

DUAL INDUCTION LOG

Company	DOWNING-NELSON OIL COMPANY, INC.		
Well	HFI #5-27		
Field	HOUSE FARMS		
County	RAWLINS		
State	KANSAS		
Location:	API # : 15-153-21360-0000		Other Services
	2063 FNL & 802 FWL		CDL/CNL
	NW - SE - SW - NW		MEL
	SEC 27 TWP 04S RGE 36W		Elevation
Permanent Datum	GROUND LEVEL	Elevation	K.B. 3370
Log Measured From	KELLY BUSHING 11' A.G.L.		D.F. 3368
Drilling Measured From	KELLY BUSHING		G.L. 3359
Date	12/2/25		
Run Number	ONE		
Depth Driller	4860		
Depth Logger	4861		
Bottom Logged Interval	4859		
Top Log Interval	00		
Casing Driller	8.625 @480		
Casing Logger	480		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2.000 PPM	
Density / Viscosity	9.870		
pH / Fluid Loss	8.0/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.80 @ 88F		
Rmf @ Meas. Temp	1.35 @ 88F		
Rmc @ Meas. Temp	2.16 @ 88F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	1.28 @ 124F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	12:15 AM		
Maximum Recorded Temperature	124F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	COLE ROBBEN	TJ DREILING	
Witnessed By	MARC DOWNING		

<<< Fold Here >>>

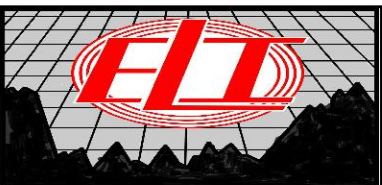
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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:

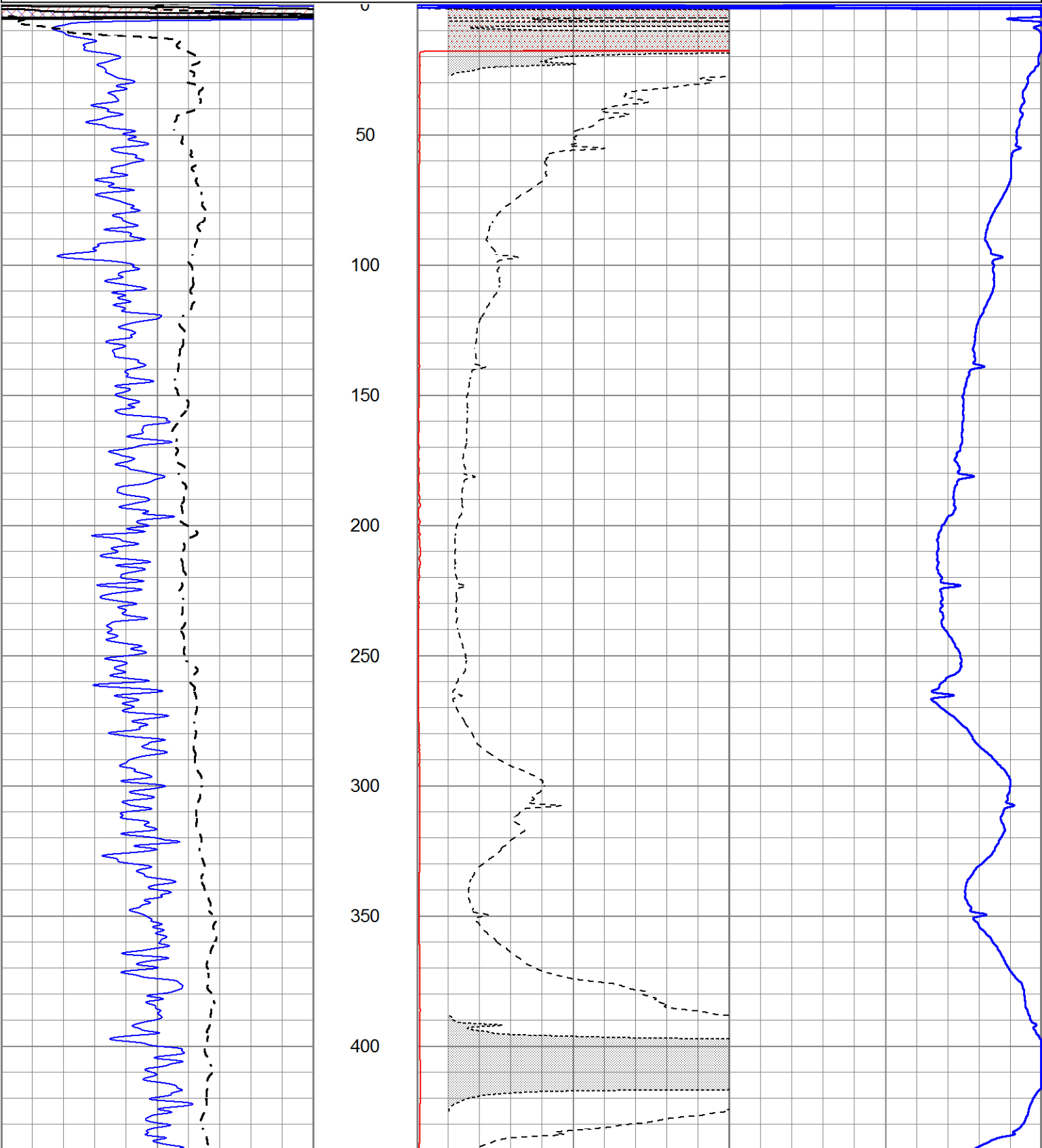
FROM BREWSTER, KANSAS - NORTH 25 MILES ON ROAD 2 TO COUNTY ROAD 'H', 1 MILE EAST, NORTH INTO

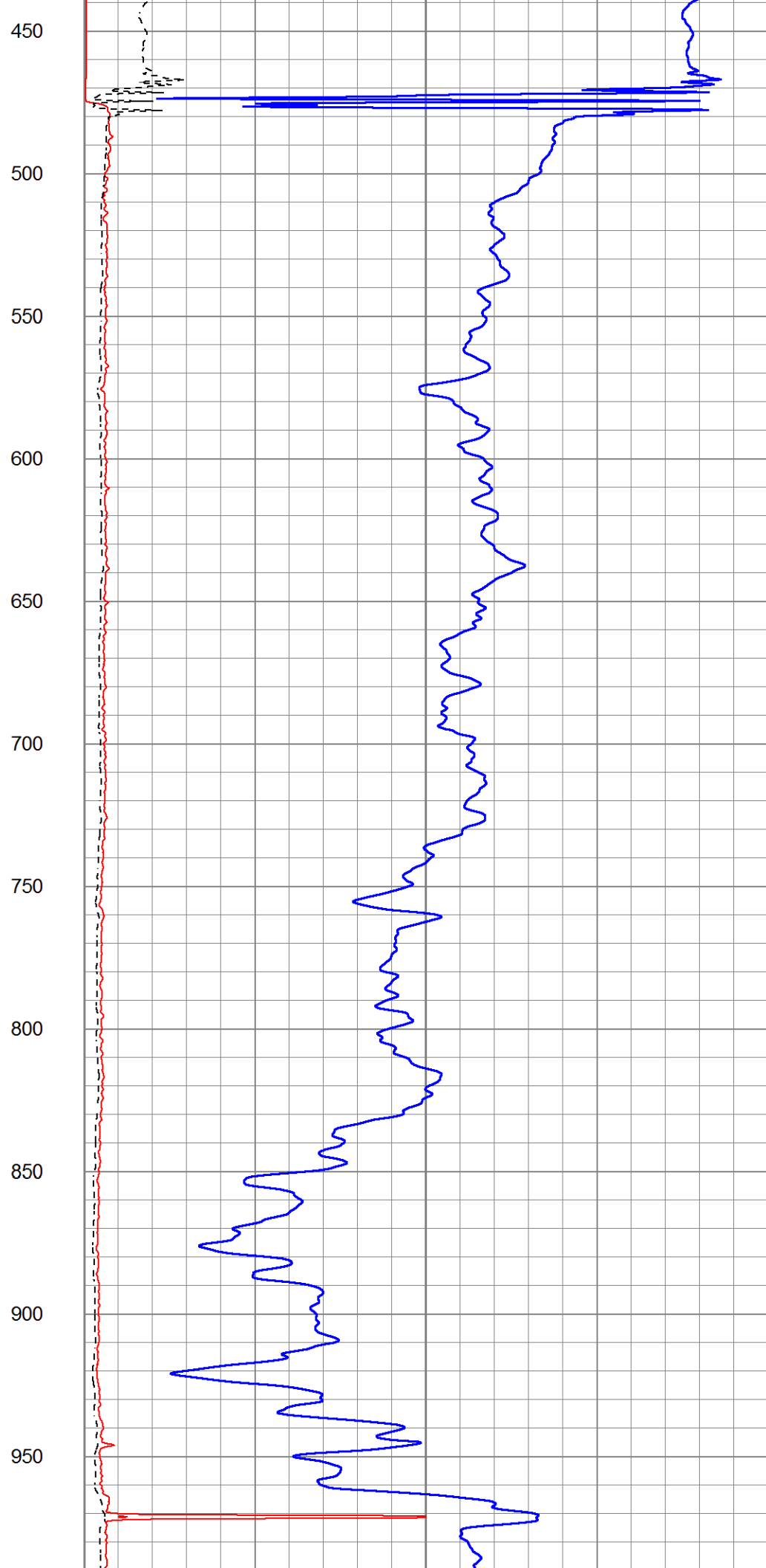
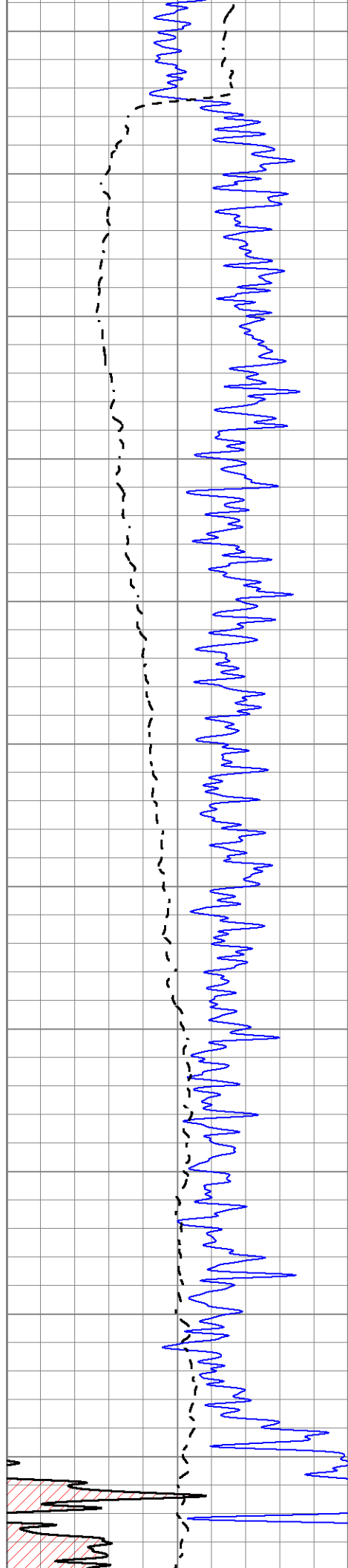


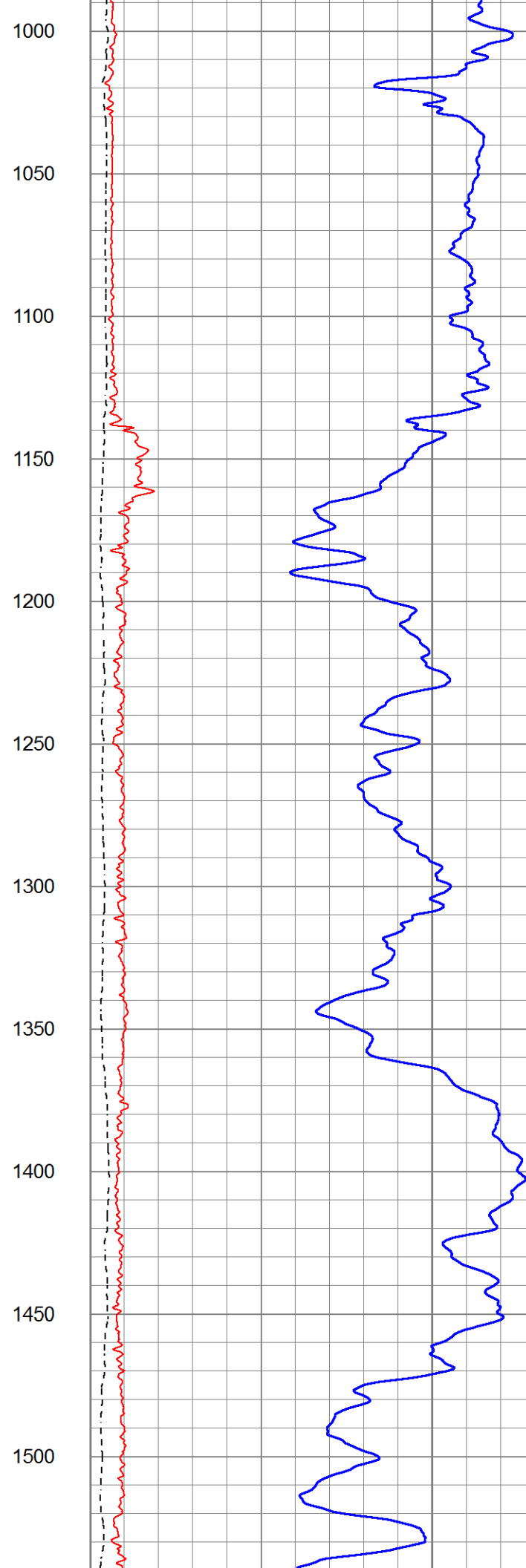
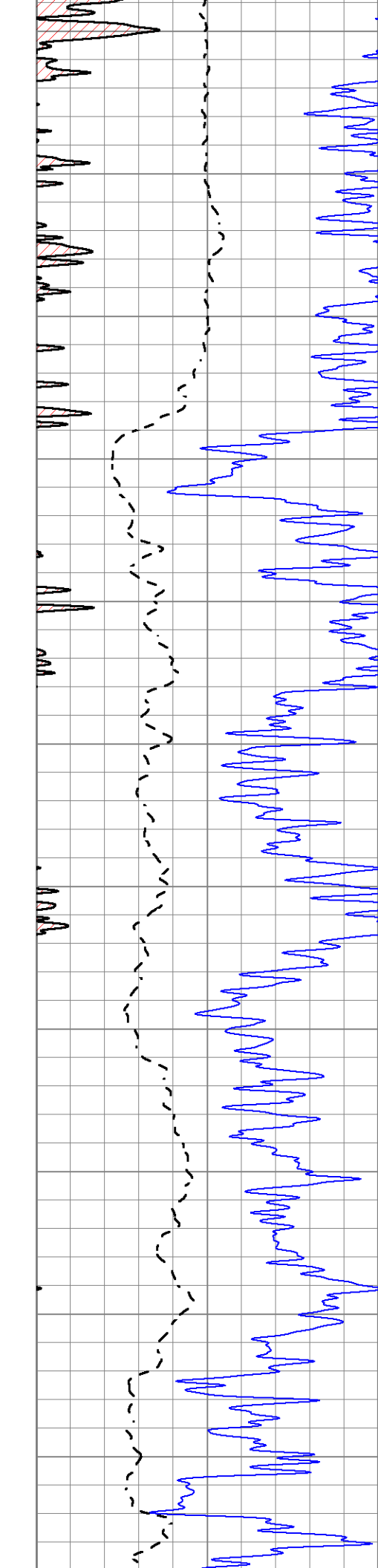
MAIN SECTION

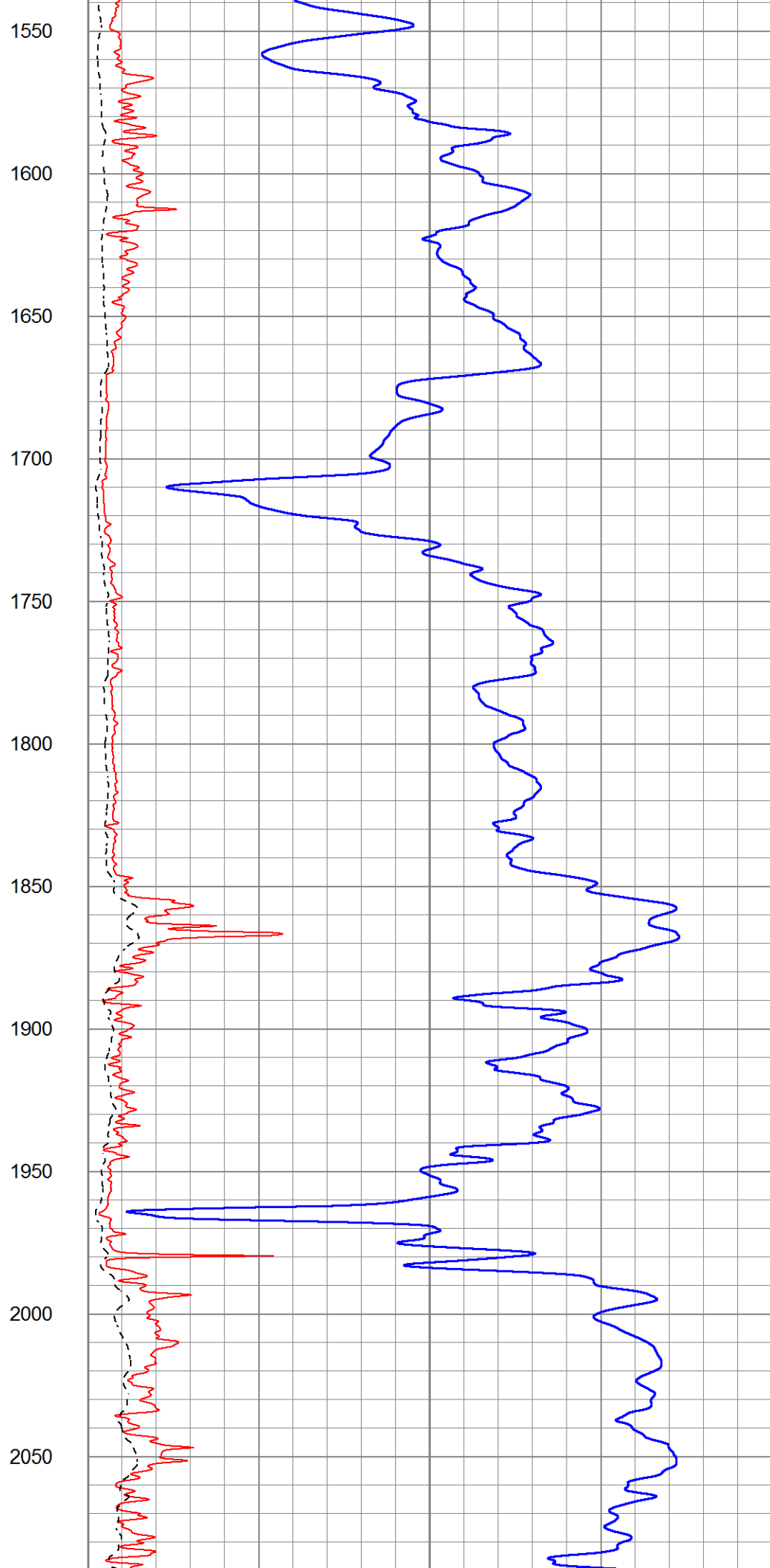
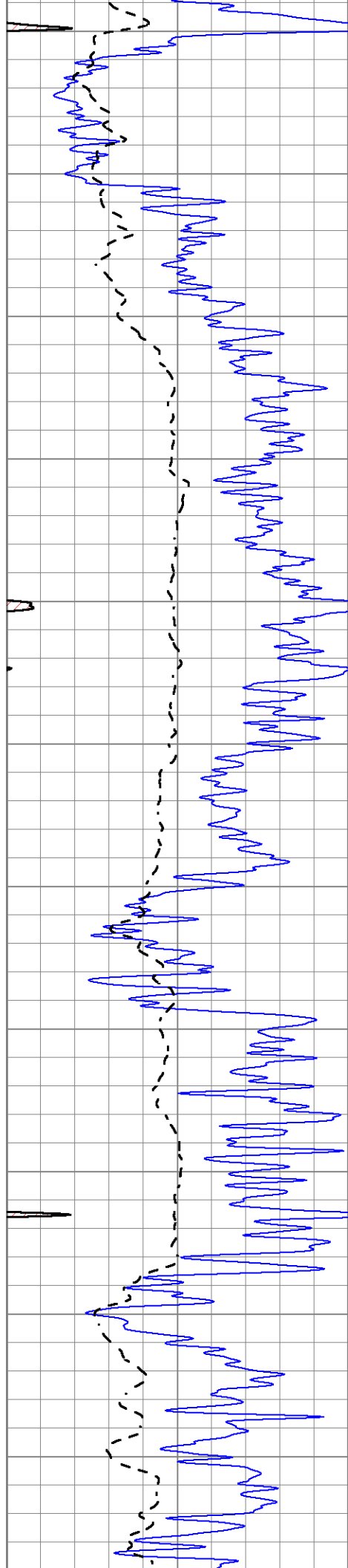
Database File	9739ddn.db
Dataset Pathname	pass3.T
Presentation Format	_dil2
Dataset Creation	Tue Dec 02 02:41:45 2025
Charted by	Depth in Feet scaled 1:600

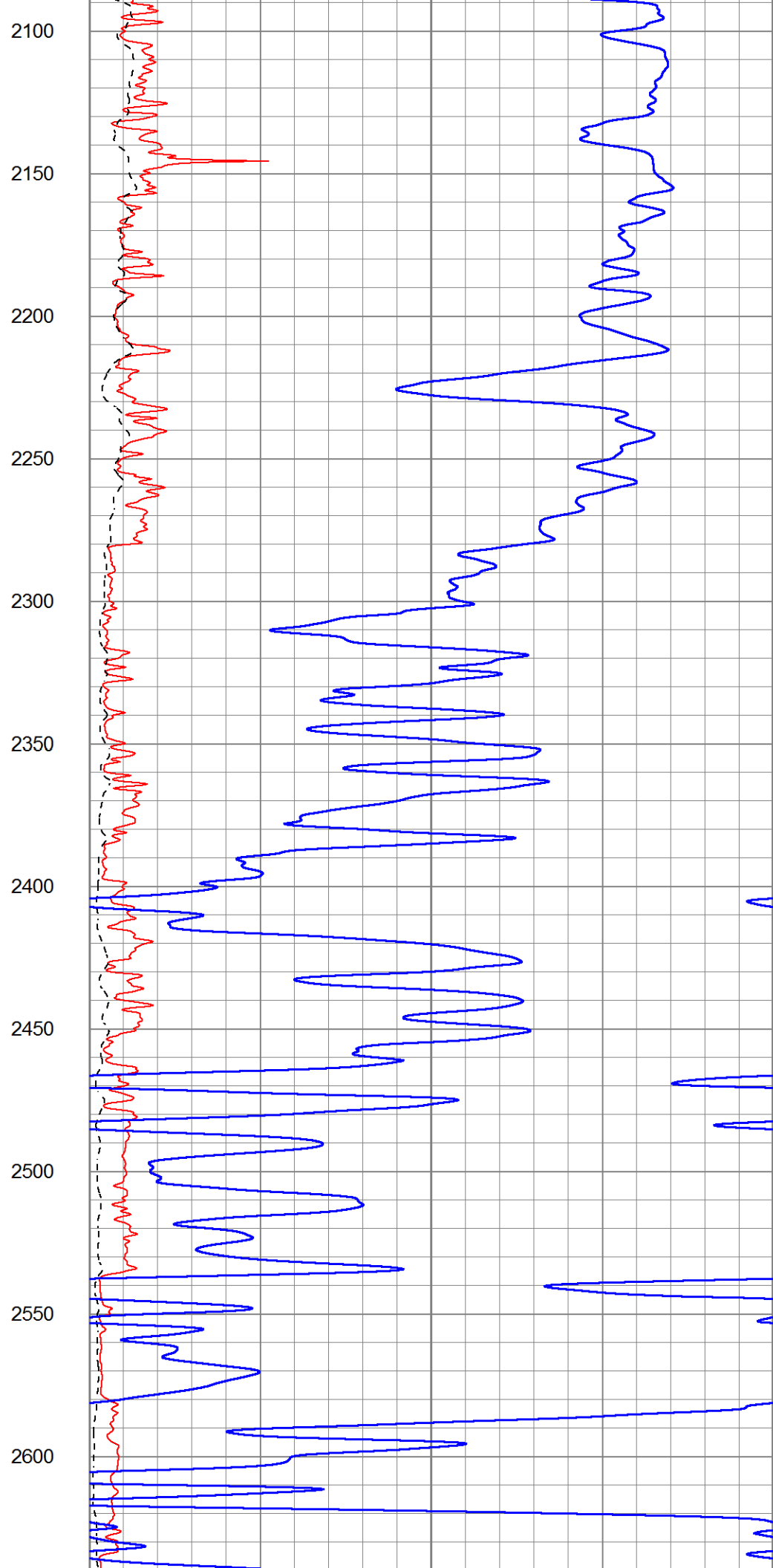
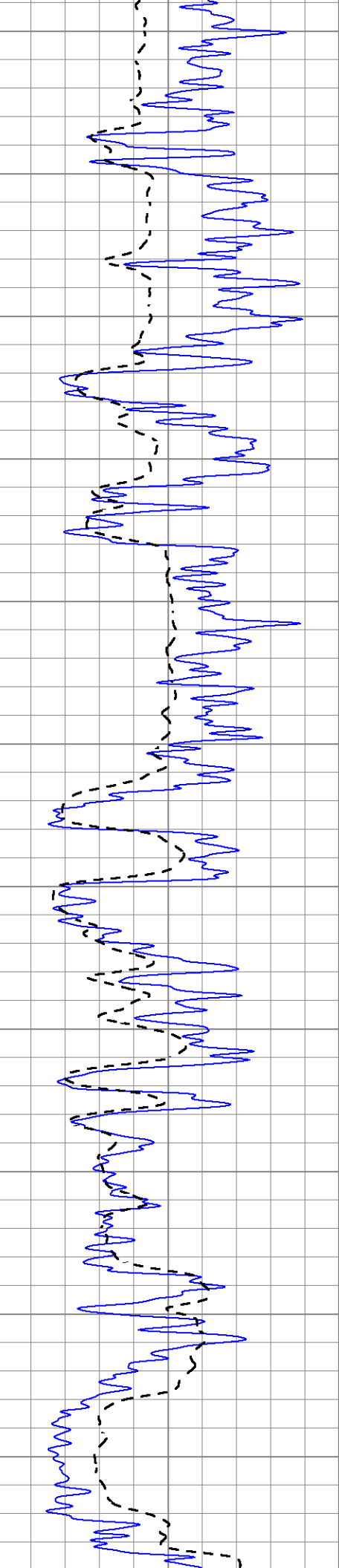
0	Gamma Ray (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
-----			0	Deep Induction (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

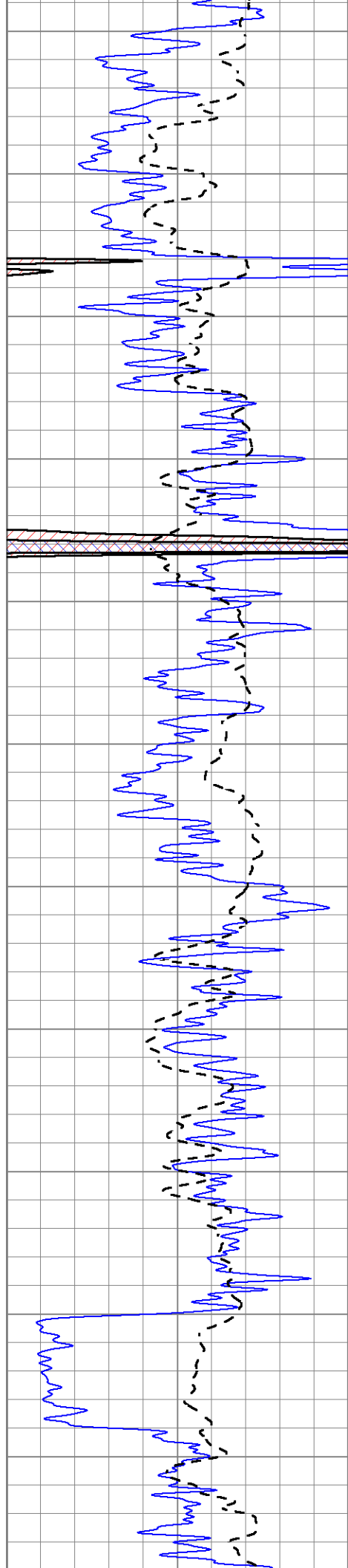












2650

2700

2750

2800

2850

2900

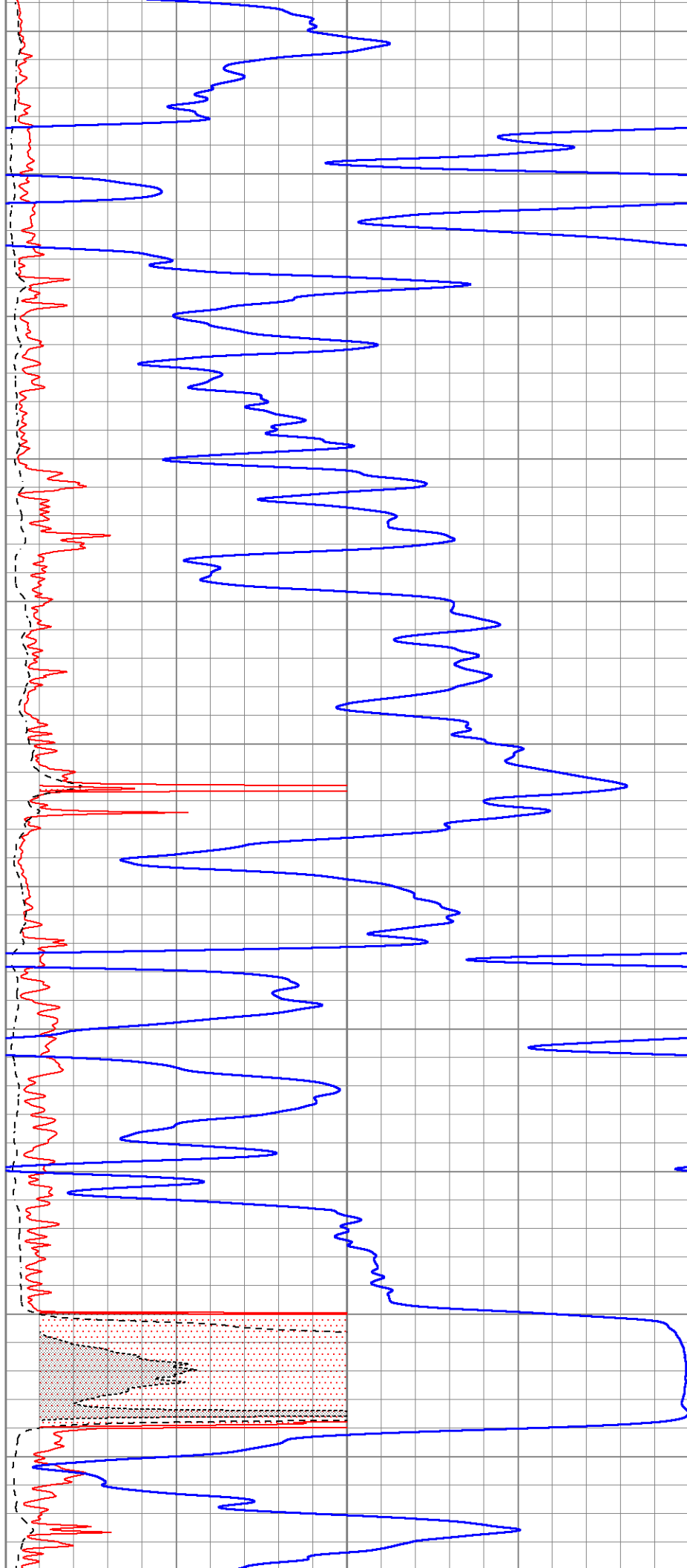
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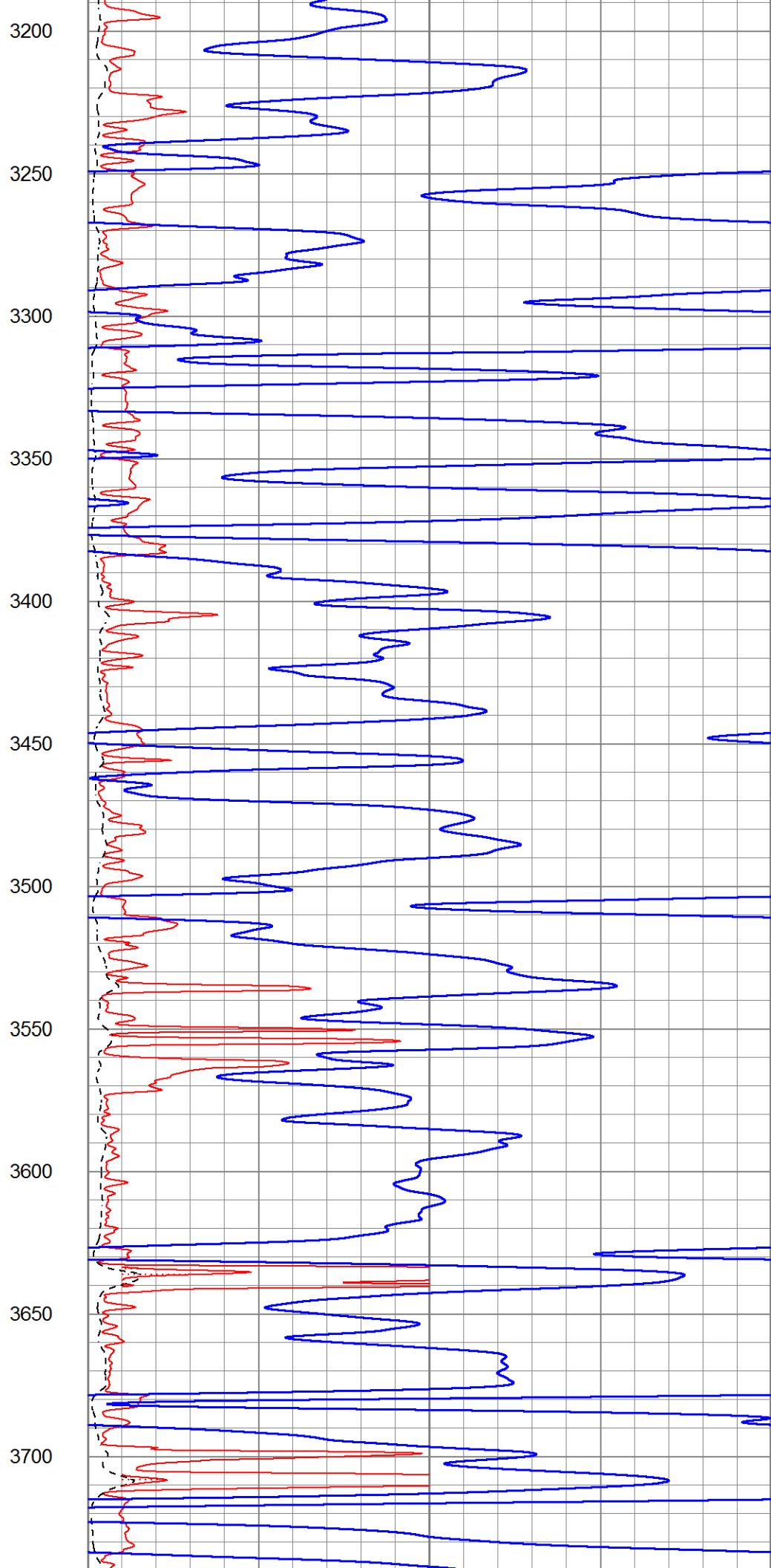
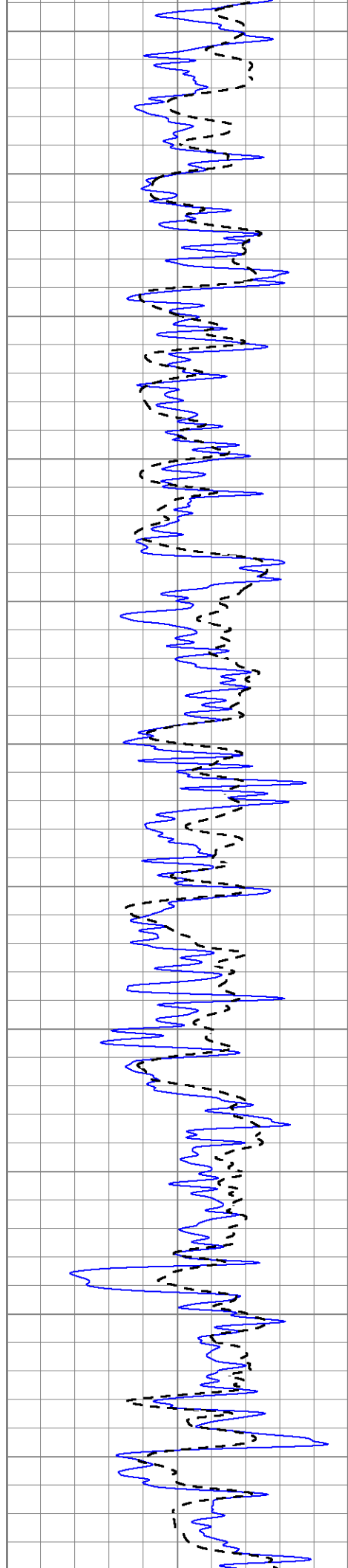
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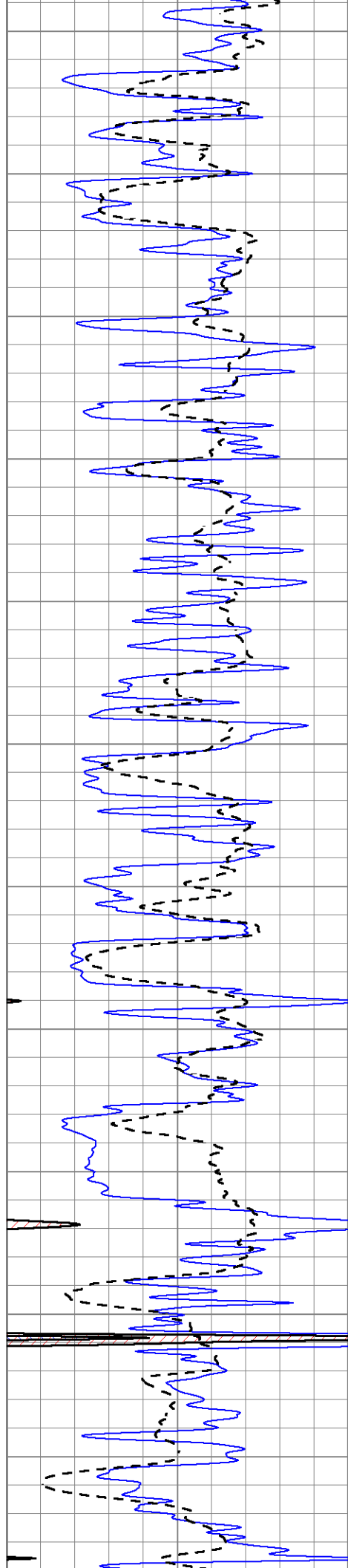
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3100

3150







3750

3800

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4000

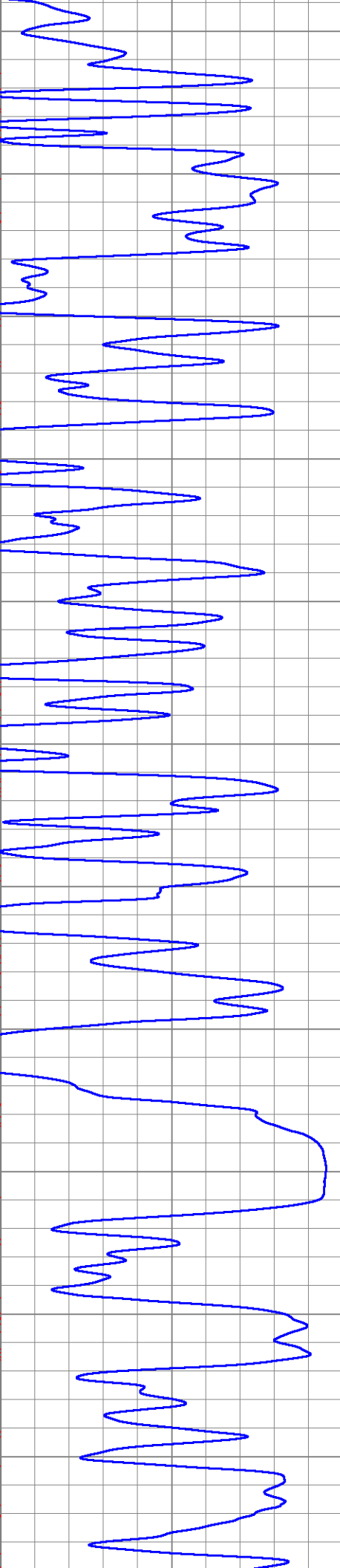
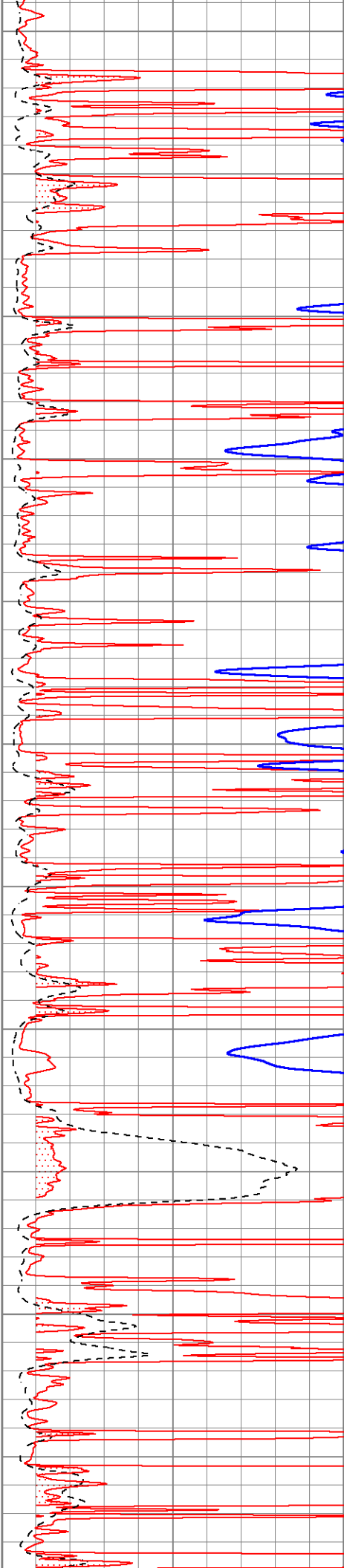
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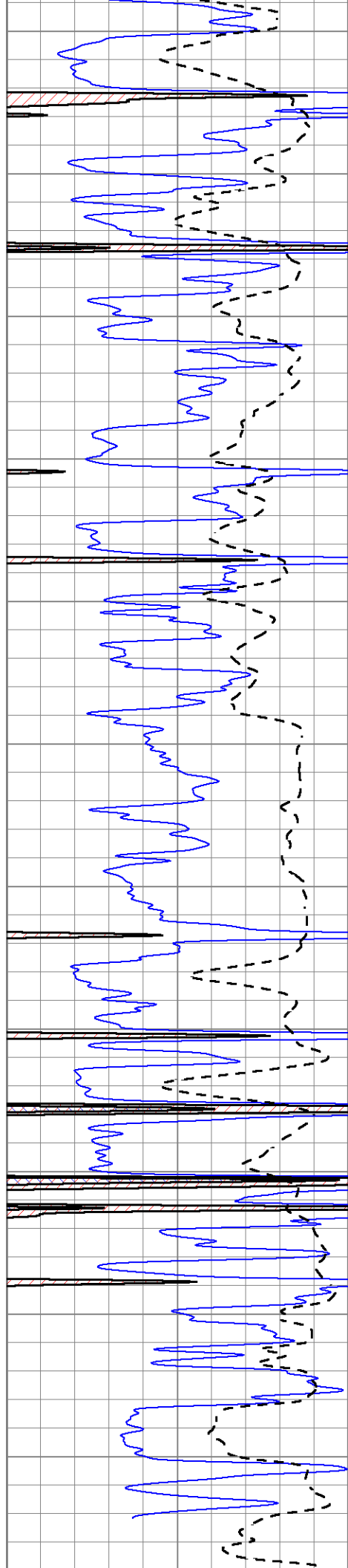
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4150

4200

4250





4300

4350

4400

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4500

4550

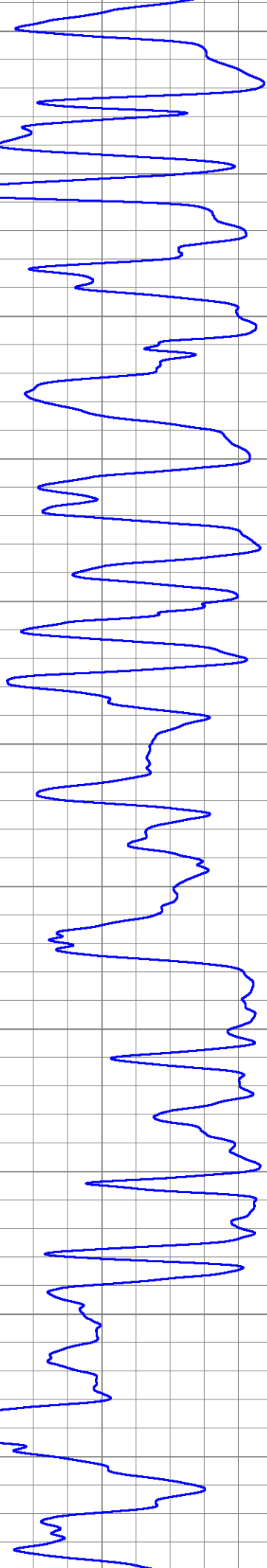
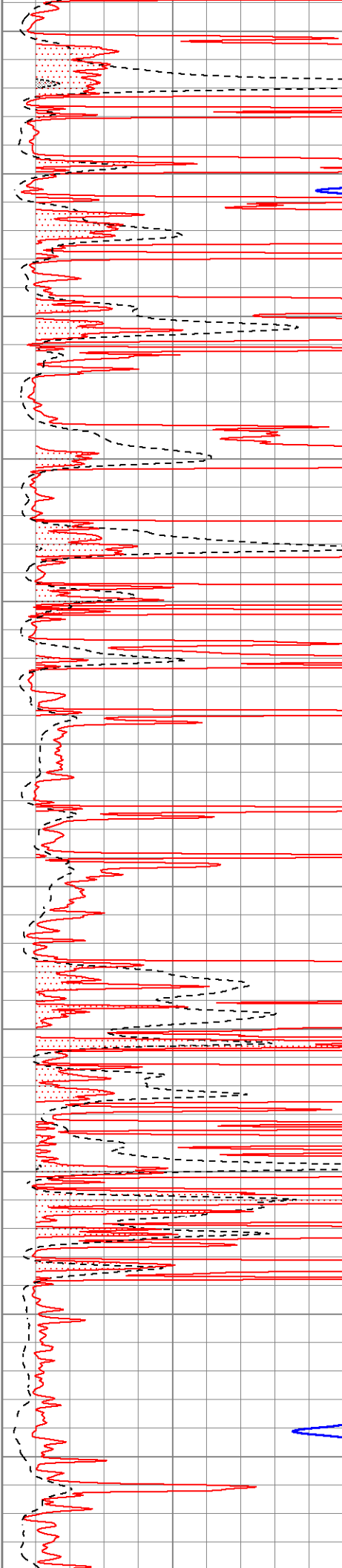
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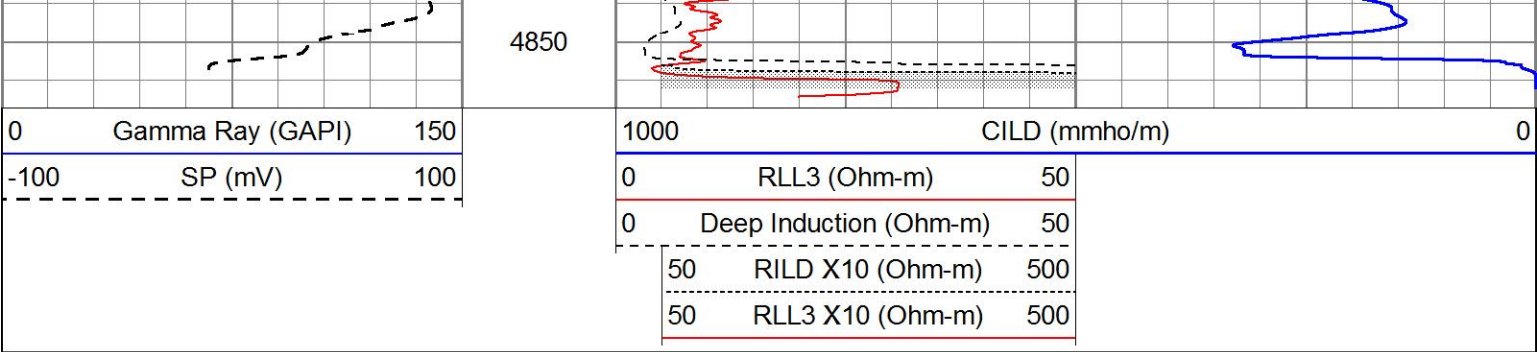
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4700

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4800

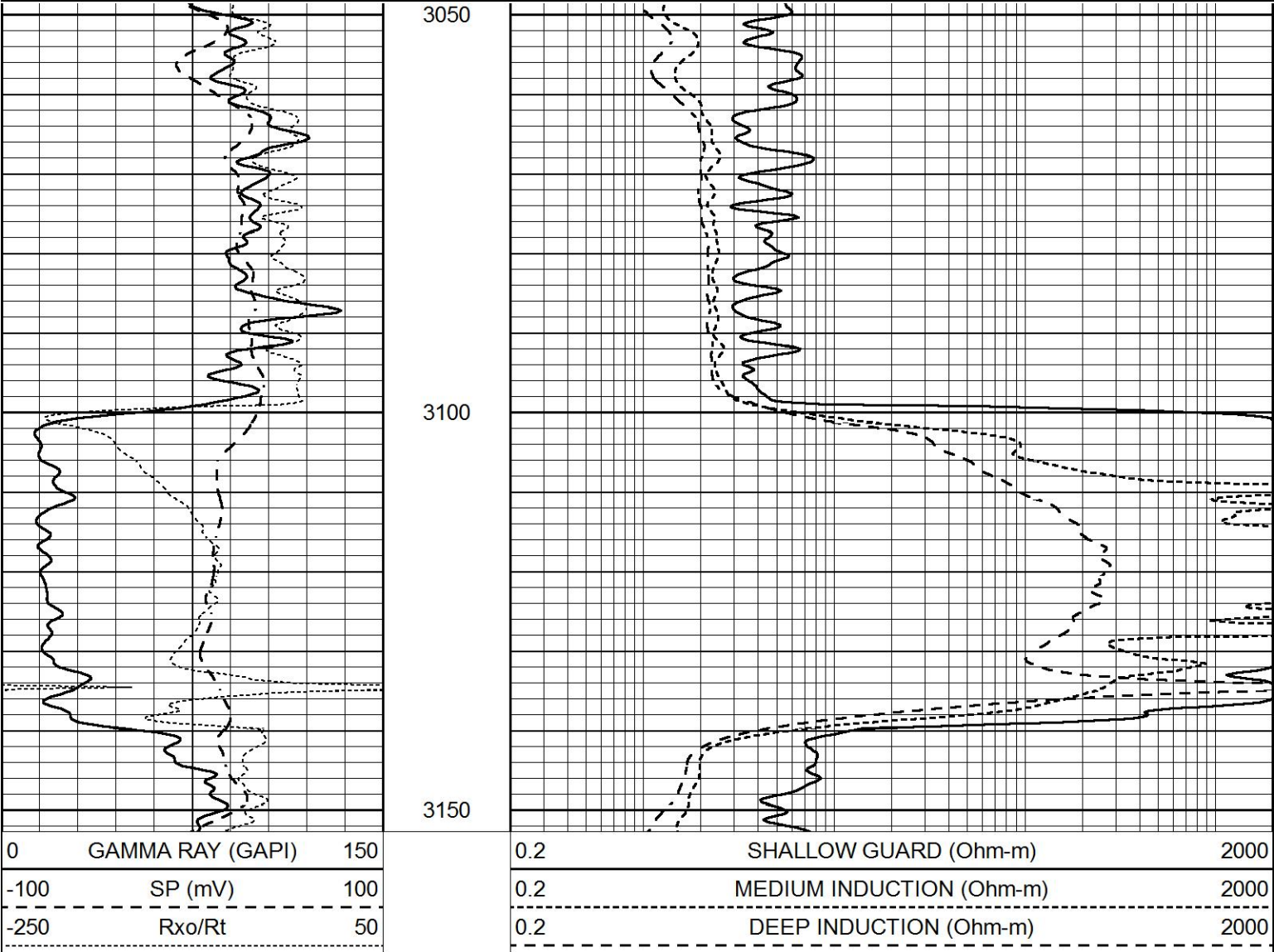




ANHYDRITE

Database File 9739ddn.db
Dataset Pathname pass3.A
Presentation Format _dil
Dataset Creation Tue Dec 02 01:37:42 2025
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

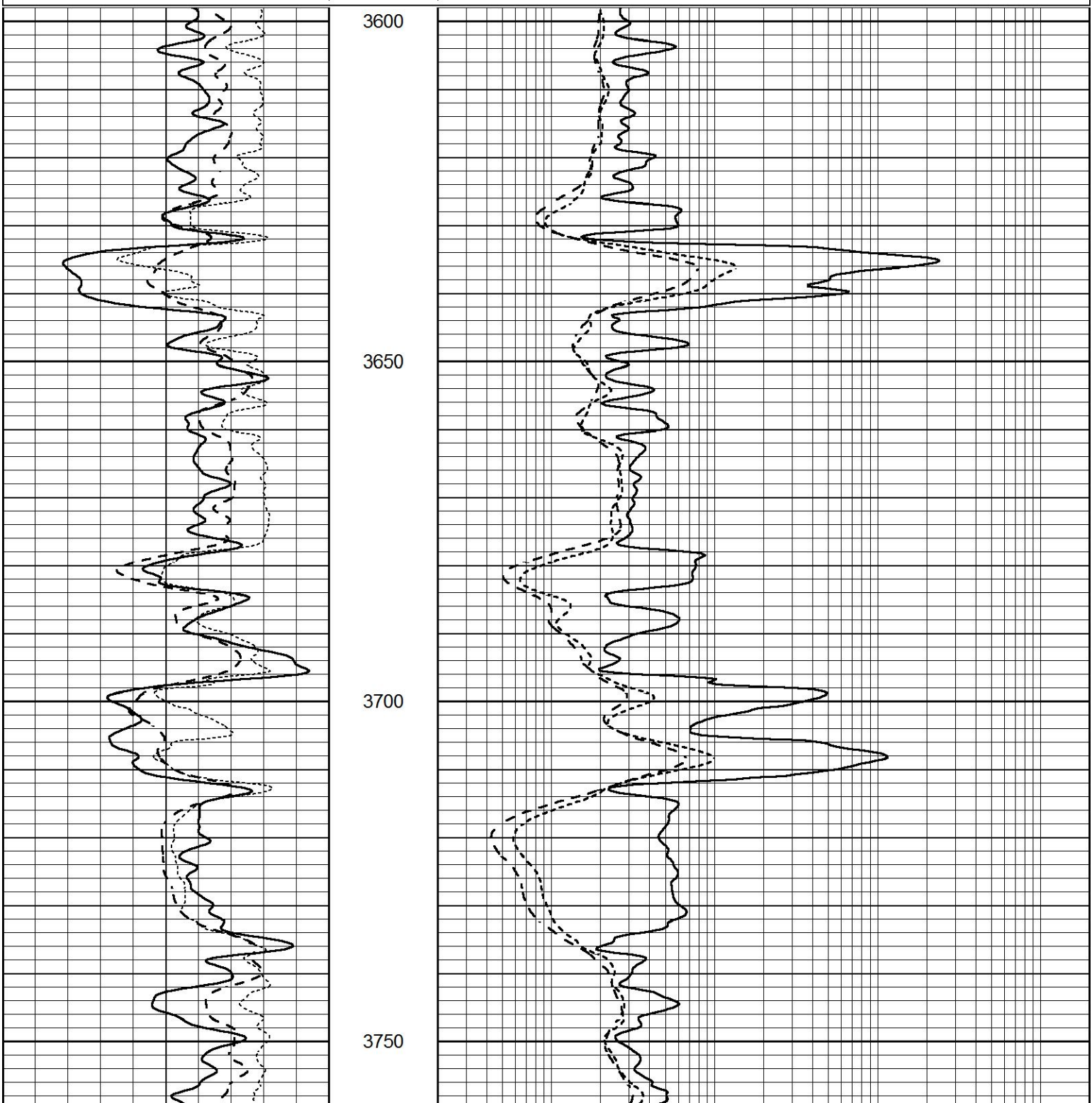


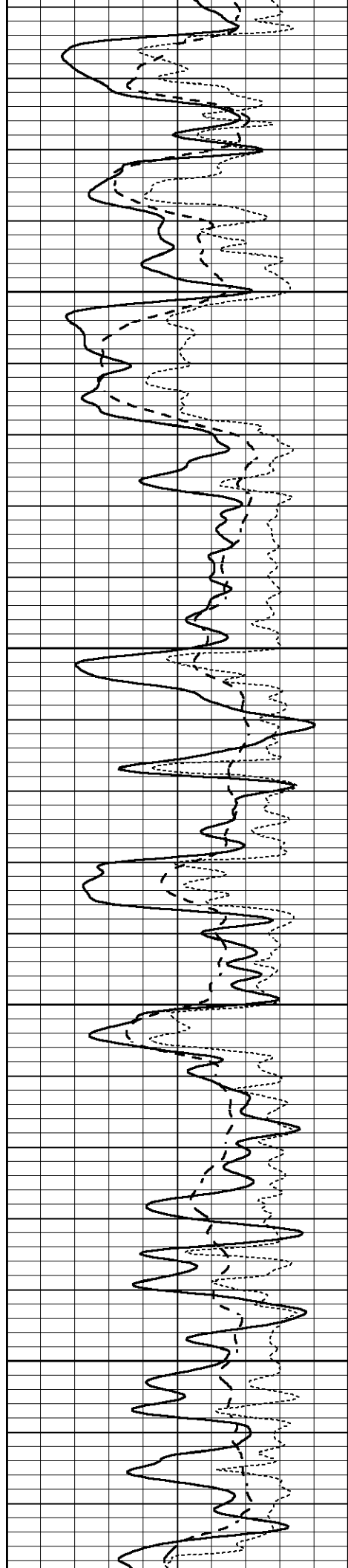


MAIN SECTION

Database File 9739ddn.db
Dataset Pathname pass3.T
Presentation Format _dil
Dataset Creation Tue Dec 02 02:41:45 2025
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



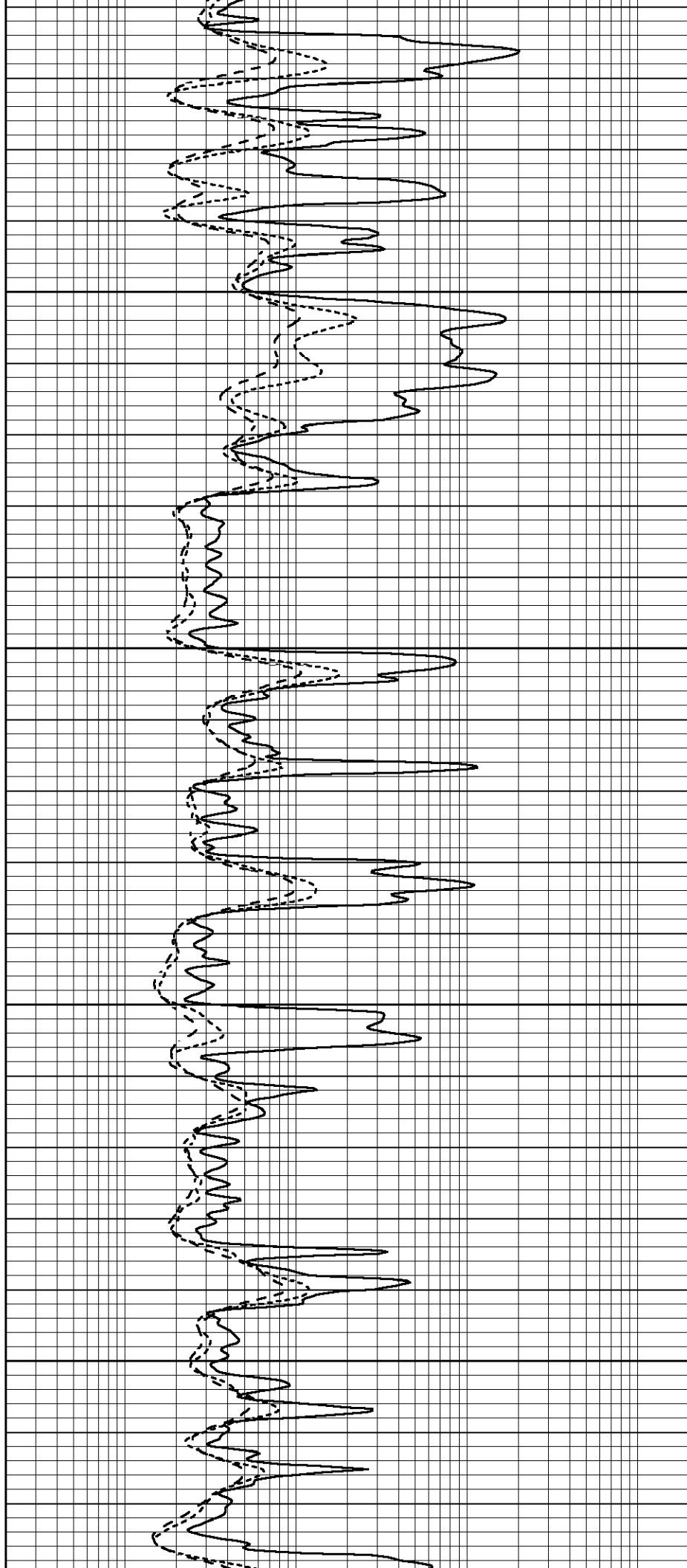


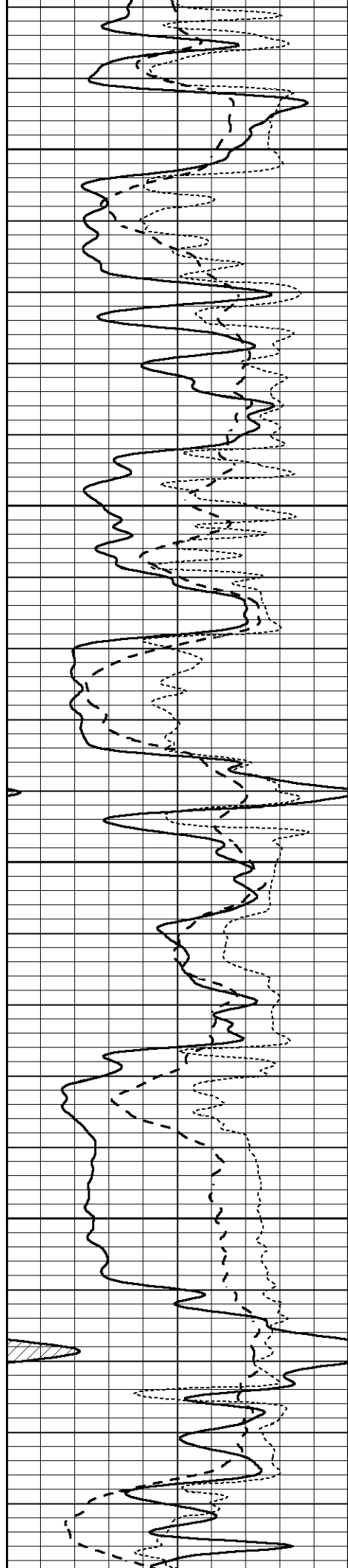
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3850

3900

3950



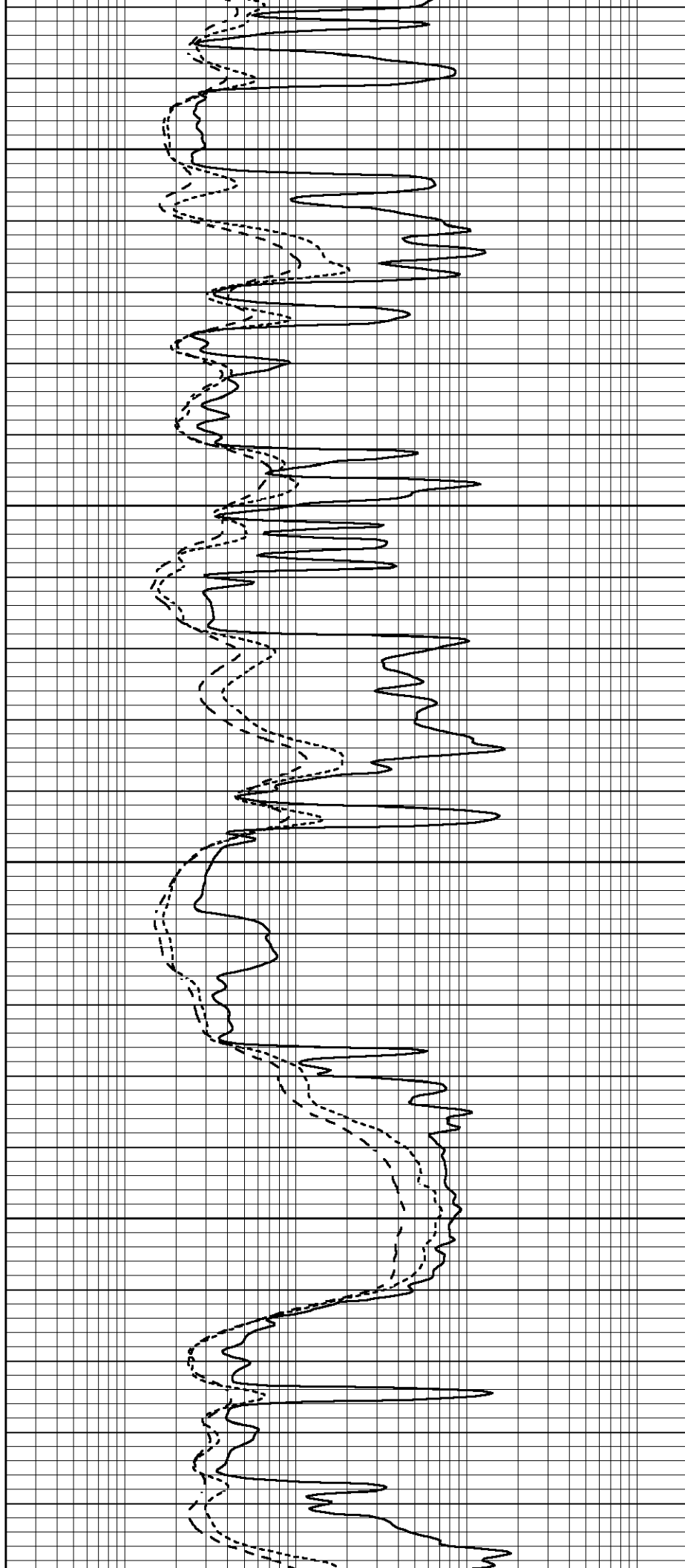


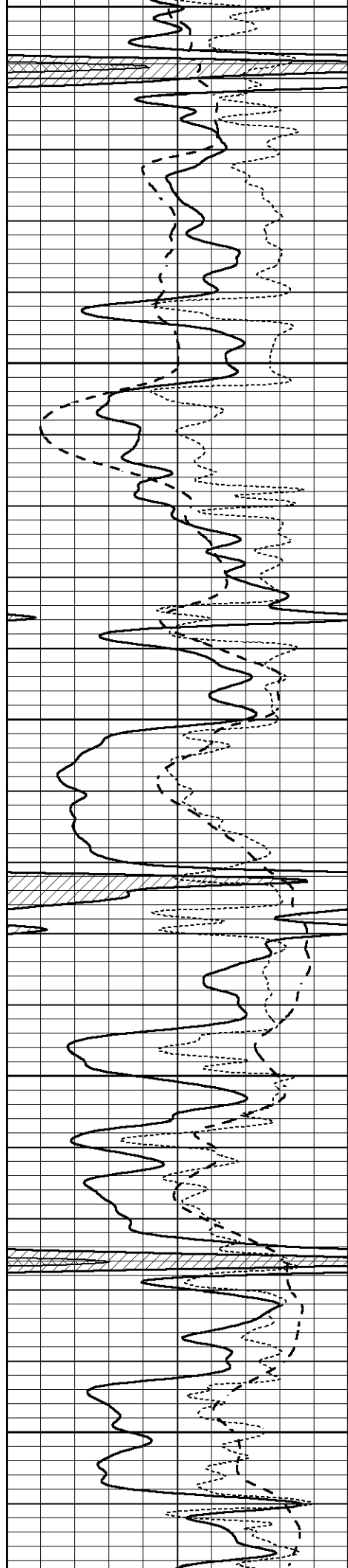
4000

4050

4100

4150





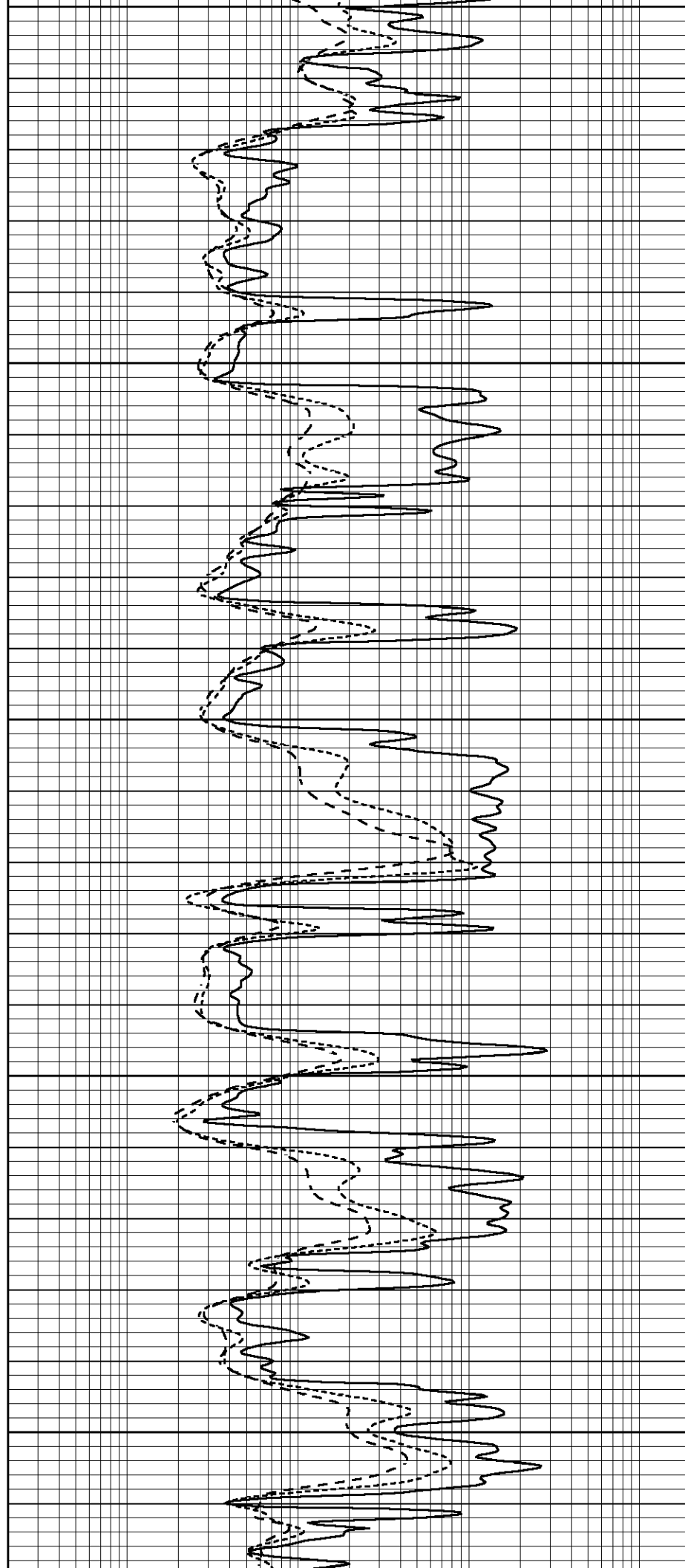
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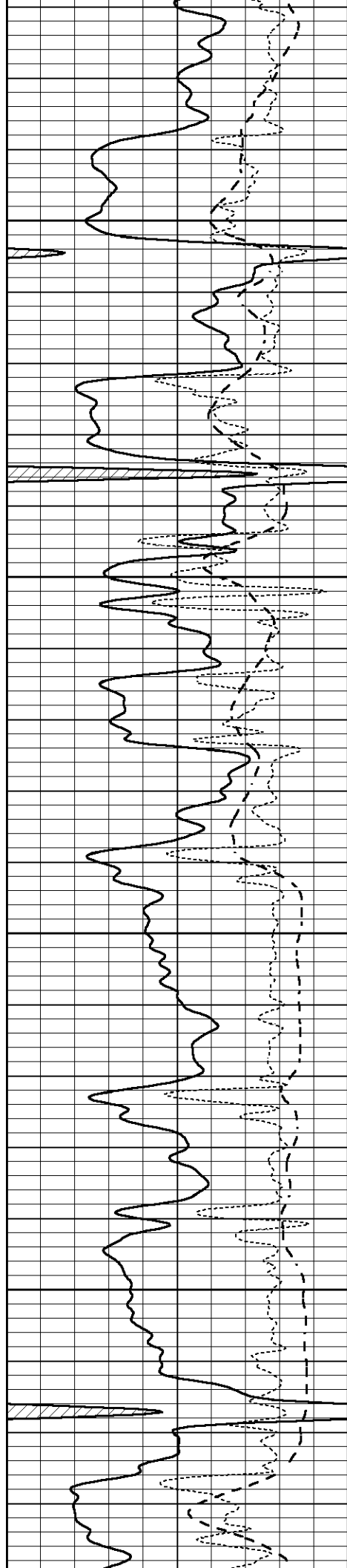
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4300

4350

4400



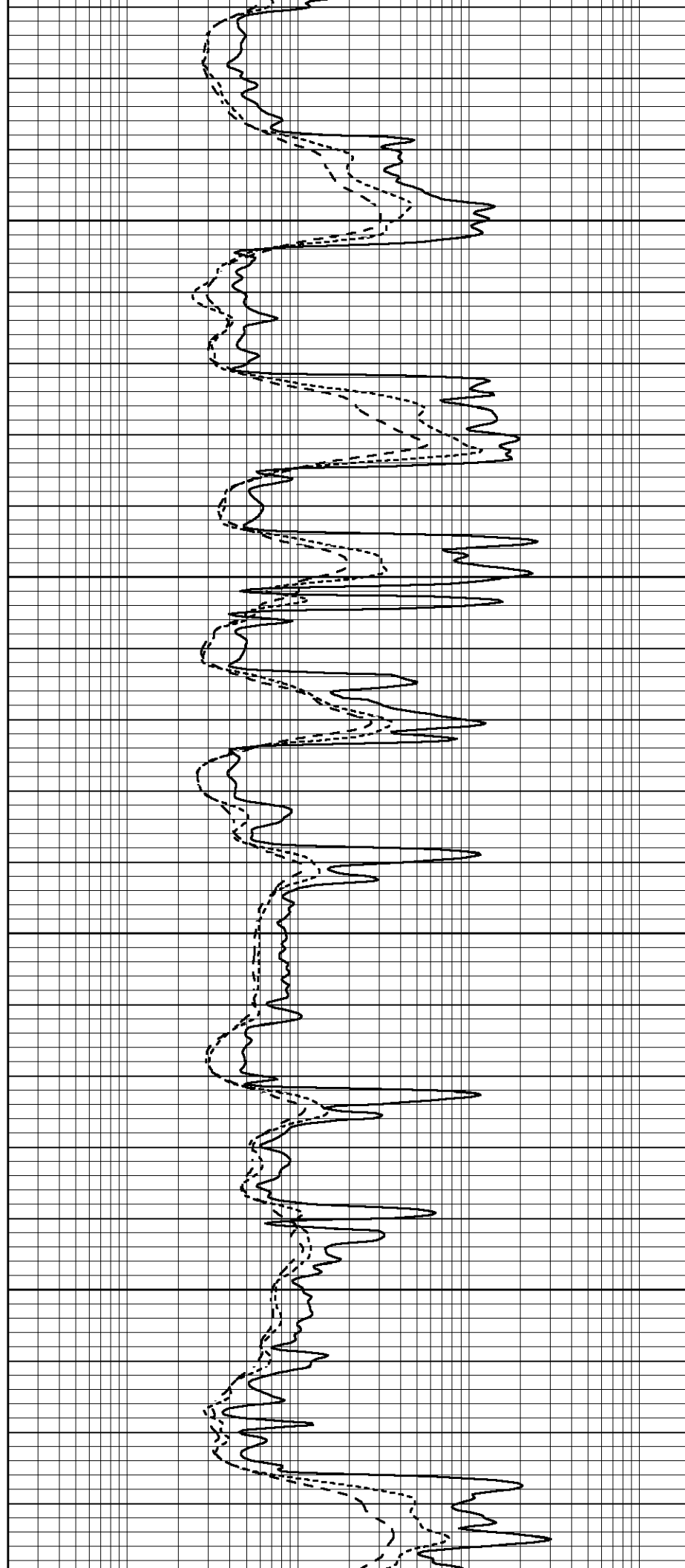


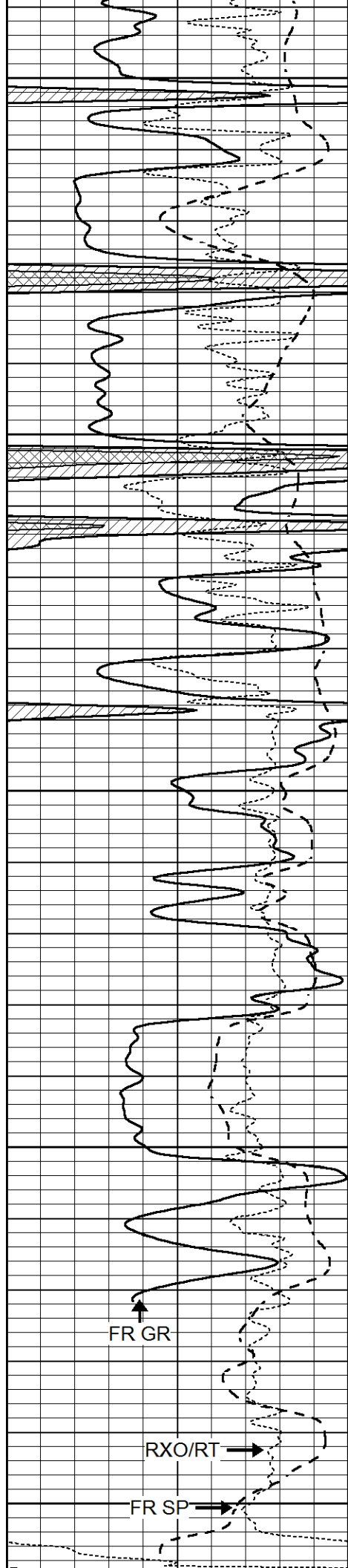
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4500

4550

4600





4650

4700

4750

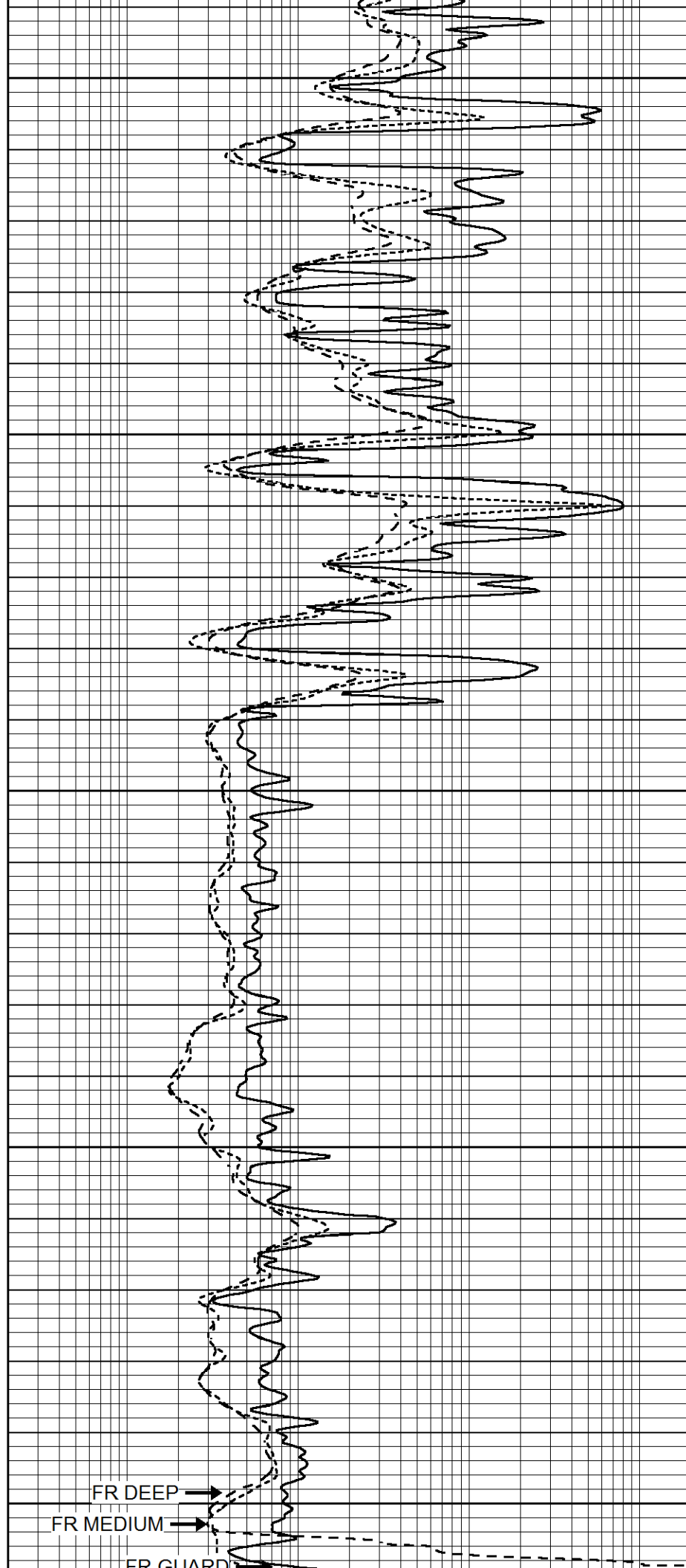
4800

4850

FR GR

RXO/RT

FR SP



FR DEEP

FR MEDIUM

FR GUARD

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

LTD 4861	SHALLOW GUARD (Ohm-m)	2000
	MEDIUM INDUCTION (Ohm-m)	2000
	DEEP INDUCTION (Ohm-m)	2000

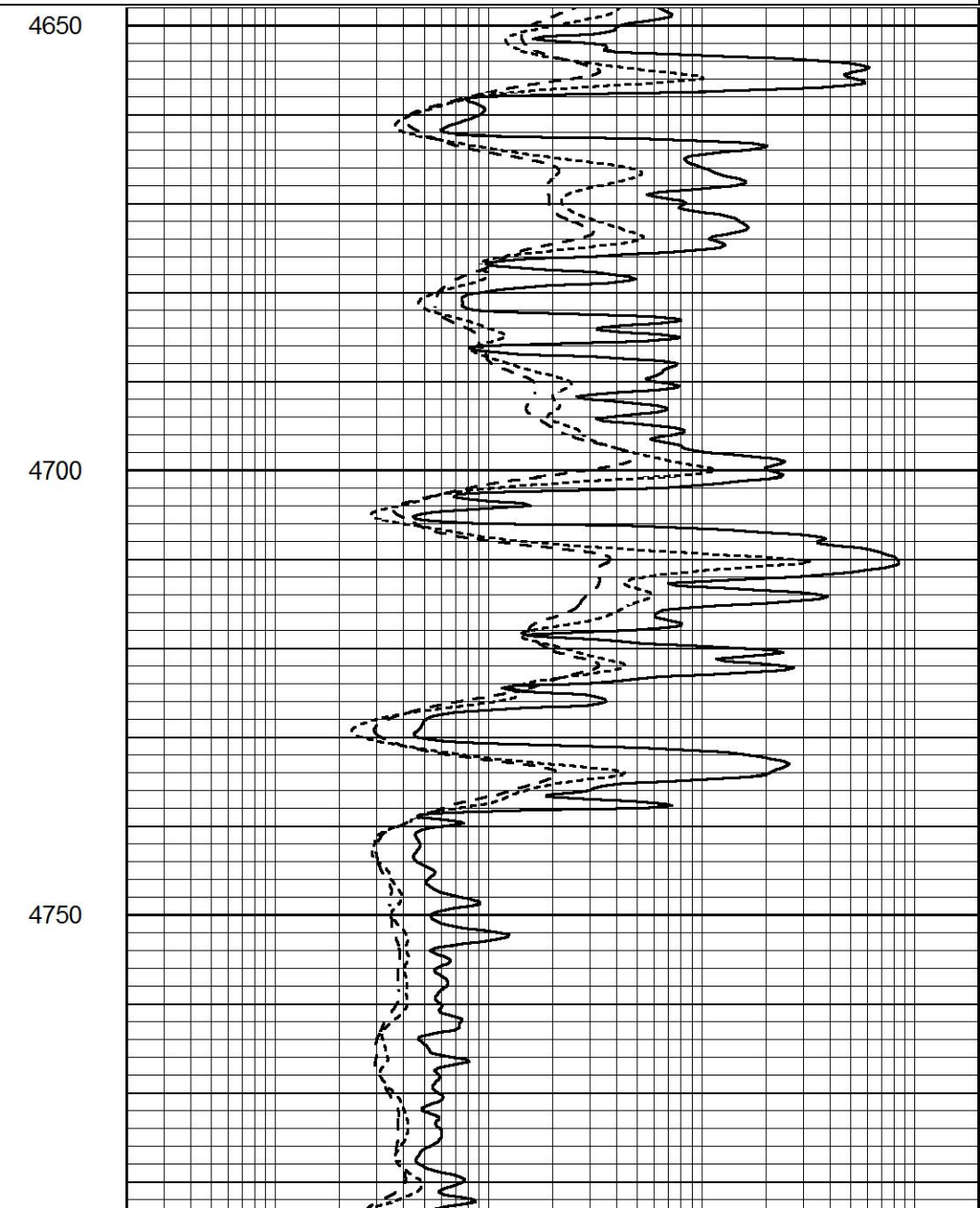
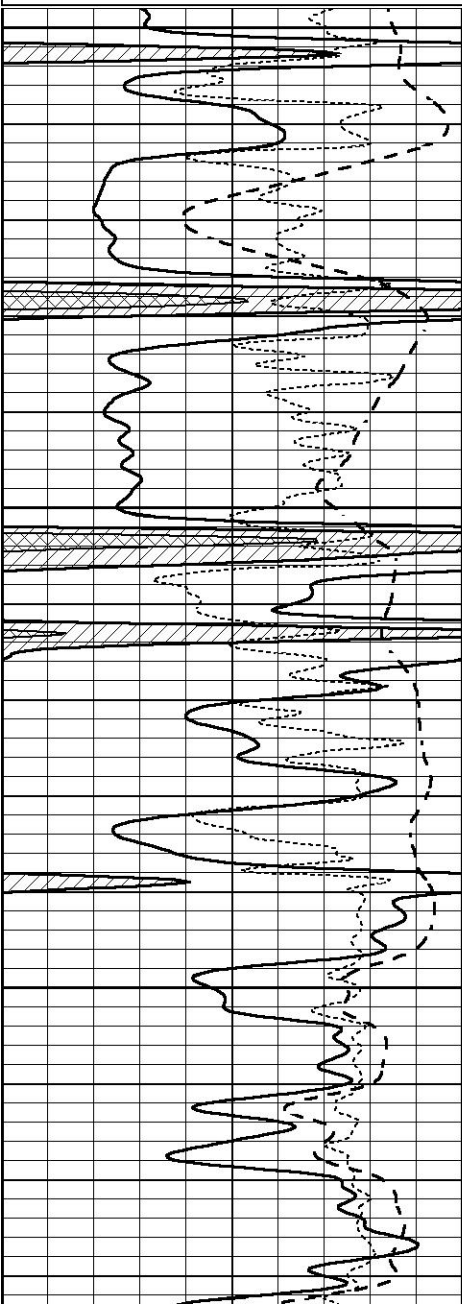


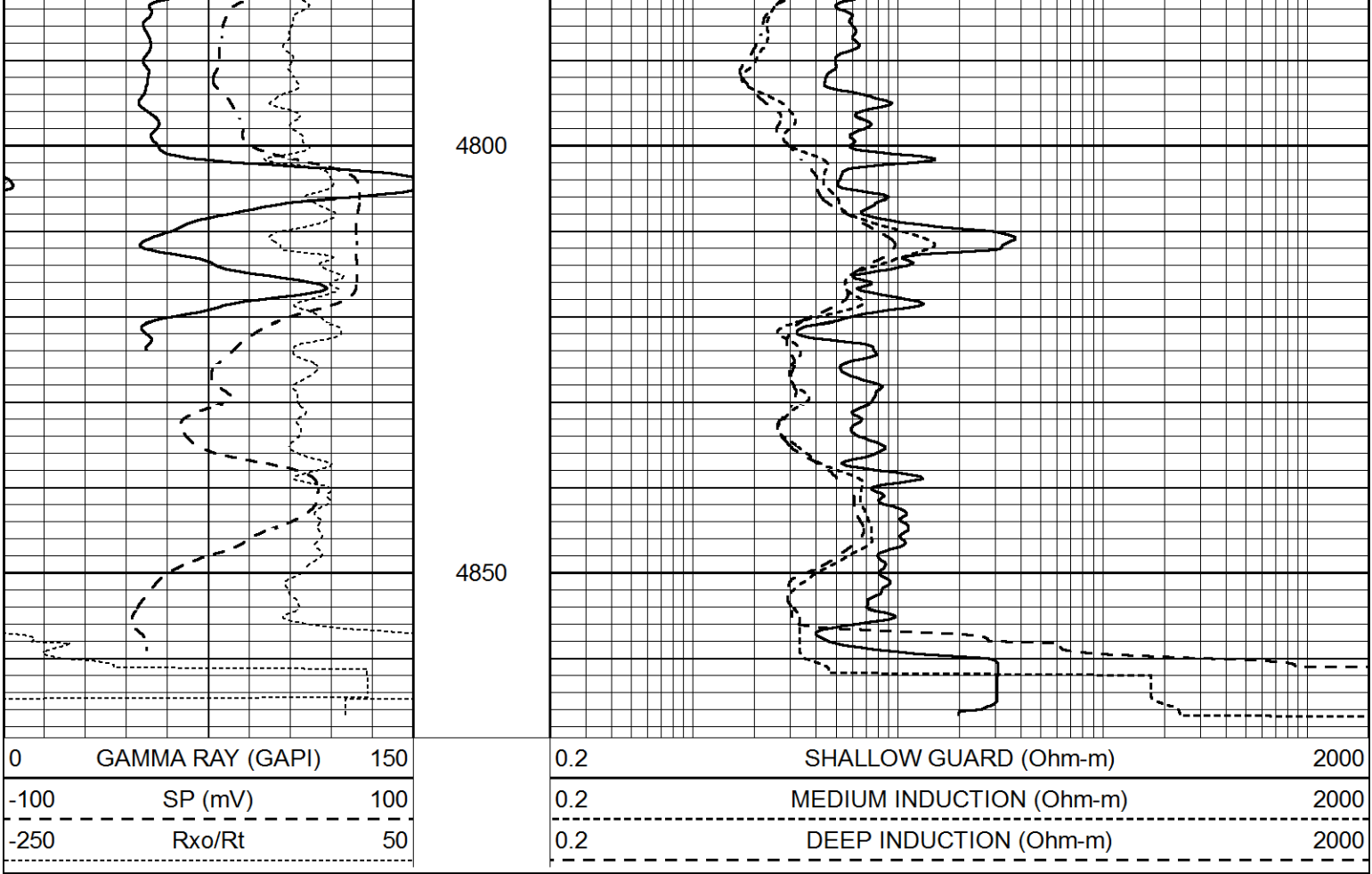
REPEAT SECTION

Database File	9739ddn.db
Dataset Pathname	pass2.R
Presentation Format	_dil
Dataset Creation	Tue Dec 02 01:22:28 2025
Charted by	Depth in Feet scaled 1:240

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

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





Calibration Report									
Database File	9739ddn.db								
Dataset Pathname	pass3.T								
Dataset Creation	Tue Dec 02 02:41:45 2025								
Dual Induction Calibration Report									
Serial-Model:					FW1410-56-Probe				
Surface Cal Performed:					Thu Sep 25 23:02:35 2025				
Downhole Cal Performed:					Tue Jul 25 12:15:37 2017				
After Survey Verification Performed:					Tue Jul 25 12:15:38 2017				
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.008	0.765	V	1.000	400.000	mmho/m	520.000	14.000	
Medium	-0.056	0.761	V	1.000	464.000	mmho/m	540.000	186.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.005	0.624	V	0.000	400.000	mmho/m	645.611	-3.034	
Medium	0.012	0.721	V	0.000	464.000	mmho/m	653.591	-7.532	
Downhole Calibration									
Readings				References			Results		
	Zero	Cal		Zero	Cal		m'	b'	
Deep	-0.647	301.329	mmho/m	-0.780	336.378	mmho/m	1.117	-0.058	
Medium	38.256	411.013	mmho/m	39.046	441.706	mmho/m	1.080	-2.280	
LL3		7.471	V		2500.000	Ohm-m			
		0.001	V		20.000	Ohm-m			
		7.085	V		4000.000	mmho/m			

After Survey Verification								
Readings				Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.647	301.329	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	38.256	411.013	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		

Litho Density Calibration Report								
Serial: 003			Model: PRB					

Master Calibration				Performed Fri Aug 01 11:20:40 2025				
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	1424.0	7274.5	2614.8	2400.8				cps
Window 2	1319.8	6538.4	2382.0	2203.6				cps
Window 3	1217.6	5121.1	2012.2	1909.9				cps
Window 4	332.0	333.7	334.9	328.8				cps
Long Space	0.0	5218.6	1062.2	883.8				cps
Short Space	1.8	2242.5	1399.2	1191.8				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 43.5	Rib Slope	: 0.949	Density/Spine Ratio			: 0.530	
Spine Angle	: 73.5	Spine Slope	: 3.375	Spine Intercept			: -17.5	

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								
Serial Number:			080621PMC					
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:	46001		
Tool Model:	Probe1		
Performed:	Thu Apr 20 09:55:57 2023		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.4300	GAPI/cps	