



MIDWEST WIRELINE

DUAL INDUCTION
LOG

Company Ressler Well Service, Inc.		Company Ressler Well Service, Inc.	
Well	Teten B #15	Well	Teten B #15
Field	Burrtton	Field	Burrtton
County	Reno	County	Reno
State	Kansas	State	Kansas
Location: API #: 15-155-21780-00-00		Other Services	
SEC 12 TWP 23S RGE 4W		CNL/CDL MEL	
Permanent Datum	Ground Level	Elevation	1487'
Log Measured From	Kelly Bushing	K.B.	1499'
Drilling Measured From	Kelly Bushing	D.F.	N/A
		G.L.	1487'
Date	10/12/2020		
Run Number	One		
Depth Driller	3875'		
Depth Logger	3870'		
Bottom Logged Interval	3869'		
Top Log Interval	250'		
Casing Driller	13.375" @ 299'		
Casing Logger	296'		
Bit Size	7.875"		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	4100		
Density / Viscosity	9.2 52		
pH / Fluid Loss	9.0 10.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.60 @ 60		
Rmt @ Meas. Temp	0.45 @ 60		
Rmc @ Meas. Temp	0.81 @ 60		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.31 @ 115		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	115		
Equipment Number	P-24		
Location	HAYS		
Recorded By	D. Schmidt		
Witnessed By	Larry Ressler		Roger Martin

<<< 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.

Burrtton,
West to Woodberry Rd, 2 North, 1/2 West,
North and East to location

Log Measured From: Kelly Bushing 12 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: Larry Ressler	
Operator:		Secondary Witness: Roger Martin	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

Log Variables

DatabaseC:\ProgramData\Warrior\Data\ressler_teten b 15.db
Dataset field/well/STKML/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	100	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	135	0	Off	0

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

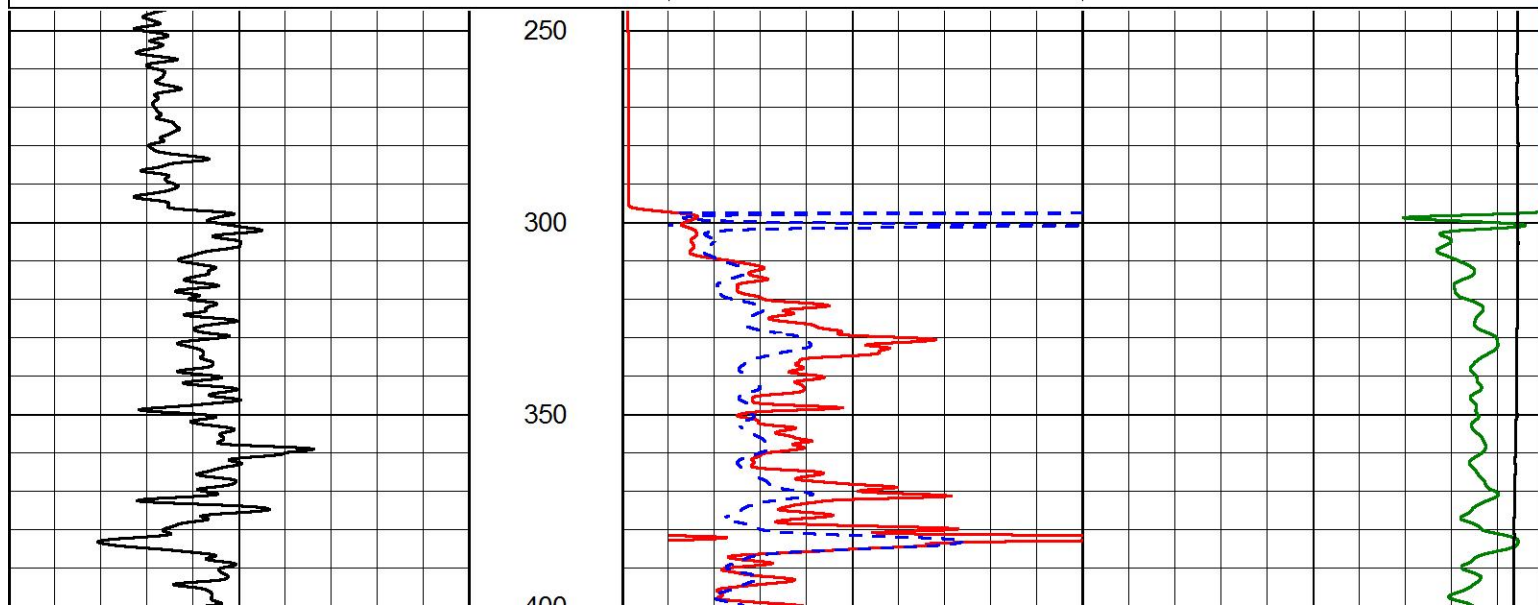


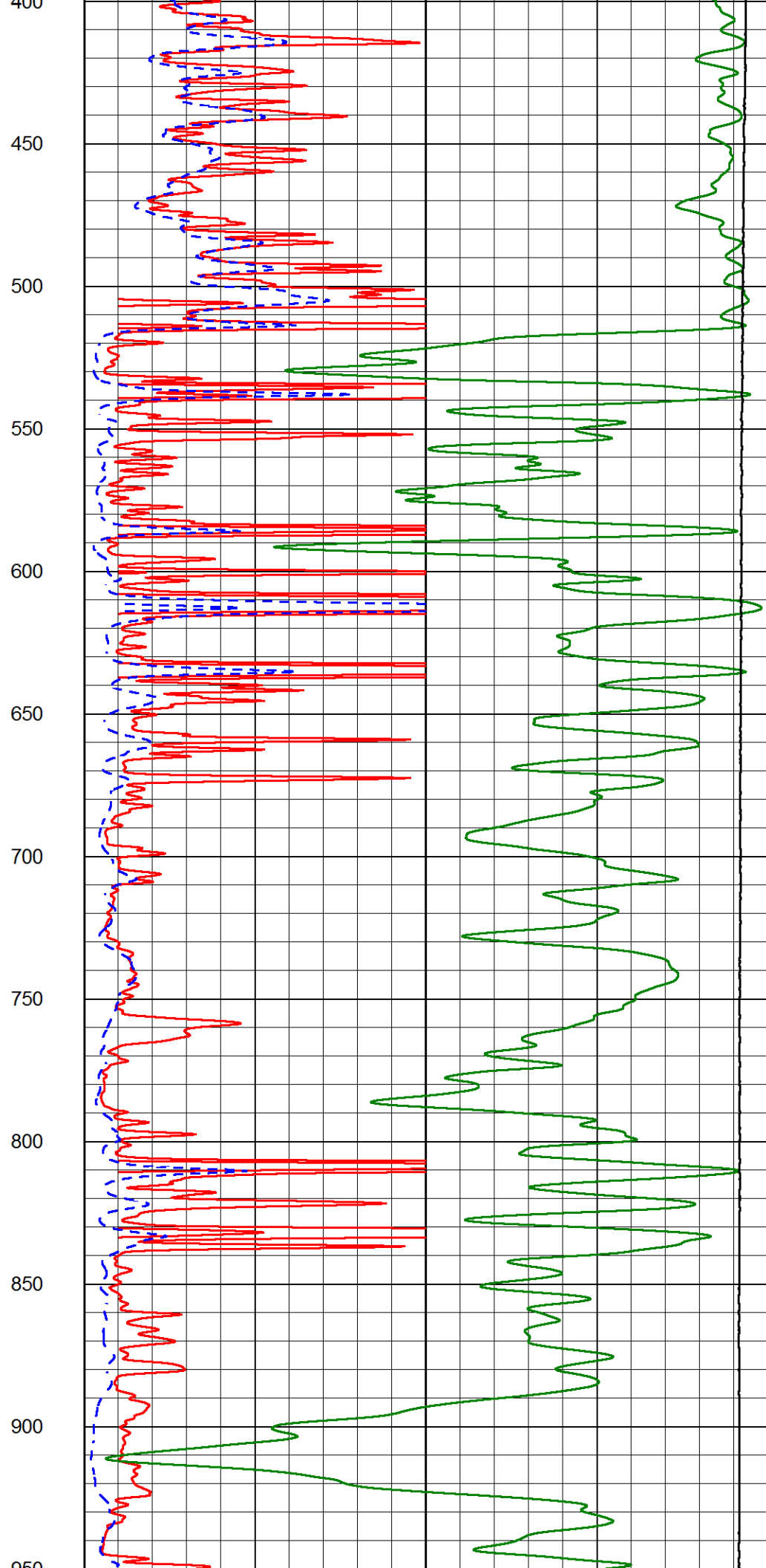
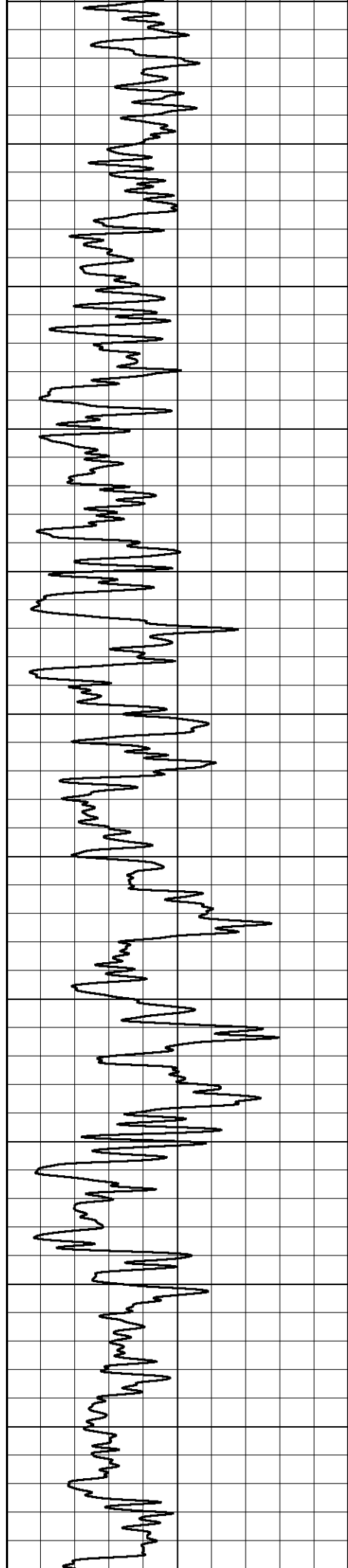
MIDWEST WIRELINE

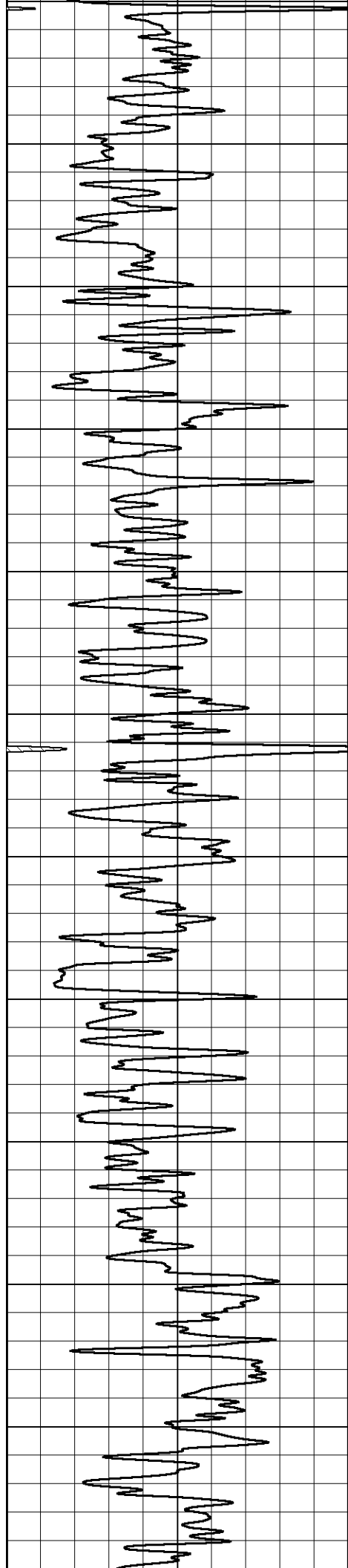
MAIN PASS

Database File ressler_teten b 15.db
Dataset Pathname STKML/pass4.1
Presentation Format _dil2in
Dataset Creation Mon Oct 12 08:27:42 2020
Charted by Depth in Feet scaled 1:600

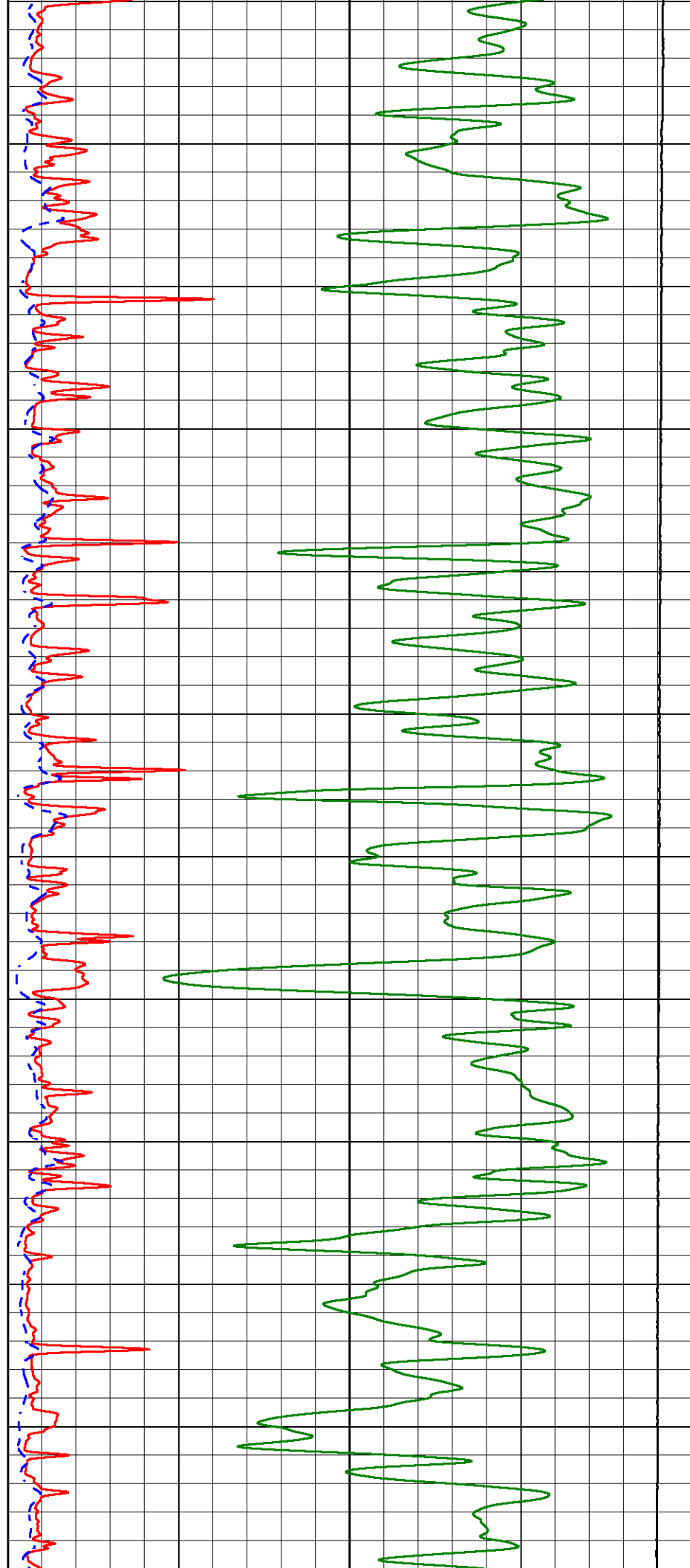
0	GAMMA RAY (GAPI)	150	1000	CONDUCTIVITY (mmho/m)	0
			15000	Line Tension (lb)	0
			0	RLL3 (Ohm-m)	50
			0	RILD (Ohm-m)	50
			50	RLL3 (Ohm-m)	200
			50	Deep Resistivity (Ohm-m)	200

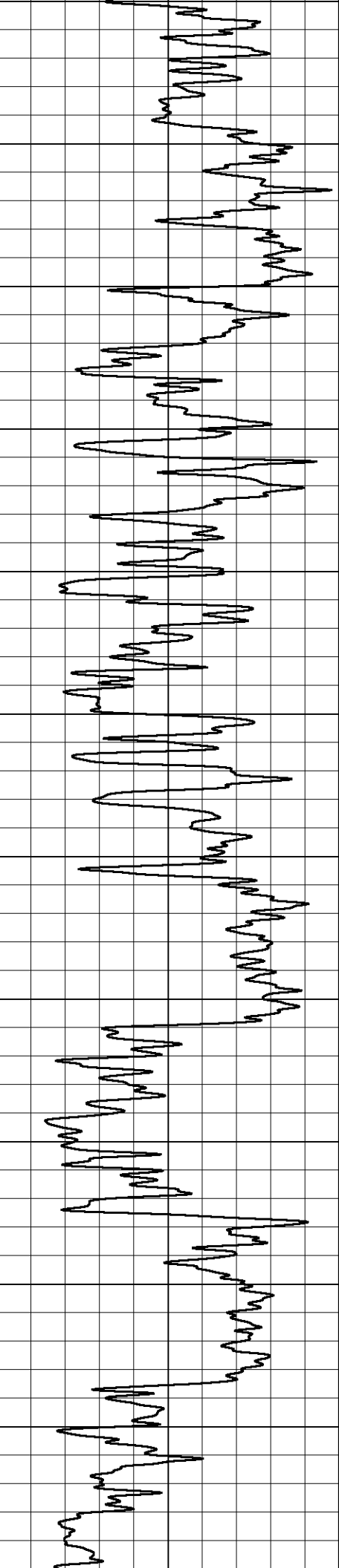




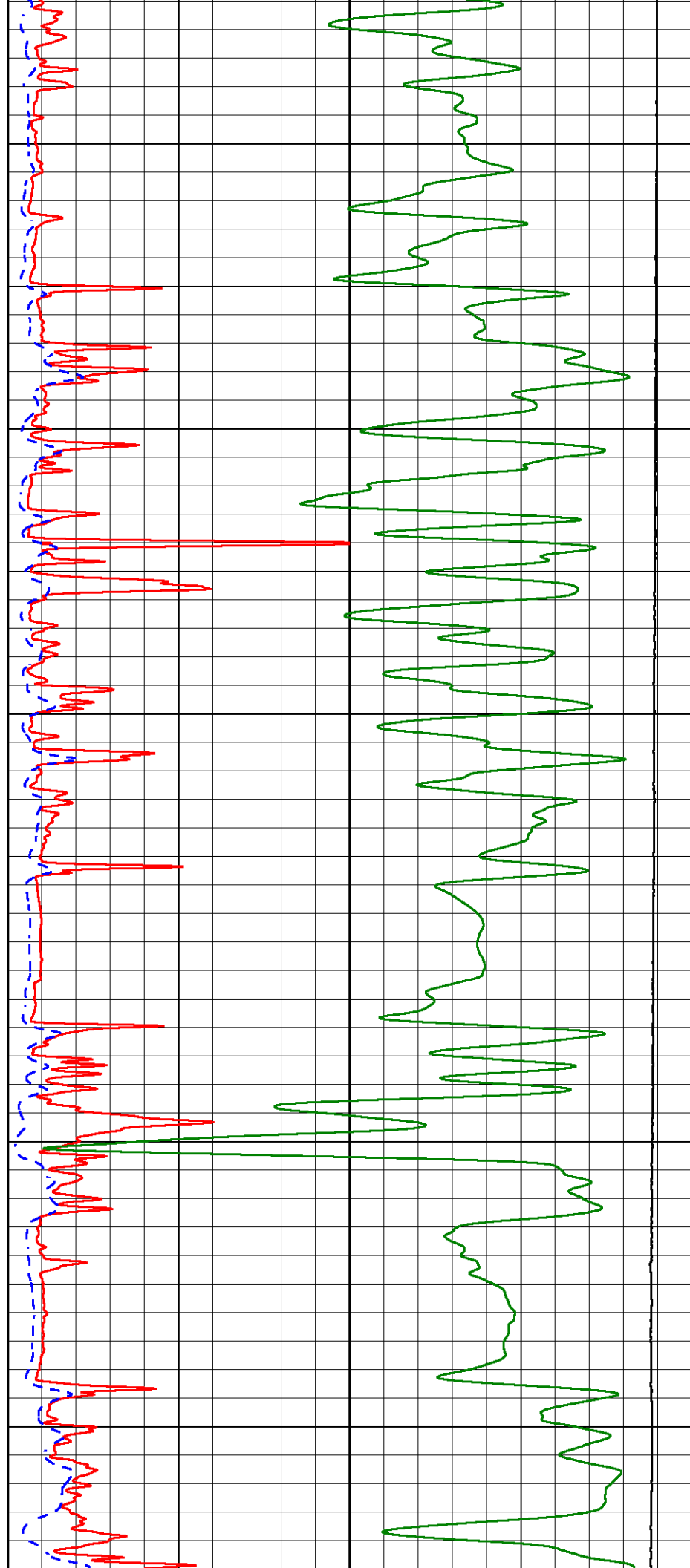


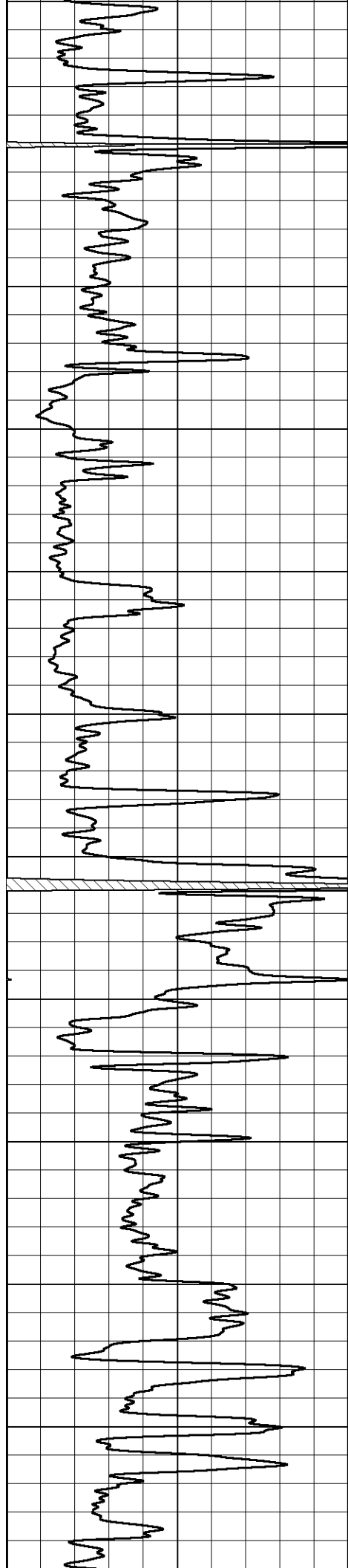
950
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500



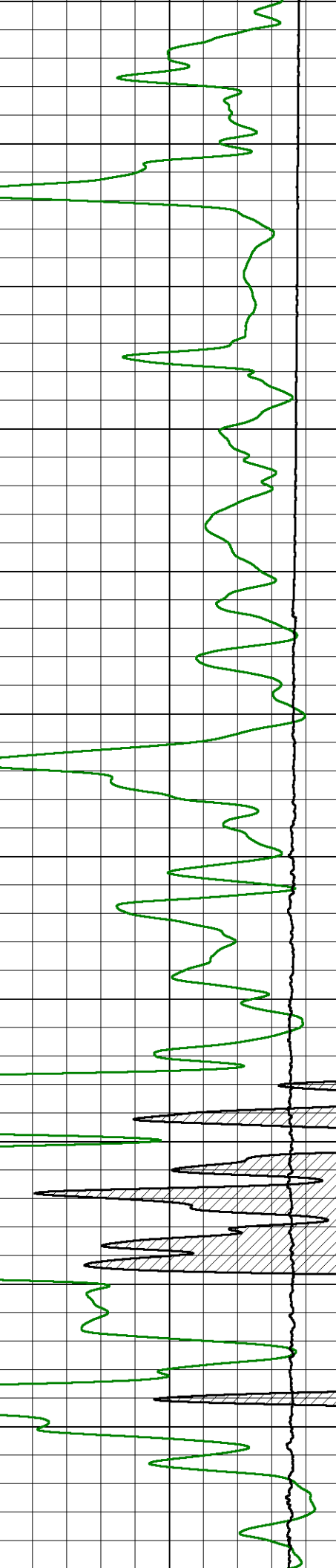
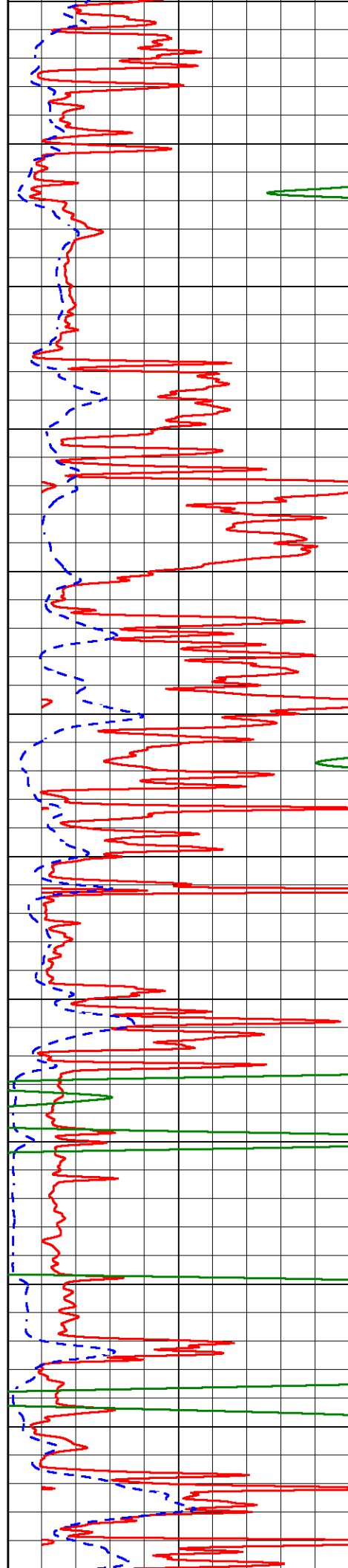


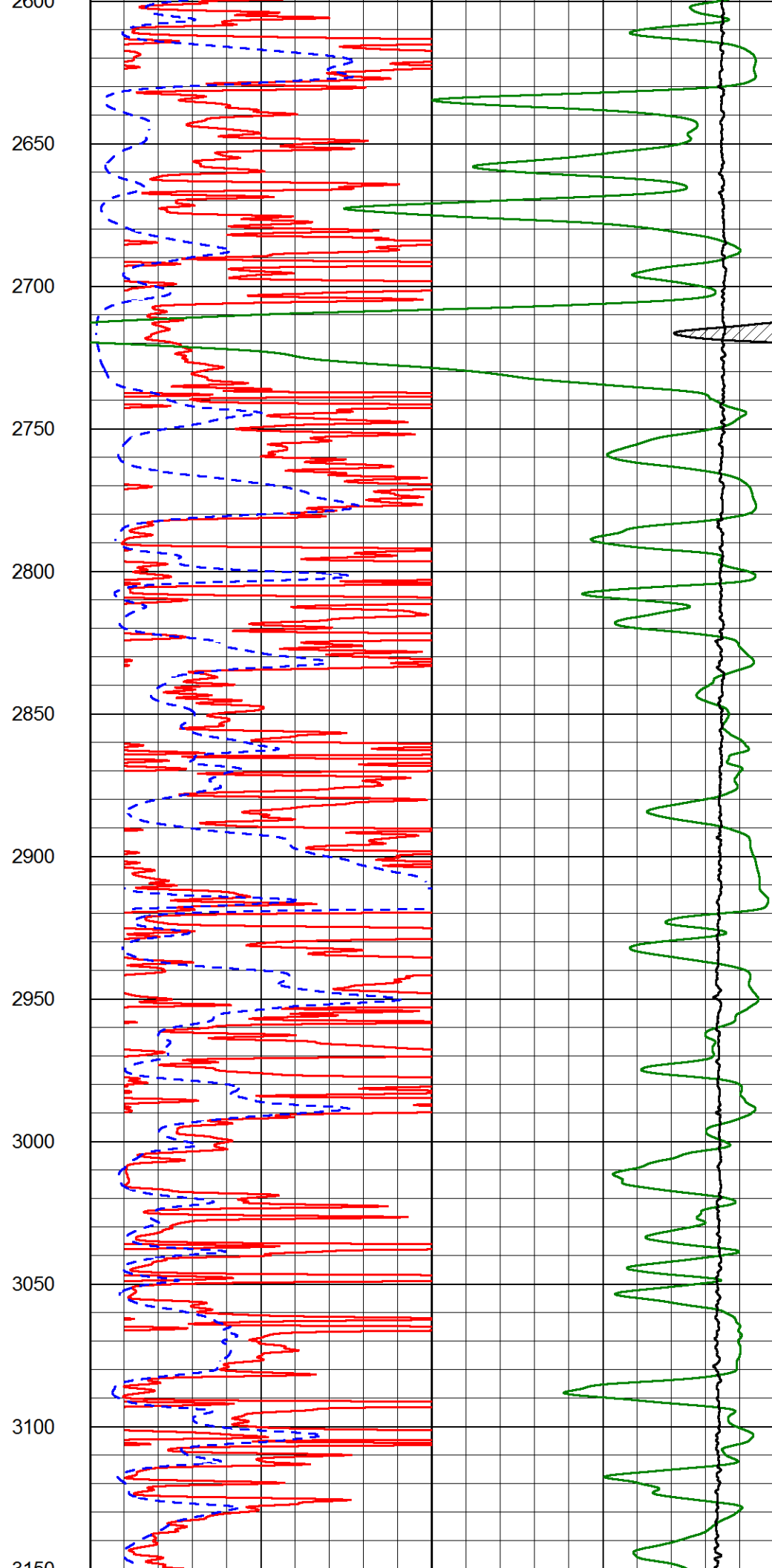
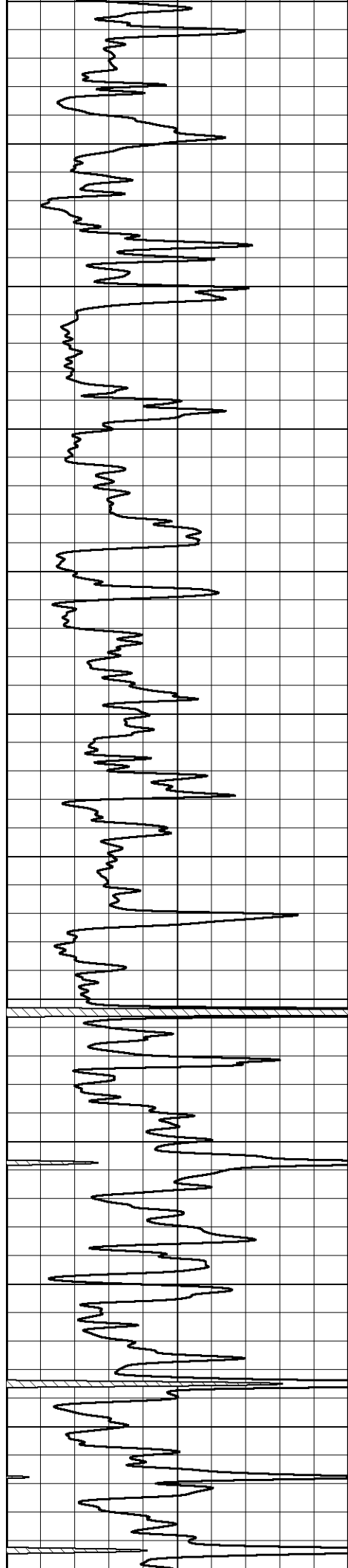
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050

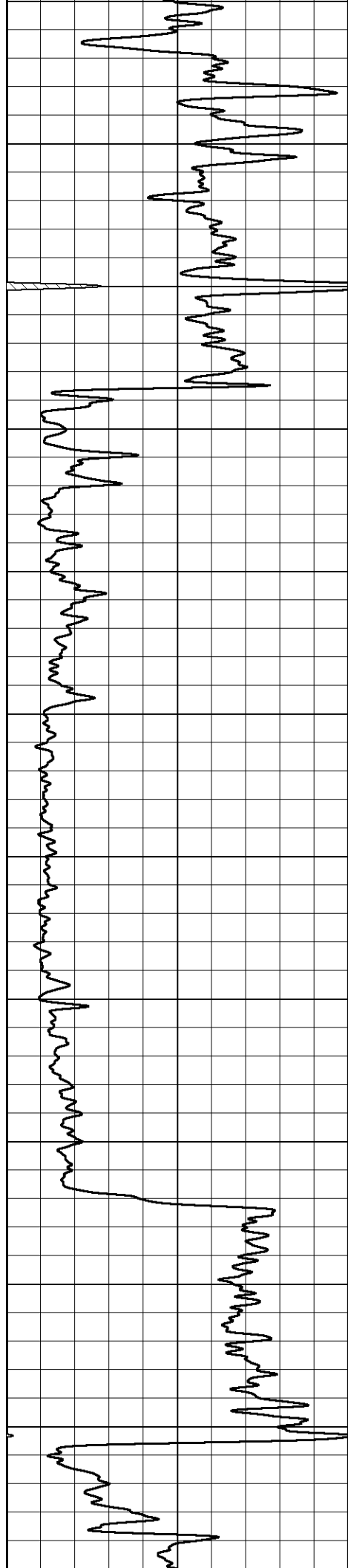




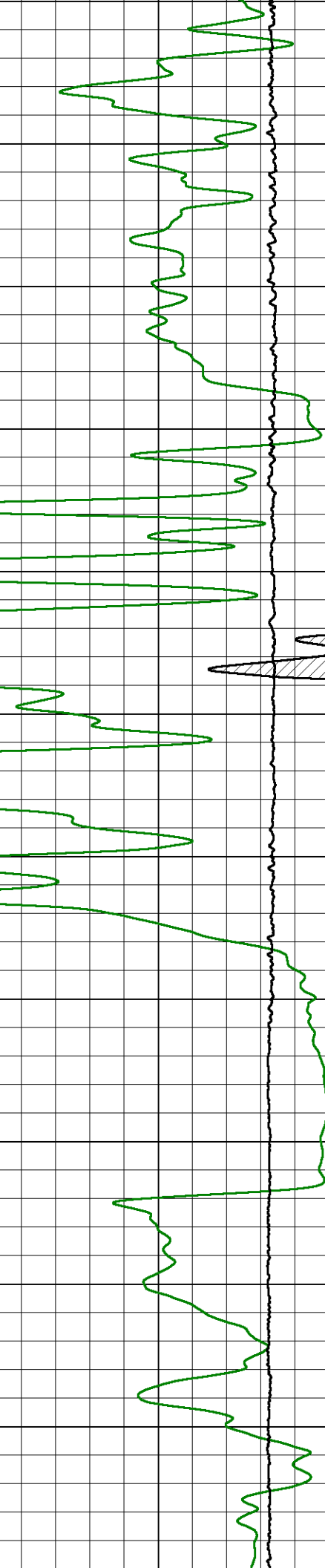
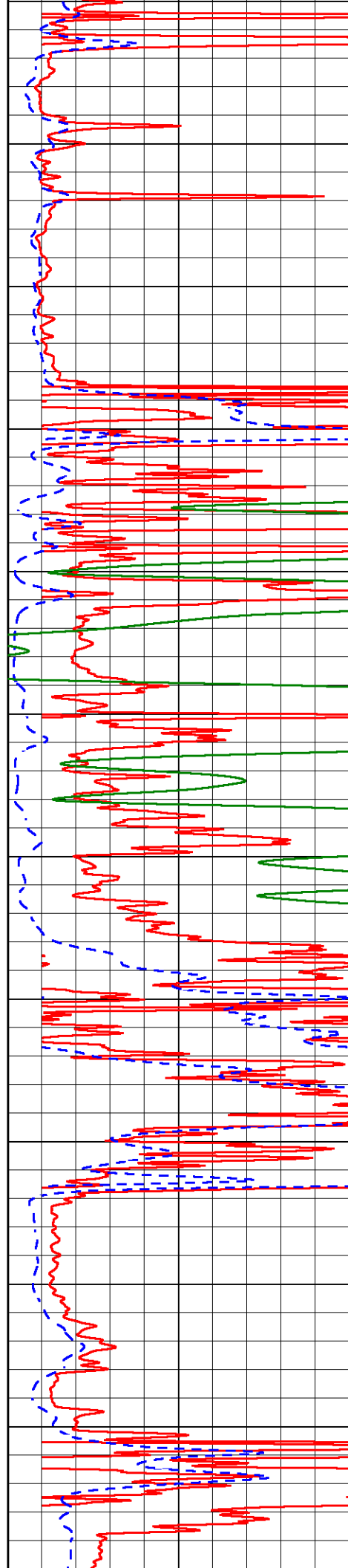
2030
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600

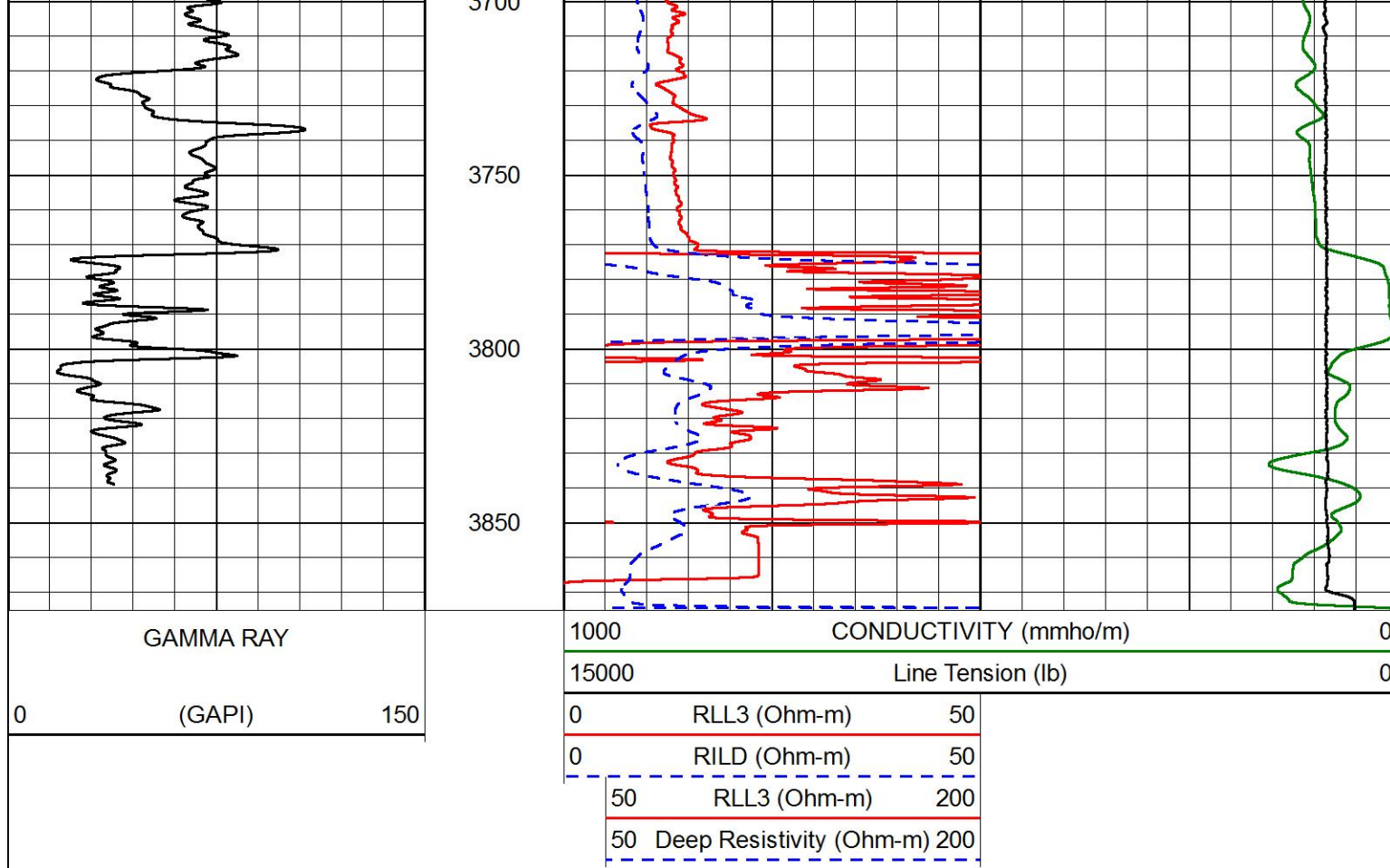






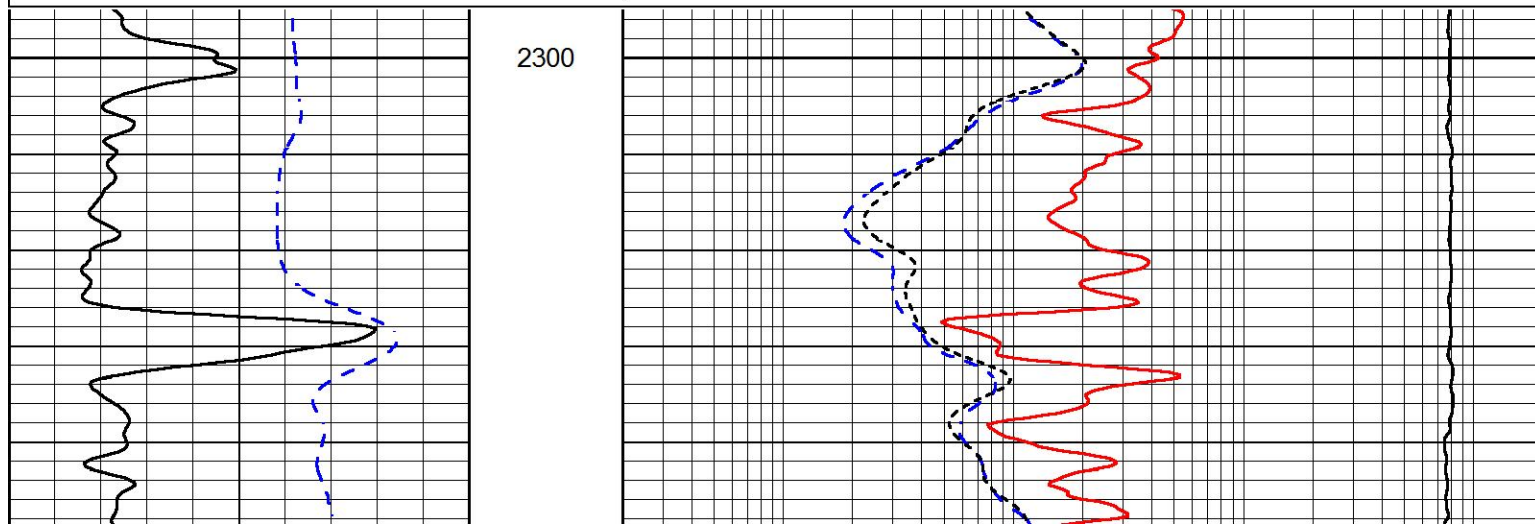
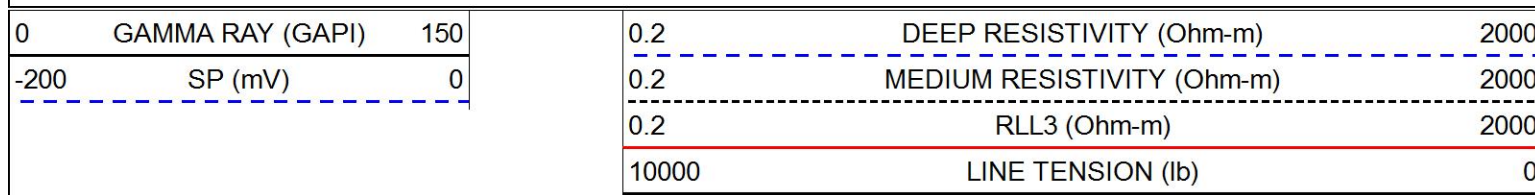
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700

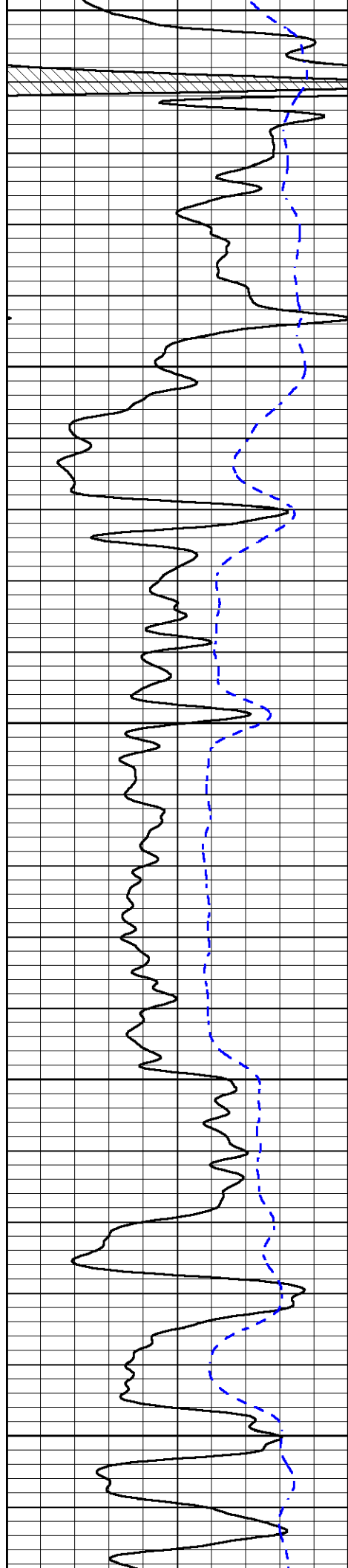




MAIN PASS

Database File: ressler_teten b 15.db
 Dataset Pathname: STKML/pass3.1
 Presentation Format: _dil
 Dataset Creation: Mon Oct 12 08:01:07 2020
 Charted by: Depth in Feet scaled 1:240





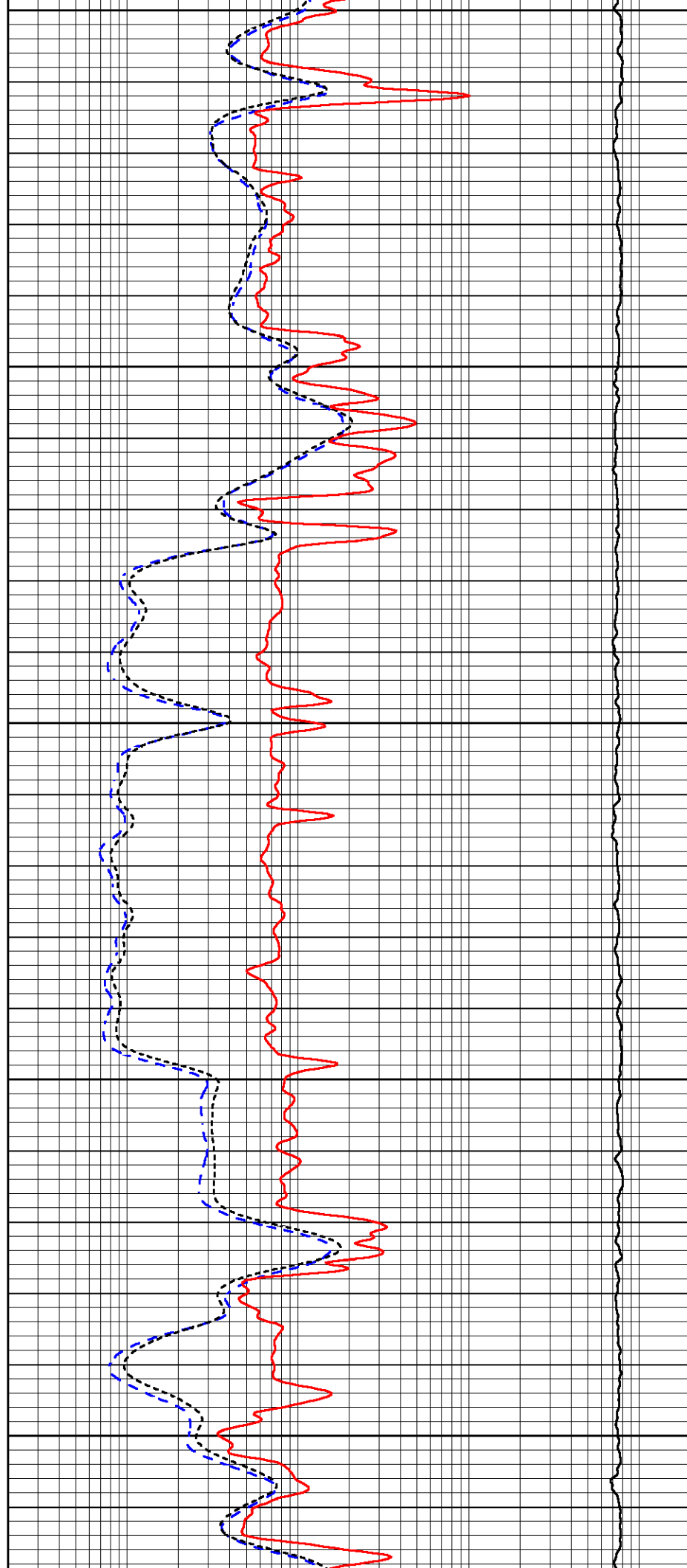
2350

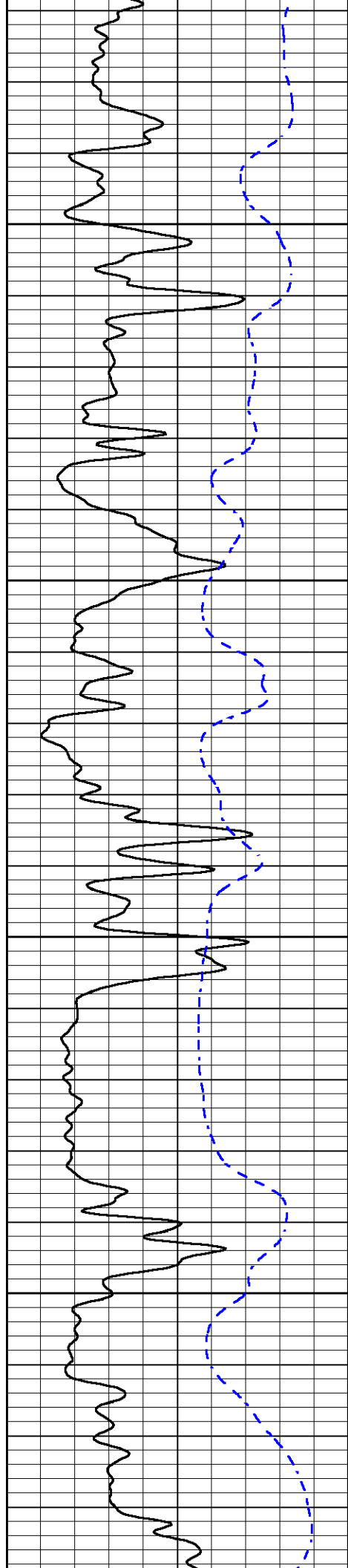
2400

2450

2500

2550



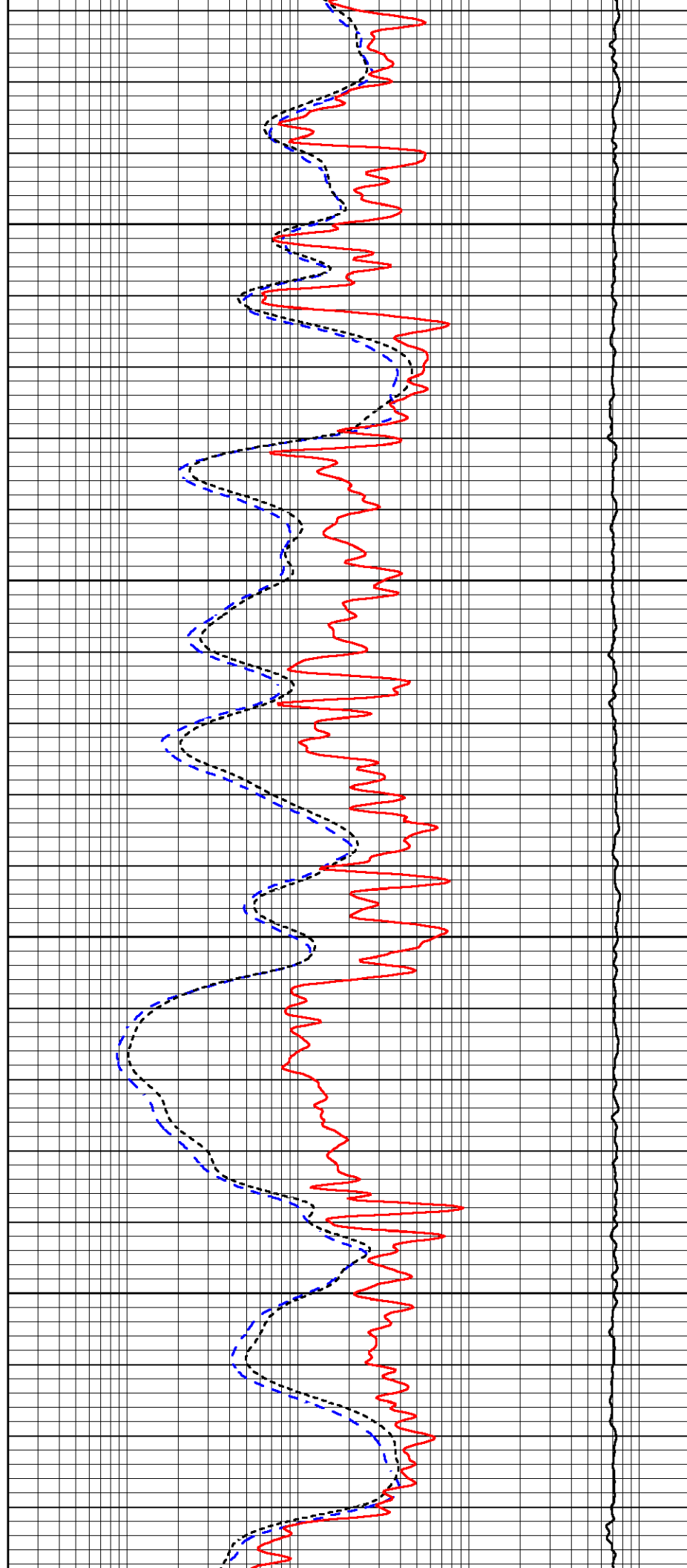


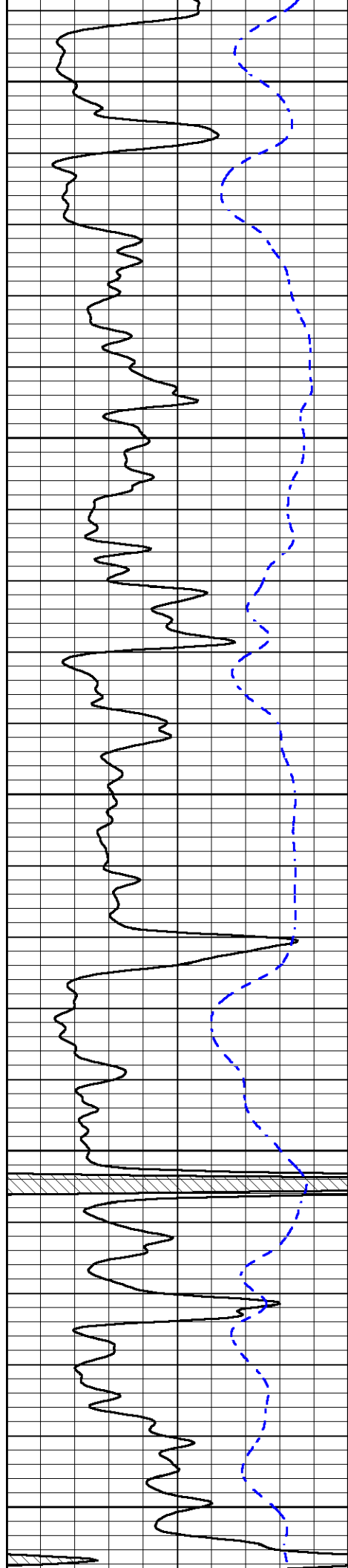
2600

2650

2700

2750





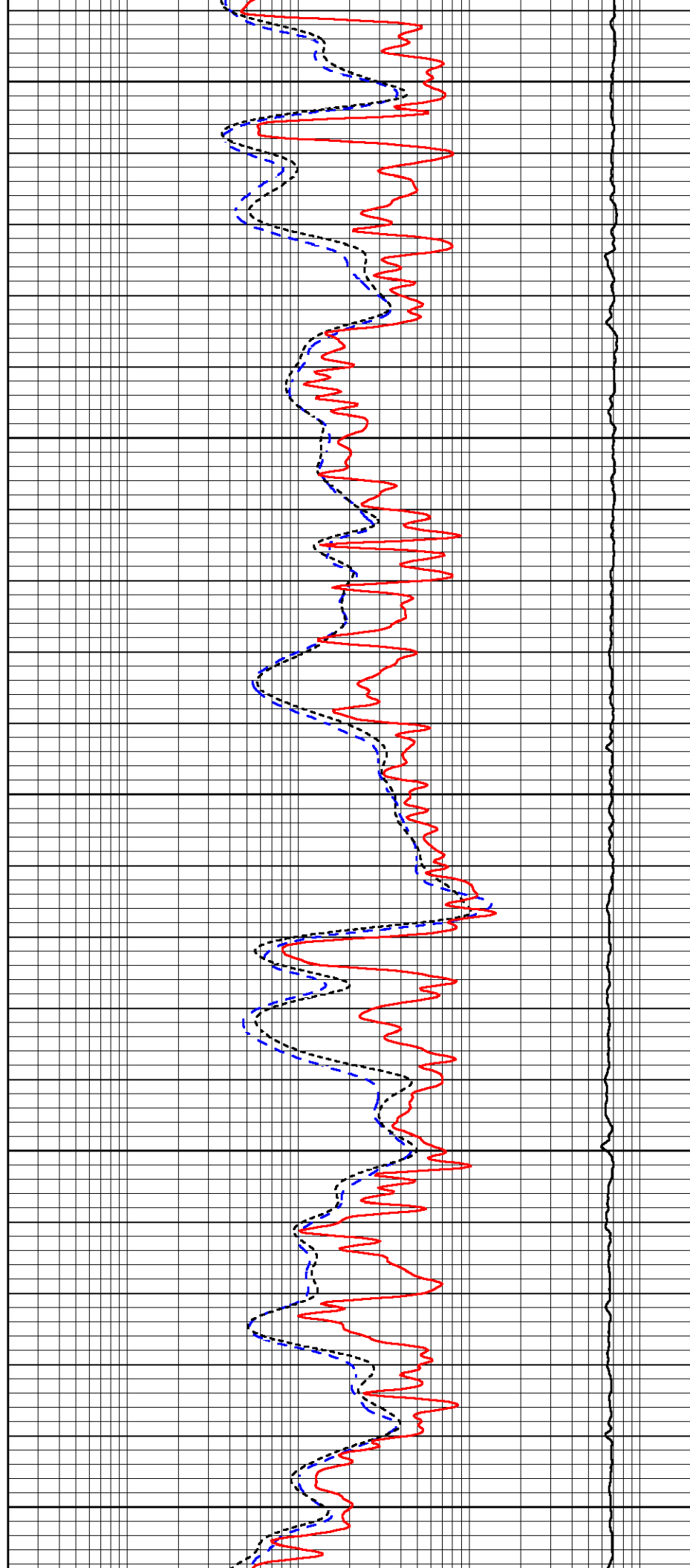
2800

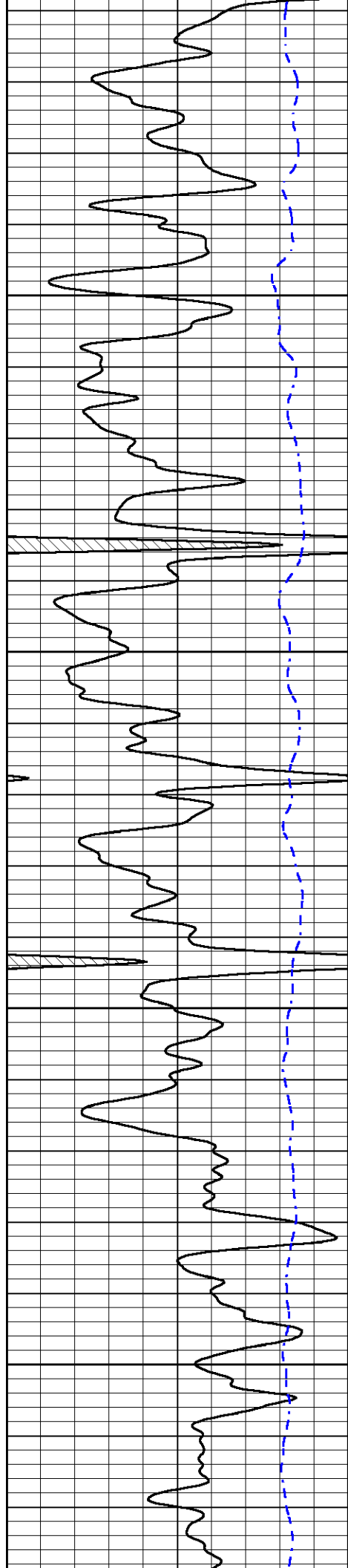
2850

2900

2950

3000



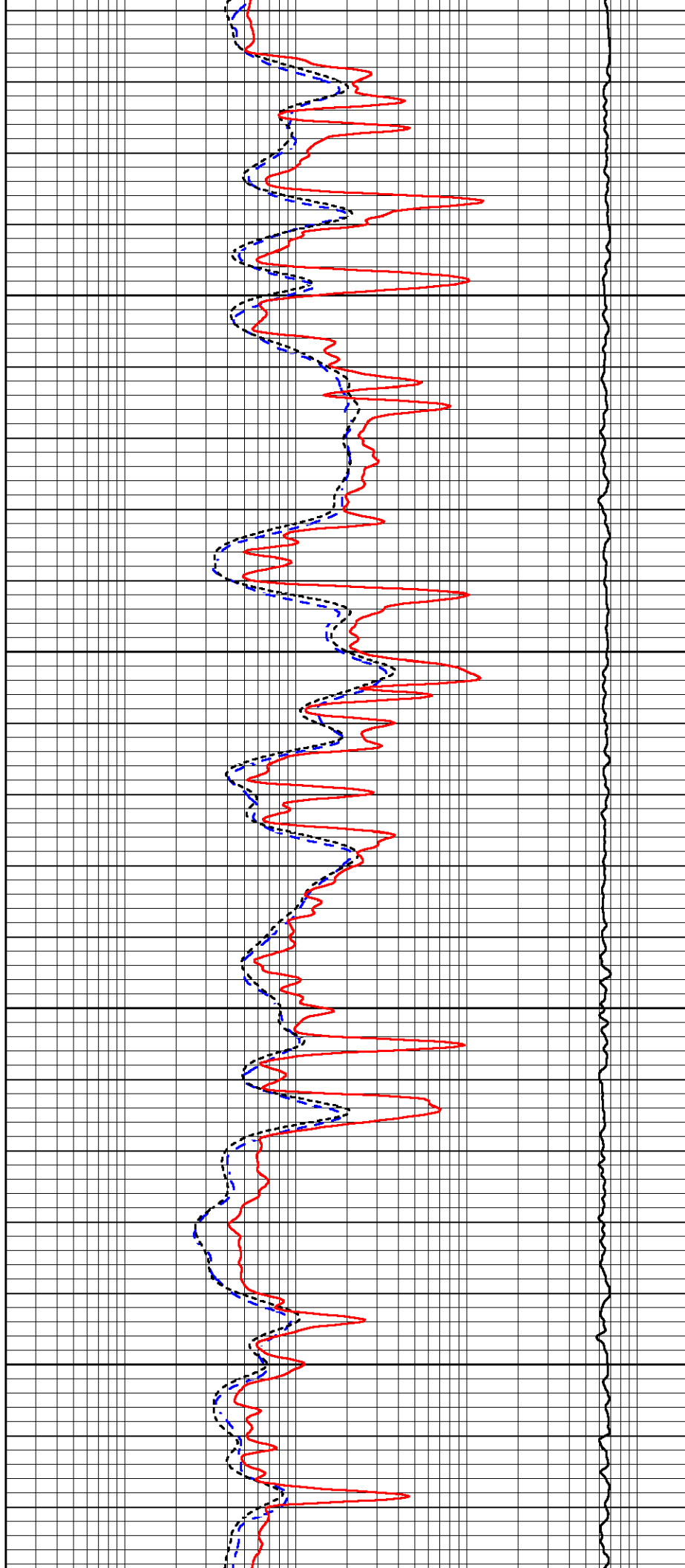


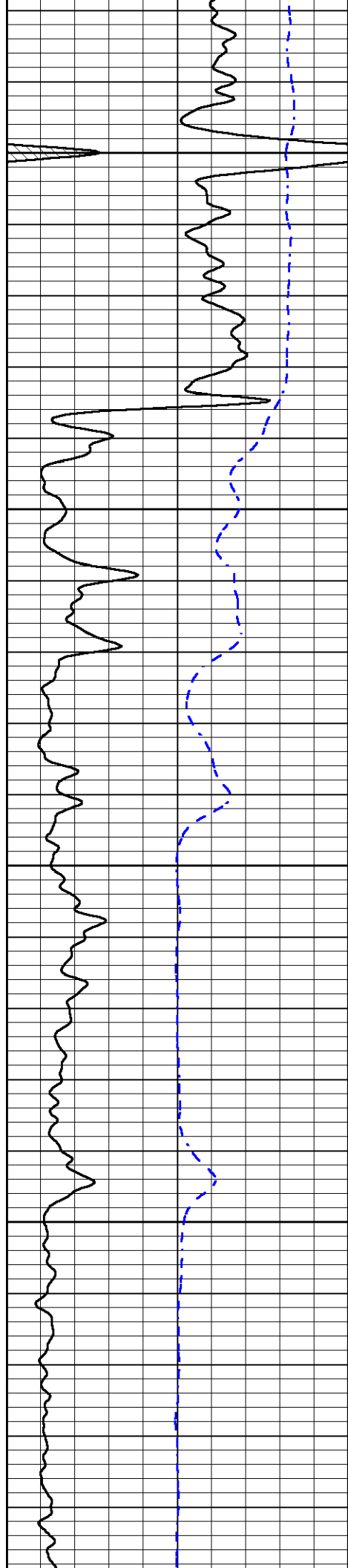
3050

3100

3150

3200



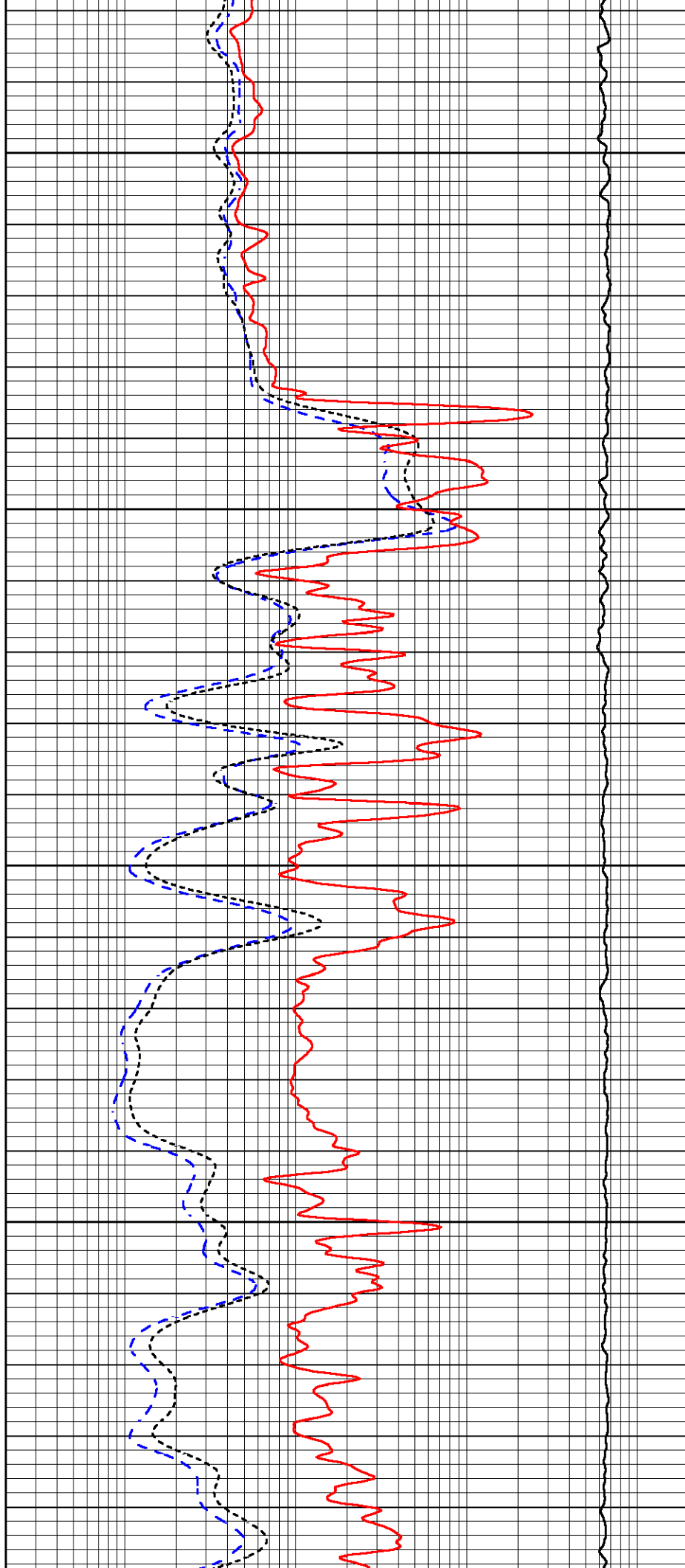


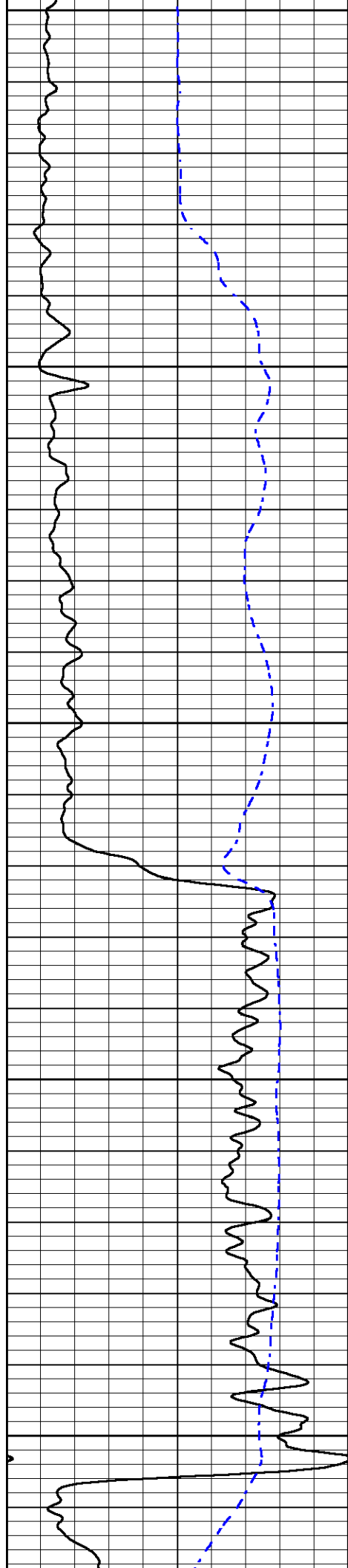
3250

3300

3350

3400





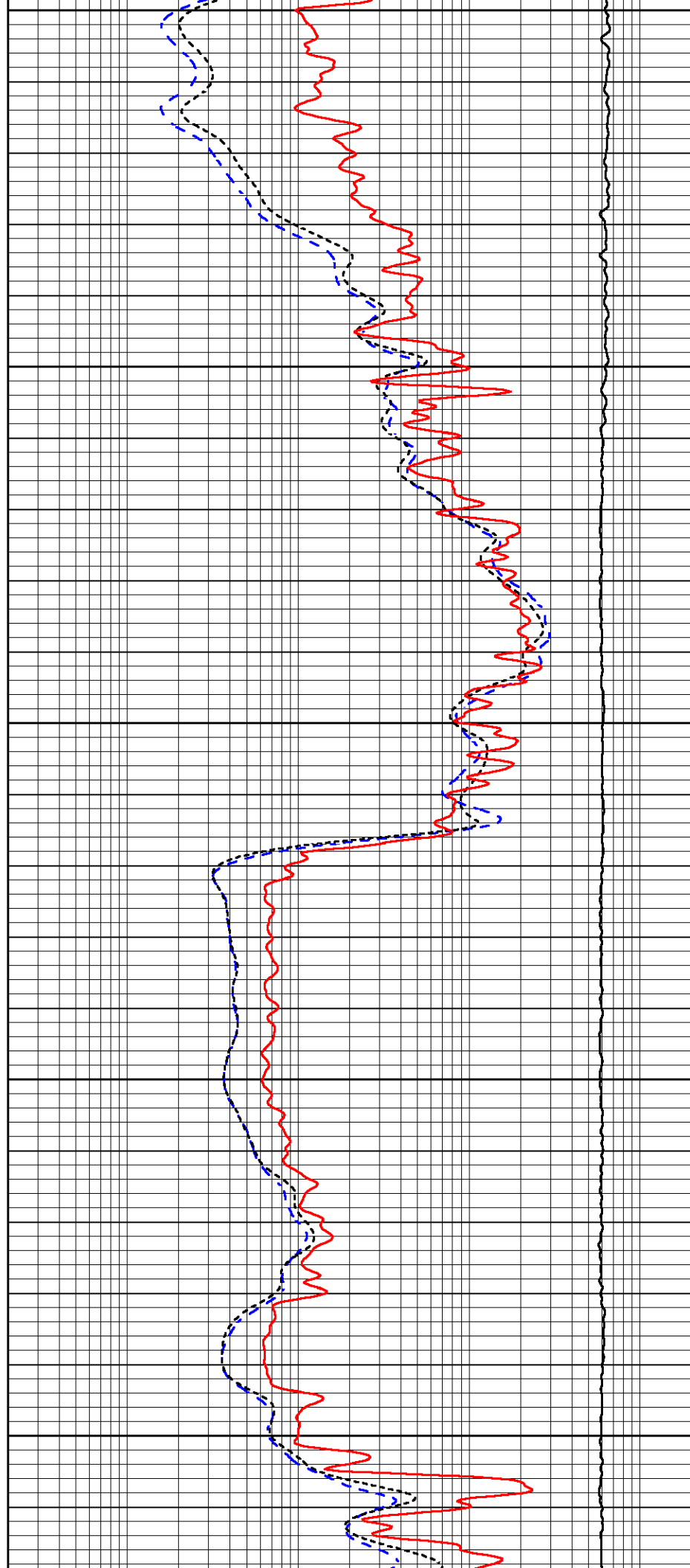
3450

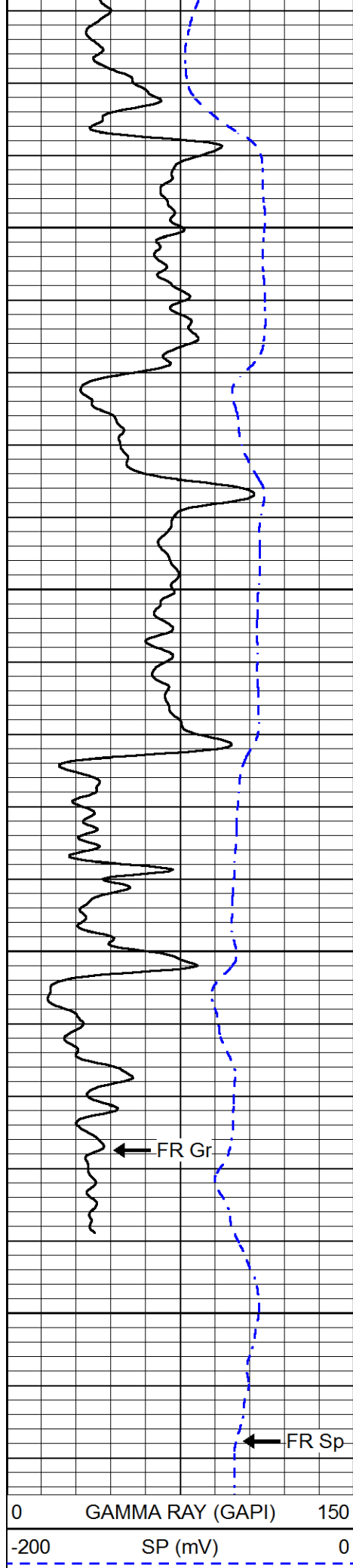
3500

3550

3600

3650



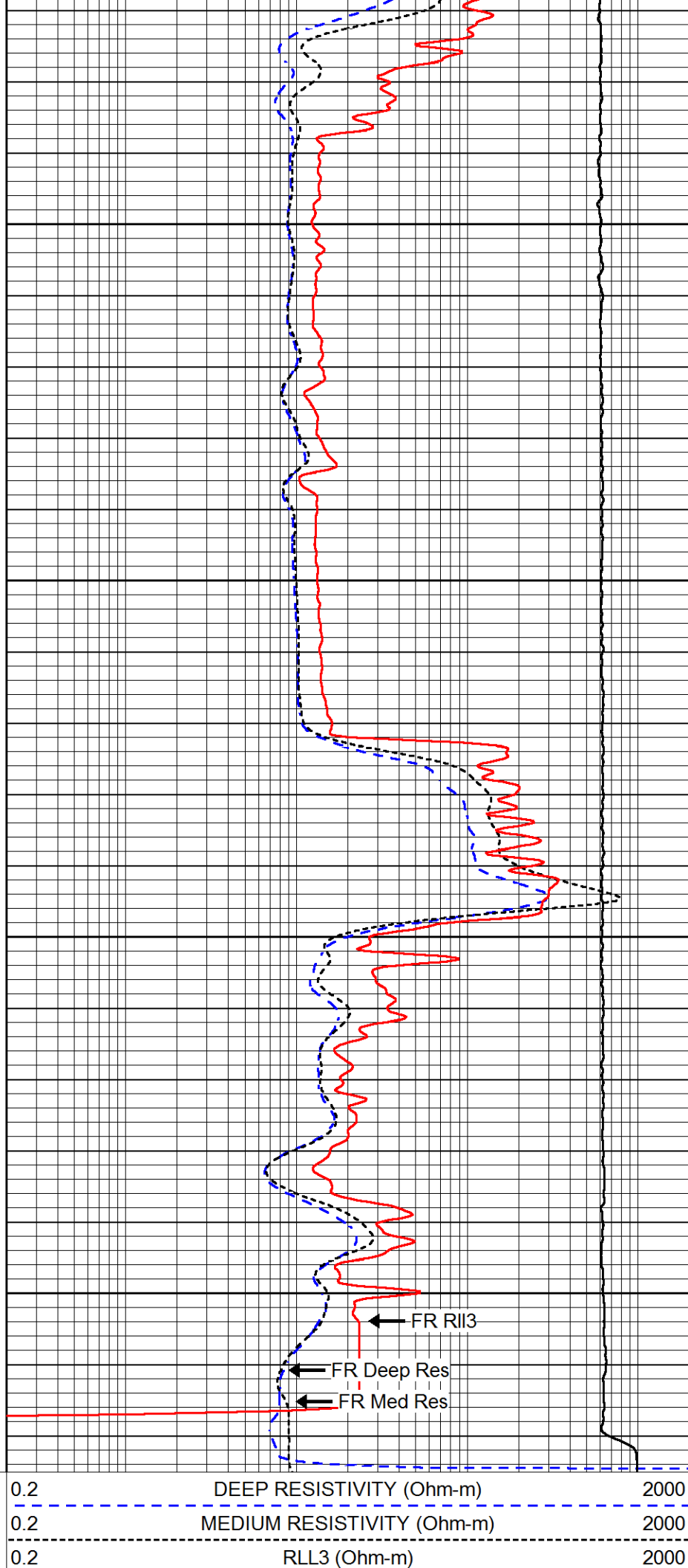


3700

3750

3800

3850



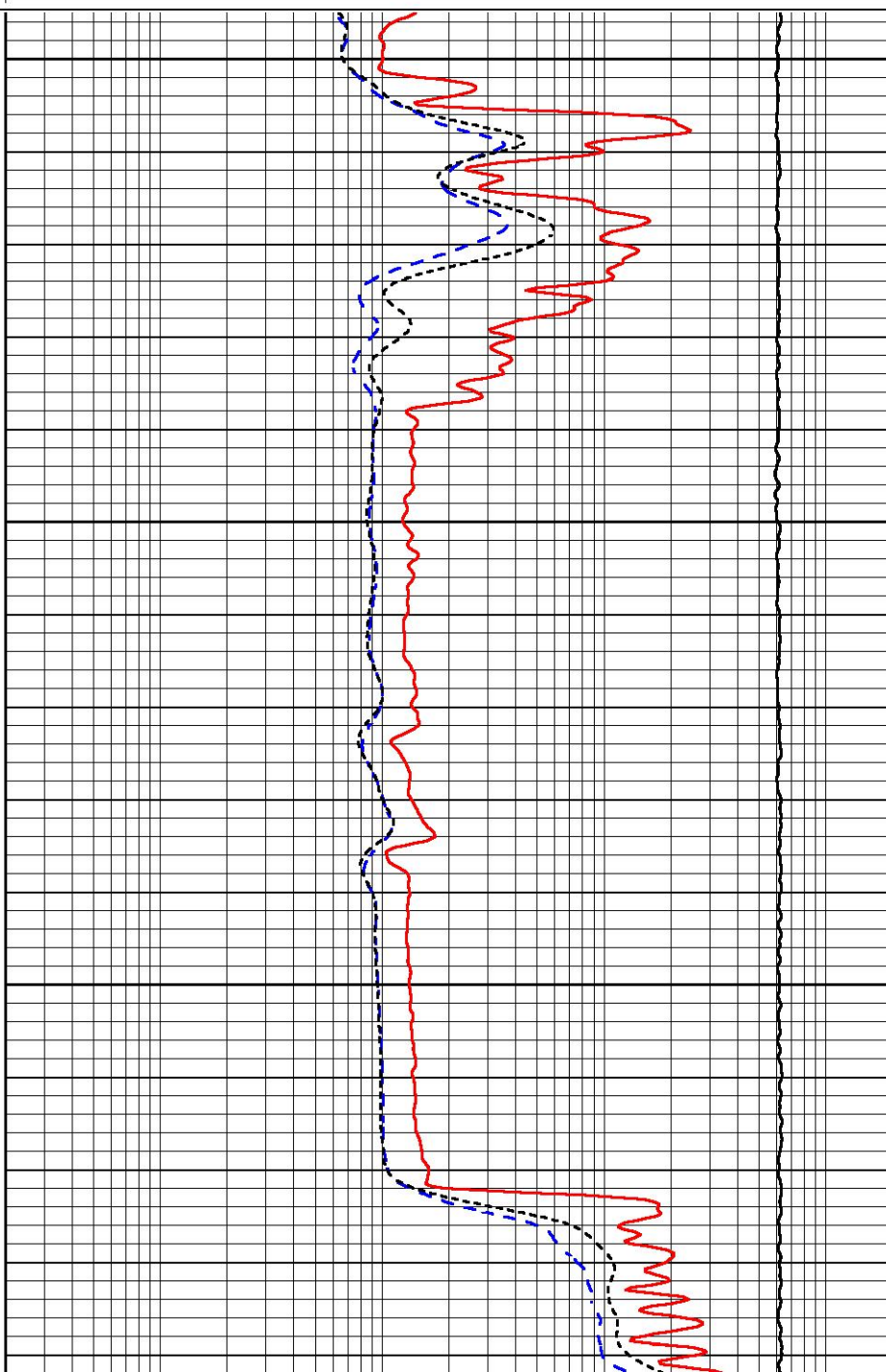
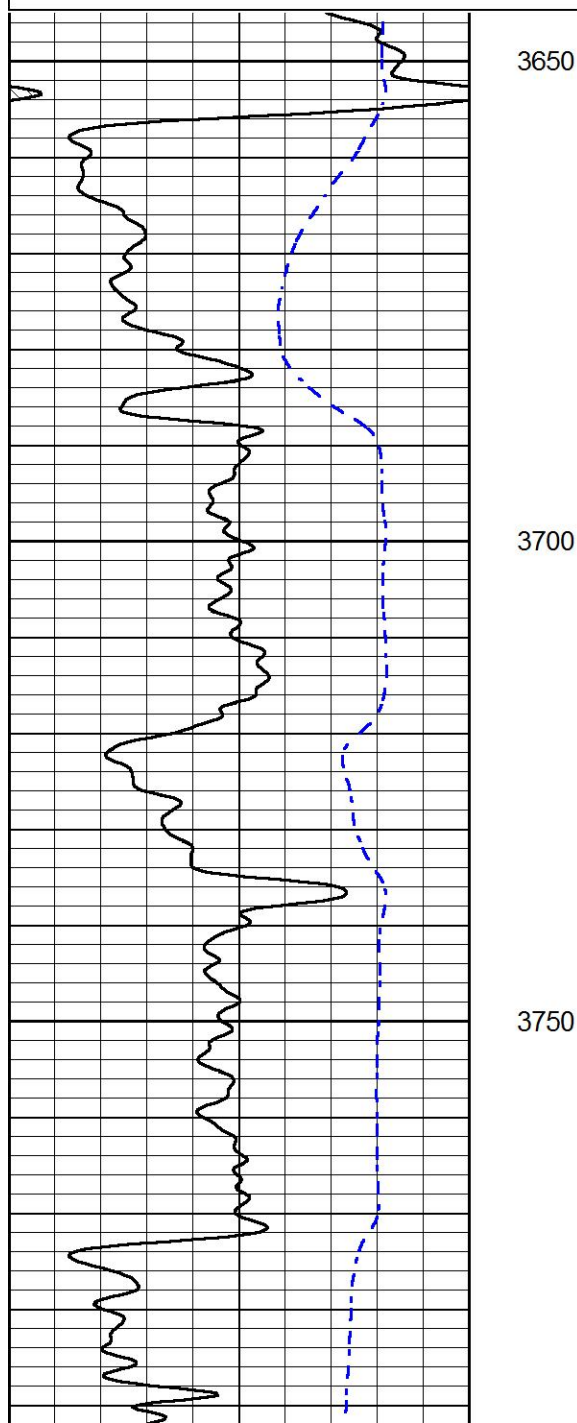


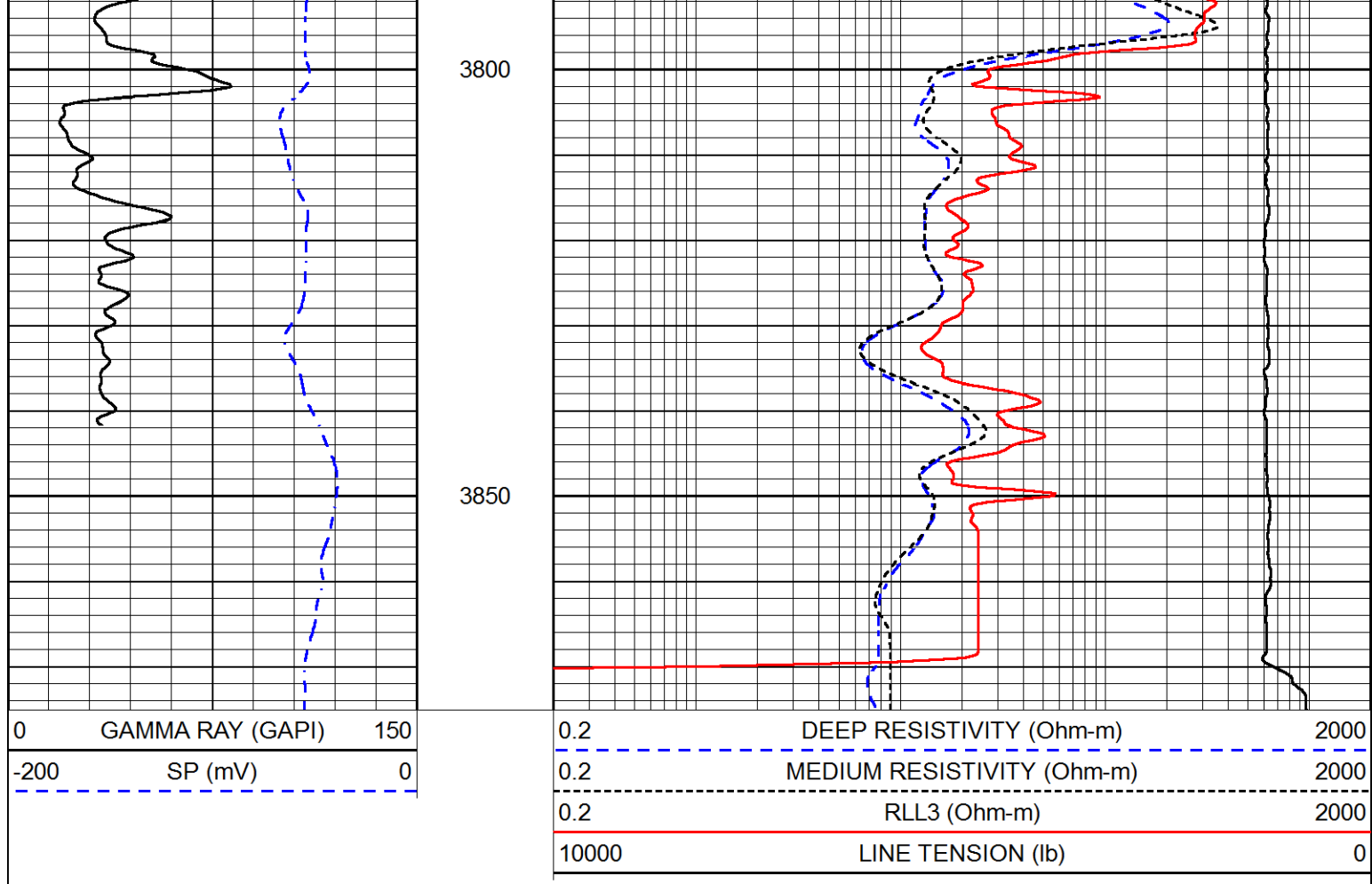
REPEAT SECTION

Database File ressler_teten b 15.db
Dataset Pathname STKML/pass2.1
Presentation Format _dil
Dataset Creation Mon Oct 12 08:00:27 2020
Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-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





Calibration Report

Database File ressler_teten b 15.db
 Dataset Pathname STKML/pass3.1
 Dataset Creation Mon Oct 12 08:01:07 2020

Dual Induction Calibration Report

Serial-Model: 952-828-PSI HIGH TEMP
 Calibration Performed: Sun Jun 28 08:39:24 2020

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.000	mmho/m	0.455	-30.000
Medium	0.000	1348.000	142.000	255.000	mmho/m	0.310	-28.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
 Performed: Tue Sep 29 10:01:17 2020

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	15000.0000	-1.4000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	17000.0000	-1.3000
Caliper	1.0033	1.0841	5.0000	16.5000	in	150.3500	-146.7000

Compensated Density Calibration Report

Serial-Model:	817-947-M&W
Source / Verifier:	16955B / 2ci
Master Calibration Performed:	Sun Sep 20 22:09:47 2020

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	6127.15	5922.31	cps
Aluminum	2.675	g/cc	1141.85	3762.09	cps
Spine Angle = 74.89			Density/Spine Ratio = 0.529		
	Size		Reading		
Small Ring	4.50	in	1.02		
Large Ring	14.50	in	1.23		

Compensated Neutron Calibration Report

Serial Number:	207-MW
Tool Model:	M&W
Calibration Performed:	WED FEB 13 10:30:30 2019

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:	233-M&W	
Tool Model:	M&W	
Calibration Performed:	Sun Sep 20 22:10:24 2020	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5500	GAPI/cps