



DUAL INDUCTION

MIDWEST WIRELINE

CompanyGriffin Management LLC		Company Griffin Management LLC	
Well	Gary #1	Well	Gary #1
Field	Turkey Creek East	Field	Turkey Creek East
County	Barber	County	Barber
State	Kansas	State	Kansas
Location: API #: 15-007-24472-00-00		Other Services	
Permanent Datum NW NW SW NW Log Measured From 1610 FNL & 280 FWL Drilling Measured From Kelly Bushing		C/NL/CDL MEL	
SEC 15 TWP 30S RGE 15W		Elevation 1911	
Ground Level 1911		K.B. 1916	
Elevation 1911		D.F. 1911	
G.L. 1911			
Date	6/5/2023		
Run Number	One		
Depth Driller	4740		
Depth Logger	4739		
Bottom Logged Interval	4738		
Top Log Interval	250		
Casing Driller	8.625 @ 258		
Casing Logger	259		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	7000		
Density / Viscosity	9.4 58		
pH / Fluid Loss	10.5 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 @ 123		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	123		
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 28.17 27.68			CDL-M&W (307-11)	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			DIL-M&W (507)	18.25	3.50	220.00	
CILD	8.33							
CILM	4.50							
SP	0.20							
Dataset: Total length: Total weight: O.D.:				griffin_gary #1.db: field/well/StkMI/pass3.1 42.33 ft 685.00 lb 4.00 in				

Log Variables

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

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 123	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 4	mmho/m -5	mV 570	degF 80	Off	ft 4739

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



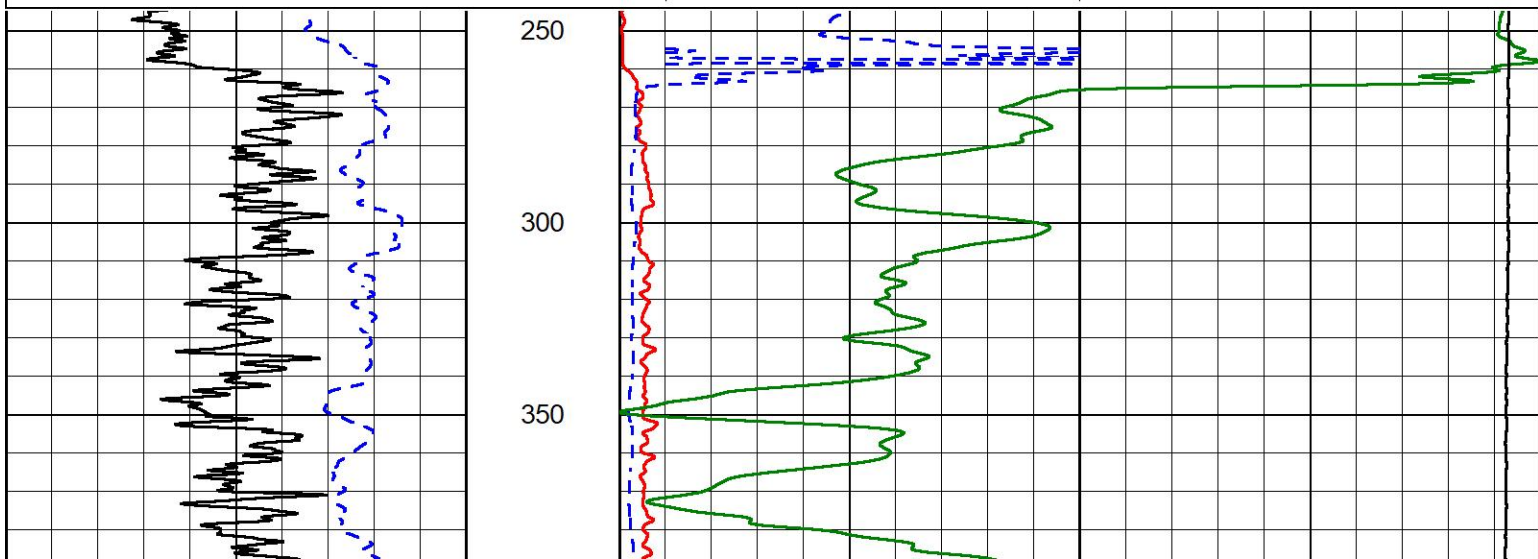
2" SCALE RESISTIVITY

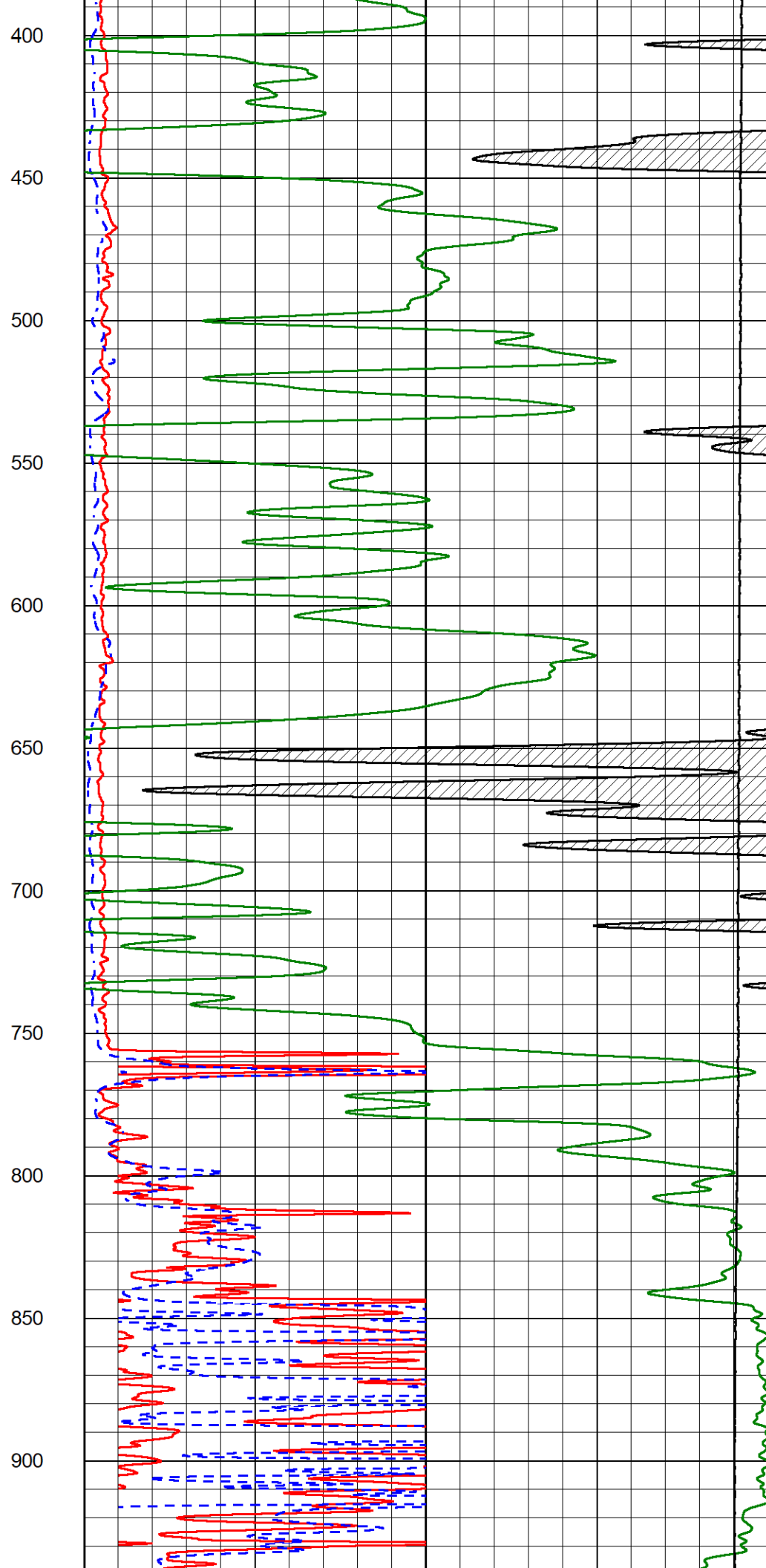
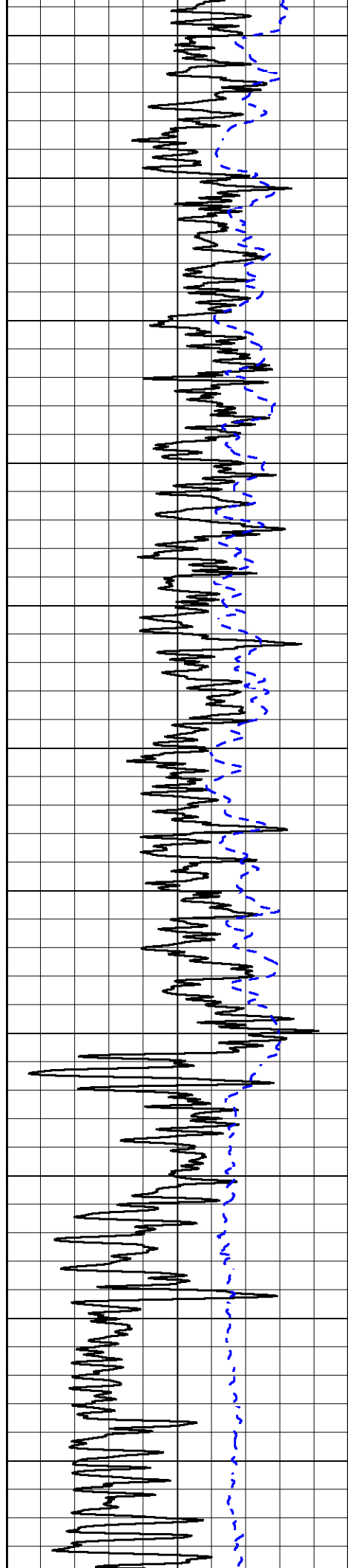
MAIN PASS

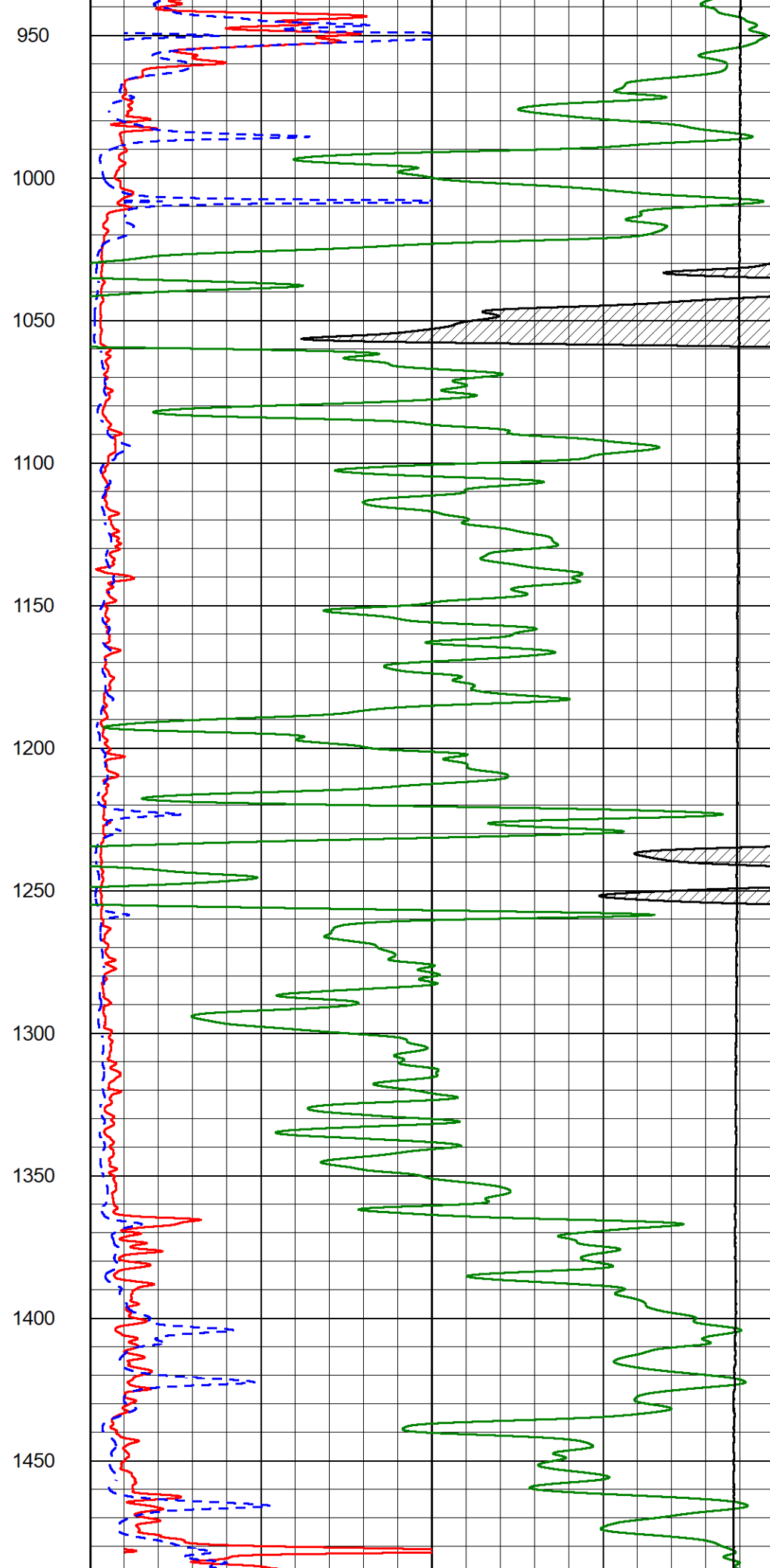
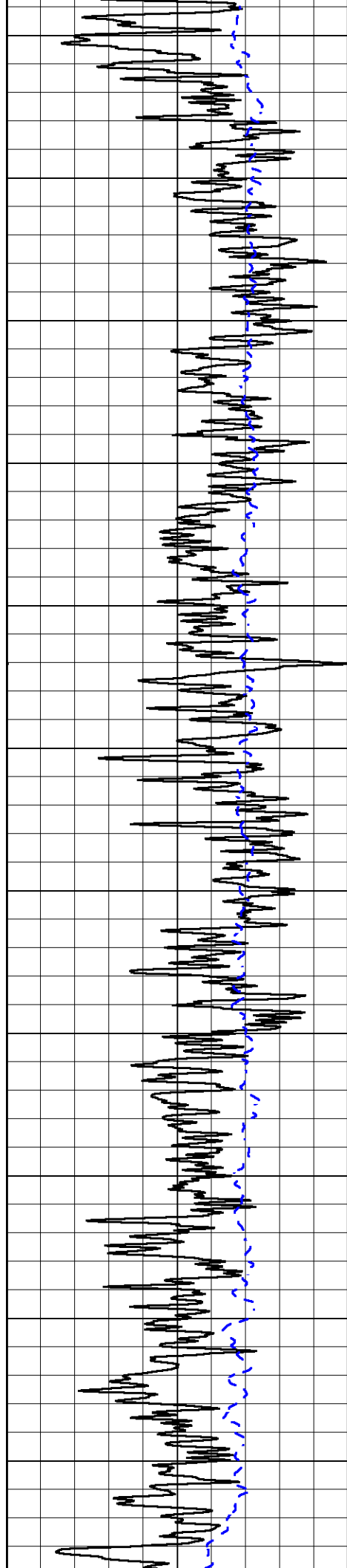
Database File griffin_gary #1.db
Dataset Pathname StkMI/pass3.2
Presentation Format _dil2in
Dataset Creation Mon Jun 05 16:08:35 2023
Charted by Depth in Feet scaled 1:600

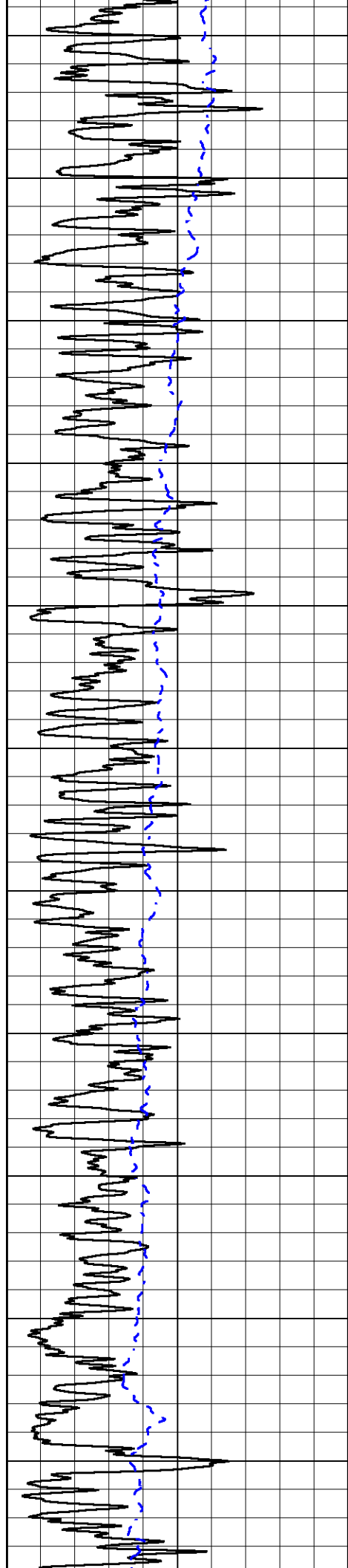
0	Gamma Ray (GAPI)	150
-200	SP (mV)	0

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









1500

1550

1600

1650

1700

1750

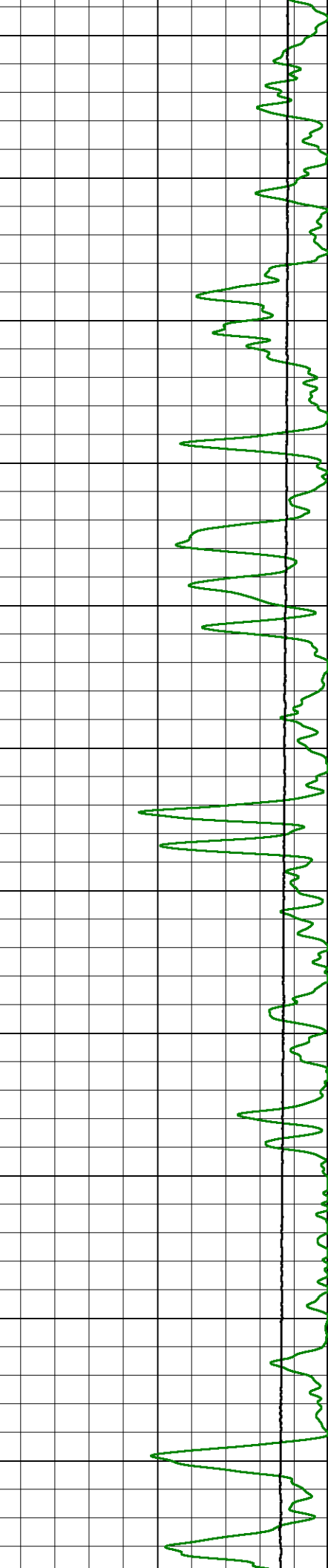
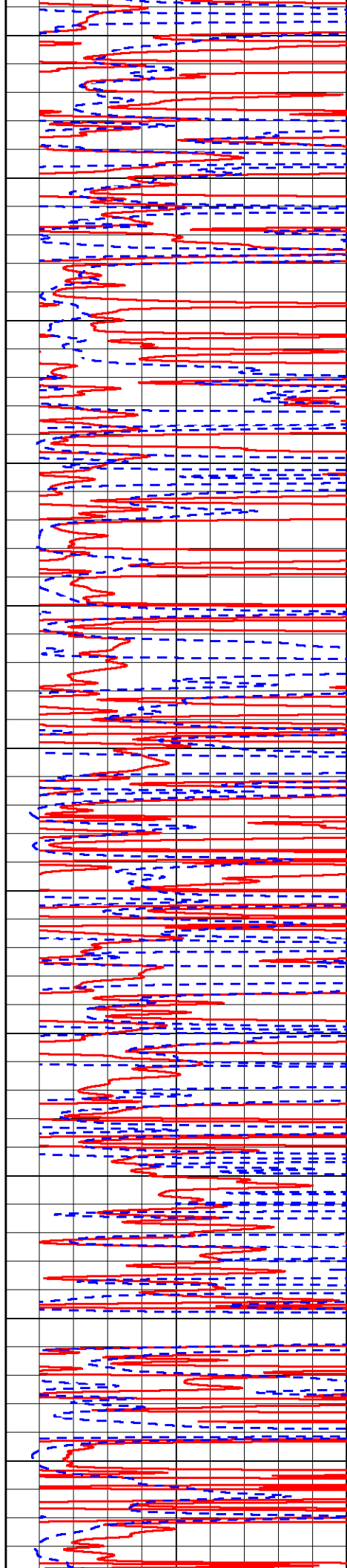
1800

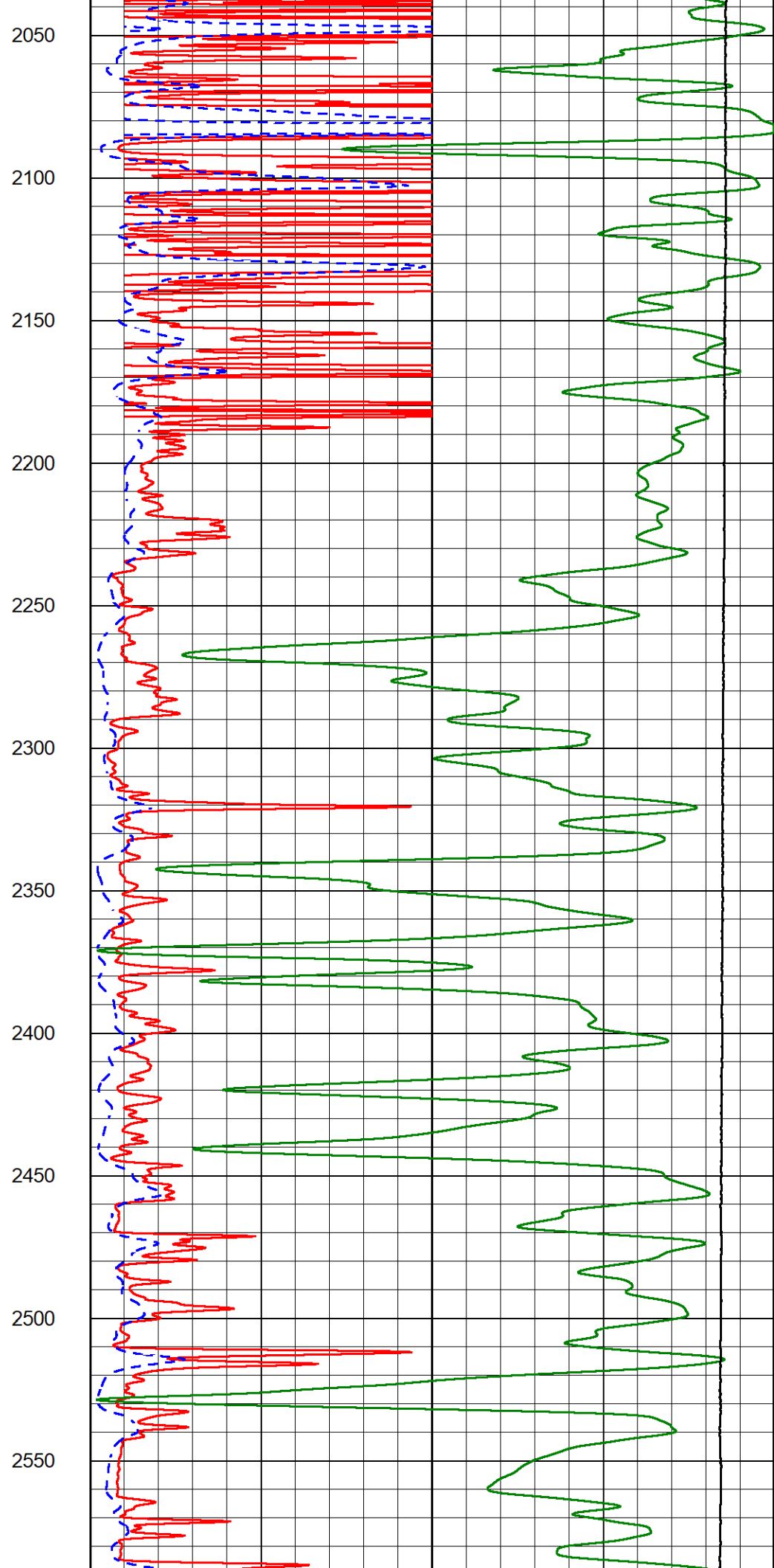
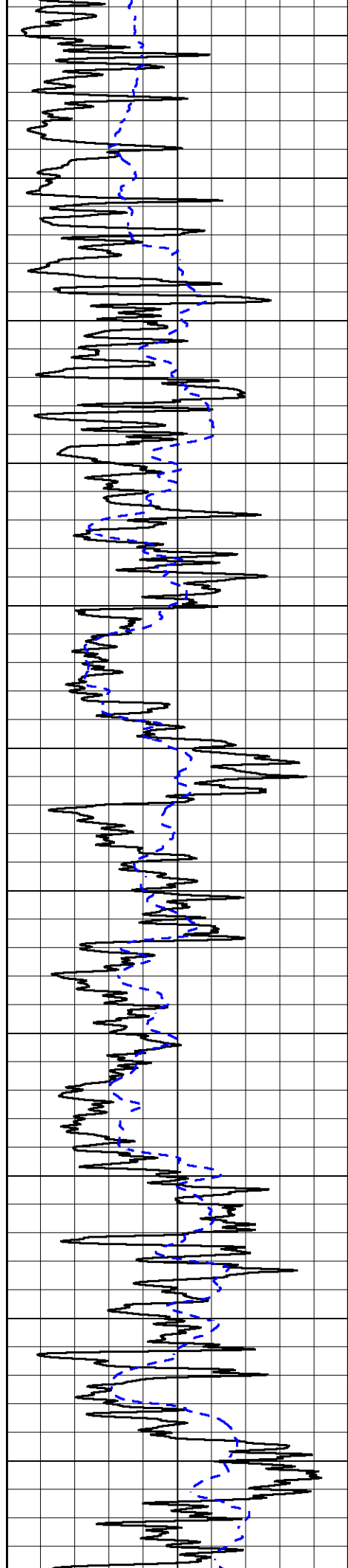
1850

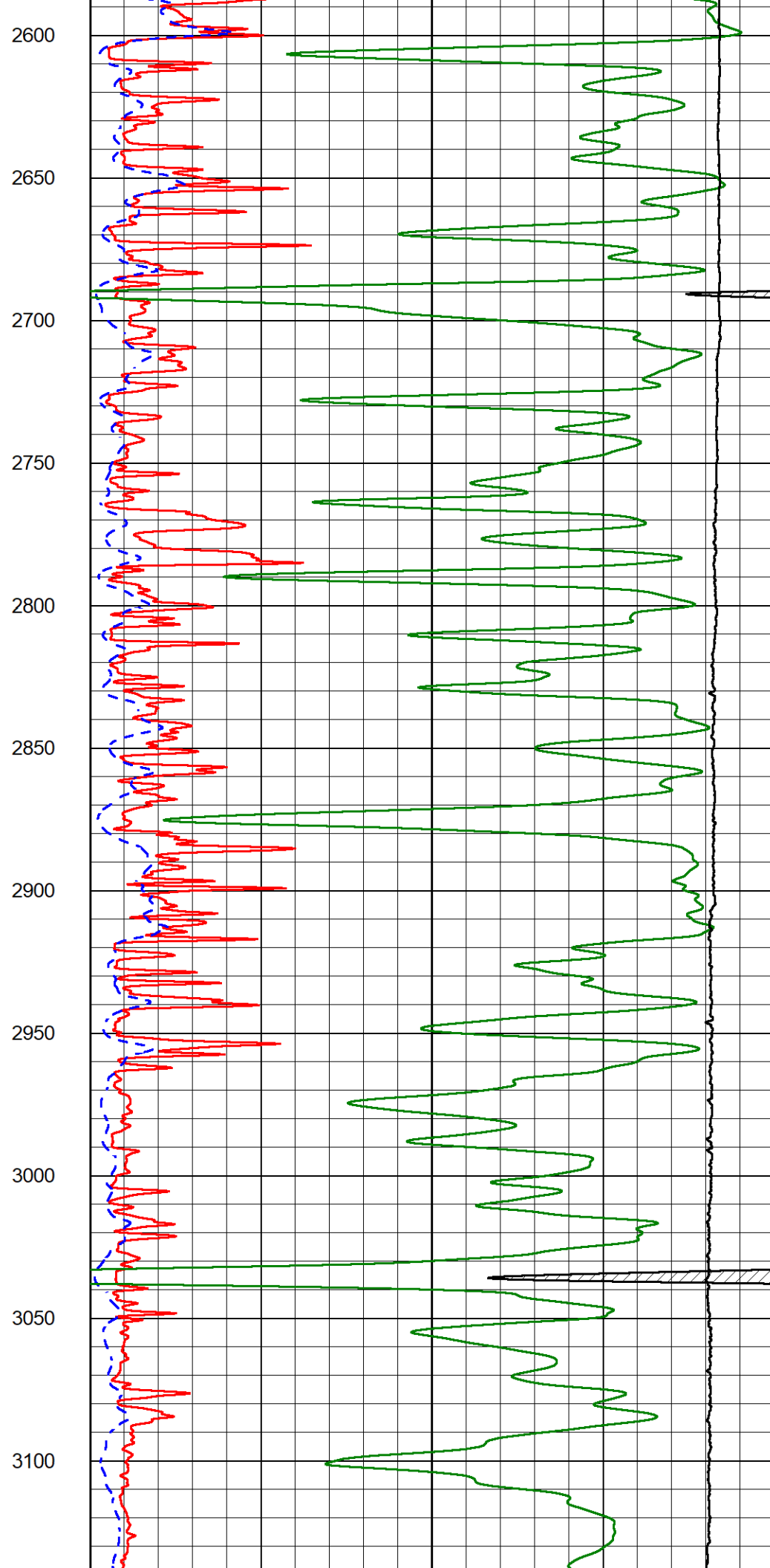
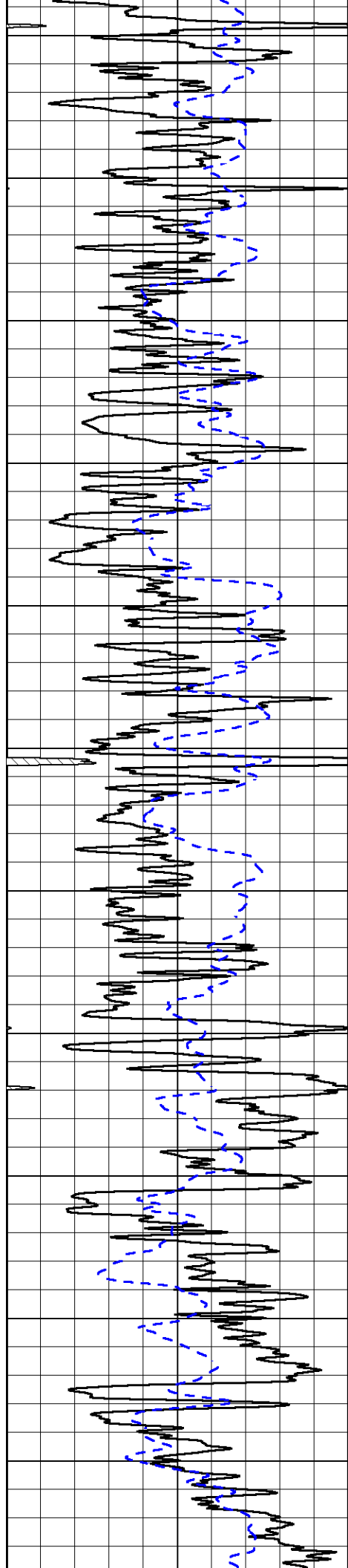
1900

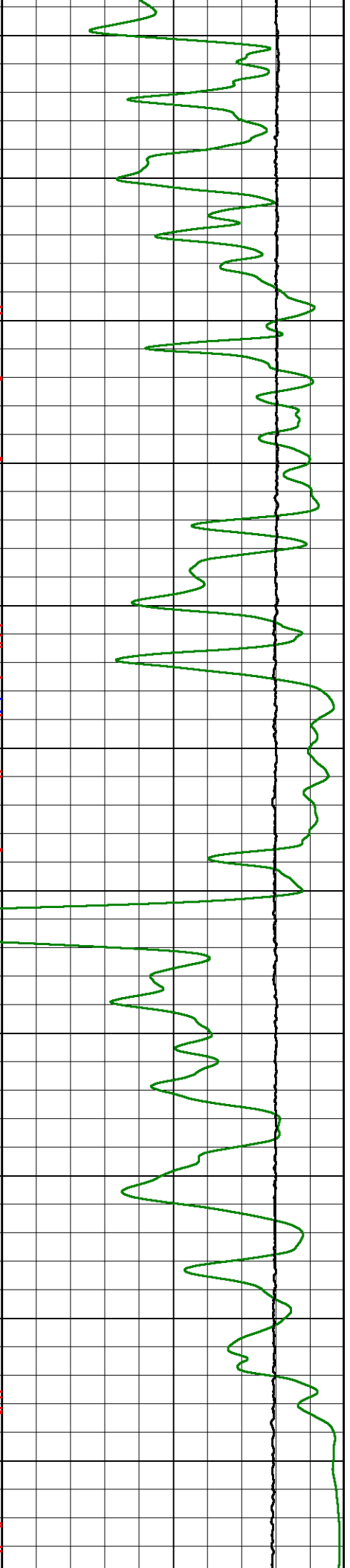
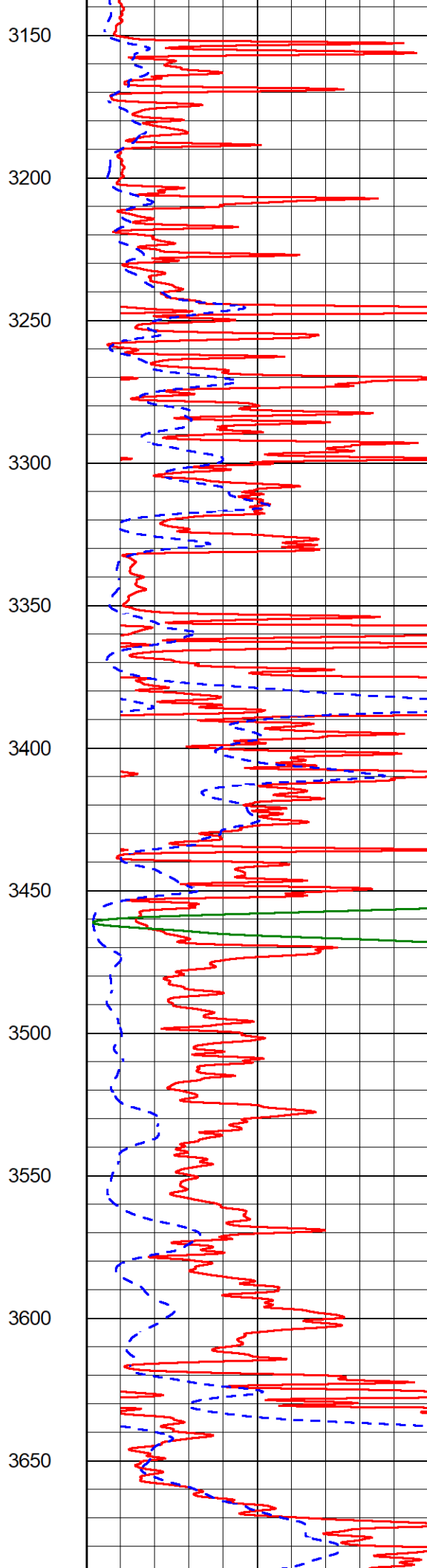
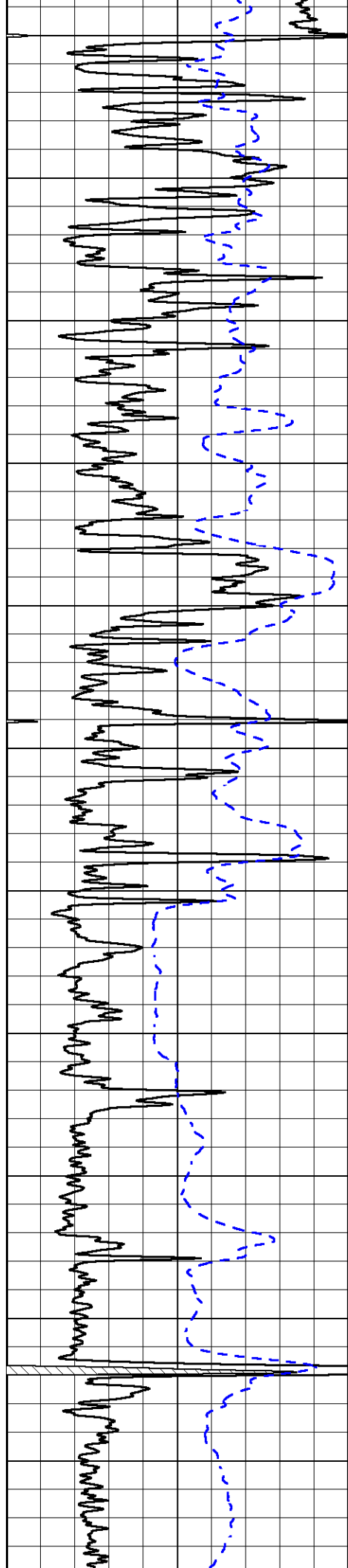
1950

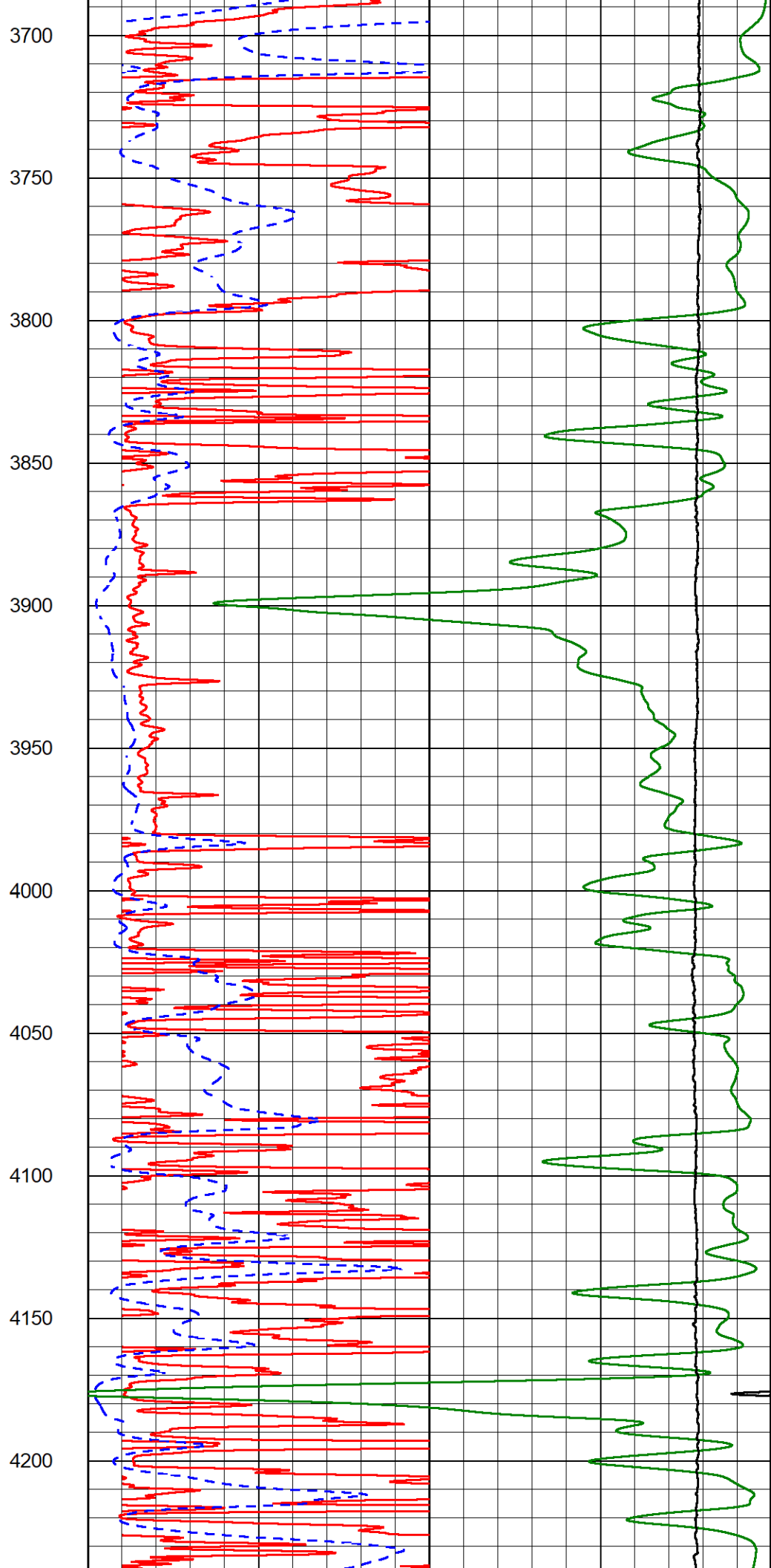
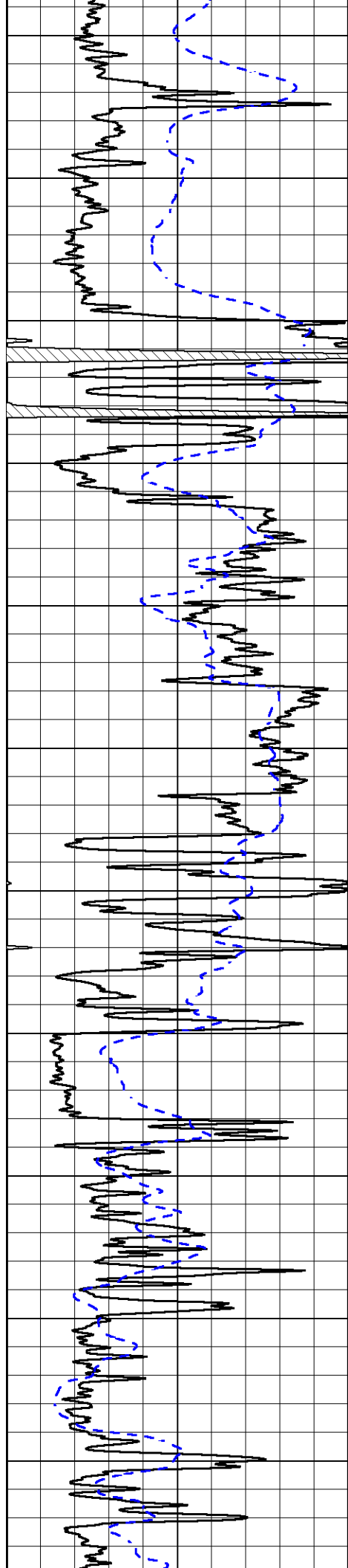
2000

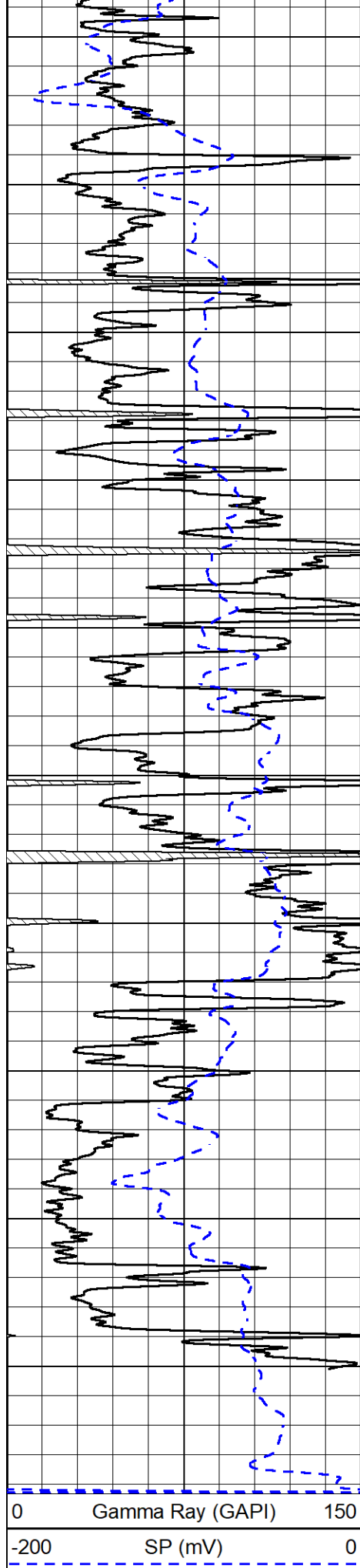












4250

4300

4350

4400

4450

4500

4550

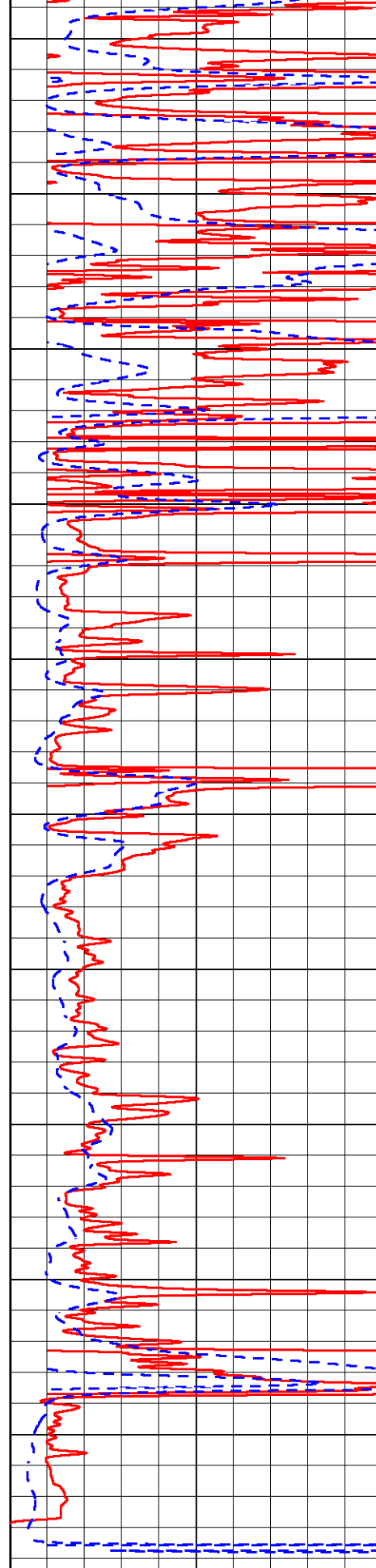
4600

4650

4700

0 Gamma Ray (GAPI) 150

-200 SP (mV) 0



1000 Conductivity (mmho/m) 15000

0 Line Tension (lb) 50

0 Shallow Resistivity (Ohm-m) 50

0 Deep Resistivity (Ohm-m) 50



0 SP (mV) 200

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



MIDWEST WIRELINE

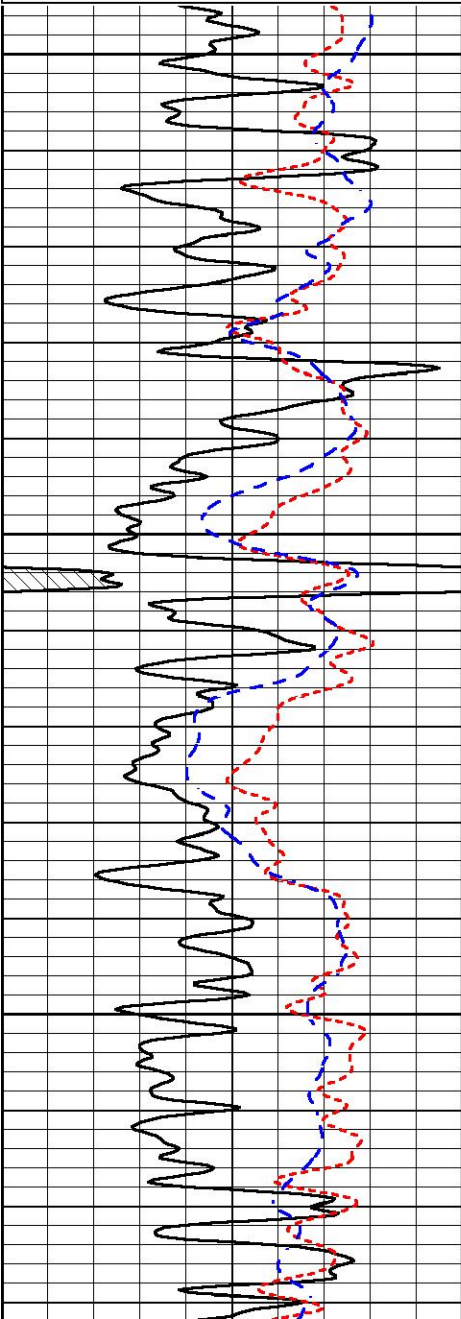
DETAIL SECTION

MAIN PASS

Database File griffin_gary #1.db
Dataset Pathname StkMI/pass3.1
Presentation Format _dil
Dataset Creation Mon Jun 05 16:08:44 2023
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

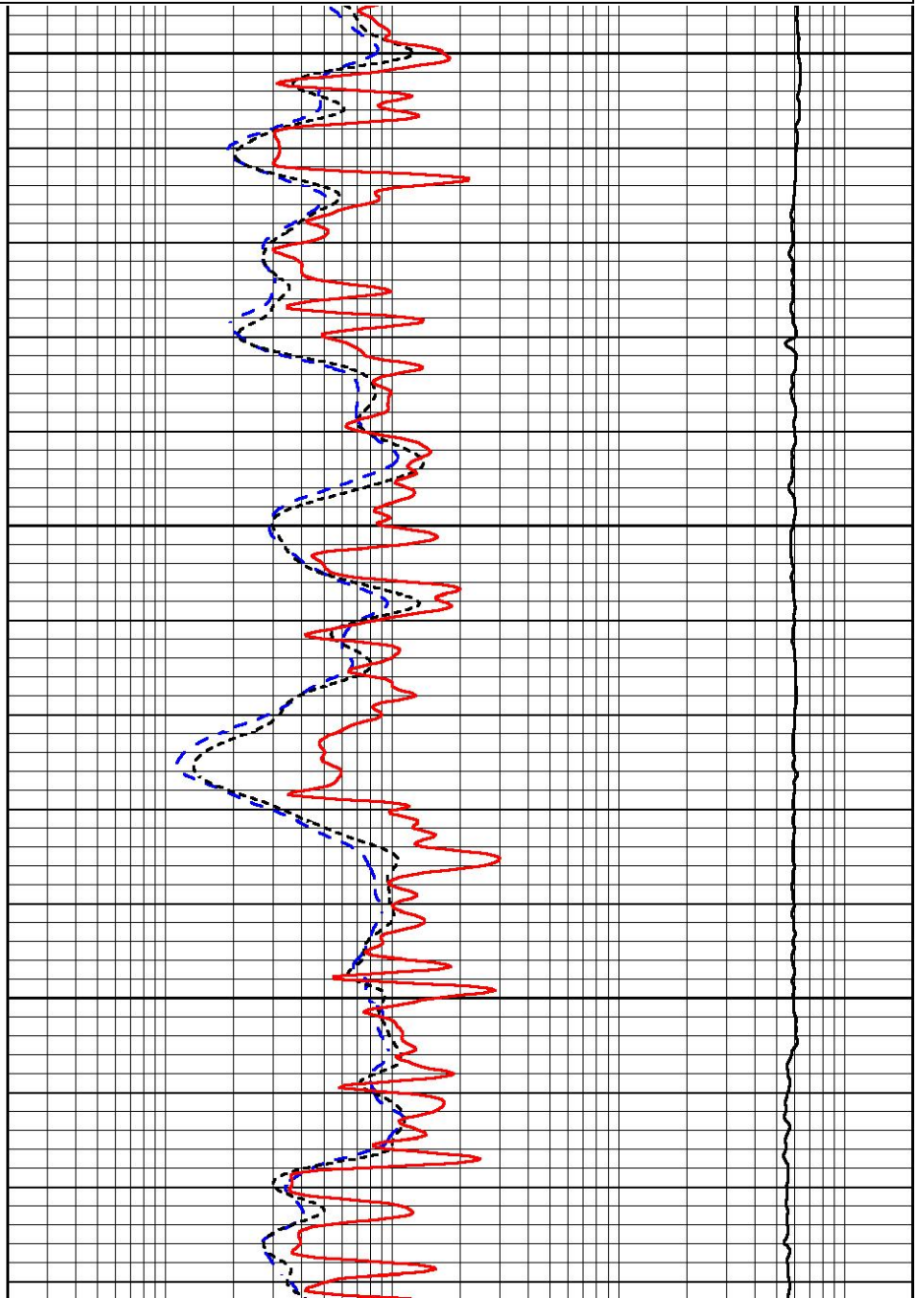
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

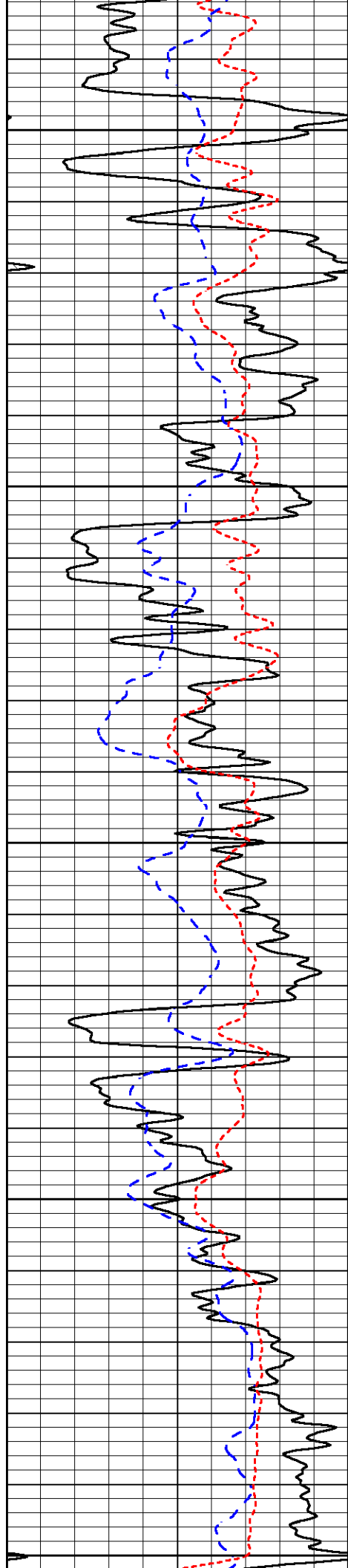


2800

2850

2900





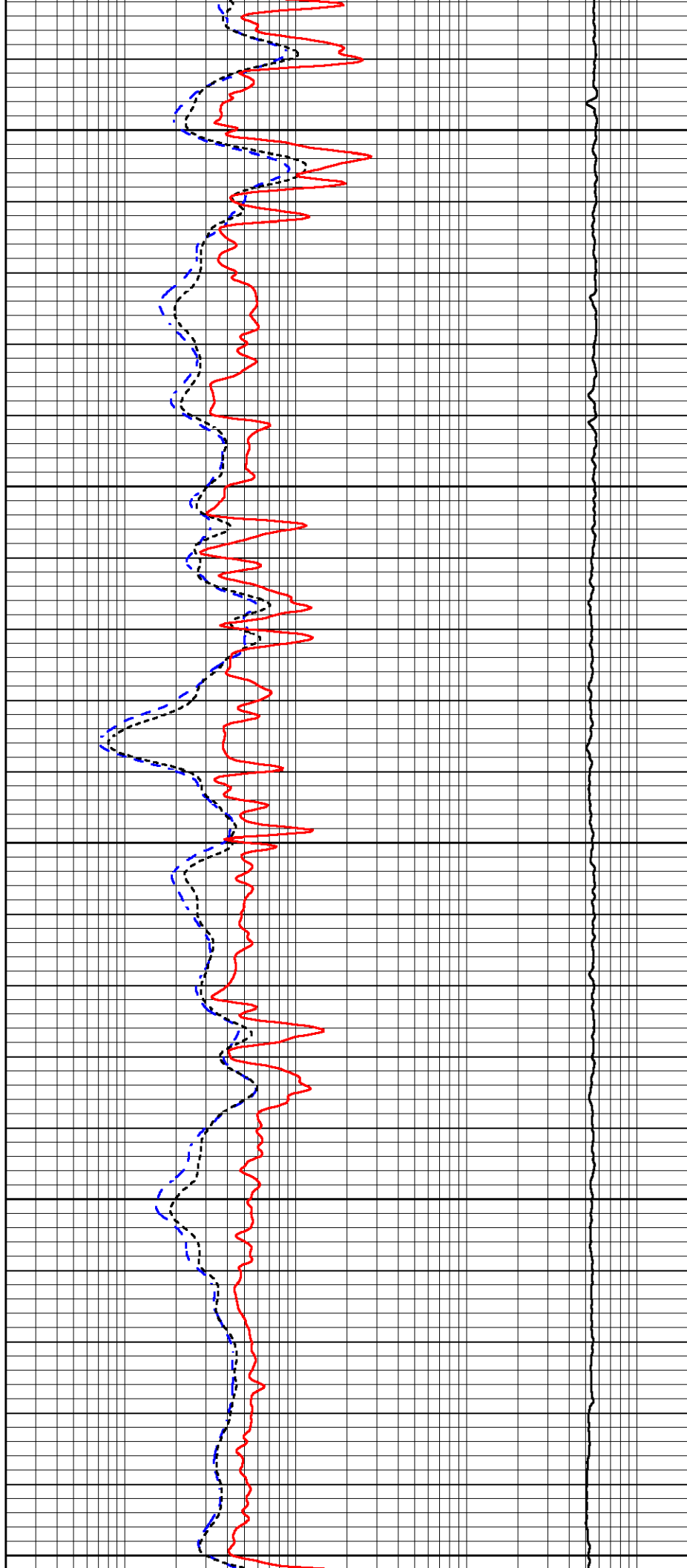
2950

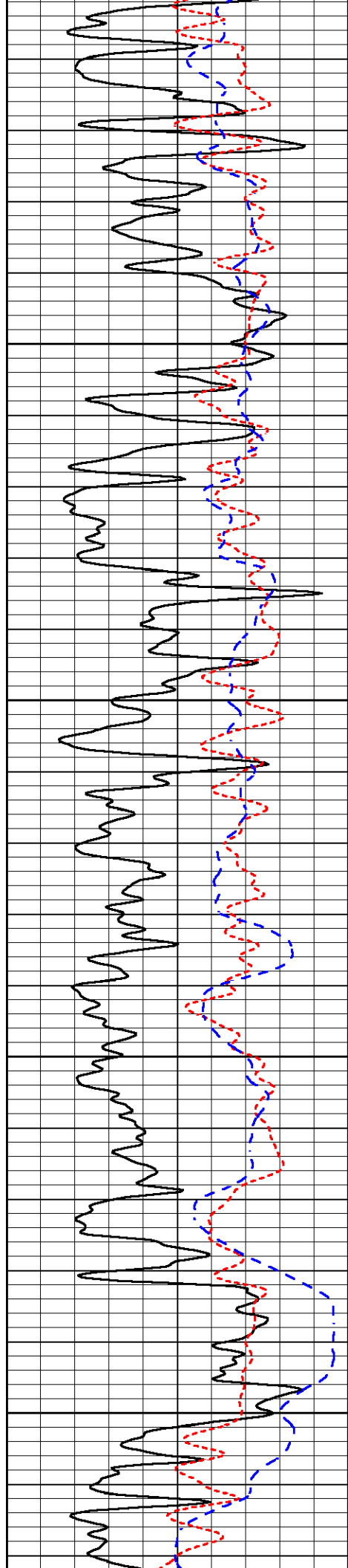
3000

3050

3100

3150



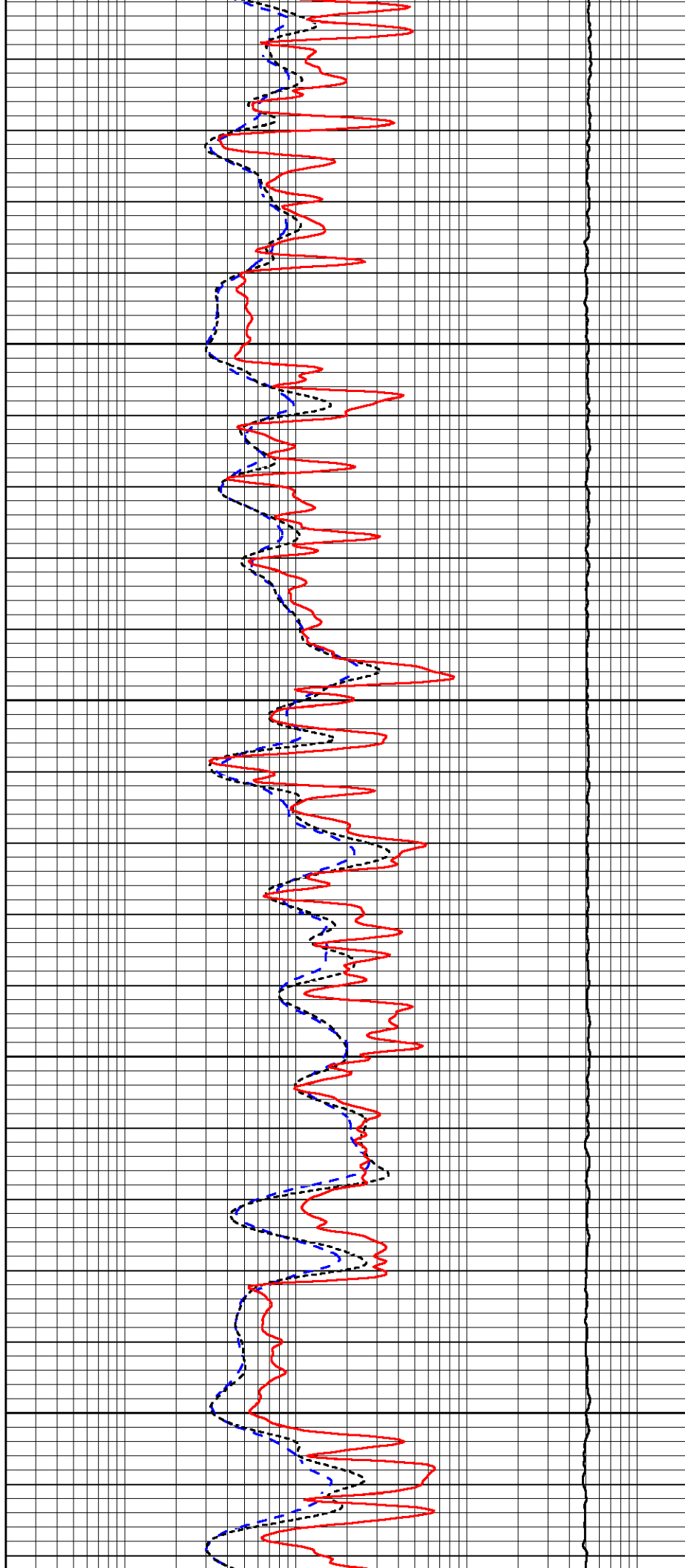


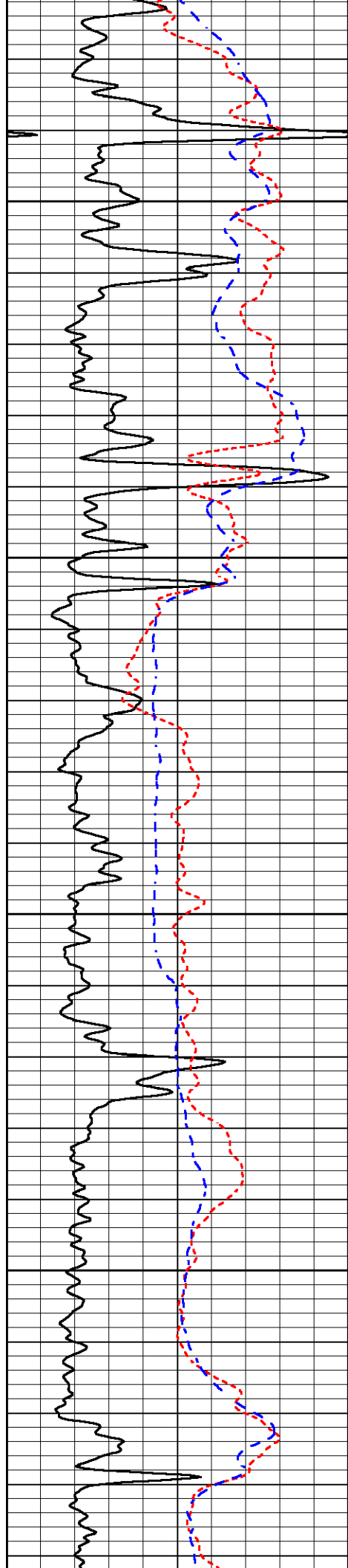
3200

3250

3300

3350



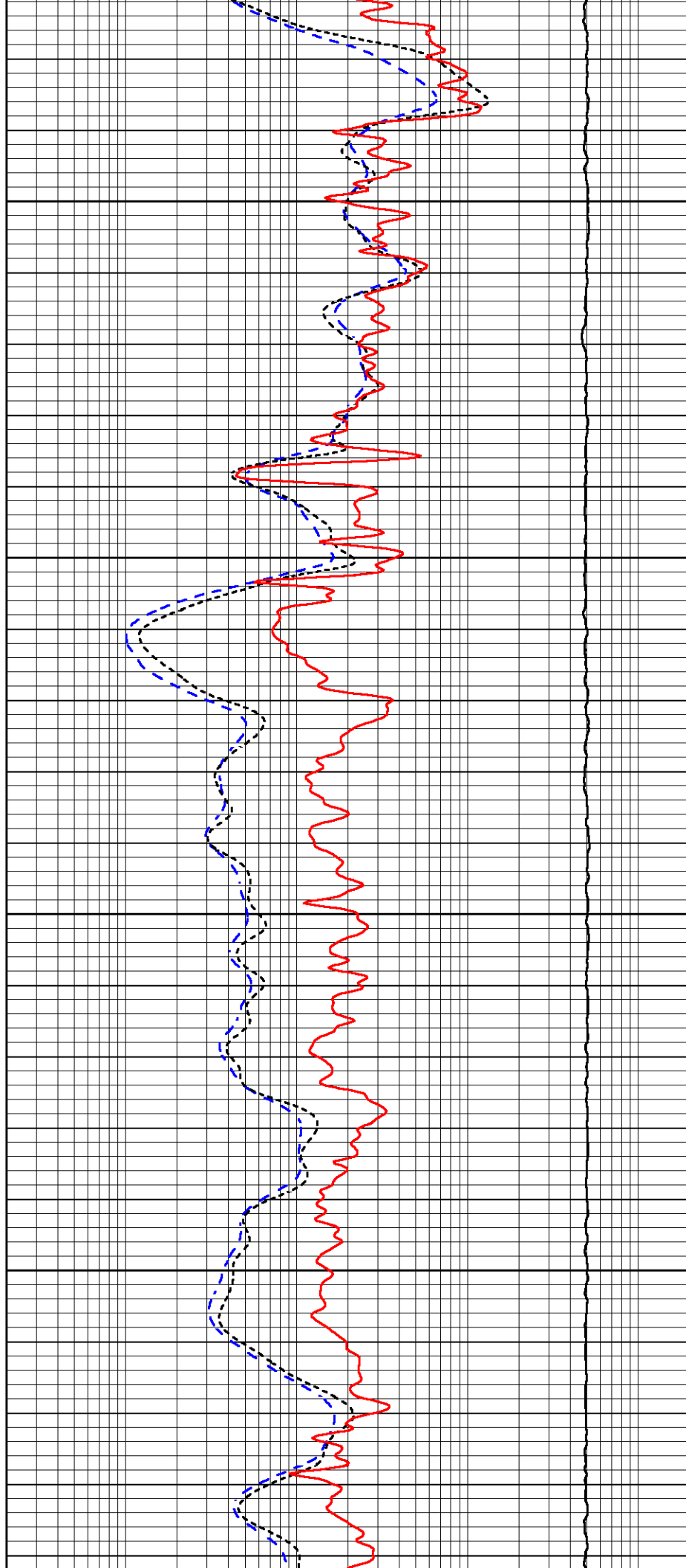


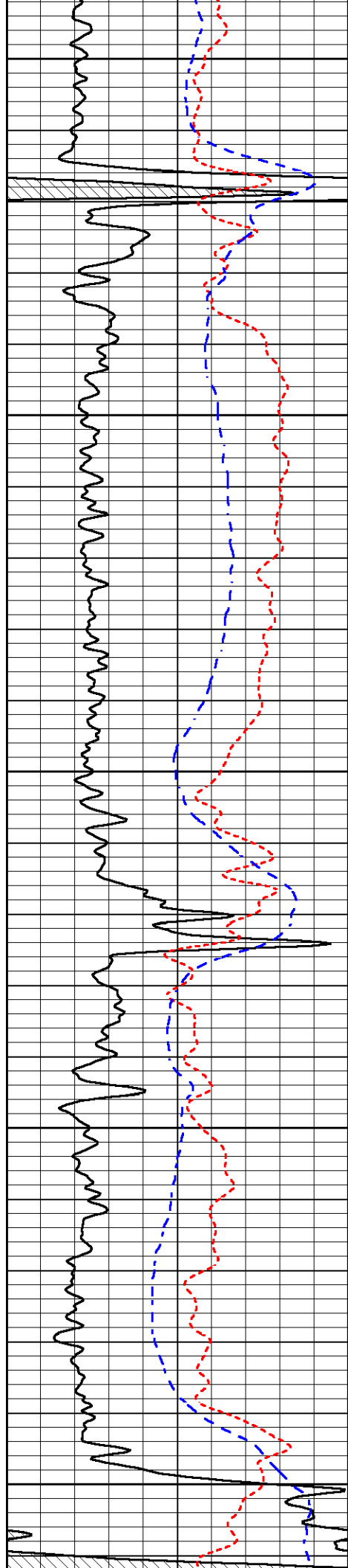
3400

3450

3500

3550





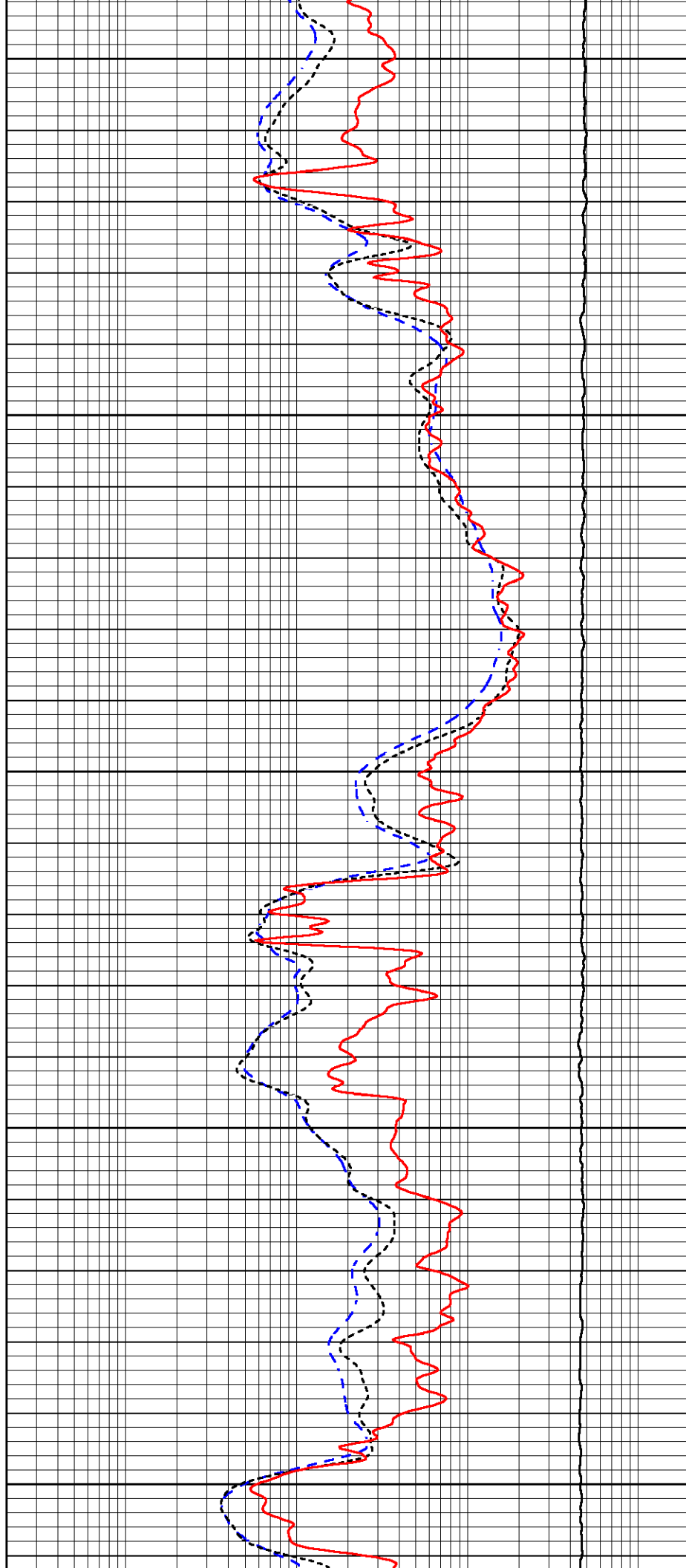
3600

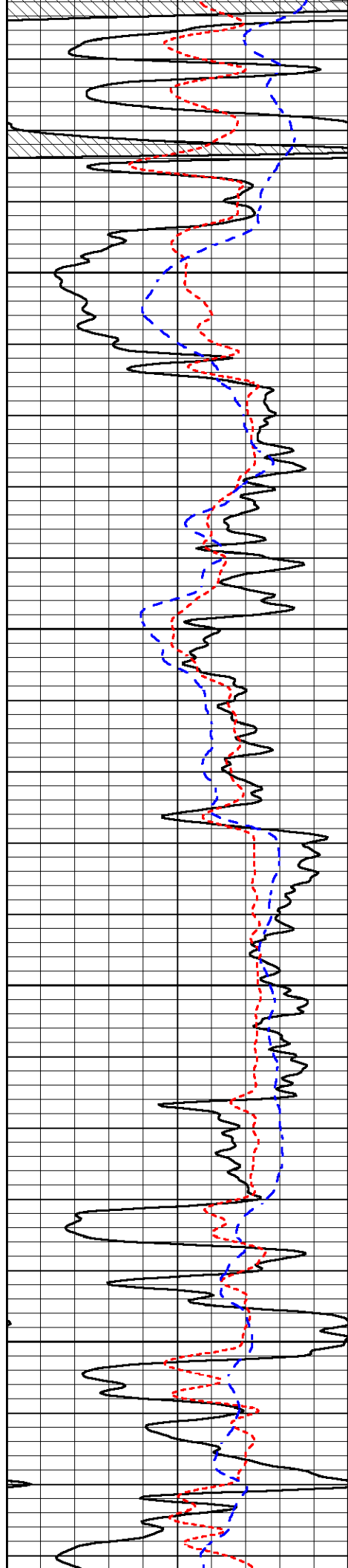
3650

3700

3750

3800



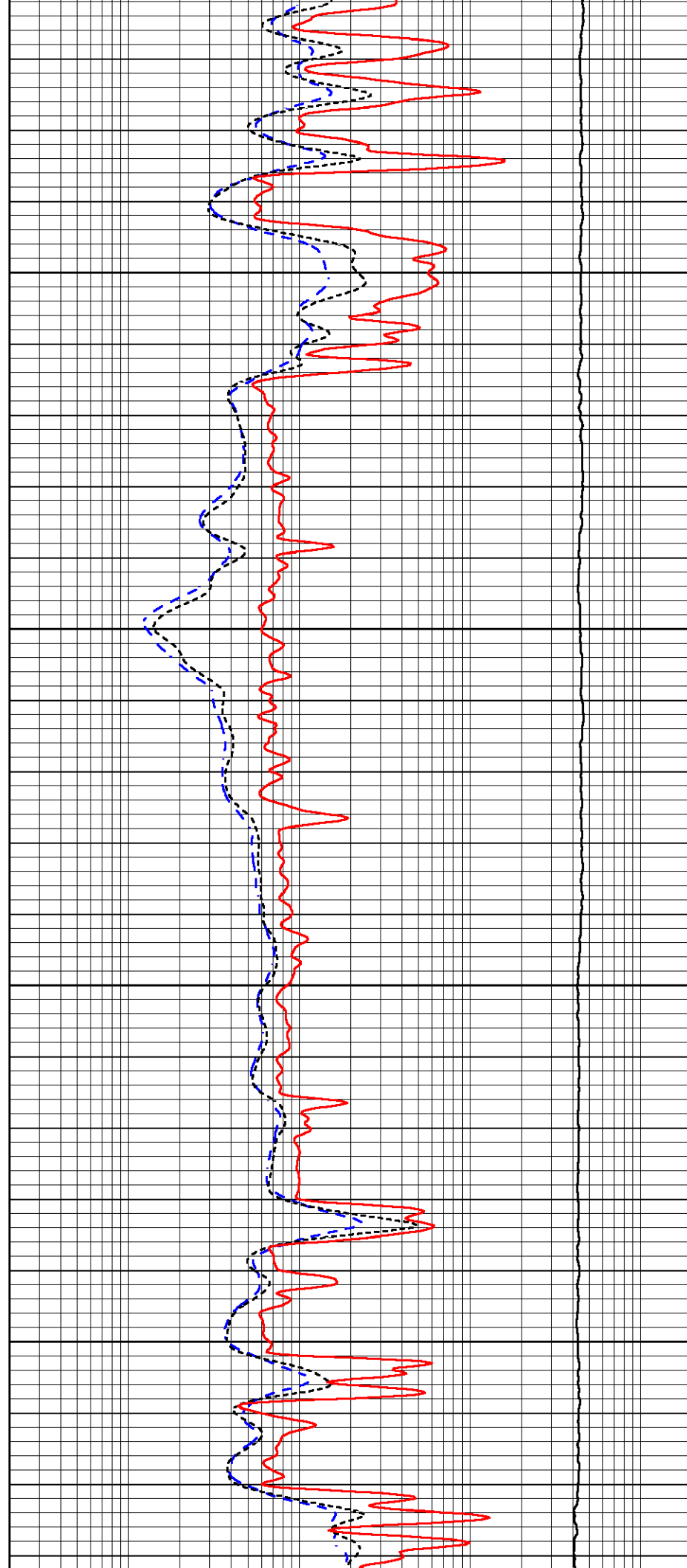


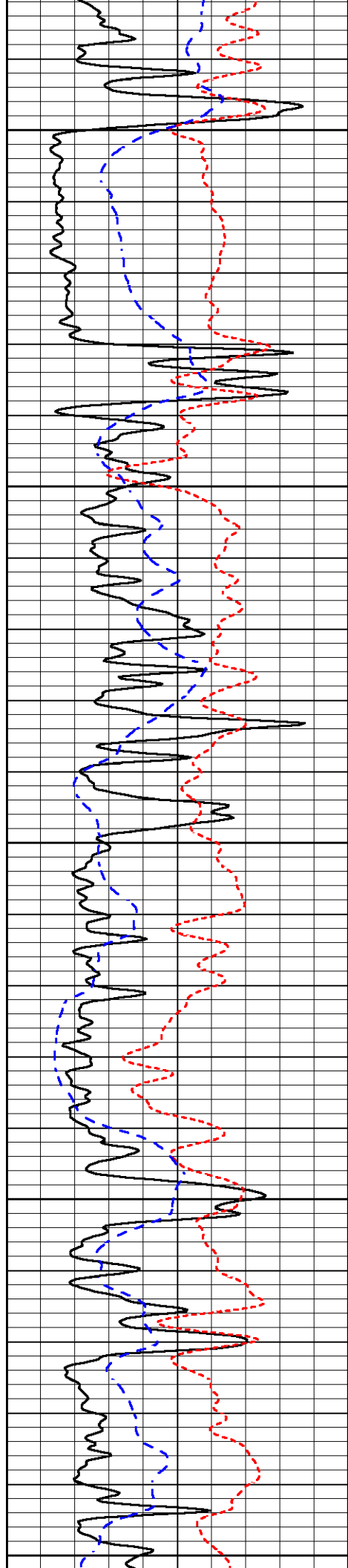
3850

3900

3950

4000





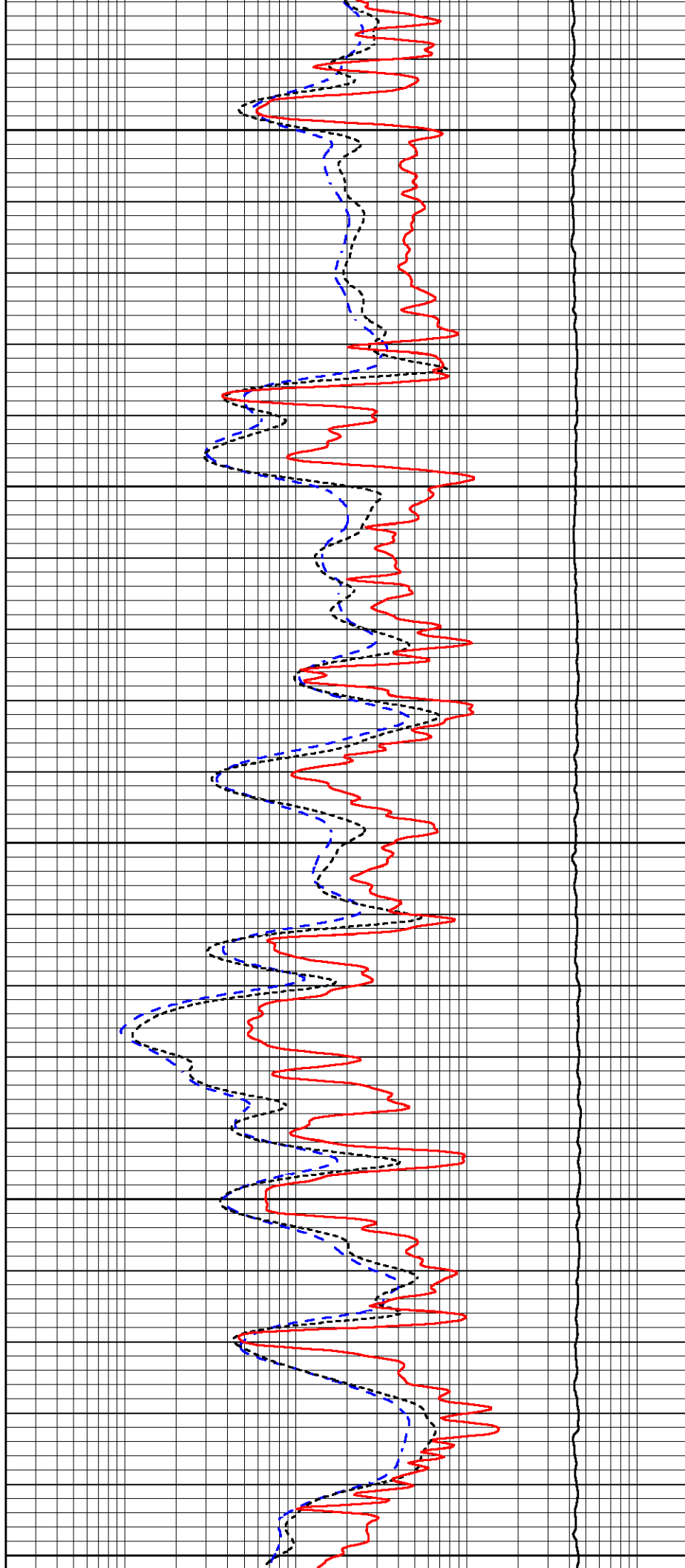
4050

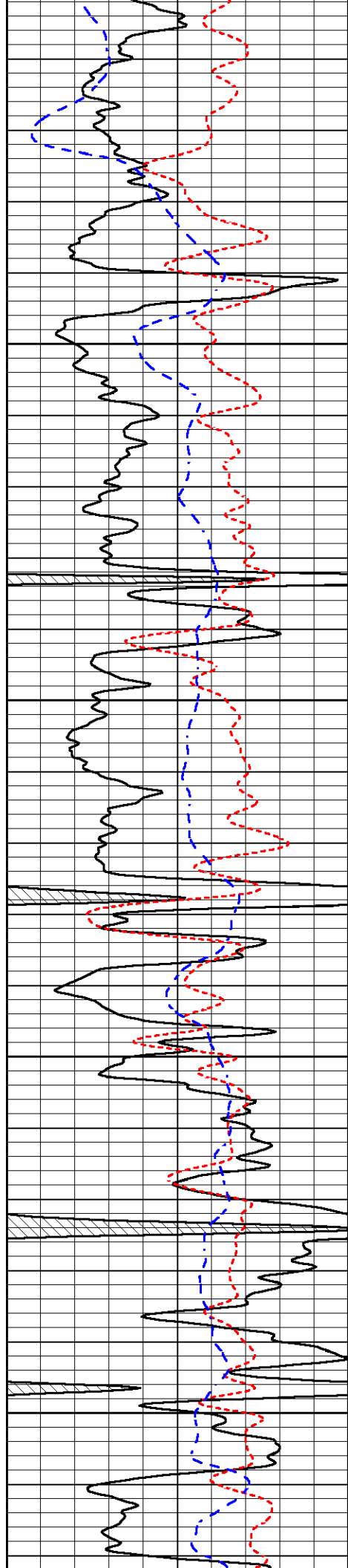
4100

4150

4200

4250



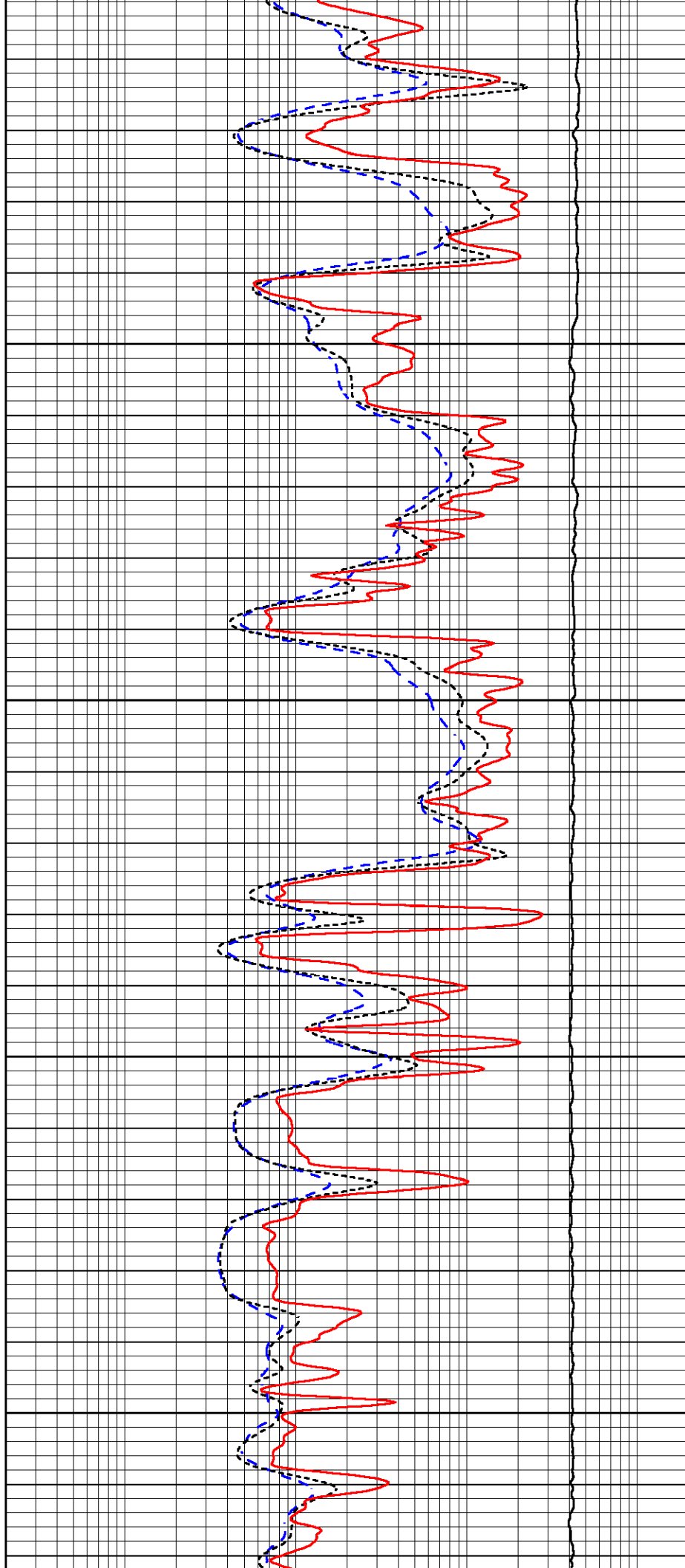


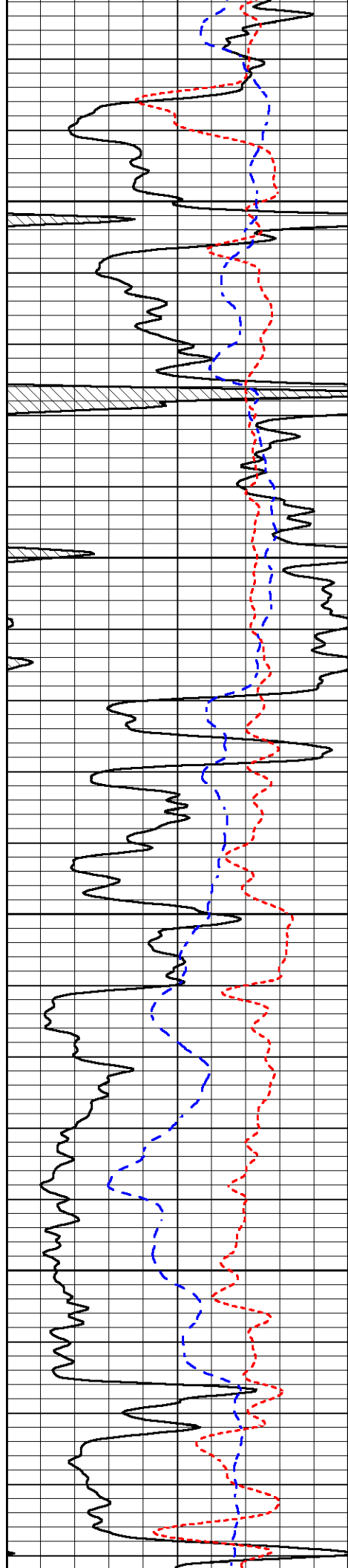
4300

4350

4400

4450



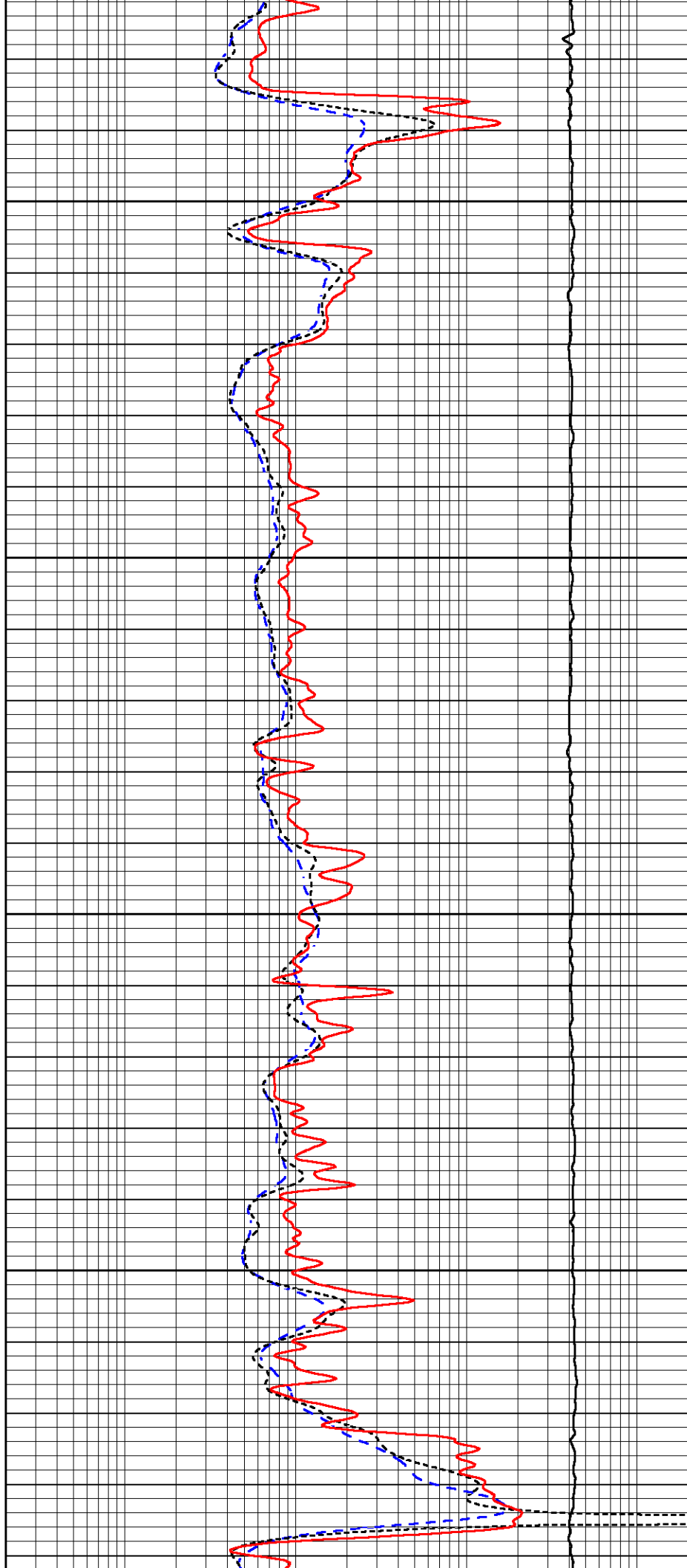


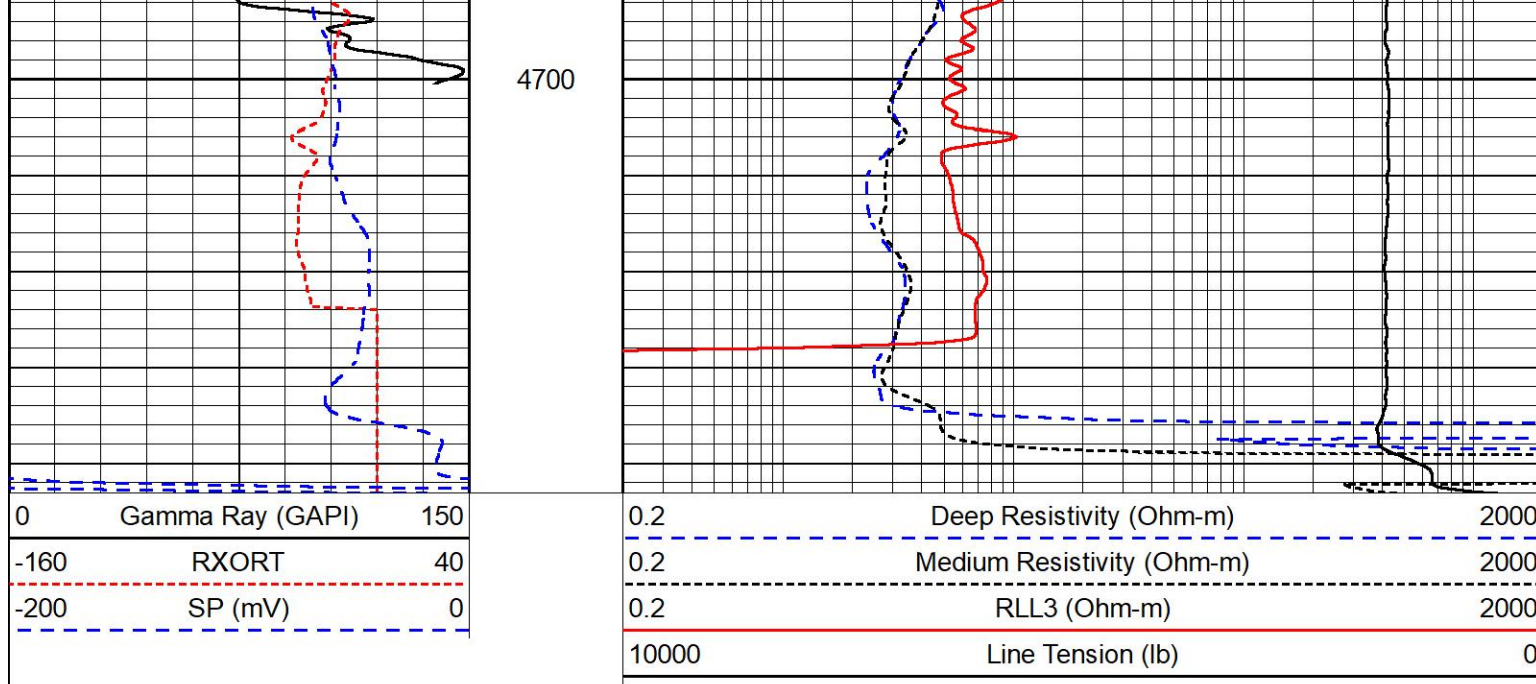
4500

4550

4600

4650



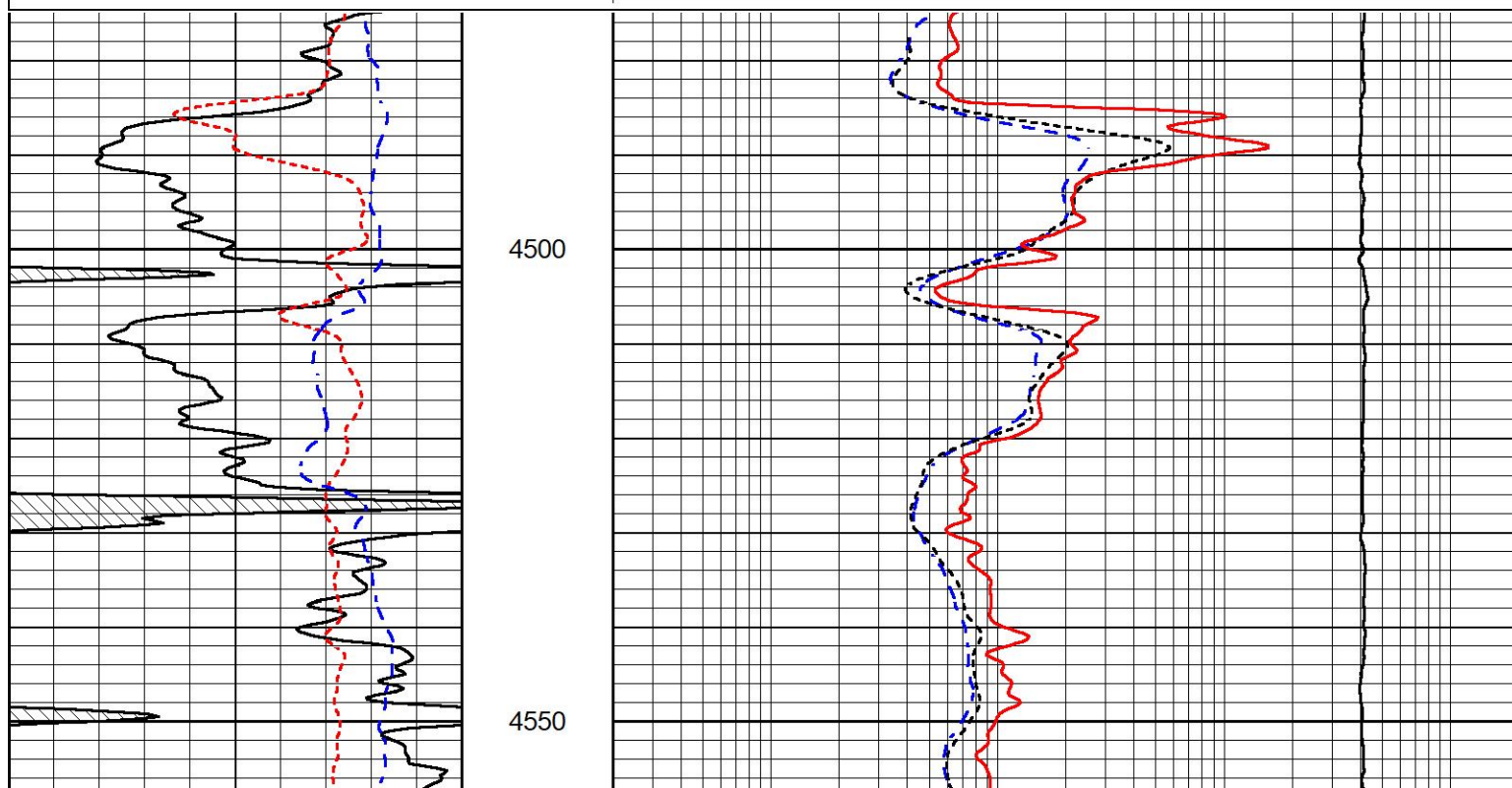
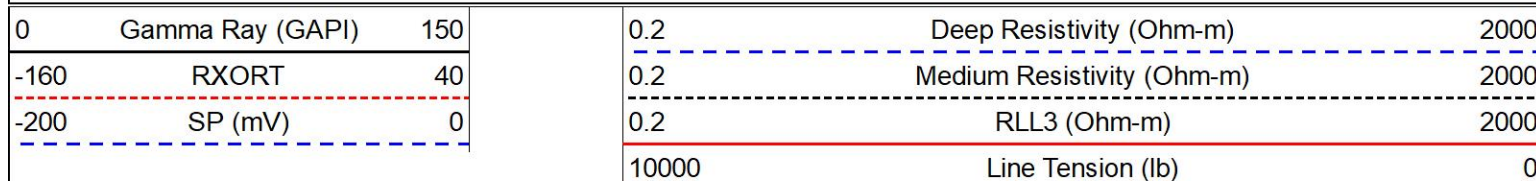


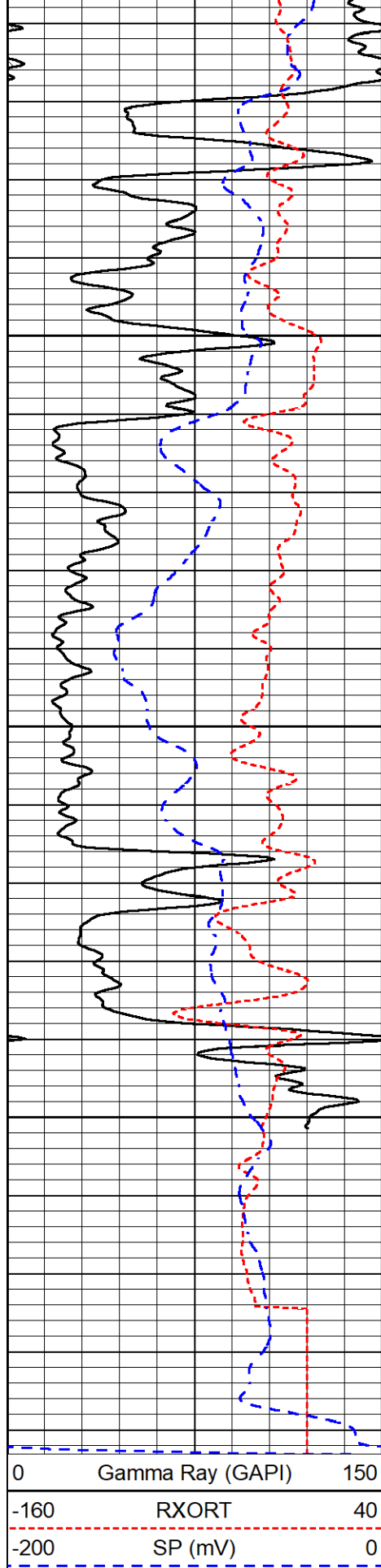
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

Database File griffin_gary #1.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format _dil
 Dataset Creation Mon Jun 05 15:21:01 2023
 Charted by Depth in Feet scaled 1:240

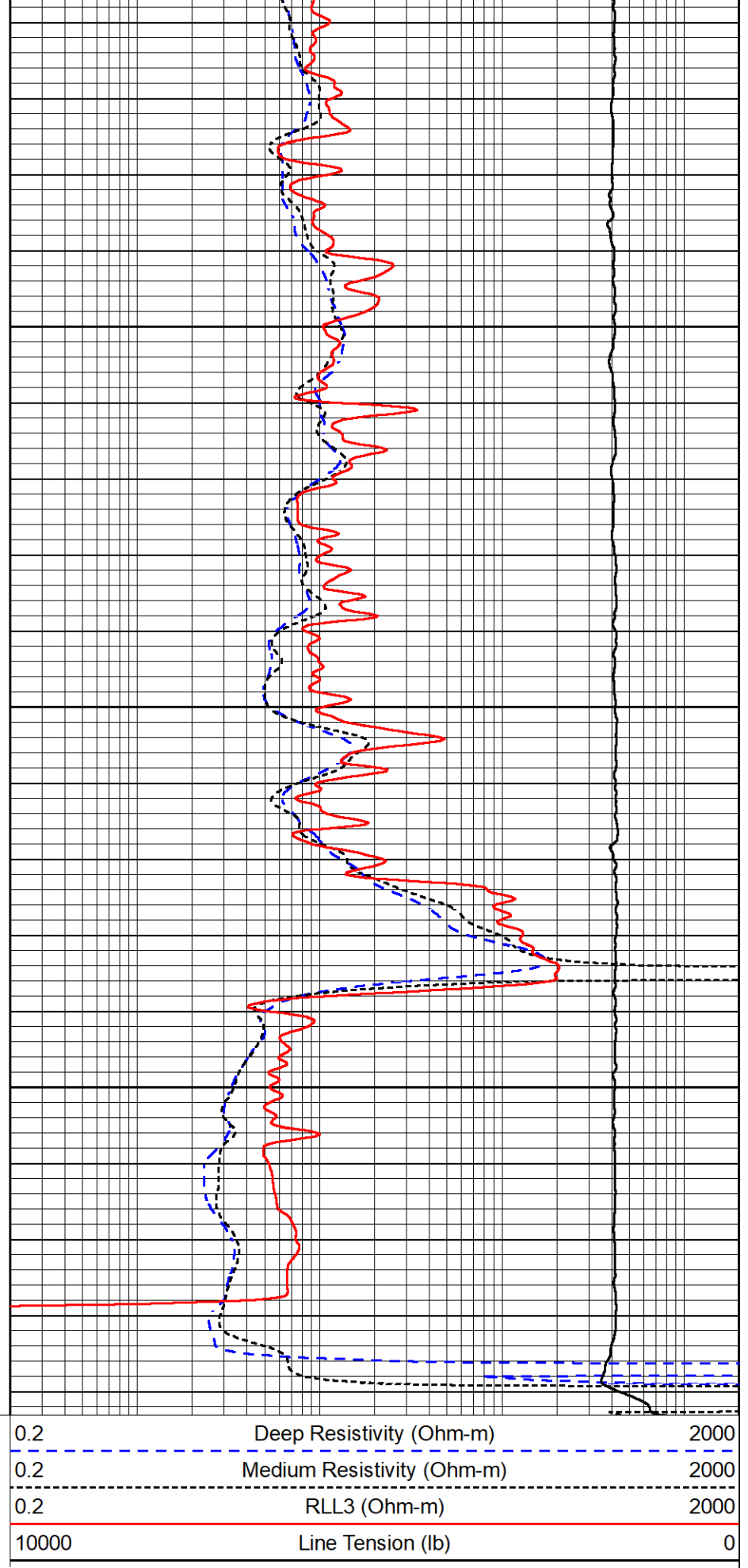




4600

4650

4700



Calibration Report

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	-35.000
Medium	192.026	839.715	0.000	255.800	mmho/m	0.420	-85.000

Microlog Calibration Report

Serial-Model: 401-PSIML
Performed: Mon Jun 27 17:53:09 2022

	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: Thu Jun 1 02:14:11 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	2.570	g/cc	822.19	3221.38	cps
Spine Angle = 75.50			Density/Spine Ratio = 0.526		
	Size		Reading		
Small Ring	6.00	in	1.16		
Large Ring	18.00	in	1.01		

Before Survey Verification

Target	Measured
<i>g/cc</i>	<i>g/cc</i>
<i>g/cc</i>	<i>g/cc</i>
<i>g/cc</i>	<i>g/cc</i>

After Survey Verification

Target	Measured
<i>g/cc</i>	<i>g/cc</i>
<i>g/cc</i>	<i>g/cc</i>
<i>g/cc</i>	<i>g/cc</i>

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	Gary #1
Field	Turkey Creek East
County	Barber
State	Kansas