



# DUAL INDUCTION LOG

Company RL INVESTMENT, LLC.  
 Well PRATT "A" #4-35  
 Field HOXIE WEST  
 County SHERIDAN State KANSAS

Location: API #: 15-179-21466-0000  
 1700' FNL & 1005' FWL  
 SEC 35 TWP 8S RGE 29W  
 Permanent Datum GROUND LEVEL Elevation 2818  
 Log Measured From KELLY BUSHING 7' A.G.L.  
 Drilling Measured From KELLY BUSHING  
 Other Services CDL/CNL/MEL  
 Elevation K.B. 2825  
 D.F. 2823  
 G.L. 2818

Date	05/08/20
Run Number	ONE
Depth Driller	4460
Depth Logger	4459
Bottom Logged Interval	4458
Top Log Interval	00
Casing Driller	8 5/8" @ 266
Casing Logger	266
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/62
pH / Fluid Loss	6.8/11.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.3@ 65F
Rmf @ Meas. Temp	.98@ 65F
Rmc @ Meas. Temp	1.56 @ 65F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.70@ 120F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	////
Maximum Recorded Temperature	120F
Equipment Number	1523
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
Witnessed By	RYAN PFEIFER

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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: HOXIE 3 S TO 30 RD., 5 W TO 50 RD.,  
 1/2 S, E INTO.

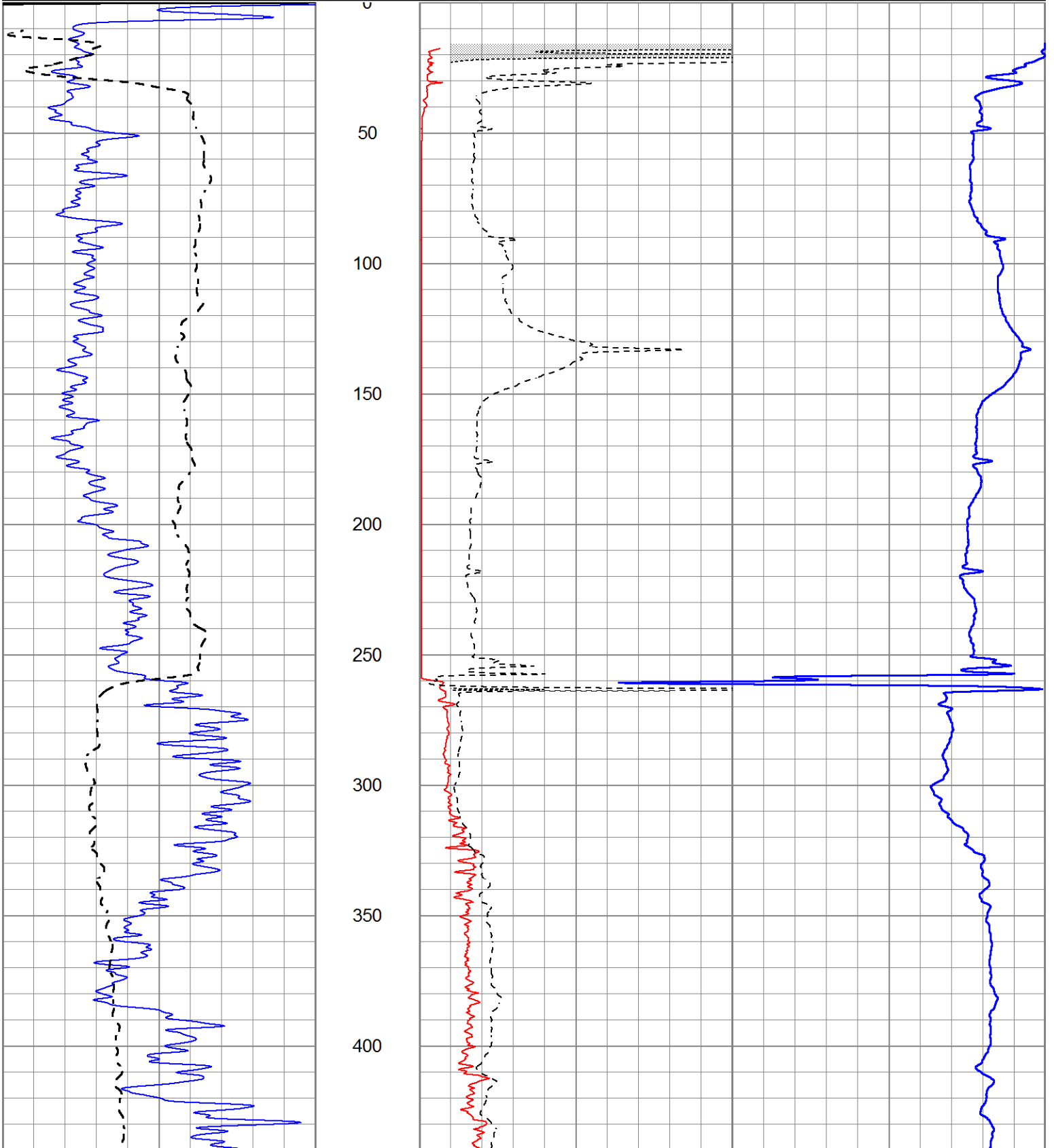


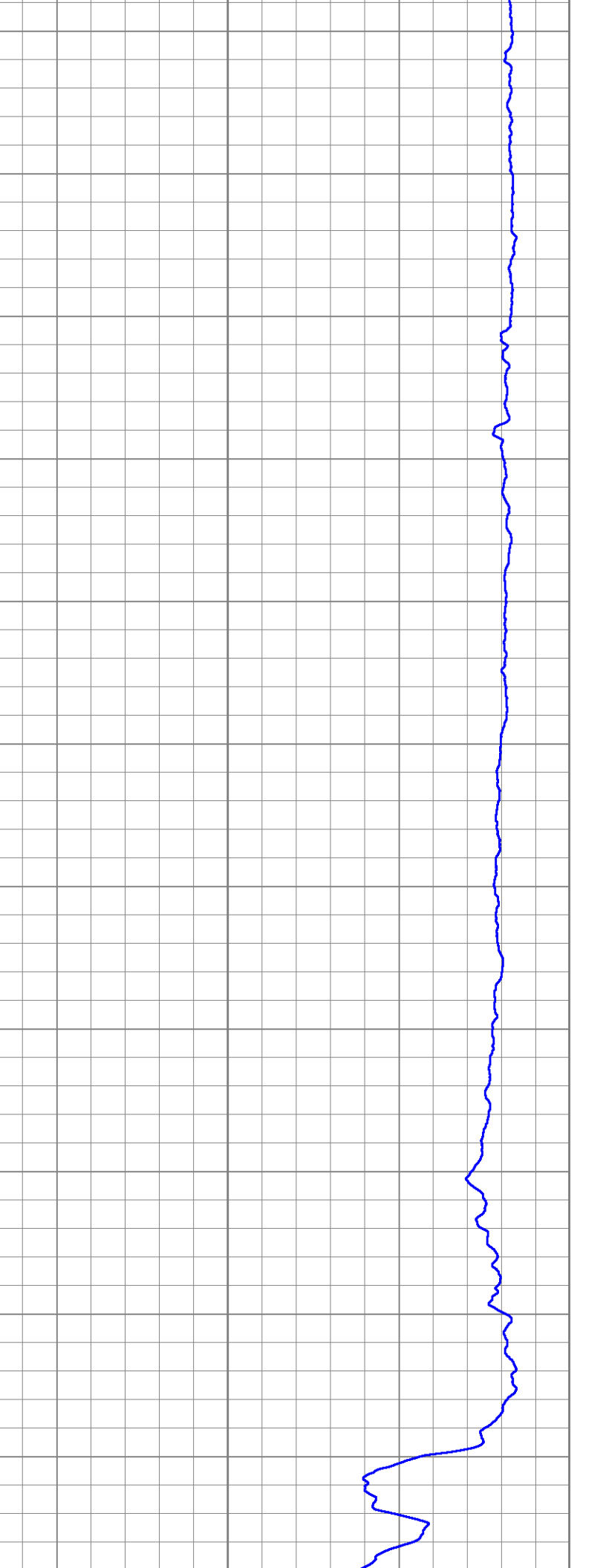
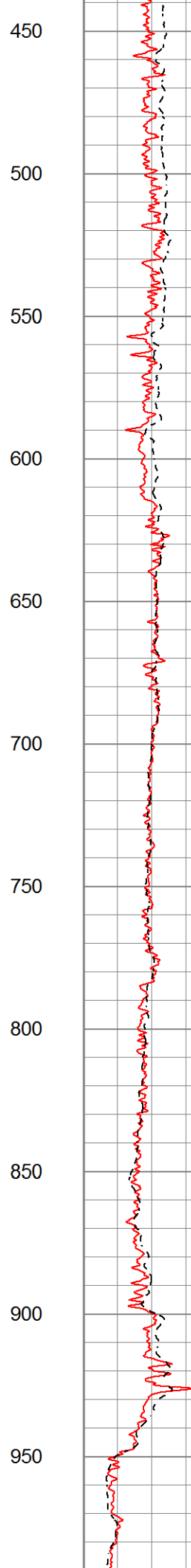
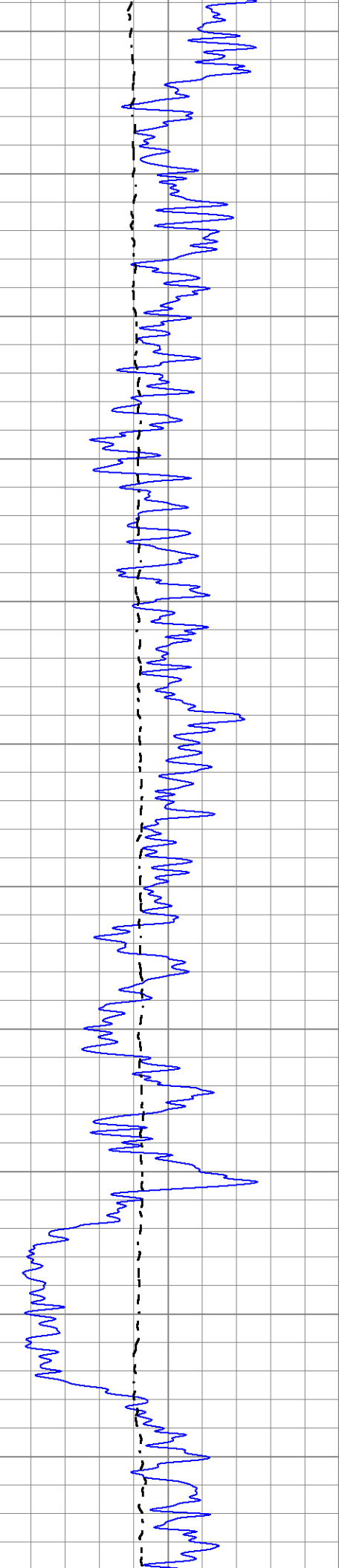
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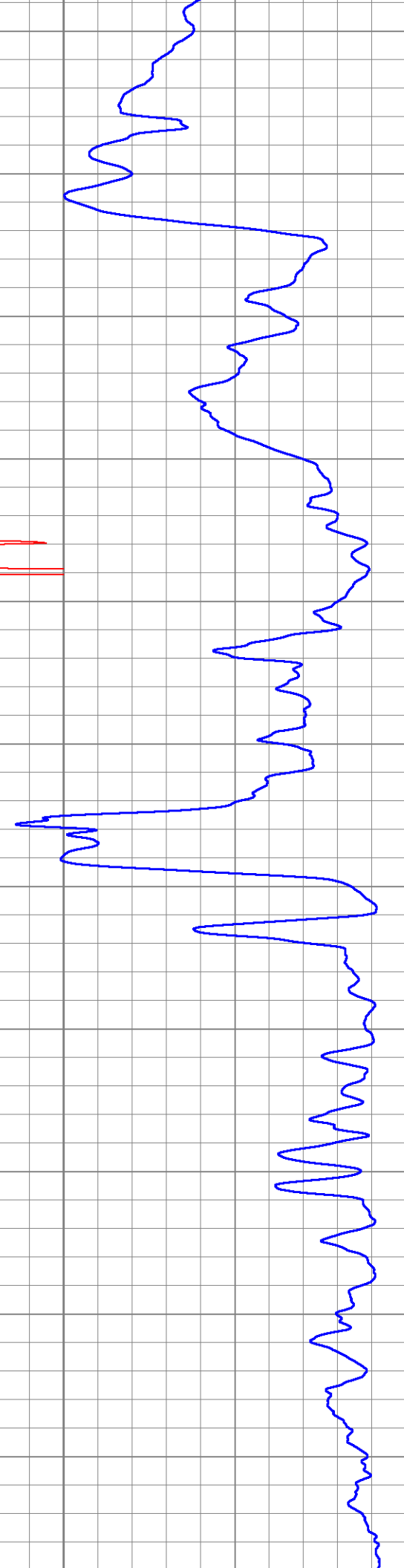
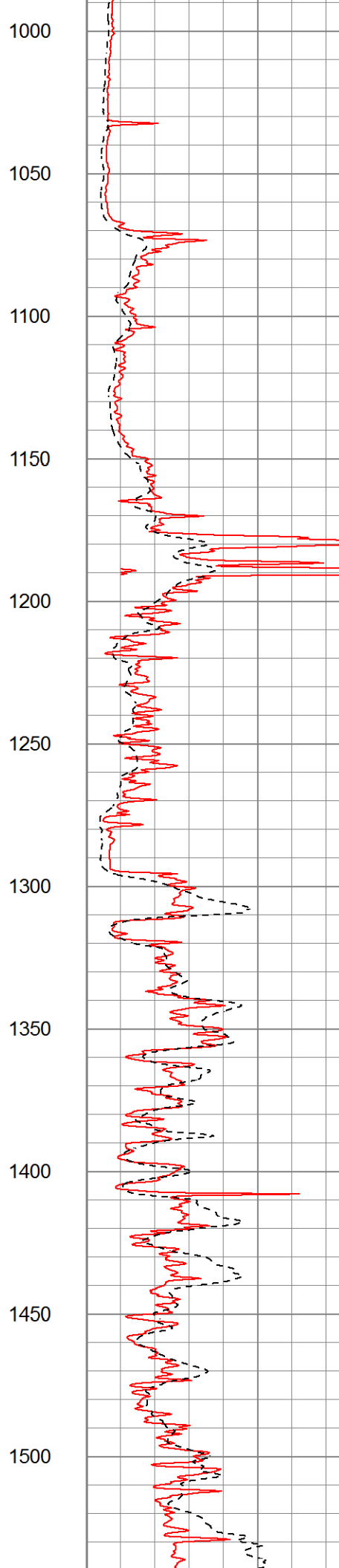
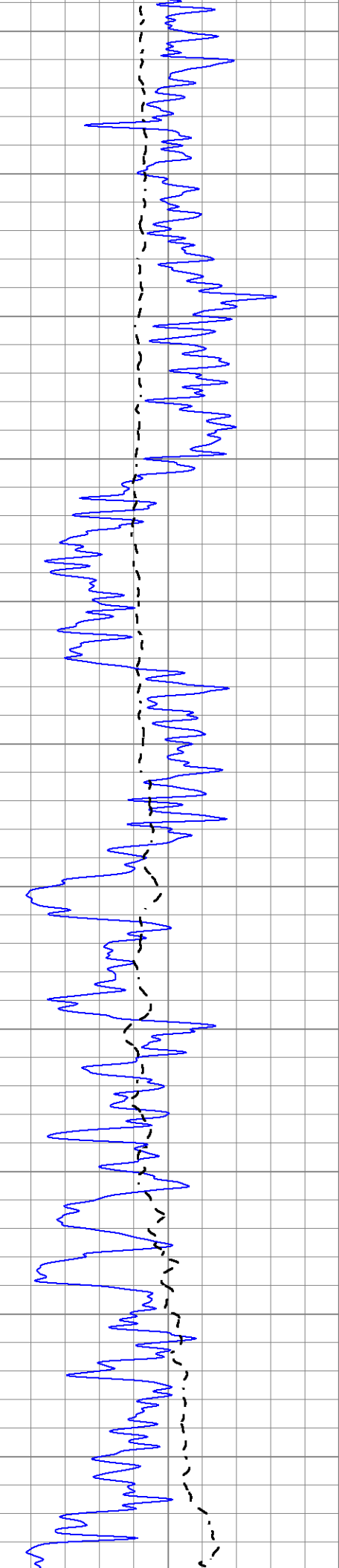
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 Presentation Format \_dil2  
 Dataset Creation Fri May 08 17:55:00 2020  
 Charted by Depth in Feet scaled 1:600

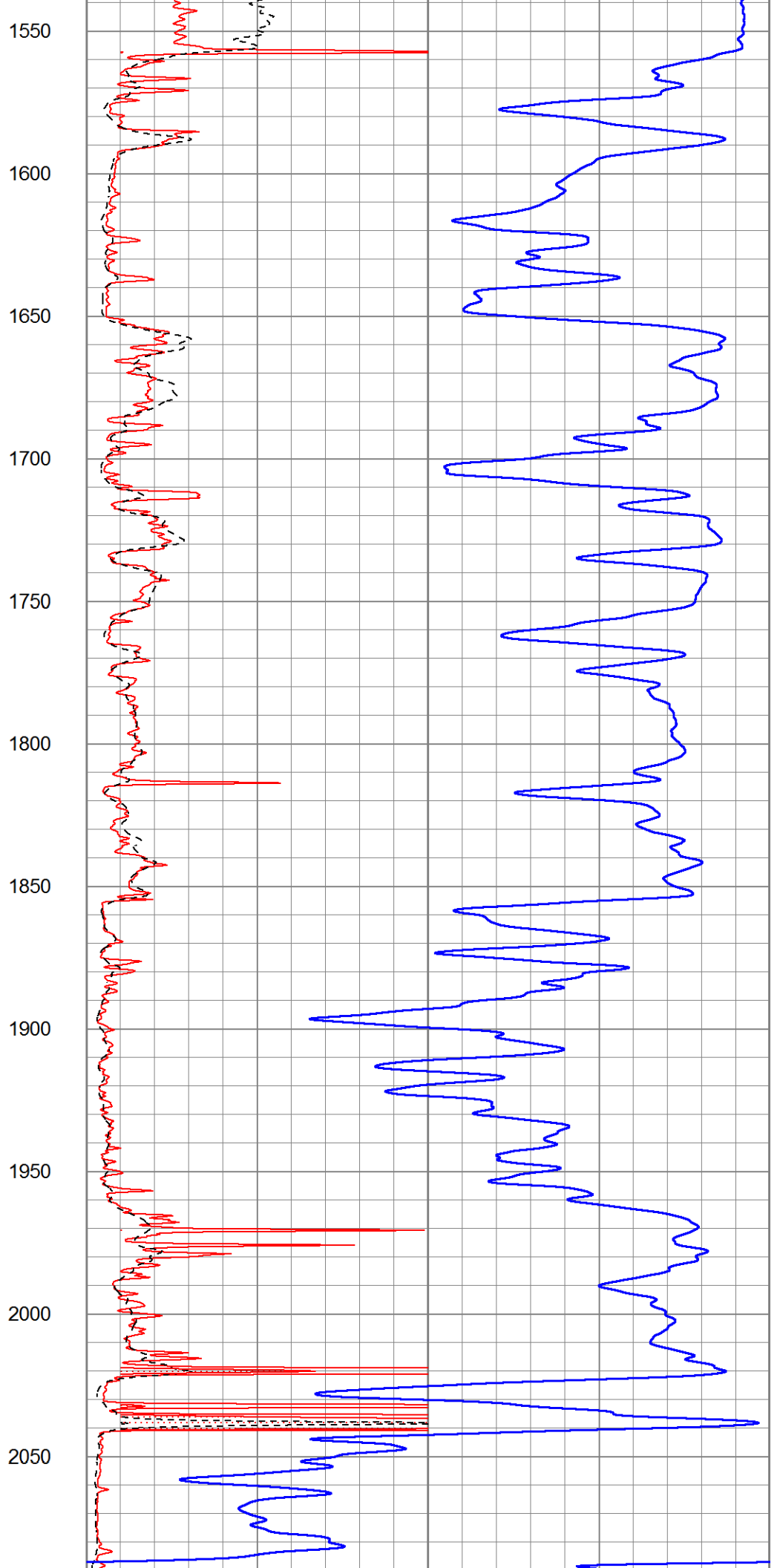
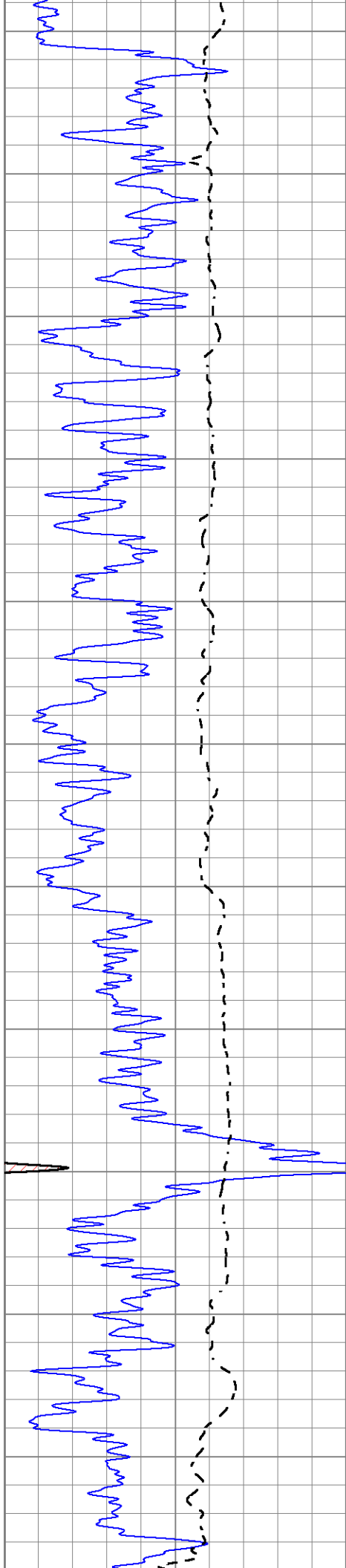
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-100	SP (mV)	100

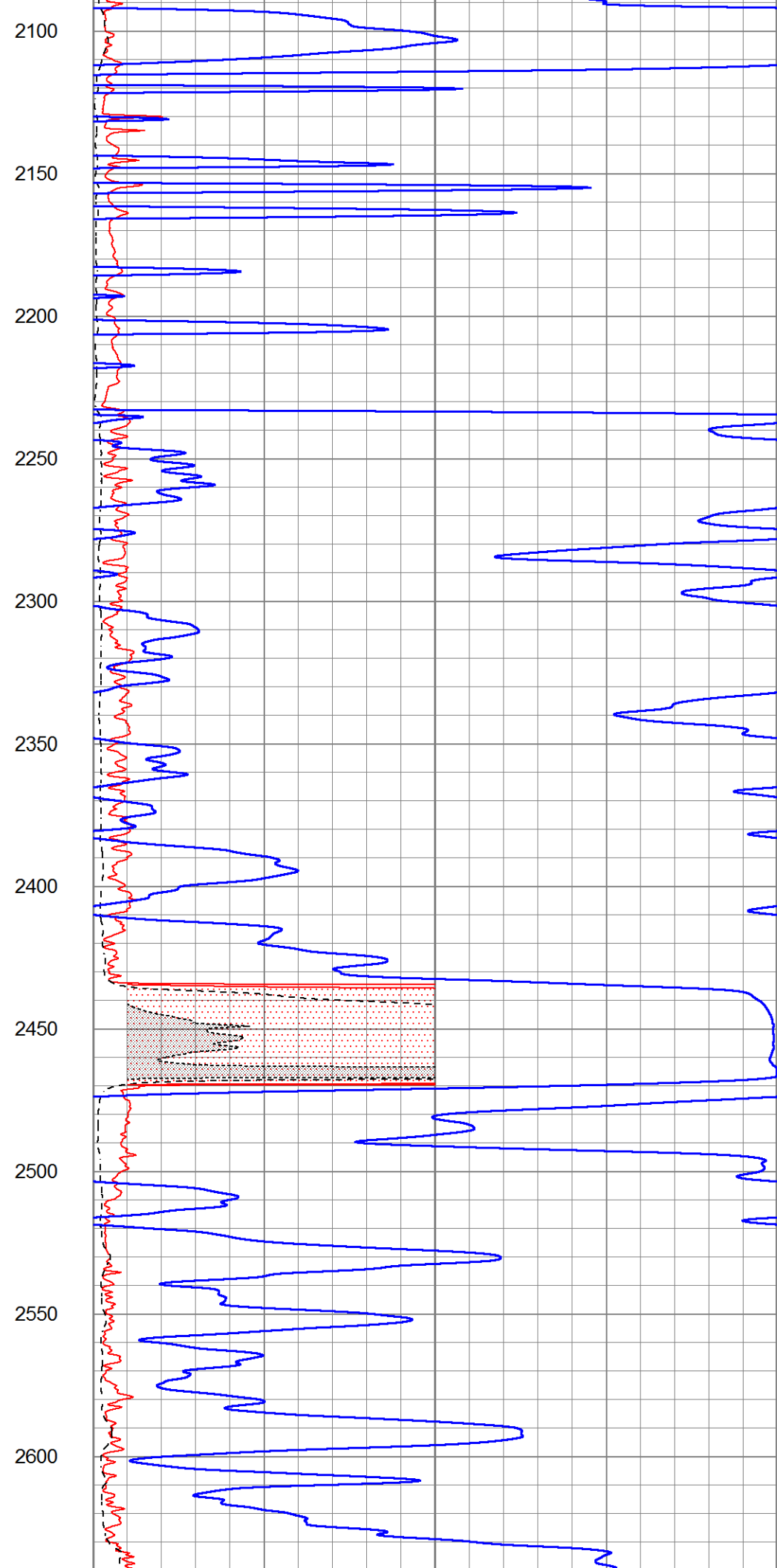
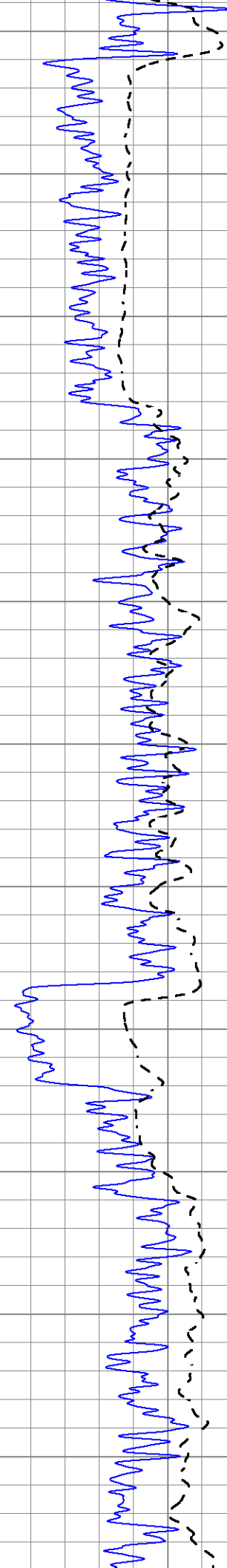
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

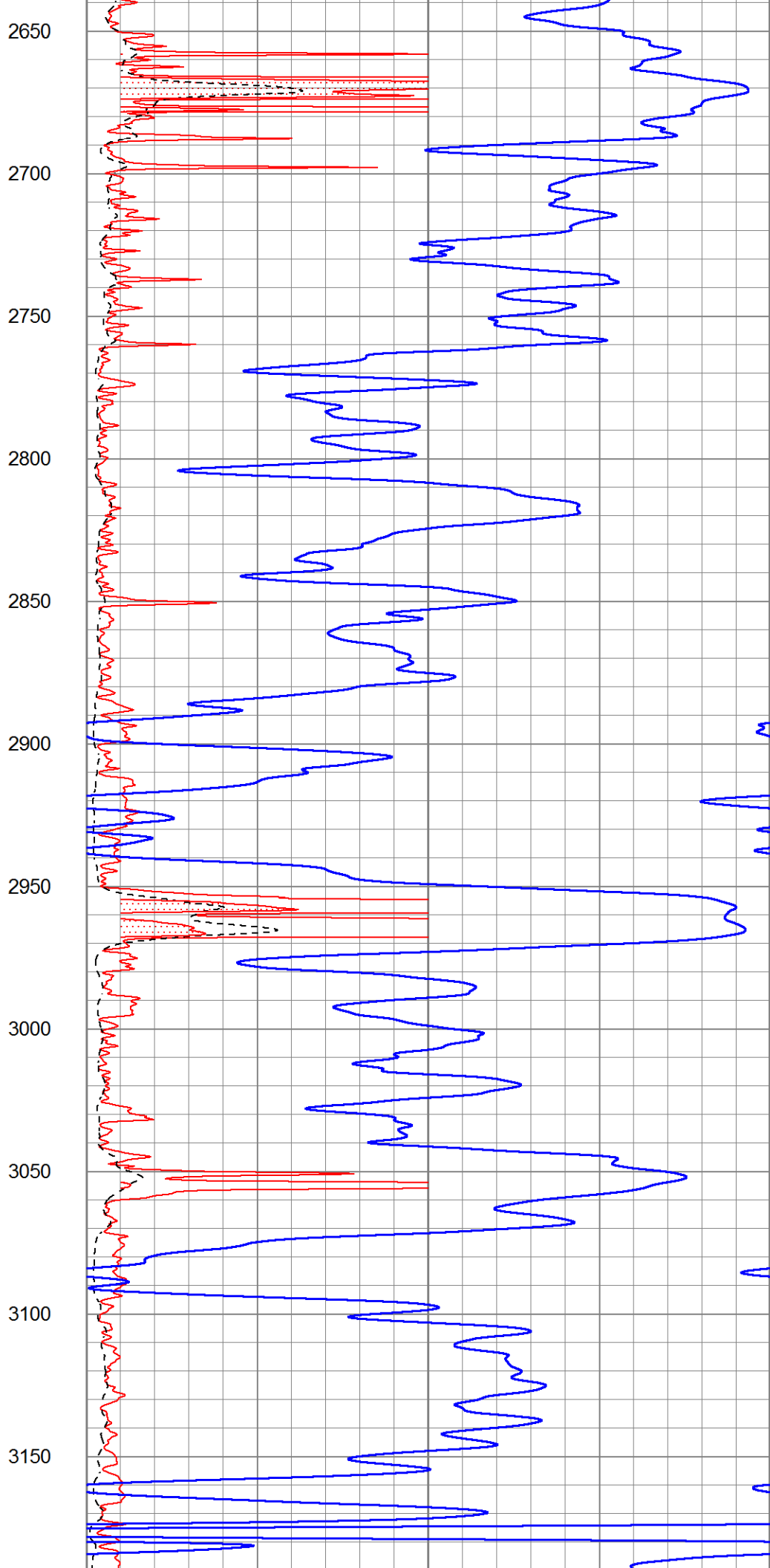
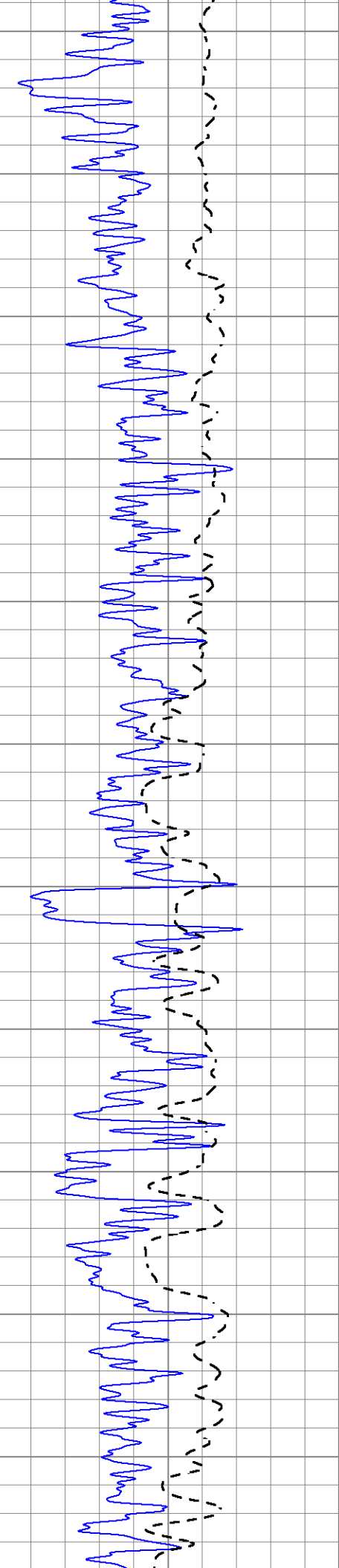


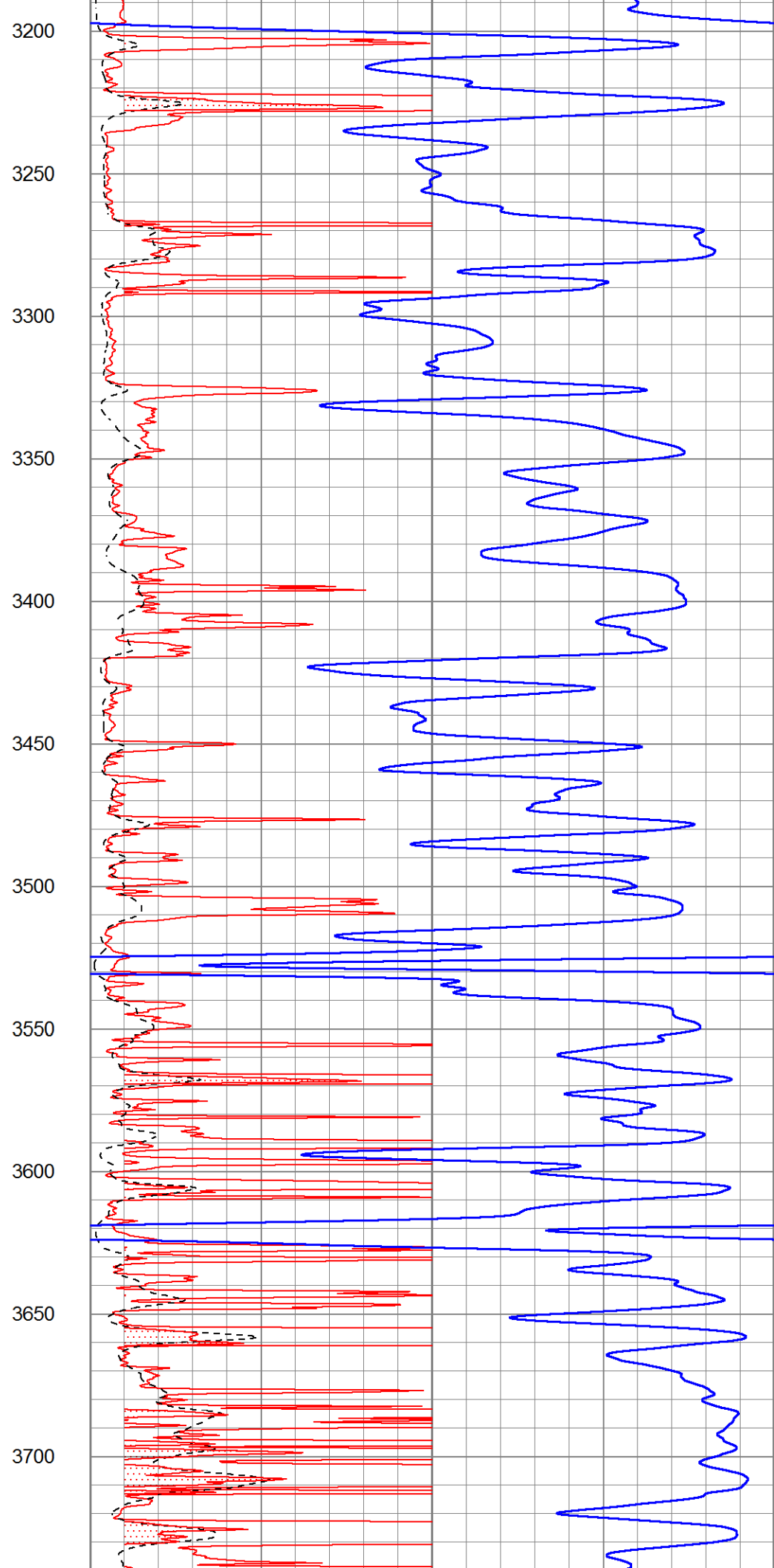
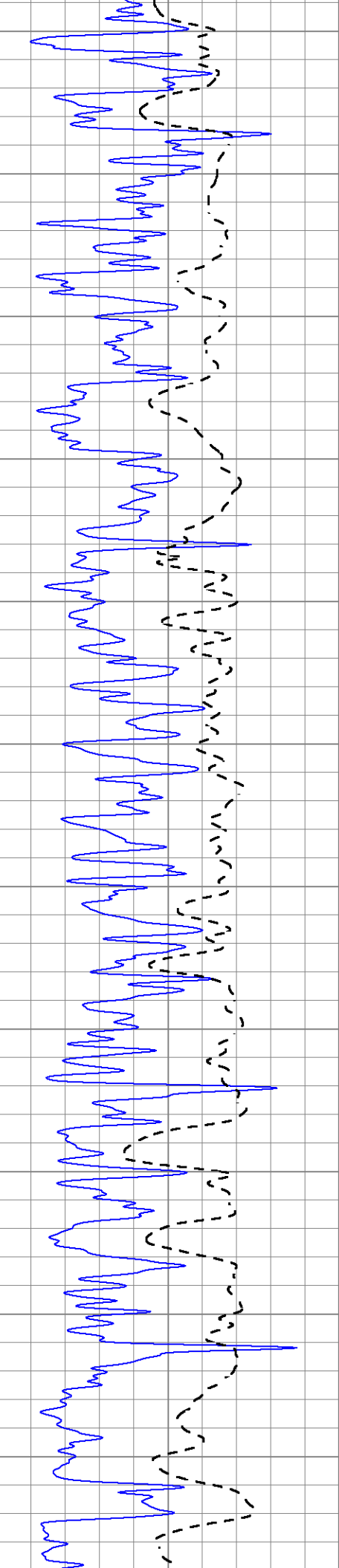


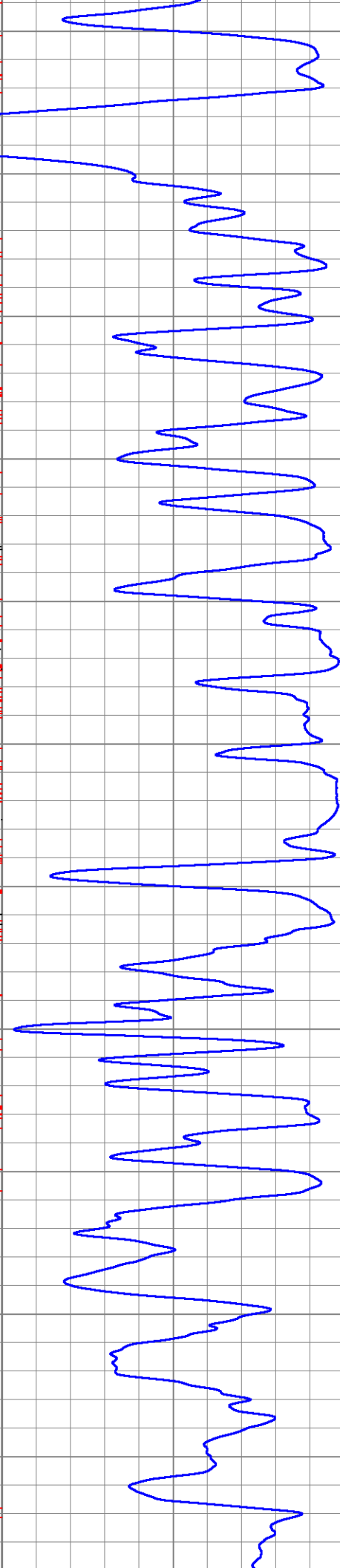
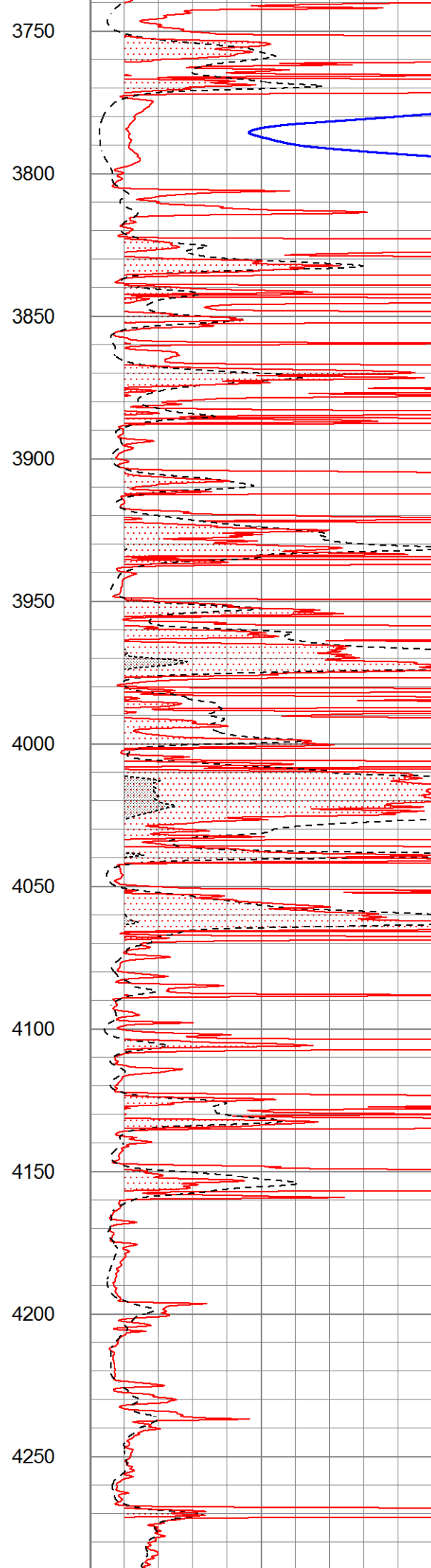
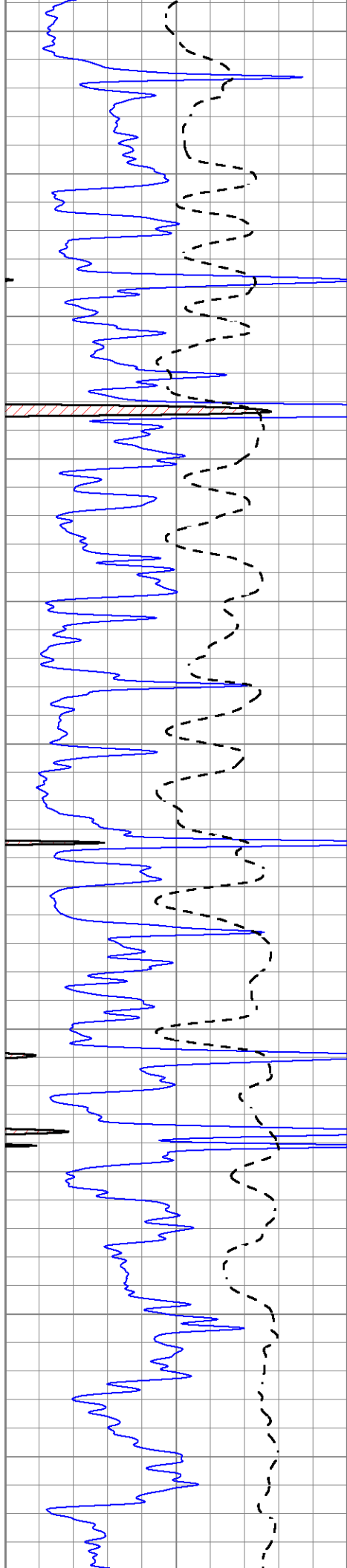


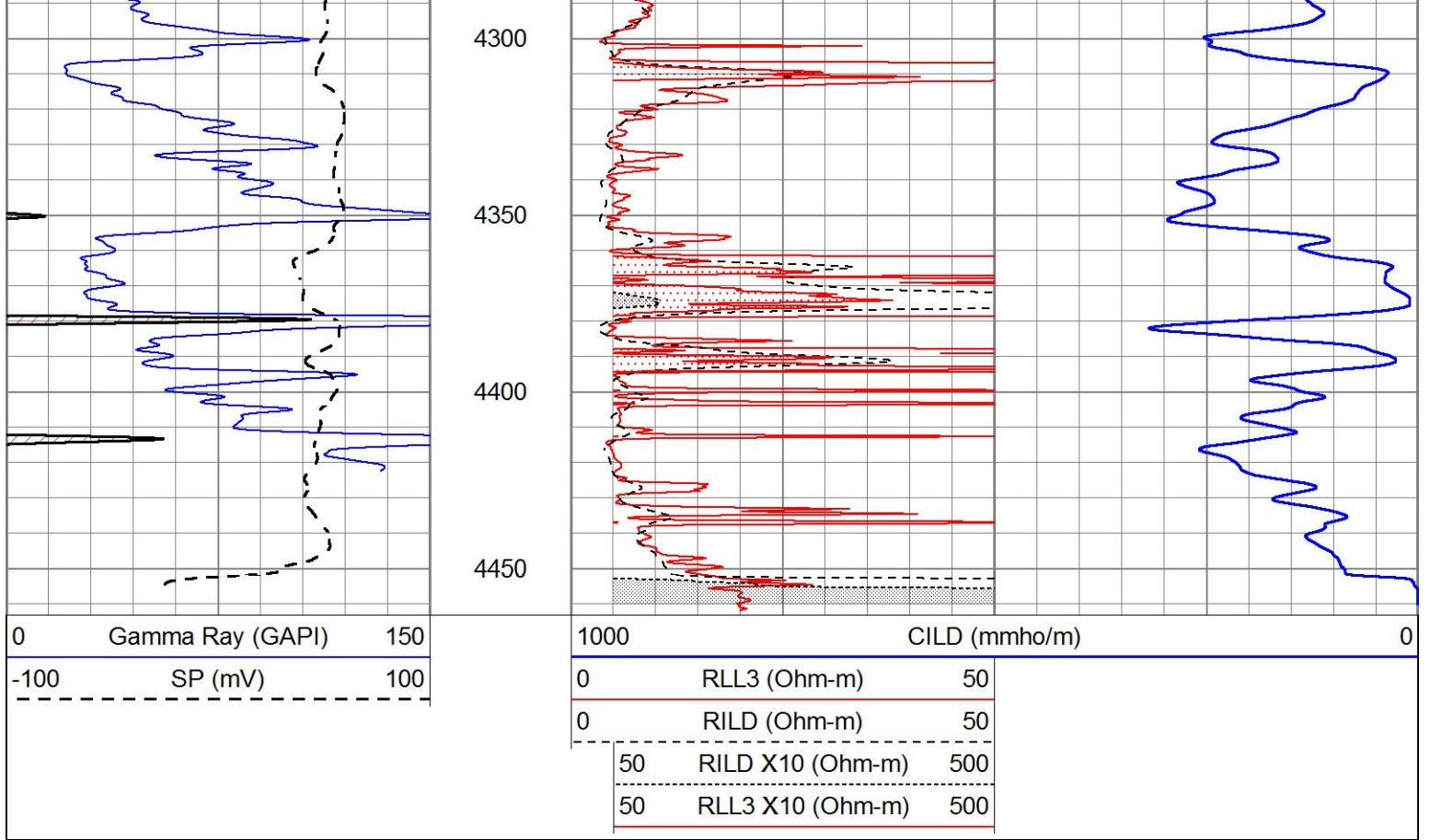










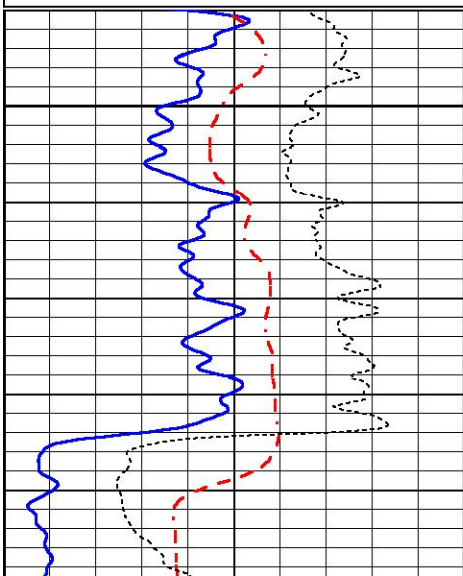


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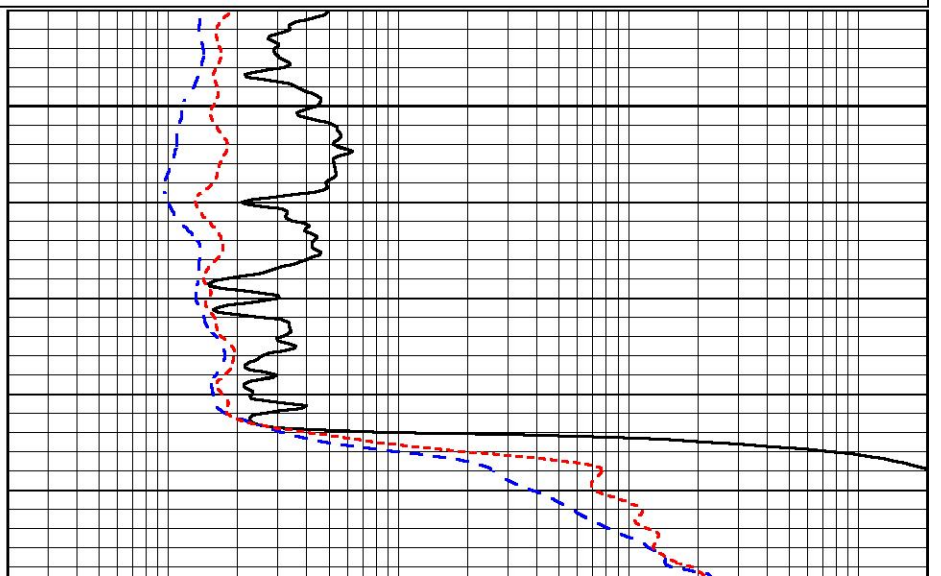
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 Presentation Format    \_dil  
 Dataset Creation      Fri May 08 17:55:00 2020  
 Charted by            Depth in Feet scaled 1:240

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

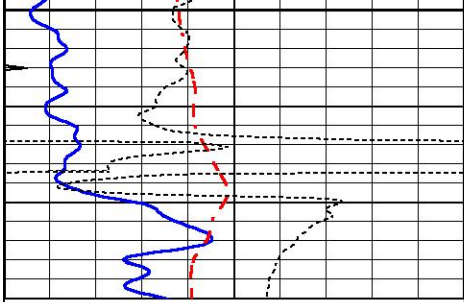
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0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



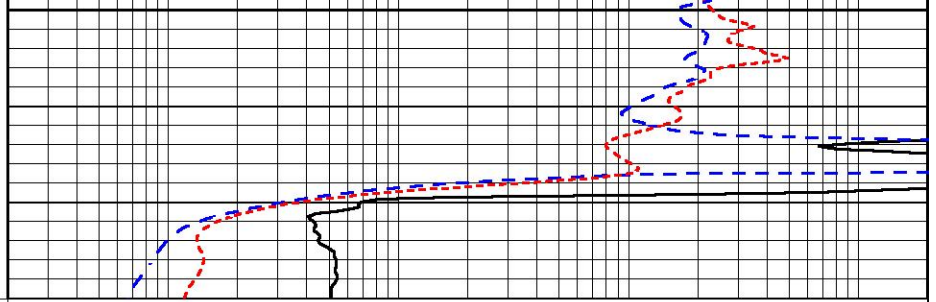
2400



2450



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

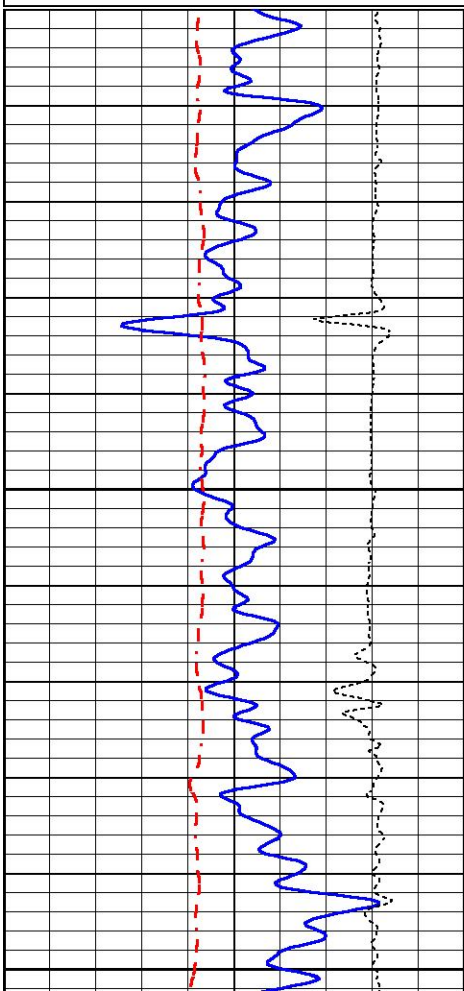


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0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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

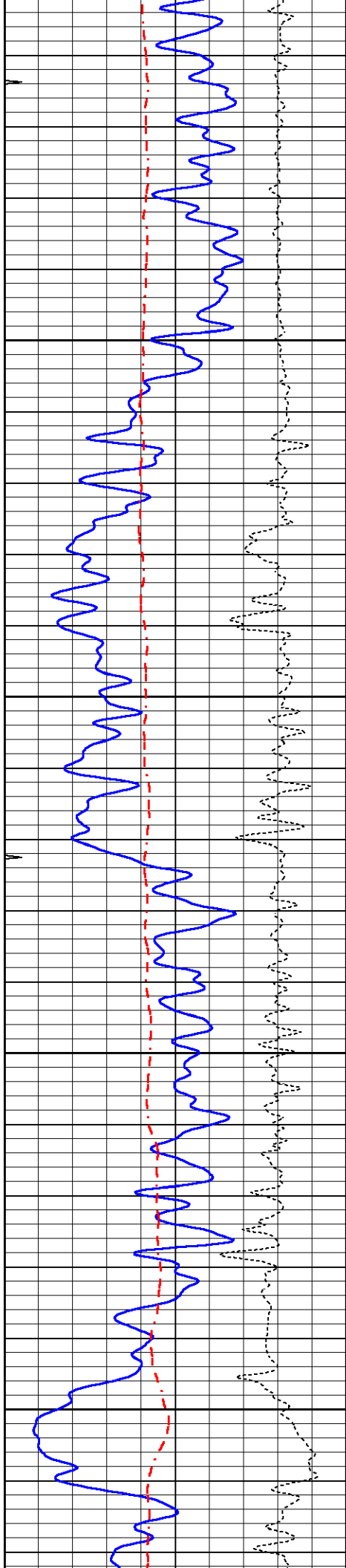


1000

1050

1100



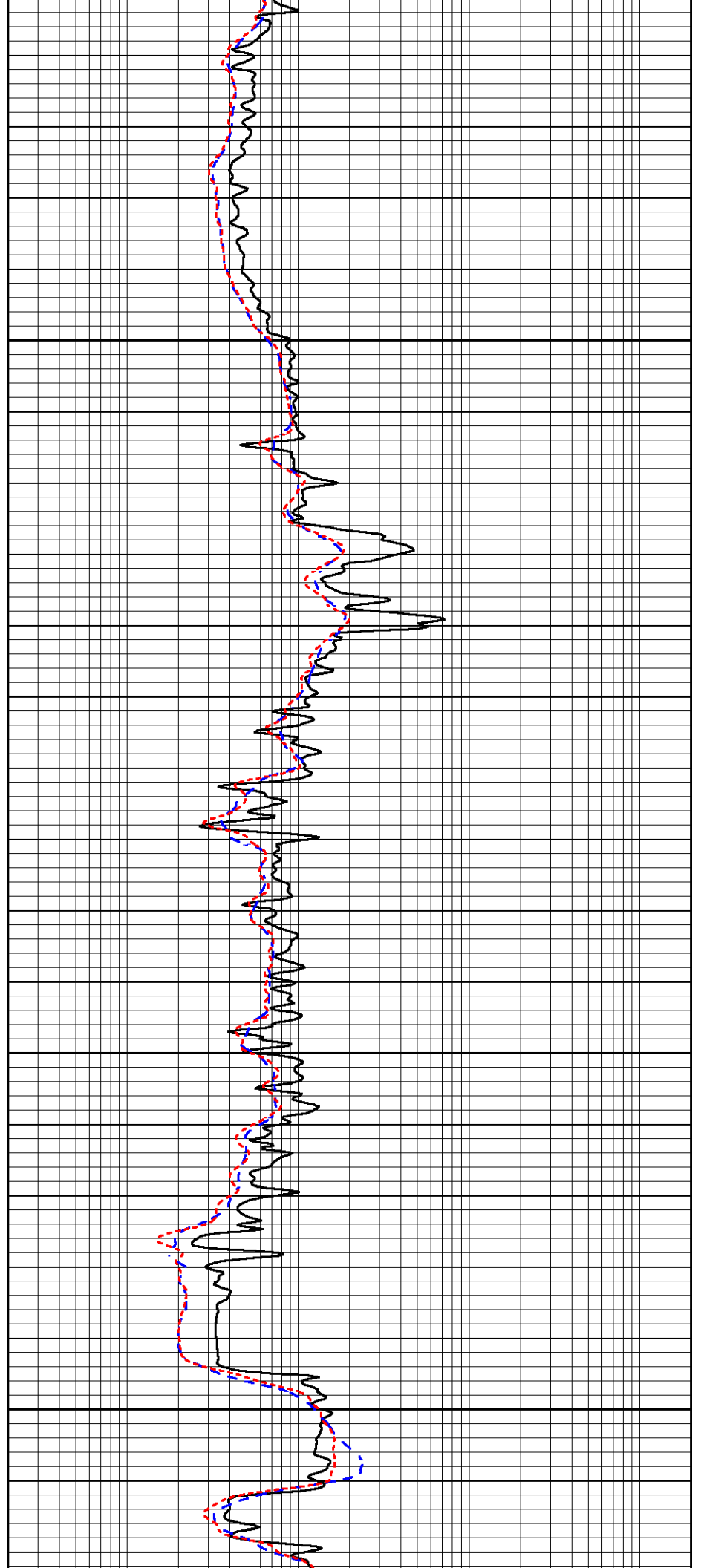


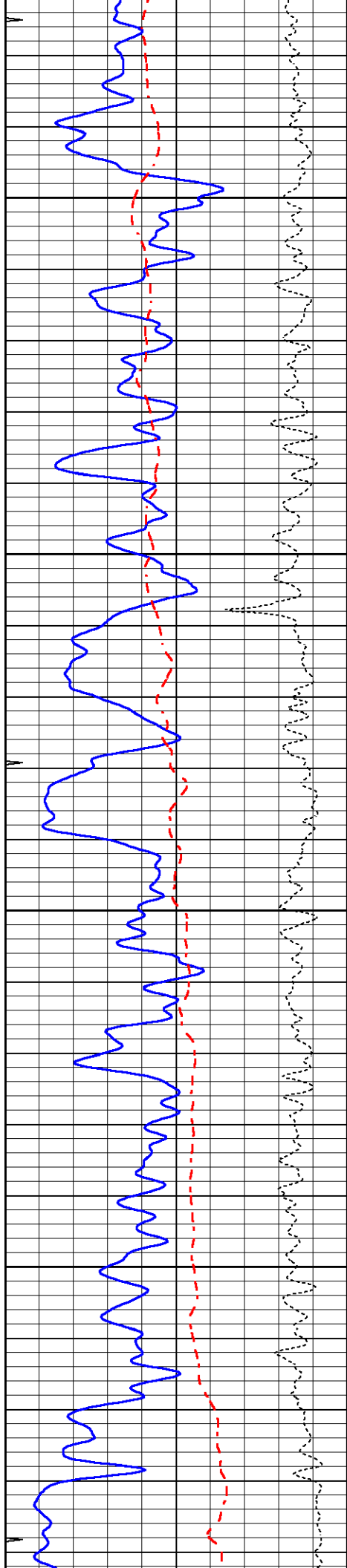
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1200

1250

1300



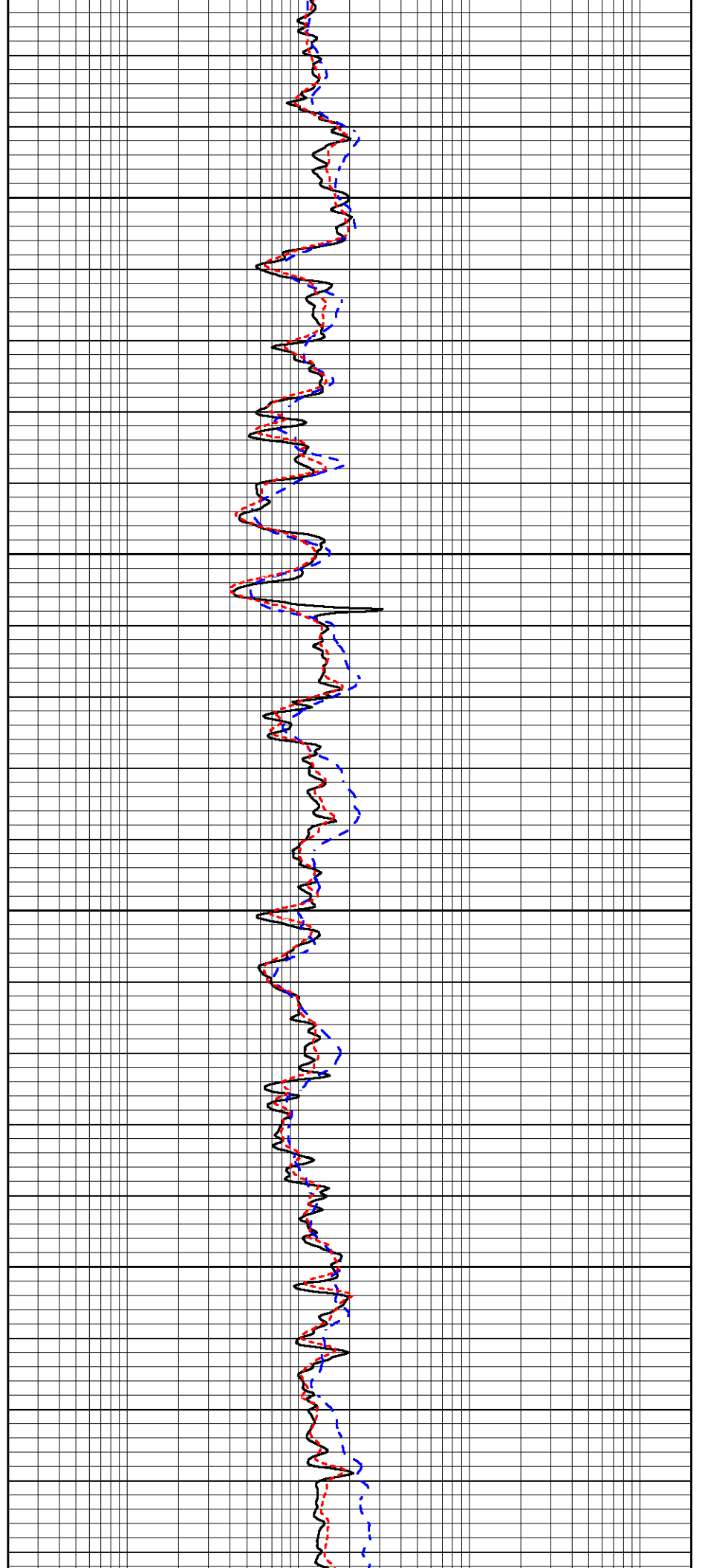


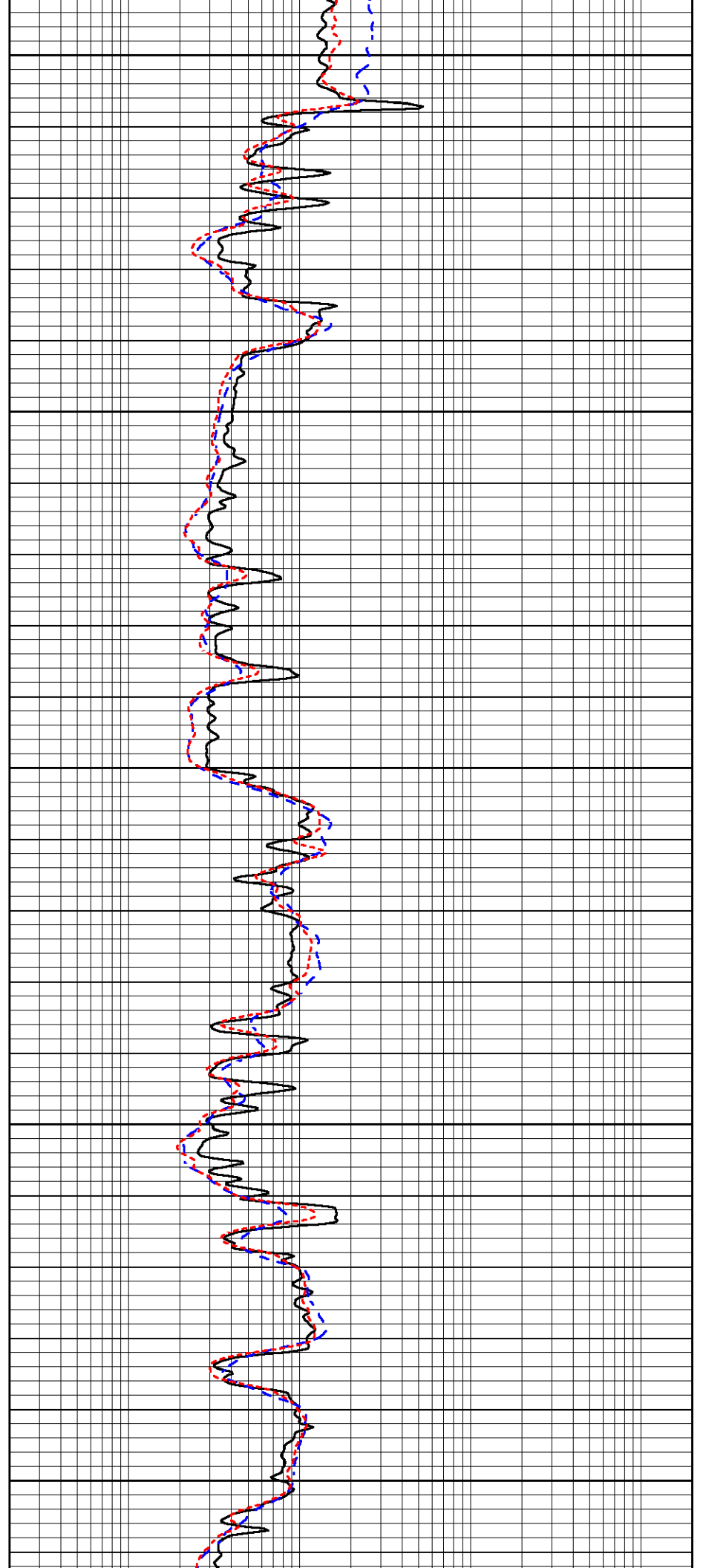
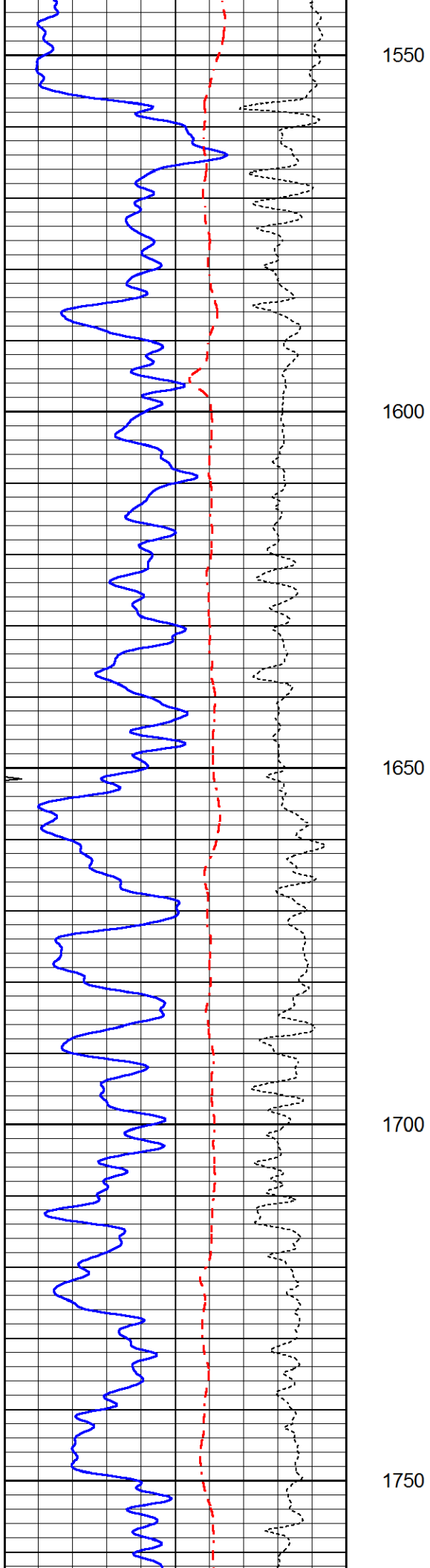
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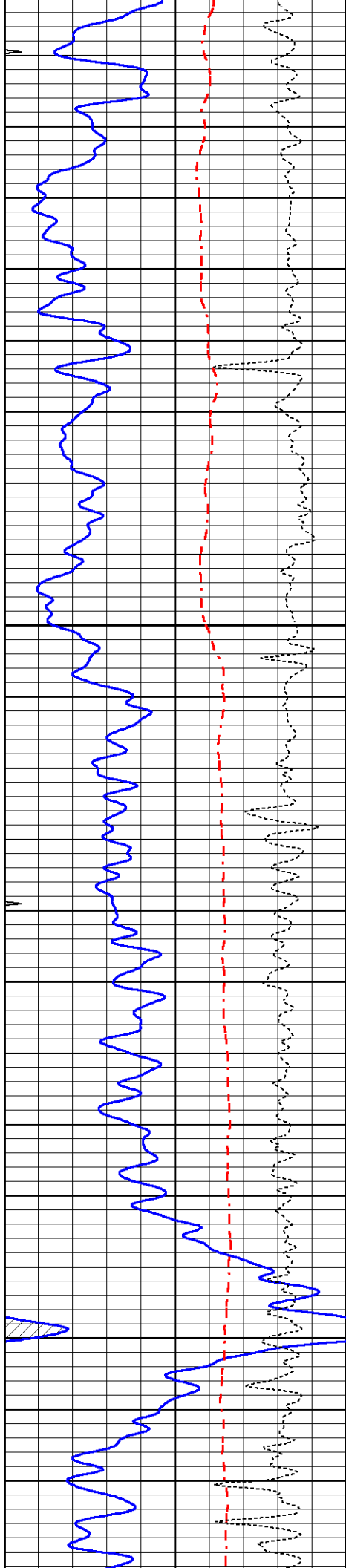
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1450

1500





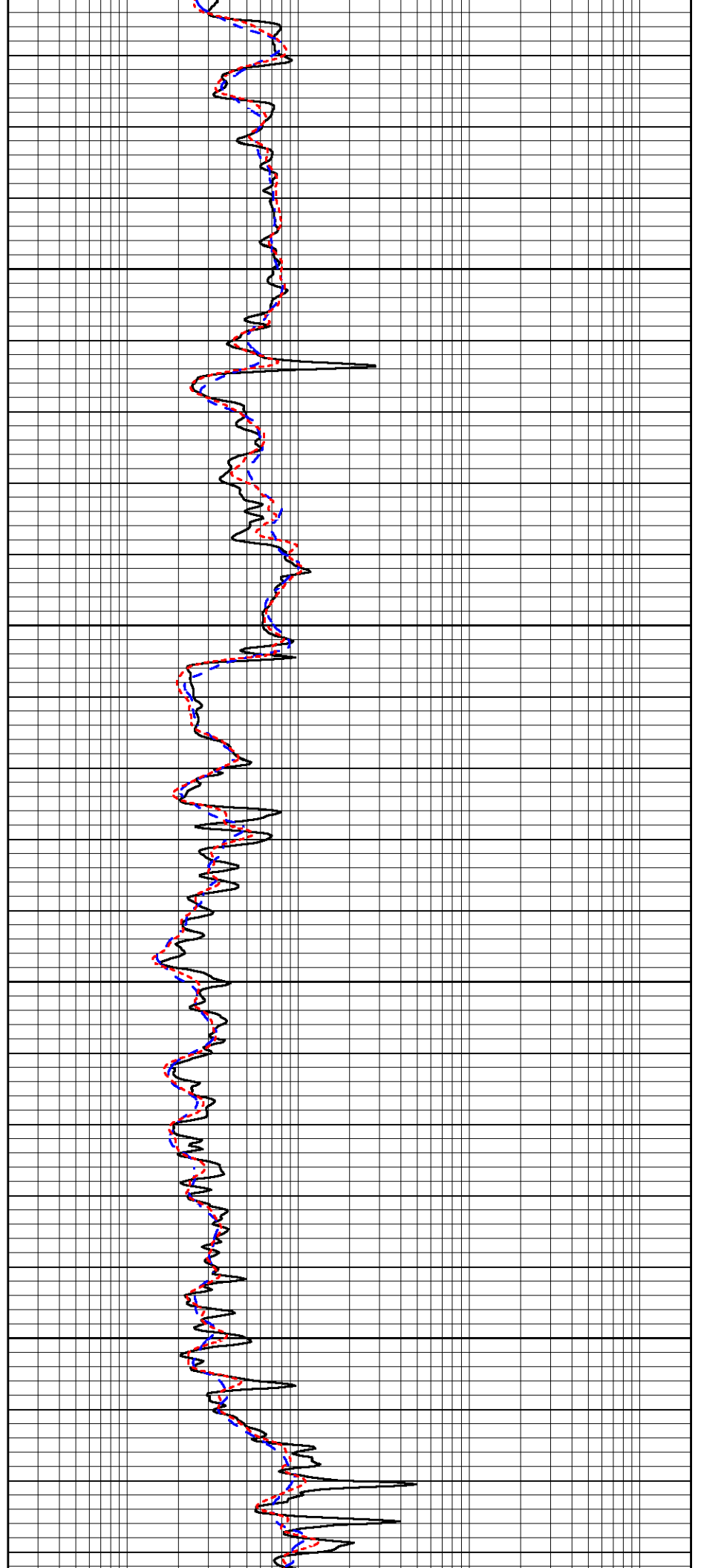


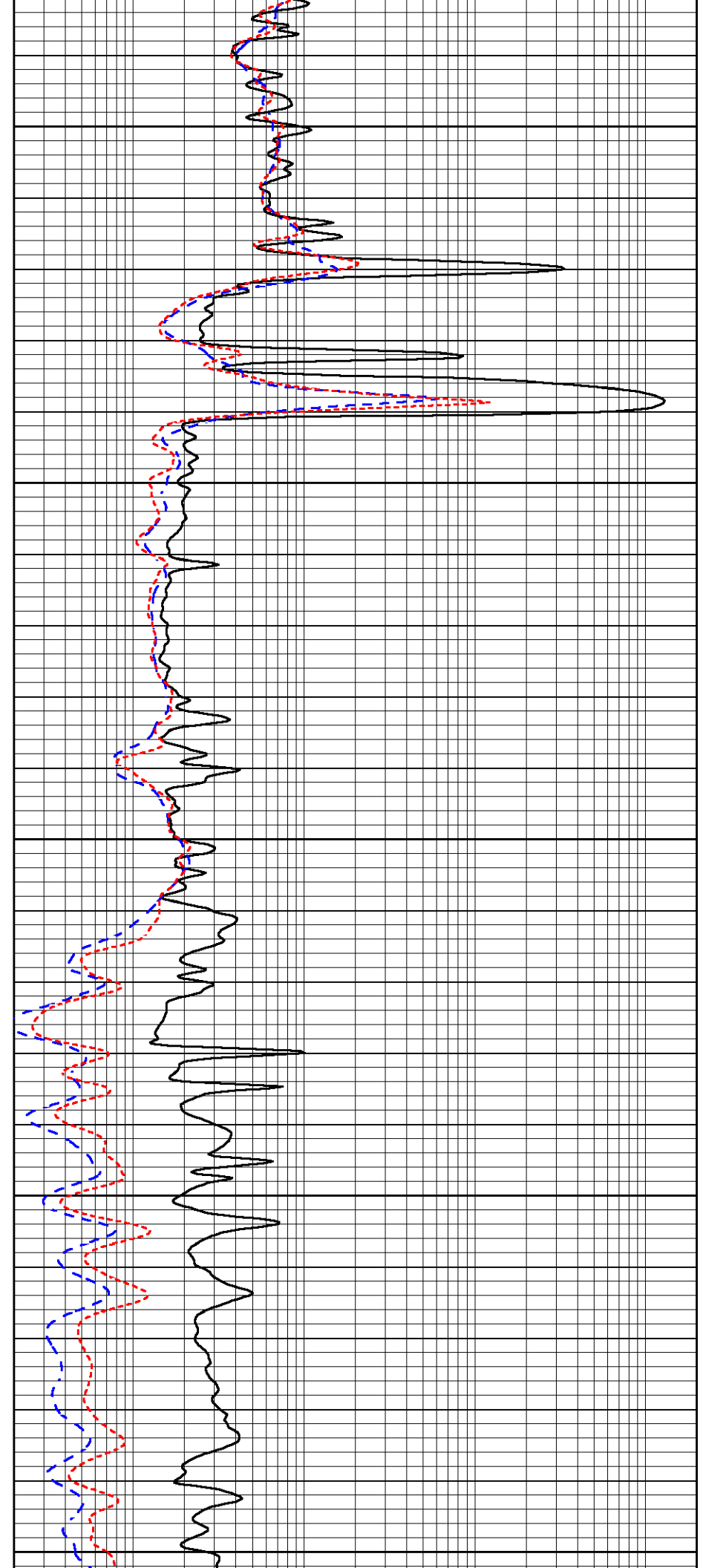
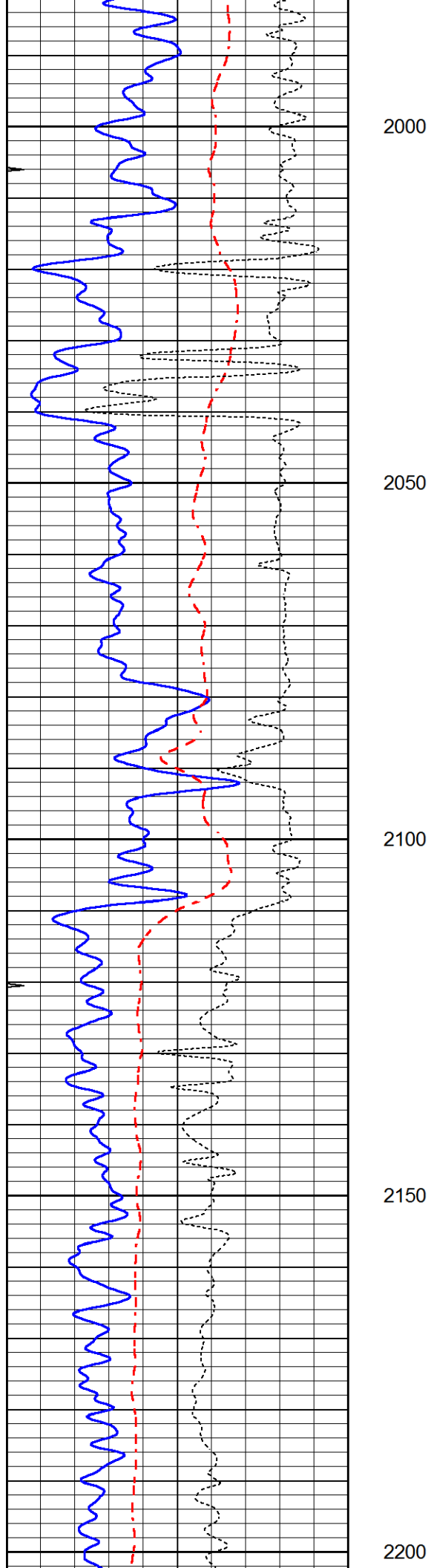
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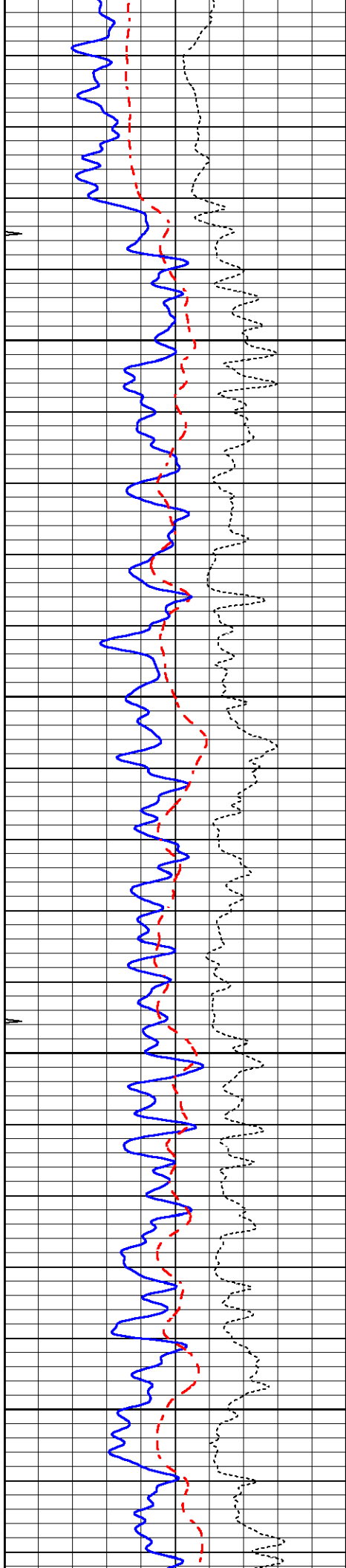
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1900

1950





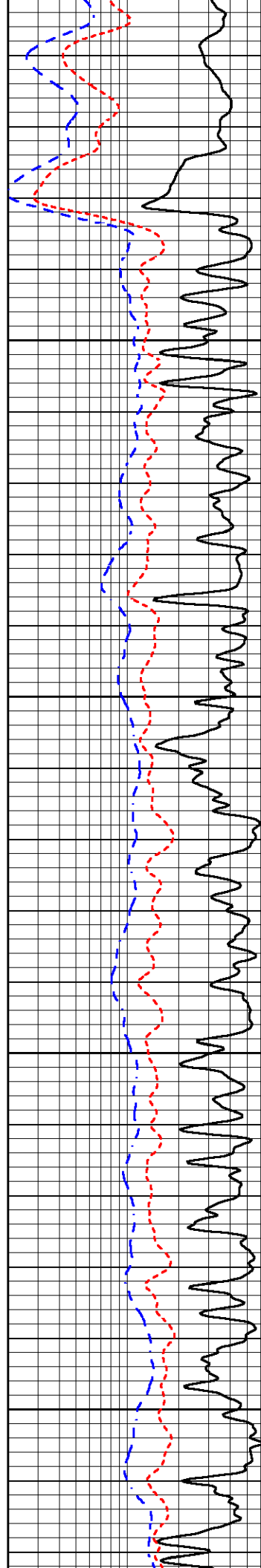


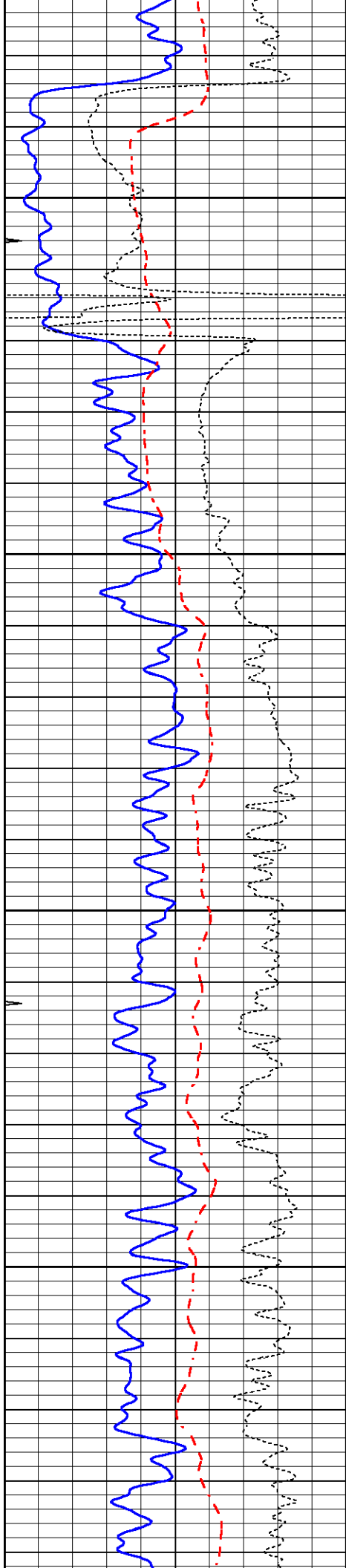
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2300

2350

2400



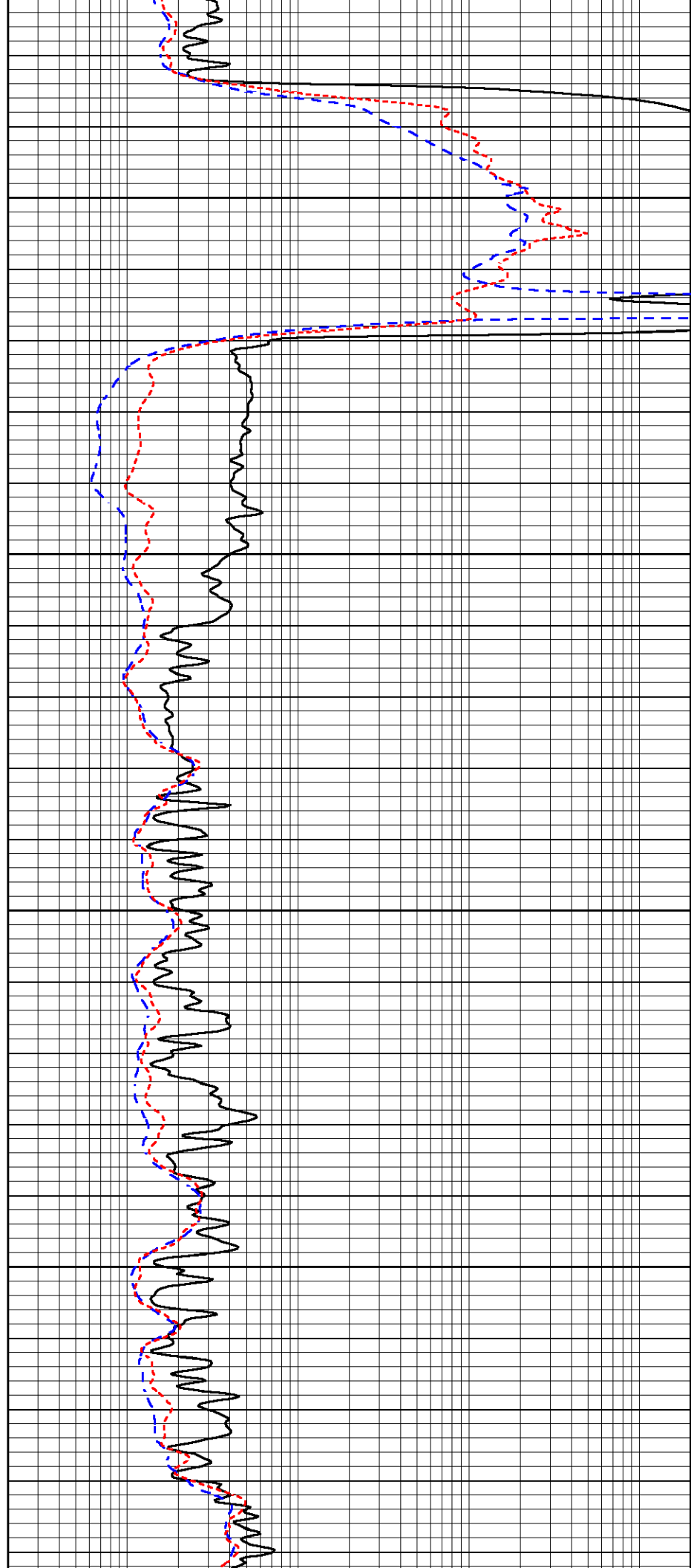


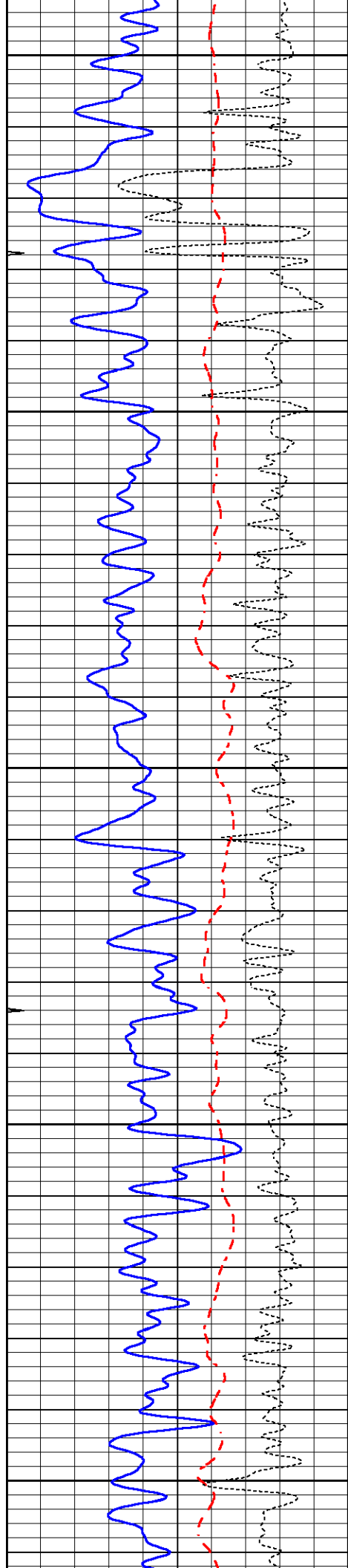
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2500

2550

2600





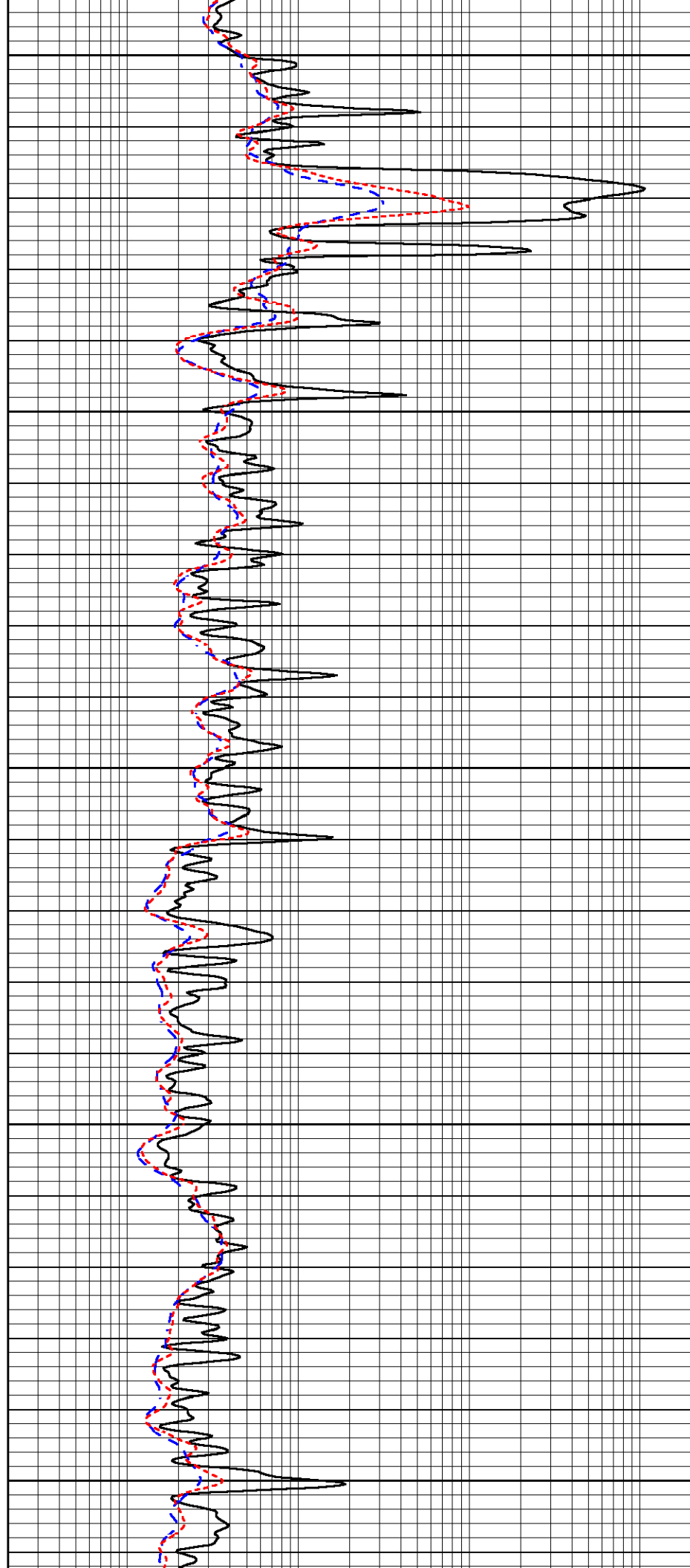
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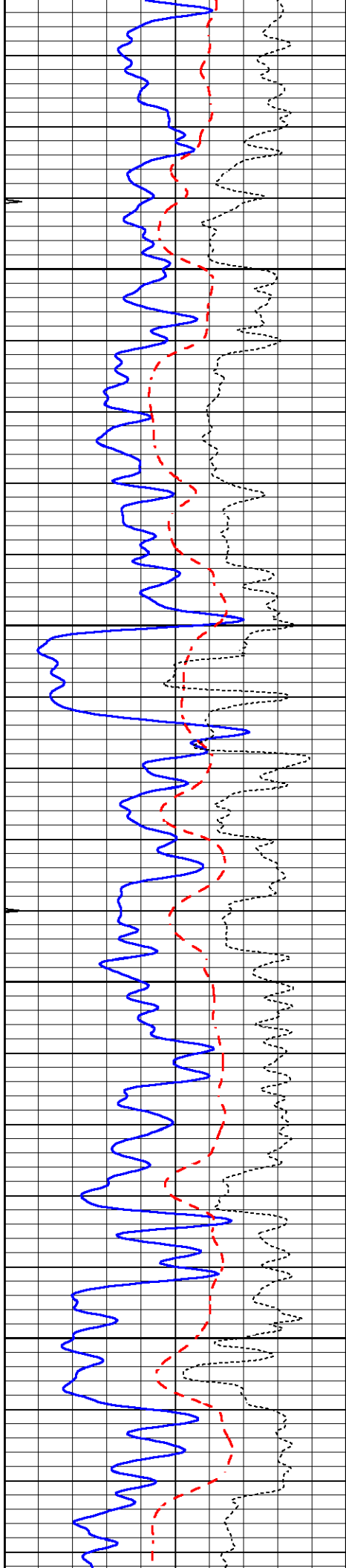
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2750

2800

2850



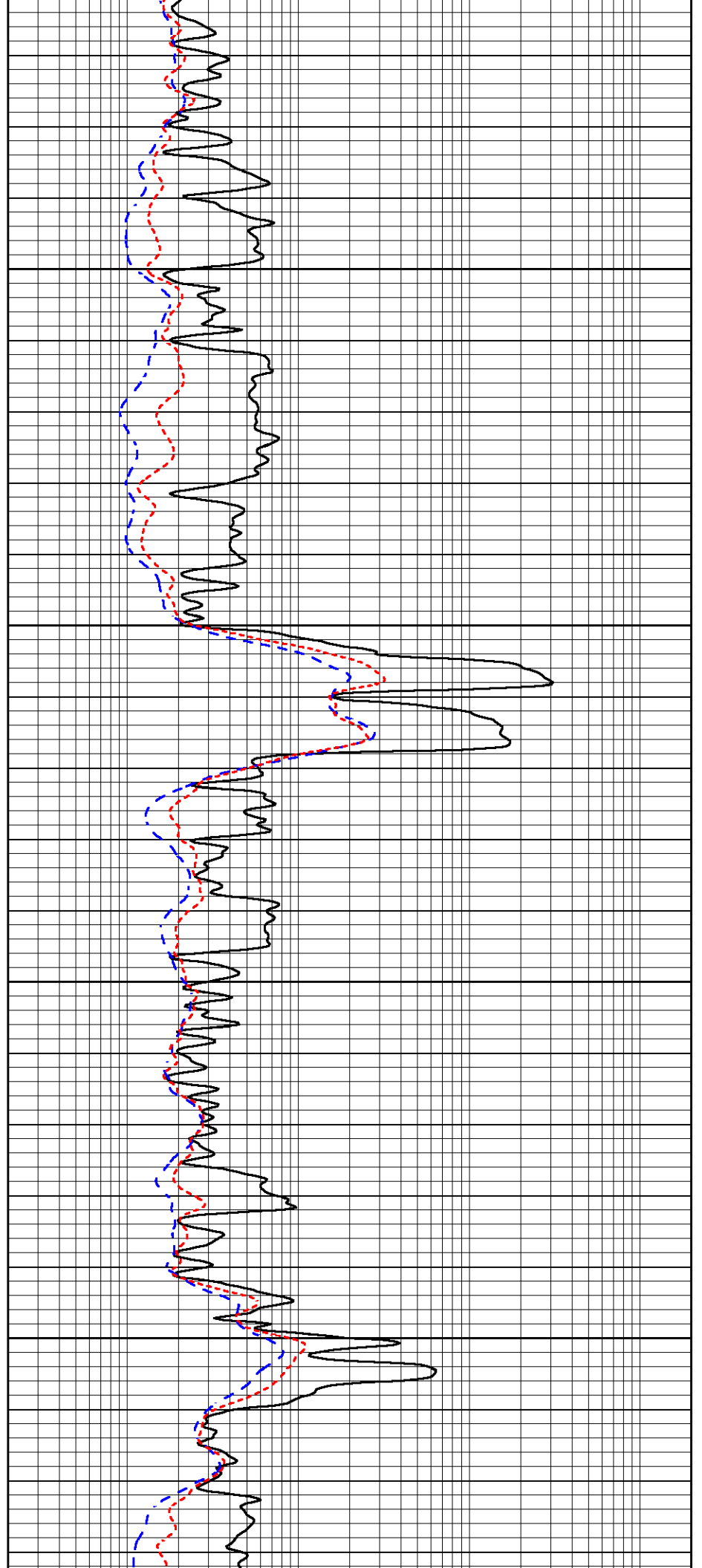


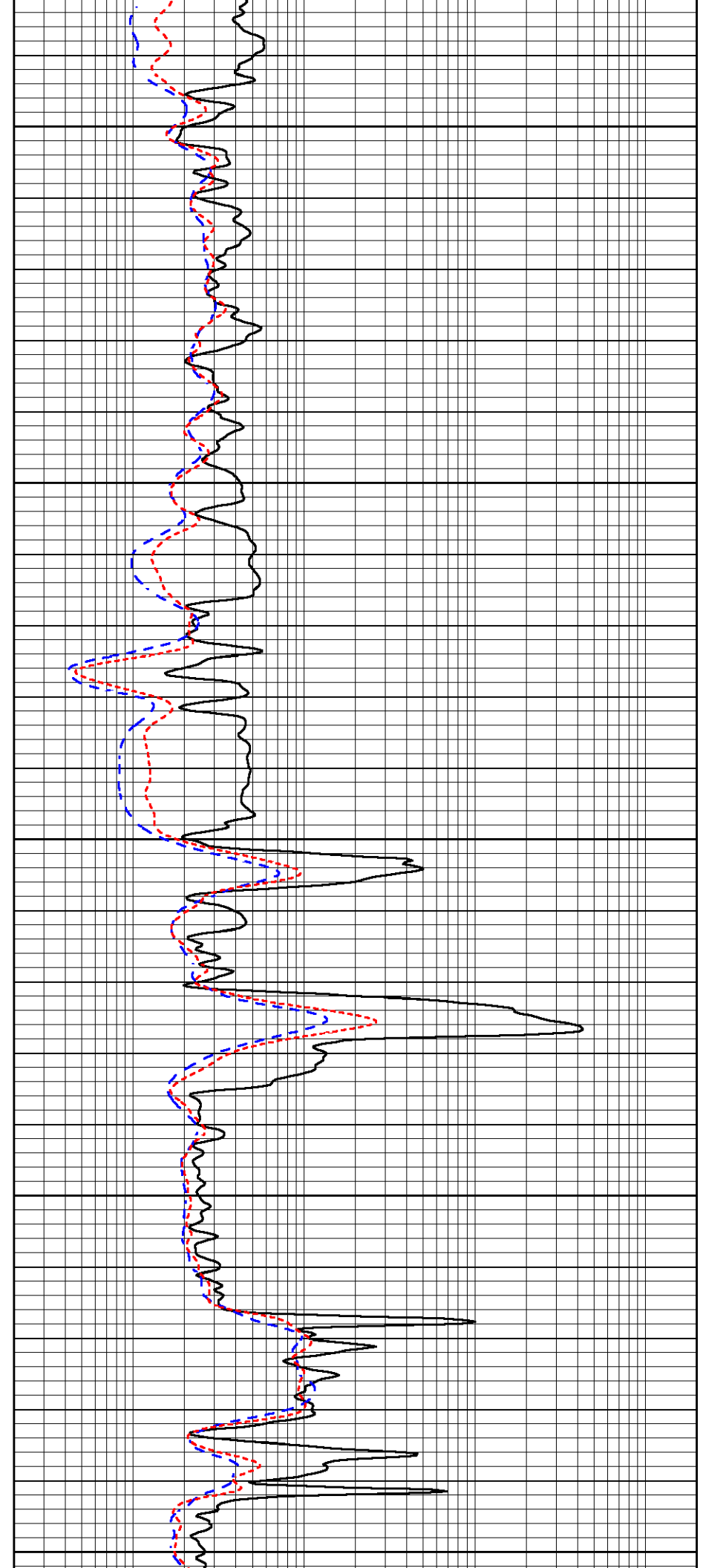
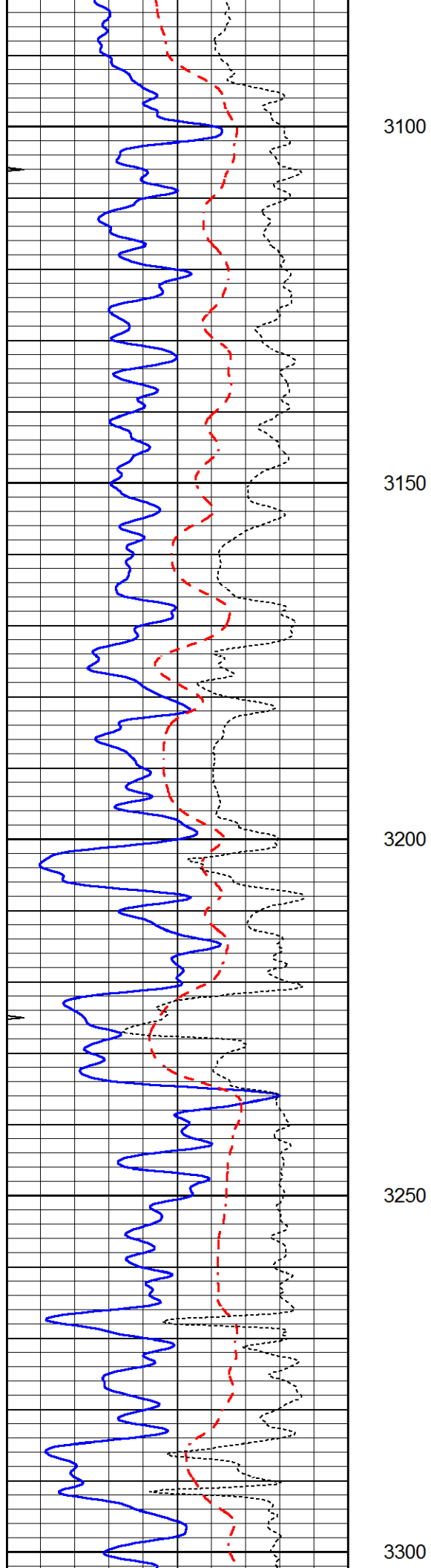
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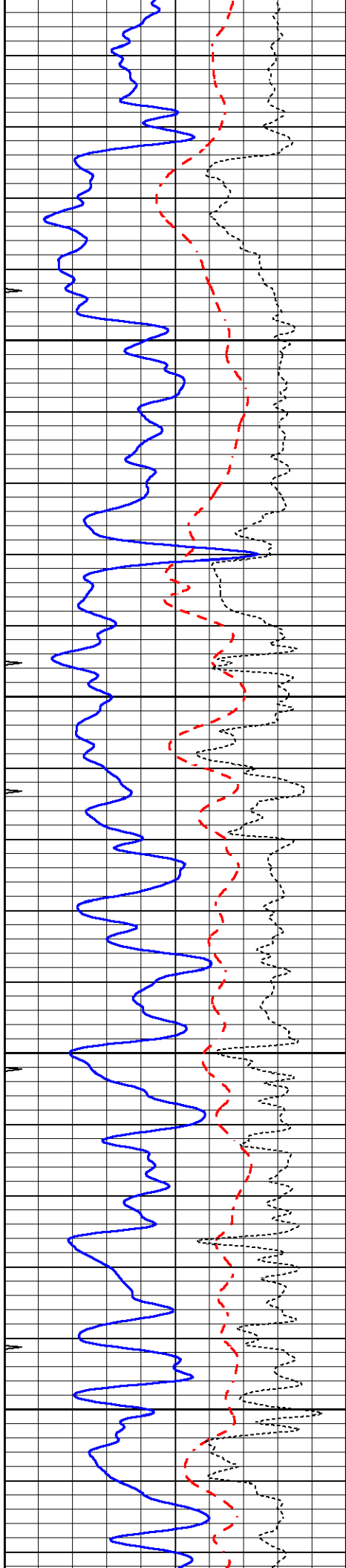
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3000

3050





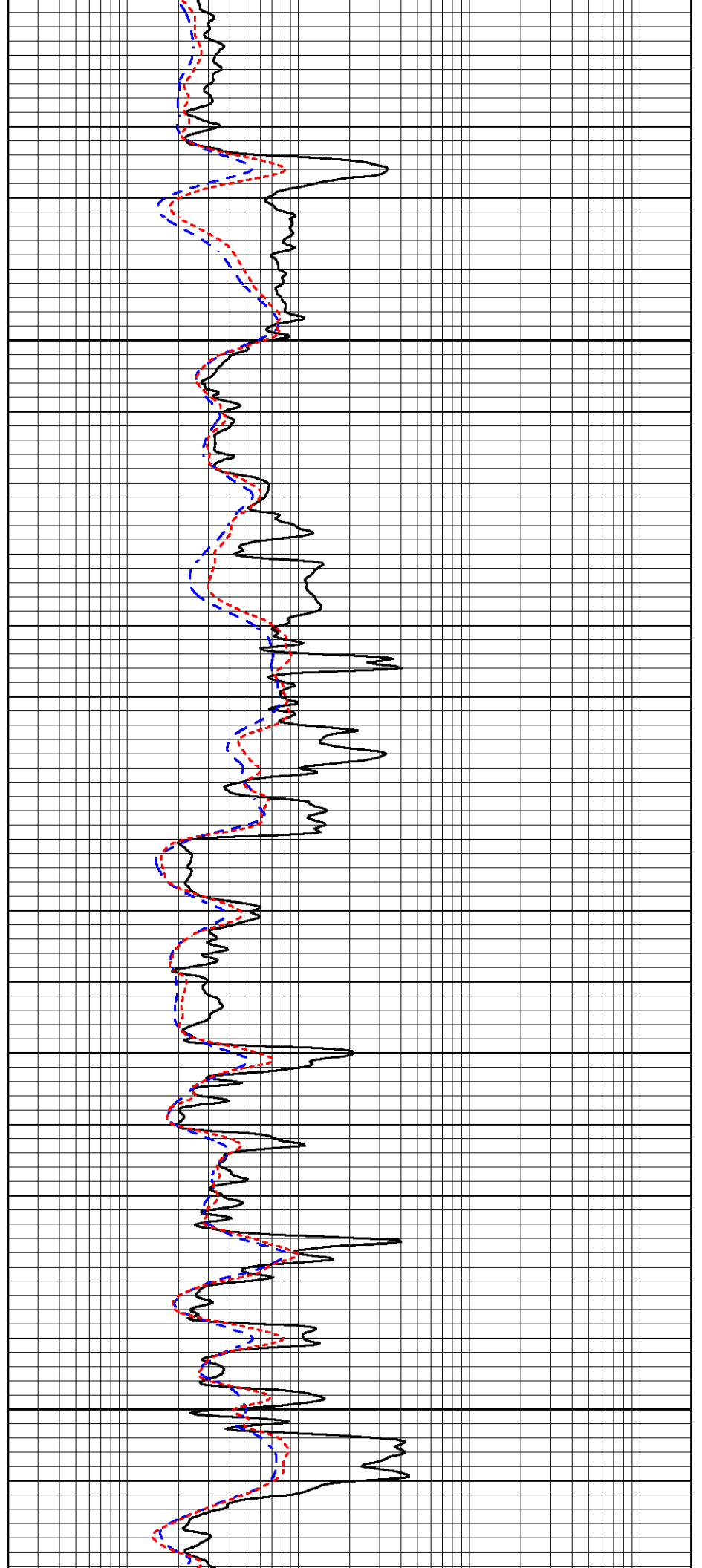


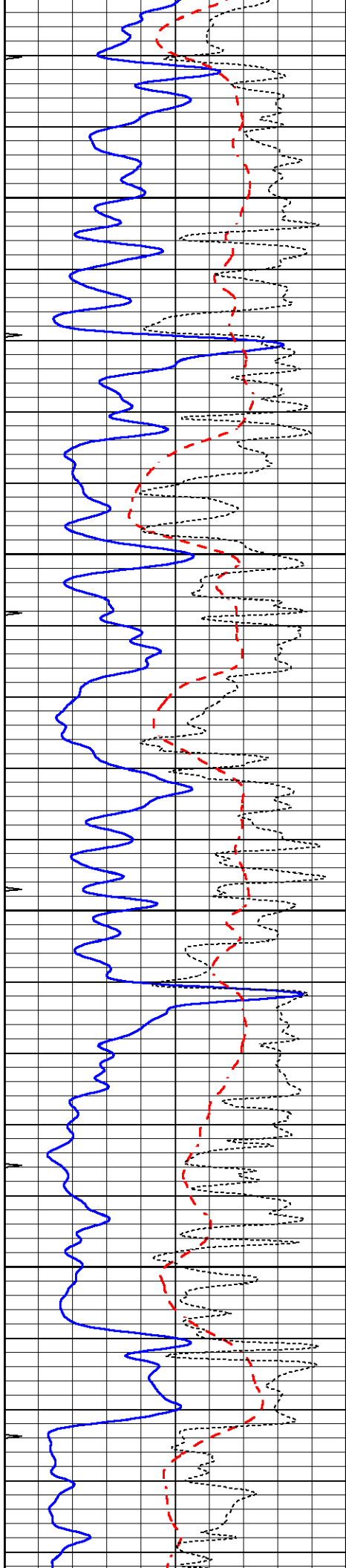
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3400

3450

3500



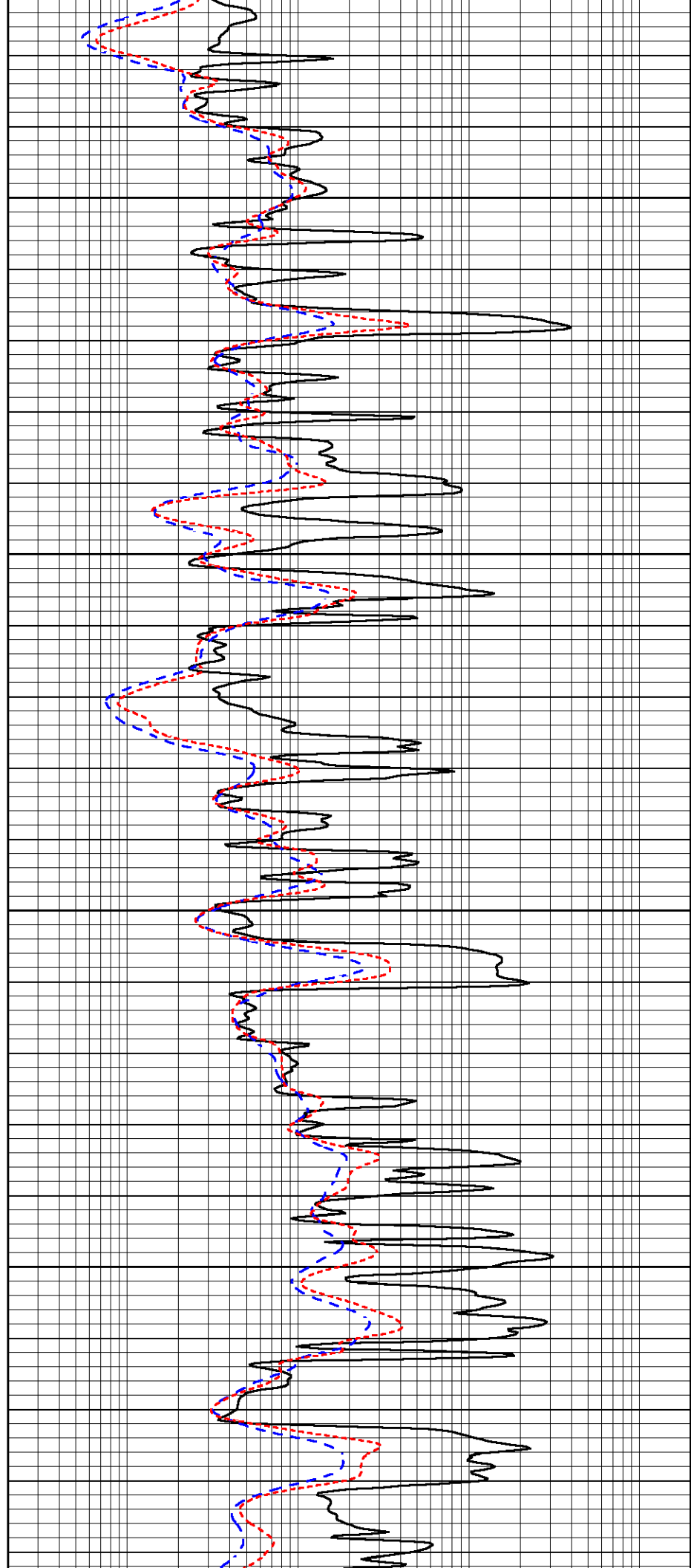


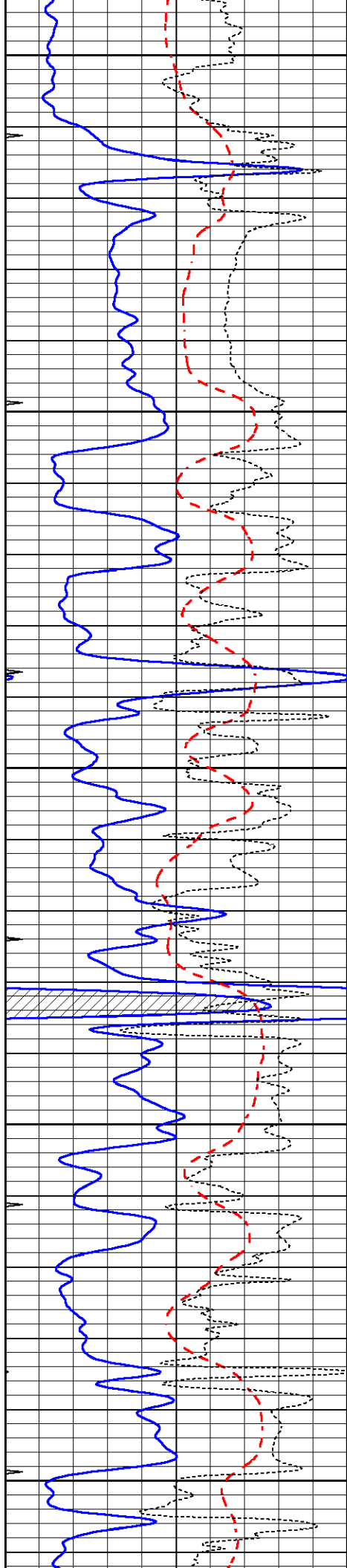
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3600

3650

3700





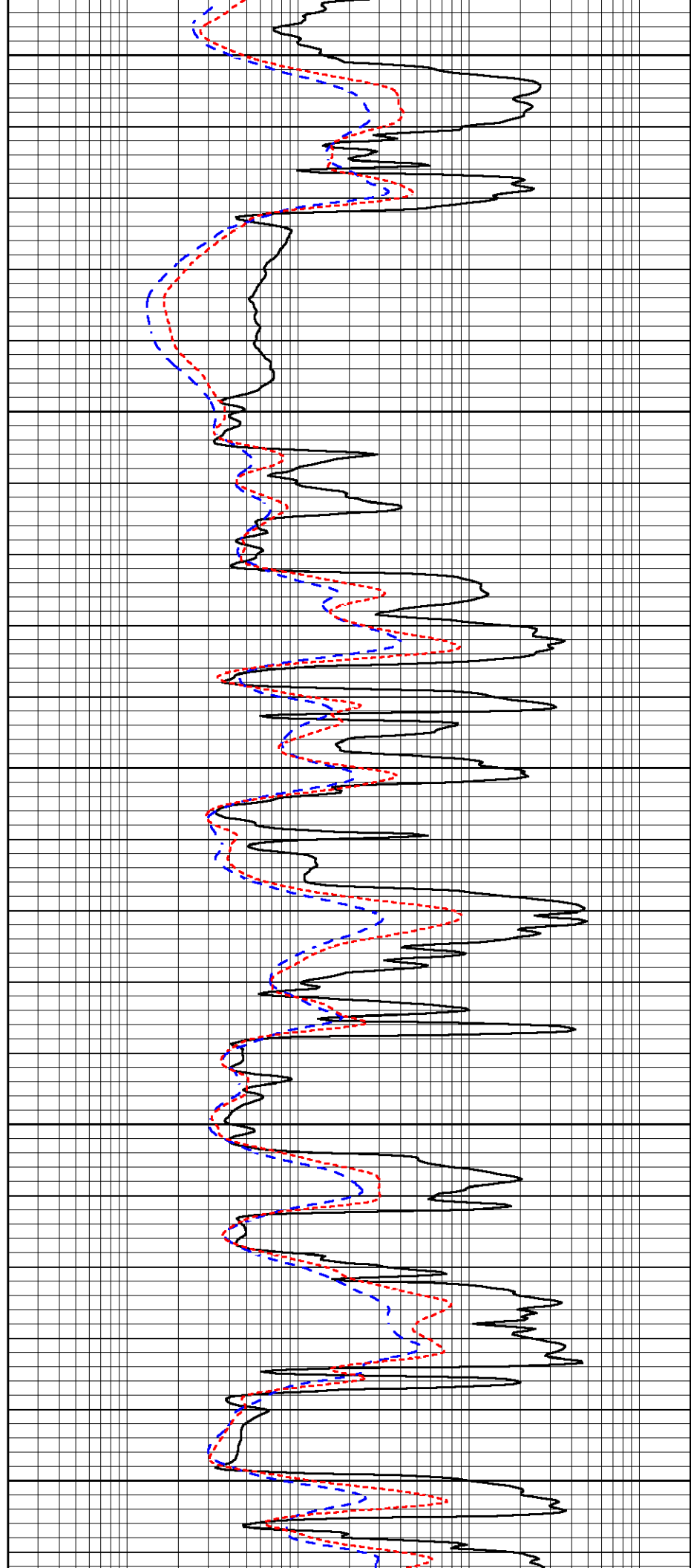
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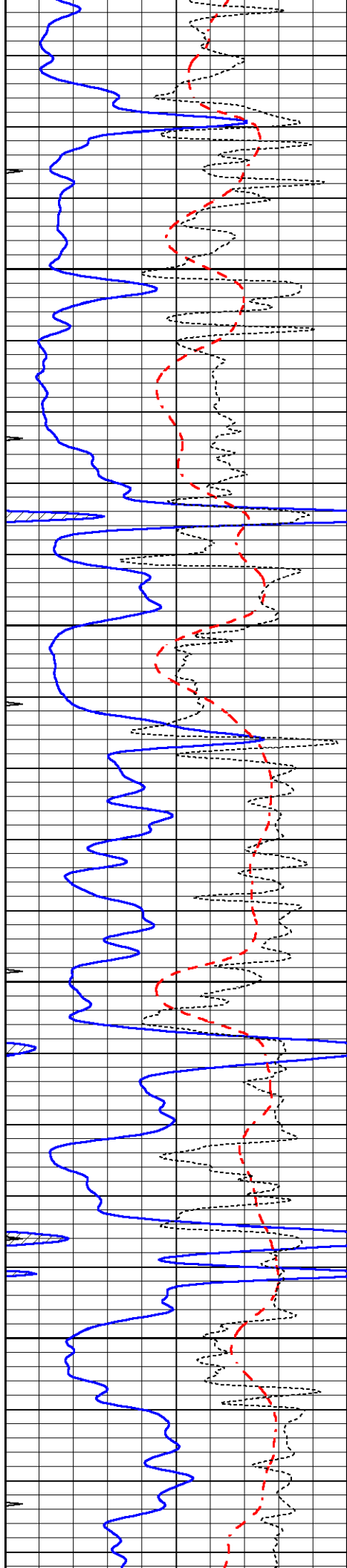
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3850

3900

3950



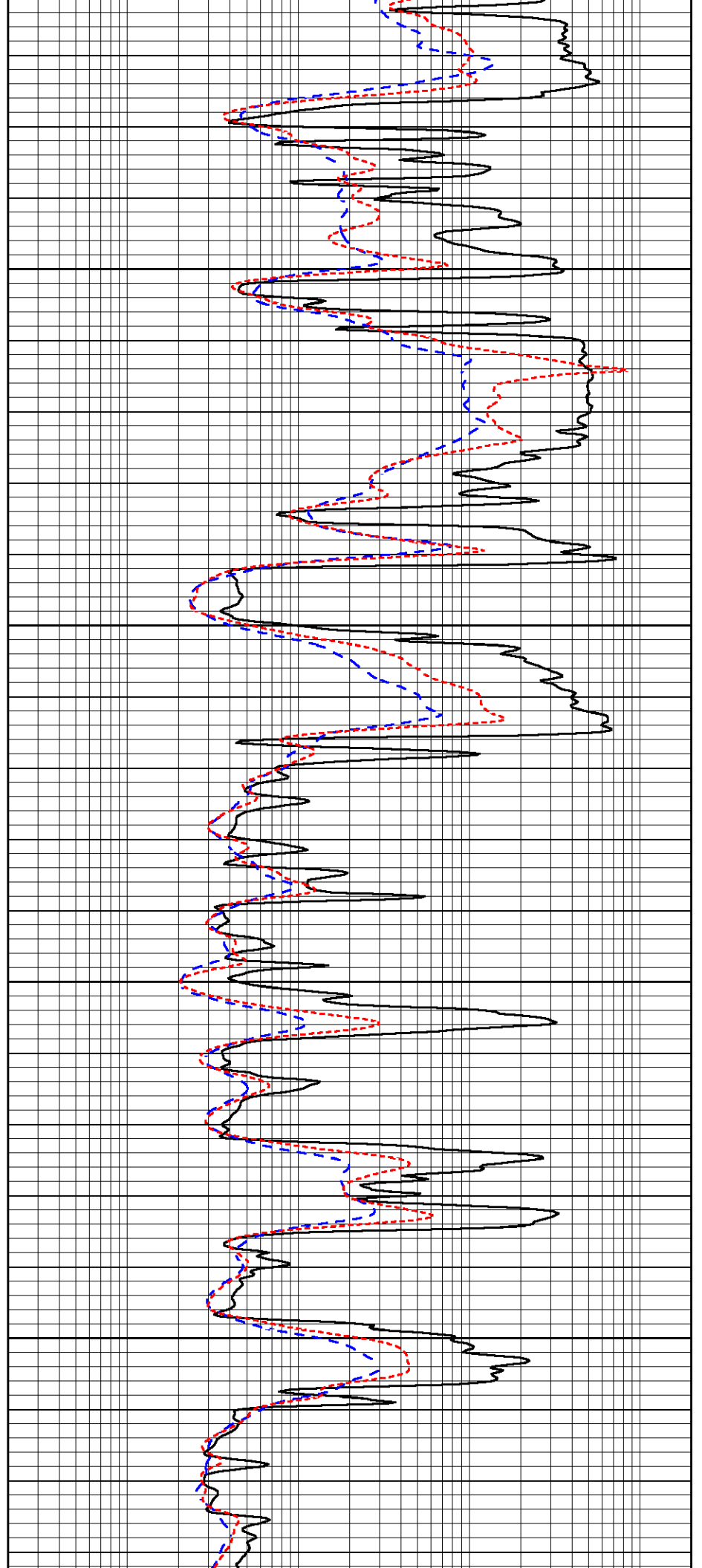


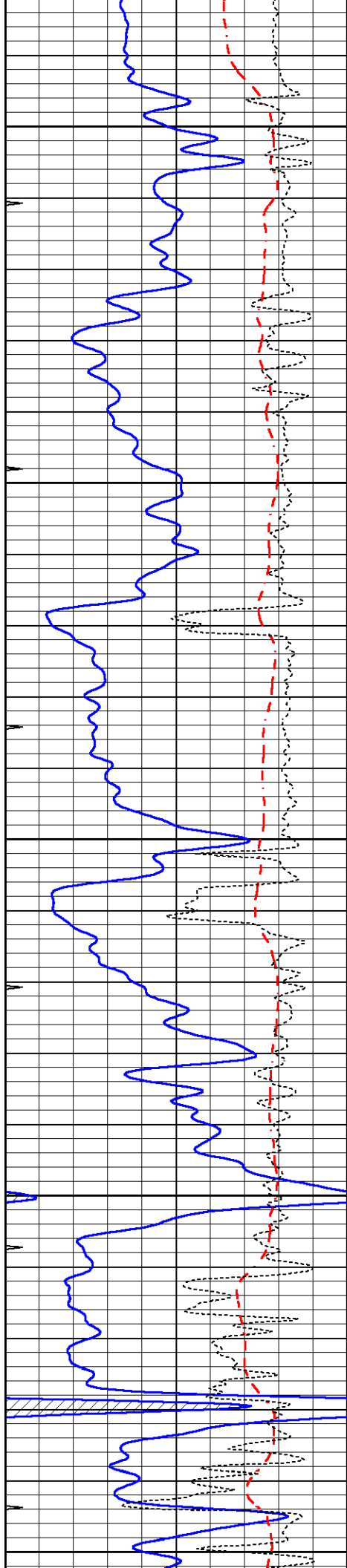
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4050

4100

4150





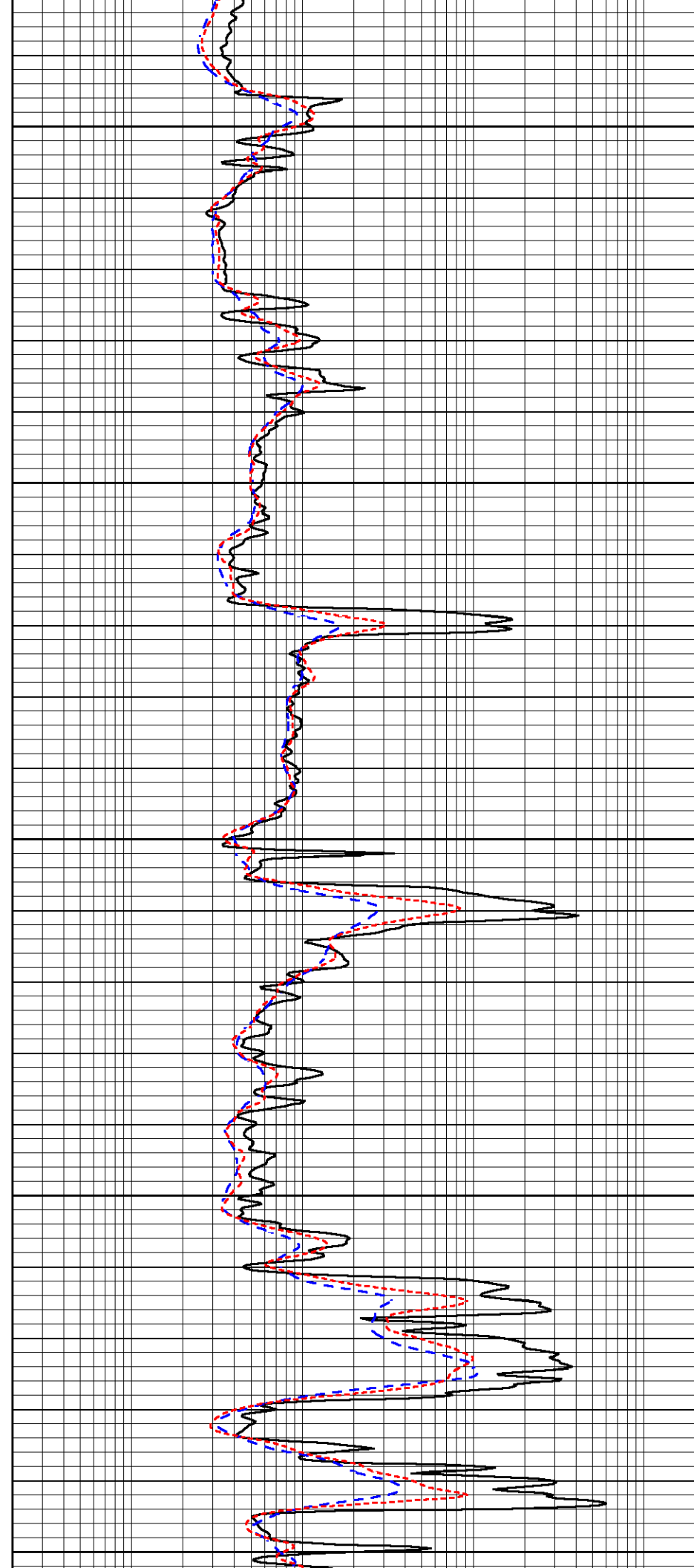
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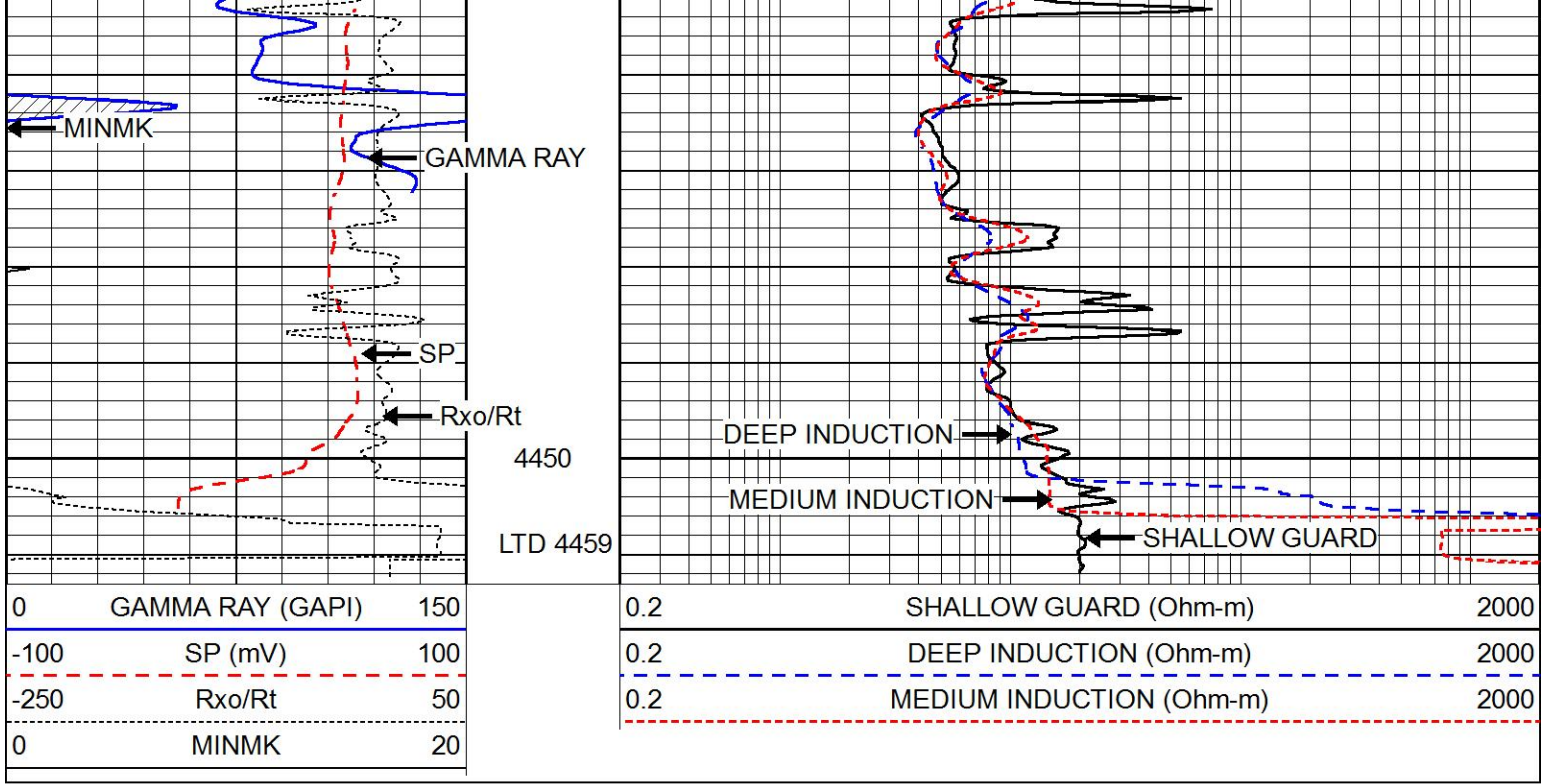
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4300

4350

4400

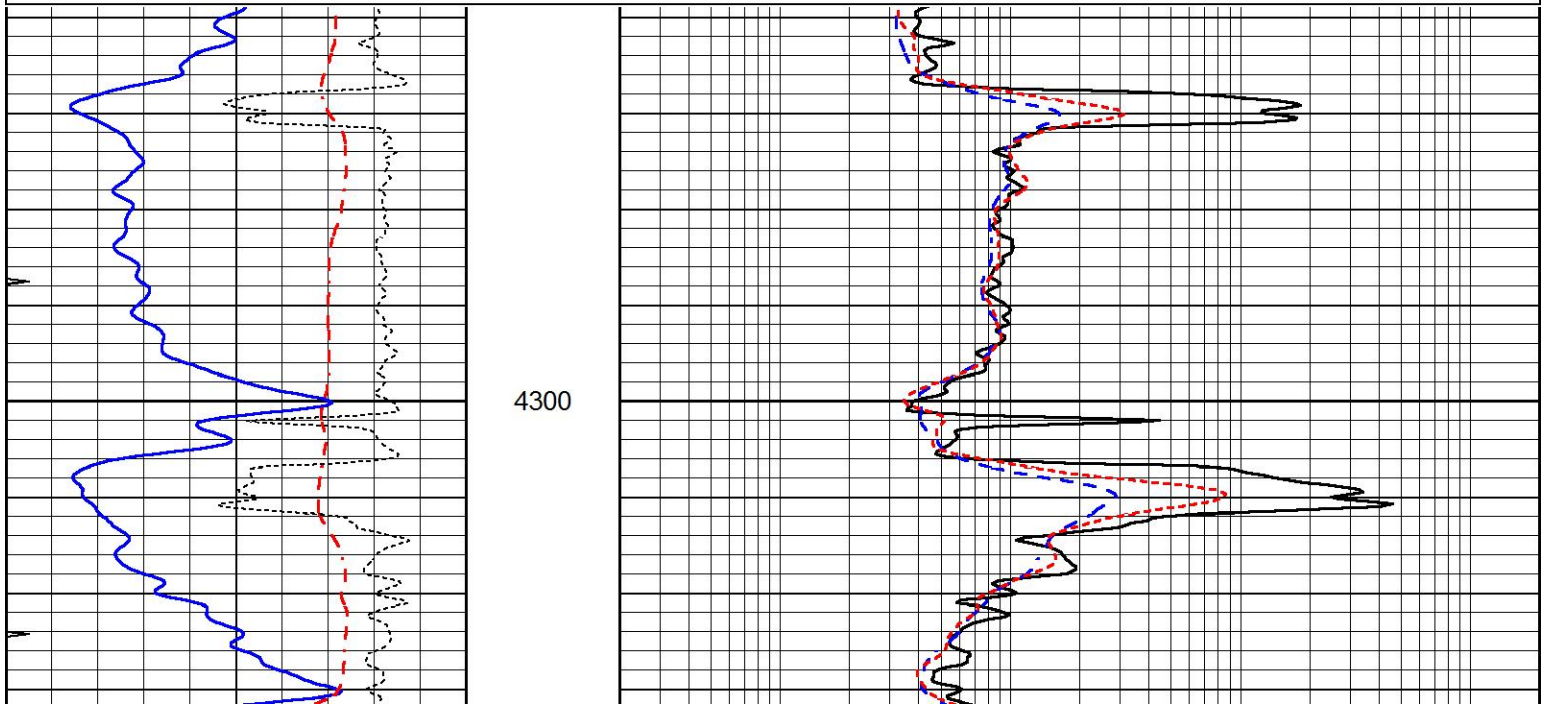


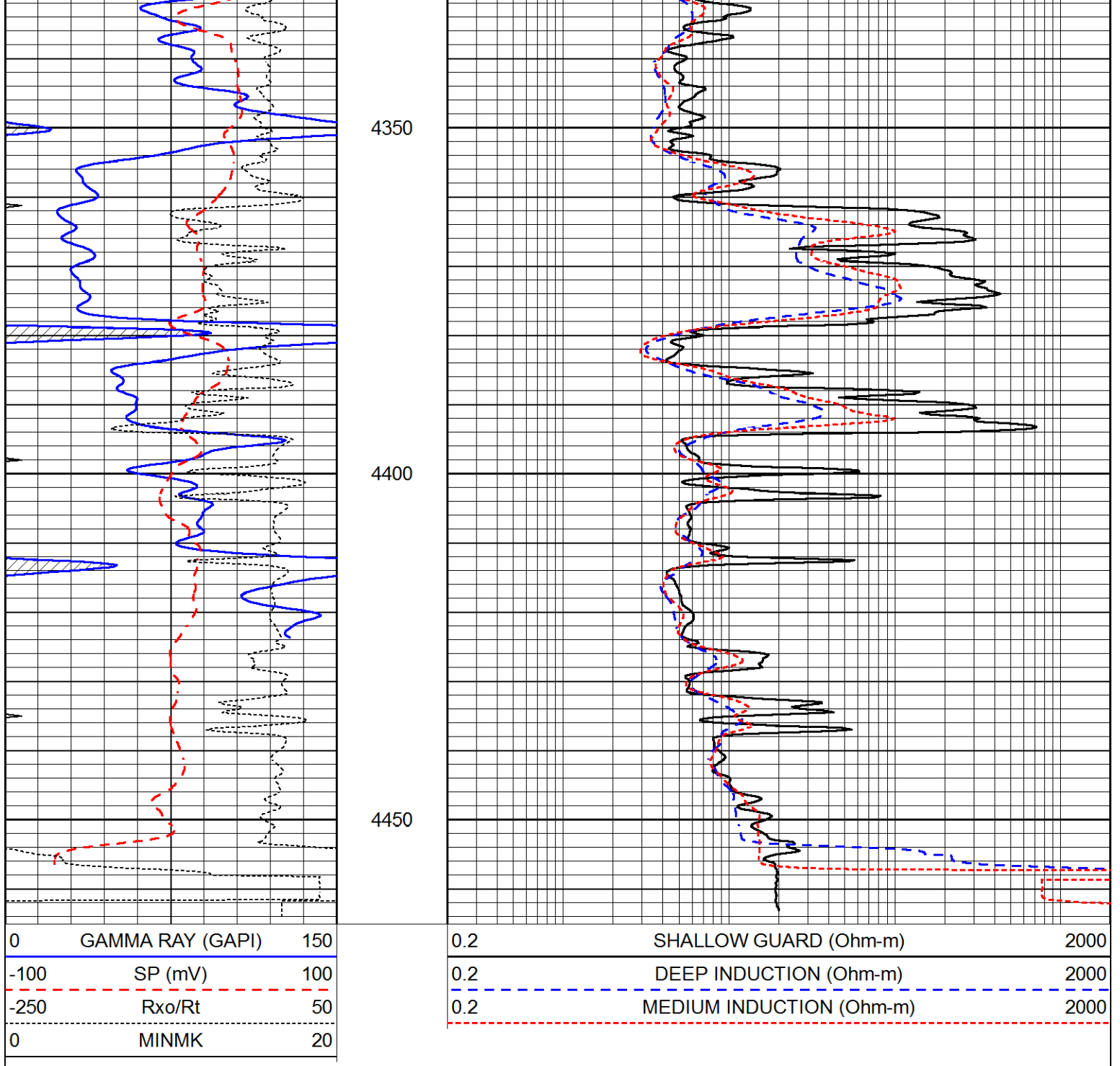


# REPEAT SECTION

Database File 4688ddn.db  
 Dataset Pathname pass2RP  
 Presentation Format \_dil  
 Dataset Creation Fri May 08 17:23:25 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	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 4688ddn.db  
 Dataset Pathname pass2RP  
 Dataset Creation Fri May 08 17:23:25 2020

### Dual Induction Calibration Report

Serial-Model: PROBE8-DILG  
 Surface Cal Performed: Mon Sep 10 14:28:35 2018  
 Downhole Cal Performed: Mon Sep 10 14:28:38 2018  
 After Survey Verification Performed: Mon Sep 10 14:28:40 2018

#### Surface Calibration

Loop:	Readings		V	References		mmho/m	Results	
	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	0.000
Mid	0.000	0.700	V	0.000	100.000	mmho/m	500.000	10.000

Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-12.000
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: 001N Model: PRB

Master Calibration		Performed Thu Mar 19 11:30:16 2020						
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	1572.2	7510.8	2837.3	2643.1				cps
Window 2	1446.2	6523.9	2552.8	2409.9				cps
Window 3	1060.9	3611.4	1731.5	1684.8				cps
Window 4	145.5	363.4	363.2	368.1				cps
Long Space	0.0	5077.7	1106.6	963.7				cps
Short Space	3.1	1709.3	1103.4	916.9				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 44.0	Rib Slope	: 0.965	Density/Spine Ratio			: 0.555	
Spine Angle	: 74.0	Spine Slope	: 3.481	Spine Intercept			: -17.4	

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: 6I  
Tool Model: G

#### CALIBRATION

Detector	Readings	Target	Normalization
Short Space	1.00 cps	1.00 cps	1.0000
Long Space	1.00 cps	1.00 cps	1.0000

#### 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: Wed Jul 03 12:57:34 2019

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 276.0 cps

Sensitivity: 0.5700 GAPI/cps