



DUAL INDUCTION LOG

Company	RITCHIE EXPLORATION, INC.			
Well	#1 FISCHER UNIT 3C			
Field	LIX			
County	FORD	State	KANSAS	
Location:	API # : 15-057-21072-0000		Other Services CDL/CNL/PE MEL/SONIC	
Permanent Datum	226' FSL & 267' FWL SW - SW - SW		Elevation K.B. 2530 D.F. 2528 G.L. 2518	
Log Measured From	SEC 3 TWP 26S RGE 24W			
Drilling Measured From	GROUND LEVEL Elevation 2518 KELLY BUSHING 12' A.G.L. KELLY BUSHING			
Date	6/30/22			
Run Number	ONE			
Depth Driller	4965			
Depth Logger	4954			
Bottom Logged Interval	4952			
Top Log Interval	00			
Casing Driller	8 5/8"@354'			
Casing Logger	350			
Bit Size	7 7/8"			
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES: 3,150 PPM		
Density / Viscosity	9.3/60			
pH / Fluid Loss	11.0/8.8			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	1.00@74F			
Rmf @ Meas. Temp	.750@74F			
Rmc @ Meas. Temp	1.20@74F			
Source of Rmf / Rmc	MEASURED			
Rm @ BHT	.592@125F			
Time Circulation Stopped	3 HOURS			
Time Logger on Bottom	1:30 A.M.			
Maximum Recorded Temperature	125F			
Equipment Number	8916			
Location	HAYS, KANSAS			
Recorded By	JEFF LUEBBERS			
Witnessed By	JOHN GOLDSMITH			

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

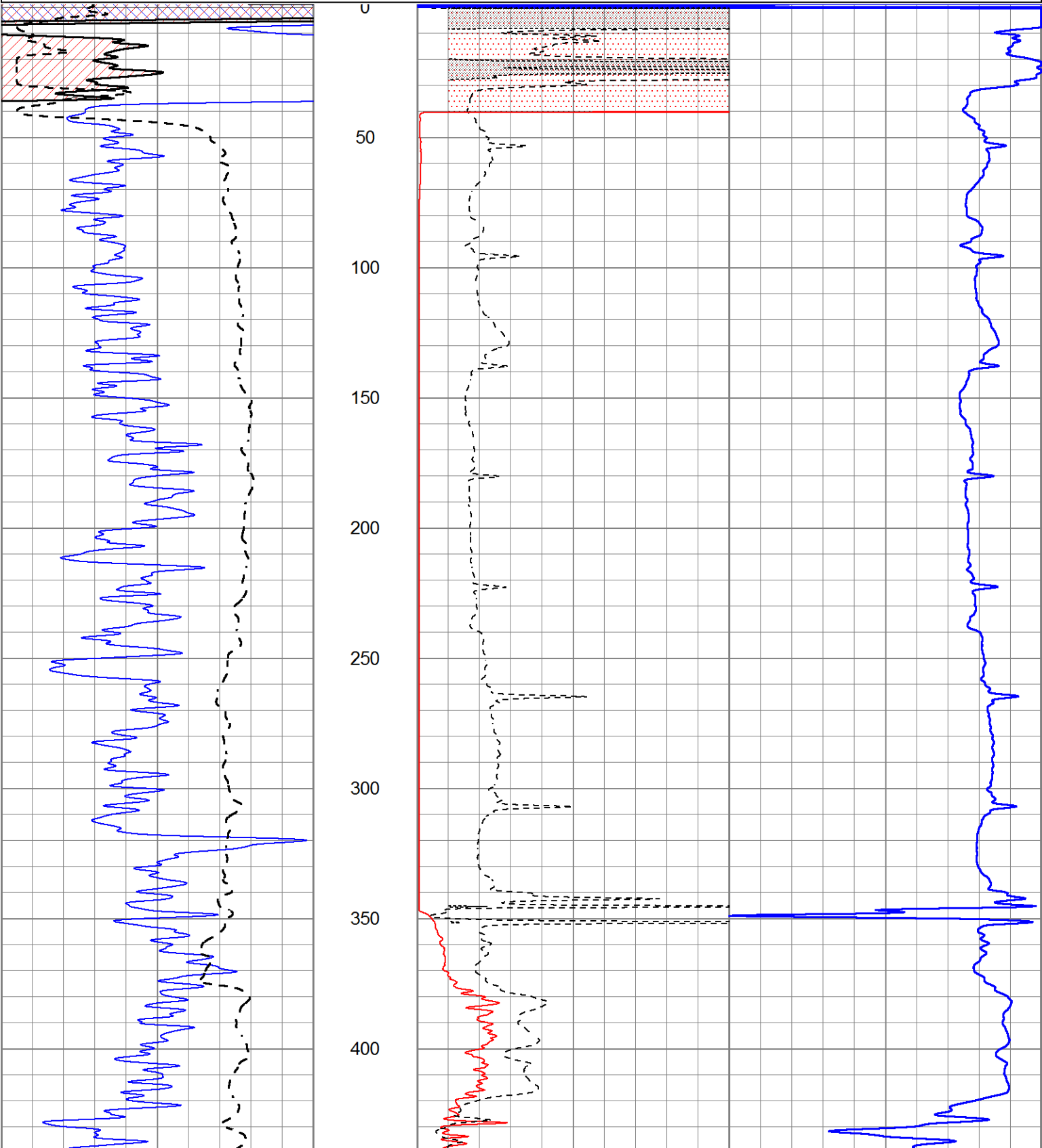
Comments

THANK YOU FOR USING ELI WIRELINE, HAYS, KS. (785) 628-6395
DIRECTIONS:
E. OF DODGE CITY, KS. TO (HWY 50 & 283 JUNCTION) 2N. ON HWY 283 TO "HORSESHOE RD.",
2W., N. INTO

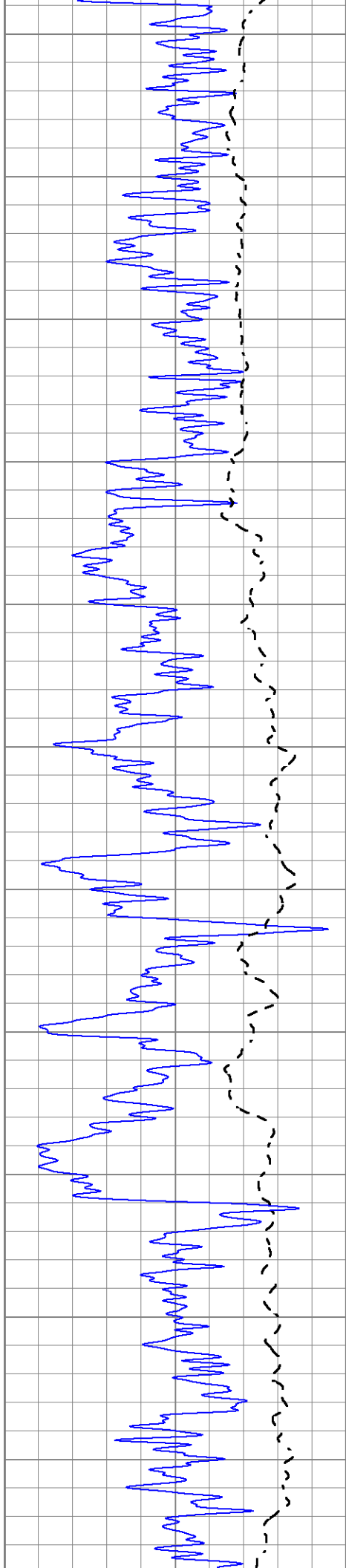
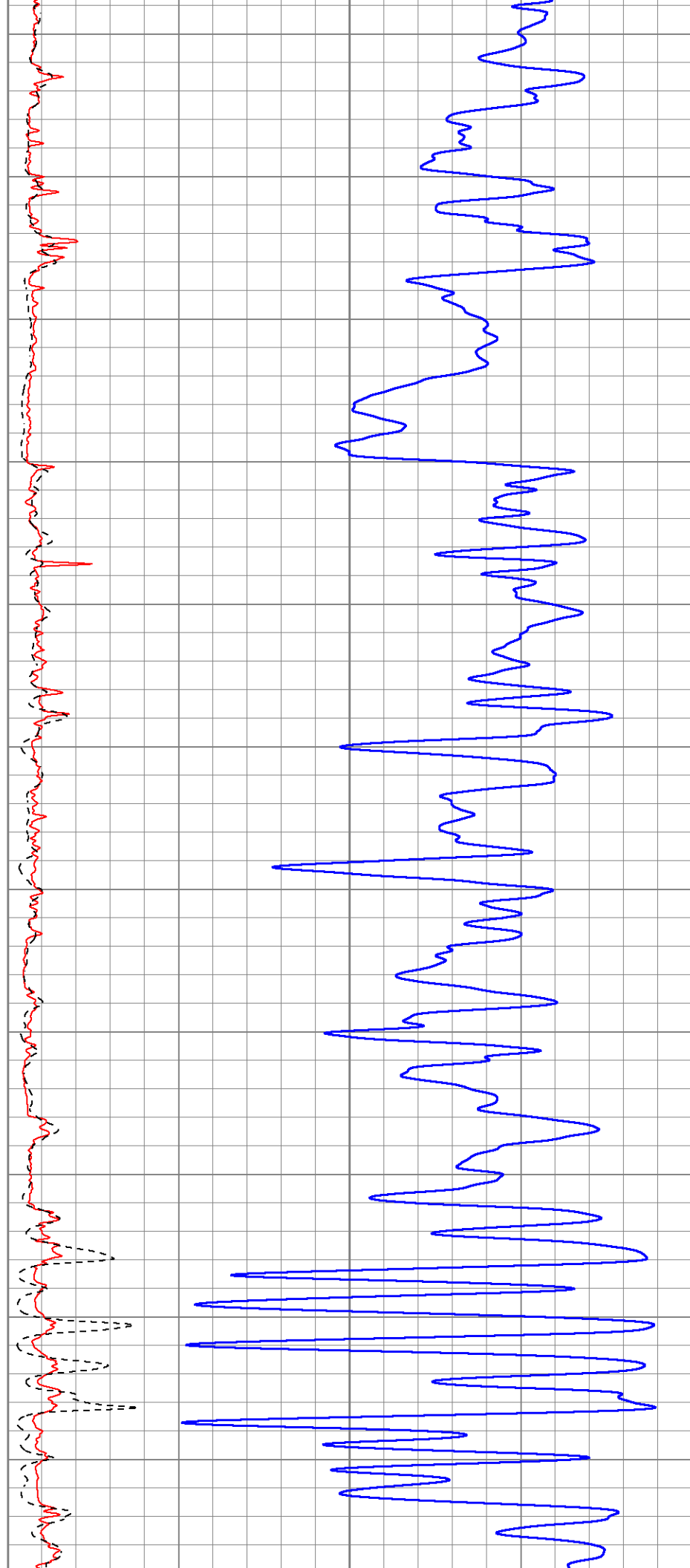


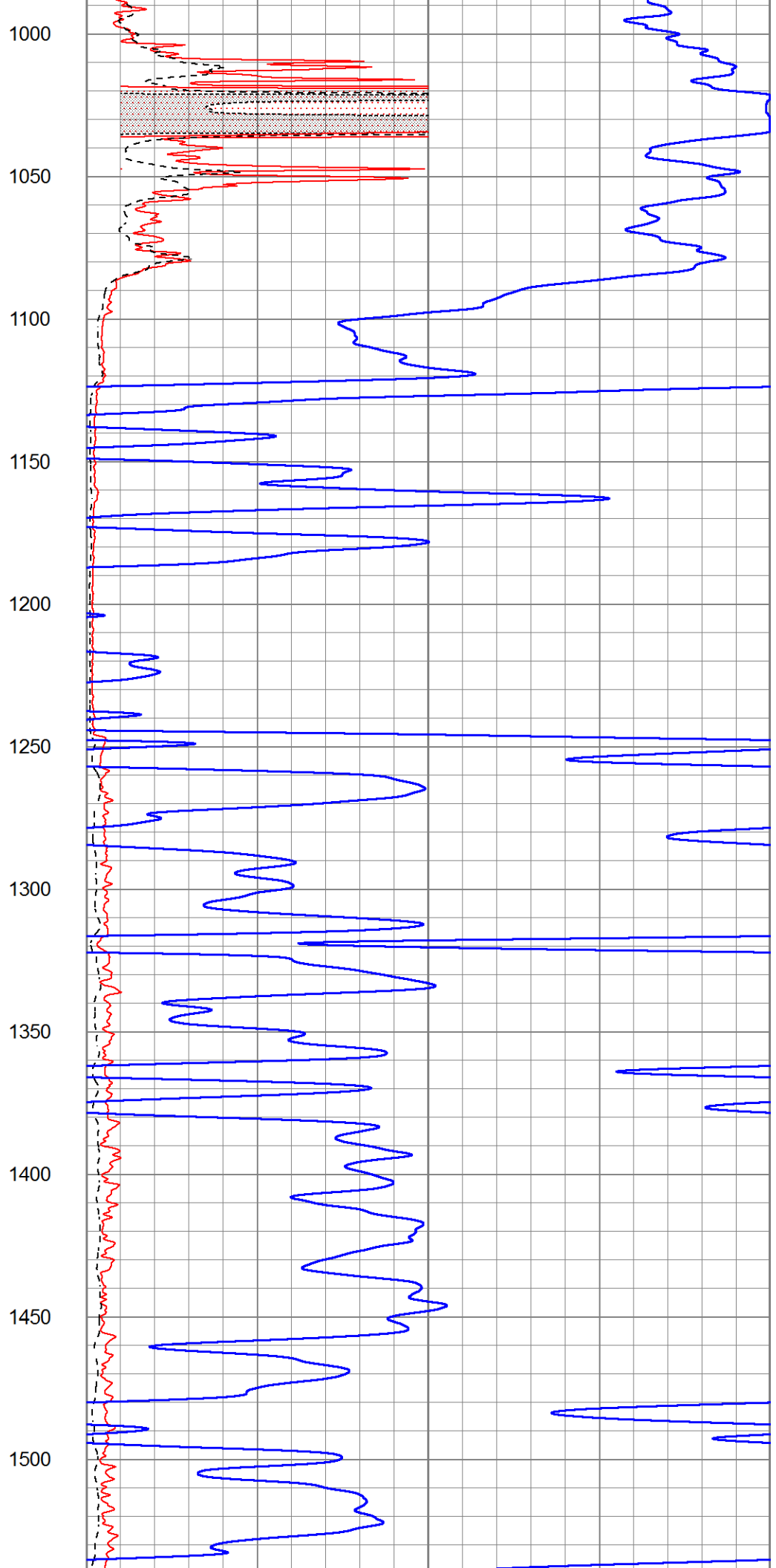
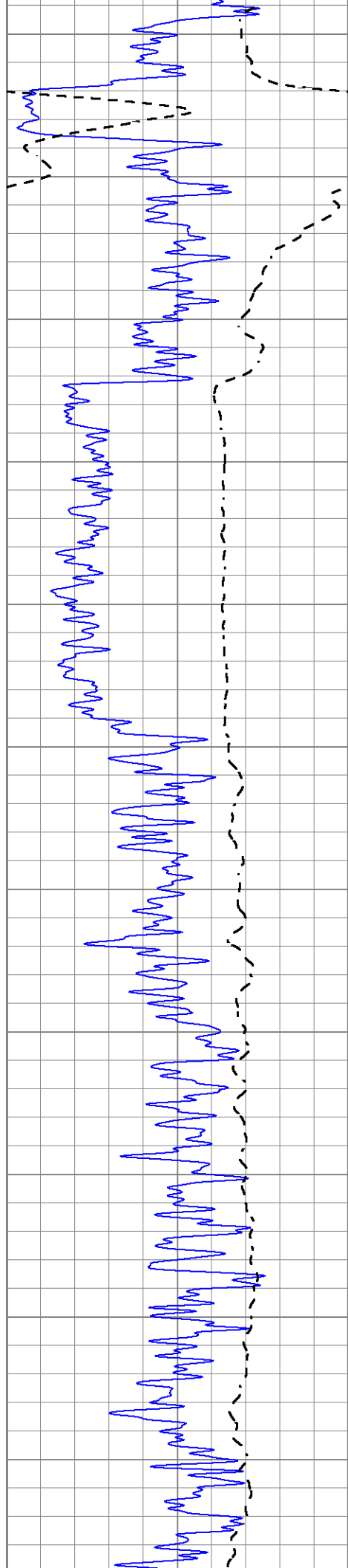
MAIN SECTION

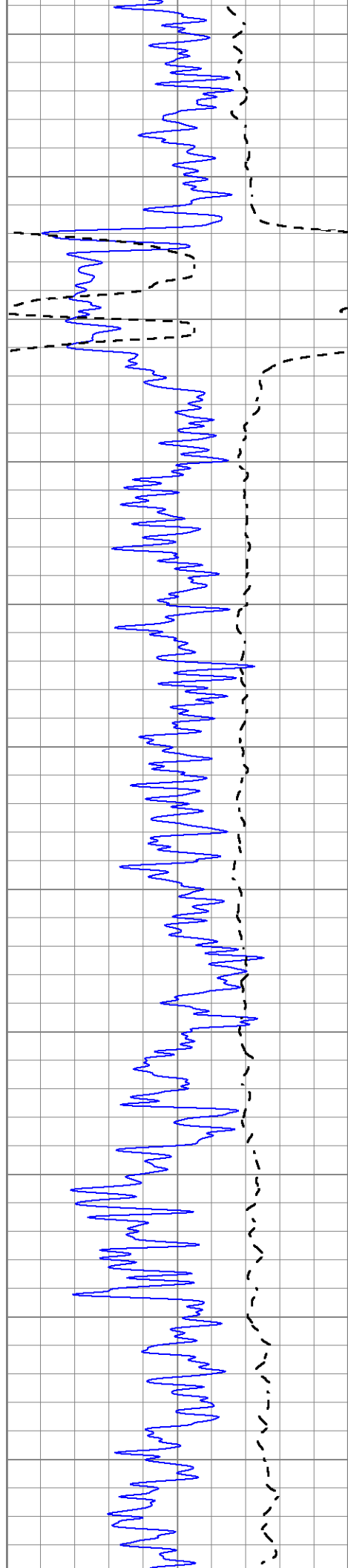
0	Gamma Ray (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
-----			0	RILD (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

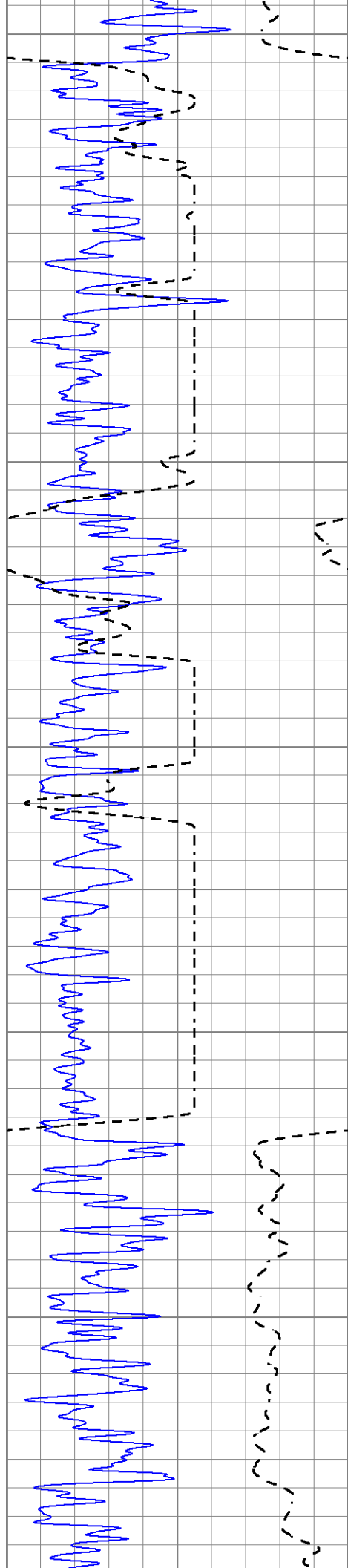


450
500
550
600
650
700
750
800
850
900
950









2100

2150

2200

2250

2300

2350

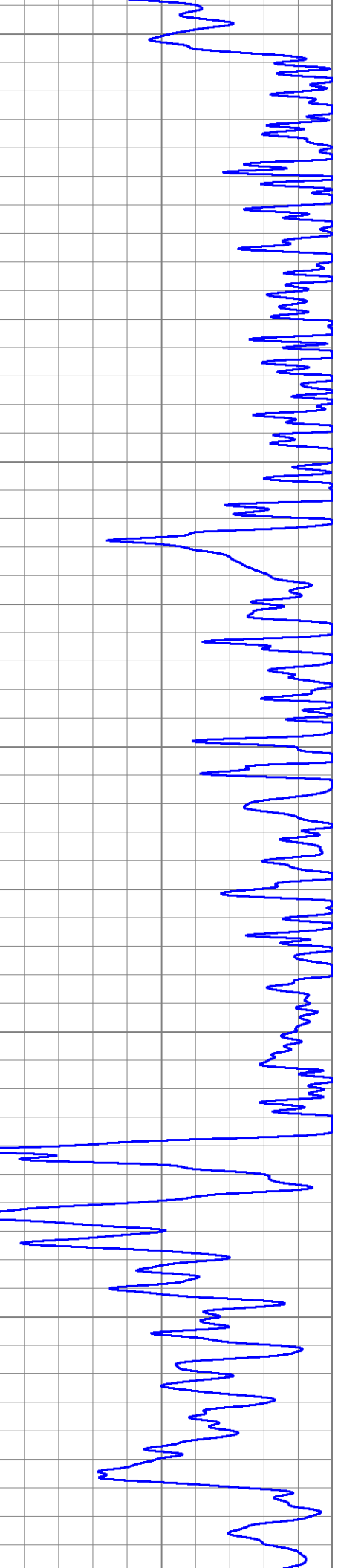
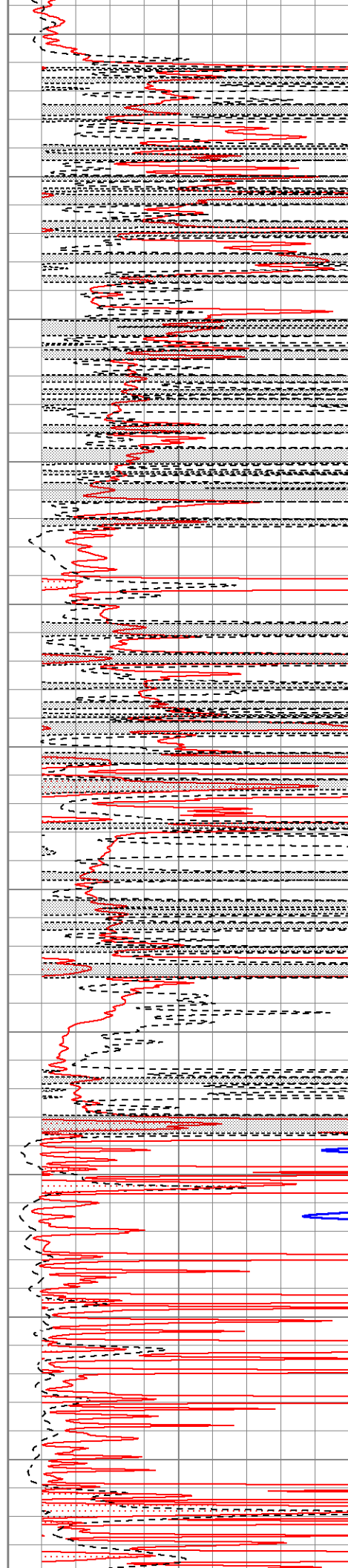
2400

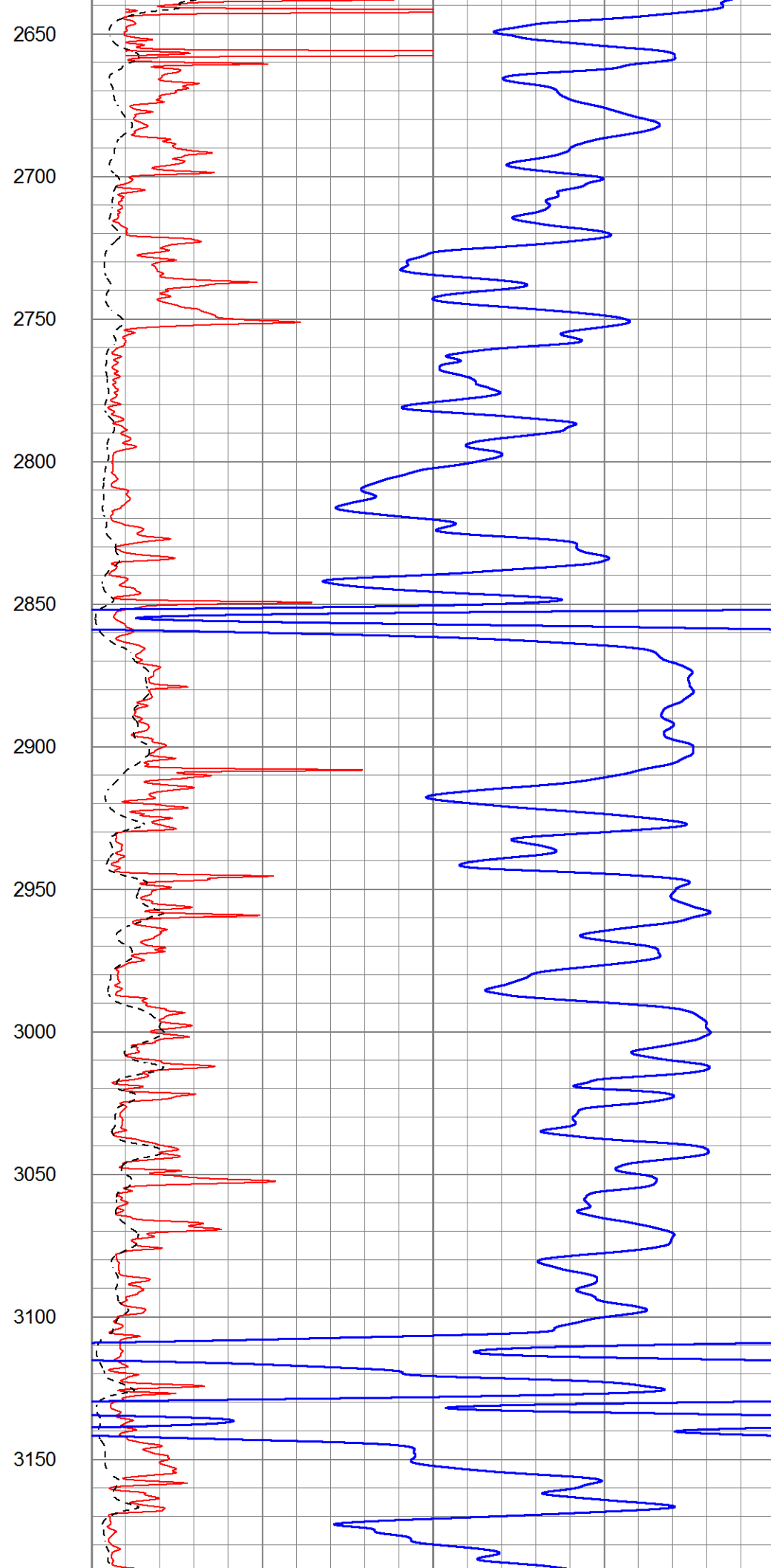
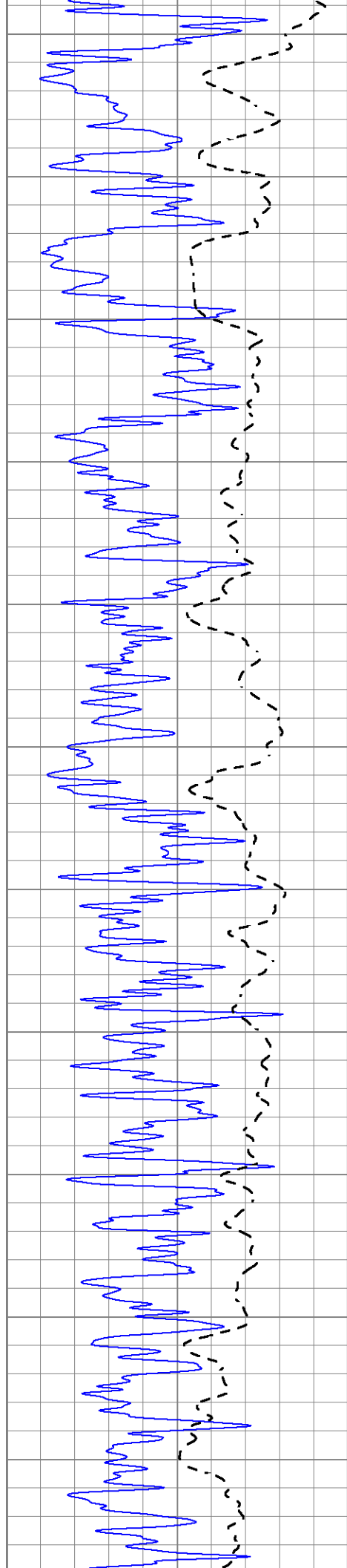
2450

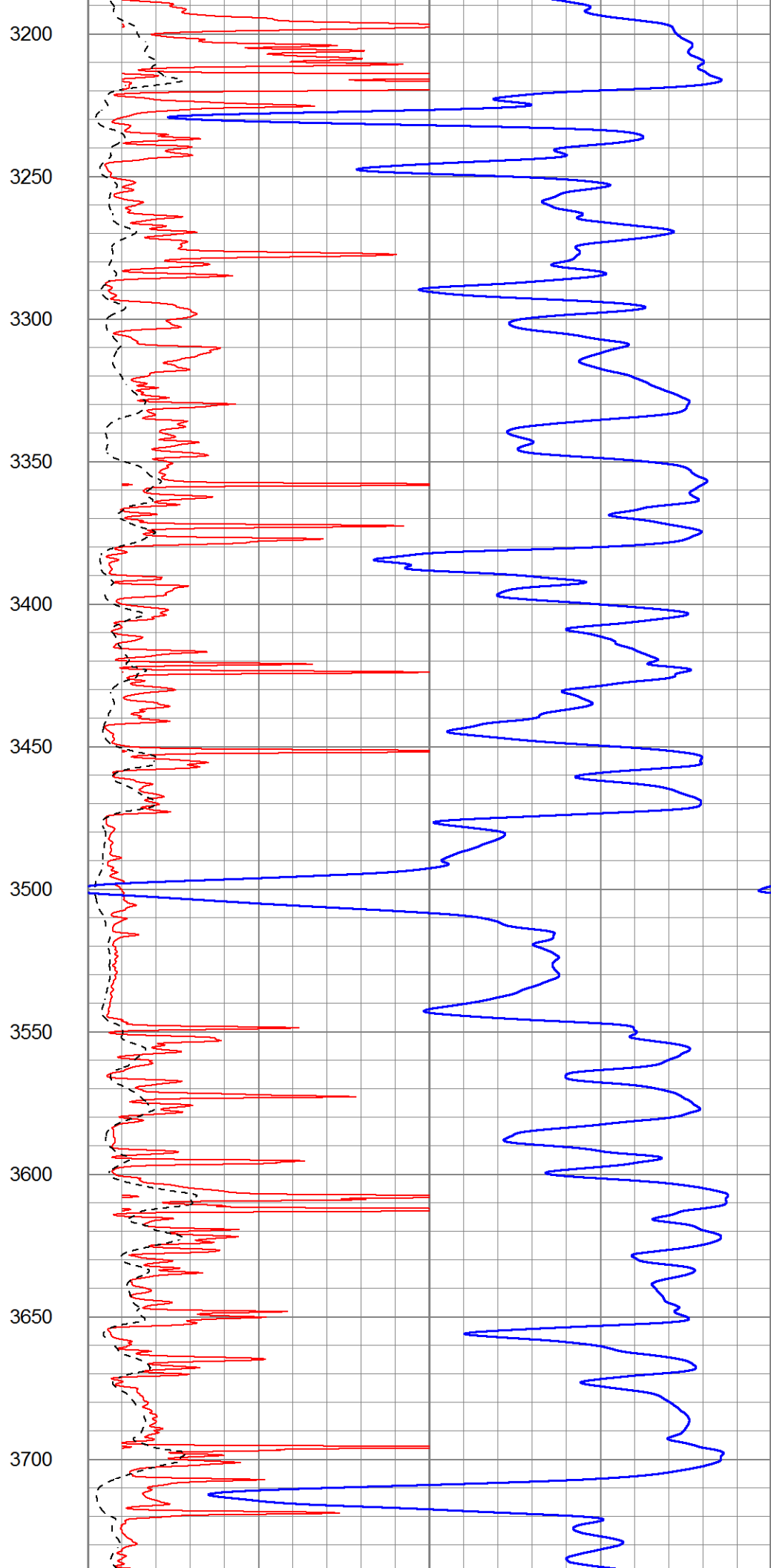
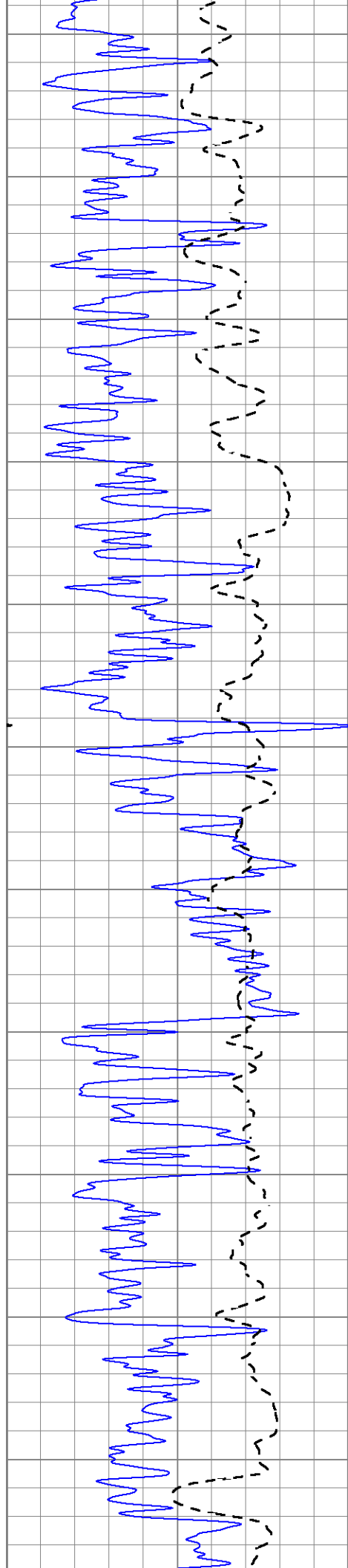
2500

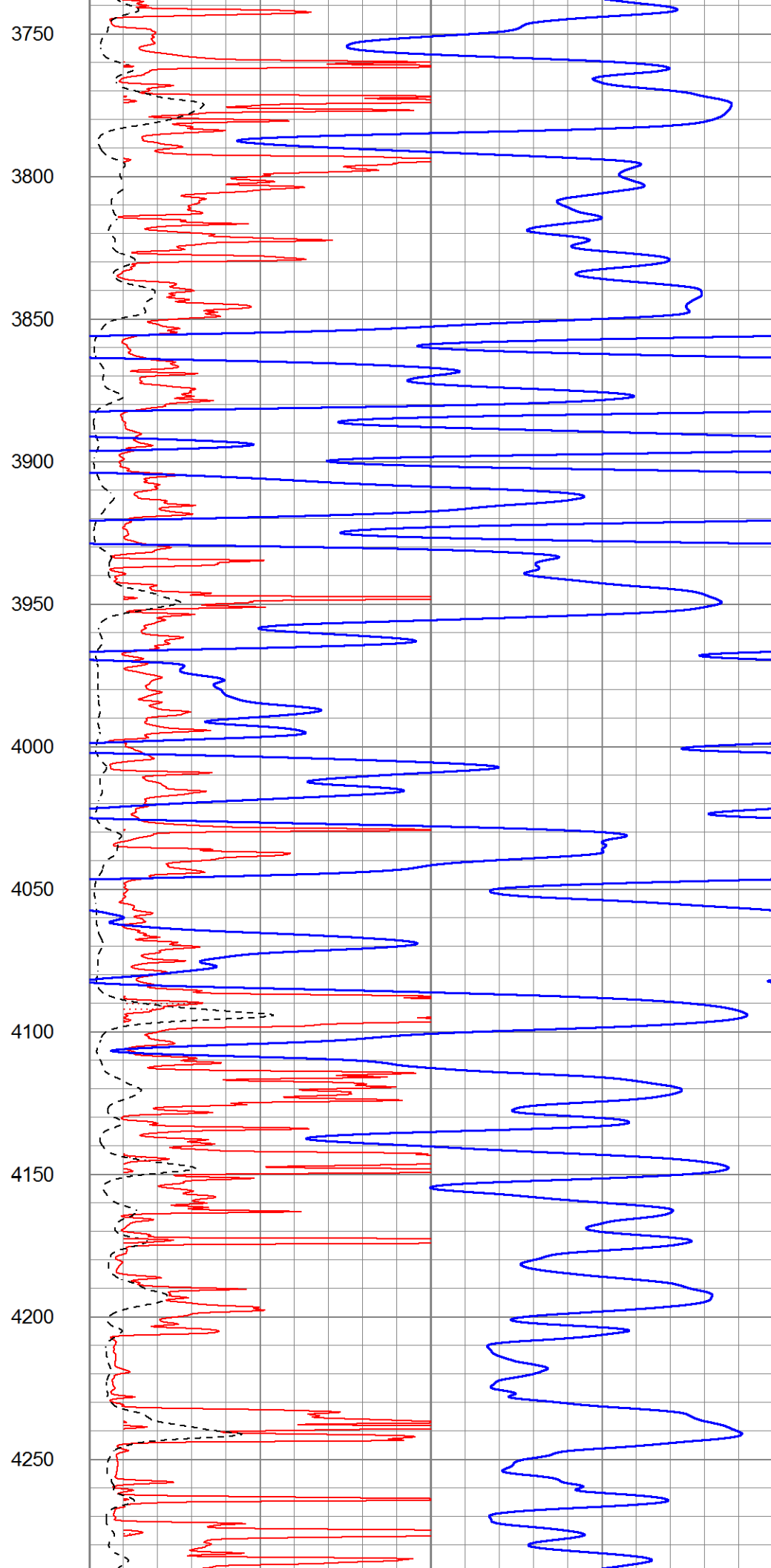
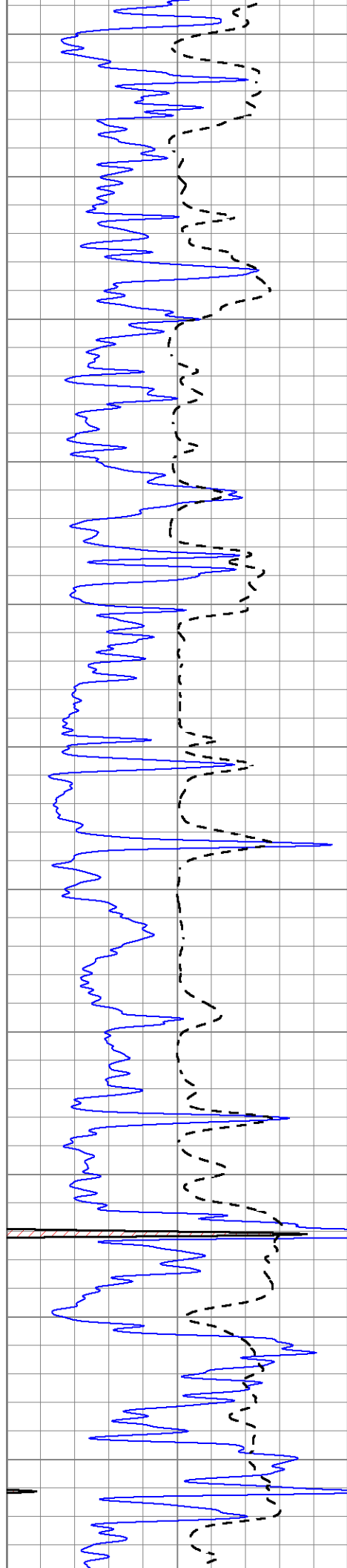
2550

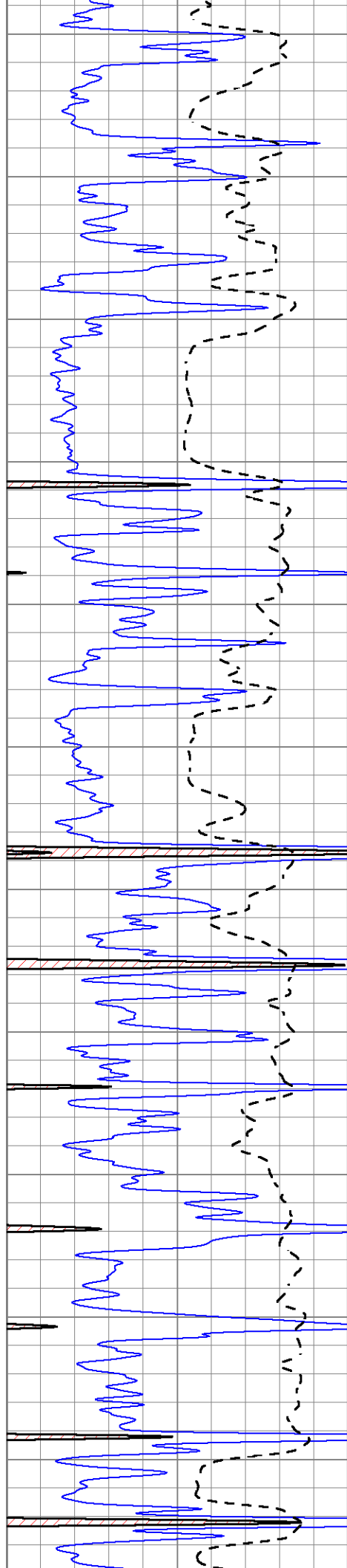
2600











4300

4350

4400

4450

4500

4550

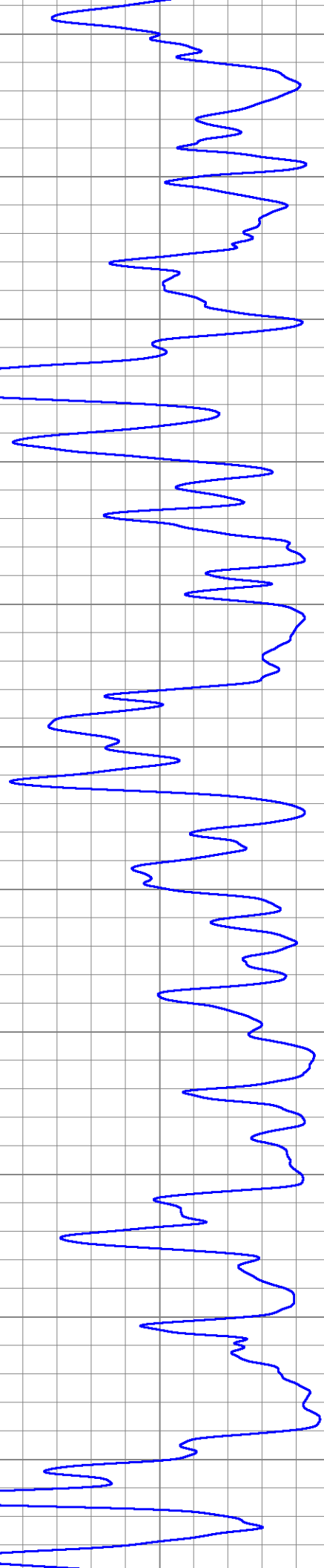
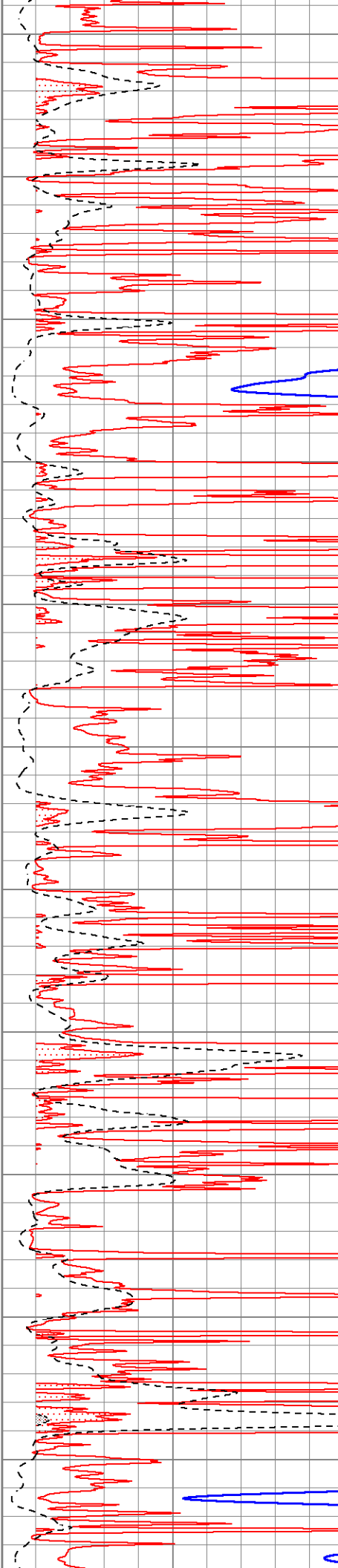
4600

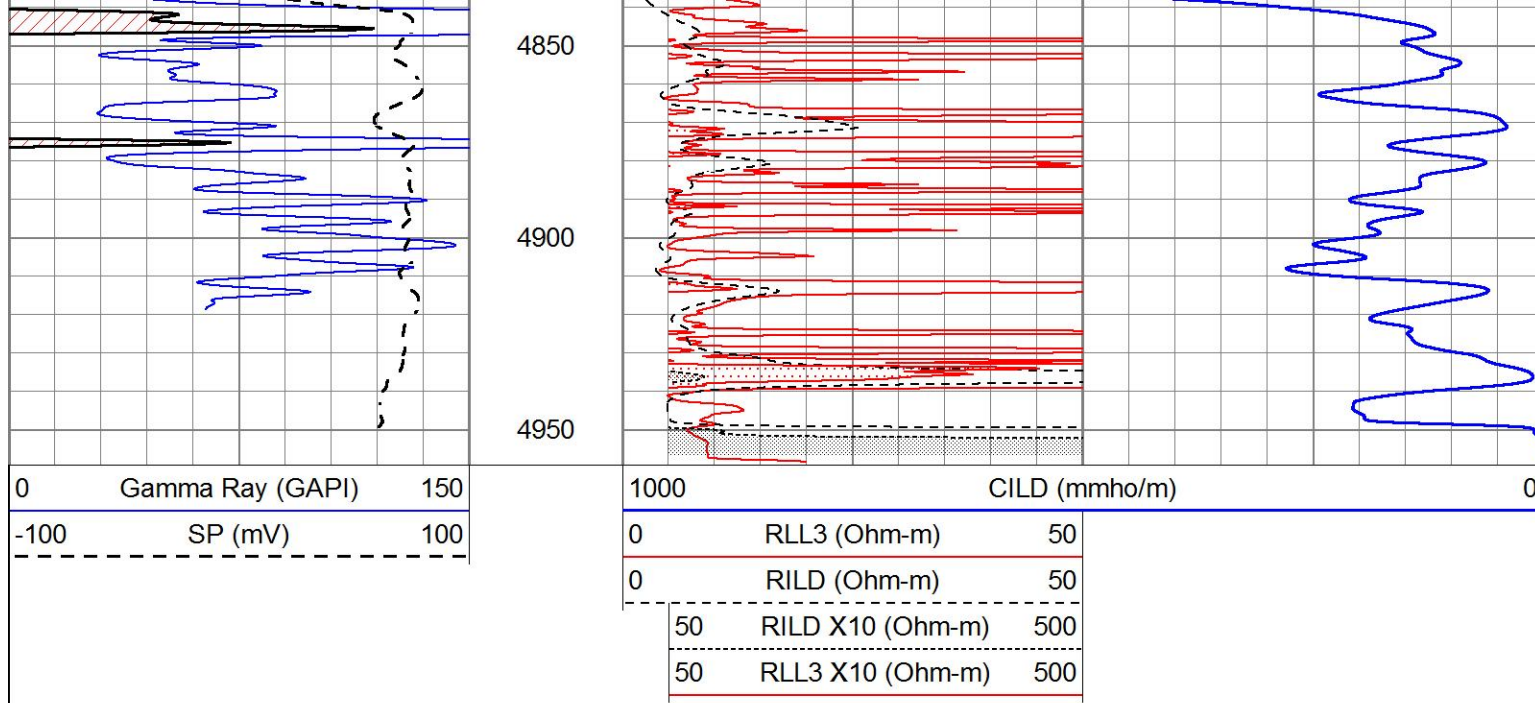
4650

4700

4750

4800

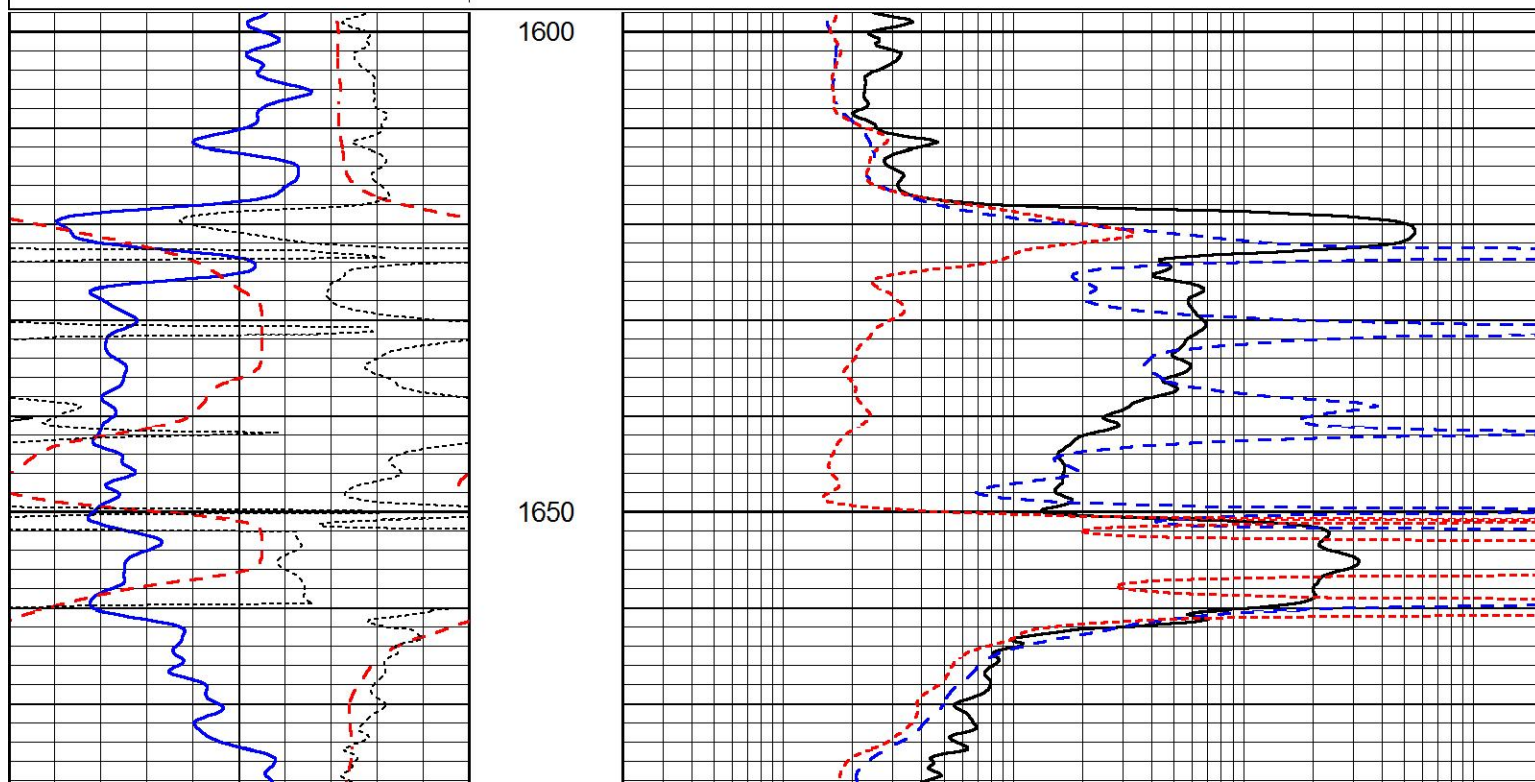


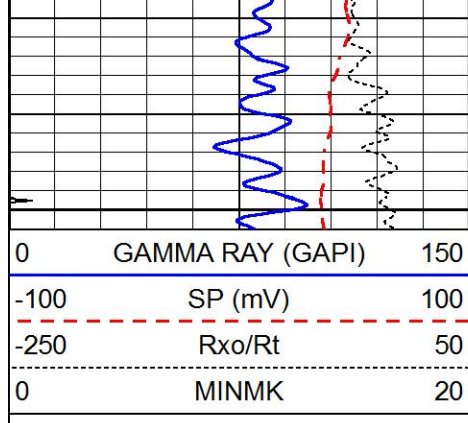


ANHYDRITE

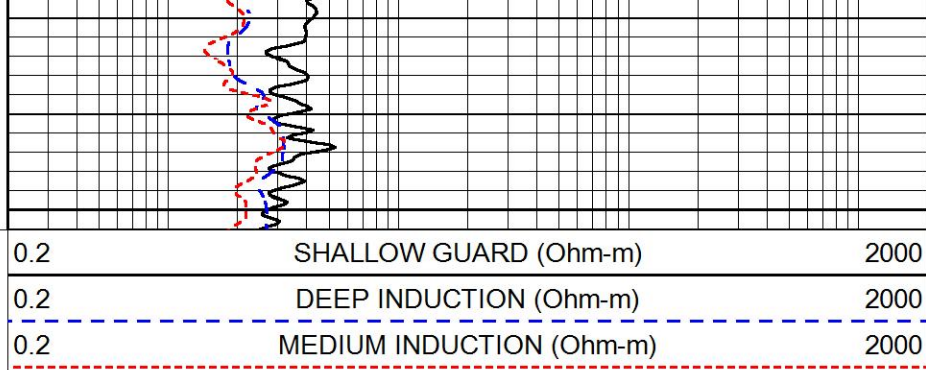
Database File 6701pe.db
 Dataset Pathname pass3.1A
 Presentation Format _dil
 Dataset Creation Thu Jun 30 03:28:52 2022
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			



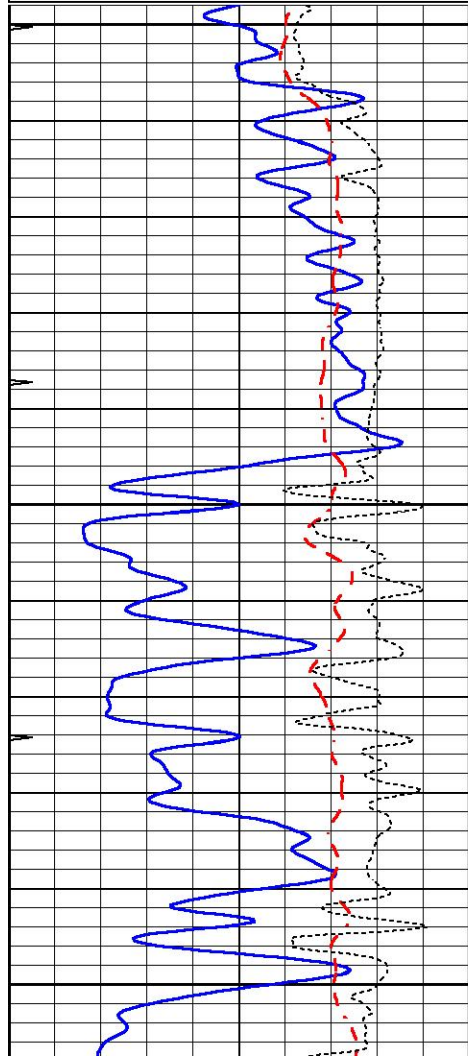
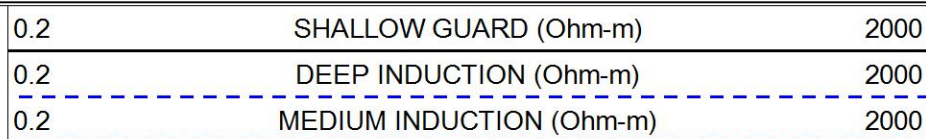
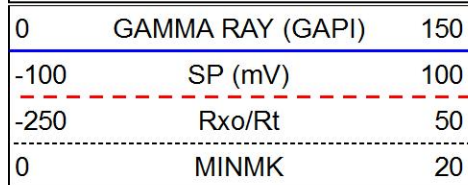


1700



MAIN SECTION

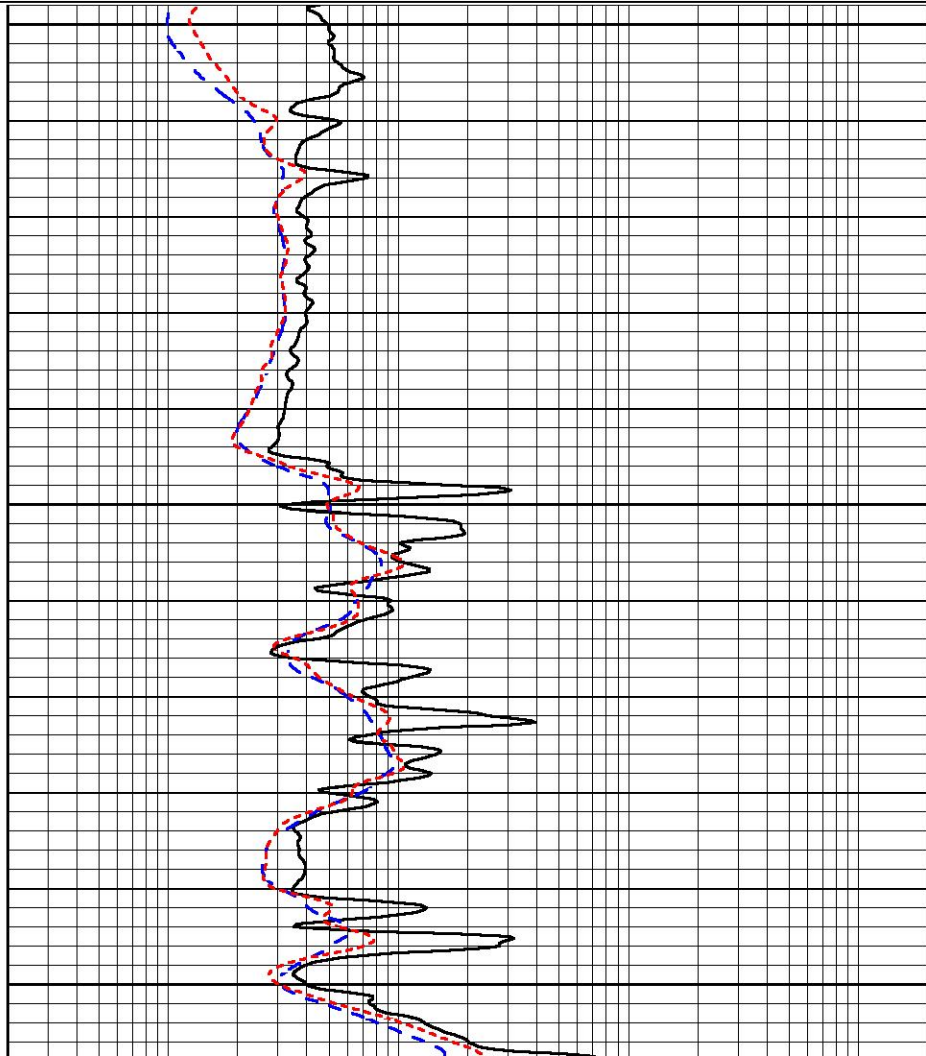
Database File 6701pe.db
 Dataset Pathname pass3.1M
 Presentation Format _dil
 Dataset Creation Thu Jun 30 03:28:18 2022
 Charted by Depth in Feet scaled 1:240

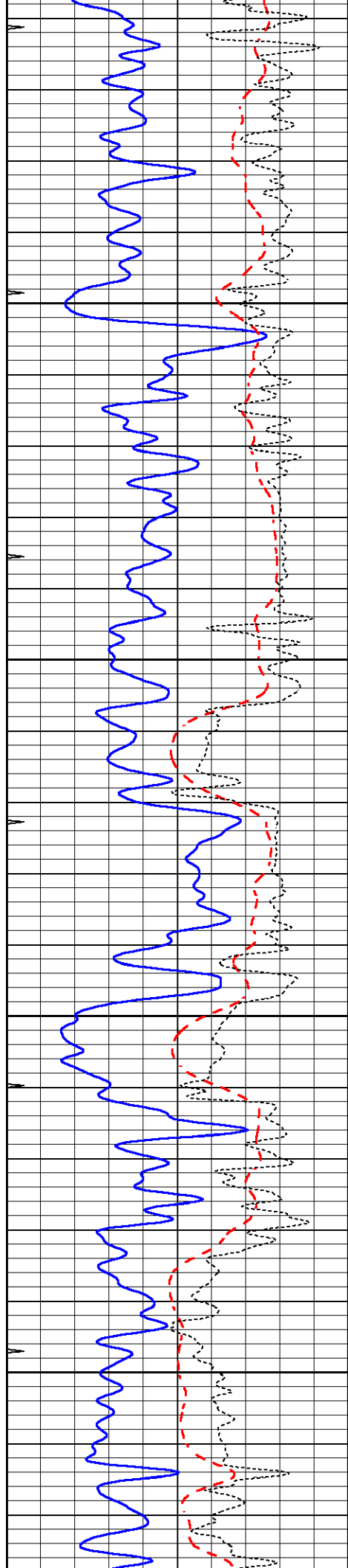


3500

3550

3600



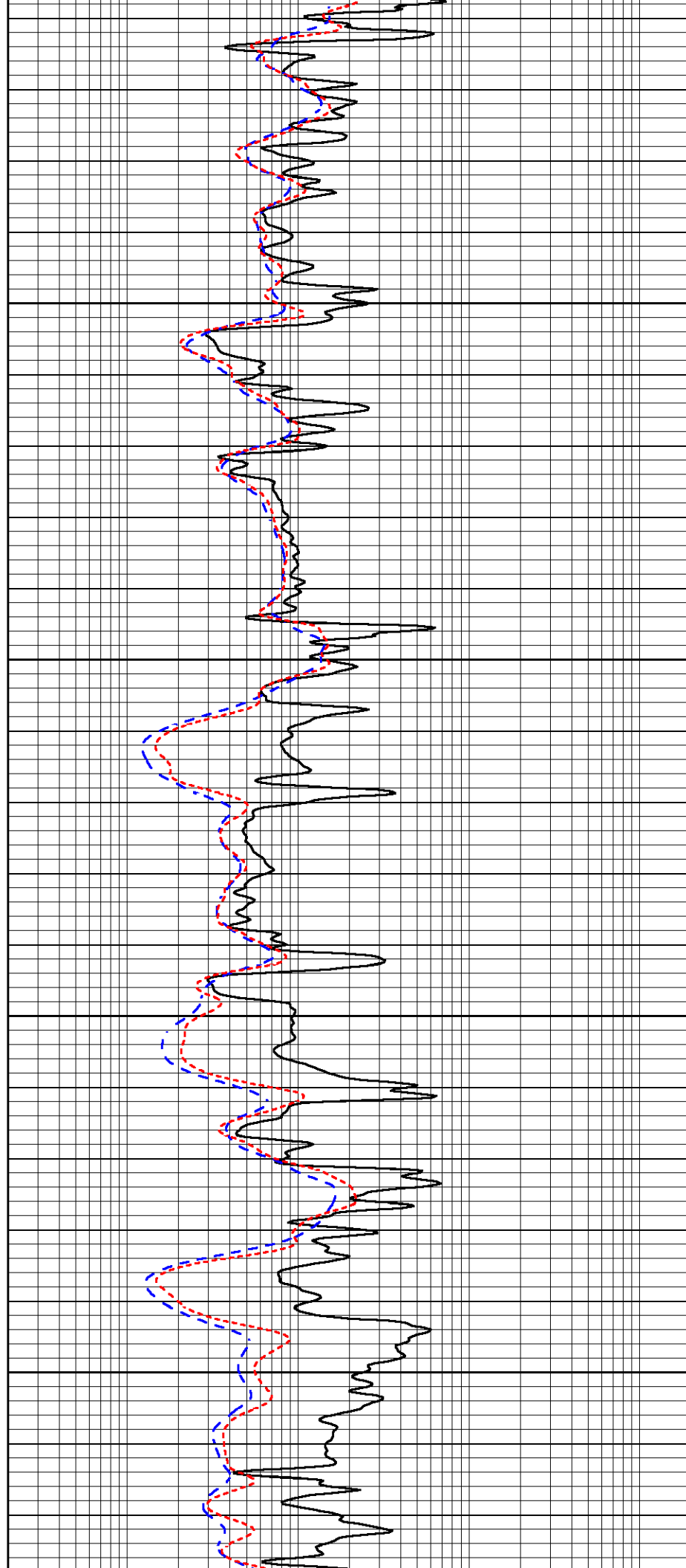


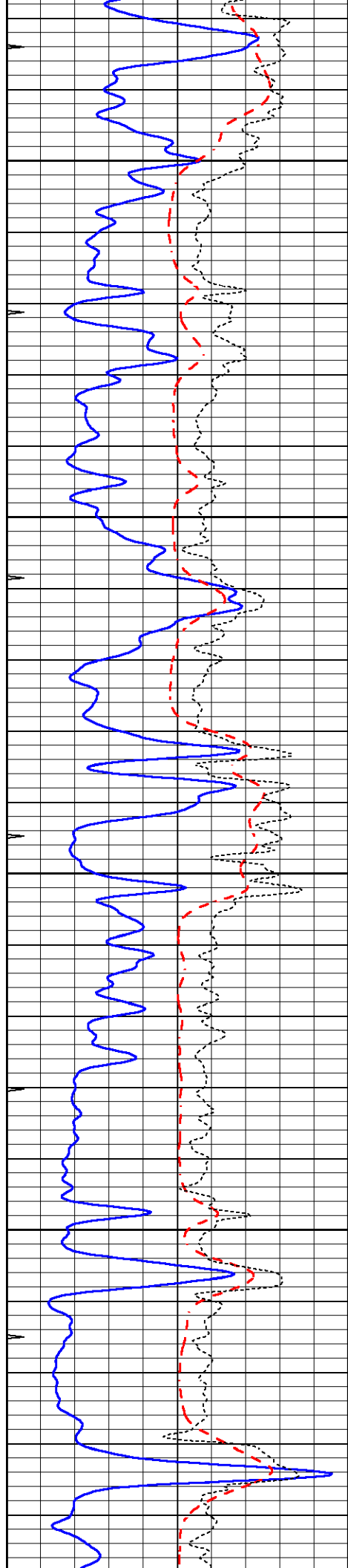
3650

3700

3750

3800



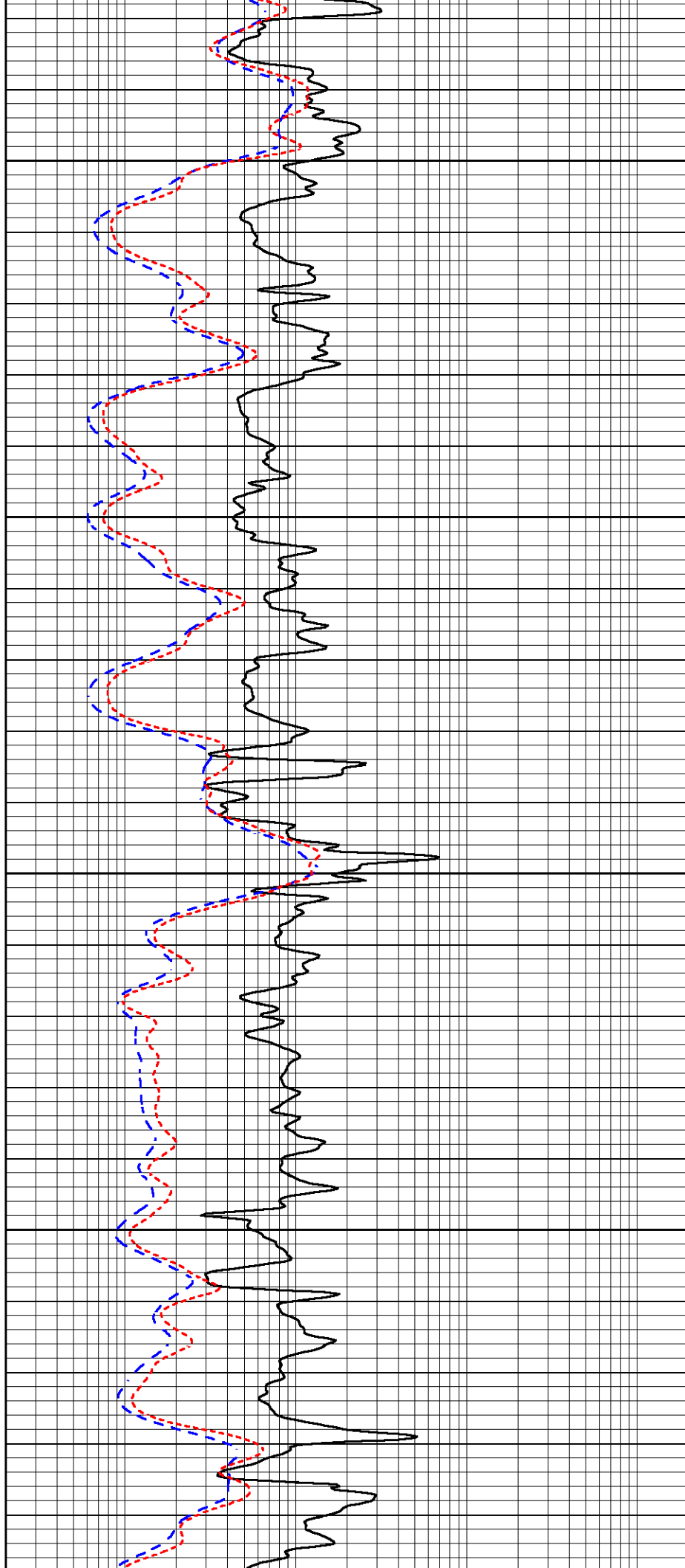


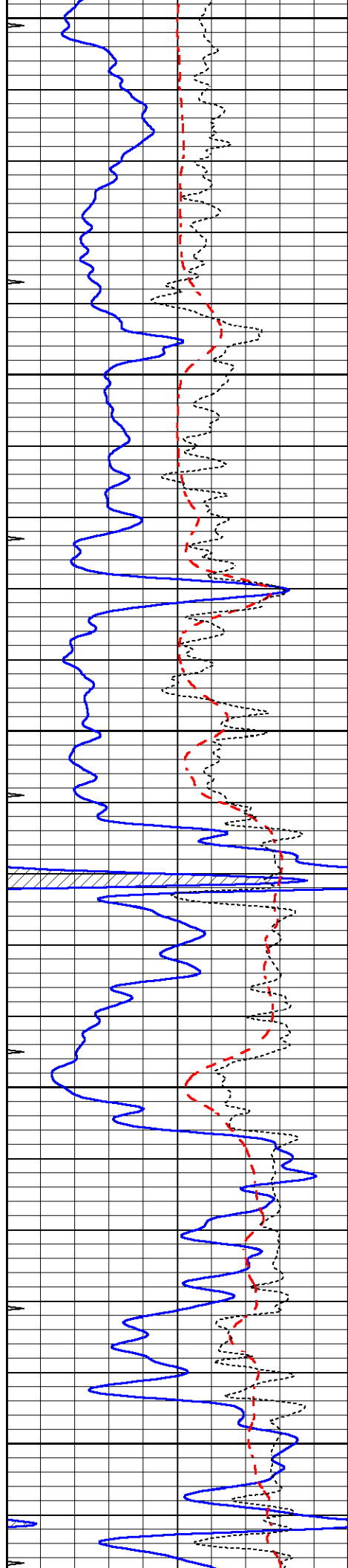
3850

3900

3950

4000





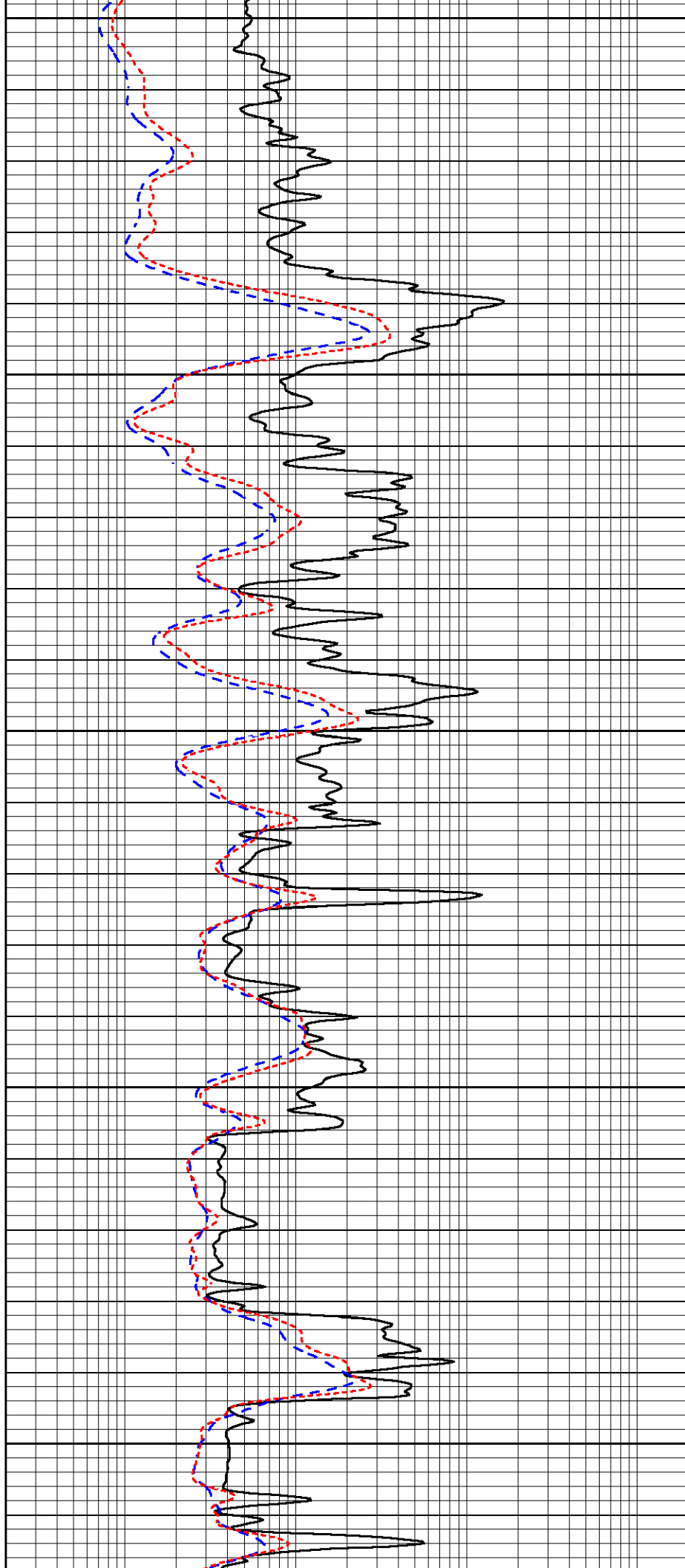
4050

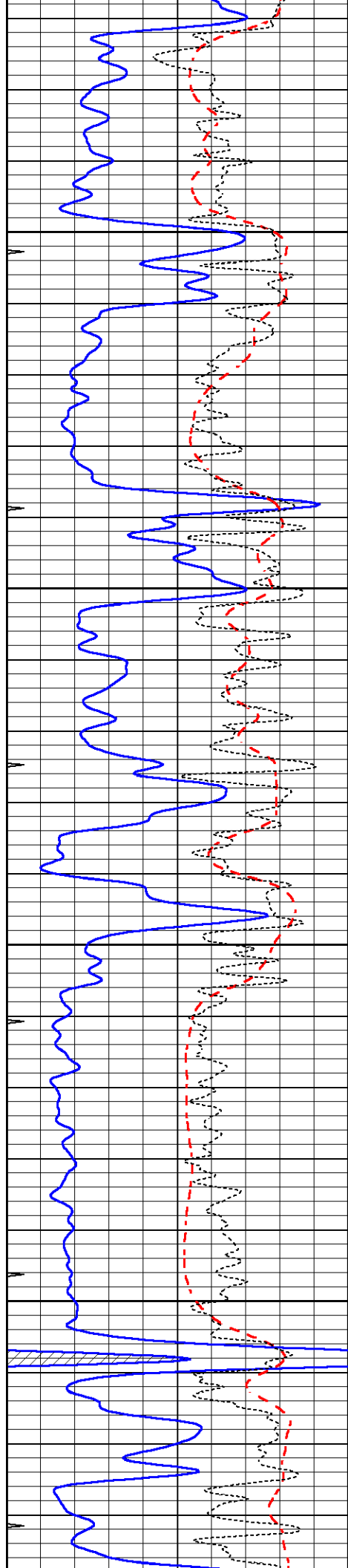
4100

4150

4200

4250



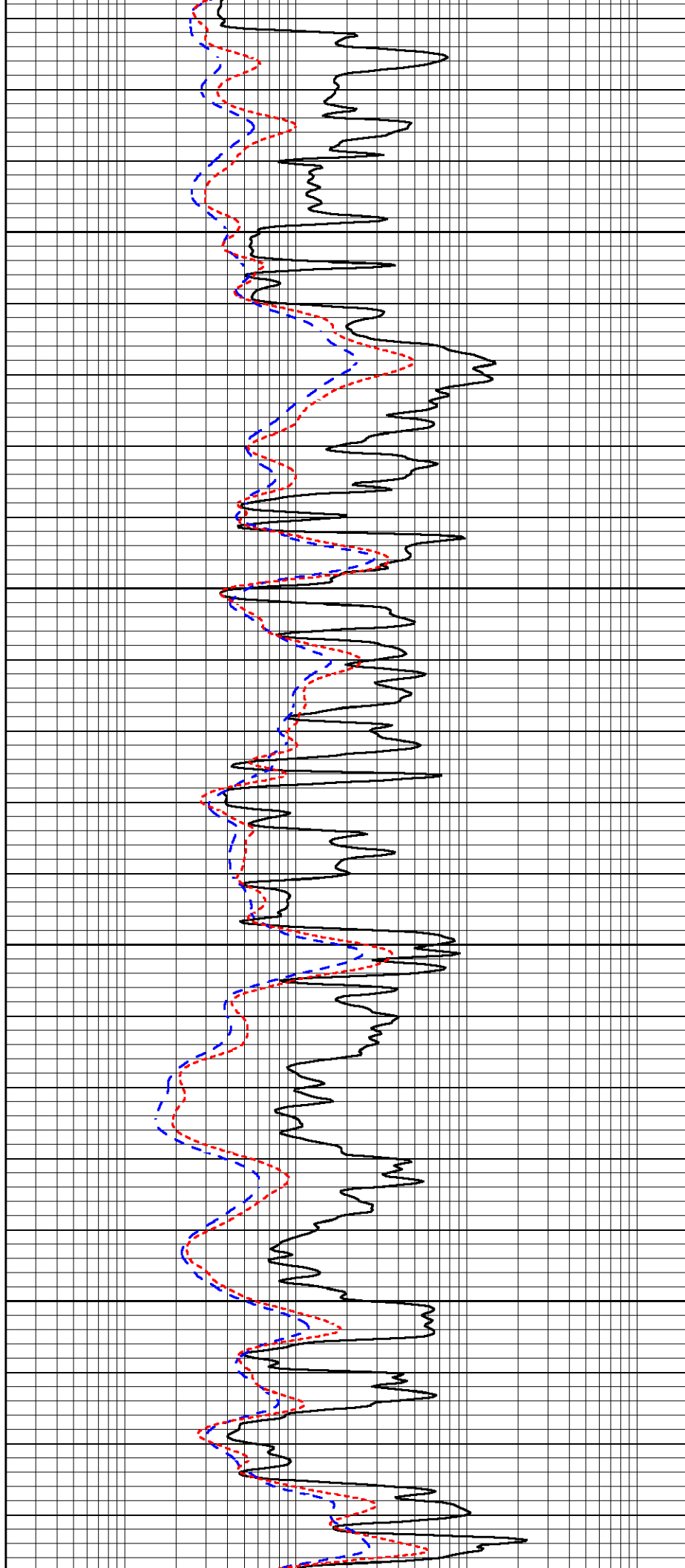


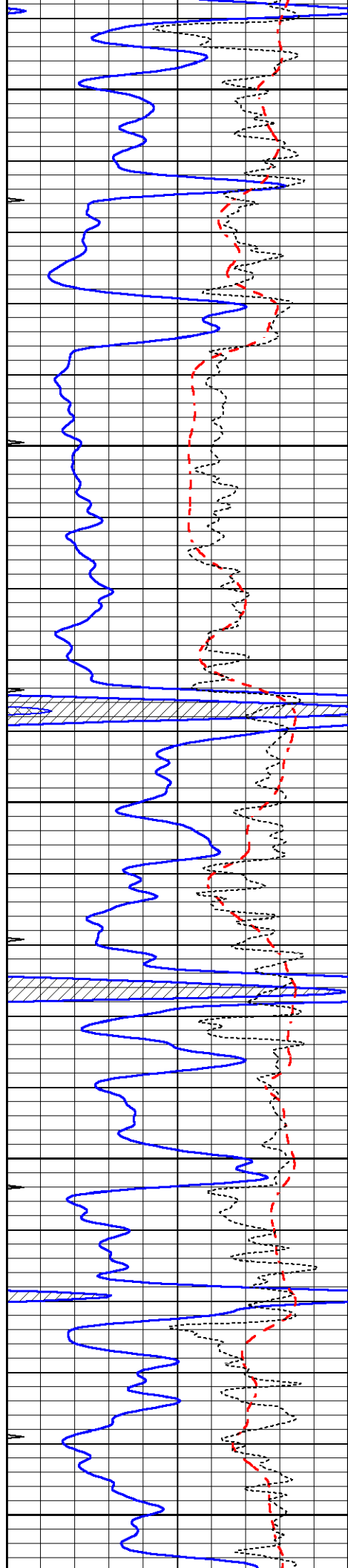
4300

4350

4400

4450





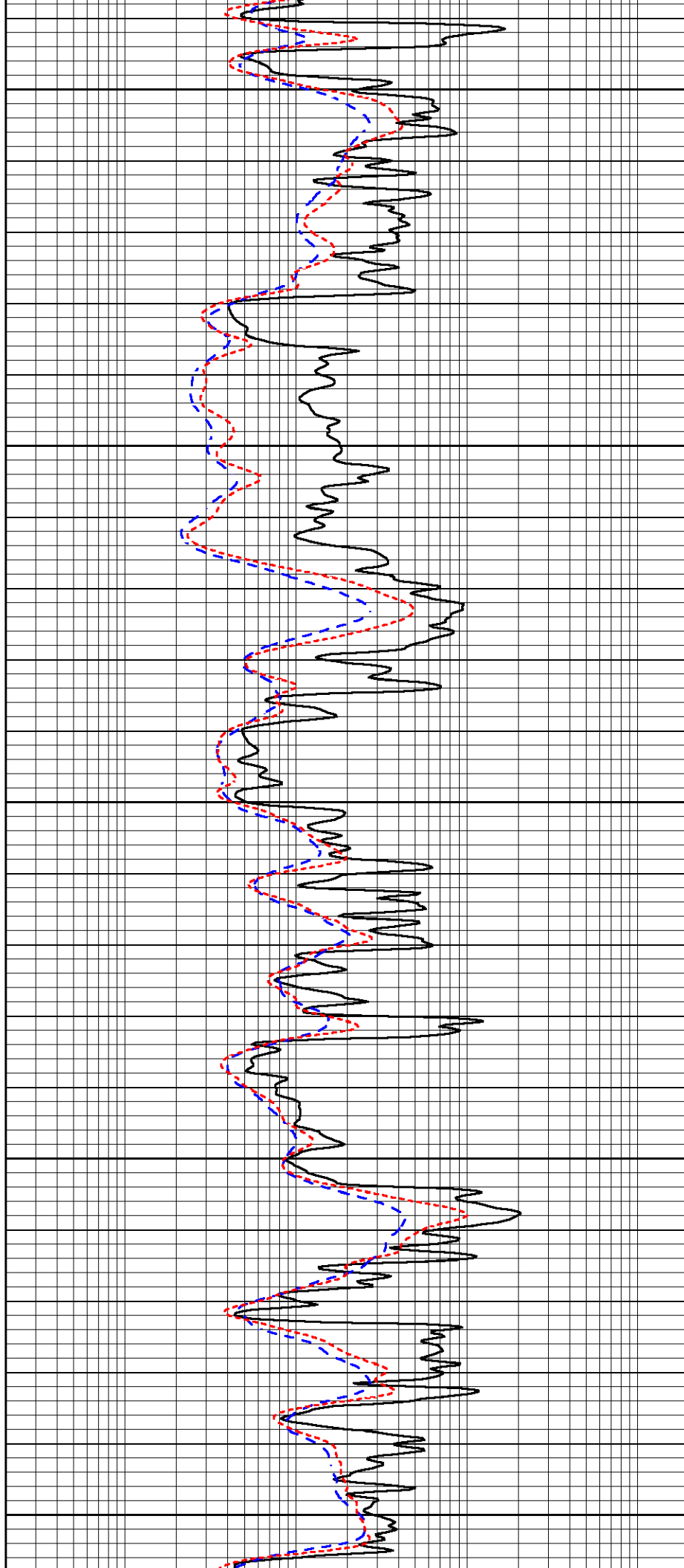
4500

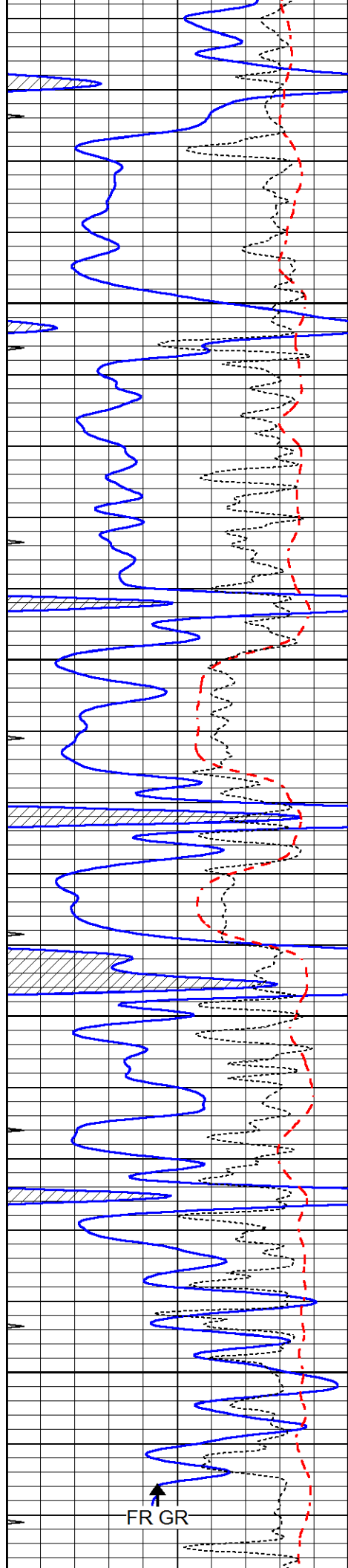
4550

4600

4650

4700





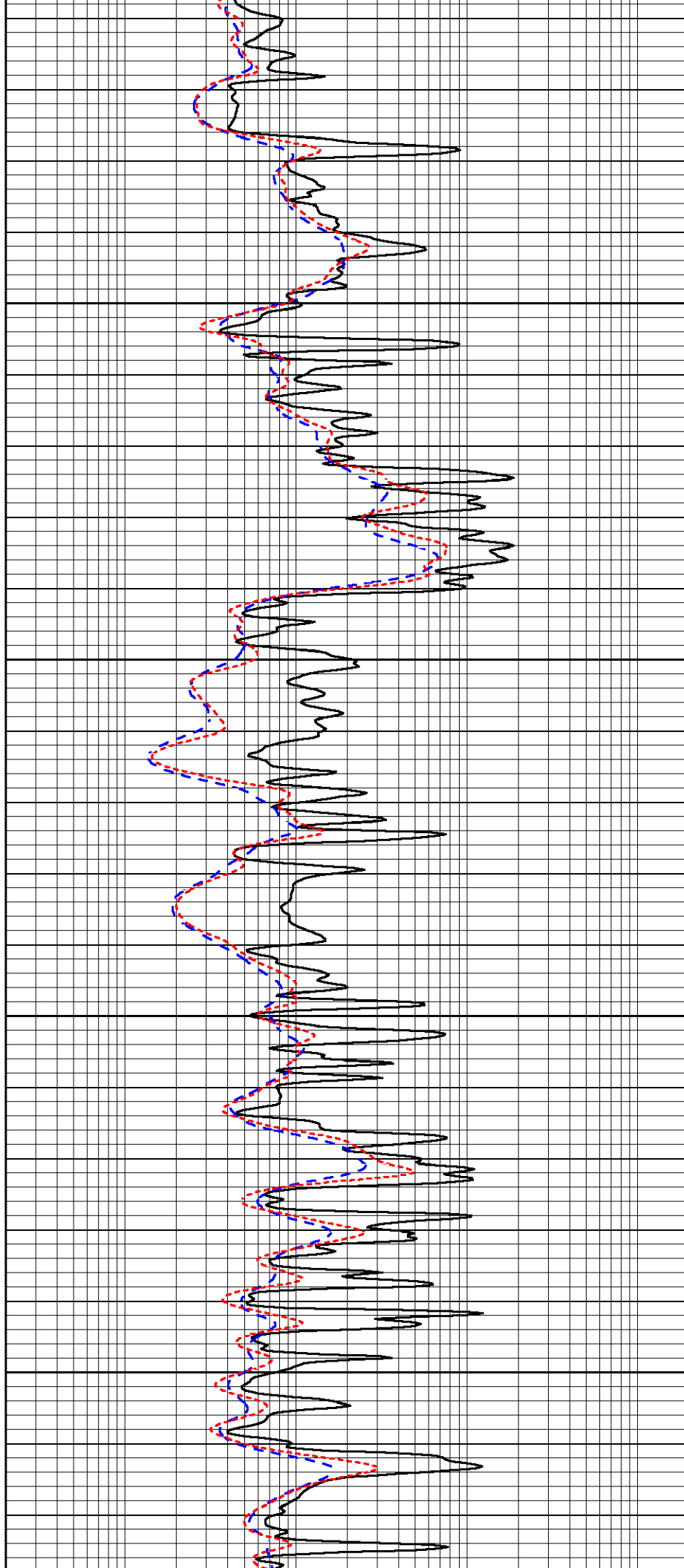
FR GR

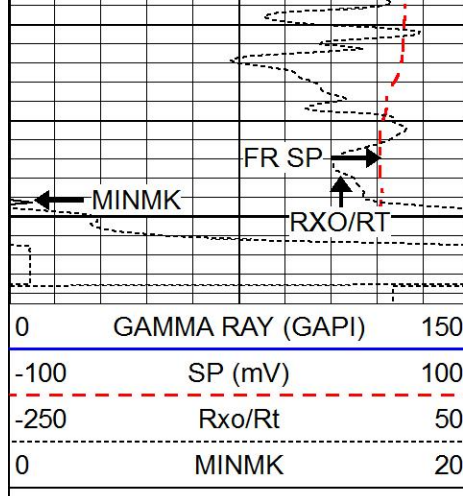
4750

4800

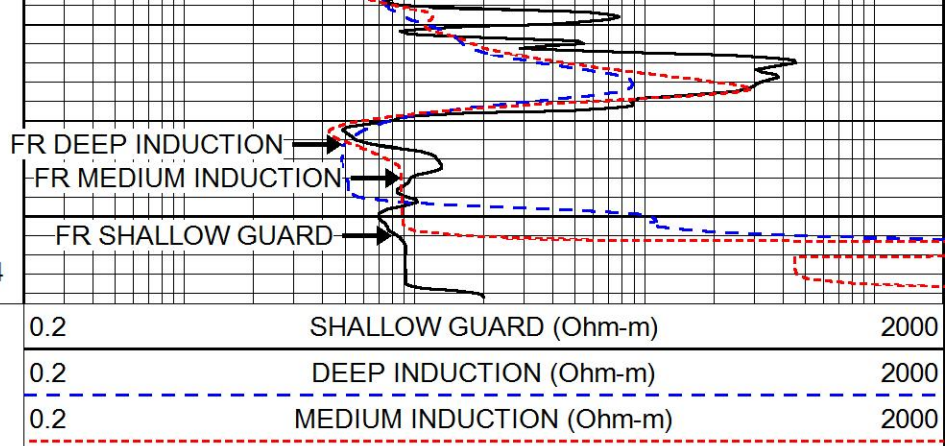
4850

4900



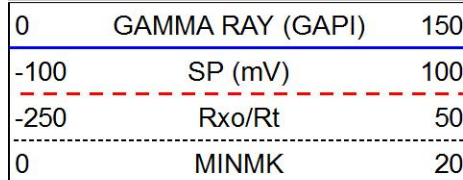


4950
LTD 4954



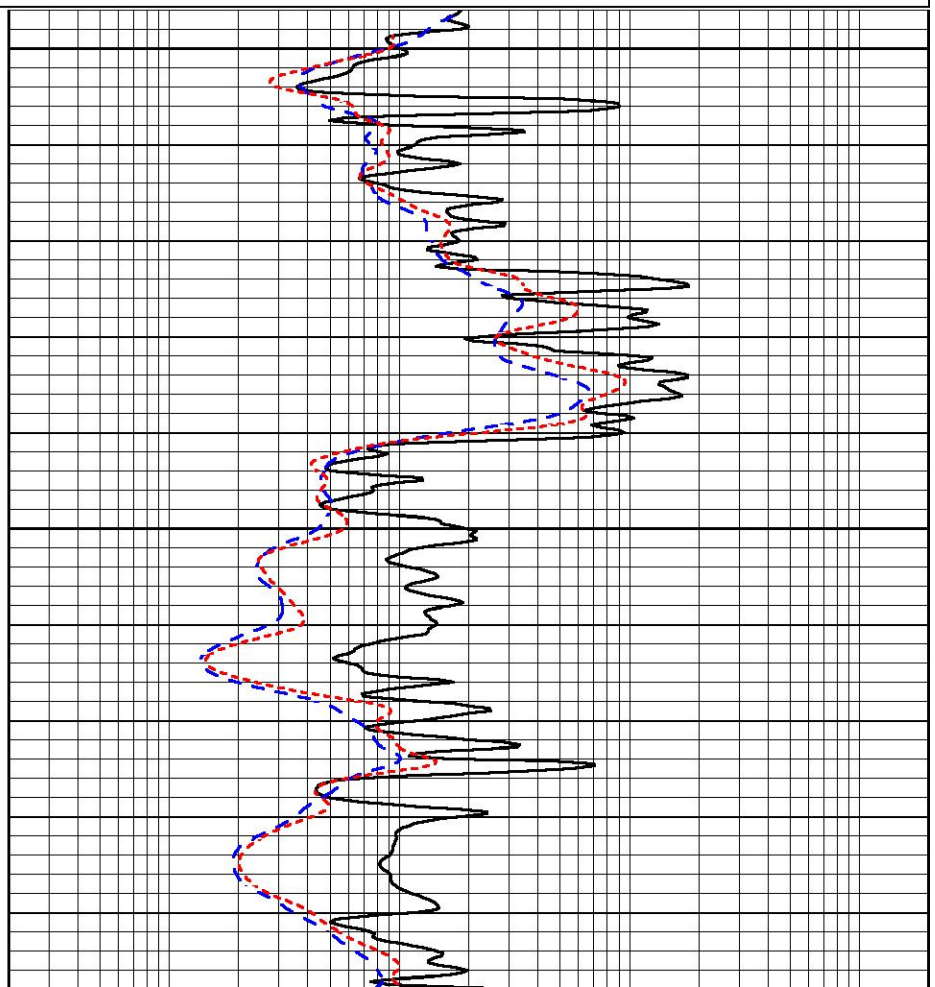
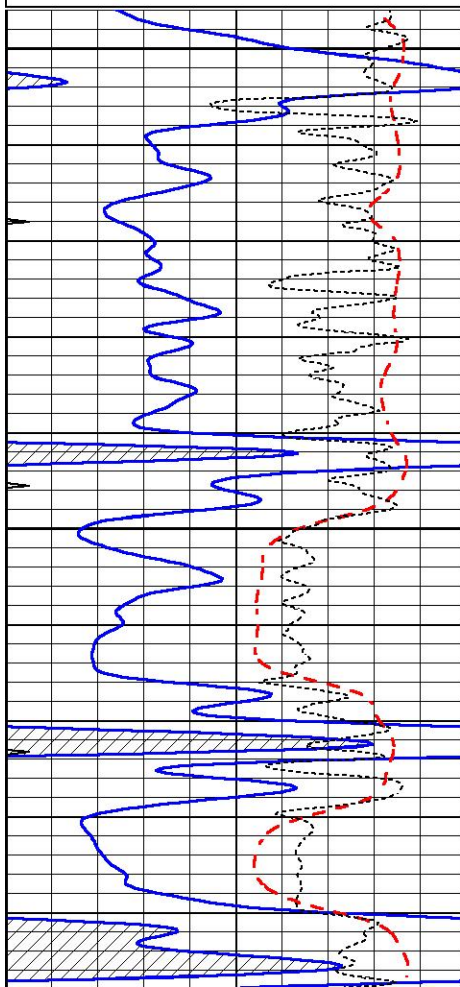
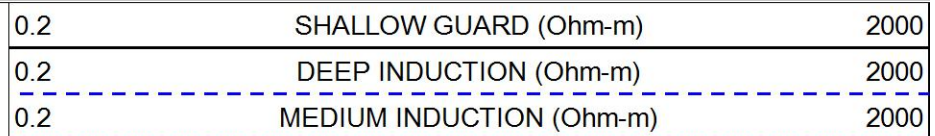
REPEAT SECTION

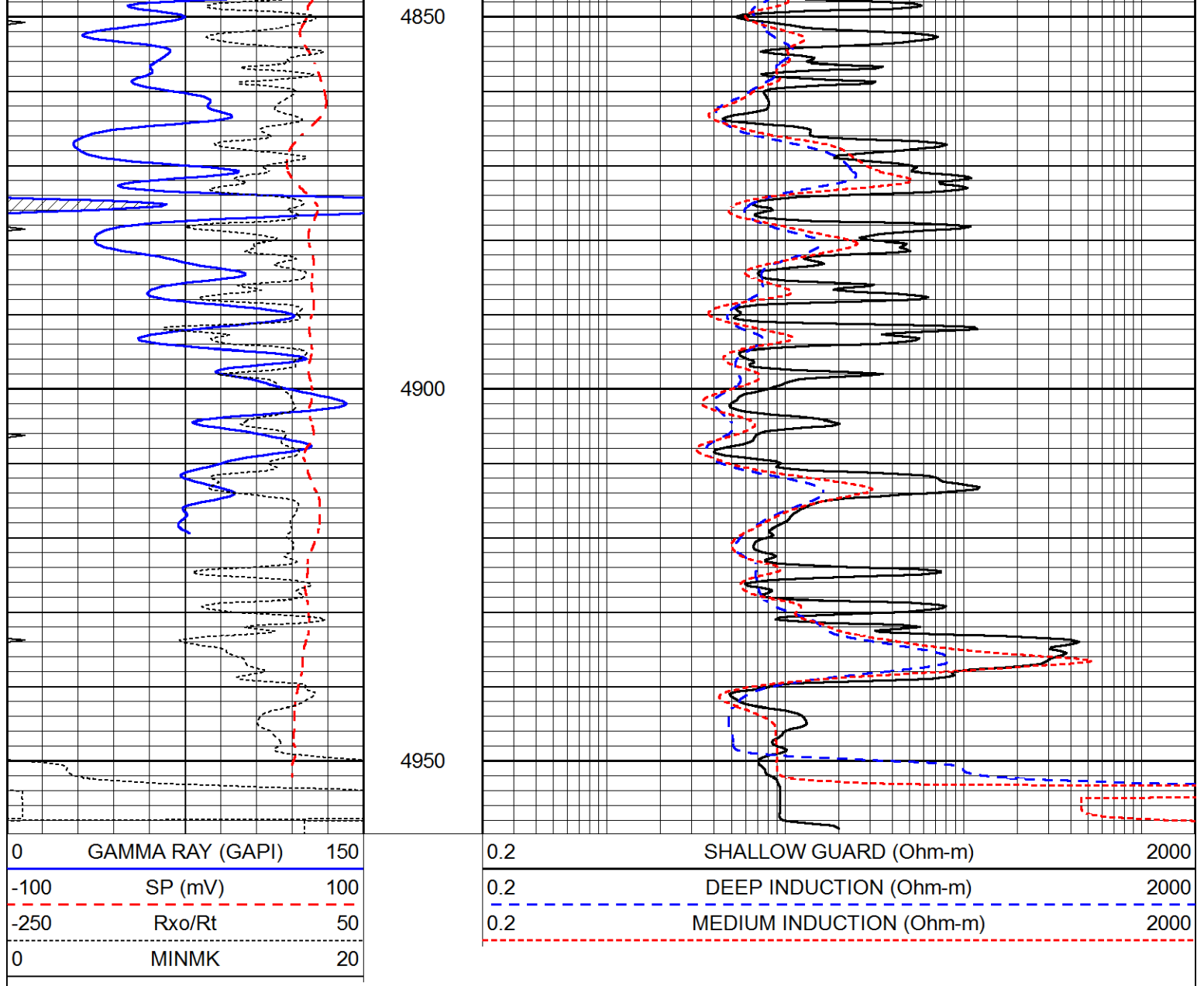
Database File 6701pe.db
Dataset Pathname pass2.1R
Presentation Format _dil
Dataset Creation Thu Jun 30 03:30:34 2022
Charted by Depth in Feet scaled 1:240



4750

4800





Calibration Report									
Database File	6701pe.db								
Dataset Pathname	pass3.1M								
Dataset Creation	Thu Jun 30 03:28:18 2022								
Dual Induction Calibration Report									
Serial-Model:					PROBE8-DILG				
Surface Cal Performed:					Thu Jun 30 02:39:16 2022				
Downhole Cal Performed:					Mon Sep 10 14:28:38 2018				
After Survey Verification Performed:					Mon Sep 10 14:28:40 2018				
Surface Calibration									
		Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	-1.000	
Medium	0.029	0.796	V	0.000	464.000	mmho/m	600.000	-16.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619	
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739	

Downhole Calibration				Readings		References		Results	
				Zero	Cal	Zero	Cal	m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m		1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m		1.000	0.000
LL3		7.500	V		1500.000	Ohm-m			
		0.000	V		20.000	Ohm-m			
		-7.200	V		3800.000	mmho-m			

After Survey Verification				Readings		Targets		Results	
				Zero	Cal	Zero	Cal	m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m		0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m		0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m			
		0.000	Ohm-m		0.000	Ohm-m			
		1.000	mmho-m		1.000	mmho-m			

Litho Density Calibration Report									
Serial: 002N					Model: PRB				

Master Calibration			Performed Tue Mar 10 15:08:00 2020		
	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	780.1	6981.9	2088.6	1871.2	cps
Window 2	718.6	5898.2	1813.8	1664.1	cps
Window 3	580.0	2989.5	1088.0	1039.1	cps
Window 4	172.8	175.7	175.3	173.5	cps
Long Space	0.0	5179.6	1095.2	945.5	cps
Short Space	1.1	1228.6	821.2	690.4	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 45.5	Rib Slope	: 1.016	Density/Spine Ratio	: 0.548
Spine Angle	: 75.5	Spine Slope	: 3.857	Spine Intercept	: -18.9

Before Survey Verification		Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	

After Survey Verification		Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc

Measured Correction	0.0000	0.0000	0.0000	g/cc
Measured Pe		0.0000	0.0000	
Compensated Neutron Calibration Report				
Serial Number:		6I		
Tool Model:		G		
CALIBRATION				
Detector		Readings		Target
				Normalization
Short Space		1.00	cps	1.00 cps
Long Space		1.00	cps	1.00 cps
				1.0000
				1.0000
PRE-SURVEY VERIFICATION				
Detector		Readings		Measured
				Target
1)	Short Space		cps	
	Long Space		cps	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
2)	Short Space		cps	
	Long Space		cps	pu
3)	Short Space		cps	
	Long Space		cps	pu
Gamma Ray Calibration Report				
Serial Number:		GR6		
Tool Model:		OPEN		
Performed:		Mon Jun 20 01:31:16 2022		
Calibrator Value:		150.0	GAPI	
Background Reading:		0.0	cps	
Calibrator Reading:		276.0	cps	
Sensitivity:		0.8500	GAPI/cps	