



DUAL INDUCTION

MIDWEST WIRELINE

Company RAMA Operating Company, Inc.
 Well Bayer #6-29
 Field Chase-Silica
 County Rice
 State Kansas

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 Well Bayer #6-29
 Field Chase-Silica
 County Rice
 State Kansas

Location: API #: 15-159-22891-00-00
 SE SW NW SW
 1381 FSL & 335 FWL
 SEC 29 TWP 19S RGE 10W
 Permanent Datum Ground Level Elevation 1785
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 CNL/CDL
 MEL/BHCS
 Elevation
 K.B. 1796
 D.F.
 G.L. 1785

Date	8/7/2023
Run Number	One
Depth Driller	3380
Depth Logger	3380
Bottom Logged Interval	3379
Top Log Interval	300
Casing Driller	8.625 @ 348
Casing Logger	346
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	4000
Density / Viscosity	9.3 59
pH / Fluid Loss	11.5 7.6
Source of Sample	Flowline
Rm @ Meas. Temp	0.75 @ 72
Rmt @ Meas. Temp	0.56 @ 72
Rmc @ Meas. Temp	1.01 @ 72
Source of Rmf / Rmc	Charts
Rm @ BHT	0.49 @ 110
Operating Rig Time	4 Hours
Max Rec. Temp. F	110
Equipment Number	P-24
Location	Hays
Recorded By	T. Martin
Witnessed By	Josh Austin

<<< Fold Here >>>

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.

Ellinwood, KS, E to Silica(2nd Rd),
 1.25 N, E into

Log Measured From: Kelly Bushing 11 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: T. Martin
 Operator:
 Operator:
 Operator:

This Log Record Was Witnessed By

Primary Witness: Josh Austin
 Secondary Witness:
 Secondary Witness:
 Secondary Witness:

Case	Offset (ft)	Depth	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	32.75		GR-M&W (105)	3.00	3.50	50.00
CNLSC CNSSC	29.65 28.90		CNT-M&W (207)	5.00	3.50	100.00
LSD DCAL SSD	20.60 20.58 20.10		CDL-M&W (307-11)	8.50	4.00	250.00
RLL3F RLL3	15.50 15.50		DIL-M&W (507)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: rama_bayer #6-29.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\rama_bayer #6-29.db
 Dataset field/well/Stack/pass3.1/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 110	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m 2	SNDERRM mmho/m 0	SPSHIFT mV 580	SRFTEMP degF 80	SZCOR Off	TDEPTH ft 3380		

Variable Description

BOREID : Borehole I.D.
 BOTTEMP : Bottom Hole Temperature
 CASEOD : Casing O.D.
 CASETHCK : Casing Thickness
 FLUIDDEN : Fluid Density
 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

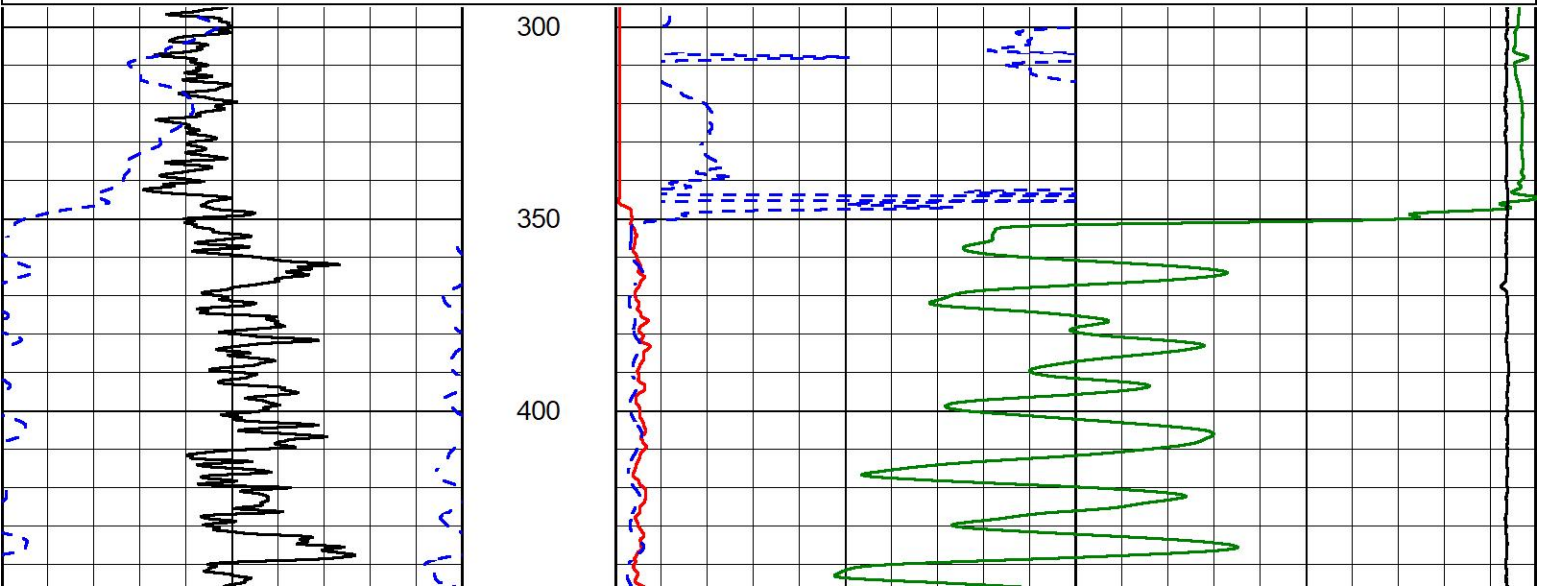


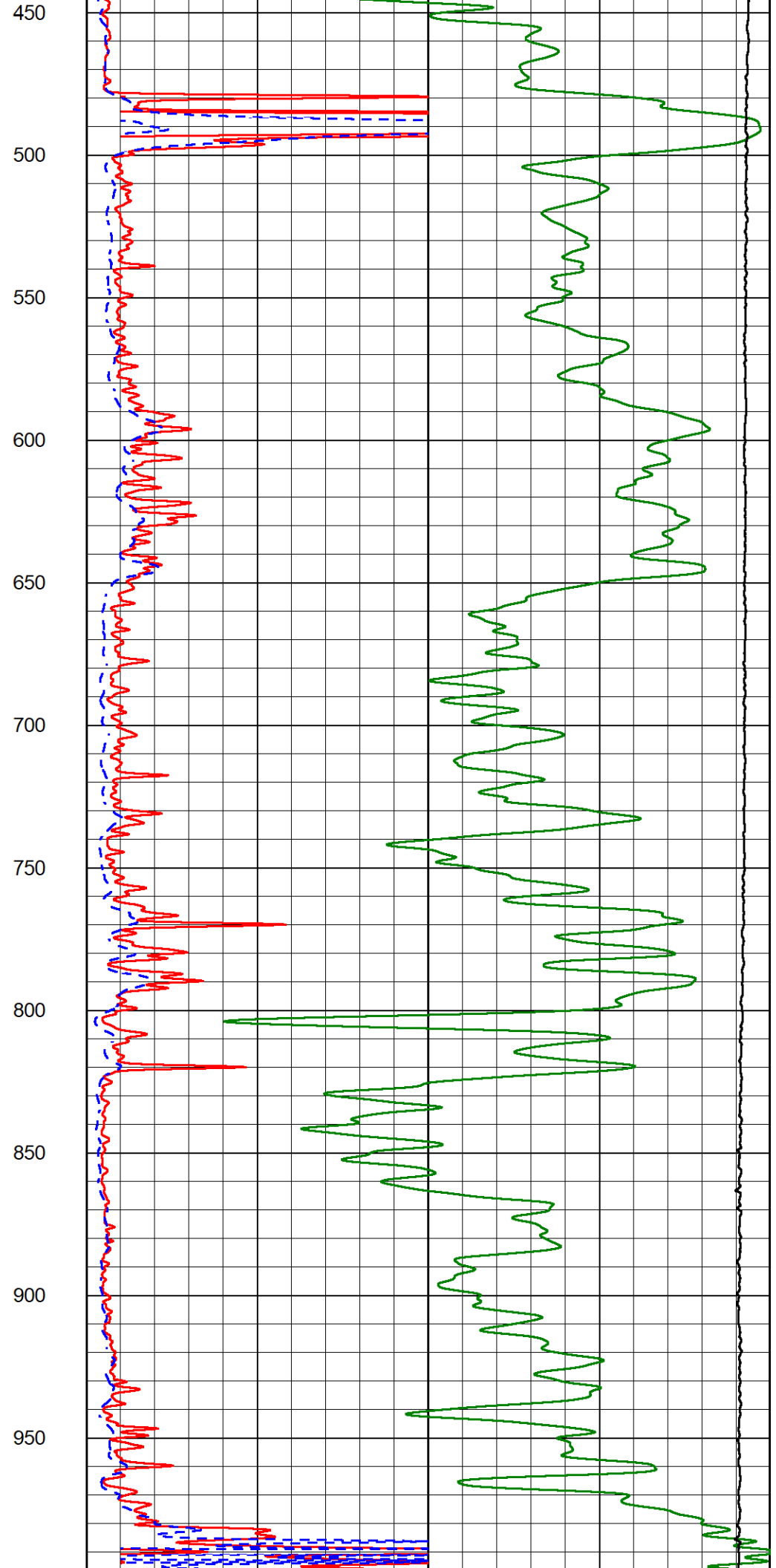
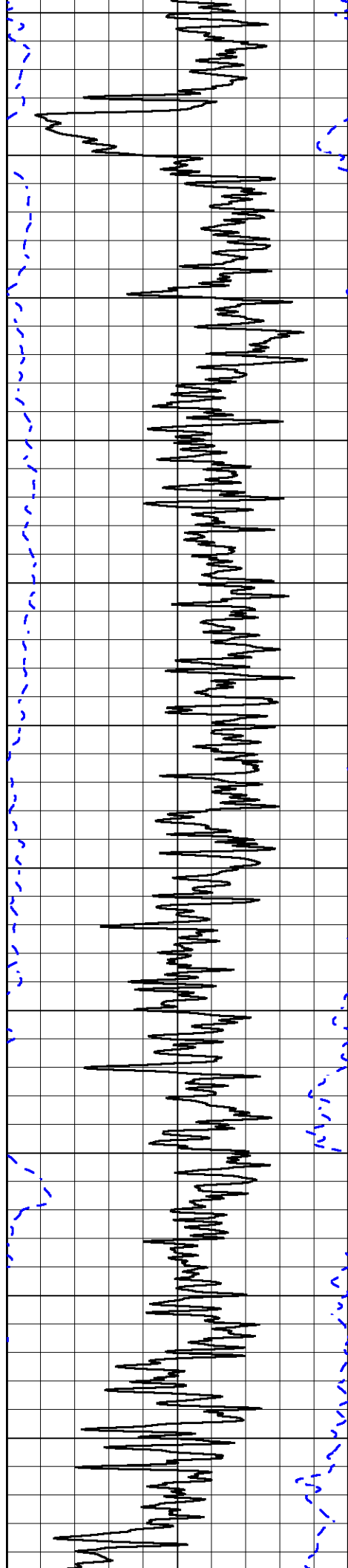
2" SCALE RESISTIVITY

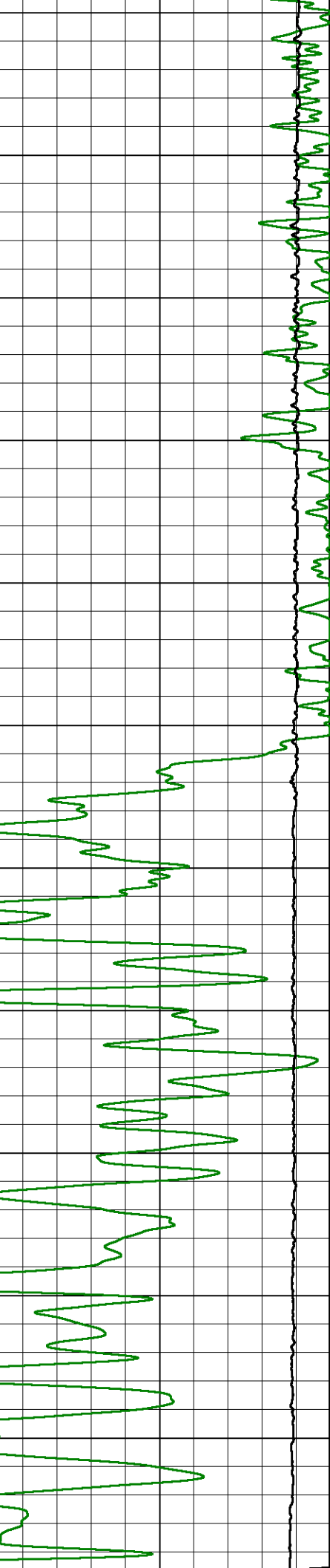
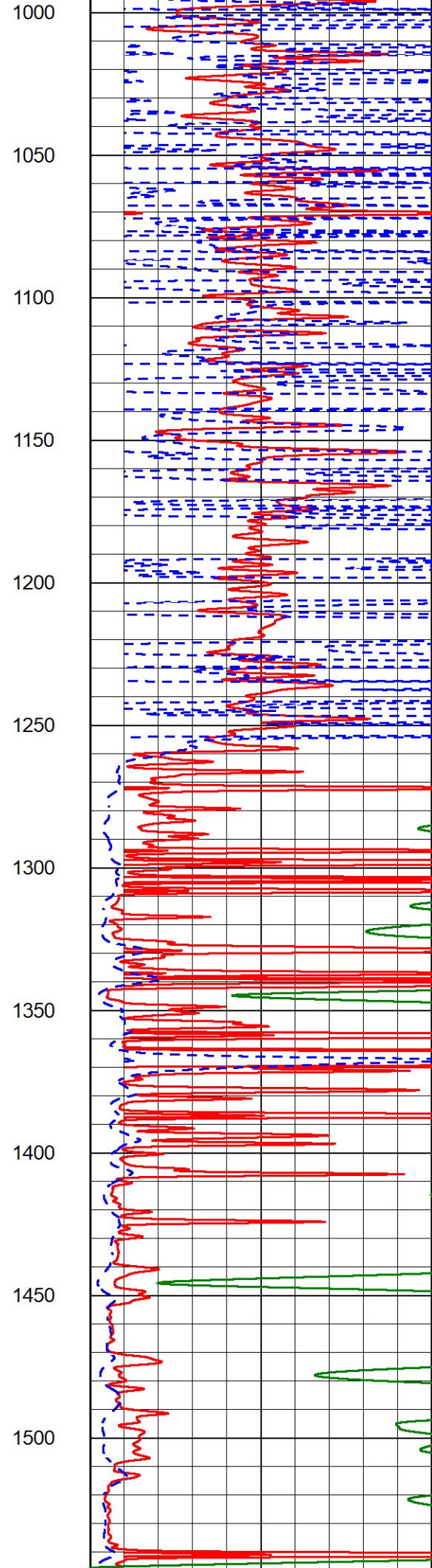
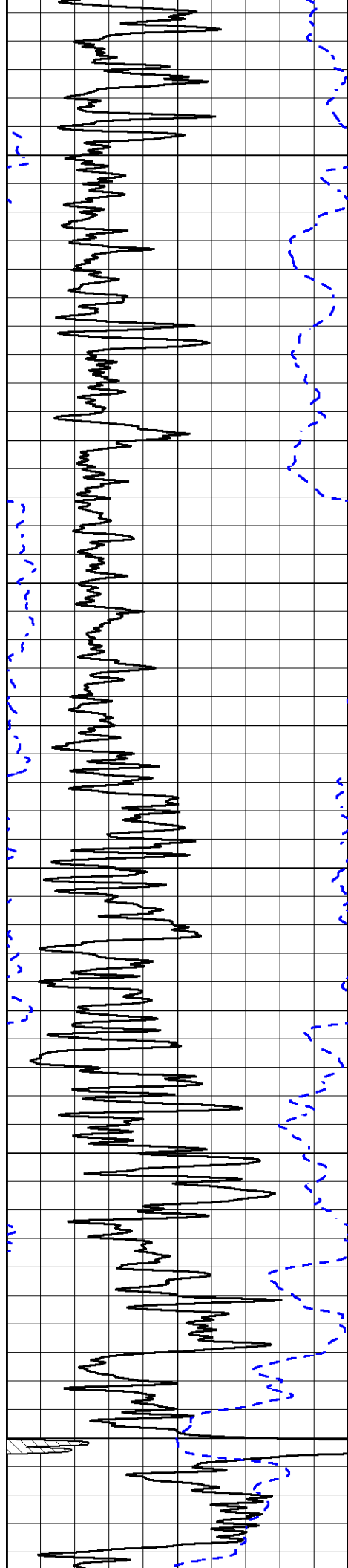
MAIN PASS

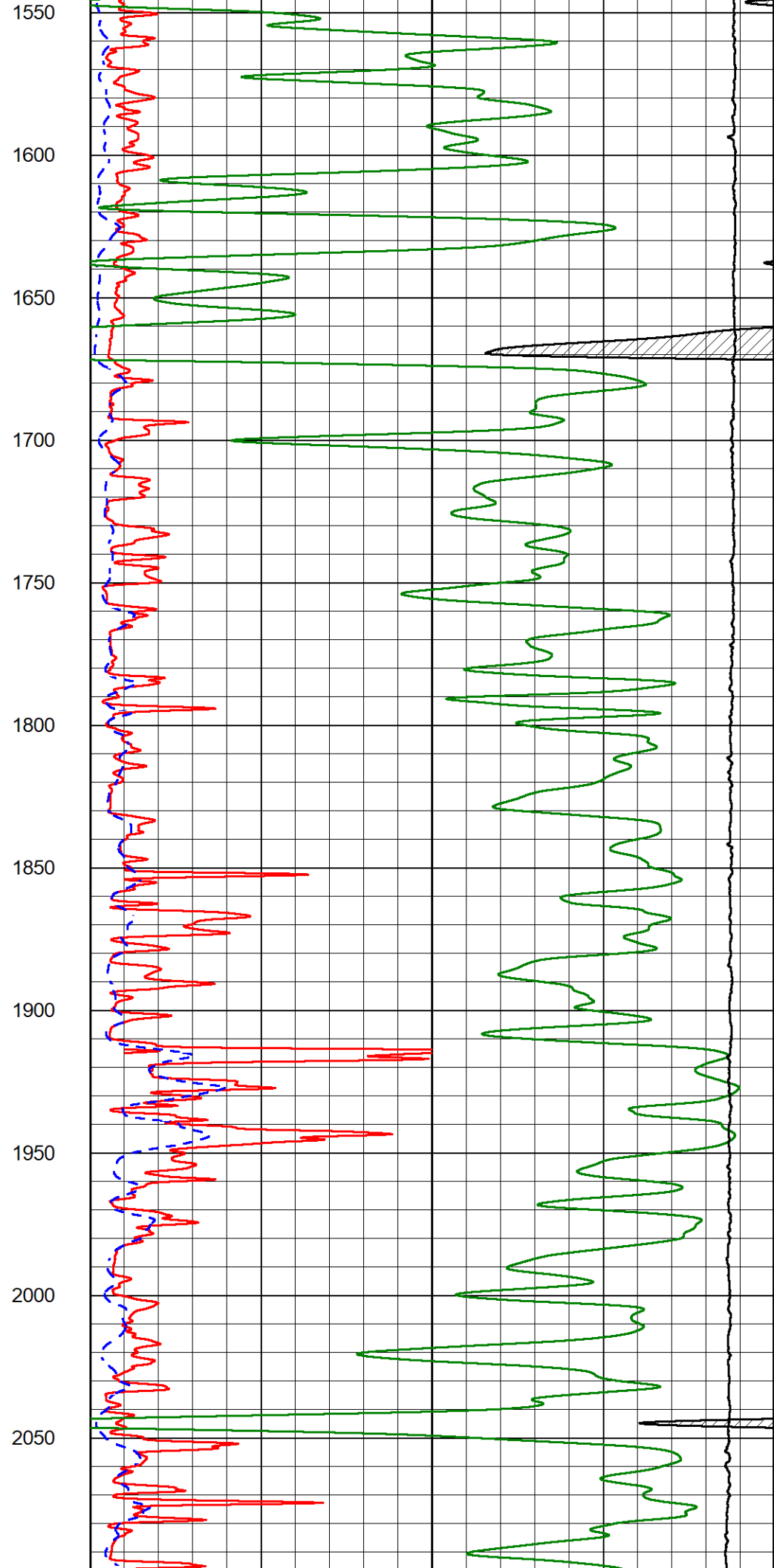
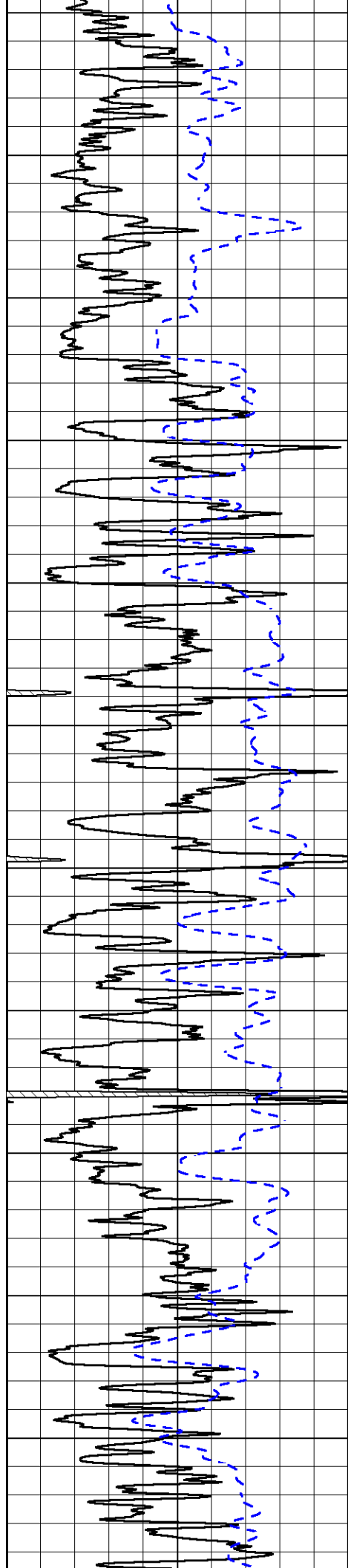
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 Presentation Format _dil2in
 Dataset Creation Mon Aug 07 22:59:29 2023
 Charted by Depth in Feet scaled 1:600

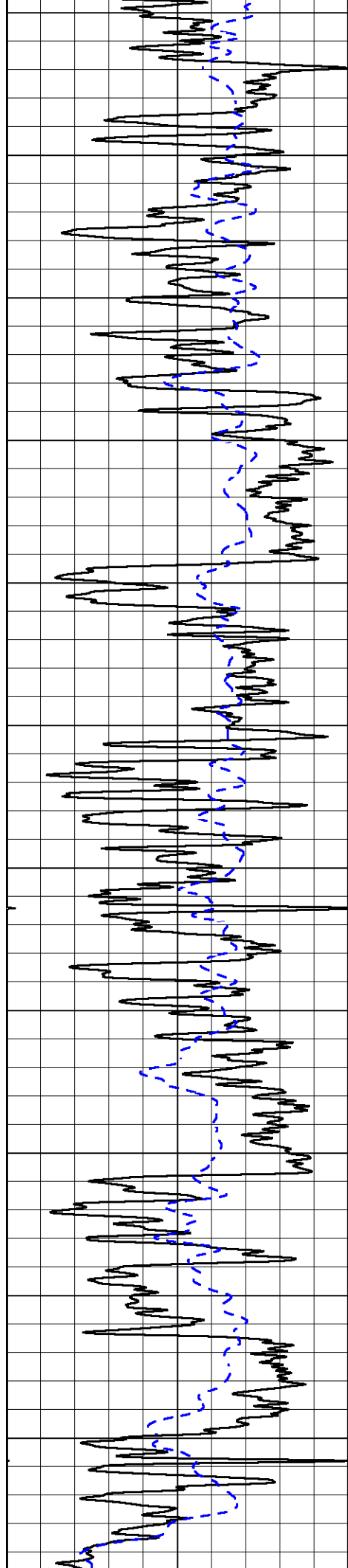
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-200	SP (mV)	0	15000	Line Tension (lb)	0
			0	Shallow Resistivity (Ohm-m)	50
			0	Deep Resistivity (Ohm-m)	50
			Shallow Resistivity		
			50	(Ohm-m)	200
			50	Deep Resistivity (Ohm-m)	200



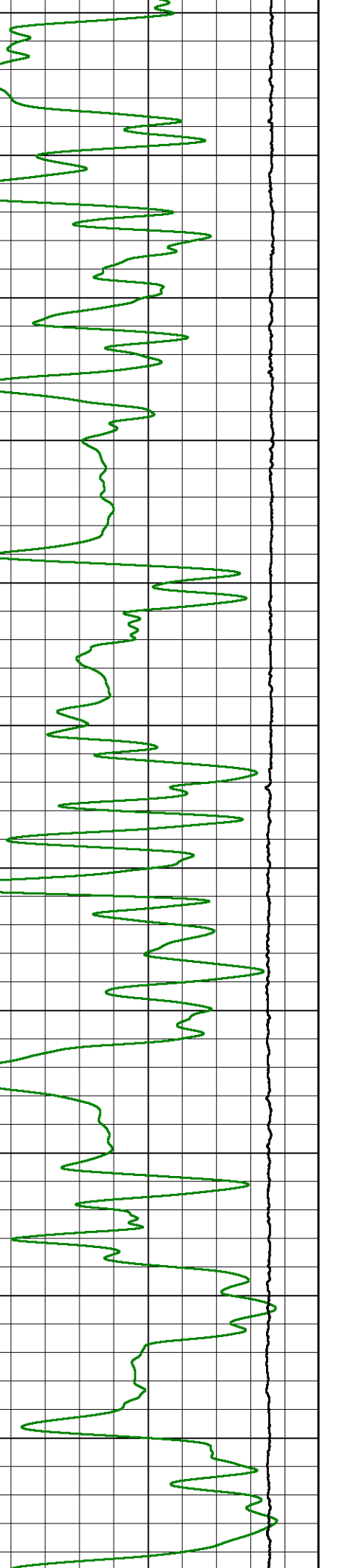
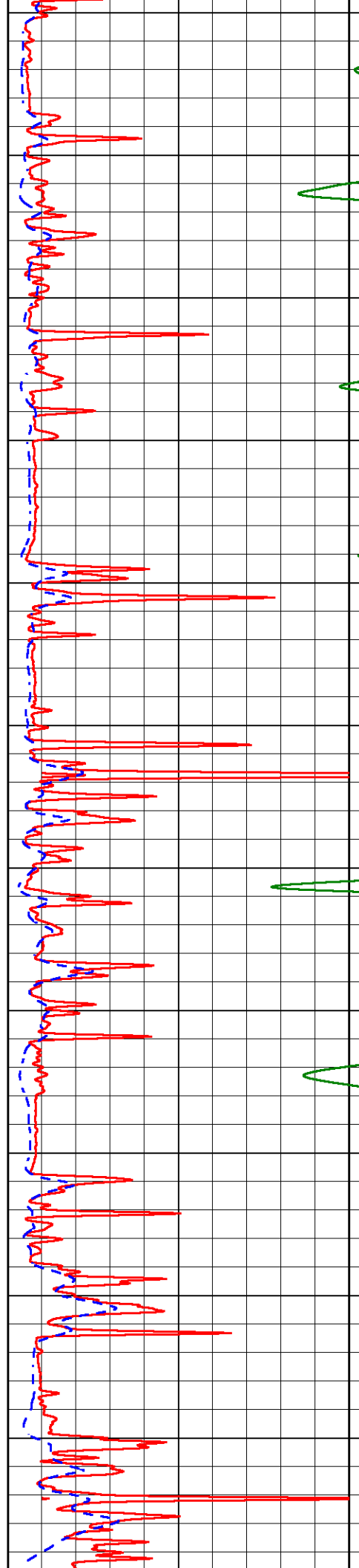


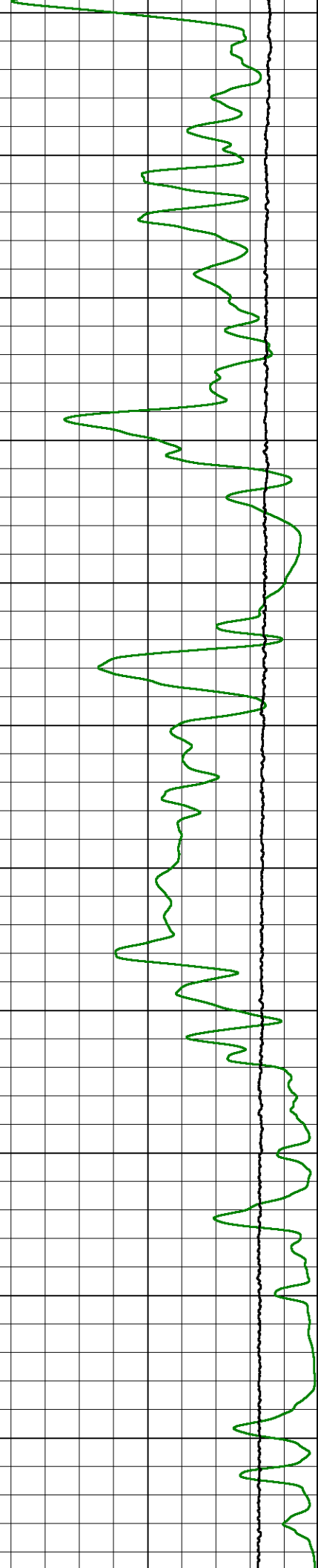
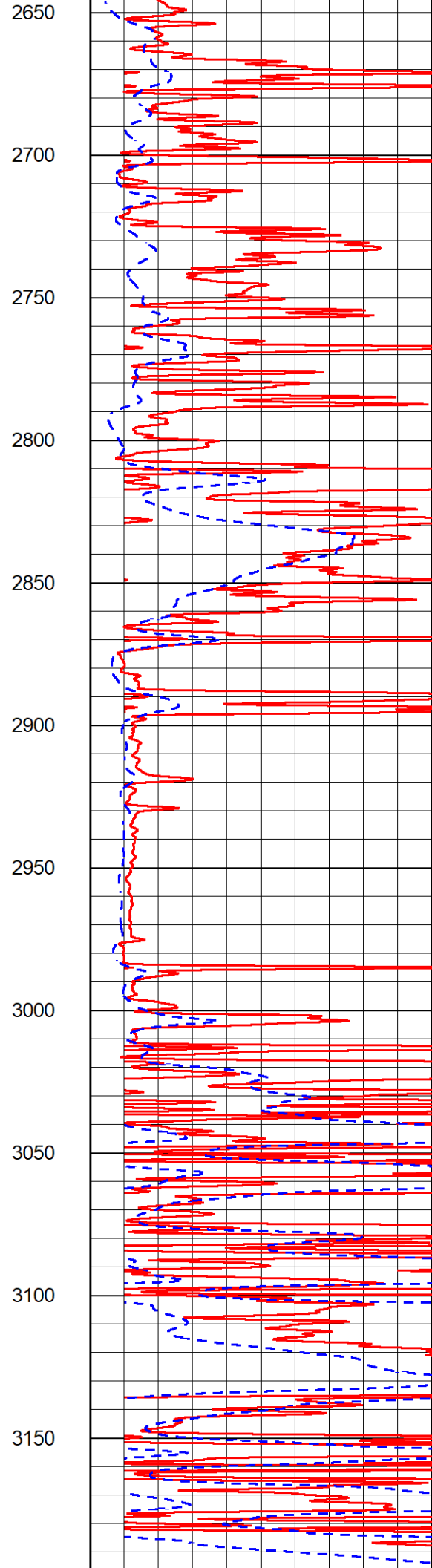
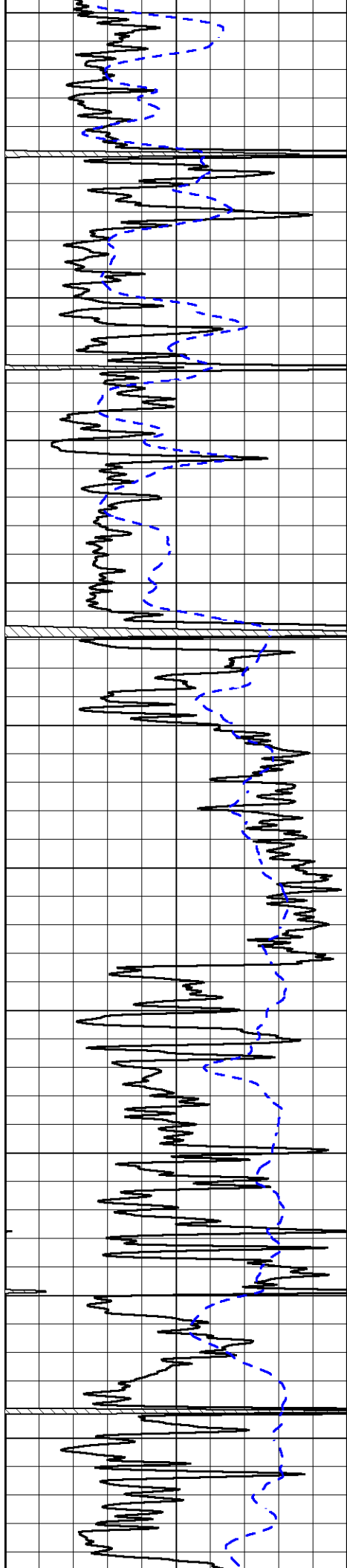


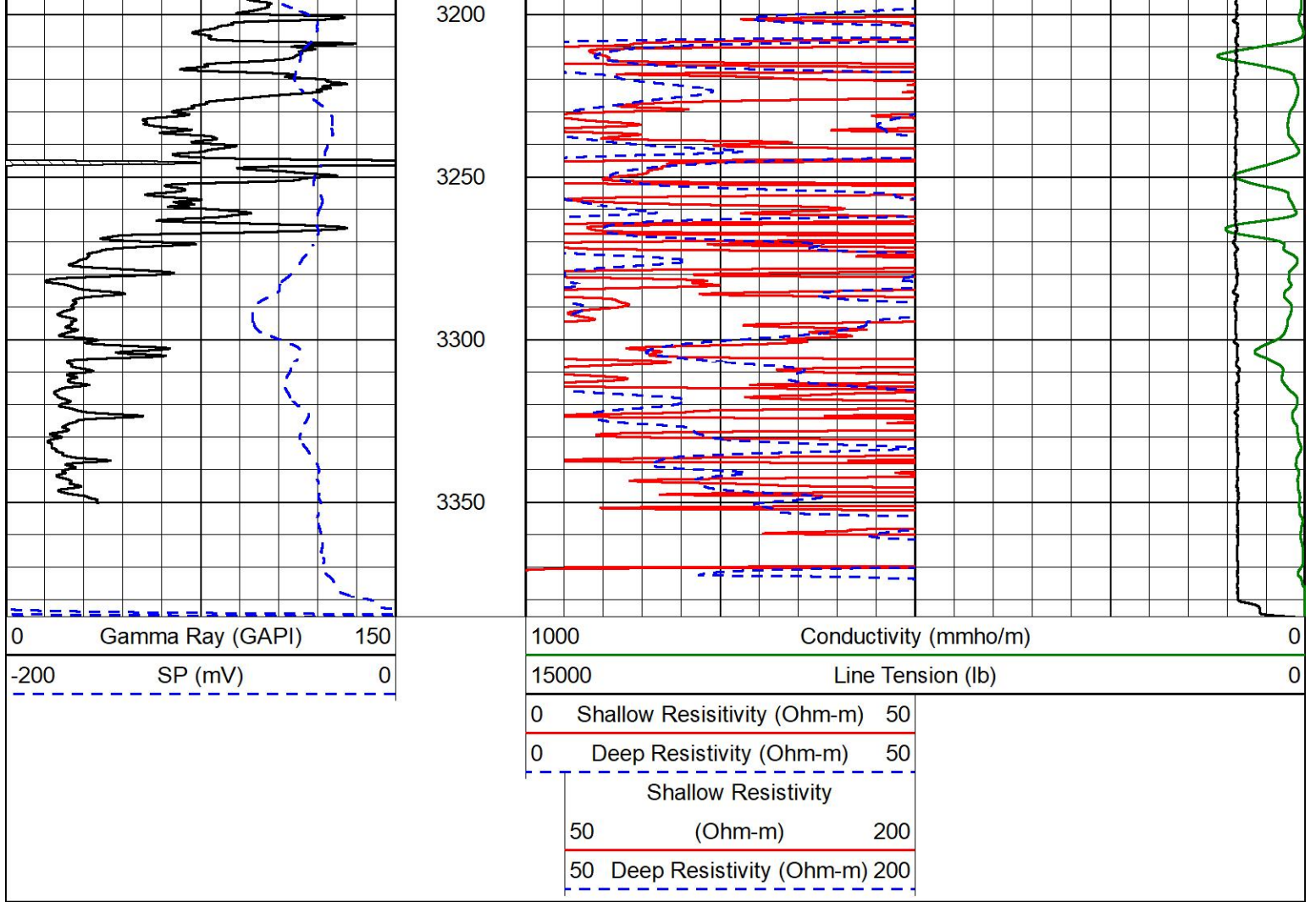




2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600



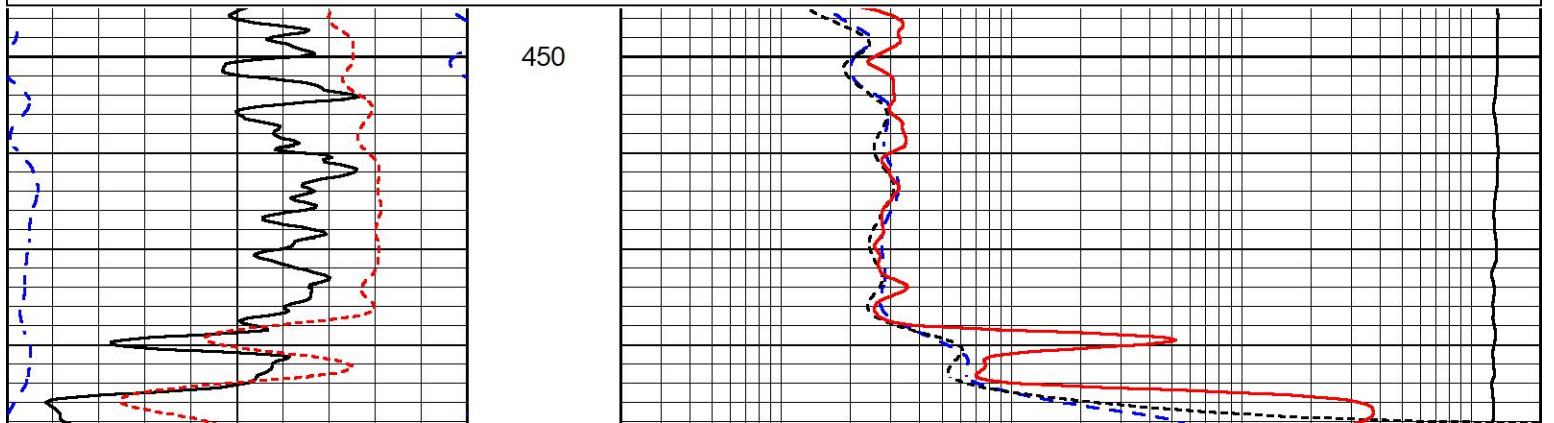
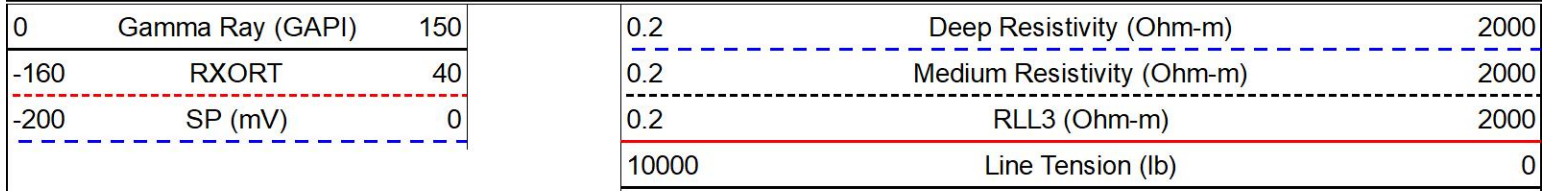


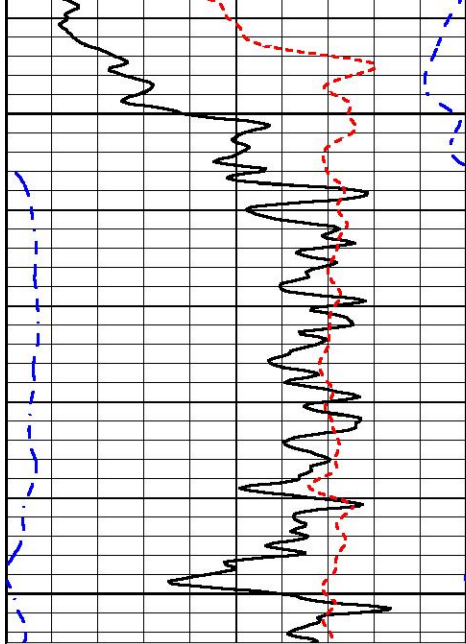


ANHYDRITE SECTION

MAIN PASS

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 Presentation Format _dil
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 Charted by Depth in Feet scaled 1:240

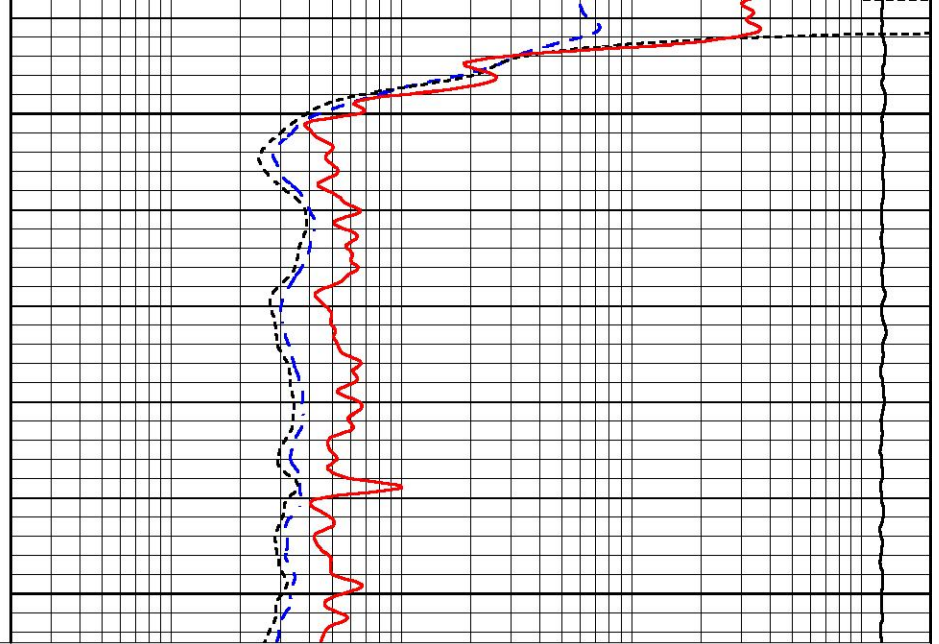




500

550

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



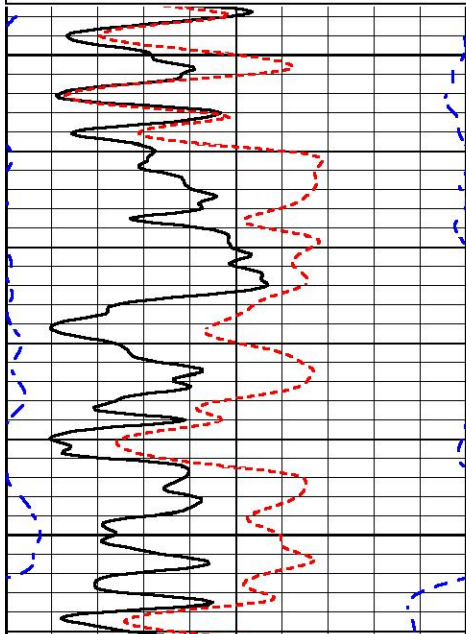
DETAIL SECTION

MAIN PASS

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 Presentation Format _dil
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 Charted by Depth in Feet scaled 1:240

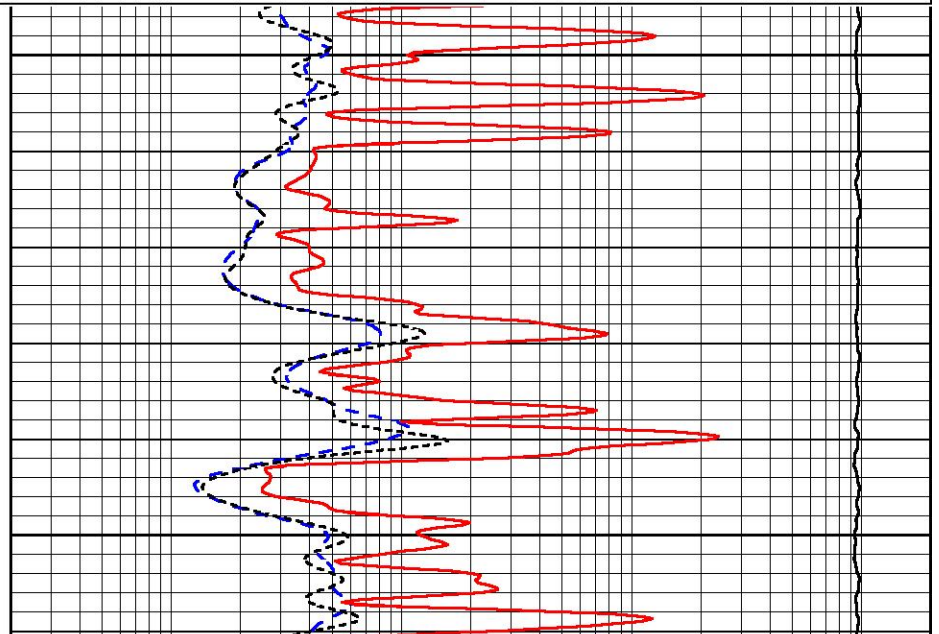
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-160	RXORT	40
-200	SP (mV)	0

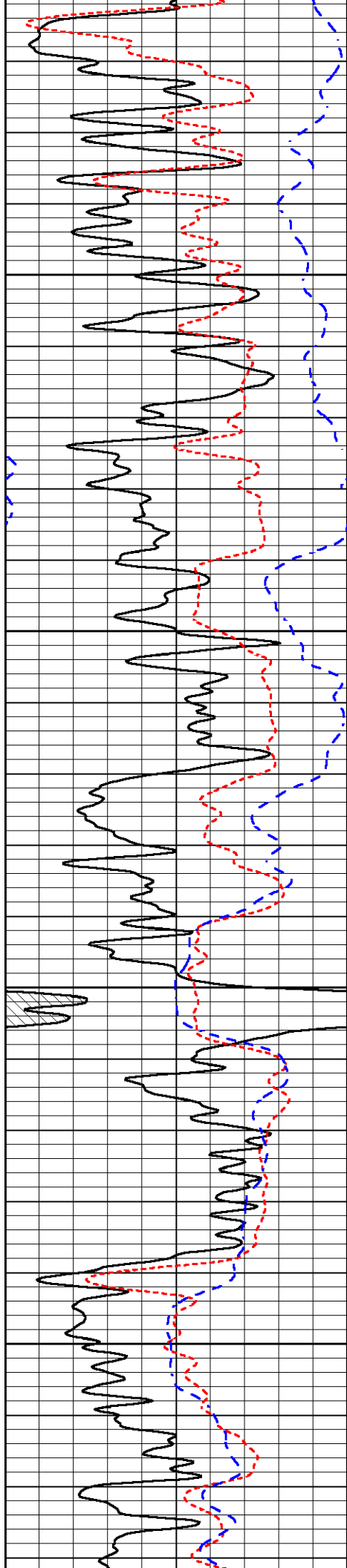
0.2	Deep Resistivity (Ohm-m)	2000
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0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0



1300

1350



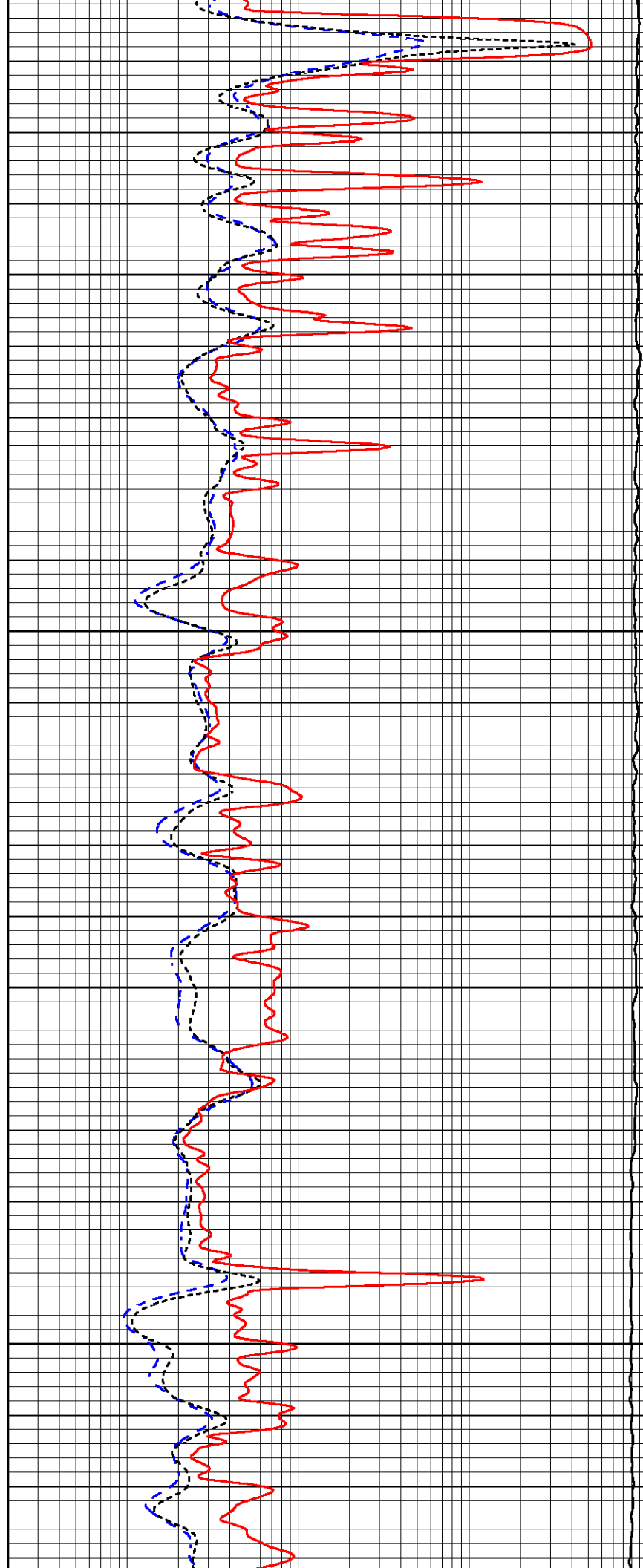


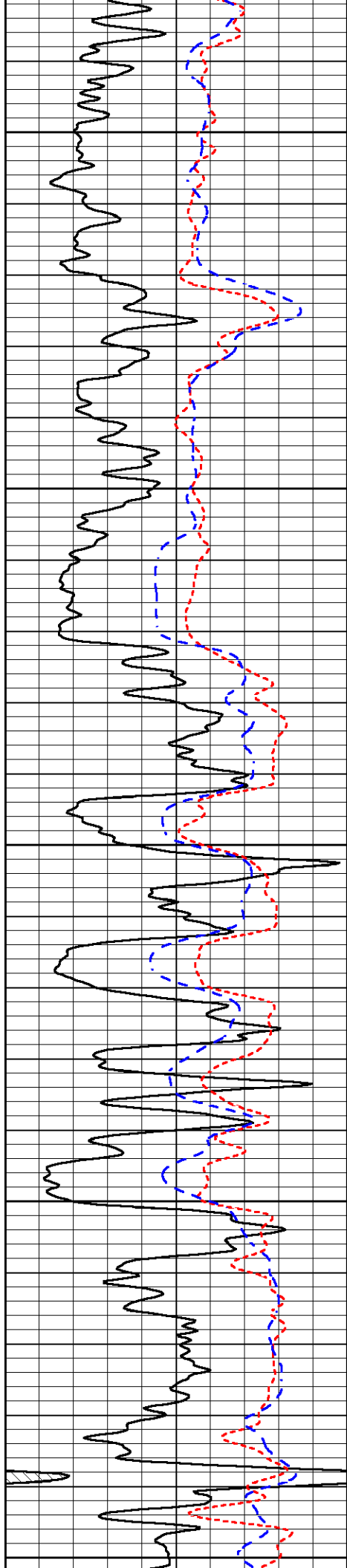
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1450

1500

1550





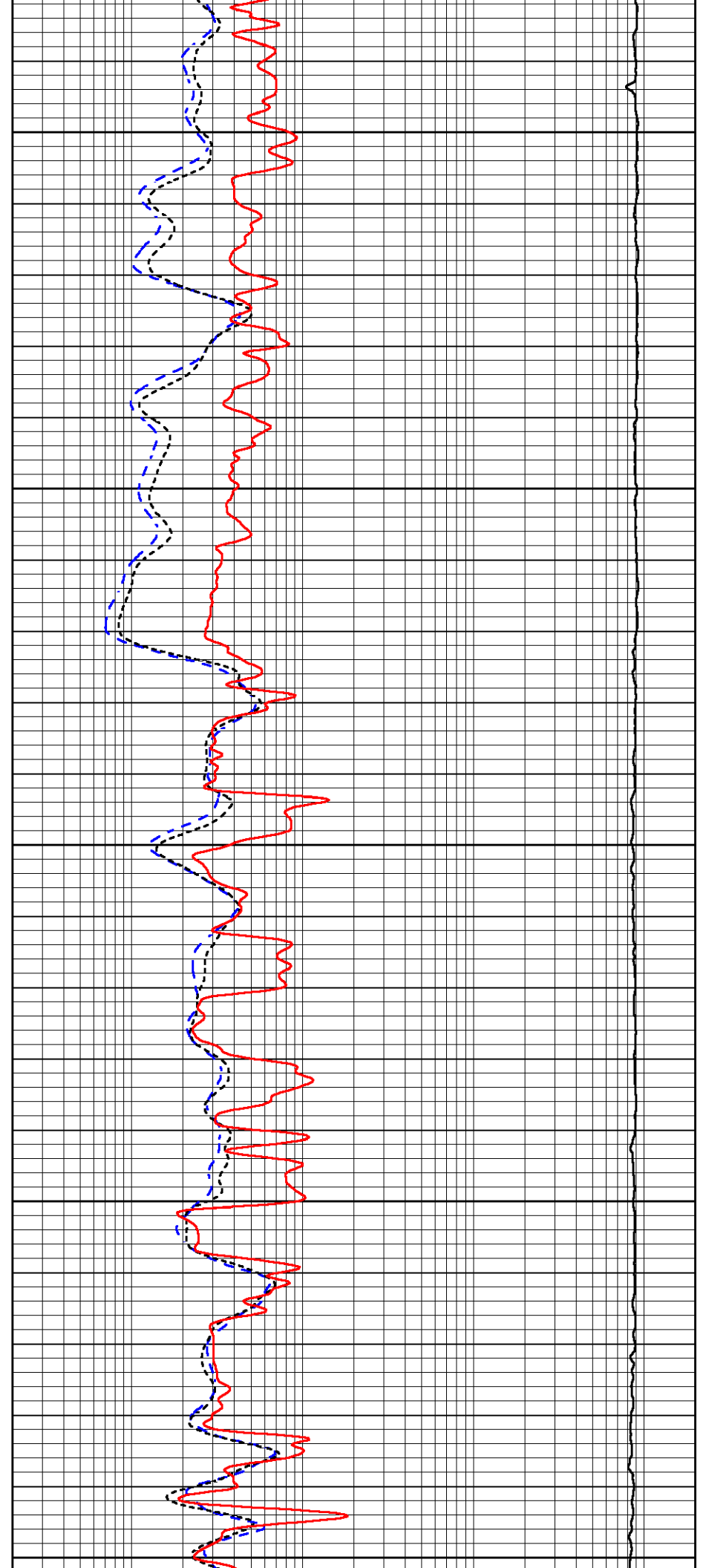
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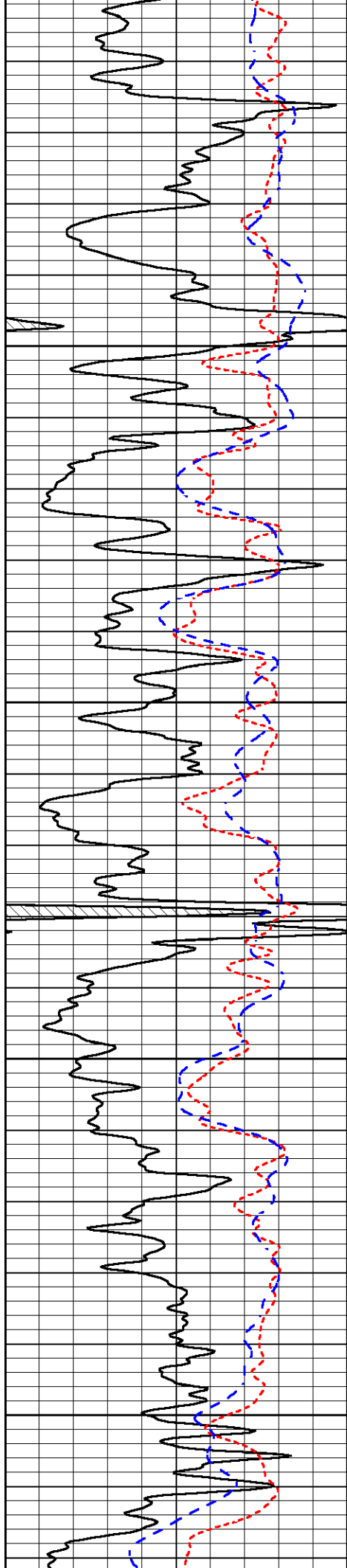
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1700

1750

1800



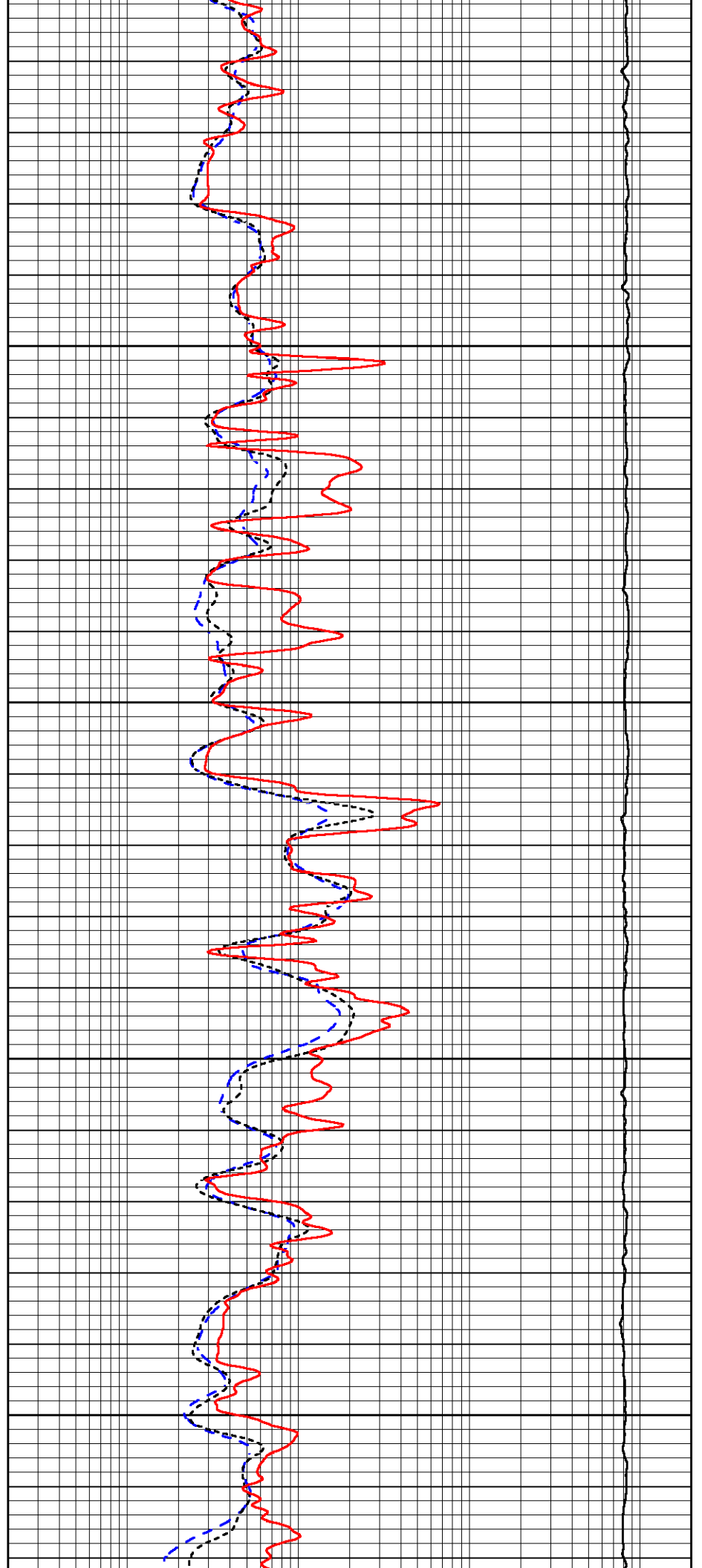


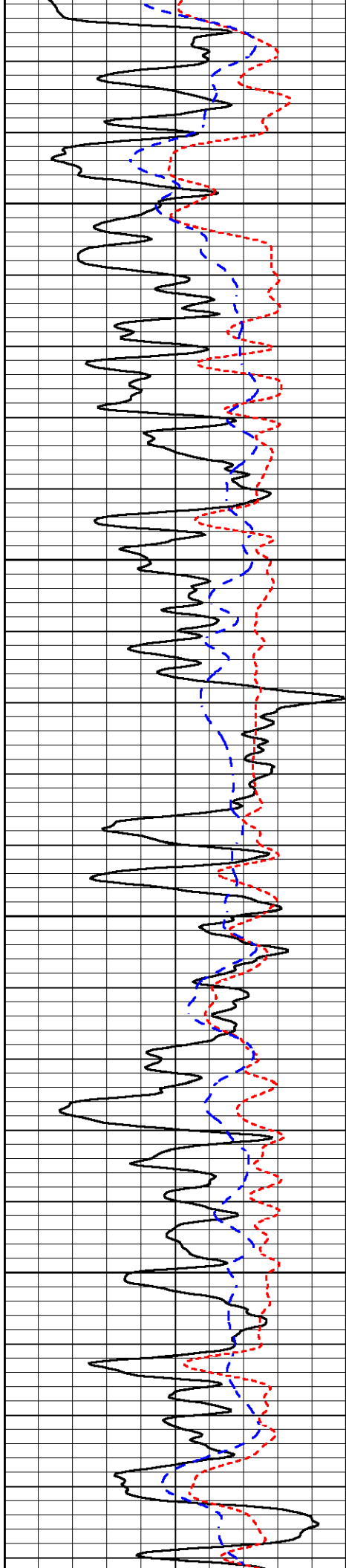
1850

1900

1950

2000



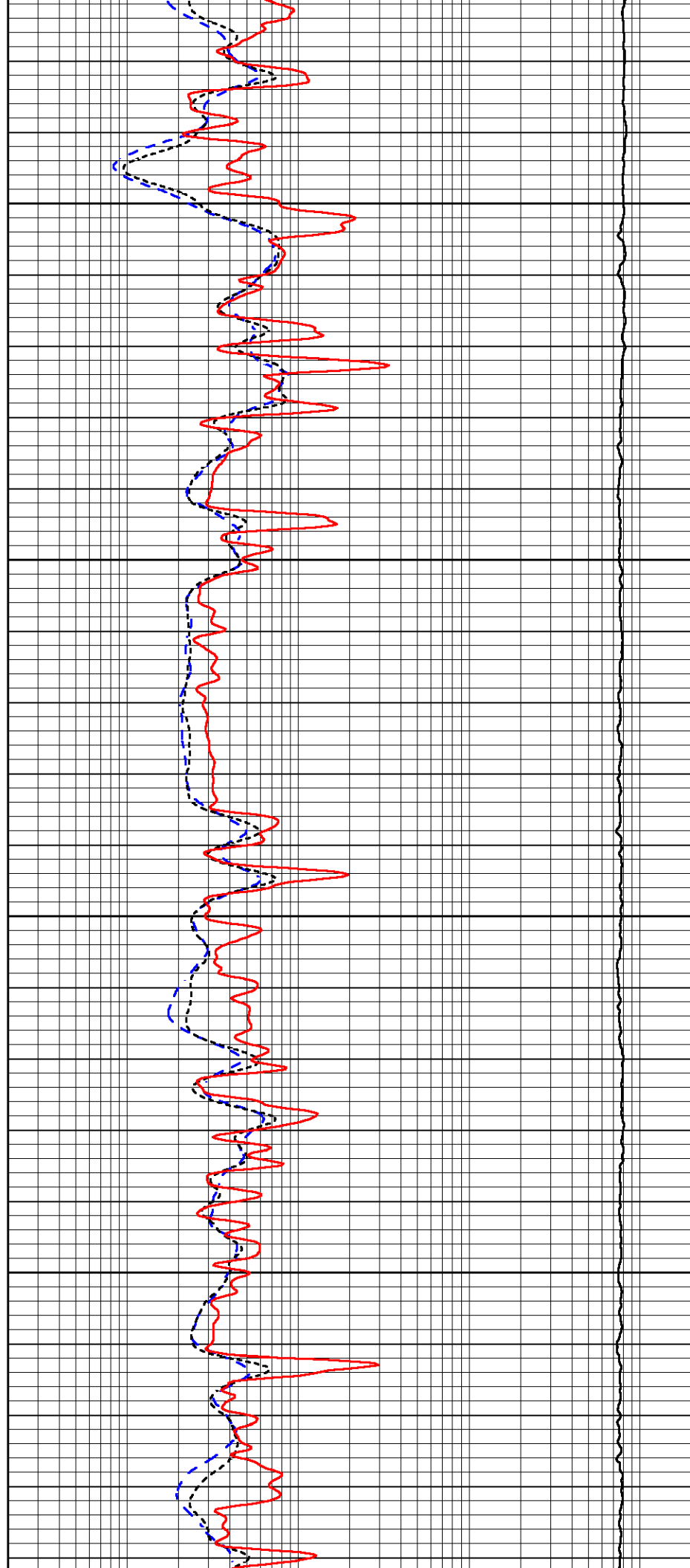


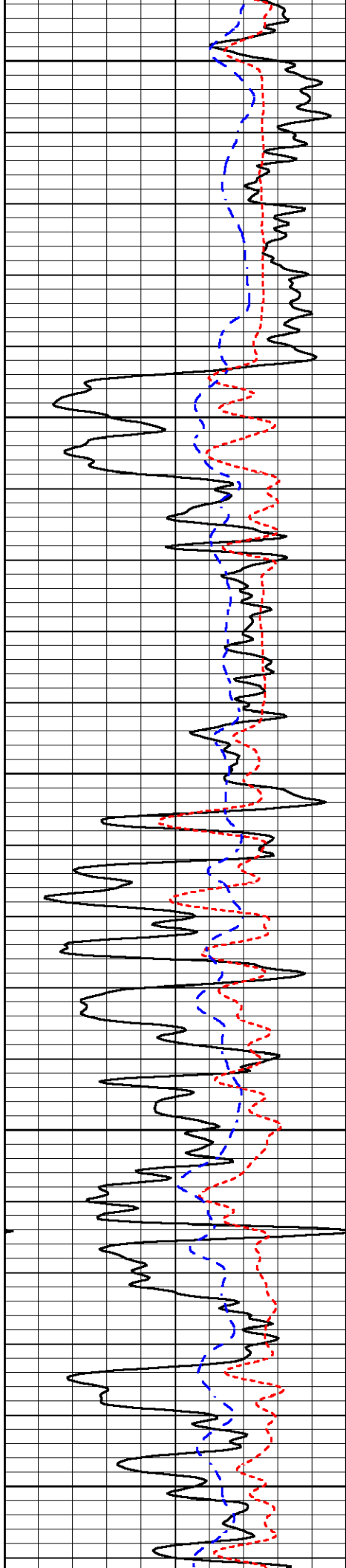
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2100

2150

2200





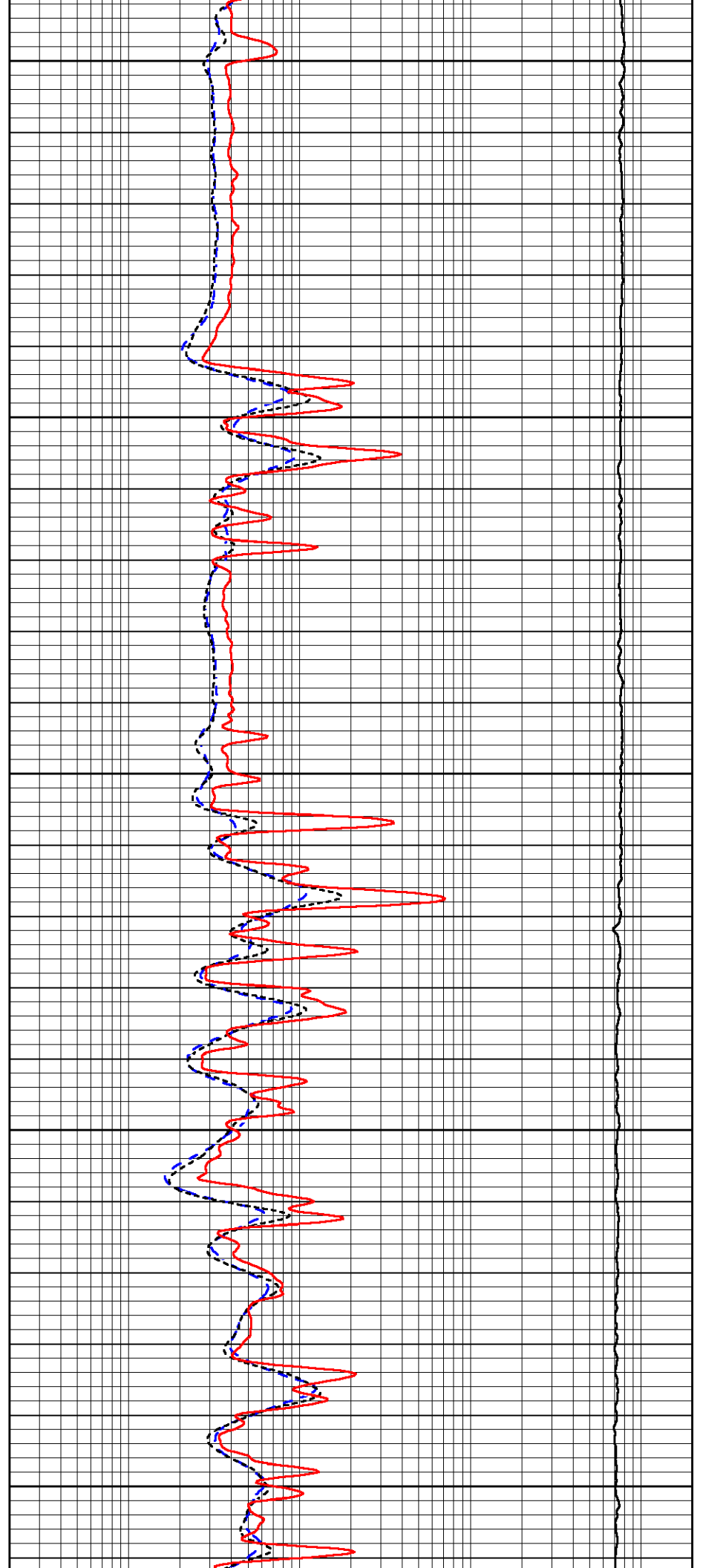
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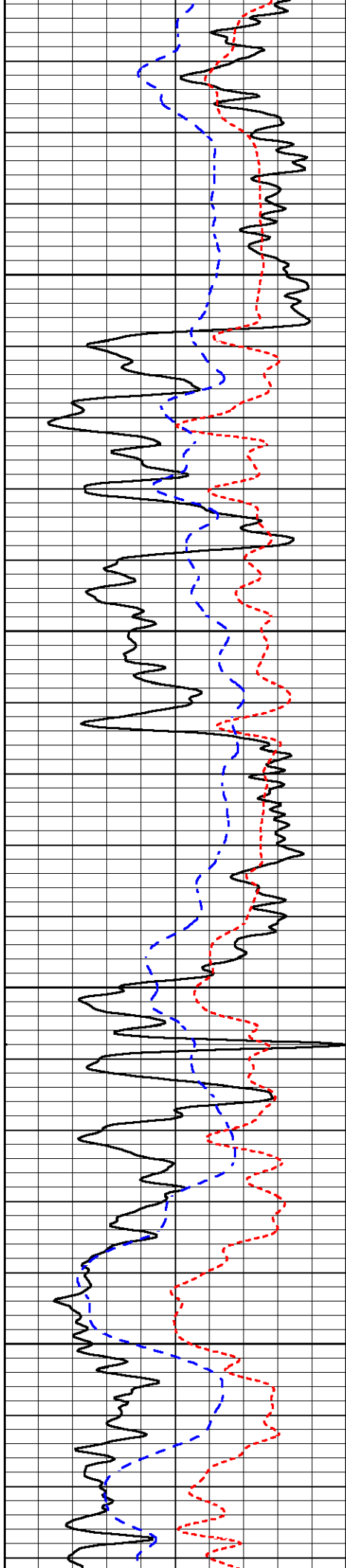
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2350

2400

2450



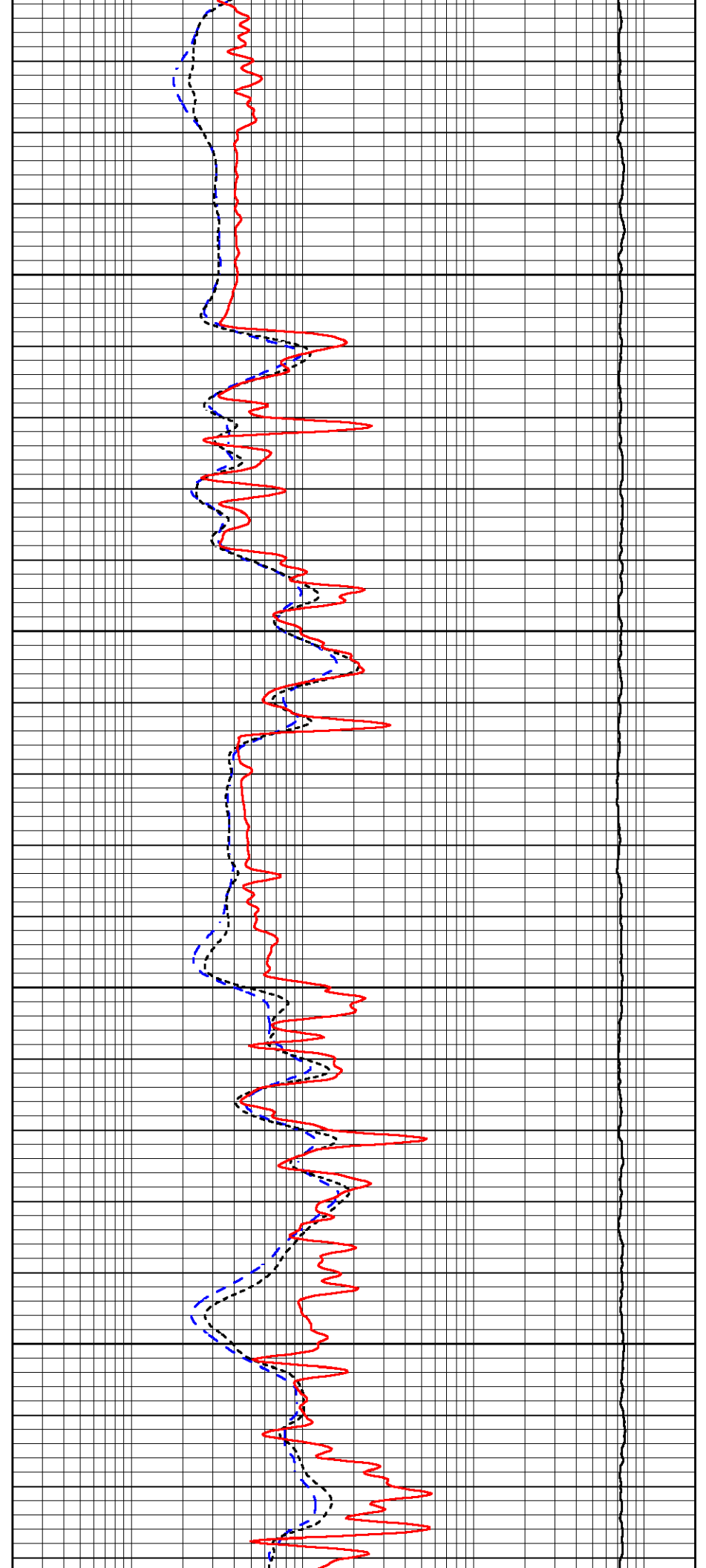


2500

2550

2600

2650

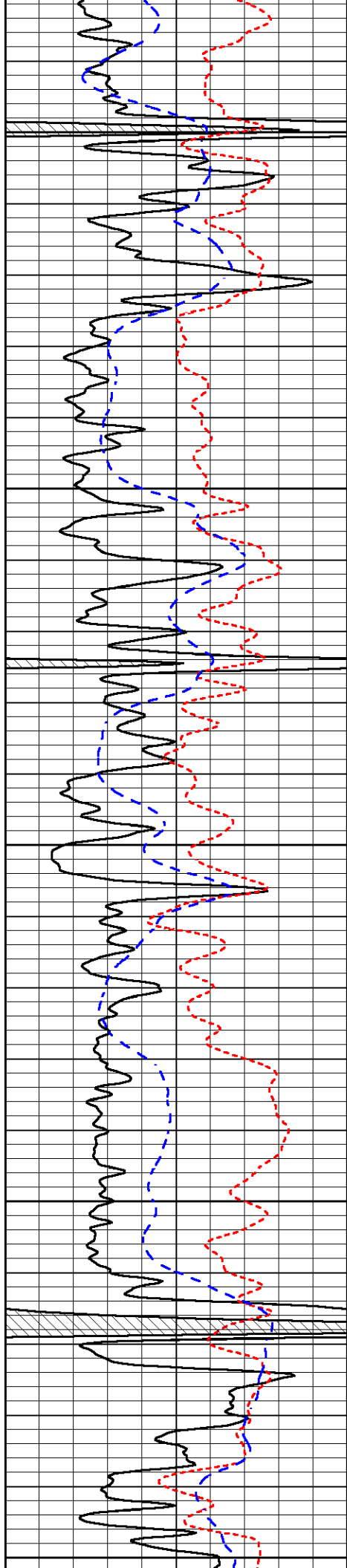


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2550

2600

2650



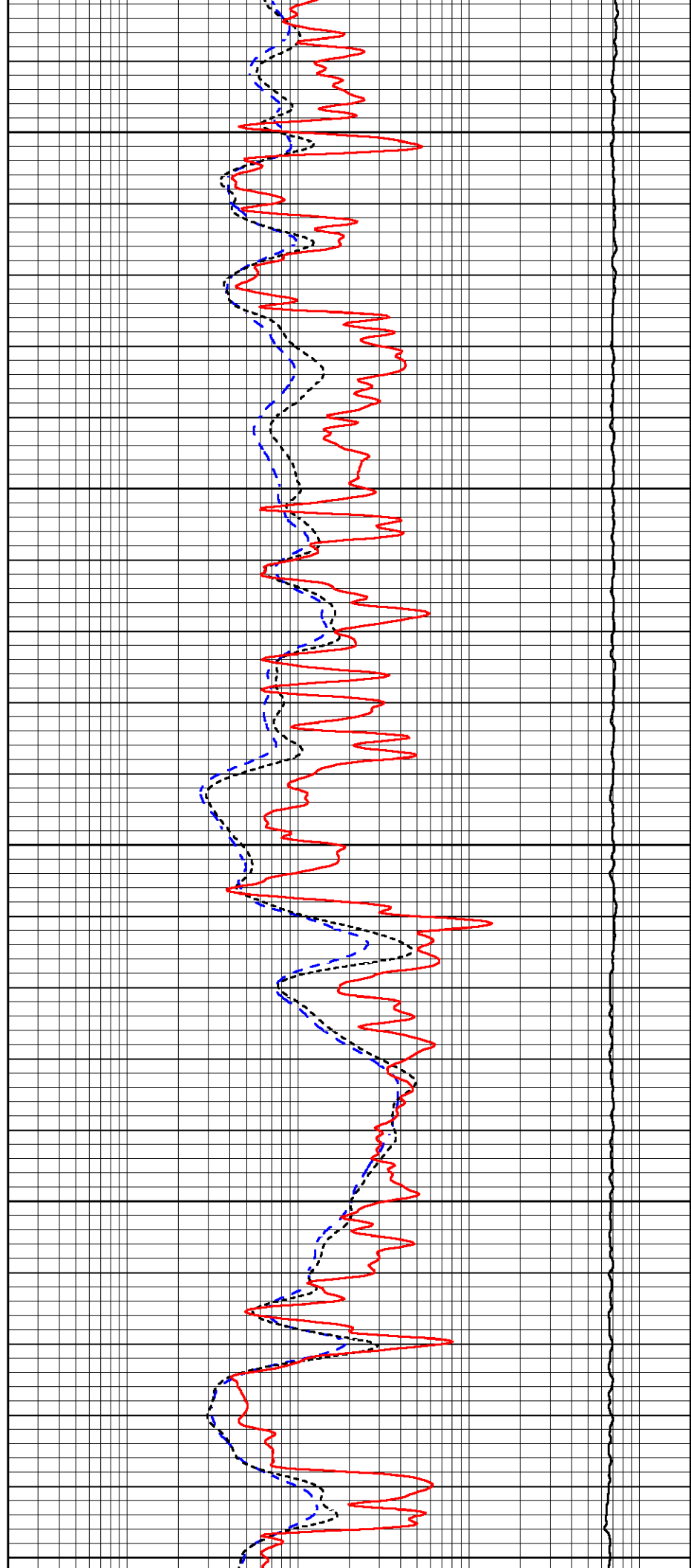
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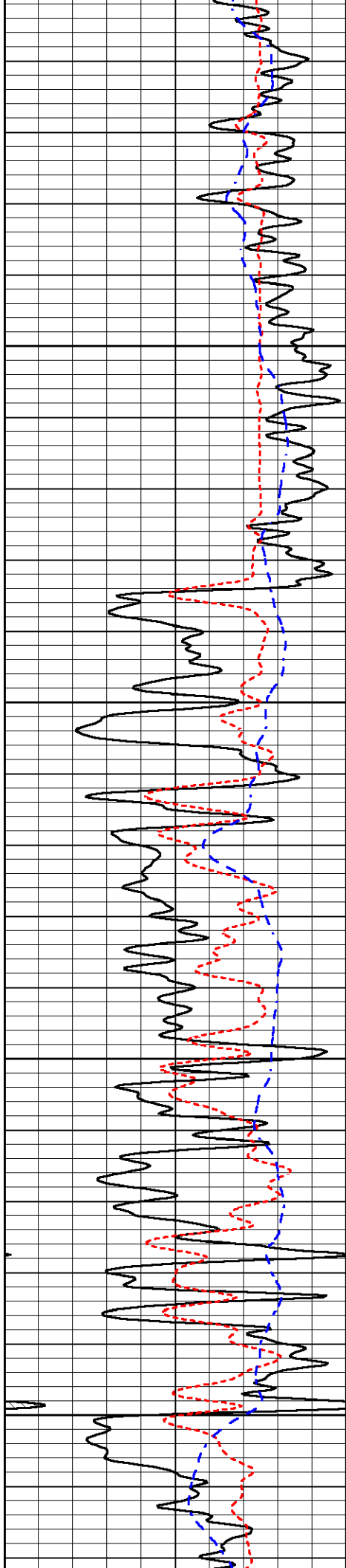
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2800

2850

2900



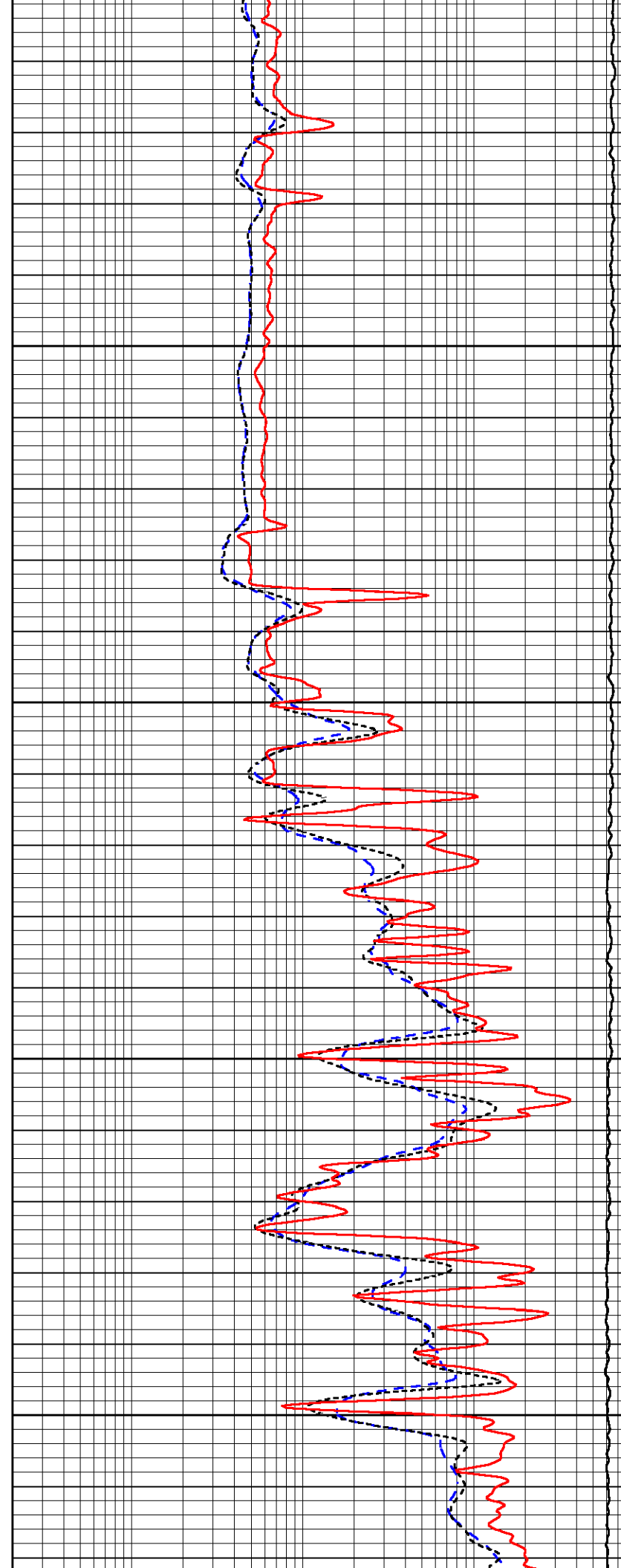


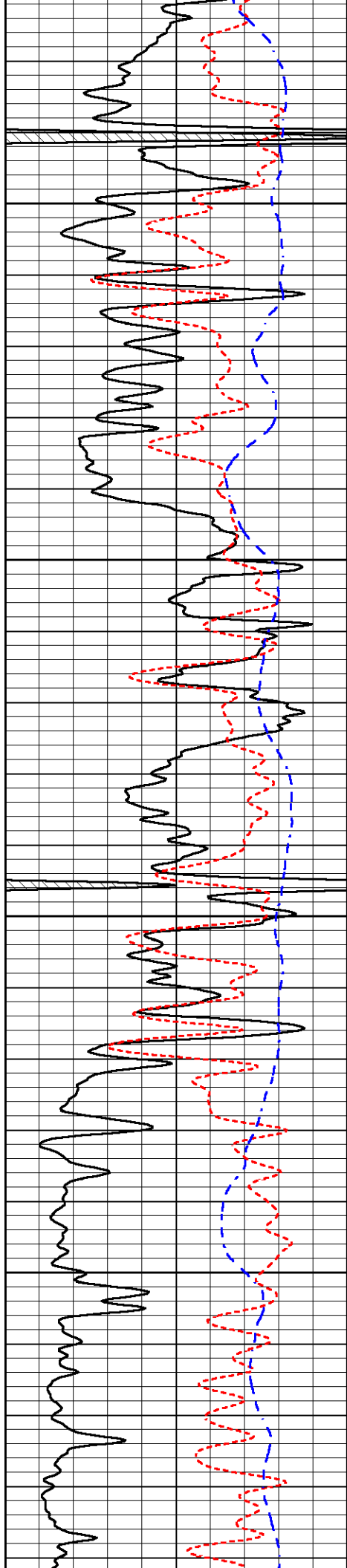
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3000

3050

3100



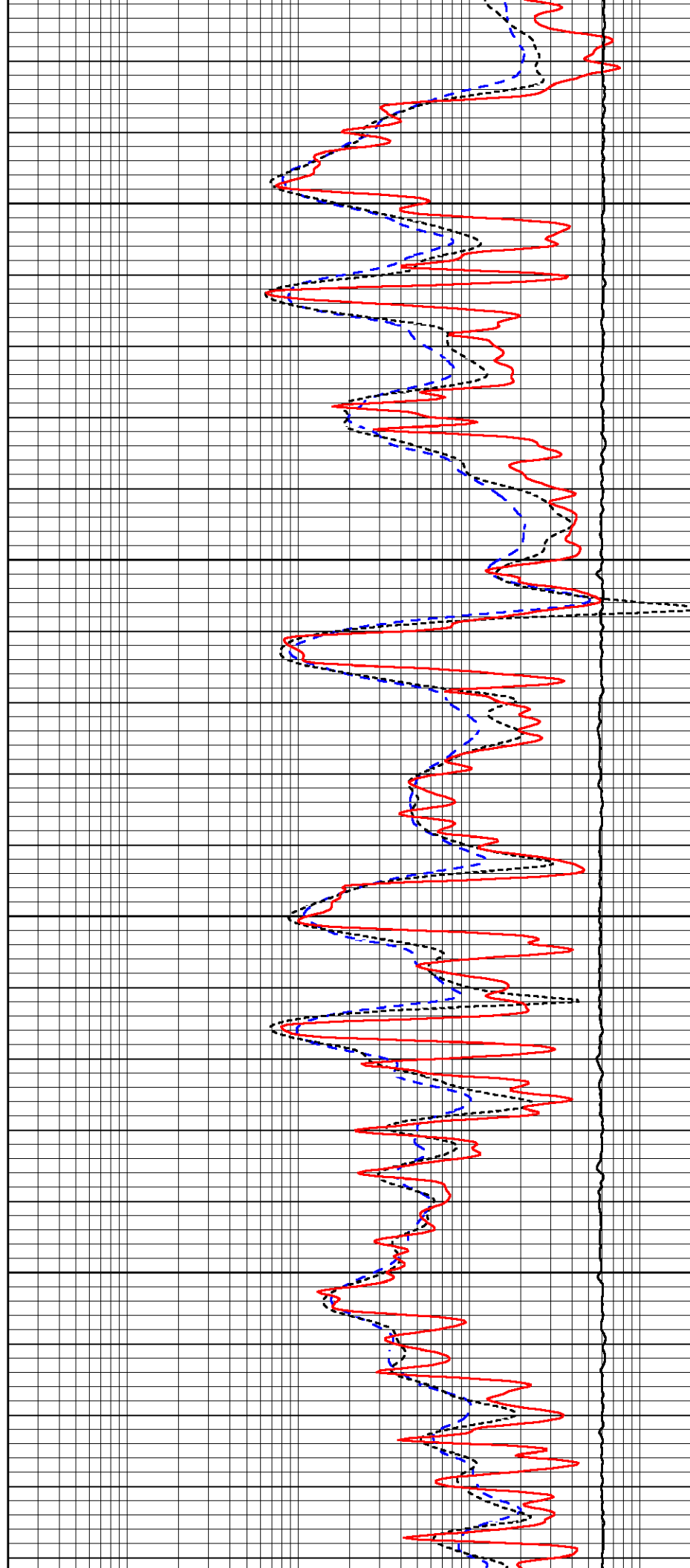


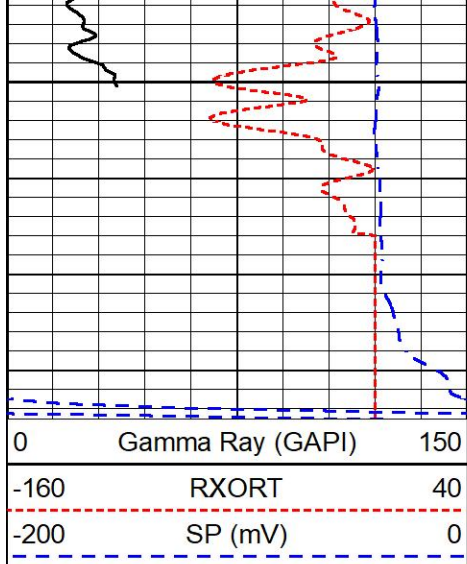
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3200

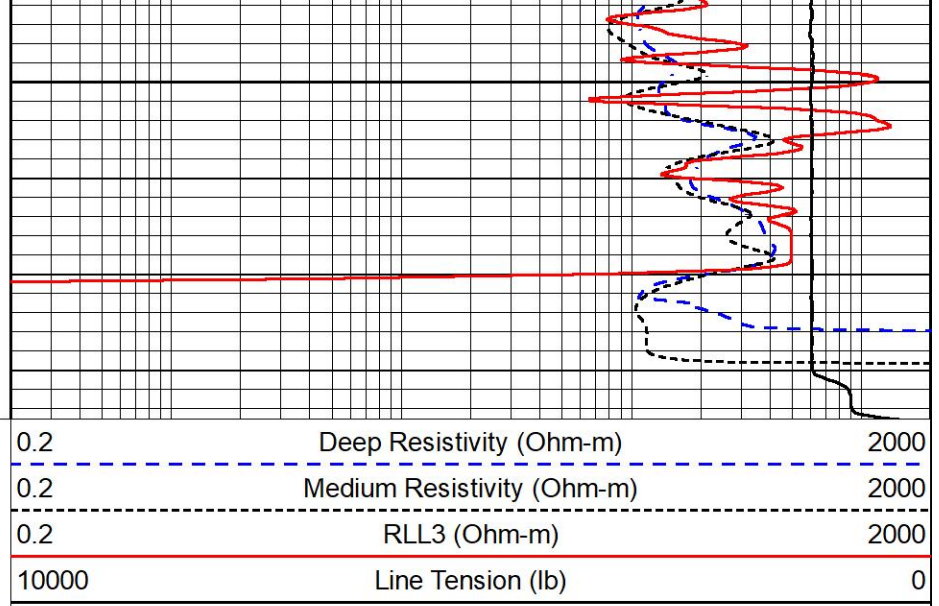
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3300





3350

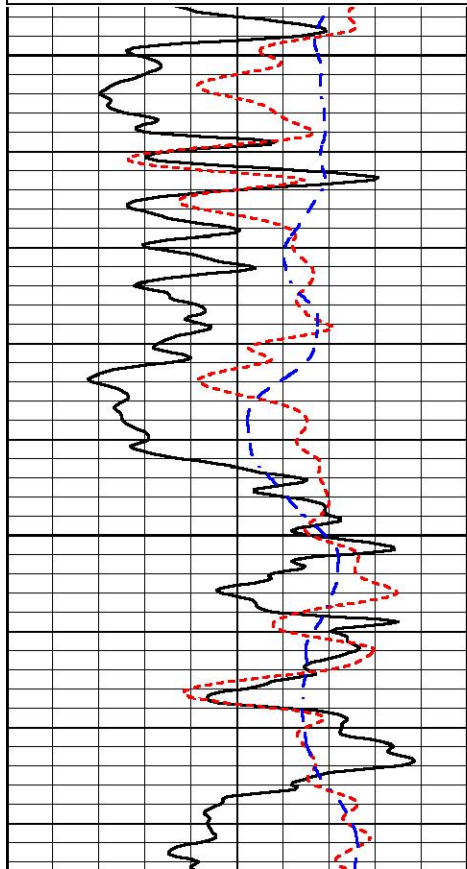
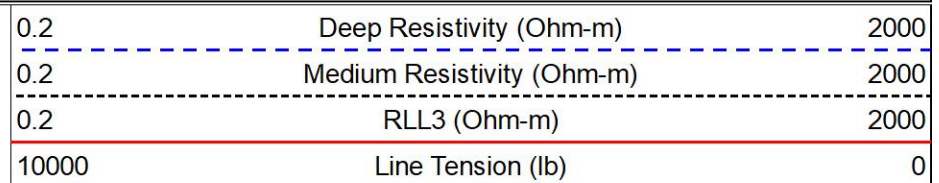
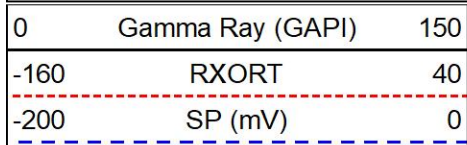


MIDWEST WIRELINE

REPEAT SECTION

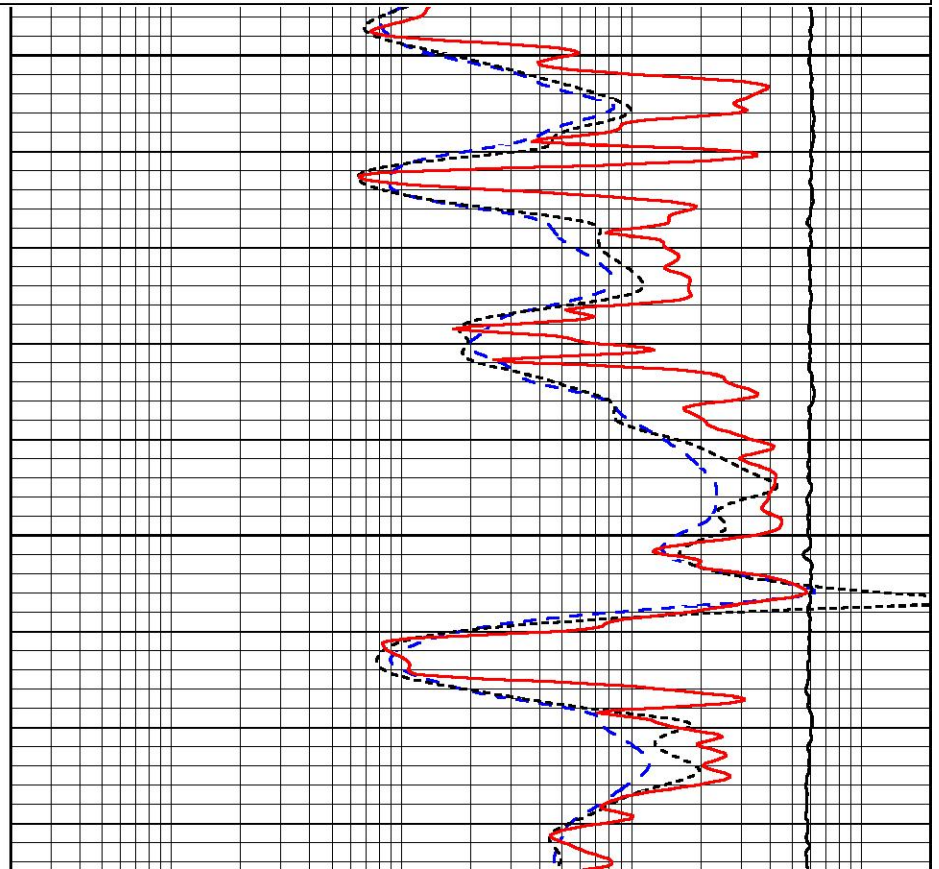
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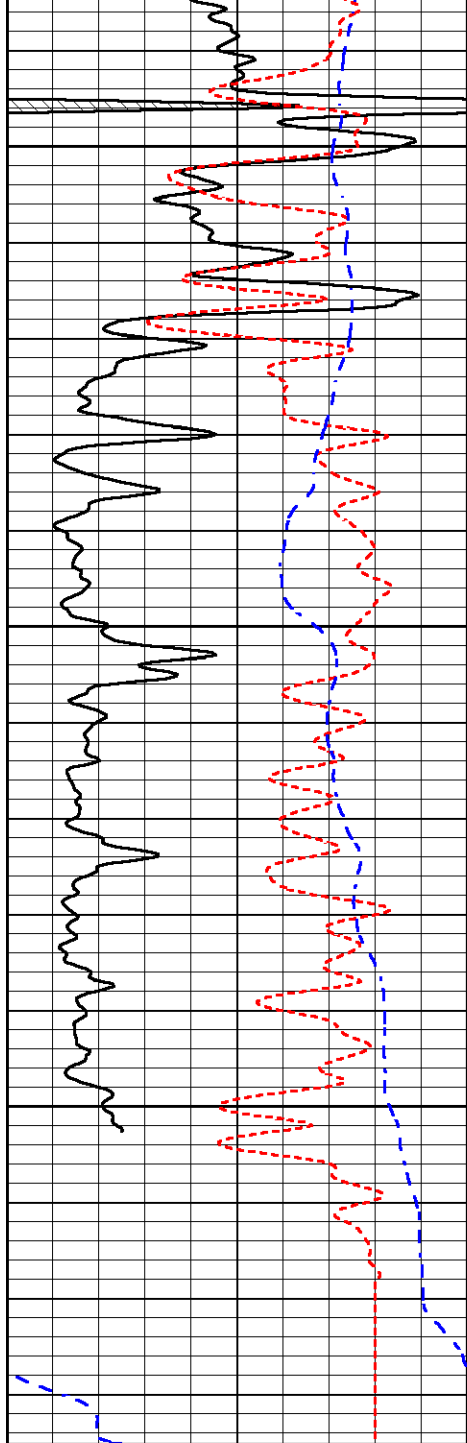
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3150

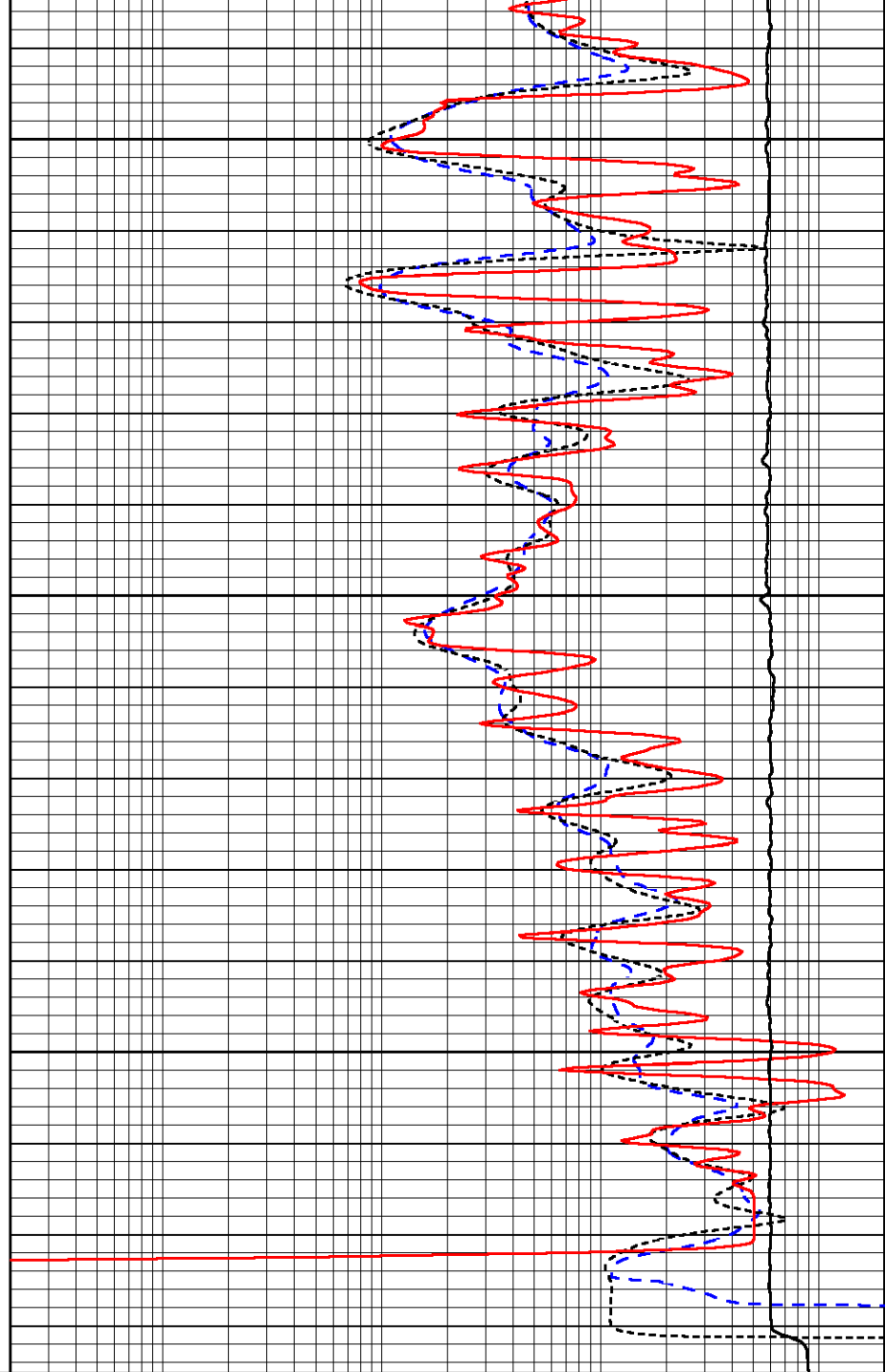
3200





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

3250
3300
3350



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 rama_bayer #6-29.db
 Dataset Pathname Stack/pass3.1
 Dataset Creation Mon Aug 07 22:59:49 2023

Dual Induction Calibration Report

Serial-Model: 507-M&W
 Surface Cal Performed:

Readings

References

Results

Loop:	Air	Loop	Air	Loop		m	b
Deep	68.570	638.100	0.000	255.800	mmho/m	0.500	-37.000
Medium	184.288	716.191	0.000	255.800	mmho/m	0.470	-84.000

Compensated Density Calibration Report

Serial-Model: 307-11-M&W
Source / Verifier: 20762B / 2ci
Master Calibration Performed: Tue Jun 6 21:48:20 2023
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3689.70	4749.82	cps
Aluminum	2.590	g/cc	822.19	3221.38	cps
Spine Angle = 75.50			Density/Spine Ratio = 0.538		
	Size		Reading		
Small Ring	6.00	in	1.16		
Large Ring	18.00	in	1.01		

Compensated Neutron Calibration Report

Serial Number: 207
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: Mon Aug 7 20:46:01 2023

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps
Calibrator Reading: 637.0 cps

Sensitivity: 0.6000 GAPI/cps



Company RAMA Operating Company, Inc.
Well Bayer #6-29
Field Chase-Silica
County Rice
State Kansas