



MIDWEST WIRELINE

DUAL INDUCTION
LOG

Company Griffin Management, LLC		Company Griffin Management, LLC	
Well	Kay #2	Well	Kay #2
Field		Field	
County	Pratt	County	Pratt
State	Kansas	State	Kansas
Location: API #: 15-151-22545-00-00		Other Services	
Permanent Datum		C/NL/CDL	
Log Measured From		MEL	
Drilling Measured From			
SEC 32 TWP 29S RGE 15W			
Ground Level		Elevation	
Kelly Bushing		1998	
Kelly Bushing		K.B. 2003	
		D.F. 1998	
		G.L. 1998	
Date	6/22/2022		
Run Number	One		
Depth Driller	4833		
Depth Logger	4832		
Bottom Logged Interval	4831		
Top Log Interval	250		
Casing Driller	8.625 @ 263		
Casing Logger	263		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	5500		
Density / Viscosity	9.4 58		
pH / Fluid Loss	11.0 8.8		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.45 @ 80		
Rmt @ Meas. Temp	0.34 @ 80		
Rmc @ Meas. Temp	0.61 @ 80		
Source of Rmt / Rmc	Charts		
Rm @ BHT	0.29 @ 124		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	124		
Equipment Number	24		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Charles Griffin	Eli Felts	

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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.

Croft,
South to 110, 1 East, 1/2 South,
West and 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		Primary Witness: Charles Griffin	
Operator:		Secondary Witness: Eli Felts	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

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 (302-02)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58			ML-PSIML (401)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50						
CILD	8.33			DIL-M&W (502 HT)	18.25	3.50	220.00
CILM	4.50						
SP	0.20						
				Dataset:	griffin_kay 2.db: field/well/stkml/pass3.13		
		Total length:	42.33 ft				
		Total weight:	685.00 lb				
		O.D.:	4.00 in				

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_kay 2.db
Dataset field/well/stkml/pass3.13/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 124	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV -207	degF 80	Off	ft 4832

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

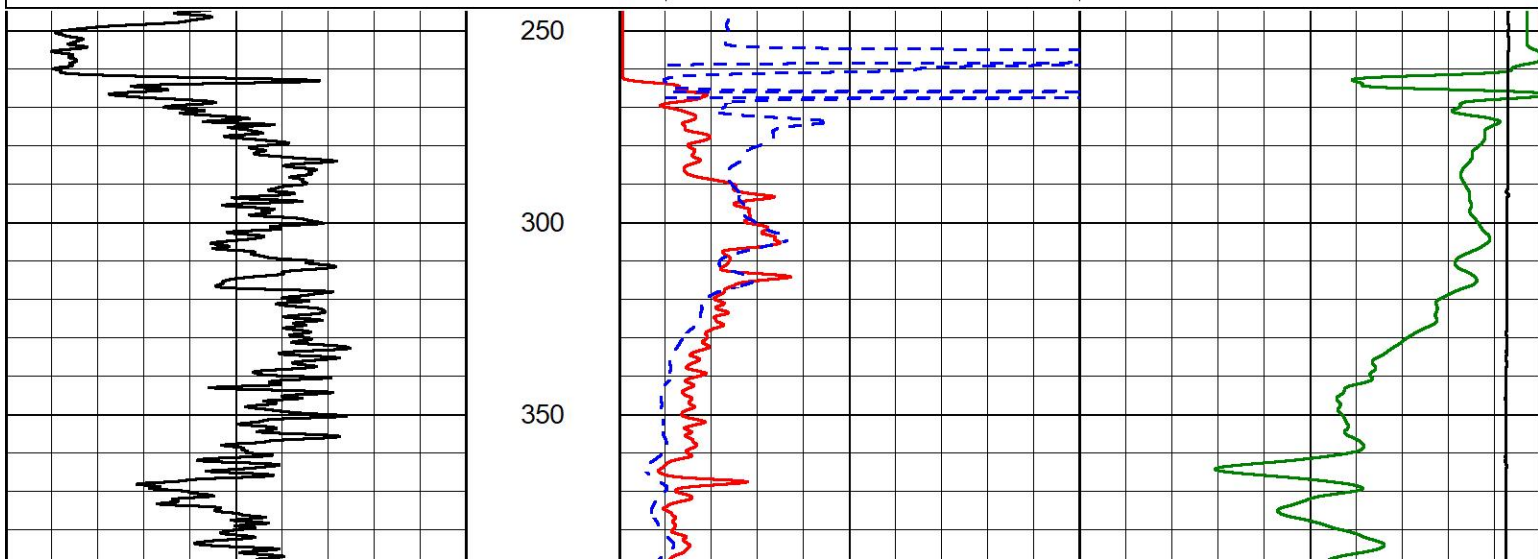


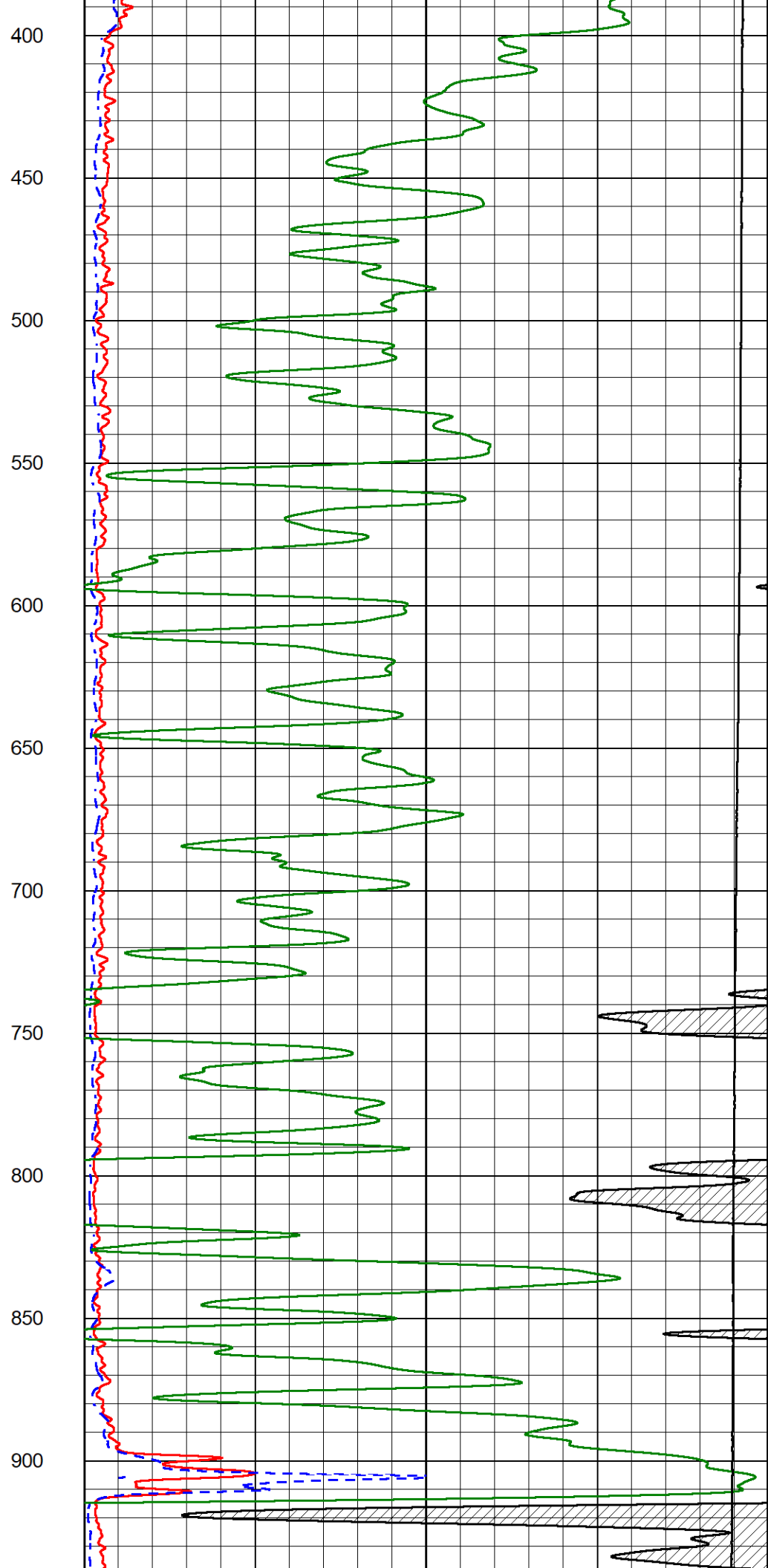
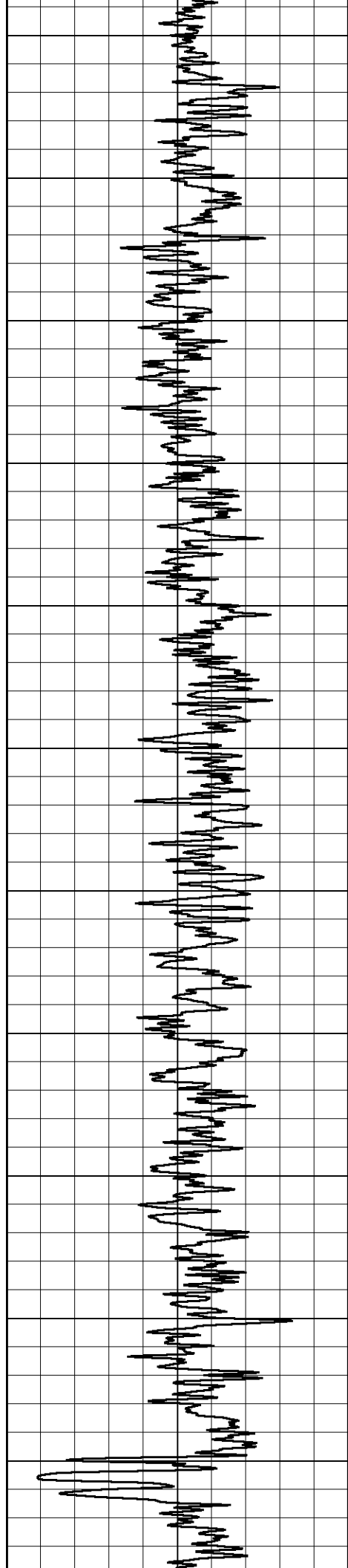
2" SCALE RESISTIVITY

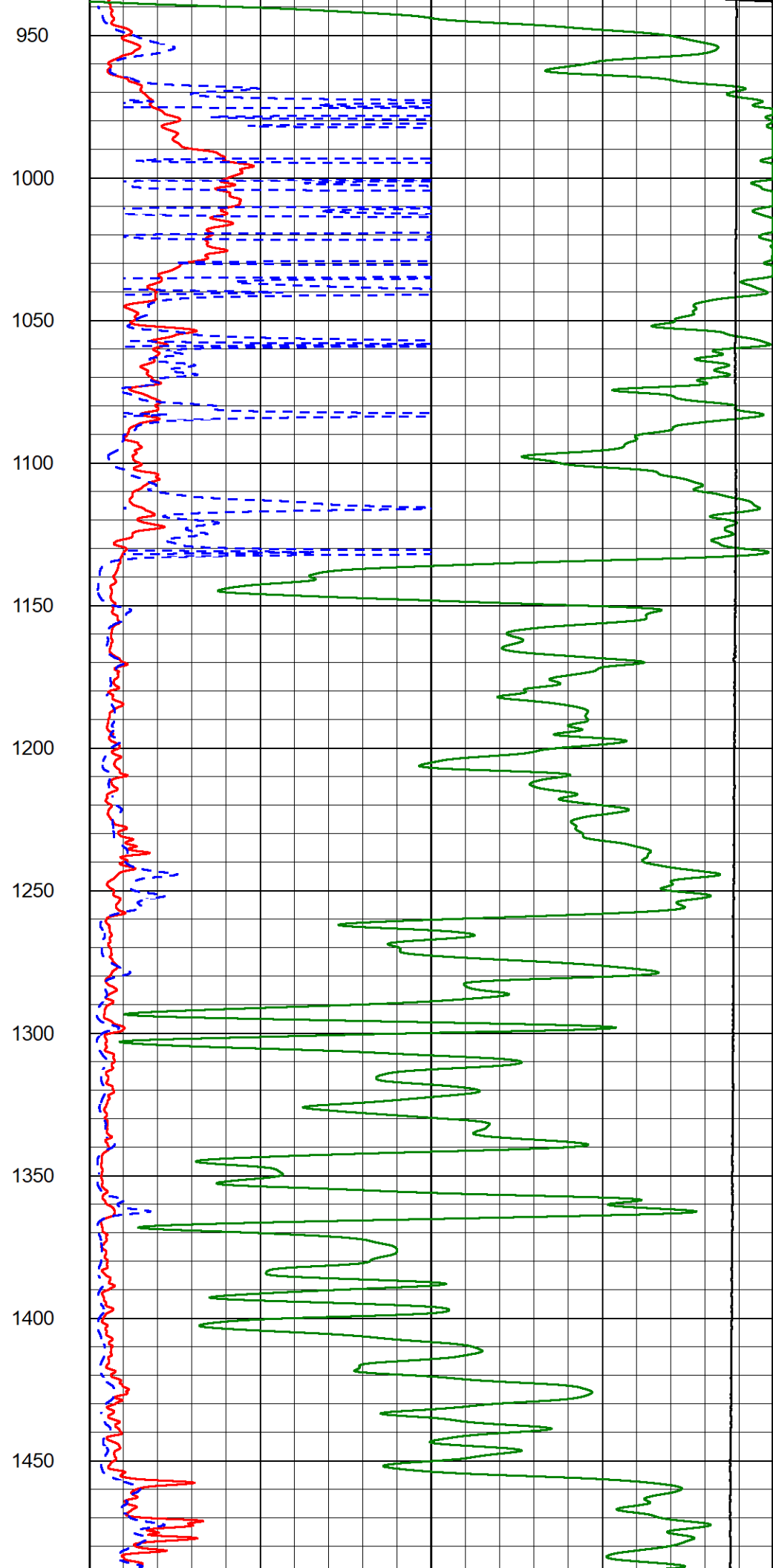
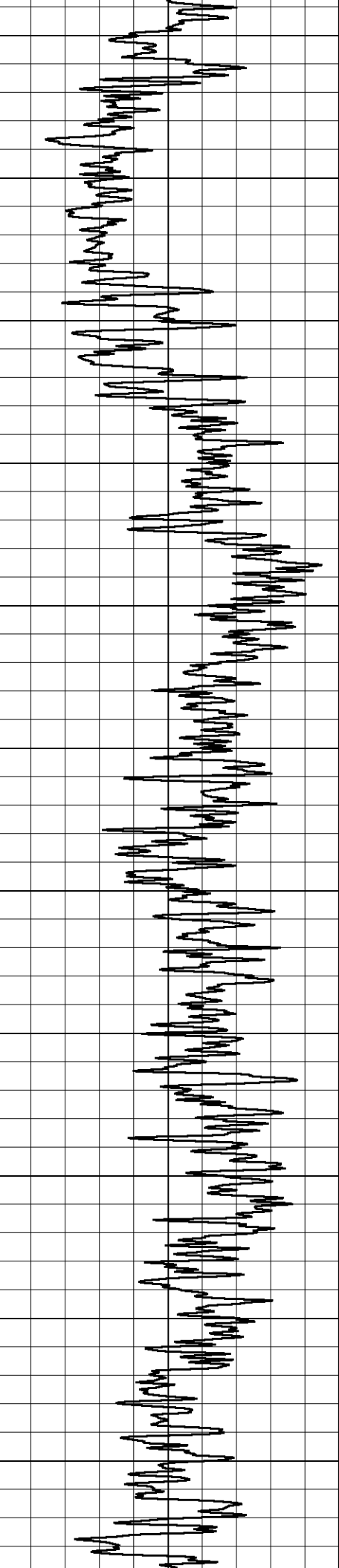
MAIN PASS

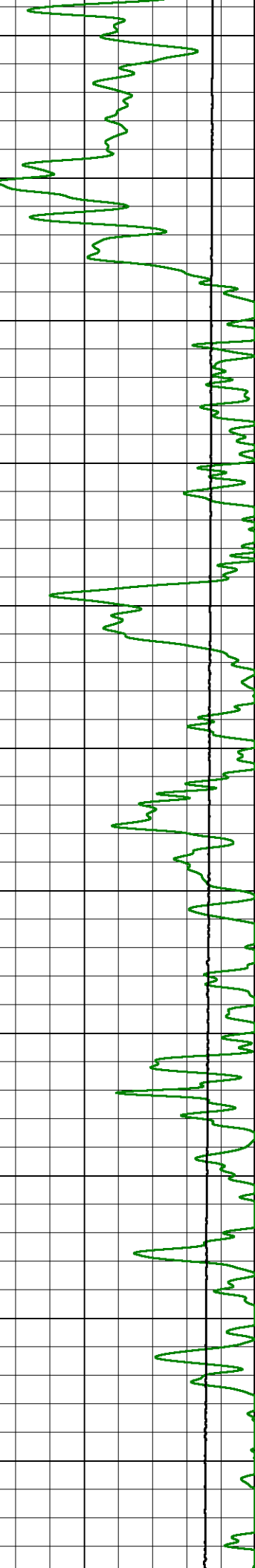
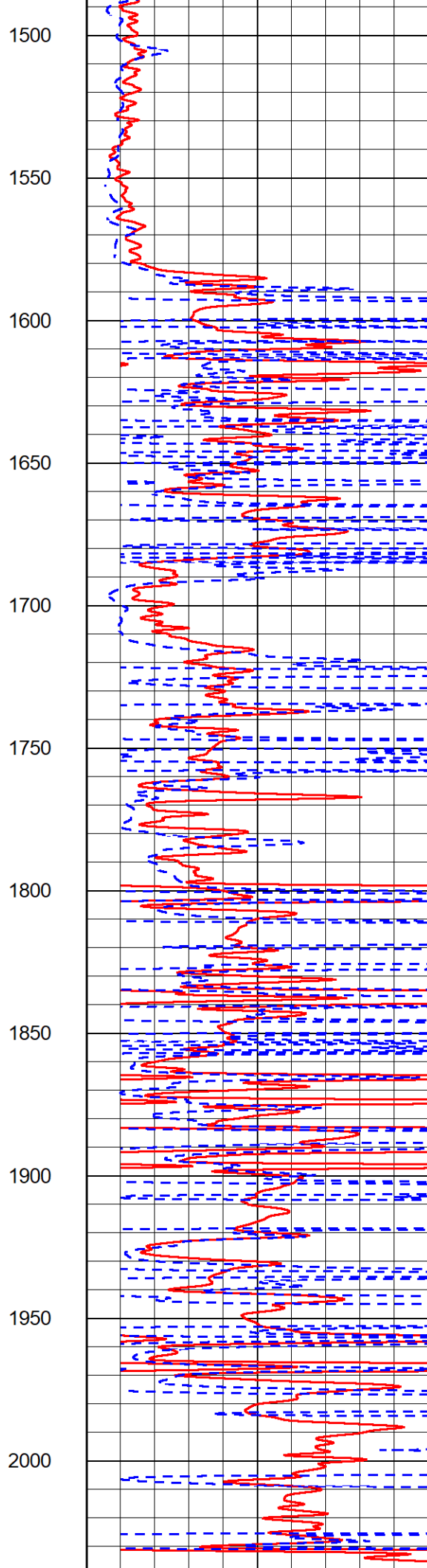
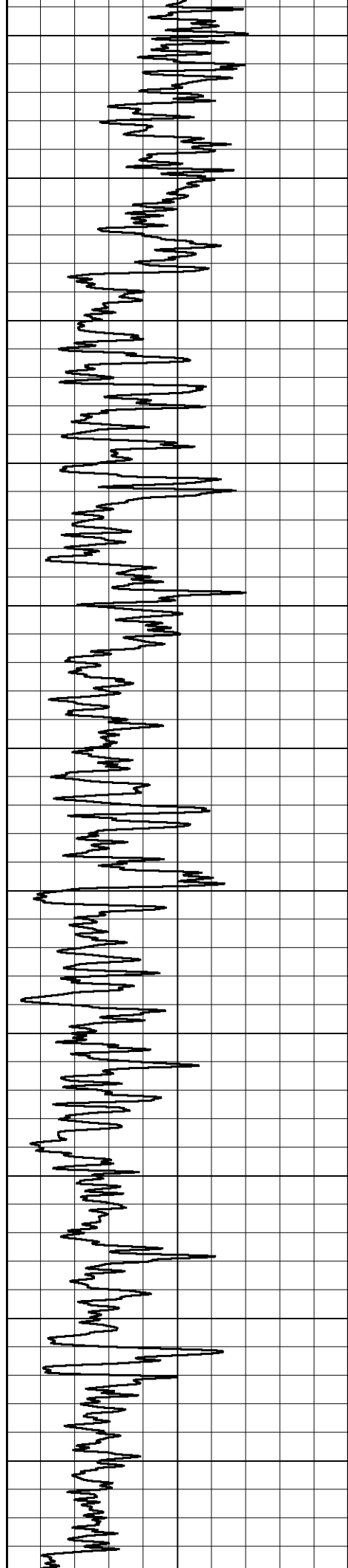
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Dataset Pathname stkml/pass3.3
Presentation Format _dil2in
Dataset Creation Wed Jun 22 06:01:39 2022
Charted by Depth in Feet scaled 1:600

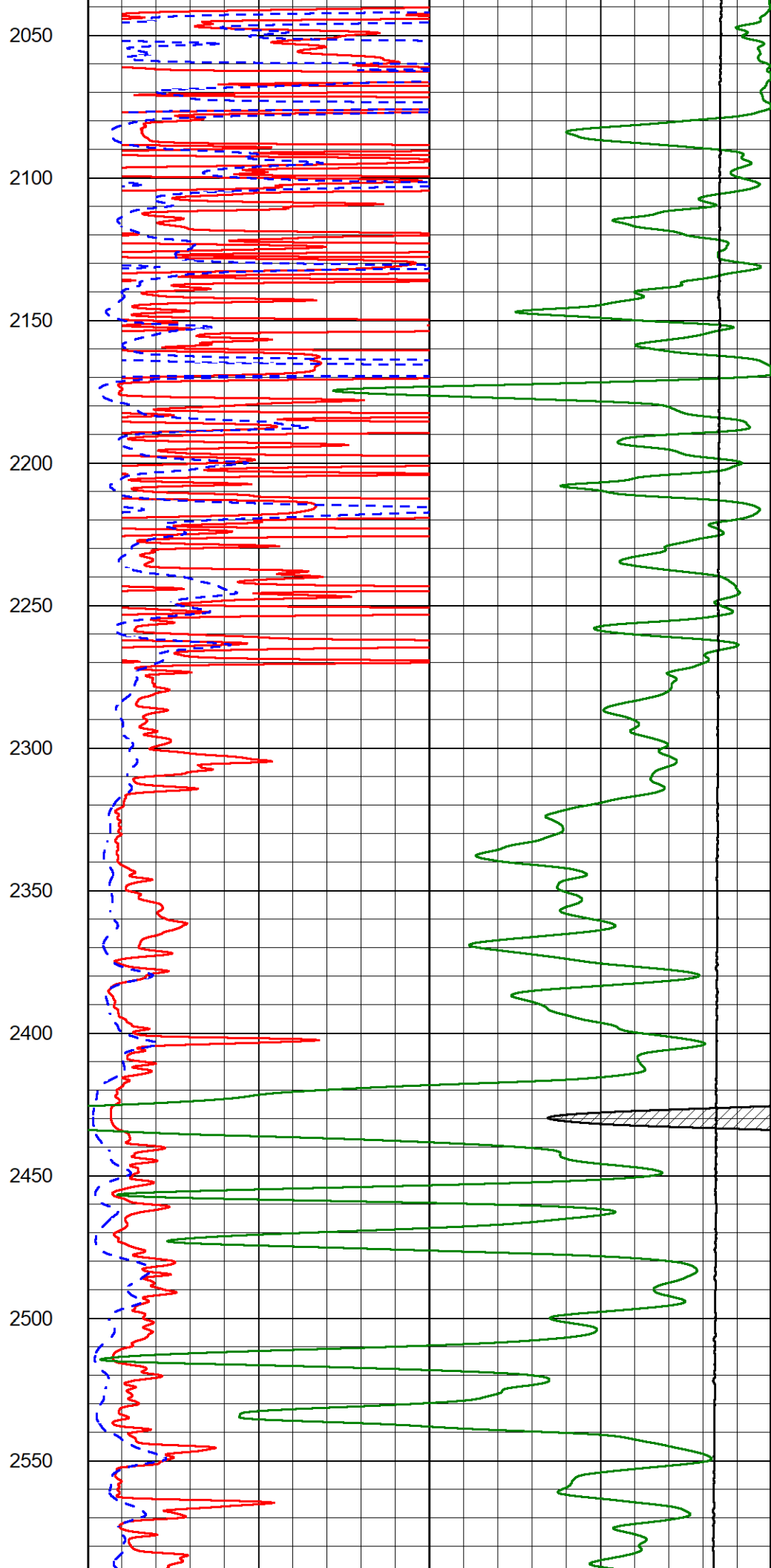
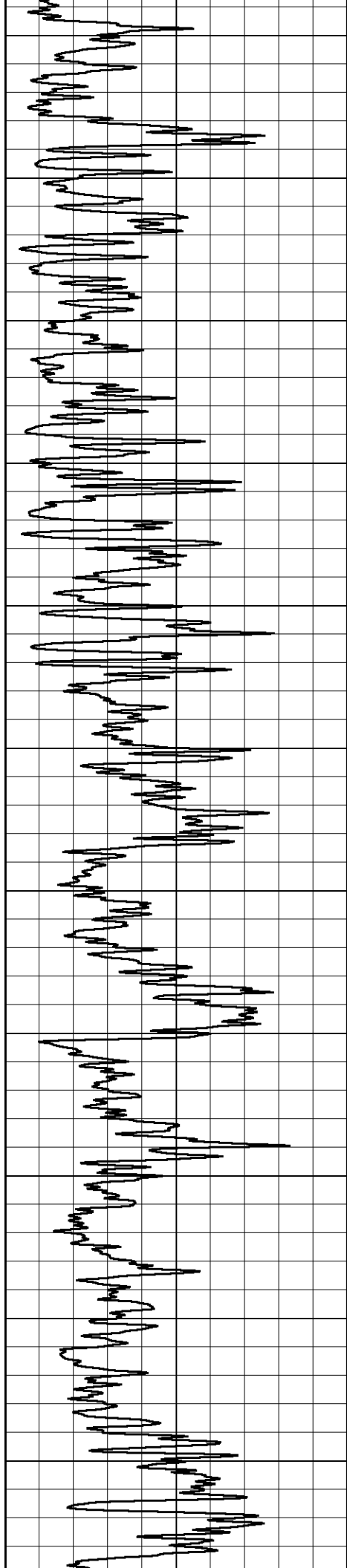
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			15000	Line Tension (lb)	0
			0	Shallow Resistivity (Ohm-m)	50
			0	Deep Resistivity (Ohm-m)	50
				Shallow Resistivity	
			50	(Ohm-m)	200
			50	Deep Resistivity (Ohm-m)	200

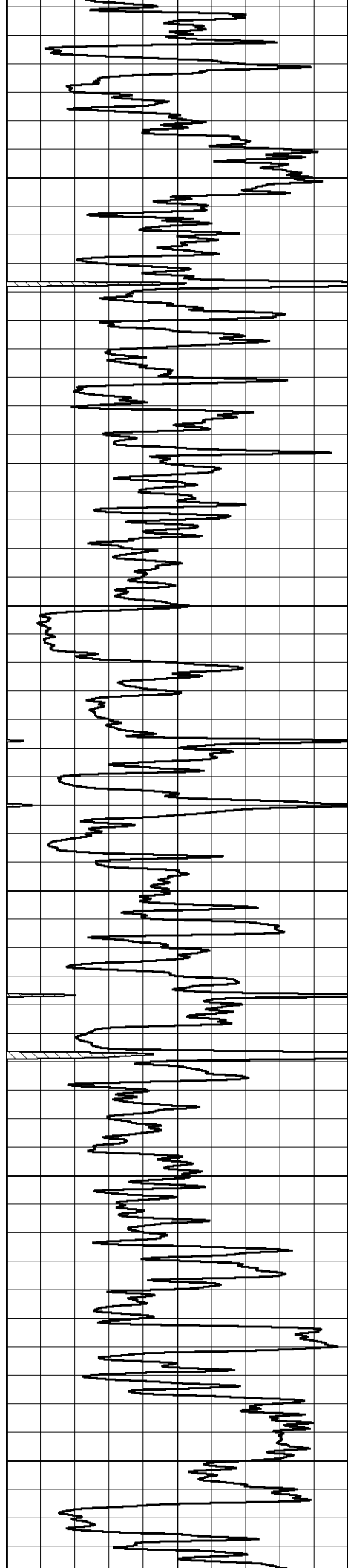












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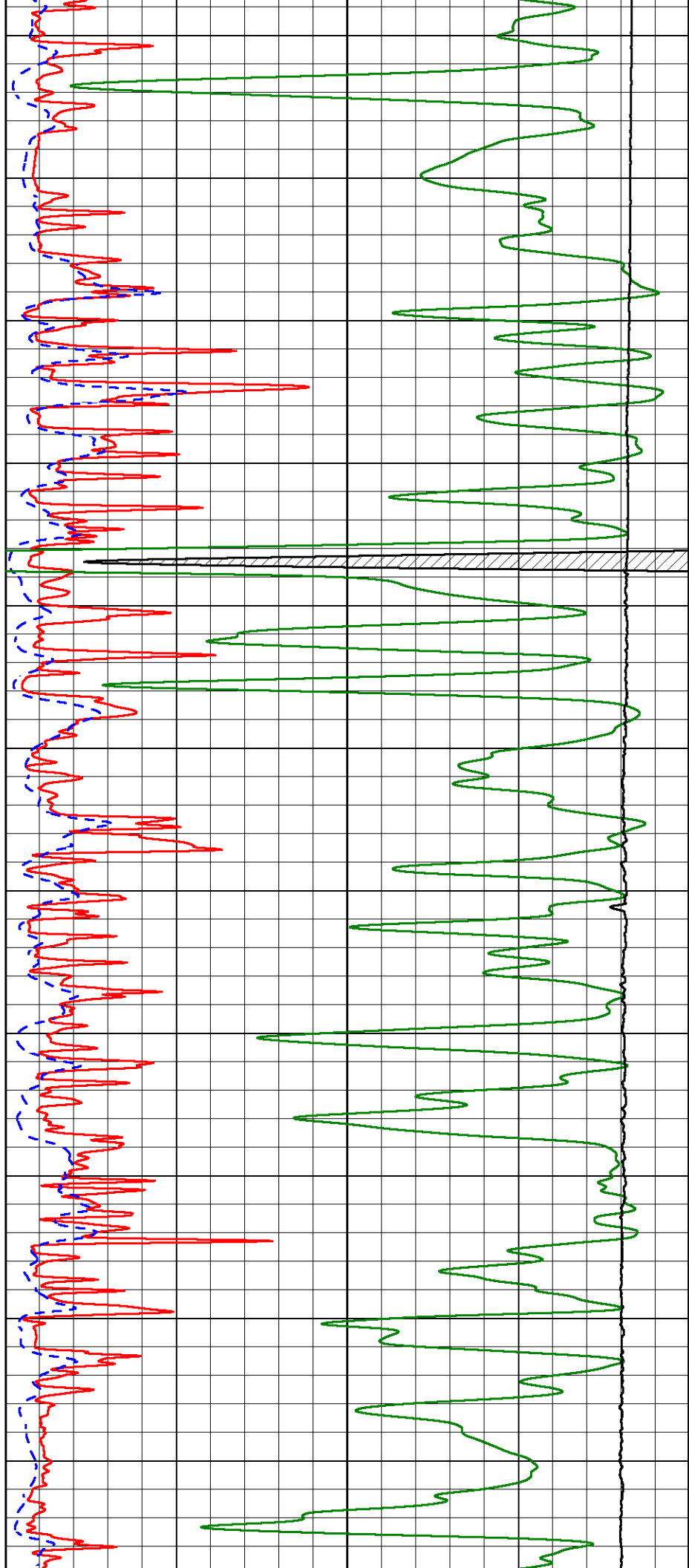
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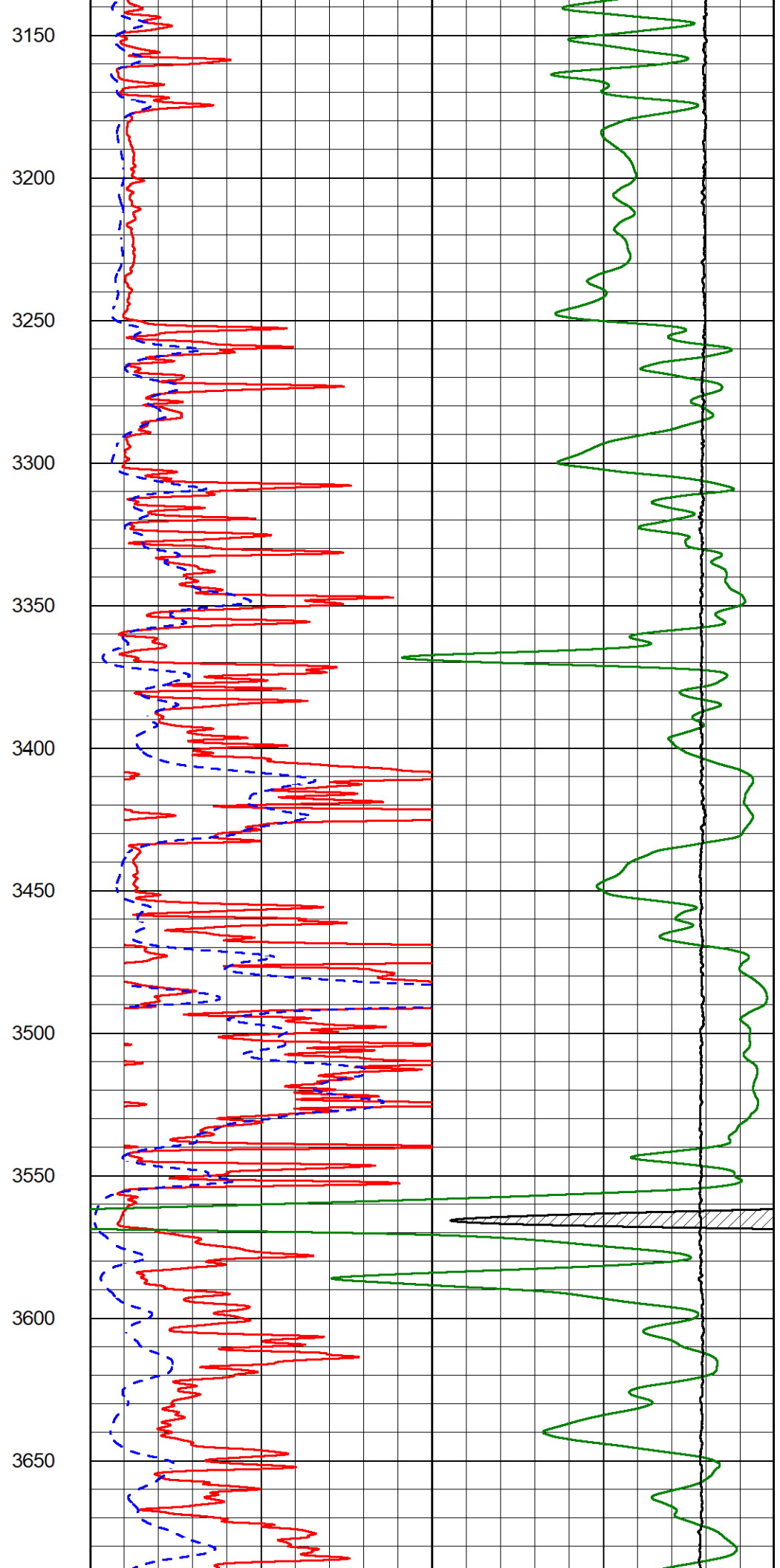
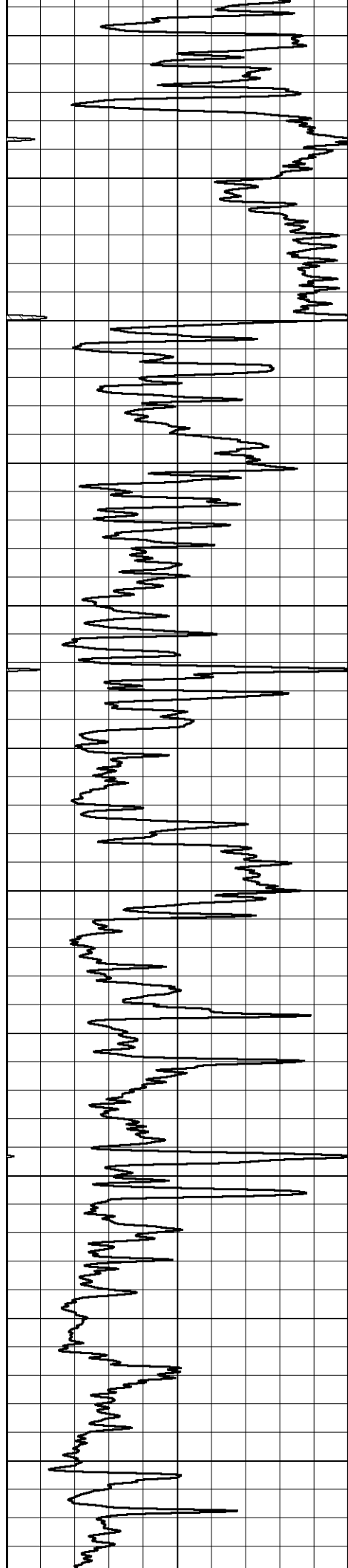
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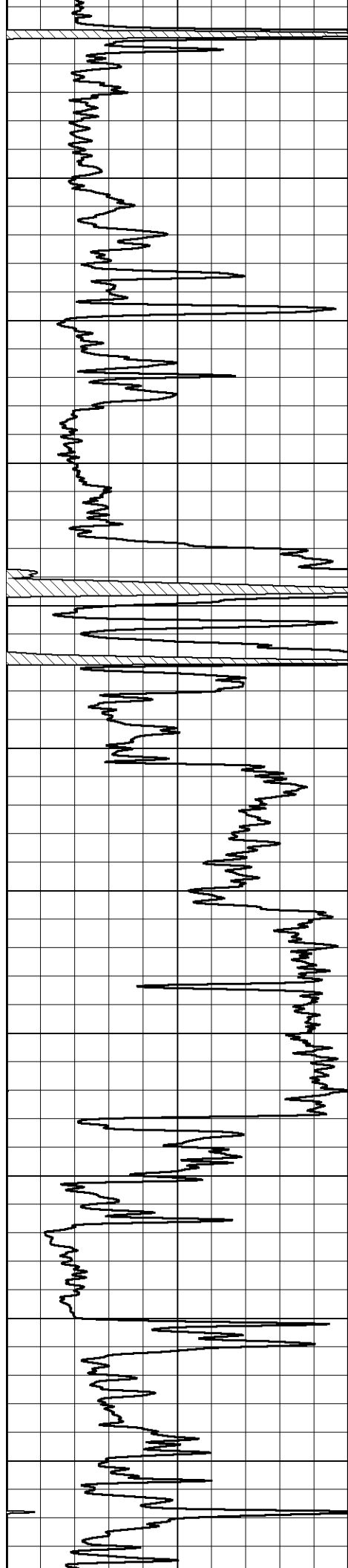
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3100







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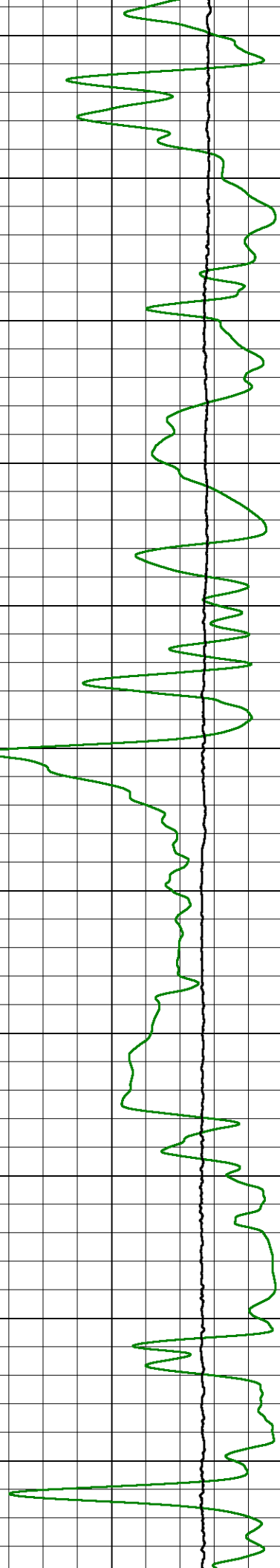
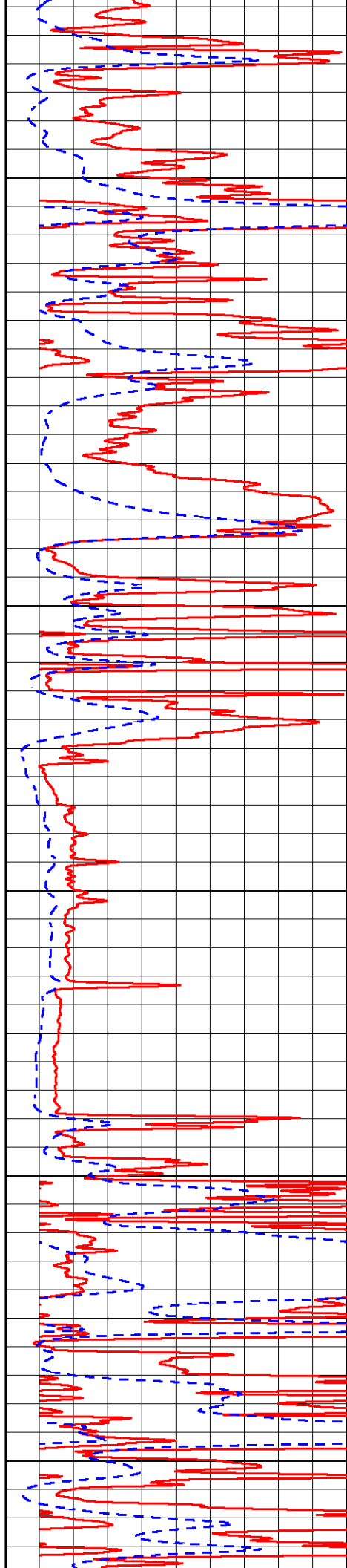
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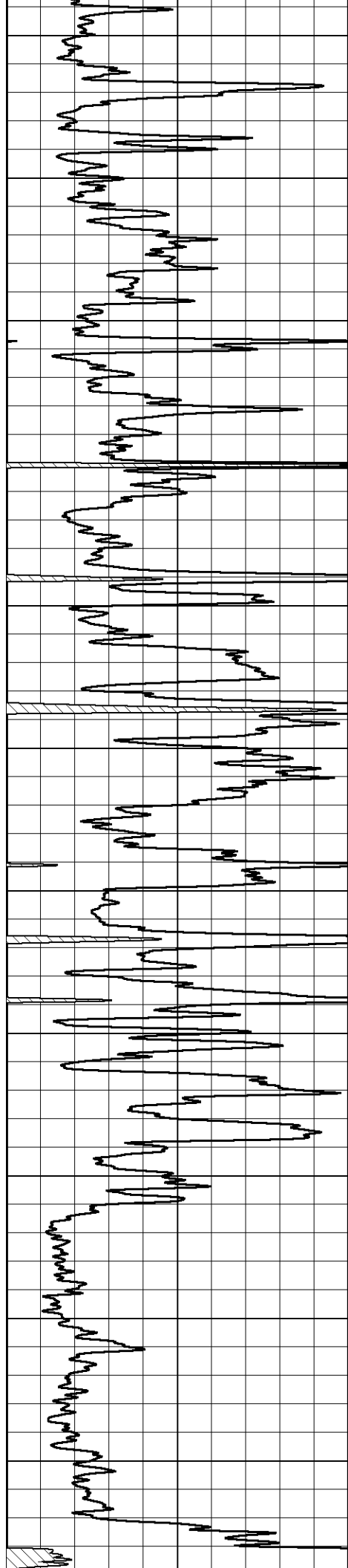
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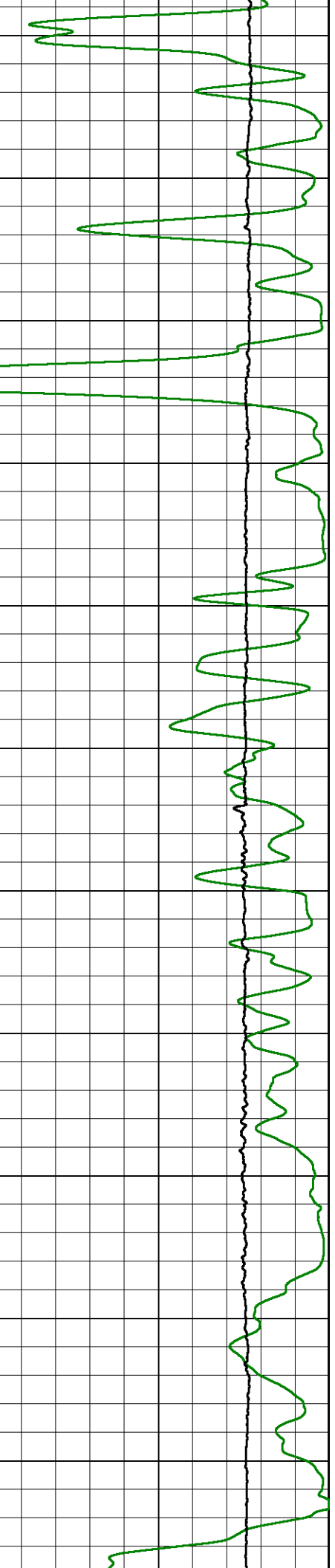
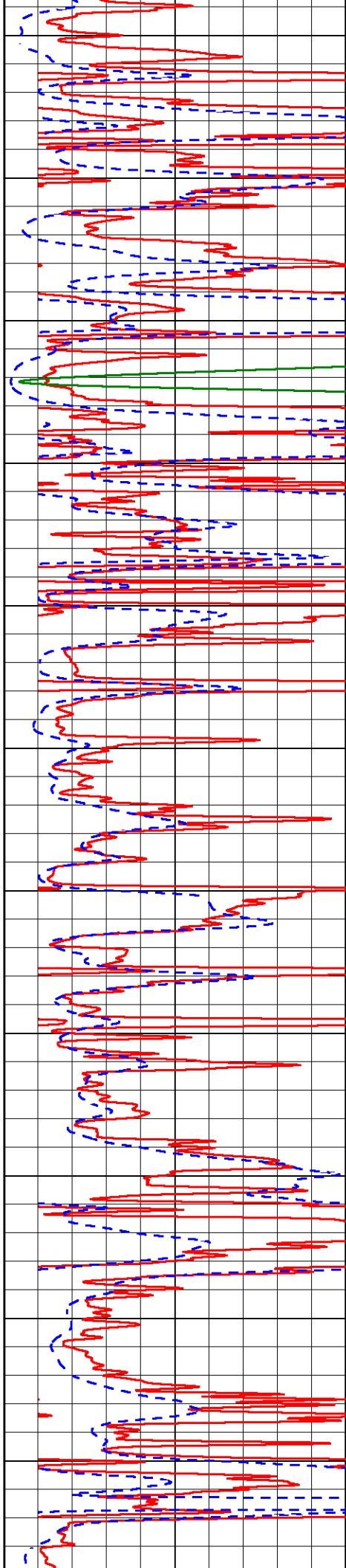
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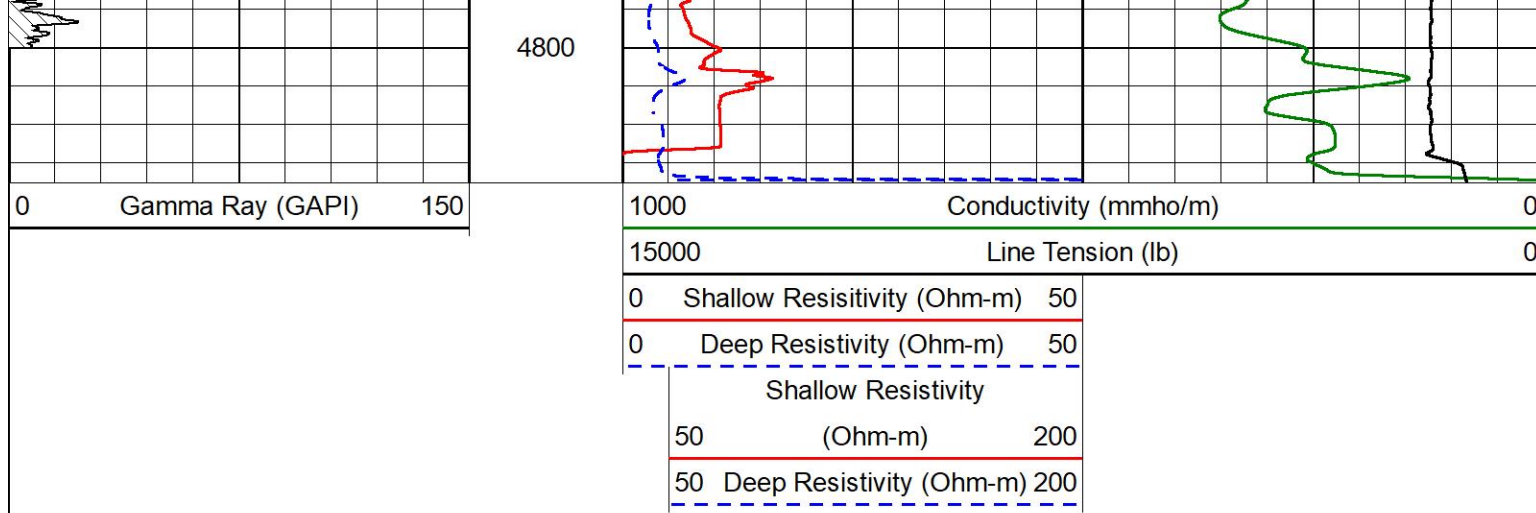
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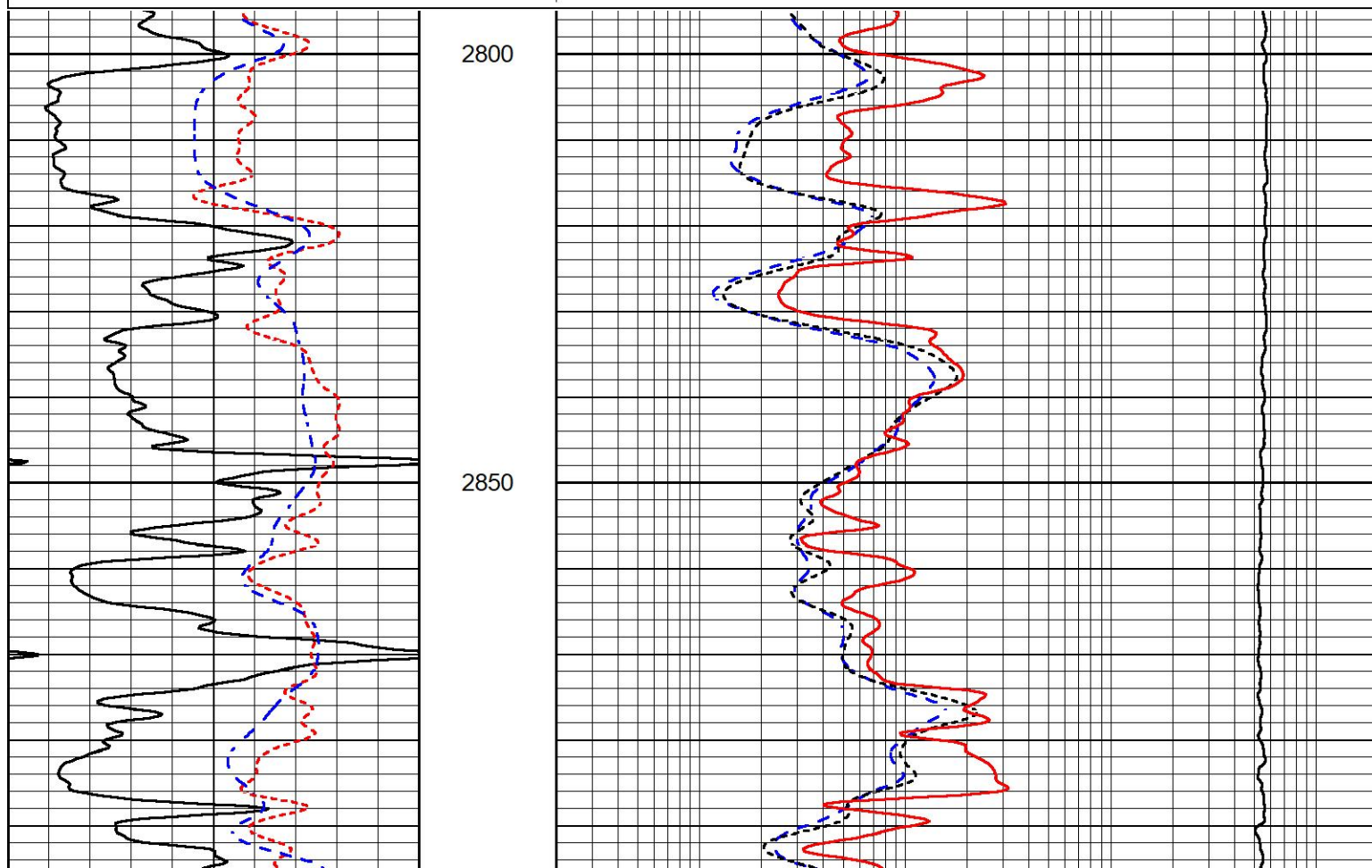


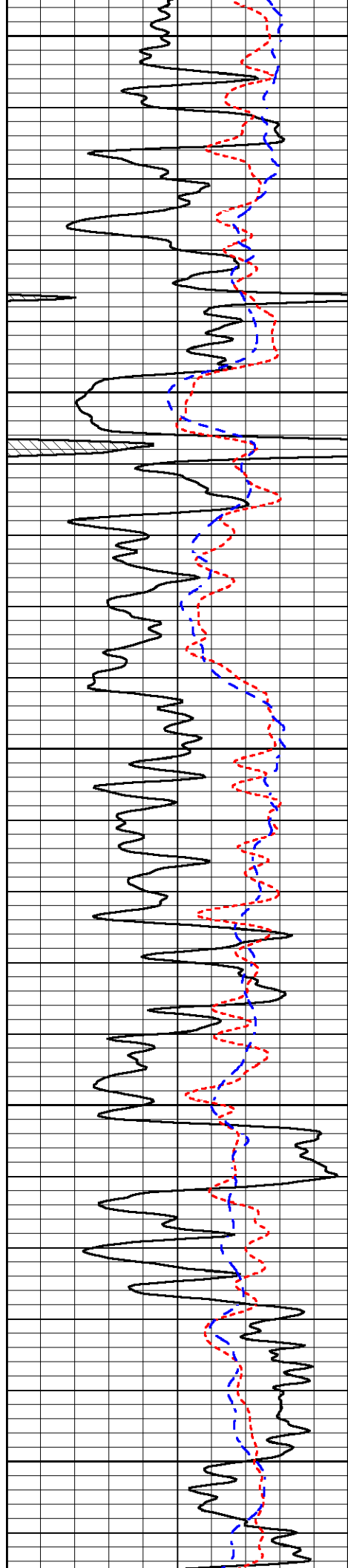
DETAIL SECTION

MAIN PASS

Database File griffin_kay 2.db
 Dataset Pathname stkml/pass3.1
 Presentation Format _dil
 Dataset Creation Wed Jun 22 06:01:50 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	RLL3 (Ohm-m)	2000
			10000	Line Tension (lb)	0





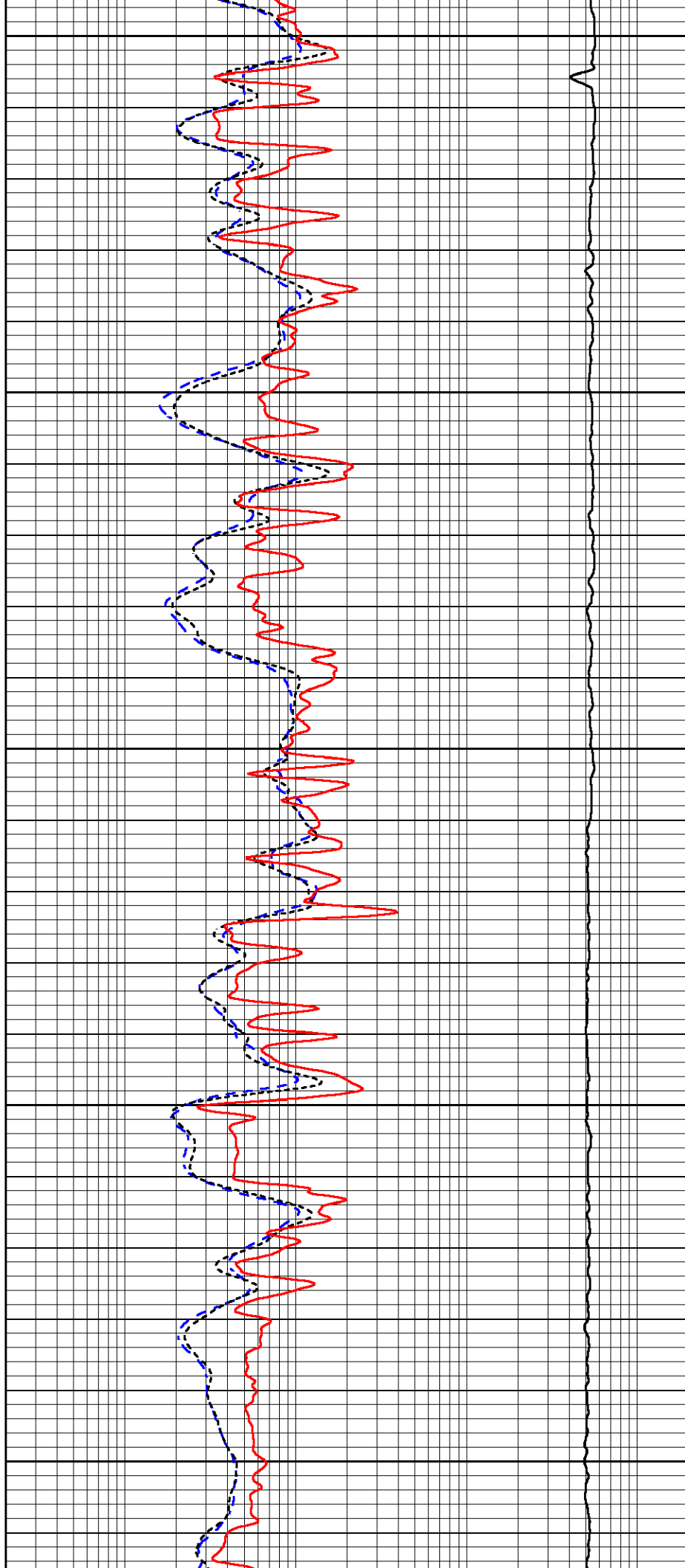
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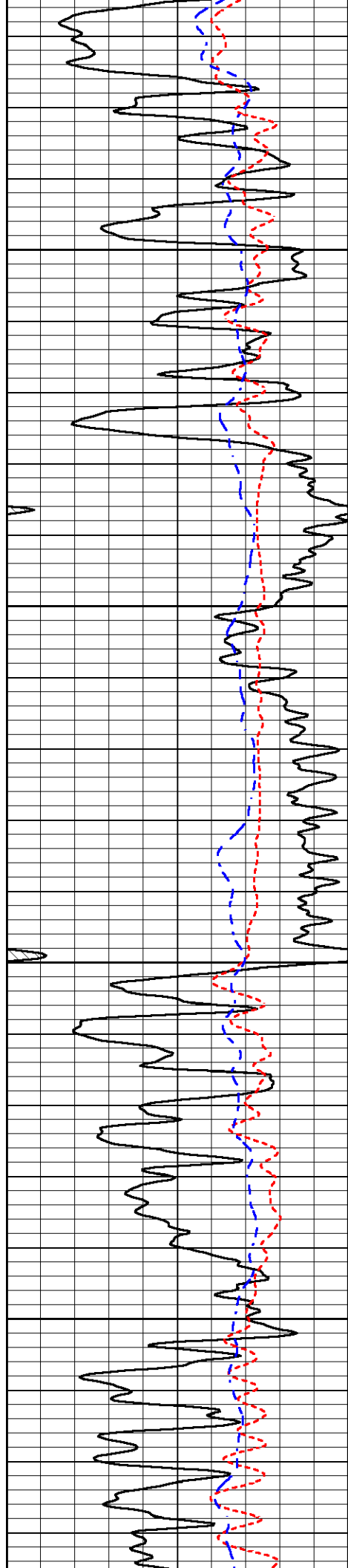
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3000

3050

3100



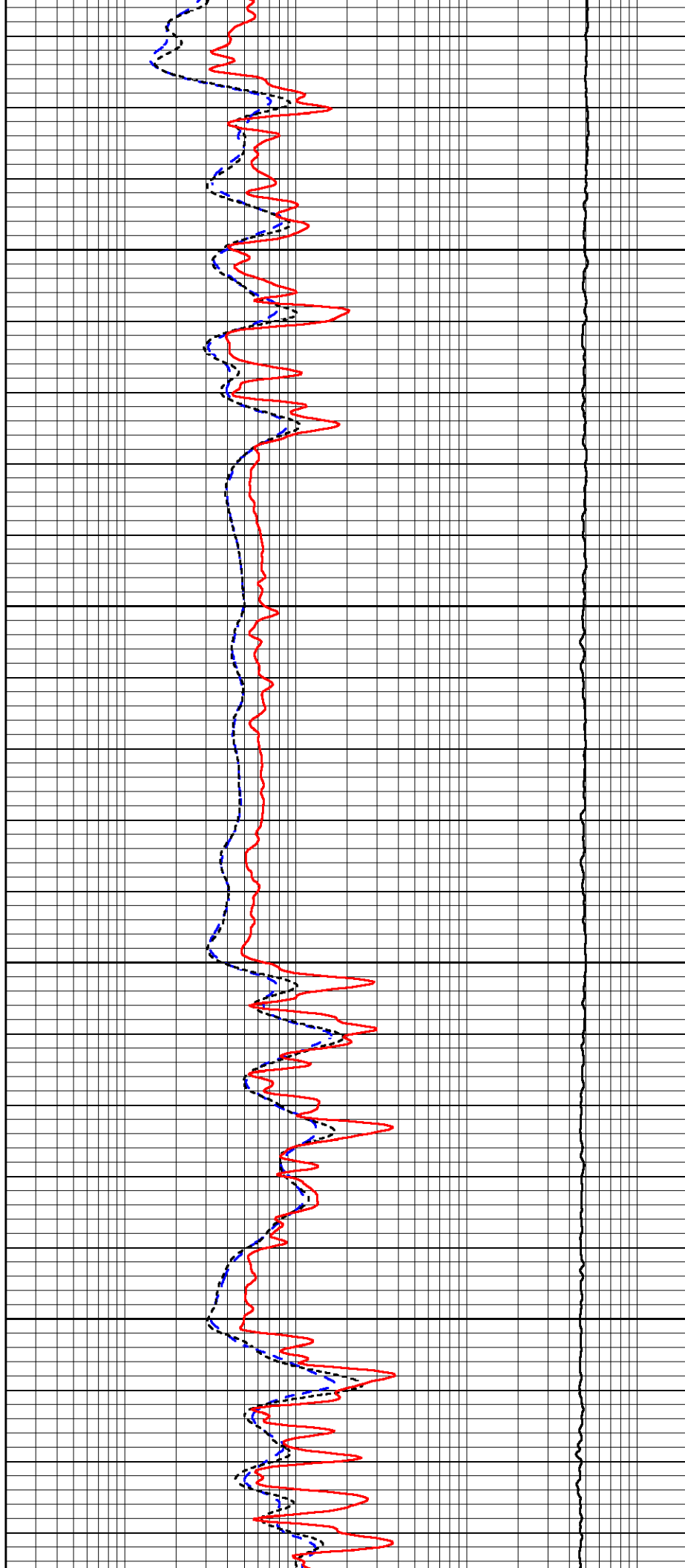


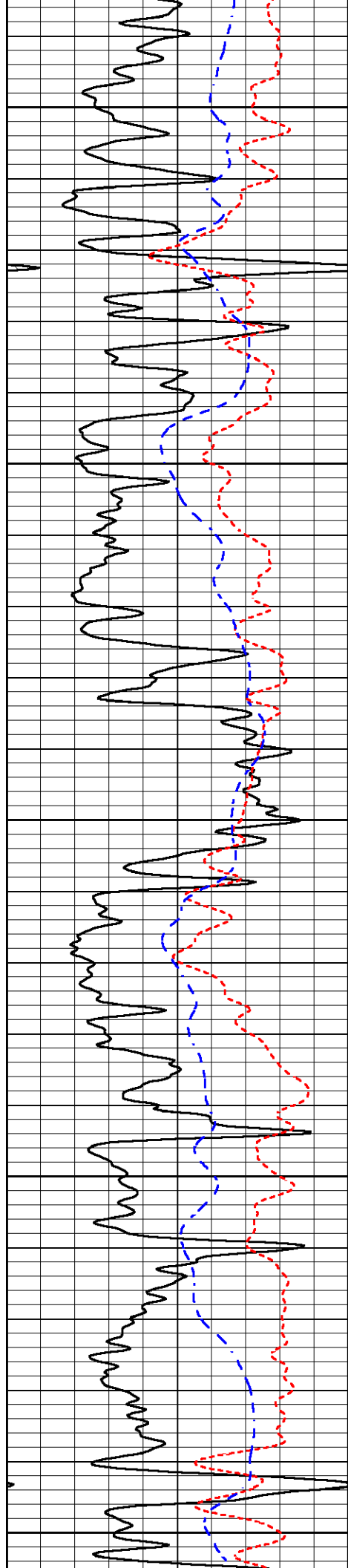
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3200

3250

3300





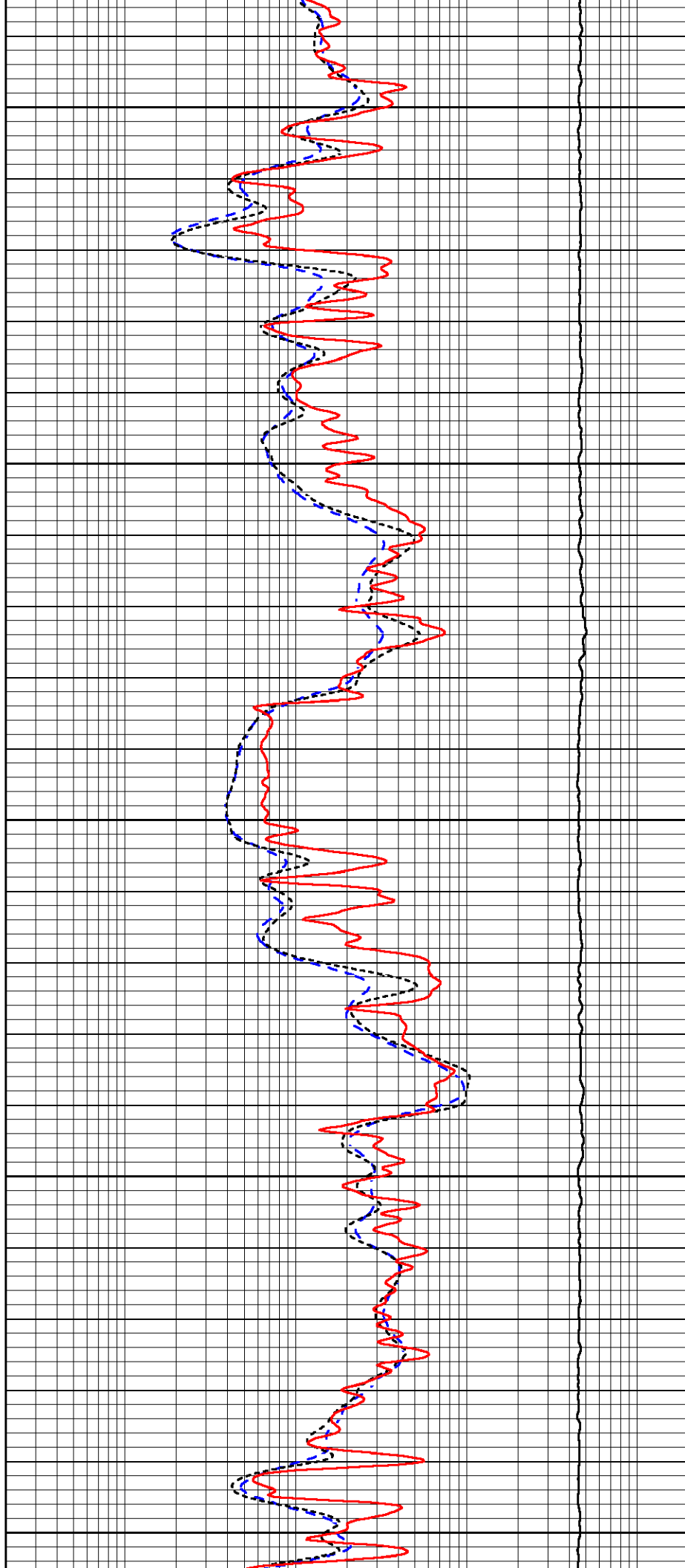
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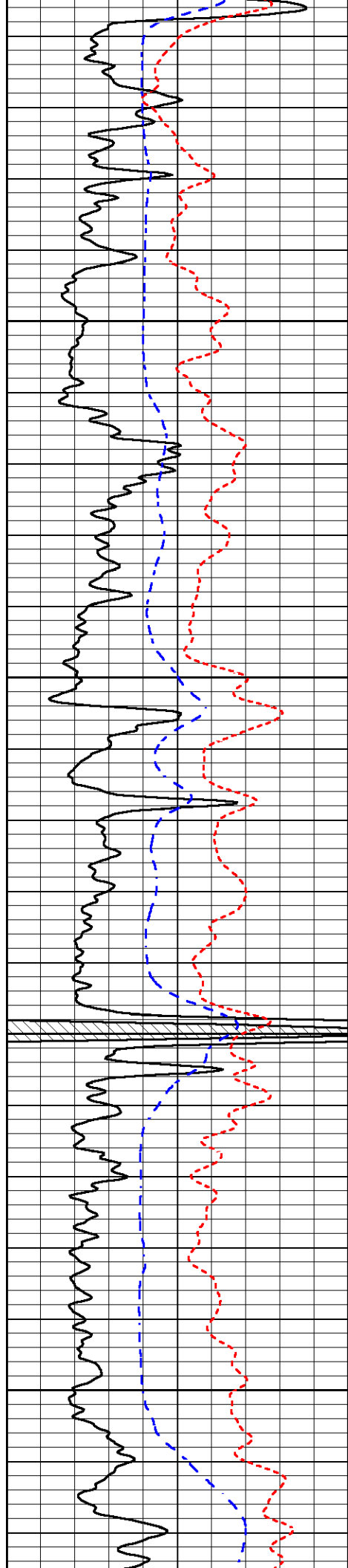
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3450

3500

3550



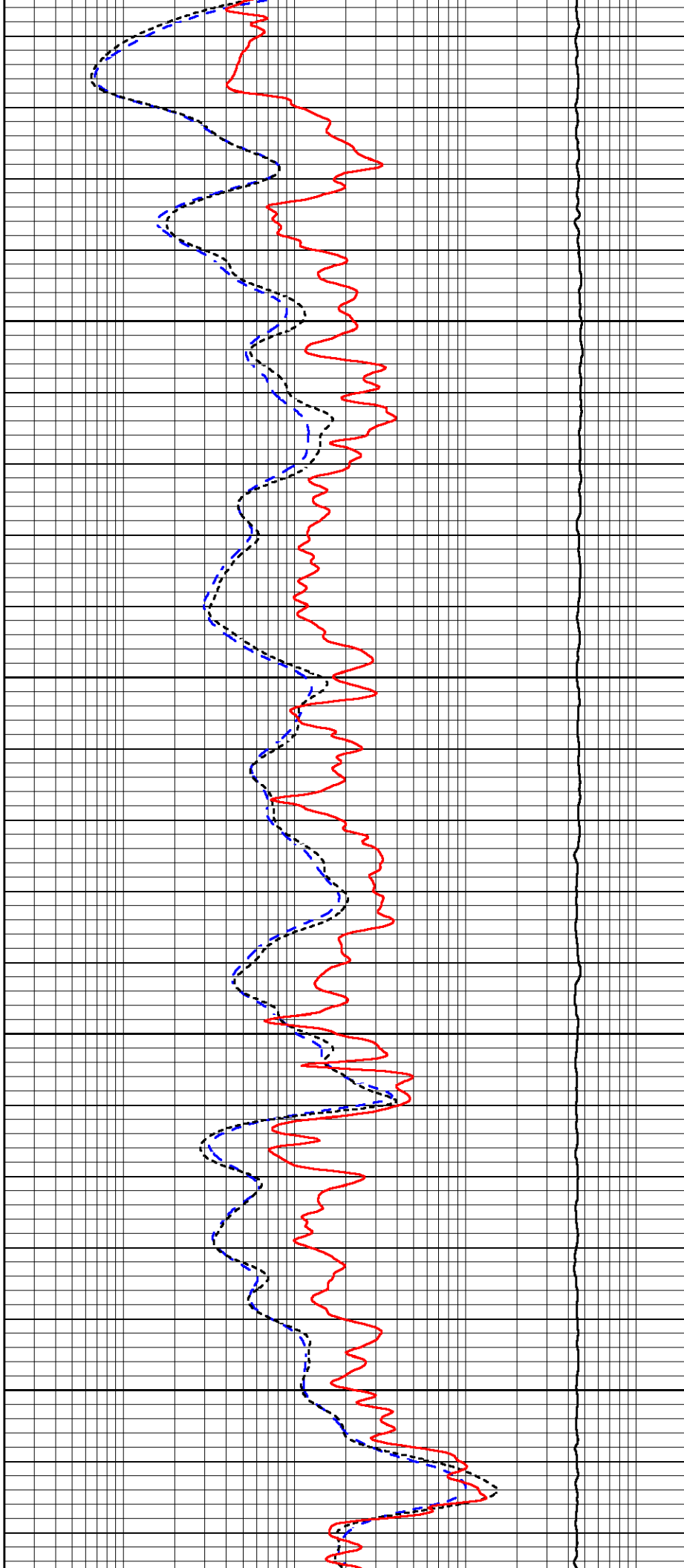


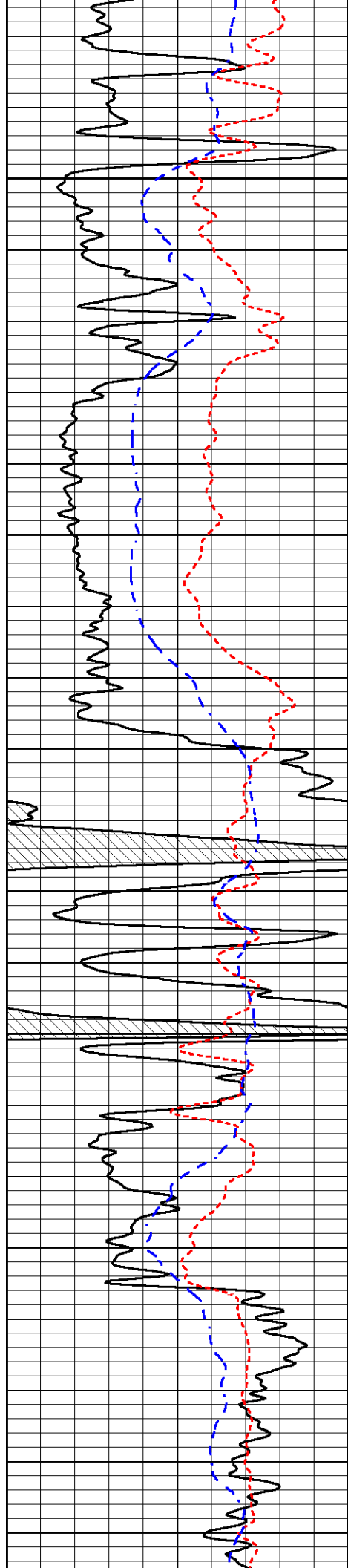
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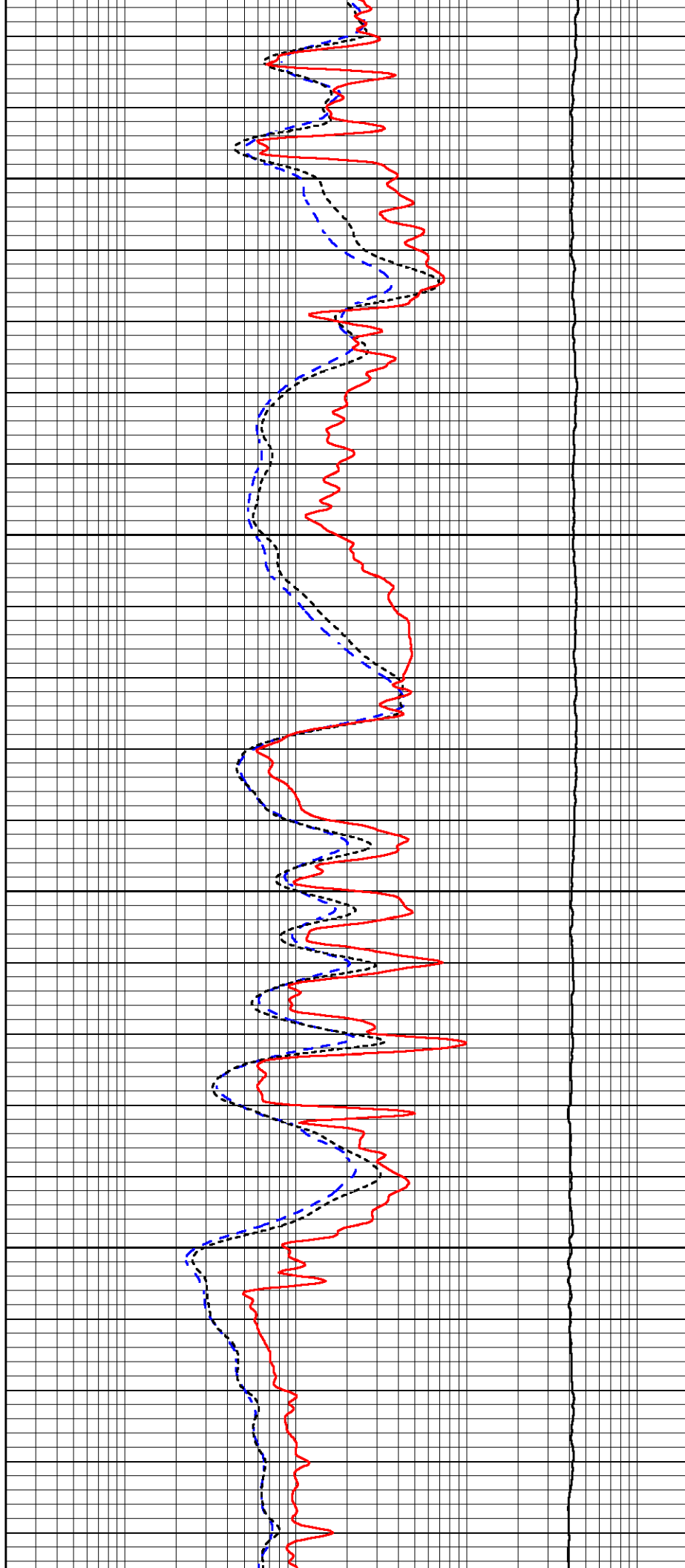


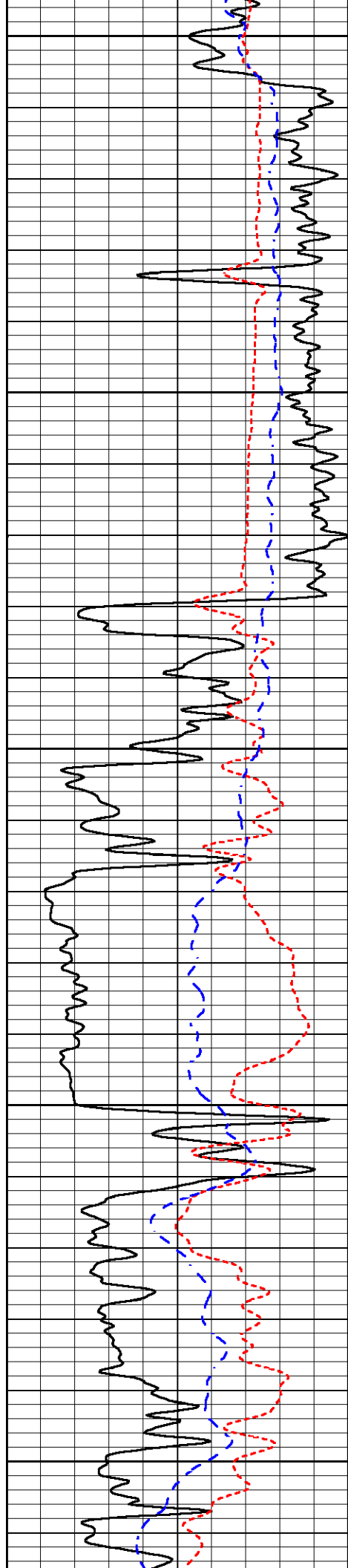
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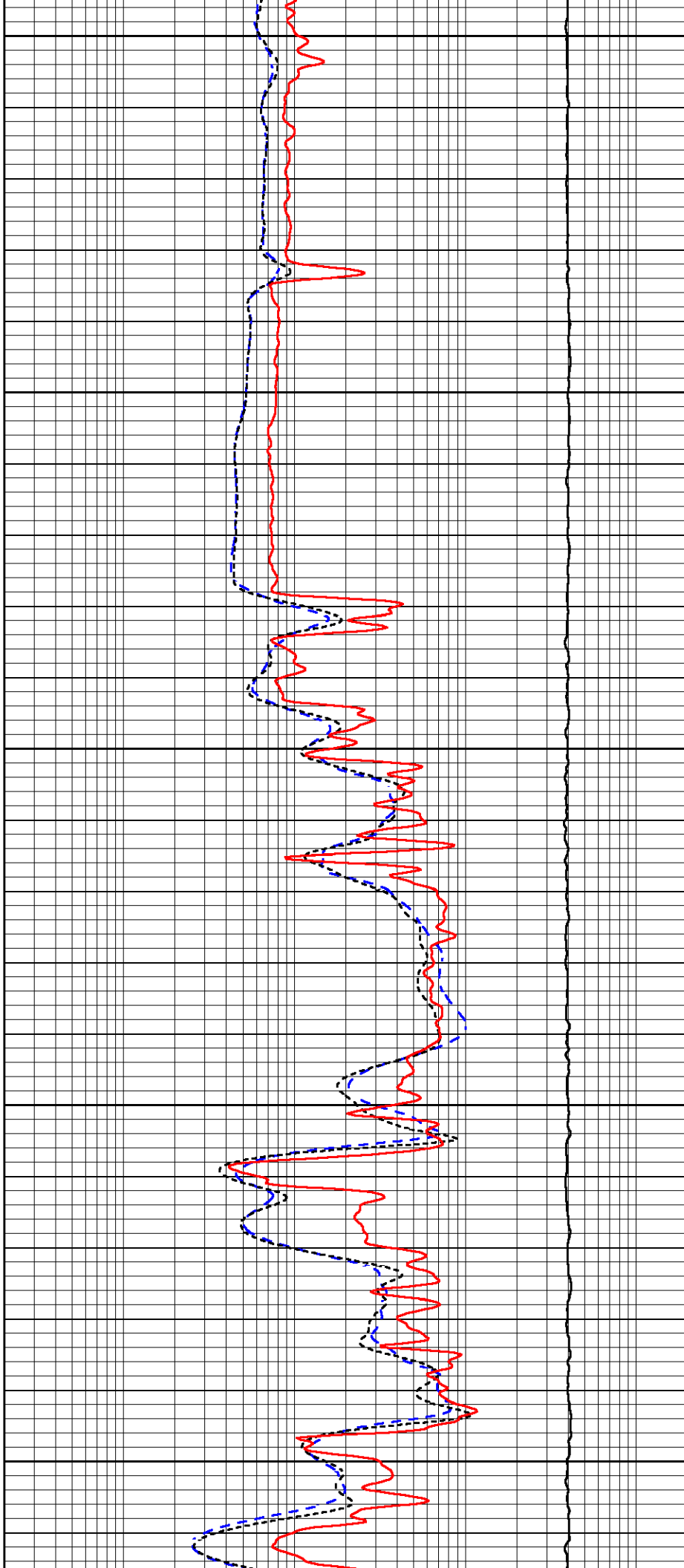
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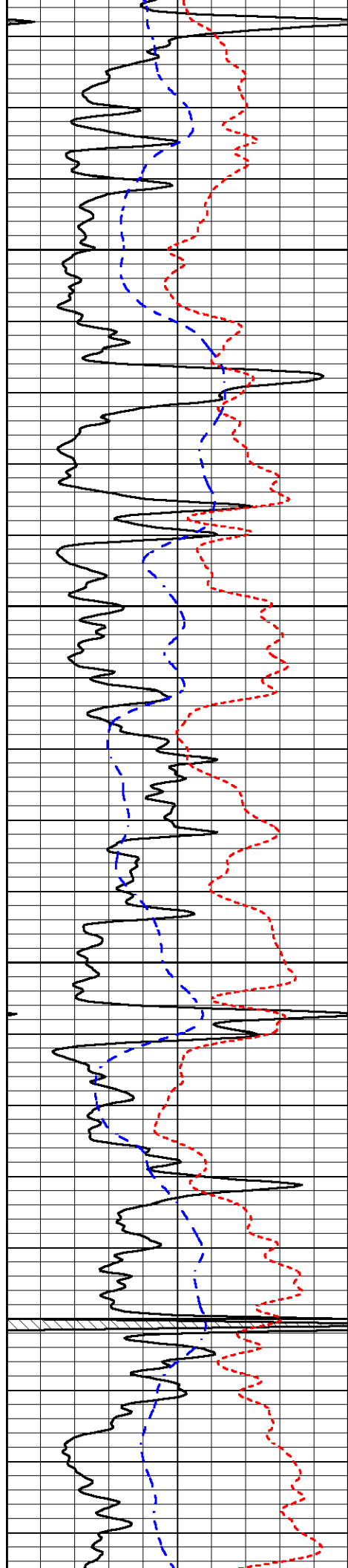
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4100

4150

4200



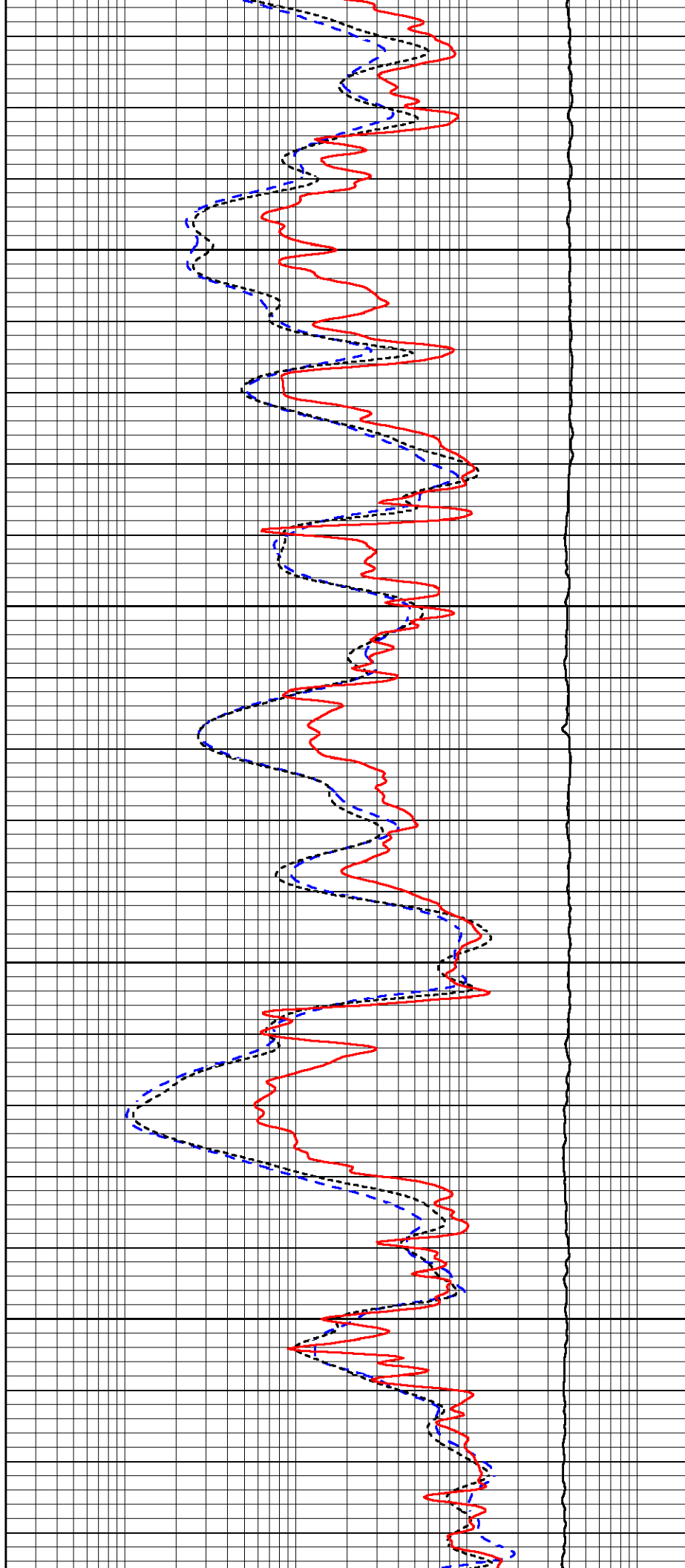


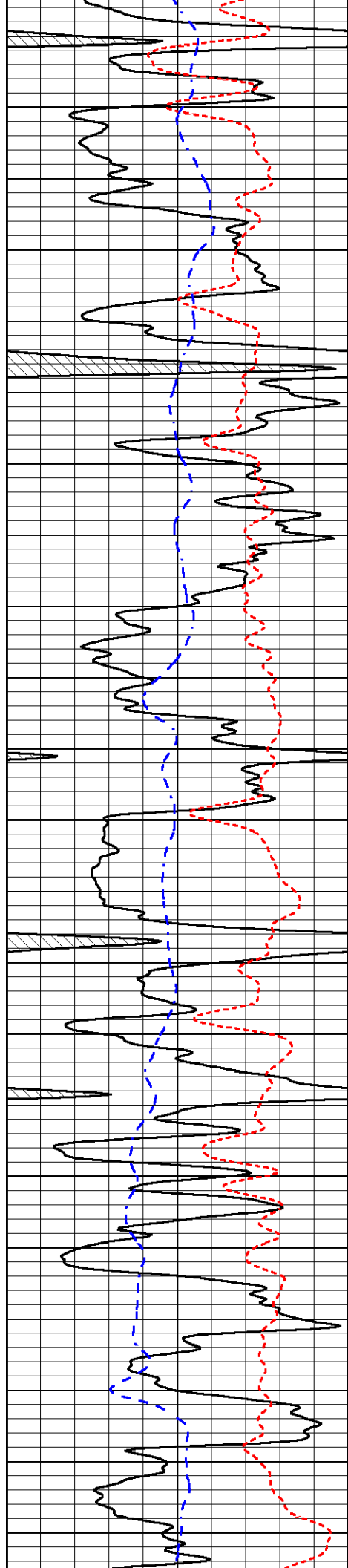
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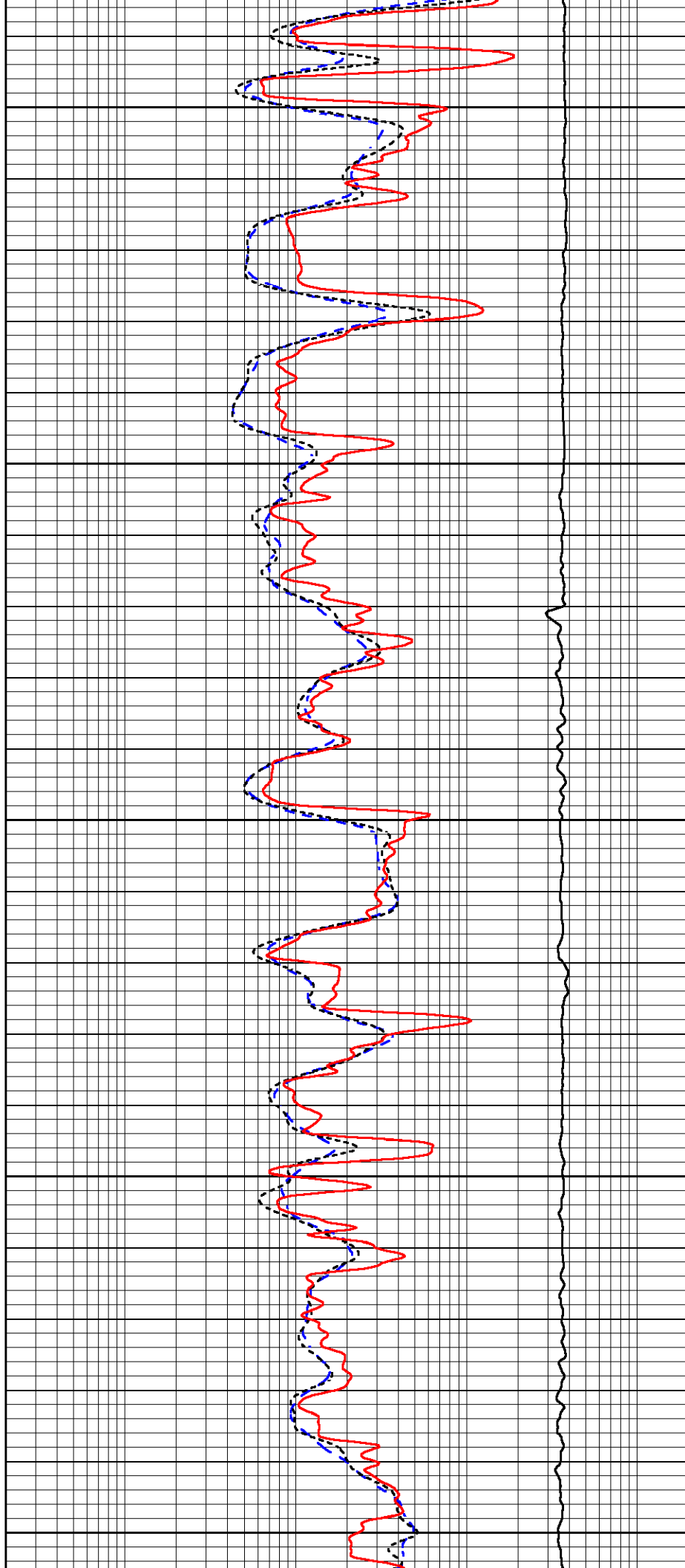
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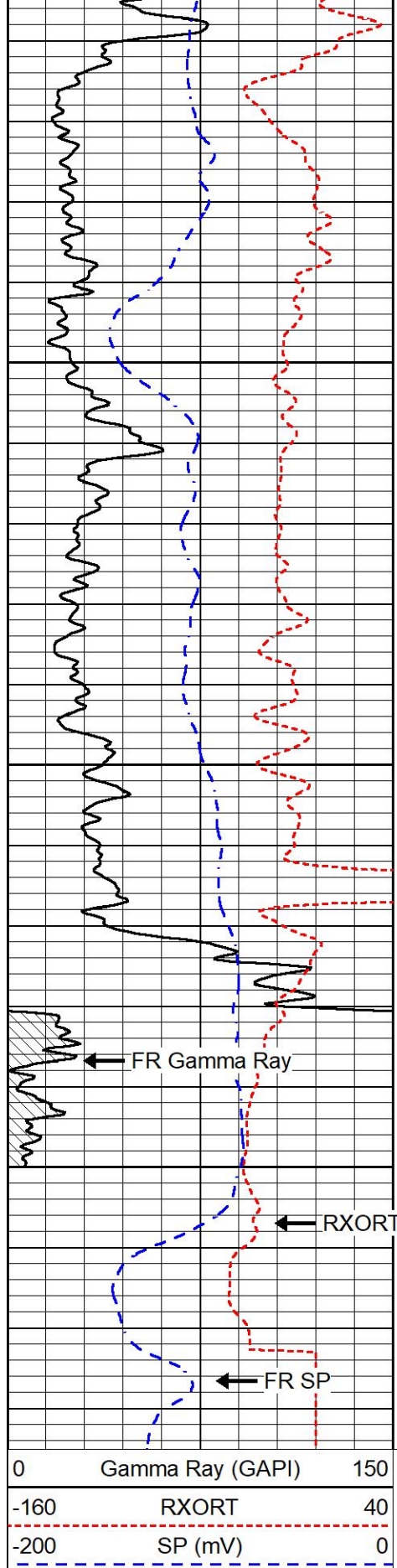
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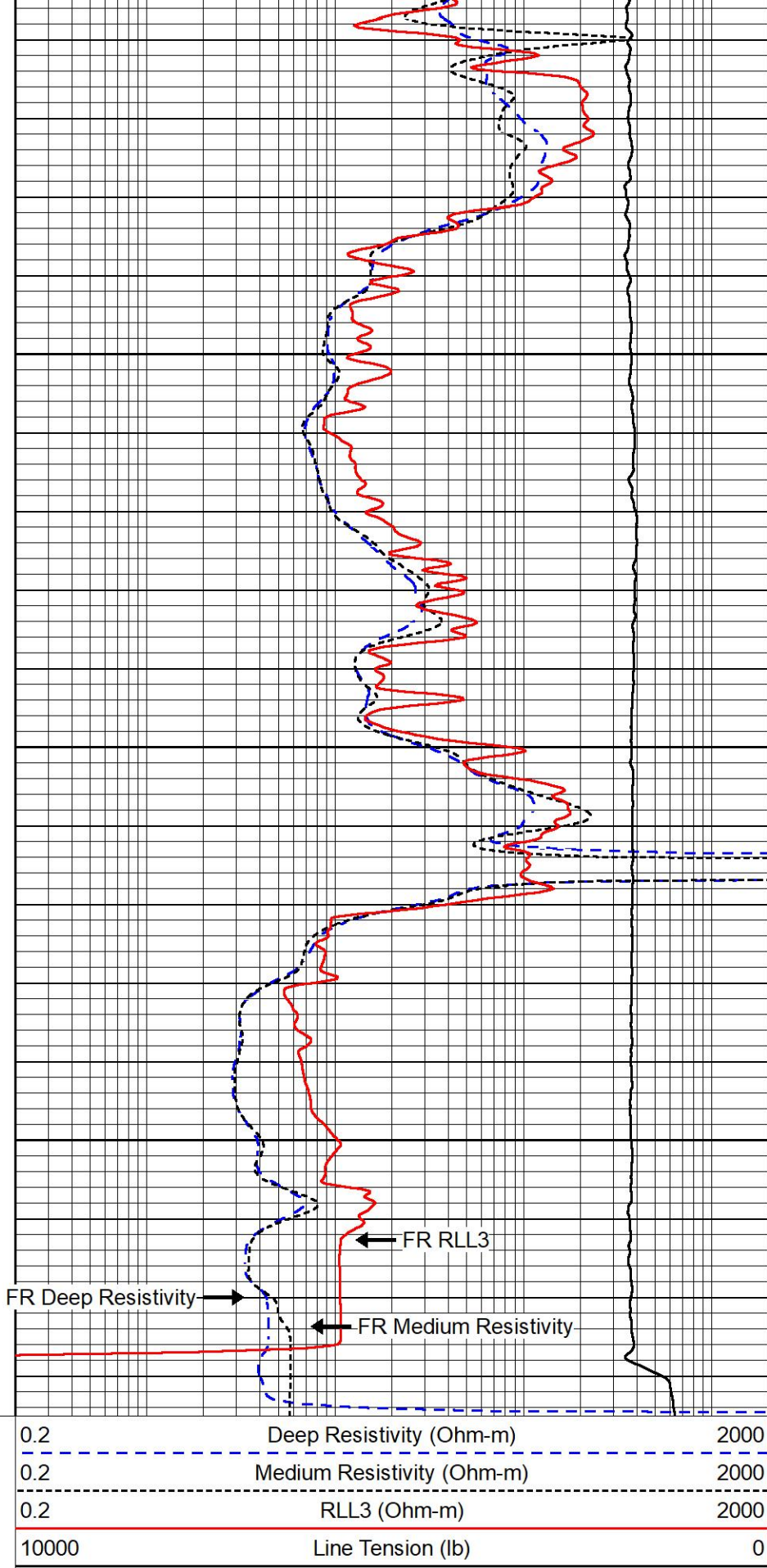




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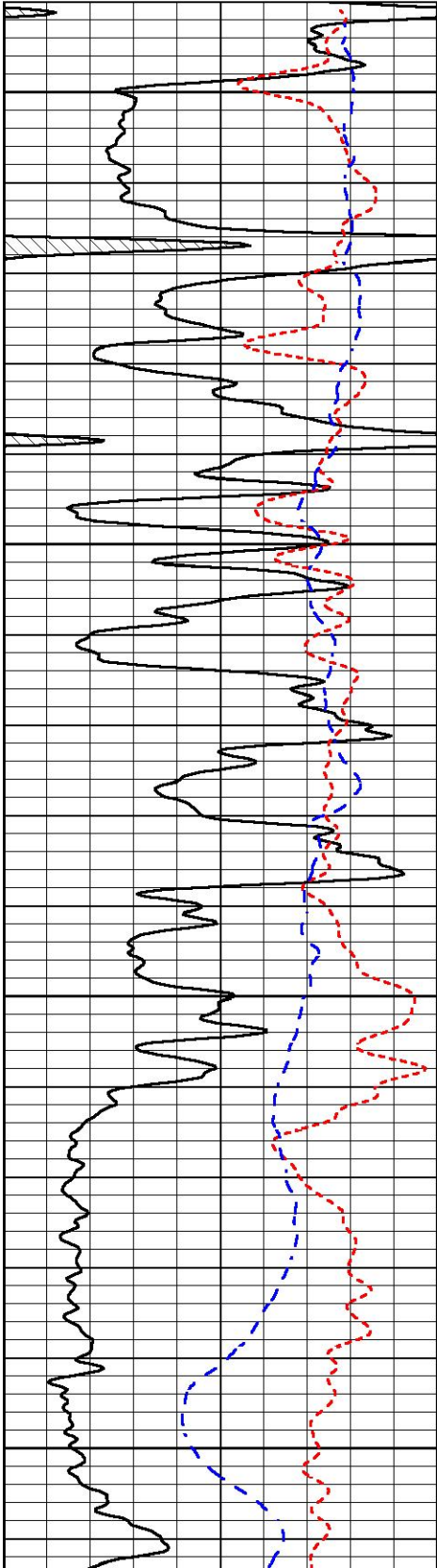
REPEAT SECTION

REPEAT PAGE

Database File griffin_kay 2.db
Dataset Pathname stkml/pass2.1
Presentation Format _dil
Dataset Creation Wed Jun 22 05:08:14 2022
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

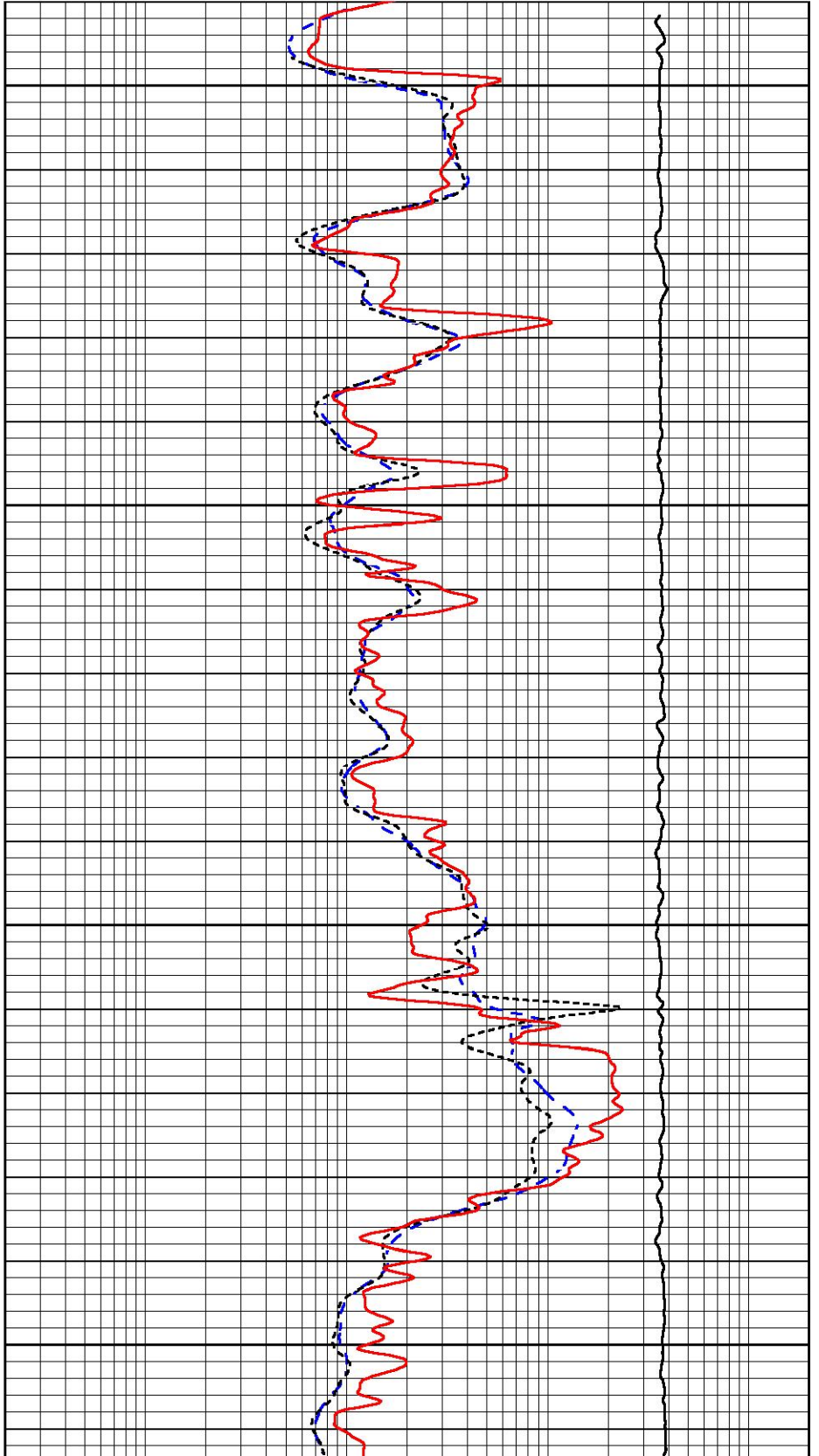


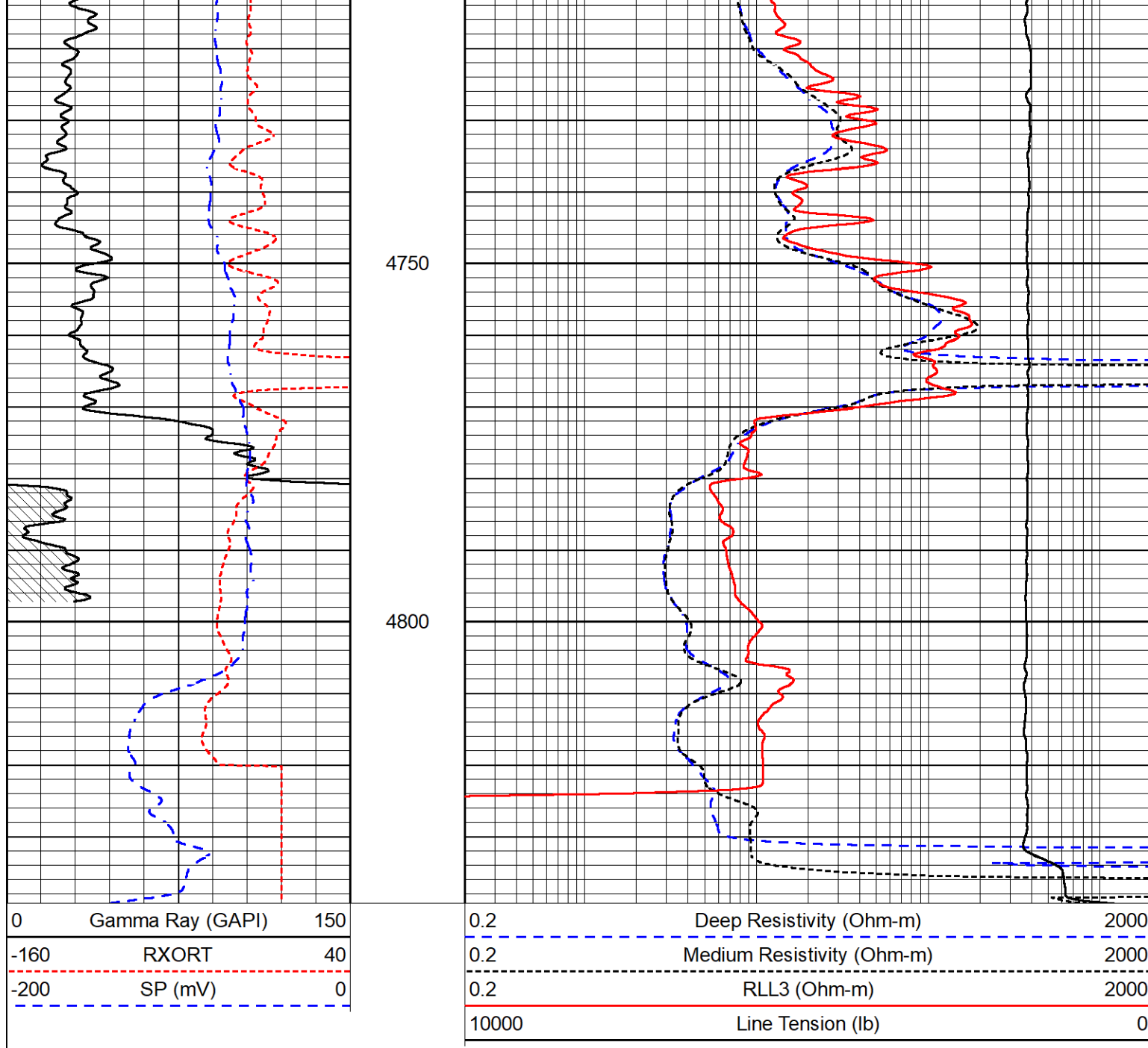
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Calibration Report

Database File griffin_kay 2.db
 Dataset Pathname stkml/pass3.13
 Dataset Creation Wed Jun 22 05:06:43 2022

Dual Induction Calibration Report

Serial-Model: 502 HT-M&W
 Surface Cal Performed: Wed Jun 22 04:33:34 2022

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.454	-35.000
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.350	-11.000

Microlog Calibration Report

Serial-Model:
Performed:

401-PSIML
Wed Jun 22 01:19:38 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	23500.0000	-2.3000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	14000.0000	-0.5000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-138.6500

Compensated Density Calibration Report

Serial-Model:

302-02-M&W

Source #:

20762B

Master Calibration Performed:

Wed Jun 22 01:19:51 2022

Master Calibration

	Density			Far Detector	Near Detector	
Magnesium	1.755	g/cc		4422.04	6163.44	cps
Aluminum	2.660	g/cc		835.14	3912.91	cps
Spine Angle = 74.75			Density/Spine Ratio = 0.524			
	Size			Reading		
Small Ring	8.00	in		0.53		
Large Ring	16.00	in		0.60		

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 Long Space	cps cps	pu	pu
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	

		Company	Griffin Management, LLC
		Well	Kay #2
		Field	
		County	Pratt
		State	Kansas