



MIDWEST WIRELINE

# DUAL INDUCTION LOG

Company Griffin Management LLC  
 Well Amber #1  
 Field Turkey Creek Camp  
 County Pratt  
 State Kansas

Company Griffin Management LLC  
 Well Amber #1  
 Field Turkey Creek Camp  
 County Pratt State Kansas

Location: API #: 15-151-22540-00-00  
 2310 FNL 330 FEL  
 SEC 28 TWP 29S RGE 15W  
 Permanent Datum Ground Level Elevation 1998  
 Log Measured From Kelly Bushing  
 Drilling Measured From Kelly Bushing  
 Other Services  
 CNL/CDL  
 MEL  
 Elevation  
 K.B. 2003  
 D.F.  
 G.L. 1998

Date	2/2/2022
Run Number	One
Depth Driller	4820
Depth Logger	4819
Bottom Logged Interval	4818
Top Log Interval	250
Casing Driller	8:625 @ 255
Casing Logger	256
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity :ppm CL	8000
Density / Viscosity	9.5 59
pH / Fluid Loss	9.5 8.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.50 @ 50
Rmt @ Meas. Temp	0.38 @ 50
Rmc @ Meas. Temp	0.68 @ 50
Source of Rmf / Rmc	CHARTS
Rm @ BHT	0.20 @ 124
Operating Rig Time	3 Hours
Max Rec. Temp. F	124
Equipment Number	P-24
Location	Hays
Recorded By	D. Schmidt
Witnessed By	JR Griffin

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All interpretations are opinions based on inferences from electrical or other measurements and Midwest Wireline LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Midwest Wireline LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Haviland,  
 East to 140th, South to 100th, East to 130th, 1/2 East,  
 South 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	Operator:	Primary Witness: JR Griffin	Secondary Witness: Eli Felts
Operator:	Operator:	Secondary Witness:	Secondary Witness:

Operator	Offset (ft)	Substrate	Description	Length (ft)	O.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (101)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (207-MW)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (301-01)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSIML (402)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50					
CILD	8.33		DIL-M&W (501 HT)	18.25	3.50	220.00
CILM	4.50					
SP	0.20					

Dataset: griffin\_amber 1.db: field/well/stkml/pass3.2  
 Total length: 42.33 ft  
 Total weight: 685.00 lb  
 O.D.: 4.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin\_amber 1.db  
 Dataset field/well/stkml/pass3.2/\_vars\_

## Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	124	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	240	20	Off	4819

## 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

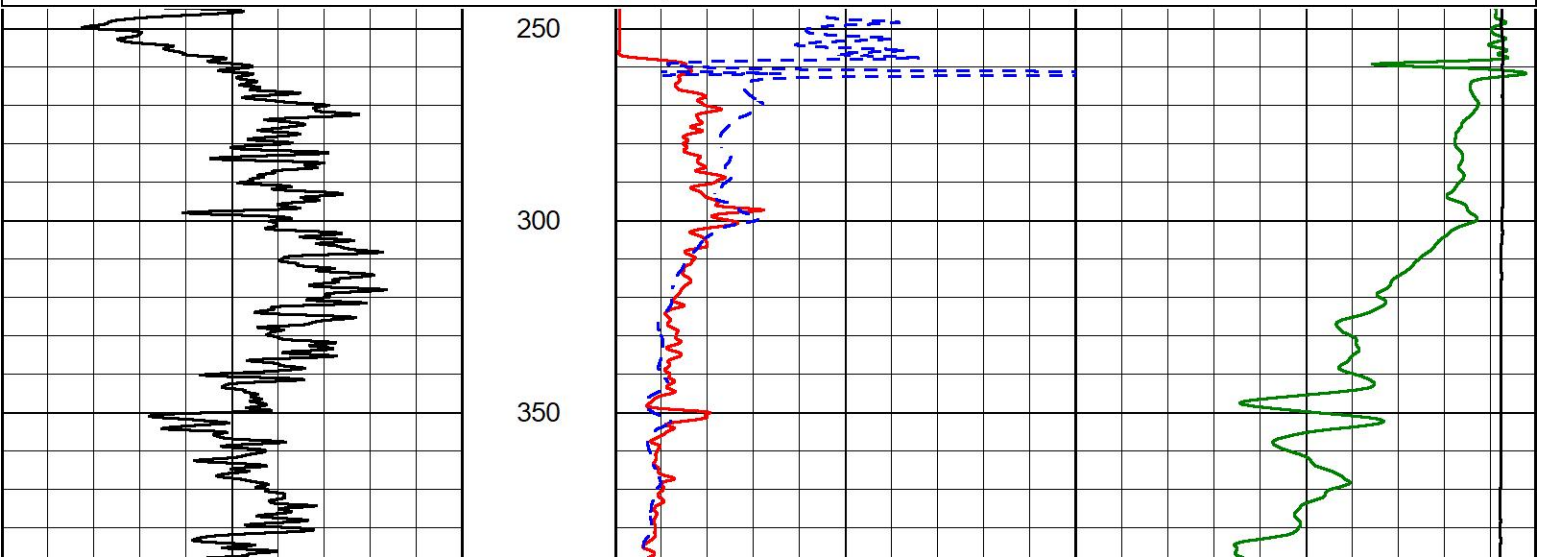


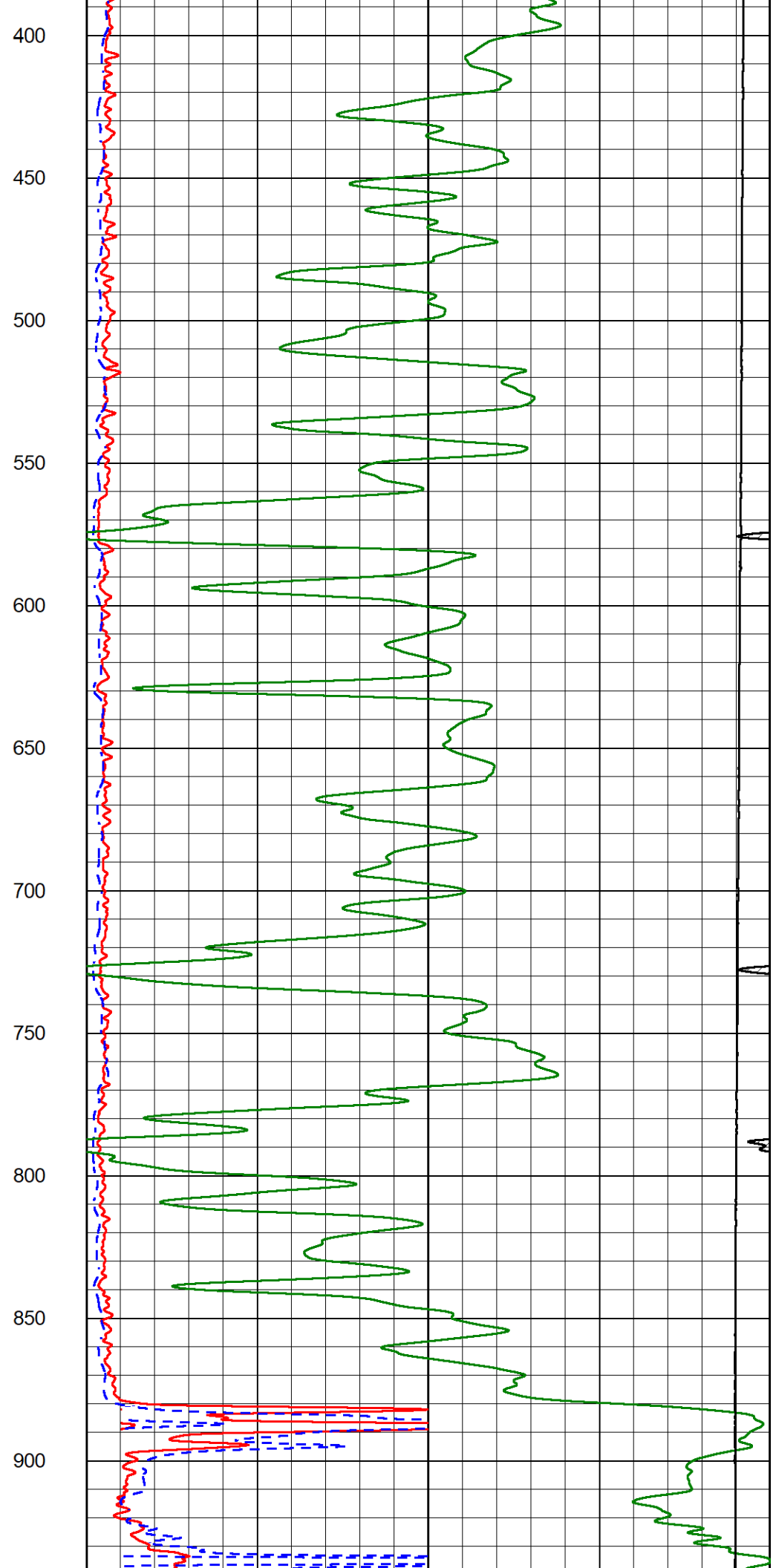
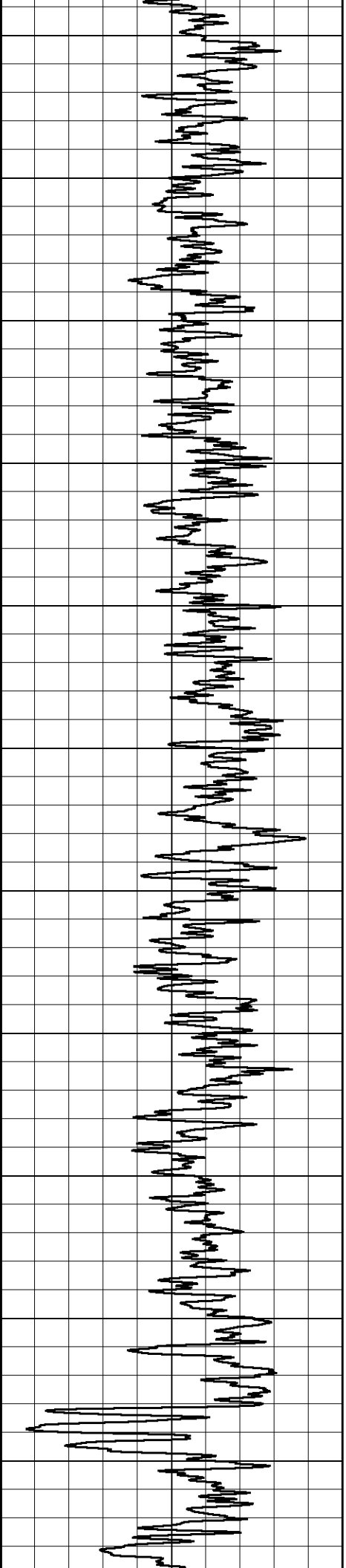
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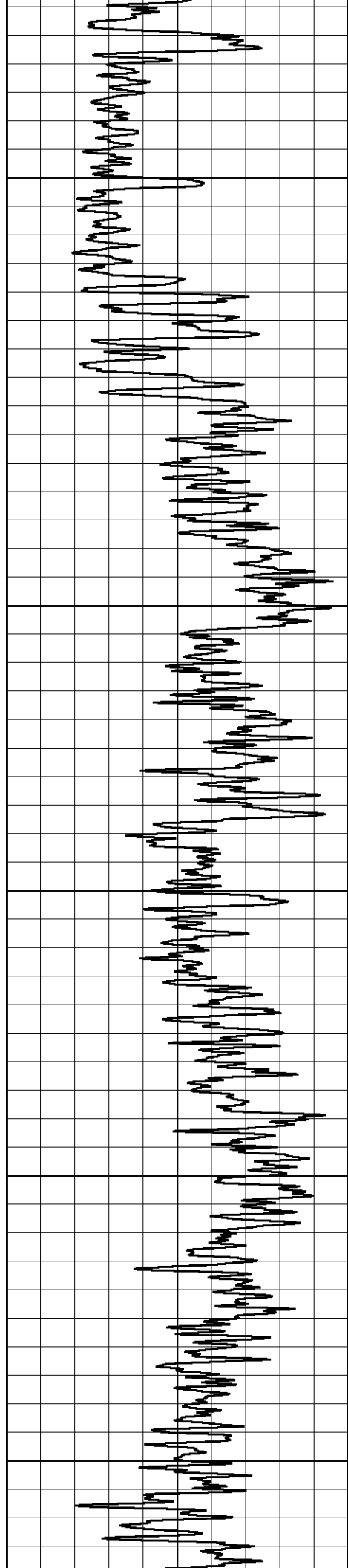
### MAIN PASS

Database File griffin\_amber 1.db  
 Dataset Pathname stkml/pass2.5  
 Presentation Format \_dil2in  
 Dataset Creation Thu Feb 03 02:26:17 2022  
 Charted by Depth in Feet scaled 1:600

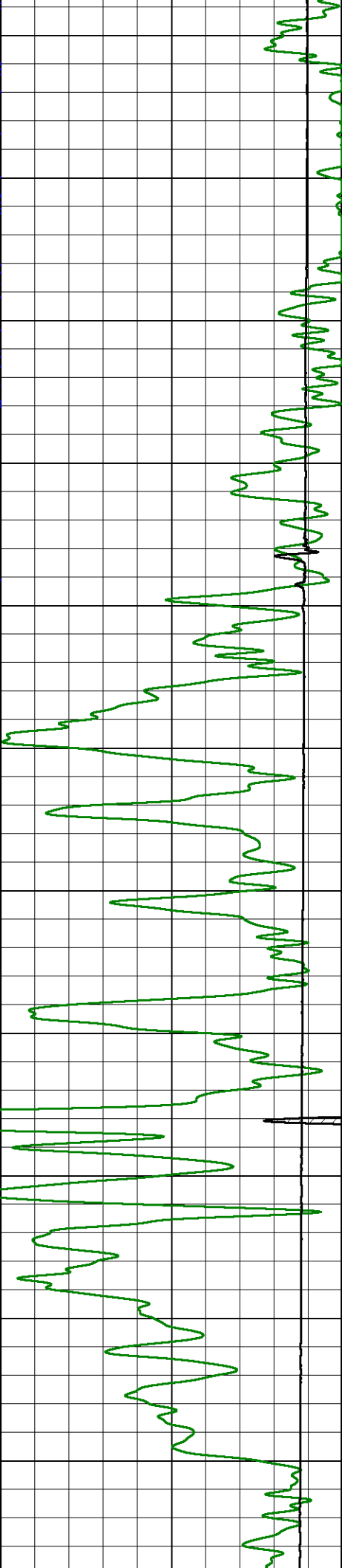
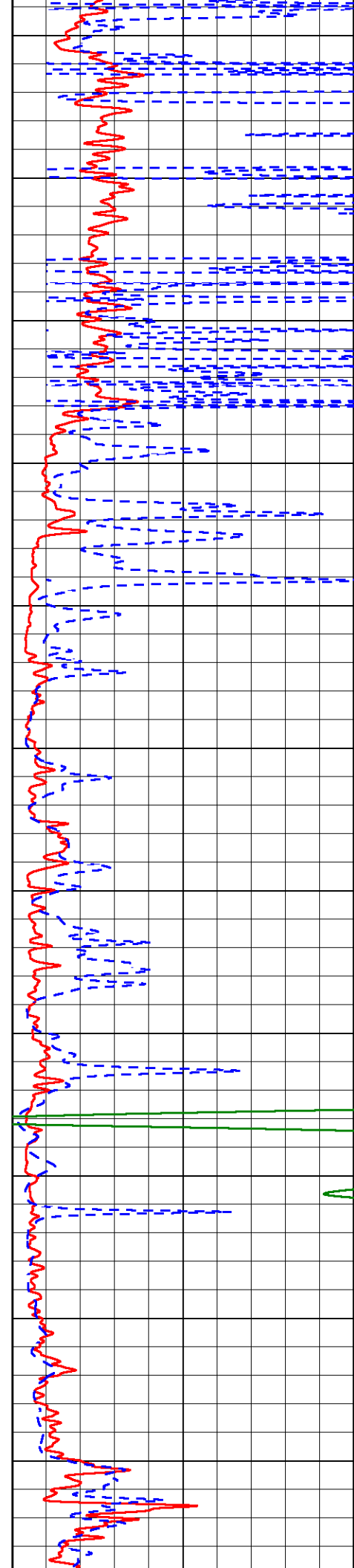
0	Gamma Ray (GAPI)	150	1000	Conductivity (mmho/m)	0
			15000	Line Tension (lb)	0
0	Shallow Resistivity (Ohm-m)	50			
0	Deep Resistivity (Ohm-m)	50			
	Shallow Resistivity				
50	(Ohm-m)	200			
50	Deep Resistivity (Ohm-m)	200			

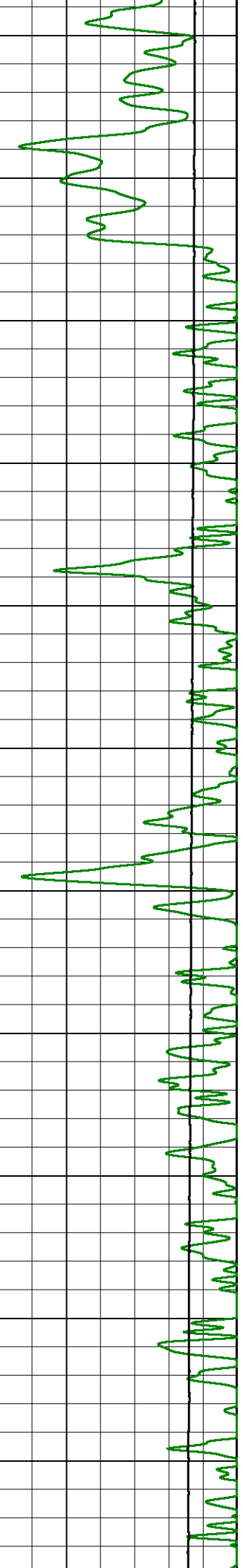
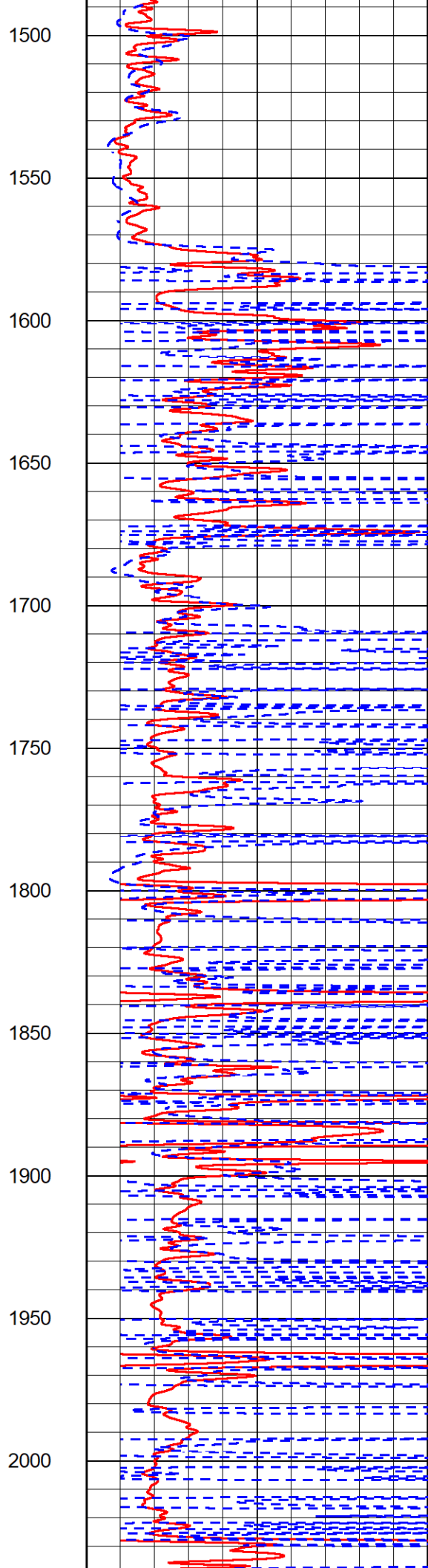
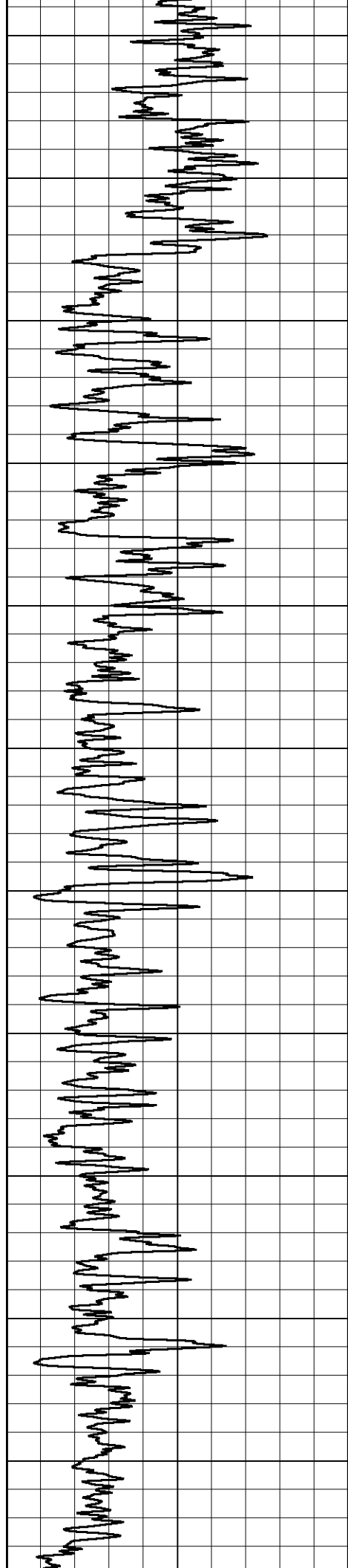


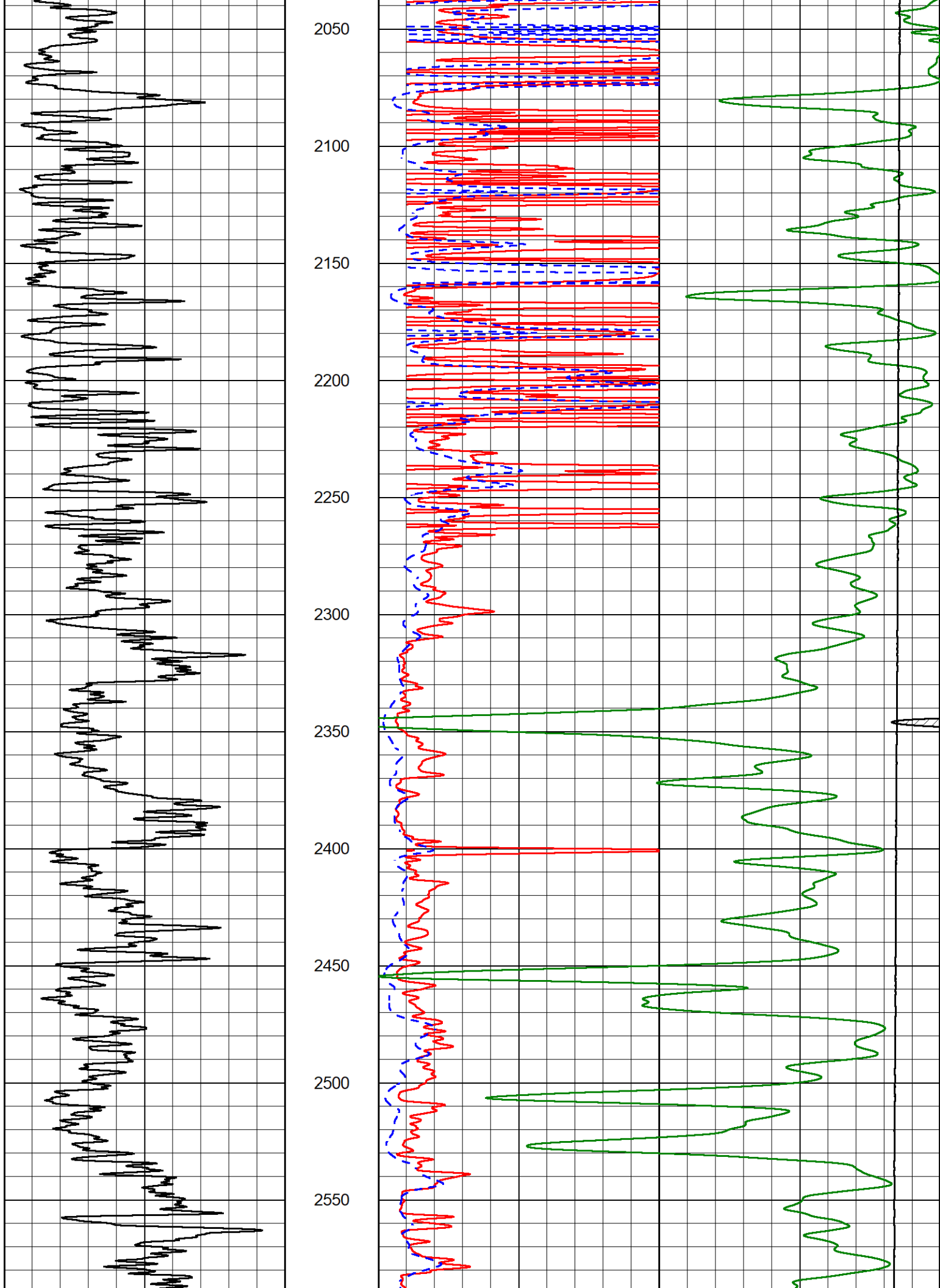


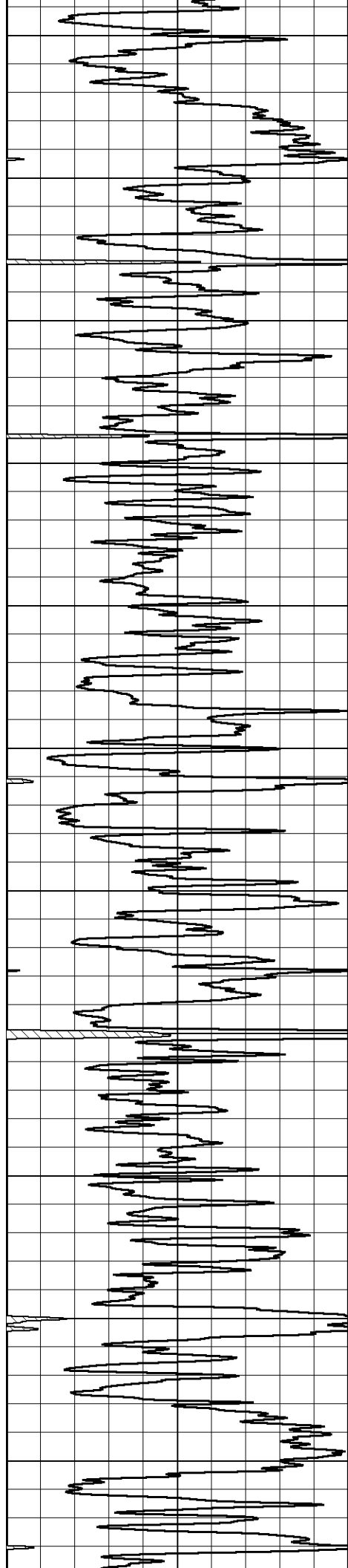


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1100  
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1200  
1250  
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1400  
1450









2600

2650

2700

2750

2800

2850

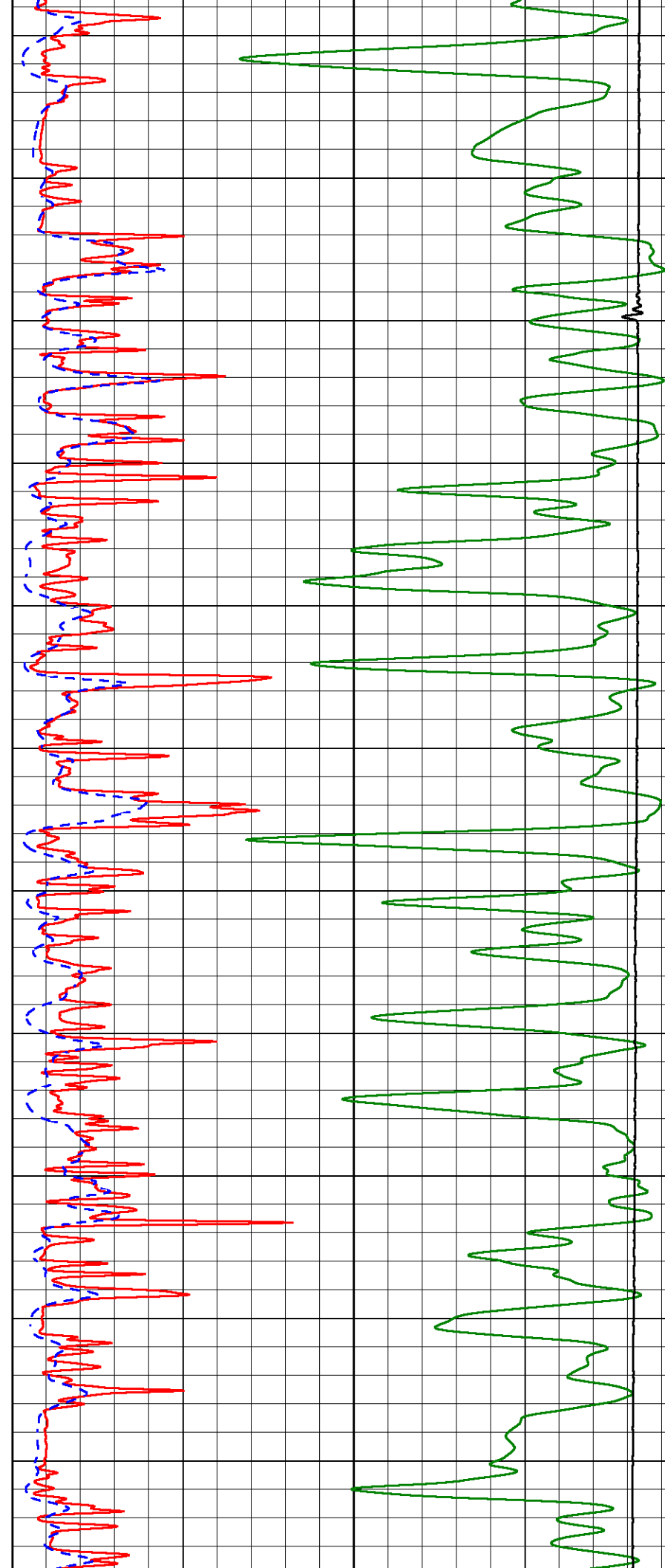
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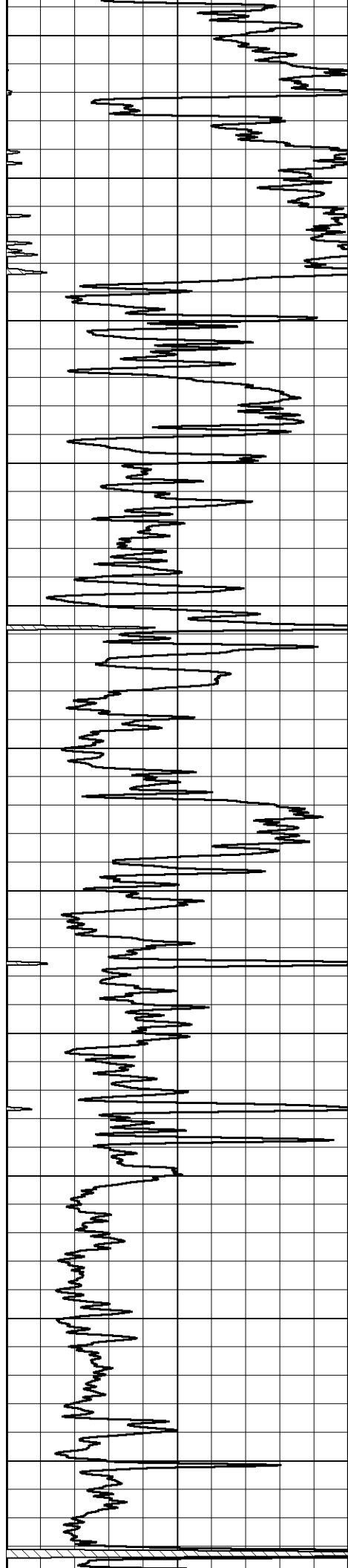
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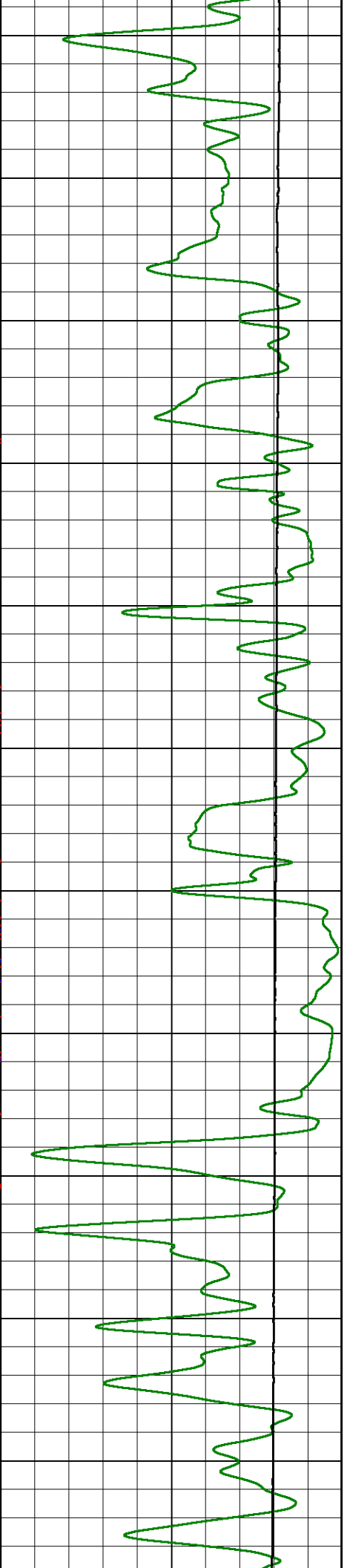
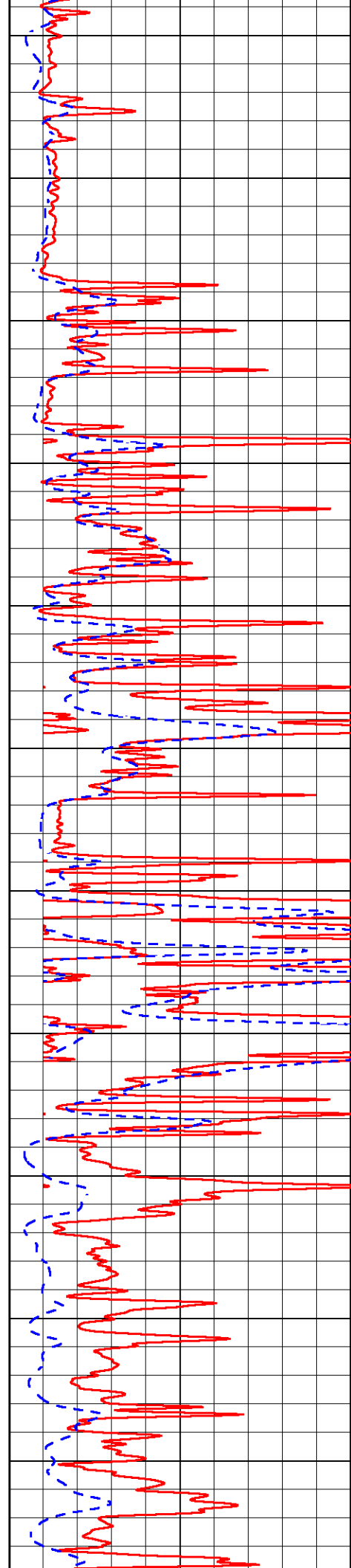
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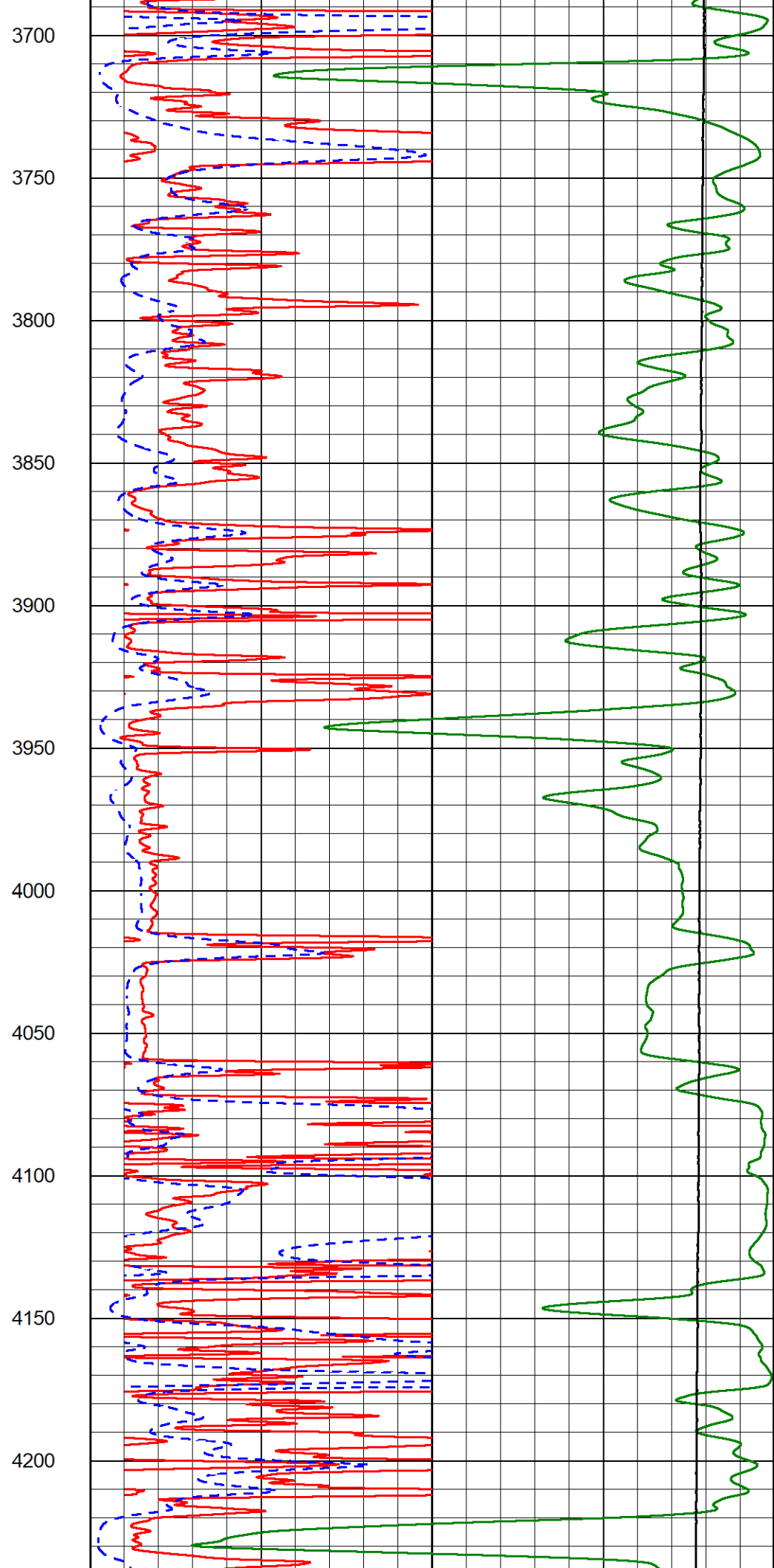
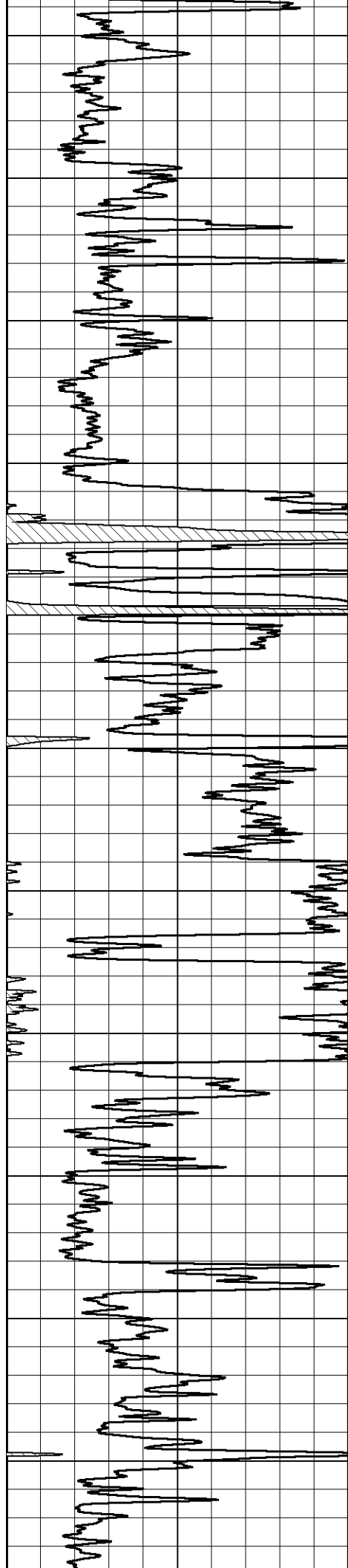
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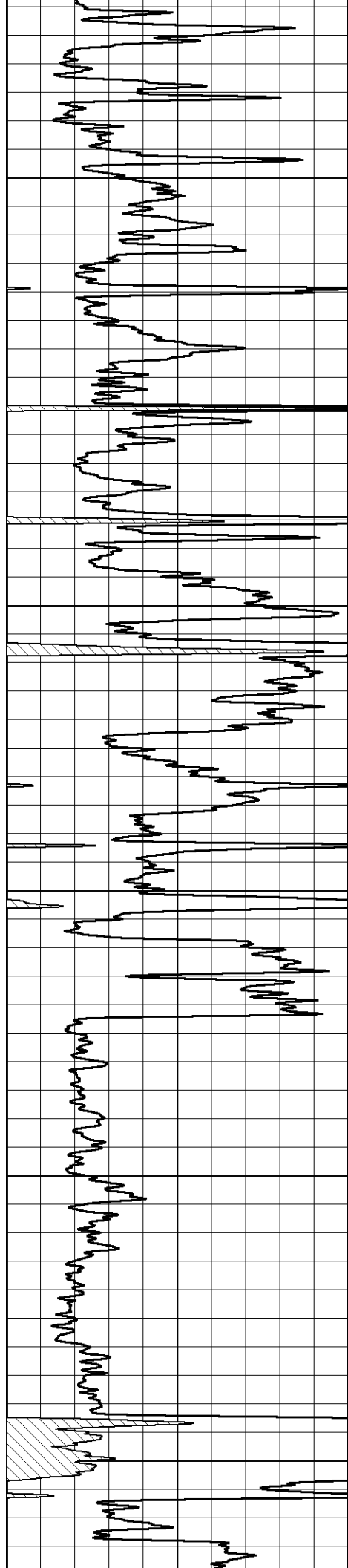
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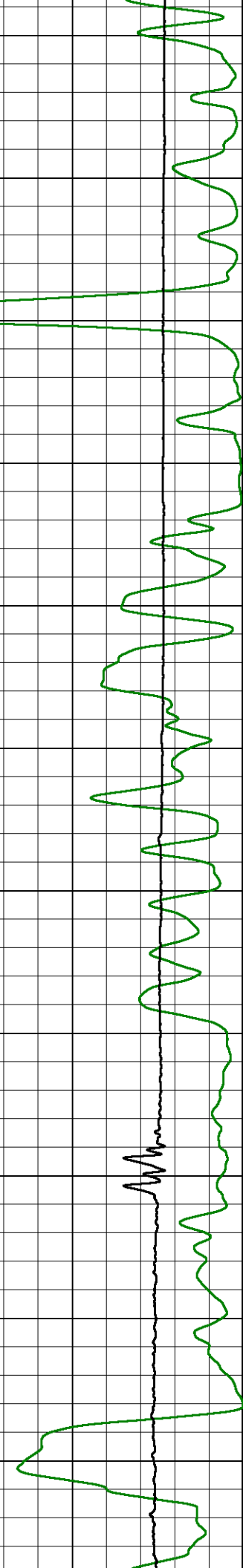
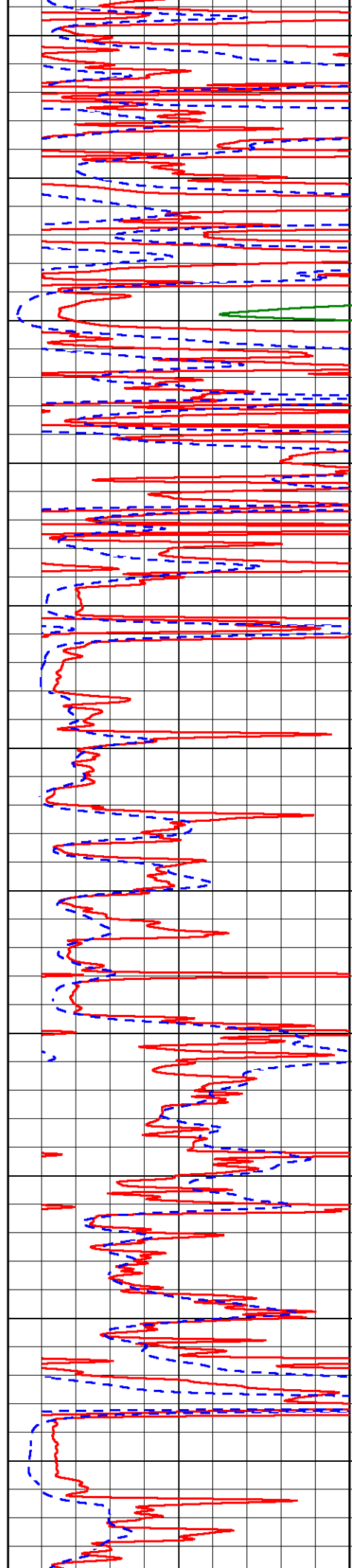
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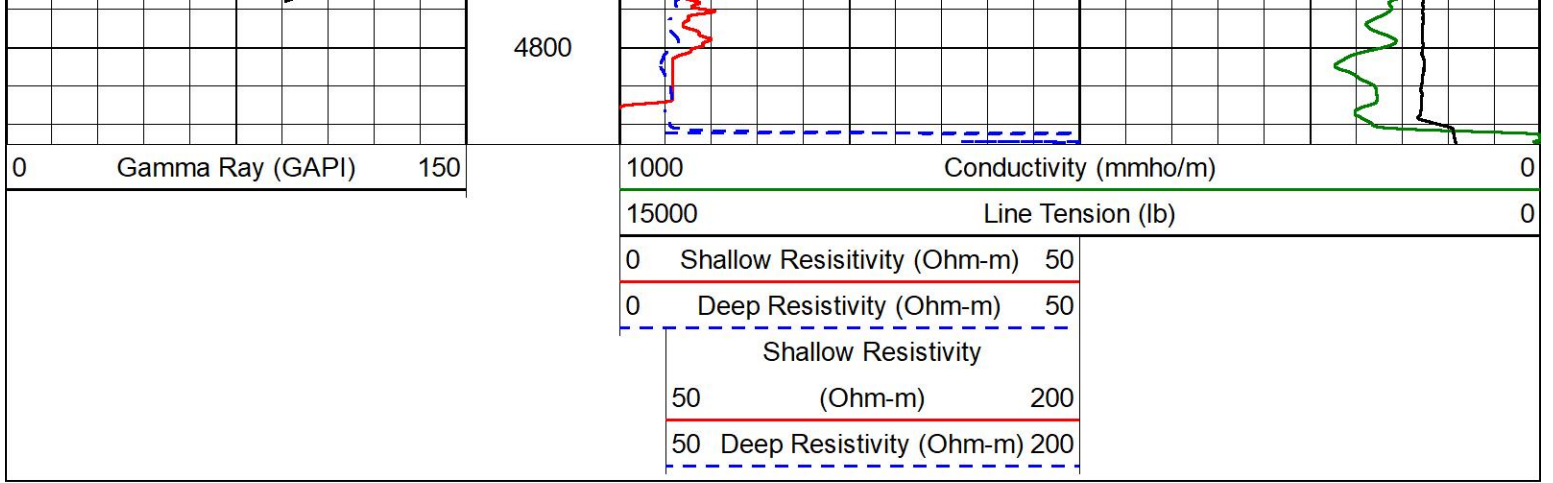






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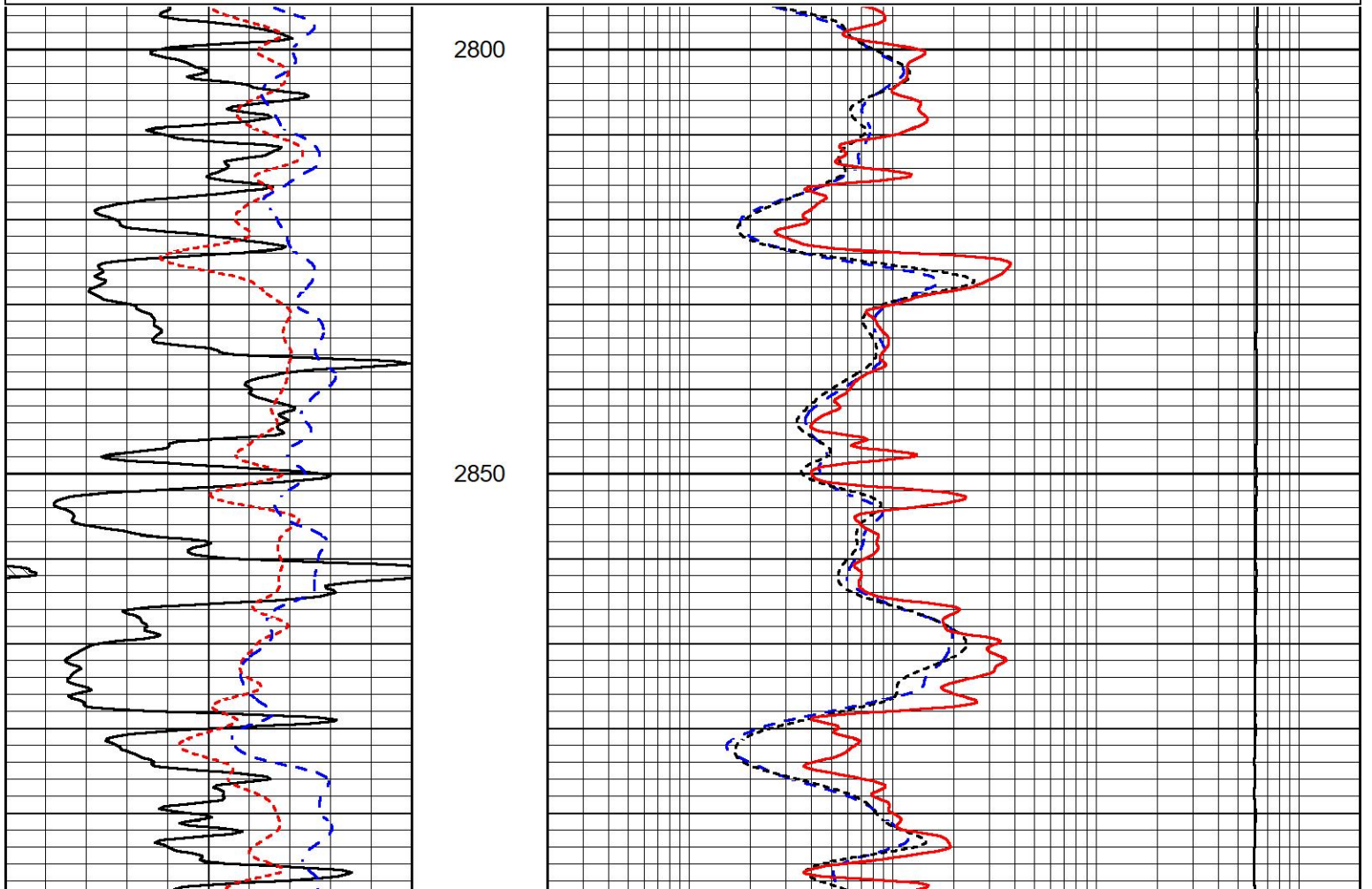


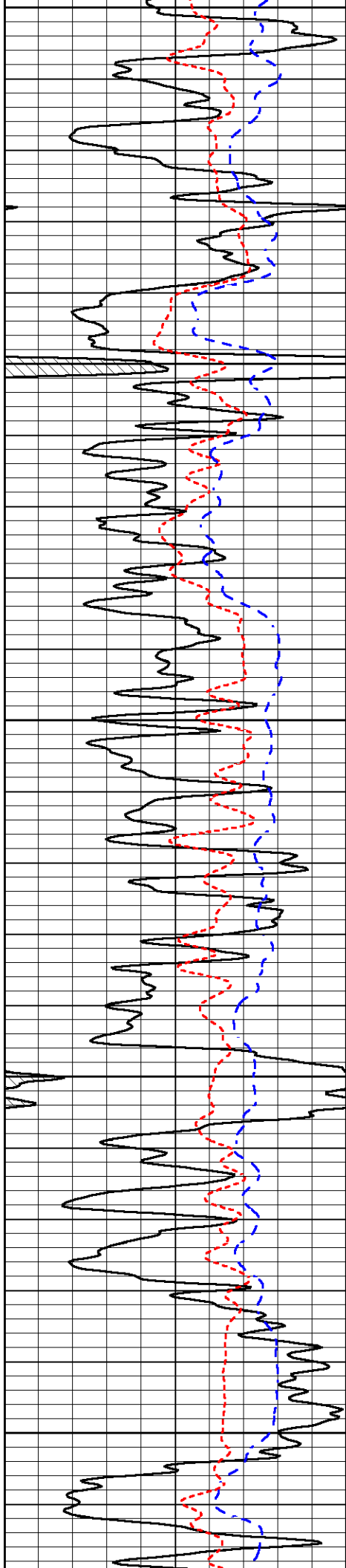
## DETAIL SECTION

### MAIN PASS

Database File griffin\_amber 1.db  
 Dataset Pathname stkml/pass2.3  
 Presentation Format \_dil  
 Dataset Creation Thu Feb 03 00:37:50 2022  
 Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	0.2	Deep Resistivity (Ohm-m)	2000
-160	RXORT	40	0.2	Medium Resistivity (Ohm-m)	2000
-200	SP (mV)	0	0.2	Shallow Resistivity (Ohm-m)	2000
			10000	Line Tension (lb)	0





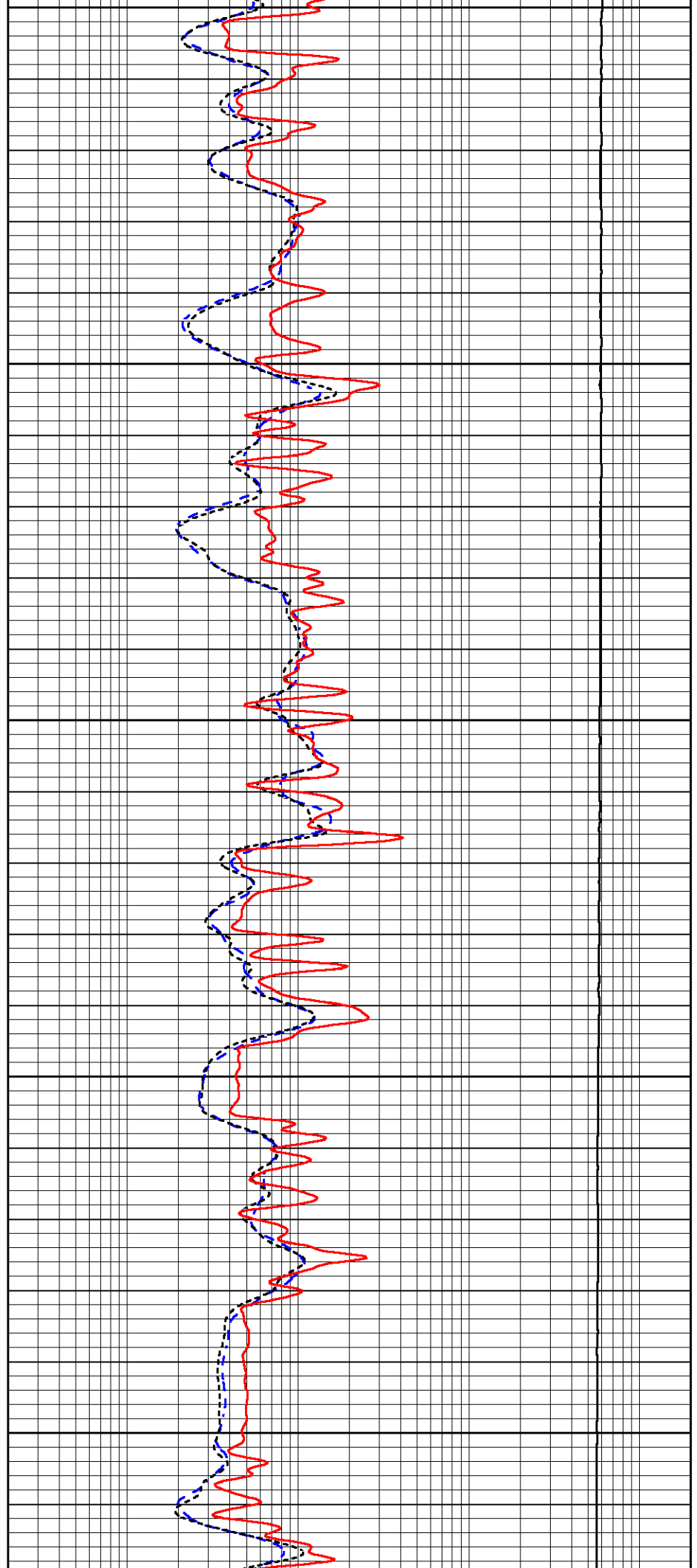
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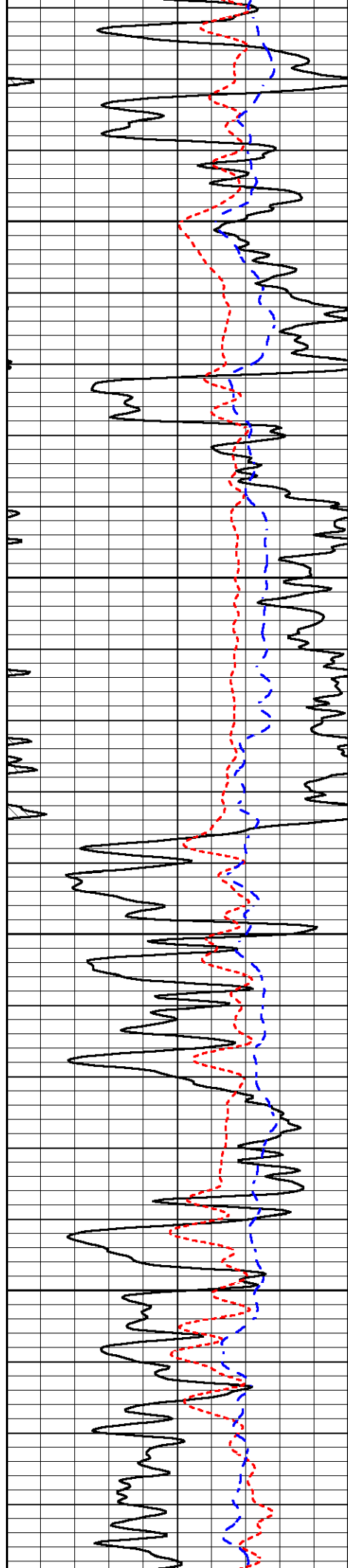
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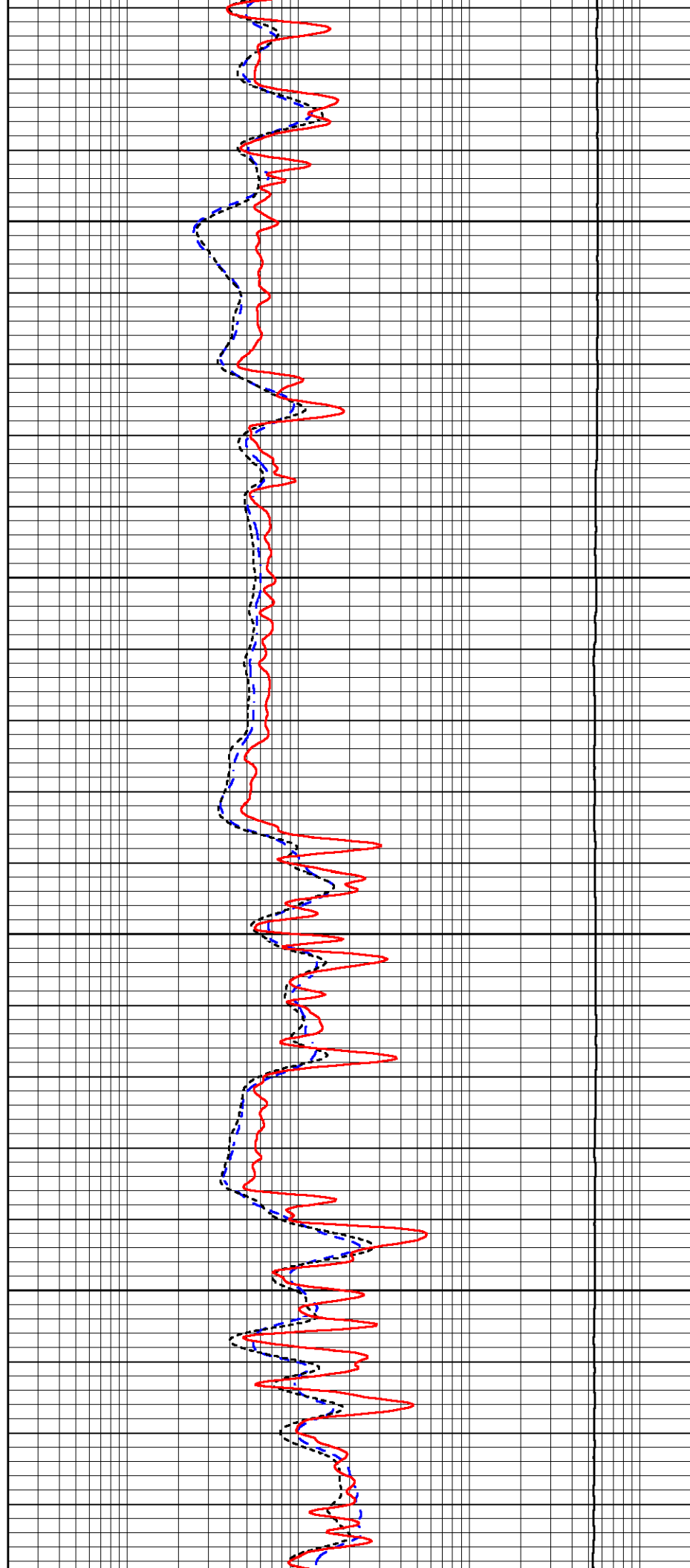


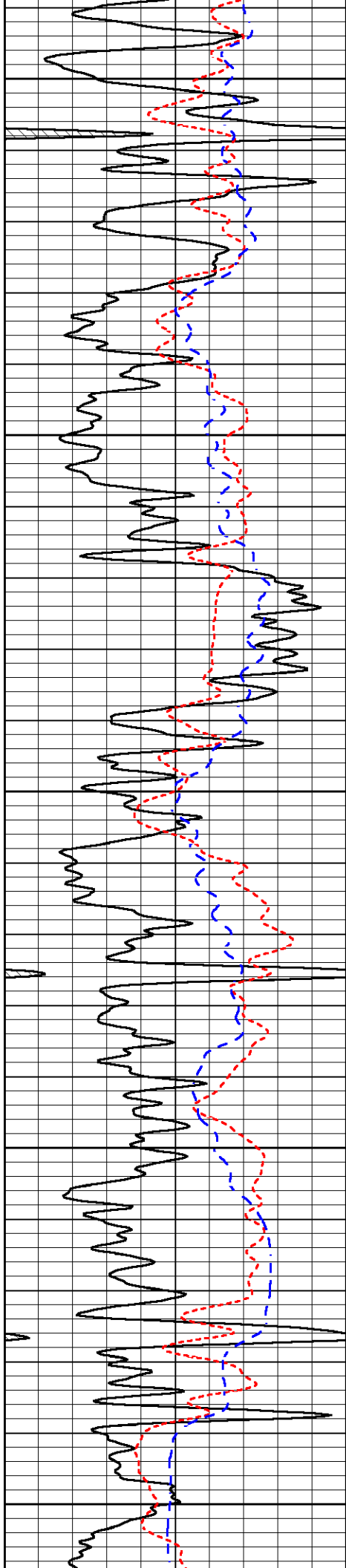
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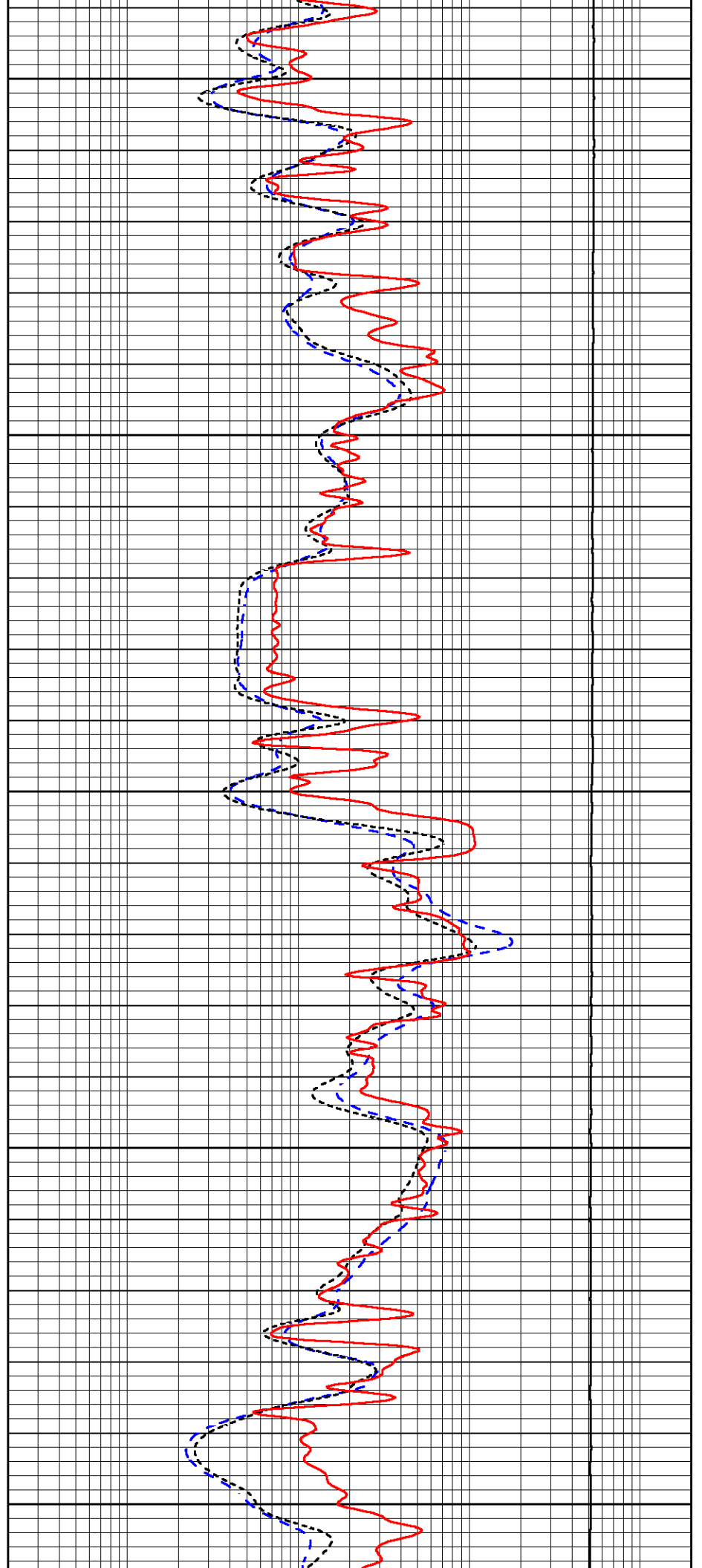
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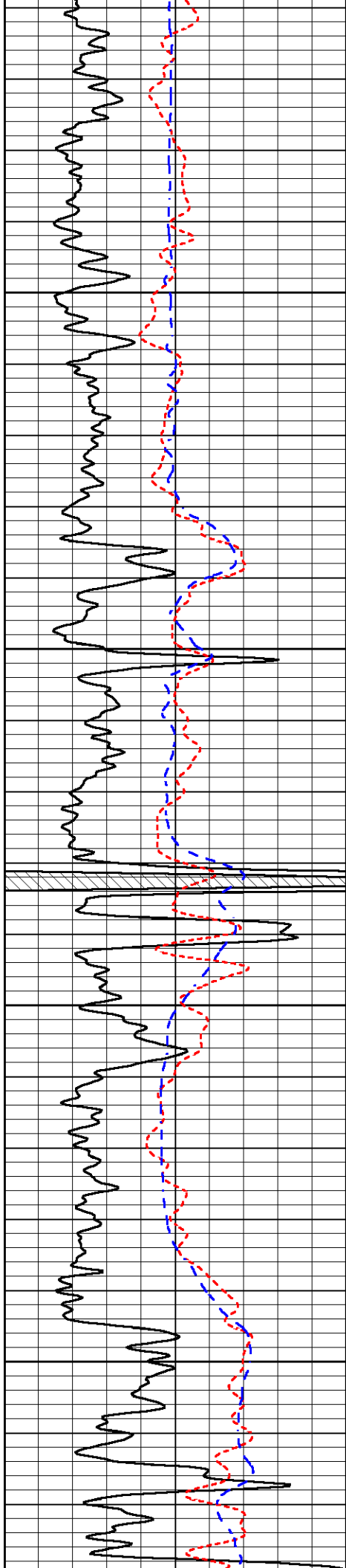
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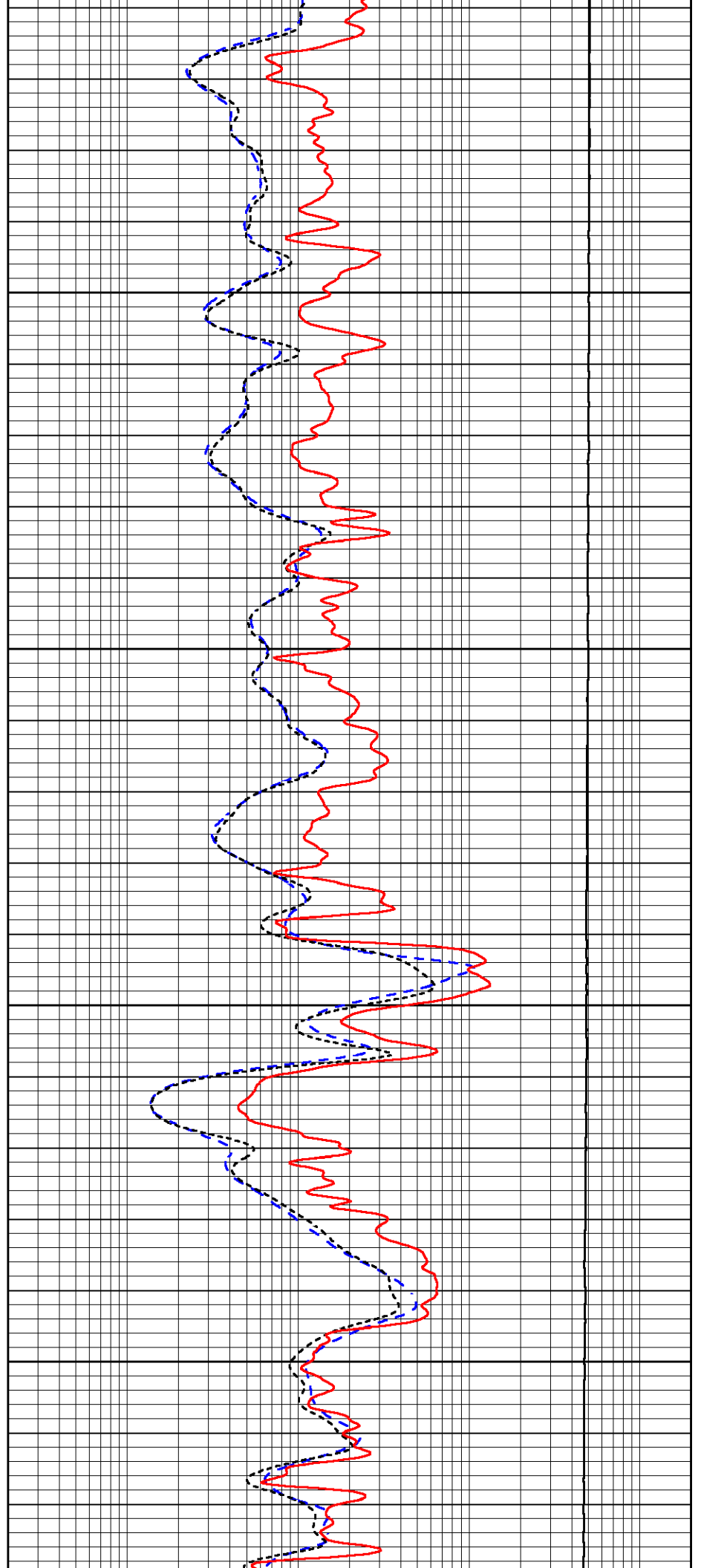


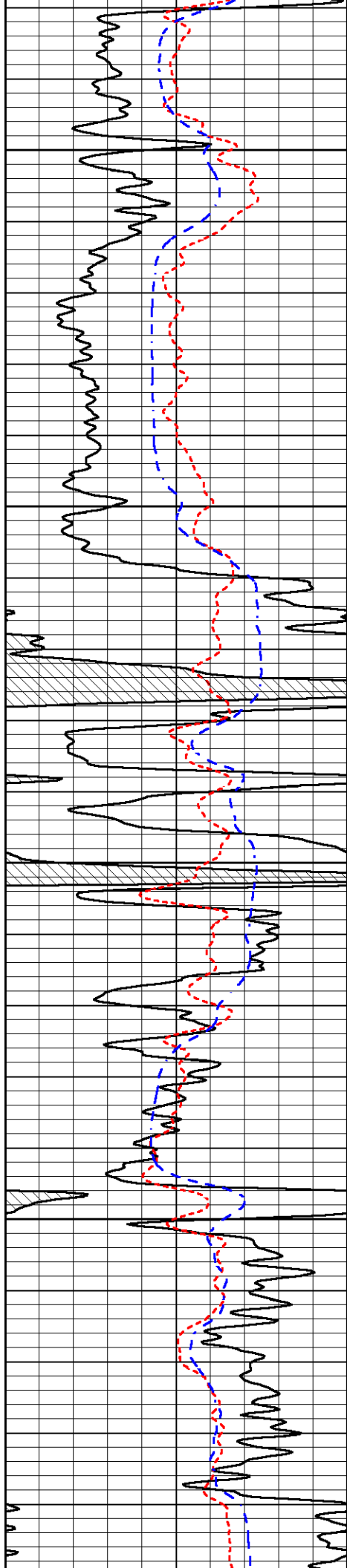
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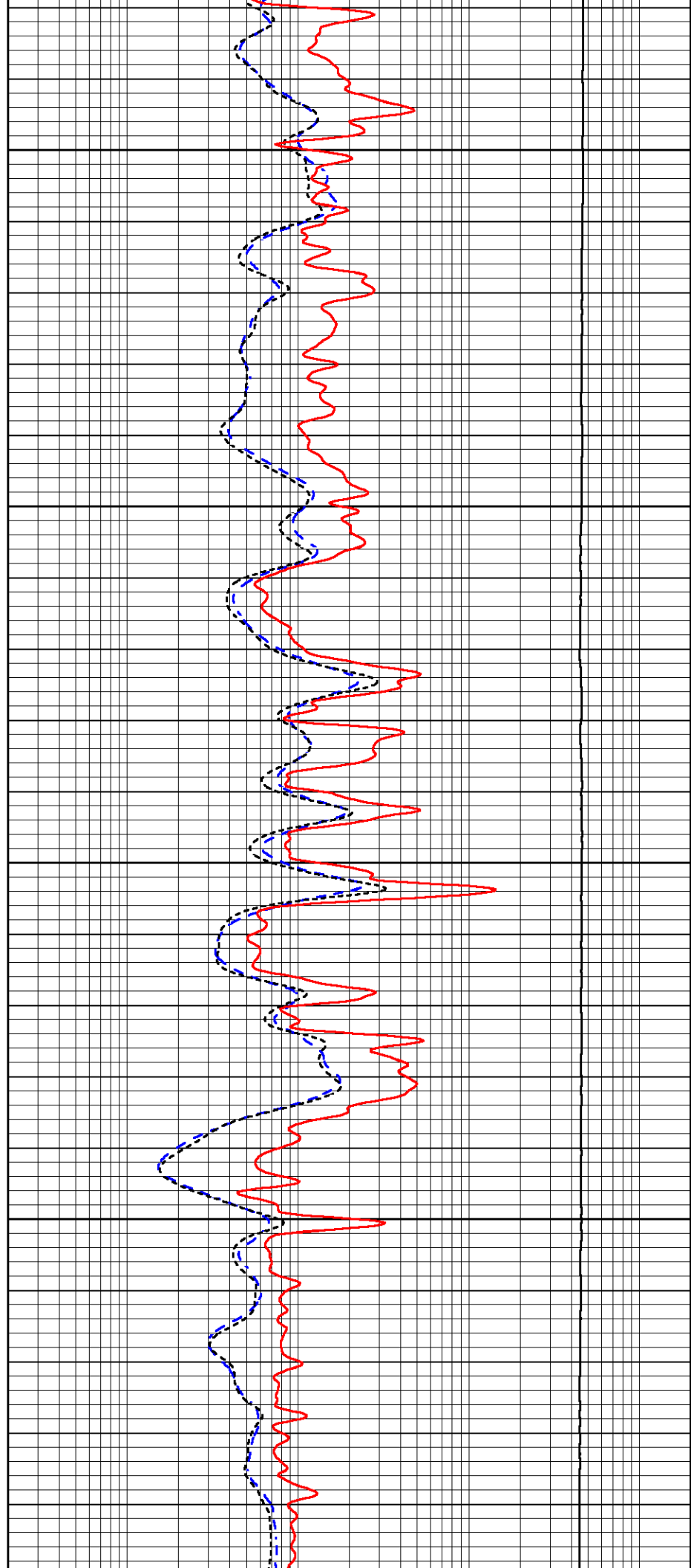


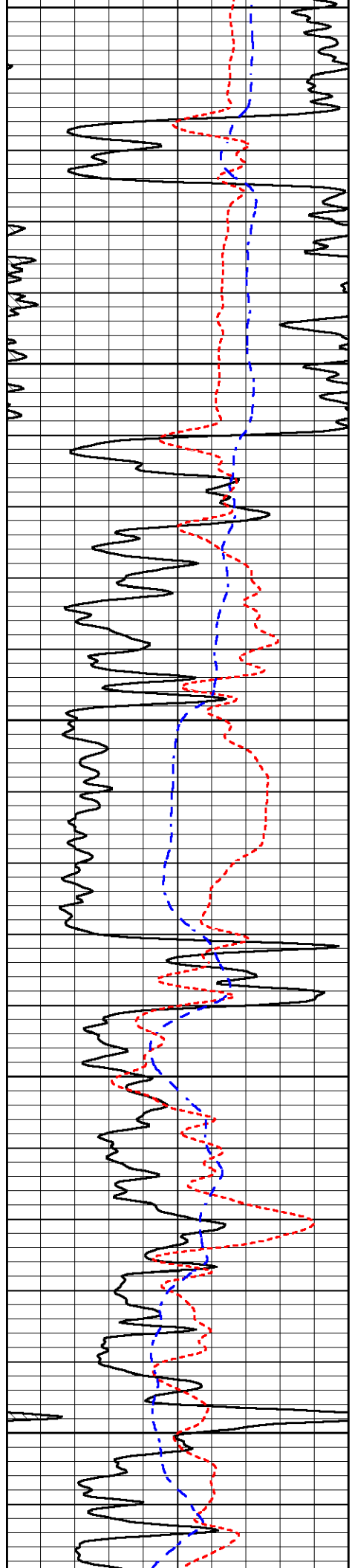
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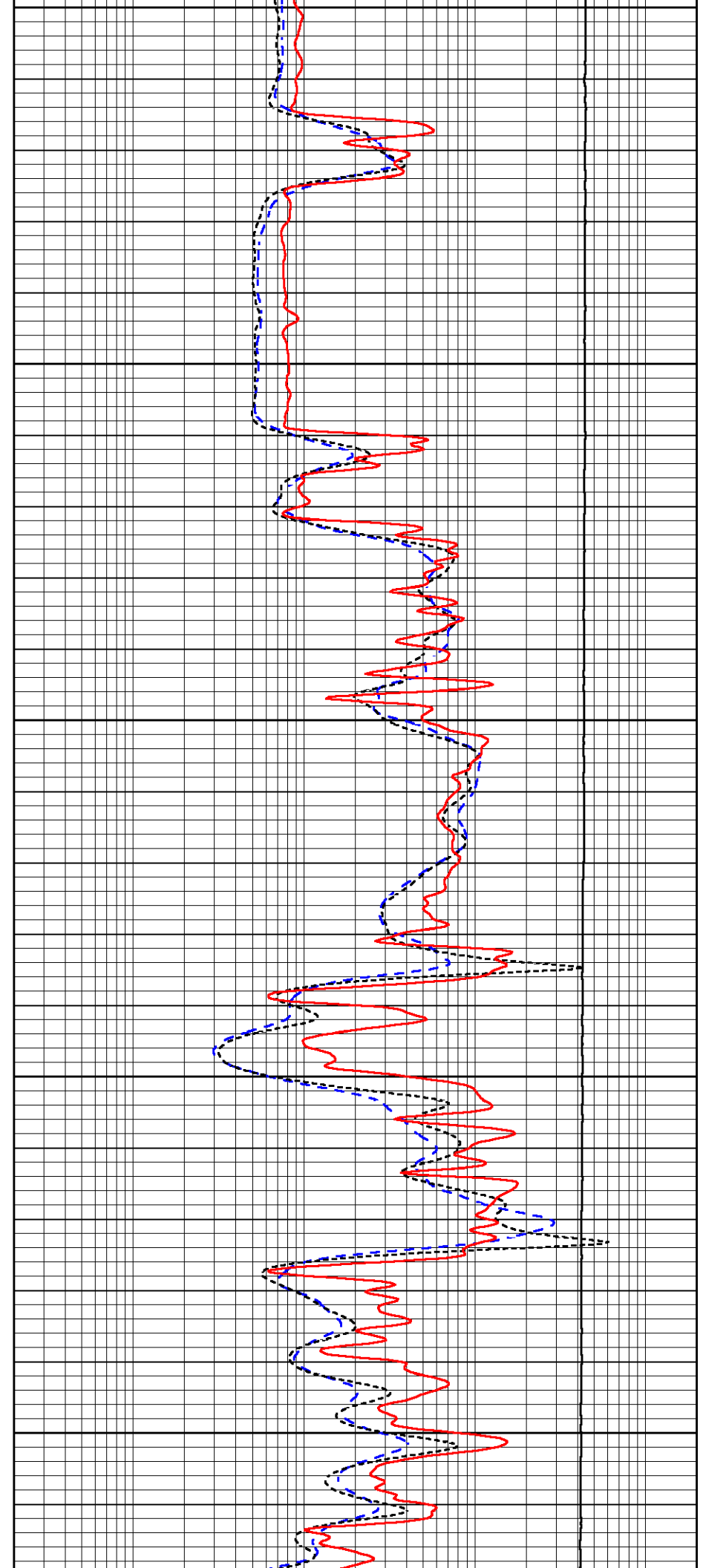
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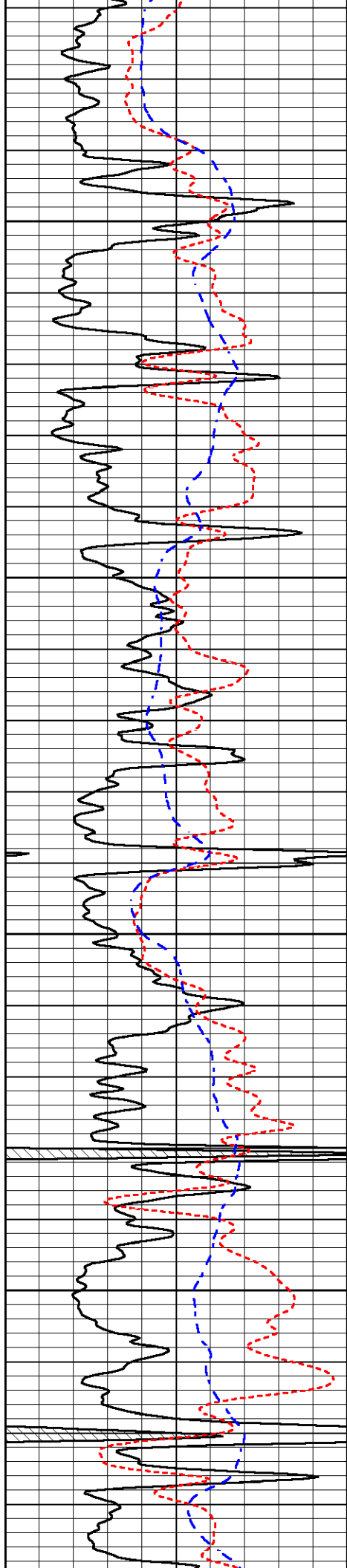
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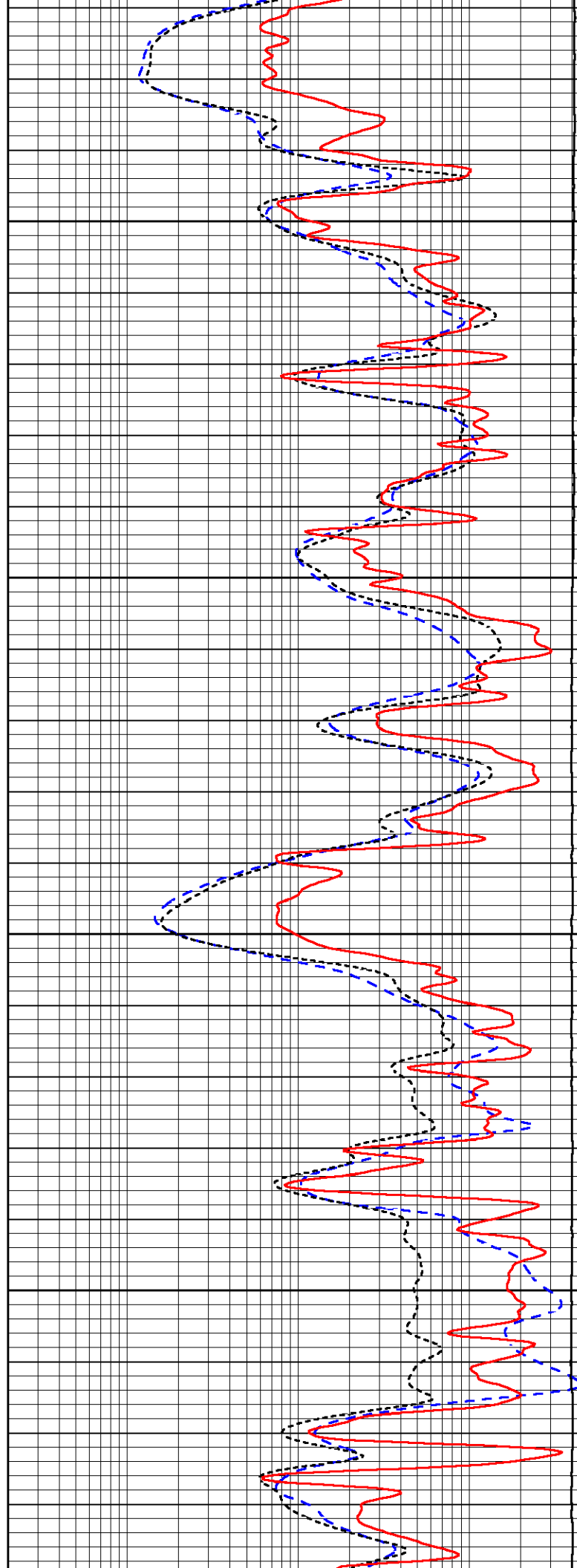


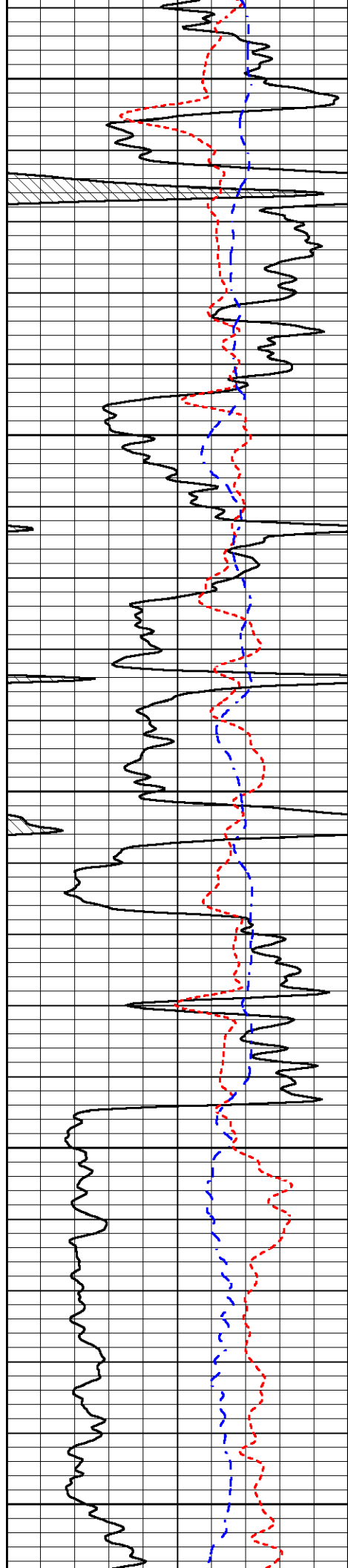
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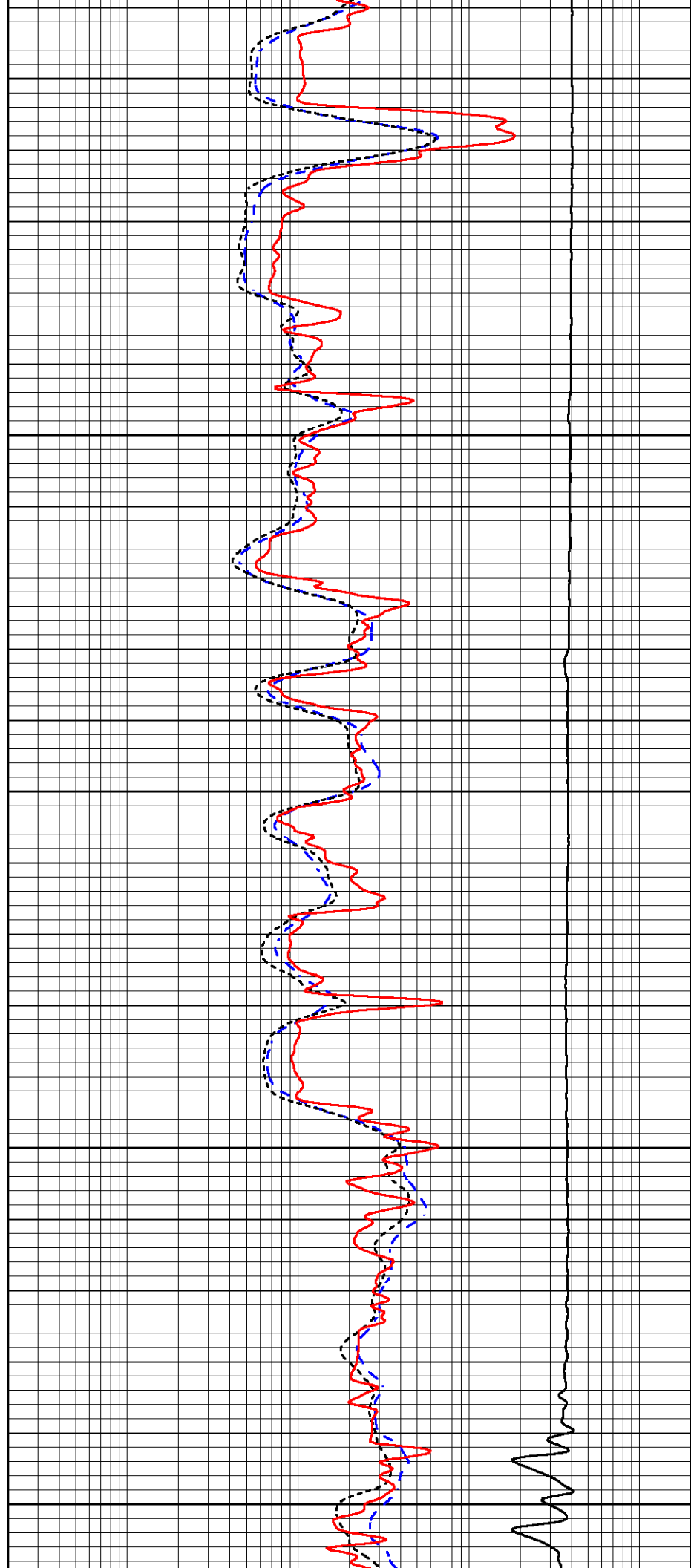
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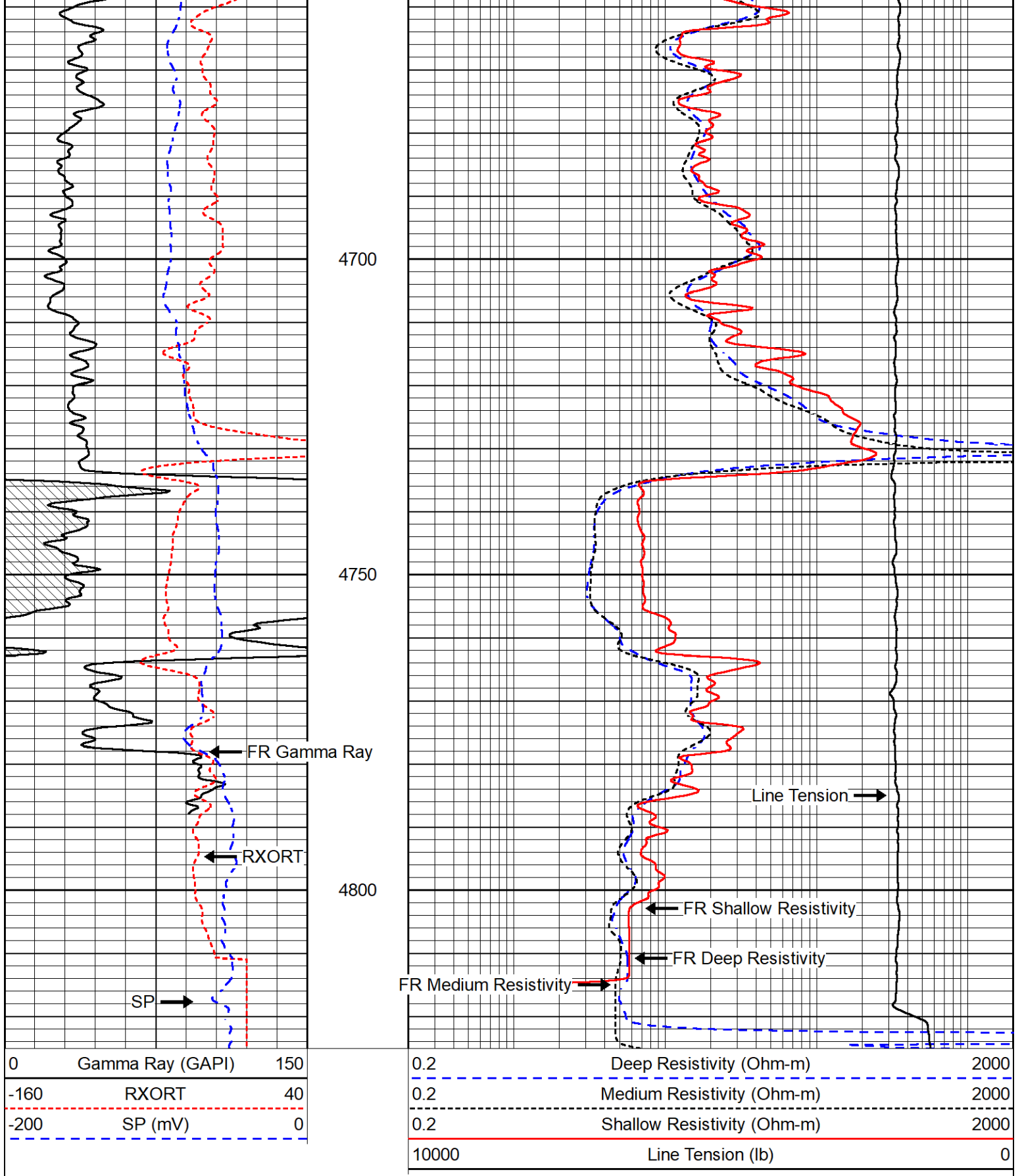
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Calibration Report

Database File griffin\_amber 1.db  
 Dataset Pathname stkml/pass2.3  
 Dataset Creation Thu Feb 03 00:37:50 2022

Dual Induction Calibration Report

Serial-Model: 501 HT-M&W

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.420	-35.500
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.300	-32.000

## Microlog Calibration Report

Serial-Model: 402-PSIML  
 Performed: Mon Jan 24 20:31:16 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	21000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	24000.0000	0.0000
Caliper	1.0052	1.0858	5.0000	16.5000	in	125.0000	-123.8000

## Compensated Density Calibration Report

Serial-Model: 301-01-M&W  
 Source #: 20762B  
 Master Calibration Performed: Fri Dec 10 13:06:08 2021

## Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3559.05	2566.81	cps
Aluminum	2.675	g/cc	664.63	1636.12	cps
Spine Angle = 74.98			Density/Spine Ratio = 0.530		
	Size		Reading		
Small Ring	8.00	in	1.16		
Large Ring	13.00	in	1.01		

## Compensated Neutron Calibration Report

Serial-Model: 207-MW-M&W  
 Source #: 100046B  
 Master Calibration Performed: Mon Nov 29 15:06:24 2021

## Master 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: 101  
 Tool Model: M&W  
 Performed: Mon Jan 24 19:14:46 2022

Calibrator Value: 500.0 GAPI

Background Reading:

24.0

cps

Calibrator Reading:

637.0

cps

Sensitivity:

0.5500

GAPI/cps



**MIDWEST WIRELINE**

Company Griffin Management LLC

Well Amber #1

Field Turkey Creek Camp

County Pratt

State Kansas