



DUAL INDUCTION LOG

Company		MULL DRILLING COMPANY, INC.	
Well		CARTER - JOHNSON #1-1	
Field		PRAIRIE RIDGE NORTHWEST	
County		LANE	State KANSAS
Location:		API # : 15-101-22672-0000 2164' FNL & 200' FEL NE - SE - SE - NE	
Permanent Datum		SEC 1 TWP 16S RGE 27W	Other Services CDL/CNL/PE MEL/SONIC
Log Measured From		GROUND LEVEL Elevation 2619	
Drilling Measured From		KELLY BUSHING 7' A.G.L KELLY BUSHING	Elevation K.B. 2626 D.F. 2624 G.L. 2619
Date	5/16/22		
Run Number	ONE		
Depth Driller	4625		
Depth Logger	4625		
Bottom Logged Interval	4623		
Top Log Interval	00		
Casing Driller	8 5/8"@223'		
Casing Logger	223		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2000 PPM	
Density / Viscosity	9.3/57		
pH / Fluid Loss	10.0/5.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.55@76F		
Rmf @ Meas. Temp	1.17@76F		
Rmc @ Meas. Temp	1.86@76F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.966@122F		
Time Circulation Stopped	2.5 HOURS		
Time Logger on Bottom	10:30 P.M.		
Maximum Recorded Temperature	122F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	BLAKE MILLER		

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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

UTICA, KS., 3W. TO "RD. C" (CASTLE ROCK RD.) 4N., 1/2W. INTO

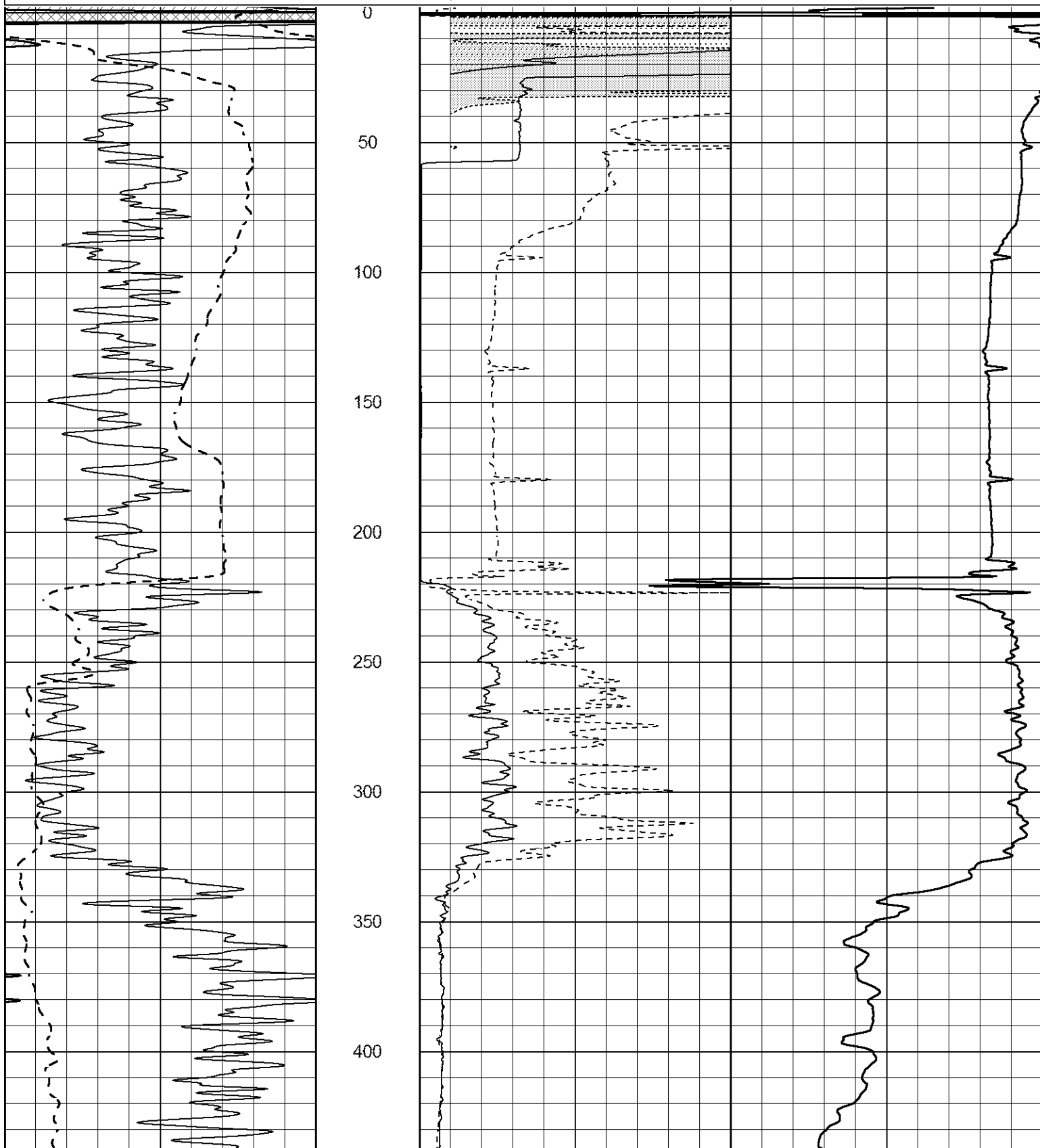


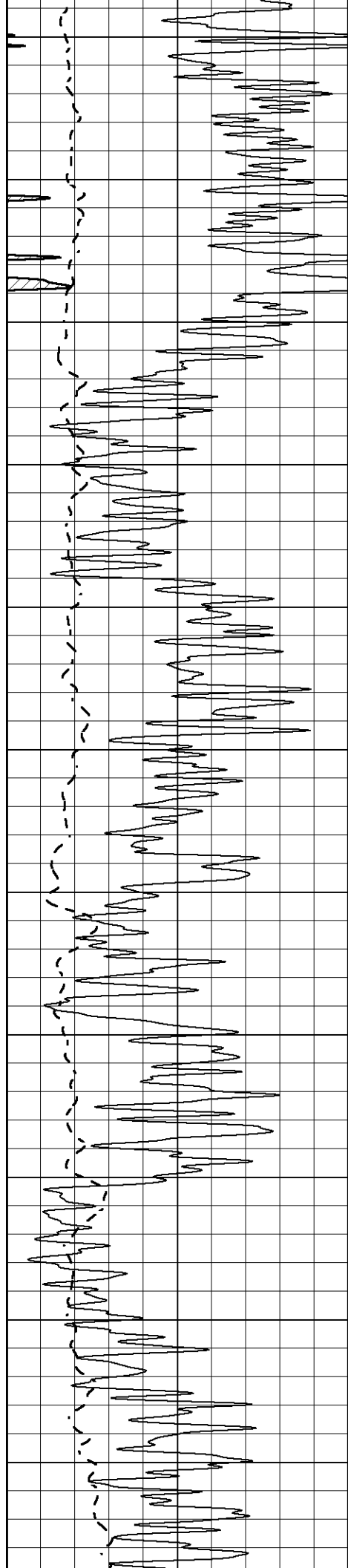
MAIN SECTION

Database File 6527pe.db
Dataset Pathname pass3.1M
Presentation Format dil2
Dataset Creation Tue May 17 00:20:39 2022
Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-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





450

500

550

600

650

700

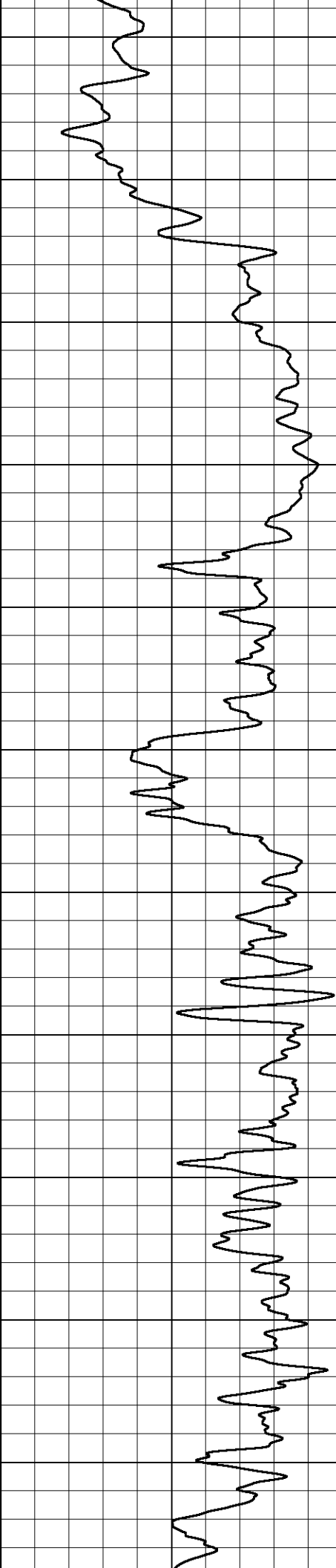
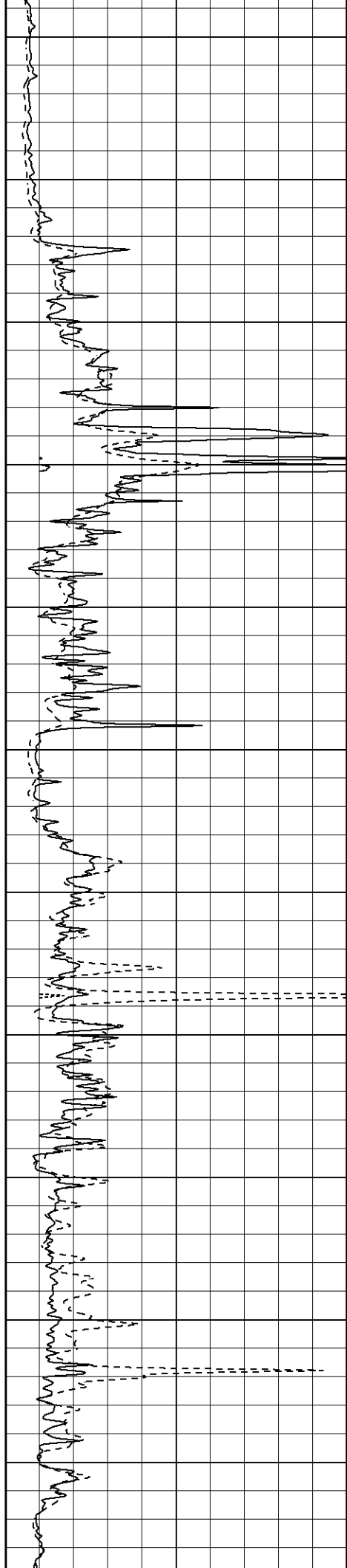
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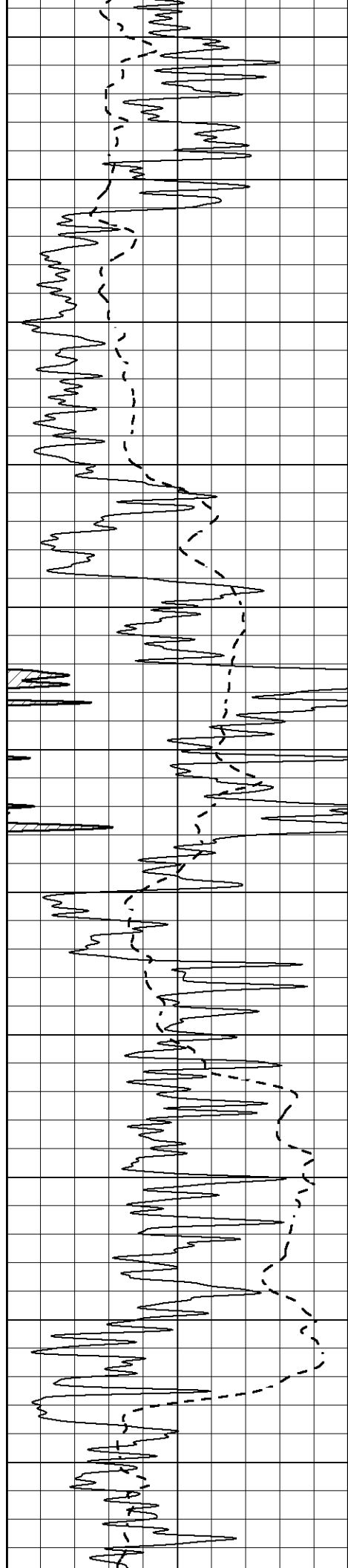
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850

900

950





1000

1050

1100

1150

1200

1250

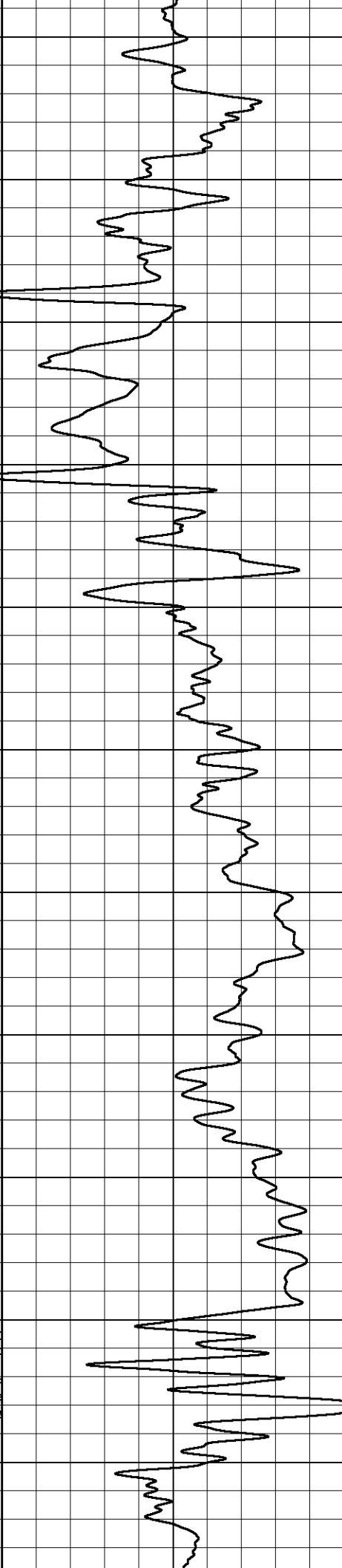
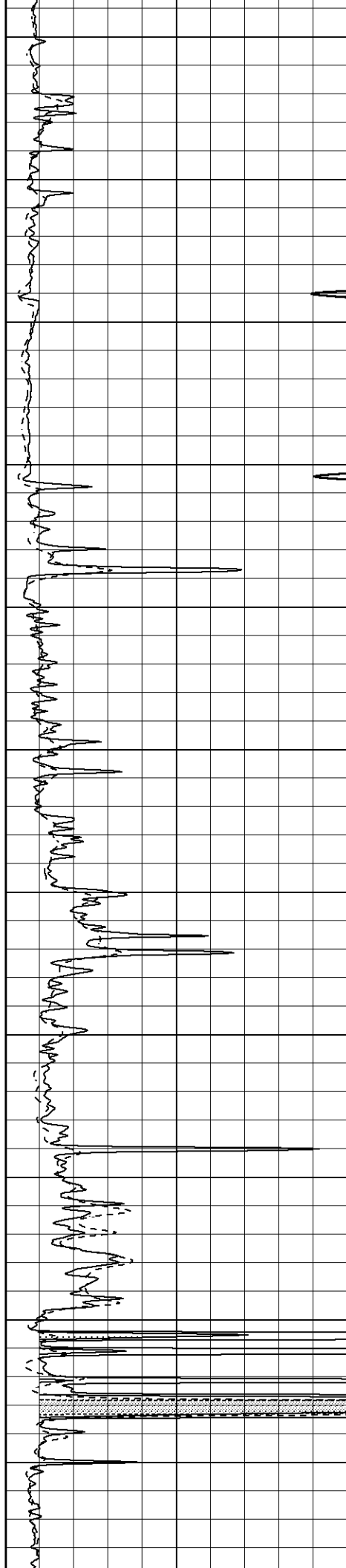
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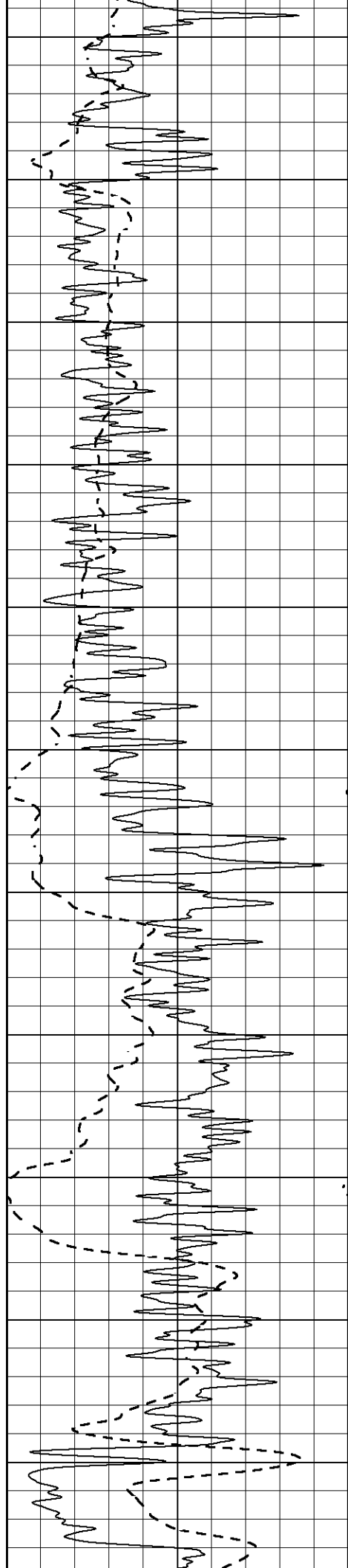
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1400

1450

1500





1550

1600

1650

1700

1750

1800

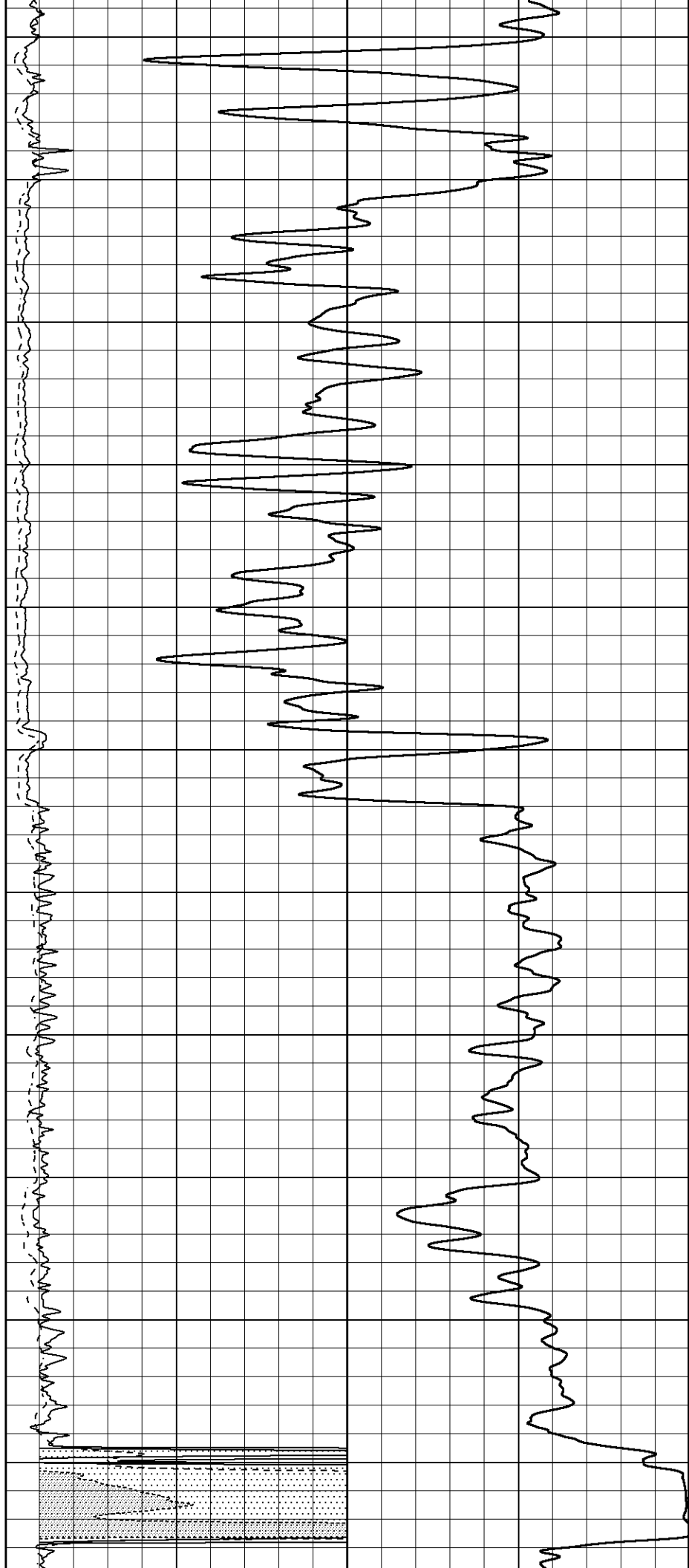
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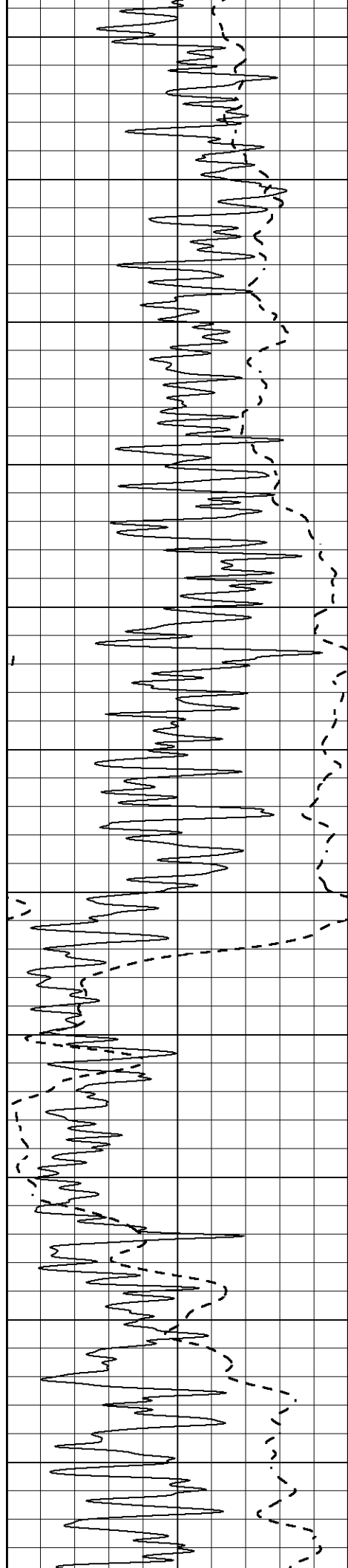
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1950

2000

2050





2100

2150

2200

2250

2300

2350

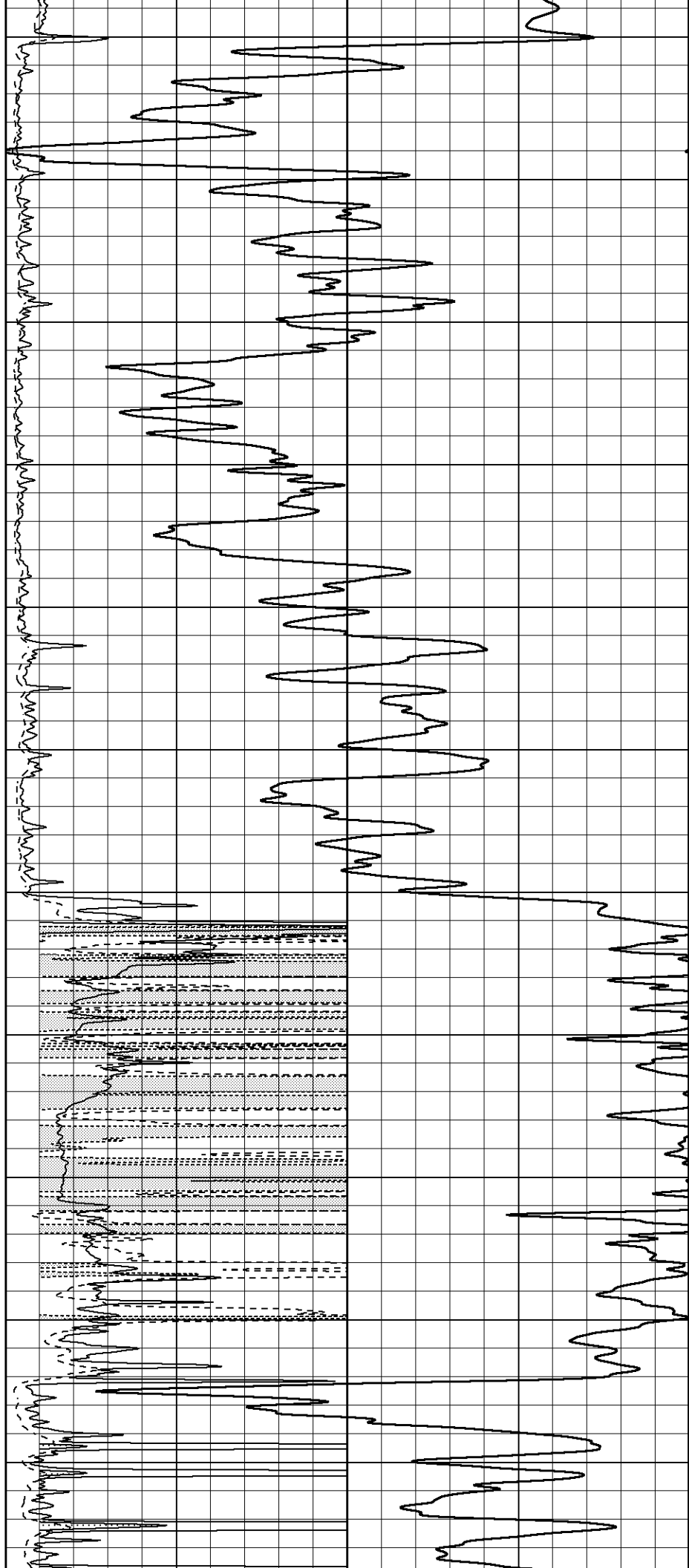
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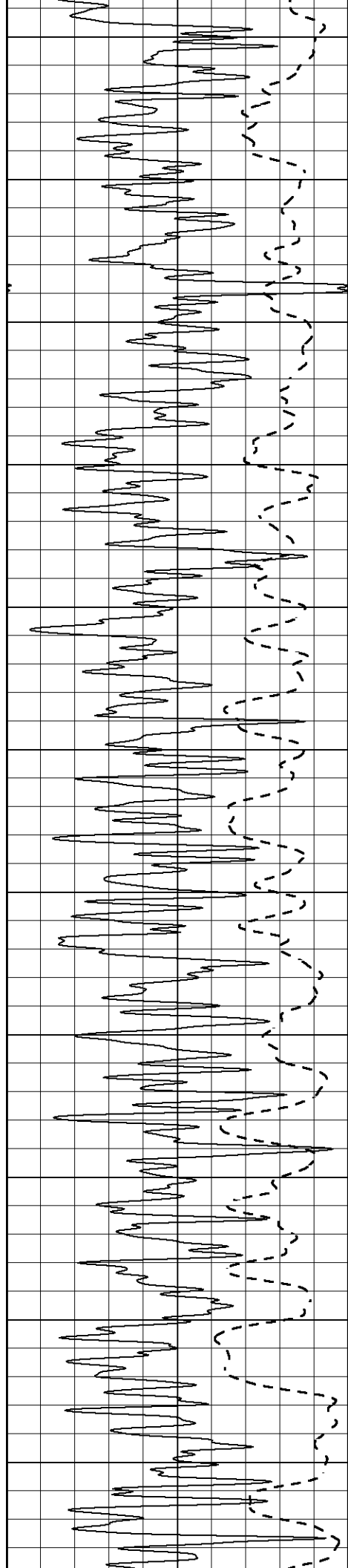
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2500

2550

2600





2650

2700

2750

2800

2850

2900

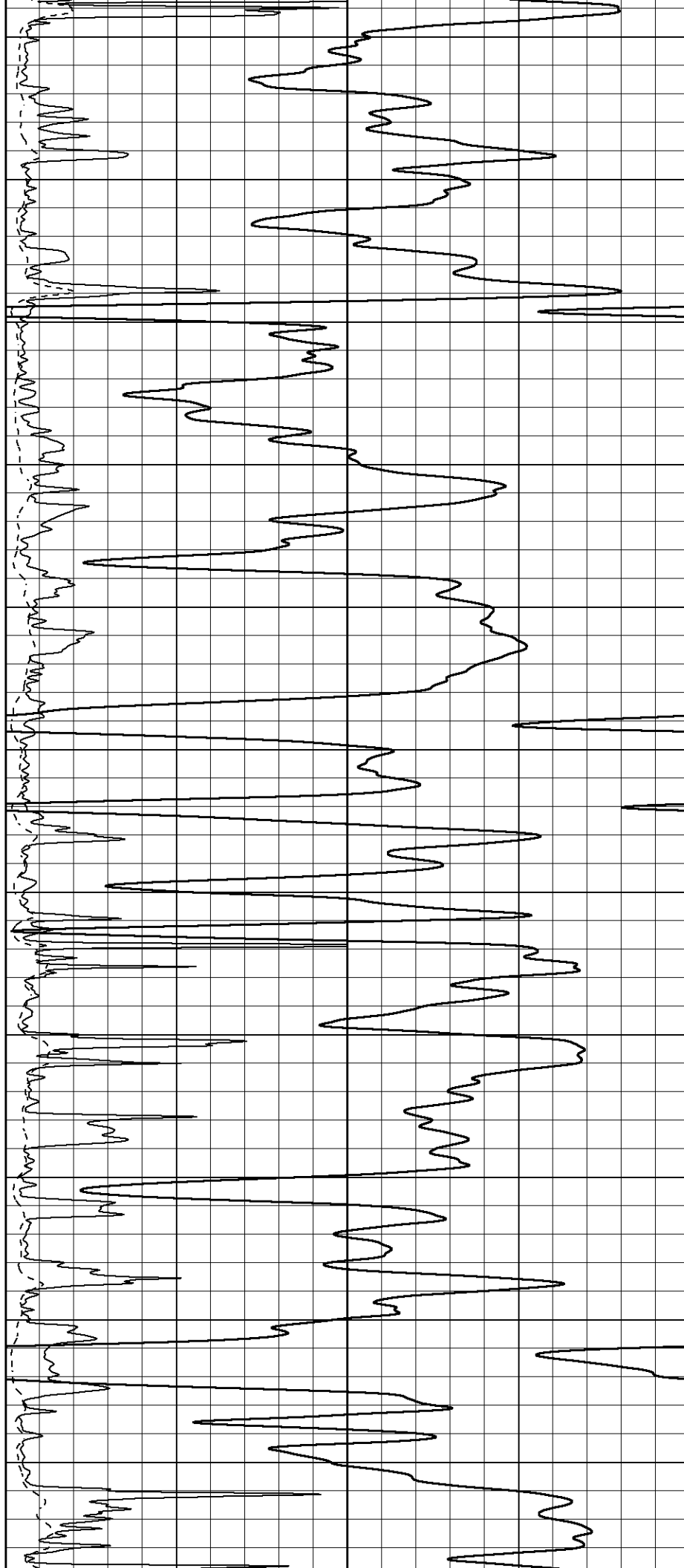
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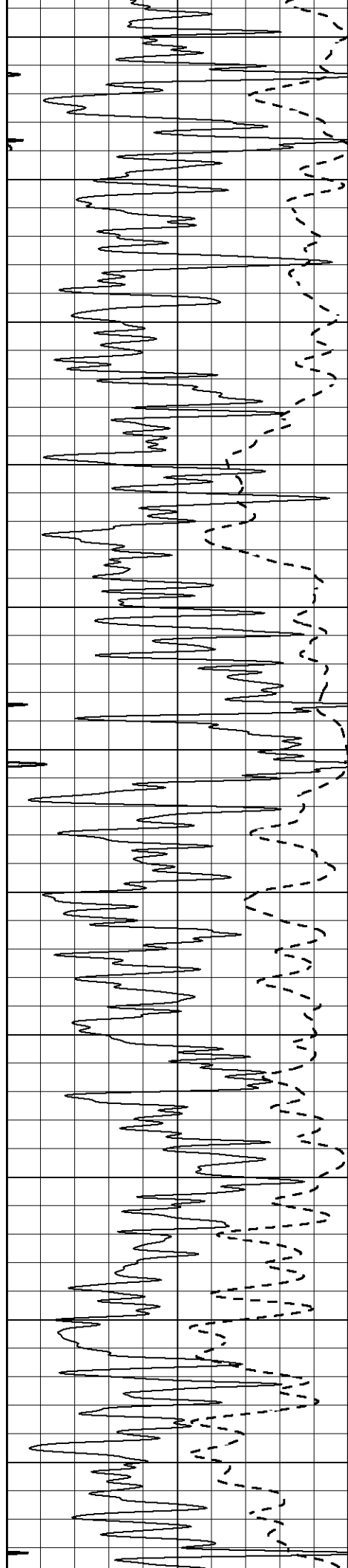
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3050

3100

3150





3200

3250

3300

3350

3400

3450

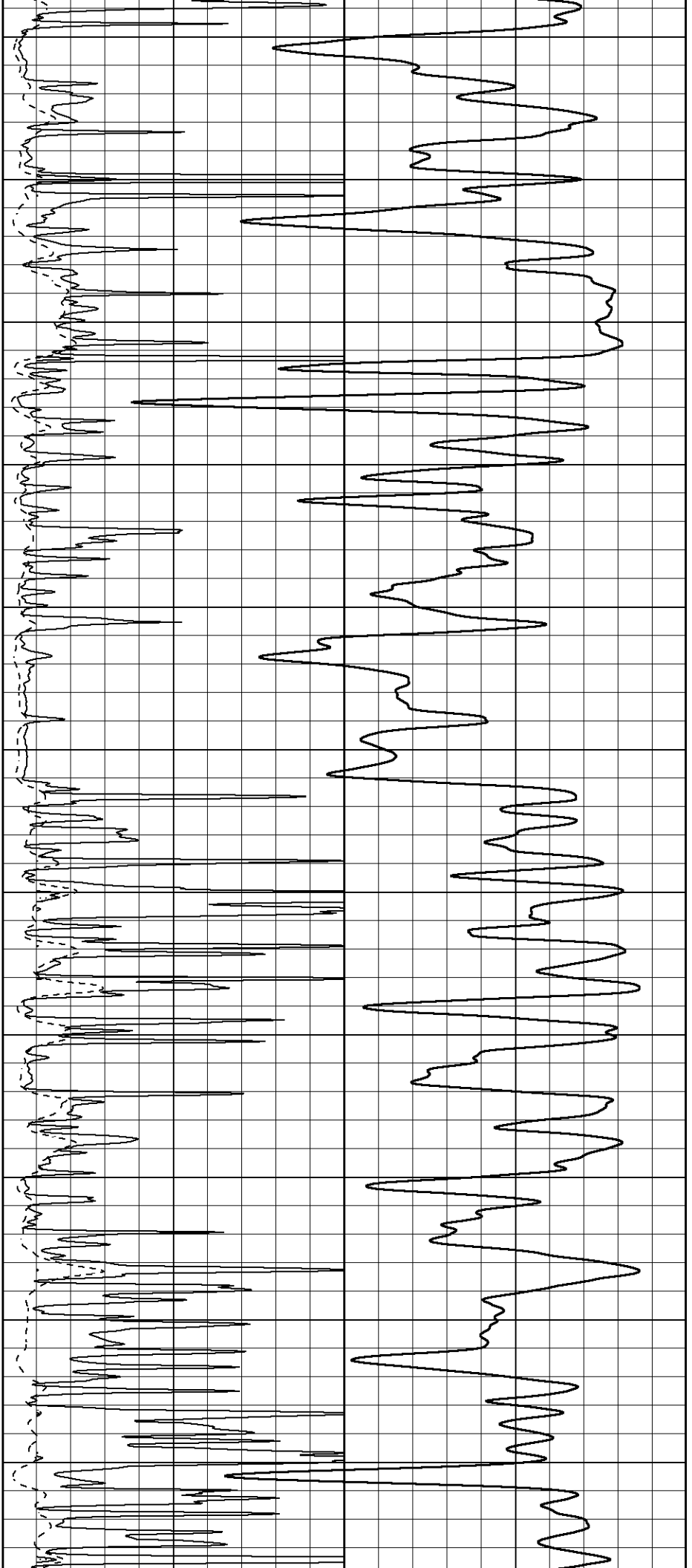
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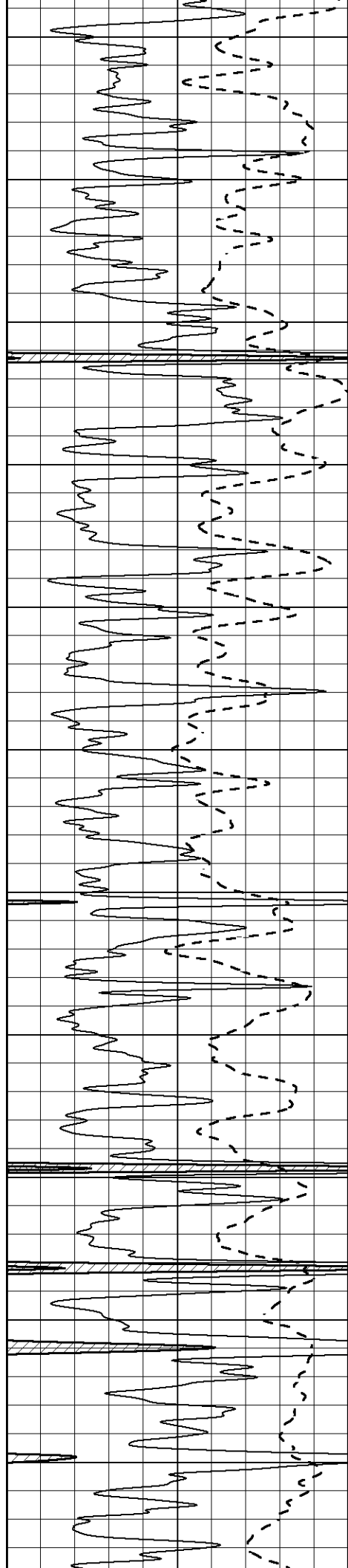
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3650

3700





3750

3800

3850

3900

3950

4000

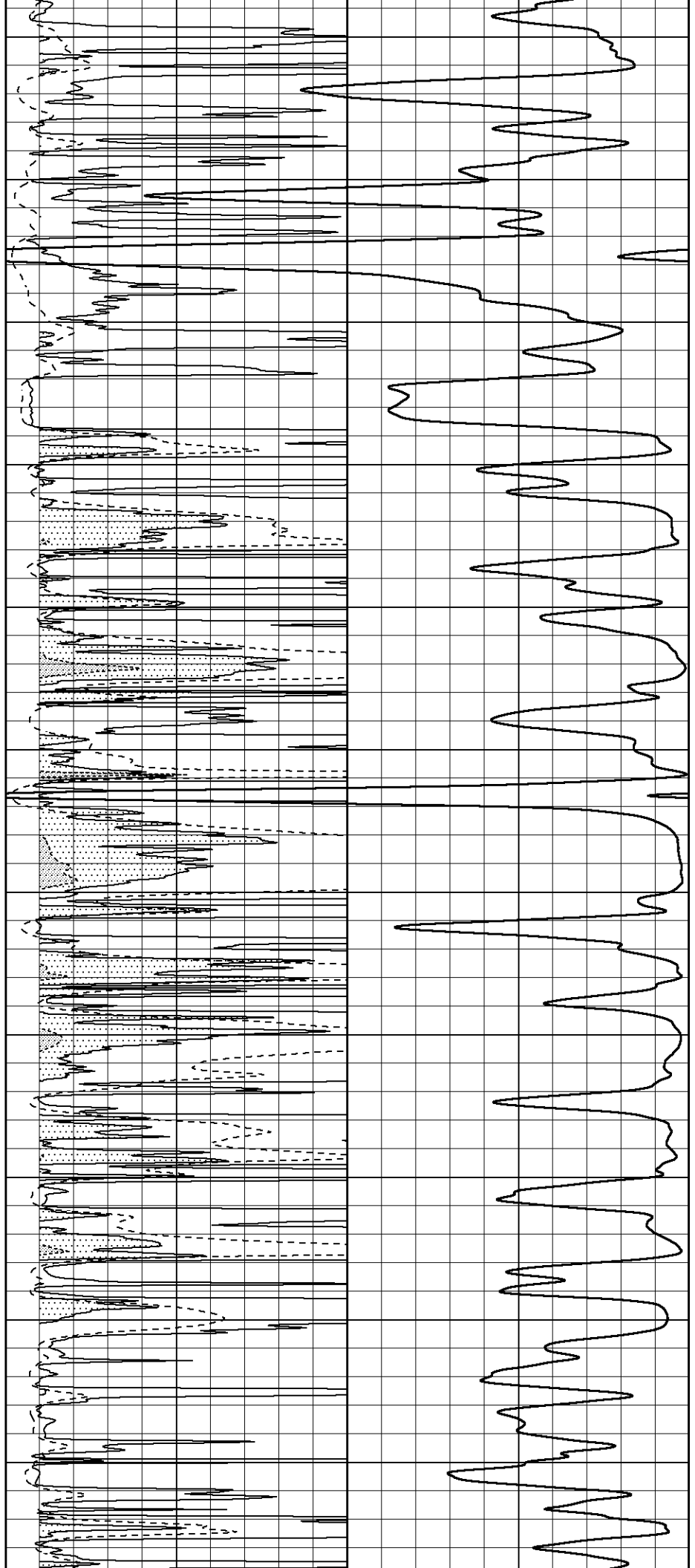
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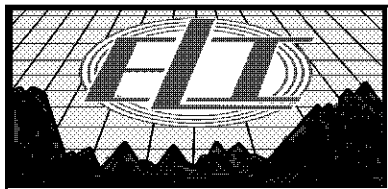
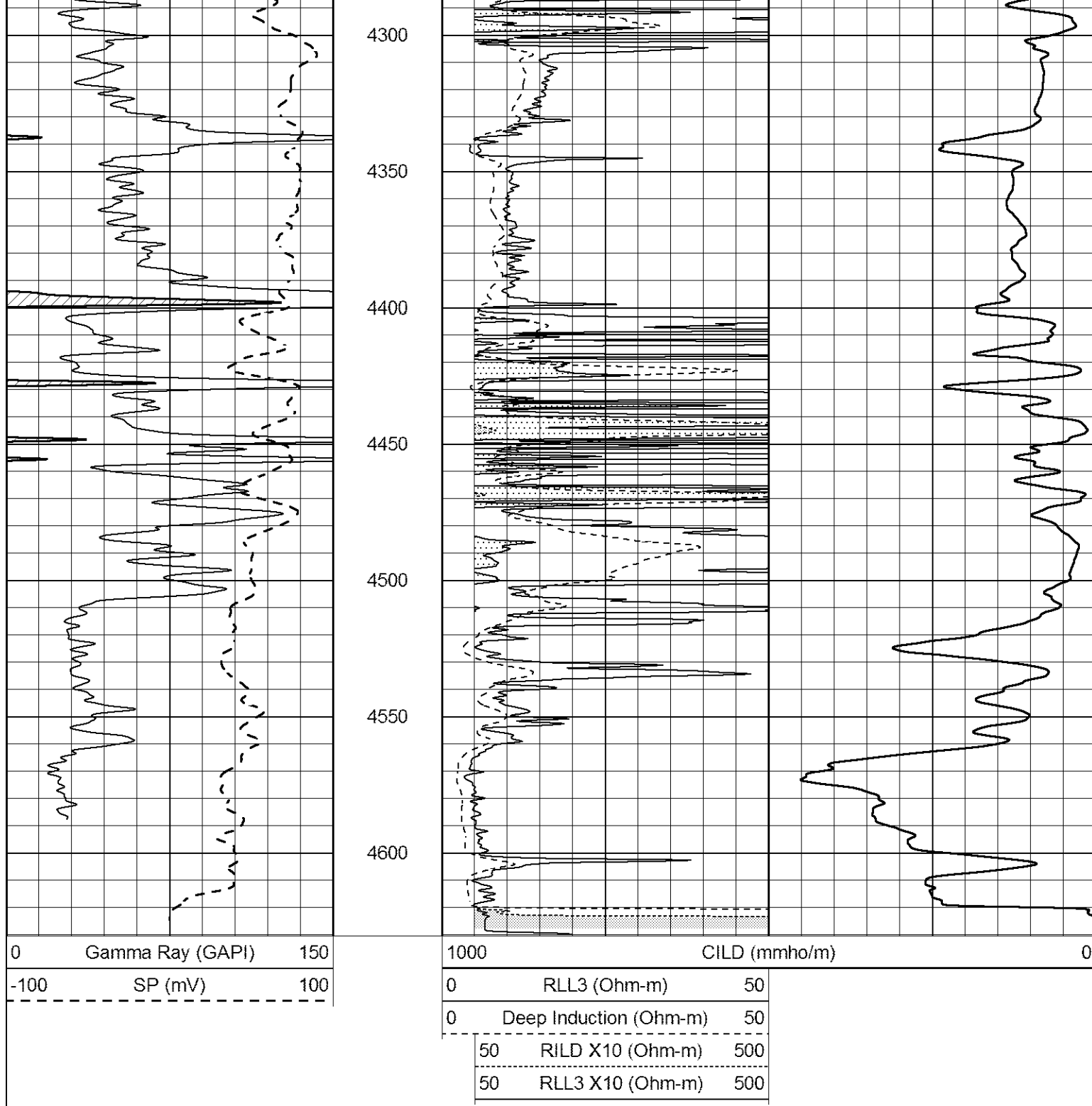
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4150

4200

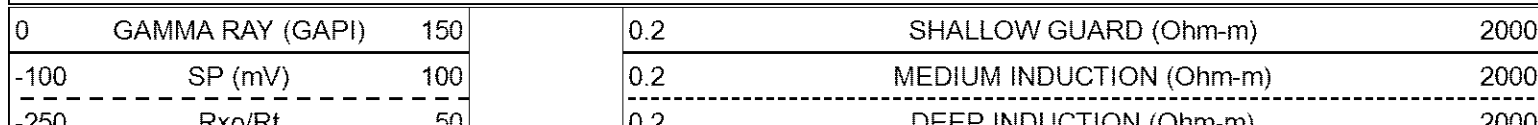
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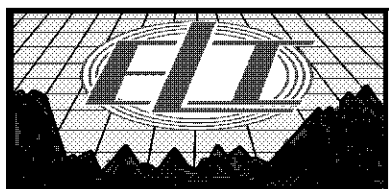
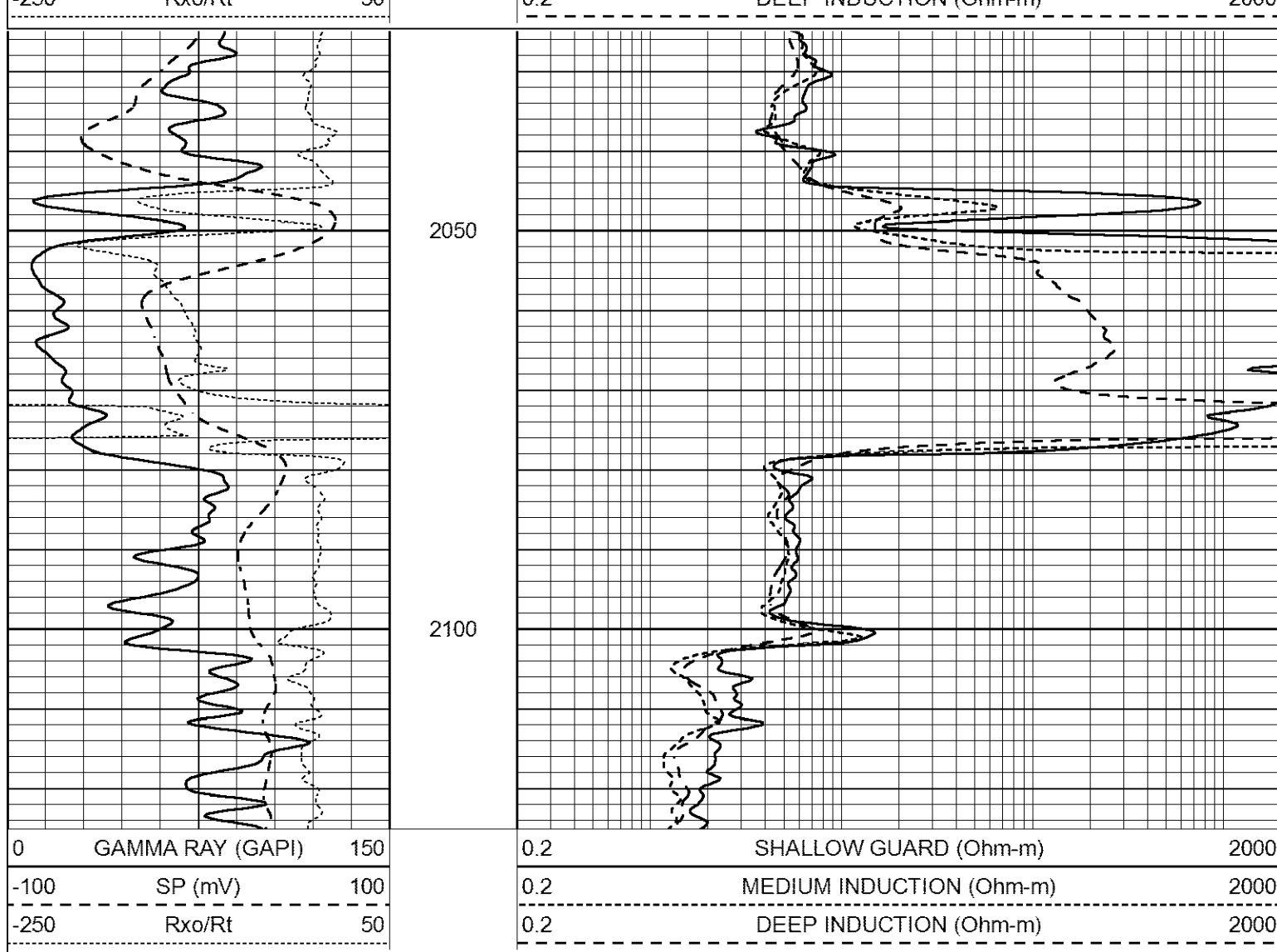




ANHYDRITE

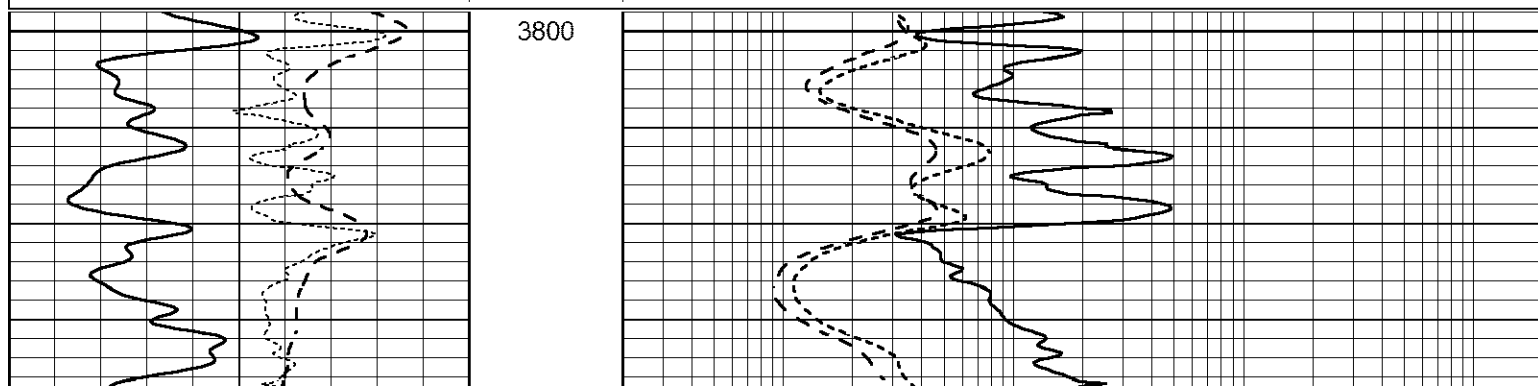
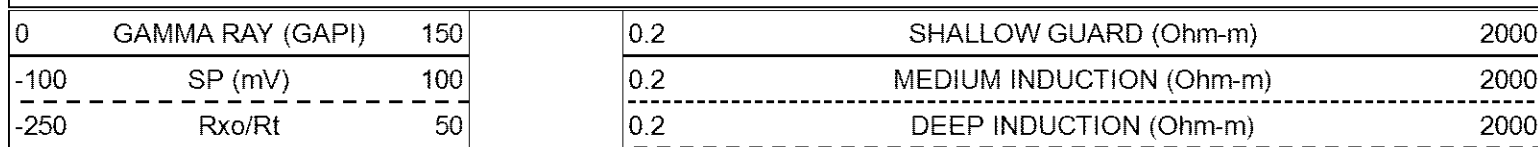
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Dataset Pathname pass3.1A
Presentation Format _dil
Dataset Creation Tue May 17 00:21:30 2022
Charted by Depth in Feet scaled 1:240

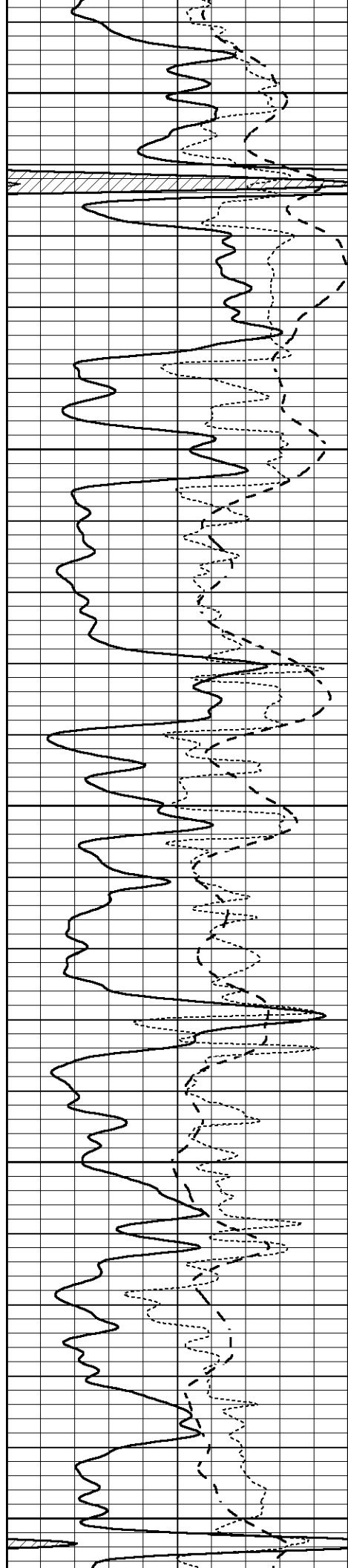




MAIN SECTION

Database File 6527pe.db
Dataset Pathname pass3.1M
Presentation Format _dil
Dataset Creation Tue May 17 00:20:39 2022
Charted by Depth in Feet scaled 1:240





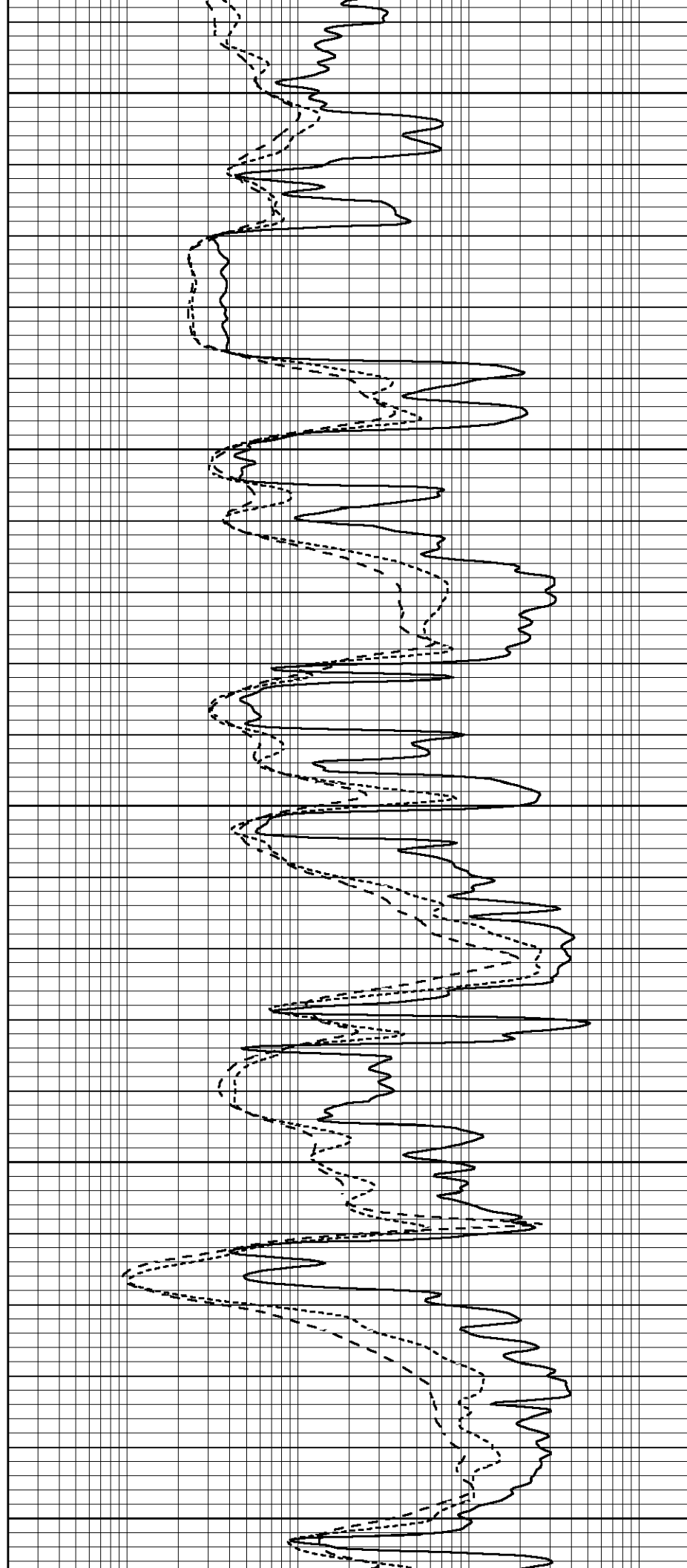
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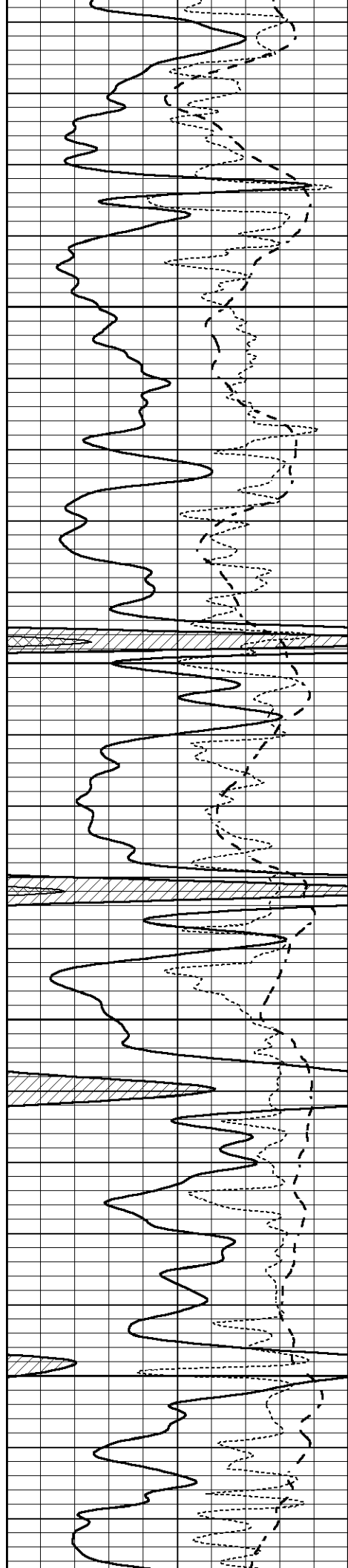
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3950

4000

4050



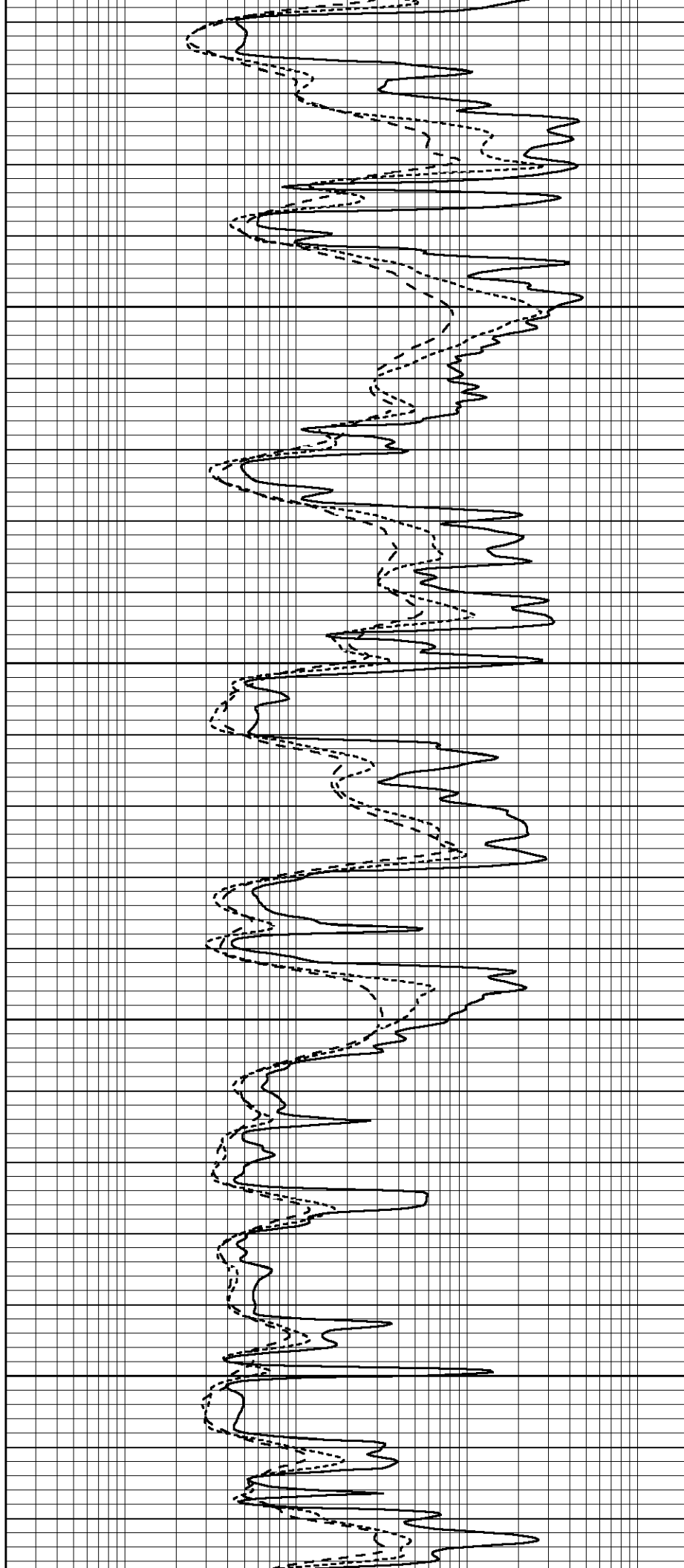


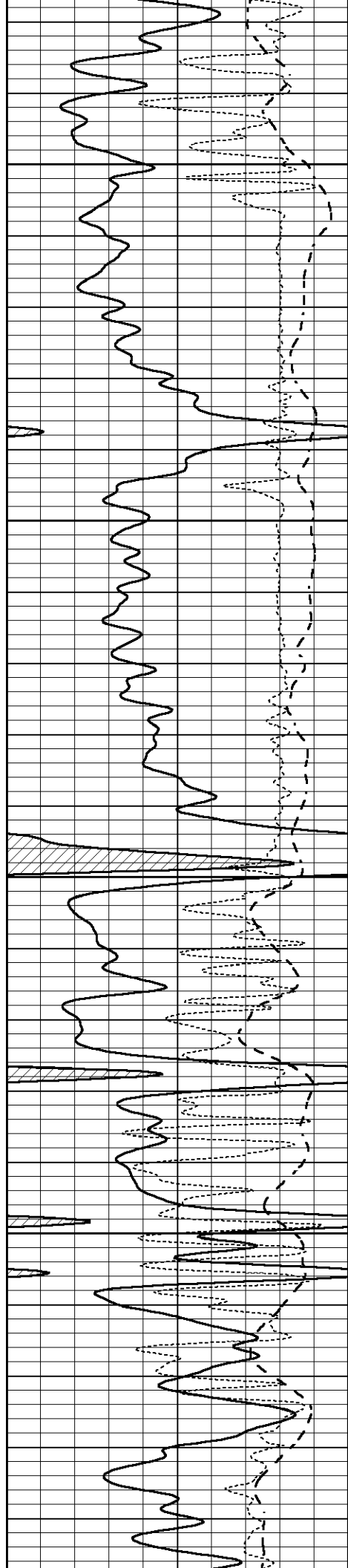
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4150

4200

4250



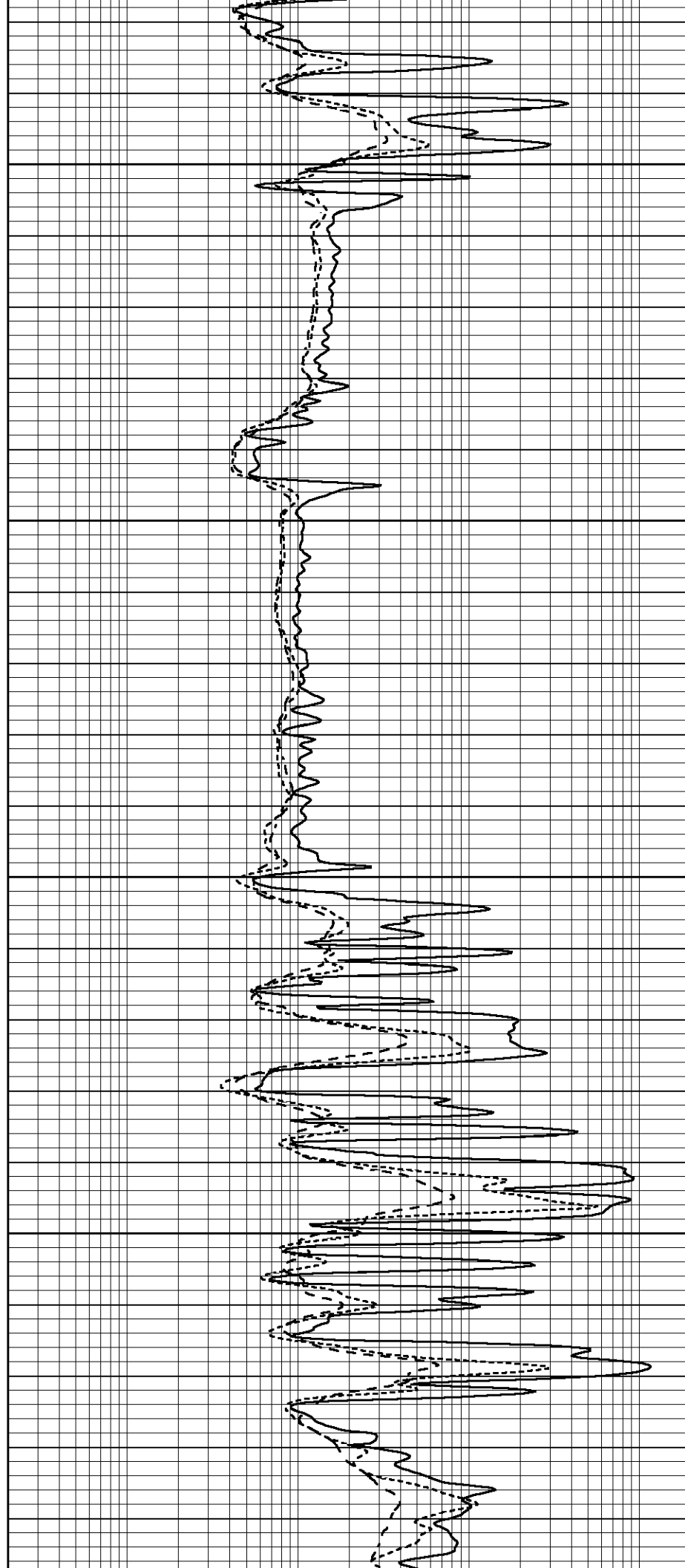


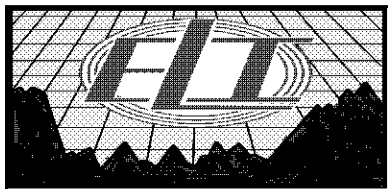
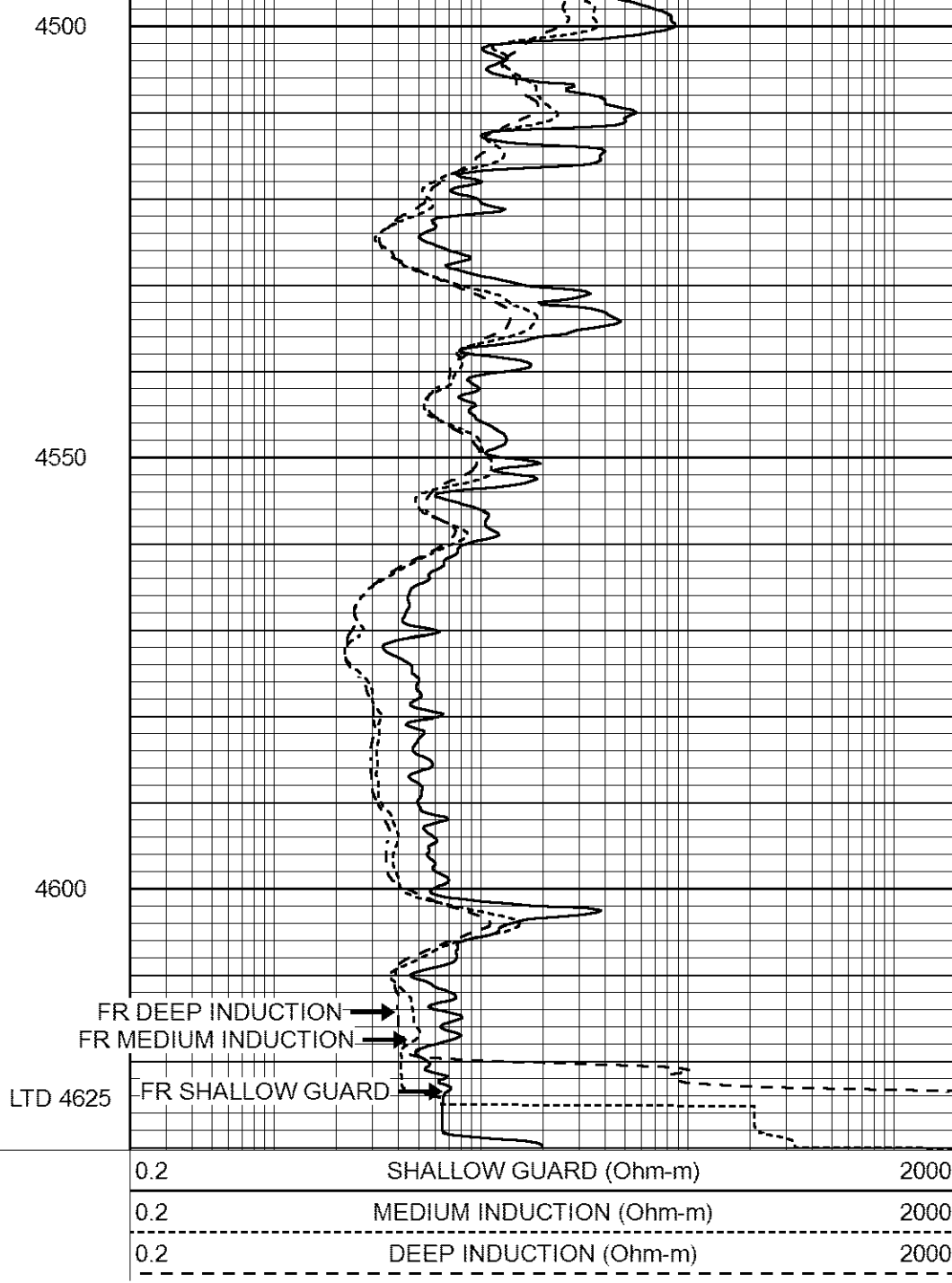
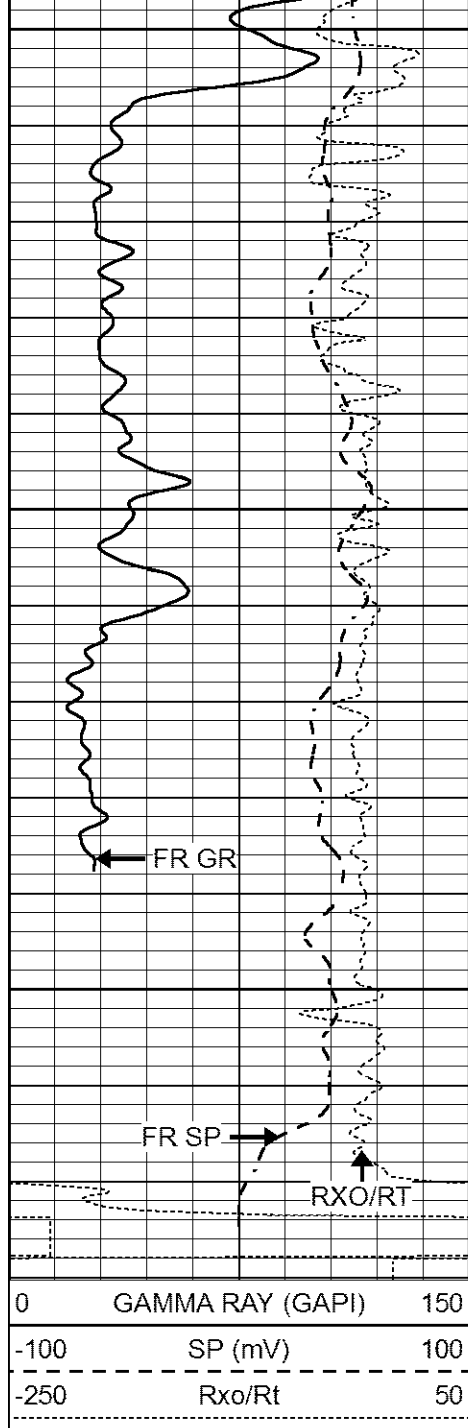
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4350

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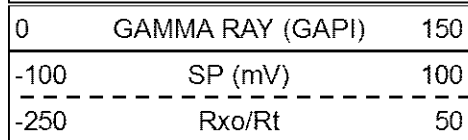
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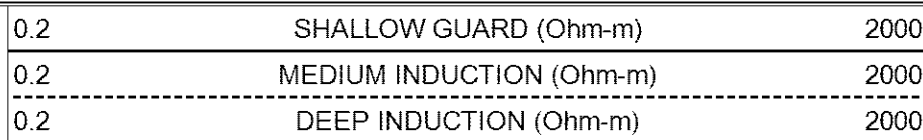


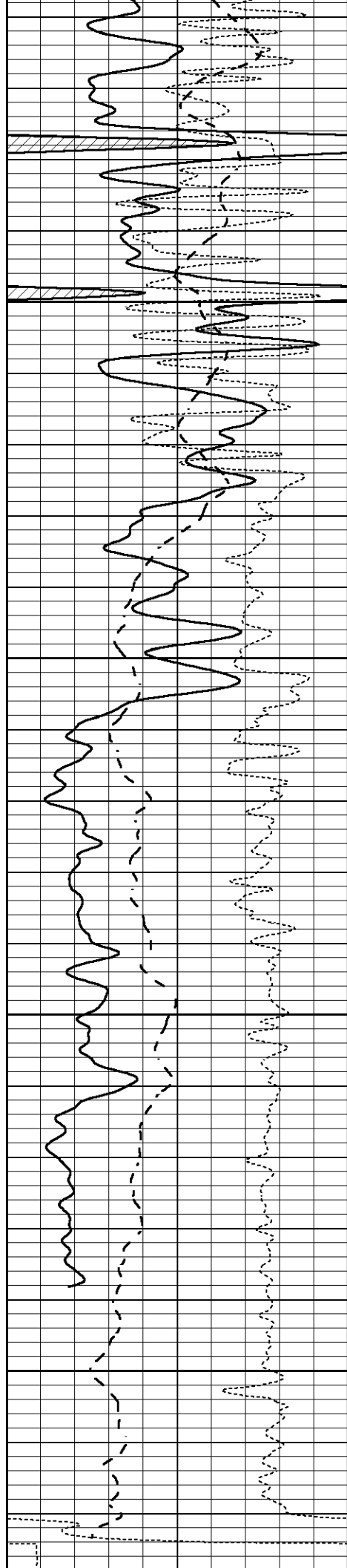
REPEAT SECTION

Database File 6527pe.db
 Dataset Pathname pass2.1R
 Presentation Format _dil
 Dataset Creation Tue May 17 00:37:30 2022
 Charted by Depth in Feet scaled 1:240



4400



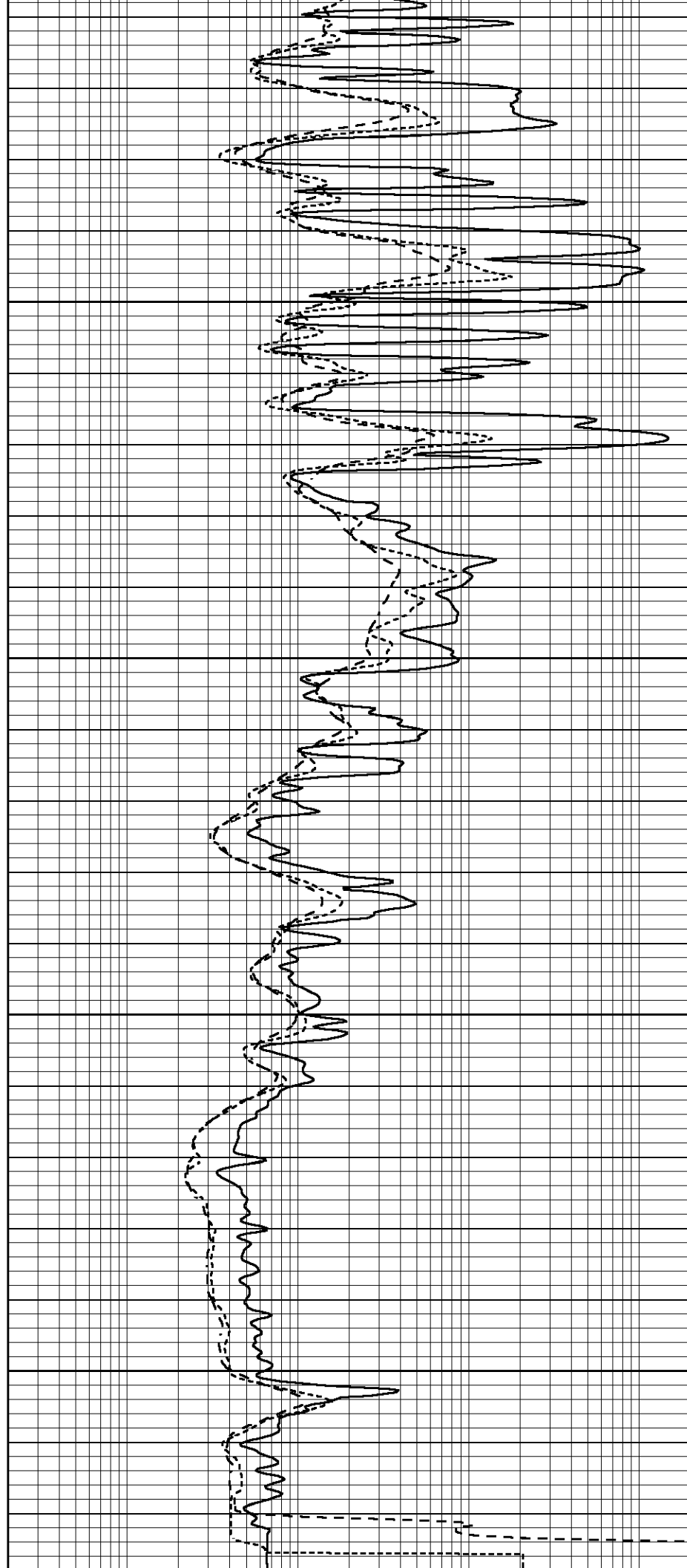


4450

4500

4550

4600



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

Calibration Report		
Database File	6527pe.db	
Dataset Pathname	pass3.1M	
Dataset Creation	Tue May 17 00:20:39 2022	

Dual Induction Calibration Report		
Serial-Model:	FW1410-56-Probe	
Surface Cal Performed:	Mon May 16 22:33:03 2022	
Downhole Cal Performed:	Tue Jul 25 12:15:37 2017	
After Survey Verification Performed:	Tue Jul 25 12:15:38 2017	

Surface Calibration								
Readings			References			Results		
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.765	V	1.000	400.000	mmho/m	420.000	-2.000
Medium	-0.056	0.761	V	1.000	464.000	mmho/m	425.187	138.000
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: 005	Model: Litho_Ver3	

Master Calibration					Performed Fri May 13 13:54:36 2022
	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	1363.1	46477.8	11515.9	9589.9	cps
Window 2	1239.4	36488.4	9270.1	7998.9	cps
Window 3	1044.3	20488.1	5500.7	4913.3	cps
Window 4	315.7	358.7	321.5	319.5	cps
Long Space	0.0	35249.0	8030.7	6759.4	cps
Short Space	1.4	9675.7	6523.4	5391.9	cps
Rho		1.7400	2.5000	0.0000	g/cc

Rho	1.7100	2.3900	0.0000	g/cc
Pe	2.0000	2.7500	5.7900	

Rib Angle	: 45.1	Rib Slope	: 1.003	Density/Spine Ratio	: 0.575
Spine Angle	: 75.1	Spine Slope	: 3.752	Spine Intercept	: -24.0

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	

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Compensated Neutron Calibration Report
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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:	7	
Tool Model:	Probe1	
Performed:	Mon May 16 22:33:16 2022	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5200	GAPI/cps

