

DUAL INDUCTION LOG

Company DOWNING - NELSON OIL COMPANY, INC.

Well HFI #3-27

Field UNNAMED

County RAWLINS State KANSAS

Location: API #: 15-153-21330-0000

Permanent Datum GROUND LEVEL Elevation 3354
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING

SEC 27 TWP 4S RGE 36W

Other Services
CDL/CNL
MEL
Elevation
K.B. 3365
D.F. 3363
G.L. 3354

Date 7/1/24

Run Number ONE

Depth Driller 4803

Depth Logger 4800

Bottom Logged Interval 4798

Top Log Interval 00

Casing Driller 8.625@475

Casing Logger 475

Bit Size 7.785

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.6/56

pH / Fluid Loss 10.0/8.8

Source of Sample FLOWLINE

Rm @ Meas. Temp 1.50@96F

Rmf @ Meas. Temp 1.13@96F

Rmc @ Meas. Temp 1.80@96F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT 1.17@123F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom 6:00 P.M.

Maximum Recorded Temperature 123F

Equipment Number 922339

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By MARC DOWNING

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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.

15-153-21330-0000

Comments

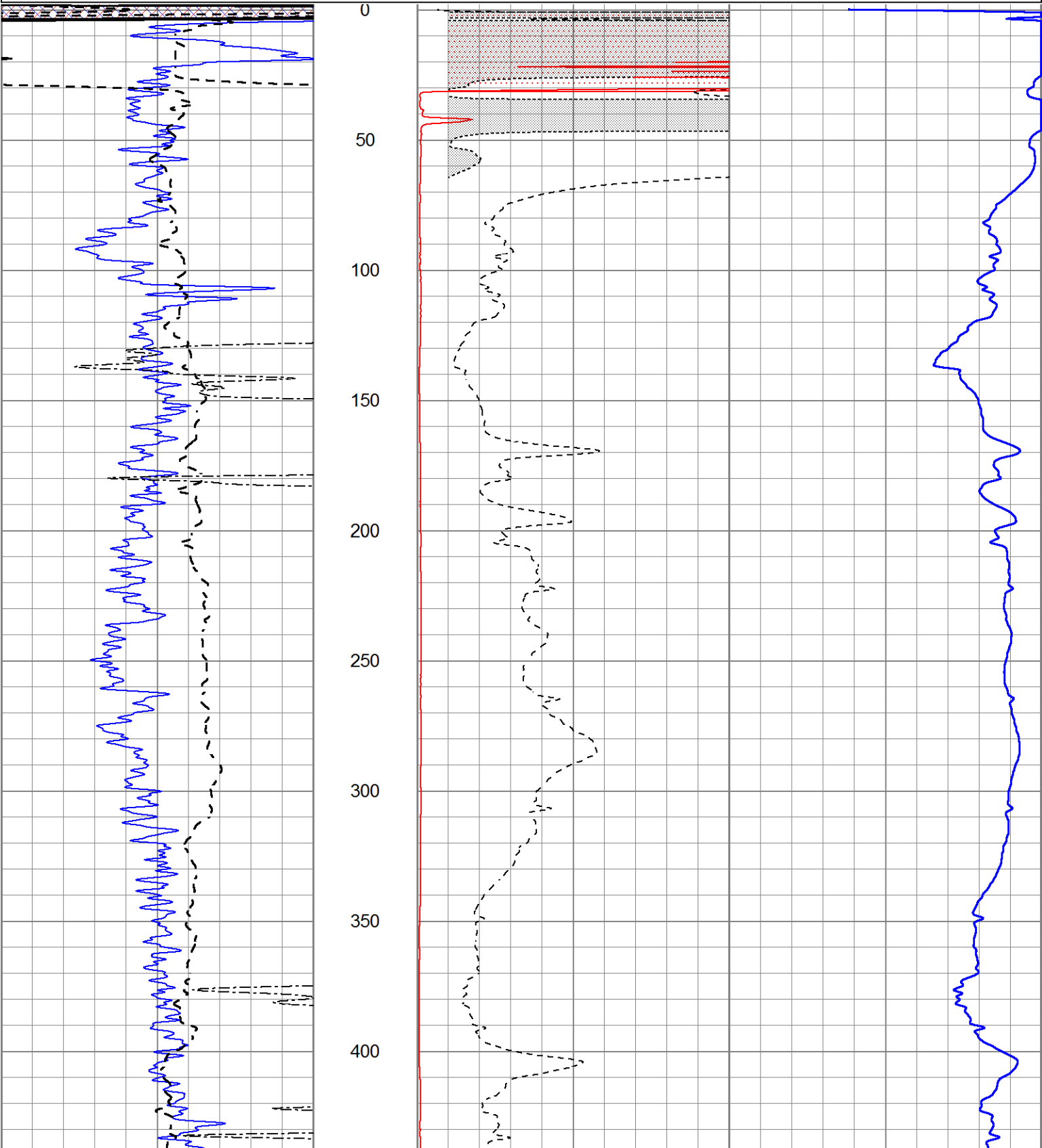
THANK YOU FOR USING ELI WIRELINE HAYS. KANSAS (785) 628-6395
DIRECTIONS
BREWSTER, KS., S. TO "RD. H", 1E. TO TANK BATTERY, 1/2N. ON LEASE RD. 1/2E., S. INTO

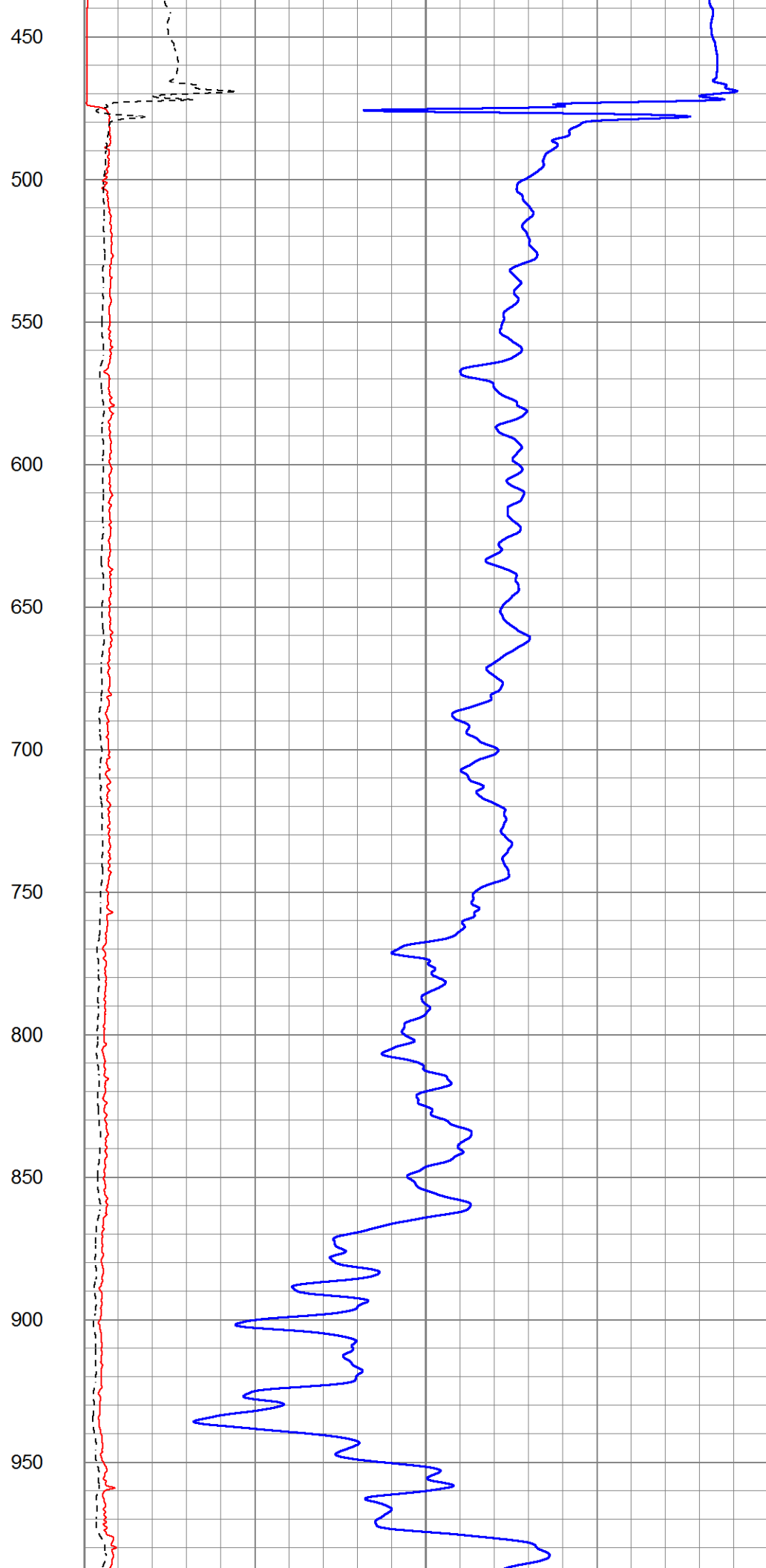
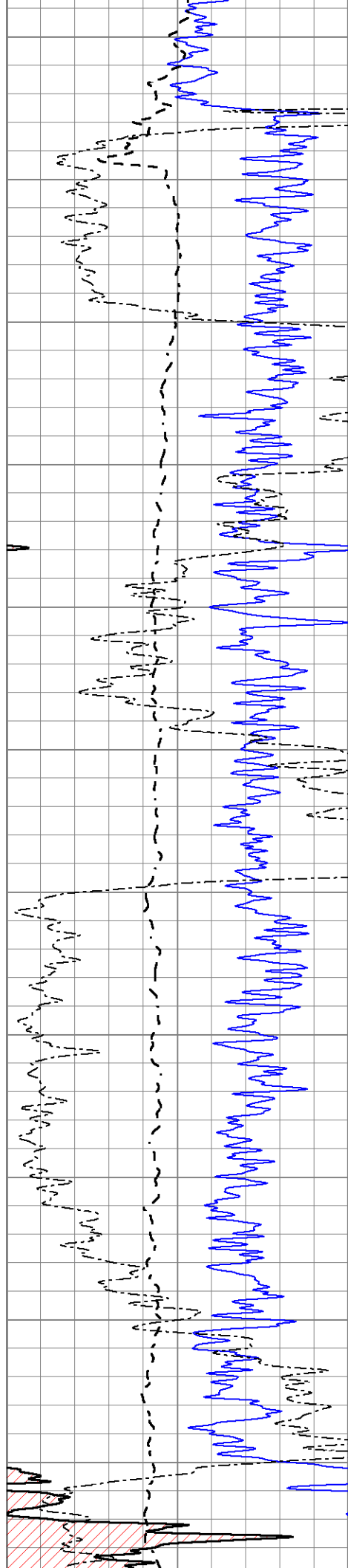


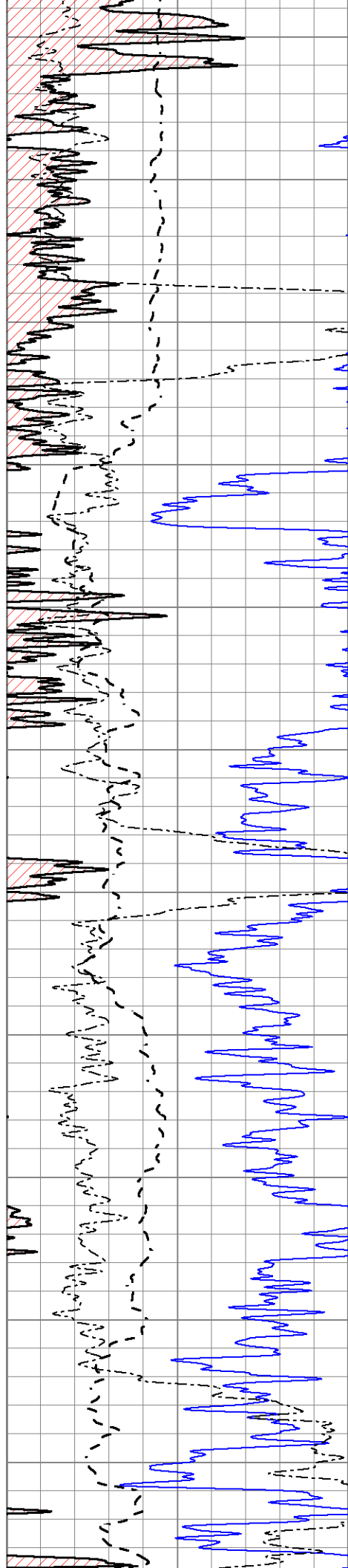
MAIN SECTION

Database File	8639ddn.db
Dataset Pathname	pass3.2M
Presentation Format	_dil2
Dataset Creation	Mon Jul 01 20:57:38 2024
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	RWA (Ohm-m)	1	0	RILD (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500







1000

1050

1100

1150

1200

1250

1300

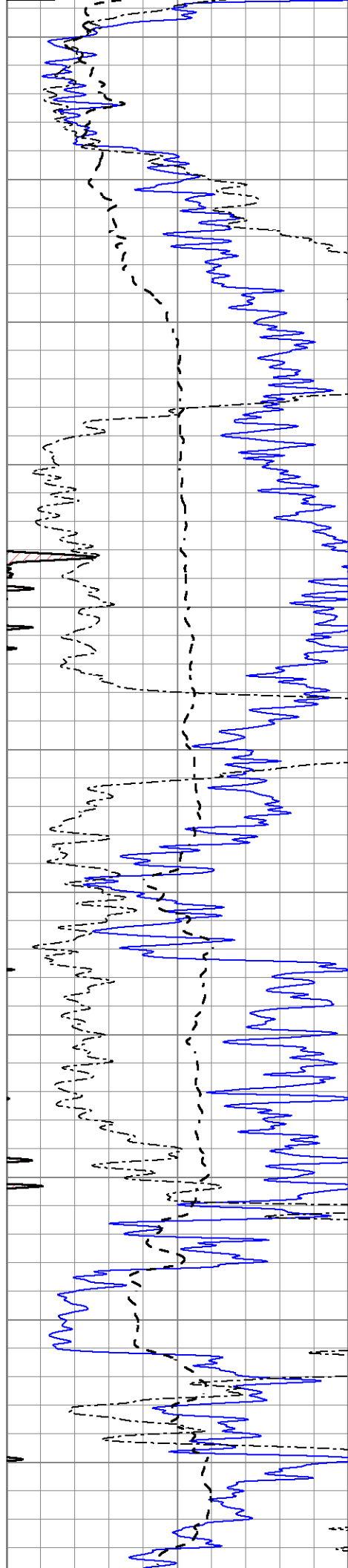
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1400

1450

1500





1550

1600

1650

1700

1750

1800

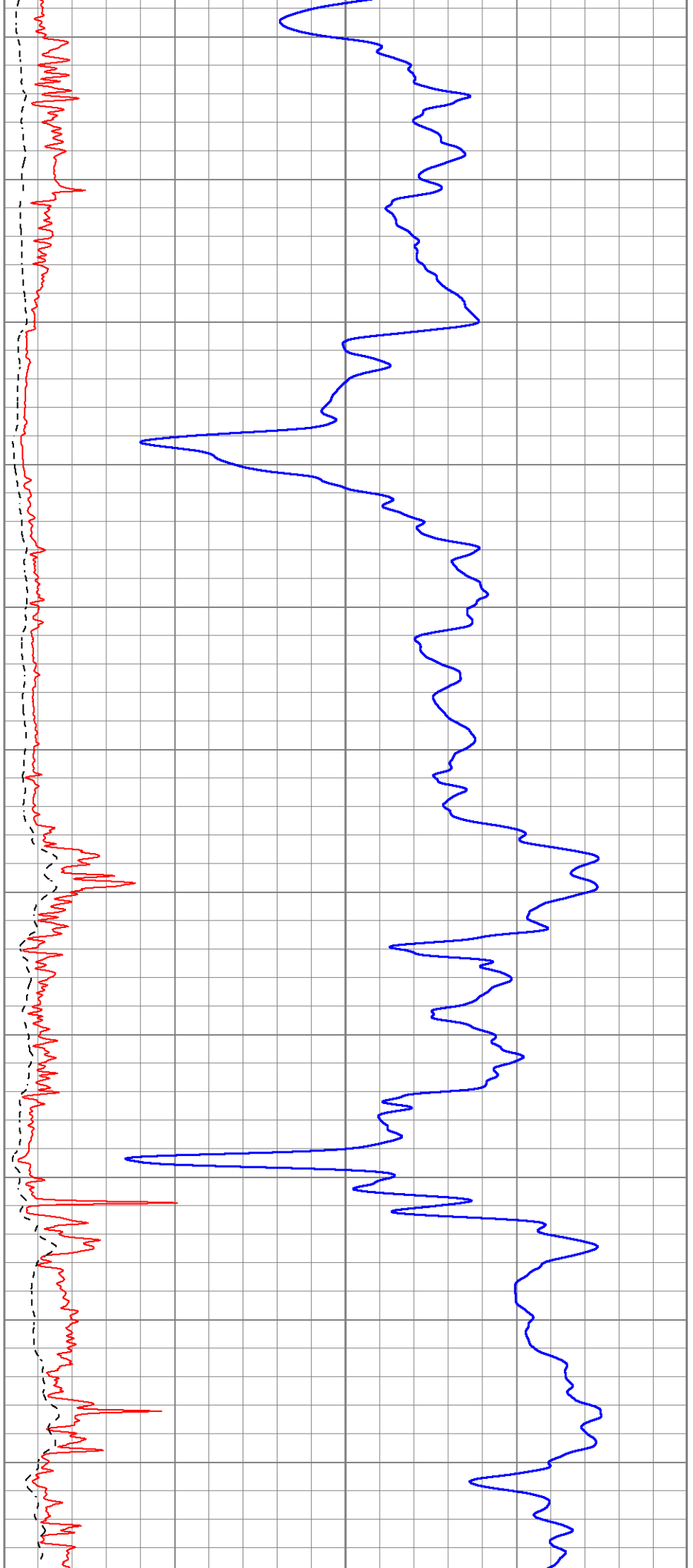
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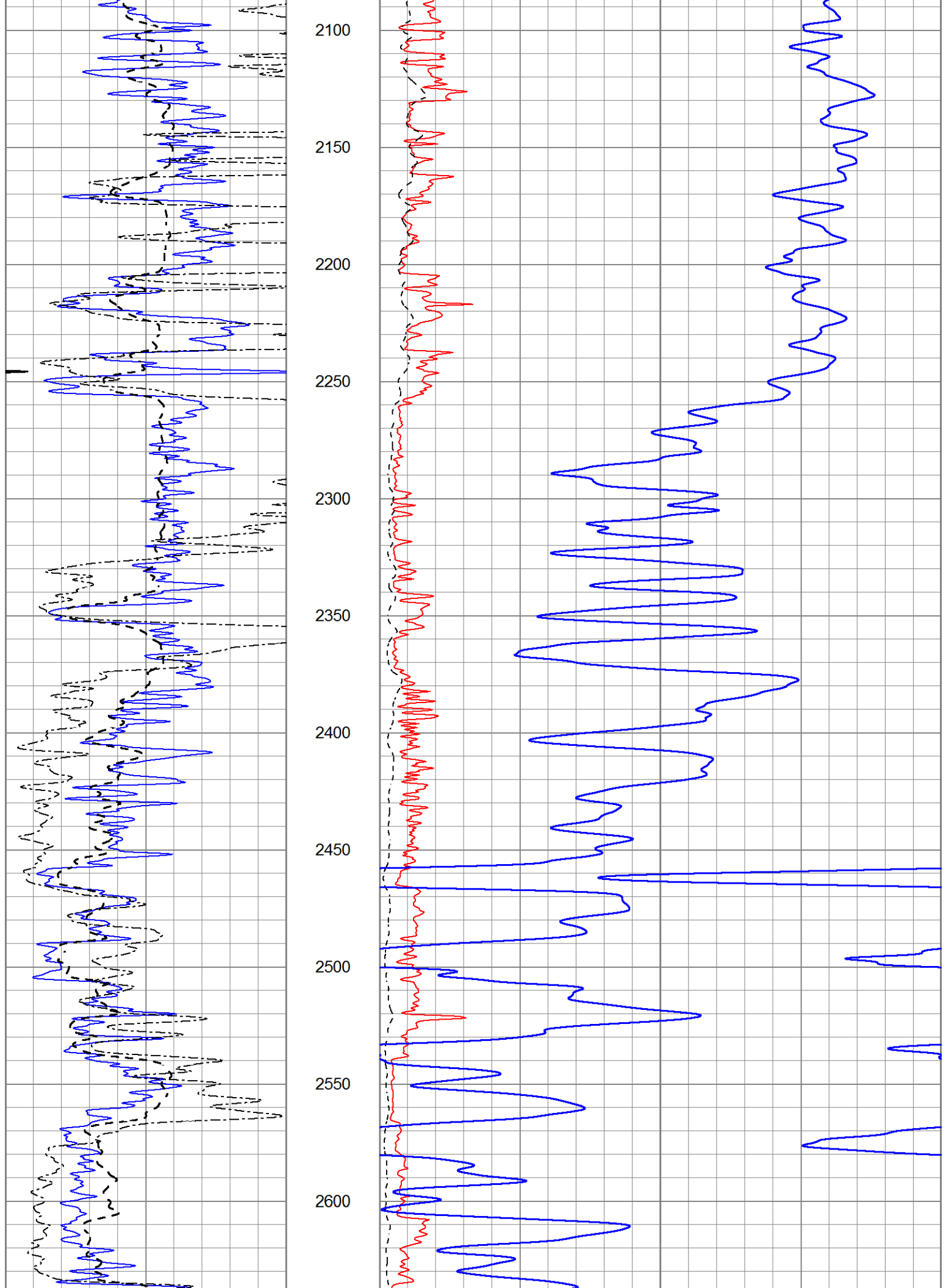
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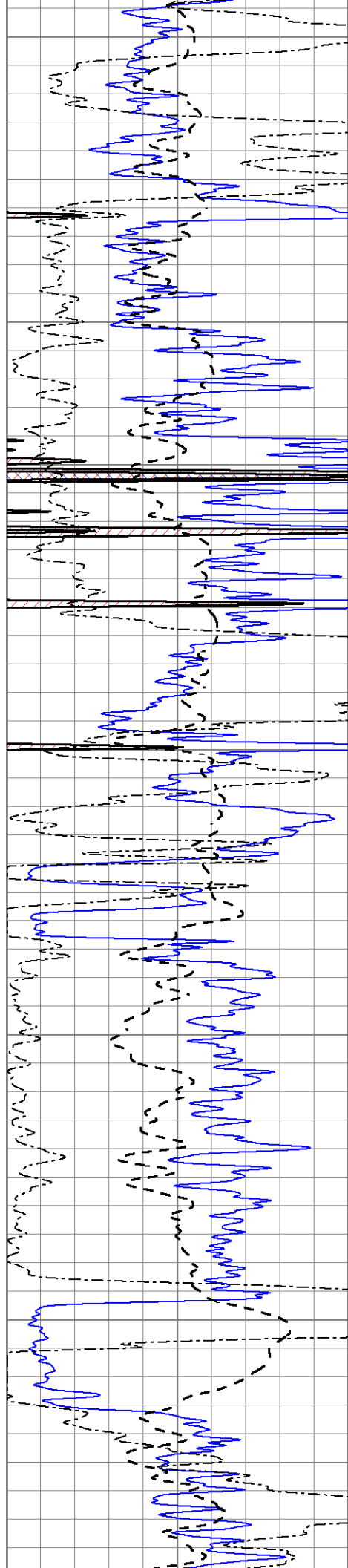
1950

2000

2050







2650

2700

2750

2800

2850

2900

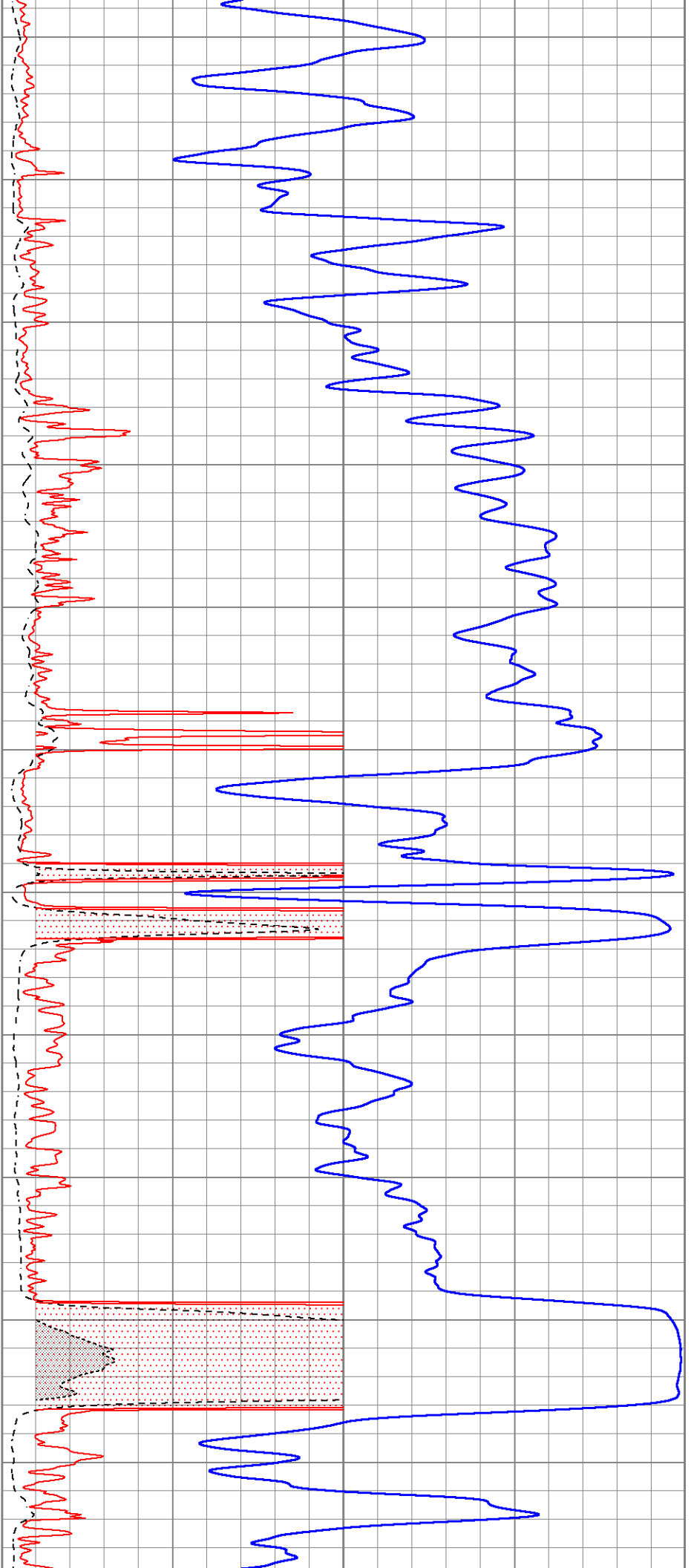
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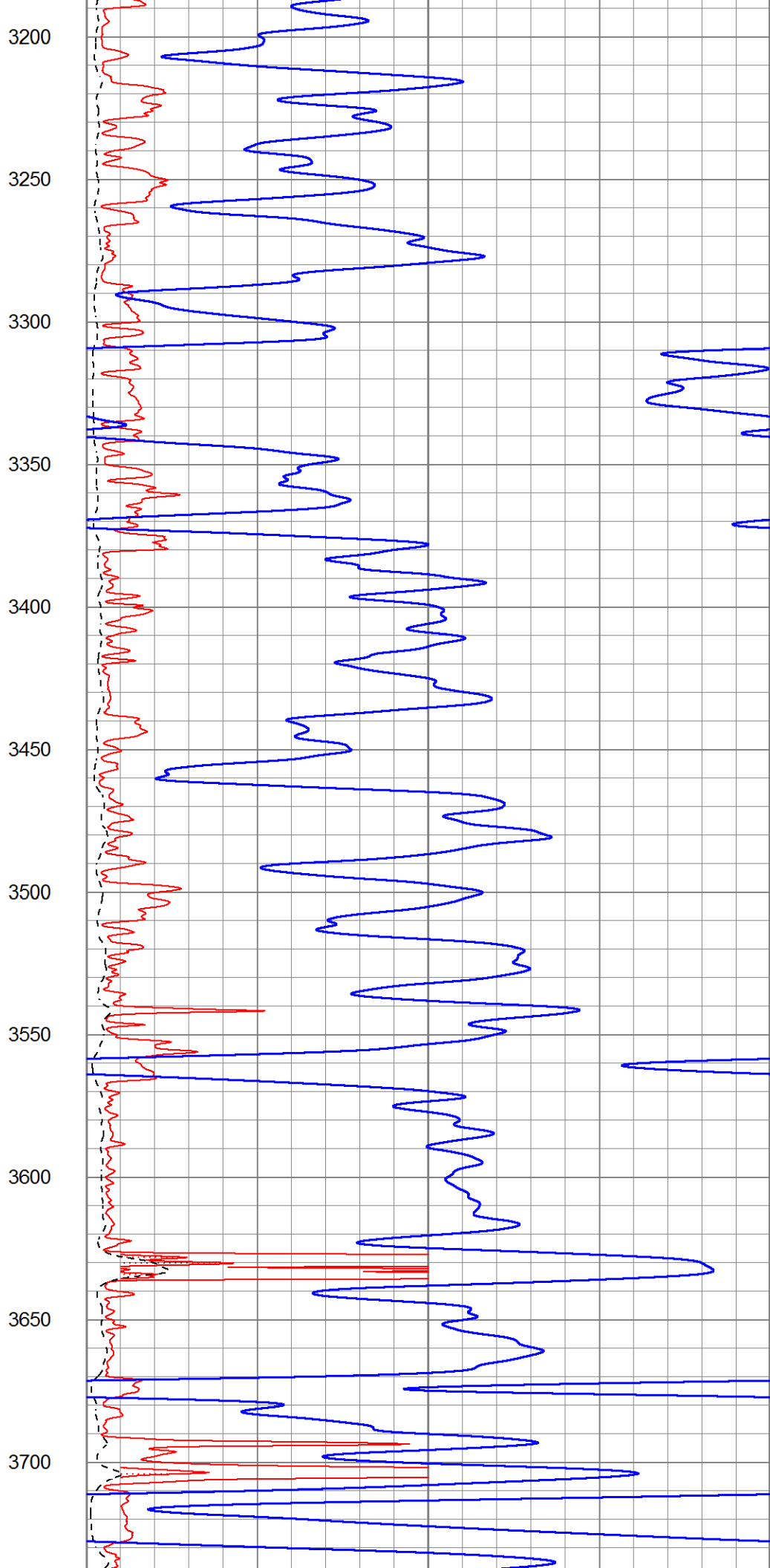
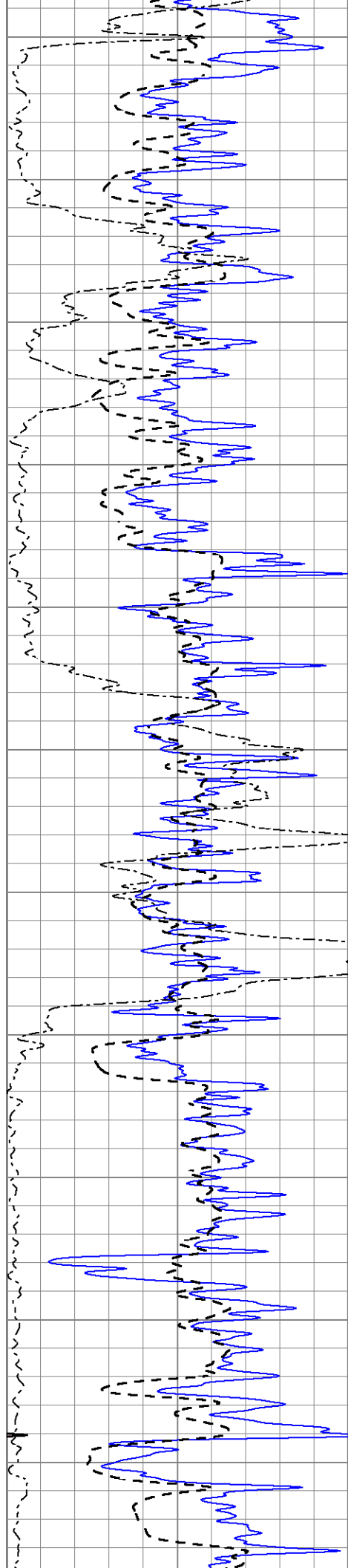
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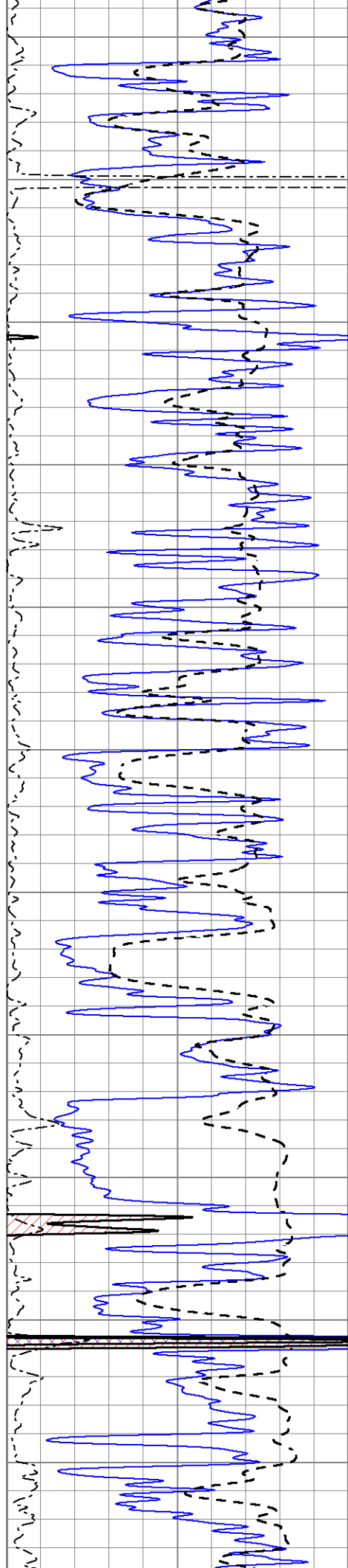
3050

3100

3150







3750

3800

3850

3900

3950

4000

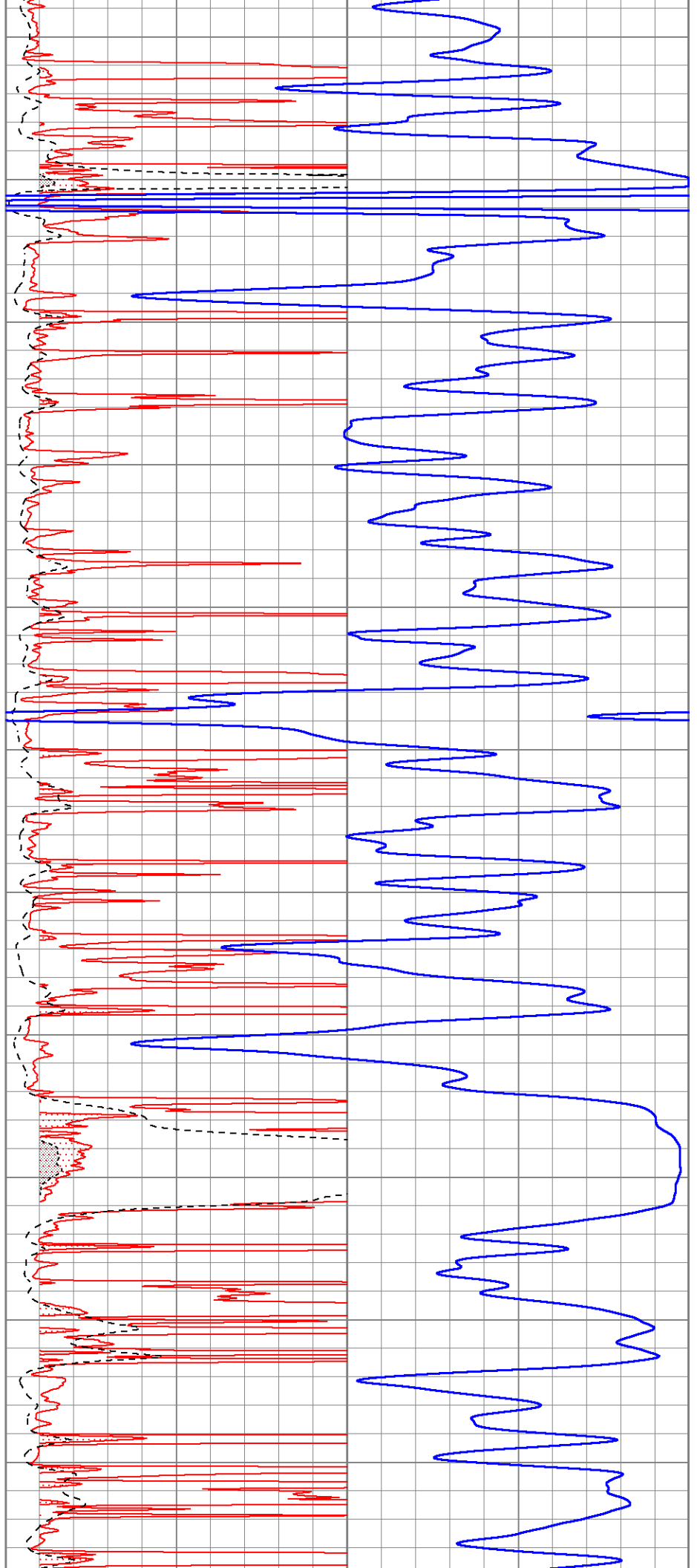
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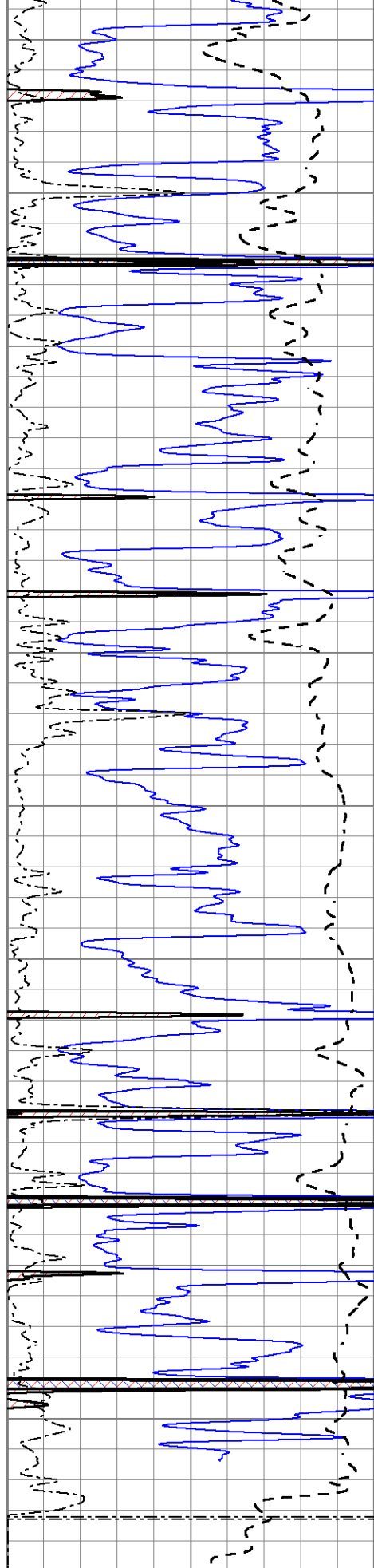
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4150

4200

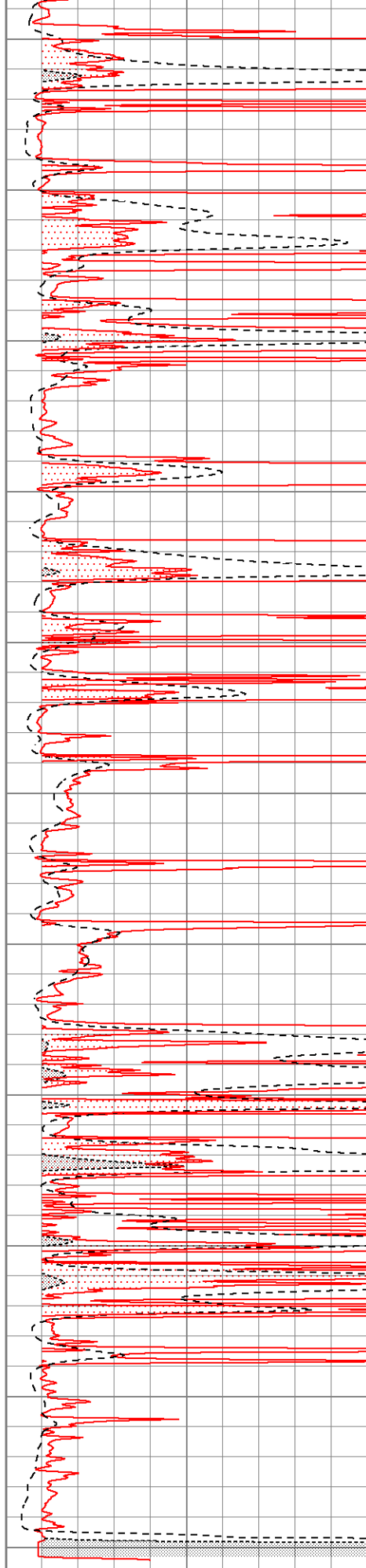
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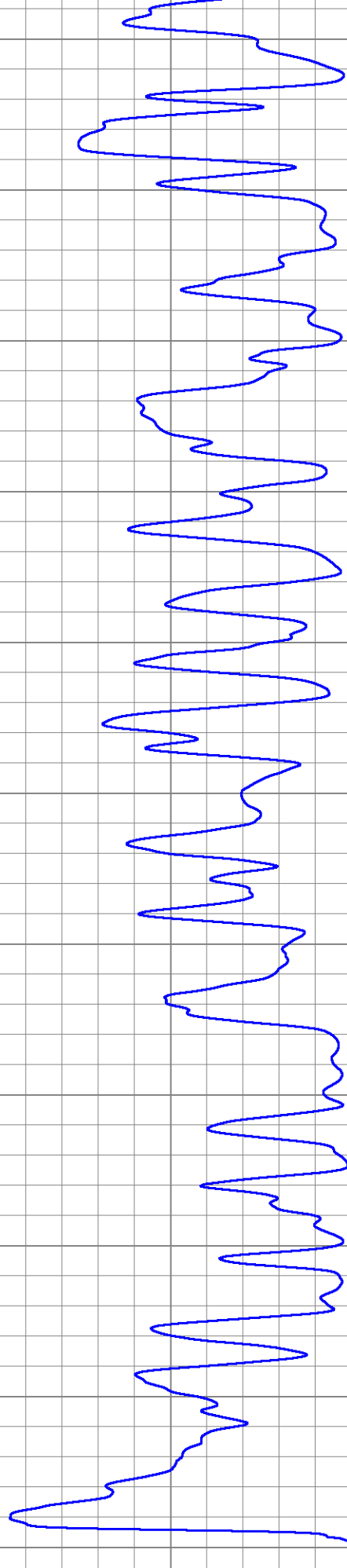


0	Gamma Ray (GAPI)	150
-100	SP (mV)	100
0	RWA (Ohm-m)	1

4300
4350
4400
4450
4500
4550
4600
4650
4700
4750
4800



1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	RLLD (Ohm-m)	50



1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	RLLD (Ohm-m)	50

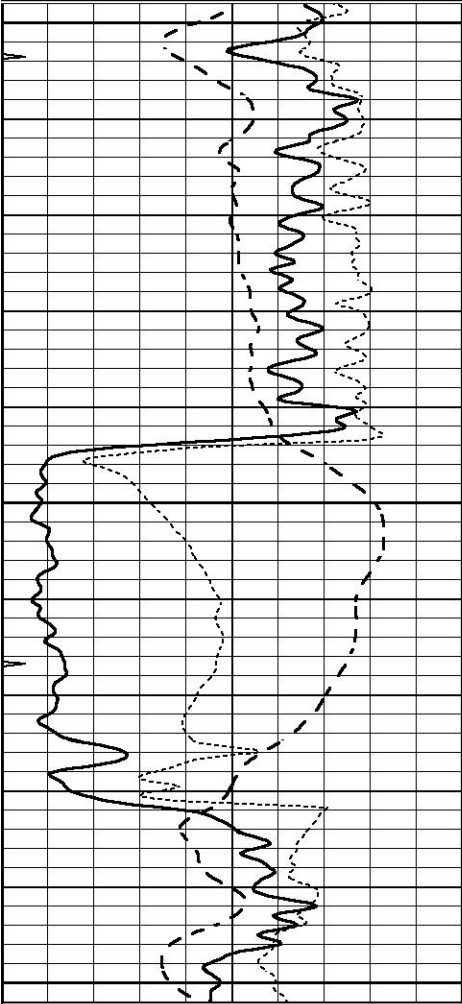
RWA (Ohm-m)	1	0	RILD (Ohm-m)	50
		50	RILD X10 (Ohm-m)	500
		50	RLL3 X10 (Ohm-m)	500



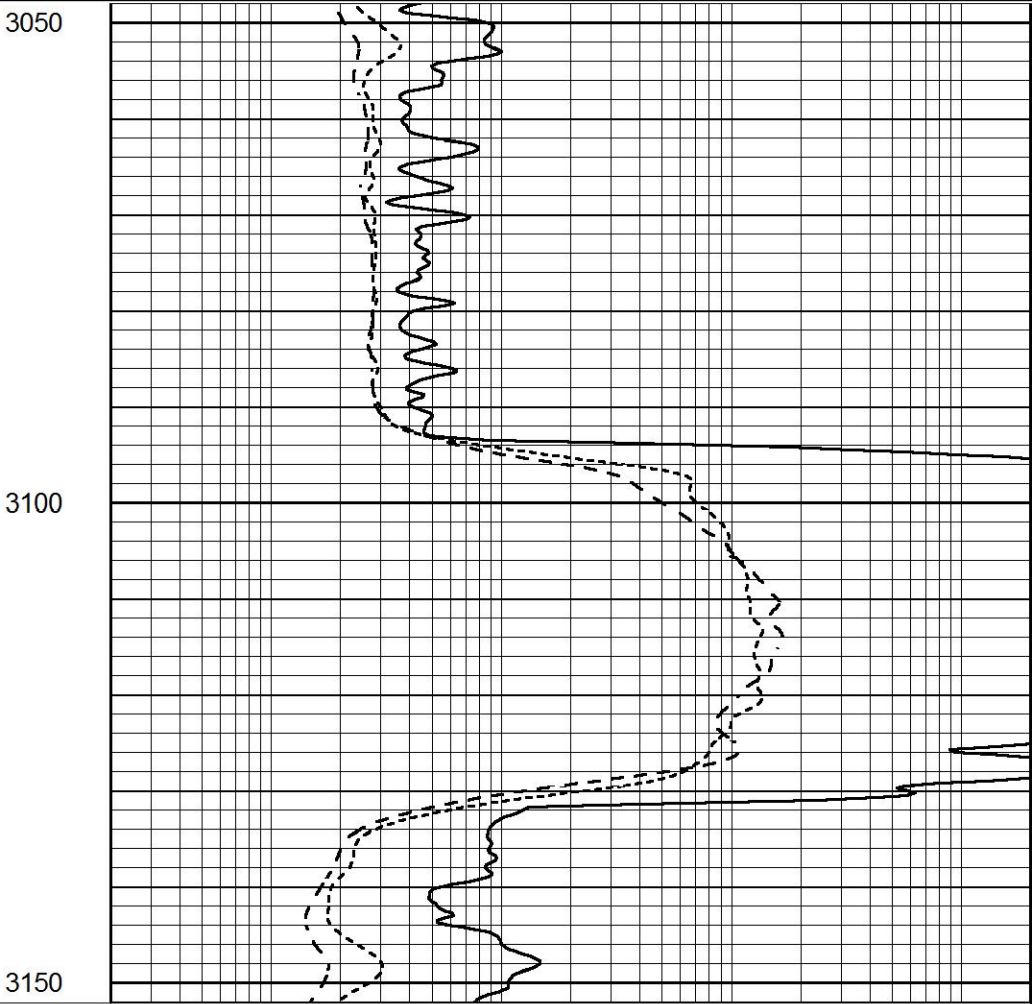
ANHYDRITE

Database File	8639ddn.db
Dataset Pathname	pass3.1A
Presentation Format	_dil
Dataset Creation	Mon Jul 01 20:08:55 2024
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			



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



MAIN SECTION

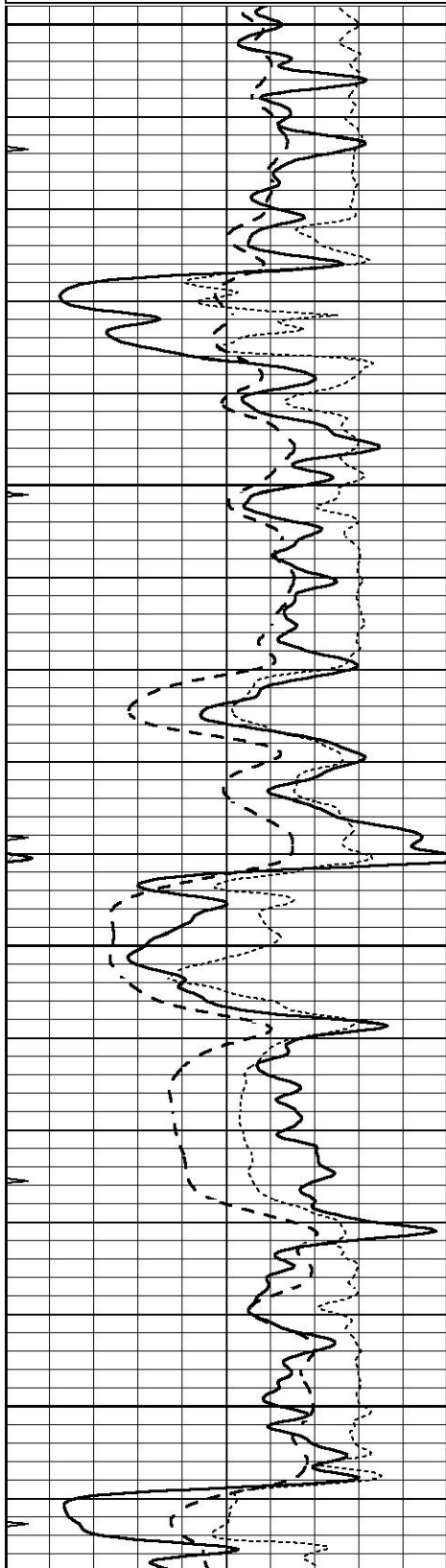


MAIN SECTION

Database File 8639ddn.db
Dataset Pathname pass3.2M
Presentation Format _dil
Dataset Creation Mon Jul 01 20:57:38 2024
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

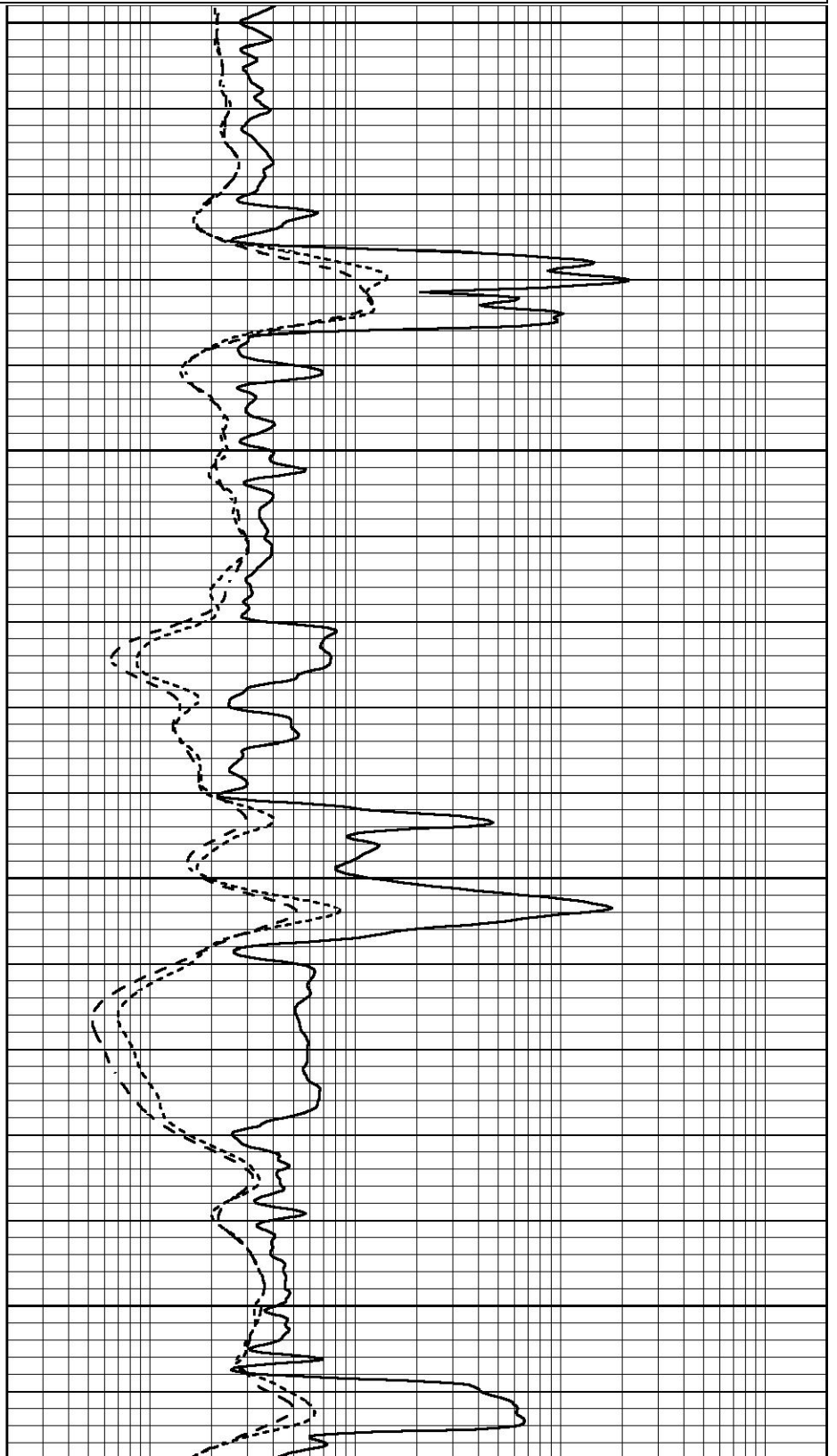


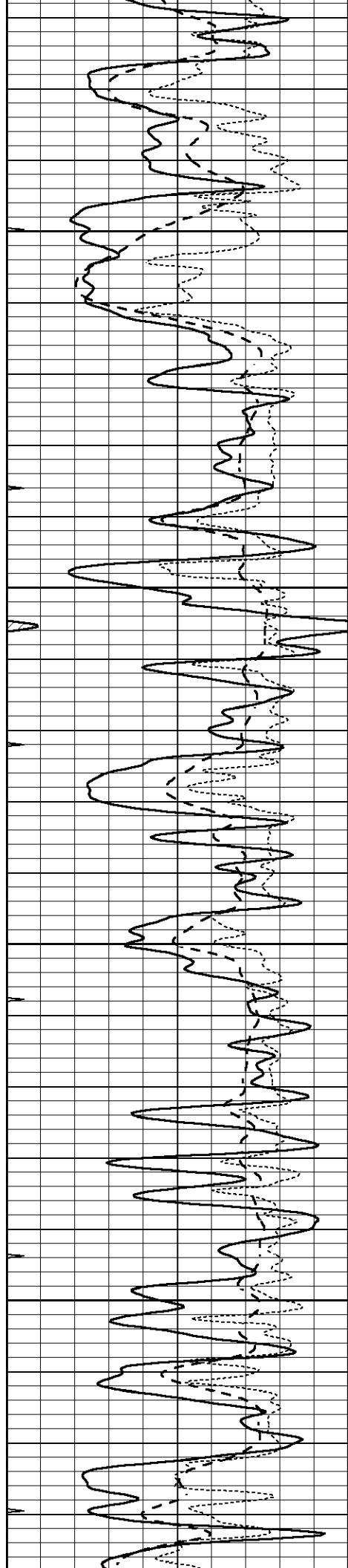
3600

3650

3700

3750



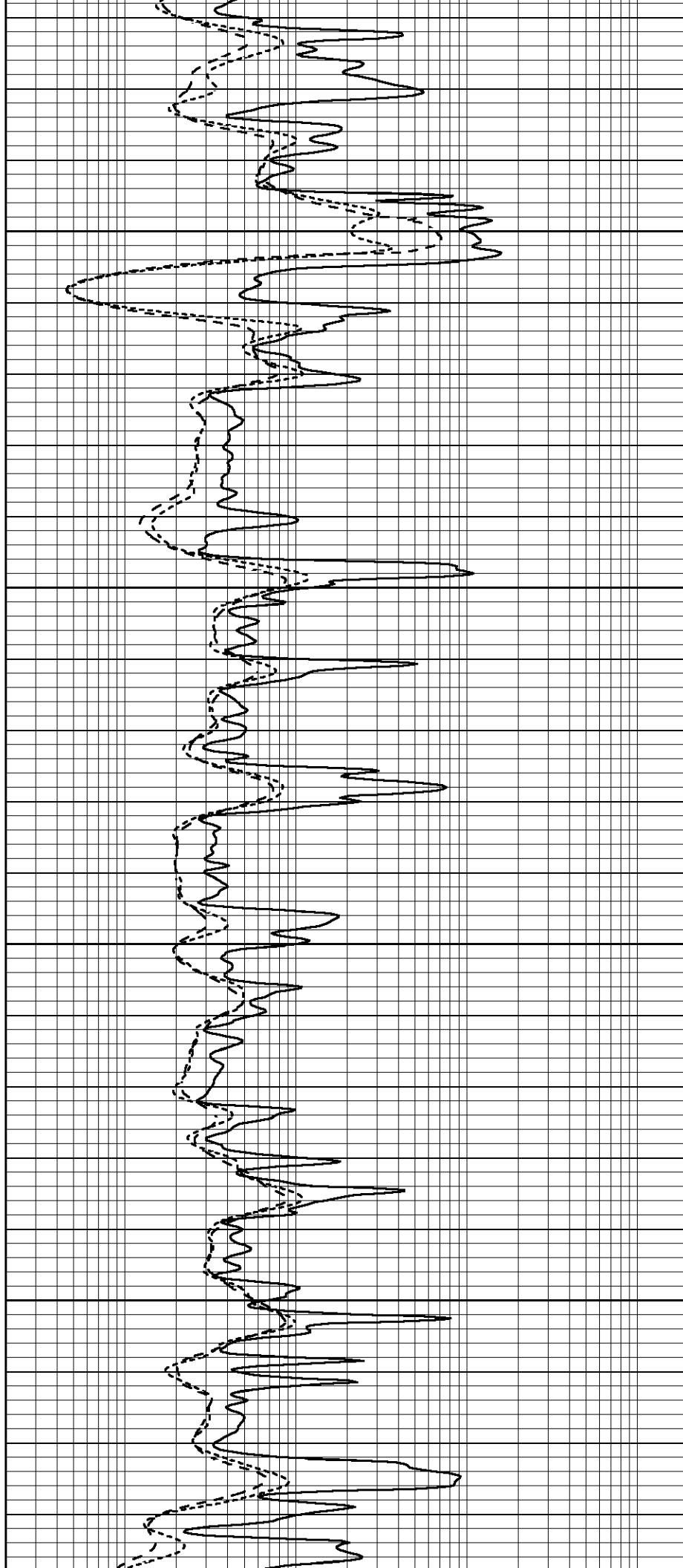


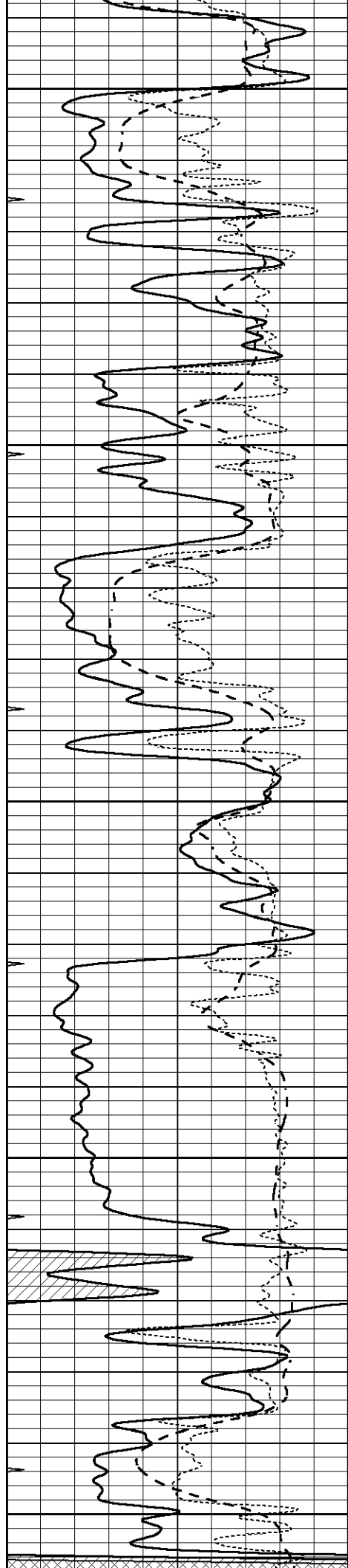
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3850

3900

3950





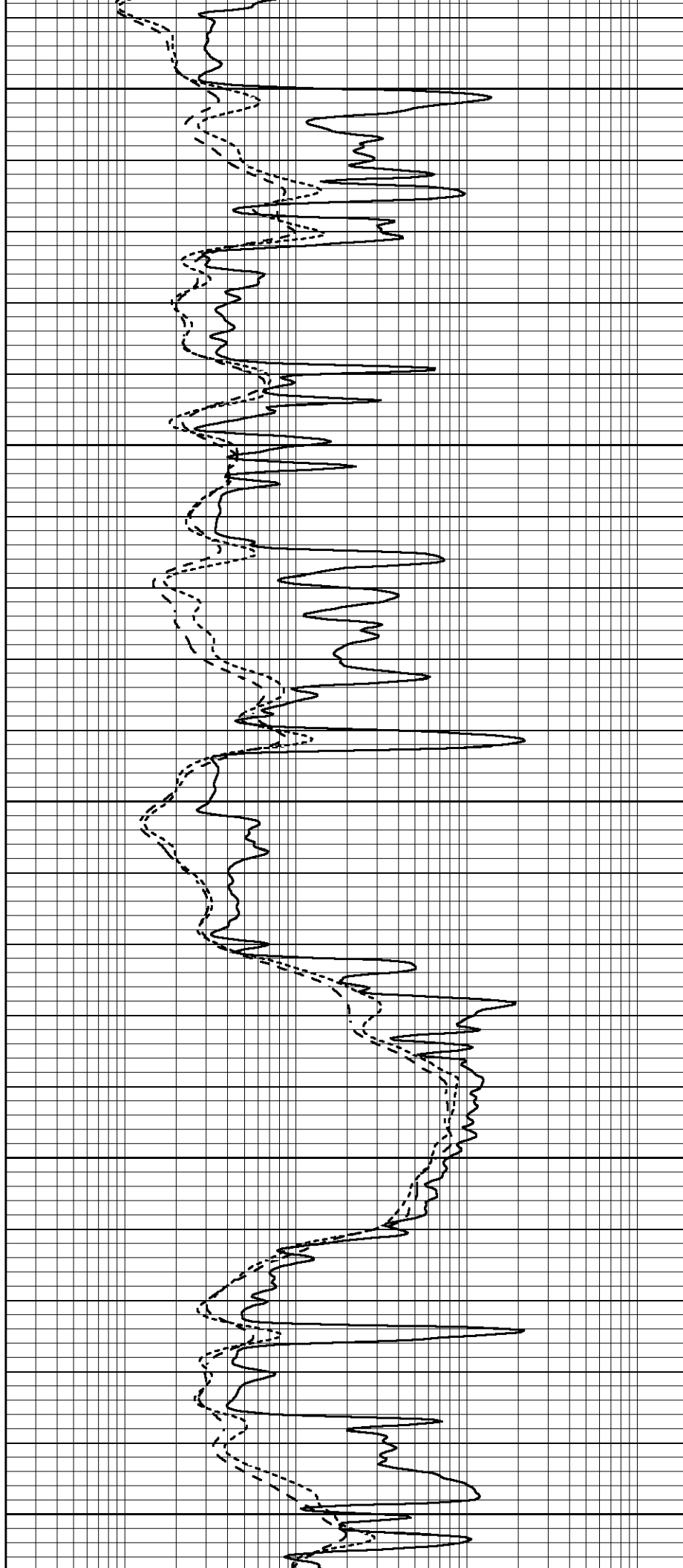
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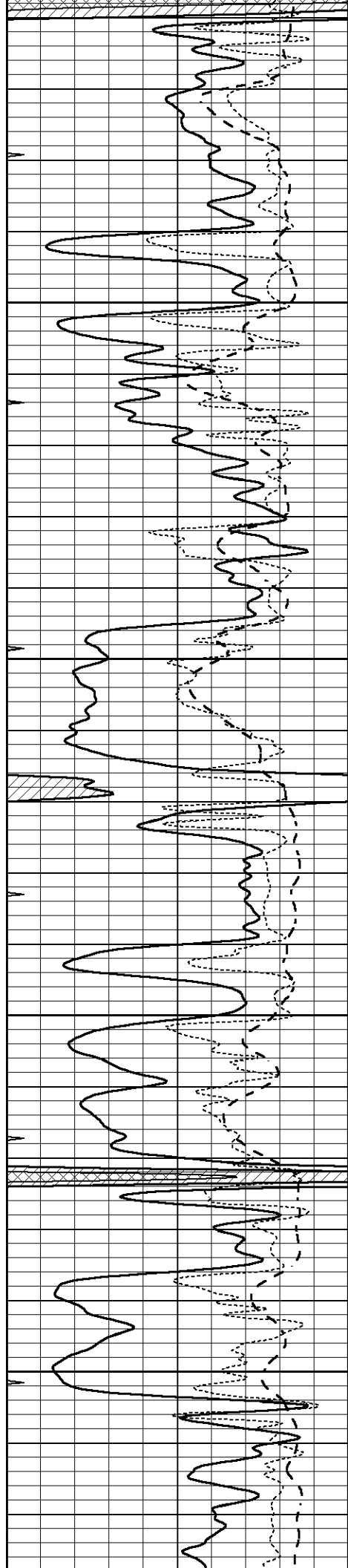
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4100

4150

4200



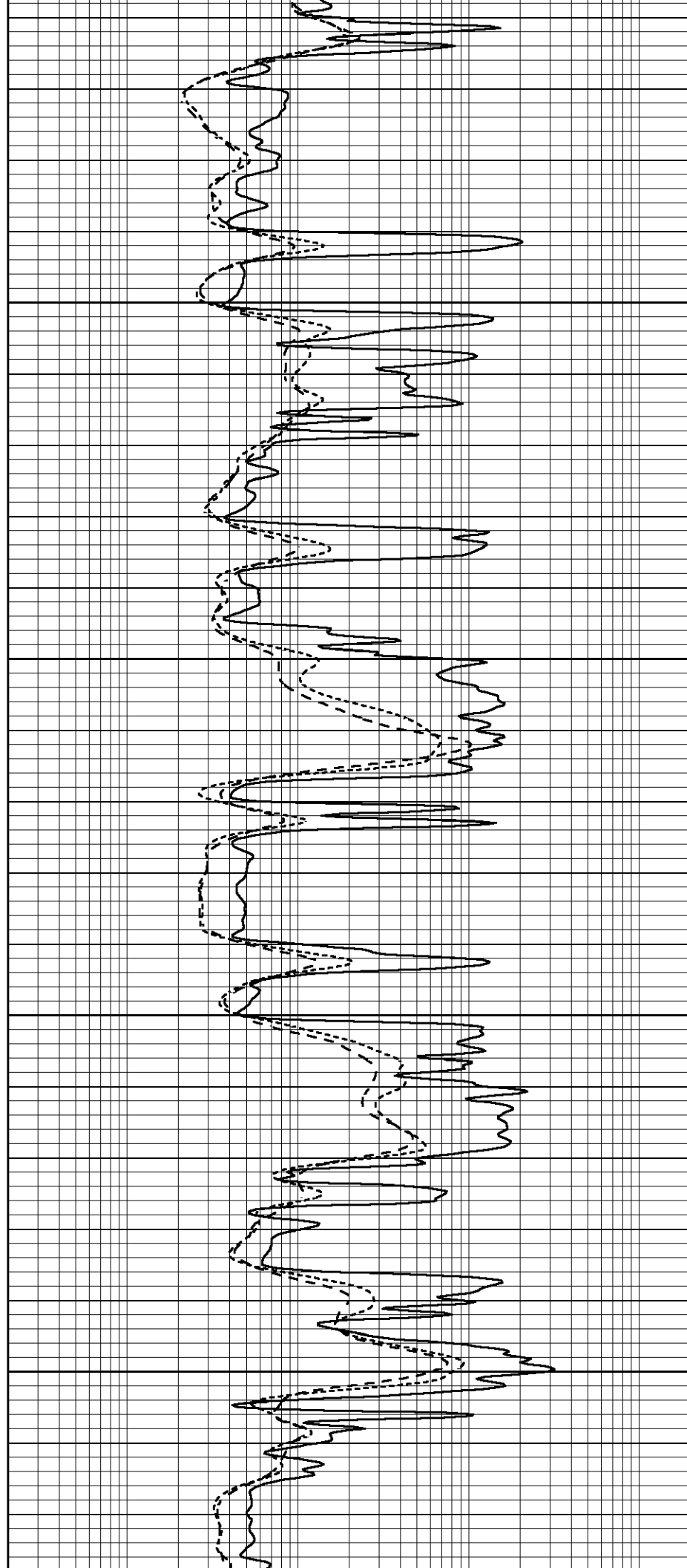


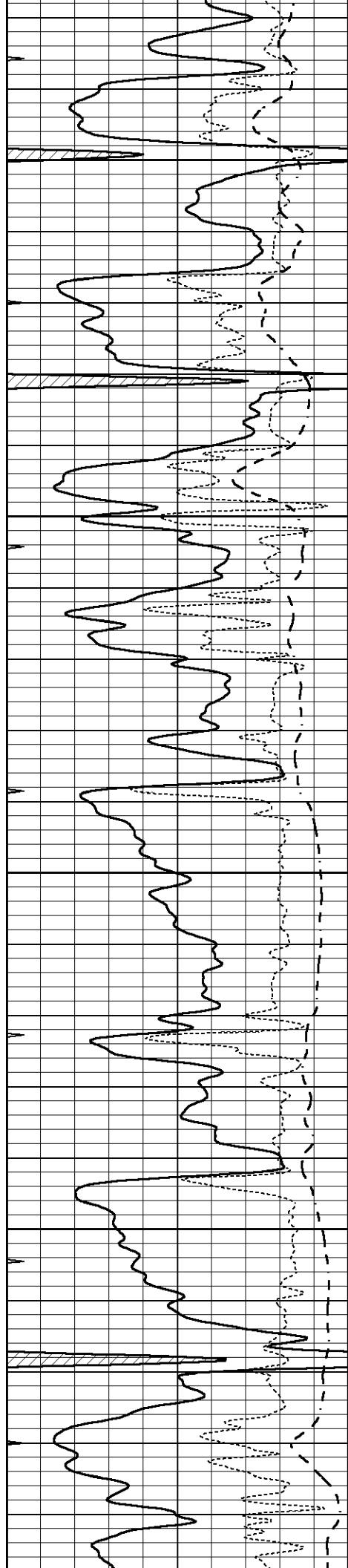
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4300

4350

4400



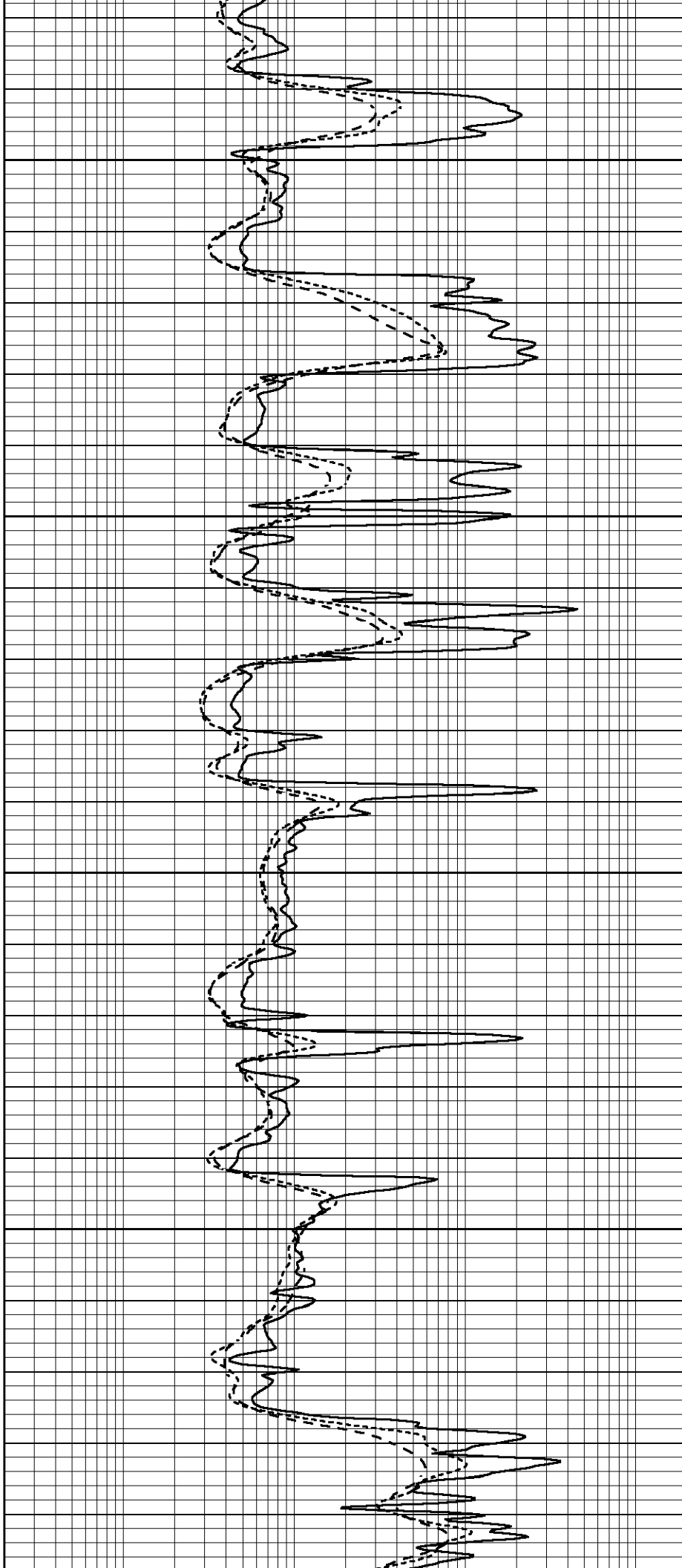


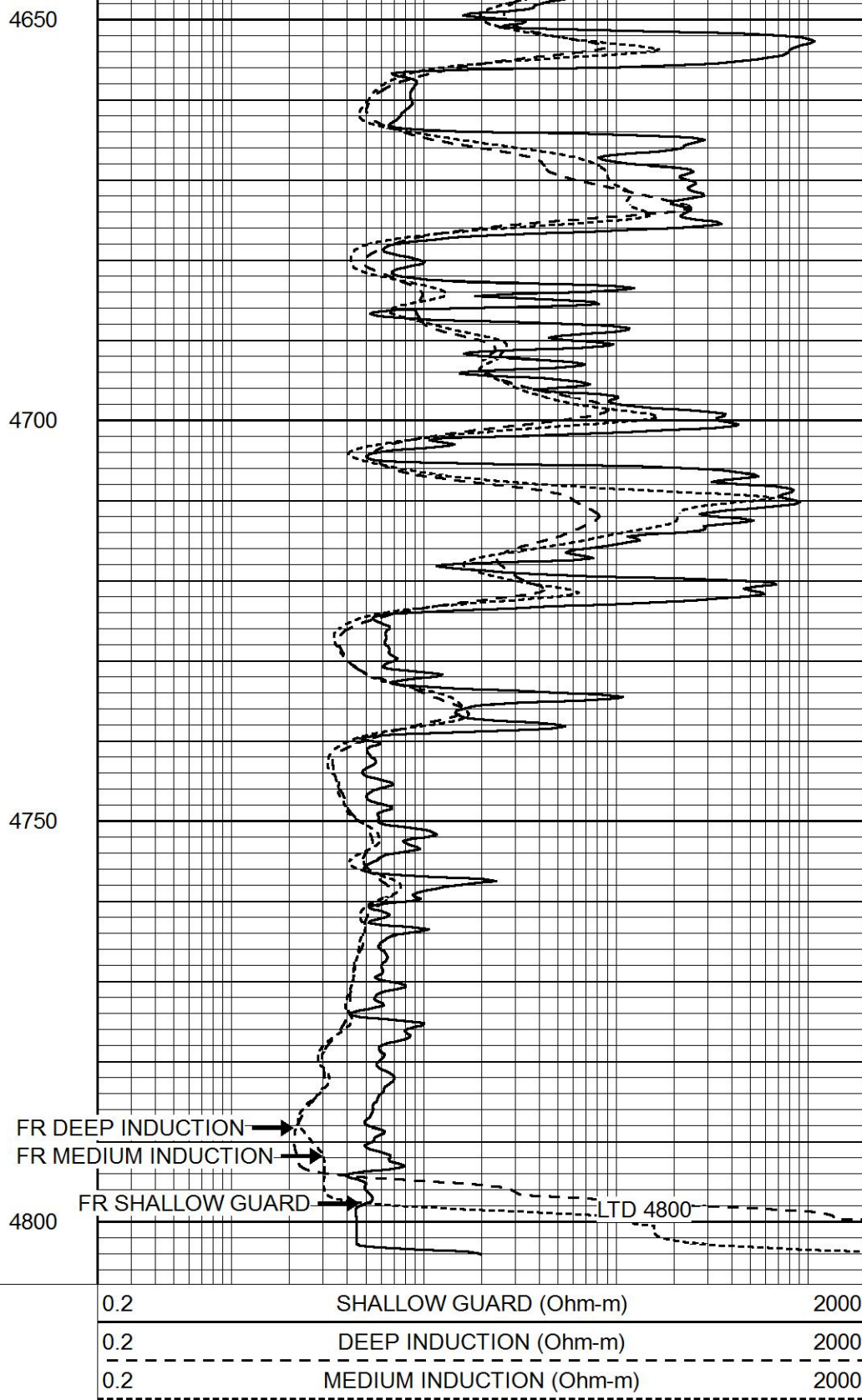
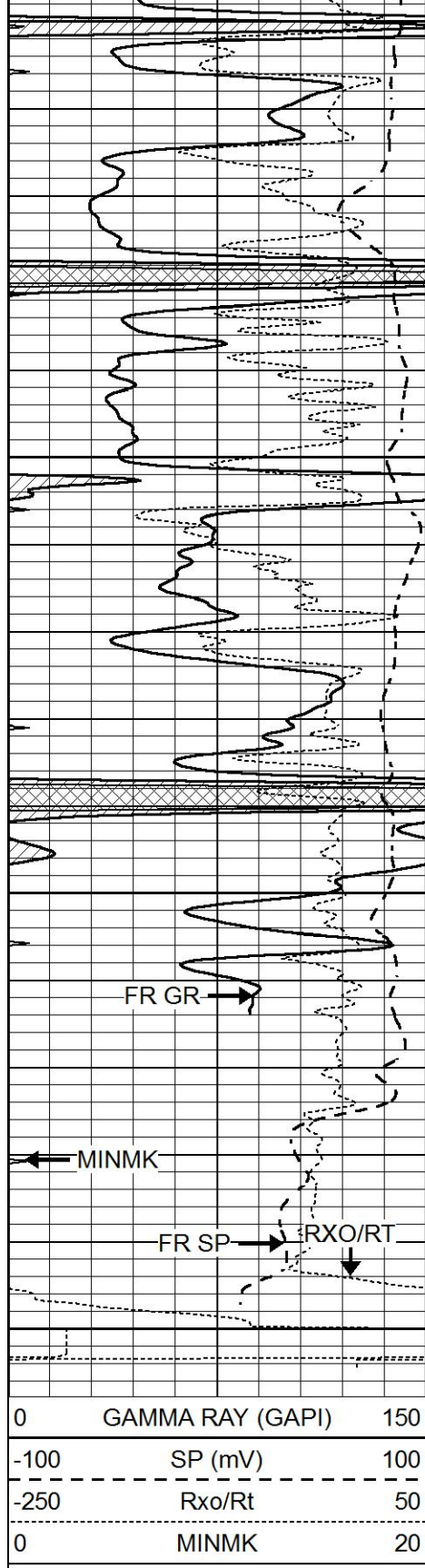
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4500

4550

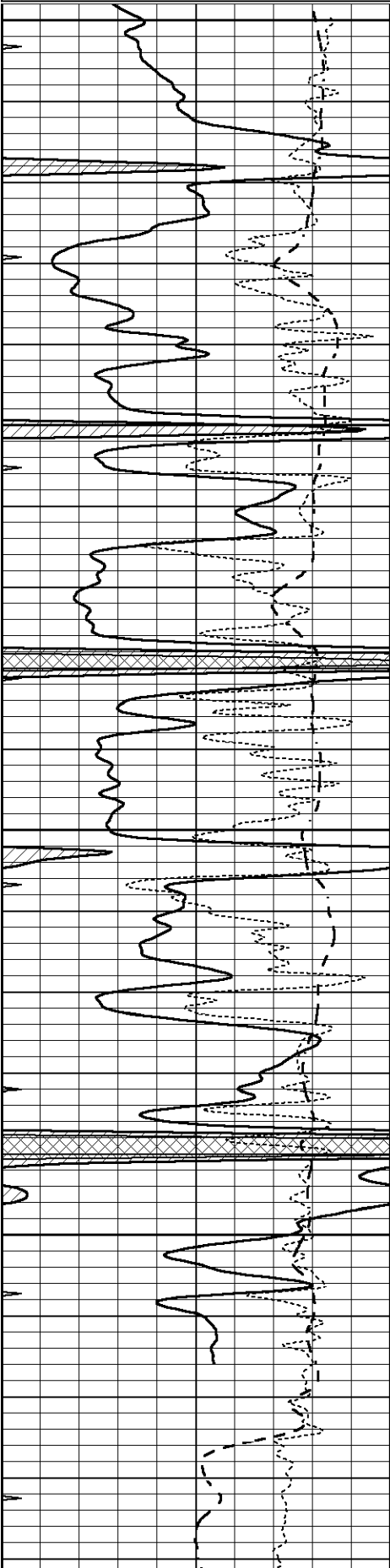
4600





REPEAT SECTION

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			

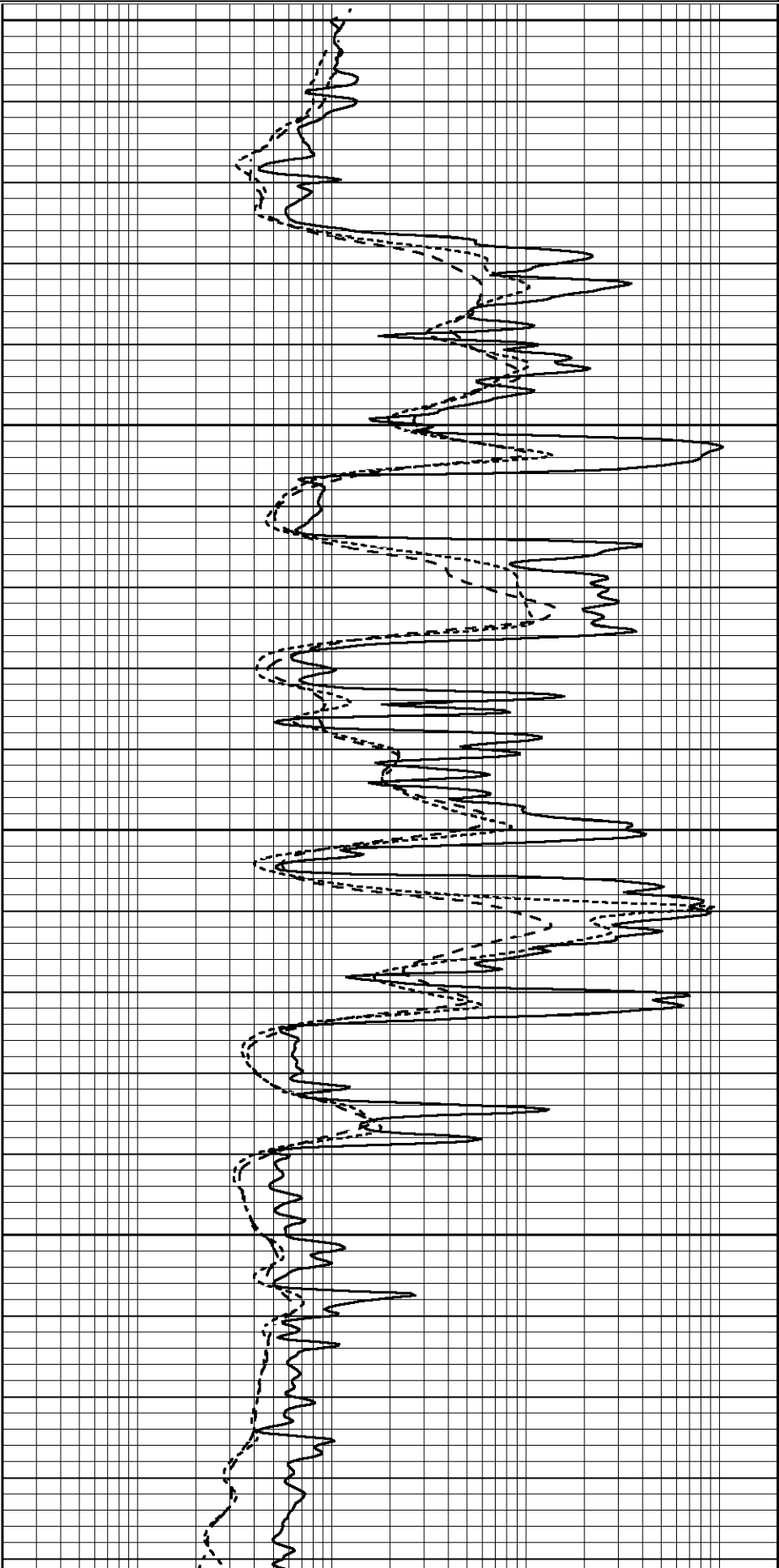


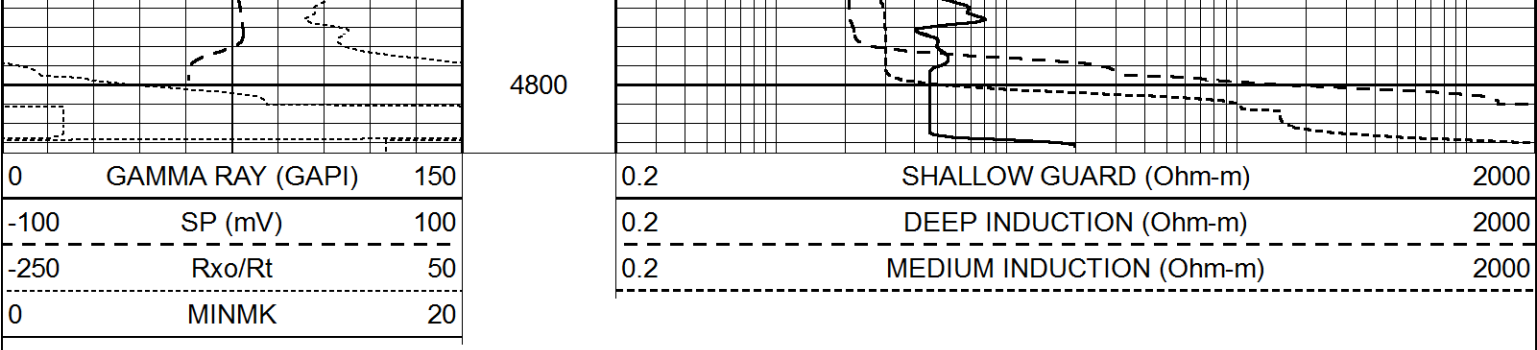
4600

4650

4700

4750





Calibration Report									
Database File	8639ddn.db								
Dataset Pathname	pass3.2M								
Dataset Creation	Mon Jul 01 20:57:38 2024								
Dual Induction Calibration Report									
Serial-Model:				PROBE8-DILG					
Surface Cal Performed:				Thu Jun 27 23:38:56 2024					
Downhole Cal Performed:				Mon Aug 14 00:39:25 2023					
After Survey Verification Performed:				Mon Jul 28 11:08:27 2008					
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.015	0.648	V	0.000	400.000	mmho/m	660.000	12.000	
Medium	0.029	0.796	V	0.000	464.000	mmho/m	650.000	2.000	
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 Tue Aug 02 11:29:35 2022									
	Background	Magnesium		Aluminum		Aluminum+Fe			
Window 1	1154.2	10019.5		3137.9		2795.6		cps	

Window 2	1054.4	8597.6	2733.4	2469.5	cps
Window 3	902.3	5241.4	1832.1	1719.3	cps
Window 4	251.9	261.1	255.8	252.9	cps
Long Space	0.0	7543.2	1679.0	1415.0	cps
Short Space	4.4	2049.3	1321.7	1116.8	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 43.7	Rib Slope	: 0.957	Density/Spine Ratio	: 0.562
Spine Angle	: 73.7	Spine Slope	: 3.426	Spine Intercept	: -17.2
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			
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:	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:		Thu Jun 13 23:56:25 2024			
Calibrator Value:		1.0	GAPI		

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps