



DUAL INDUCTION LOG

Company	Palomino Petroleum	Company	Palomino Petroleum
Well	Froelich Trust #1	Well	Froelich Trust #1
Field	Broughton Northeast	Field	Broughton Northeast
County	Lane	County	Lane
State	Kansas	State	Kansas
Location:		API # : 15 101 22624	Other Services CDNL ML
2233' FNL & 655' FWL			
Permanent Datum	Ground Level	Elevation	2567'
Log Measured From	KB 10' AGL		
Drilling Measured From	KB		
SEC 11 TWP 16S RGE 27W			
Date	4/07/19		
Run Number	One		
Depth Driller	4549'		
Depth Logger	4554'		
Bottom Logged Interval	4552'		
Top Log Interval	200'		
Casing Driller	8 5/8" @ 220'		
Casing Logger	214'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical		
Density / Viscosity	9.2/54		
pH / Fluid Loss	10.0/7.2		
Source of Sample	Pit	Chlorides 3900 PPM	
Rm @ Meas. Temp	1.5@76degf		
Rmt @ Meas. Temp	1.13@76degf		
Rmc @ Meas. Temp	1.8@76degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	1.0@115degf		
Time Circulation Stopped	1:00 p.m		
Time Logger on Bottom	4:15 p.m		
Maximum Recorded Temperature	115degf		
Equipment Number	T-605		
Location	Hays, KS		
Recorded By	C. Patterson		
Witnessed By	Mr. Ryan Seib		

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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

Utica,KS West 9 mi to Red Chief Rd, Then North on Red Chief Rd 2.5 mi. to 285 Rd.,
East on 285 until Cattle Guard, Continue East Through Cattle Guard
follow Trail Through existing Leases to Location

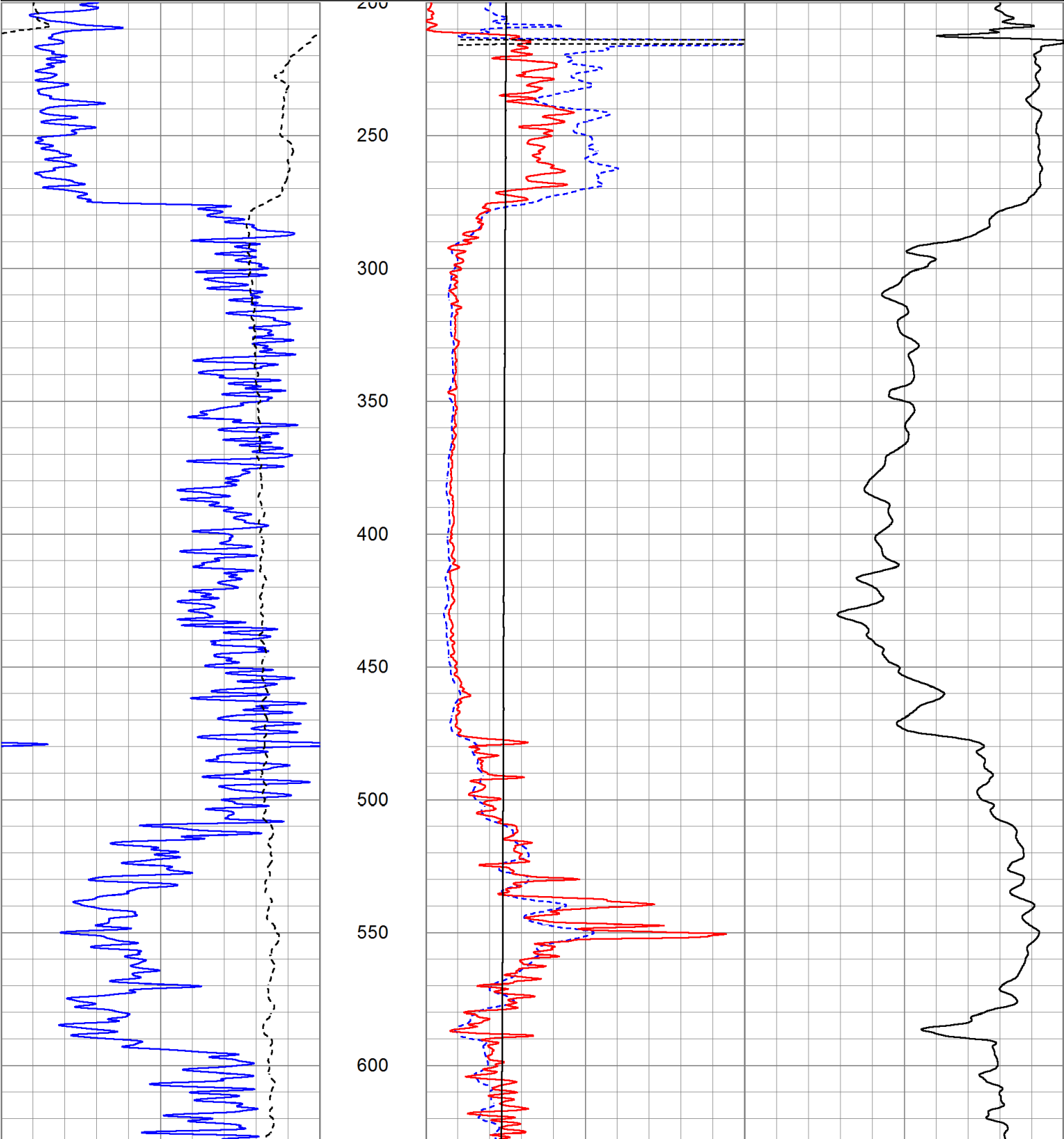
Thanks for using Gemini Wireline LLC
785-625-1182

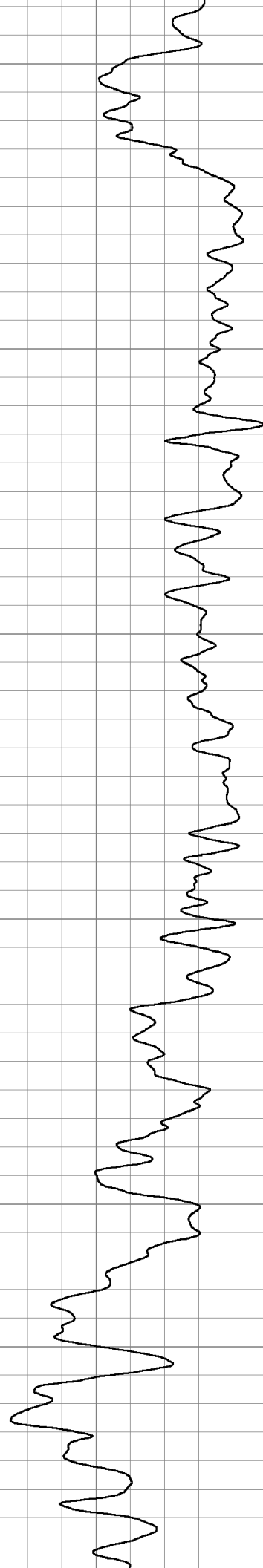
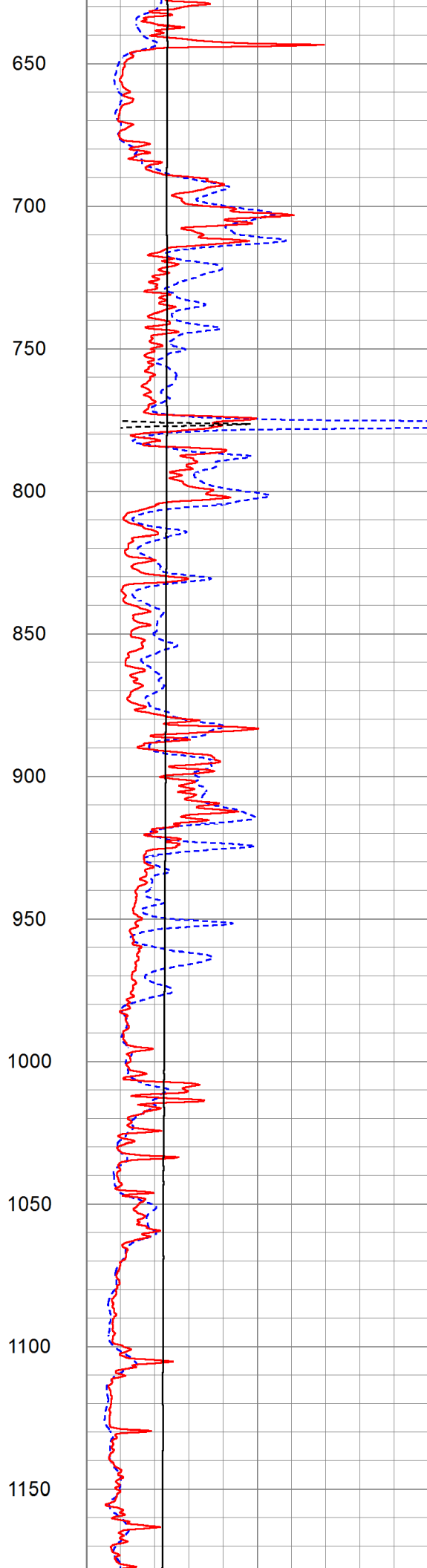
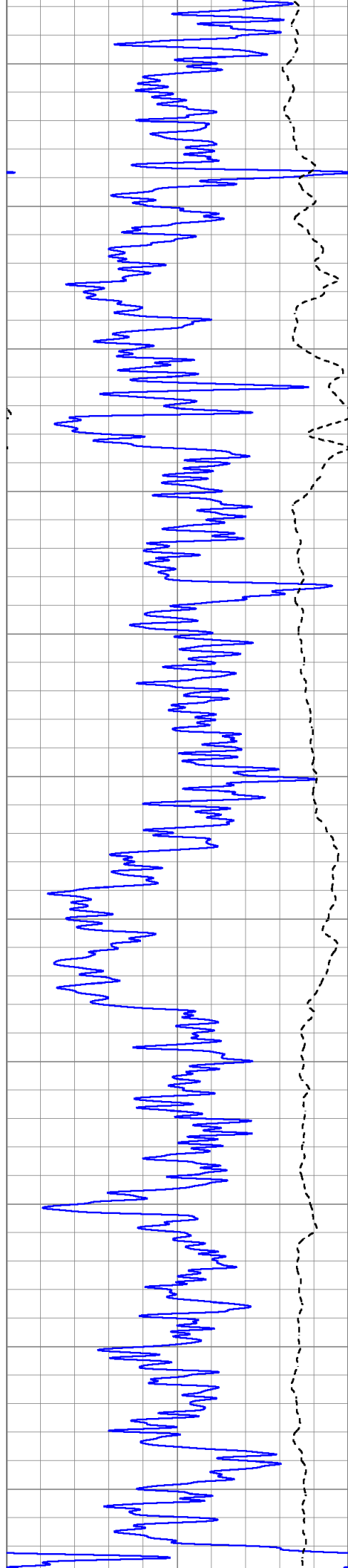


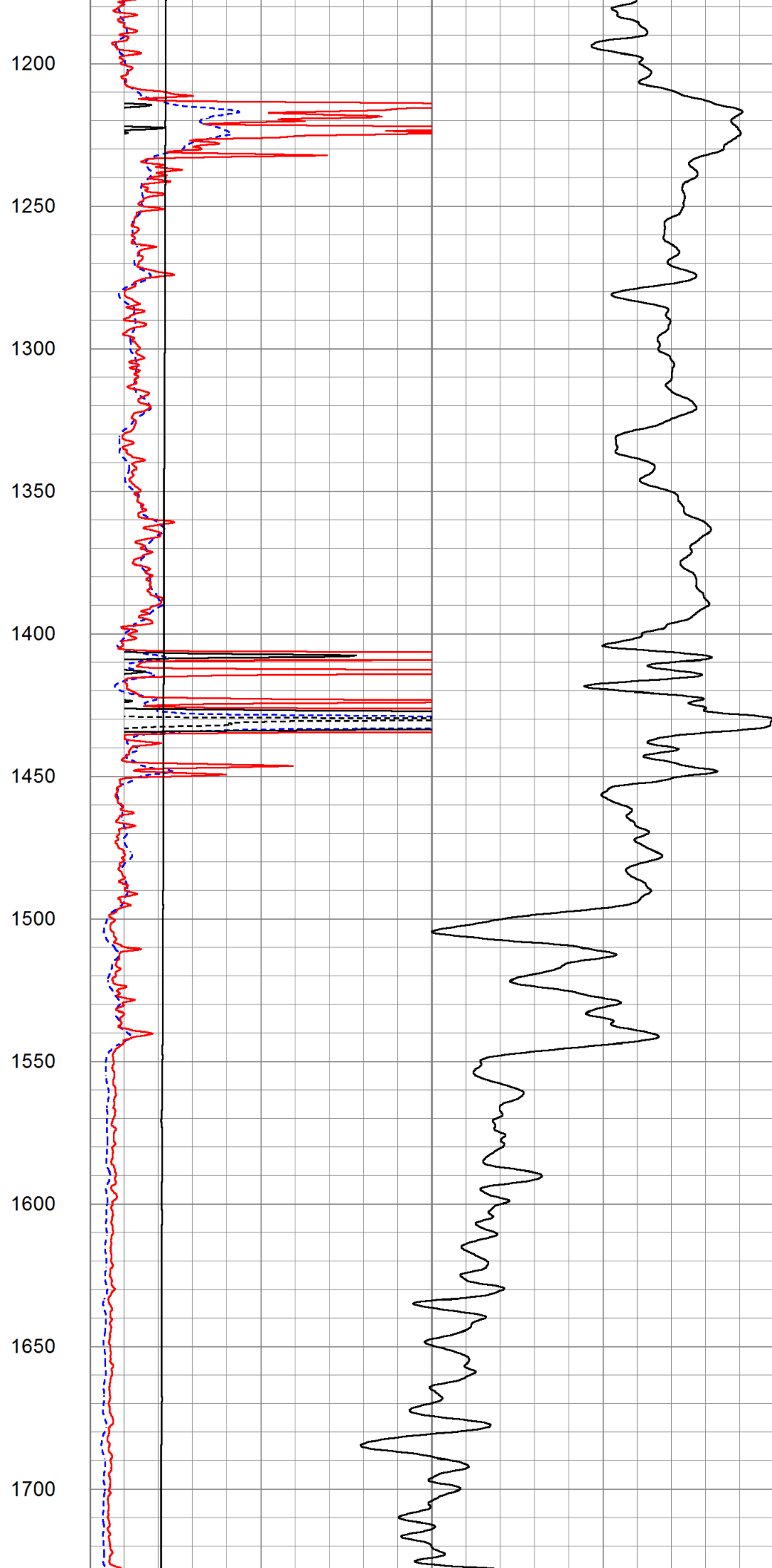
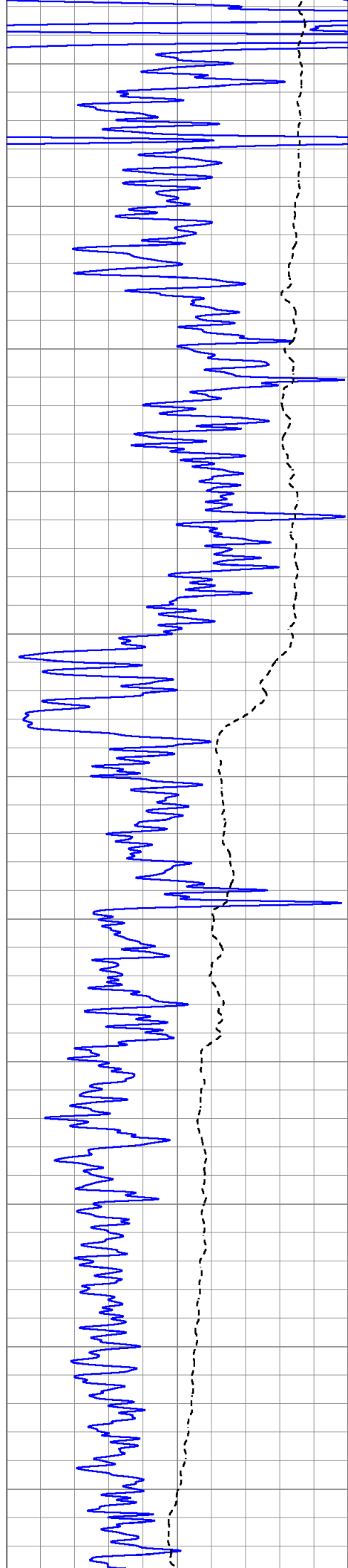
MAIN PASS

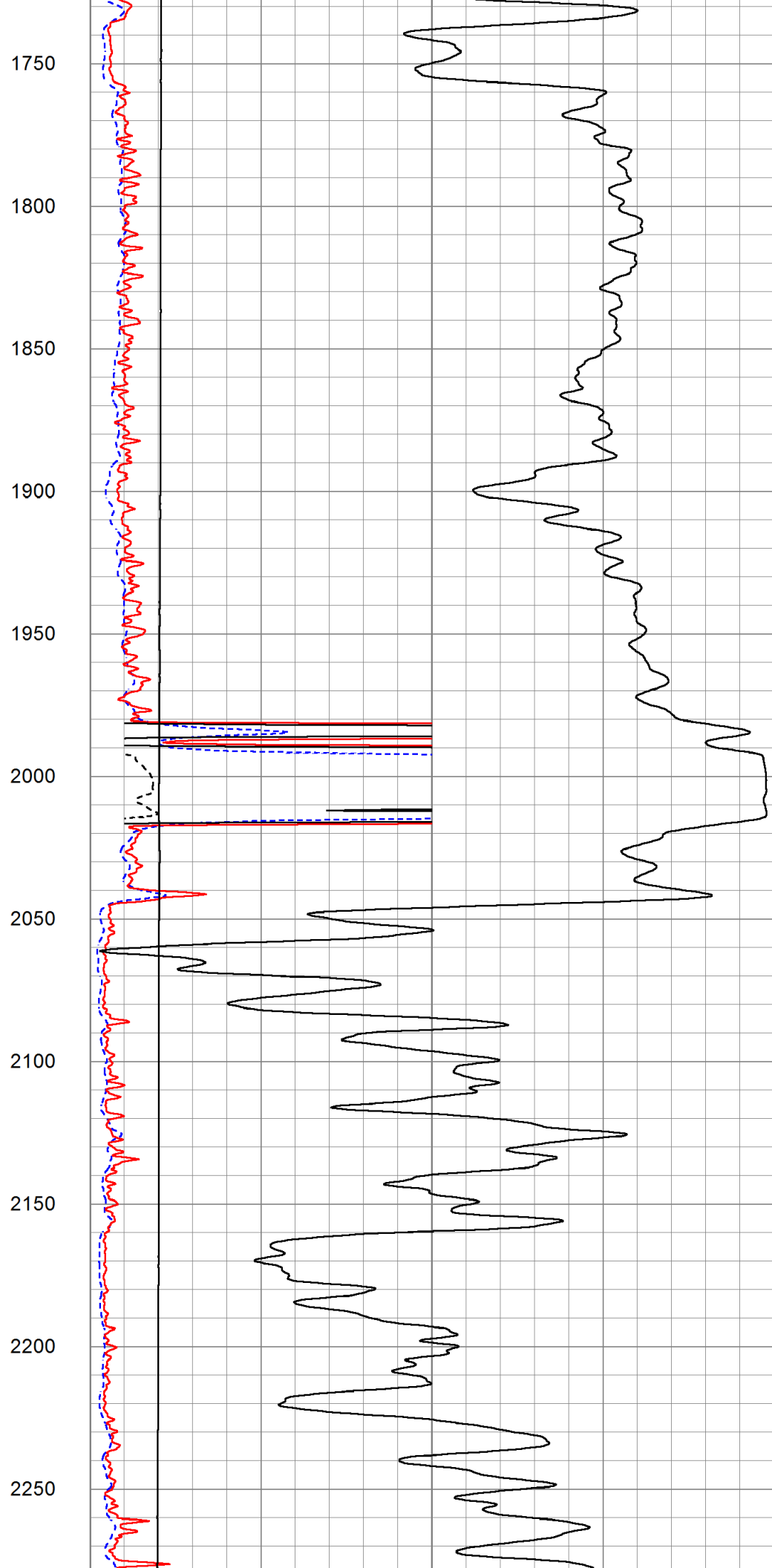
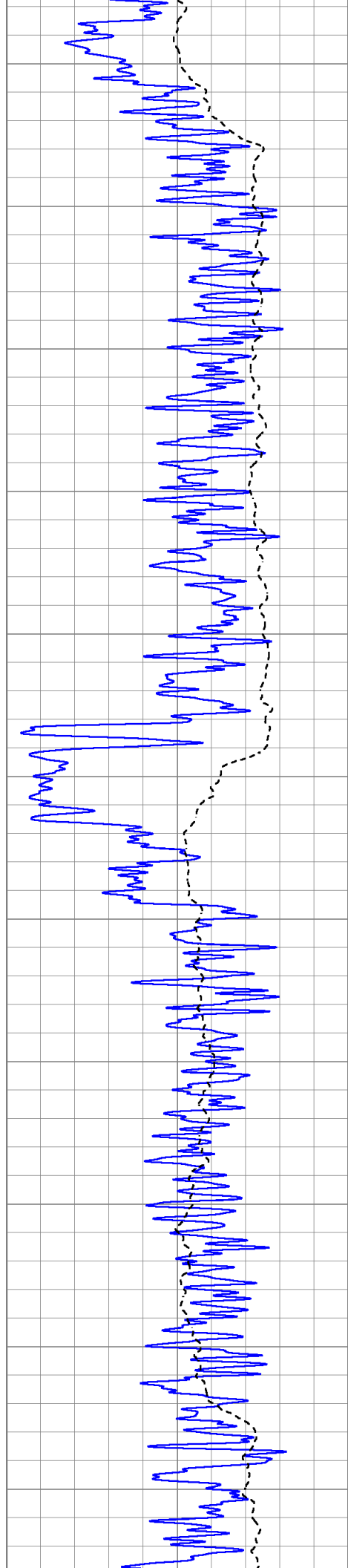
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Dataset Pathname	pass2.1
Presentation Format	kdillinn
Dataset Creation	Sun Apr 07 17:54:23 2019
Charted by	Depth in Feet scaled 1:600

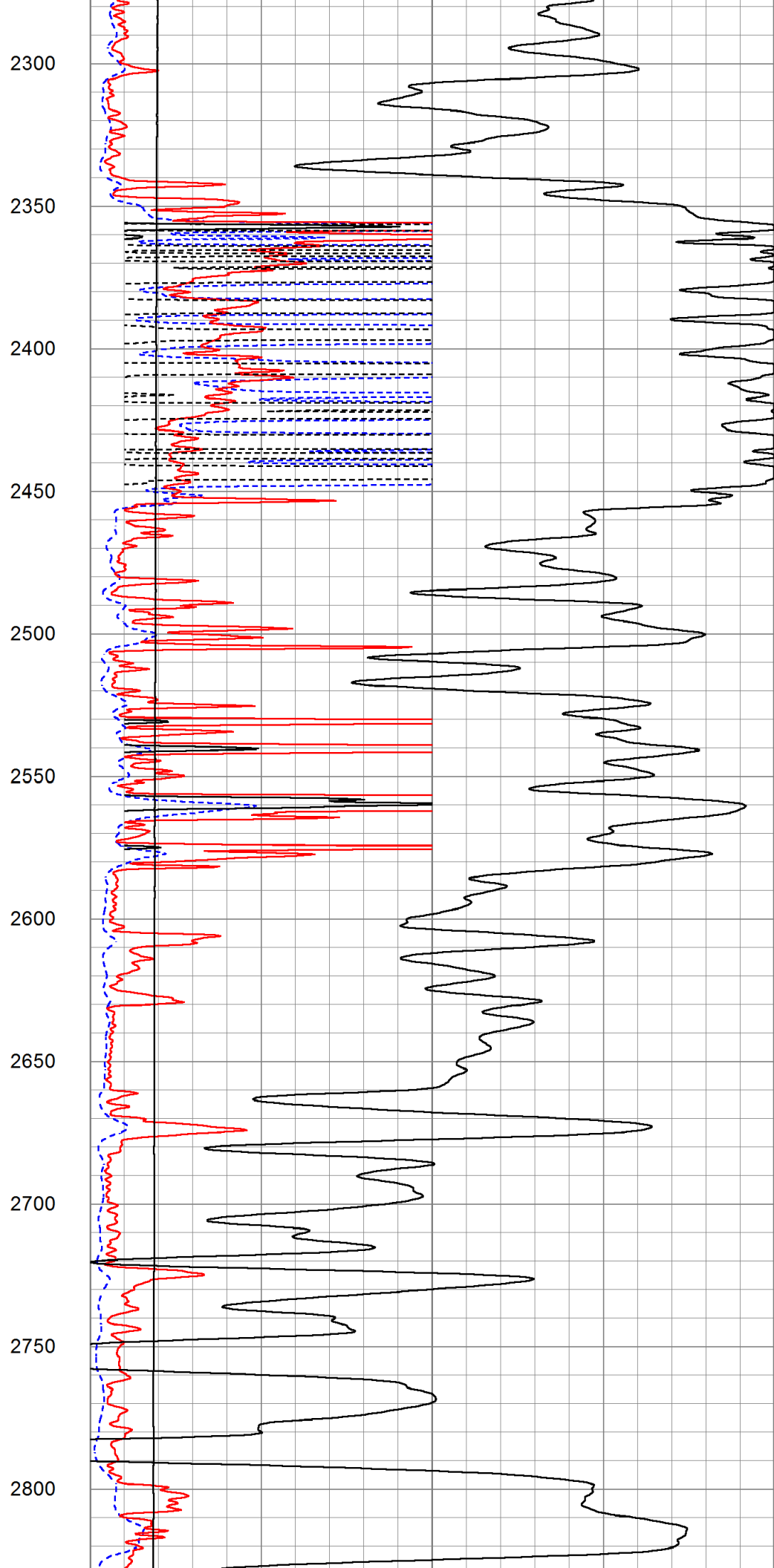
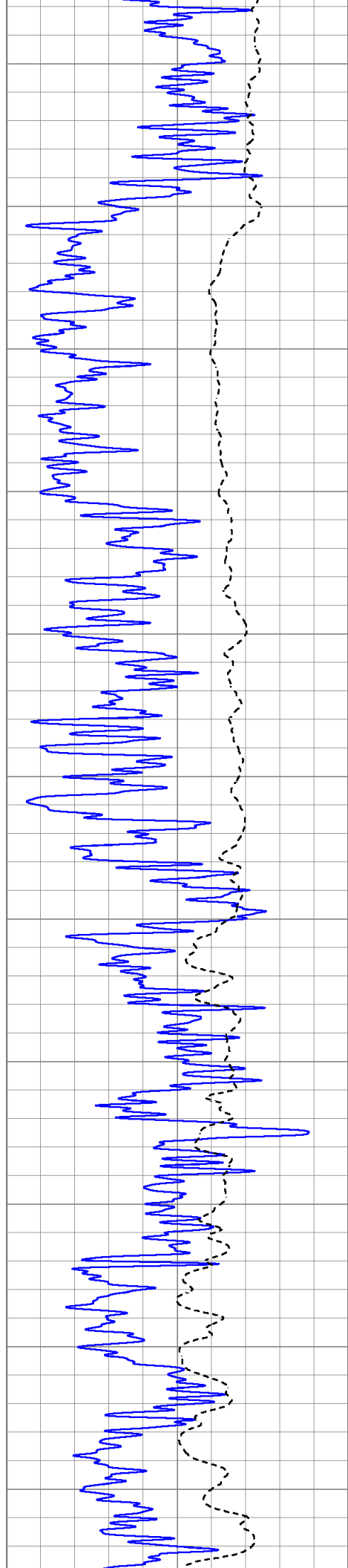
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-100	SP (mV)	100	10000	LTEN (lb)	0
			0	RILD (Ohm-m)	50
			0	RLL3 (Ohm-m)	50
			50	RILD x 10 (Ohm-m)	500
			50	RLL3 x 10 (Ohm-m)	500

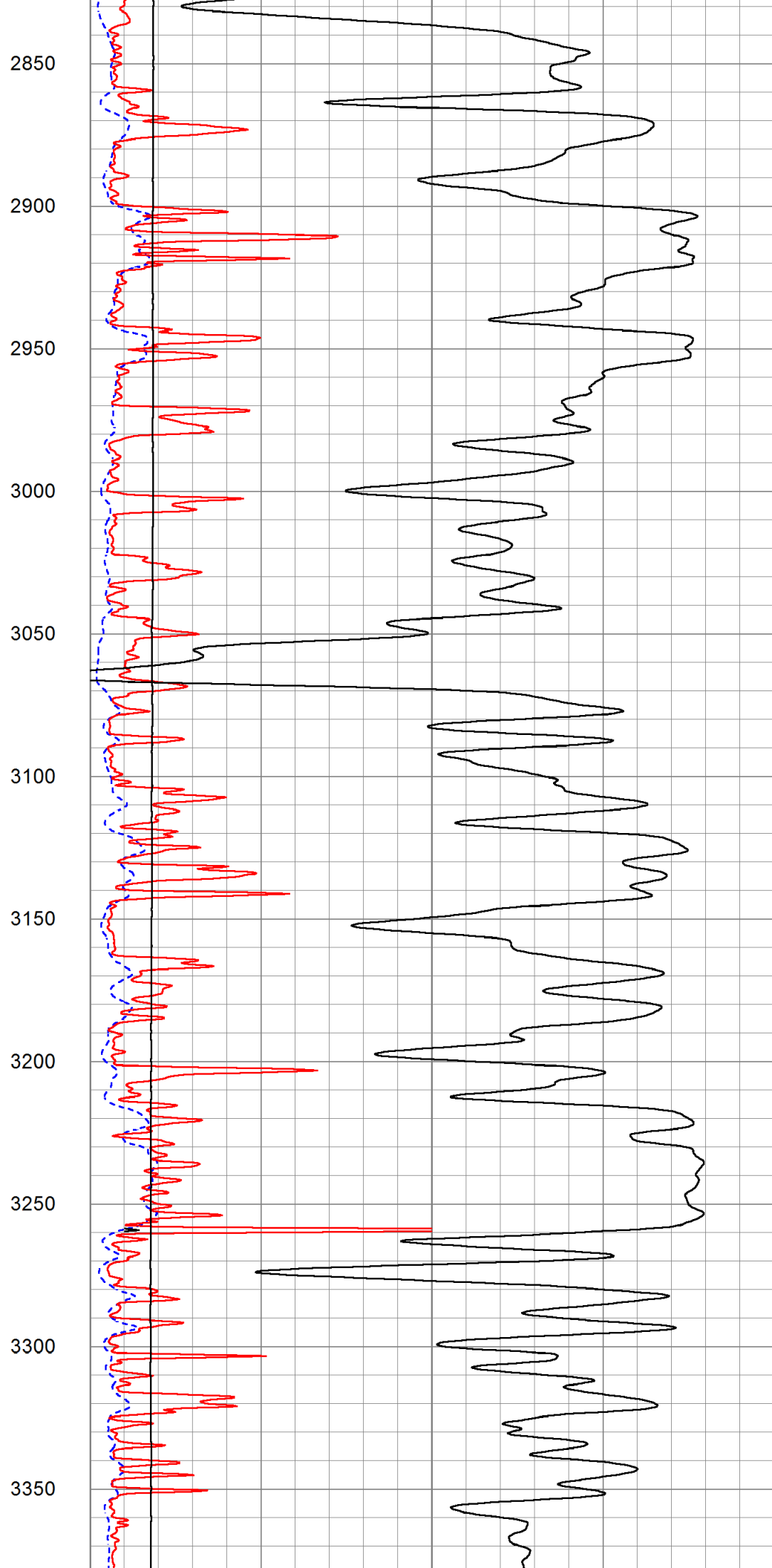
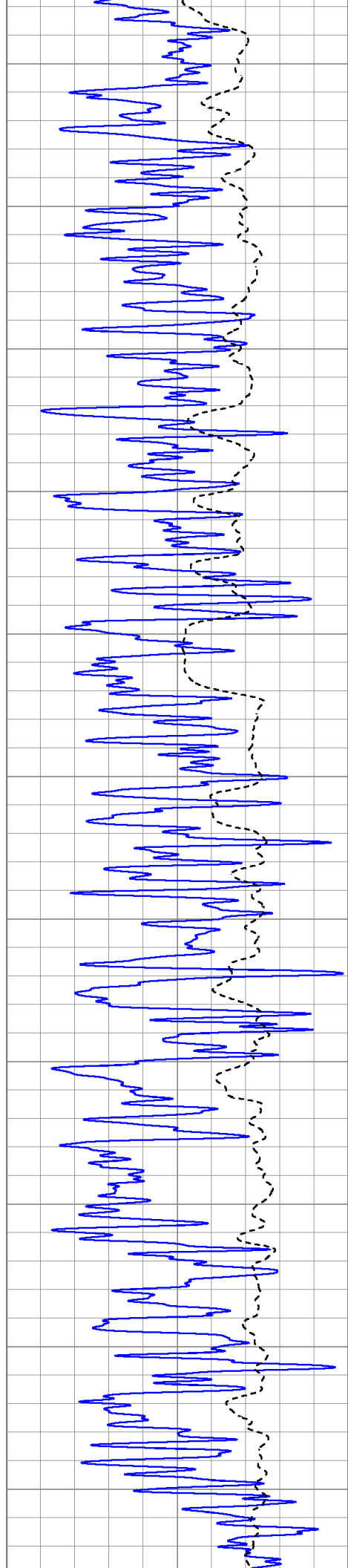


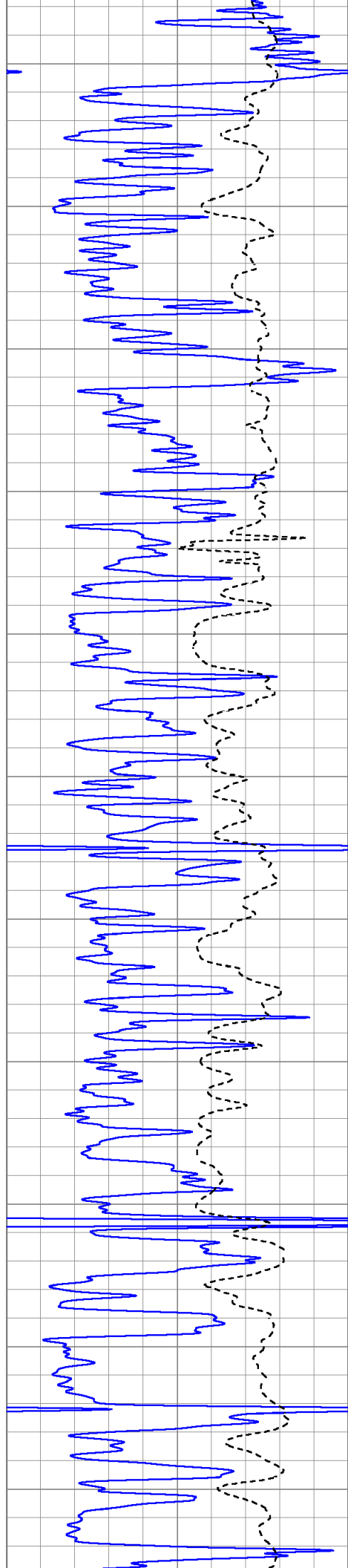












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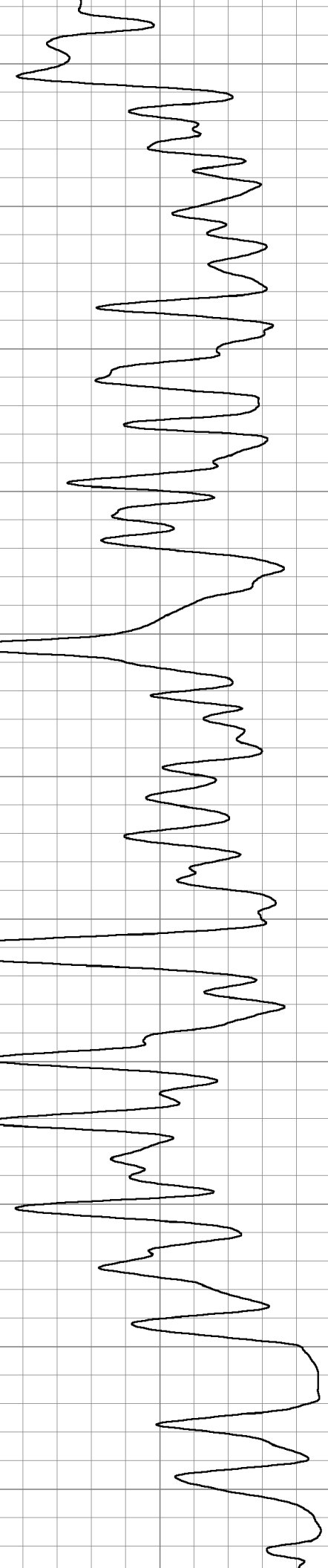
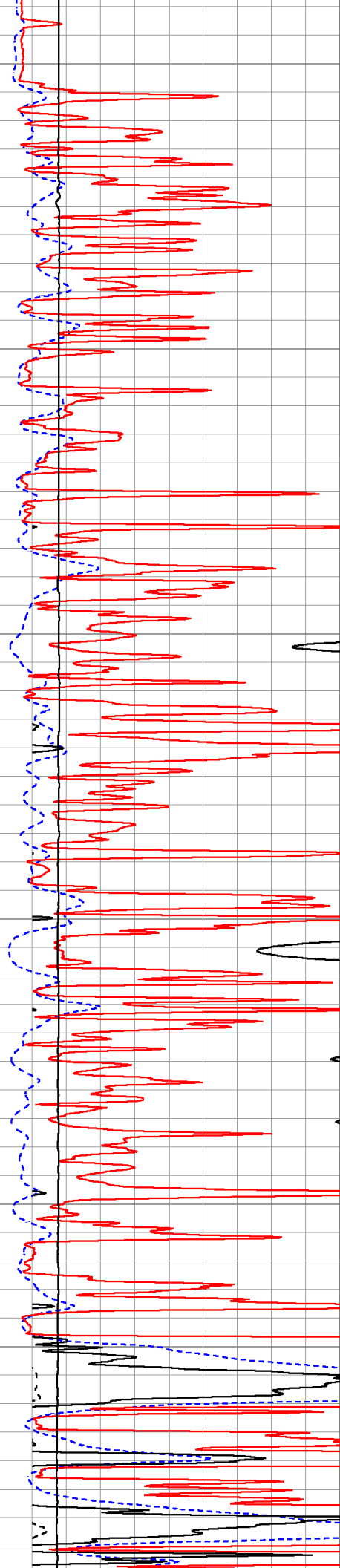
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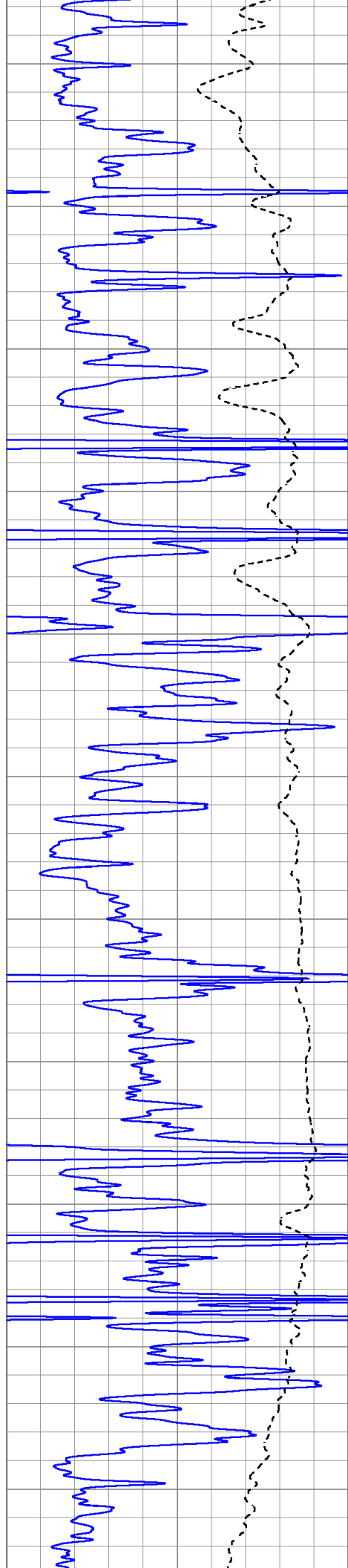
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3800

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3900





3950

4000

4050

4100

4150

4200

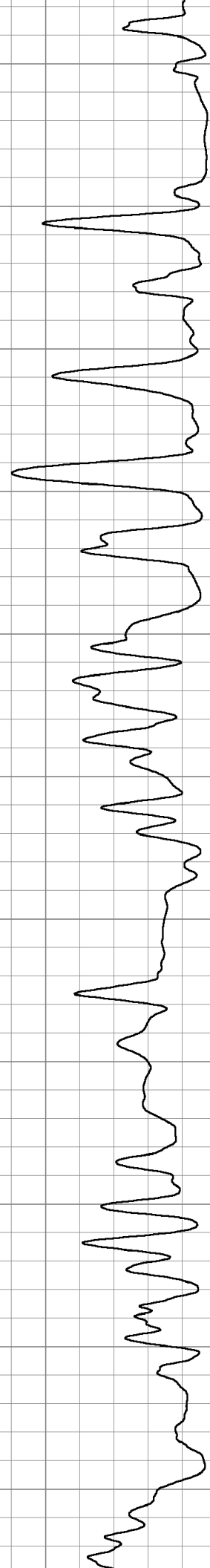
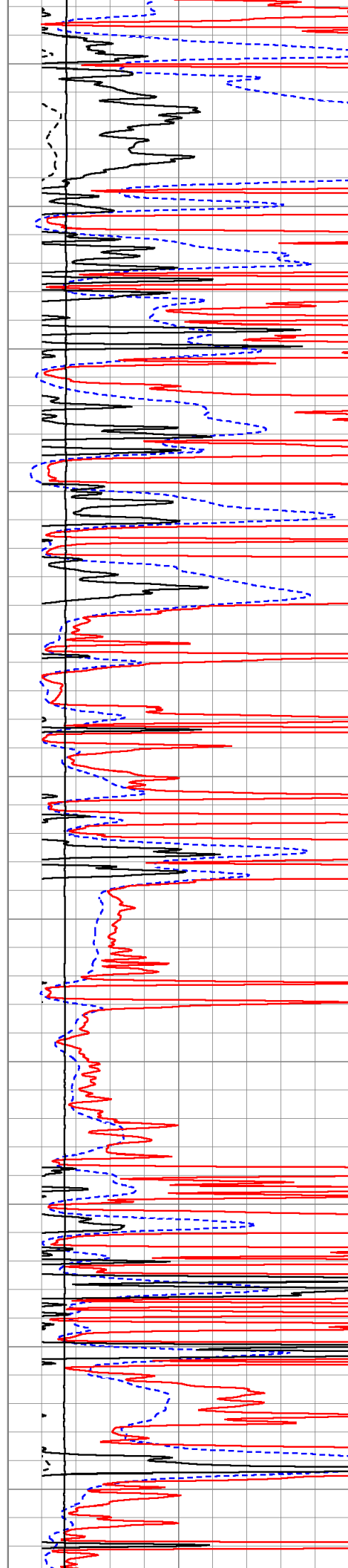
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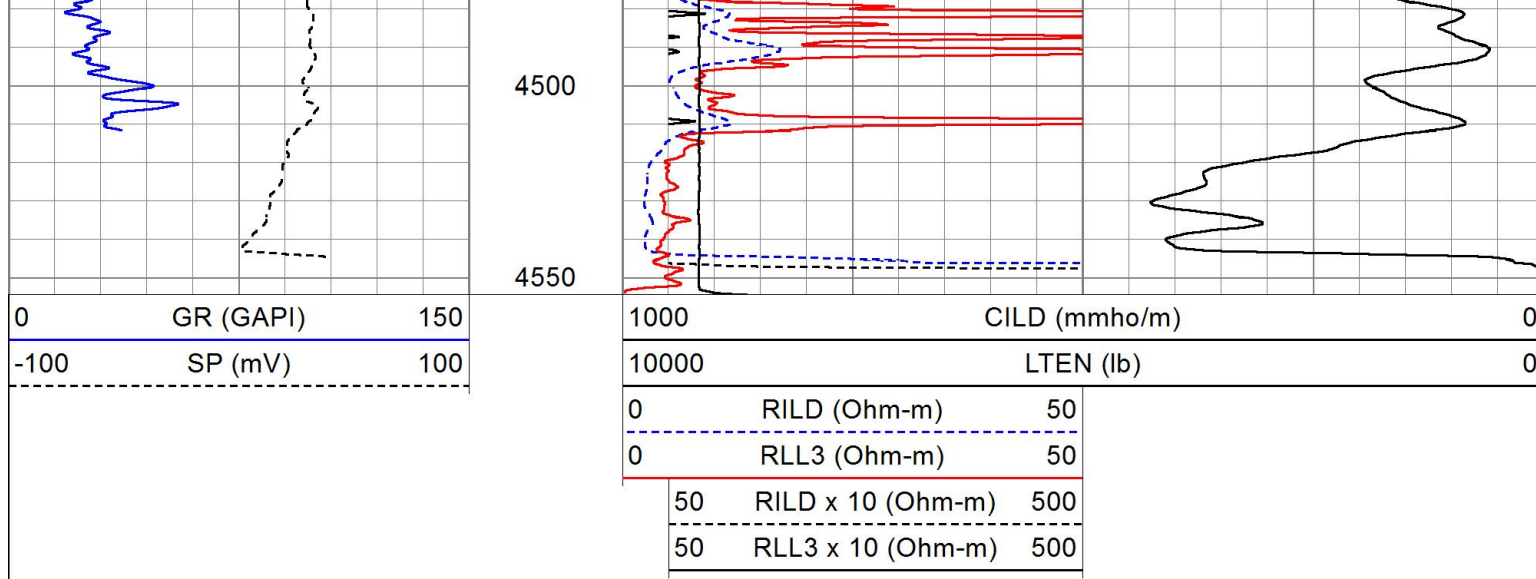
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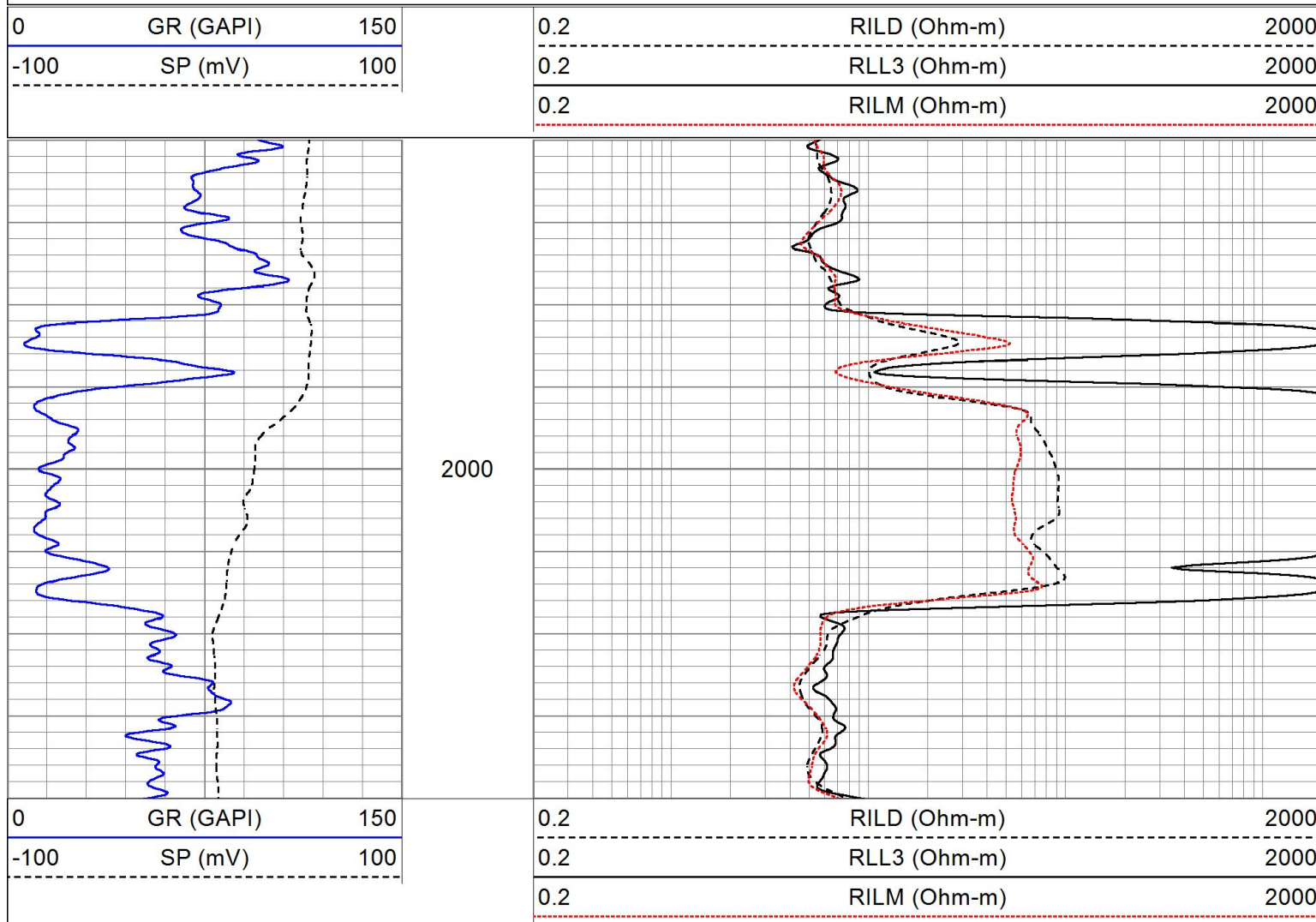
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MAIN PASS

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 Dataset Pathname pass2.1
 Presentation Format kdil
 Dataset Creation Sun Apr 07 17:54:23 2019
 Charted by Depth in Feet scaled 1:240



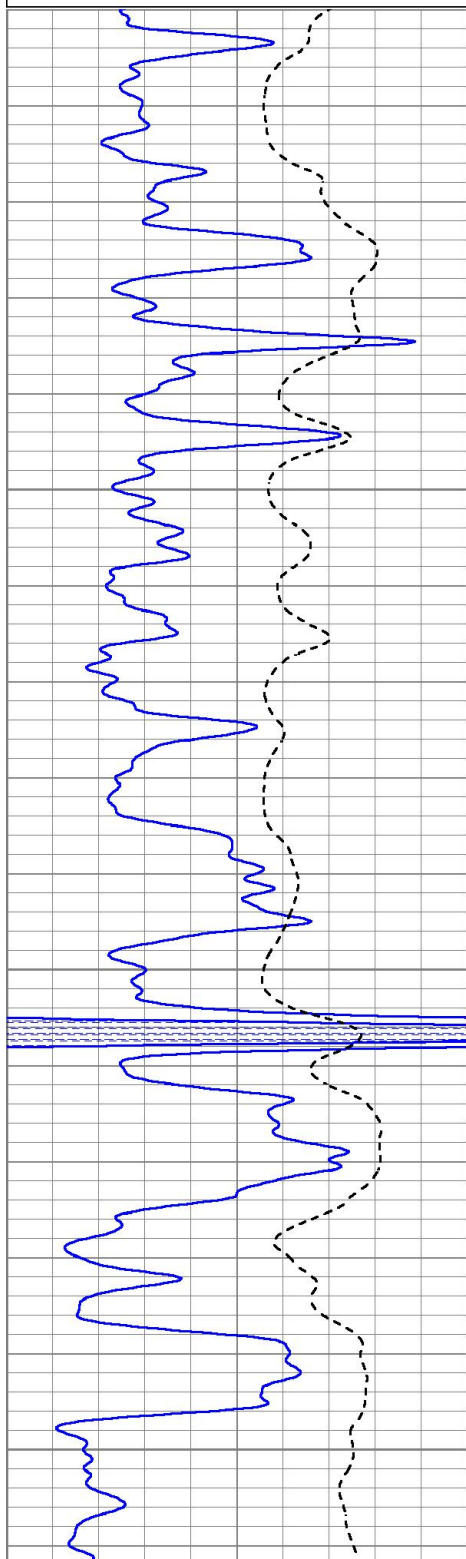


MAIN PASS

Database File ppfroelichtrust#1oh.db
Dataset Pathname pass2.1
Presentation Format kdil
Dataset Creation Sun Apr 07 17:54:23 2019
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

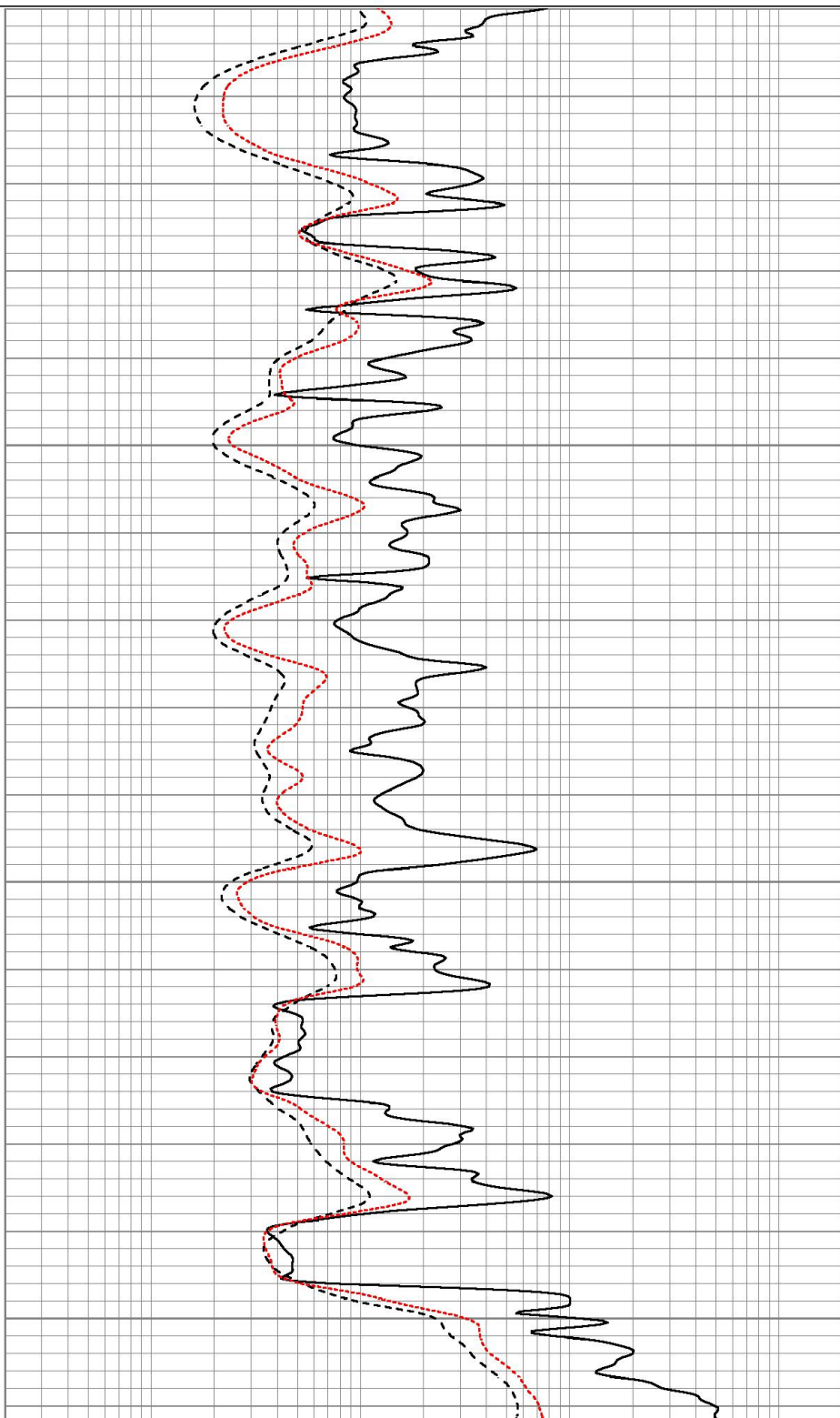


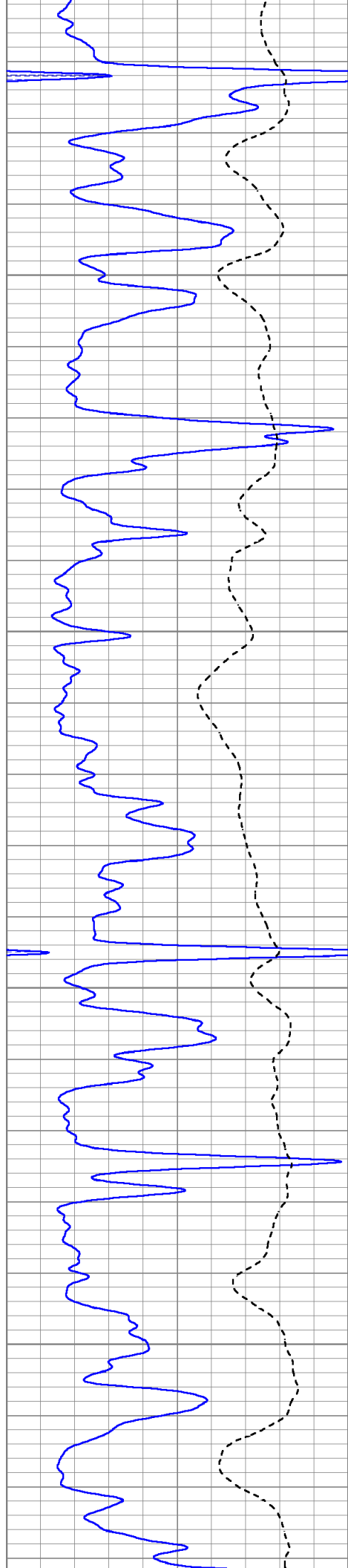
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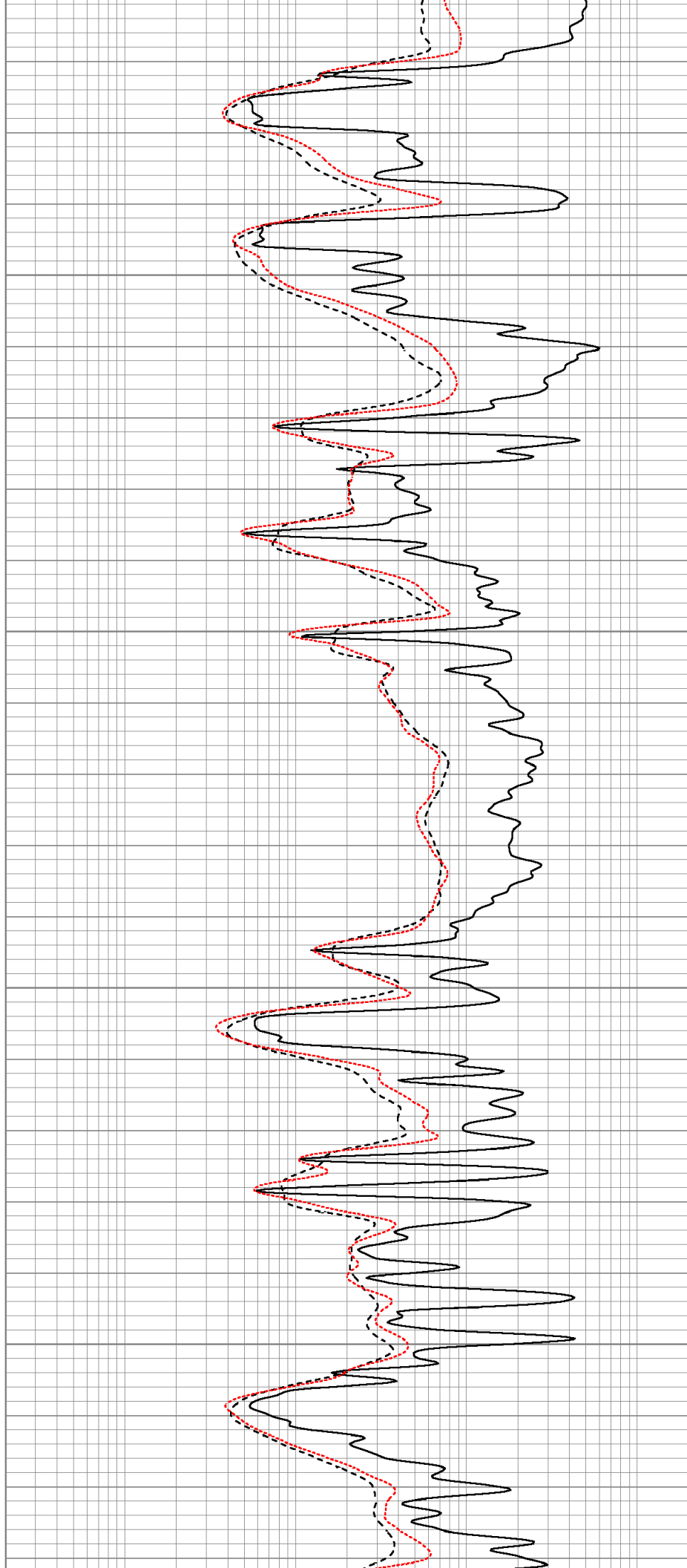


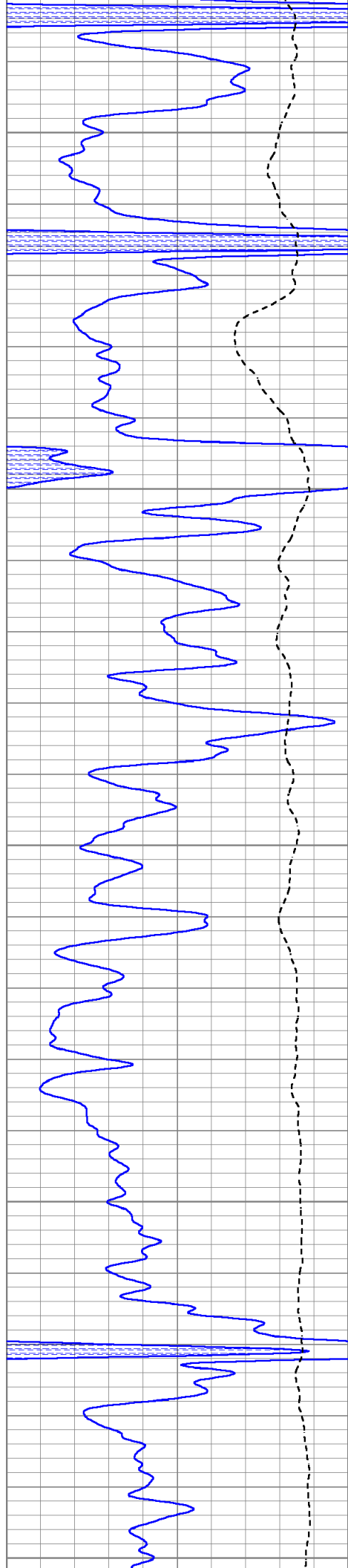
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4050





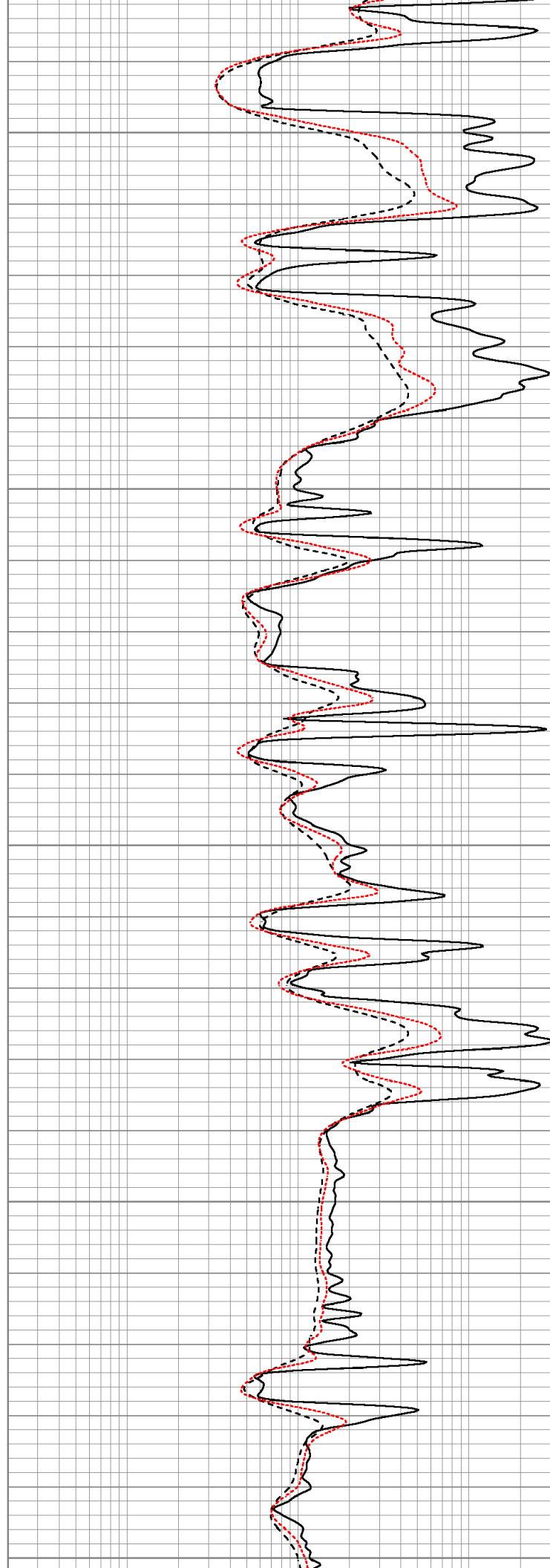
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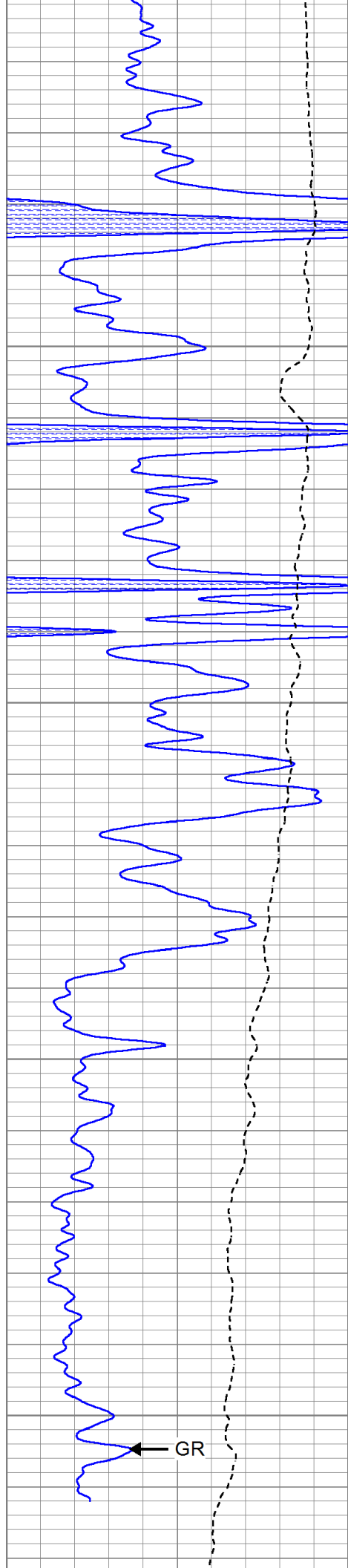
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4300





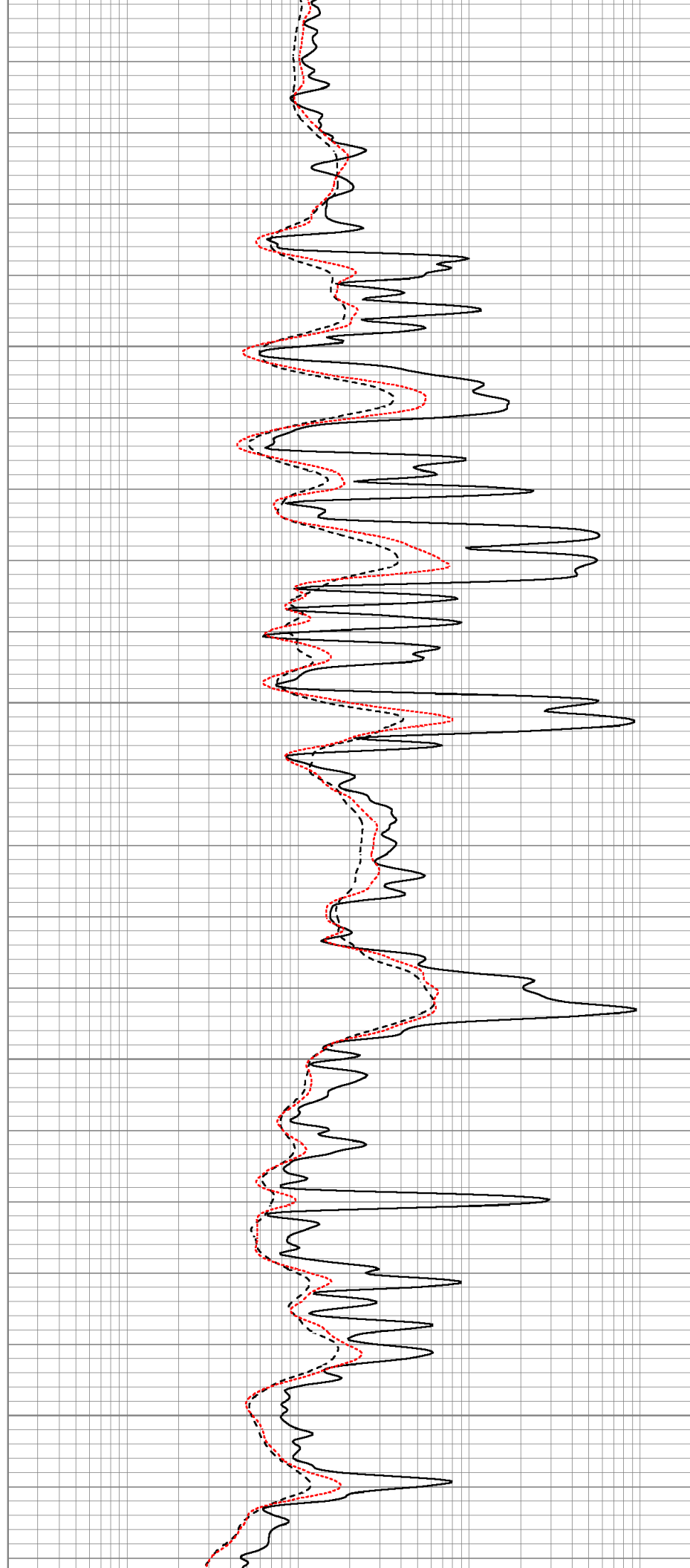
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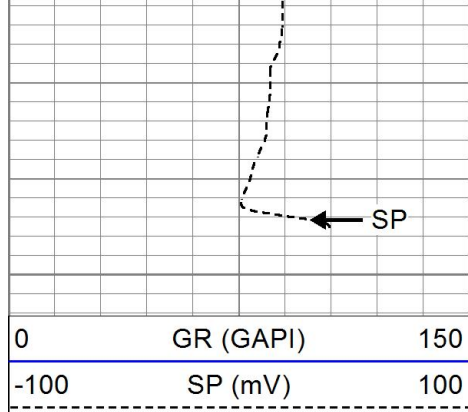
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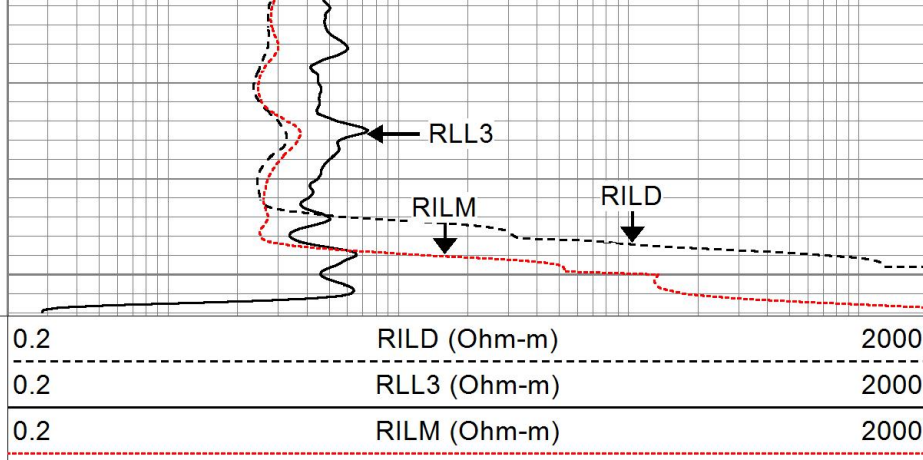
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GR



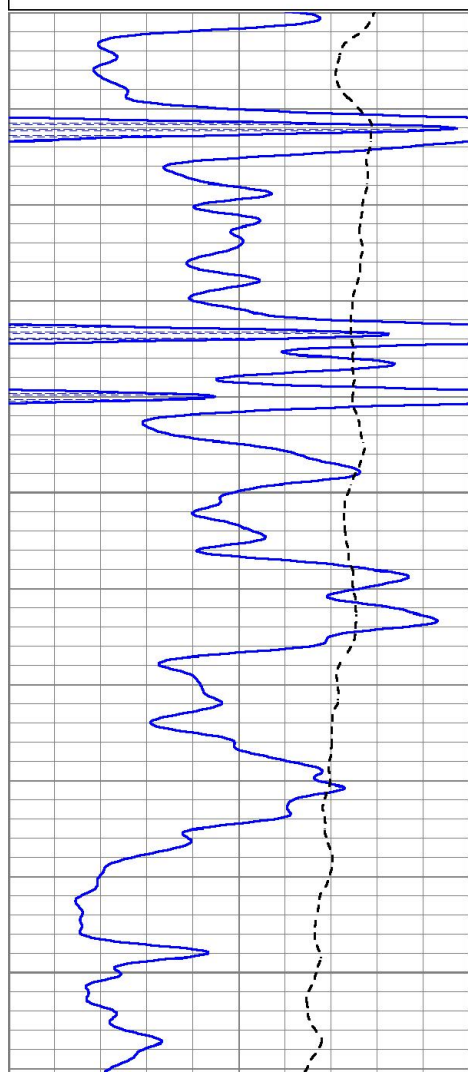
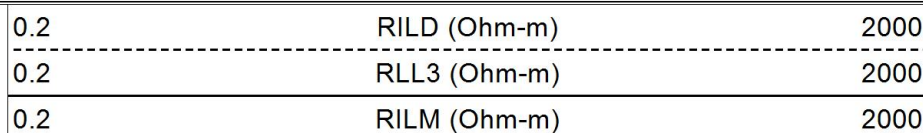
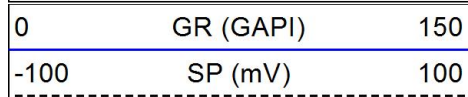


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REPEAT SECTION

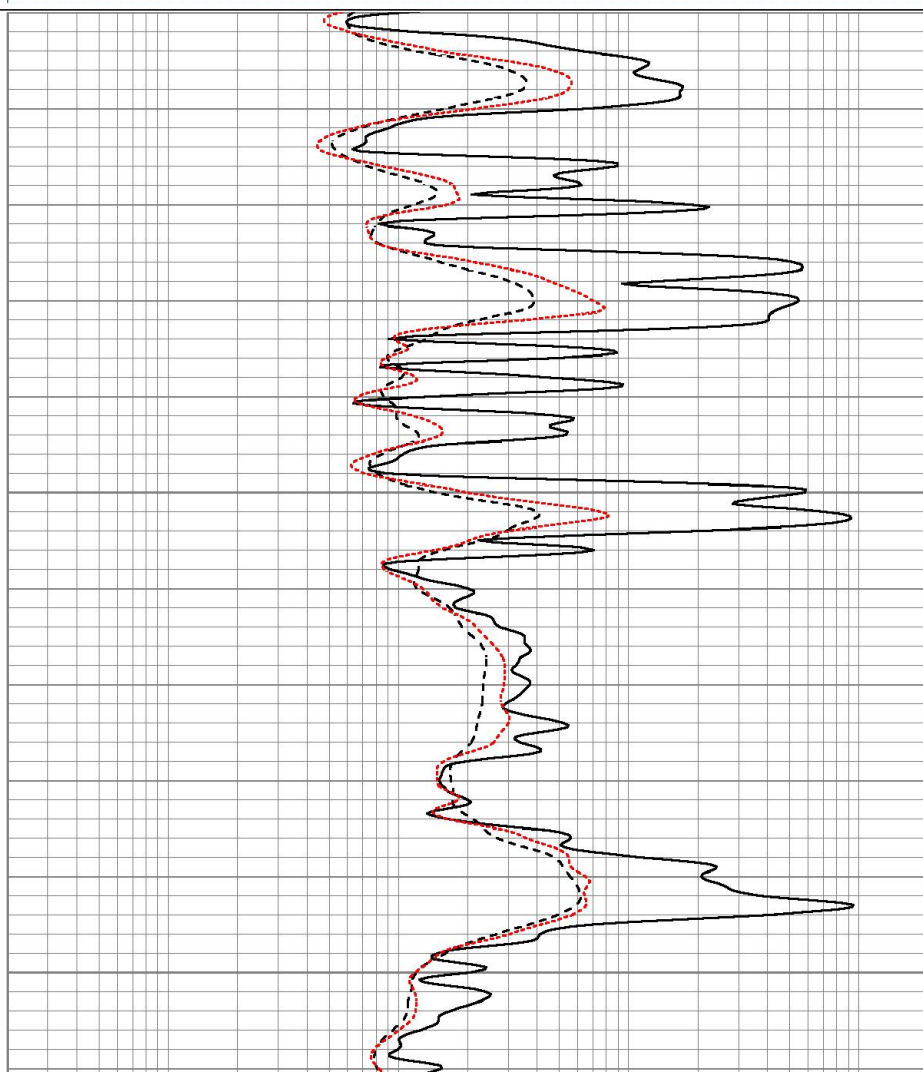
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 Presentation Format kdil
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 Charted by Depth in Feet scaled 1:240

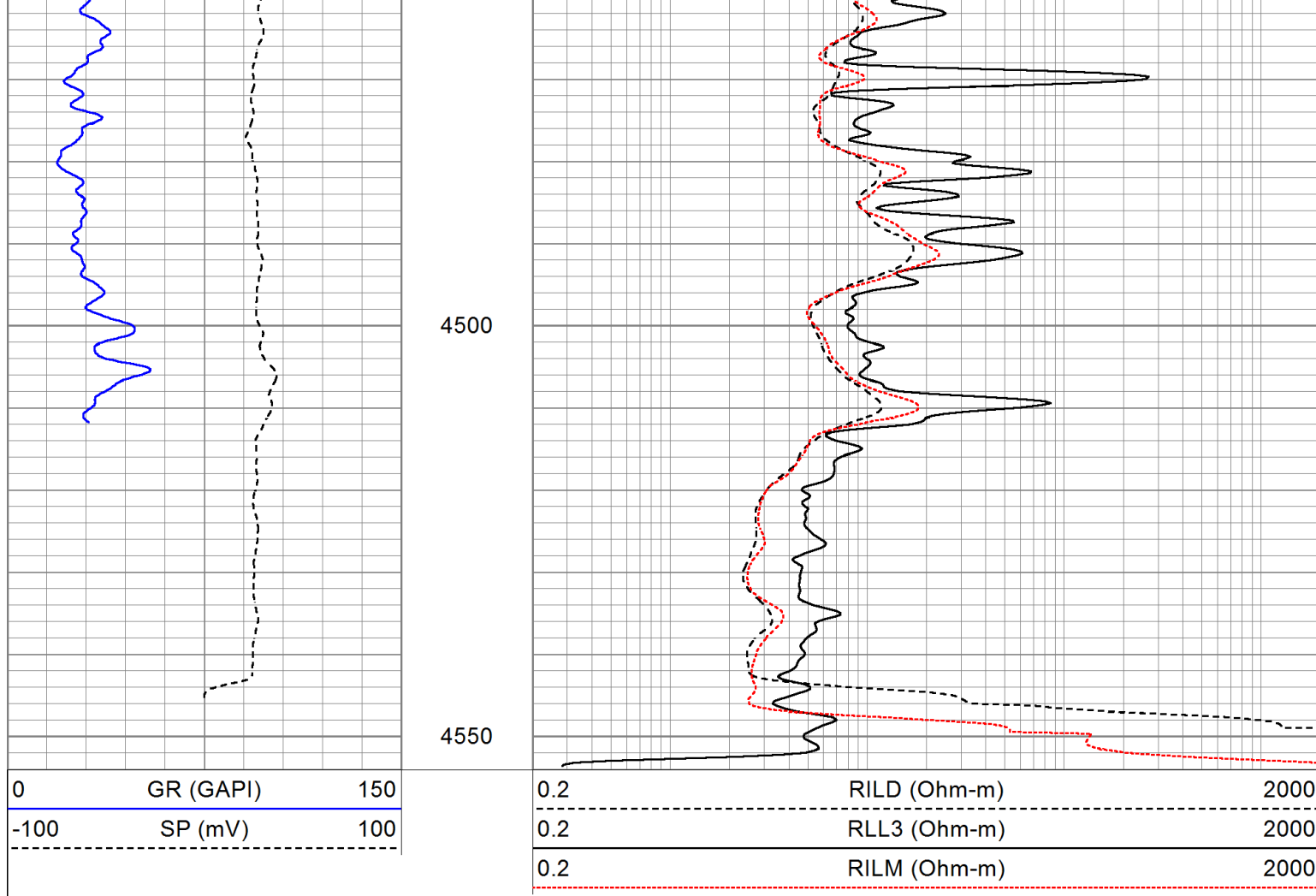


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Calibration Report									
Database File	ppfroelichtrust#1oh.db								
Dataset Pathname	pass2.1								
Dataset Creation	Sun Apr 07 17:54:23 2019								
Dual Induction Calibration Report									
Serial-Model:		5375-G							
Surface Cal Performed:		Tue Jan 22 08:45:42 2019							
Downhole Cal Performed:		Tue Jan 22 08:46:17 2019							
After Survey Verification Performed:		Tue Jan 22 08:46:17 2019							
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.002	0.642	V	0.000	350.000	mmho/m	547.166	-1.056	
Medium	0.004	0.724	V	0.000	425.000	mmho/m	590.216	-2.564	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.002	0.642	V	0.000	350.000	mmho/m	547.349	-1.170	
Medium	0.004	0.725	V	0.000	550.000	mmho/m	763.497	-3.249	
Downhole Calibration									
Readings				References			Results		
Internal:	Zero	Cal		Zero	Cal		m	b	

Deep	0.089	349.955	mmho/m	0.113	349.997	mmho/m	1.000	0.024
Medium	-0.171	400.157	mmho/m	-0.049	400.115	mmho/m	1.000	0.122
Shallow	2.429	0.011	V	500.000	2.000	Ohm-m	200.929	0.282
After Survey Verification								
Readings			Targets			Results		
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.089	349.955	mmho/m	1.000	0.024
Medium	0.000	0.000	mmho/m	-0.171	400.157	mmho/m	1.000	0.122
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000
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:			Wed Dec 05 04:54:01 2018					
			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 Dec 05 04:53:48 2018					
			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:			Wed Dec 05 04:58:30 2018					
Calibrator Value:			1.0		GAPI			
Background Reading:			0.0		cps			
Calibrator Reading:			1.0		cps			

GAPI/cps

Dataset: ppfroelichtrust#1oh.db: field/well/run1/pass2.1
Total length: 41.49 ft
Total weight: 756.00 lb
O.D.: 4.00 in