

DUAL INDUCTION LOG

Company	MULL DRILLING COMPANY, INC.	Company	MULL DRILLING COMPANY, INC.
Well	NUTTLE #1-7	Well	NUTTLE #1-7
Field	PRARIE RIDGE NORTH	Field	PRARIE RIDGE NORTH
County	NESS	County	NESS
State	KANSAS	State	KANSAS
Location:	API # : 15-135-26140-0000 335' FNL & 224' FEL SE - NW - NW - NE	Other Services CDL/CNL/PE MEL/SONIC	
Permanent Datum	GROUND LEVEL	Elevation	2655
Log Measured From	KELLY BUSHING 11' A.G.L.	K.B. 2666 D.F. 2664 G.L. 2655	
Drilling Measured From	KELLY BUSHING		
SEC 7	TWP 16S	RGE 26W	
Date	1/9/22		
Run Number	ONE		
Depth Driller	4670		
Depth Logger	4672		
Bottom Logged Interval	4670		
Top Log Interval	00		
Casing Driller	8 5/8"@220'		
Casing Logger	220		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2,600 PPM	
Density / Viscosity	9.4/51		
pH / Fluid Loss	11.0/6.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.10@78F		
Rmf @ Meas. Temp	.825@78F		
Rmc @ Meas. Temp	1.32@78F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.703@122F		
Time Circulation Stopped	3.5 HOURS		
Time Logger on Bottom	7:00 P.M.		
Maximum Recorded Temperature	122F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	BLAKE MILLER		

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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.

15-135-26140-0000

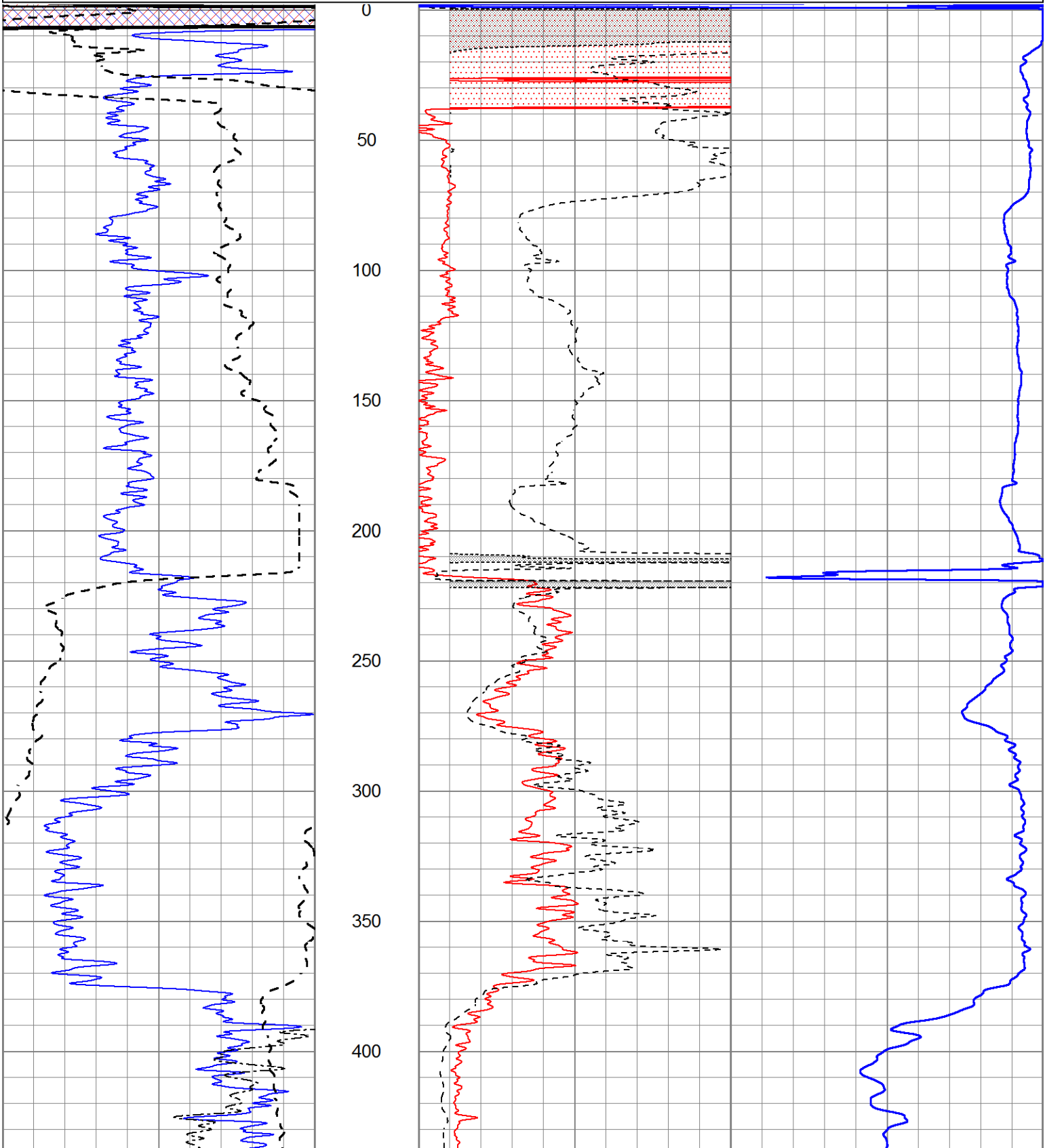
Comments

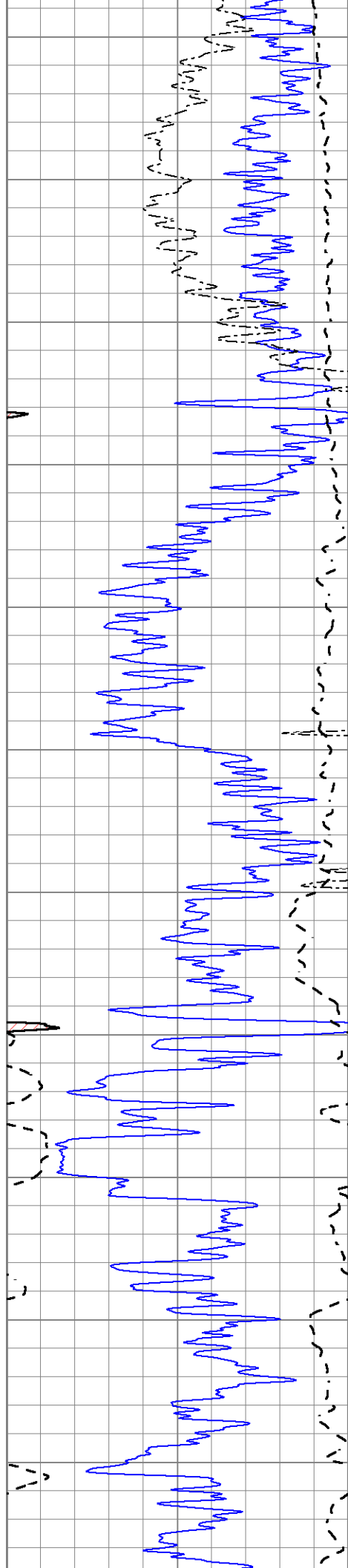
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
UTICA, KS., 3W. ON HWY 4 TO "CASTLE ROCK RD.", N. TO CURVE, WEST, BACK NORTH @
CURVE 1/2 MILE E. INTO



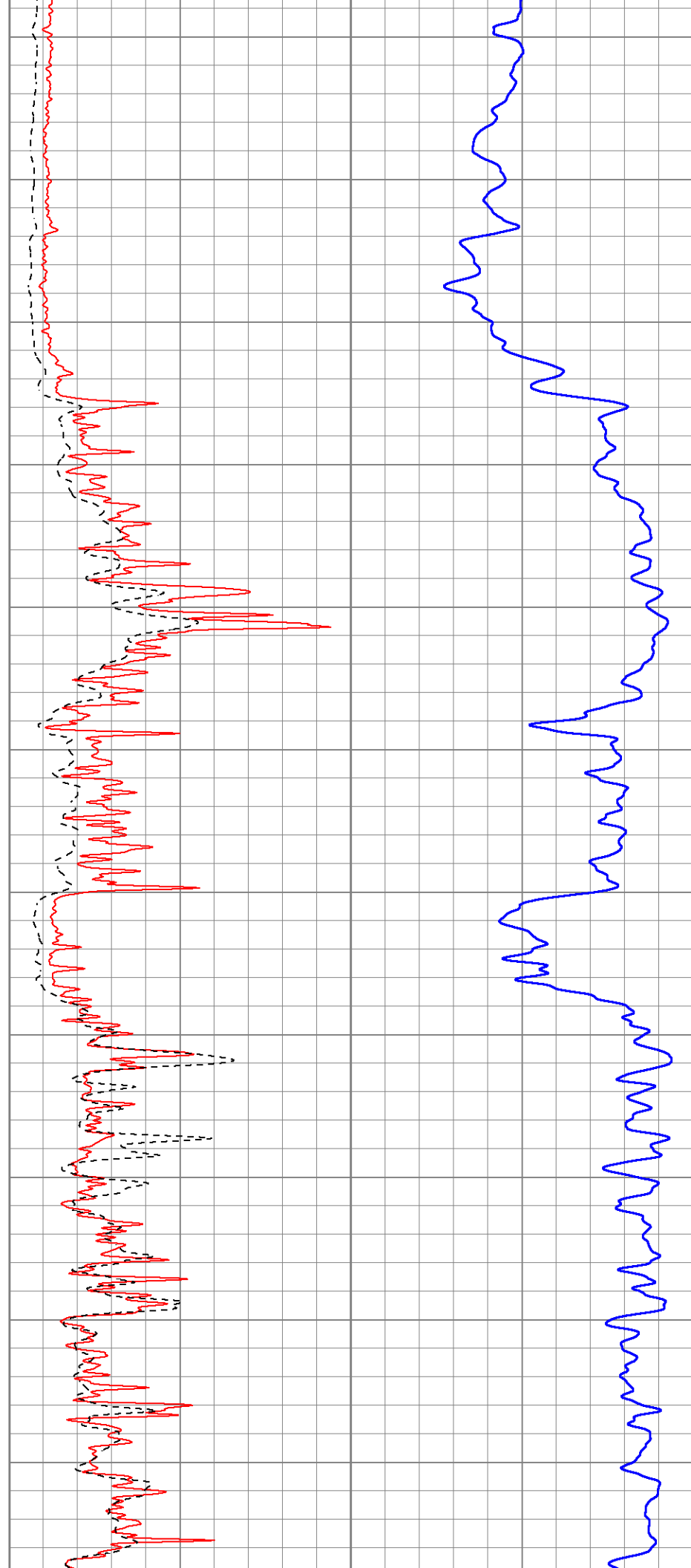
MAIN SECTION

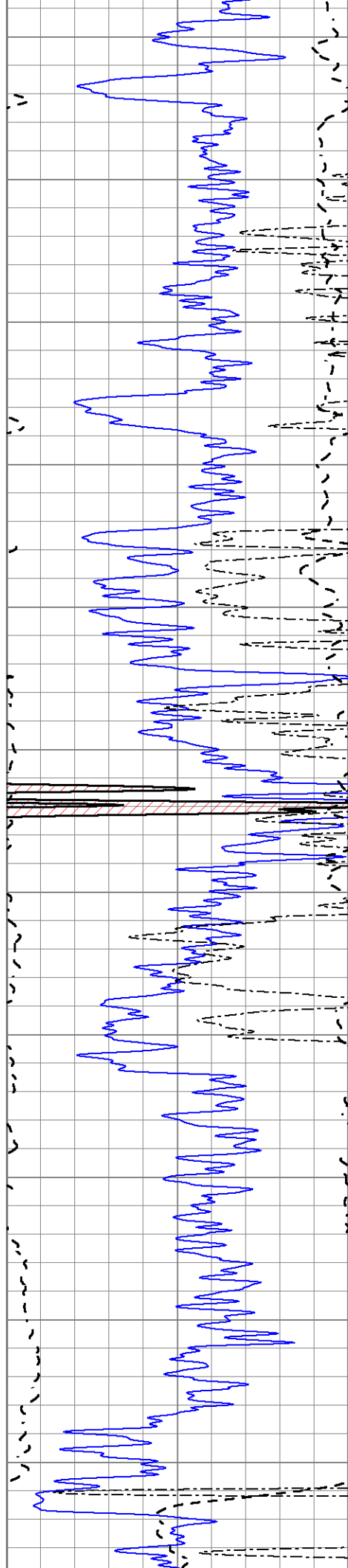
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-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
0	RWA (Ohm-m)	1	0	RILD (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500



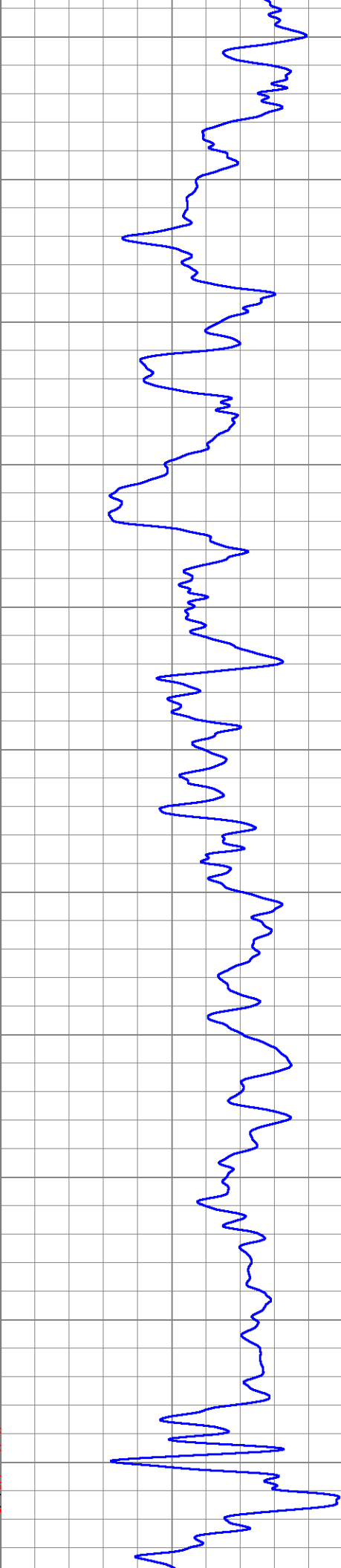
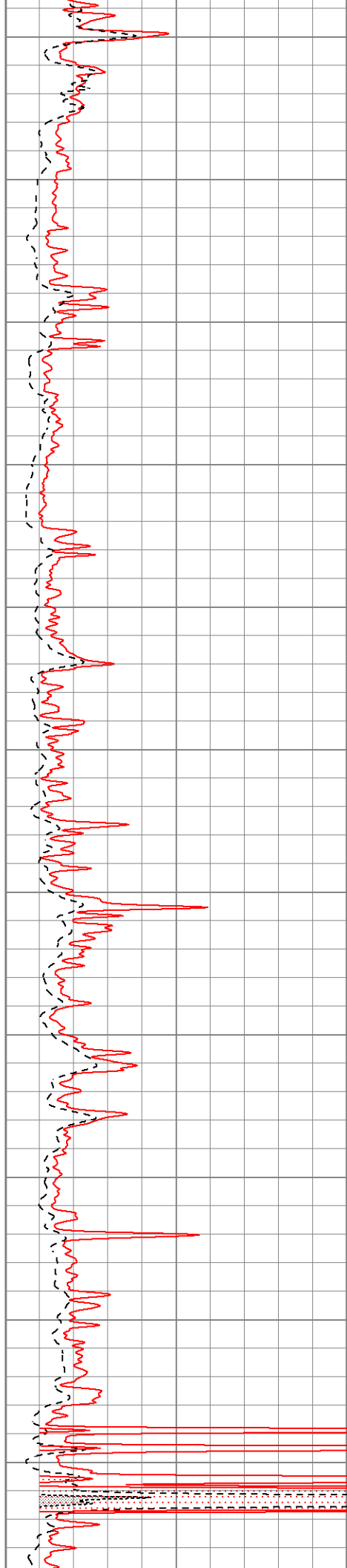


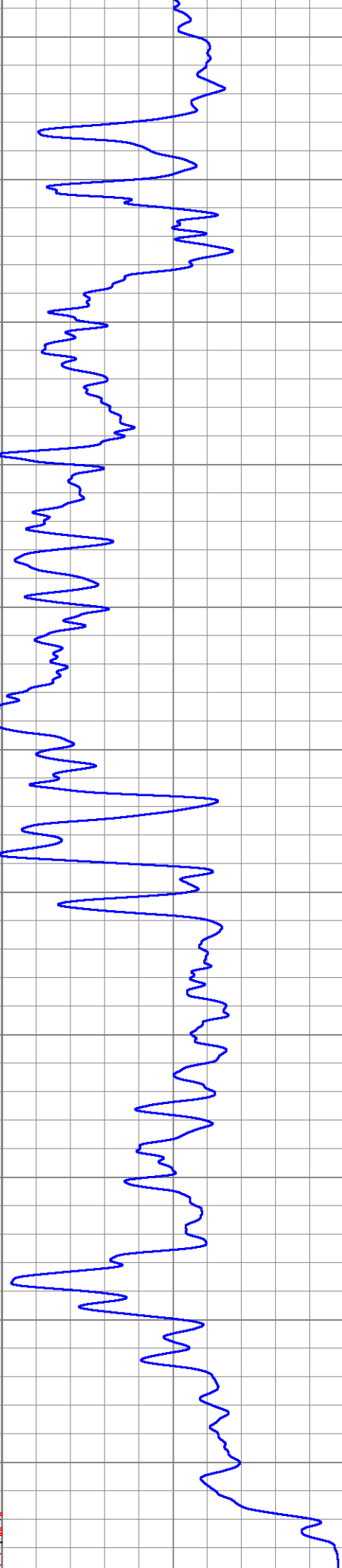
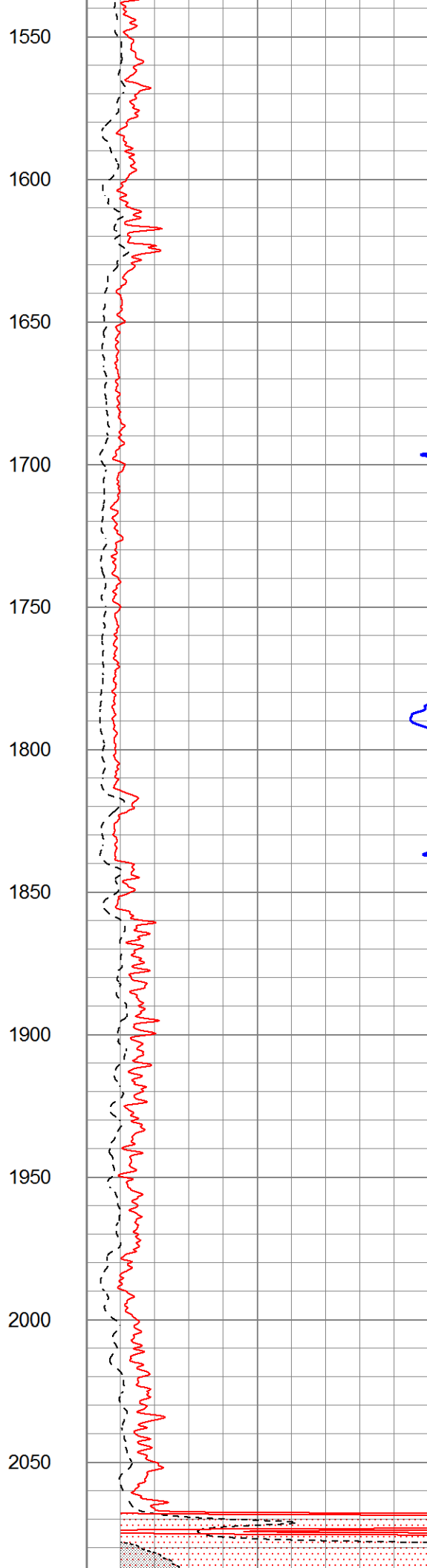
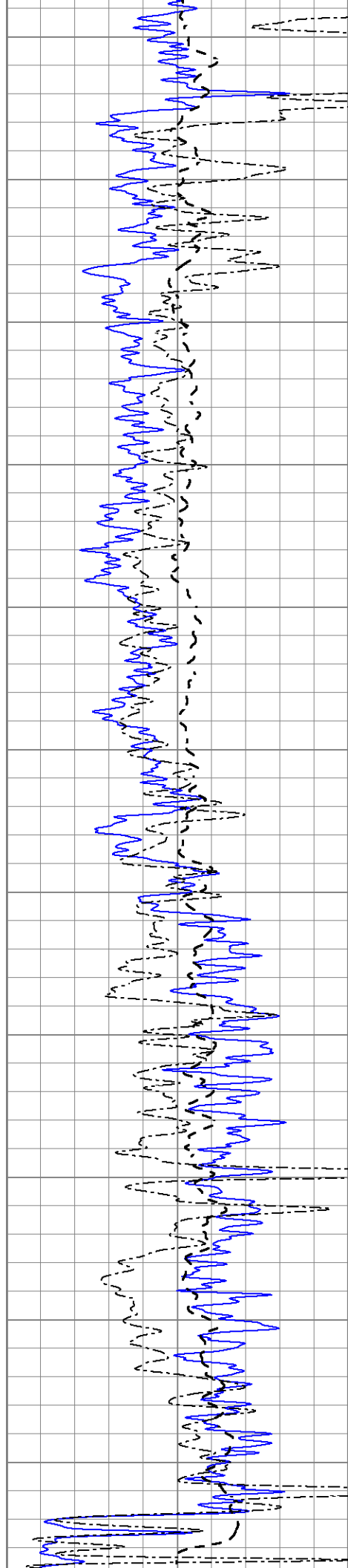
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500
550
600
650
700
750
800
850
900
950

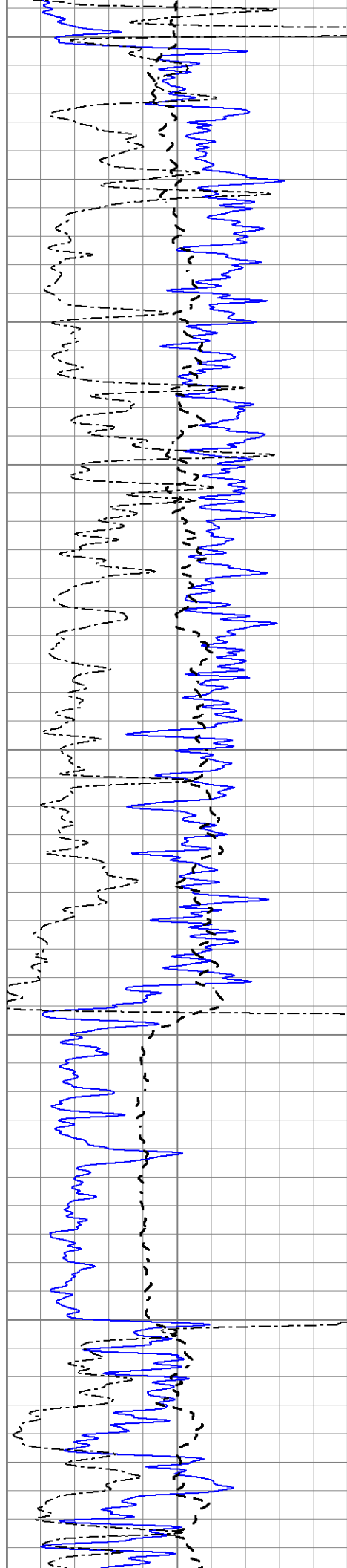




1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500







2100

2150

2200

2250

2300

2350

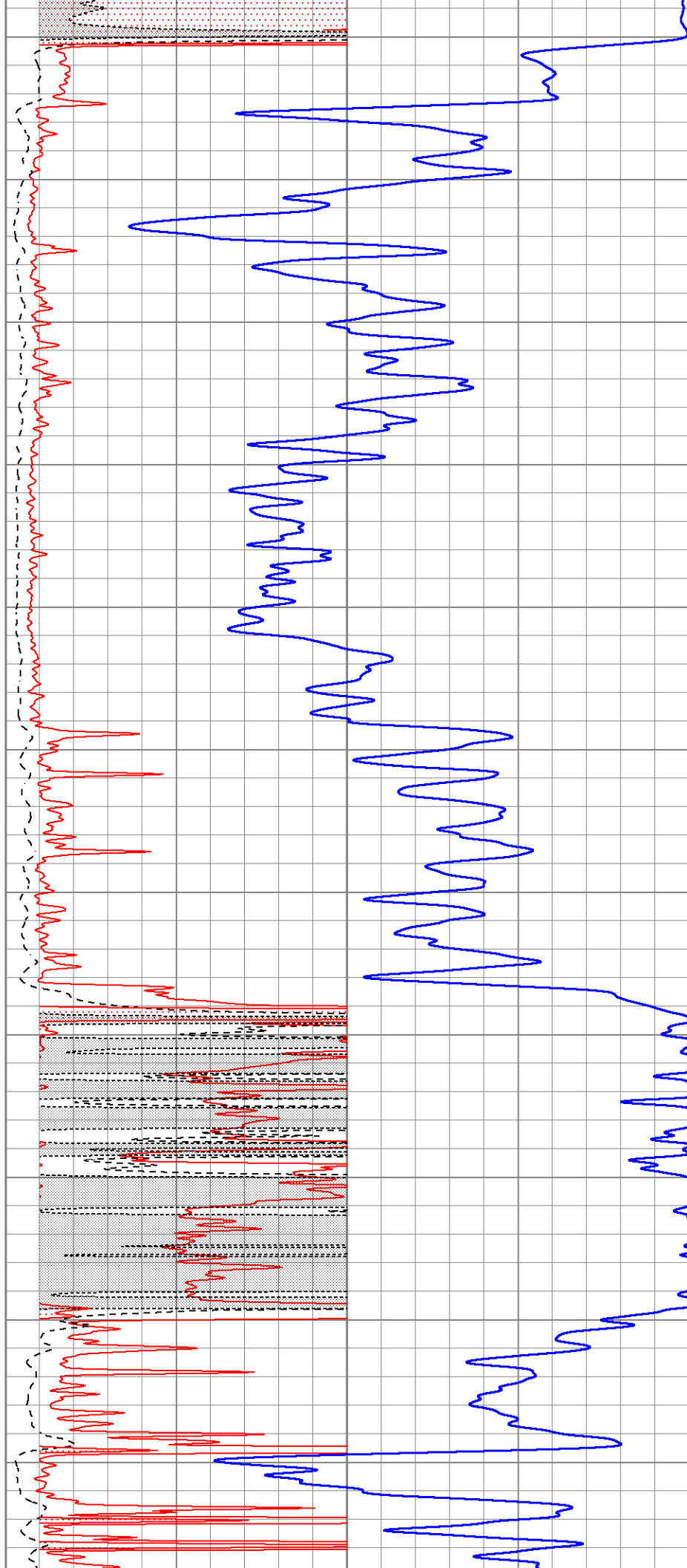
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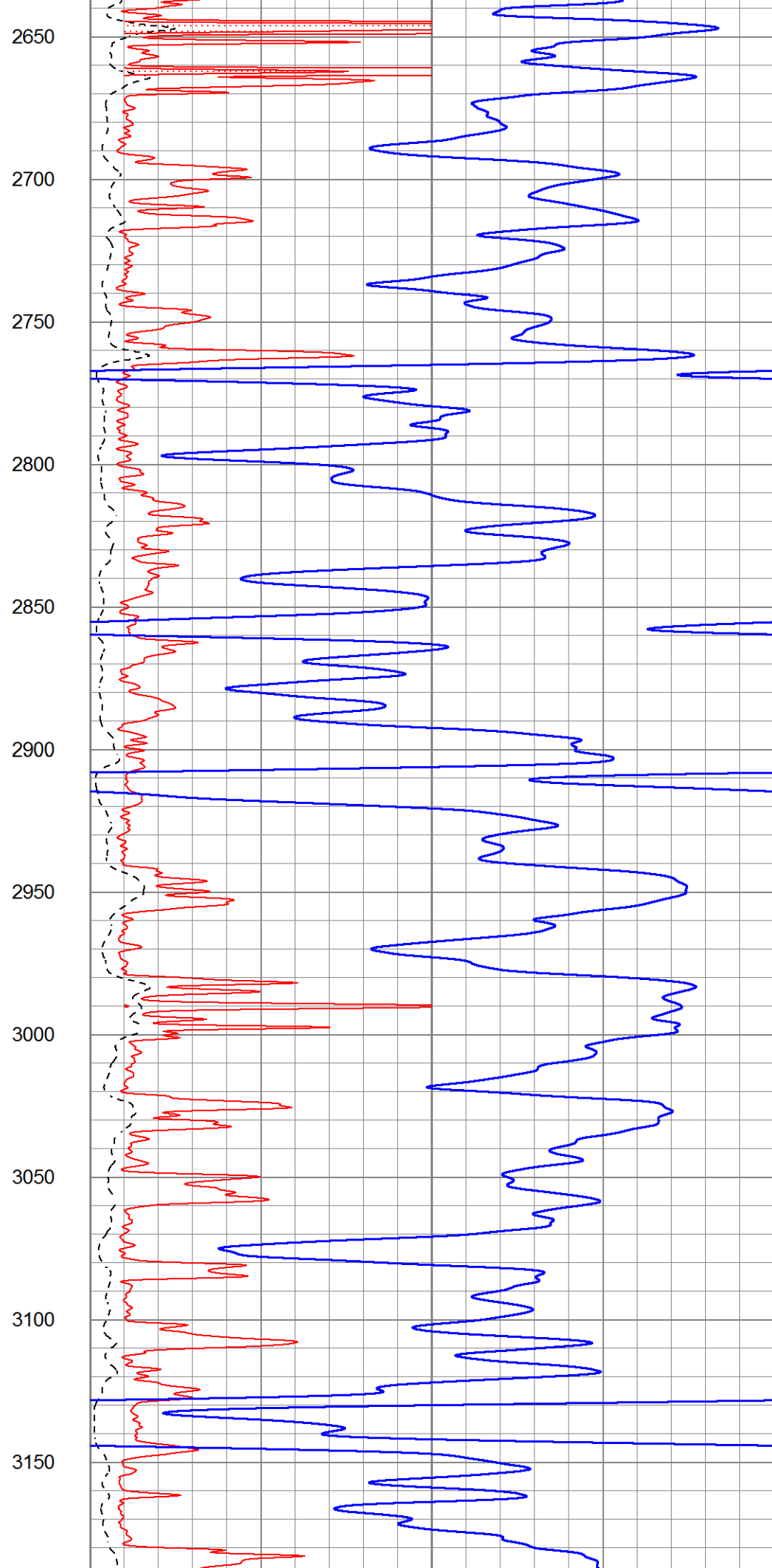
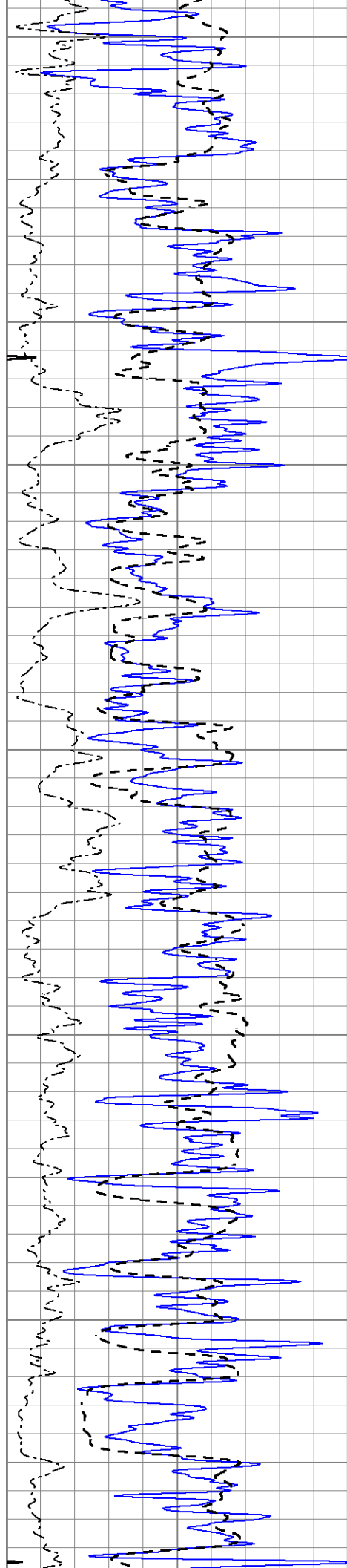
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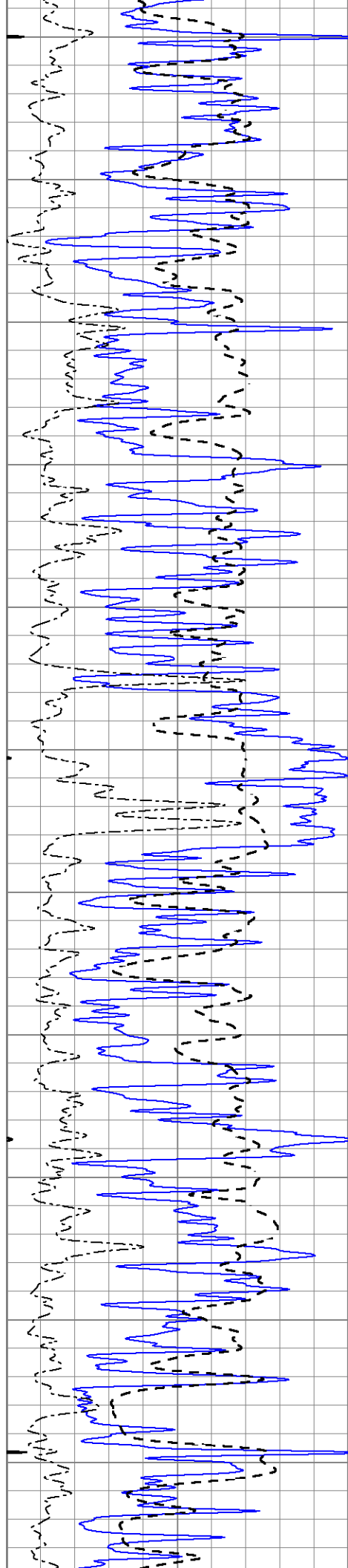
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2550

2600







3200

3250

3300

3350

3400

3450

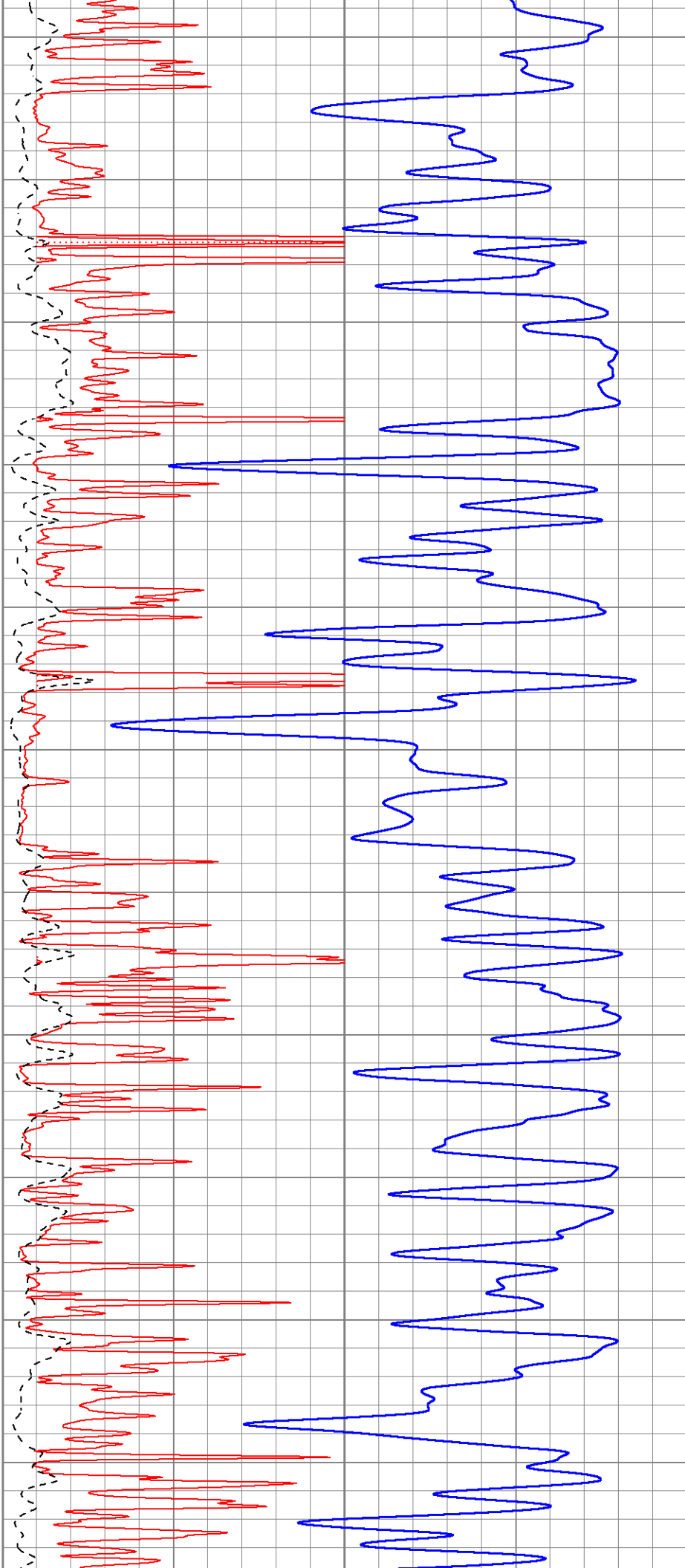
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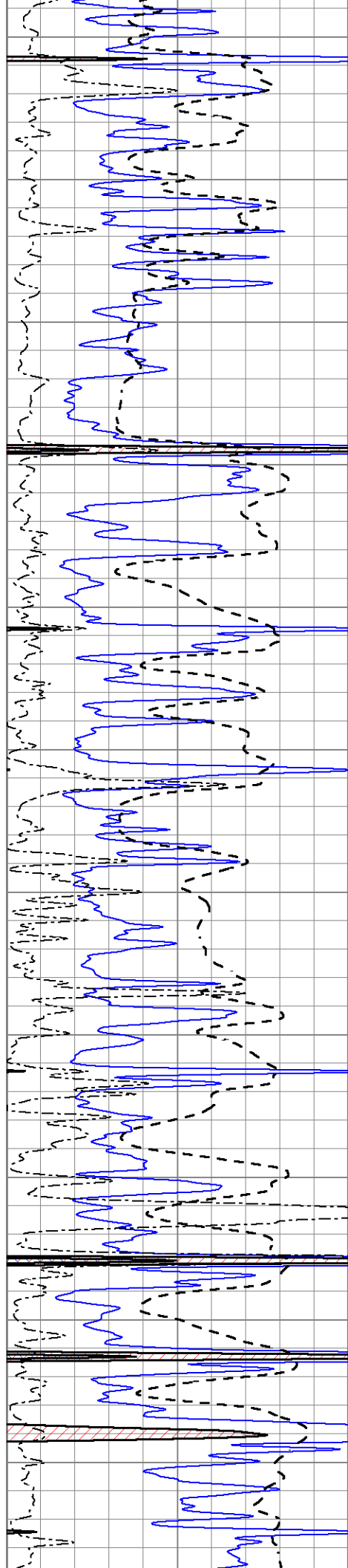
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3600

3650

3700





3750

3800

3850

3900

3950

4000

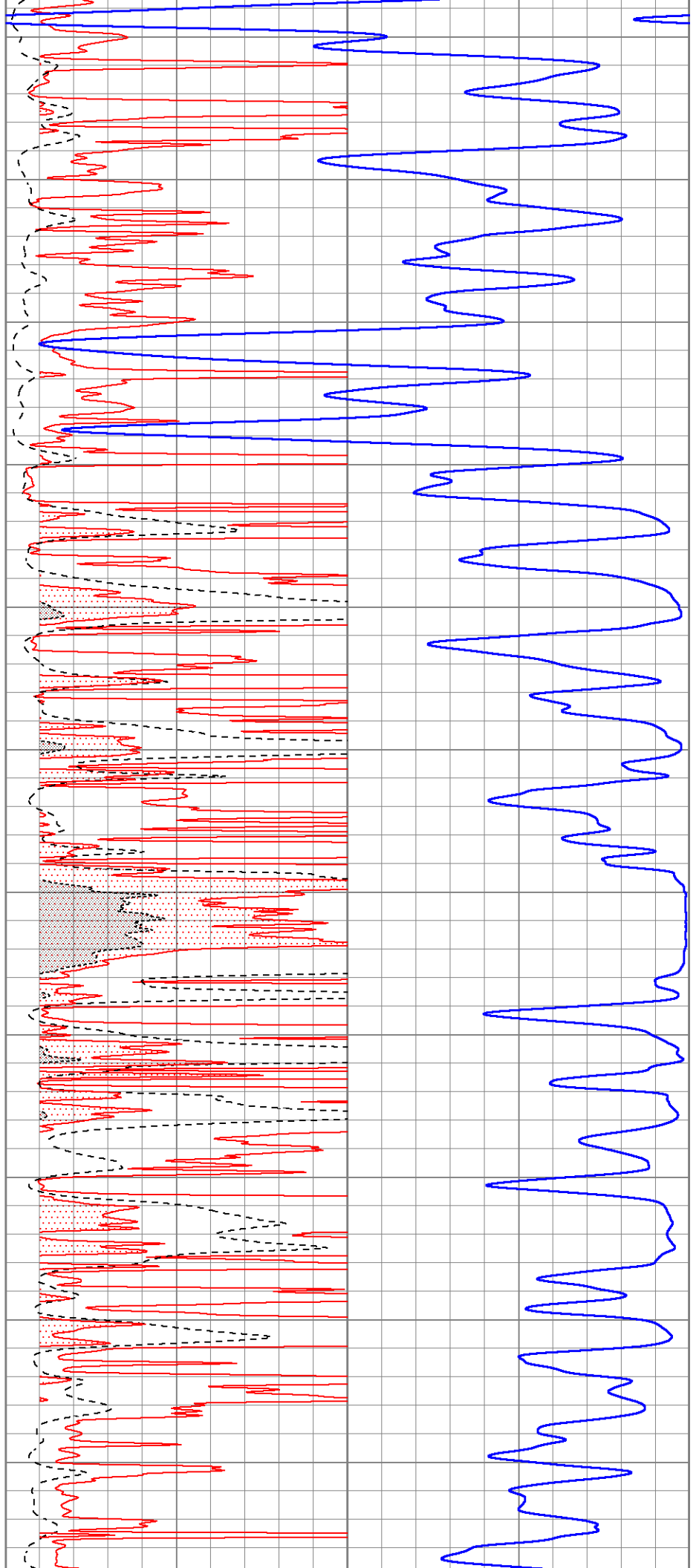
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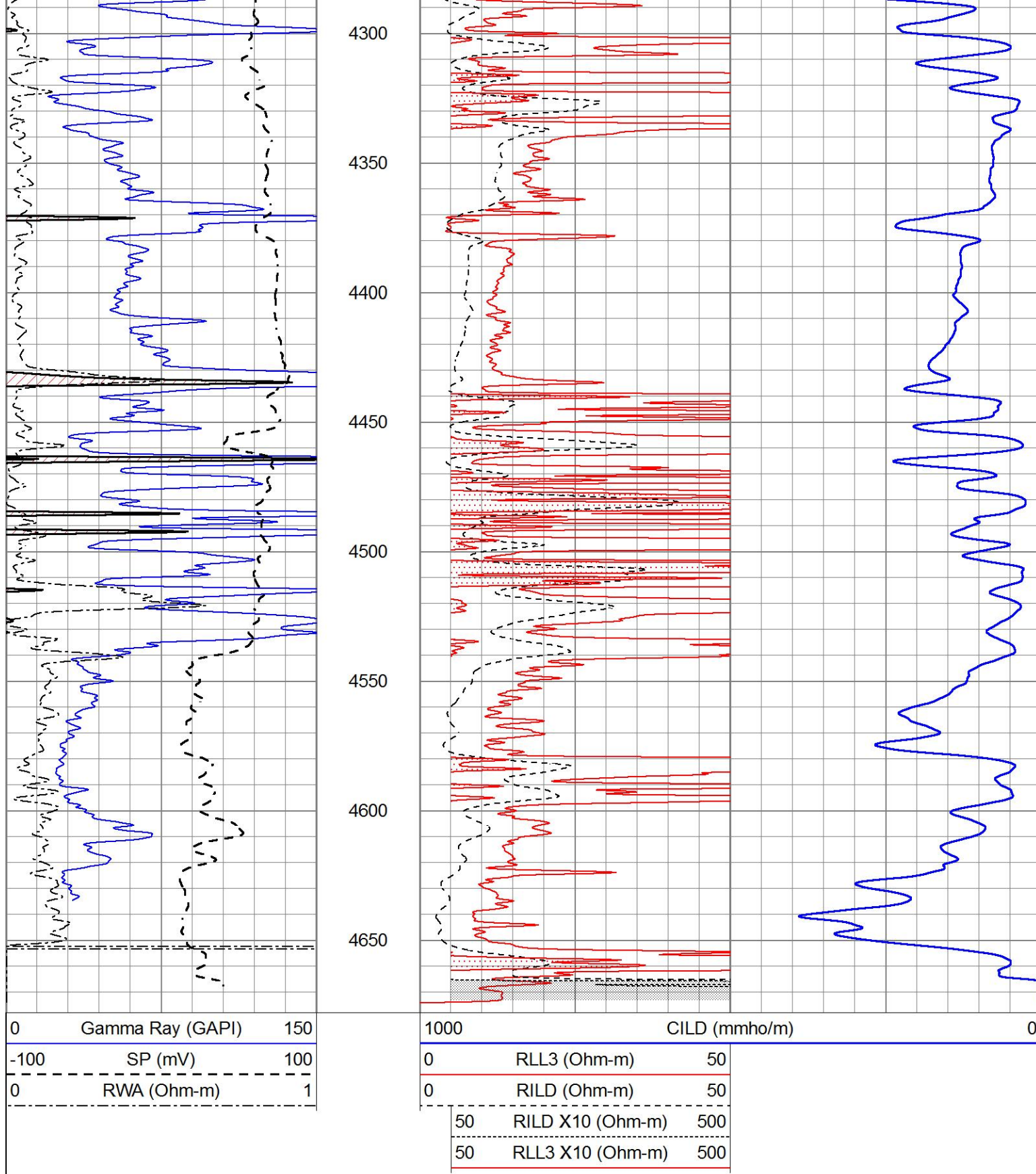
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4150

4200

4250

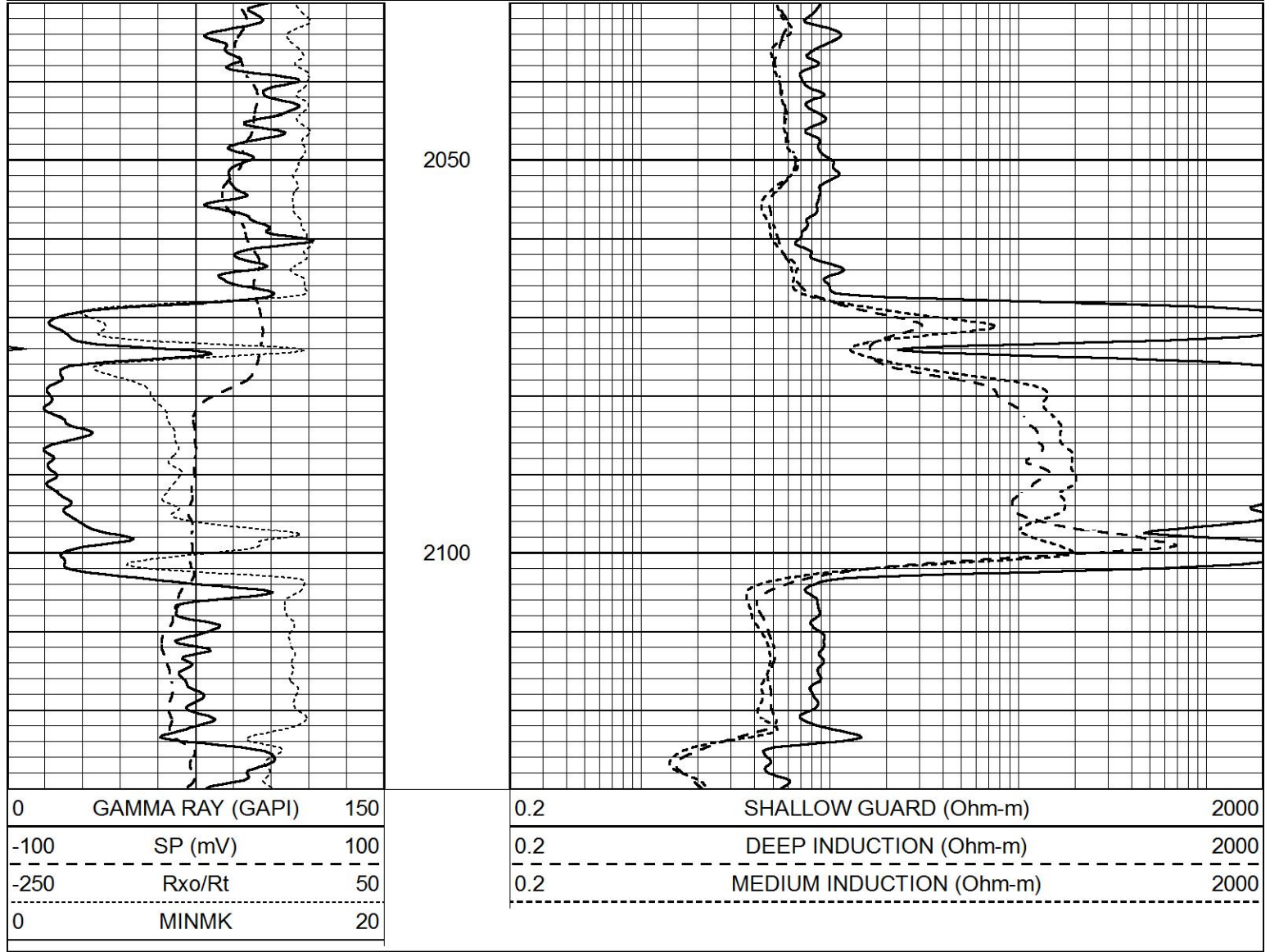




ANHYDRITE

Database File 5933pe.db
 Dataset Pathname pass3.1A
 Presentation Format _dil
 Dataset Creation Sun Jan 09 20:01:23 2022

Dataset Creation Charted by			Sun Jan 09 20:01:23 2022 Depth in Feet scaled 1:240		
0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-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			

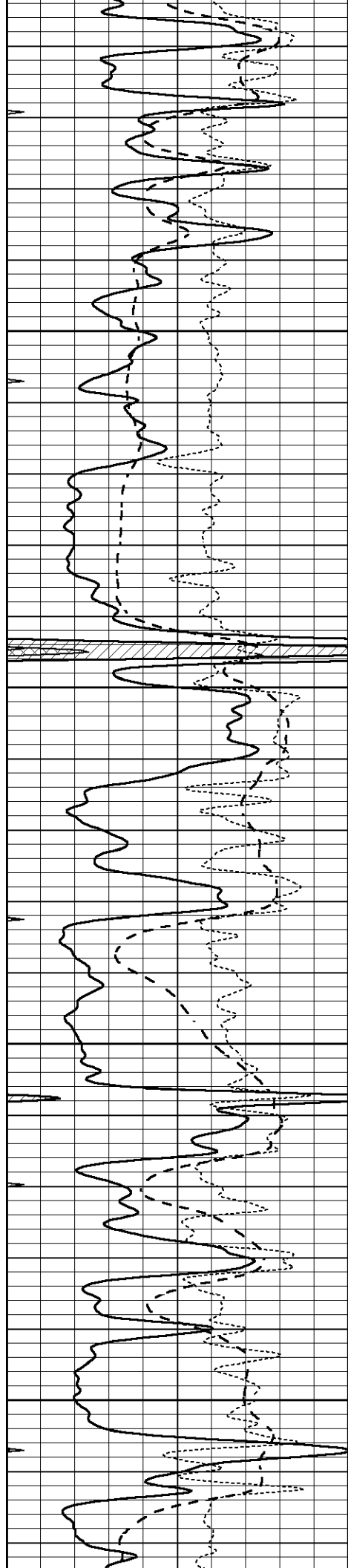


MAIN SECTION

Database File	5933pe.db
Dataset Pathname	pass3.1M
Presentation Format	_dil
Dataset Creation	Sun Jan 09 20:01:12 2022
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	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			



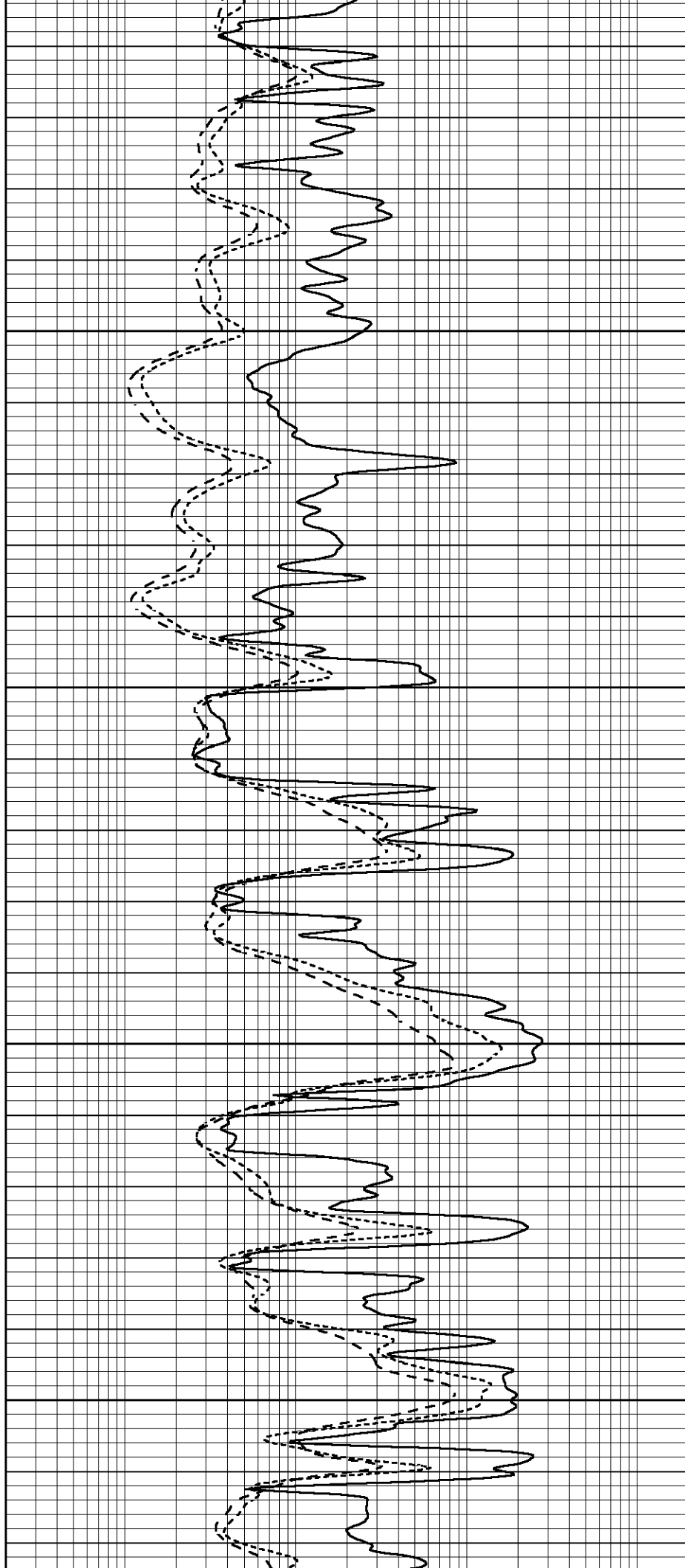


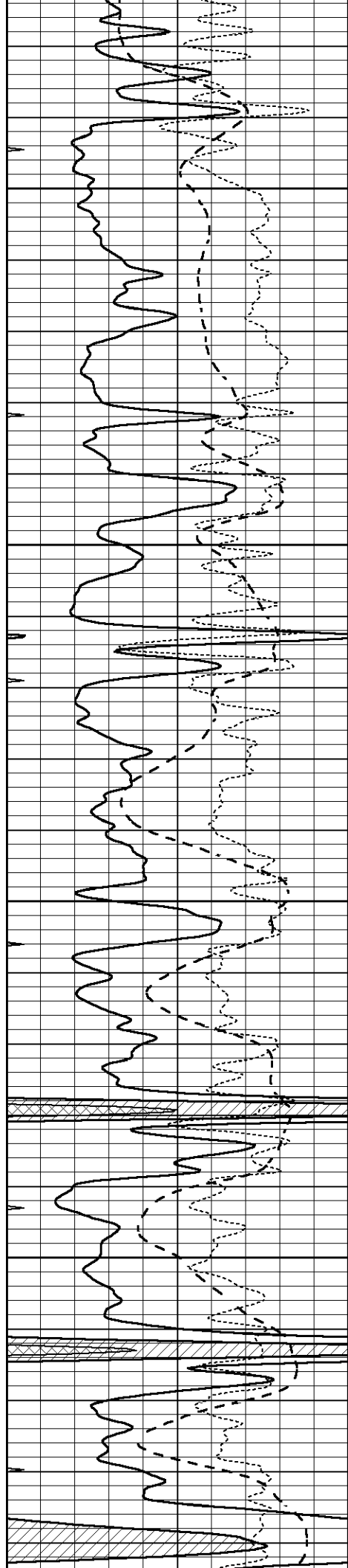
3850

3900

3950

4000



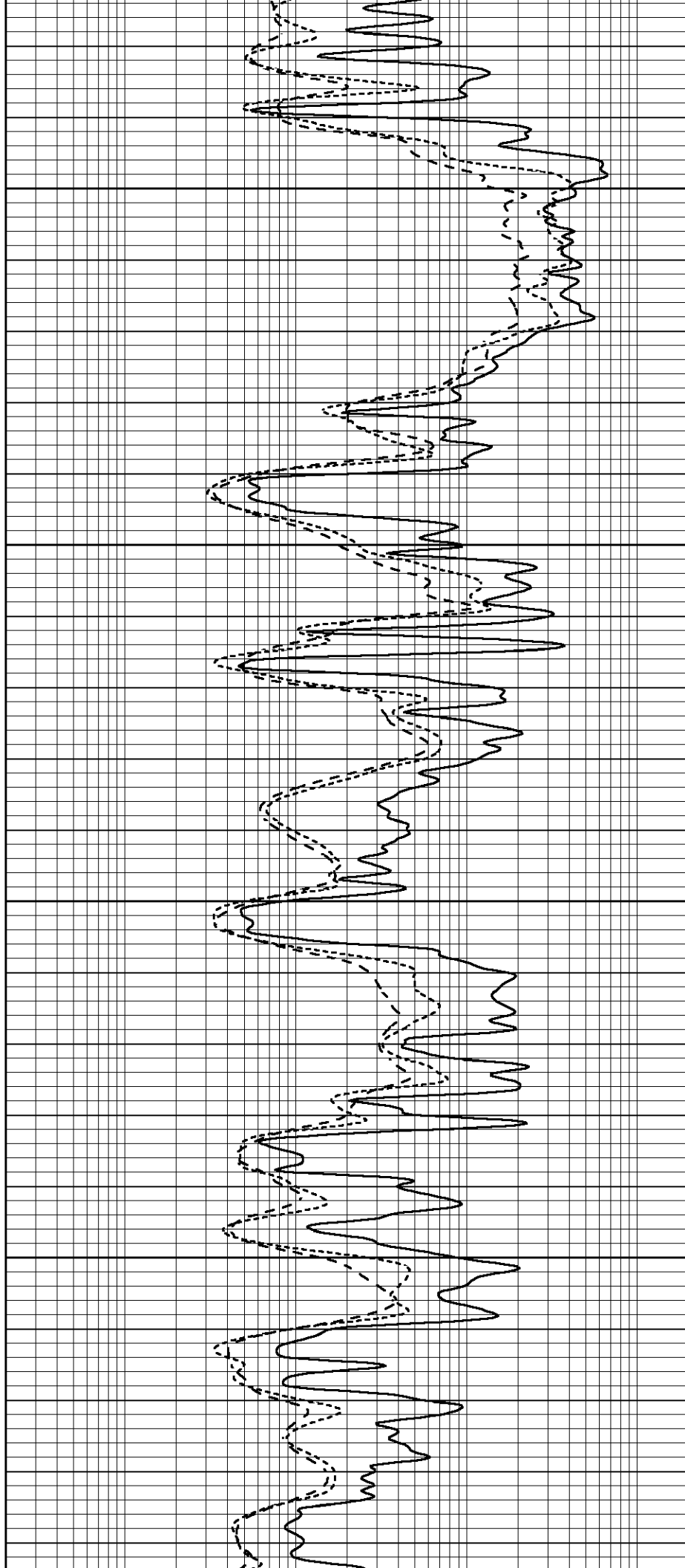


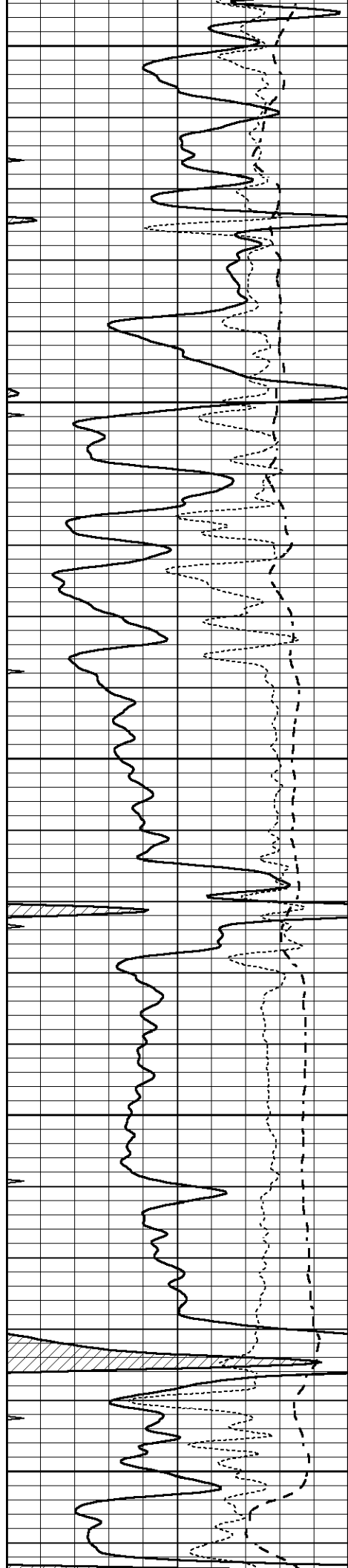
4050

4100

4150

4200





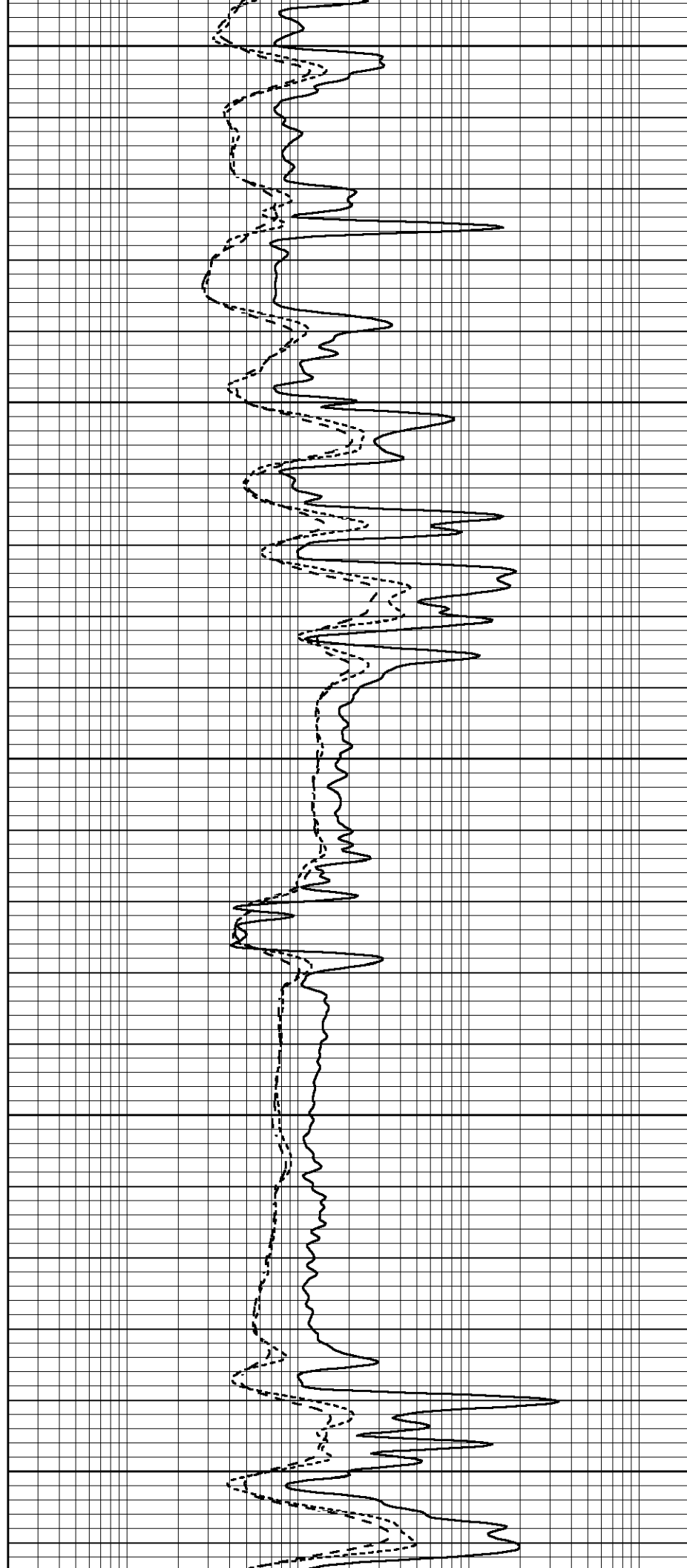
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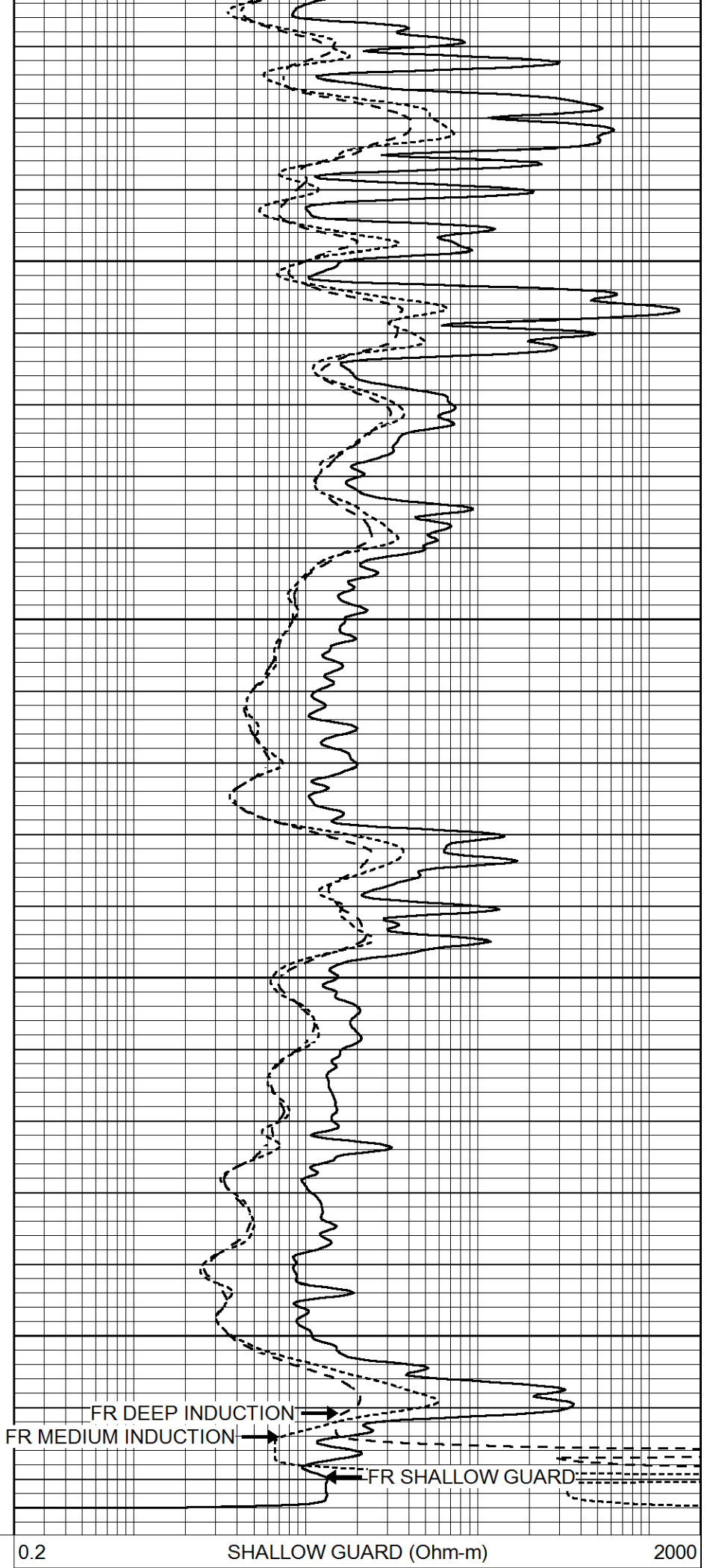
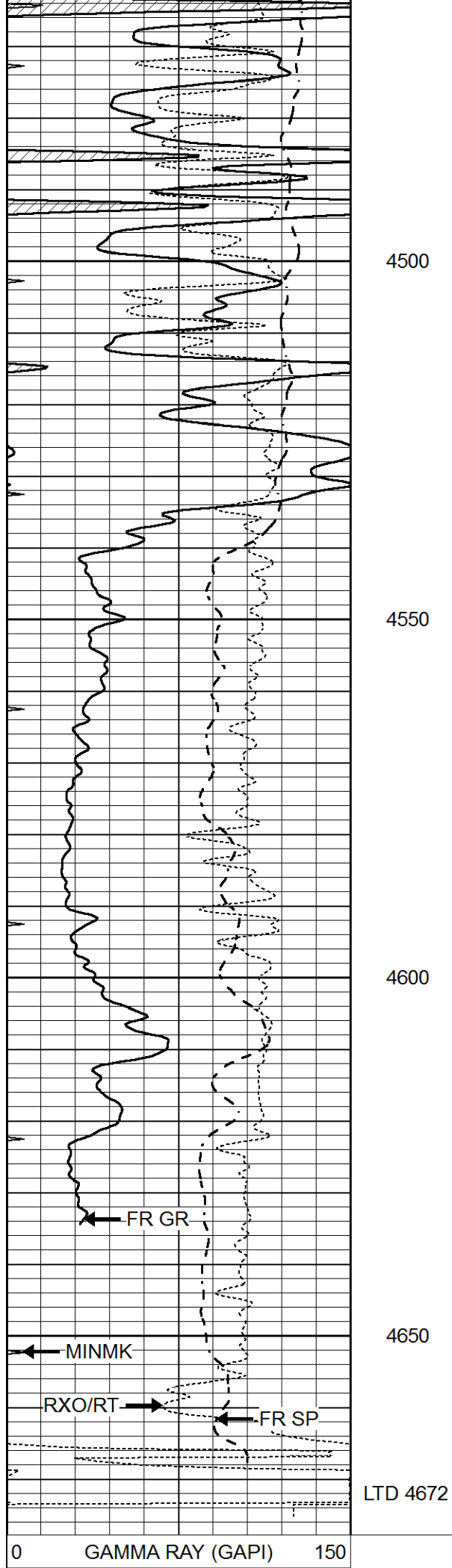
4300

4350

4400

4450





-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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

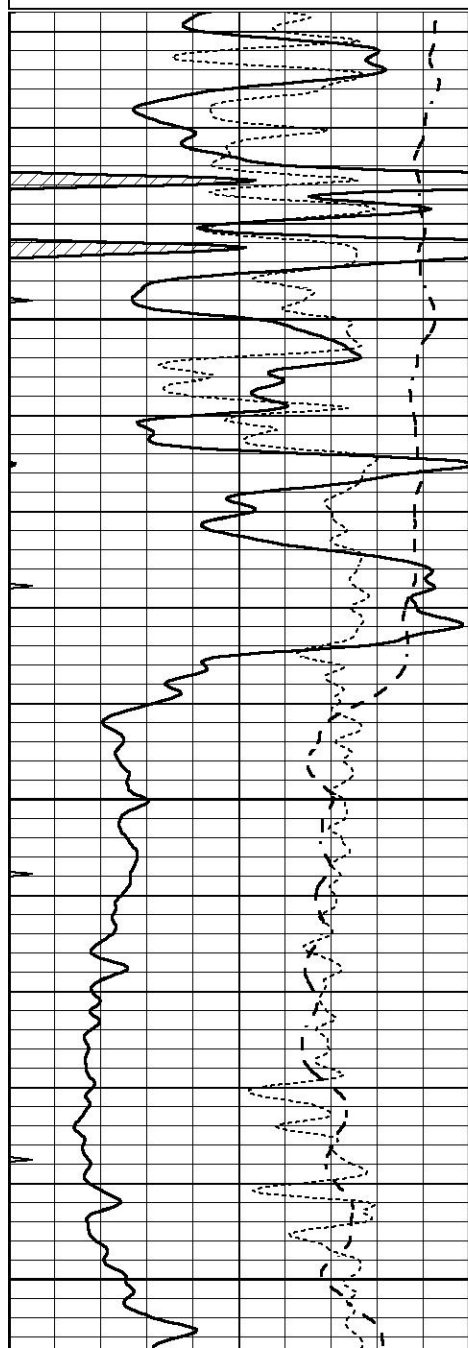


REPEAT SECTION

Database File 5933pe.db
 Dataset Pathname pass2.1R
 Presentation Format _dil
 Dataset Creation Sun Jan 09 20:11:04 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

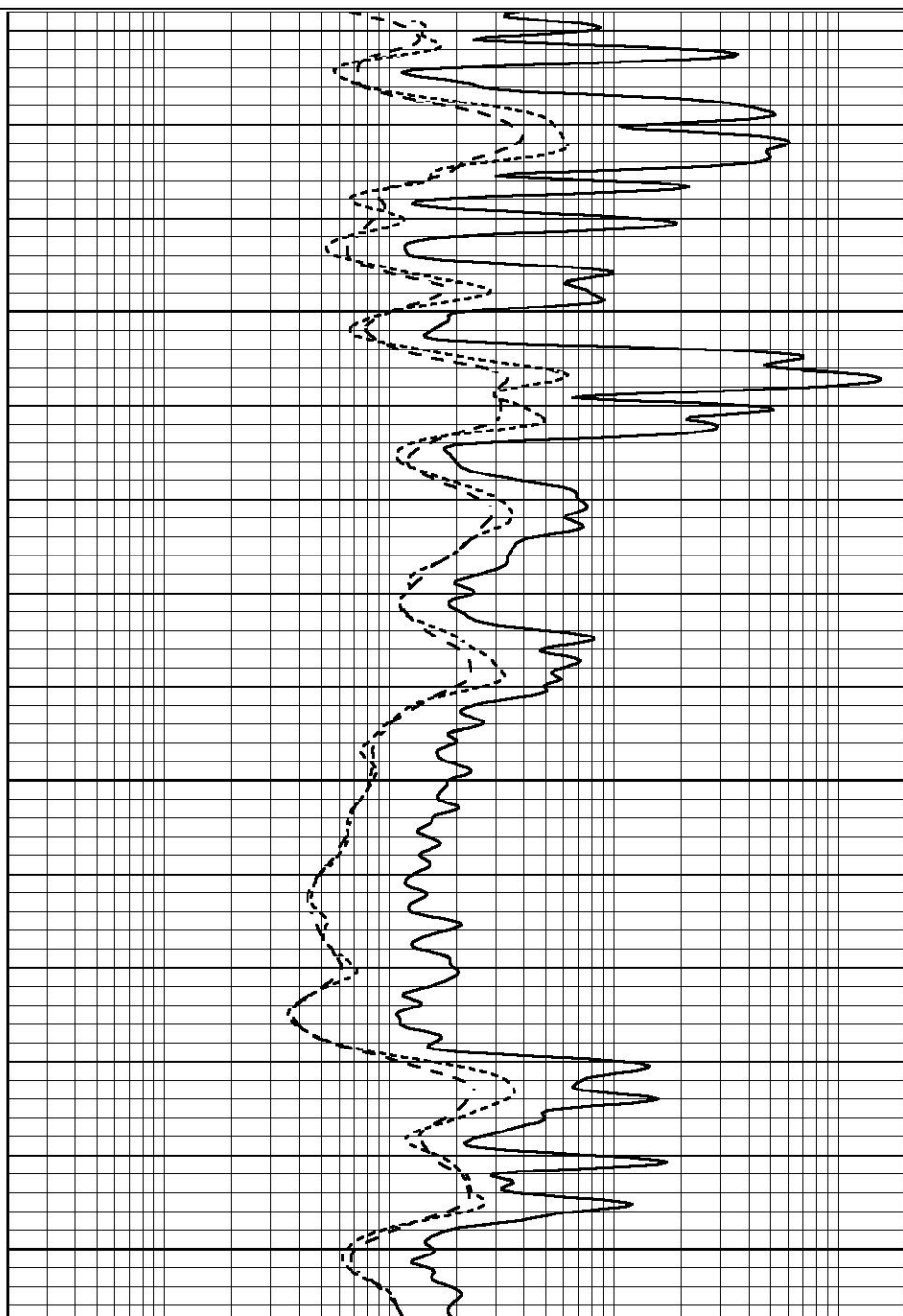
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

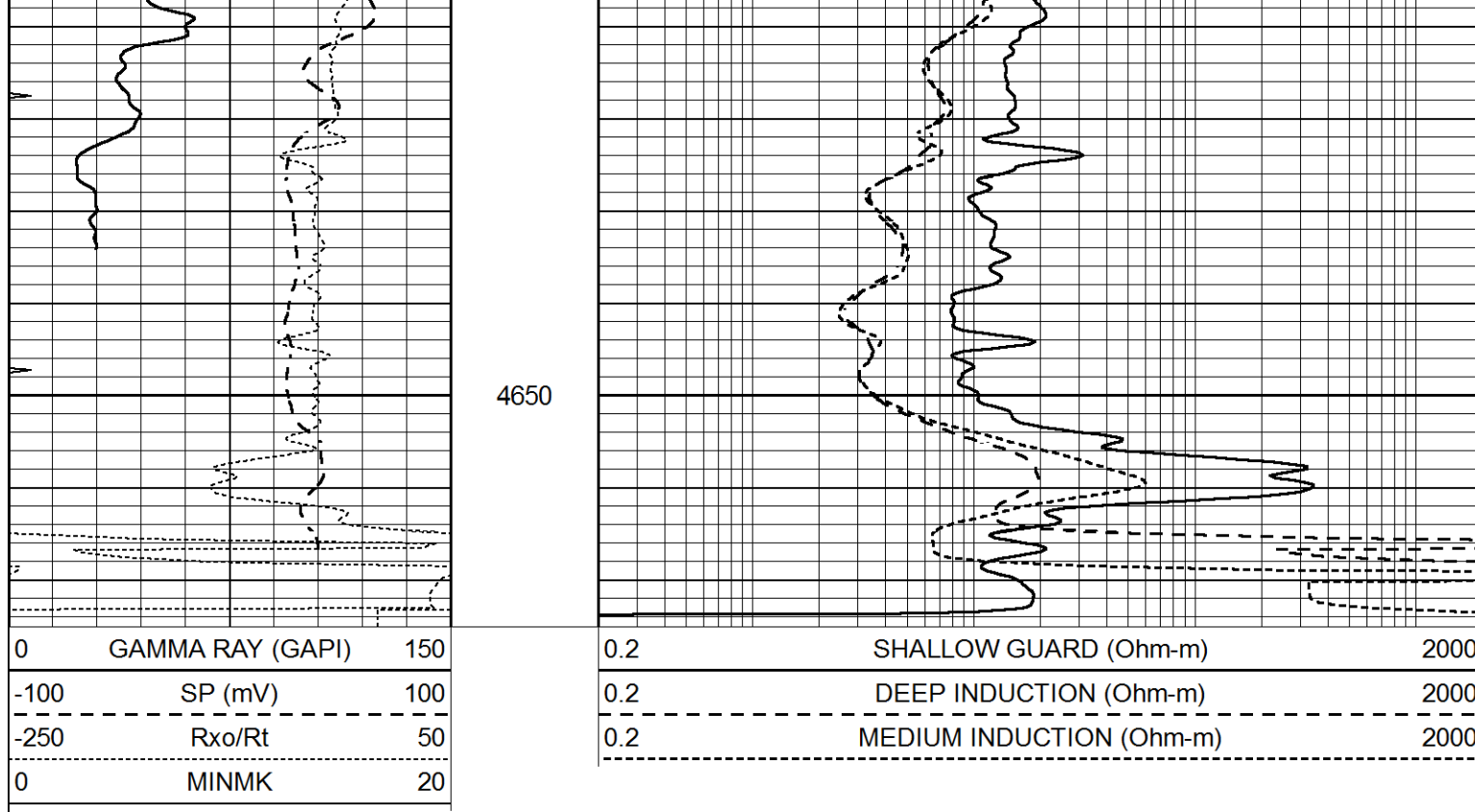


4500

4550

4600





Calibration Report									
Database File	5933pe.db								
Dataset Pathname	pass3.1M								
Dataset Creation	Sun Jan 09 20:01:12 2022								
Dual Induction Calibration Report									
Serial-Model:				DIL4-GEAR					
Surface Cal Performed:				Sun Jan 09 19:15:20 2022					
Downhole Cal Performed:				Tue Sep 25 17:01:29 2001					
After Survey Verification Performed:				Sat Jun 11 16:07:12 2005					
Surface Calibration									
		Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.008	0.666	V	0.000	400.000	mmho/m	580.000	-5.000	
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	-5.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365	
Medium	0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549	
Downhole Calibration									
		Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Medium	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Shallow	2.525	0.026	V	500.000	2.000	Ohm-m	250.000	-5.000	
After Survey Verification									
		Readings			Targets			Results	

Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000
Medium	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Litho Density Calibration Report Serial: 004 Model: PRB								
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Master Calibration			Performed Tue May 18 11:02:48 2021					
	Background	Magnesium		Aluminum		Aluminum+Fe		
Window 1	1187.1	10004.0		3142.5		2810.8		cps
Window 2	1084.9	8556.6		2749.3		2502.4		cps
Window 3	923.1	5129.8		1819.8		1719.3		cps
Window 4	263.5	263.6		259.7		262.8		cps
Long Space	0.0	7471.7		1664.4		1417.5		cps
Short Space	1.5	984.9		645.6		561.2		cps
Rho		1.7100		2.5900		0.0000		g/cc
Pe		2.0000		2.7500		5.7900		
Rib Angle	: 44.3	Rib Slope	: 0.976	Density/Spine Ratio			: 0.564	
Spine Angle	: 74.3	Spine Slope	: 3.555	Spine Intercept			: -15.6	

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					
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								
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Serial Number:			070808PMC					
Tool Model:			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:	070558		
Tool Model:	OPEN_GR		
Performed:	Wed Jan 05 15:49:21 2022		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.3000	GAPI/cps	