



DUAL INDUCTION LOG

Company	PATTERSON ENERGY LLC		
Well	SOEKEN 'A' #8		
Field	KRAFT PRUSIA		
County	BARTON	State	KANSAS
Location:	API # : 15 009 26412		Other Services
	770' FSL & 1154' FWL		ML CDNL
Permanent Datum	SEC 15 TWP 17S RGE 11W	Elevation	1841'
Log Measured From	Ground Level		
Drilling Measured From	KB 8' AGL		
	KB		Elevation K.B. 1849' D.F. 1847' G.L. 1841'
Date	11/21/23		
Run Number	One		
Depth Driller	3549		
Depth Logger	3548		
Bottom Logged Interval	3546		
Top Log Interval	00		
Casing Driller	8 5/8"@680'		
Casing Logger	680'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical		
Density / Viscosity	9.2/56		
pH / Fluid Loss	9.5/9.2		
Source of Sample	Pit		
Rm @ Meas. Temp	2.0@70degf		
Rmf @ Meas. Temp	1.5@70degf		
Rmc @ Meas. Temp	2.4@70degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	1.4@100degf		
Time Circulation Stopped	5:00 AM		
Time Logger on Bottom	8:00 AM		
Maximum Recorded Temperature	100degf		
Equipment Number	T-605		
Location	HAYS, KS.		
Recorded By	COLBY DREILING		
Witnessed By	AUSTIN KLAUS		

<<< 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

CLAFLIN NORTH ON 130TH AVE 3.5 MILES, EAST 1/4 MILE, THEN NORTH INTO.

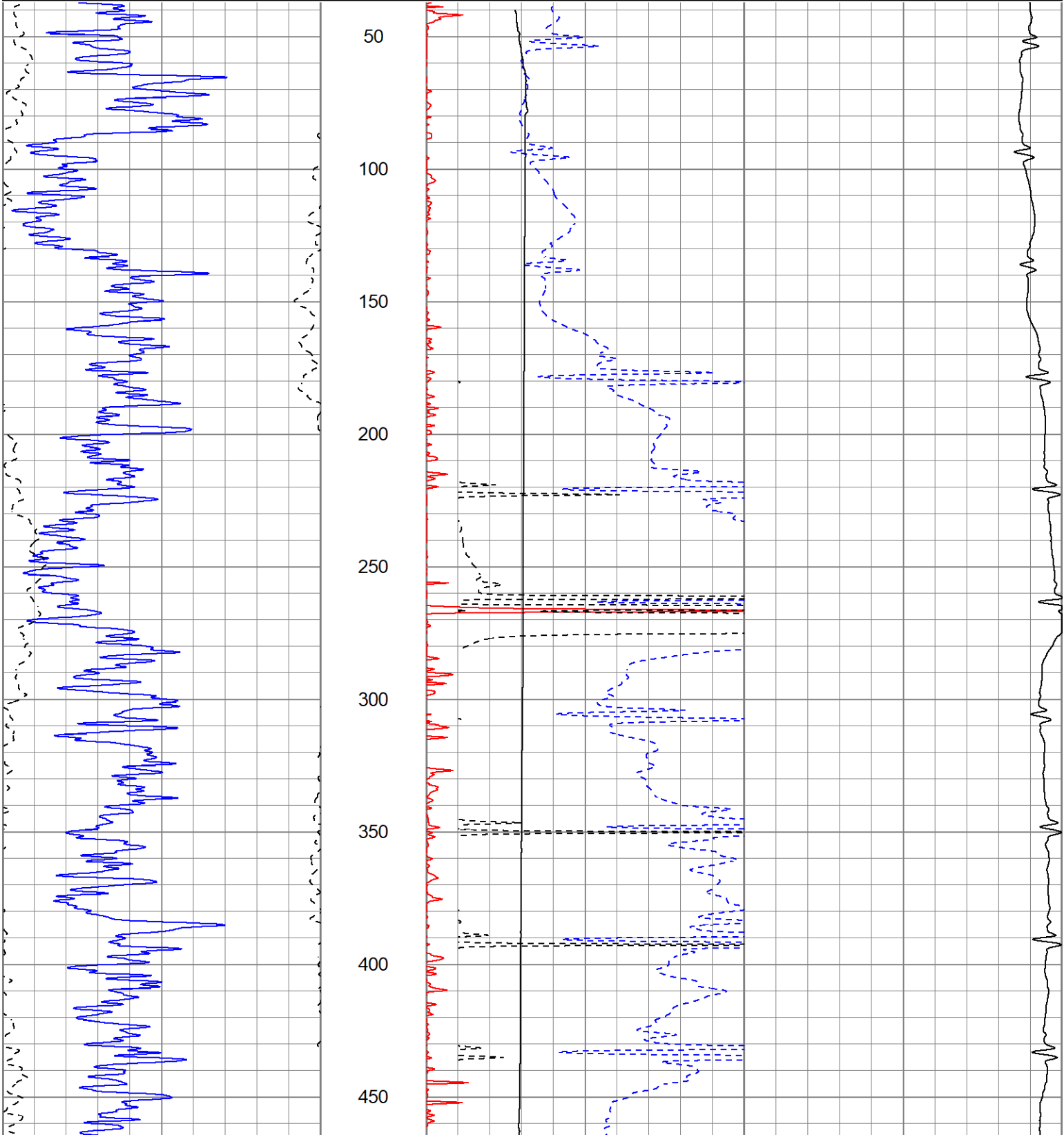
Thanks for using Gemini Wireline LLC
785-625-1182

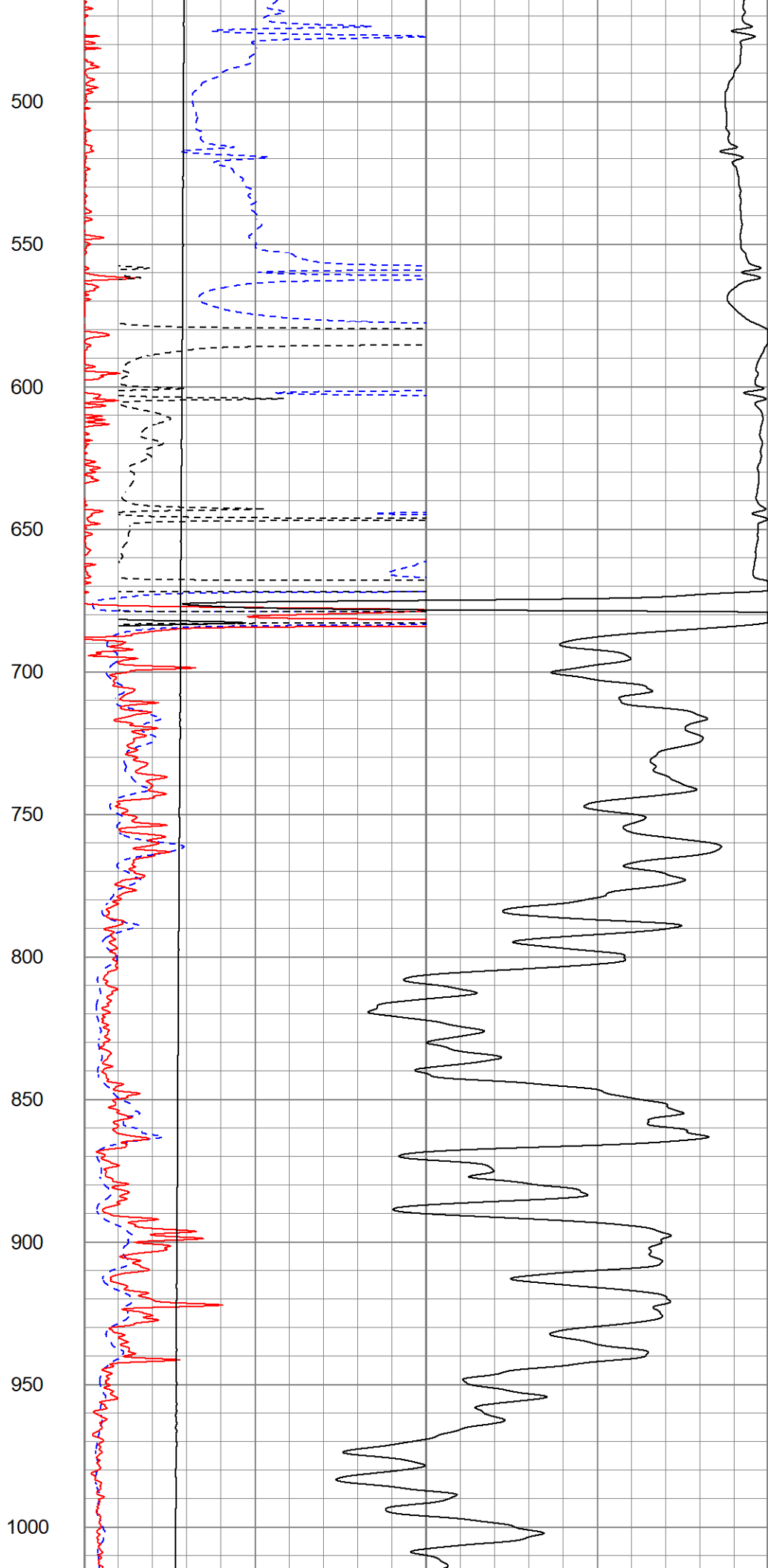
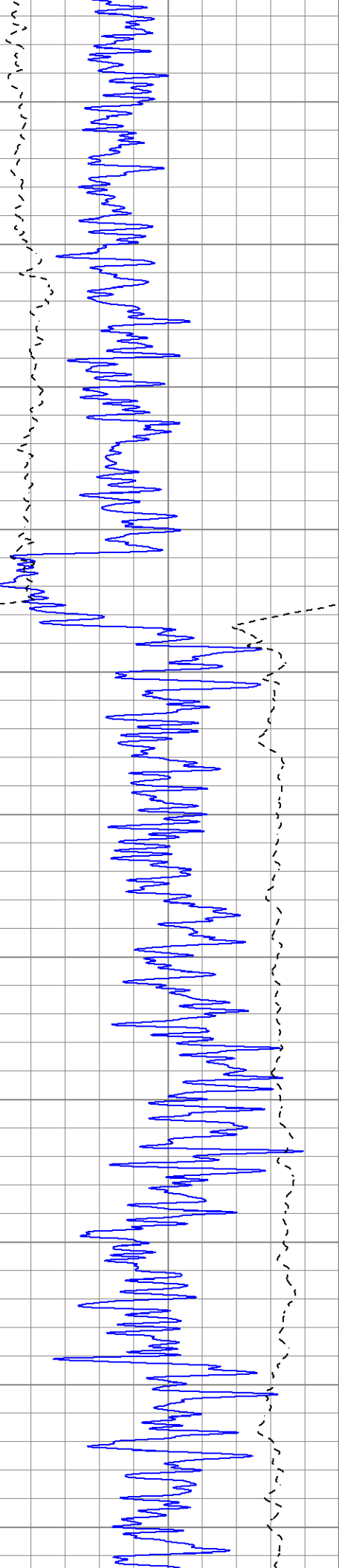


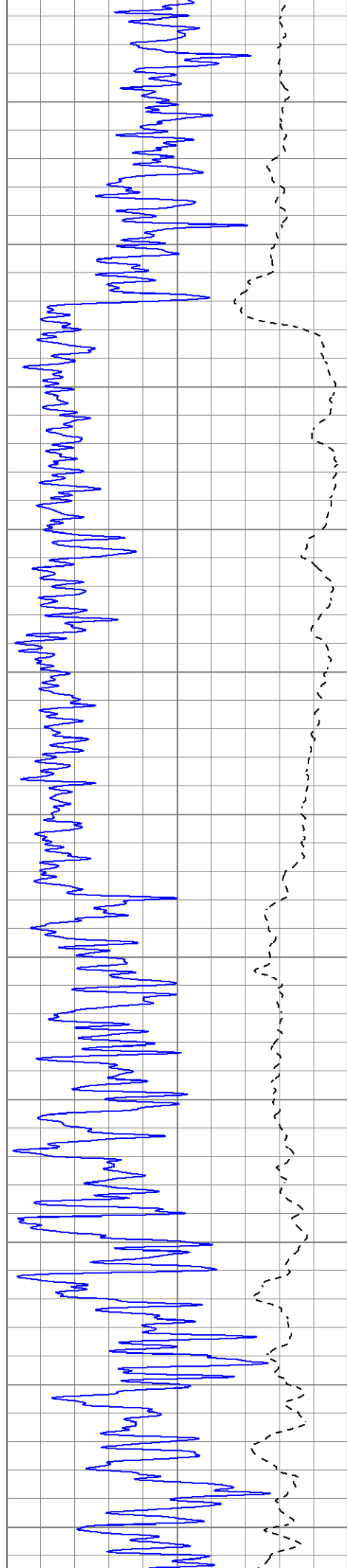
MAIN PASS

Database File	pesoakena#80h.db
Dataset Pathname	pass3.1
Presentation Format	kdillinn
Dataset Creation	Tue Nov 21 10:05:05 2023
Charted by	Depth in Feet scaled 1:600

0	GR (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	10000	LTEN (lb)	0
			0	RILD (Ohm-m)	50
			0	RLL3 (Ohm-m)	50
			50	RILD x 10 (Ohm-m)	500
			50	RLL3 x 10 (Ohm-m)	500







1050

1100

1150

1200

1250

1300

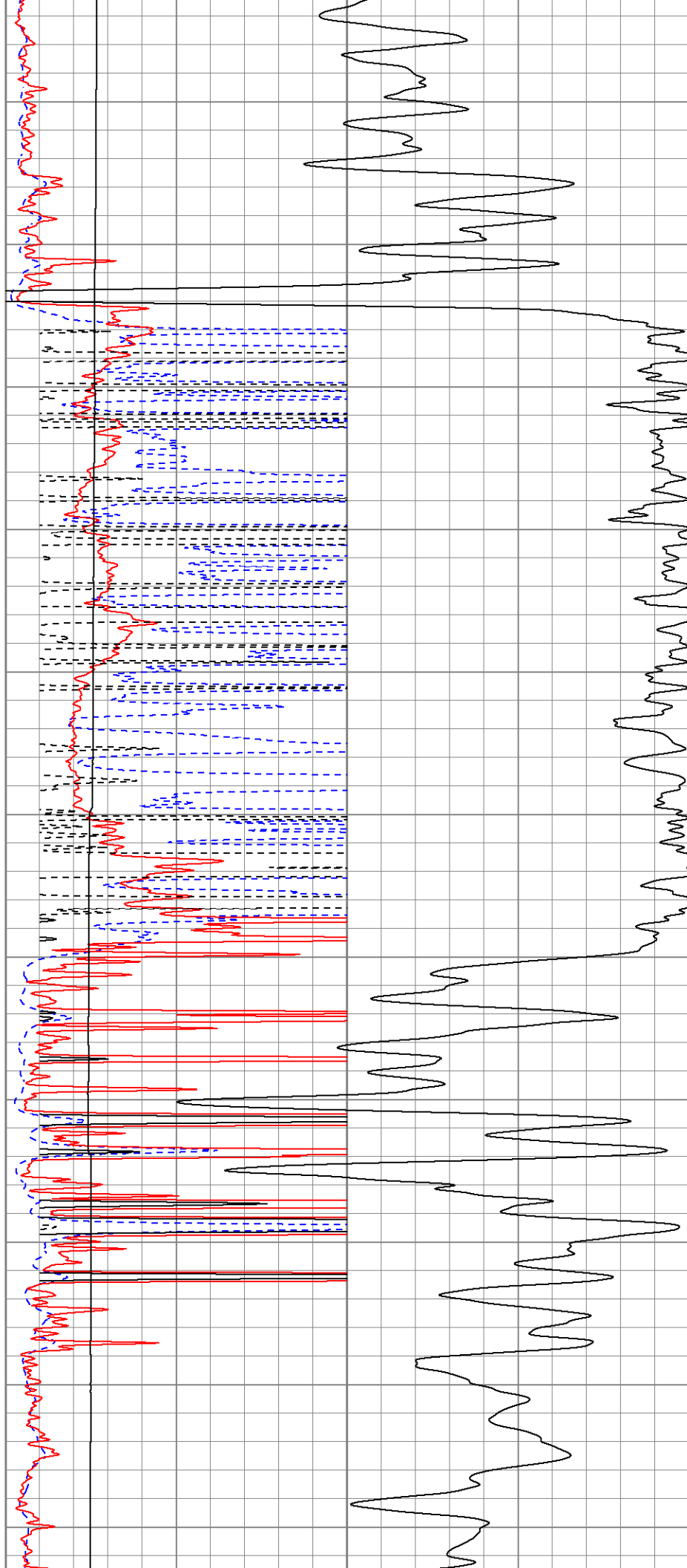
1350

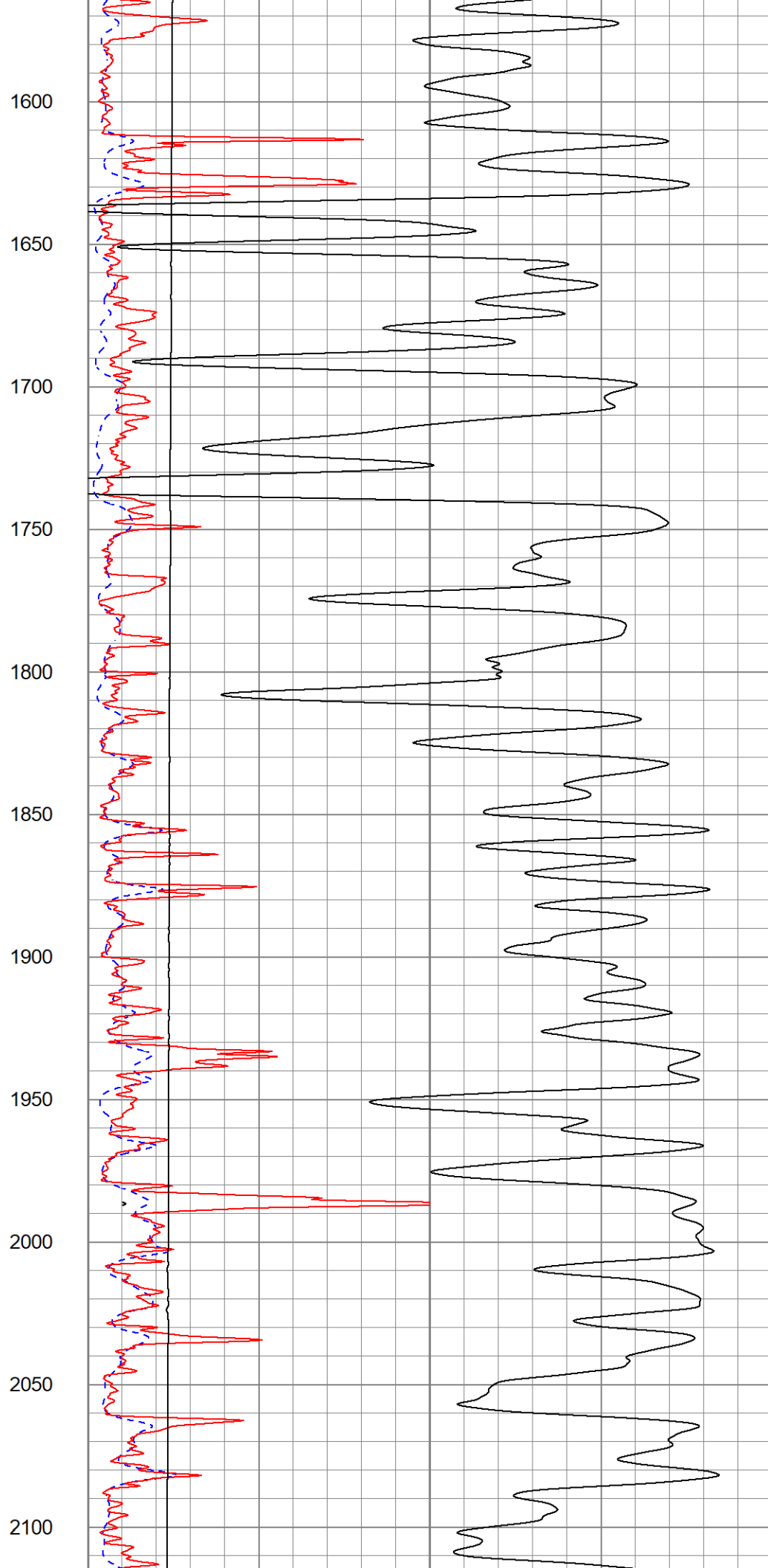
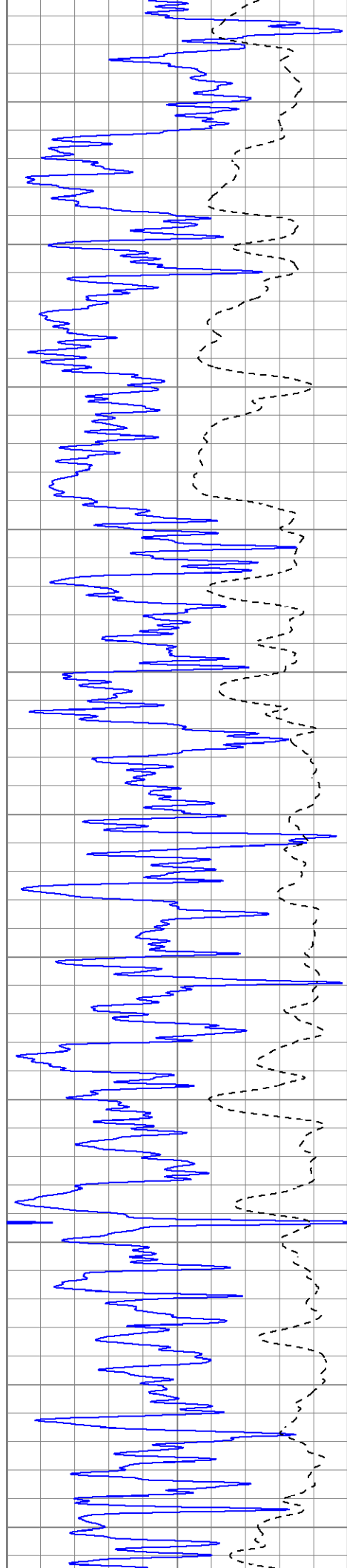
1400

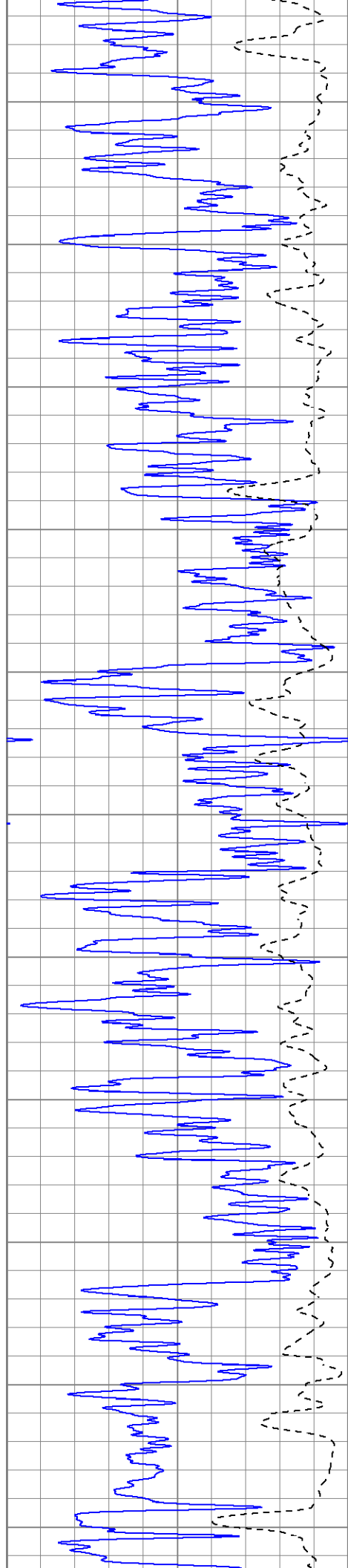
1450

1500

1550







2150

2200

2250

2300

2350

2400

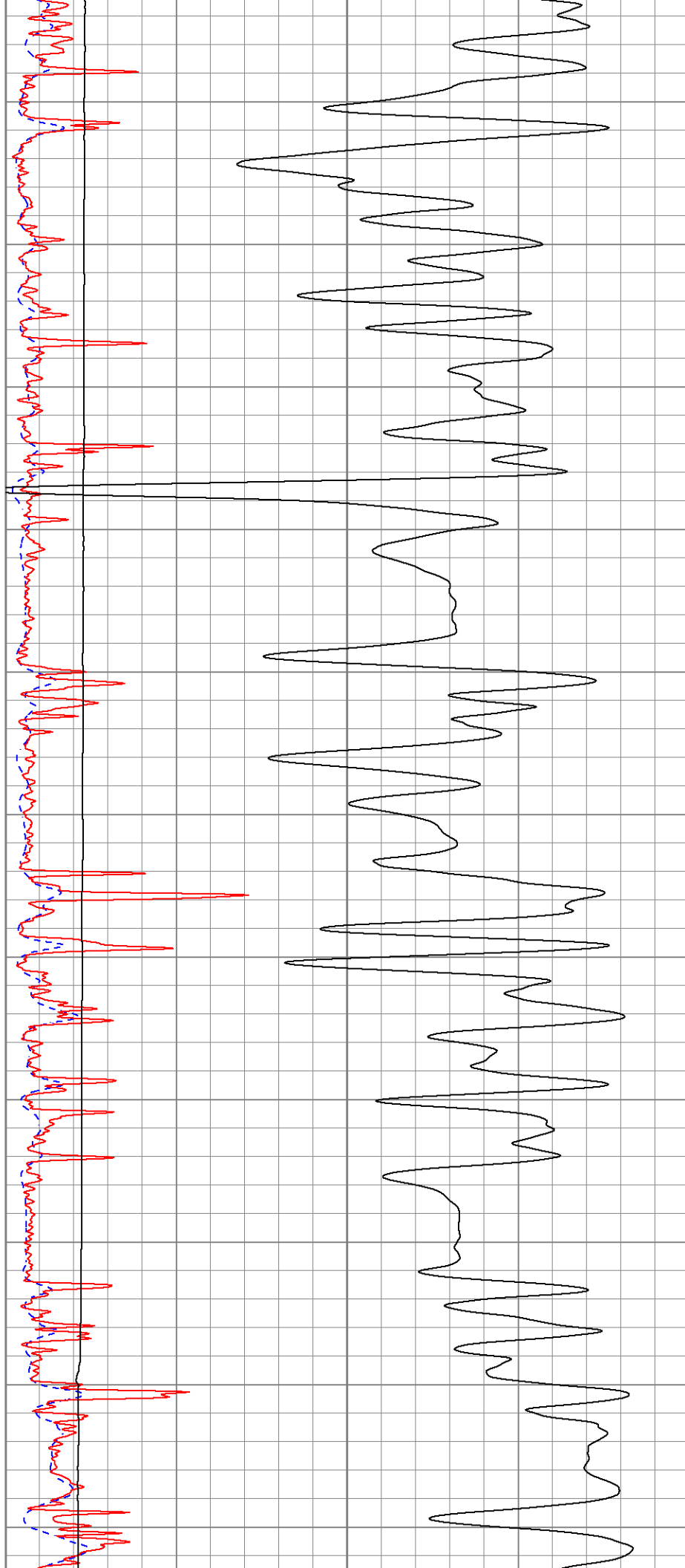
2450

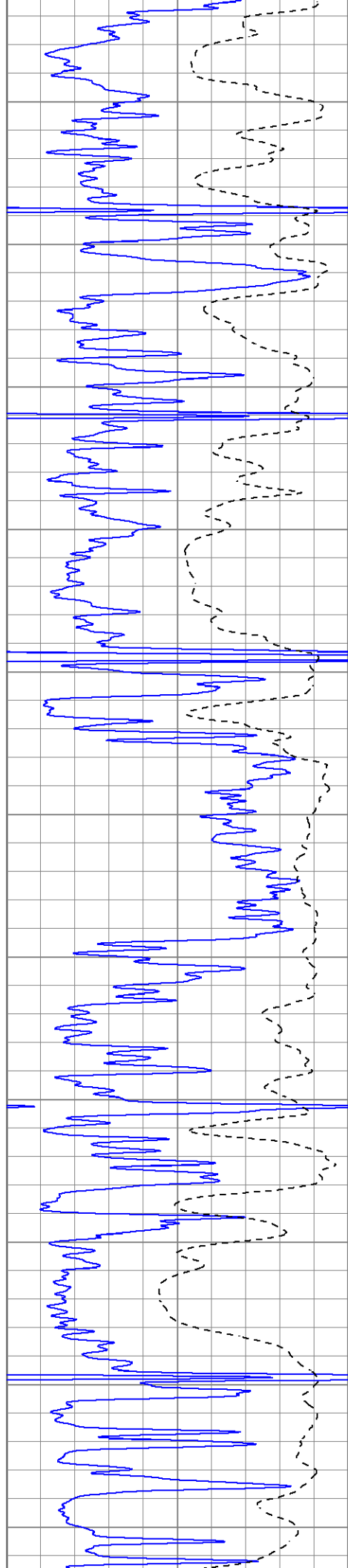
2500

2550

2600

2650





2700

2750

2800

2850

2900

2950

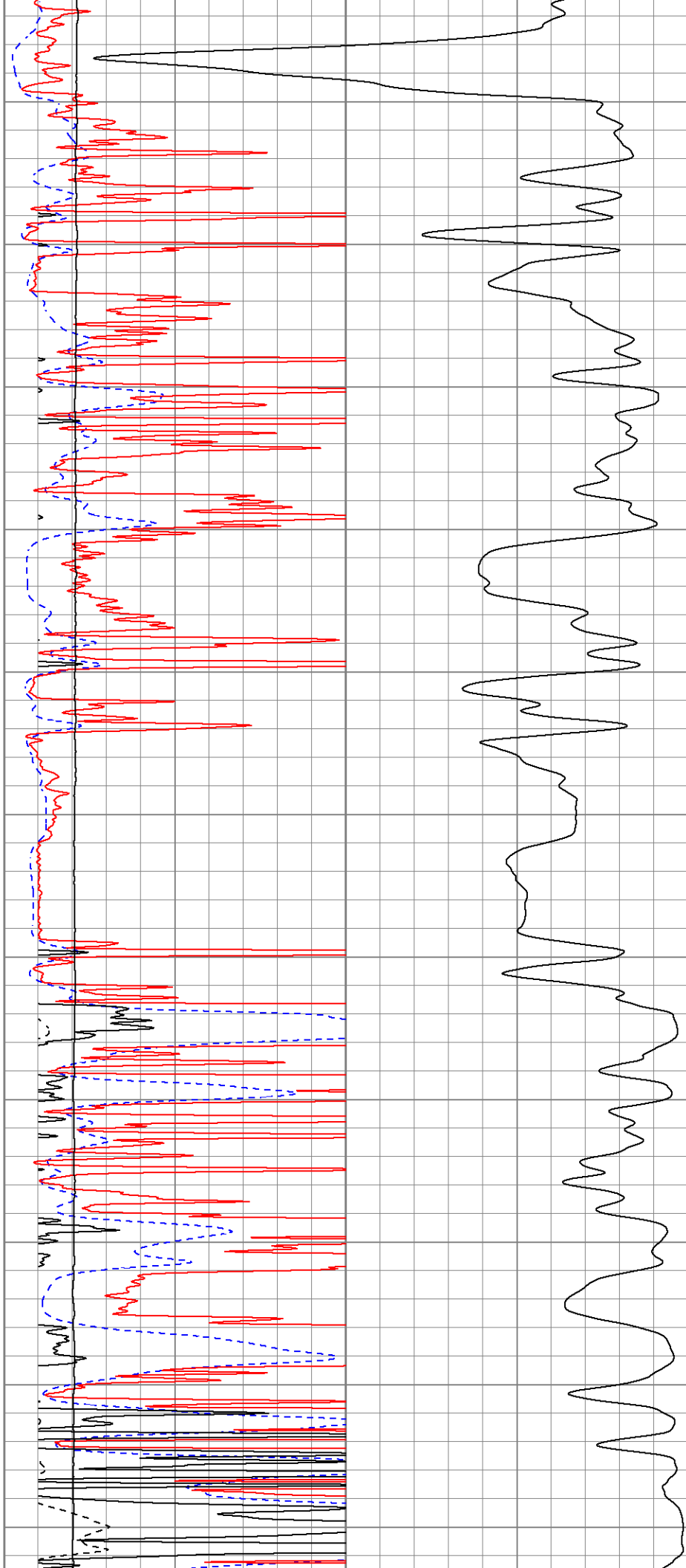
3000

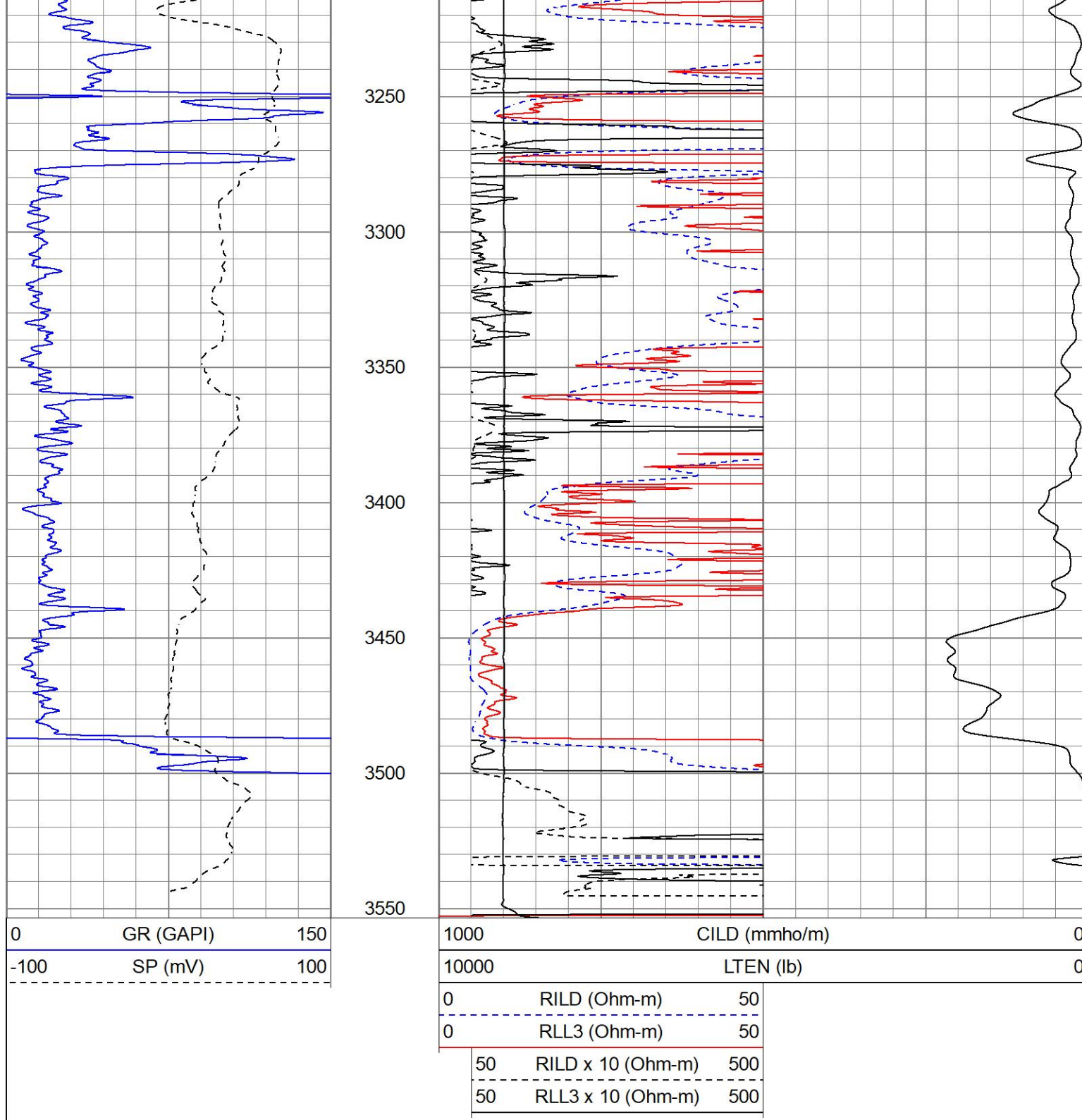
3050

3100

3150

3200



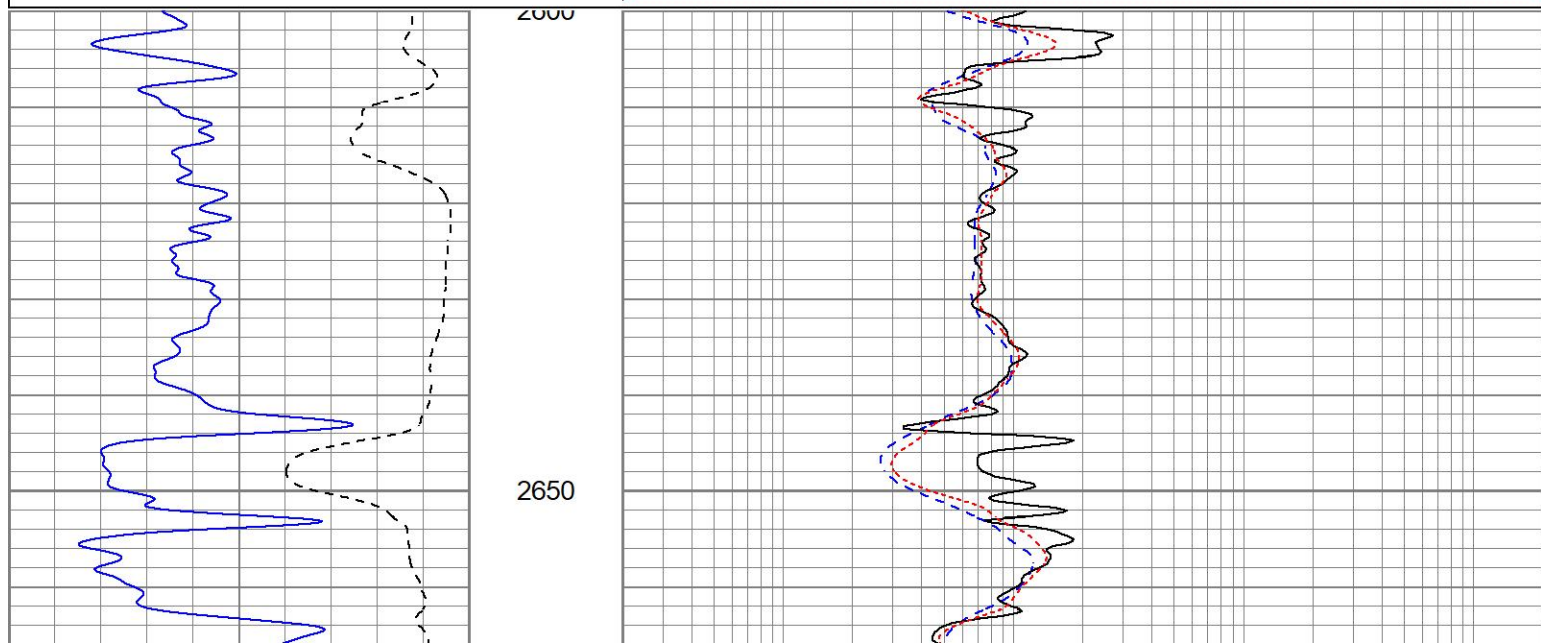
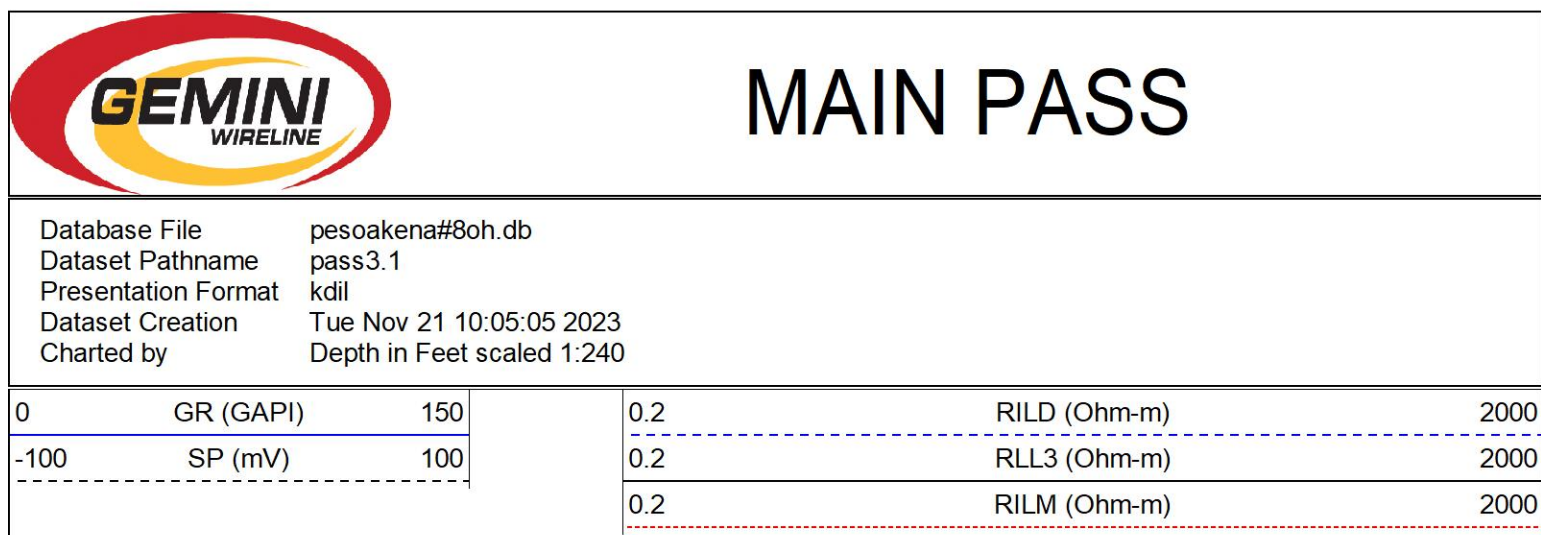
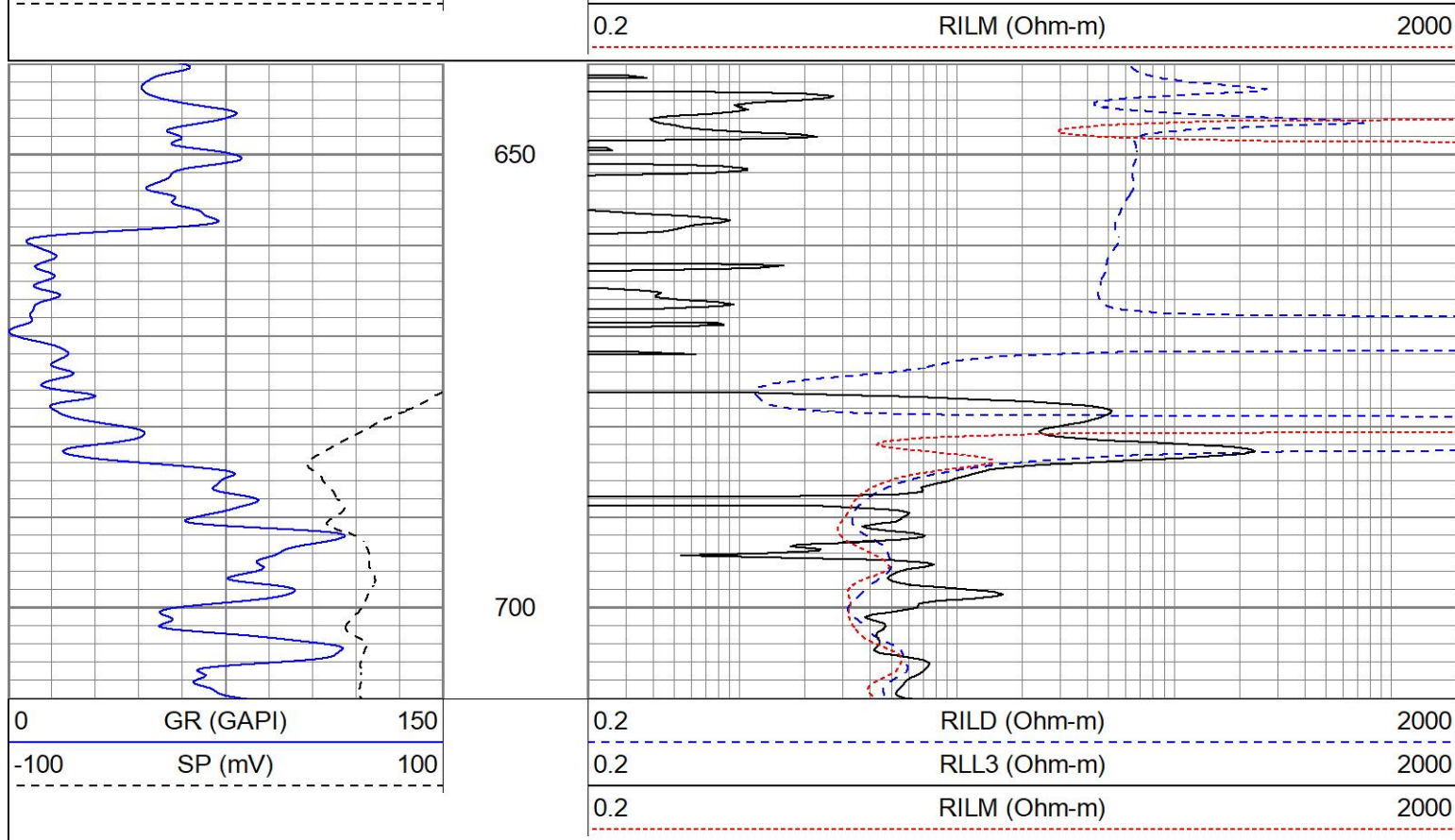


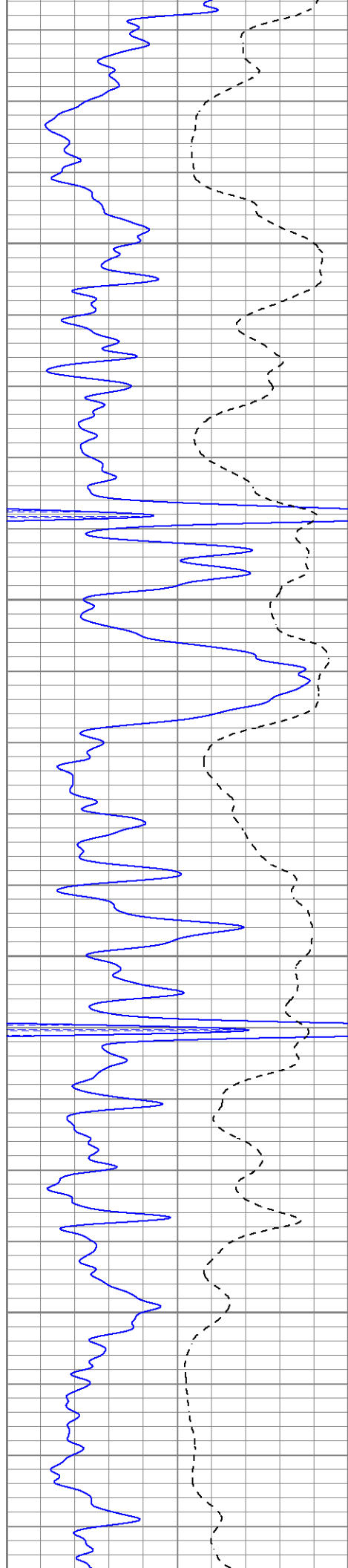


MAIN PASS

Database File	pesoakena#8oh.db
Dataset Pathname	pass3.1
Presentation Format	kdil
Dataset Creation	Tue Nov 21 10:05:05 2023
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150	0.2	RILD (Ohm-m)	2000
-100	SP (mV)	100	0.2	RLL3 (Ohm-m)	2000



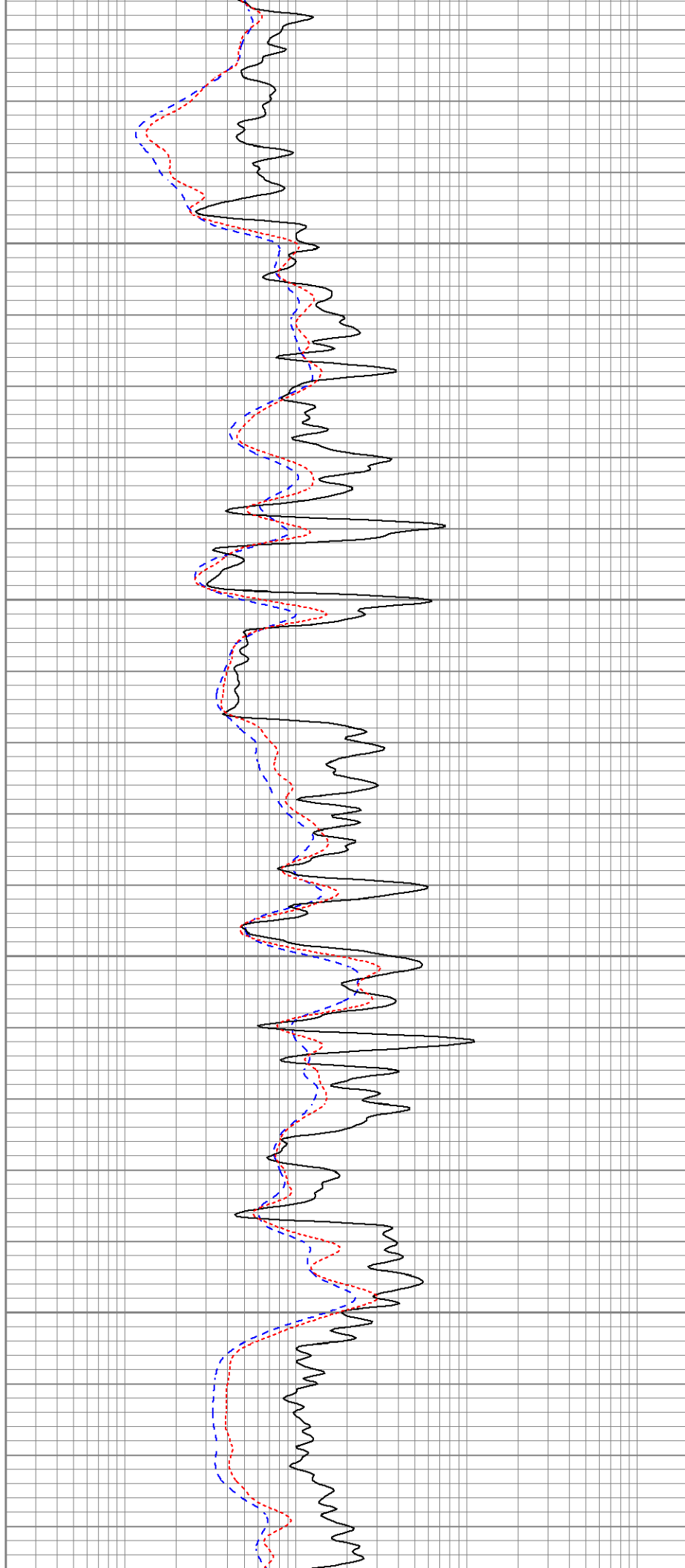


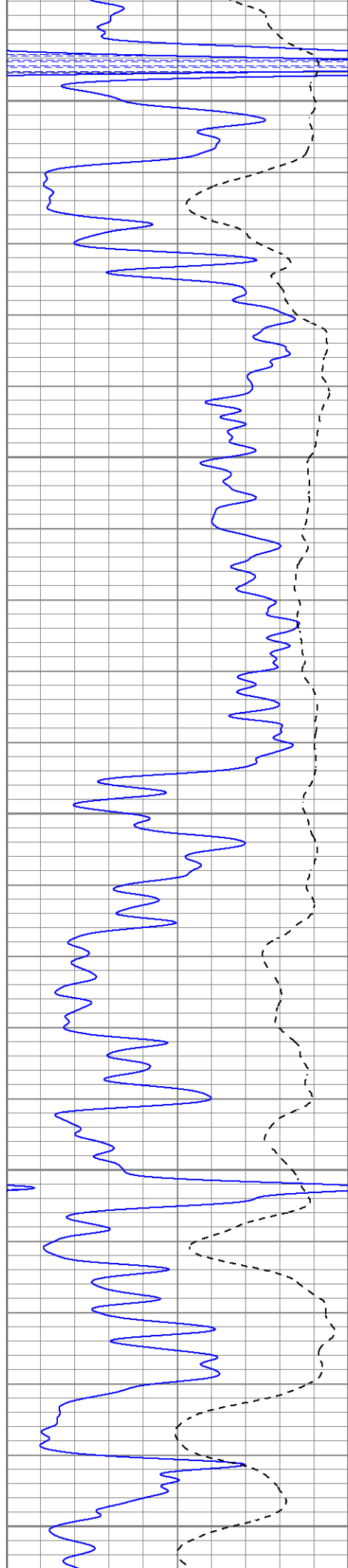
2700

2750

2800

2850





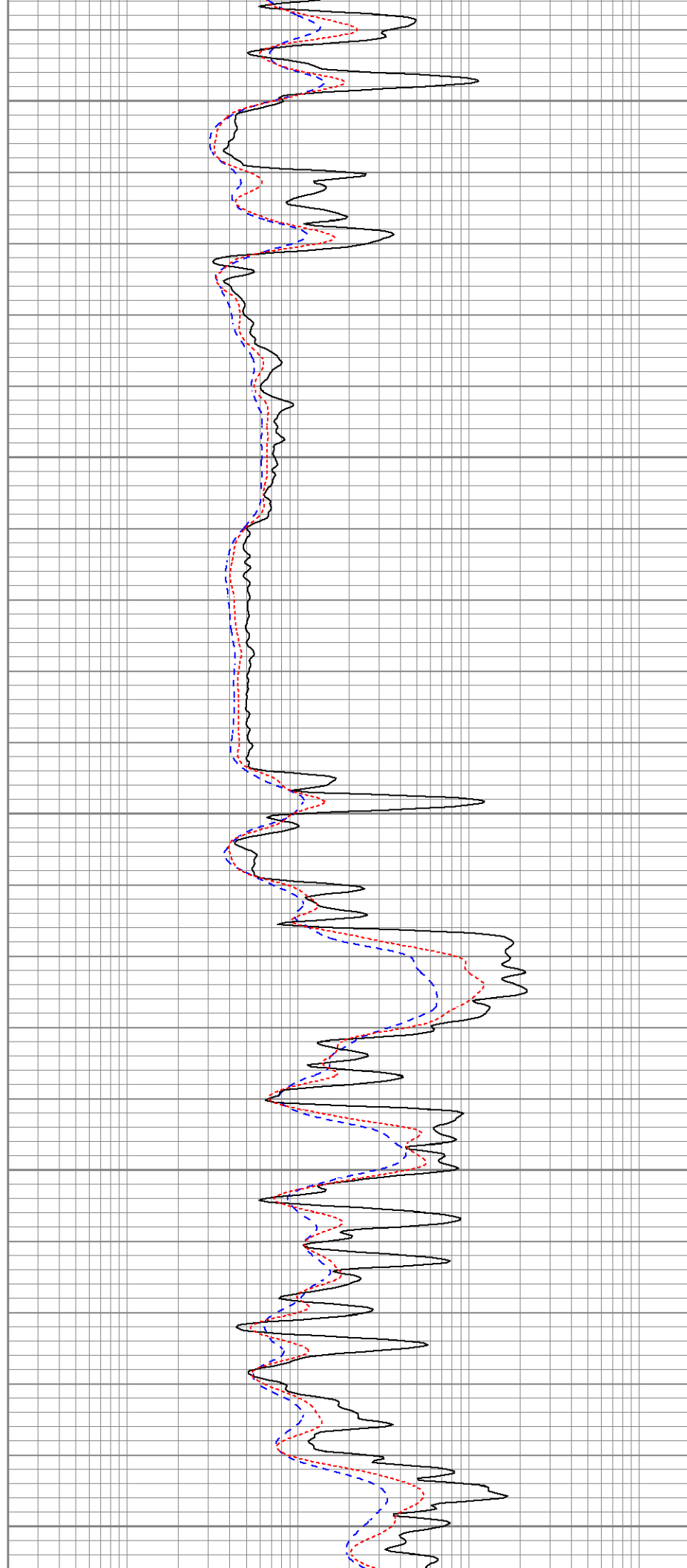
2900

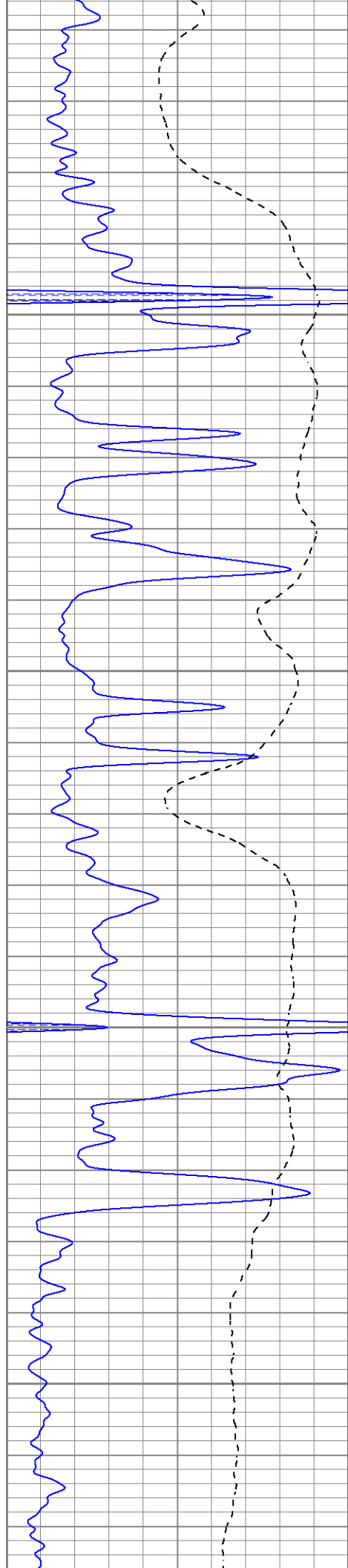
2950

3000

3050

3100



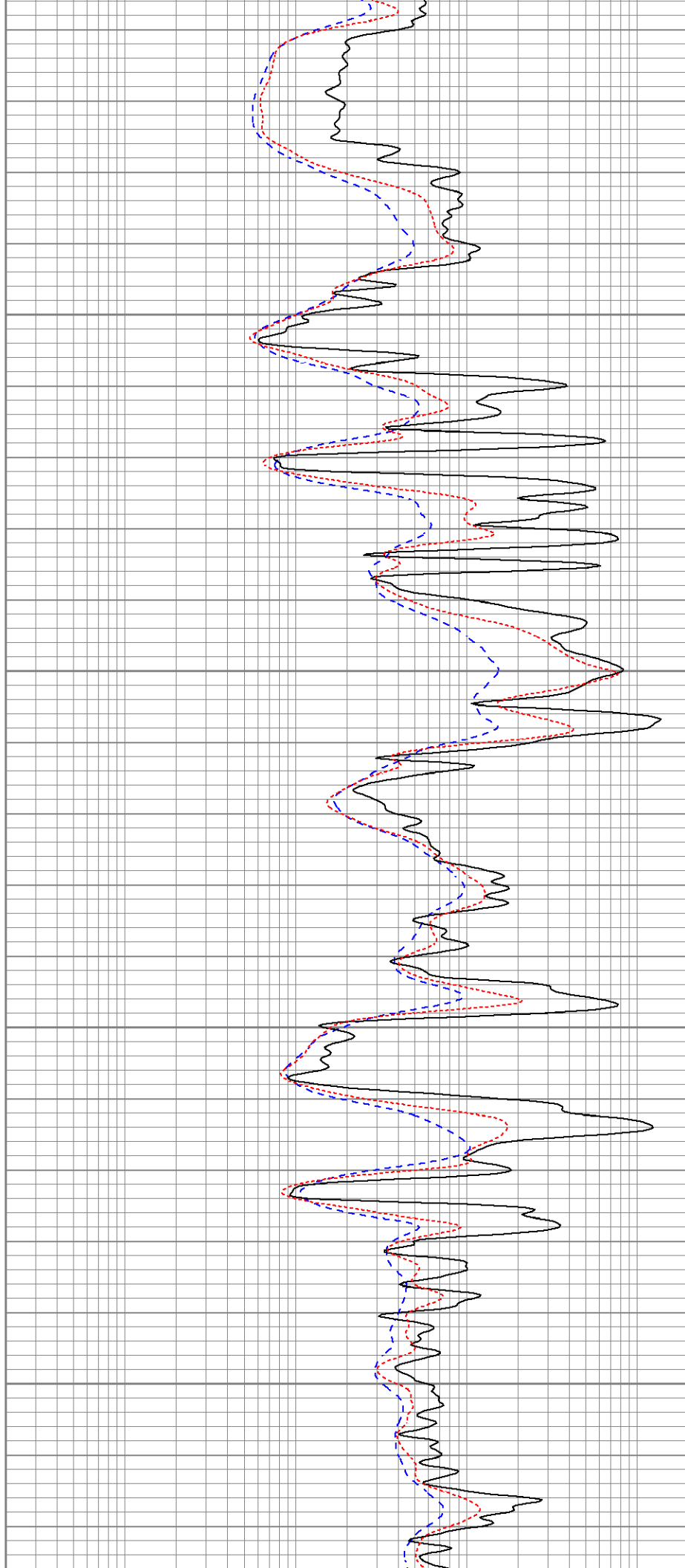


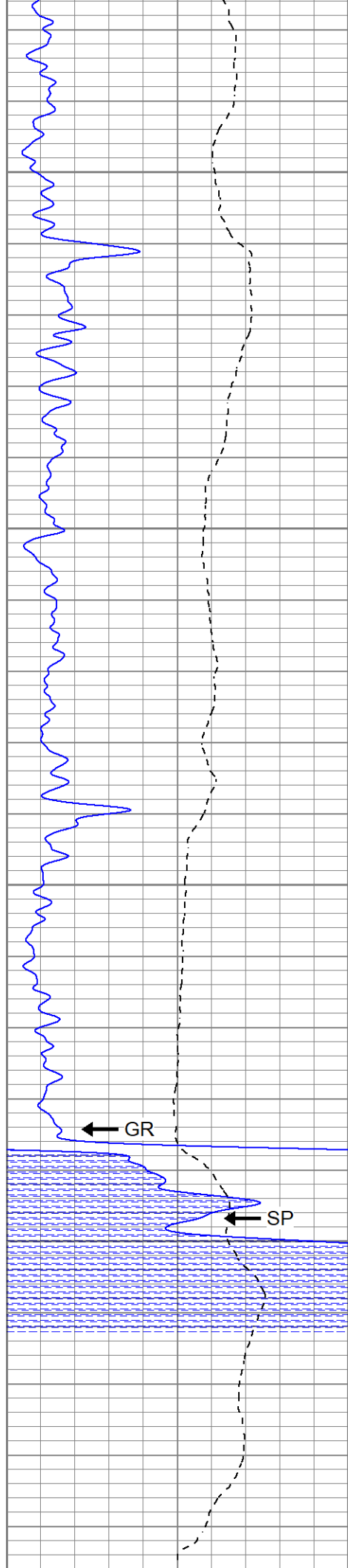
3150

3200

3250

3300





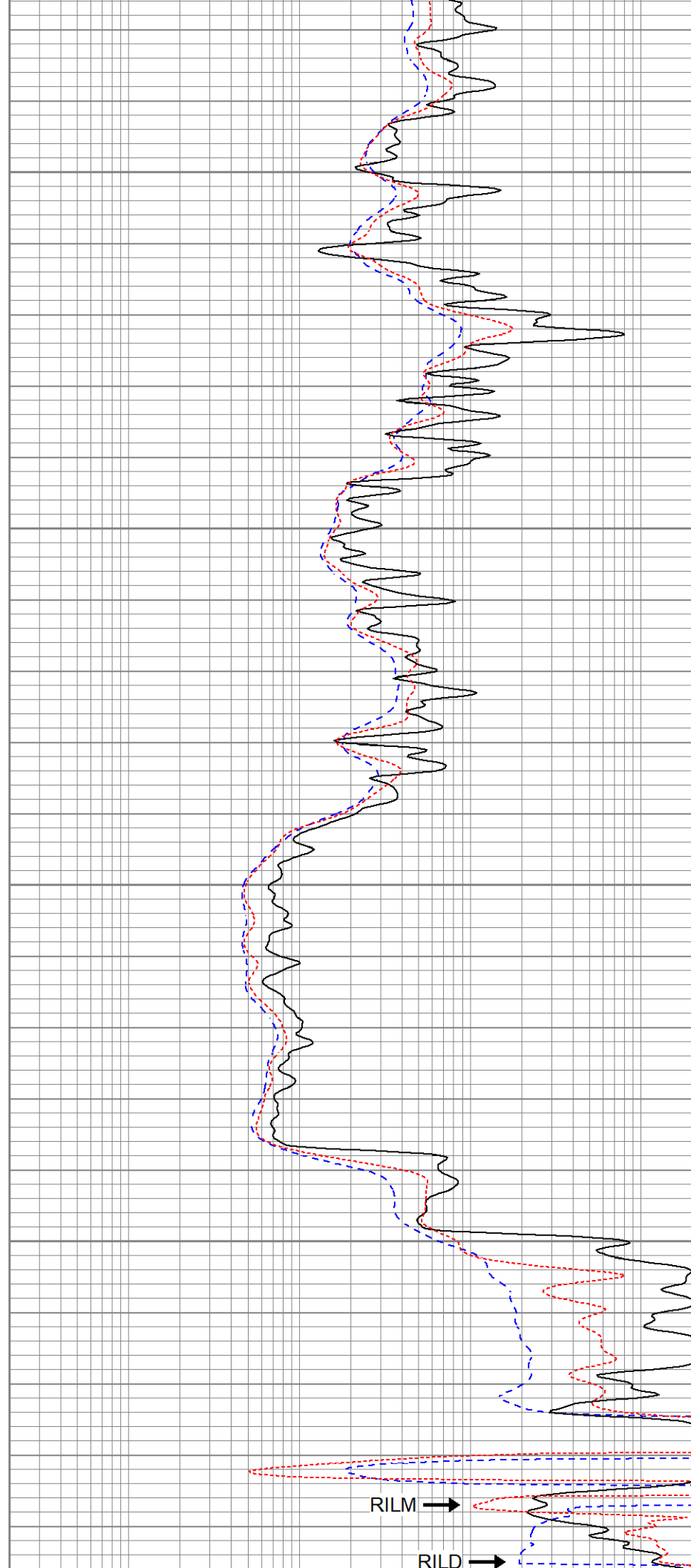
3350

3400

3450

3500

UTR-0510



RILM →

RILD →

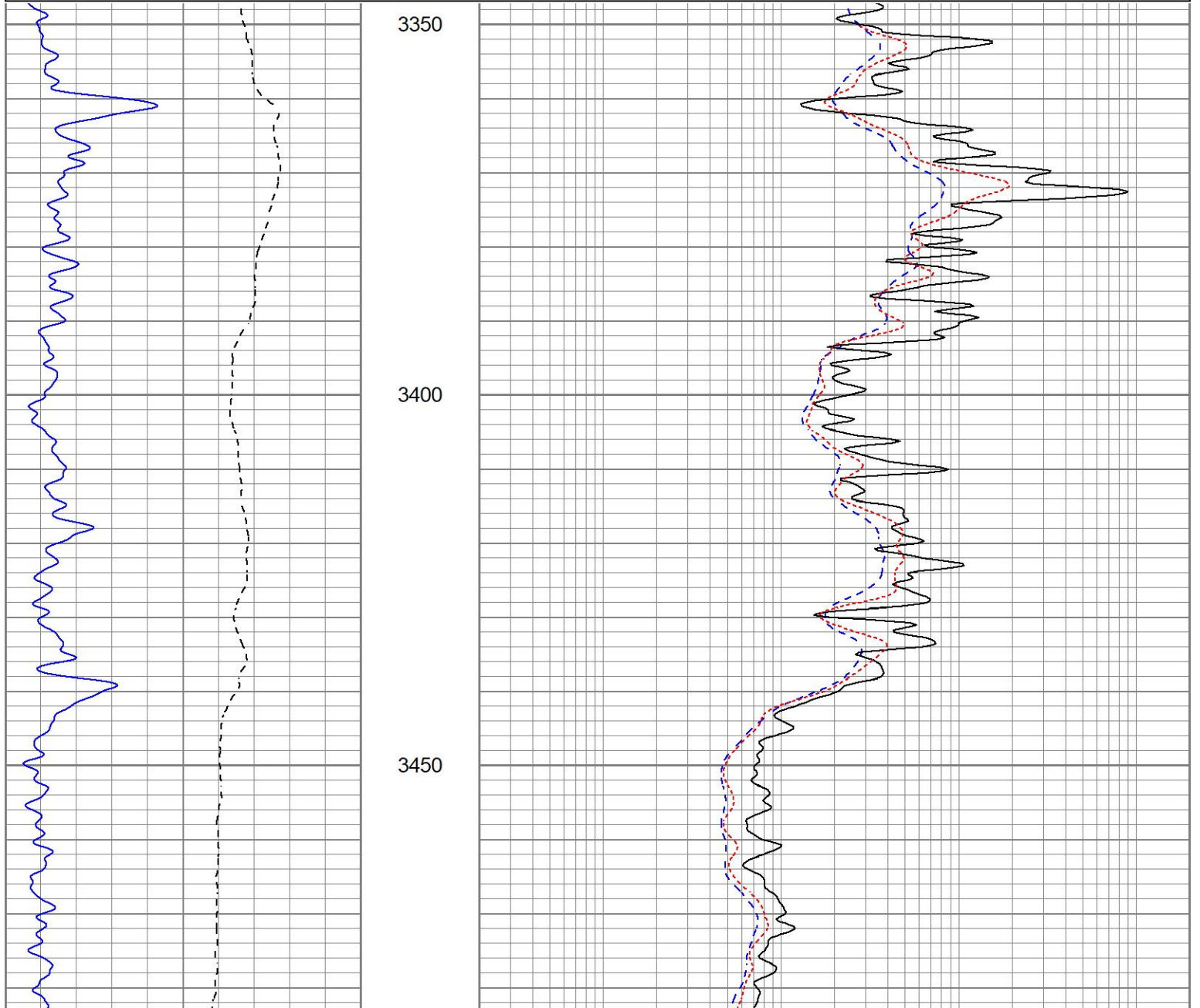
			LTD 3548			
			3550			
0	GR (GAPI)	150		0.2	RILD (Ohm-m)	2000
-100	SP (mV)	100		0.2	RLL3 (Ohm-m)	2000
				0.2	RILM (Ohm-m)	2000

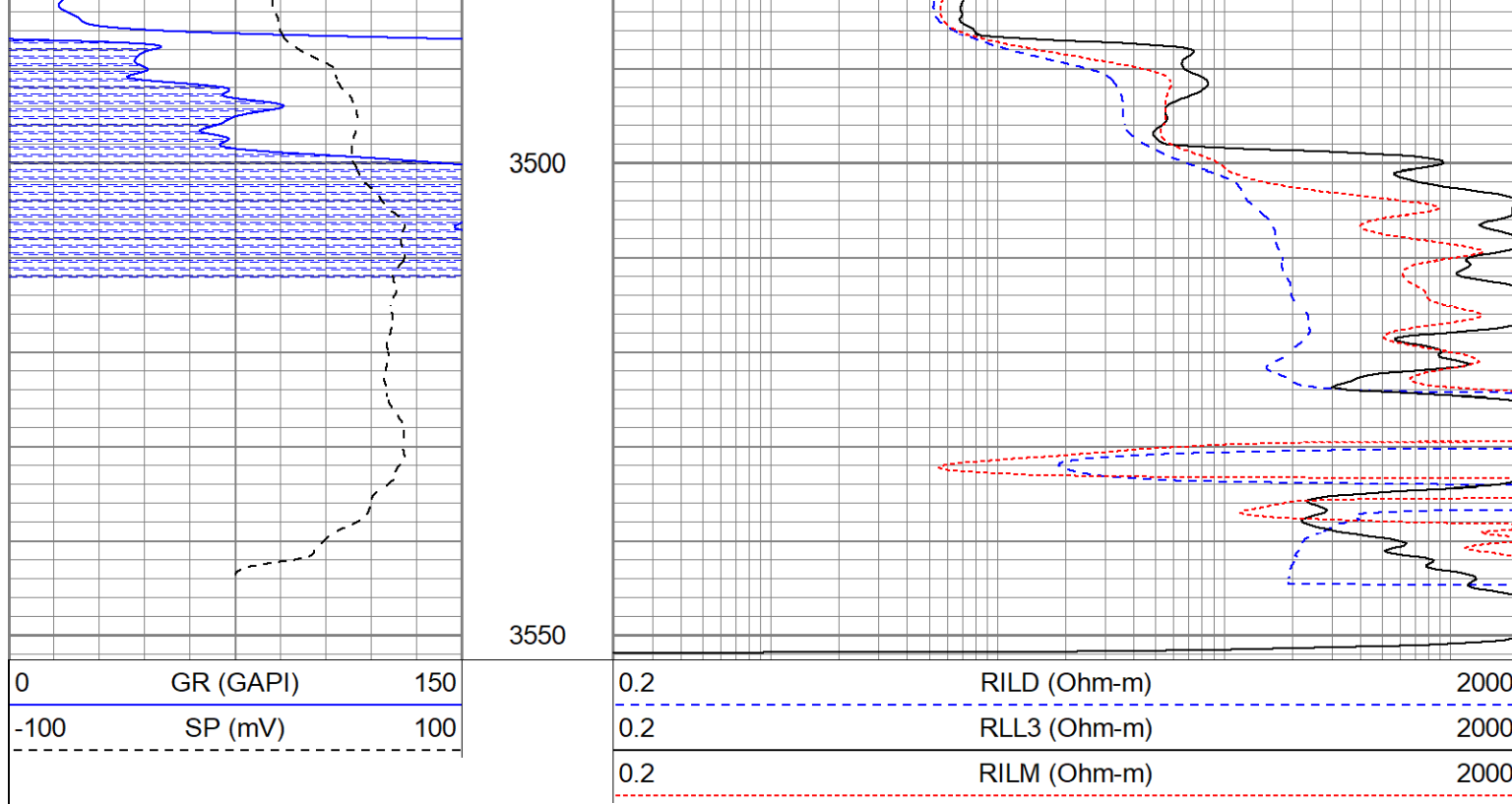


REPEAT PASS

Database File	pesoakena#8oh.db
Dataset Pathname	pass2.1
Presentation Format	kdil
Dataset Creation	Tue Nov 21 10:03:13 2023
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150	0.2	RILD (Ohm-m)	2000
-100	SP (mV)	100	0.2	RLL3 (Ohm-m)	2000
			0.2	RILM (Ohm-m)	2000





Calibration Report									
Database File	pesoakena#8oh.db								
Dataset Pathname	pass3.1								
Dataset Creation	Tue Nov 21 10:05:05 2023								
Dual Induction Calibration Report									
Serial-Model:				1842-ADM					
Surface Cal Performed:				Mon Sep 20 22:00:42 2021					
Downhole Cal Performed:				Thu Sep 14 13:06:48 2023					
After Survey Verification Performed:				Thu Sep 14 13:02:29 2023					
Surface Calibration									
		Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.018	0.672	V	0.000	350.000	mmho/m	535.475	-9.896	
Medium	0.003	0.769	V	0.000	400.000	mmho/m	522.607	-1.745	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.018	0.672	V	0.000	350.000	mmho/m	535.240	-9.549	
Medium	0.003	0.768	V	0.000	550.000	mmho/m	718.637	-2.088	
Downhole Calibration									
		Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	-0.210	349.810	mmho/m	-0.343	349.810	mmho/m	1.000	-0.133	
Medium	6.952	396.760	mmho/m	-0.226	399.745	mmho/m	1.026	-7.360	
Shallow	2.495	0.026	V	500.000	2.000	Ohm-m	201.711	-3.319	
After Survey Verification									
		Readings			Targets			Results	

Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	32.030	5.643	mmho/m	1.000	-0.133
Medium	0.000	0.000	mmho/m	6.952	396.760	mmho/m	1.026	-7.360
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Admyr Lithodensity Calibration Report

Serial-Model:	1C-C
Source:	Blue2
Master Calibration Performed:	Tue Aug 30 10:20:37 2022

Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.670	g/cc		6362.49	3546.71	cps
Aluminium	2.640	g/cc		1733.54	2362.69	cps
Aluminium+Sleeve	2.617	g/cc		1657.01	2197.69	cps
Spine Angle = 72.65			Density/Spine Ratio = 0.712			
	PE			NLITH	NHARD	
Magnesium	2.000	barn		2520.00	1620.00	cps
Aluminium	3.000	barn		1926.00	1699.00	cps
Aluminium+Sleeve	5.000	barn		915.00	1230.00	cps
M = 0.370			B = -0.079		R = 0.999	
	Size			Reading		
Small Ring	8.00	in		8.61	V	
Large Ring	14.30	in		12.40	V	

--

Neutron Calibration Report

Serial Number:	AD5139	
Tool Model:	ADMY5139	
Performed:	(Not Performed)	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Temperature Calibration Report

Serial Number:	WithMC				
Tool Model:	WMC				
Performed:	Fri Apr 19 12:15:04 2019				
	Reference		Reading		
Low Reference:	0.00	degF	0.00	degF	
High Reference:	1.00	degF	1.00	degF	
Gain:	1.00				
Offset:	0.00				
Delta Spacing	1				

Inclinometer Calibration Report

Performed:	Wed May 5 19:20:48 2021				
	Low Read.	High Read.		Low Ref.	High Ref.

X Accelerometer	205.00	1843.00	-1.00	1.00	gee
Y Accelerometer	205.00	1843.00	-1.00	1.00	gee
Z Accelerometer					gee

Gamma Ray Calibration Report

Serial Number:	WithMC	
Tool Model:	WMC	
Performed:	Sat Nov 11 16:49:39 2023	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps