



DUAL INDUCTION LOG

Company EDISON OPERATING COMPANY, LLC.
 Well DORAN #2-16
 Field DILLWYN
 County STAFFORD State KANSAS

Location: API #: 15-185-24102-0000
 1661' FSL & 2310' FEL
 N/2 - SW - NW - SE
 Permanent Datum GROUND LEVEL Elevation 1973
 Log Measured From KELLY BUSHING 10' A.G.L.
 Drilling Measured From KELLY BUSHING
 SEC 16 TWP 24S RGE 14W
 Other Services
 CDL/CNL/PE
 MEL/SONIC
 Elevation
 K.B. 1983
 D.F. 1981
 G.L. 1973

Date	3/6/22
Run Number	ONE
Depth Driller	4405
Depth Logger	4402
Bottom Logged Interval	4400
Top Log Interval	00
Casing Driller	8 5/8"@369'
Casing Logger	369
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.0/68
pH / Fluid Loss	10.0/10.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.500@70F
Rmf @ Meas. Temp	.375@70F
Rmc @ Meas. Temp	.600@70F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.292@120F
Time Circulation Stopped	2.5 HOURS
Time Logger on Bottom	6:30 P.M.
Maximum Recorded Temperature	120F
Equipment Number	922339
Location	HAYS, KANSAS
Recorded By	JEFF LUEBBERS
Witnessed By	ADAM KENNEDY

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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.

15-185-24102-0000 Comments

THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
 DIRECTIONS
 ST. JOHN, KS. S. TO (HWY 50 & 281 JUNCTION) 6W. ON HWY 50, 1/2N., W. INTO

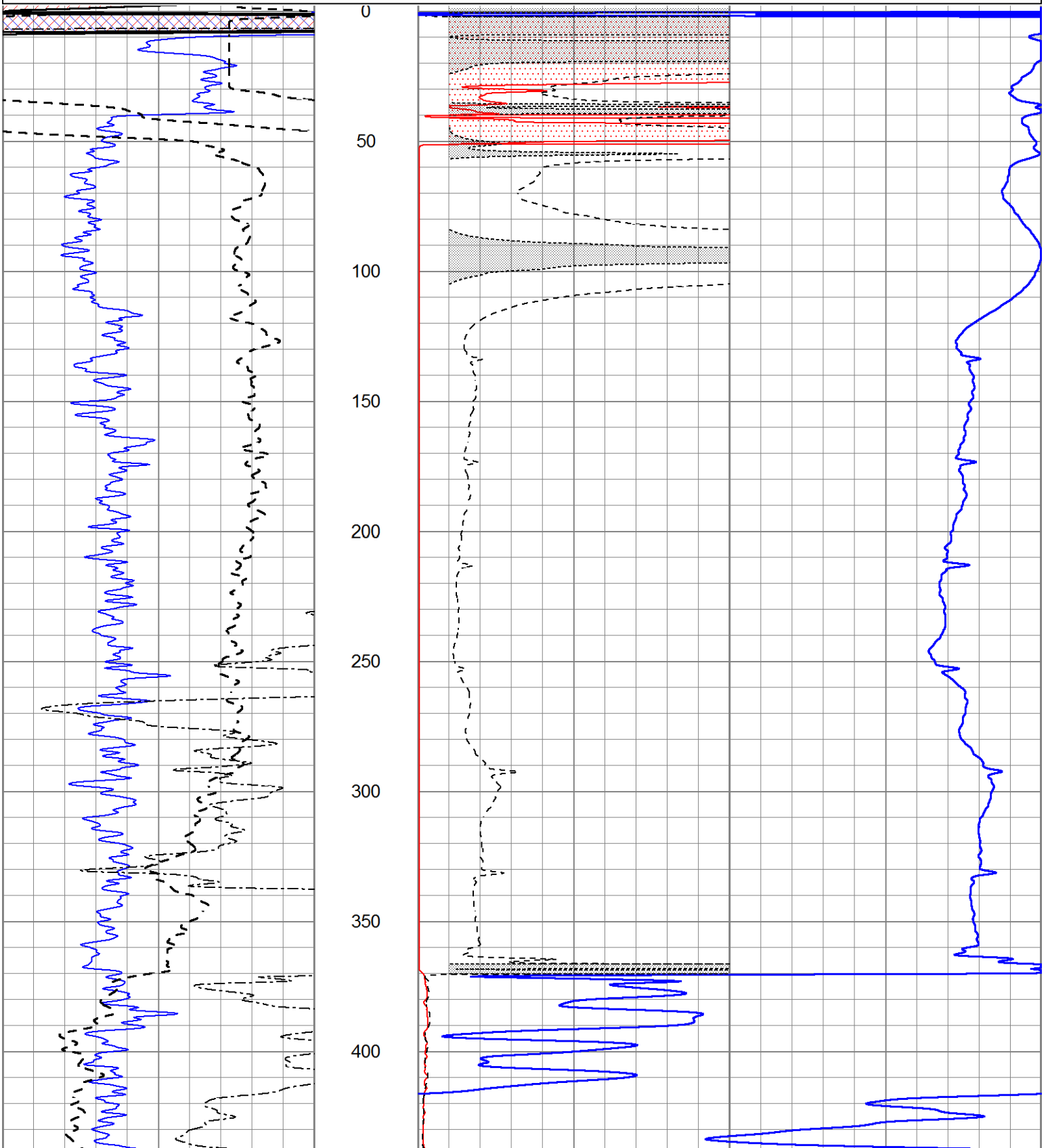


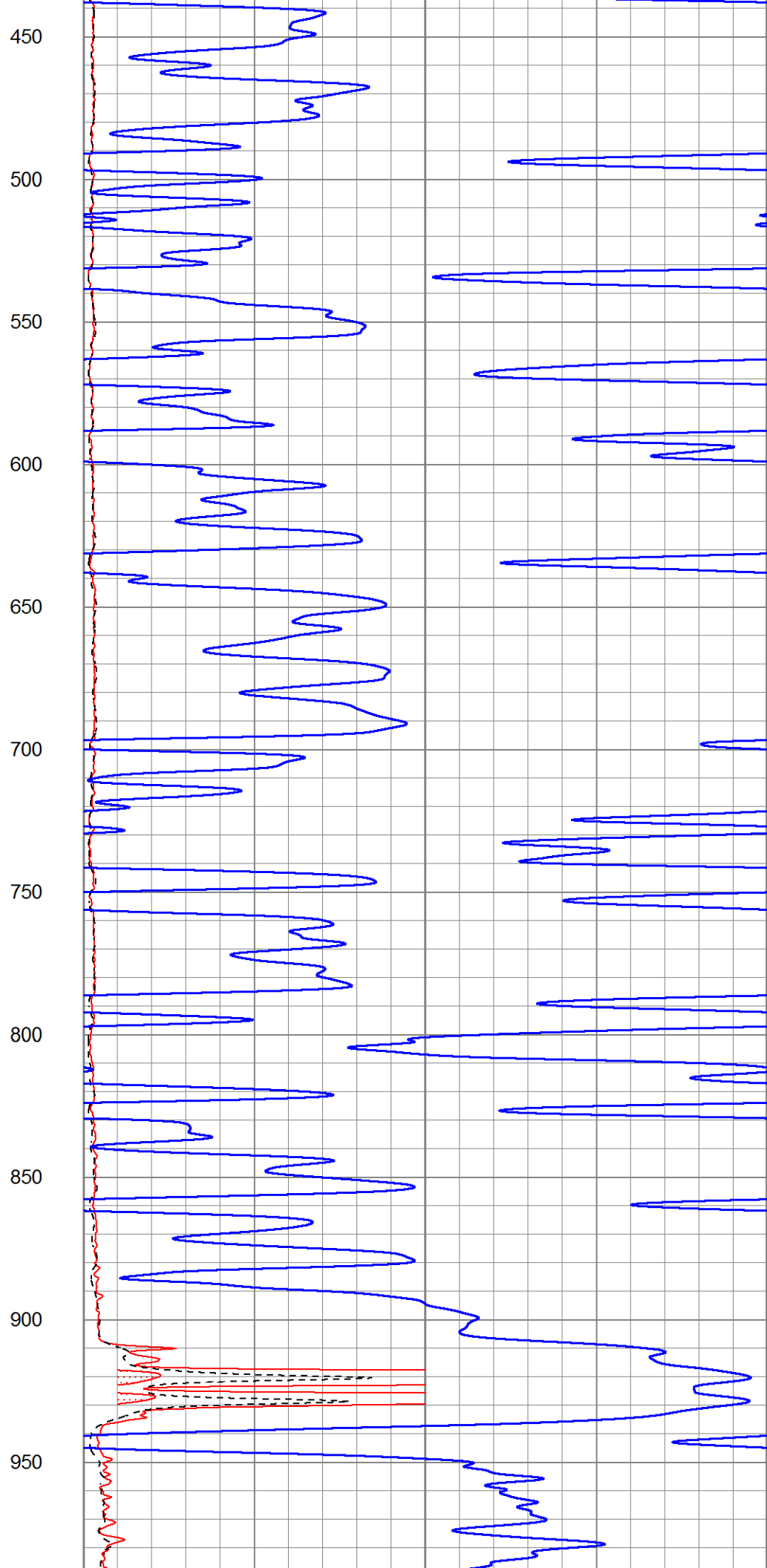
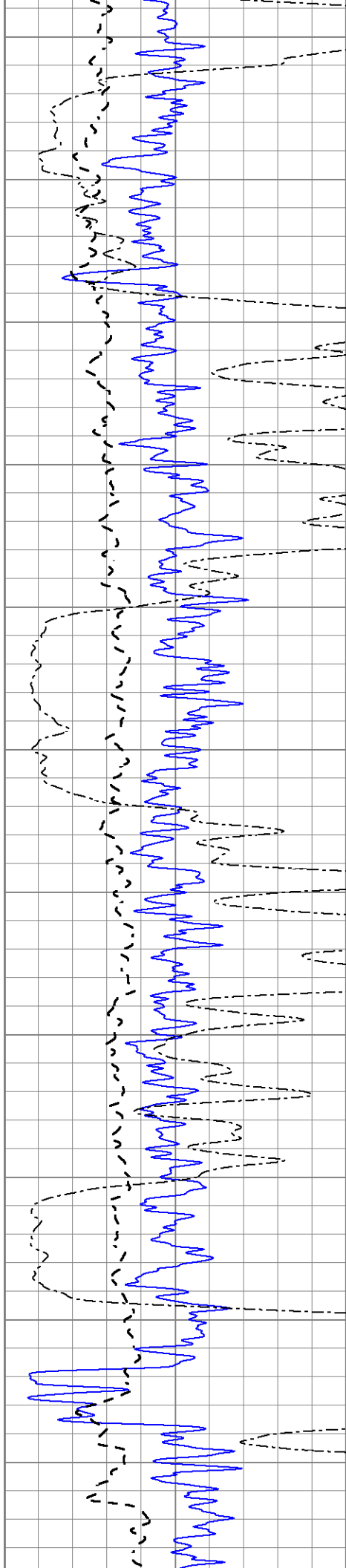
MAIN SECTION

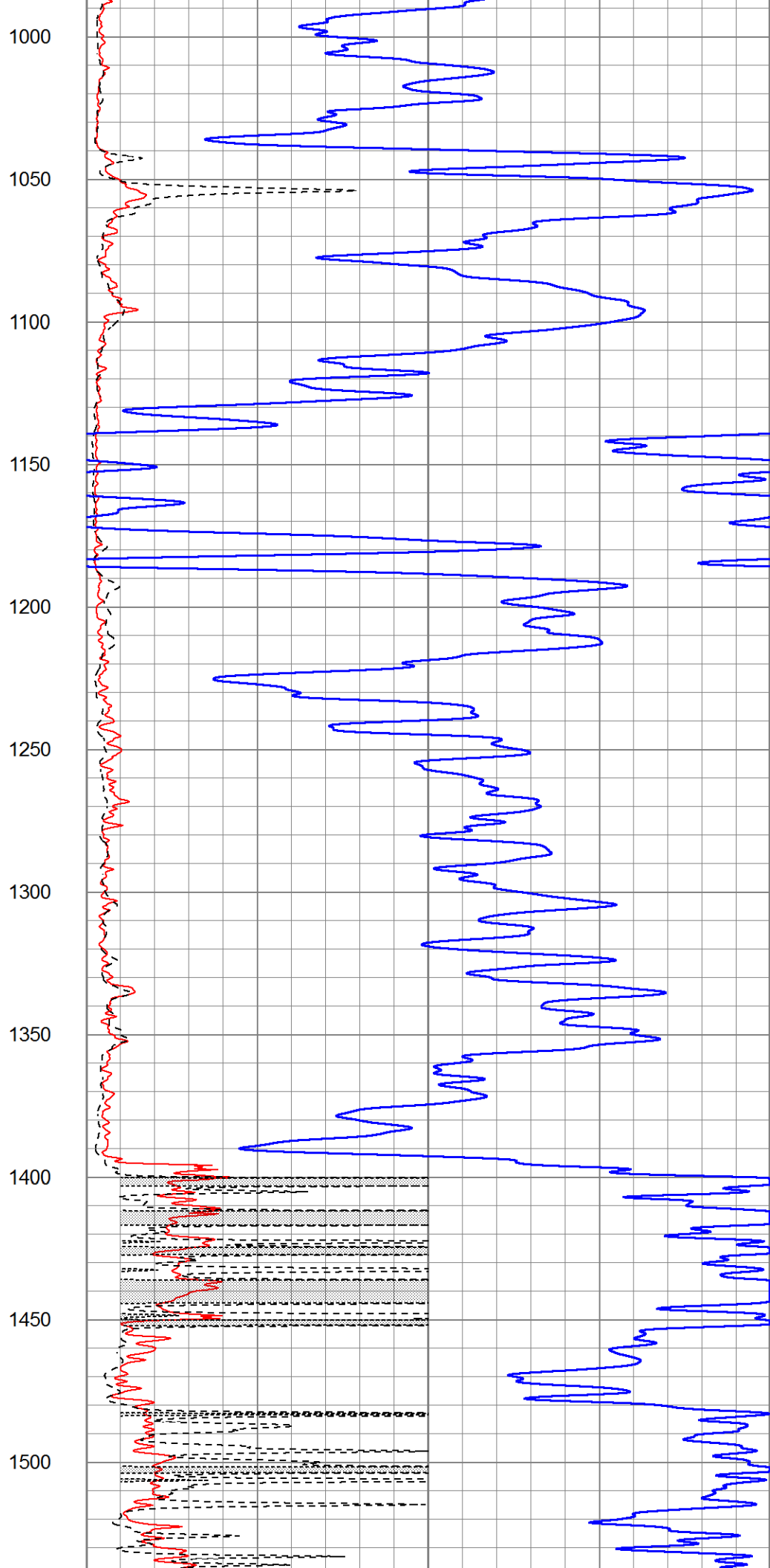
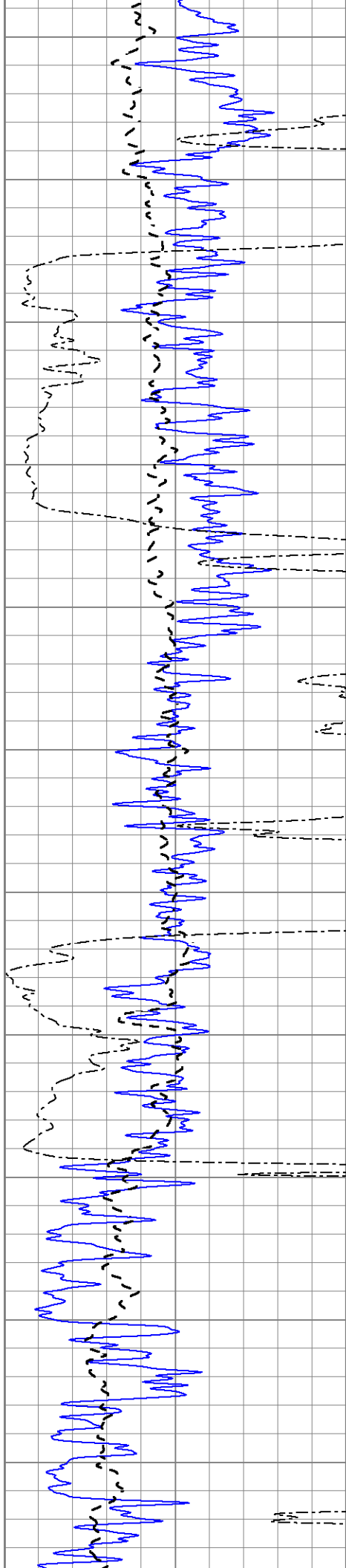
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 Presentation Format _dil2
 Dataset Creation Sun Mar 06 20:07:22 2022
 Charted by Depth in Feet scaled 1:600

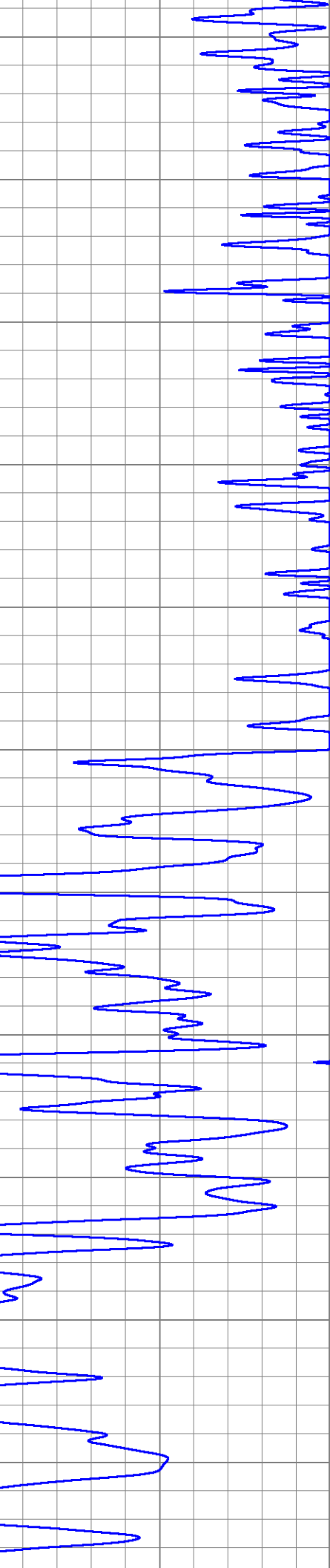
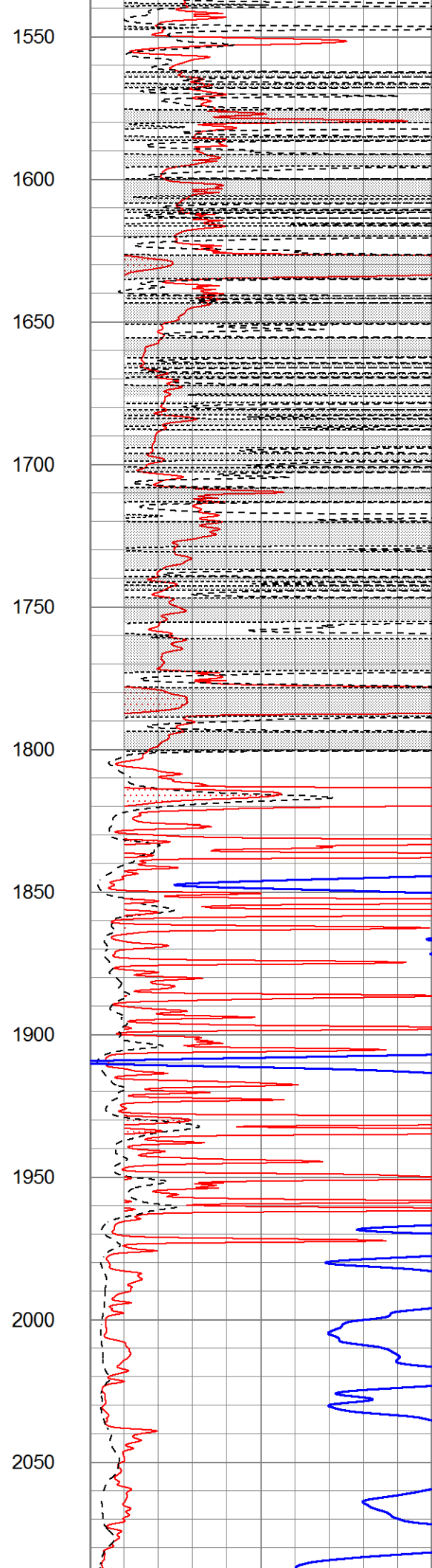
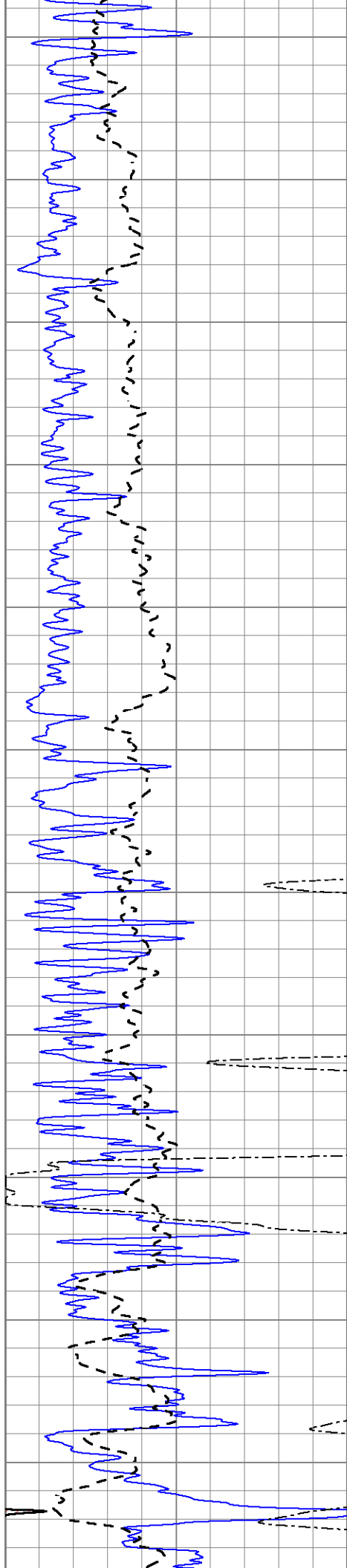
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0	RWA (Ohm-m)	1

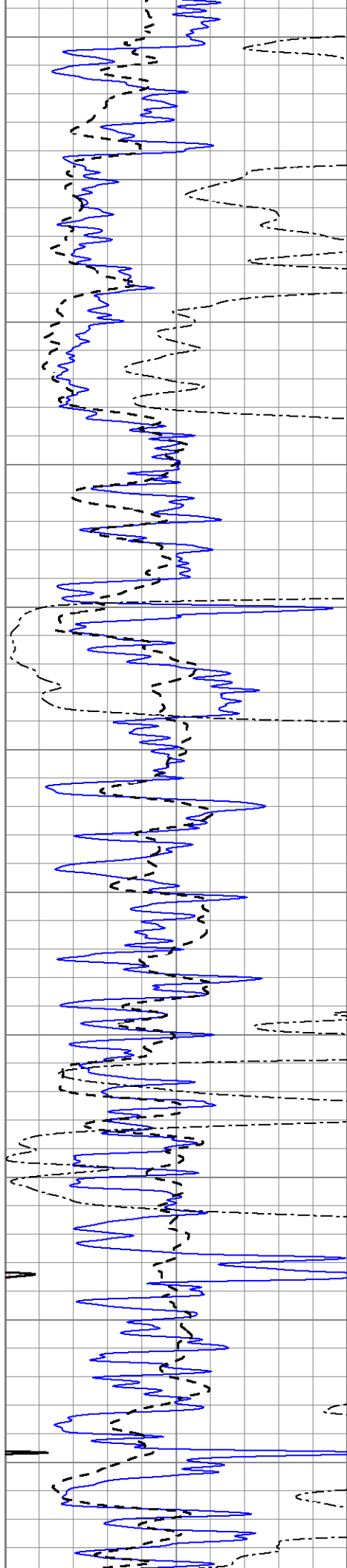
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500











2100

2150

2200

2250

2300

2350

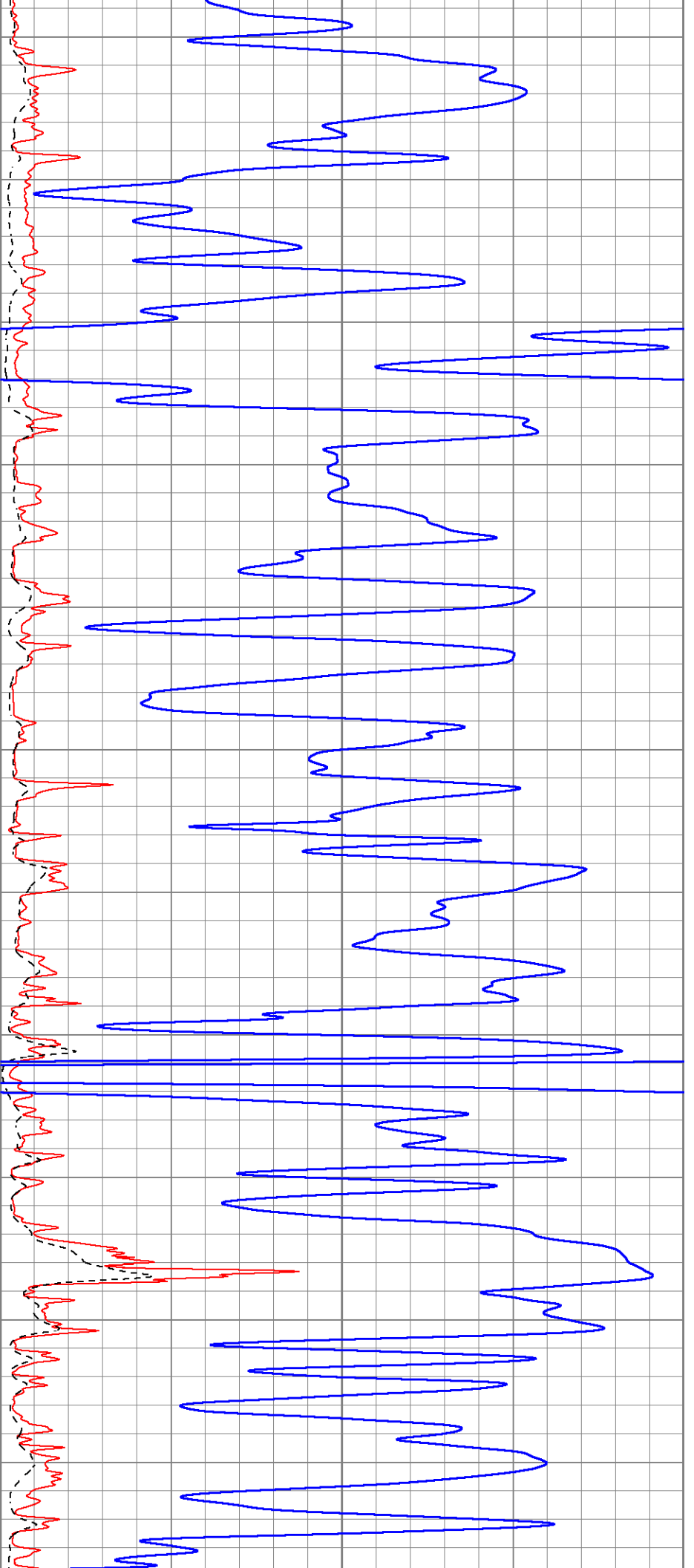
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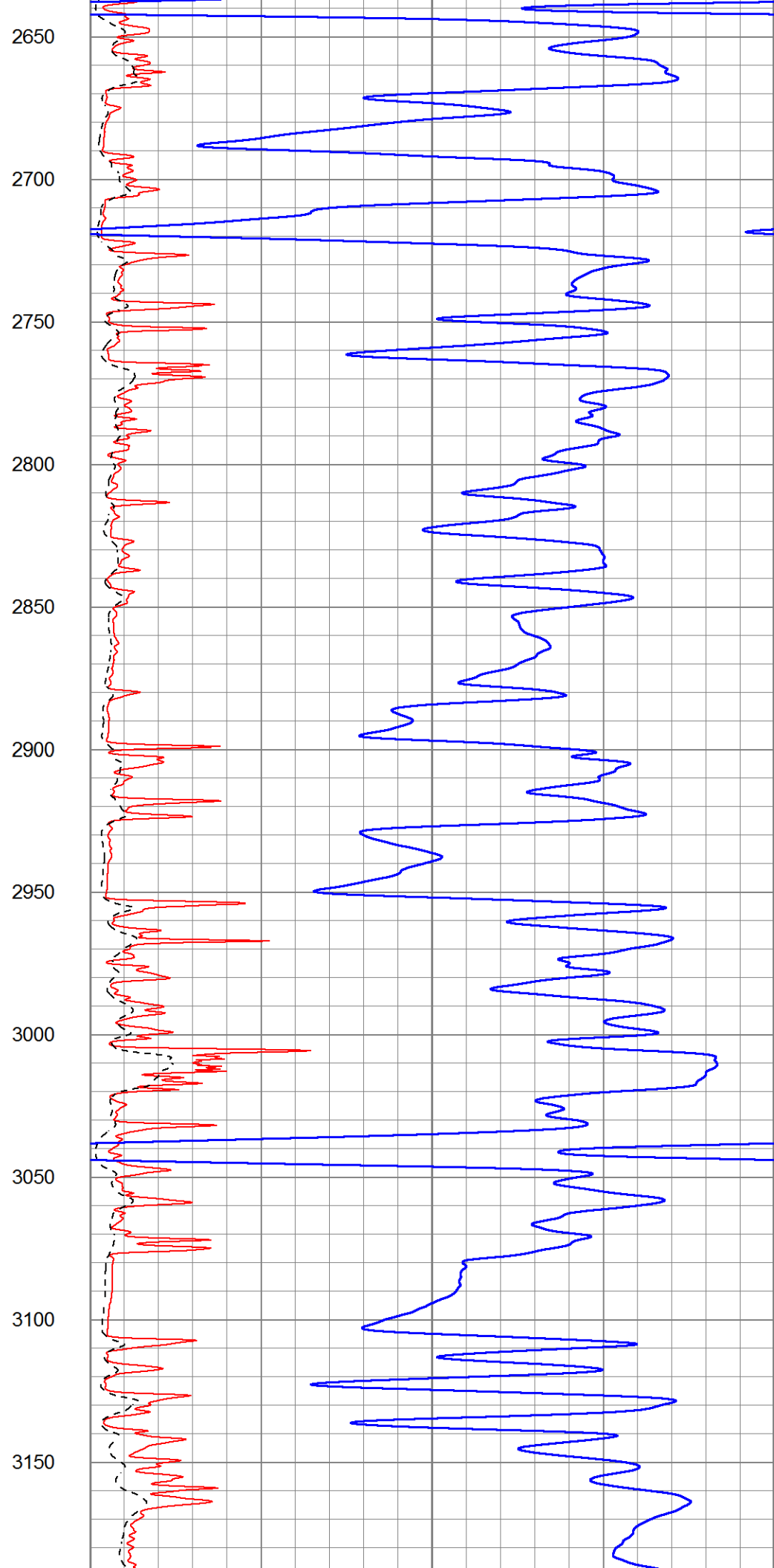
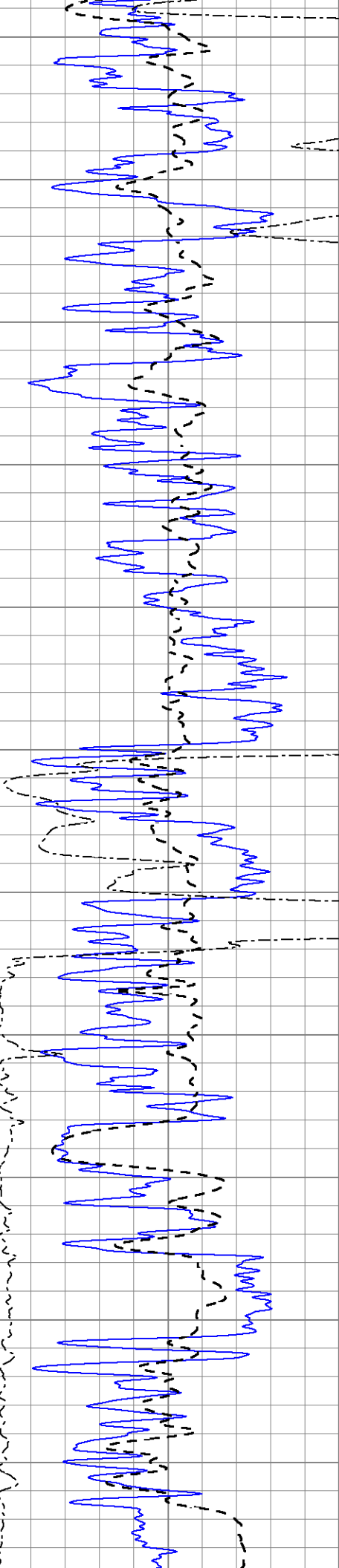
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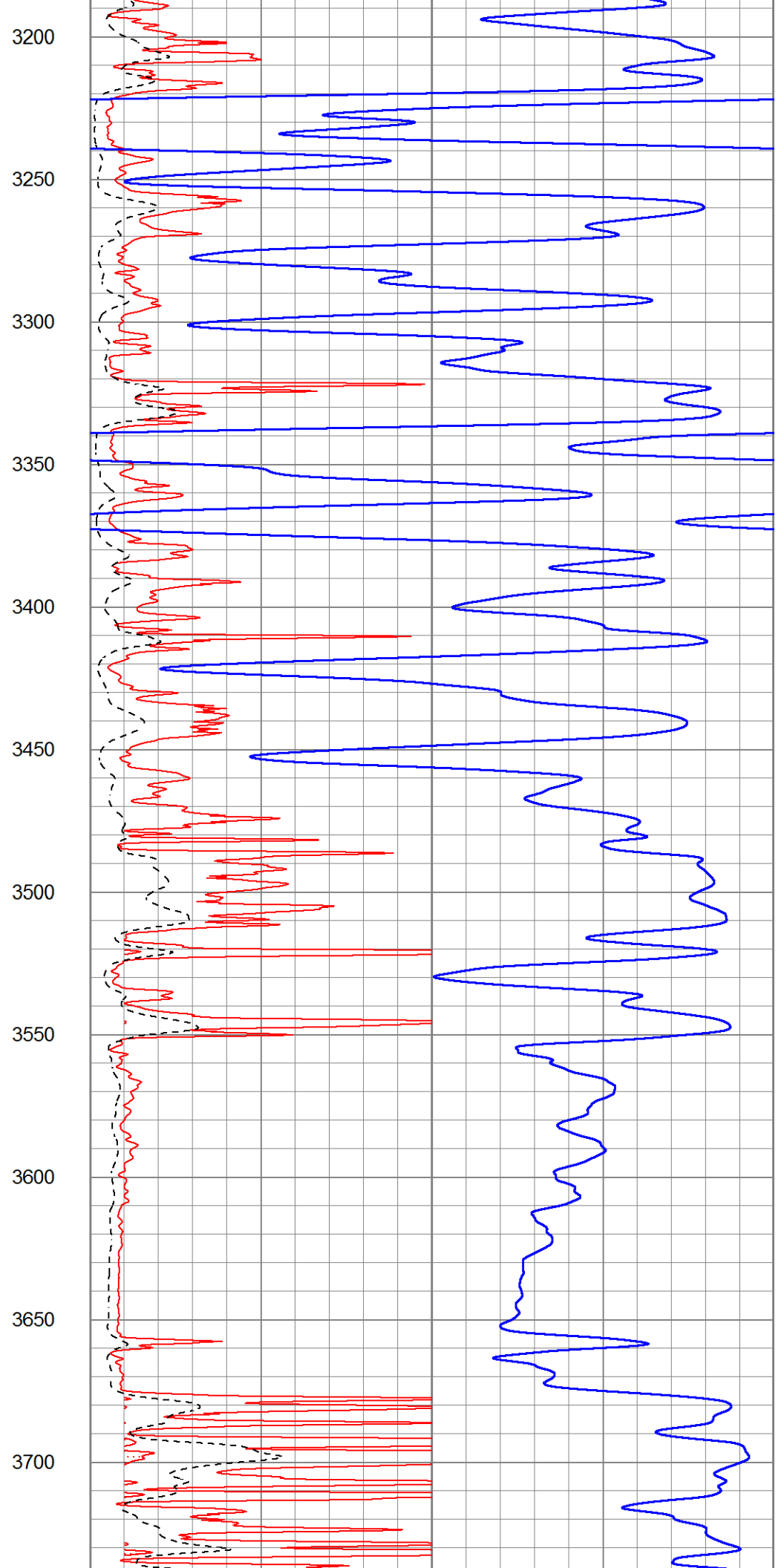
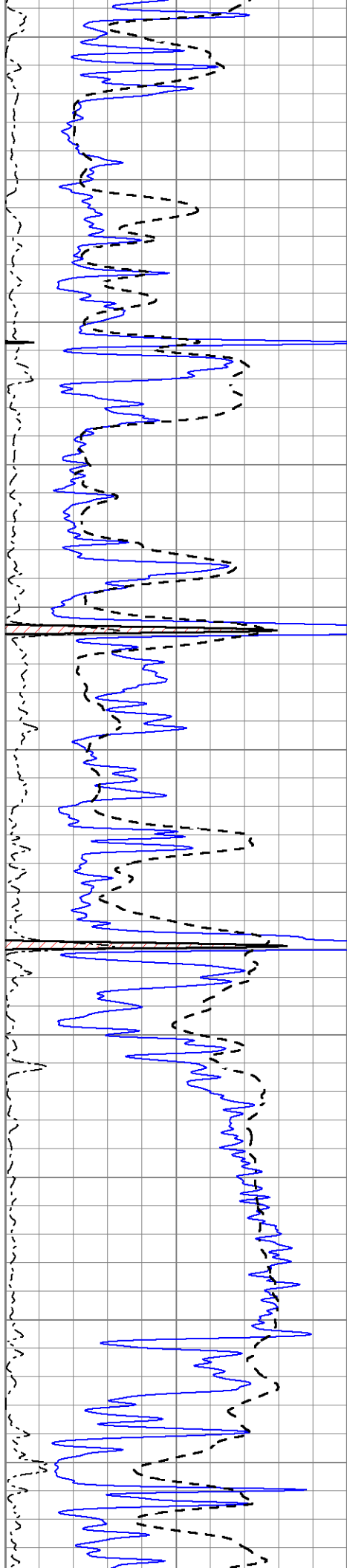
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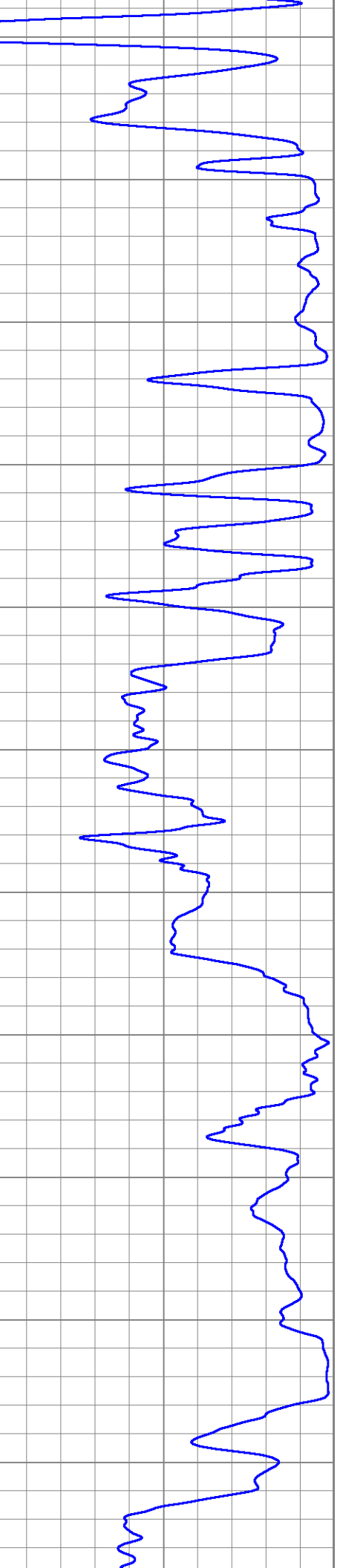
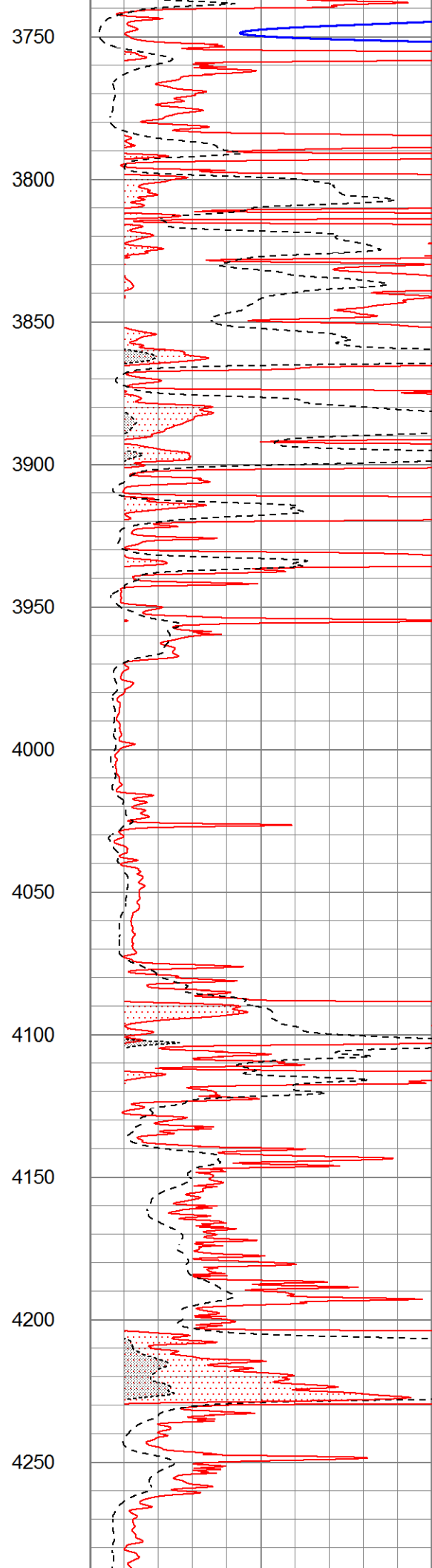
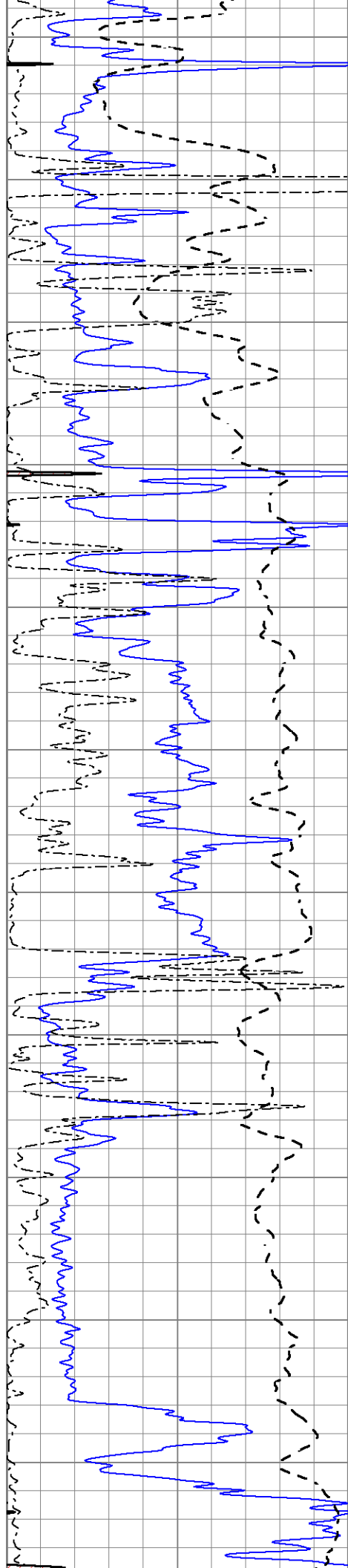
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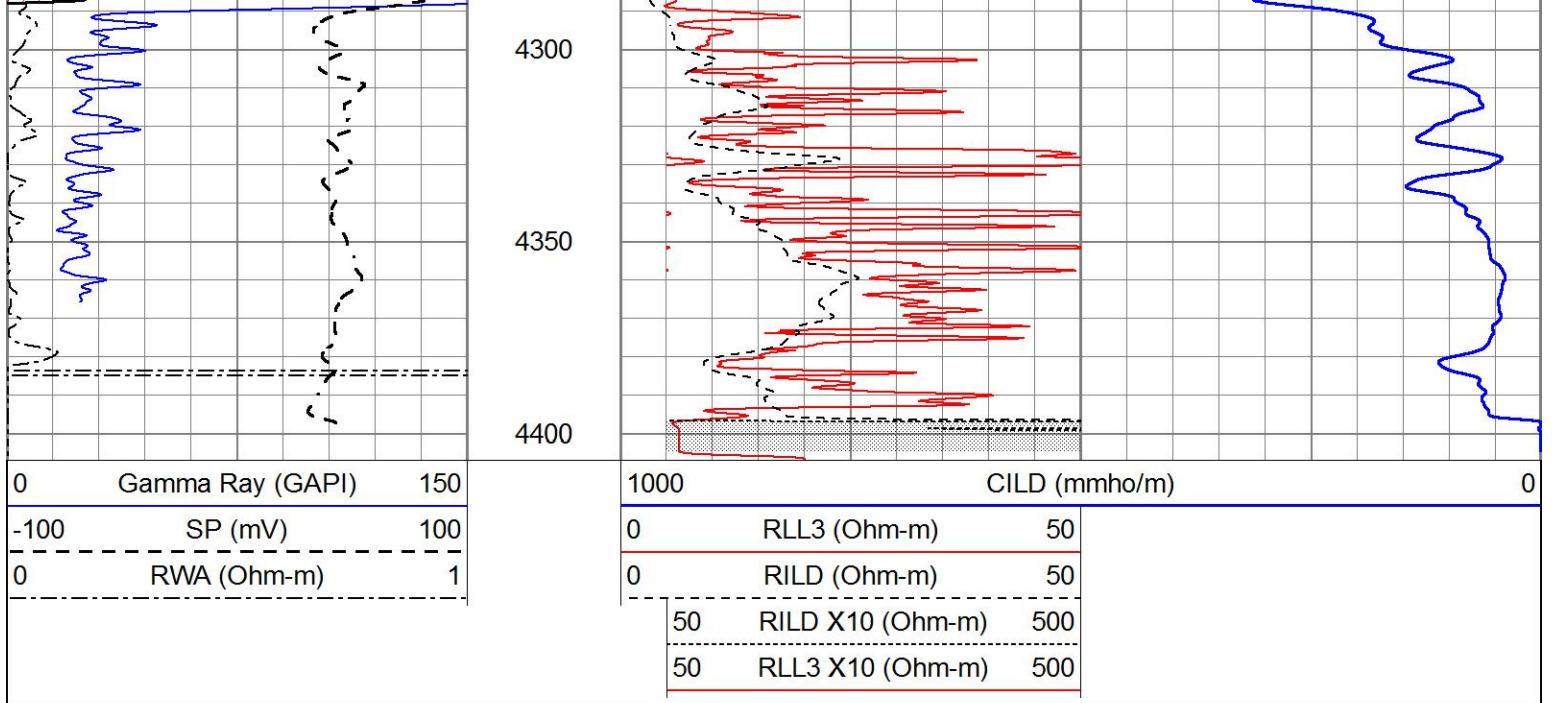
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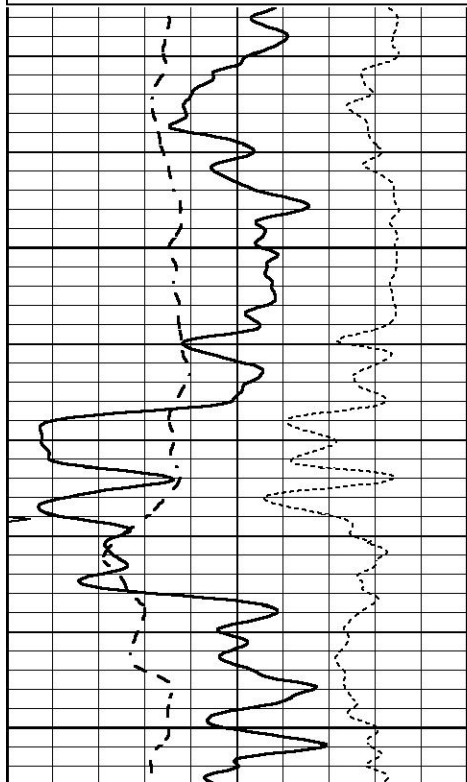




ANHYDRITE

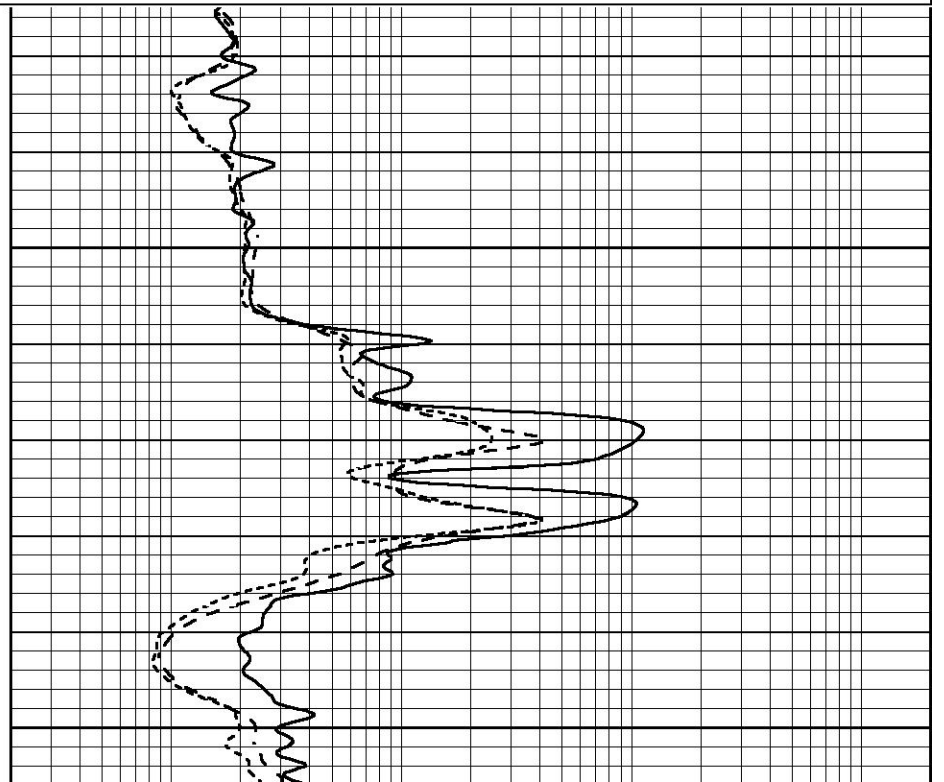
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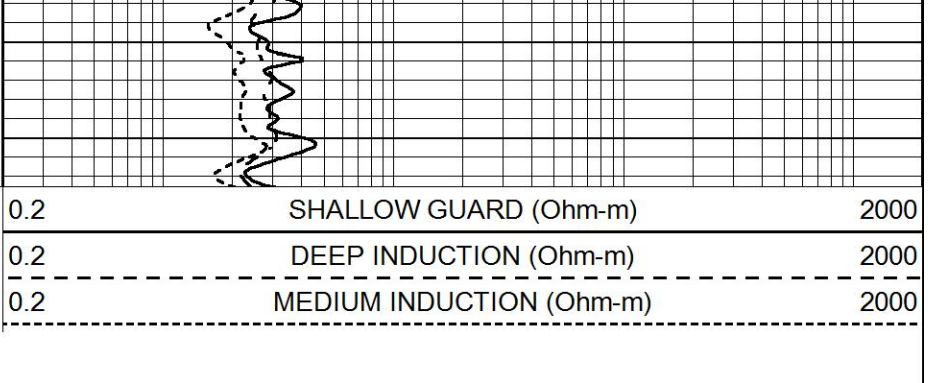
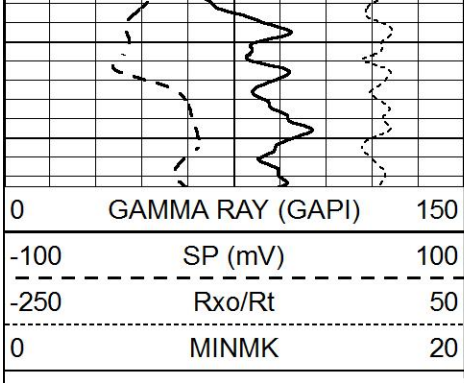
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-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			



900

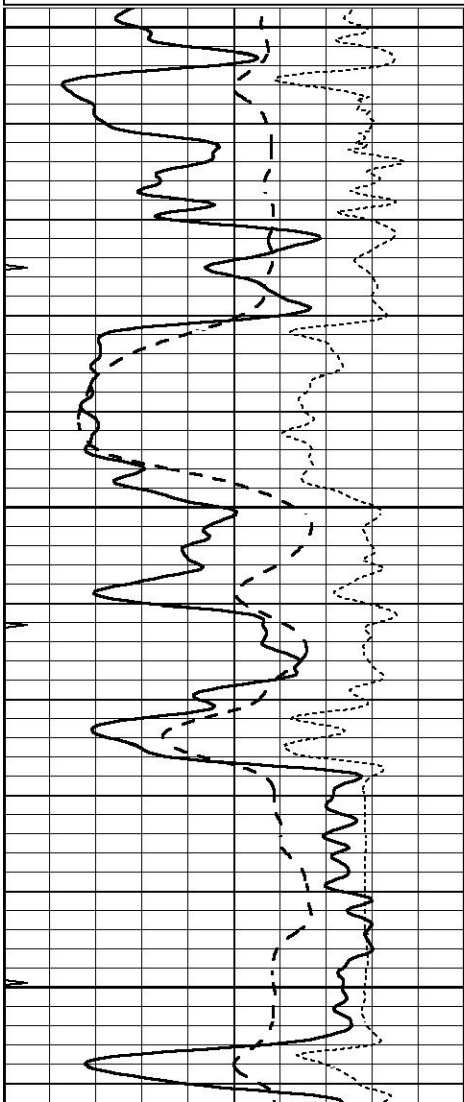
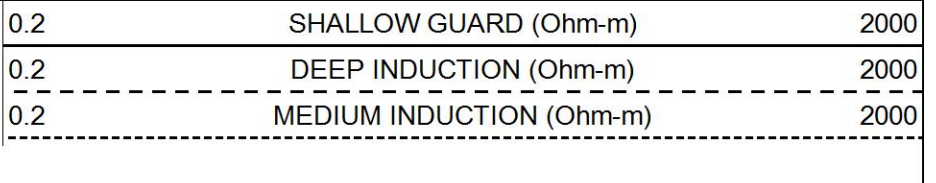
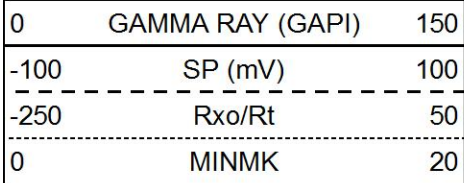
950





MAIN SECTION

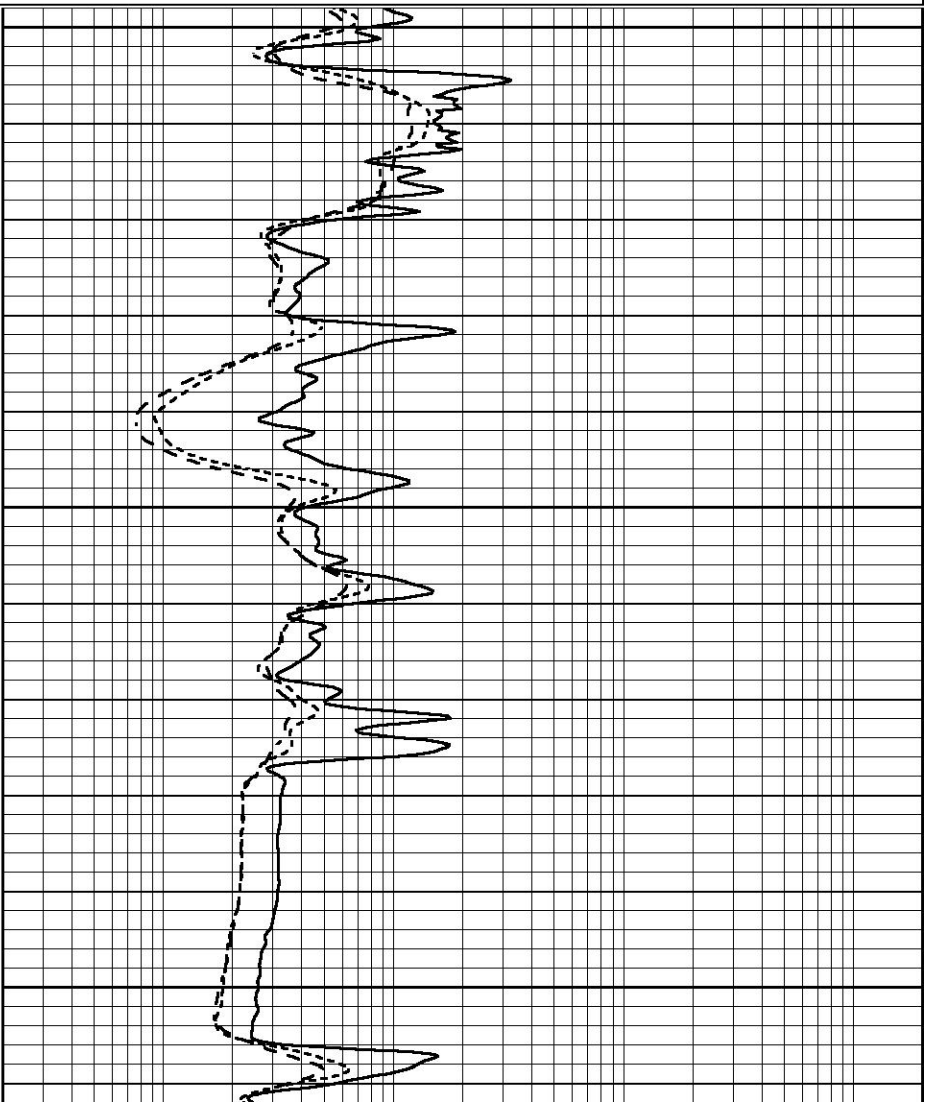
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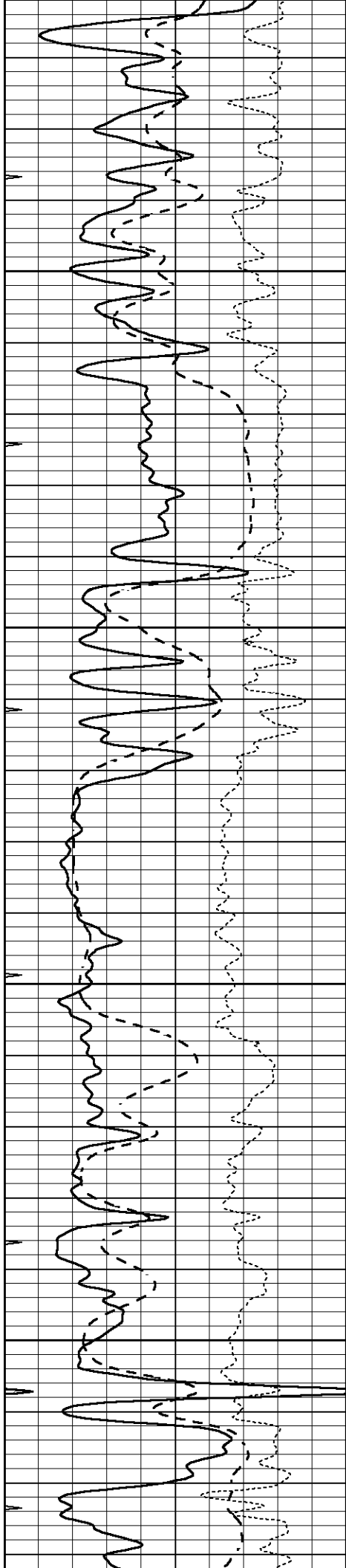


3000

3050

3100



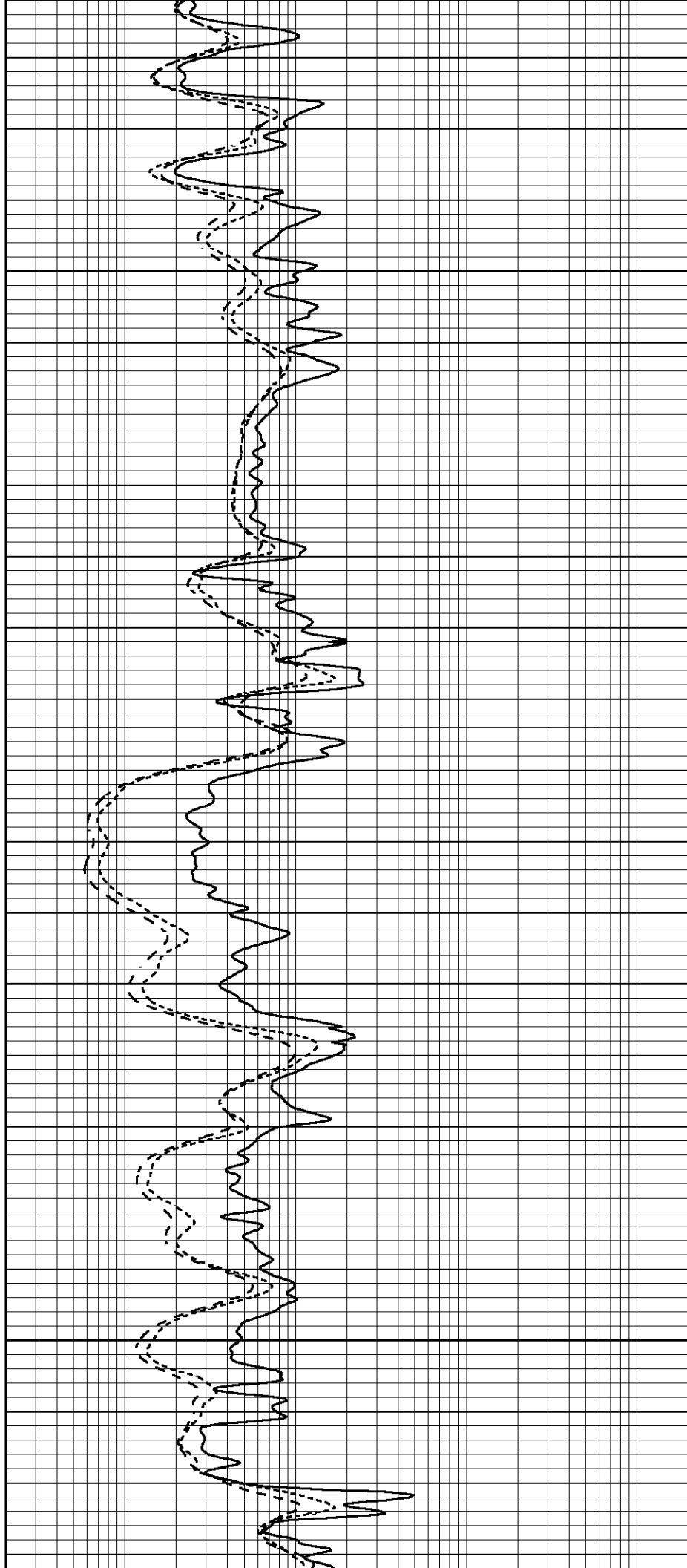


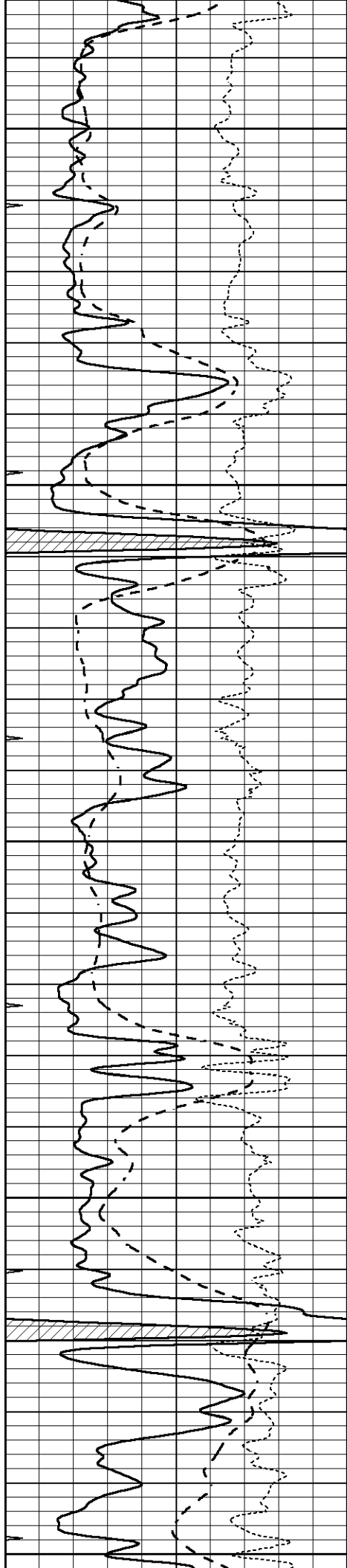
3150

3200

3250

3300





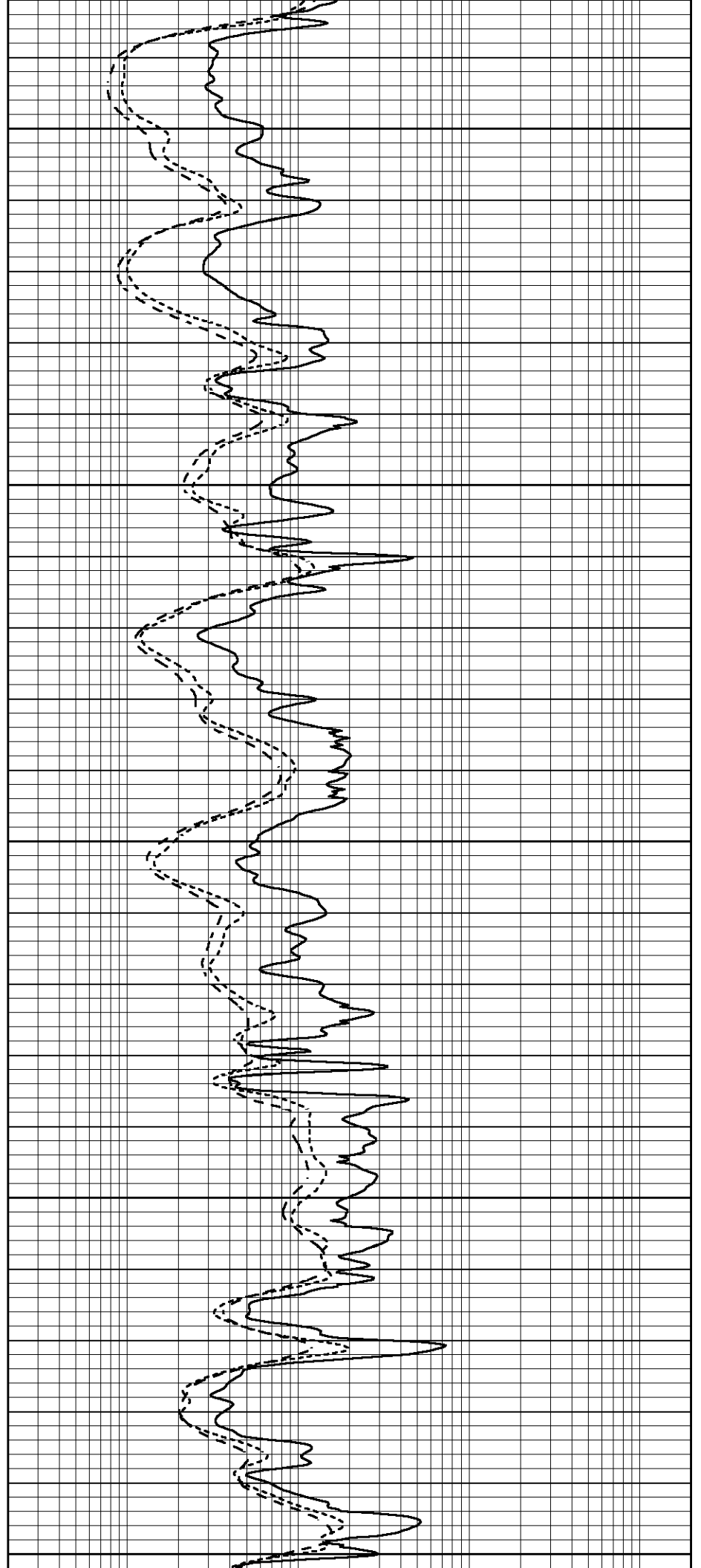
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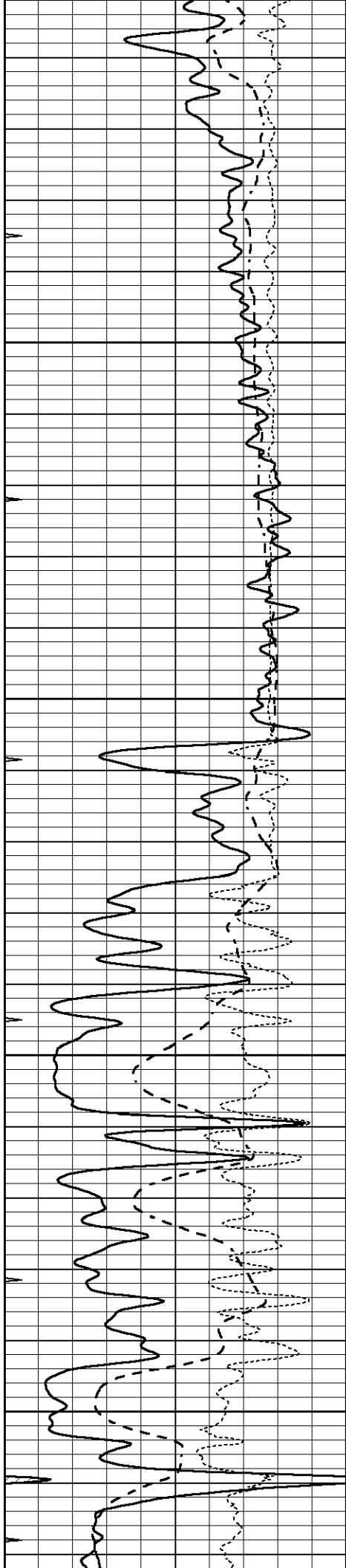
3400

3450

3500

3550



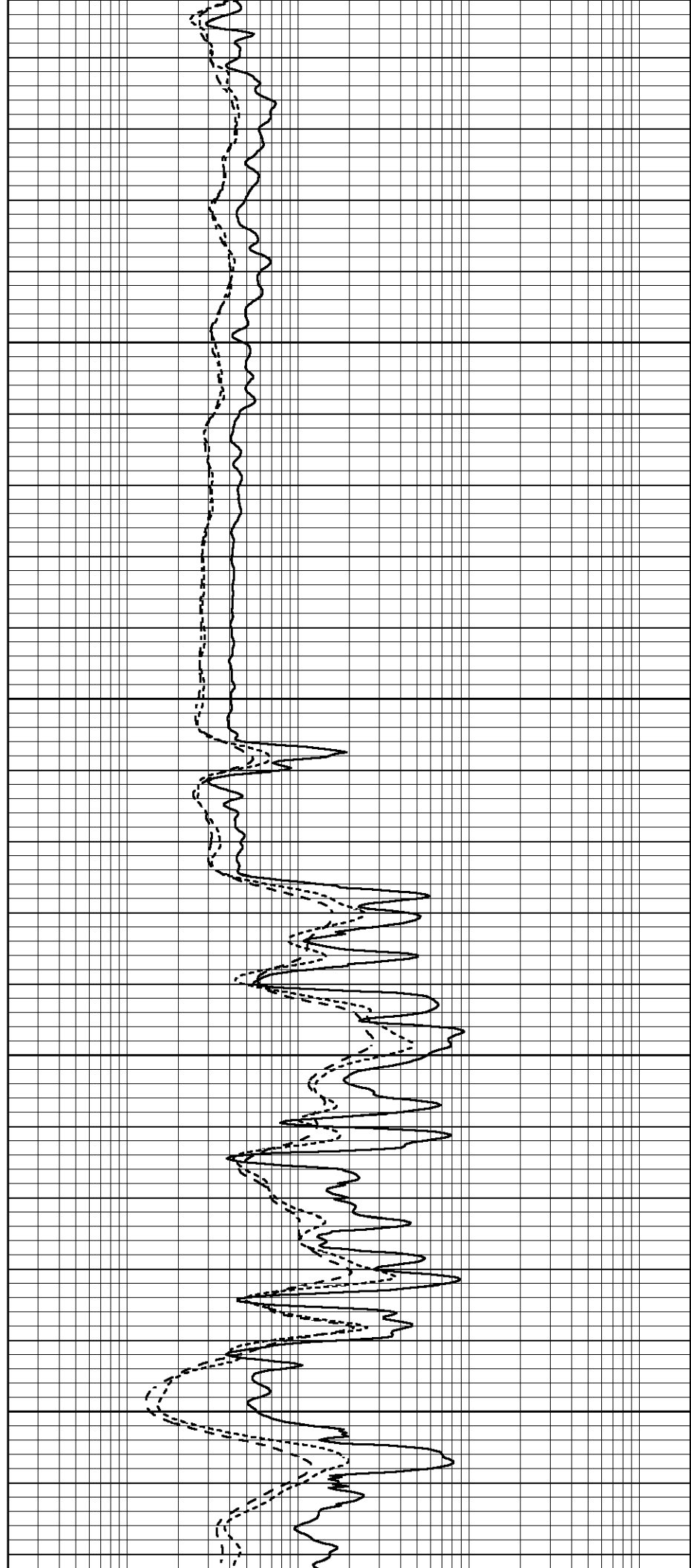


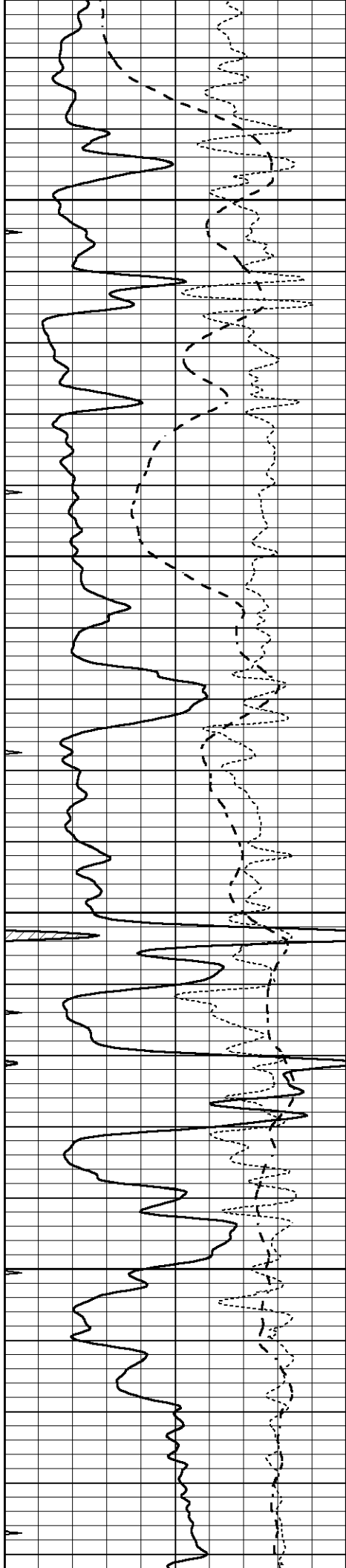
3600

3650

3700

3750



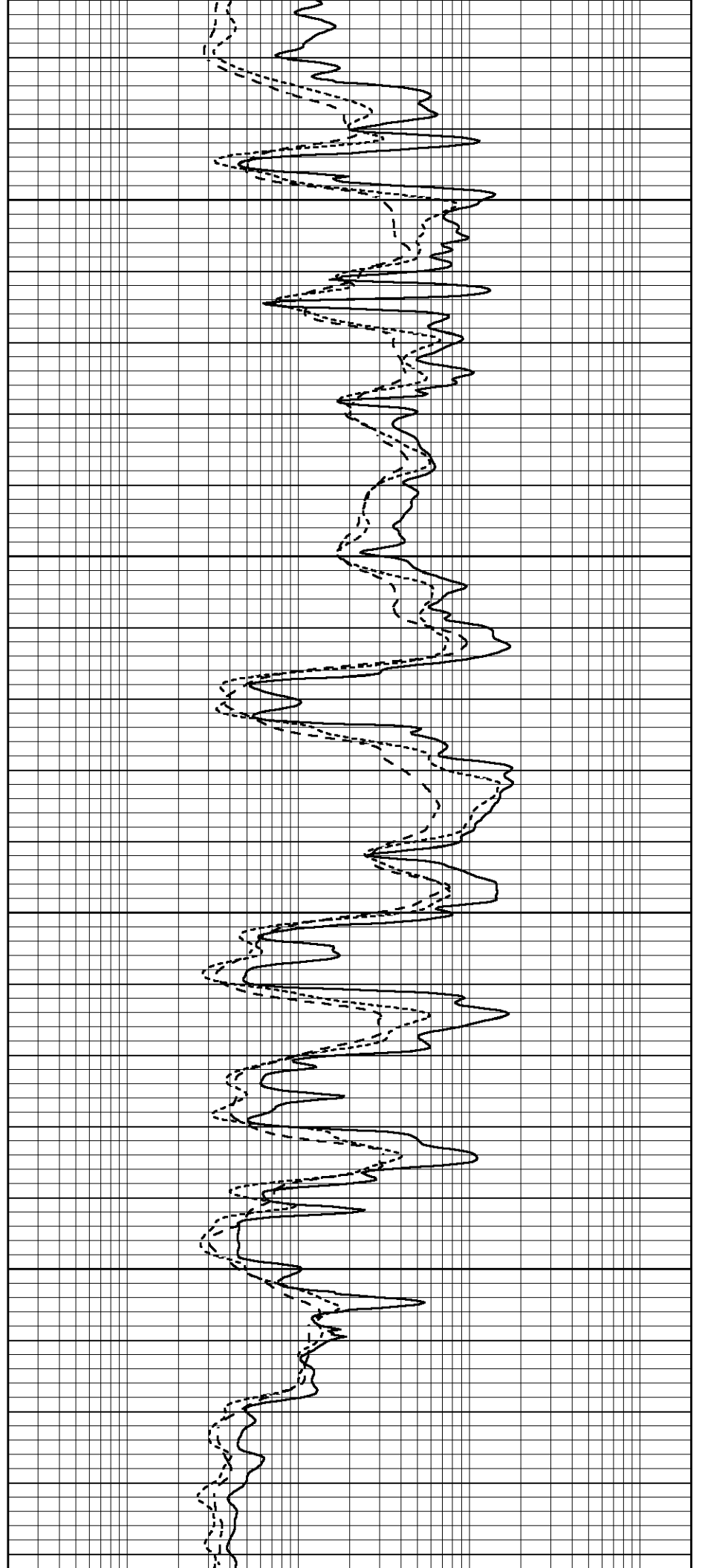


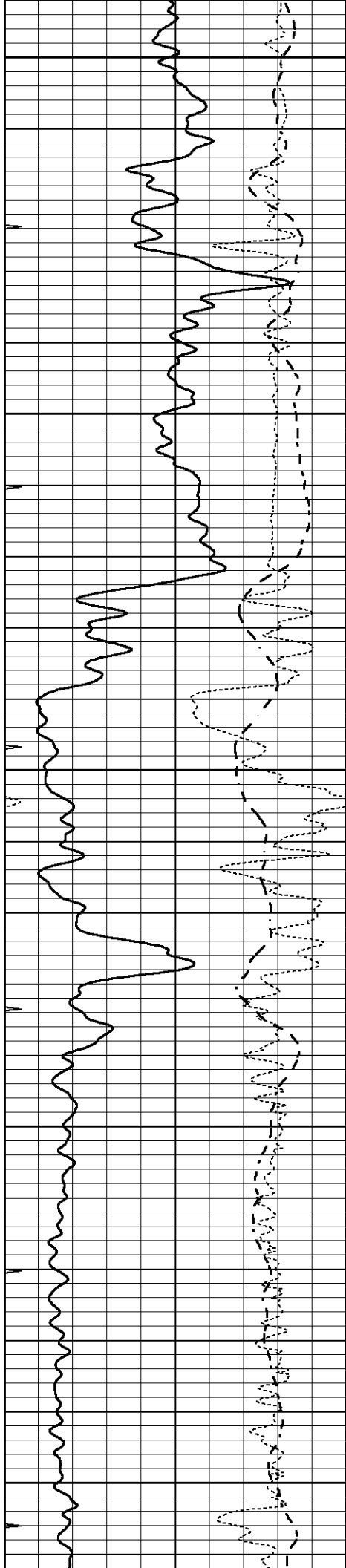
3800

3850

3900

3950





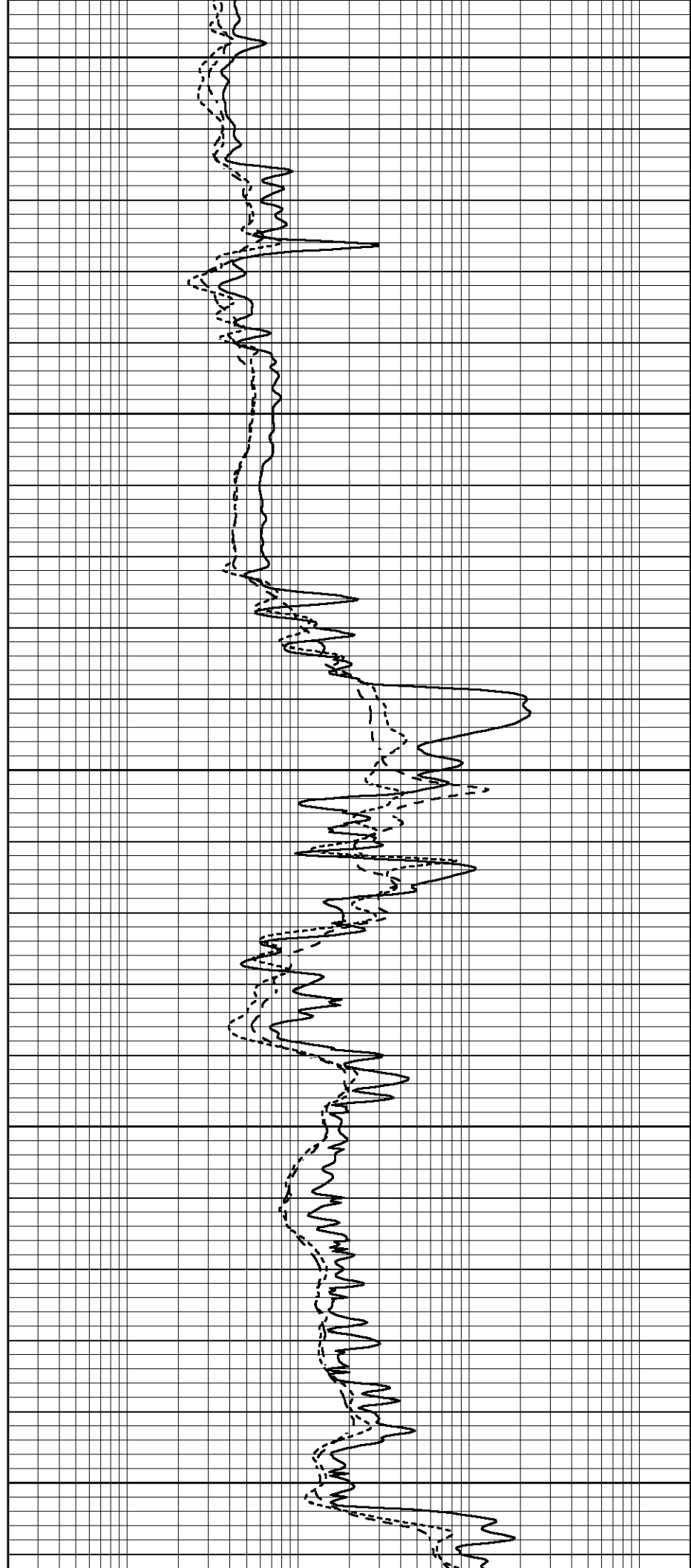
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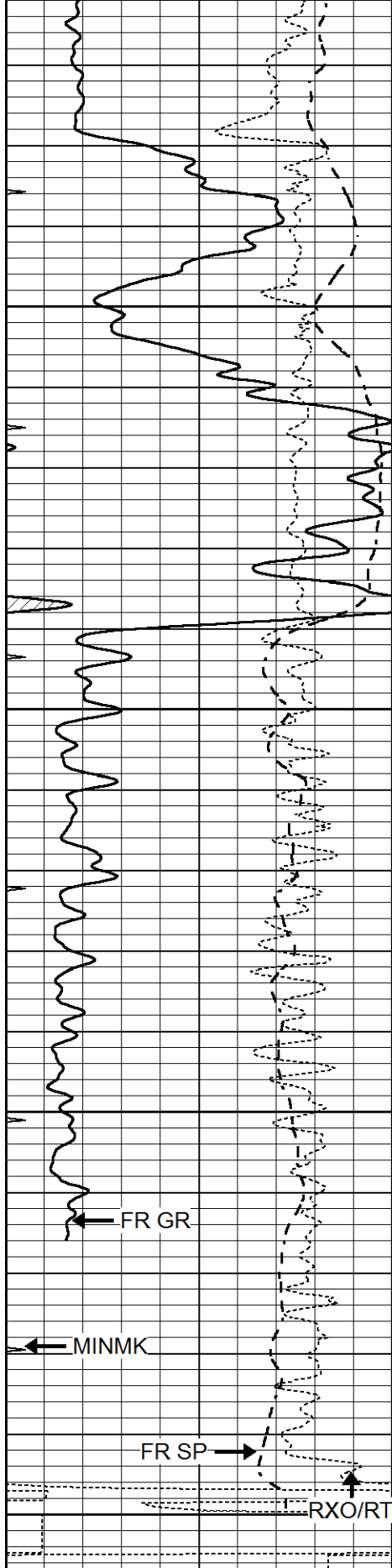
4050

4100

4150

4200





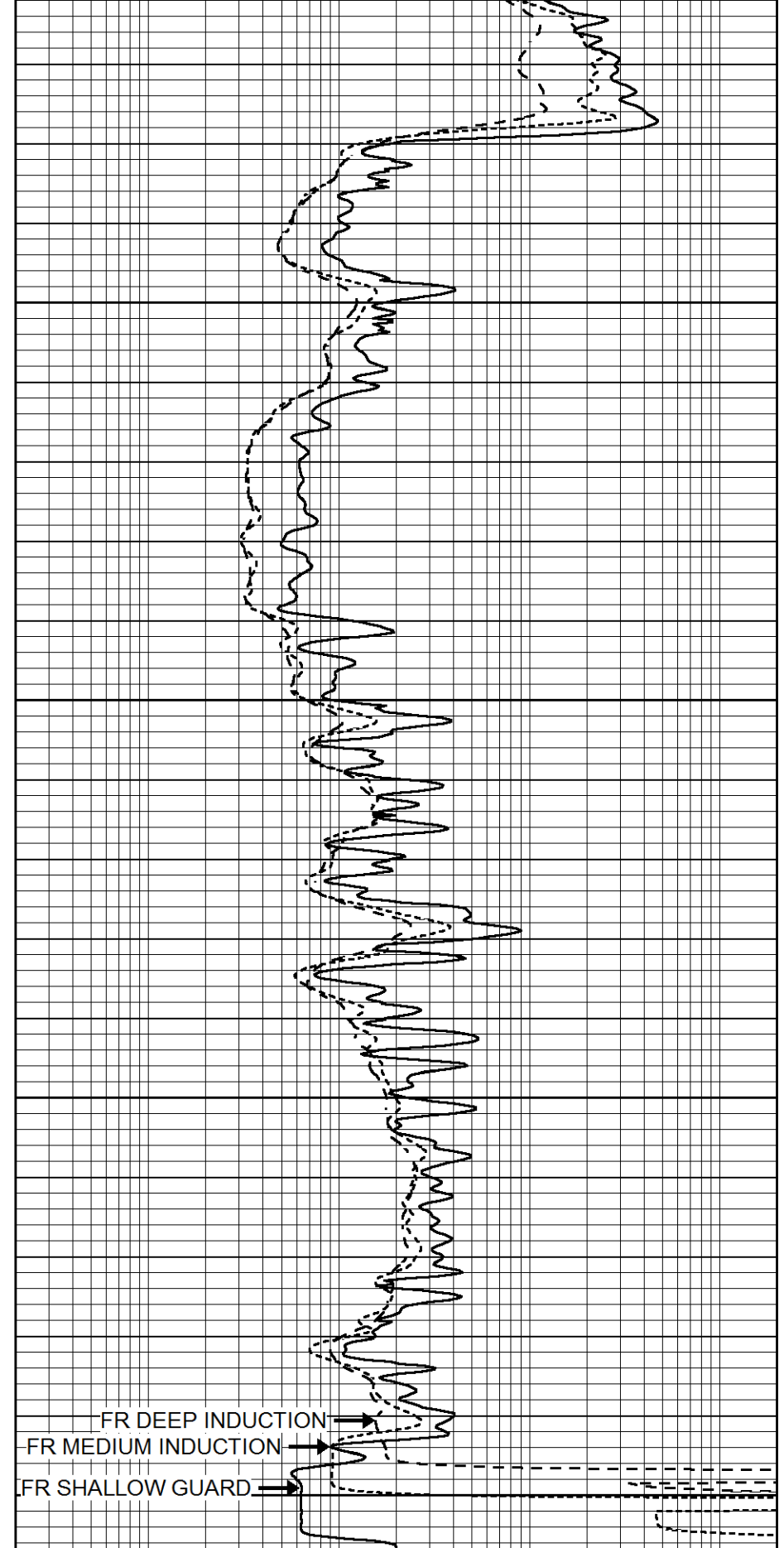
4250

4300

4350

4400
LTD 4402

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

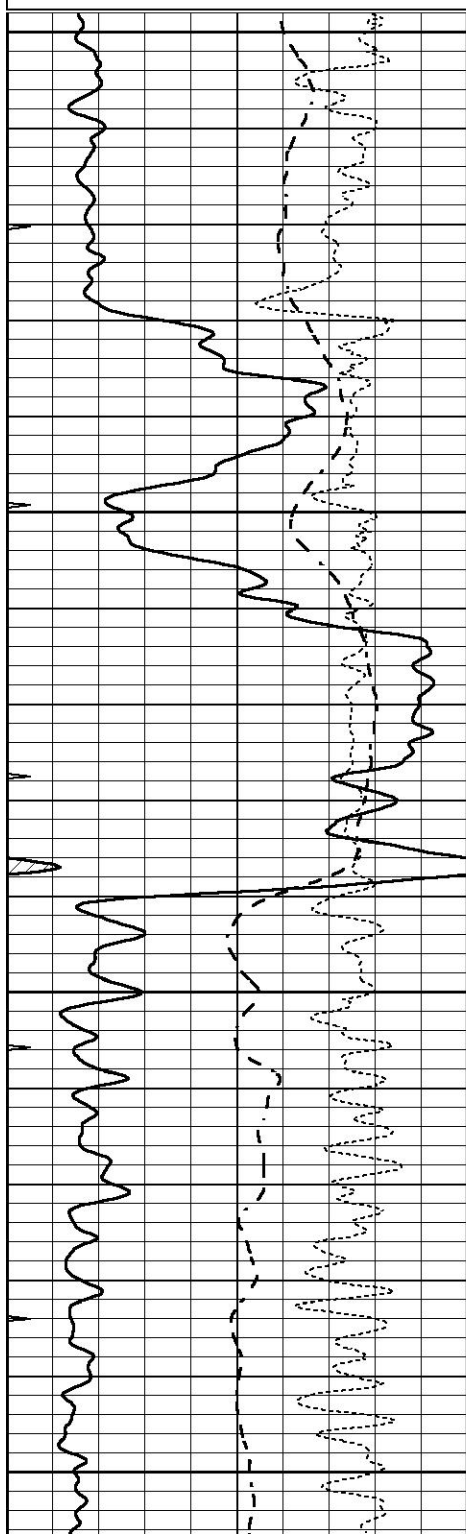


REPEAT SECTION

Database File 6257pe.db
 Dataset Pathname pass2.1R
 Presentation Format _dil
 Dataset Creation Sun Mar 06 20:07:43 2022
 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

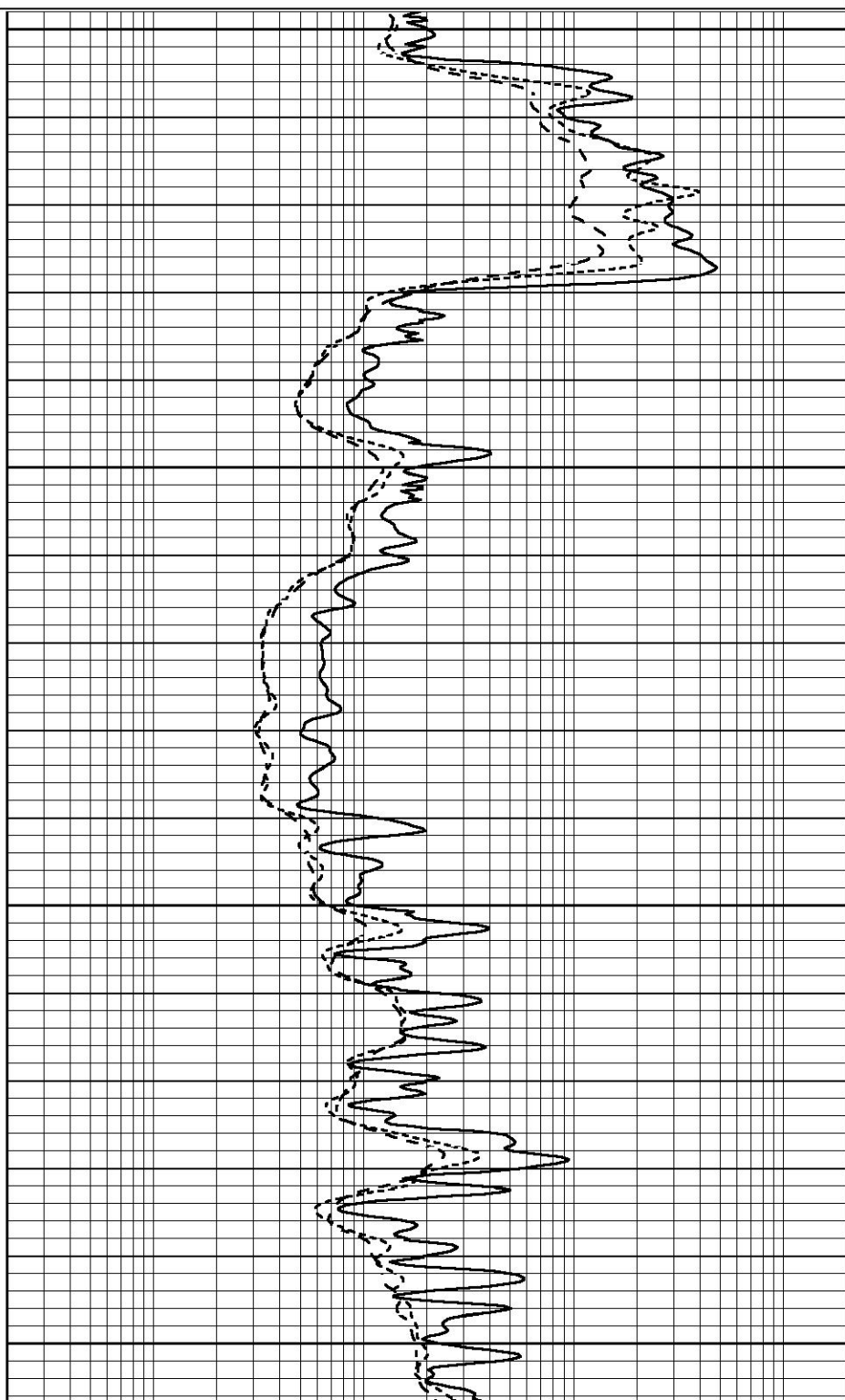


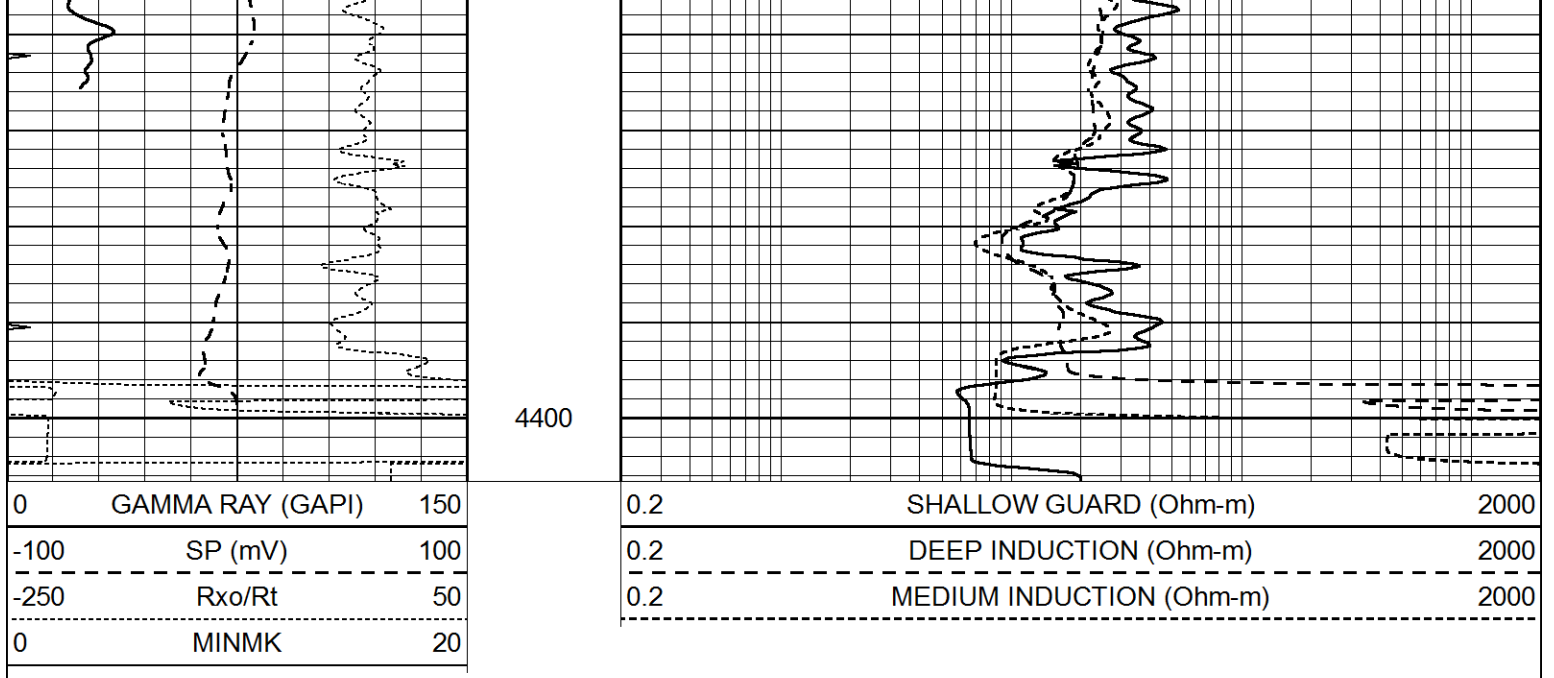
4200

4250

4300

4350





Calibration Report

Database File 6257pe.db
 Dataset Pathname pass3.1M
 Dataset Creation Sun Mar 06 20:07:22 2022

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG
 Surface Cal Performed: Sun Mar 06 18:45:31 2022
 Downhole Cal Performed: Wed Mar 11 11:31:19 2020
 After Survey Verification Performed: Wed Mar 11 11:31:22 2020

Surface Calibration

Loop:	Readings				References			Results	
	Air	Loop	V		Air	Loop	mmho/m	m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	720.000	-14.000	
Medium	0.039	0.728	V	0.000	464.000	mmho/m	720.000	-24.000	
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	V		Zero	Cal	mmho/m	m'	b'
Deep	0.000	0.000	V	14.508	388.384	mmho/m	1.000	0.000	
Medium	0.000	0.000	V	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	V		Zero	Cal	mmho/m	m'	b'
Deep	0.000	0.000	V	0.000	0.000	mmho/m	0.000	0.000	
Medium	0.000	0.000	V	0.000	0.000	mmho/m	0.000	0.000	
LL3		1.000	V		1.000	Ohm-m			
		0.000	V		0.000	Ohm-m			

0.000 Onm-m
1.000 mmho-m

0.000 Onm-m
1.000 mmho-m

Litho Density Calibration Report
Serial: 001 Model: PRB

Master Calibration

Performed Mon May 11 11:33:29 2020

	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	1593.8	10211.9	3449.0	3132.1	cps
Window 2	1486.7	8824.2	3065.6	2829.4	cps
Window 3	1206.8	4705.7	1944.6	1871.7	cps
Window 4	361.0	367.9	364.8	363.1	cps
Long Space	0.0	7337.5	1578.9	1342.7	cps
Short Space	2.7	2543.4	1657.9	1382.7	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	
Rib Angle	: 44.4	Rib Slope	: 0.980	Density/Spine Ratio	: 0.552
Spine Angle	: 74.4	Spine Slope	: 3.590	Spine Intercept	: -19.2

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: 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
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Short Space
Long Space

cps
cps

pu

pu

Gamma Ray Calibration Report

Serial Number:	070558	
Tool Model:	OPEN_GR	
Performed:	Wed Mar 02 14:49:46 2022	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2800	GAPI/cps