



MIDWEST WIRELINE

DUAL INDUCTION
LOG

Company Griffin Management, LLC		Company Griffin Management, LLC	
Well	Gary #3	Well	Gary #3
Field	Turkey Creek East	Field	Turkey Creek East
County	Barber	County	Barber
State	Kansas	State	Kansas
Location: API #: 15-007-24481-00-00		Other Services	
SEC 15 TWP 30S RGE 15W		C/NL/CDL MEL	
Permanent Datum	Ground Level	Elevation	1932
Log Measured From	Kelly Bushing	K.B.	1937
Drilling Measured From	Kelly Bushing	D.F.	1932
		G.L.	1932
Date	10/11/2023		
Run Number	One		
Depth Driller	4804		
Depth Logger	4805		
Bottom Logged Interval	4804		
Top Log Interval	250		
Casing Driller	8.625 @ 259		
Casing Logger	258		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	10000		
Density / Viscosity	9.4 60		
pH / Fluid Loss	9.5 10.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.25 @ 70		
Rmt @ Meas. Temp	0.19 @ 70		
Rmc @ Meas. Temp	0.34 @ 70		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.14 @ 124		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	124		
Equipment Number	P-108		
Location	HAYS		
Recorded By	D. Schmidt		
Witnessed By	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,
1 South, 1 East,
South & 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		This Log Record Was Witnessed By	
Engineer: D. Schmidt		Primary Witness: Eli Felts	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	
Operator:		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		DIL-M&W (505 HT)	18.25	3.50	220.00
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					
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
CILD	8.33					
CILM	4.50					
SP	0.20					
Dataset: griffin_gary 3.db: field/well/stkml/pass3.5						
Total length: 42.23 ft						
Total weight: 685.00 lb						
O.D.: 5.00 in						

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_gary 3.db
Dataset field/well/stkml/pass3.5/_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	No	mmho/m -9	mmho/m -2	mV 382	degF 50	Off	ft 4805

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

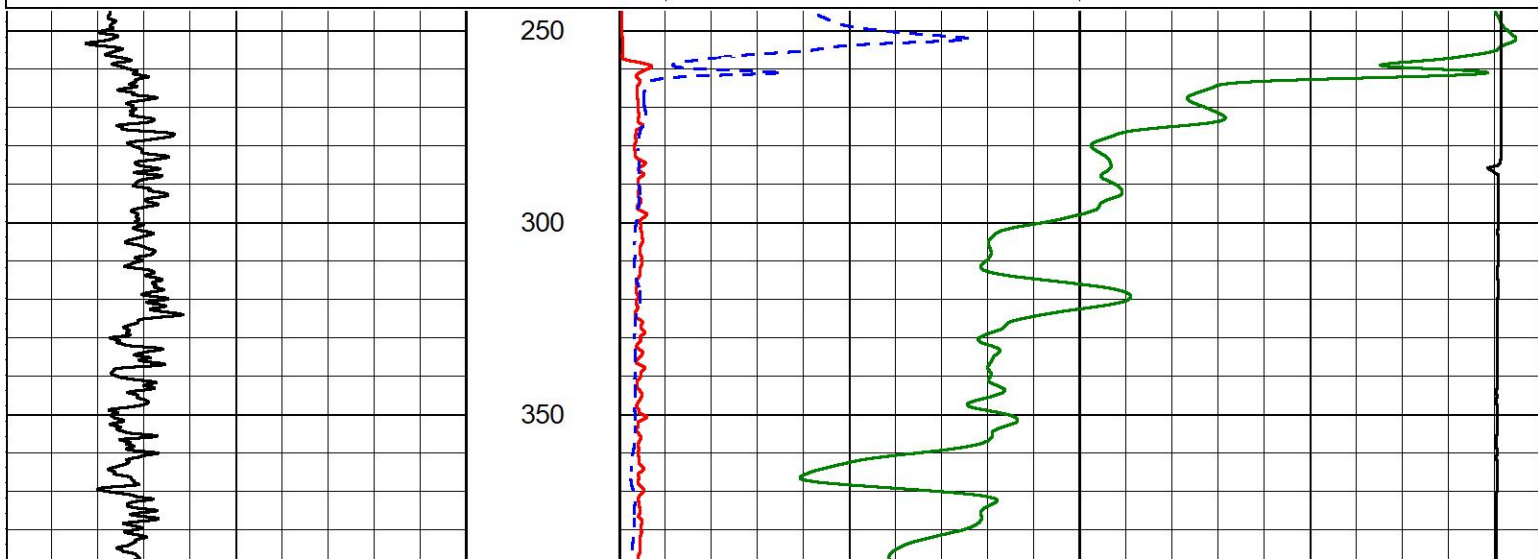


2" SCALE RESISTIVITY

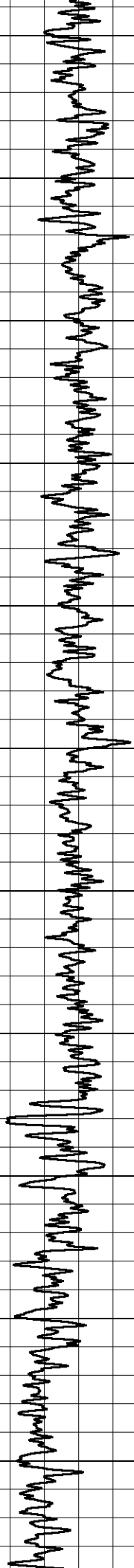
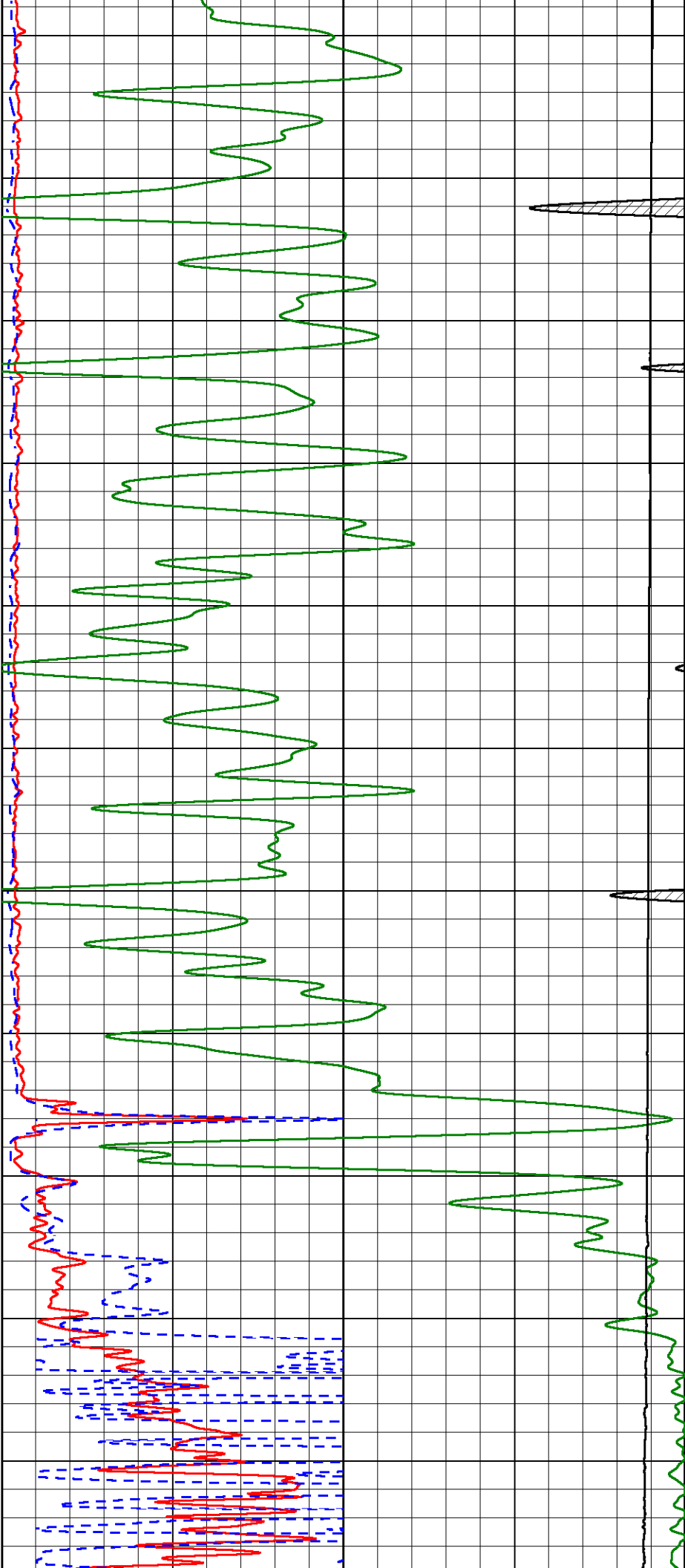
MAIN PASS

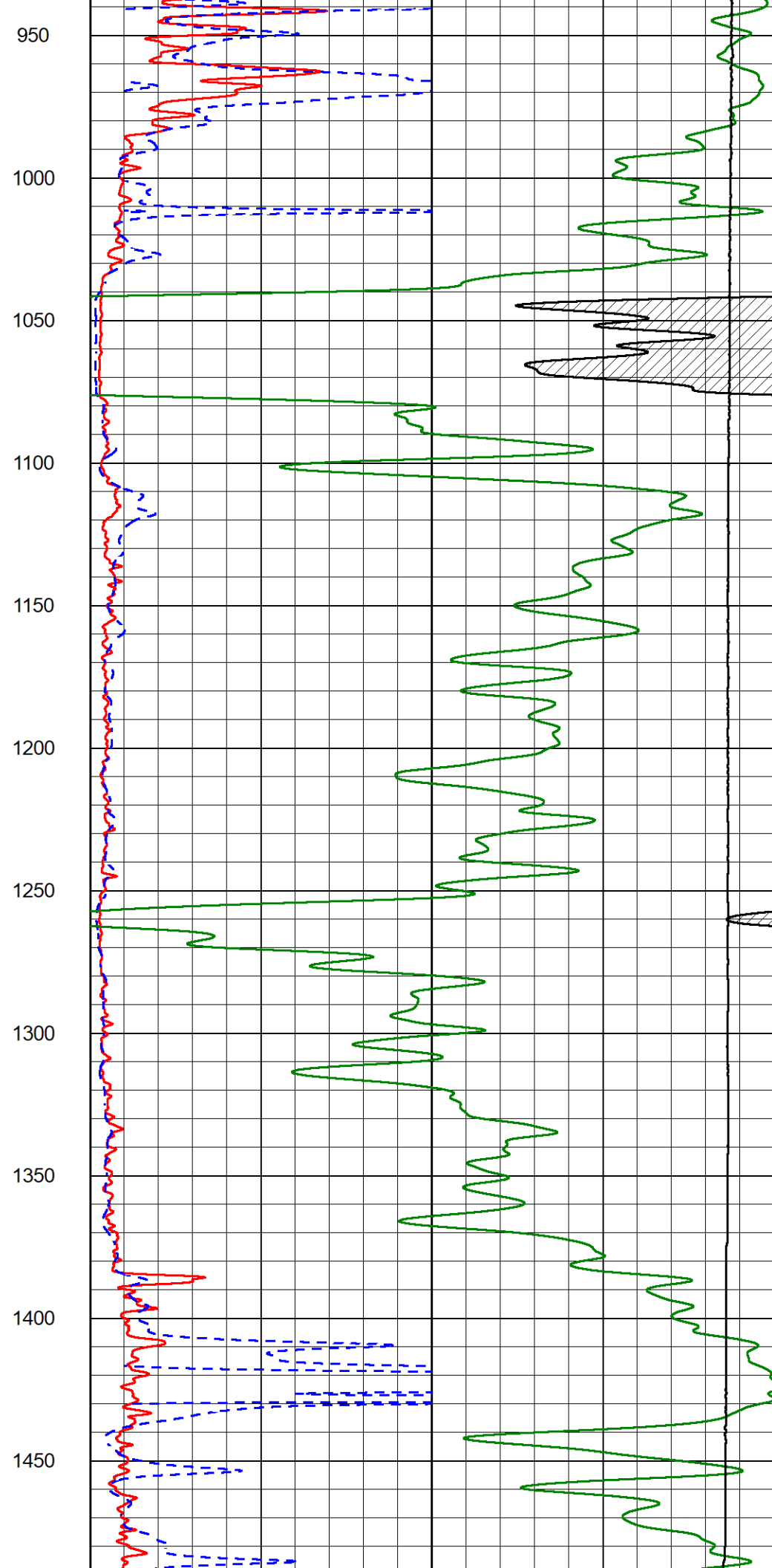
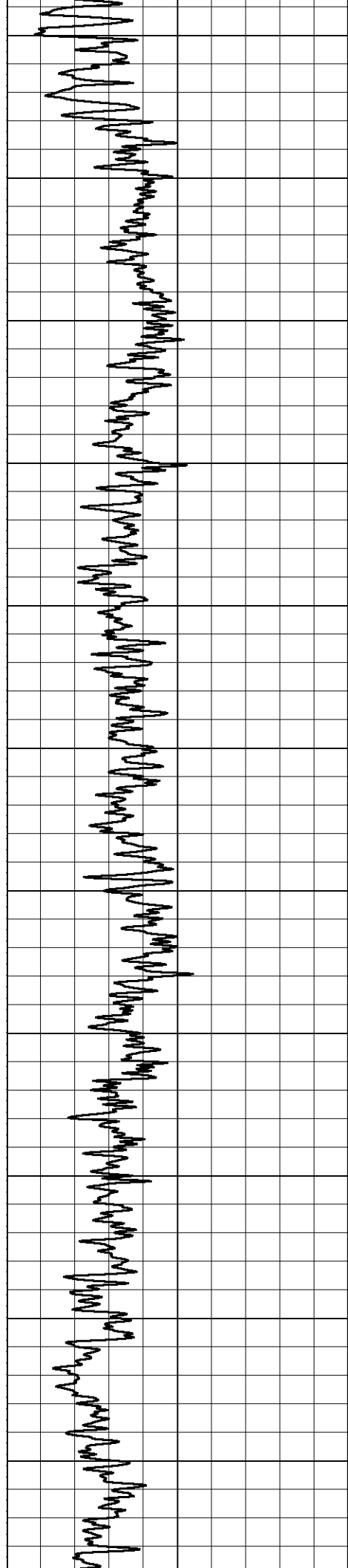
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Dataset Pathname stkml/pass3.3
Presentation Format _dil2in
Dataset Creation Wed Oct 11 07:03:46 2023
Charted by Depth in Feet scaled 1:600

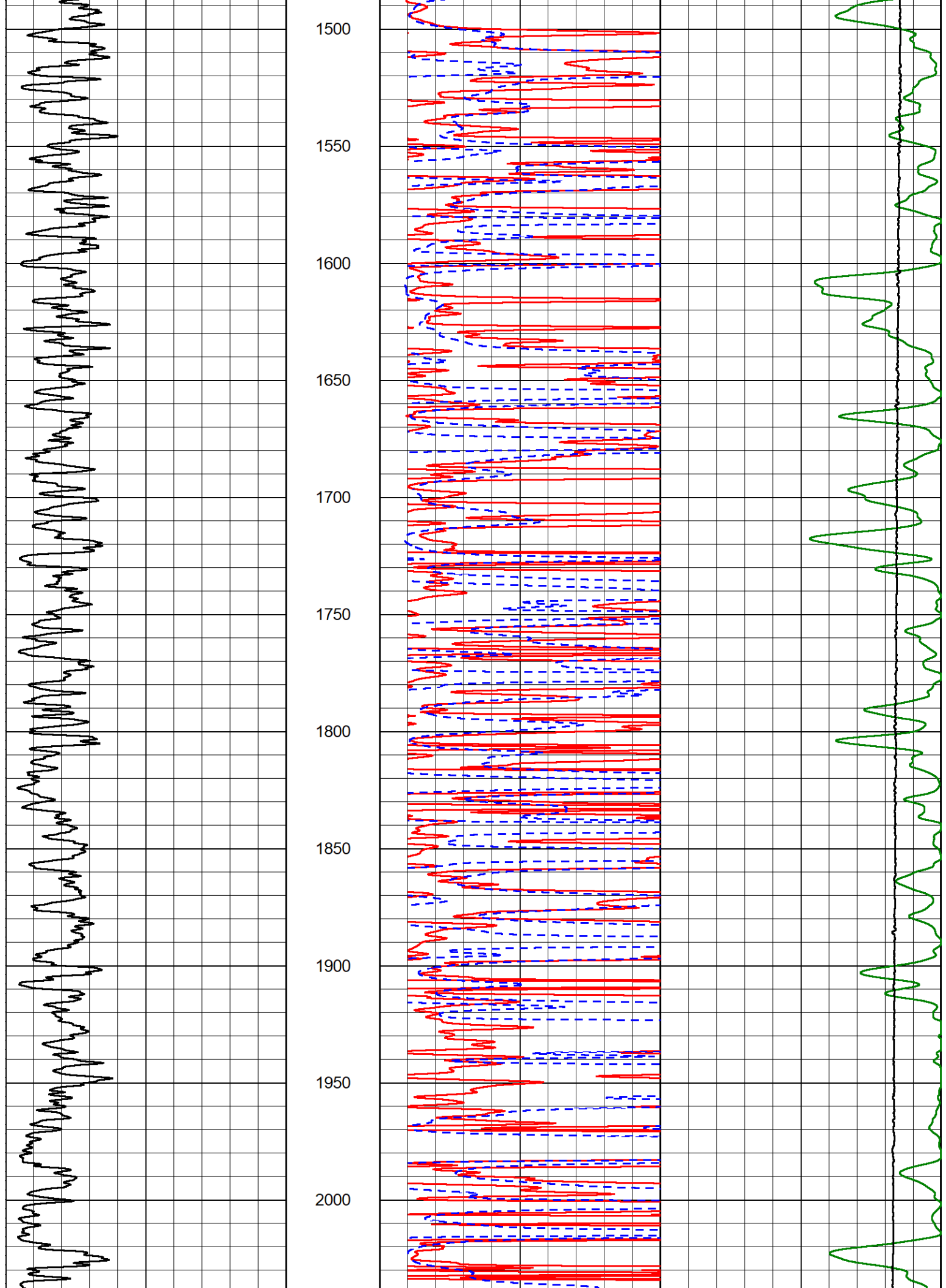
0	Gamma Ray (GAPI)	300	1000	Conductivity (mmho/m)	0
			15000	Line Tension (lb)	0
			0	Shallow Resistivity (Ohm-m)	50
			0	Deep Resistivity (Ohm-m)	50
				Shallow Resistivity	
			50	(Ohm-m)	200
			50	Deep Resistivity (Ohm-m)	200

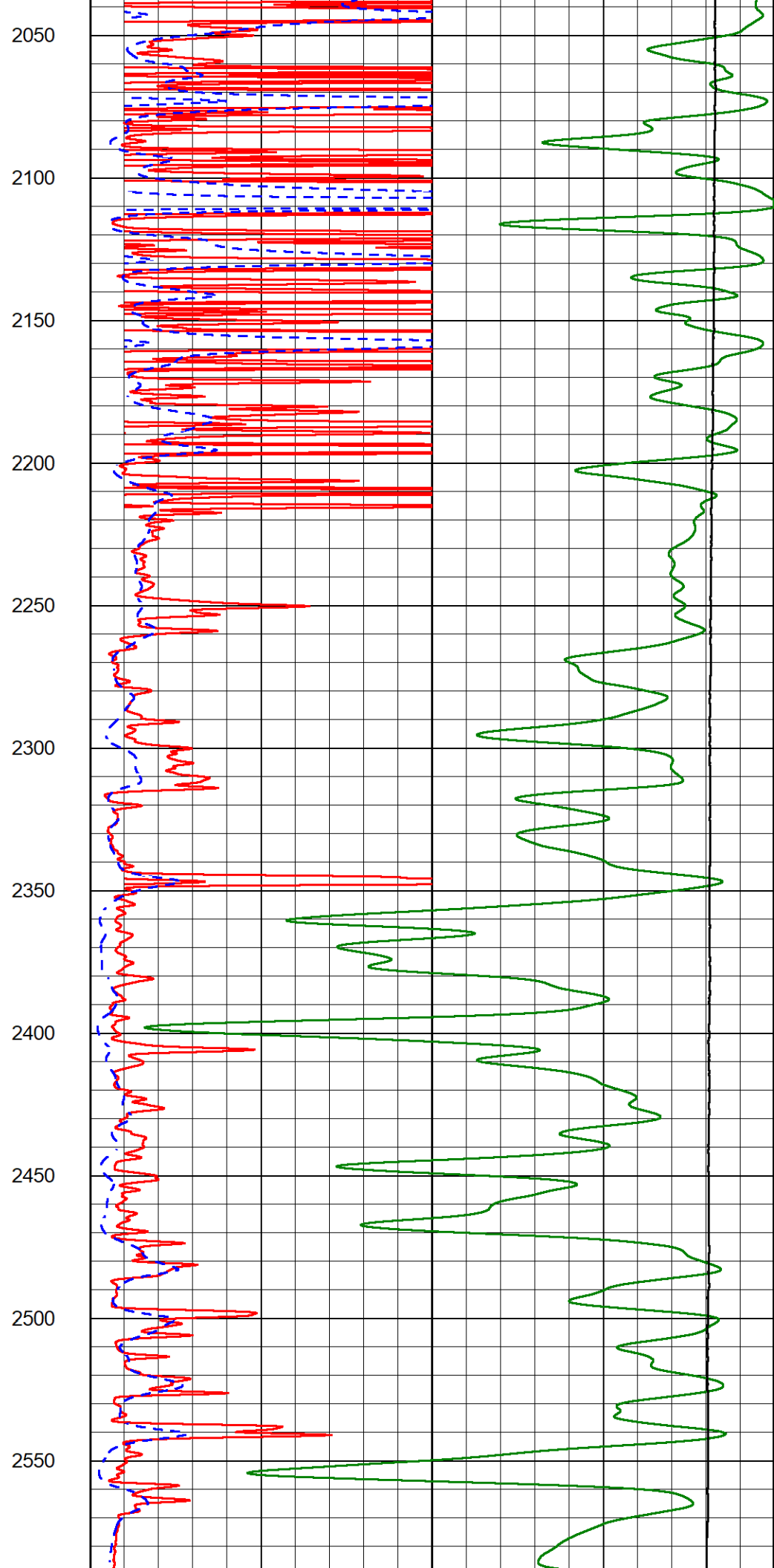
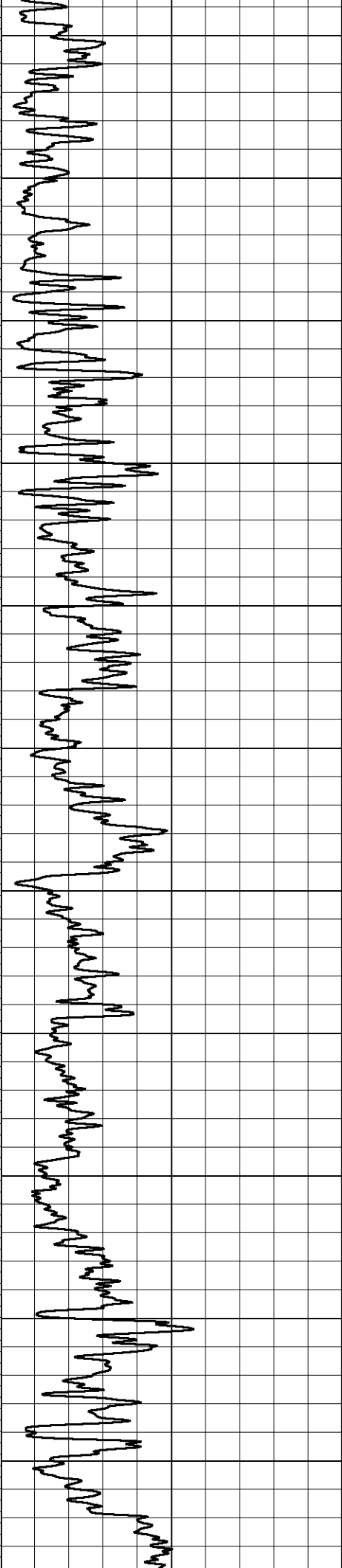


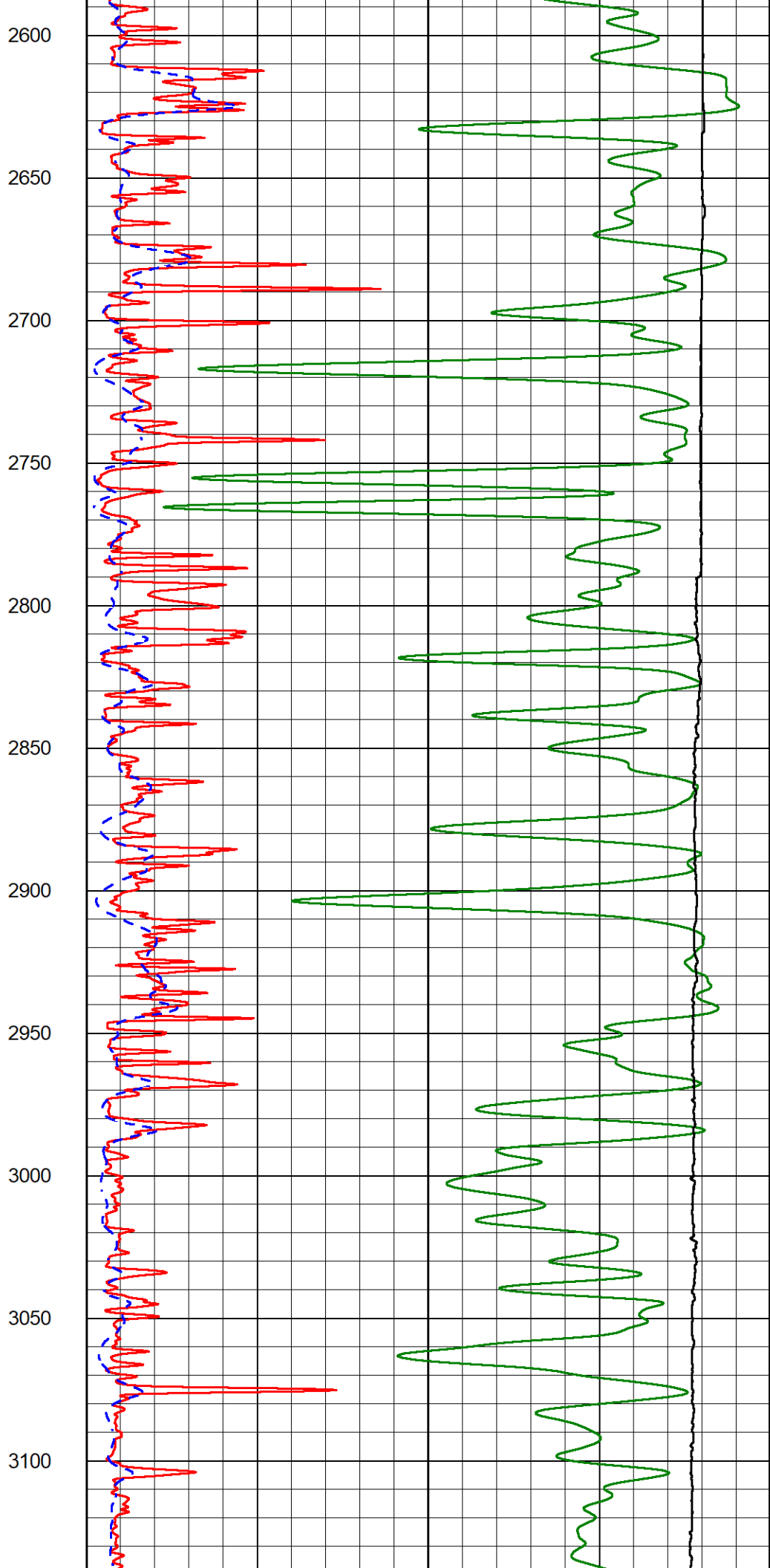
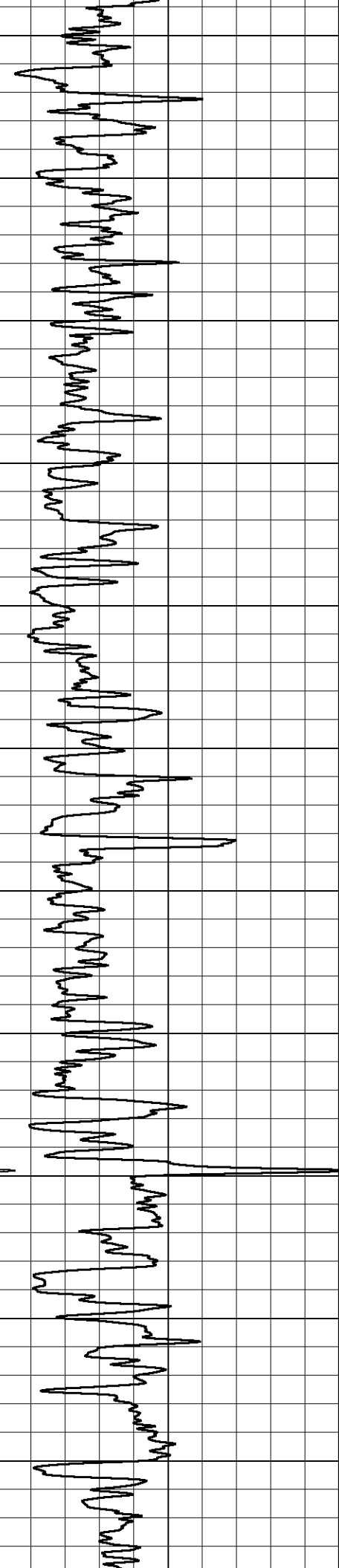
400
450
500
550
600
650
700
750
800
850
900

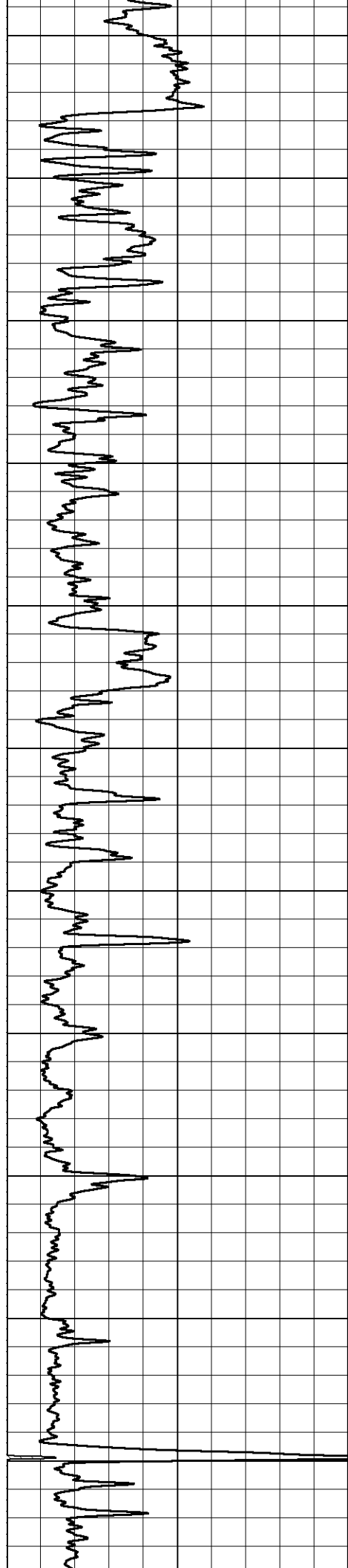












3150

3200

3250

3300

3350

3400

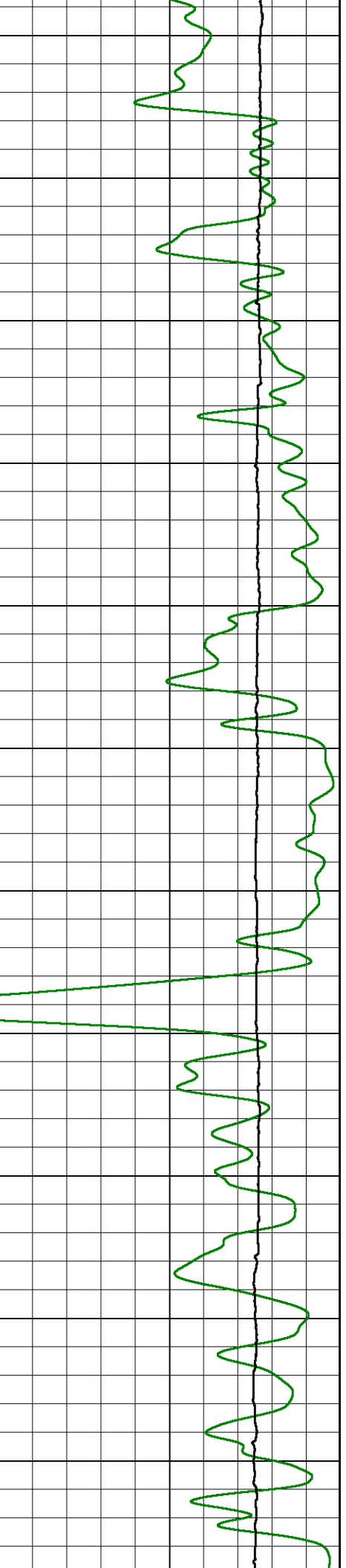
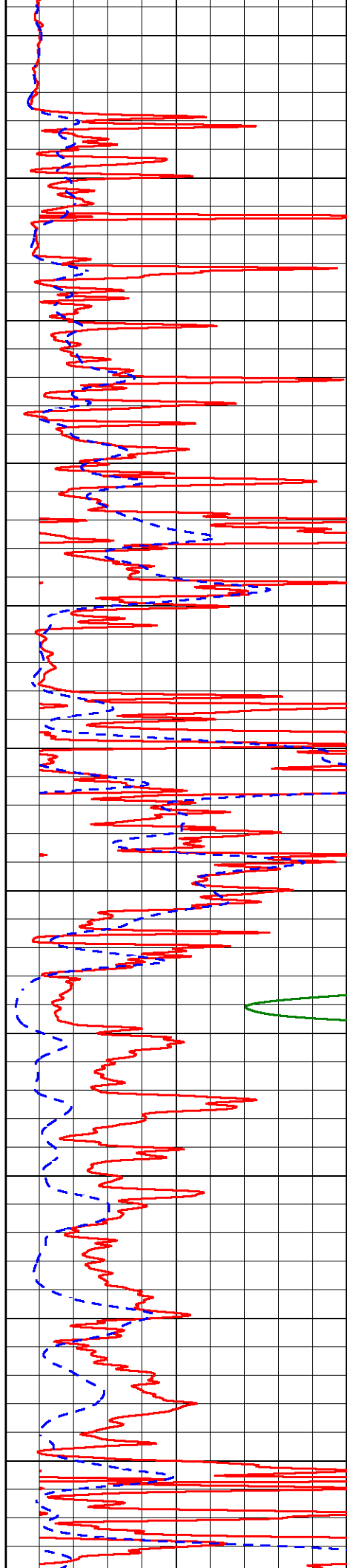
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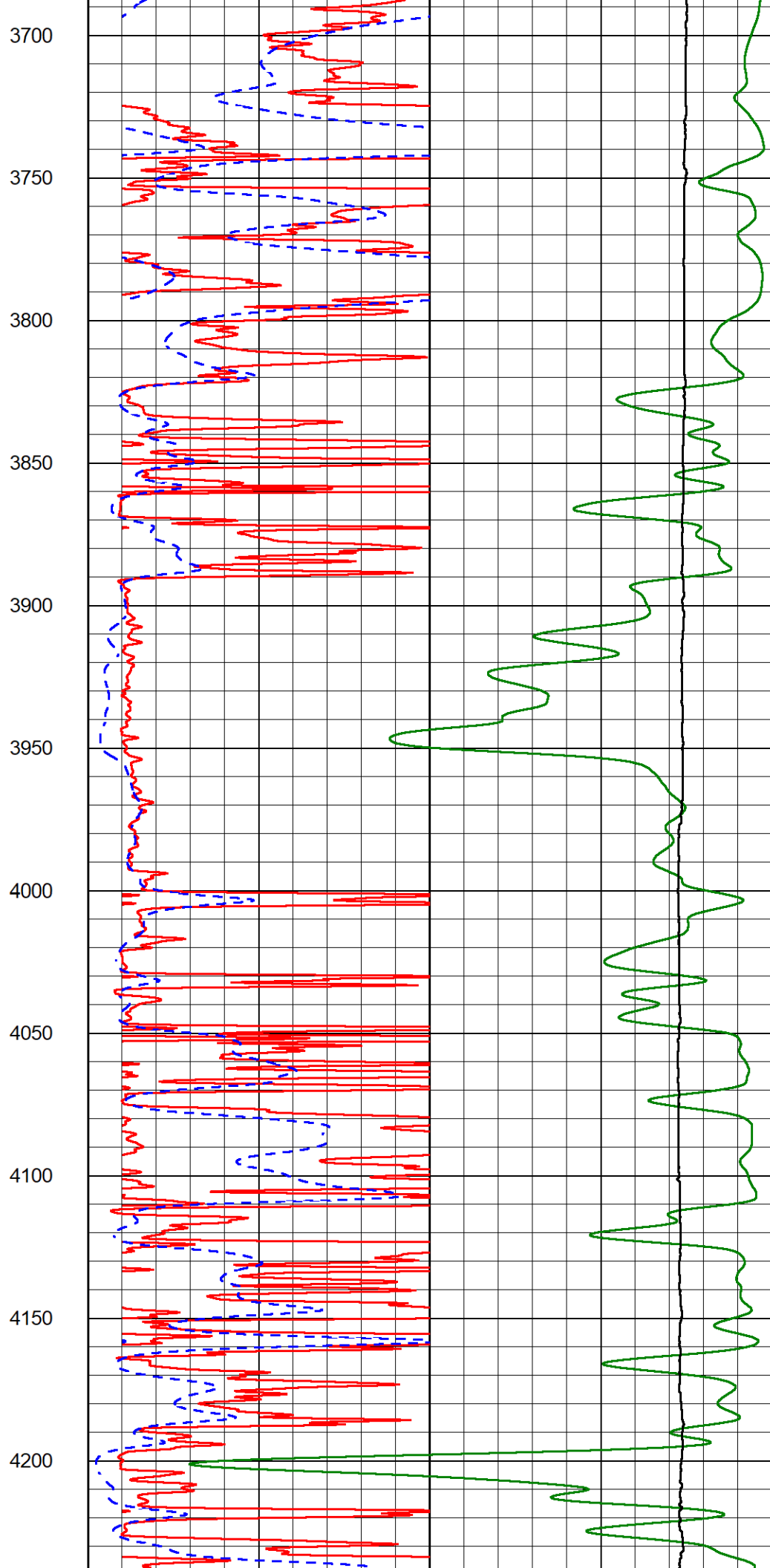
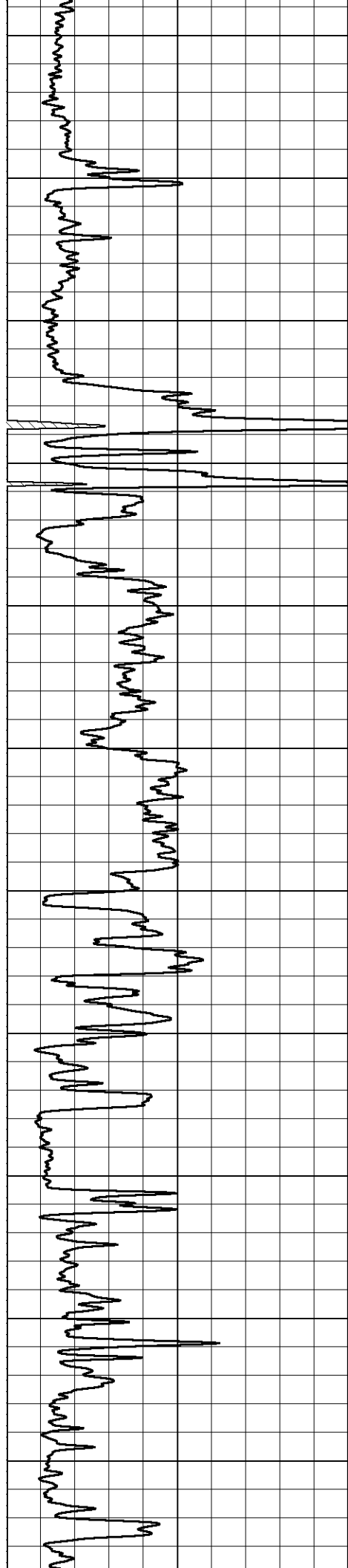
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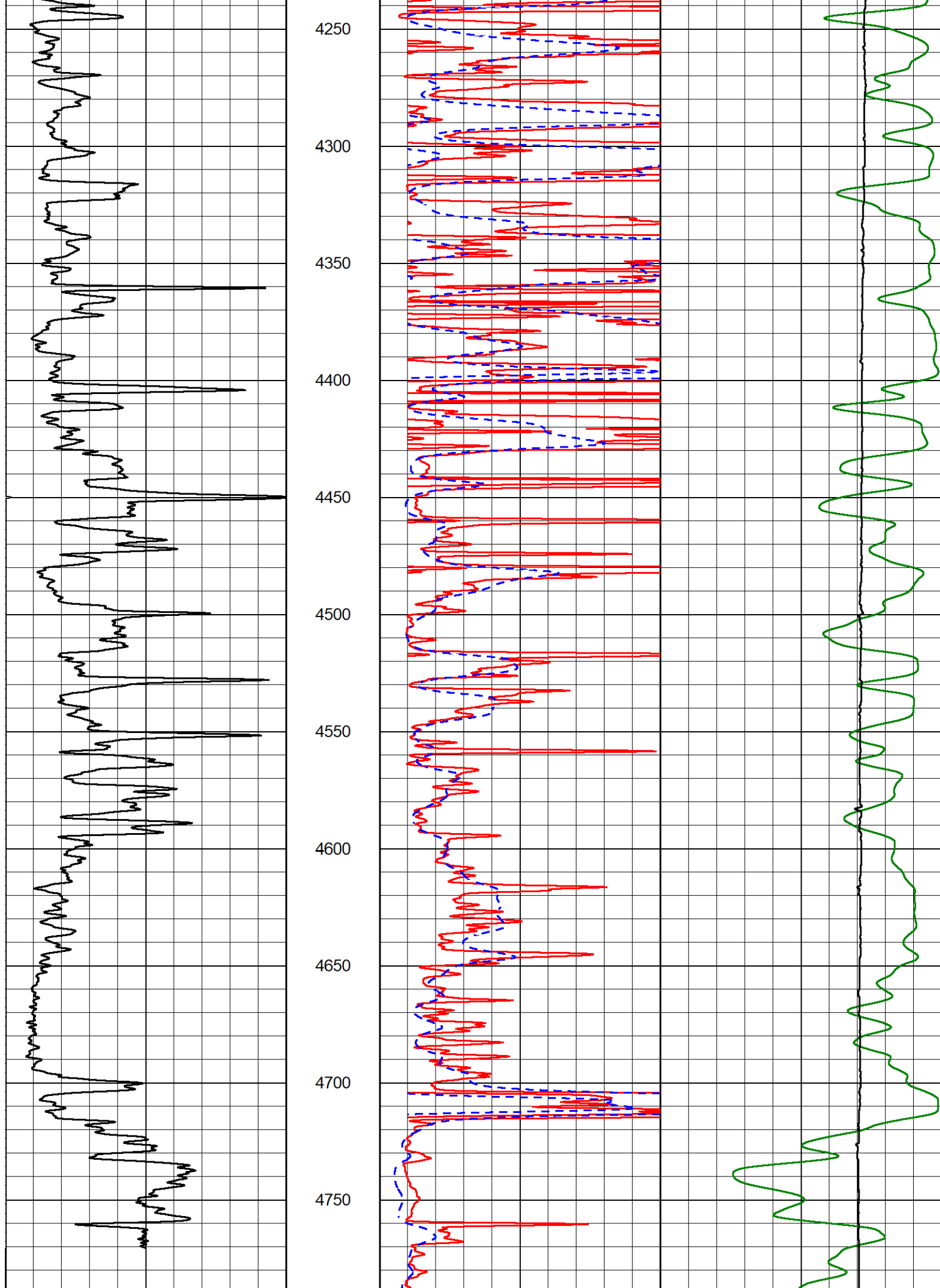
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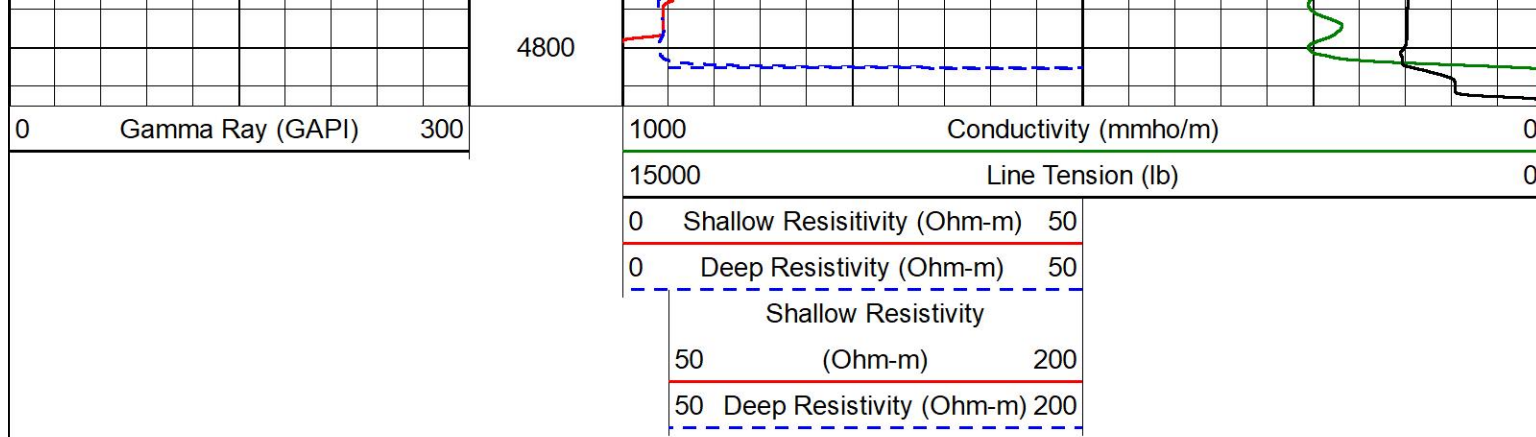
3600

3650









MIDWEST WIRELINE

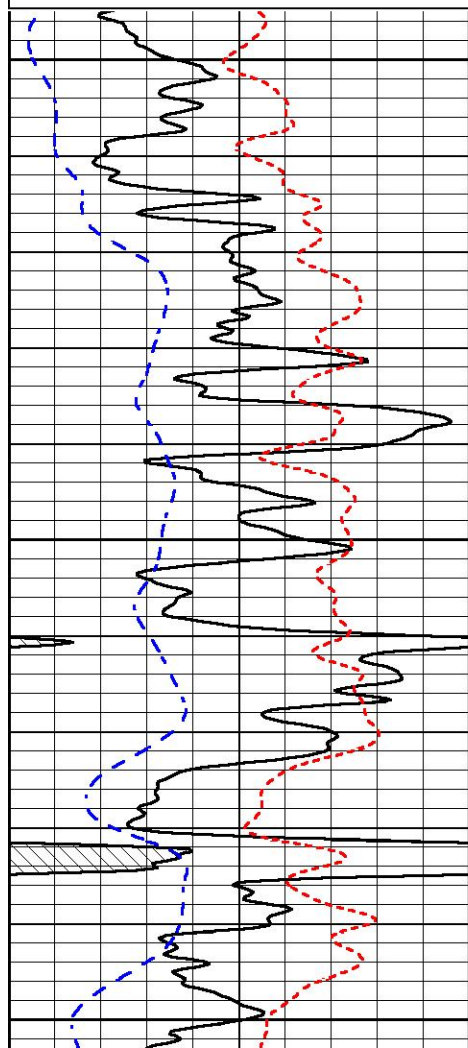
DETAIL SECTION

MAIN PASS

Database File griffin_gary 3.db
 Dataset Pathname stkml/pass3.1
 Presentation Format _dil
 Dataset Creation Wed Oct 11 06:55:53 2023
 Charted by Depth in Feet scaled 1:240

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

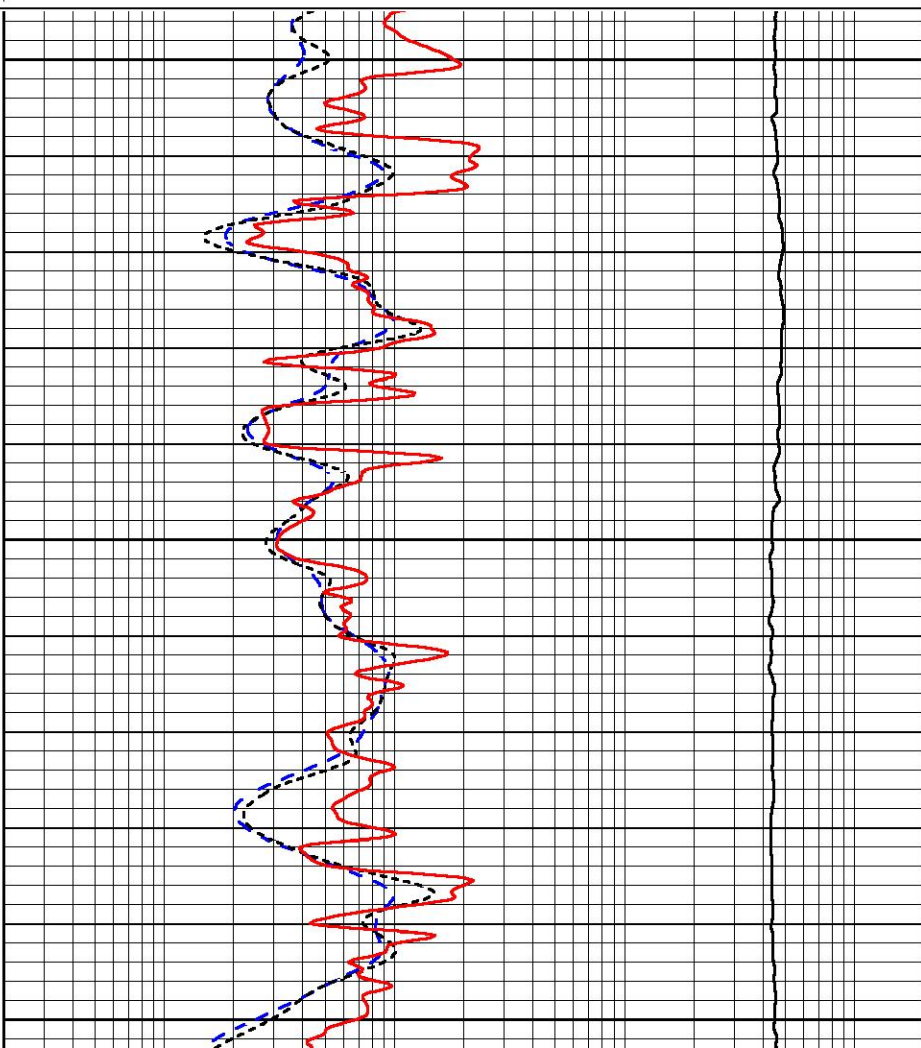
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

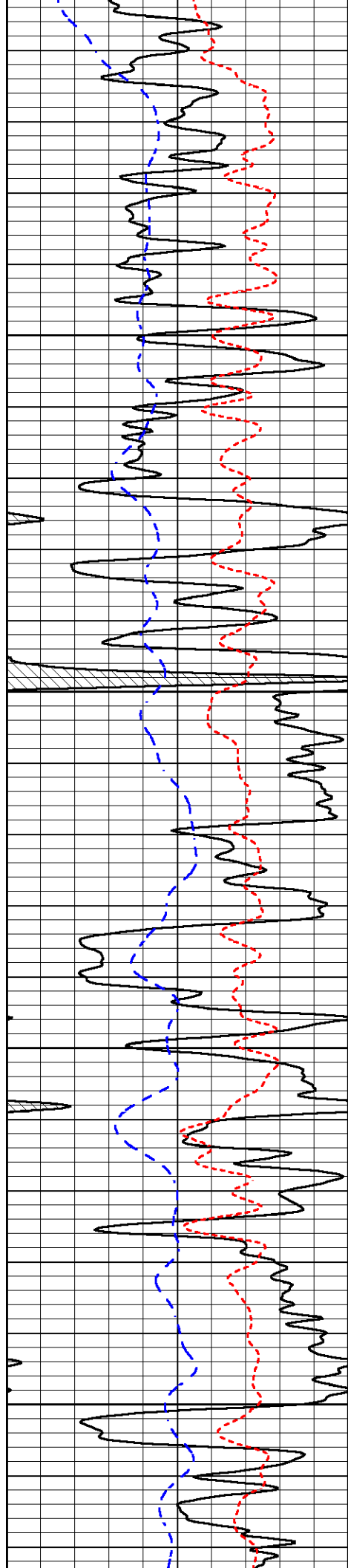


2800

2850

2900



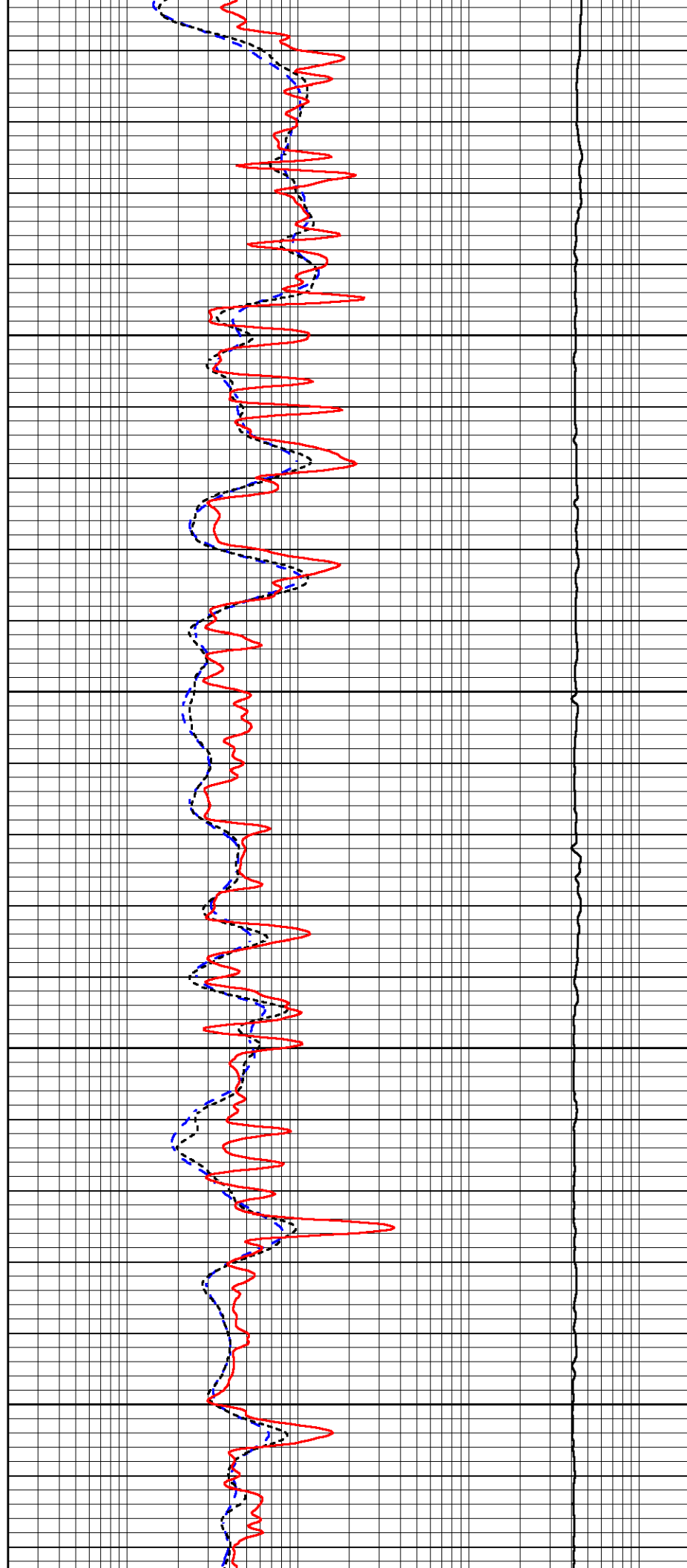


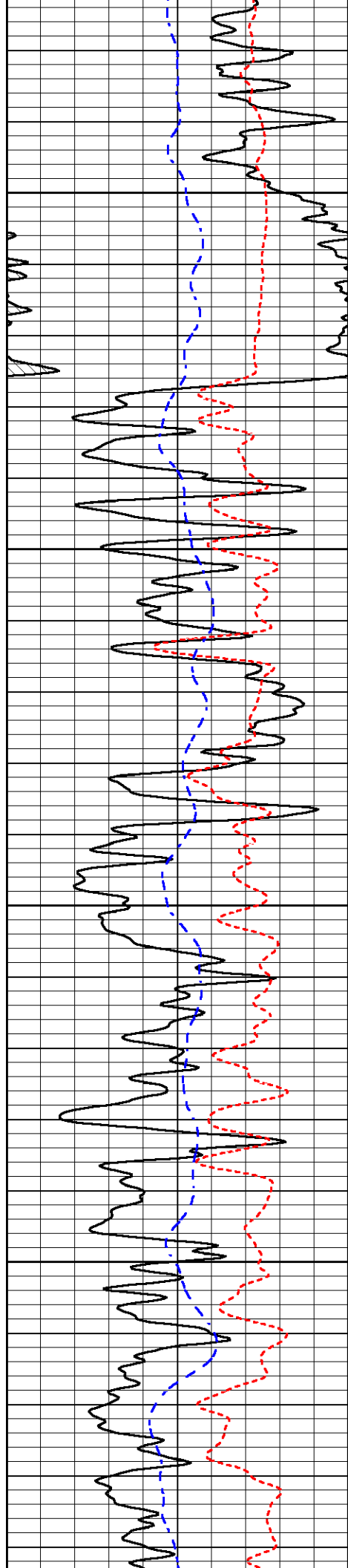
2950

3000

3050

3100



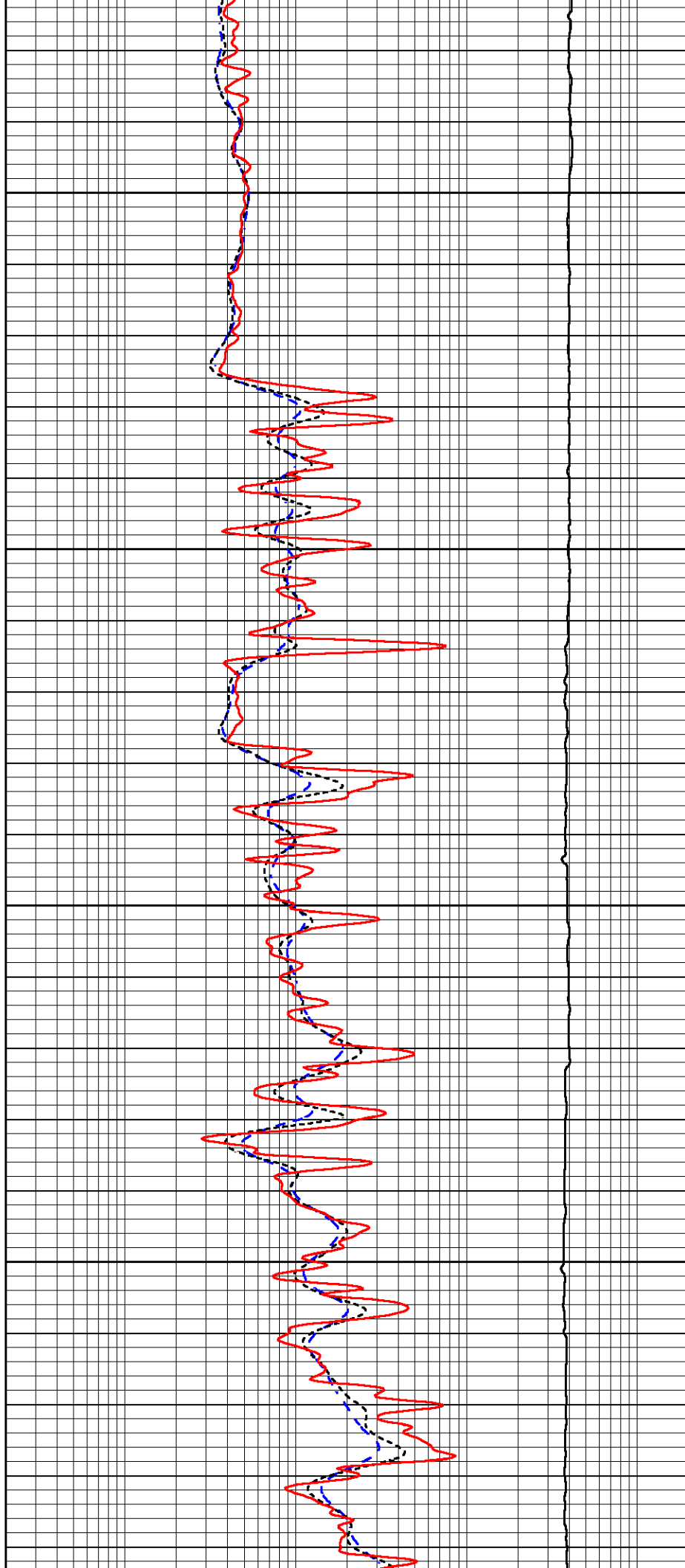


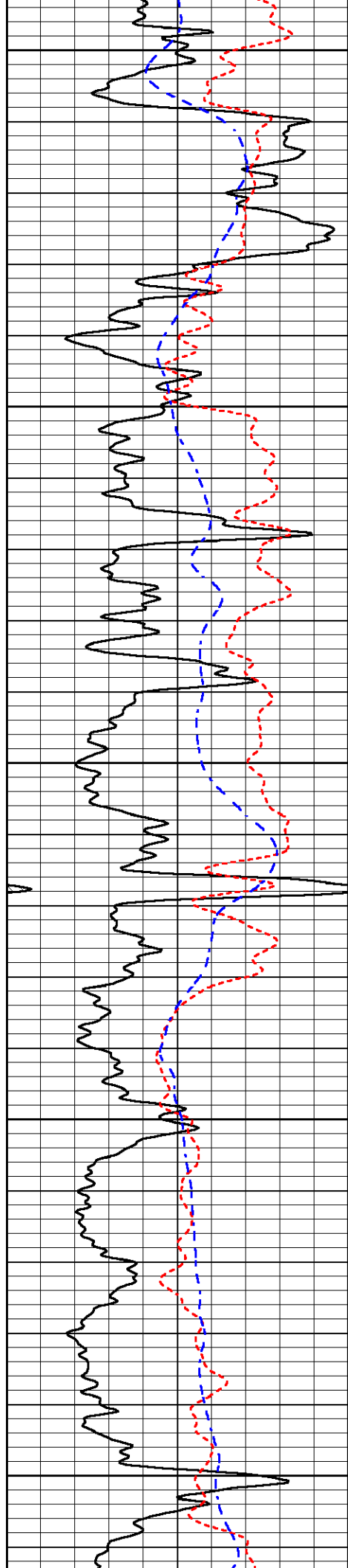
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3200

3250

3300





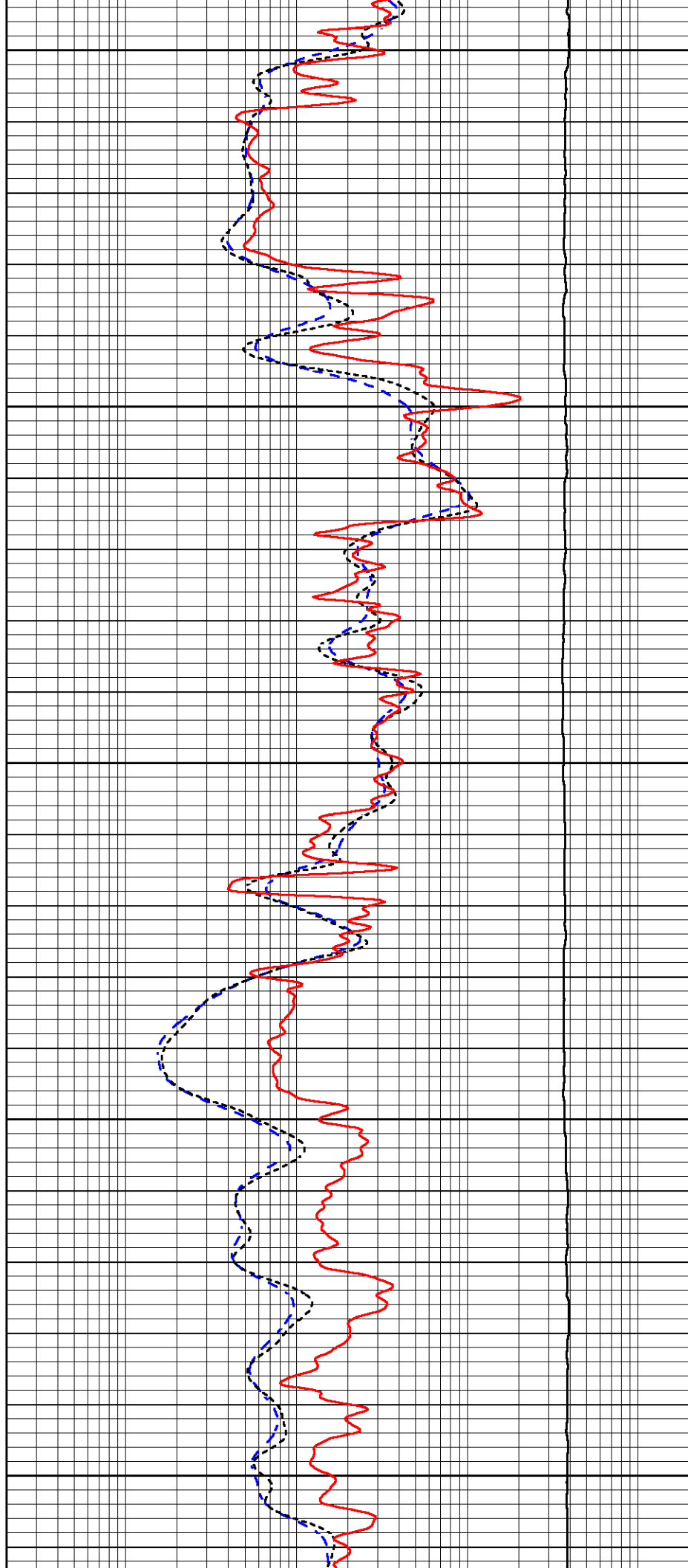
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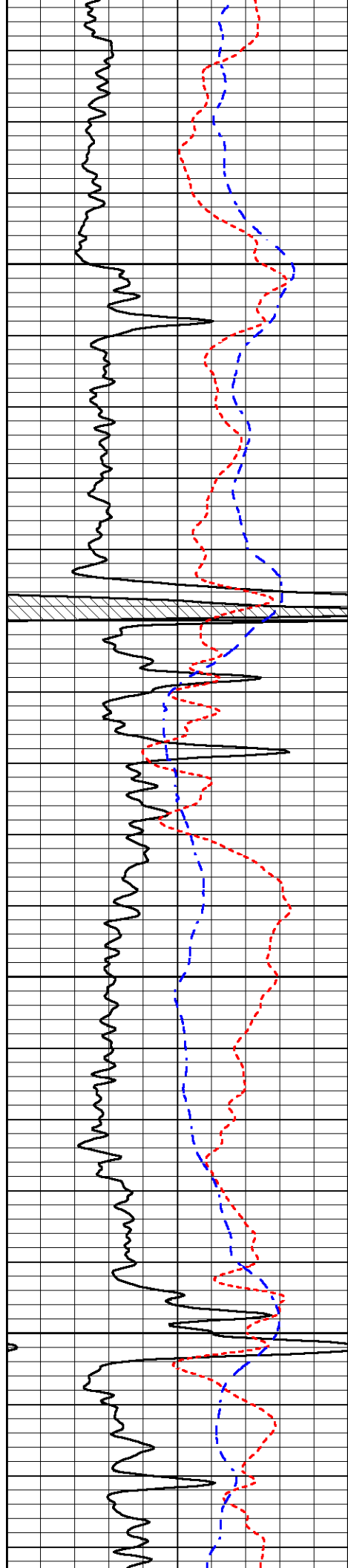
3400

3450

3500

3550



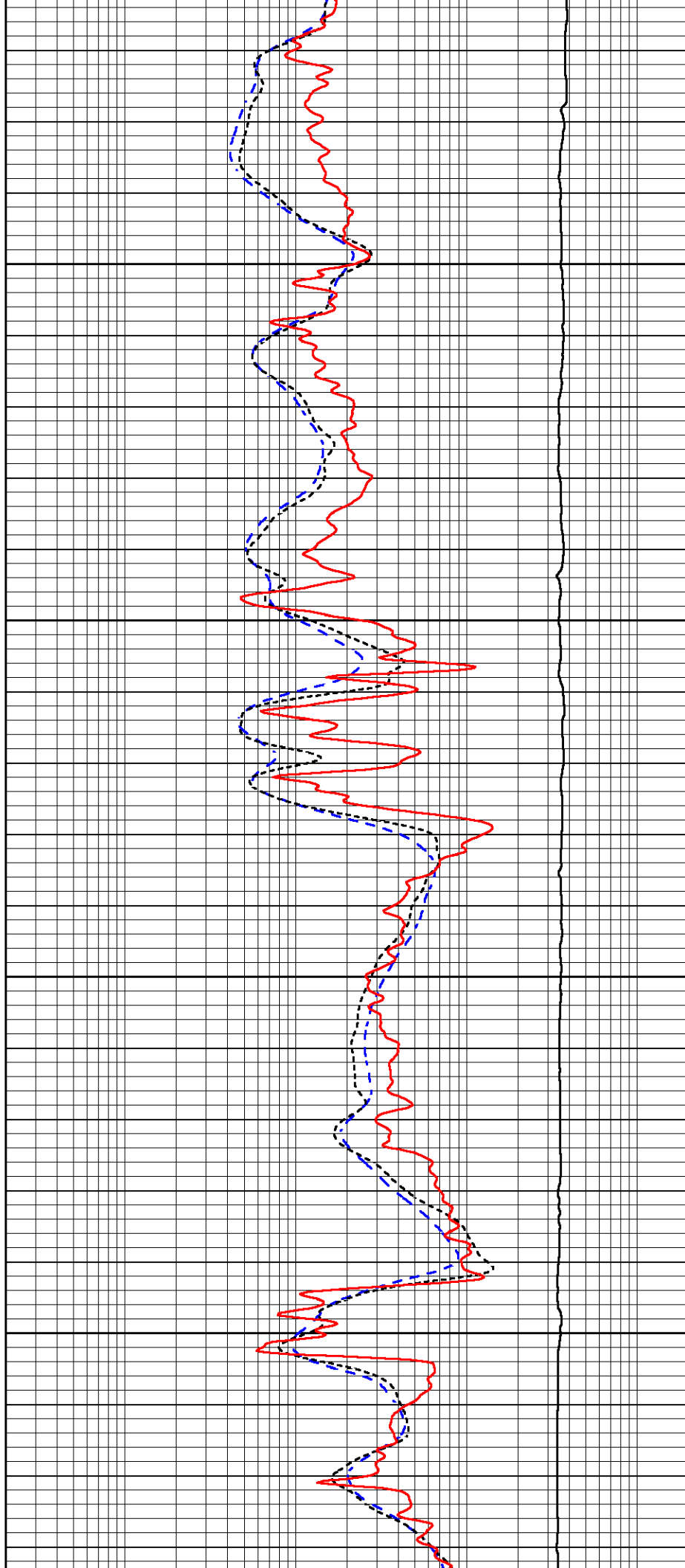


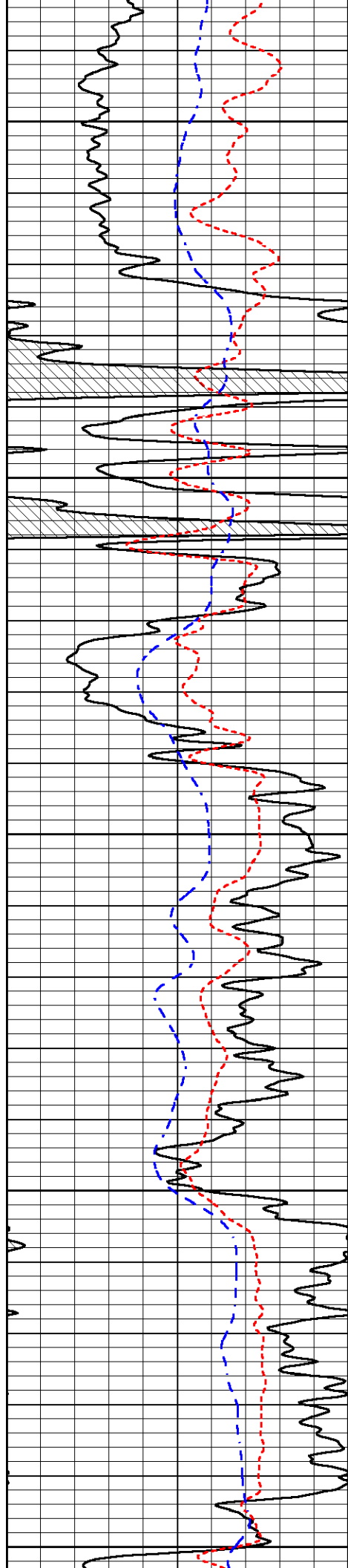
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3650

3700

3750





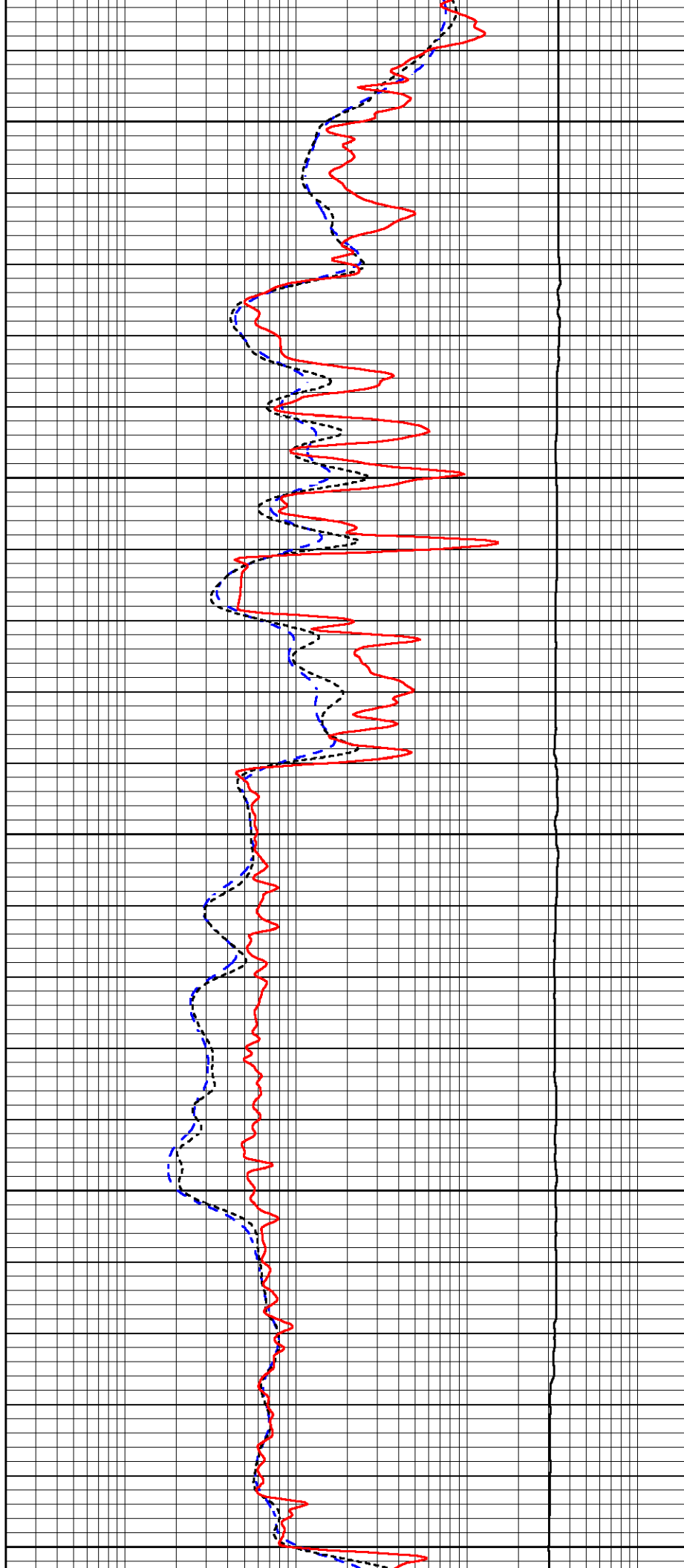
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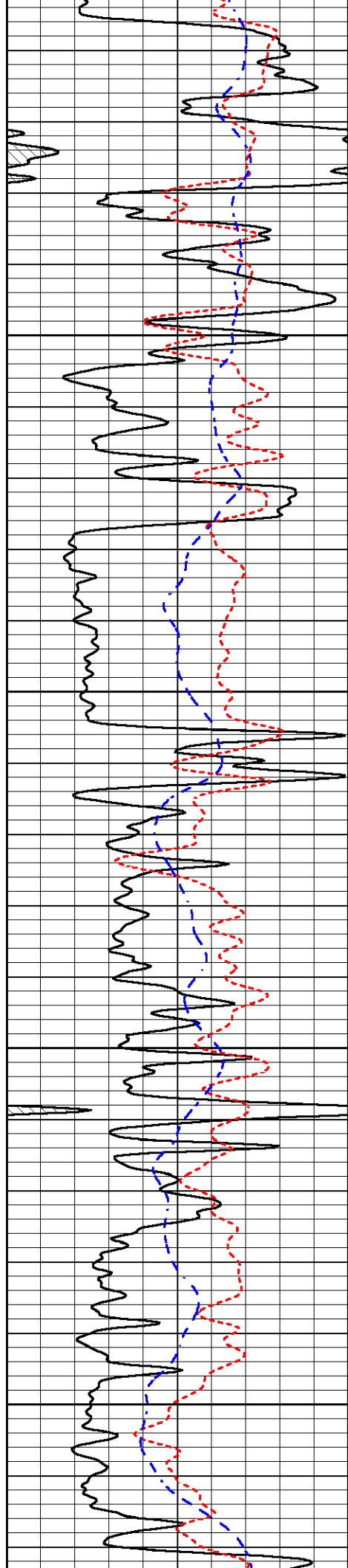
3850

3900

3950

4000



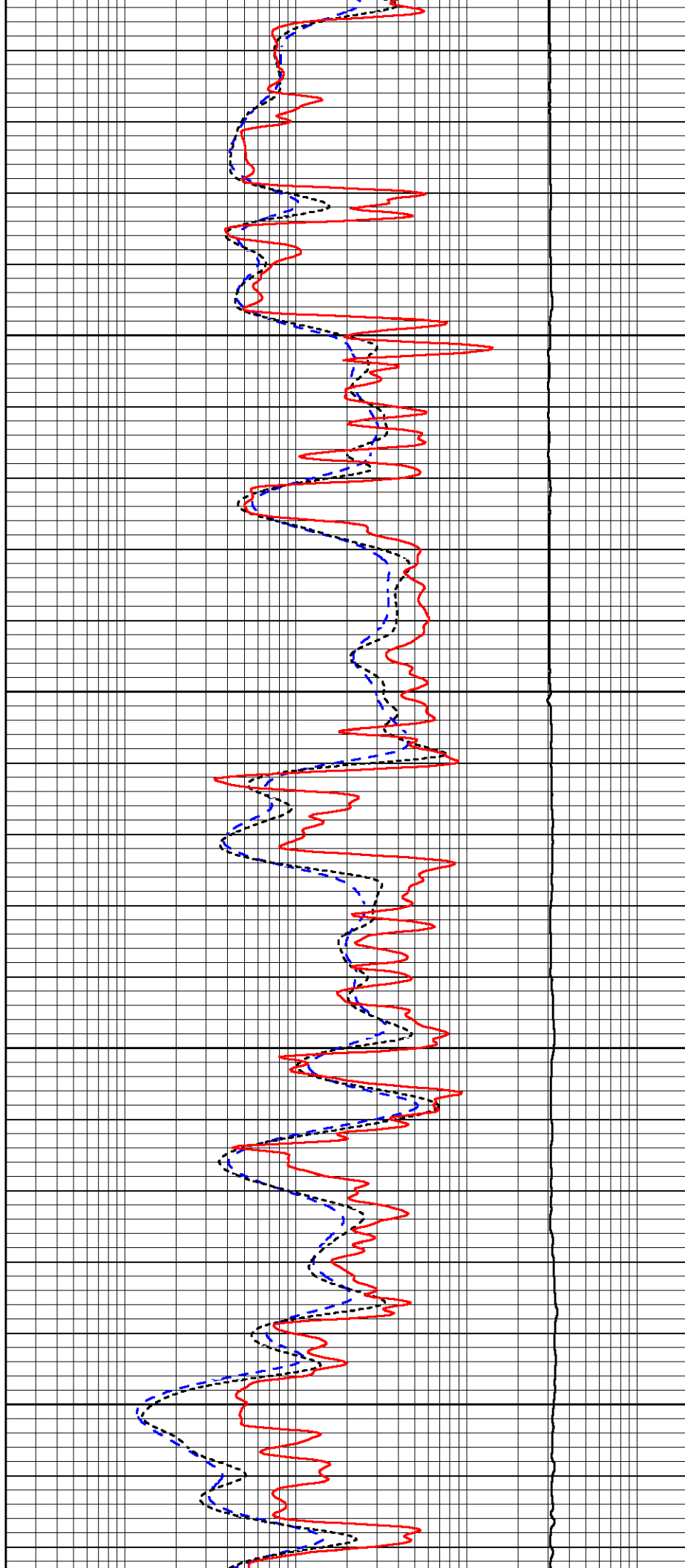


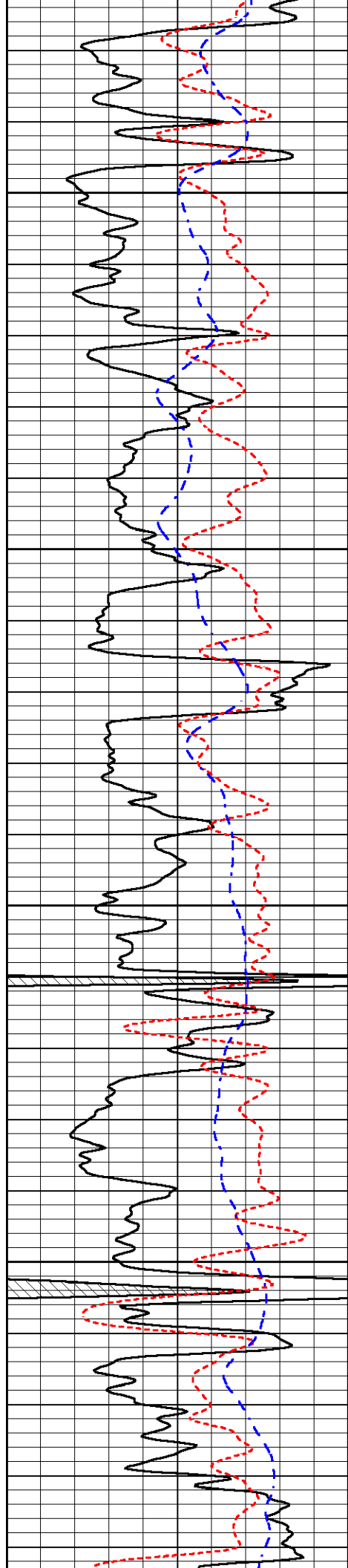
4050

4100

4150

4200



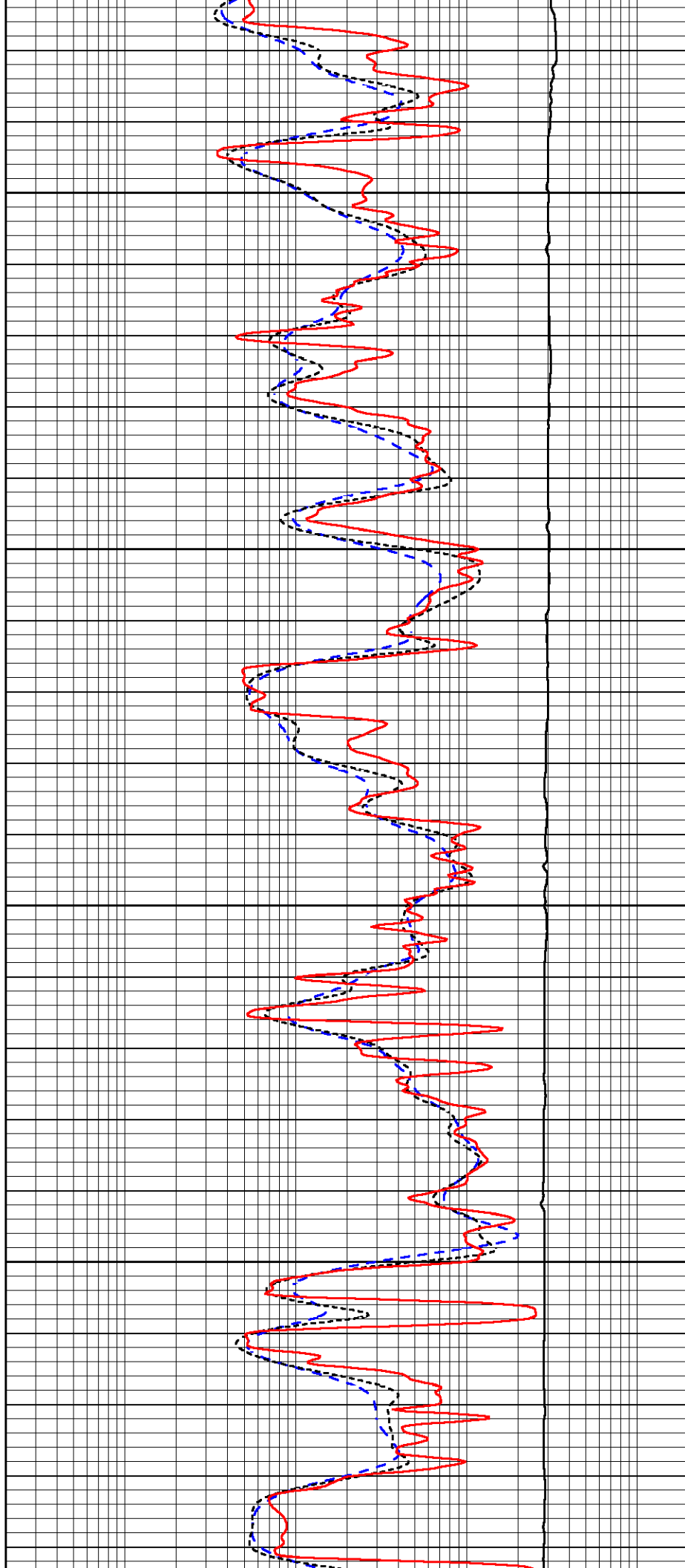


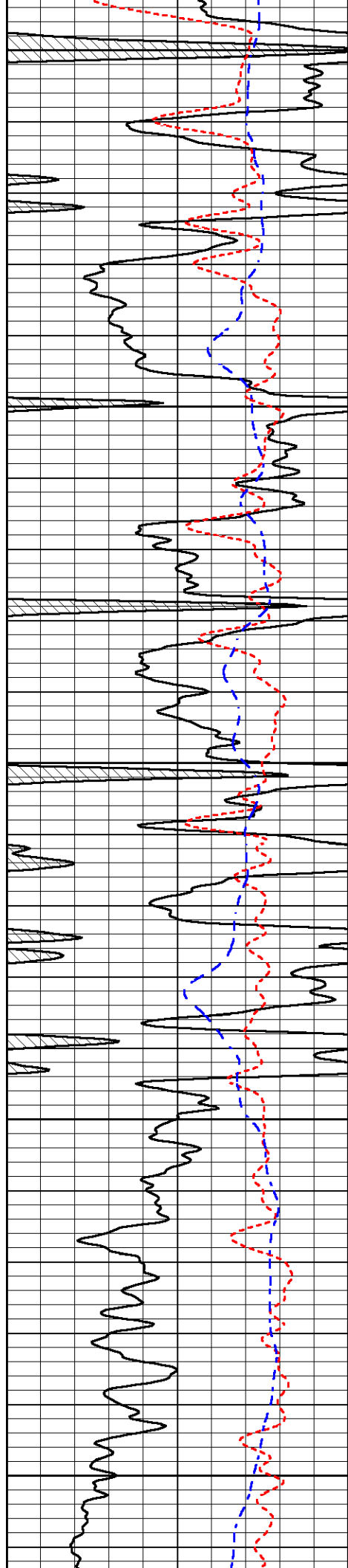
4250

4300

4350

4400





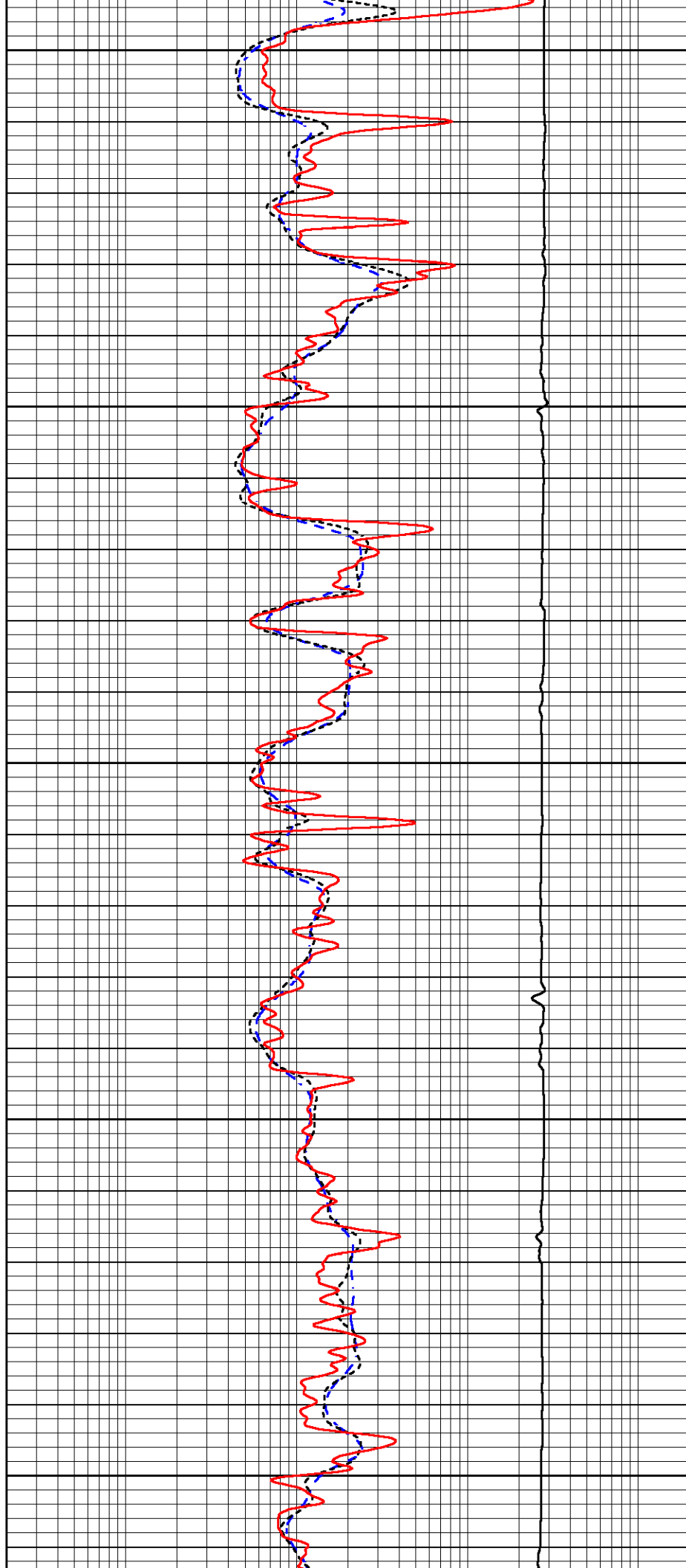
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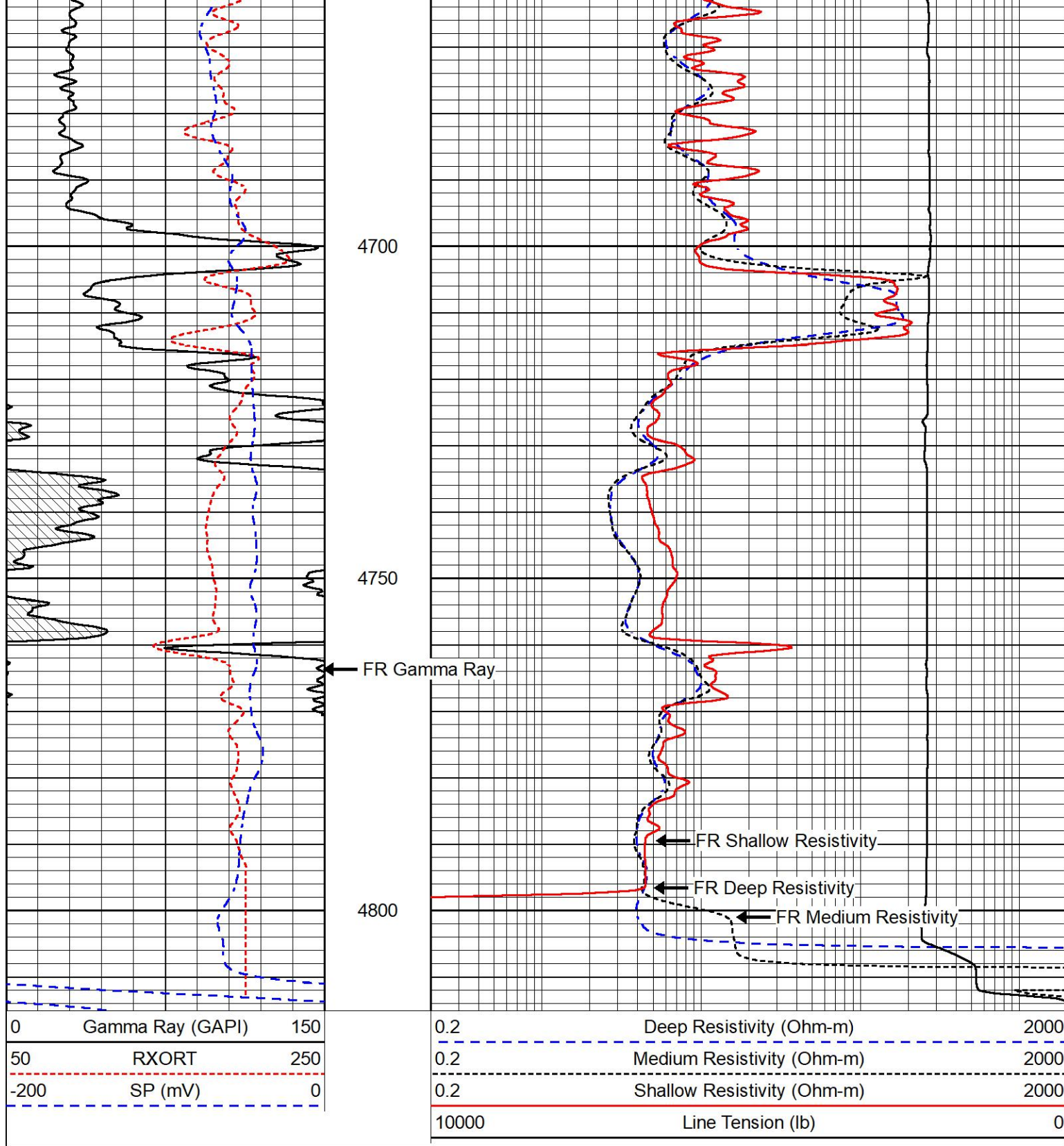
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4550

4600

4650





MIDWEST WIRELINE

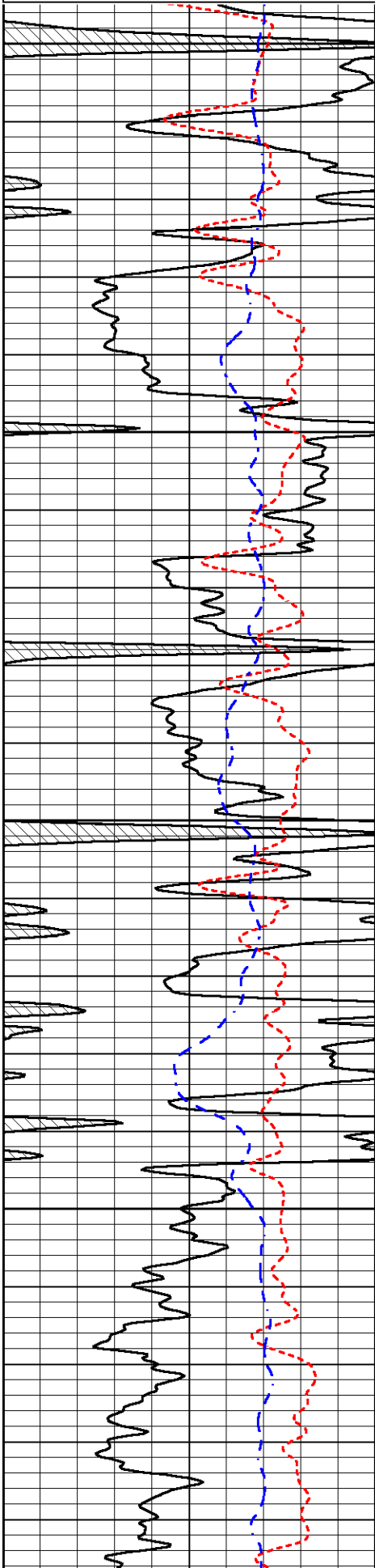
REPEAT SECTION

REPEAT PASS

Database File griffin_gary 3.db
Dataset Pathname stkml/pass2.10
Presentation Format _dil
Dataset Creation Wed Oct 11 05:05:39 2023
Charted by Depth in Feet scaled 1:240



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



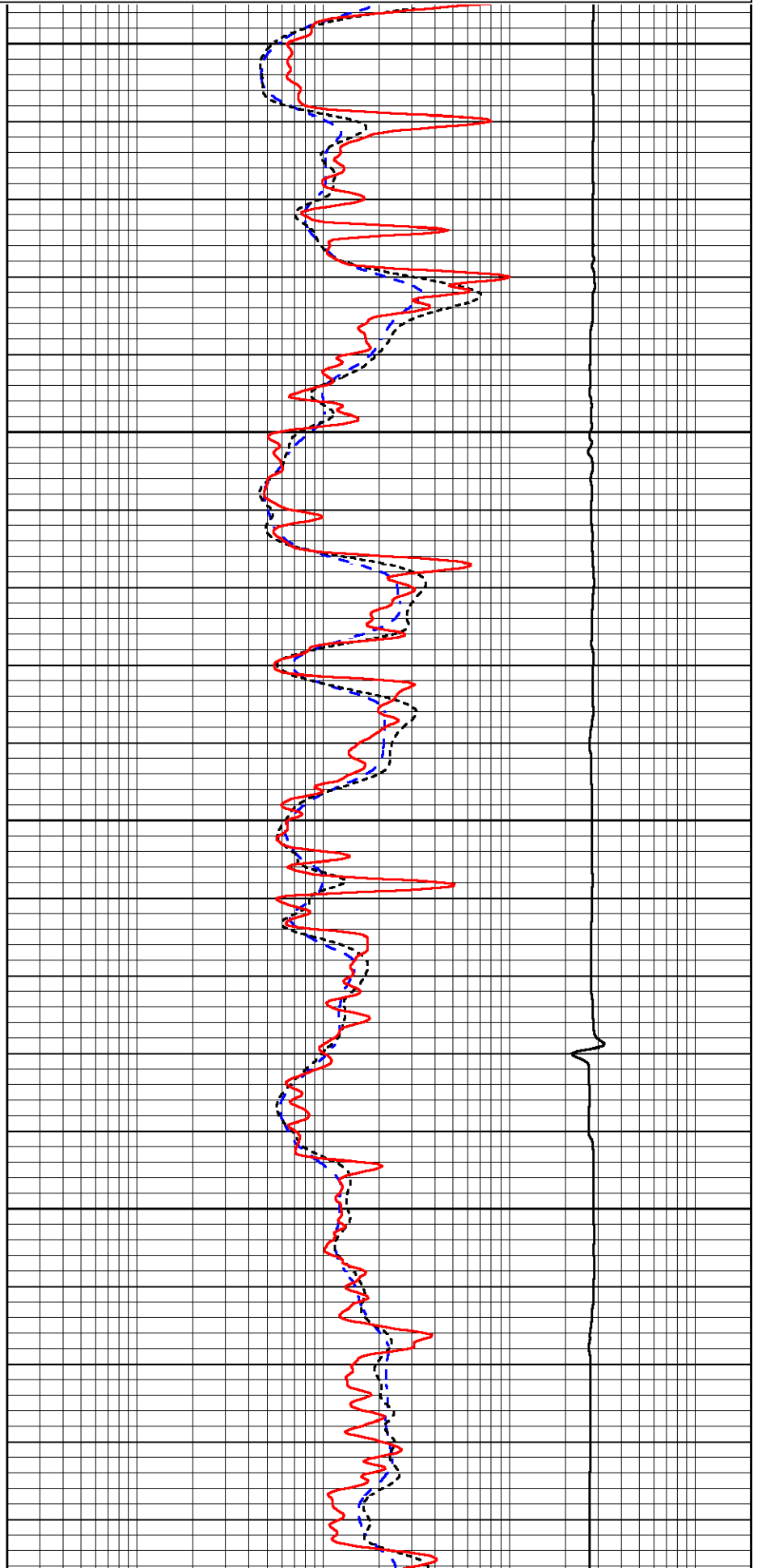
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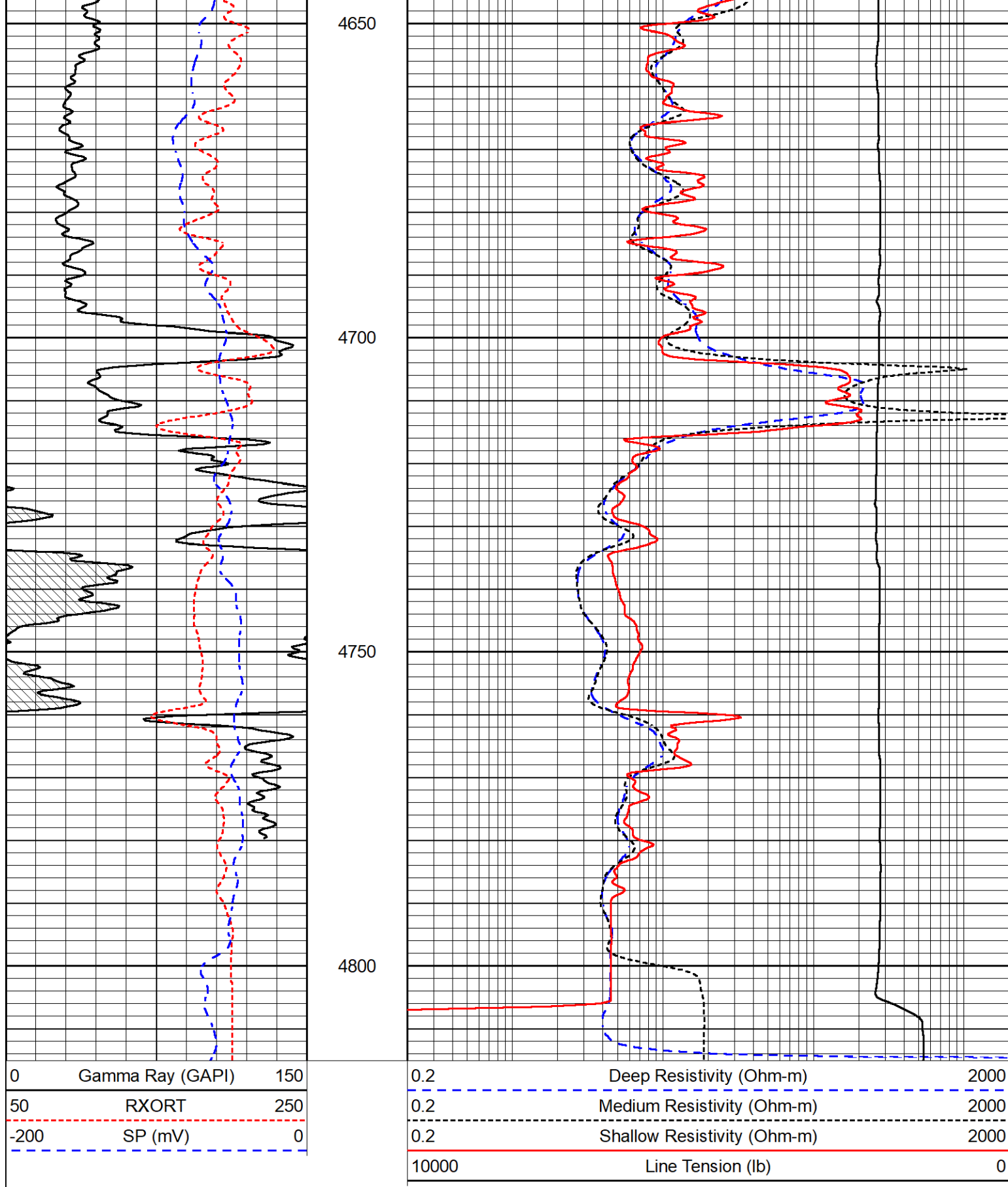
4500

4550

4600

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





Calibration Report

Database File griffin_gary 3.db
Dataset Pathname stkml/pass3.5
Dataset Creation Wed Oct 11 06:35:29 2023

Dual Induction Calibration Report

Readings			References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	167.000	835.000	0.000	255.800	mmho/m	0.480	-42.000
Medium	1348.000	1348.000	0.000	255.800	mmho/m	0.410	-40.000

Microlog Calibration Report

Serial-Model: Performed:	402-PSI STKBL ML Sat Sep 23 14:09:43 2023
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Readings			References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	30000.0000	-1.2500
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	25000.0000	-0.1000
Caliper	1.0046	1.1419	5.5000	20.0000	in	50.0000	-44.4250

LITHODENSITY Calibration Report

Serial Number:	701-01								
Tool Model:	STEP LITHO Short								
Performed:	Wed Aug 16 15:02:56 2023								
Source:									
	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	52	53	205	255	24	69	44	1	cps
LS:	81	85	334	425	46	135	88	2	cps
Aluminum:									
SS:	774	936	2171	1967	43	73	44	2	cps
LS:	847	1595	3011	1457	56	137	87	5	cps
Magnesium:									
SS:	1271	1508	3520	2831	46	71	45	3	cps
LS:	3600	6590	11760	4608	88	128	83	13	cps
Aluminum+Iron:									
SS:	492	651	1805	1706	40	72	44	2	cps
LS:	499	1107	2530	1299	53	134	86	4	cps
		Density			PE				
		Actual	Calibrated		Actual	Calibrated	Quality		
Background:									
SS:							0.222		
LS:							0.212		
Aluminum:									
SS:		2.6000	2.6000	g/cc			0.248		
LS:		2.6000	2.6000	g/cc			0.220		
Magnesium:									
SS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.222		
LS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.213		
Aluminum+Iron:									
SS:						6.1800	0.239		
LS:						6.1800	0.214		

Caliper:	Reference:	Reading:
Small Ring:	6.0 in	100.0
Large Ring:	16.0 in	400.0
Gain:	18.000	

Offset: 0.075

Compensated Neutron Calibration Report

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: Wed Aug 30 12:31:03 2023

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps
Calibrator Reading: 637.0 cps

Sensitivity: 0.6500 GAPI/cps



Company Griffin Management, LLC
Well Gary #3
Field Turkey Creek East
County Barber
State Kansas