



DUAL INDUCTION LOG

MIDWEST WIRELINE

Company Griffin Management, LLC

Well Ethan #2

Field

County Barber State Kansas

Location: API #: 15-007-24498-00-00

Other Services

SEC 16 TWP 30S RGE 15W

SW SW NE SE
1625 FSL & 1170 FEL

CNL/CDL
MEL

Permanent Datum Ground Level Elevation 1879

Log Measured From Kelly Bushing

Elevation
K.B. 1884
D.F.
G.L. 1879

Date 6/9/2024

Run Number One

Depth Driller 4868

Depth Logger 4864

Bottom Logged Interval 4863

Top Log Interval 1000

Casing Driller 8.625 @ 1010

Casing Logger 1009

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 4500

Density / Viscosity 9.4 55

pH / Fluid Loss 10.0 8.8

Source of Sample FLOWLINE

Rm @ Meas. Temp 0.40 @ 80

Rmf @ Meas. Temp 0.30 @ 80

Rmc @ Meas. Temp 0.54 @ 80

Source of Rmf / Rmc CHARTS

Rm @ BHT 0.26 @ 125

Operating Rig Time 3 Hours

Max Rec. Temp. F 125

Equipment Number 110

Location HAYS

Recorded By D. Schmidt

Witnessed By Charles Griffin

<<< 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.

Croft,
South to 110, 1 East,
South and East to location

Log Measured From: Kelly Bushing

5 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Charles Griffin
Secondary Witness: Eli Felts
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.23		GR-M&W (105)	3.00	3.50	50.00
CNLSC	37.13		CNT-M&W (210)	5.00	3.50	100.00
CNSSC	36.38					
			MWLith-STEP LITHO Short (701-01)	8.40	5.00	250.00
LCAL	28.21		ML-PSI STKBL ML (402)	7.58	4.00	65.00
LLW8N	28.21					
LLW7N	28.21					
LLW6N	28.21					
LLW5N	28.21					
LLW4N	28.21					
LLW3N	28.21					
LLW2N	28.21					
LLW1N	28.21					
LSLOCK	27.96					
LLLOCK	27.96					
PELTMPR	27.96					
LSHVNG	27.96					
LLHVNG	27.96					
LSW8N	27.71					
LSW7N	27.71					
LSW6N	27.71					
LSW5N	27.71					
LSW4N	27.71					
LSW3N	27.71					
LSW2N	27.71					
LSW1N	27.71					
MCAL	19.58		DIL-M&W (508A)	18.25	3.50	220.00
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
CILD	8.33					
CILM	4.50					
SP	0.20					
Dataset: griffin_ethan 2.db: field/well/stkml/pass3.1 Total length: 42.23 ft Total weight: 685.00 lb O.D.: 5.00 in						

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_ethan 2.db
Dataset field/well/stkml/pass3.1/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 125	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m 0	mmho/m 0	mV 340	degF 80	Off	ft 4864

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

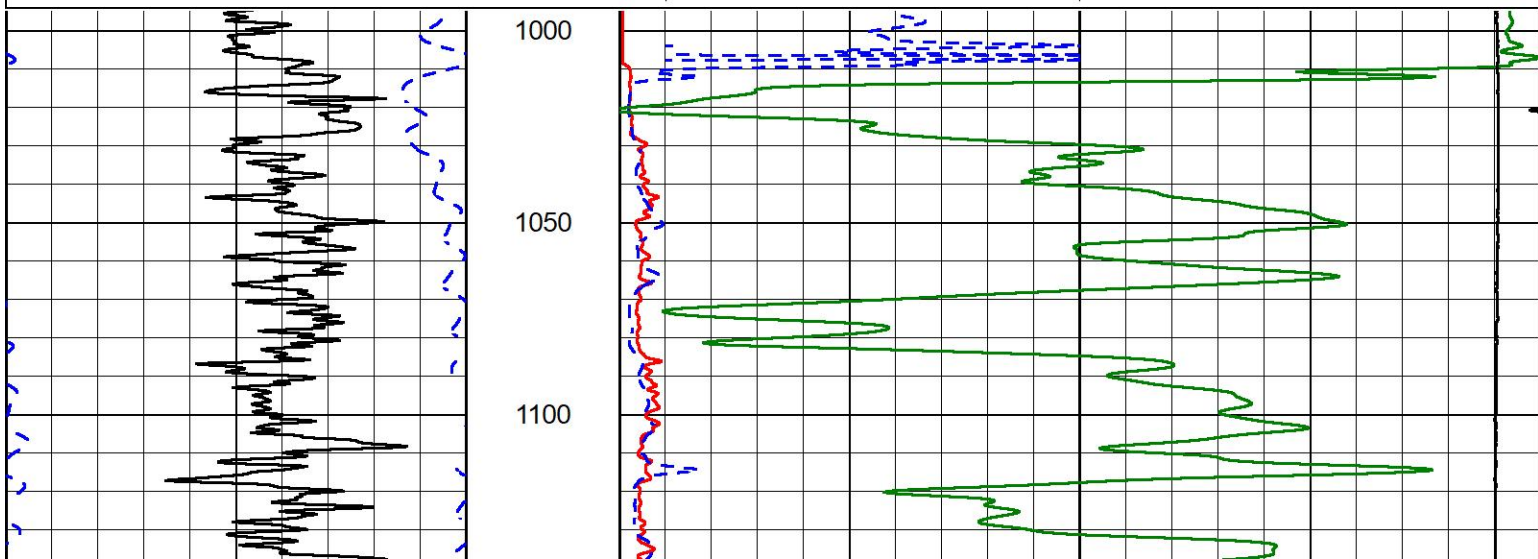


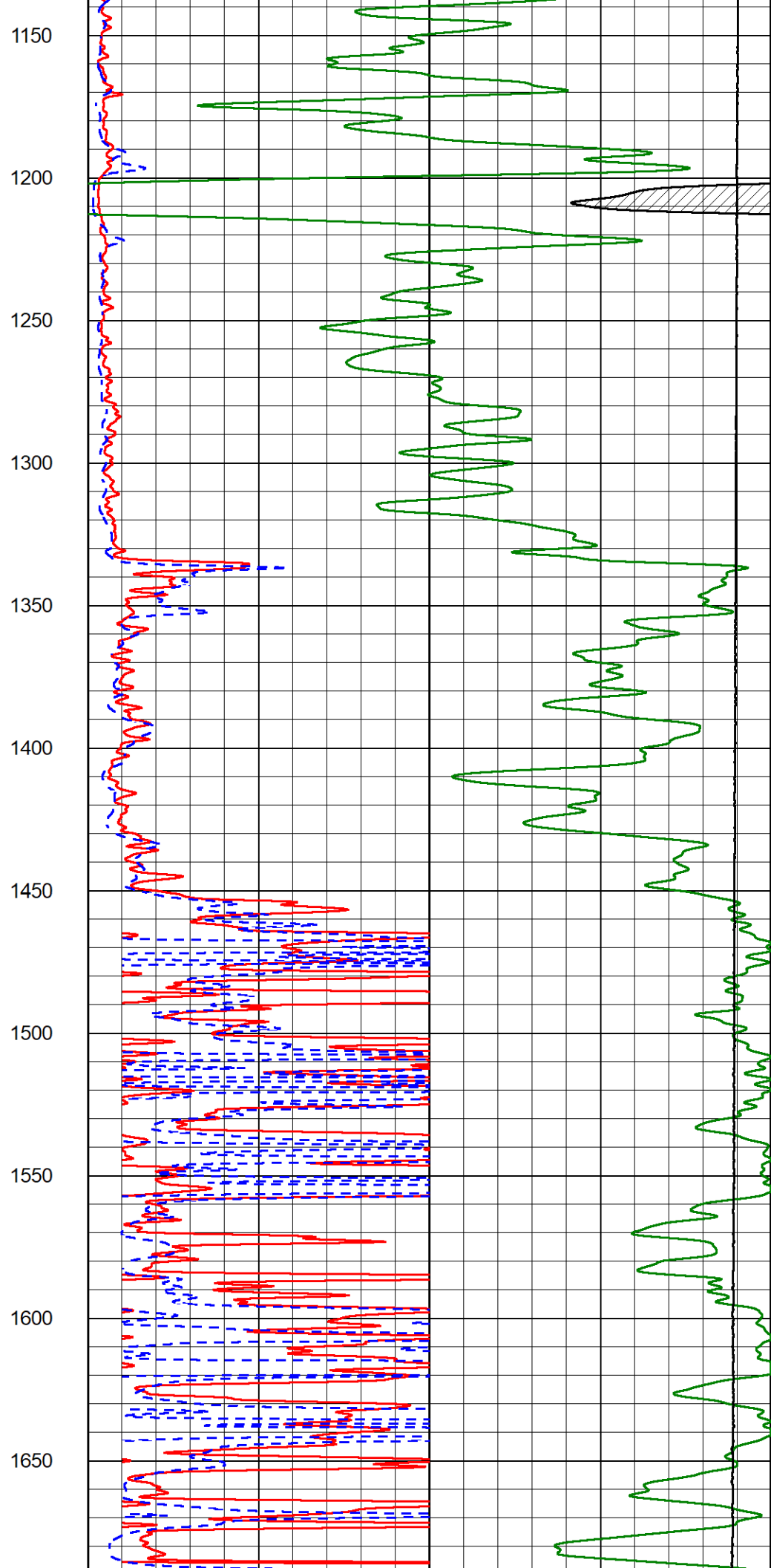
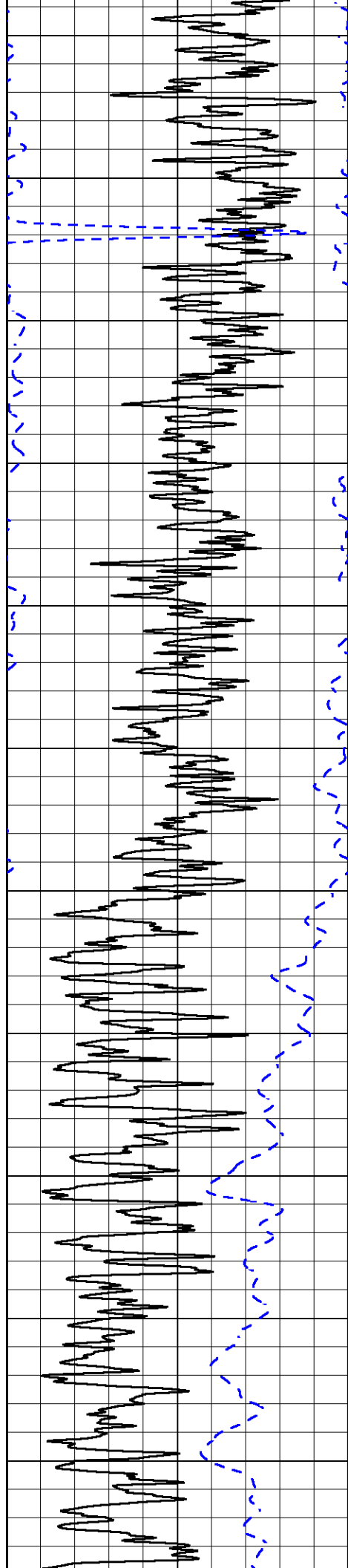
2" SCALE RESISTIVITY

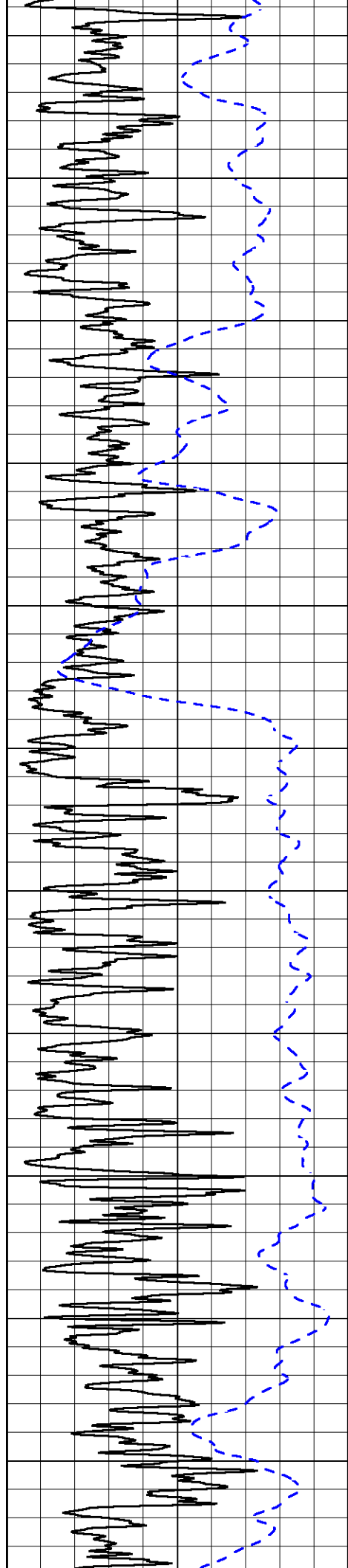
MAIN PASS

Database File griffin_ethan 2.db
Dataset Pathname stkml/pass3.3
Presentation Format _dil2in
Dataset Creation Sun Jun 09 23:05:11 2024
Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	1000	Conductivity (mmho/m)	0
-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







1700

1750

1800

1850

1900

1950

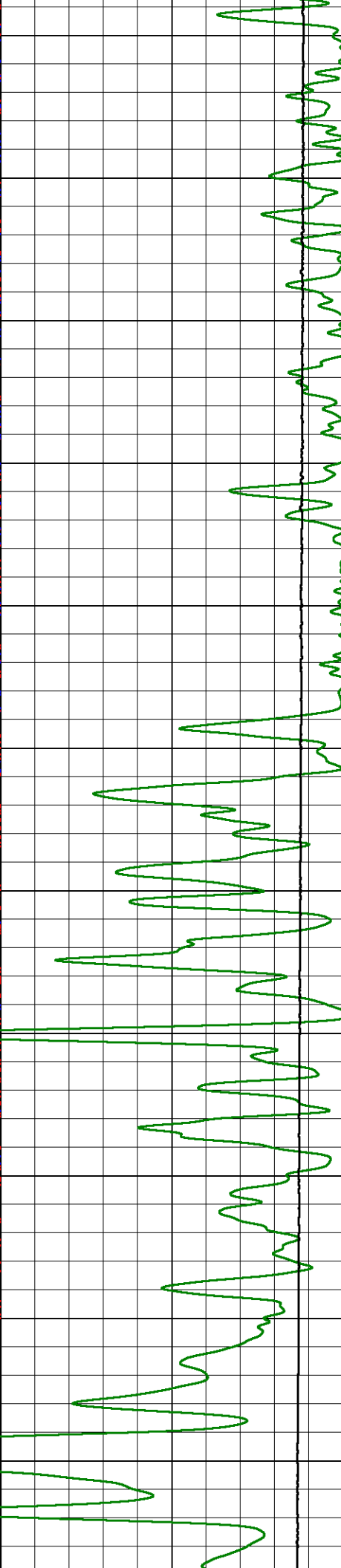
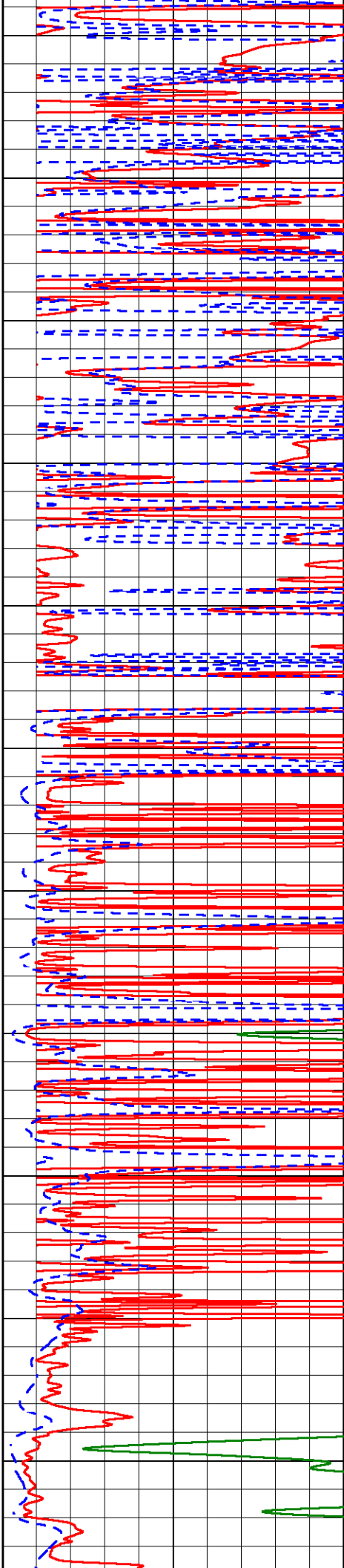
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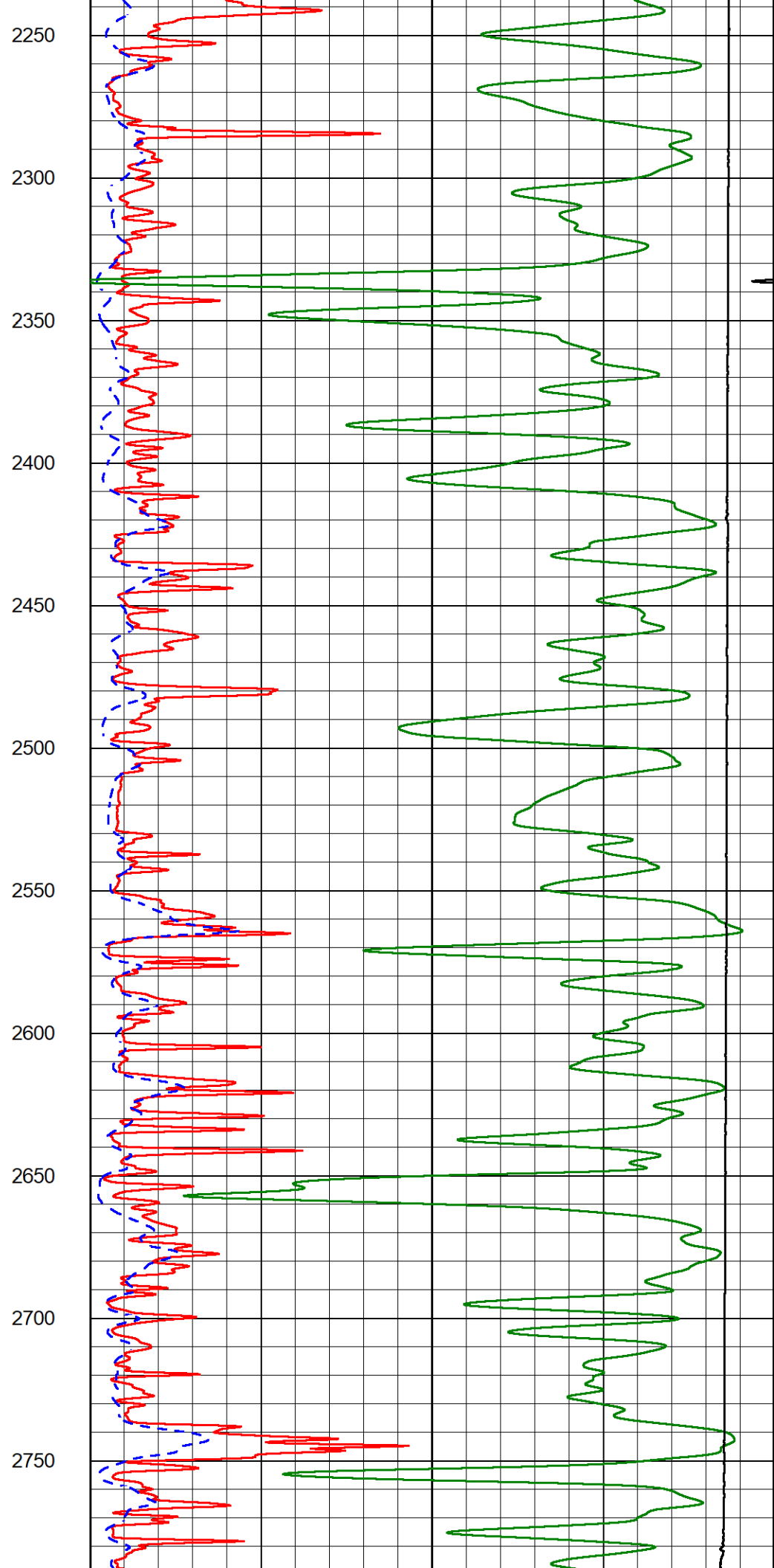
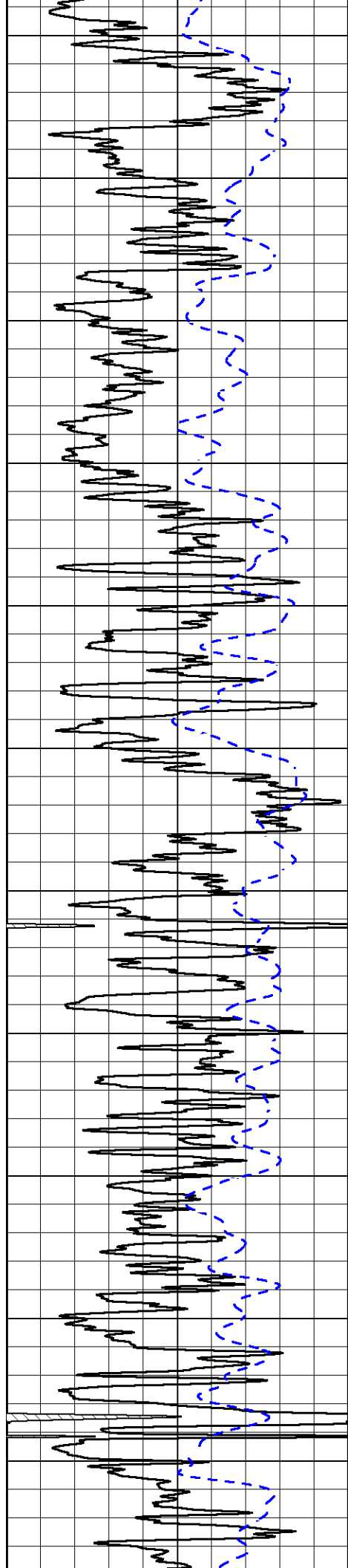
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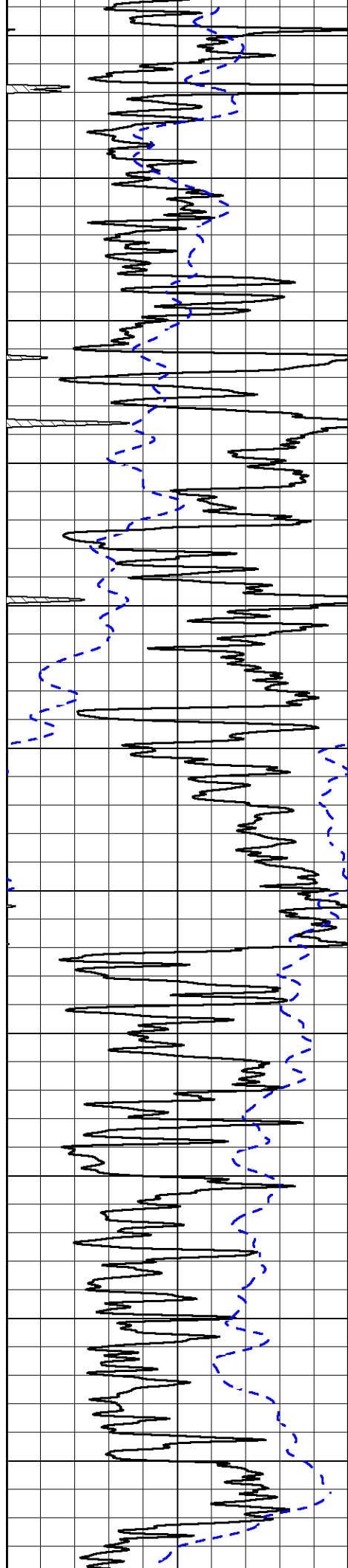
2100

2150

2200







2800

2850

2900

2950

3000

3050

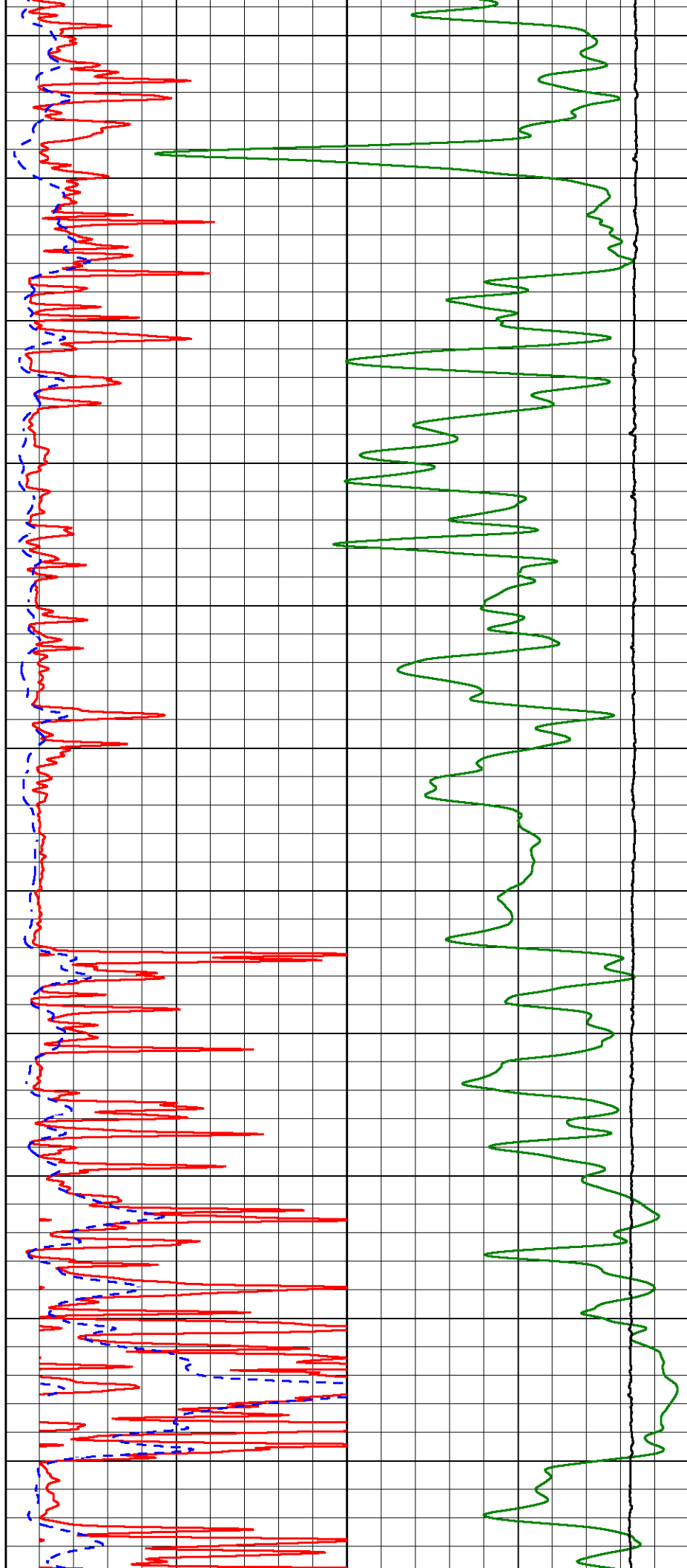
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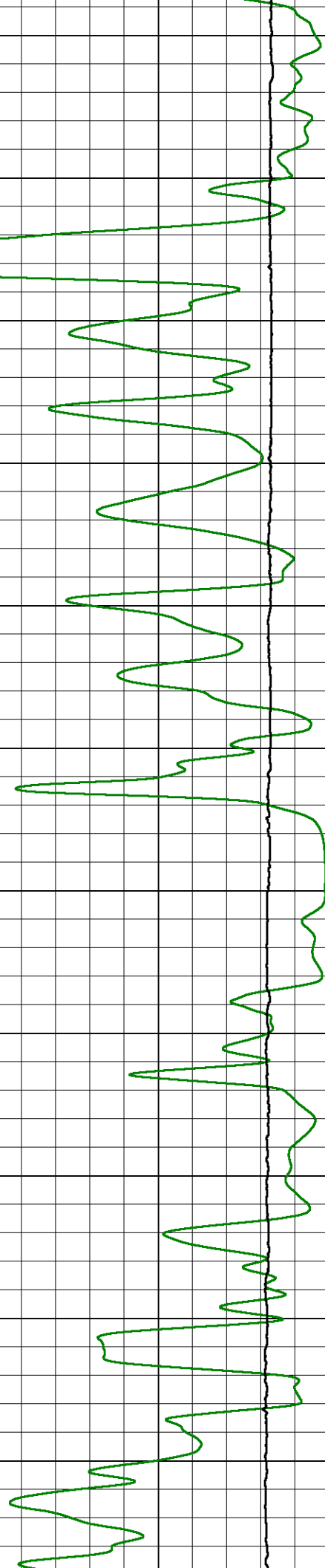
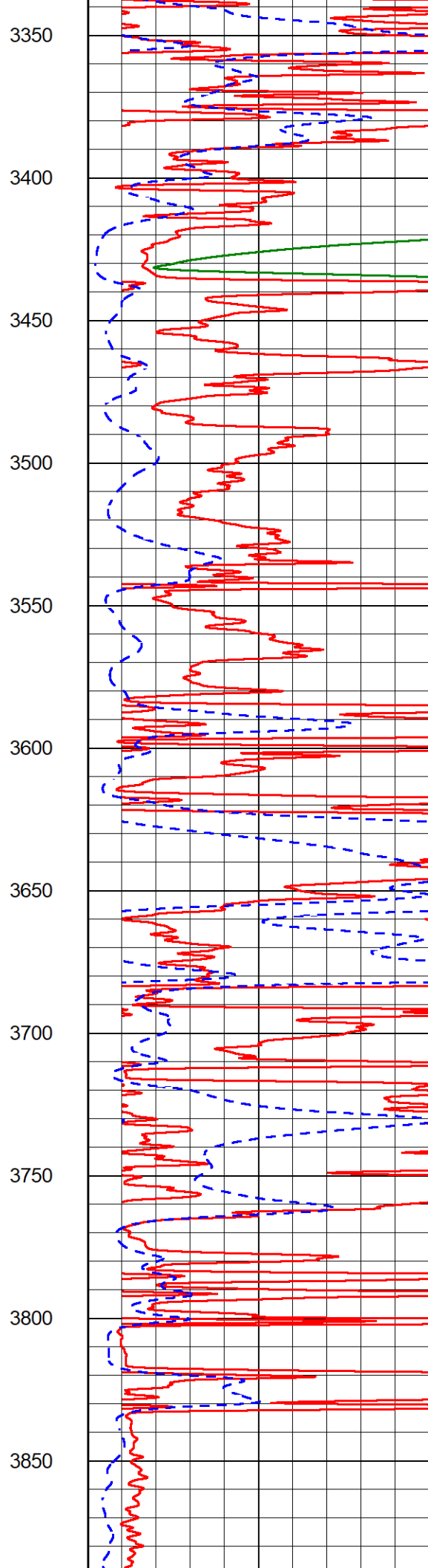
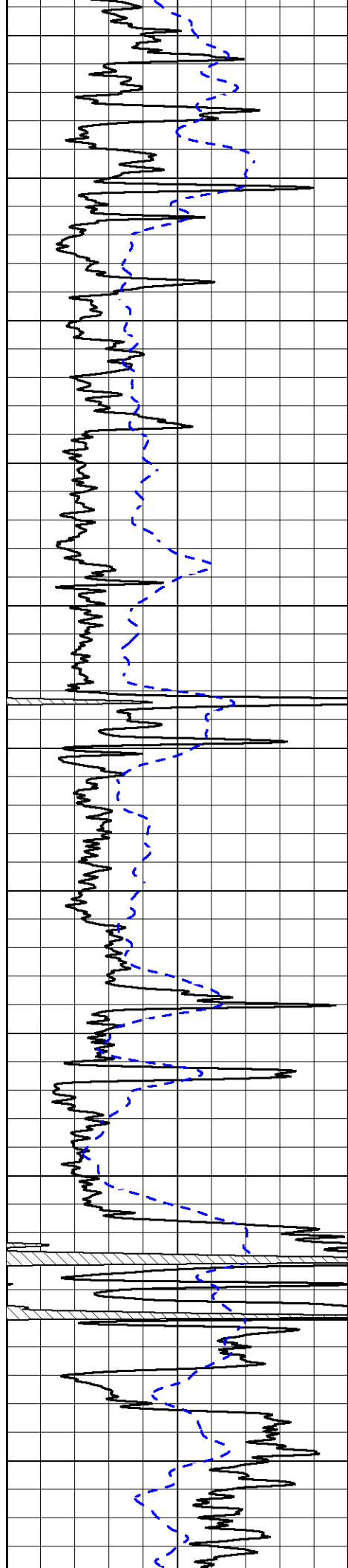
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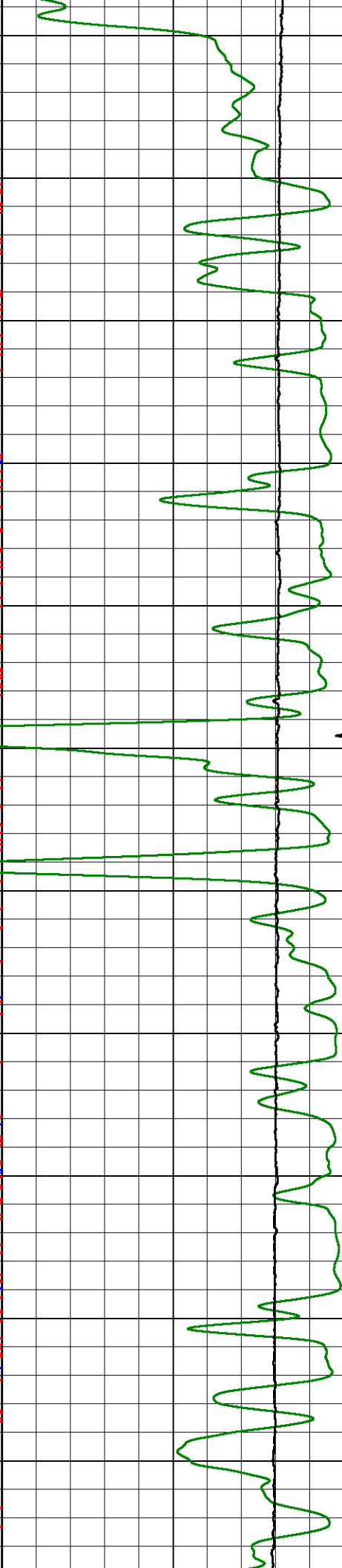
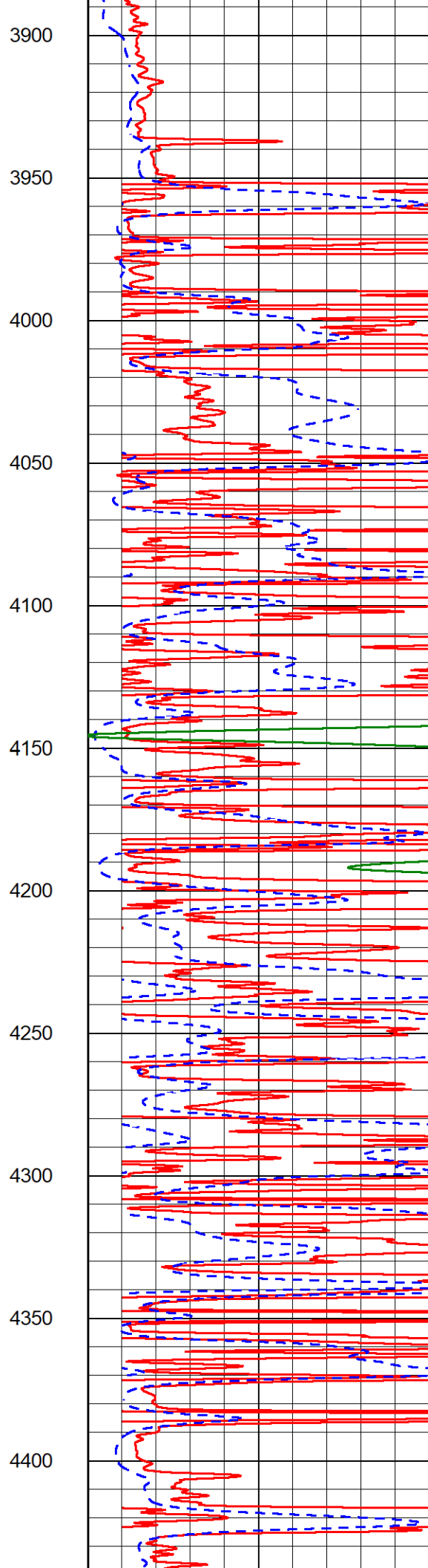
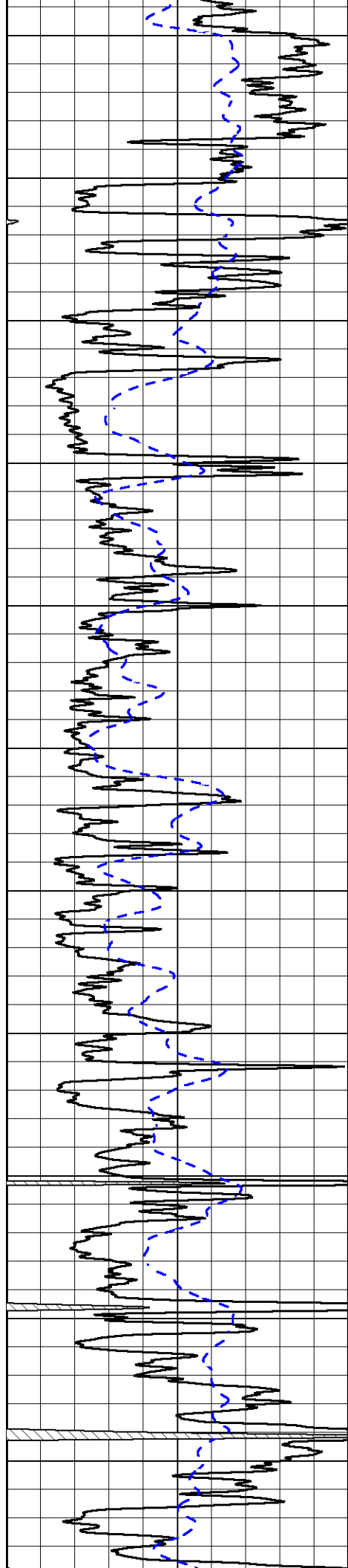
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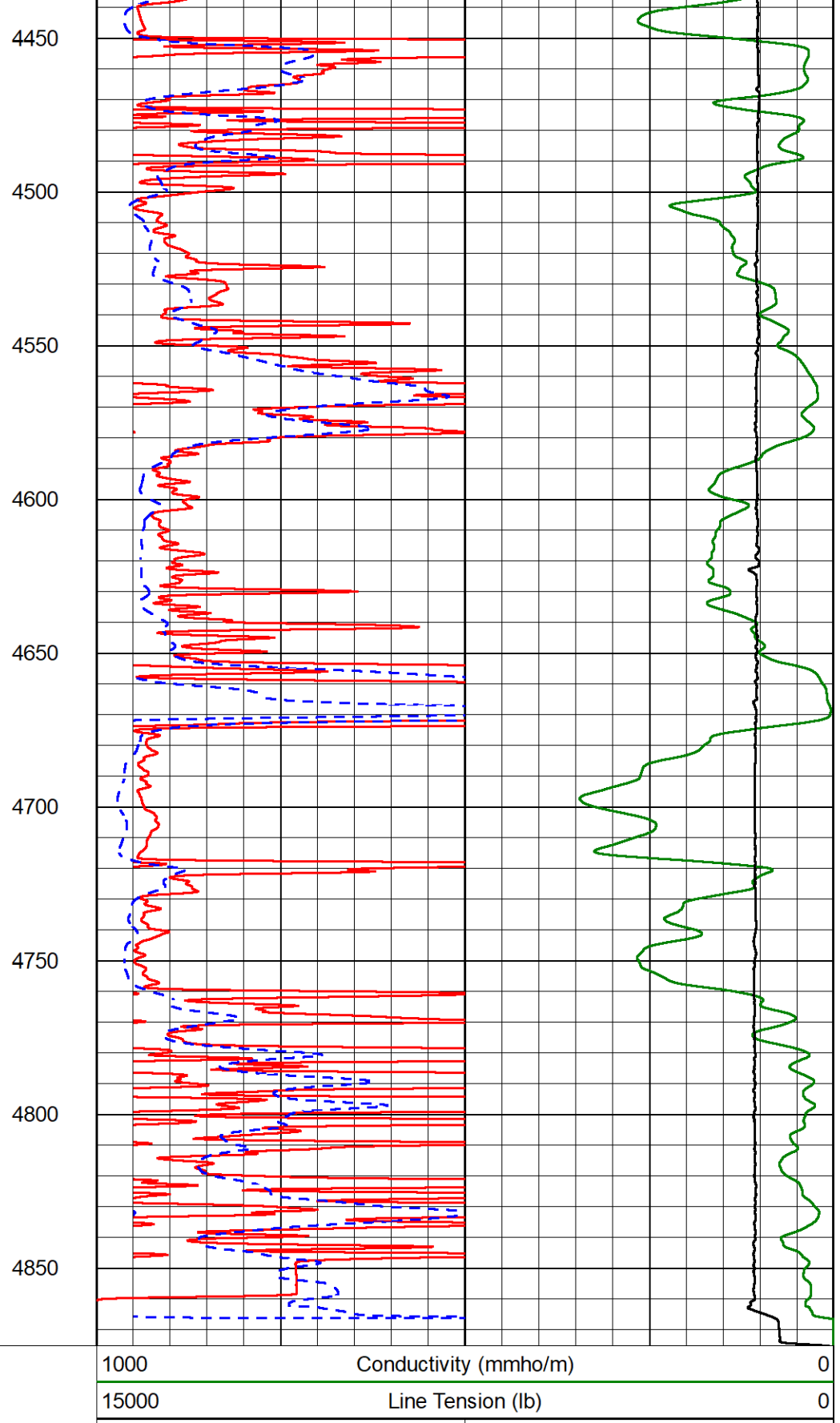
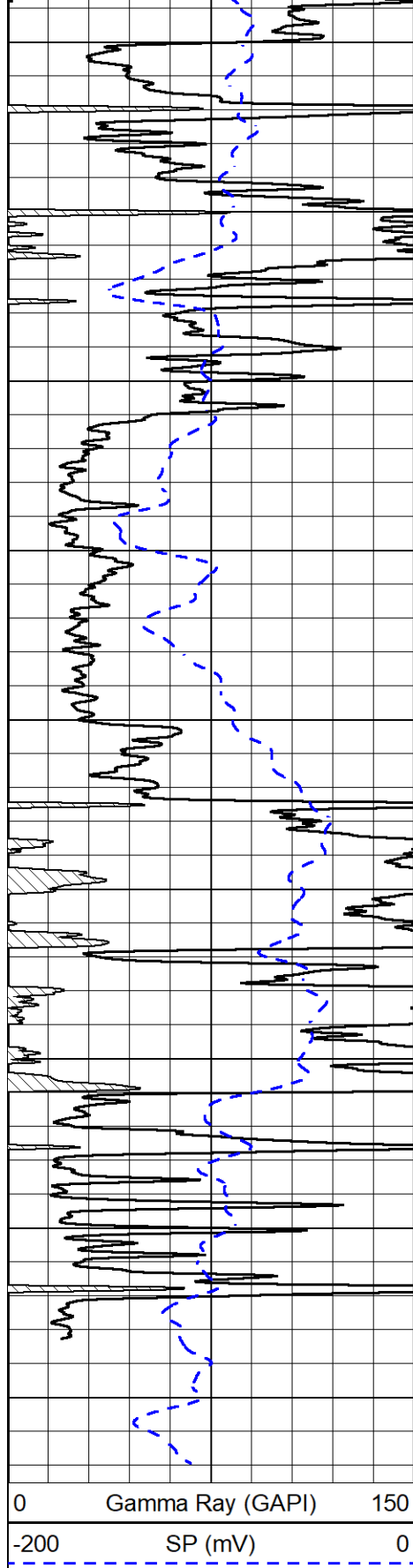
3250

3300









0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
Shallow Resistivity		
50	(Ohm-m)	200
50	Deep Resistivity (Ohm-m)	200



MIDWEST WIRELINE

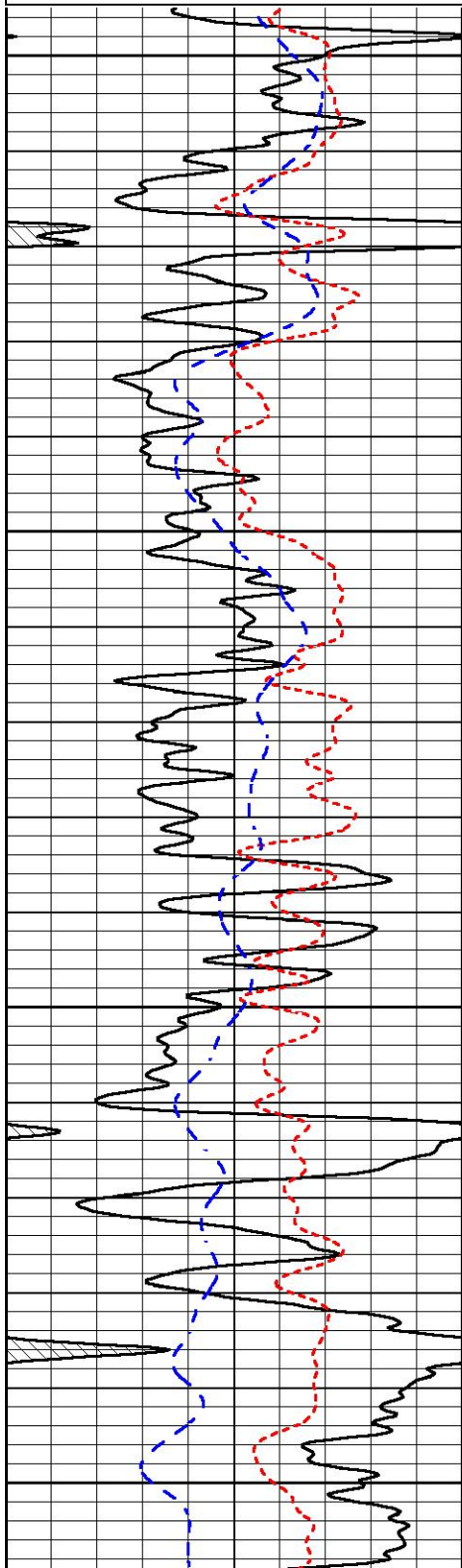
DETAIL SECTION

MAIN PASS

Database File griffin_ethan 2.db
Dataset Pathname stkml/pass3.1
Presentation Format _dil
Dataset Creation Sun Jun 09 23:01:17 2024
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
50	RXORT	250
-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

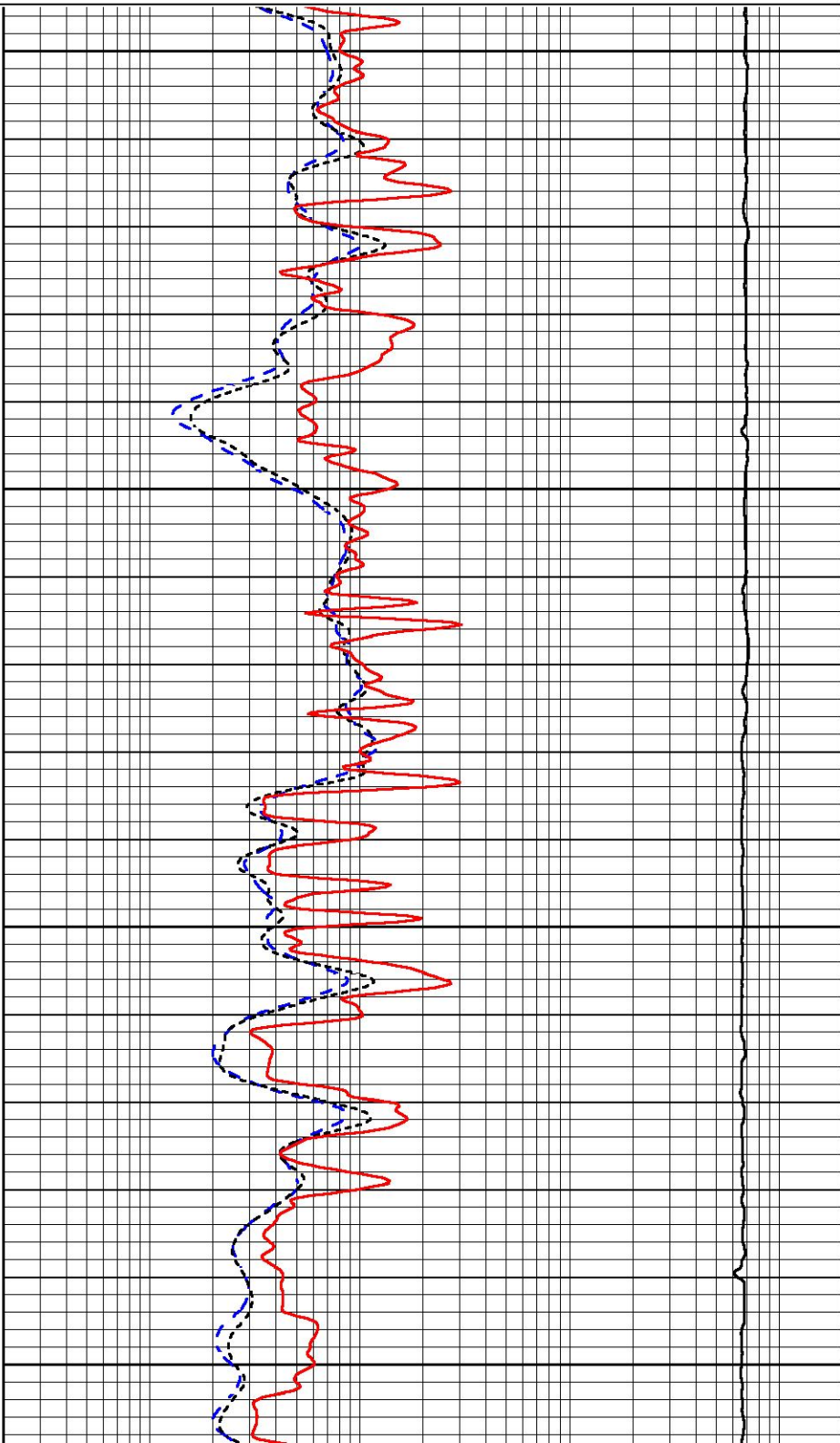


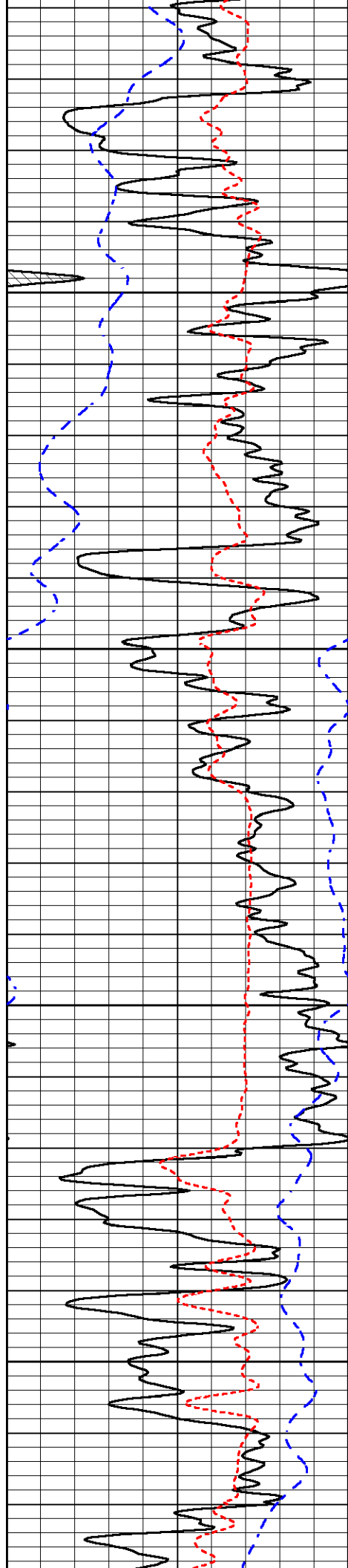
2800

2850

2900

2950



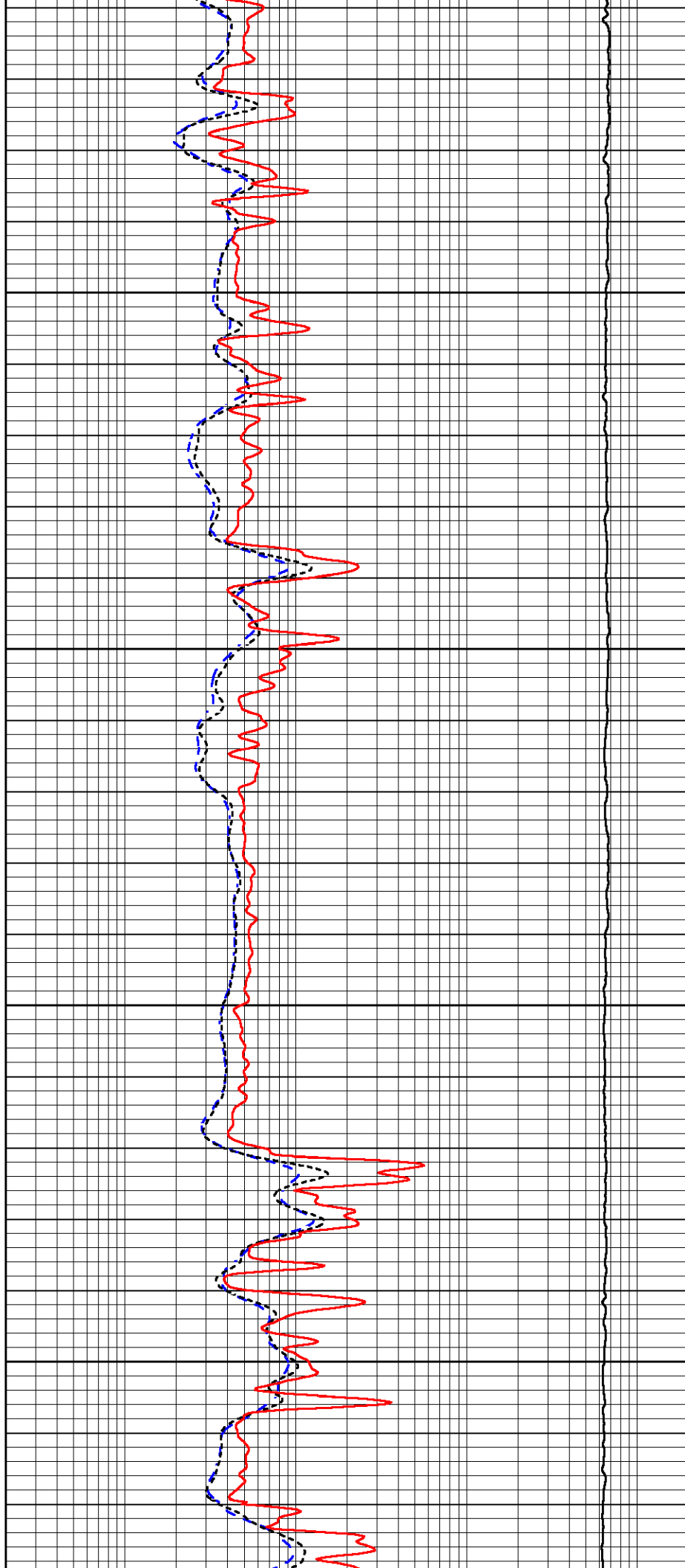


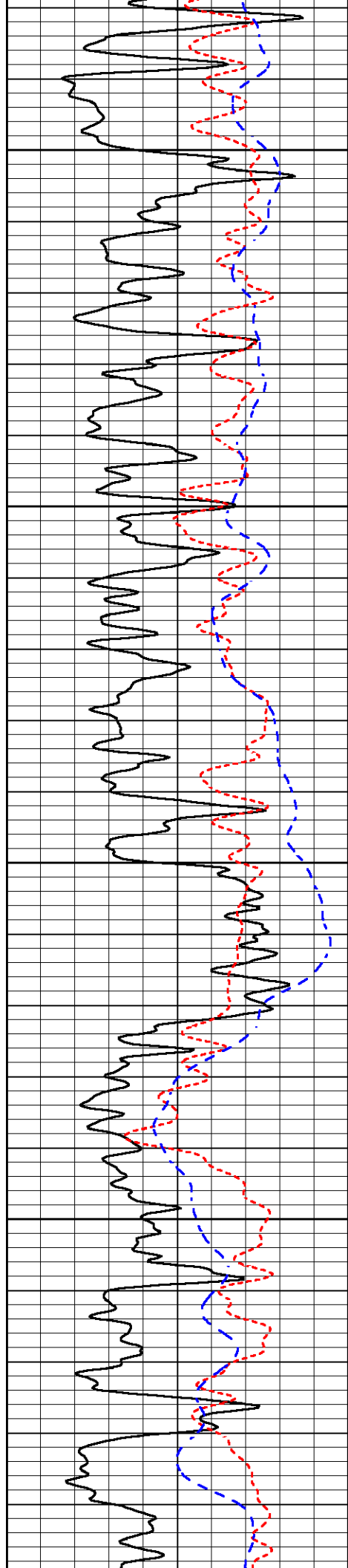
3000

3050

3100

3150



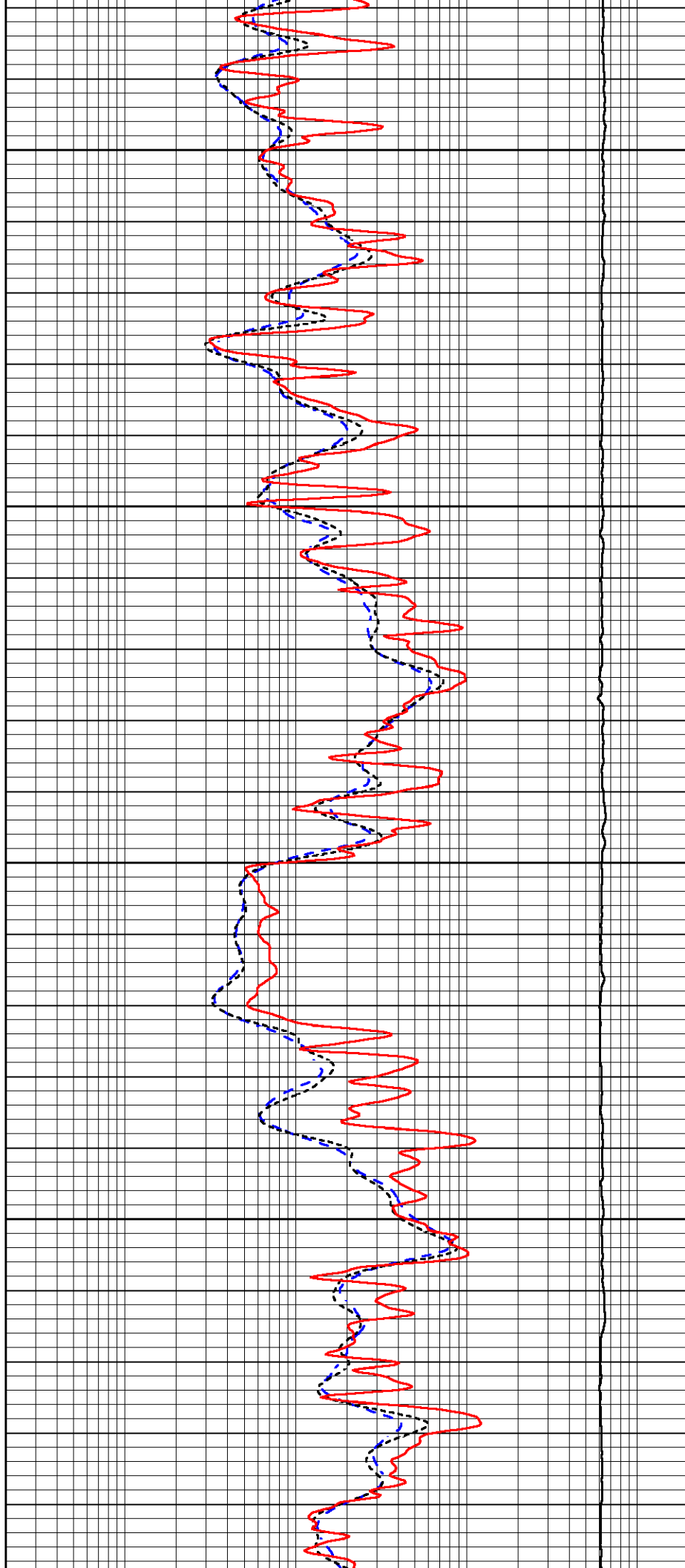


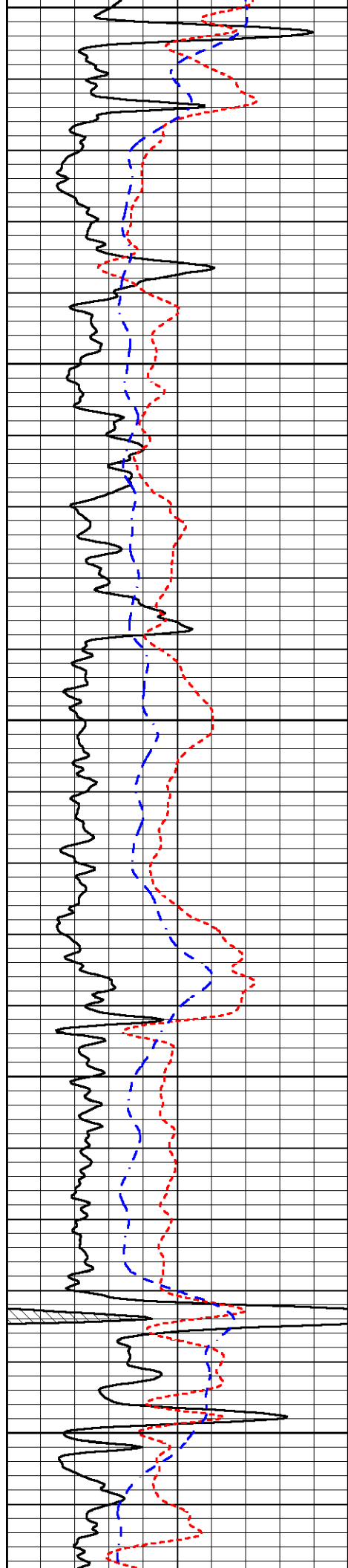
3200

3250

3300

3350





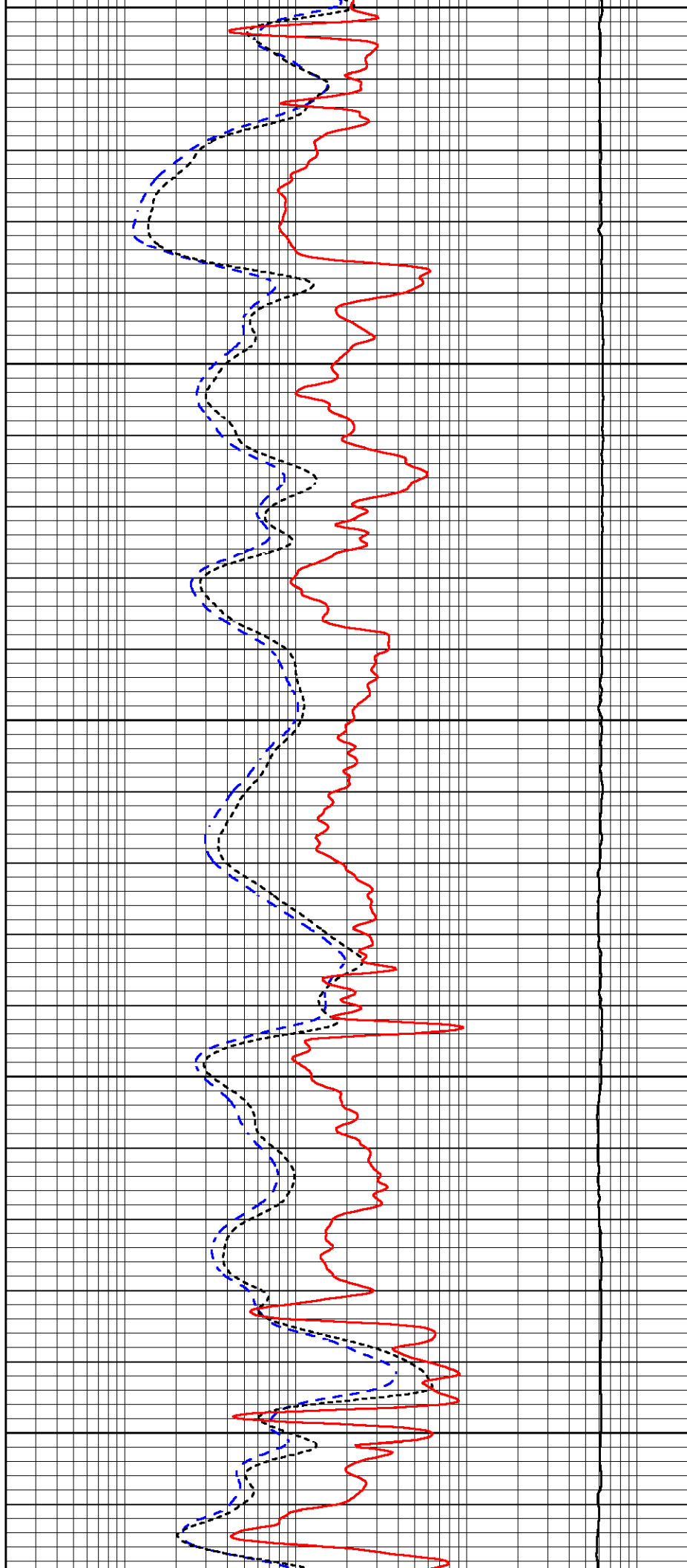
3400

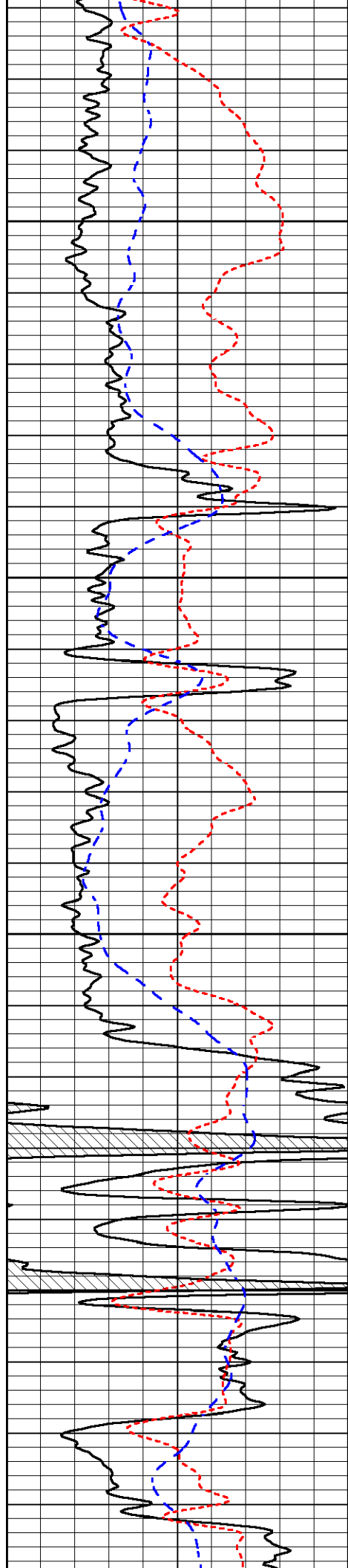
3450

3500

3550

3600



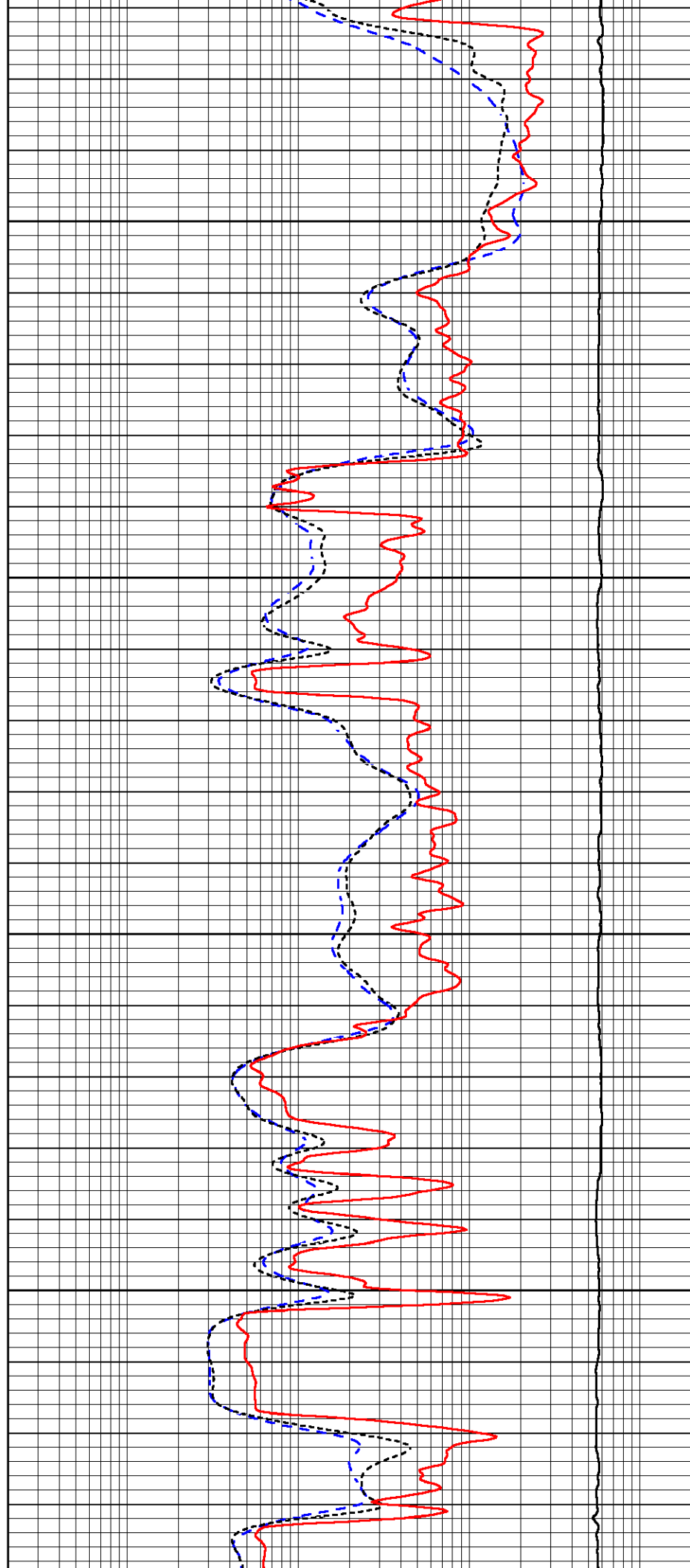


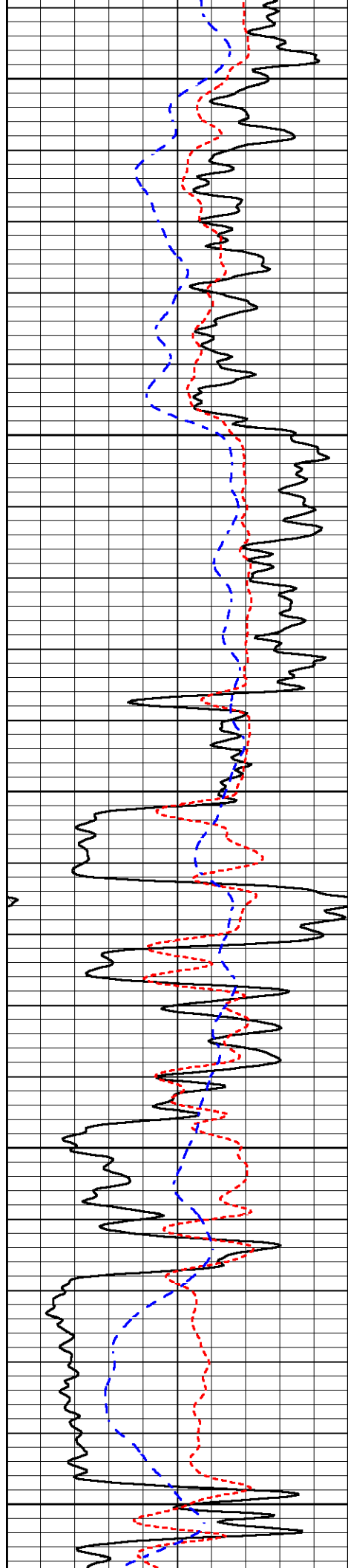
3650

3700

3750

3800





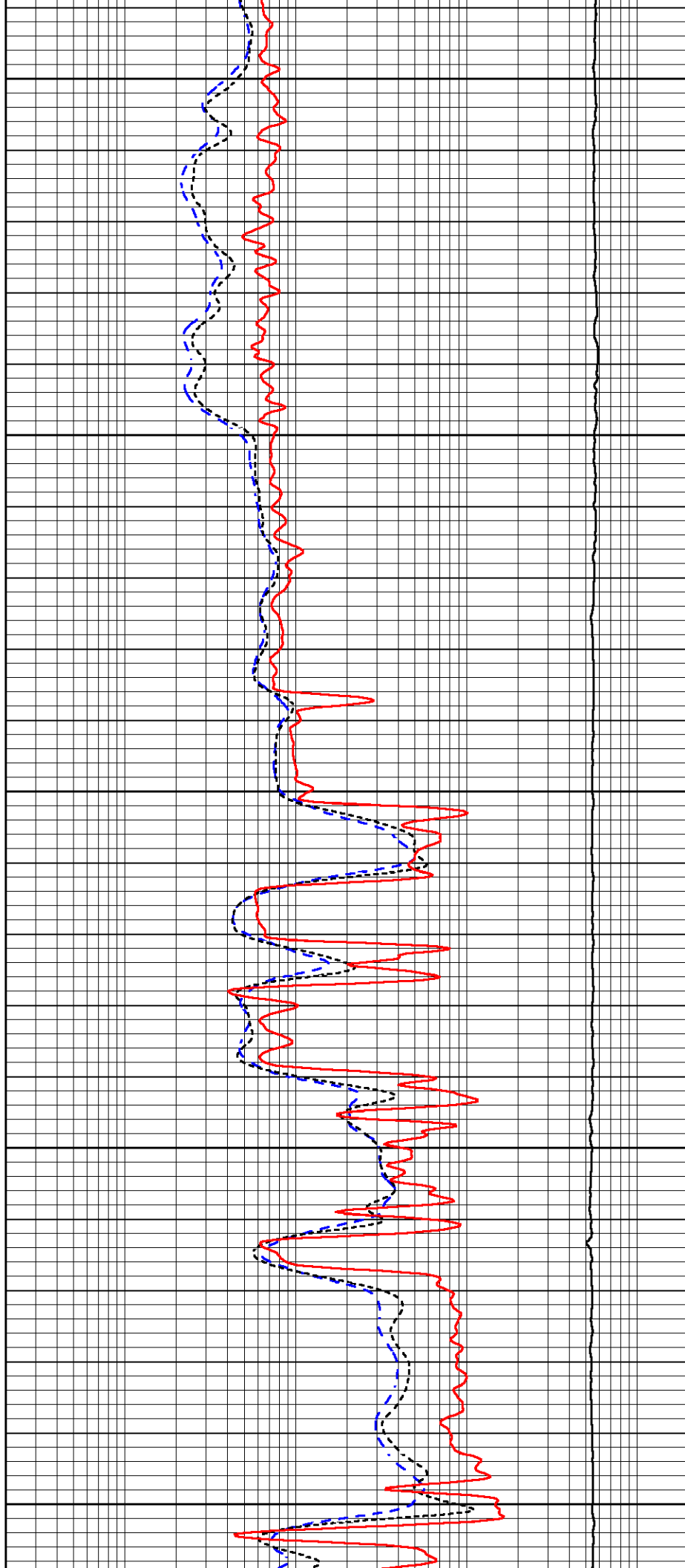
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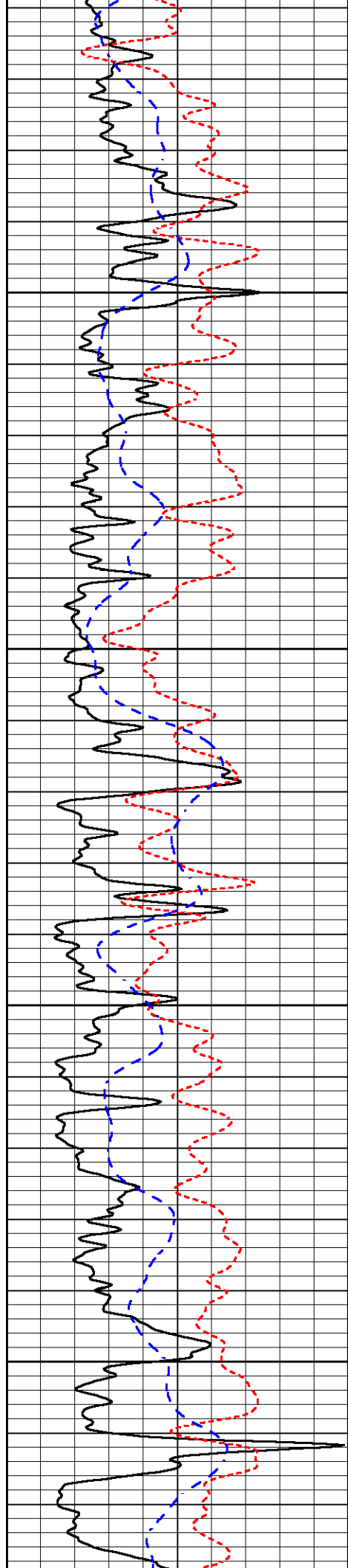
3900

3950

4000

4050



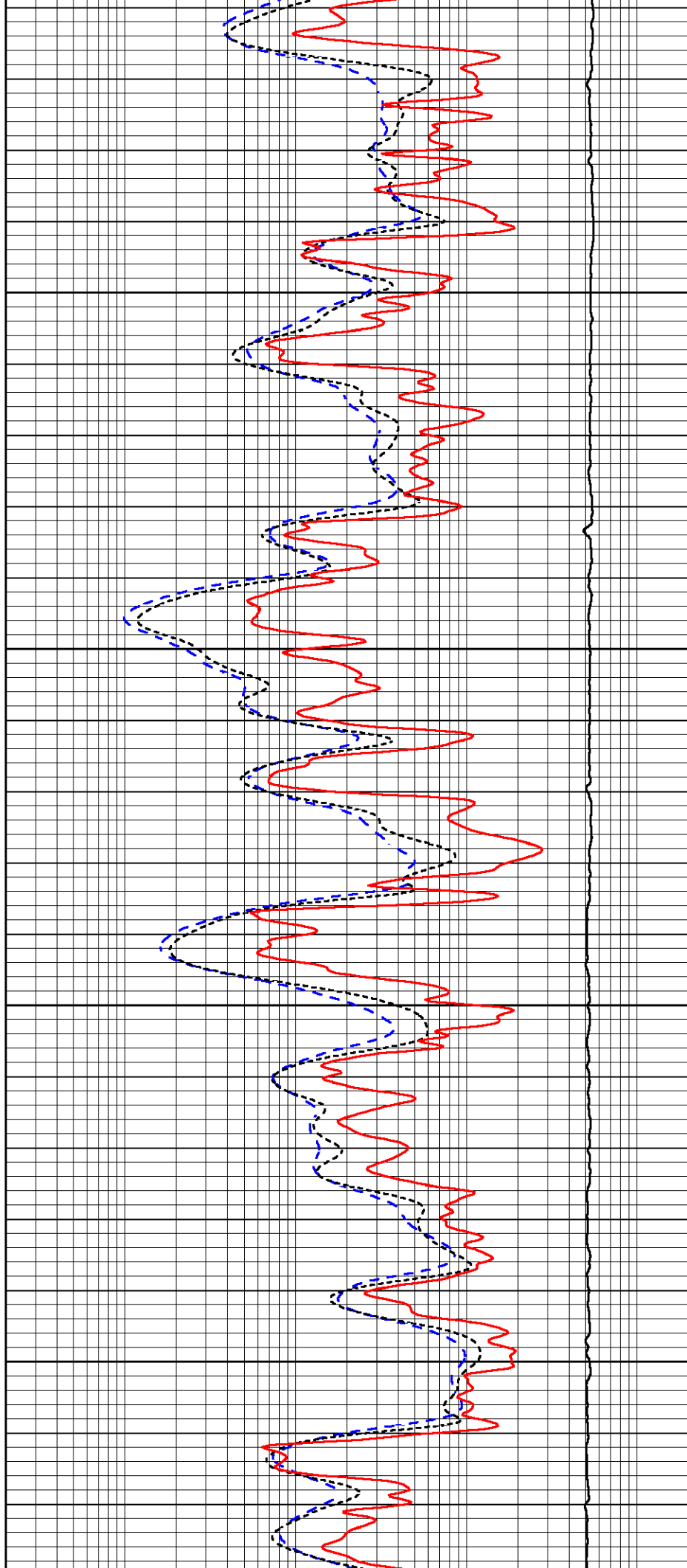


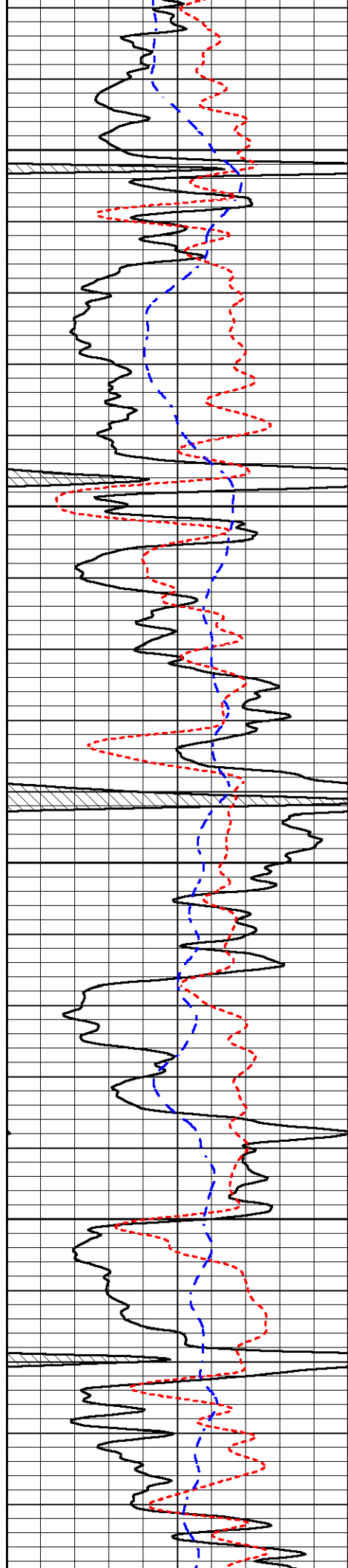
4100

4150

4200

4250



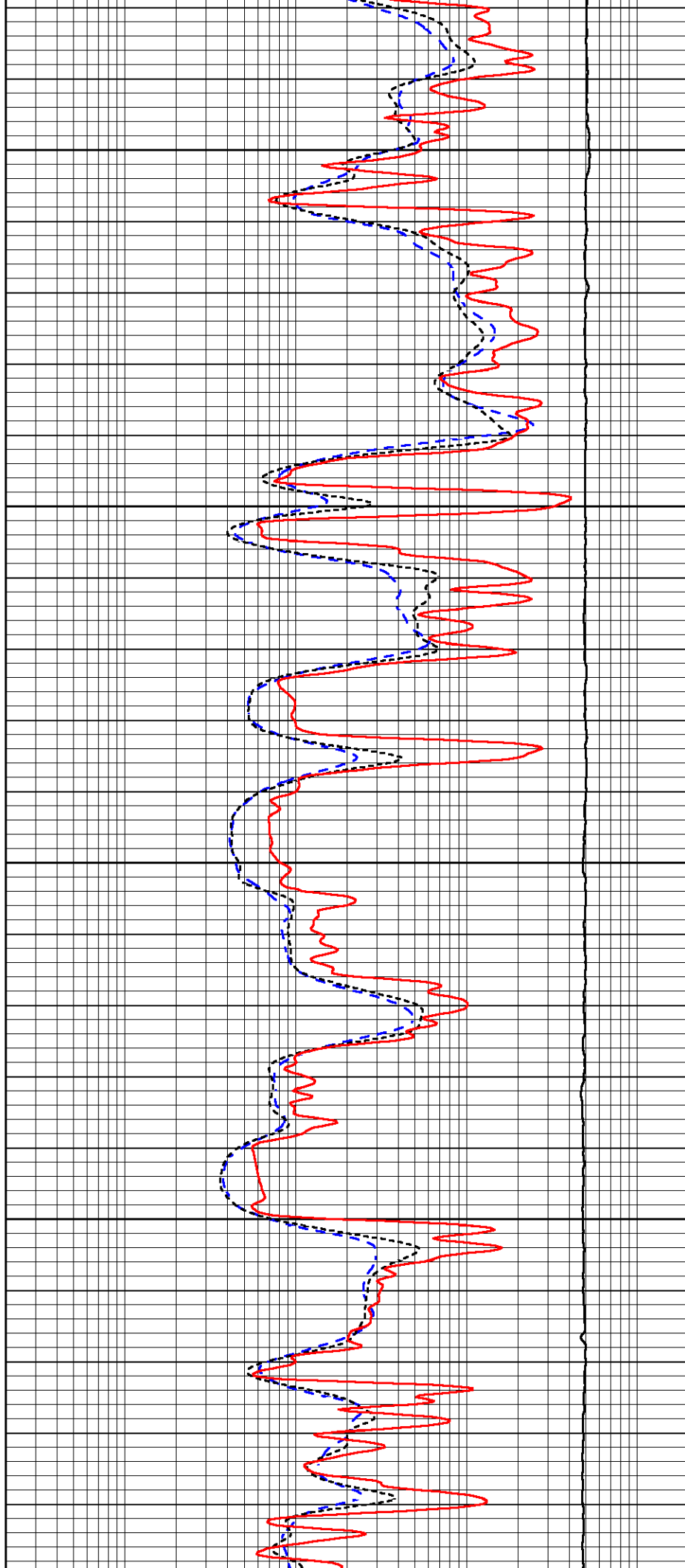


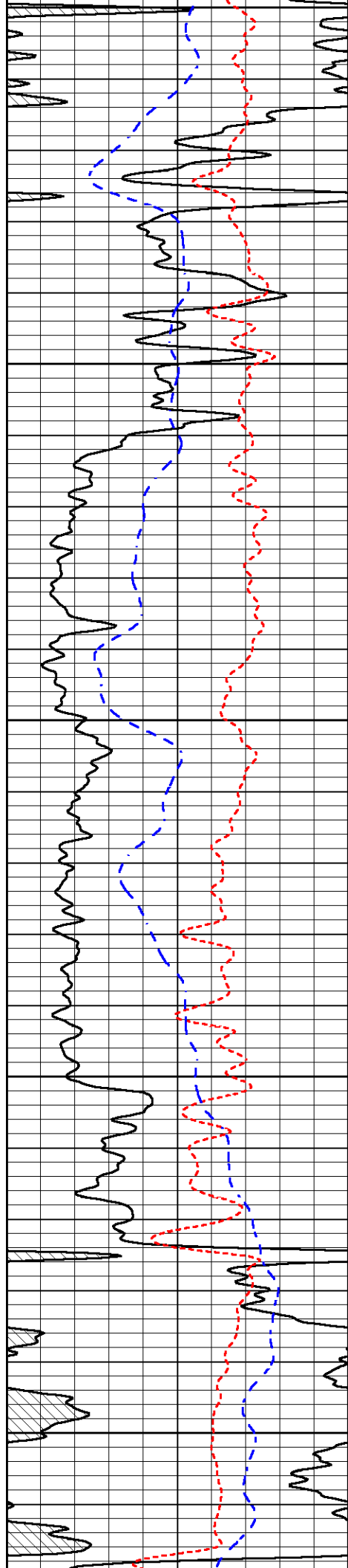
4300

4350

4400

4450





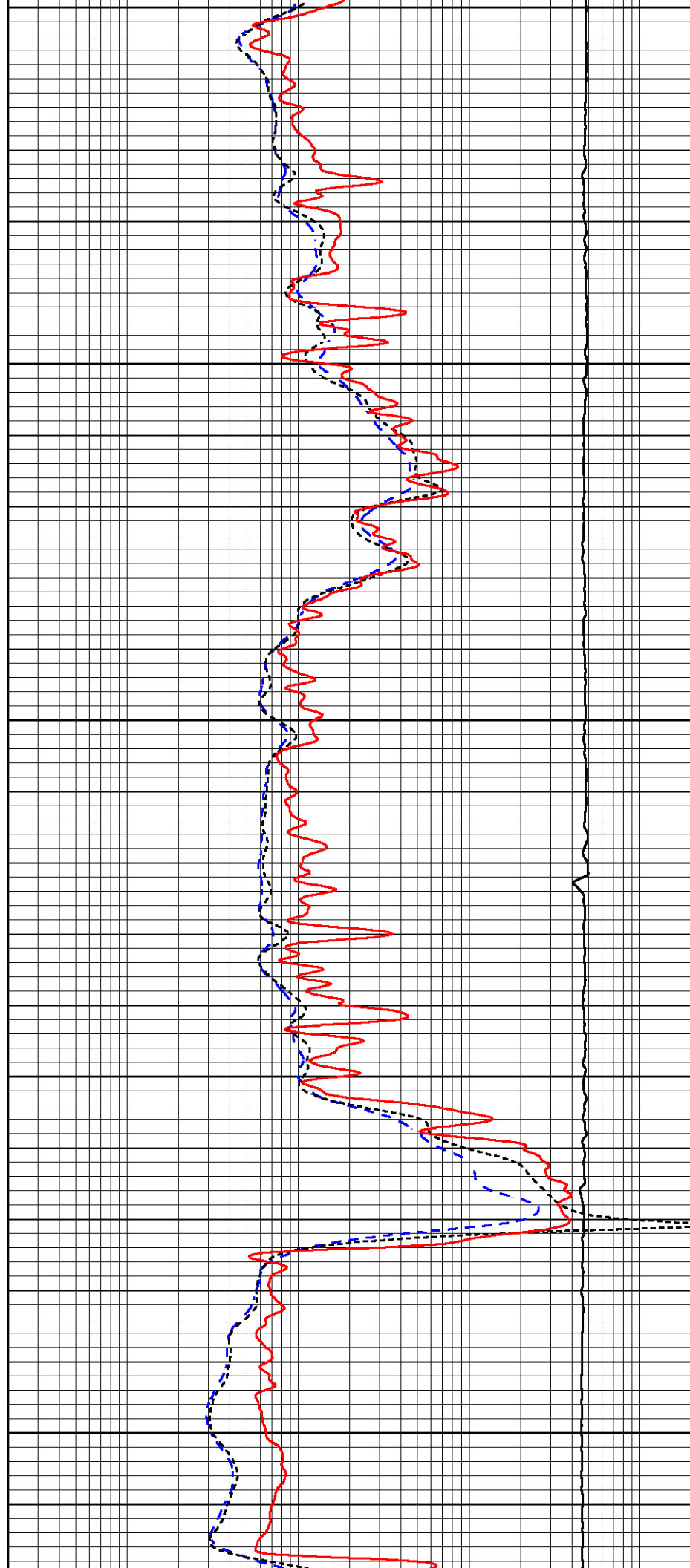
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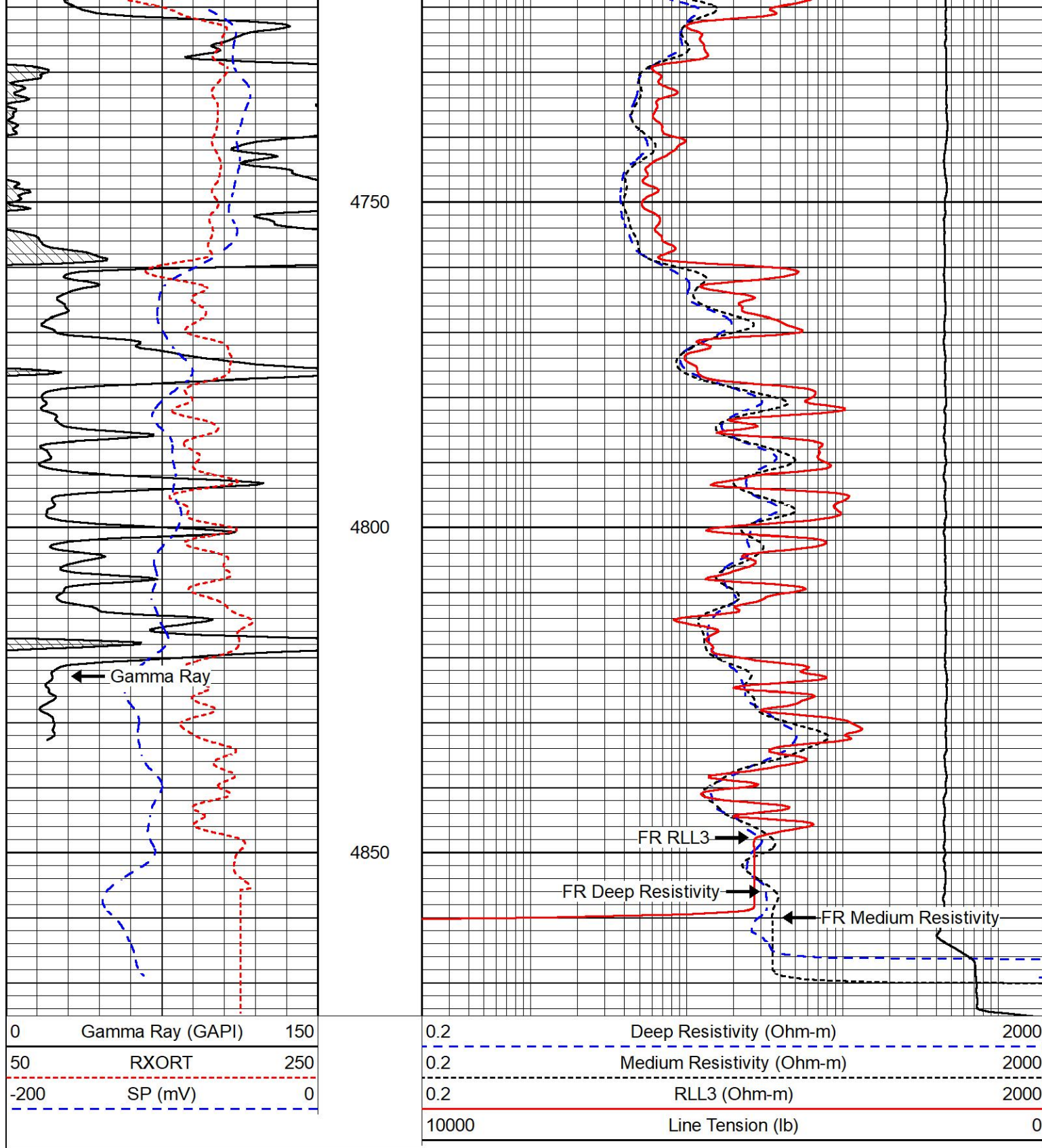
4550

4600

4650

4700



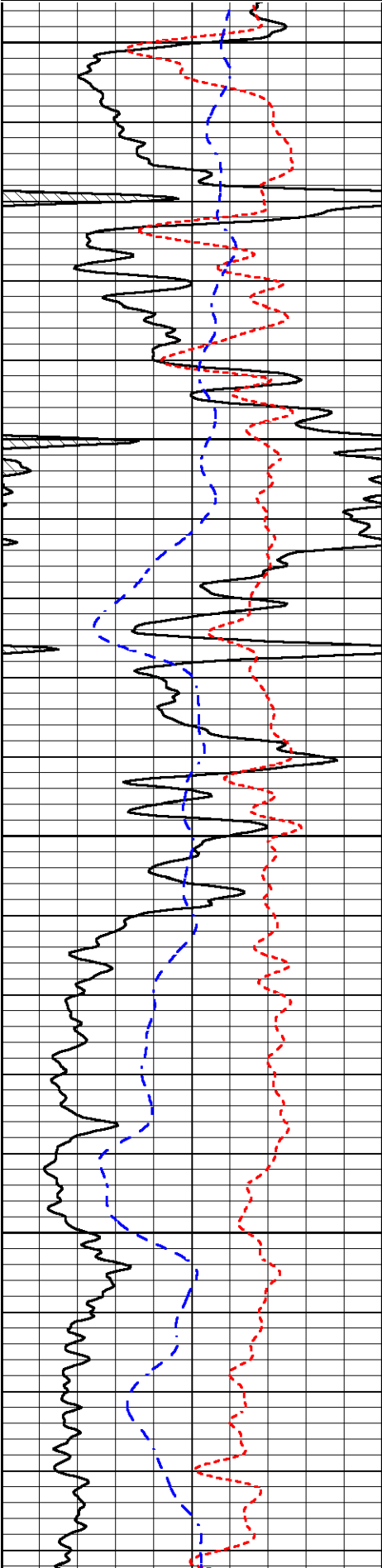


REPEAT SECTION

REPEAT PASS

Database File griffin_ethan 2.db
Dataset Pathname stkml/pass2.1
Presentation Format _dil
Dataset Creation Sun Jun 09 23:12:31 2024
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
50	RXORT	250
-200	SP (mV)	0



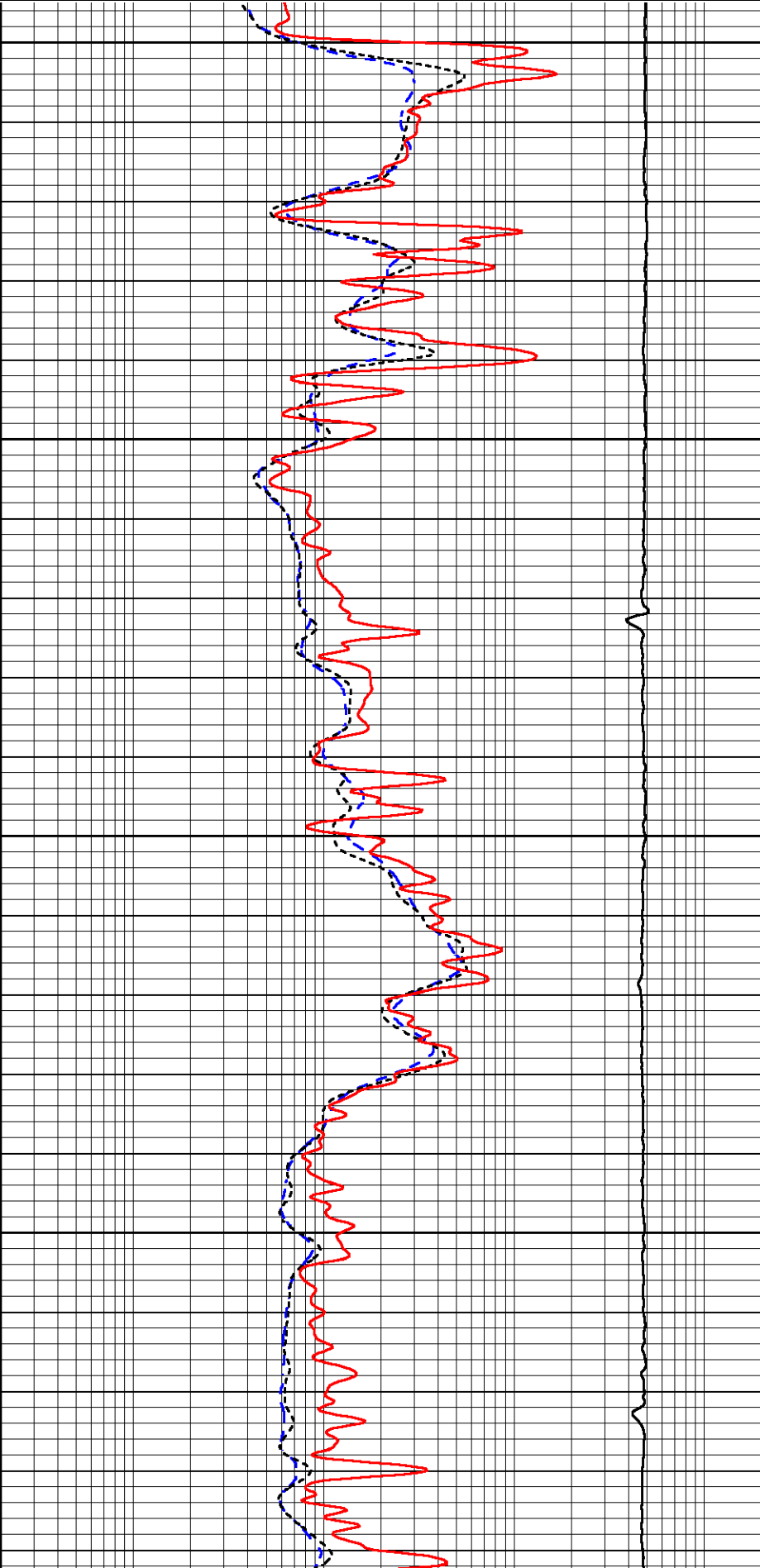
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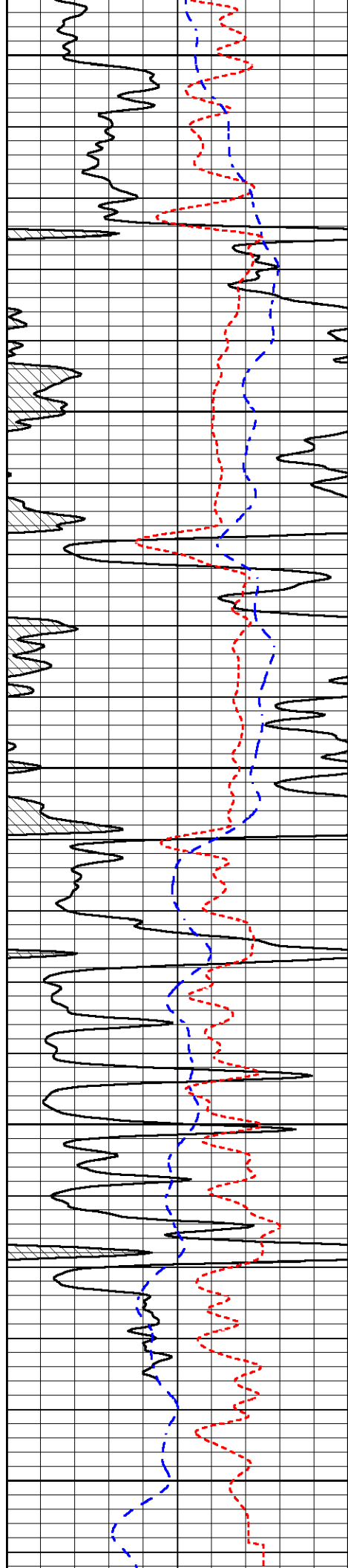
4500

4550

4600

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





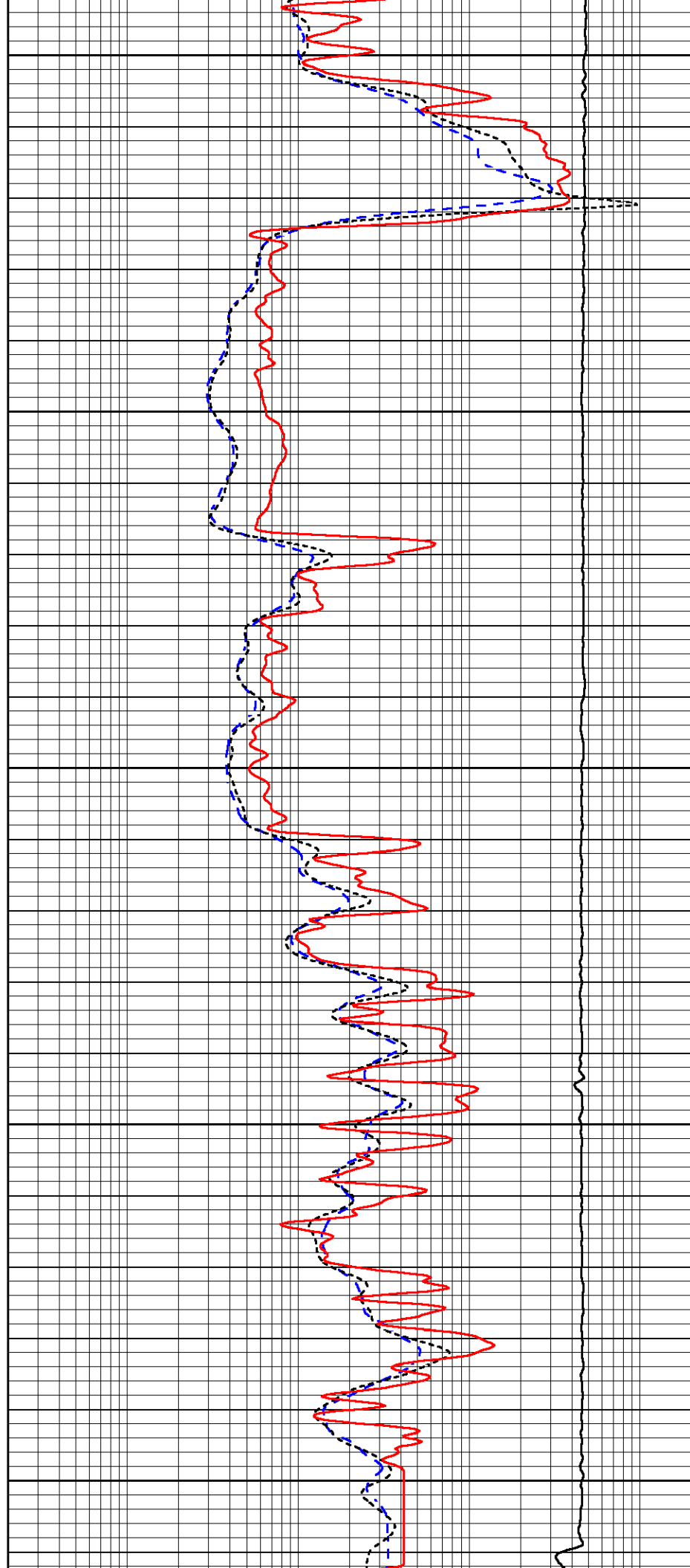
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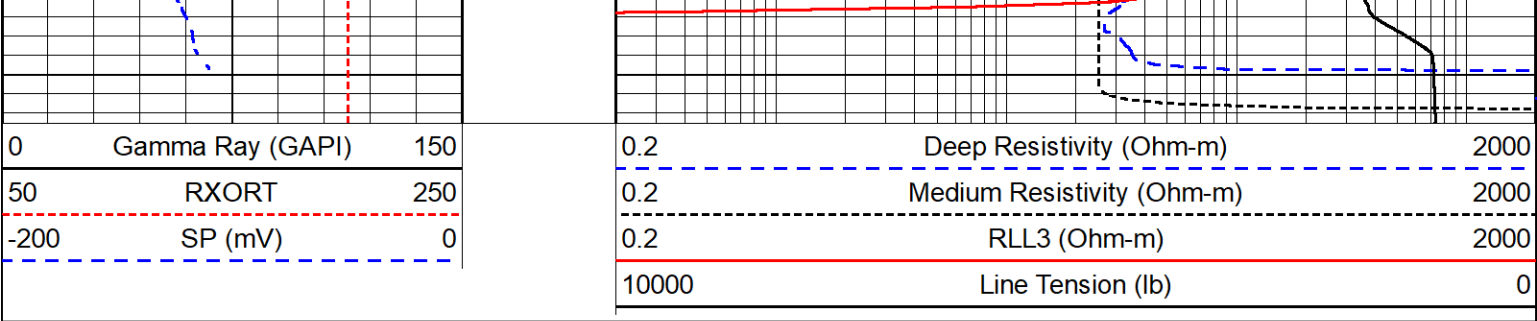
4700

4750

4800

4850





Calibration Report									
Database File	griffin_ethan 2.db								
Dataset Pathname	stkml/pass3.1								
Dataset Creation	Sun Jun 09 23:01:17 2024								
Dual Induction Calibration Report									
Serial-Model:					508A-M&W				
Surface Cal Performed:					Wed Jun 5 03:23:43 2024				
Readings			References				Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	84.200	428.150		0.000	255.800	mmho/m	0.485	-44.000	
Medium	141.000	670.654		0.000	255.800	mmho/m	0.410	-43.500	
Microlog Calibration Report									
Serial-Model:					402-PSI STKBL ML				
Performed:					Thu May 30 05:58:00 2024				
Readings			References				Results		
	Zero	Cal		Zero	Cal		m	b	
Normal	0.0037	0.0043		0.0000	10.0000	Ohm-m	11000.0000	-0.2000	
Inverse	0.1208	0.0013		0.0000	10.0000	Ohm-m	14500.0000	-0.2000	
Caliper	1.0046	1.1419		5.5000	20.0000	in	50.0000	-44.6250	
LITHODENSITY Calibration Report									
Serial Number:		701-01							
Tool Model:		STEP LITHO Short							
Performed:		Fri May 31 11:21:55 2024							
Source:									
	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	51	53	204	248	24	67	43	1	cps
LS:	76	85	326	418	46	135	87	2	cps
Aluminum:									
SS:	1068	1312	3049	2764	50	71	47	3	cps
LS:	1190	2281	4191	1907	55	132	82	5	cps
Magnesium:									
SS:	1763	2130	5001	4004	56	72	46	5	cps
LS:	4893	9012	16271	6524	121	127	83	16	cps
Aluminum+Iron:									
SS:	685	924	2571	2406	45	72	47	3	cps
LS:	694	1582	3562	1707	54	132	84	4	cps

	Density Actual	Calibrated		PE Actual	Calibrated	Quality
Background:						
SS:						0.222
LS:						0.216
Aluminum:						
SS:	2.6000	2.6000	g/cc			0.201
LS:	2.6000	2.6000	g/cc			0.230
Magnesium:						
SS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.223
LS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.211
Aluminum+Iron:						
SS:					6.1800	0.204
LS:					6.1800	0.223

Caliper:	Reference:	Reading:
Small Ring:	6.0 in	0.2
Large Ring:	14.0 in	0.8
Gain:	12.765	
Offset:	2.575	

Compensated Neutron Calibration Report
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Serial Number:	210
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:	Sat Oct 21 23:48:19 2023	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.6000	GAPI/cps

	Company	Griffin Management, LLC
	Well	Ethan #2
	Field	
	County	Barber
	State	Kansas