



MIDWEST WIRELINE

# DUAL INDUCTION LOG

Company **Russell Oil, Inc.**  
 Well **Ben Wieland #14-1**  
 Field **Wildcat**  
 County **Logan** State **Kansas**

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Location: **API #: 15-109-21611-00-00**  
**NE SW SW SW**  
**455' FSL & 435' FWL**  
**SEC 14 TWP 11S RGE 32W**  
 Permanent Datum **Ground Level** Elevation **3043'**  
 Log Measured From **Kelly Bushing**  
 Drilling Measured From **Kelly Bushing**  
 Other Services **CNL/CDL MEL**  
 Elevation **3048'**  
 D.F. **3043'**  
 G.L.

Date	6/17/2021
Run Number	One
Depth Driller	4718'
Depth Logger	4718'
Bottom Logged Interval	4717'
Top Log Interval	300'
Casing Driller	8.625" @ 323'
Casing Logger	325'
Bit Size	7.875"
Type Fluid in Hole	Chemical
Salinity, ppm CL	2500
Density / Viscosity	9.4 50
pH / Fluid Loss	10.5 8.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.8 @ 75
Rmt @ Meas. Temp	0.6 @ 75
Rmc @ Meas. Temp	1.08 @ 75
Source of Rmf / Rmc	CHARTS
Rm @ BHT	0.49 @ 123
Operating Rig Time	3.5 Hours
Max Rec. Temp. F	123 Deg F
Equipment Number	P-24
Location	HAYS
Recorded By	T. Martin
Witnessed By	Kitt Noah

<<< 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.

Oakley, KS, Old 40 and 83, 2 S on 83, E then N 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: Kitt Noah  
 Secondary Witness:  
 Secondary Witness:  
 Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	33.00		GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC CNSSC	29.90 29.15		CNT-M&W (207-MW)	5.50	3.50	100.00
LSD DCAL SSD	20.85 20.83 20.35		CDL-M&W (934-226)	8.50	4.00	250.00
RLL3F RLL3	15.80 15.80		DIL-PSI HIGH TEMP (952-828)	18.50	3.50	220.00
CILD	8.00					
CILM	4.70					
SP	0.20					

Dataset: russell\_ben wieland #14-1.db: field/well/Stack/pass3.1  
 Total length: 35.50 ft  
 Total weight: 620.00 lb  
 O.D.: 4.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\russell\_ben wieland #14-1.db  
 Dataset field/well/Stack/pass3.1/\_vars\_

## Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	123	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	0	0	470	90	Off	4718

## 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

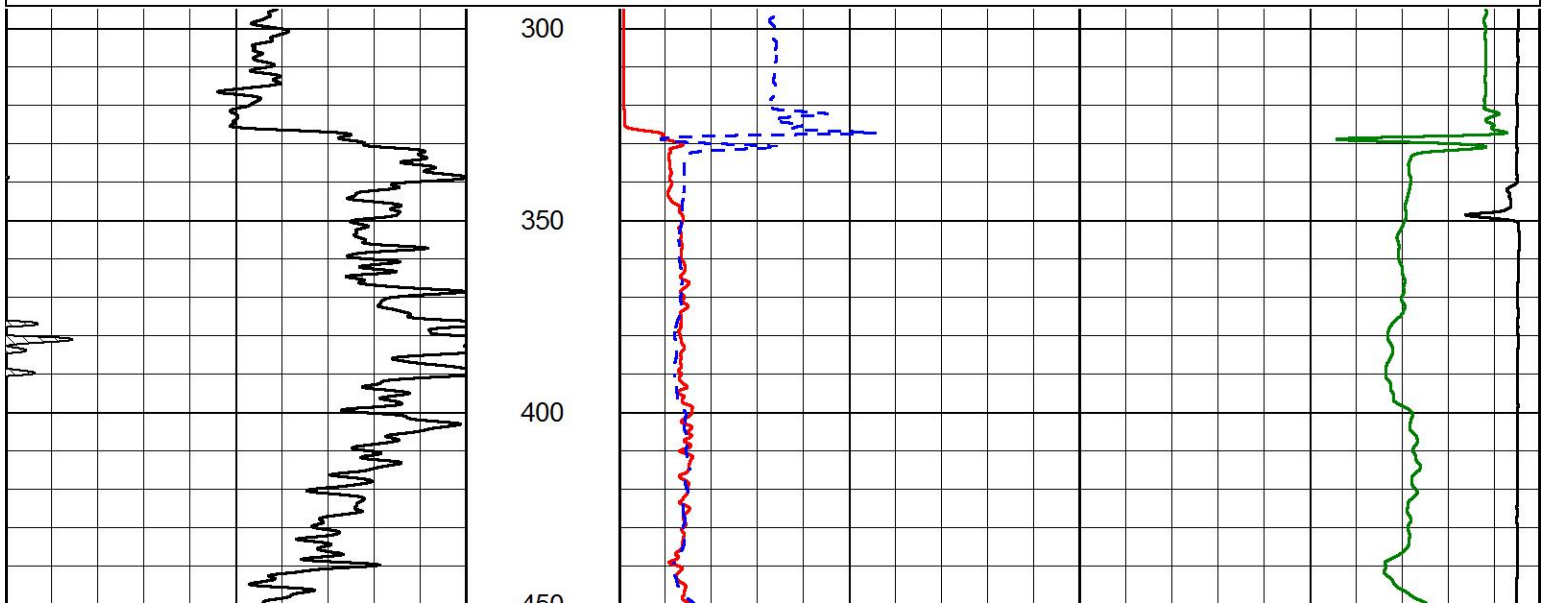


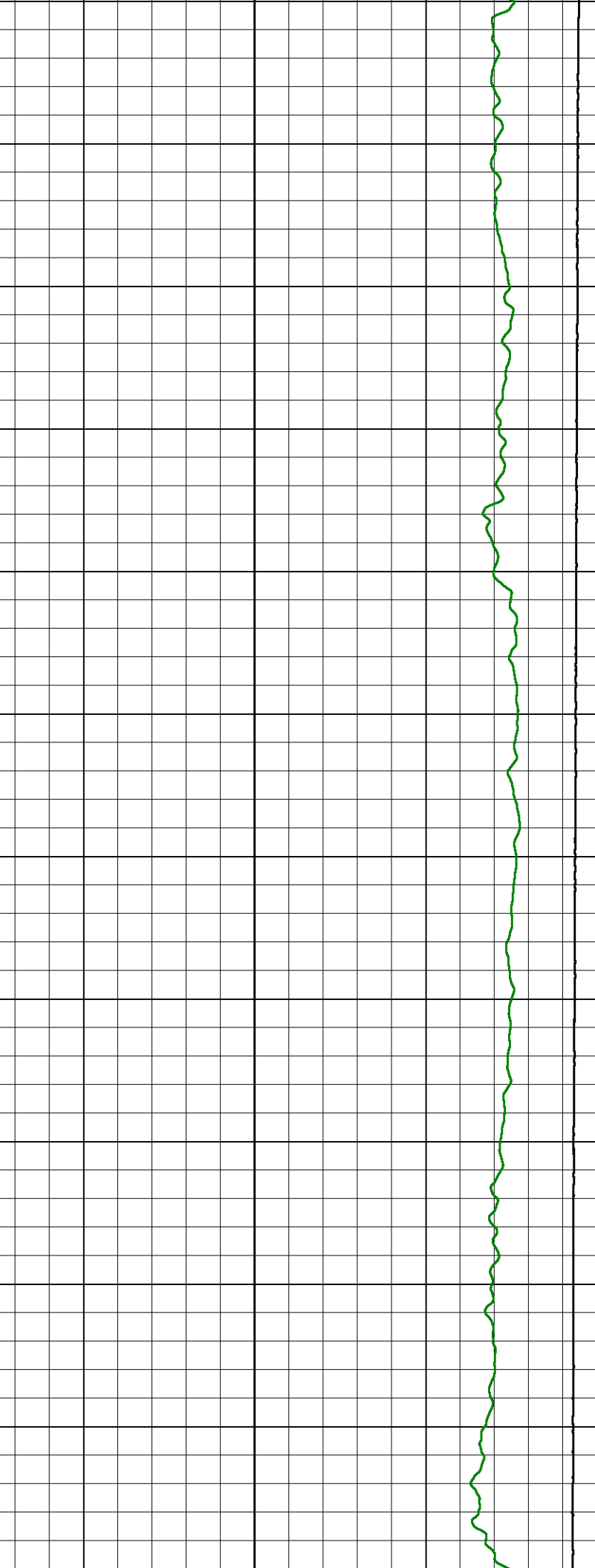
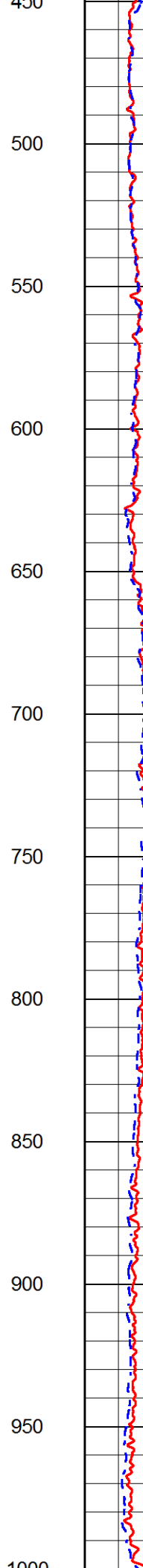
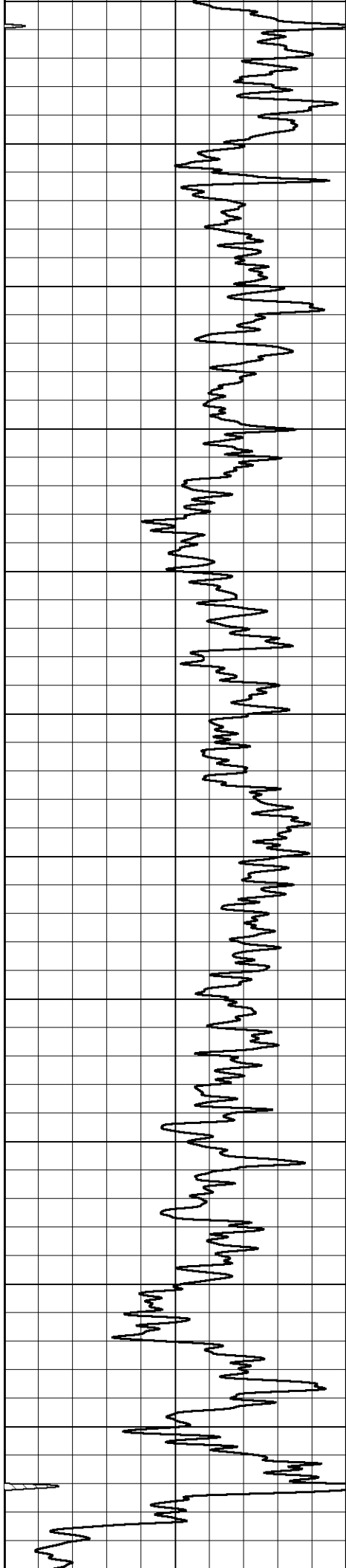
## 2" SCALE RESISTIVITY

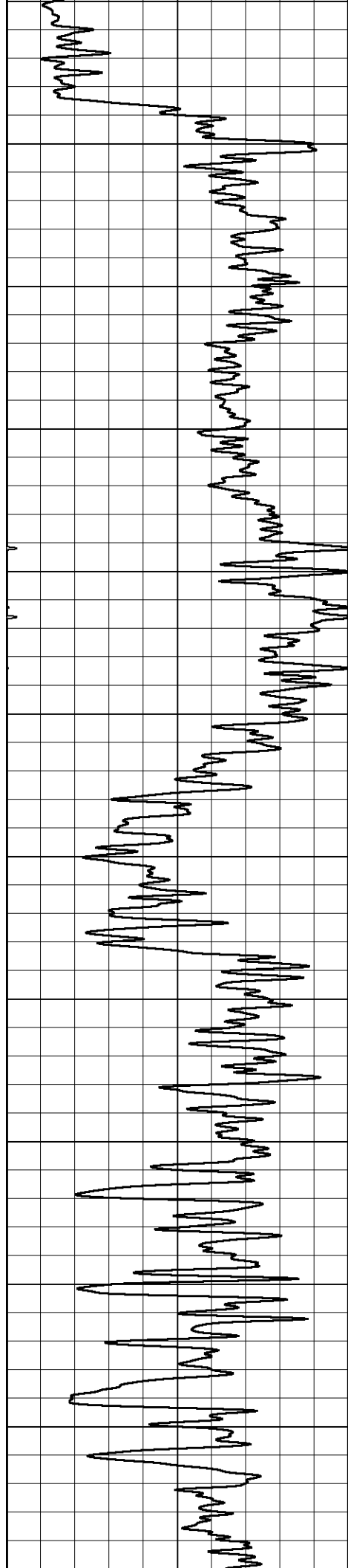
### MAIN PASS

Database File russell\_ben wieland #14-1.db  
 Dataset Pathname Stack/pass3.2  
 Presentation Format \_dil2in  
 Dataset Creation Thu Jun 17 23:17:05 2021  
 Charted by Depth in Feet scaled 1:600

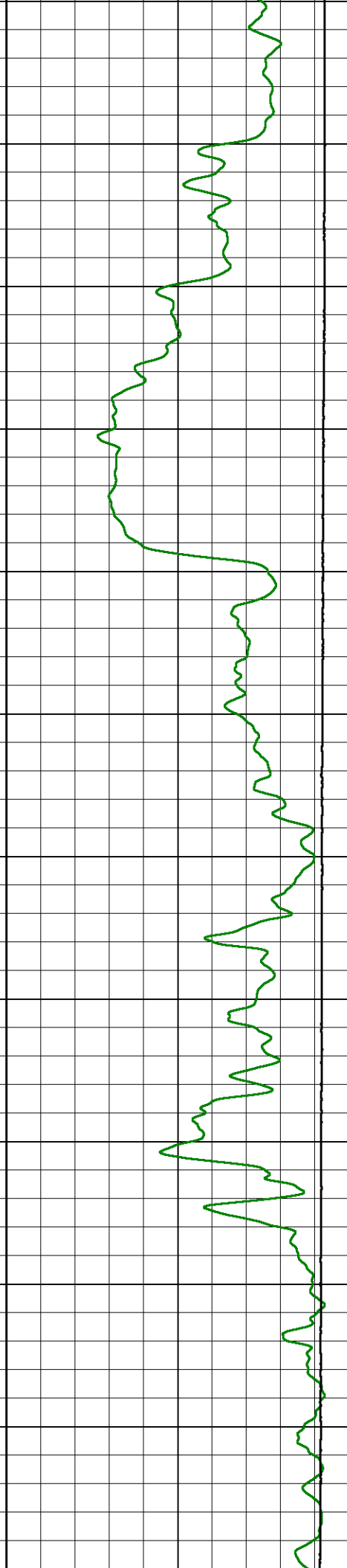
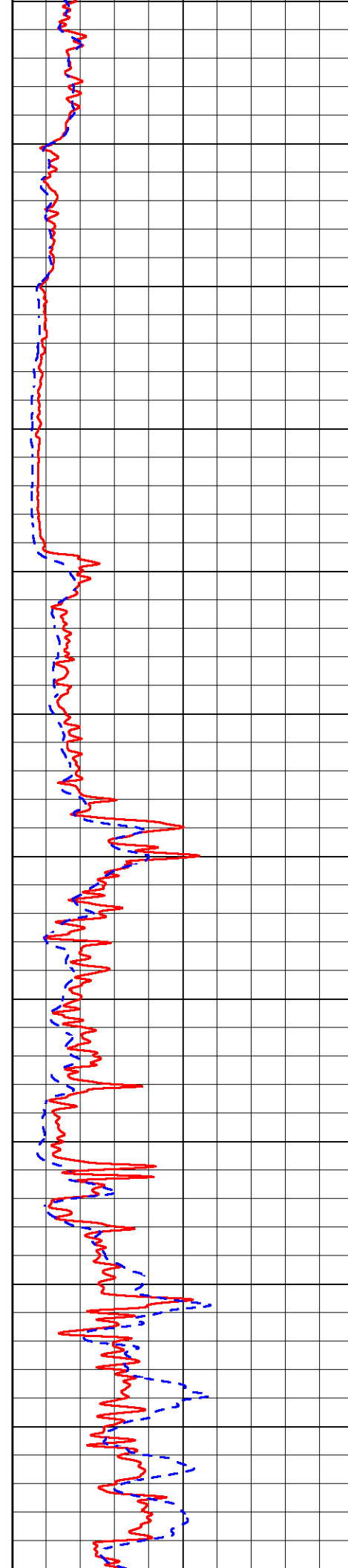
GAMMA RAY (GAPI)	1000	CONDUCTIVITY (mmho/m)	0
	15000	Line Tension (lb)	0
	0	RLL3 (Ohm-m)	50
	0	RILD (Ohm-m)	50
	50	RLL3 (Ohm-m)	100
	50	Deep Resistivity (Ohm-m)	200

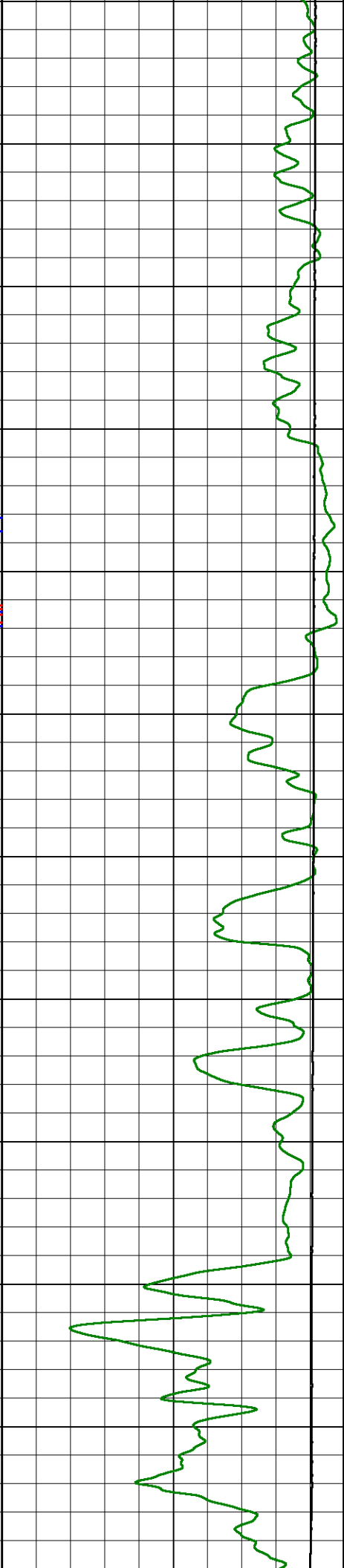
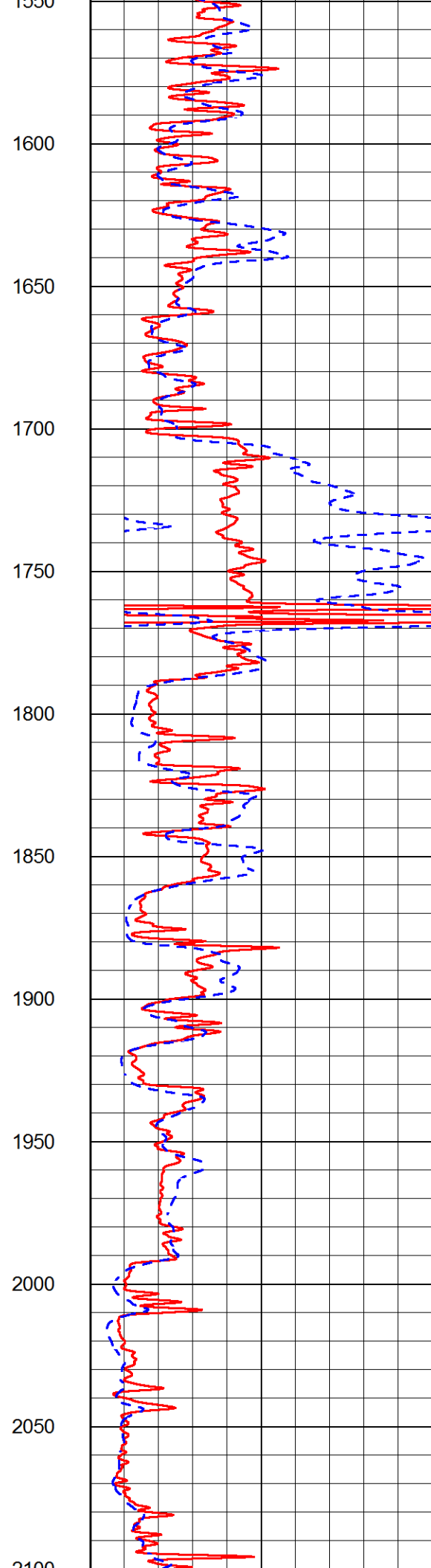
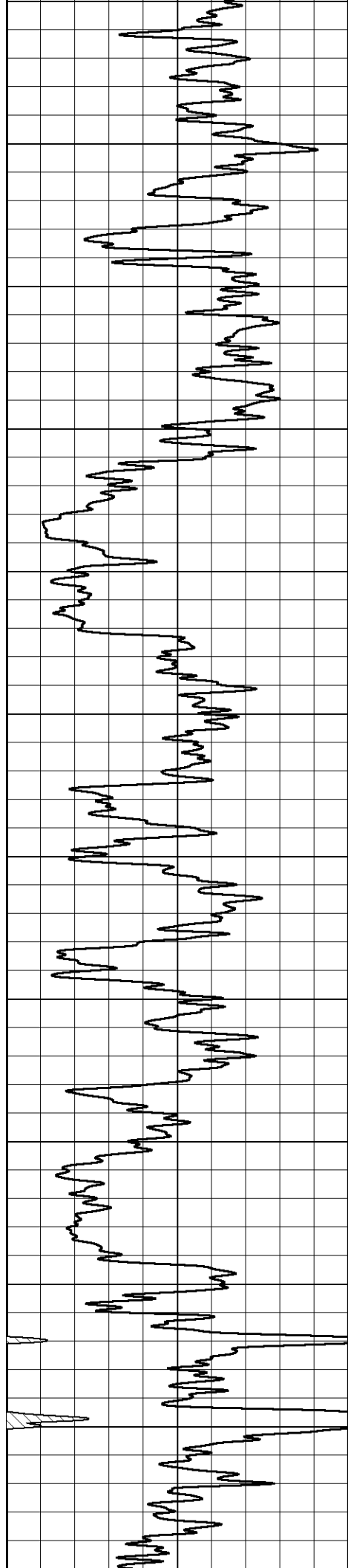




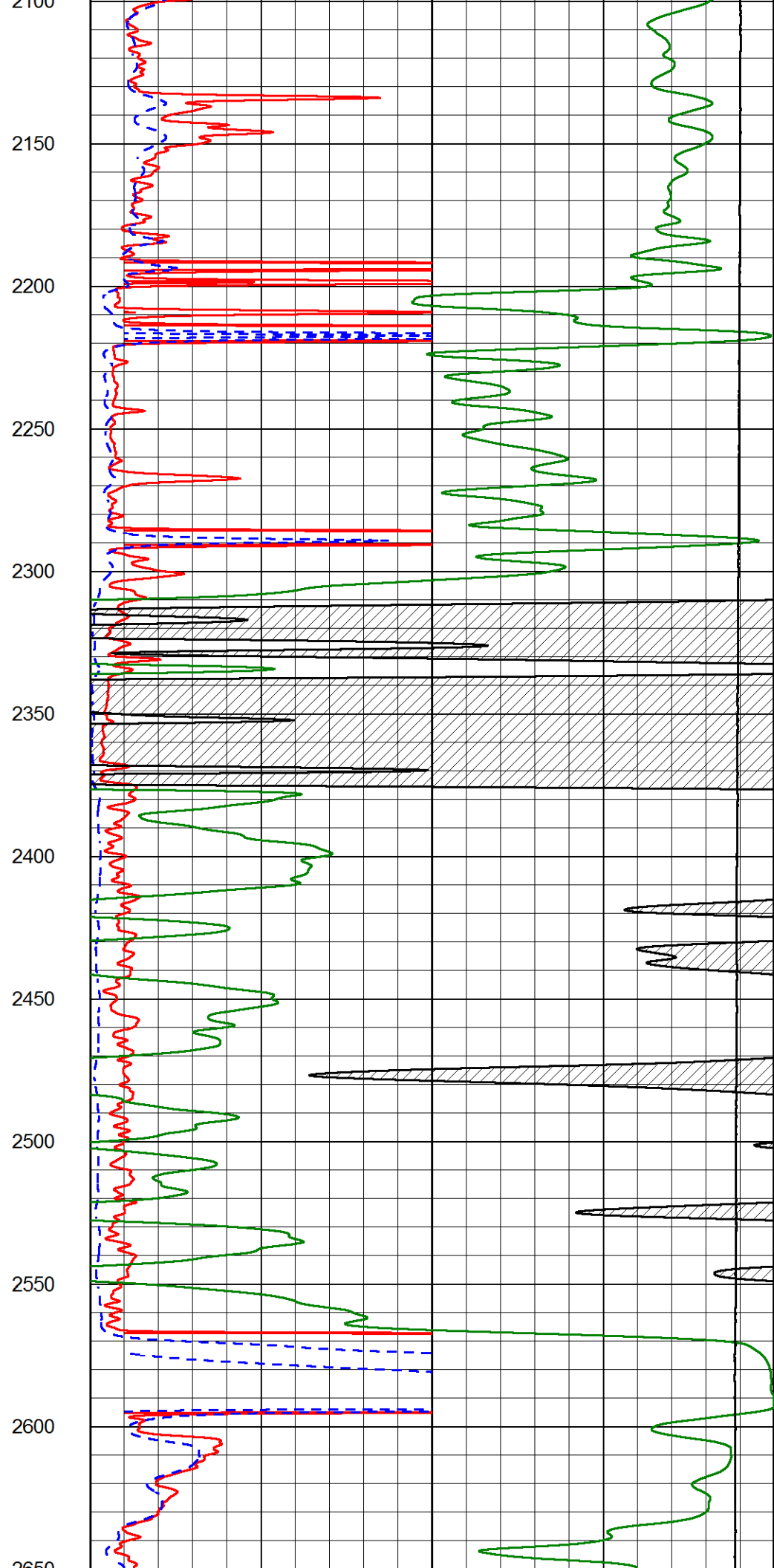
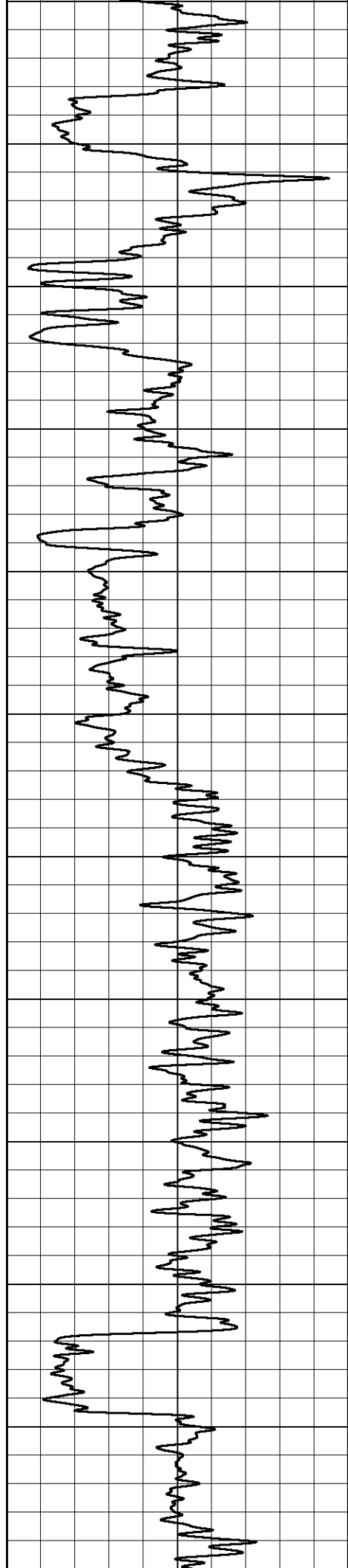


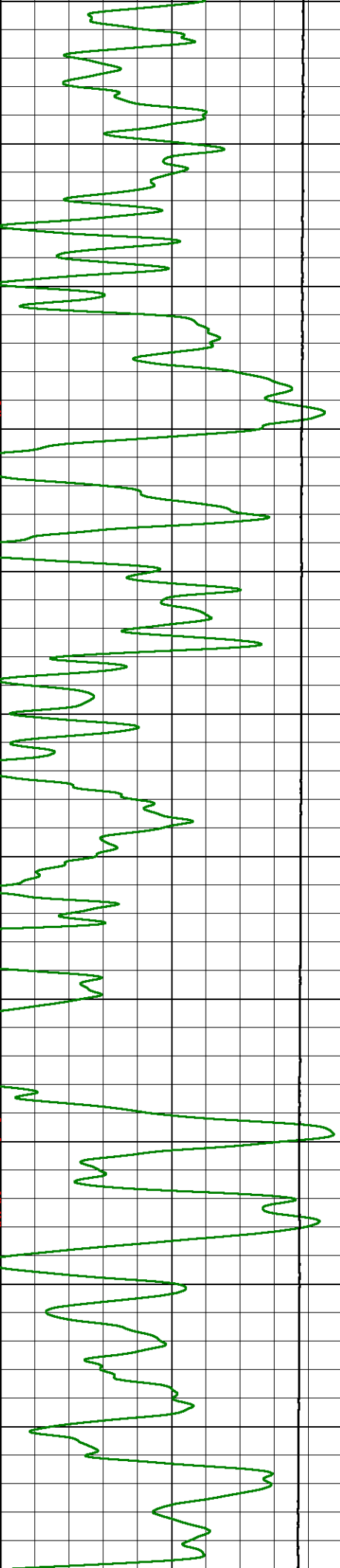
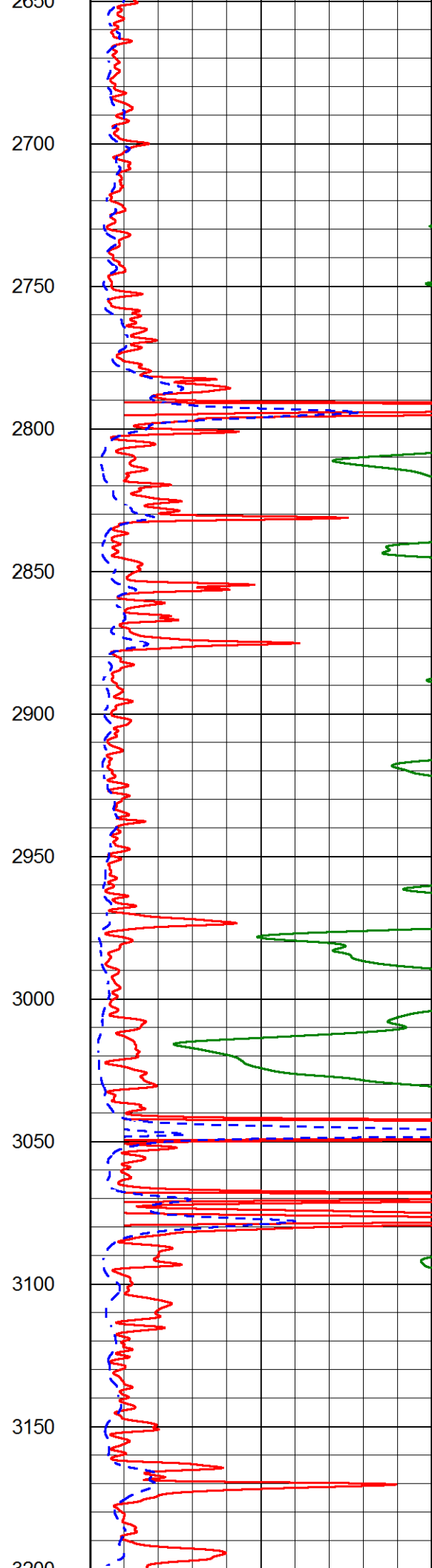
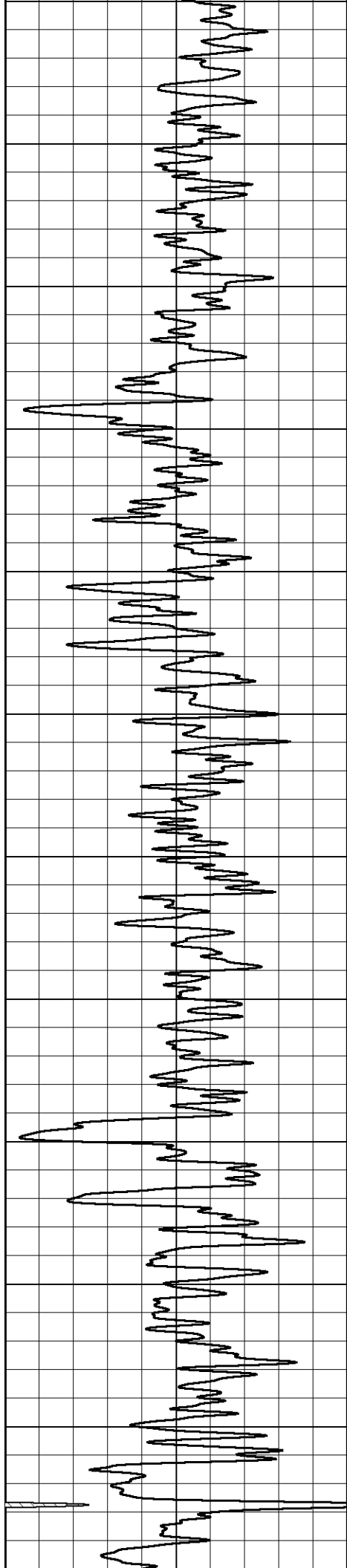
1000  
1050  
1100  
1150  
1200  
1250  
1300  
1350  
1400  
1450  
1500  
1550



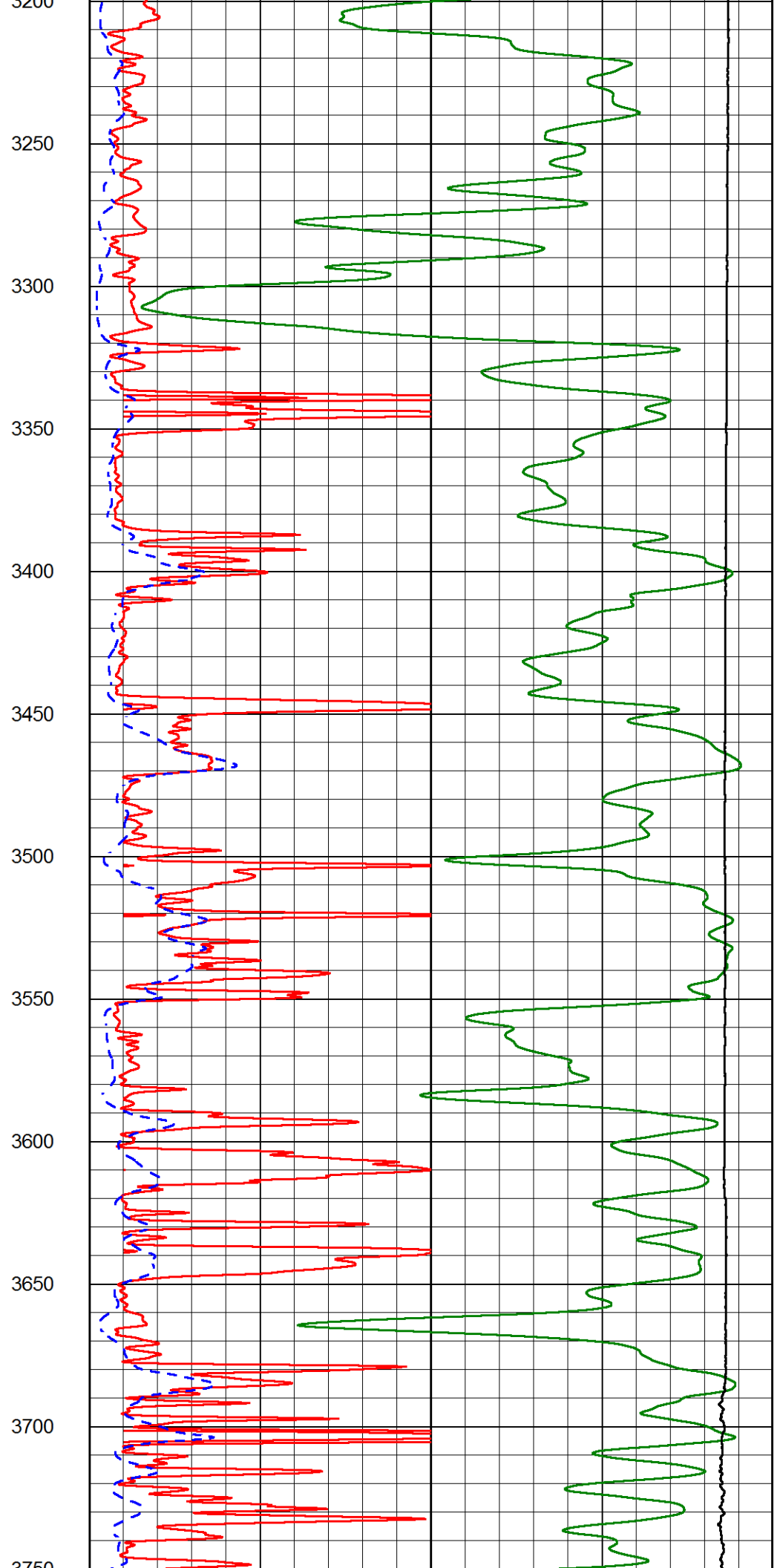
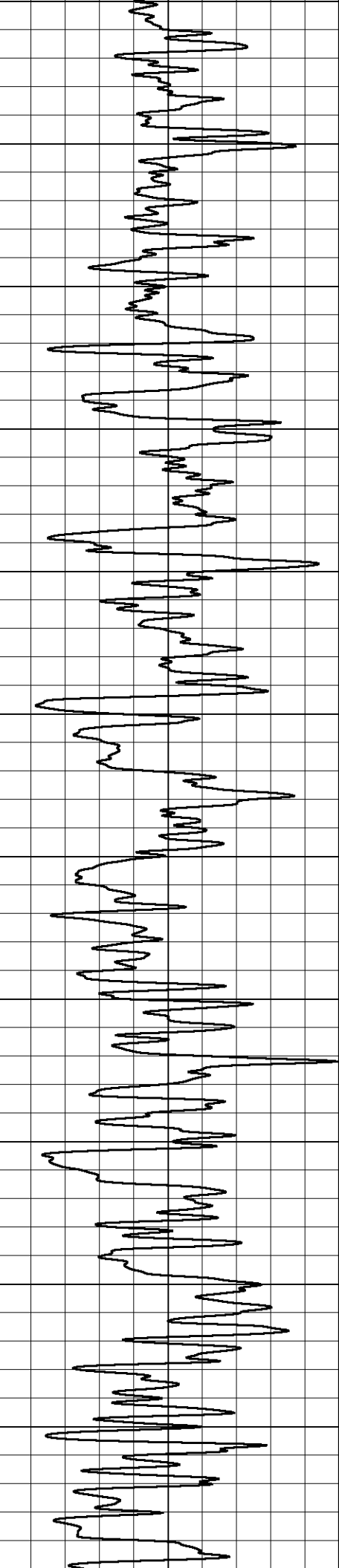


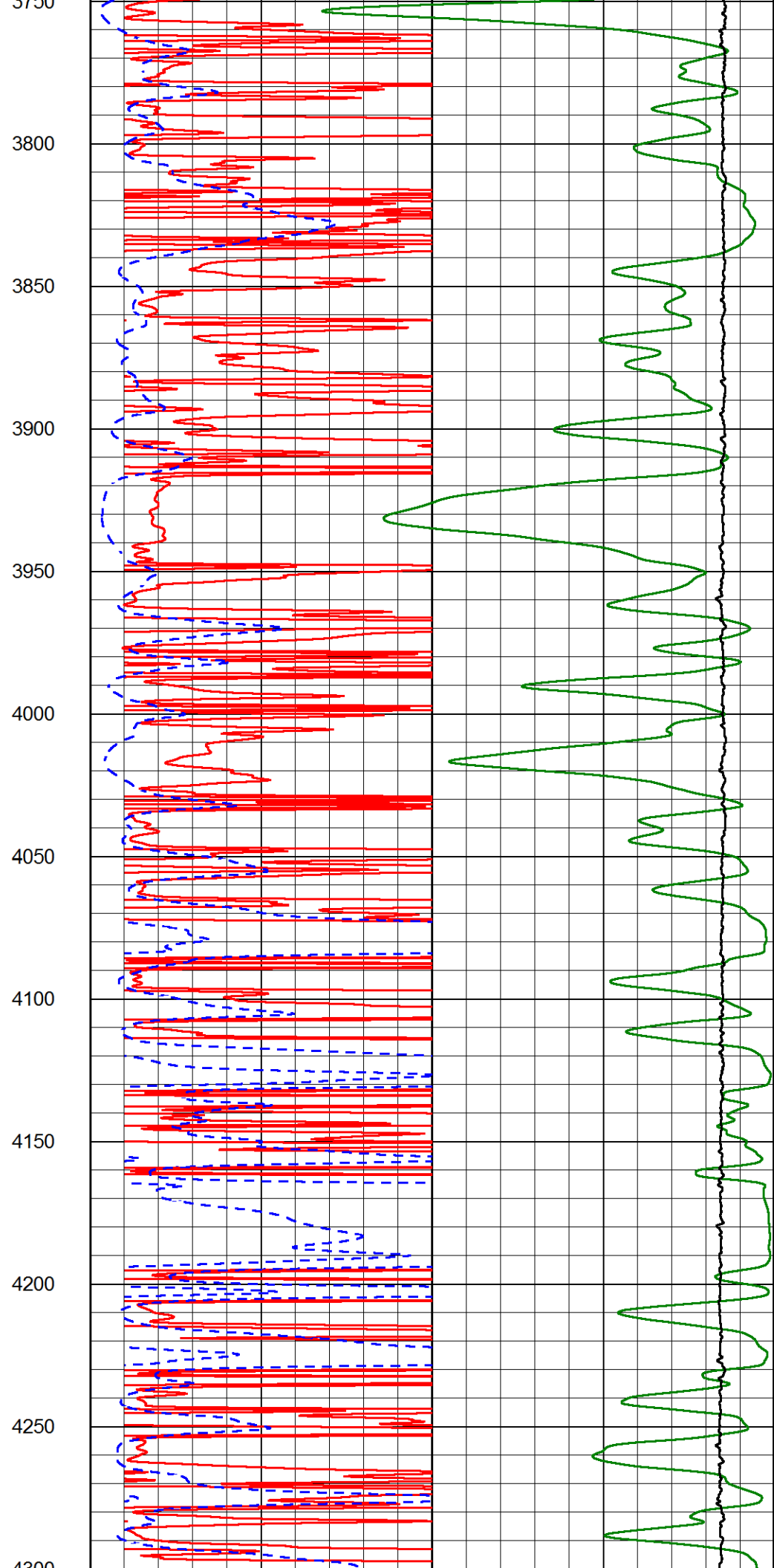
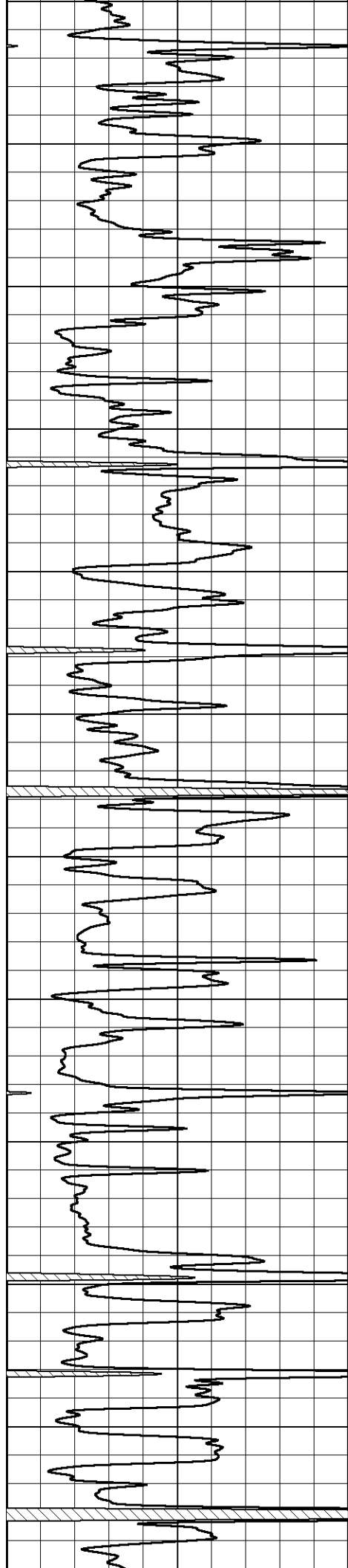


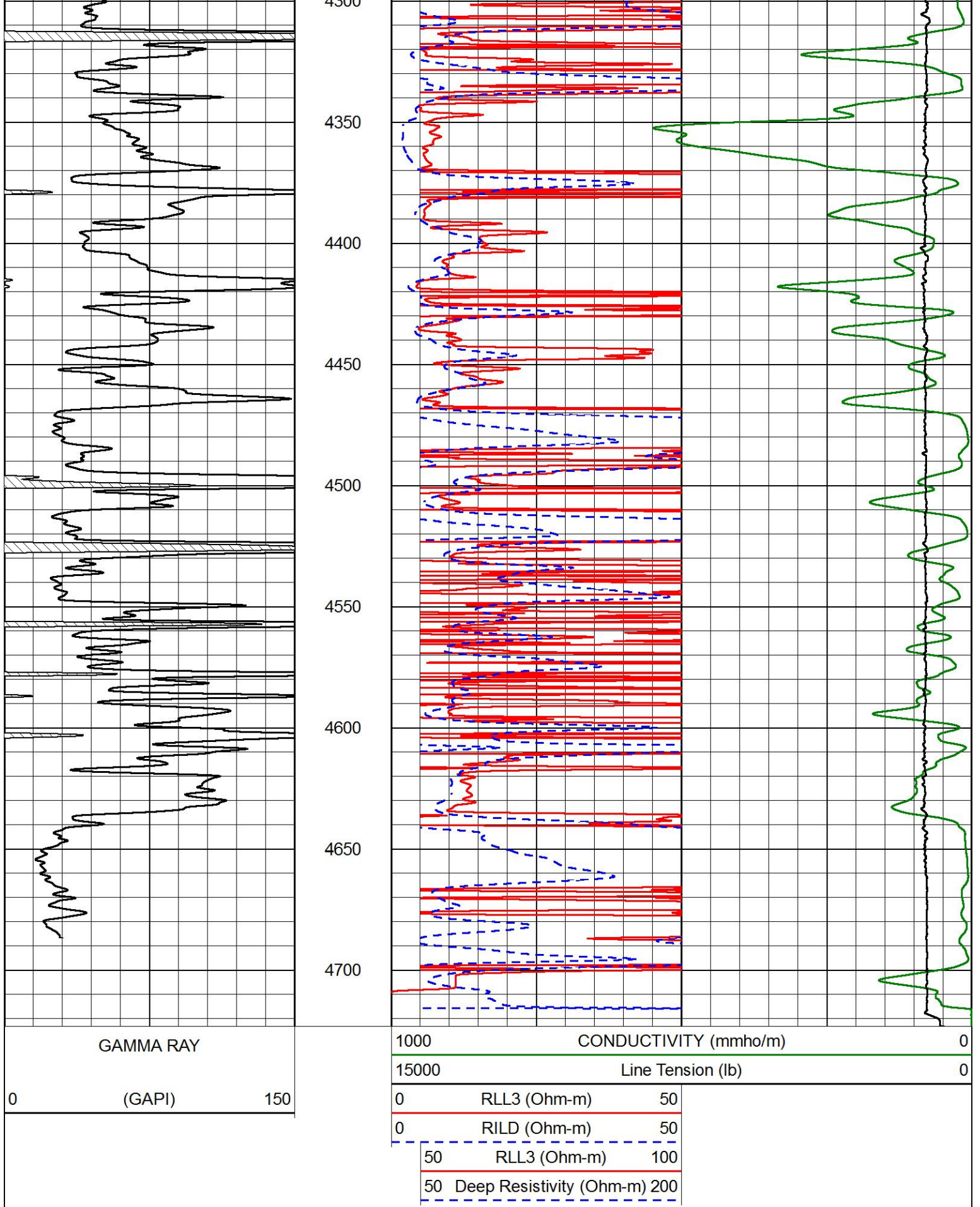












# ANHYDRITE SECTION

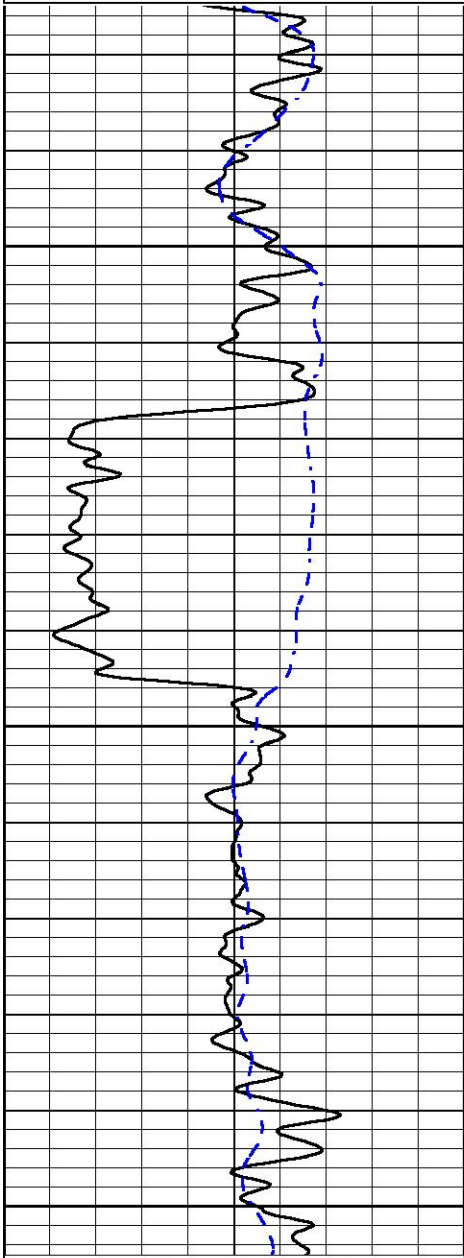
MAIN PASS



Database File russell\_ben wieland #14-1.db  
 Dataset Pathname Stack/pass3.4  
 Presentation Format \_dil  
 Dataset Creation Thu Jun 17 22:51:04 2021  
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-200	SP (mV)	0

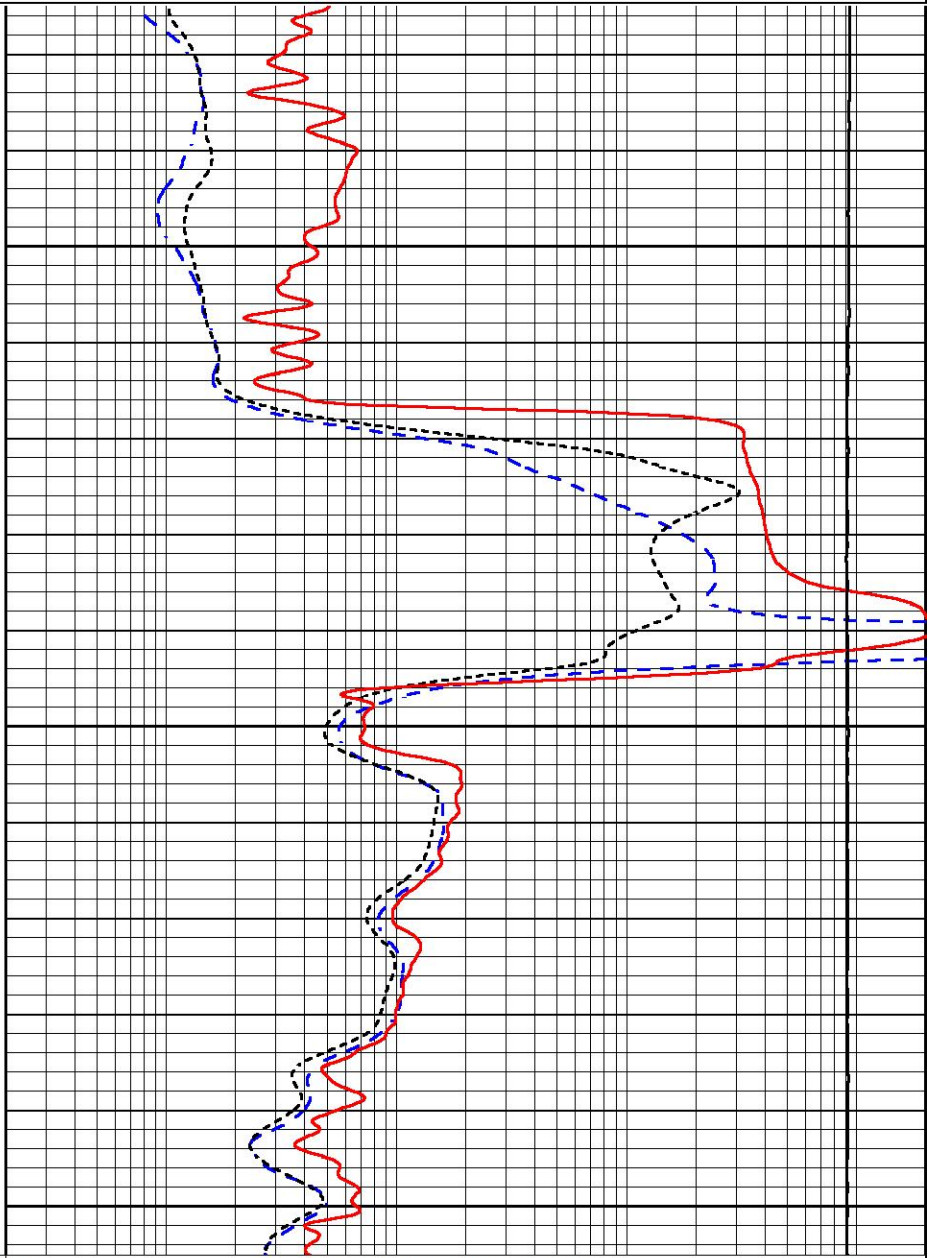
0.2	DEEP RESISTIVITY (Ohm-m)	2000
0.2	MEDIUM RESISTIVITY (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	LINE TENSION (lb)	0



2550

2600

2650



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



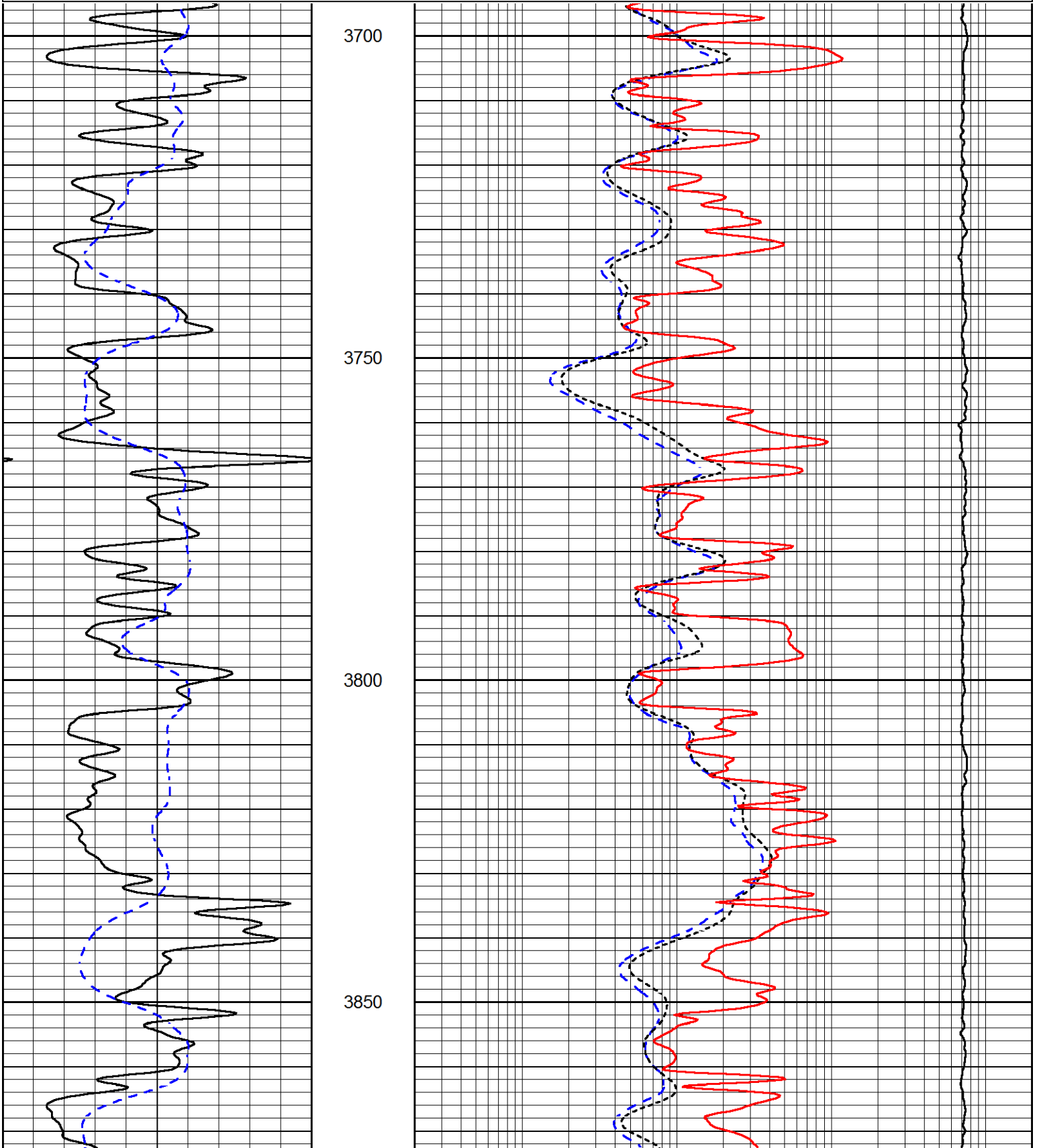
# DETAIL SECTION

MAIN PASS

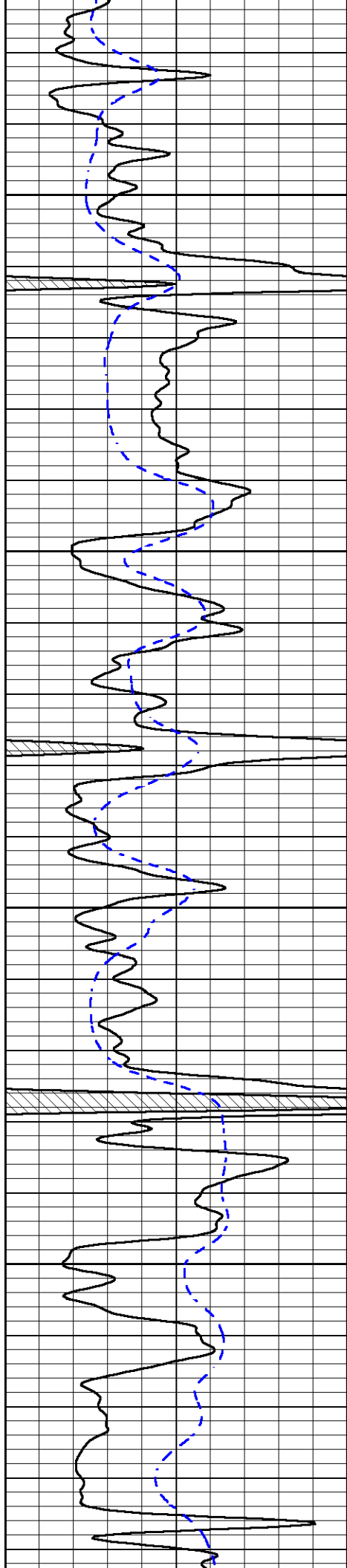
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 Dataset Pathname Stack/pass3.1  
 Presentation Format \_dil  
 Dataset Creation Thu Jun 17 23:17:21 2021  
 Charted by Depth in Feet scaled 1:240

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





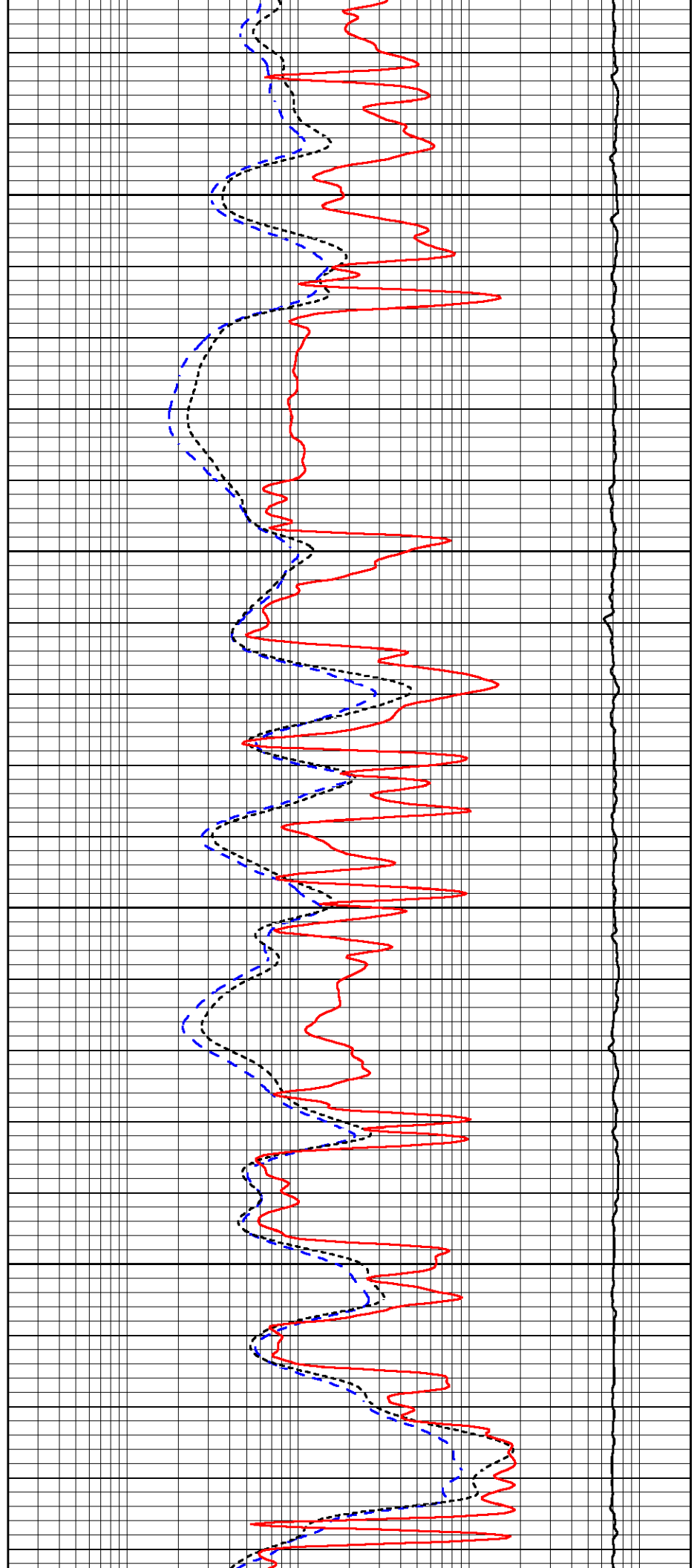


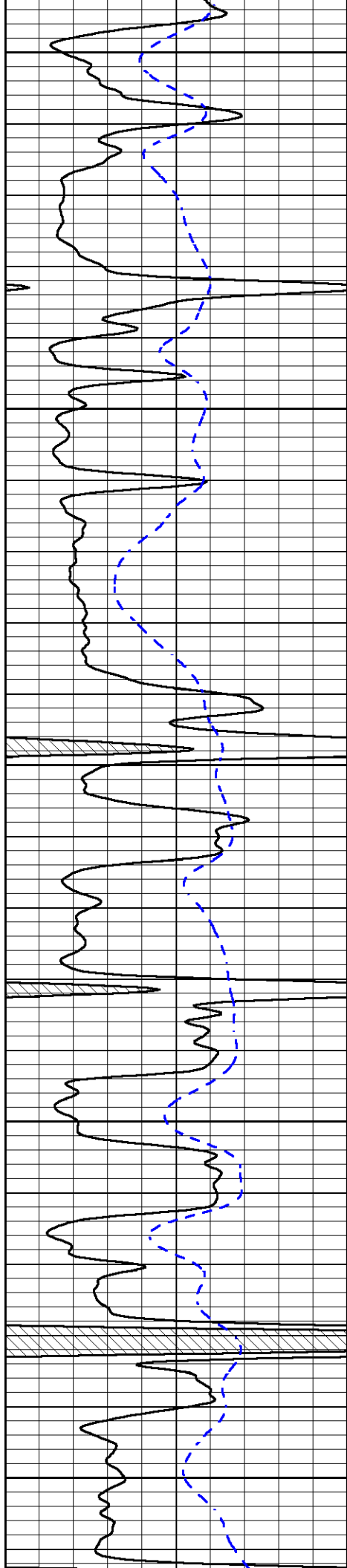
3900

3950

4000

4050





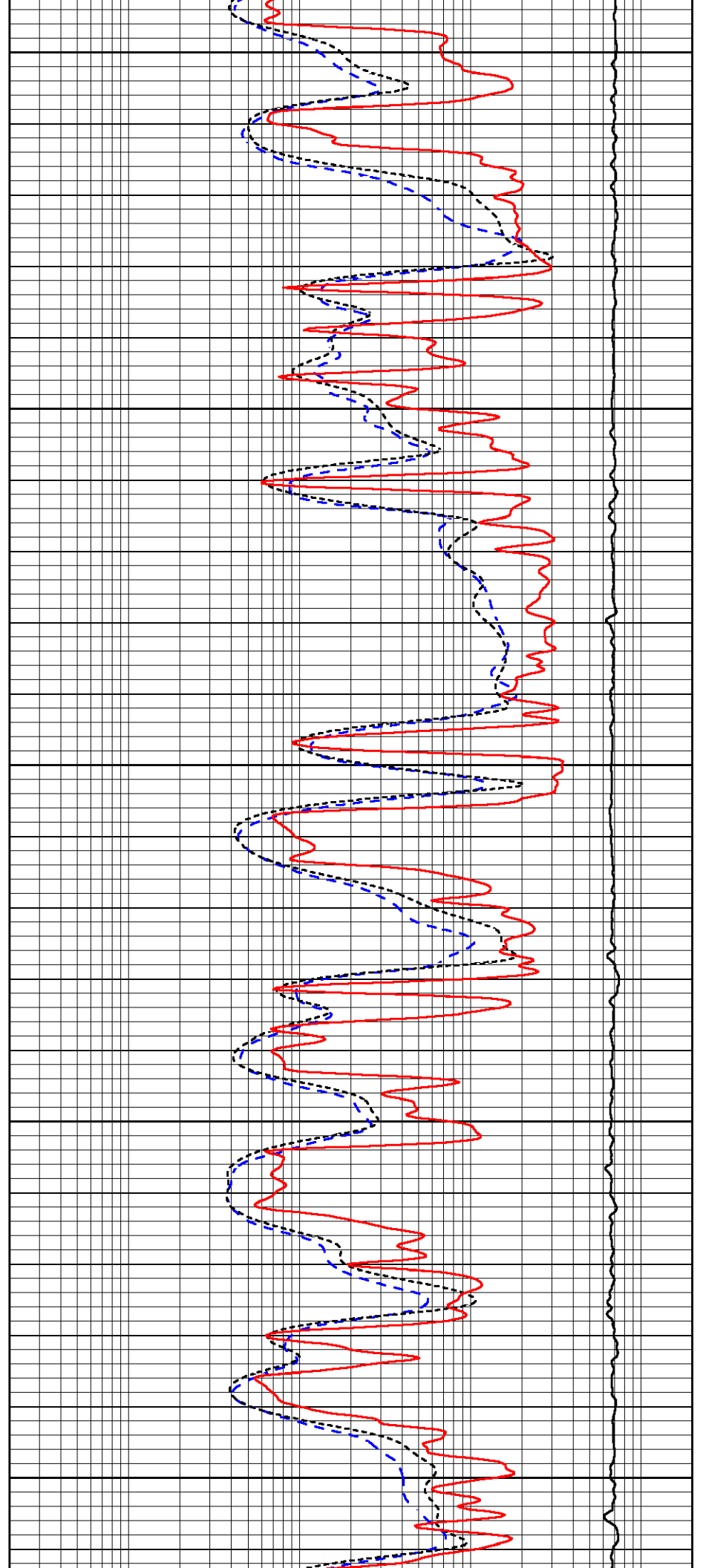
4100

4150

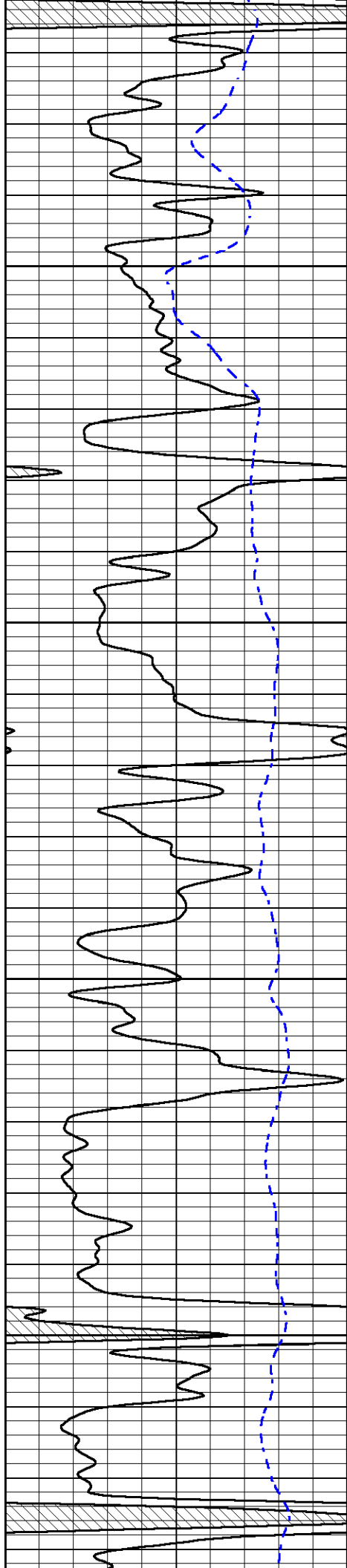
4200

4250

4300





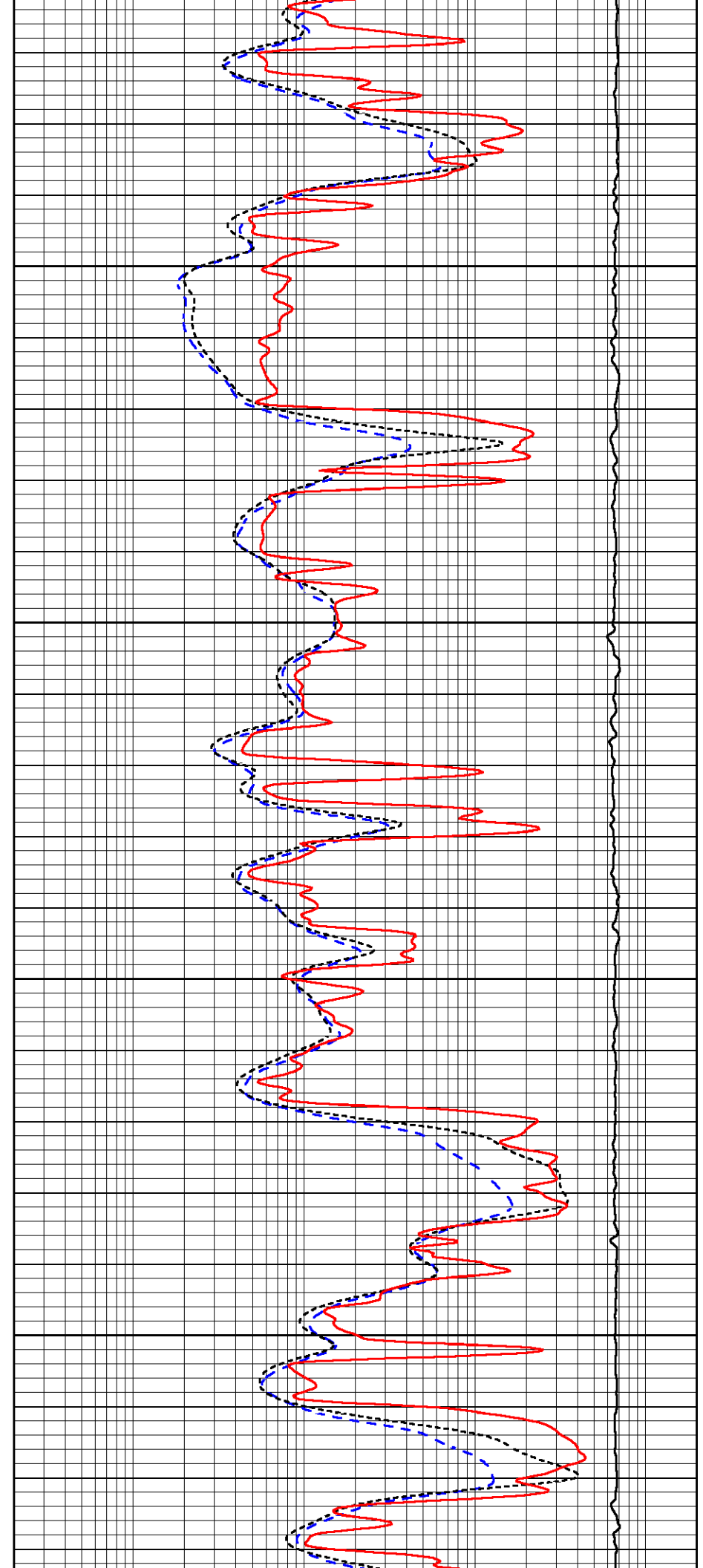


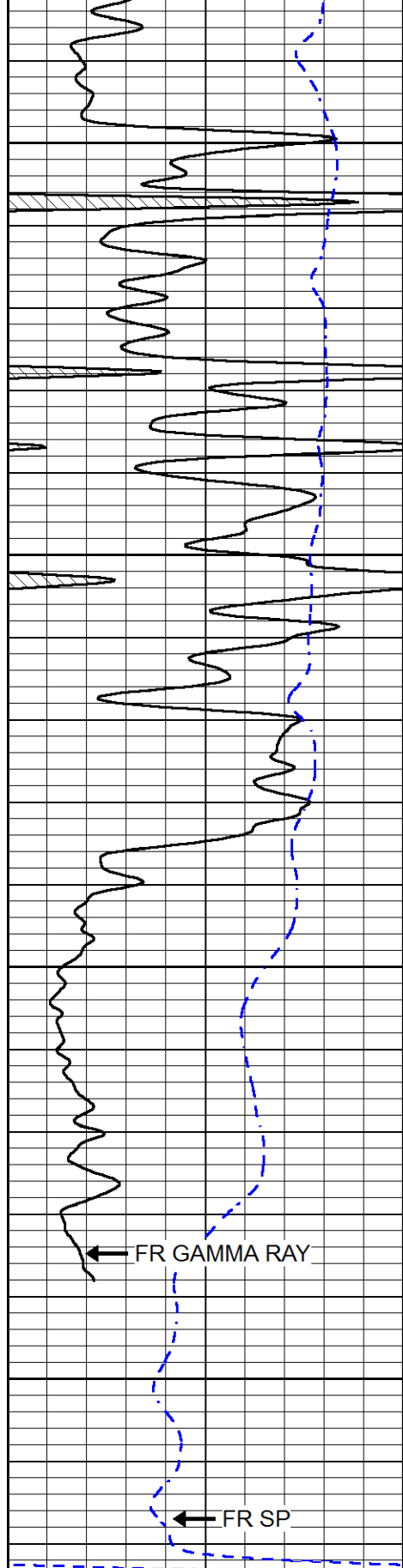
4350

4400

4450

4500





4550

4600

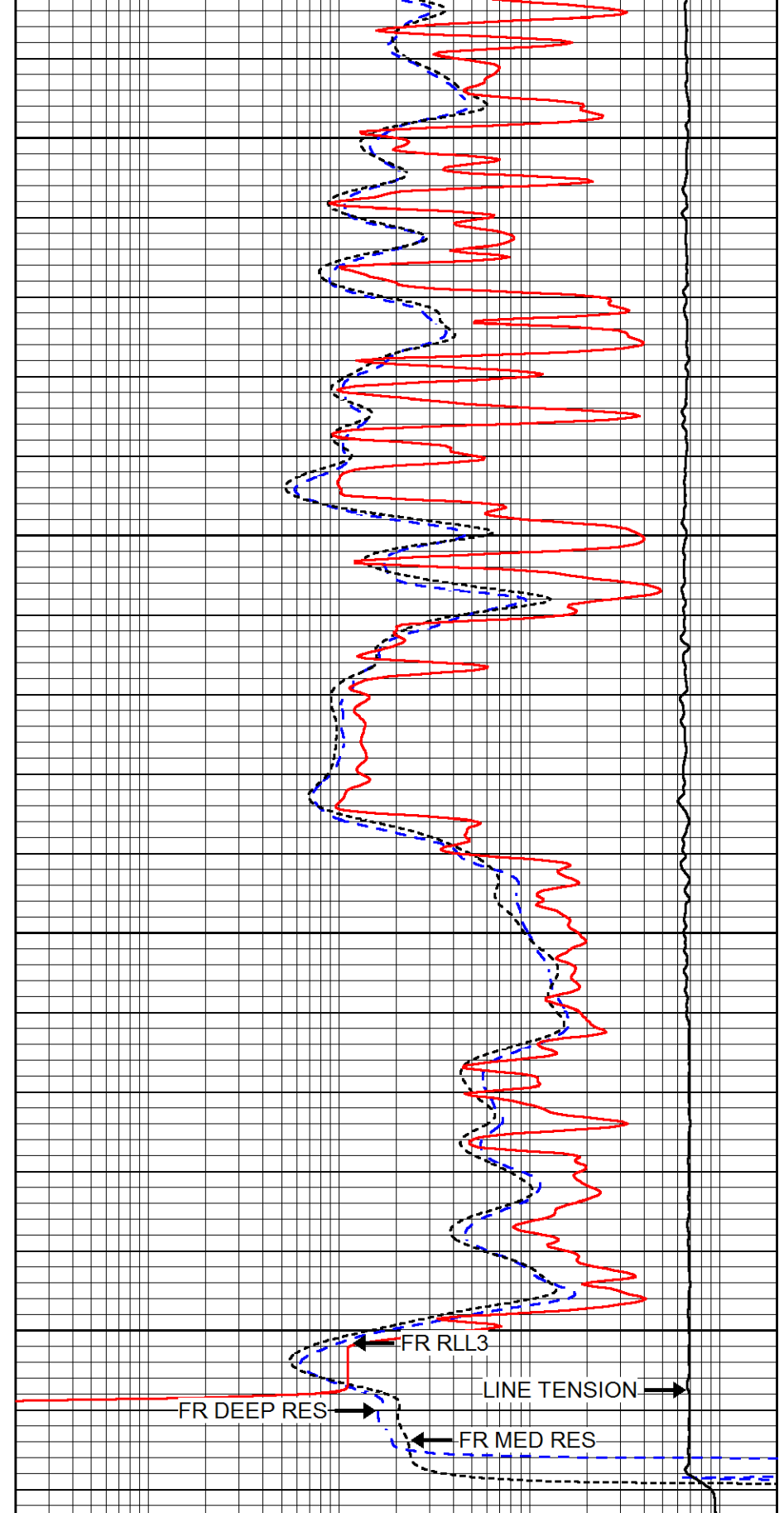
4650

4700

FR GAMMA RAY

FR SP

0	GAMMA RAY (GAPI)	150
-200	SP (mV)	0



FR RLL3

FR DEEP RES

LINE TENSION

FR MED RES

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

DEPTH SECTION



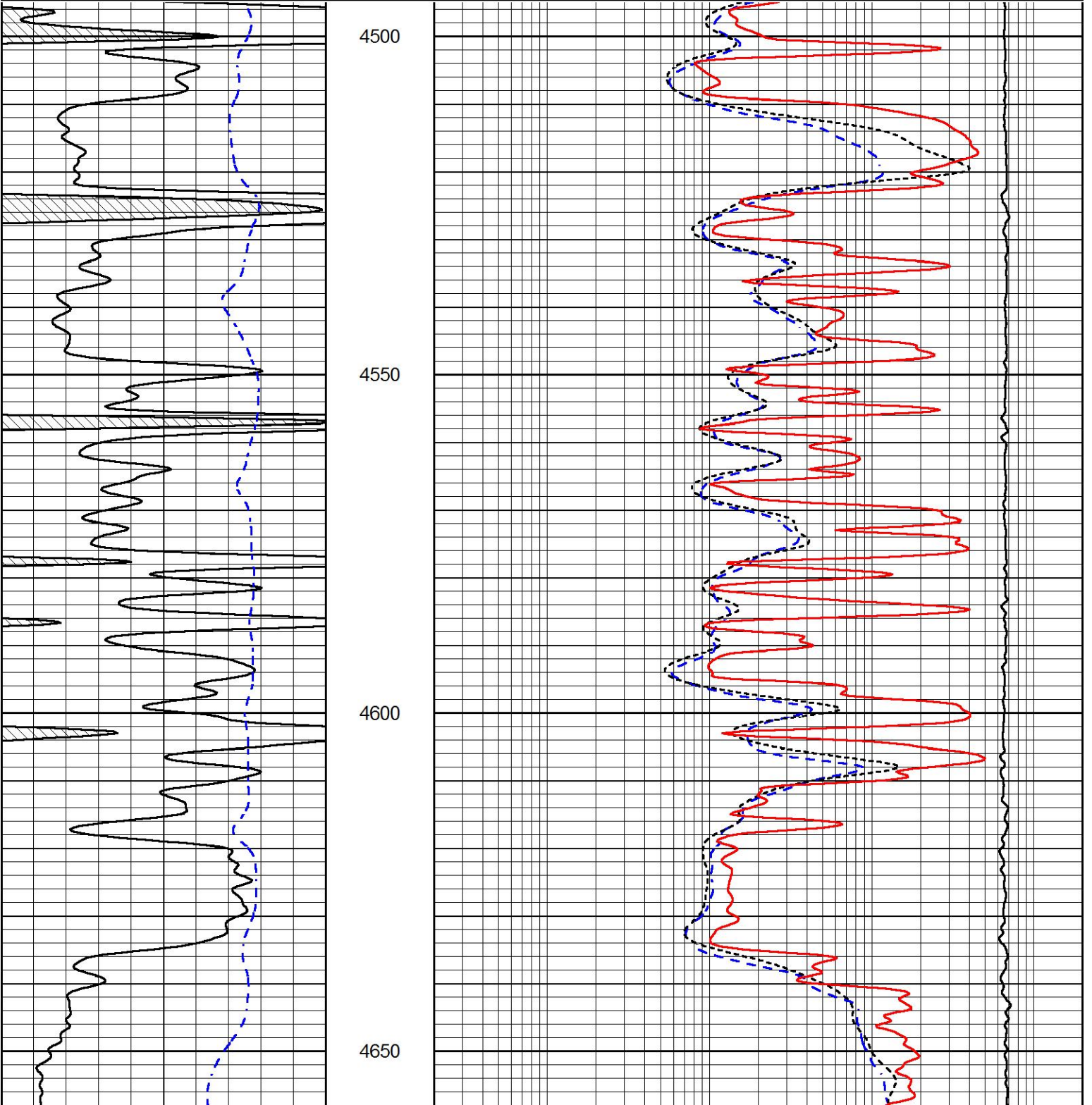
# REPEAT SECTION

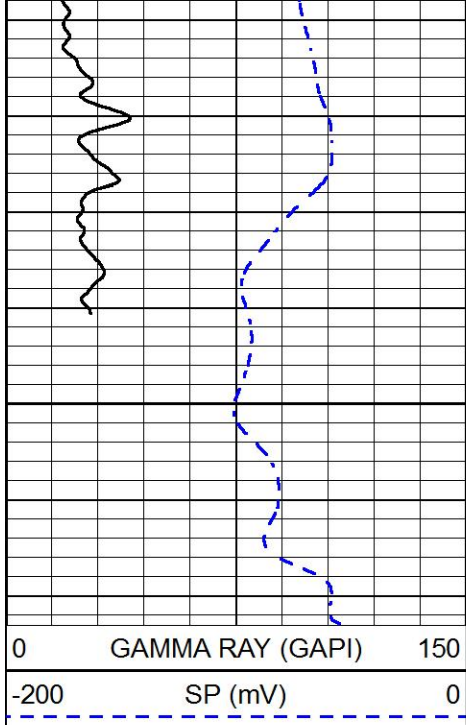
## REPEAT PASS

Database File russell\_ben wieland #14-1.db  
 Dataset Pathname Stack/pass2.1  
 Presentation Format \_dil  
 Dataset Creation Thu Jun 17 22:35:34 2021  
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-200	SP (mV)	0

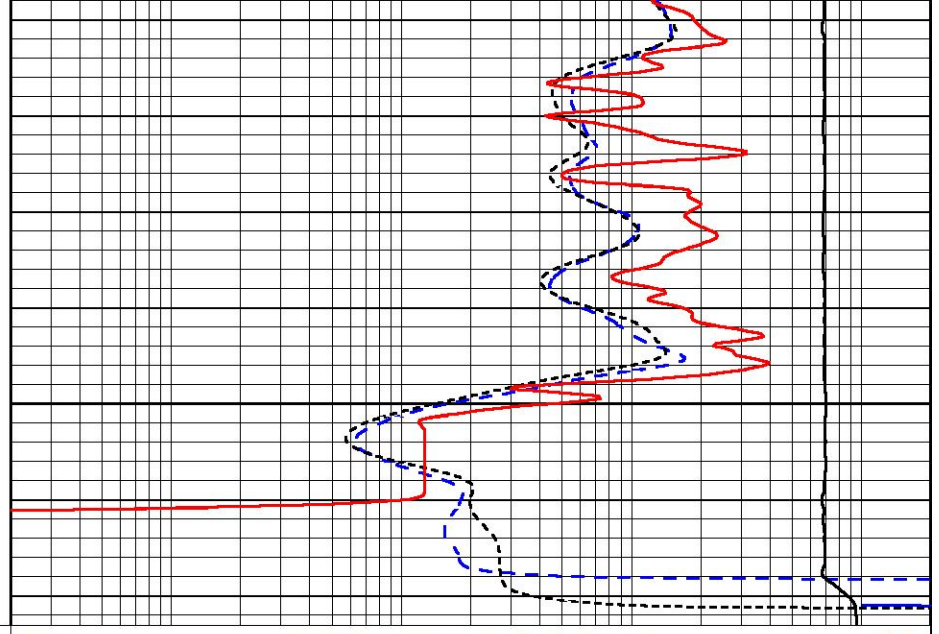
0.2	DEEP RESISTIVITY (Ohm-m)	2000
0.2	MEDIUM RESISTIVITY (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	LINE TENSION (lb)	0





4700

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



Company      Russell Oil, Inc.  
 Well          Ben Wieland #14-1  
 Field         Wildcat  
 County        Logan  
 State          Kansas