

DUAL INDUCTION LOG

Company SHAKESPEARE OIL COMPANY INC.
Well YORK #3-2
Field TRI - COUNTY
County SCOTT State KANSAS

Location: API #: 15-171-21305-0000
702' FSL & 624' FEL
SW - NE - SE - SE
Permanent Datum GROUND LEVEL Elevation 2858
Log Measured From KELLY BUSHING 10' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services CDL/CNL/PE
MEL
Elevation
K.B. 2868
D.F. 2866
G.L. 2858

SEC 2 TWP 16S RGE 31W

Date	12/5/22		
Run Number	ONE		
Depth Driller	4610		
Depth Logger	4608		
Bottom Logged Interval	4606		
Top Log Interval	00		
Casing Driller	8 5/8" @ 226'		
Casing Logger	226		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES: 2,600 PPM	
Density / Viscosity	9.4/43		
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.60 @ 58F		
Rmf @ Meas. Temp	1.20 @ 58F		
Rmc @ Meas. Temp	1.92 @ 58F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.761 @ 122F		
Time Circulation Stopped	2.5 HOURS		
Time Logger on Bottom	5:30 P.M.		
Maximum Recorded Temperature	122F		
Equipment Number	8916		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	VERN SCHRAG		

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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

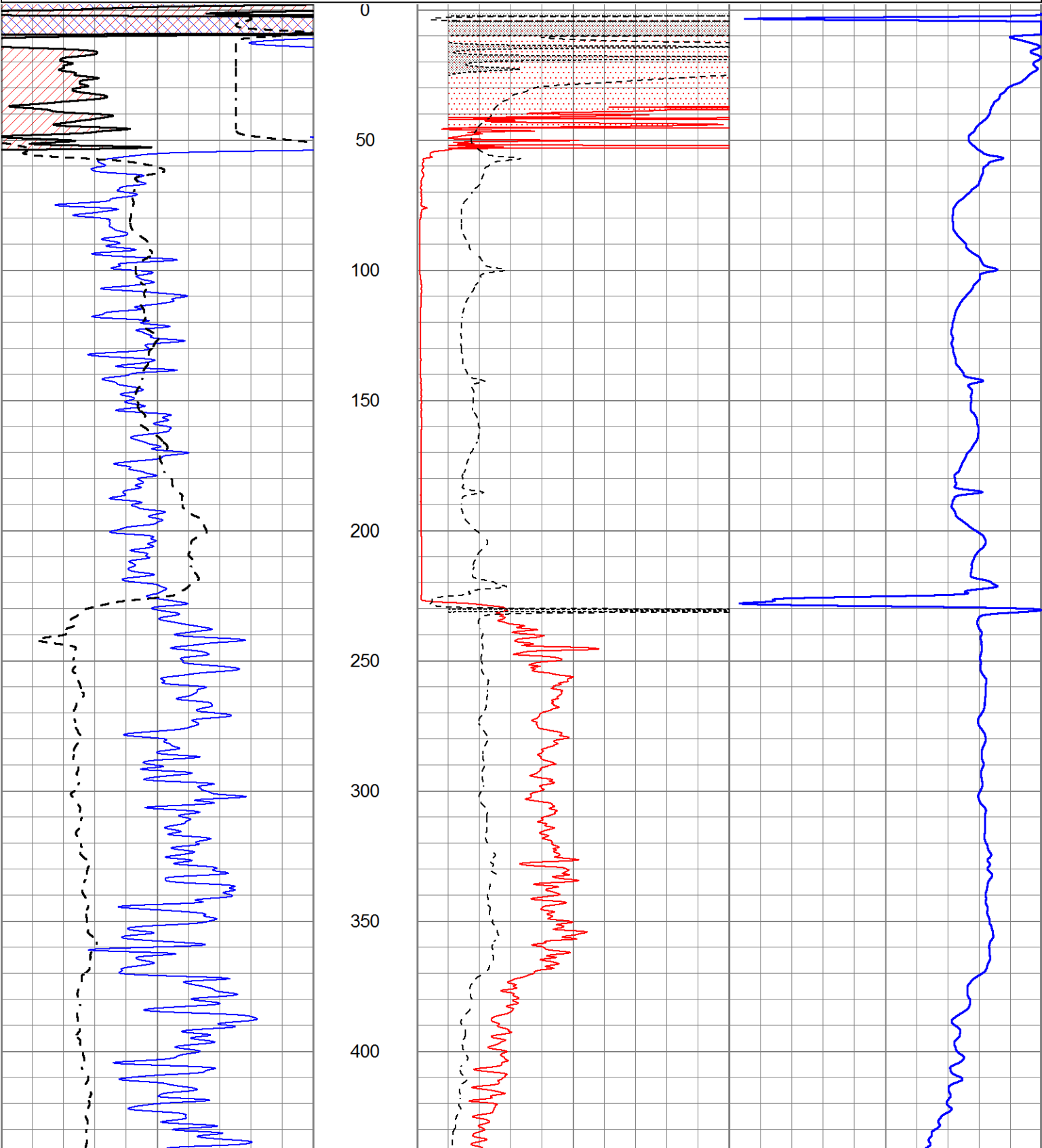
THANK YOU FOR USING ELI WIRELINE, HAYS, KS. (785) 628-6395
DIRECTIONS:
HEALY, KS., 2W. ON HWY 4 TO "BISON RD.", 3 1/2N. TO CURVE, 2 W. TO "BISON 2 RD.", N. TO "RD. 280", W. TO FARM, N. TO "RD. 290", 1 1/2 W. PAST TANK BATTERY, N. INTO



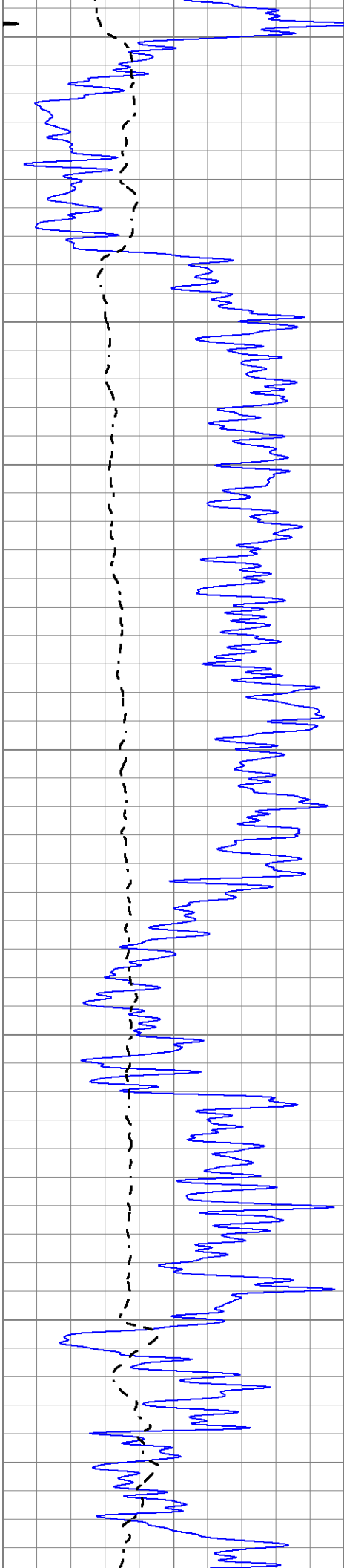
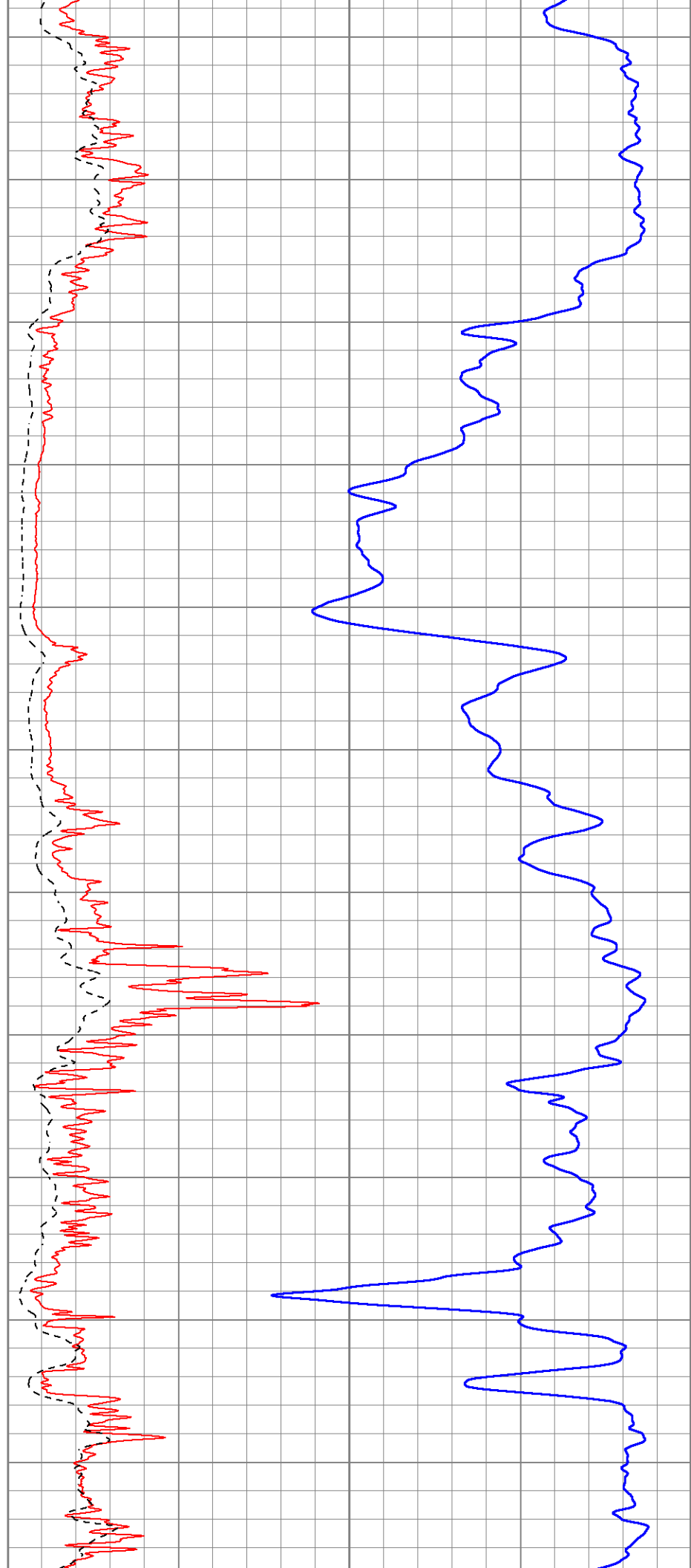
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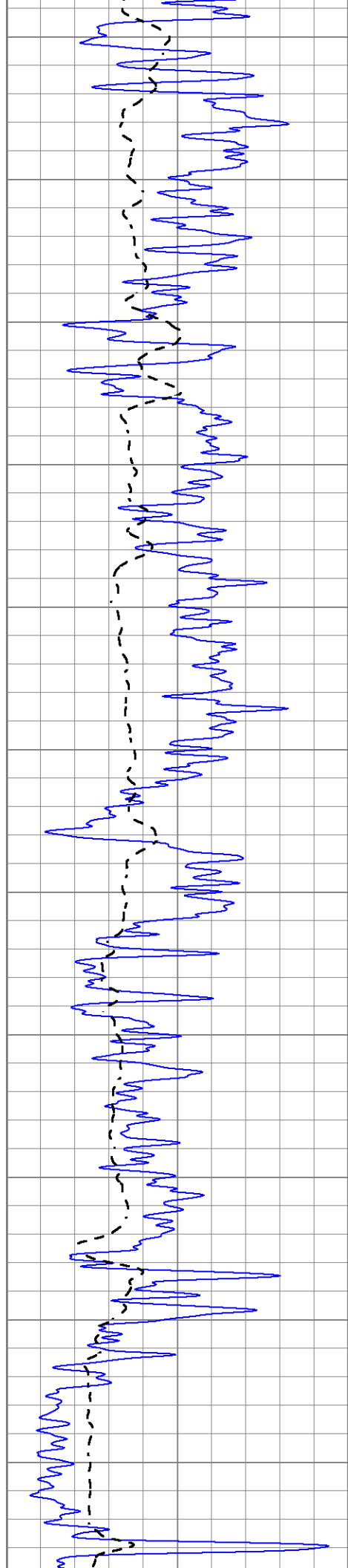
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Dataset Pathname	pass3.1M
Presentation Format	_dil2
Dataset Creation	Mon Dec 05 19:40:49 2022
Charted by	Depth in Feet scaled 1:600

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



450
500
550
600
650
700
750
800
850
900
950





1000

1050

1100

1150

1200

1250

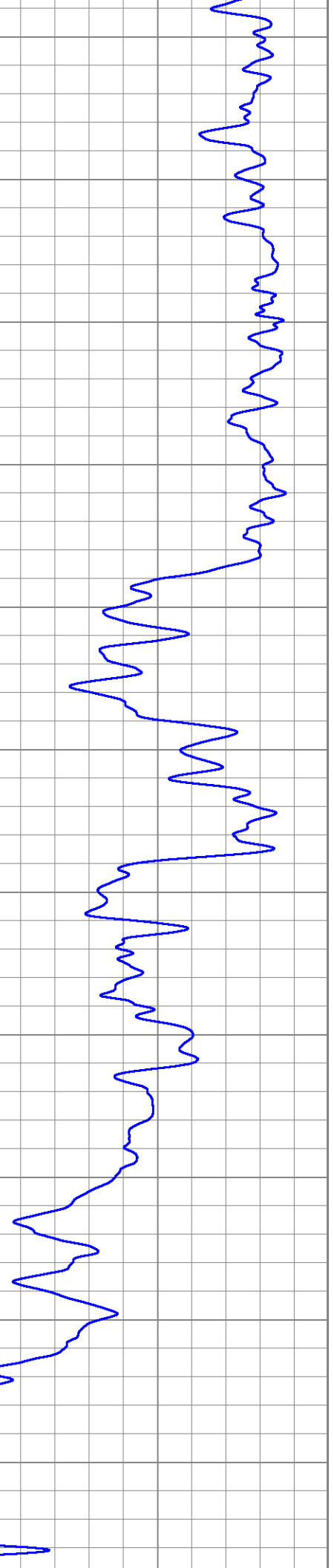
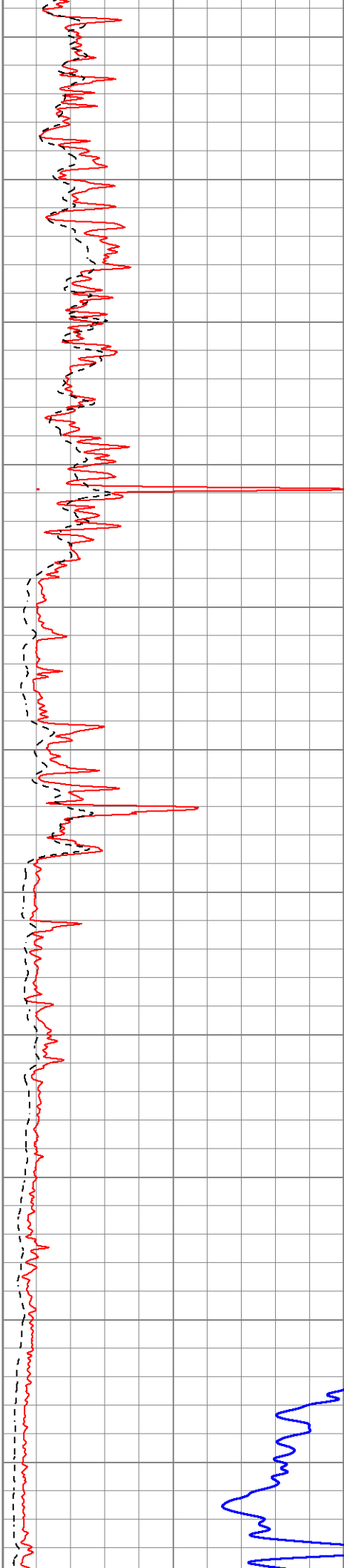
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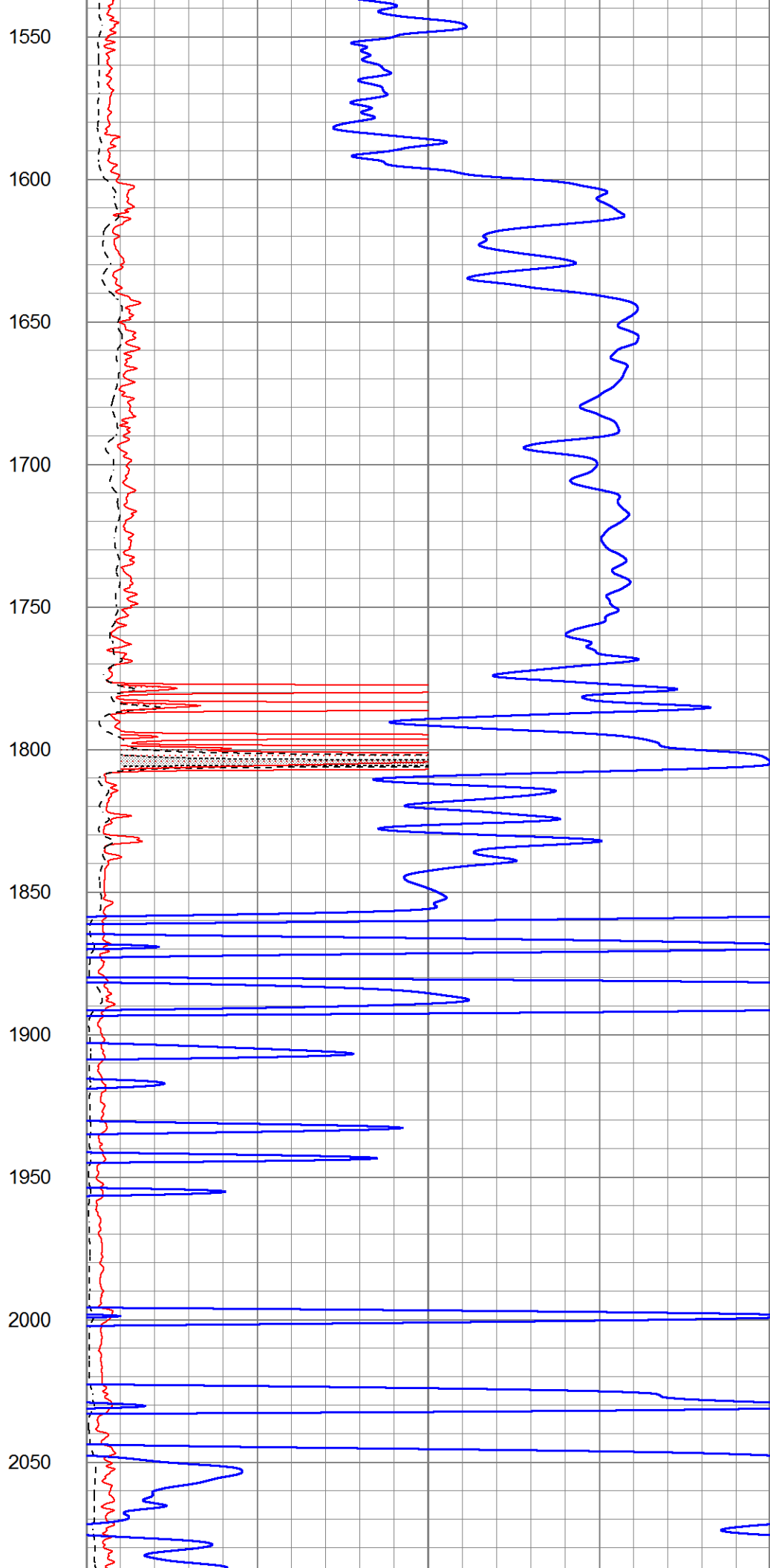
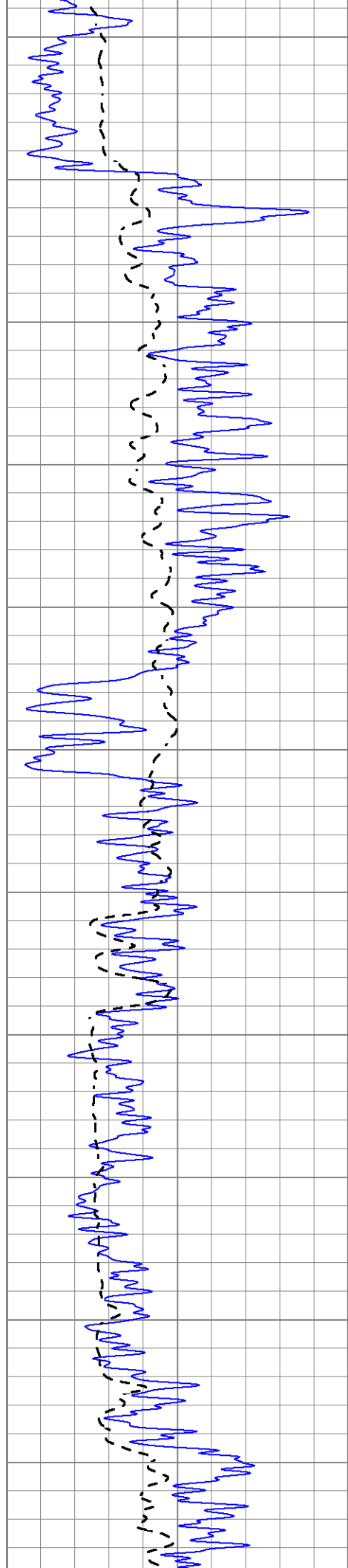
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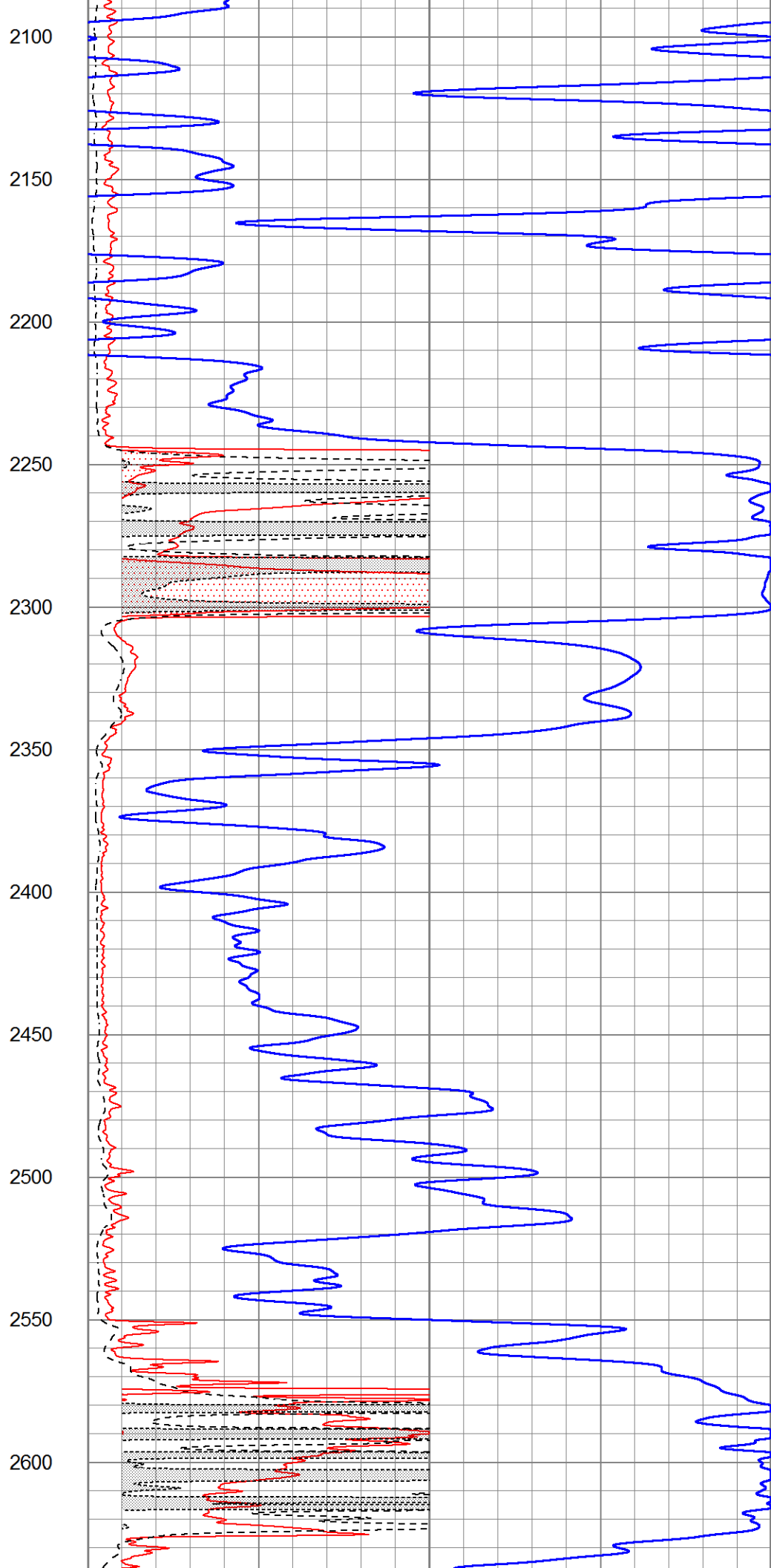
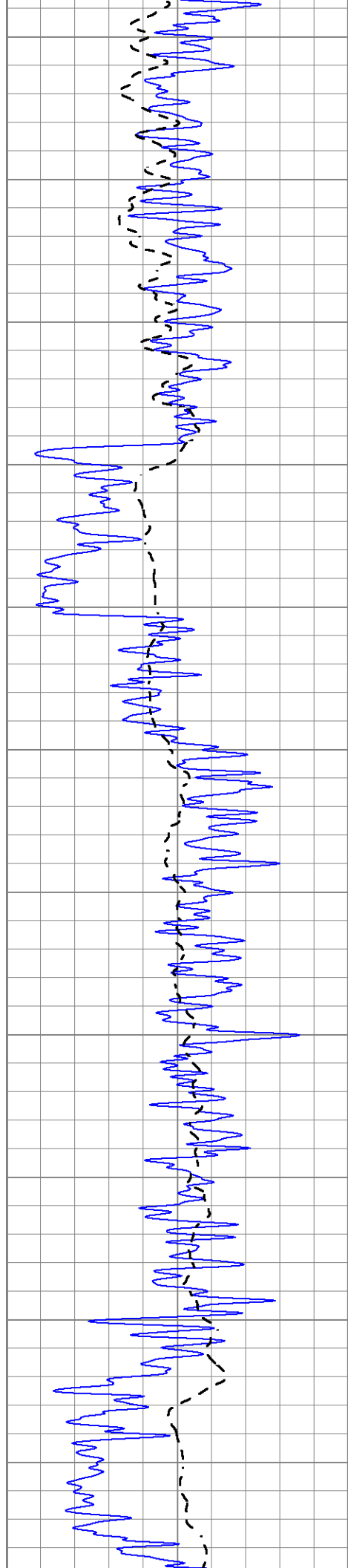
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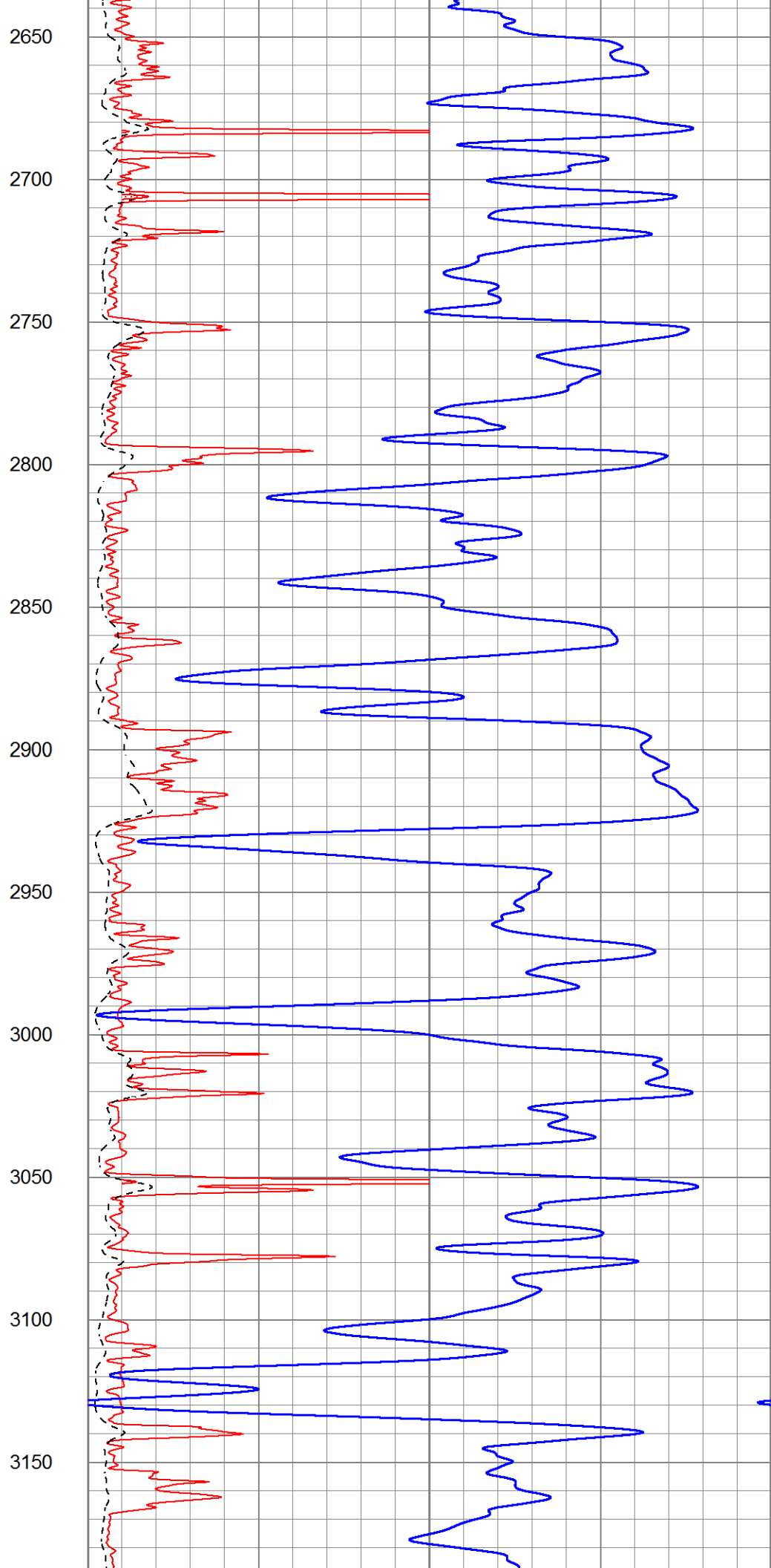
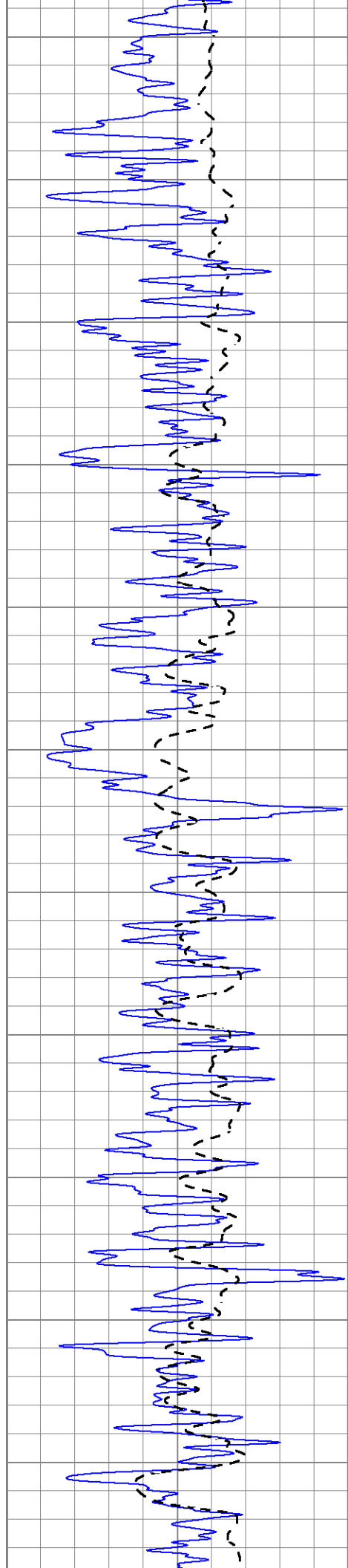
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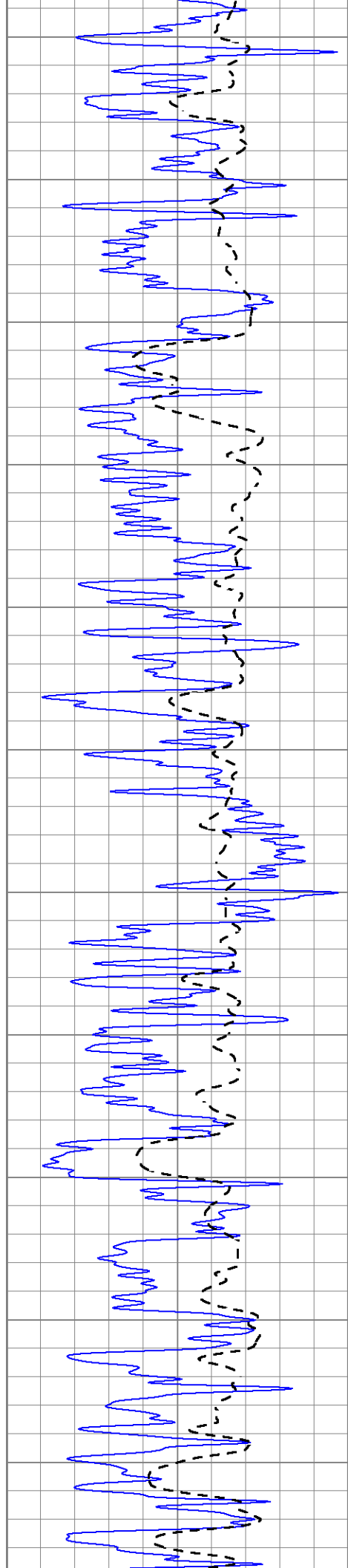
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3200

3250

3300

3350

3400

3450

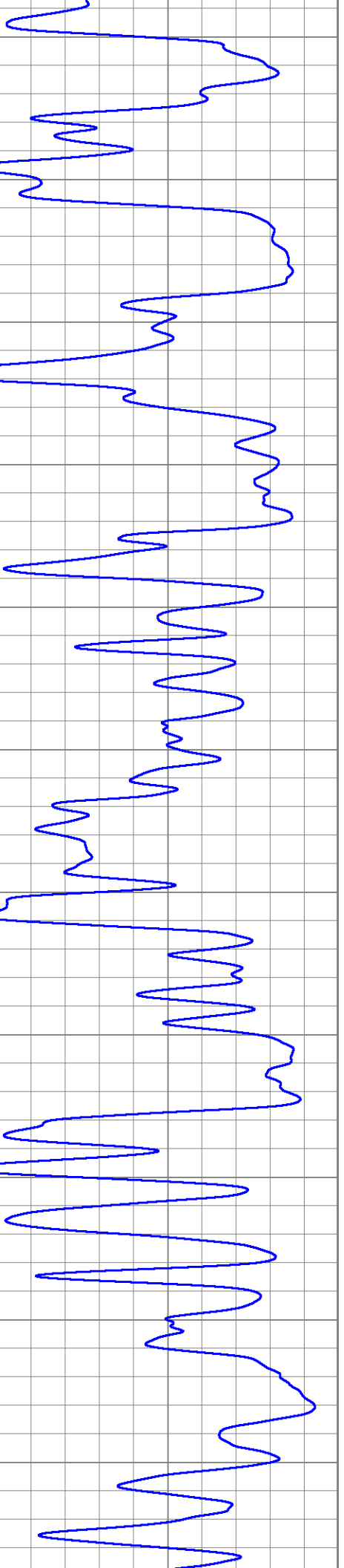
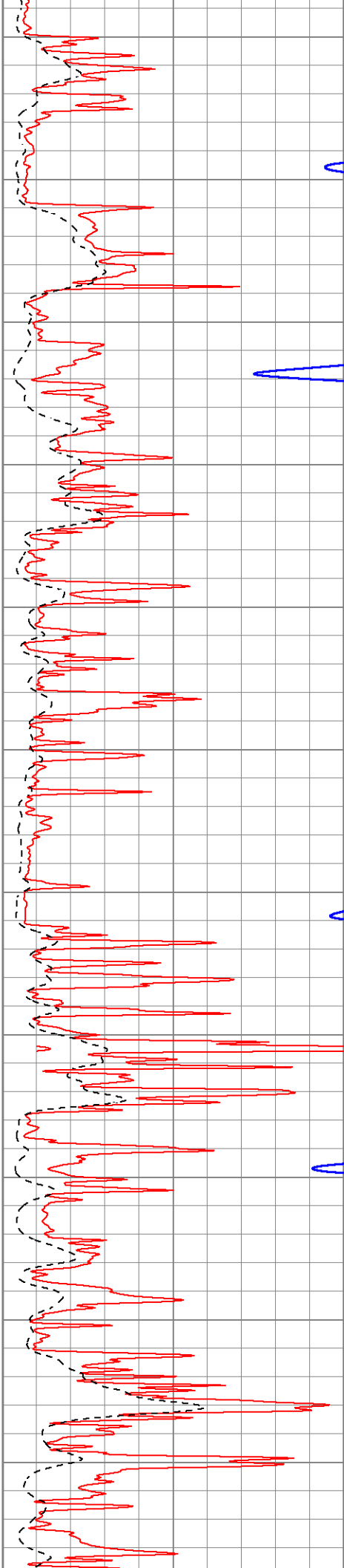
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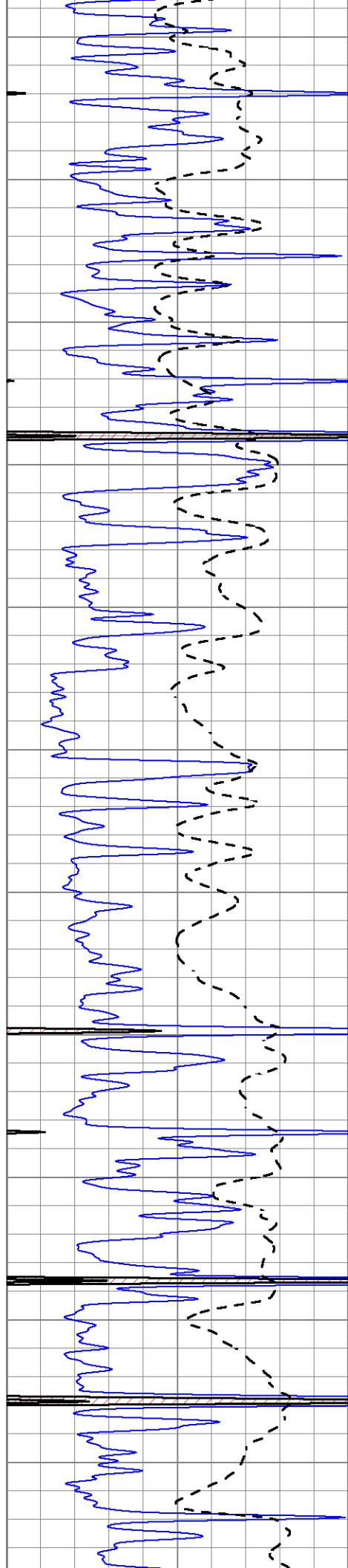
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3600

3650

3700





3750

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3900

3950

4000

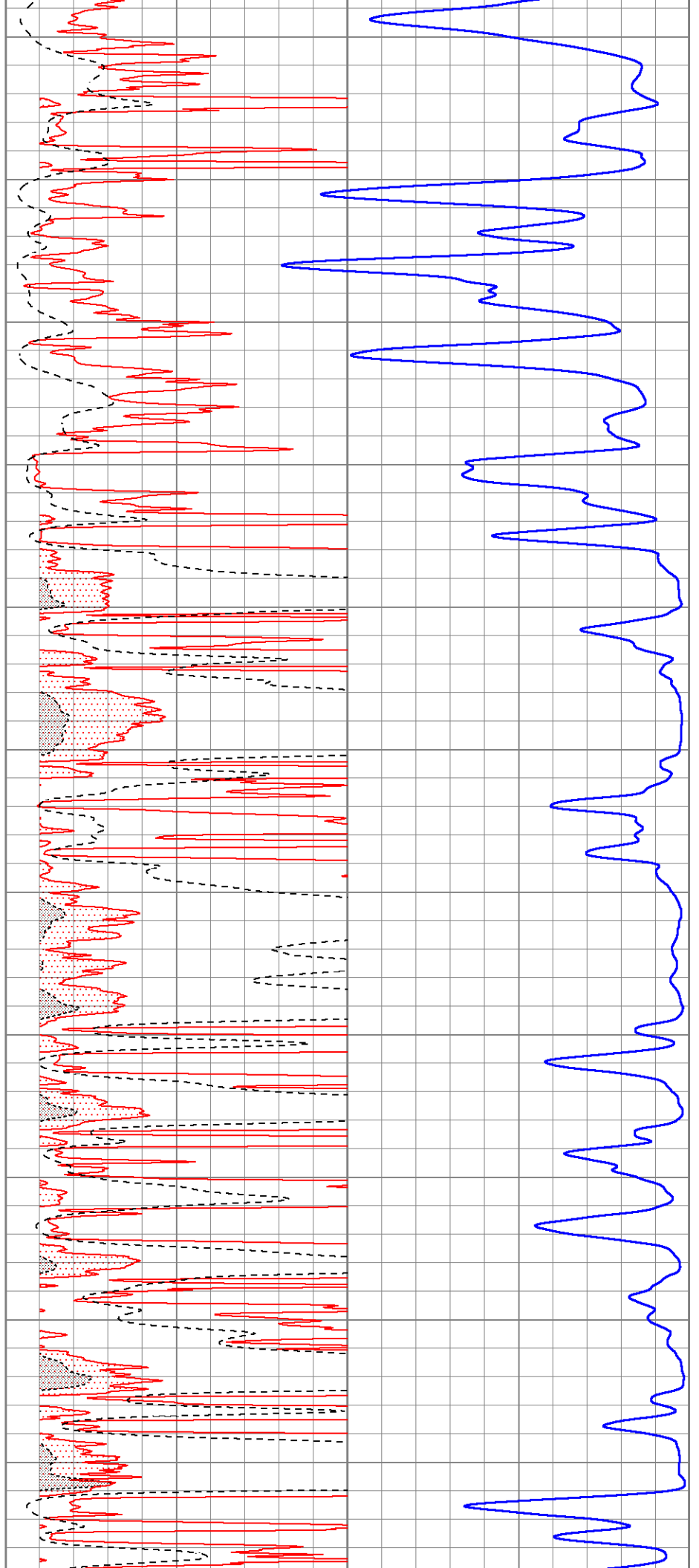
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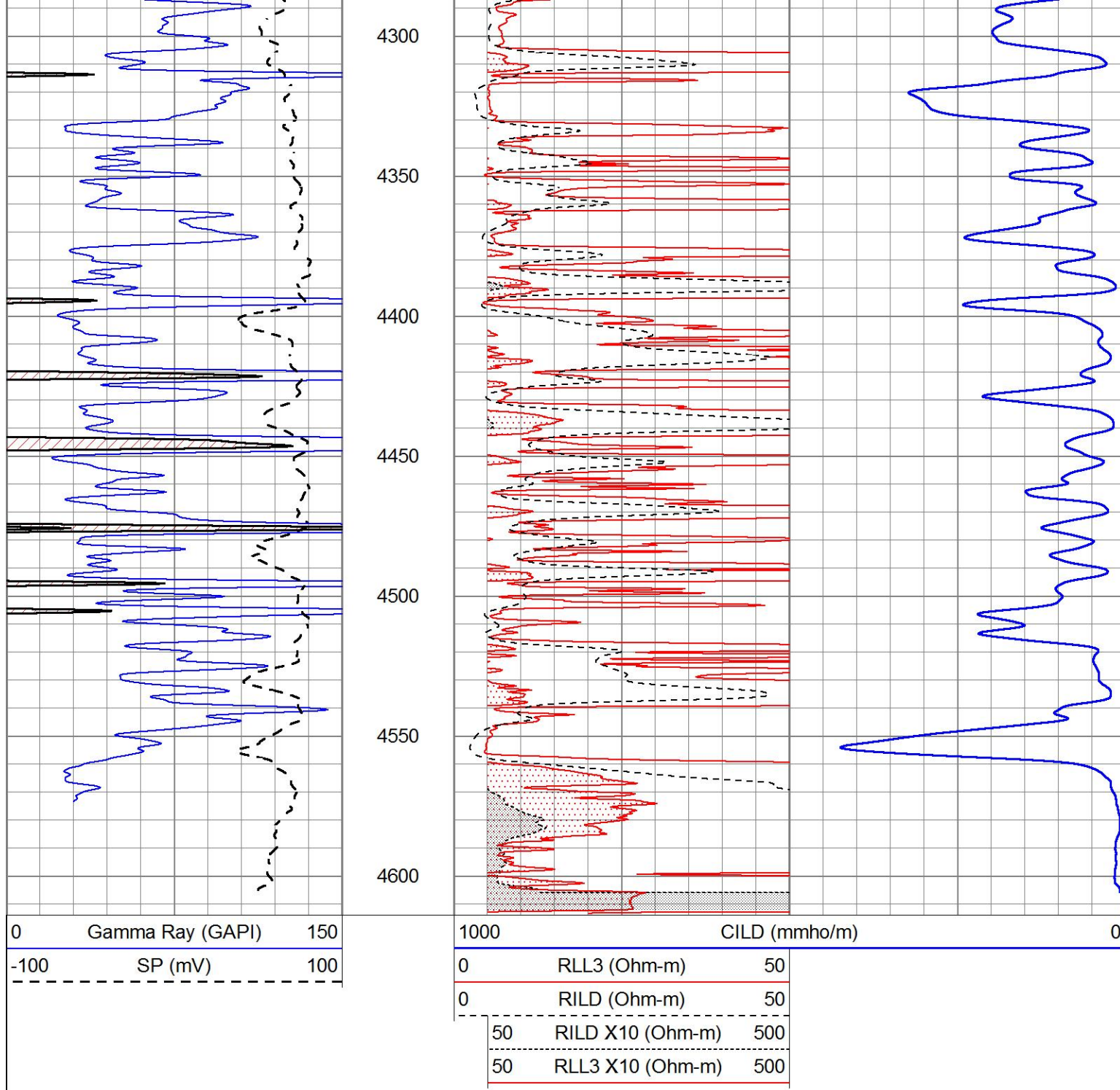
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4150

4200

4250

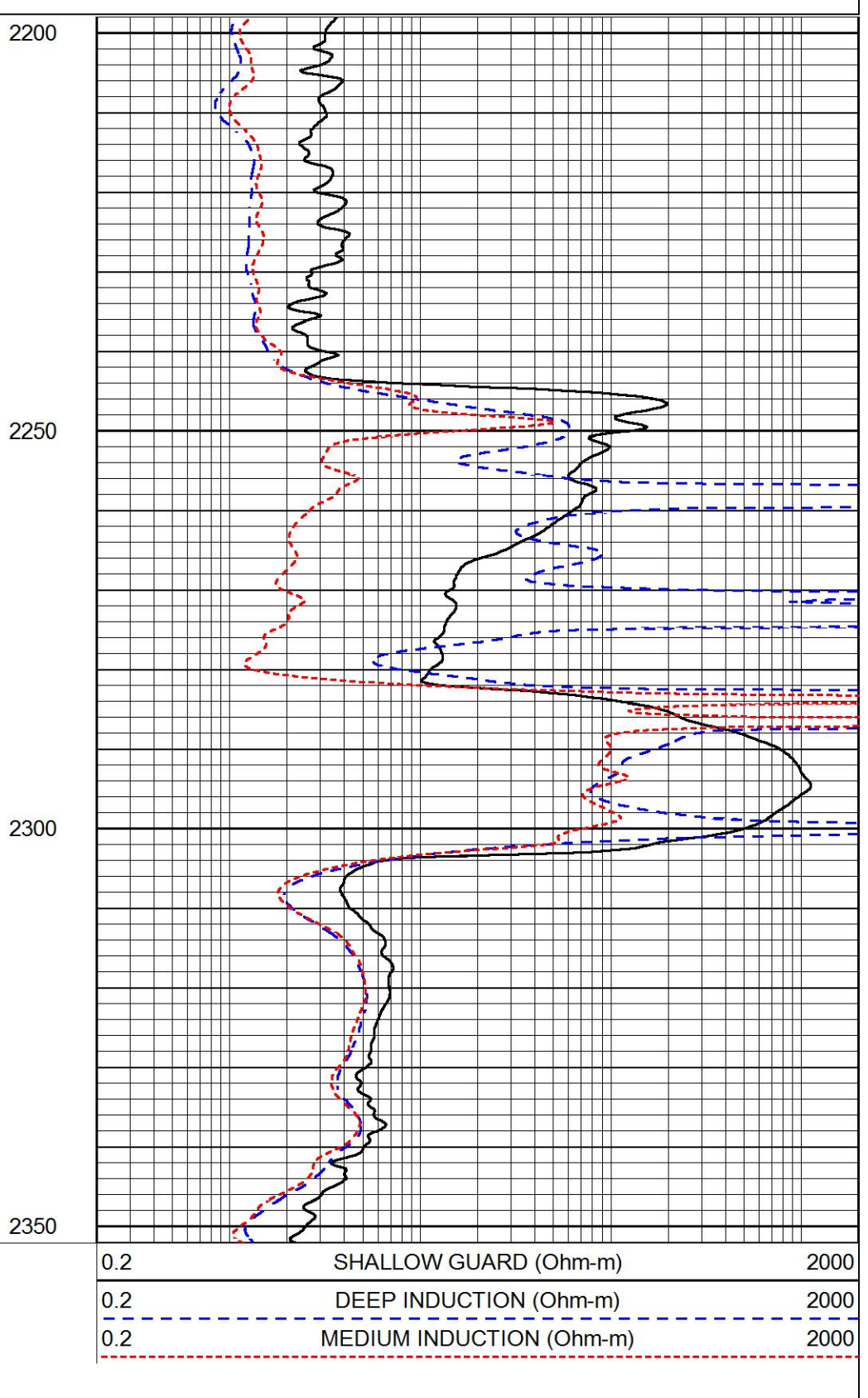
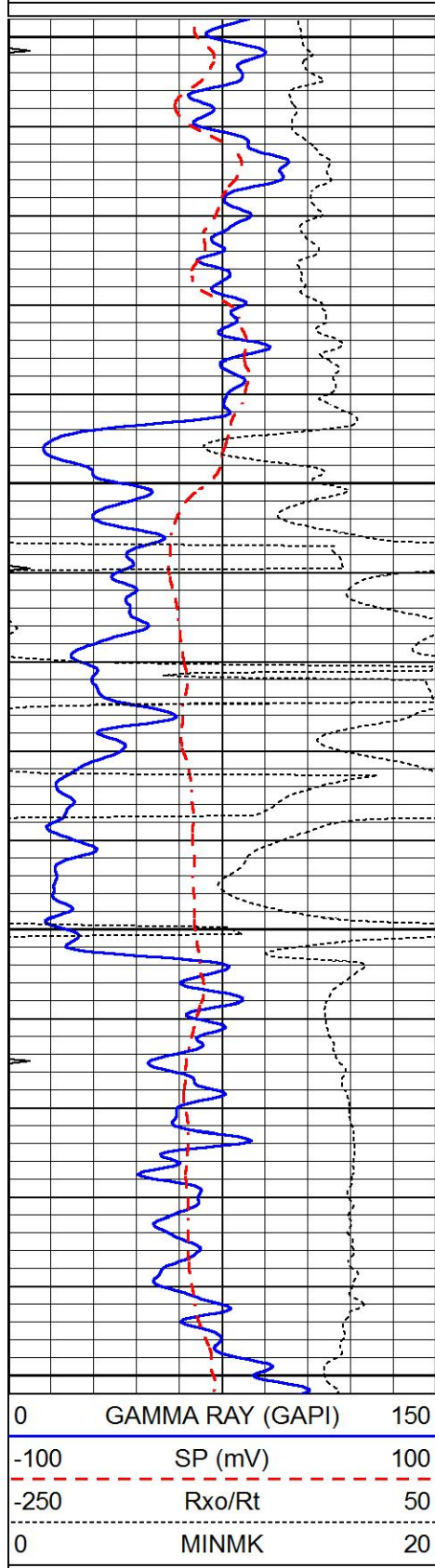




ANHYDRITE

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 Presentation Format _dil
 Dataset Creation Mon Dec 05 19:41:56 2022
 Charted by Depth in Feet scaled 1:240

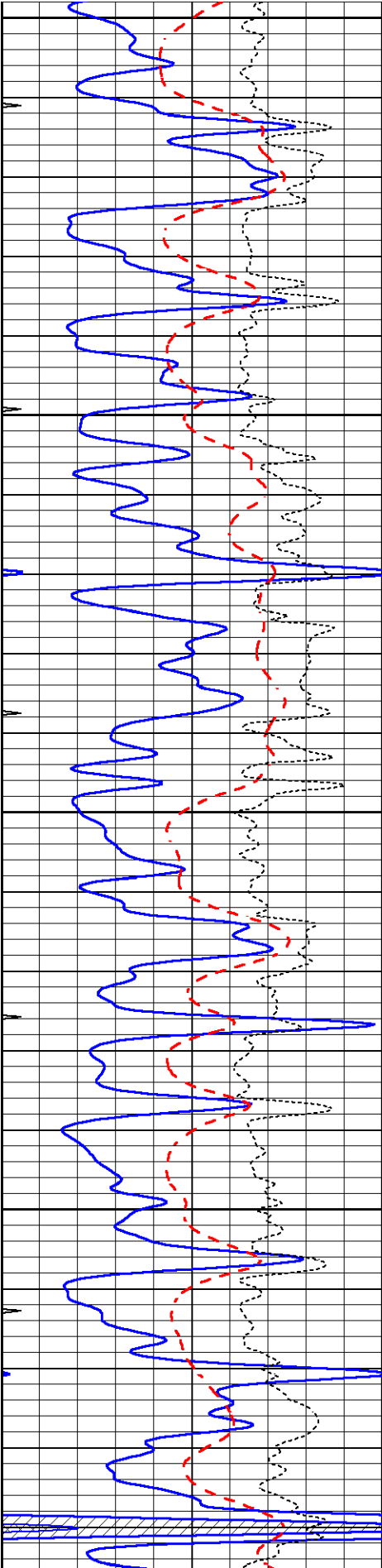
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-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			



MAIN SECTION

Database File 6811pe.db
 Dataset Pathname pass3.1M
 Presentation Format _dil
 Dataset Creation Mon Dec 05 19:40:49 2022
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20



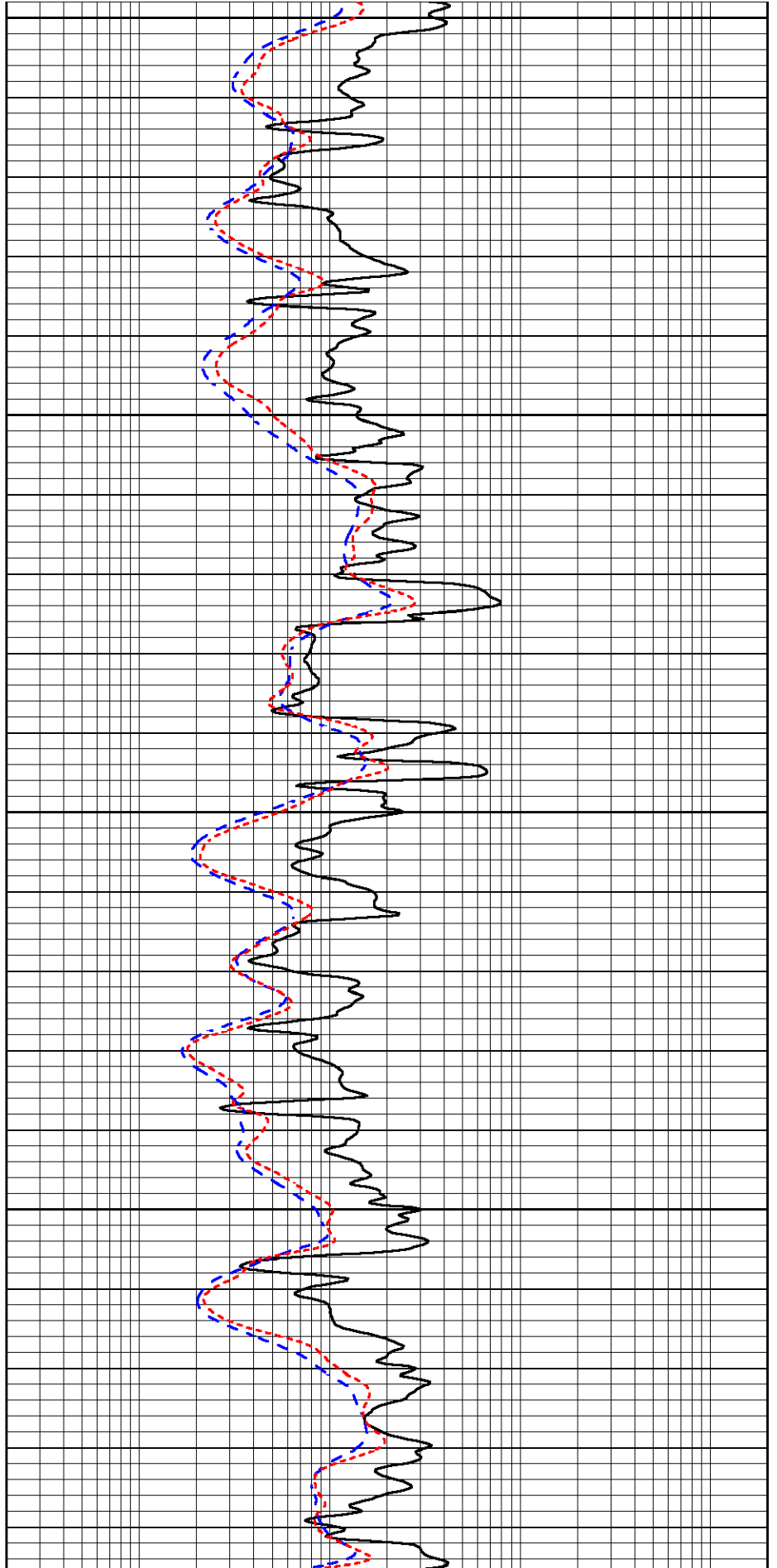
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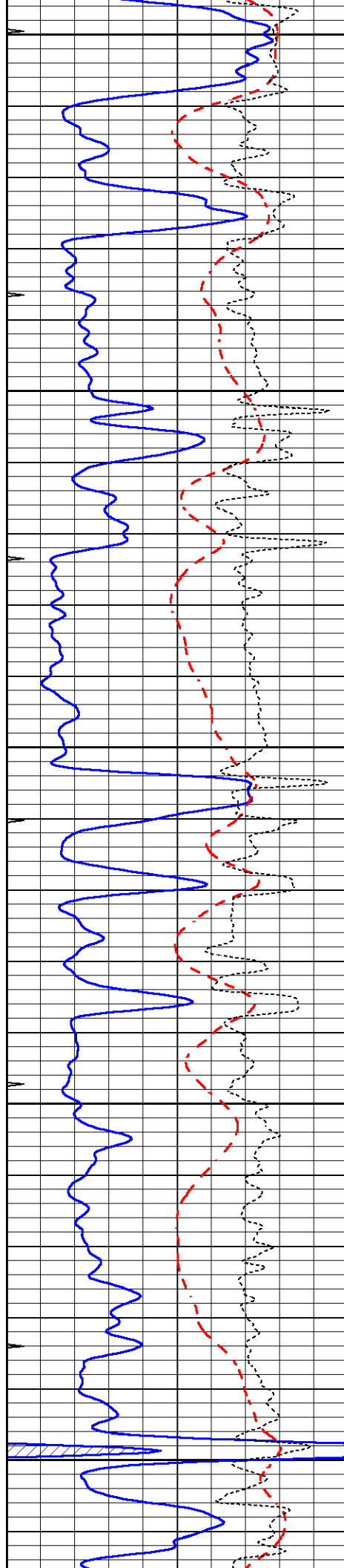
3750

3800

3850

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





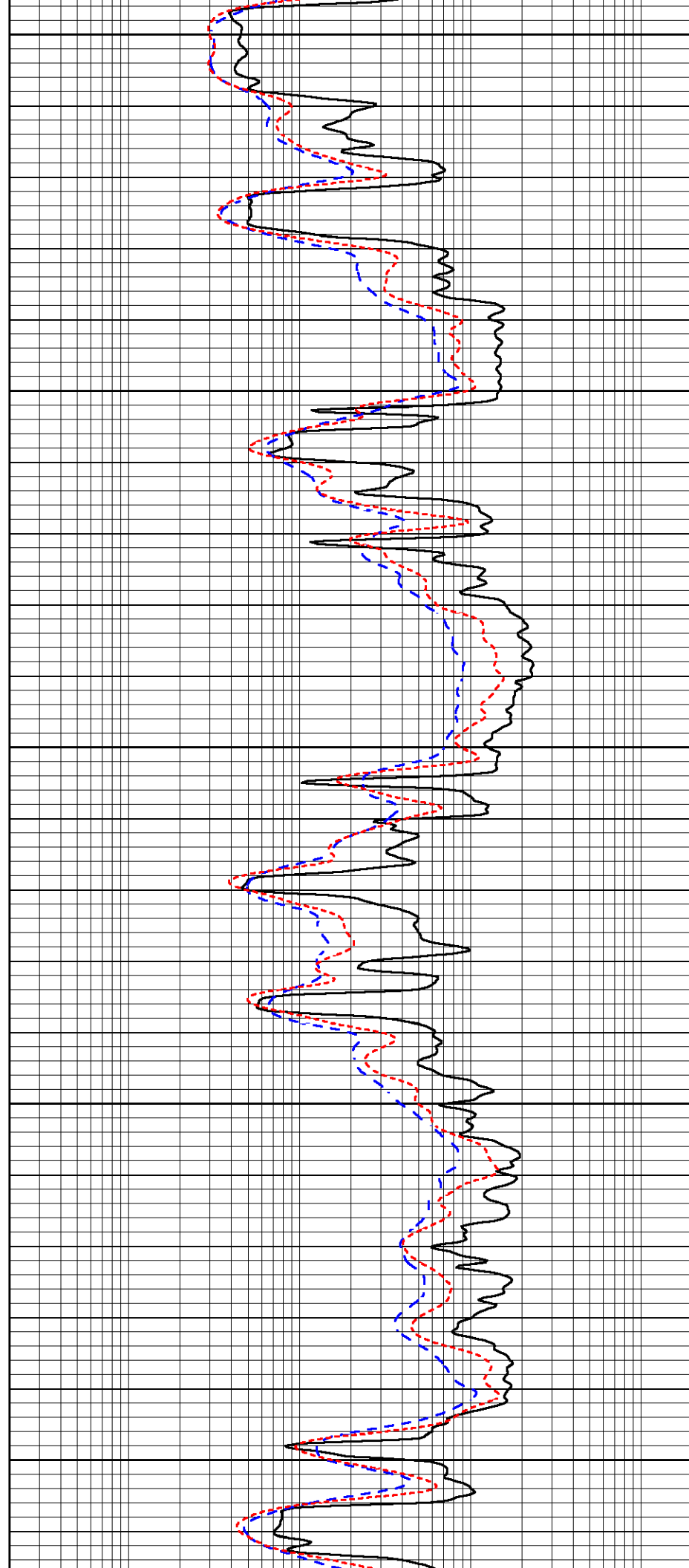
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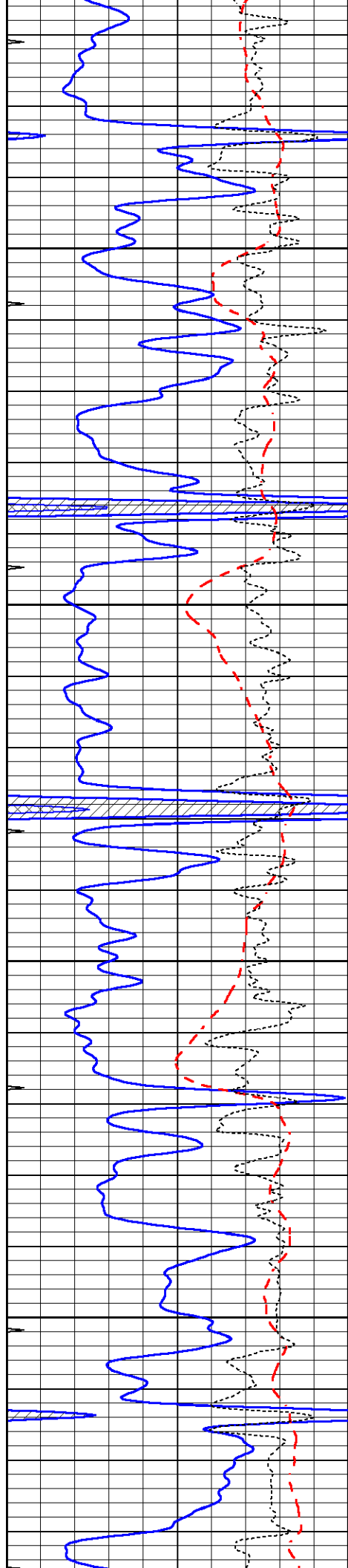
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4000

4050

4100



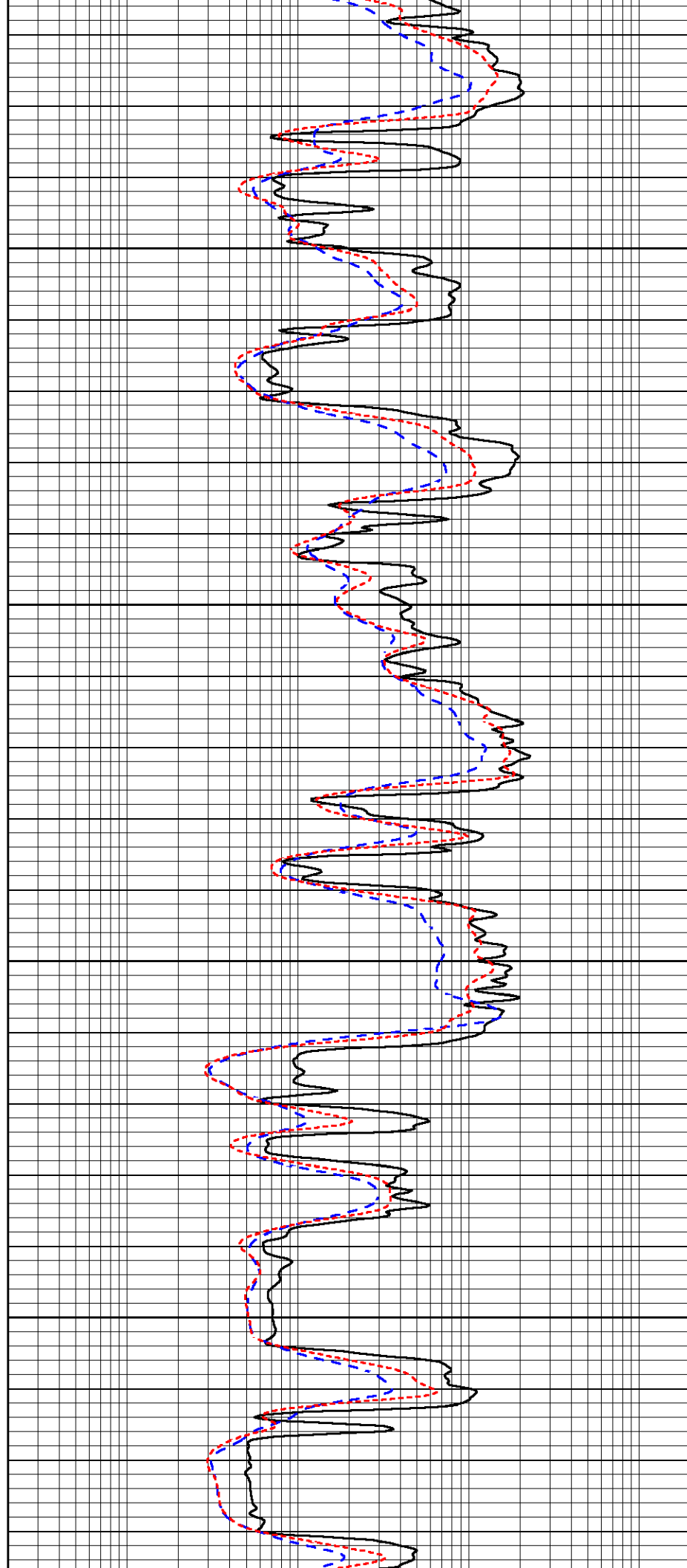


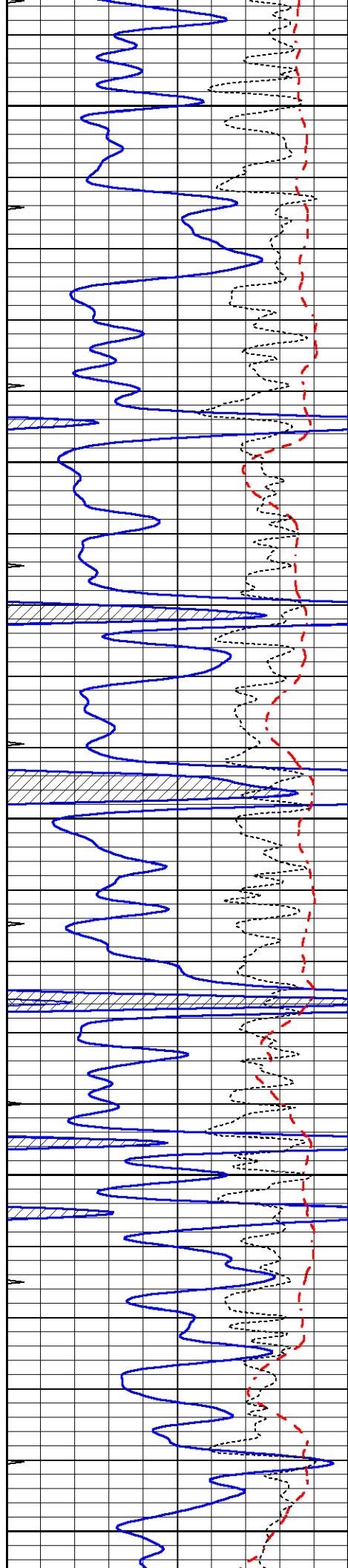
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4200

4250

4300





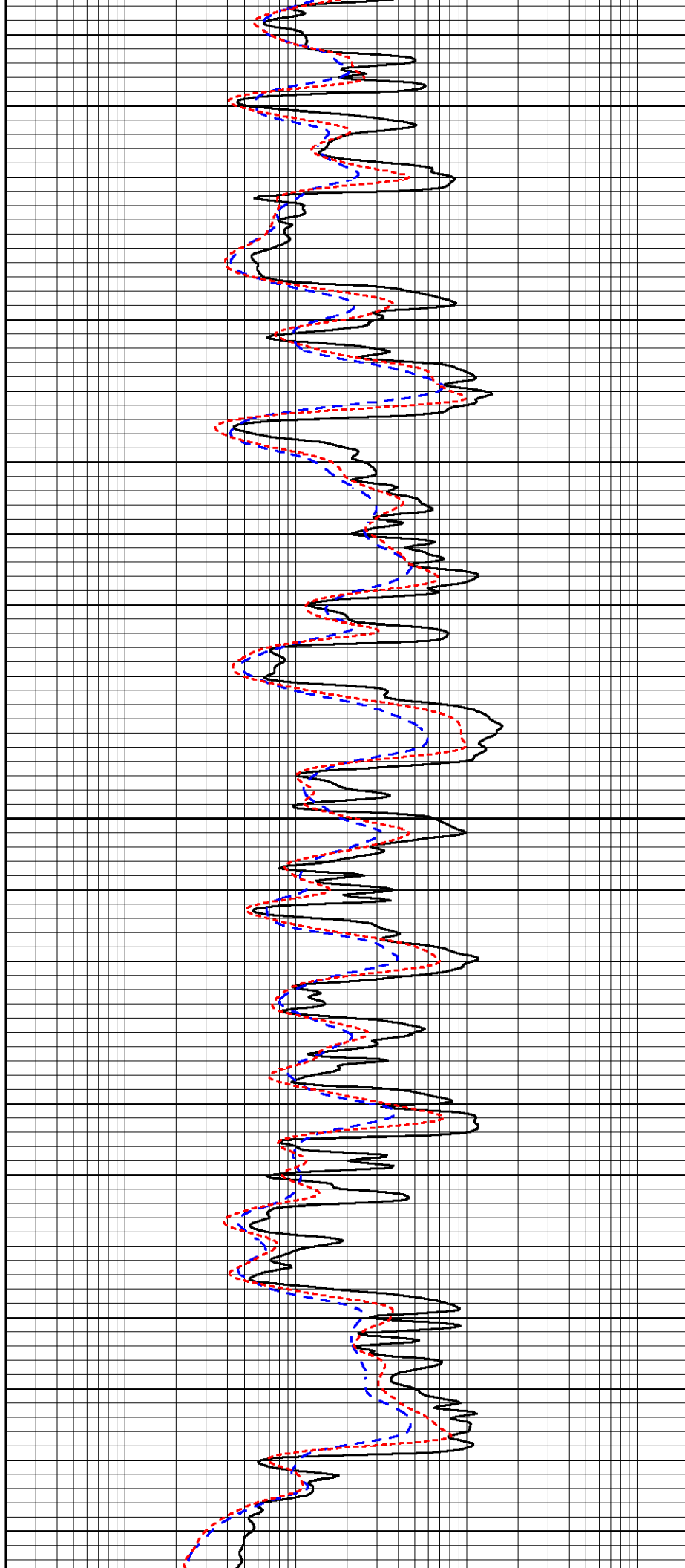
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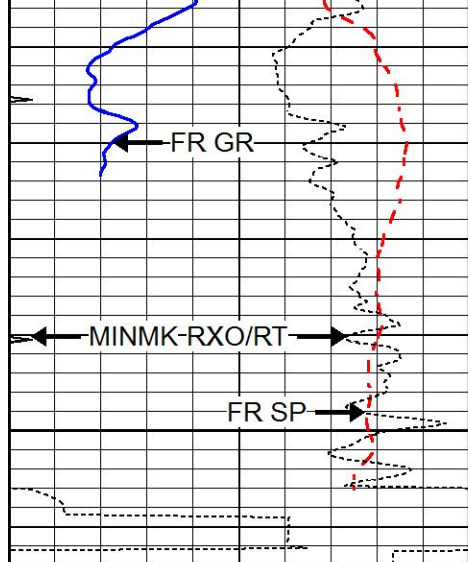
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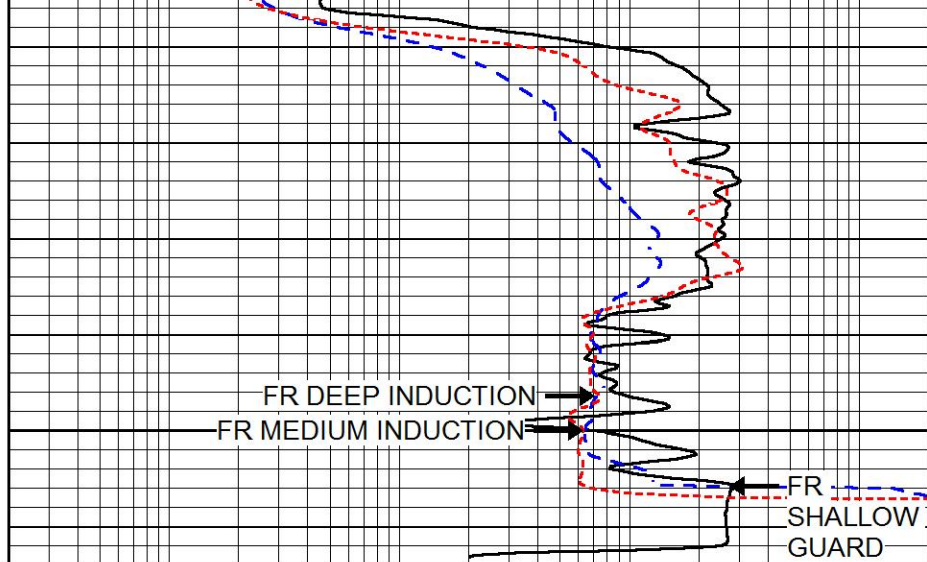
4500

4550





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20



0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

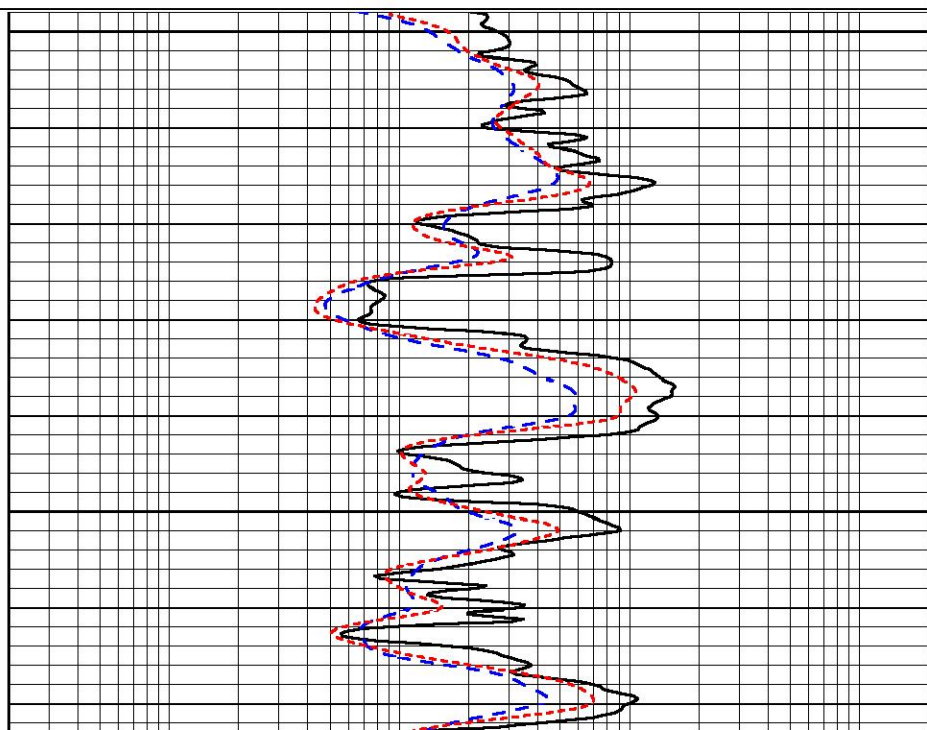
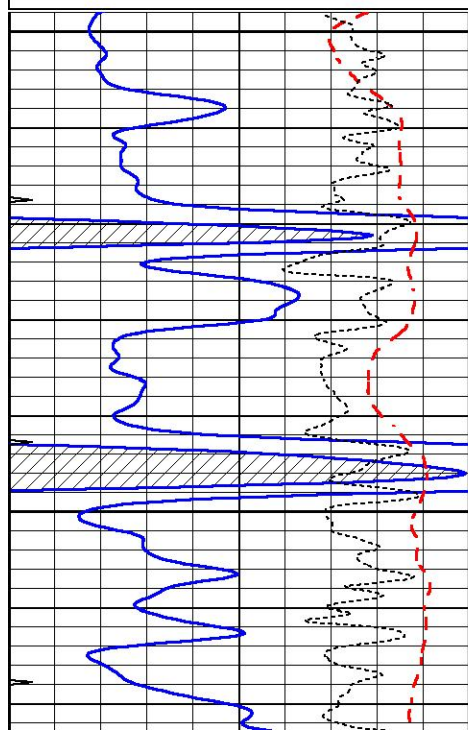


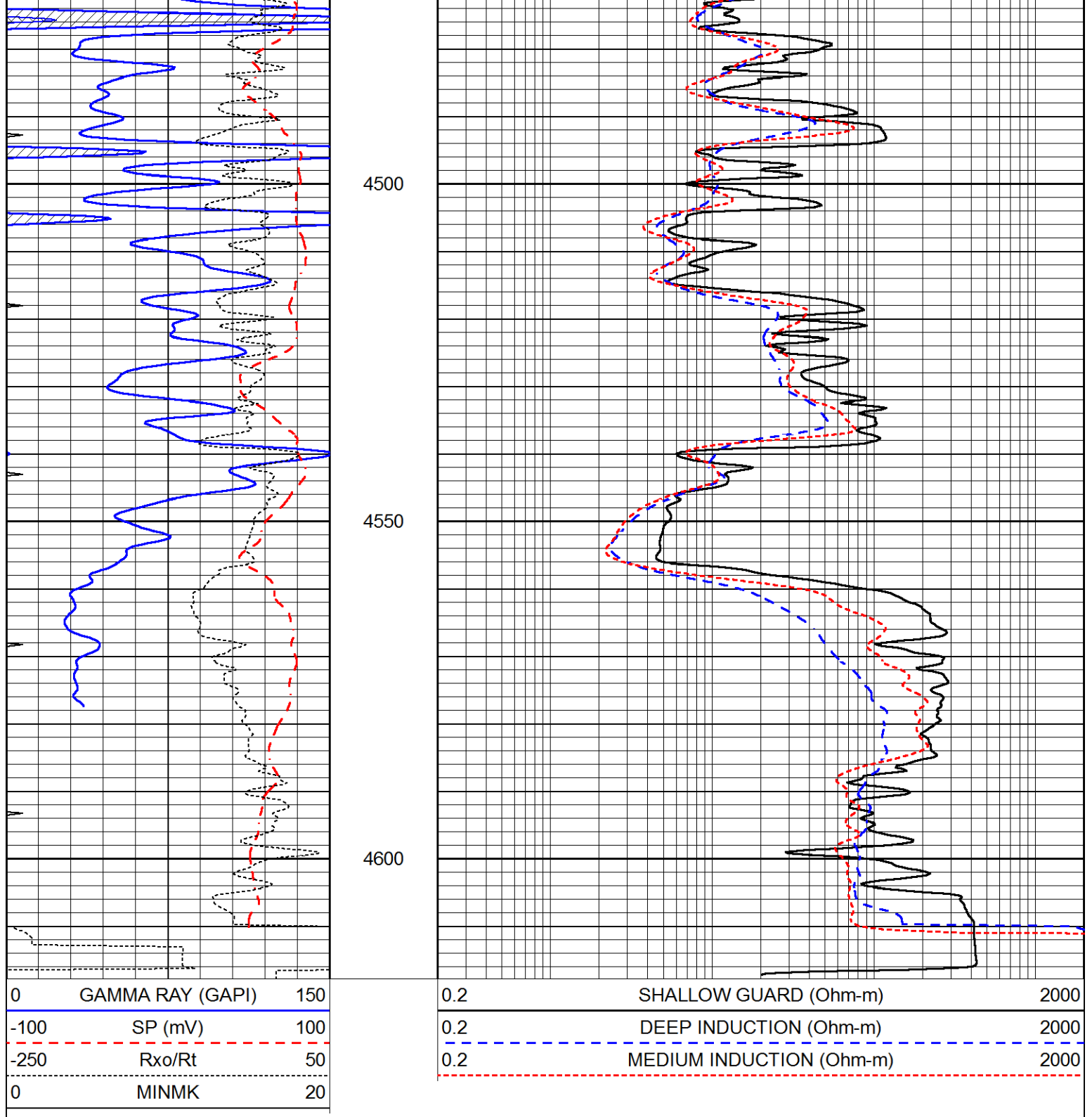
REPEAT SECTION

Database File 6811pe.db
 Dataset Pathname pass2.1R
 Presentation Format _dil
 Dataset Creation Mon Dec 05 18:36:28 2022
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000





Calibration Report

Database File 6811pe.db
 Dataset Pathname pass3.1M
 Dataset Creation Mon Dec 05 19:40:49 2022

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Thu Nov 17 16:51:10 2022
 Downhole Cal Performed: Mon Sep 10 14:28:38 2018
 After Survey Verification Performed: Mon Sep 10 14:28:40 2018

Surface Calibration

Readings

References

Results

Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	7.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	620.000	-6.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration								
Readings			References			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		

After Survey Verification								
Readings			Targets			Results		
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report								
Serial: 004			Model: PRB					

Master Calibration				Performed Fri Nov 04 15:19:59 2022				
	Background	Magnesium		Aluminum	Aluminum+Fe			
Window 1	1153.2	7232.1		2536.8	2279.5			cps
Window 2	1055.6	6225.5		2222.3	2030.5			cps
Window 3	902.5	3849.3		1546.4	1462.0			cps
Window 4	254.4	258.2		253.1	253.9			cps
Long Space	0.0	5169.9		1166.7	974.9			cps
Short Space	4.7	1383.0		950.5	792.1			cps
Rho		1.7100		2.5900	0.0000			g/cc
Pe		2.0000		2.7500	5.7900			
Rib Angle	: 45.9	Rib Slope	: 1.031	Density/Spine Ratio			: 0.573	
Spine Angle	: 75.9	Spine Slope	: 3.970	Spine Intercept			: -20.2	

Before Survey Verification				Performed Wed Dec 31 18:00:00 1969				
Window 1	0.0	0.0		0.0	0.0			cps
Window 2	0.0	0.0		0.0	0.0			cps
Window 3	0.0	0.0		0.0	0.0			cps
Window 4	0.0	0.0		0.0	0.0			cps
Long Space	0.0	0.0		0.0	0.0			cps
Short Space	0.0	0.0		0.0	0.0			cps
Measured Rho		0.0000		0.0000	0.0000			g/cc
Measured Correction		0.0000		0.0000	0.0000			g/cc
Measured Pe				0.0000	0.0000			

After Survey Verification				Performed Wed Dec 31 18:00:00 1969				
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Window 1	0.0	0.0	0.0	0.0	cps
Window 2	0.0	0.0	0.0	0.0	cps
Window 3	0.0	0.0	0.0	0.0	cps
Window 4	0.0	0.0	0.0	0.0	cps
Long Space	0.0	0.0	0.0	0.0	cps
Short Space	0.0	0.0	0.0	0.0	cps
Measured Rho		0.0000	0.0000	0.0000	g/cc
Measured Correction		0.0000	0.0000	0.0000	g/cc
Measured Pe			0.0000	0.0000	
Compensated Neutron Calibration Report					
		Serial Number:	6I		
		Tool Model:	G		
CALIBRATION					
	Detector	Readings		Target	Normalization
	Short Space	1.00	cps	1.00	cps
	Long Space	1.00	cps	1.00	cps
PRE-SURVEY VERIFICATION					
	Detector	Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	
3)	Short Space		cps		
	Long Space		cps	pu	
POST-SURVEY VERIFICATION					
	Detector	Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	pu
3)	Short Space		cps		
	Long Space		cps	pu	pu
Gamma Ray Calibration Report					
Serial Number:		GR6			
Tool Model:		OPEN			
Performed:		Tue Nov 08 13:43:57 2022			
Calibrator Value:		150.0	GAPI		
Background Reading:		0.0	cps		
Calibrator Reading:		276.0	cps		
Sensitivity:		0.8500	GAPI/cps		