

DUAL INDUCTION LOG

Company SHELBY RESOURCES, LLC.

Well M - B UNIT #1-26

Field WILDCAT

County PAWNEE State KANSAS

Location: API #: 15-145-21860-0000

2630' FNL & 1950' FEL
SW - SE - SW - NE

SEC 26 TWP 21S RGE 17W

Permanent Datum GROUND LEVEL Elevation 2068
Log Measured From KELLY BUSHING 11" A.G.L.
Drilling Measured From KELLY BUSHING

Other Services
CDL/CNL
MEL/SON

Elevation

K.B. 2079
D.F. 2077
G.L. 2068

Date 8/2/20

Run Number ONE

Depth Driller 4050

Depth Logger 4051

Bottom Logged Interval 4049

Top Log Interval 00

Casing Driller 8 5/8"@1087'

Casing Logger 1087

Bit Size 7 7/8"

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.5/44

pH / Fluid Loss 10.0/12.0

Source of Sample FLOWLINE

Rm @ Meas. Temp .530@89F

Rmf @ Meas. Temp .398@89F

Rmc @ Meas. Temp .636@89F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .403@117F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom 5:00 A.M.

Maximum Recorded Temperature 117F

Equipment Number 922339

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By JEREMY SCHWARTZ

<<< 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

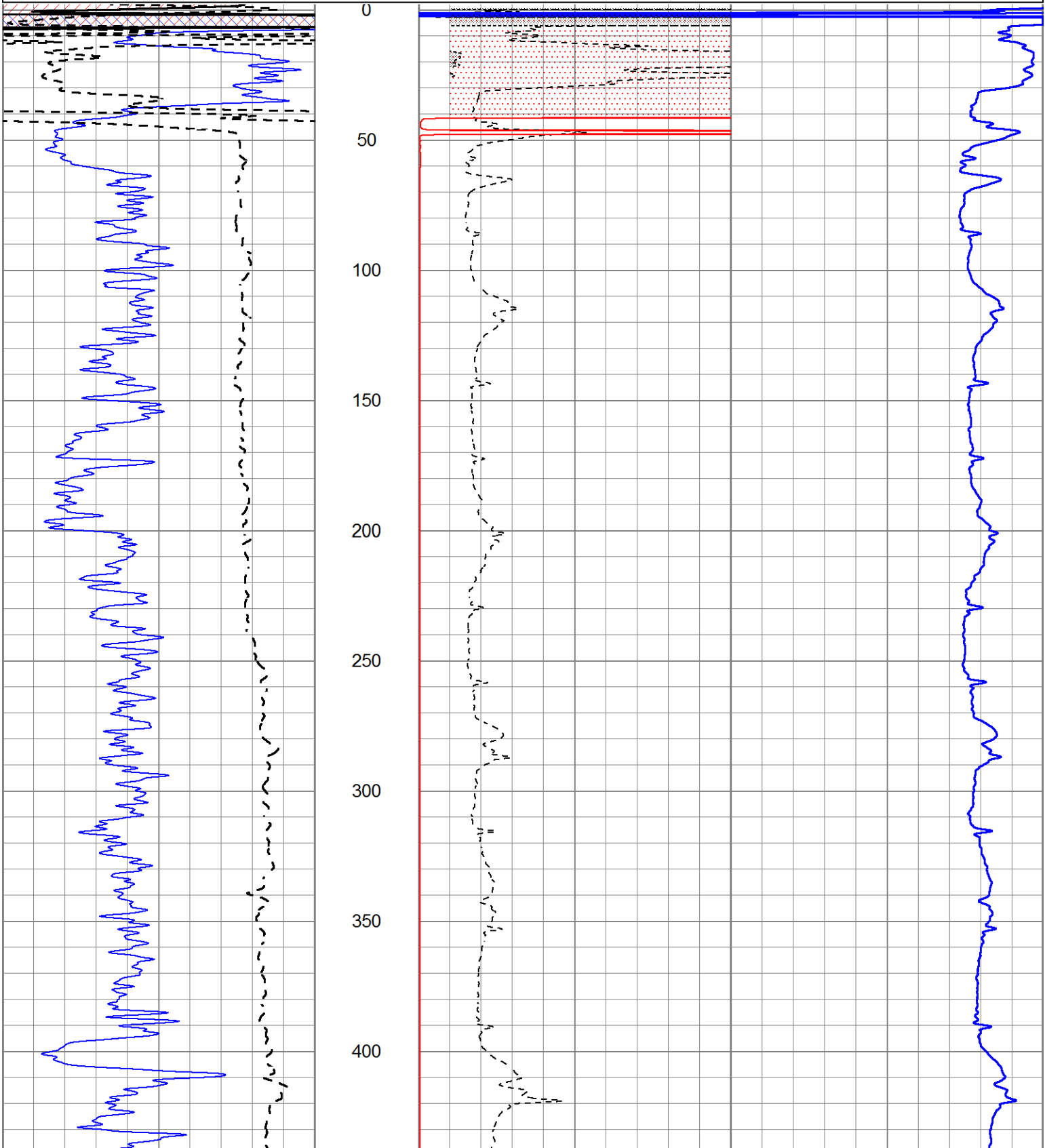
THANK YOU FOR USING E.L.I. WIRELINE SERVICES HAYS, KANSAS (785)628-6395
DIRECTIONS
LARNED, KS., 2W. ON HWY 156 TO "RD. 140", 1/2N., W. INTO

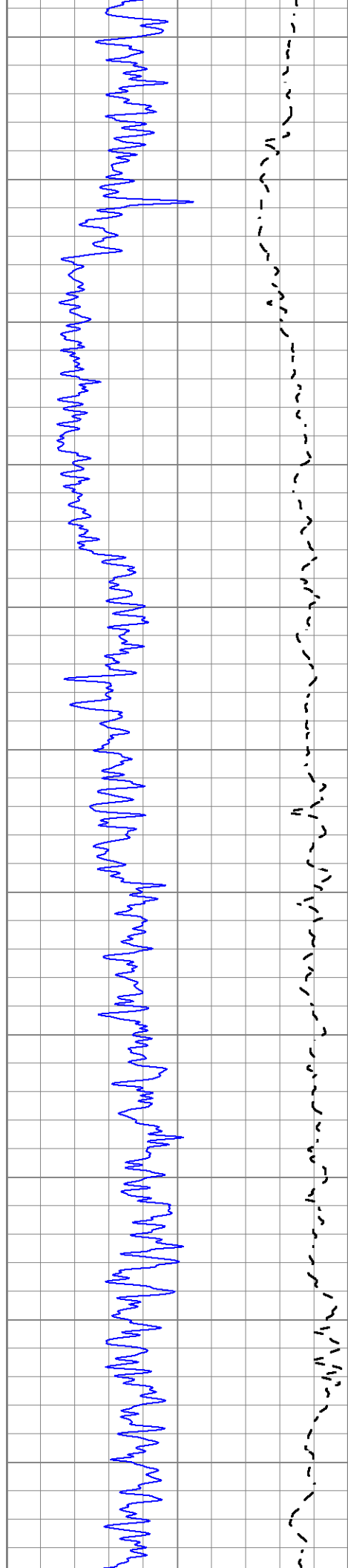


MAIN SECTION

Database File	4804ddn.db
Dataset Pathname	pass5.6M
Presentation Format	dil2
Dataset Creation	Sun Aug 02 07:30:34 2020
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

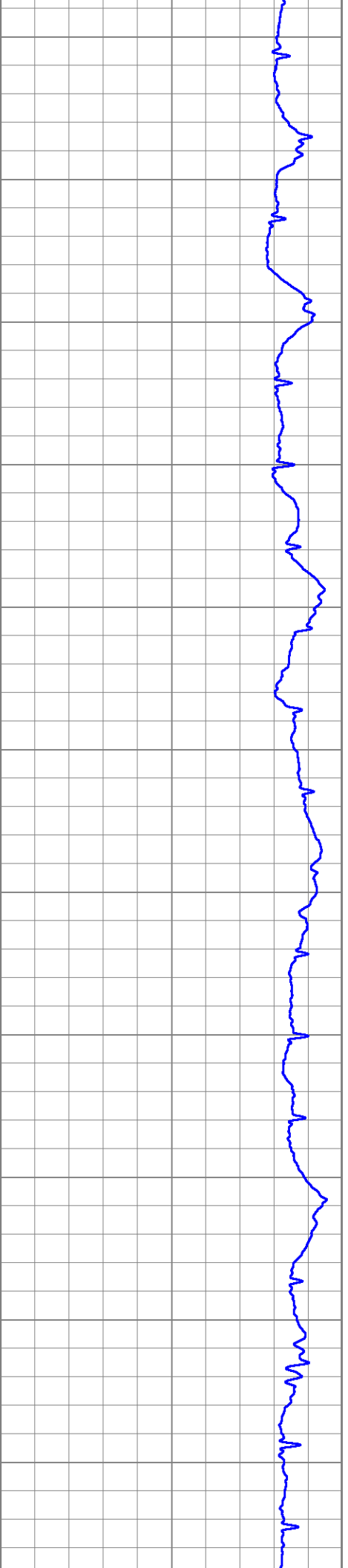
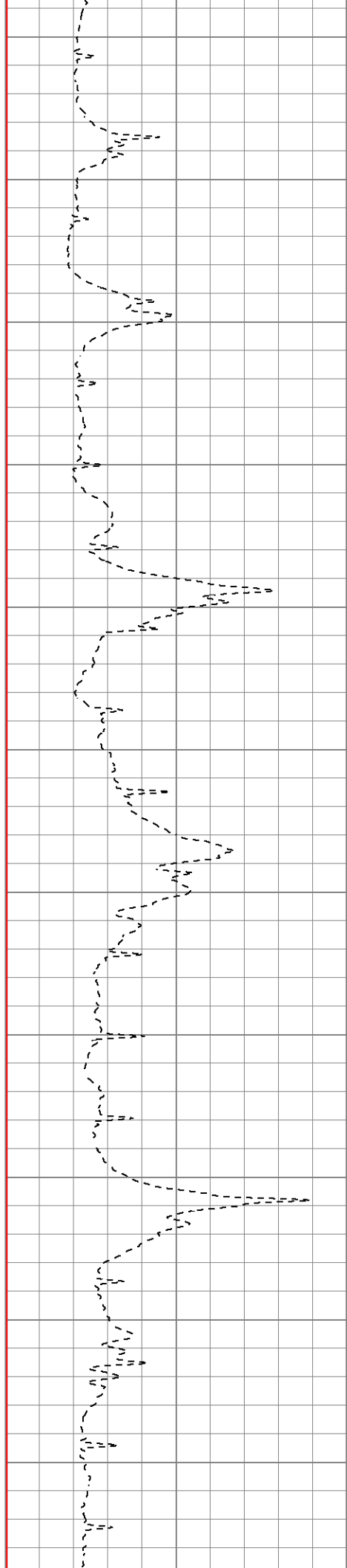
750

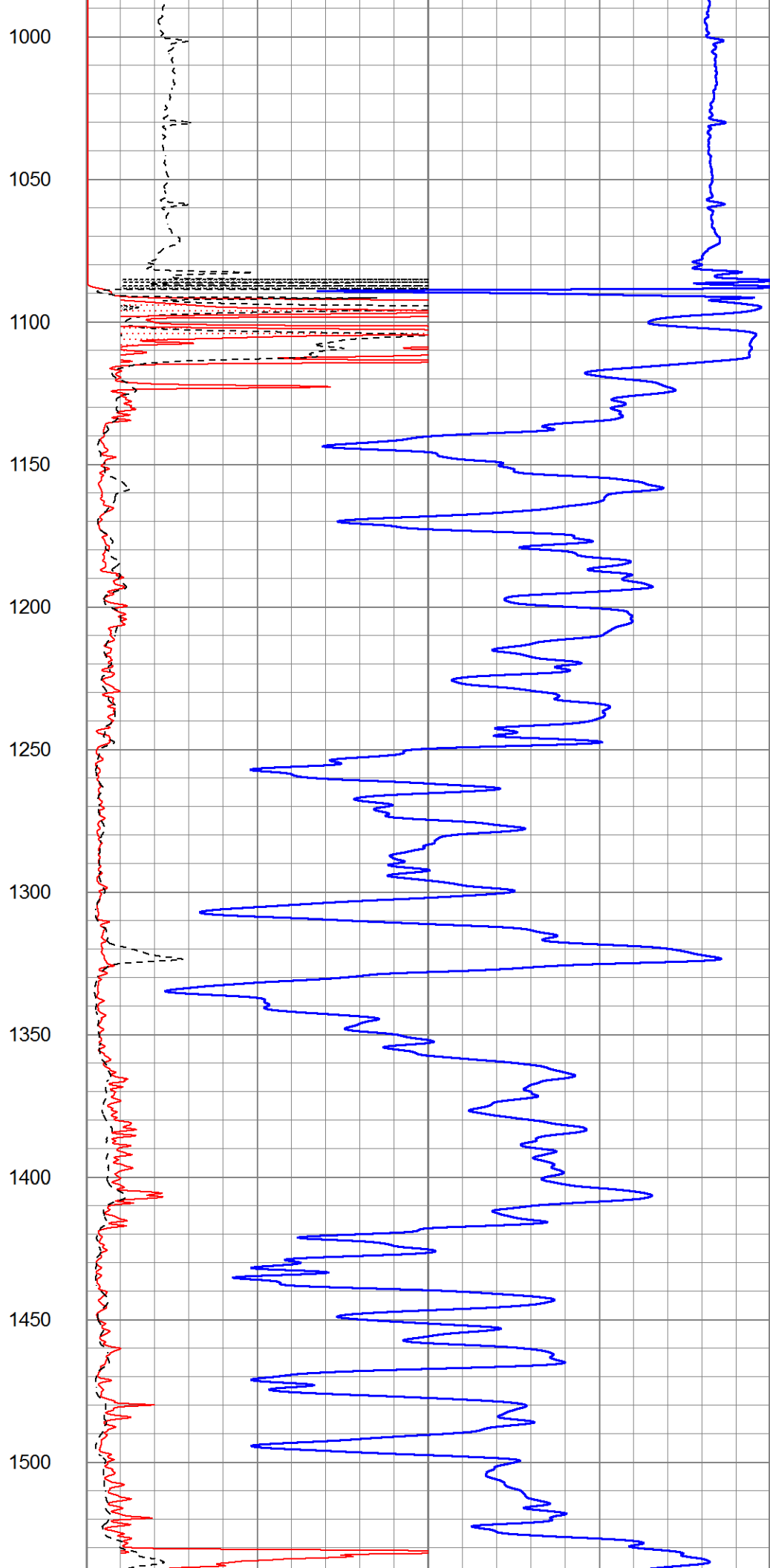
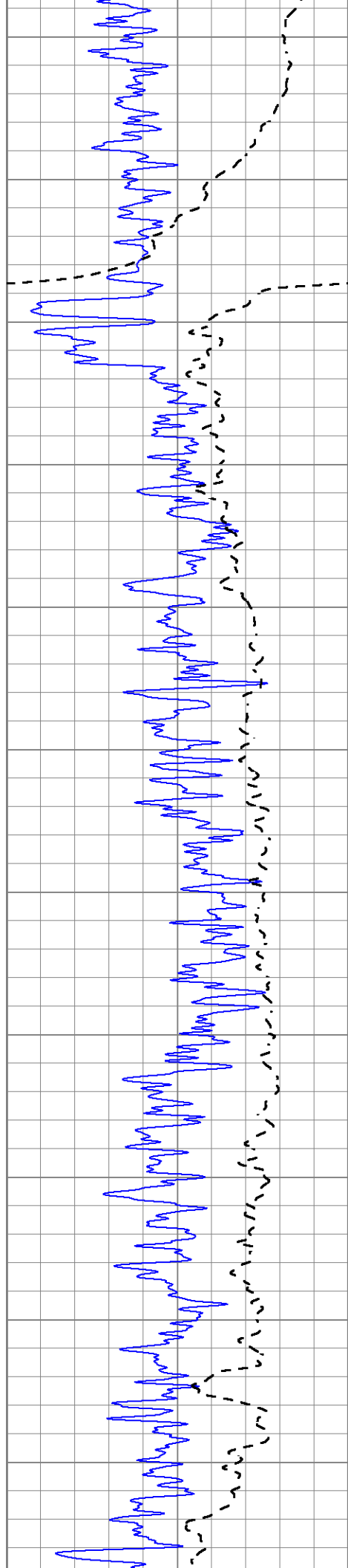
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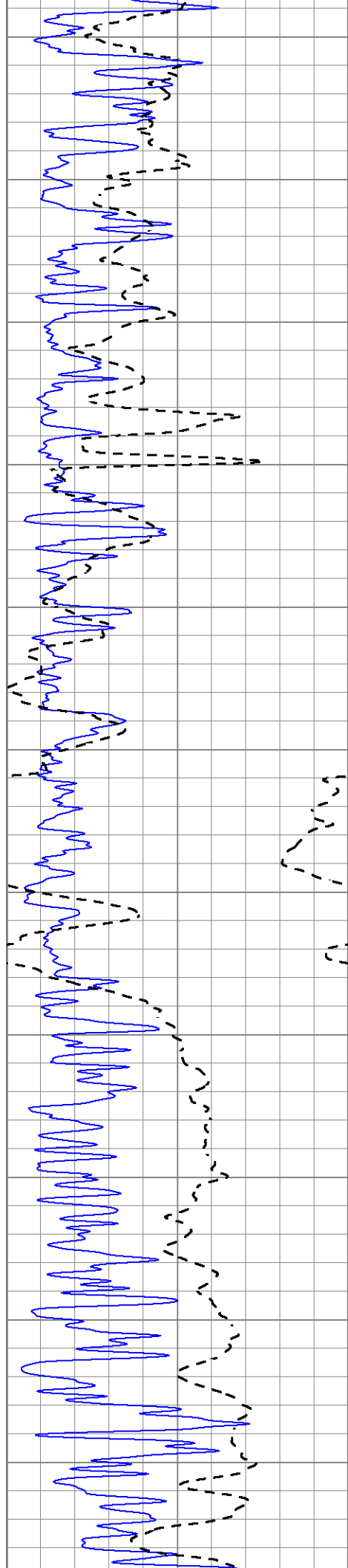
850

900

950







1550

1600

1650

1700

1750

1800

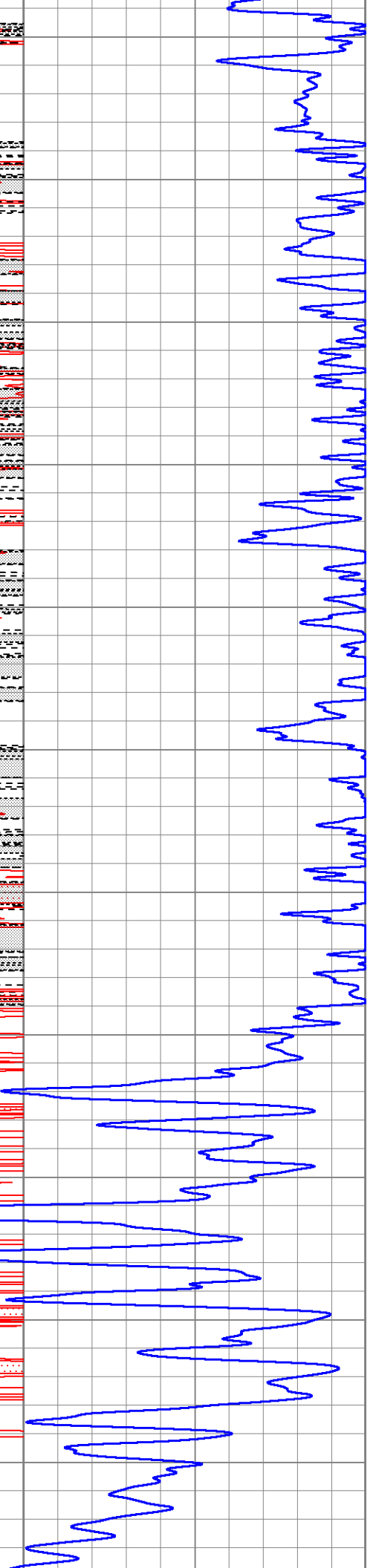
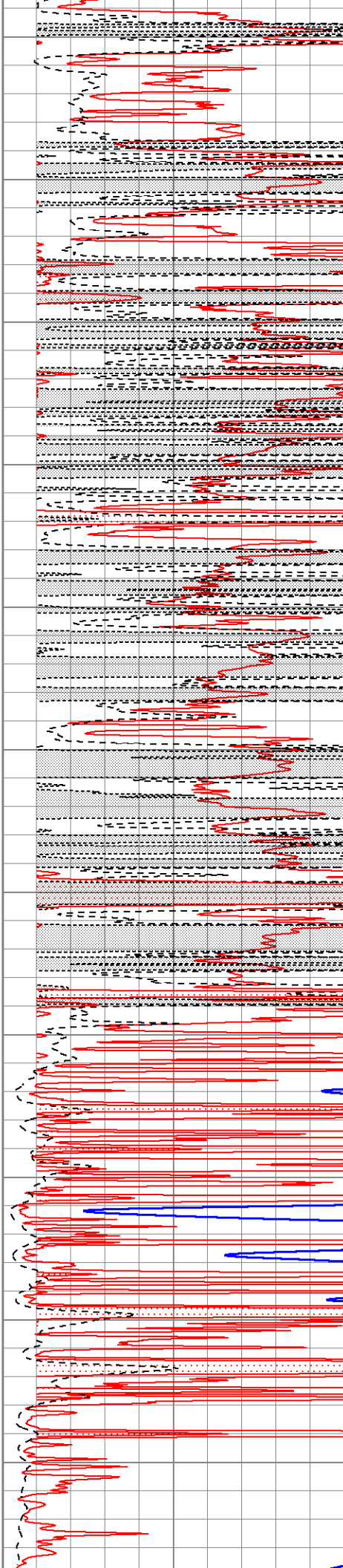
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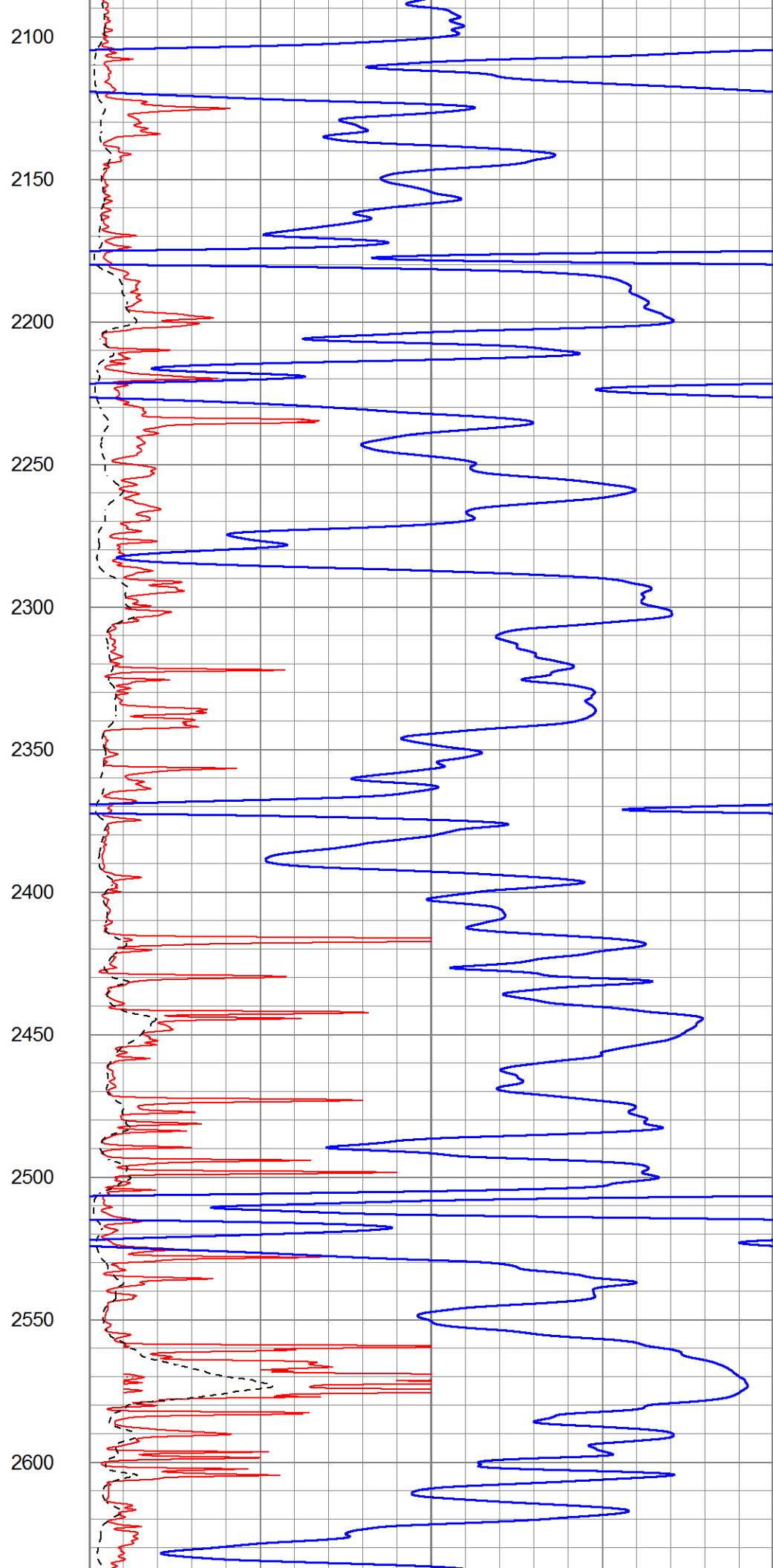
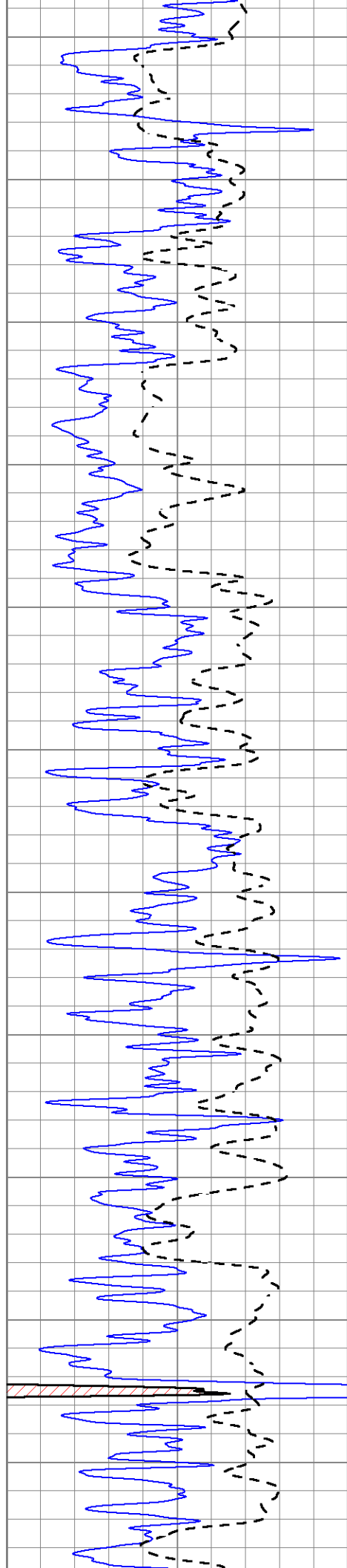
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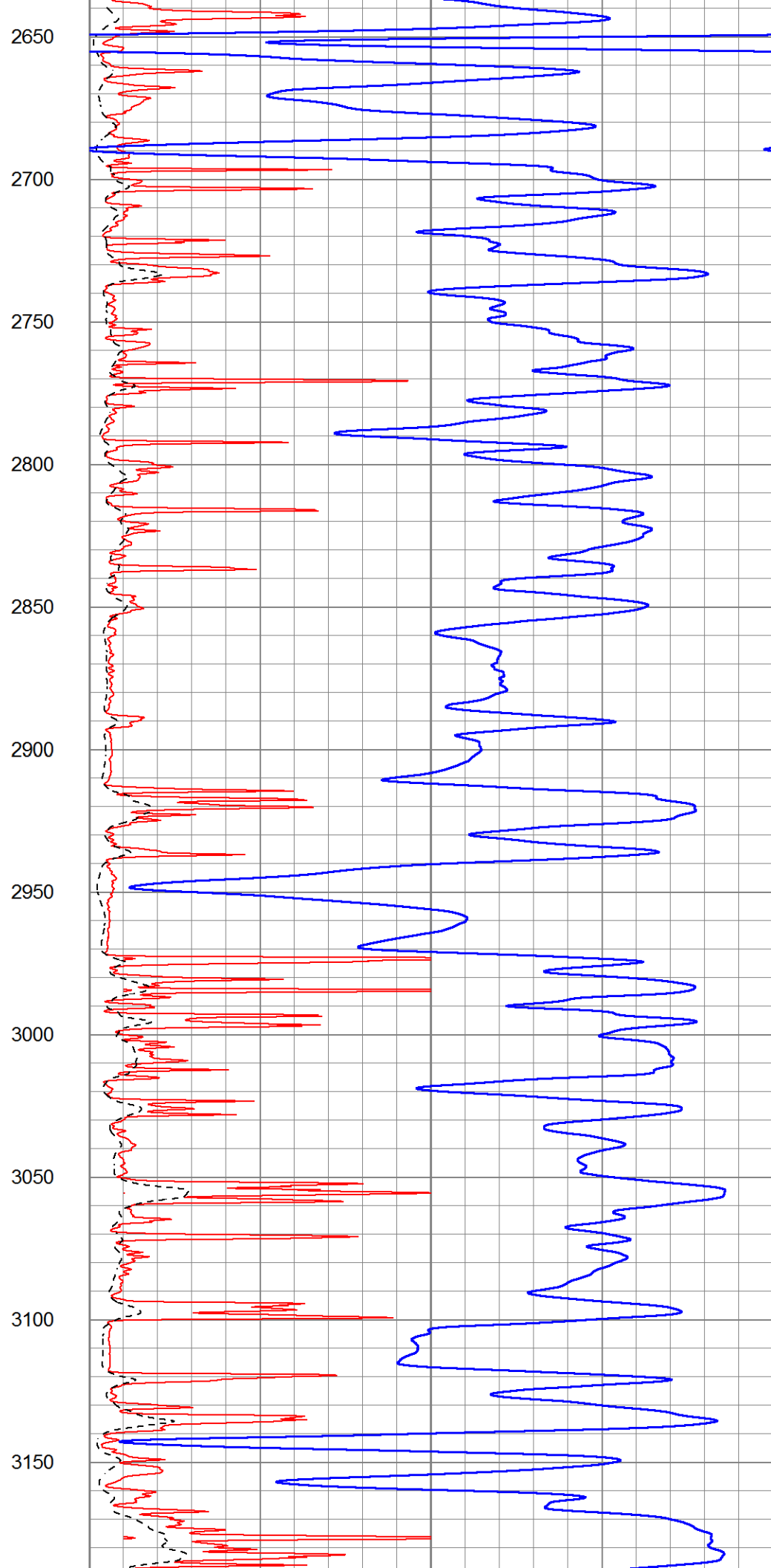
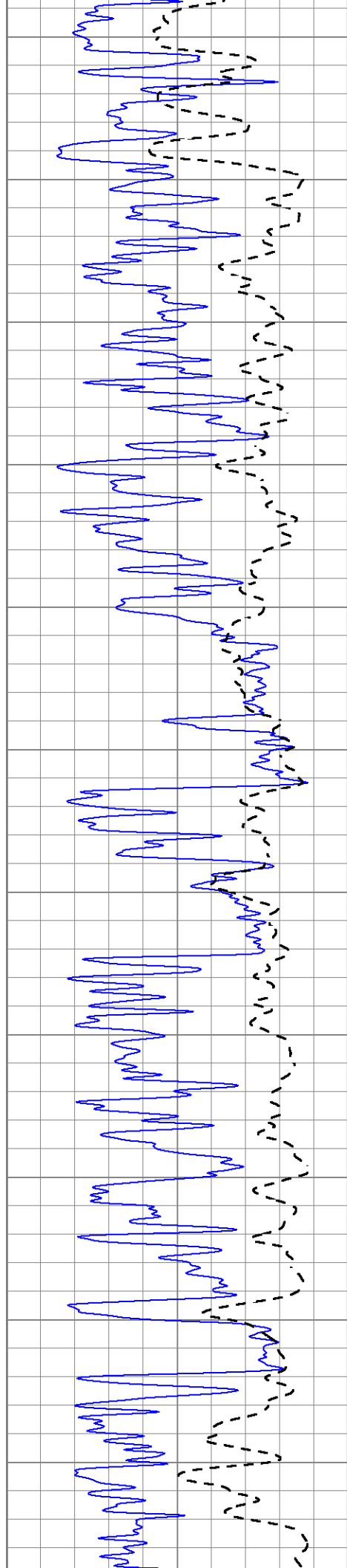
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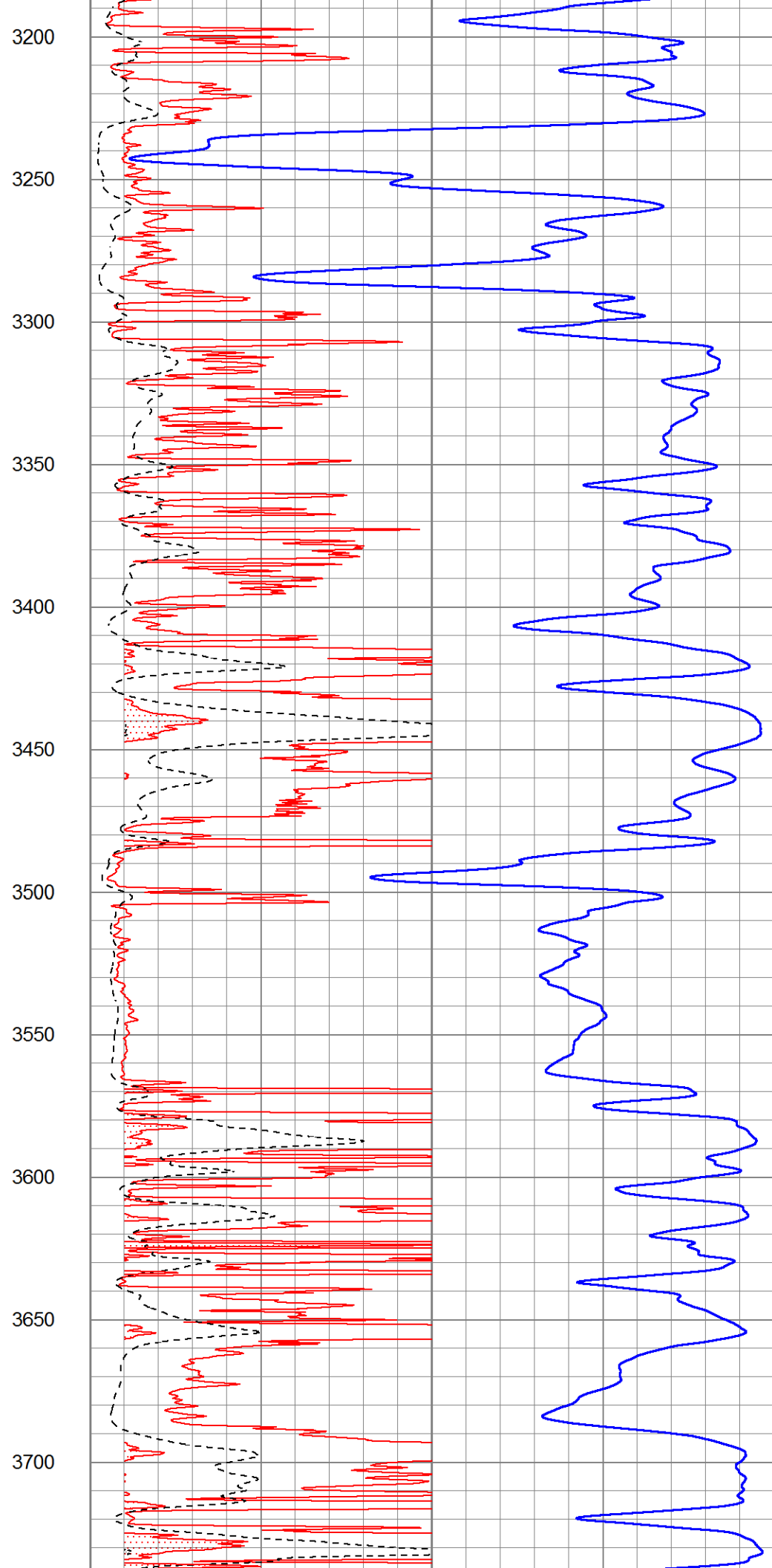
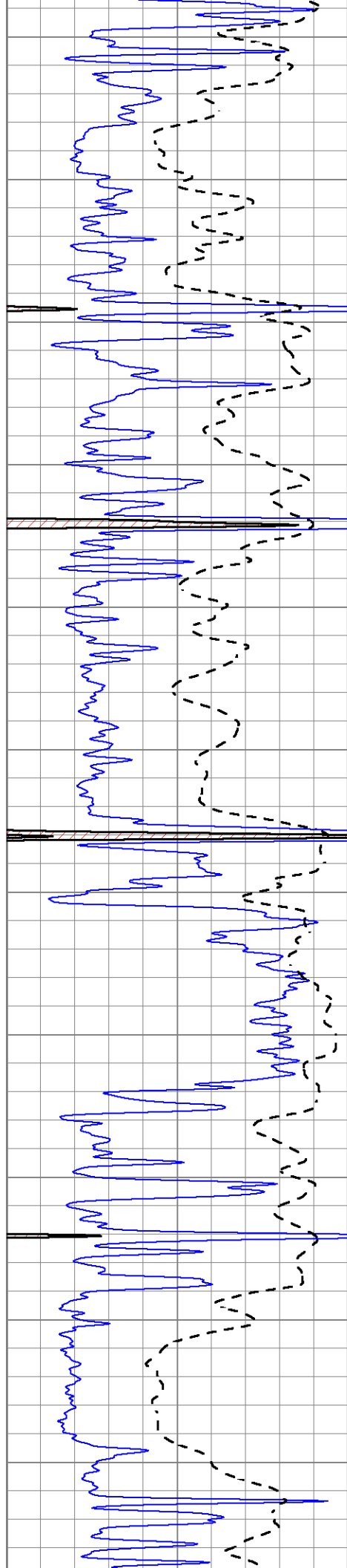
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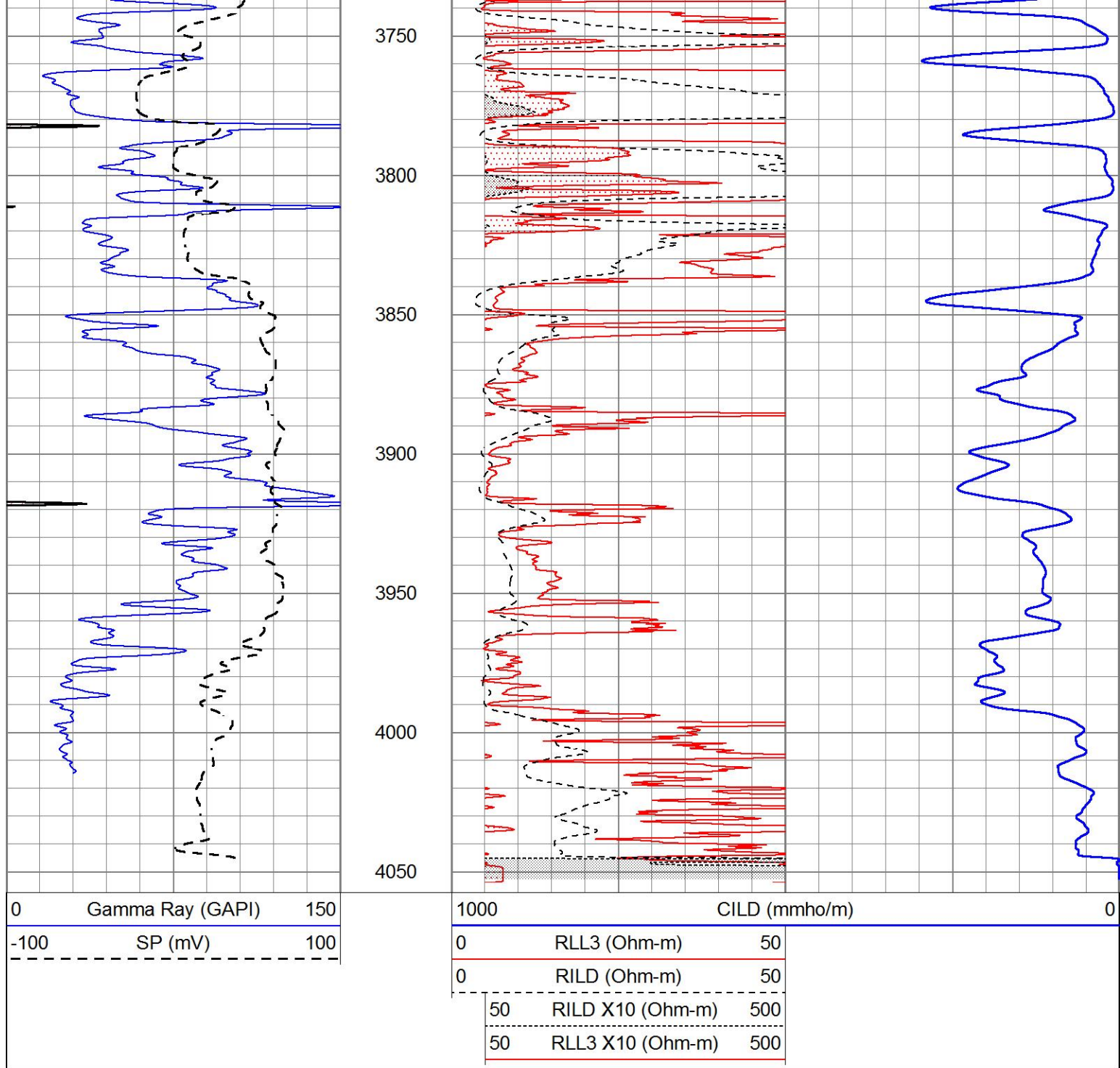
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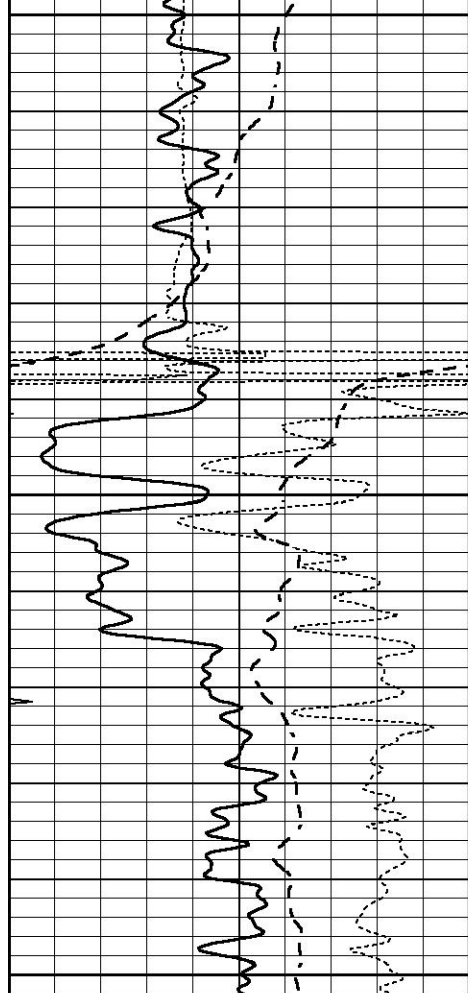


ANHYDRITE

Database File 4804ddn.db
Dataset Pathname pass5.6A
Presentation Format _dil
Dataset Creation Sun Aug 02 07:22:28 2020
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

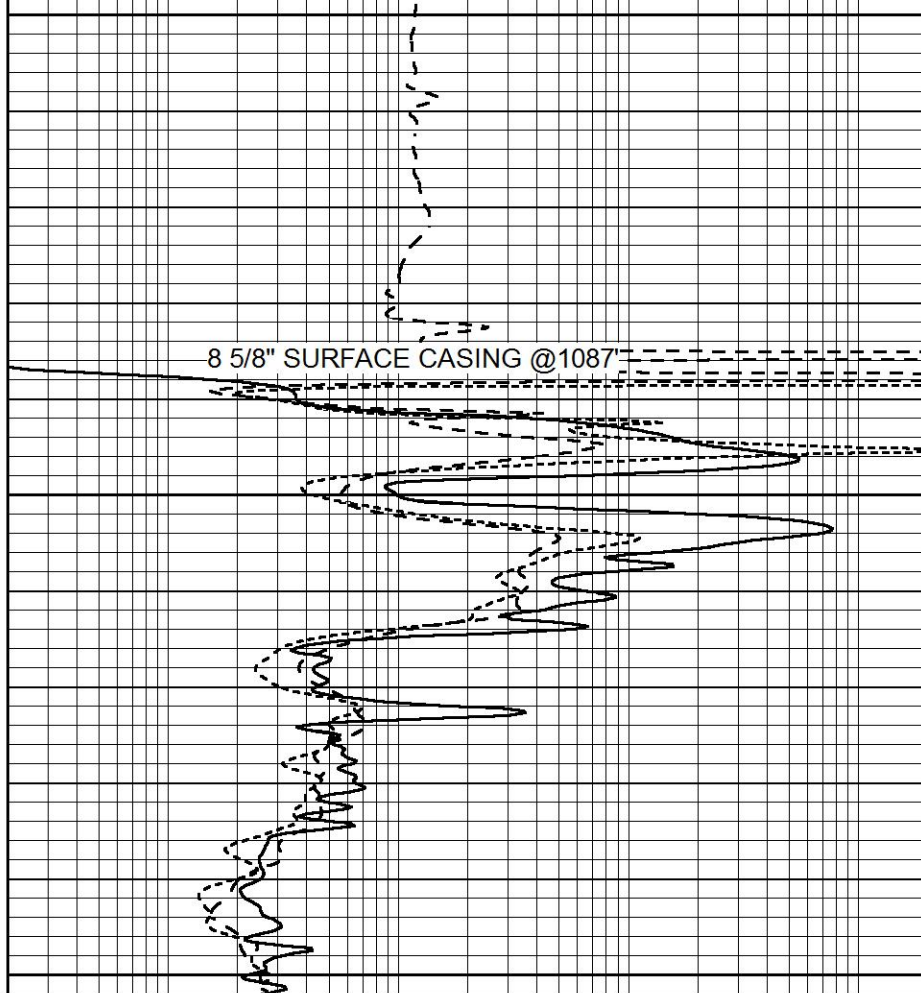


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

1050

1100

1150



8 5/8" SURFACE CASING @1087'

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

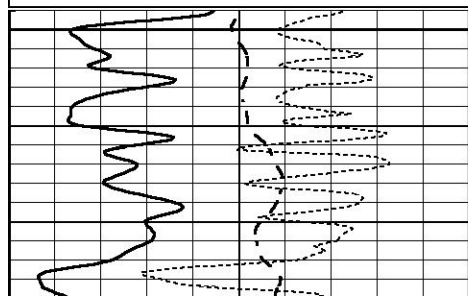


MAIN SECTION

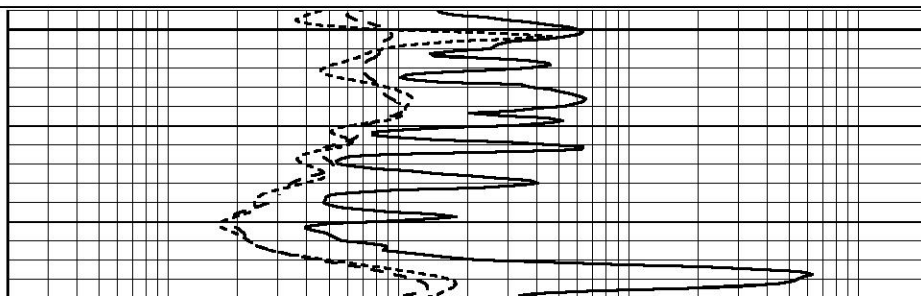
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 Dataset Pathname pass5.6M
 Presentation Format _dil
 Dataset Creation Sun Aug 02 07:30:34 2020
 Charted by Depth in Feet scaled 1:240

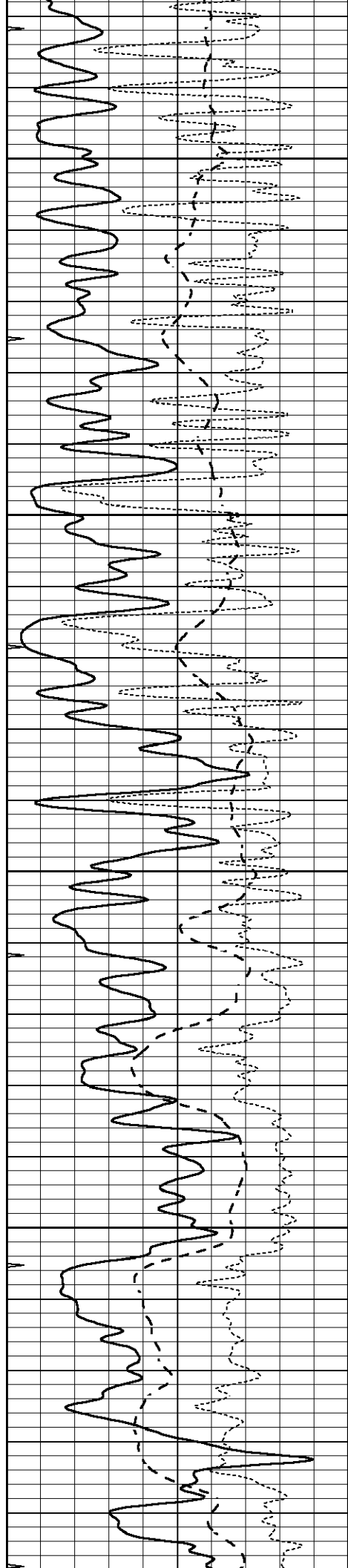
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



1900



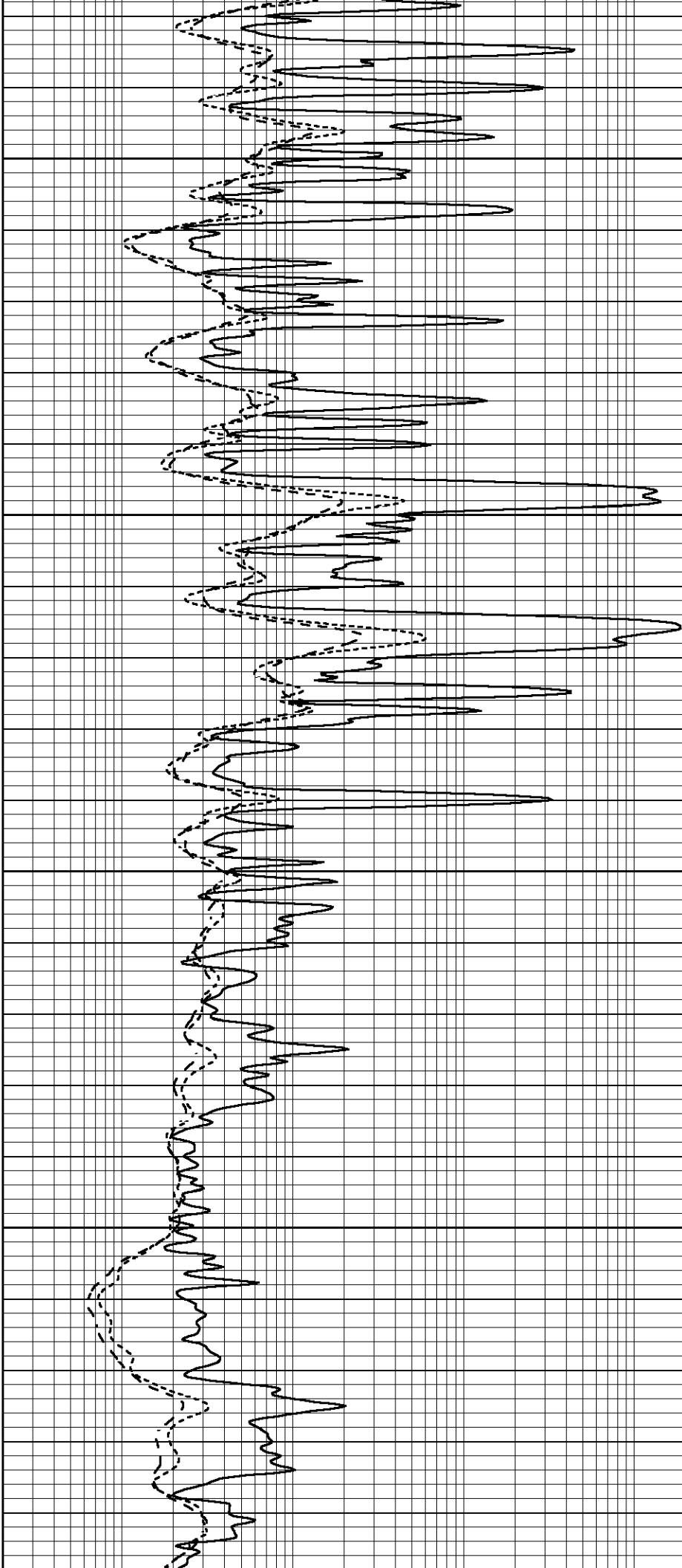


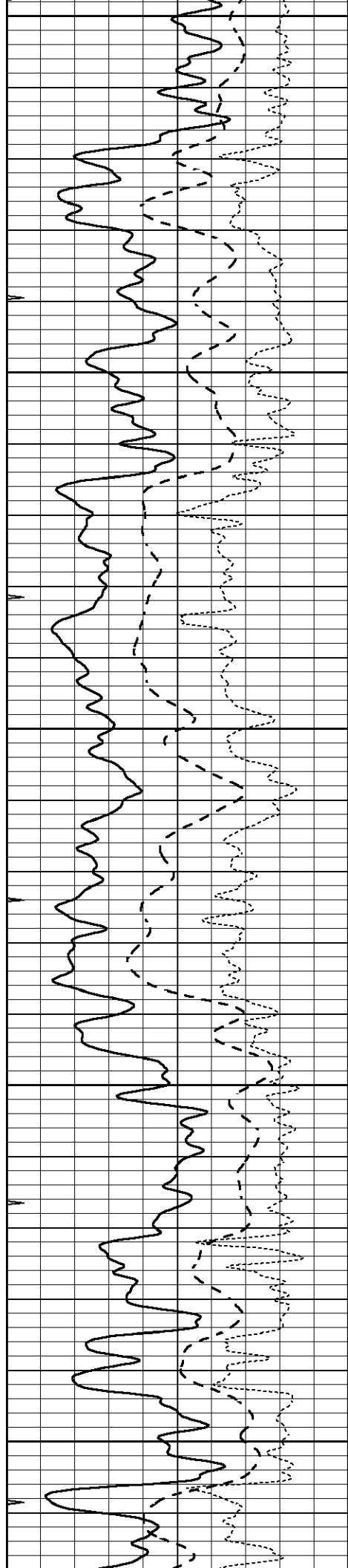
1950

2000

2050

2100





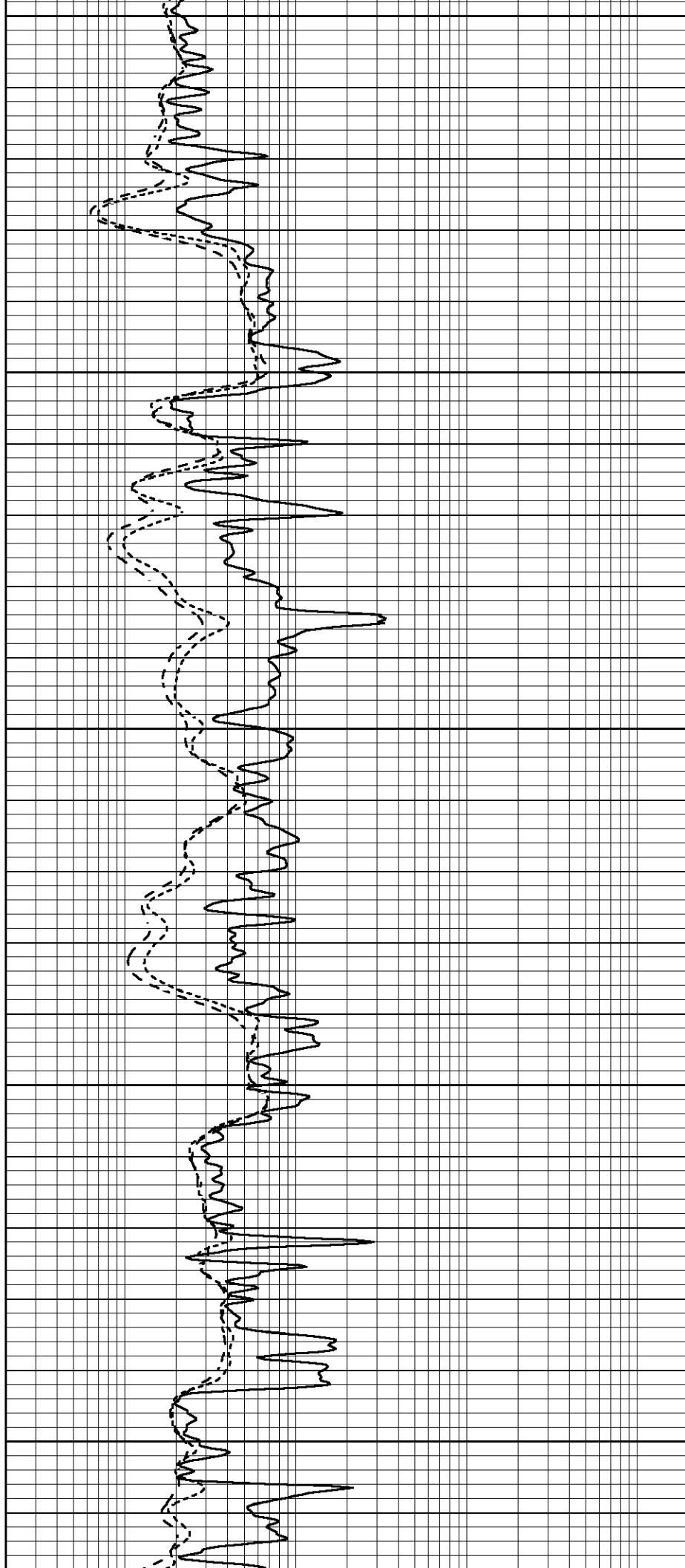
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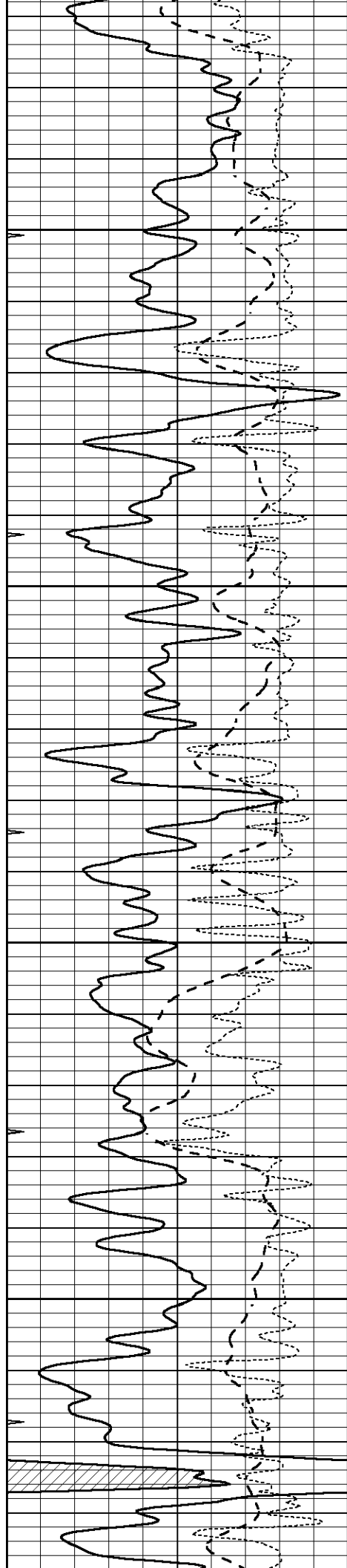
2200

2250

2300

2350



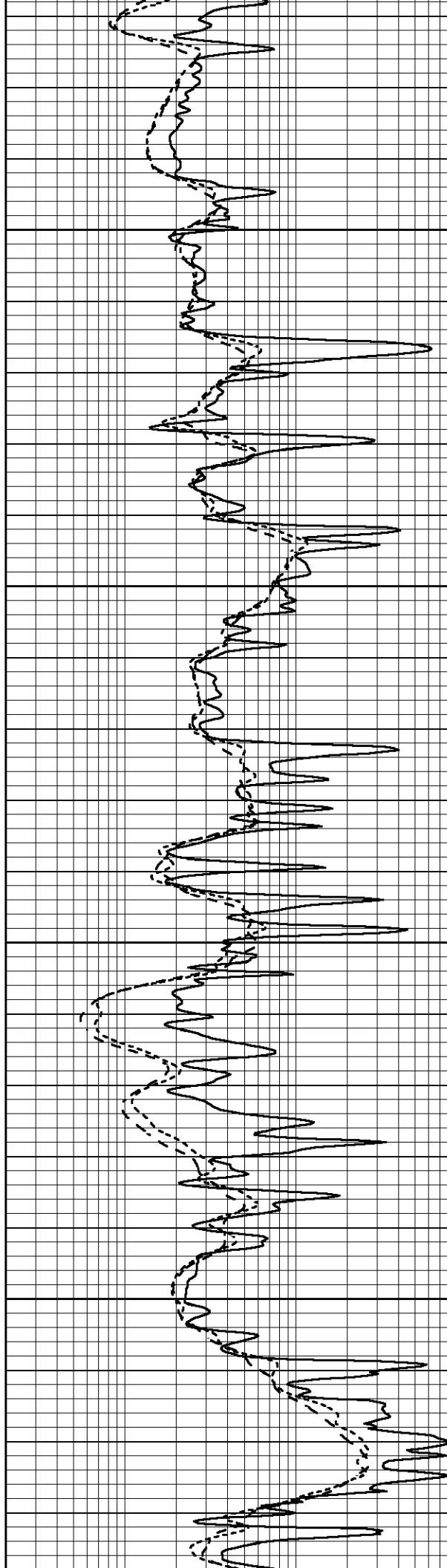


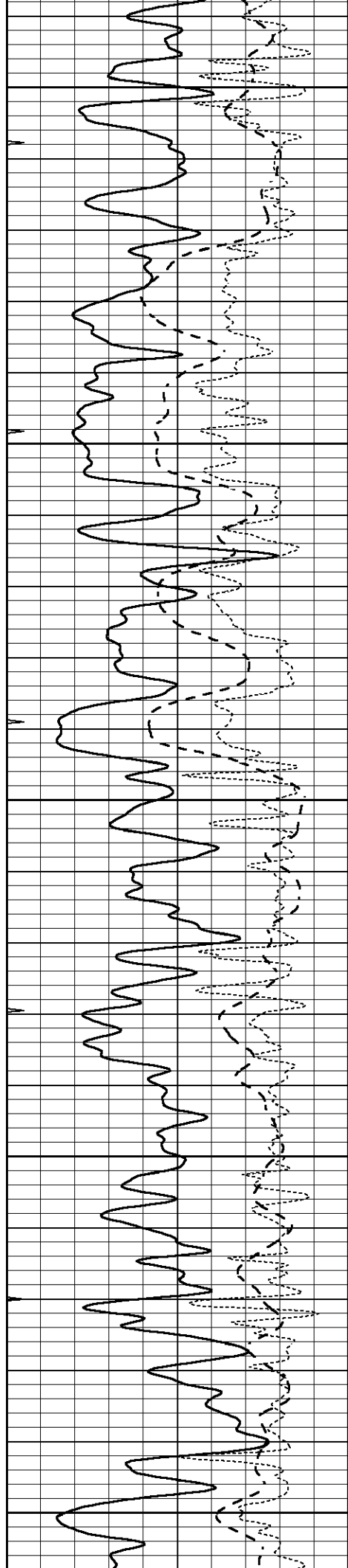
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2450

2500

2550





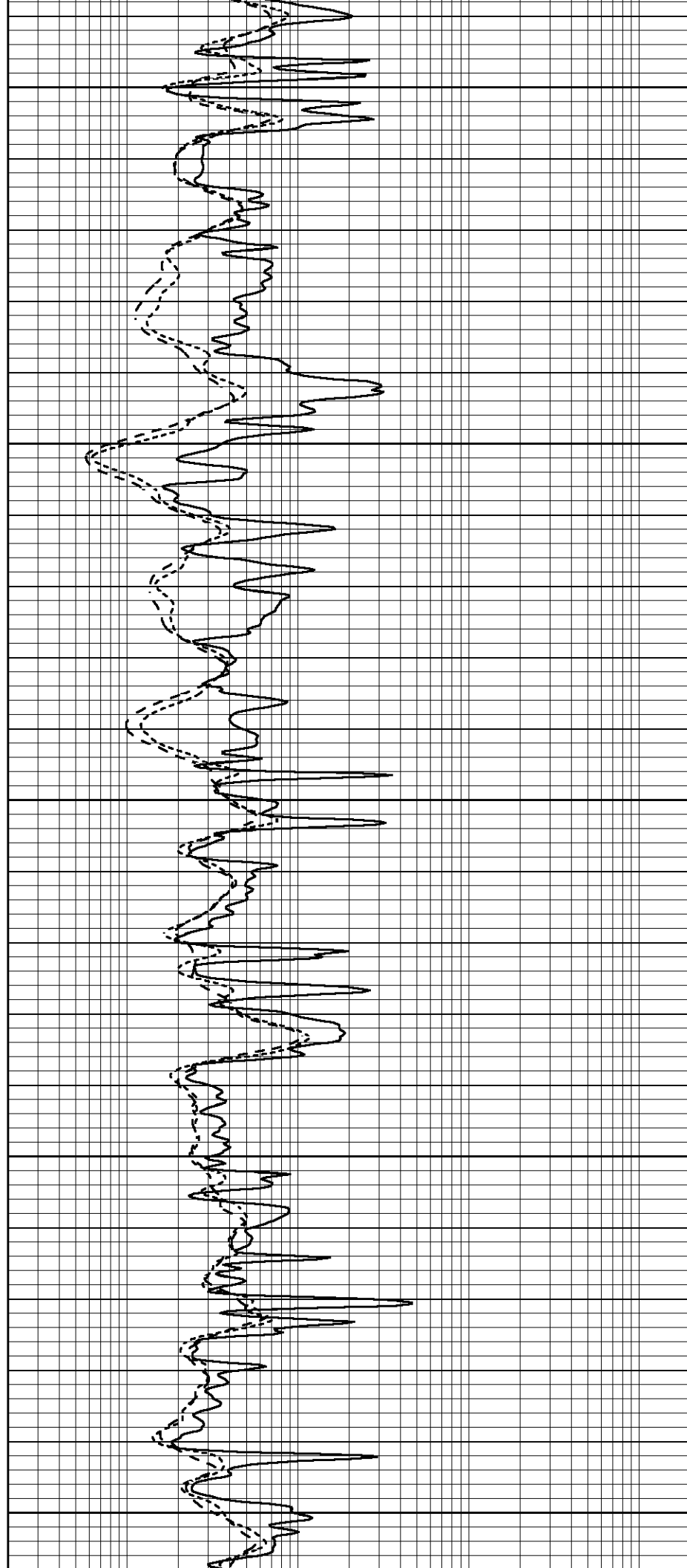
2600

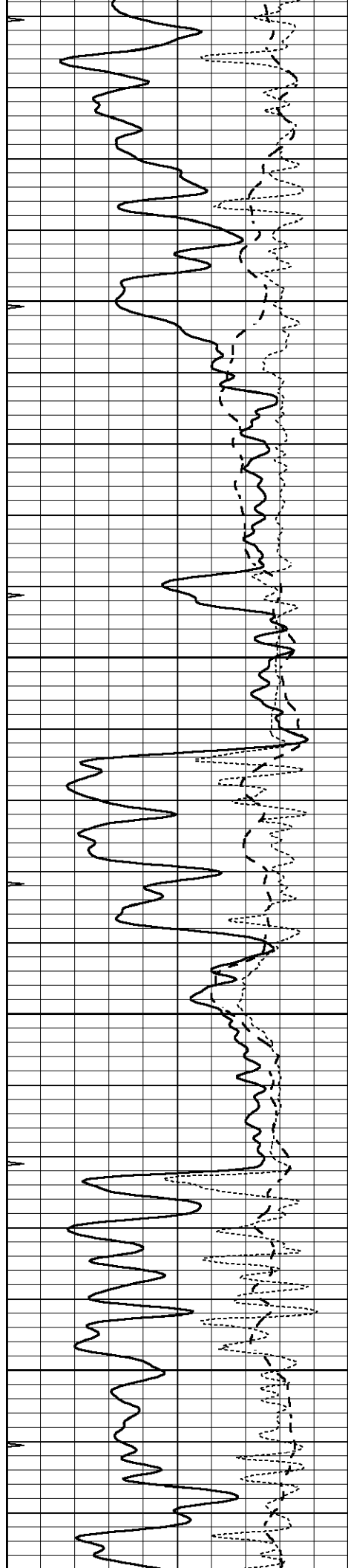
2650

2700

2750

2800



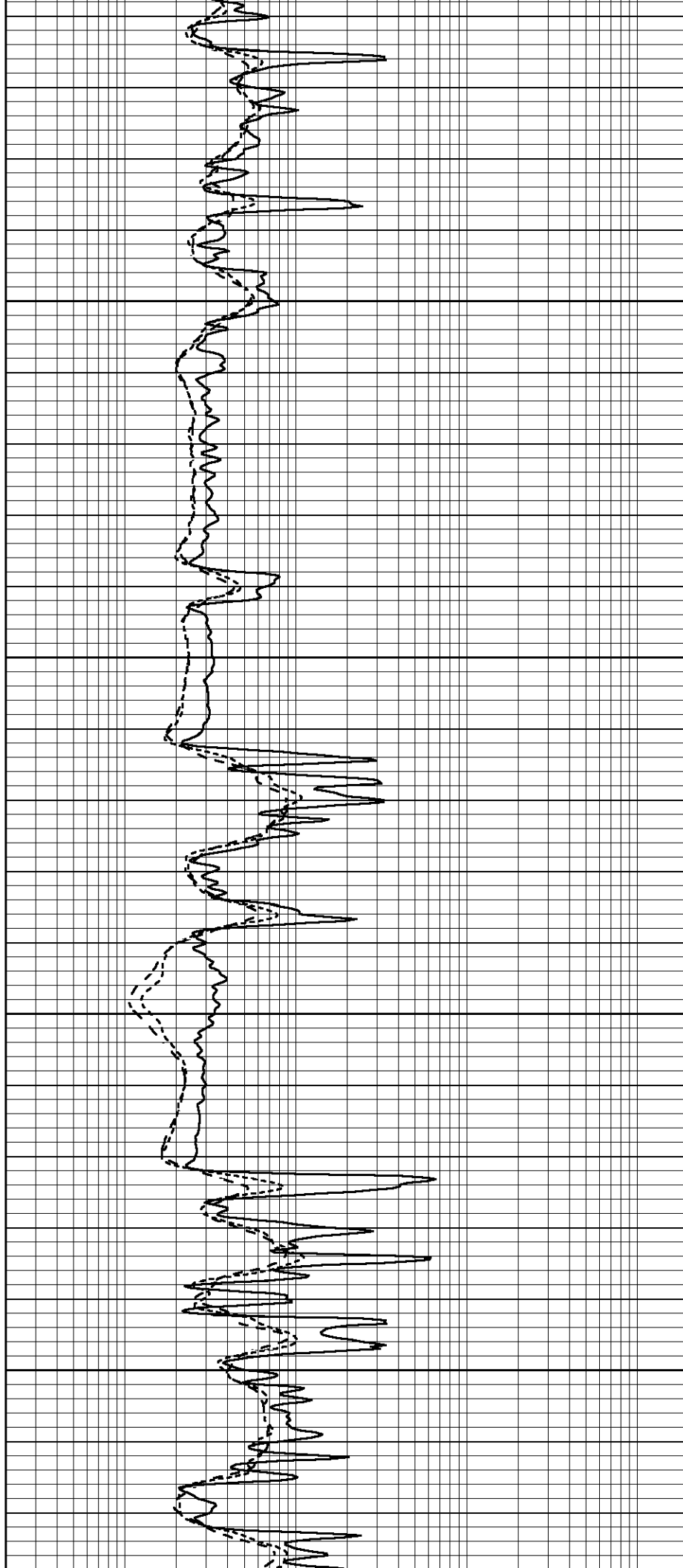


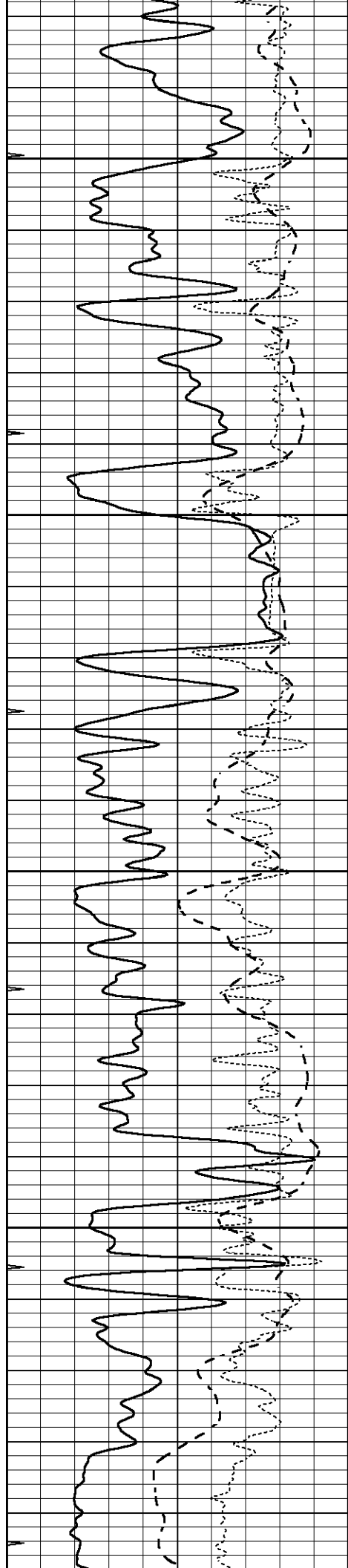
2850

2900

2950

3000



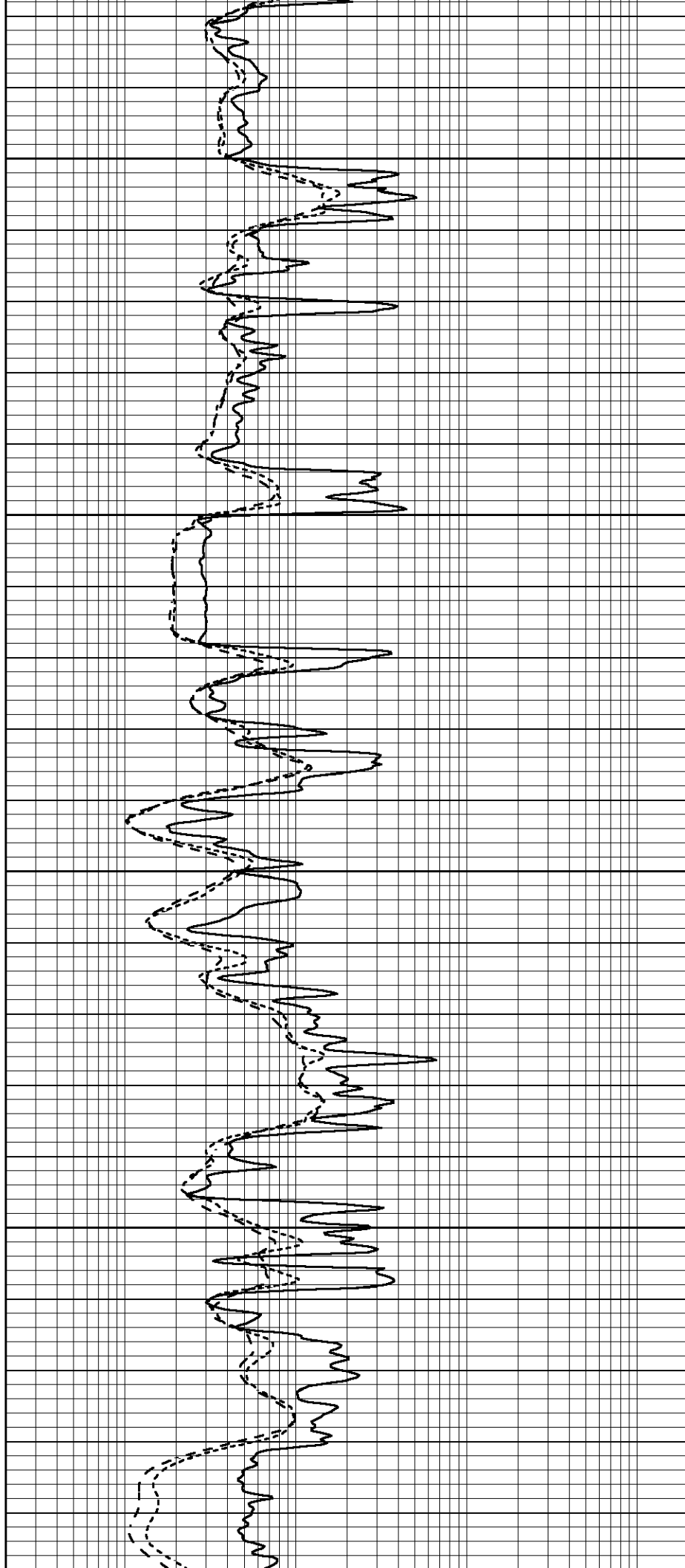


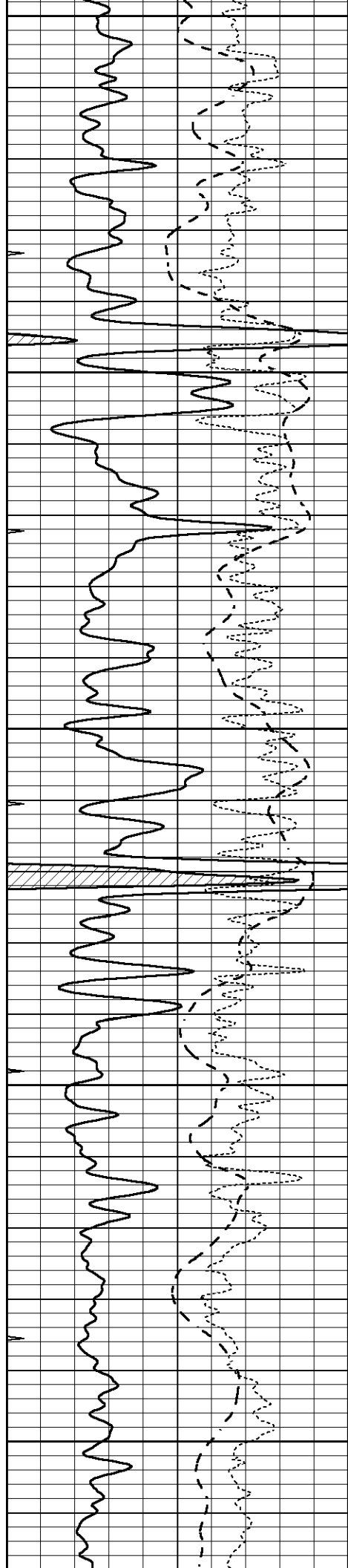
3050

3100

3150

3200





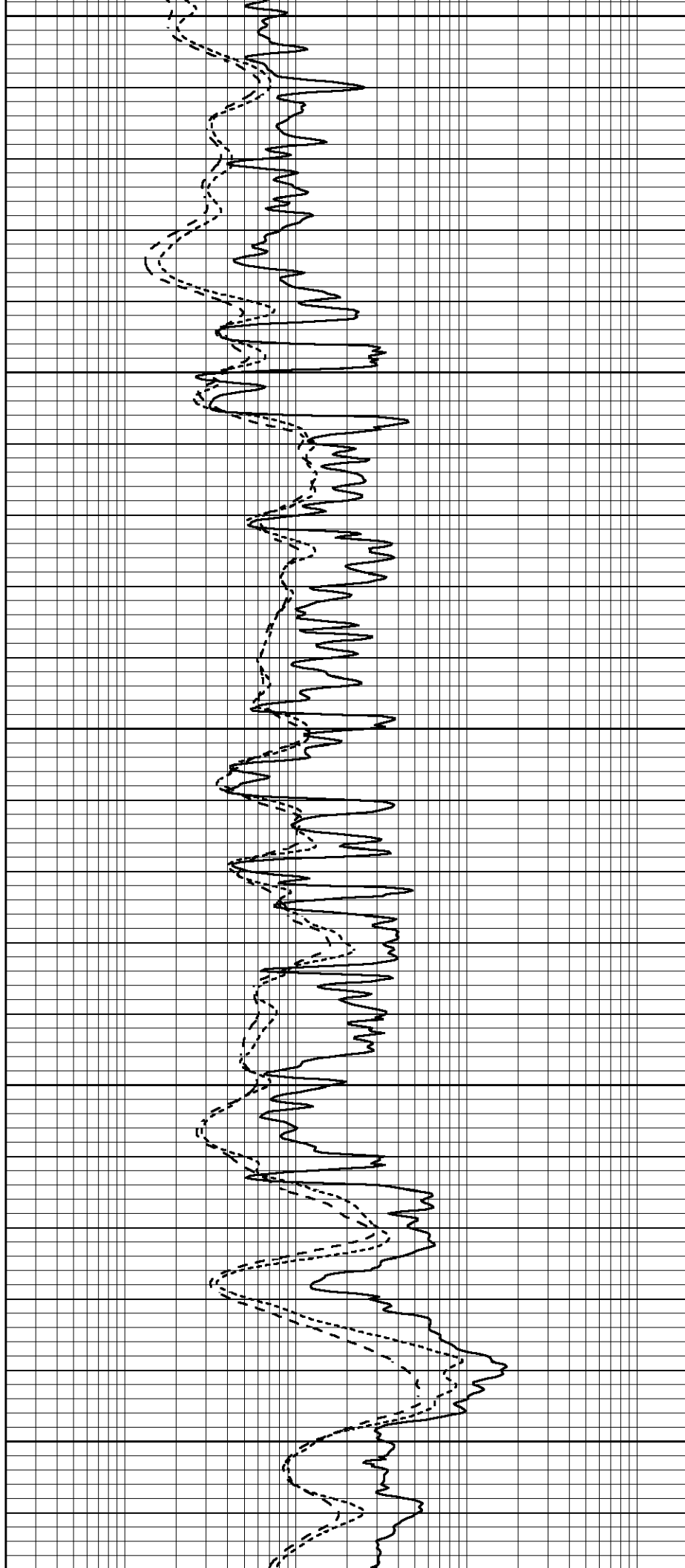
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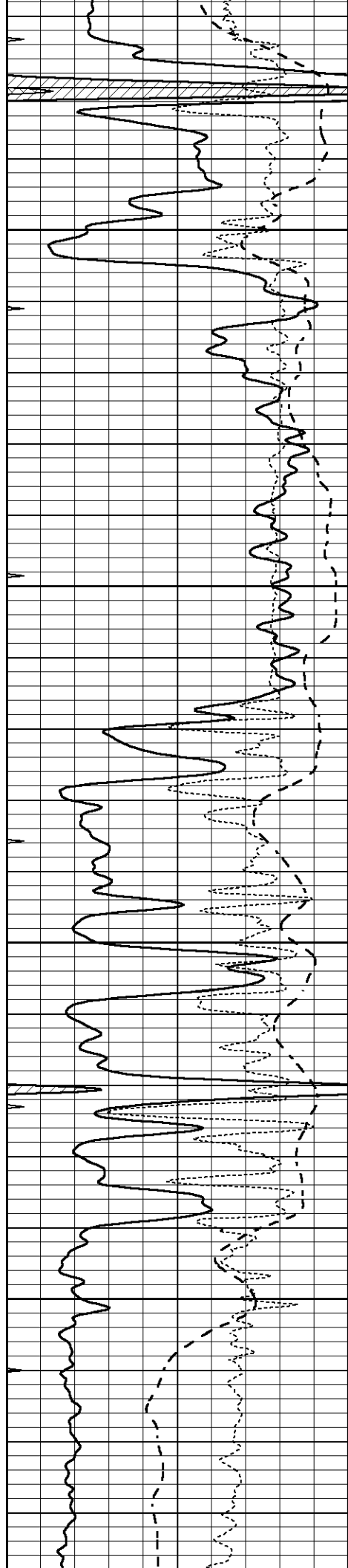
3300

3350

3400

3450



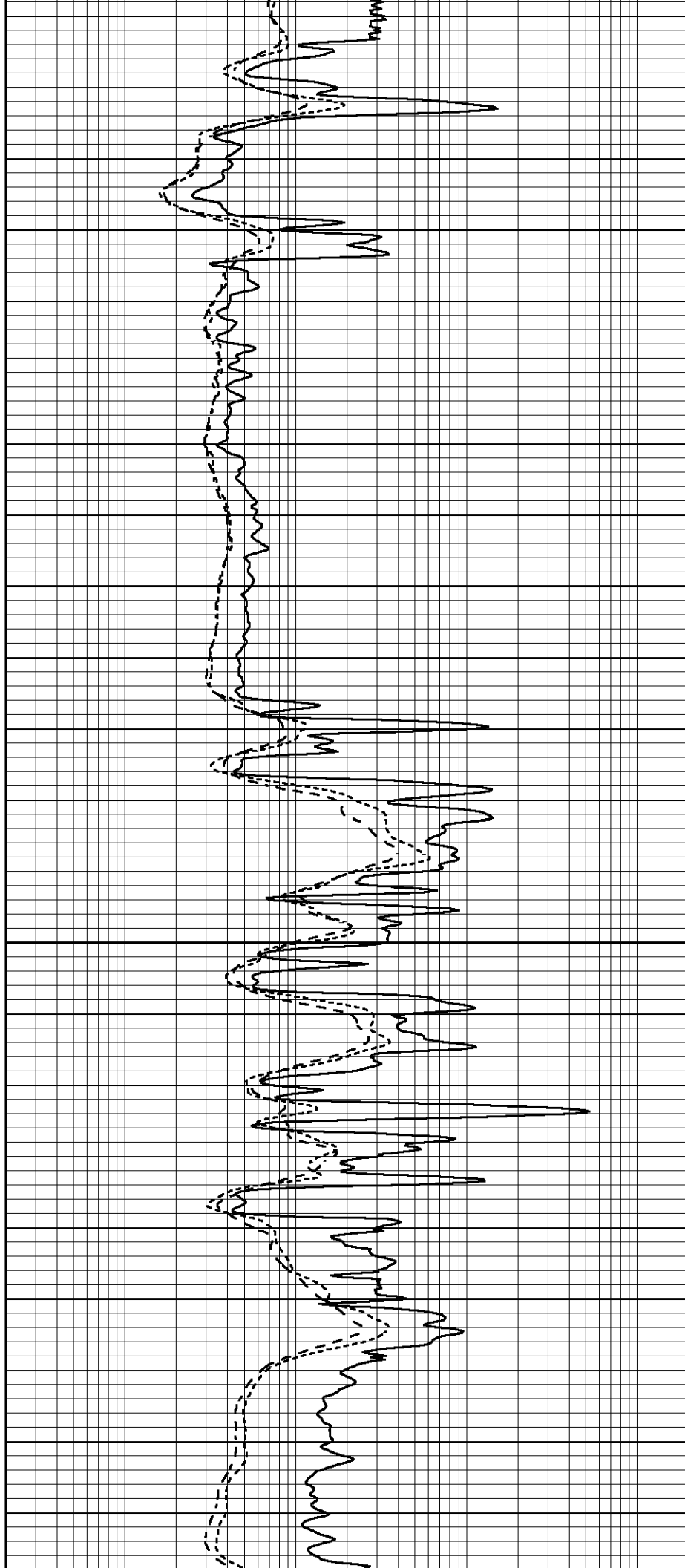


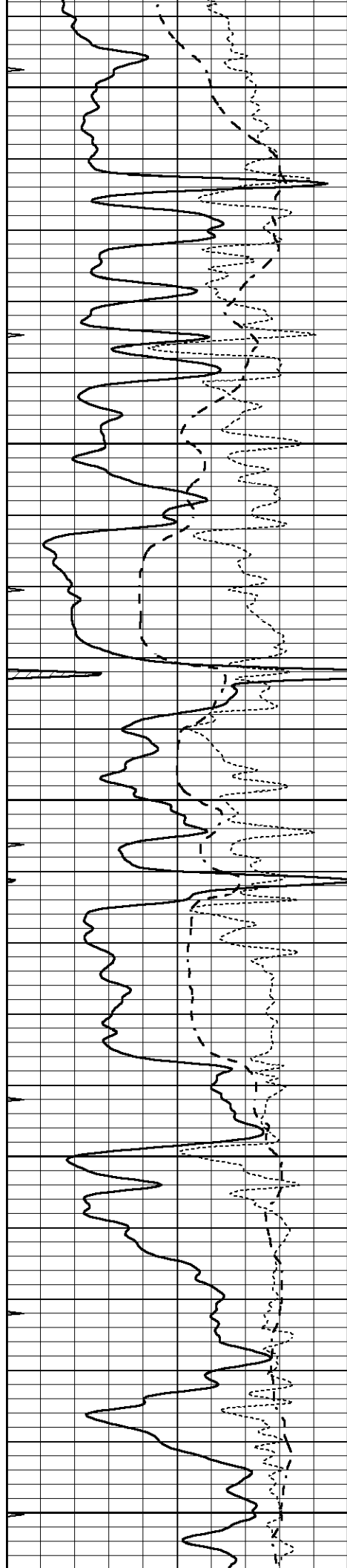
3500

3550

3600

3650





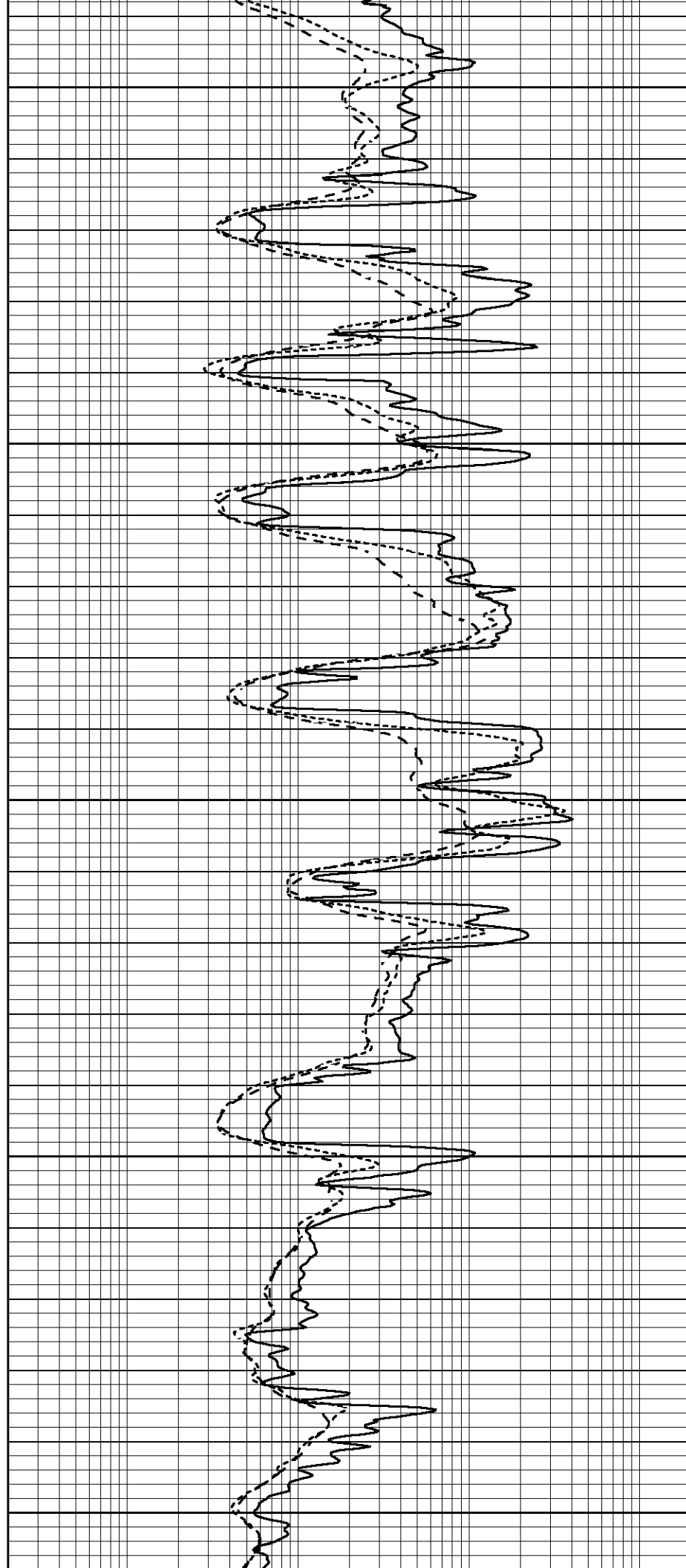
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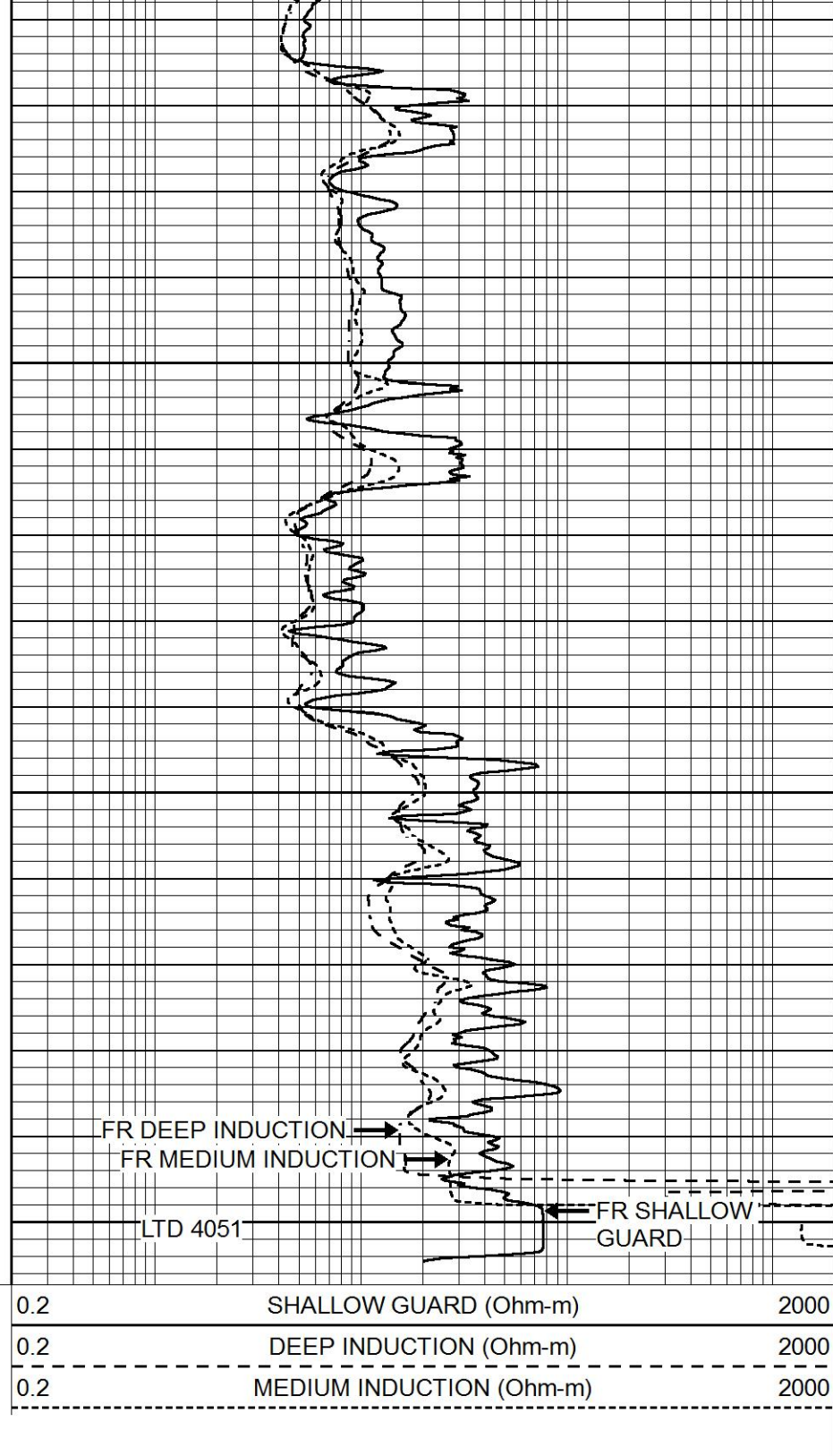
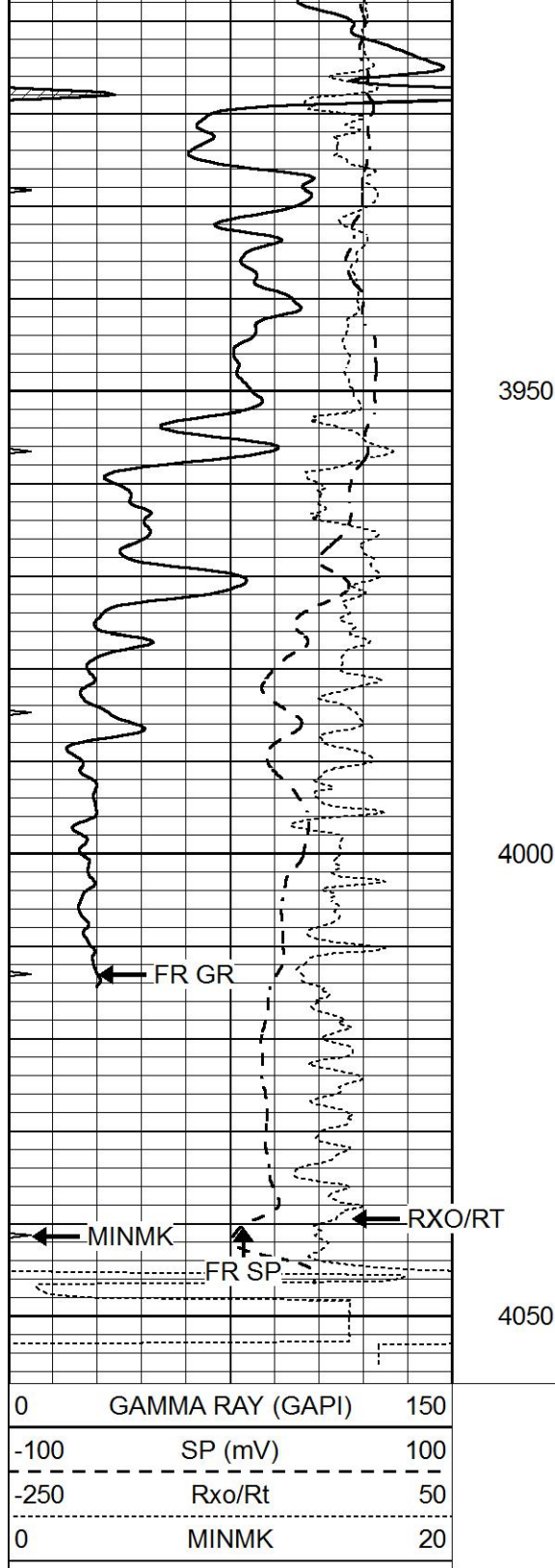
3750

3800

3850

3900





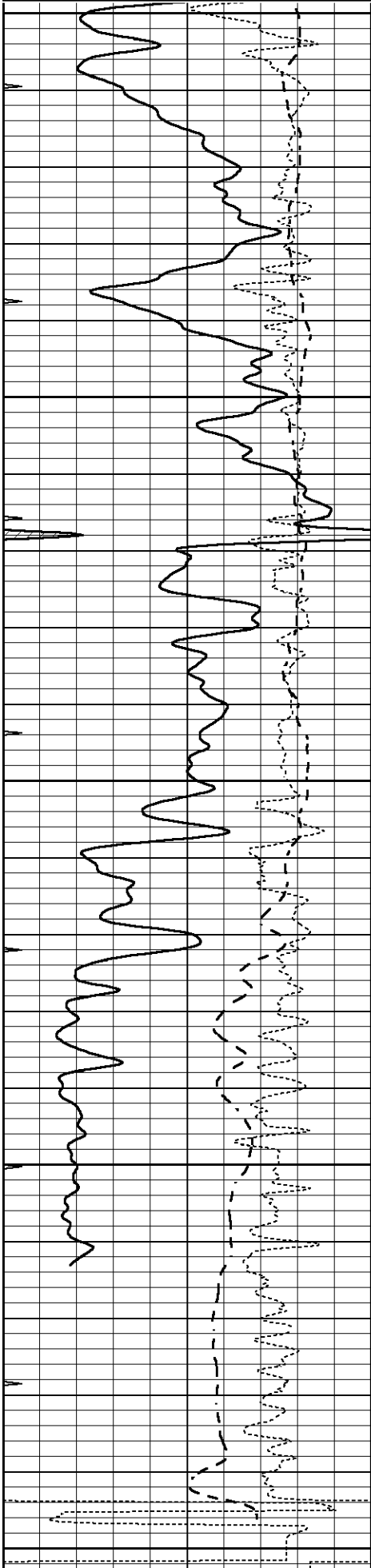
REPEAT SECTION

Database File 4804ddn.db
 Dataset Pathname pass4.2R
 Presentation Format _dil
 Dataset Creation Sun Aug 02 07:02:48 2020
 Charted by Depth in Feet scaled 1:240

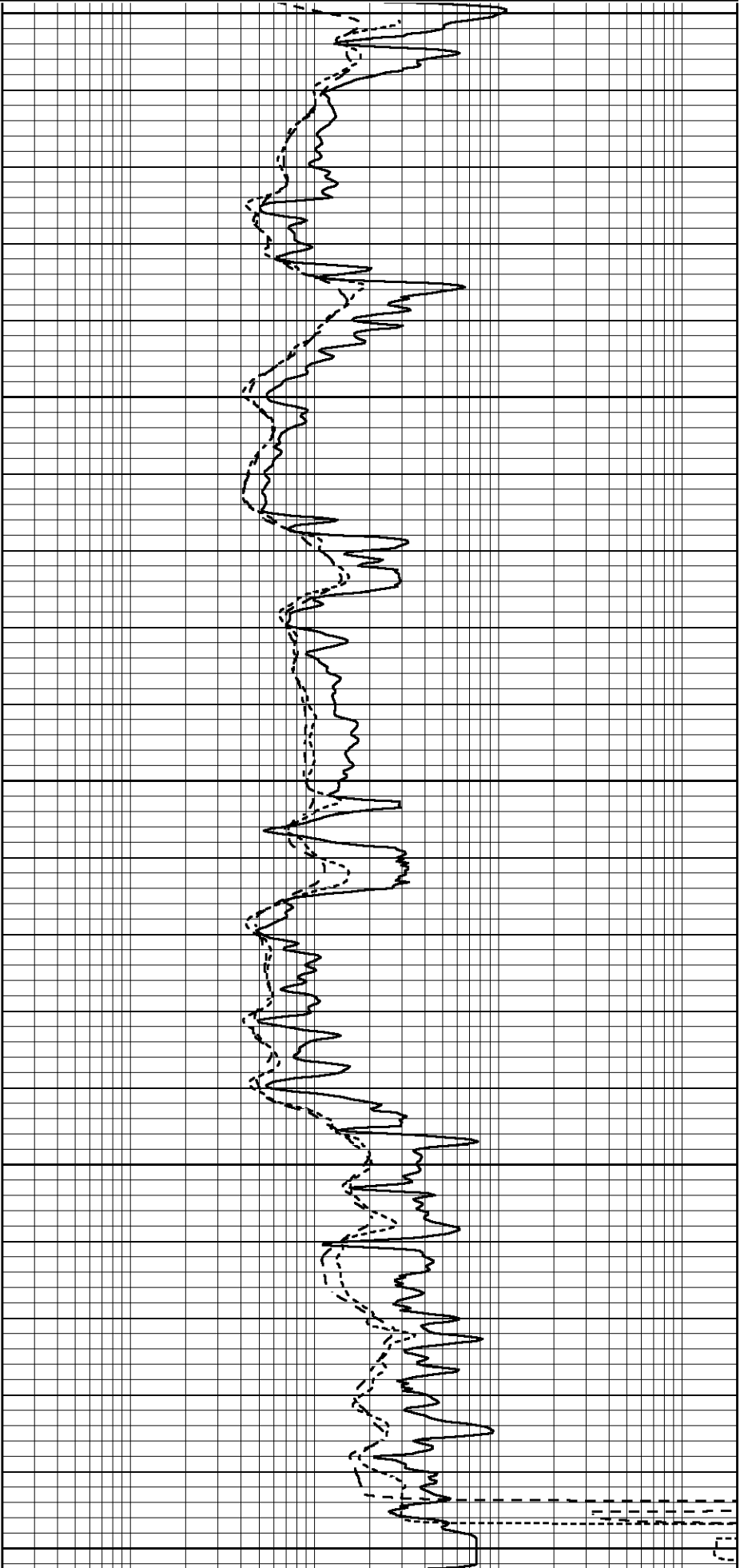
0 GAMMA RAY (GAPI) 150

0.2 SHALLOW GUARD (Ohm-m) 2000

-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



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			

Calibration Report	
Database File	4804ddn.db
Dataset Pathname	pass5.5
Dataset Creation	Sun Aug 02 07:18:06 2020

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Sun Aug 02 04:52:13 2020
Downhole Cal Performed:	Thu Mar 12 11:45:10 2020
After Survey Verification Performed:	Thu Mar 12 11:45:00 2020

Surface Calibration								
Readings			References				Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	620.000	-10.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	675.000	-68.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration								
Readings			References				Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		4000.000	mmho-m		

After Survey Verification								
Readings			Targets				Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	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		
		0.000	mmho-m		4000.000	mmho-m		

Litho Density Calibration Report	
Serial: 004	Model: PRB

Master Calibration					Performed Mon May 11 10:45:58 2020
	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	1199.7	10039.4	3208.4	2838.9	cps
Window 2	1096.3	8590.5	2806.1	2527.9	cps
Window 3	934.1	5176.2	1855.7	1739.5	cps
Window 4	267.0	271.6	264.8	264.9	cps
Long Space	0.0	7494.2	1709.8	1431.6	cps
Short Space	1.1	1784.2	1182.7	971.1	cps

Short Space	17.1	1784.3	1183.7	971.1	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 44.5	Rib Slope	: 0.982	Density/Spine Ratio	: 0.574
Spine Angle	: 74.5	Spine Slope	: 3.601	Spine Intercept	: -18.0

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:	Wed Jul 03 10:25:53 2019			
Calibrator Value:	1.0	GAPI		
Background Reading:	0.0	cps		
Calibrator Reading:	1.0	cps		

Sensitivity:

0.3000

GAPI/cps