

DUAL INDUCTION

MIDWEST WIRELINE

Company Castle Resources, Inc.		Company Castle Resources, Inc.	
Well	Czirr #1	Well	Czirr #1
Field	Unnamed	Field	Unnamed
County	Wabaunsee	County	Wabaunsee
State	Kansas	State	Kansas
Location: API #: 15-197-20325-00-00		Other Services	
Permanent Datum NW/SE NW/SE		CNL/CDL	
Log Measured From Kelly Bushing		MEL/BHCS	
Drilling Measured From Kelly Bushing		Elevation	
SEC 8 TWP 11S RGE 11E		K.B. 1142	
		D.F. 1137	
		G.L. 1137	
Date	9/12/2024		
Run Number	One		
Depth Driller	3100		
Depth Logger	3099		
Bottom Logged Interval	3098		
Top Log Interval	300		
Casing Driller	8.625 @ 304		
Casing Logger	300		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	1400		
Density / Viscosity	9.4 38		
pH / Fluid Loss	9.5 12.5		
Source of Sample	Flowline		
Rm @ Meas. Temp	1.75 @ 76		
Rmt @ Meas. Temp	1.31 @ 76		
Rmc @ Meas. Temp	2.36 @ 76		
Source of Rmt / Rmc	Charts		
Rm @ BHT	1.24 @ 107		
Operating Rig Time	4.5 Hours		
Max Rec. Temp. F	107		
Equipment Number	P-24		
Location	Hays		
Recorded By	T. Martin		
Witnessed By	Jerry Green		

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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.

I-70 & McFarland Rd, 1/2 N to Sunflower,
1 E to Quail, 1.25 N to gate, N & W 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

Engineer: T. Martin
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Jerry Green
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33			GR-M&W (105)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48			CNT-M&W (201-M&W)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68			CDL-M&W (305-24)	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 (507)	18.25	3.50	220.00
CILM	4.50						
SP	0.20						
Dataset:				castle_czirr #1.db: field/well/StkMI/pass3.1			
Total length:		42.33 ft					
Total weight:		685.00 lb					
O.D.:		4.00 in					

Log Variables

DatabaseC:\ProgramData\Warrior\Data\castle_czirr #1.db
Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 107	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 -8.2	SPSHIFT mV 255	SRFTEMP degF 80	SZCOR Off	TDEPTH ft 3099		

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

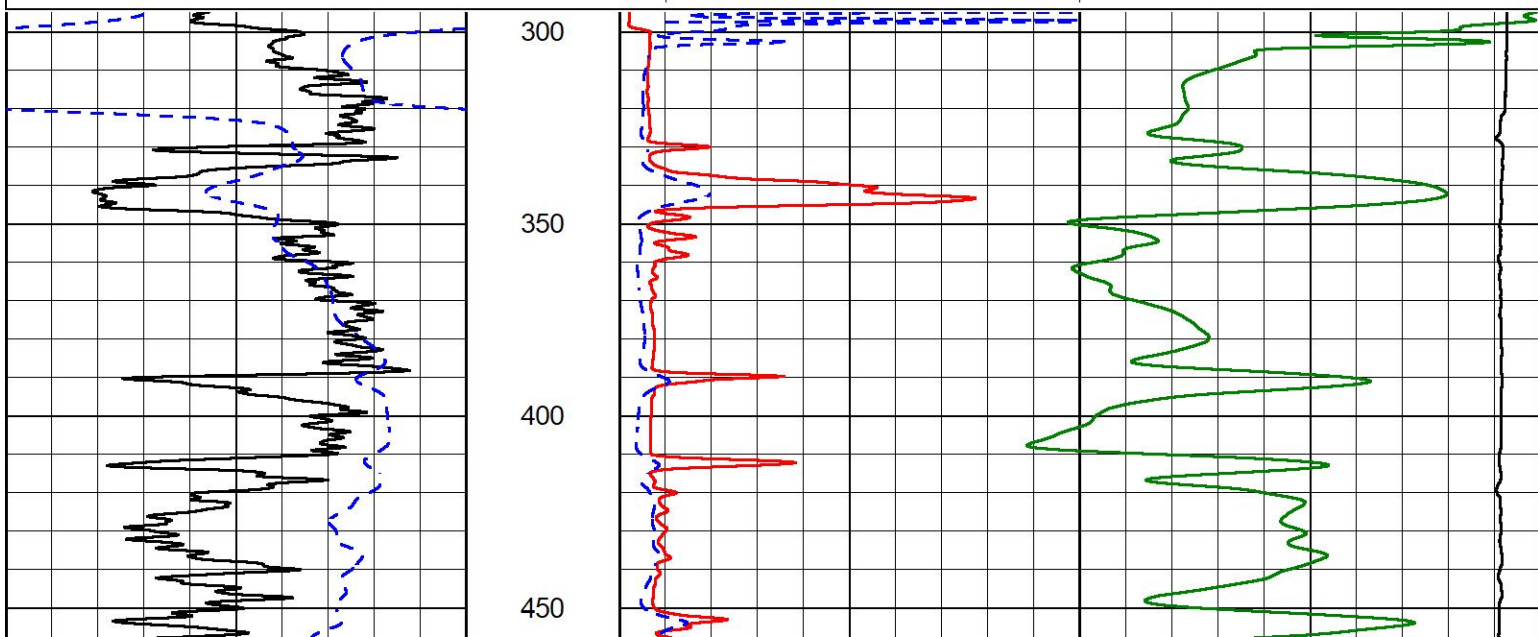


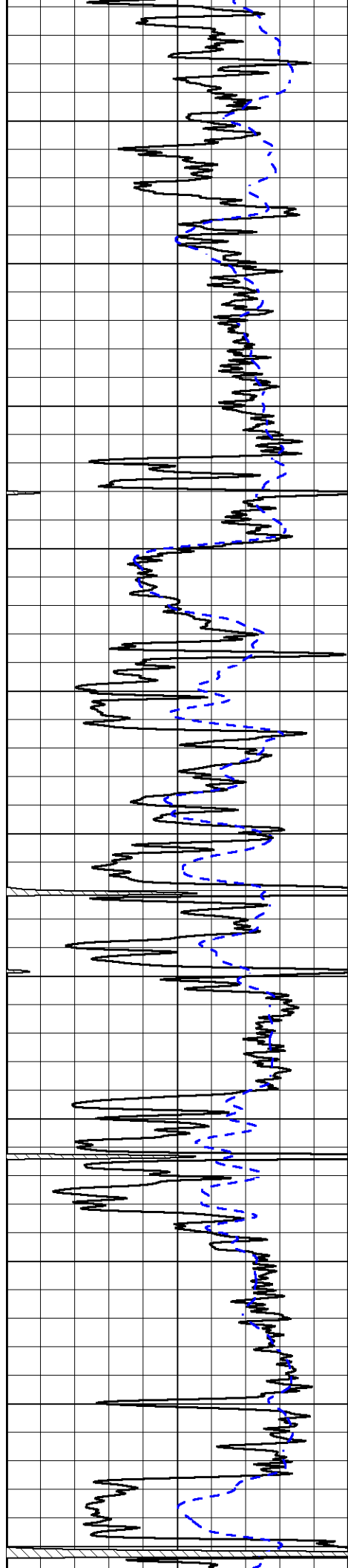
2" SCALE RESISTIVITY

MAIN PASS

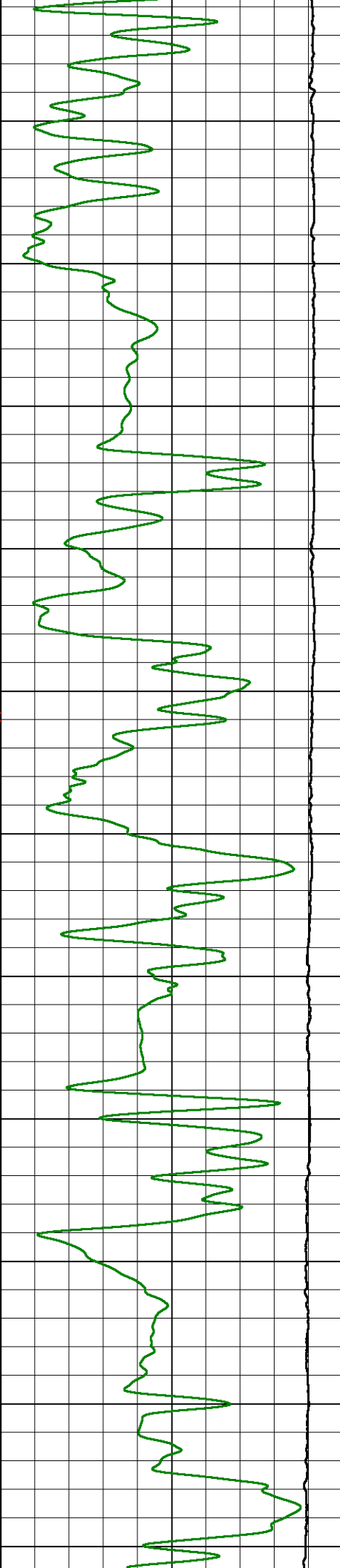
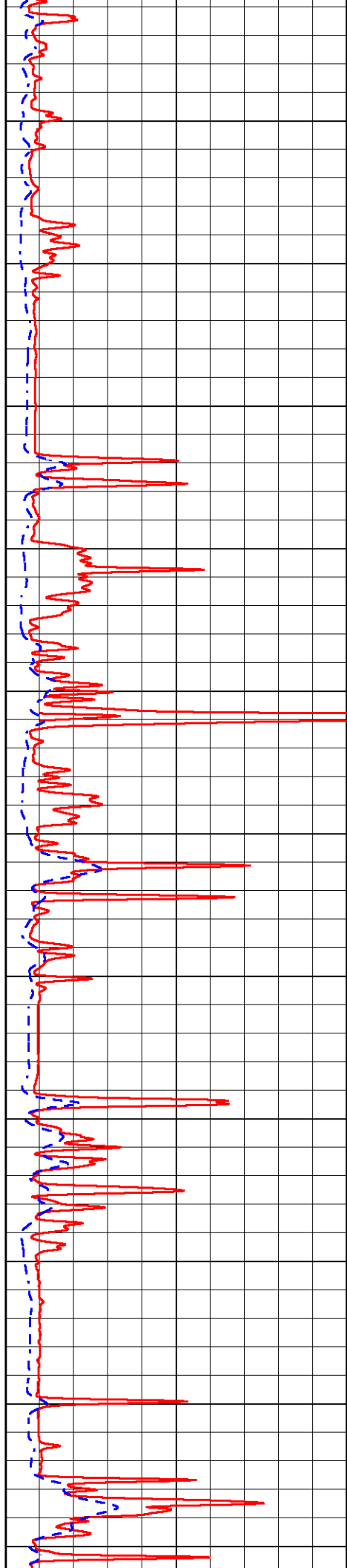
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Dataset Pathname StkMI/pass3.2
Presentation Format _dil2in
Dataset Creation Thu Sep 12 11:28:55 2024
Charted by Depth in Feet scaled 1:600

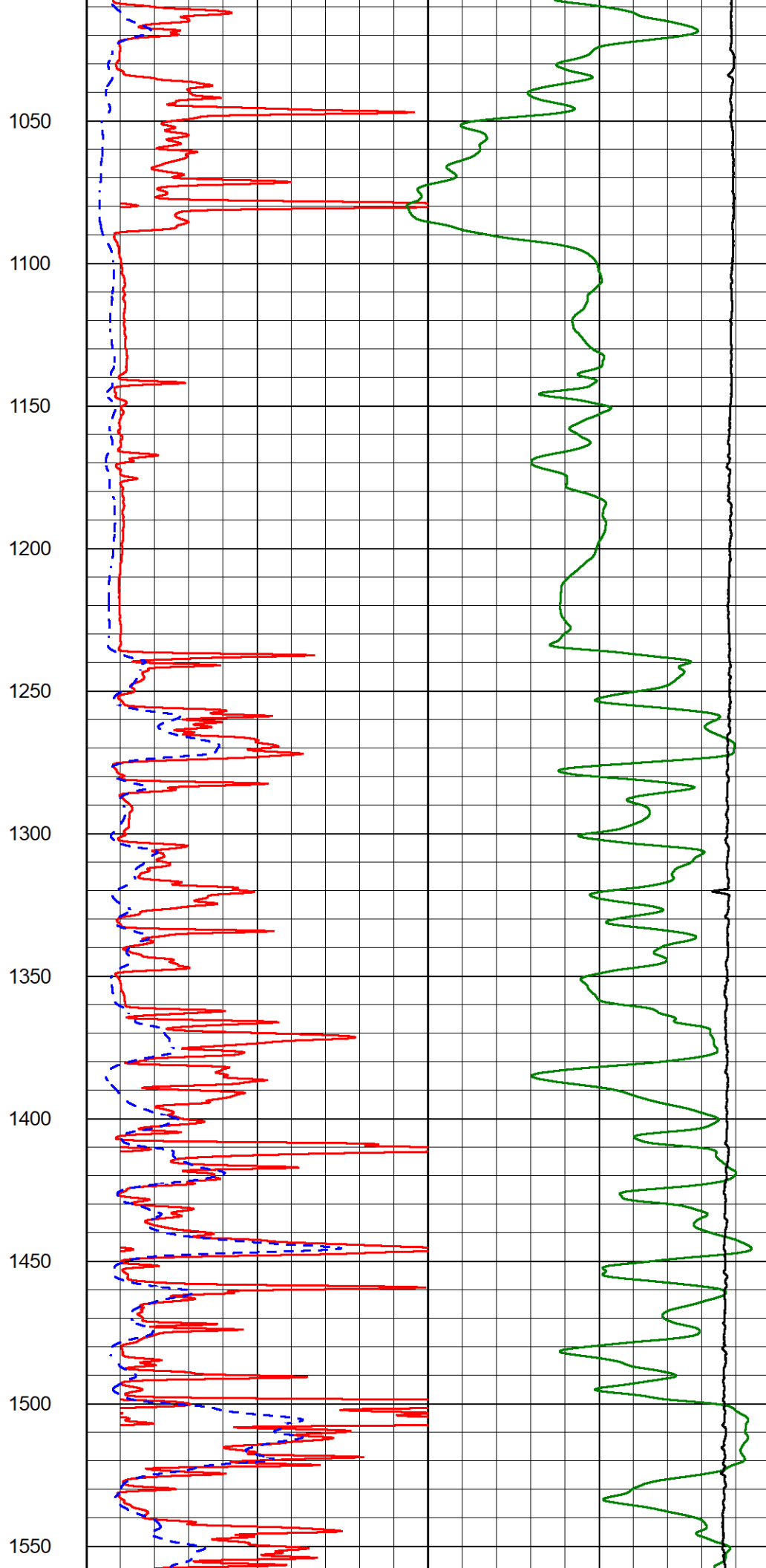
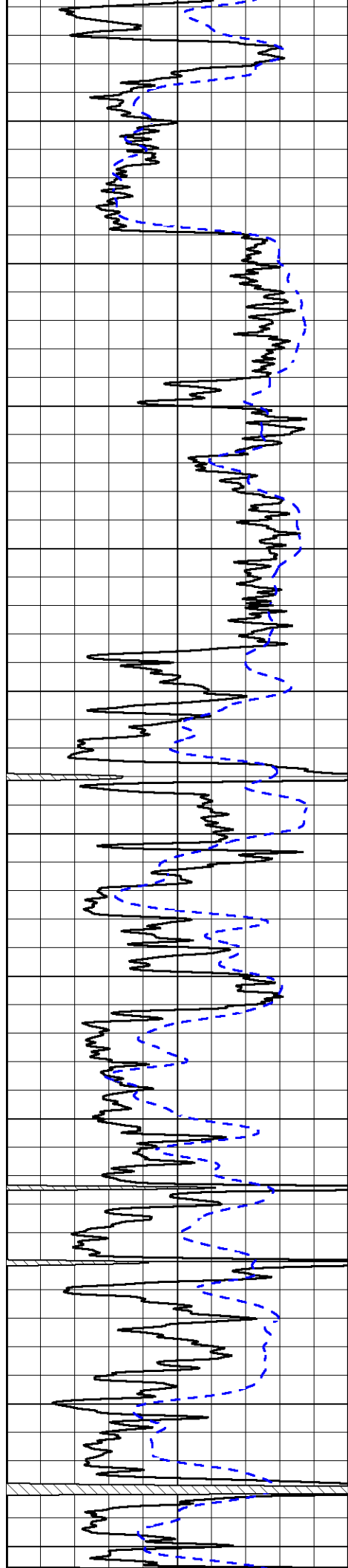
0	Gamma Ray (GAPI)	150	1000	Conductivity (mmho/m)	0
-200	SP (mV)	0	15000	Line Tension (lb)	0
			0	RLL3 (Ohm-m)	50
			0	Deep Resistivity (Ohm-m)	50
			50	RLL3 (Ohm-m)	200
			50	Deep Resistivity (Ohm-m)	200

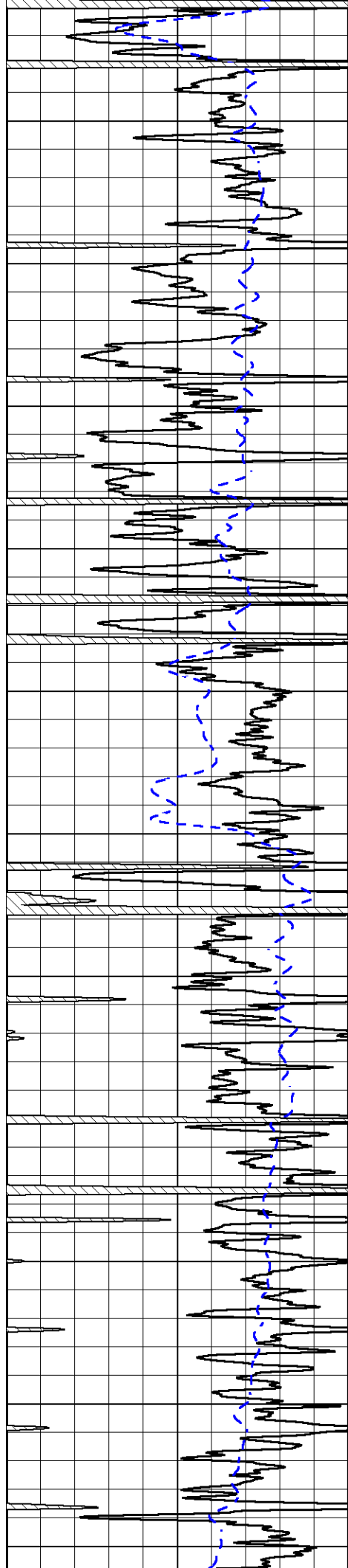




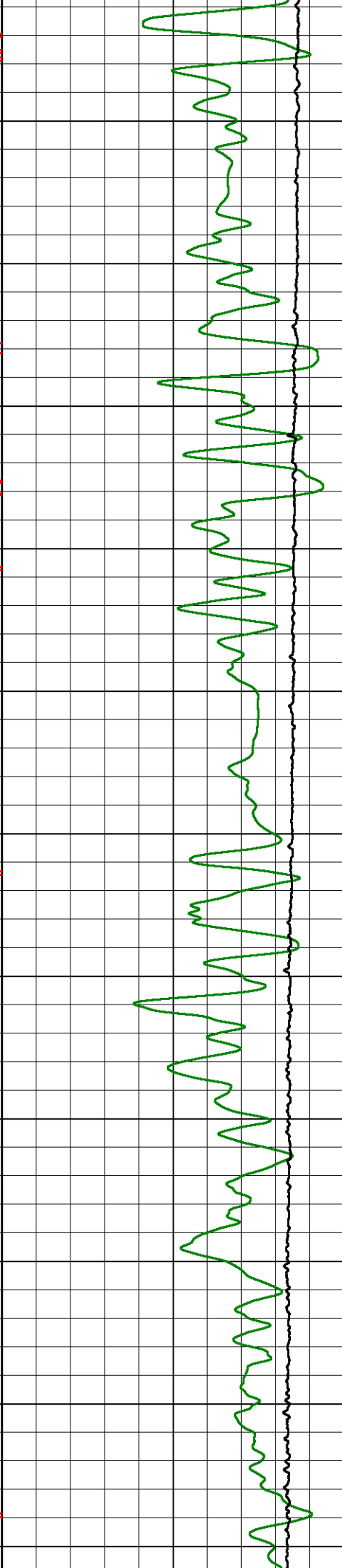
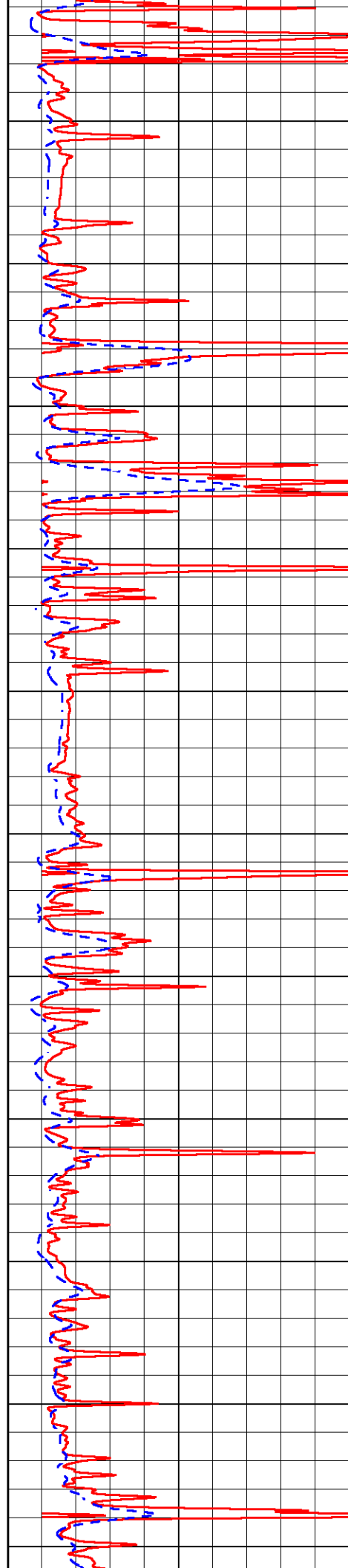
500
550
600
650
700
750
800
850
900
950
1000

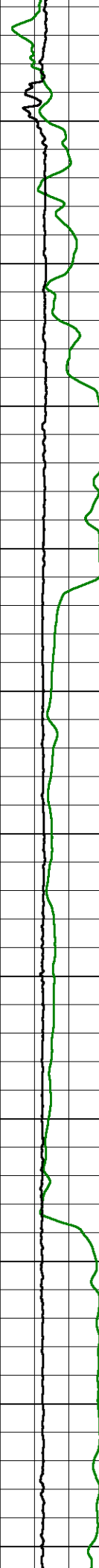
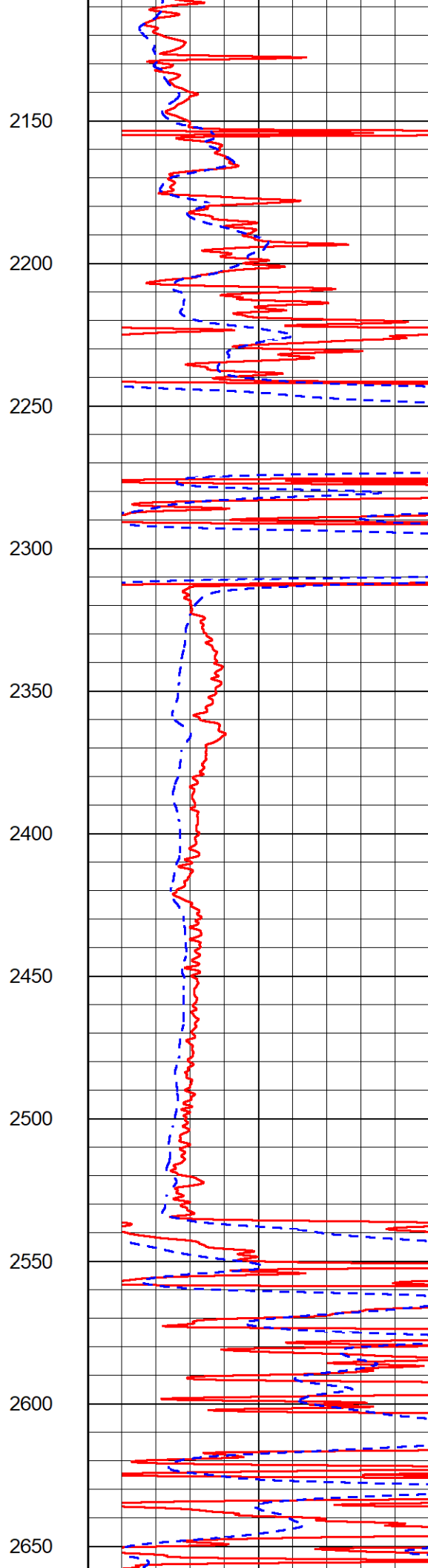
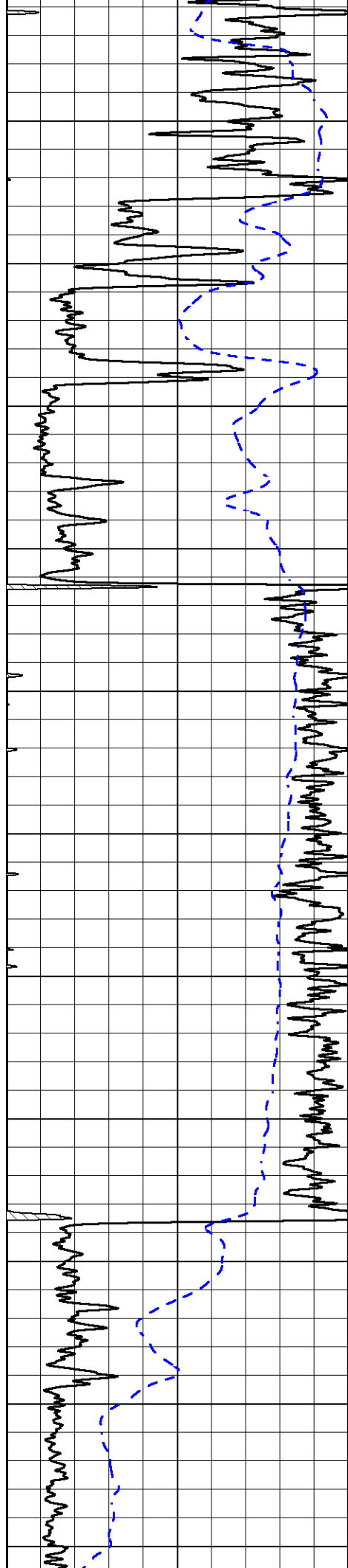


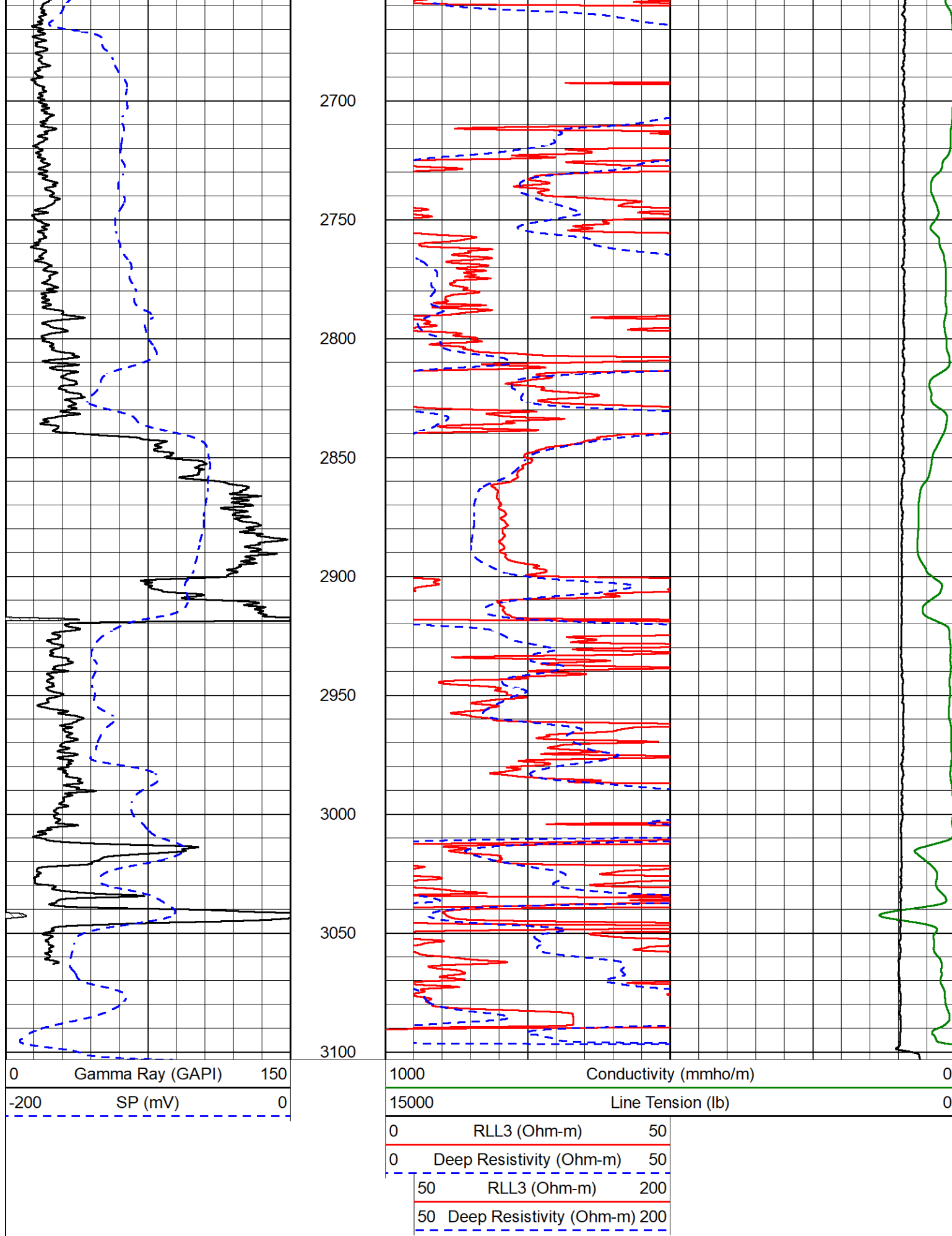




1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100







DETAIL SECTION



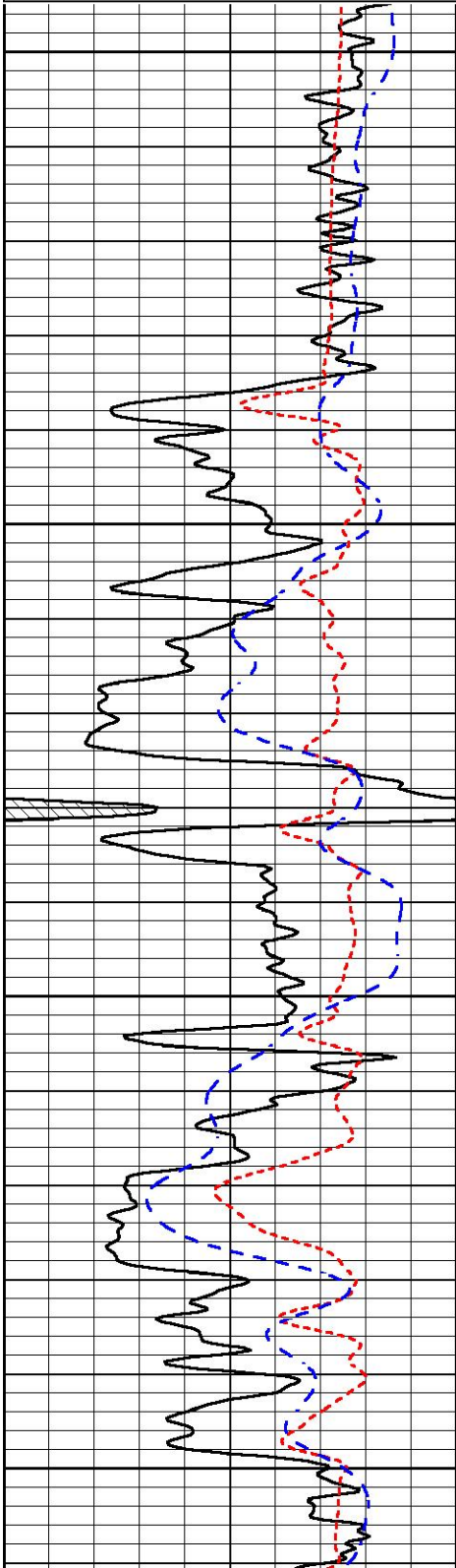
DETAIL SECTION

MAIN PASS

Database File castle_czirr #1.db
Dataset Pathname StkMI/pass3.1
Presentation Format _dil
Dataset Creation Thu Sep 12 11:31:32 2024
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

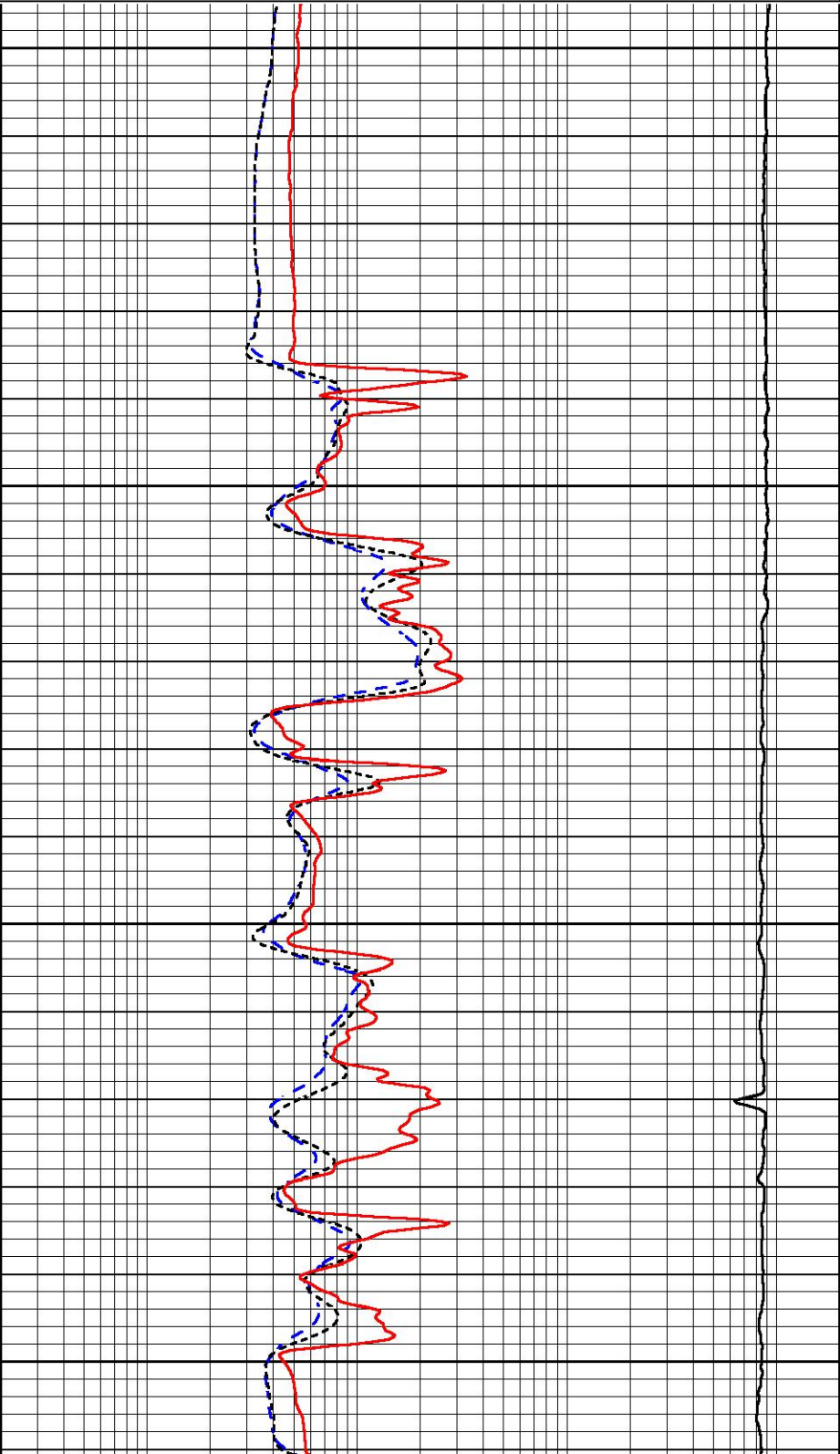


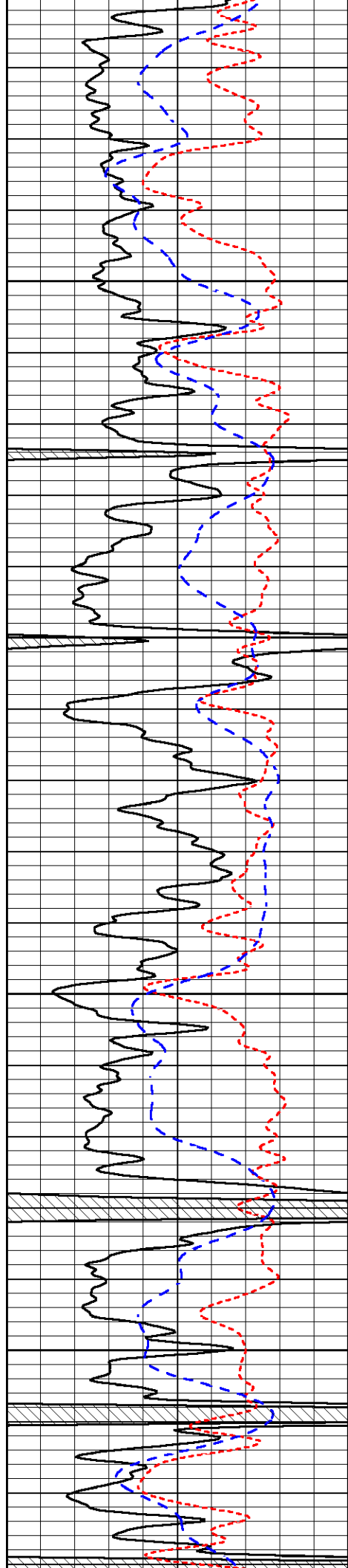
1200

1250

1300

1350



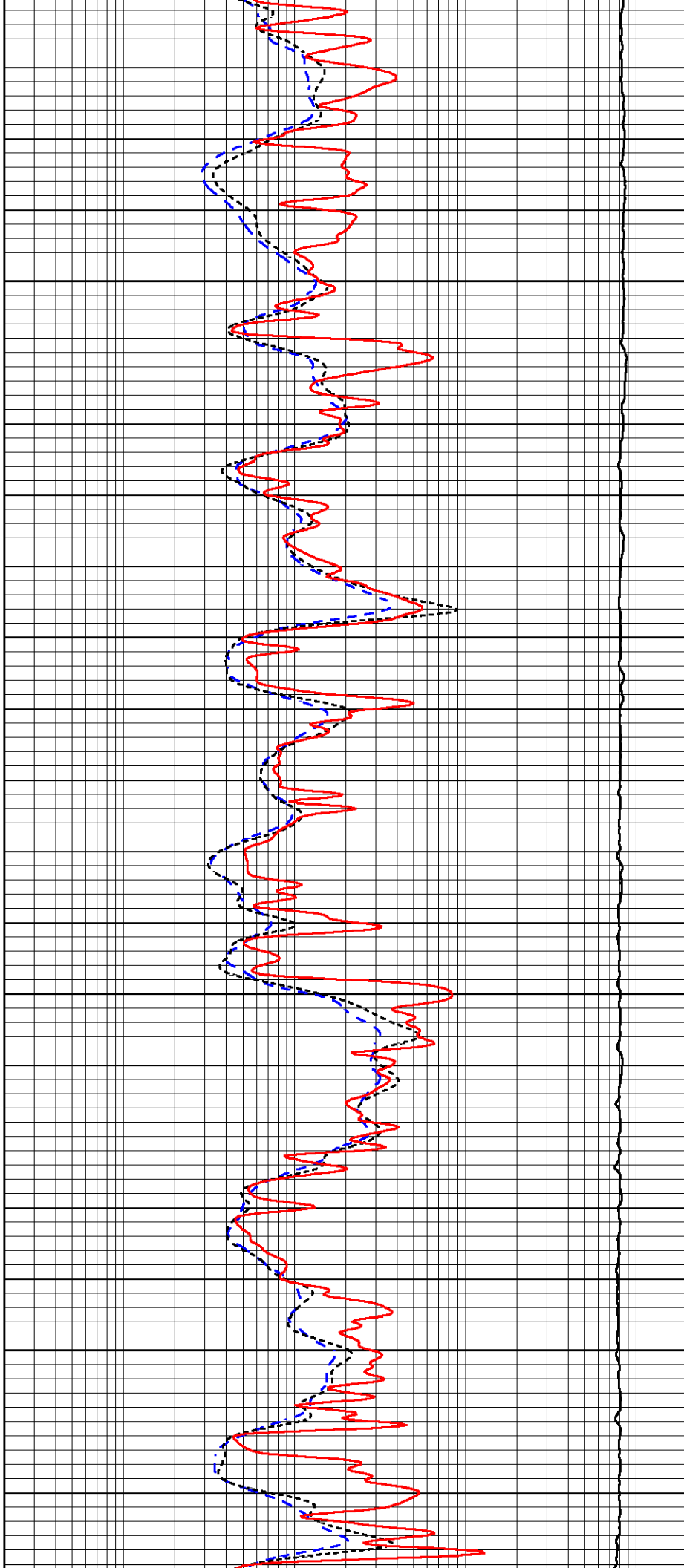


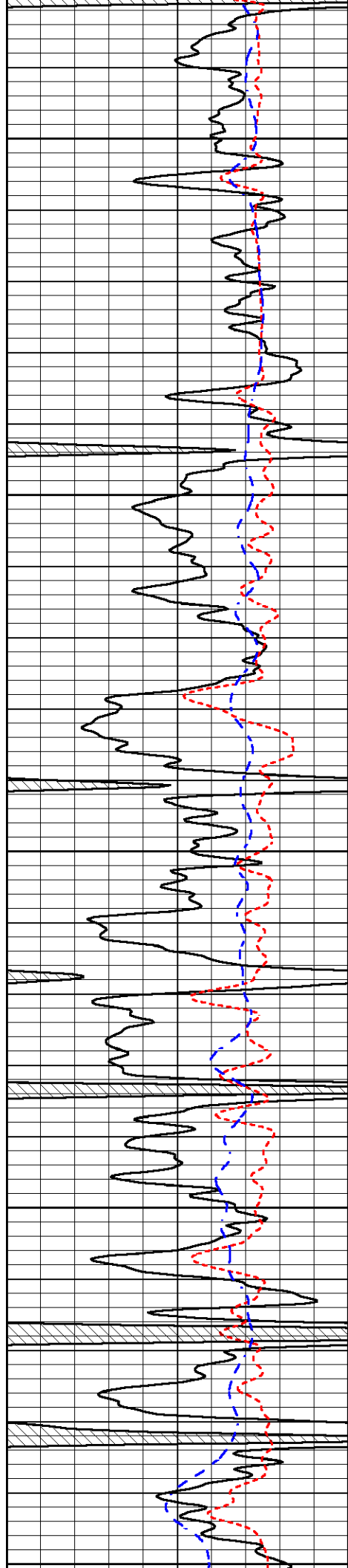
1400

1450

1500

1550





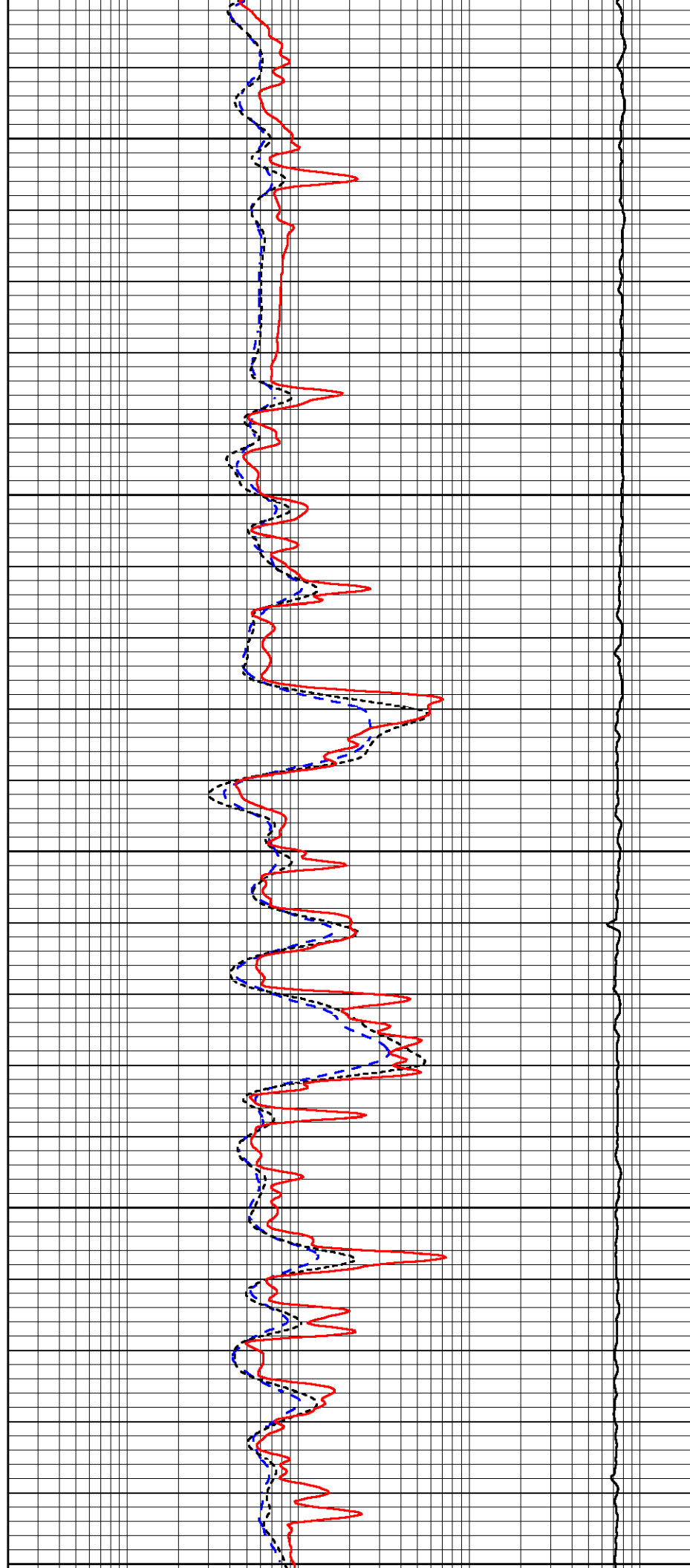
1600

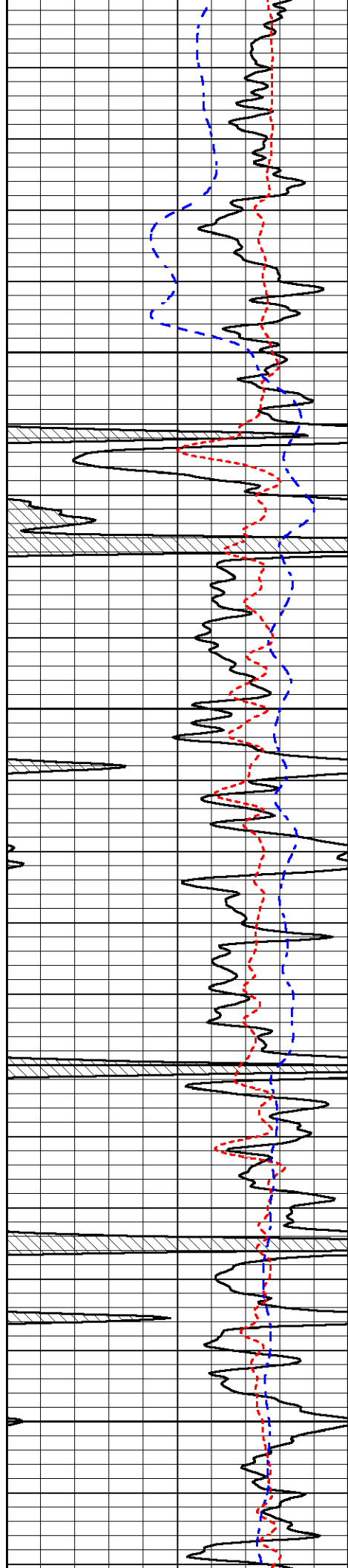
1650

1700

1750

1800



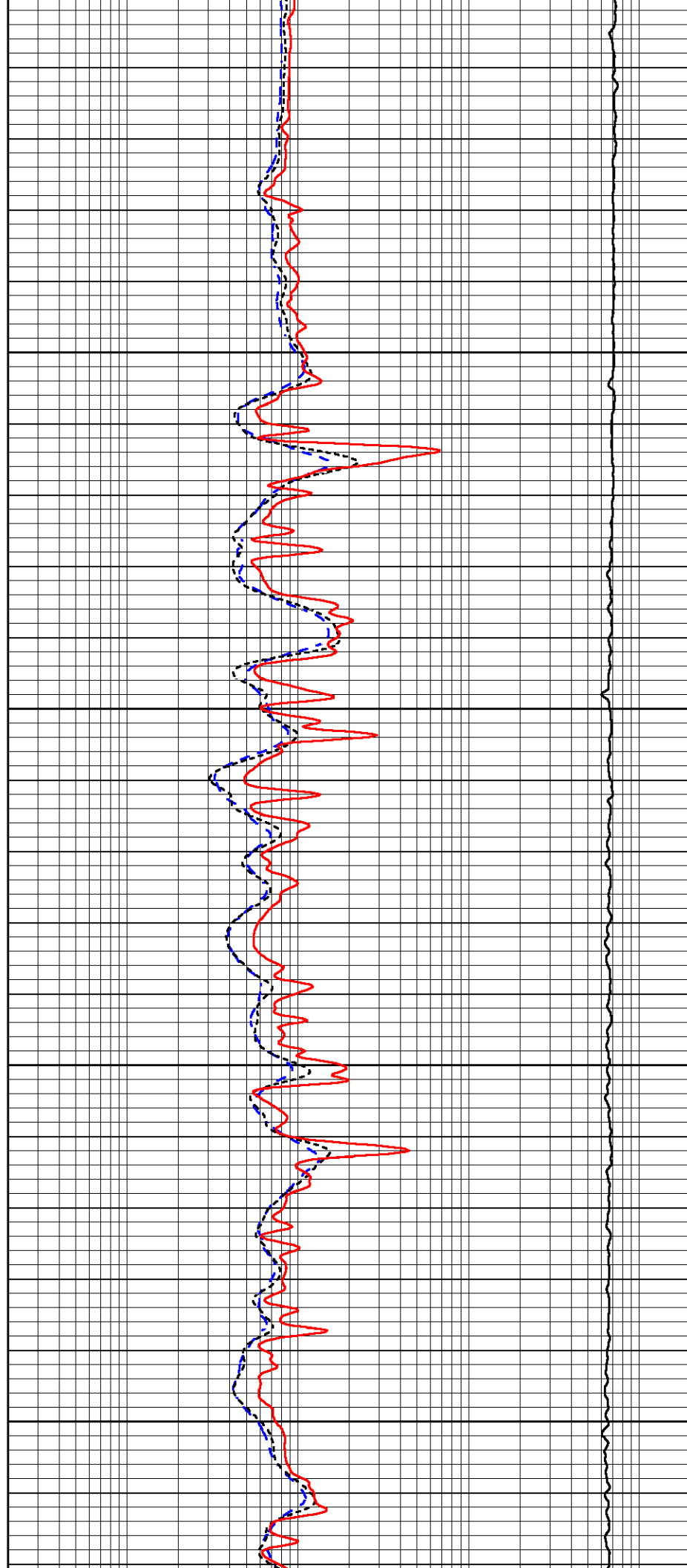


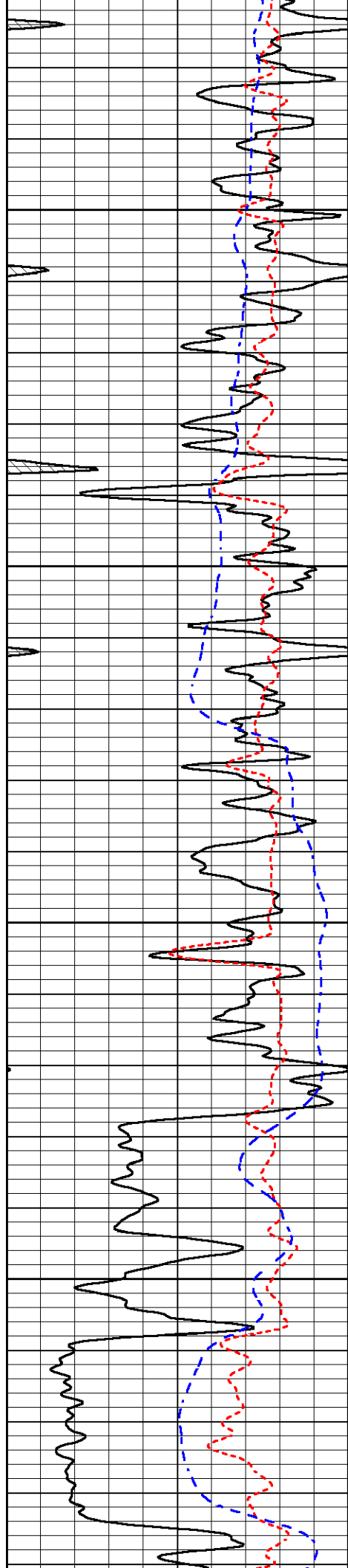
1850

1900

1950

2000



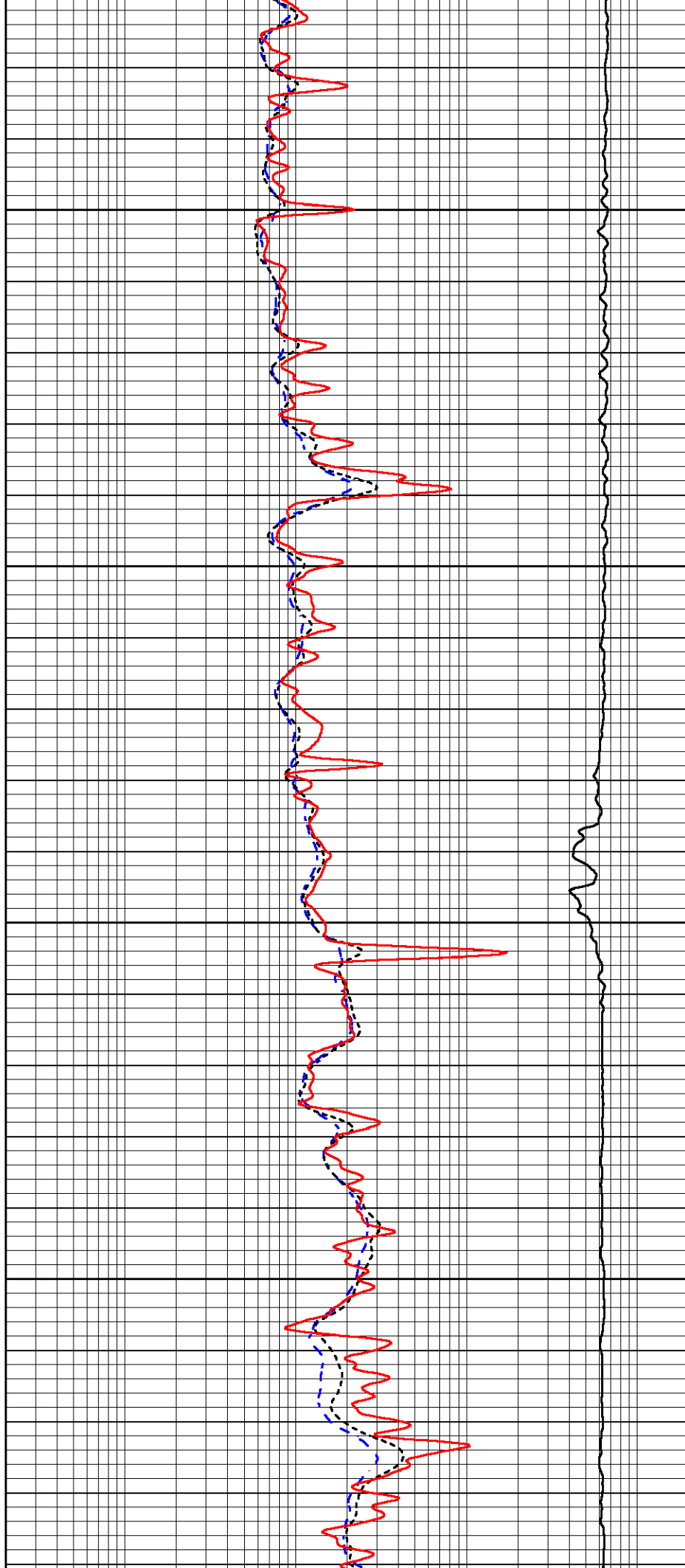


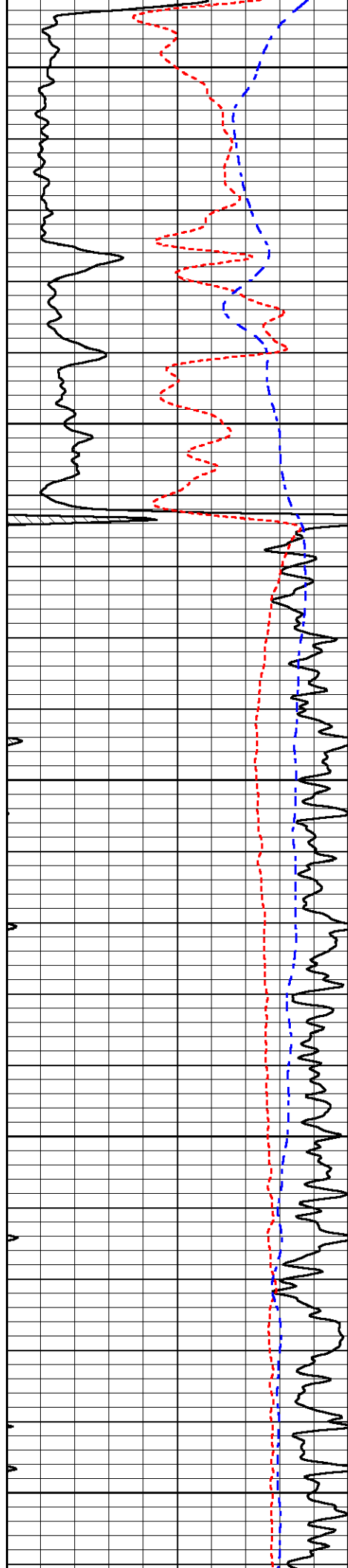
2050

2100

2150

2200





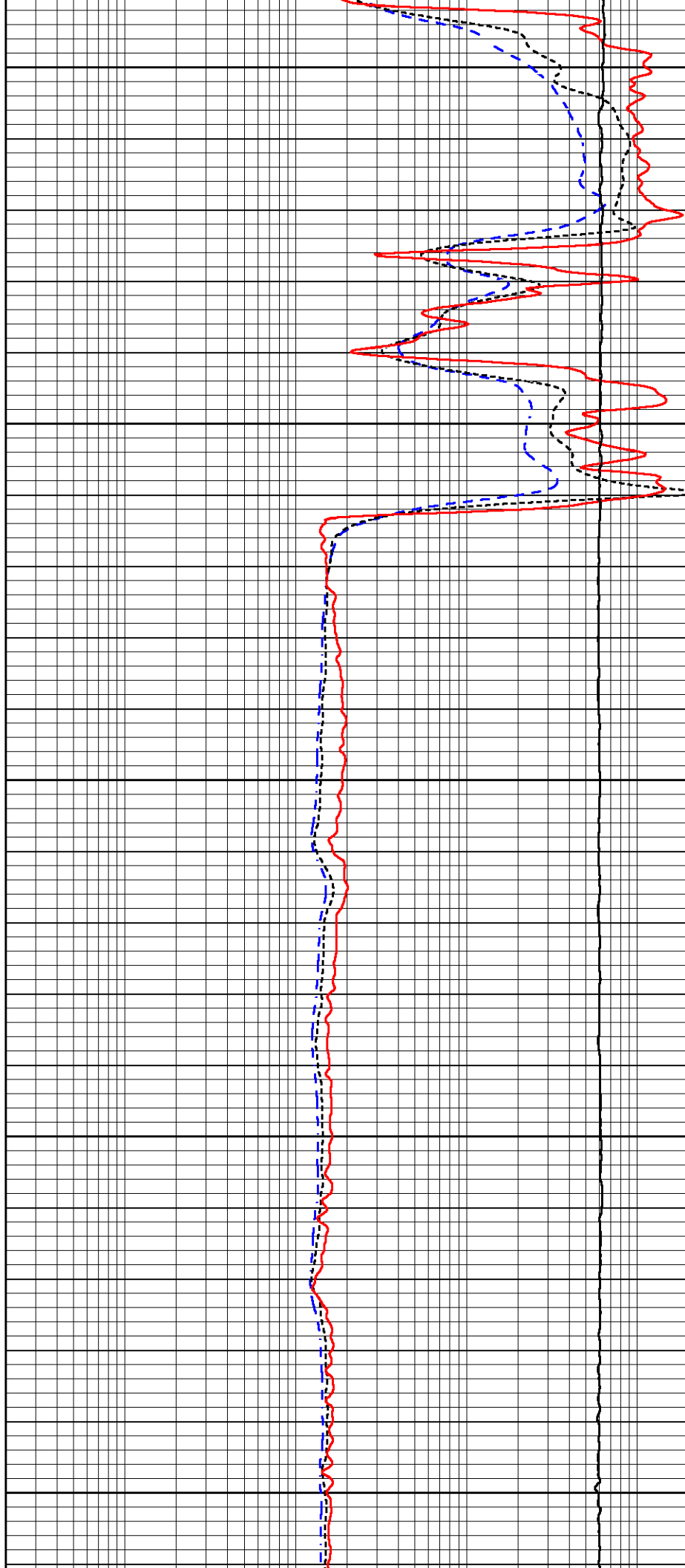
2250

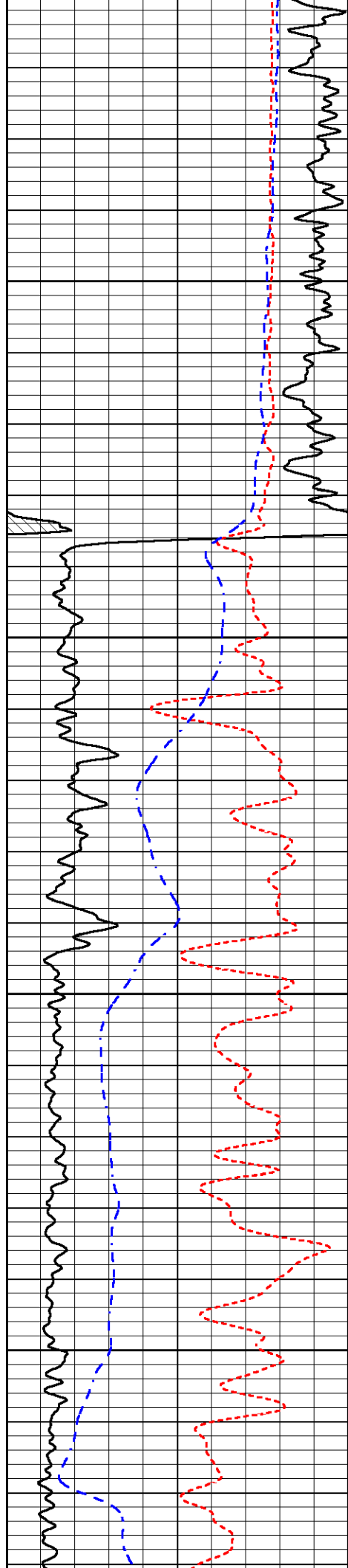
2300

2350

2400

2450



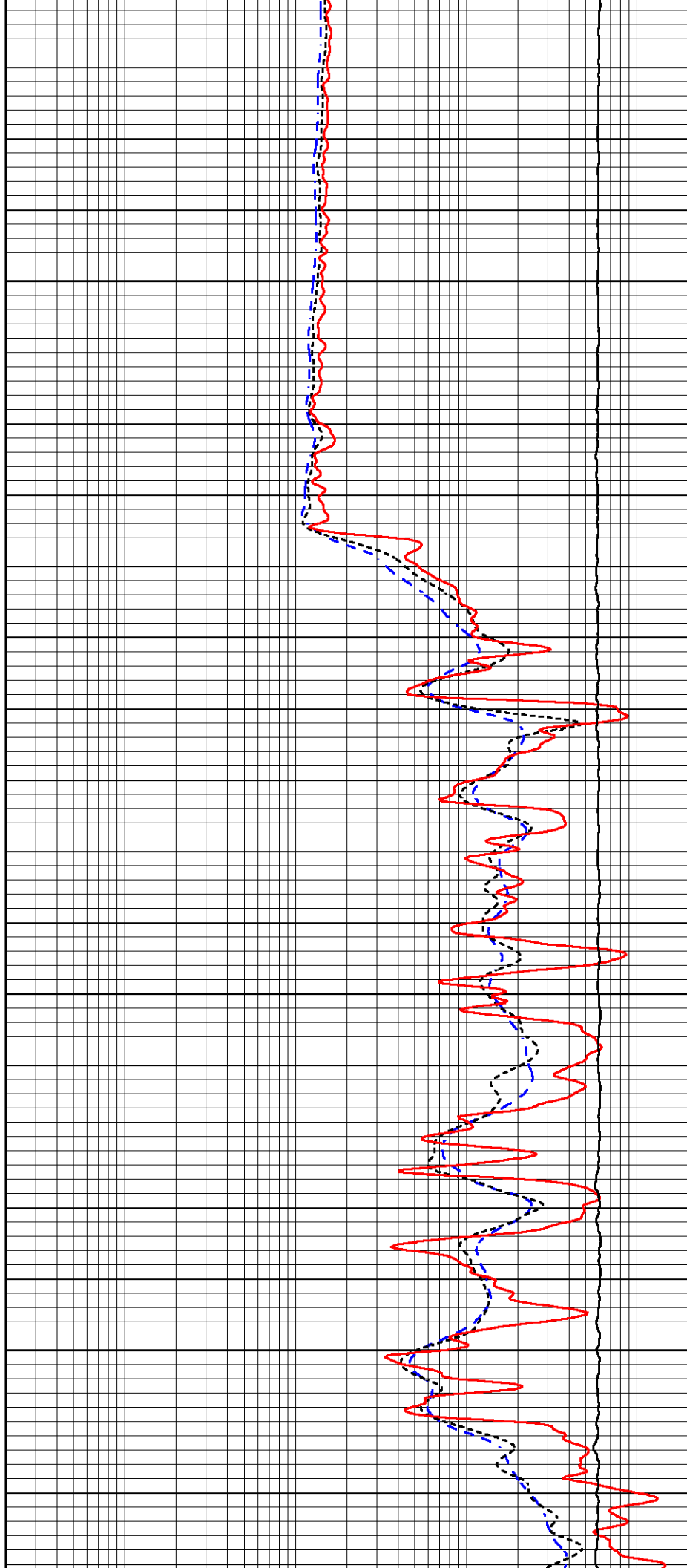


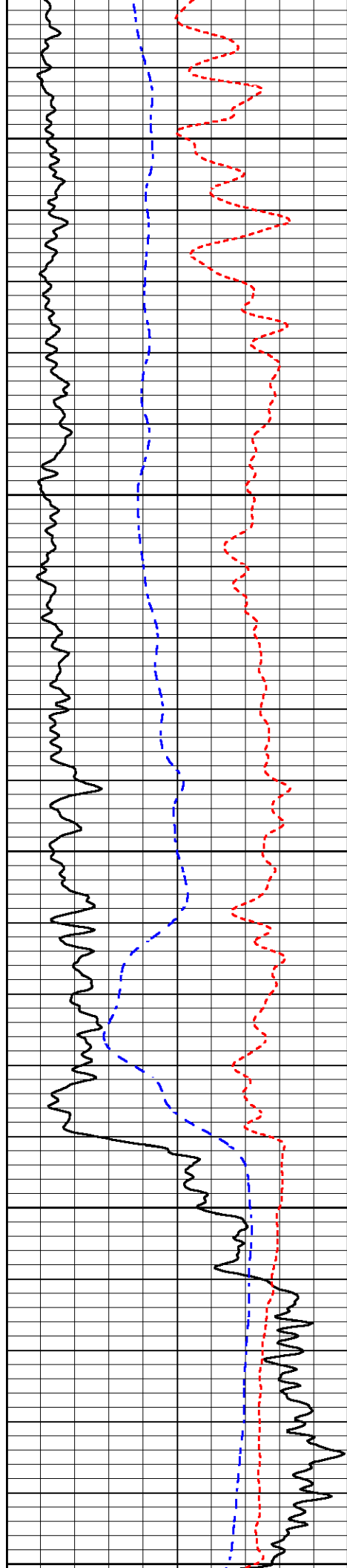
2500

2550

2600

2650





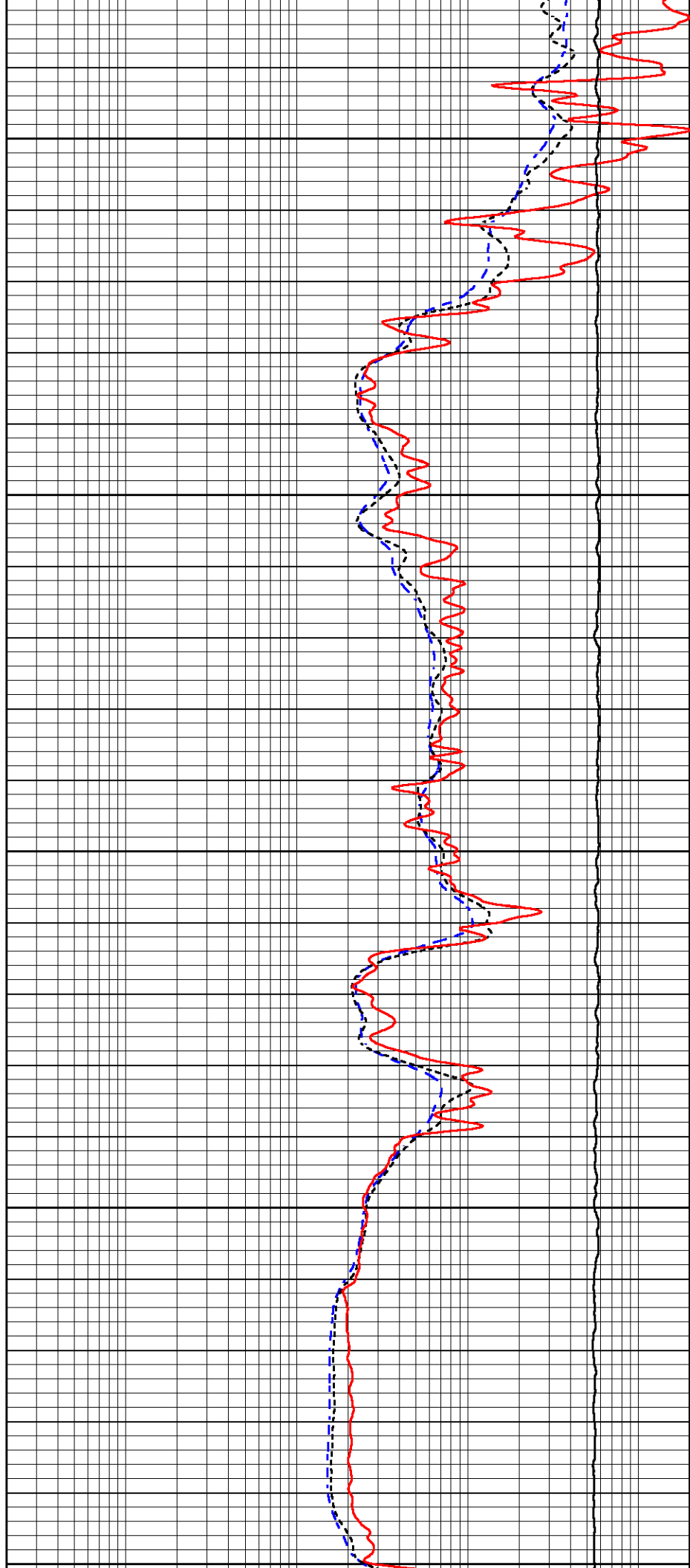
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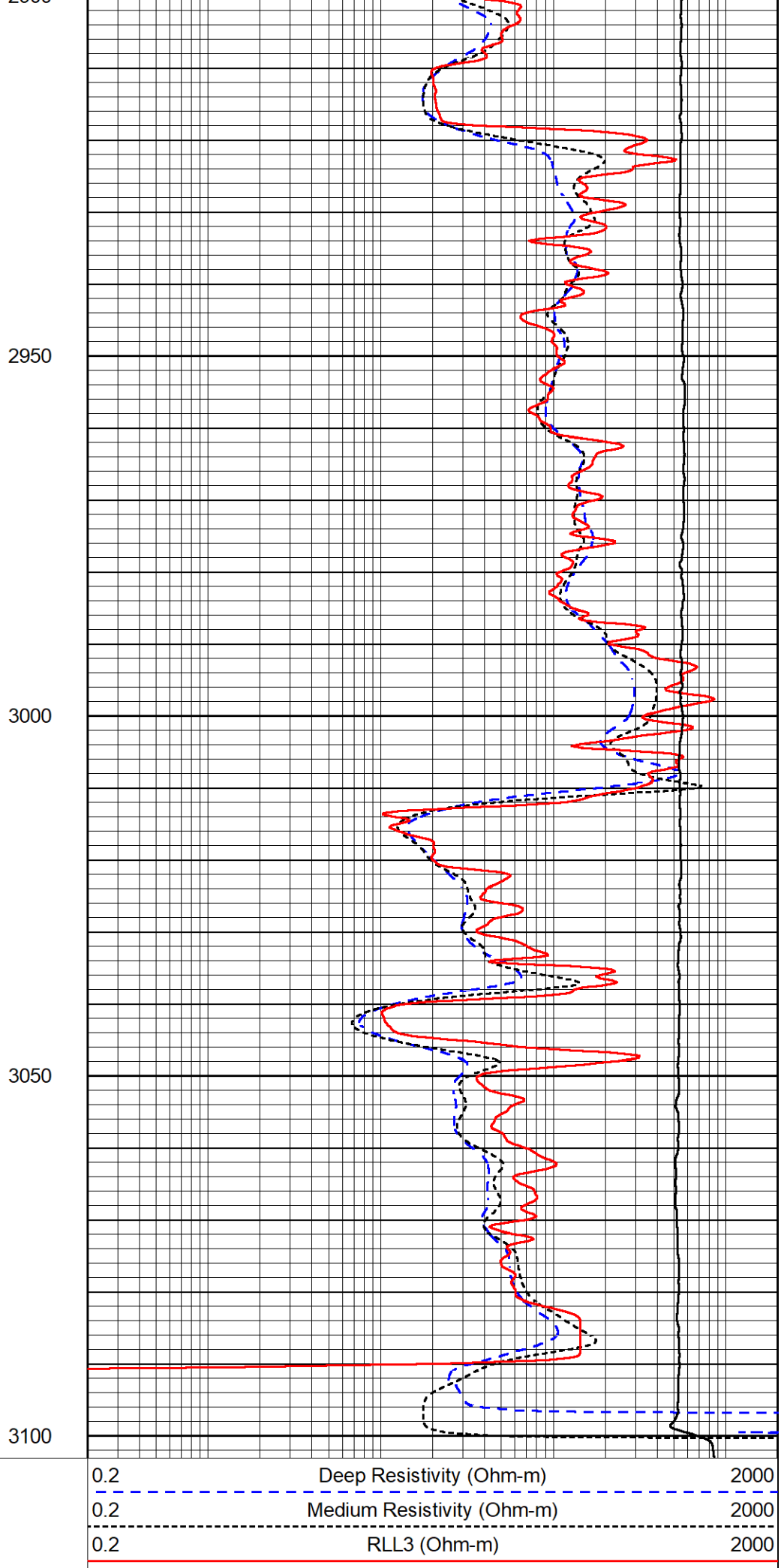
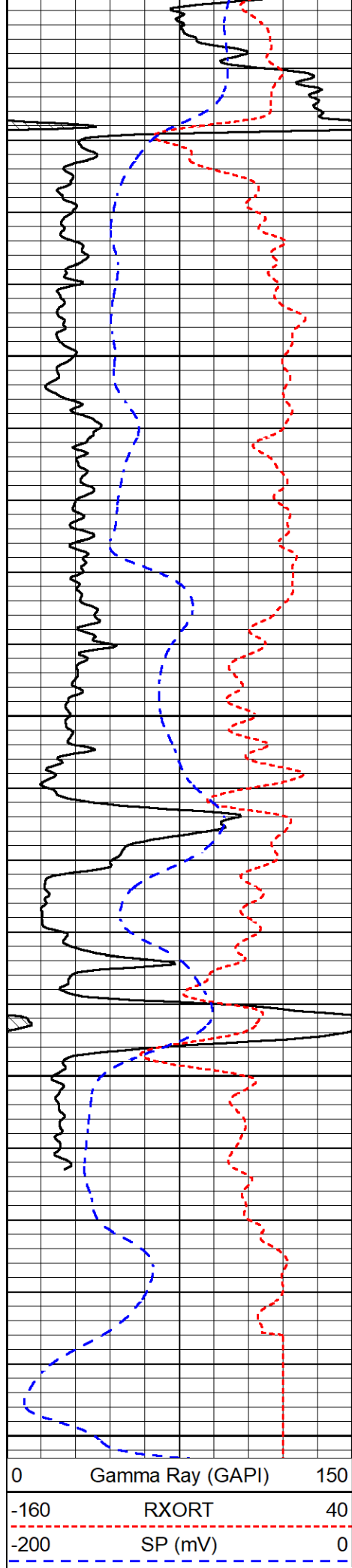
2750

2800

2850

2900





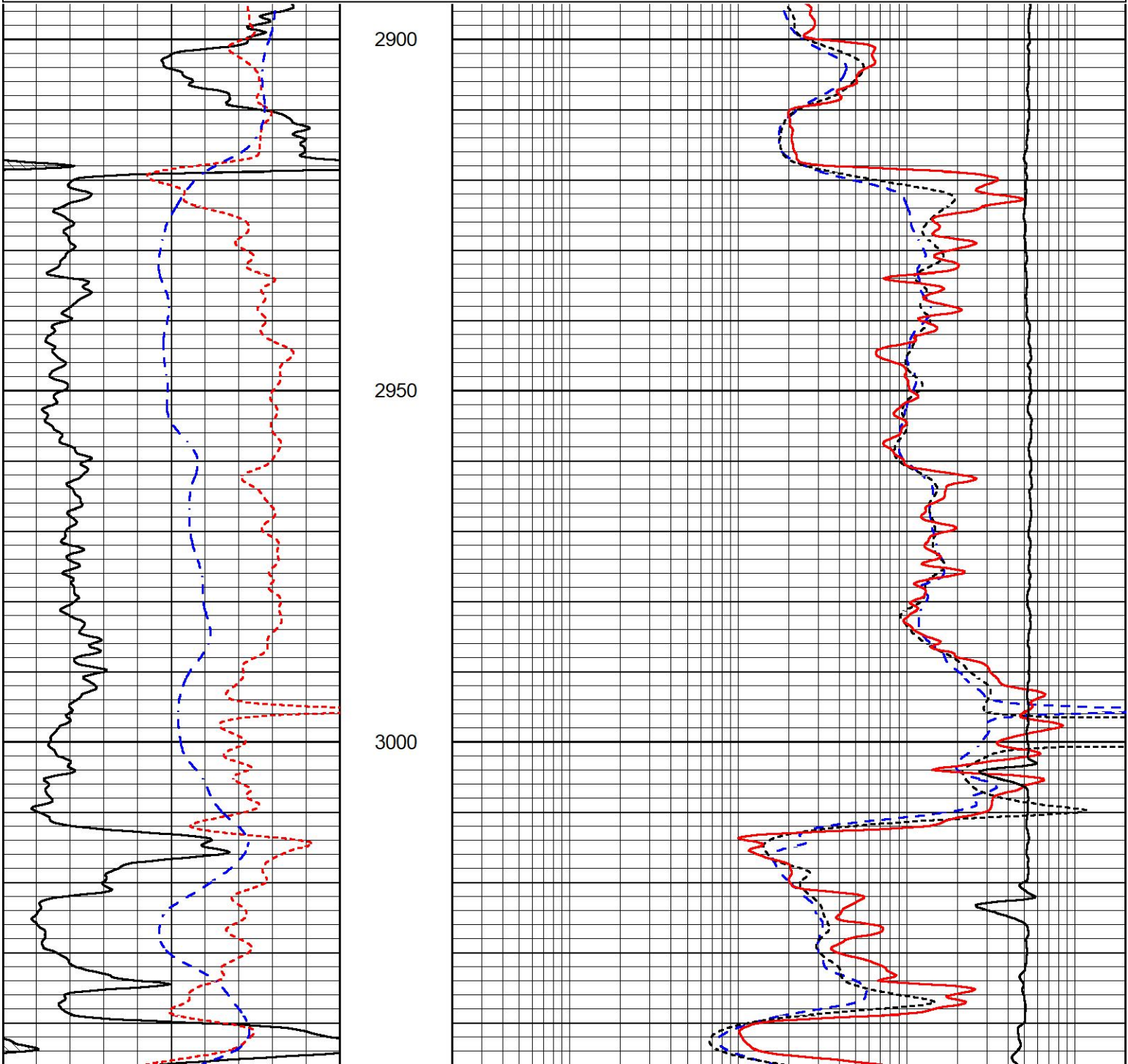


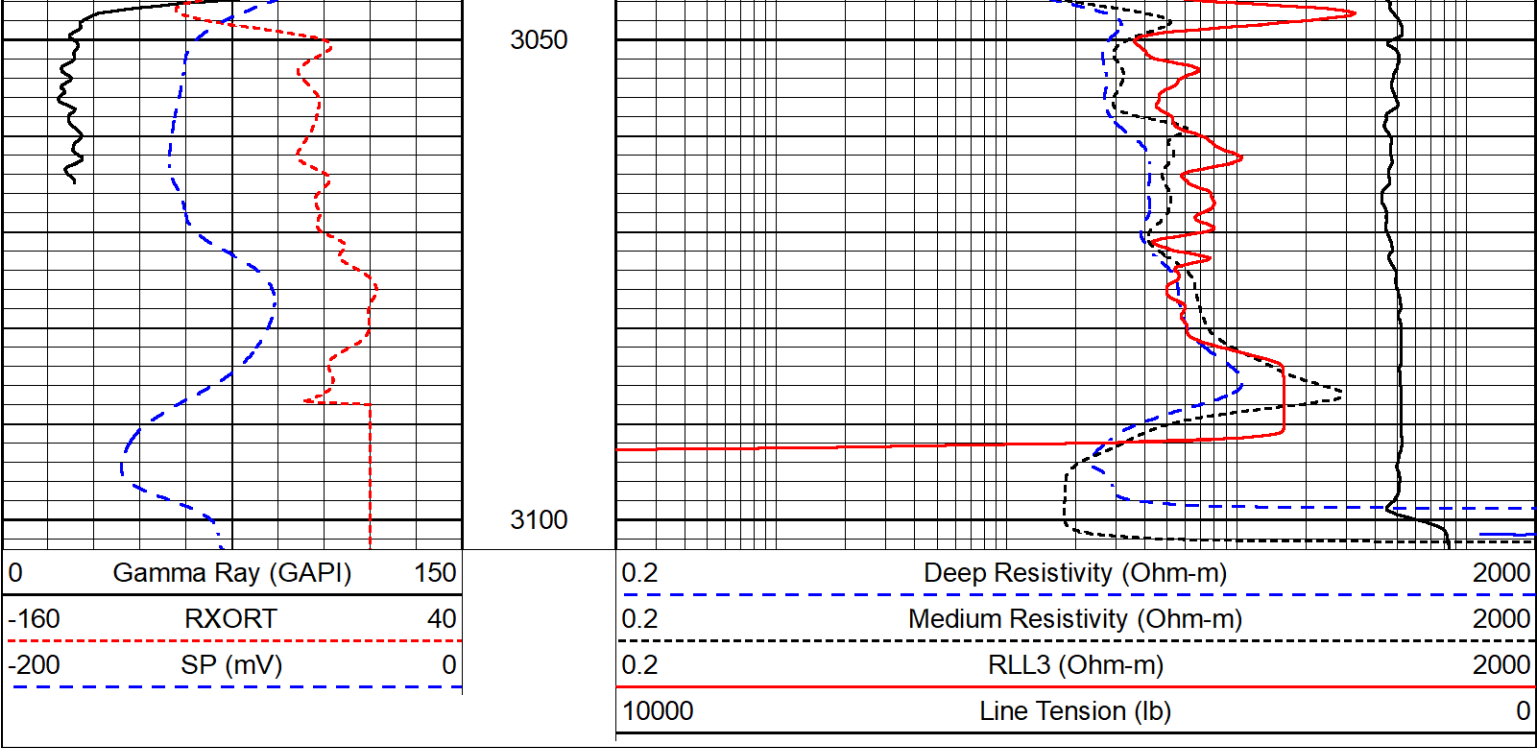
REPEAT SECTION

REPEAT PASS

Database File castle_czirr #1.db
Dataset Pathname StkMI/pass2.1
Presentation Format _dil
Dataset Creation Thu Sep 12 11:08:43 2024
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





Calibration Report							
Database File	castle_czirr #1.db						
Dataset Pathname	StkMI/pass3.1						
Dataset Creation	Thu Sep 12 11:31:32 2024						
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	0.450	-79.000
Microlog Calibration Report							
Serial-Model:				401-PSIML			
Performed:				Mon Sep 25 22:02:56 2023			
		Readings		References		Results	
	Zero	Cal		Zero	Cal	m	b
Normal	0.0000	1.0000		0.0000	1.0000 Ohm-m	13500.0000	0.7000
Inverse	0.0000	1.0000		0.0000	1.0000 Ohm-m	17000.0000	0.2500
Caliper	1.0052	1.0858		5.0000	16.5000 in	142.7190	-139.1700
Compensated Density Calibration Report							
Serial-Model:				305-24-M&W			
Source / Verifier:				77782B / 2ci			
Master Calibration Performed:				Thu Sep 5 12:54:58 2024			
Before Survey Verification Performed:							
After Survey Verification Performed:							

Master Calibration

	Density			Far Detector		Near Detector	
Magnesium	1.680	g/cc		6359.64		7565.63	cps
Aluminum	2.560	g/cc		1367.24		5039.74	cps
Spine Angle = 75.20				Density/Spine Ratio = 0.553			
	Size			Reading			
Small Ring	4.00	in		1.74			
Large Ring	14.00	in		1.38			

Compensated Neutron Calibration Report

Serial Number:	201-M&W
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		cps			
	Long Space		cps	pu		pu

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



MIDWEST WIRELINE

Well	CEM 111
Field	Unnamed
County	Wabaunsee
State	Kansas