



DUAL INDUCTION LOG

Company	RED OAK ENERGY, INC.	Location:	API # : 15-071-20895-0000	Other Services CDL/CNL/PE MEL
Well	NILS UNIT #1-13	SEC 13 TWP 16S RGE 42W		Elevation K.B. 3792 D.F. 3790 G.L. 3784
Field	WILDCAT	1362' FNL & 120' FWL		
County	GREELEY	State	KANSAS	
Permanent Datum	GROUND LEVEL	Elevation	3784	
Log Measured From	KELLY BUSHING 8' A.G.L			
Drilling Measured From	KELLY BUSHING			
Date	7/14/21			
Run Number	ONE			
Depth Driller	5159			
Depth Logger	5160			
Bottom Logged Interval	5158			
Top Log Interval	00			
Casing Driller	8 5/8" @ 388'			
Casing Logger	388'			
Bit Size	7 7/8			
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM		
Density / Viscosity	9.3/71			
pH / Fluid Loss	9.0/8.8			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	.90 @ 82F			
Rmf @ Meas. Temp	.67 @ 82F			
Rmc @ Meas. Temp	1.08 @ 82F			
Source of Rmf / Rmc	MEASUREMENT			
Rm @ BHT	.58 @ 126F			
Time Circulation Stopped	2 HOURS			
Time Logger on Bottom	////			
Maximum Recorded Temperature	126F			
Equipment Number	3802			
Location	HAYS, KANSAS			
Recorded By	JASON CAPPELLUCCI			
Witnessed By	SEAN DEENIHAN			

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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.

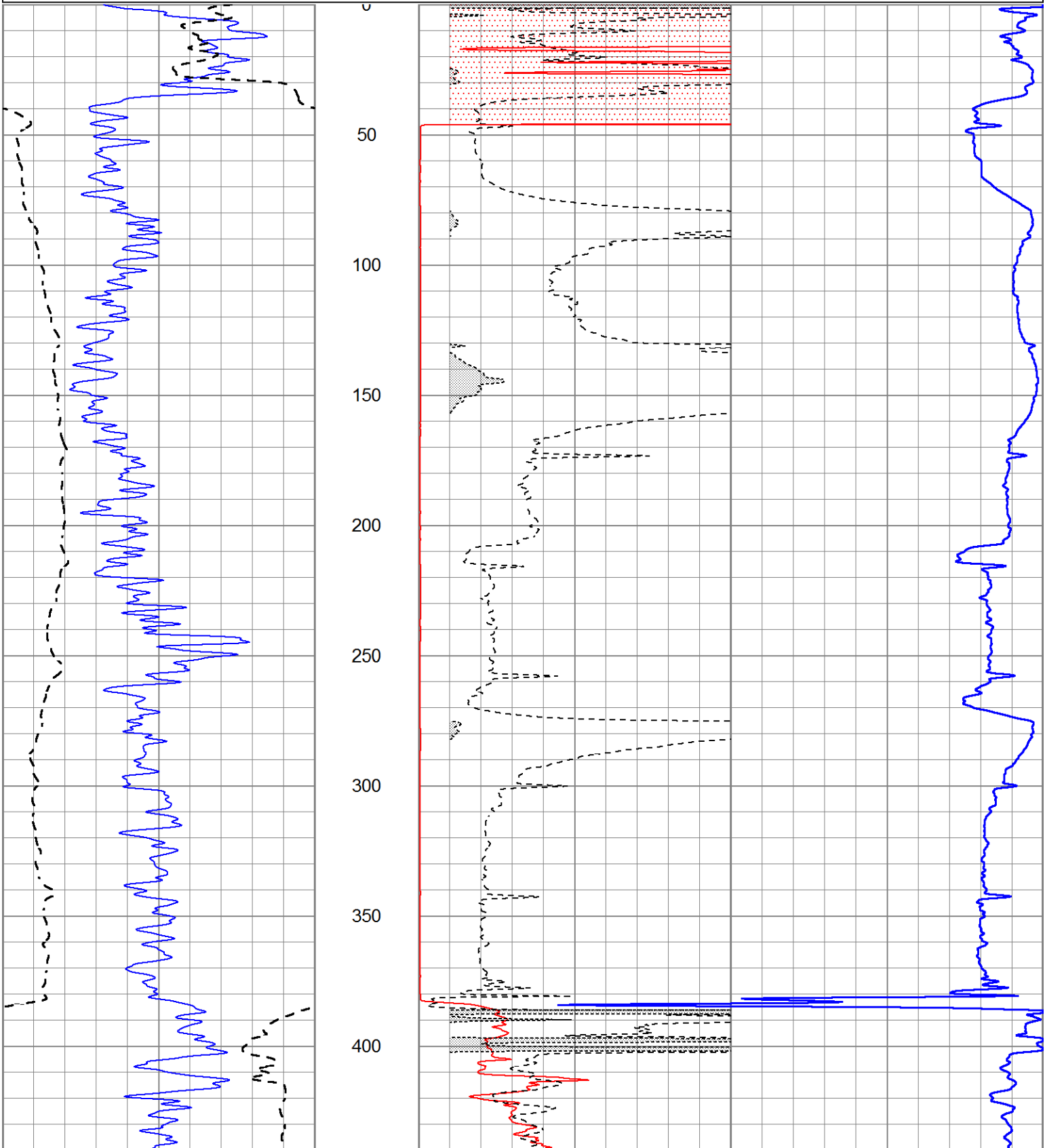
Comments

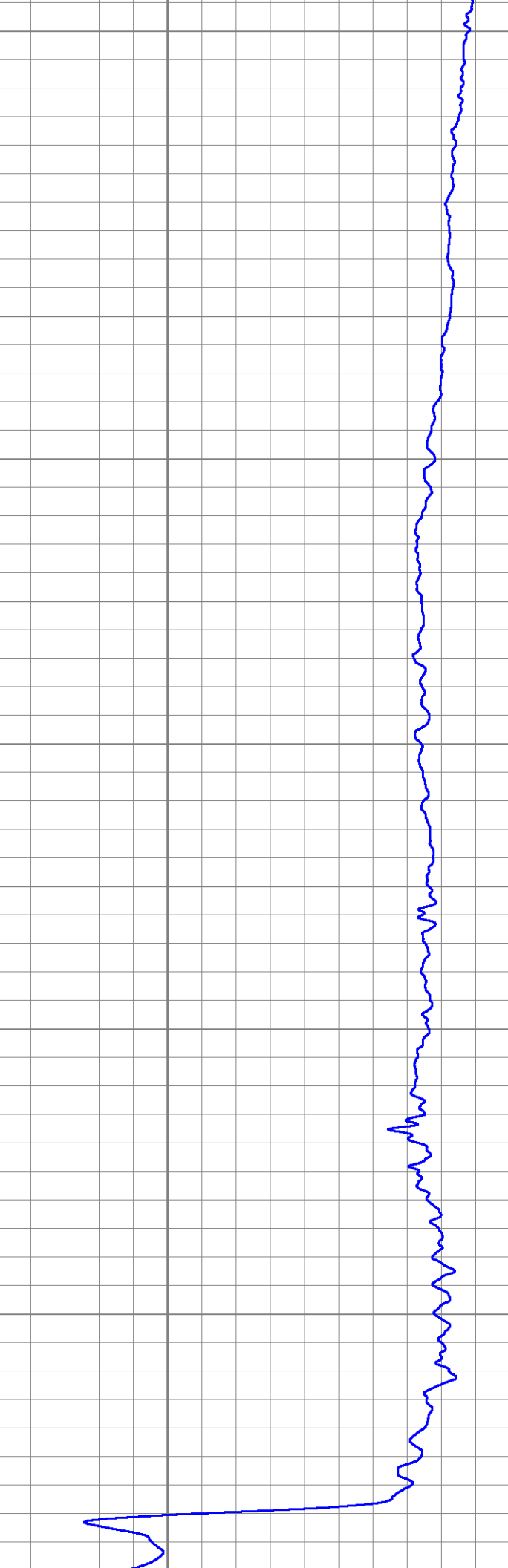
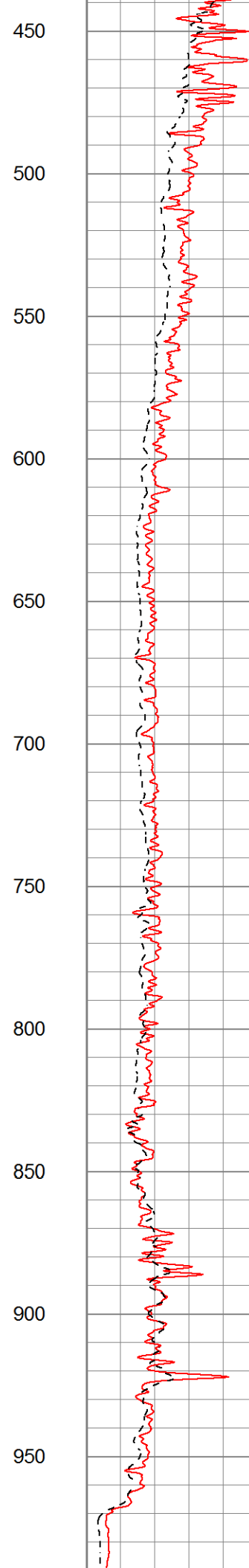
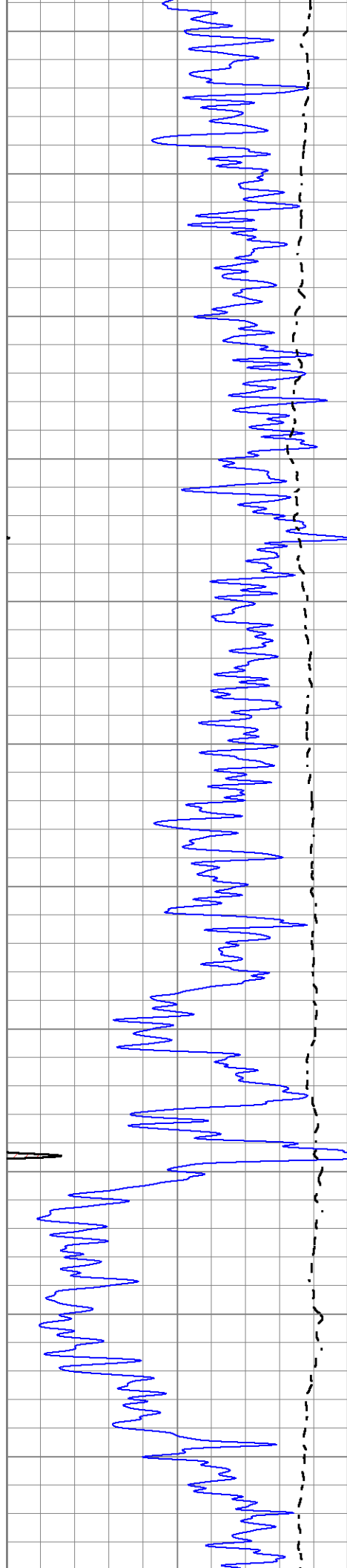
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
SHARON SPRINGS, KS. - SOUTH TO COUNTY LINE - 3 SOUTH TO D RD. - 8 WEST
TO RD. 7 - 3/4 NORTH - EAST INTO

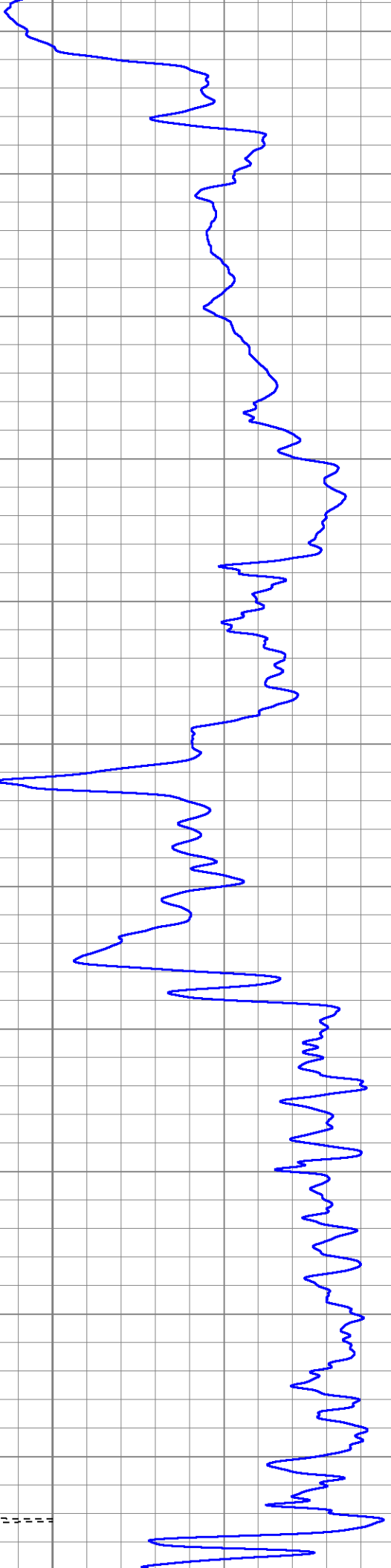
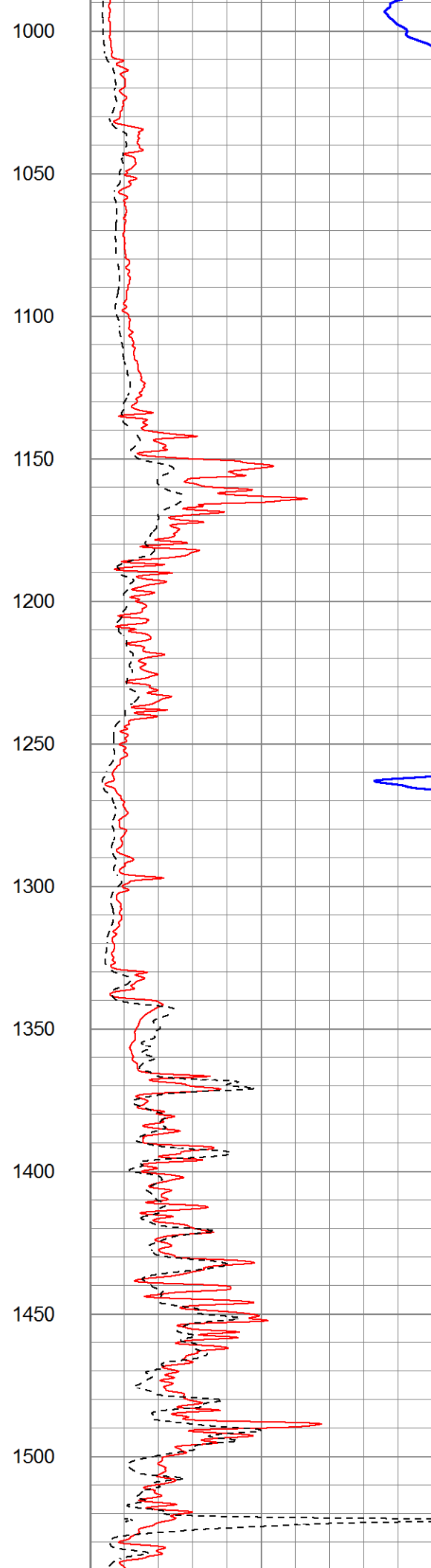
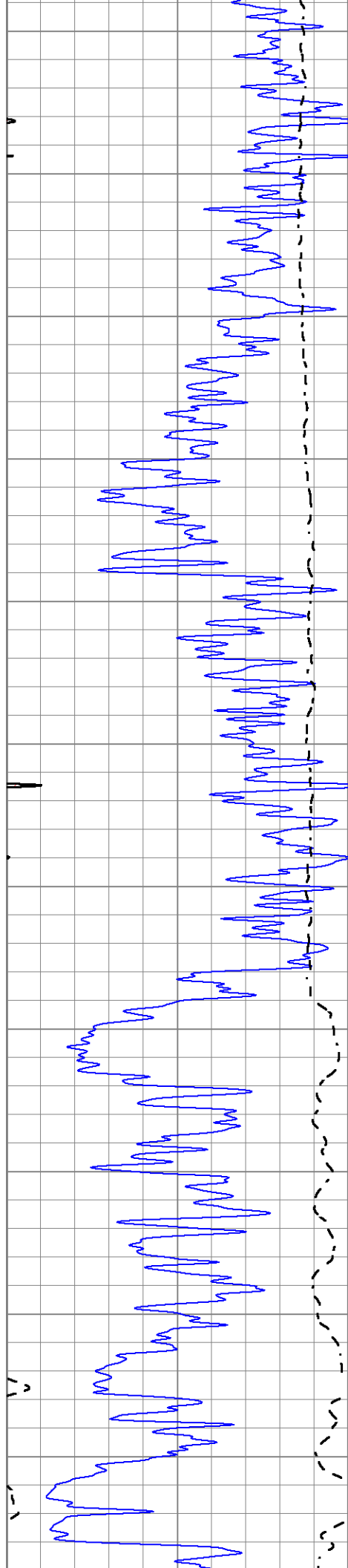


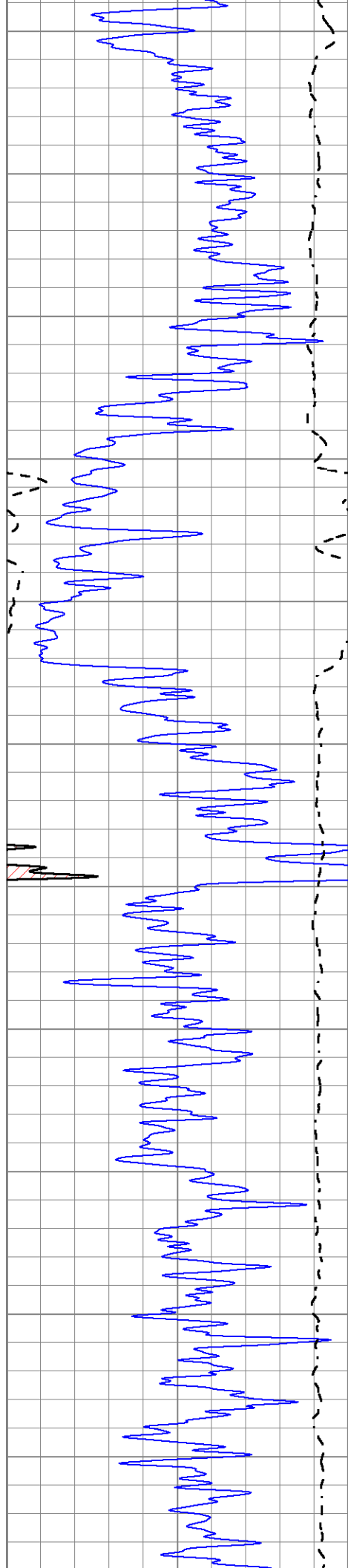
MAIN SECTION

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

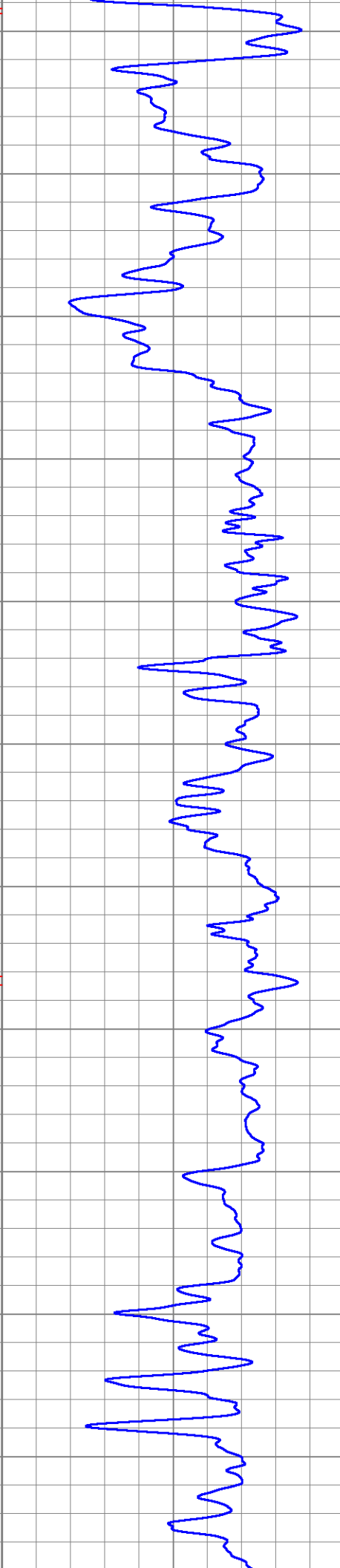
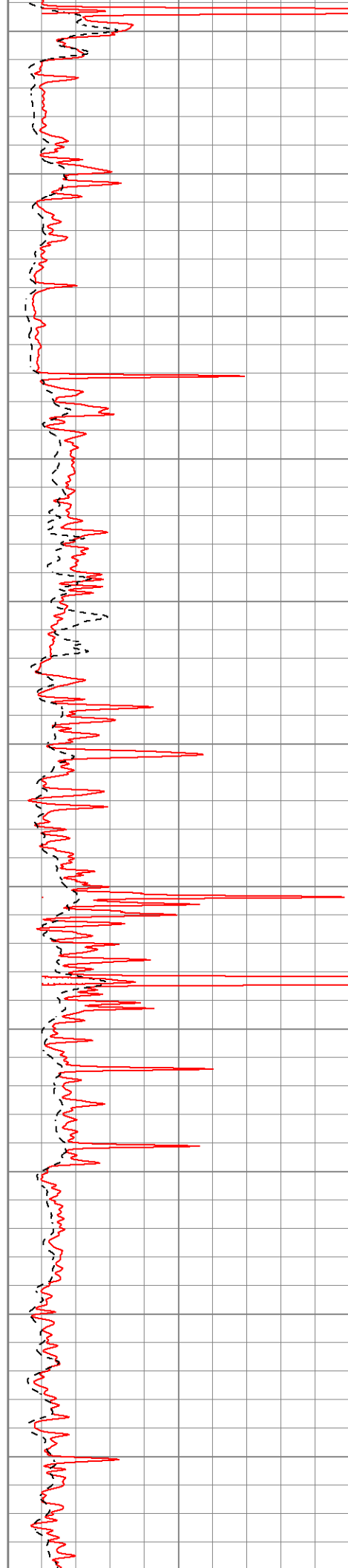


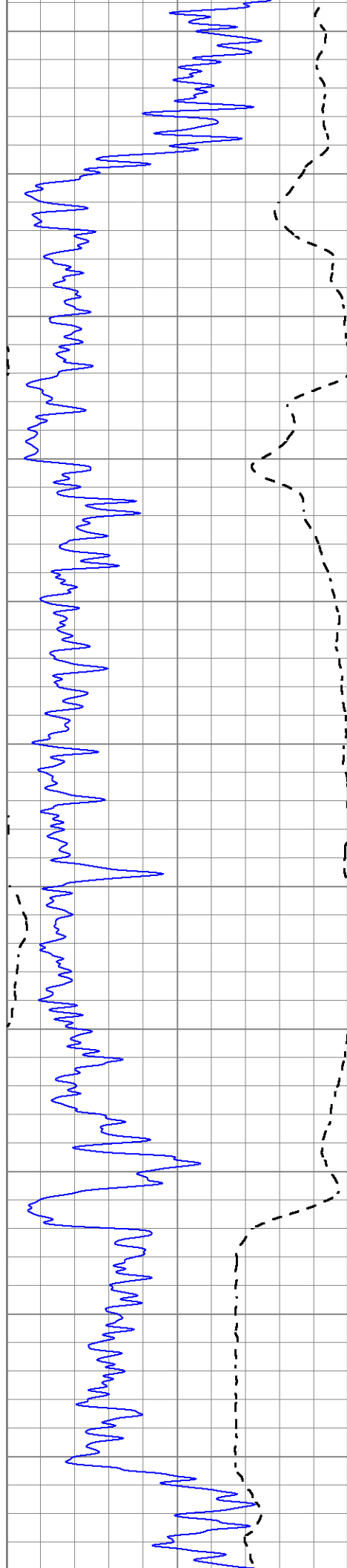






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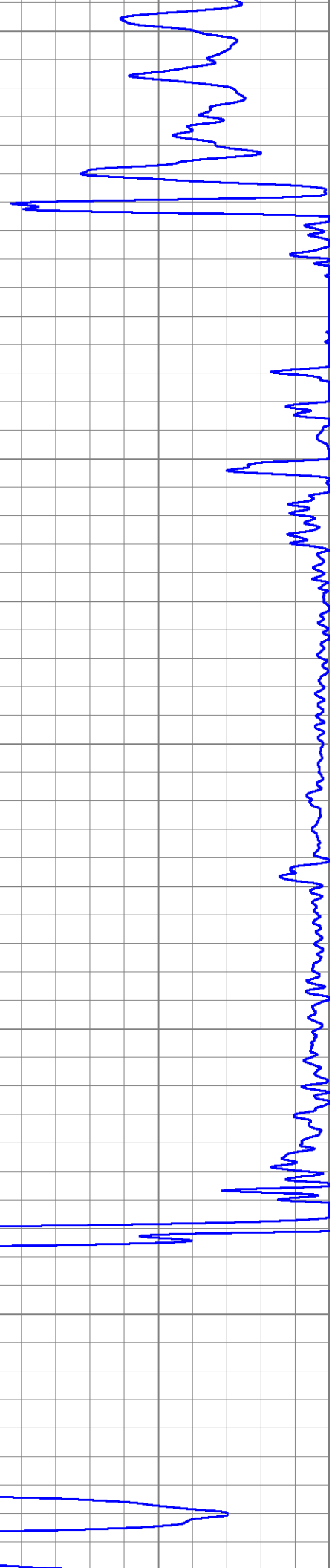
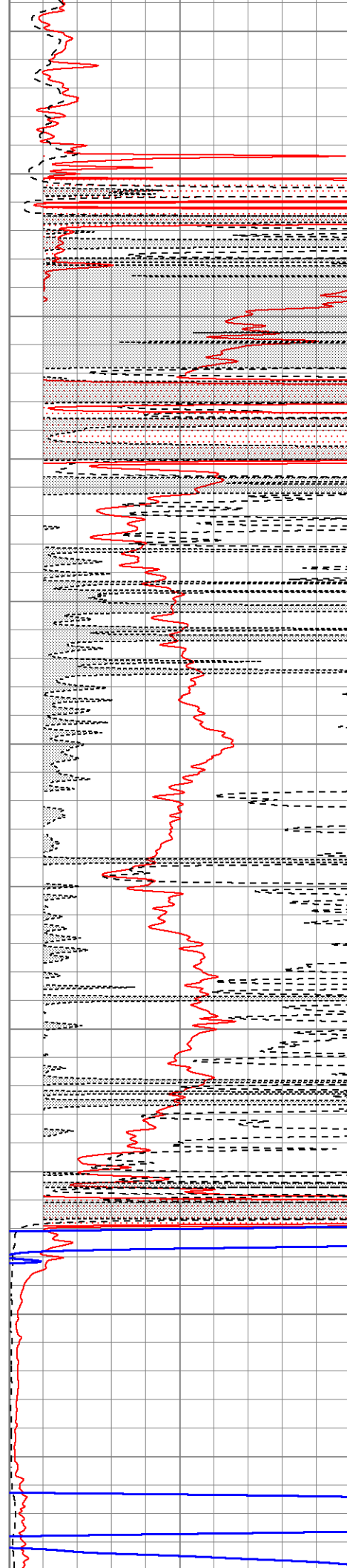
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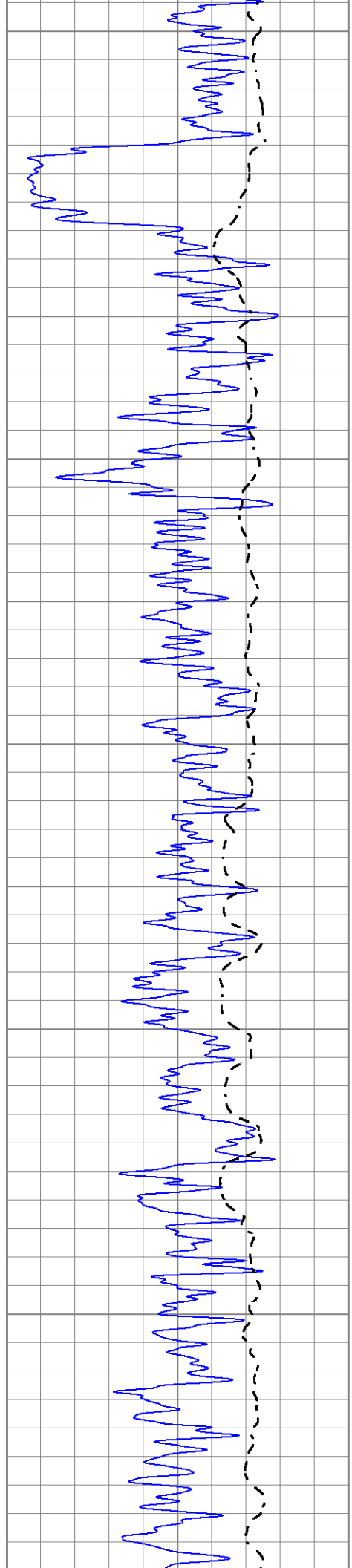
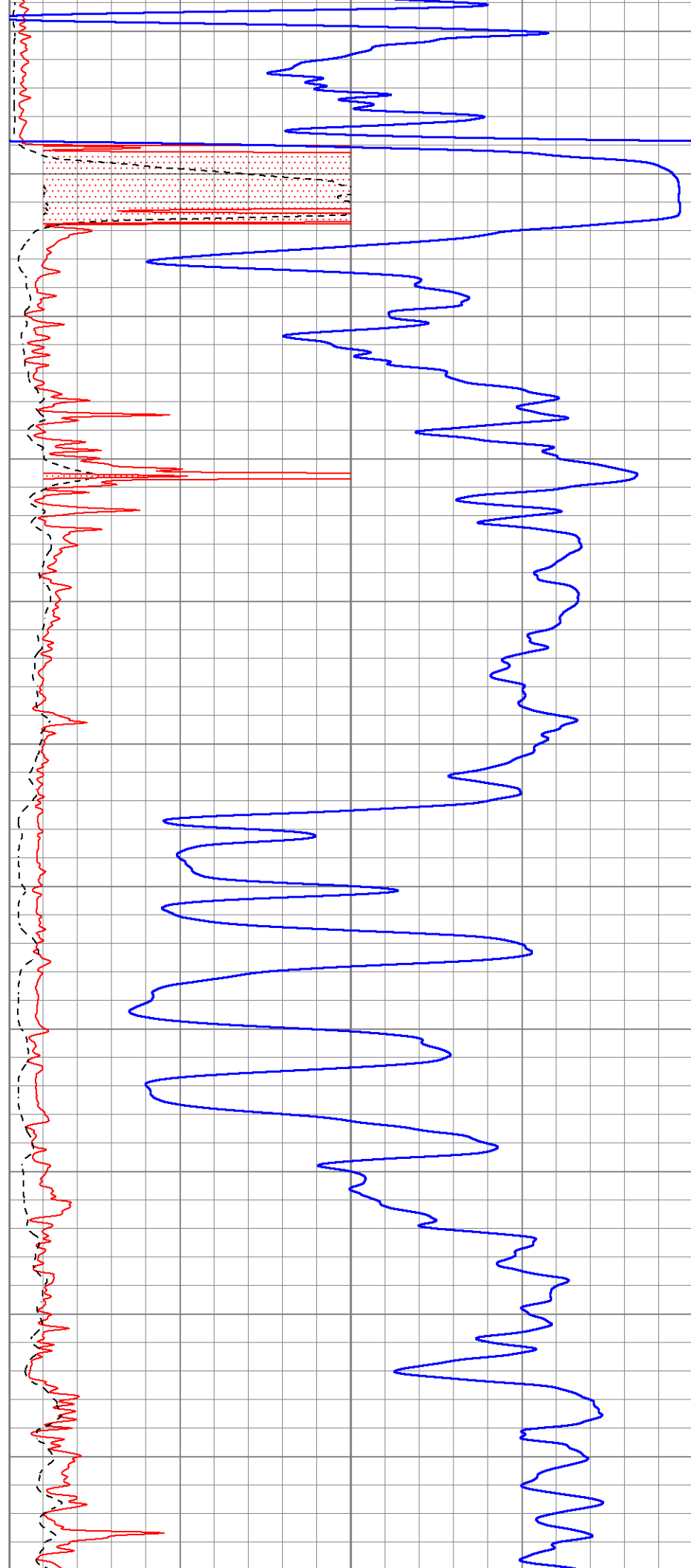
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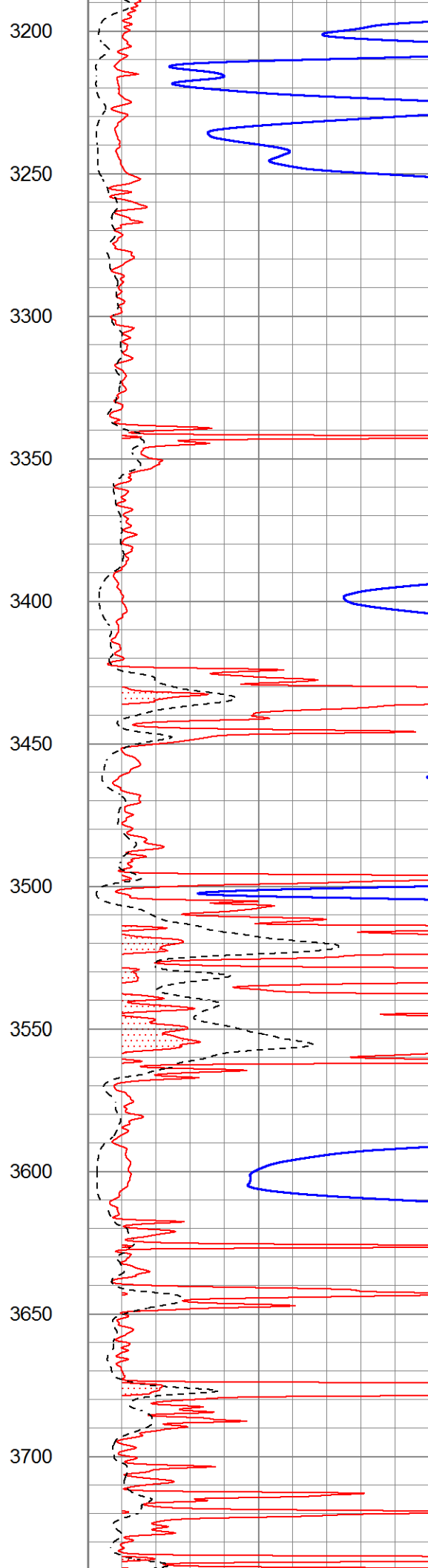
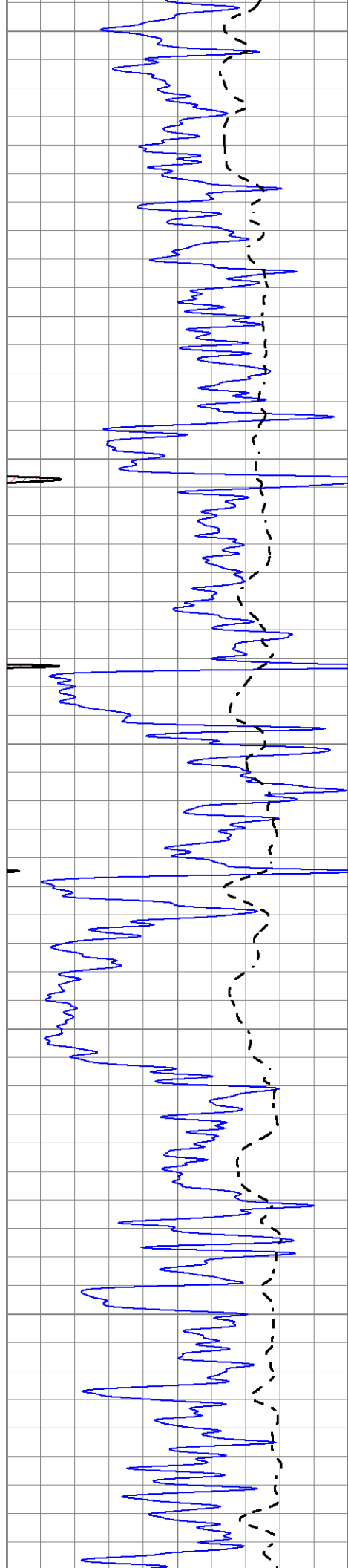
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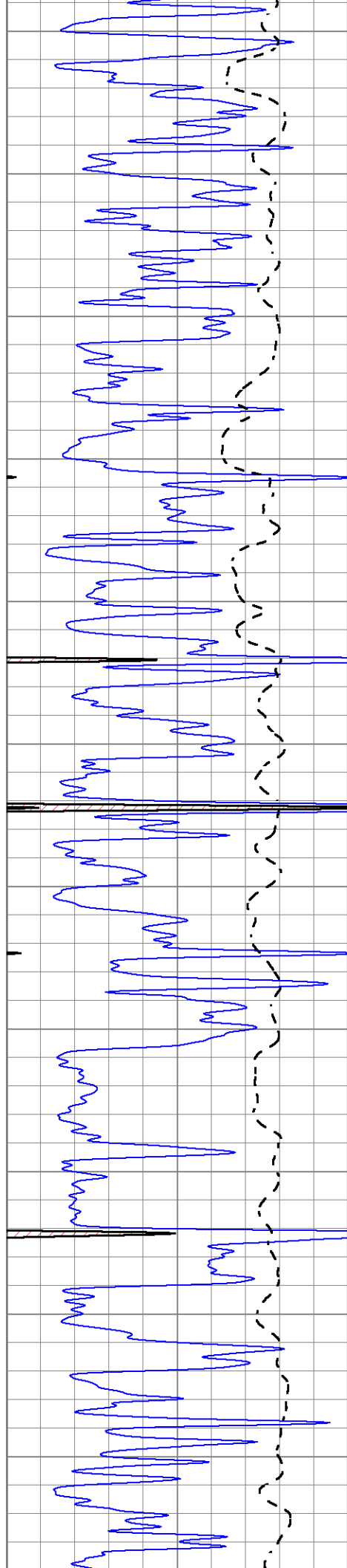
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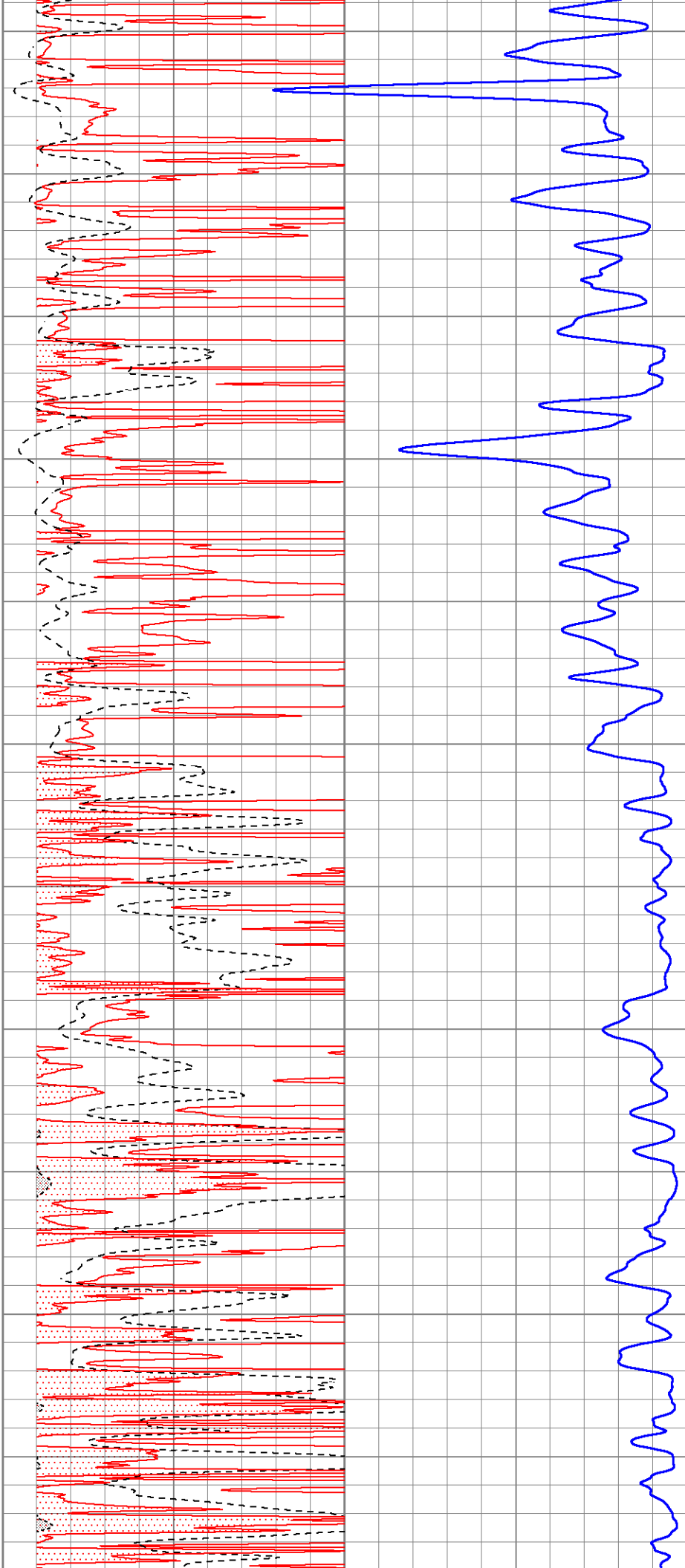
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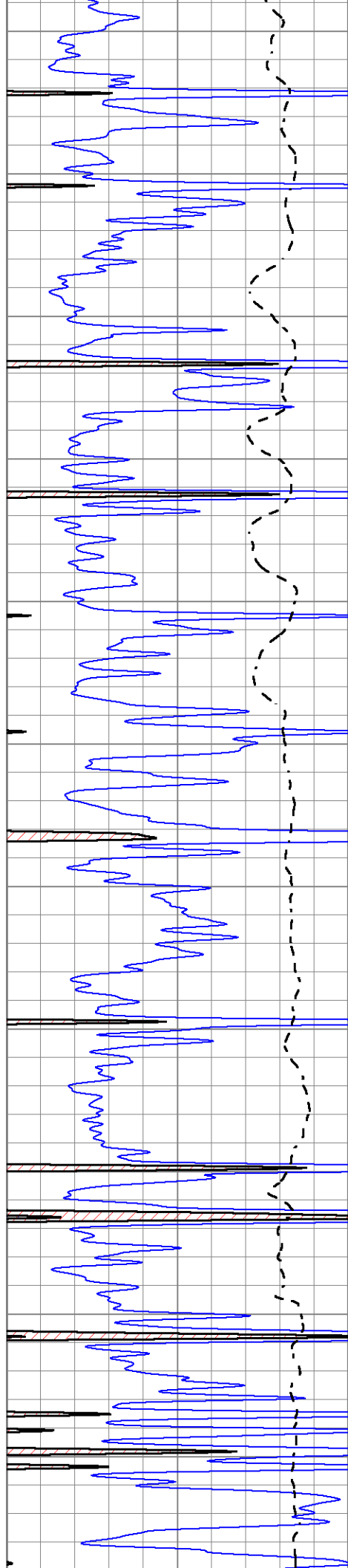
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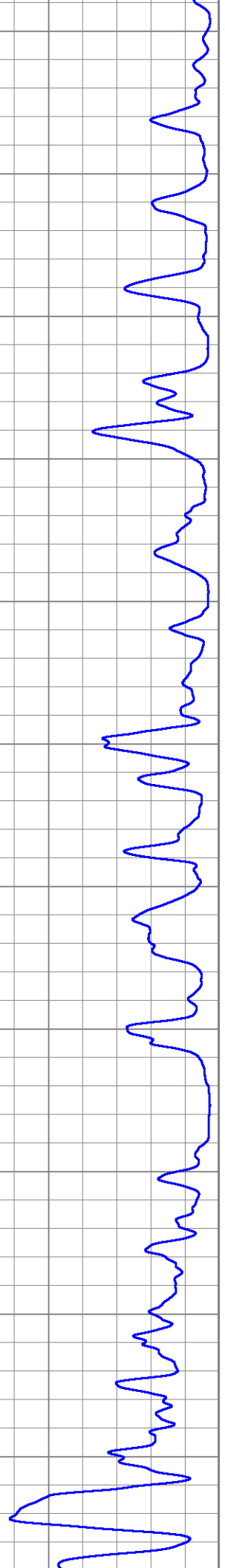
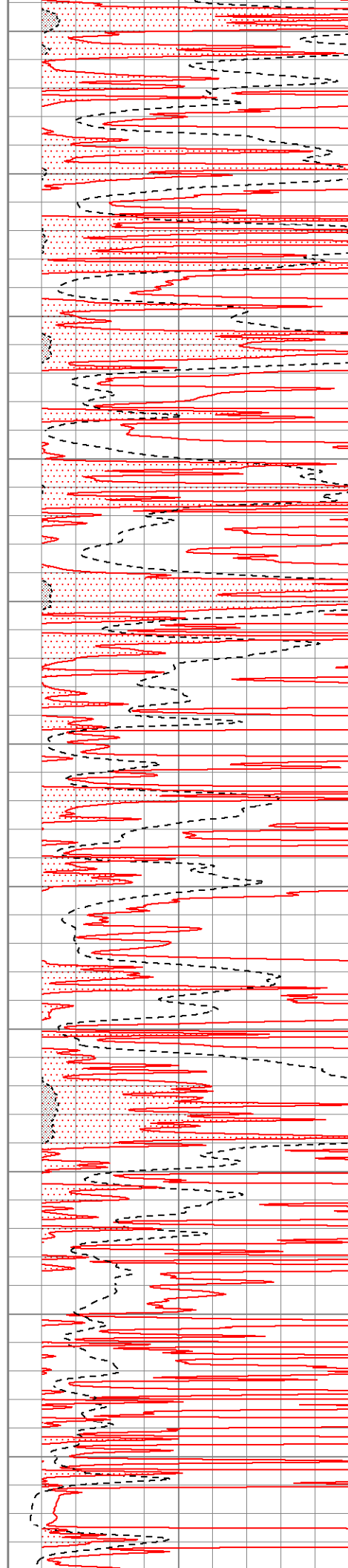
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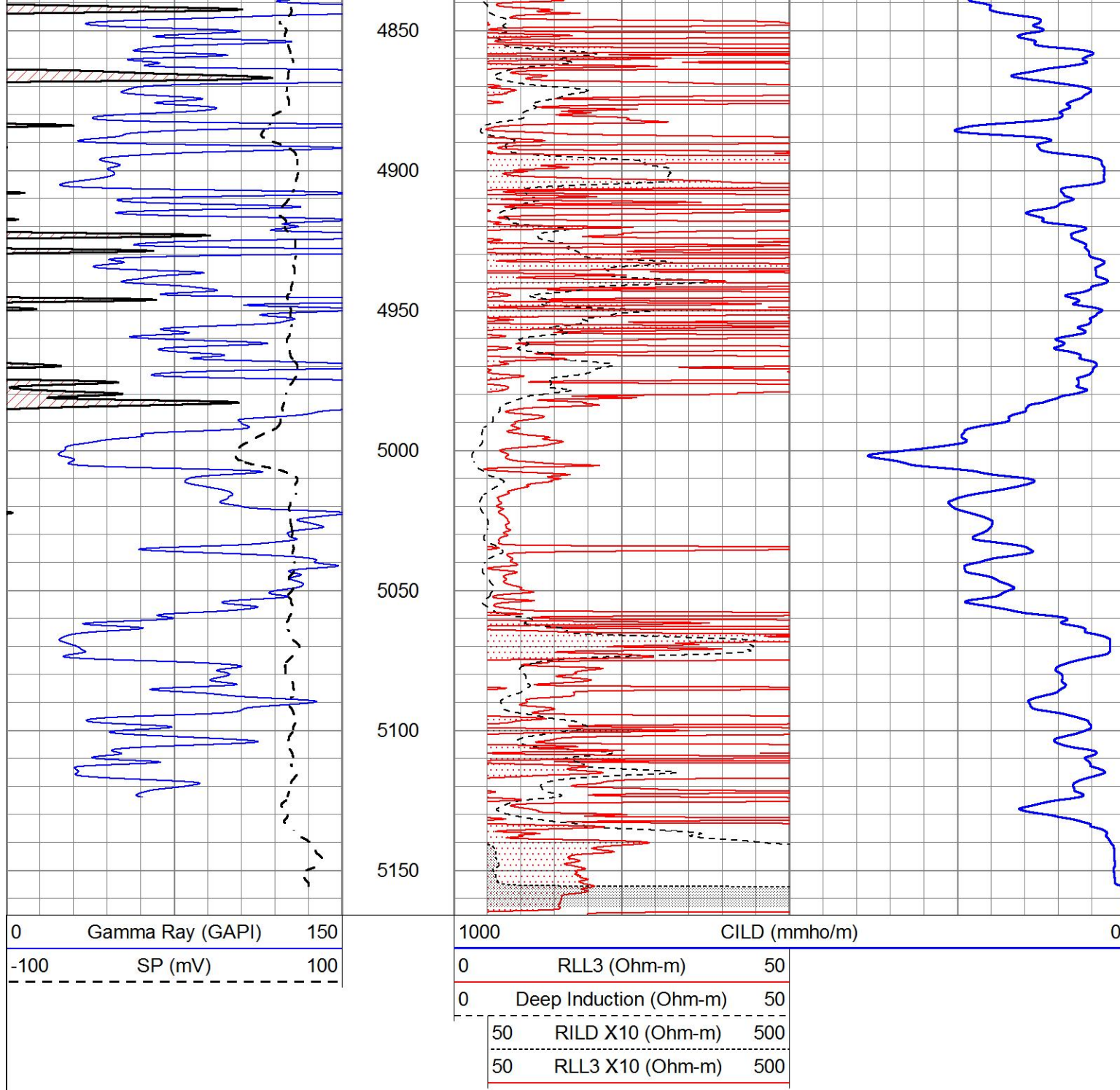
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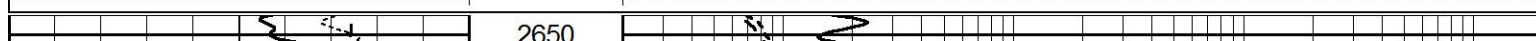


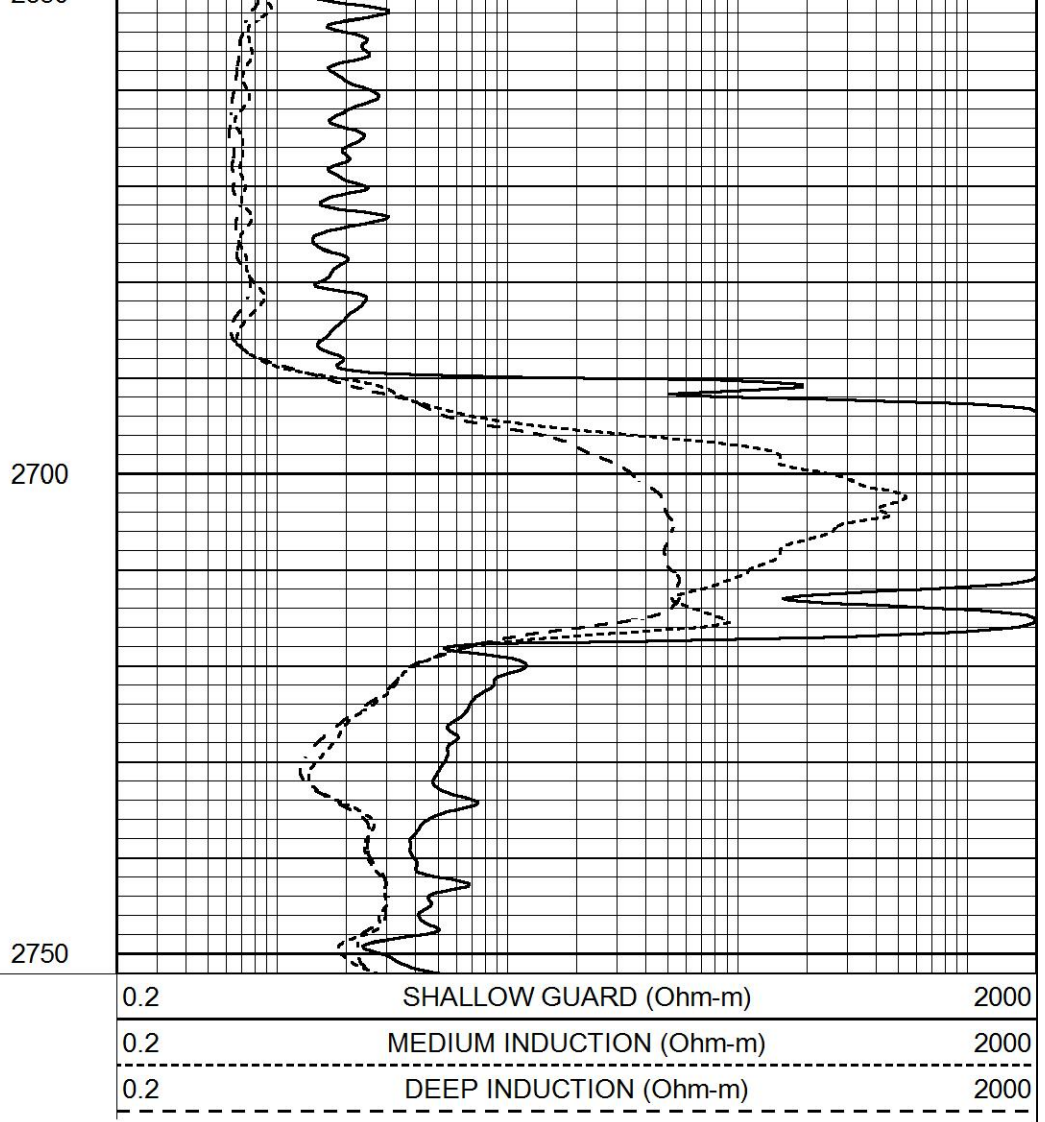
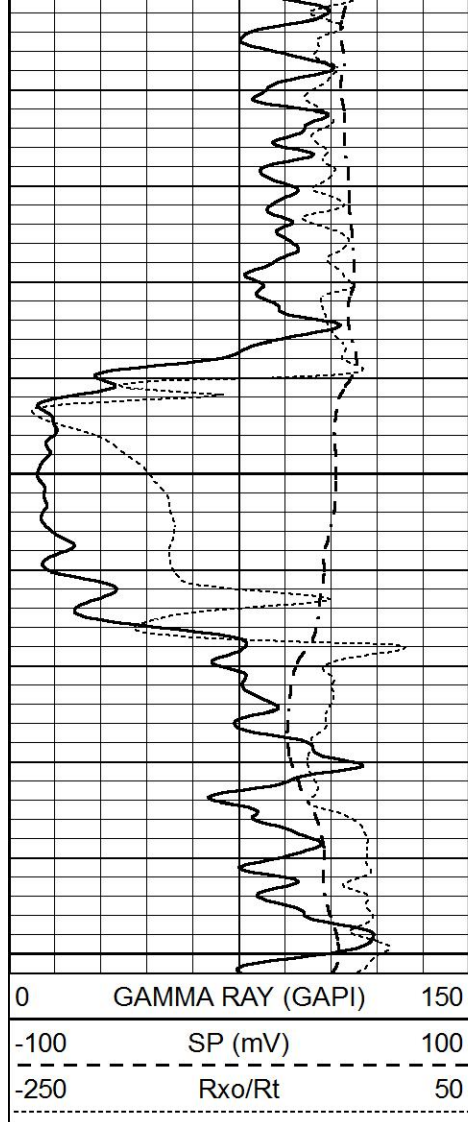


ANHYDRITE

Database File 5631pe.db
 Dataset Pathname pass3.2
 Presentation Format _dil
 Dataset Creation Wed Jul 14 10:09:17 2021
 Charted by Depth in Feet scaled 1:240

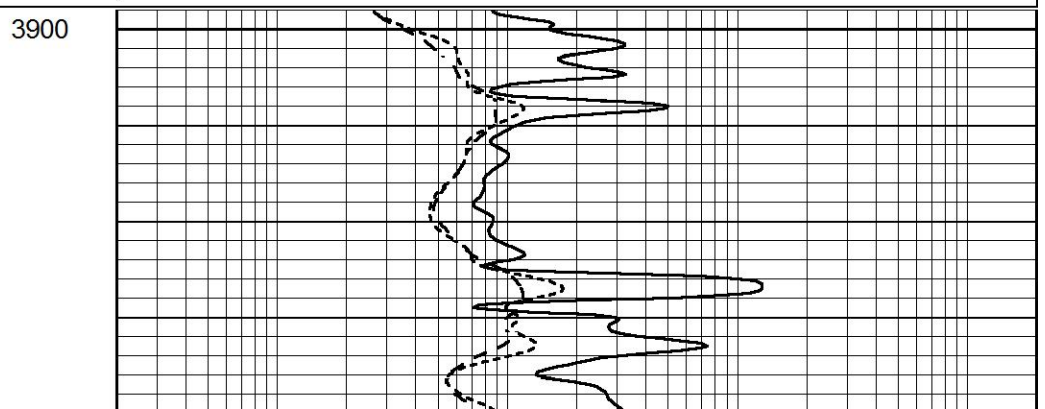
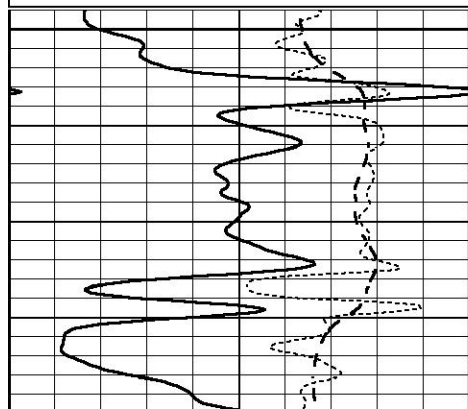
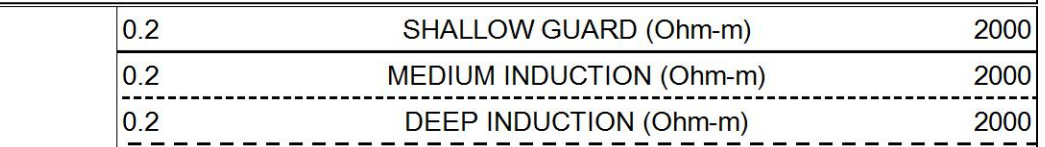
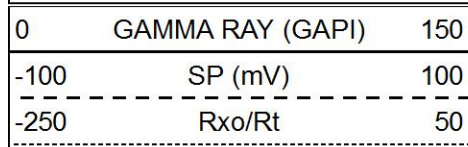
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-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

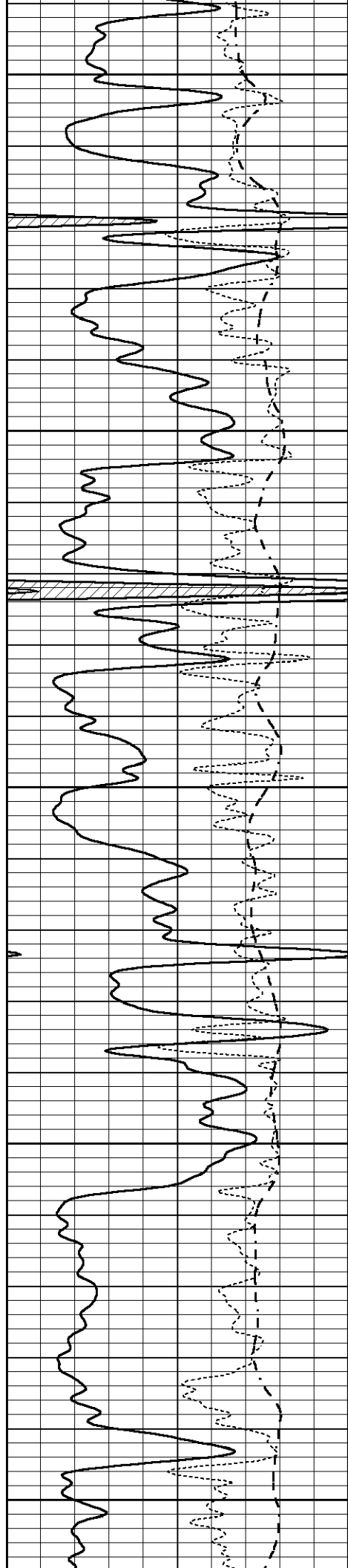




MAIN SECTION

Database File 5631pe.db
 Dataset Pathname pass3.1
 Presentation Format _dil
 Dataset Creation Wed Jul 14 09:57:21 2021
 Charted by Depth in Feet scaled 1:240





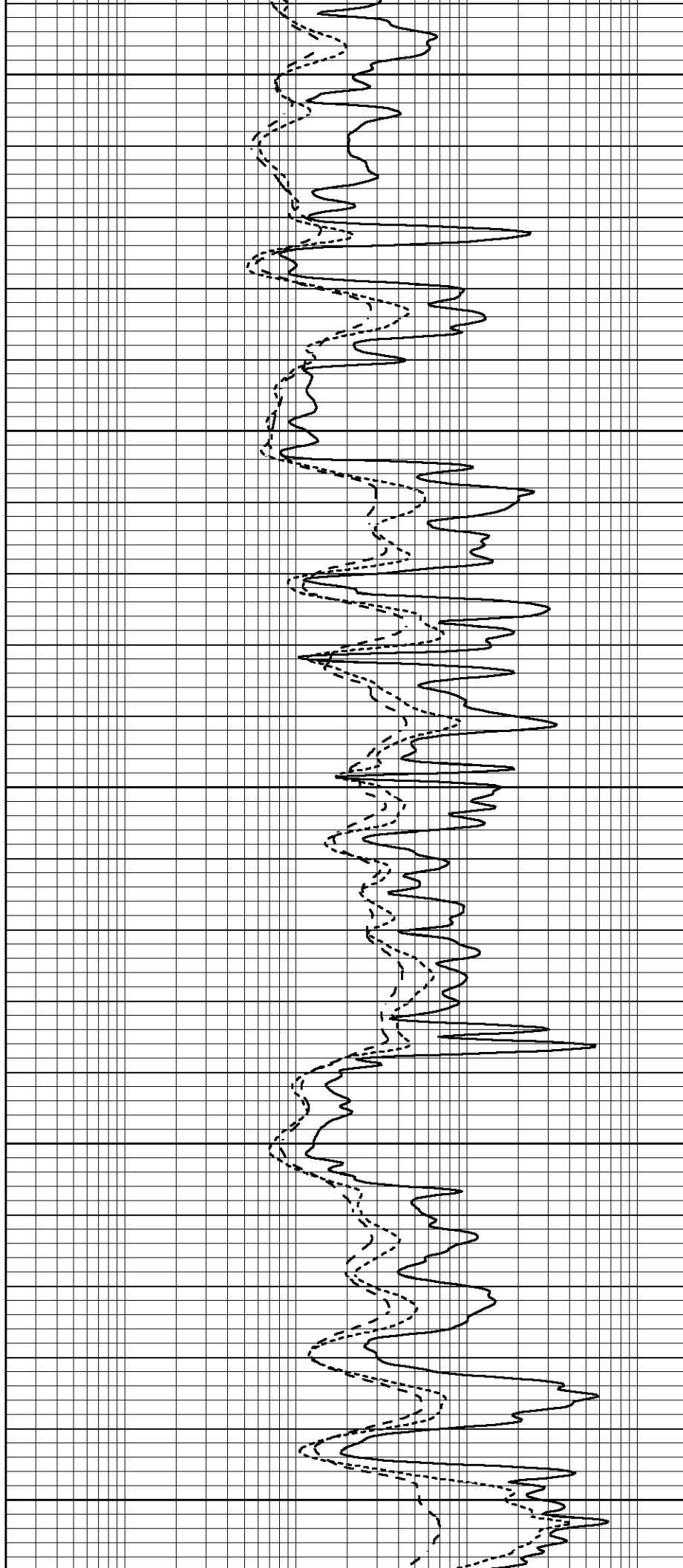
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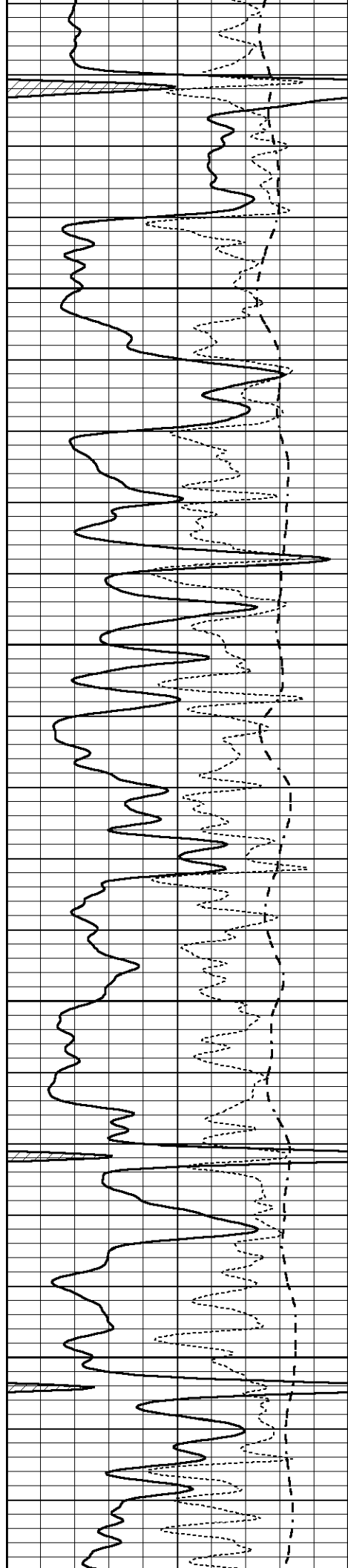
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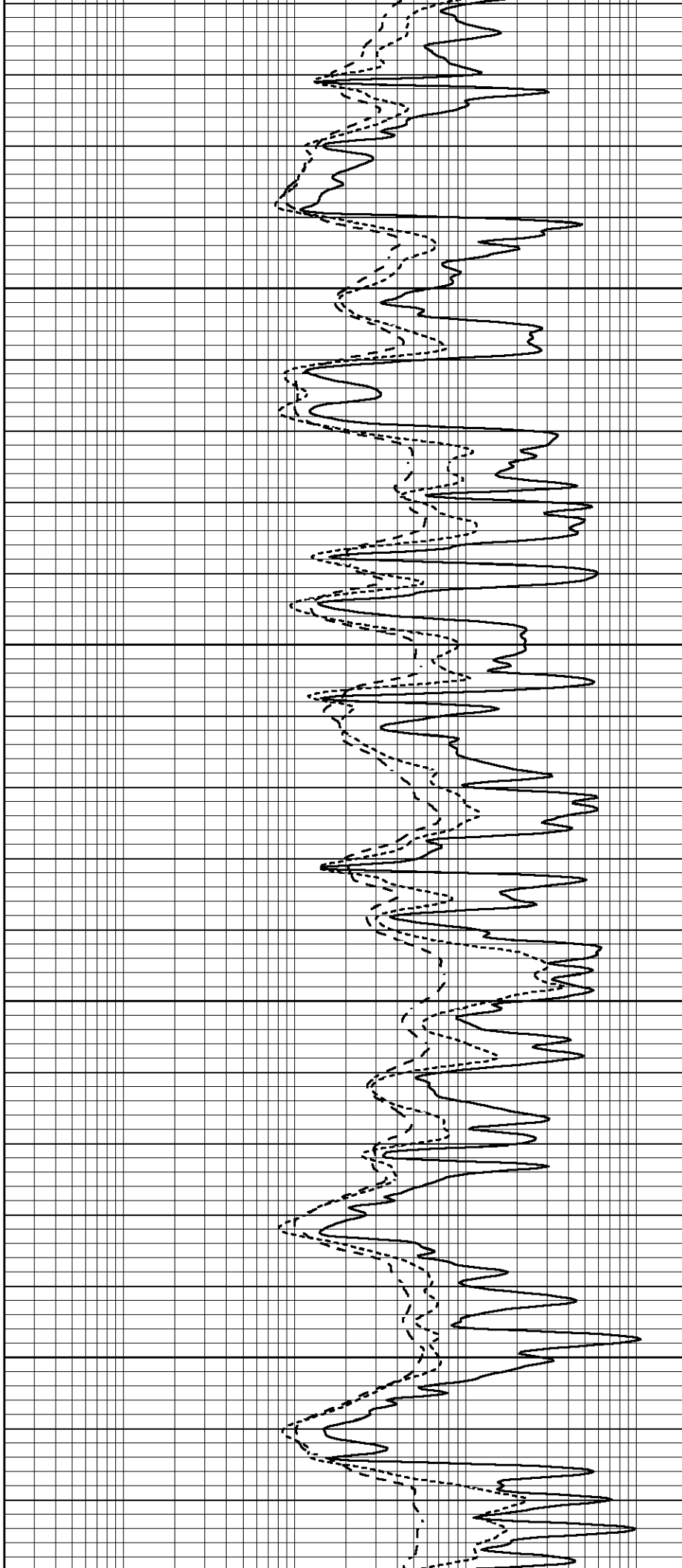


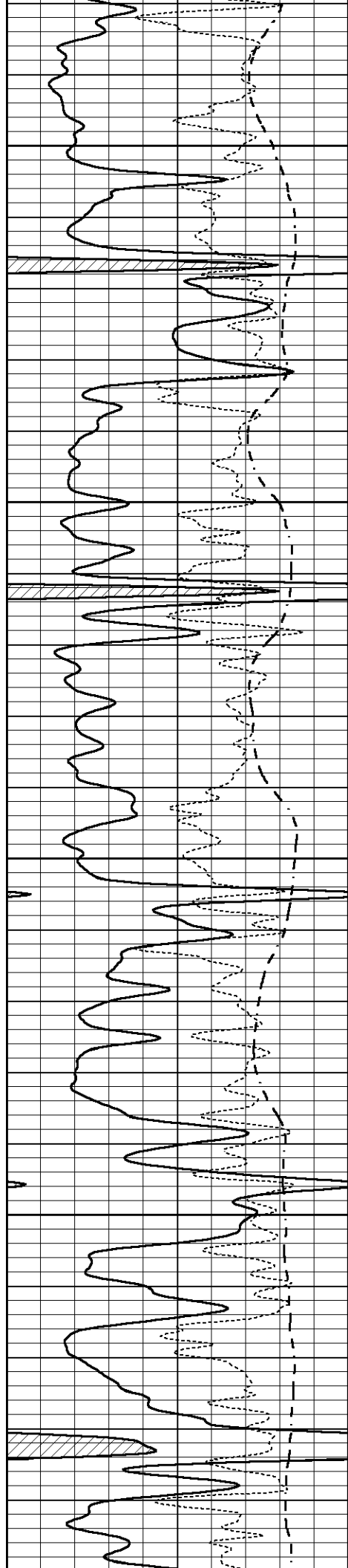
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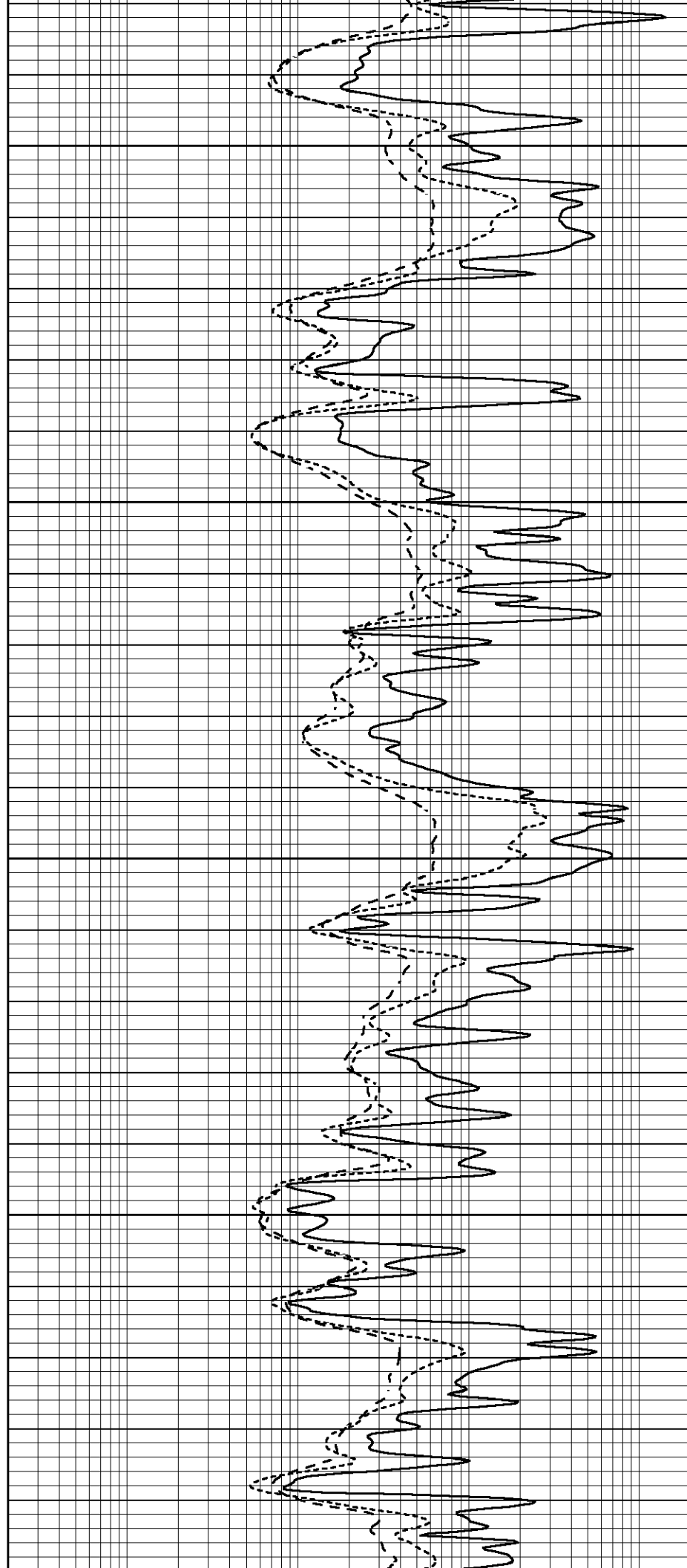
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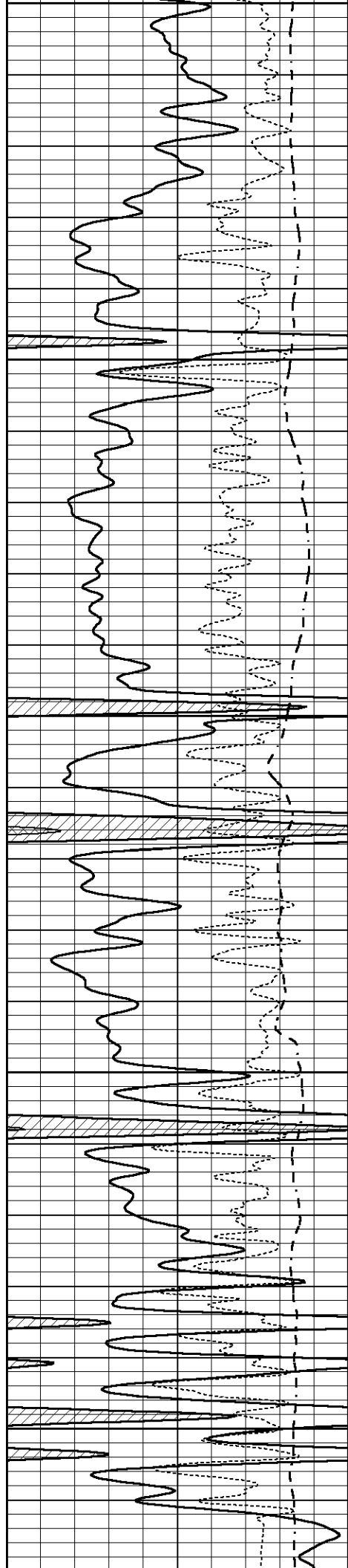
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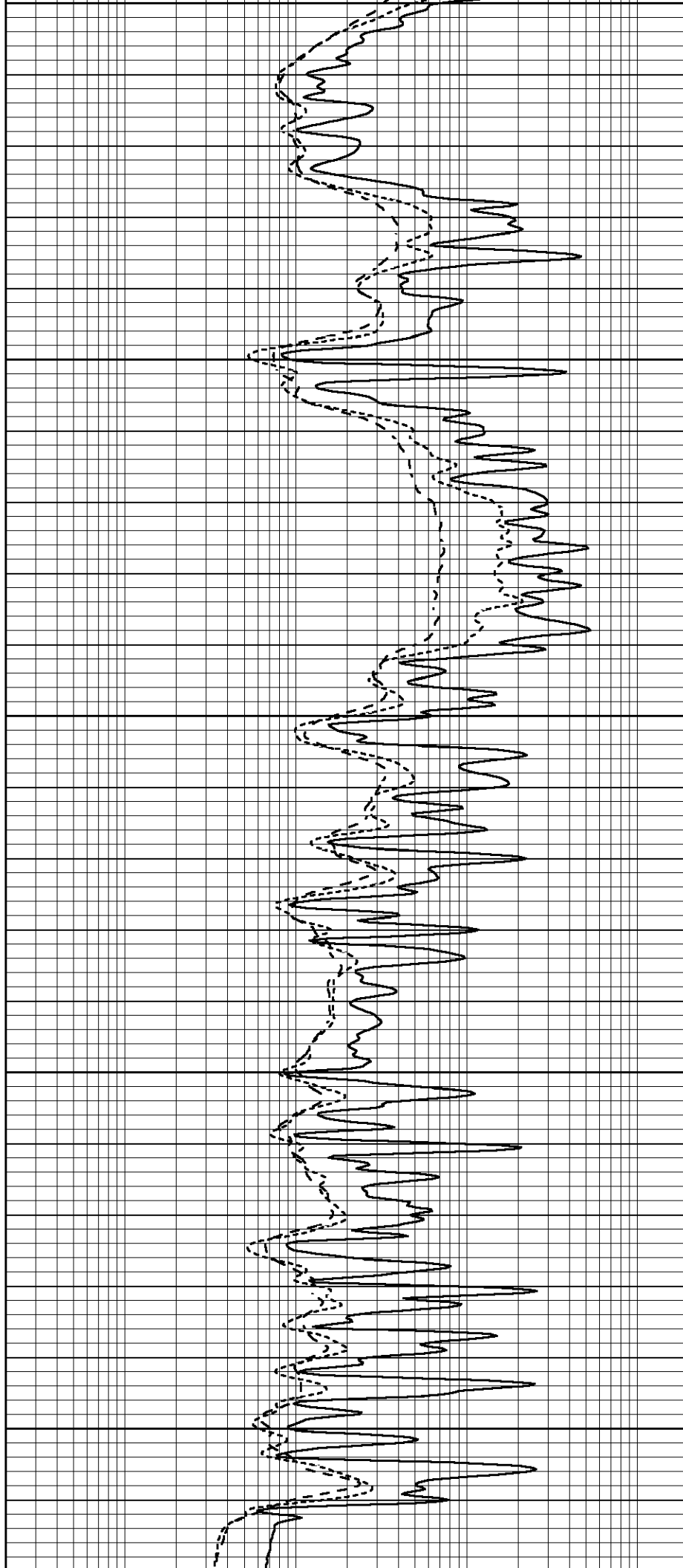
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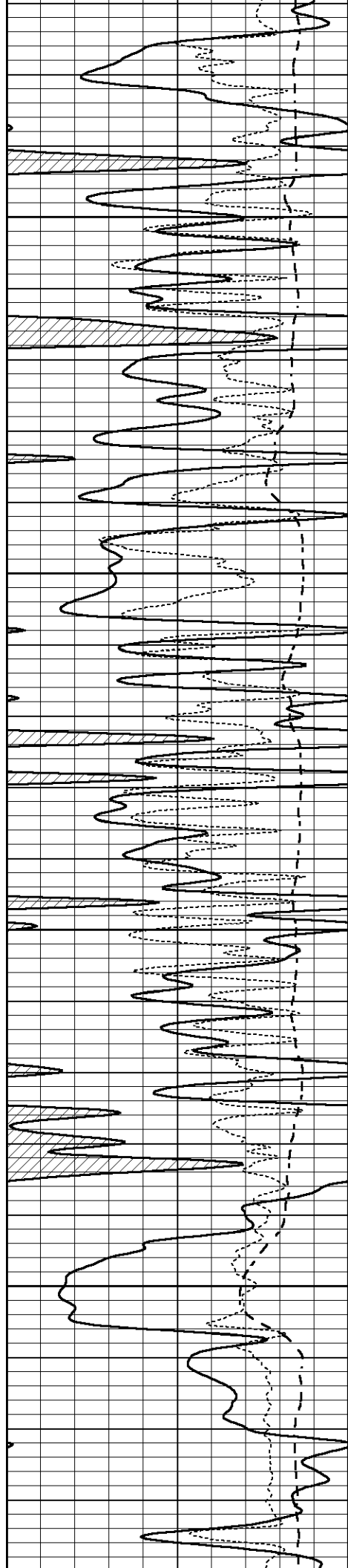
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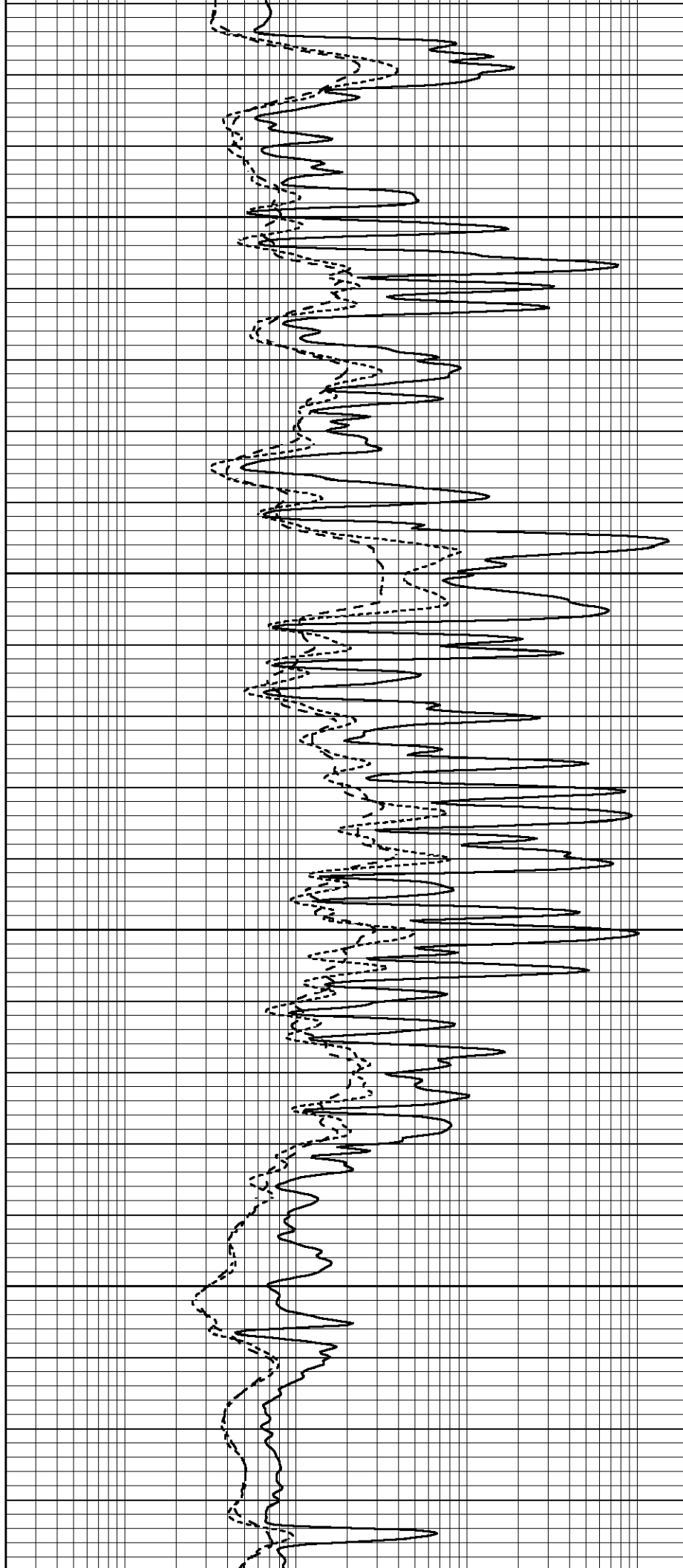


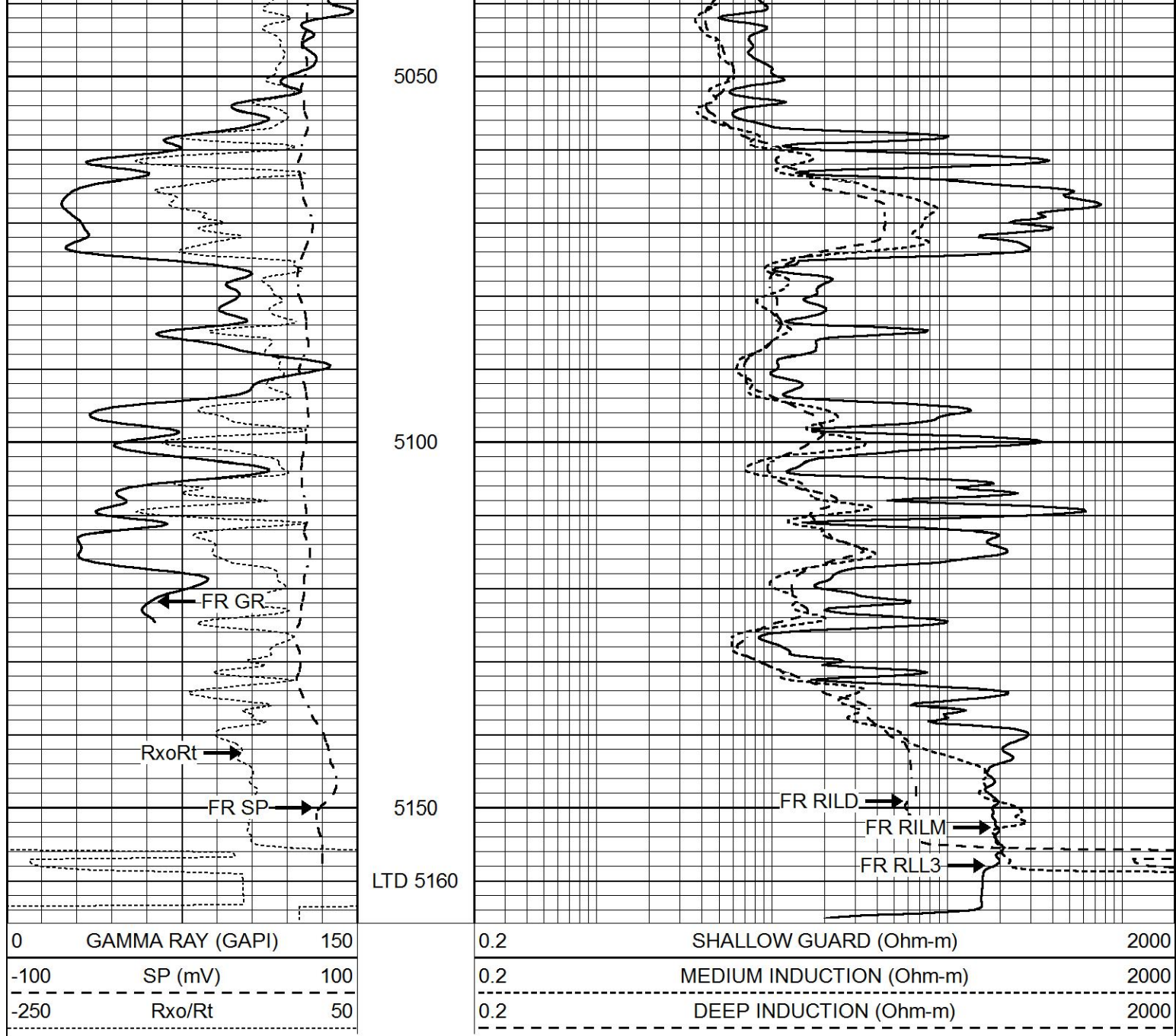
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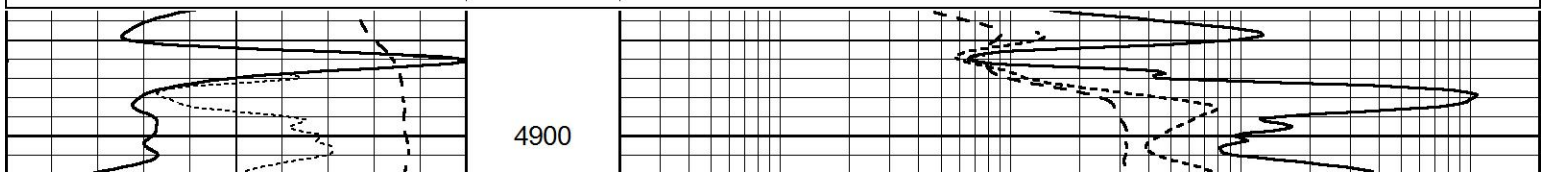


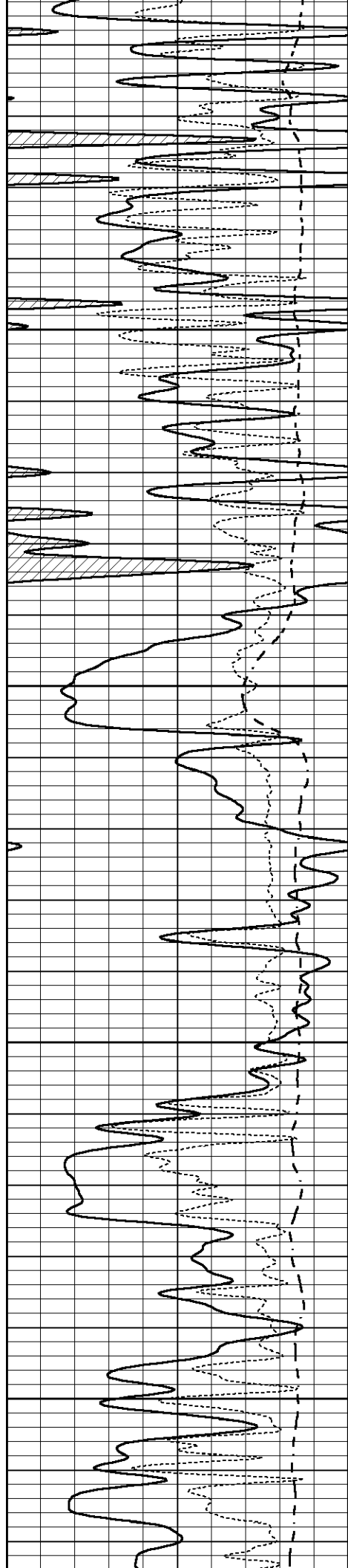


REPEAT SECTION

Database File 5631pe.db
 Dataset Pathname pass2.1
 Presentation Format _dil
 Dataset Creation Wed Jul 14 10:22:15 2021
 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	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000



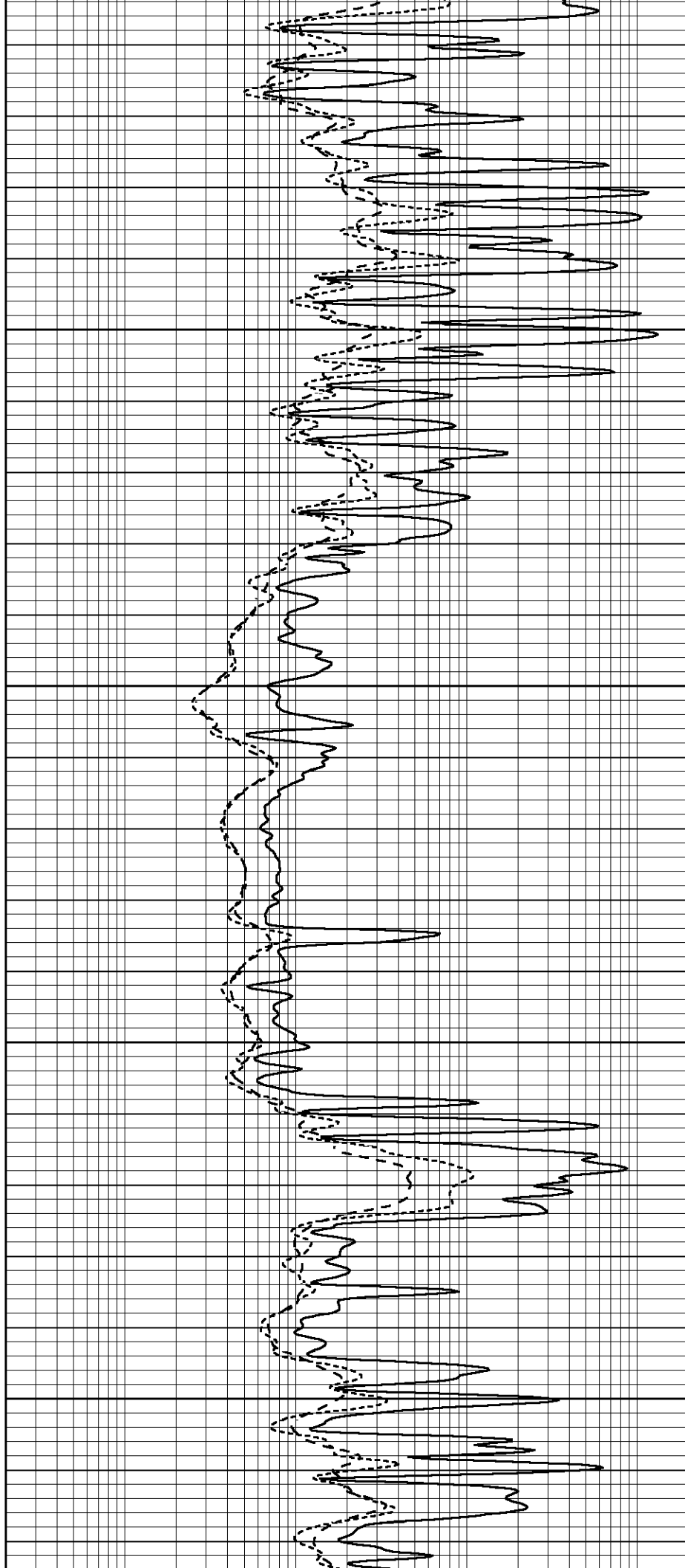


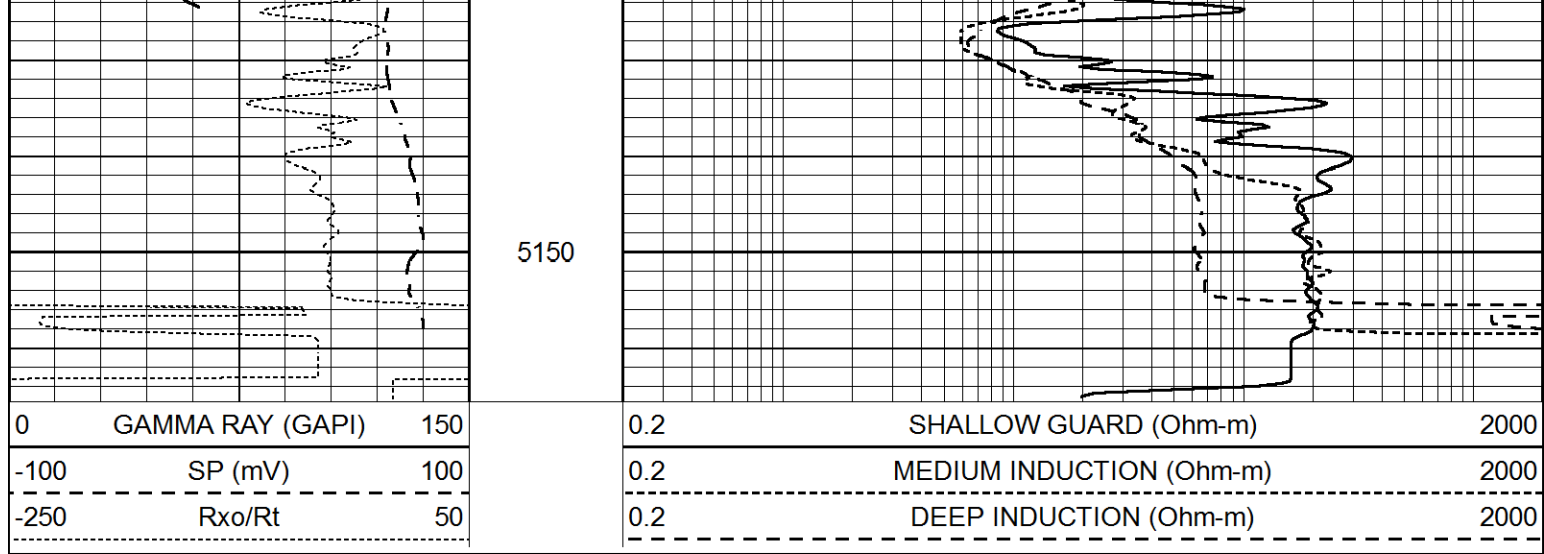
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5050

5100





Calibration Report									
Database File	5631pe.db								
Dataset Pathname	pass2.1								
Dataset Creation	Wed Jul 14 10:22:15 2021								
Dual Induction Calibration Report									
Serial-Model:					FW1410-55-Probe				
Surface Cal Performed:					Tue Feb 19 11:44:18 2019				
Downhole Cal Performed:					Tue Feb 19 11:44:24 2019				
After Survey Verification Performed:					Tue Feb 19 11:44:27 2019				
Surface Calibration									
		Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524	
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595	
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251	
Downhole Calibration									
		Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'	
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149	
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099	
LL3		7.503	V		1500.000	Ohm-m			
		0.001	V		20.000	Ohm-m			
		-7.481	V		3745.000	mmho-m			
After Survey Verification									
		Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'	
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000	
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000	
LL3		0.000	Ohm-m		1500.000	Ohm-m			
		0.000	Ohm-m		20.000	Ohm-m			
		0.000	mmho-m		3745.000	mmho-m			

Master Calibration

Performed: Mon Dec 07 12:12:14 2020

	Background	Aluminum	Magnesium		
Window 1	557.73	5525.14	24361.20	cps	
Window 2	47.08	1245.09	5901.17	cps	
Window 4	239.06	1250.70	5456.76	cps	
Window 5	564.08	8300.56	16134.07	cps	
Window 6	44.21	1356.78	2705.40	cps	
Window 8	267.87	2686.97	5150.30	cps	
Bulk Density	-	2.6020	1.6830	g/cc	
Pe	-	3.0000	2.5070	b/e	
LS Alpha:	: -1.8719	SS Alpha:	: -0.8000	LS CPE:	: 1.1424
LS Beta:	: 135562.6841	SS Beta:	: 20128.7209	SS CPE:	: 1.5489

Before Survey Background Counts Verification

Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

After Survey Background Counts Verification

Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

Lithodensity Caliper Calibration

Performed: Mon Dec 07 12:12:14 2020

Results		References (in)		Gain	Offset
Low	High	Low	High		
664.3	1102.8	8.0	14.0	0.0	-1.1

Before Survey Caliper Verification

Performed:

Reference	Reading
_____	_____
Caliper (in)	

After Survey Caliper Verification

Performed:

Reference	Reading
_____	_____
Caliper (in)	

		Serial Number: Tool Model:	080621PMC NABORS
PRE-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu
POST-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu
Gamma Ray Calibration Report			
Serial Number:	7		
Tool Model:	Probe1		
Performed:	Tue Jan 19 17:50:08 2021		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.5300	GAPI/cps	