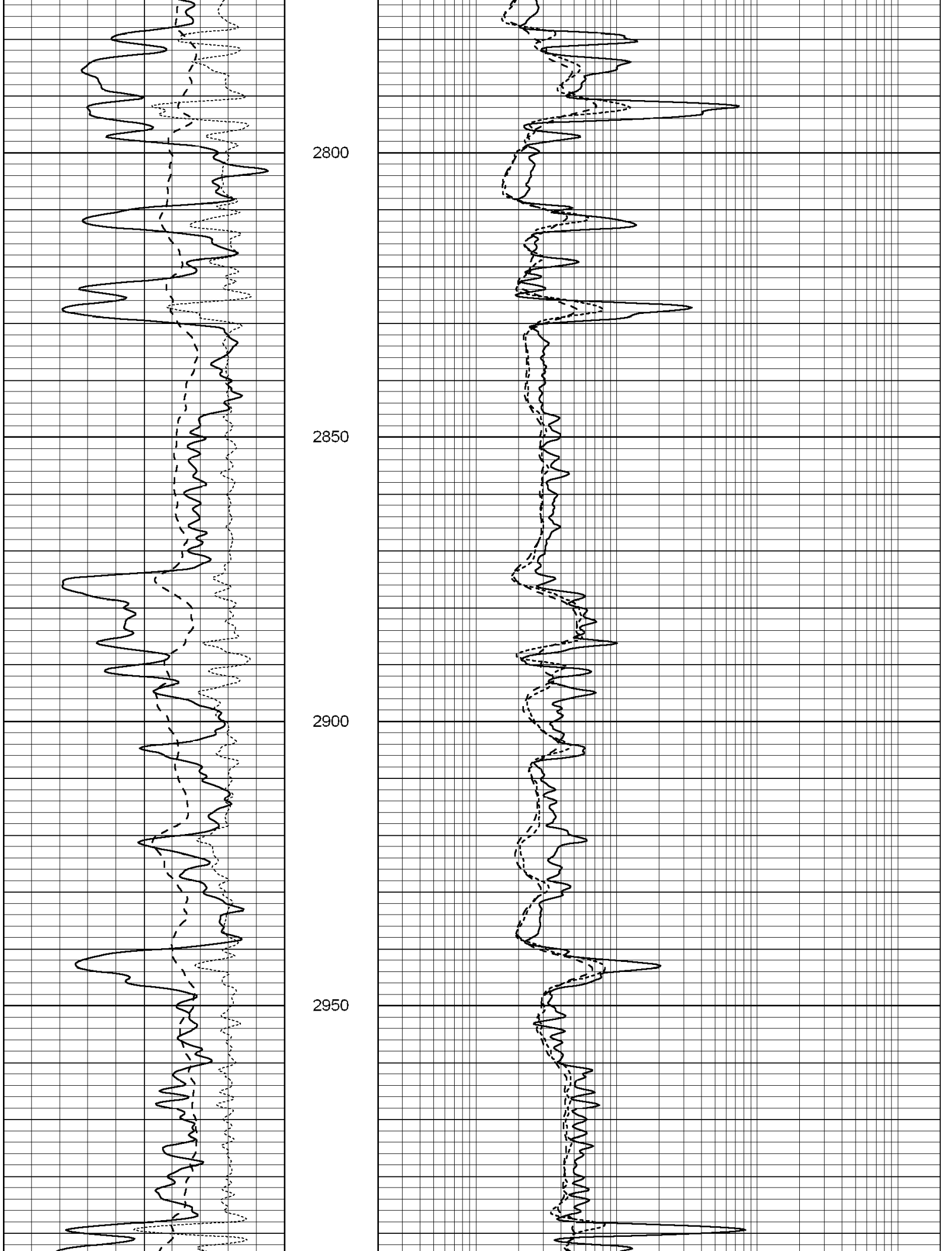
0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

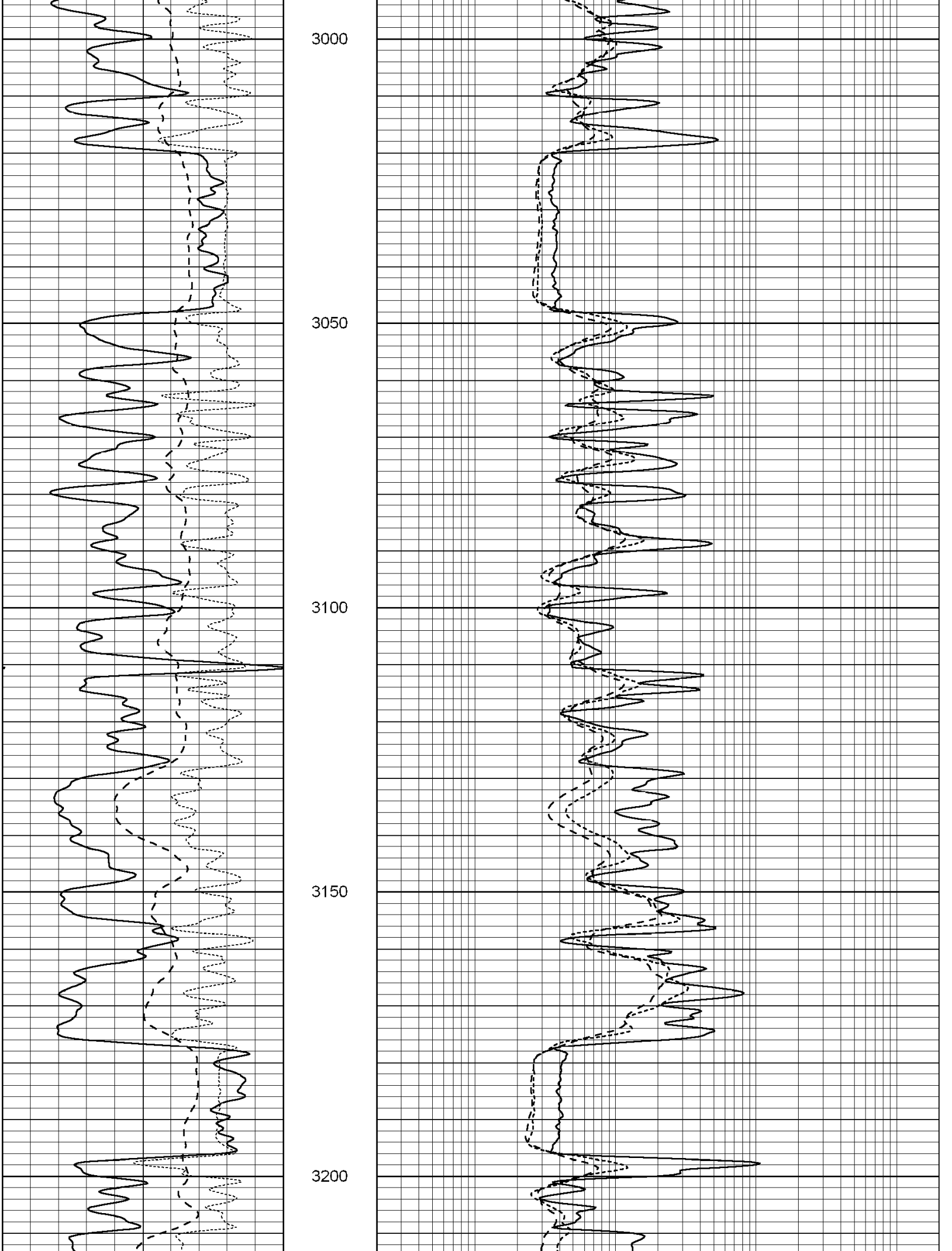

1900
1950
2000
2050
2100

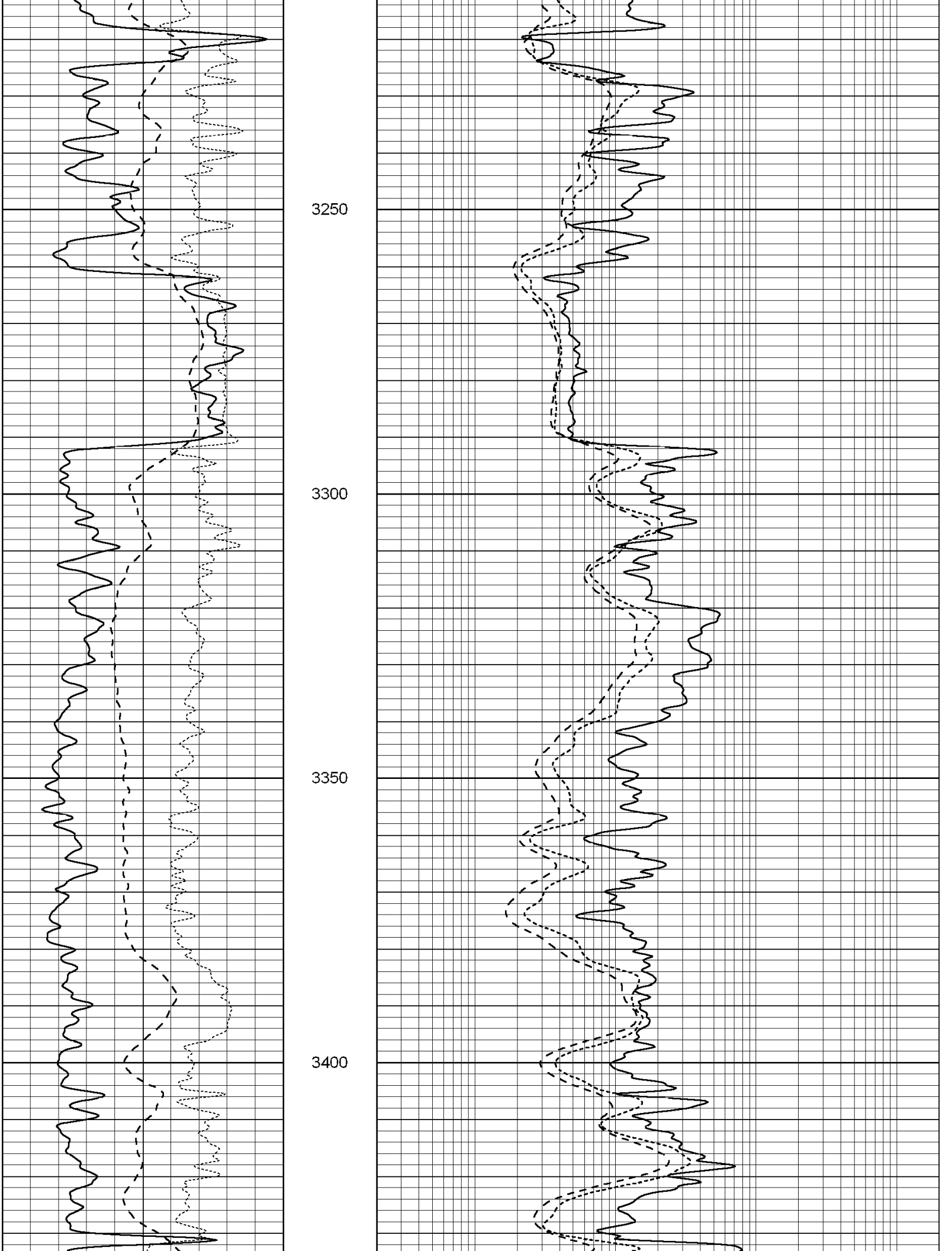

2150
2200
2250
2300

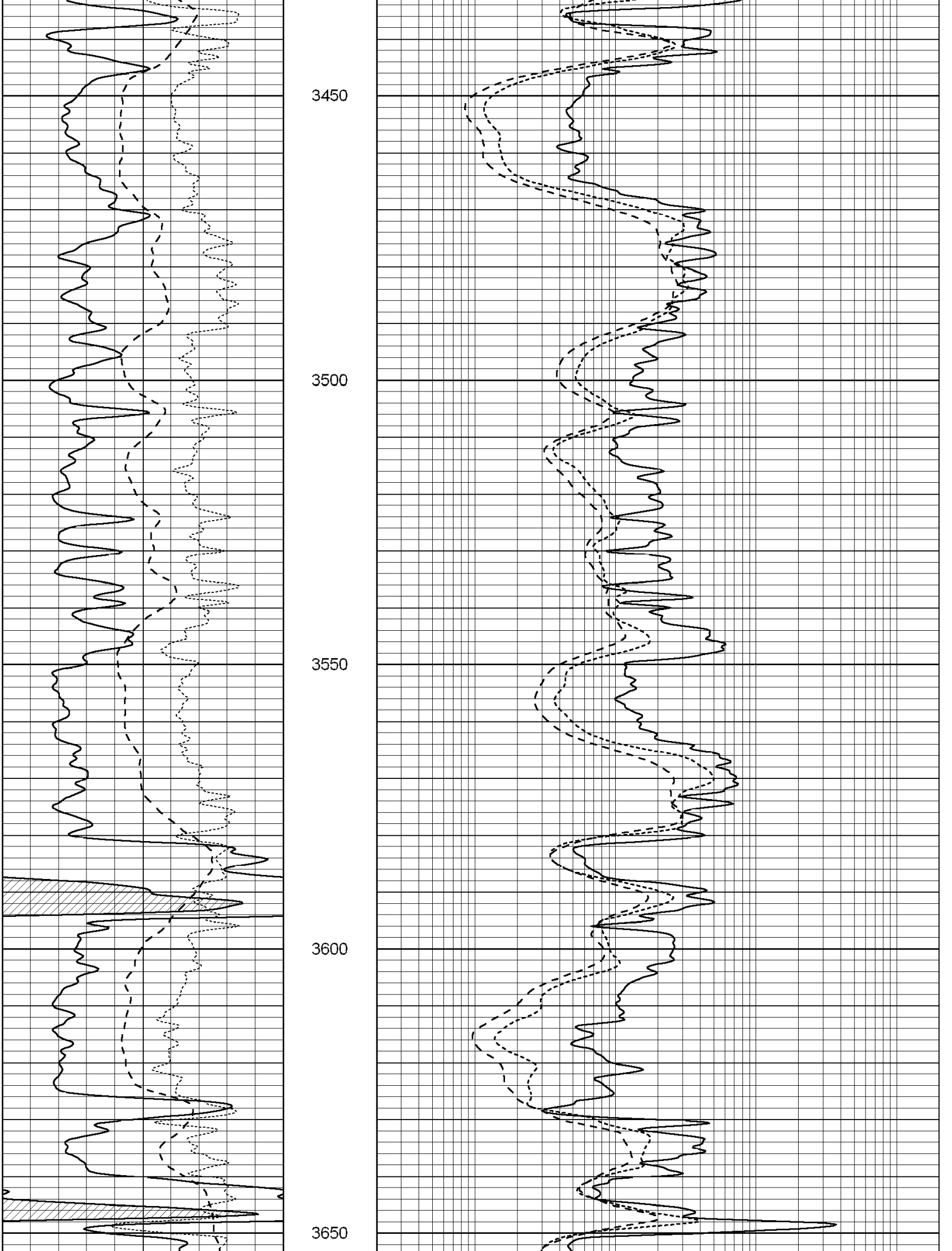

2350
2400
2450
2500
2550

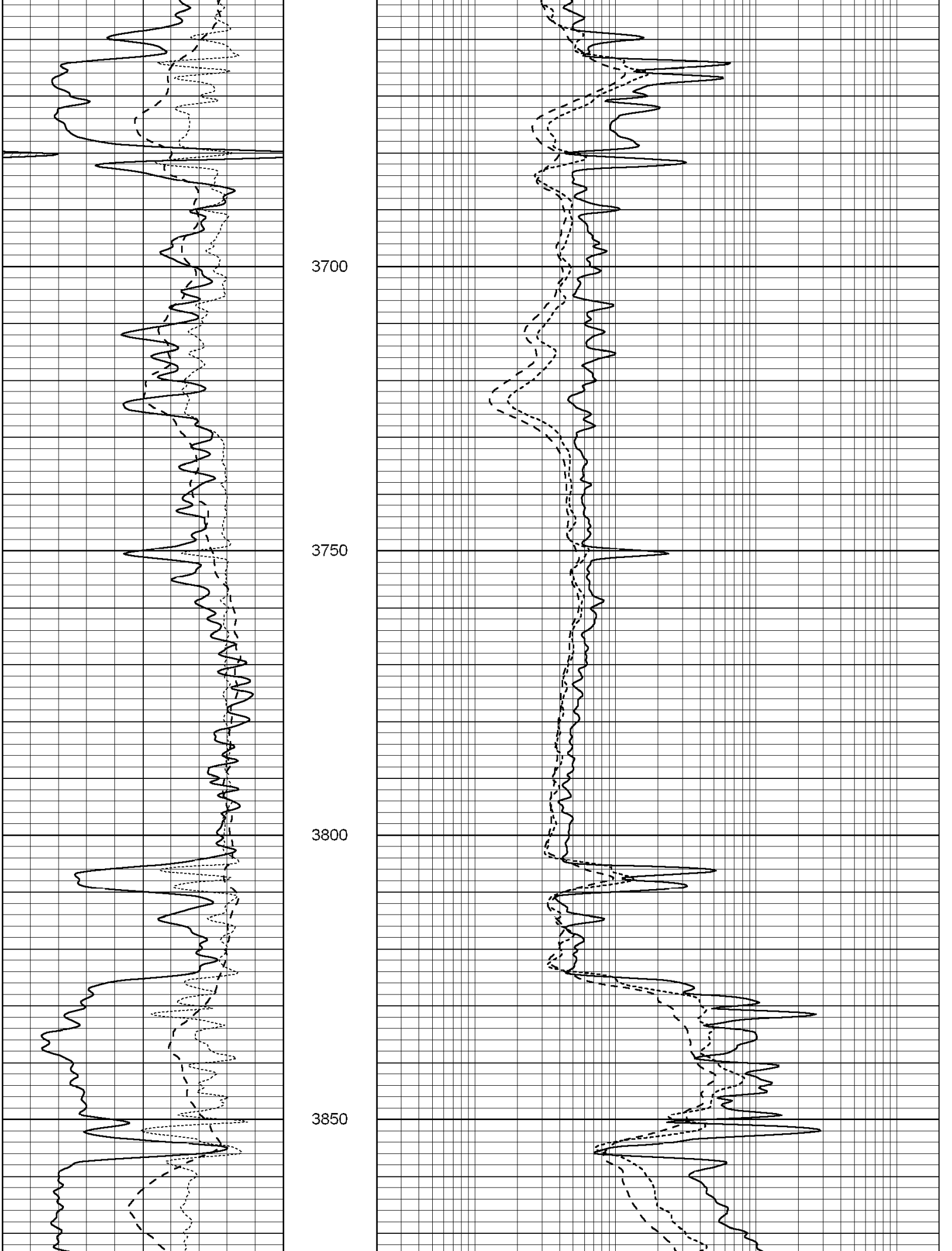

2600
2650
2700
2750

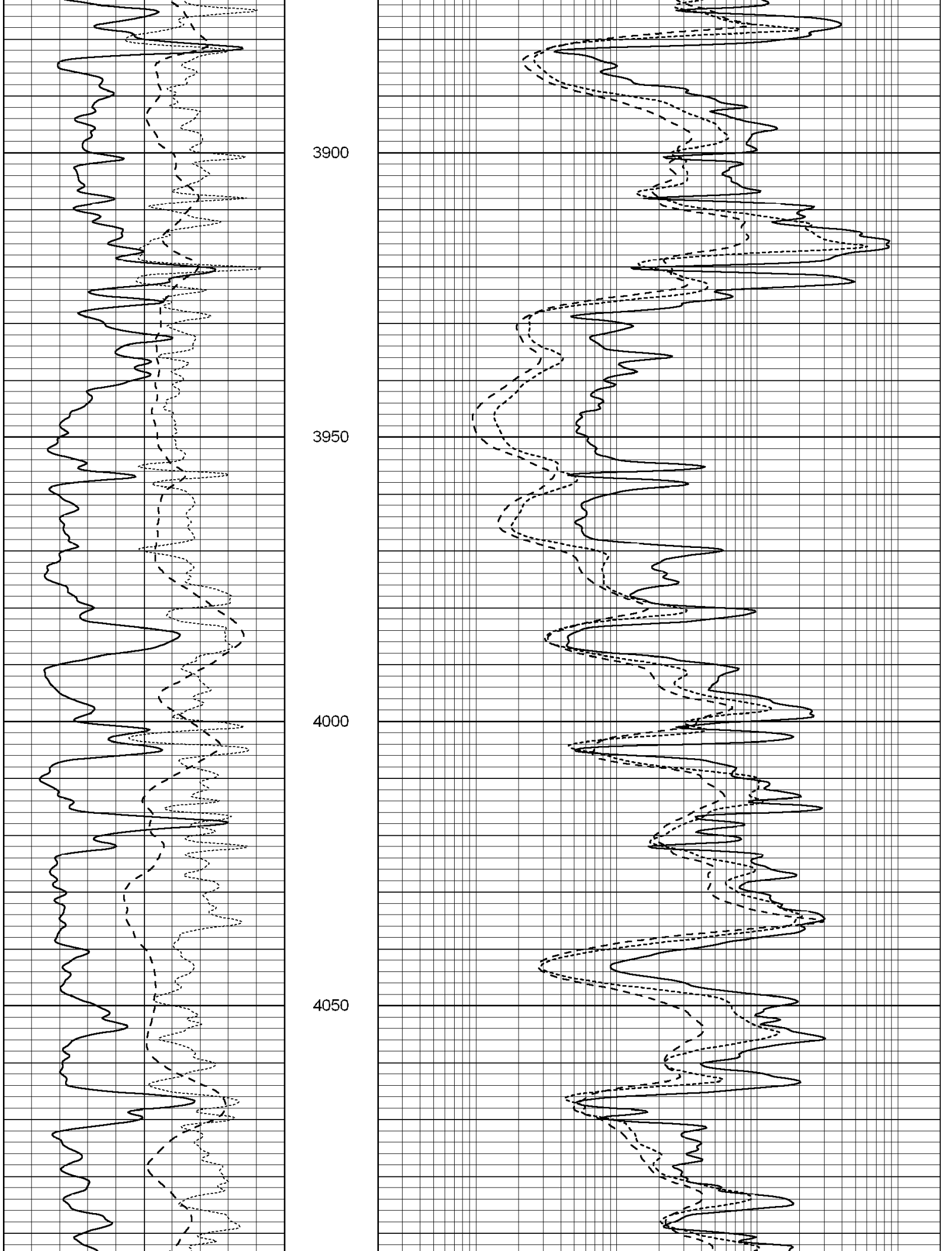

2800
2850
2900
2950

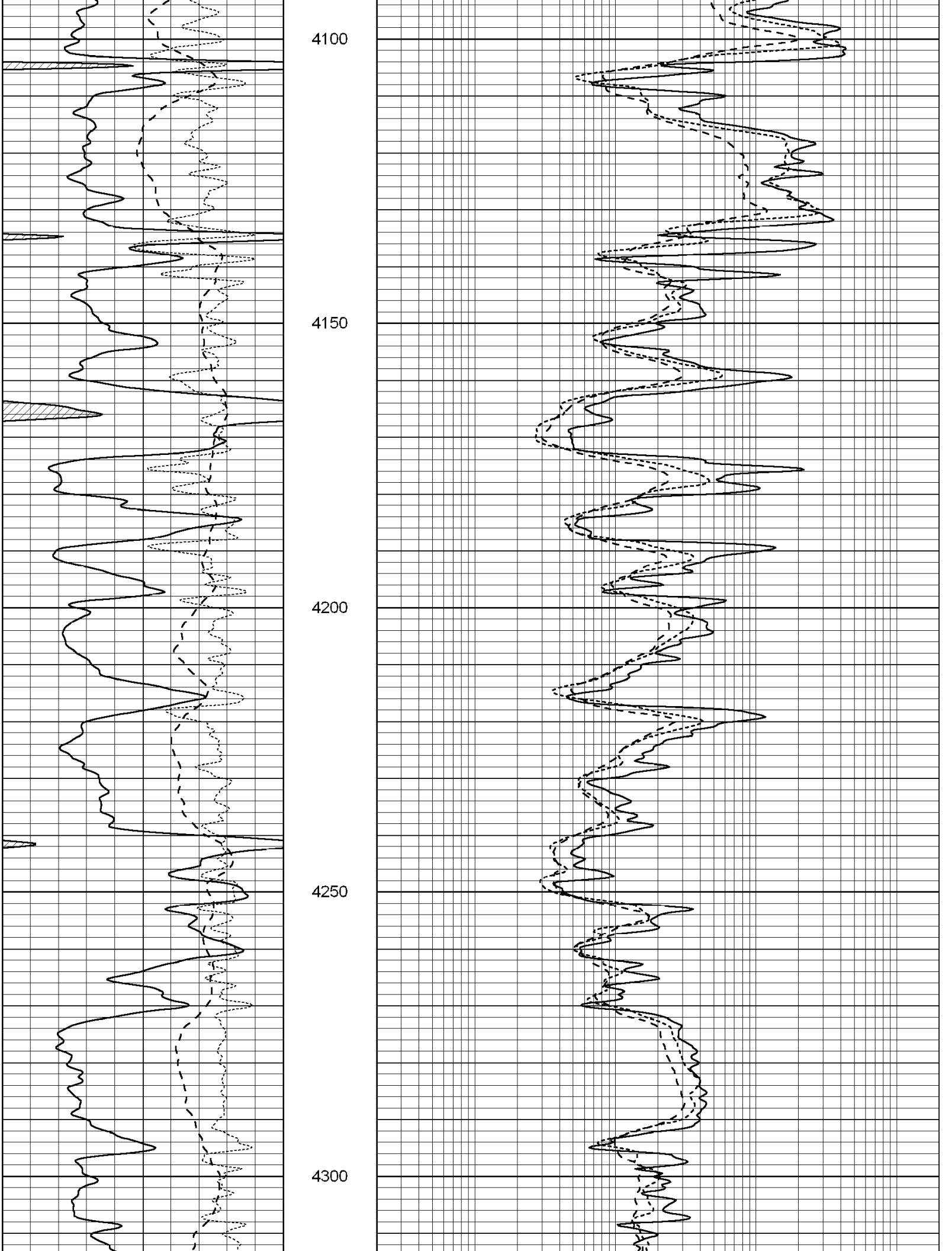

3000
3050
3100
3150
3200

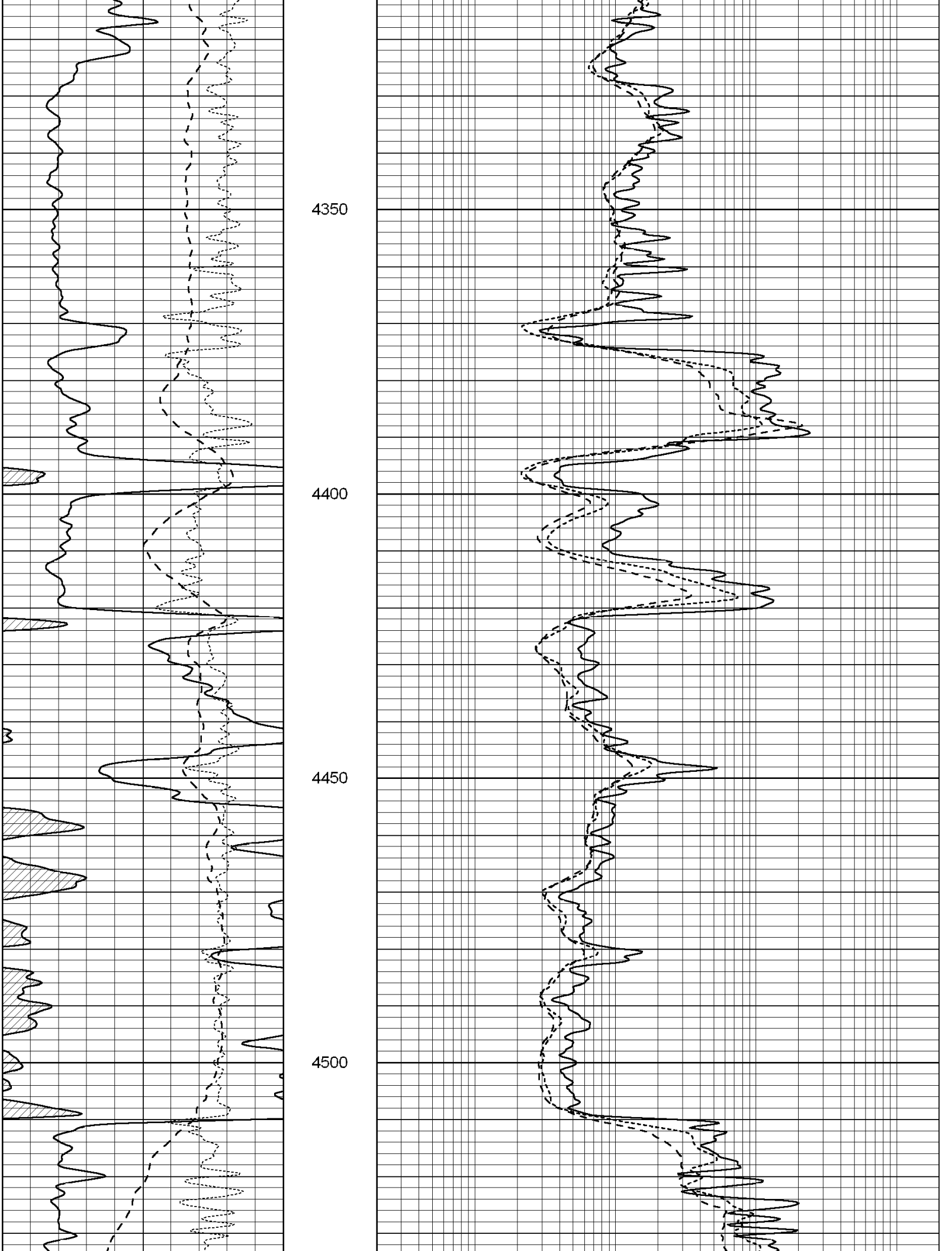

3250
3300
3350
3400

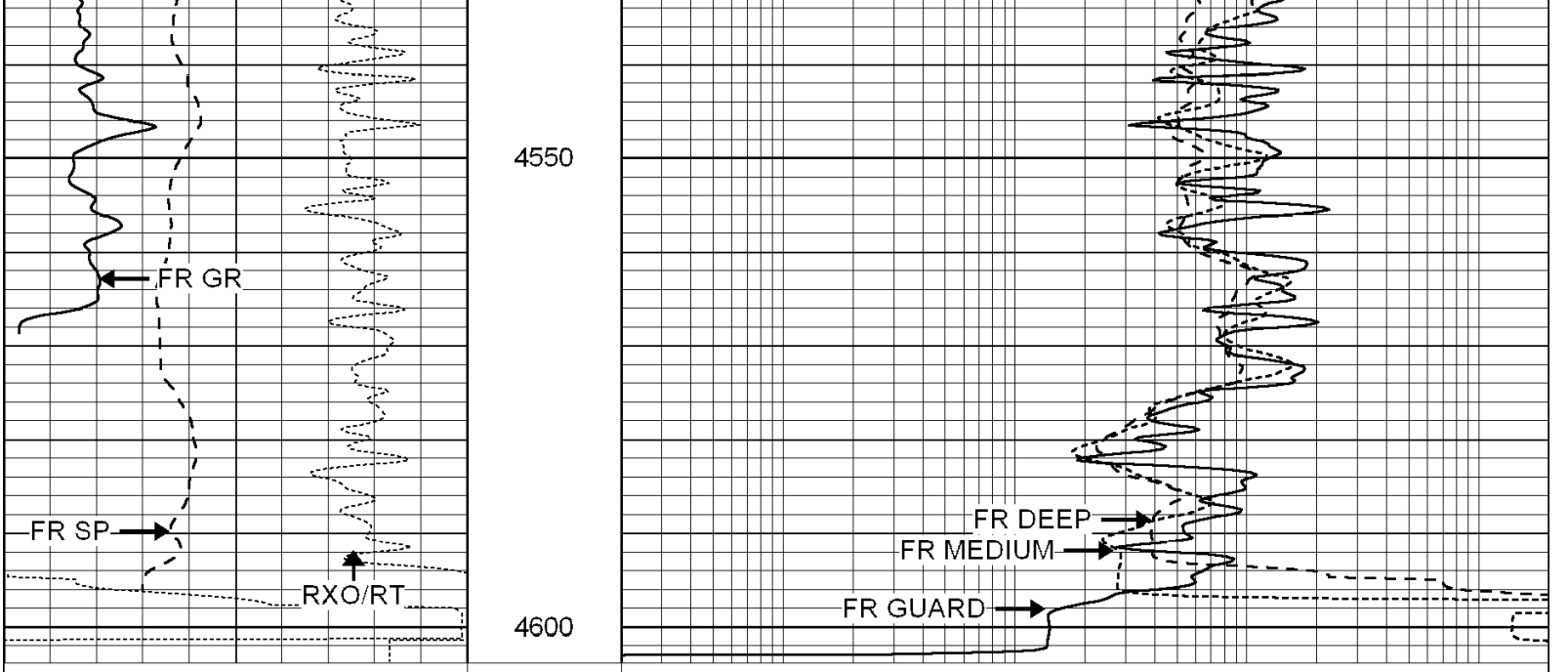

3450
3500
3550
3600
3650


3700
3750
3800
3850


3900
3950
4000
4050


4100
4150
4200
4250
4300


4350
4400
4450
4500



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

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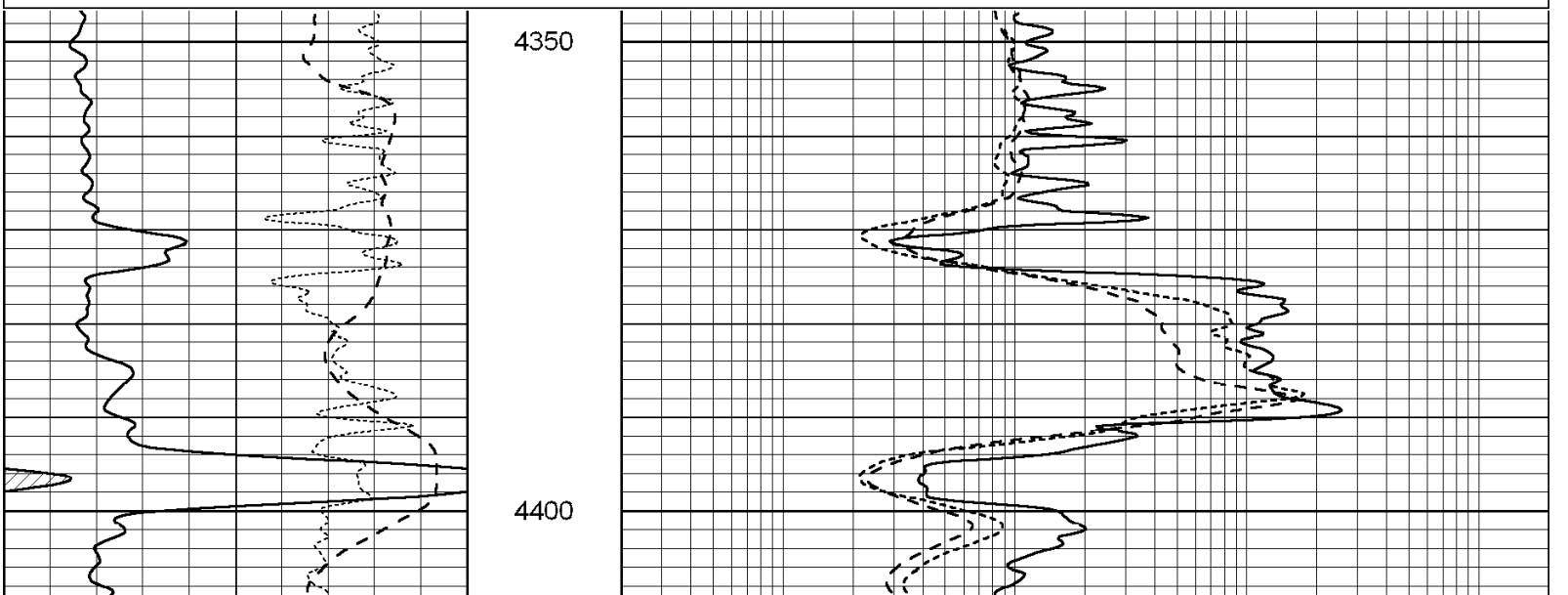
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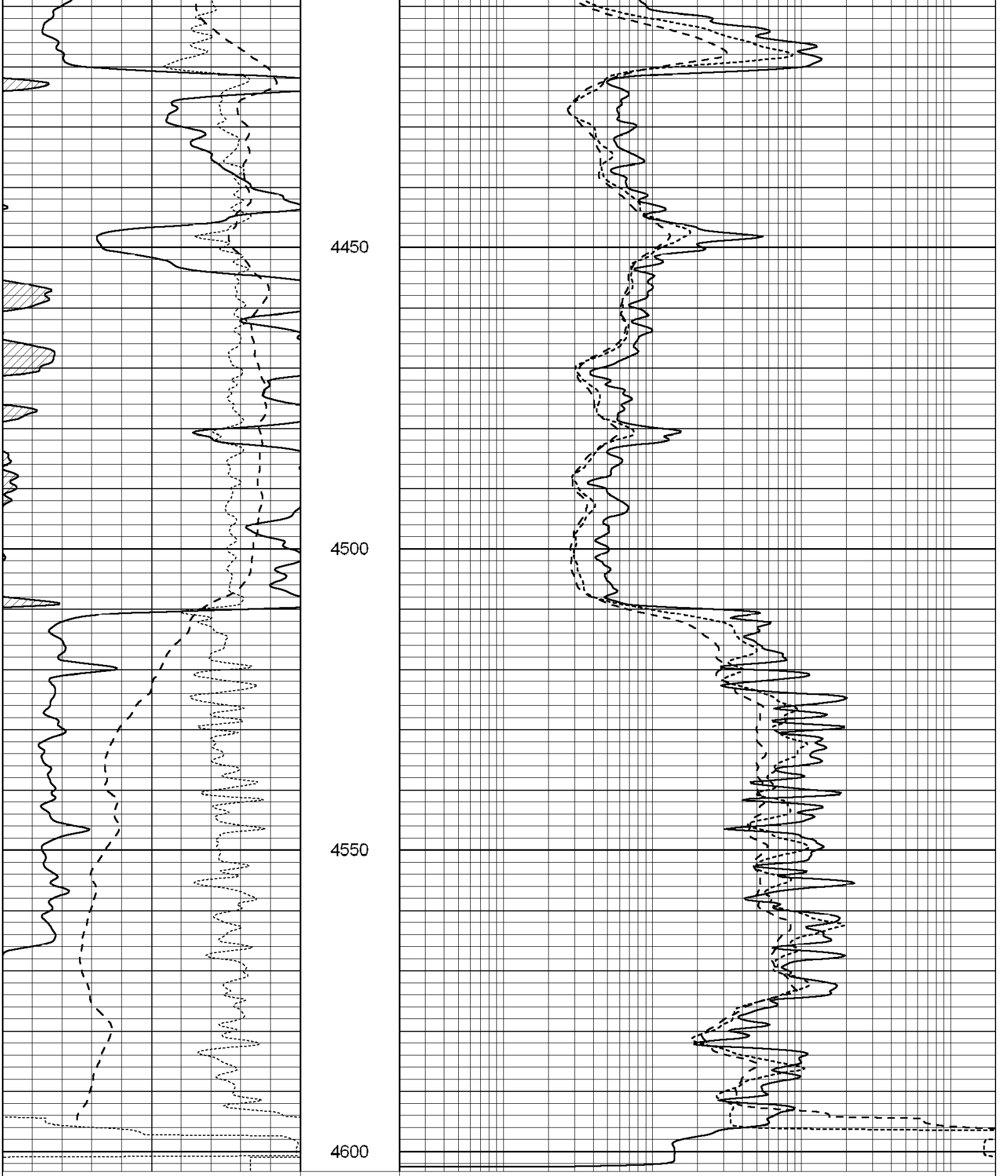
REPEAT SECTION

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Dataset Pathname:	pass2.7
Presentation Format:	dil
Dataset Creation:	Thu Dec 18 09:03:18 2008 by Calc Open-Cased 060407
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000




4450
4500
4550
4600
0
GAMMA RAY (GAPI)
150
-100
SP (mV)
100
-250
Rxo/Rt
50
0.2
RLL3 (Ohm-m)
2000
0.2
DEEP INDUCTION (Ohm-m)
2000
0.2
MEDIUM INDUCTION (Ohm-m)
2000

Calibration Report

Database File: 003083pe.db
Dataset Pathname: pass3.9
Dataset Creation: Thu Dec 18 10:21:02 2008 by Calc Open-Cased 060407

Dual Induction Calibration Report

Serial-Model: DIL2-GEAR
Performed: Thu Dec 18 08:29:34 2008

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.002	0.667	V	0.000	400.000	mmho-m	650.000	3.000
Medium	-0.003	0.739	V	0.000	462.500	mmho-m	720.000	-16.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.658	V	0.000	400.000	mmho-m	609.010	-0.700
Medium	0.015	0.761	V	0.000	462.500	mmho-m	620.392	-9.326

Litho Density Calibration Report

Serial: 003 Model: PRB
Performed Sun May 27 14:00:47 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2129.3	13425.5	4493.9	14622.8	cps
Window 2	1911.5	10435.8	3706.5	11076.3	cps
Window 3	1670.1	6774.1	2736.9	7064.4	cps
Window 4	493.6	496.3	490.8	497.3	cps
Long Space	0.0	8524.3	1795.1	9164.8	cps
Short Space	2.1	3478.4	2258.5	3656.0	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 44.5	Rib Slope	: 0.983	Density/Spine Ratio	: 0.544
Spine Angle	: 74.5	Spine Slope	: 3.607	Spine Intercept	: -20.4

Caliper

	Readings	Reference
Low Ref	2.2	6.2
High Ref	4.5	15.5

Gain: 3.9 Offset: -2.3

Compensated Neutron Calibration Report

Serial Number: NEU_4I
Tool Model: G

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	996.00	cps	1000.00	cps	1.0000
Long Space	977.00	cps	1000.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR3
Tool Model: OPEN
Performed: Thu Dec 18 08:29:41 2008

Calibrator Value: 200.0 GAPI

Background Reading:	3.0	cps
Calibrator Reading:	186.0	cps
Sensitivity:	0.5500	GAPI/cps