



DUAL INDUCTION LOG

Company ST. CROIX OPERATING, INC.

Well PRAIRIE RIDGE #1

Field UNNAMED

County WASHINGTON State COLORADO

Location: API #: 05-121-11103-0000

1788 FSL & 1166 FEL

SEC 13 TWP 3S RGE 50W

Permanent Datum GROUND LEVEL Elevation 4485
Log Measured From KELLY BUSHING 8' A.G.L
Drilling Measured From KELLY BUSHING

Other Services
CDL/CNL
PE
Elevation
K.B. 4493
D.F. 4491
G.L. 4485

Date	9/23/24
Run Number	ONE
Depth Driller	3950
Depth Logger	3949
Bottom Logged Interval	3947
Top Log Interval	00
Casing Driller	8 625 @ 445
Casing Logger	445
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3/71
pH / Fluid Loss	8.0/9.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.60 @ 68F
Rmf @ Meas. Temp	1.20 @ 68F
Rmc @ Meas. Temp	1.92 @ 68F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.938 @ 116F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	11:00 A.M.
Maximum Recorded Temperature	116F
Equipment Number	3802
Location	HAYS, KANSAS
Recorded By	COLE ROBBEN
Witnessed By	WESTON LAFON

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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 SERVICES, HAYS, KS. (785) 628-6395

DIRECTIONS:

FROM ANTON, COLORADO GO 14 MILES EAST ON HIGHWAY 36, TURN LEFT, GO 9 MILES NORTH ON CR 'RR', TURN RIGHT, GO 2 MILES EAST ON CR 17, SOUTH INTO, FOLLOW LEASE ROAD

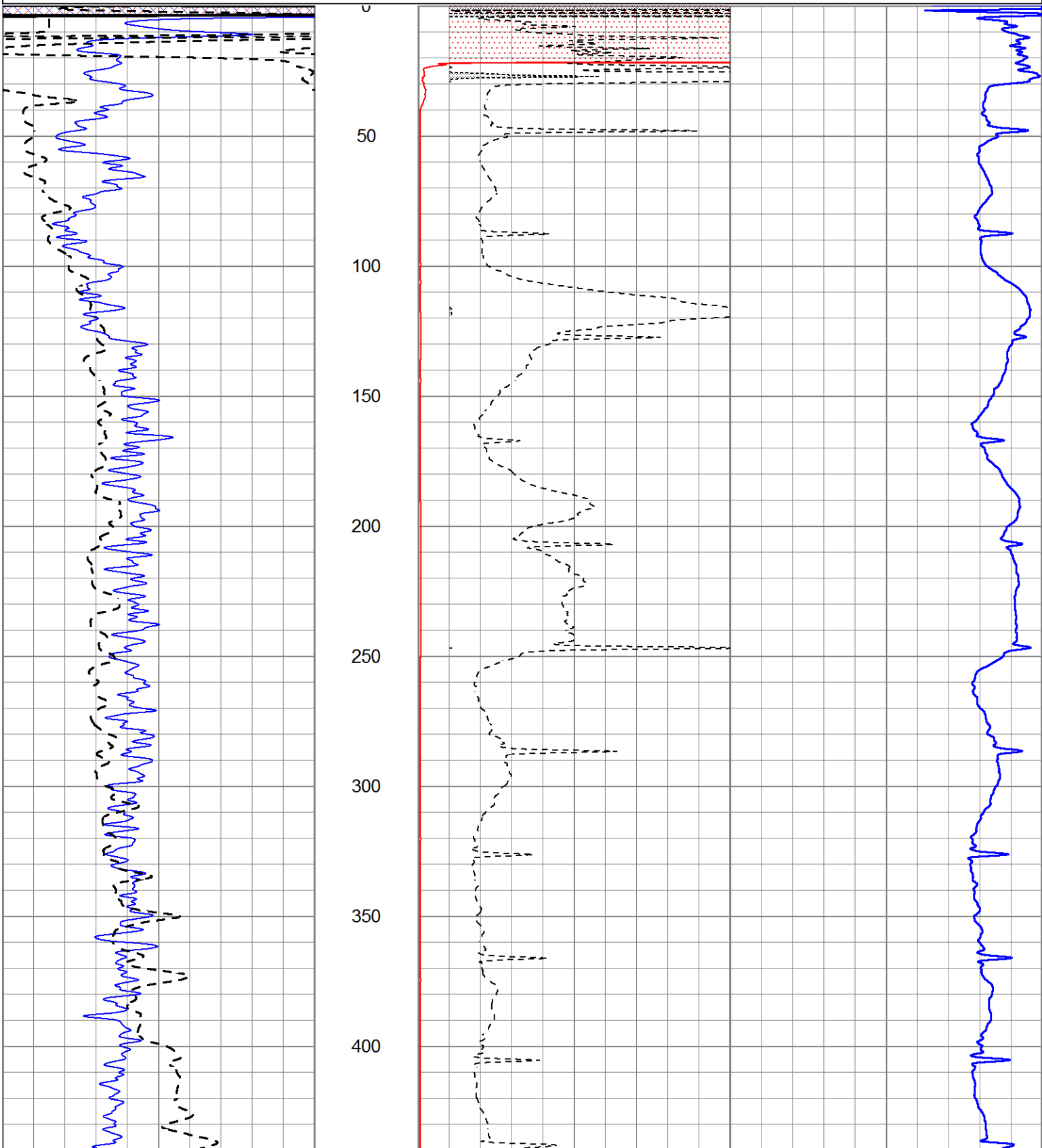


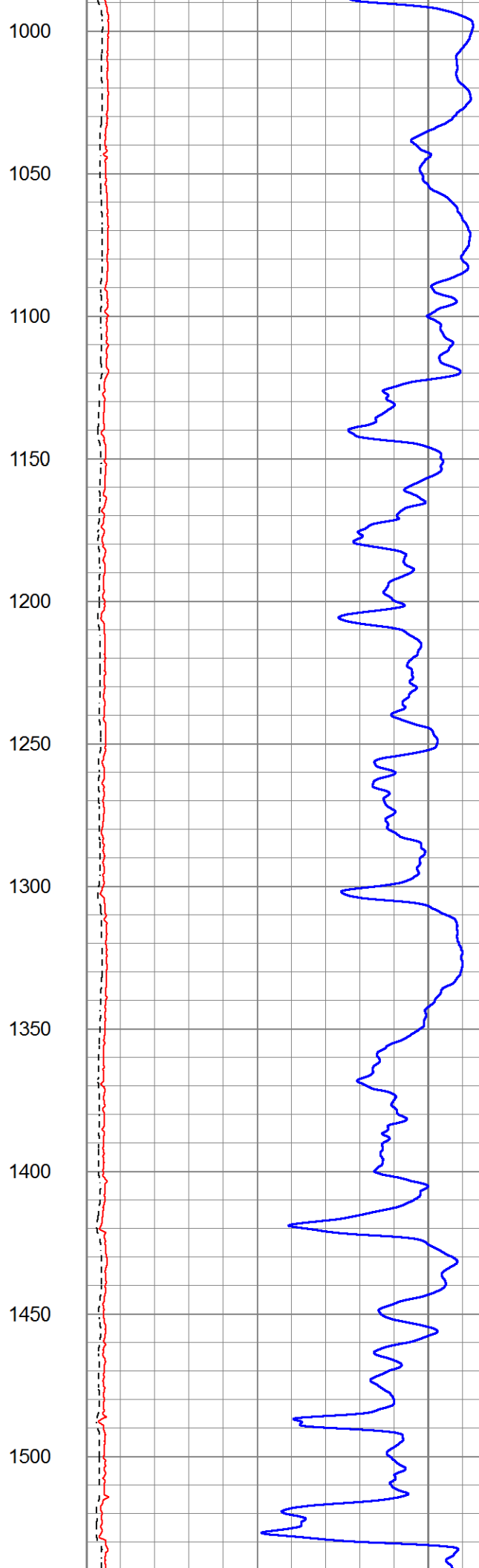
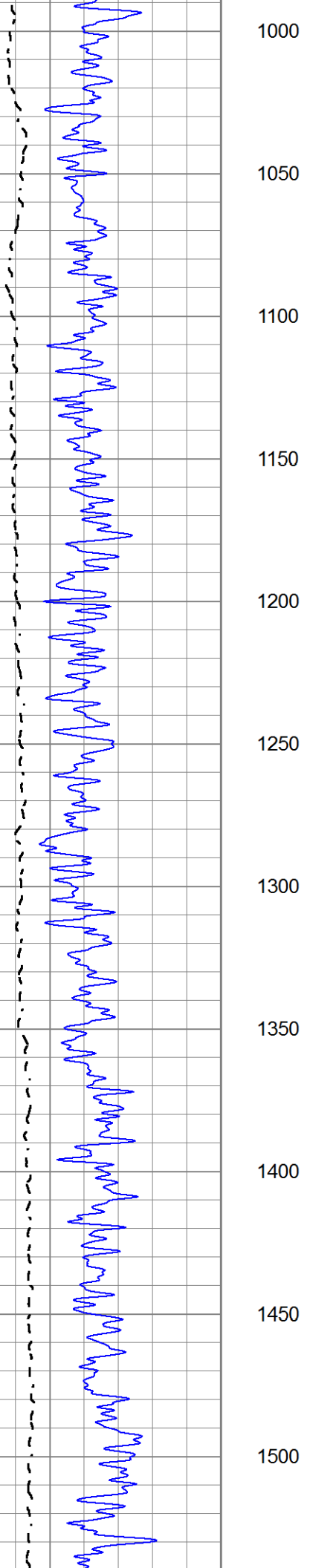
MAIN SECTION

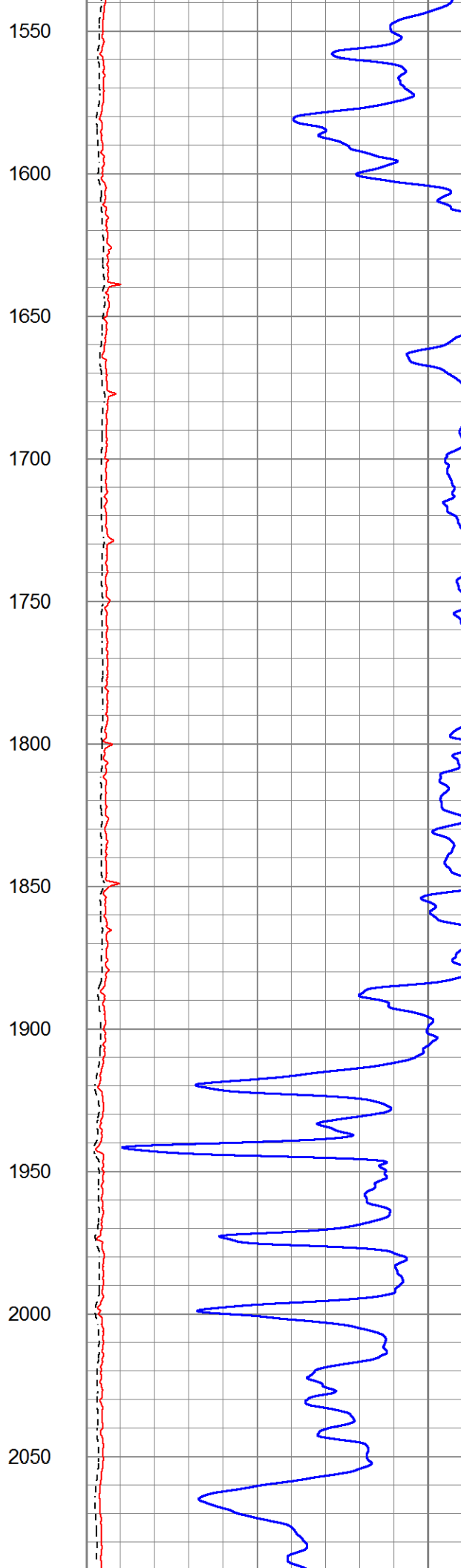
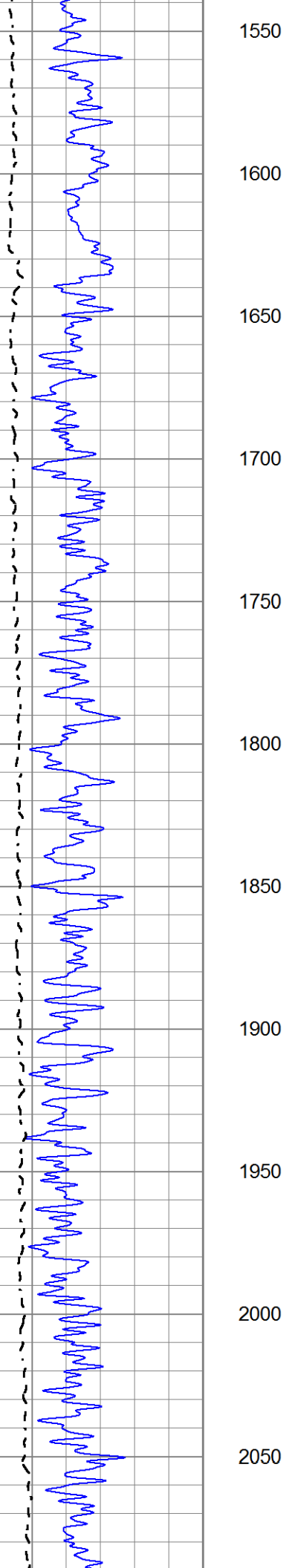
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 Presentation Format _dil2
 Dataset Creation Mon Sep 23 13:46:22 2024
 Charted by Depth in Feet scaled 1:600

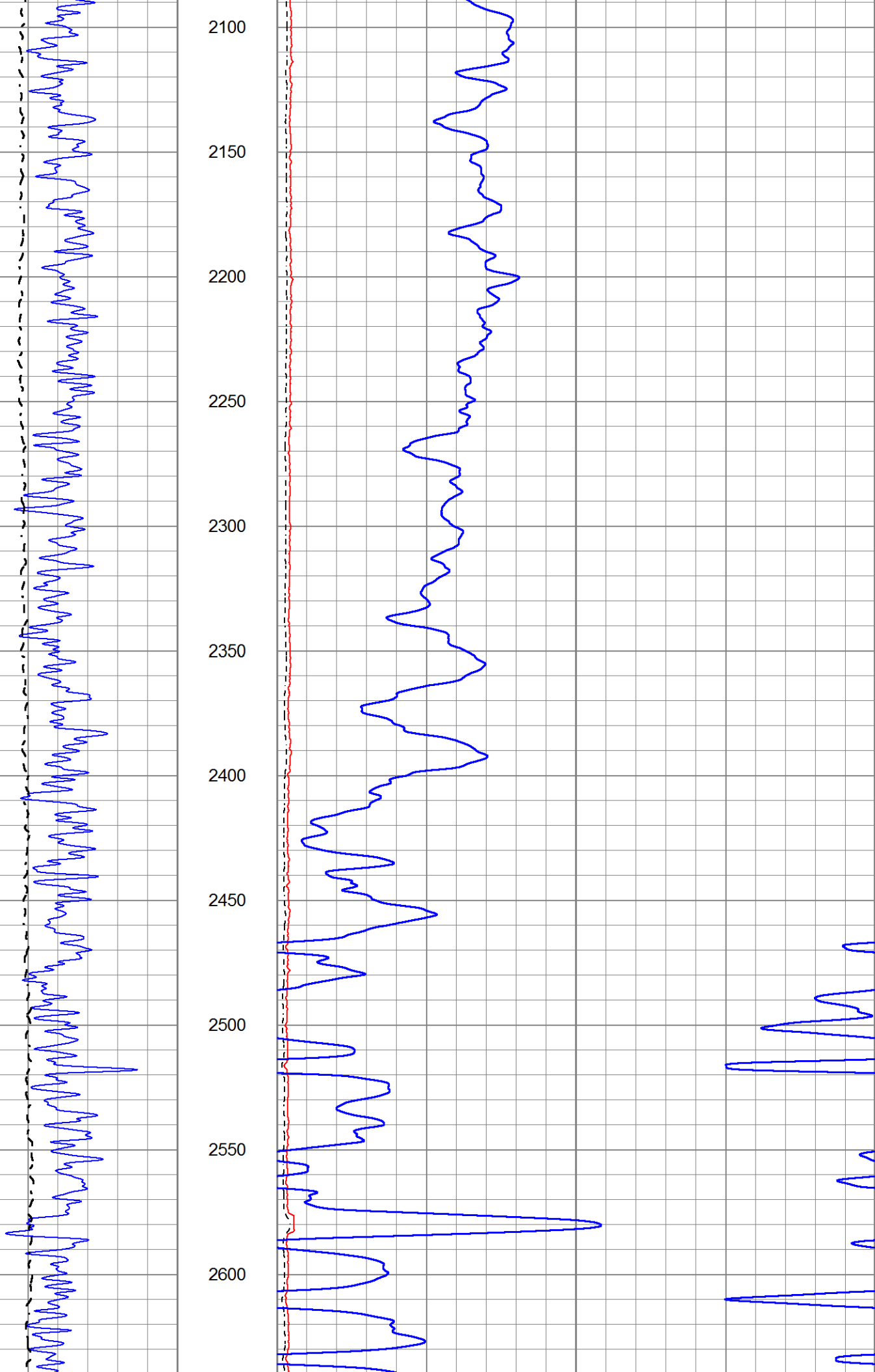
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-100	SP (mV)	100

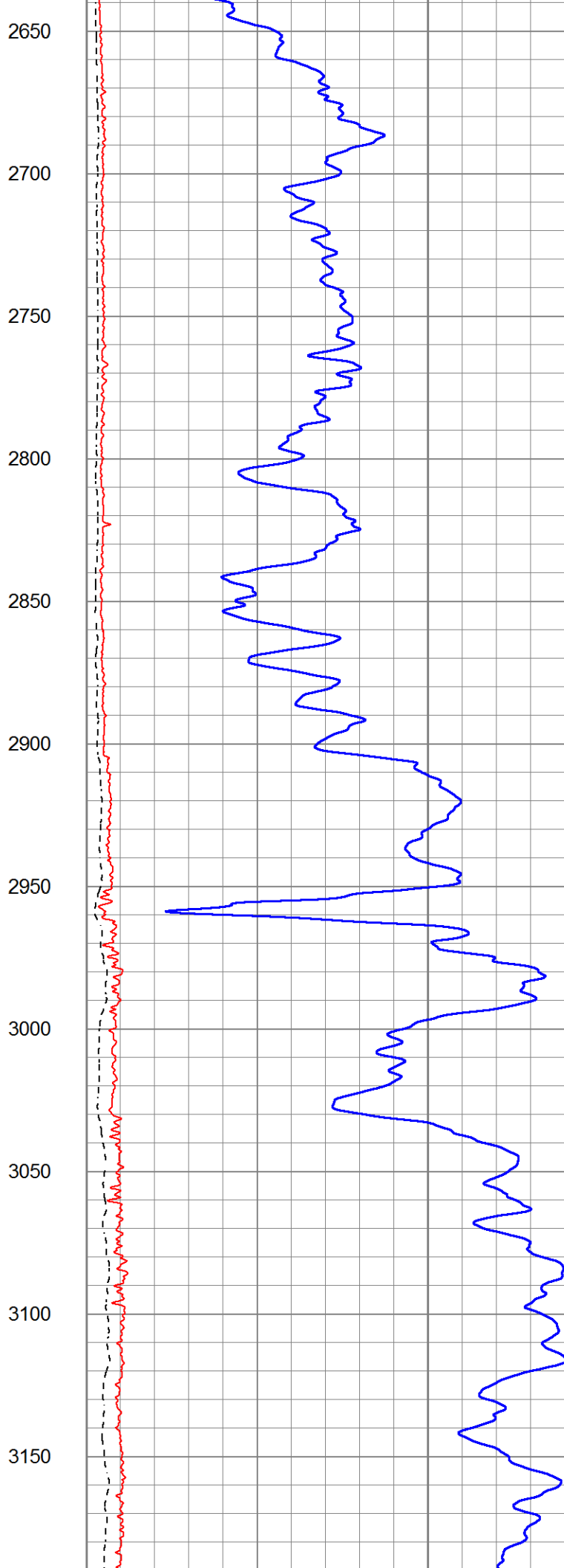
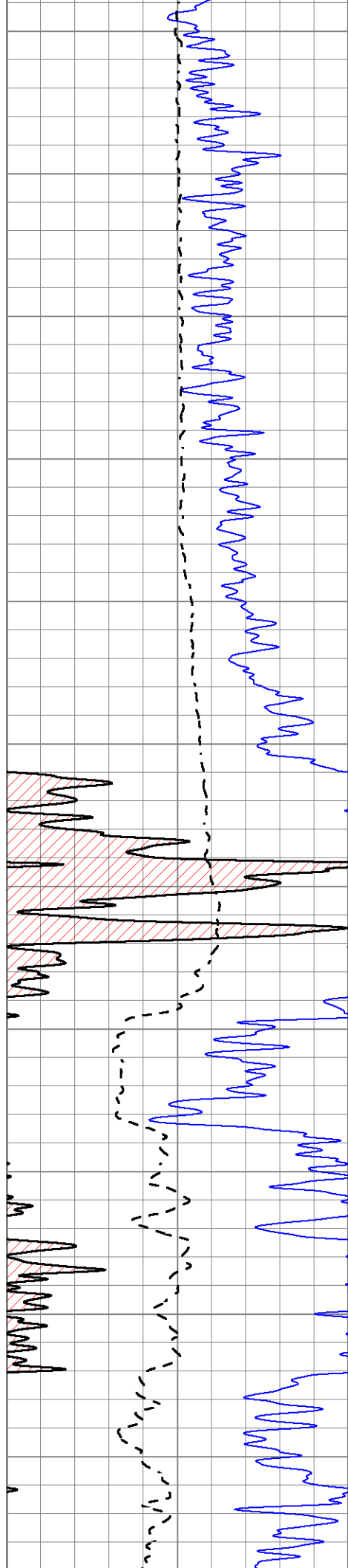
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

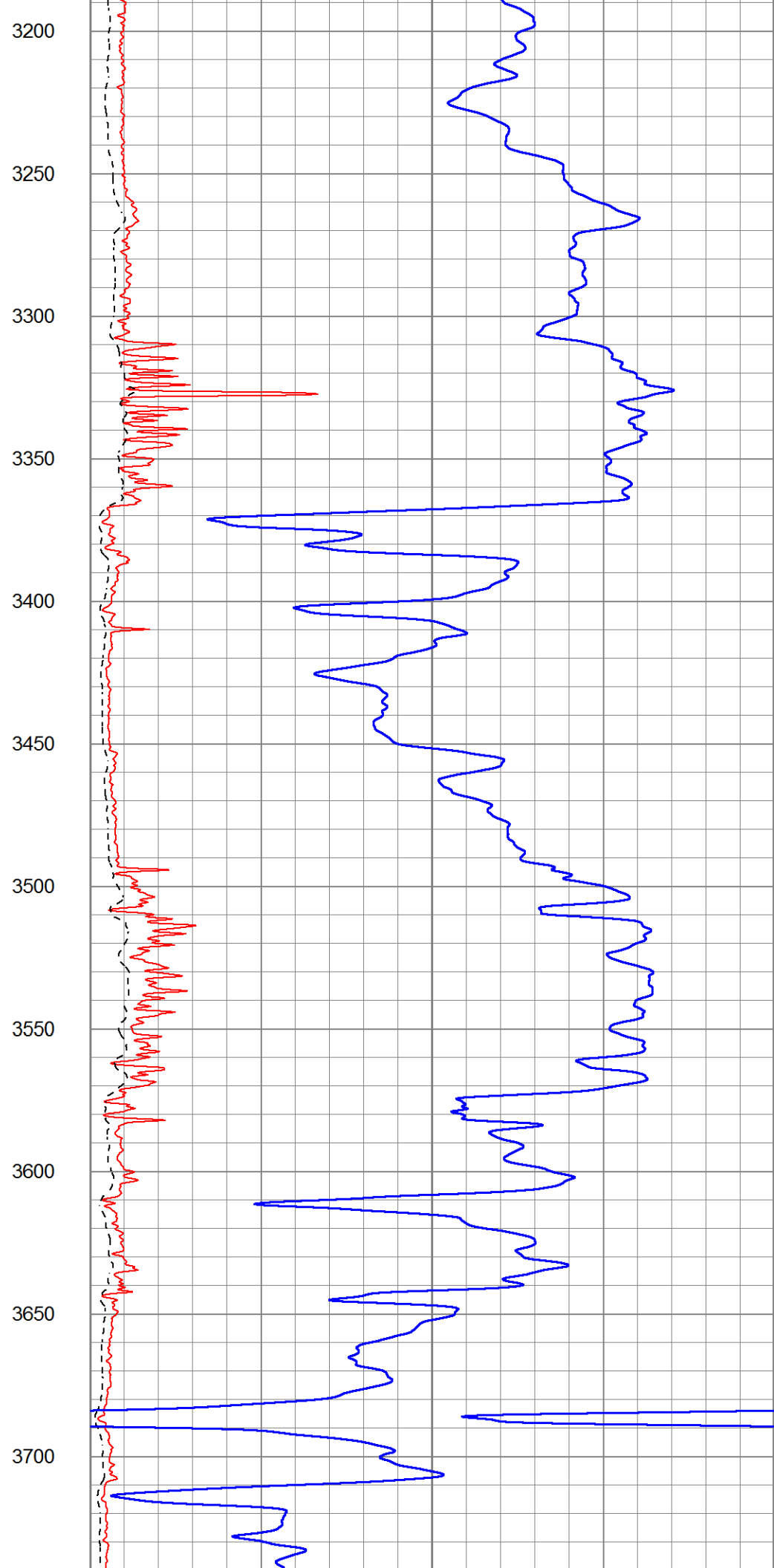
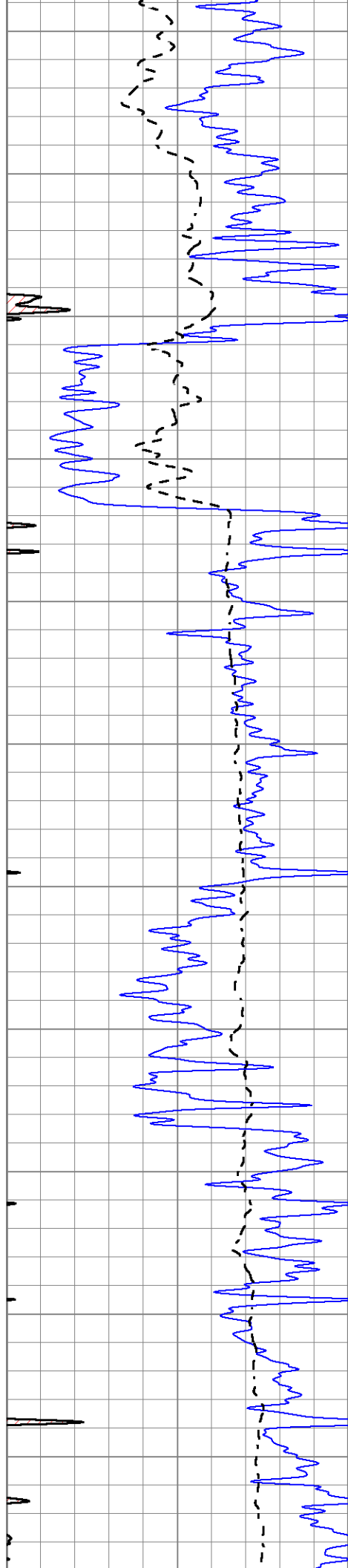


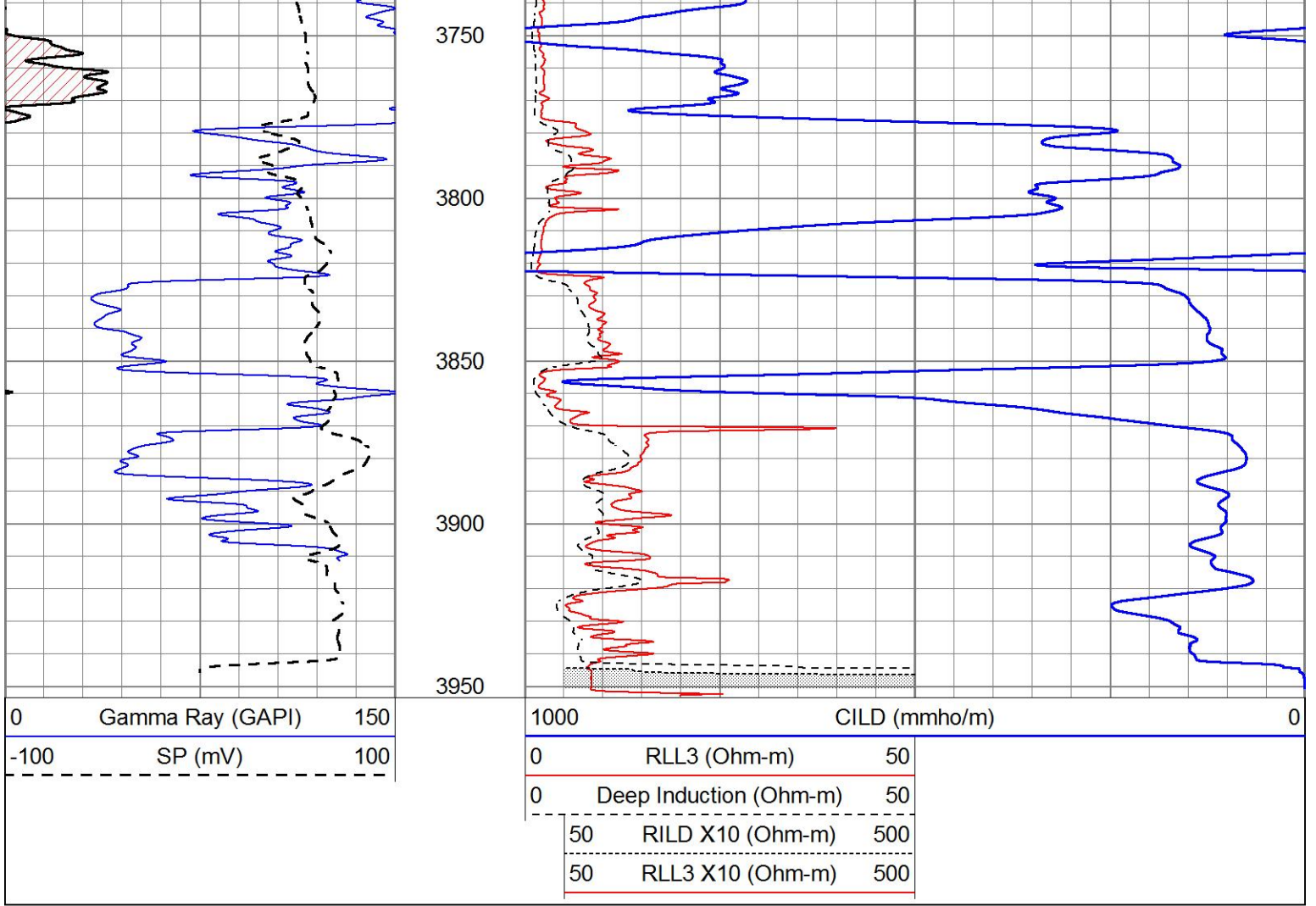






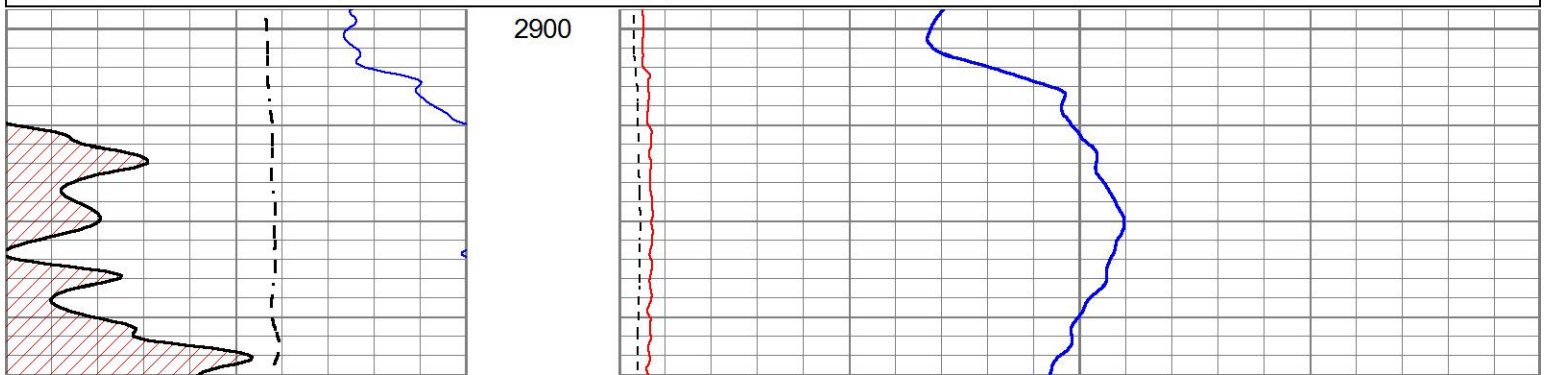
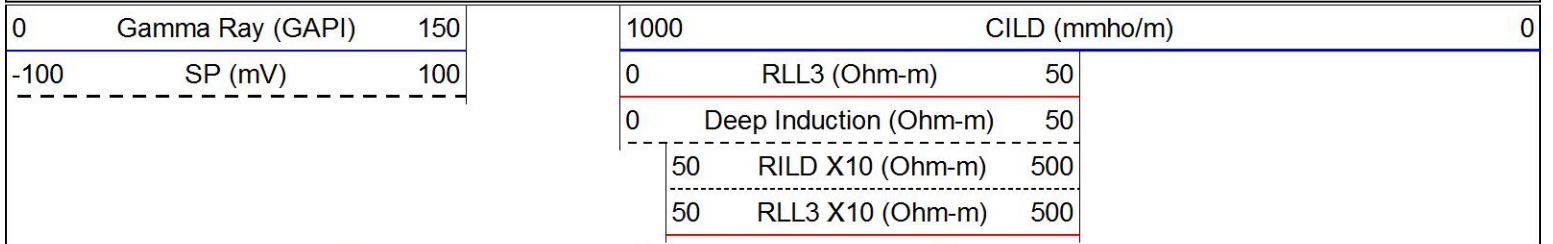


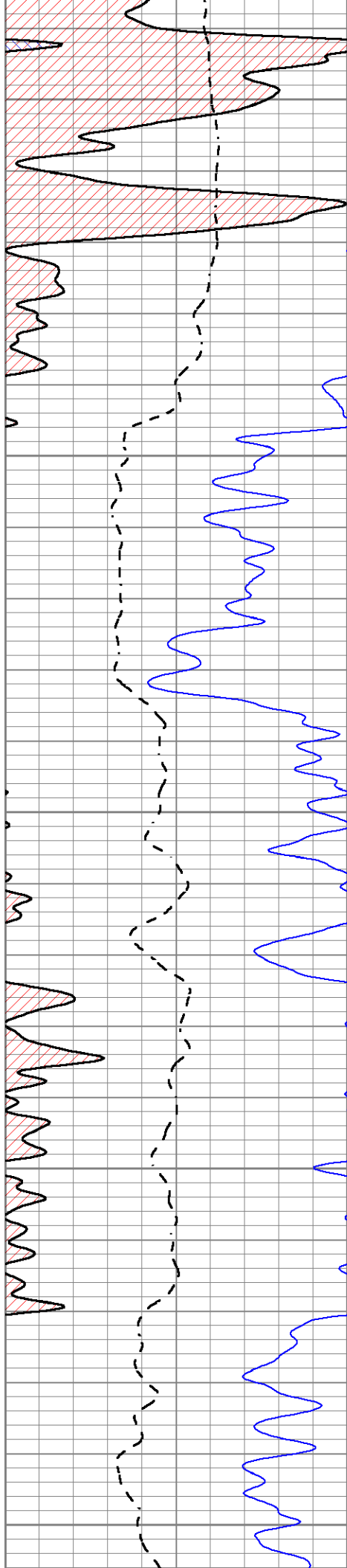




MAIN SECTION

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 Dataset Pathname pass3.12
 Presentation Format _dil2
 Dataset Creation Mon Sep 23 13:46:22 2024
 Charted by Depth in Feet scaled 1:240





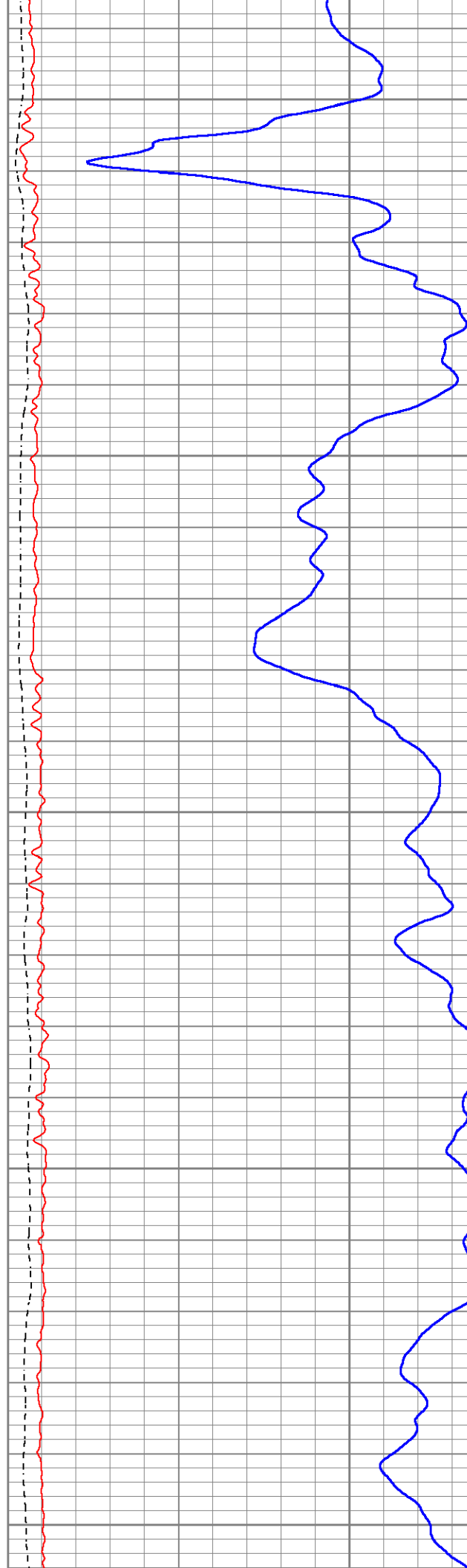
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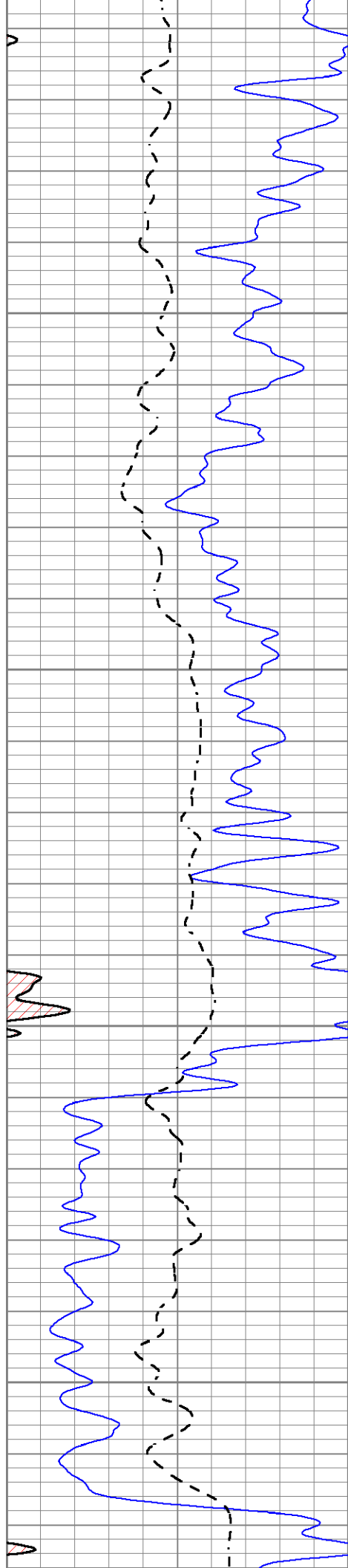
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3050

3100

3150



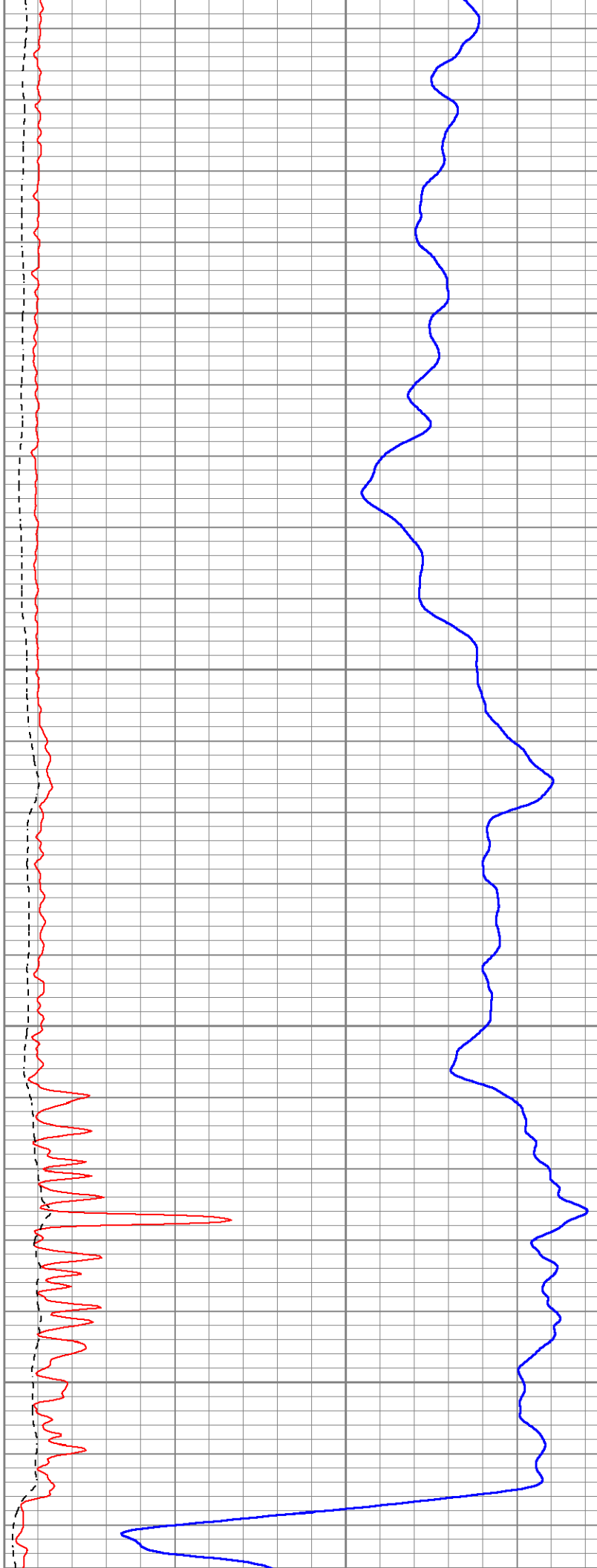


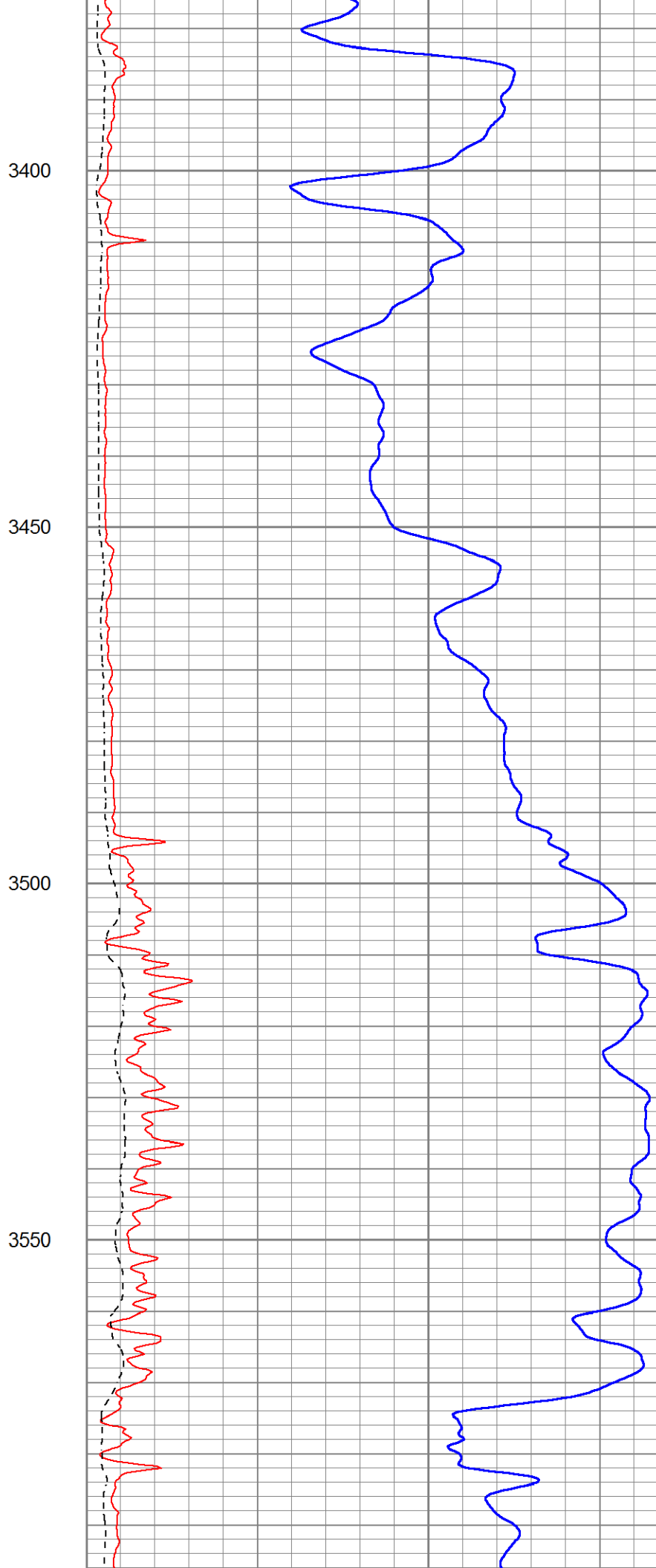
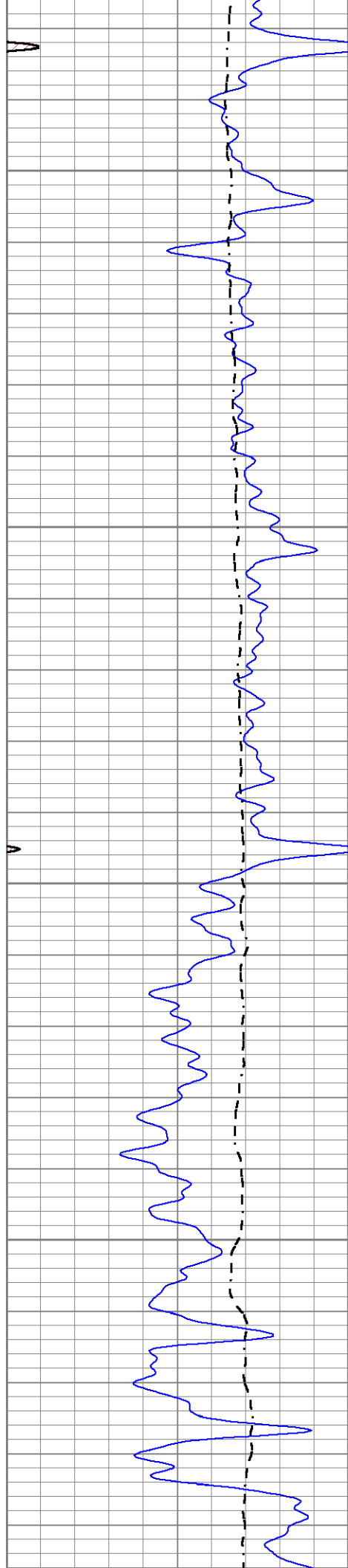
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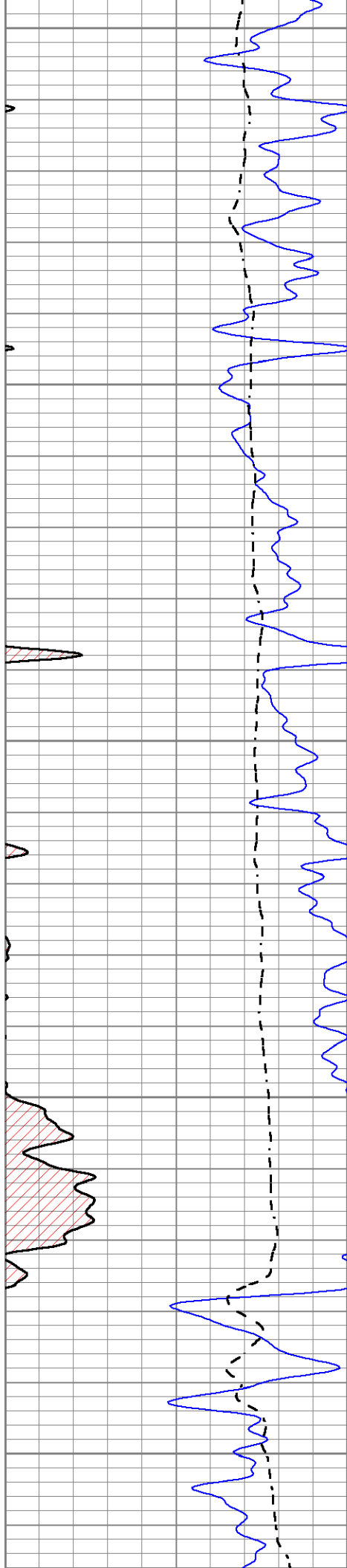
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3300

3350







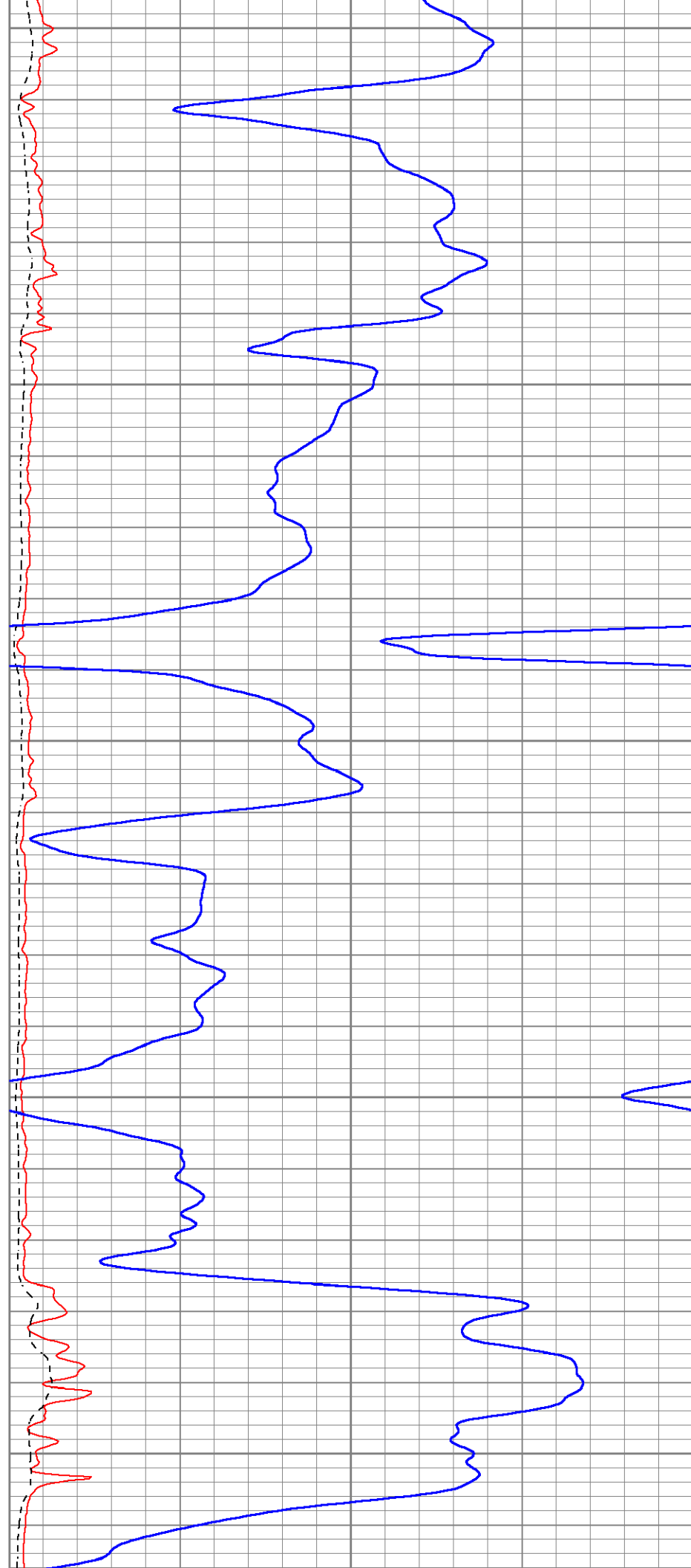
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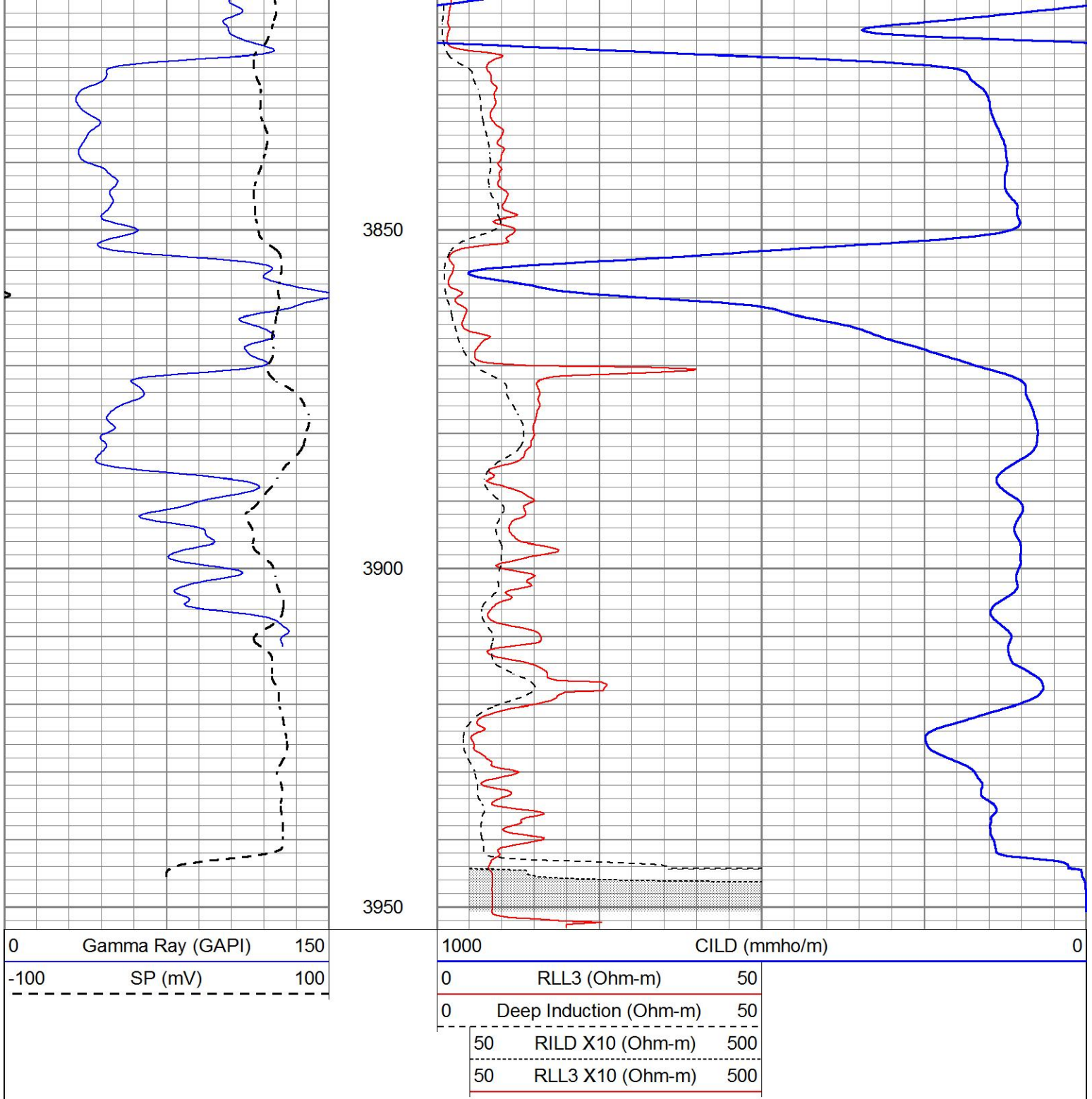
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3700

3750

3800

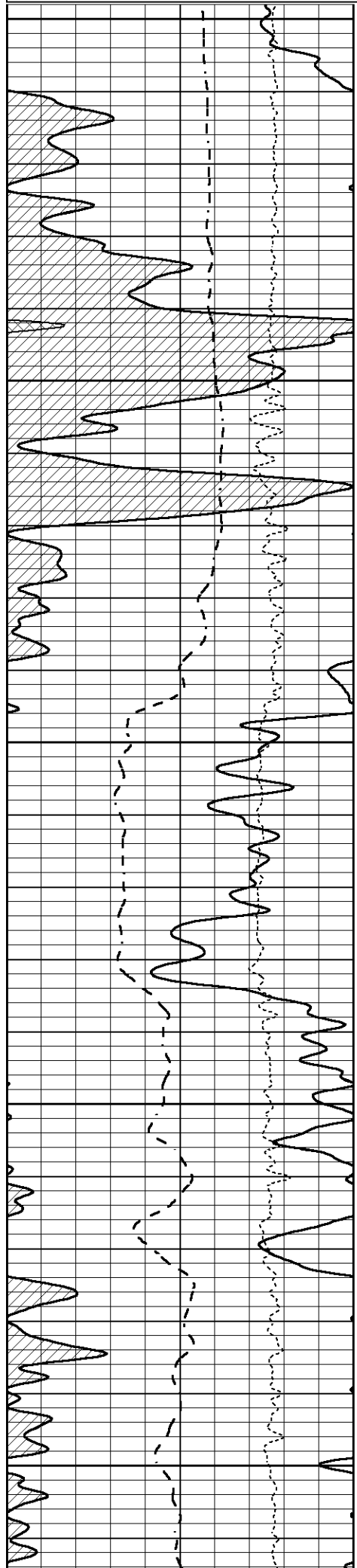




MAIN SECTION

Database File 9051pe.db
 Dataset Pathname pass3.12
 Presentation Format _dil
 Dataset Creation Mon Sep 23 13:46:22 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	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000



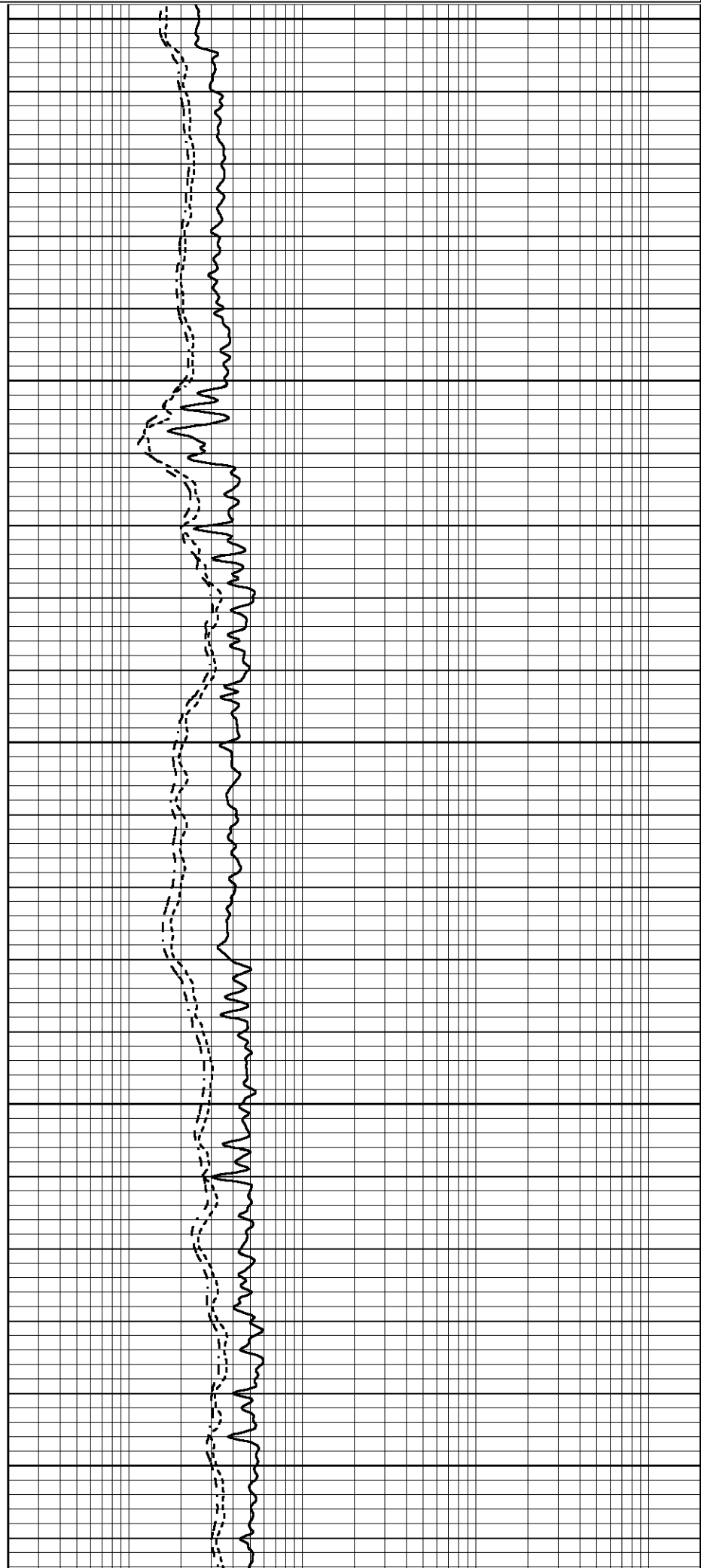
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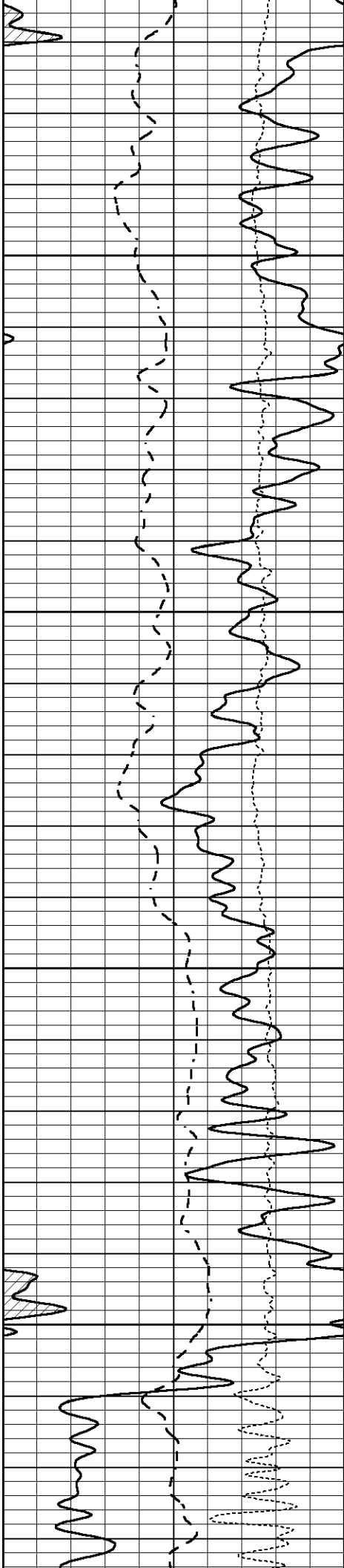
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3000

3050

3100



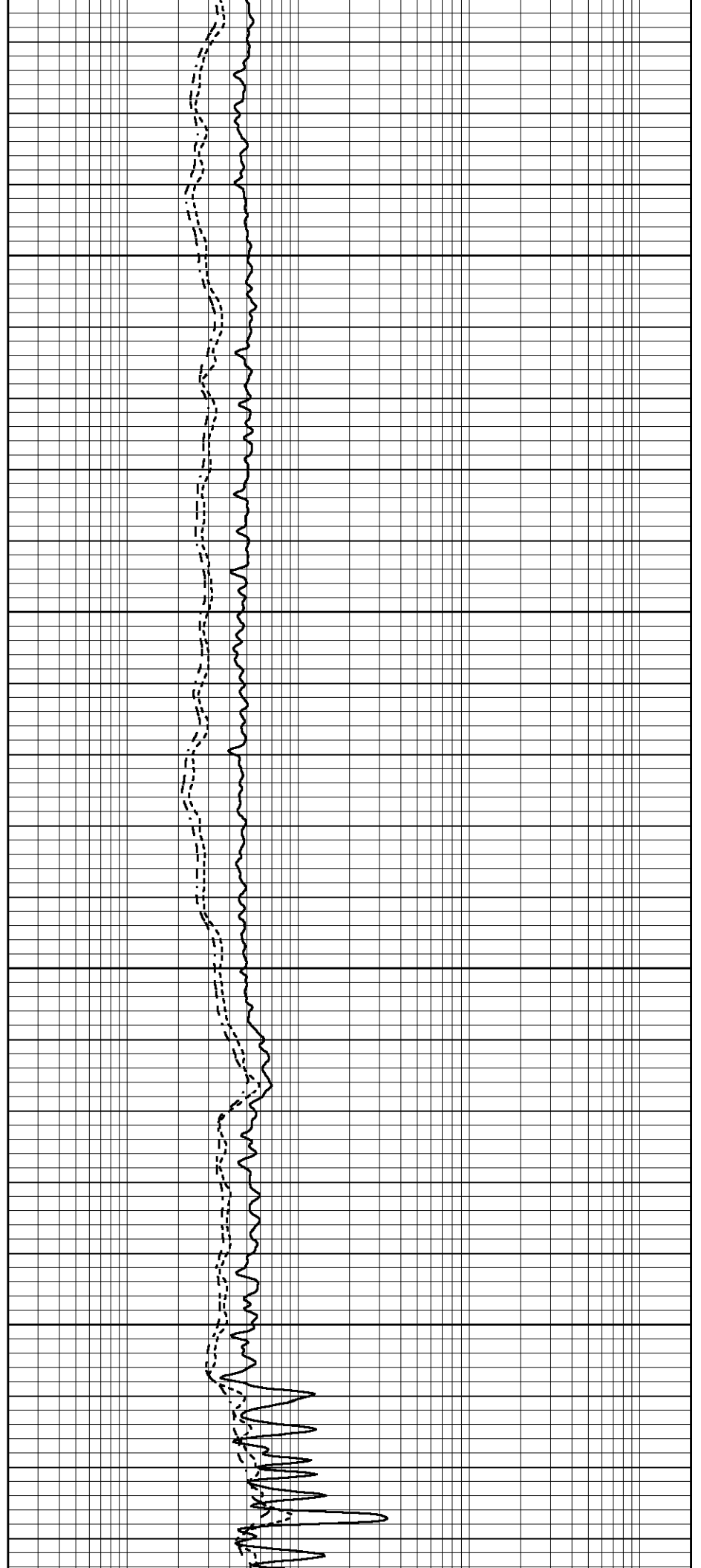


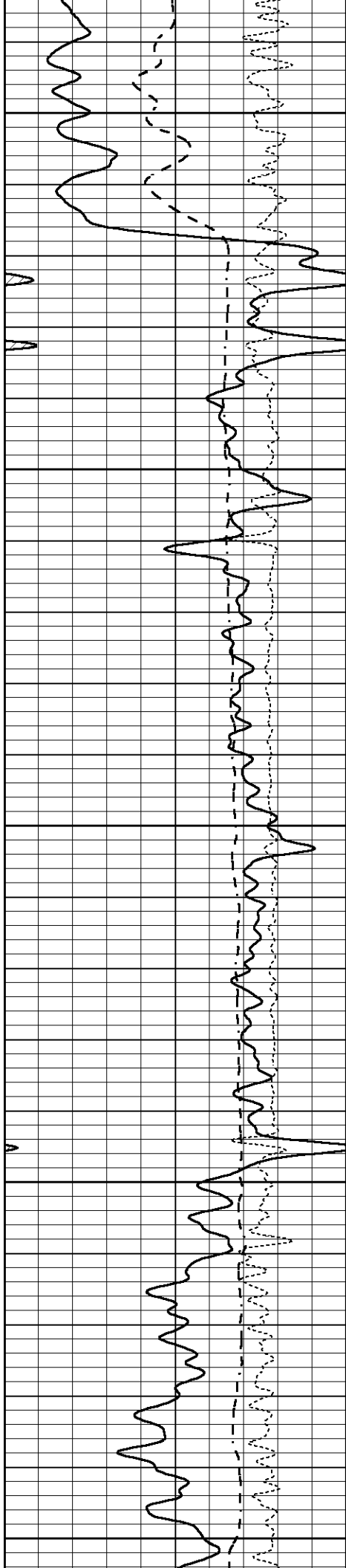
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3200

3250

3300





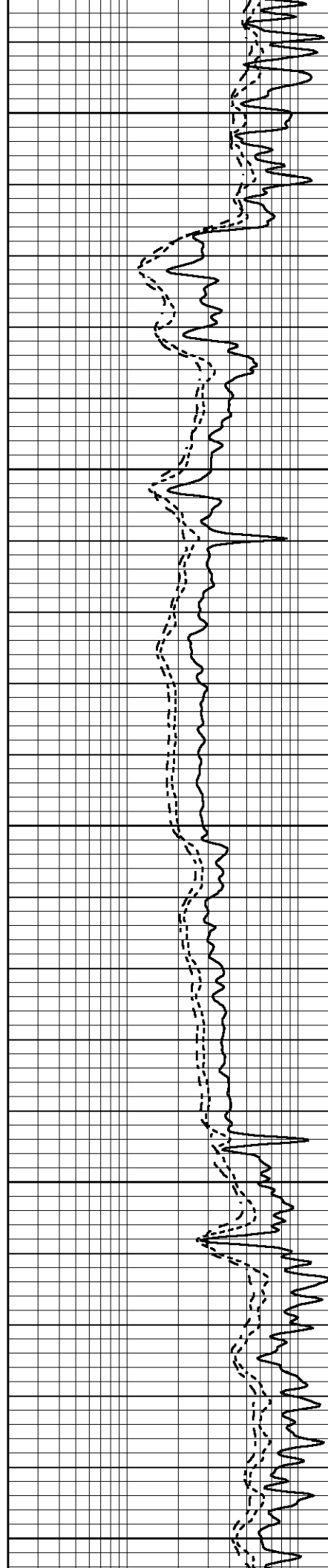
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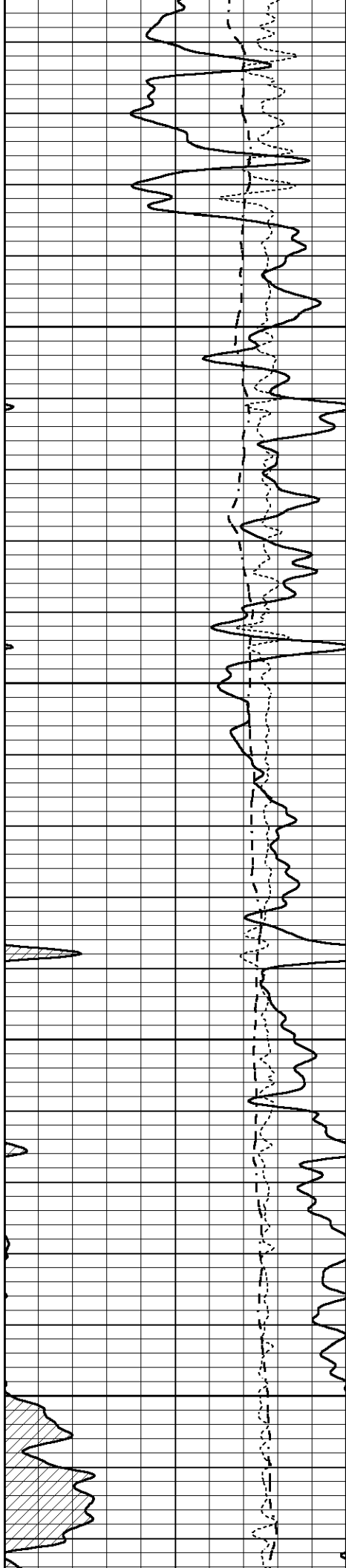
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3500

3550



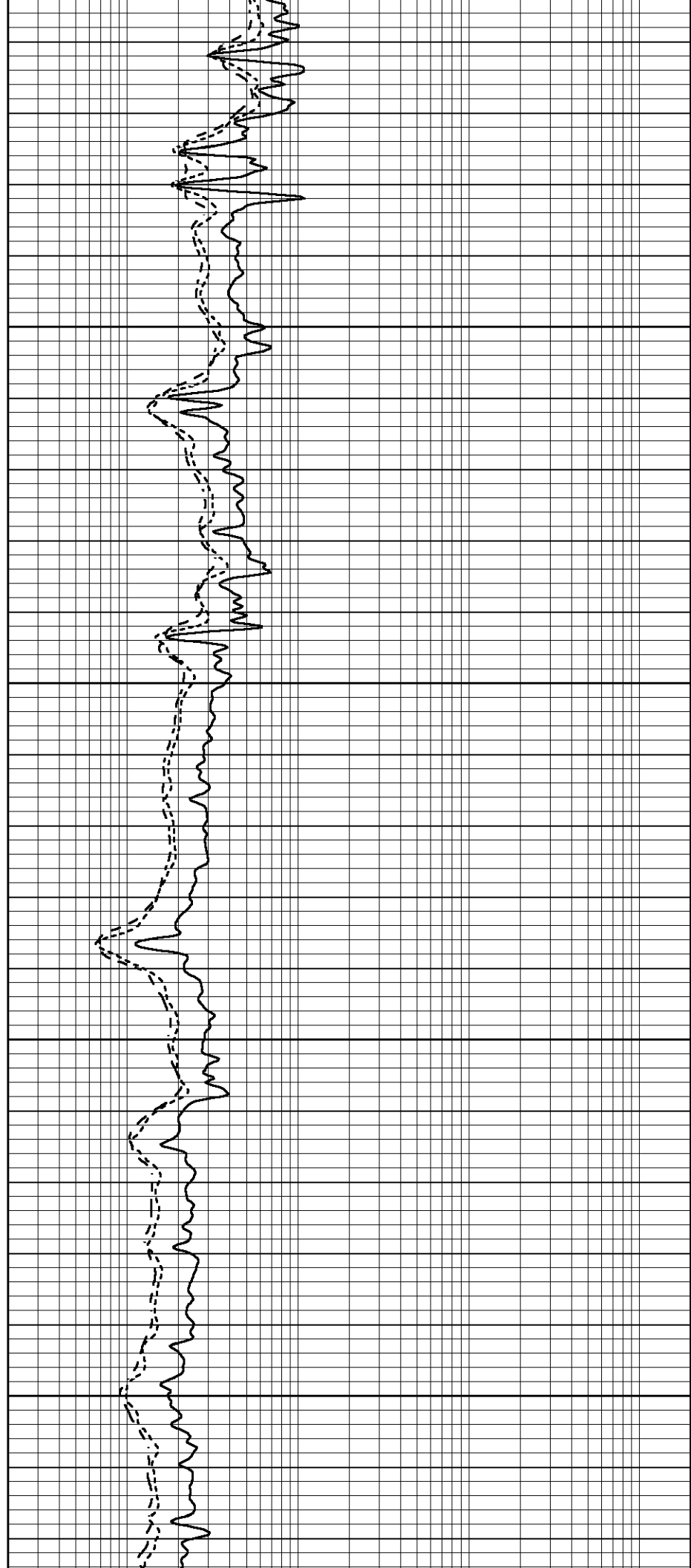


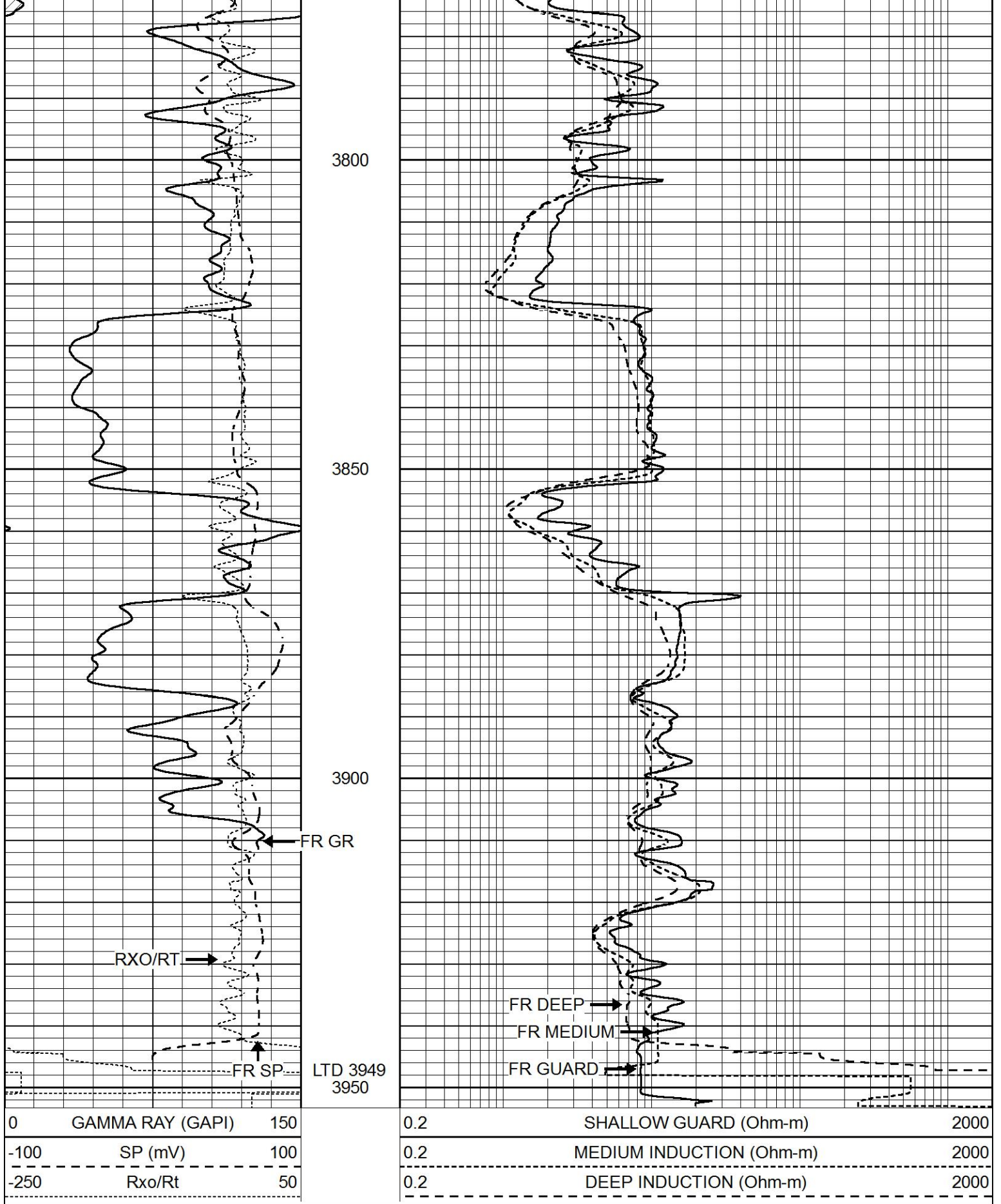
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3700

3750



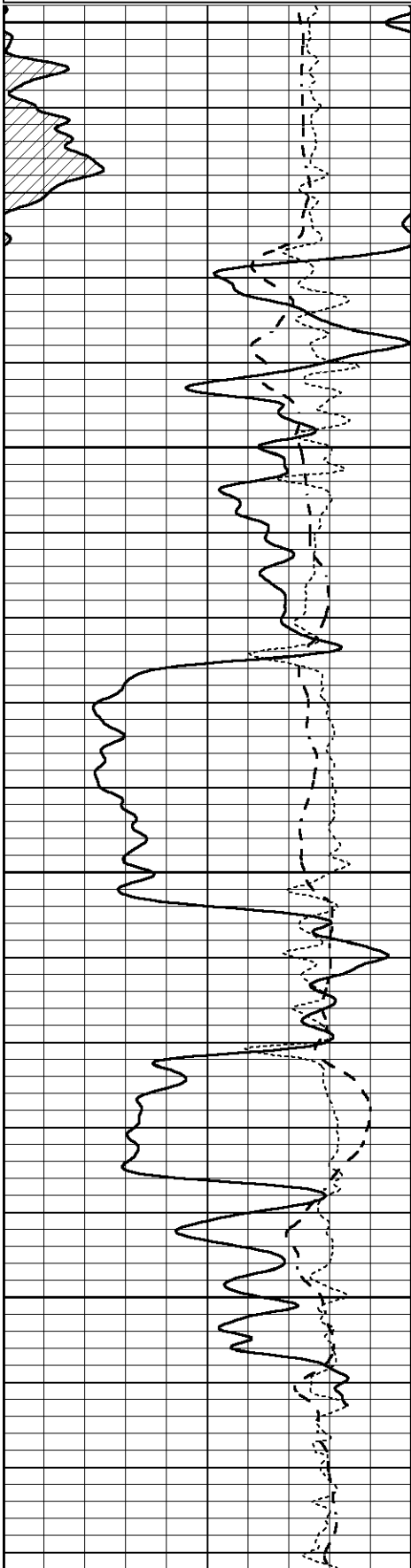


REPEAT SECTION

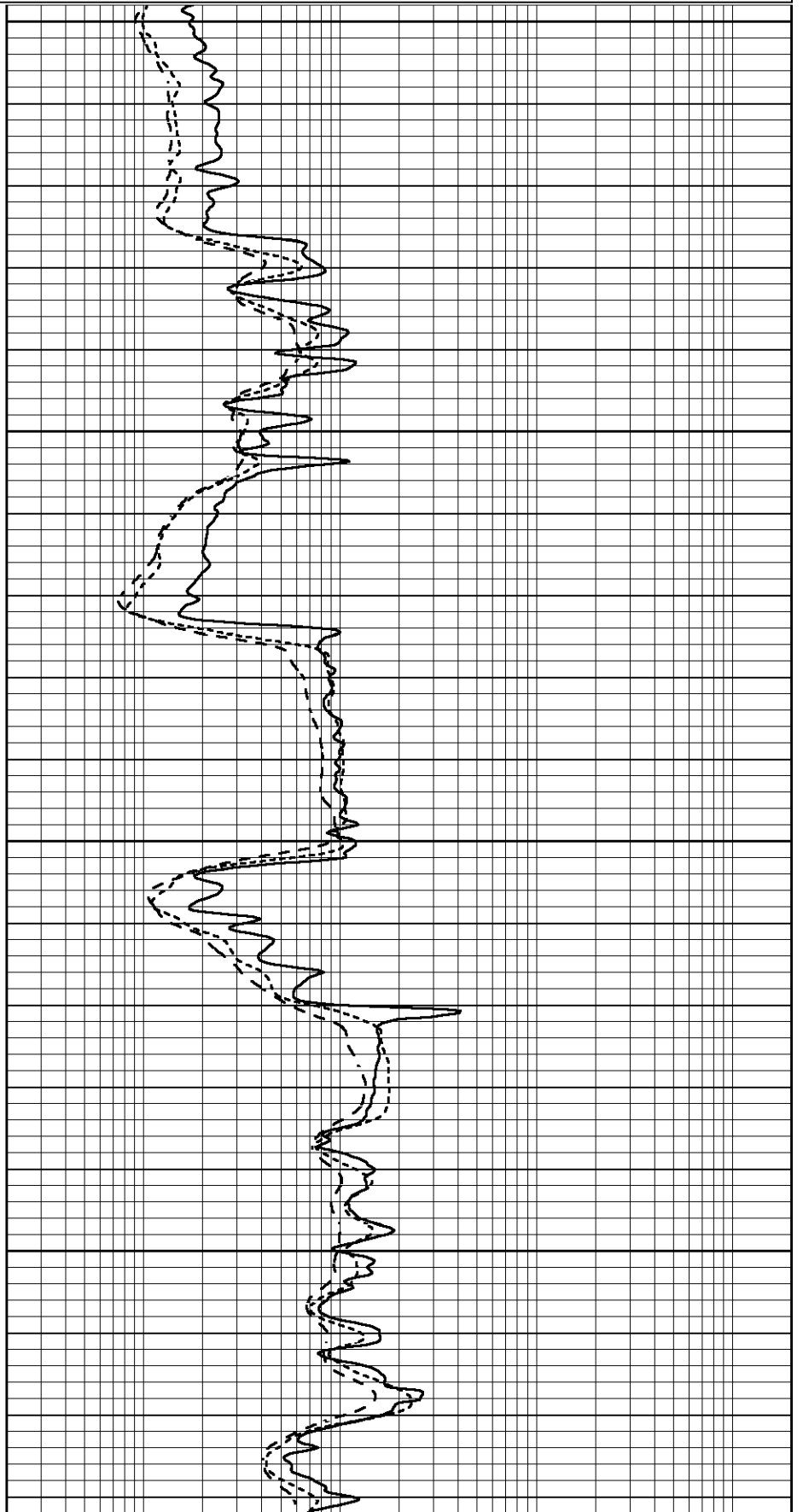
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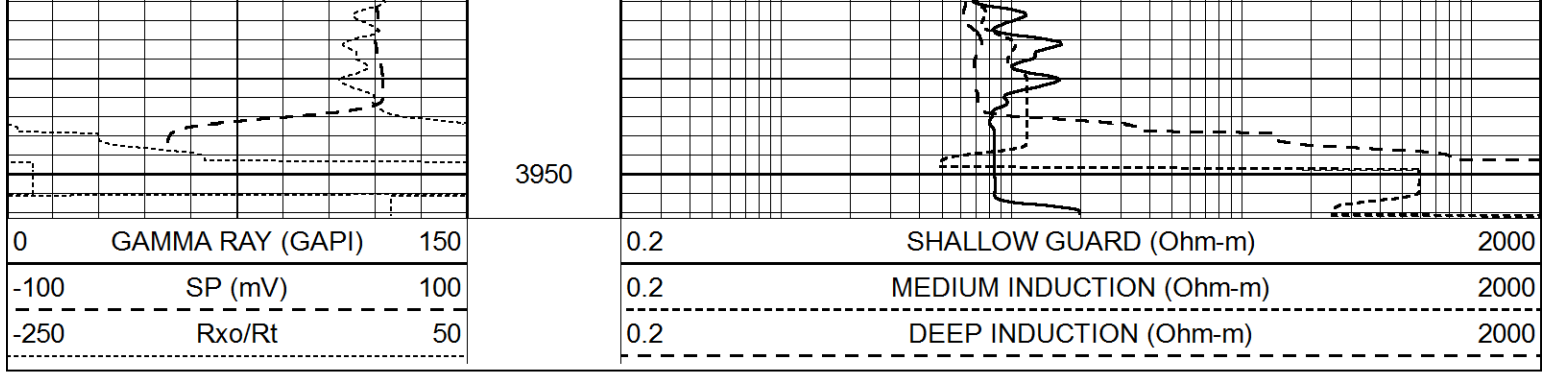
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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



3750
 3800
 3850
 3900





Calibration Report

Database File 9051pe.db
 Dataset Pathname pass3.12
 Dataset Creation Mon Sep 23 13:46:22 2024

Dual Induction Calibration Report

Serial-Model: FW1410-56-Probe
 Surface Cal Performed: Tue Apr 30 11:10:17 2024
 Downhole Cal Performed: Tue Jul 25 12:15:37 2017
 After Survey Verification Performed: Tue Jul 25 12:15:38 2017

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.008	0.765	V	1.000	400.000	mmho/m	520.000	18.000
Medium	-0.056	0.761	V	1.000	464.000	mmho/m	540.000	185.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.005	0.624	V	0.000	400.000	mmho/m	645.611	-3.034
Medium	0.012	0.721	V	0.000	464.000	mmho/m	653.591	-7.532

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.647	301.329	mmho/m	-0.780	336.378	mmho/m	1.117	-0.058
Medium	38.256	411.013	mmho/m	39.046	441.706	mmho/m	1.080	-2.280
LL3		7.471	V		2500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.085	V		4000.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.647	301.329	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	38.256	411.013	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report

Serial: 003 Model: PRB

Master Calibration

Performed Mon May 22 11:42:20 2023

Background Magnesium Aluminum Aluminum+Fe

Well: 1 1510.0 7495.7 9740.0 9510.0

Window 1	1512.3	7465.7	2749.0	2519.6	cps
Window 2	1398.8	6705.7	2507.3	2313.8	cps
Window 3	1289.2	5259.5	2124.1	2009.6	cps
Window 4	351.1	351.6	351.8	353.2	cps
Long Space	0.0	5306.9	1108.5	915.0	cps
Short Space	3.3	2239.9	1441.2	1212.0	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	

Rib Angle : 44.3 Rib Slope : 0.975 Density/Spine Ratio : 0.541
 Spine Angle : 74.3 Spine Slope : 3.551 Spine Intercept : -18.8

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: 080621PMC
 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: 46001
 Tool Model: Probe1
 Performed: Thu Apr 20 09:55:57 2023

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.4300	GAPI/cps