



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	DOWNING - NELSON OIL CO. INC.		
Well	NICKELSON - LLOYD UNIT #1-23		
Field	GLEN DALE SOUTH		
County	GRAHAM	State	KANSAS
Location:	API # : 15-065-23776-0000		Other Services CDL/CNL MEL
Permanent Datum	GROUND LEVEL	Elevation	2479
Log Measured From	KELLY BUSHING 8' A.G.L.		
Drilling Measured From	KELLY BUSHING		
SEC 23	TWP 9S	RGE 24W	
Run Number	ONE		
Depth Driller	4100		
Depth Logger	4095		
Bottom Logged Interval	4093		
Top Log Interval	00		
Casing Driller	8 5/8"@221'		
Casing Logger	221		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1,000 PPM	
Density / Viscosity	8.7/48		
pH / Fluid Loss	10.0/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.950@60F		
Rmt @ Meas. Temp	.713@60F		
Rmc @ Meas. Temp	1.14@60F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.487@117F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	9:00 A.M.		
Maximum Recorded Temperature	117F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
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 SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395
DIRECTIONS
WAKEENY, KS. 14N. ON HWY 283 TO "RED LINE RD.", 6W. TO "RD. 200", 1N., 1/8E., N. INTO



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MAIN SECTION

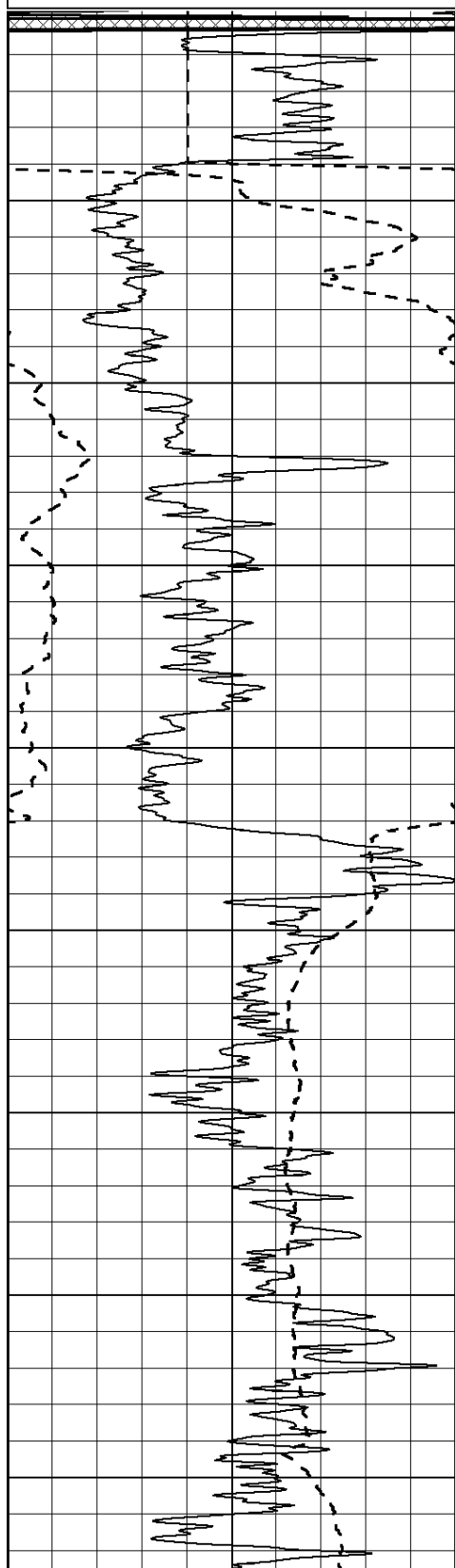
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Presentation Format: dil2
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Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

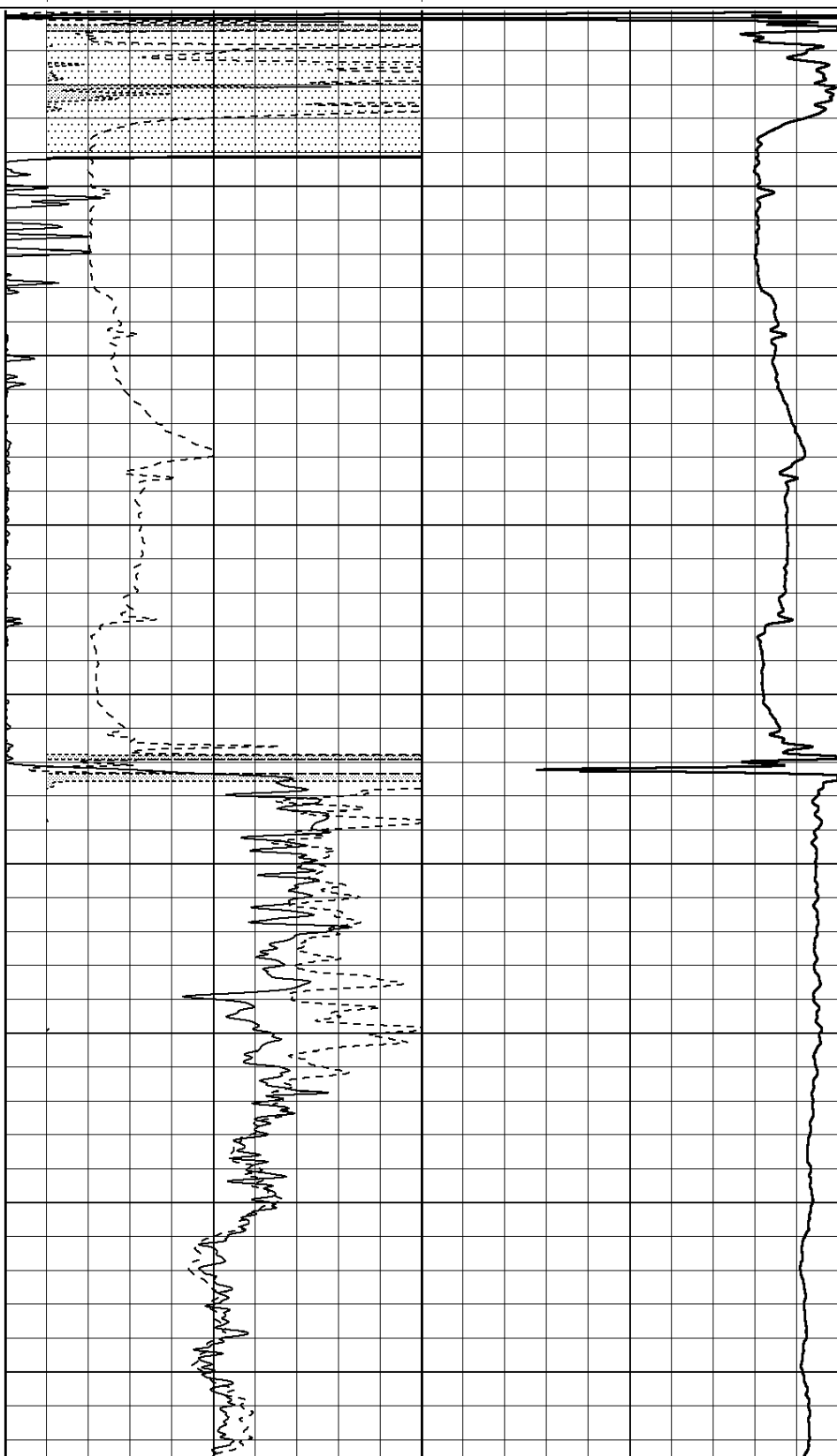
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0	RILD (Ohm-m)	50

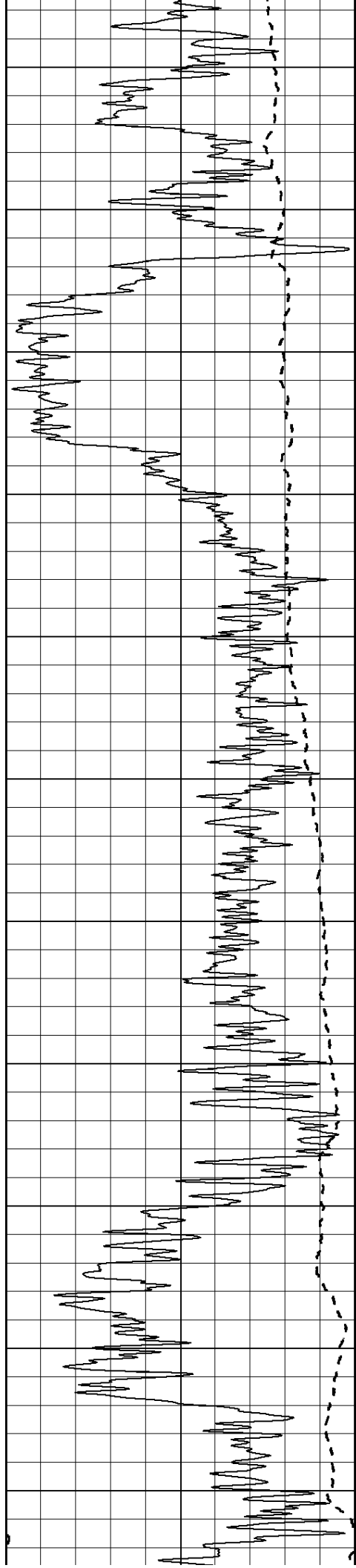
1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500



0
50
100
150
200
250
300
350
400





450

500

550

600

650

700

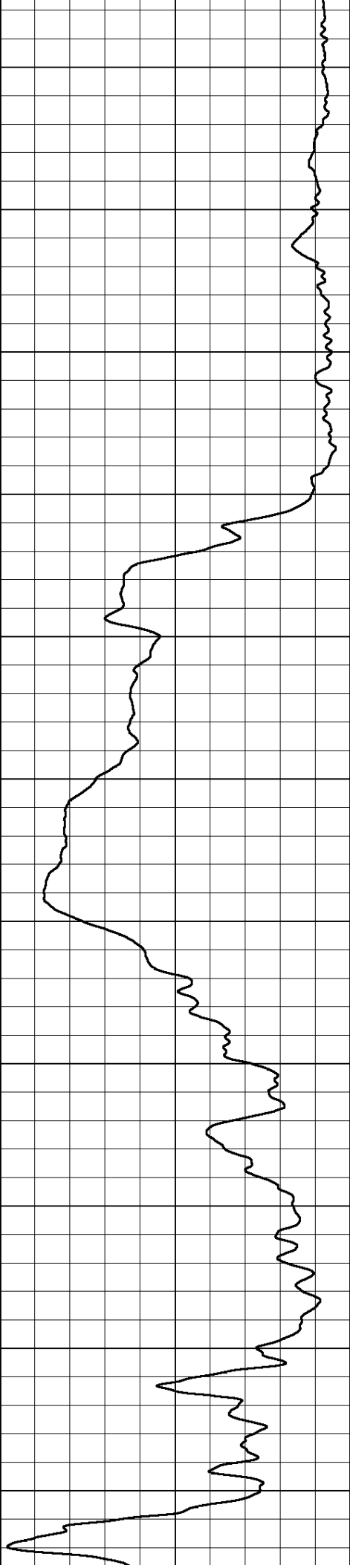
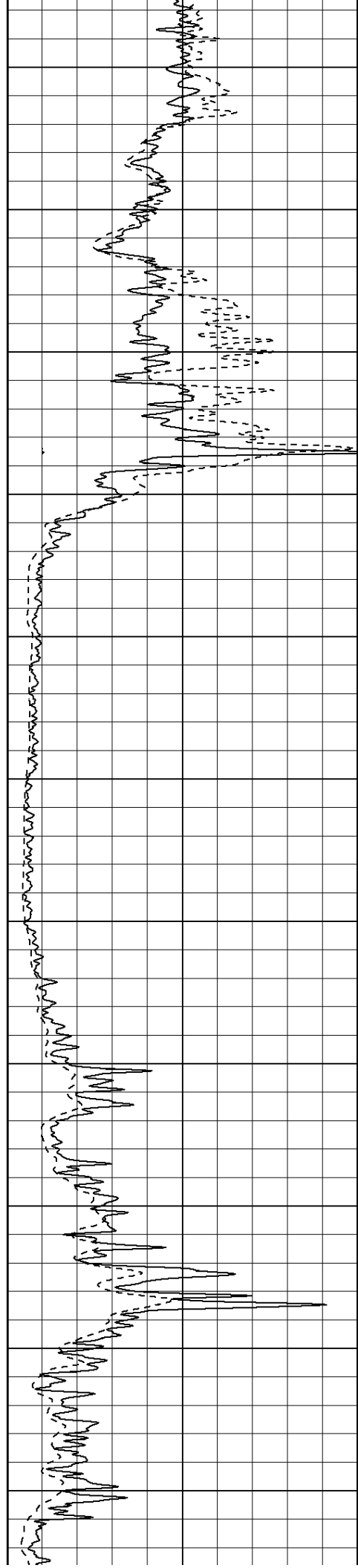
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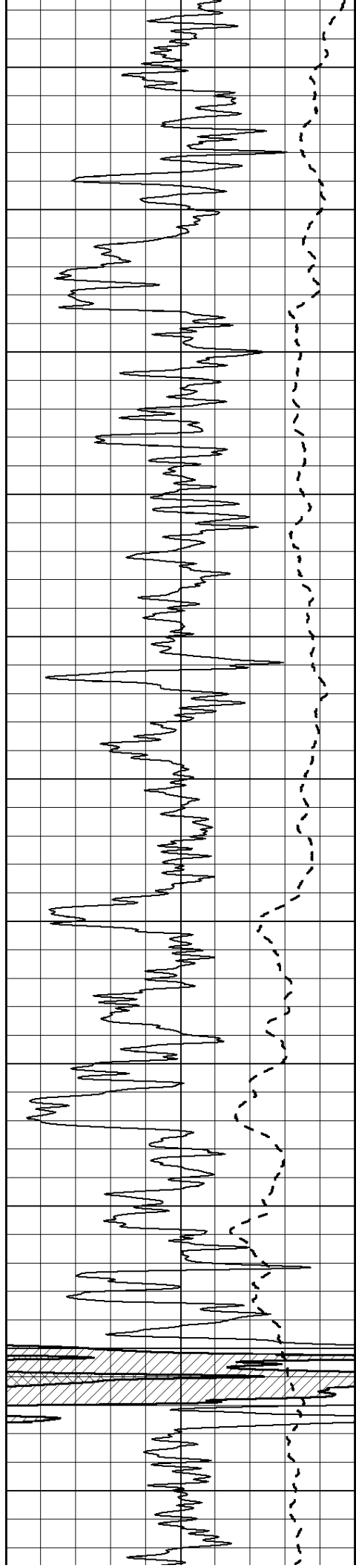
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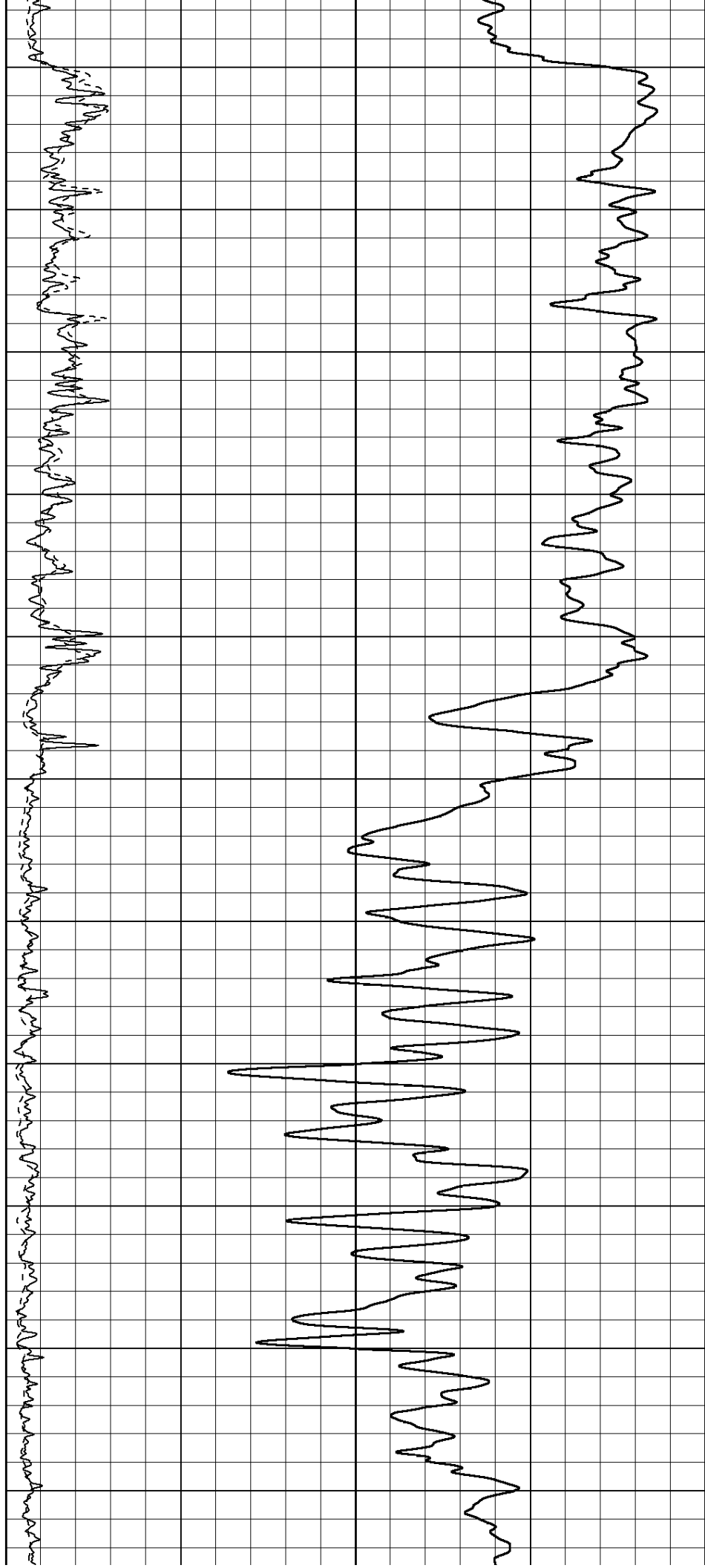
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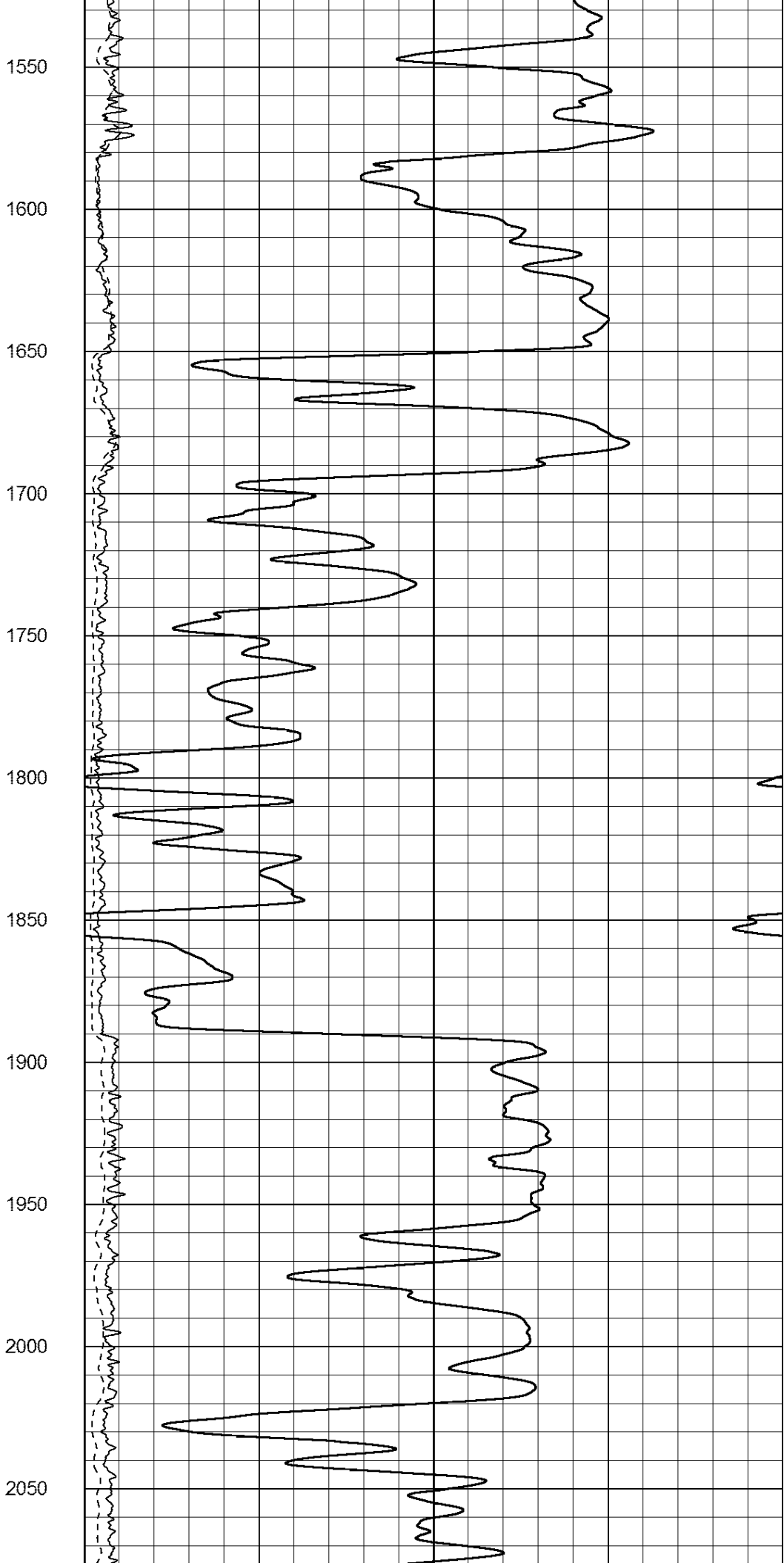
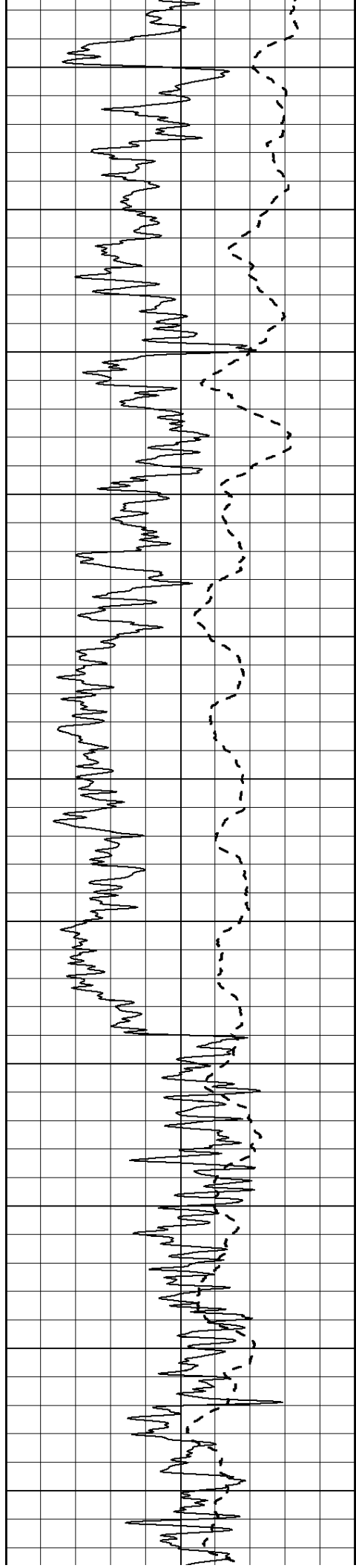
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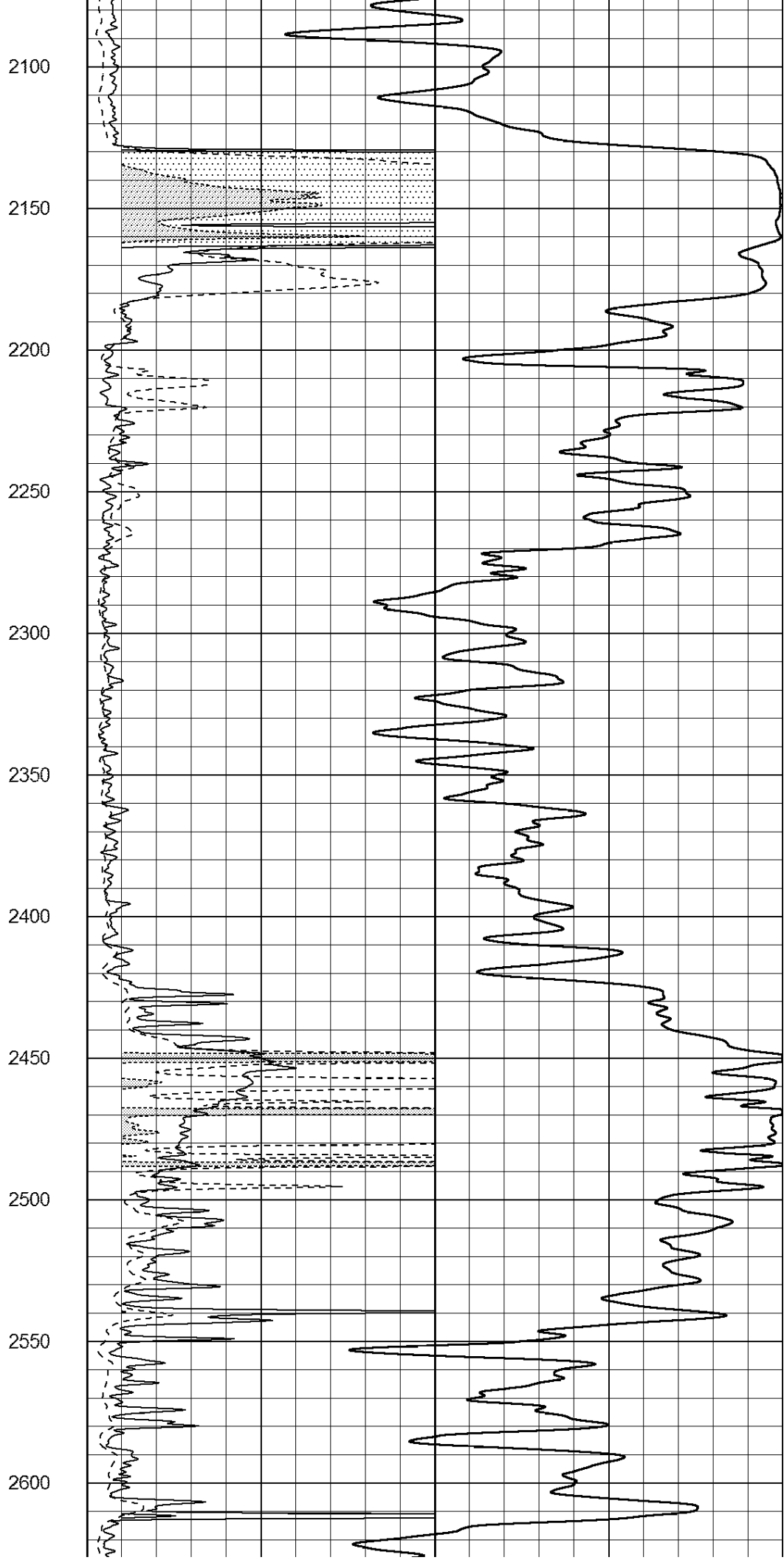
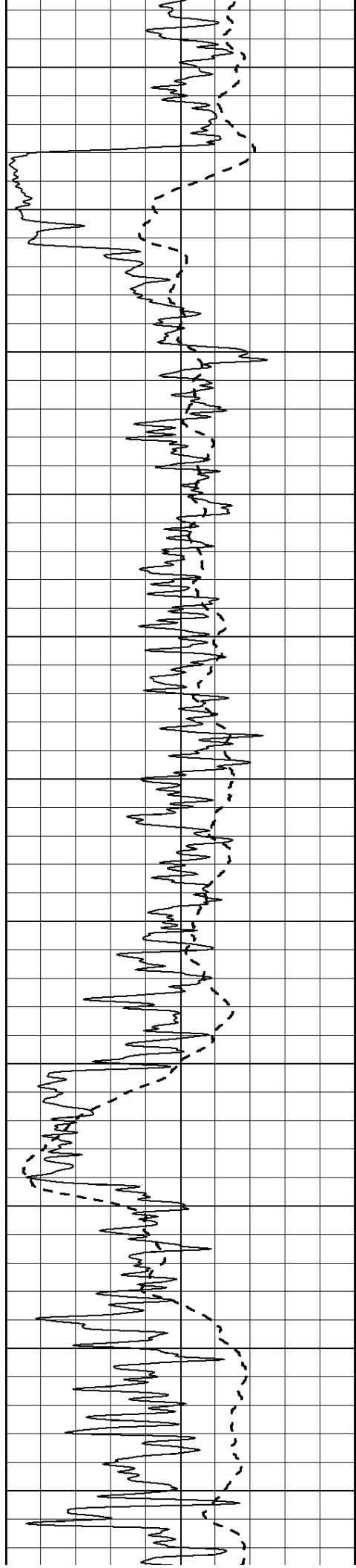


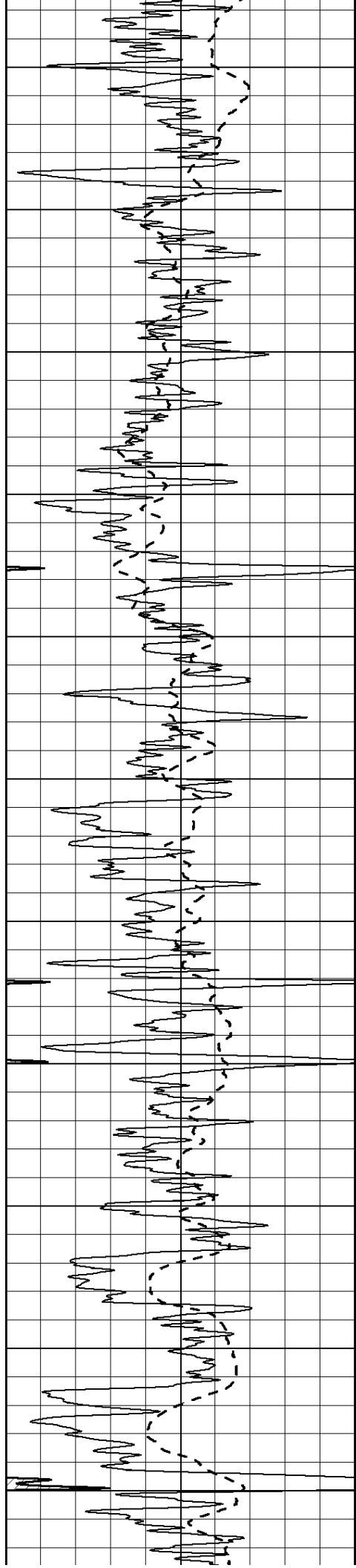


1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500









2650

2700

2750

2800

2850

2900

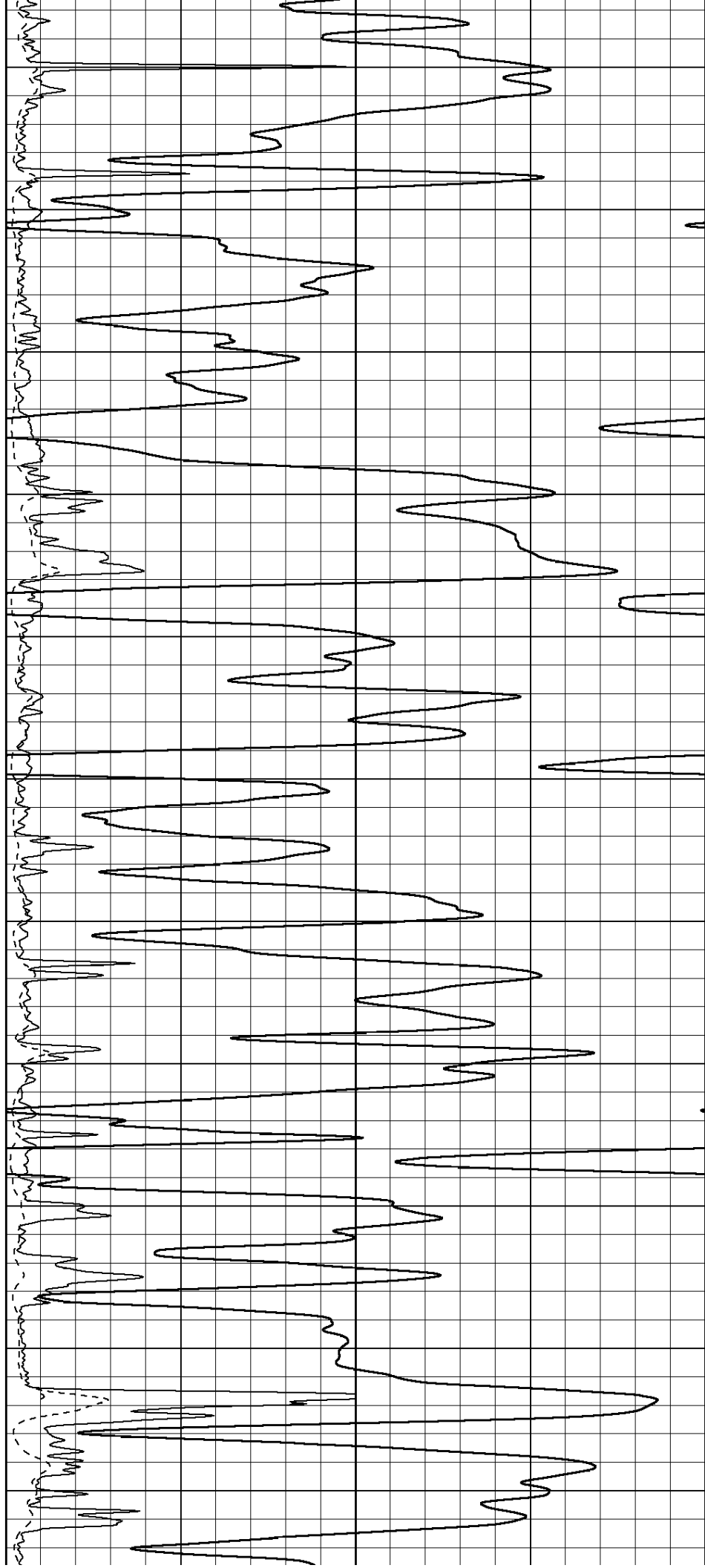
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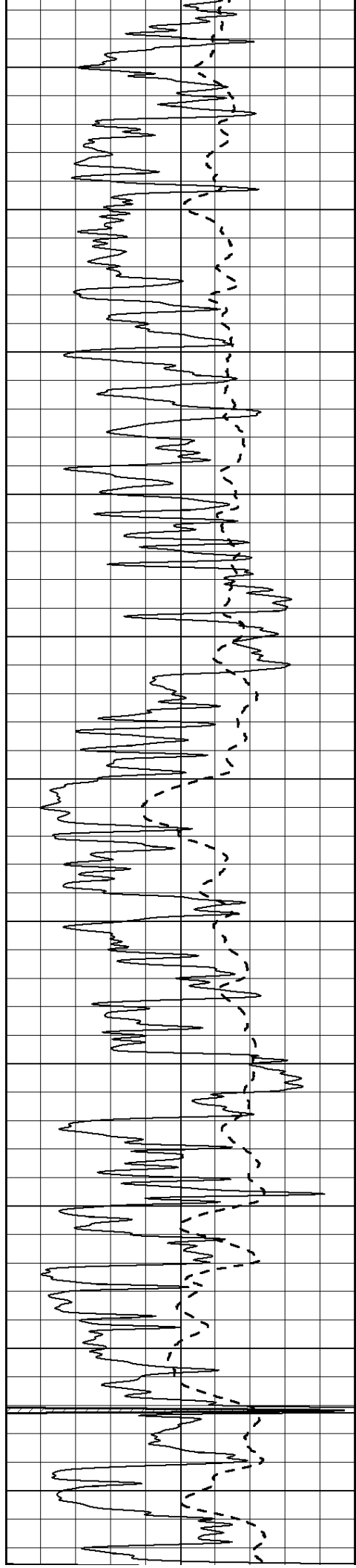
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3050

3100

3150





3200

3250

3300

3350

3400

3450

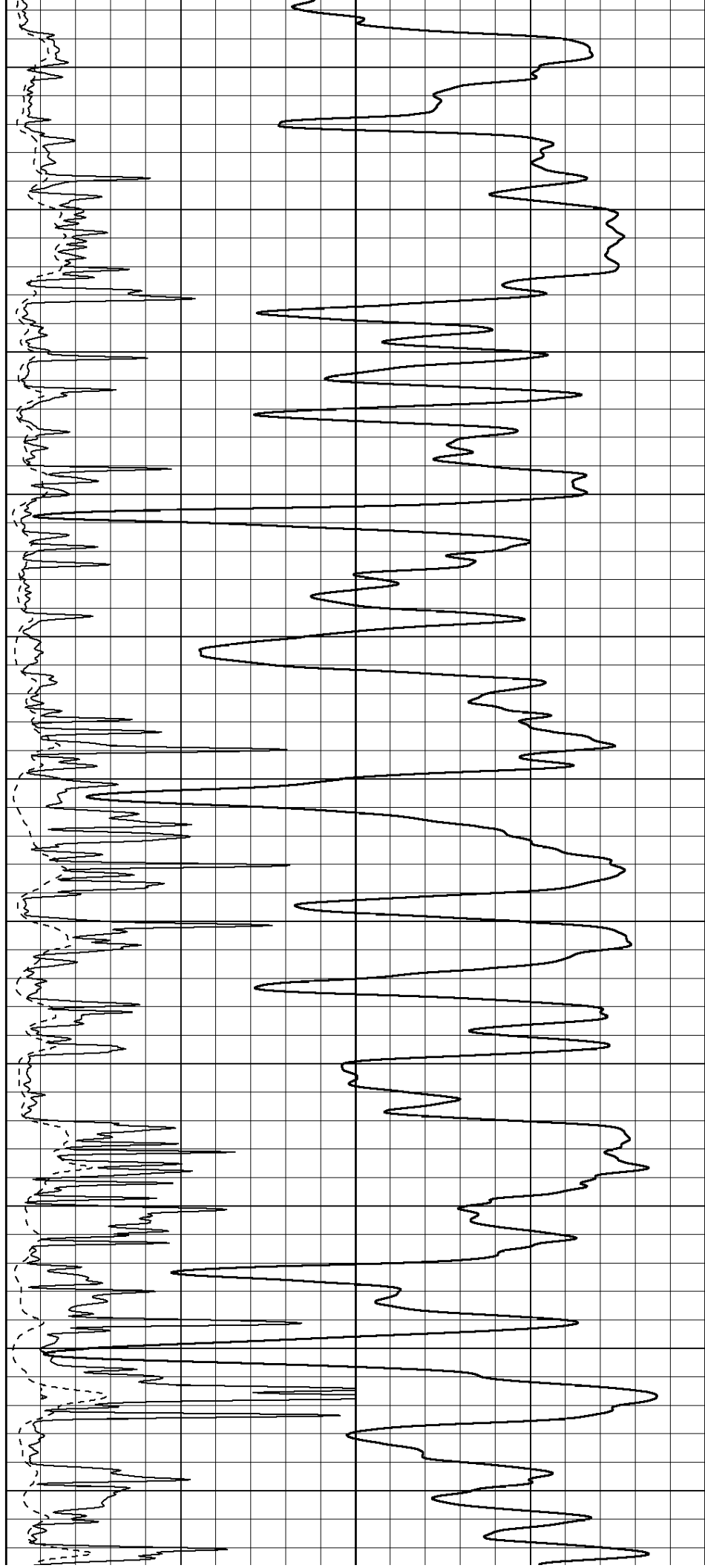
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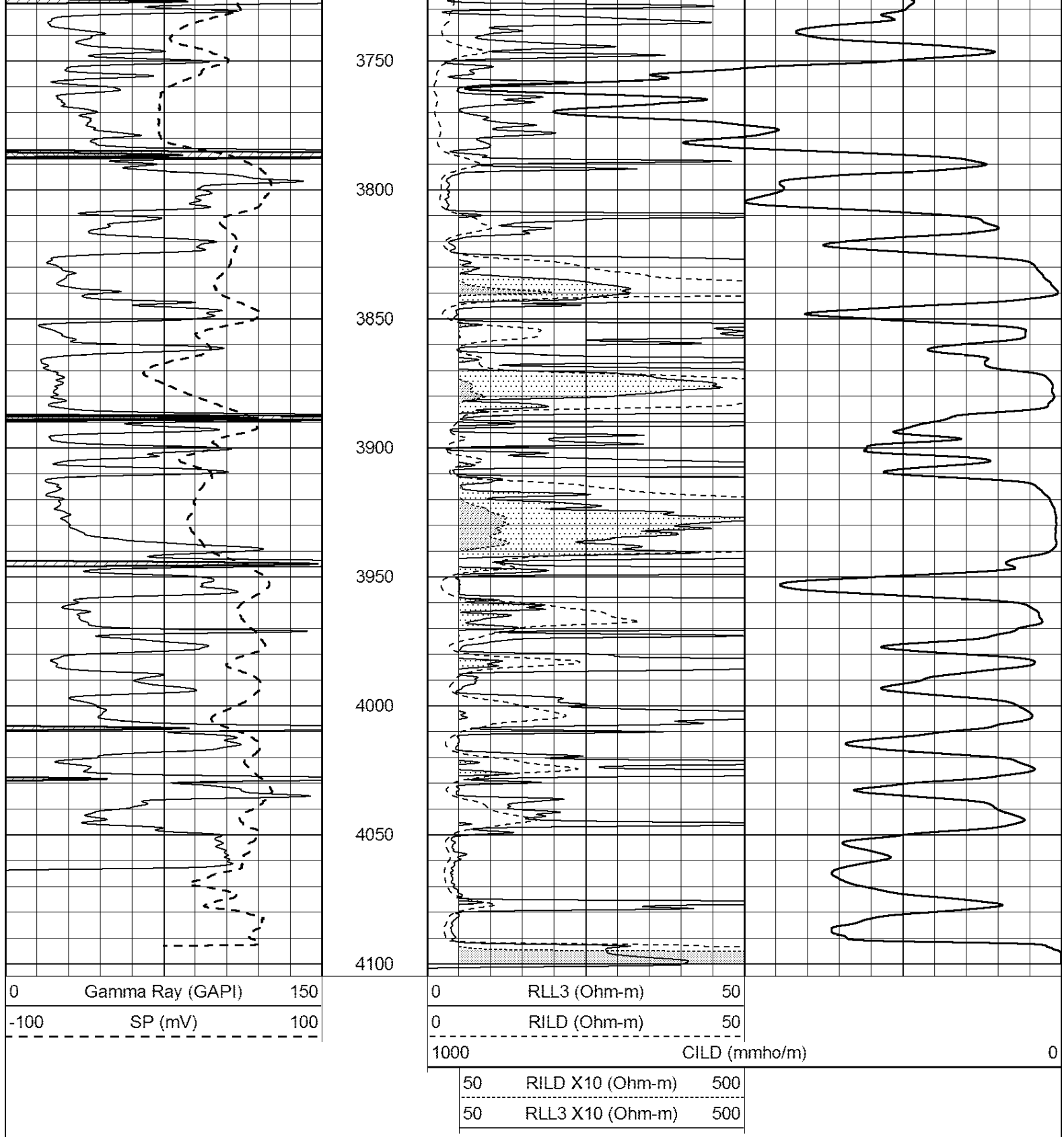
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3600

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3700





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ANHYDRITE

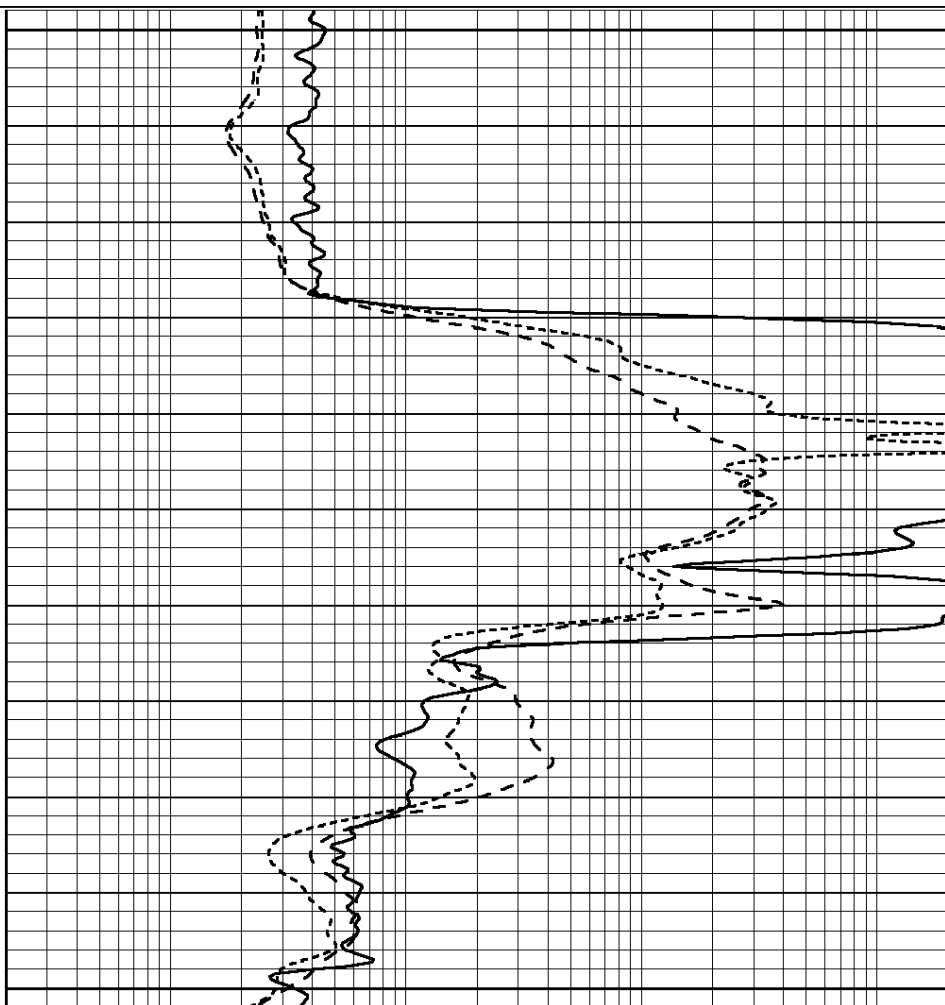
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0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20



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



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



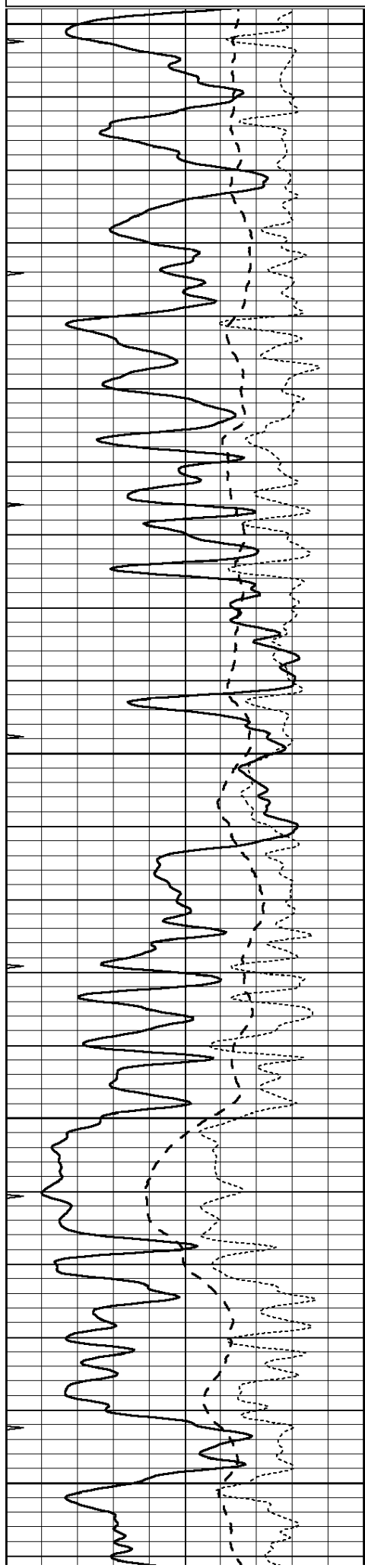
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MAIN SECTION

Database File: 007462ddn.db
Dataset Pathname: pass4.5
Presentation Format: dil
Dataset Creation: Sun Oct 09 10:47:21 2011
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



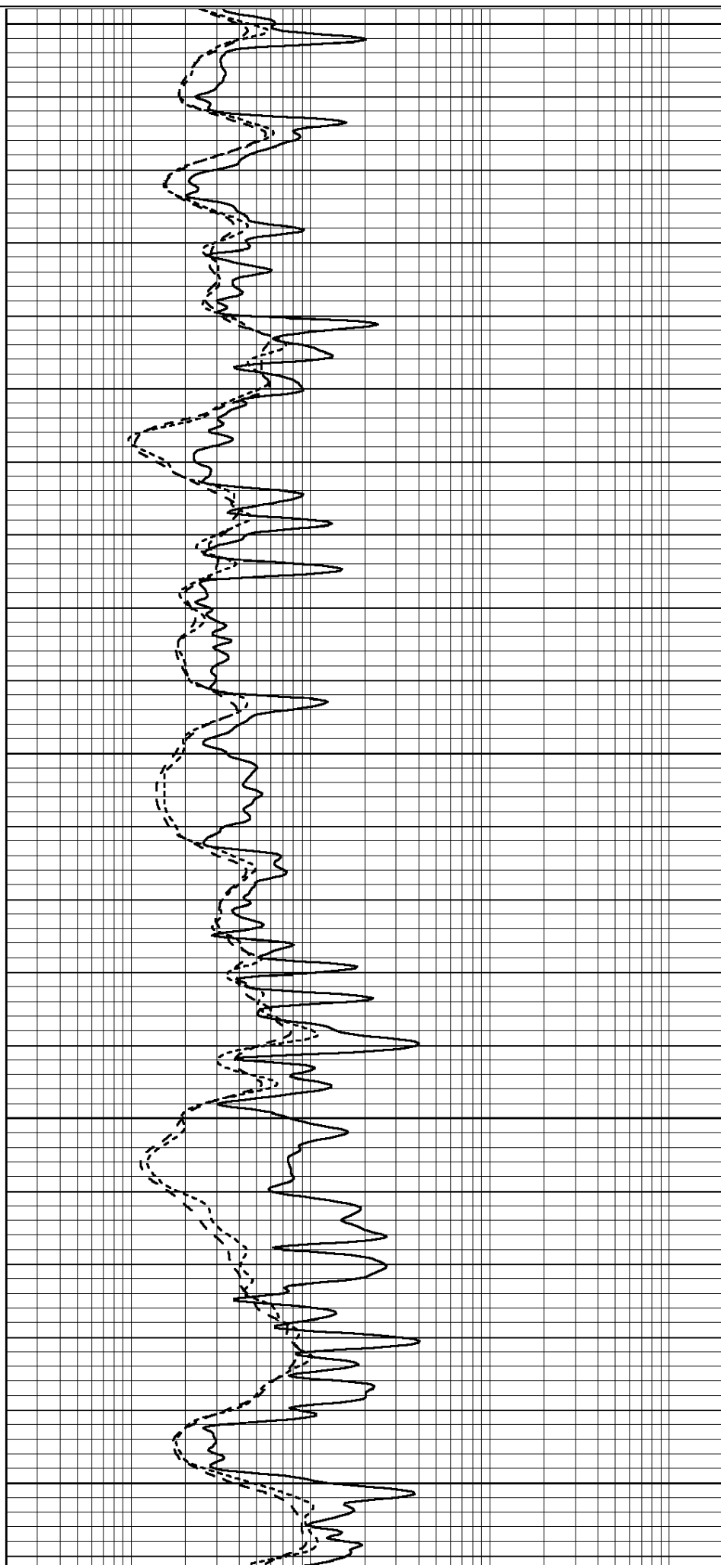
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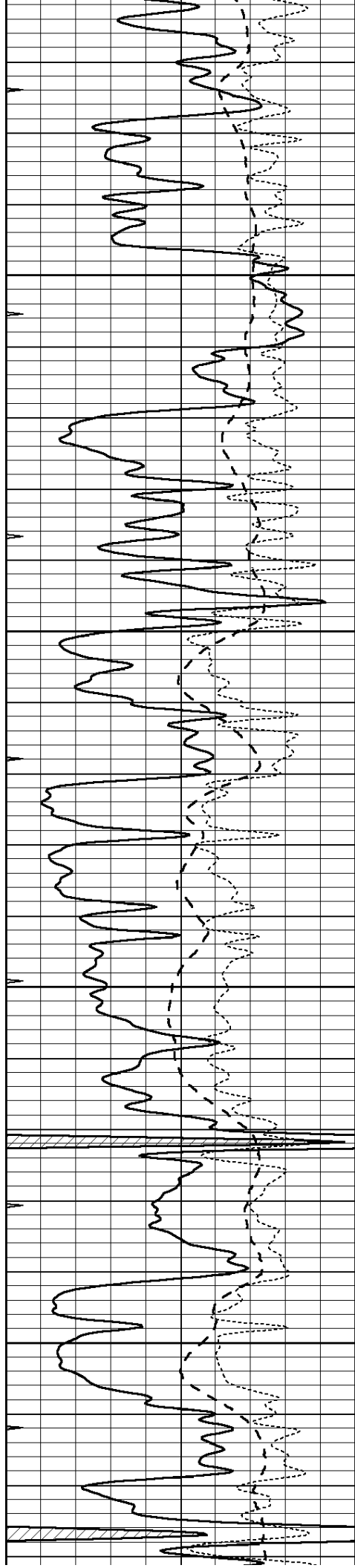
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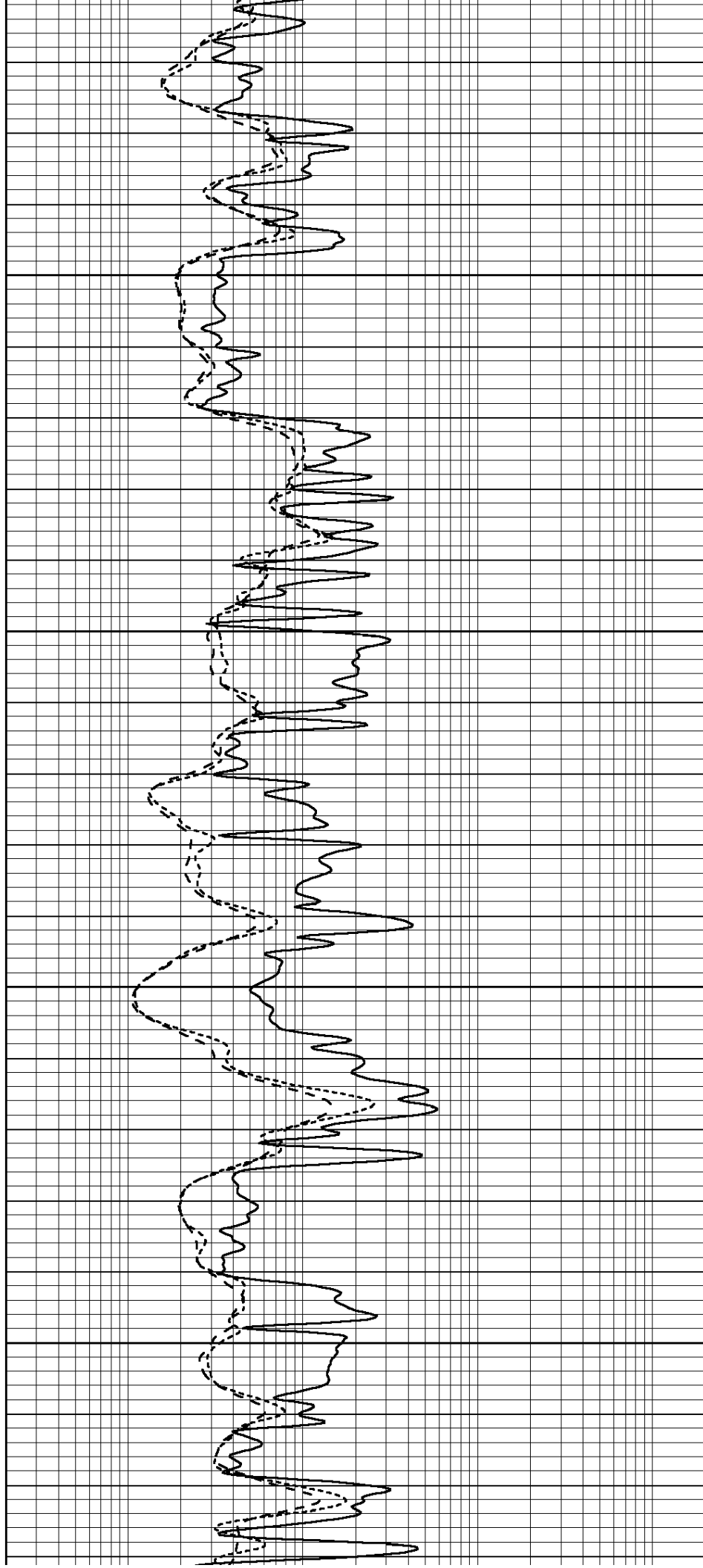


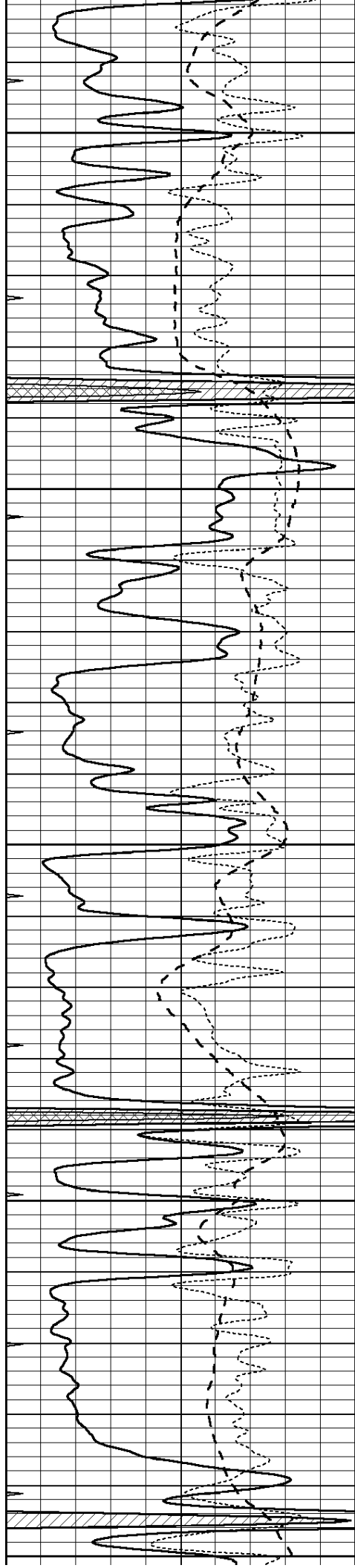
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3700





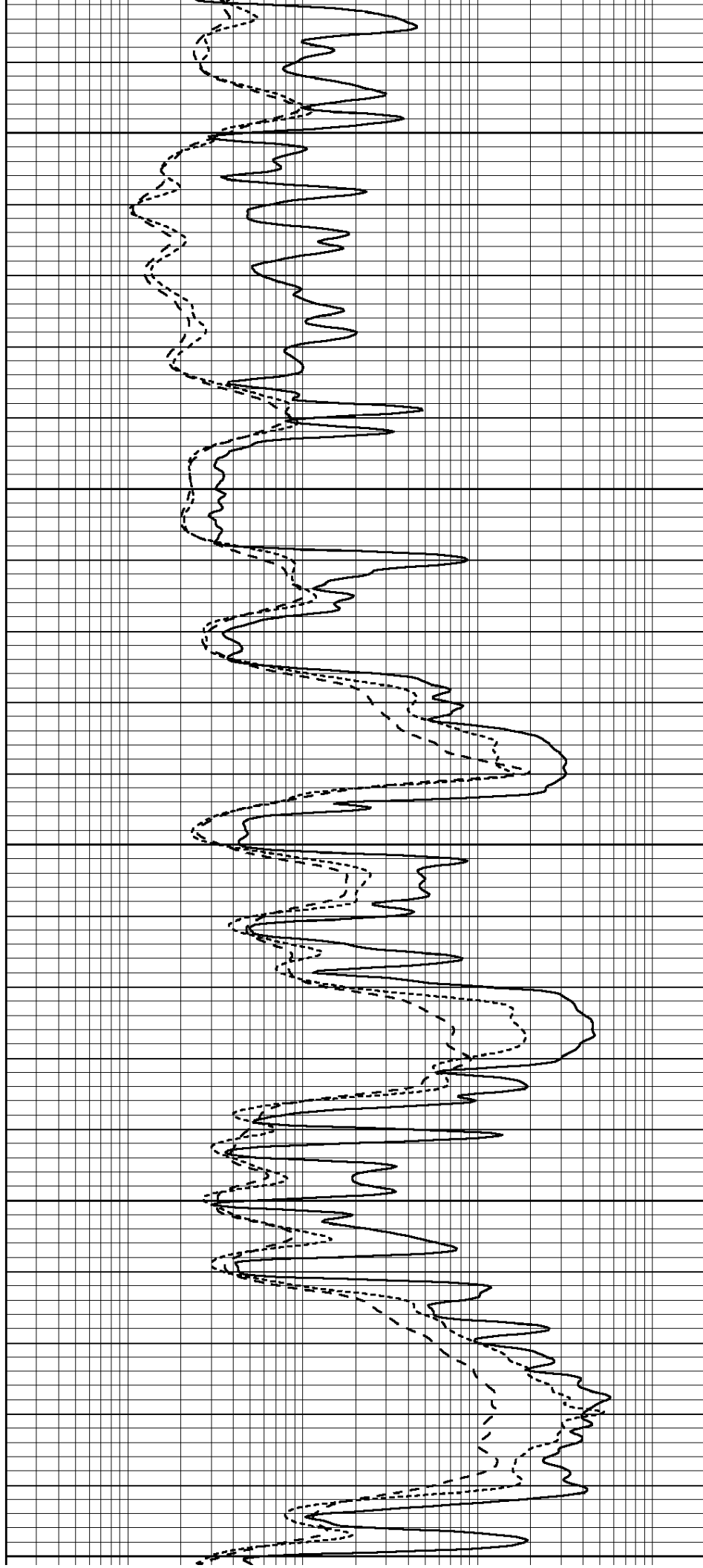
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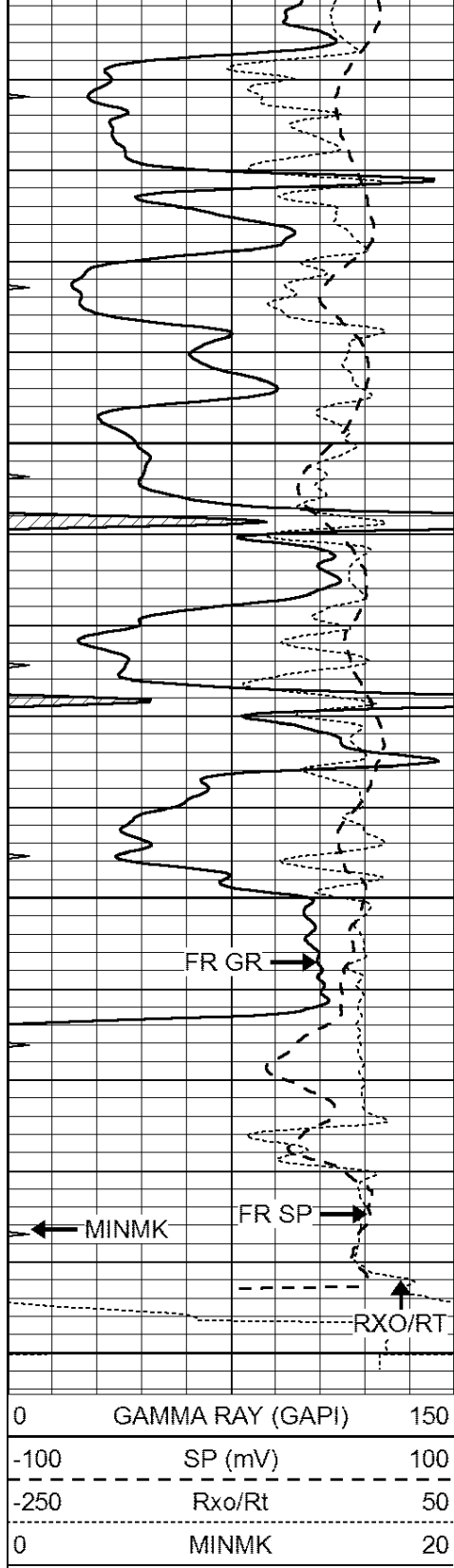
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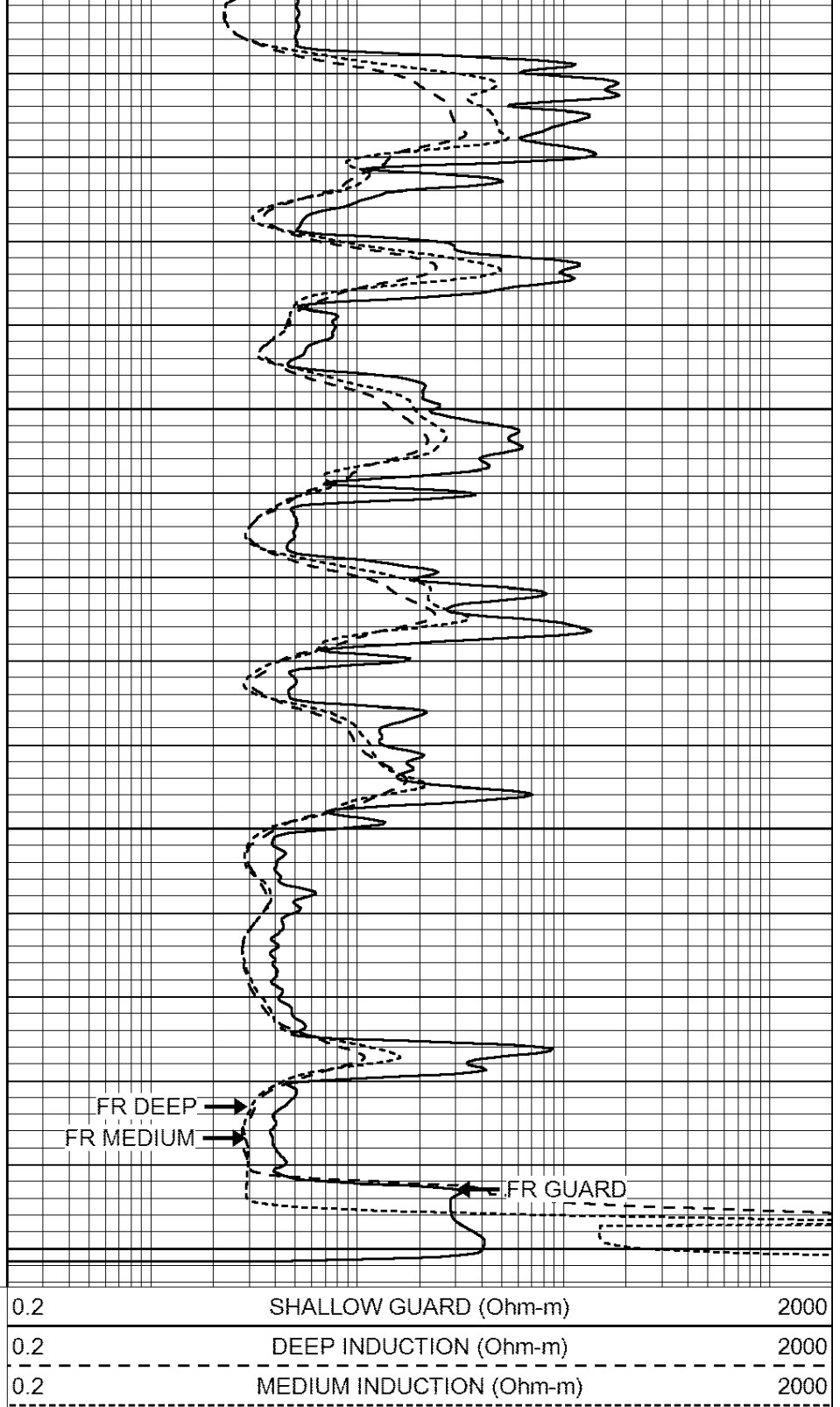




4000

4050

LTD 4095
4100



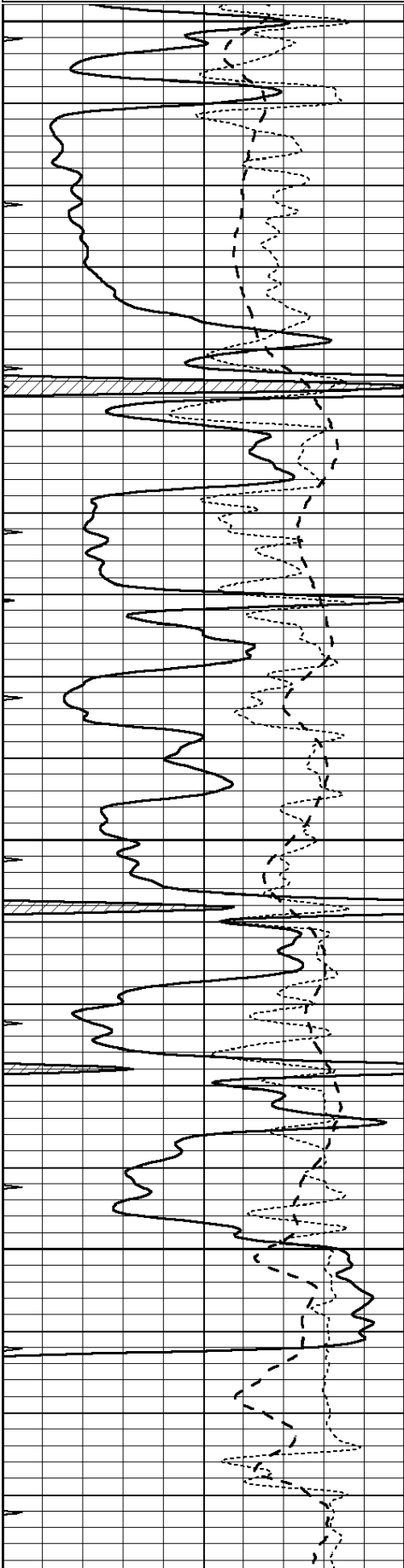
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REPEAT SECTION

Database File: 007462ddn.db
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 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

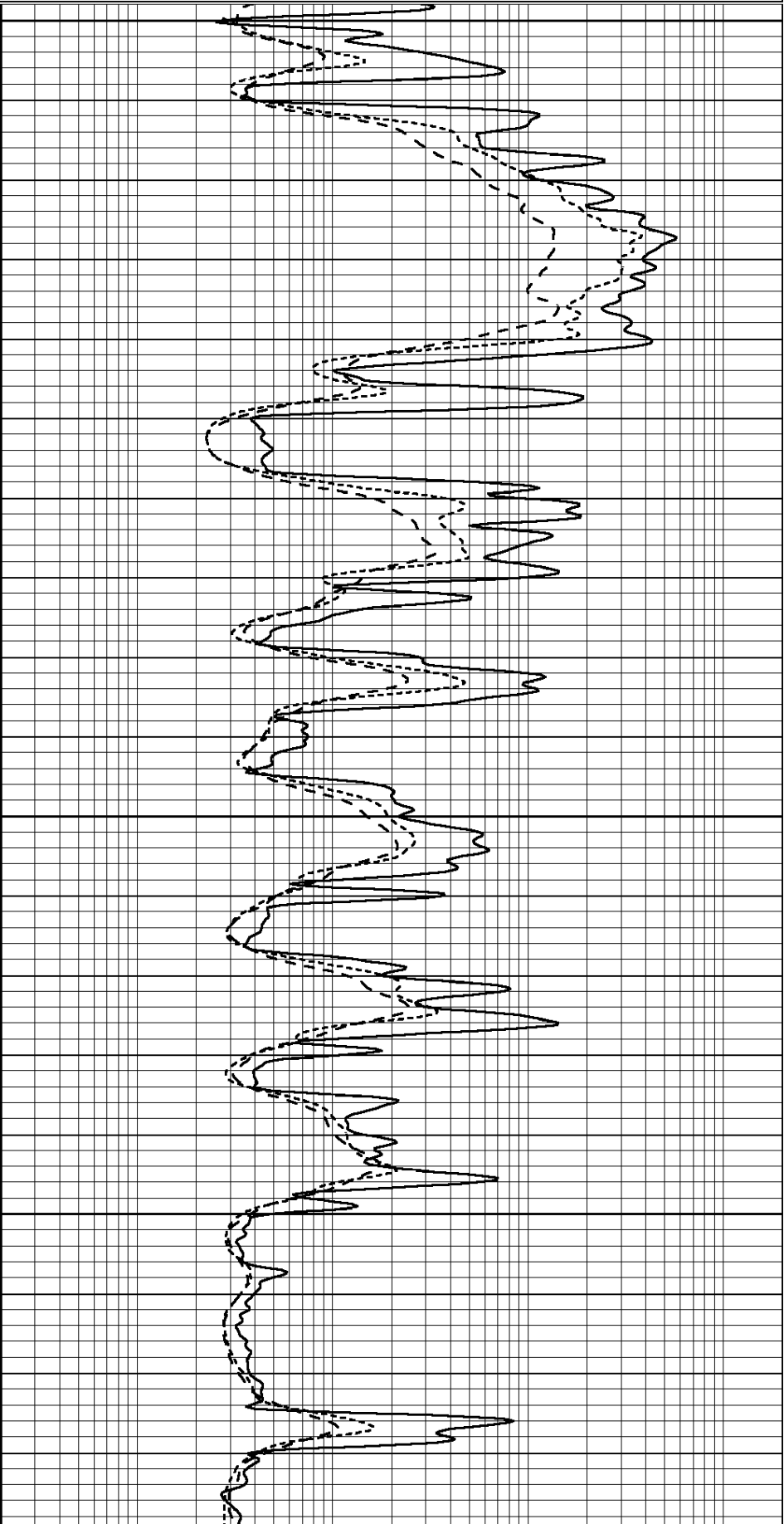


3900

3950

4000

4050





The graph shows a steady increase in the total workforce over the 20-year period. The number of people aged 65 and over also increases, but at a slower rate than the total workforce. The gap between the two lines, representing the workforce excluding those aged 65 and over, shows a slight increase until the mid-1990s, followed by a slight decrease.

Calibration Report

Dual Induction Calibration Report

Readings

References

Results

Litho Density Calibration Report

Litho Density Calibration

Caliper

Compensated Neutron Calibration Report

CAL IRRADIATION

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	1.00	cps	1.00	cps	1.0000
Long Space	1.00	cps	1.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number:	GR1				
Tool Model:	OPEN				
Performed:	Sun Oct 09 08:37:51 2011				
Calibrator Value:	200.0	GAPI			
Background Reading:	3.0	cps			
Calibrator Reading:	186.0	cps			
Sensitivity:	0.2500	GAPI/cps			