



MIDWEST WIRELINE

DUAL INDUCTION

CompanyGriffin Manangement LLC		Company Griffin Manangement LLC	
Well	Hope #3X	Well	Hope #3X
Field	Turkey Creek East	Field	Turkey Creek East
County	Barber	County	Barber
State	Kansas	State	Kansas
Location:		API # : 15-007-24474-00-00	Other Services
Permanent Datum		S2 SW NE NE	CNL/CDL
Log Measured From		1120 FNL & 990 FEL	MEL
Drilling Measured From		SEC 16 TWP 30S RGE 15W	
Date	6/21/2023		
Run Number	One		
Depth Driller	4773		
Depth Logger	4773		
Bottom Logged Interval	4772		
Top Log Interval	950		
Casing Driller	8.625 @ 977		
Casing Logger	979		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	8000		
Density / Viscosity	9.1 47		
pH / Fluid Loss	10.0 8.8		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.75 @ 76		
Rmt @ Meas. Temp	0.56 @ 76		
Rmc @ Meas. Temp	1.01 @ 76		
Source of Rmt / Rmc	Charts		
Rm @ BHT	0.46 @ 124		
Operating Rig Time	2.5 Hours		
Max Rec. Temp. F	124		
Equipment Number	P-24		
Location	Hays		
Recorded By	T. Martin		
Witnessed By	Eli Felts		

<<< 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 Blktp and SW 110, 1 E, S 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: Eli Felts
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 (207-MW)	5.00	3.50	100.00				
LSD DCAL SSD	28.18			CDL-M&W (307-11)	8.50	4.00	250.00				
	28.17										
	27.68										
MCAL MI MN	19.58							ML-PSIML (401)	7.58	4.00	65.00
	19.58										
	19.58										
RLL3F RLL3	15.50 15.50			DIL-M&W (507)	18.25	3.50	220.00				
CILD	8.33										
	4.50										
SP	0.20										
Dataset: Total length: Total weight: O.D.:				griffin_hope #3x.db: field/well/StkMI/pass3.1 42.33 ft 685.00 lb 4.00 in							

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_hope #3x.db
Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	124	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		-1	-3	470	80		4773

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

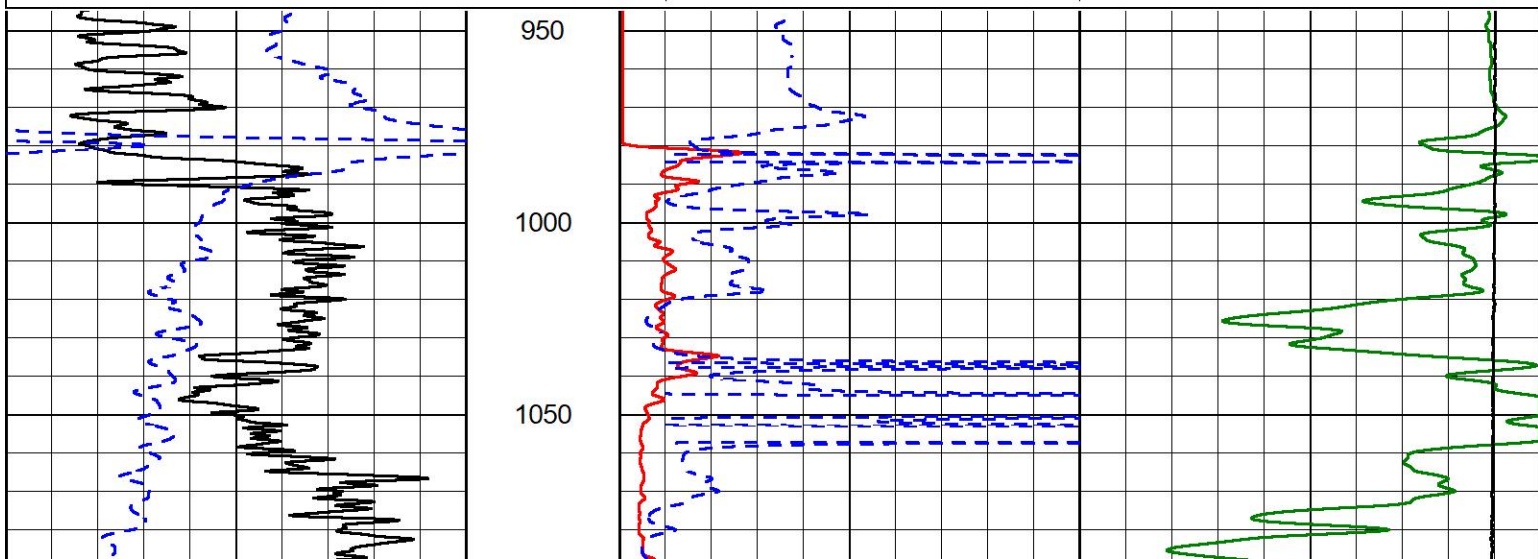


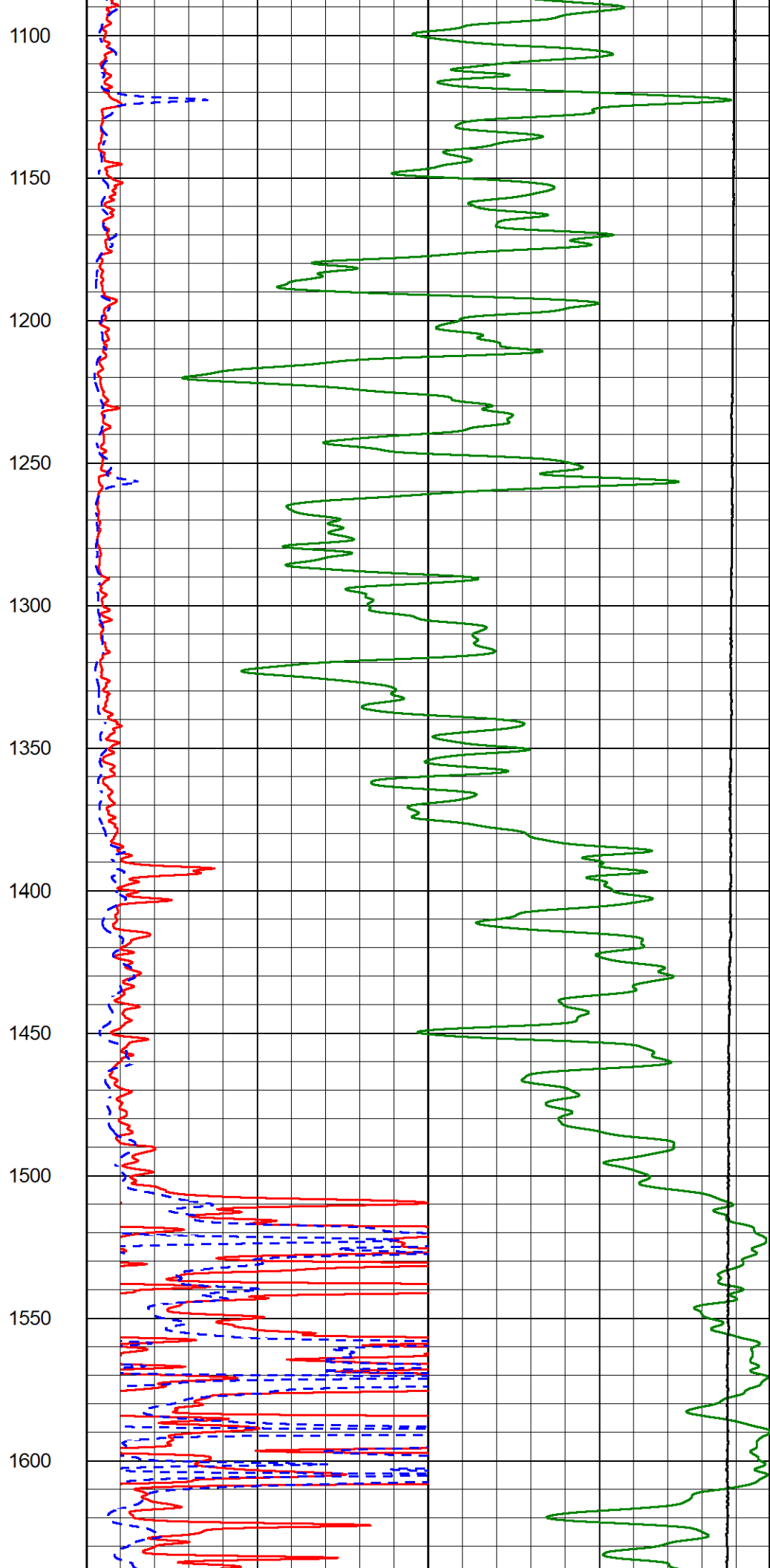
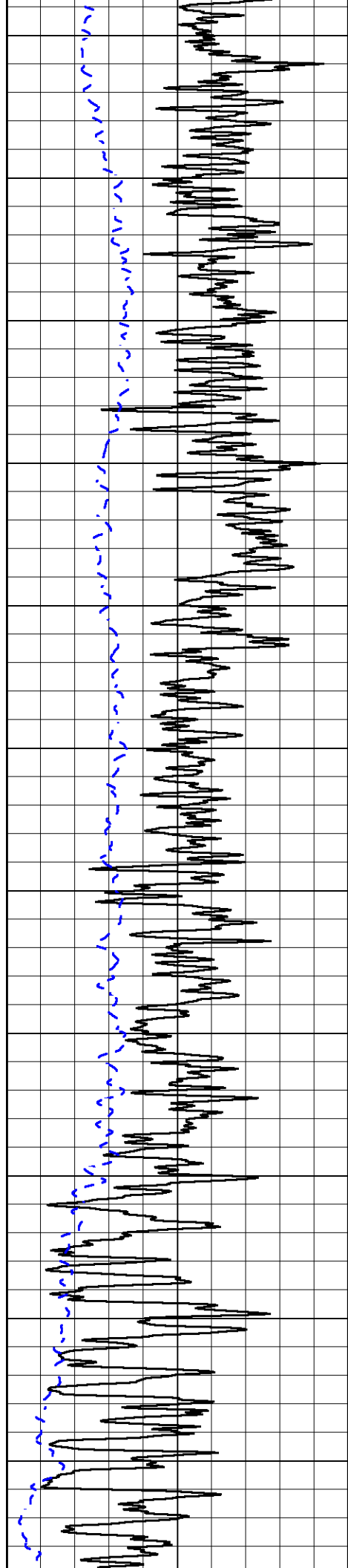
2" SCALE RESISTIVITY

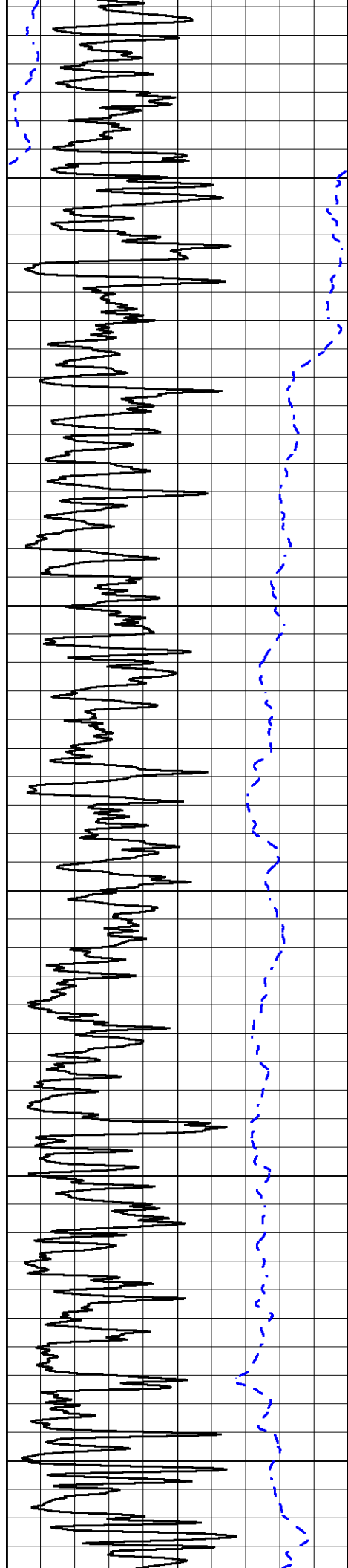
MAIN PASS

Database File griffin_hope #3x.db
Dataset Pathname StkMI/pass3.2
Presentation Format _dil2in
Dataset Creation Wed Jun 21 05:26:06 2023
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







1650

1700

1750

1800

1850

1900

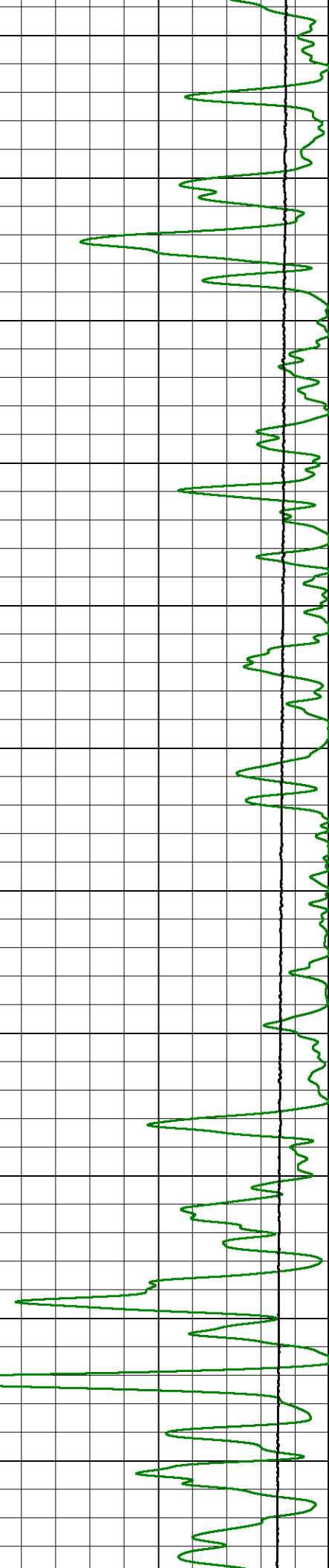
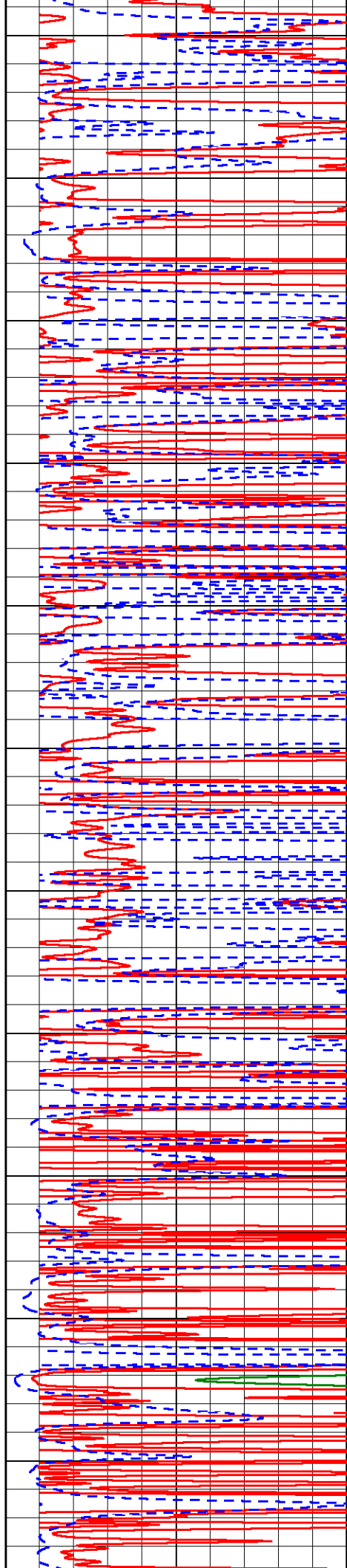
1950

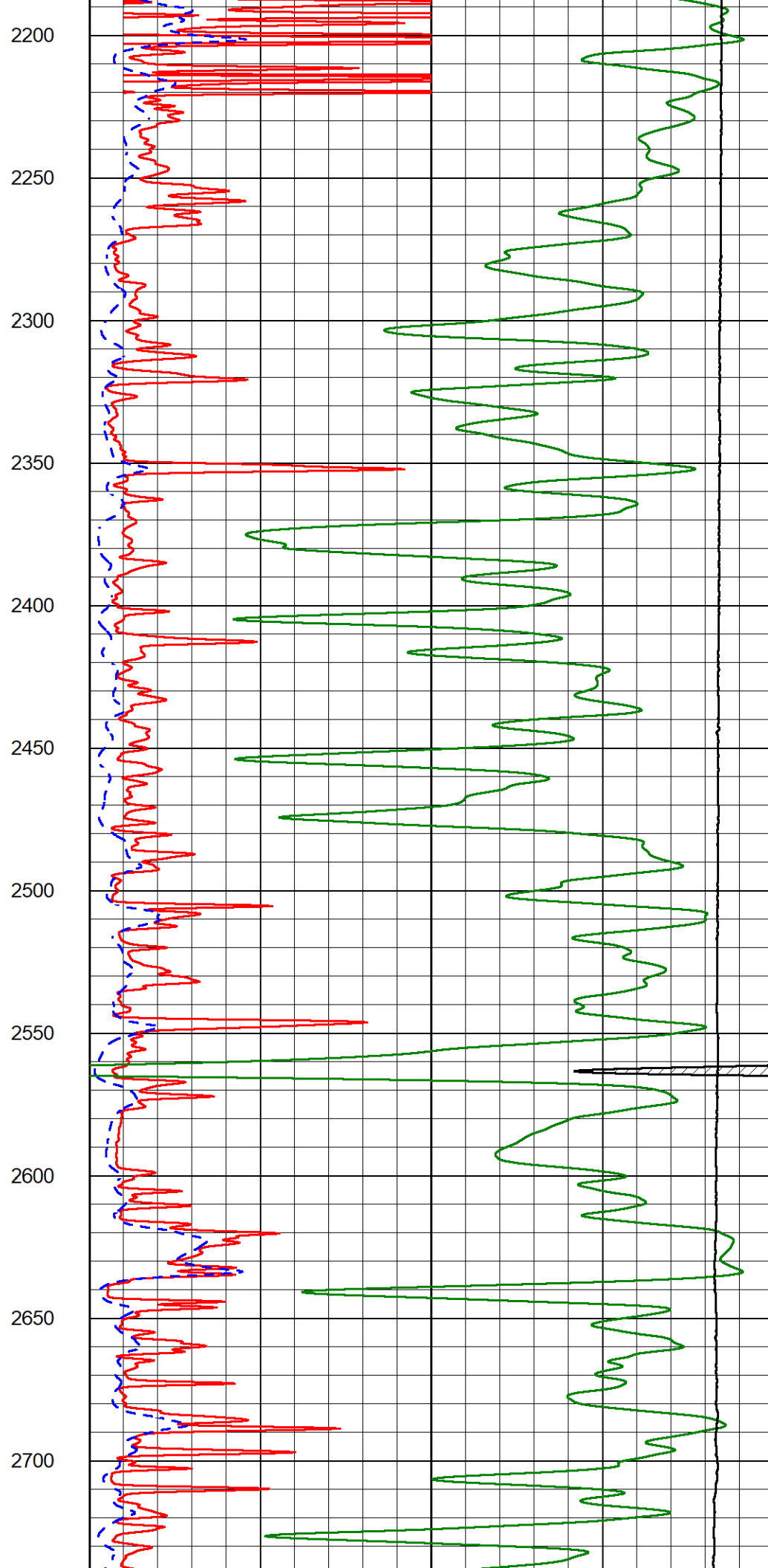
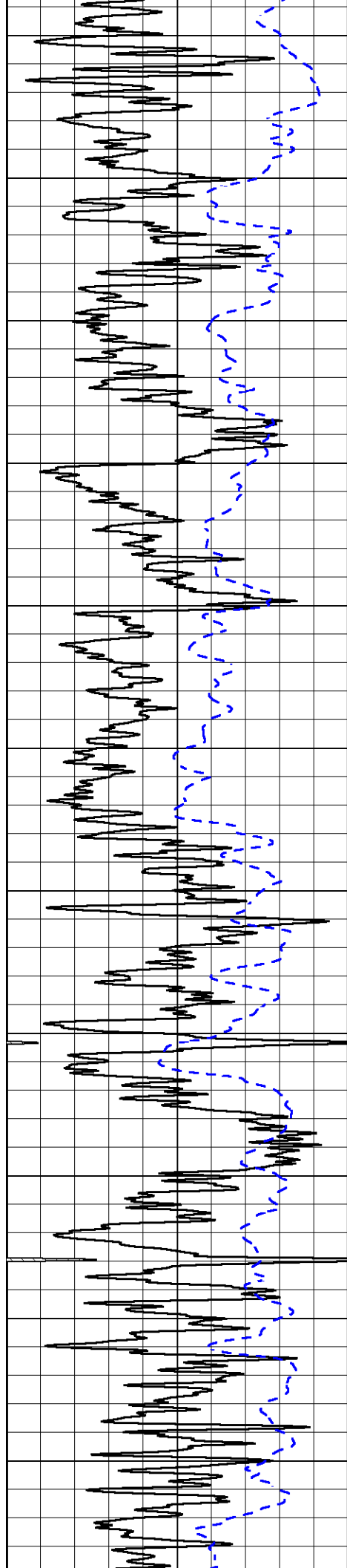
2000

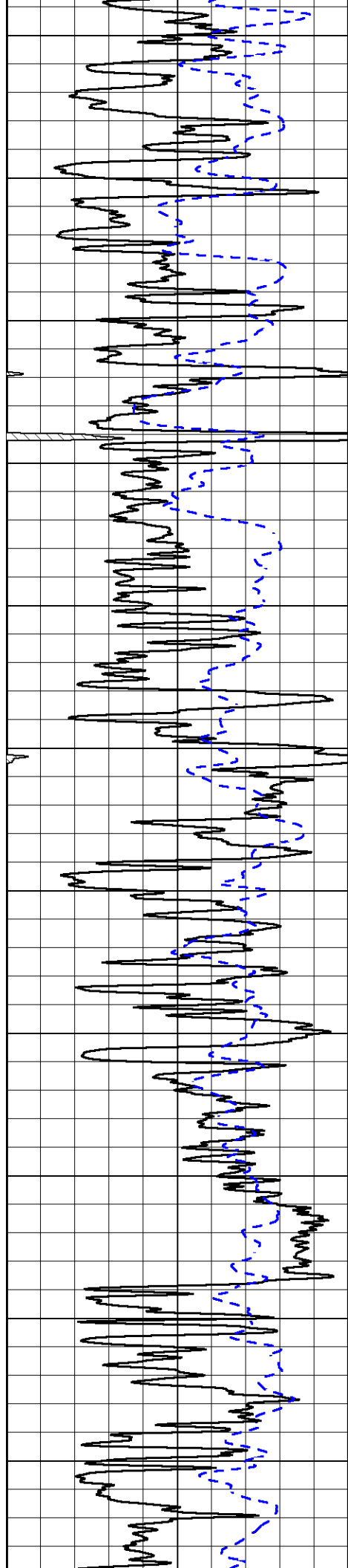
2050

2100

2150







2750

2800

2850

2900

2950

3000

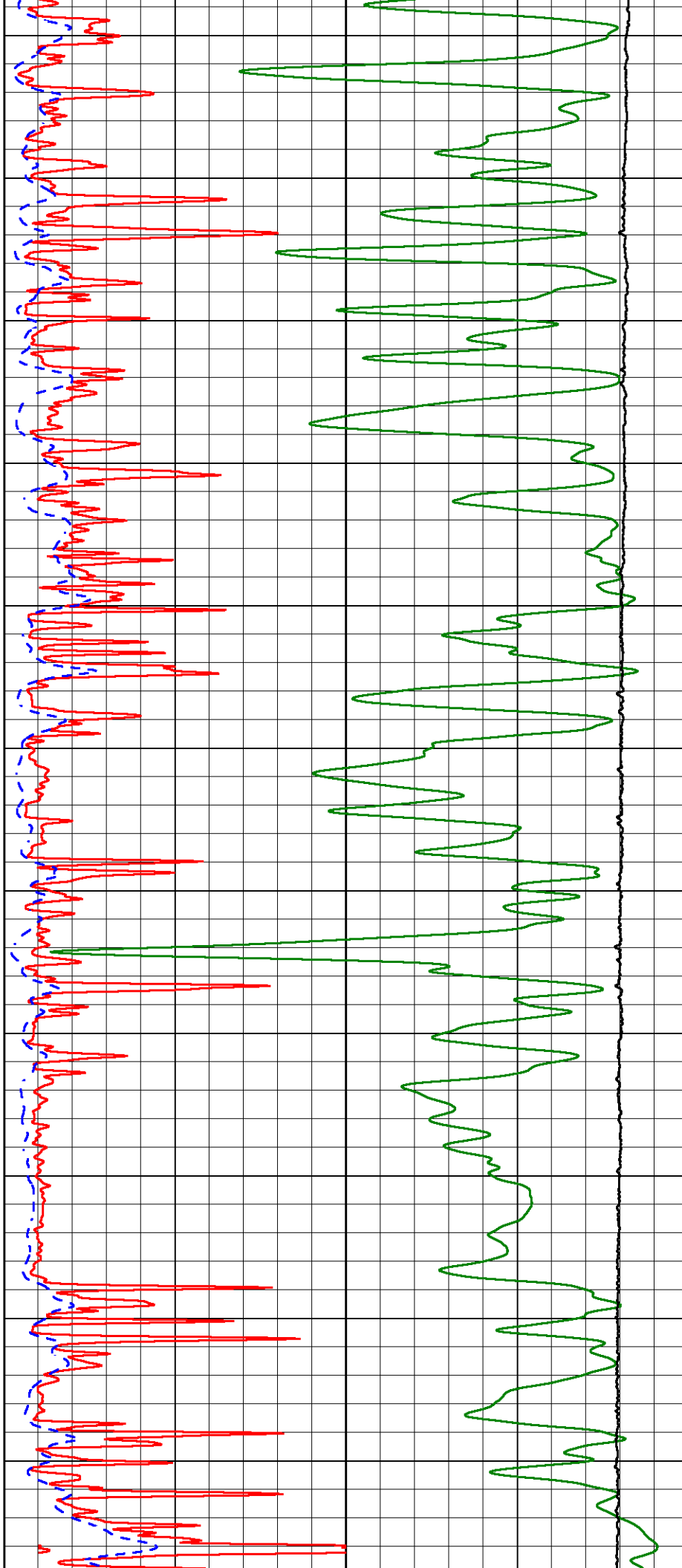
3050

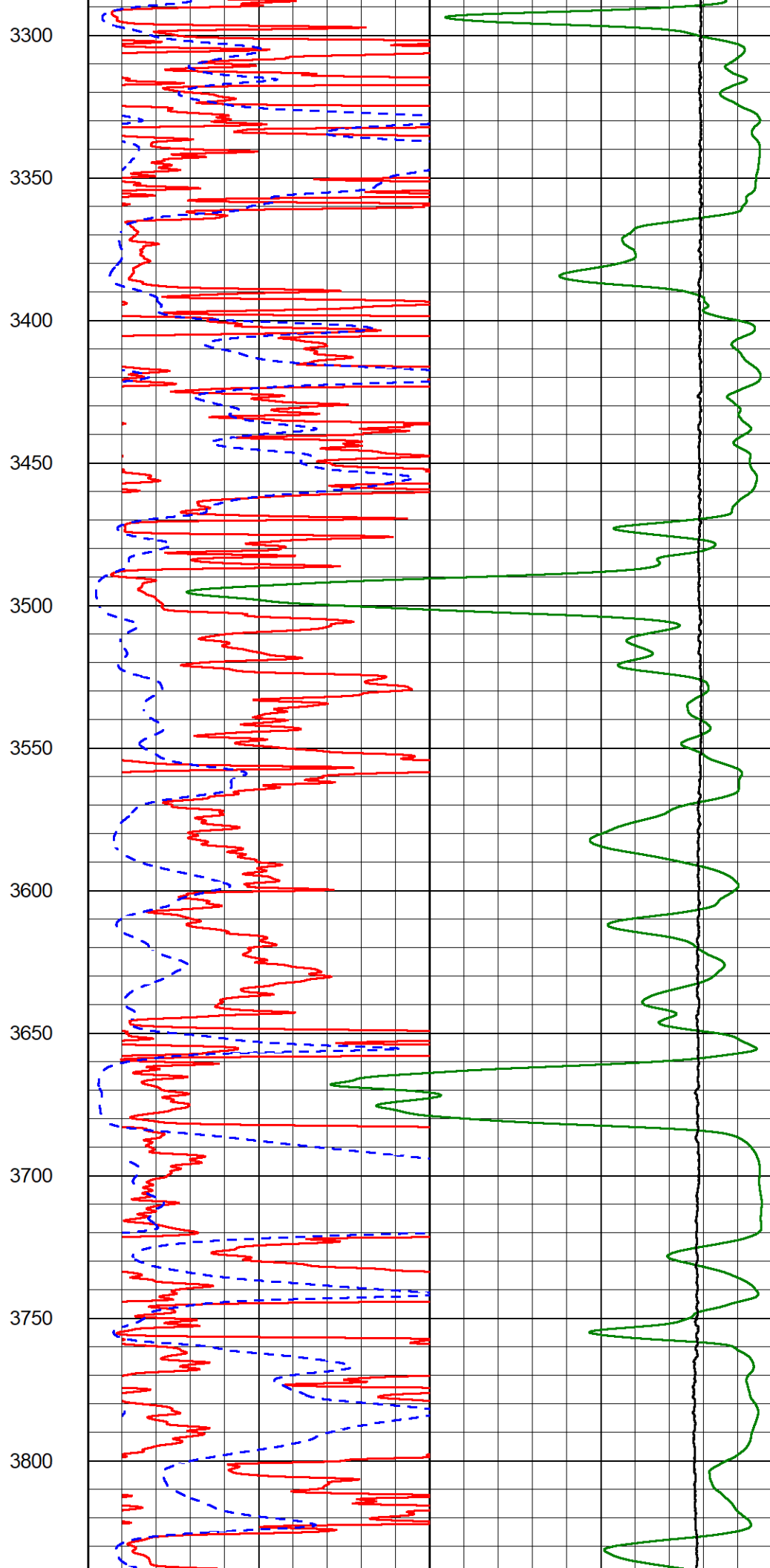
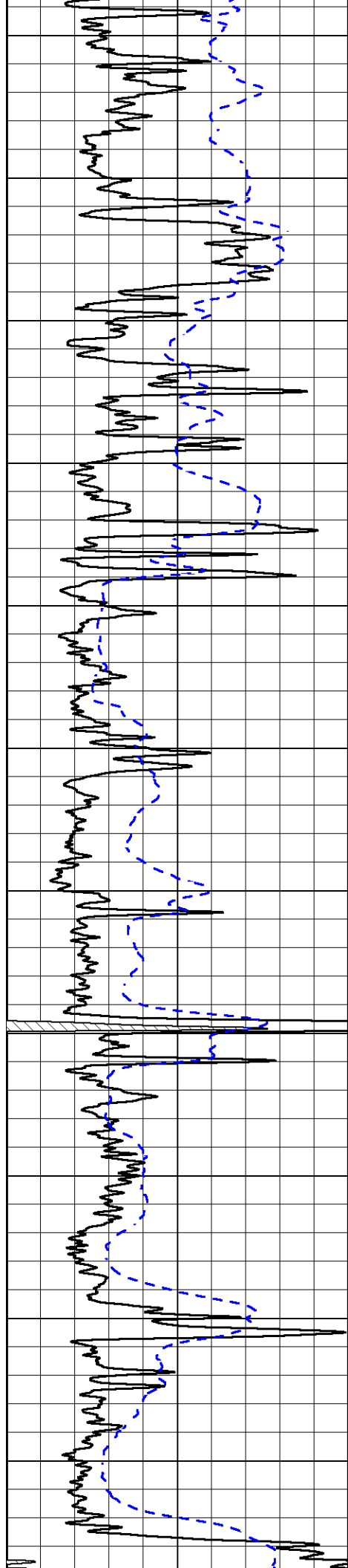
3100

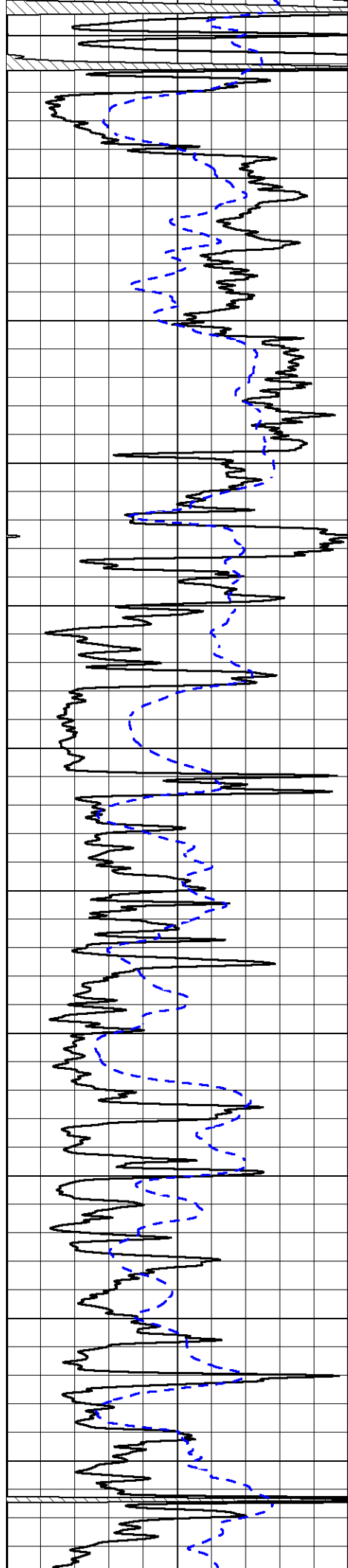
3150

3200

3250







3850

3900

3950

4000

4050

4100

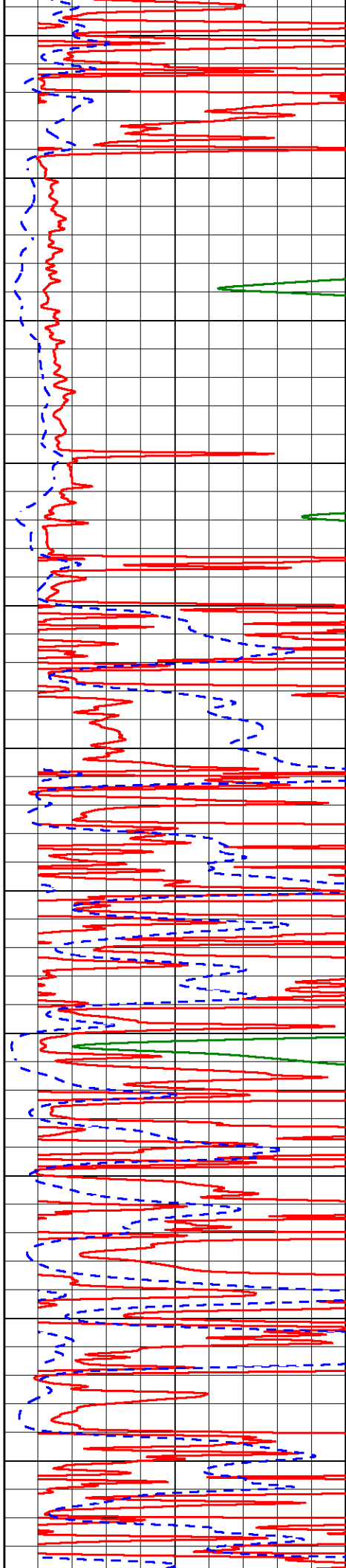
4150

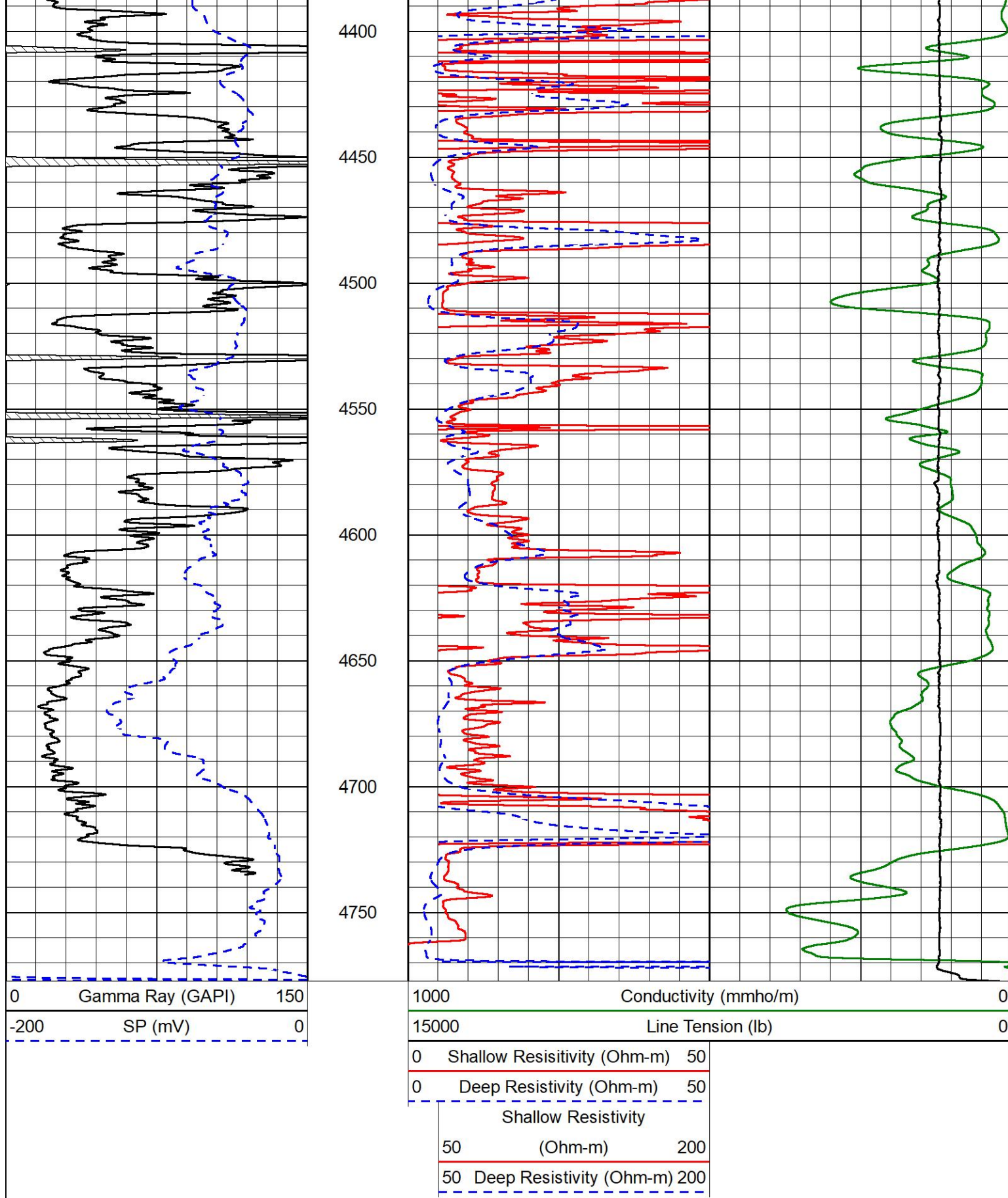
4200

4250

4300

4350



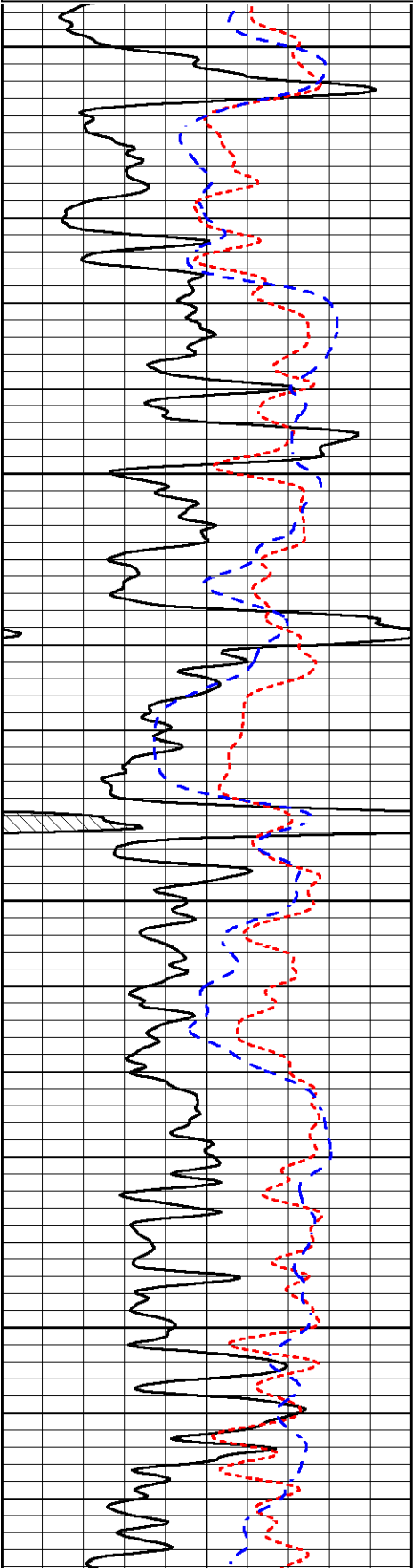


DETAIL SECTION

MAIN PASS

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

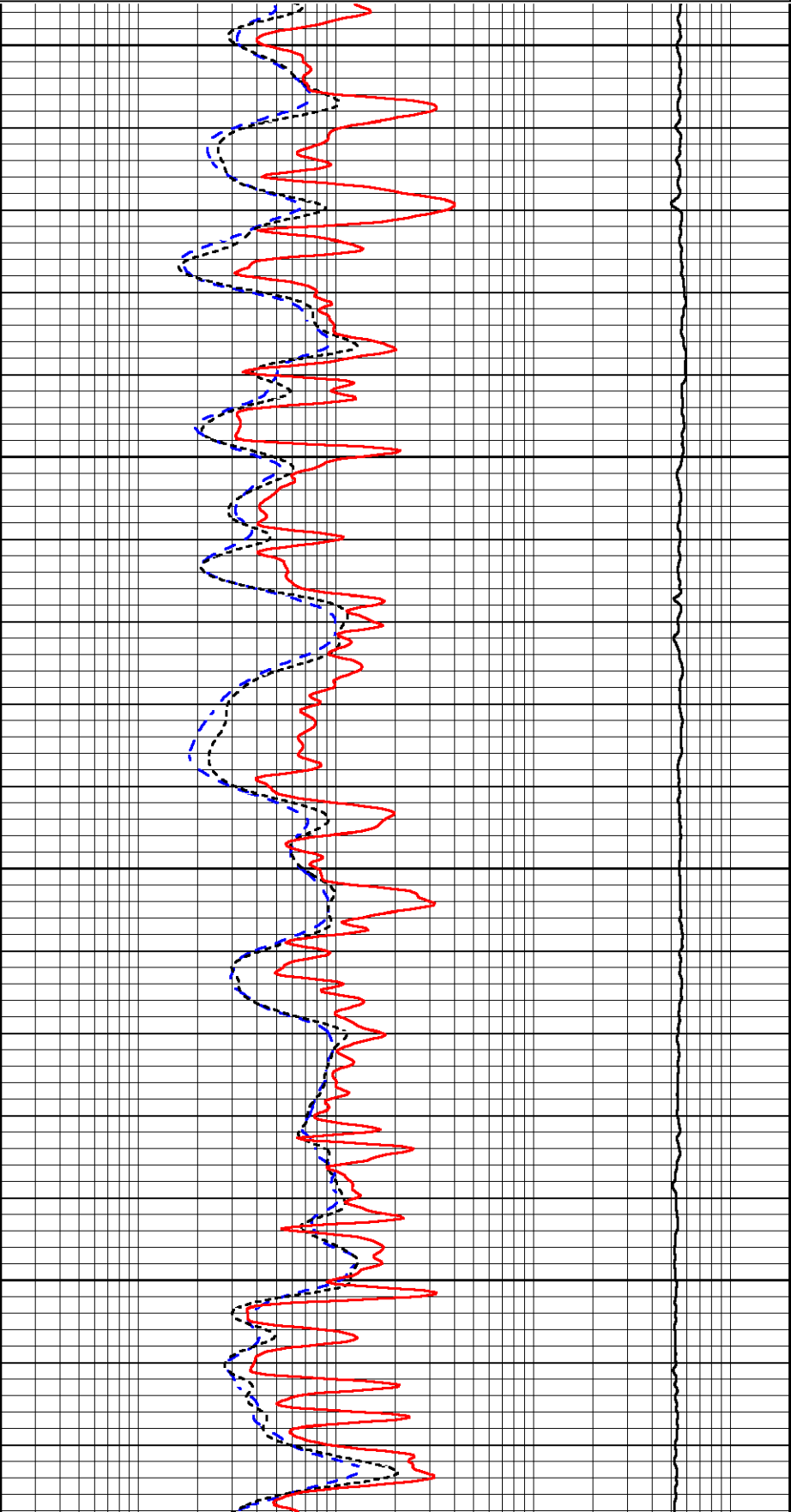


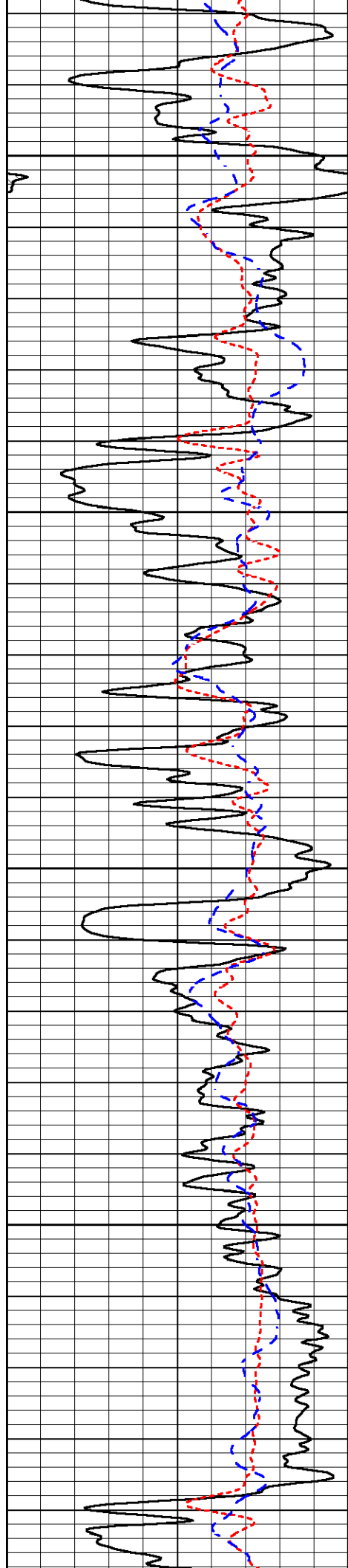
2800

2850

2900

2950



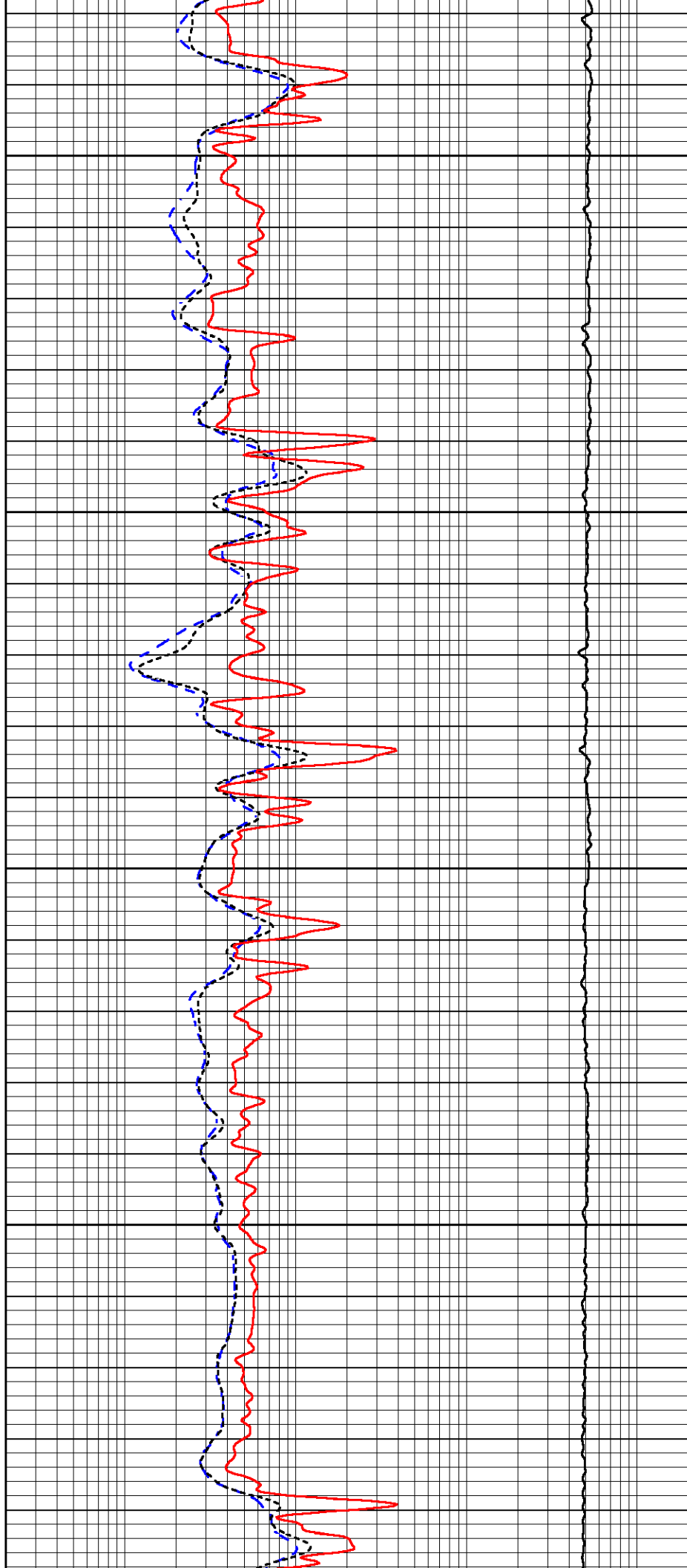


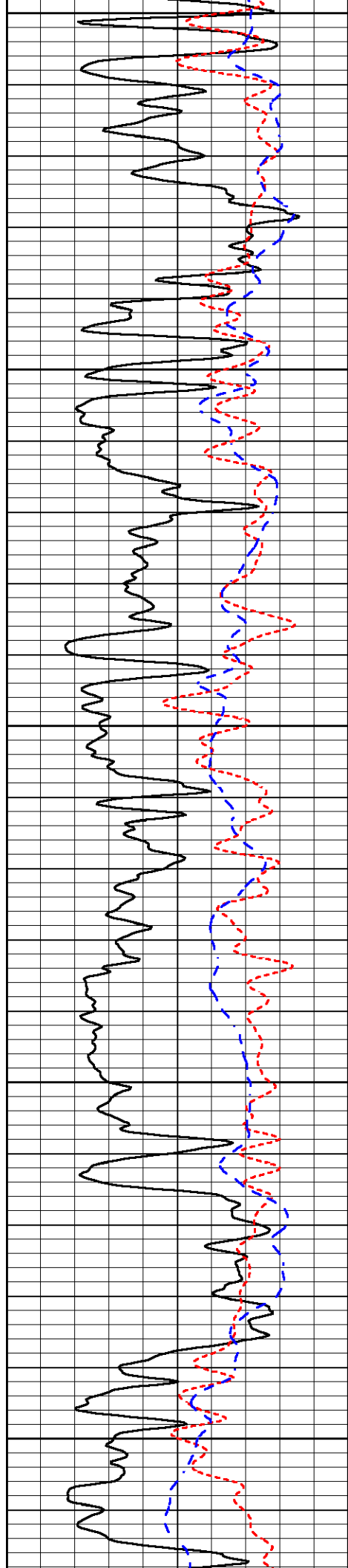
3000

3050

3100

3150





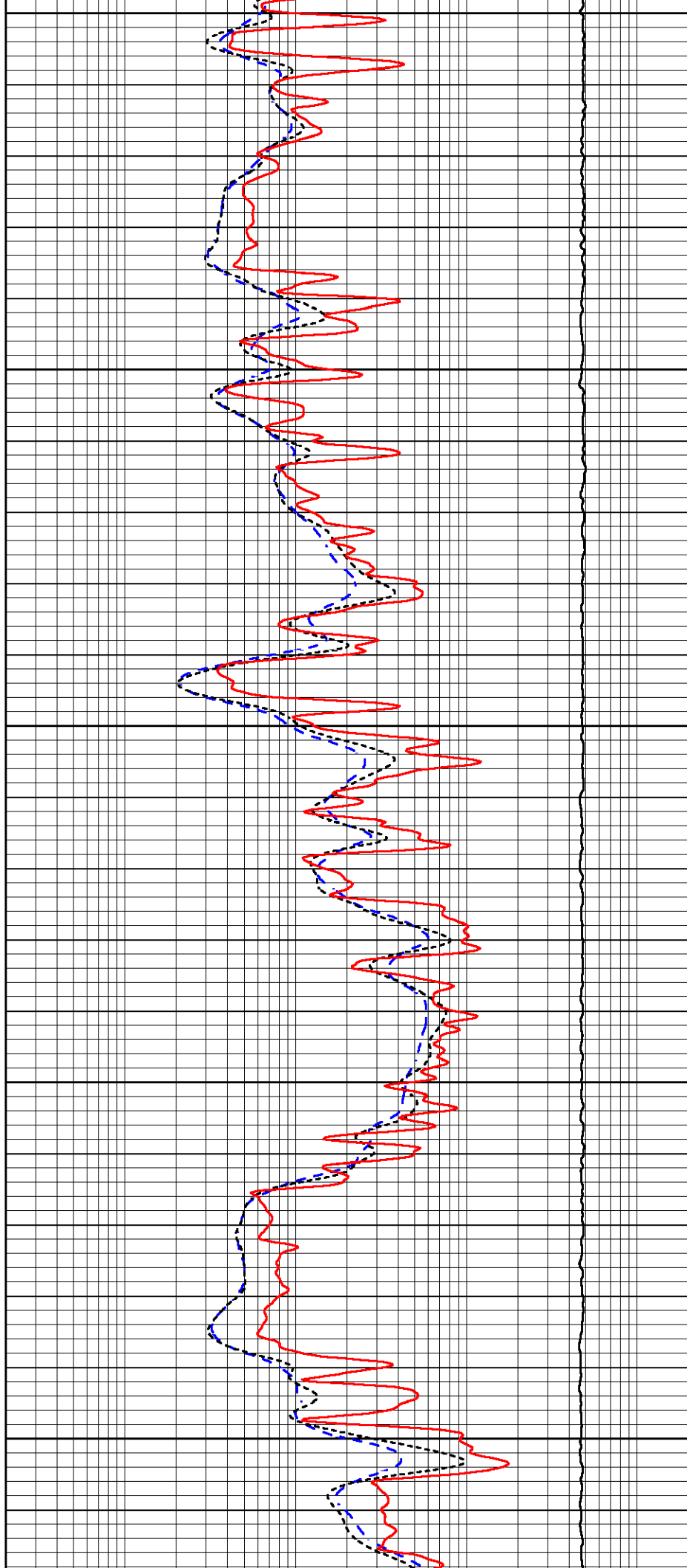
3200

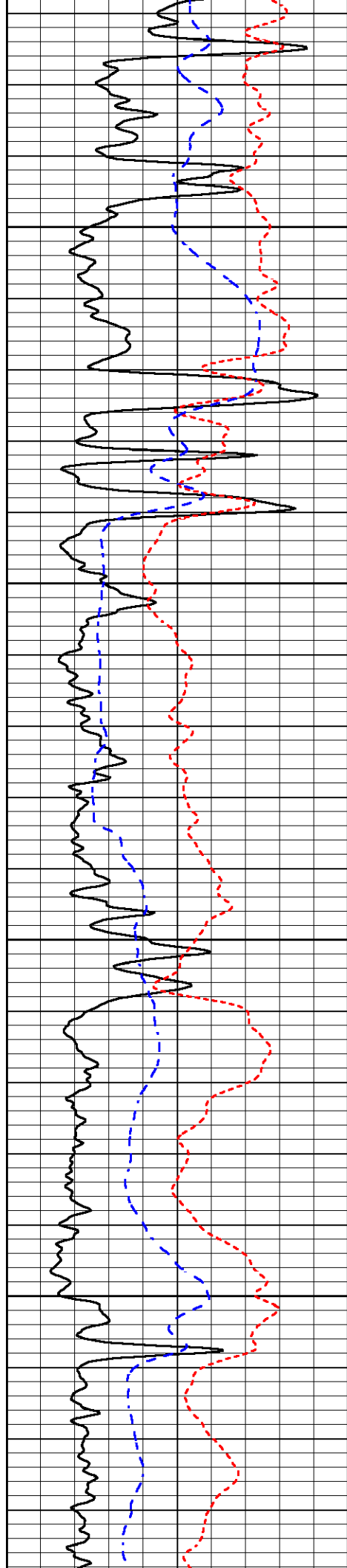
3250

3300

3350

3400



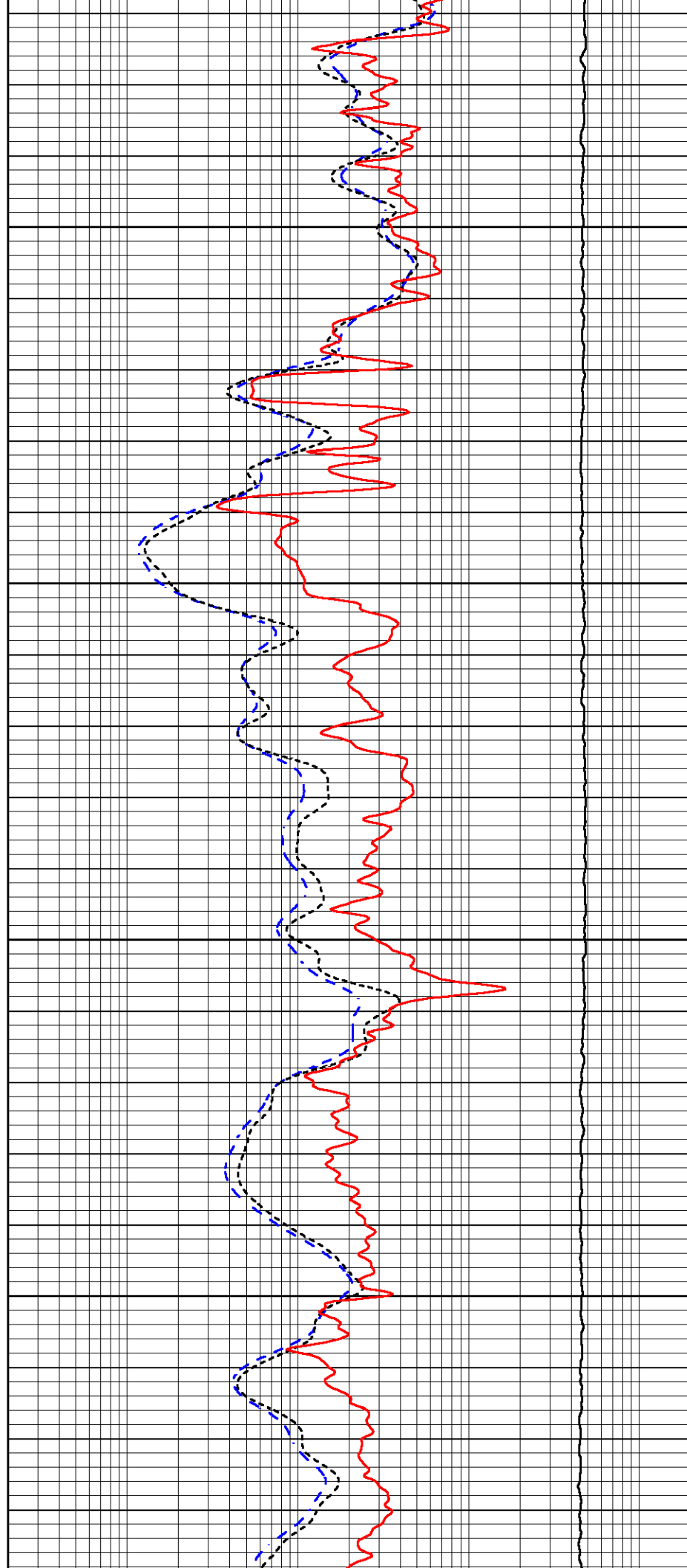


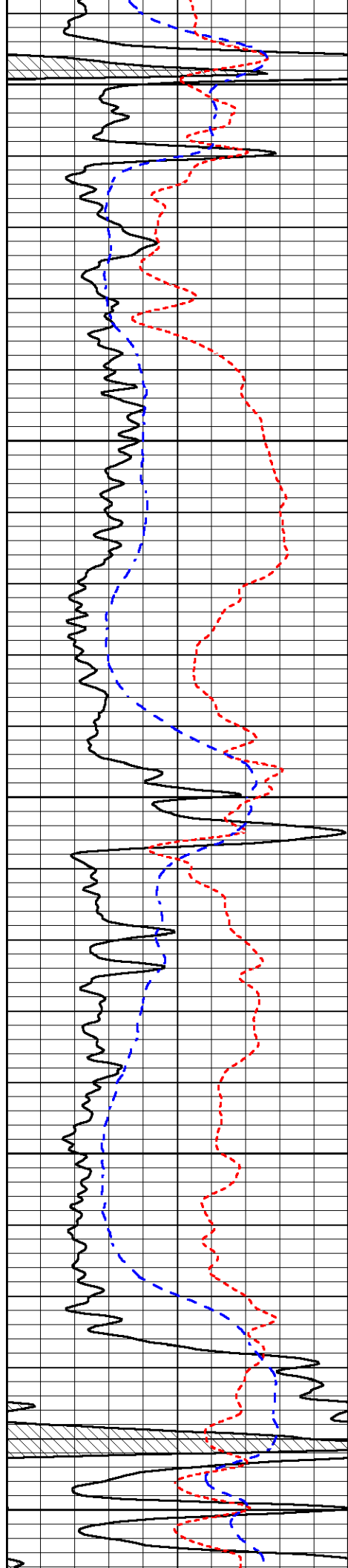
3450

3500

3550

3600





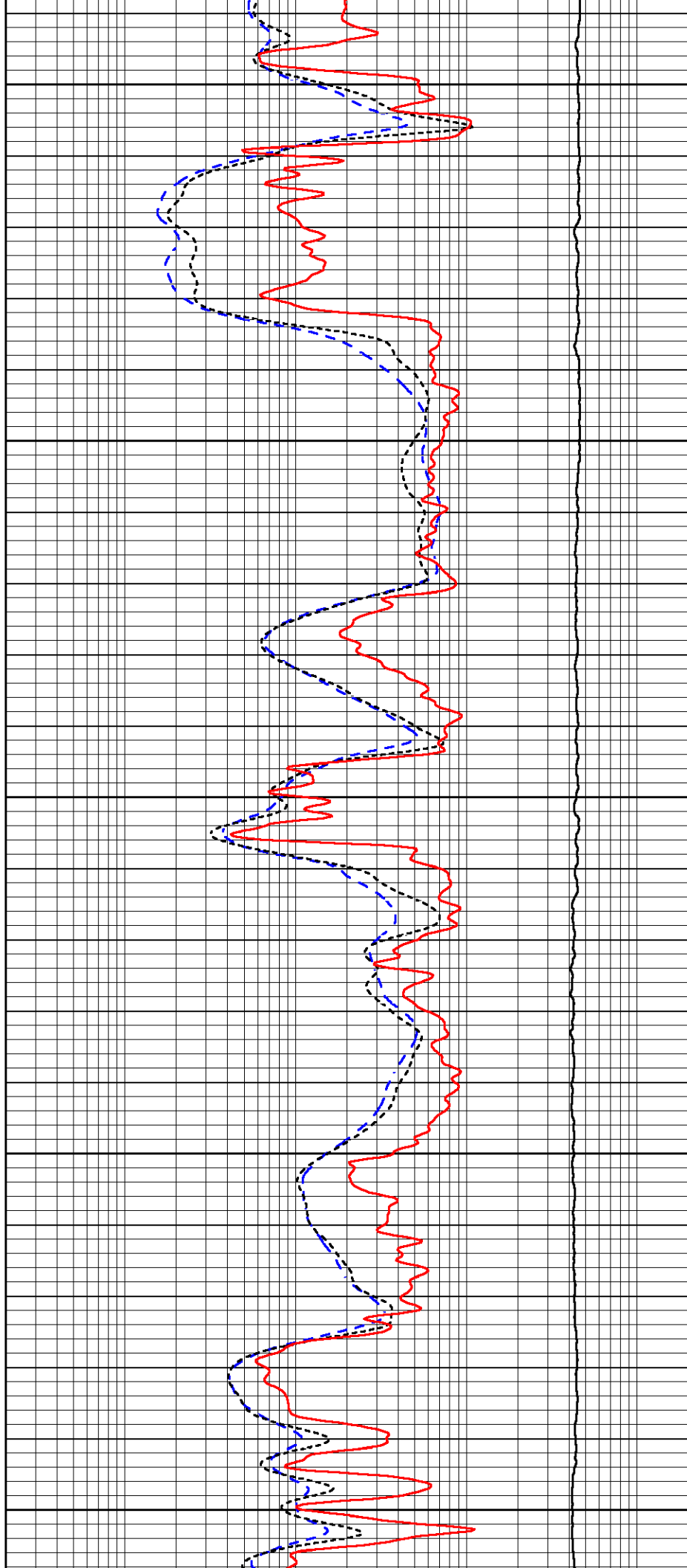
3650

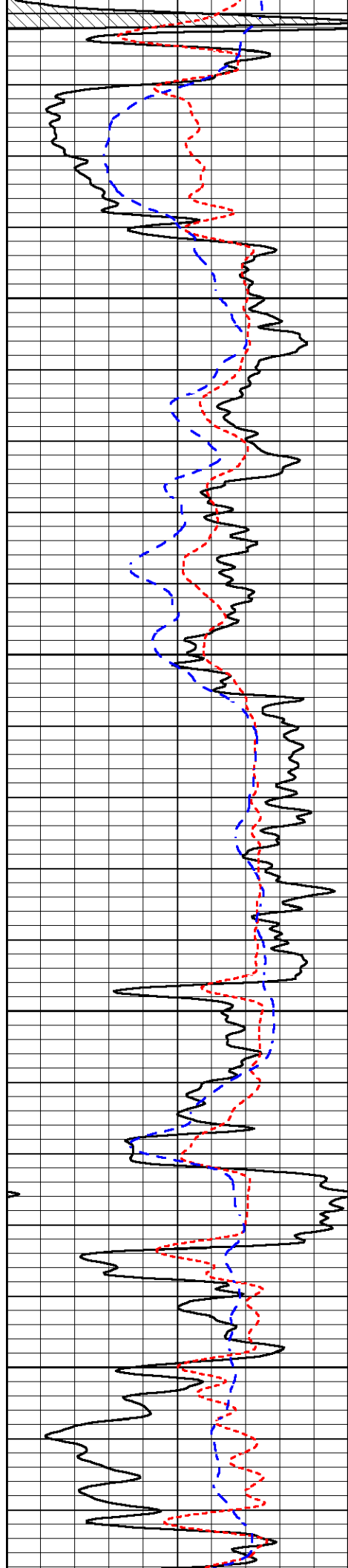
3700

3750

3800

3850



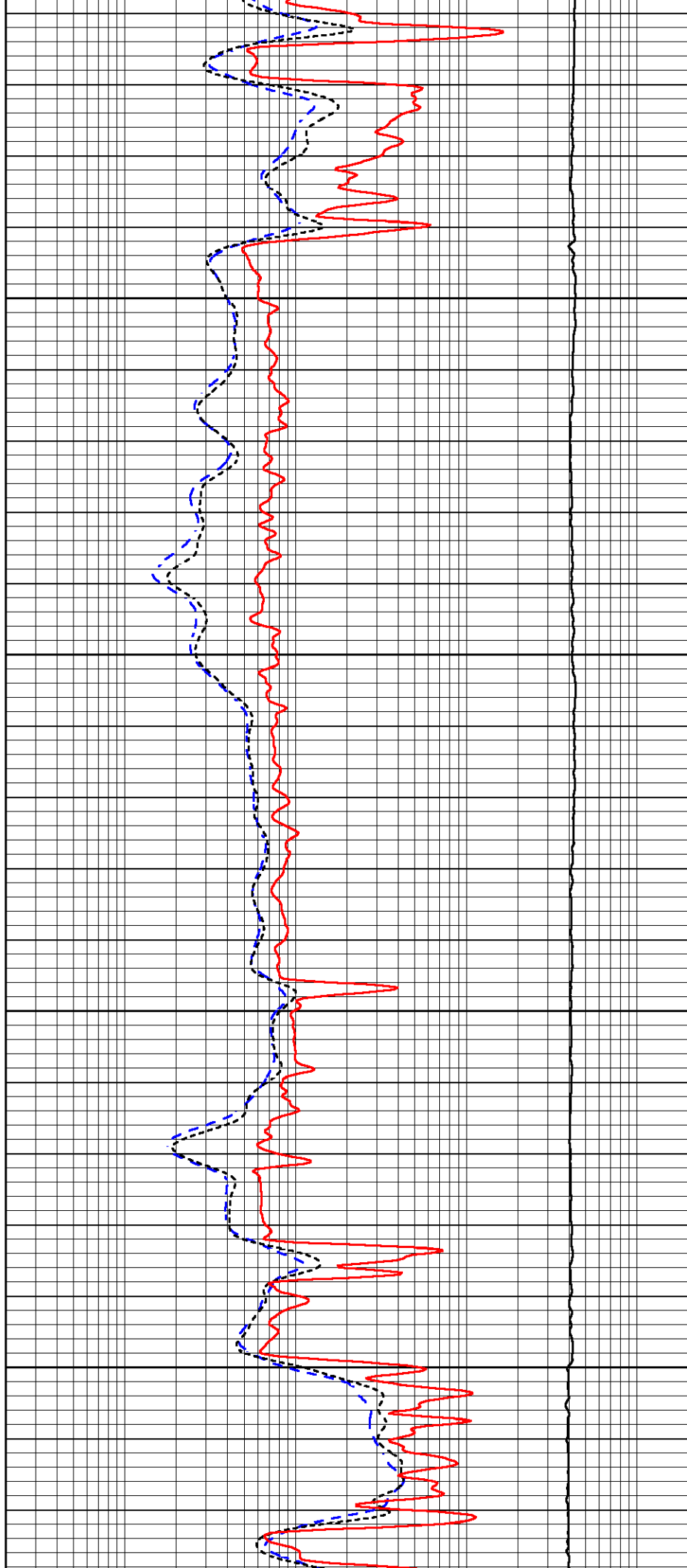


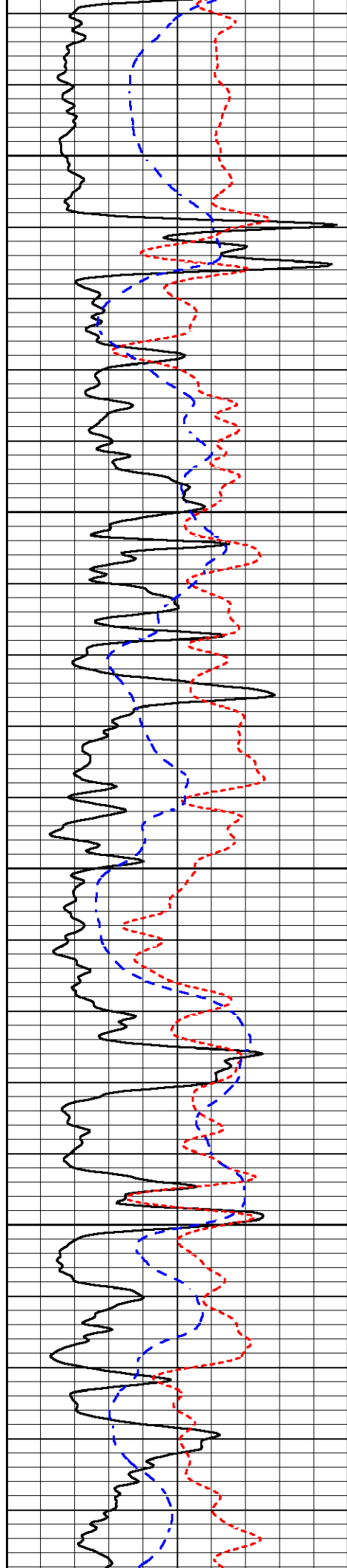
3900

3950

4000

4050



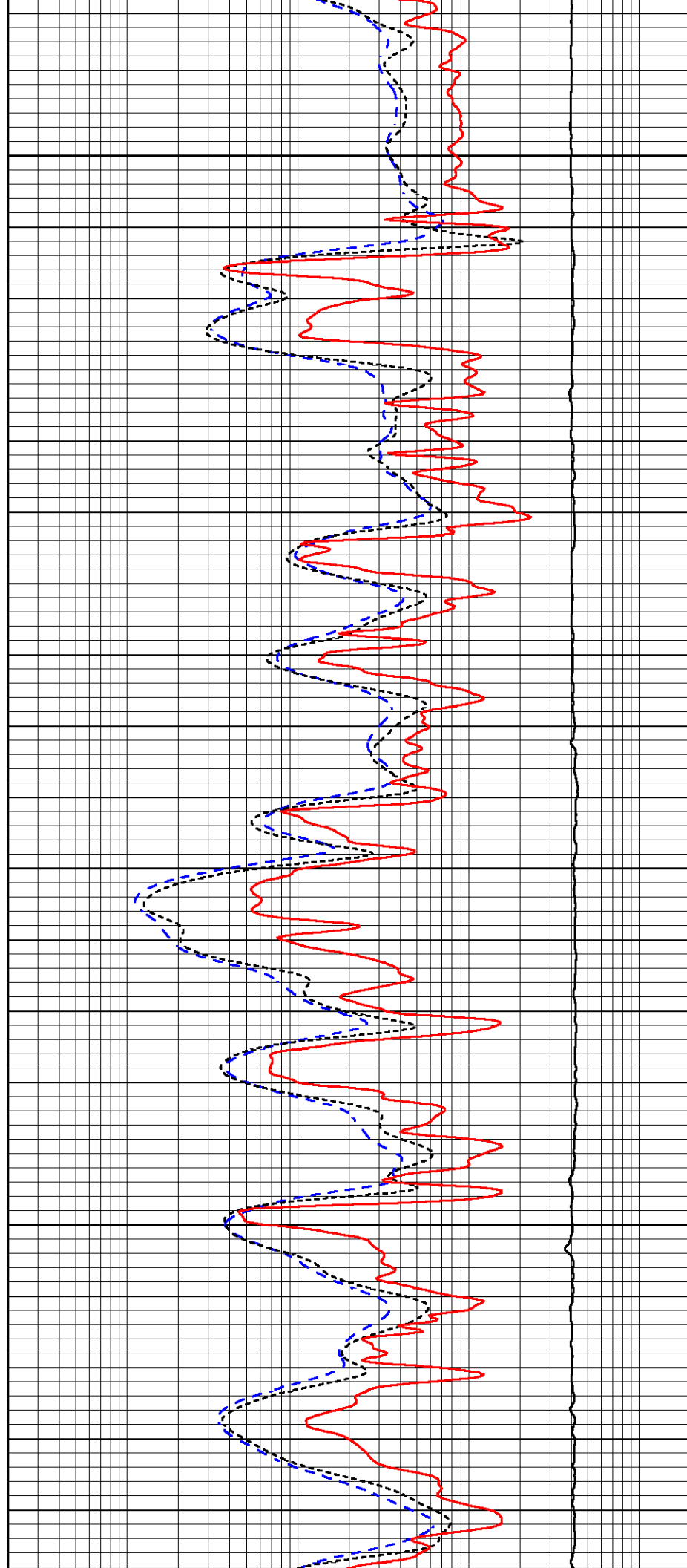


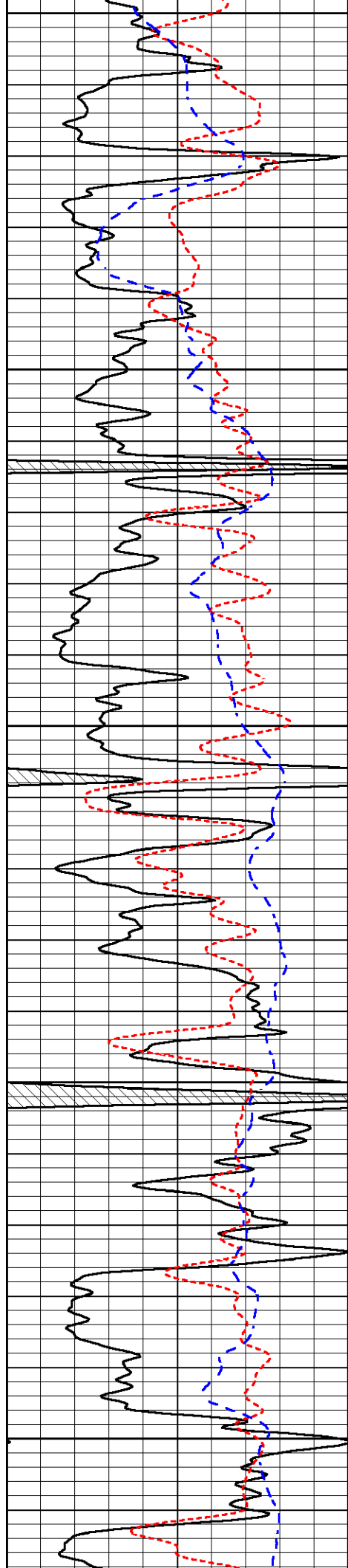
4100

4150

4200

4250





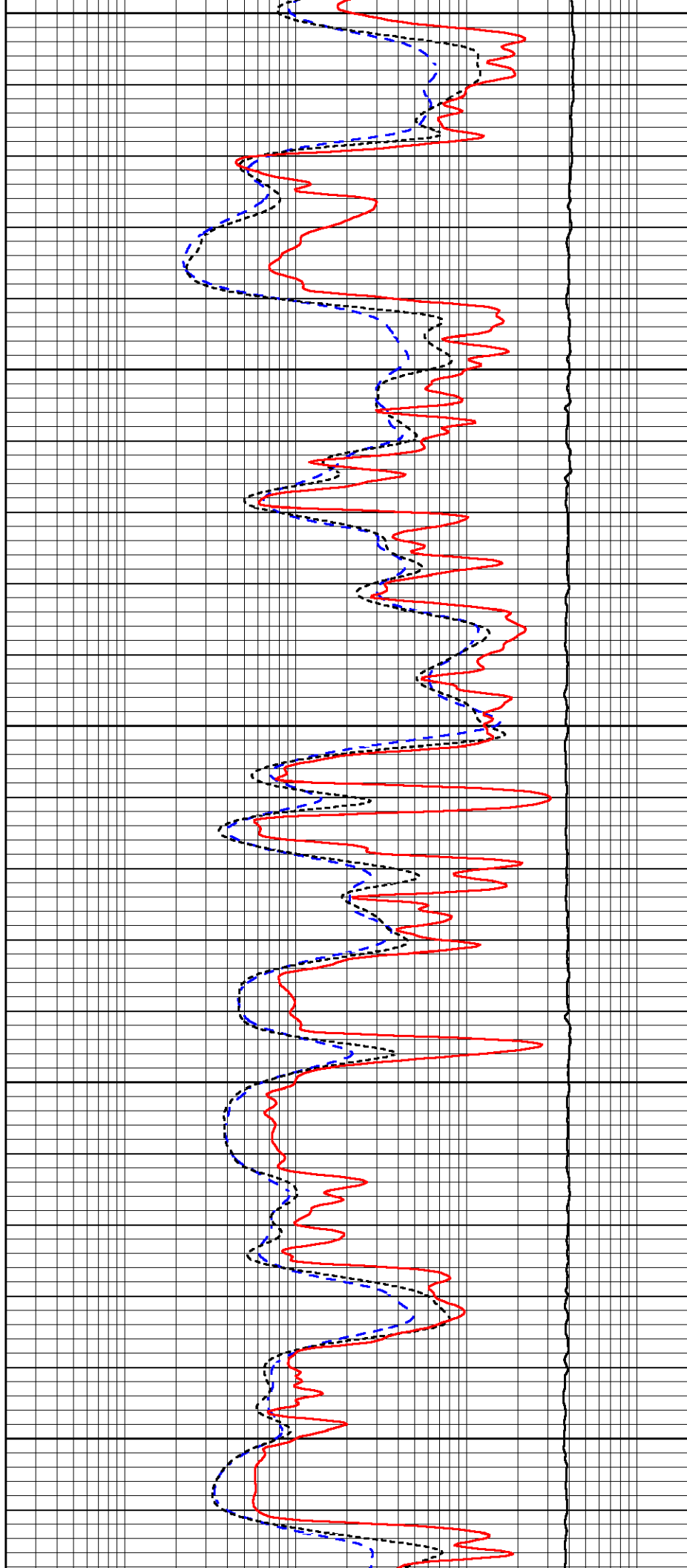
4300

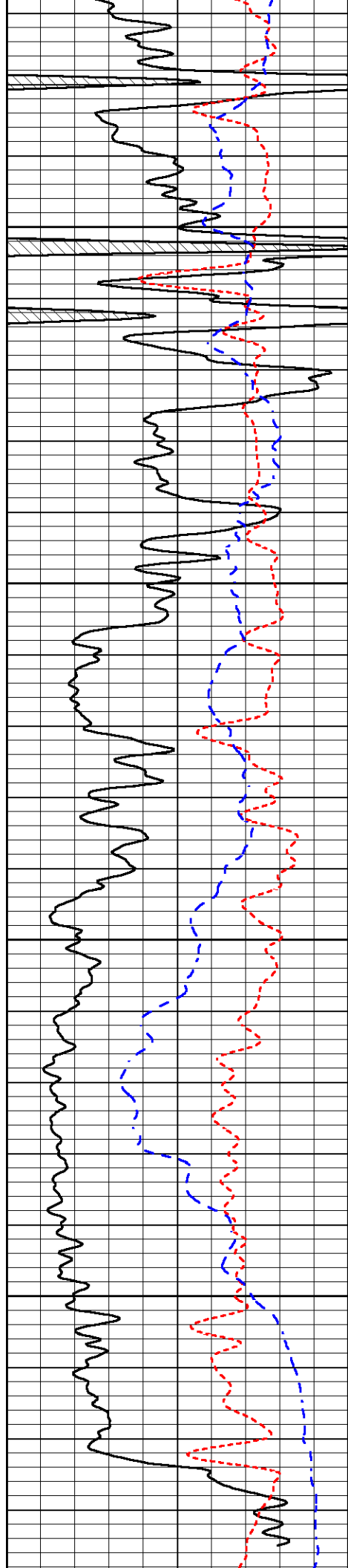
4350

4400

4450

4500



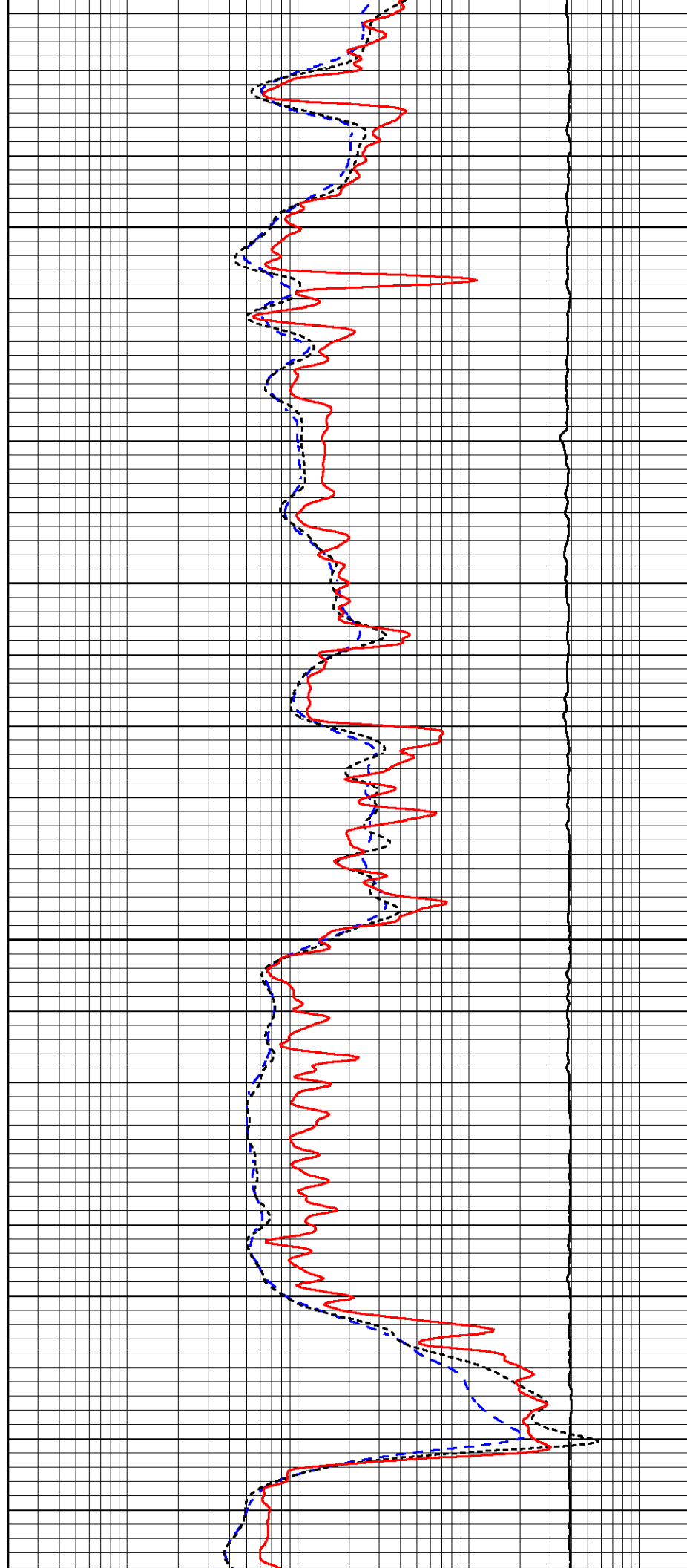


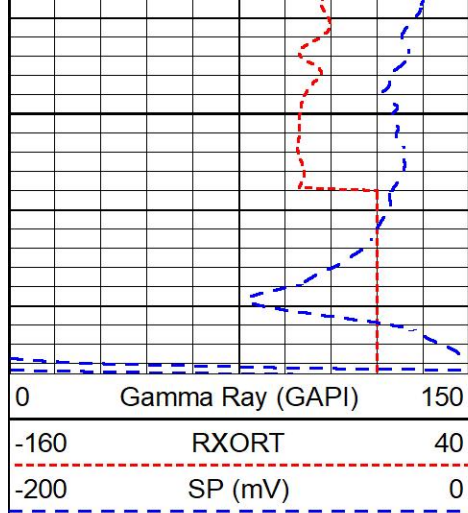
4550

4600

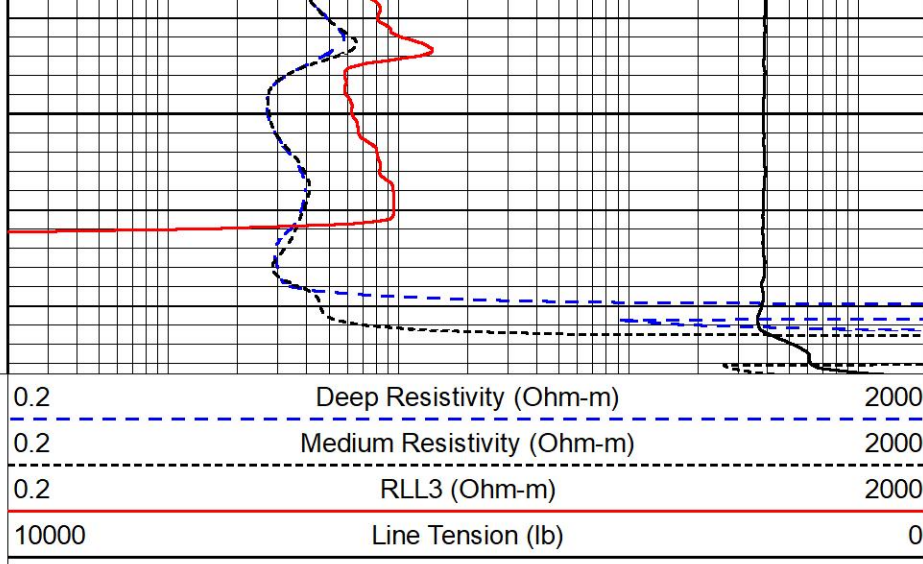
4650

4700





4750

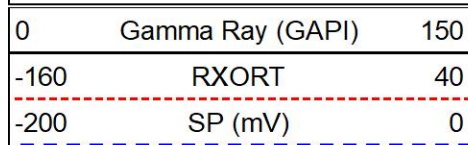


MIDWEST WIRELINE

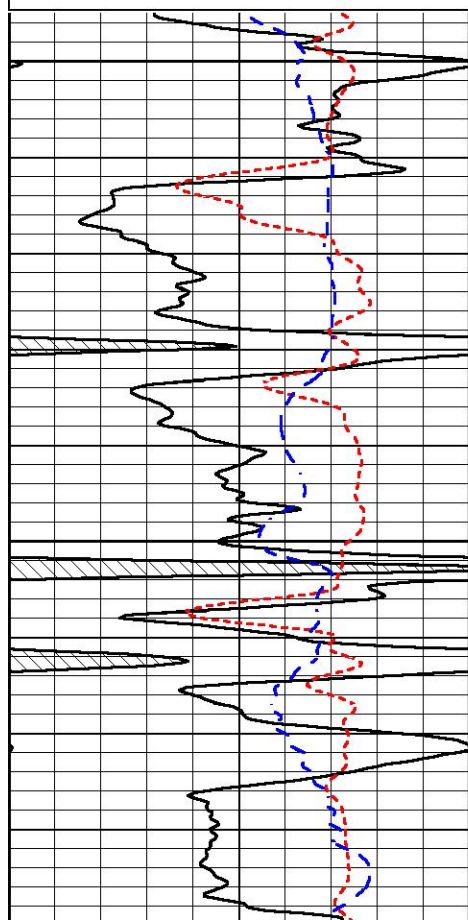
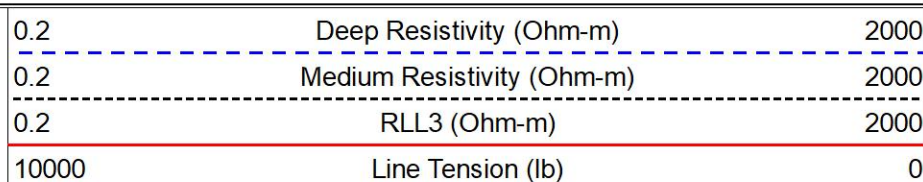
REPEAT SECTION

REPEAT PASS

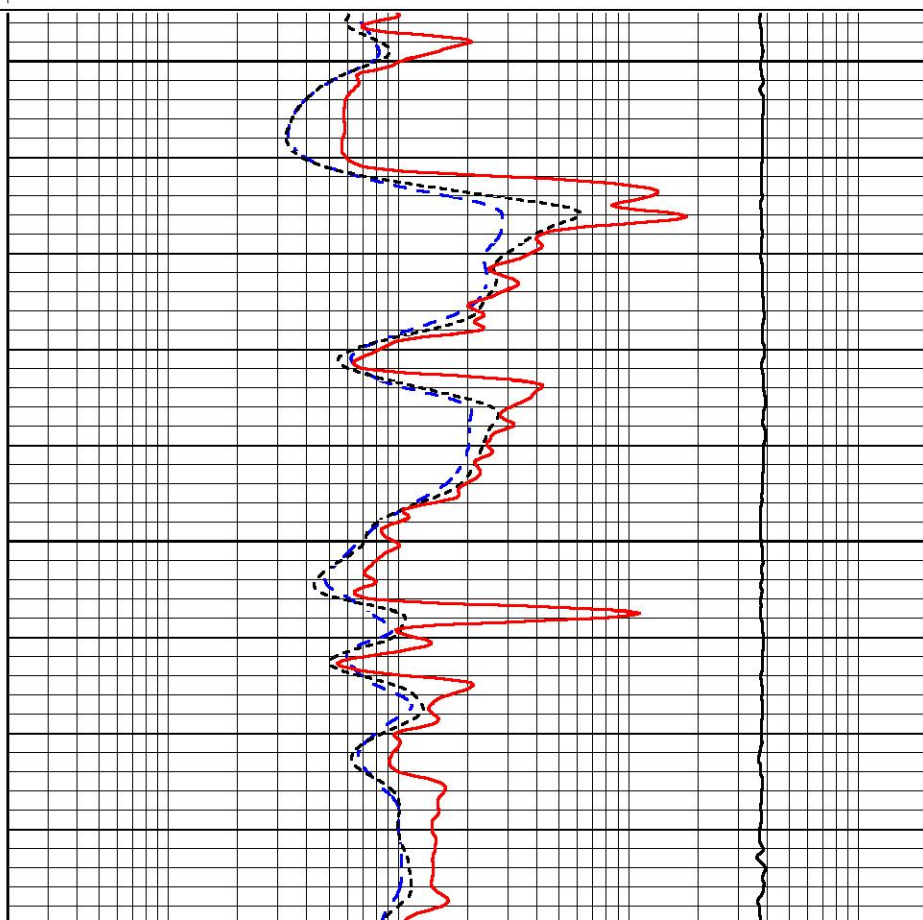
Database File griffin_hope #3x.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format _dil
 Dataset Creation Wed Jun 21 05:24:45 2023
 Charted by Depth in Feet scaled 1:240

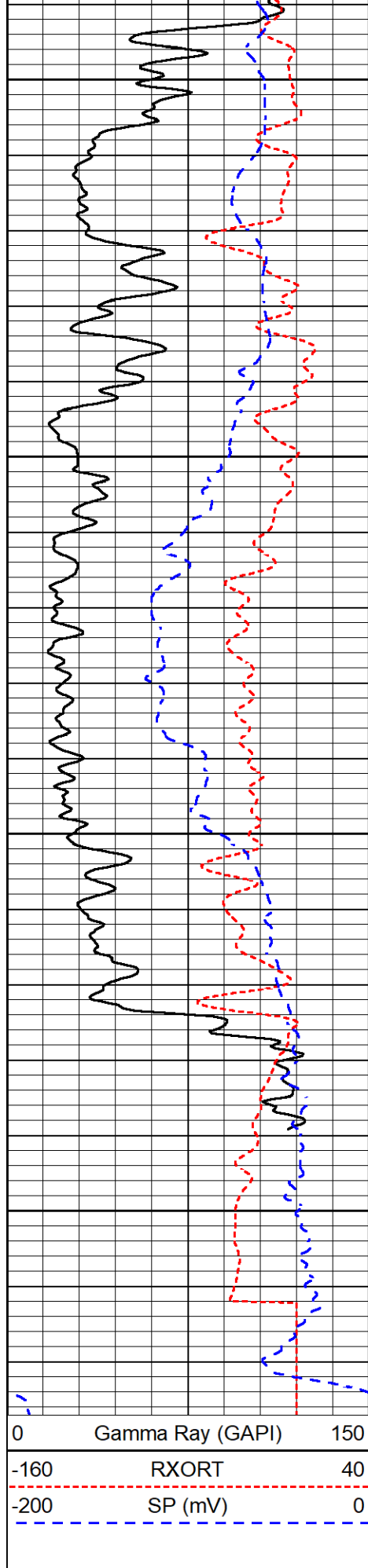


4500



4550



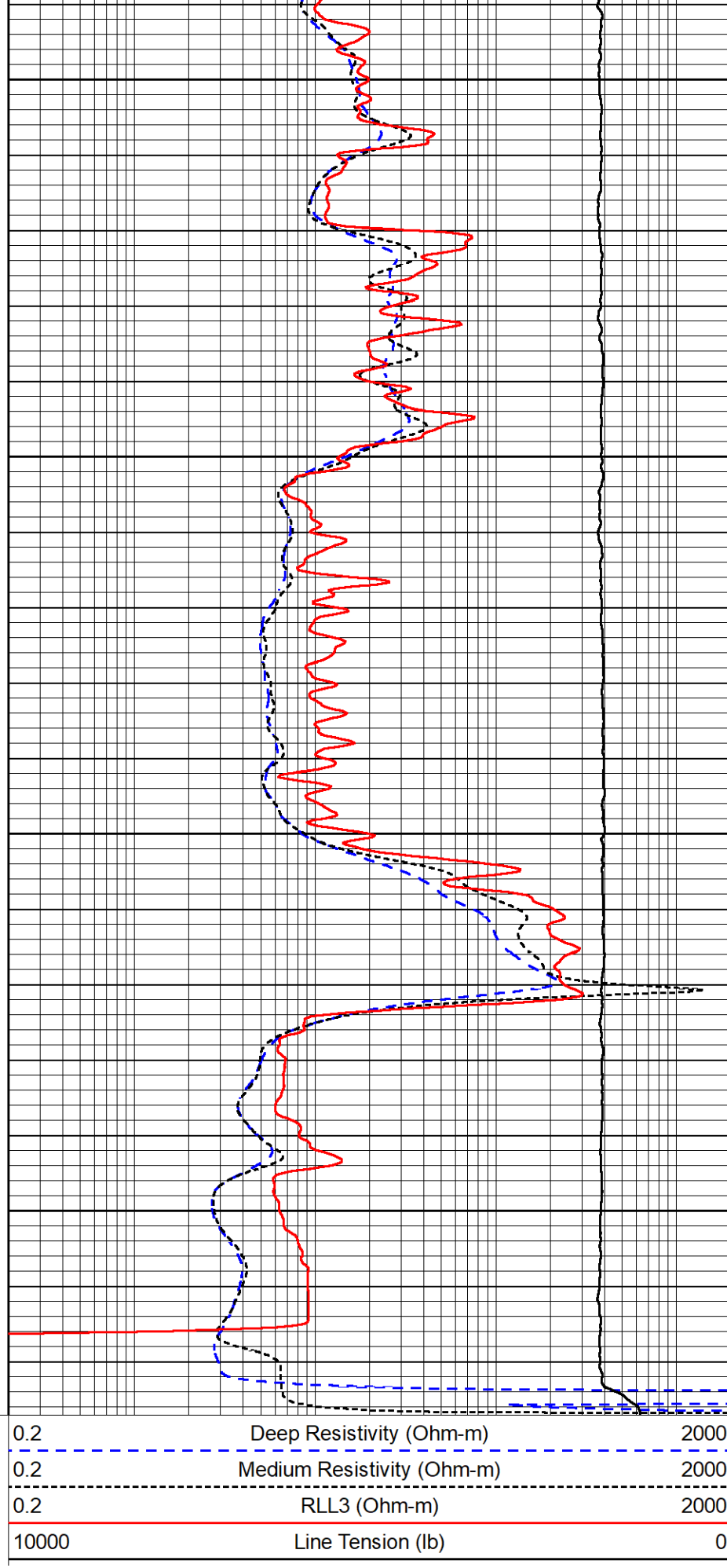


4600

4650

4700

4750



Database Filegrimn_rope #3x.db
Dataset PathnameStkMI/pass3.1
Dataset CreationWed Jun 21 05:26:42 2023

Dual Induction Calibration Report							
Serial-Model:		507-M&W					
Surface Cal Performed:							
Readings		References			Results		
Loop:	Air	Loop	Air	Loop		m	b
Deep	67.445	566.296	0.000	255.800	mmho/m	0.450	-30.000
Medium	192.026	839.715	0.000	255.800	mmho/m	0.420	-84.000

Microlog Calibration Report							
Serial-Model:		401-PSIML					
Performed:		Mon Jun 5 16:37:07 2023					
Readings		References			Results		
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	15000.0000	-1.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	15000.0000	-0.7500
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-138.9500

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				

Before Survey Verification							
	Target		Measured				
	g/cc		g/cc				
	g/cc		g/cc				
	g/cc		g/cc				

After Survey Verification							
	Target		Measured				
	g/cc		g/cc				
	g/cc		g/cc				
	g/cc		g/cc				

Compensated Neutron Calibration Report

Serial Number: 207-MW
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: Fri Dec 3 15:10:46 2021

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps
Calibrator Reading: 637.0 cps

Sensitivity: 0.5500 GAPI/cps



MIDWEST WIRELINE

Company Griffin Management LLC
Well Hope #3X
Field Turkey Creek East
County Barber
State Kansas