MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Val Energy, Inc.
Well Gail Sawyer #1-30
Field Wilson
County Cowley State Kansas
Location: API #: 15-035-24743-00-00
330 FSL & 2255 FEL
SEC 30 TWP 32S RGE 6E

Other Services: CNL/CDL, MEL

Elevation: K.B. 1297, D.F., G.L. 1289

Permanent Datum: Ground Level — Elevation 1289
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing

Company Val Energy, Inc.
Well Gail Sawyer #1-30
Field Wilson
County Cowley
State Kansas

Date	10/5/2021			
Run Number	One			
Depth Driller	3303			
Depth Logger	3302			
Bottom Logged Interval	3301			
Top Log Interval	300			
Casing Driller	8.625 @ 301			
Casing Logger	312			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	900			
Density / Viscosity	8.6 / 62			
pH / Fluid Loss	11.0 / 8.0			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	1.10 @ 74			
Rmf @ Meas. Temp	.83 @ 74			
Rmc @ Meas. Temp	1.49 @ 74			
Source of Rmf / Rmc	CHARTS			
Rm @ BHT	.75 @ 109			
Operating Rig Time	2 Hours			
Max Rec. Temp. F	109			
Equipment Number	P-24			
Location	HAYS			
Recorded By	J. Henrickson			
Witnessed By	Joe Baker			

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Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Winfield Kansas
East to 201, 1 South, 1 West, West Into at Gate

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: J. Henrickson	Primary Witness: Joe Baker
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\val_gail_sawyer_1_30.db
Dataset field/well/stackml/pass4.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	109	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	0	81	Off	3302

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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	40.58		GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC	37.48		CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73					
			CDL-M&W (934-226)	8.50	4.00	250.00
LSD	28.43					
DCAL	28.42					
SSD	27.93					
			ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
MCAL	19.83					
MI	19.83					
MN	19.83					
RLL3F	15.80					
RLL3	15.80					

		DIL-PSI HIGH TEMP (952-828)	18.50	3.50	220.00
CILD	8.00				
CILM	4.70				
SP	0.20				

Dataset: val_gail_sawyer_1_30.db: field/well/stackml/pass4.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

MIDWEST WIRELINE

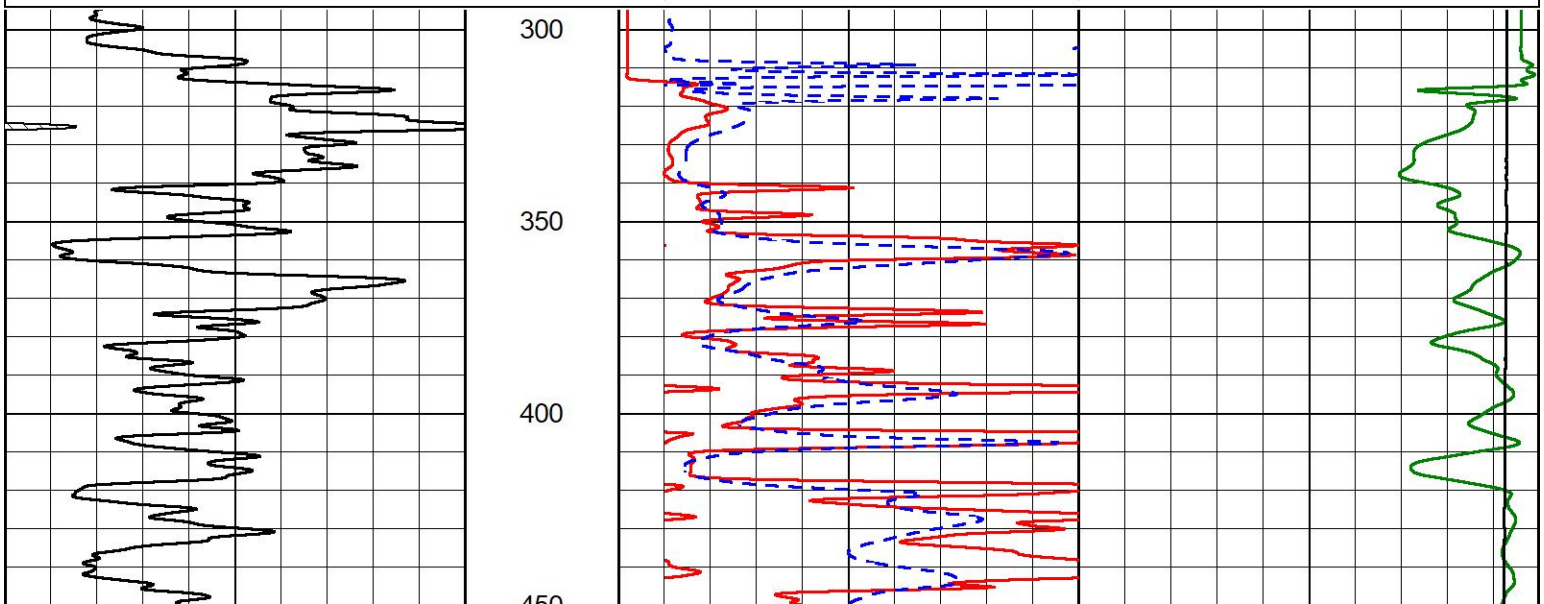
2" SCALE RESISTIVITY

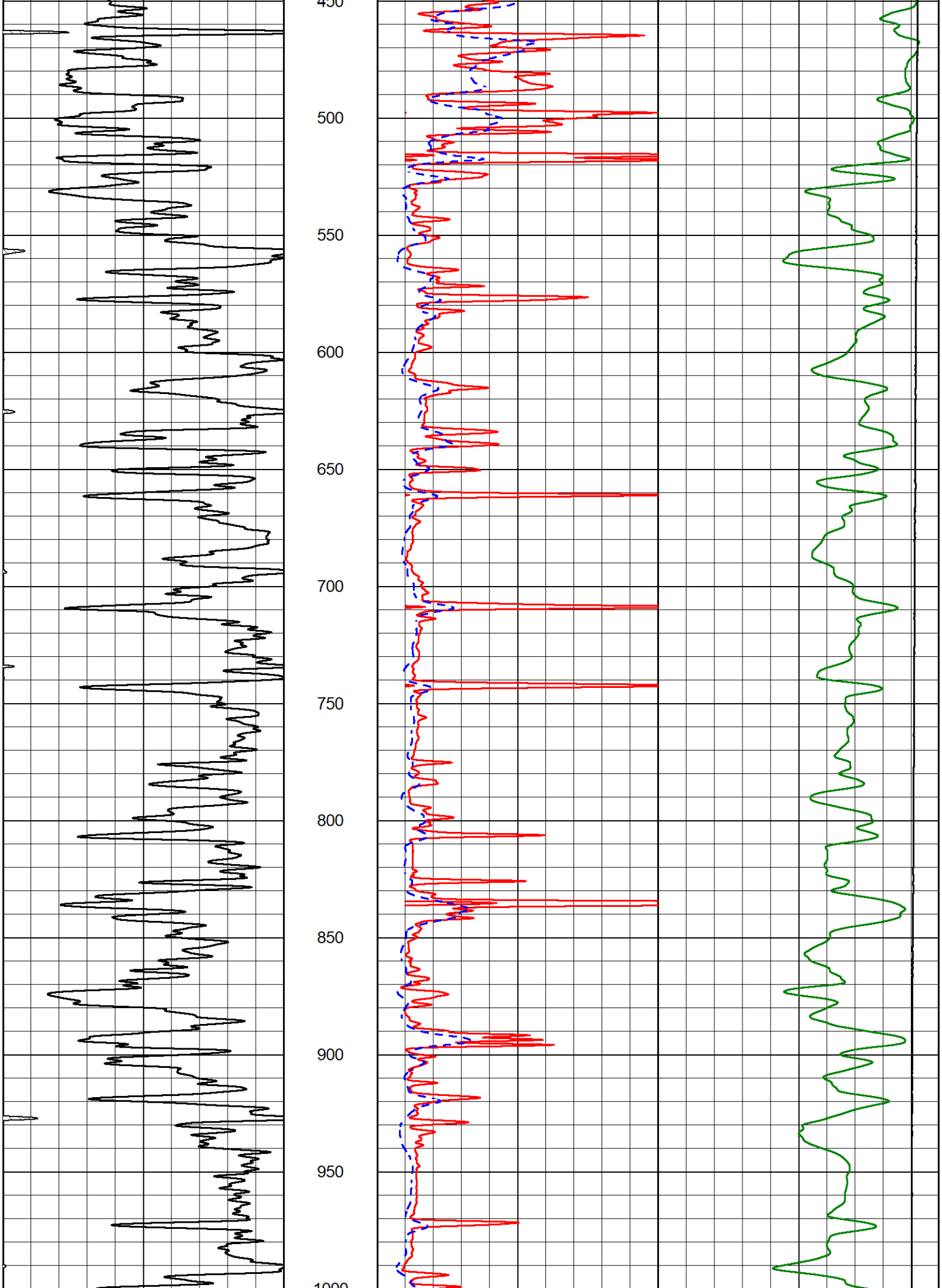
MAIN PASS

Database File	val_gail_sawyer_1_30.db
Dataset Pathname	stackml/pass5.1
Presentation Format	_dil2in
Dataset Creation	Tue Oct 05 17:22:46 2021
Charted by	Depth in Feet scaled 1:600

GAMMA RAY
0 (GAPI) 150

1000 CONDUCTIVITY (mmho/m) 0
15000 Line Tension (lb) 0
0 RLL3 (Ohm-m) 50
0 RILD (Ohm-m) 50
50 RLL3 (Ohm-m) 200
50 Deep Resistivity (Ohm-m) 200

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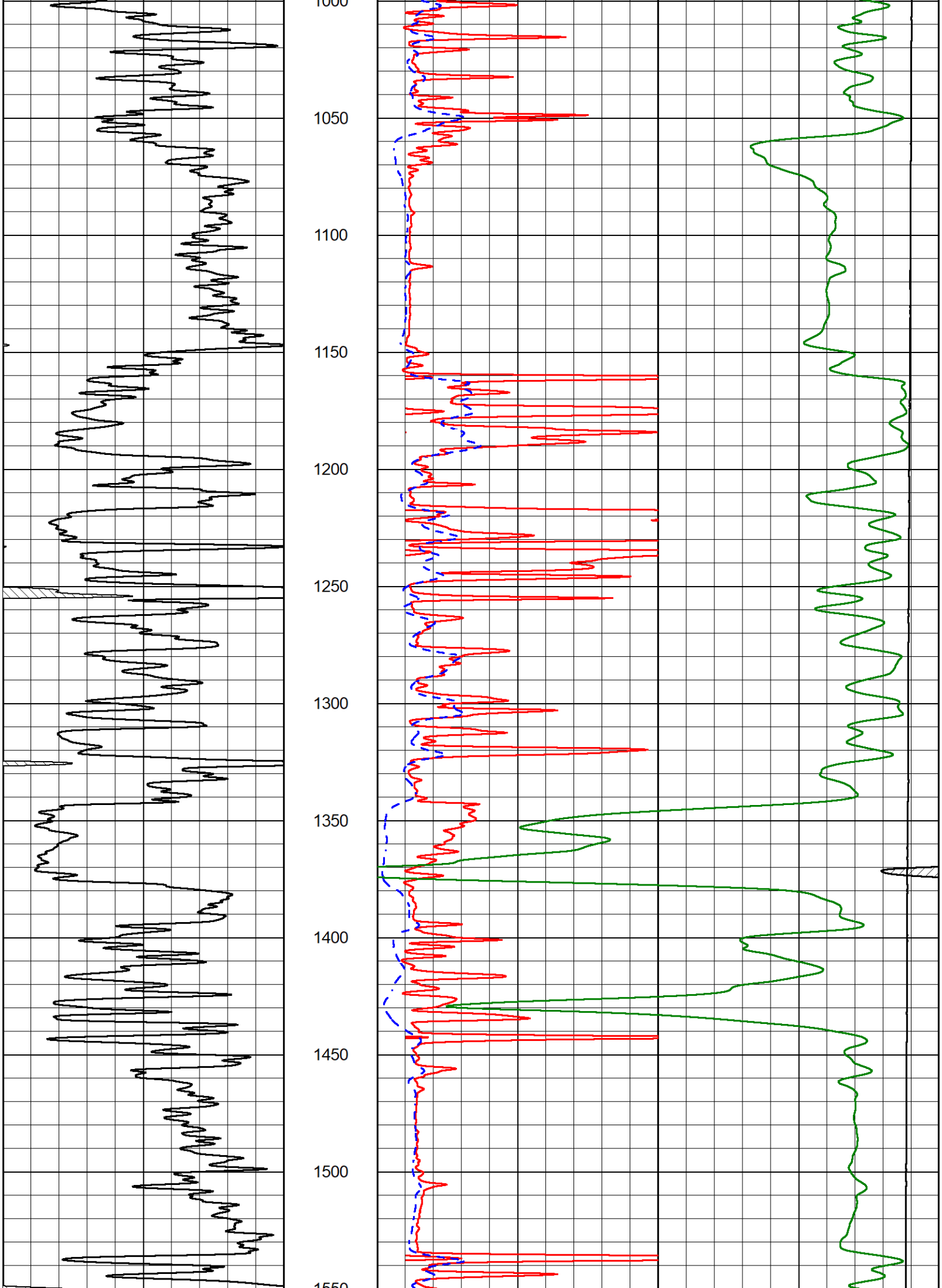
650
700
750
800
850
900
950
1000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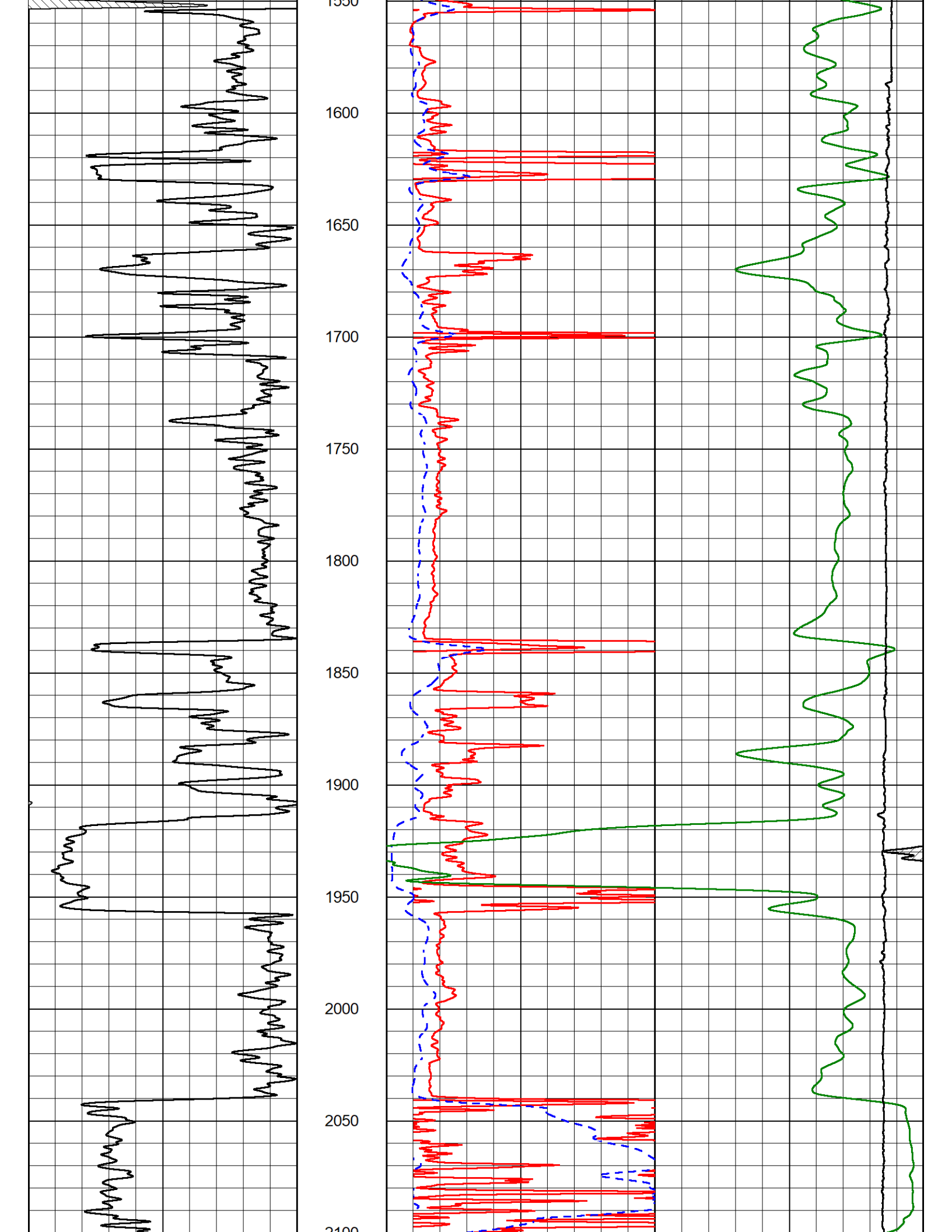
1200
1250
1300
1350
1400
1450
1500
1550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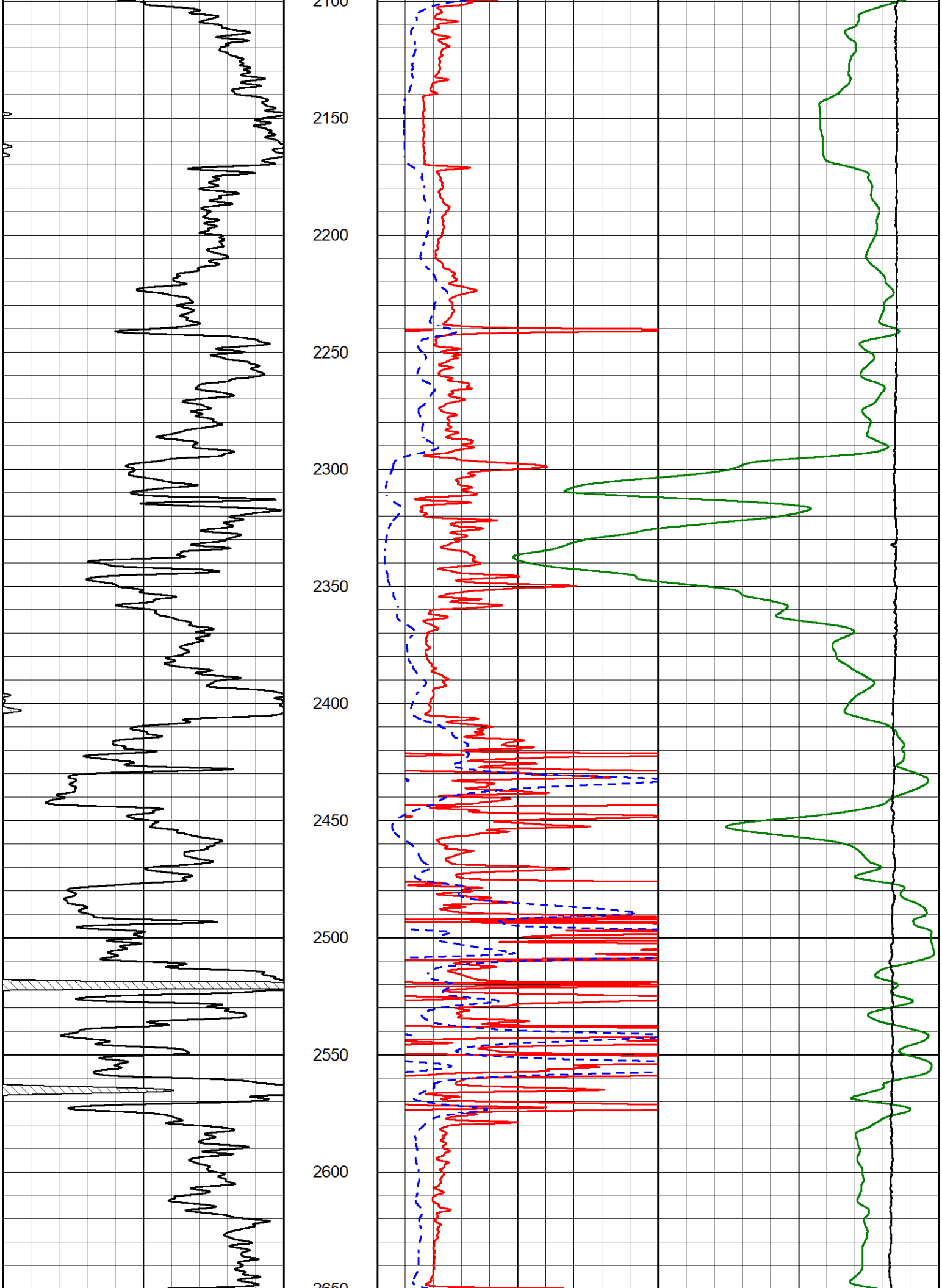
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100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2400
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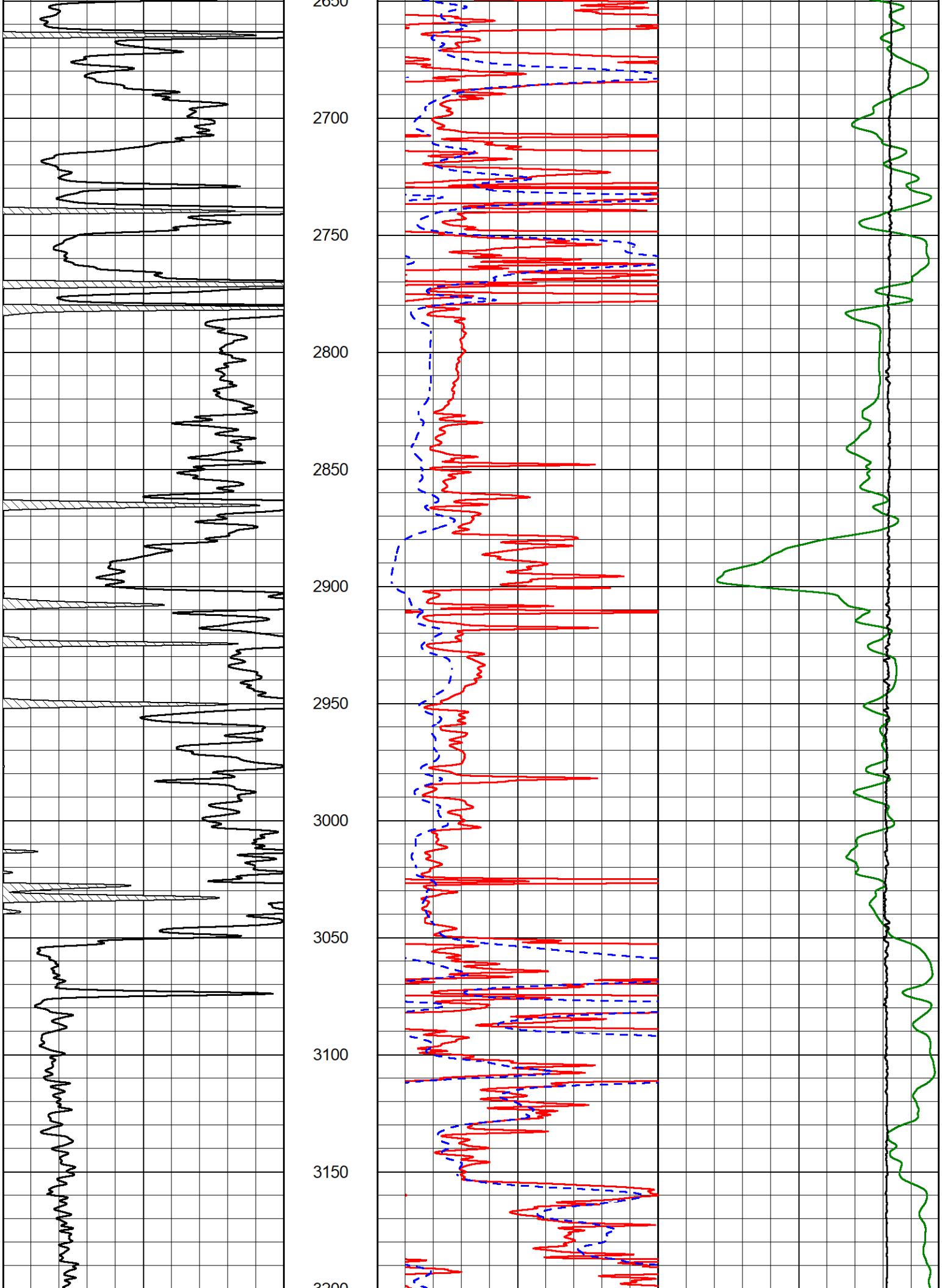
2600
2650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2850
2900
2950
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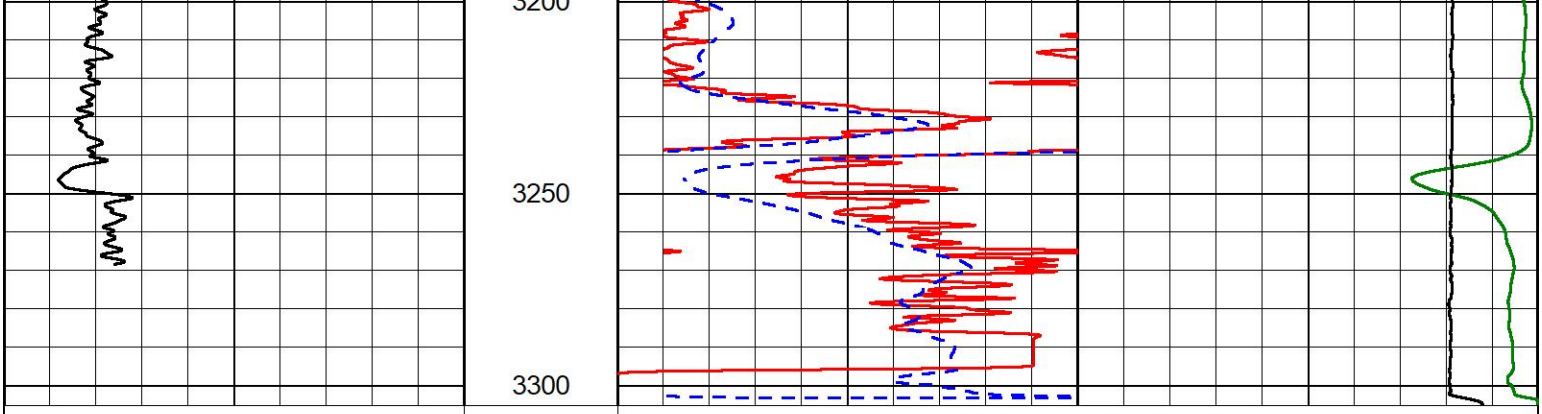
3050
3100
3150
3200

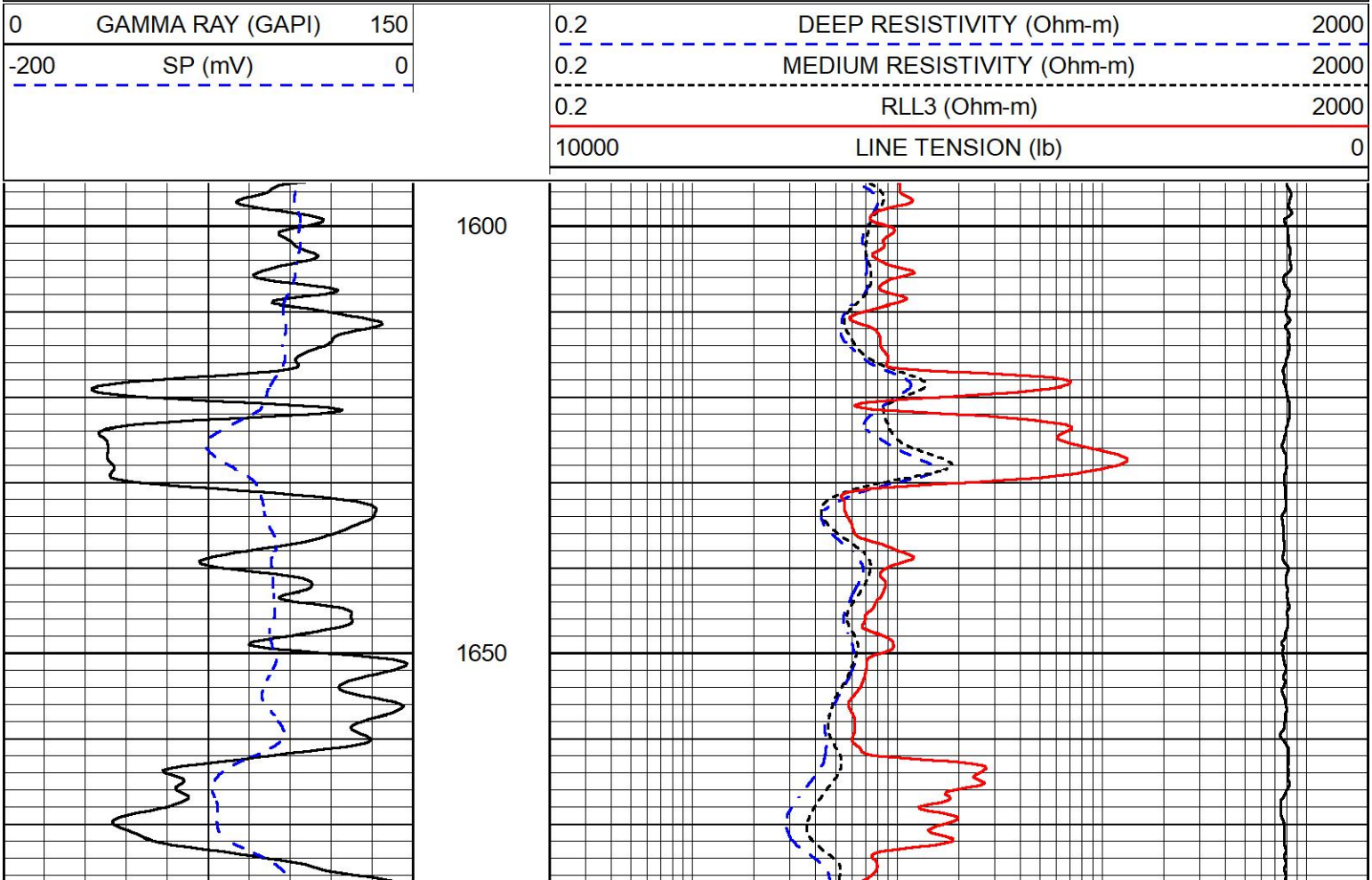


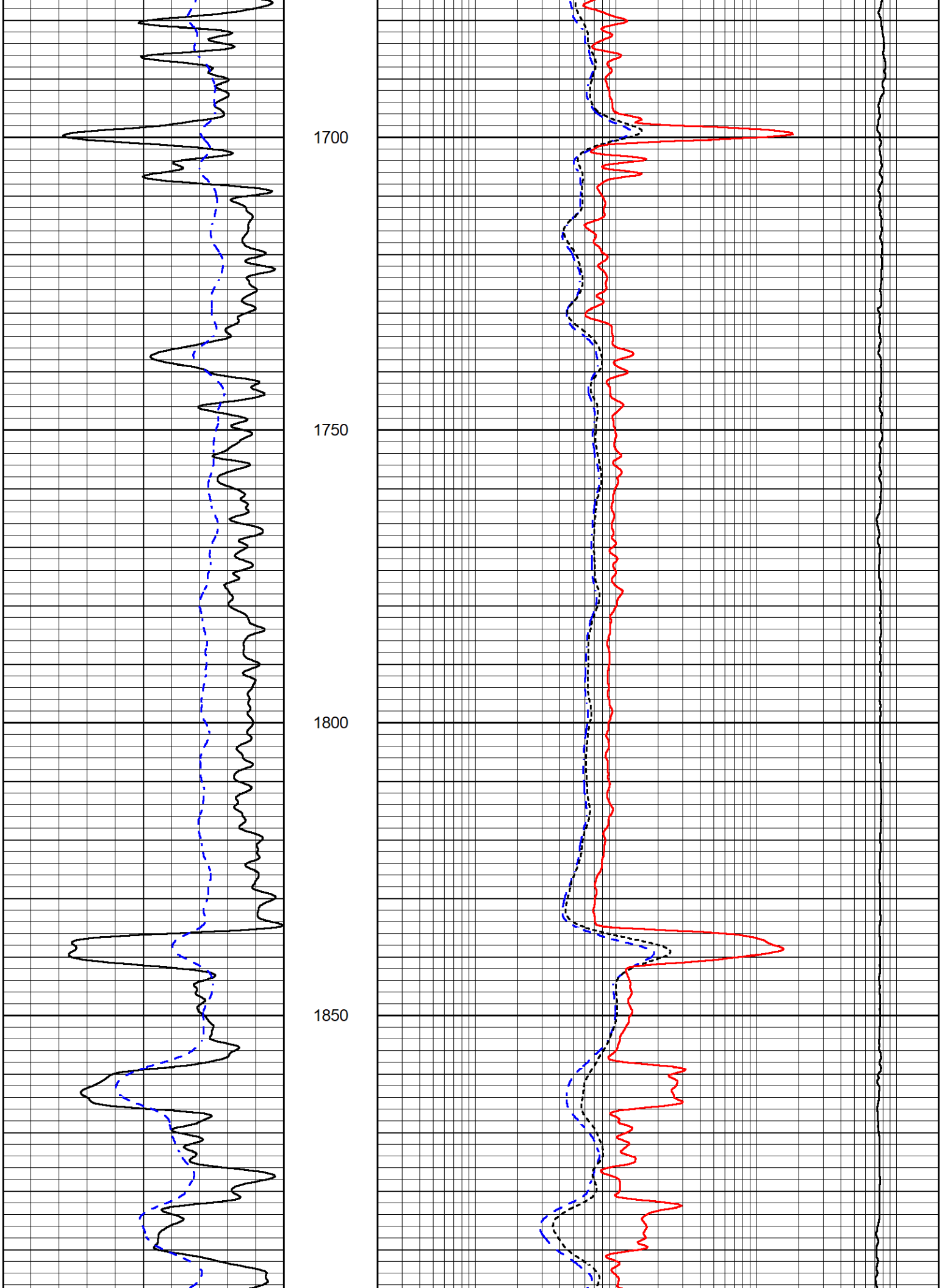
MIDWEST WIRELINE

DETAIL SECTION

MAIN PASS

Database File	val_gail_sawyer_1_30.db
Dataset Pathname	stackml/pass4.1
Presentation Format	_dil
Dataset Creation	Tue Oct 05 17:08:40 2021
Charted by	Depth in Feet scaled 1:240

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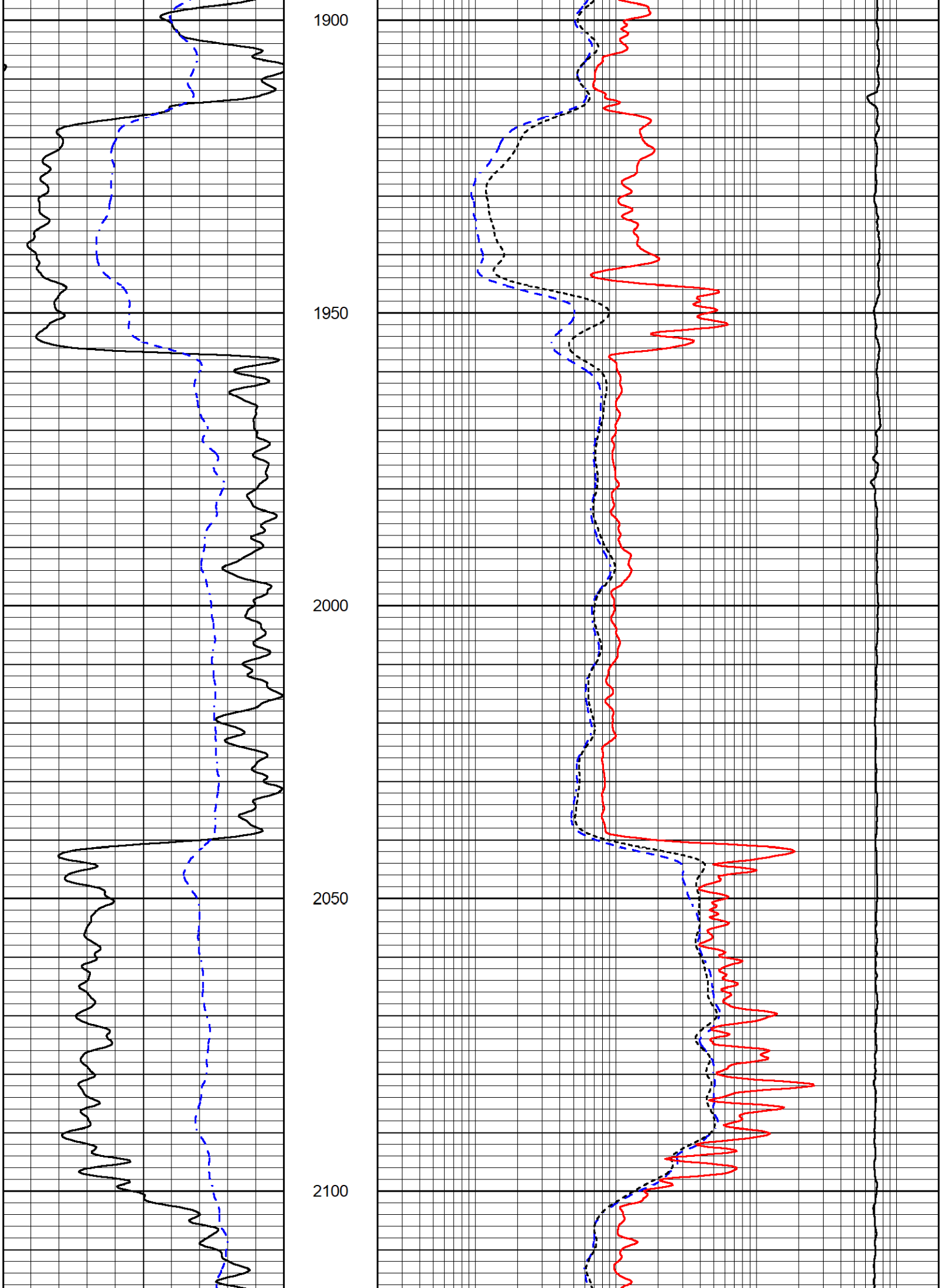
1850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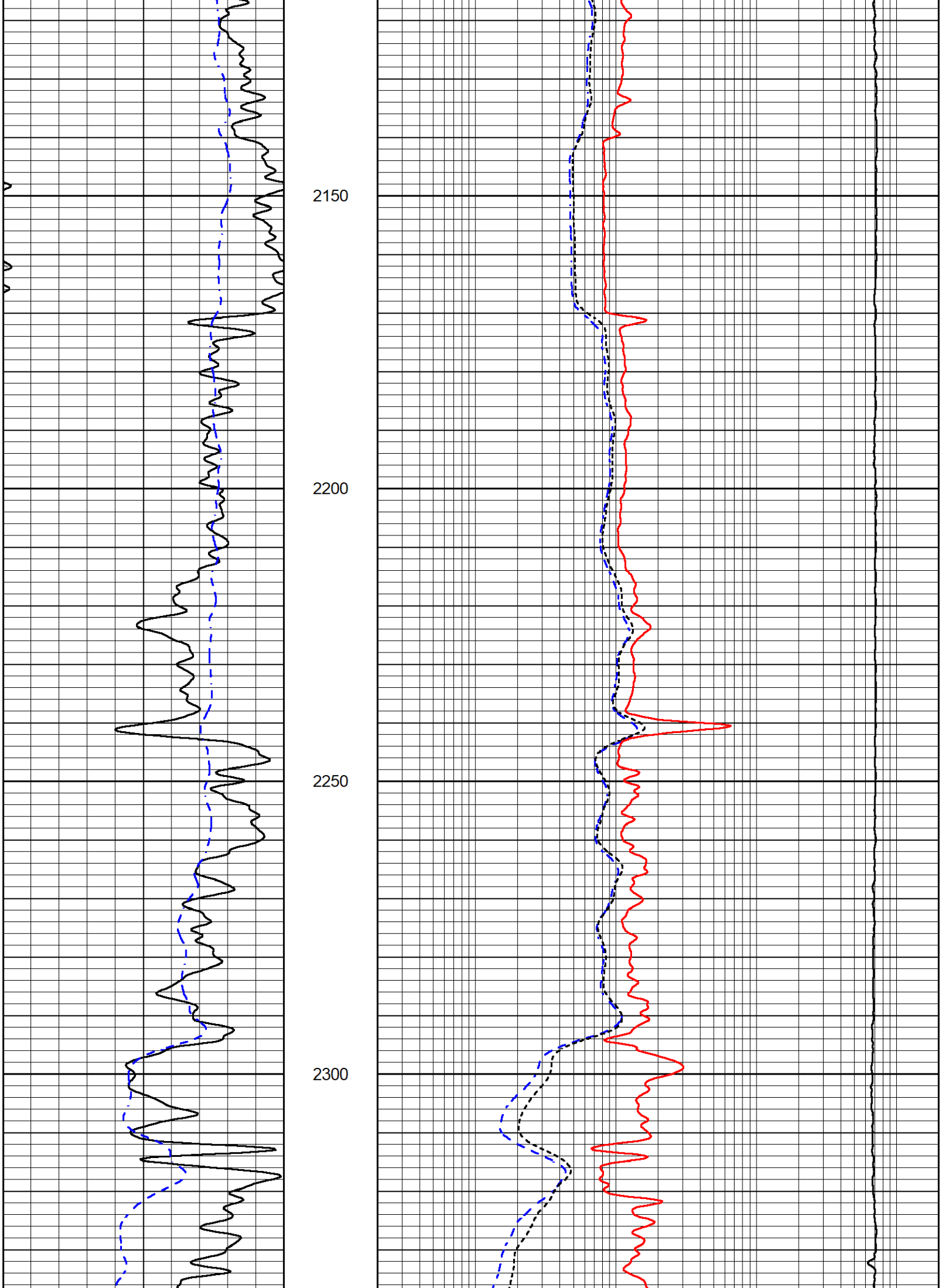
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2200
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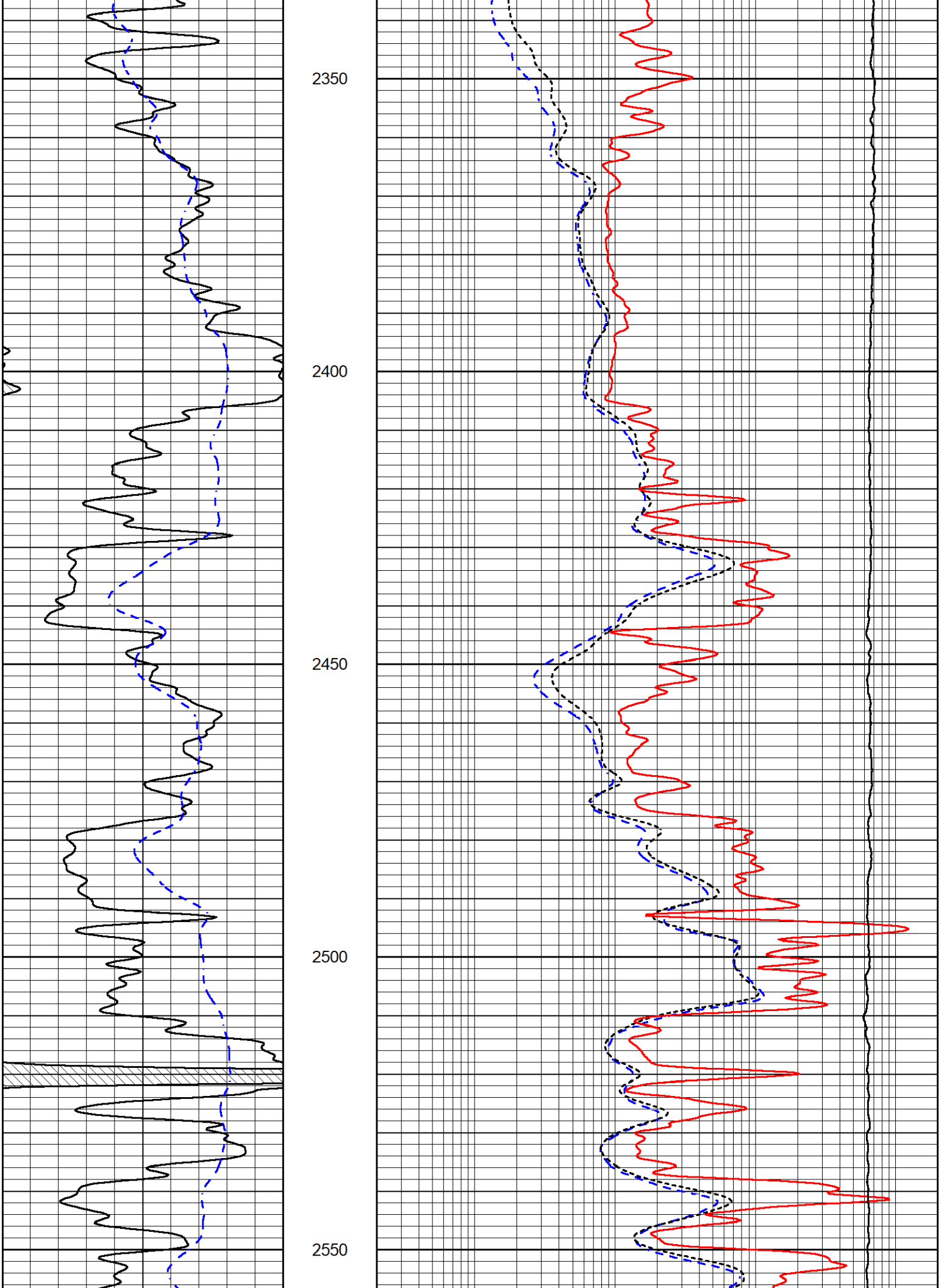
2300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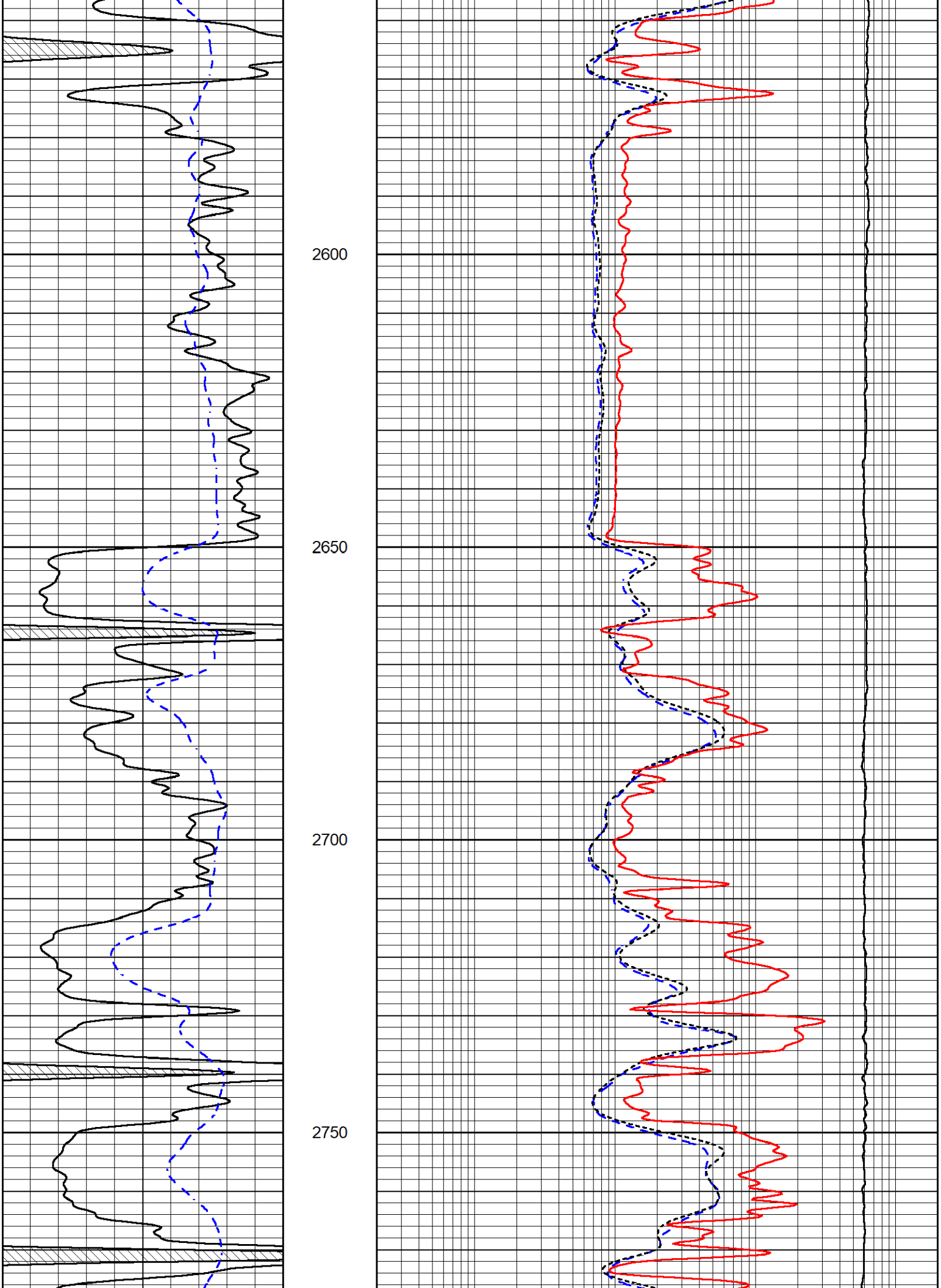
2400
2450
2500
2550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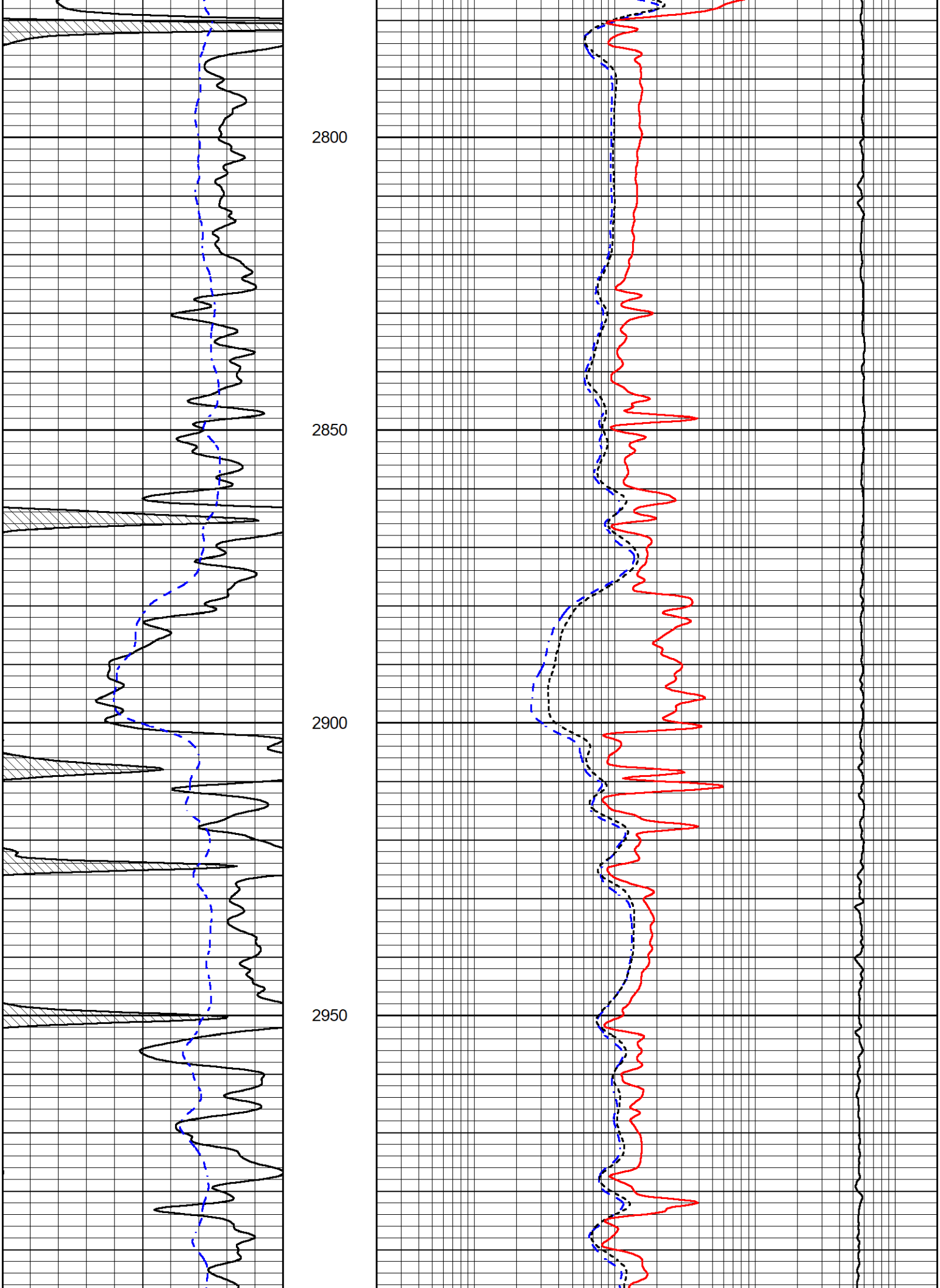
2650
2700
2750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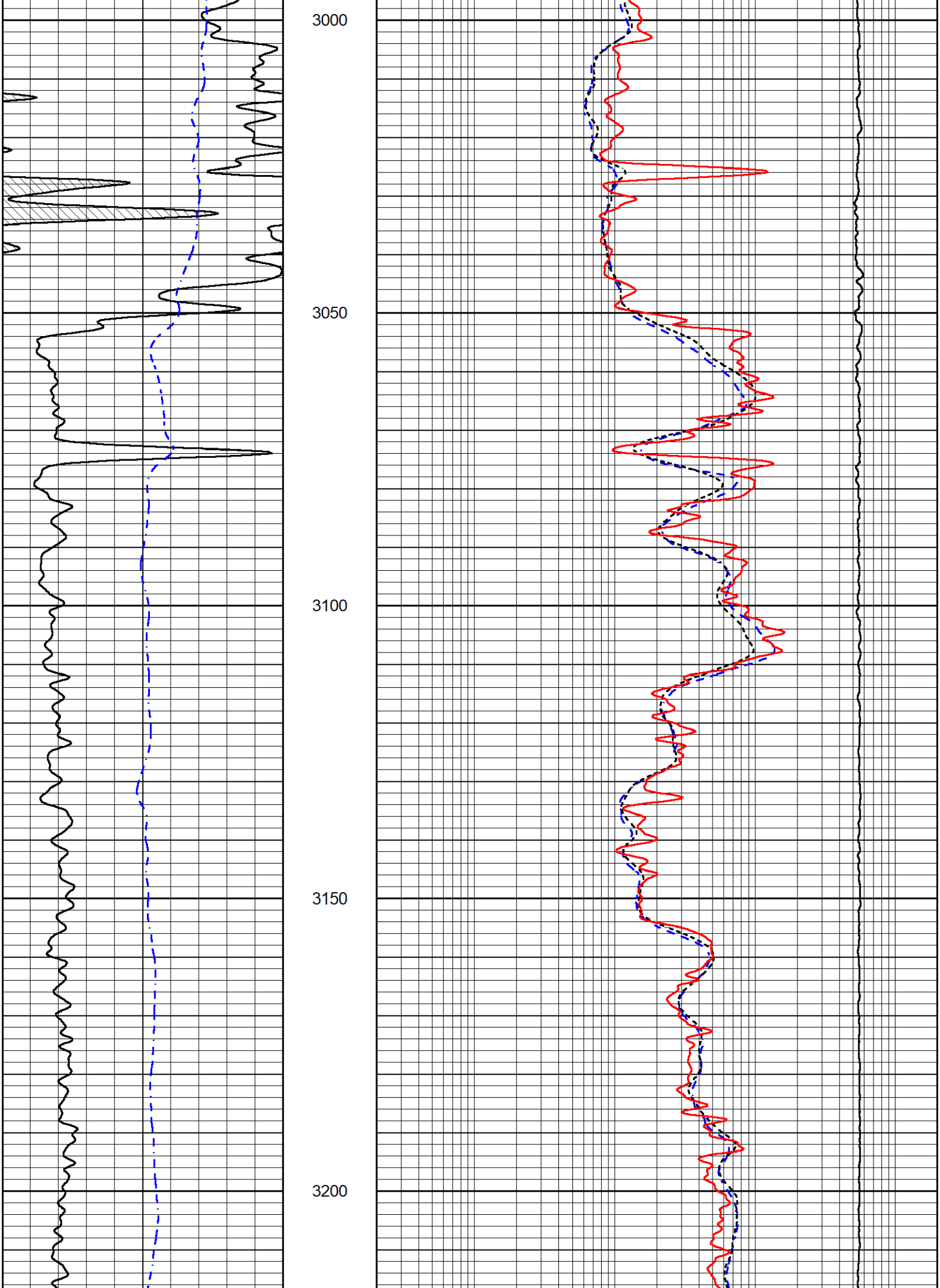
2950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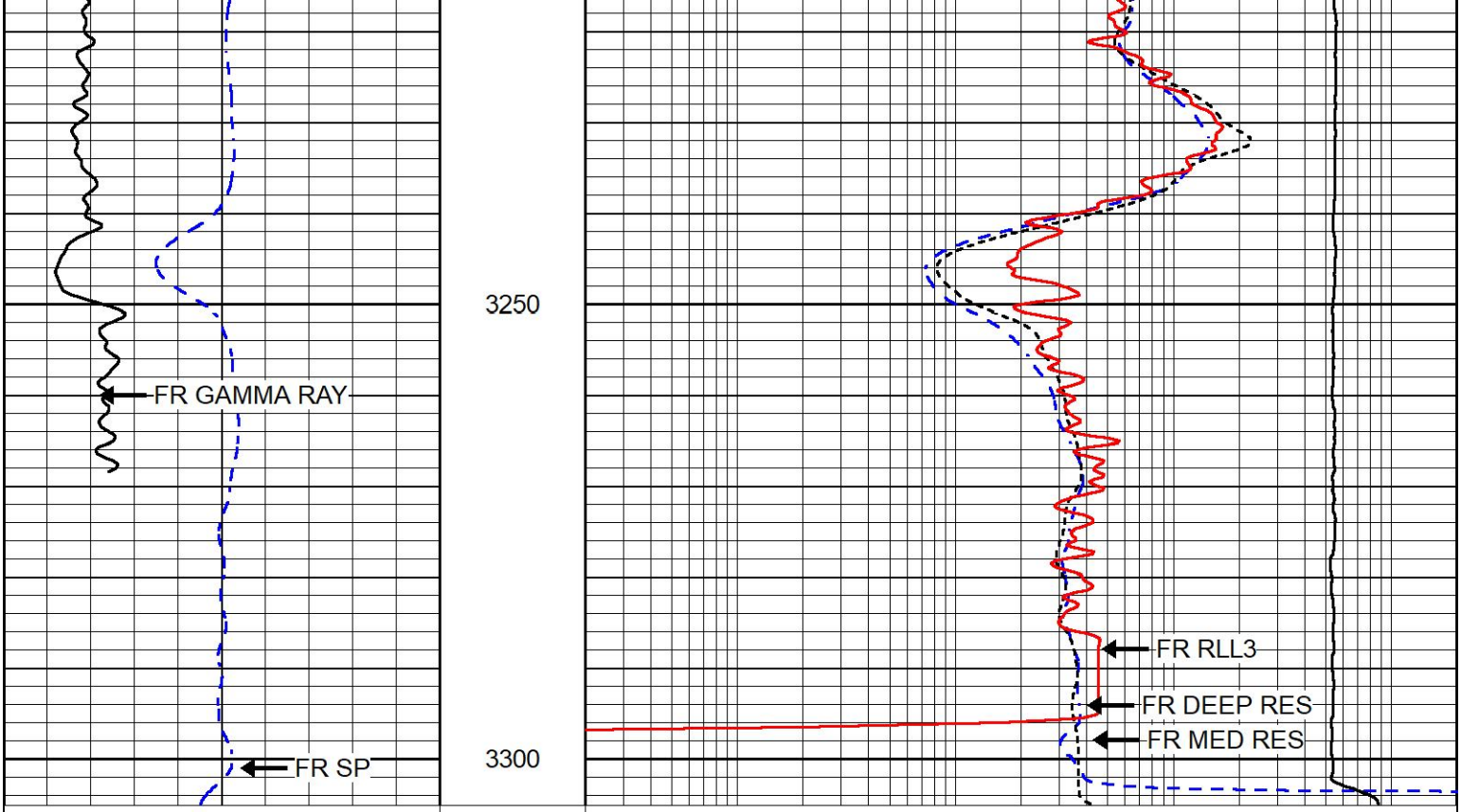


0	GAMMA RAY (GAPI)	150
-200	SP (mV)	0

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

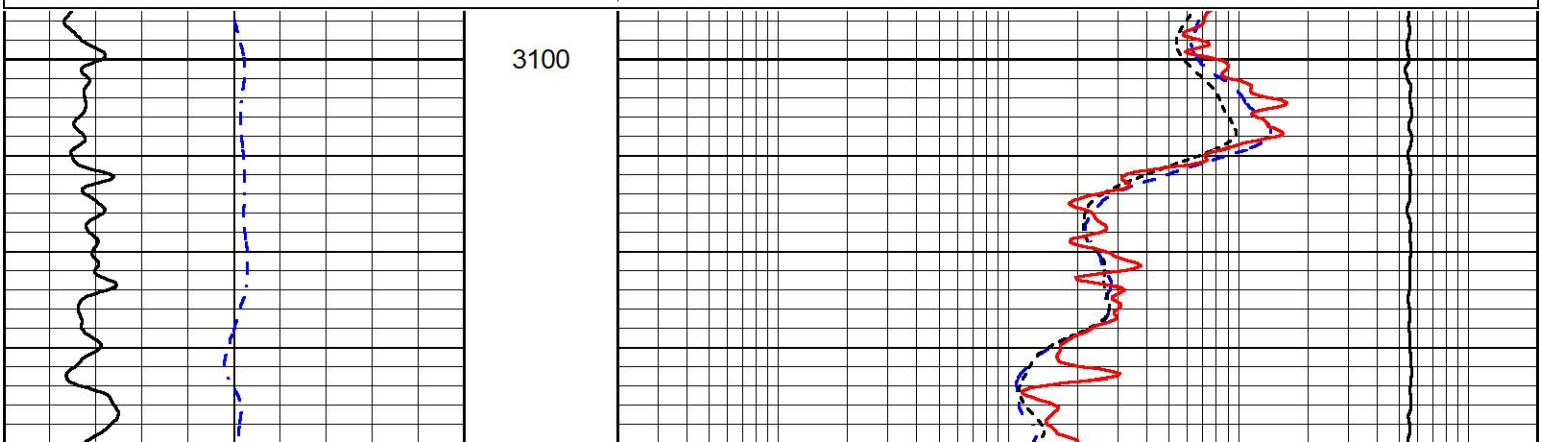
REPEAT SECTION

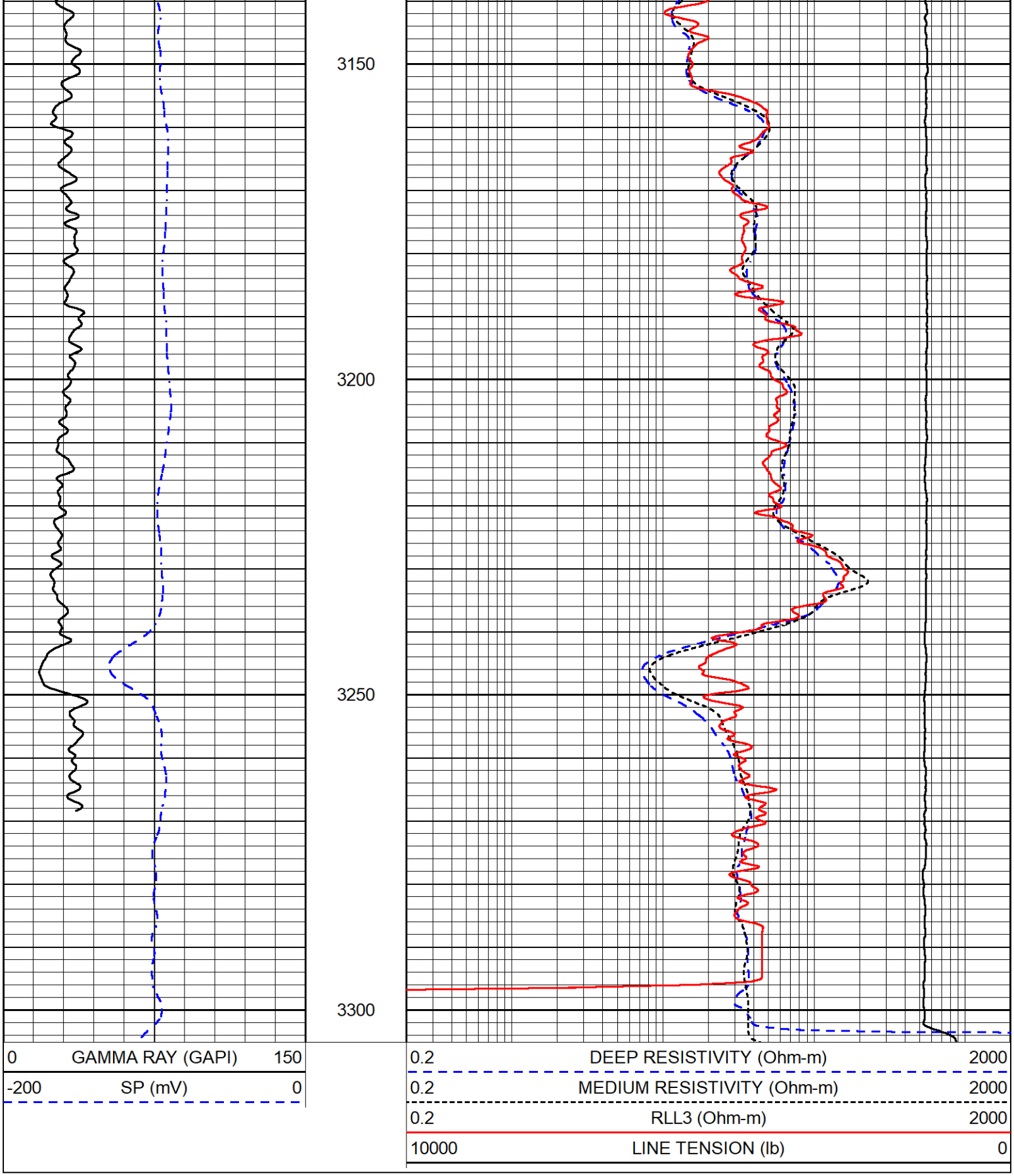
REPEAT PASS

Database File	val_gail_sawyer_1_30.db
Dataset Pathname	stackml/pass2.1
Presentation Format	_dil
Dataset Creation	Tue Oct 05 17:03:56 2021
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-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	val_gail_sawyer_1_30.db
Dataset Pathname	stackml/pass4.1
Dataset Creation	Tue Oct 05 17:08:40 2021

Dual Induction Calibration Report

Serial-Model:	952-828-PSI HIGH TEMP

Surface Cal Performed:

Loop:	Readings Air	Readings Loop	References Air	References Loop		Results m	Results b
Deep	167.000	835.000	0.000	255.000	mmho/m	0.455	-34.000
Medium	0.000	1348.000	142.000	255.000	mmho/m	0.300	-28.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
Performed: Thu Aug 19 02:54:30 2021

	Readings Zero	Readings Cal	References Zero	References Cal		Results m	Results b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	7000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	8000.0000	-0.5000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-139.2000

Compensated Density Calibration Report

Serial-Model: 934-226-M&W
Source / Verifier: 16955B / 2ci
Master Calibration Performed: Thu Aug 19 02:54:40 2021
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3841.37	2748.76	cps
Aluminum	2.680	g/cc	717.56	1761.87	cps

Spine Angle = 75.15 Density/Spine Ratio = 0.533

	Size		Reading
Small Ring	8.00	in	1.16
Large Ring	13.00	in	1.02

Before Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

After Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

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:	233-M&W	
Tool Model:	M&W	
Performed:	Wed Mar 3 05:25:33 2021	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5500	GAPI/cps