MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Murfin Drilling Company, Inc.
Well Weis A #1-14
Field
County Sheridan State Kansas
Location: API # : 15-179-21508-00-00
2135 FNL & 330 FWL
SEC 14 TWP 6S RGE 28W

Other Services: CNL/CDL, MEL/BHCS

Permanent Datum: Ground Level — Elevation 2730
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing

Elevation: K.B. 2735, D.F., G.L. 2730

Company Murfin Drilling Company, Inc.
Well Weis A #1-14
Field
County Sheridan
State Kansas

Date	8/1/2024			
Run Number	One			
Depth Driller	4200			
Depth Logger	4193			
Bottom Logged Interval	4192			
Top Log Interval	0			
Casing Driller	8.625 @ 263			
Casing Logger	261			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	1300			
Density / Viscosity	9.3 / 59			
pH / Fluid Loss	10.5 / 6.4			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	1.10 @ 88			
Rmf @ Meas. Temp	0.83 @ 88			
Rmc @ Meas. Temp	1.49 @ 88			
Source of Rmf / Rmc	CHARTS			
Rm @ BHT	0.82 @ 118			
Operating Rig Time	5 Hours			
Max Rec. Temp. F	118			
Equipment Number	110			
Location	HAYS			
Recorded By	D. Schmidt			
Witnessed By	Jeison Rodiriquez			

<<< Fold Here >>>

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

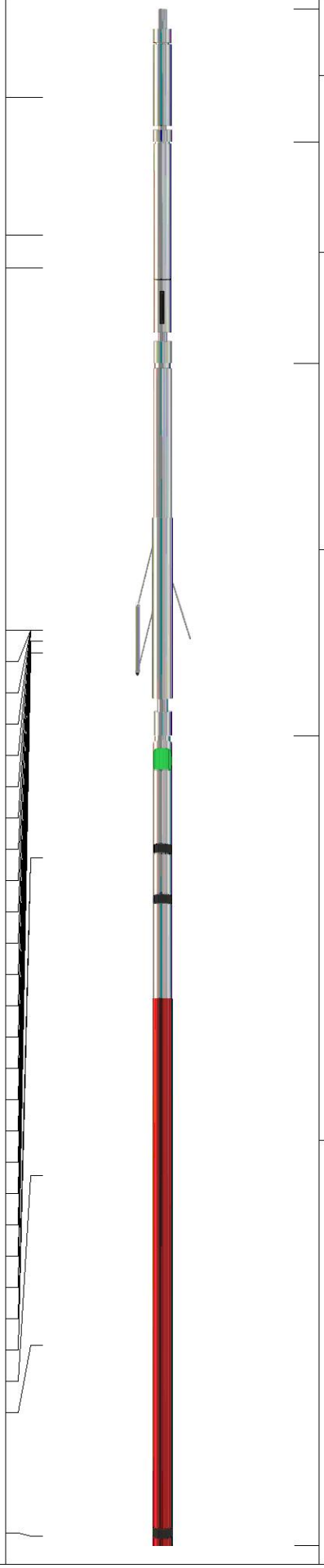
Hoxie,
North to 120th, 1 East, 1/2 North,
East into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew	This Log Record Was Witnessed By
Engineer: D. Schmidt	Primary Witness: Jeison Rodiriquez
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	32.65		GR-M&W (105)	3.00	3.50	50.00
CNLSC	29.55		CNT-M&W (210)	5.00	3.50	100.00
CNSSC	28.80					
			MWLith-STEP LITHO Short (703-03)	8.40	5.00	250.00
LCAL	20.63					
LLW8N	20.63					
LLW7N	20.63					
LLW6N	20.63					
LLW5N	20.63					
LLW4N	20.63					
LLW3N	20.63					
LLW2N	20.63					
LLW1N	20.63					
LSLOCK	20.38					
LLLOCK	20.38					
PELTMPR	20.38					
LSHVNG	20.38					
LLHVNG	20.38					
LSW8N	20.13					
LSW7N	20.13					
LSW6N	20.13		DIL-M&W (506)	18.25	3.50	220.00
LSW5N	20.13					
LSW4N	20.13					
LSW3N	20.13					
LSW2N	20.13					
LSW1N	20.13					
RLL3F	15.50					
RLL3	15.50					
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset:	murfin_weis a 1-14.db: field/well/stack/pass3.1
Total length:	34.65 ft
Total weight:	620.00 lb
O.D.:	5.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\murfin_weis a 1-14.db
Dataset field/well/stack/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	118	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	0	-12	150	90	Off	4193

Variable Description

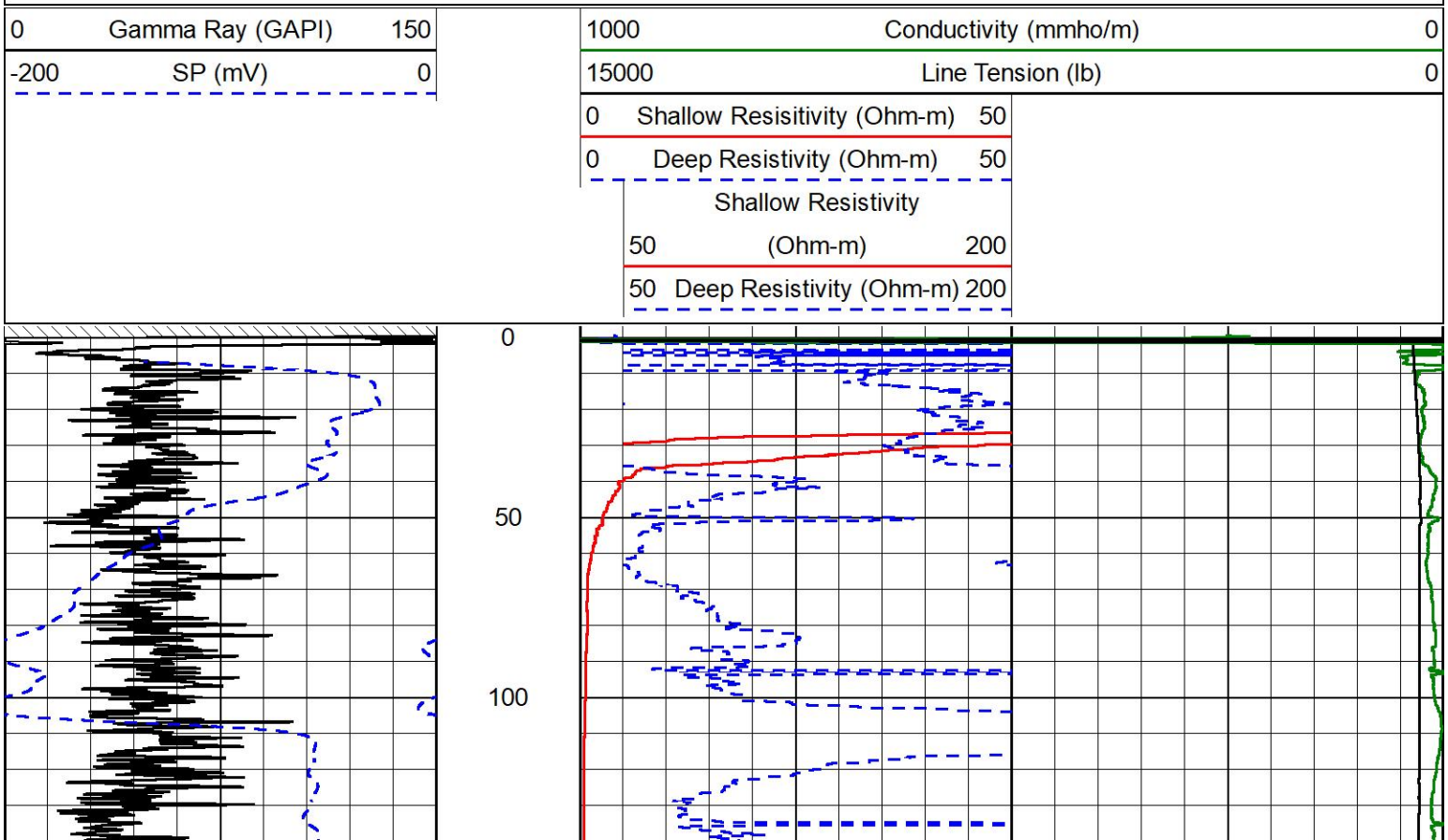
A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth

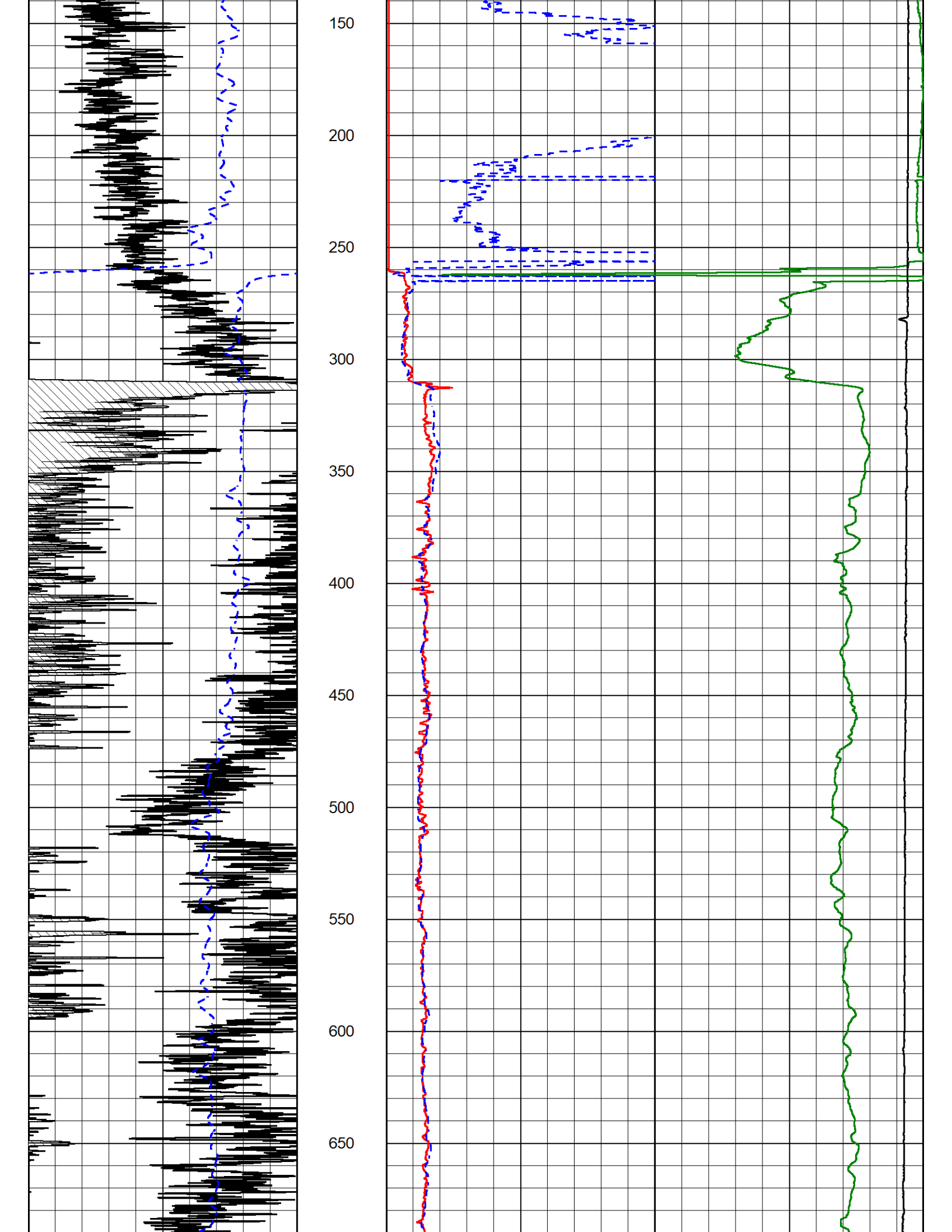
MIDWEST WIRELINE

2" SCALE RESISTIVITY

MAIN PASS

Database File	murfin_weis a 1-14.db
Dataset Pathname	stack/pass3.3
Presentation Format	_dil2in
Dataset Creation	Fri Aug 02 01:14:38 2024
Charted by	Depth in Feet scaled 1:600

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600
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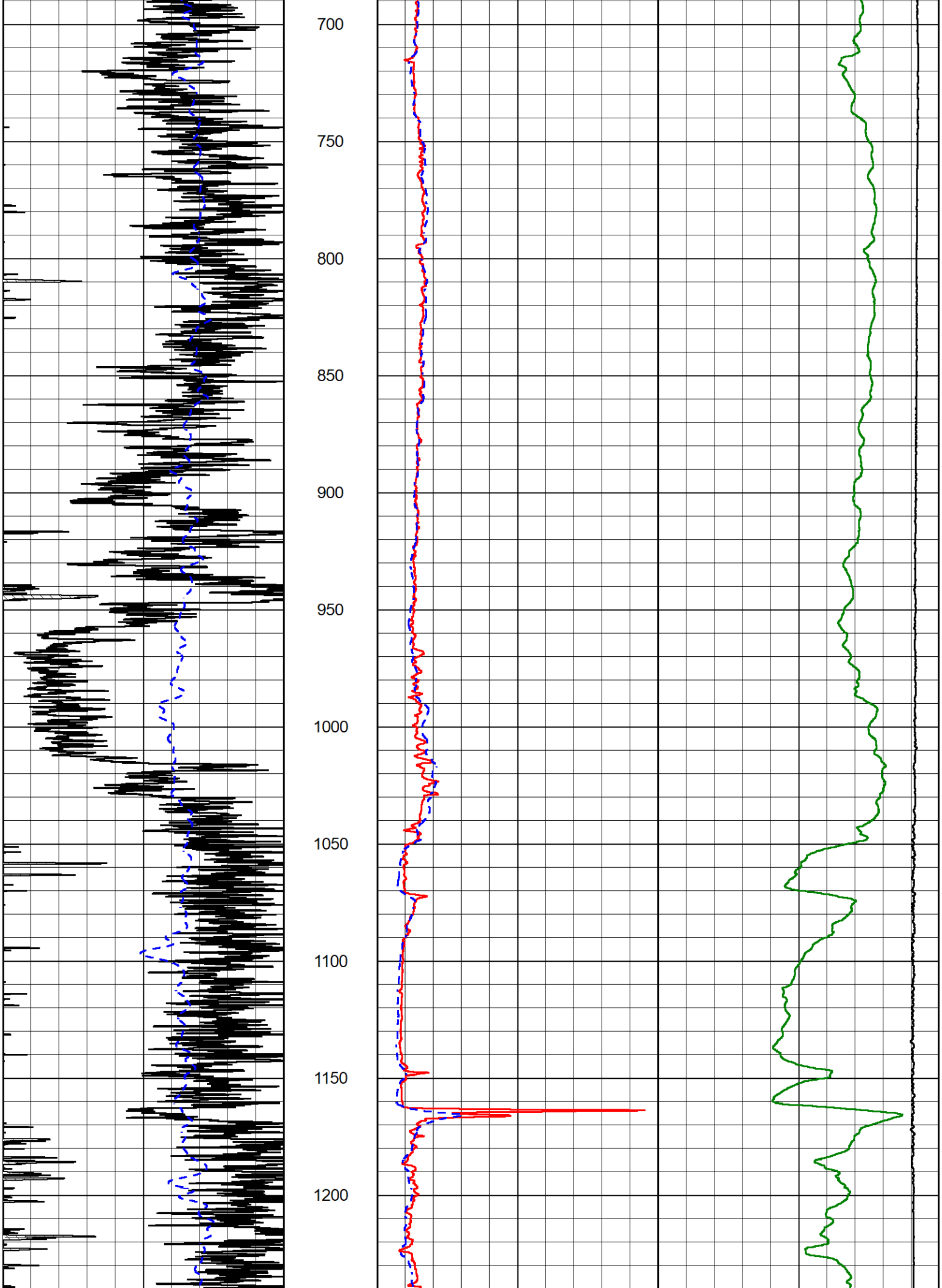
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1100
1150
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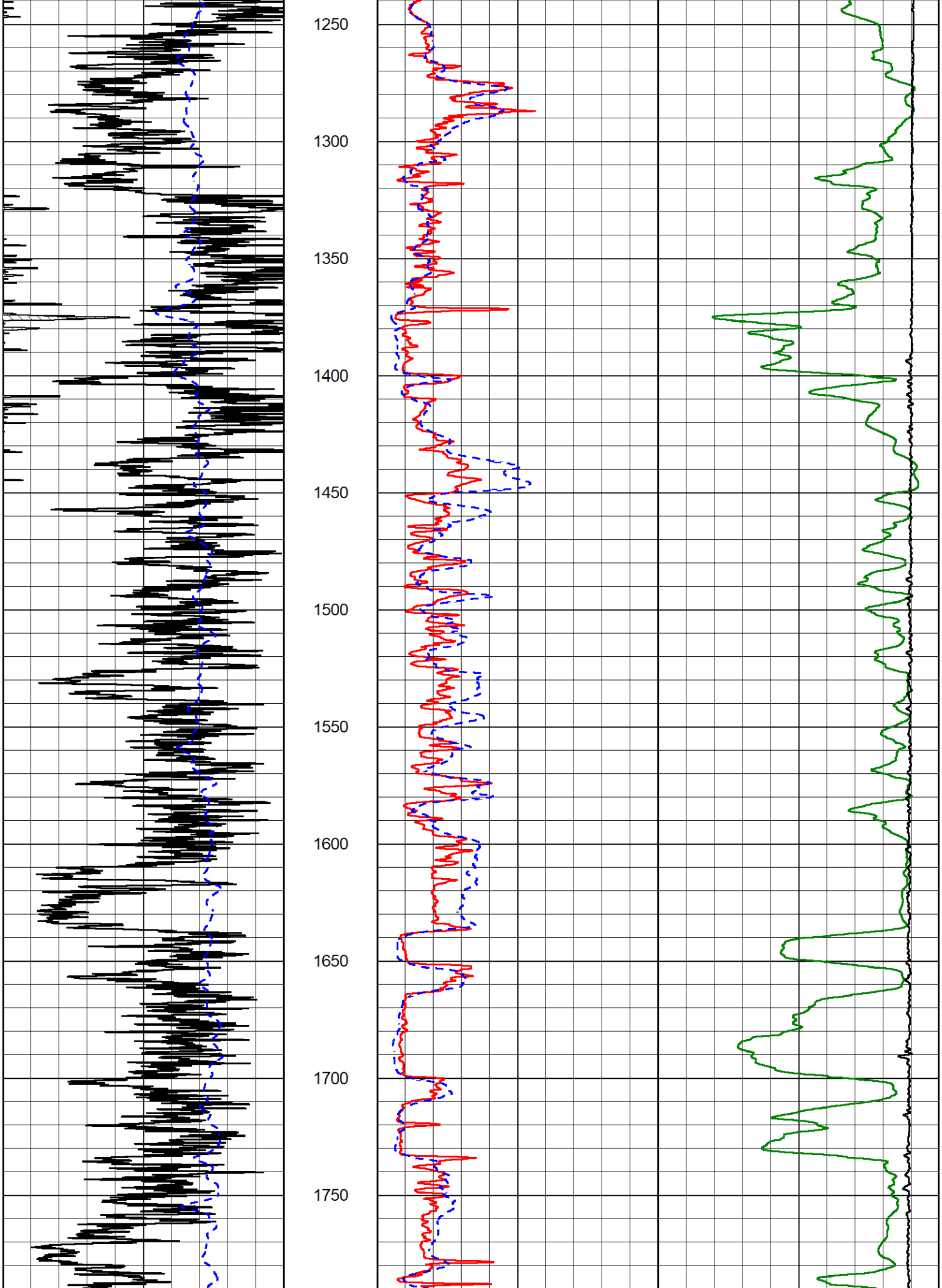
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1550
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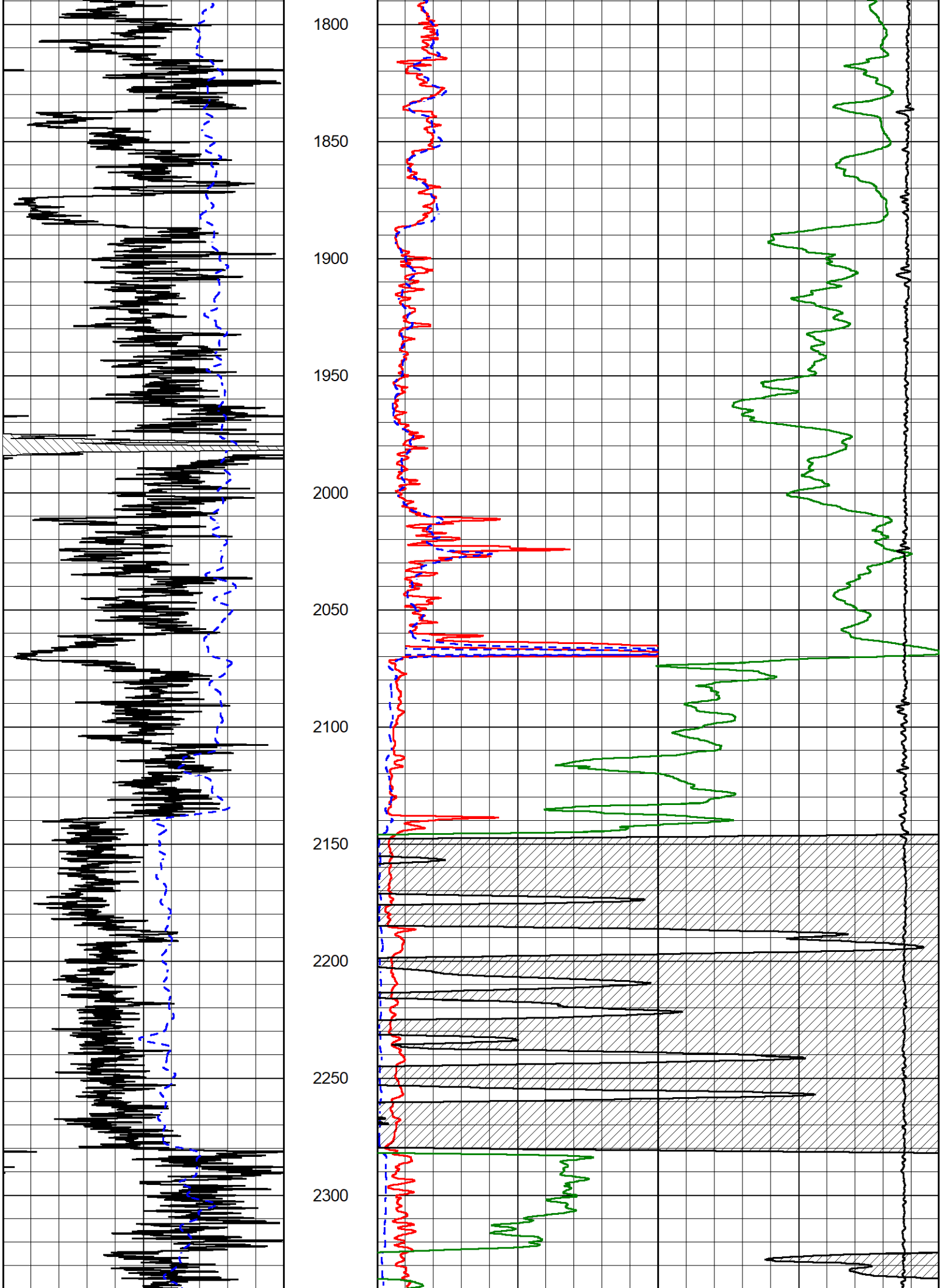
1650
1700
1750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2200
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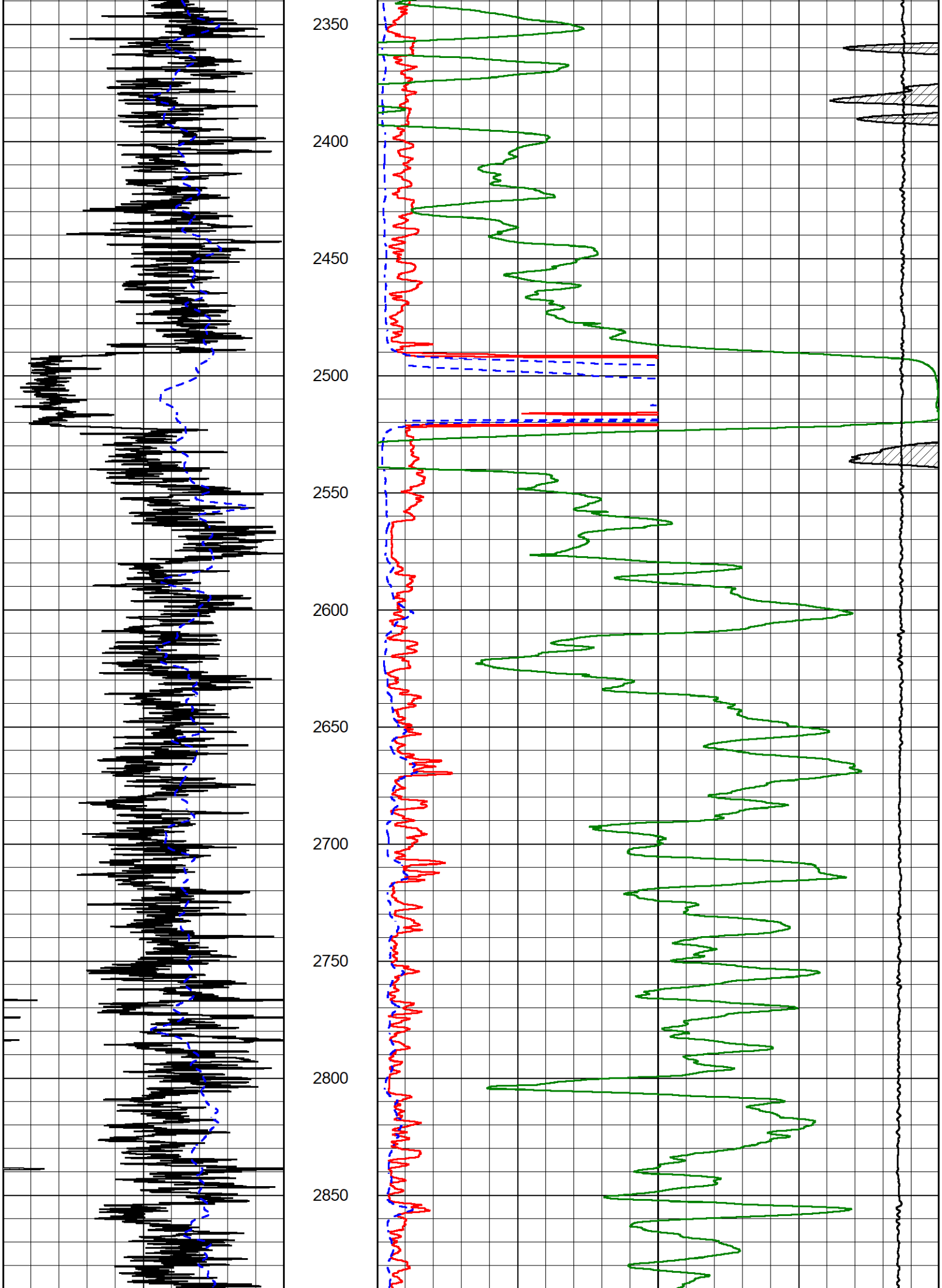
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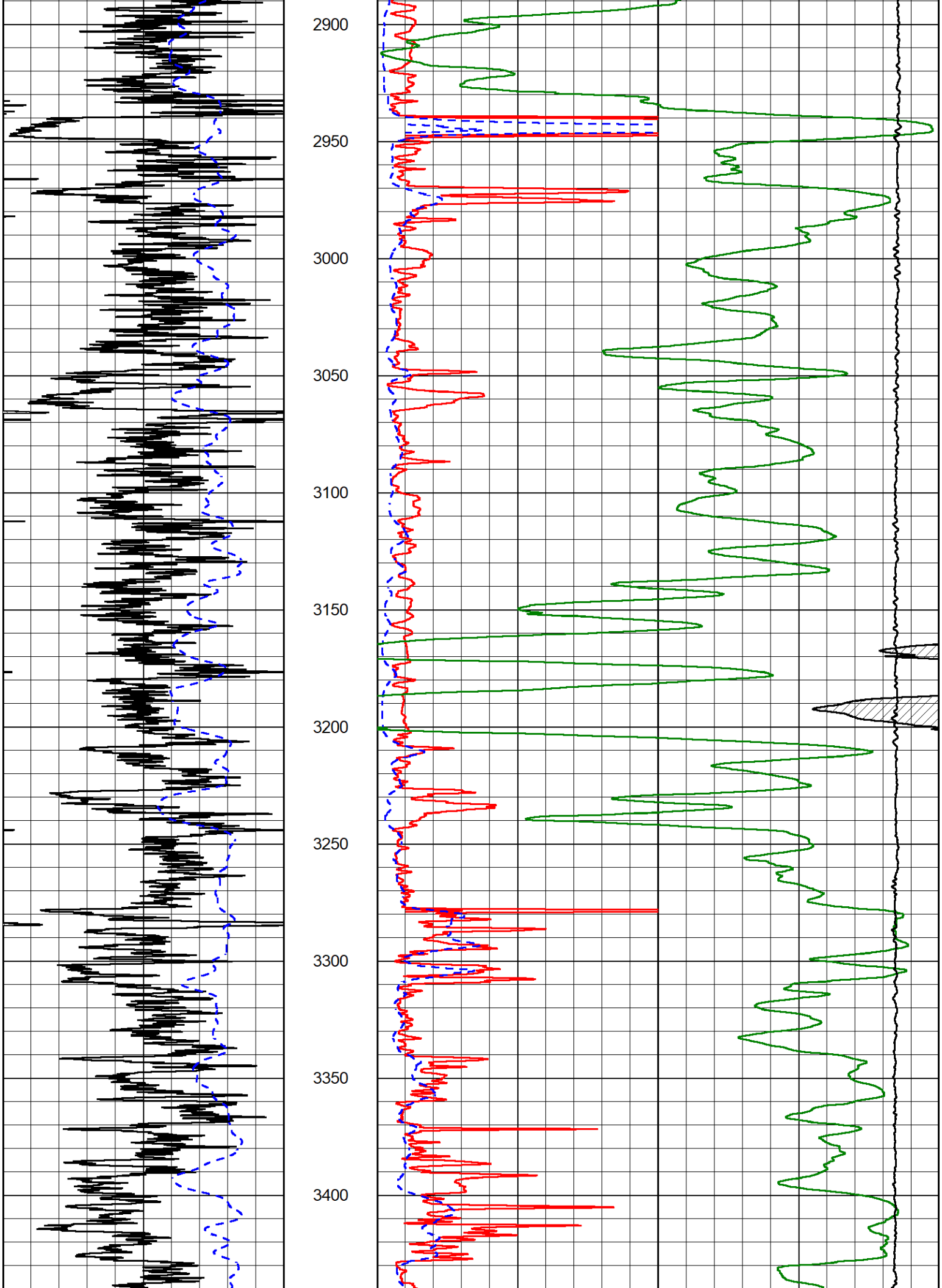
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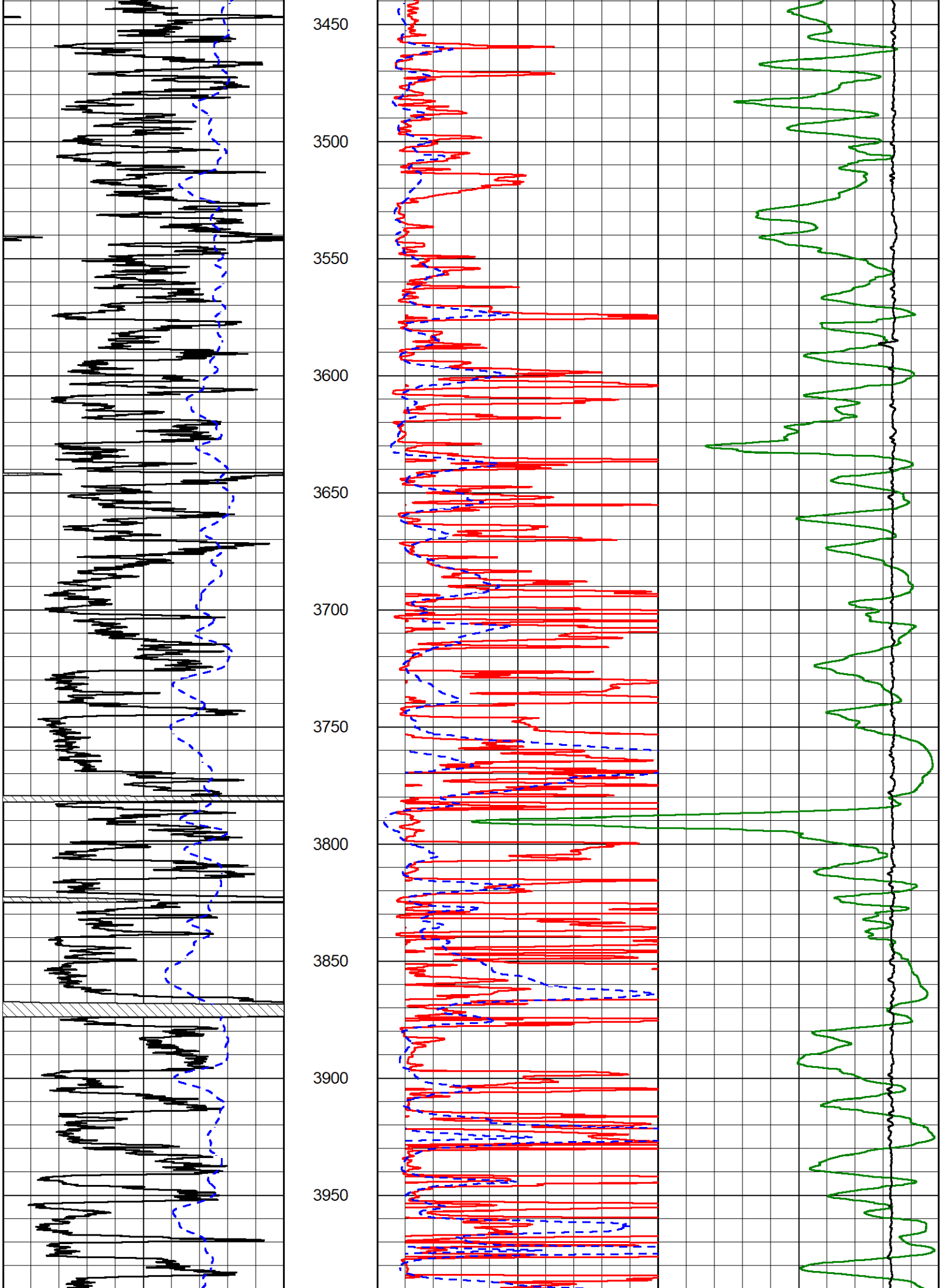
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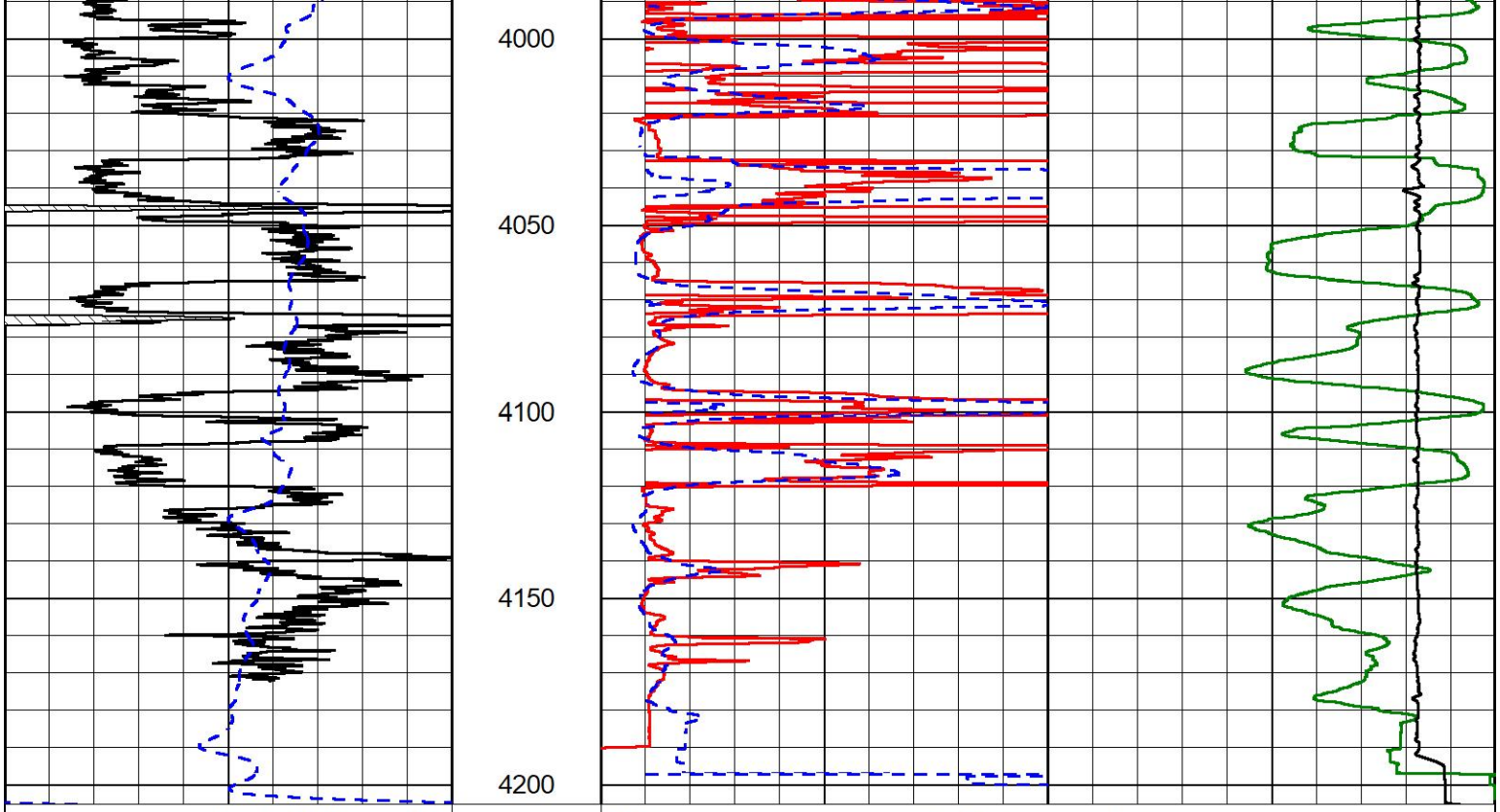
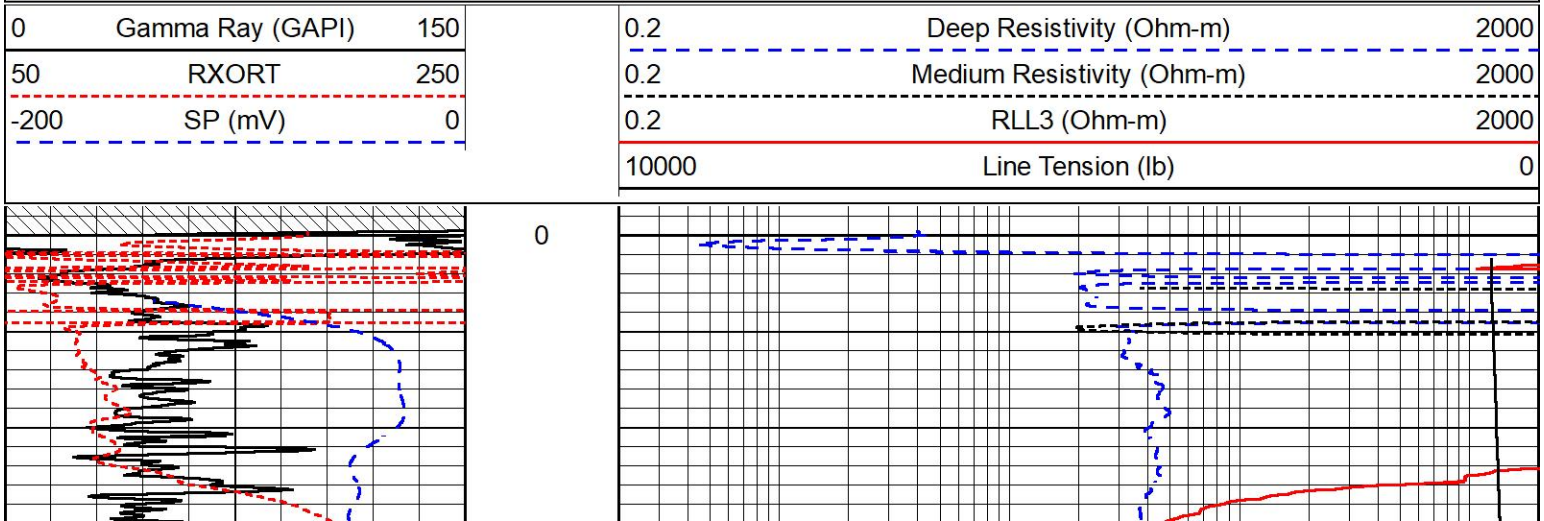


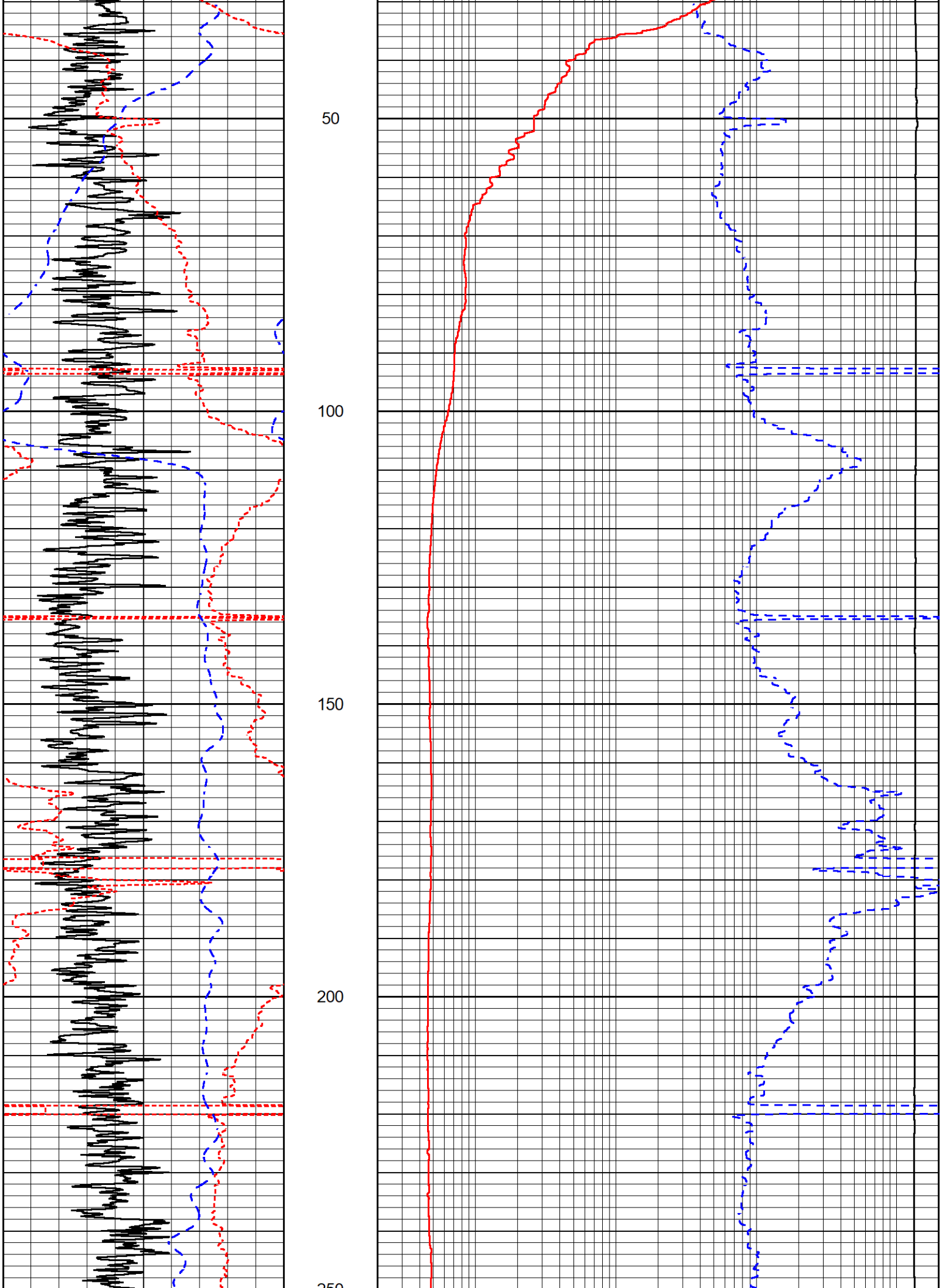
MIDWEST WIRELINE

DETAIL SECTION

MAIN PASS

Database File	murfin_weis a 1-14.db
Dataset Pathname	stack/pass3.1
Presentation Format	_dil
Dataset Creation	Fri Aug 02 01:13:18 2024
Charted by	Depth in Feet scaled 1:240

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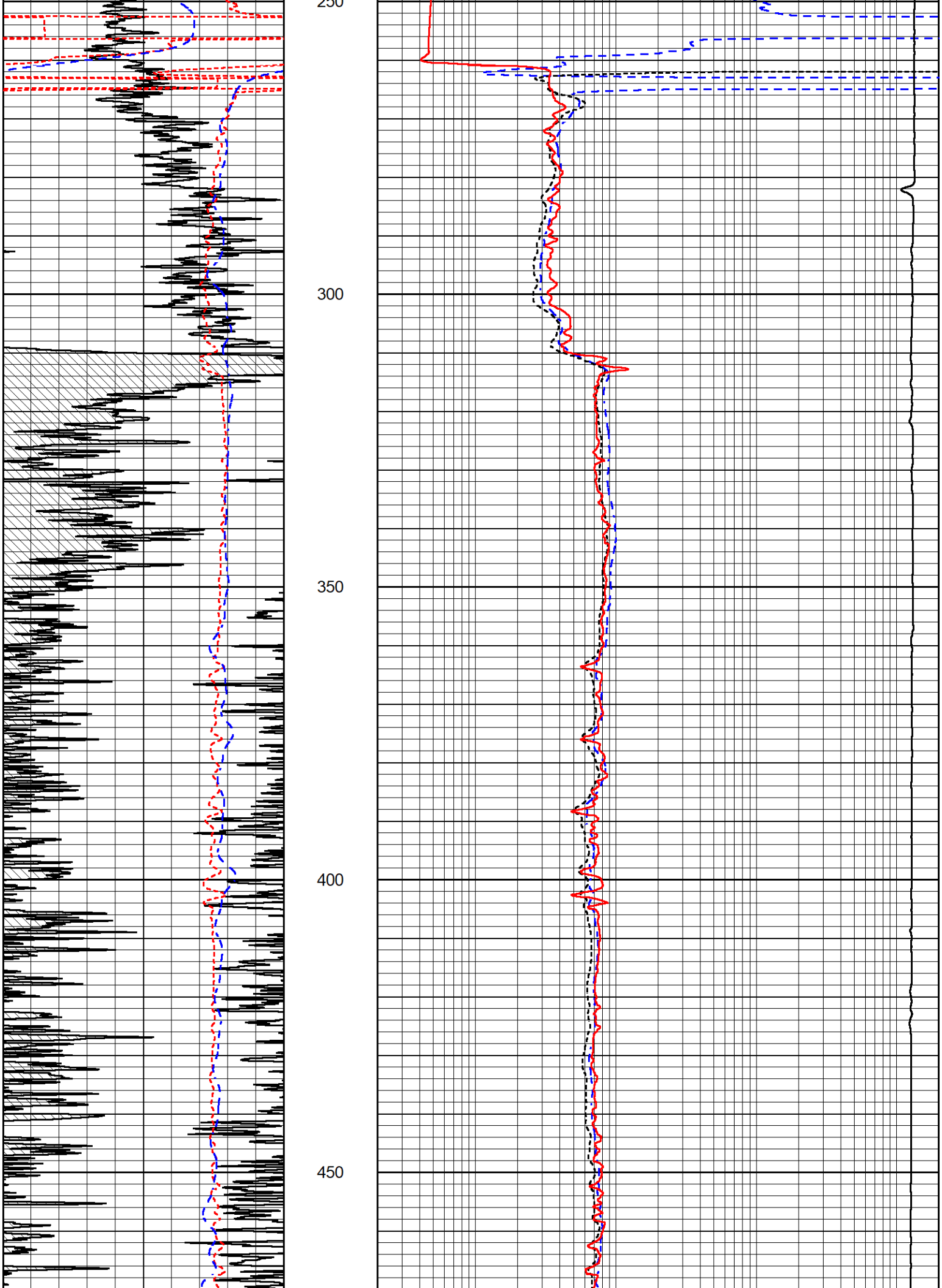
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300
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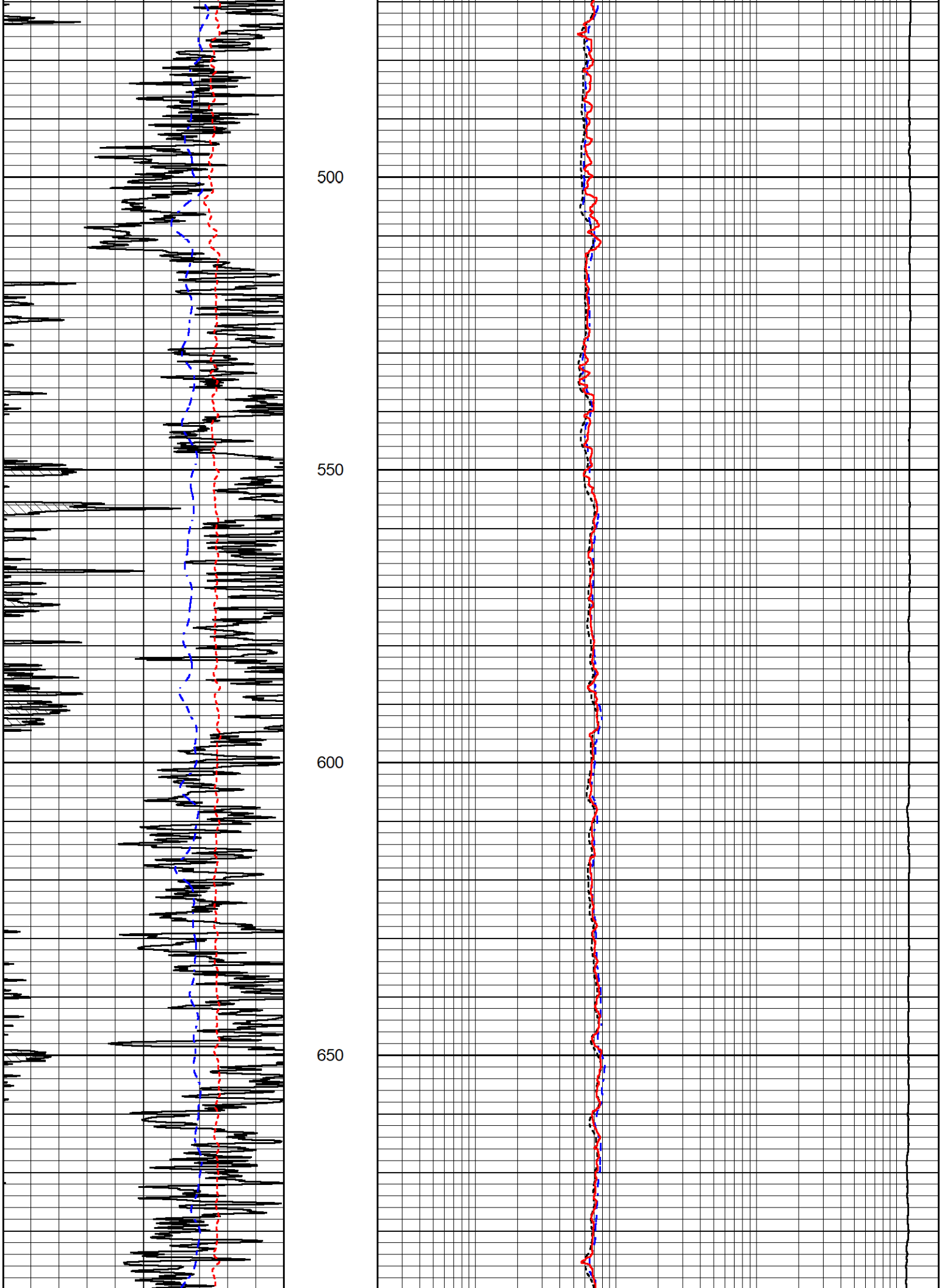
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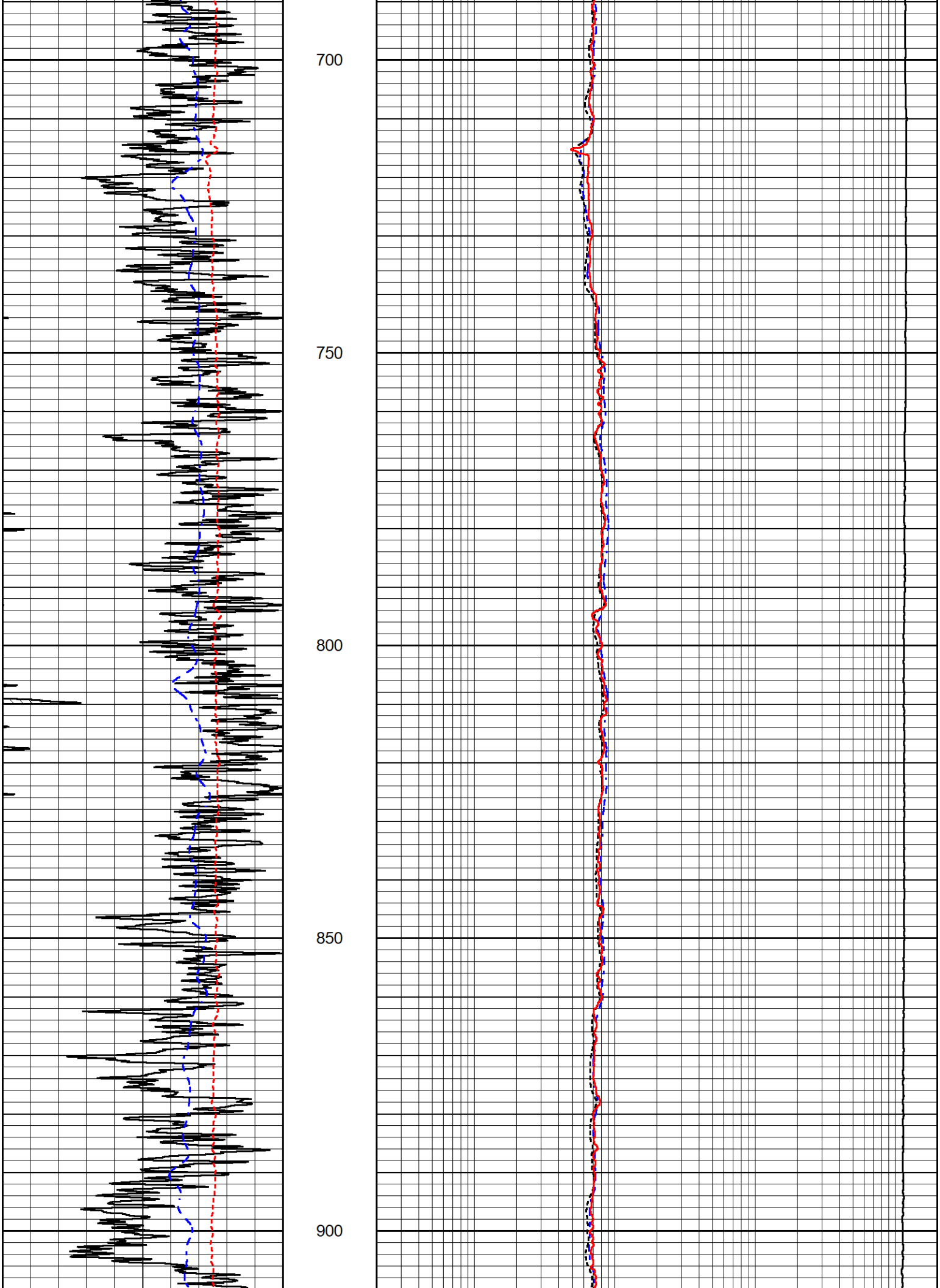
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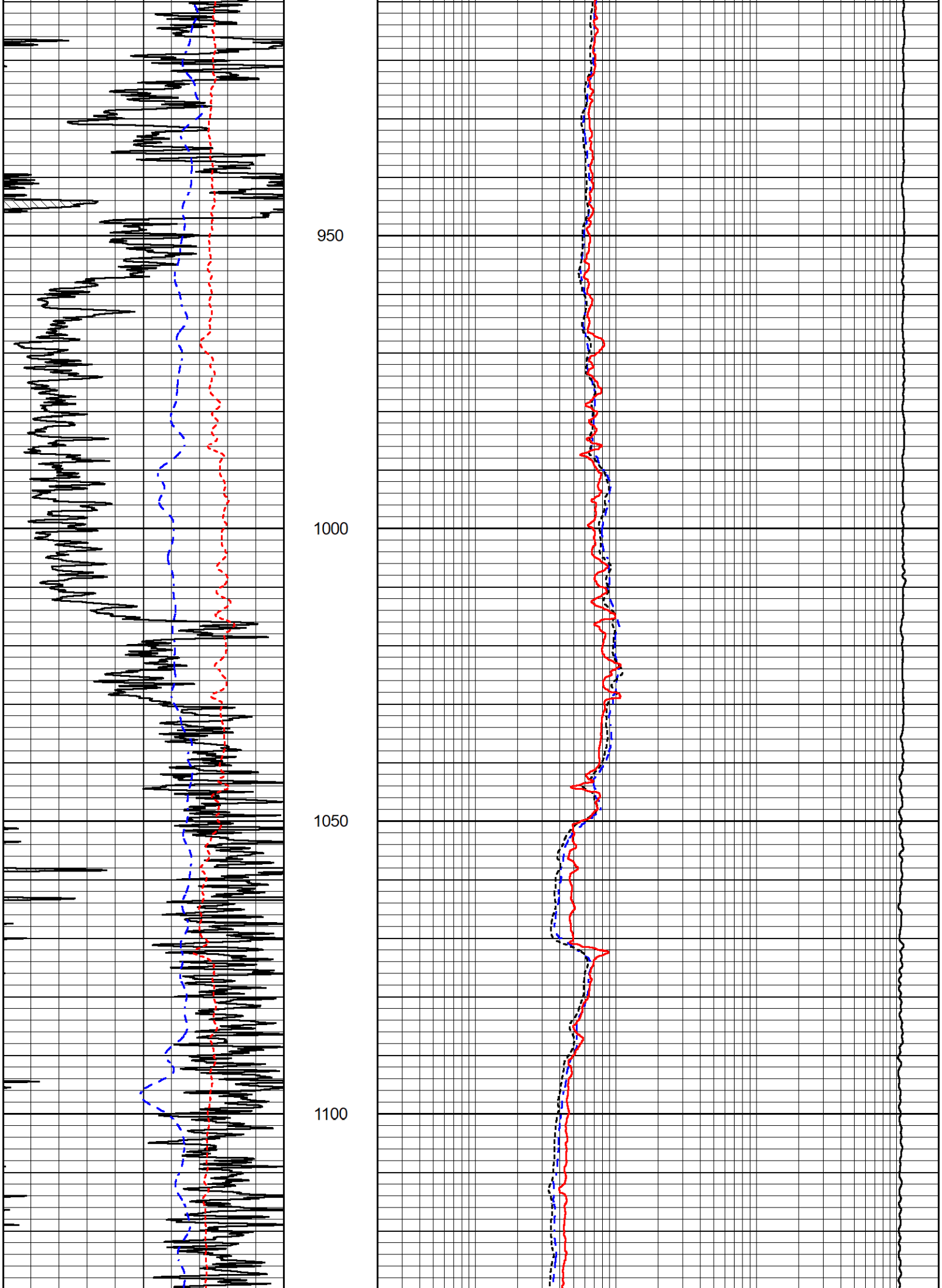
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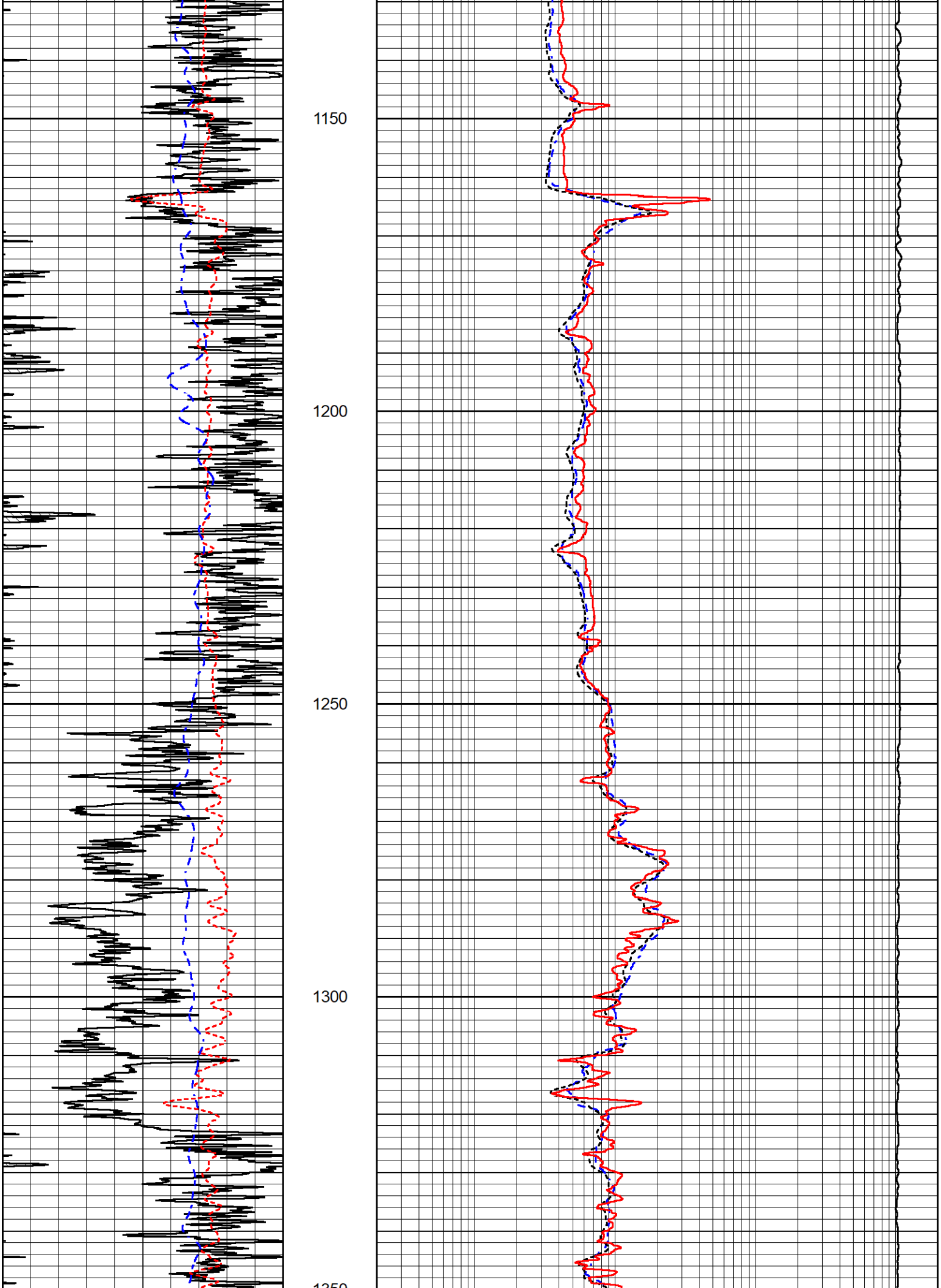
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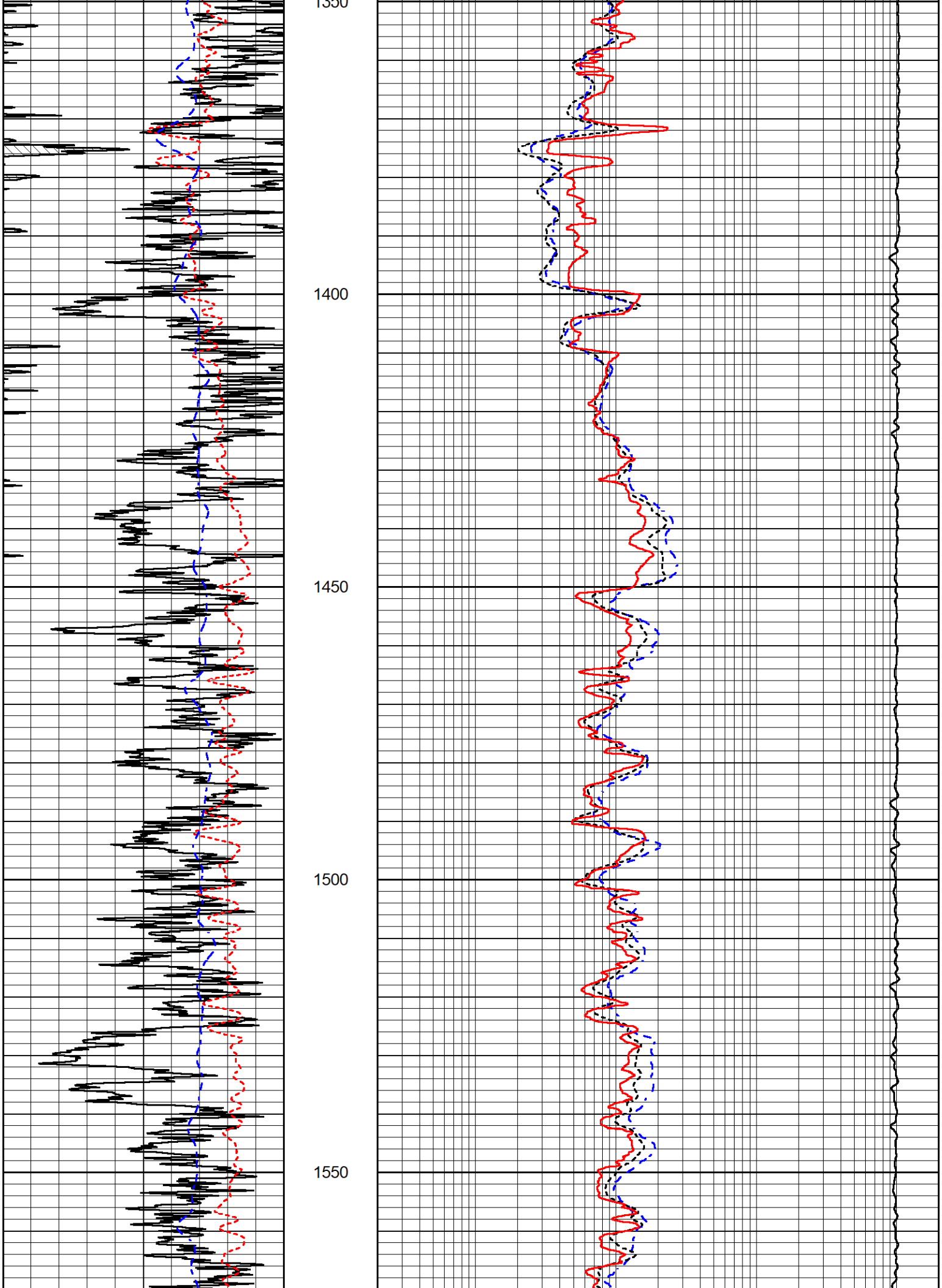
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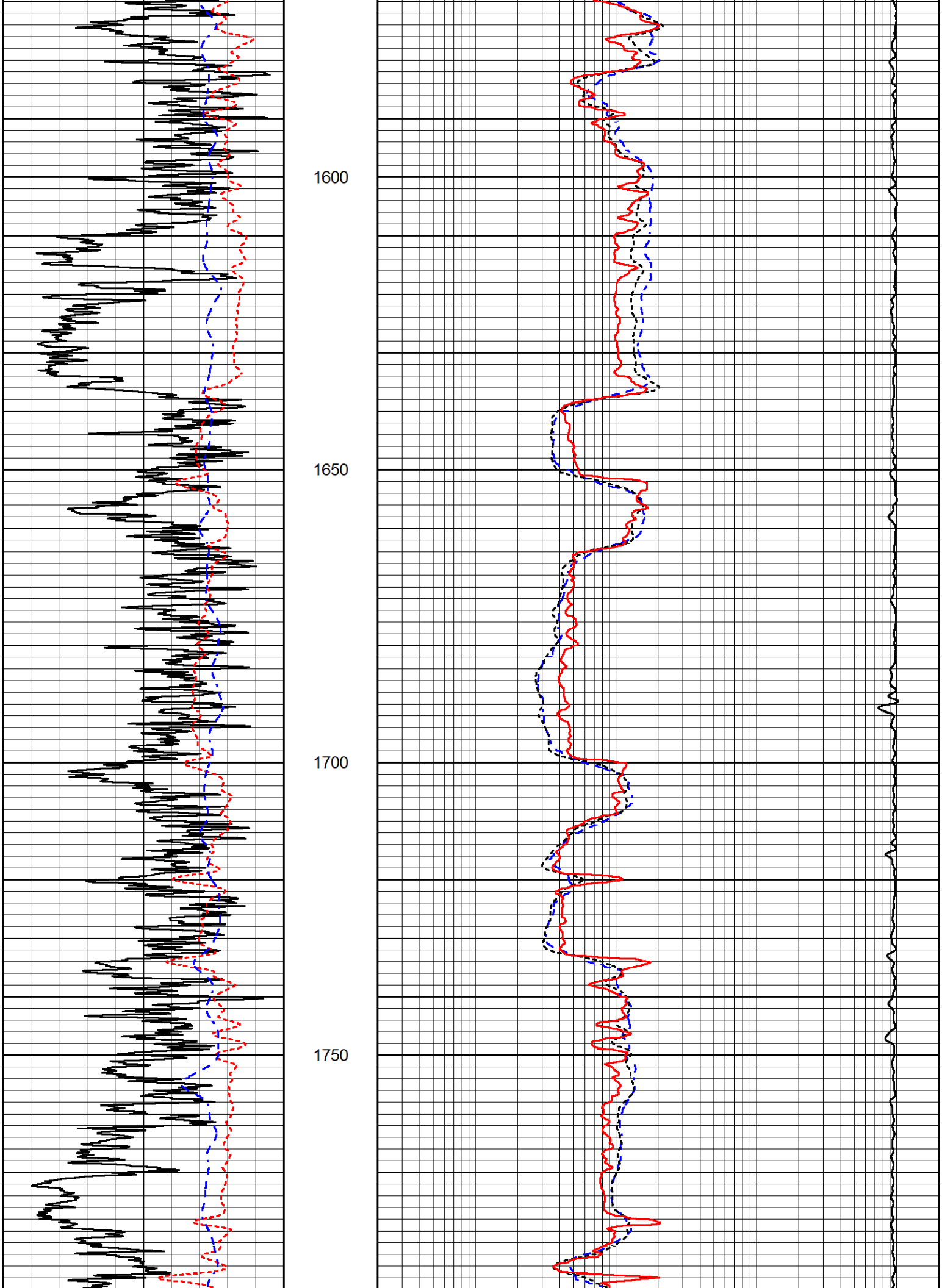
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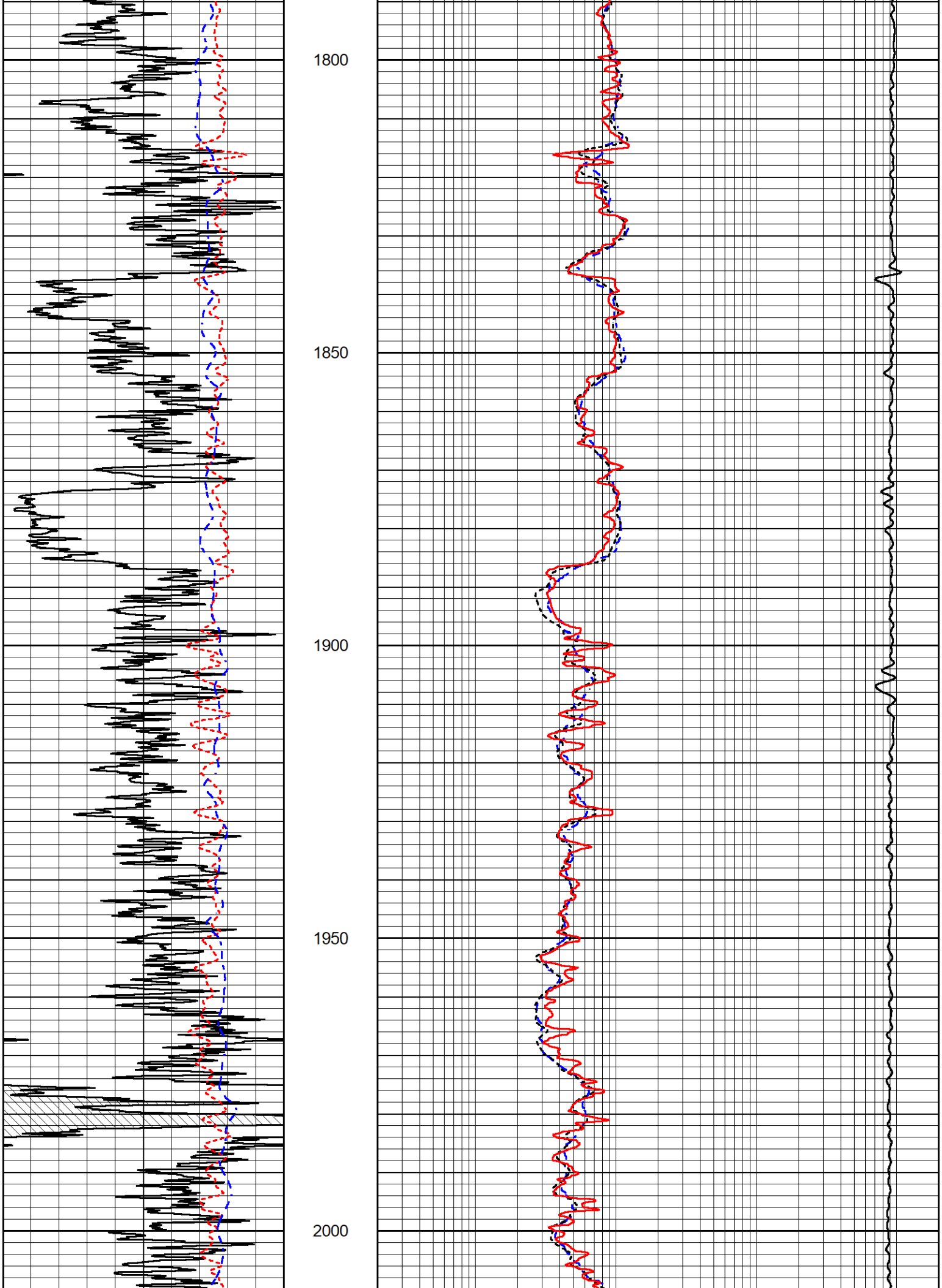
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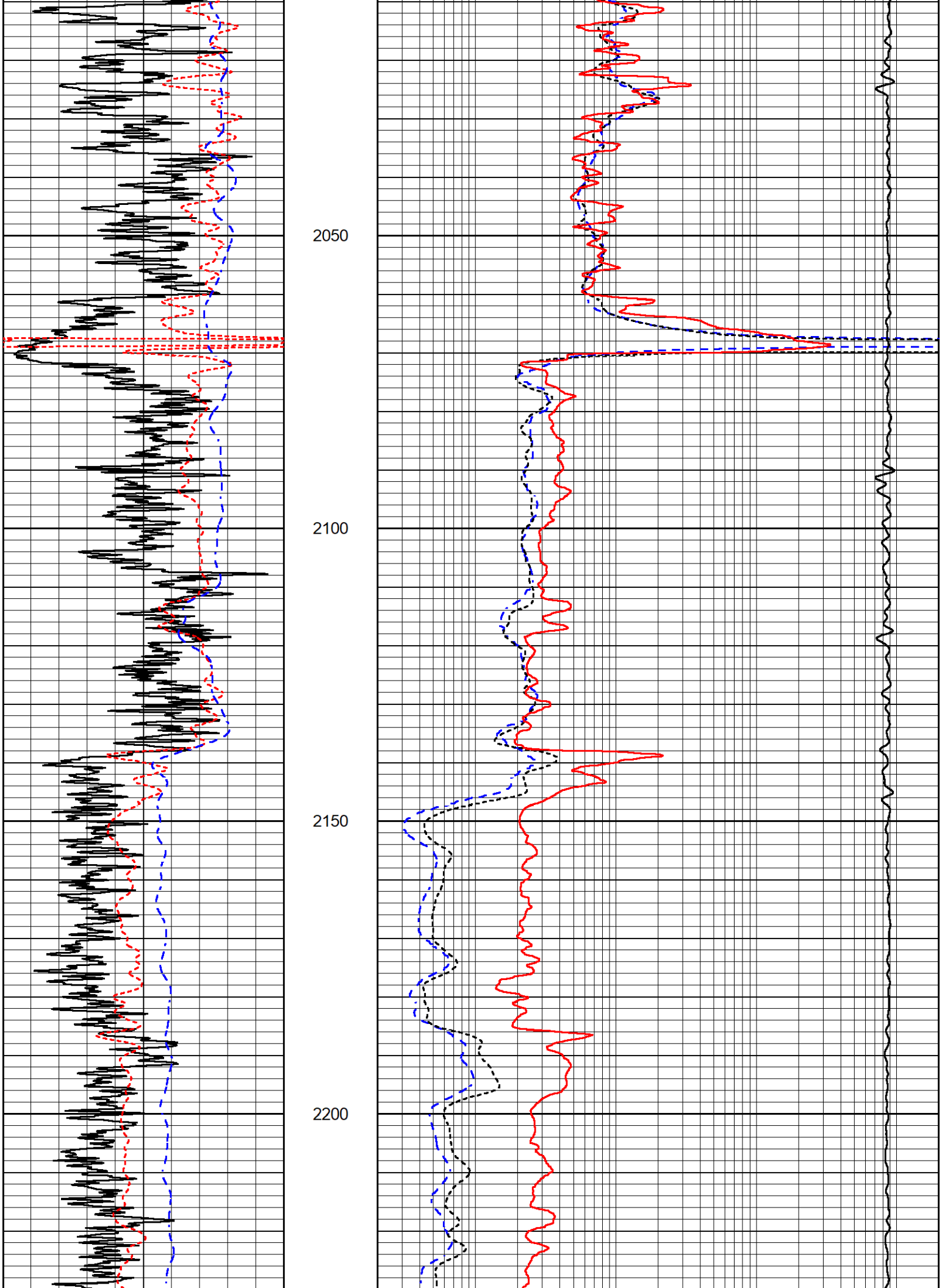
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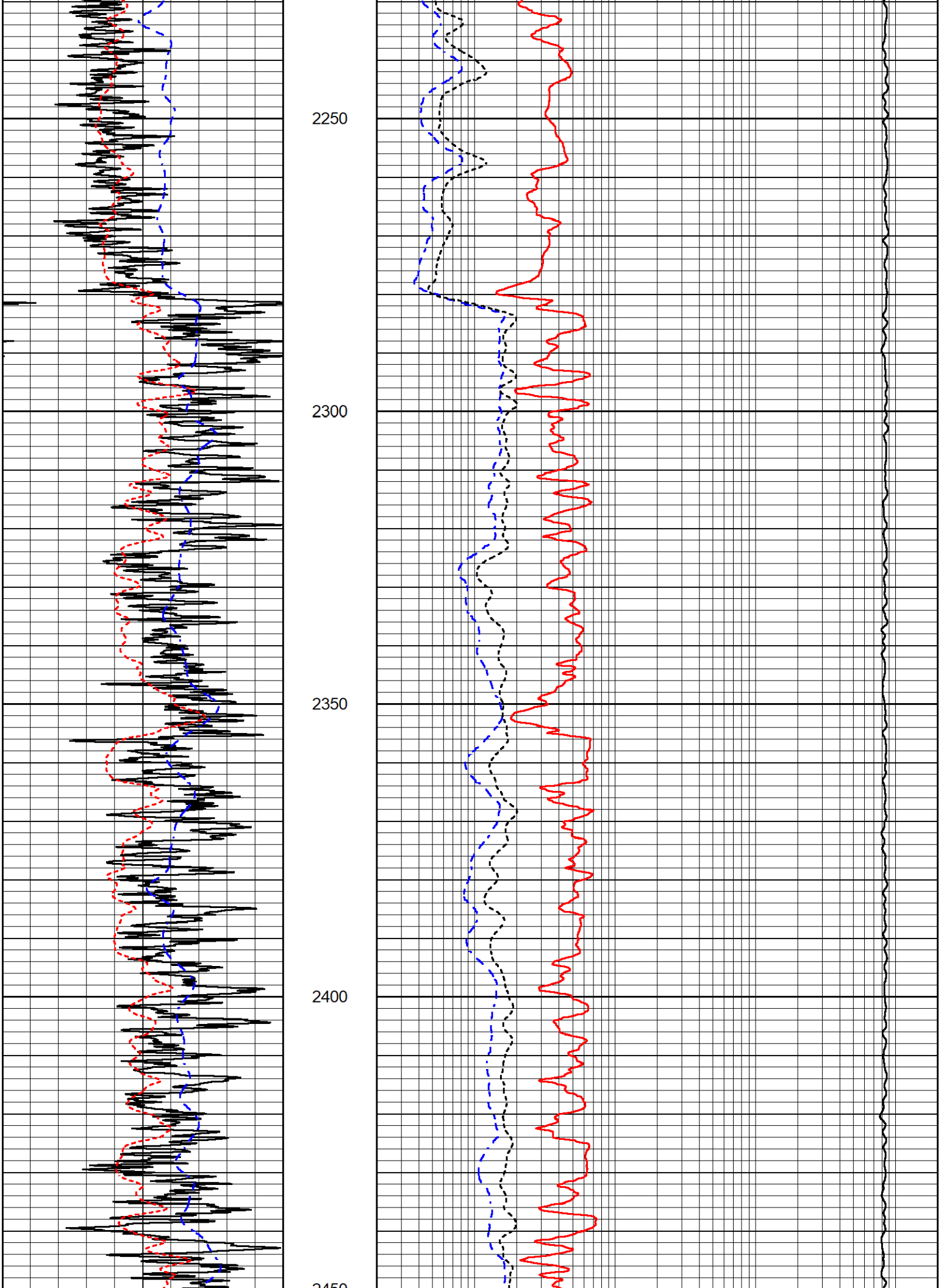
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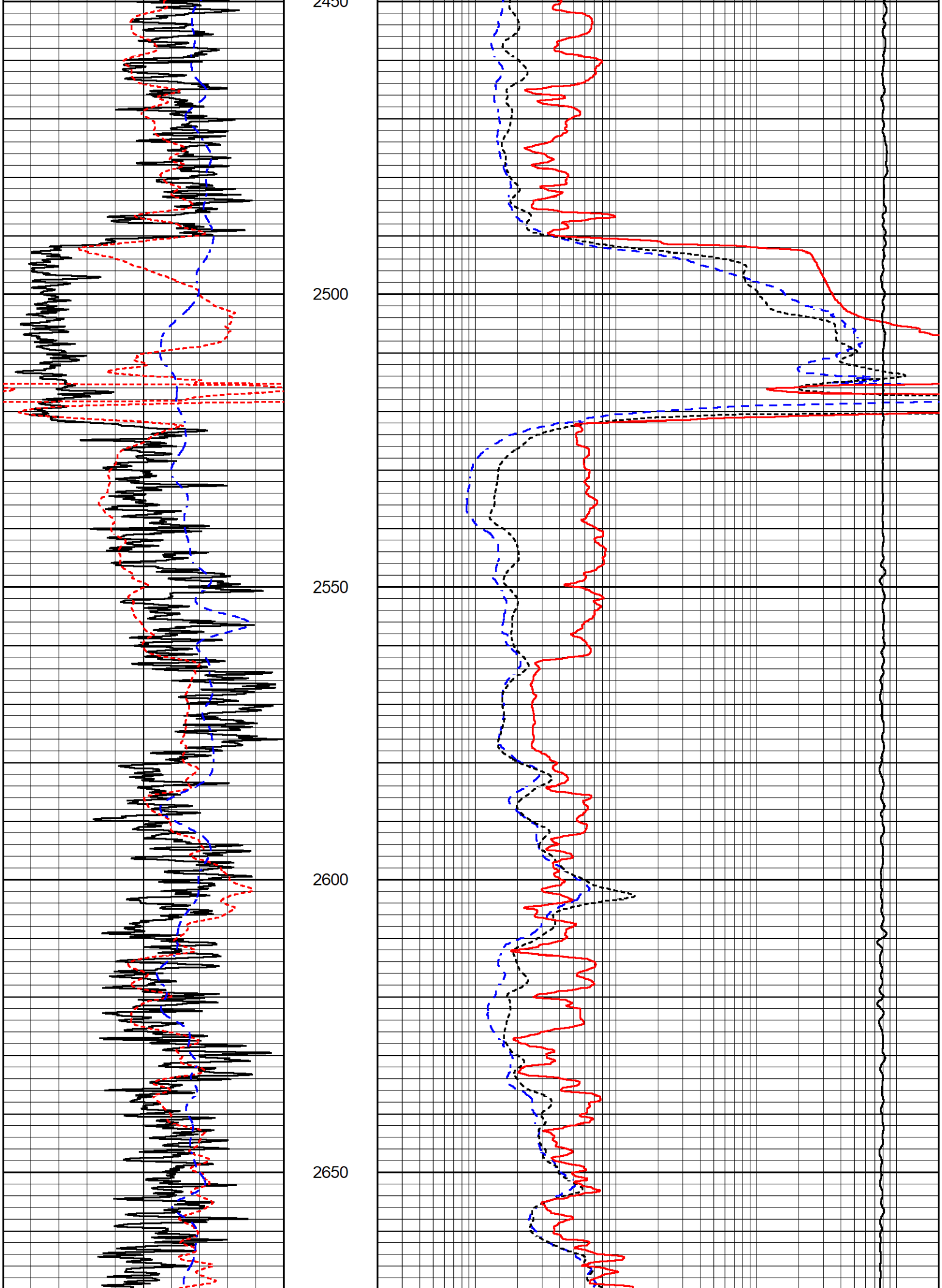
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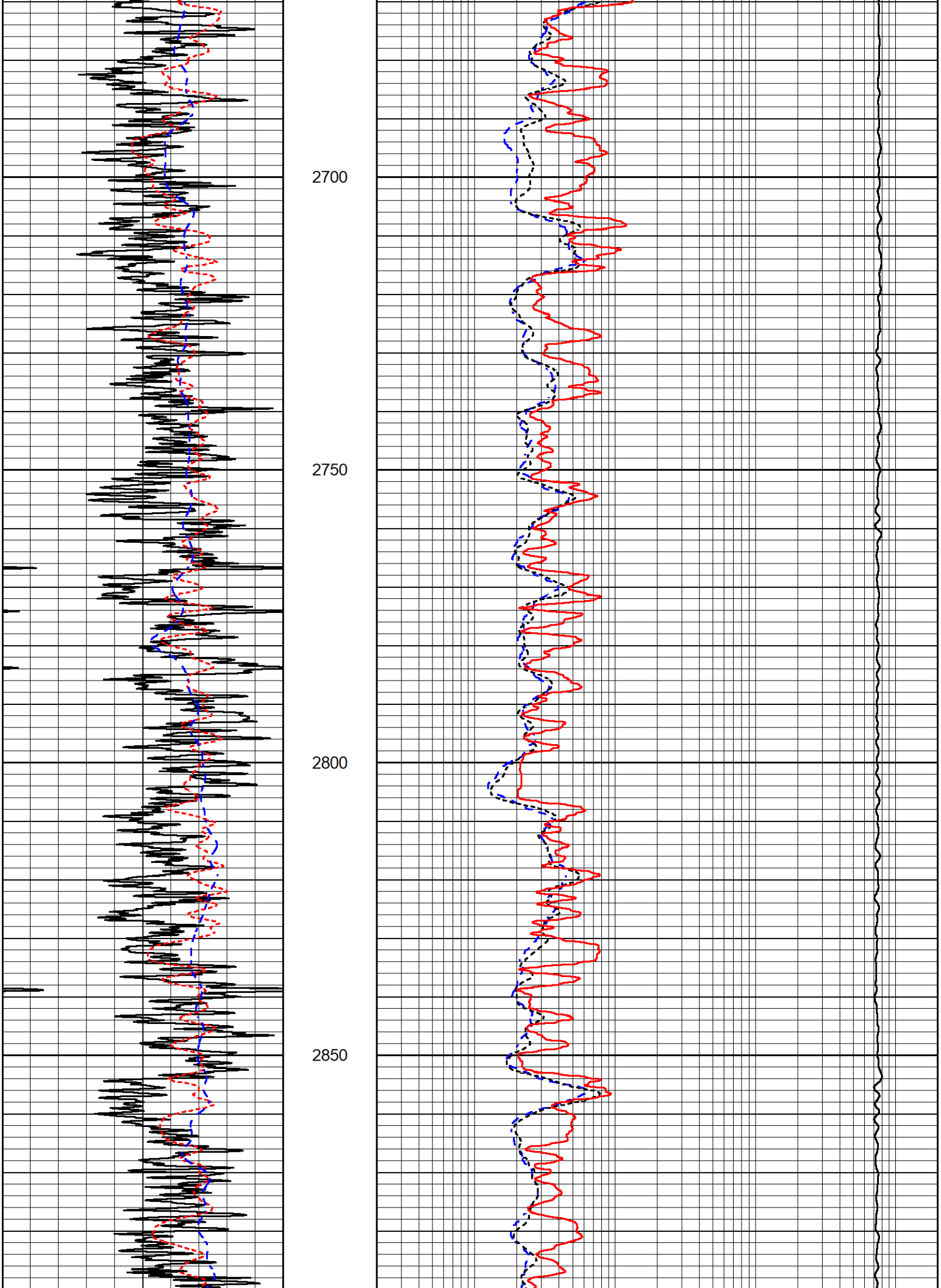
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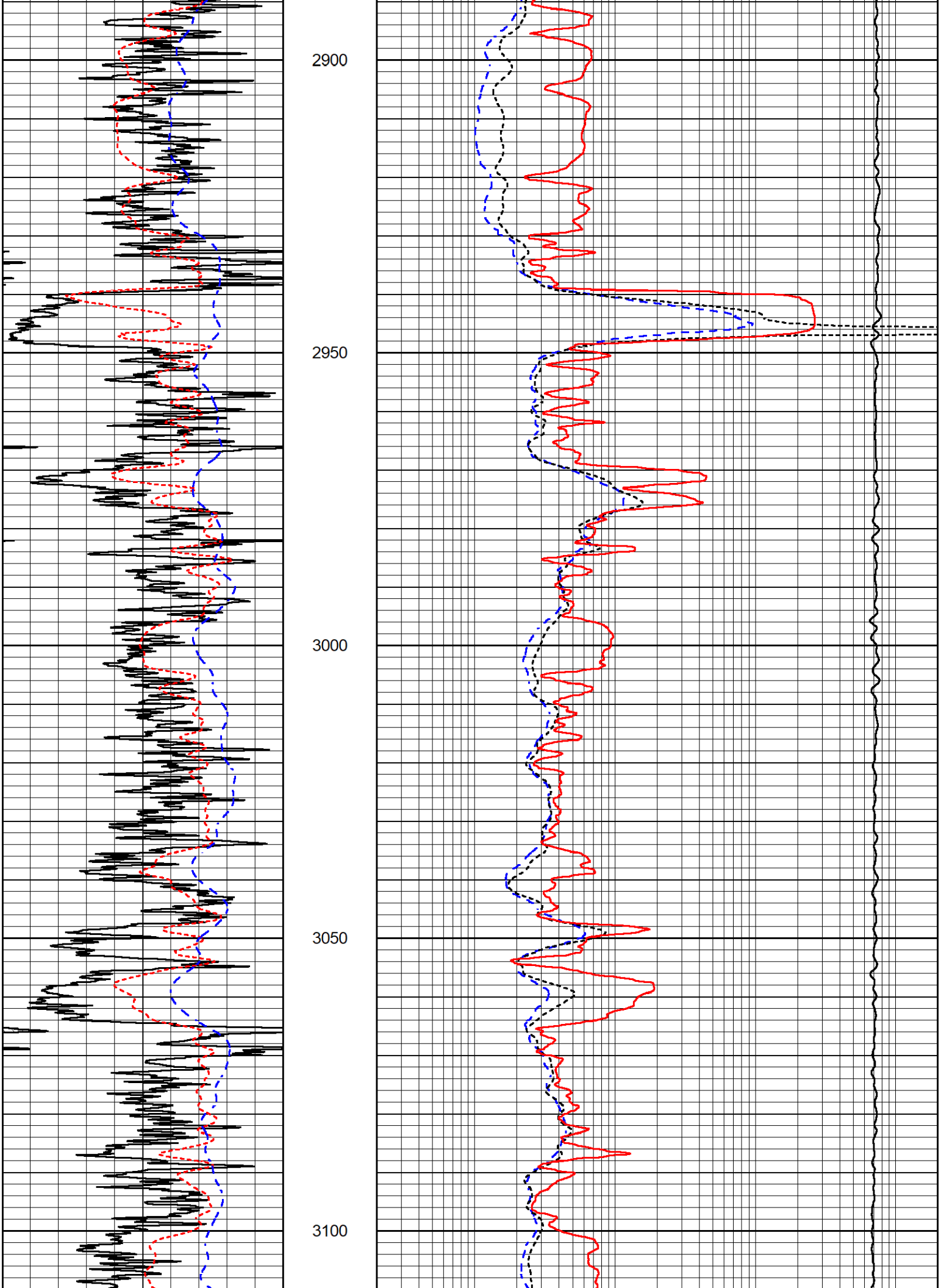
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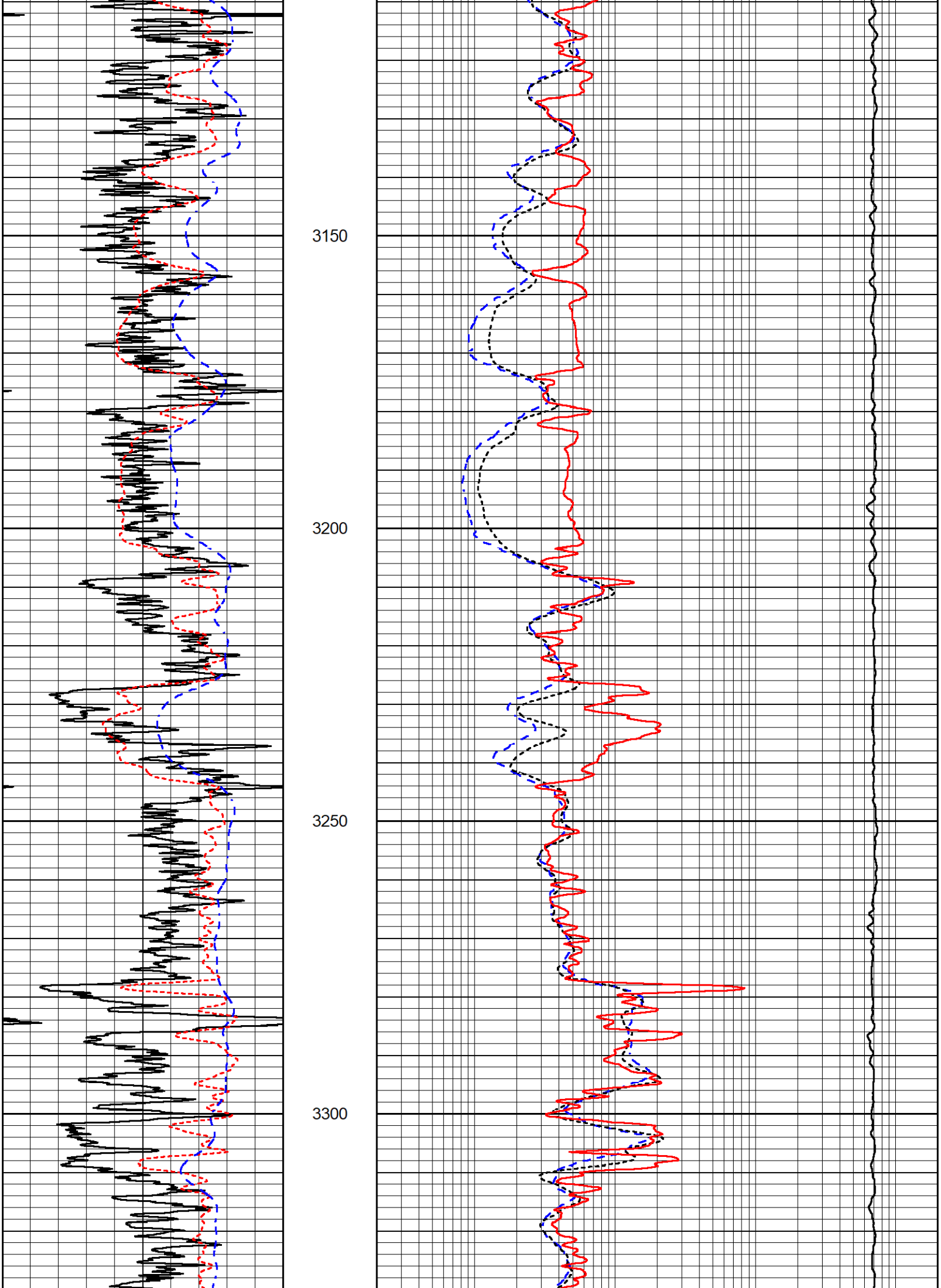
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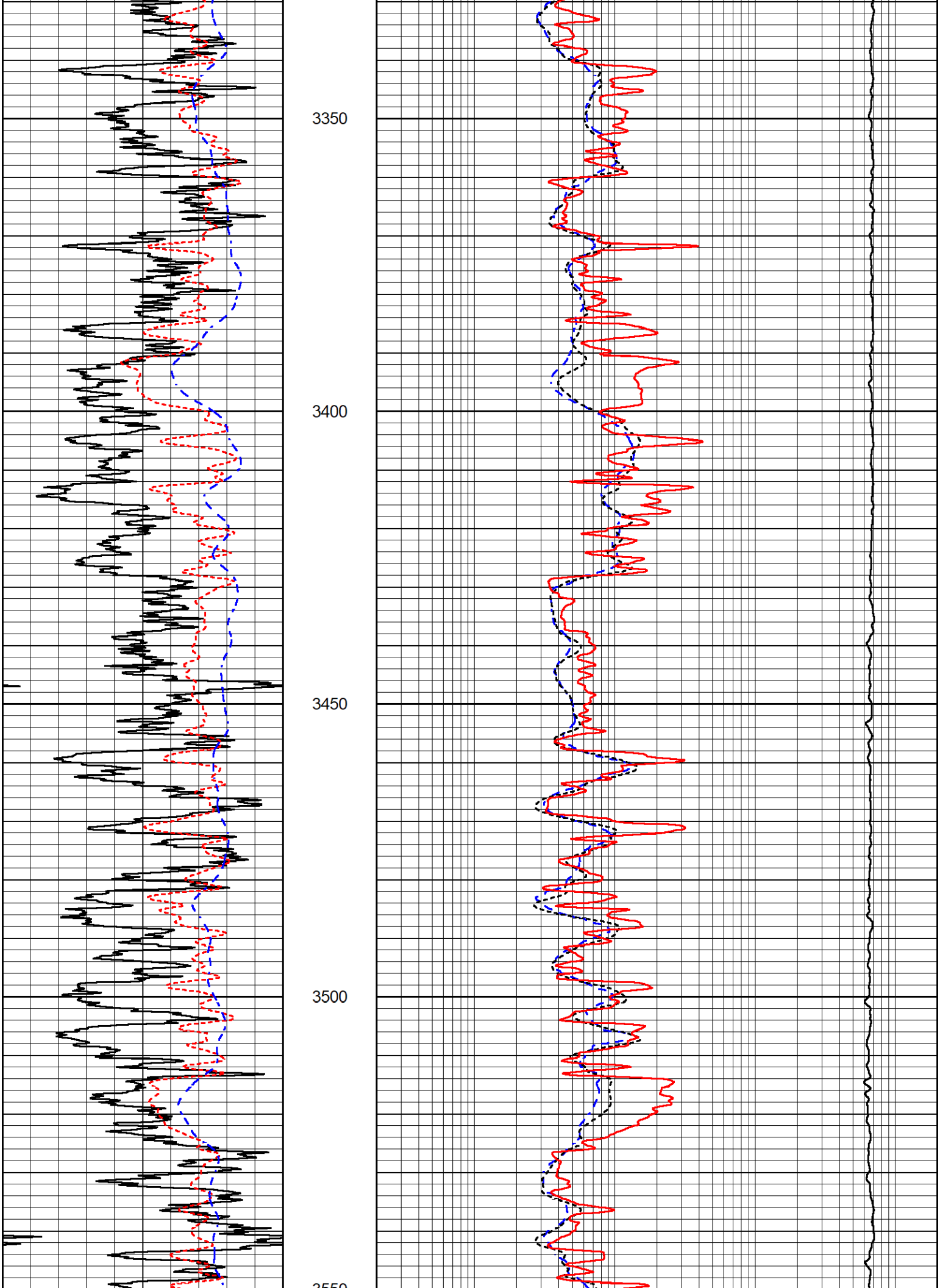
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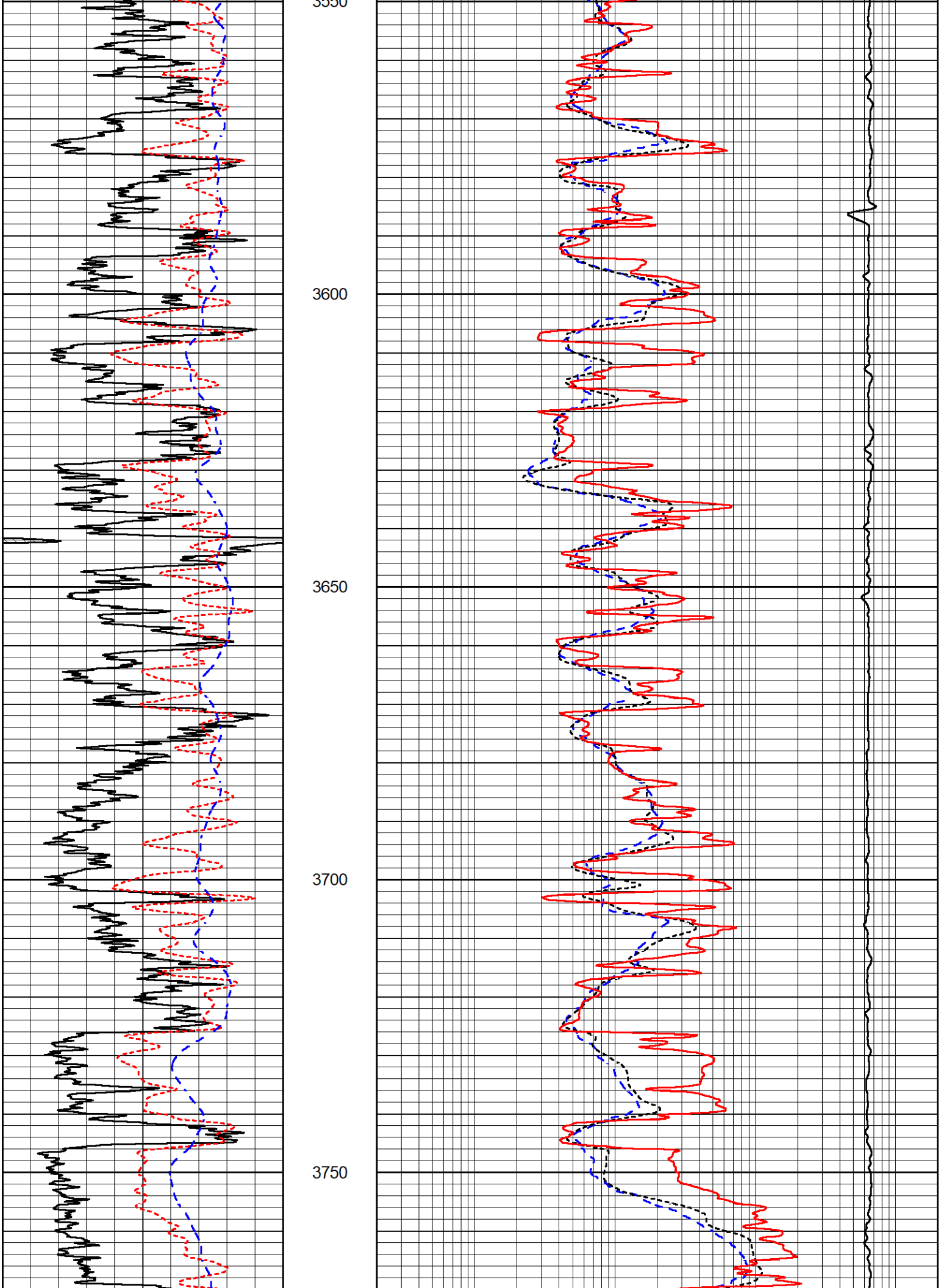
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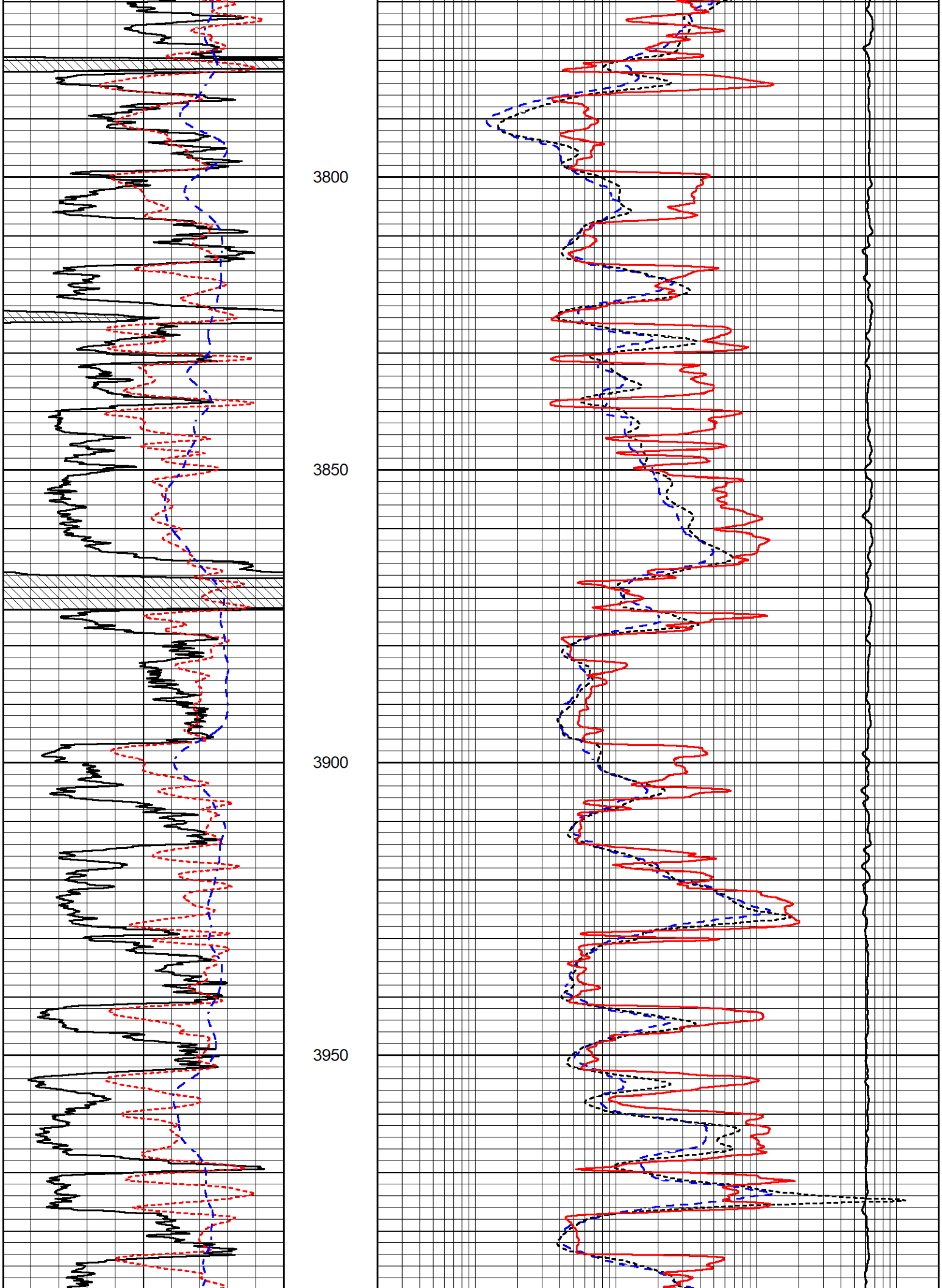
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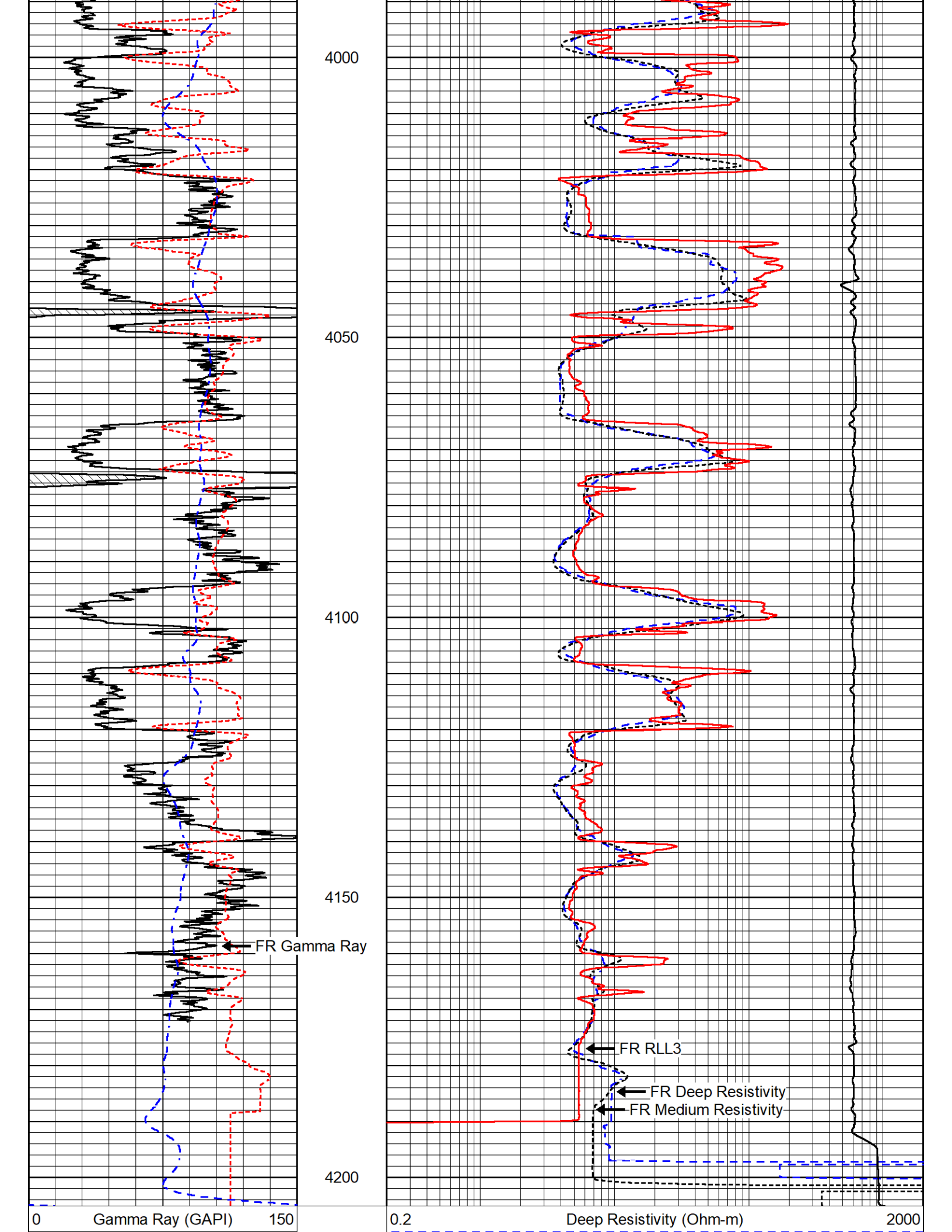

4000
4050
4100
4150
4200
FR Gamma Ray
FR RLL3
FR Deep Resistivity
FR Medium Resistivity
0
Gamma Ray (GAPI)
150
0.2
Deep Resistivity (Ohm-m)
2000

50	RXORT	250
-200	SP (mV)	0

0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

MIDWEST WIRELINE

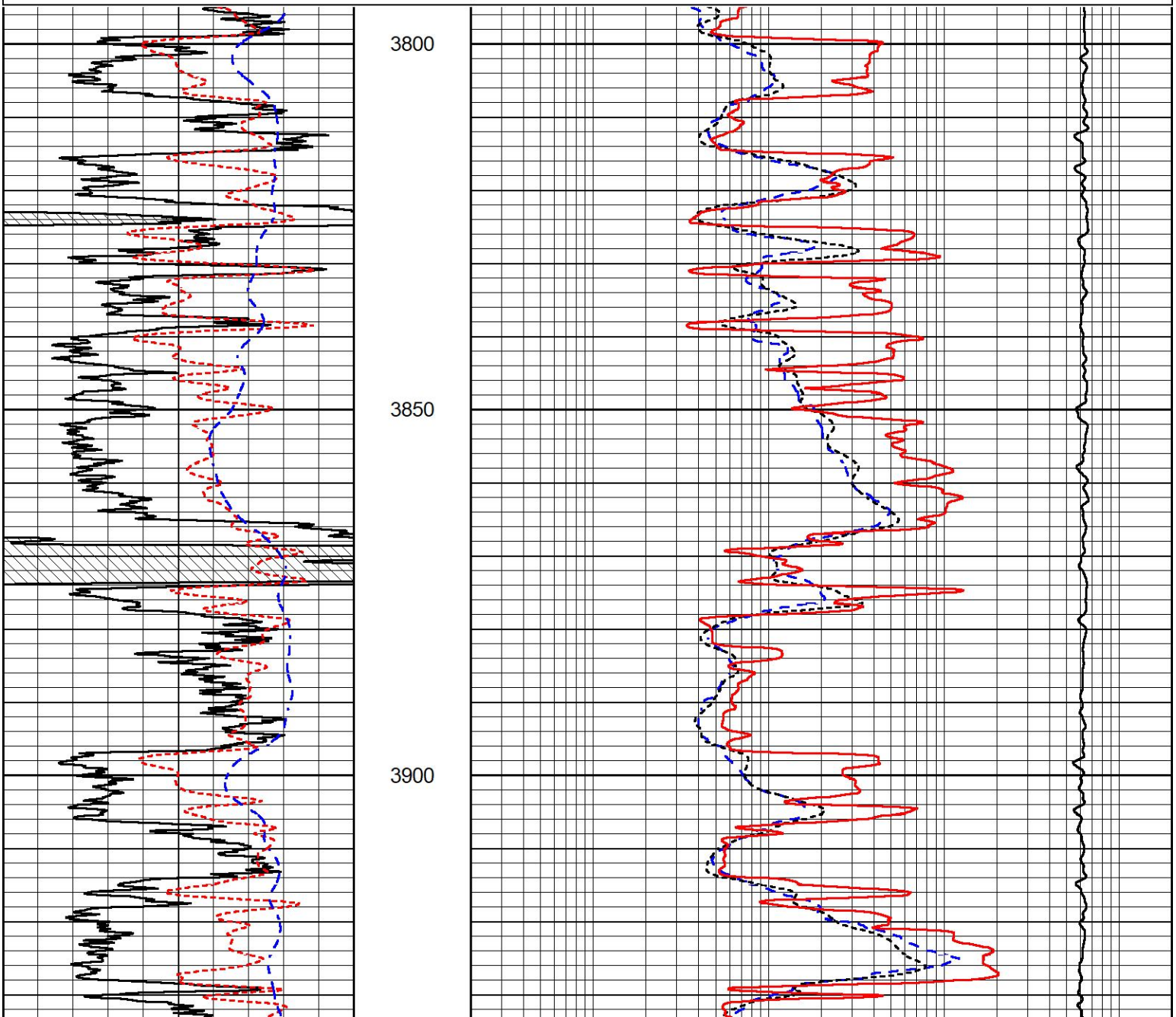
REPEAT SECTION

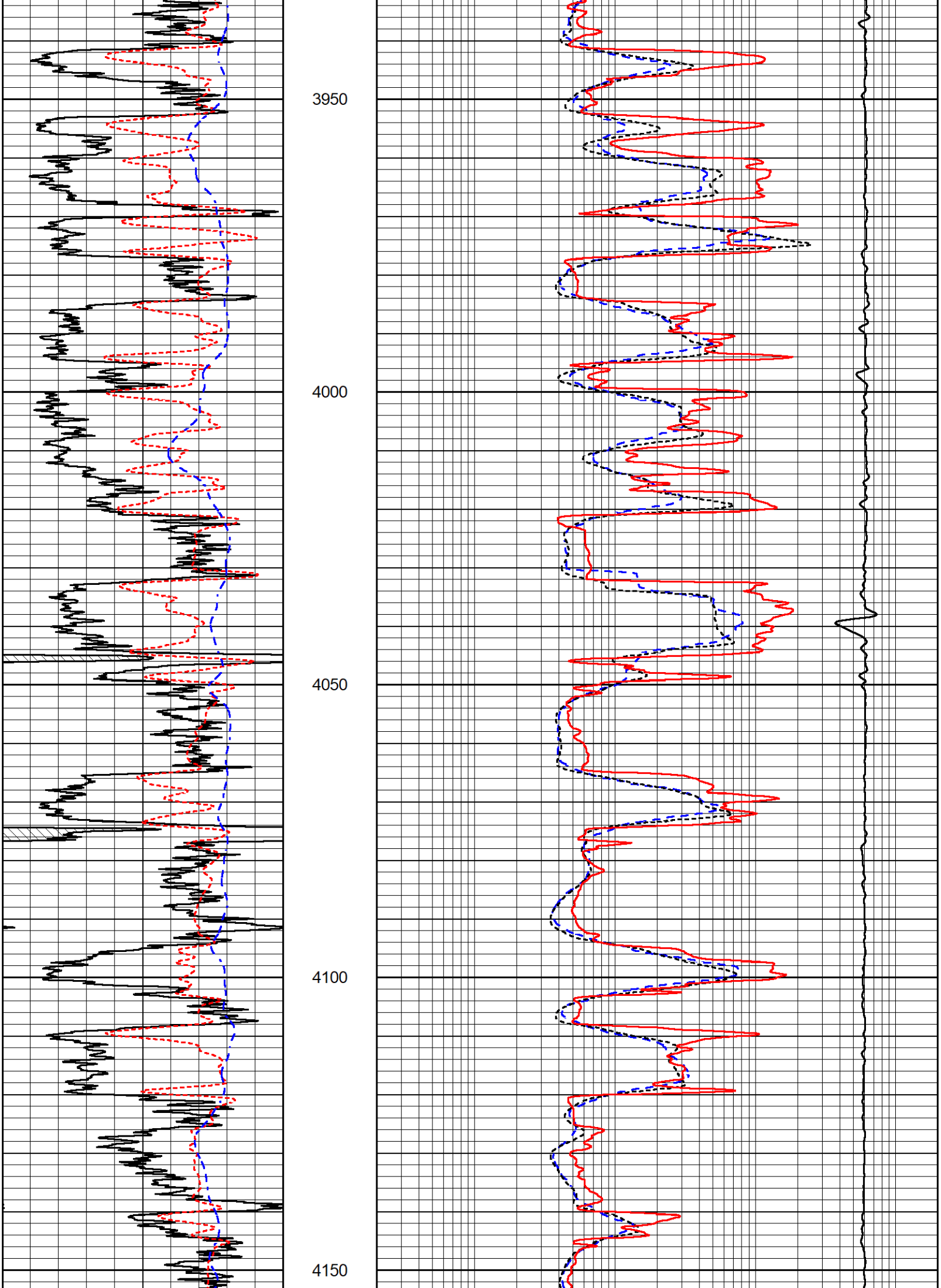
REPEAT PASS

Database File	murfin_weis a 1-14.db
Dataset Pathname	stack/pass2.1
Presentation Format	_dil
Dataset Creation	Fri Aug 02 00:38:34 2024
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
50	RXORT	250
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

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4050
4100
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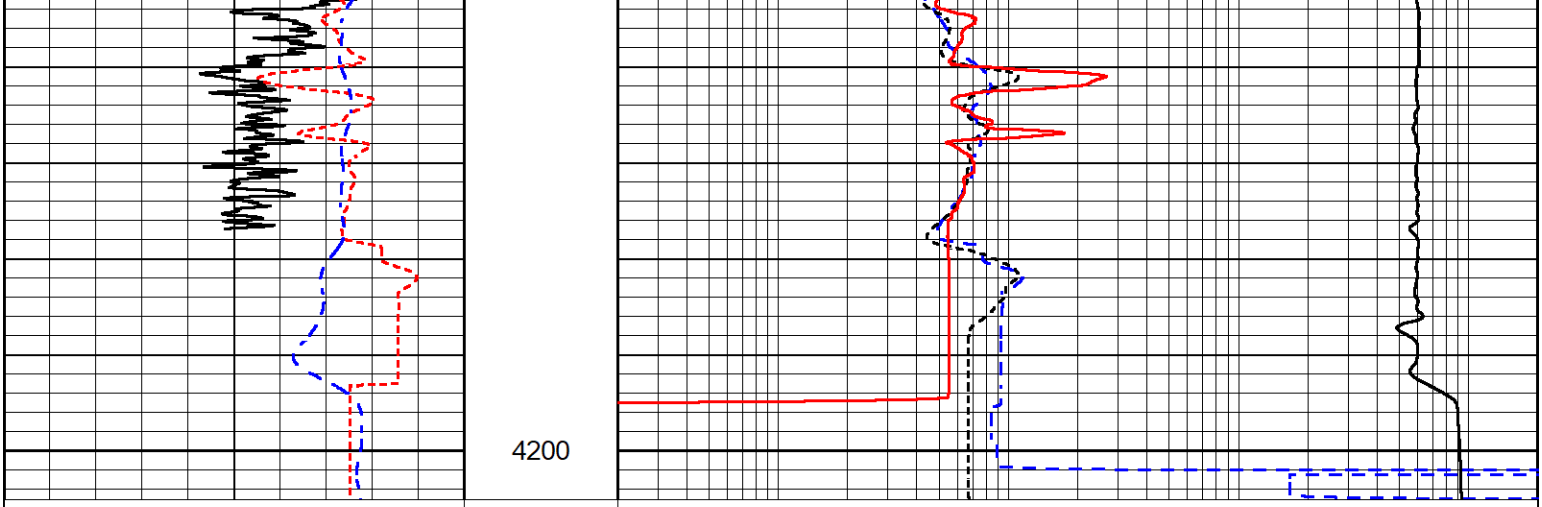

Calibration Report

Database File	murfin_weis a 1-14.db
Dataset Pathname	stack/pass3.1
Dataset Creation	Fri Aug 02 01:13:18 2024

Dual Induction Calibration Report

Serial-Model:	506-M&W
Surface Cal Performed:	Sun Jun 30 20:32:27 2024

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	84.211	428.152	0.000	255.800	mmho/m	0.465	-32.000
Medium	141.000	670.654	0.000	255.800	mmho/m	0.390	-10.000

LITHODENSITY Calibration Report

Serial Number:	703-03
Tool Model:	STEP LITHO Short
Performed:	Fri May 31 13:59:15 2024

Source:

	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	56	59	223	276	25	75	46	1	cps
LS:	83	90	344	441	51	132	90	3	cps
Aluminum:									
SS:	1063	1260	2893	2631	48	80	48	3	cps
LS:	1179	2084	3854	1823	62	133	86	5	cps
Magnesium:									
SS:	1756	2035	4740	3894	55	79	49	4	cps
LS:	4981	8390	15059	6054	115	127	85	14	cps
Aluminum+Iron:									
SS:	676	887	2426	2310	45	79	52	2	cps
LS:	700	1495	3280	1630	60	131	90	5	cps

	Density Actual	Calibrated		PE Actual	Calibrated	Quality
Background:						
SS:						0.236
LS:						0.189
Aluminum:						
SS:	2.6000	2.6000	g/cc			0.249
LS:	2.6000	2.6000	g/cc			0.216
Magnesium:						
SS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.232
LS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.198
Aluminum+Iron:						
SS:					6.1800	0.208
LS:					6.1800	0.188

Caliper:	Reference:		Reading:
Small Ring:	6.0	in	1.0
Large Ring:	14.0	in	1.0
Gain:	12.765		
Offset:	2.170		

Compensated Neutron Calibration Report

Serial Number: 210
Tool Model: M&W

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

Gamma Ray Calibration Report

Serial Number:	105	
Tool Model:	M&W	
Performed:	Sat Oct 21 23:48:19 2023	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.6000	GAPI/cps

MIDWEST WIRELINE

Company	Murfin Drilling Company, Inc.
Well	Weis A #1-14
Field	
County	Sheridan
State	Kansas