



# DUAL INDUCTION LOG

Company MAI OIL OPERATIONS, INC.

Well S & S UNIT #1

Field KRAFT - PRUSA

County RUSSELL State KANSAS

Location: API #: 15-167-24123-0000

SEC 36 TWP 15S RGE 12W

Permanent Datum GROUND LEVEL Elevation 1836  
Log Measured From KELLY BUSHING 10' A.G.L.  
Drilling Measured From KELLY BUSHING

Other Services  
CDL/CNL  
MEL/SON

Elevation

K.B. 1846  
D.F. 1844  
G.L. 1836

Date	6/20/22
Run Number	ONE
Depth Driller	3420
Depth Logger	3421
Bottom Logged Interval	3419
Top Log Interval	00
Casing Driller	8 5/8"@721'
Casing Logger	721
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4/54
pH / Fluid Loss	10.0/5.4
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.750@91F
Rmf @ Meas. Temp	.563@91F
Rmc @ Meas. Temp	.900@91F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.615@111F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	7.45 P.M.
Maximum Recorded Temperature	111F
Equipment Number	8916
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	JIM MUSGROVE

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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:  
DUBUQUE, KS., 1/2 W. TO "198TH", 1N., 1/2E., S. INTO @ ORANGE GATE

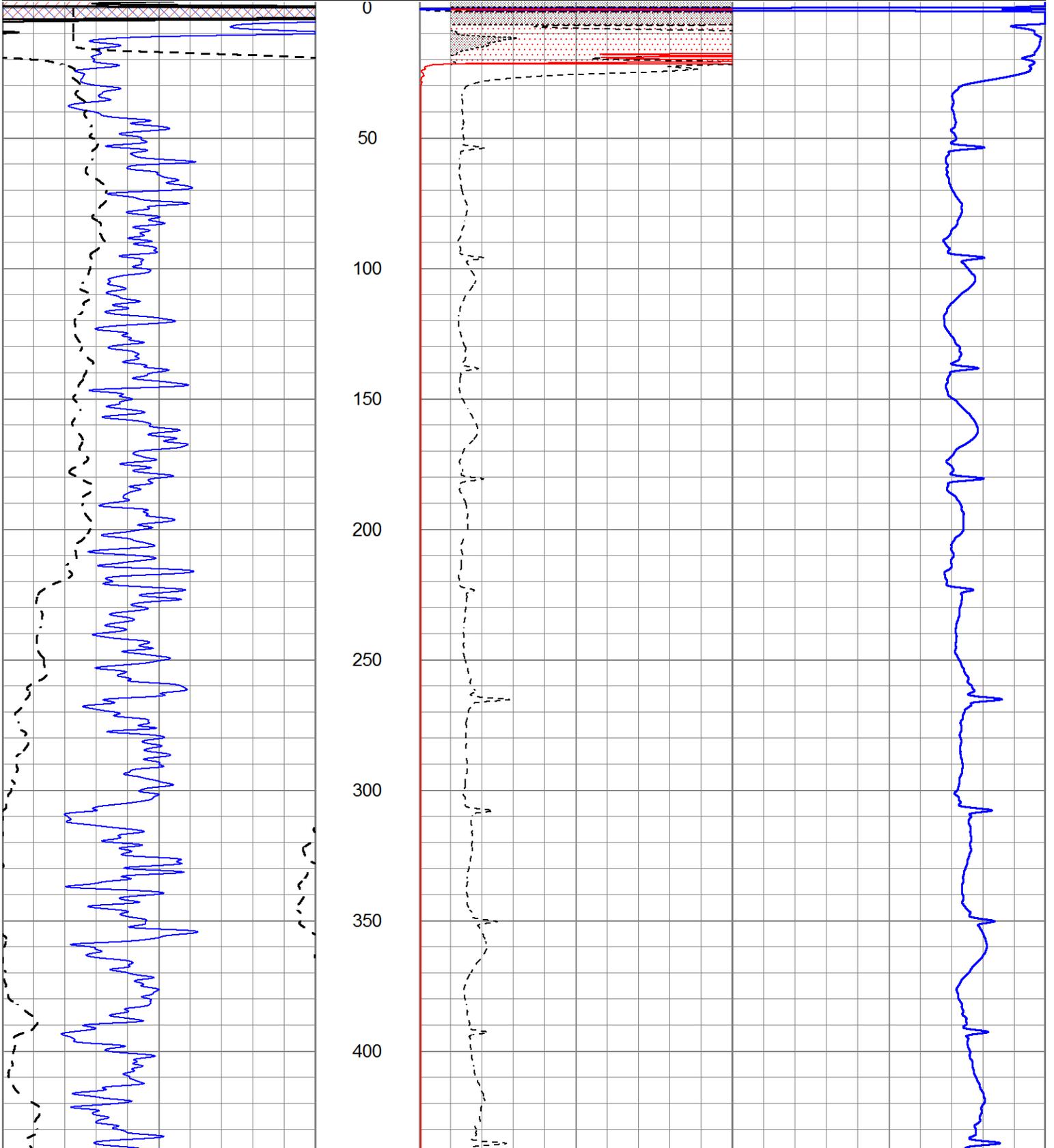


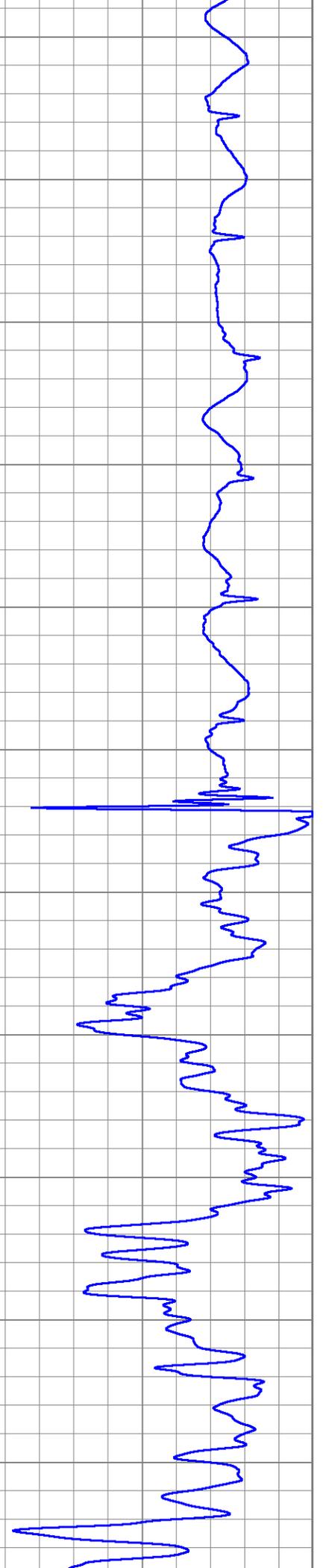
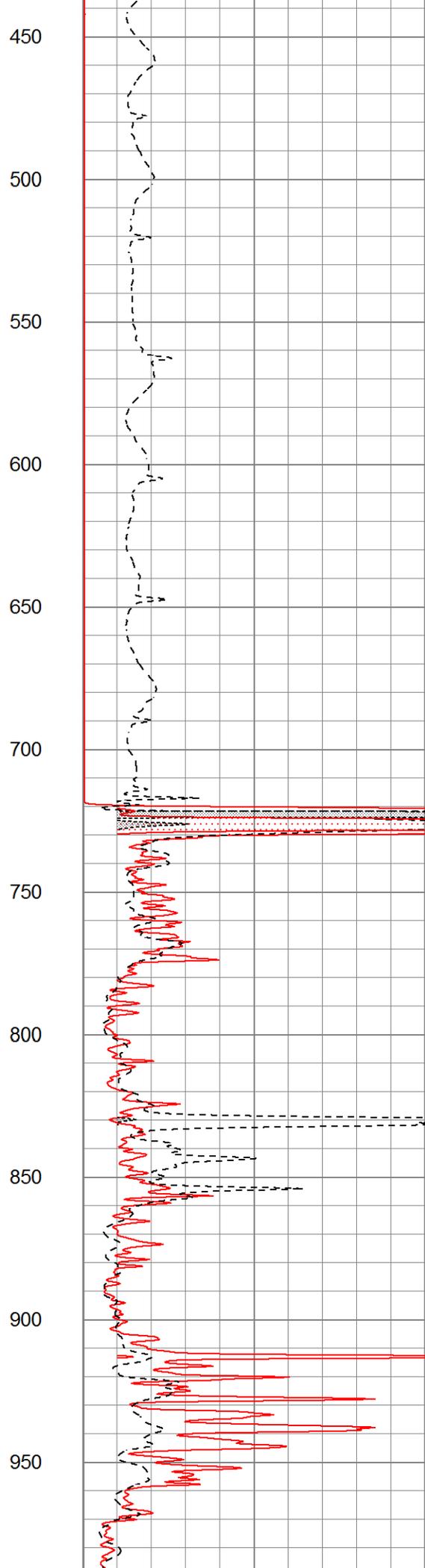
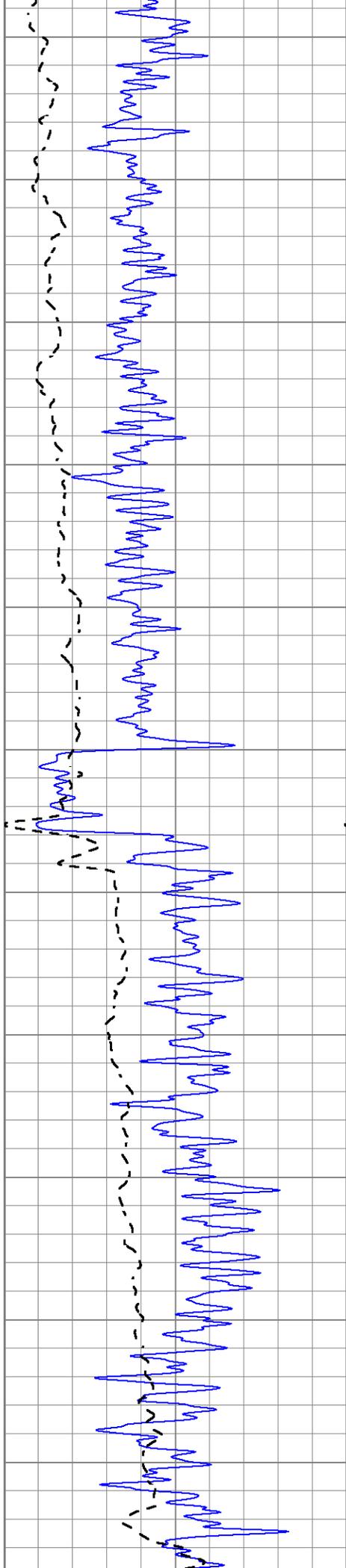
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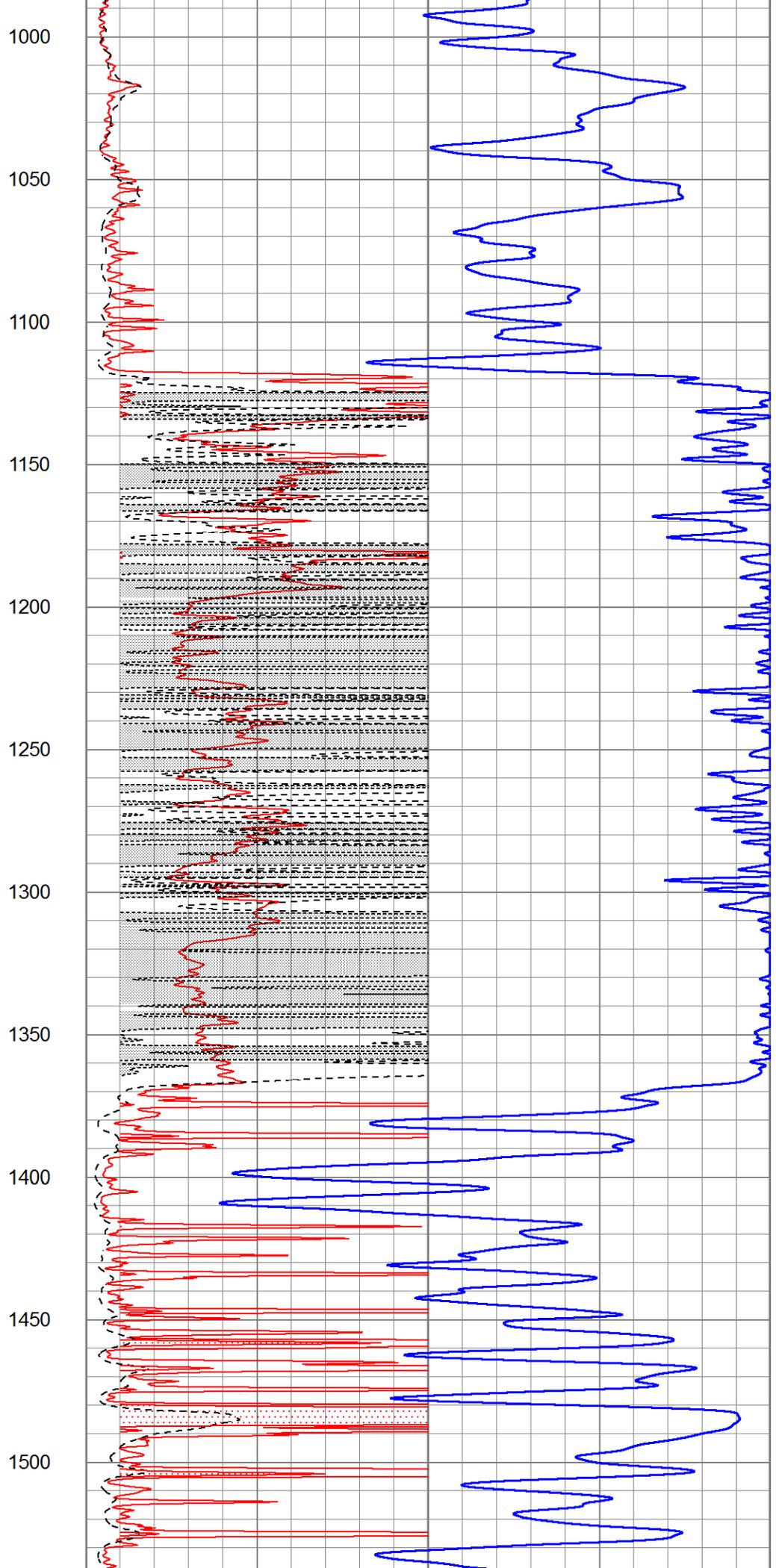
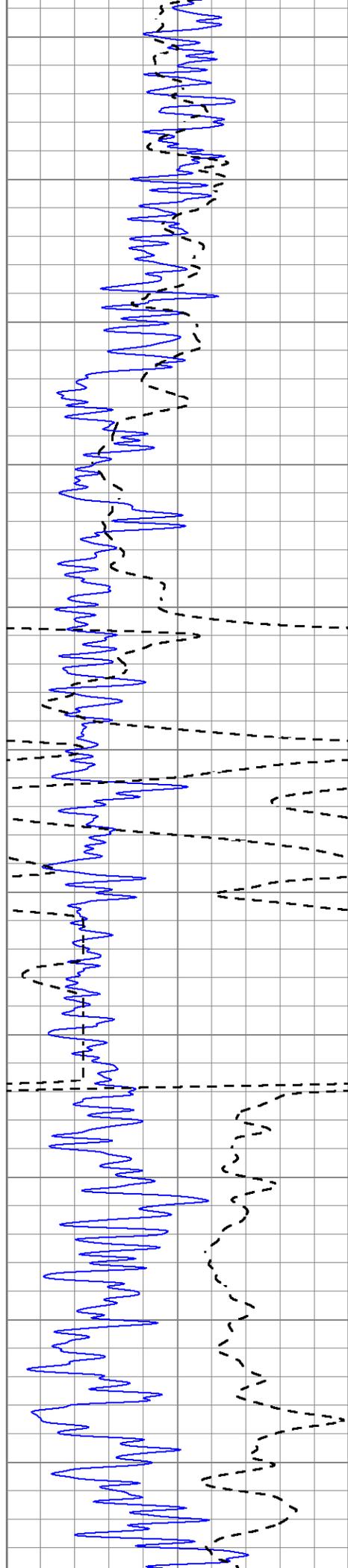
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 Presentation Format \_dil2  
 Dataset Creation Mon Jun 20 21:18:36 2022  
 Charted by Depth in Feet scaled 1:600

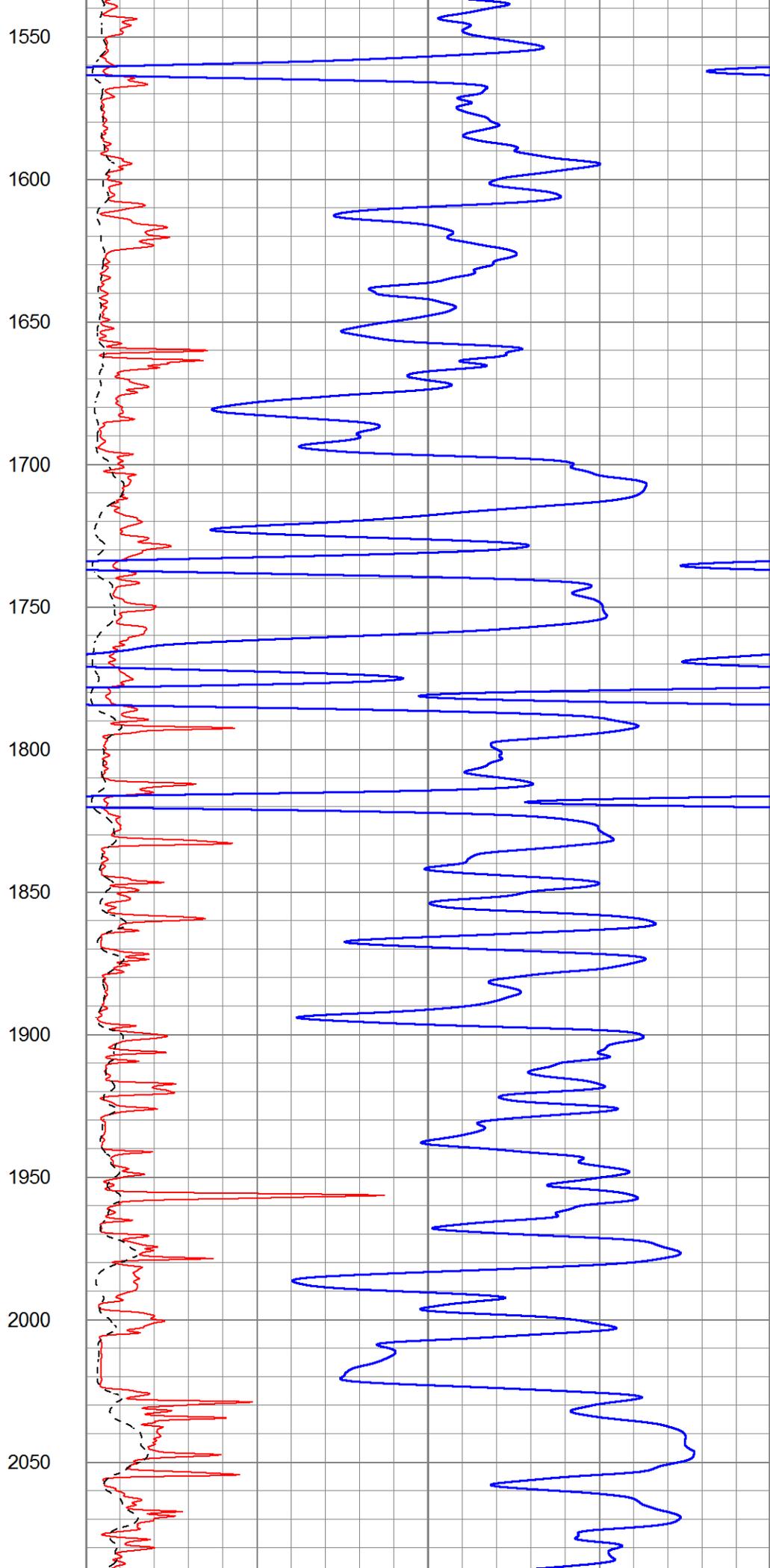
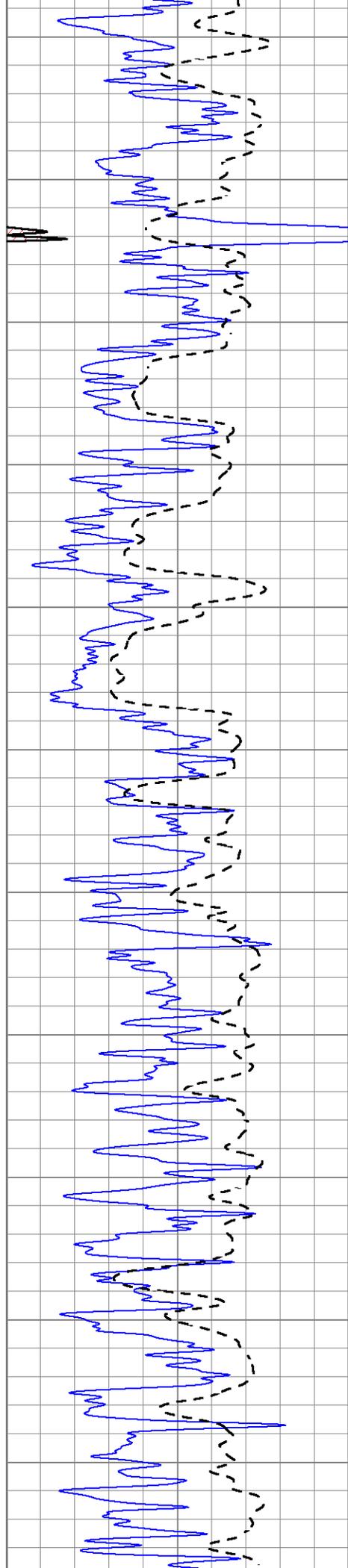
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-100	SP (mV)	100

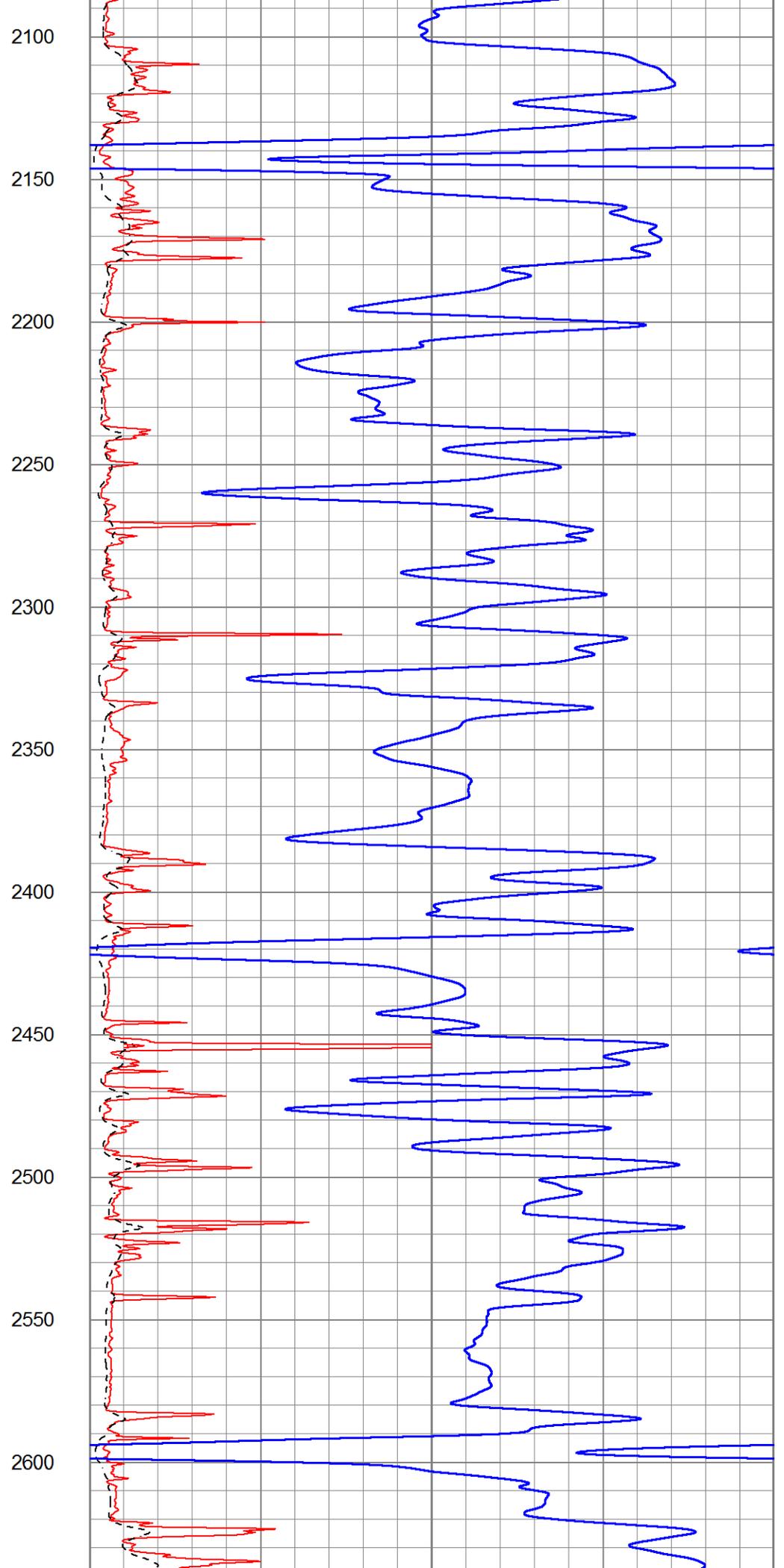
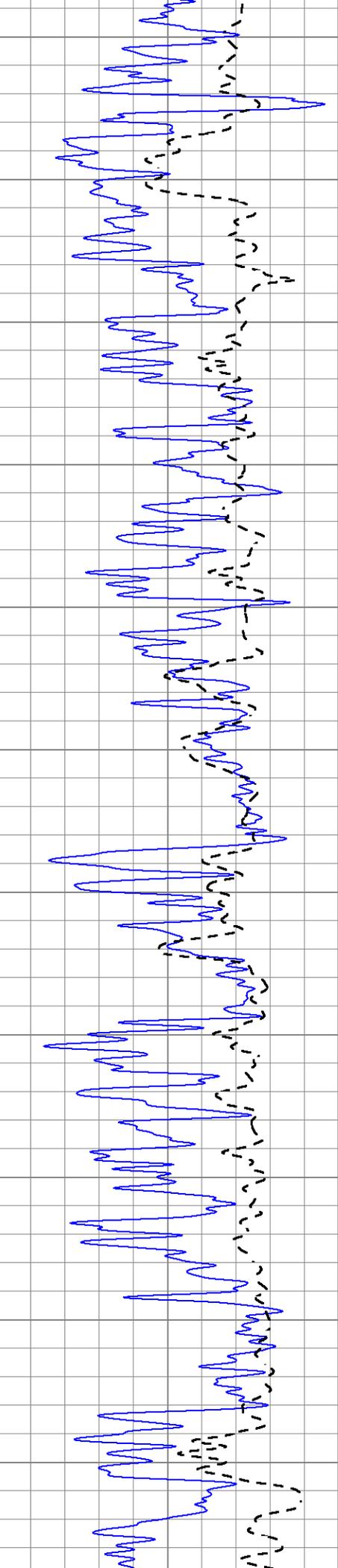
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

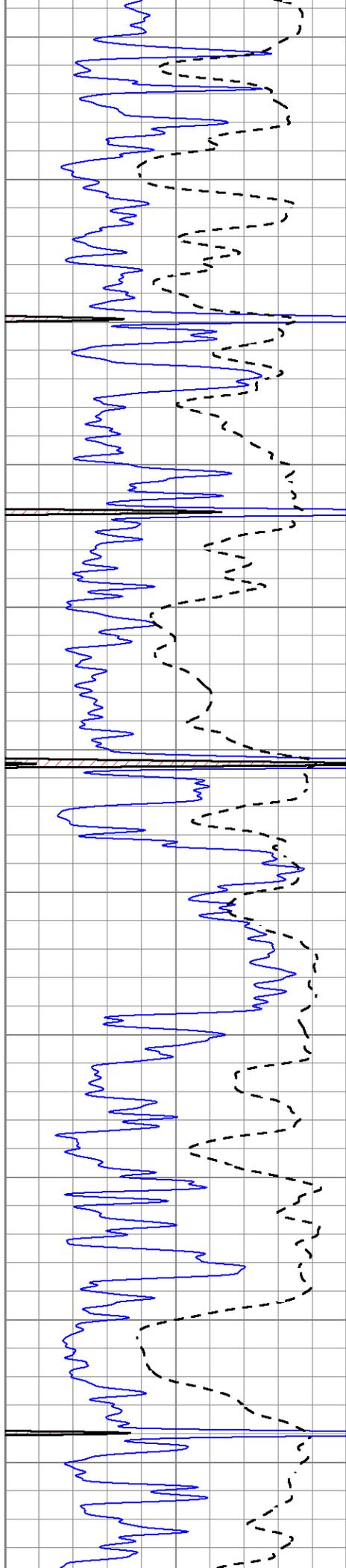












2650

2700

2750

2800

2850

2900

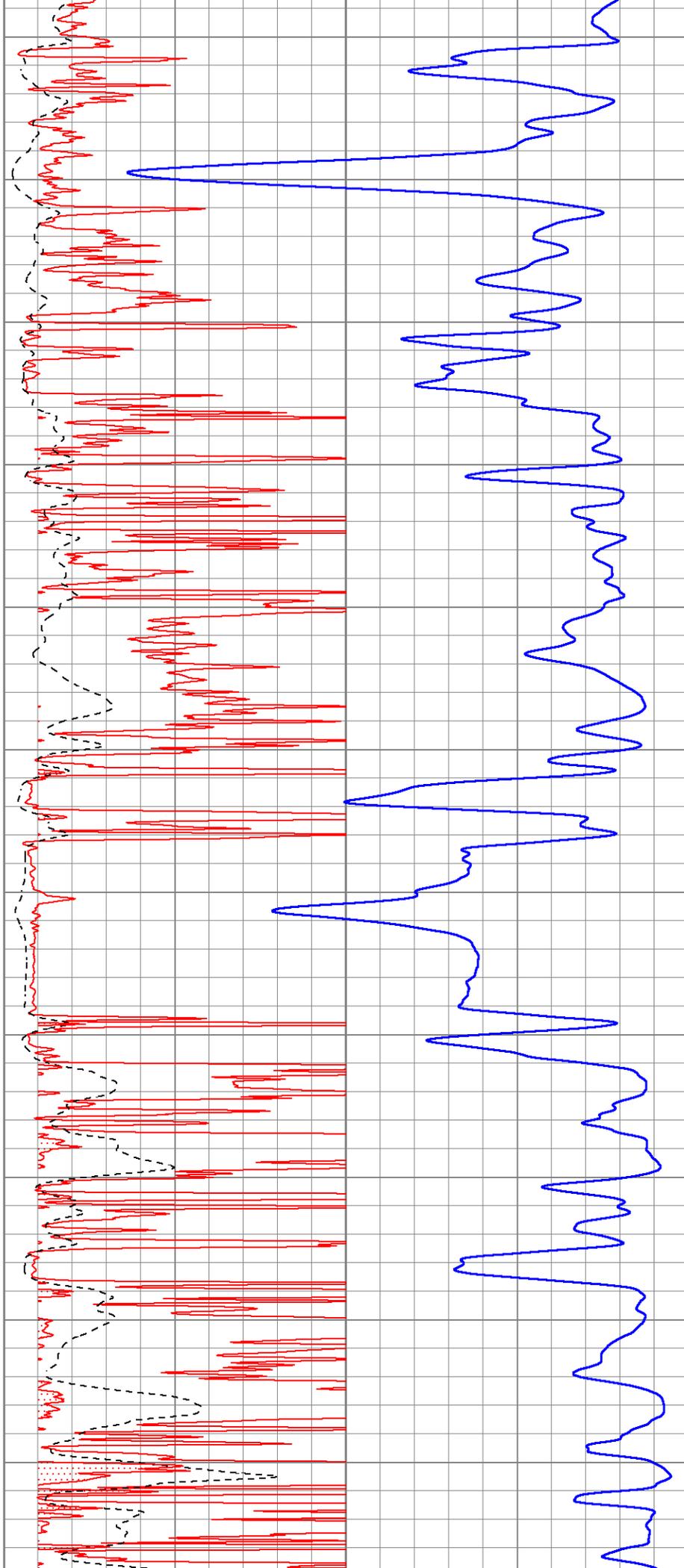
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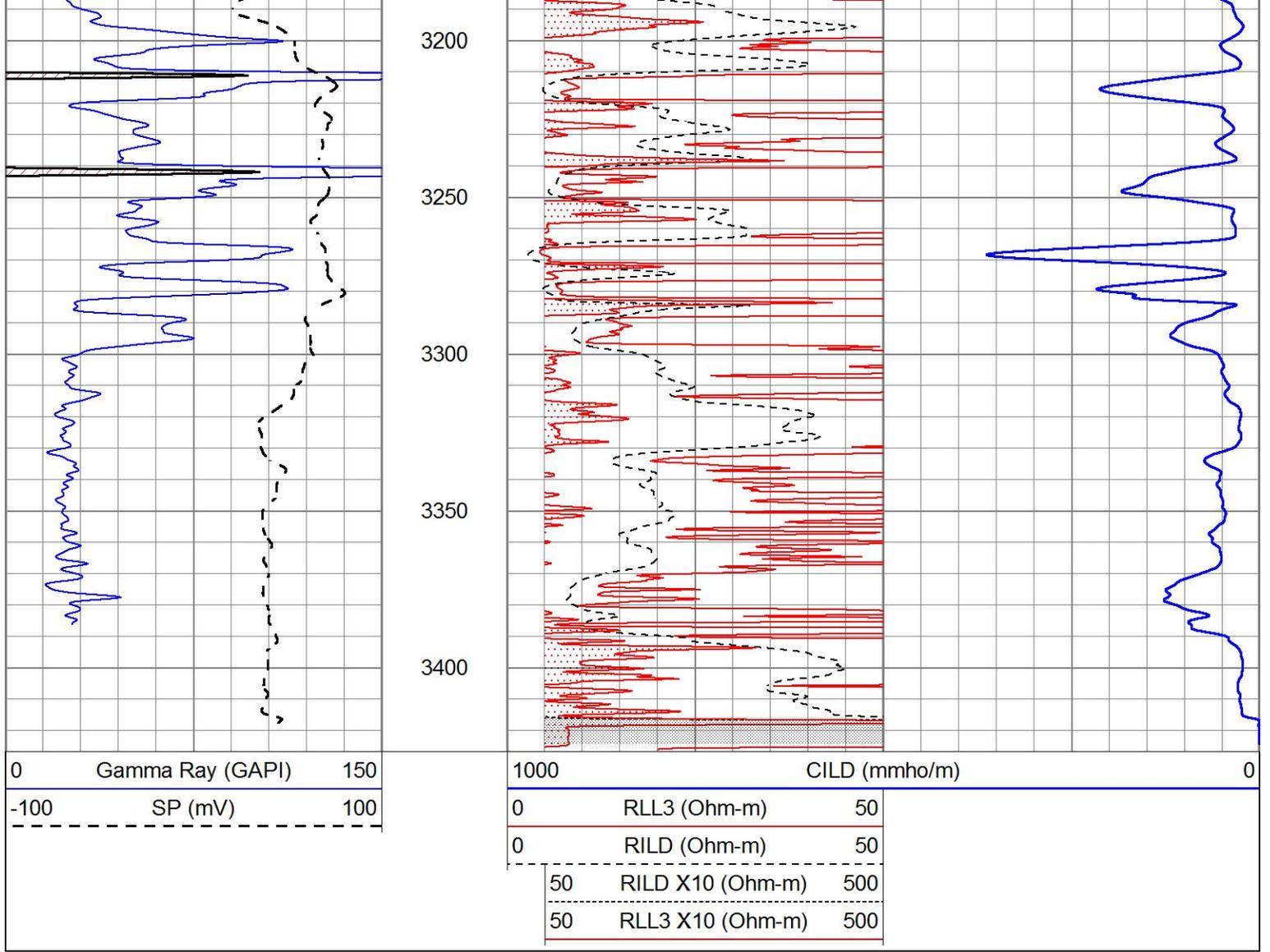
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3050

3100

3150



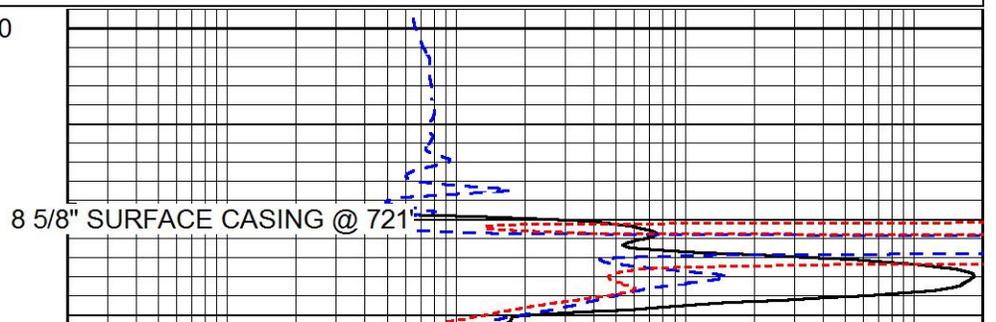
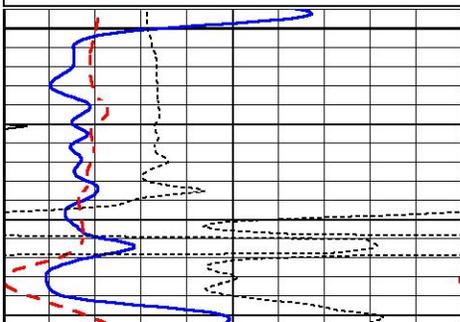


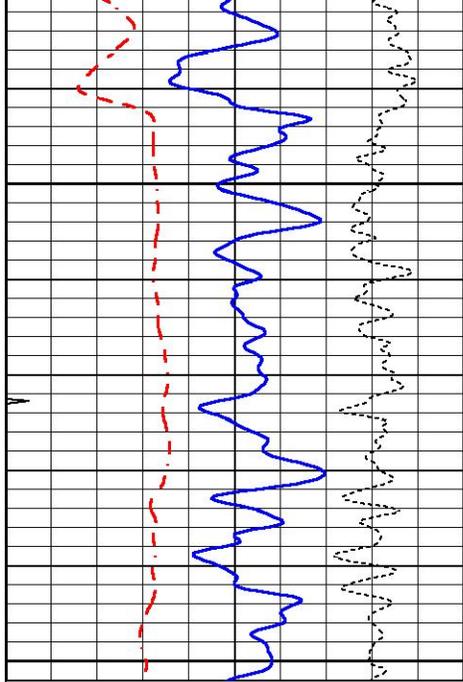
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0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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

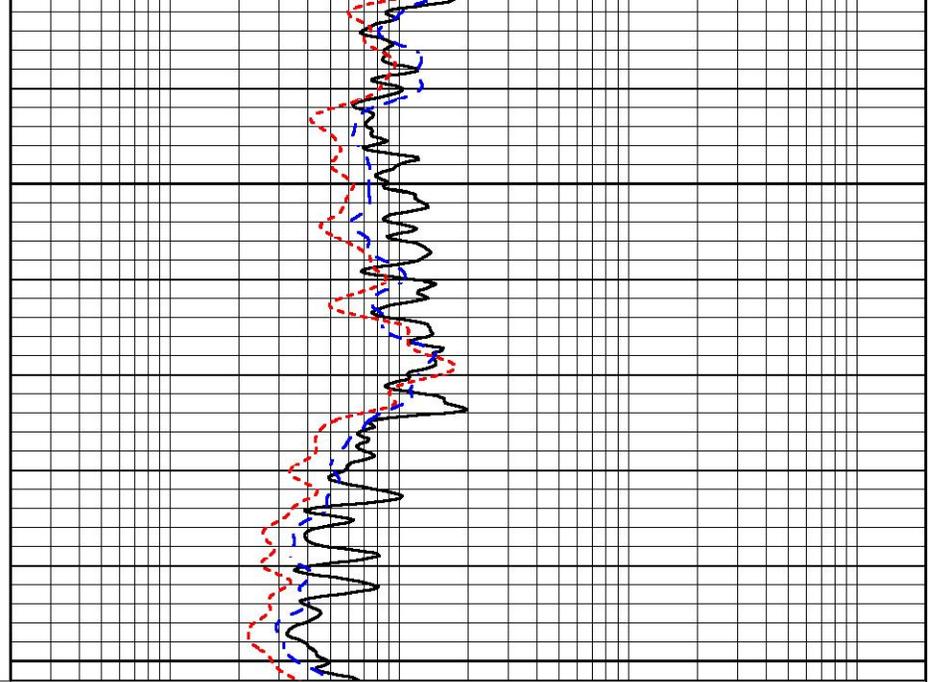




750

800

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

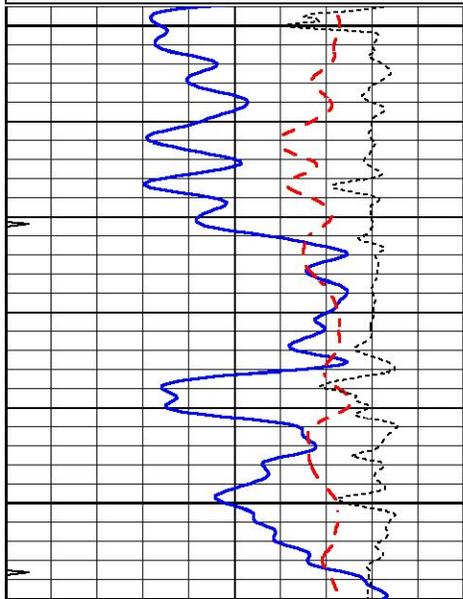


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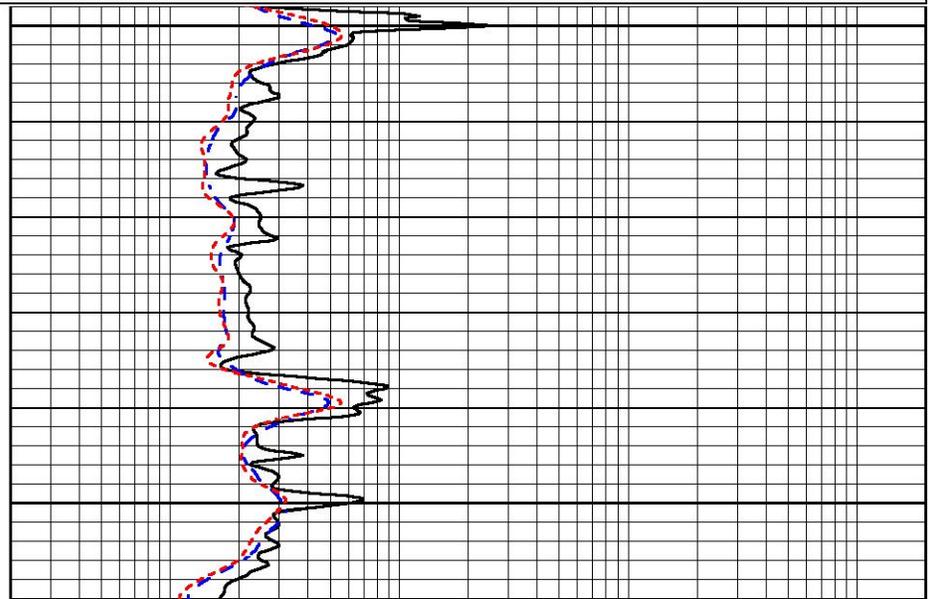
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

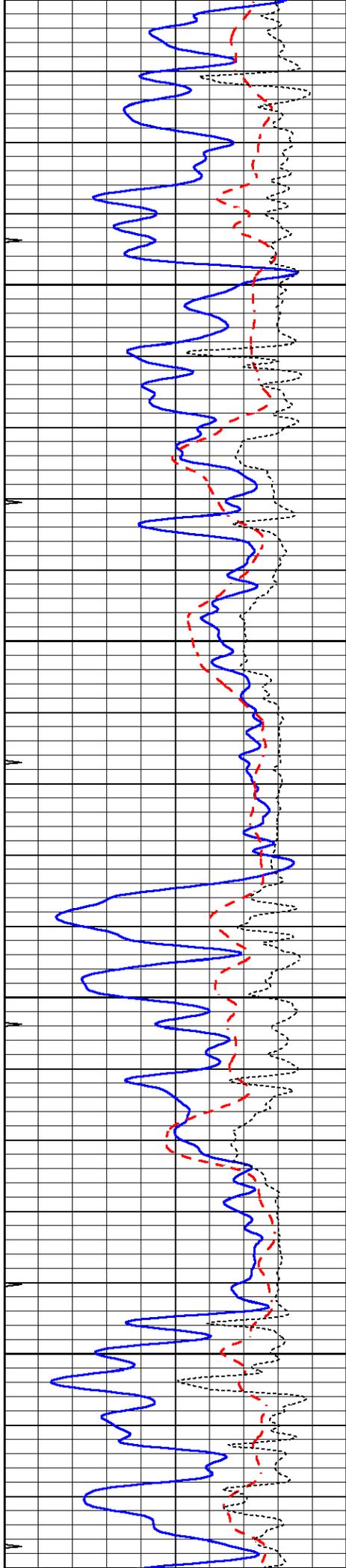
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



2200

2250



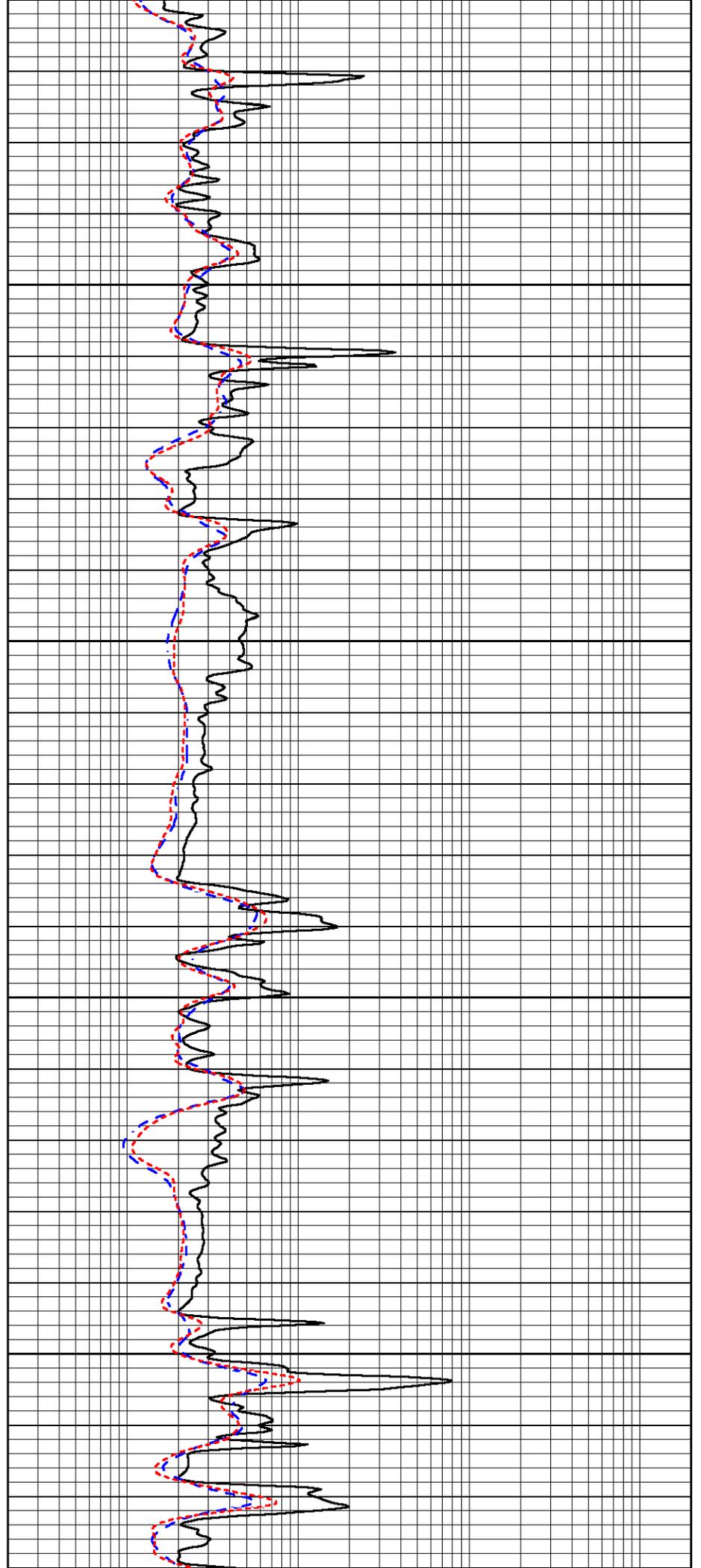


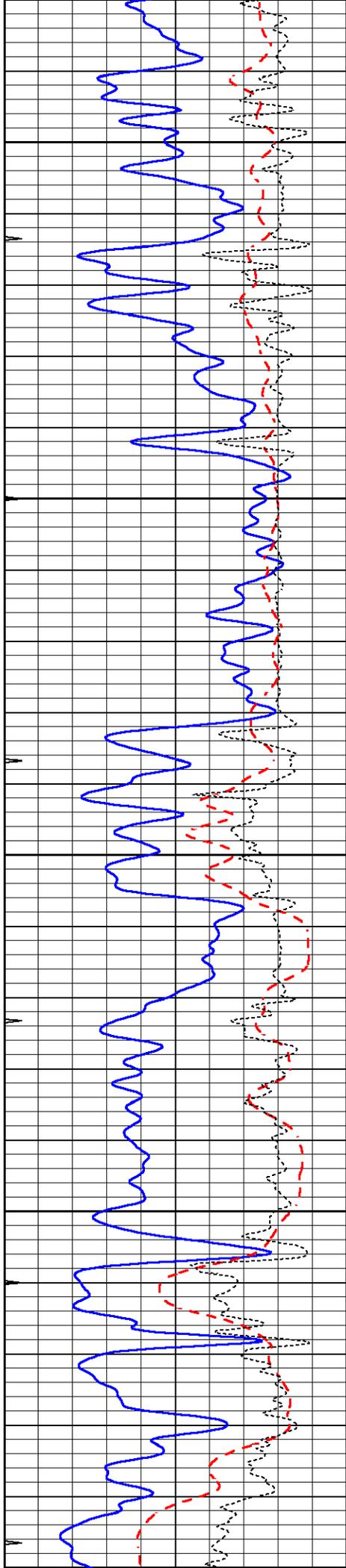
2300

2350

2400

2450





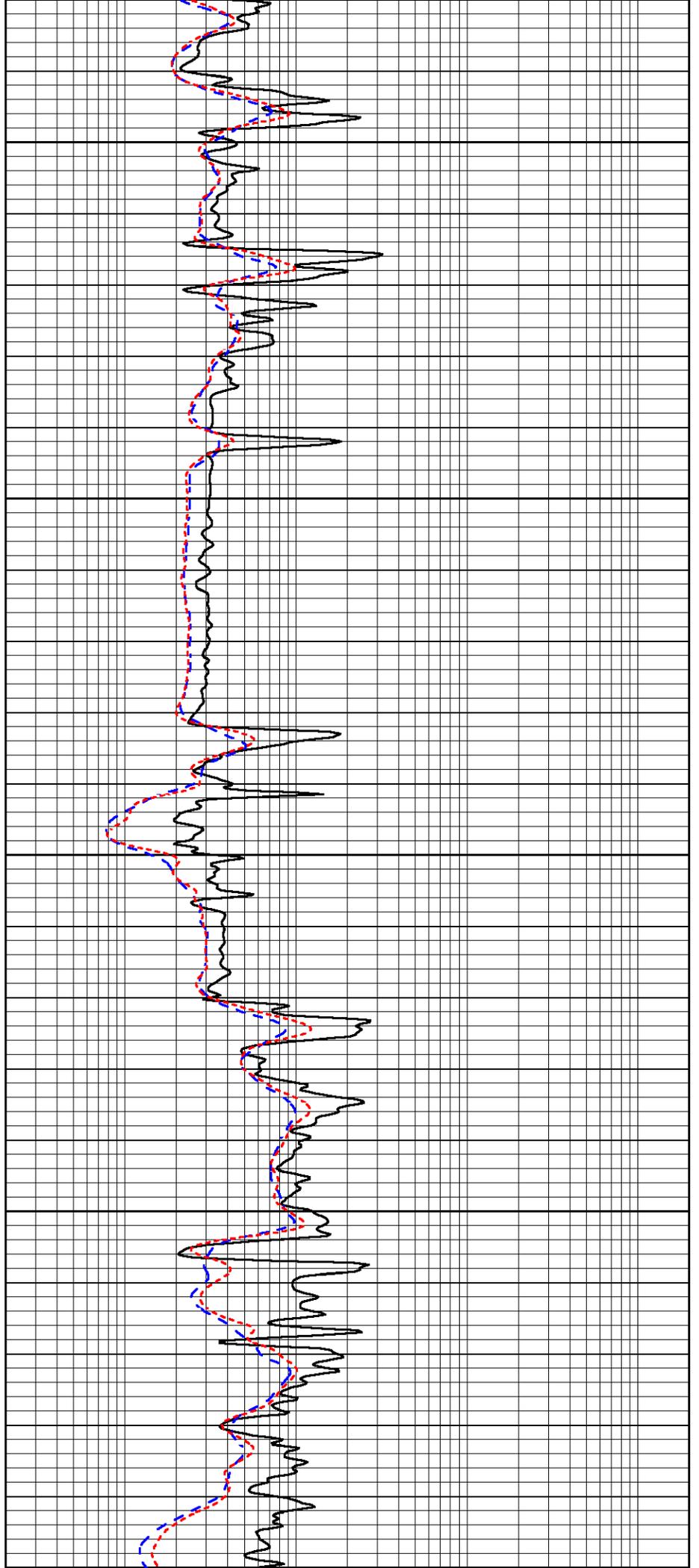
2500

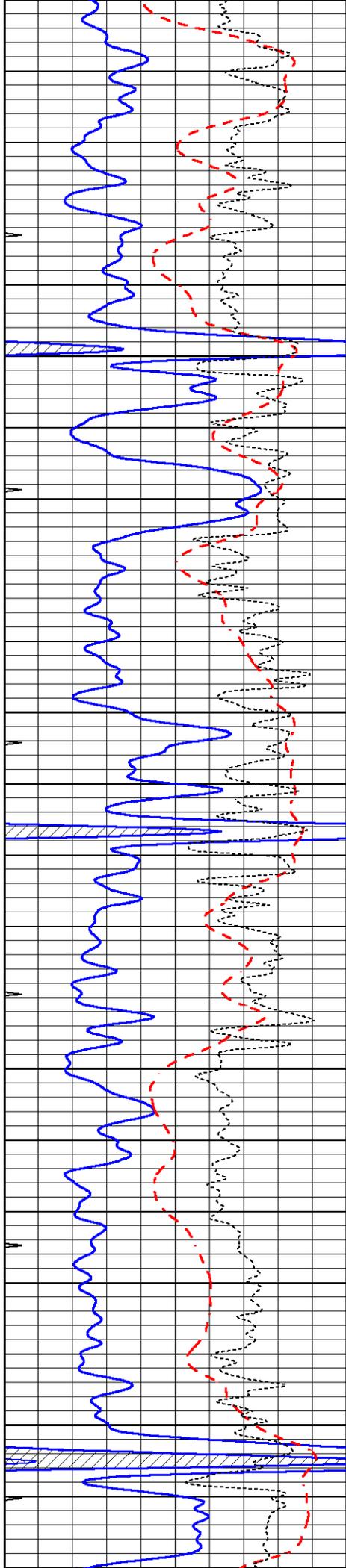
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2600

2650

2700





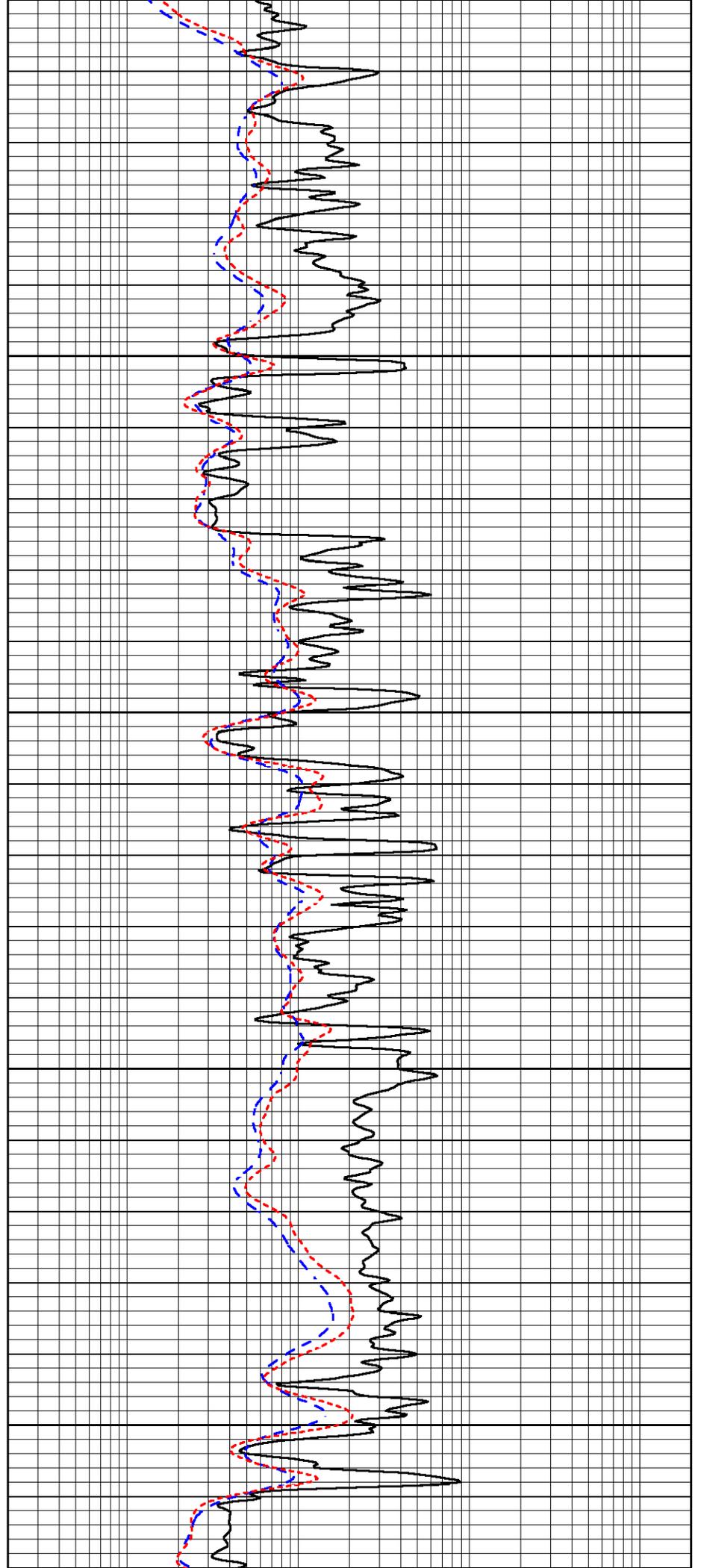
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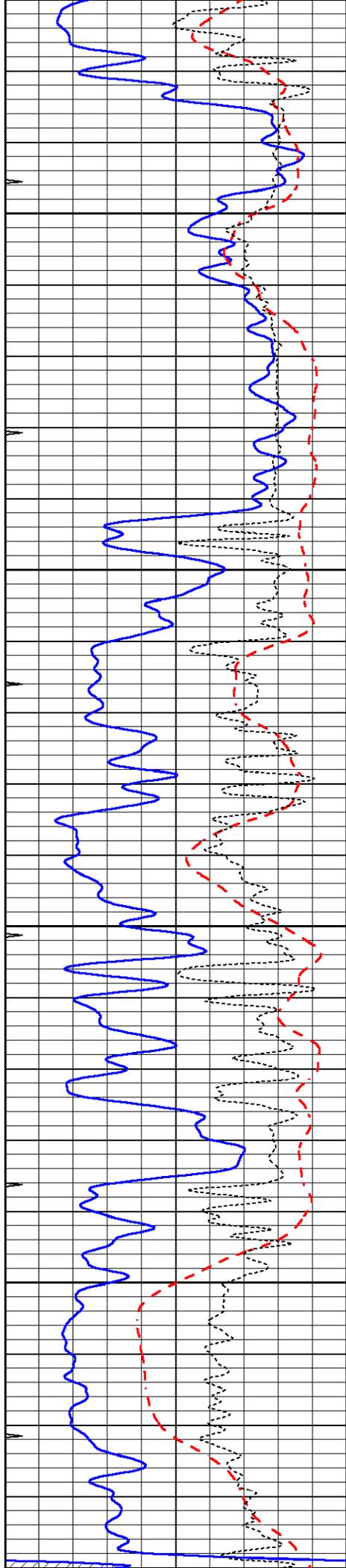
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2800

2850

2900



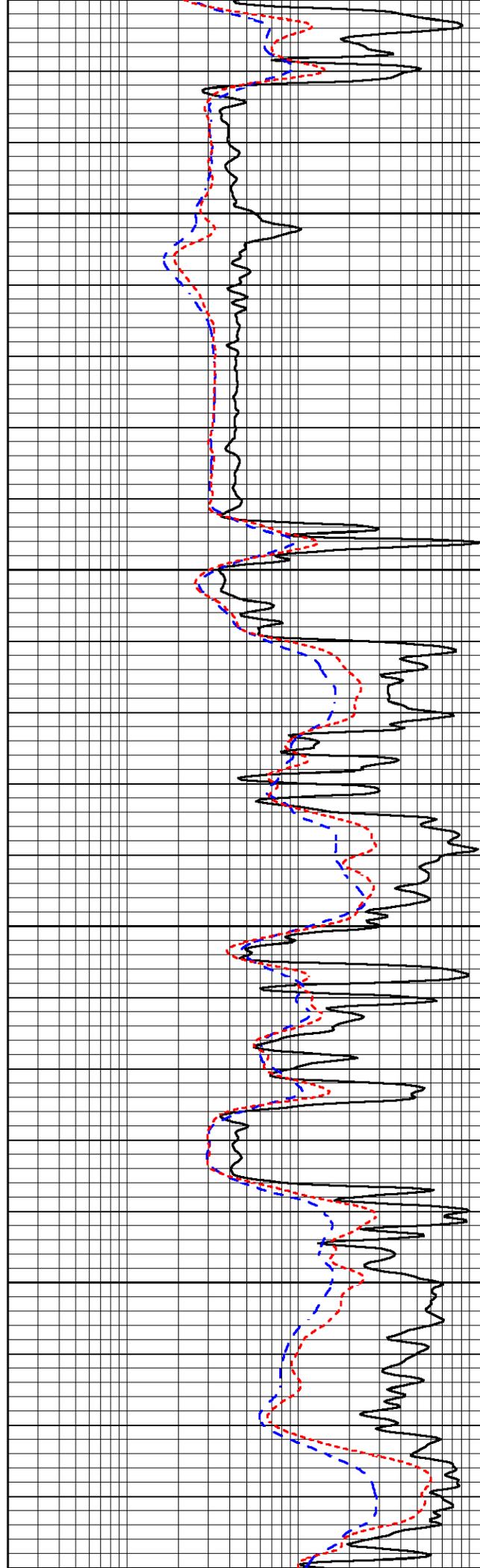


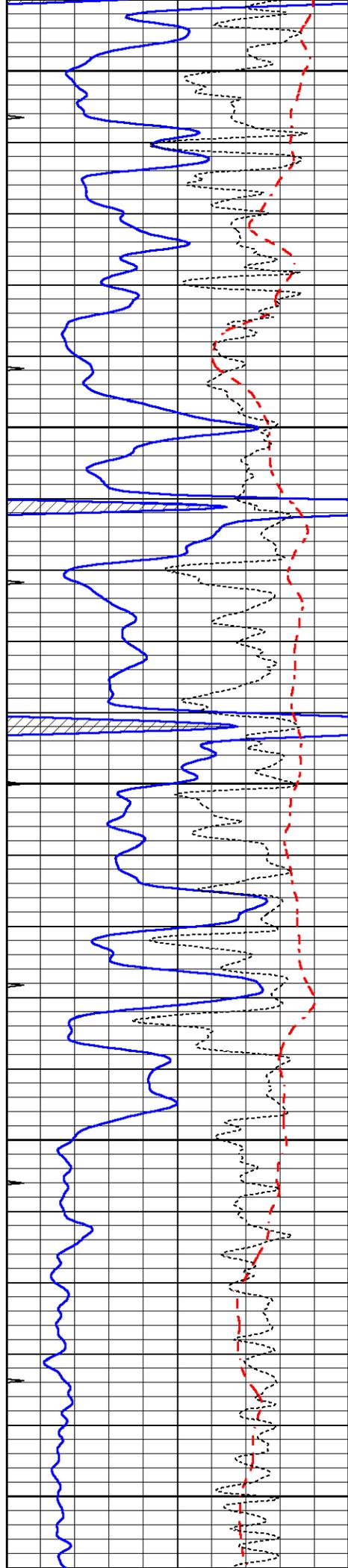
2950

3000

3050

3100





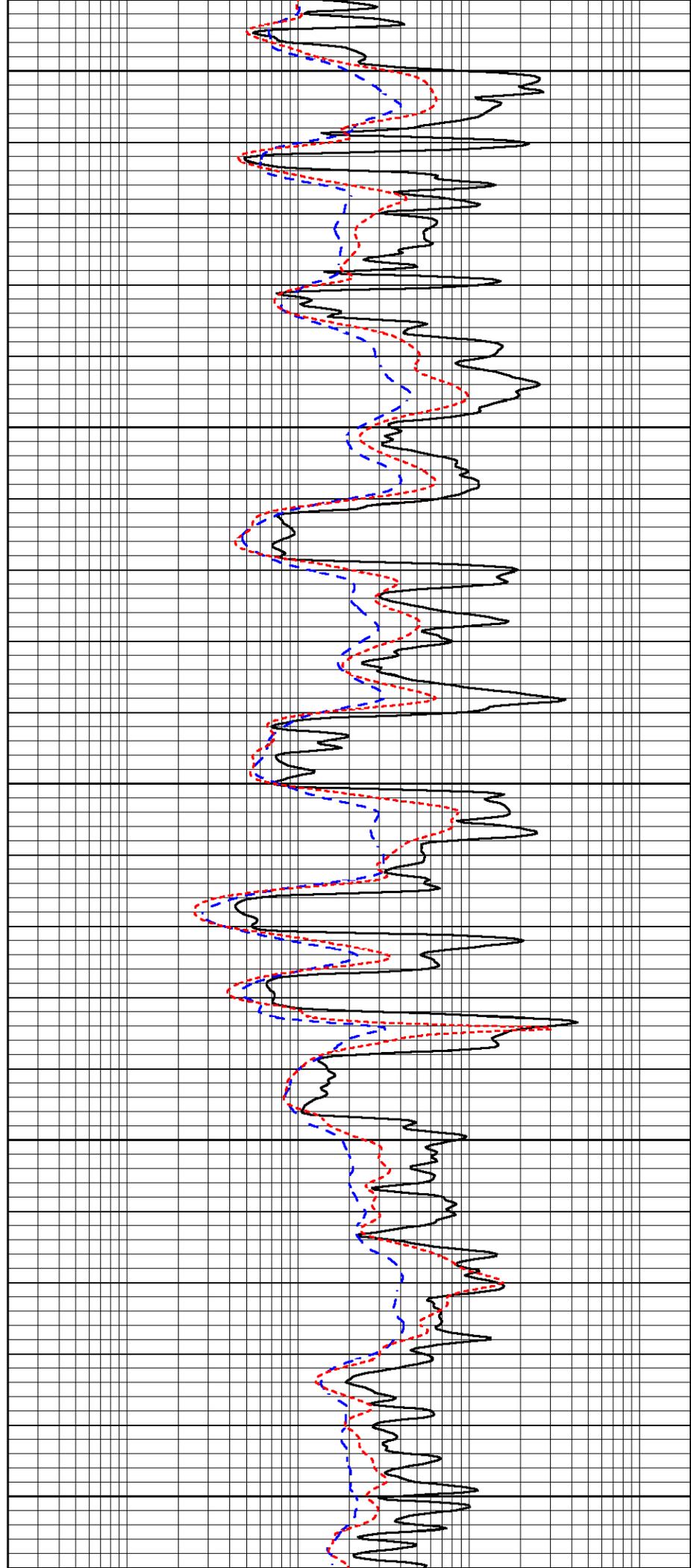
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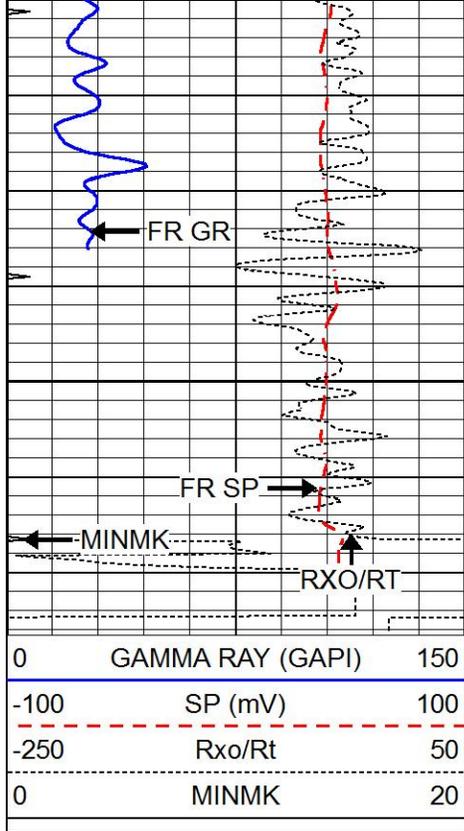
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3250

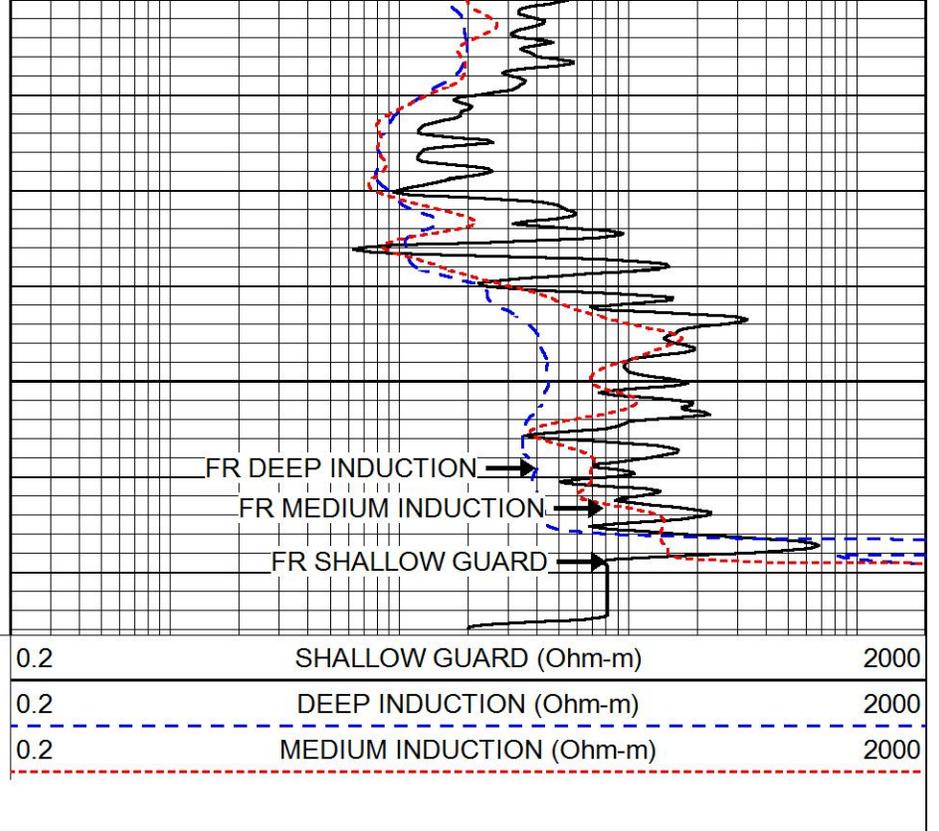
3300

3350



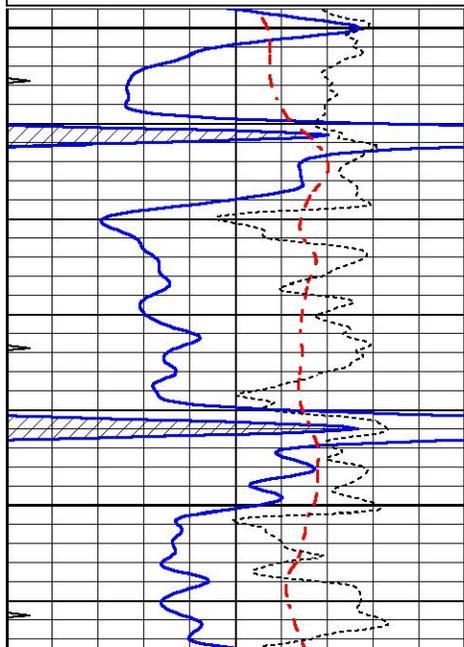
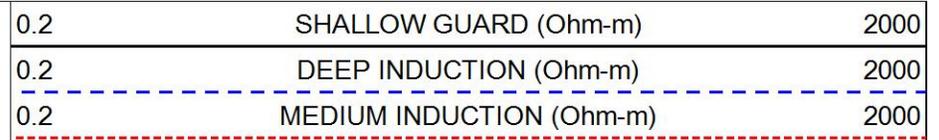
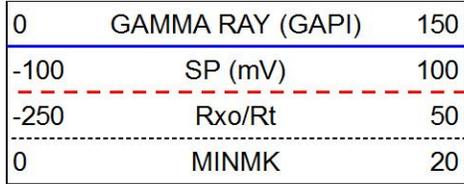


3400  
LTD 3421

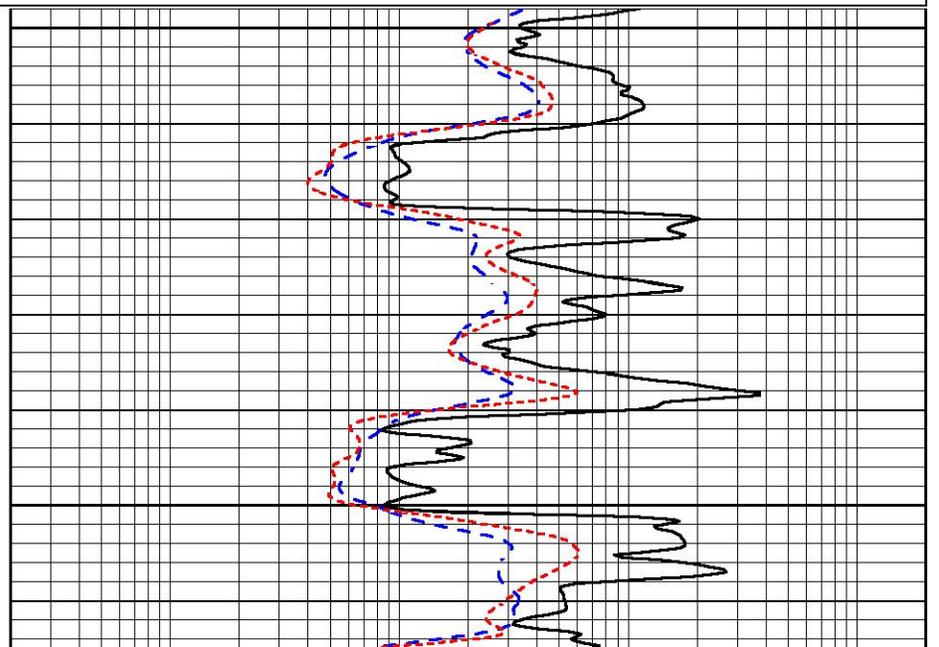


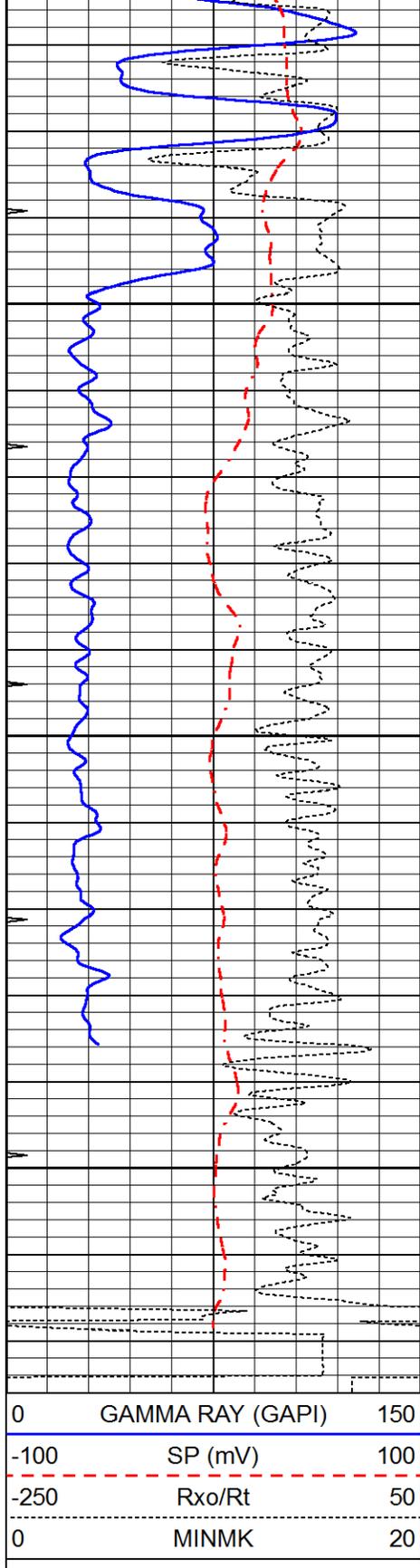
# REPEAT SECTION

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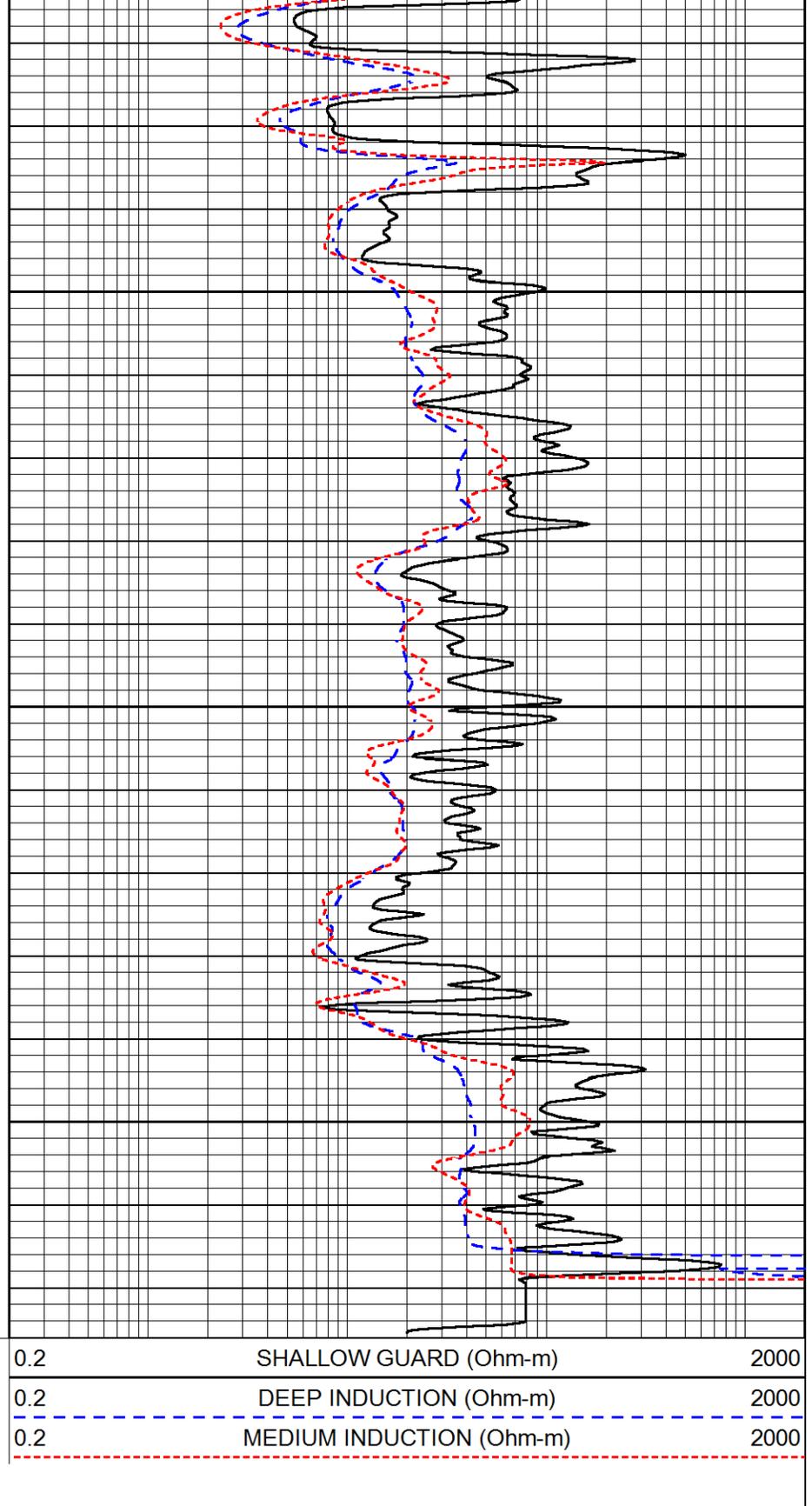


3200  
3250





3300  
3350  
3400



Calibration Report

Database File 6568ddn.db  
 Dataset Pathname pass3.1M  
 Dataset Creation Mon Jun 20 21:18:36 2022

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG  
 Surface Cal Performed: Mon Jun 20 20:27:34 2022  
 Downhole Cal Performed: Mon Jul 28 12:02:56 2008

Surface Calibration								
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	625.000	-4.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	650.000	-25.000
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		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report  
Serial: 004      Model: PRB

Master Calibration					Performed Mon May 23 11:44:16 2022			
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	1148.7	7216.0	2498.2	2291.5				cps
Window 2	1052.1	6193.6	2181.7	2034.2				cps
Window 3	896.0	3827.3	1530.0	1472.6				cps
Window 4	252.1	258.7	255.1	254.3				cps
Long Space	0.0	5141.5	1129.6	982.1				cps
Short Space	3.4	1390.2	903.9	792.3				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 44.1	Rib Slope	: 0.970	Density/Spine Ratio			: 0.559	
Spine Angle	: 74.1	Spine Slope	: 3.520	Spine Intercept			: -16.9	

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
	Background	Magnesium	Aluminum	Aluminum+Fe				
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					
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: 6l  
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: Mon Jun 20 01:31:16 2022

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 276.0 cps

Sensitivity:

0.8500

GAPI/cps