DUAL INDUCTION LOG

Company WOOLSEY OPERATING COMPANY, LLC.
Well TINKER #1
Field DIERKS EXT
County SUMNER State KANSAS

Location: API # : 15-191-22817-0000
2100' FSL & 1200' FWL
SEC 24 TWP 30S RGE 1W

Other Services
CDL/CNL/PE
SON

Elevation
K.B. 1242
D.F. 1240
G.L. 1237

Permanent Datum GROUND LEVEL Elevation 1237
Log Measured From KELLY BUSHING 5' A.G.L
Drilling Measured From KELLY BUSHING

Company WOOLSEY OPERATING COMPANY, LLC
Well TINKER #1
Field DIERKS EXT
County SUMNER
State KANSAS

Date	6/7/20		
Run Number	ONE		
Depth Driller	3950		
Depth Logger	3950		
Bottom Logged Interval	3948		
Top Log Interval	00		
Casing Driller	8 5/8" @ 306'		
Casing Logger	306'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2400 PPM	
Density / Viscosity	9.3/53		
pH / Fluid Loss	9.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.60 @ 81F		
Rmf @ Meas. Temp	.45 @ 81F		
Rmc @ Meas. Temp	.72 @ 81F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.41 @ 117F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	117F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	BLAKE MILLER		

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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 ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

DIRECTIONS

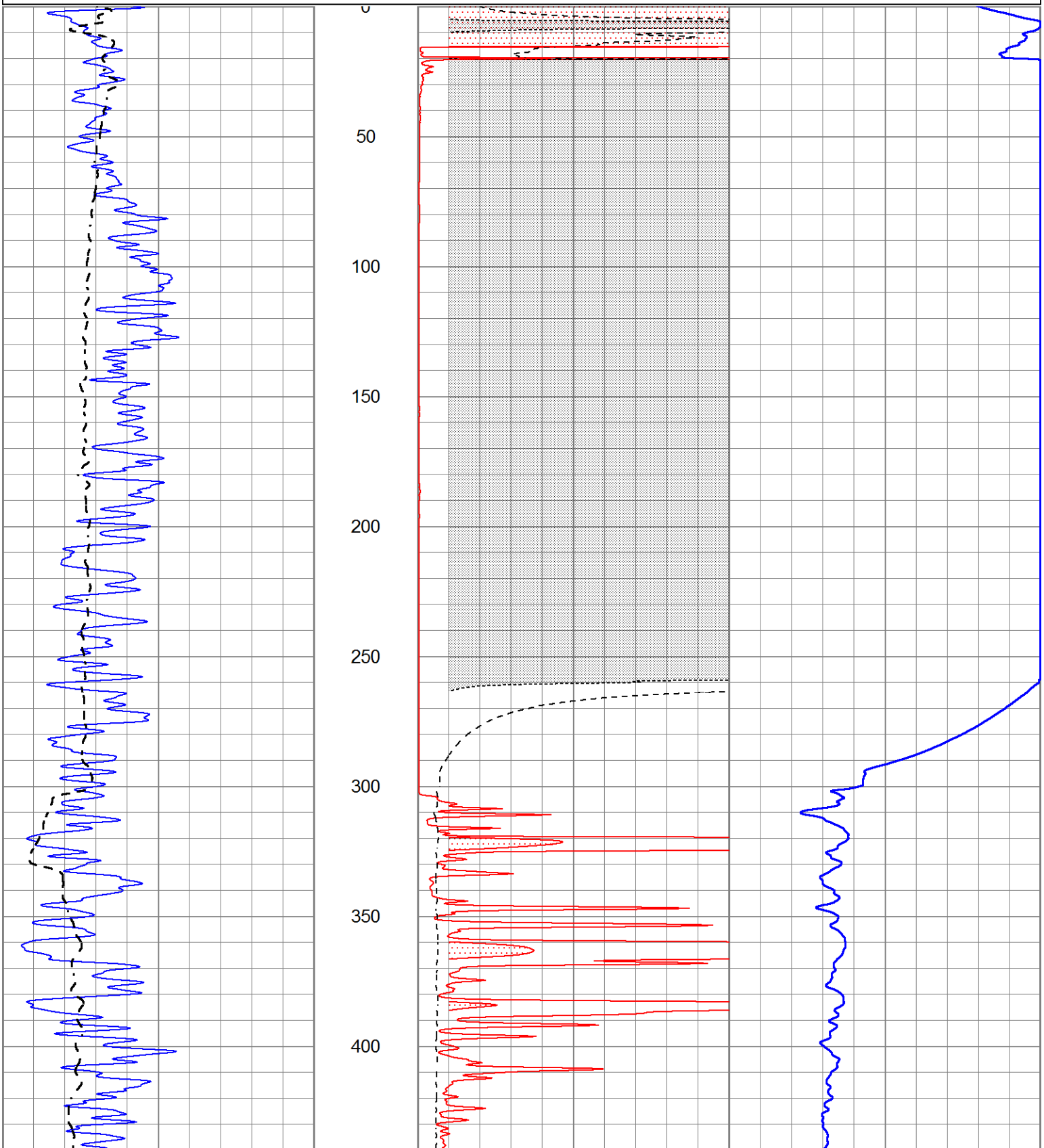
WICHITA, KS. - SOUTH TO MULVANE EXIT - WEST TO HWY 81 - SOUTH TO 110TH
2 3/4 WEST - NORTH INTO

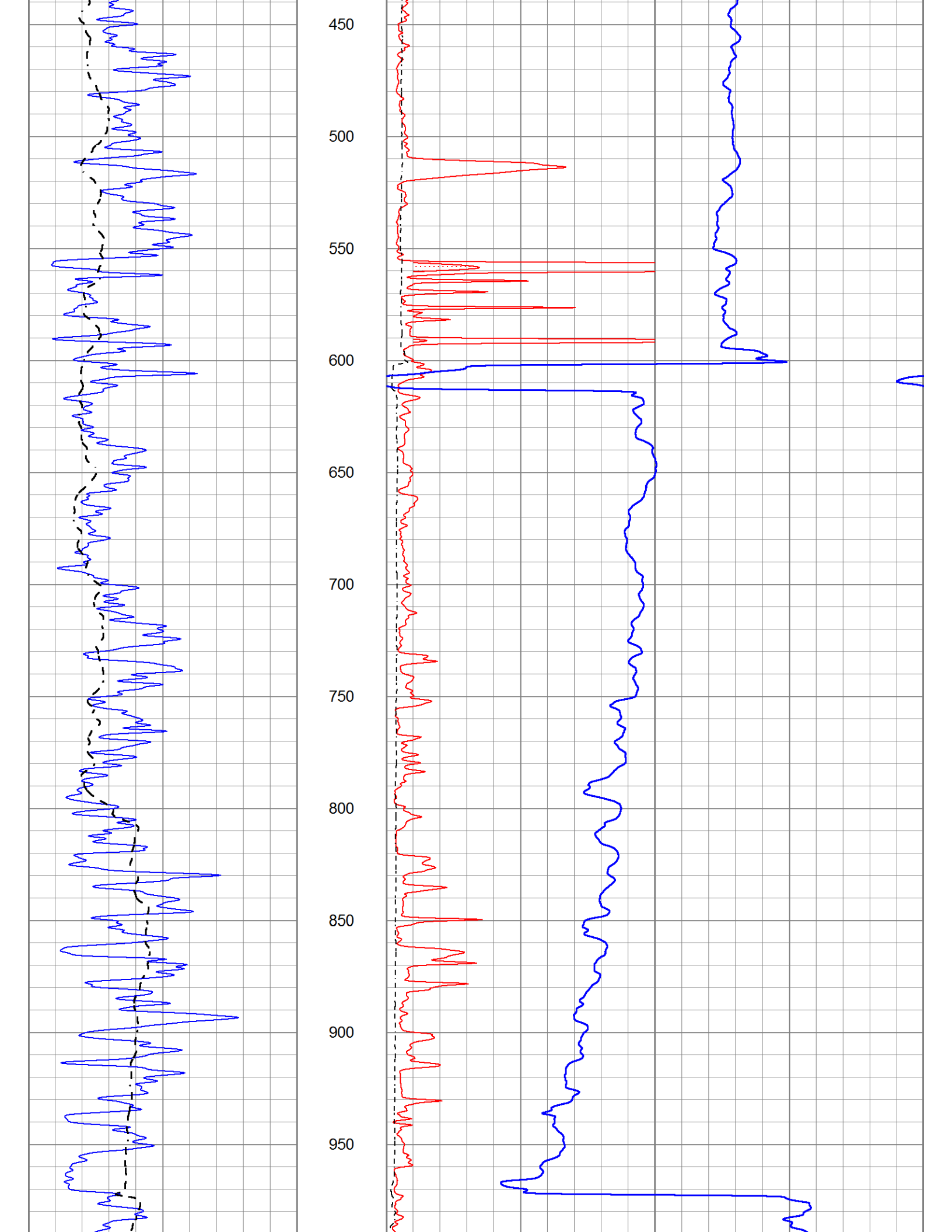
MAIN SECTION

Database File	4738pe.db
Dataset Pathname	pass3.1
Presentation Format	_dil2
Dataset Creation	Sun Jun 07 06:54:10 2020
Charted by	Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

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

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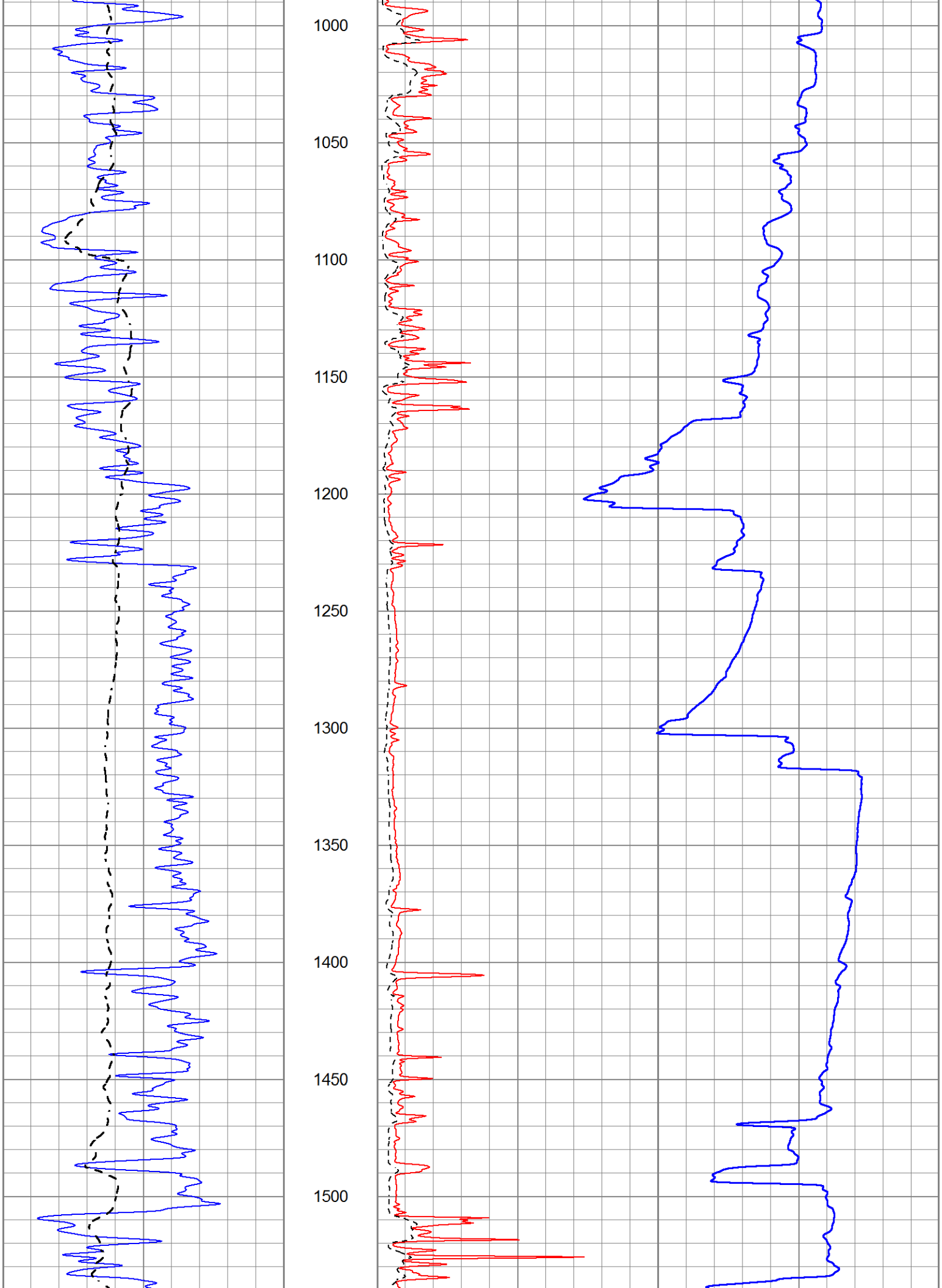
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1450
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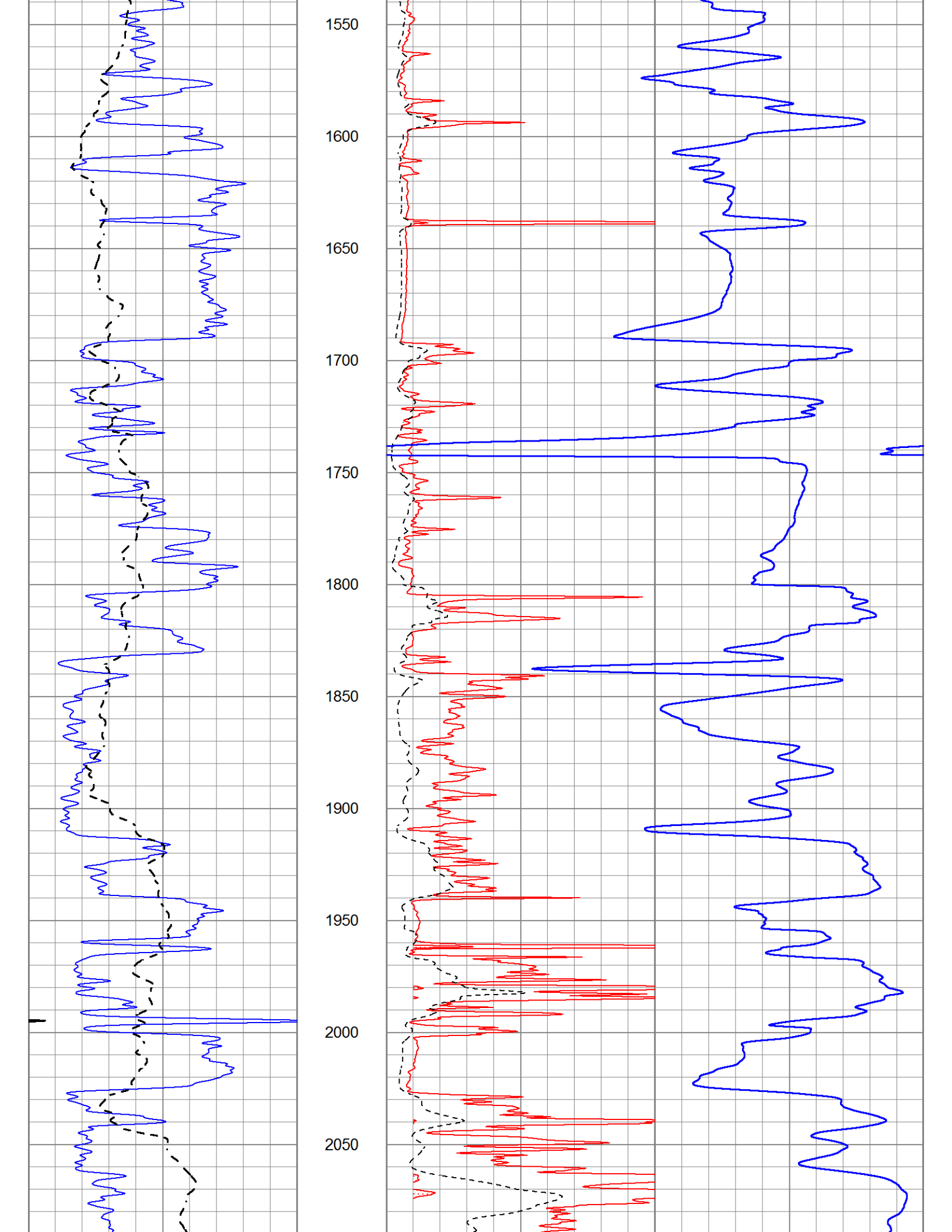
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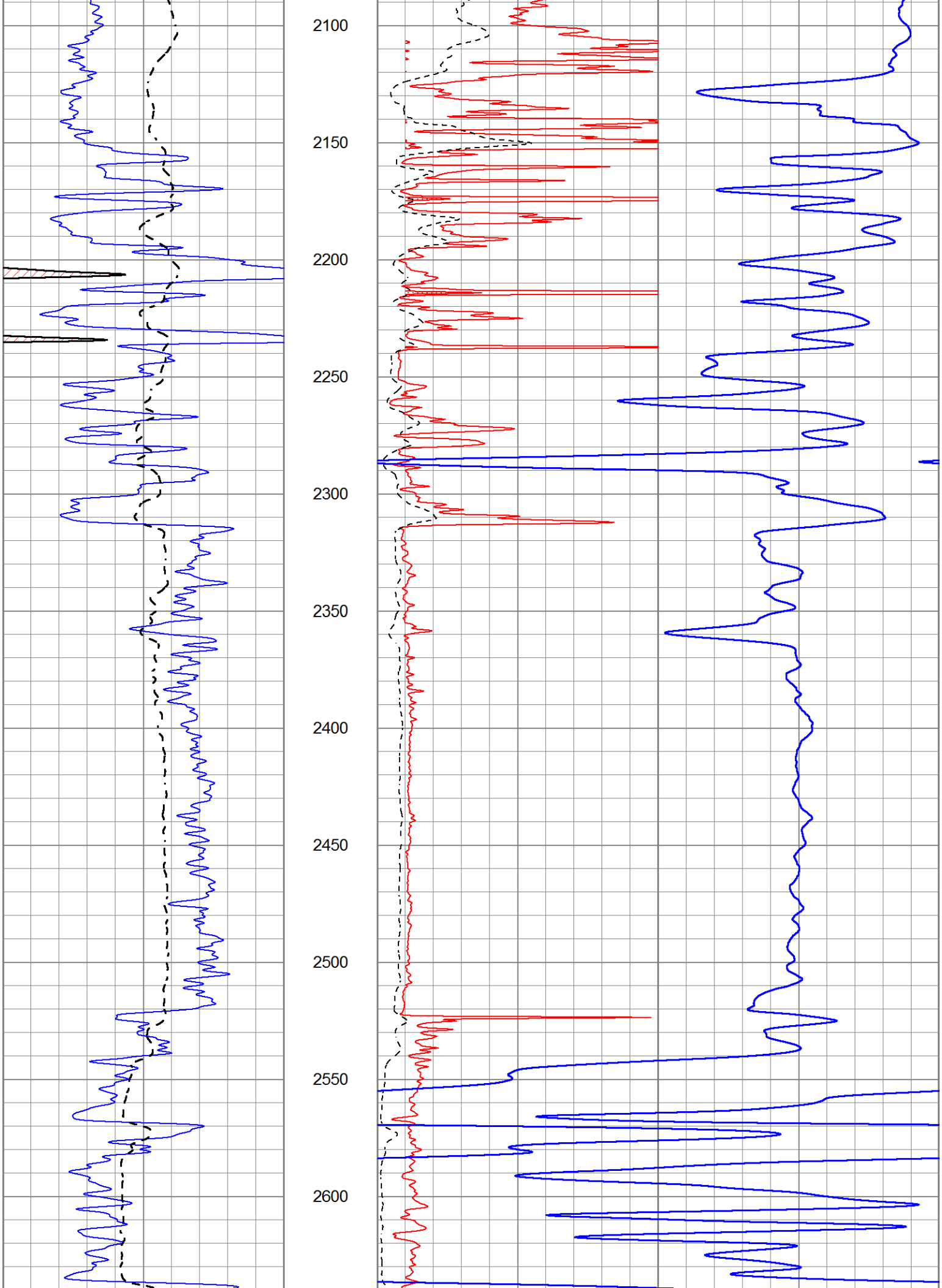
1950
2000
2050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2300
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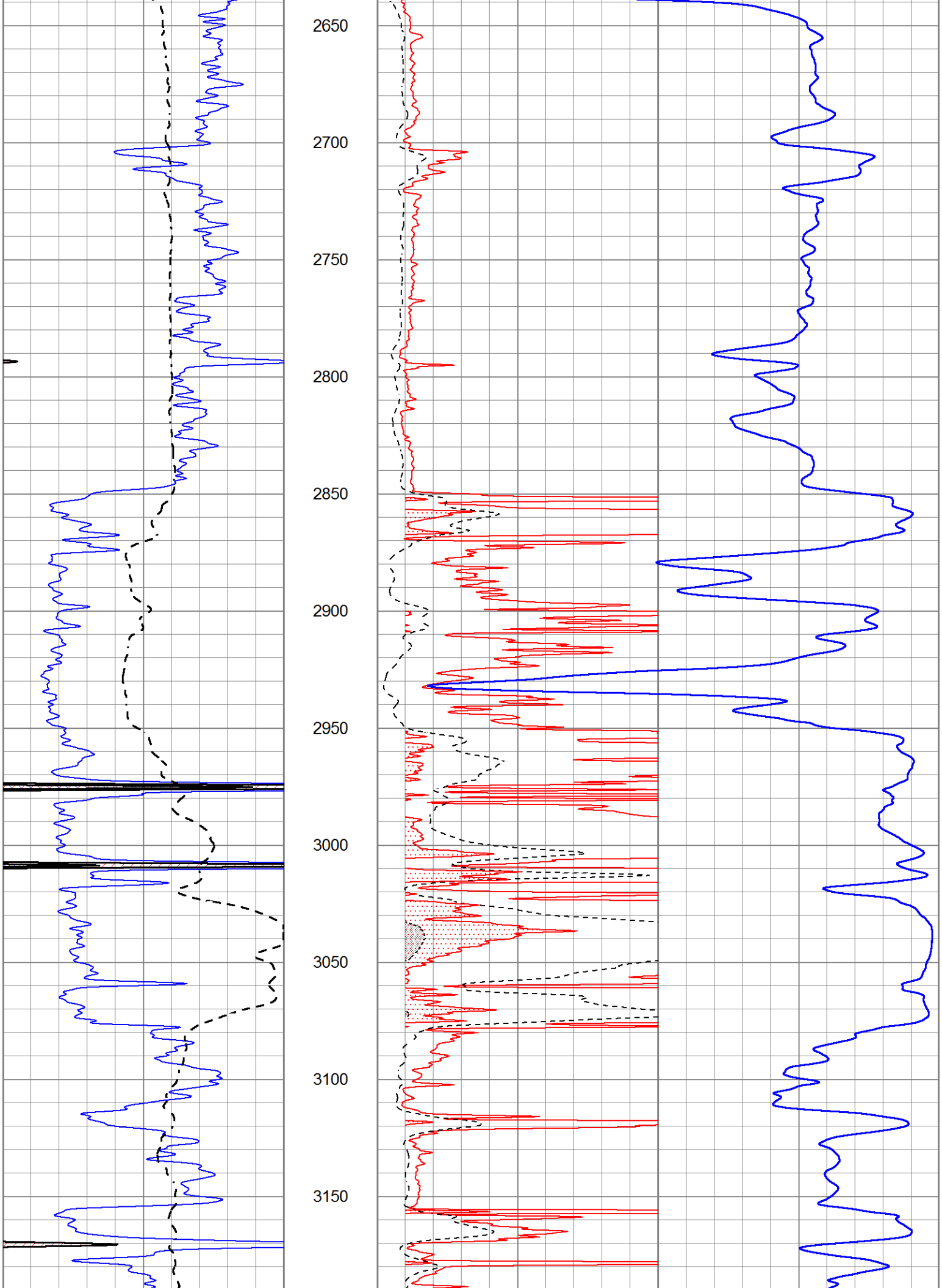
2550
2600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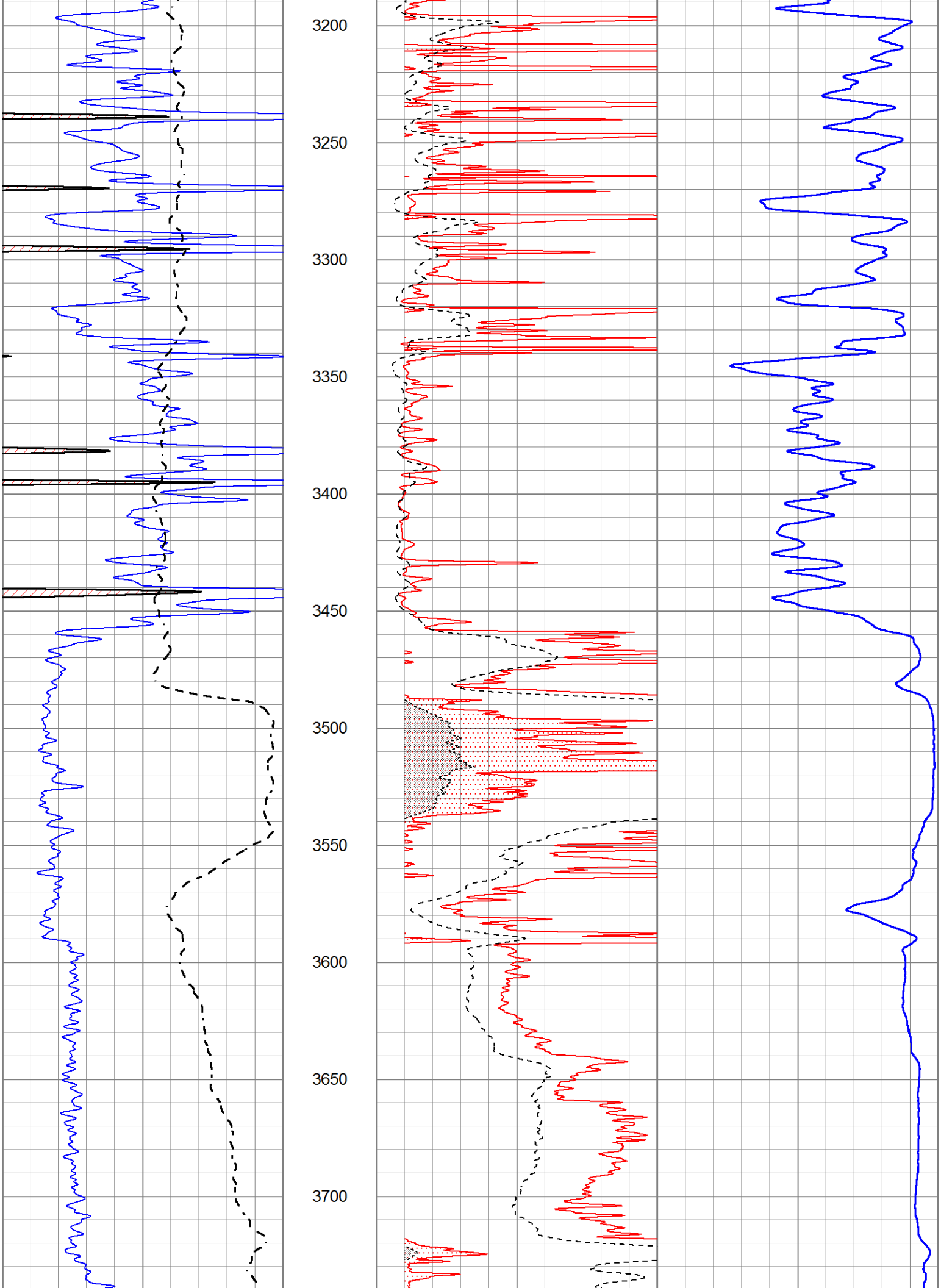
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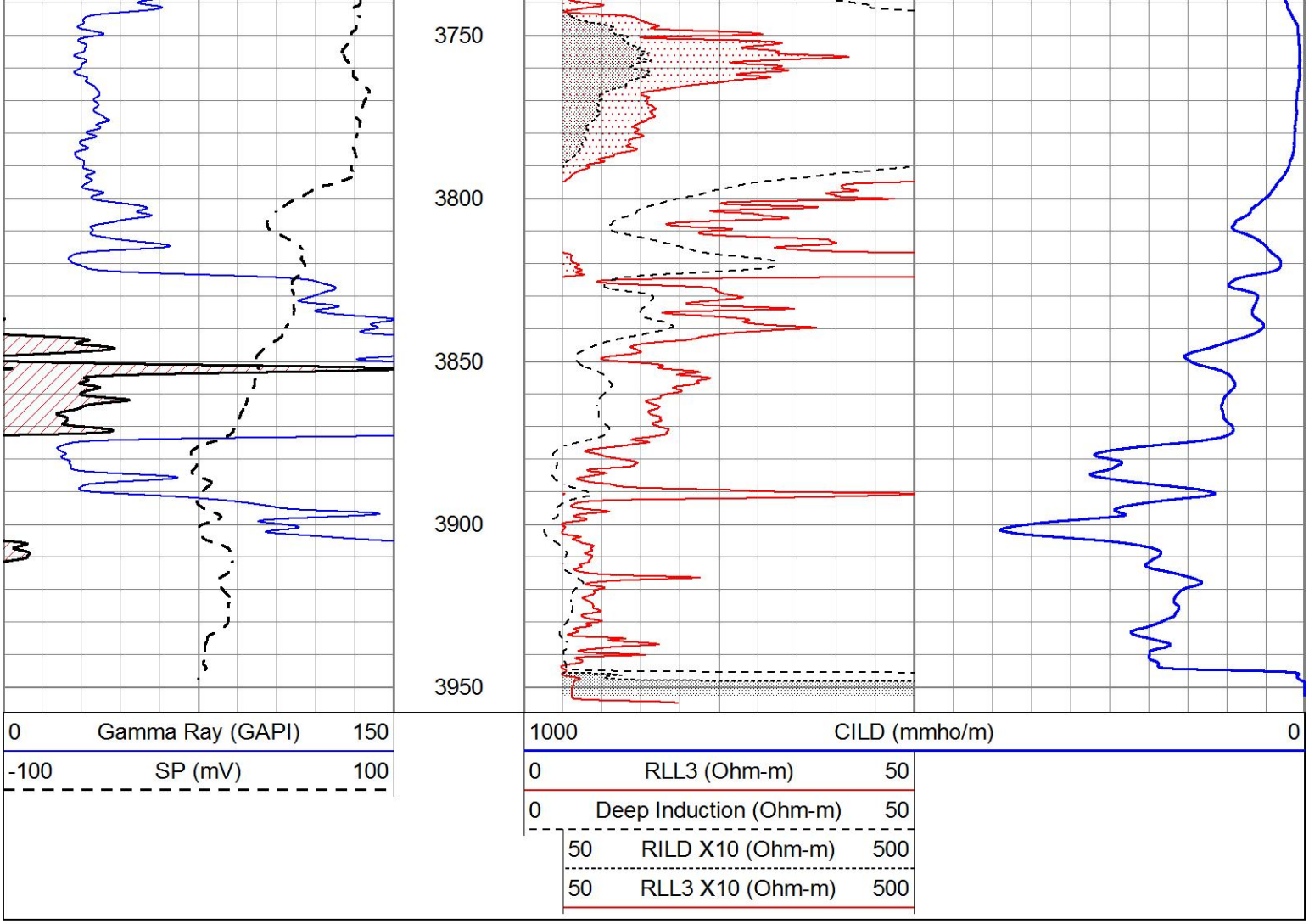
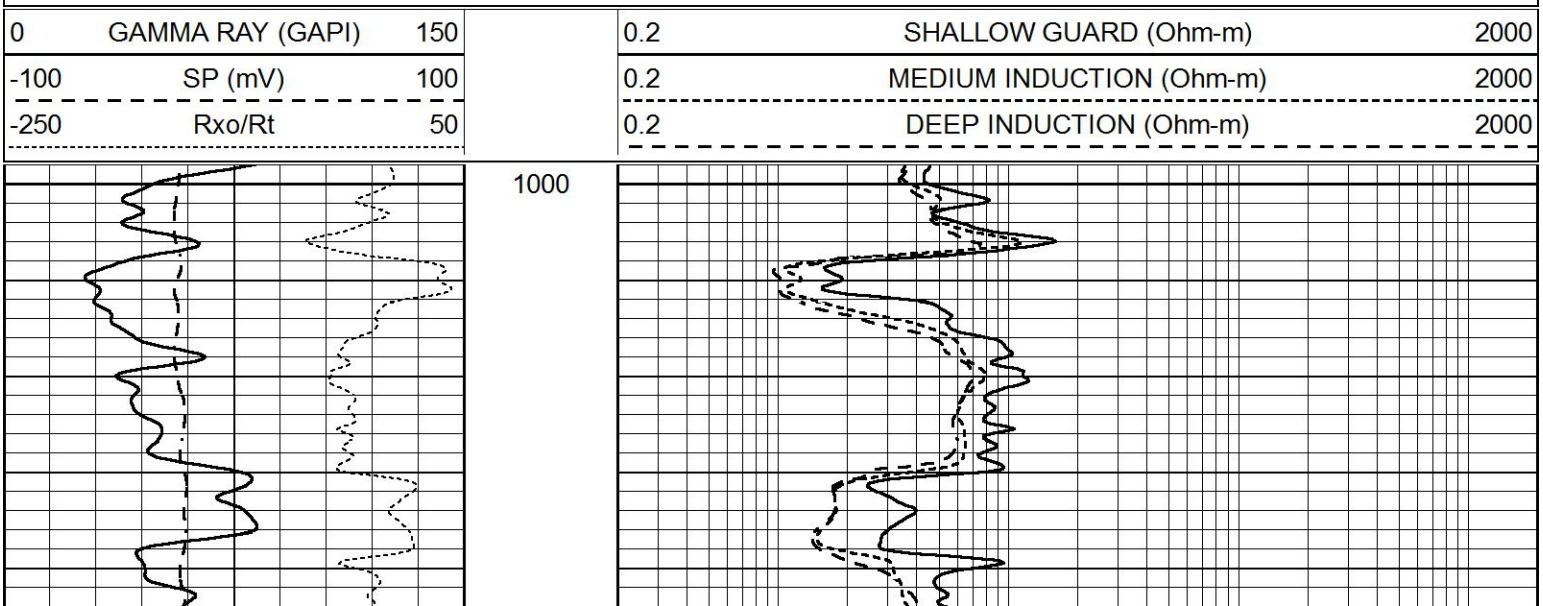
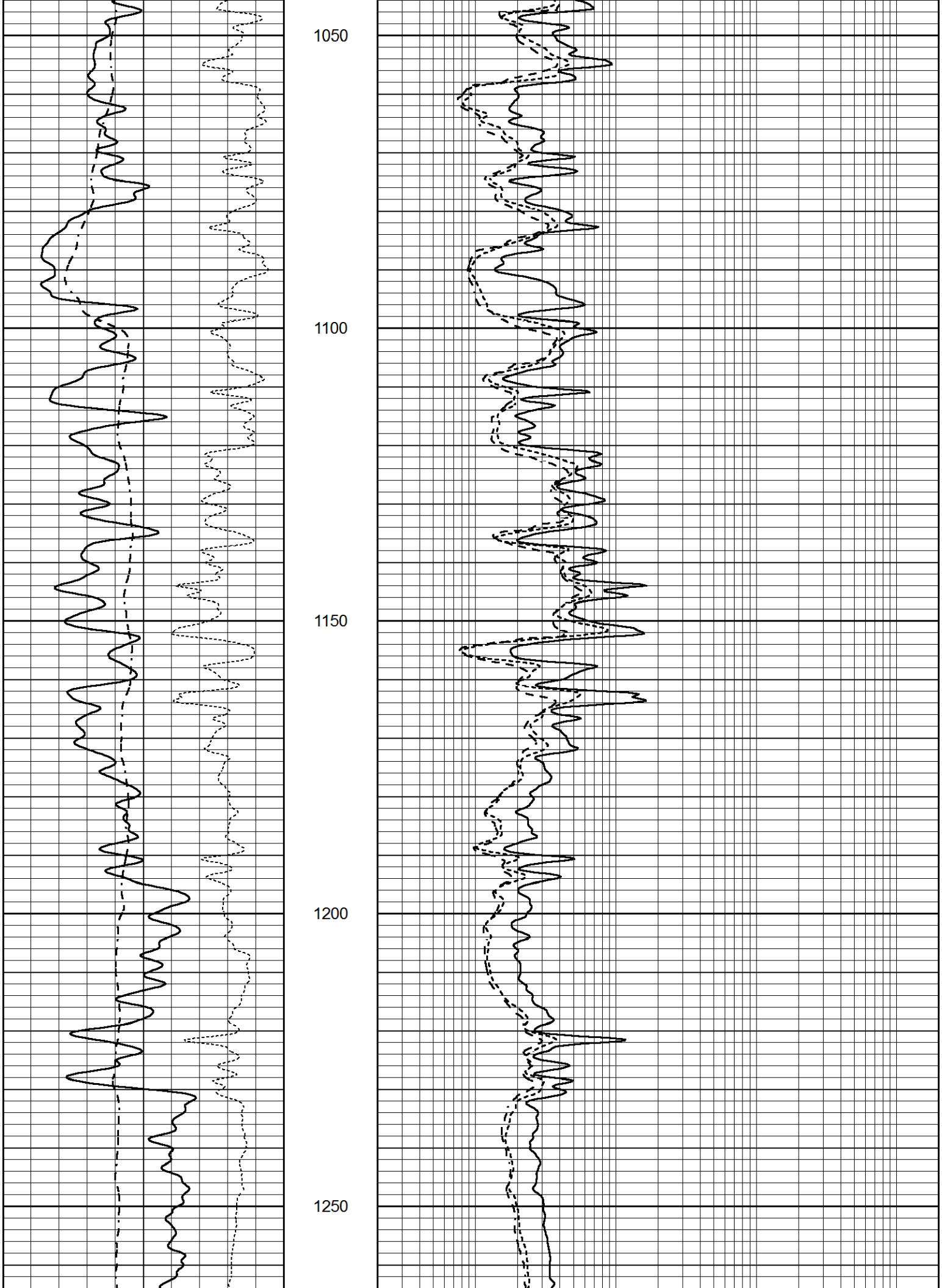


MAIN SECTION

Database File	4738pe.db
Dataset Pathname	pass3.1
Presentation Format	_dil
Dataset Creation	Sun Jun 07 06:54:10 2020
Charted by	Depth in Feet scaled 1:240

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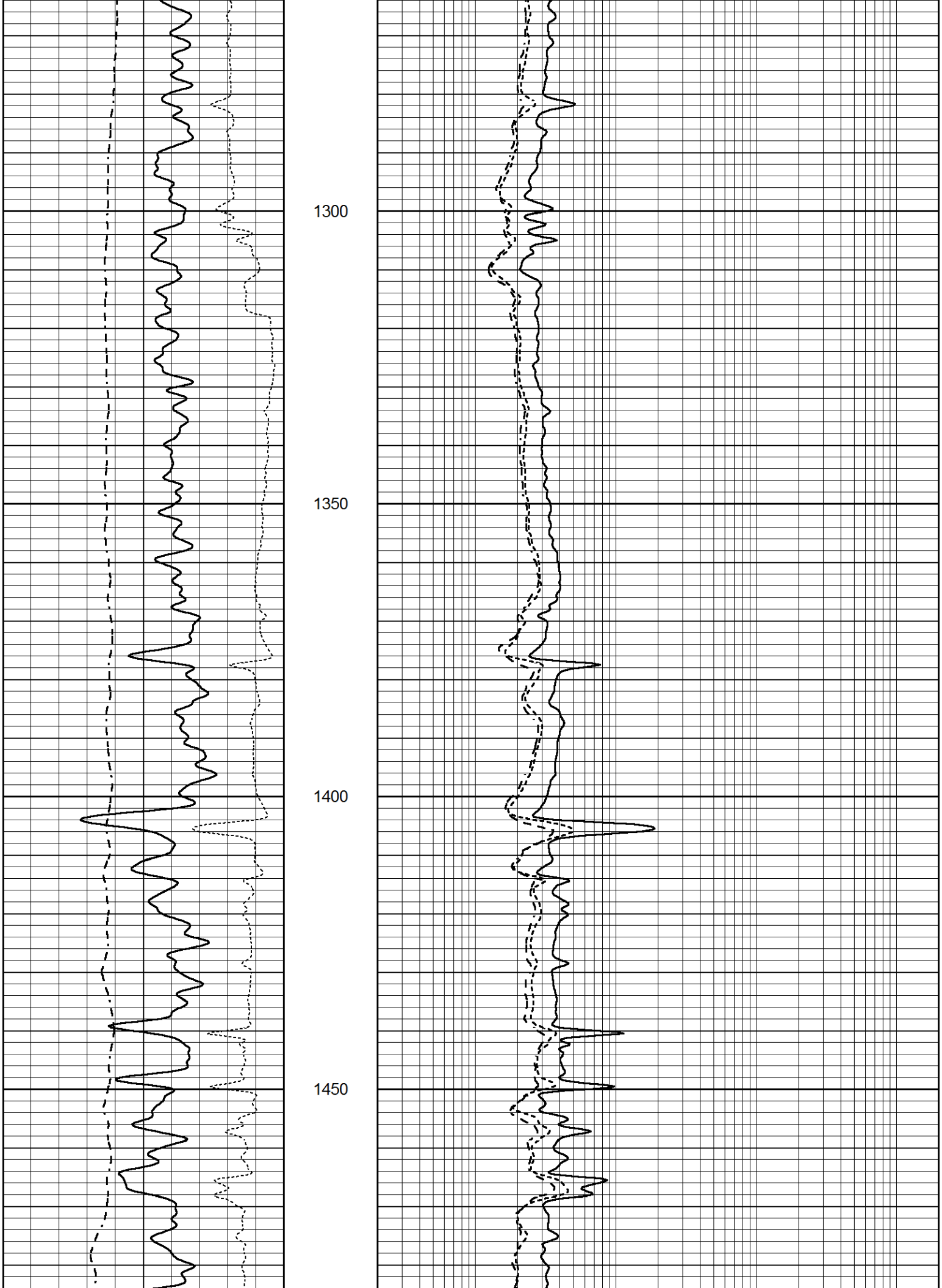
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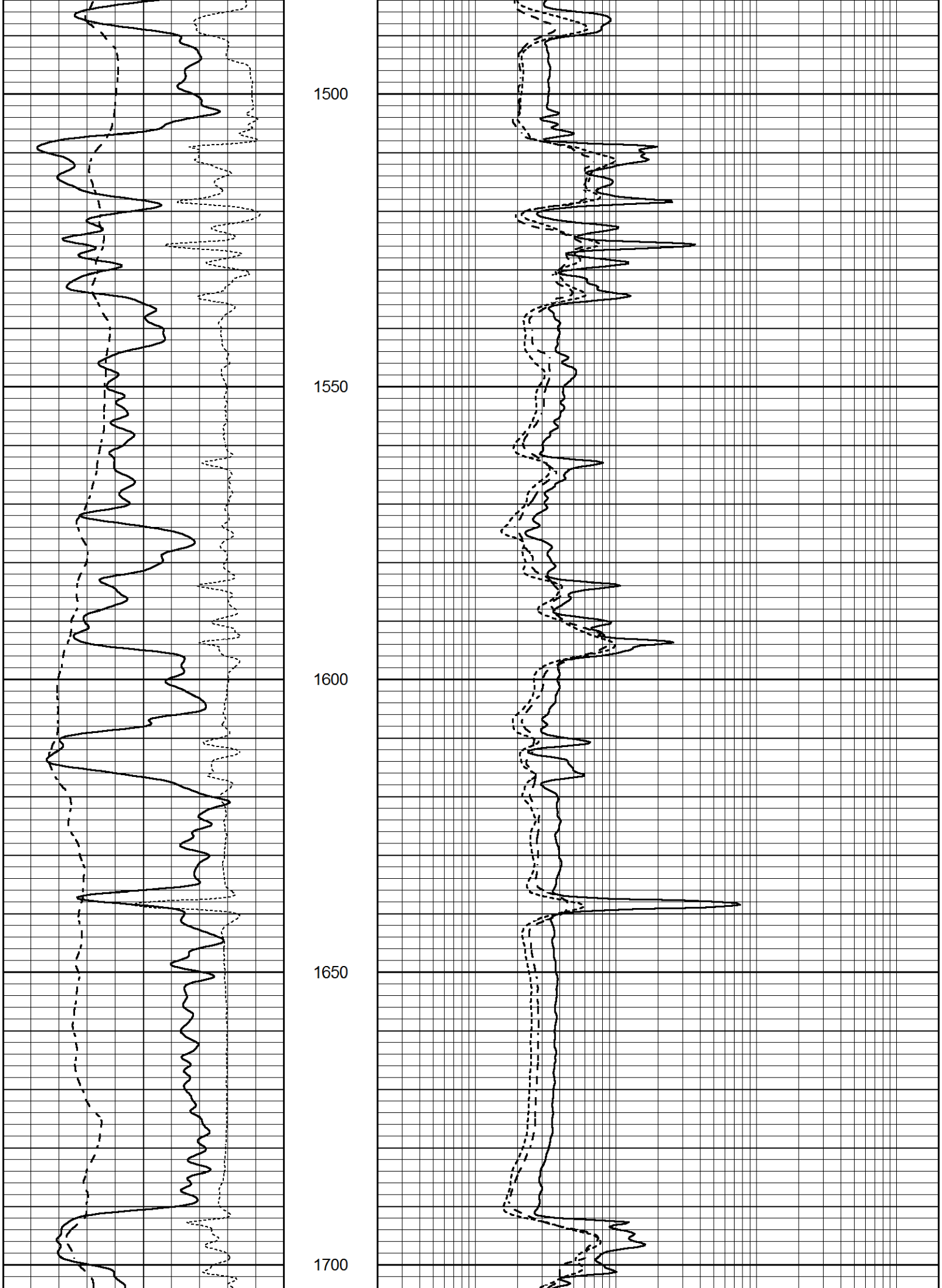
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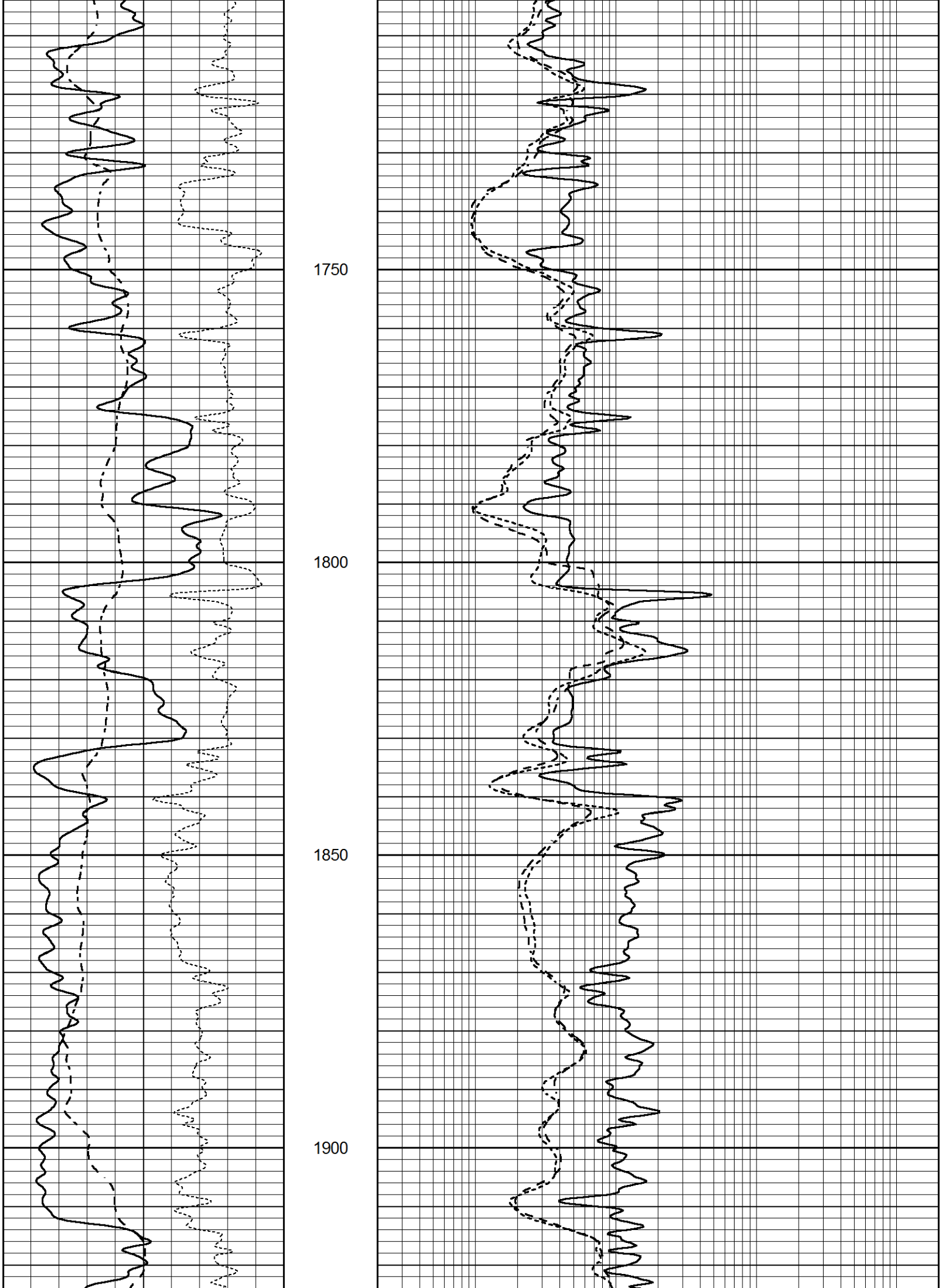
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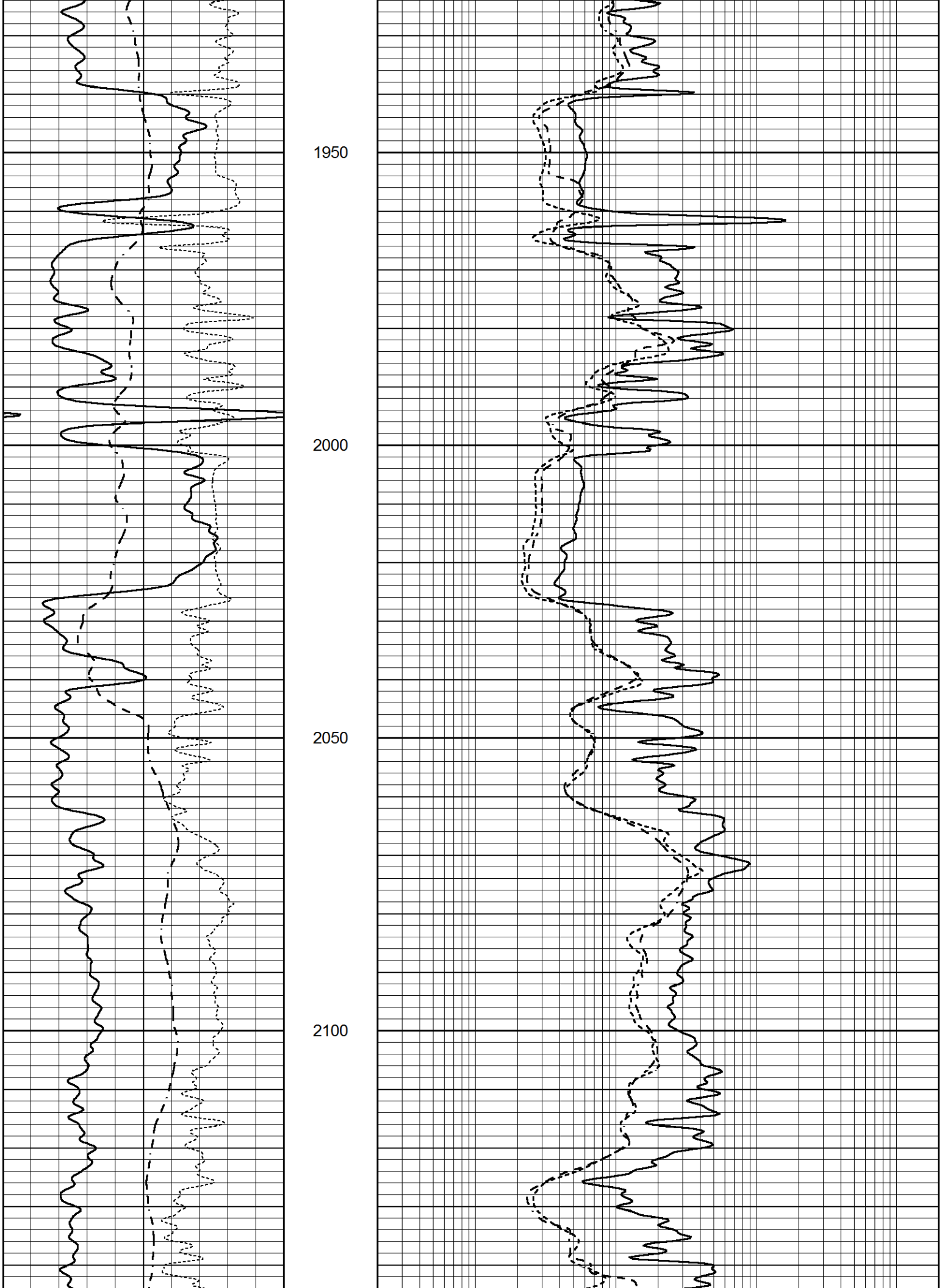
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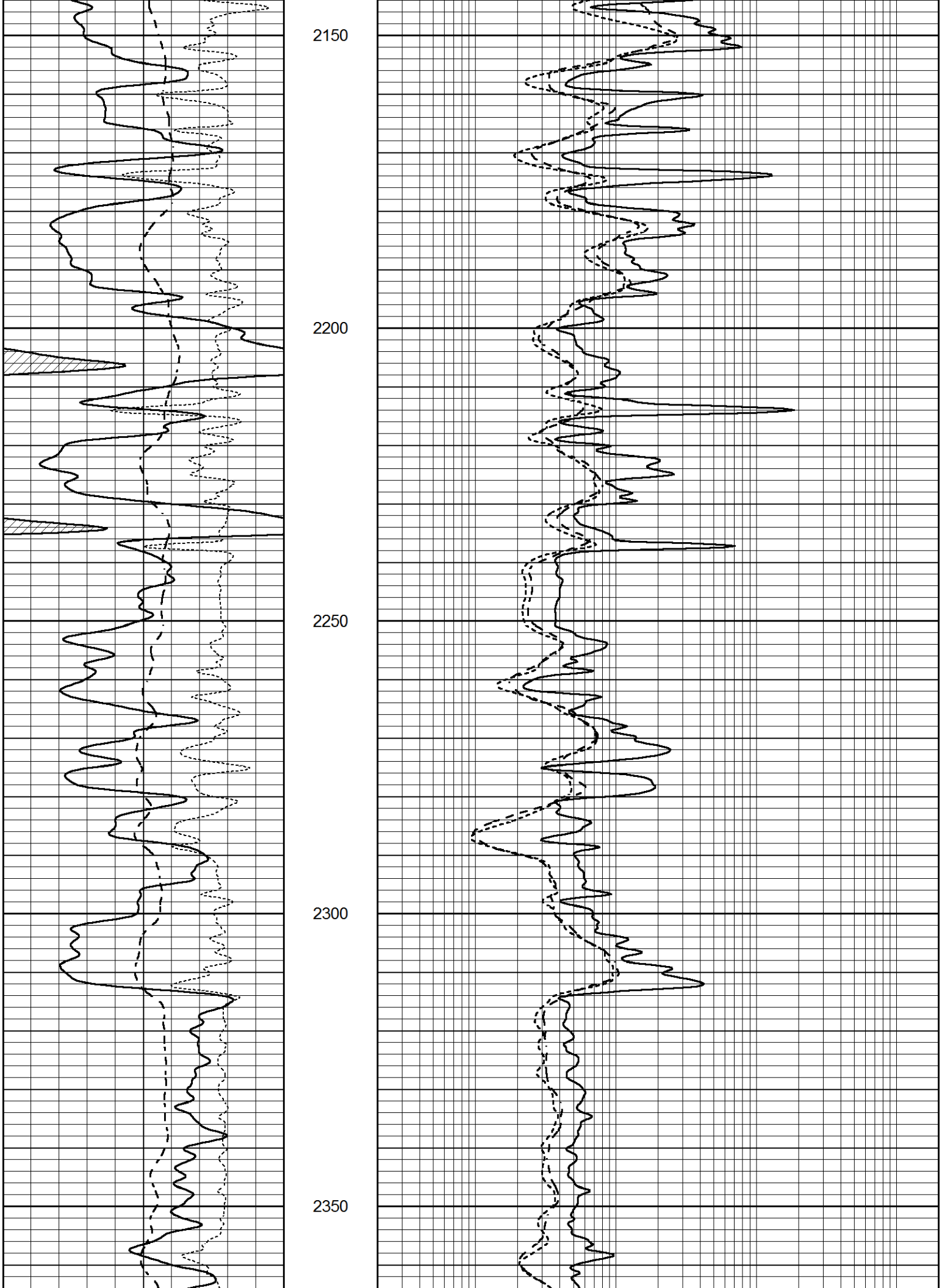
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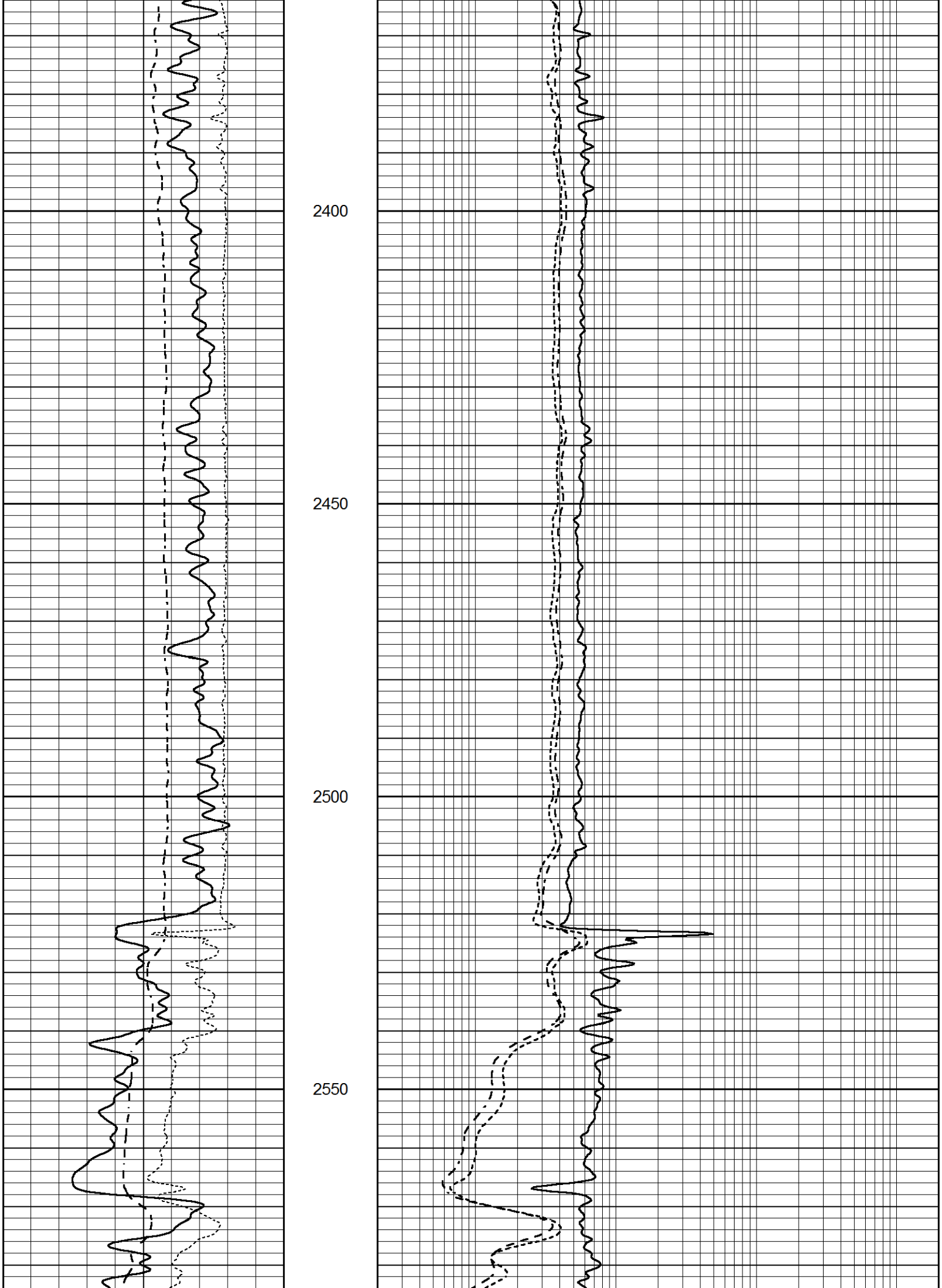
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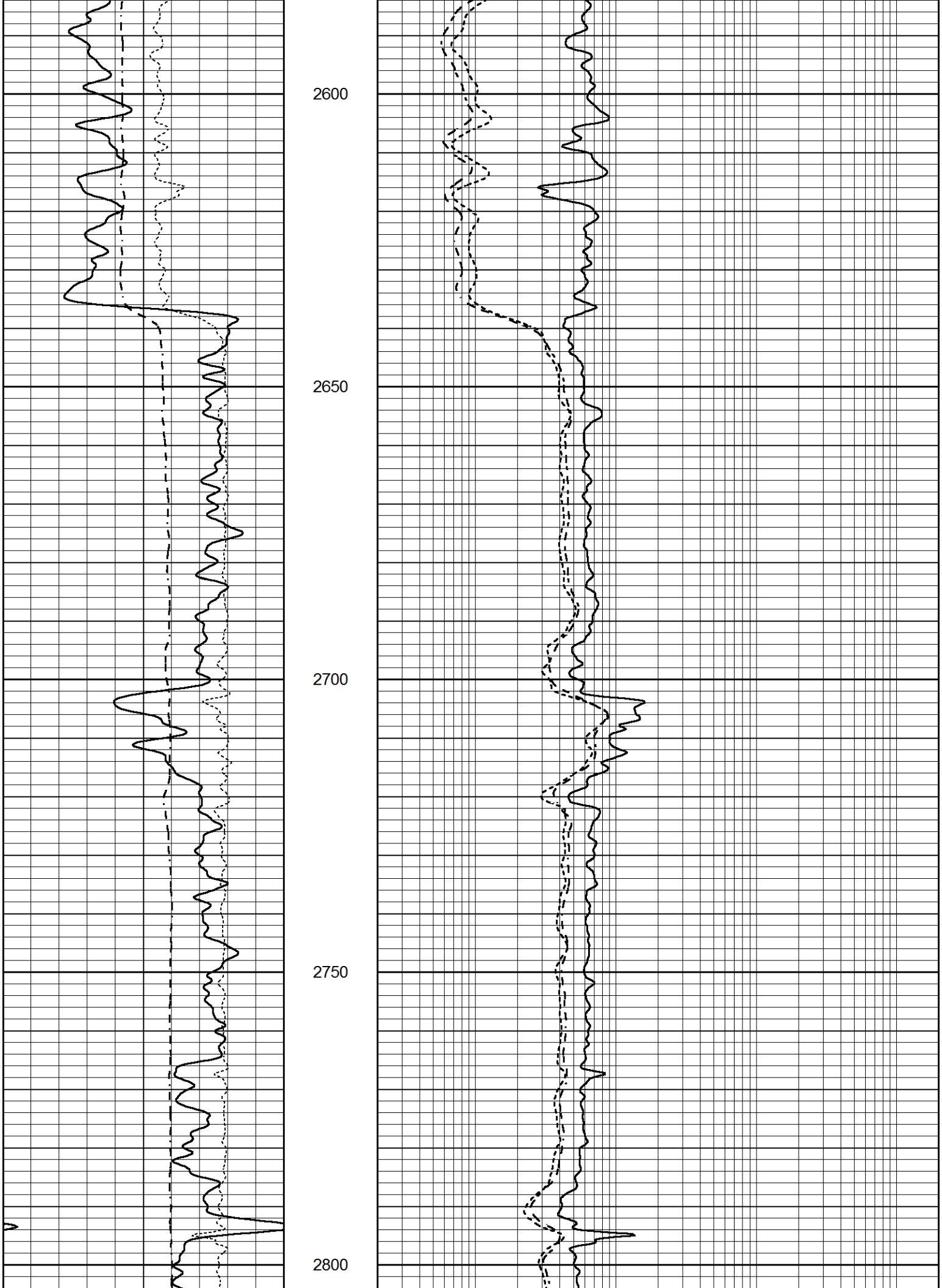
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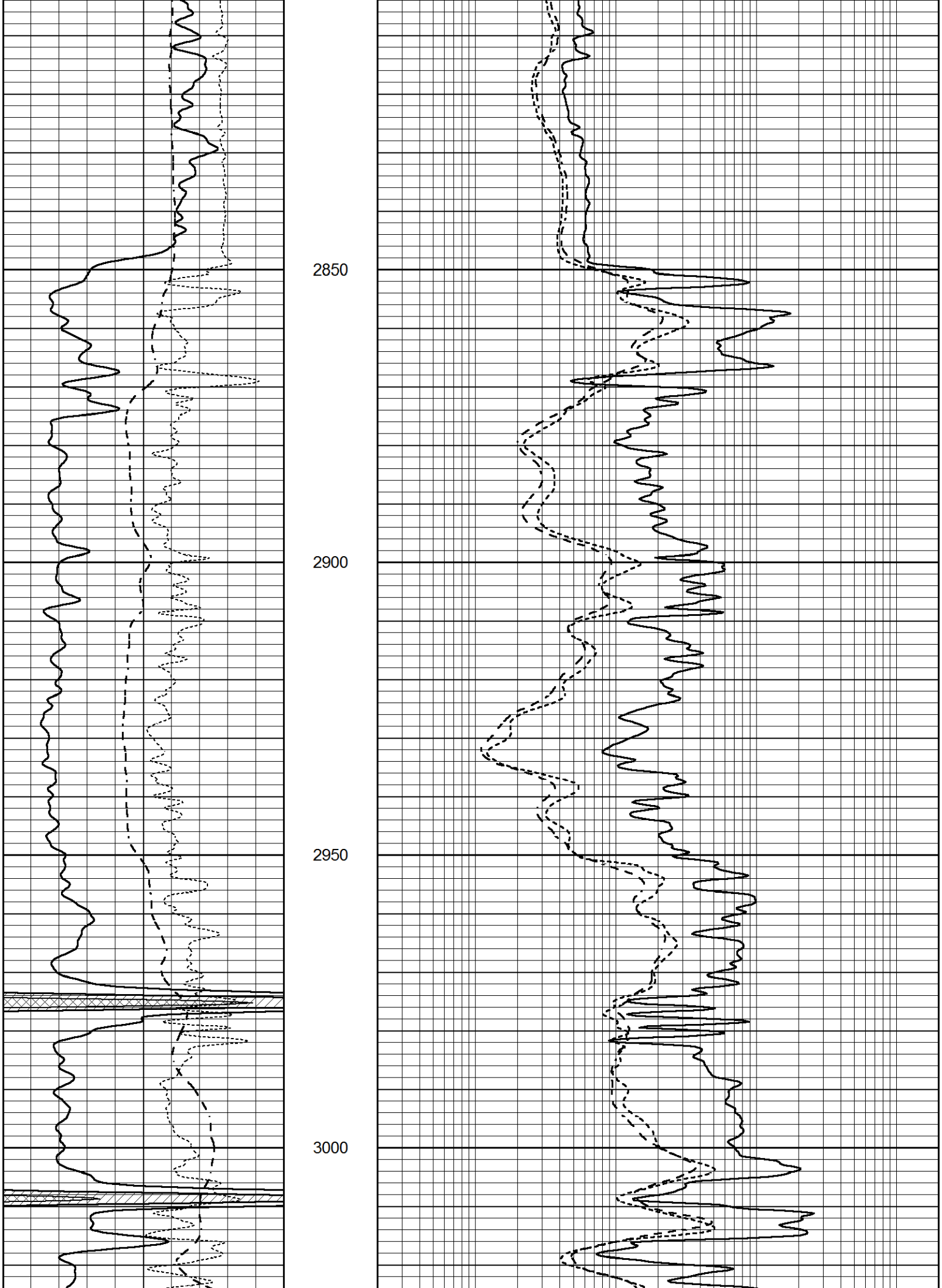
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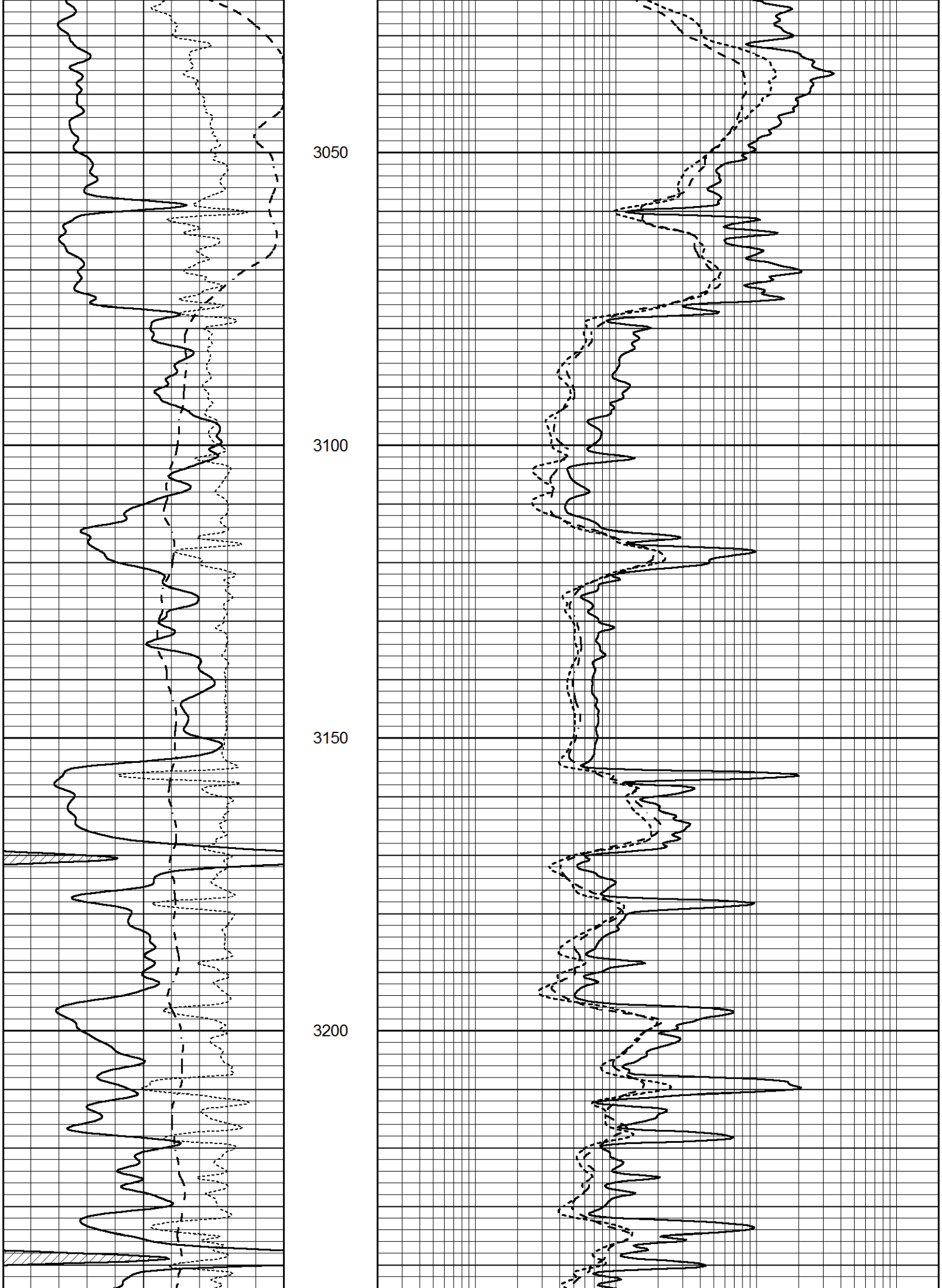
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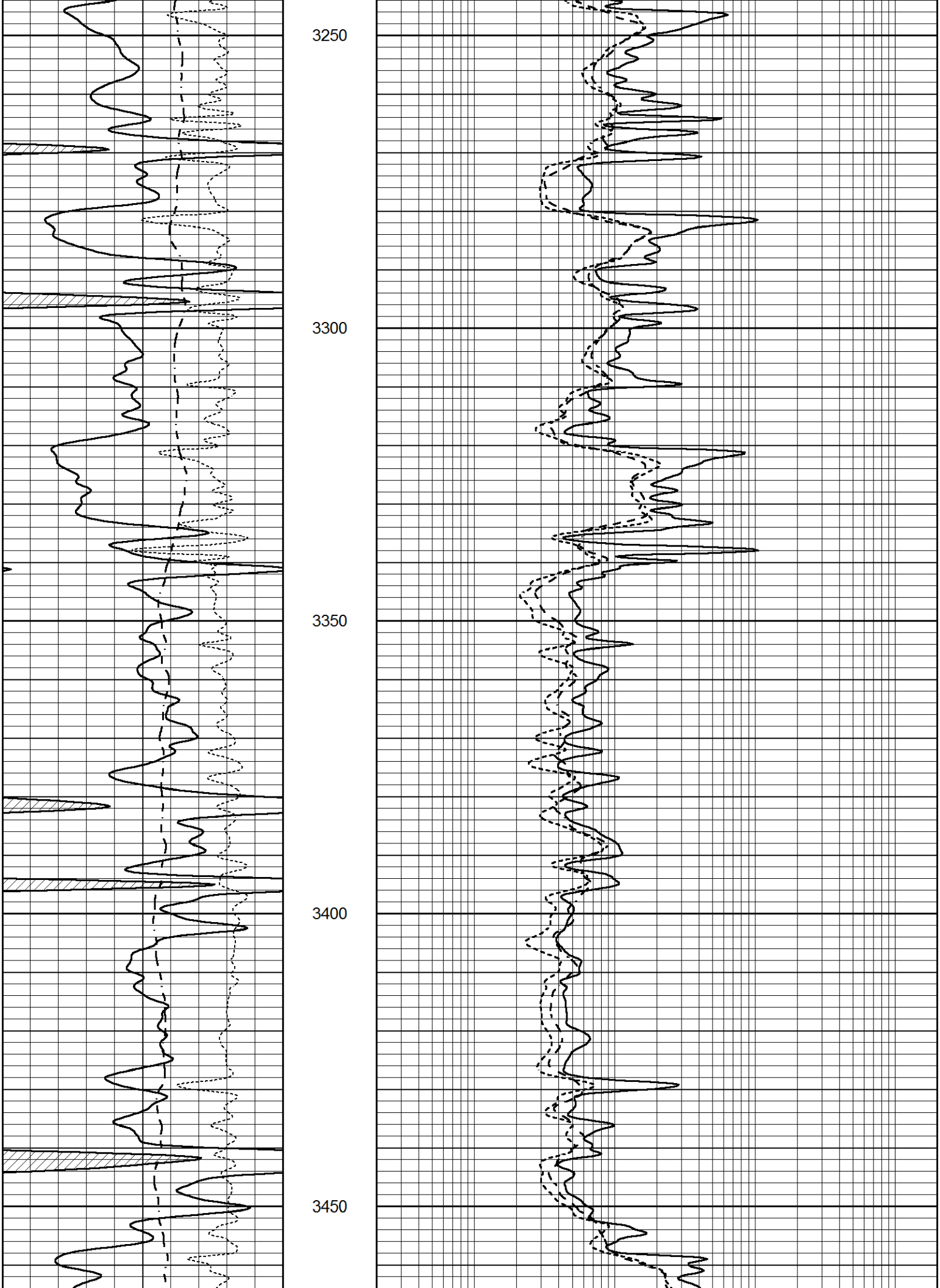
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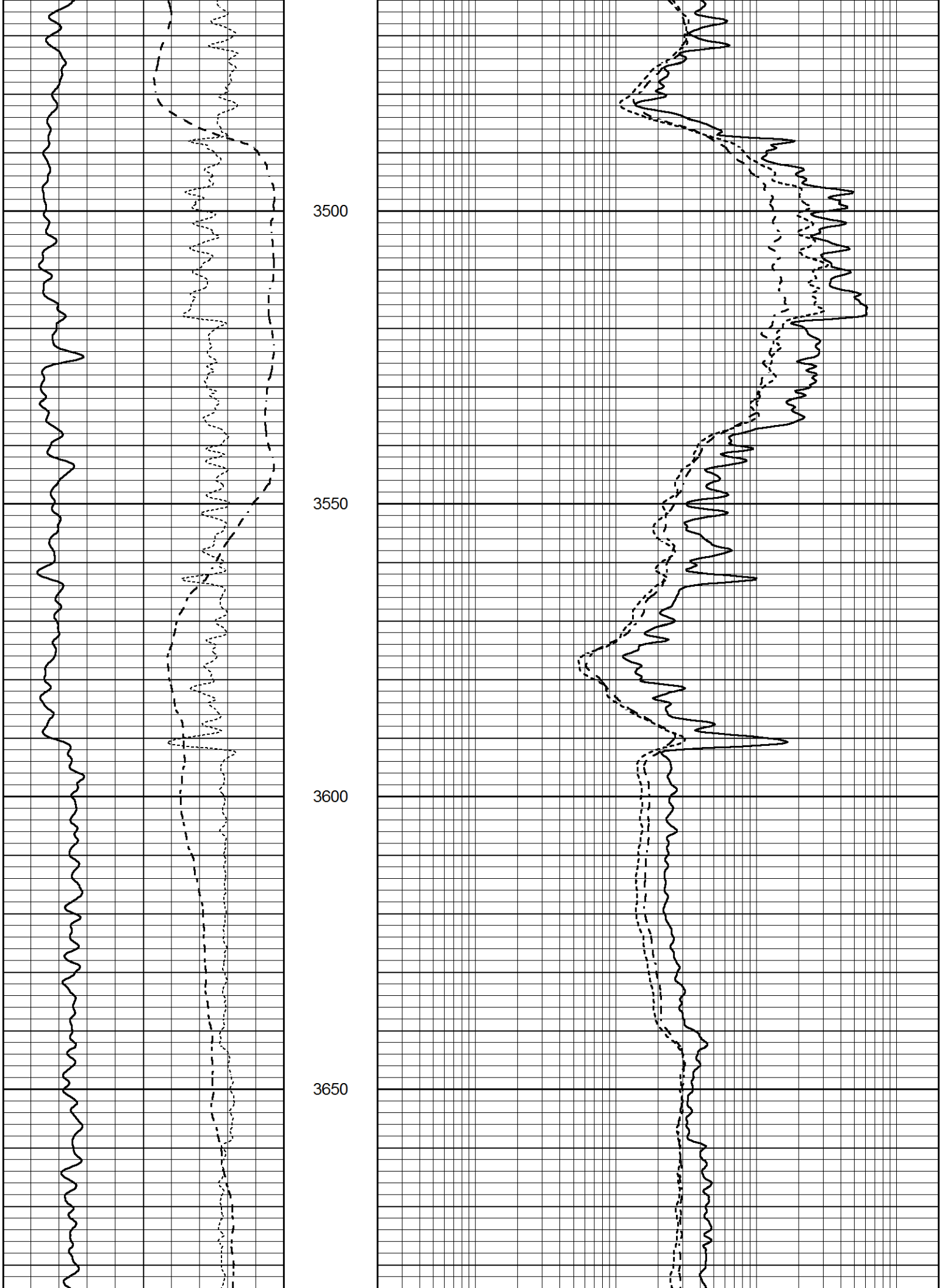
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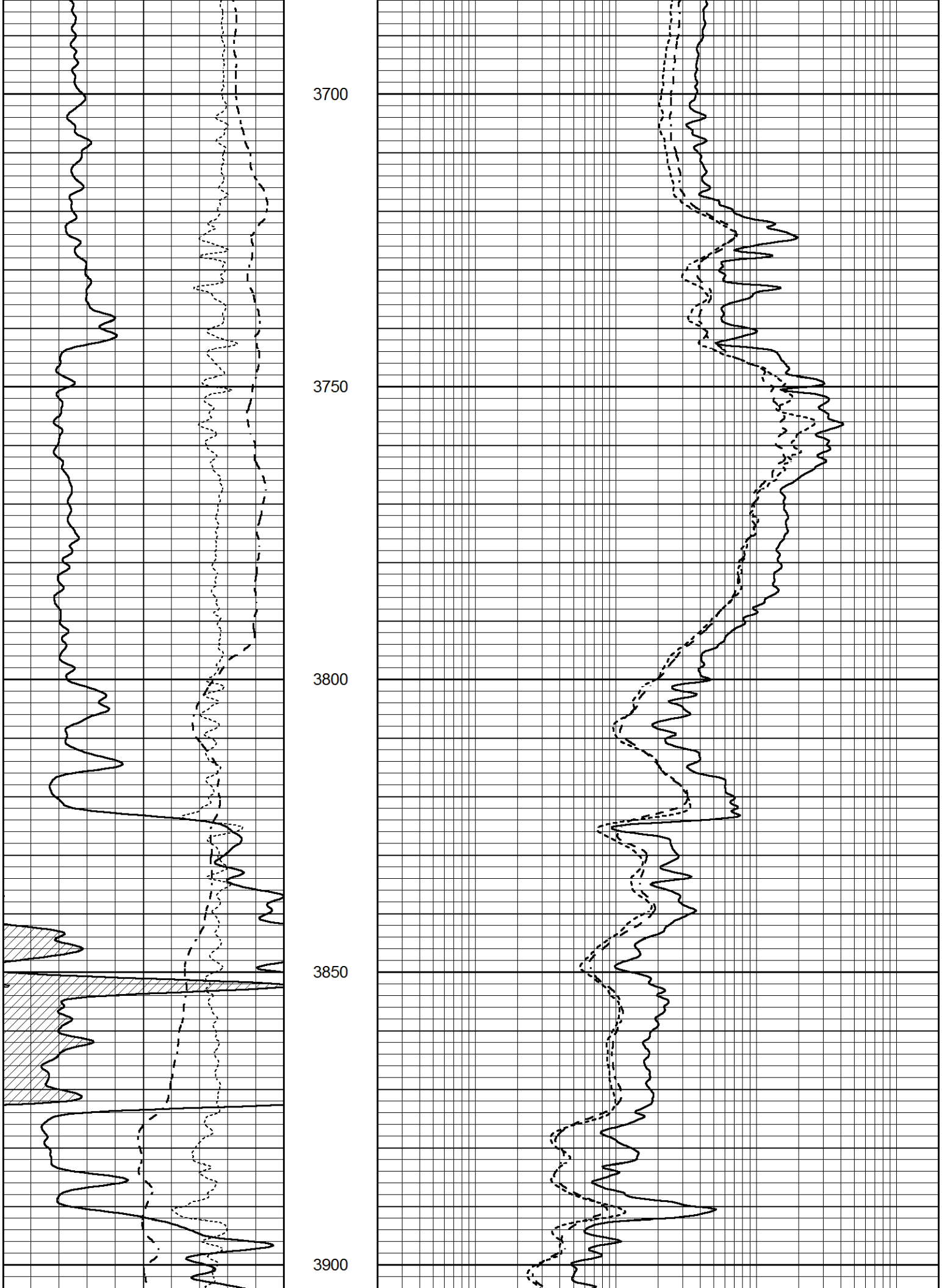
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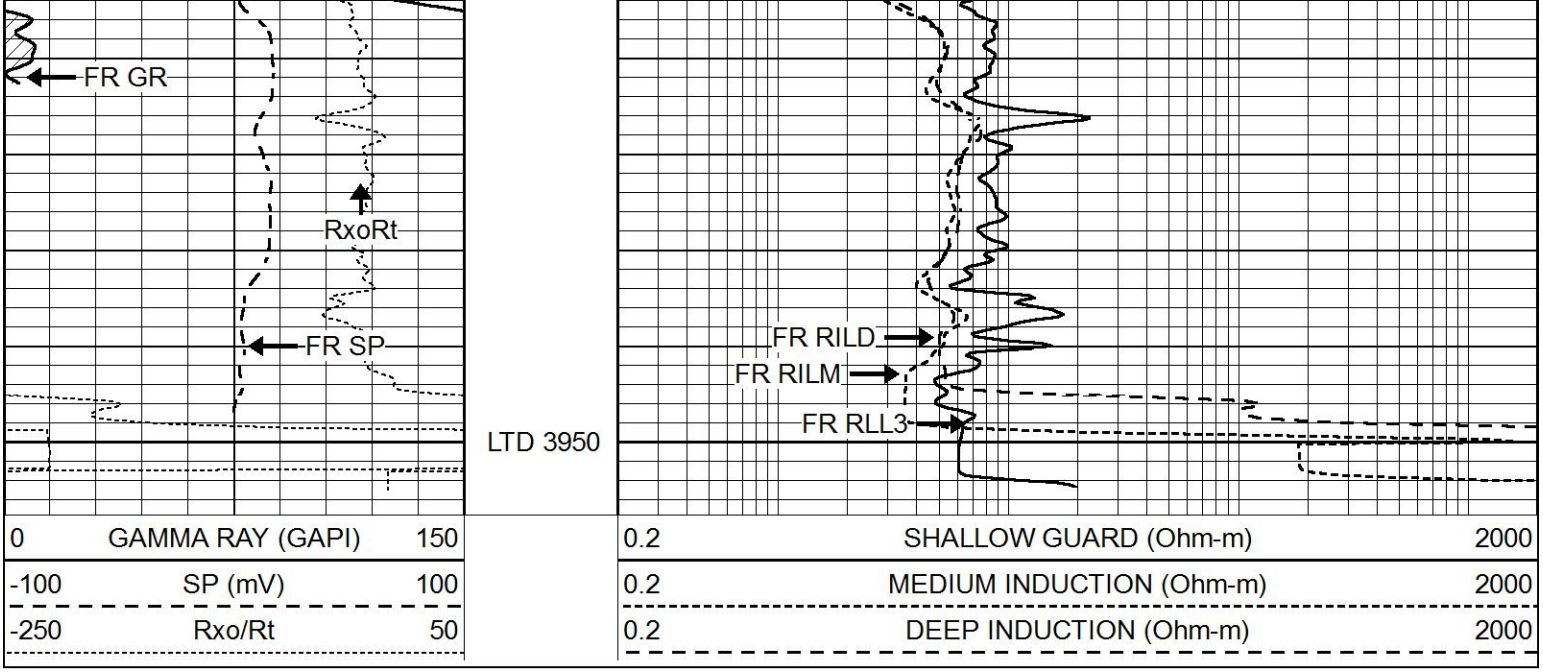
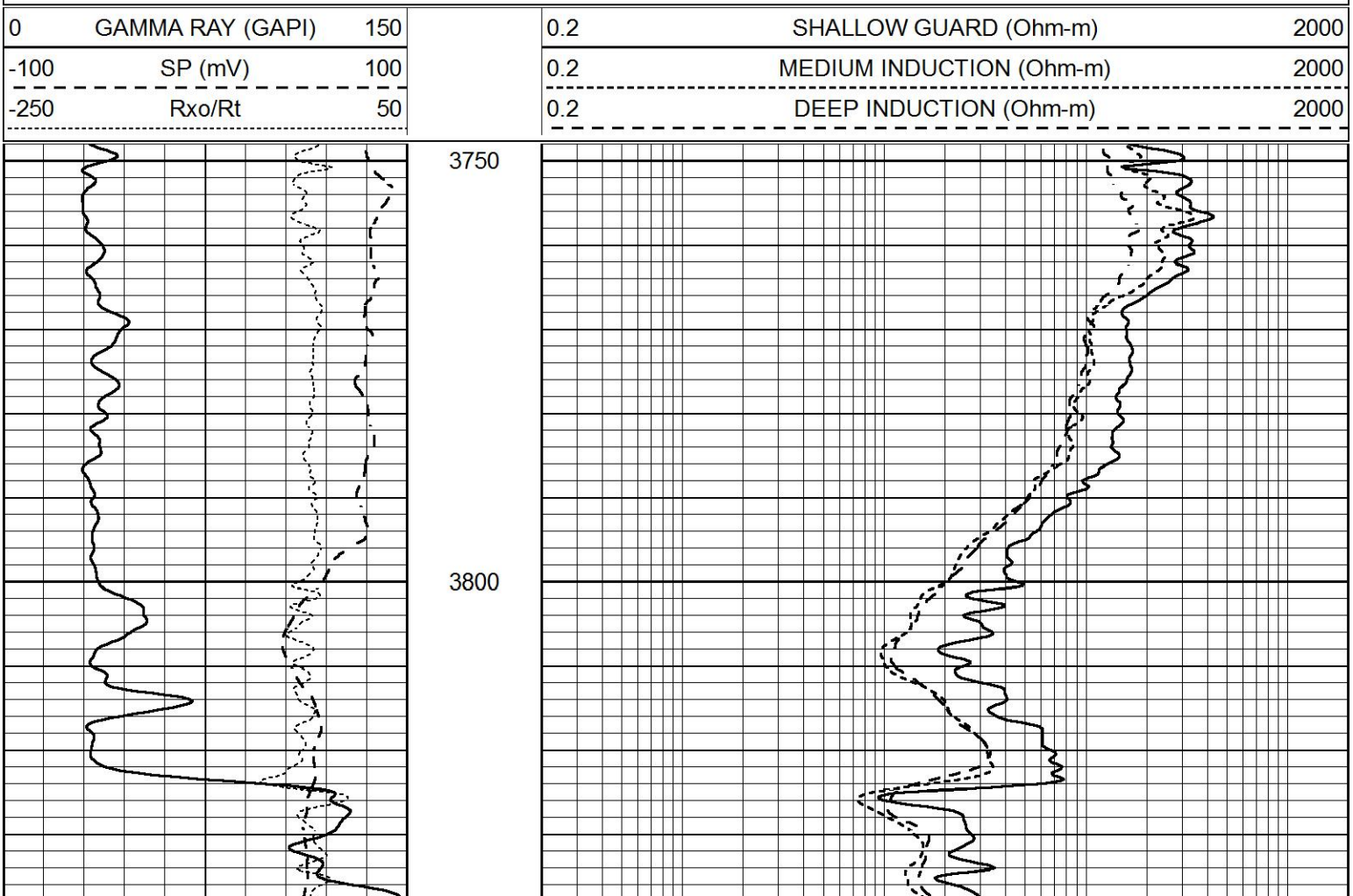
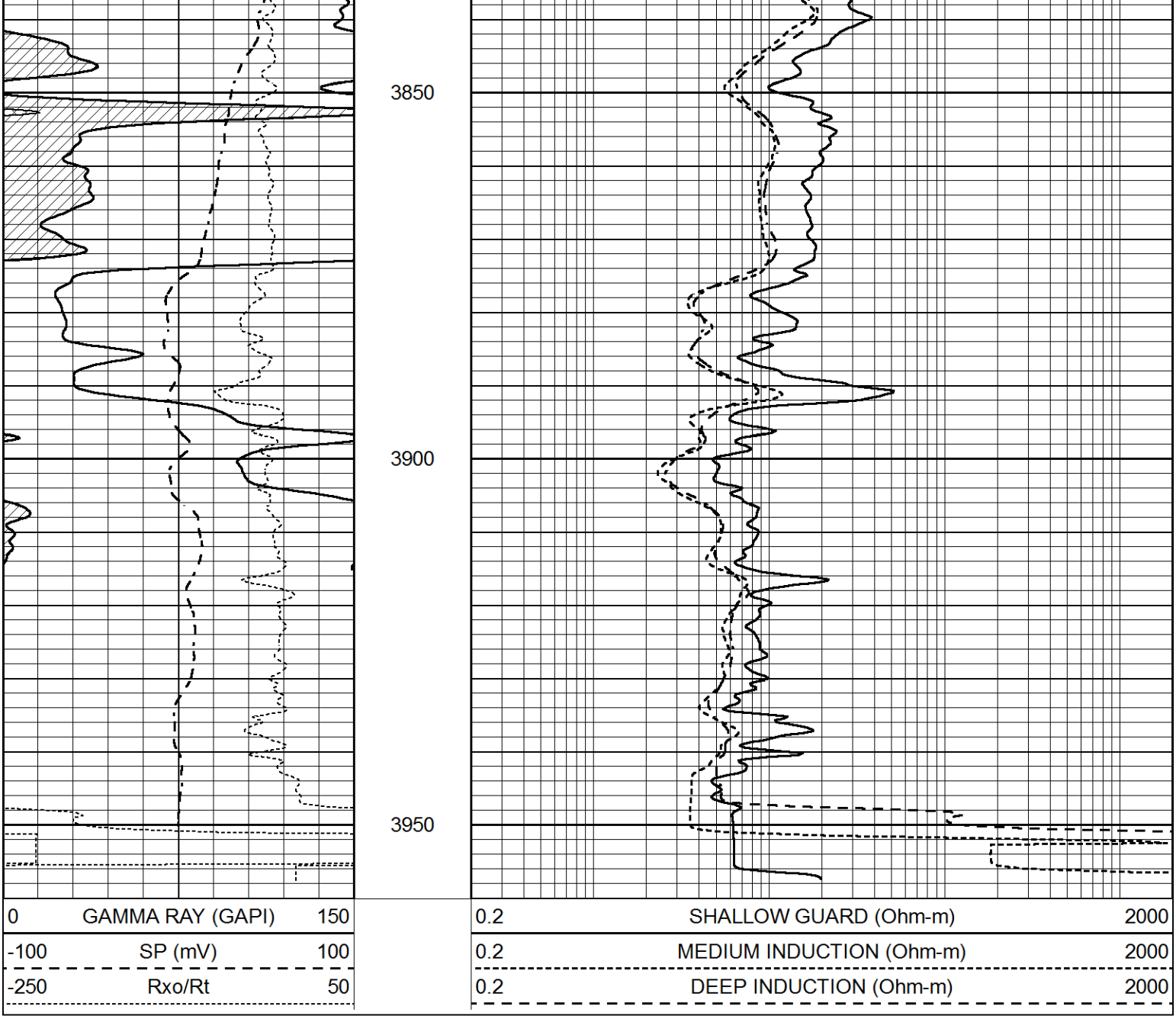


REPEAT SECTION

Database File	4738pe.db
Dataset Pathname	pass2.1
Presentation Format	_dil
Dataset Creation	Sun Jun 07 04:40:17 2020
Charted by	Depth in Feet scaled 1:240





Calibration Report

Database File 4738pe.db
Dataset Pathname pass2.1
Dataset Creation Sun Jun 07 04:40:17 2020

Dual Induction Calibration Report

Serial-Model:	FW1410-55-Probe
Surface Cal Performed:	Tue Feb 19 11:44:18 2019
Downhole Cal Performed:	Tue Feb 19 11:44:24 2019
After Survey Verification Performed:	Tue Feb 19 11:44:27 2019

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595

Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report

Serial: 140703
Model: V4_10P
Source Number: 74GBq-19

Master Calibration — Performed: Thu May 21 10:43:15 2020

	Background	Aluminum	Magnesium	
Window 1	531.08	5459.71	23833.72	cps
Window 2	42.08	1230.06	5814.64	cps
Window 4	232.81	1236.34	5296.40	cps
Window 5	564.62	8687.43	16546.07	cps
Window 6	44.20	1453.03	2846.27	cps
Window 8	270.67	2786.28	5209.33	cps
Bulk Density	-	2.6020	1.6830	g/cc
Pe	-	3.0000	2.5070	b/e

LS Alpha:	: -1.8459	SS Alpha:	: -0.7701	LS CPE:	: 1.1427
LS Beta:	: 125609.8082	SS Beta:	: 19396.7594	SS CPE:	: 1.5007

Before Survey Backround Counts Verification — Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

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

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

Lithodensity Caliper Calibration — Performed: Thu May 21 10:43:15 2020

Results Readings		References (in)			
Low	High	Low	High	Gain	Offset
4564.4	7712.2	8.0	14.0	0.0	-1.1

Before Survey Caliper Verification — Performed:

	Reference	Reading
Caliper (in)		

After Survey Caliper Verification — Performed:

	Reference	Reading
Caliper (in)		

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

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: 7
Tool Model: Probe1
Performed: Tue Dec 10 10:02:55 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.4800 GAPI/cps