



DUAL INDUCTION LOG

Company DOWNING NELSON OIL COMPANY, INC.
 Well KRAMER A UNIT #1-17
 Field UNNAMED
 County RAWLINS
 State KANSAS

Company DOWNING NELSON OIL COMPANY, INC.
 Well KRAMER A UNIT #1-17
 Field UNNAMED
 County RAWLINS State KANSAS

Location: API #: 15-153-21285-00-00
 1392 FSL & 2478' FWL
 SE - SE - NE - SW
 SEC 17 TWP 5S RGE 36W
 Permanent Datum GROUND LEVEL Elevation 3342
 Log Measured From KELLY BUSHING 11' A.G.L.
 Drilling Measured From KELLY BUSHING
 Other Services CDL/CNL MEL
 Elevation K.B. 3353
 D.F. 3351
 G.L. 3342

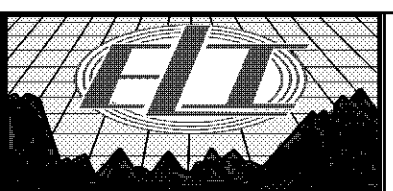
Date	5/18/22		
Run Number	ONE		
Depth Driller	4932		
Depth Logger	4931		
Bottom Logged Interval	4929		
Top Log Interval	00		
Casing Driller	8 5/8"@486'		
Casing Logger	486		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 800 PPM	
Density / Viscosity	9.2/49		
pH / Fluid Loss	10.0/8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.950@70F		
Rmt @ Meas. Temp	.713@70F		
Rmc @ Meas. Temp	1.14@70F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.536@124F		
Time Circulation Stopped	2.5 HOURS		
Time Logger on Bottom	11:30 P.M.		
Maximum Recorded Temperature	122F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	COLE ROBBEN	TJ DREILING	
Witnessed By	MARC DOWNING		

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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
 BREWSTER, KS. NORTH ON BLACKTOP TO CURVE WEST,
 3 MILES NORTH TO ROAD D, 1/2 WEST, NORTH INTO

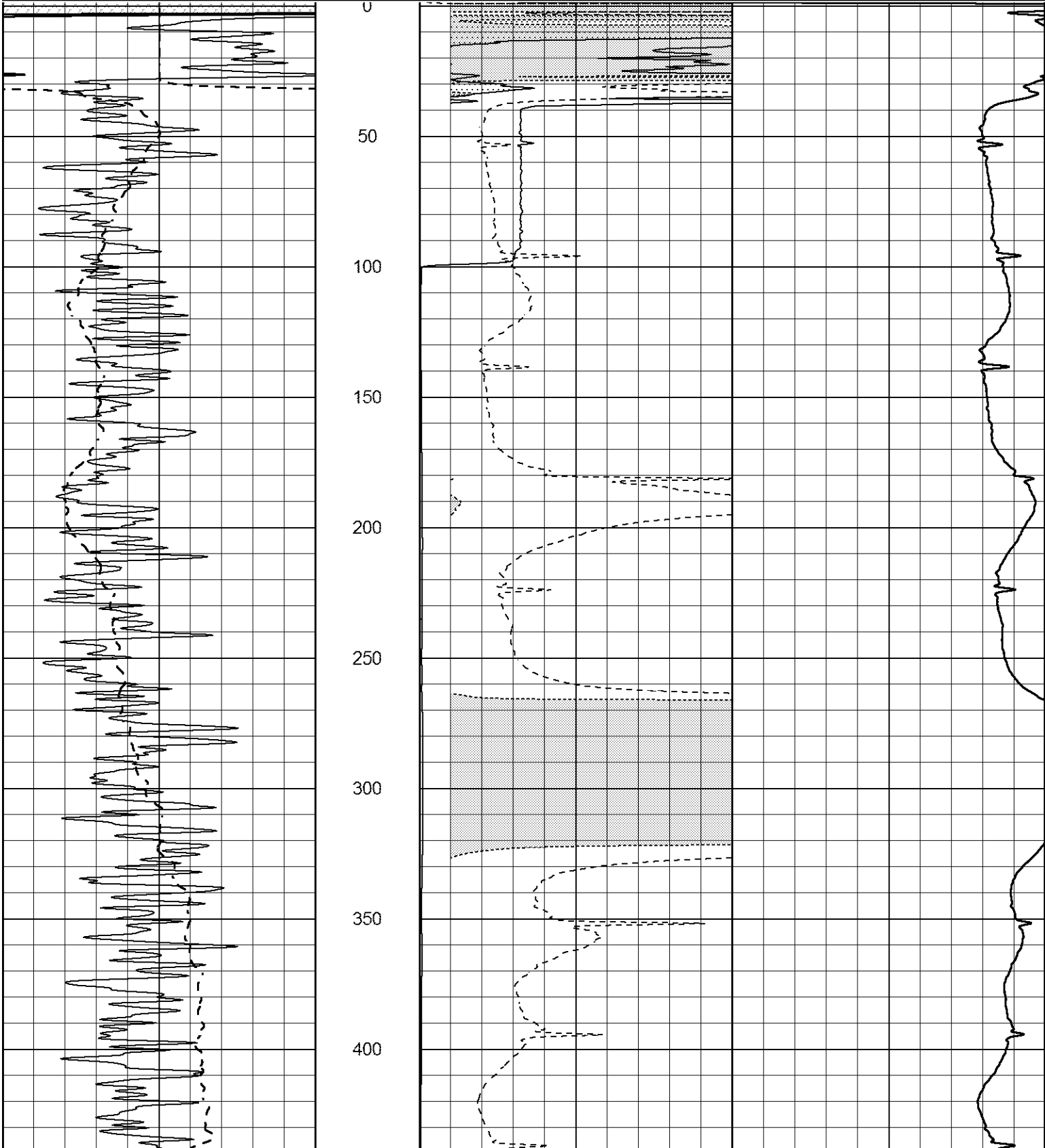


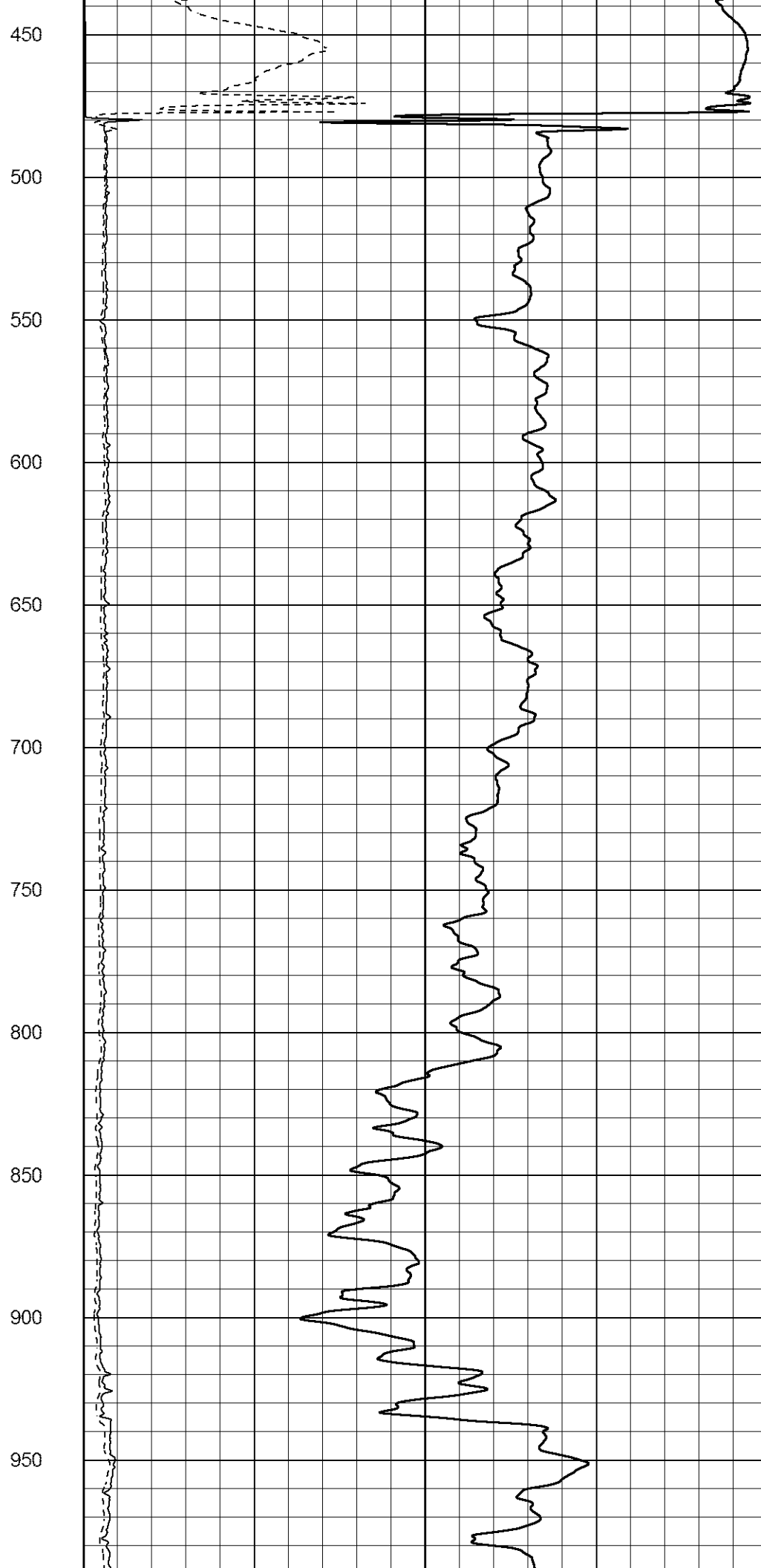
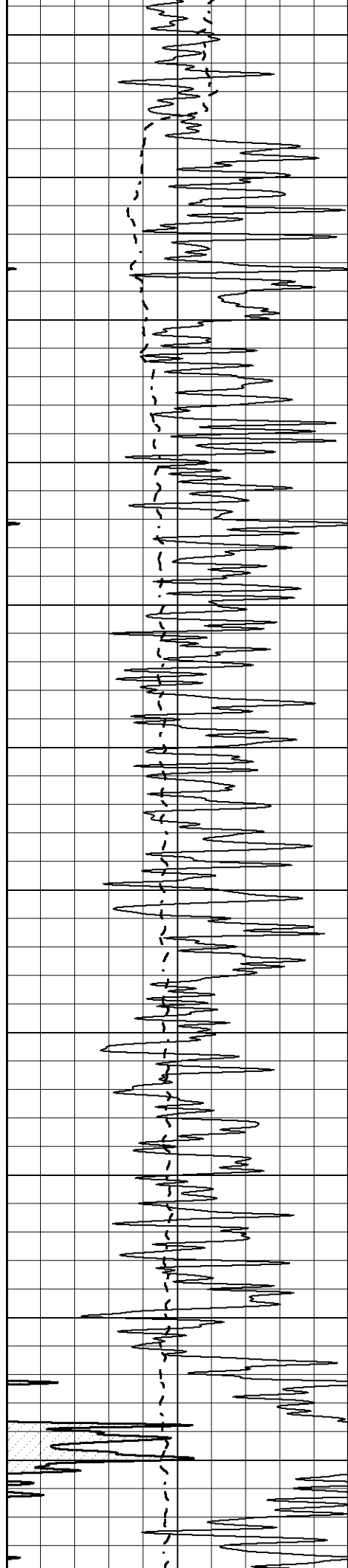
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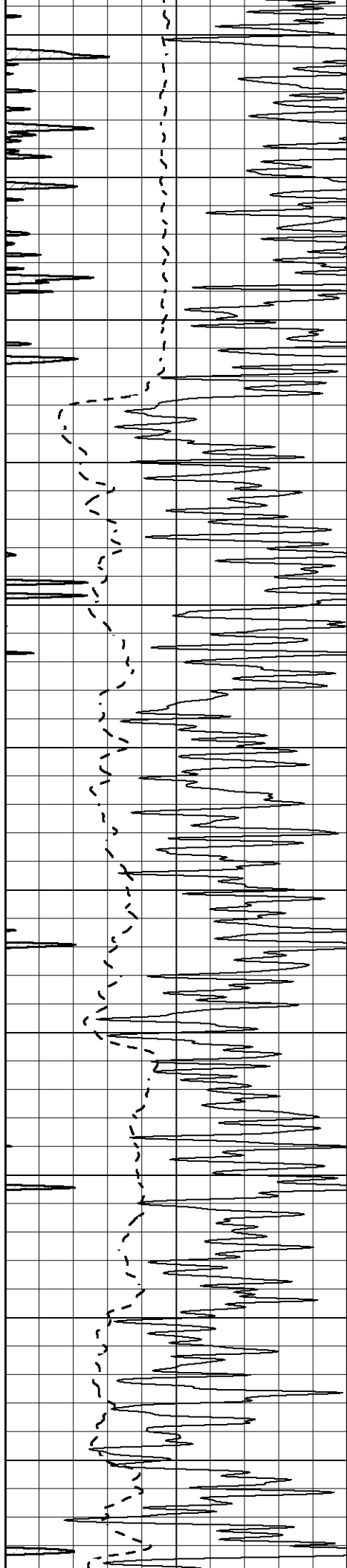
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 Dataset Pathname pass4.5M
 Presentation Format _dil2
 Dataset Creation Thu May 19 02:53:43 2022
 Charted by Depth in Feet scaled 1:600

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







1000

1050

1100

1150

1200

1250

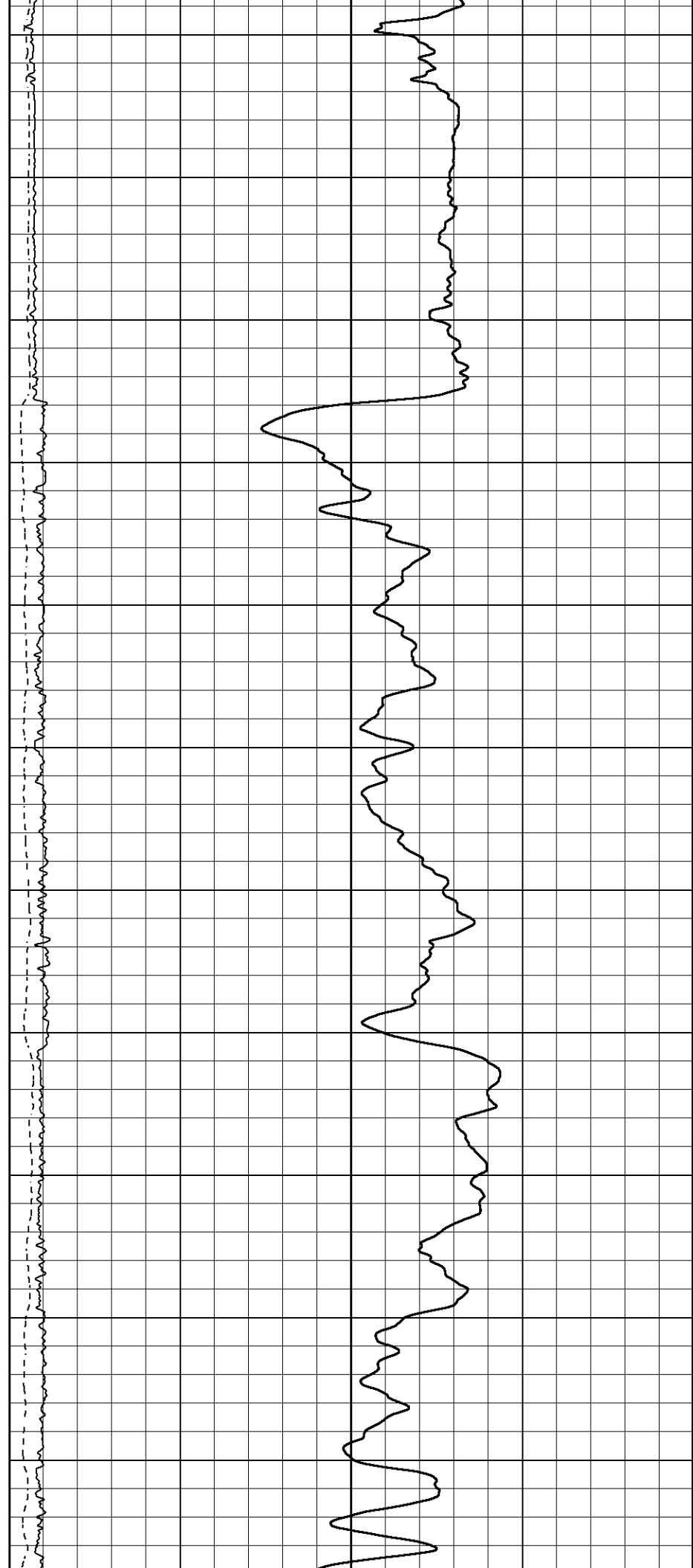
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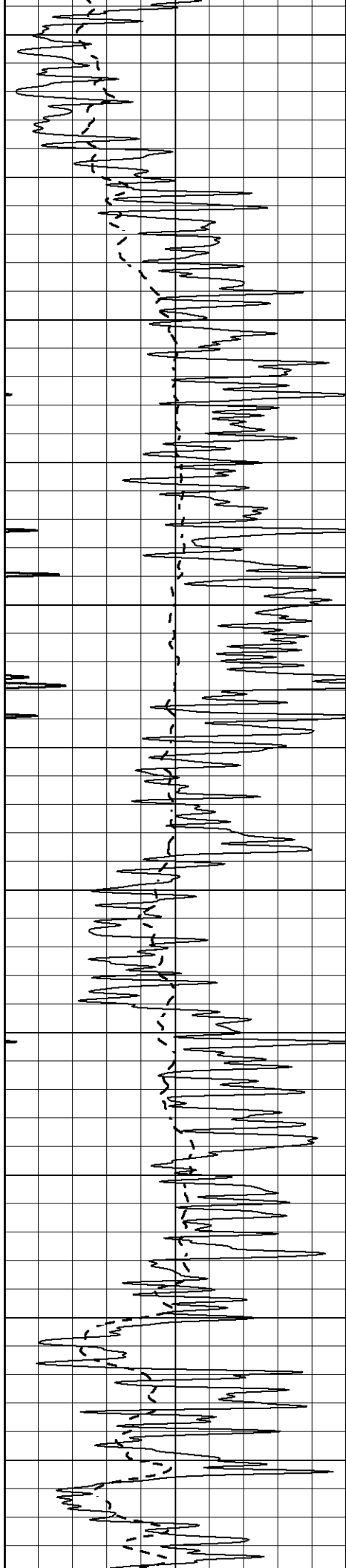
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1400

1450

1500





1550

1600

1650

1700

1750

1800

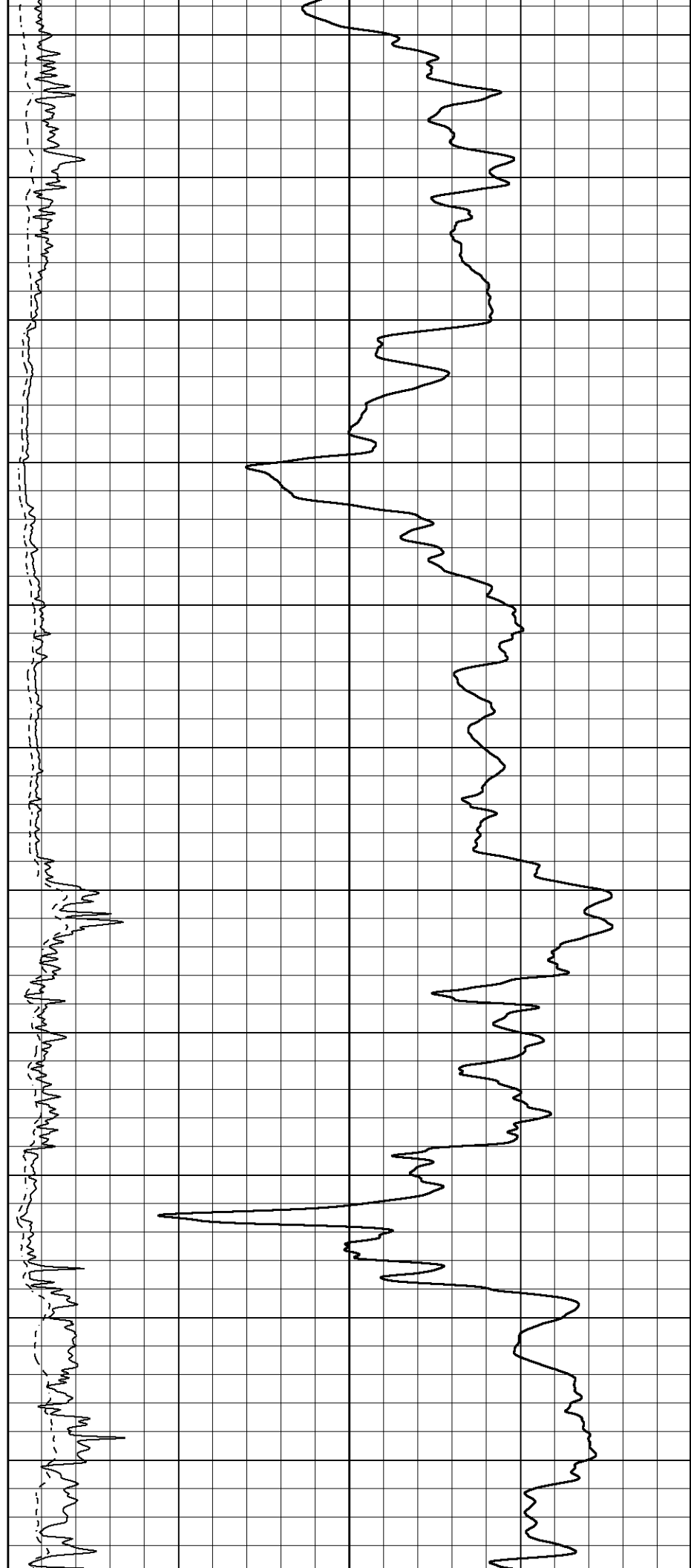
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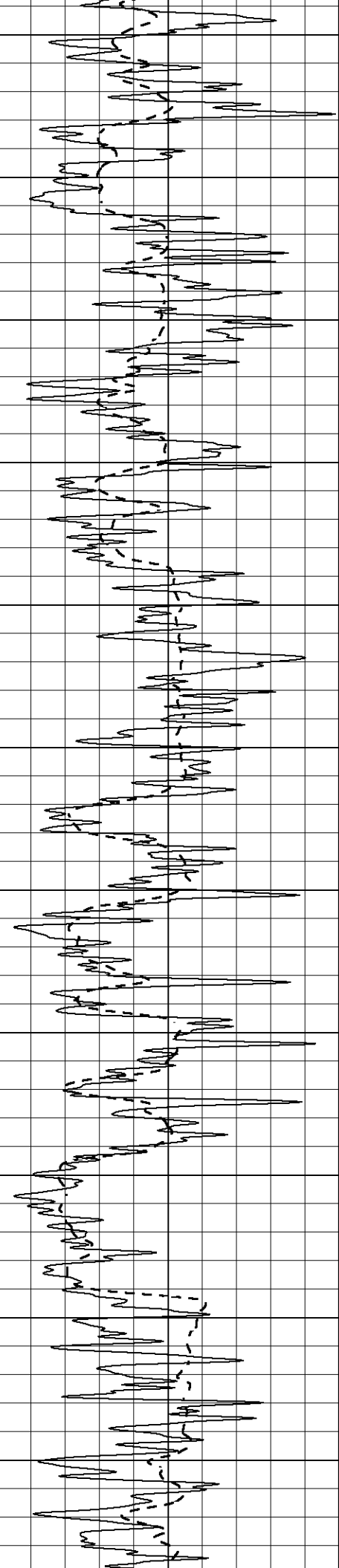
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1950

2000

2050





2100

2150

2200

2250

2300

2350

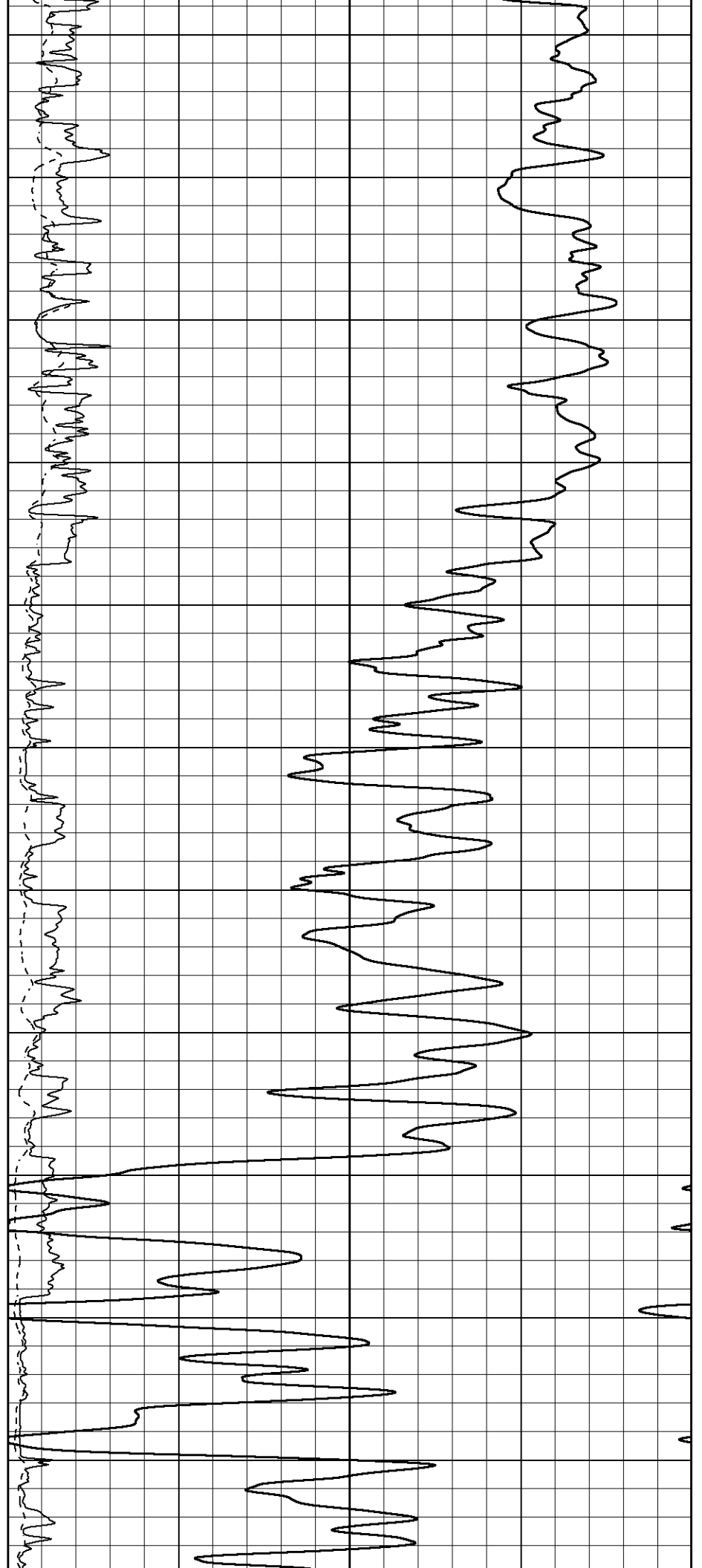
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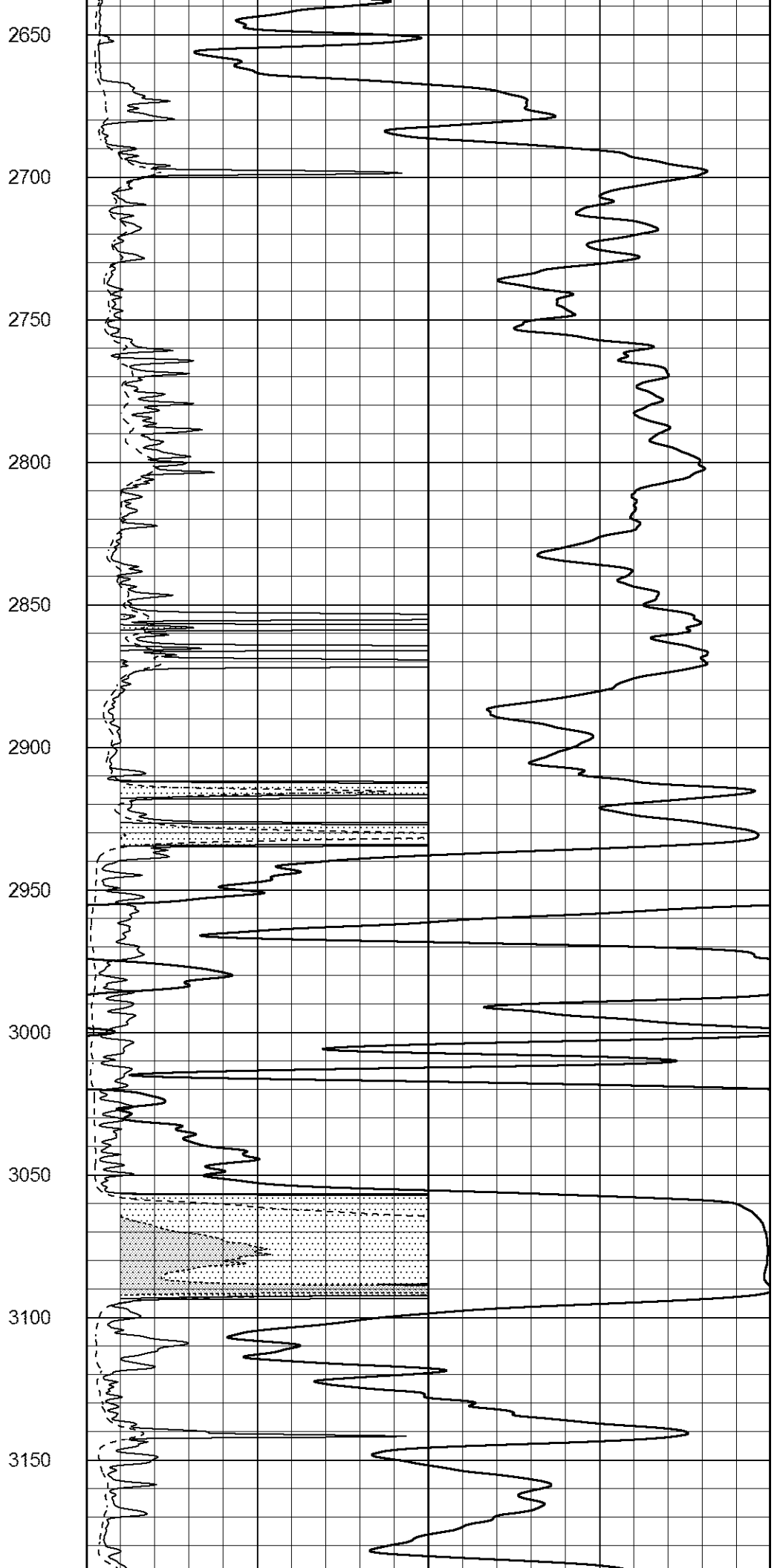
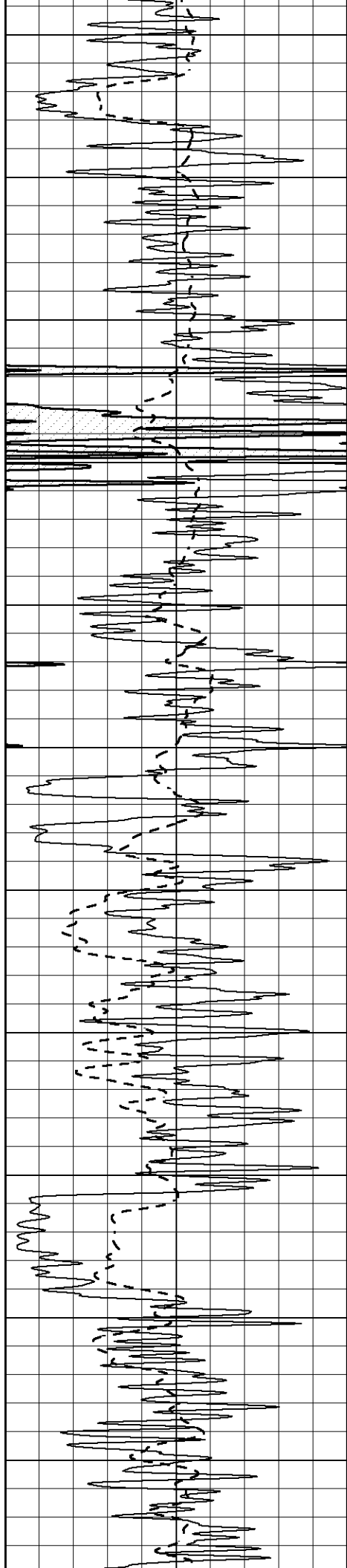
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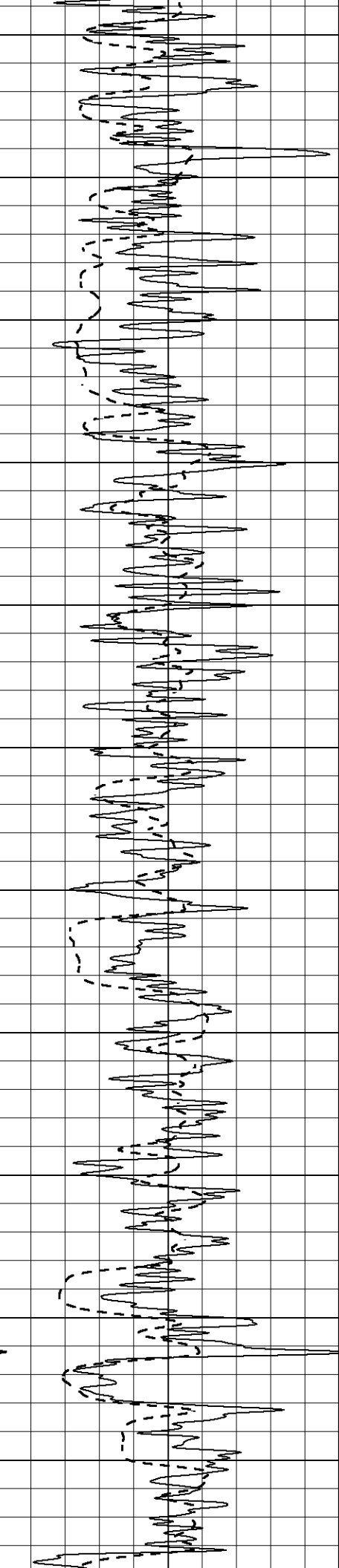
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2550

2600







3200

3250

3300

3350

3400

3450

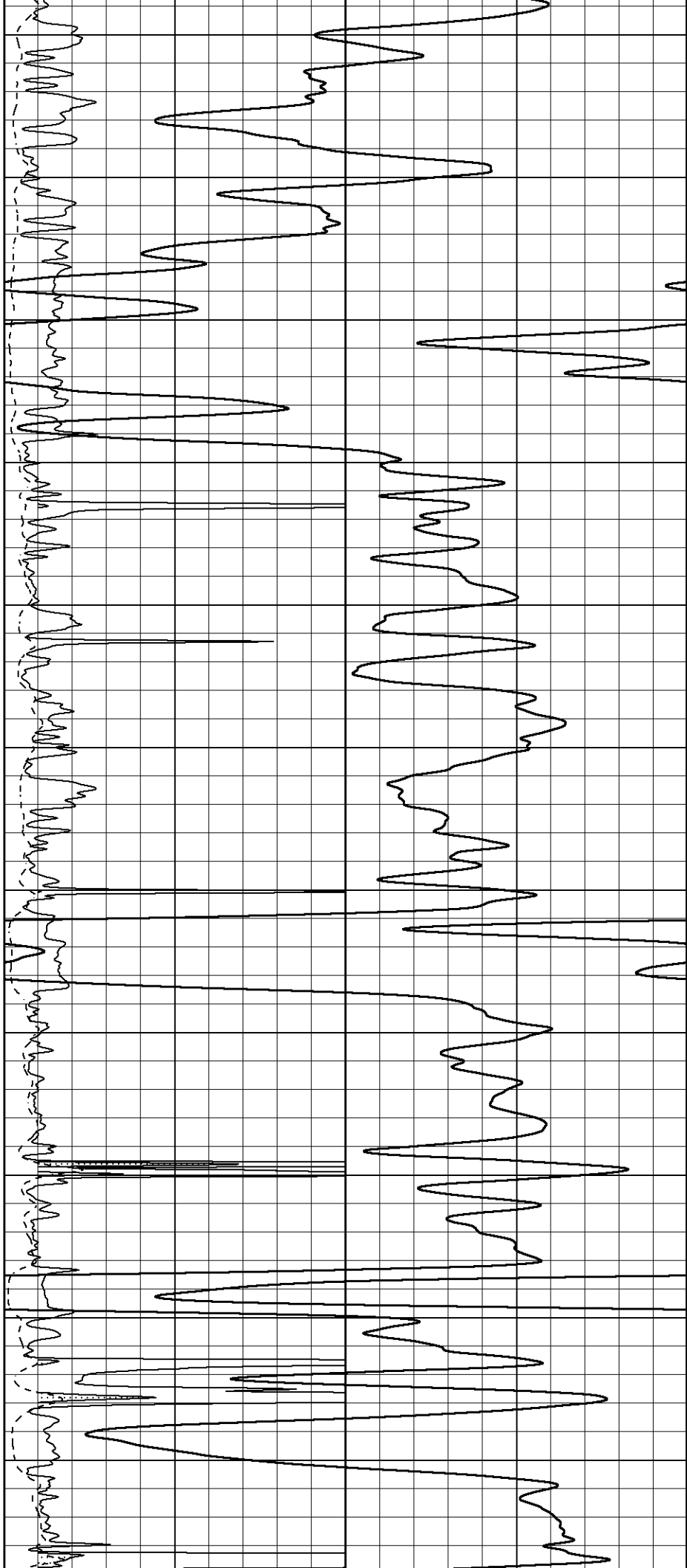
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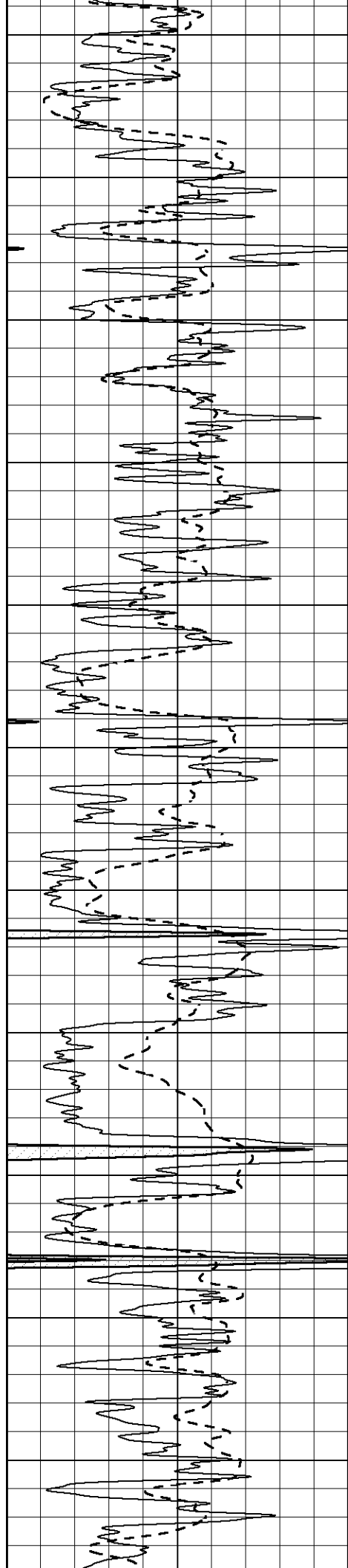
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3600

3650

3700





3750

3800

3850

3900

3950

4000

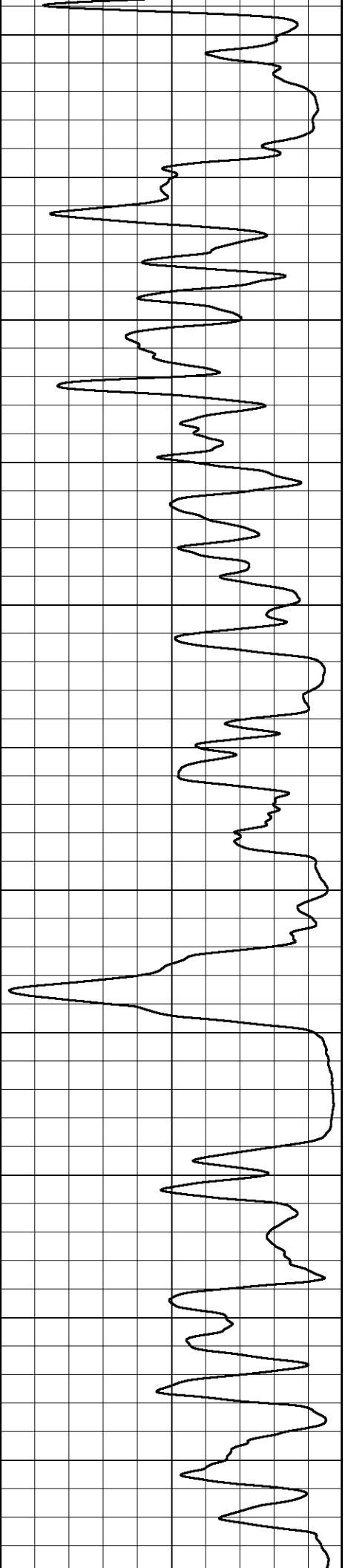
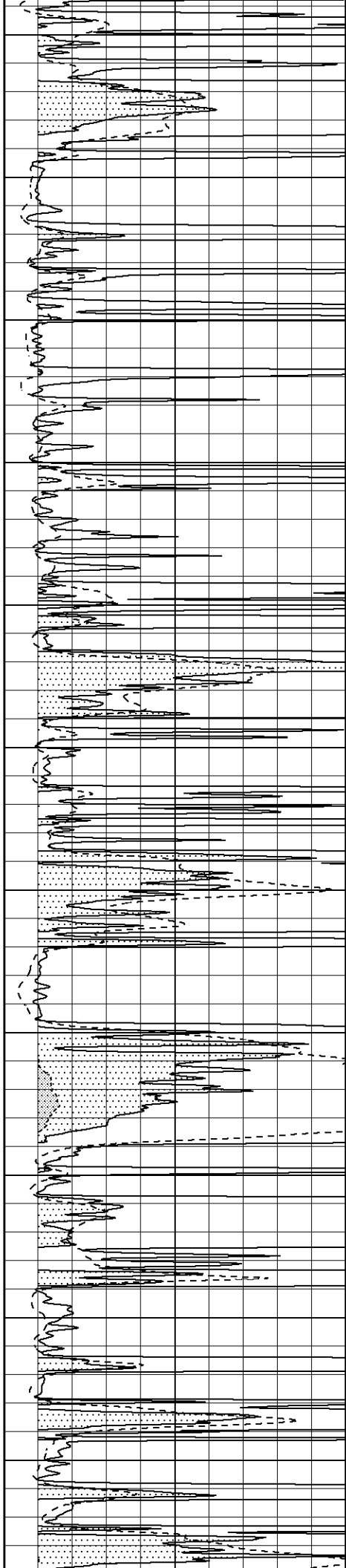
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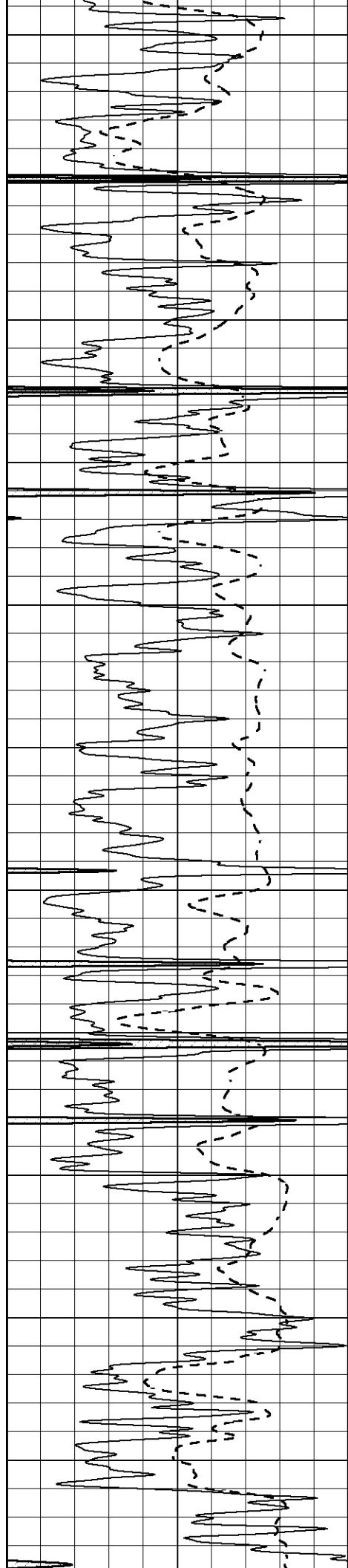
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4150

4200

4250





4300

4350

4400

4450

4500

4550

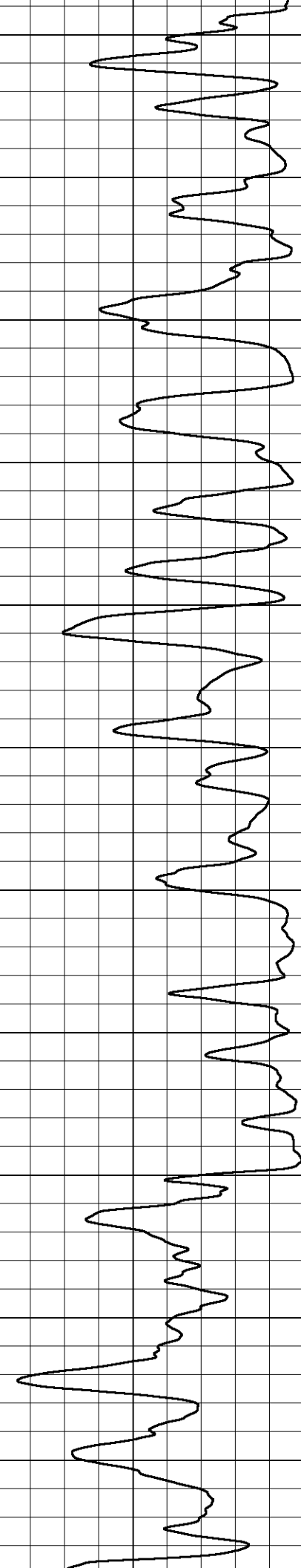
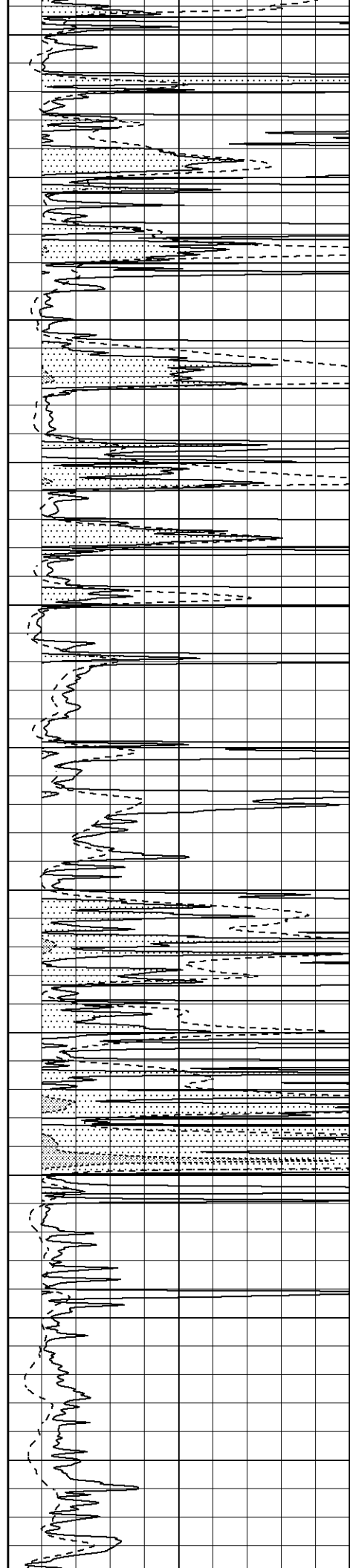
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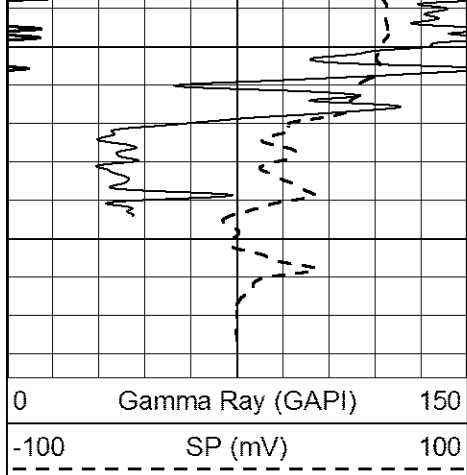
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4700

4750

4800

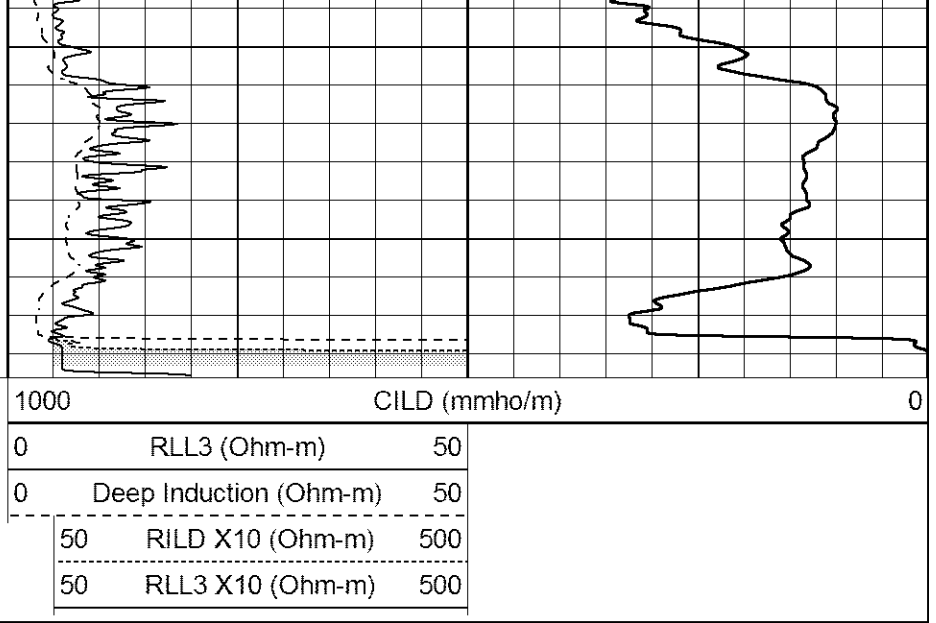




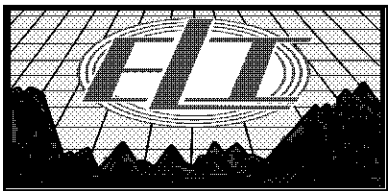
4850

4900

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

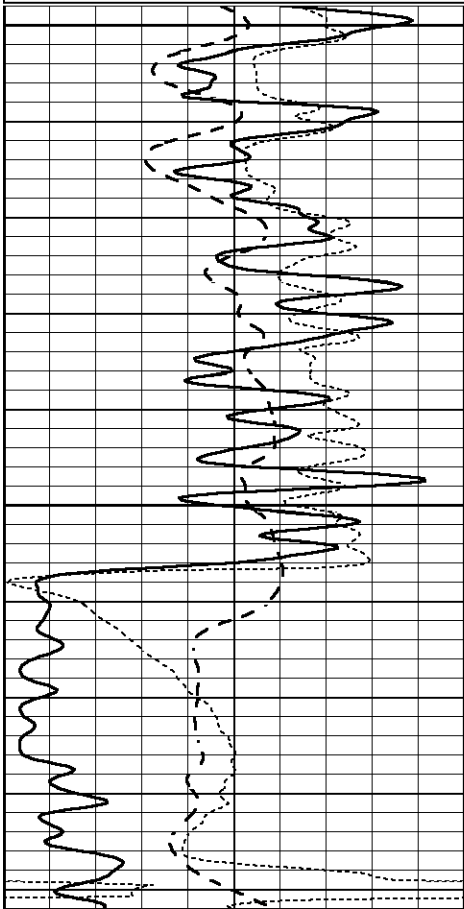


ANHYDRITE

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 Presentation Format _dil
 Dataset Creation Thu May 19 02:04:16 2022
 Charted by Depth in Feet scaled 1:240

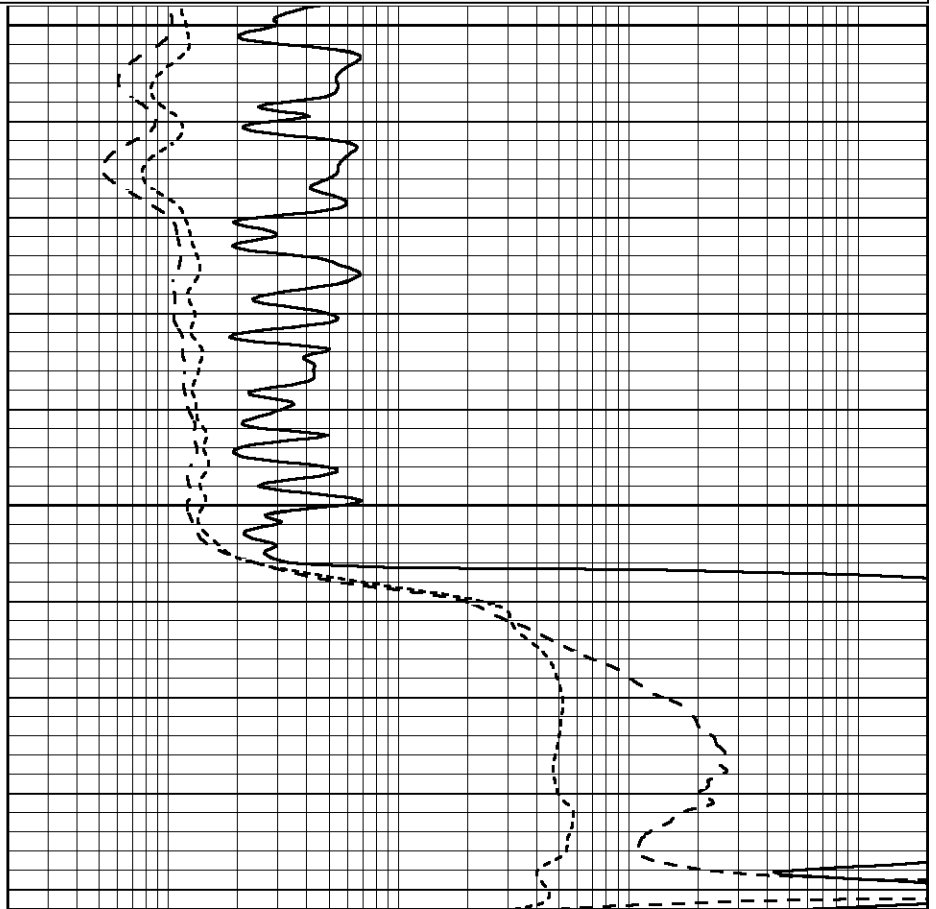
0 GAMMA RAY (GAPI) 150
 -100 SP (mV) 100
 -250 Rxo/Rt 50

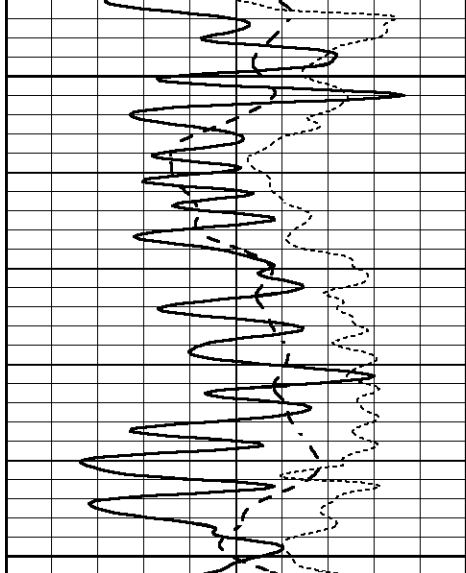
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 0.2 MEDIUM INDUCTION (Ohm-m) 2000
 0.2 DEEP INDUCTION (Ohm-m) 2000



3000

3050

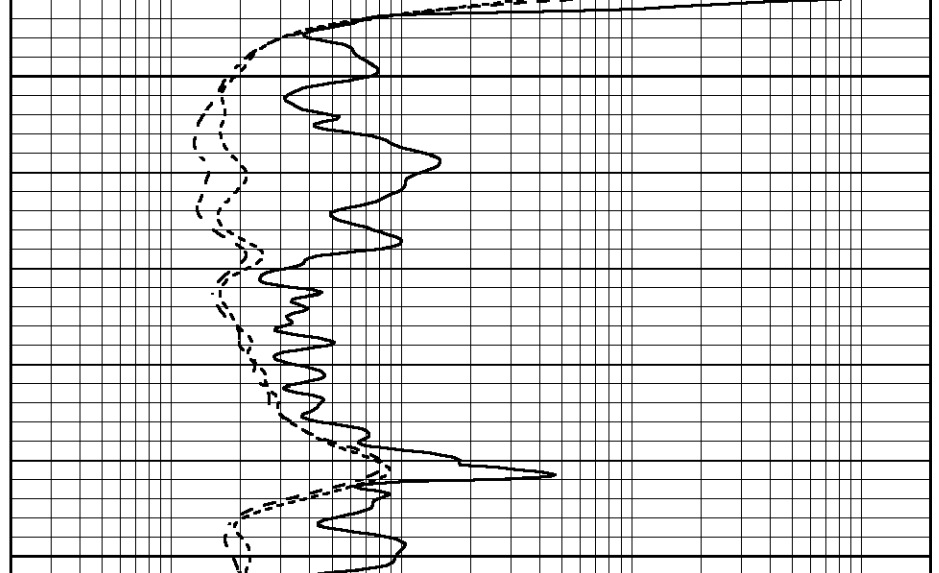




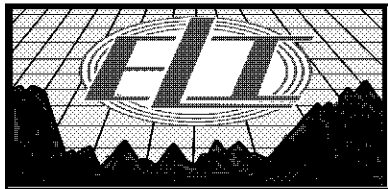
3100

3150

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

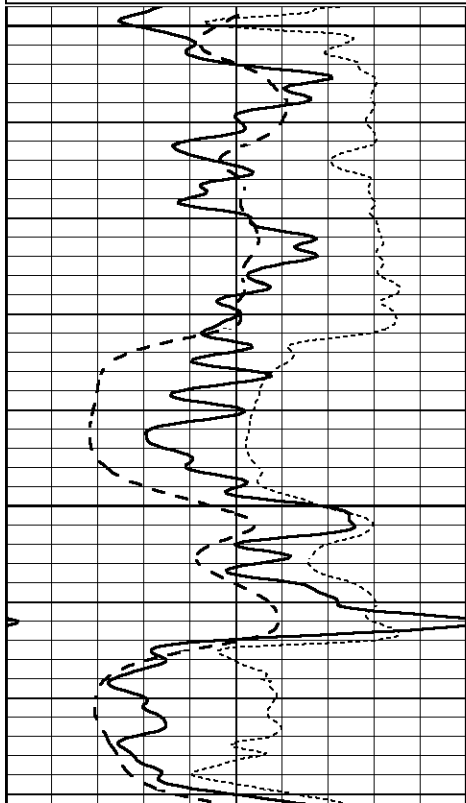


MAIN SECTION

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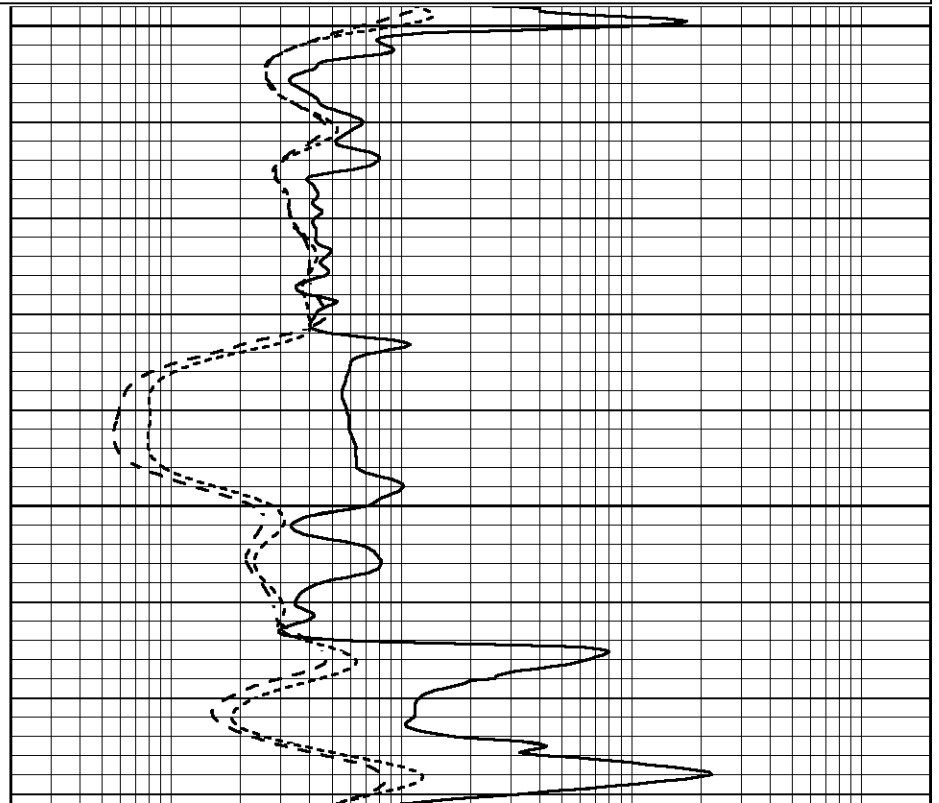
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

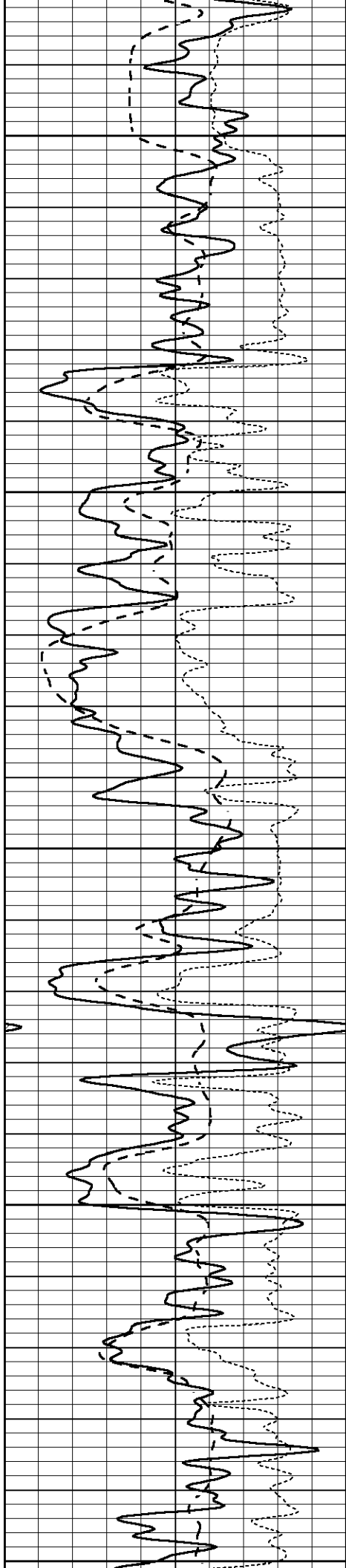
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



3600

3650





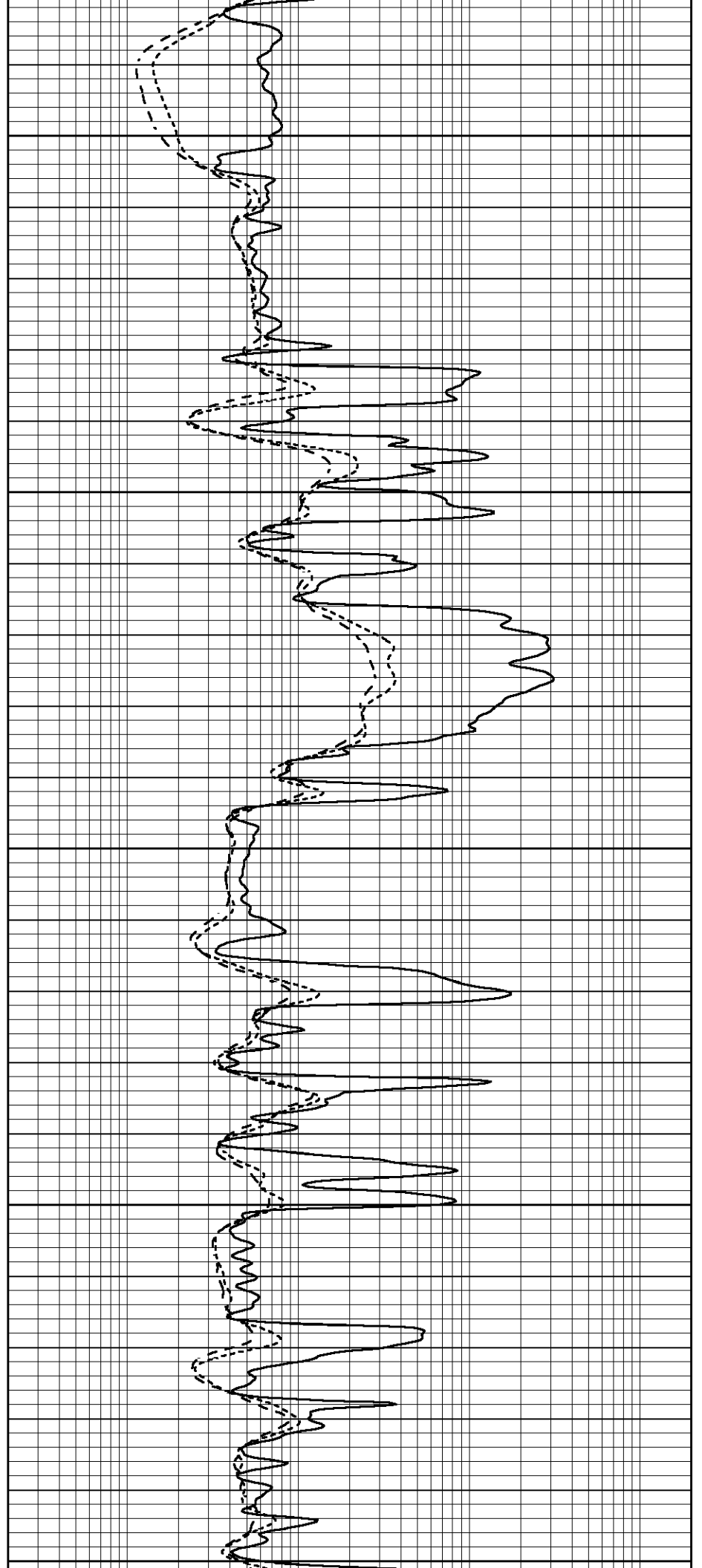
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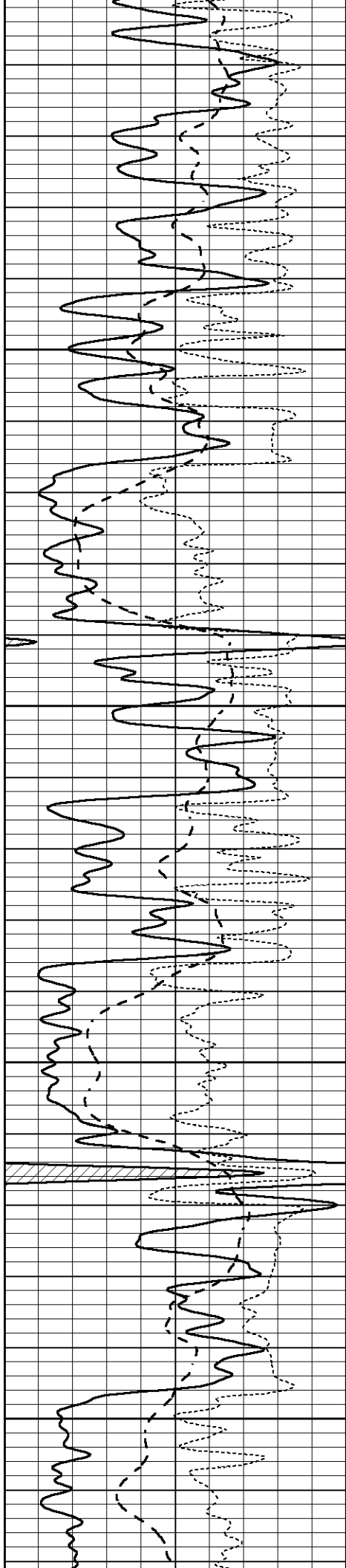
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3800

3850

3900



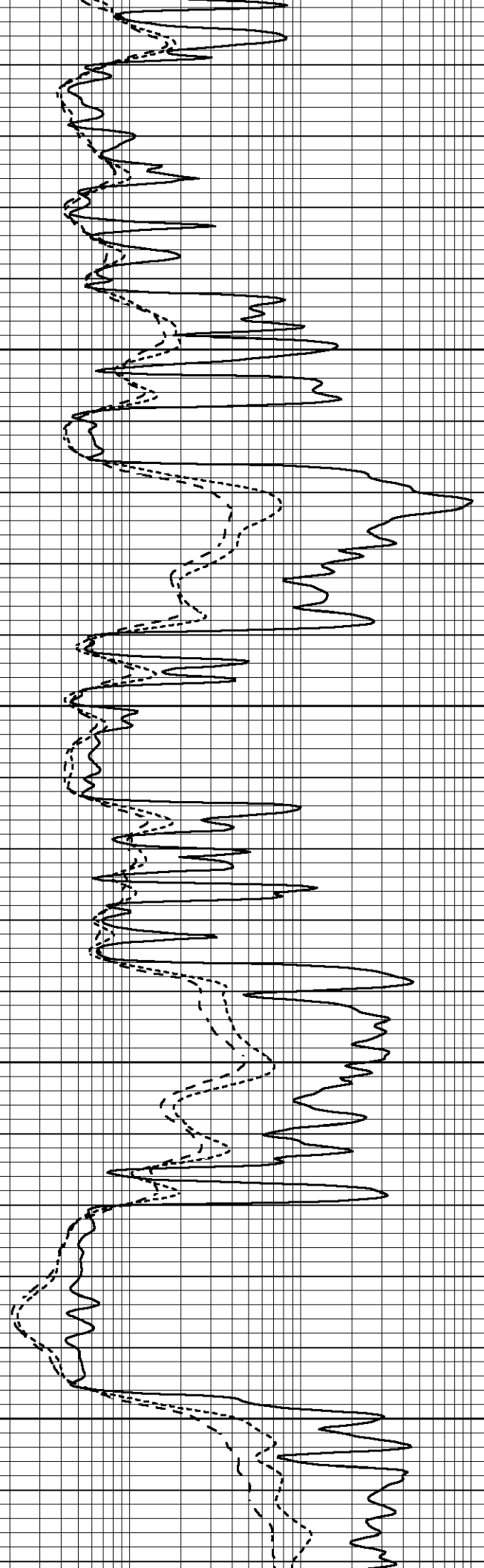


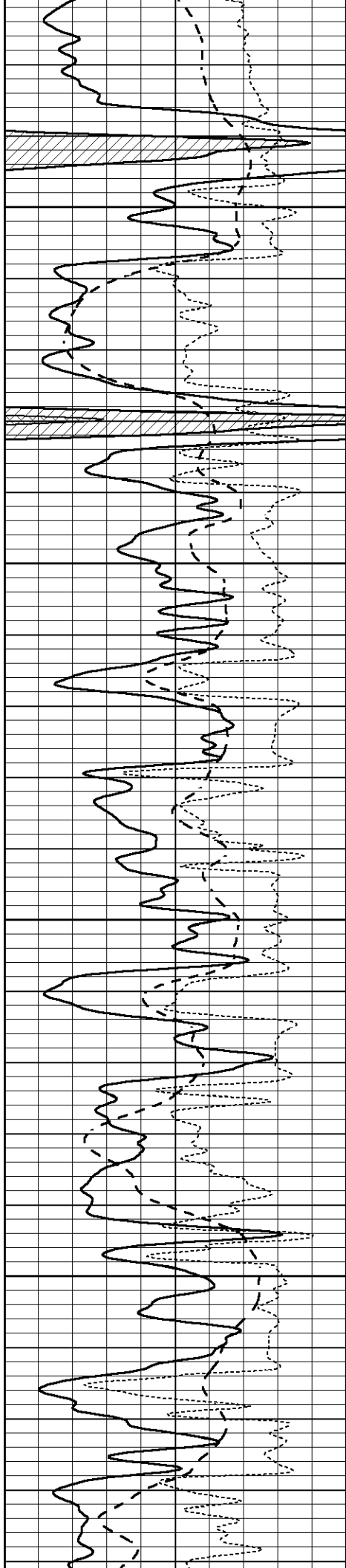
3950

4000

4050

4100



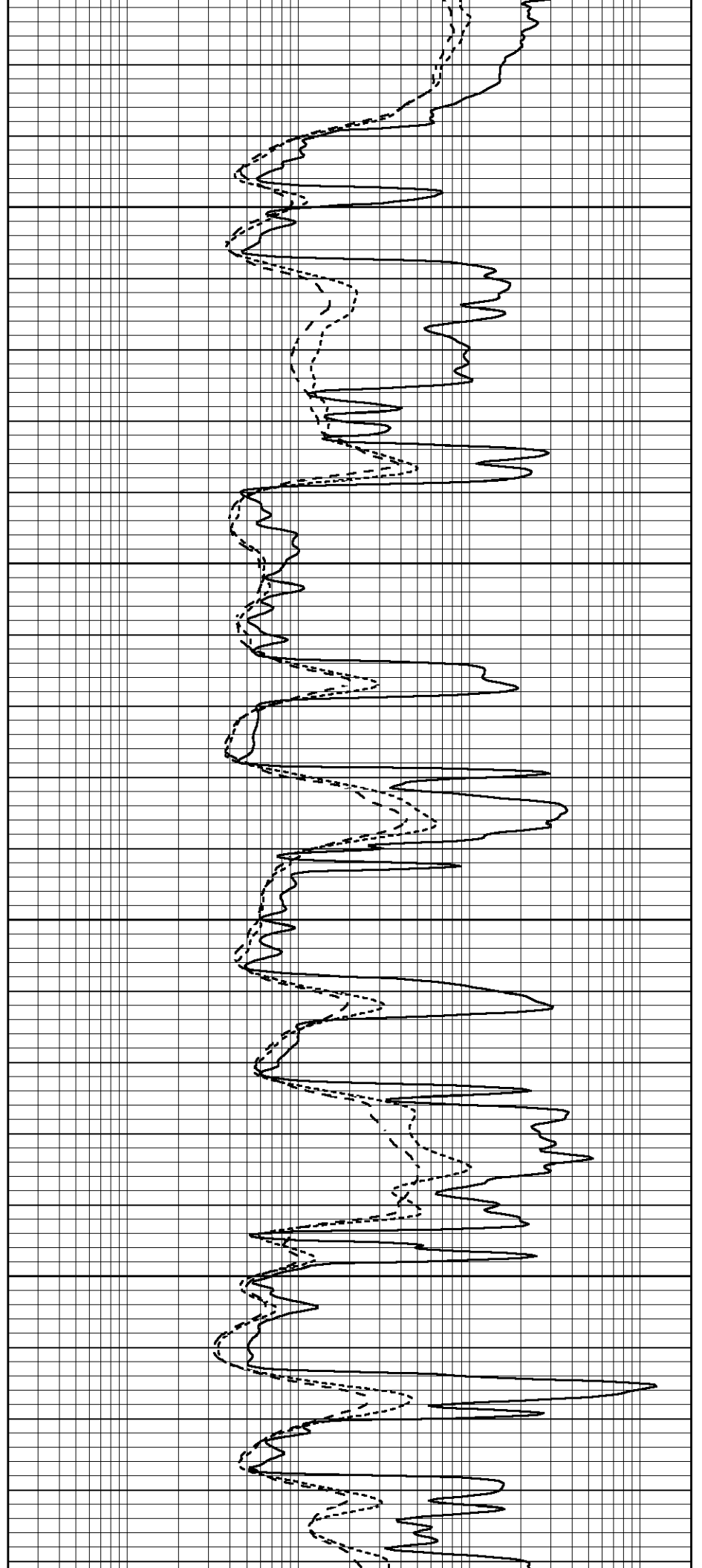


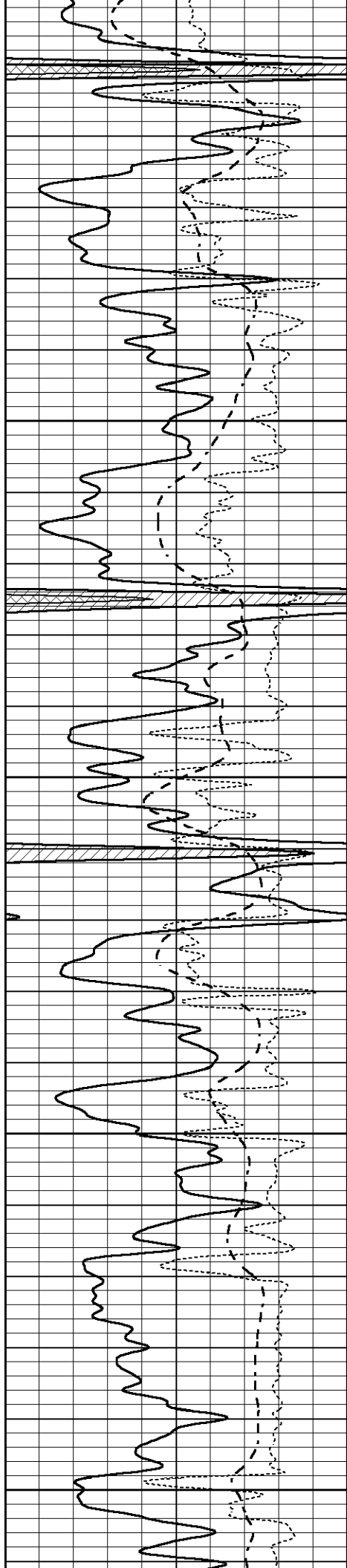
4150

4200

4250

4300





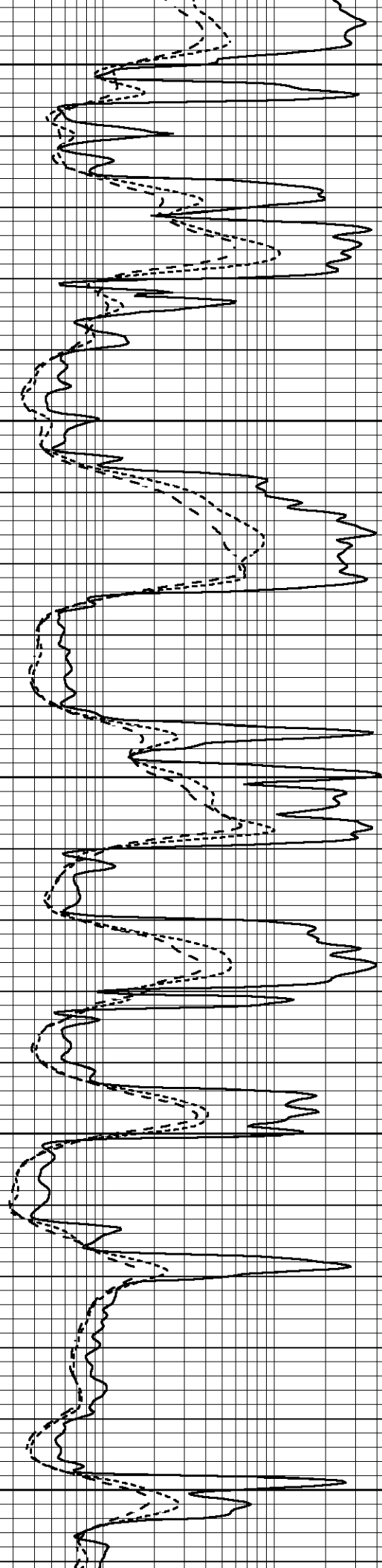
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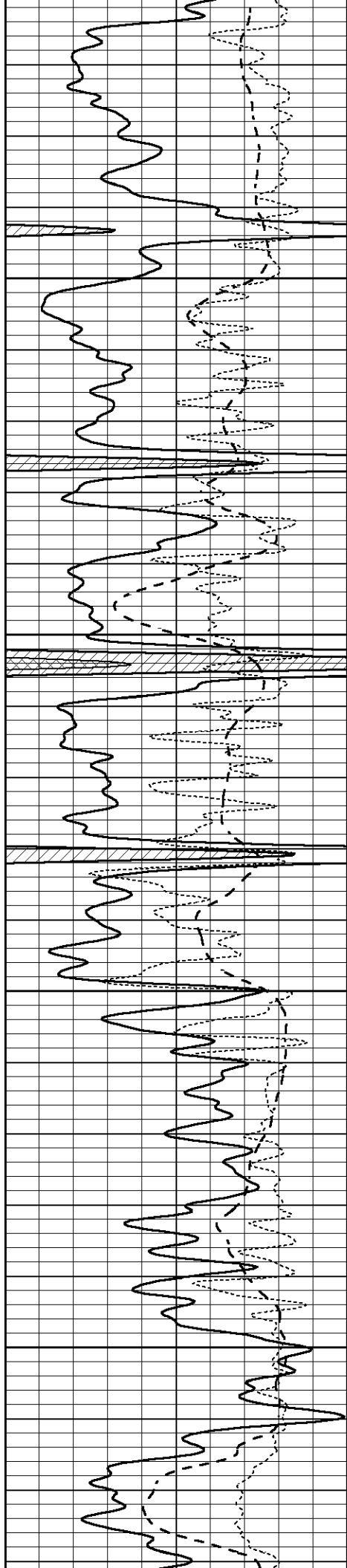
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4450

4500

4550



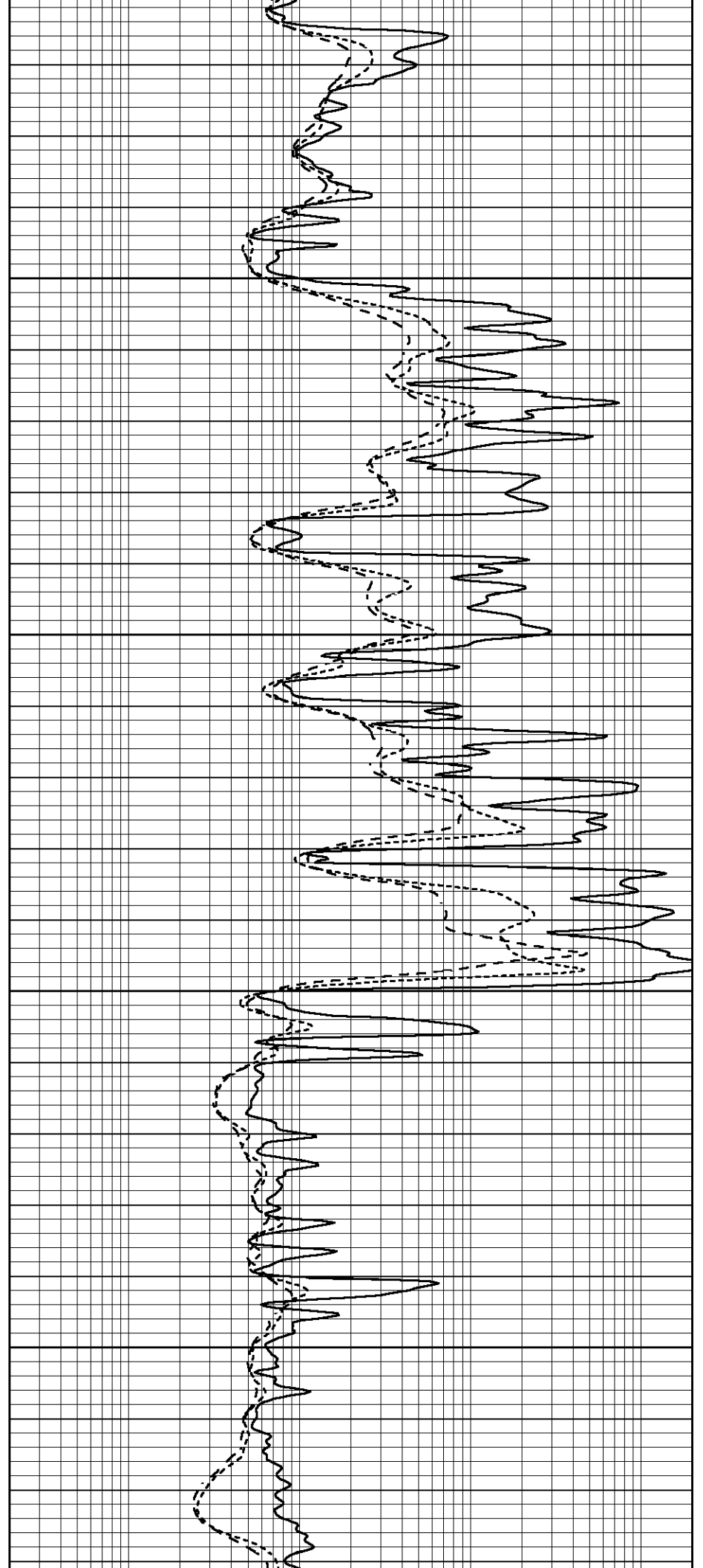


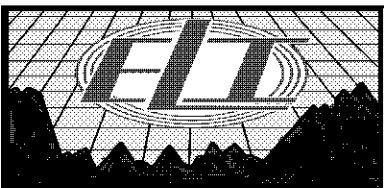
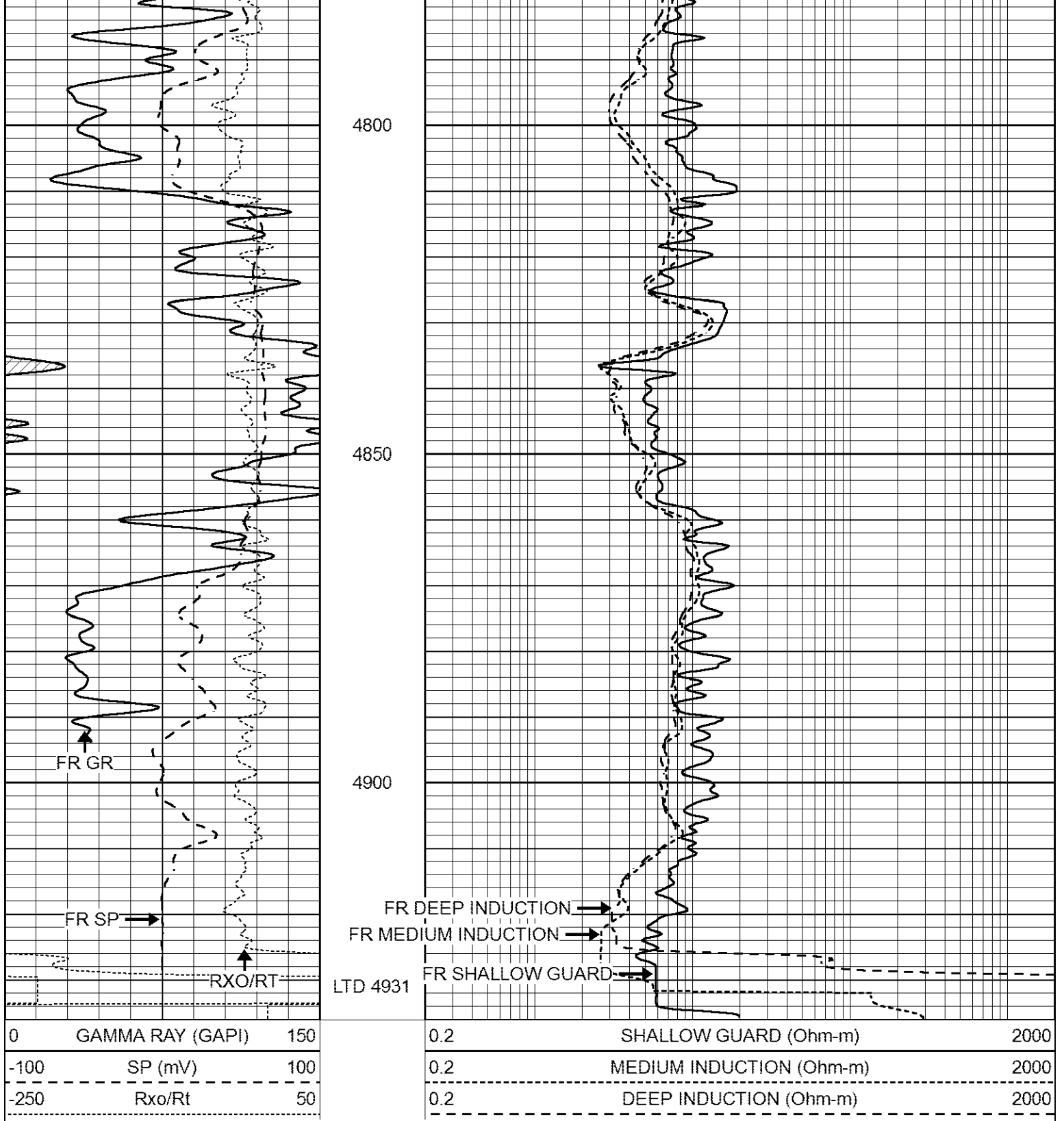
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4650

4700

4750





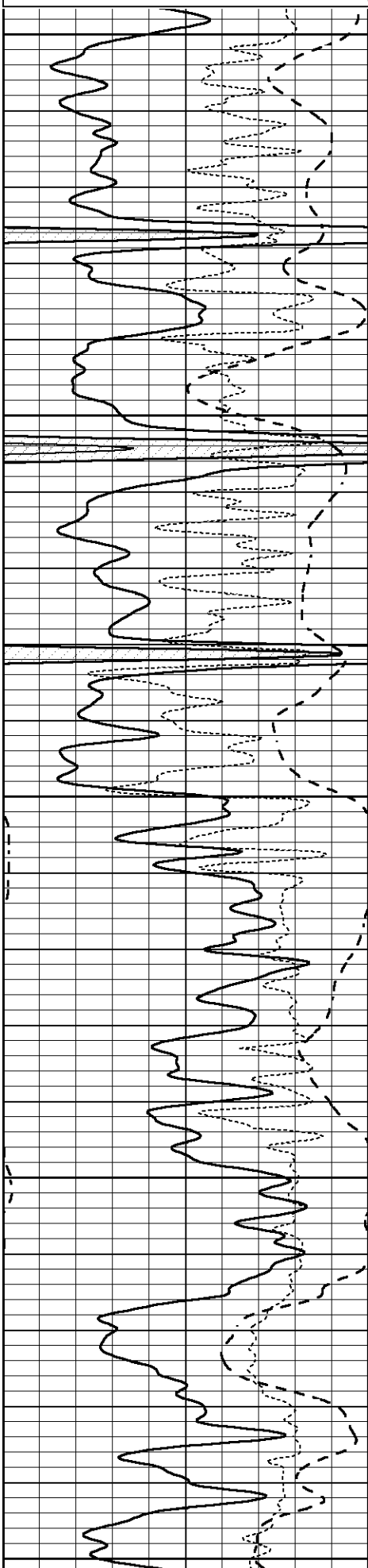
REPEAT SECTION

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 Presentation Format _dil
 Dataset Creation Thu May 19 02:48:10 2022
 Charted by Depth in Feet scaled 1:240

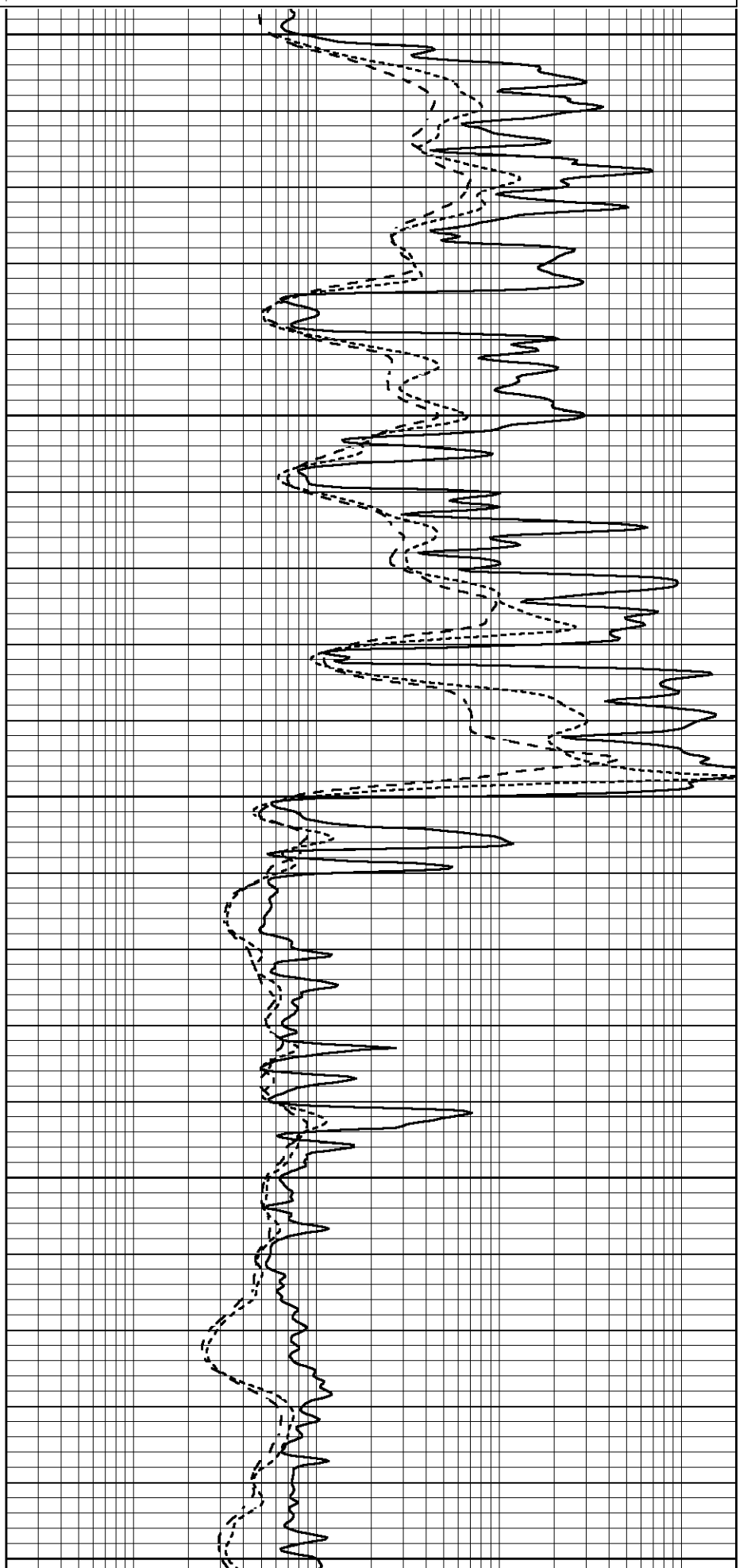


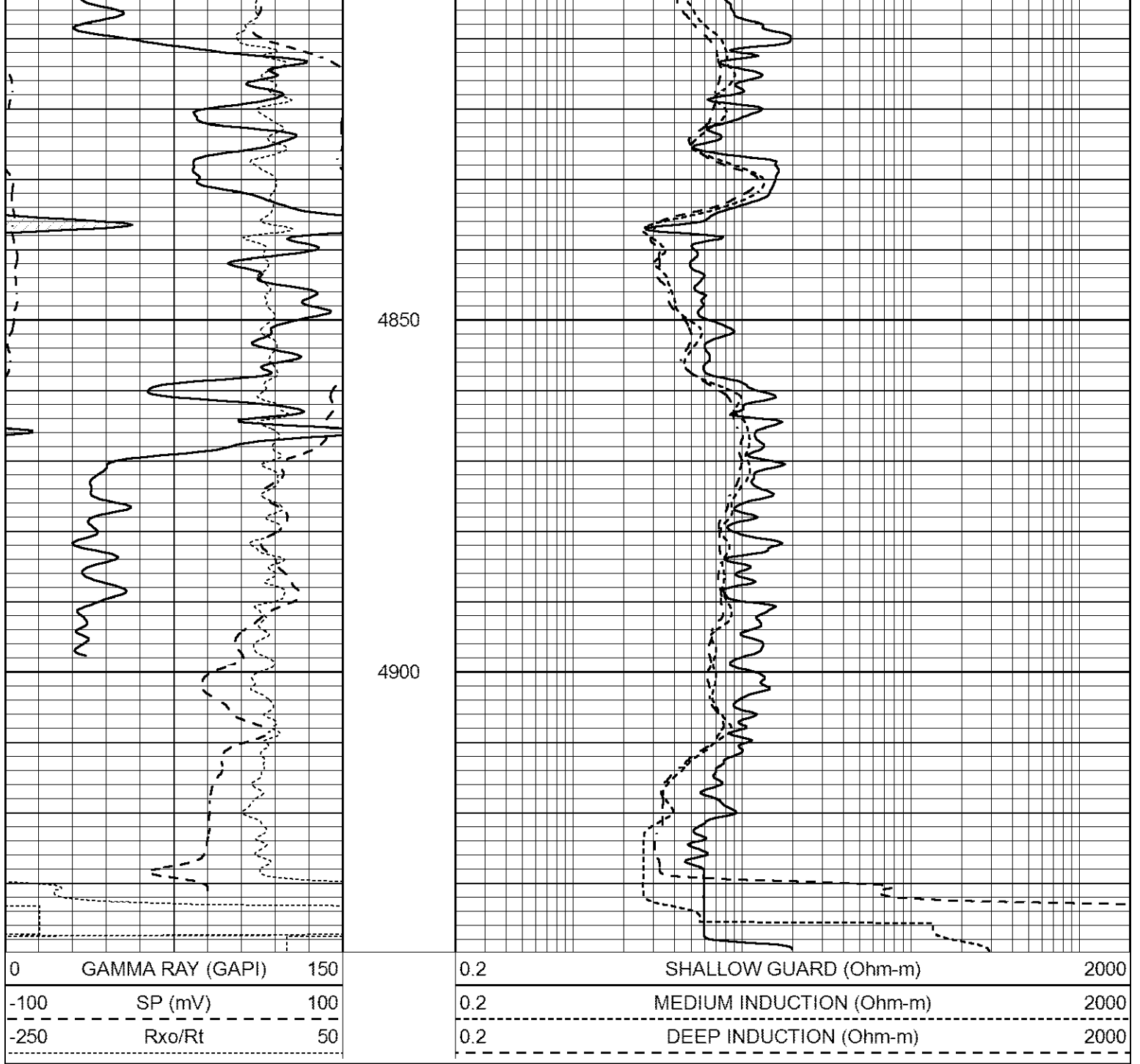
-100 SP (mV) 100
-250 Rxo/Rt 50

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



4600
4650
4700
4750
4800





Calibration Report

Database File 6530.db
 Dataset Pathname pass4.3M
 Dataset Creation Thu May 19 02:36:10 2022

Dual Induction Calibration Report

Serial-Model: FW1410-56-Probe
 Surface Cal Performed: Tue May 17 12:24:41 2022
 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	V	Air	Loop	mmho/m	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	420.000	155.000

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		1.7100	2.5900	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	

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: 7
Tool Model: Probe1
Performed: Tue May 17 12:24:57 2022

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5000 GAPI/cps