



MIDWEST WIRELINE

DUAL INDUCTION LOG

Company **Carmen Schmitt, Inc.**
 Well **Four Boys #2-28**
 Field **PIANALTO**
 County **Cheyenne** State **Kansas**

Company **Carmen Schmitt, Inc.**
 Well **Four Boys #2-28**
 Field **PIANALTO**
 County **Cheyenne**
 State **Kansas**

Location: **1005 FSL & 2047 FWL**
 SEC 28 TWP 4S RGE 37W
 Permanent Datum **Ground Level** Elevation **3407**
 Log Measured From **Kelly Bushing**
 Drilling Measured From **Kelly Bushing**
 Other Services **CNL/CDL MEL**
 Elevation **3412**
 D.F. **3407**
 G.L.

Date	4/28/2022
Run Number	One
Depth Driller	5040
Depth Logger	5038
Bottom Logged Interval	5037
Top Log Interval	350
Casing Driller	8,625 @ 390
Casing Logger	390
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	2,000
Density / Viscosity	9.4 55
pH / Fluid Loss	10.5 7.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.8 @ 65
Rmt @ Meas. Temp	.6 @ 65
Rmc @ Meas. Temp	1.08 @ 65
Source of Rmf / Rmc	CHARTS
Rm @ BHT	.41 @ 126
Operating Rig Time	3 Hours
Max Rec. Temp. F	126
Equipment Number	P-24
Location	Hays
Recorded By	D Schmidt
Witnessed By	Brad Rine

<<< 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.

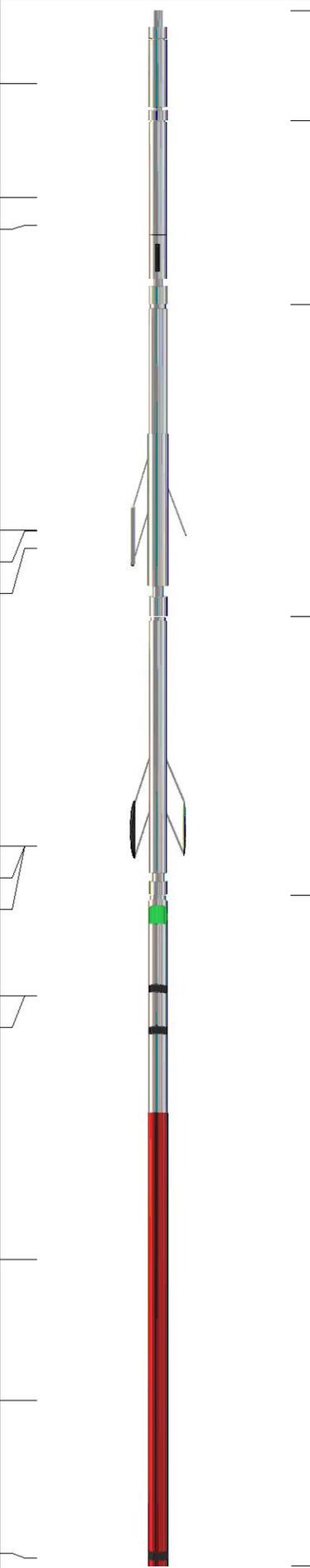
Bird City,
 East to 31 Rd, South to H Rd, 1/2 East,
 North into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew		This Log Record Was Witnessed By	
Engineer: D Schmidt	Operator:	Primary Witness: Brad Rine	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Operator	Offset (ft)	Depth	Description	Length (ft)	O.D. (in)	Weight (lb)
----------	-------------	-------	-------------	-------------	-----------	-------------

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (101)	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 (305-05)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSIML (402)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50					
CILD	8.33		DIL-M&W (501 HT)	18.25	3.50	220.00
CILM	4.50					
SP	0.20					

Dataset: carmen schmitt_four boys 2028.db: field/well/stkml/pass3.14
 Total length: 42.33 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\carmen schmitt_four boys 2028.db
 Dataset field/well/stkml/pass3.14/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	126	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	112	60	Off	5038

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

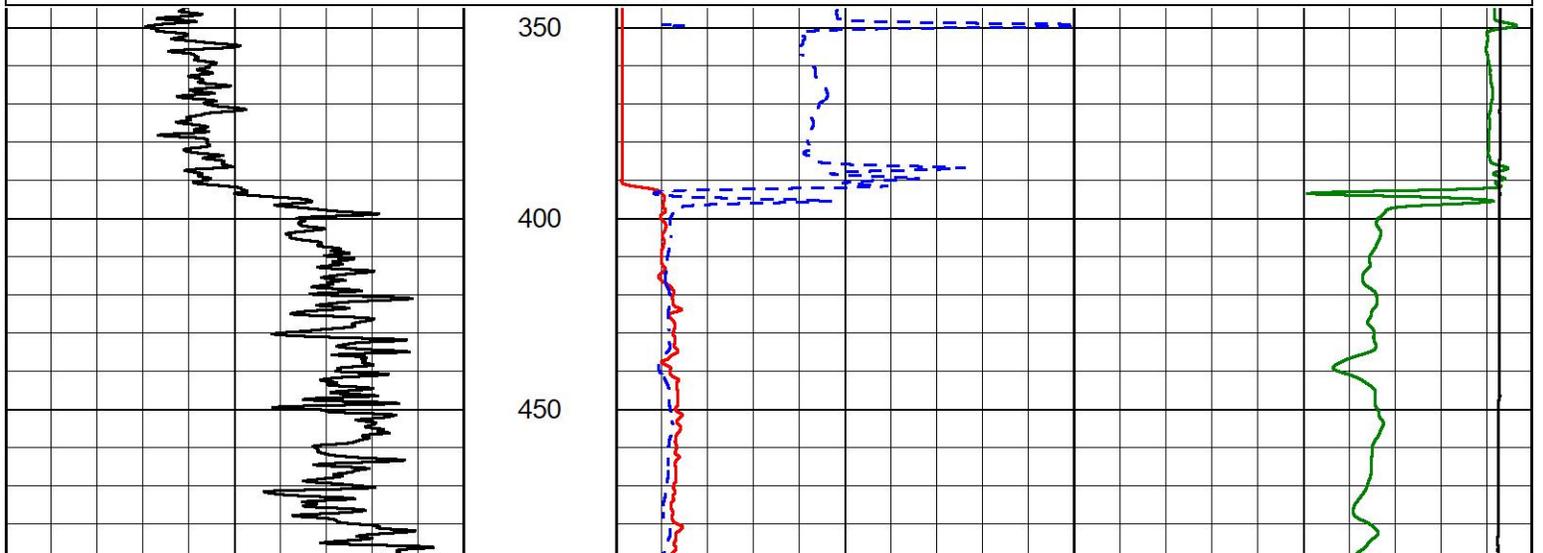


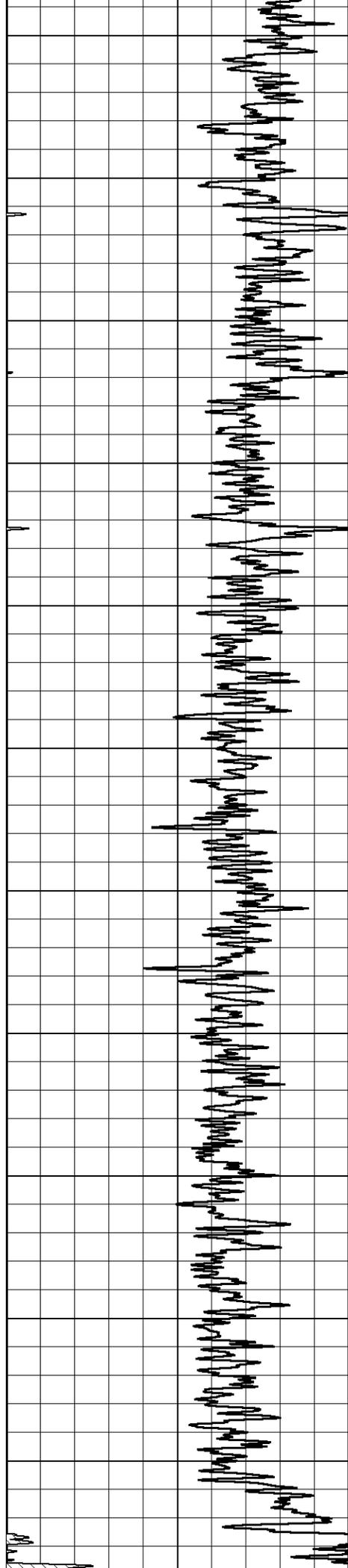
2" SCALE RESISTIVITY

MAIN PASS

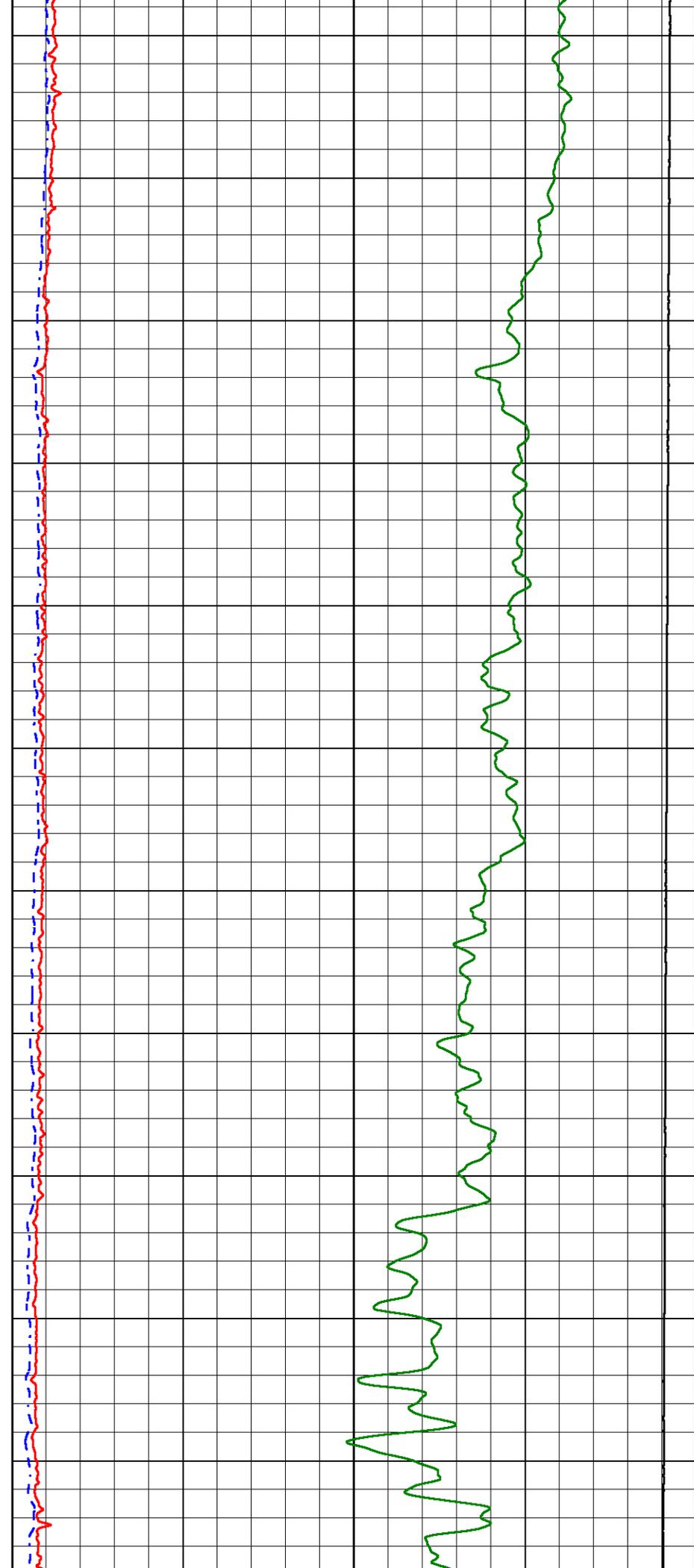
Database File carmen schmitt_four boys 2028.db
 Dataset Pathname stkml/pass3.3
 Presentation Format _dil2in
 Dataset Creation Thu Apr 28 11:47:01 2022
 Charted by Depth in Feet scaled 1:600

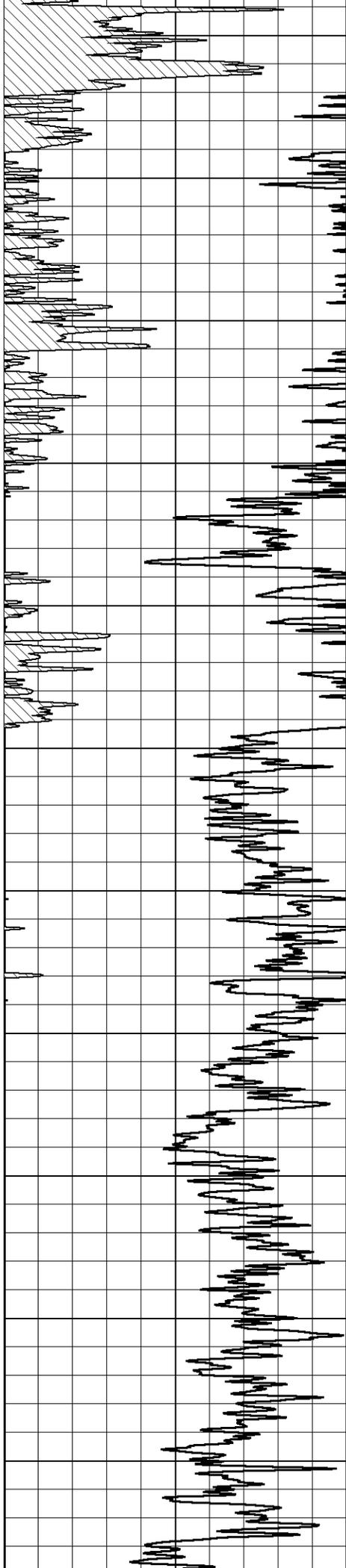
0	Gamma Ray (GAPI)	150	1000	Conductivity (mmho/m)	0
			15000	Line Tension (lb)	0
0	Shallow Resistivity (Ohm-m)	50			
0	Deep Resistivity (Ohm-m)	50			
	Shallow Resistivity				
50	(Ohm-m)	200			
50	Deep Resistivity (Ohm-m)	200			





500
550
600
650
700
750
800
850
900
950
1000





1050

1100

1150

1200

1250

1300

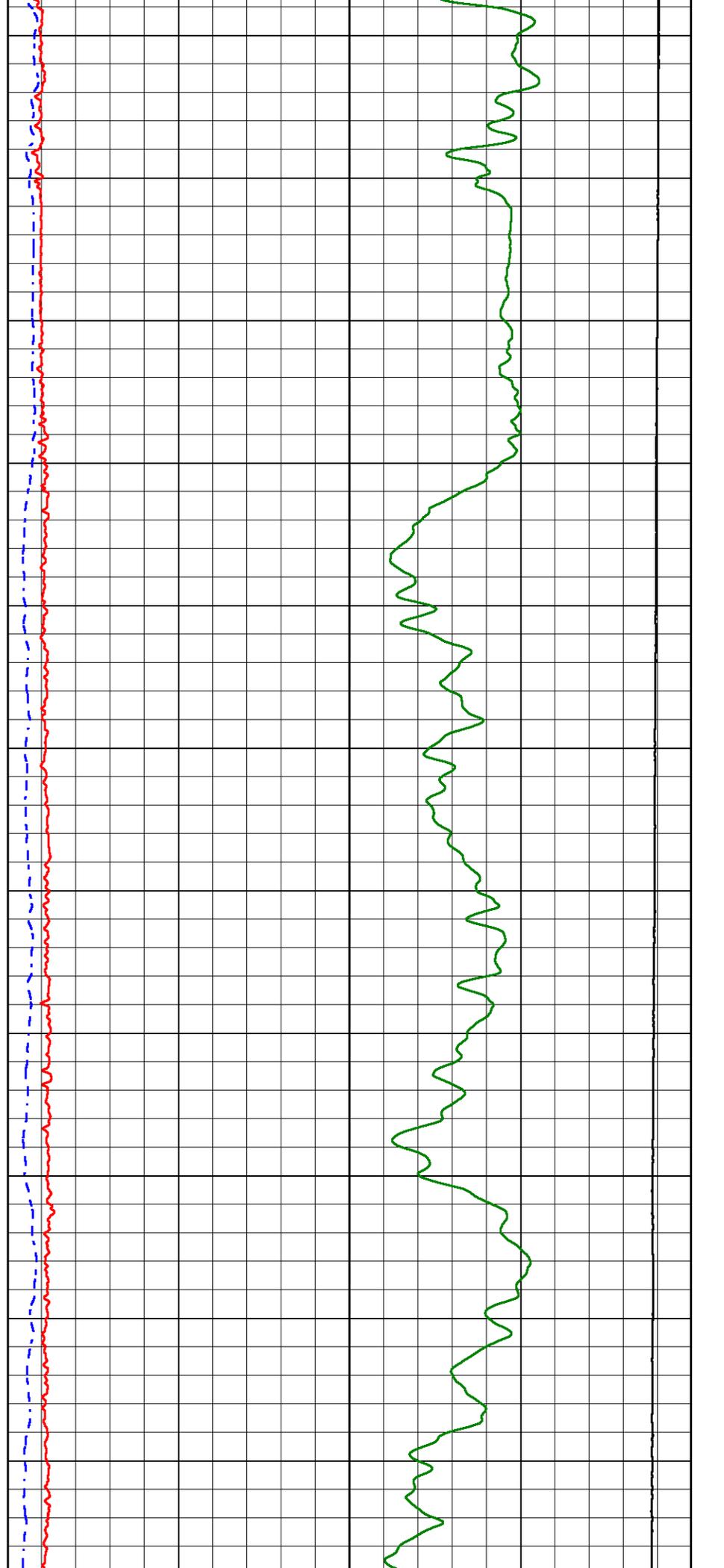
1350

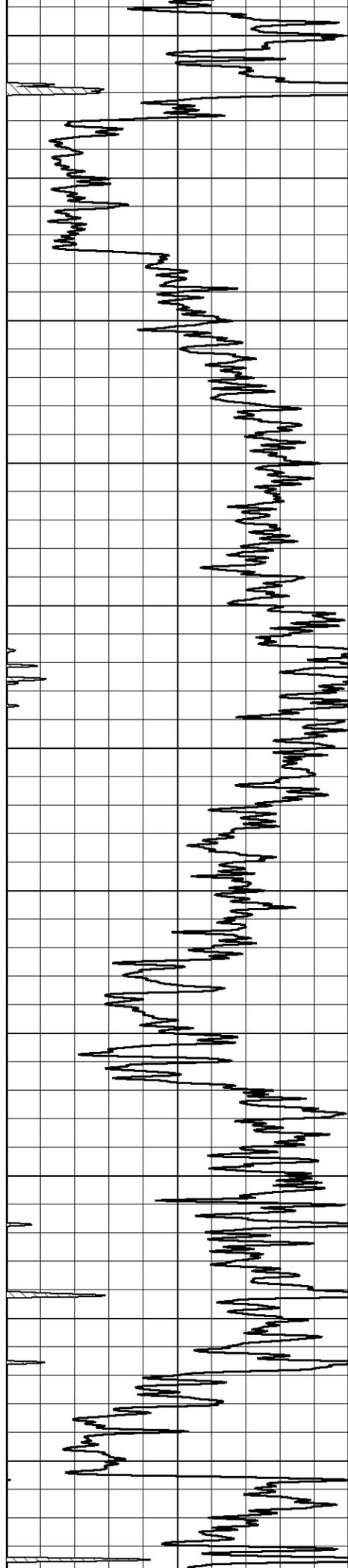
1400

1450

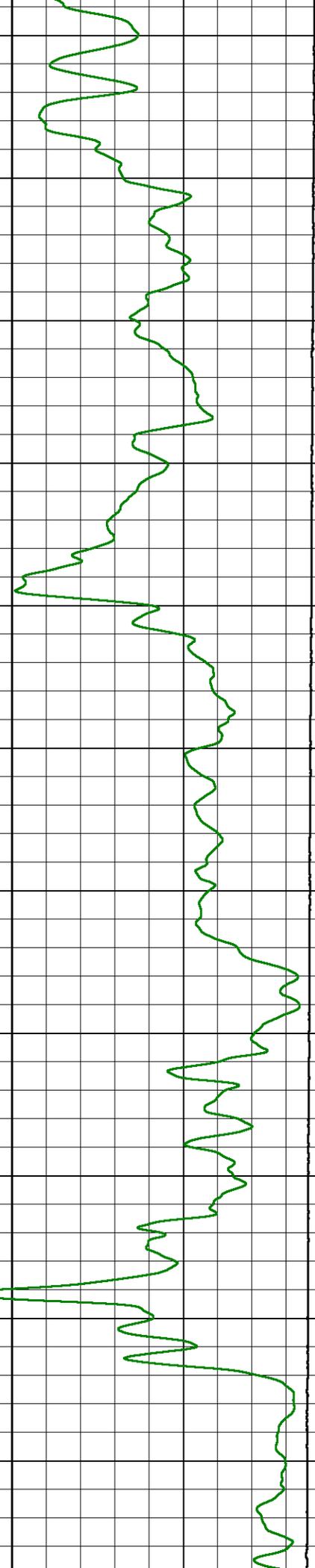
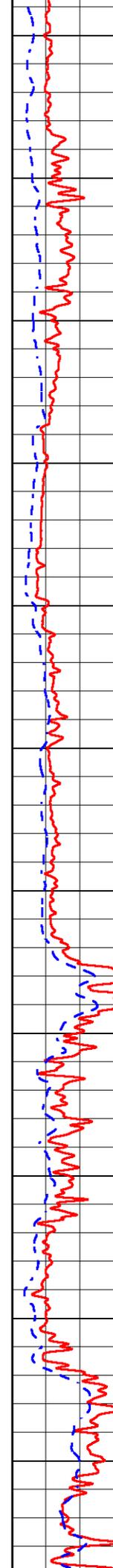
1500

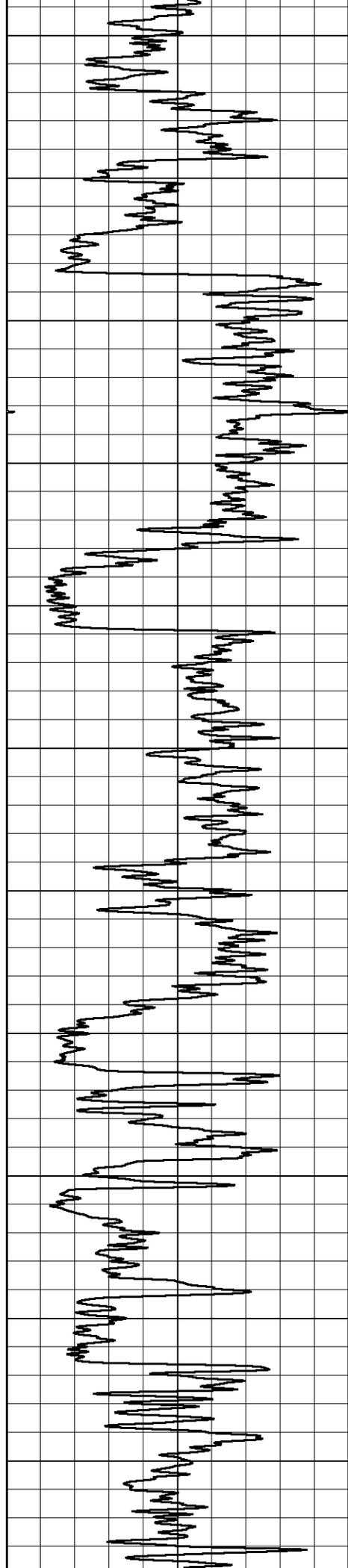
1550



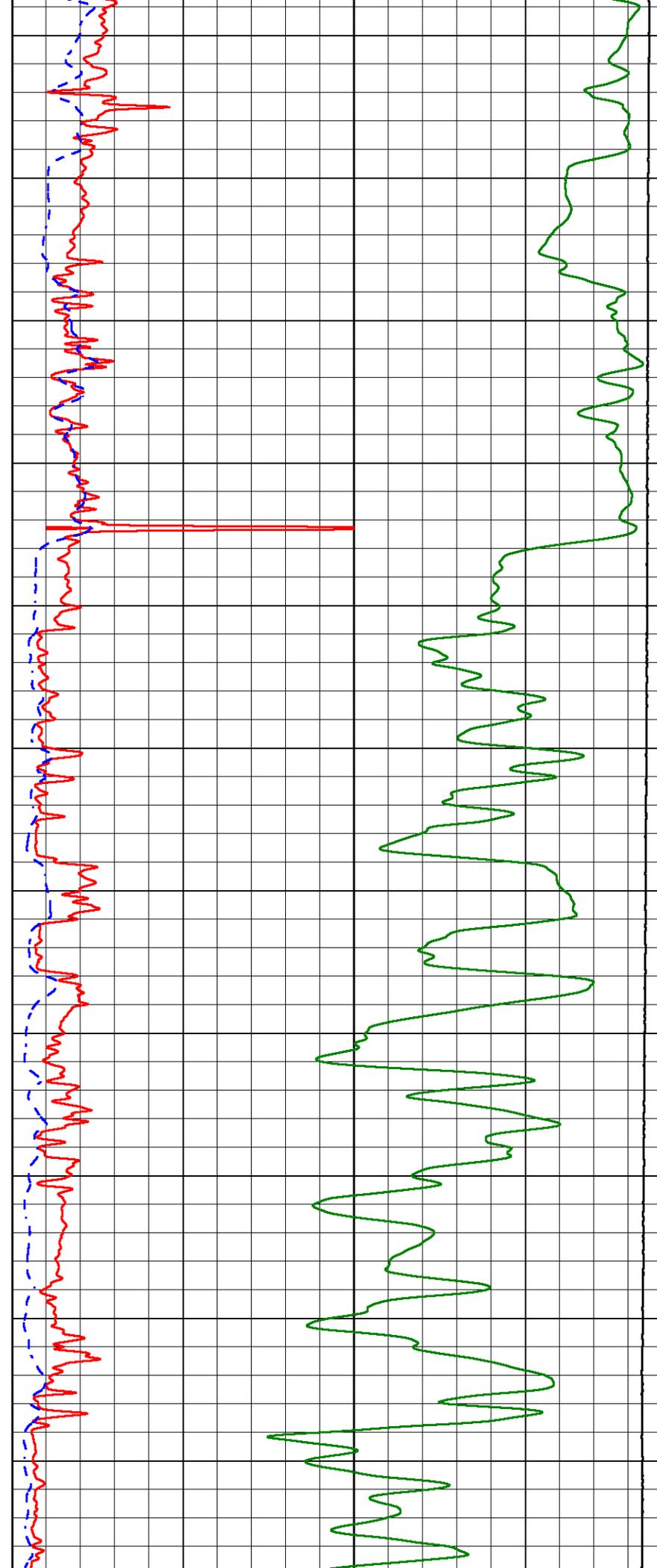


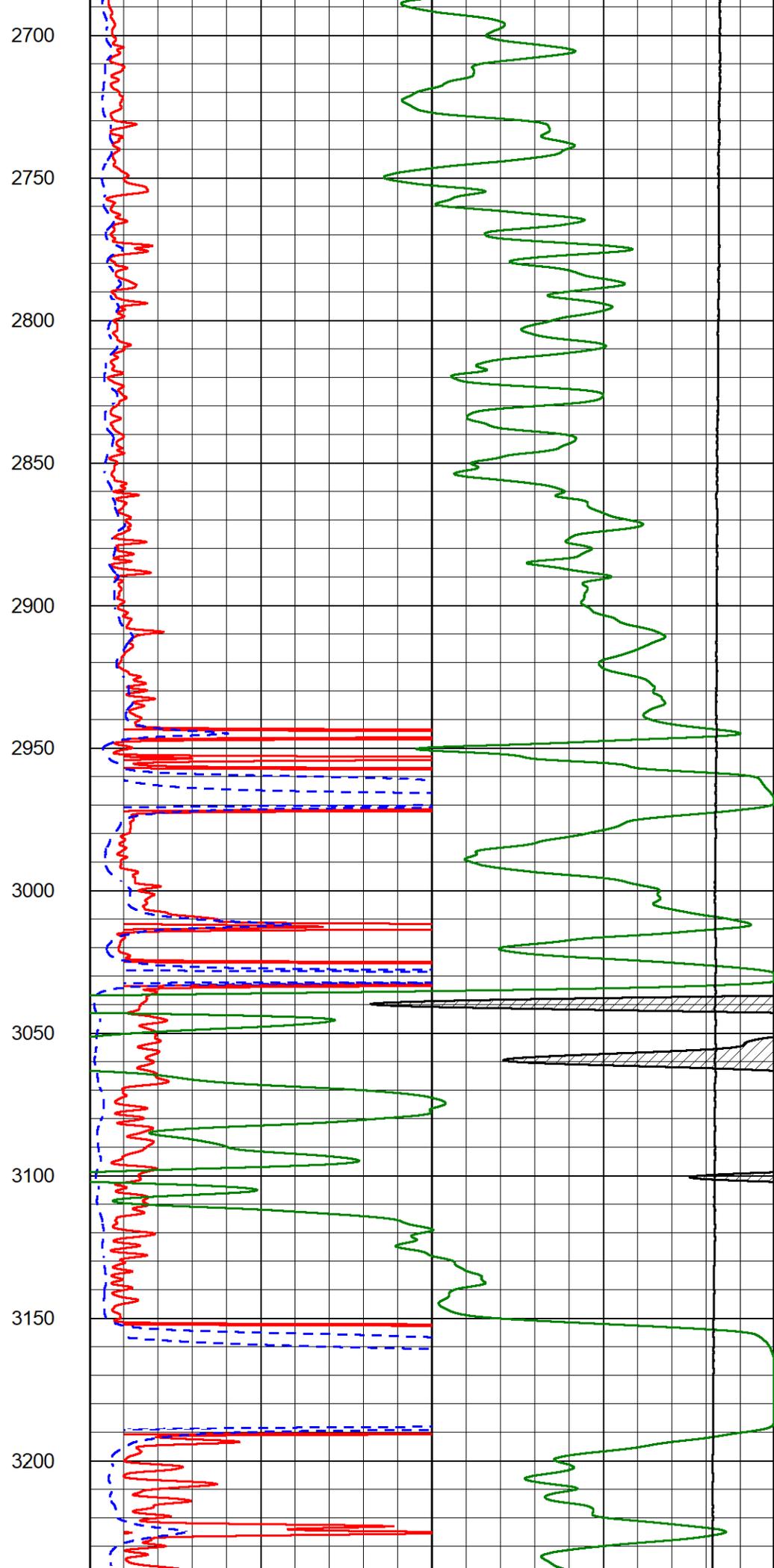
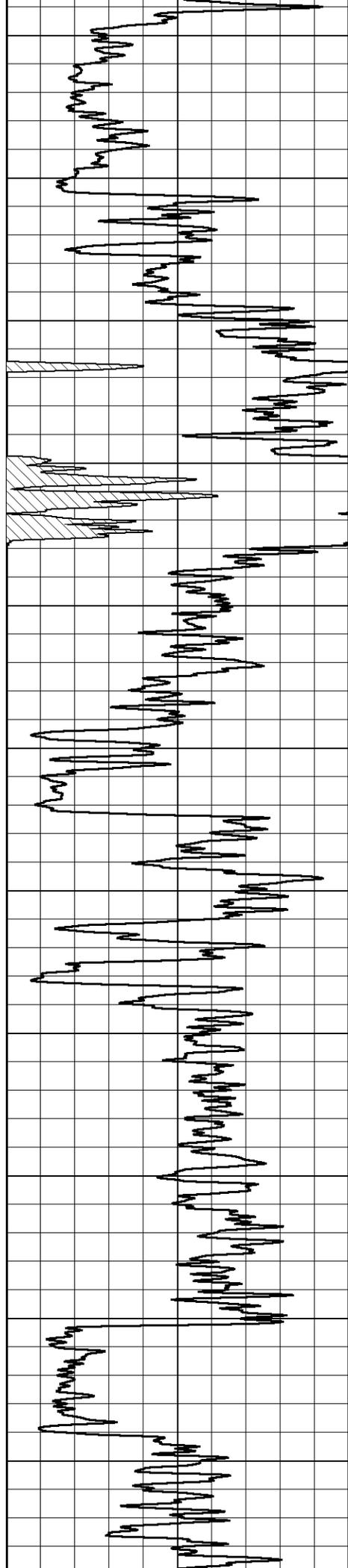
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100

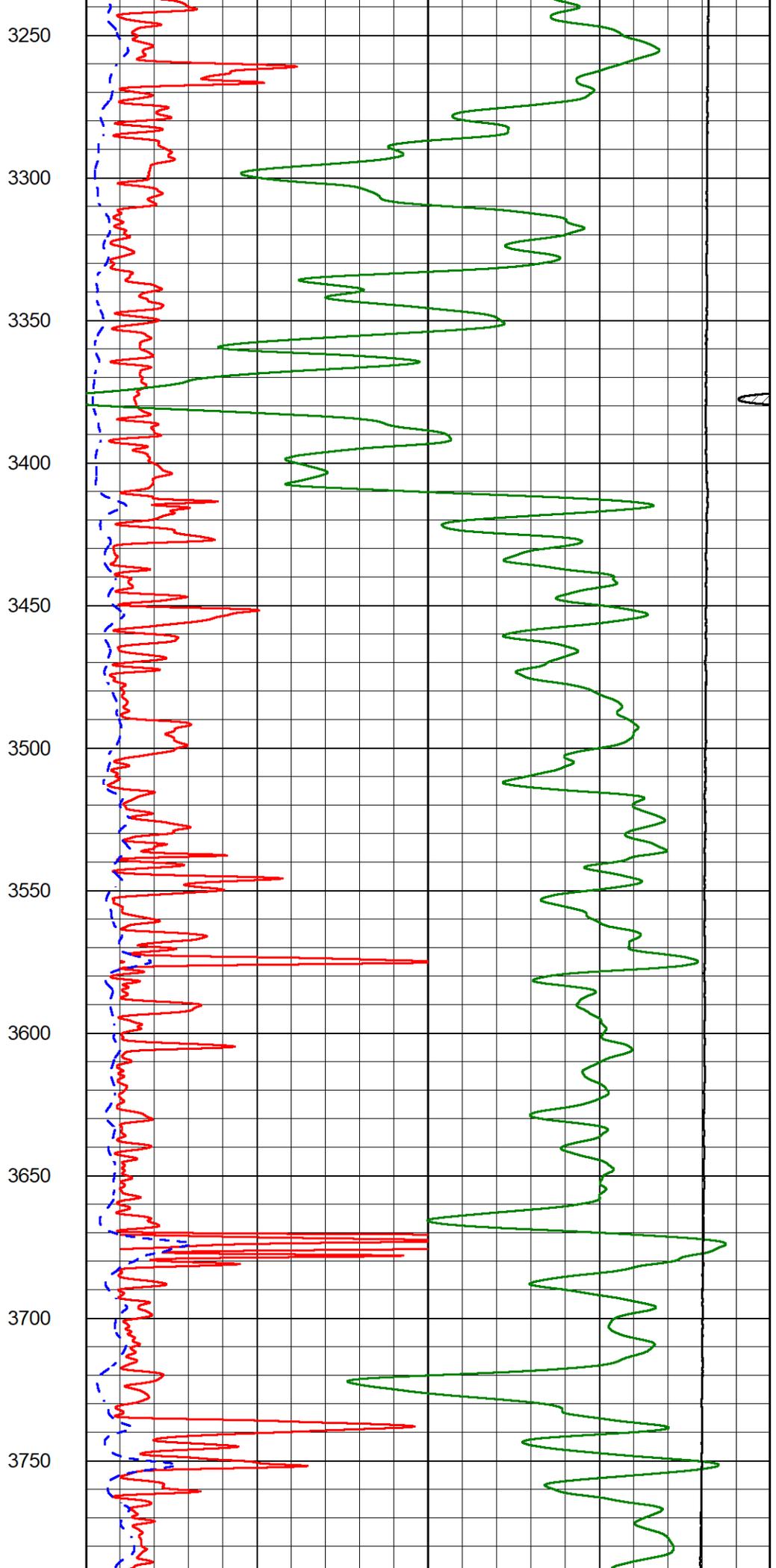
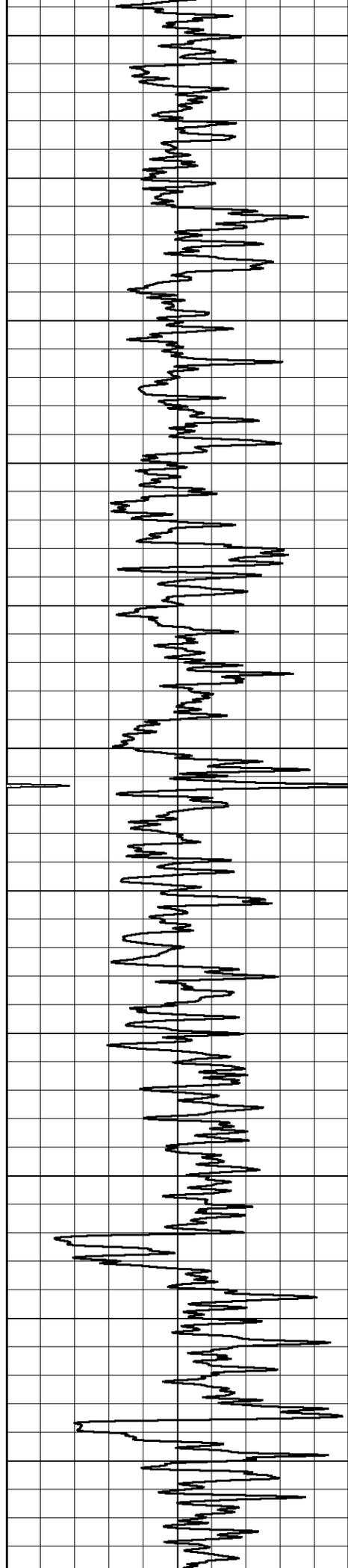


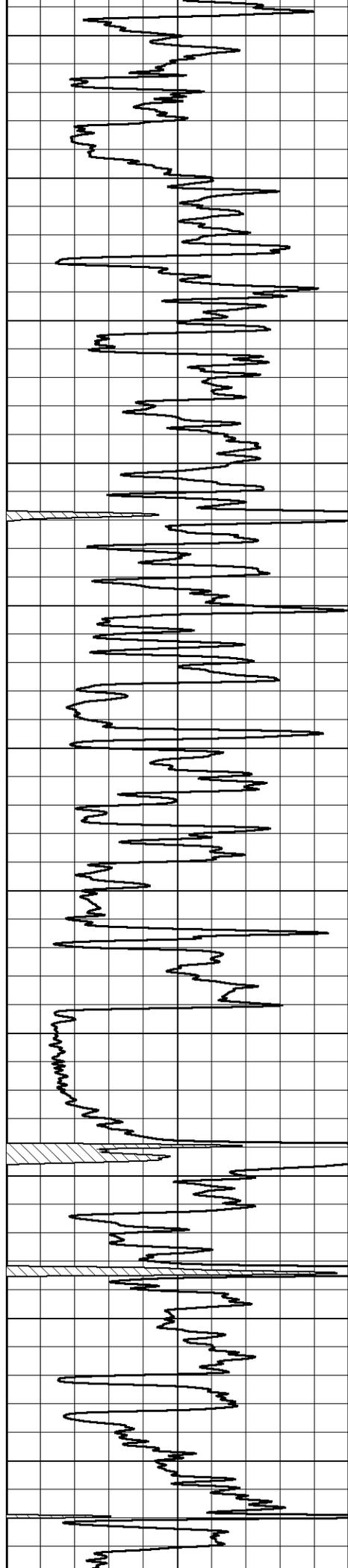


2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650









3800

3850

3900

3950

4000

4050

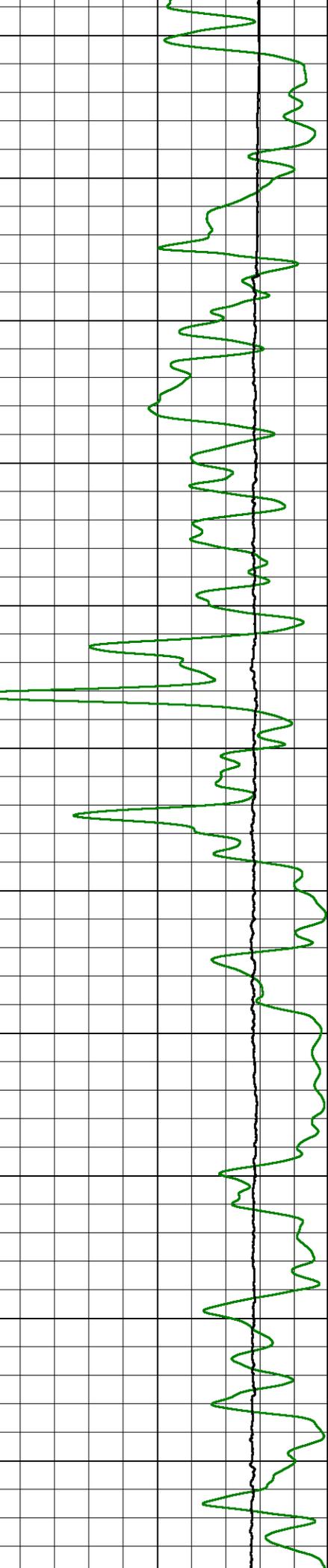
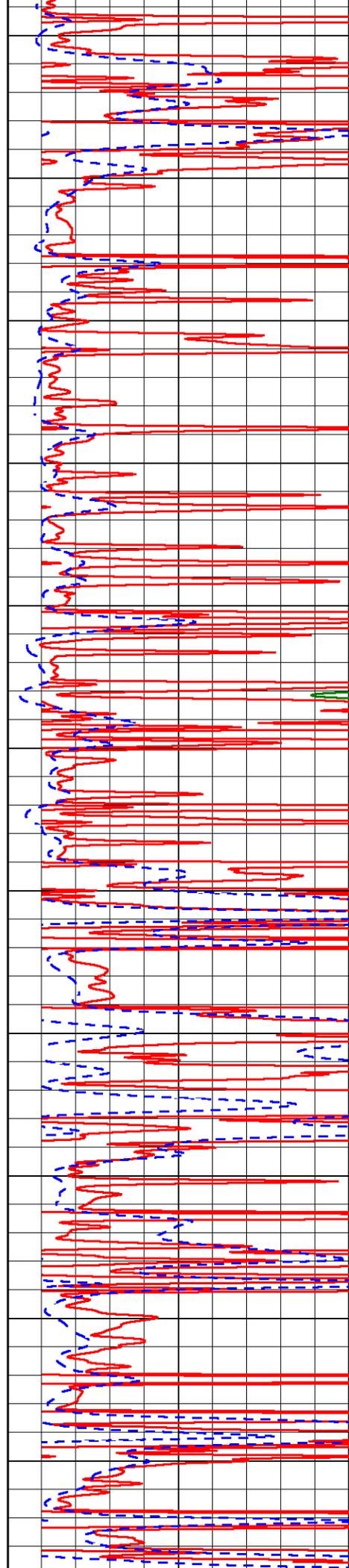
4100

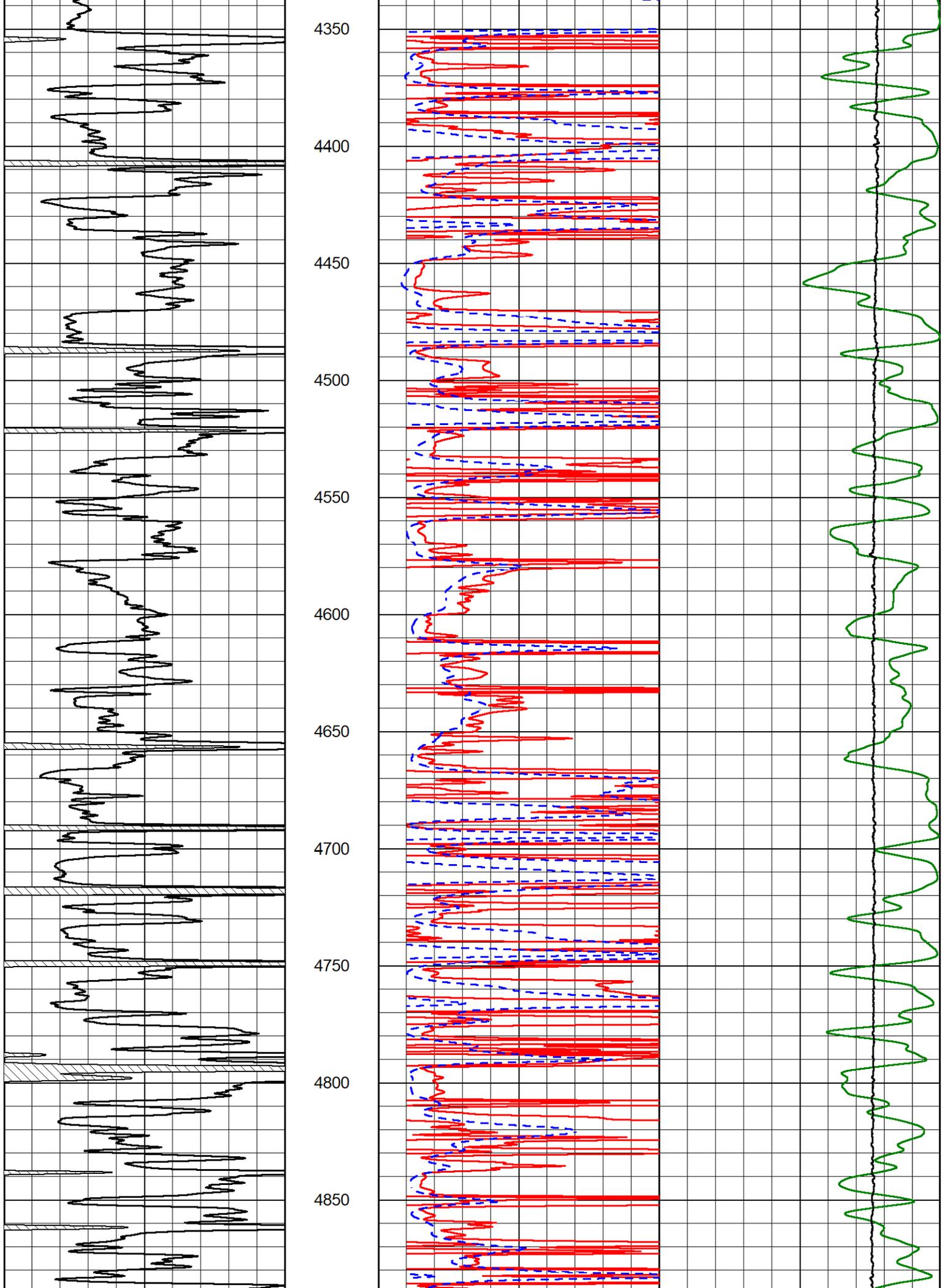
4150

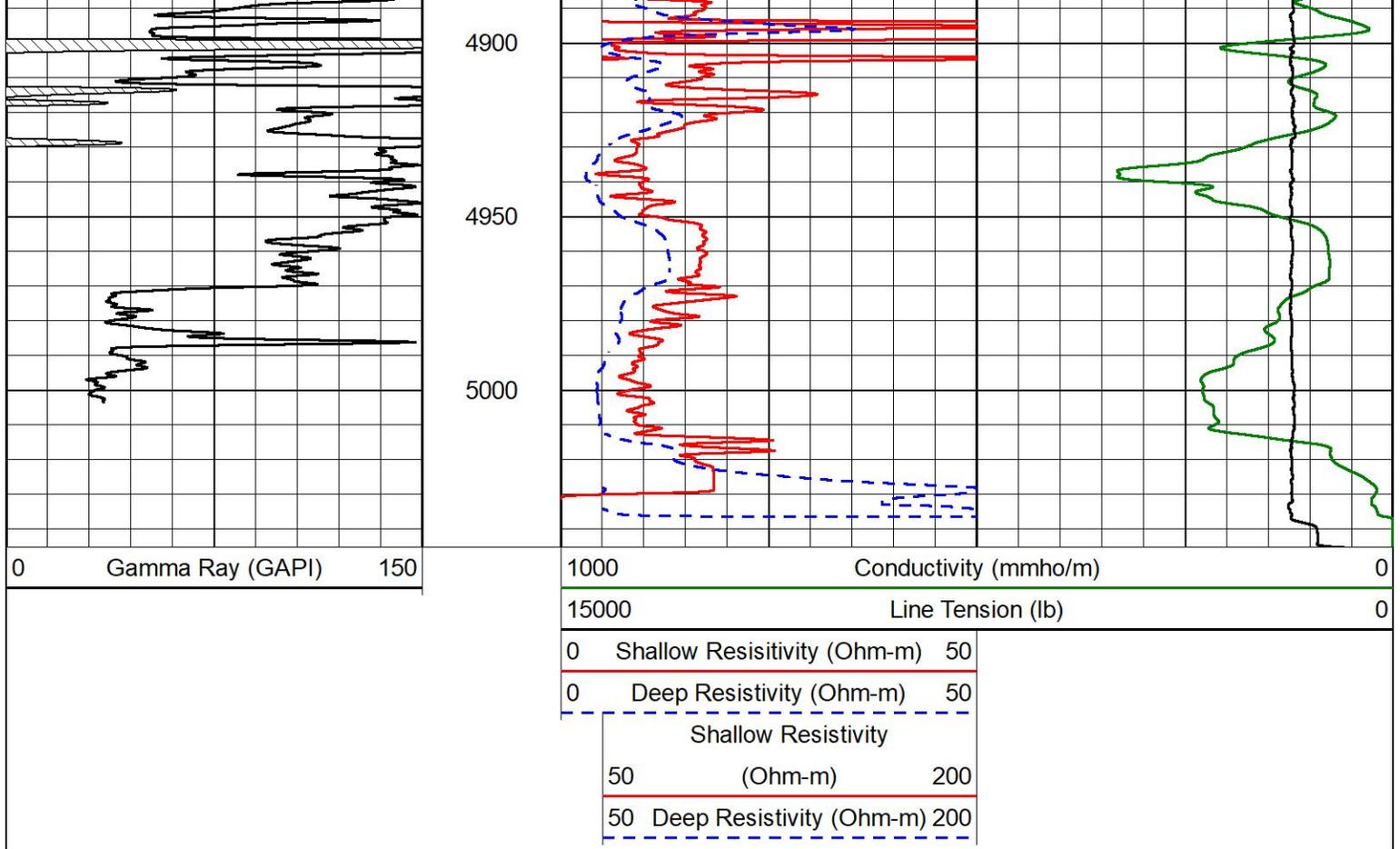
4200

4250

4300





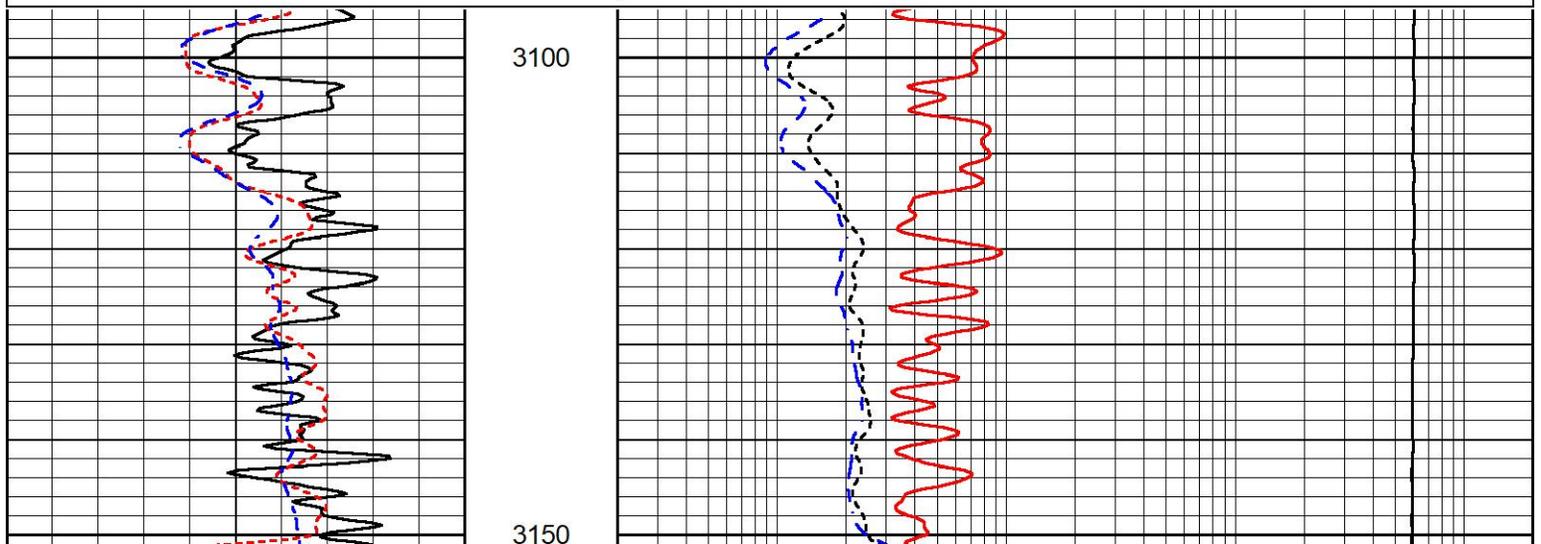
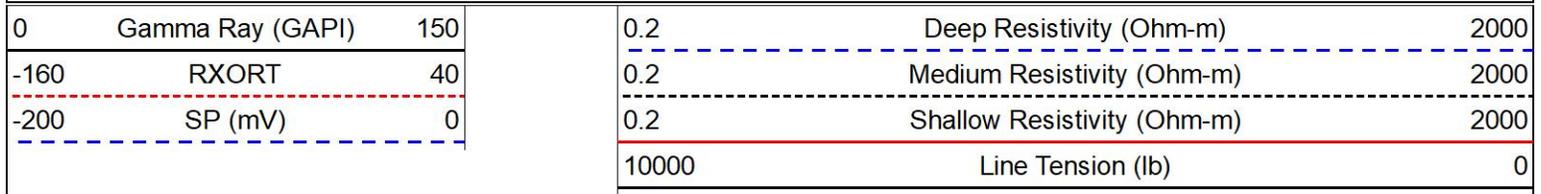


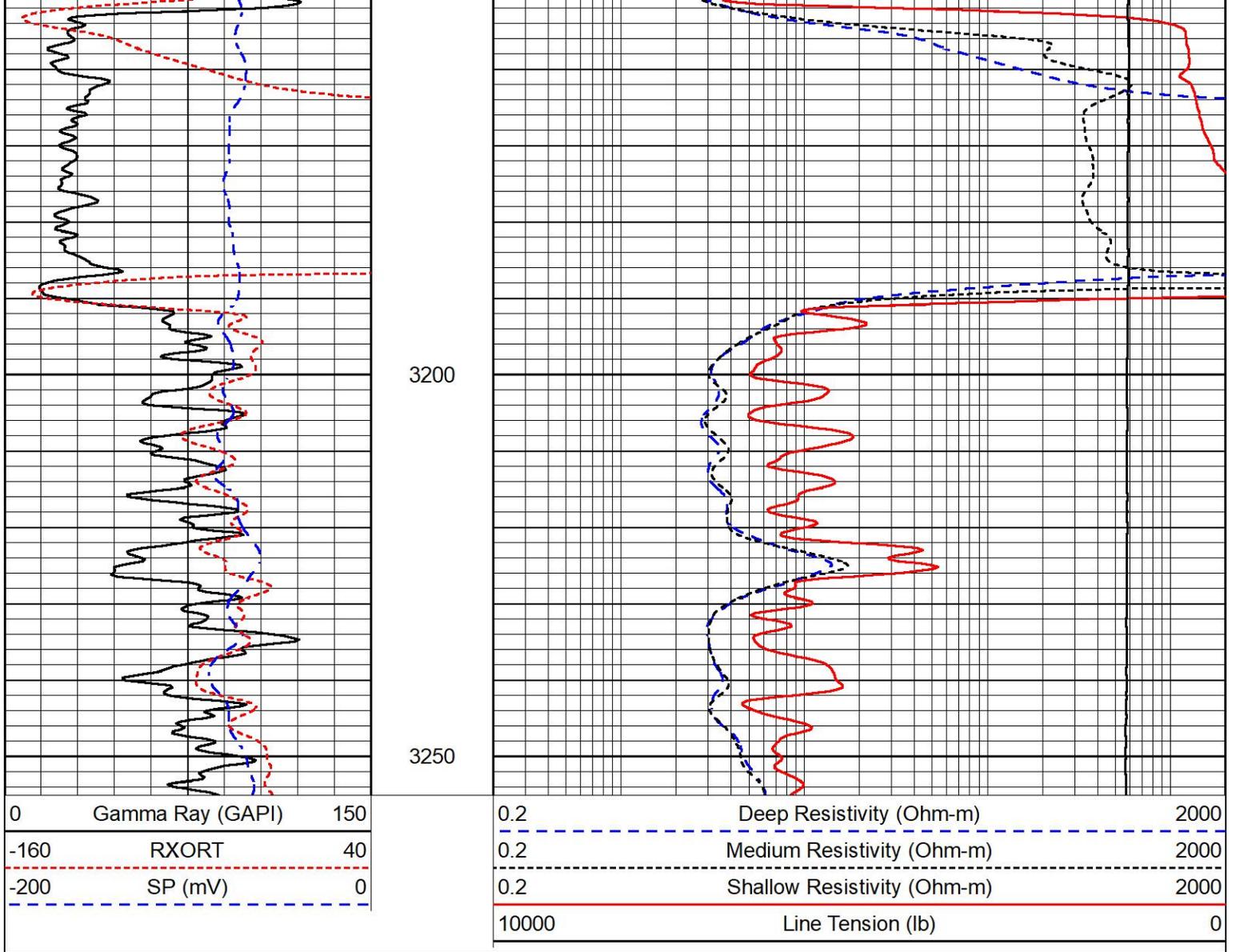
MIDWEST WIRELINE

ANHYDRITE SECTION

MAIN PASS

Database File carmen schmitt_four boys 2028.db
 Dataset Pathname stkml/pass3.4
 Presentation Format _dil
 Dataset Creation Thu Apr 28 11:47:24 2022
 Charted by Depth in Feet scaled 1:240

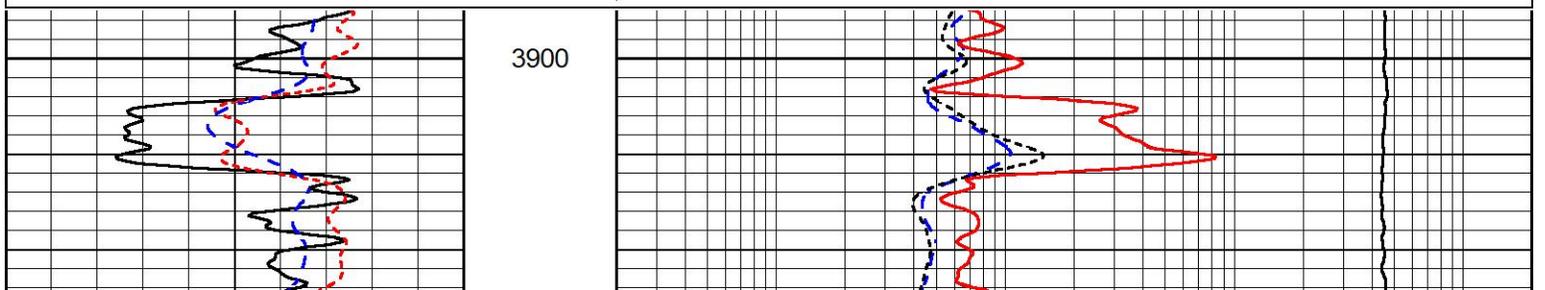
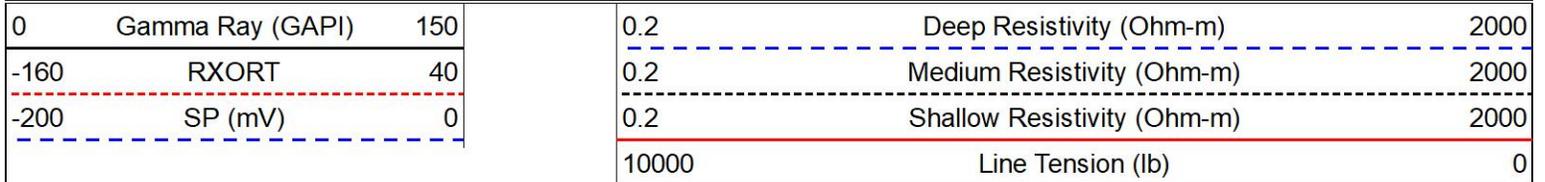


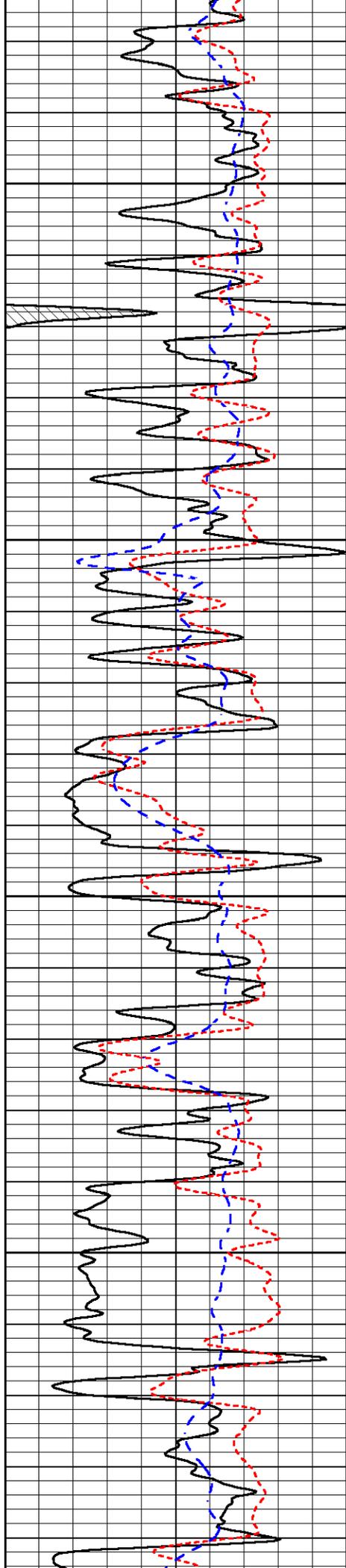


DETAIL SECTION

MAIN PASS

Database File carmen schmitt_four boys 2028.db
 Dataset Pathname stkml/pass3.1
 Presentation Format _dil
 Dataset Creation Thu Apr 28 11:46:47 2022
 Charted by Depth in Feet scaled 1:240



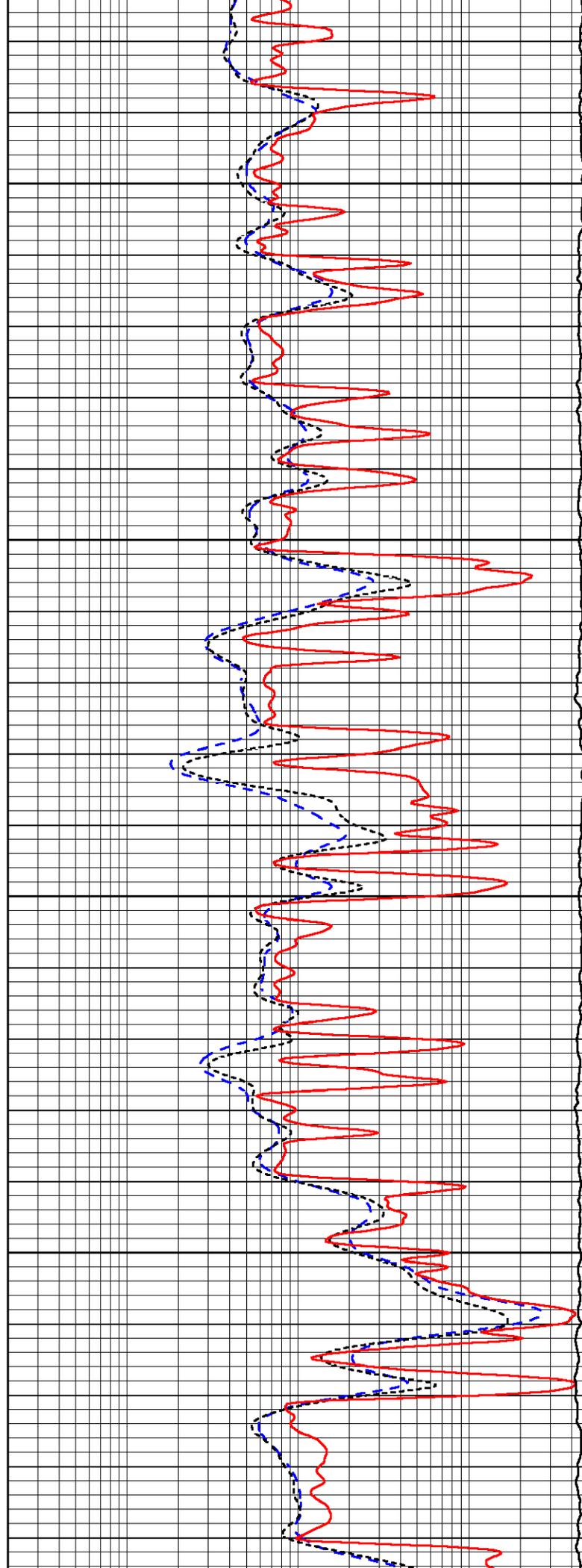


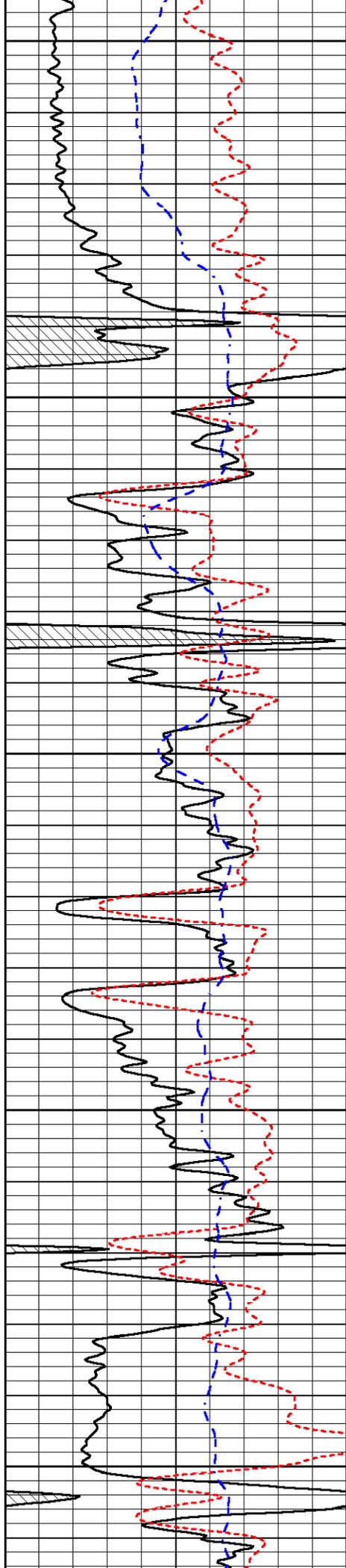
3950

4000

4050

4100





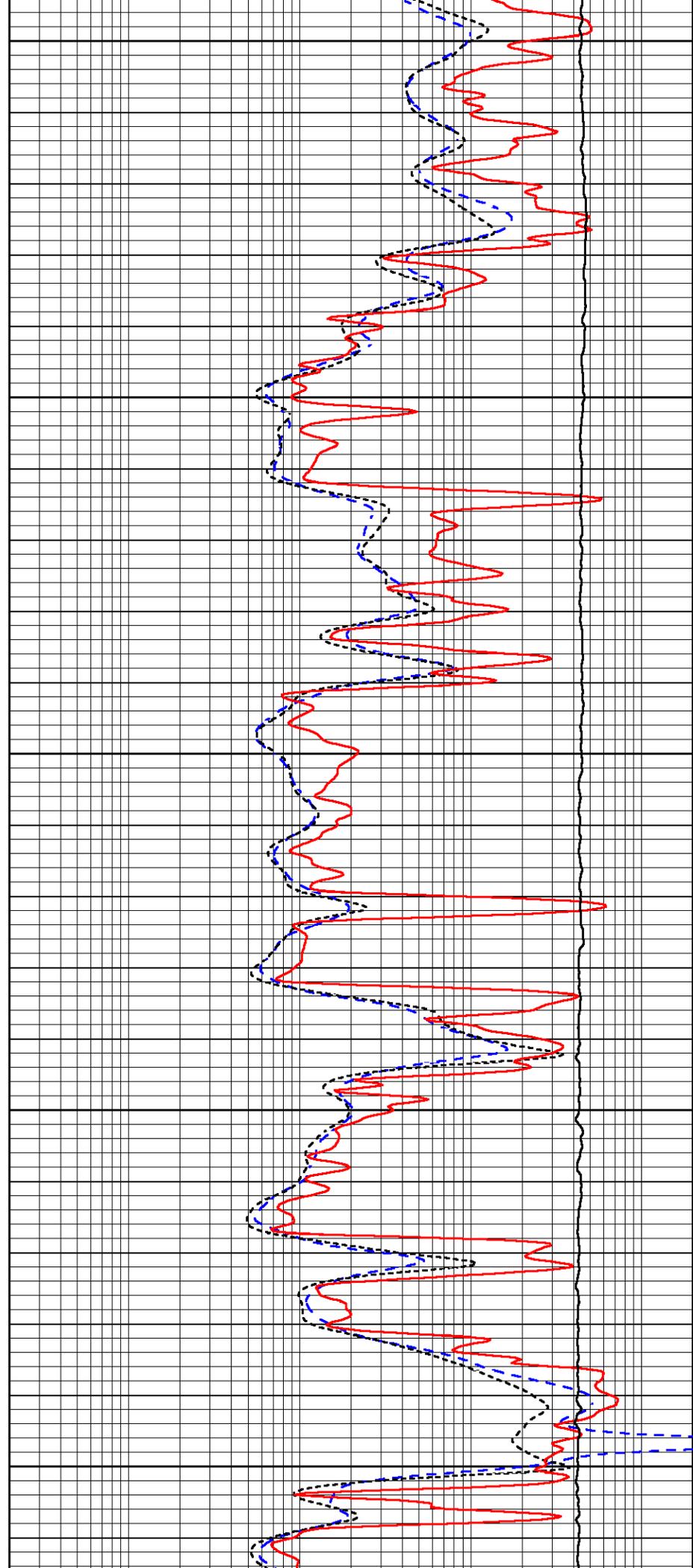
4150

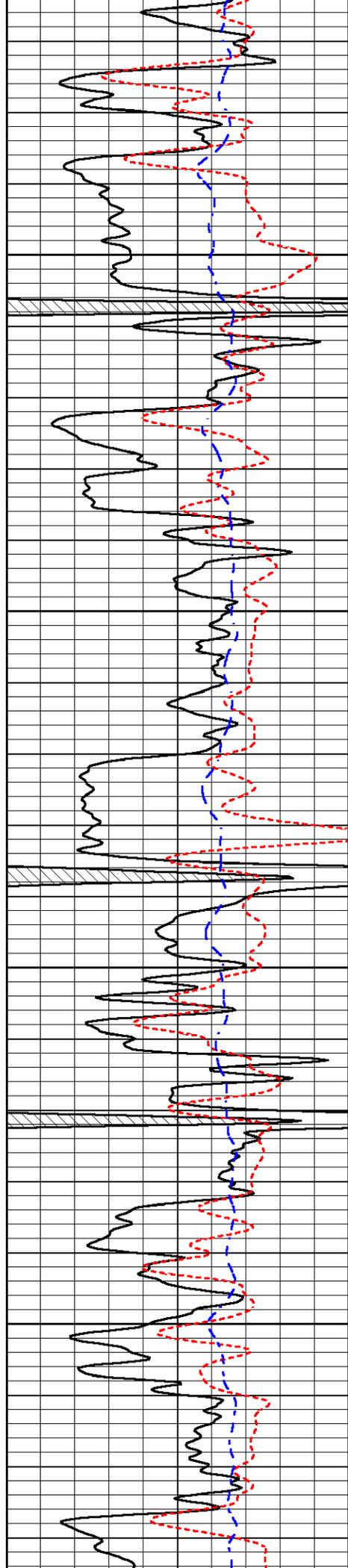
4200

4250

4300

4350



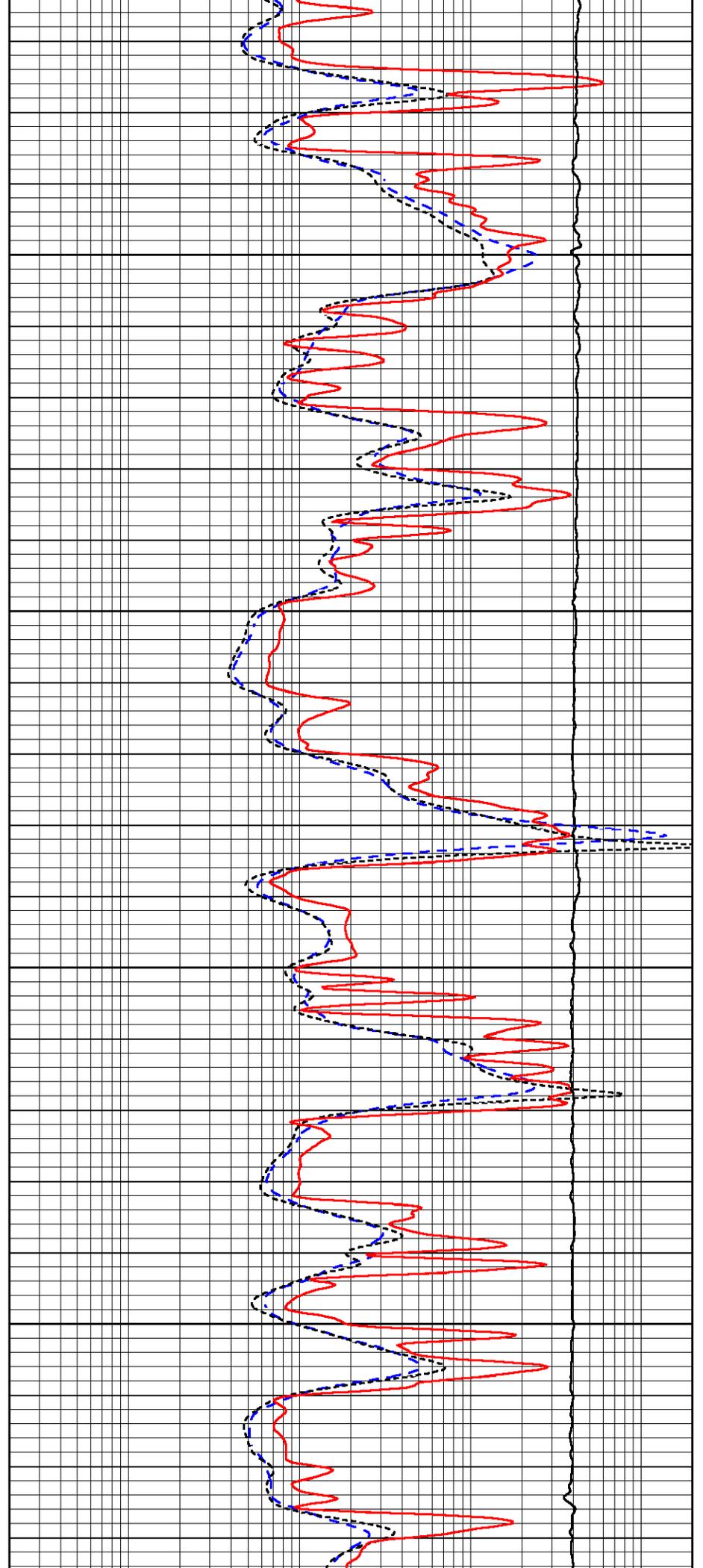


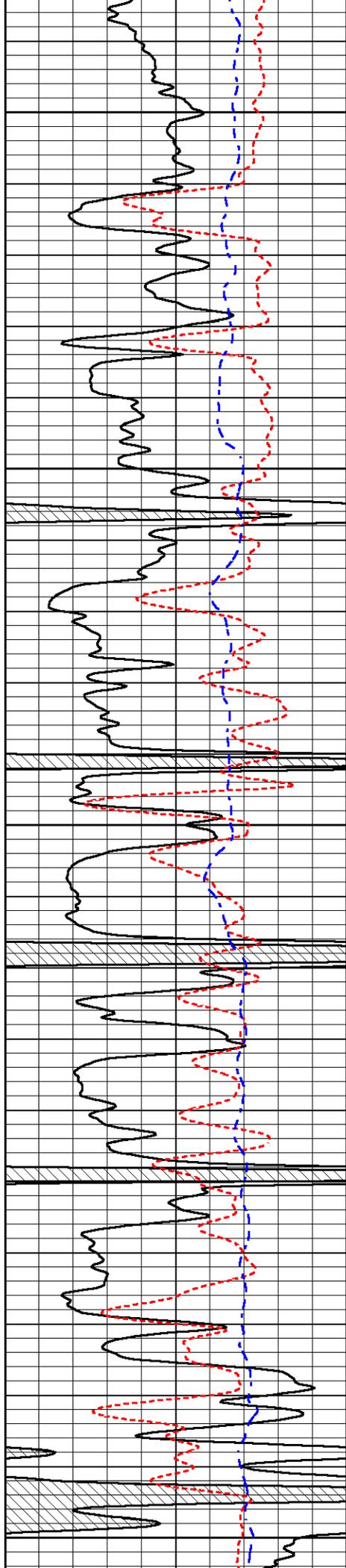
4400

4450

4500

4550





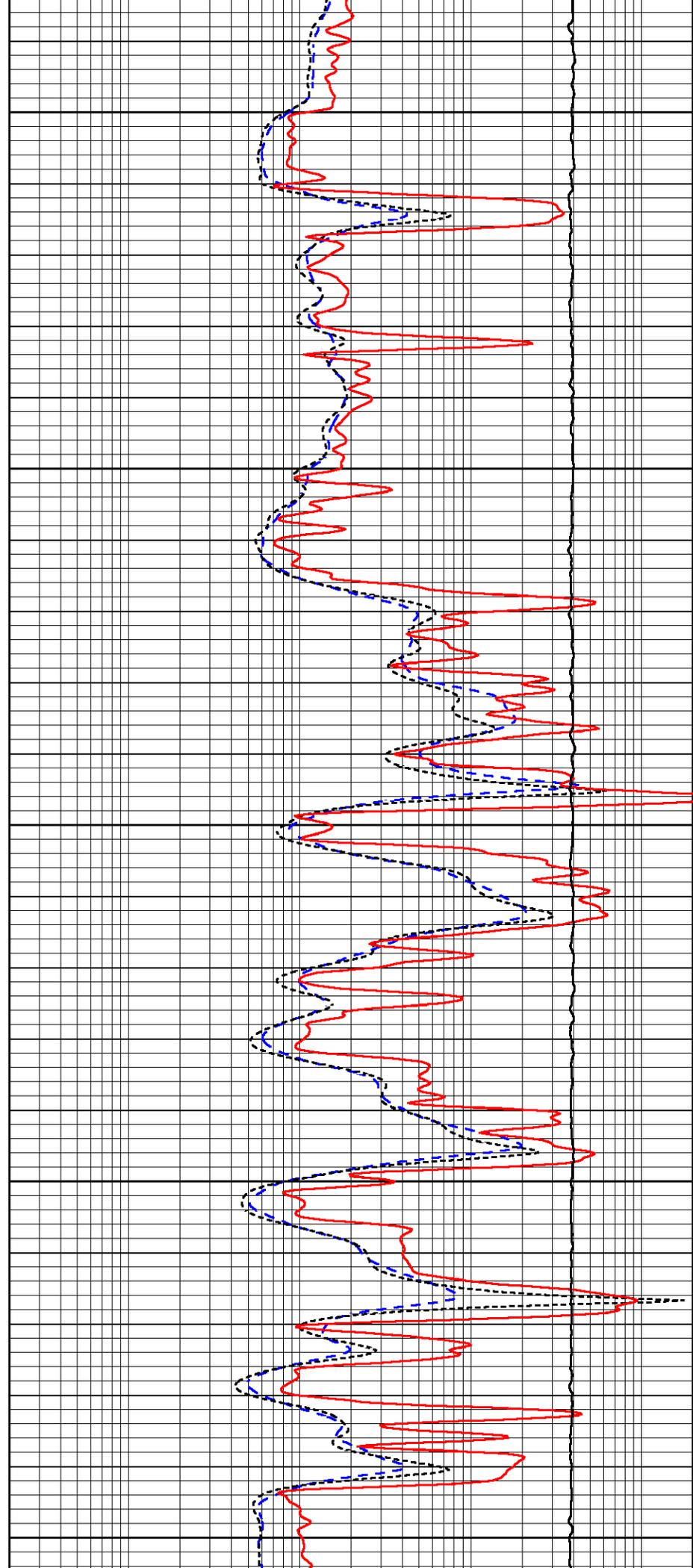
4600

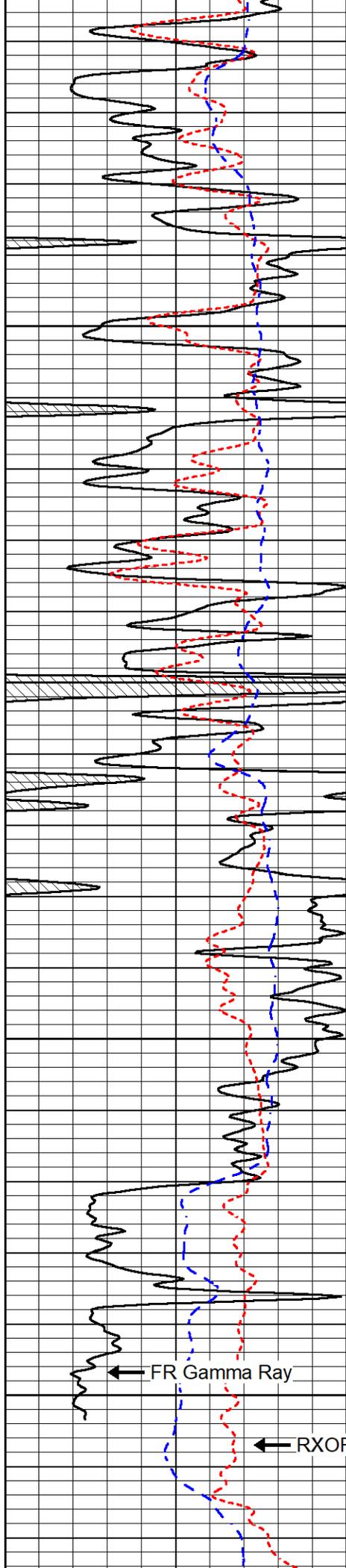
4650

4700

4750

4800





4850

4900

4950

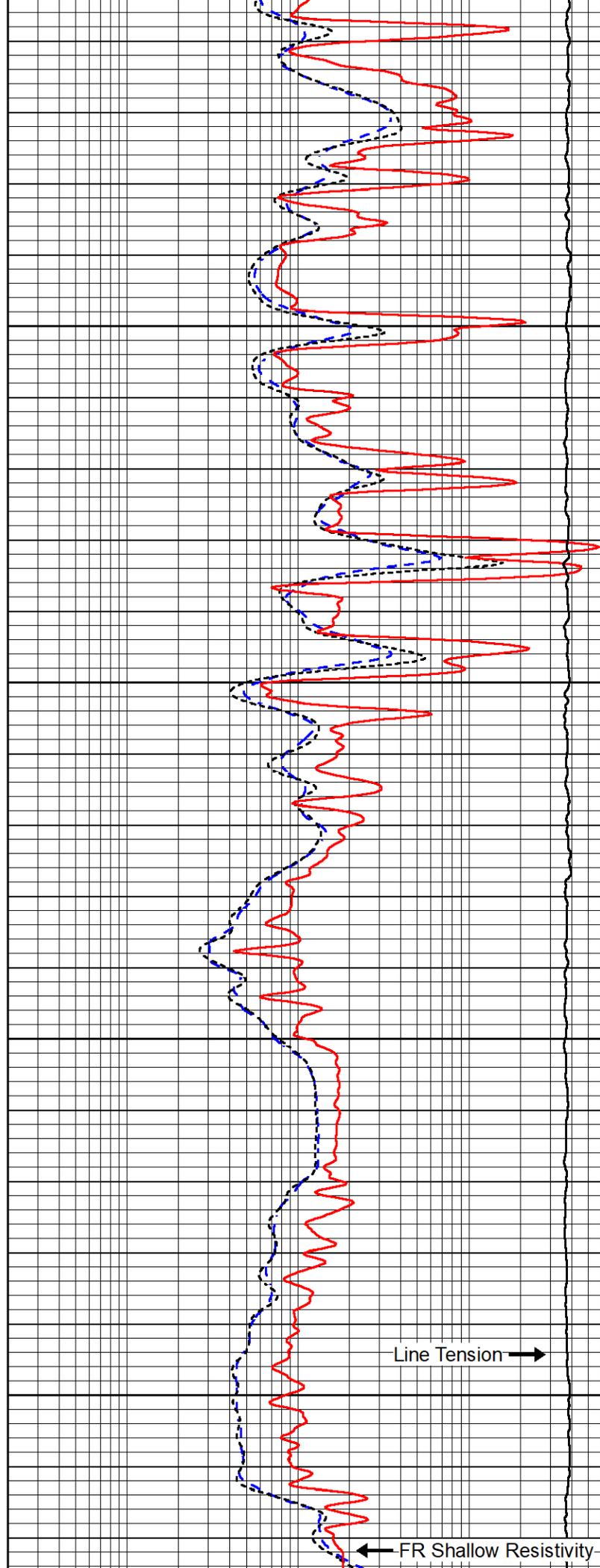
5000

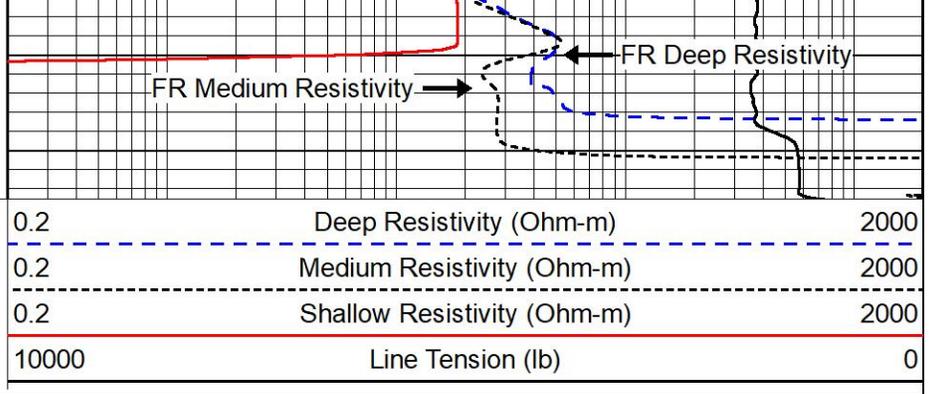
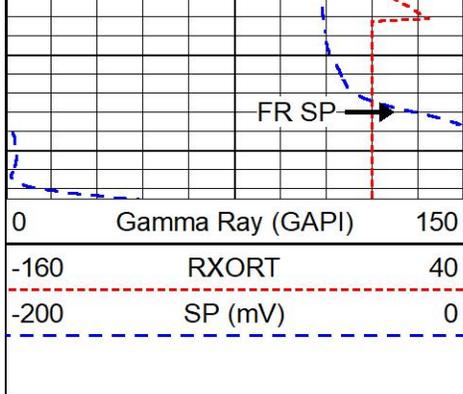
← FR Gamma Ray

← RXORT

← FR Shallow Resistivity

Line Tension →

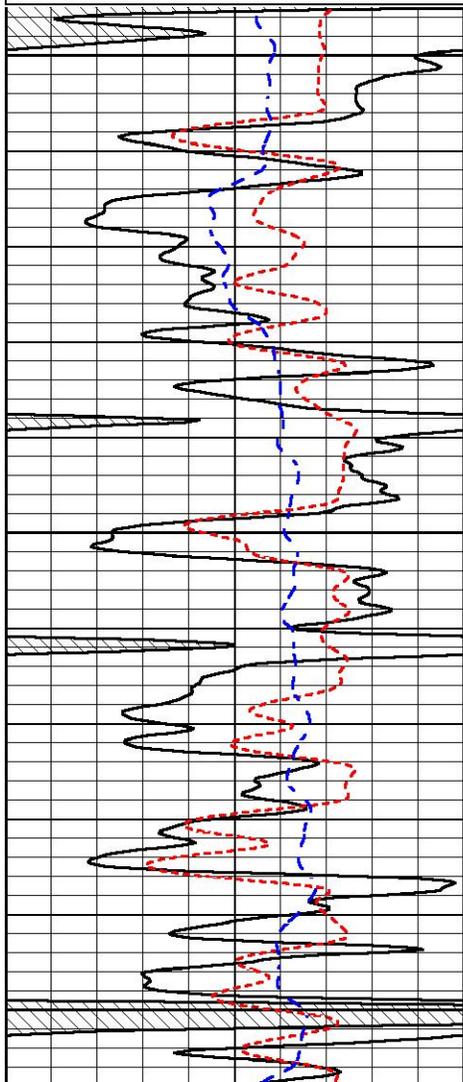
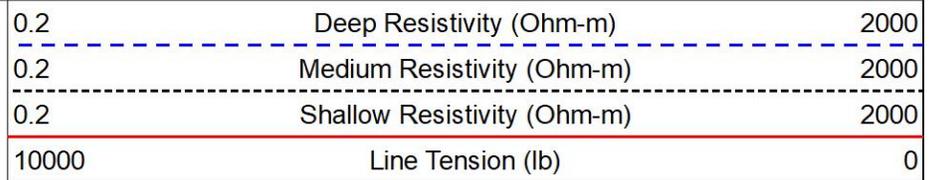
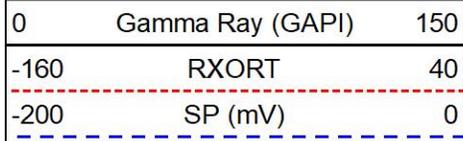




REPEAT SECTION

REPEAT PASS

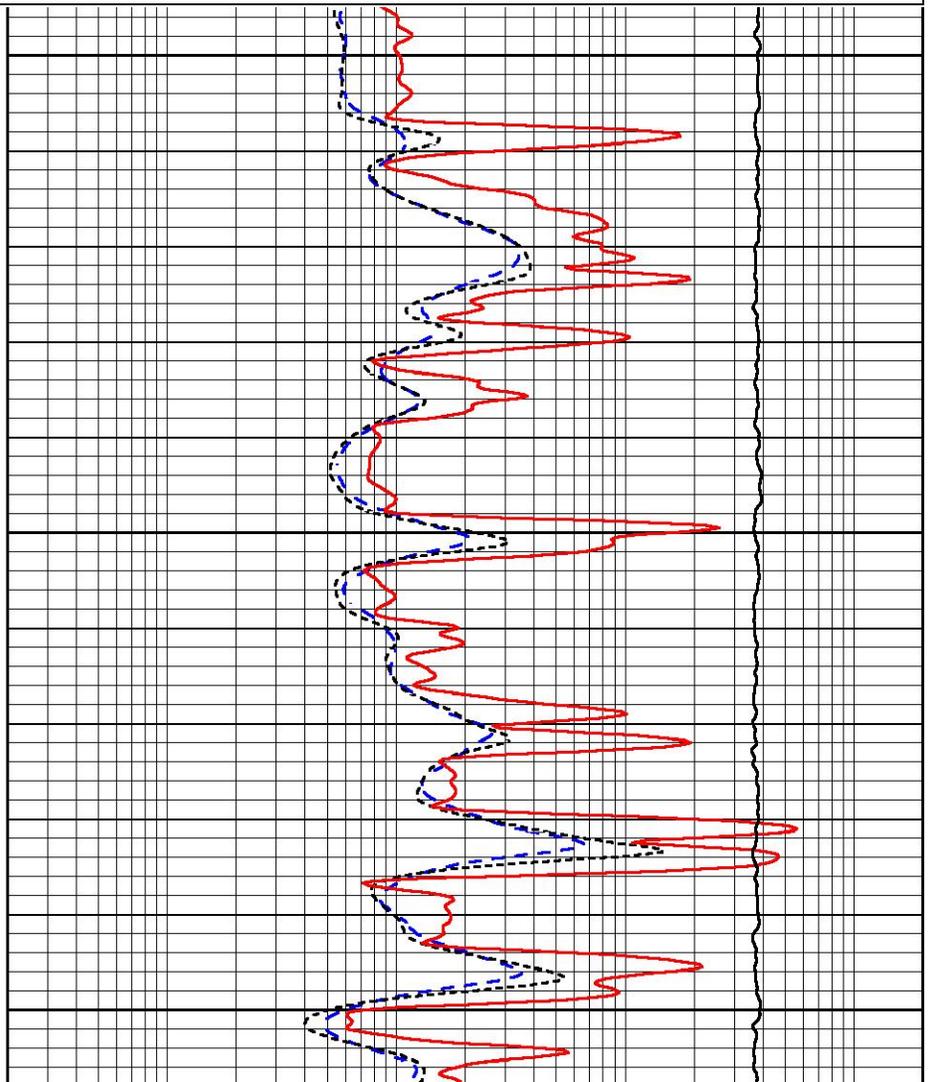
Database File carmen schmitt_four boys 2028.db
 Dataset Pathname stkml/pass2.1
 Presentation Format _dil
 Dataset Creation Thu Apr 28 10:54:32 2022
 Charted by Depth in Feet scaled 1:240

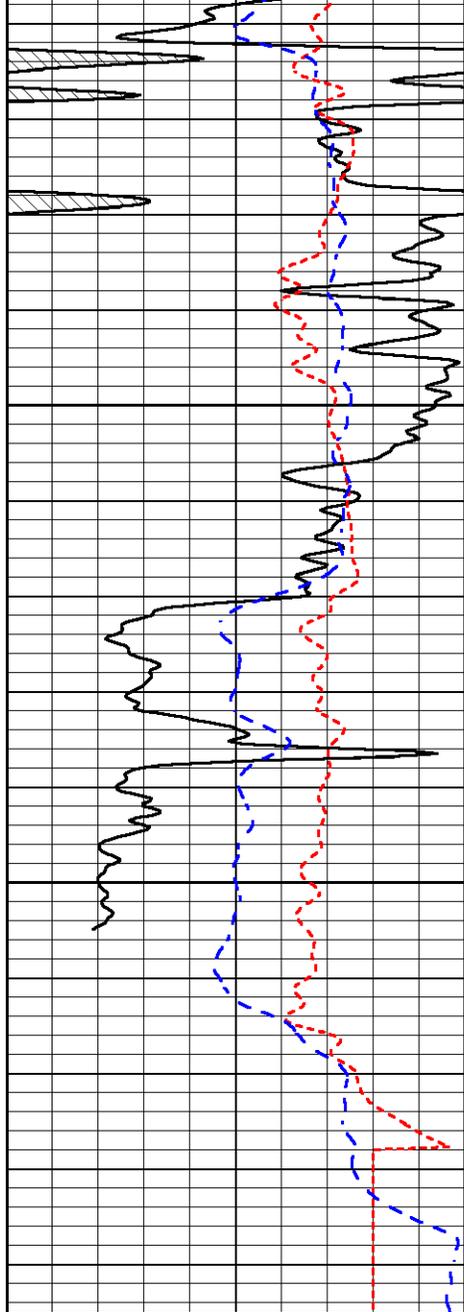


4800

4850

4900

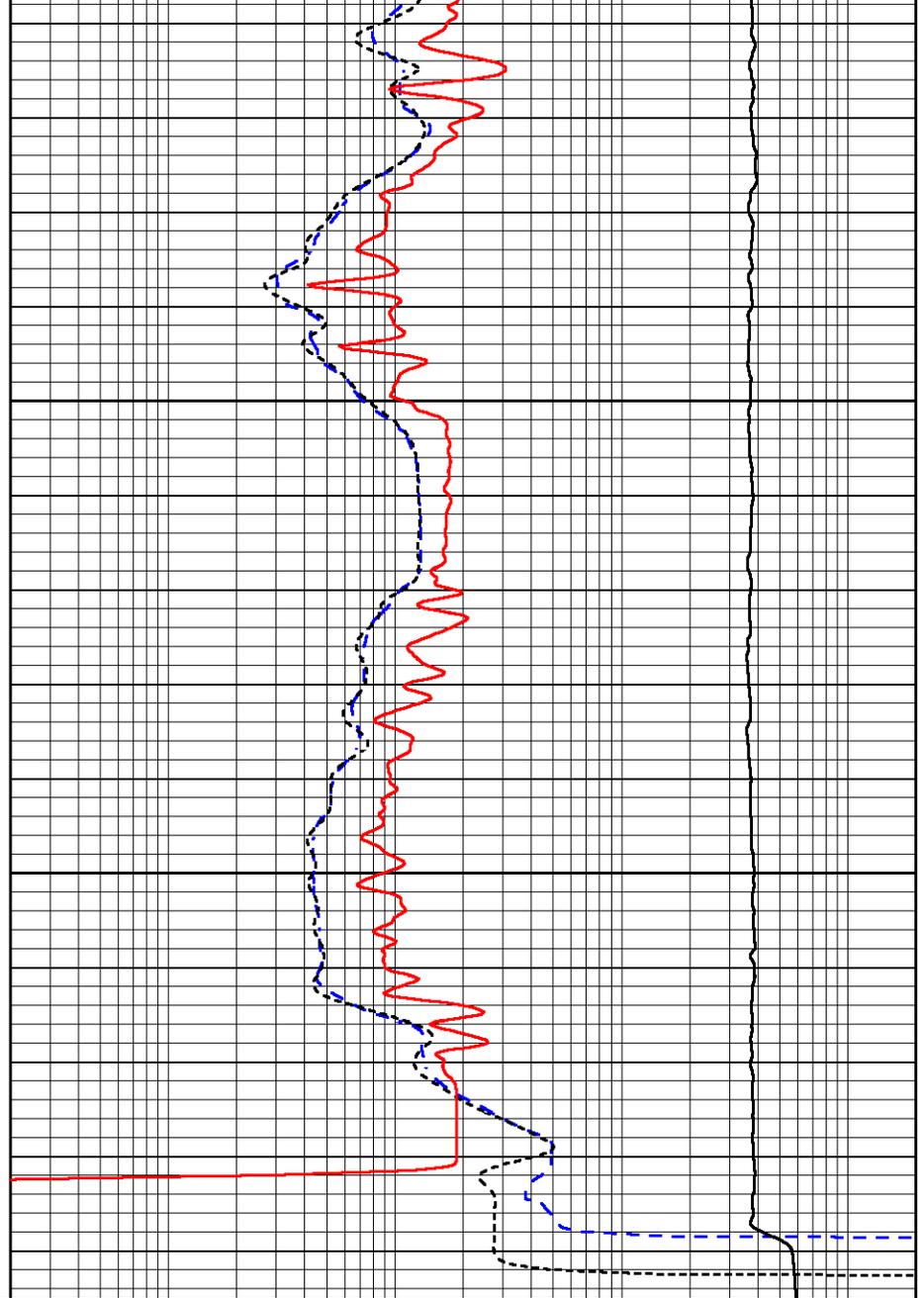




4950

5000

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	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

Calibration Report

Database File carmen schmitt_four boys 2028.db
 Dataset Pathname stkml/pass3.14
 Dataset Creation Thu Apr 28 10:59:26 2022

Dual Induction Calibration Report

Serial-Model: 501 HT-M&W
 Surface Cal Performed: Wed Feb 23 19:44:50 2022

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.455	-37.000
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.320	-32.000

Microlog Calibration Report

Serial-Model: 402-PSIML
 Performed: Mon Jan 24 20:31:16 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	28000.0000	-0.8000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	25000.0000	0.0000
Caliper	1.0052	1.0858	5.0000	16.5000	in	125.0000	-122.2000

Compensated Density Calibration Report

Serial-Model: 305-05-M&W
 Source #: 20762B
 Master Calibration Performed: Fri Apr 22 07:18:08 2022

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	8862.47	9339.96	cps
Aluminum	2.600	g/cc	1556.73	5707.29	cps
Spine Angle = 74.19			Density/Spine Ratio = 0.467		
	Size		Reading		
Small Ring	4.00	in	1.74		
Large Ring	14.00	in	1.38		

Compensated Neutron Calibration Report

Serial-Model: 207-MW-M&W
 Source #: 100046B
 Master Calibration Performed: Mon Nov 29 15:06:24 2021

Master 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: 101
 Tool Model: M&W
 Performed: Mon Jan 24 19:14:46 2022

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps
 Calibrator Reading: 637.0 cps

Sensitivity: 0.5500 GAPI/cps





MIDWEST WIRELINE

Well	Four Boys #2-28
Field	PIANALTO
County	Cheyenne
State	Kansas