



MIDWEST WIRELINE

MICRORESISTIVITY LOG

Company White & Ellis Drilling Inc

Well Dunkle 7

Field

County Butler State Kansas

Location: API #: 15-015-24232-00-00

Permanent Datum SEC 5 TWP 25S RGE 5E
Log Measured From Ground Level Elevation 1396
Drilling Measured From Kelly Bushing
Kelly Bushing
Other Services
CNL/CDL
DIL/BHCS

Company White & Ellis Drilling Inc
Well Dunkle 7
Field
County Butler
State Kansas

Date	7/12/2024
Run Number	One
Depth Driller	2836
Depth Logger	2831
Bottom Logged Interval	2830
Top Log Interval	200
Casing Driller	9.625 @ 207
Casing Logger	217
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	2400
Density / Viscosity	9.55 43
pH / Fluid Loss	10.0 9.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.1 @ 75
Rmt @ Meas. Temp	.83 @ 75
Rmc @ Meas. Temp	1.49 @ 75
Source of Rmf / Rmc	CHARTS
Rm @ BHT	.79 @ 104
Operating Rig Time	4 Hours
Max Rec. Temp. F	104
Equipment Number	110
Location	HAYS
Recorded By	J. Henrickson
Witnessed By	Bill Stout

<<< 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.

Potwin Kansas
Southeast to 50th, 1 1/2 E, N Into

Log Measured From: Kelly Bushing 9 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: J. Henrickson
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Bill Stout
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\white_ellis_dunkle_7.db
Dataset field/well/stackml/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	104	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	0	0	85	95	Off	2831

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

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 (703-03)	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		DIL-M&W (506)	18.25	3.50	220.00
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: white_ellis_dunkle_7.db: field/well/stackml/pass3.1
 Total length: 42.23 ft
 Total weight: 685.00 lb
 O.D.: 5.00 in



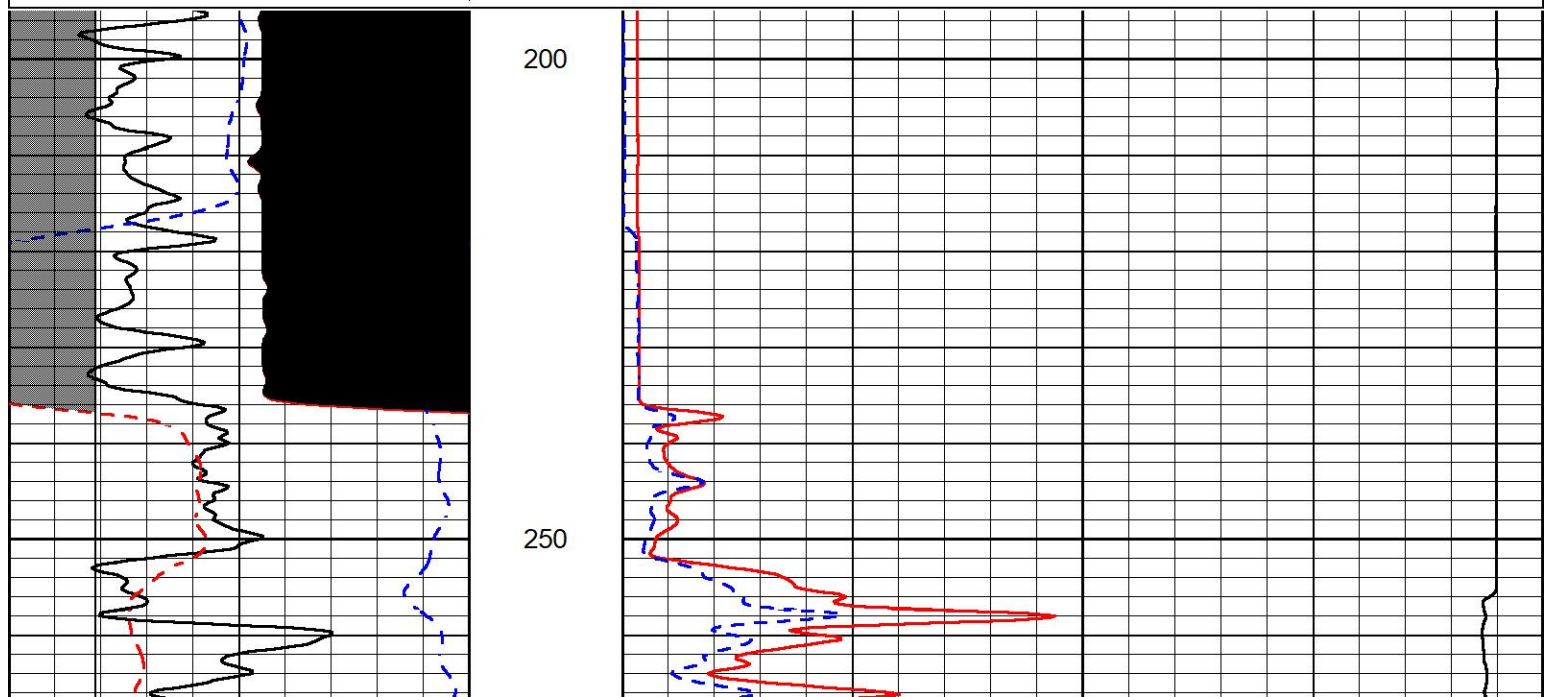
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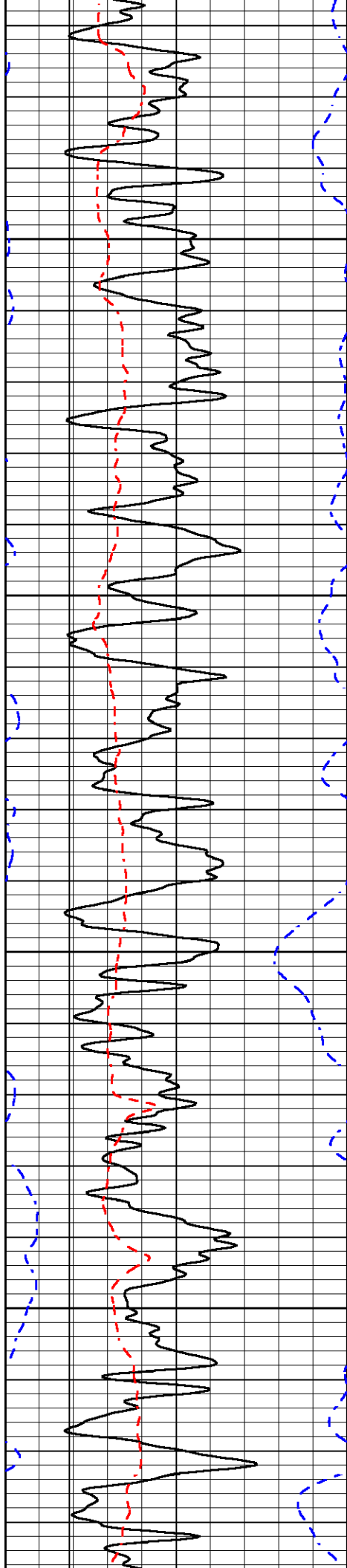
MAIN PASS

Database File white_ellis_dunkle_7.db
 Dataset Pathname stackml/pass3.1
 Presentation Format _micro
 Dataset Creation Fri Jul 12 18:55:24 2024
 Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mc cal (in)	7.875
-200	SP (mV)	0

0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



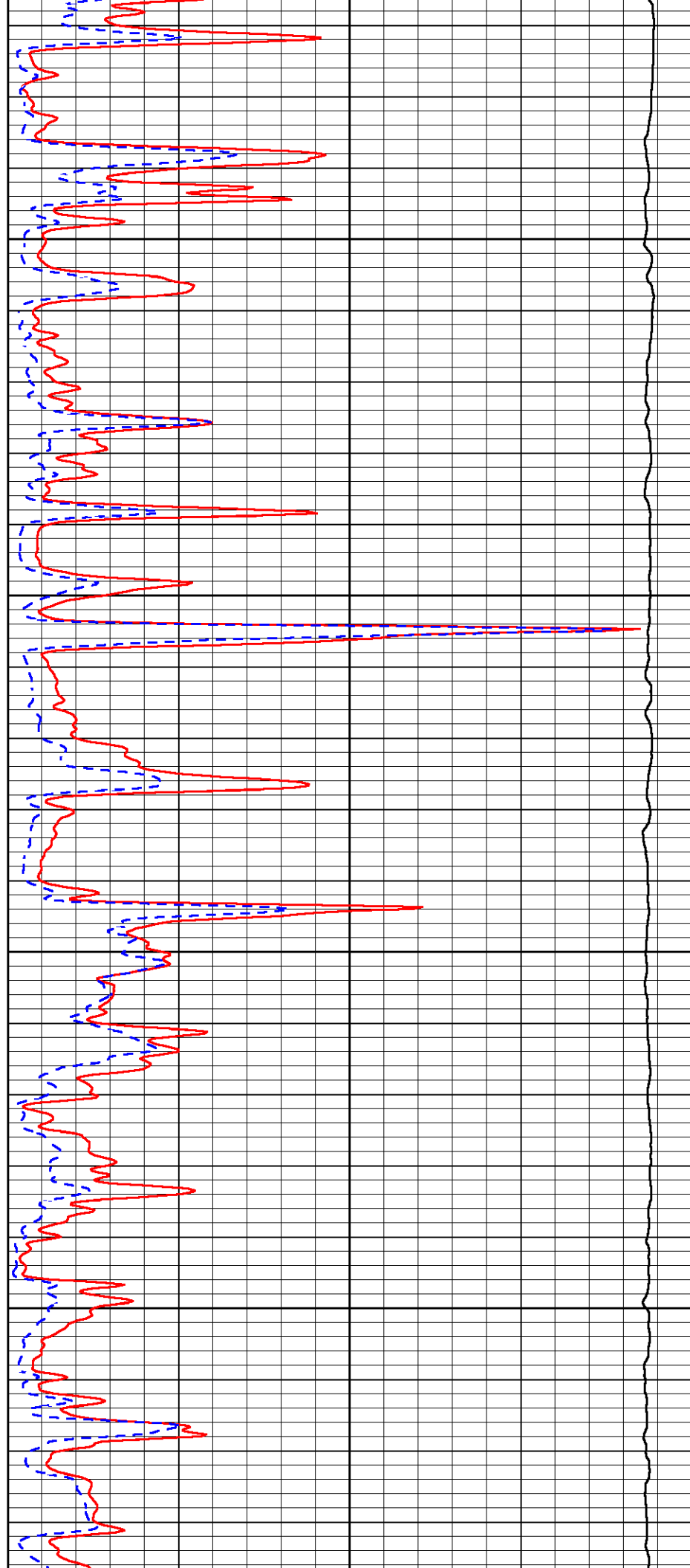


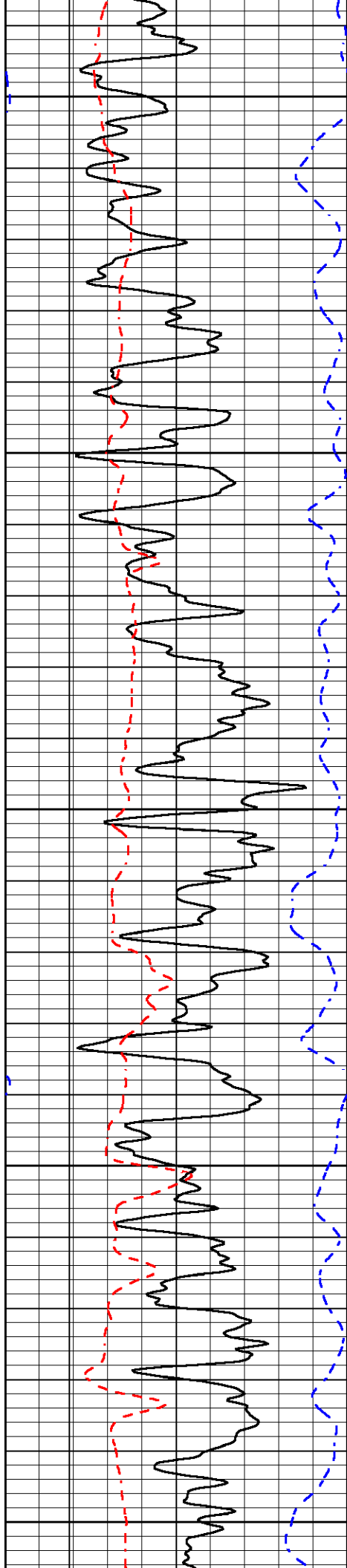
300

350

400

450





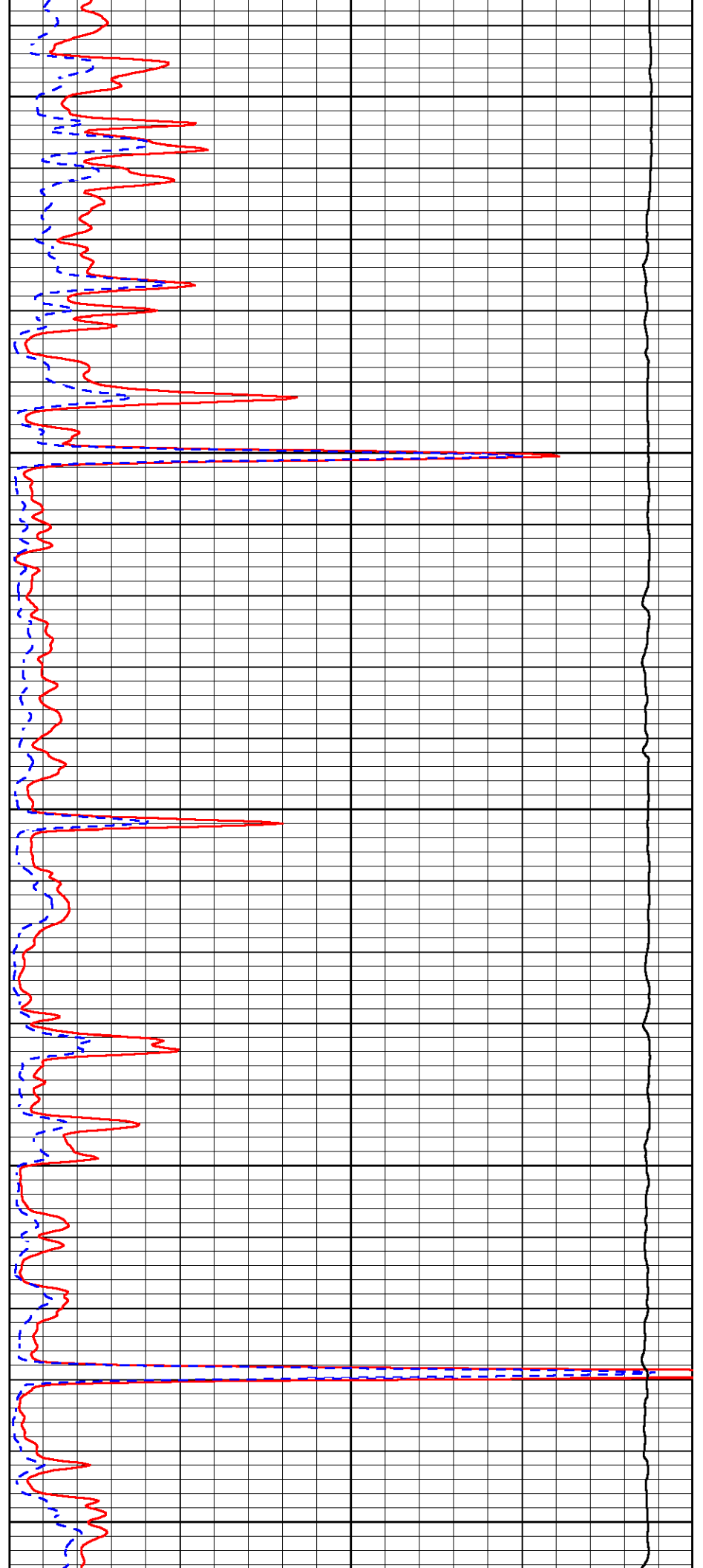
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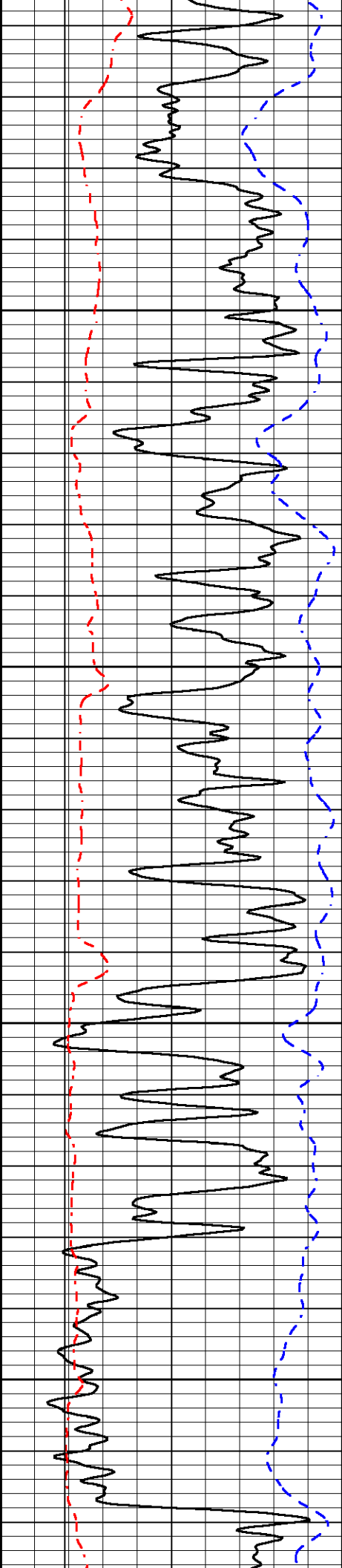
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600

650

700



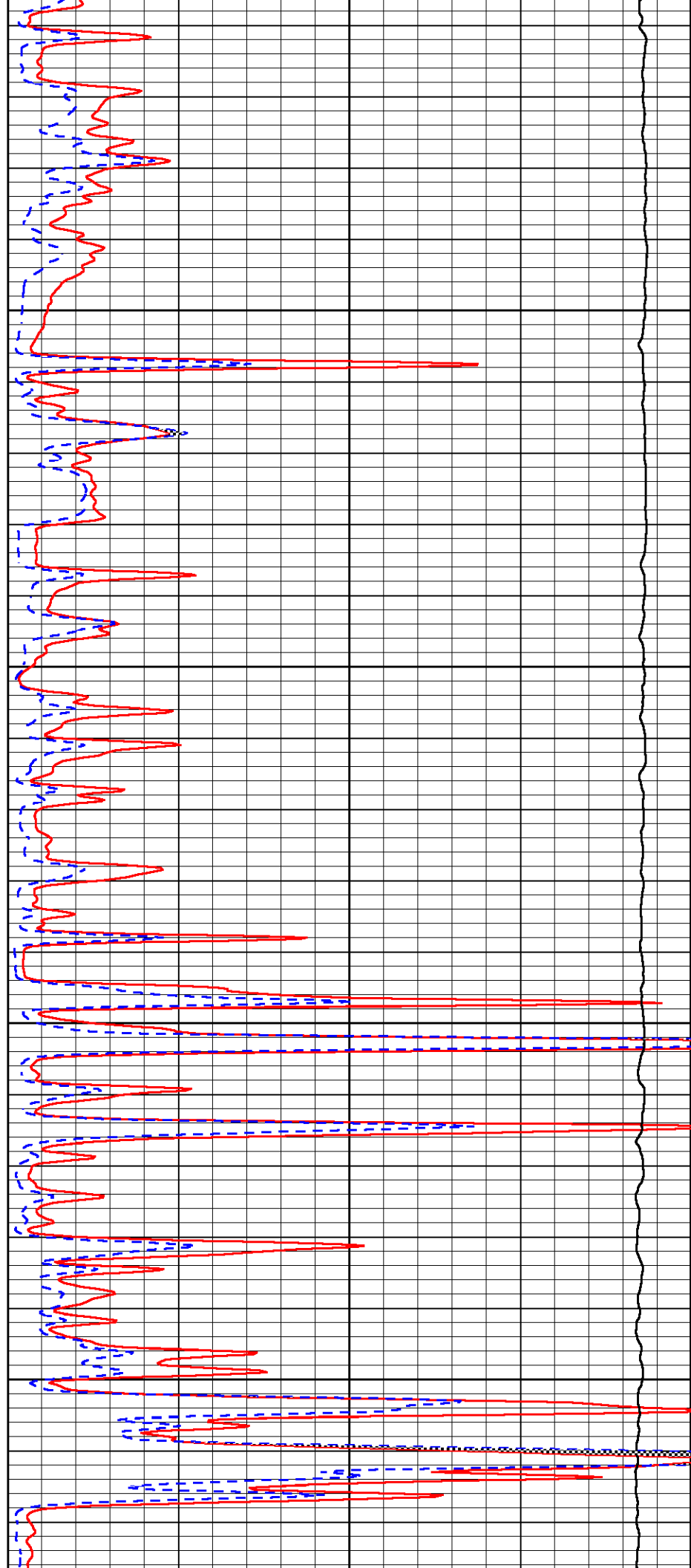


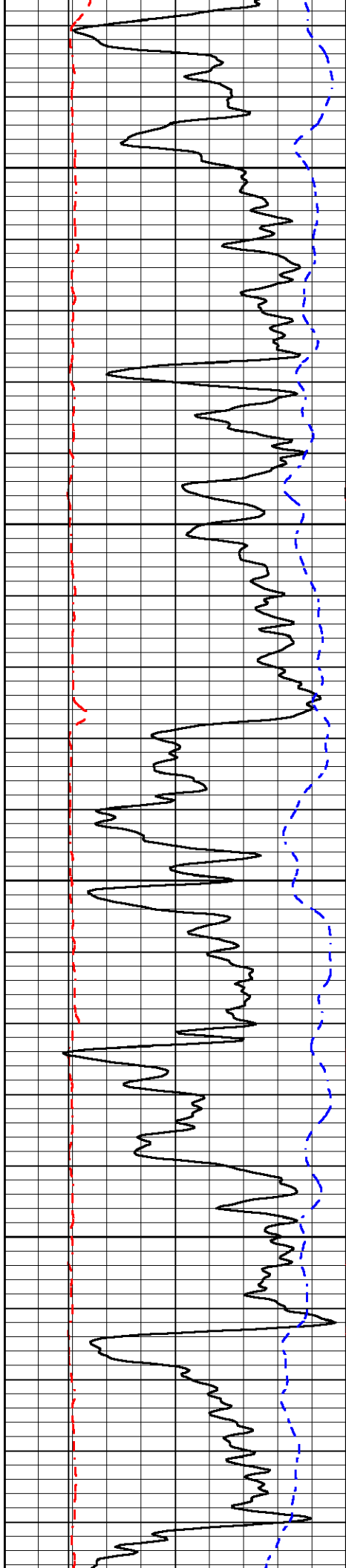
750

800

850

900



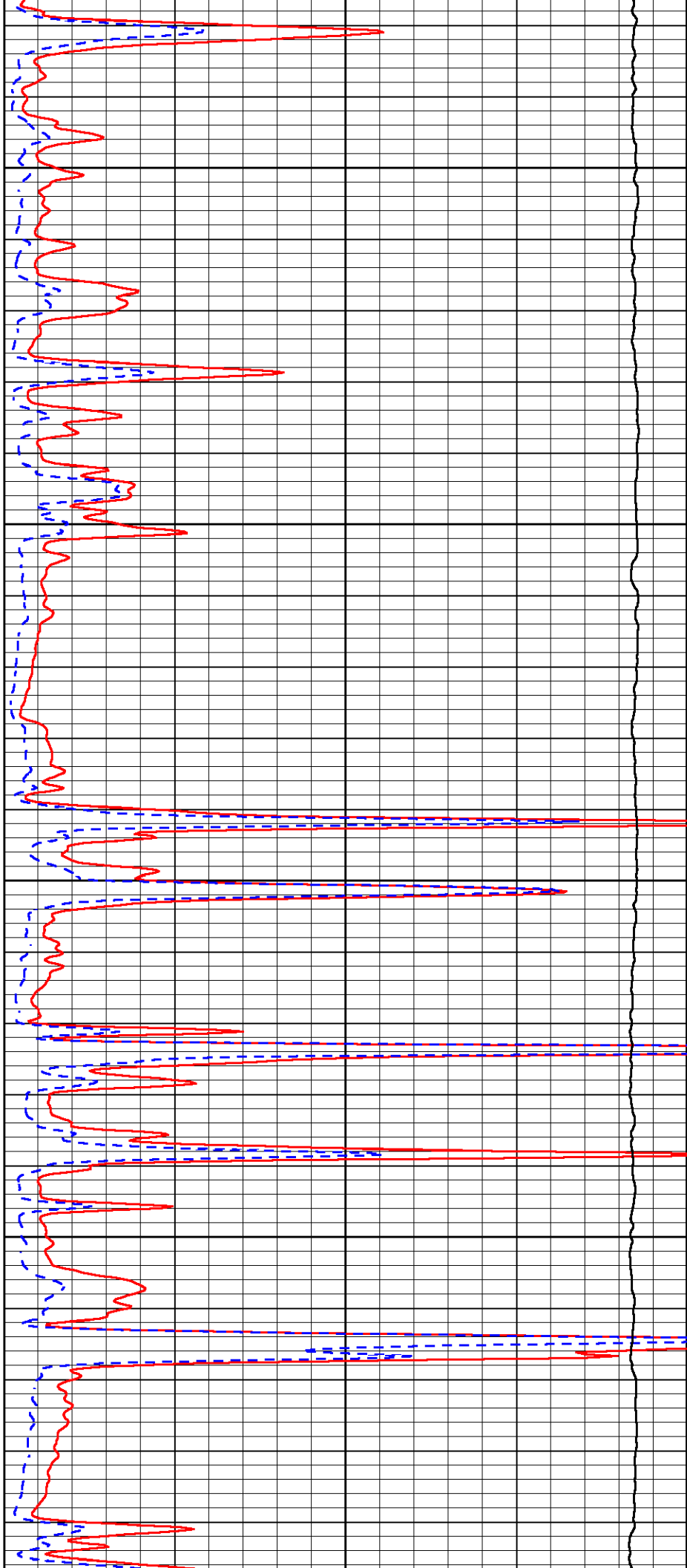


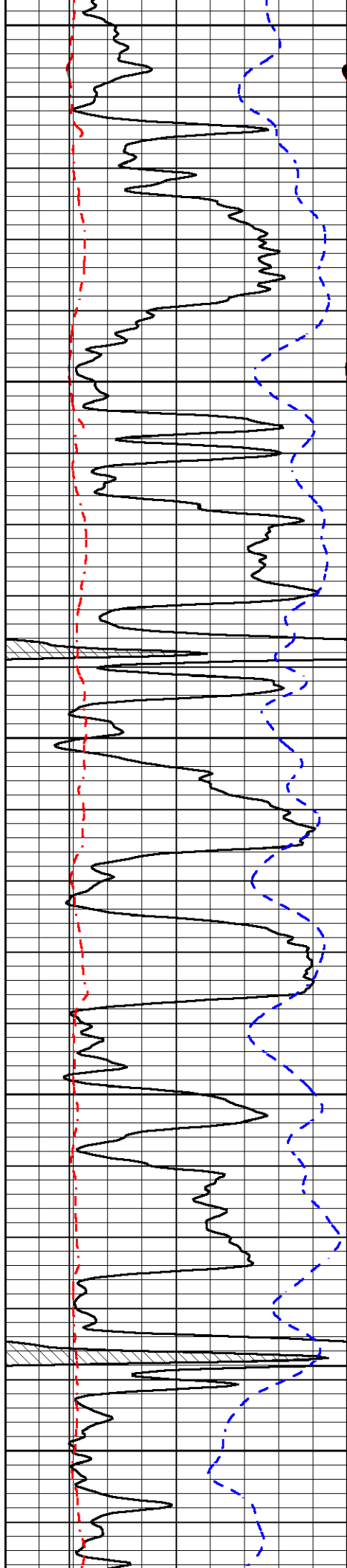
950

1000

1050

1100





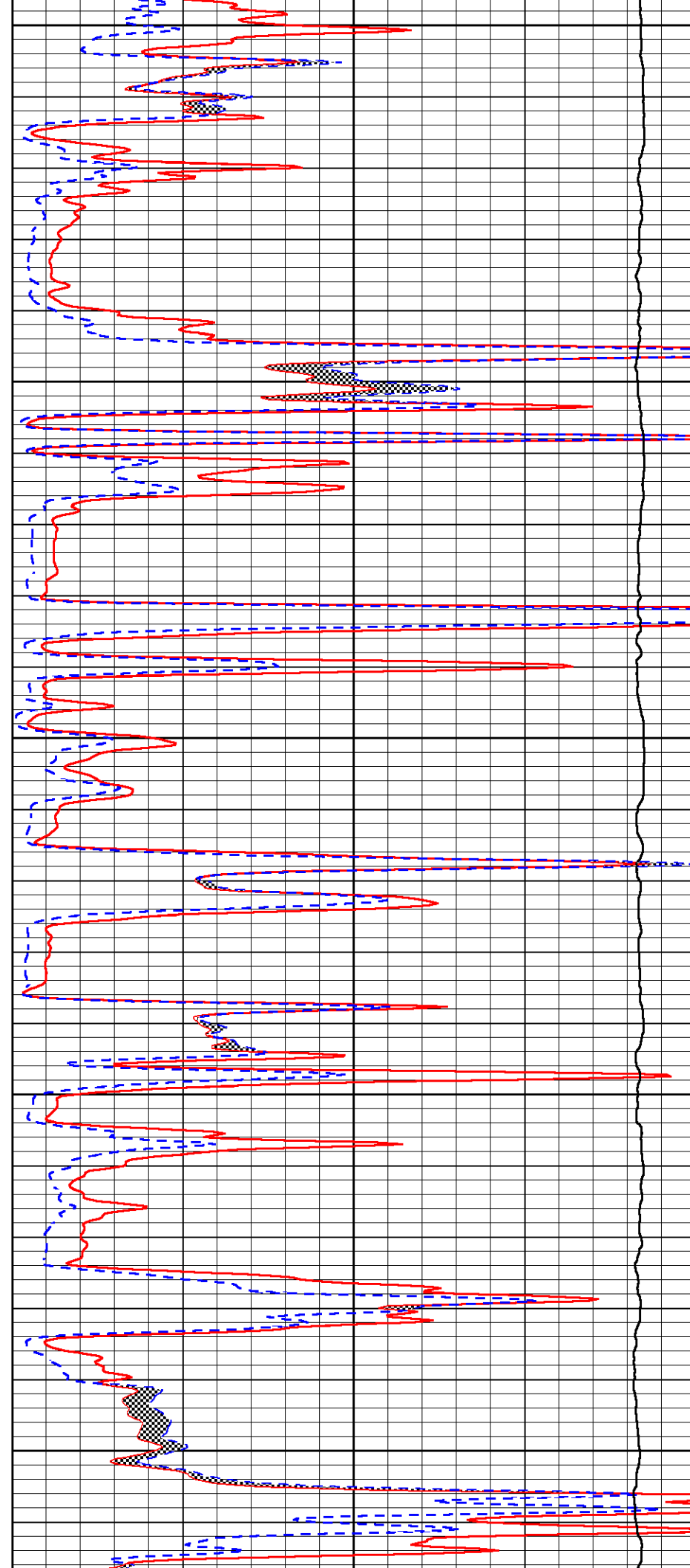
1150

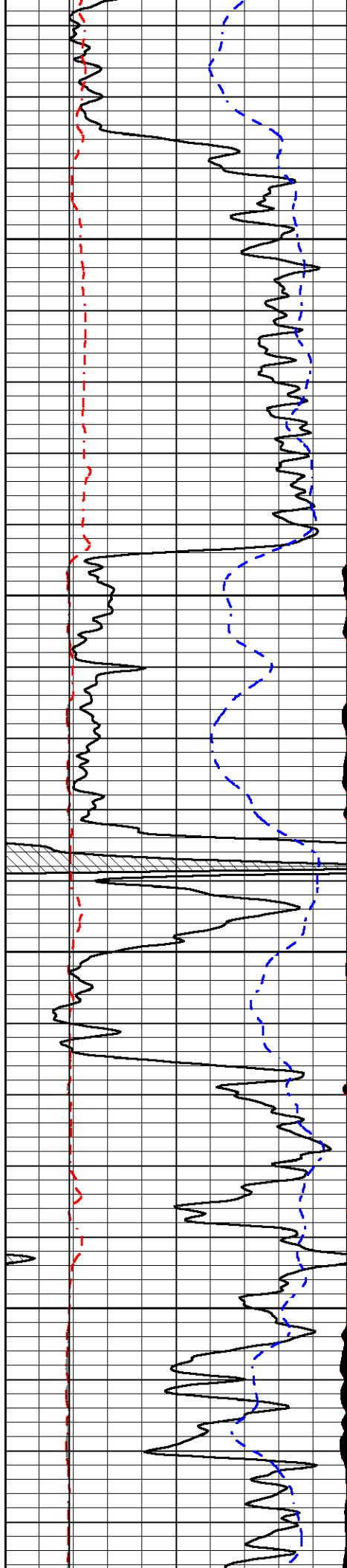
1200

1250

1300

1350



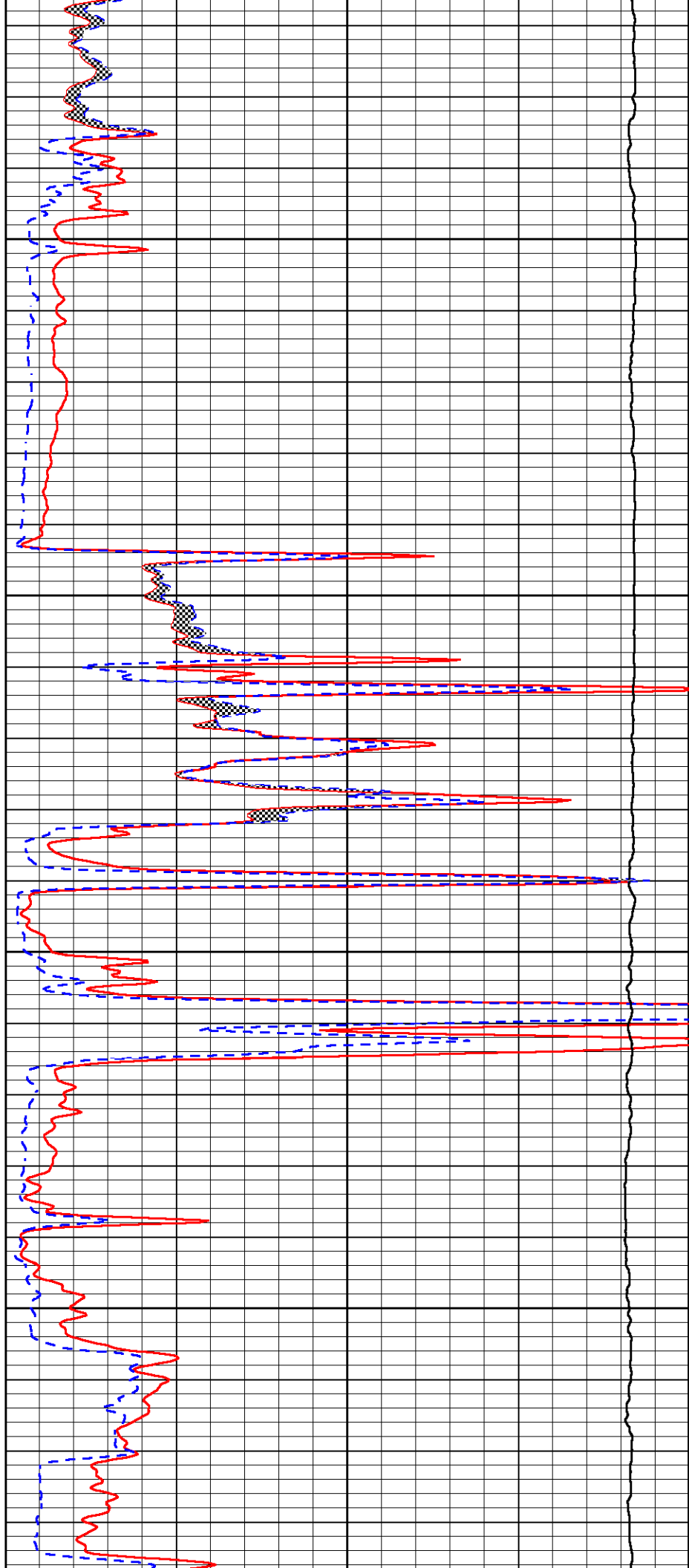


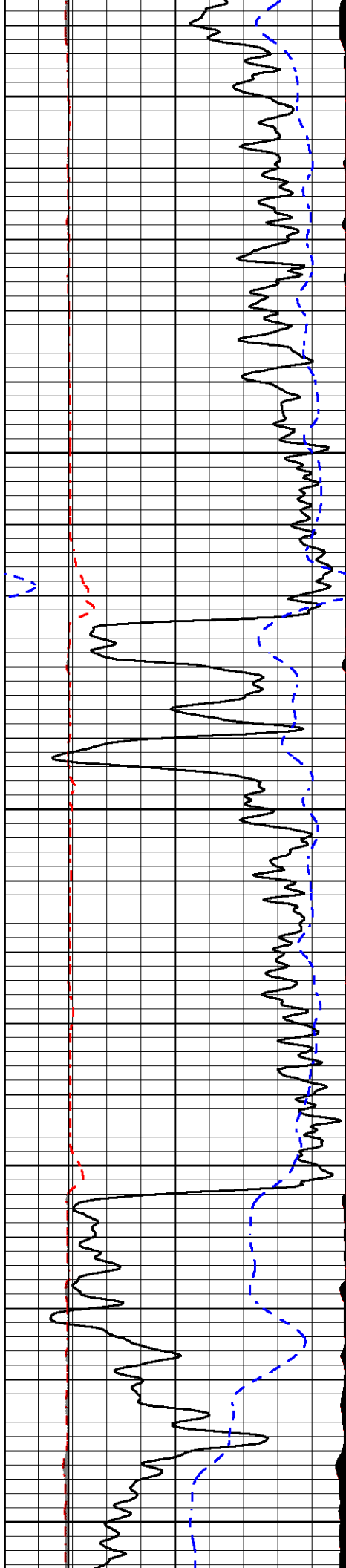
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1450

1500

1550





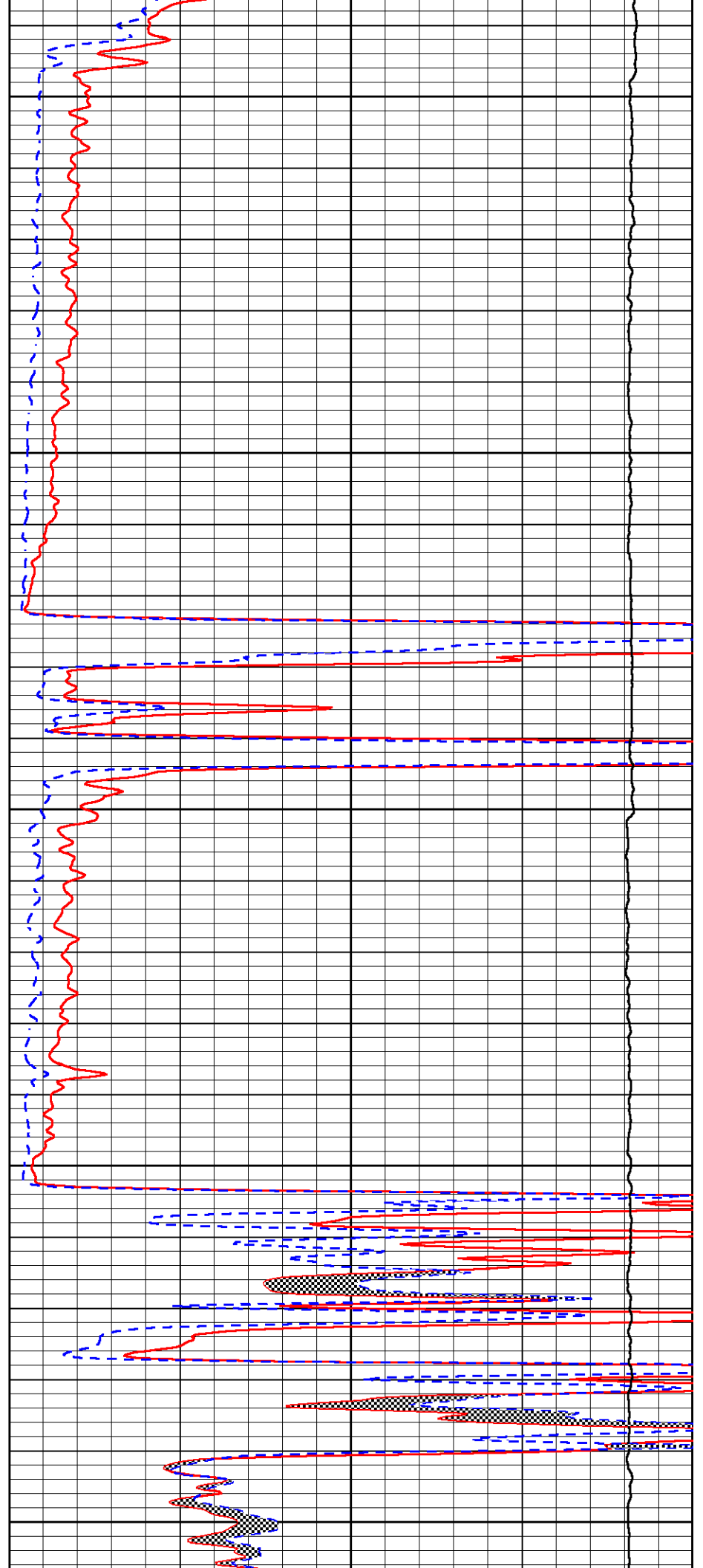
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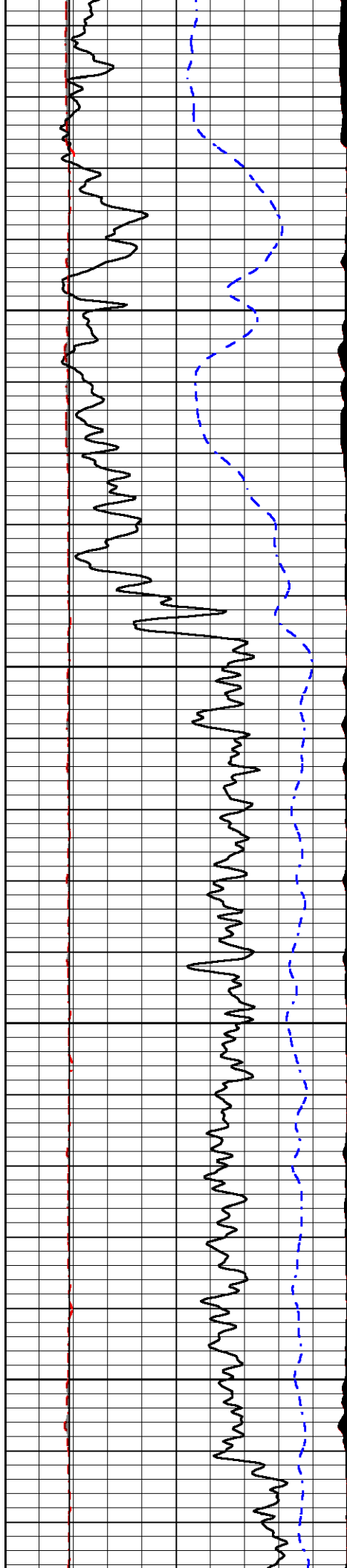
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1700

1750

1800



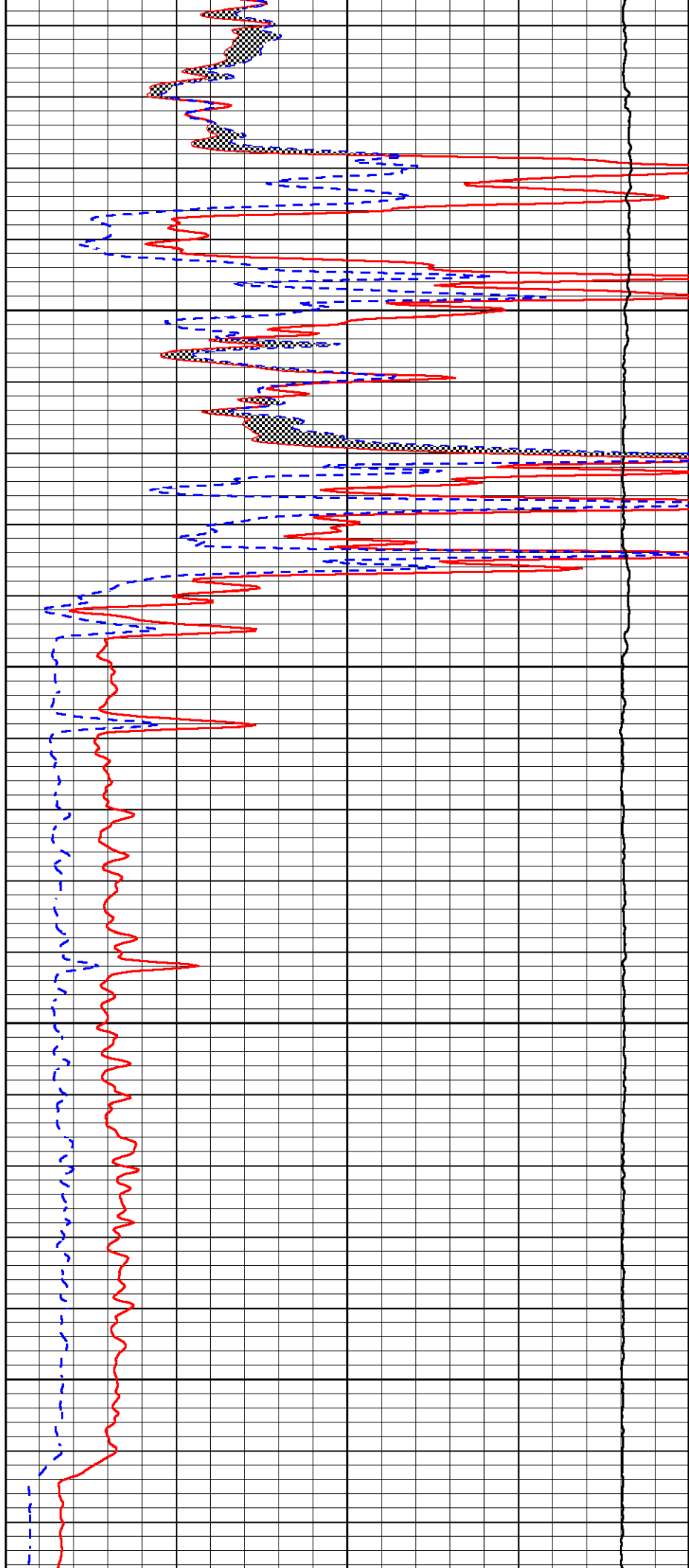


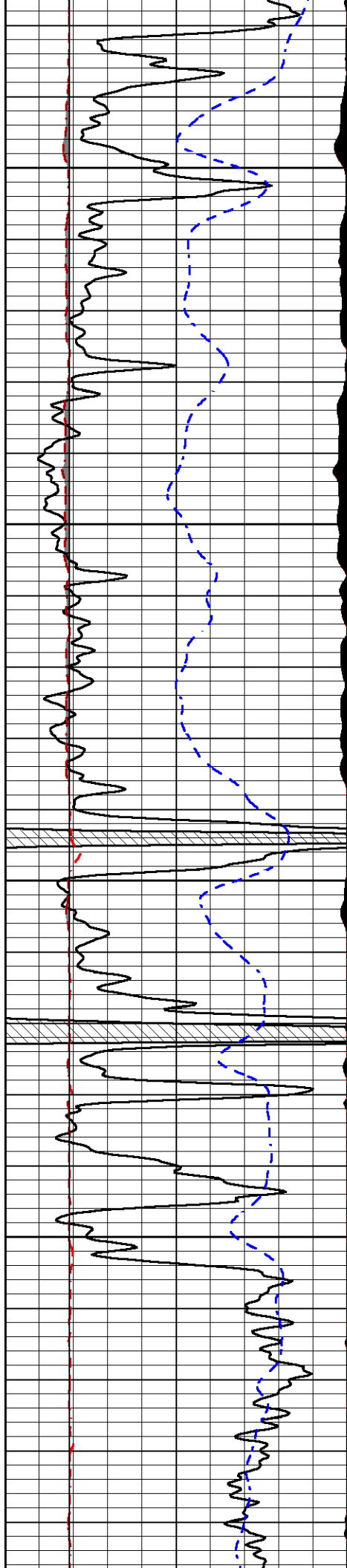
1850

1900

1950

2000



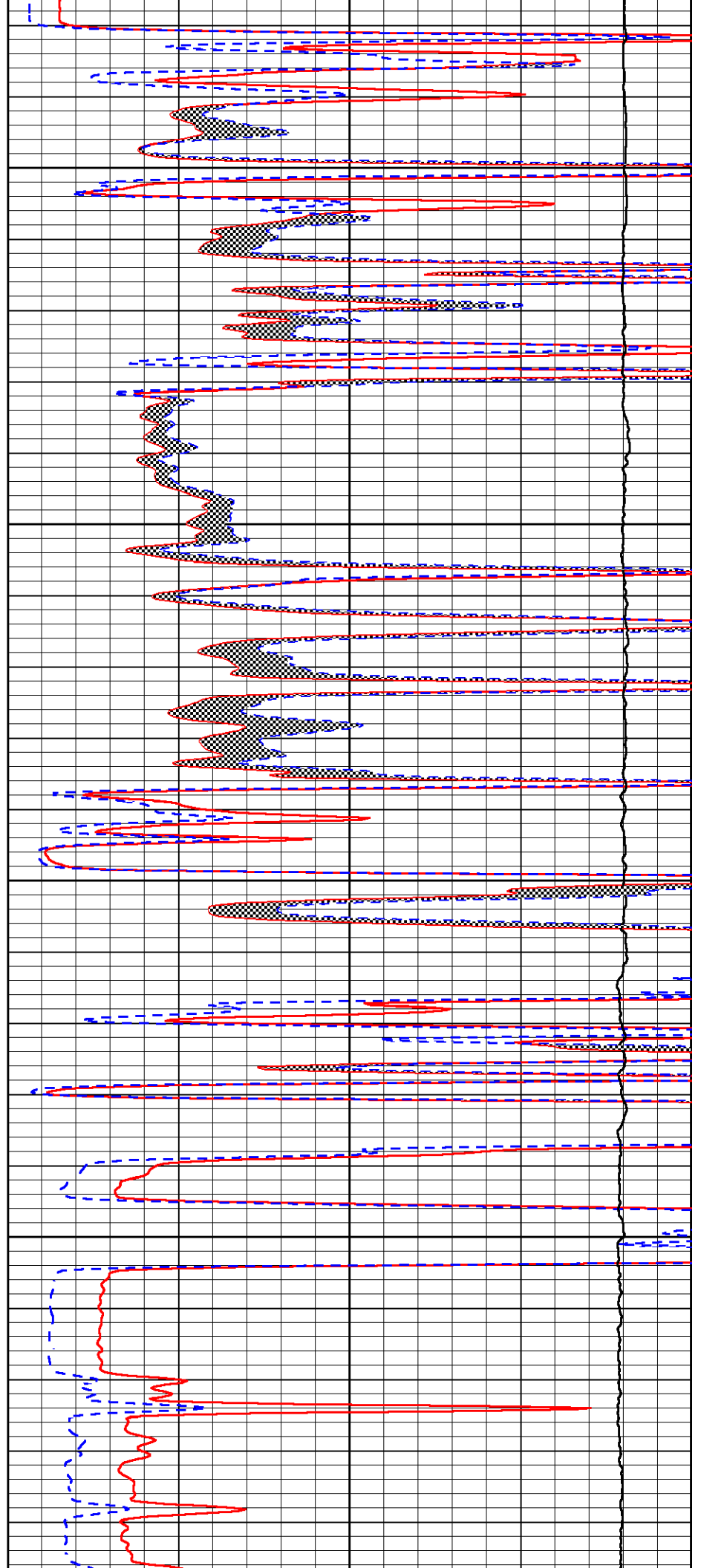


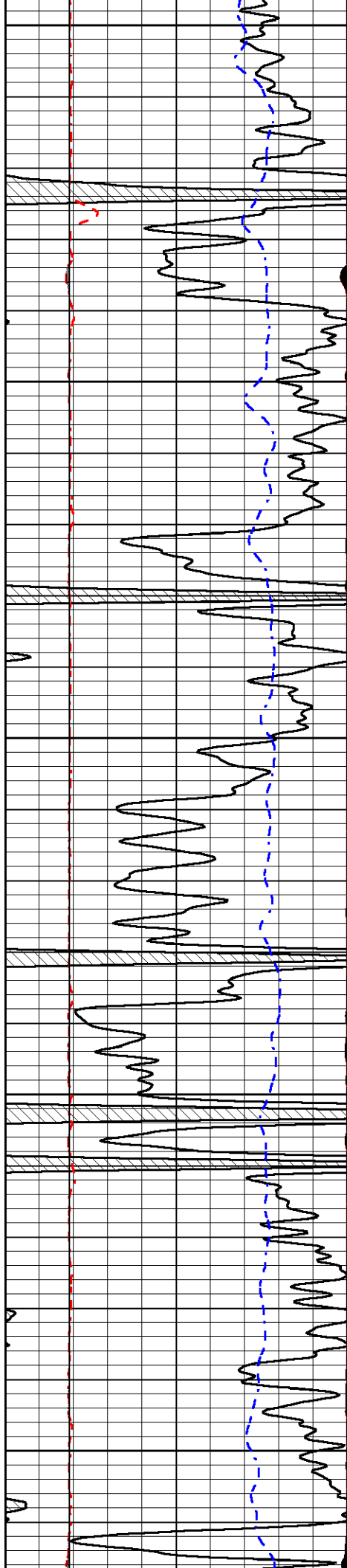
2050

2100

2150

2200





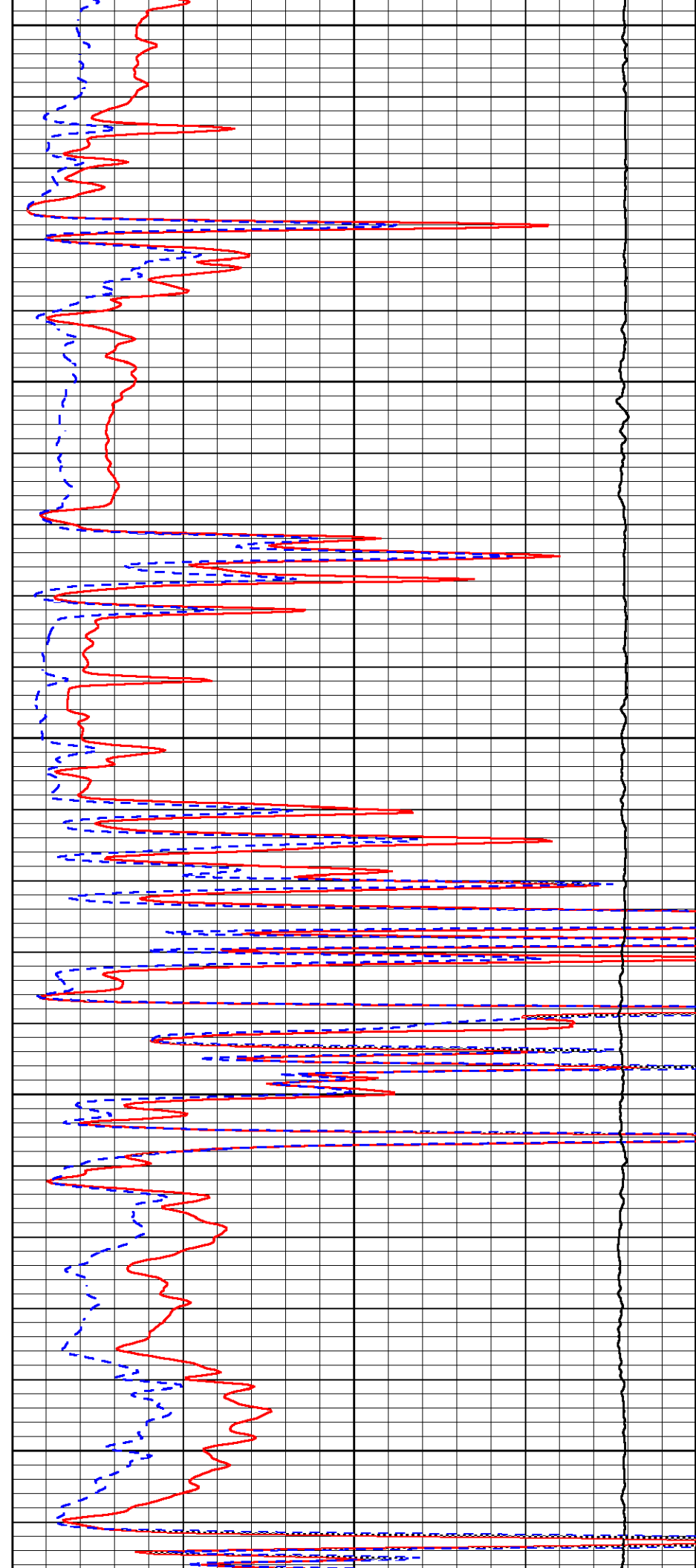
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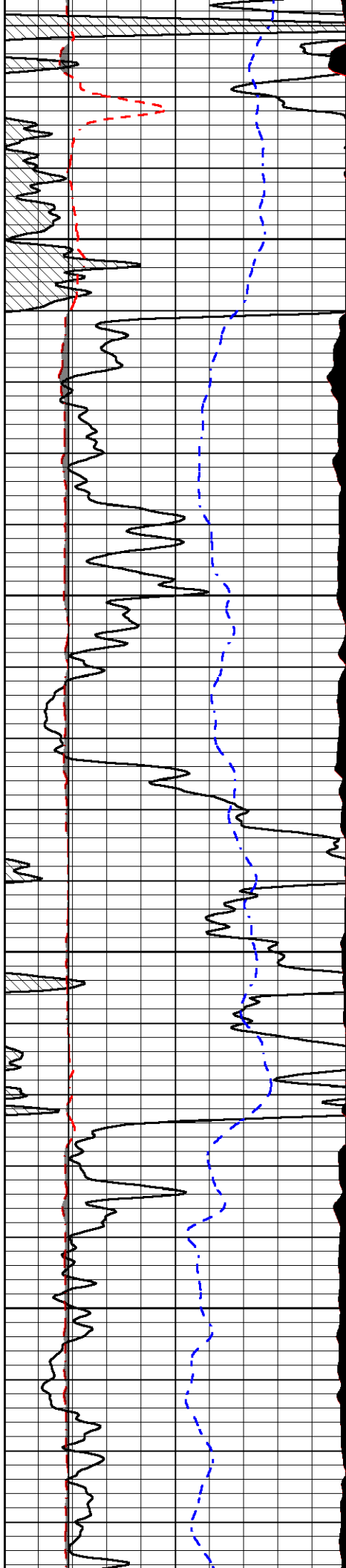
2300

2350

2400

2450



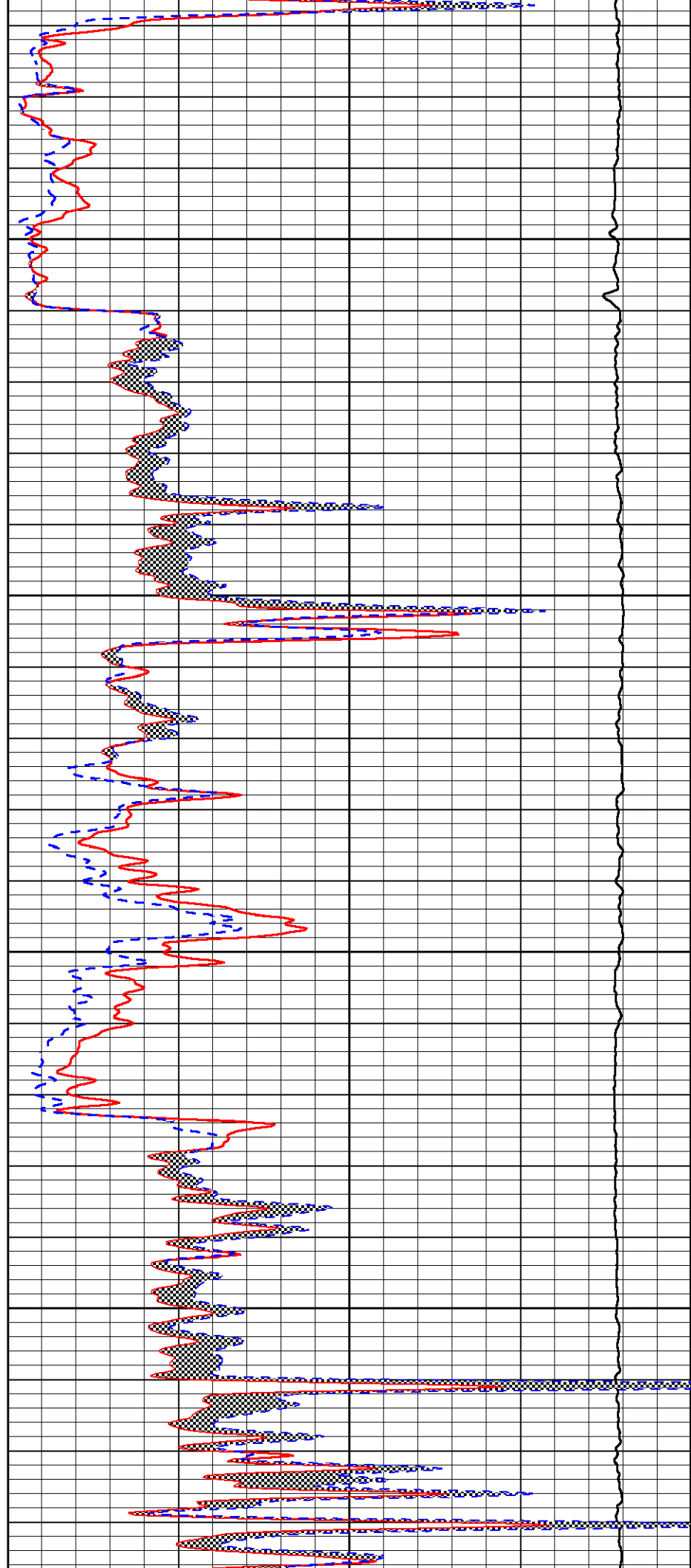


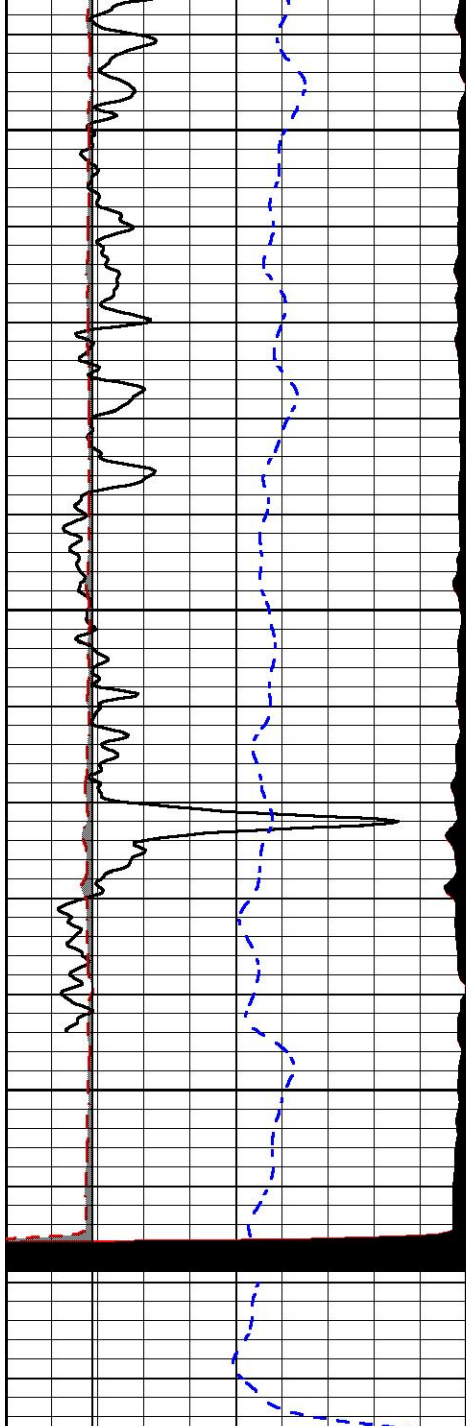
2500

2550

2600

2650



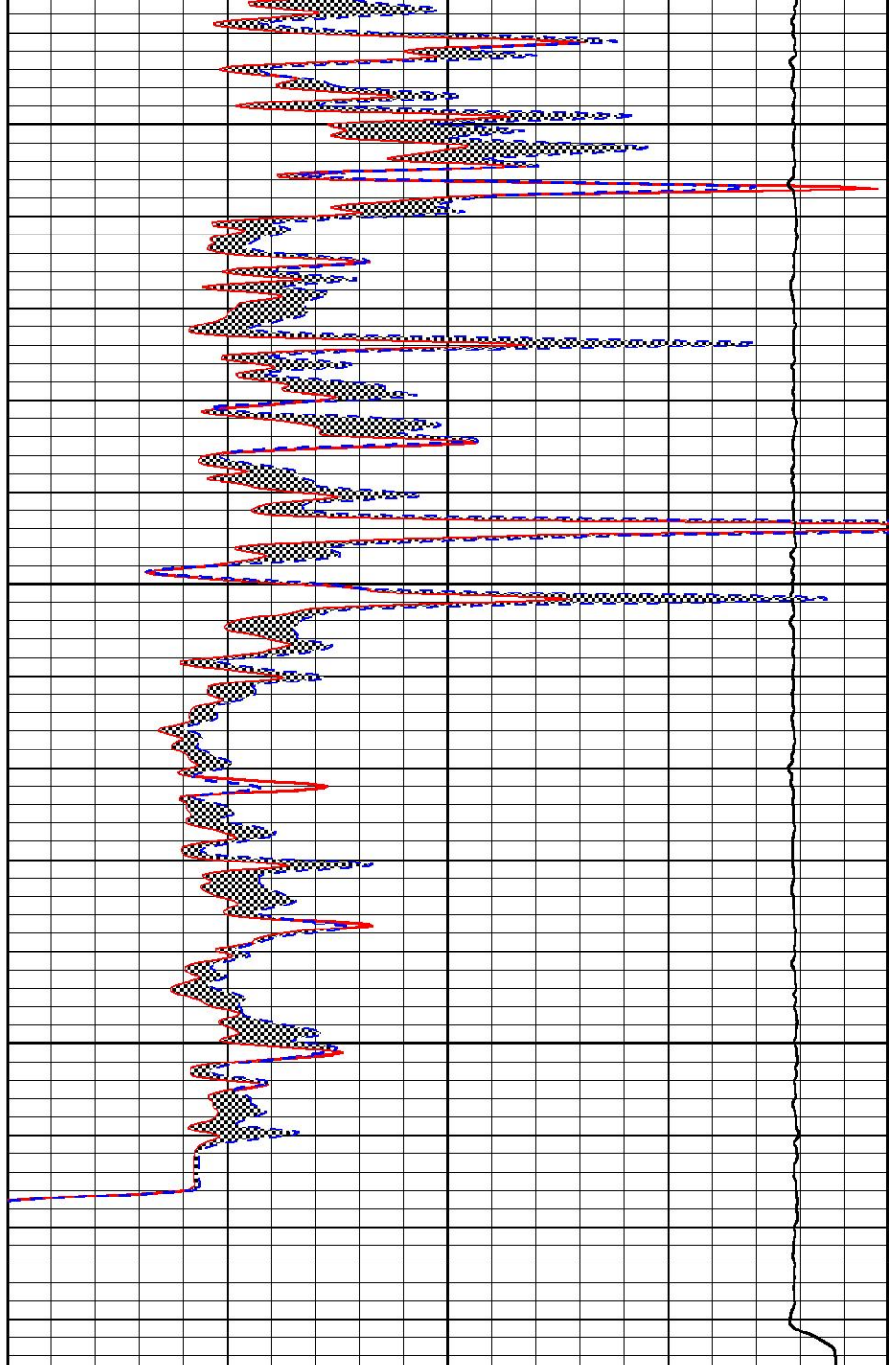


2700

2750

2800

0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0



0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

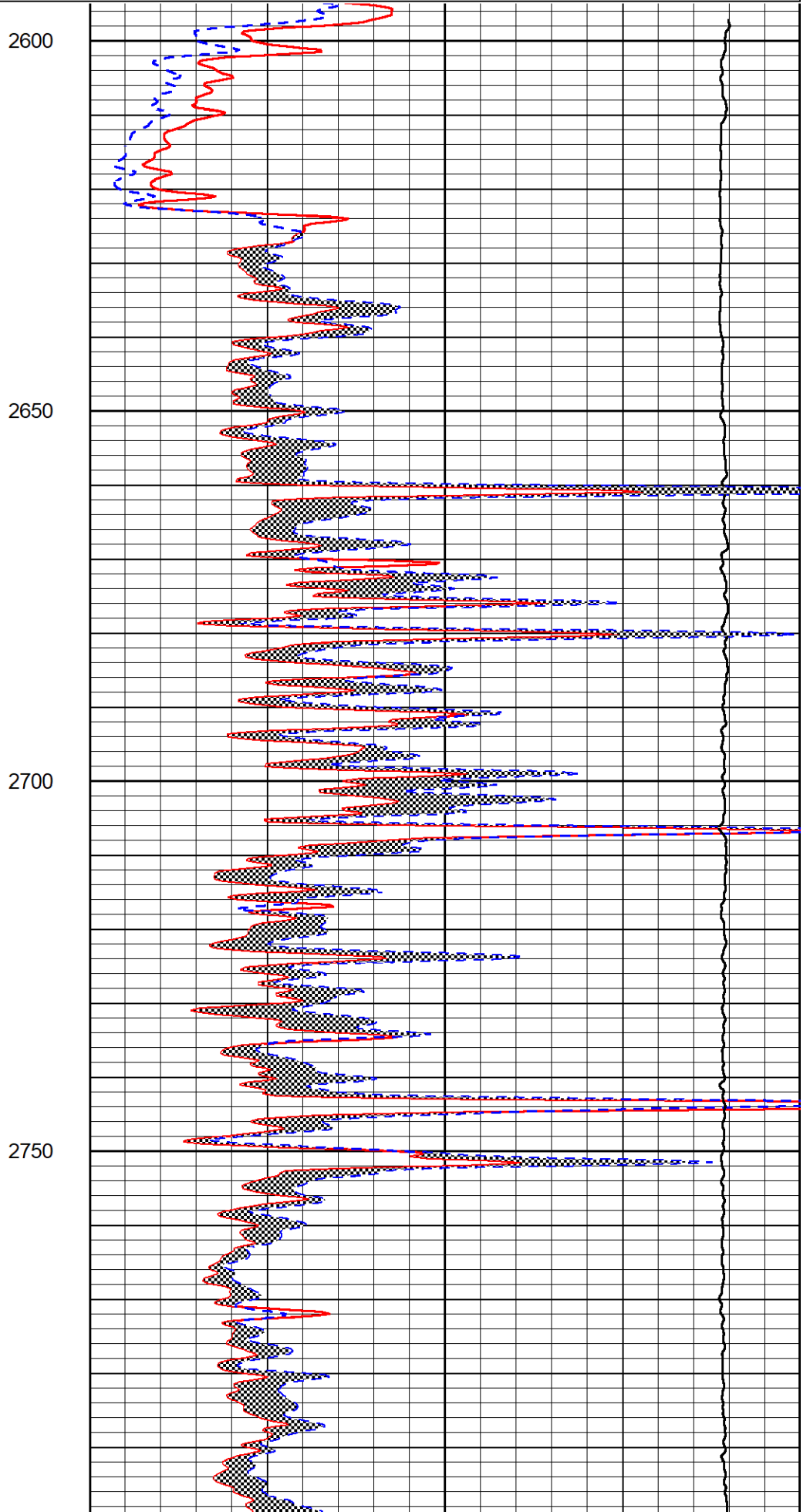
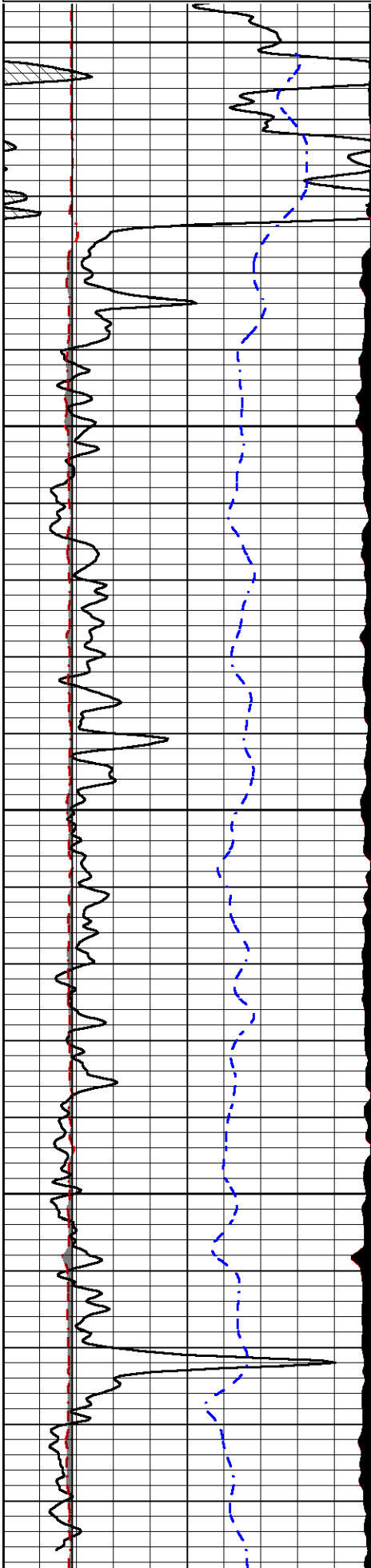
Database File white_ellis_dunkle_7.db
 Dataset Pathname stackml/pass2.1
 Presentation Format _micro
 Dataset Creation Fri Jul 12 18:02:51 2024
 Charted by Depth in Feet scaled 1:240

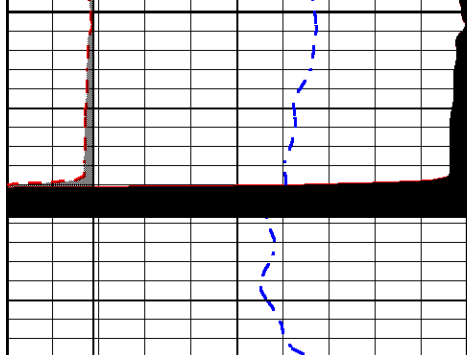
0	Gamma Ray (GAPI)	150
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0	Micro Inverse 1 X 1 (Ohm-m)	40
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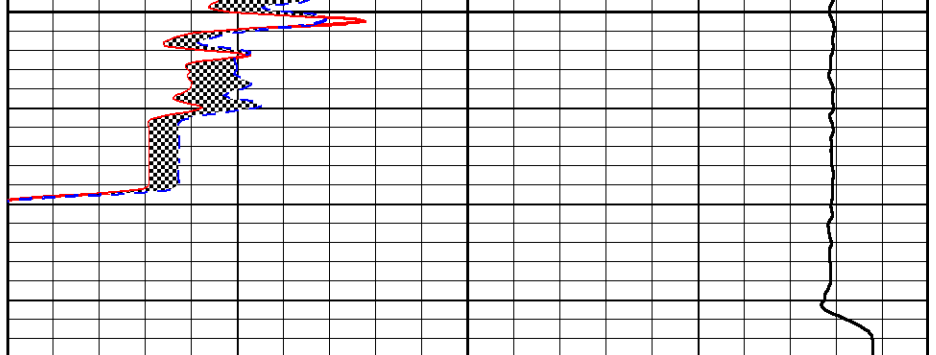
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0





2800



0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

Calibration Report

Database File white_ellis_dunkle_7.db
 Dataset Pathname stackml/pass3.1
 Dataset Creation Fri Jul 12 18:55:24 2024

Dual Induction Calibration Report

Serial-Model: 506-M&W
 Surface Cal Performed: Sun Jun 30 20:32:27 2024

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	84.211	428.152	0.000	255.800	mmho/m	0.465	-32.000
Medium	141.000	670.654	0.000	255.800	mmho/m	0.390	-10.000

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	12000.0000	-0.5000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	18500.0000	-0.7000
Caliper	1.0046	1.1419	5.5000	20.0000	in	50.0000	-44.6250

LITHODENSITY Calibration Report

Serial Number: 703-03
 Tool Model: STEP LITHO Short
 Performed: Fri May 31 13:59:15 2024

Source:

	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	56	59	223	276	25	75	46	1	cps
LS:	83	90	344	441	51	132	90	3	cps
Aluminum:									
SS:	1063	1260	2893	2631	48	80	48	3	cps
LS:	1179	2084	3854	1823	62	133	86	5	cps

Magnesium:
 SS: 1756 2035 4740 3894 55 79 49 4 cps
 LS: 4981 8390 15059 6054 115 127 85 14 cps

Aluminum+Iron:
 SS: 676 887 2426 2310 45 79 52 2 cps
 LS: 700 1495 3280 1630 60 131 90 5 cps

	Density			PE				
	Actual	Calibrated		Actual	Calibrated	Quality		
Background:								
SS:						0.236		
LS:						0.189		
Aluminum:								
SS:	2.6000	2.6000	g/cc			0.249		
LS:	2.6000	2.6000	g/cc			0.216		
Magnesium:								
SS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.232		
LS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.198		
Aluminum+Iron:								
SS:					6.1800	0.208		
LS:					6.1800	0.188		

Caliper:	Reference:	Reading:
Small Ring:	6.0 in	1.0
Large Ring:	14.0 in	1.0
Gain:	12.765	
Offset:	1.800	

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: 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



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