



DUAL INDUCTION LOG

Company DEUTSCH OIL COMPANY
 Well BAUMAN #8-4
 Field BAUMAN
 County PRATT
 State KANSAS

Company DEUTSCH OIL COMPANY
 Well BAUMAN #8-4
 Field BAUMAN
 County PRATT State KANSAS

Location: API #: 15-151-22596-0000
 4316' FSL & 2310' FEL
 N/2 - SW - NW - NE
 SEC 4 TWP 26S RGE 11W
 Permanent Datum GROUND LEVEL Elevation 1835
 Log Measured From KELLY BUSHING 7' A.G.L.
 Drilling Measured From KELLY BUSHING
 Other Services
 CDL/CNL/PE
 MEL/SONIC
 Elevation
 K.B. 1842
 D.F. 1840
 G.L. 1835

Date	8/23/24
Run Number	ONE
Depth Driller	4200
Depth Logger	4200
Bottom Logged Interval	4198
Top Log Interval	00
Casing Driller	8.675@265
Casing Logger	265
Bit Size	7.785
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/58
pH / Fluid Loss	9.5/10.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.550@92F
Rmf @ Meas. Temp	.413@92F
Rmc @ Meas. Temp	.660@92F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.429@118F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	7:15 P.M.
Maximum Recorded Temperature	118F
Equipment Number	922339
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	AARON YOUNG

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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.

15-151-22596-0000 Comments

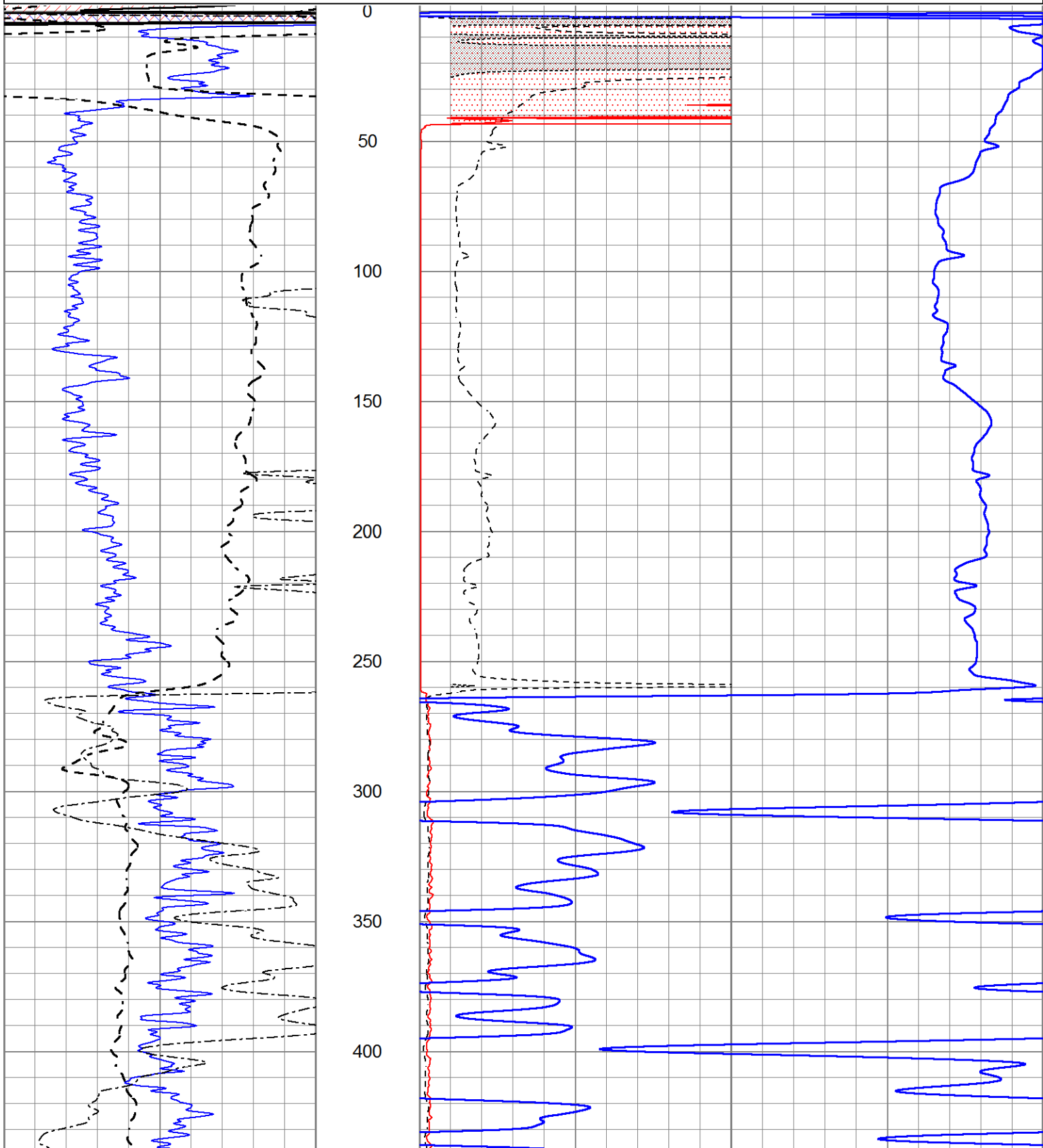
THANK YOU FOR USING ELI WIRELINE HAYS. KANSAS (785) 628-6395
 DIRECTIONS
 STAFFORD, KS., 9S. ON BLKTOP TO "SE 90TH ST.", 4 1/2E. TO "NE 120TH AVE.", 1/2 S., W. INTO

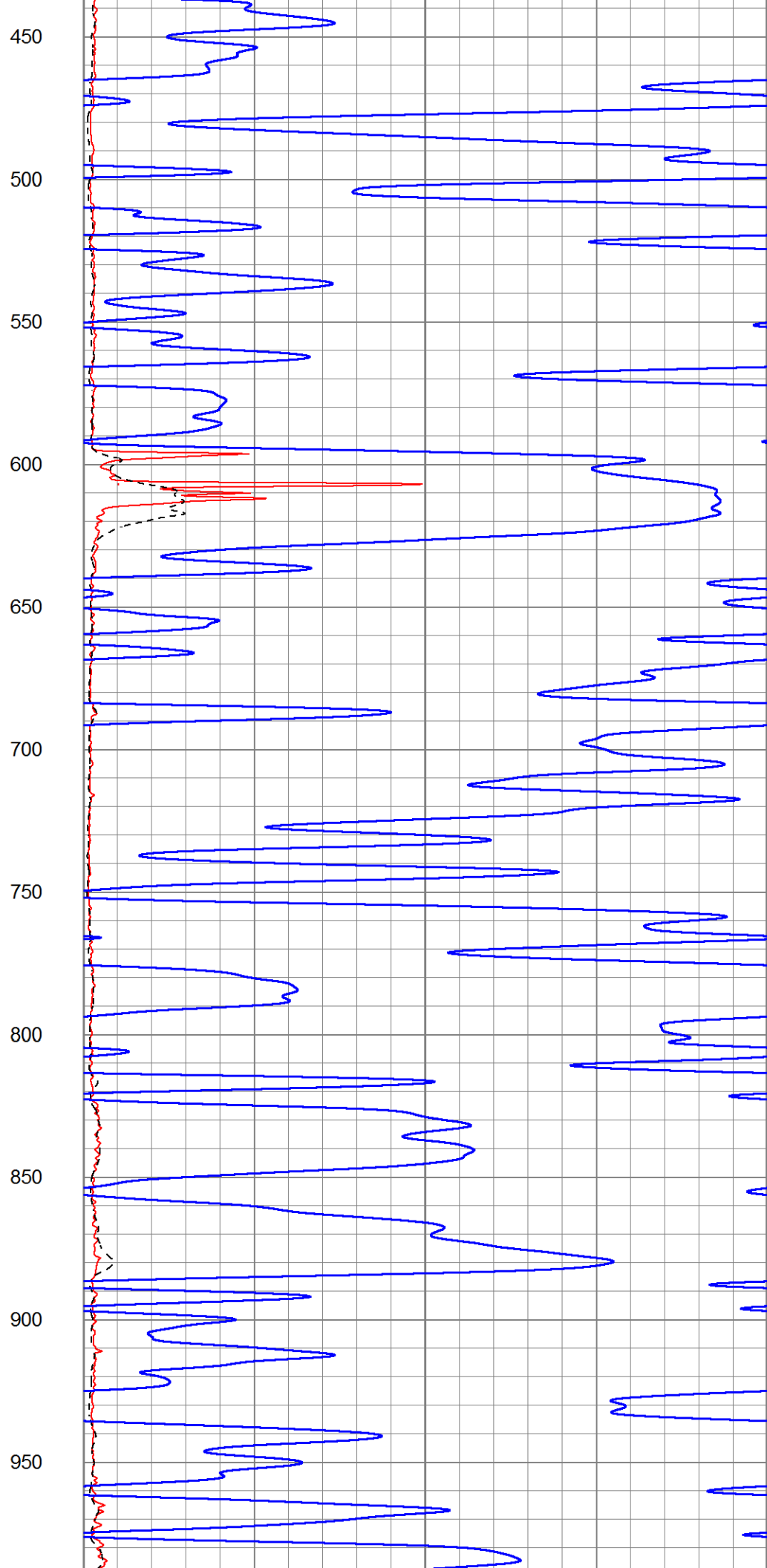
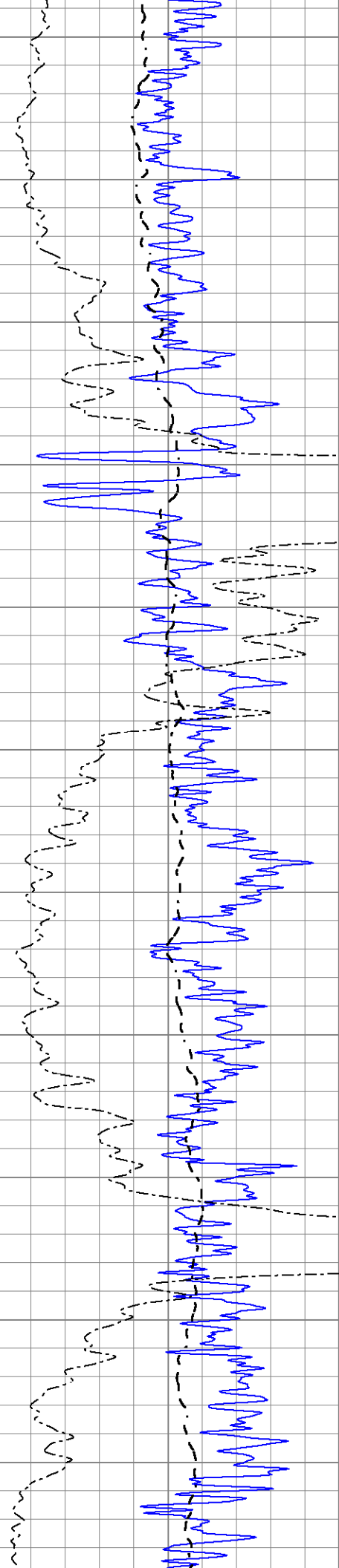


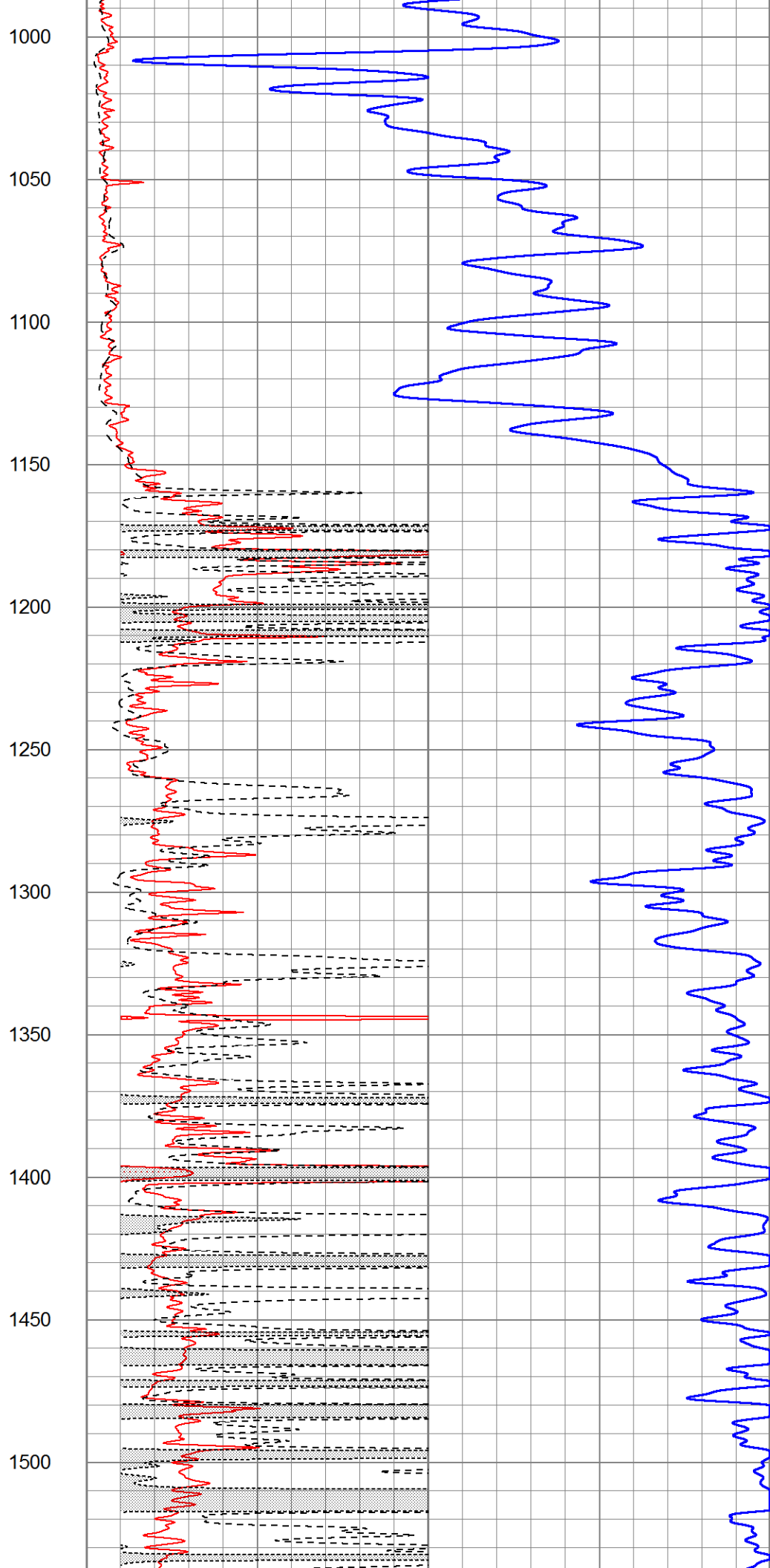
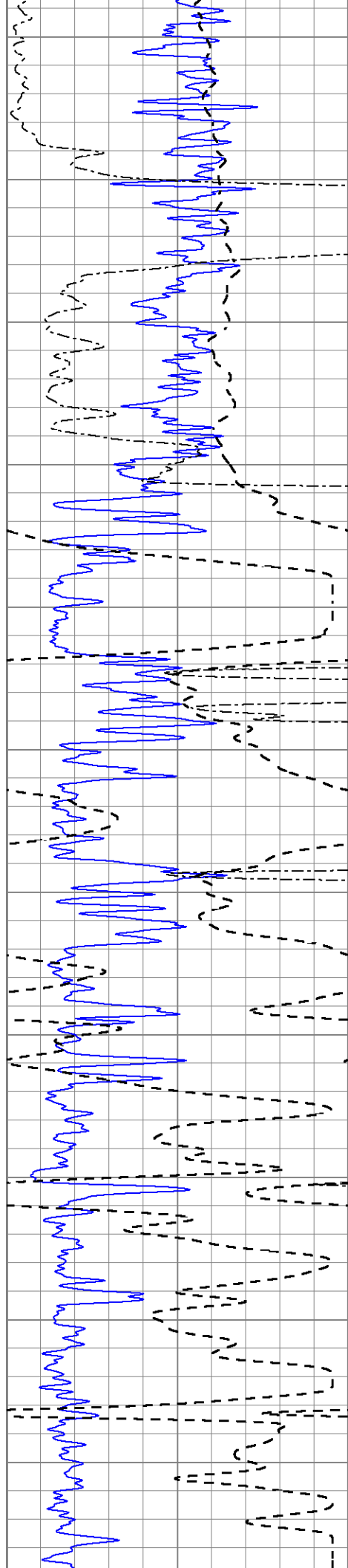
MAIN SECTION

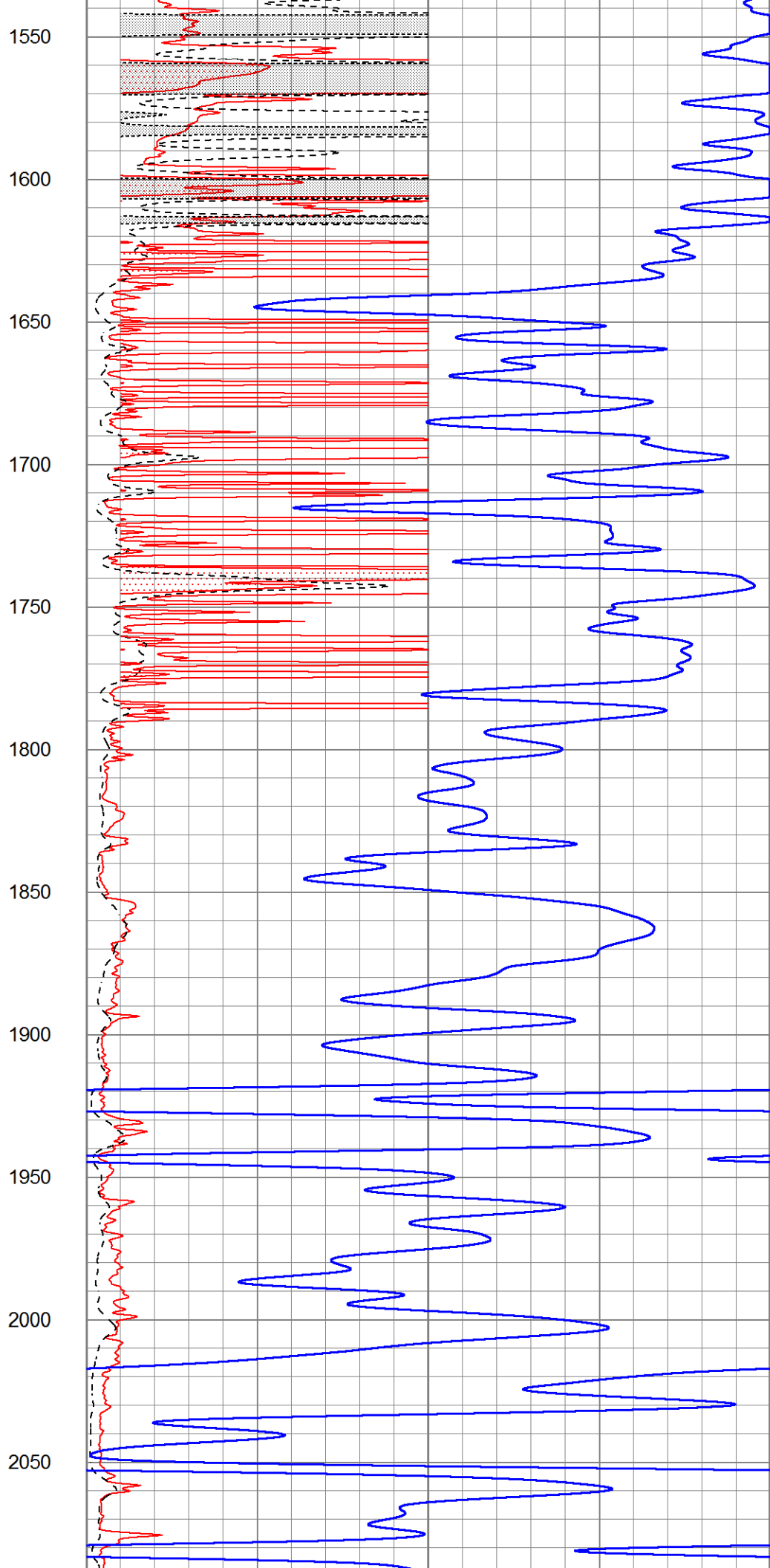
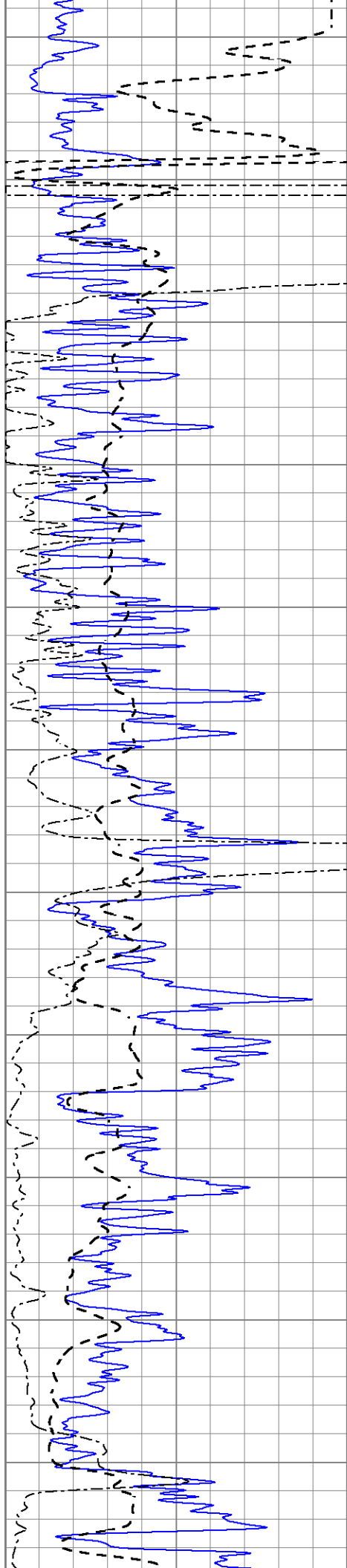
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 Presentation Format _dil2
 Dataset Creation Fri Aug 23 21:28:28 2024
 Charted by Depth in Feet scaled 1:600

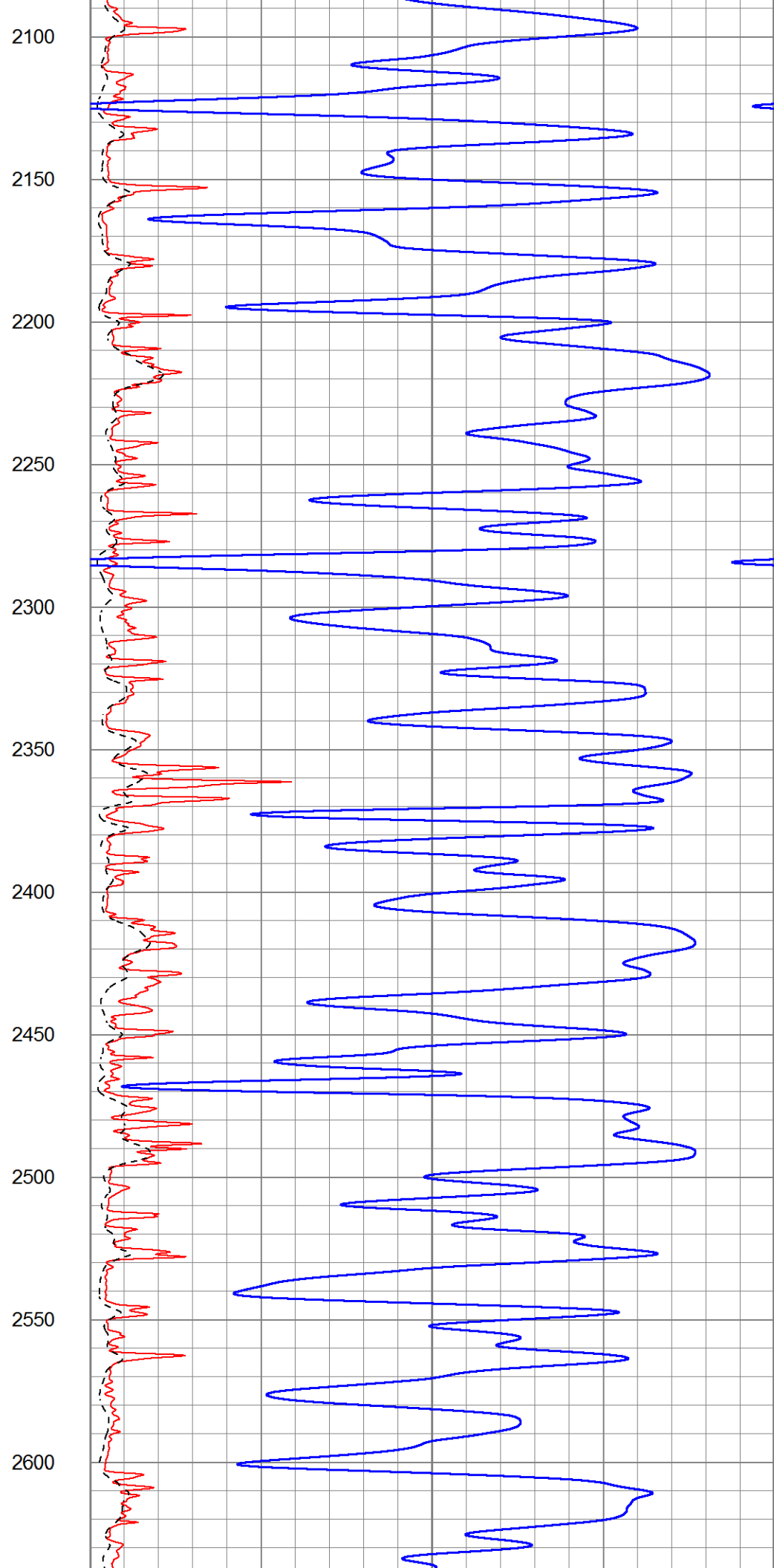
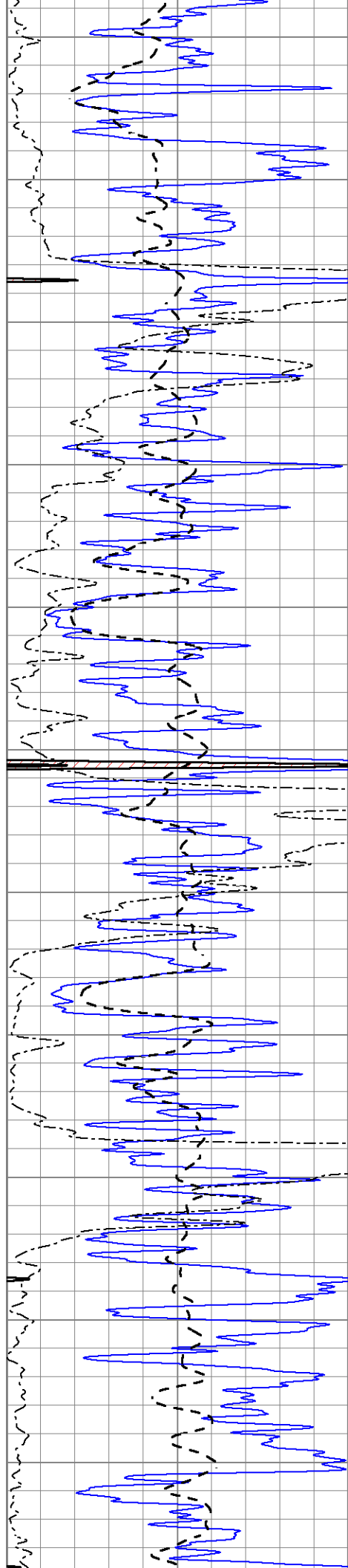
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-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
0	RWA (Ohm-m)	1	0	RILD (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

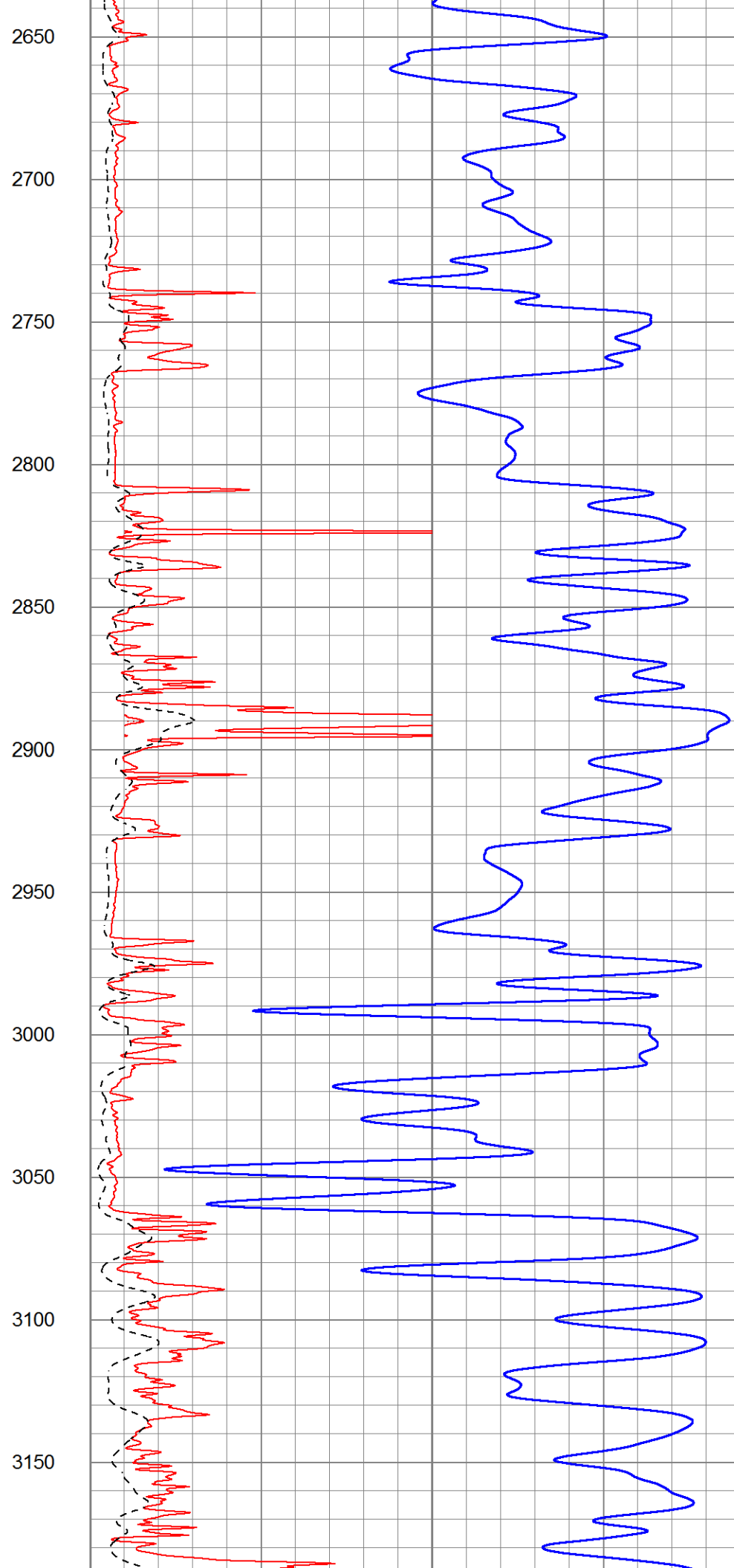
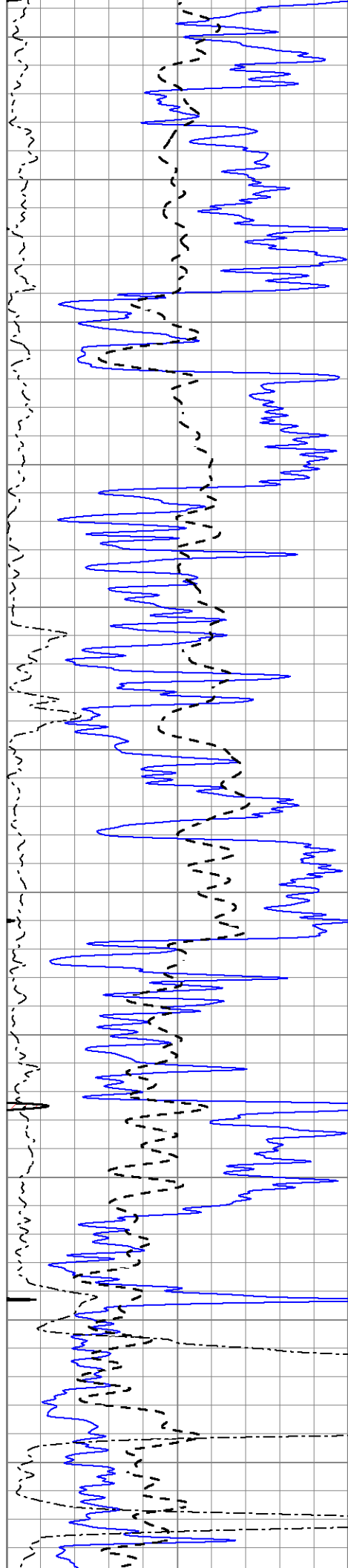


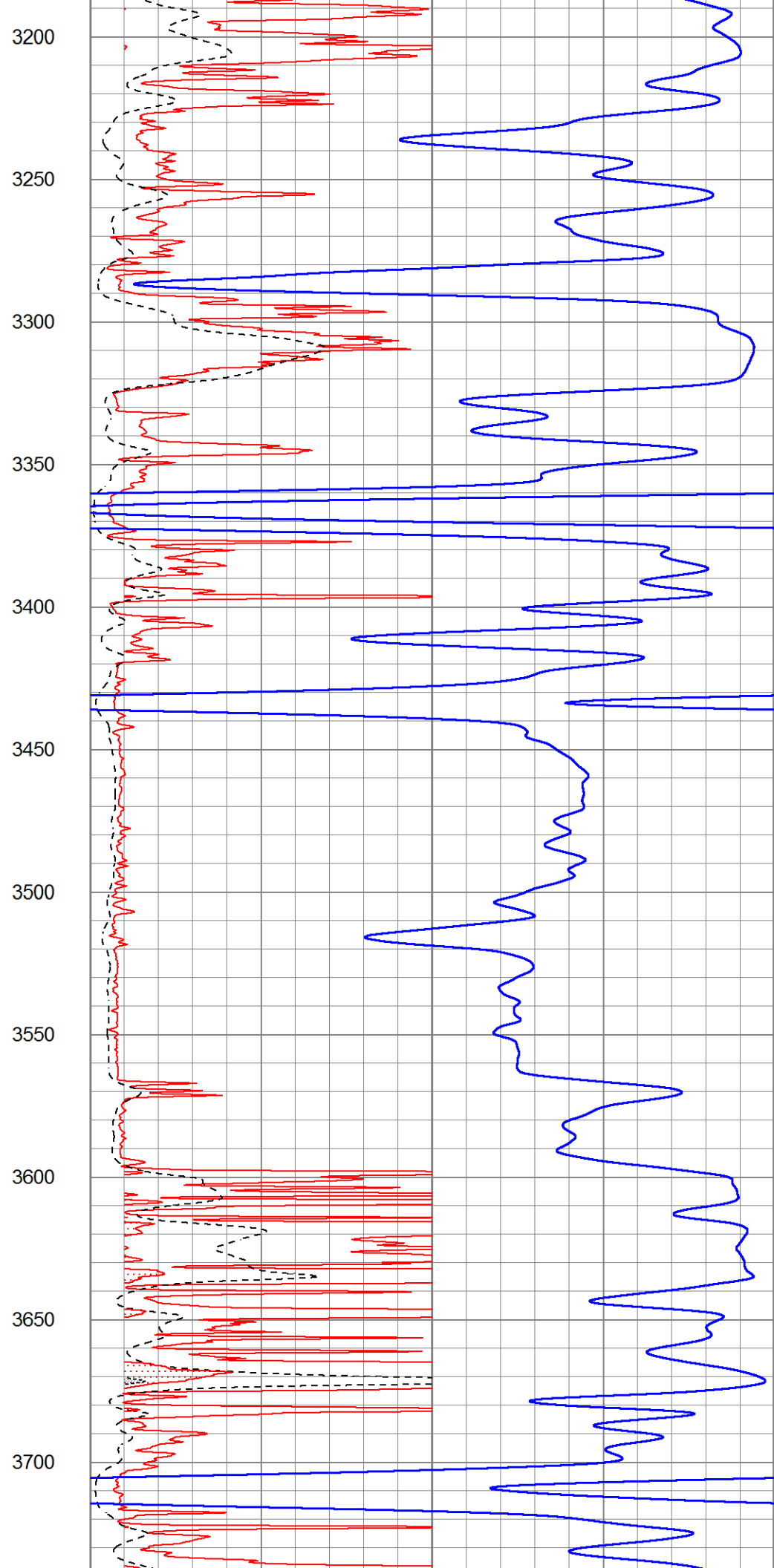
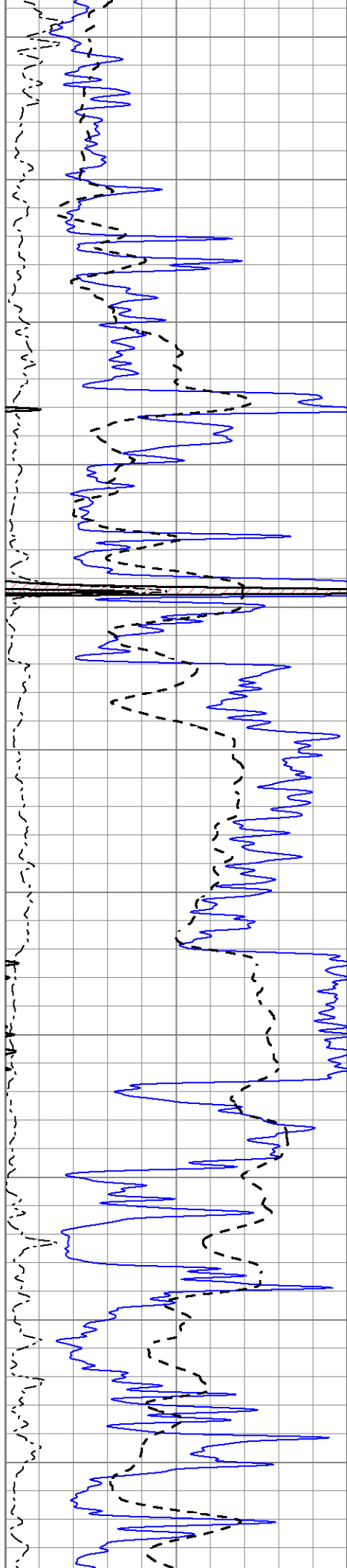


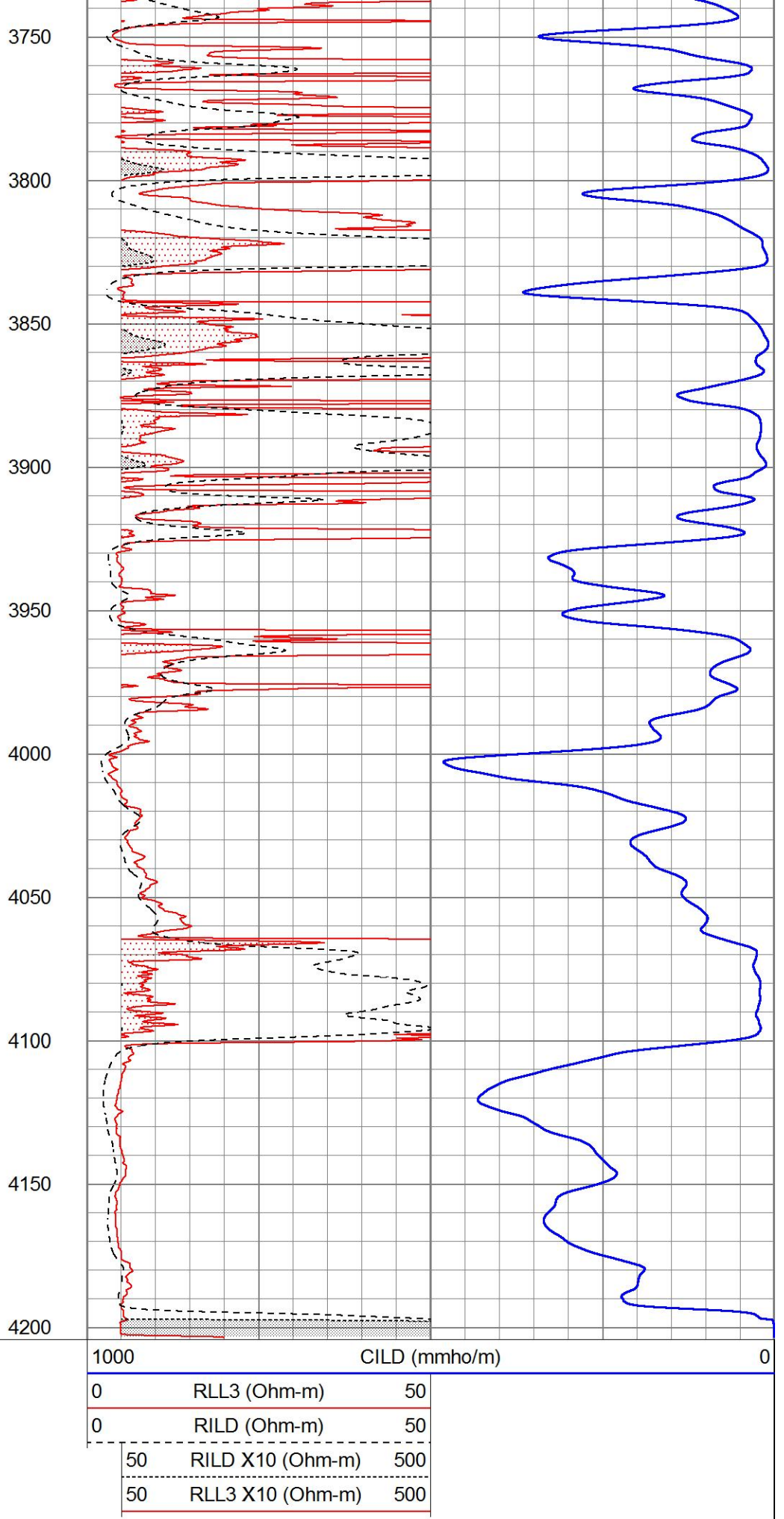
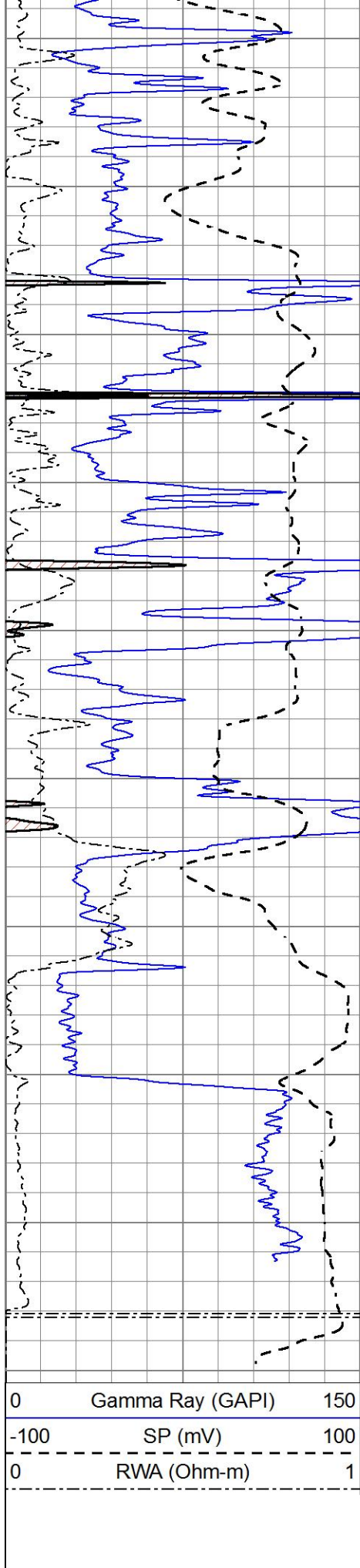












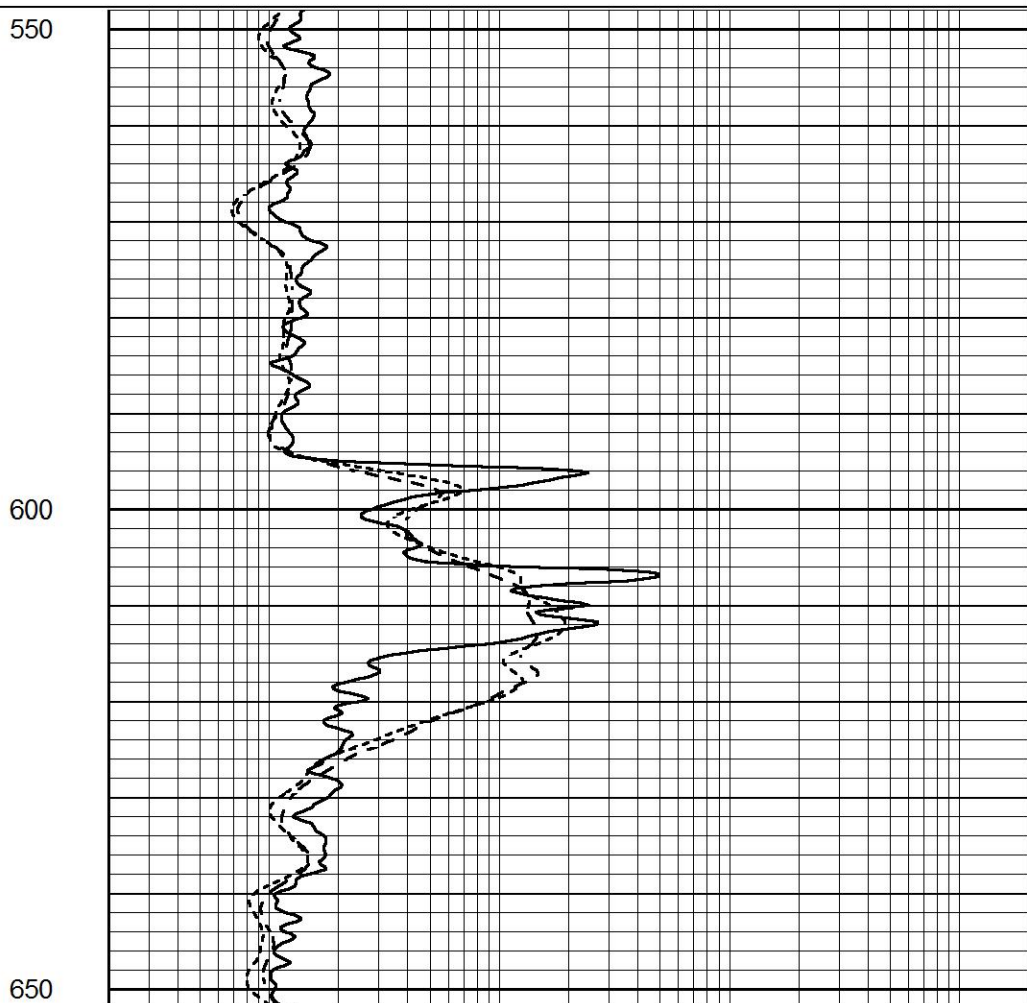
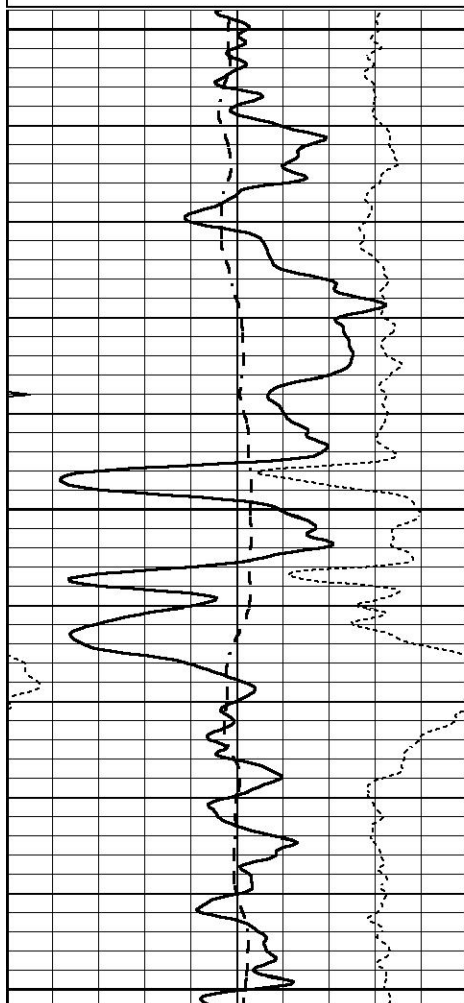


ANHYDRITE

Database File 8738pe.db
 Dataset Pathname pass3.1A
 Presentation Format _dil
 Dataset Creation Fri Aug 23 21:28:50 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



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

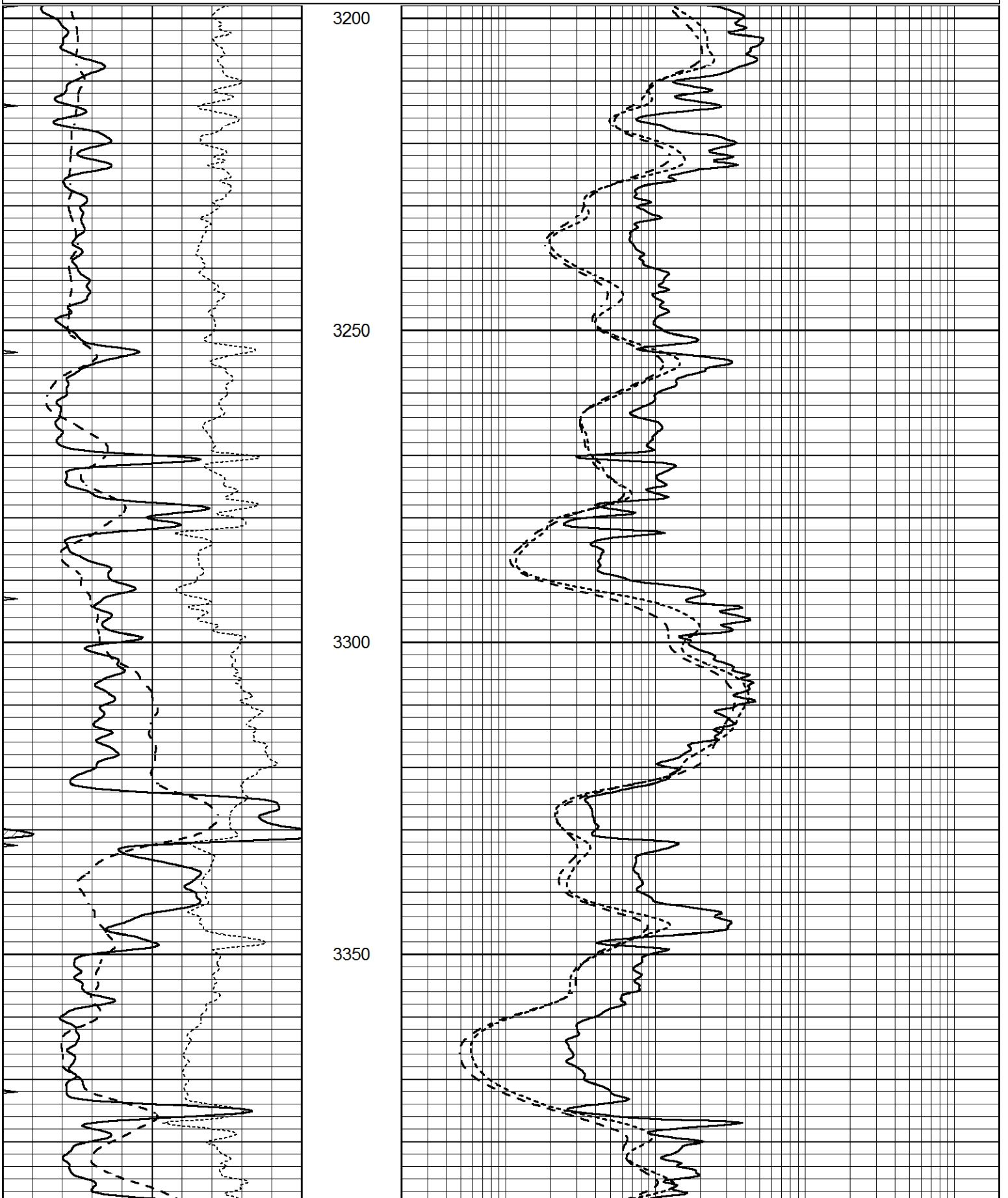


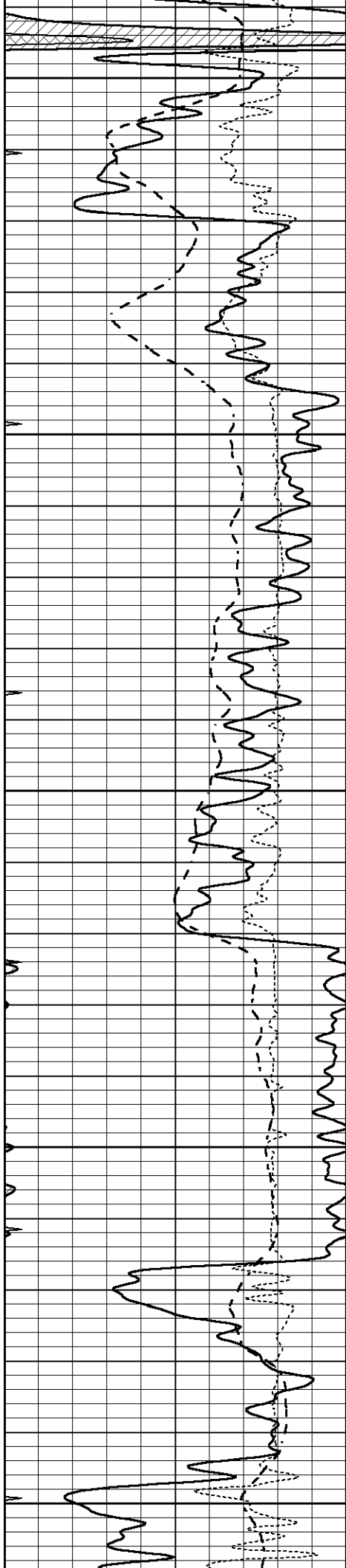
MAIN SECTION

Database File 8738pe.db
 Dataset Pathname pass3.1M
 Presentation Format _dil

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





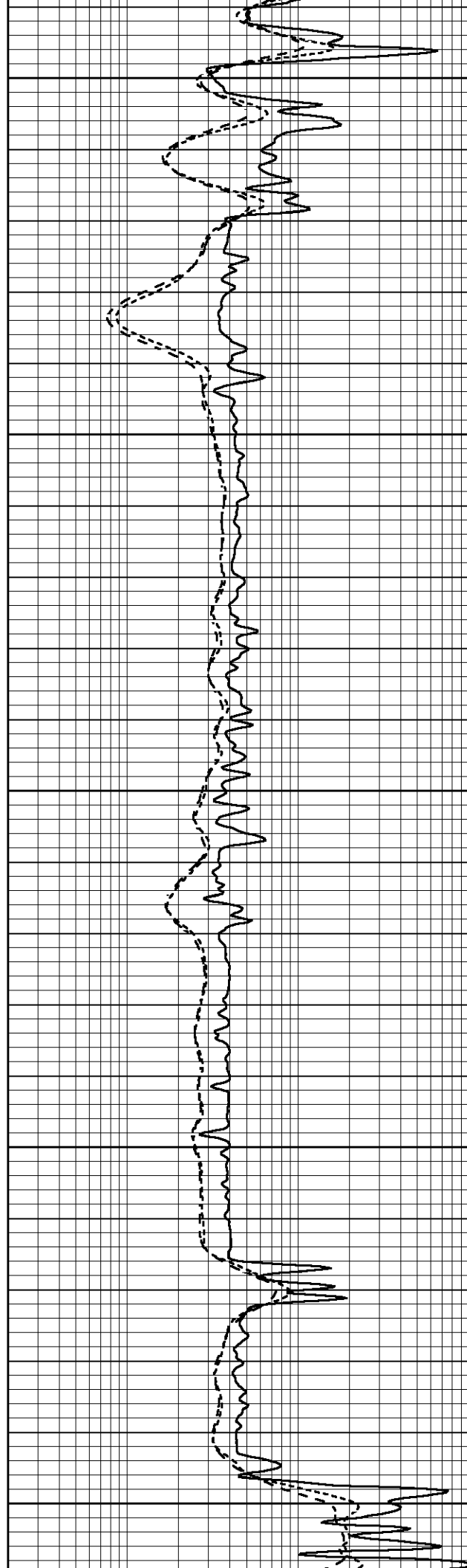
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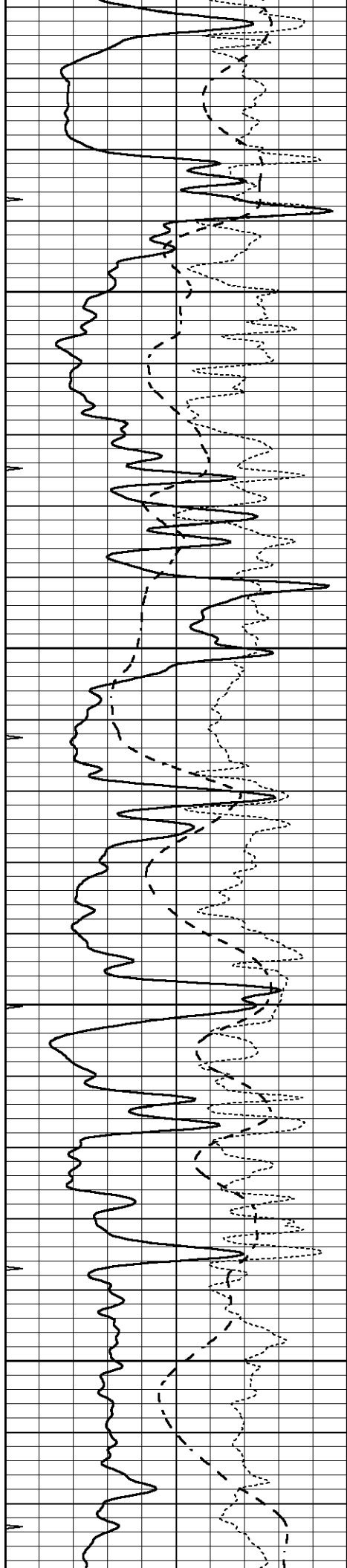
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3500

3550

3600



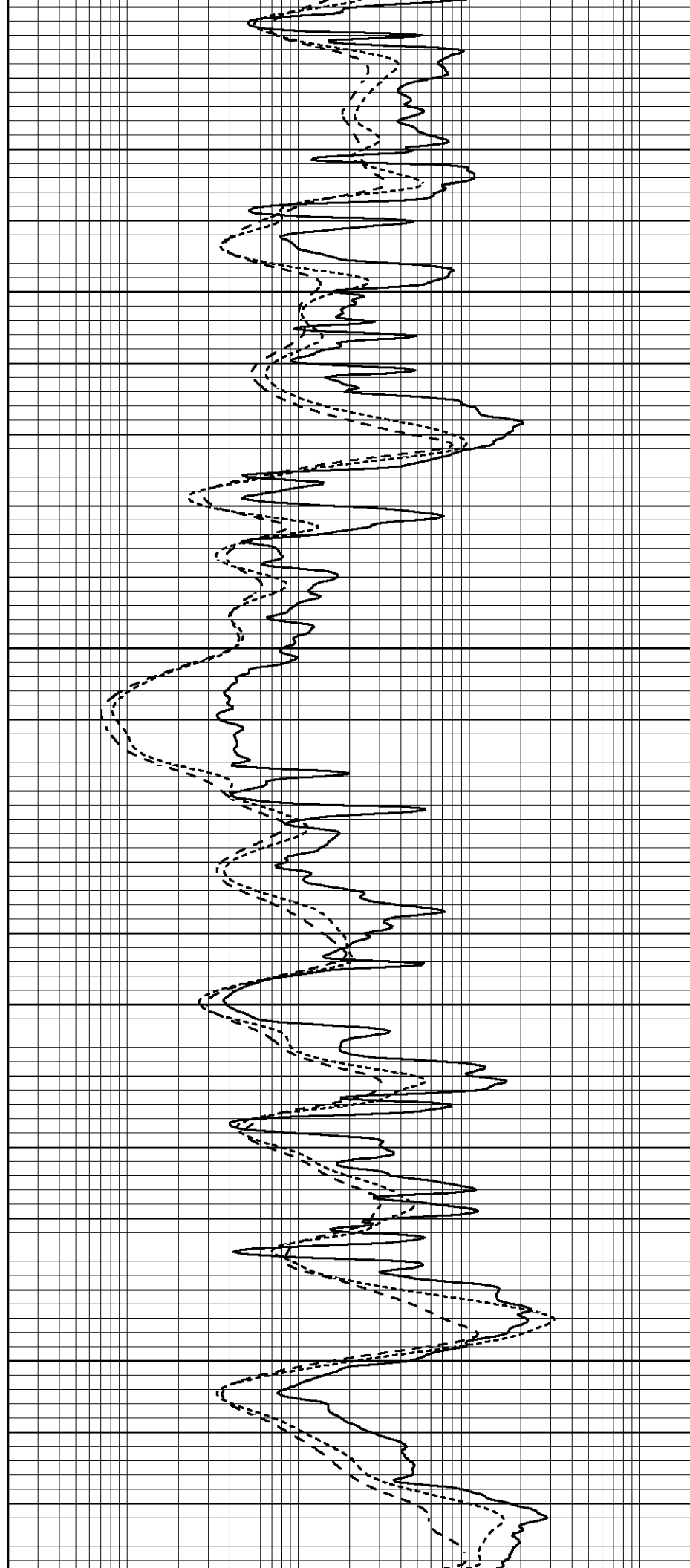


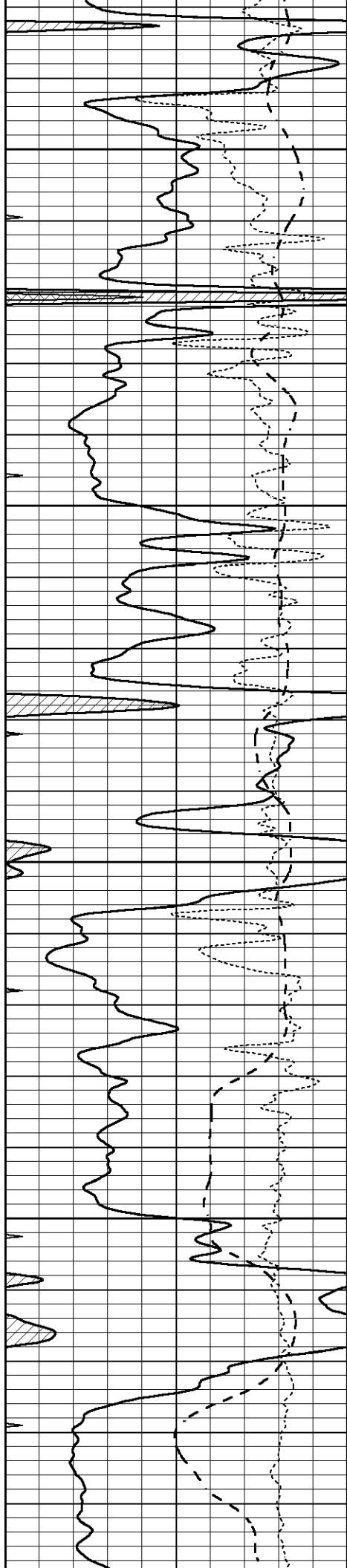
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3700

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3800



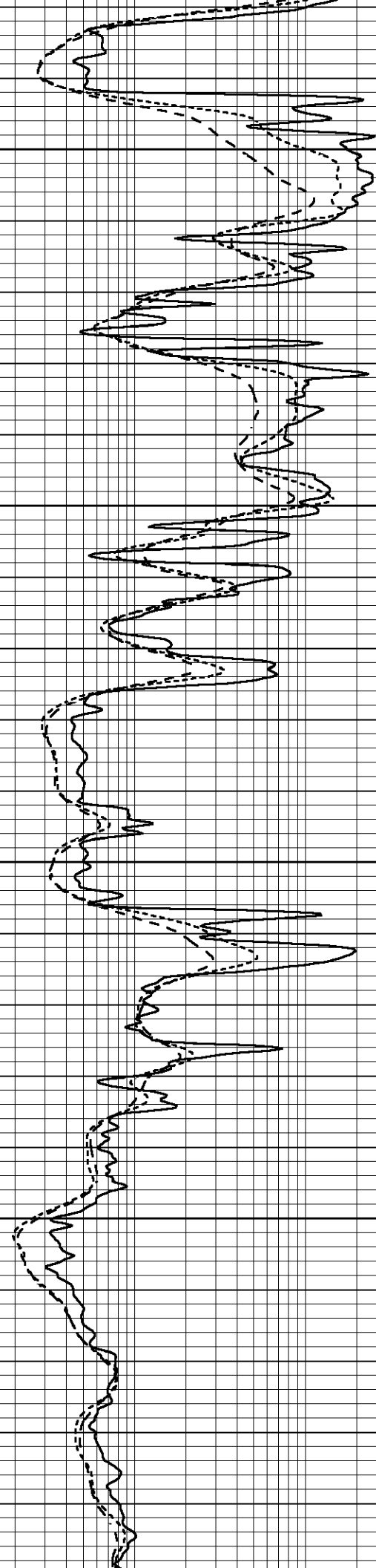


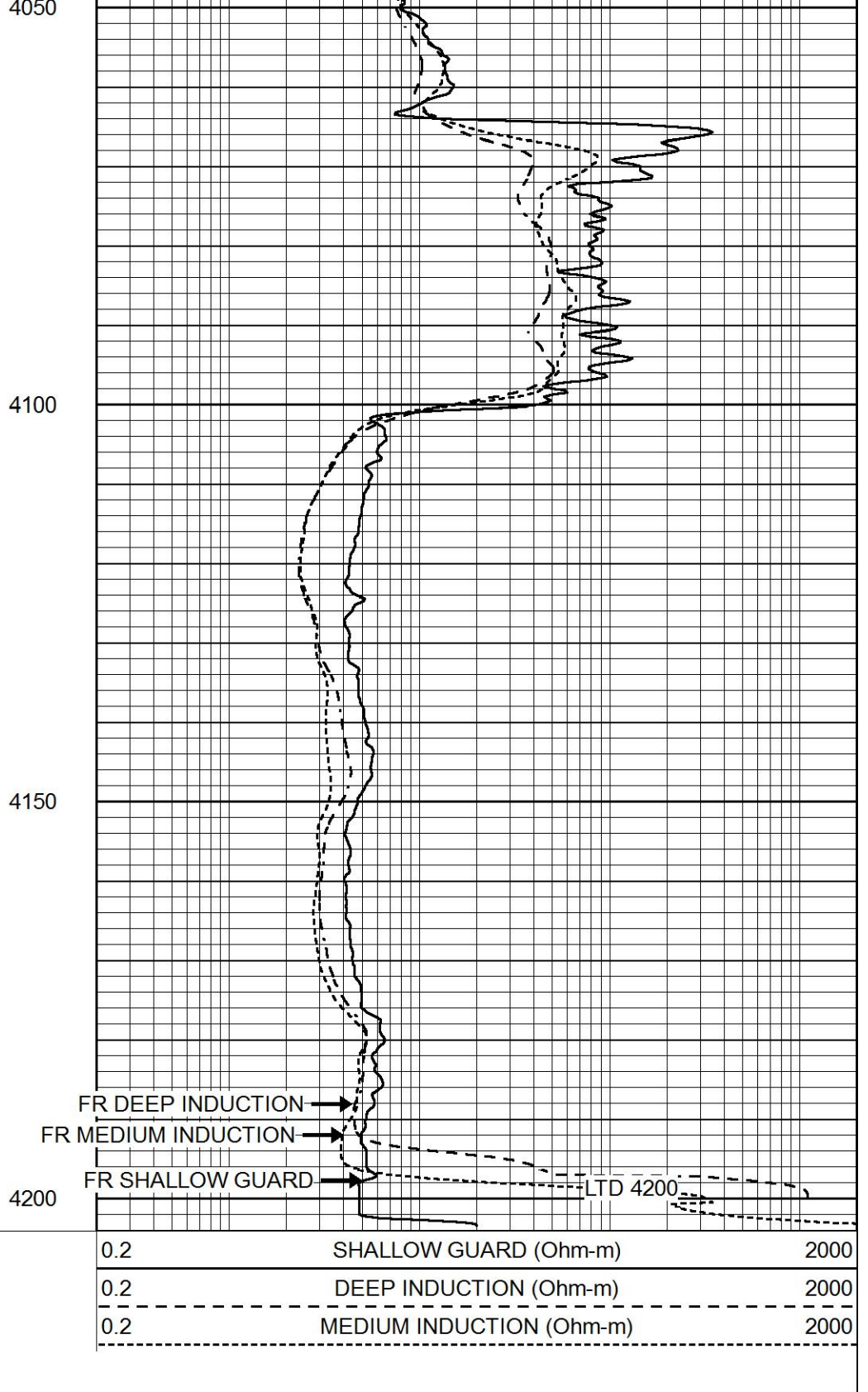
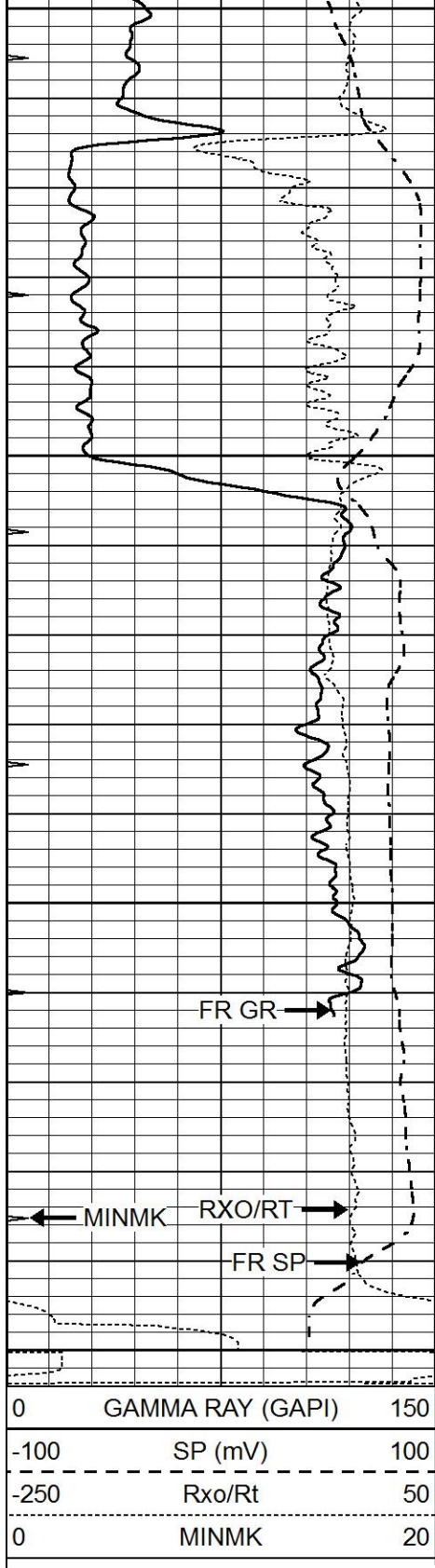
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3900

3950

4000



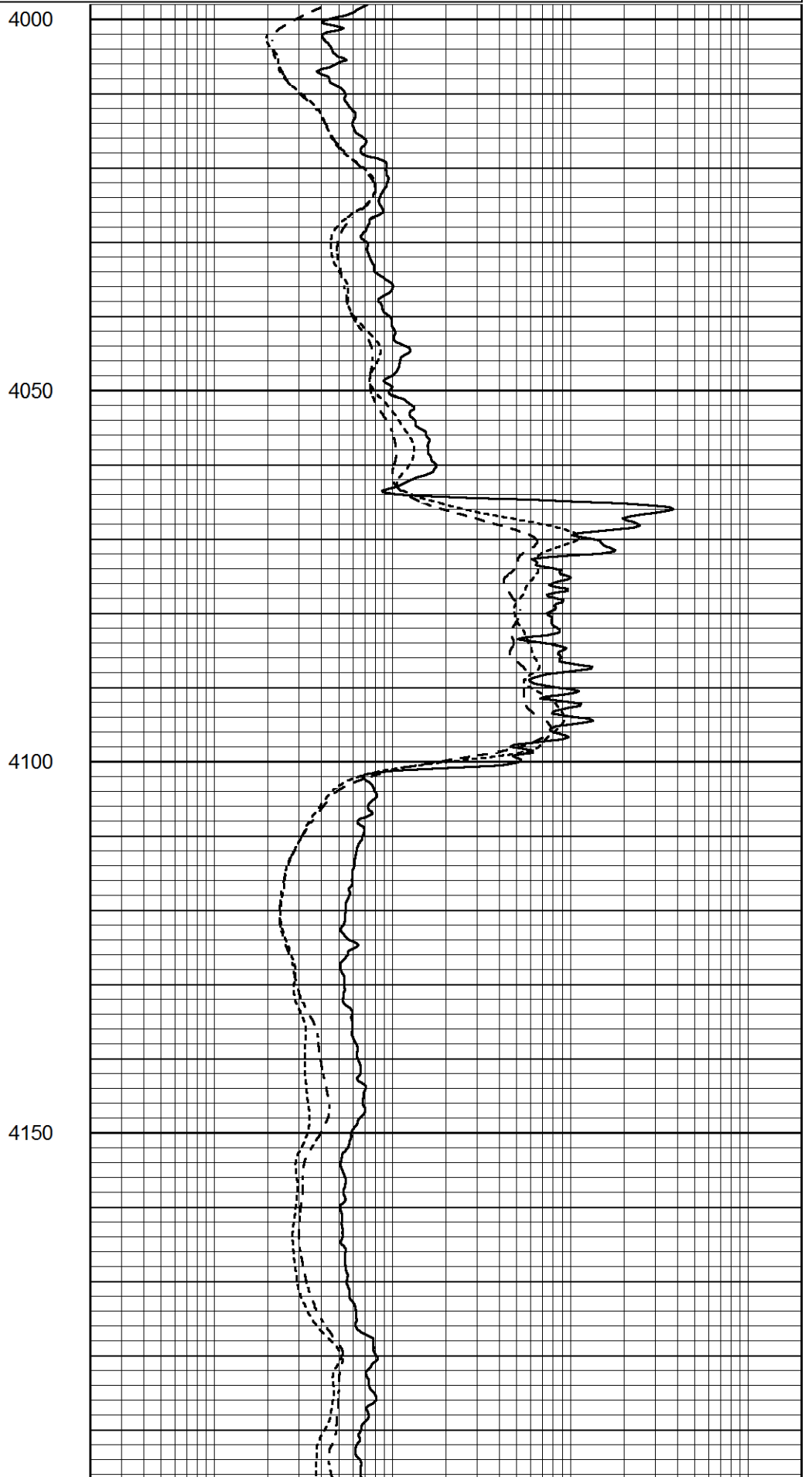
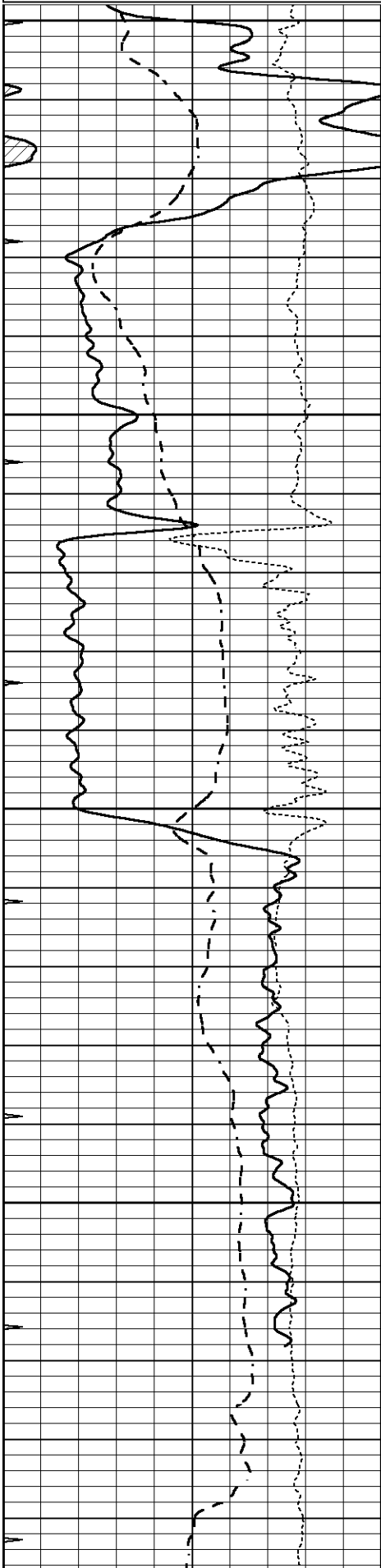


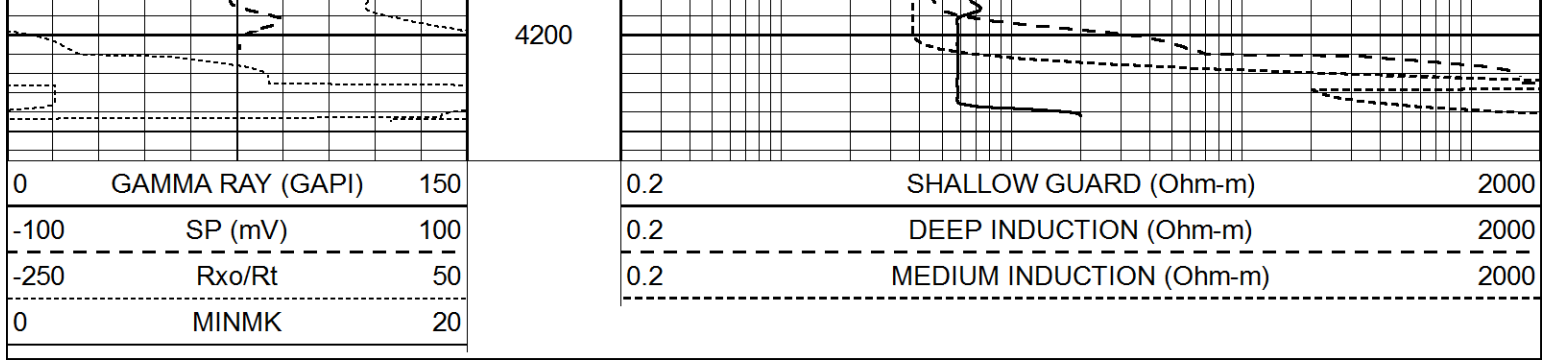
REPEAT SECTION

Database File 8738pe.db
 Dataset Pathname pass2.1R
 Presentation Format _dil
 Dataset Creation Fri Aug 23 20:38:14 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





Calibration Report

Database File 8738pe.db
 Dataset Pathname pass3.1M
 Dataset Creation Fri Aug 23 21:28:28 2024

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 23 20:39:23 2024
 Downhole Cal Performed: Mon Aug 14 00:39:25 2023
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration									
Loop:	Readings				References			Results	
	Air	Loop			Air	Loop		m	b
Deep	0.015	0.648	V		0.000	400.000	mmho/m	660.000	15.000
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 1	1054.4	8597.6	2733.4	2469.5	cps
Window 2	902.3	5241.4	1832.1	1719.3	cps
Window 3	251.9	261.1	255.8	252.9	cps
Window 4	0.0	7543.2	1679.0	1415.0	cps
Long Space	4.4	2049.3	1321.7	1116.8	cps
Short Space		1.7100	2.5900	0.0000	g/cc
Rho		2.0000	2.7500	5.7900	
Pe					

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: 070807PMC
 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: 070559
 Tool Model: OPEN_GR
 Performed: Fri Aug 23 11:44:05 2024

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