



DUAL INDUCTION LOG

Company	PATTERSON ENERGY	Company	PATTERSON ENERGY
Well	T.S. LEIKER #16	Well	T.S. LEIKER #16
Field	LEIKER EAST	Field	LEIKER EAST
County	ELLIS	County	ELLIS
State	KANSAS	State	KANSAS
Location:	API # : 15-051-27144	Other Services	ML CDNL
Permanent Datum	SEC 13 TWP 15S RGE 18W	Elevation	
Log Measured From	Ground Level	Elevation	2002
Drilling Measured From	KB 8' AGL	K.B. 2010	
	KB	D.F. 2008	
		G.L. 2002	
Date	6/23/26		
Run Number	One		
Depth Driller	3843		
Depth Logger	3844		
Bottom Logged Interval	3842		
Top Log Interval	00		
Casing Driller	8 5/8"@1175		
Casing Logger	1175		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical		
Density / Viscosity	9.2/56		
pH / Fluid Loss	10/9.6		
Source of Sample	Pit		
Rm @ Meas. Temp	.9@72degf		
Rmf @ Meas. Temp	.68@72degf		
Rmc @ Meas. Temp	1.1@72degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	.60@108degf		
Time Circulation Stopped	1:30 PM		
Time Logger on Bottom	3:00 PM		
Maximum Recorded Temperature	108degf		
Equipment Number	T-605		
Location	Hays, KS.		
Recorded By	GUS PFANENSTIEL		
Witnessed By	JASON T. ALM		

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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

183 SOUTH OUT OF HAYS TO NORFOLK RD. 2 1/4 MILE,
SOUTH INTO.

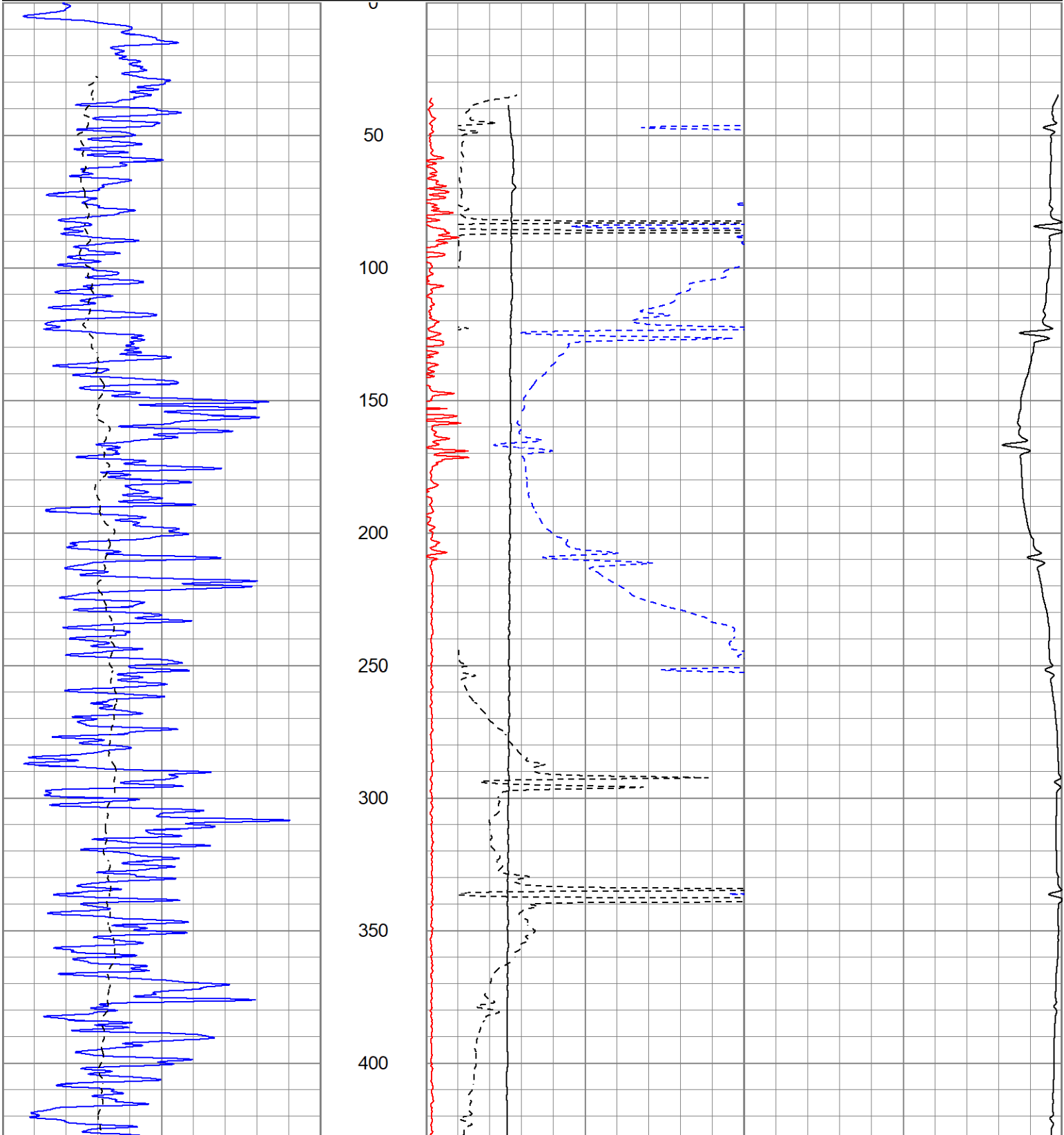
Thanks for using Gemini Wireline LLC
785-625-1182

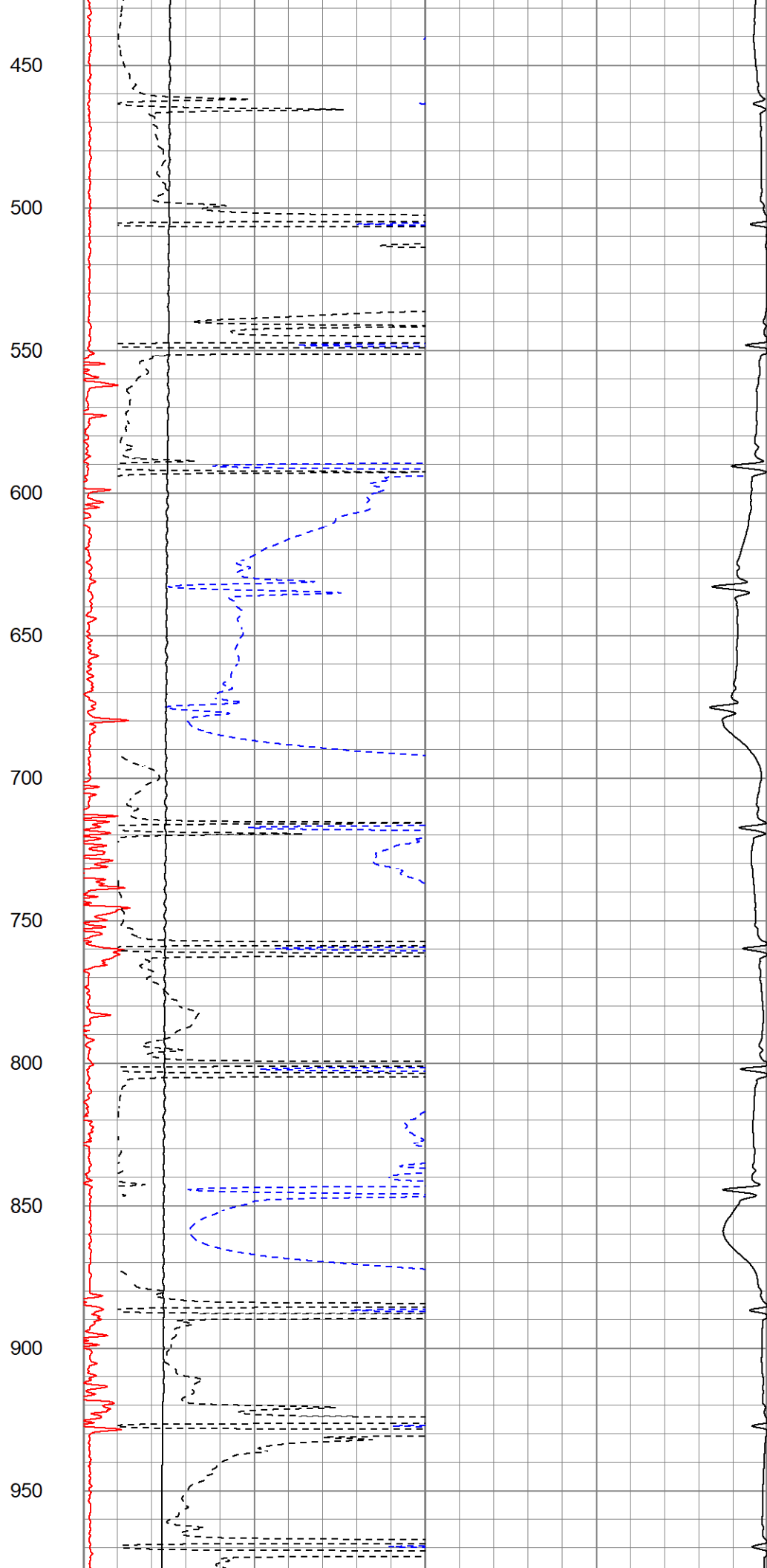
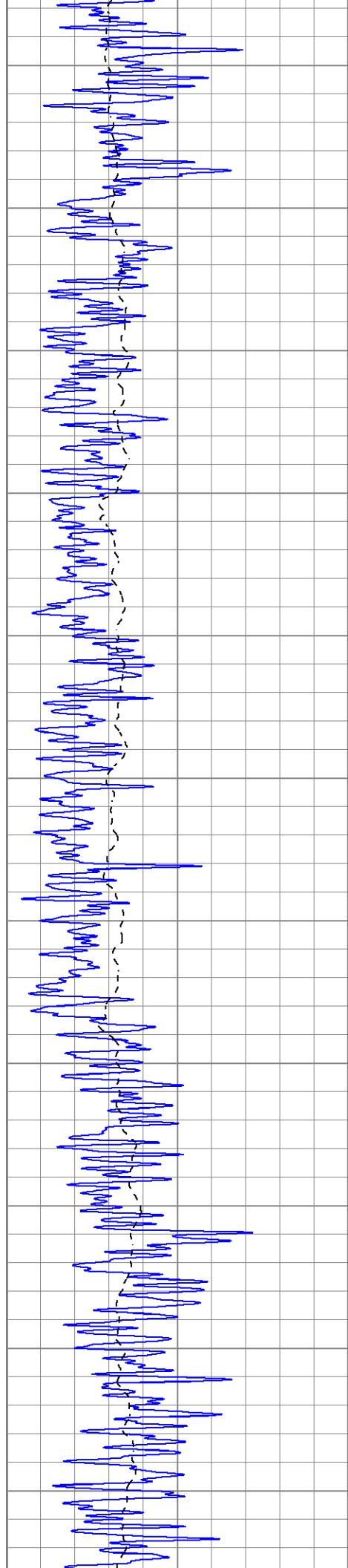


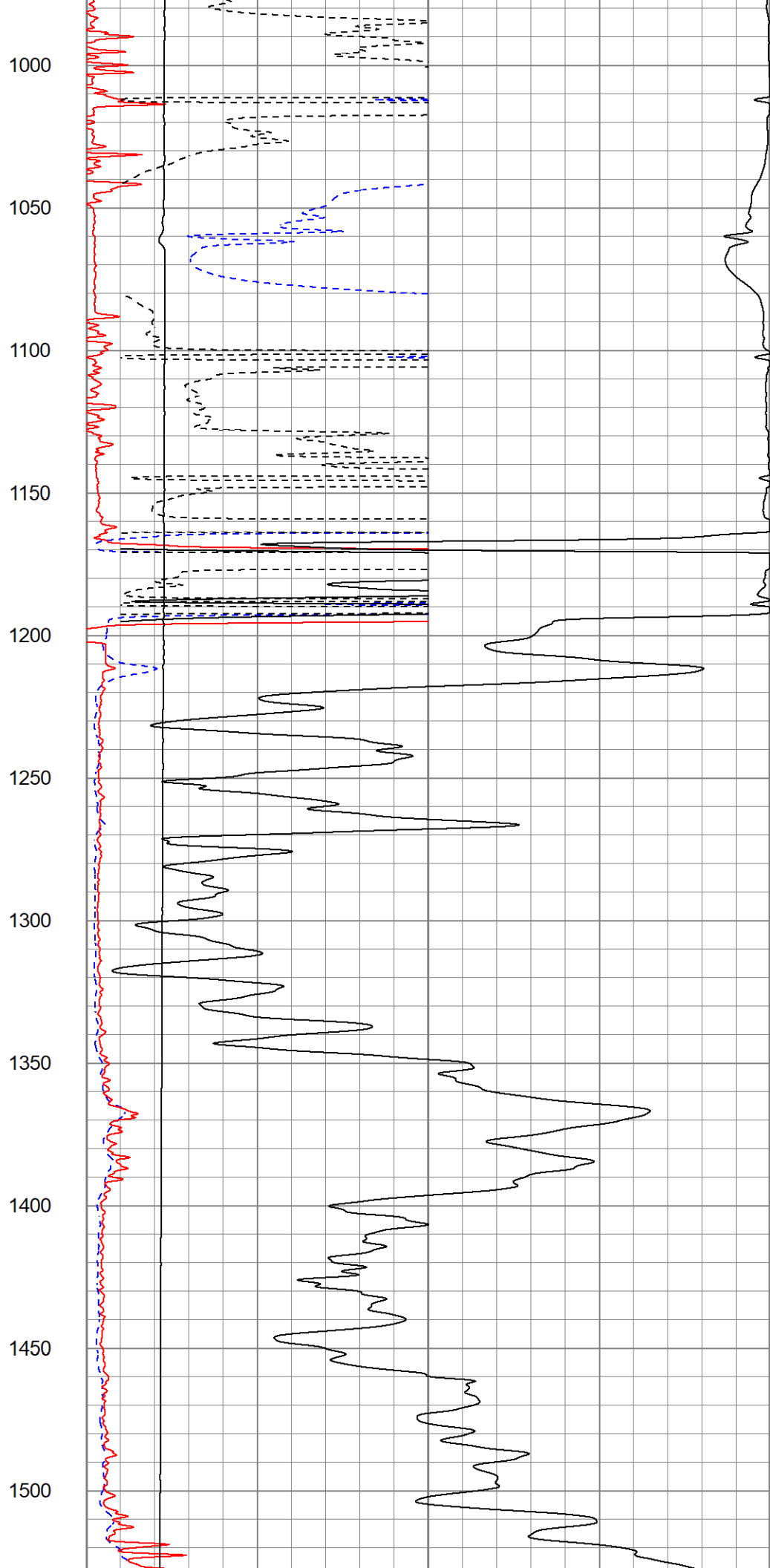
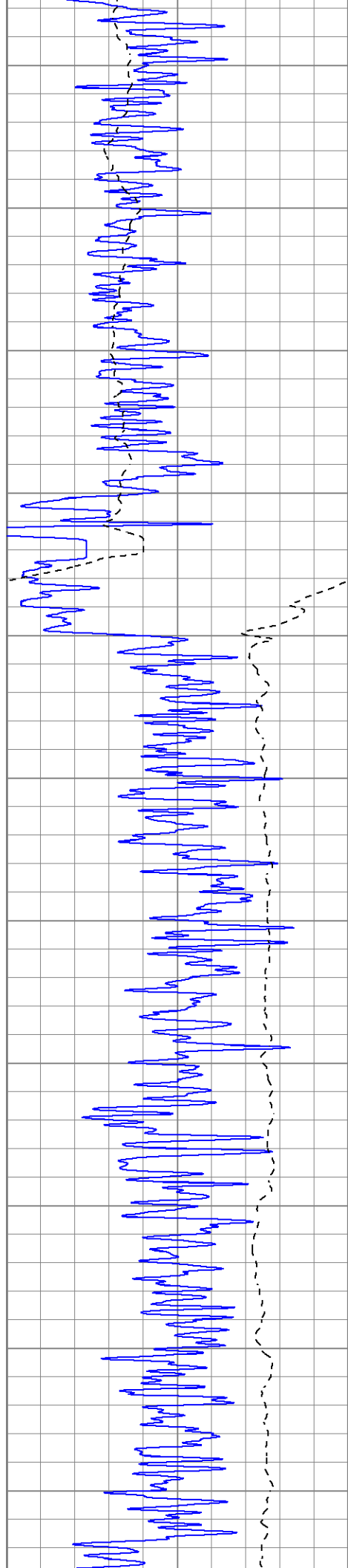
MAIN PASS

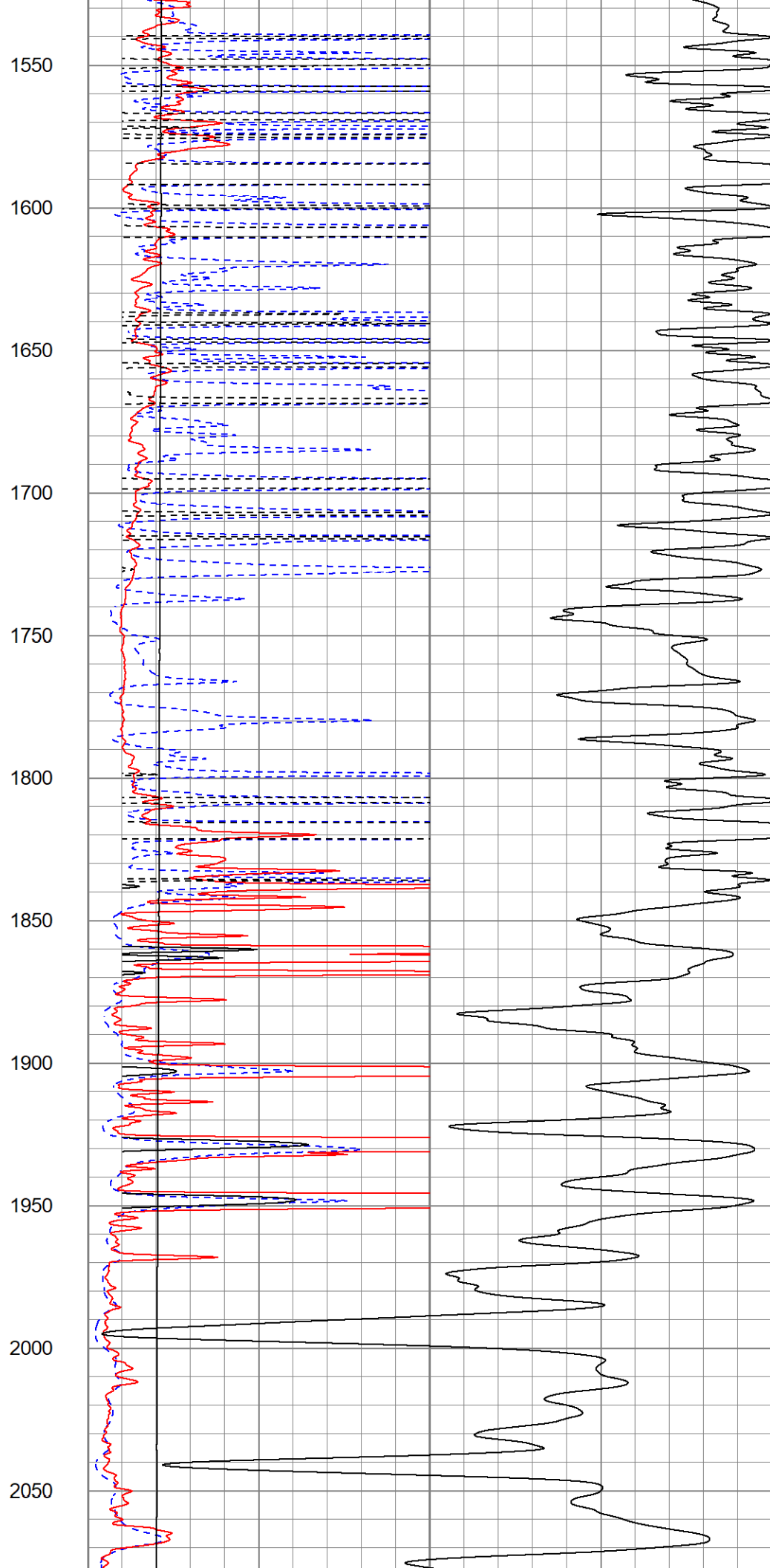
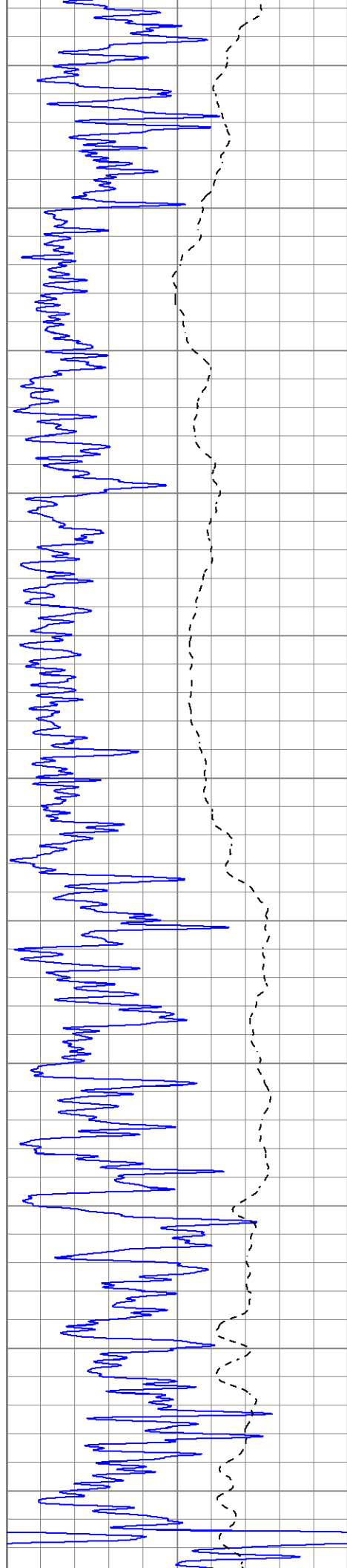
Database File	petsleiker#16oh.db
Dataset Pathname	pass3.1
Presentation Format	kdillinn
Dataset Creation	Tue Jun 23 17:03:48 2026
Charted by	Depth in Feet scaled 1:600

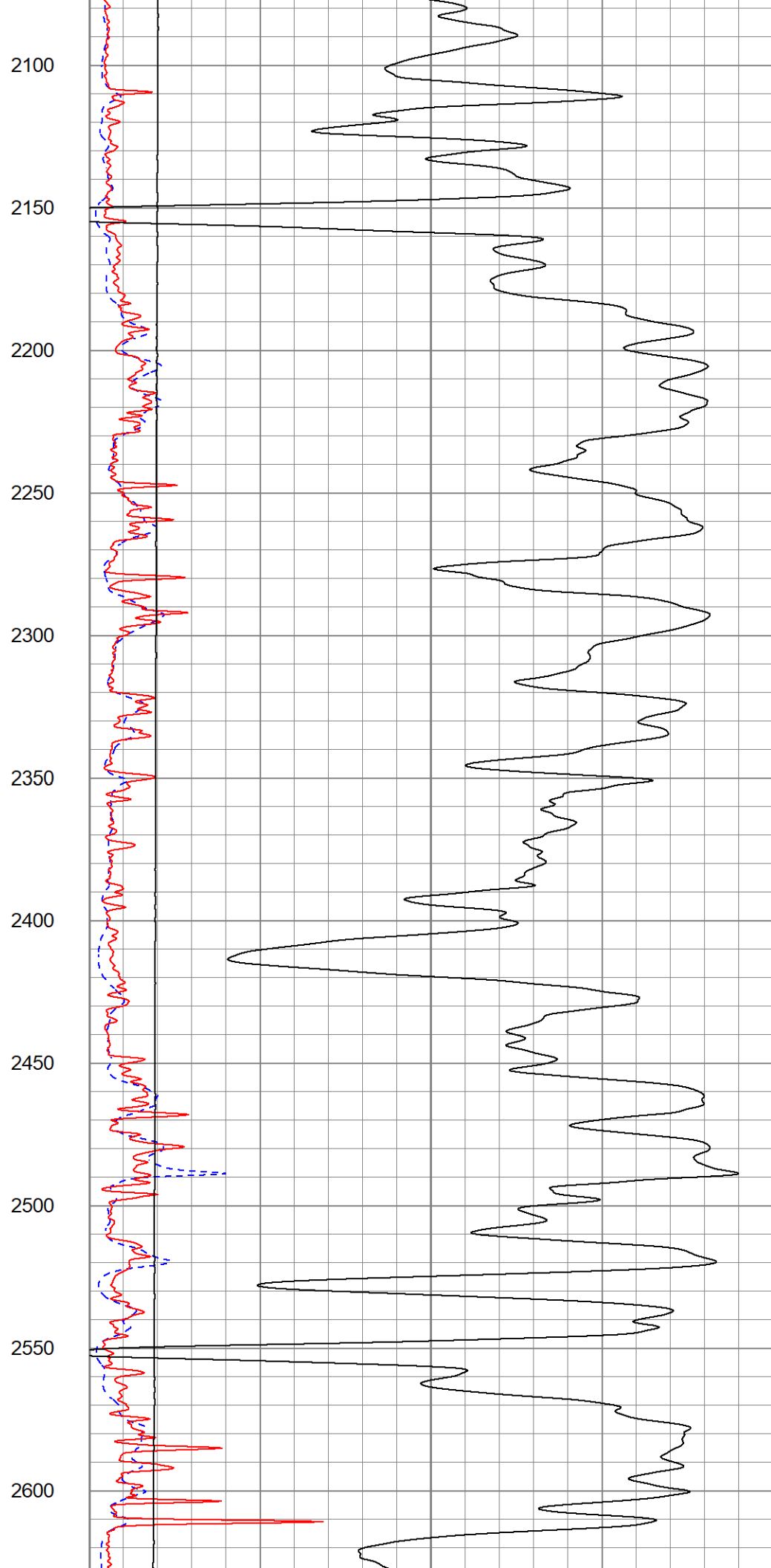
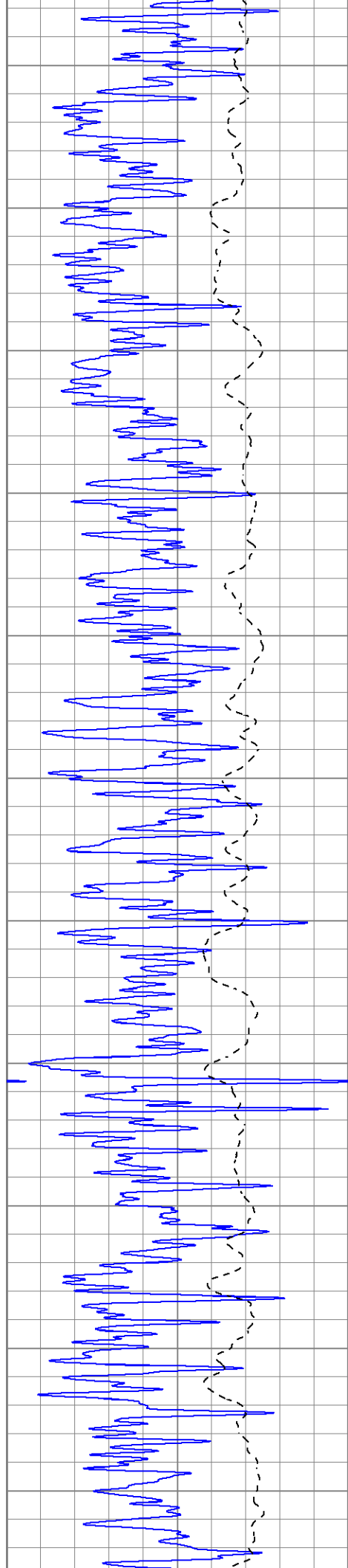
0	GR (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	10000	LTEN (lb)	0
			0	RILD (Ohm-m)	50
			0	RLL3 (Ohm-m)	50
			50	RILD x 10 (Ohm-m)	500
			50	RLL3 x 10 (Ohm-m)	500

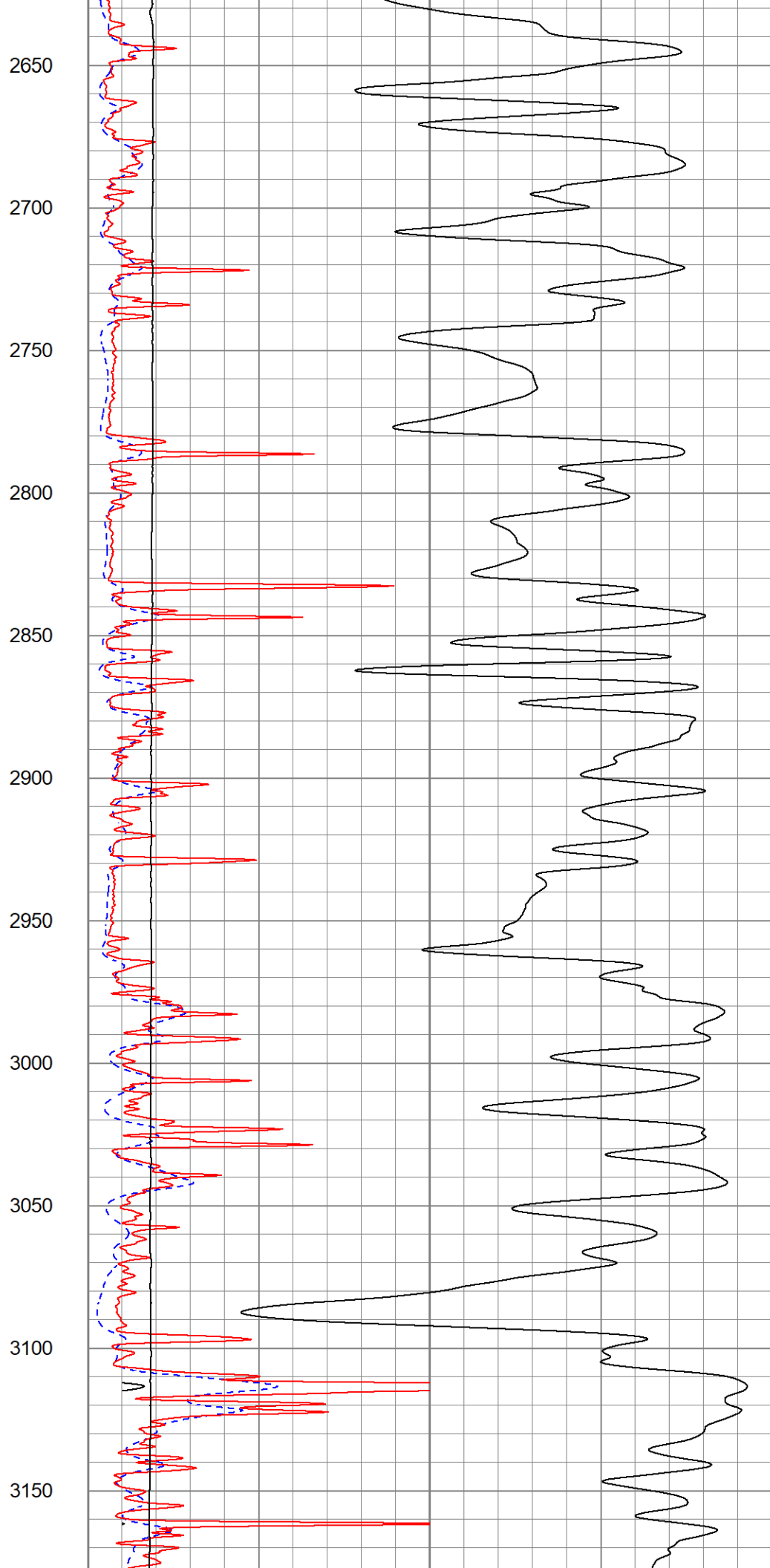
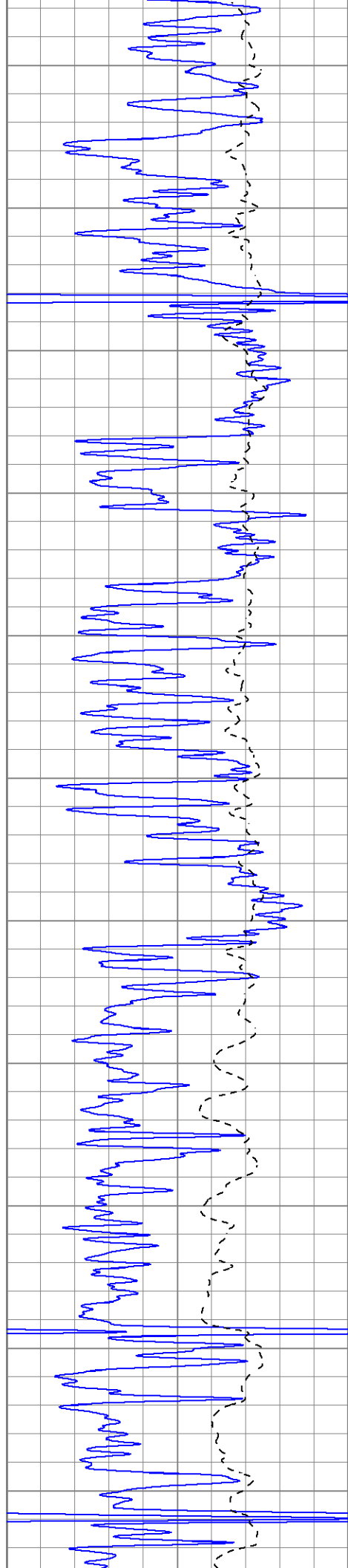


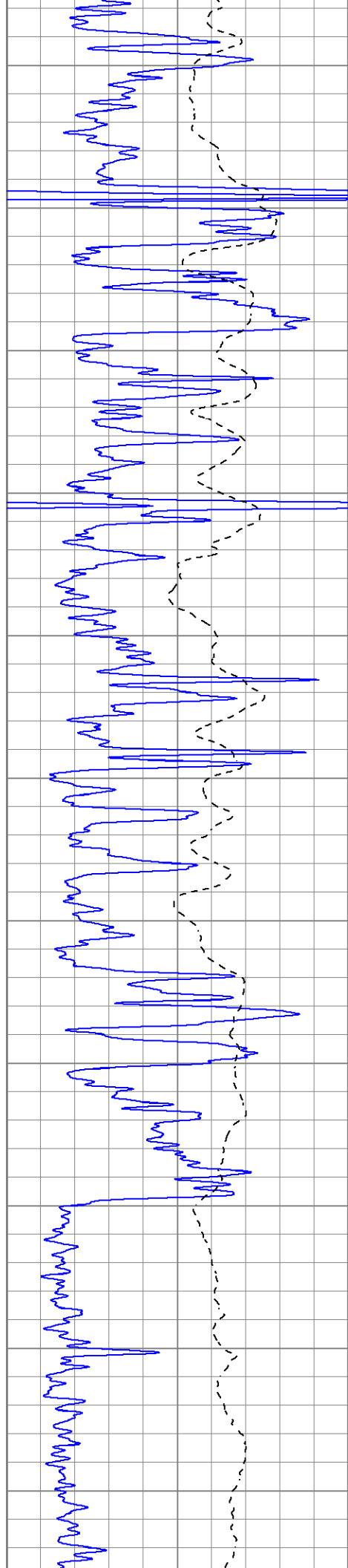












3200

3250

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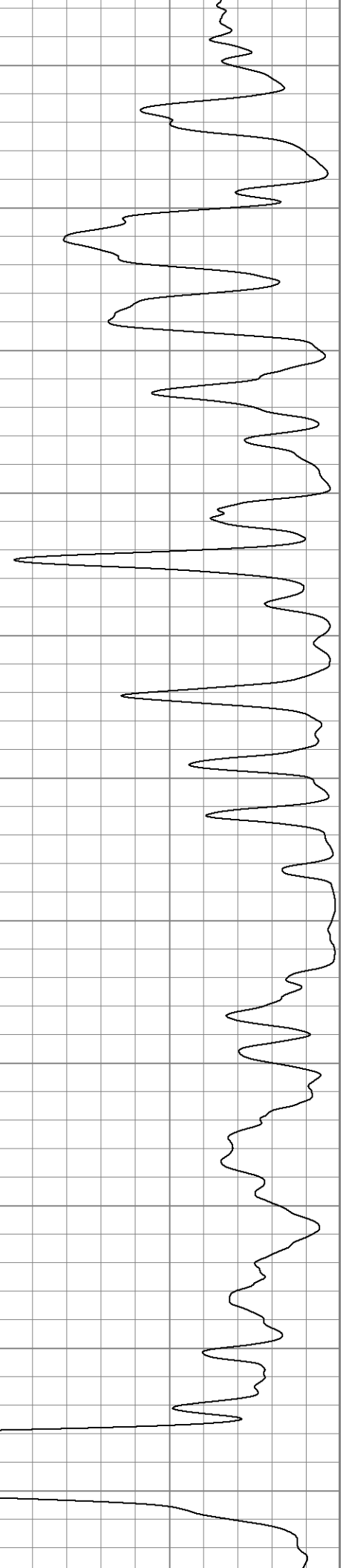
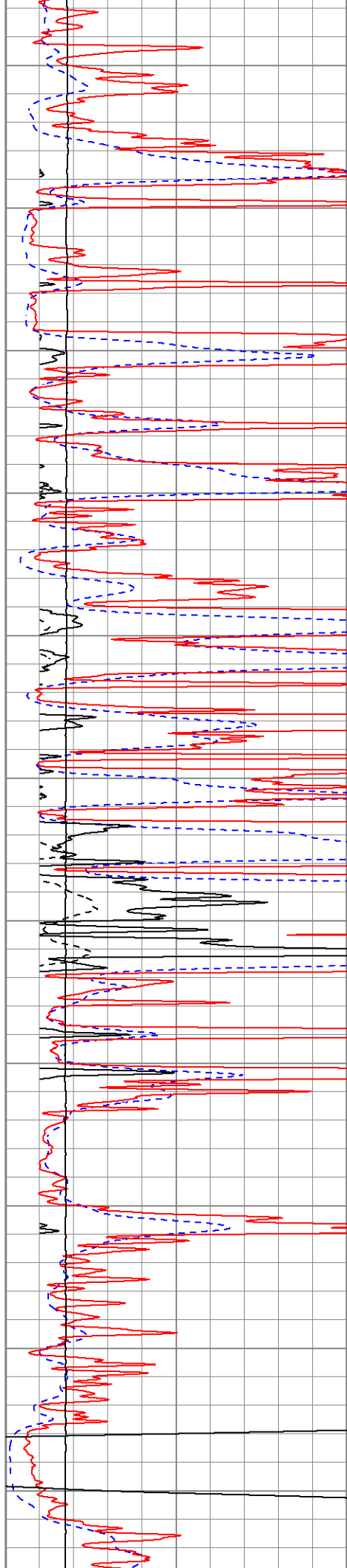
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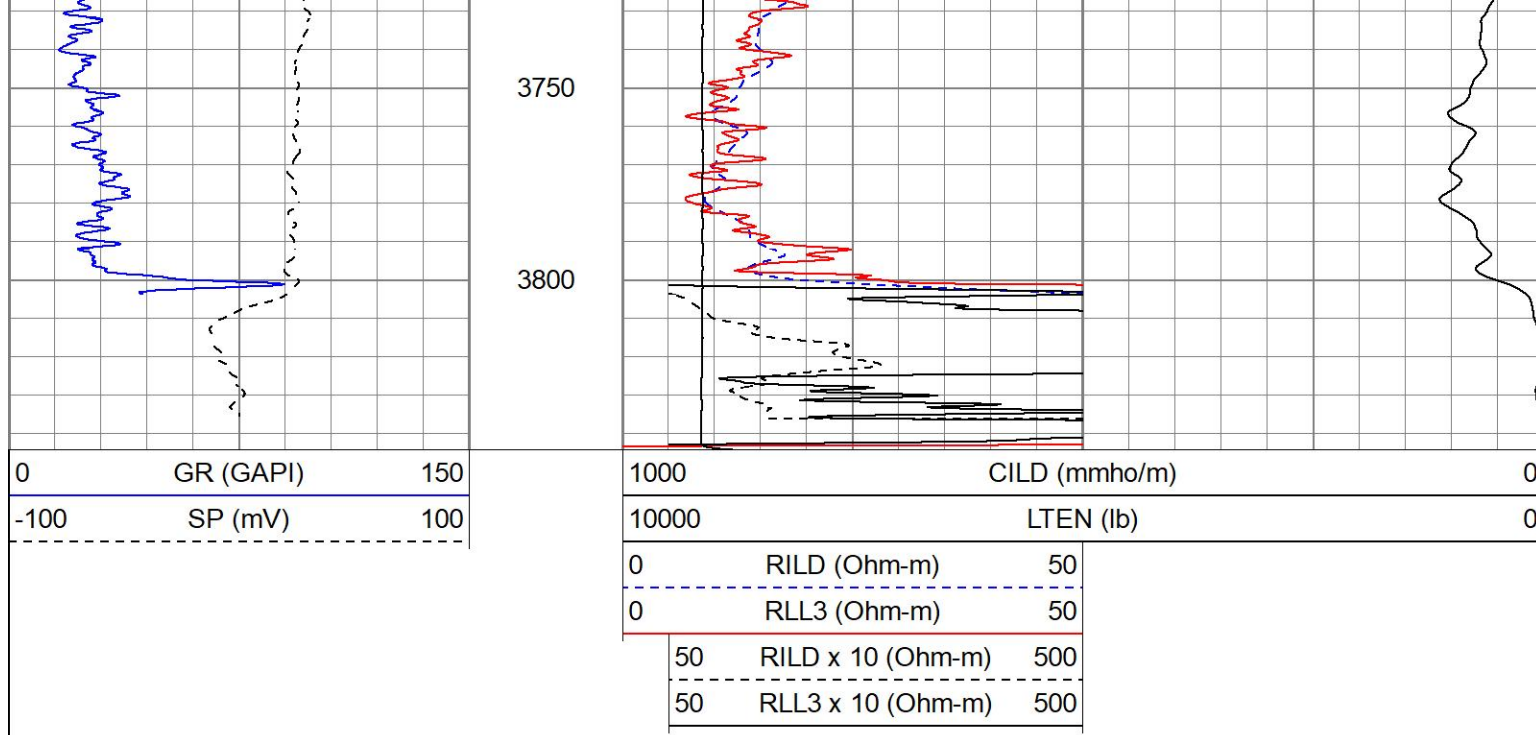
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3600

3650

3700

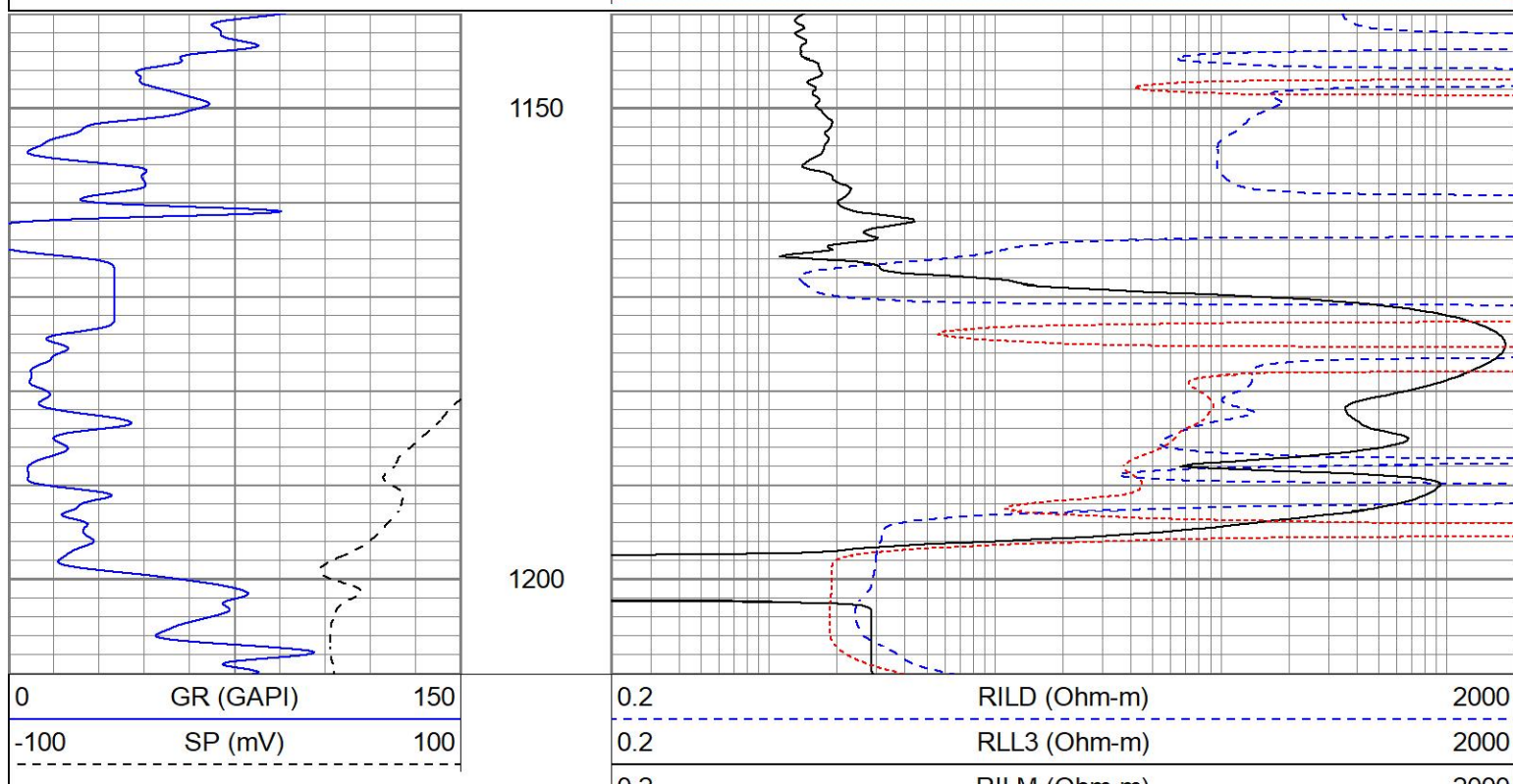




MAIN PASS

Database File: petsleiker#16oh.db
 Dataset Pathname: pass3.1
 Presentation Format: kdil
 Dataset Creation: Tue Jun 23 17:03:48 2026
 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



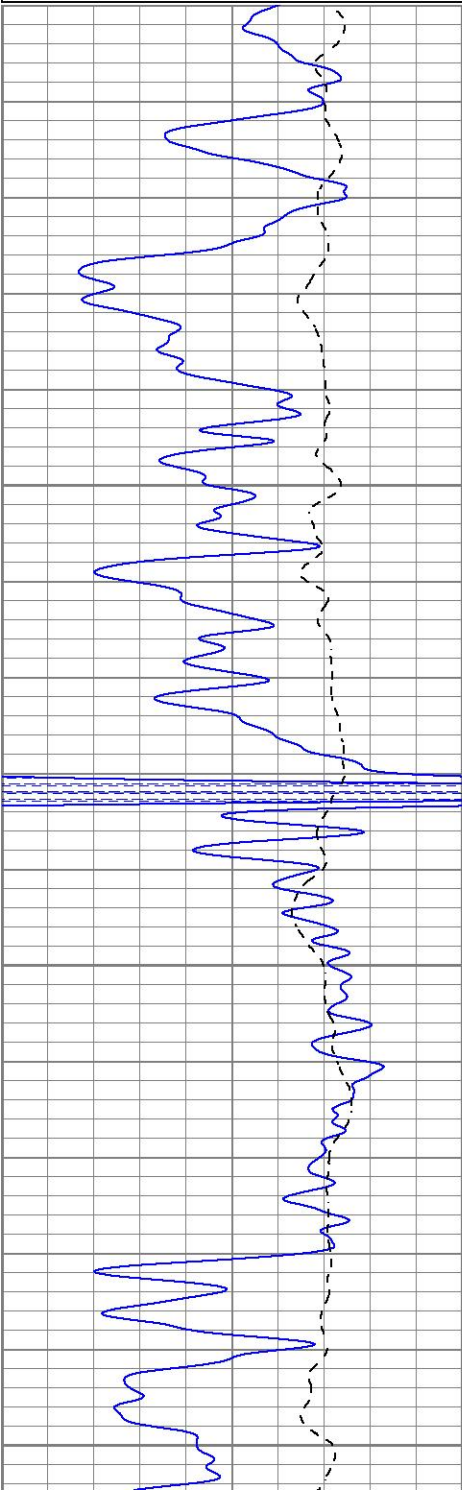


MAIN PASS

Database File	petsleiker#16oh.db
Dataset Pathname	pass3.1
Presentation Format	kdil
Dataset Creation	Tue Jun 23 17:03:48 2026
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150
-100	SP (mV)	100

0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000

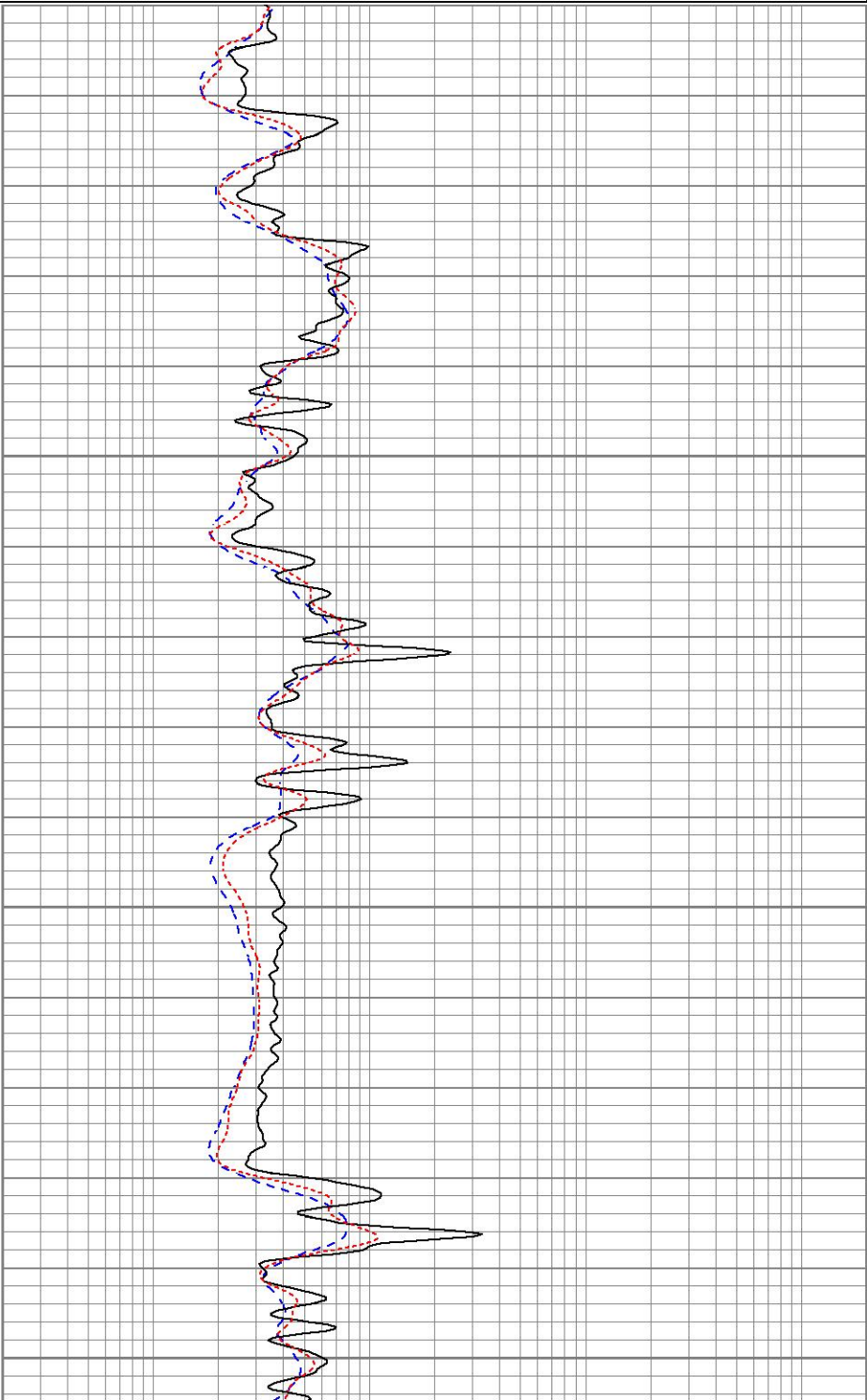


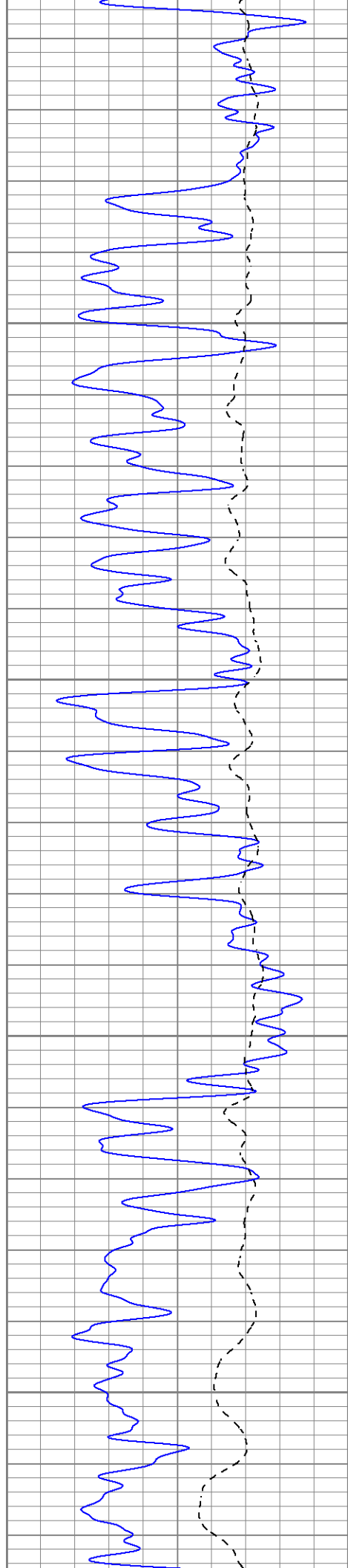
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2700

2750

2800



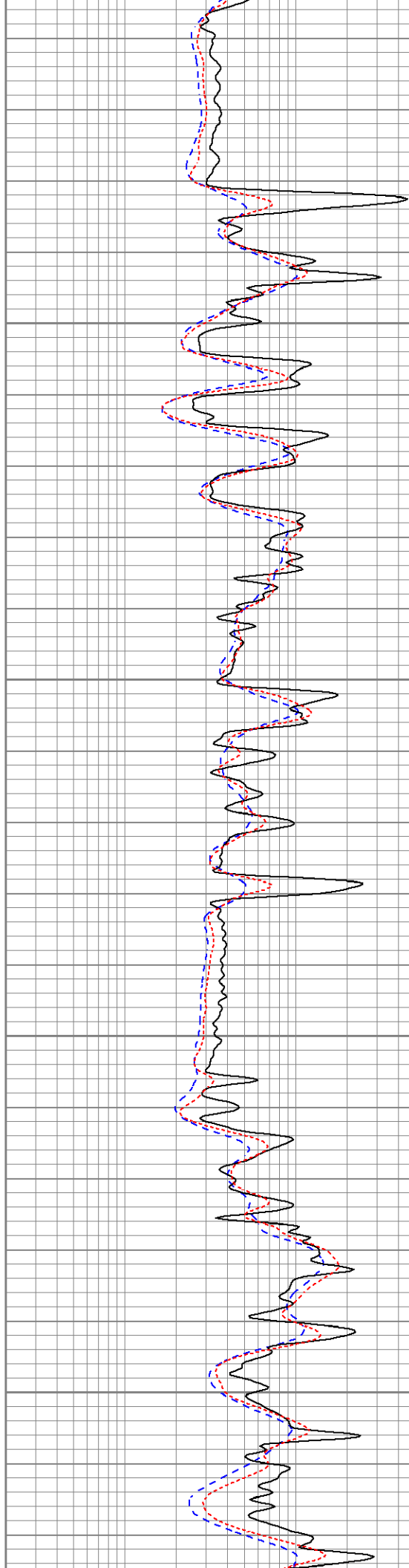


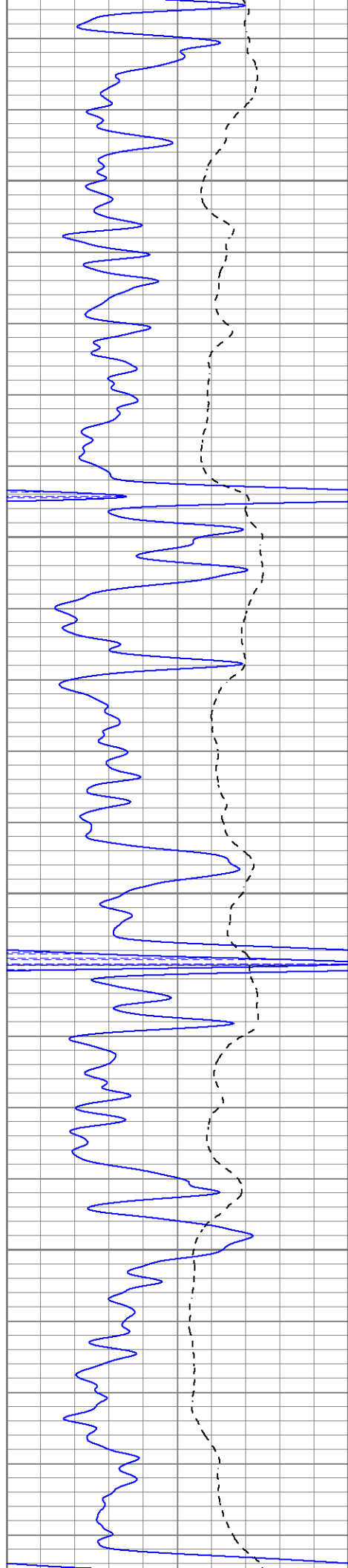
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2900

2950

3000



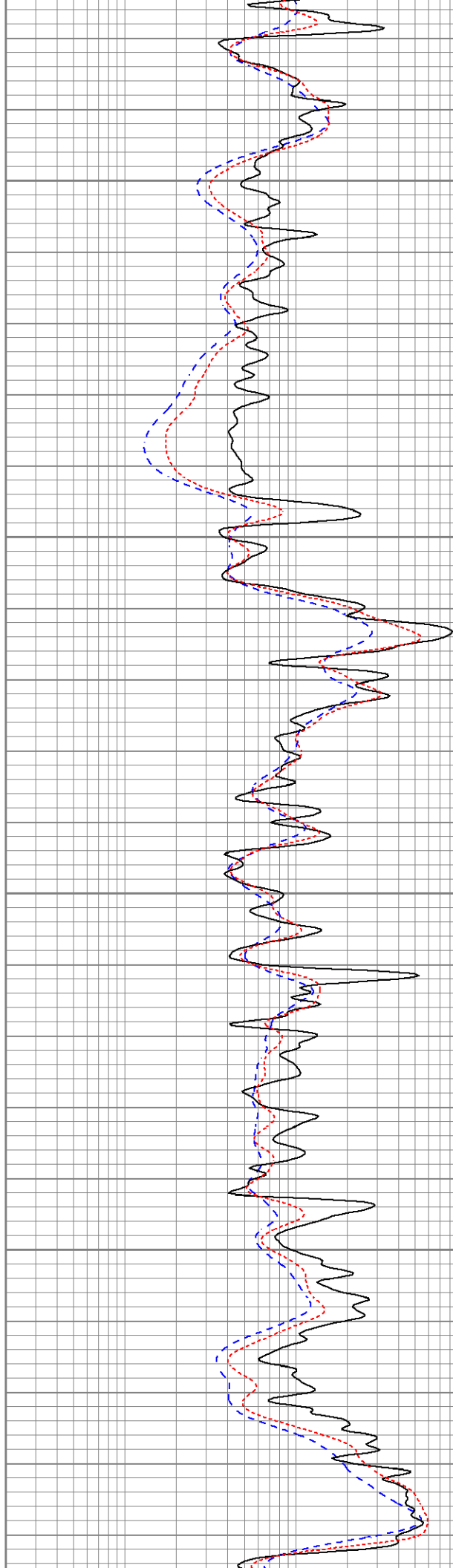


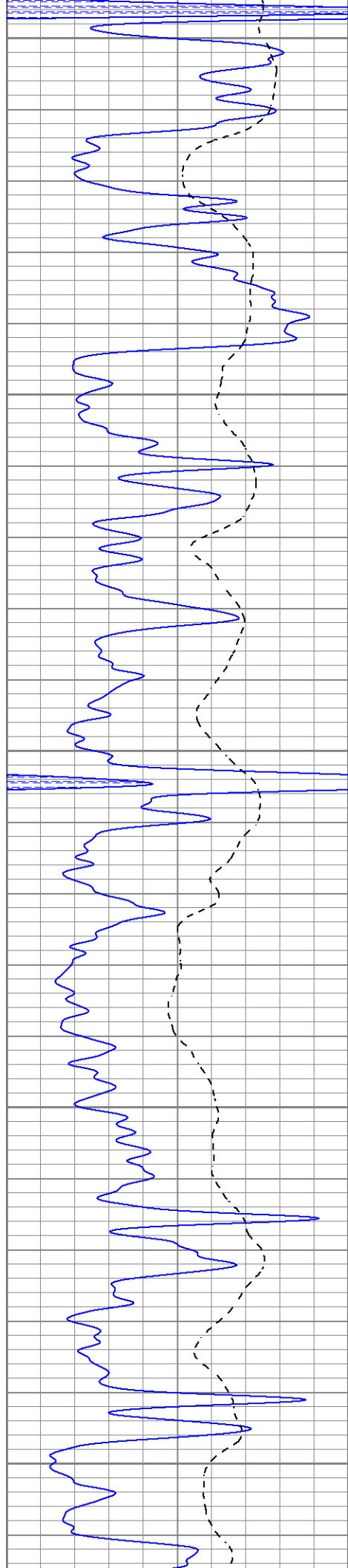
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3100

3150

3200





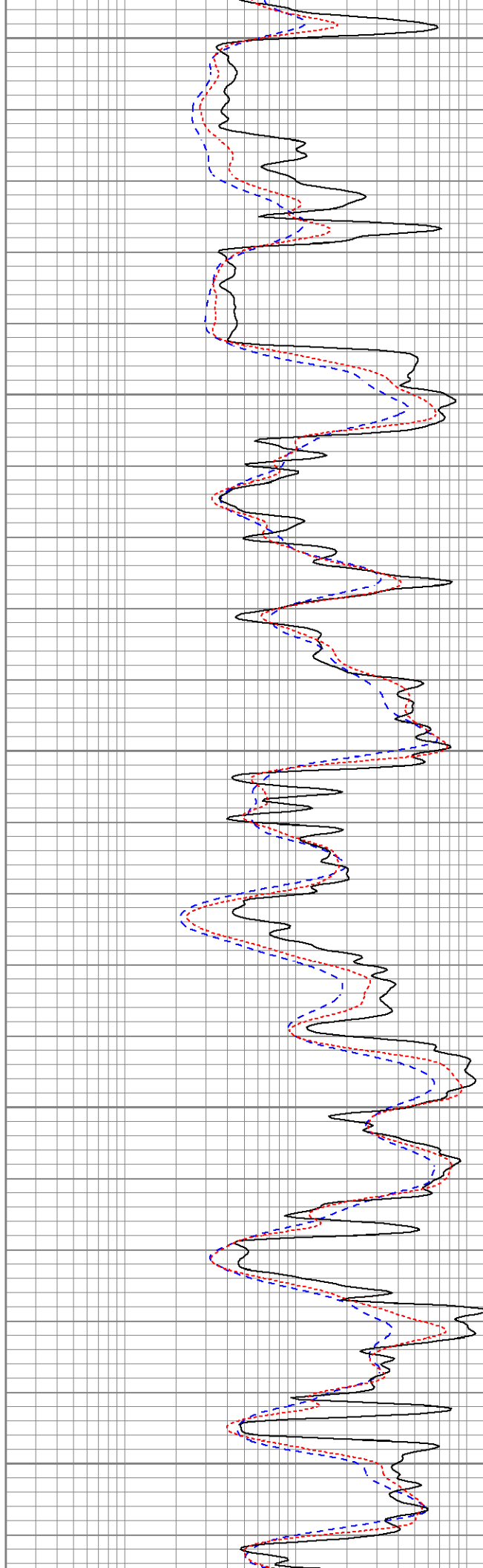
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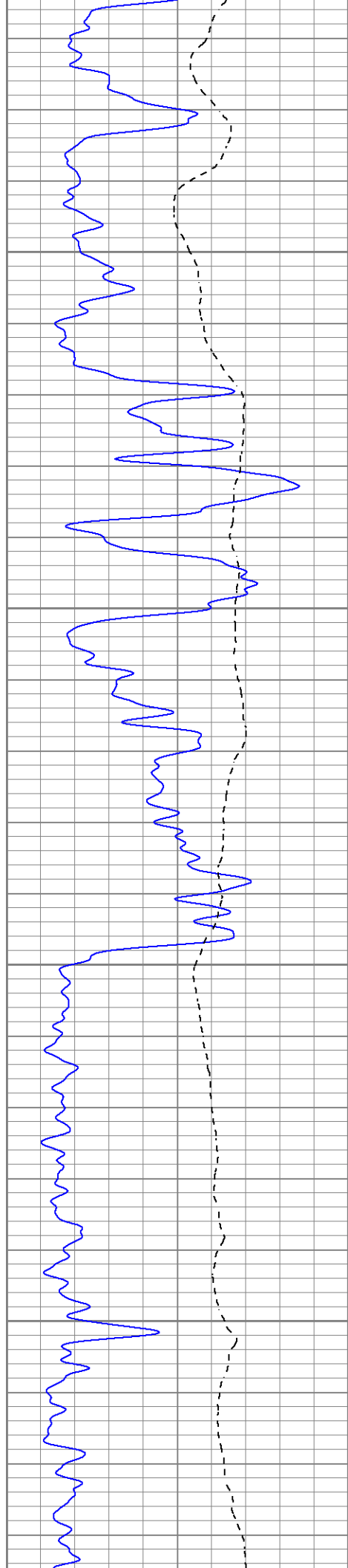
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3350

3400

3450



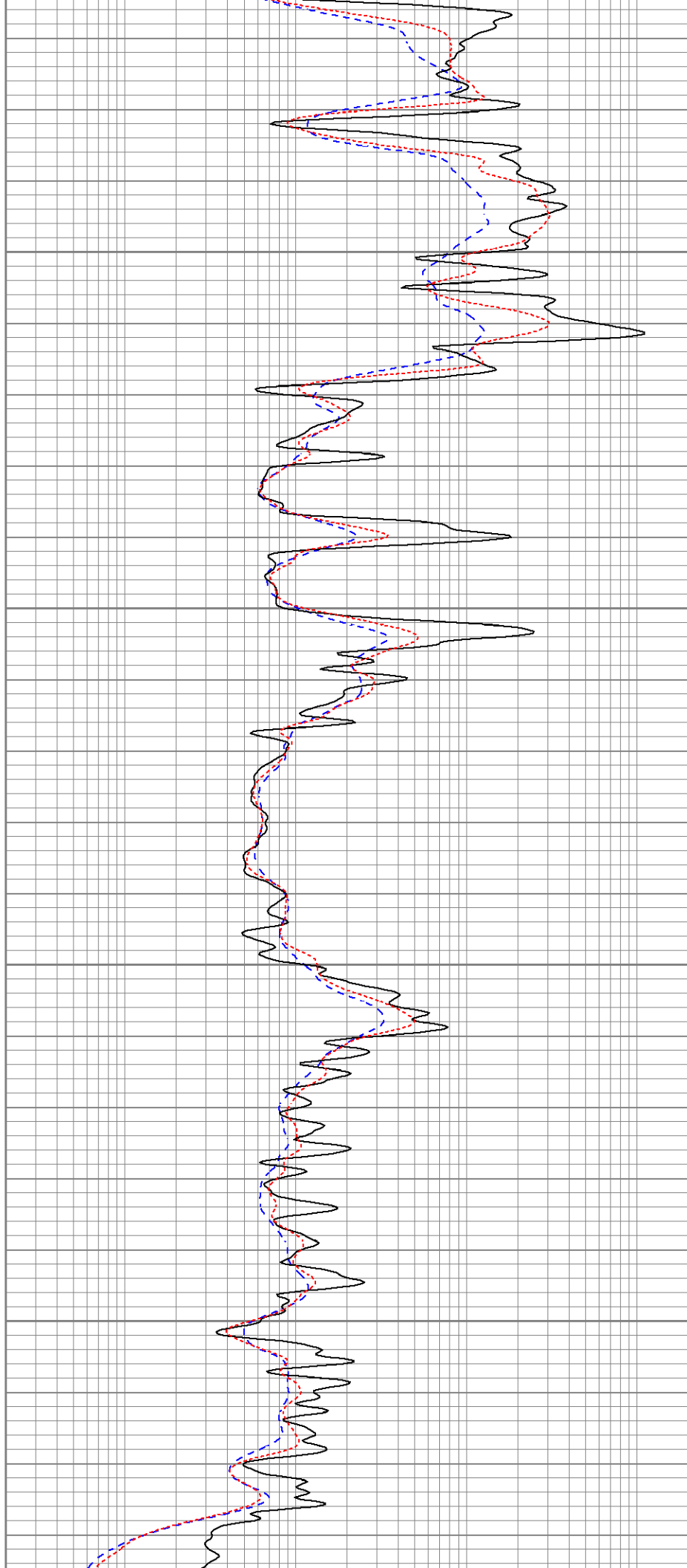


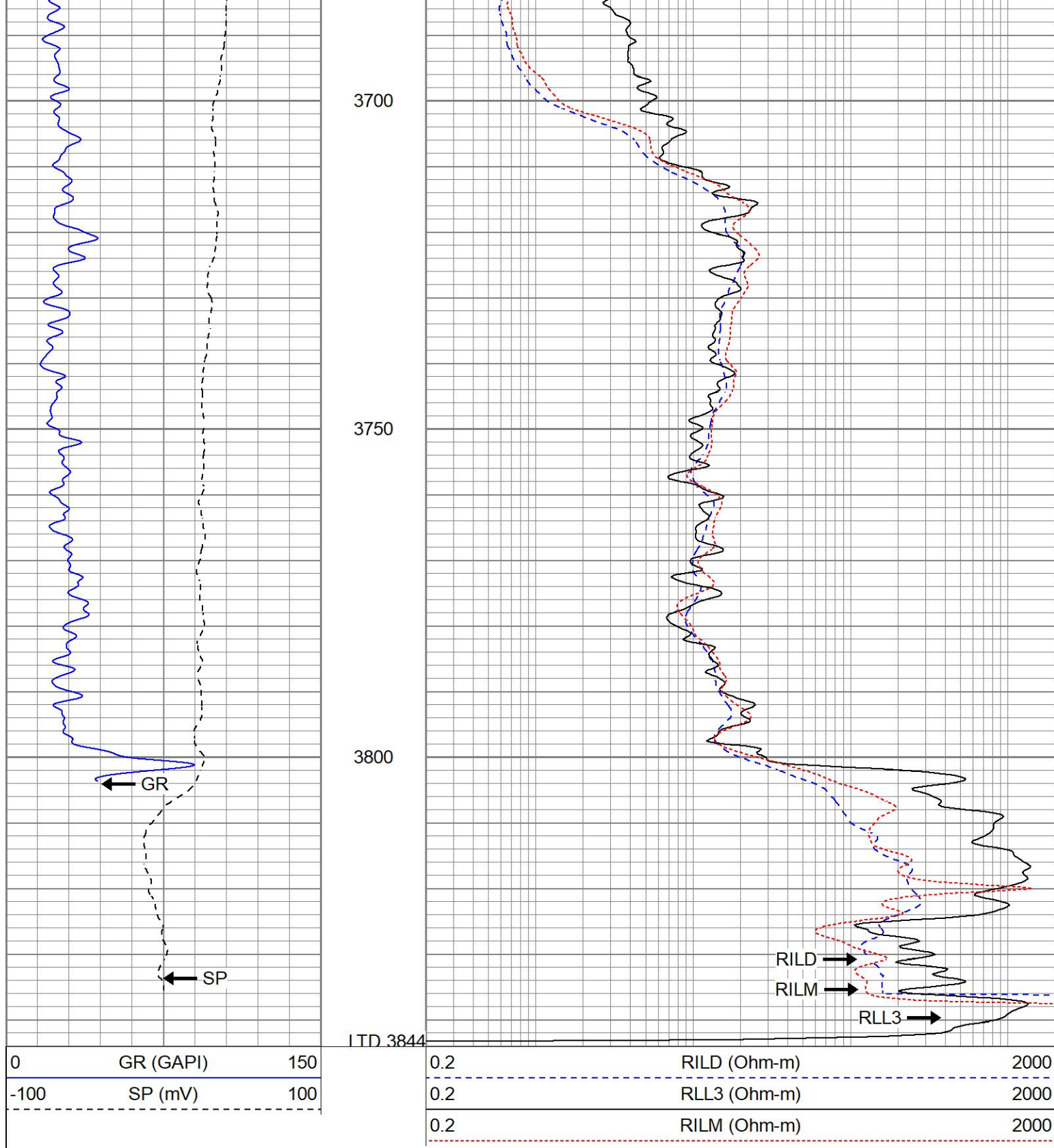
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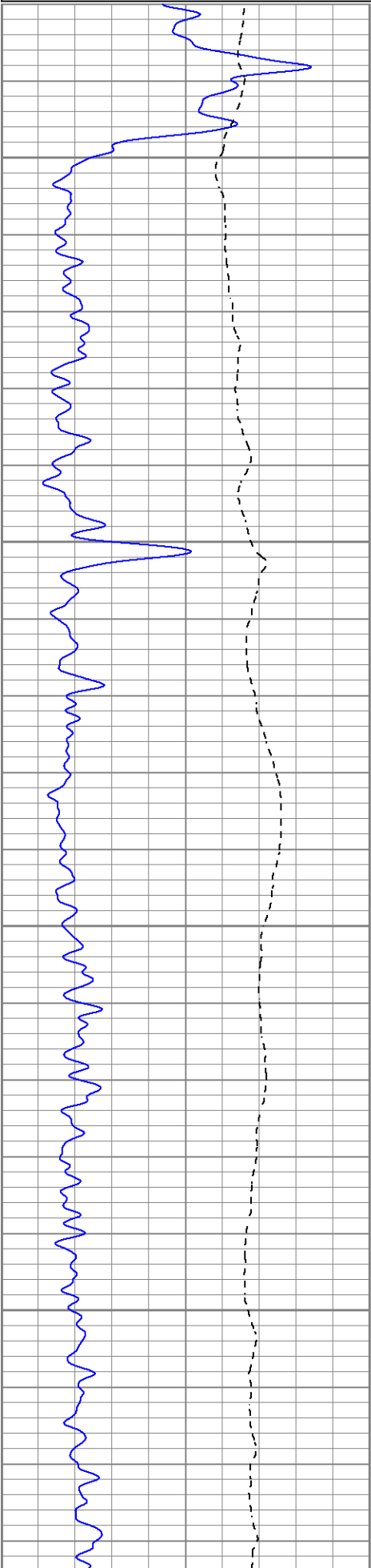




REPEAT SECTION

Database File: petsleiker#16oh.db
Dataset Pathname: pass20
Presentation Format: kdil
Dataset Creation: Tue Jun 23 17:09:25 2026
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	150
-100	SP (mV)	100



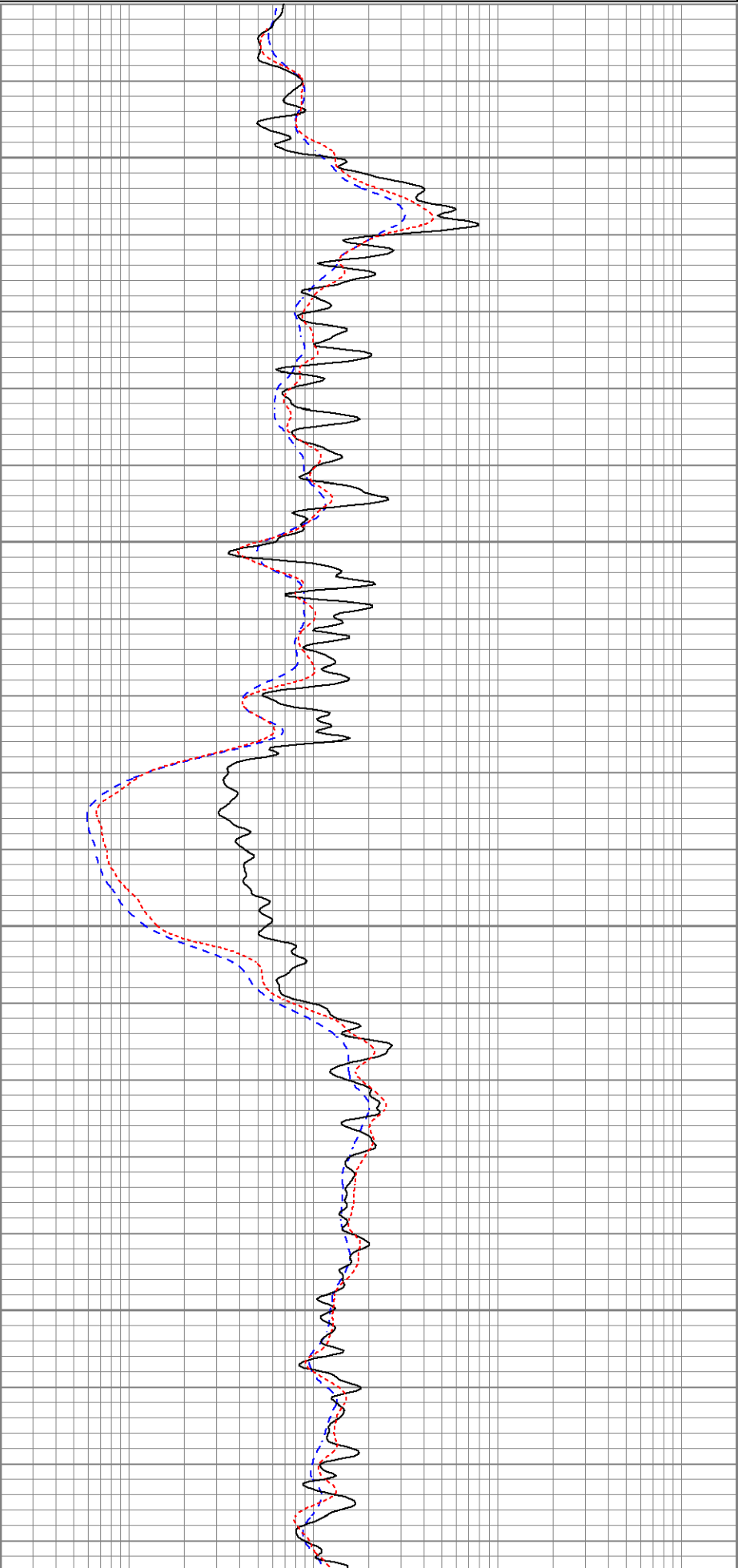
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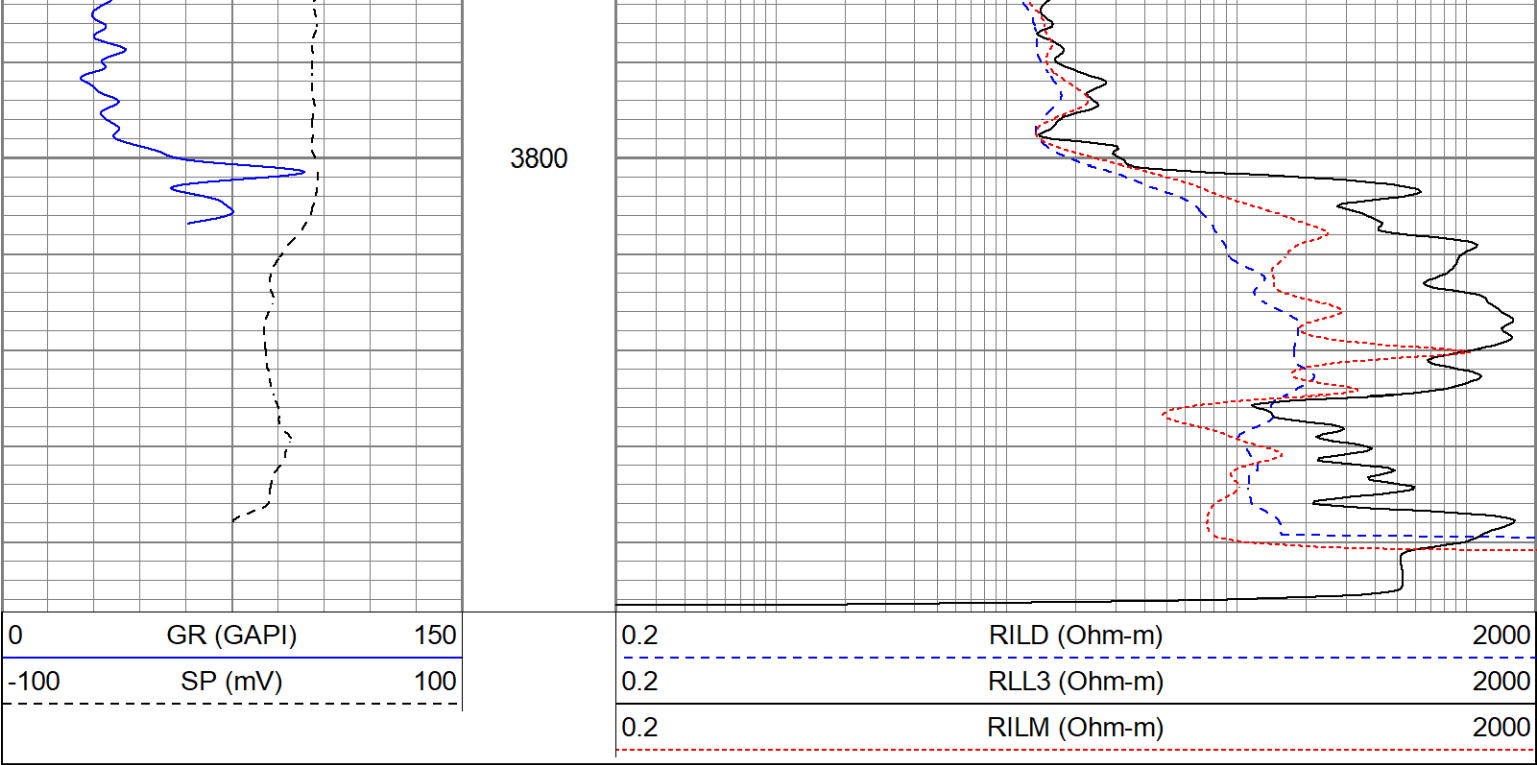
3650

3700

3750

0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000





Calibration Report									
Database File	petsleiker#16oh.db								
Dataset Pathname	pass20								
Dataset Creation	Tue Jun 23 17:09:25 2026								
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 Oct 7 09:19:34 2025

Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.790	g/cc		5395.42	4600.53	cps
Aluminium	2.650	g/cc		1513.92	3118.74	cps
Aluminium+Sleeve	2.617	g/cc		1410.33	2784.25	cps
Spine Angle = 72.99			Density/Spine Ratio = 0.647			
	PE			NLITH	NHARD	
Magnesium	1.928	barn		3883.75	4301.83	cps
Aluminium	5.230	barn		748.77	1477.57	cps
Aluminium+Sleeve	6.800	barn		619.10	1414.49	cps
M = 0.809			B = -0.212		R = 1.000	
	Size			Reading		
Small Ring	8.00	in		2.84	V	
Large Ring	14.00	in		4.05	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 Apr 6 22:30:37 2024	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps