MIDWEST WIRELINE

DUAL INDUCTION LOG

Company luka-Carmi Devenopment LLC
Well Sessler #2
Field Chase-Silica
County Barton
State Kansas

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Well Sessler #2
Field Chase-Silica
County Barton State Kansas

Location: API # : 15-009-26386-00-00
SE SE NW NW
1290 FNL & 1135 FWL
SEC 27 TWP 20S RGE 11W

Other Services
CNL/CDL
MEL/BHCS

Permanent Datum Ground Level Elevation 1767
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Elevation
K.B. 1775
D.F.
G.L. 1767

Date	3/27/2023		
Run Number	One		
Depth Driller	3429		
Depth Logger	3427		
Bottom Logged Interval	3426		
Top Log Interval	250		
Casing Driller	8.625 @ 270		
Casing Logger	263		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	9800		
Density / Viscosity	9.0 50		
pH / Fluid Loss	10.5 5.8		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.65 @ 72		
Rmf @ Meas. Temp	0.49 @ 72		
Rmc @ Meas. Temp	0.88 @ 72		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.42 @ 110		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	110		
Equipment Number	P-24		
Location	Hays		
Recorded By	T. Martin		
Witnessed By	Pat Deenihan		

<<< Fold Here >>>

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Ellinwood, KS, S to SE 50/SE 100,
3 E, 1/4 S, E into

Log Measured From: Kelly Bushing 8 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: T. Martin	Primary Witness: Pat Deenihan
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	32.75		GR-M&W (105)	3.00	3.50	50.00
CNLSC	29.65		CNT-M&W (207-MW)	5.00	3.50	100.00
CNSSC	28.90					
			CDL-M&W (307-08)	8.50	4.00	250.00
LSD	20.60					
DCAL	20.58					
SSD	20.10					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (507)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: iuka-carmi_sessler #2.db: field/well/Stack/pass3.1
Total length: 34.75 ft
Total weight: 620.00 lb
O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\iuka-carmi_sessler #2.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	110	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	0	120	50	Off	3427

Variable Description

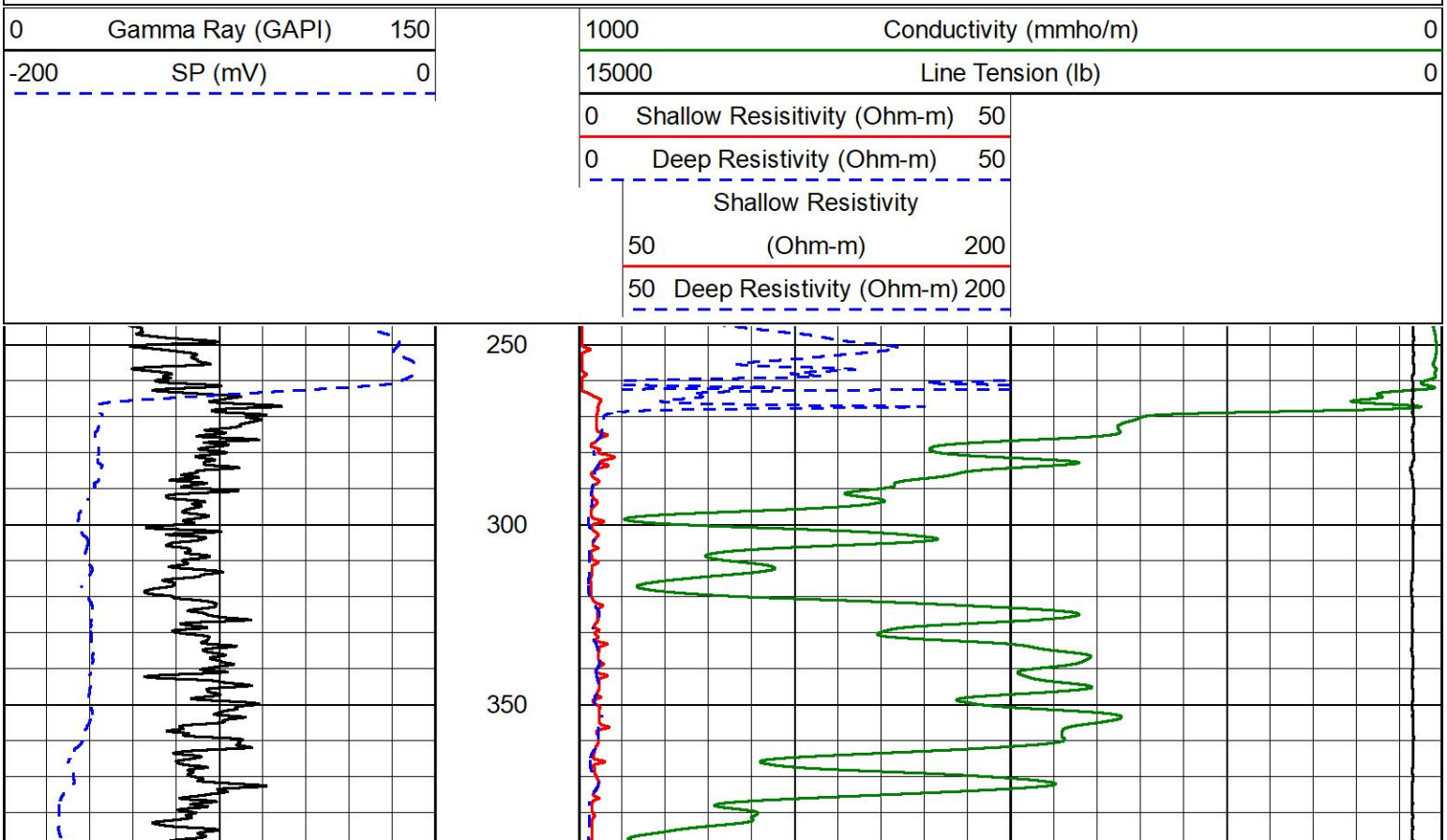
A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM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

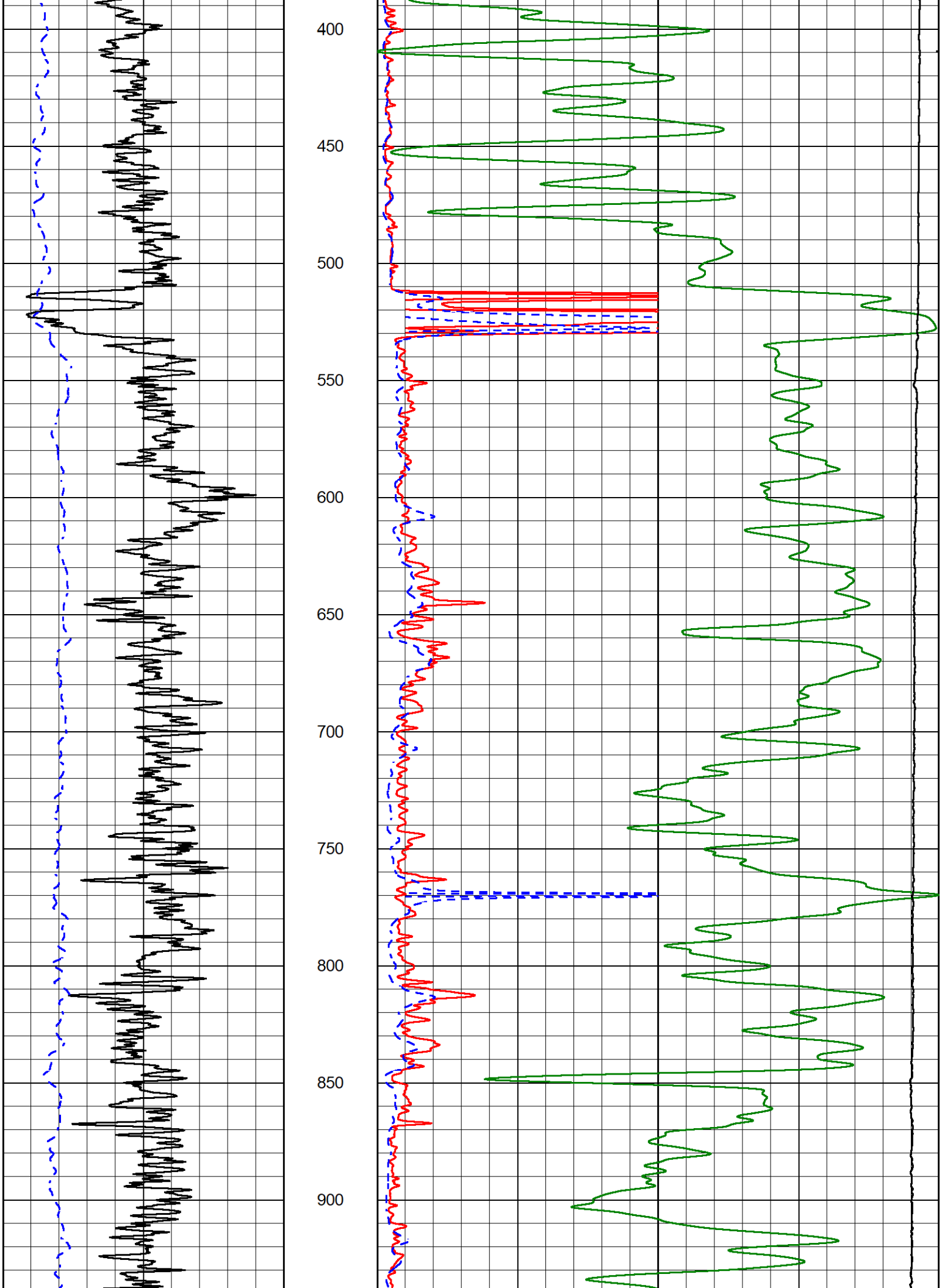
MIDWEST WIRELINE

2" SCALE RESISTIVITY

MAIN PASS

Database File	iuka-carmi_sessler #2.db
Dataset Pathname	Stack/pass3.2
Presentation Format	_dil2in
Dataset Creation	Mon Mar 27 16:27:51 2023
Charted by	Depth in Feet scaled 1:600

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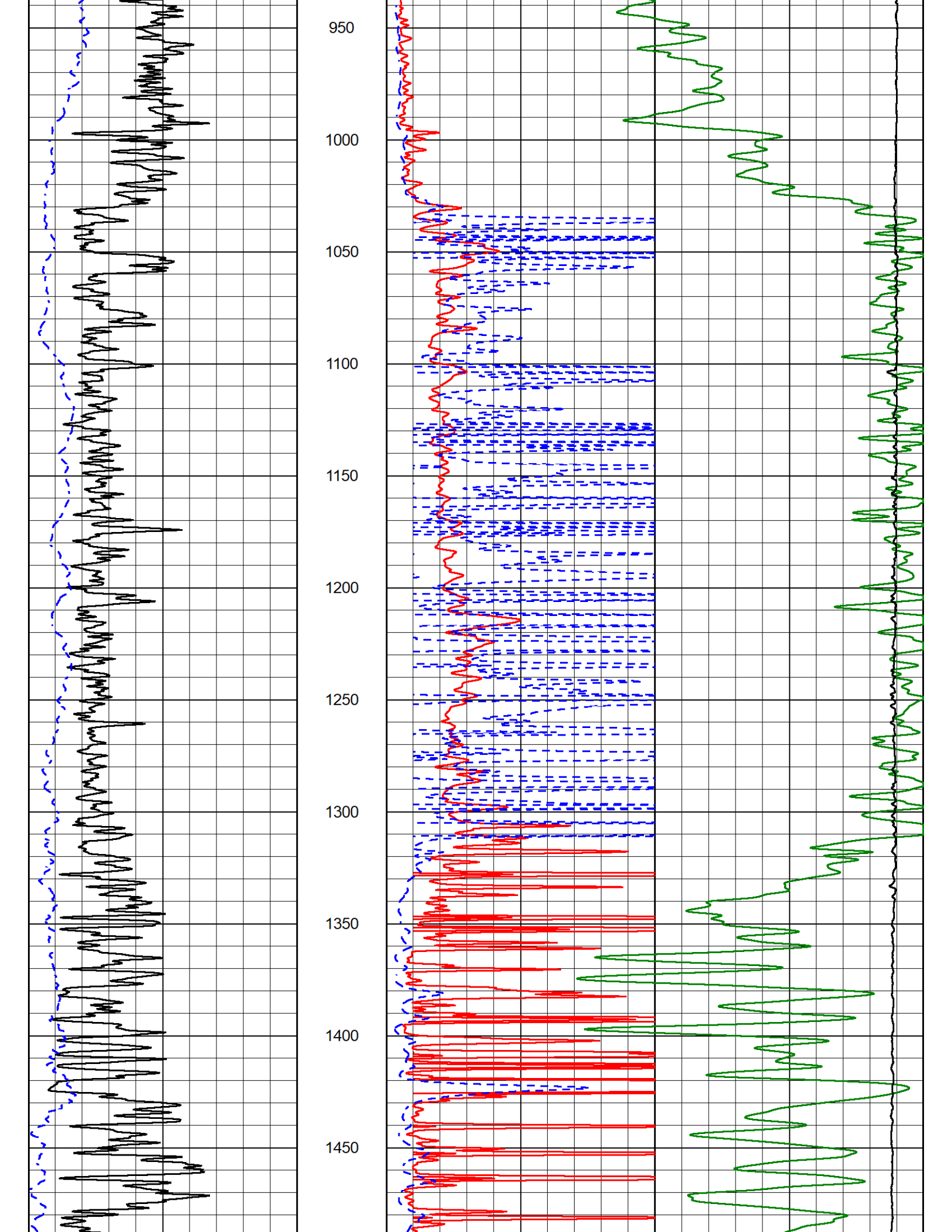
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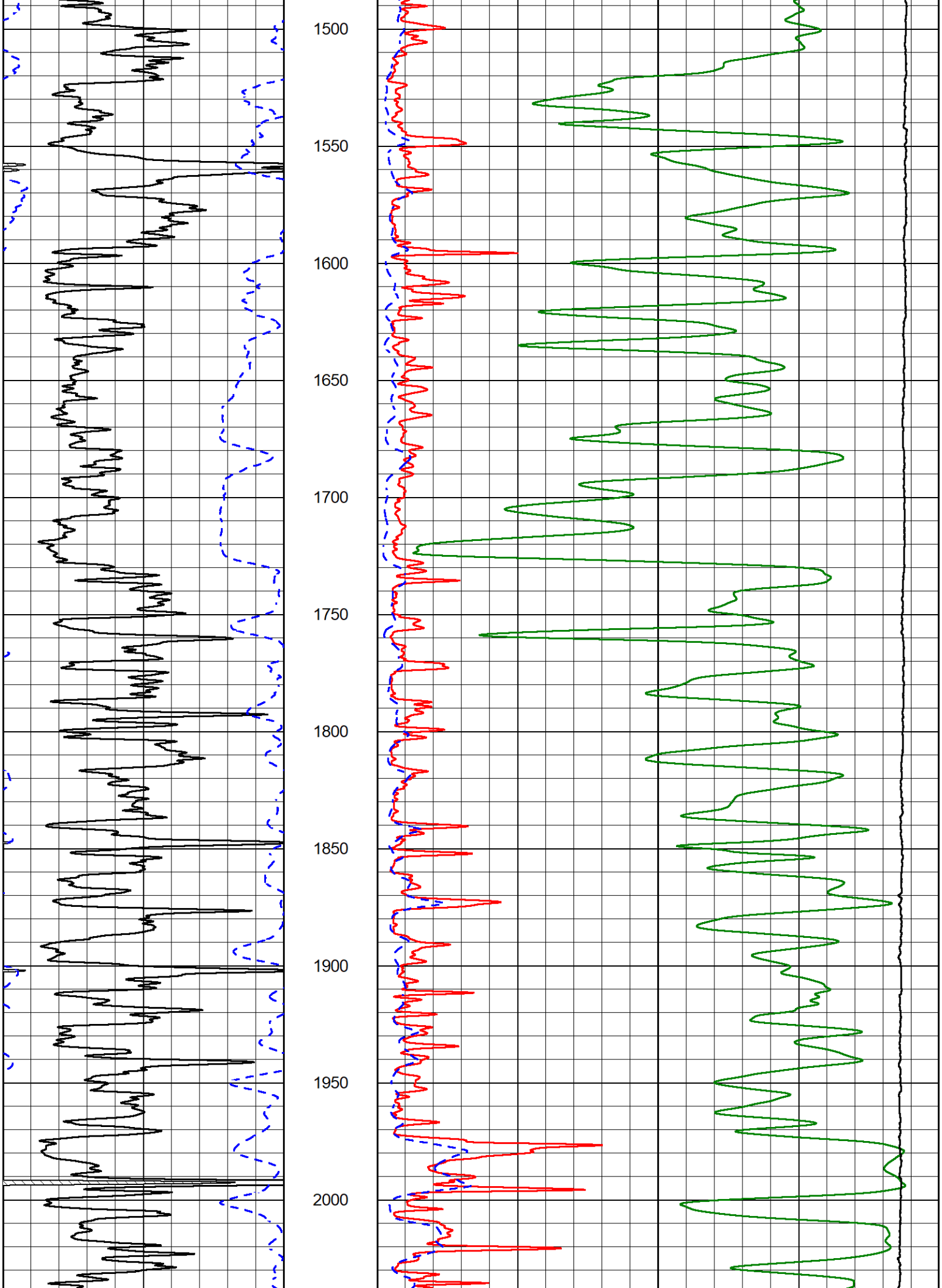
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1950
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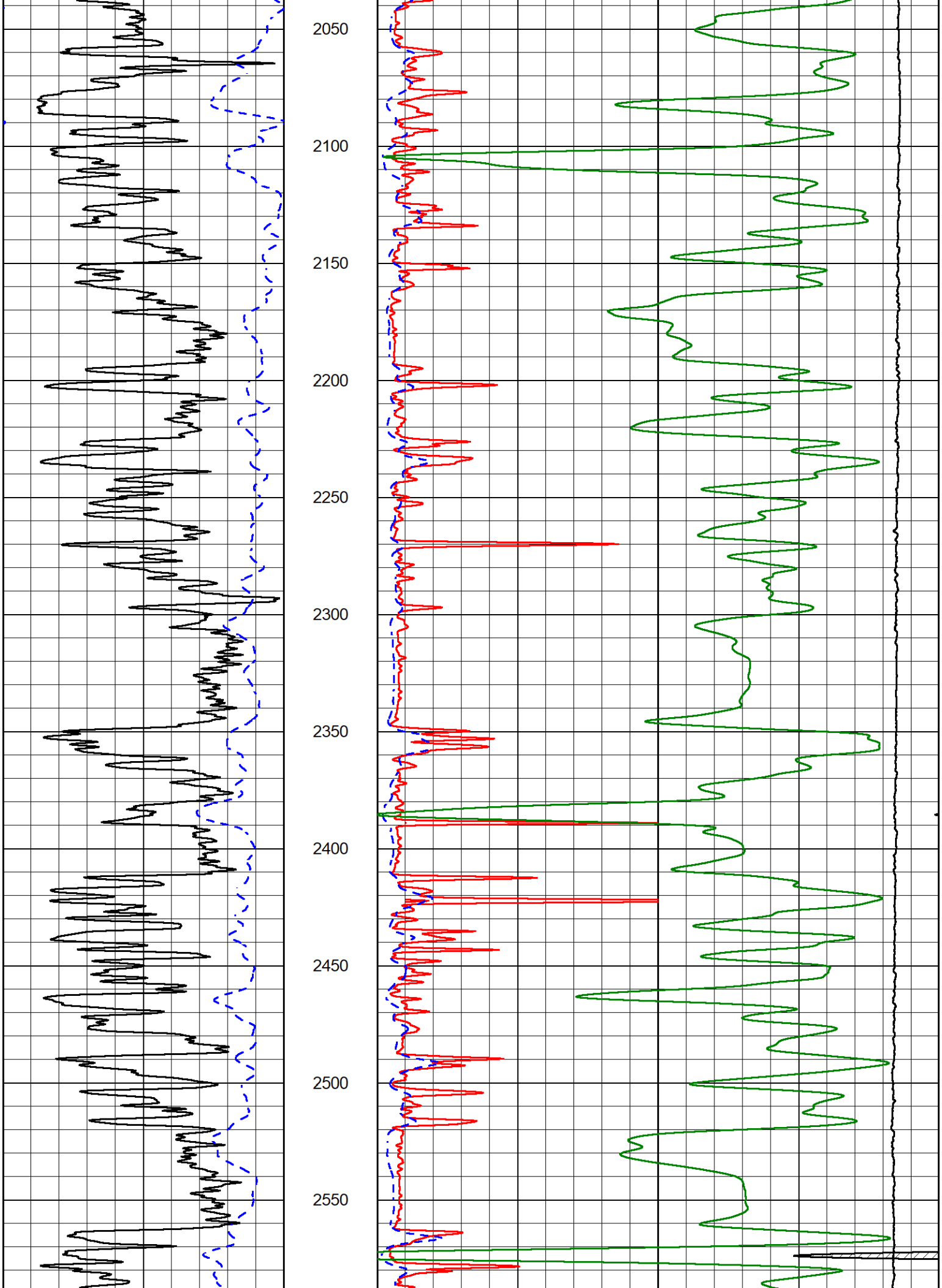
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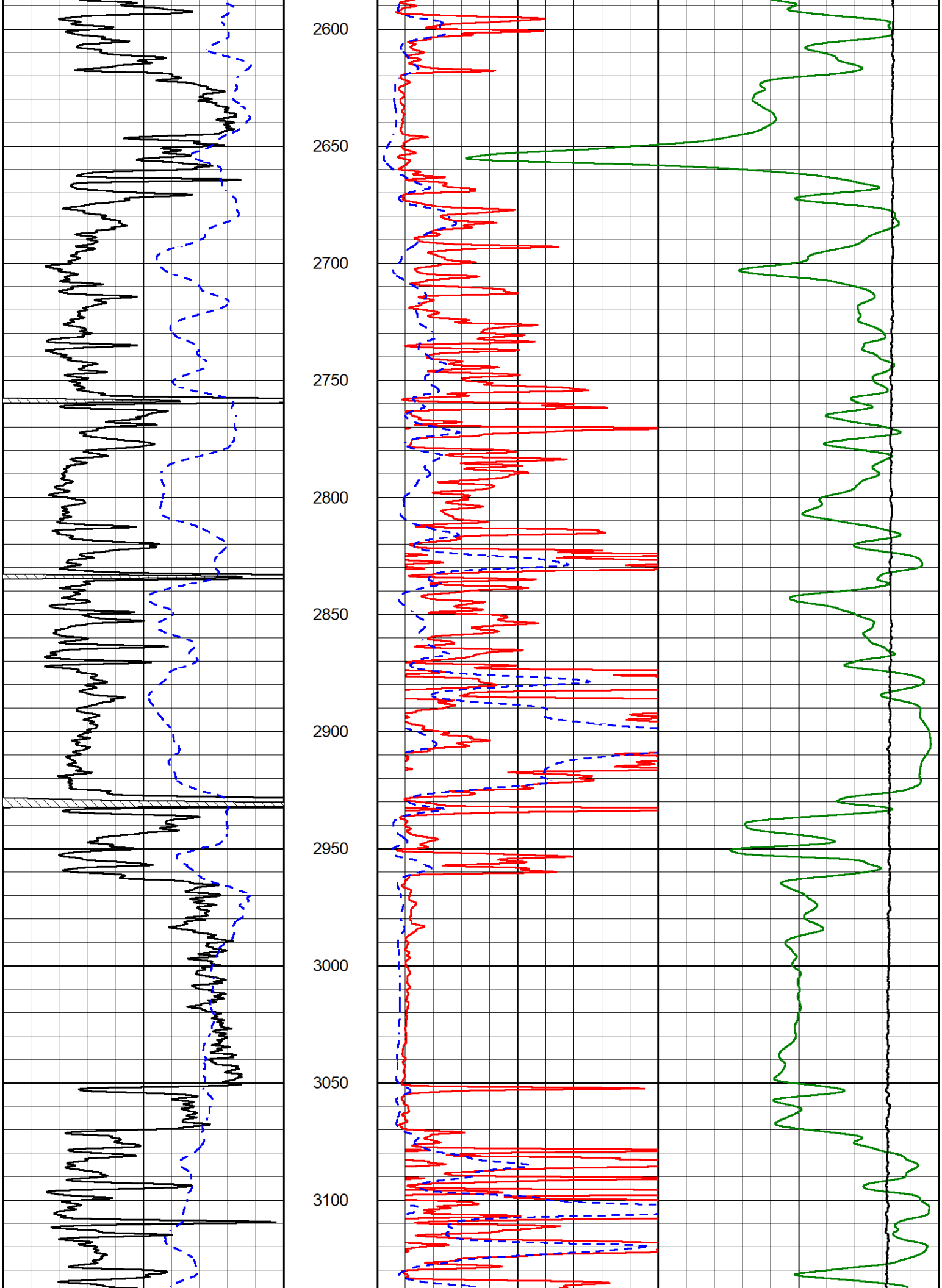
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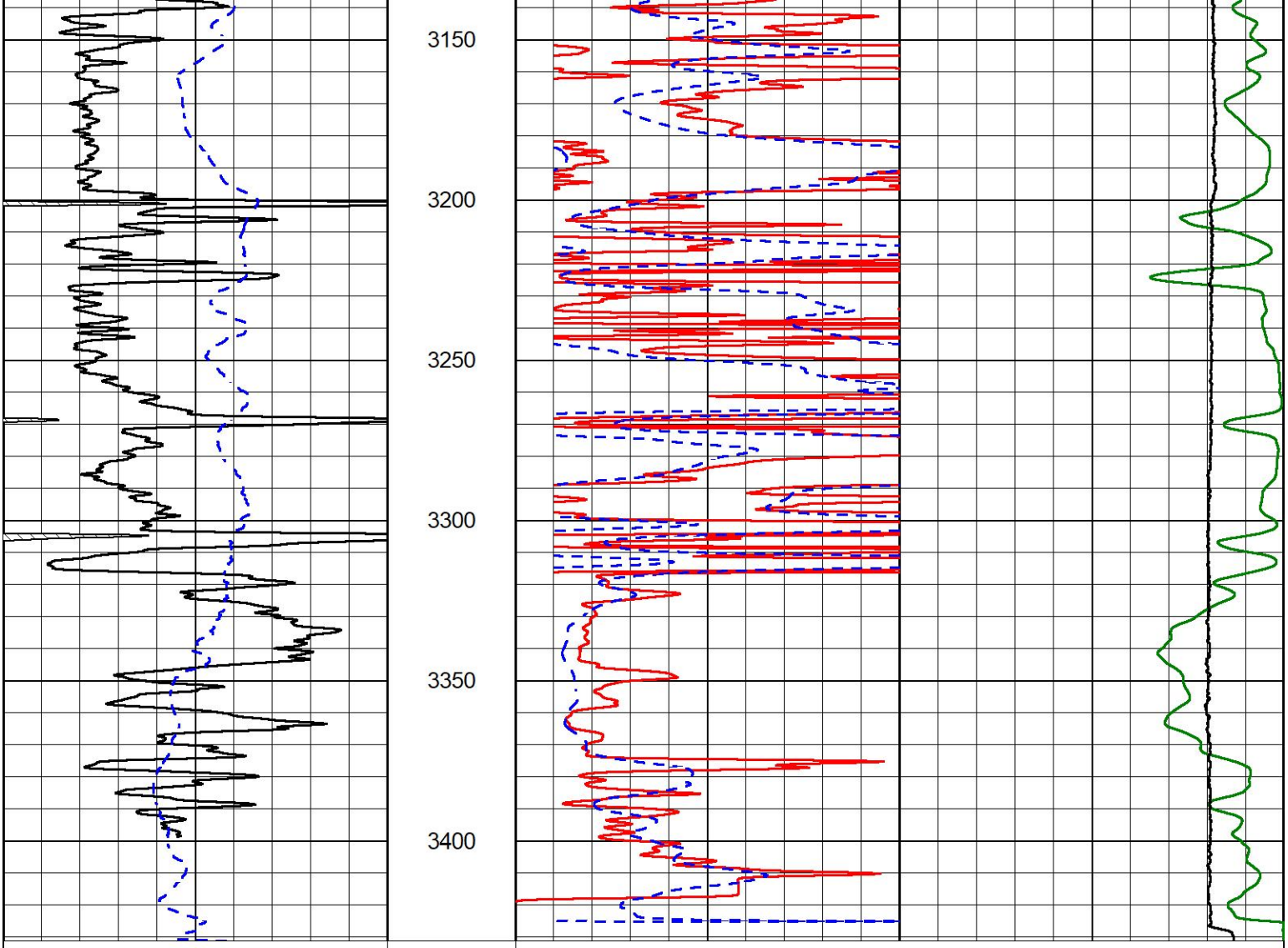


MIDWEST WIRELINE

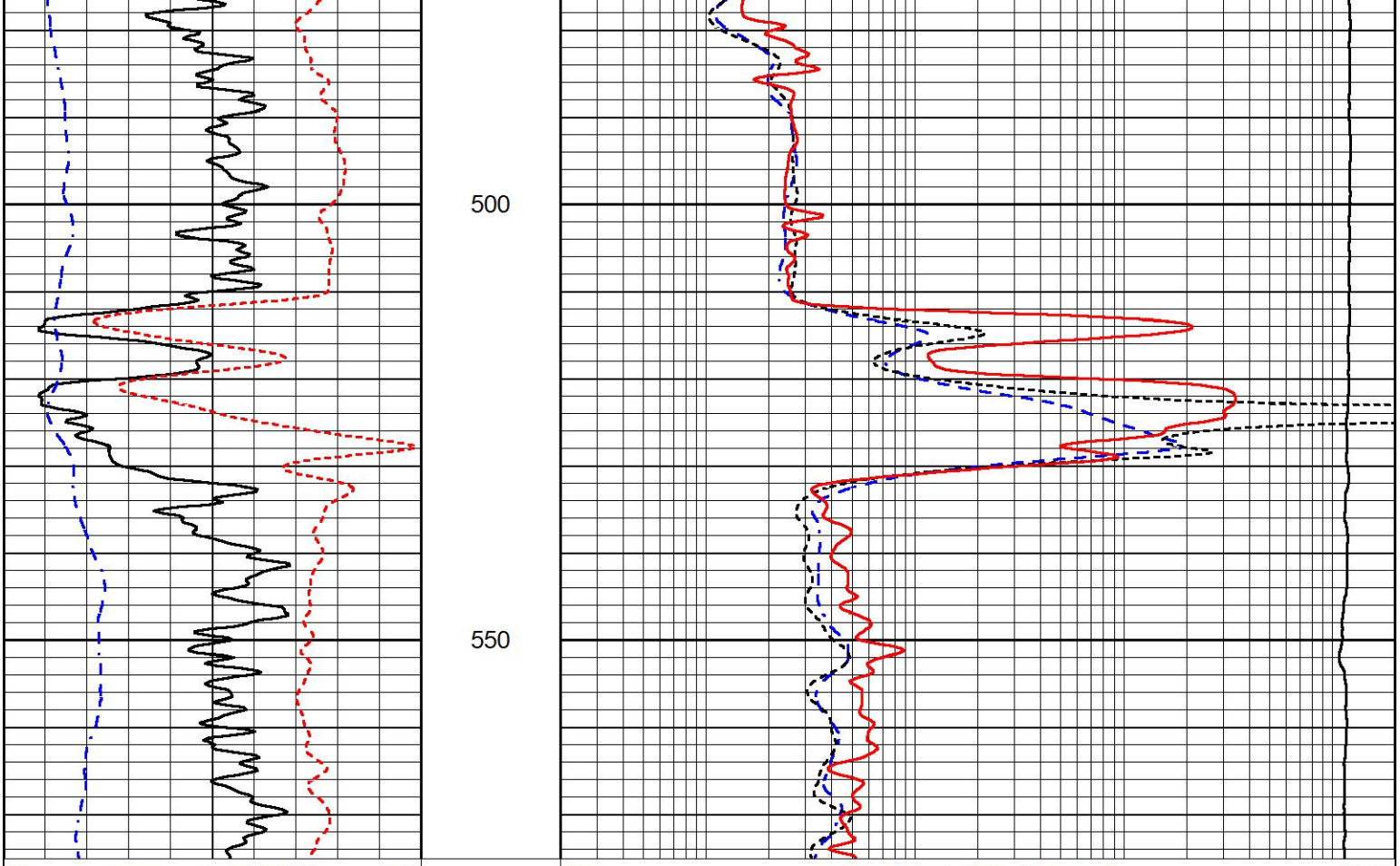
ANHYDRITE SECTION

MAIN PASS

Database File	iuka-carmi_sessler #2.db
Dataset Pathname	Stack/pass3.4
Presentation Format	_dil
Dataset Creation	Mon Mar 27 16:32:43 2023
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXORT	40
-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



0	Gamma Ray (GAPI)	150
-160	RXORT	40
-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

MIDWEST WIRELINE

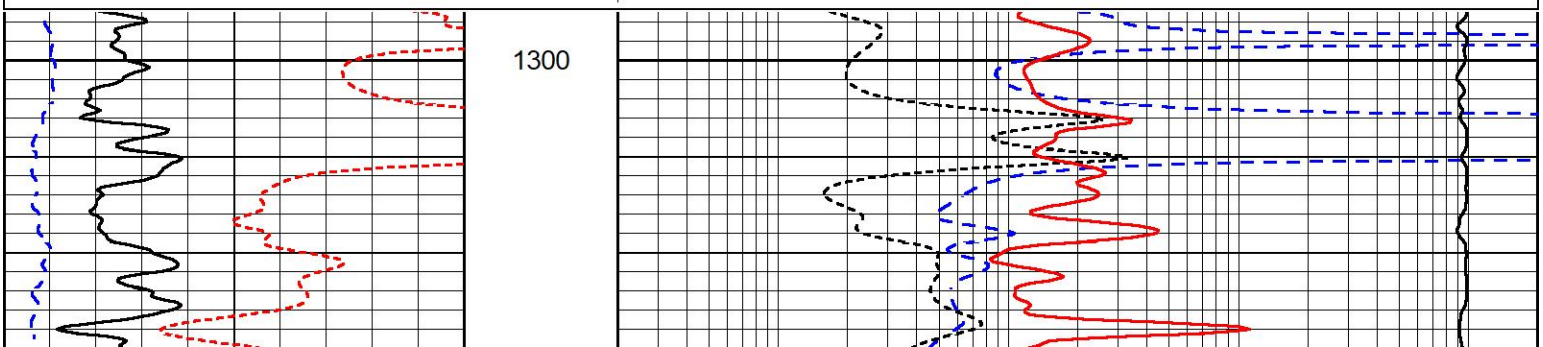
DETAIL SECTION

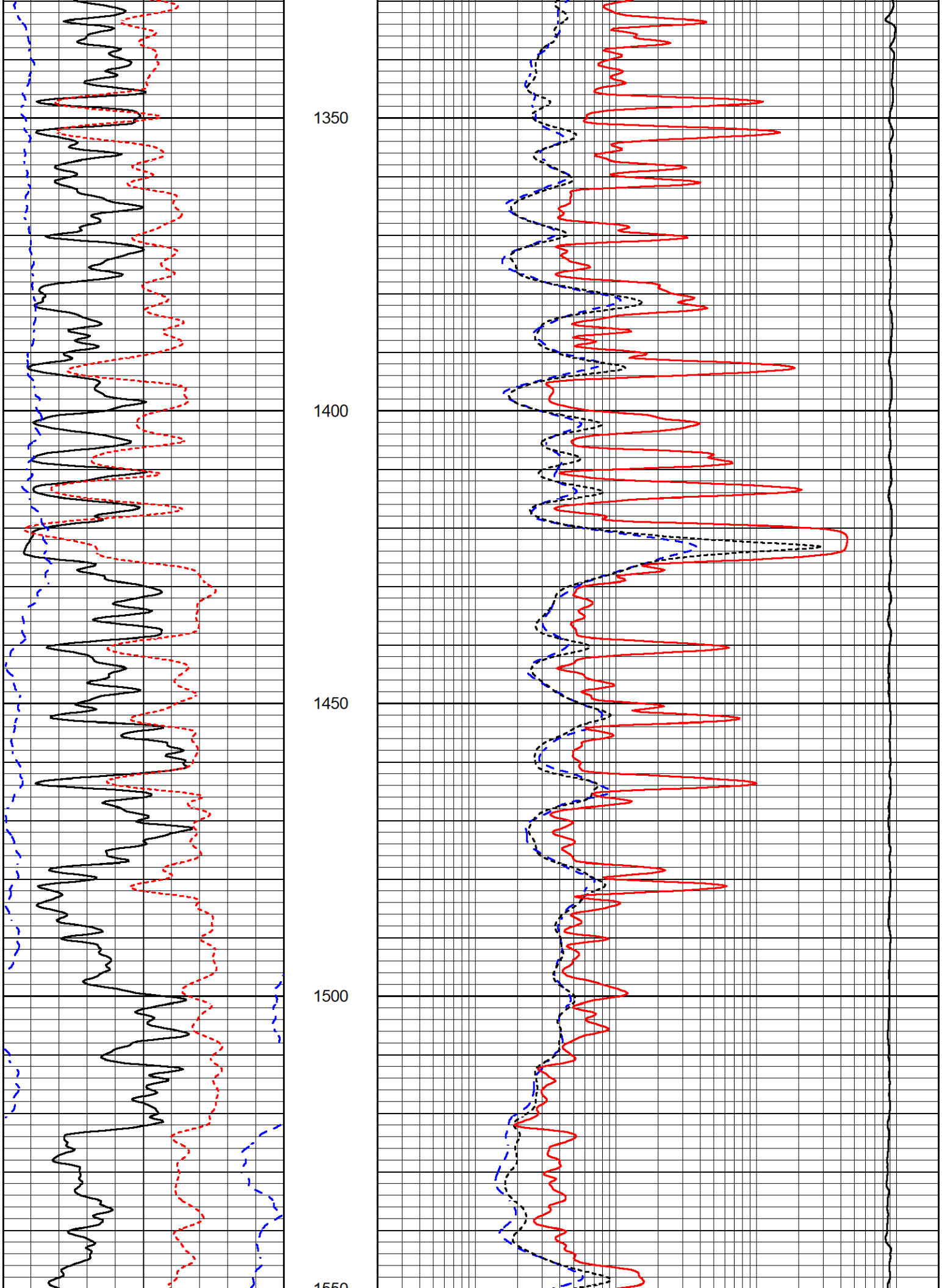
MAIN PASS

Database File	iuka-carmi_sessler #2.db
Dataset Pathname	Stack/pass3.1
Presentation Format	_dil
Dataset Creation	Mon Mar 27 16:28:04 2023
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXORT	40
-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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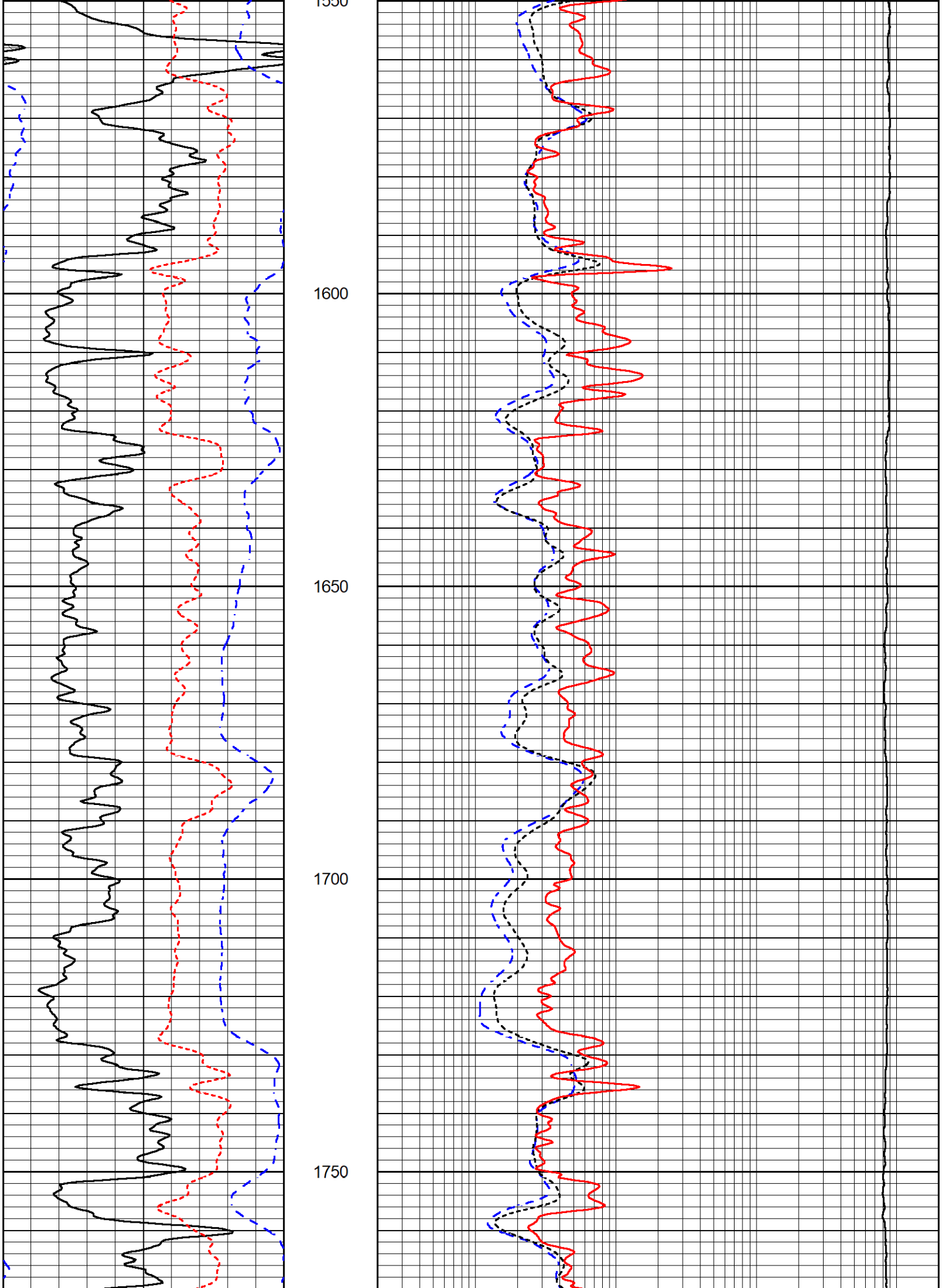
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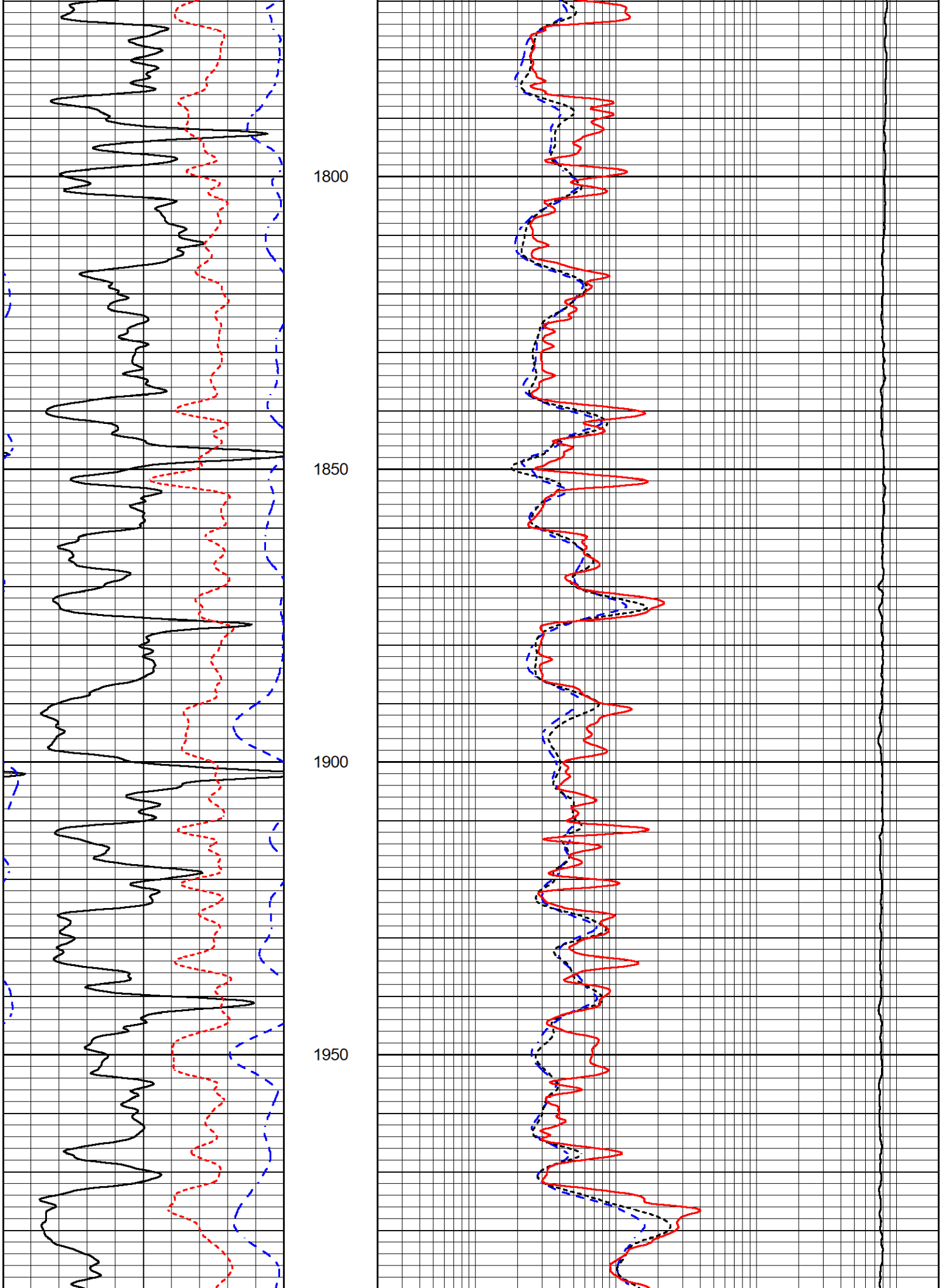
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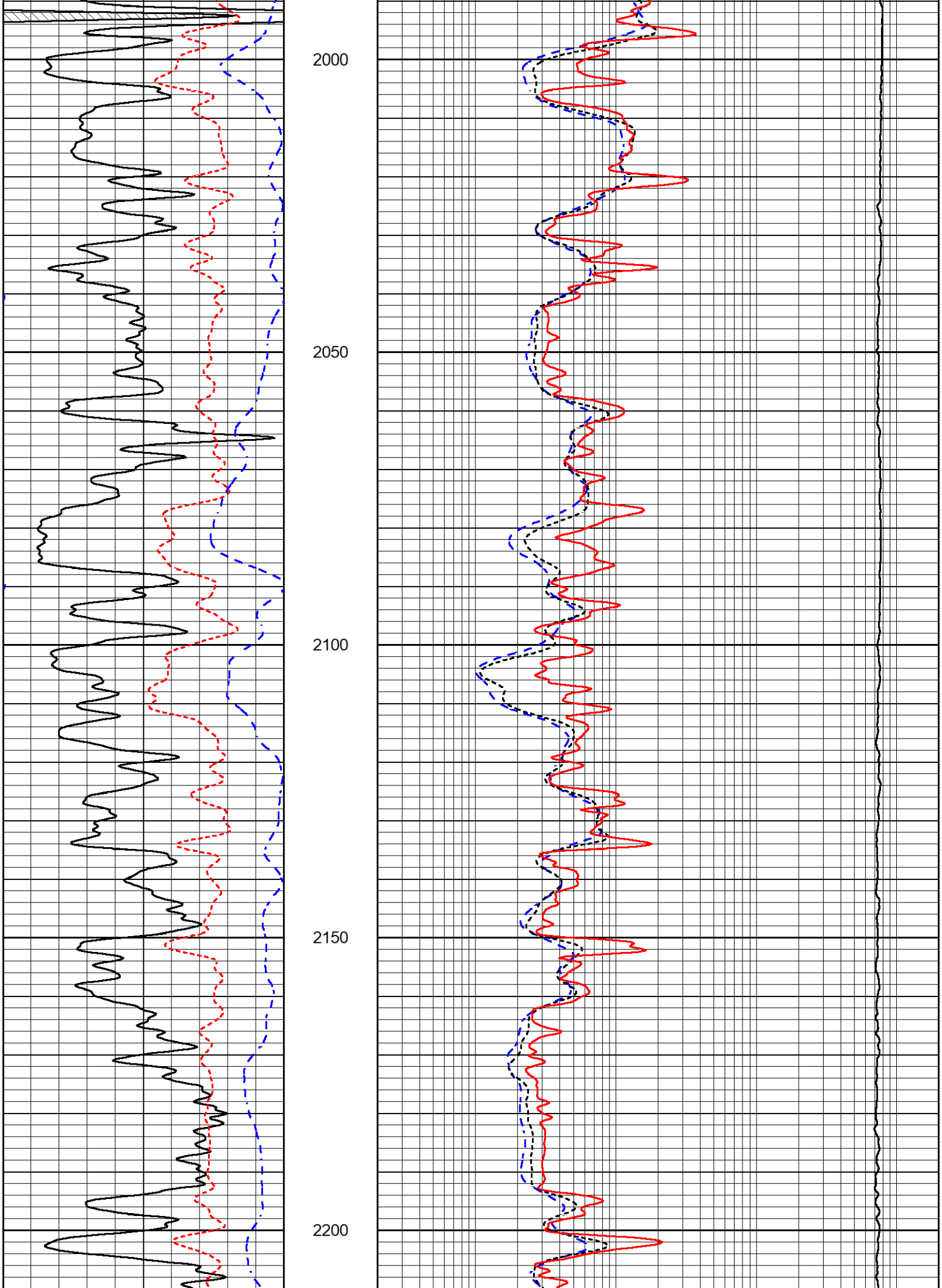
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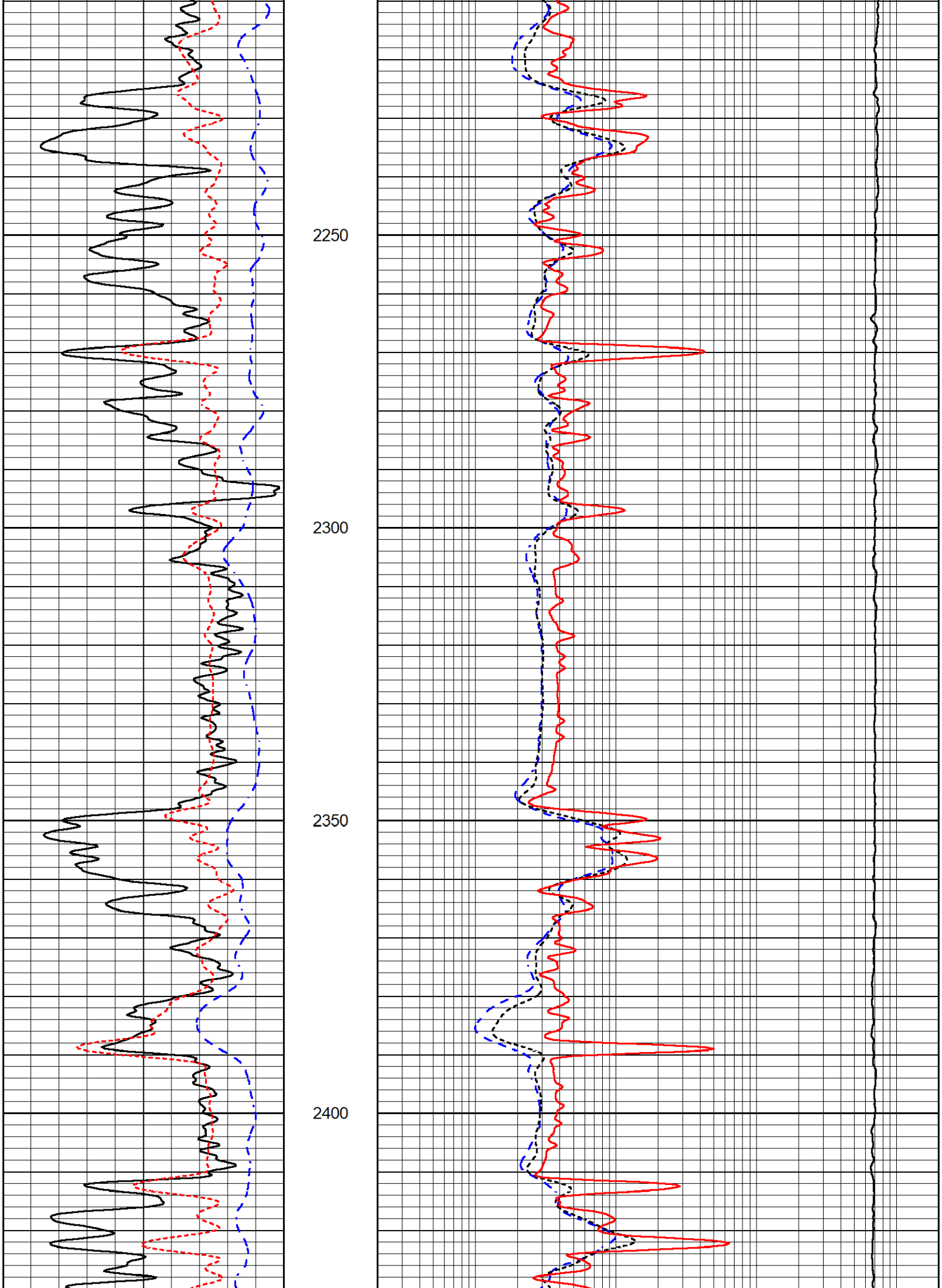
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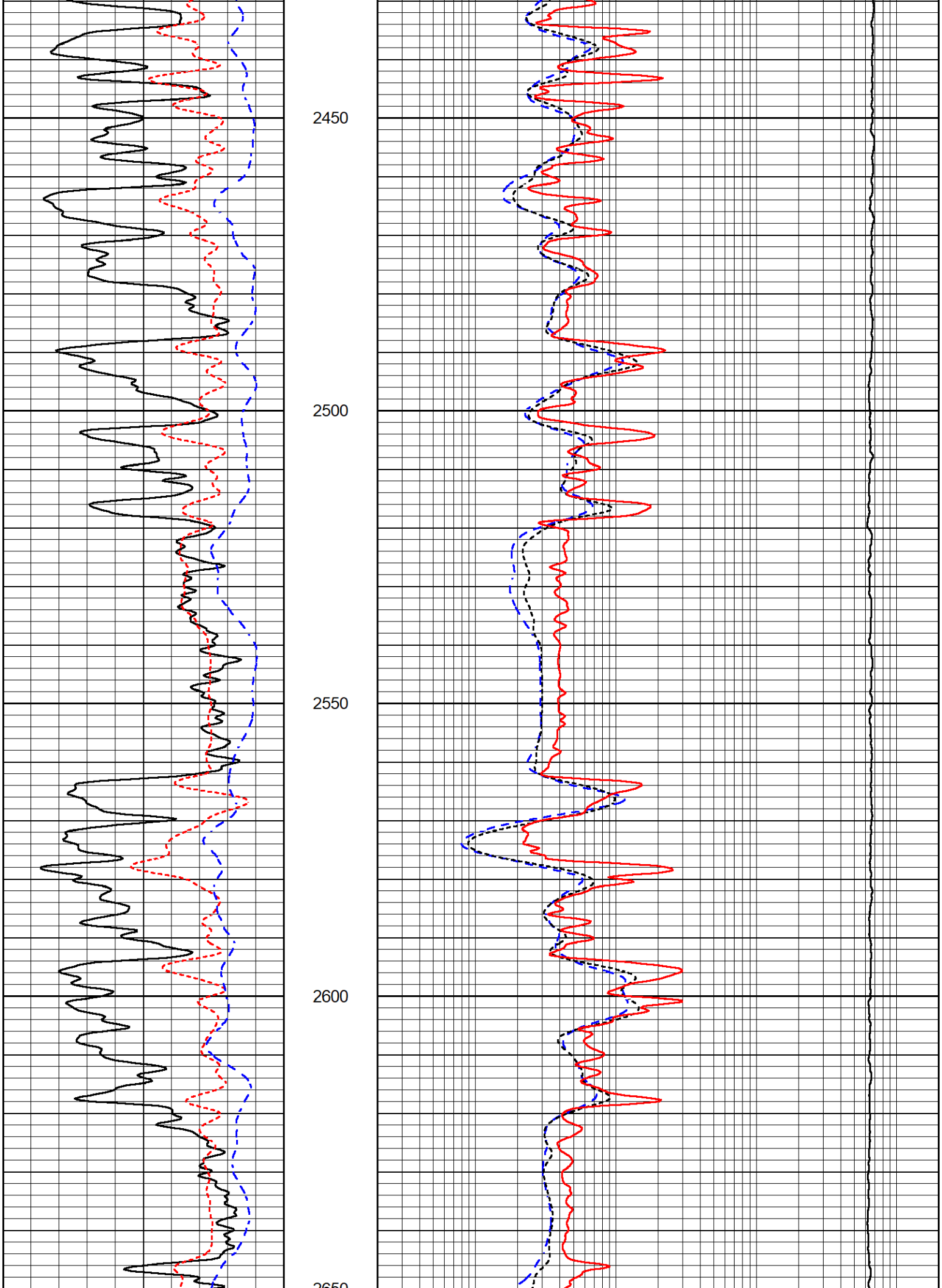
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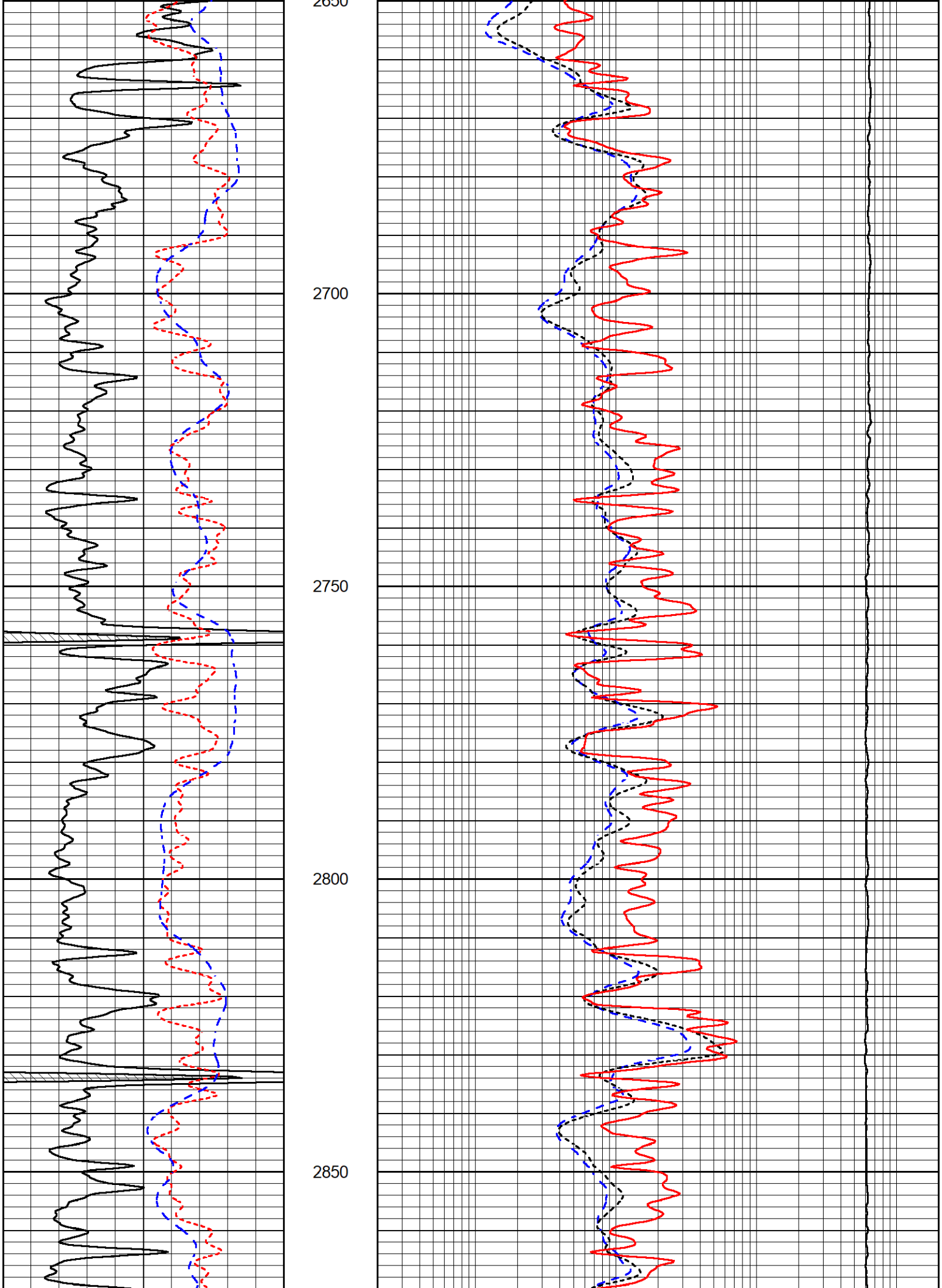
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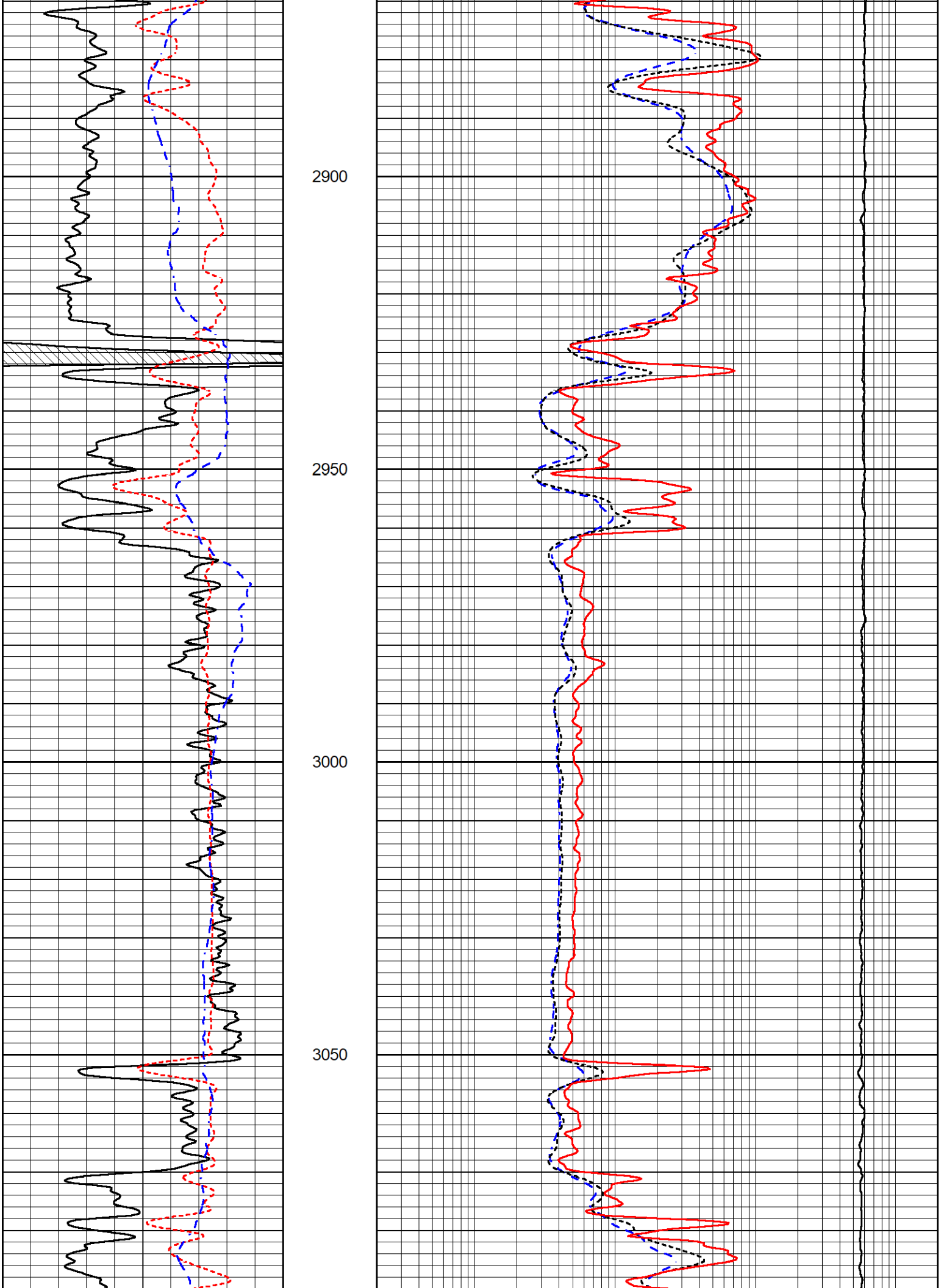
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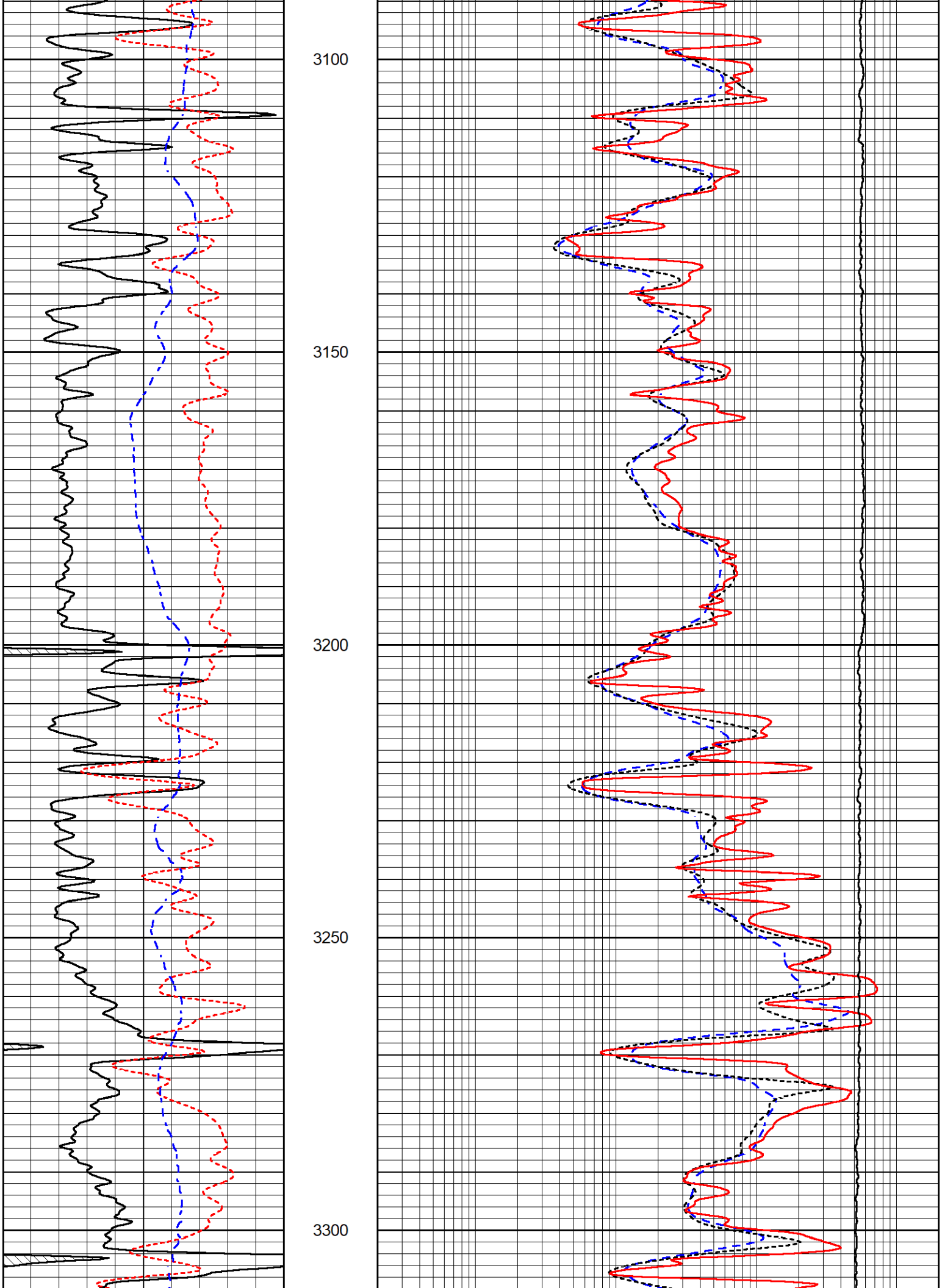
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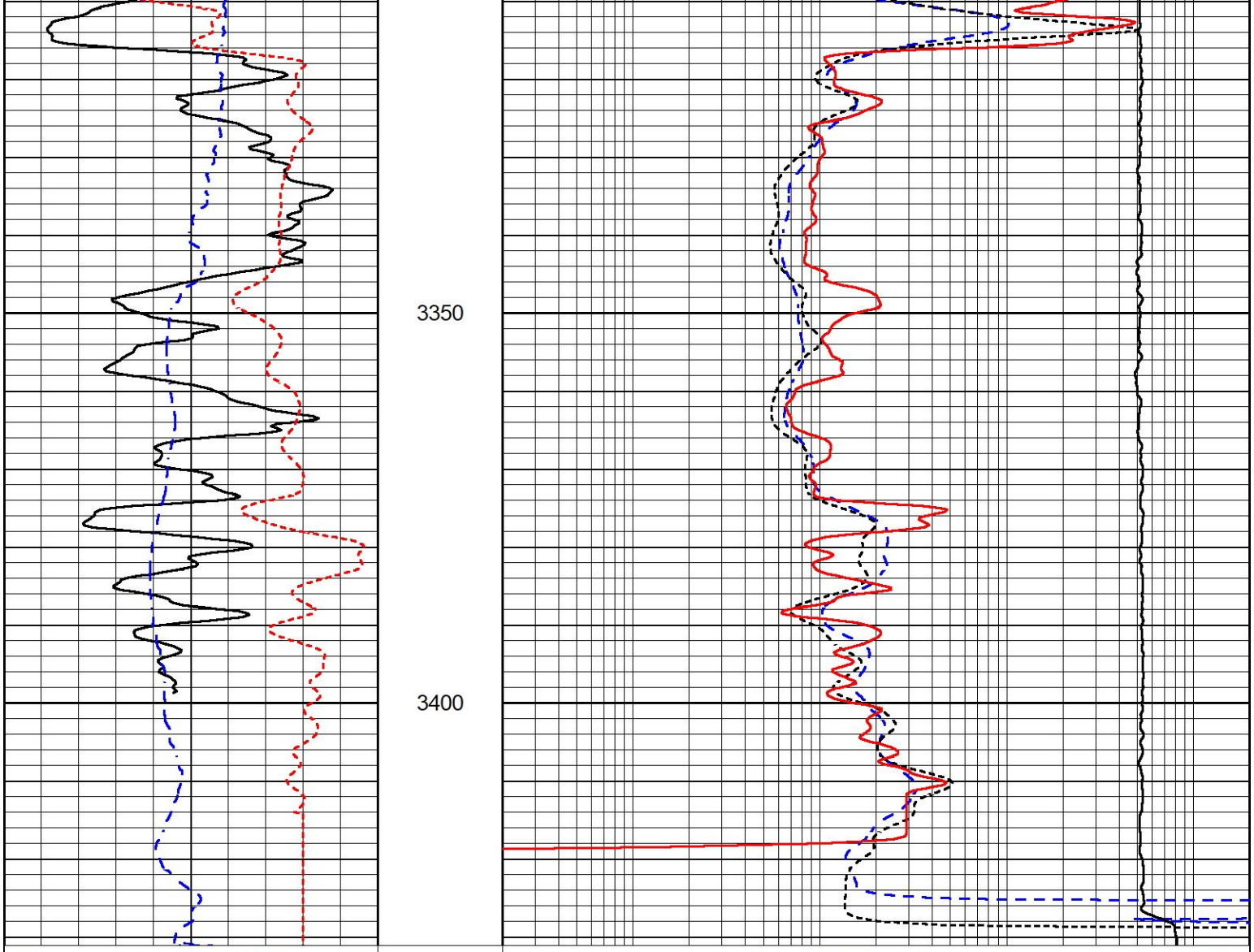


0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

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

MIDWEST WIRELINE

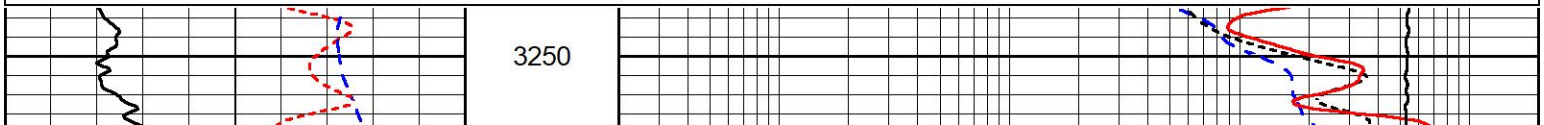
REPEAT SECTION

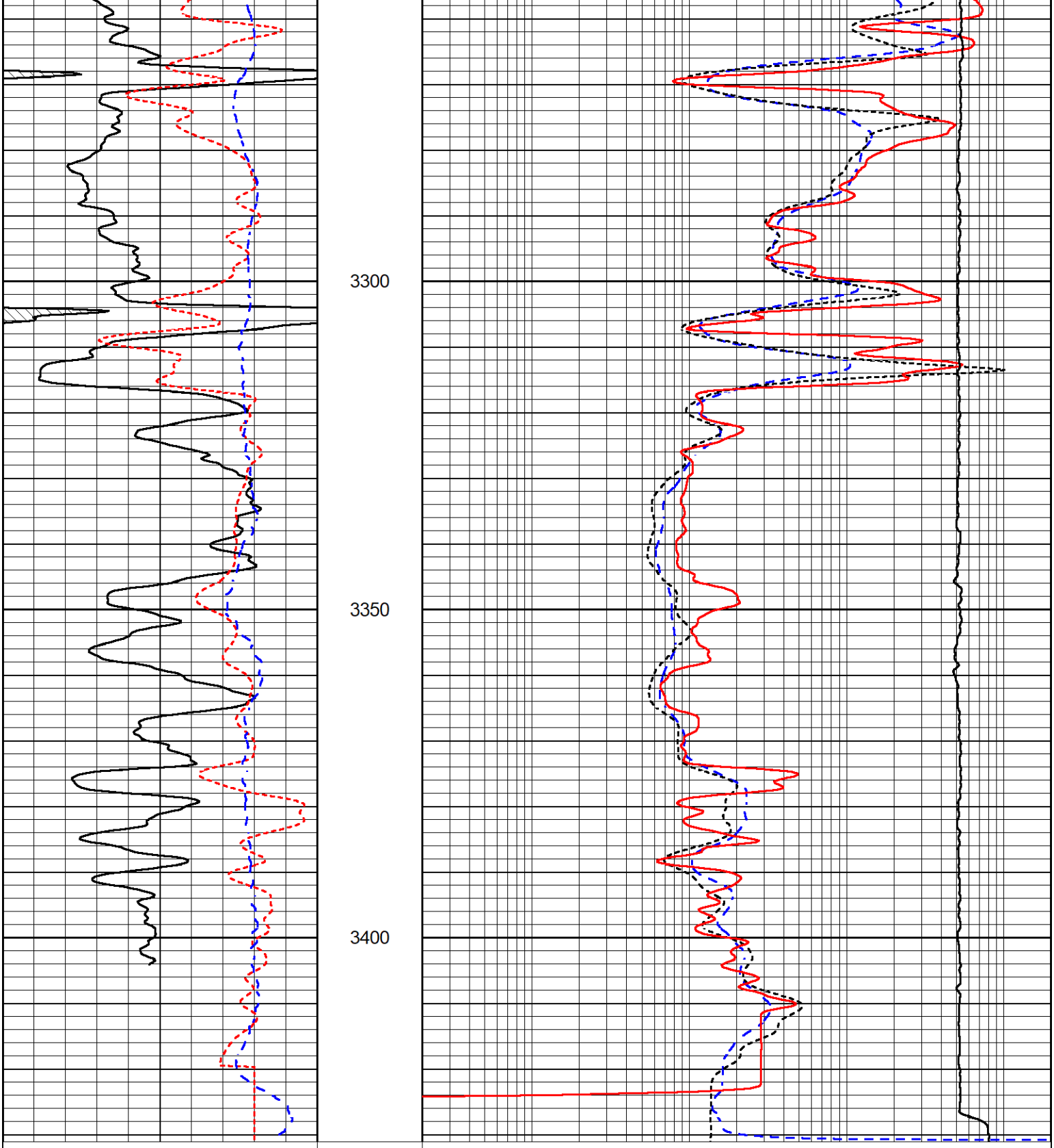
REPEAT PASS

Database File	iuka-carmi_sessler #2.db
Dataset Pathname	Stack/pass2.1
Presentation Format	_dil
Dataset Creation	Mon Mar 27 16:08:08 2023
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXORT	40
-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





Calibration Report

Database File	iuka-carmi_sessler #2.db
Dataset Pathname	Stack/pass3.1
Dataset Creation	Mon Mar 27 16:28:04 2023

Dual Induction Calibration Report

Dual Induction Calibration Report

Serial-Model: 507-M&W
Surface Cal Performed: Sun Mar 19 18:02:16 2023

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	67.445	566.296	0.000	255.800	mmho/m	0.450	-31.000
Medium	192.026	839.715	0.000	255.800	mmho/m	0.420	-84.000

Compensated Density Calibration Report

Serial-Model: 307-08-M&W
Source #: 20762B
Master Calibration Performed: Sat Feb 25 11:00:49 2023

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4131.04	5675.82	cps
Aluminum	2.635	g/cc	781.38	3576.78	cps

Spine Angle = 74.50 Density/Spine Ratio = 0.509

	Size		Reading
Small Ring	6.00	in	1.16
Large Ring	18.00	in	1.01

Compensated Neutron Calibration Report

Serial Number: 207-MW
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

PRE-SURVEY VERIFICATION

	Detector	Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	
3)	Short Space		cps		
	Long Space		cps	pu	

POST-SURVEY VERIFICATION

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

2)	Short Space	cps		
	Long Space	cps	pu	pu
3)	Short Space	cps		
	Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	105	
Tool Model:	M&W	
Performed:	Fri Dec 3 15:10:46 2021	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.5500	GAPI/cps

MIDWEST WIRELINE

Company	Iuka-Carmi Devenopment LLC
Well	Sessler #2
Field	Chase-Silica
County	Barton
State	Kansas