NABORS COMPLETION & PRODUCTION SERVICES CO.

DUAL INDUCTION LOG

Company	LOTUS OPERATING COMPANY, LLC.
Well	#2 "A" ACHENBACH "OWWO"
Field	STRANATHAN
County	BARBER
State	KANSAS

Company LOTUS OPERATING COMPANY, LLC.

Well #2 "A" ACHENBACH "OWWO"

Field STRANATHAN

County BARBER State KANSAS

Location: API # : 15-007-00396-0001

1650' FNL & 1650' FEL

NE - SW - NE

SEC 2 TWP 35S RGE 13W

Other Services: CDL/CNL/PE, MEL/SON/FF

Permanent Datum	GROUND LEVEL	Elevation 1491	Elevation: K.B. 1504
Log Measured From	KELLY BUSHING 13' A.G.L.		D.F. 1502
Drilling Measured From	KELLY BUSHING		G.L. 1491

Date	11/24/14		
Run Number	ONE		
Depth Driller	5650		
Depth Logger	5650		
Bottom Logged Interval	5648		
Top Log Interval	00		
Casing Driller	8 5/8"@260'		
Casing Logger	260		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,000 PPM	
Density / Viscosity	8.8/45		
pH / Fluid Loss	9.0/11.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.800@50F		
Rmf @ Meas. Temp	.600@50F		
Rmc @ Meas. Temp	.960@50F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.305@131F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	3:20 A.M.		
Maximum Recorded Temperature	131F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	TIM HELLMAN		

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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, KANSAS (785) 628-6395

DIRECTIONS

HARDTNER, KS., 2 1/2W. ON BLKTOP TO "GYP HILL RD.", 1 1/4N., W. INTO

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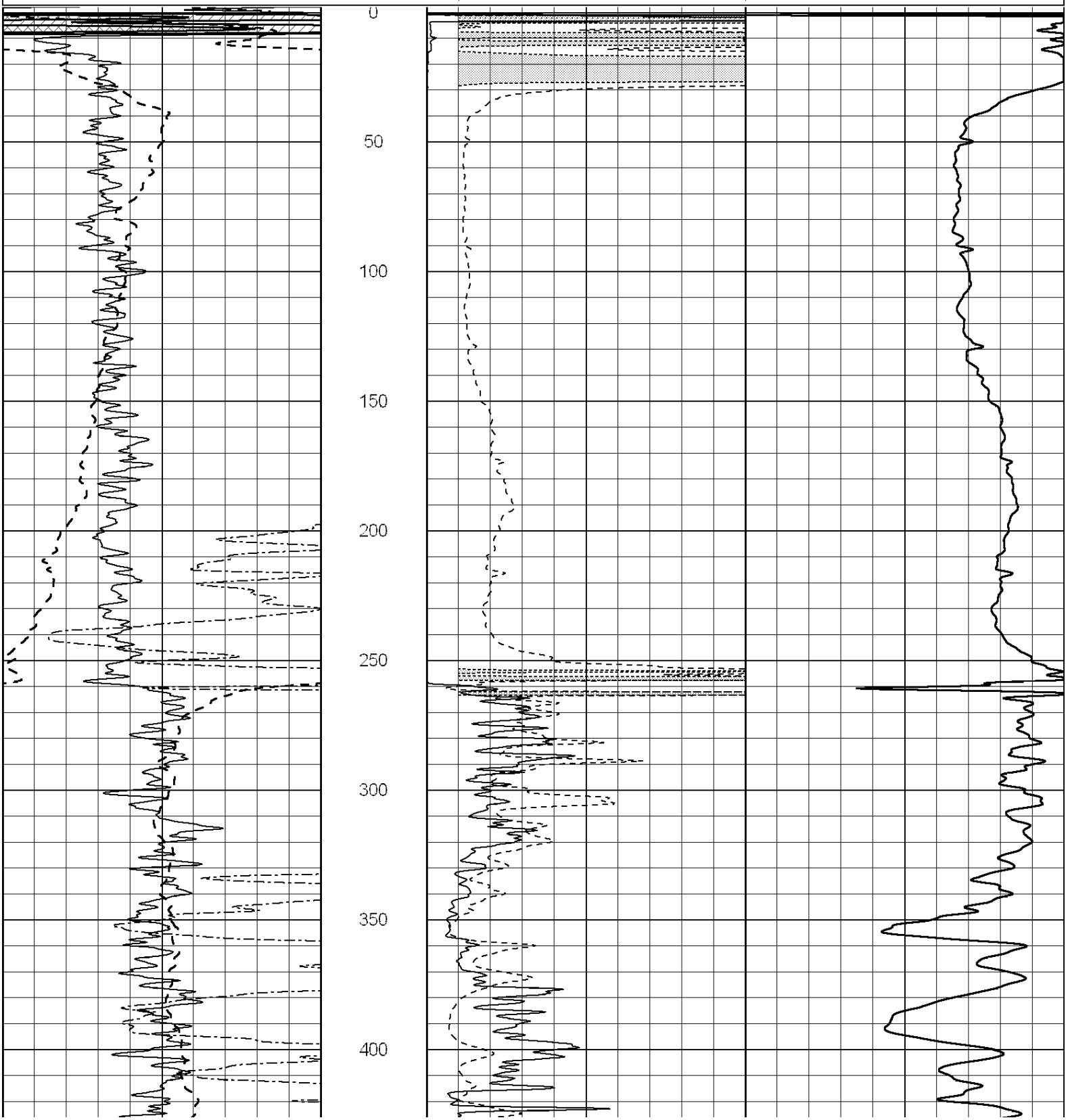
MAIN SECTION

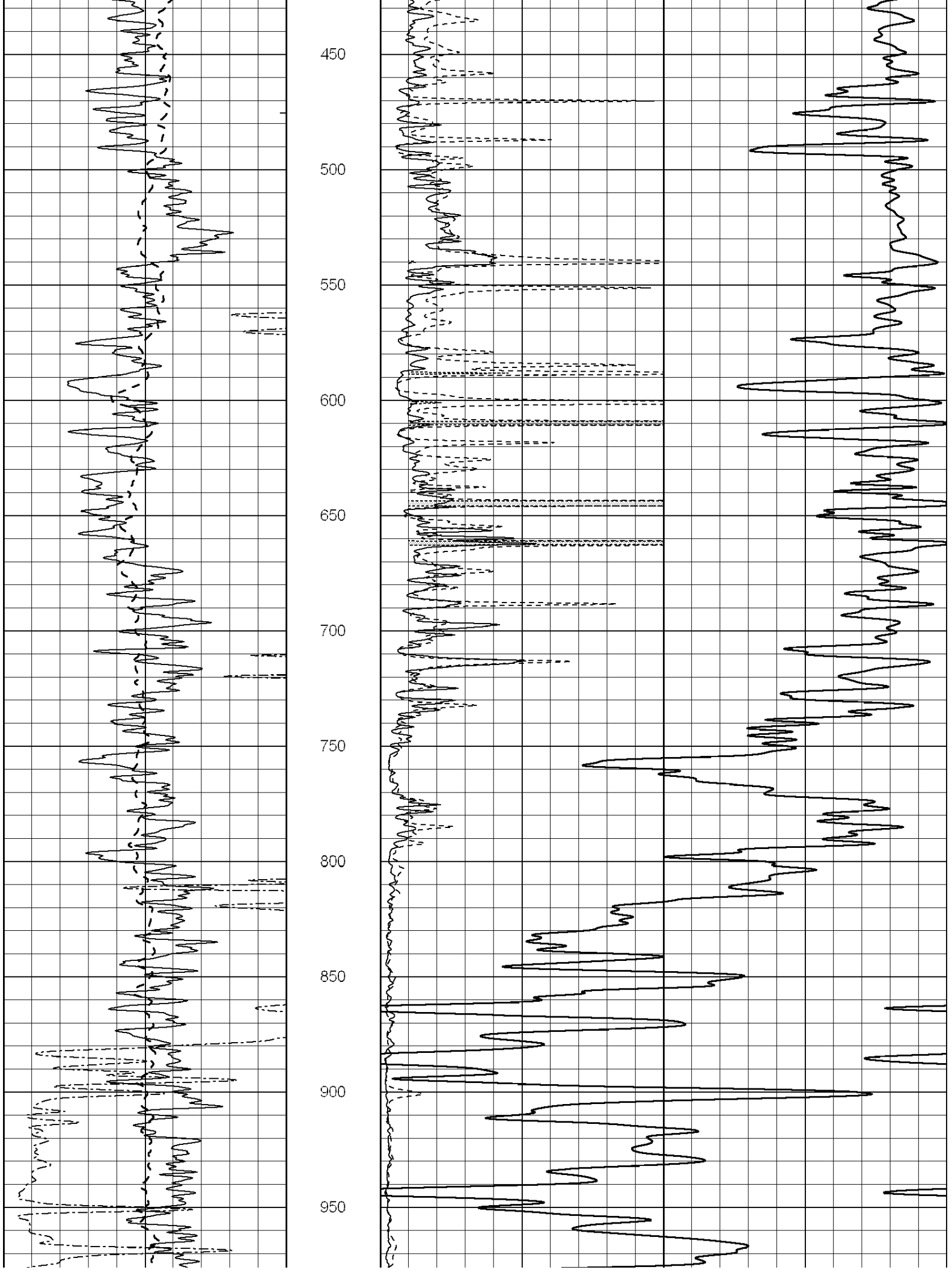
SERVICES CO.

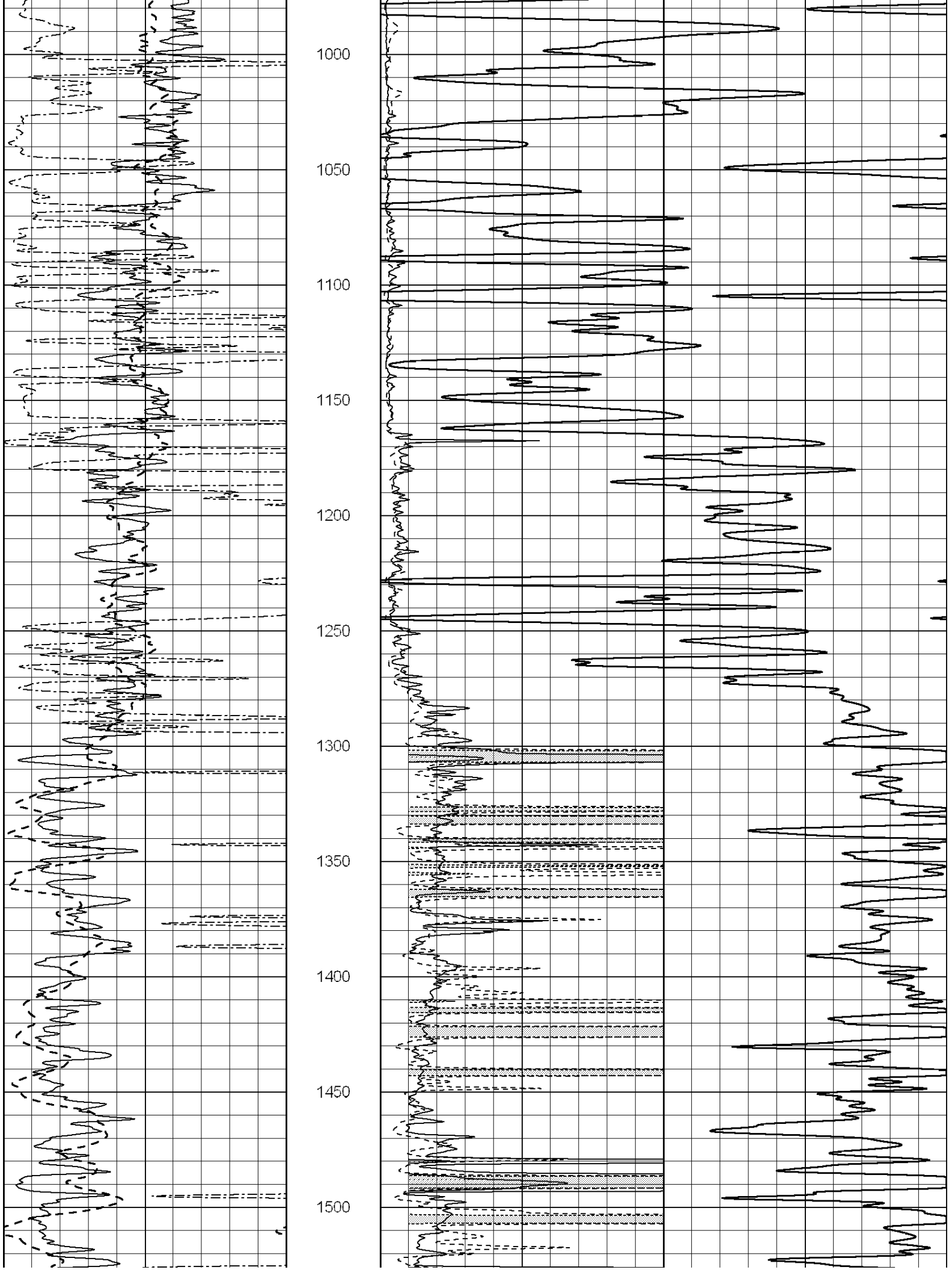
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Dataset Pathname: pass3.7
Presentation Format: dil2
Dataset Creation: Tue Nov 25 05:45:20 2014
Charted by: Depth in Feet scaled 1:600

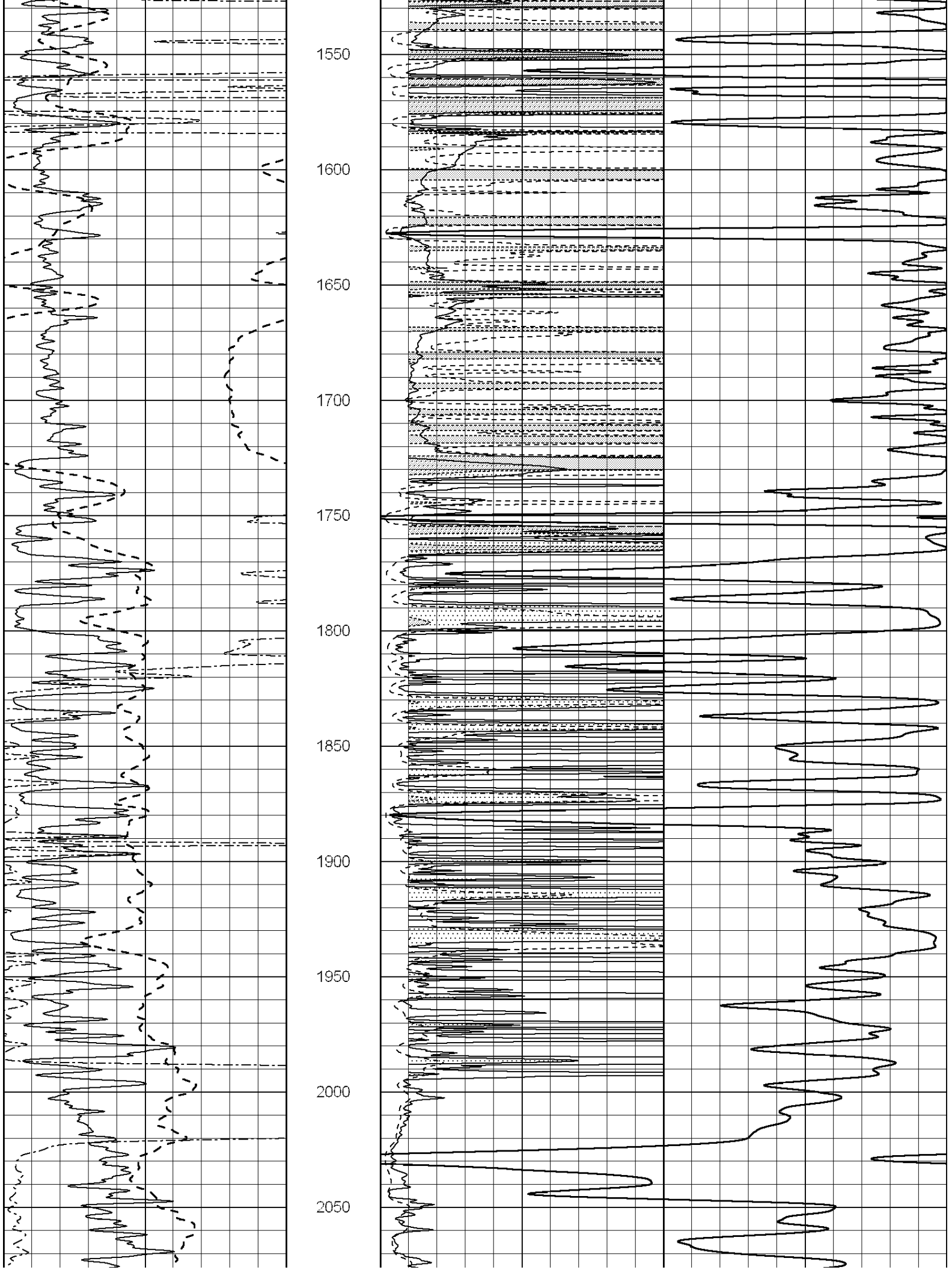
0	Gamma Ray (GAPI)	150
-100	SP (mV)	100
0	RWA (Ohm-m)	1

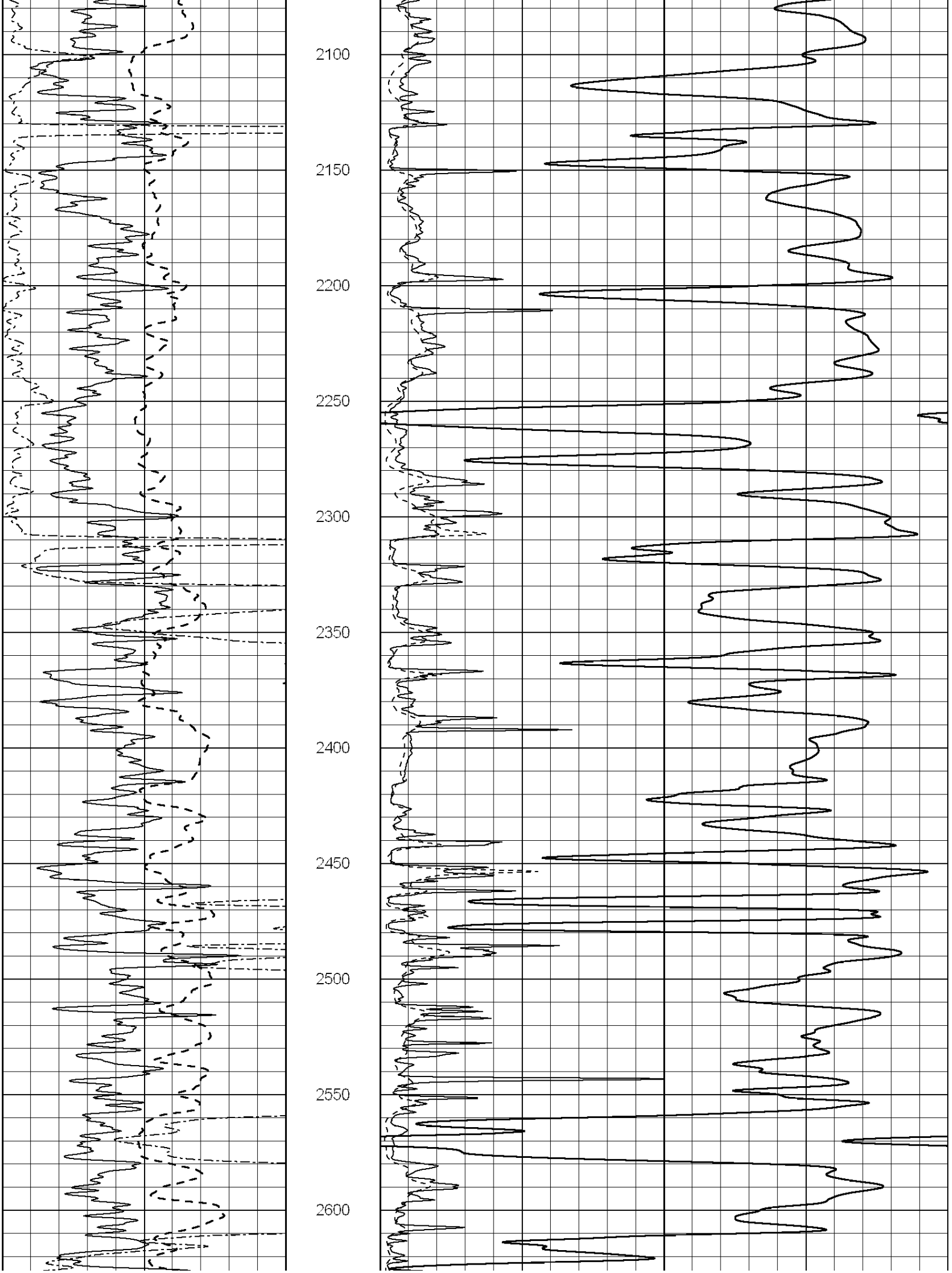
0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50
1000	CILD (mmho/m)	0
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

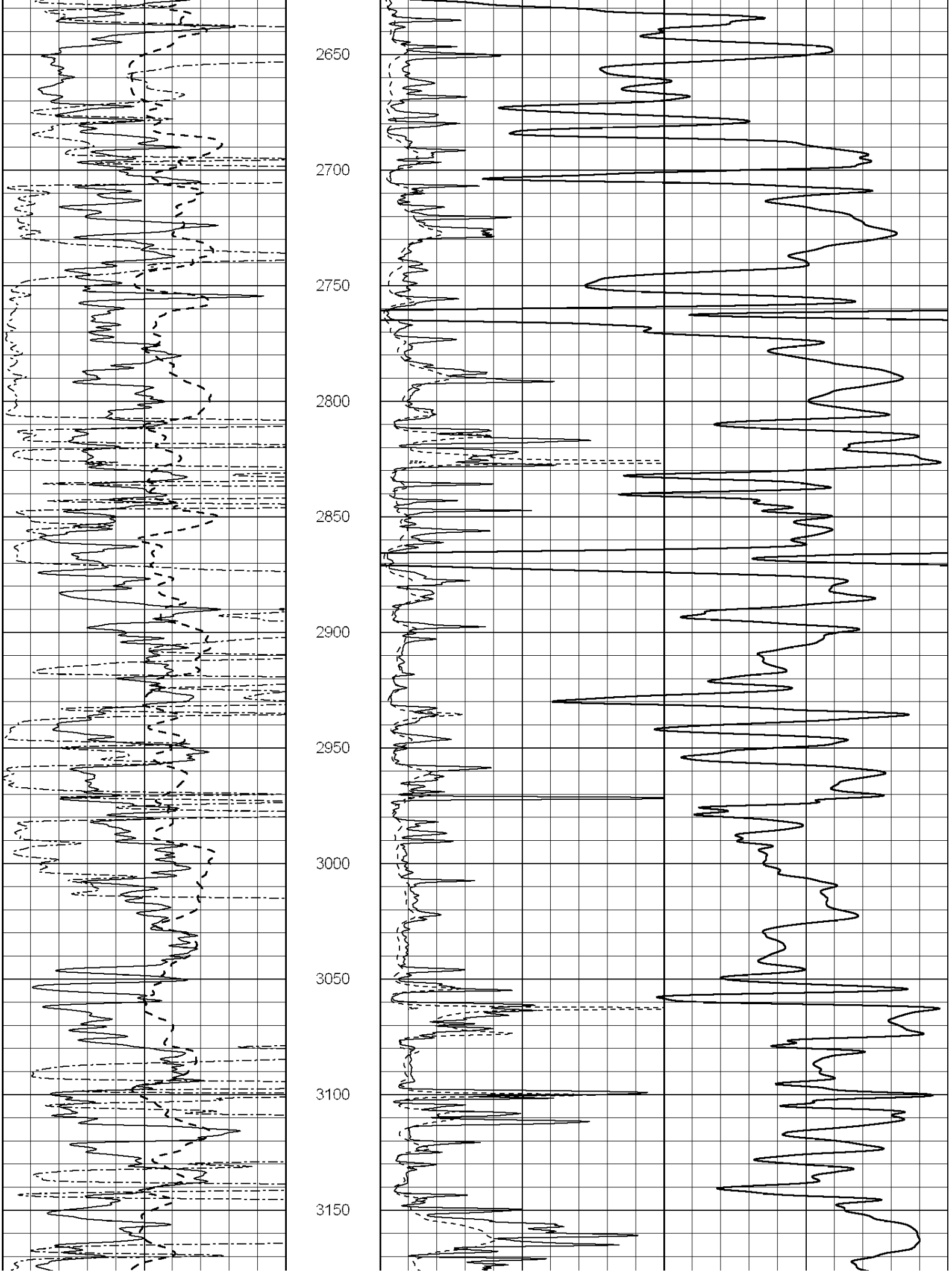


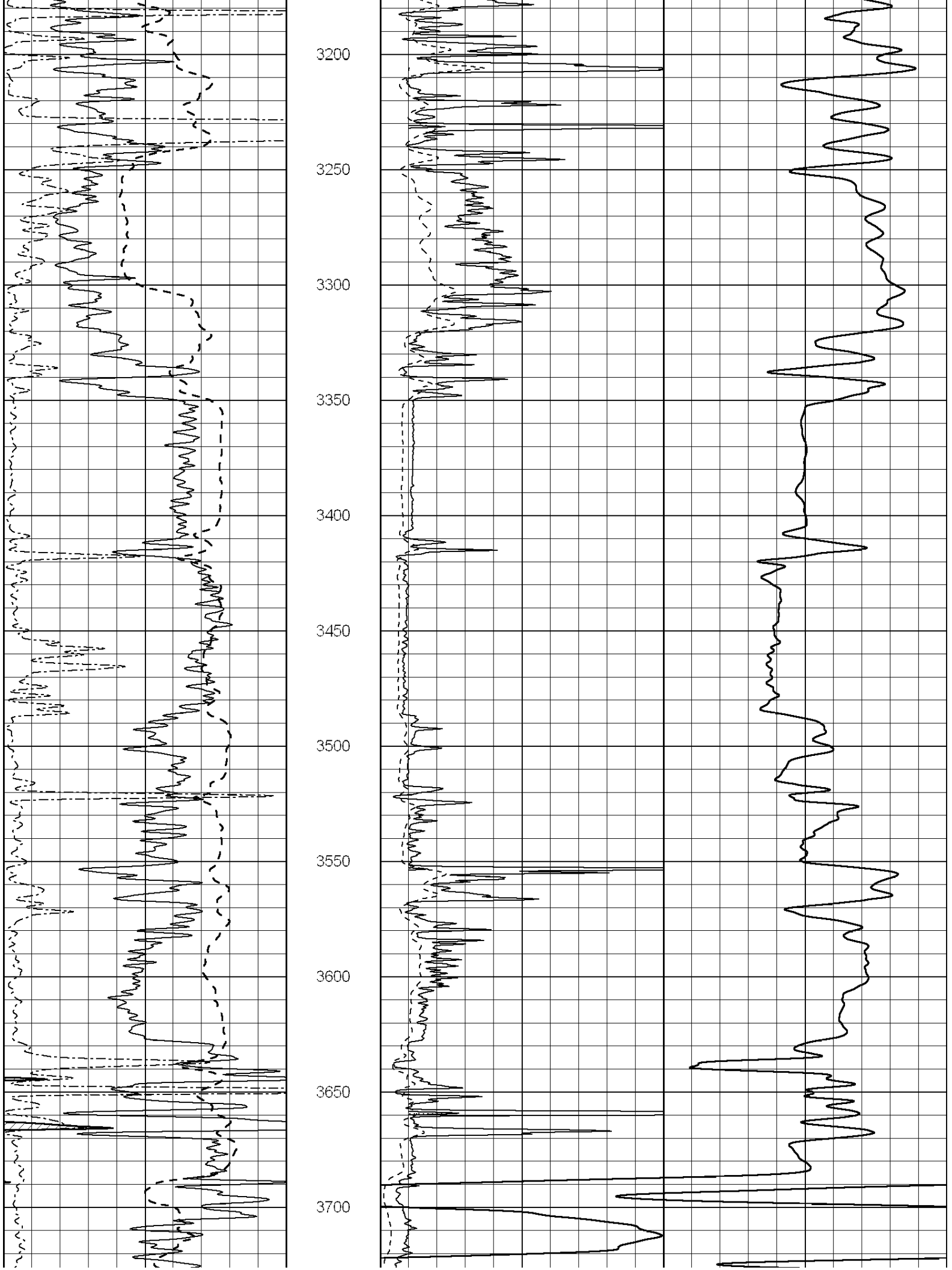

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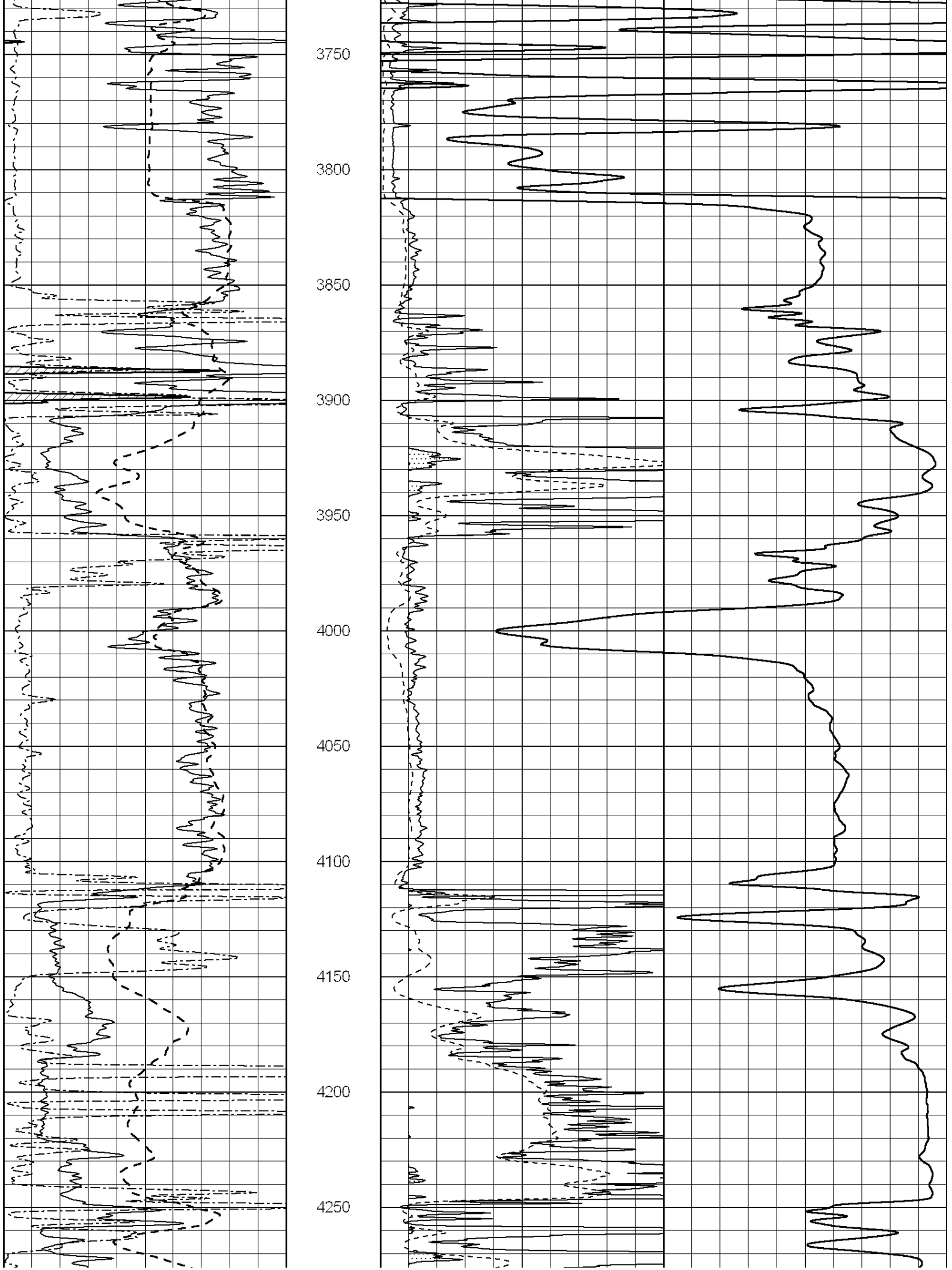

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1400
1450
1500

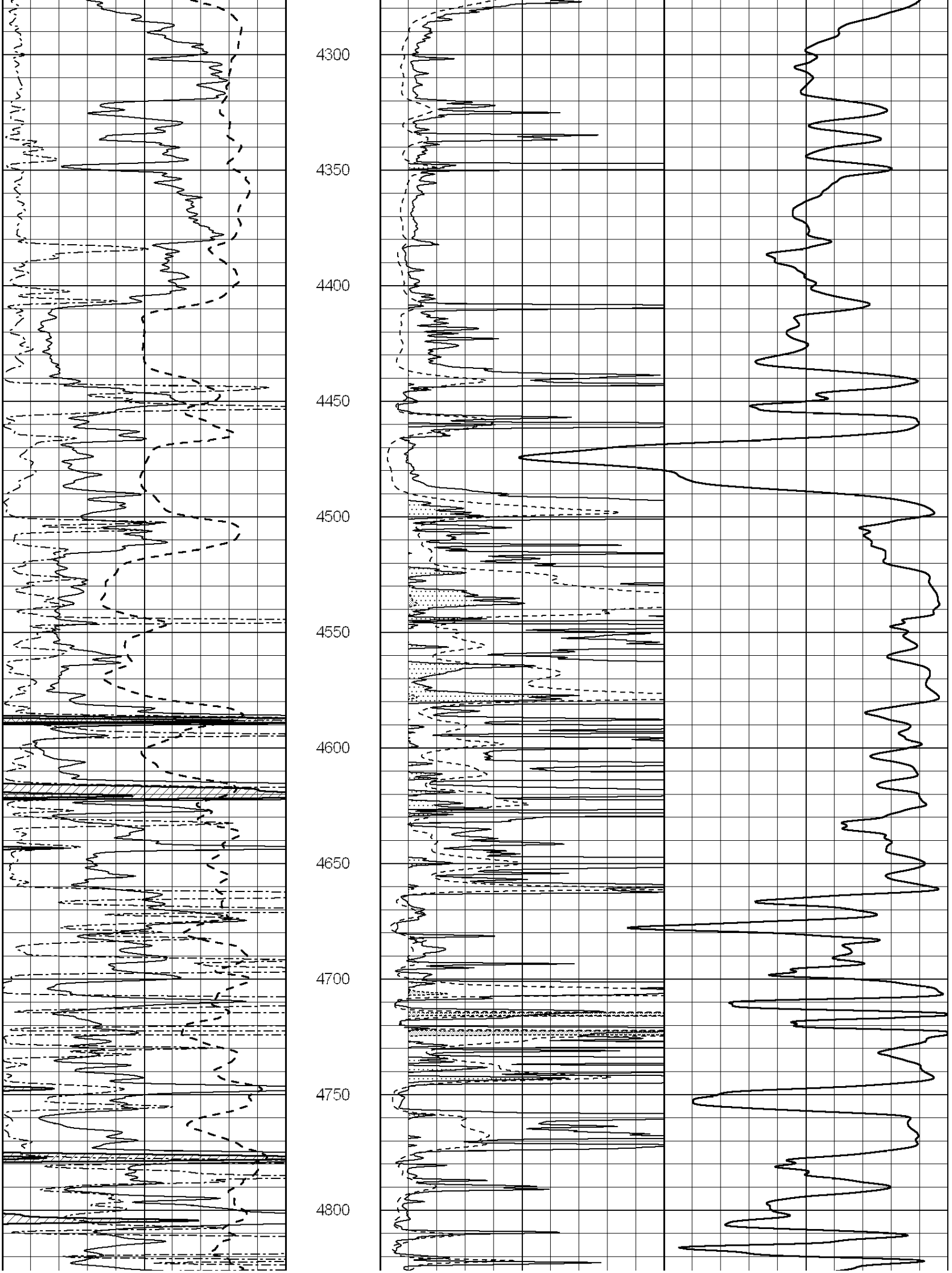

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2000
2050

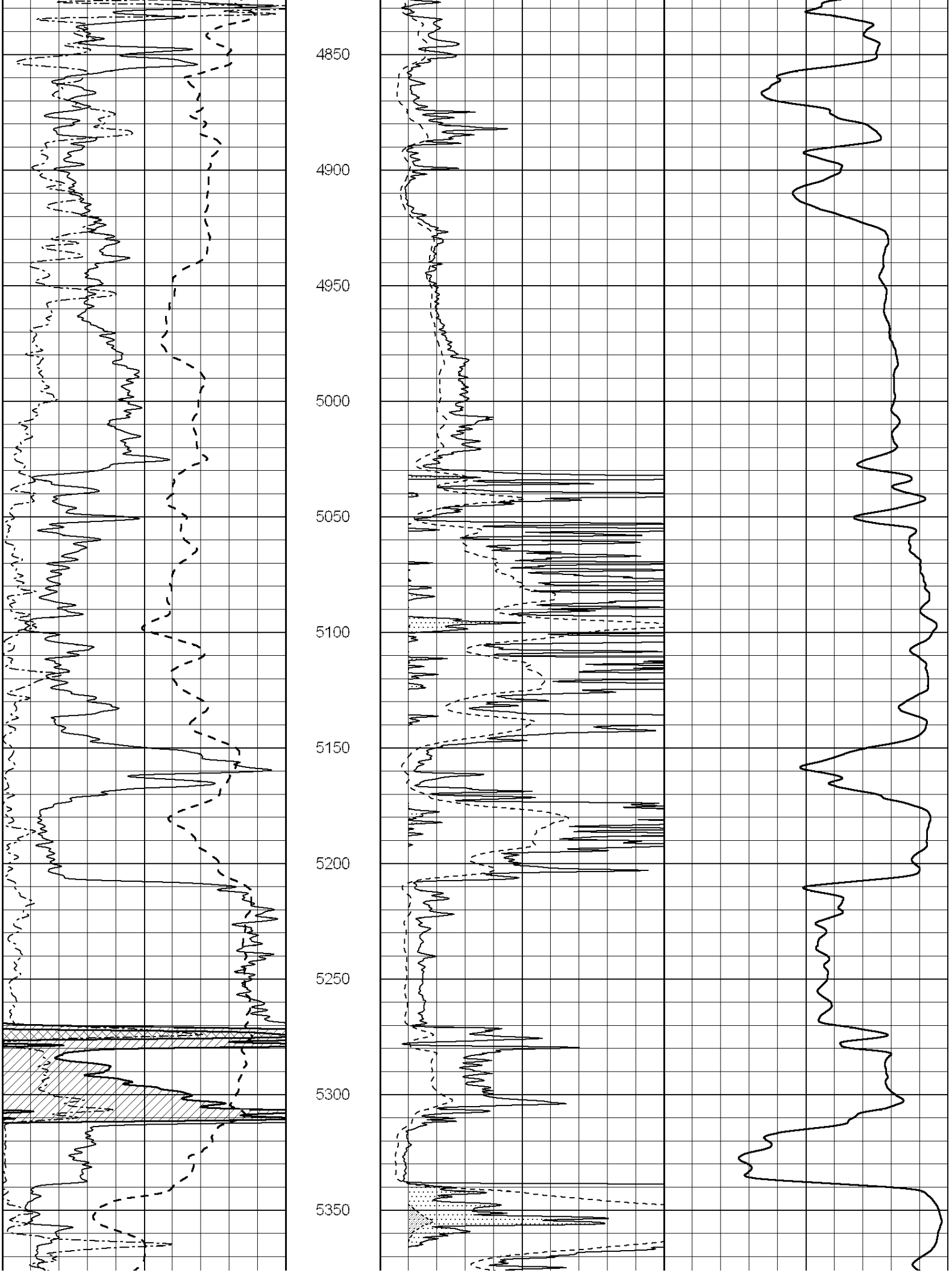

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2500
2550
2600

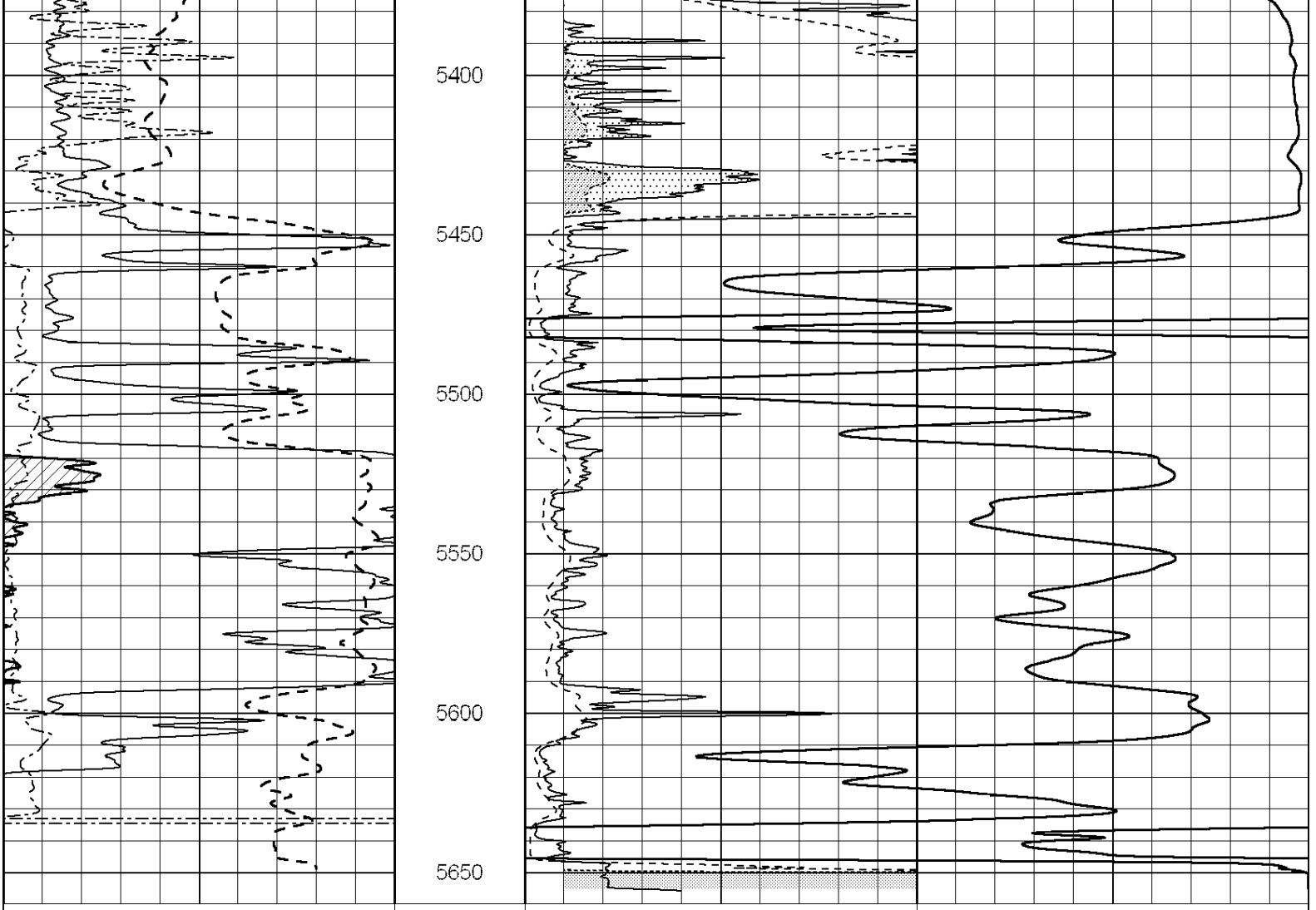

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5250
5300
5350



0	Gamma Ray (GAPI)	150
-100	SP (mV)	100
0	RWA (Ohm-m)	1

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

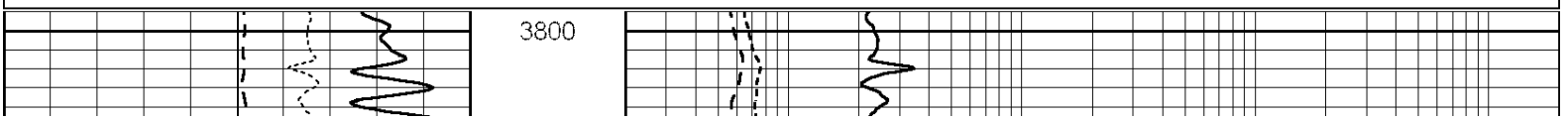
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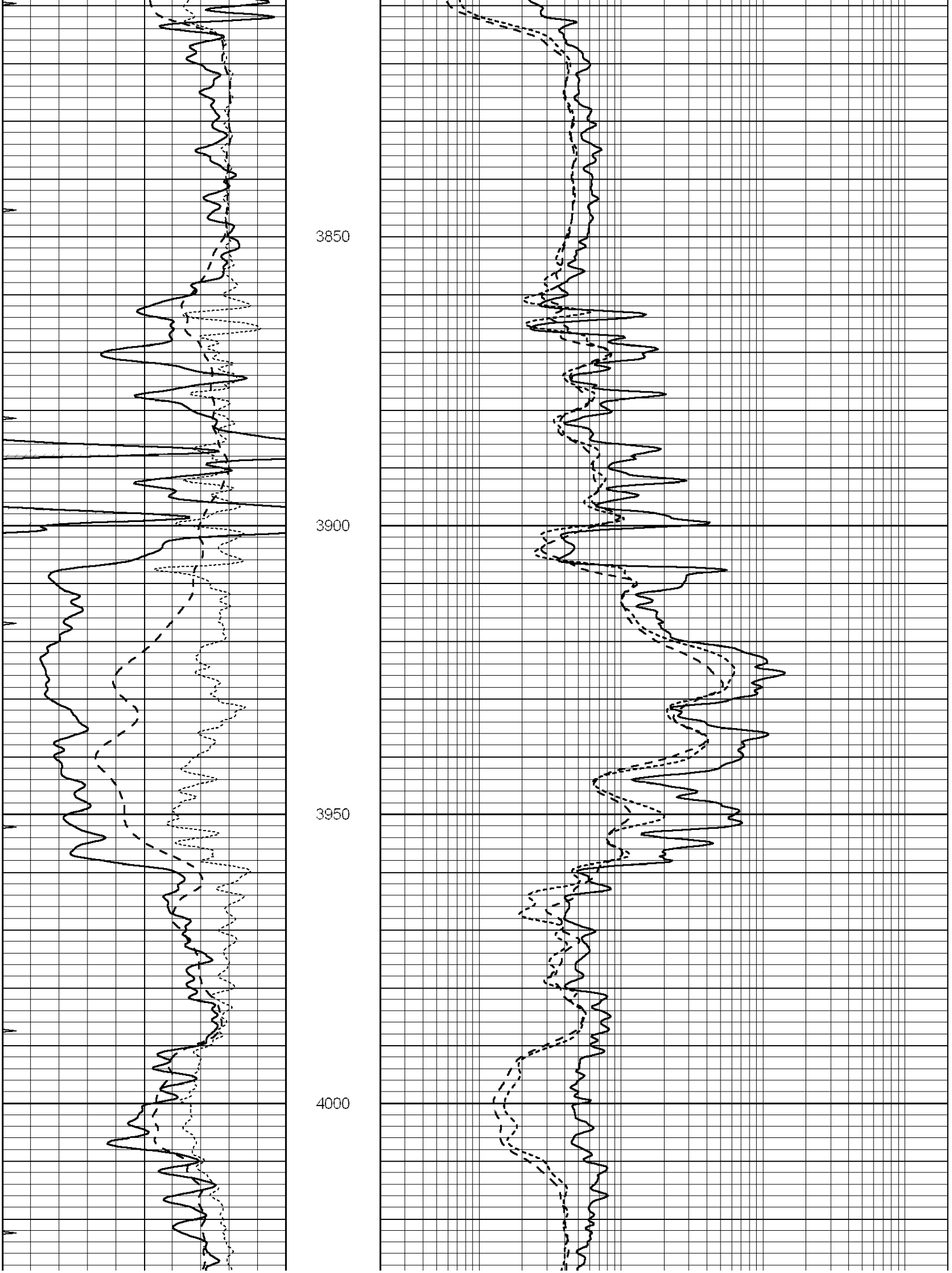
MAIN SECTION

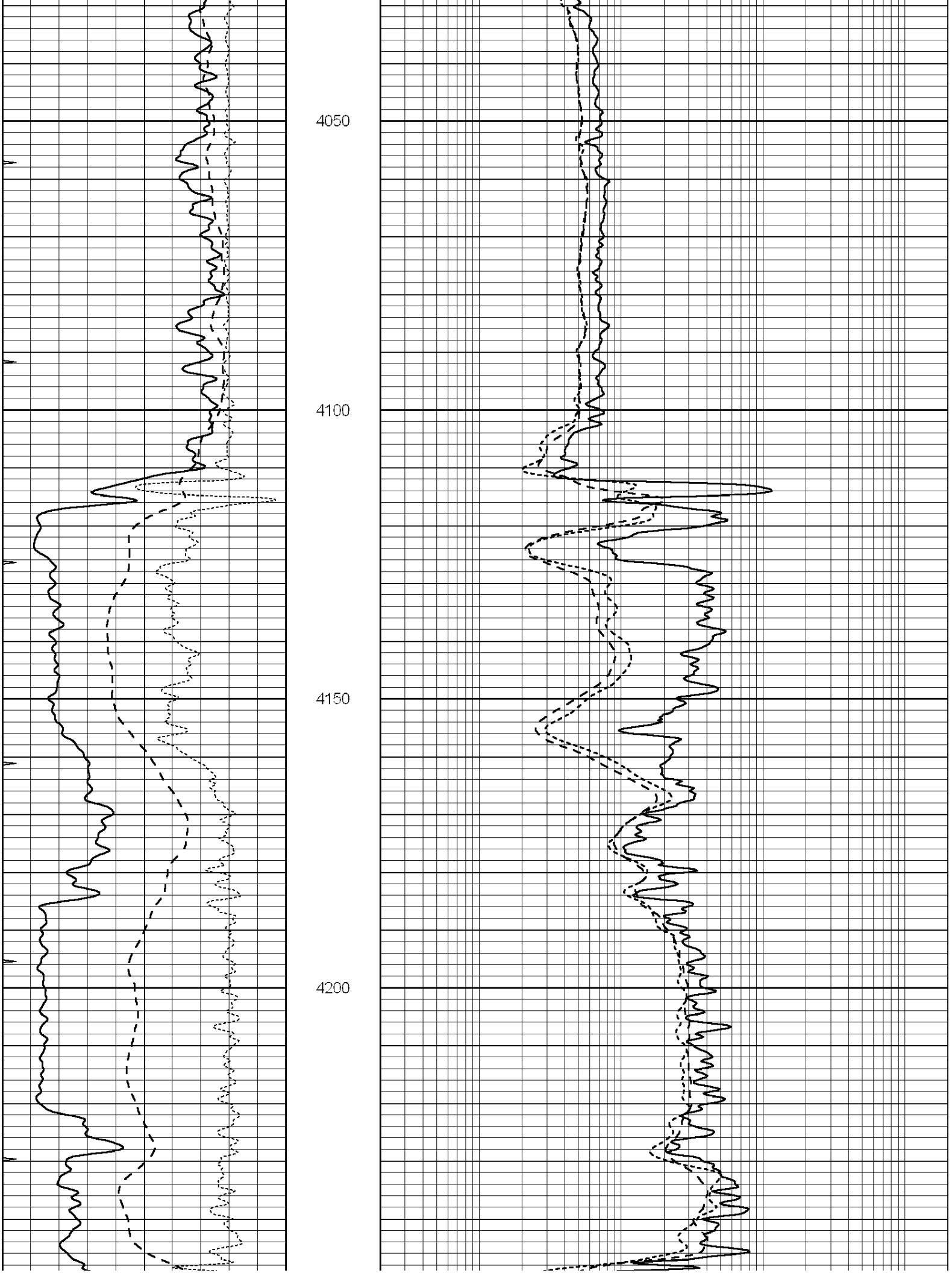
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Presentation Format:	_dil
Dataset Creation:	Tue Nov 25 05:45:20 2014
Charted by:	Depth in Feet scaled 1:240

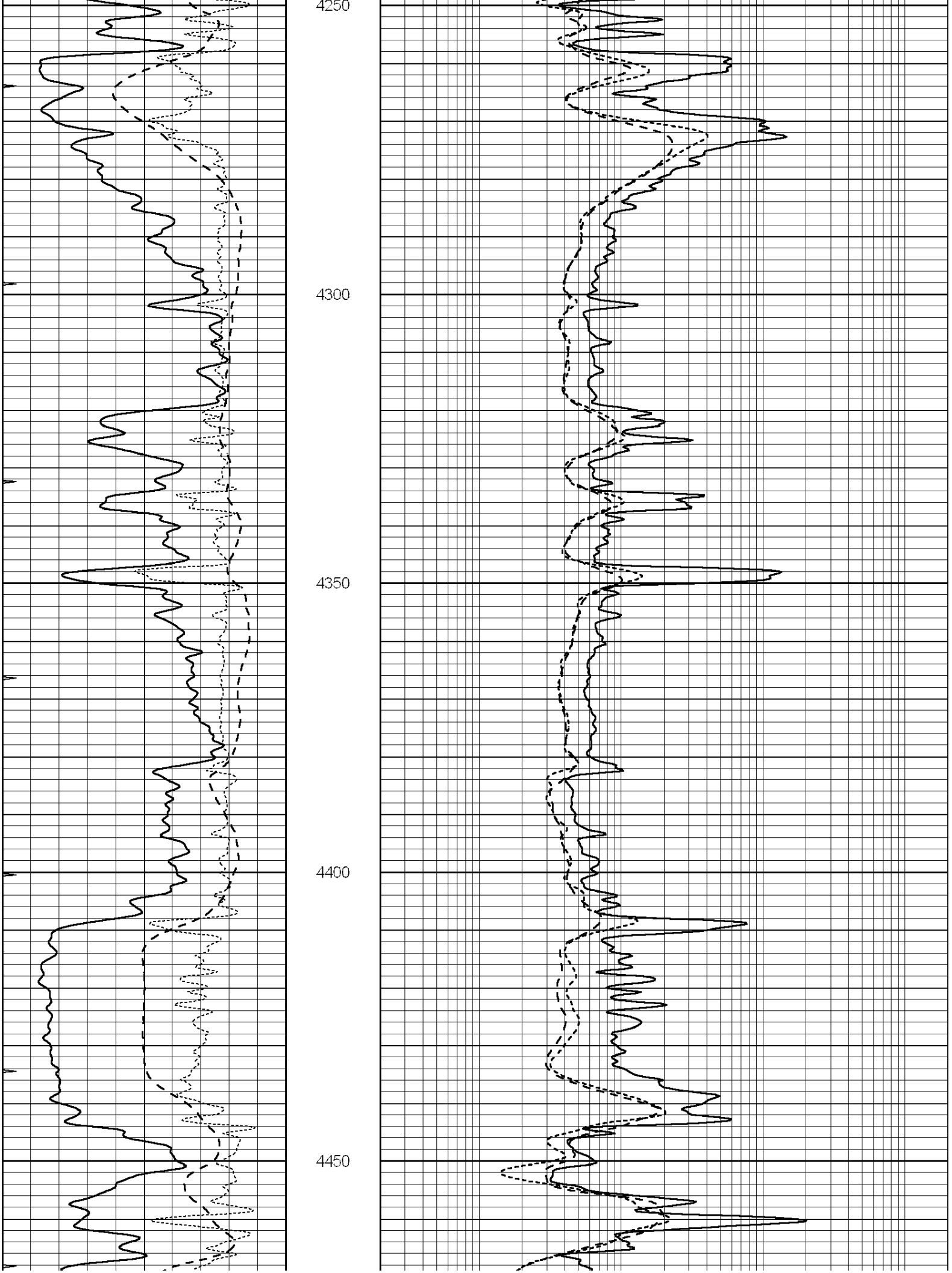
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

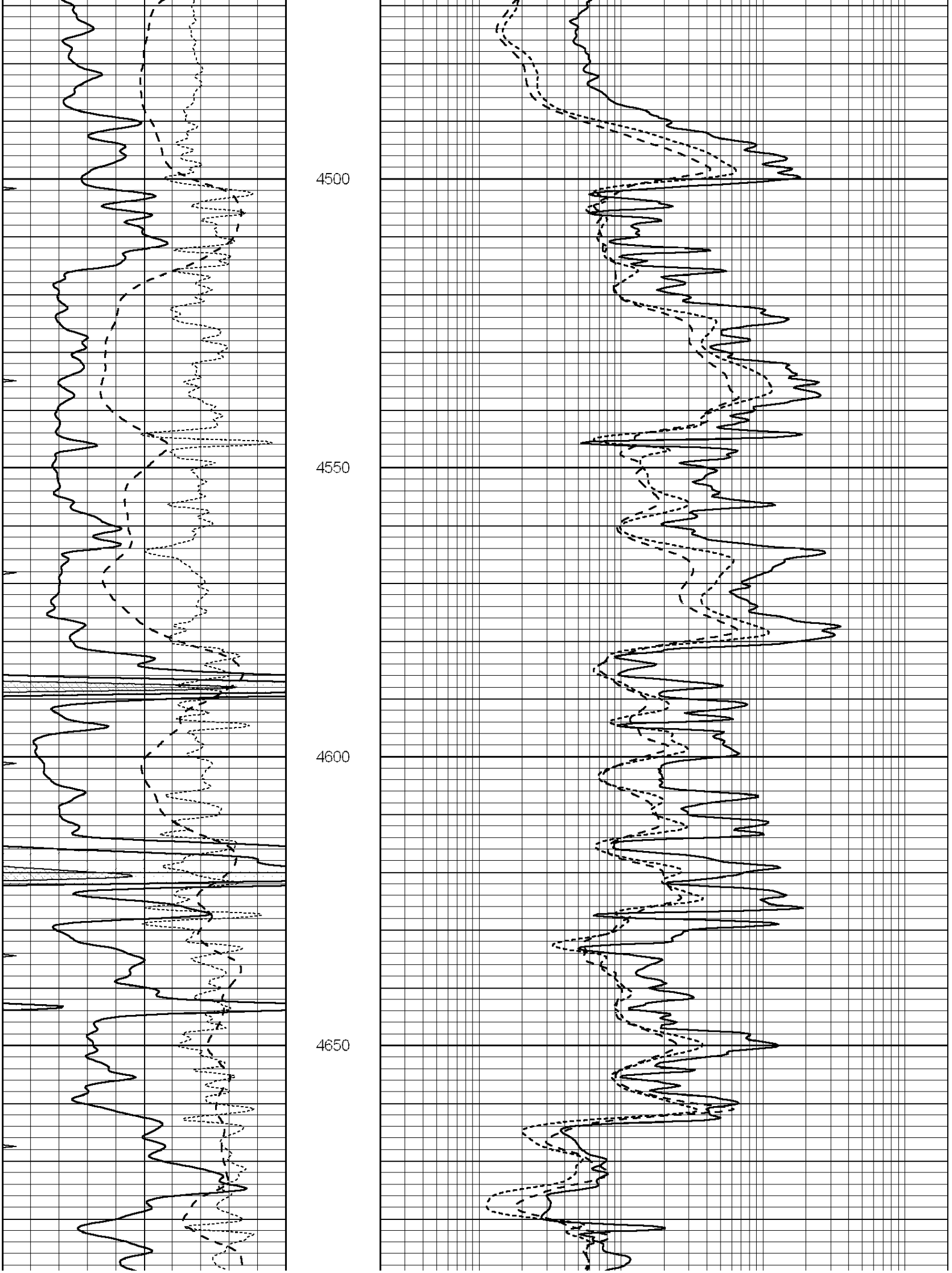
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

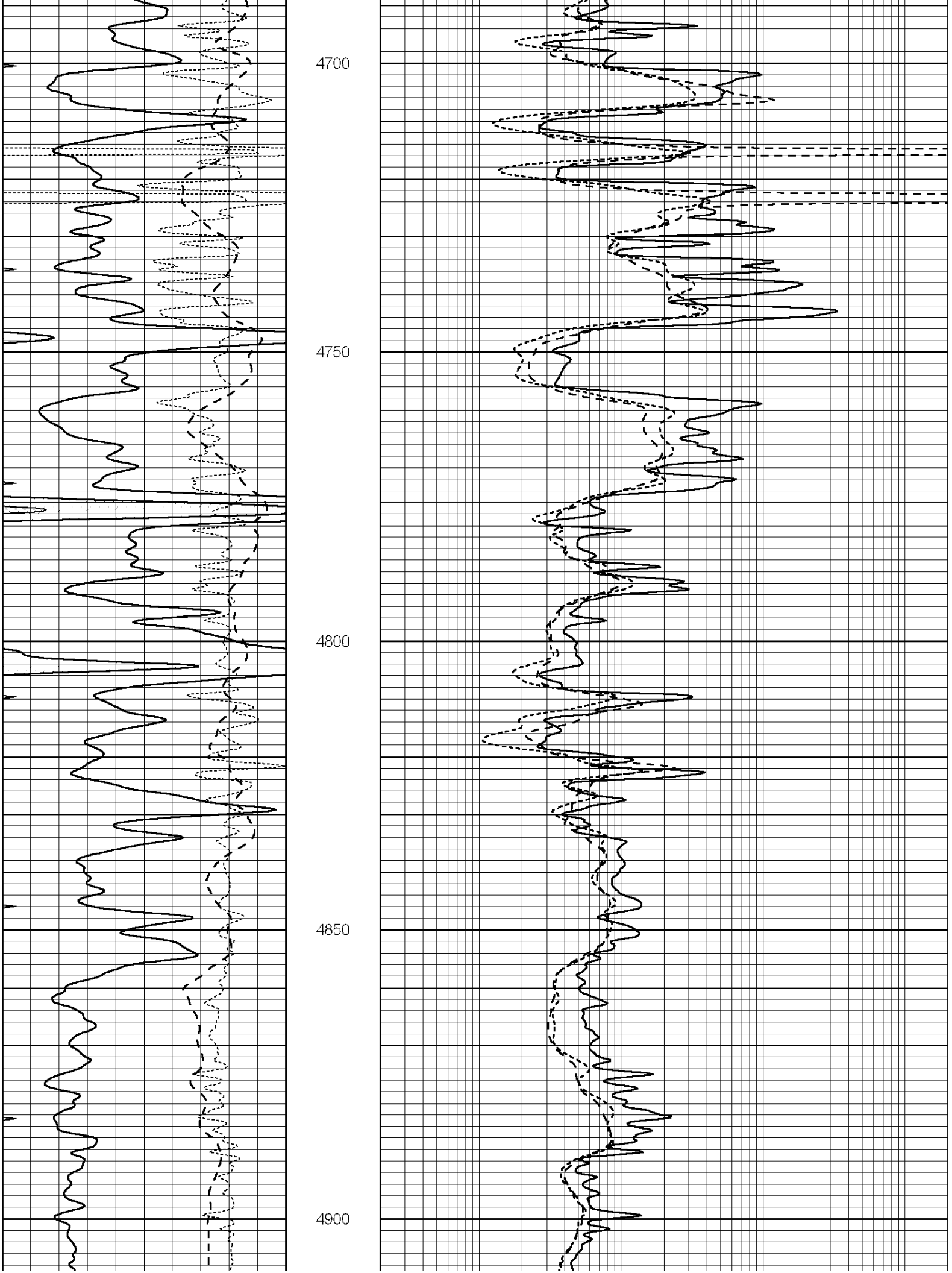


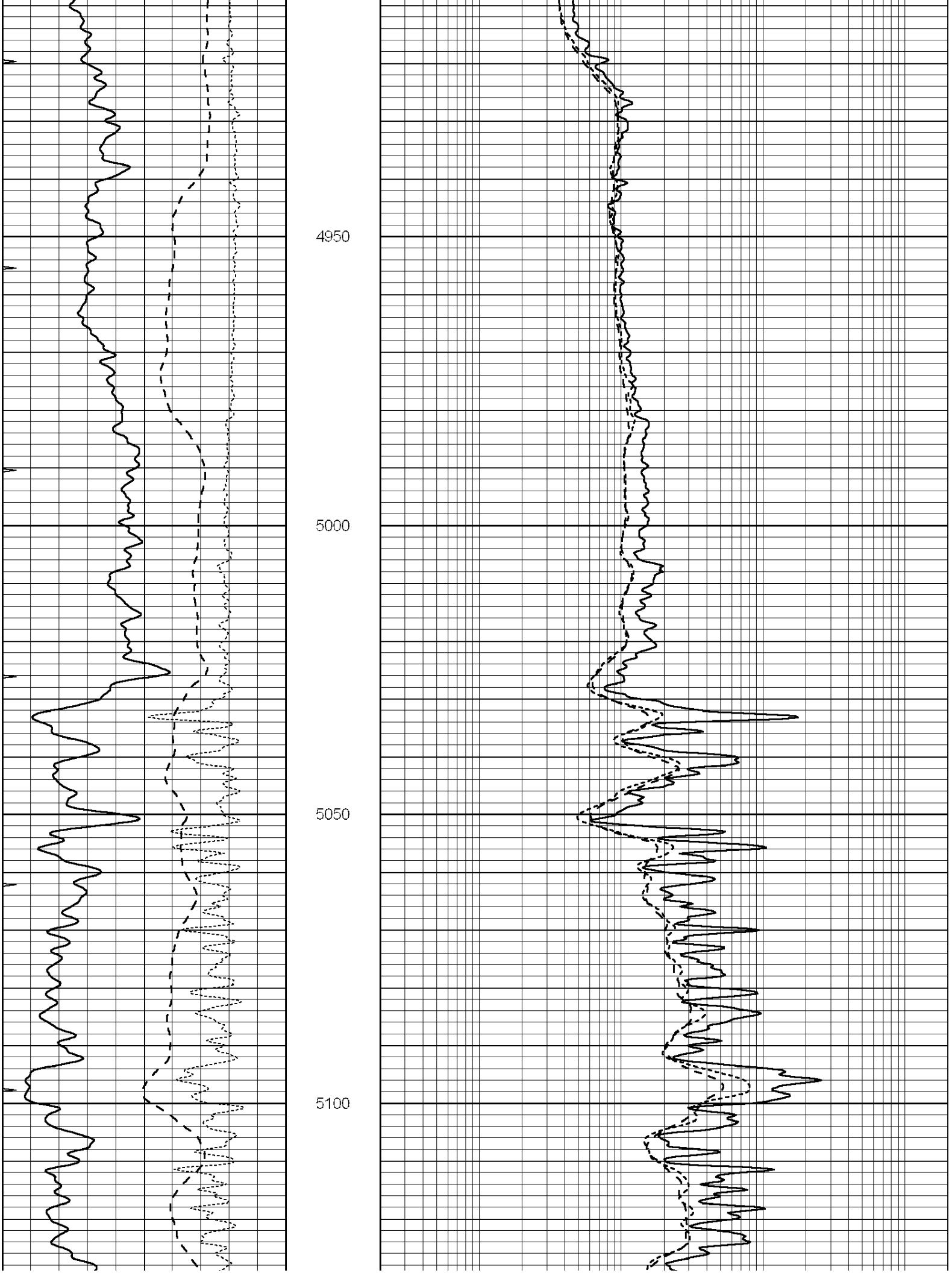

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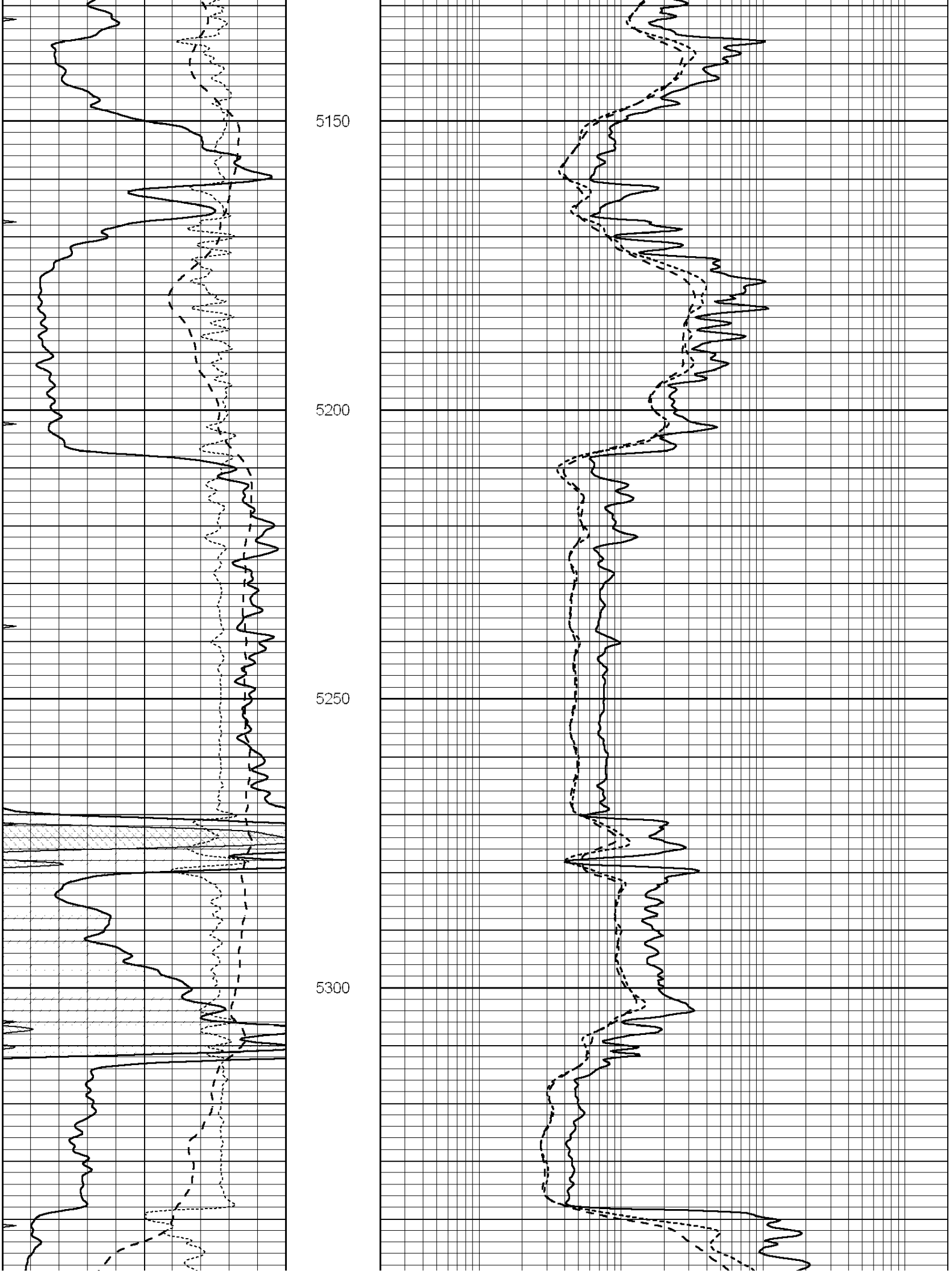

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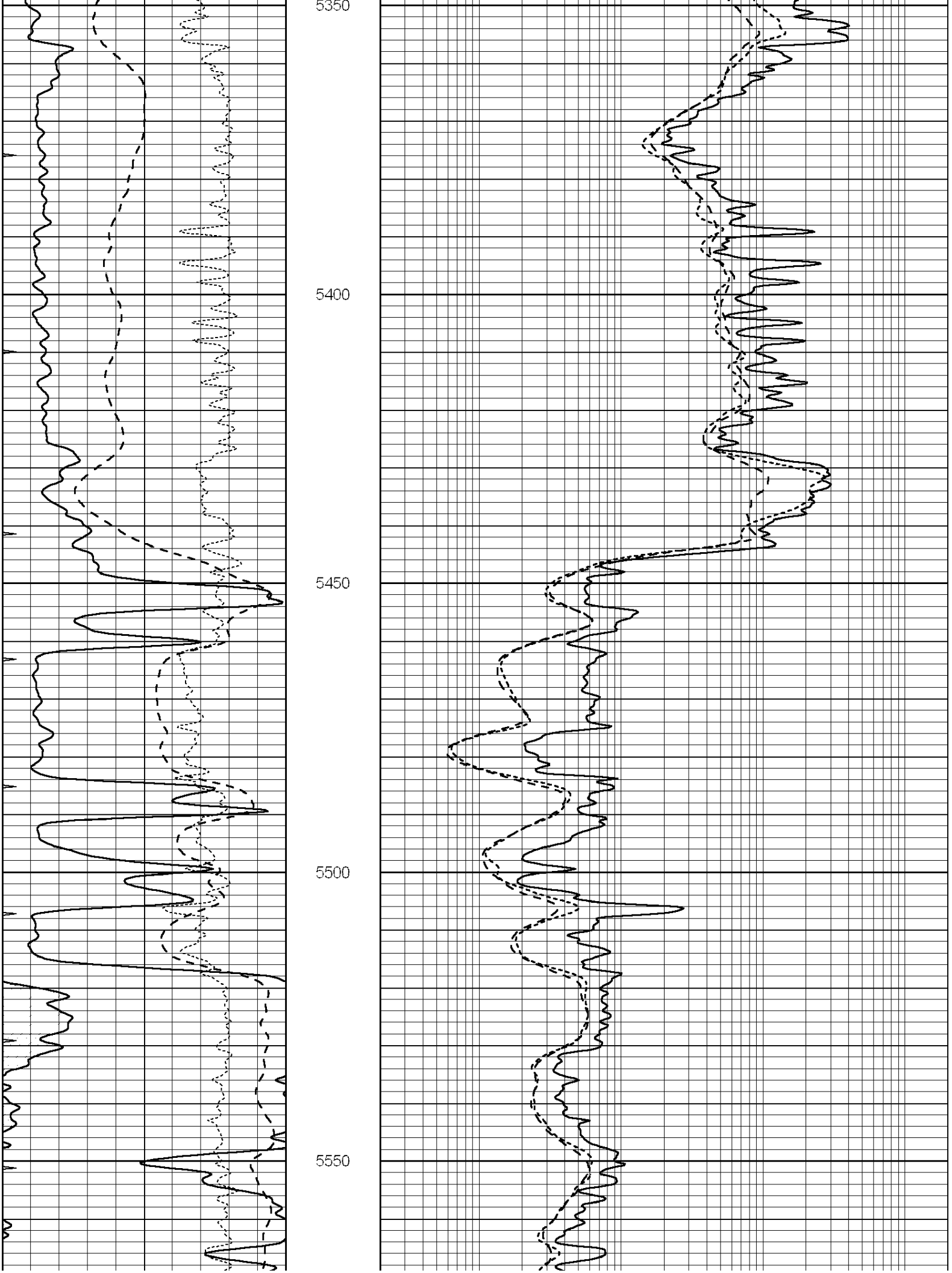

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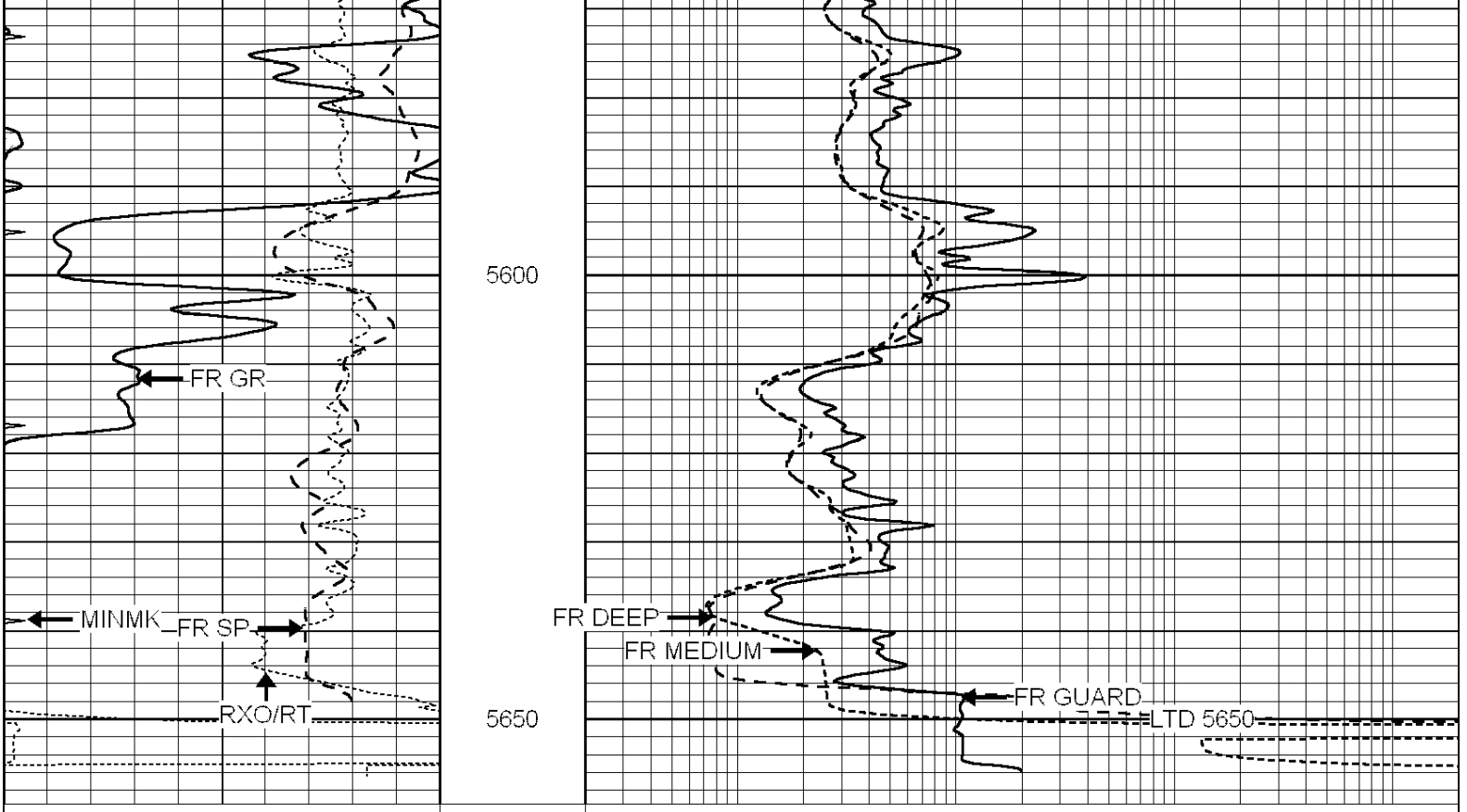

4500
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4950
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5100


5150
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5250
5300


5350
5400
5450
5500
5550



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

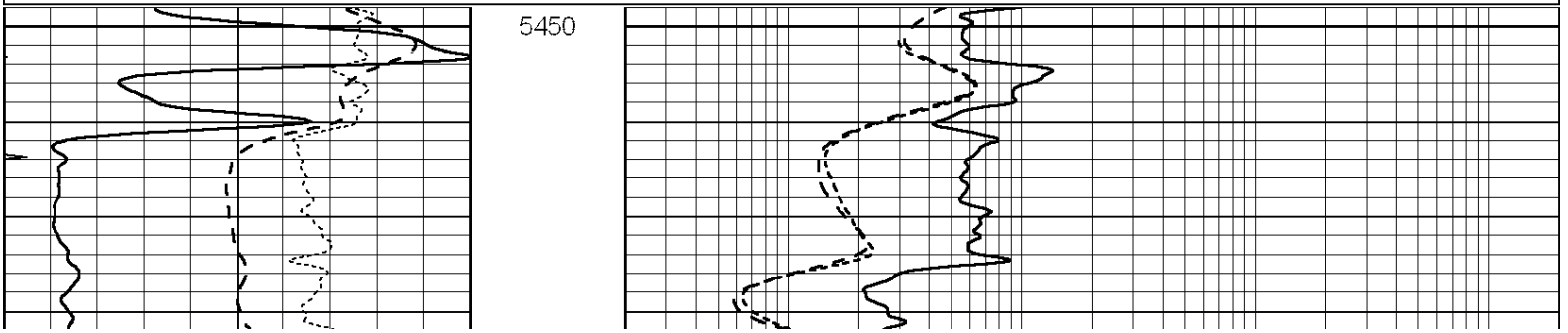
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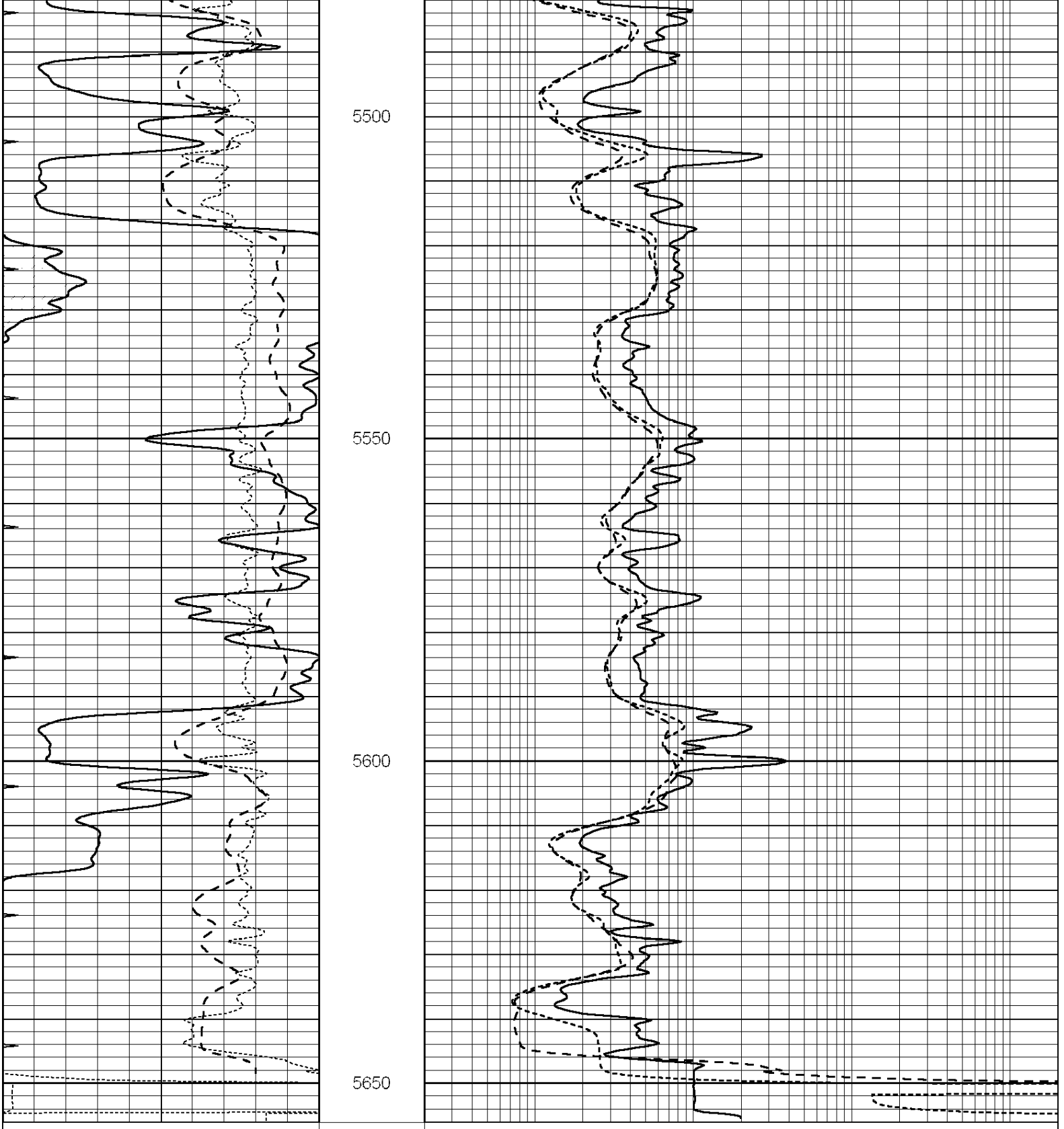
REPEAT SECTION

Database File: 25918pe.db
Dataset Pathname: pass2.5
Presentation Format: _dil
Dataset Creation: Tue Nov 25 06:12:26 2014 by Calc SOC 120430
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

Calibration Report

Database File: 25918pe.db
Dataset Pathname: pass3.7
Dataset Creation: Tue Nov 25 05:45:20 2014

Dual Induction Calibration Report

Serial-Model:	PROBE9-DILG
Surface Cal Performed:	Tue Nov 25 01:38:46 2014
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	670.000	-15.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	670.000	-26.000
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		4000.000	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		

Litho Density Calibration Report

Serial: 004N Model: PRB

Master Calibration

Performed Fri May 30 11:01:00 2014

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1378.8	10804.6	3492.0	12453.4	cps
Window 2	1262.4	9313.5	3076.7	10594.7	cps
Window 3	1077.6	5668.7	2076.0	6314.8	cps
Window 4	306.4	313.0	306.4	315.6	cps
Long Space	0.0	8051.0	1814.3	9332.3	cps
Short Space	1.9	1706.1	1146.0	1707.6	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	

Rib Angle	: 45.0	Rib Slope	: 1.002	Density/Spine Ratio	: 0.571
Spine Angle	: 75.0	Spine Slope	: 3.745	Spine Intercept	: -18.9

Before Survey Verification

Performed Wed Dec 31 18:00:00 1969

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps

Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

After Survey Verification — Performed Wed Dec 31 18:00:00 1969

Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

Compensated Neutron Calibration Report

Serial Number: 070808
Tool Model: Probe

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 070558
Tool Model: OPEN_GR
Performed: Mon Nov 17 10:01:40 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.2800 GAPI/cps