



DUAL INDUCTION LOG

Company Ressler Well Service, Inc.

Well McLeod #10-1

Field Spivey-Grabs-Basil

County Kingman State KS

Location: API #: 15 095 22300

SEC 10 TWP 30S RGE 8W

Permanent Datum Ground Level Elevation 1501'

Log Measured From KB 10' AGL

Drilling Measured From KB

ML
CDNL

Elevation

K.B. 1511'

D.F. 1510'

G.L. 1501'

Date 10-10-15

Run Number One

Depth Driller 4280'

Depth Logger 4282'

Bottom Logged Interval 4280'

Top Log Interval 200'

Casing Driller 220'

Casing Logger 220'

Bit Size 7 7/8"

Type Fluid in Hole Chemical Mud

Density / Viscosity 9.5/4.4

pH / Fluid Loss 10/11.2

Source of Sample Pit

Rm @ Meas. Temp 1.4@62degf

Rmf @ Meas. Temp 1.05@62degf

Rmc @ Meas. Temp 1.68@62degf

Source of Rmf / Rmc Calculated

Rm @ BHT .72@120degf

Time Circulation Stopped 6:45 a.m.

Time Logger on Bottom 8:45 a.m.

Maximum Recorded Temperature 120 degf

Equipment Number T127

Location Hays, KS.

Recorded By Gus Pfannenstiel

Witnessed By Mr. Terry McLeod

Mr. Larry Ressler

<<< 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 Gemini Wireline
785-625-1182

Zenda East 6 Miles, North 1 mile,
West 1/3 mile, South into after bridge.



Main Pass

Database File rwmcleod#10-1oh.db
Dataset Pathname pass2
Presentation Format kdillin2
Dataset Creation Sat Oct 10 08:48:24 2015
Charted by Depth in Feet scaled 1:600

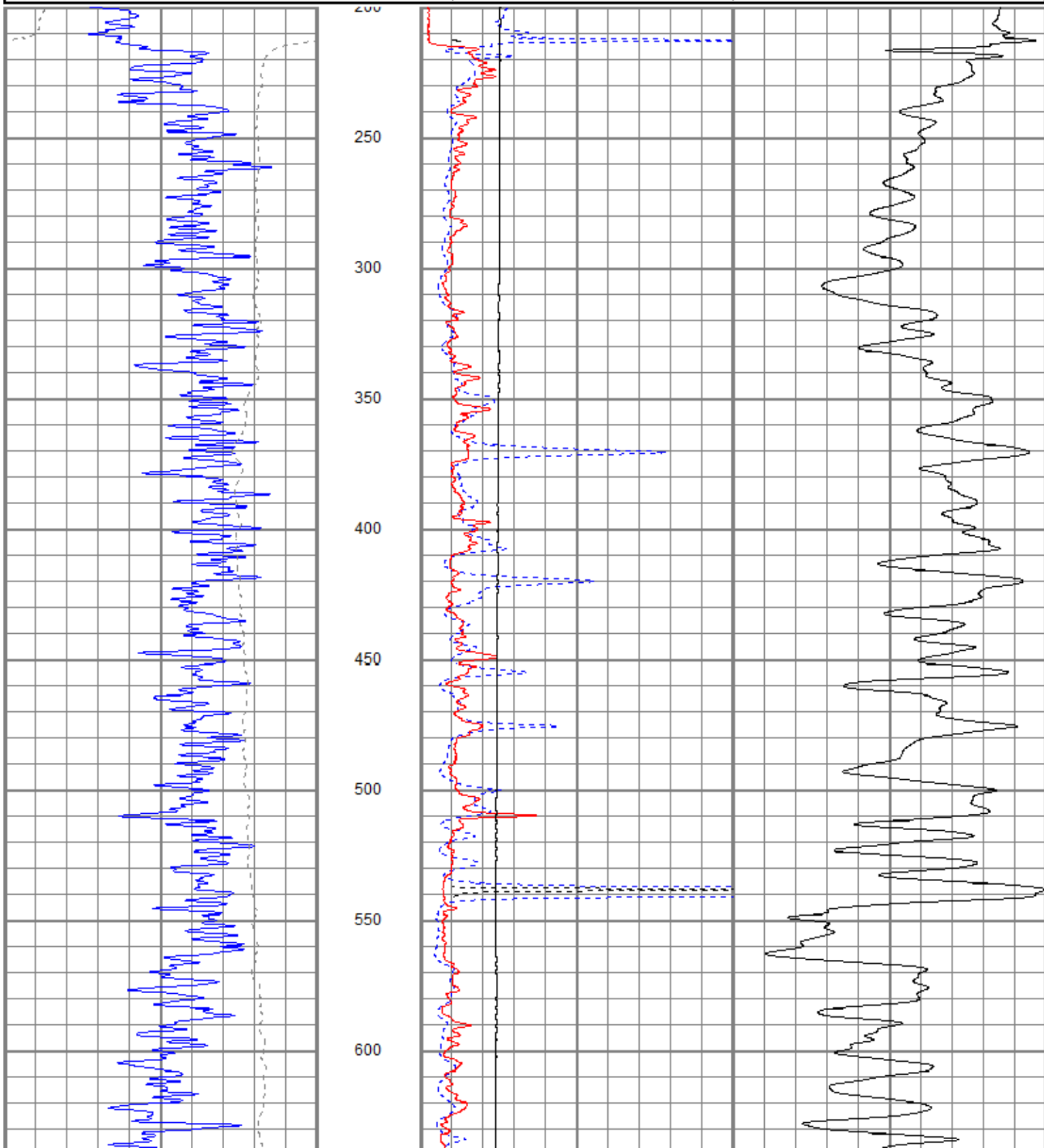
0	GR (GAPI)	150
-200	SP (mV)	0

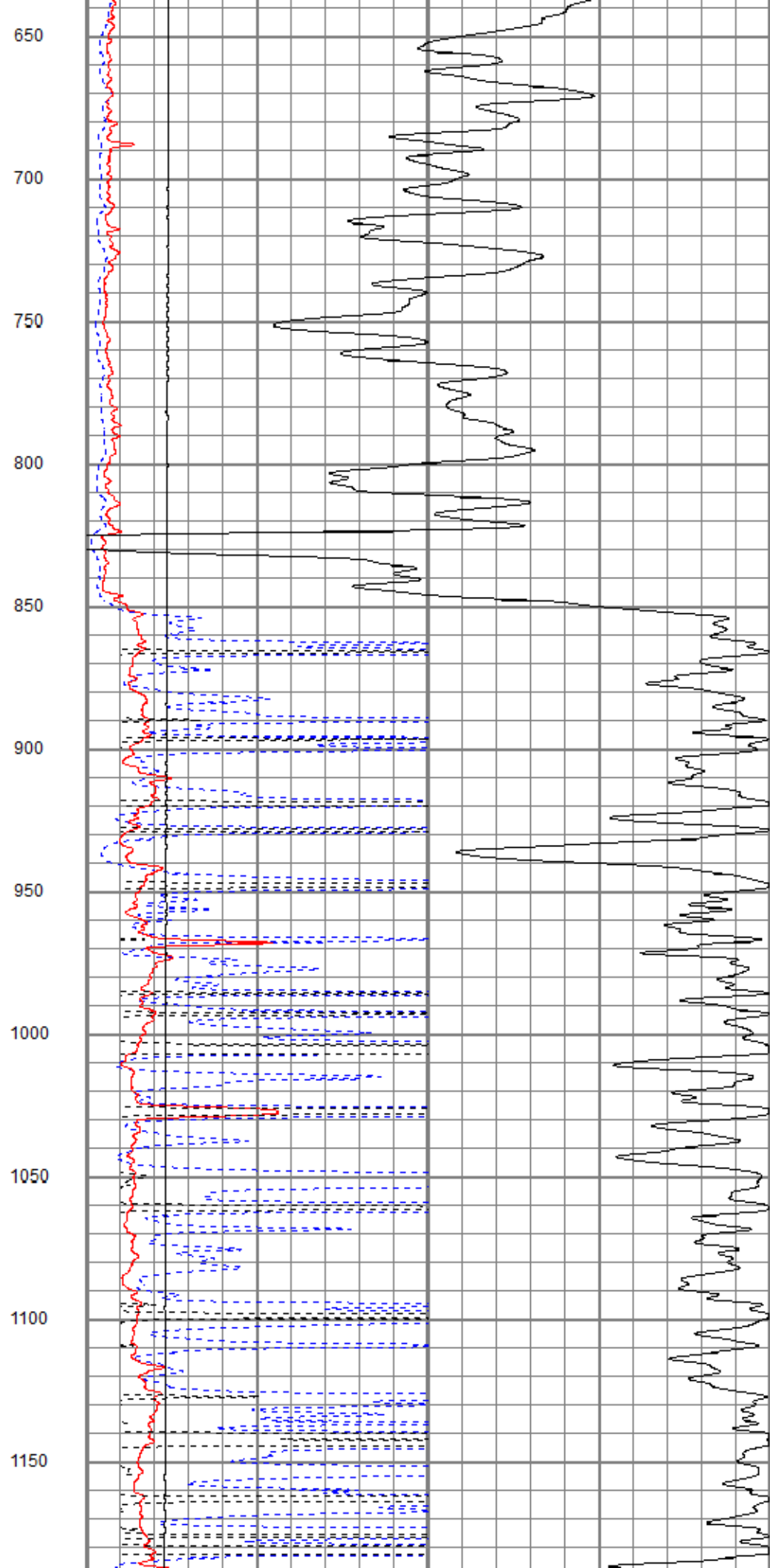
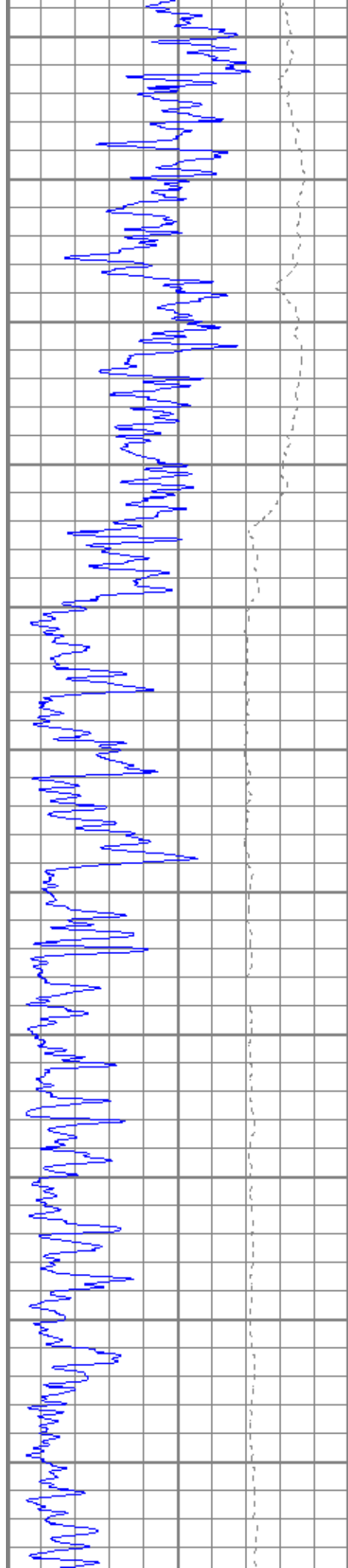
0	RILD (Ohm-m)	50
0	RLL3 (Ohm-m)	50

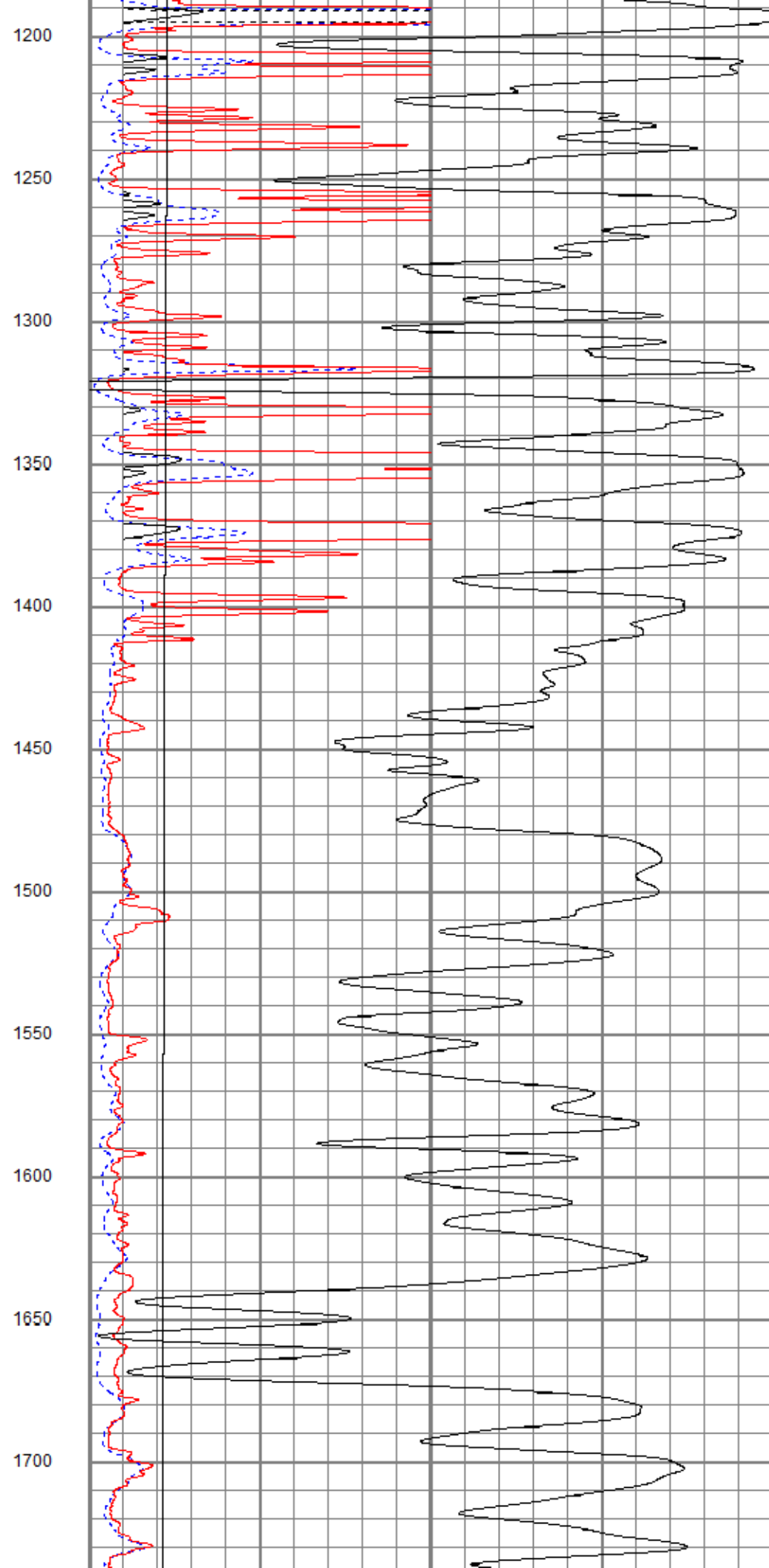
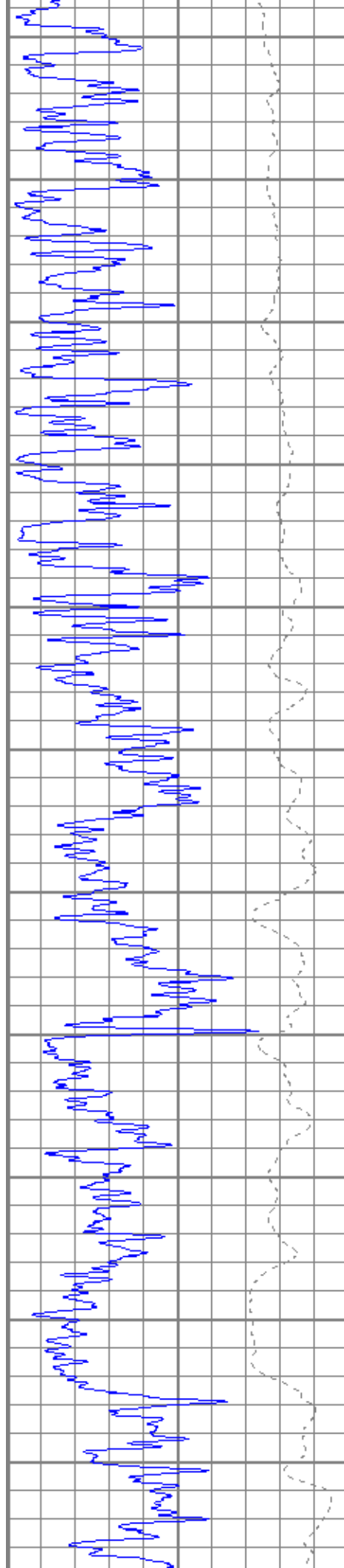
1000	CILD (mmho/m)	0
------	---------------	---

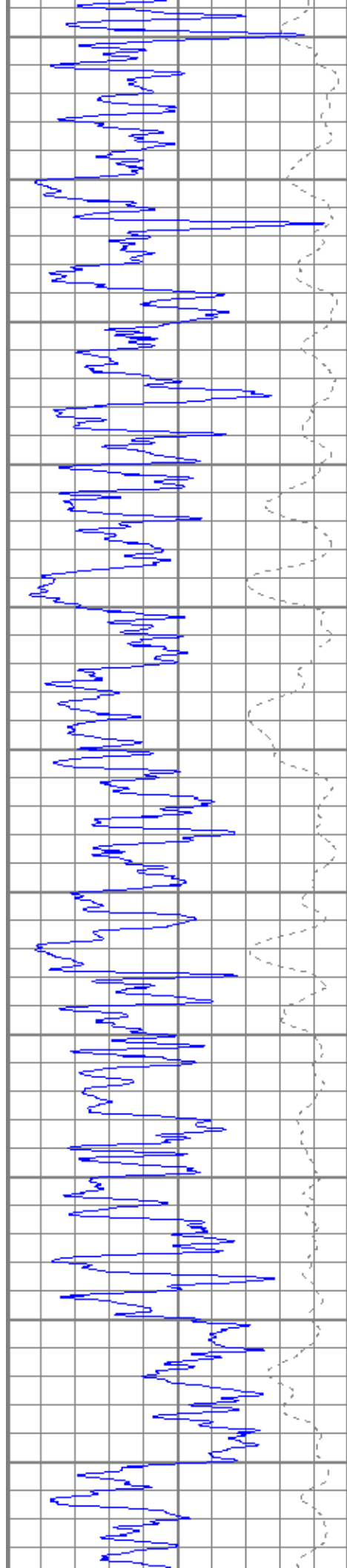
10000	LTEN (lb)	0
-------	-----------	---

50	RILD x 10 (Ohm-m)	500
50	RLL3 x 10 (Ohm-m)	500

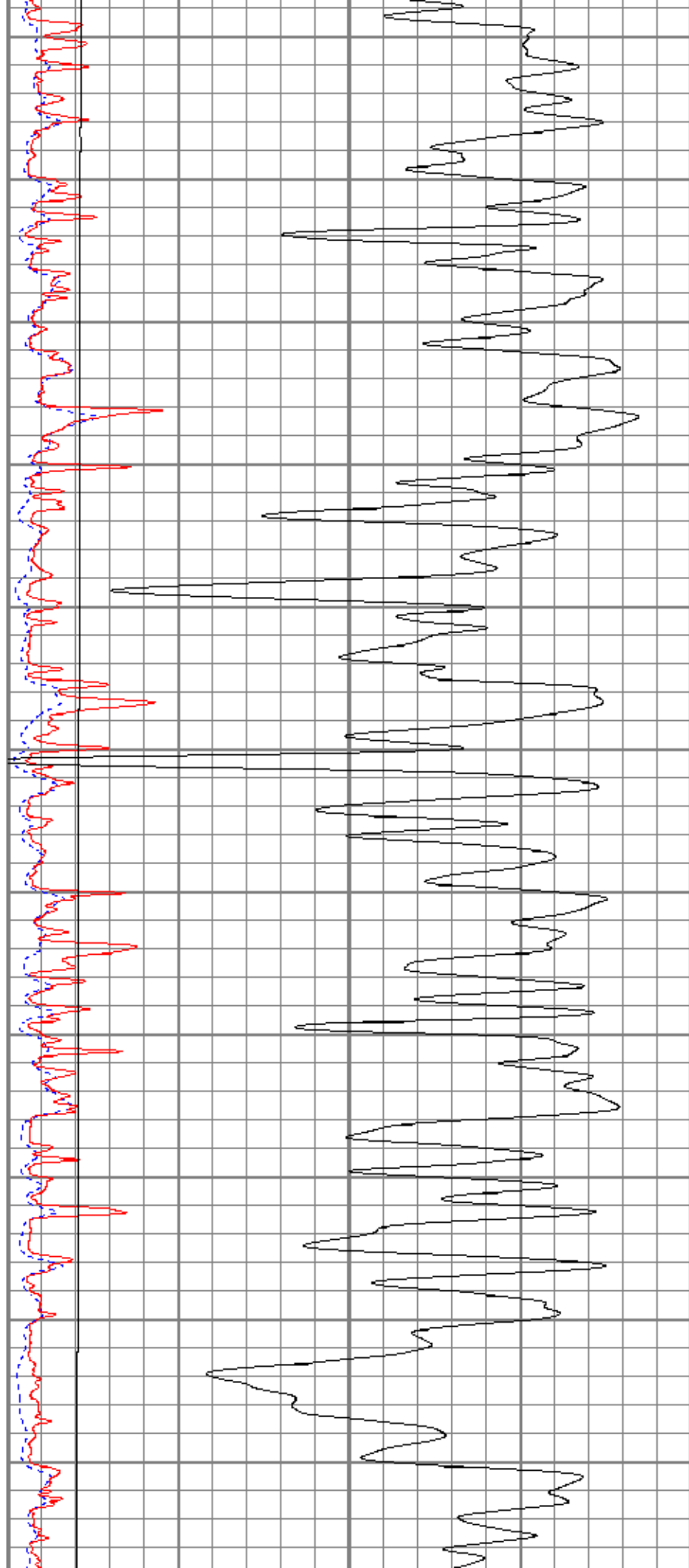


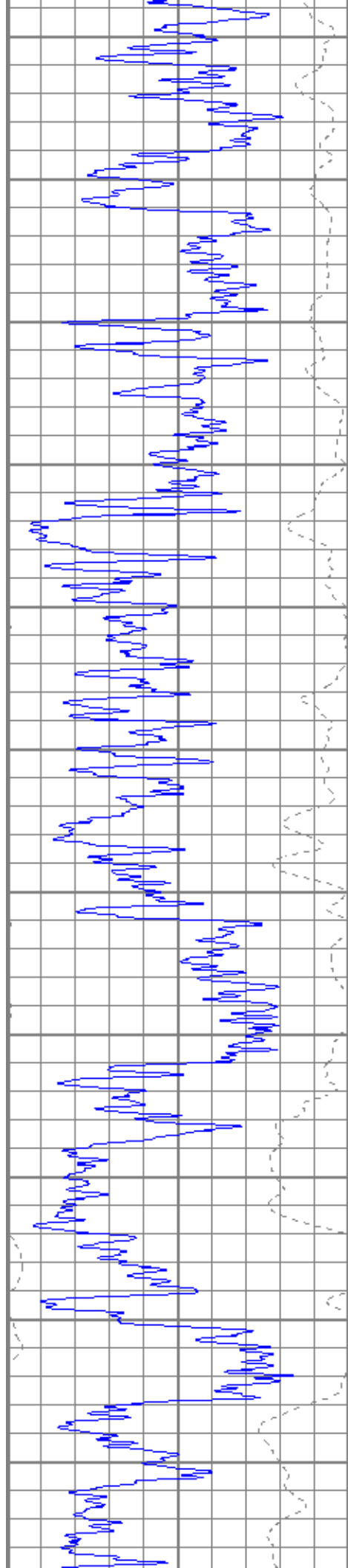






1750
1800
1850
1900
1950
2000
2050
2100
2150
2200
2250





2300

2350

2400

2450

2500

2550

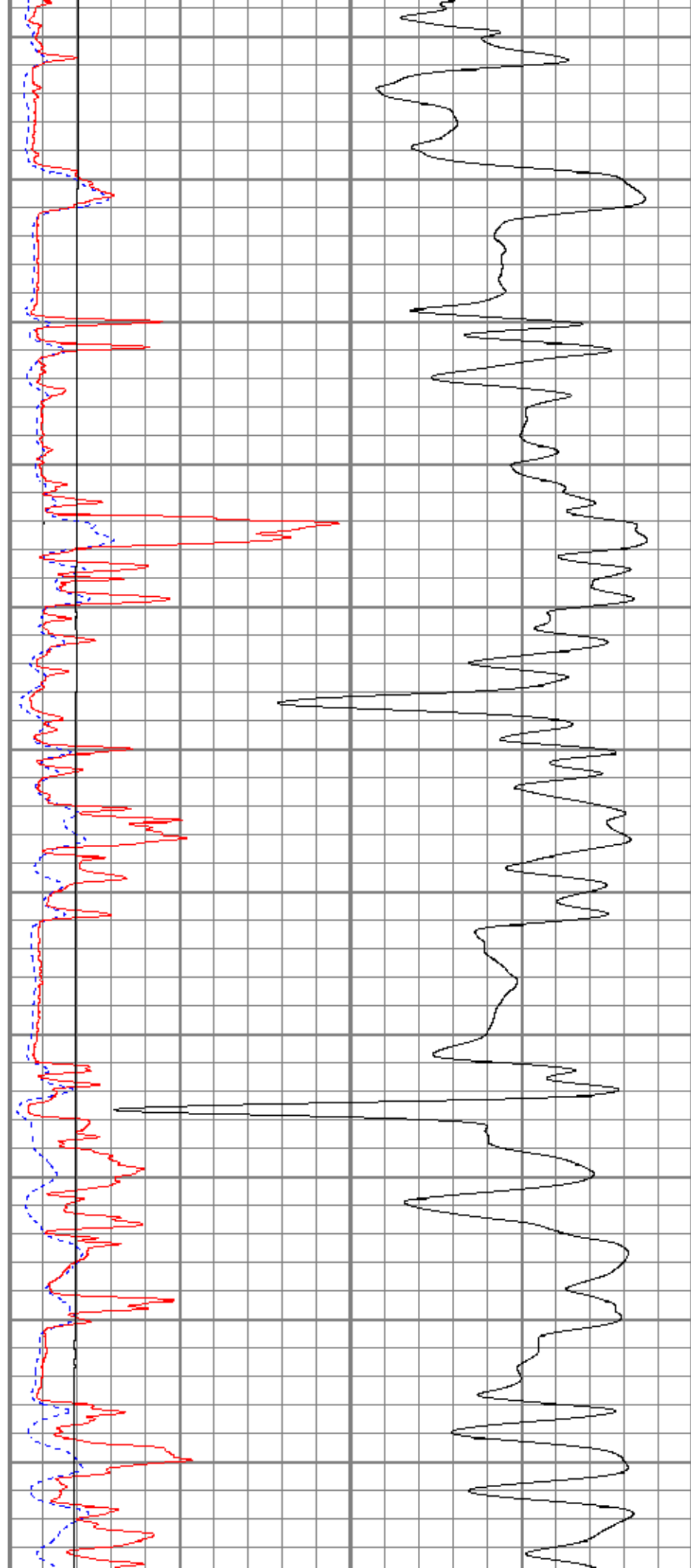
2600

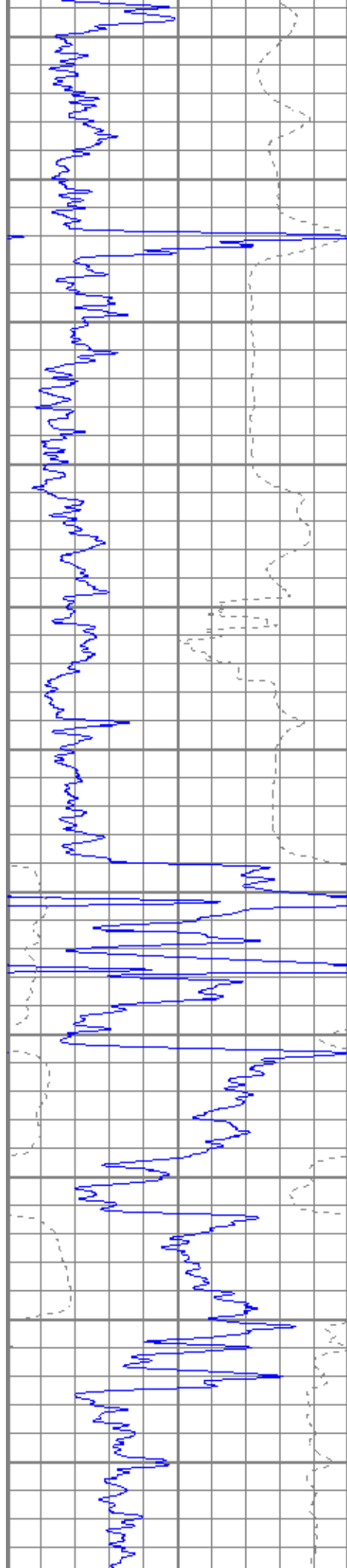
2650

2700

2750

2800





2850

2900

2950

3000

3050

3100

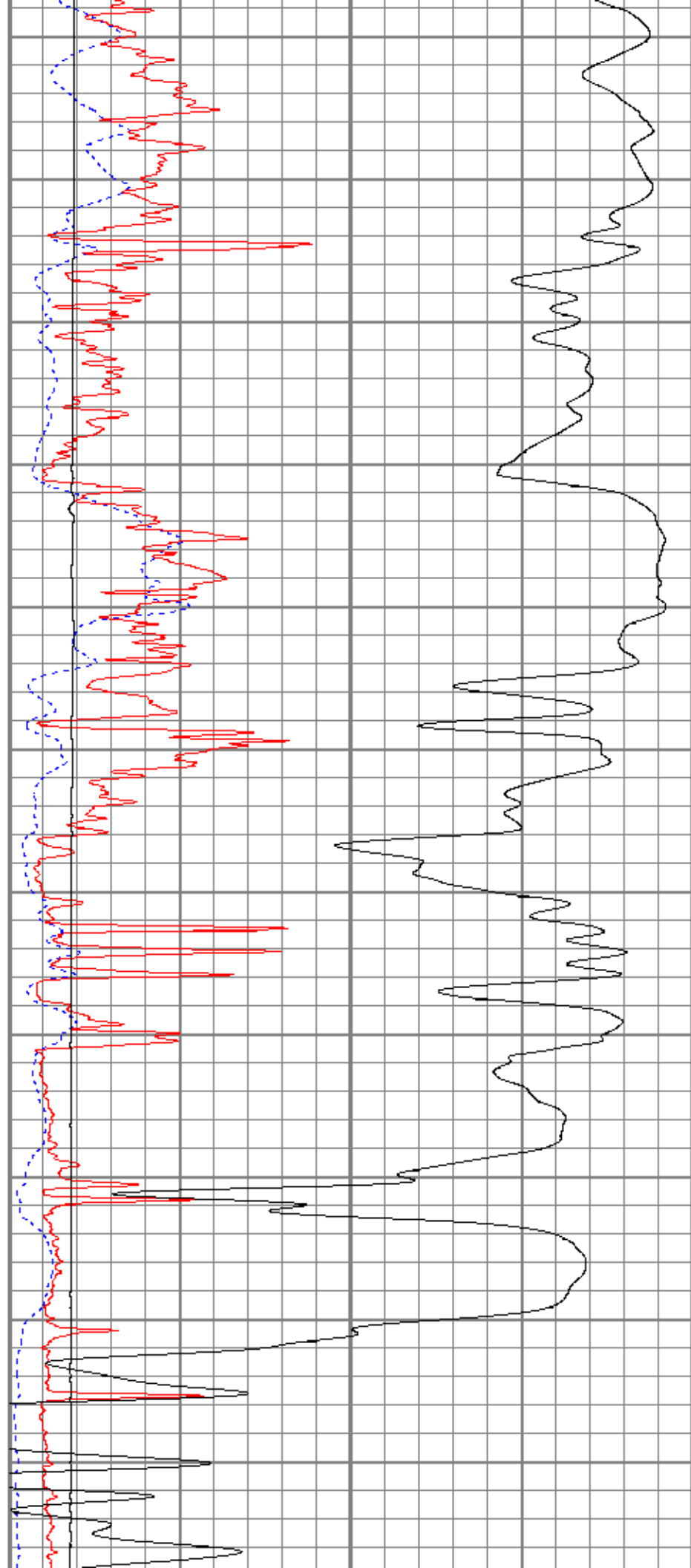
3150

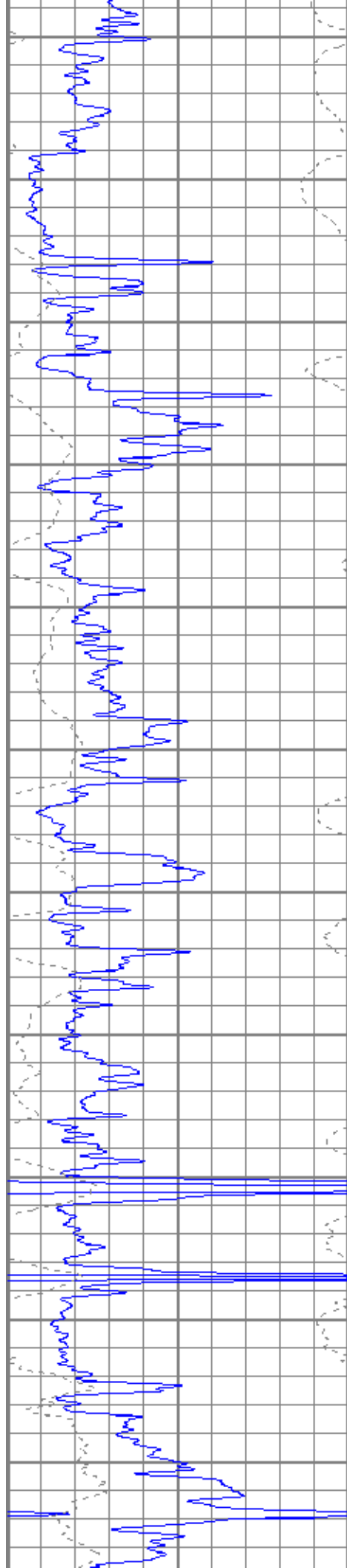
3200

3250

3300

3350





3400

3450

3500

3550

3600

3650

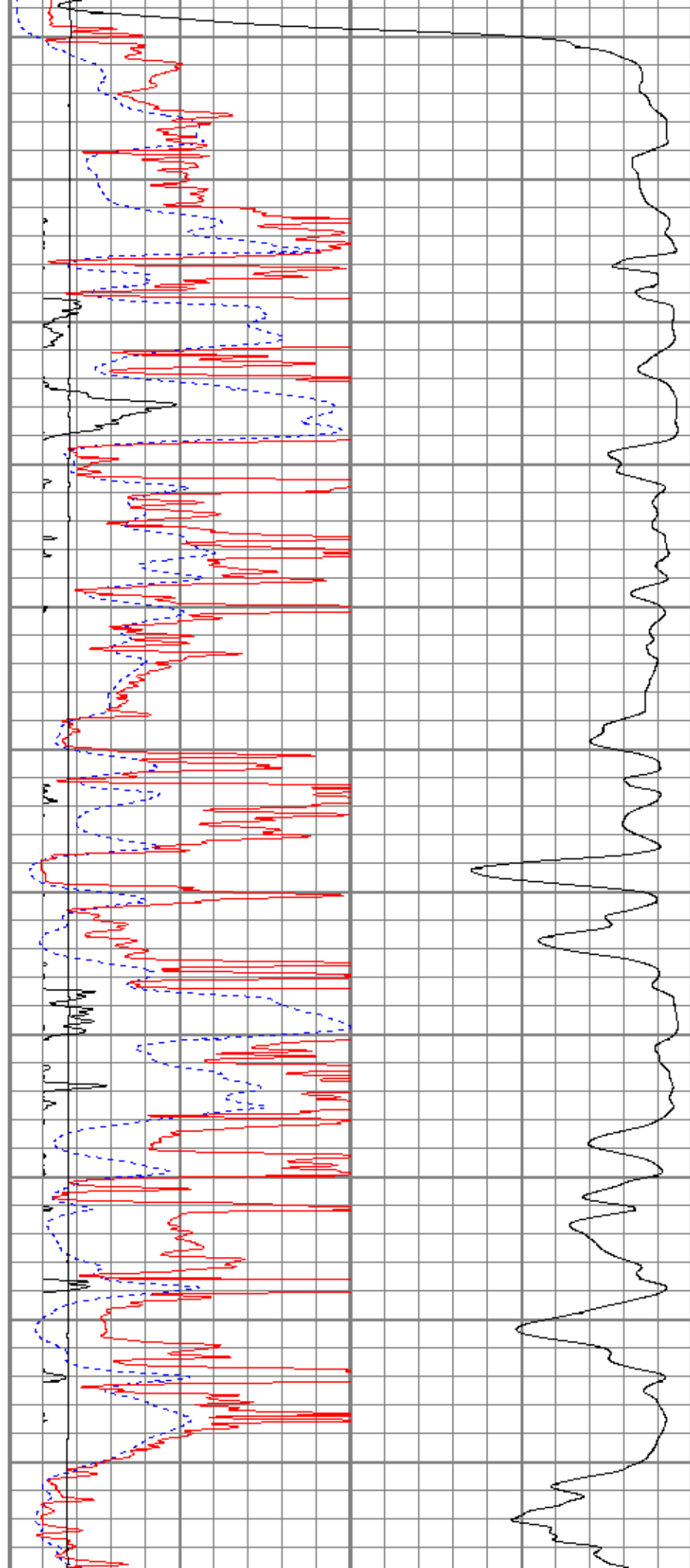
3700

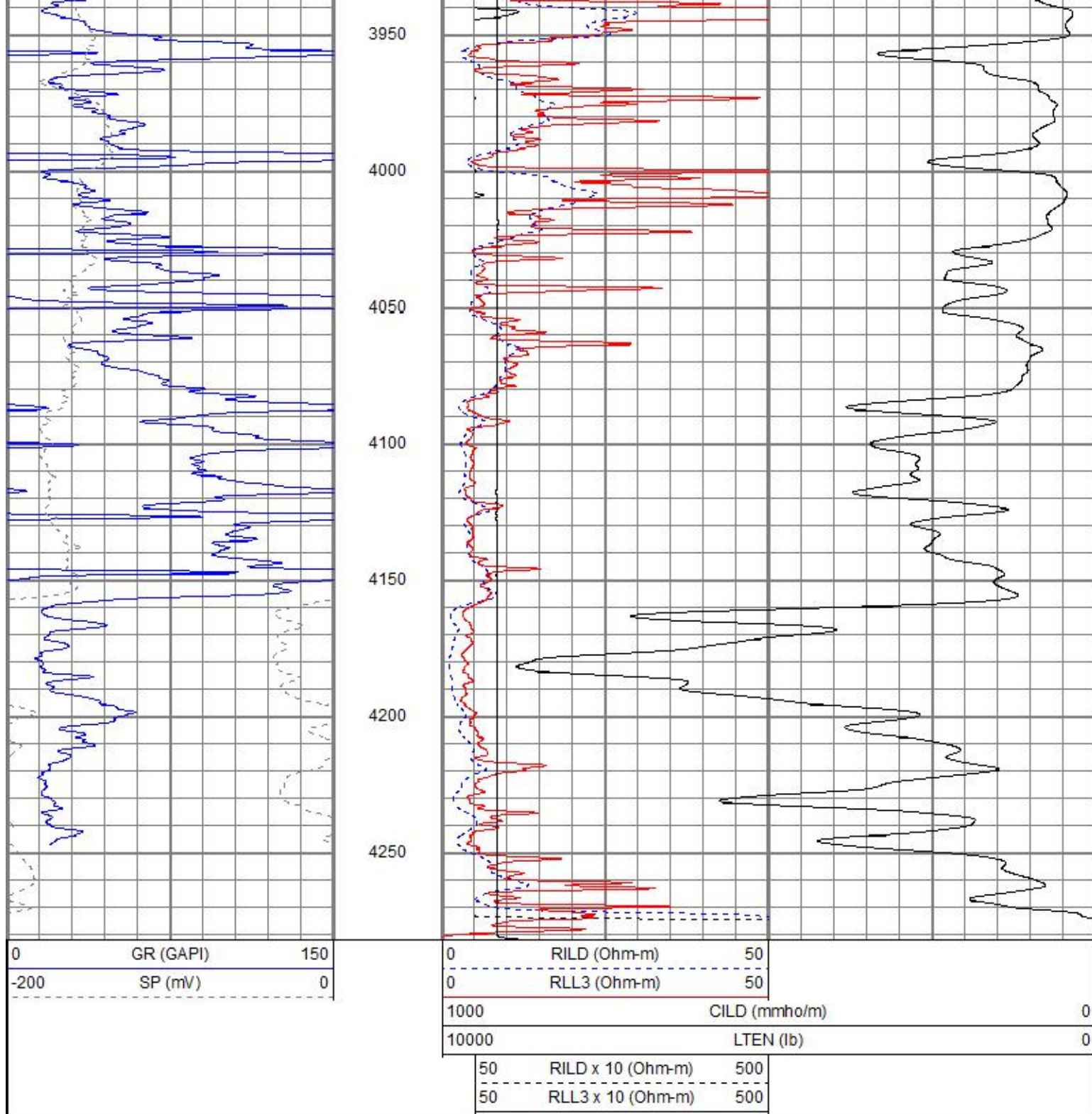
3750

3800

3850

3900

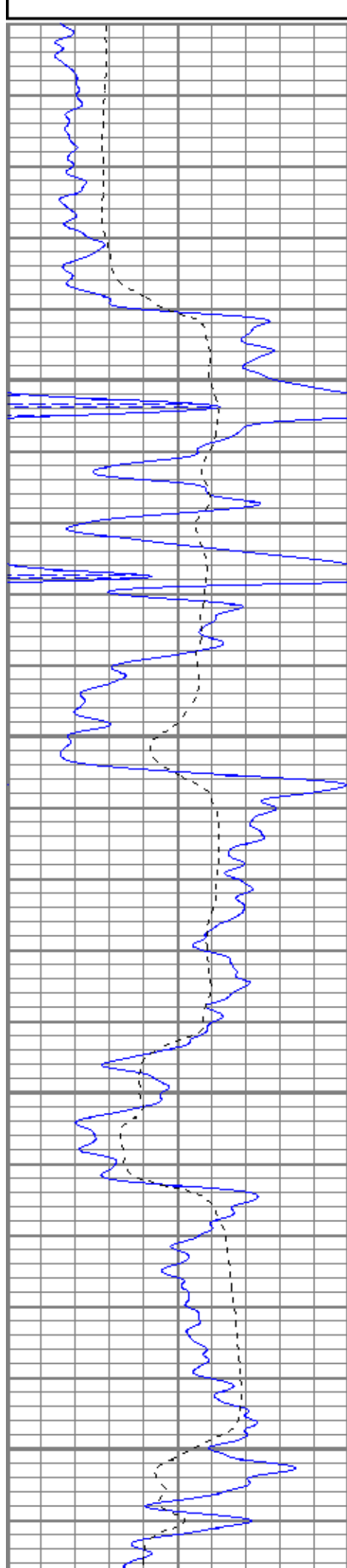




Main Pass

Database File: rwmcleod#10-1oh.db
 Dataset Pathname: pass2
 Presentation Format: kdil
 Dataset Creation: Sat Oct 10 08:48:24 2015
 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	RIL M (Ohm-m)	2000



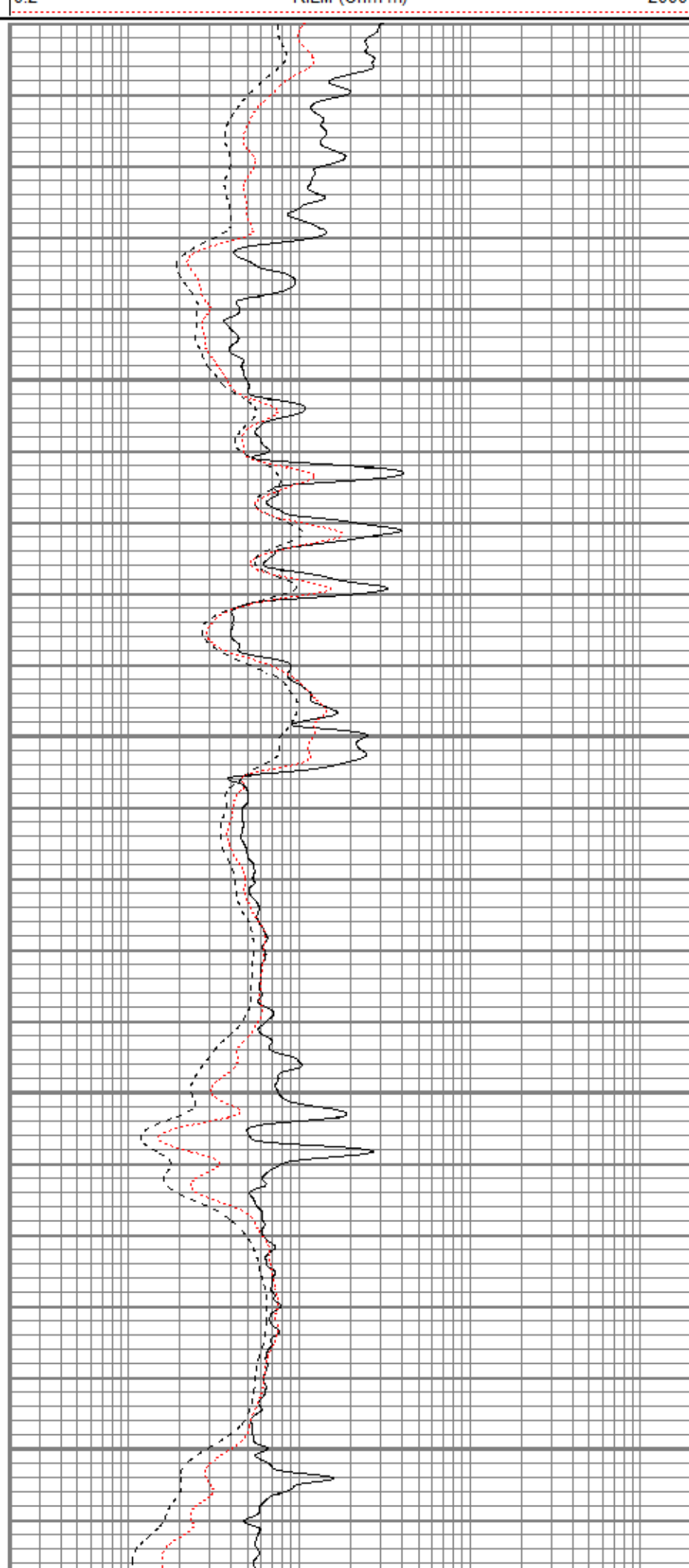
3100

3150

3200

3250

3300



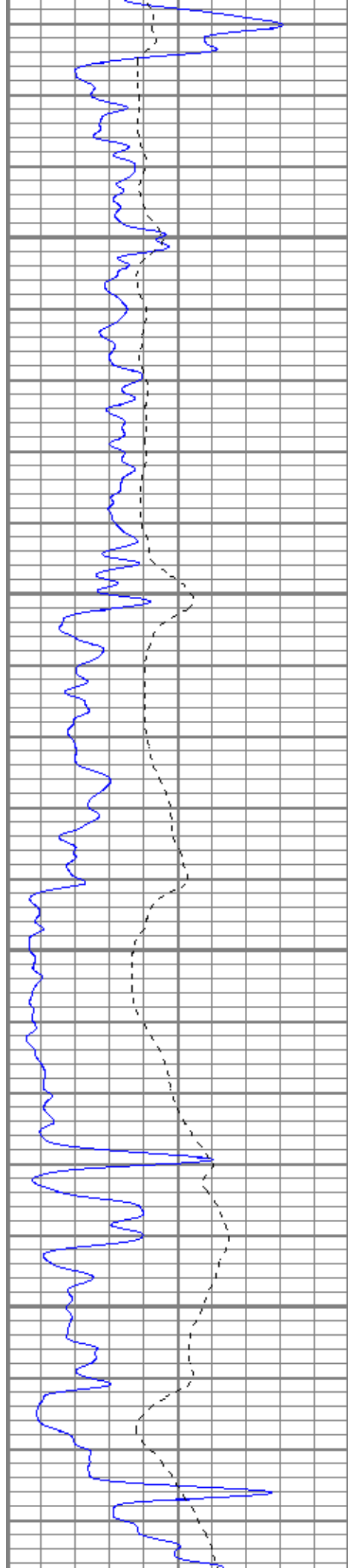
3100

3150

3200

3250

3300

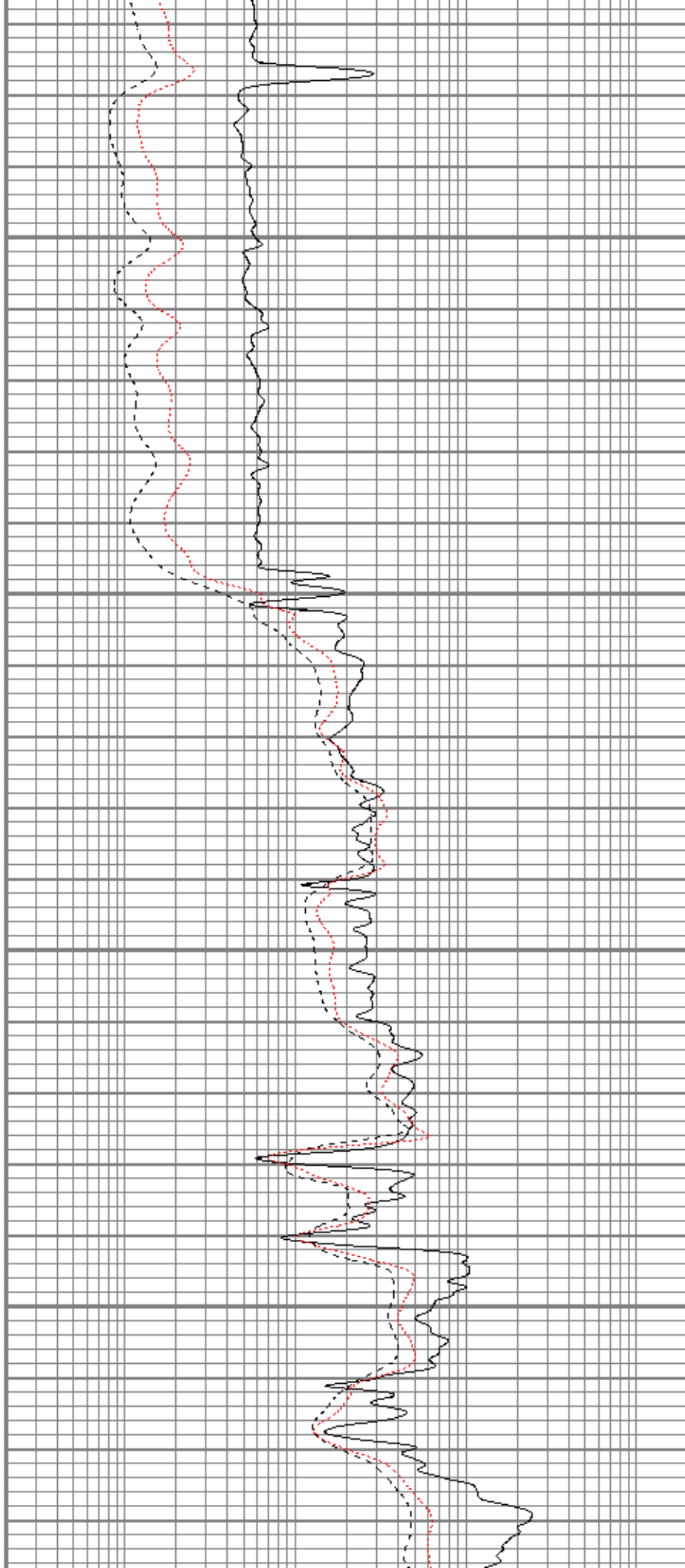


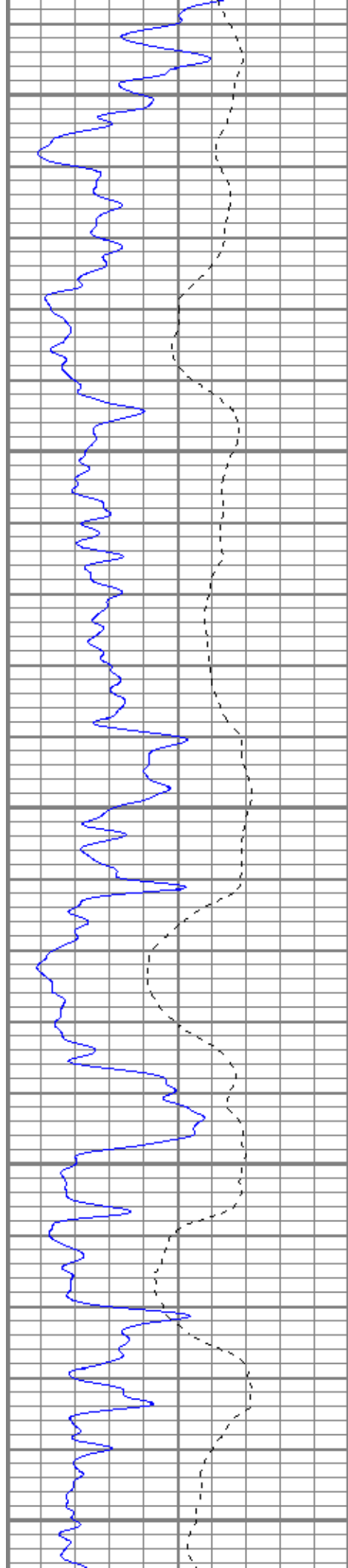
3350

3400

3450

3500





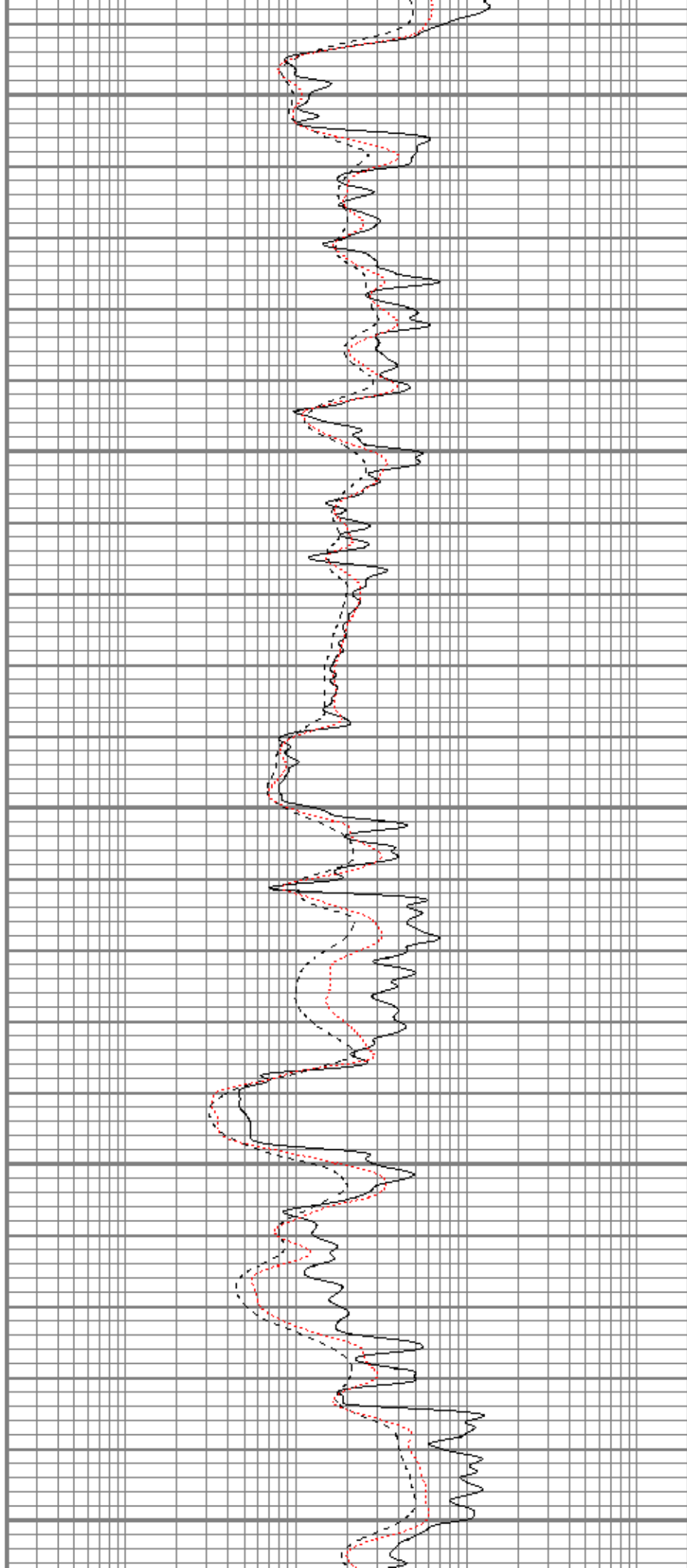
3550

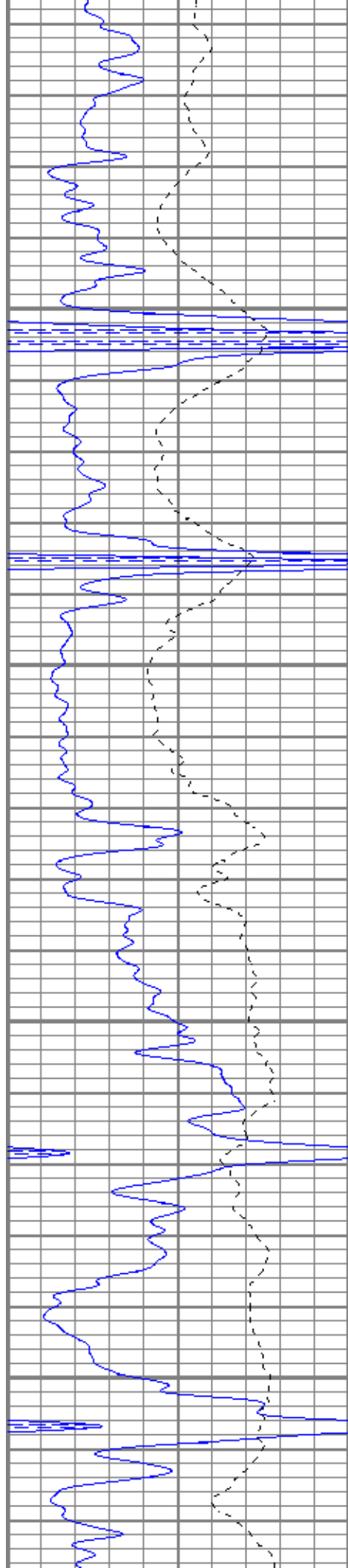
3600

3650

3700

3750



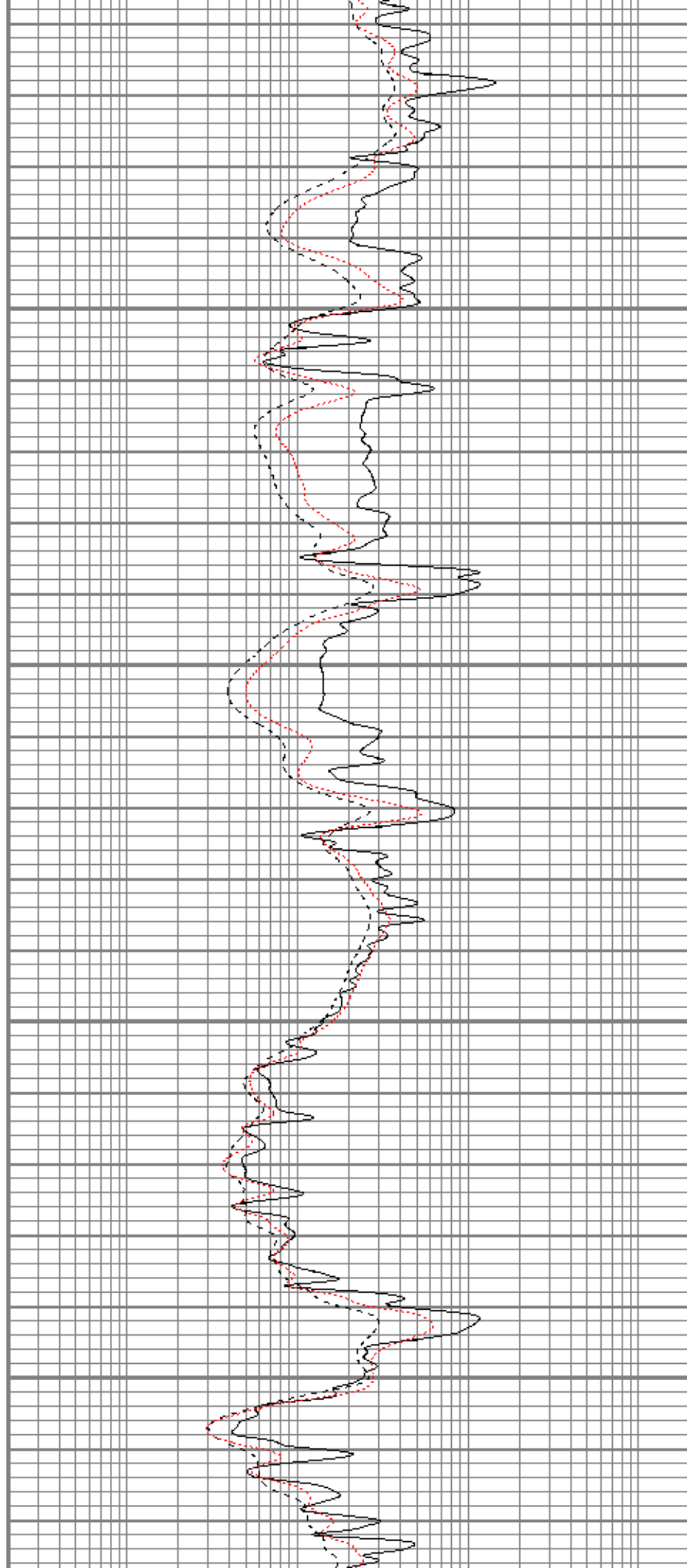


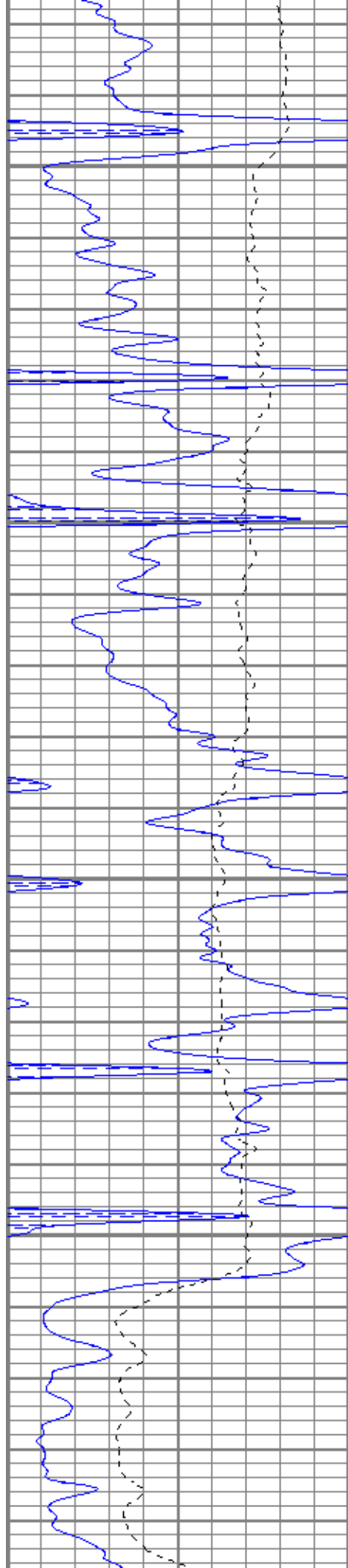
3800

3850

3900

3950



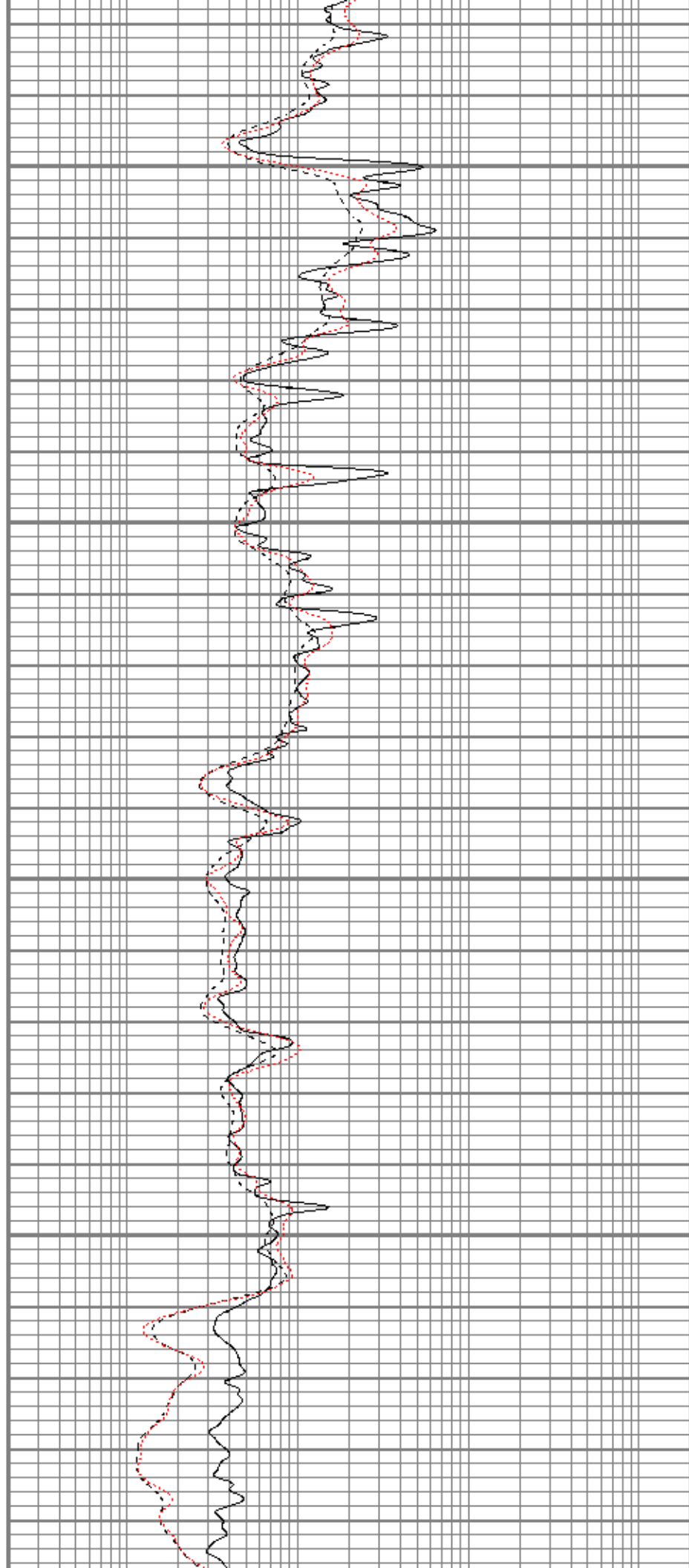


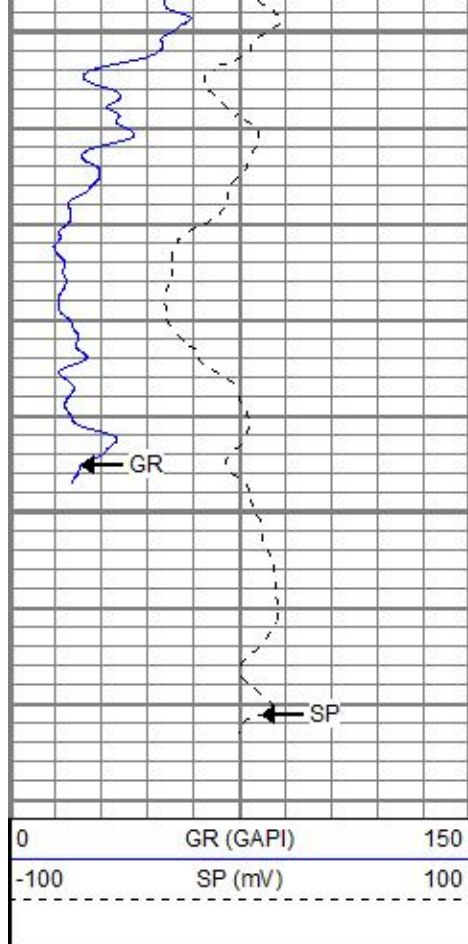
4000

4050

4100

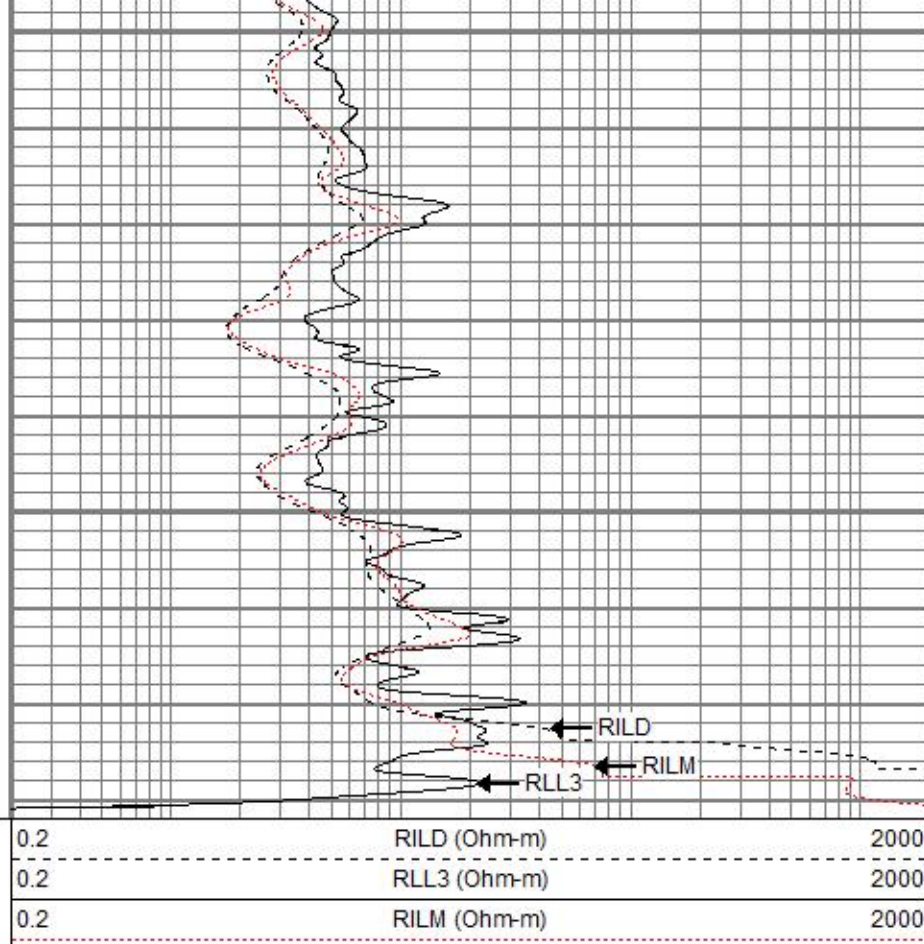
4150





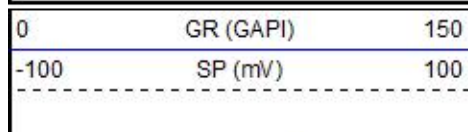
4200

4250

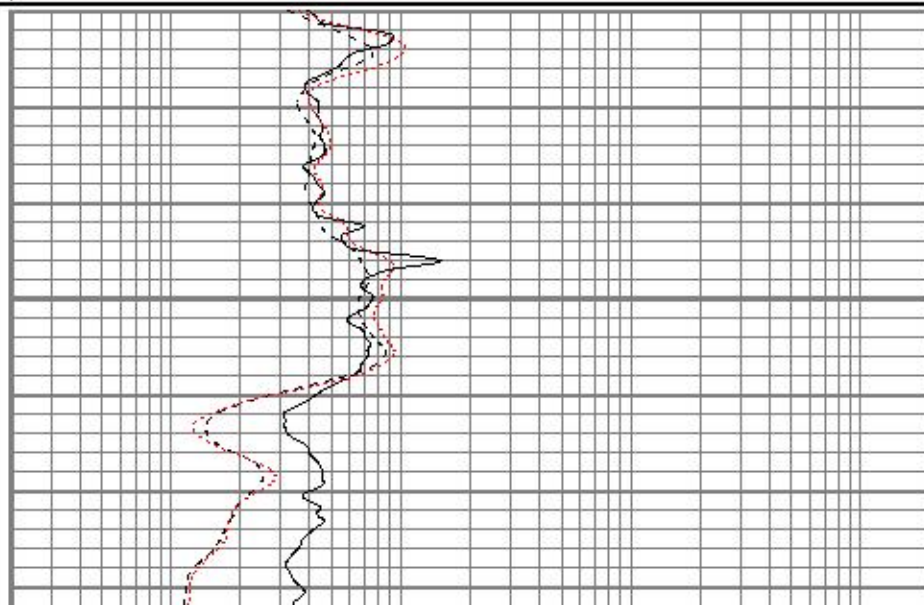
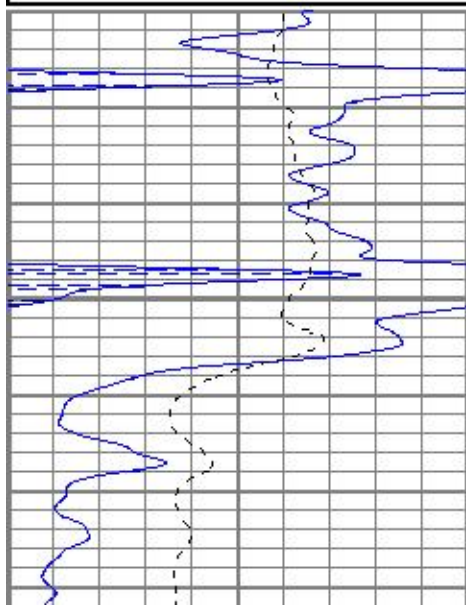
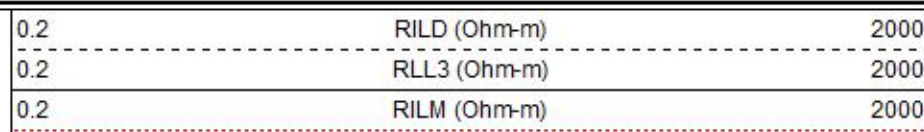


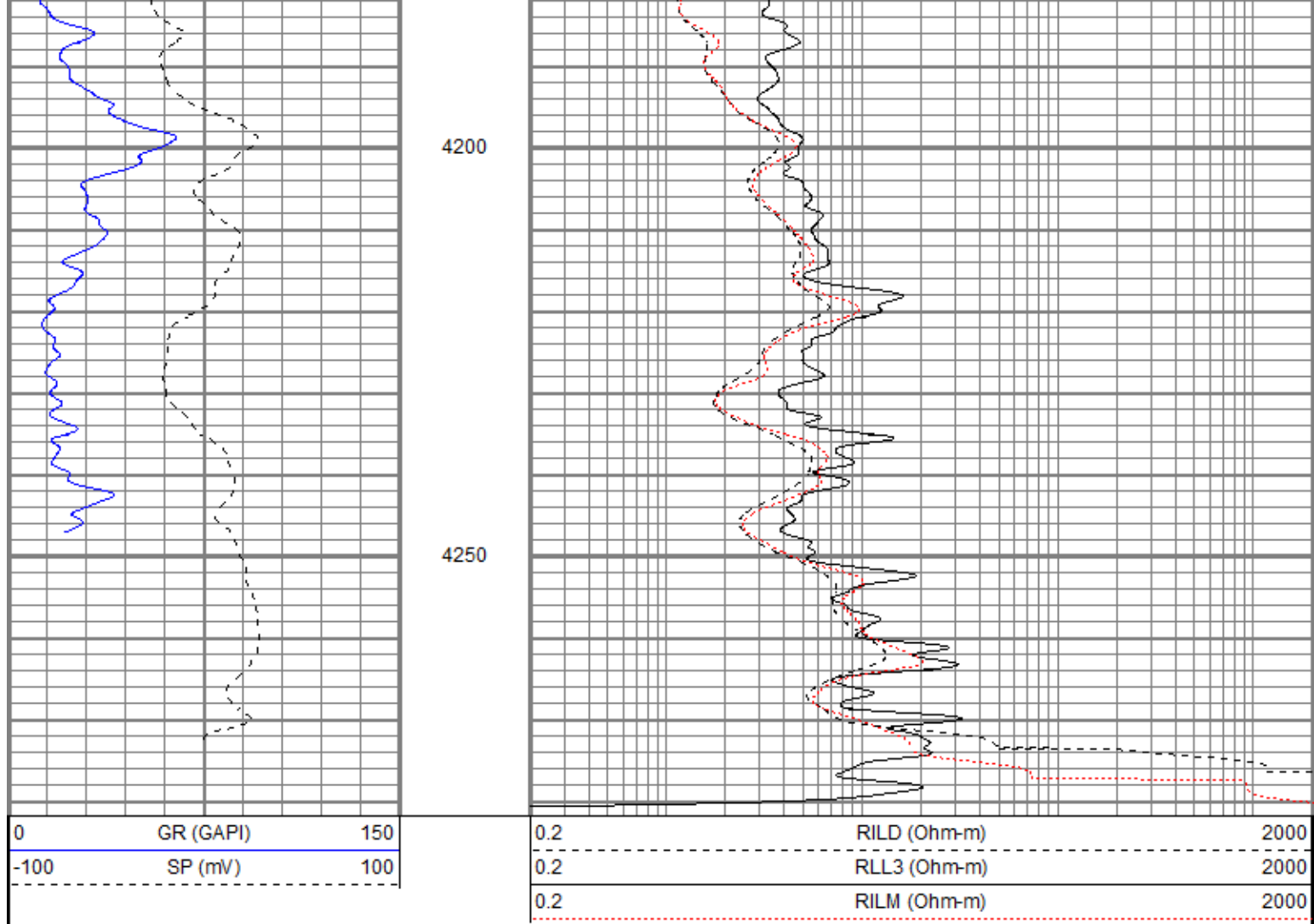
Repeat Pass

Database File rwmcleod#10-1oh.db
 Dataset Pathname pass1.1
 Presentation Format kdil
 Dataset Creation Sat Oct 10 09:03:04 2015
 Charted by Depth in Feet scaled 1:240



4150





Calibration Report								
Database File	rwmcleod#10-1oh.db							
Dataset Pathname	pass1.1							
Dataset Creation	Sat Oct 10 09:03:04 2015							
Dual Induction Calibration Report								
Serial-Model:			5375-G					
Surface Cal Performed:			Sat Oct 10 08:33:18 2015					
Downhole Cal Performed:			Sat Oct 10 08:33:23 2015					
After Survey Verification Performed:			Sat Oct 10 08:33:27 2015					
Surface Calibration								
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.007	0.642	V	0.000	350.000	mmho/m	551.294	-3.816
Medium	0.010	0.728	V	0.000	400.000	mmho/m	556.531	-5.391
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.642	V	0.000	350.000	mmho/m	550.717	-3.768
Medium	0.010	0.729	V	0.000	550.000	mmho/m	764.510	-7.354
Downhole Calibration								
Readings				References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.145	350.239	mmho/m	-0.044	350.323	mmho/m	1.001	-0.189

Medium	0.435	400.472	mmho/m	-0.037	400.340	mmho/m	1.001	-0.473
Shallow	2.440	0.018	V	500.000	2.000	Ohm-m	185.553	0.000
After Survey Verification								
Readings			Targets			Results		
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.145	350.239	mmho/m	1.001	-0.189
Medium	0.000	0.000	mmho/m	0.435	400.472	mmho/m	1.001	-0.473
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Compensated Density Calibration Report								
Serial-Model:			2501DHT-DHT					
Source / Verifier:			csv-j12 /					
Master Calibration Performed:			Sat Oct 10 08:33:44 2015					
Before Survey Verification Performed:								
After Survey Verification Performed:								

Master Calibration								
Density			Far Detector			Near Detector		
Magnesium	1.750	g/cc		711.36		284.22	cps	
Aluminum	2.660	g/cc		133.07		180.42	cps	
Spine Angle = 74.83			Density/Spine Ratio = 0.524					
Size			Reading					
Small Ring	7.60	in		5749.57				
Large Ring	14.00	in		9401.93				

Before Survey Verification								
Target			Measured					

After Survey Verification								
Target			Measured					

Gamma Ray Calibration Report								
Serial Number:			2001					
Tool Model:			OH					
Performed:			Sat Oct 10 08:34:00 2015					
Calibrator Value:			1.0	GAPI				
Background Reading:			0.0	cps				
Calibrator Reading:			1.0	cps				
Sensitivity:			0.2400	GAPI/cps				

Neutron Calibration Report								
Serial Number:			5108					
Tool Model:			PROBE					
Performed:			Sat Oct 10 08:34:02 2015					
Calibrator Value:			1	NAPI				
Calibrator Reading:			1	cps				

Dataset:	rwmcleod#10-1oh.db: field/well/run1/pass1.1
Total length:	40.39 ft
Total weight:	676.00 lb
O.D.:	4.00 in