



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

DUAL INDUCTION LOG

Company	RITCHIE EXPLORATION, INC.		
Well	CAMPAS TRUST #1		
Field	WILDCAT		
County	WICHITA		
State	KANSAS		
Company	RITCHIE EXPLORATION, INC.		
Well	CAMPAS TRUST #1		
Field	WILDCAT		
County	WICHITA		
State	KANSAS		
Location:	AP1 # : 15-203-20278-0000 2275' FSL & 950' FEL		Other Services CDL/CNL
Permanent Datum	SEC 33 TWP 16S RGE 37W	GROUND LEVEL	Elevation 3361
Log Measured From		KELLY BUSHING 5' A.G.L.	K.B. 3366
Drilling Measured From		KELLY BUSHING	D.F. 3364 G.L. 3361
Date	7/31/14		
Run Number	ONE		
Depth Driller	5040		
Depth Logger	5044		
Bottom Logged Interval	5042		
Top Log Interval	00		
Casing Driller	8 5/8" @ 263		
Casing Logger	258		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 9000 PPM	
Density / Viscosity	9.364		
pH / Fluid Loss	9.0/9.6		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.60 @ 90F		
Rmt @ Meas. Temp	.45 @ 90F		
Rmc @ Meas. Temp	.72 @ 90F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.43 @ 125F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	125F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	MAX LOVELY		

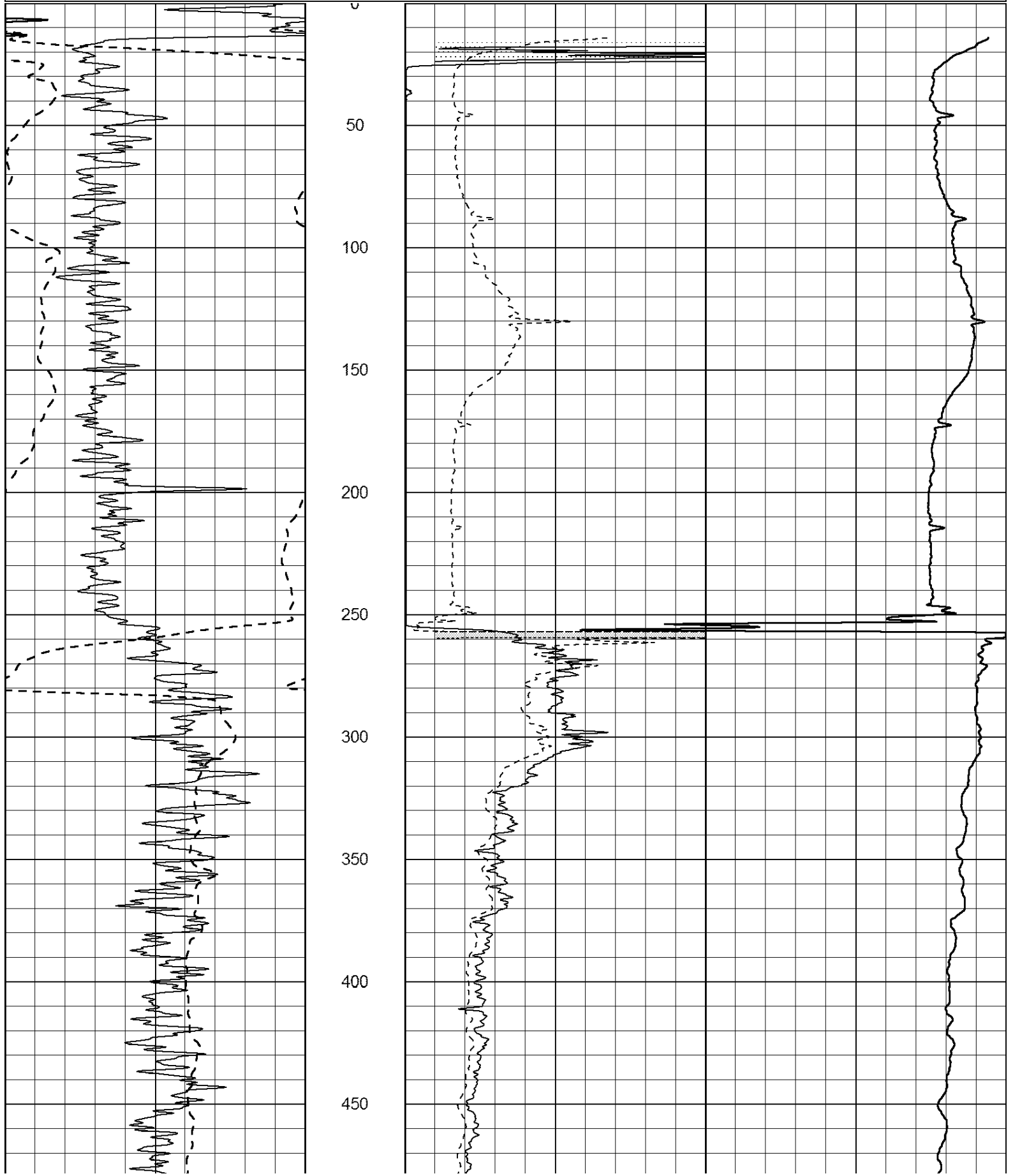
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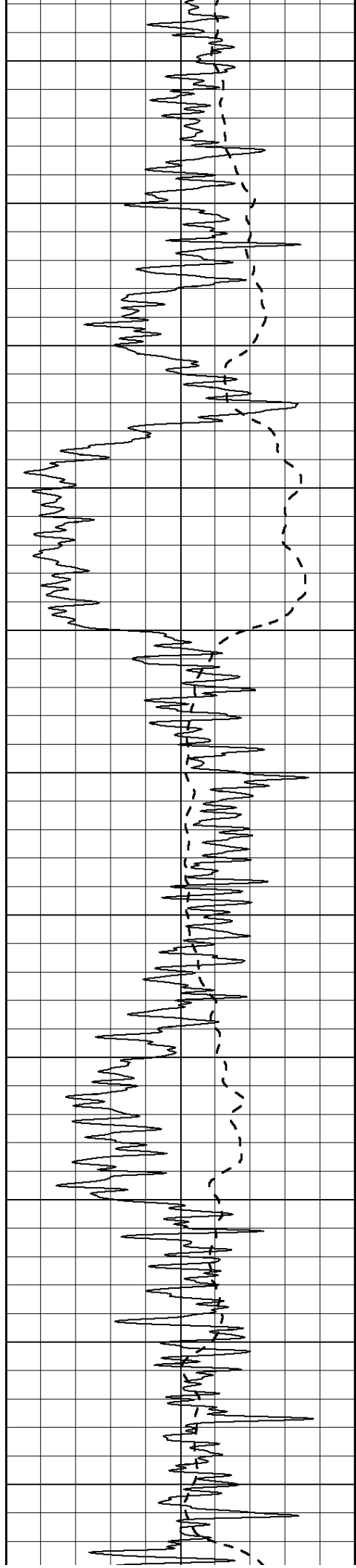
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
LEOTI, KS. - 9 NORTH TO RD. G - 2 WEST TO RD. 10 - 1/2 NORTH - WEST INTO

Charted by: _____ Depth in Feet scaled 1:500					
0	Gamma Ray (GAPI)	150	0	RLL3 (Ohm-m)	50
-100	SP (mV)	100	0	RILD (Ohm-m)	50
-----			-----		
			1000	CILD (mmho/m)	0
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500





500

550

600

650

700

750

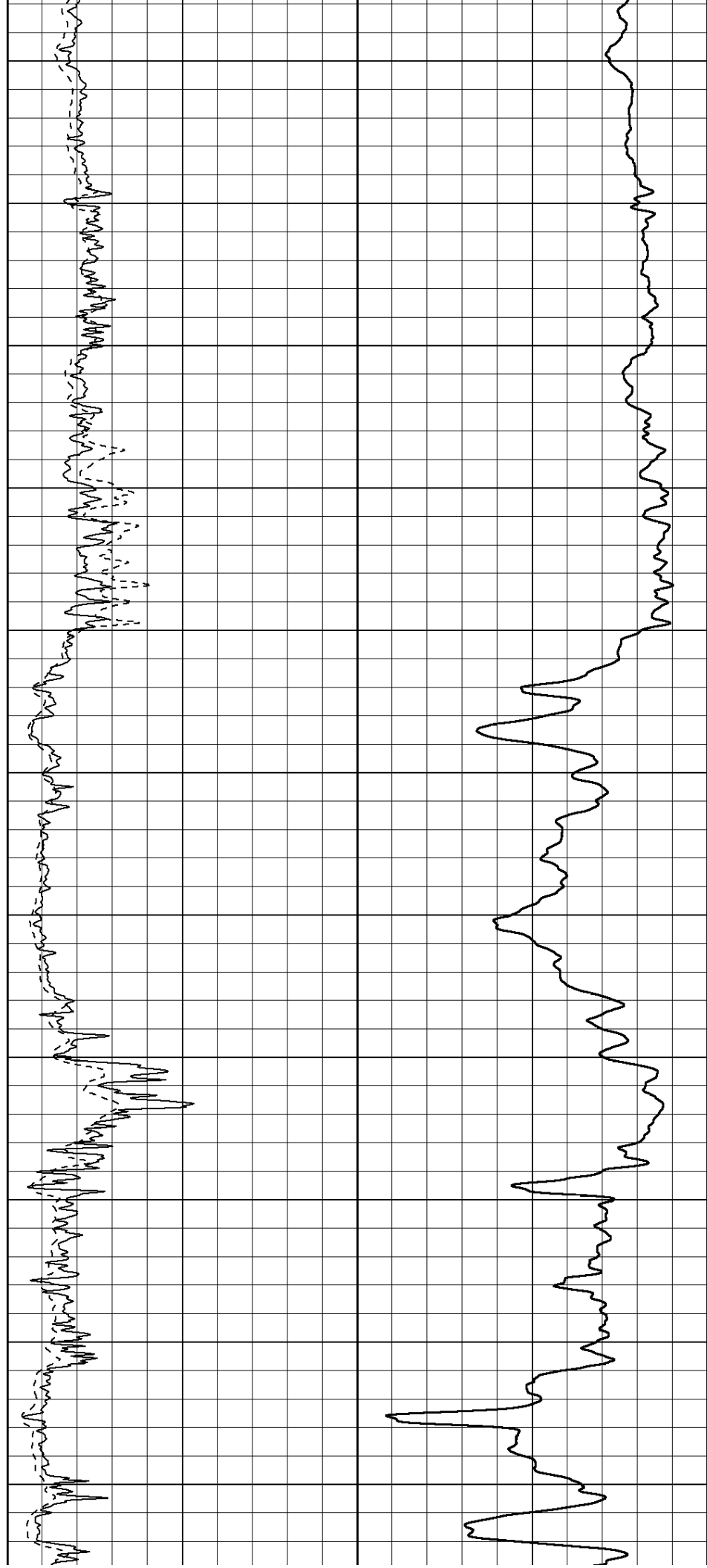
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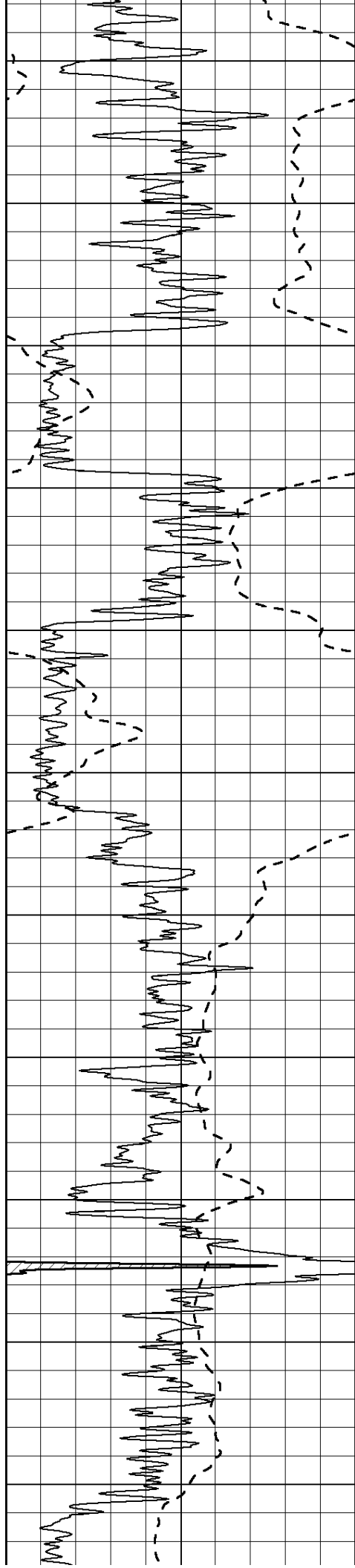
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950

1000





1050

1100

1150

1200

1250

1300

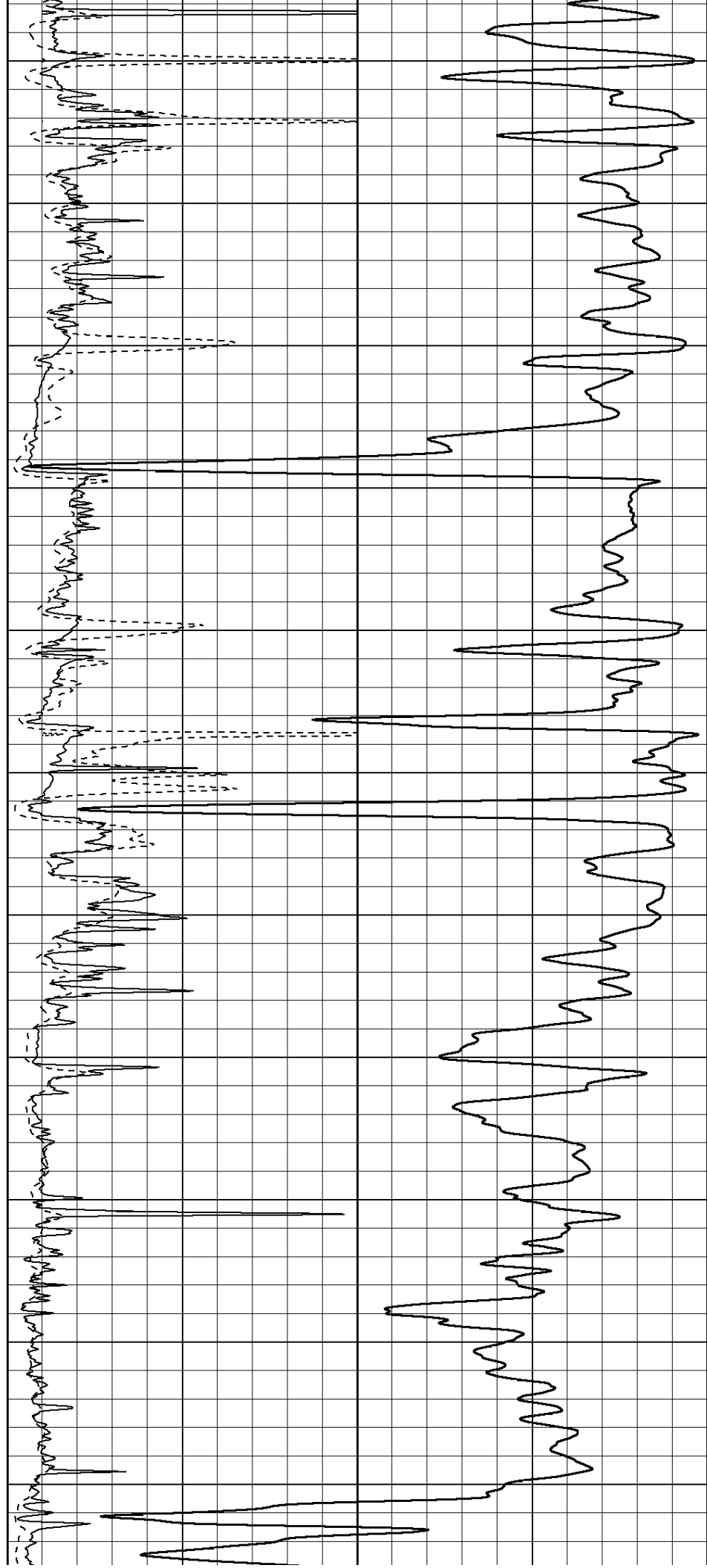
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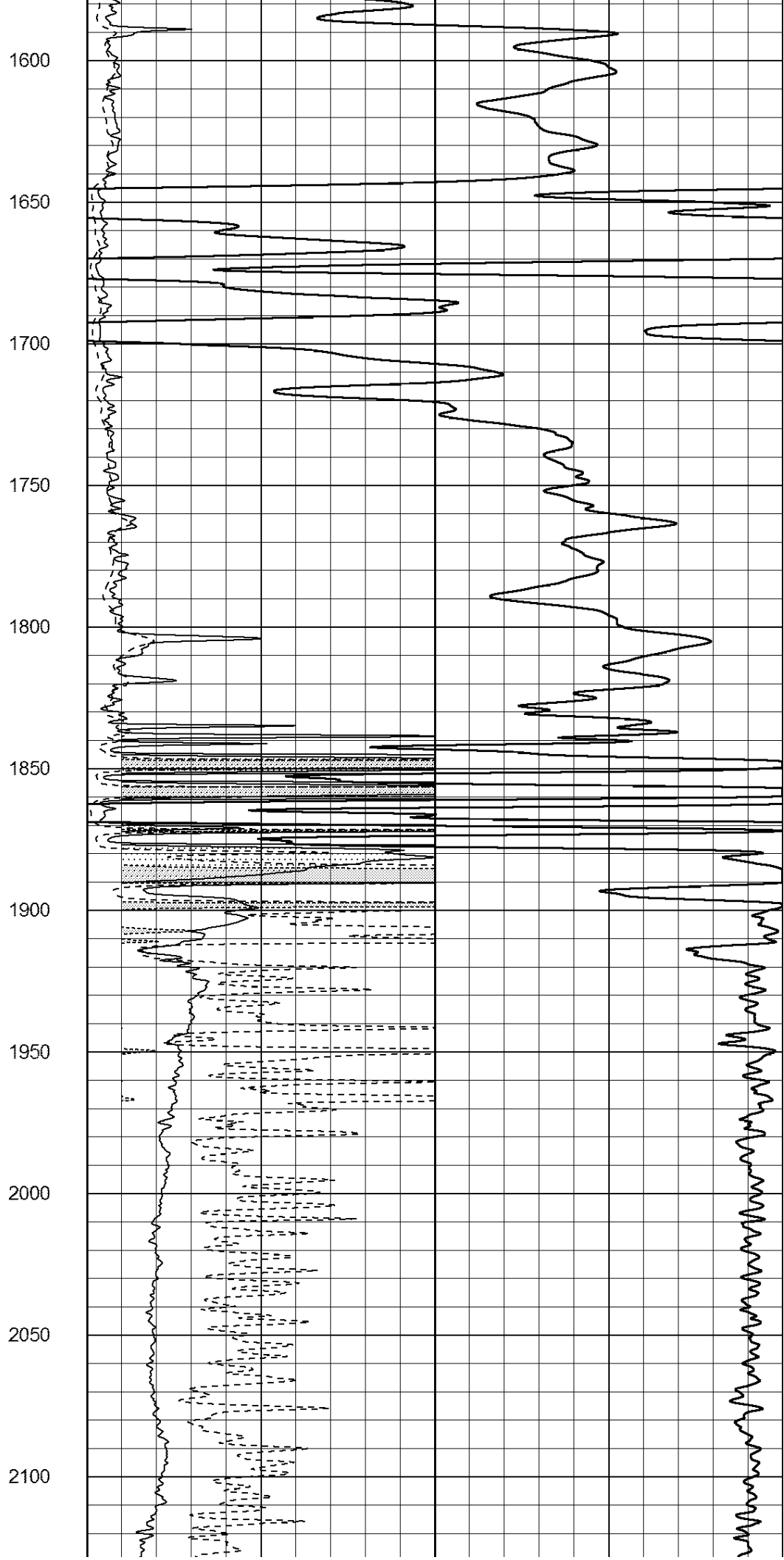
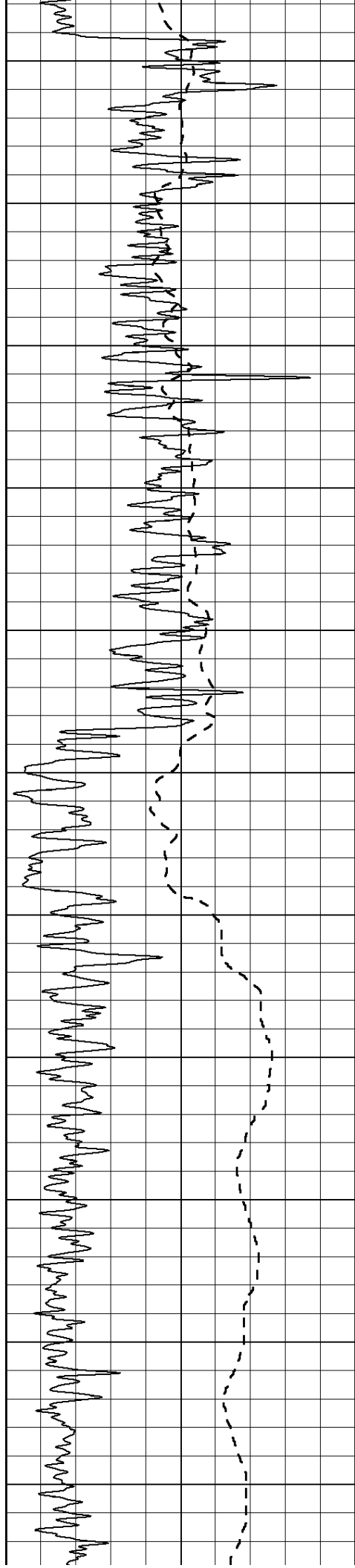
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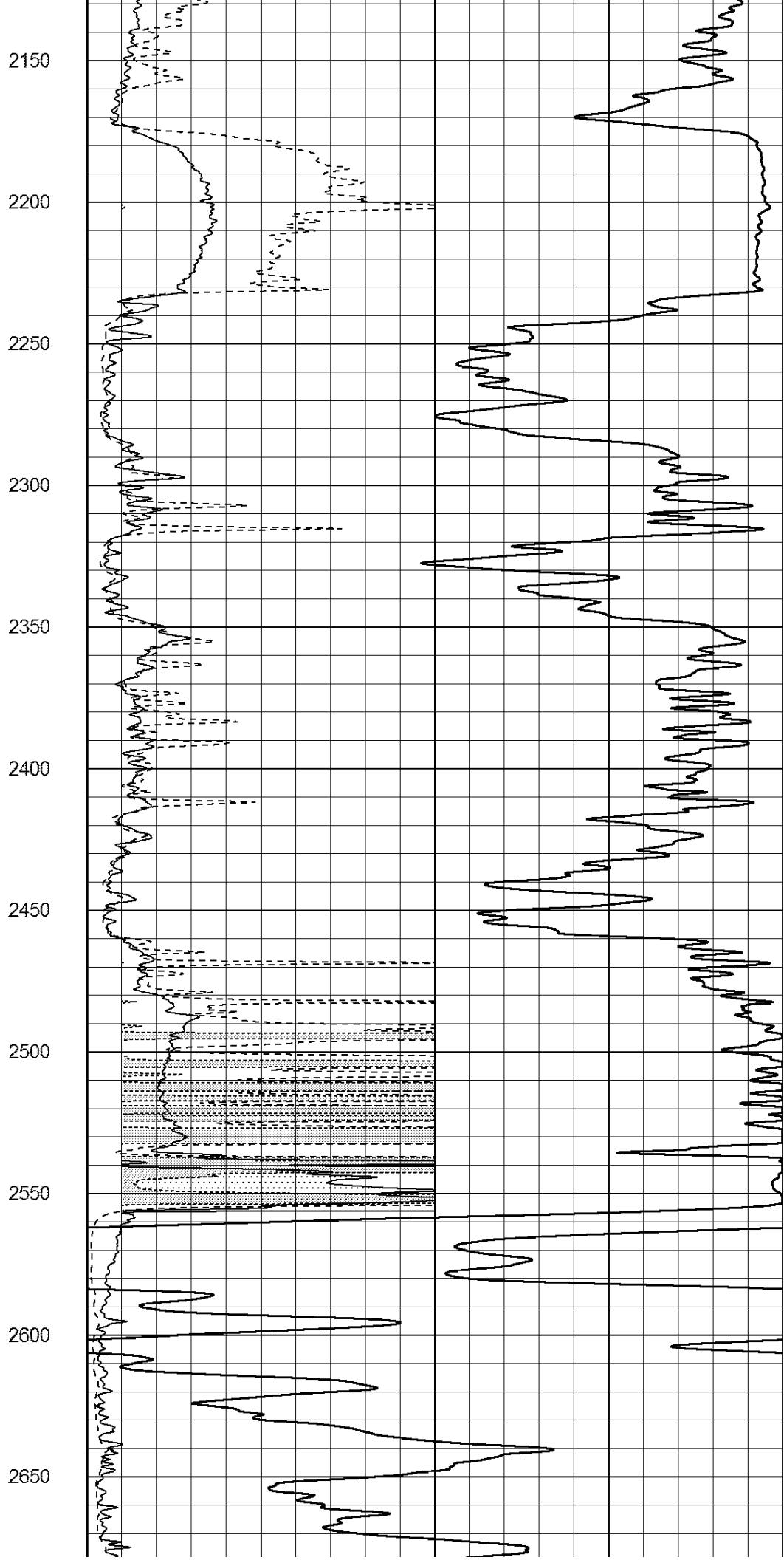
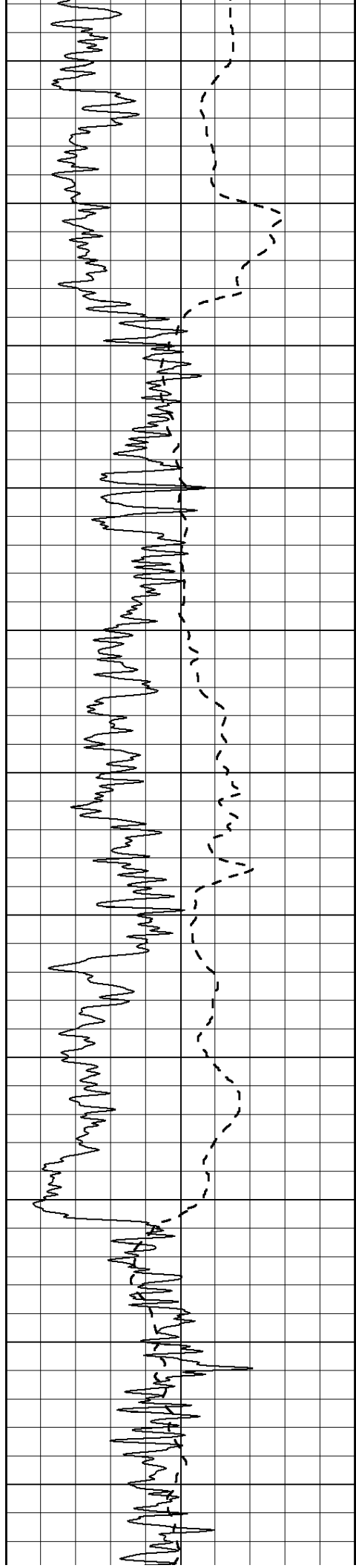
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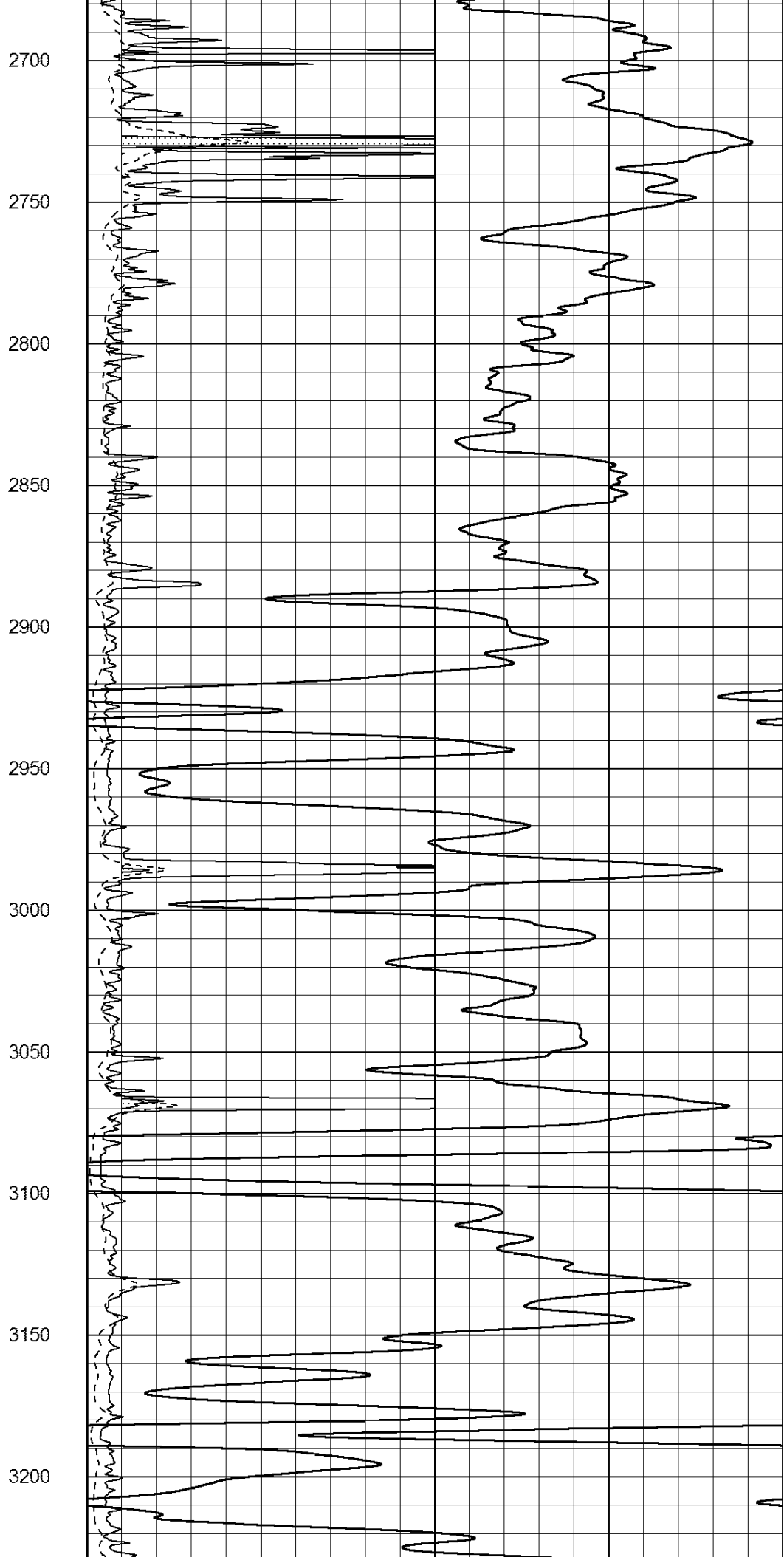
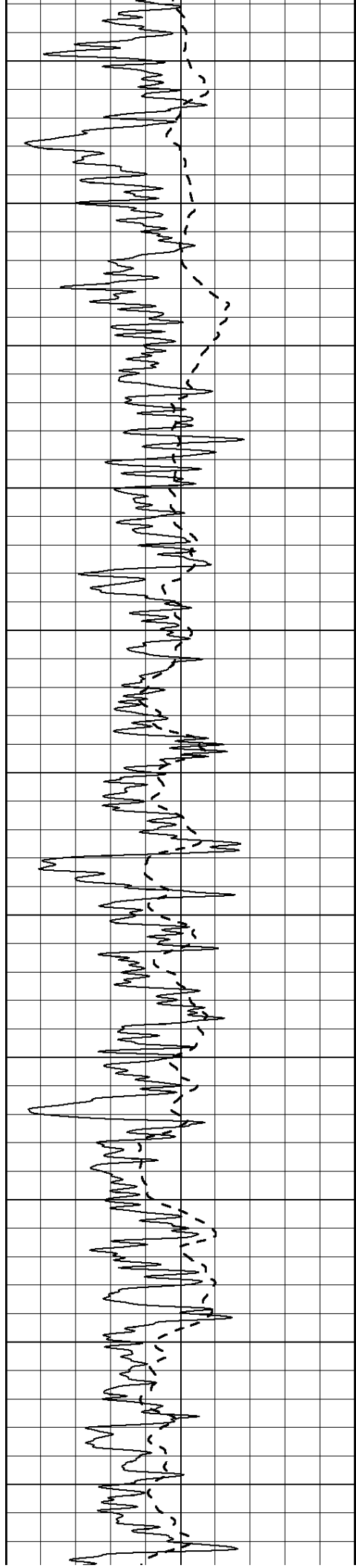
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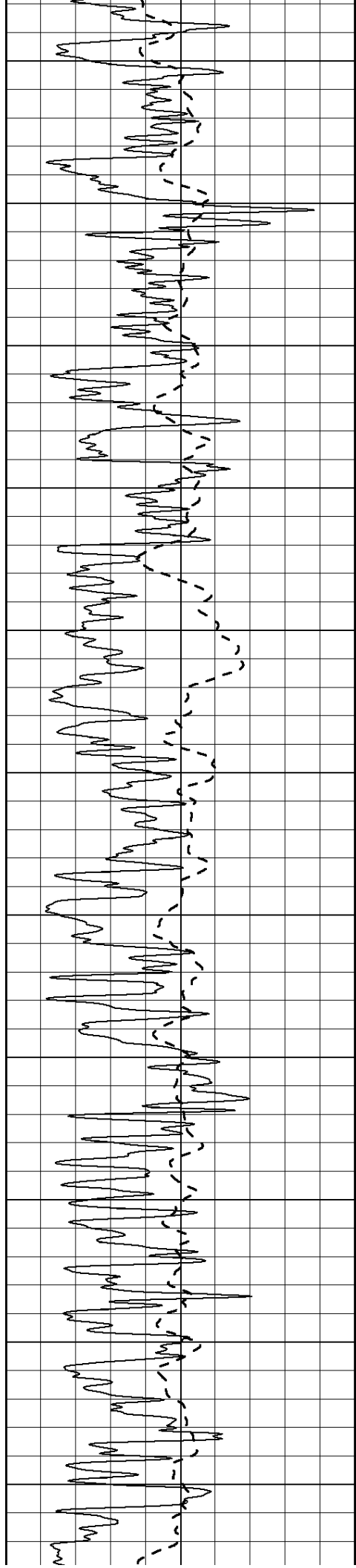
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3250

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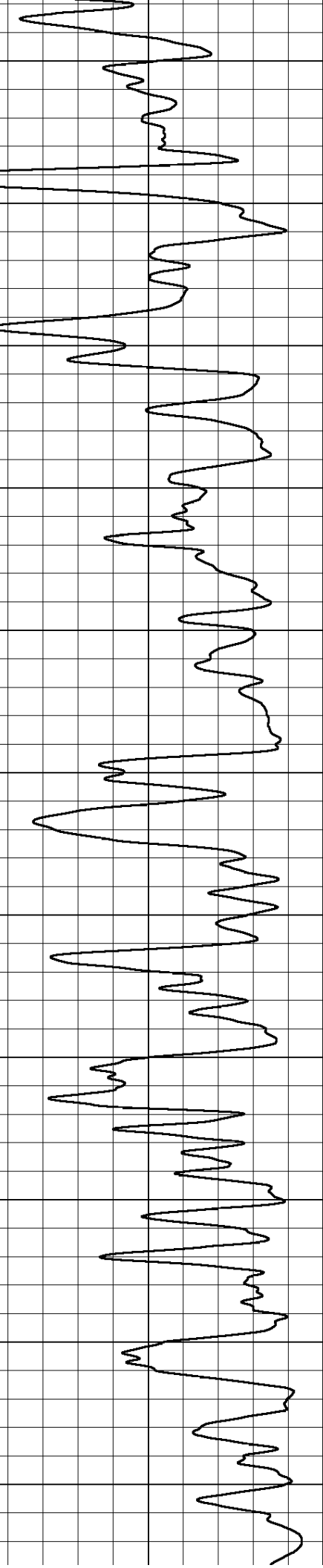
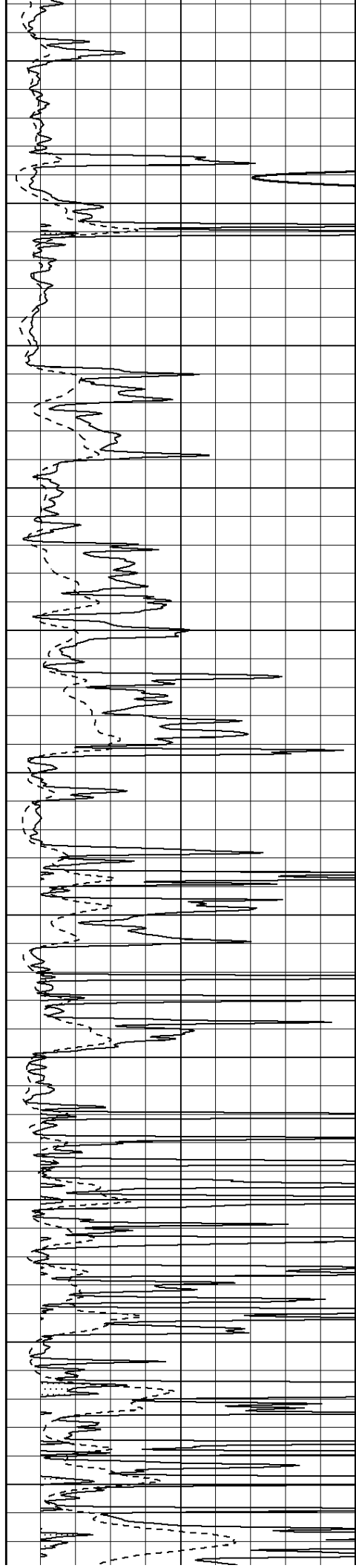
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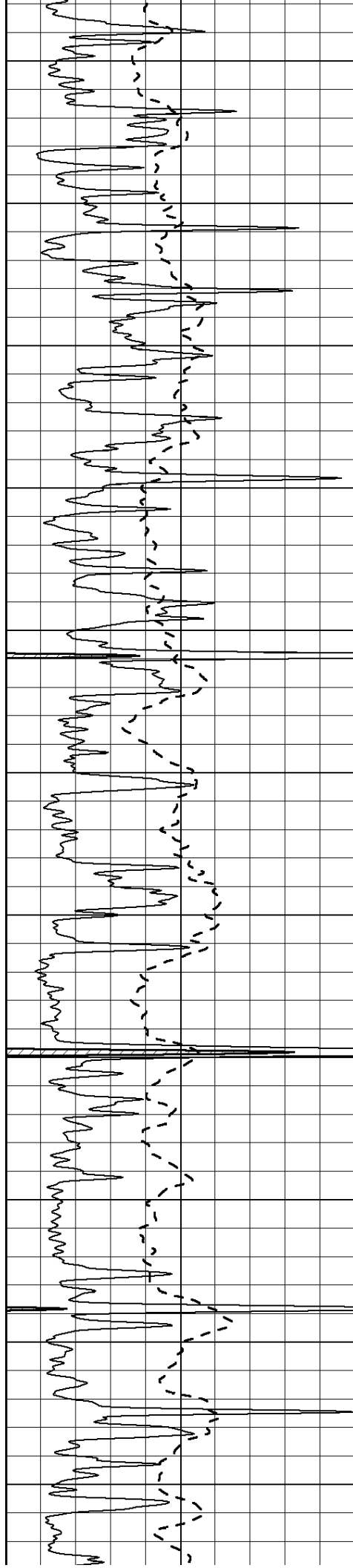
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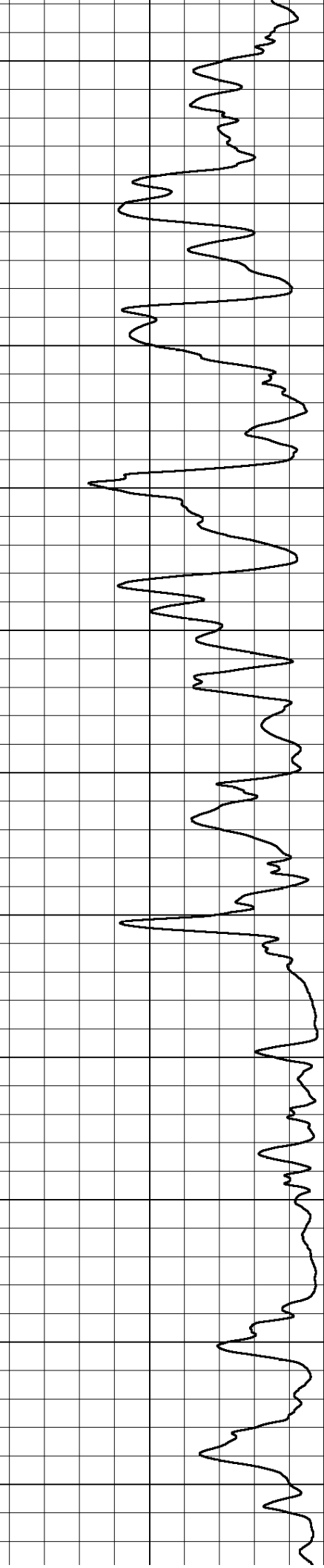
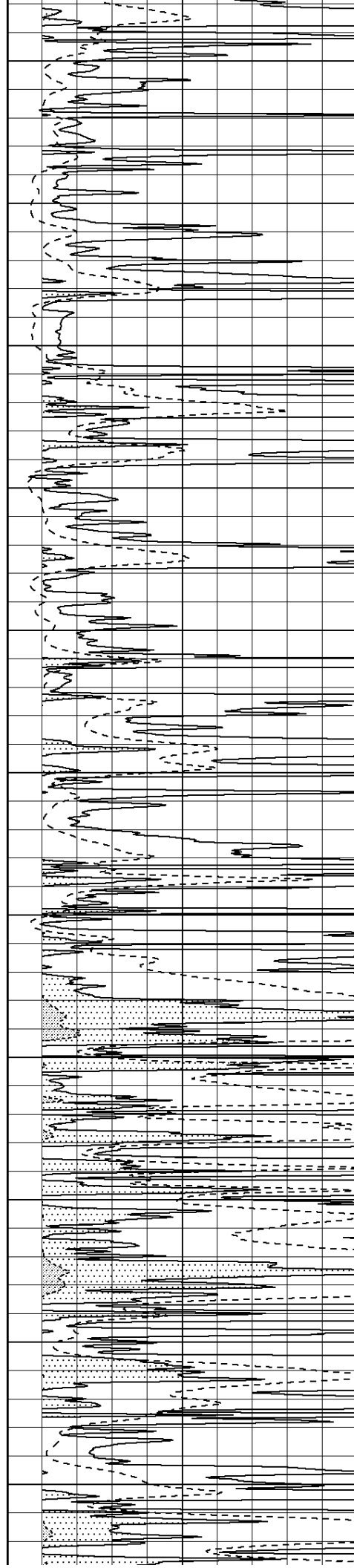
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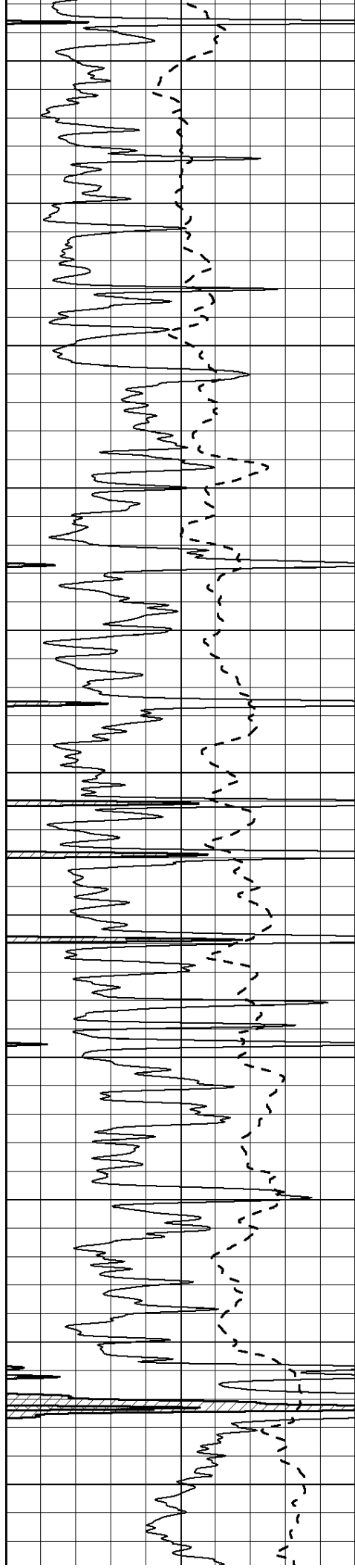
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4600

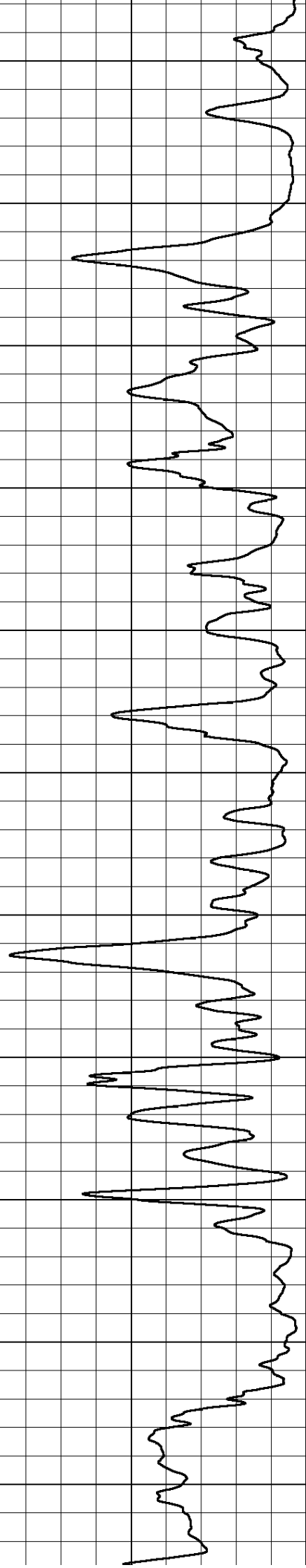
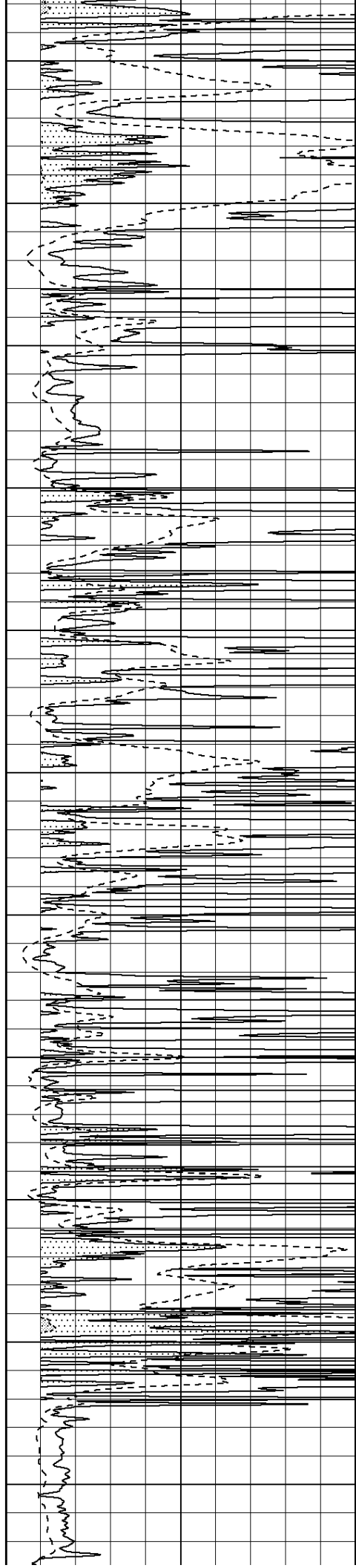
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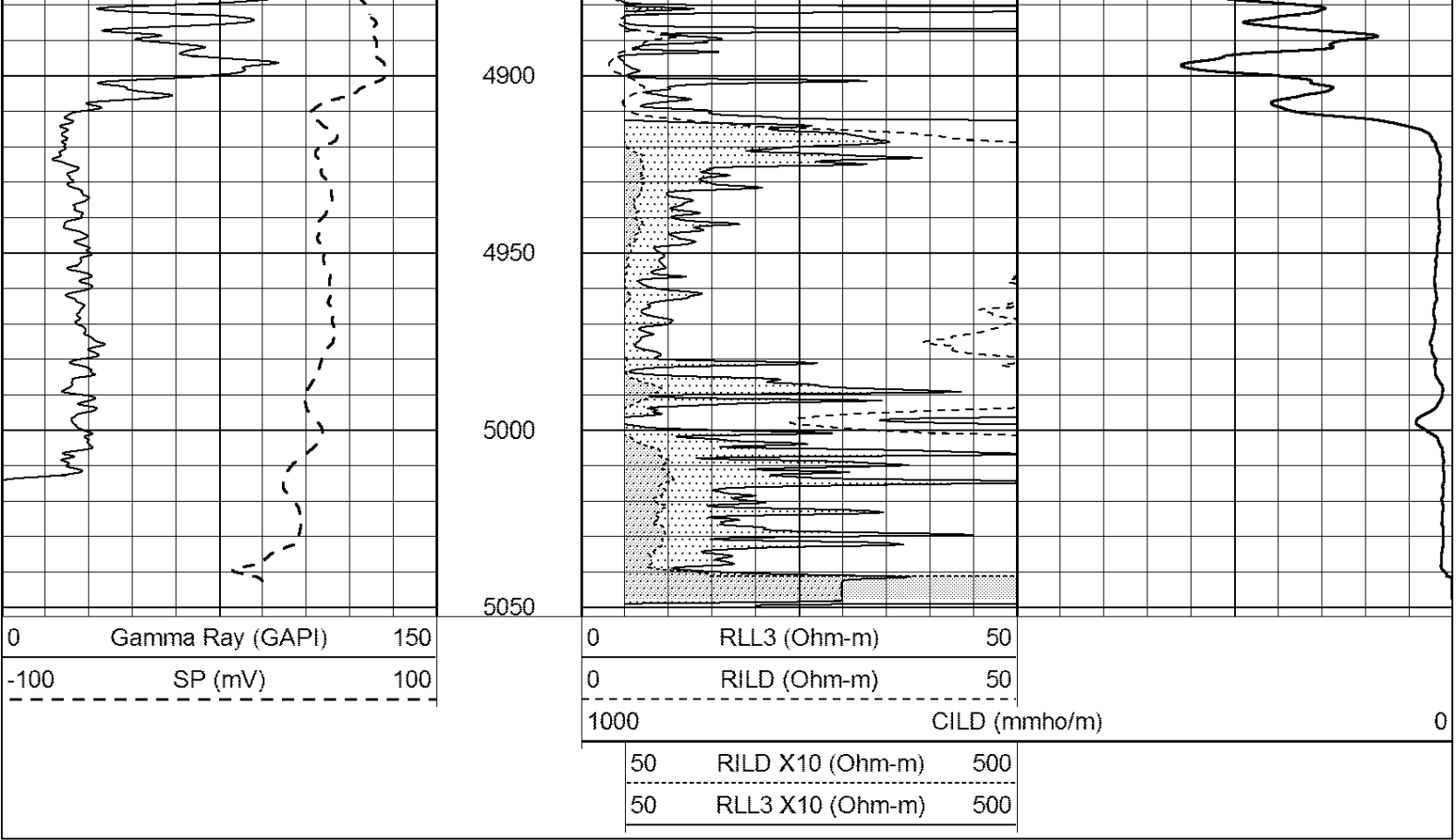
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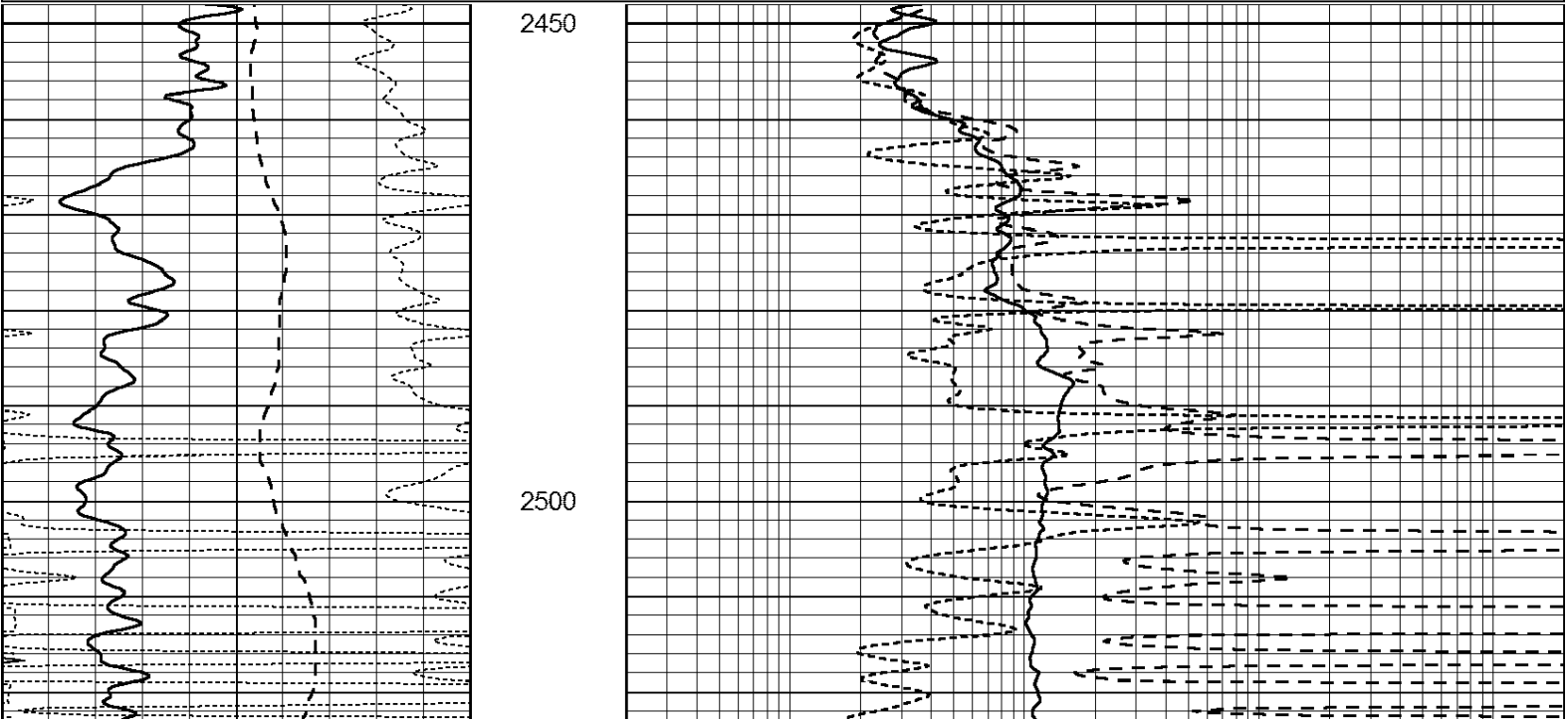
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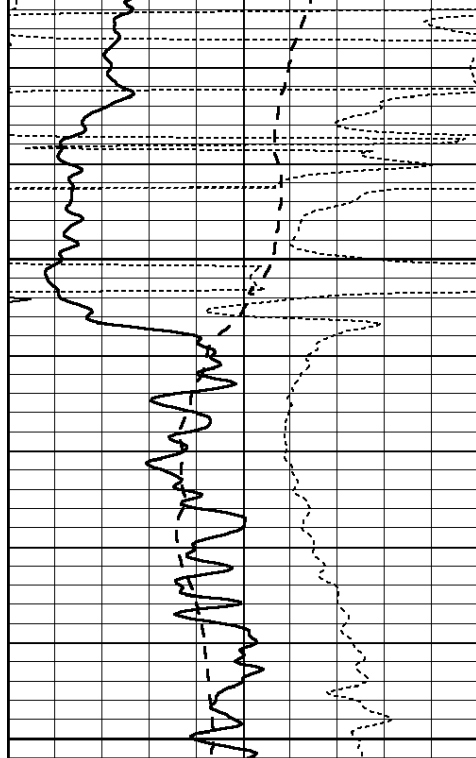
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Presentation Format: _dil					
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Charted by: Depth in Feet scaled 1:240					
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-100	SP (mV)		100	0.2	DEEP INDUCTION (Ohm-m) 2000
-250	Rxo/Rt		50	0.2	MEDIUM INDUCTION (Ohm-m) 2000
0	MINMK		20		

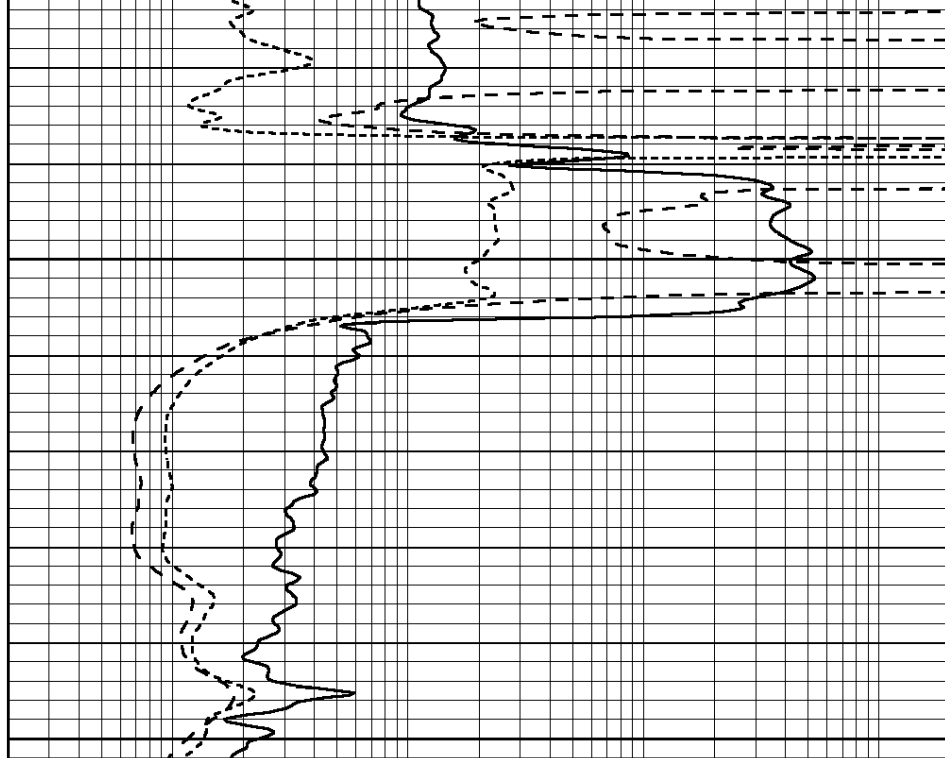




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2600

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

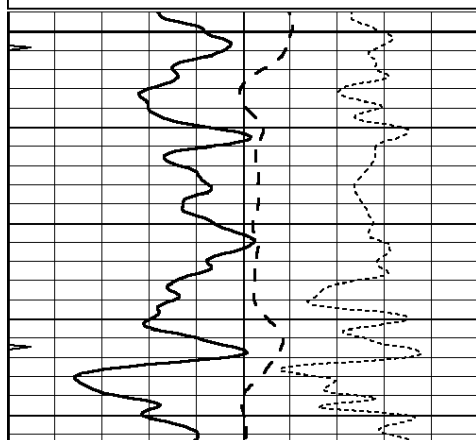


MAIN SECTION

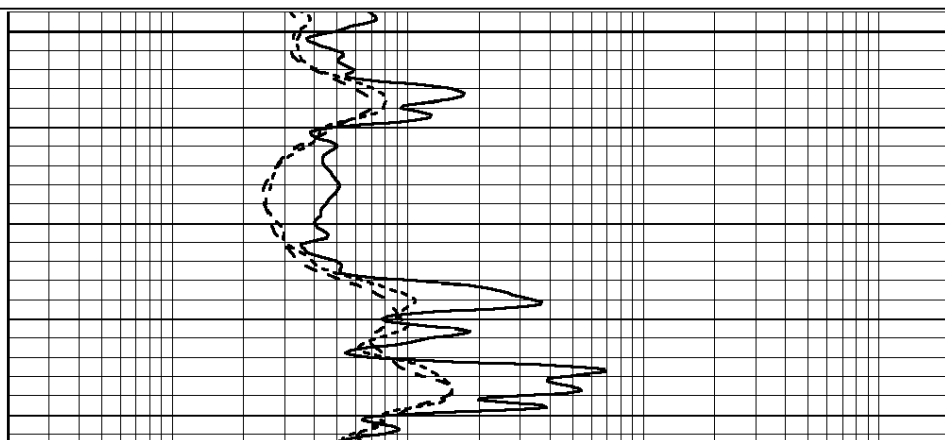
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 Charted by: Depth in Feet scaled 1:240

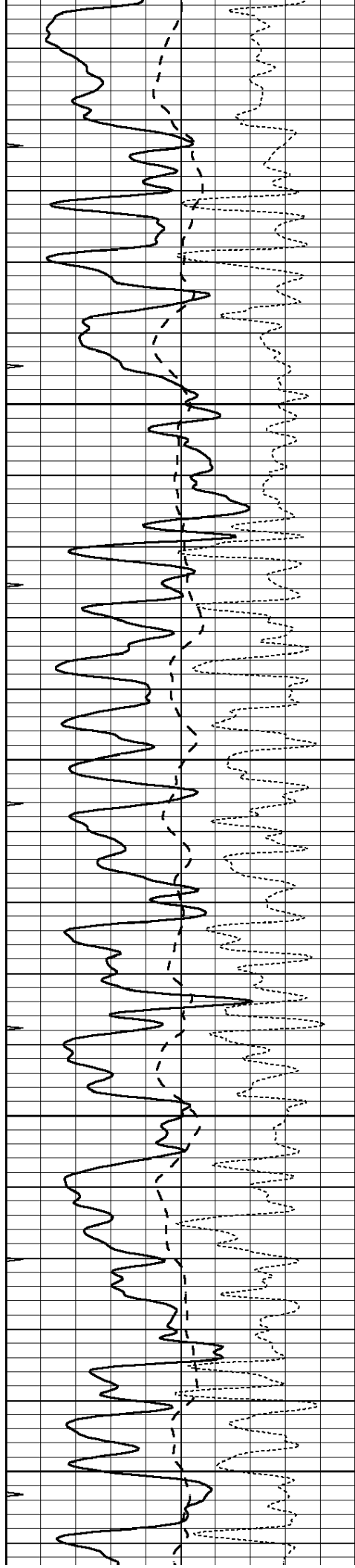
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



3500





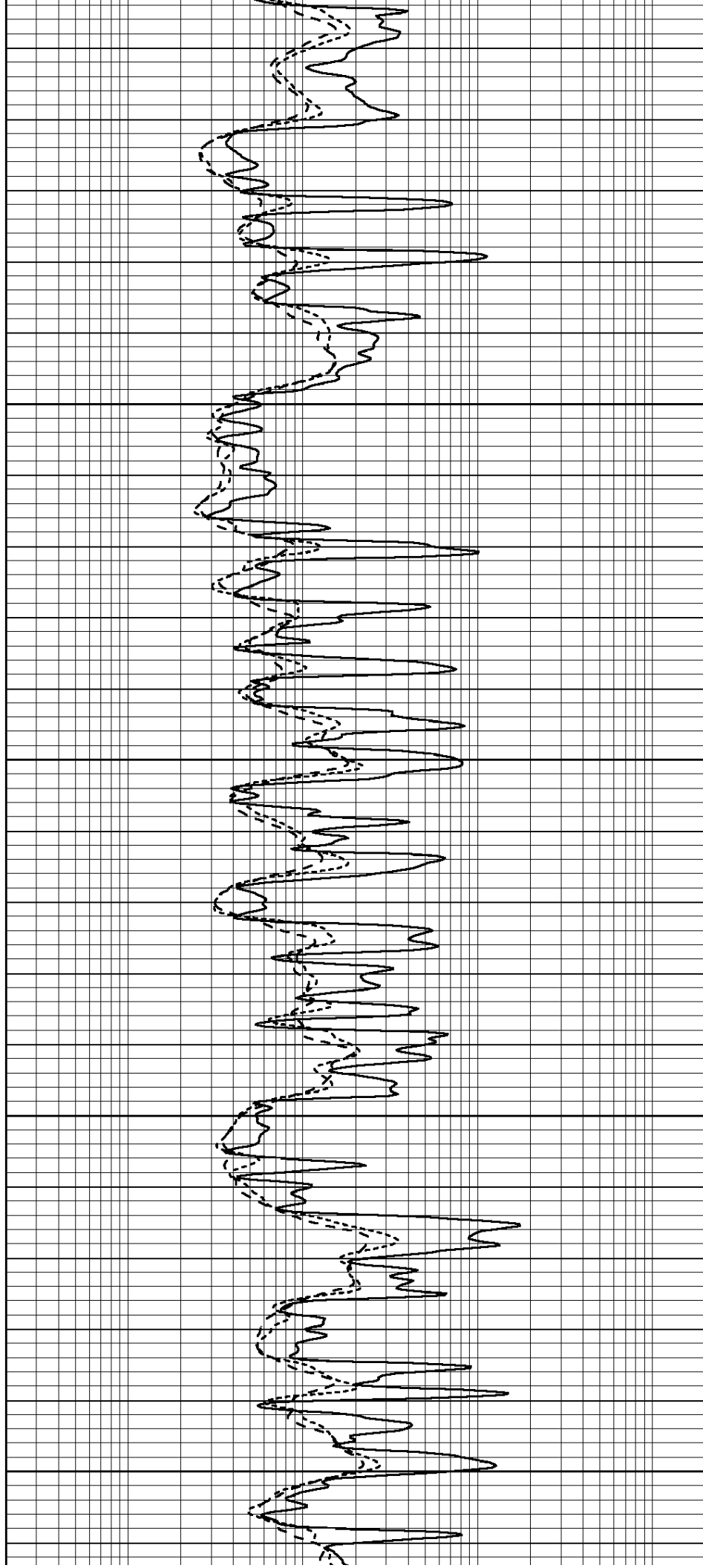
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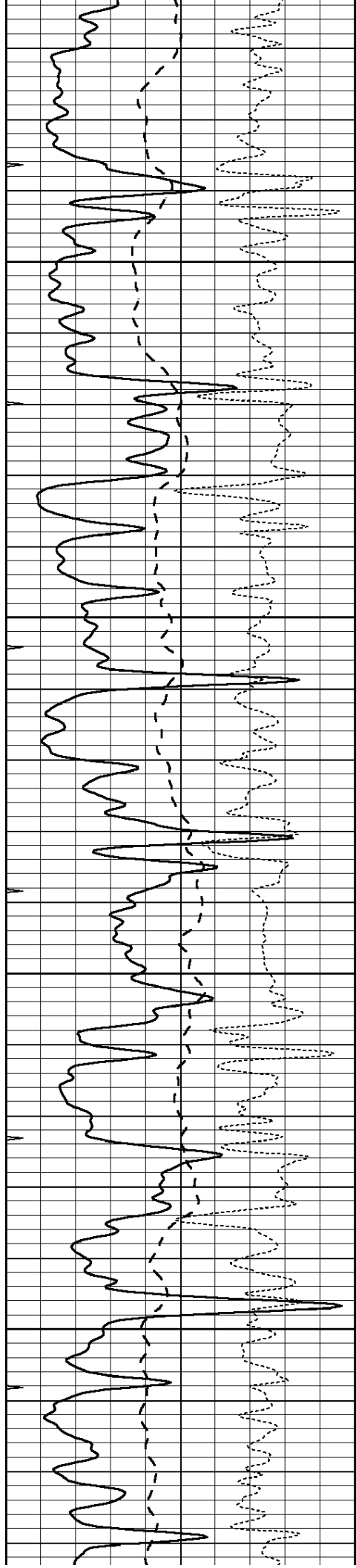
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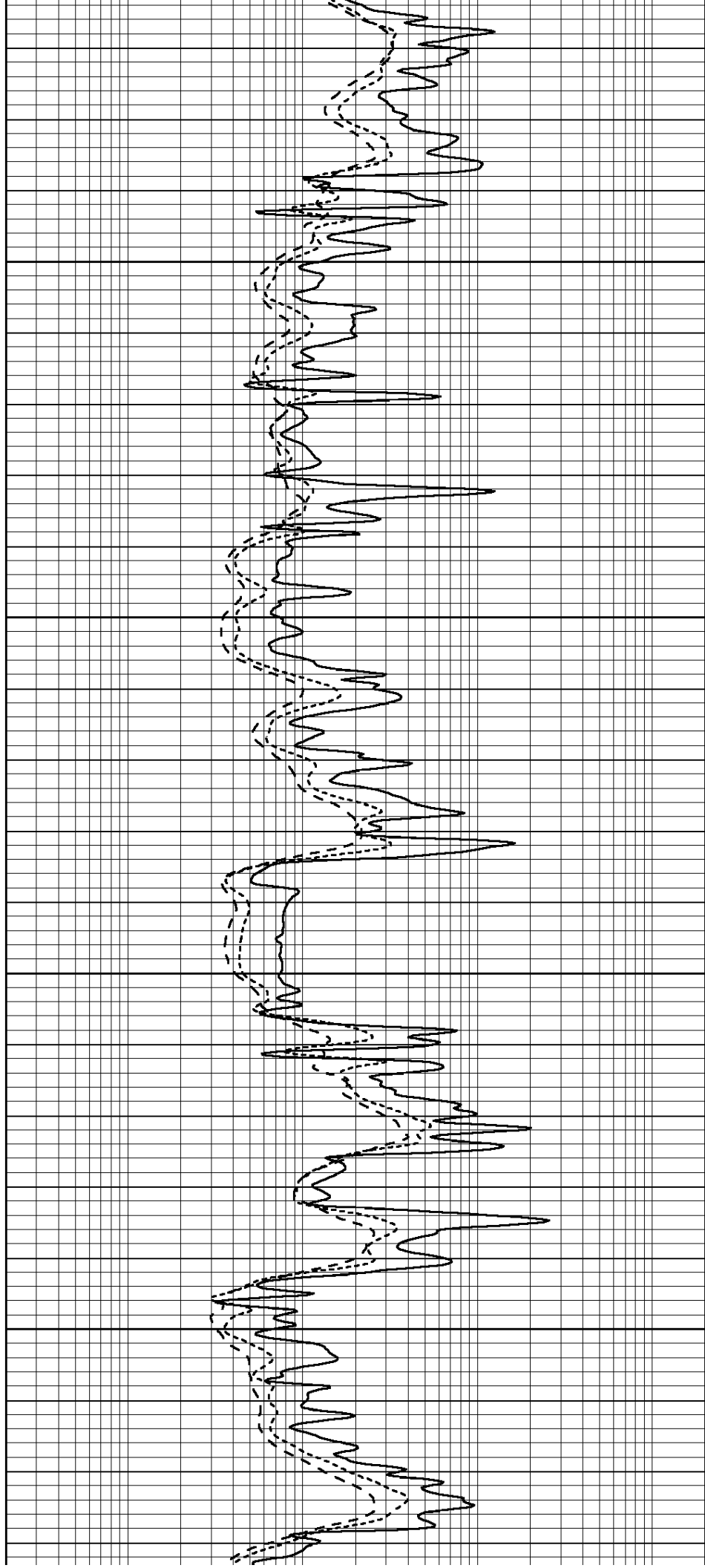


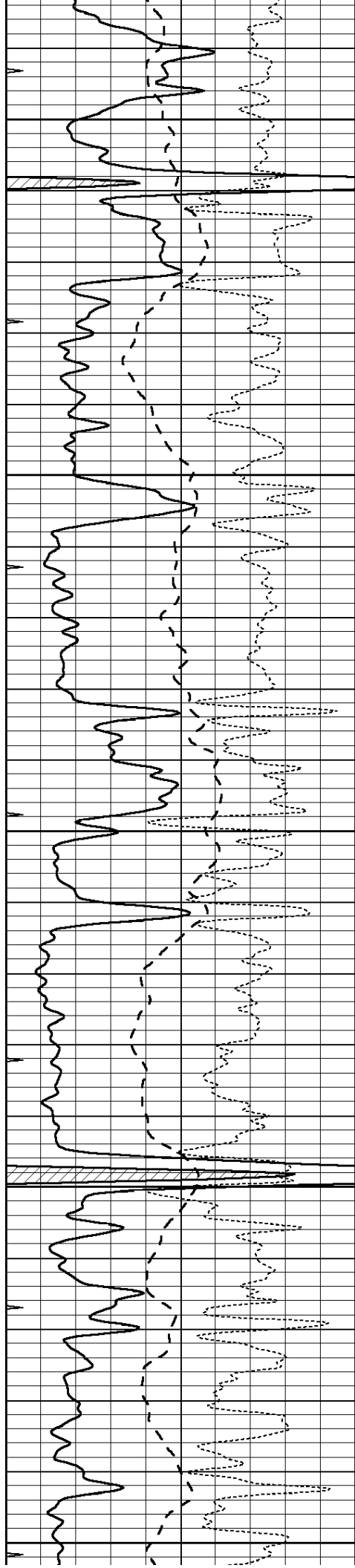
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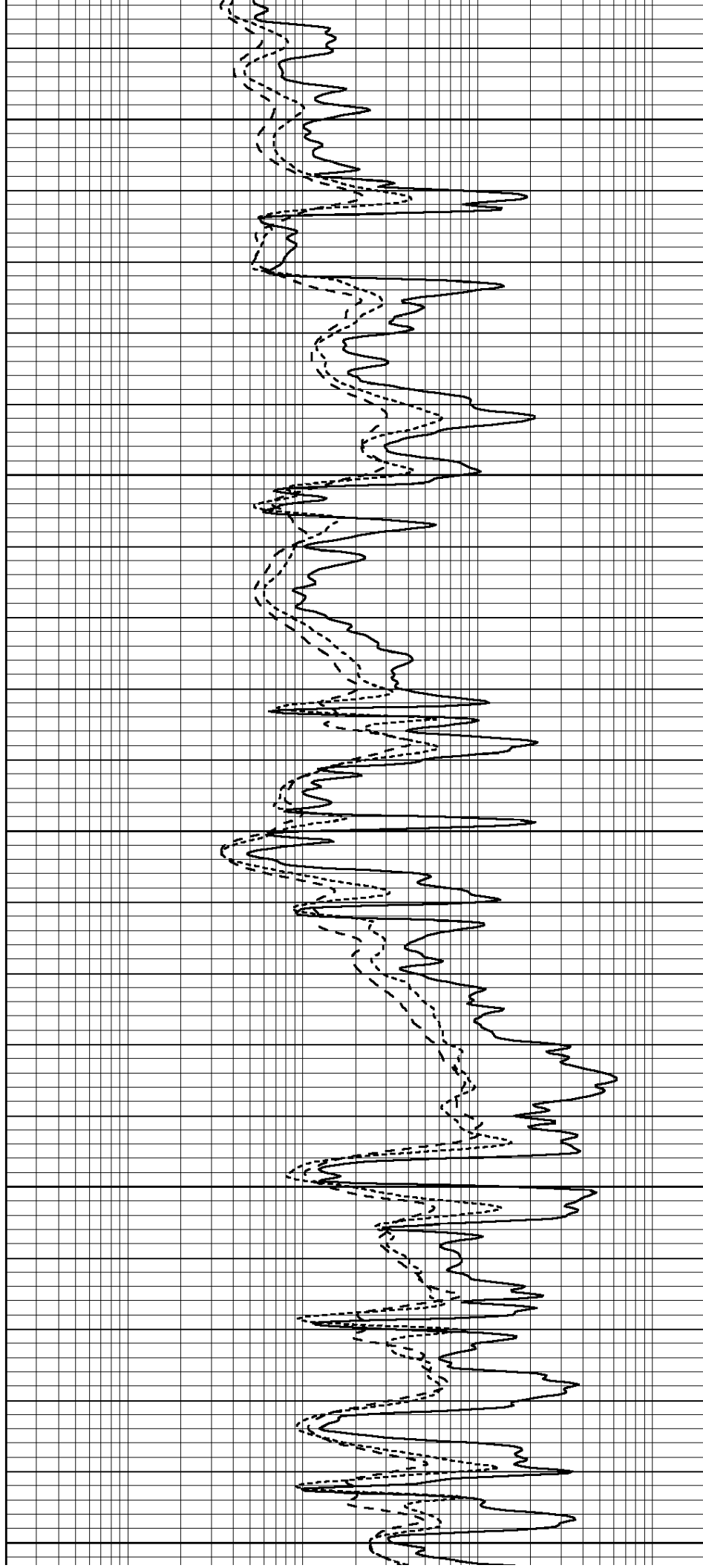
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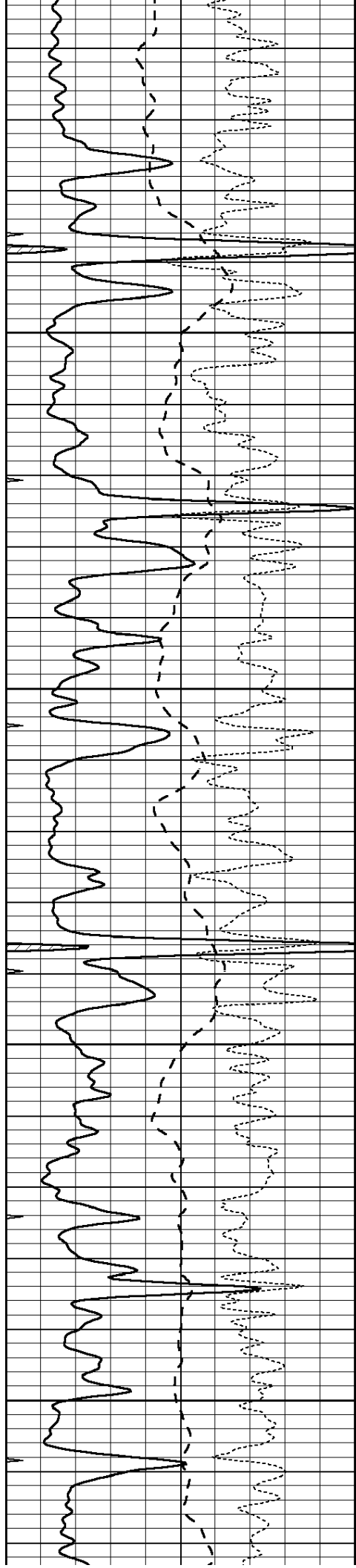
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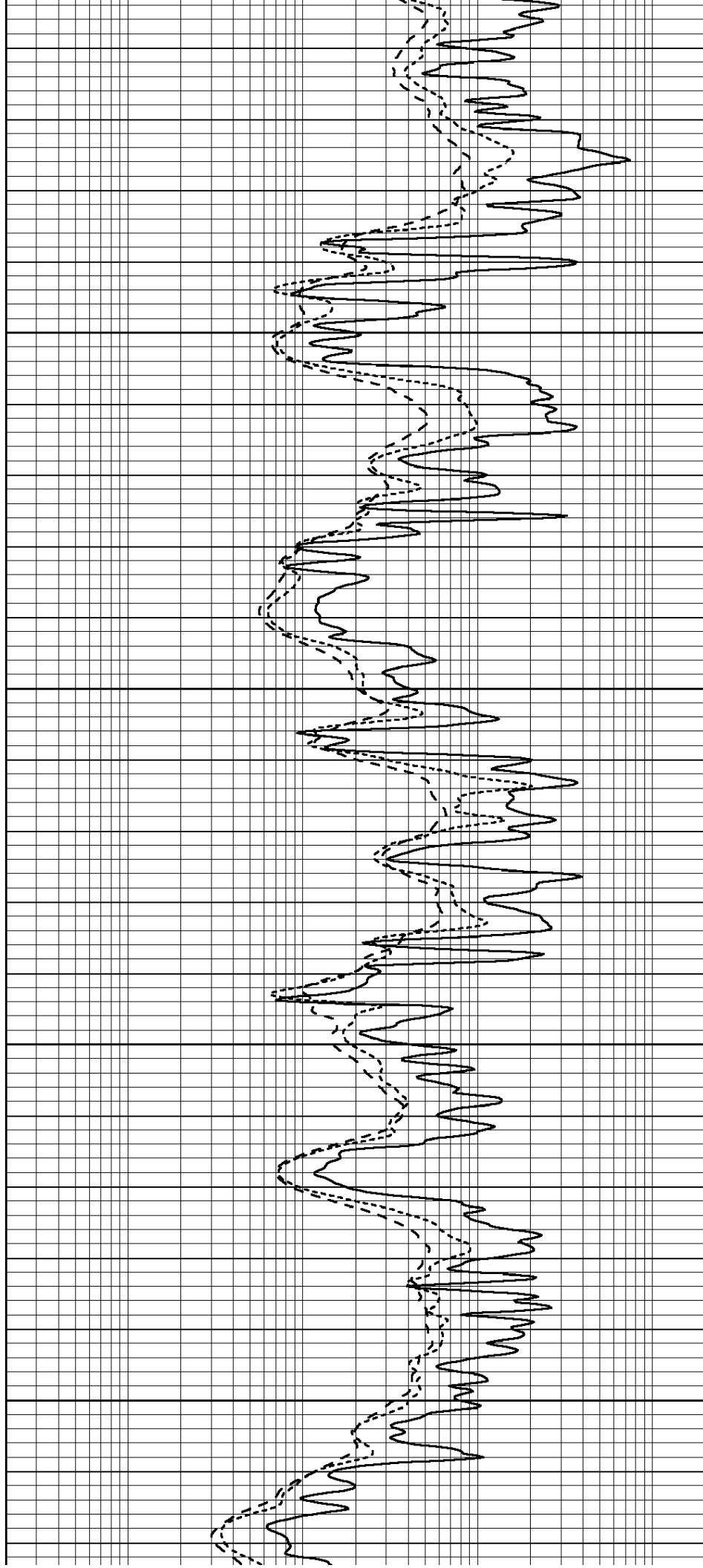


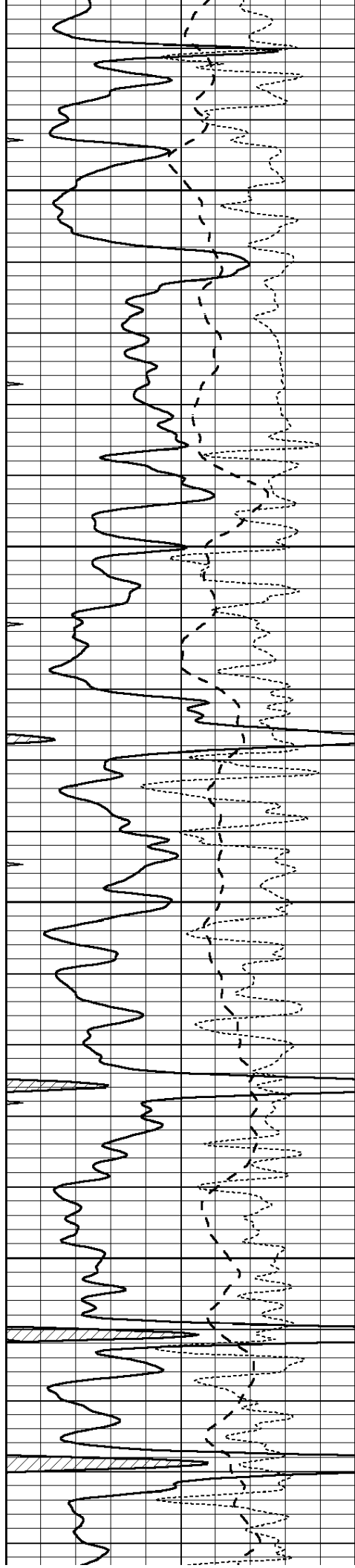
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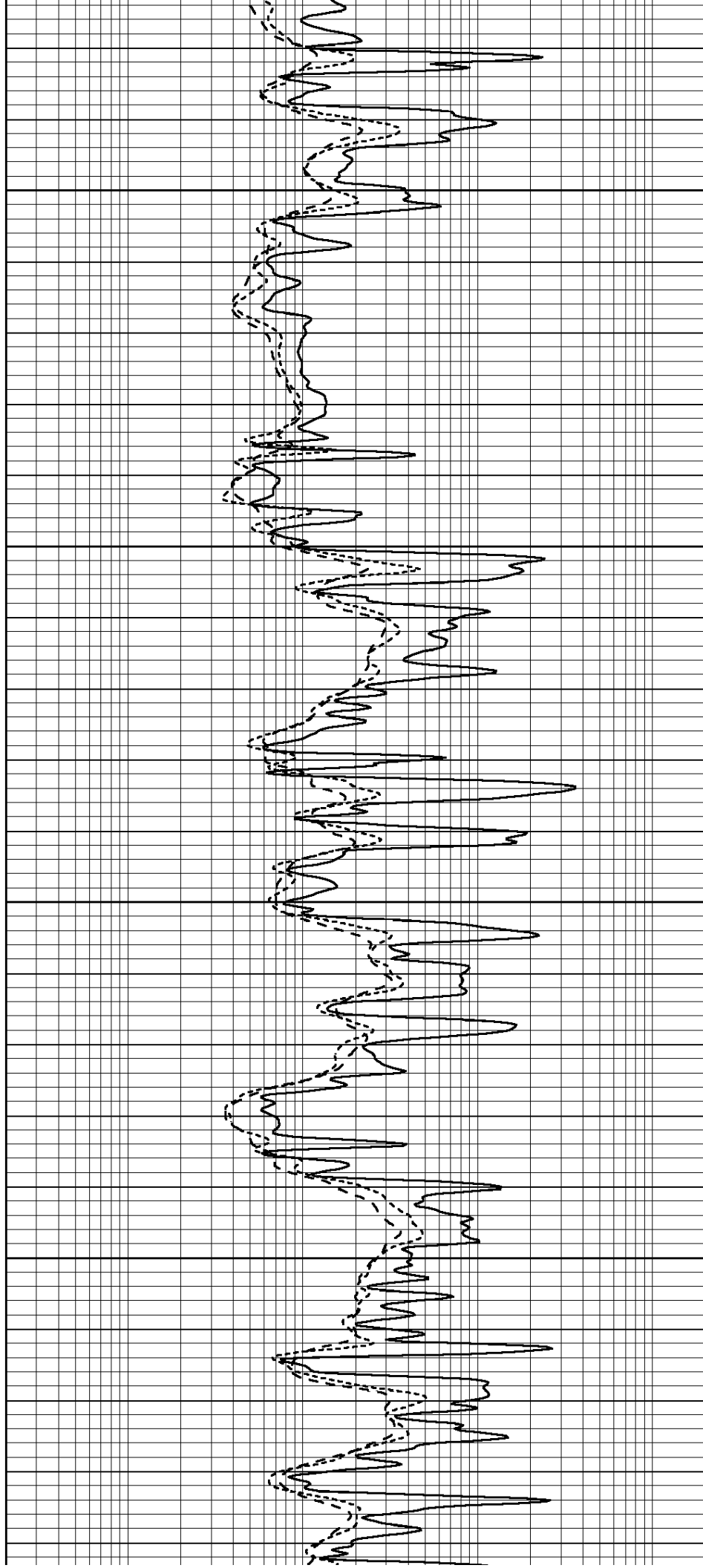


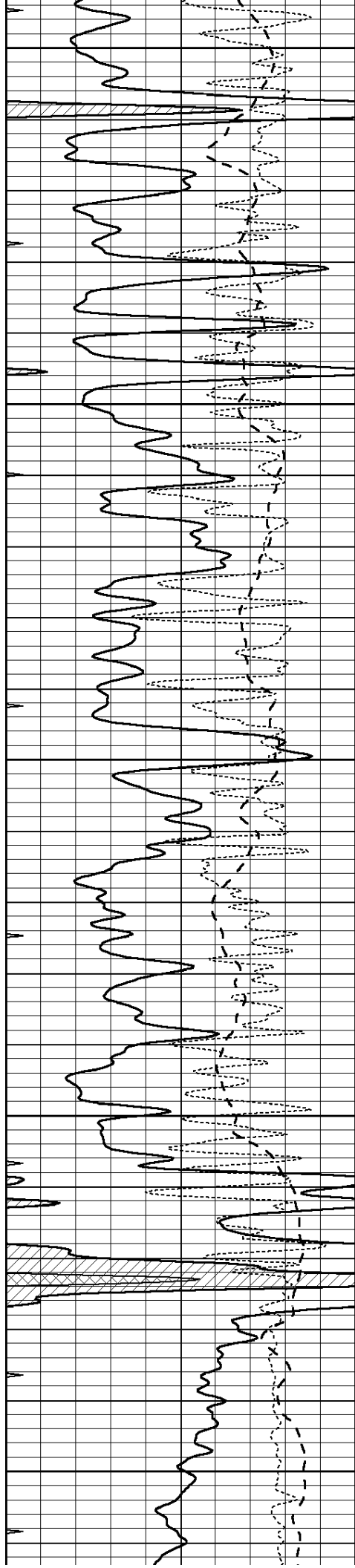
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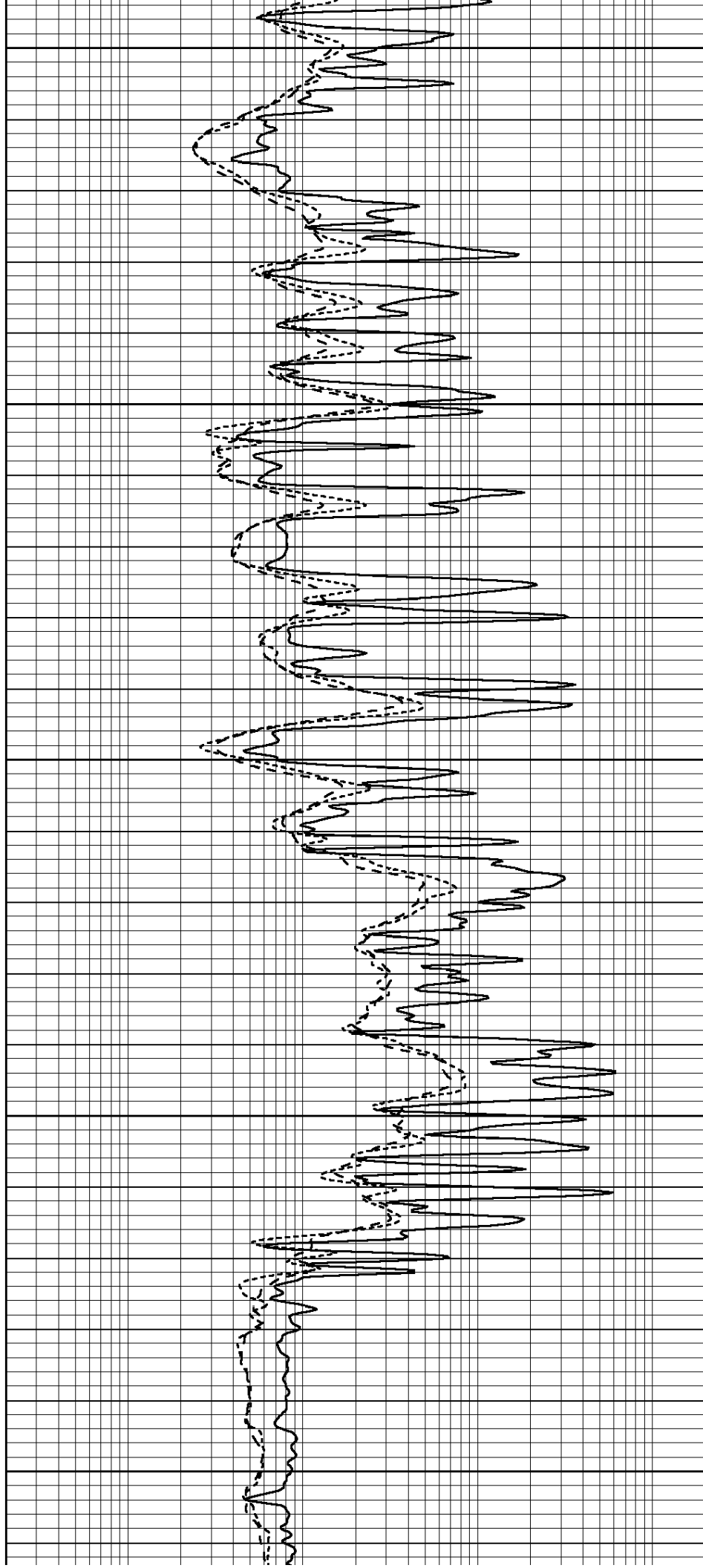
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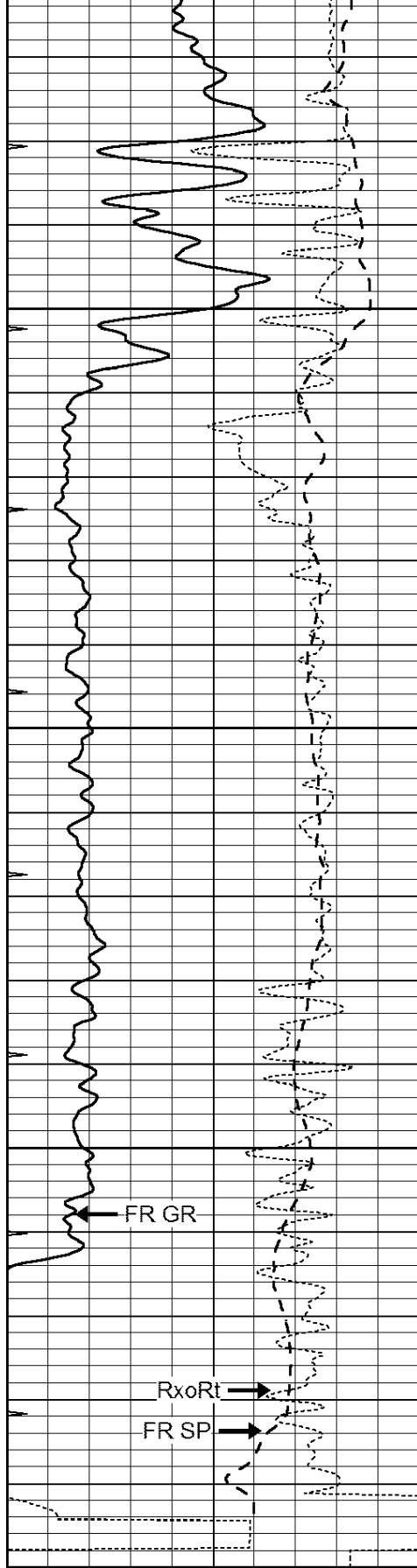
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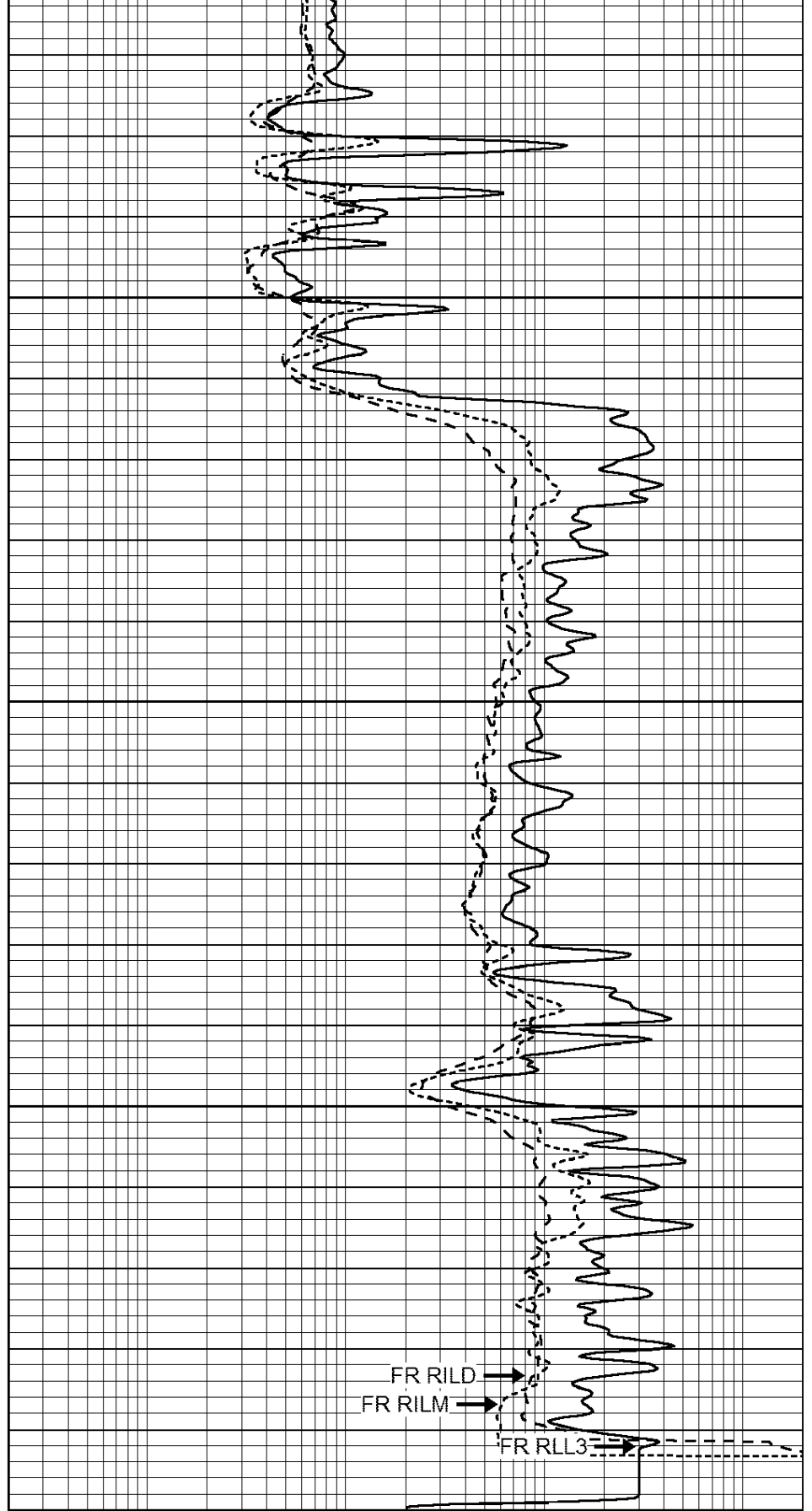
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5000

LTD 5044

5050

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



FR RILD
FR RILM

FR RLL3

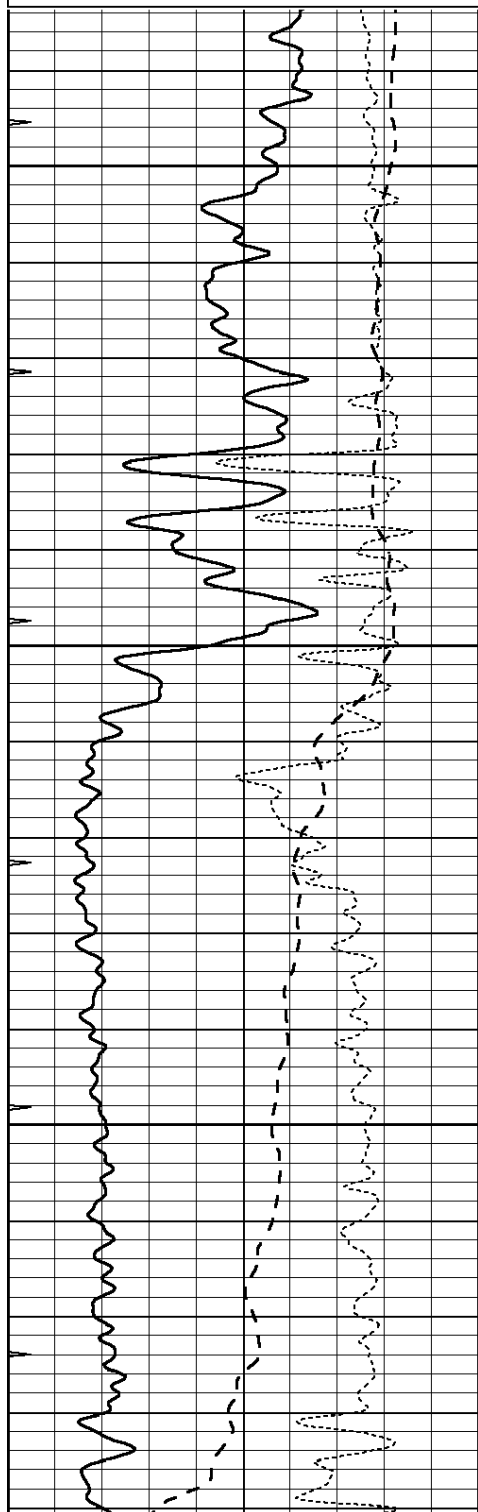
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0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

REPEAT SECTION

Database File: 24070ddn.db
 Dataset Pathname: pass2.1
 Presentation Format: _dil
 Dataset Creation: Thu Jul 31 14:00:48 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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

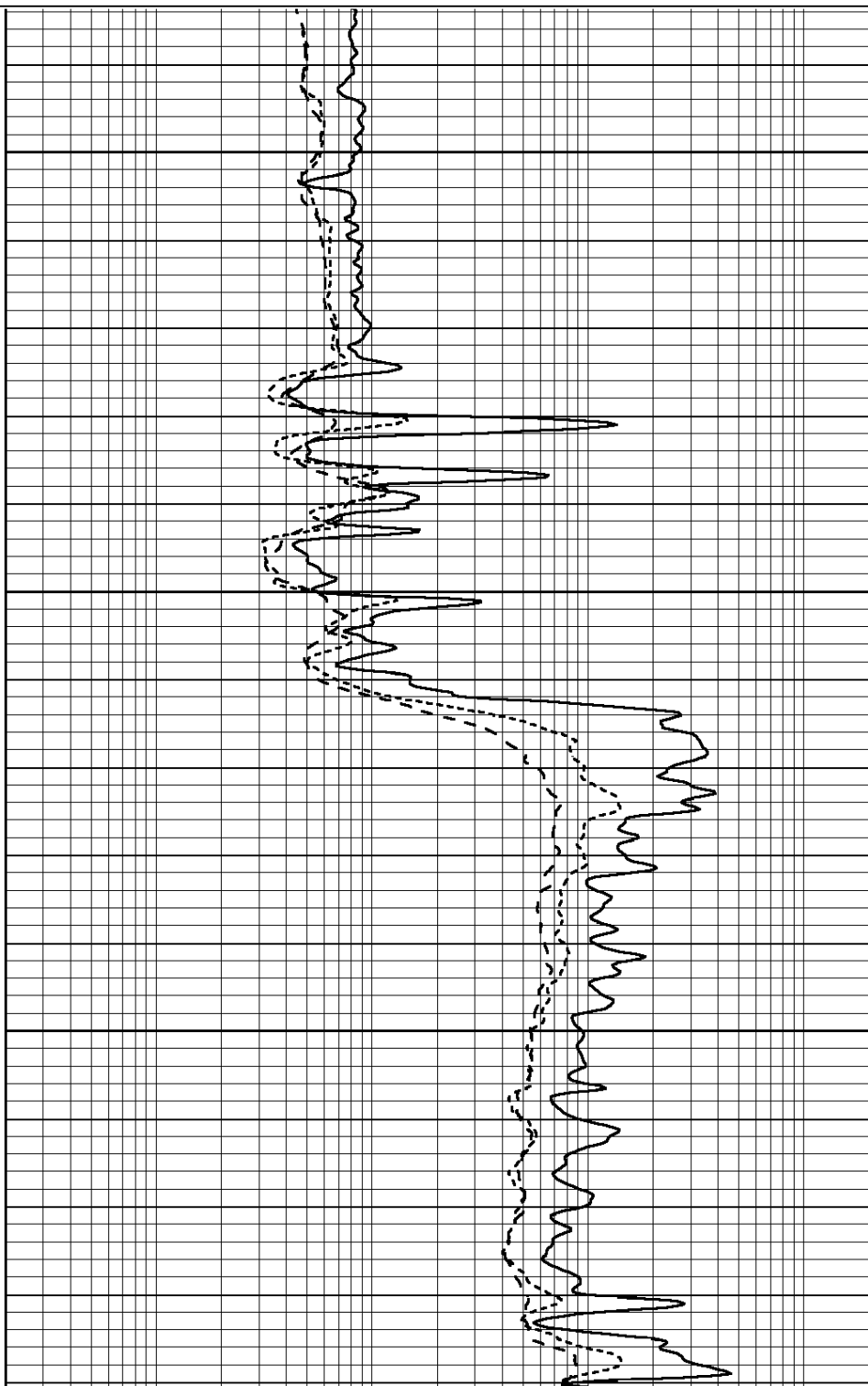
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0.2	MEDIUM INDUCTION (Ohm-m)	2000

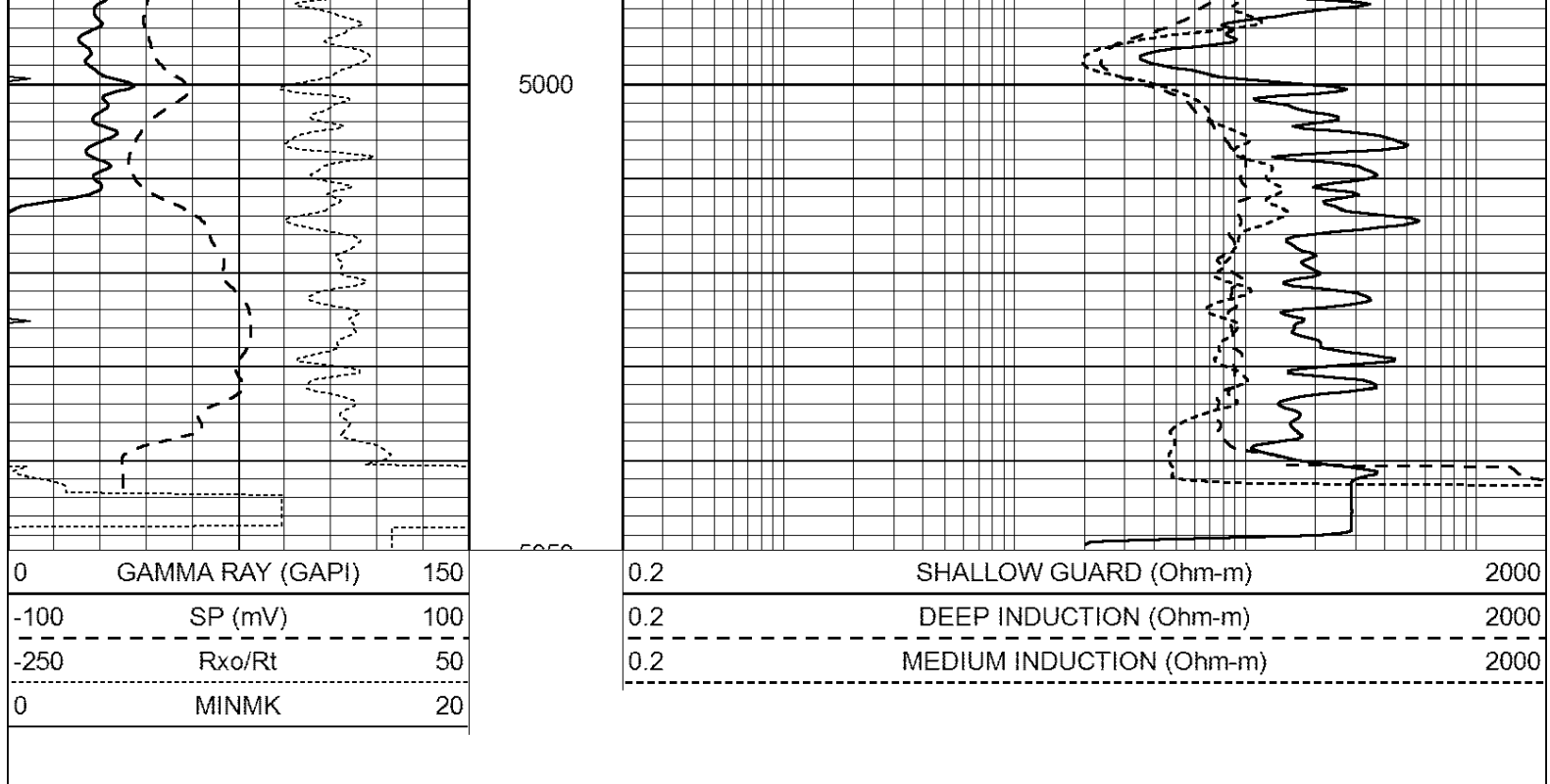


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Calibration Report									
Database File:		24070ddn.db							
Dataset Pathname:		pass2.1							
Dataset Creation:		Thu Jul 31 14:00:48 2014 by Calc Open-Cased 090629							
Dual Induction Calibration Report									
Serial-Model:		PROBE8-DILG							
Surface Cal Performed:		Sun Jul 27 18:19:21 2014							
Downhole Cal Performed:		Mon Jul 28 11:08:27 2008							
After Survey Verification Performed:		Mon Jul 28 11:08:27 2008							
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.015	0.648	V	0.000	400.000	mmho/m	630.000	-6.000	
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-16.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619	
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739	
Downhole Calibration									
Readings				References			Results		
	Zero	Cal		Zero	Cal		m'	b'	
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000	
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000	
LL3		7.500	V		1500.000	Ohm-m			
		0.000	V		20.000	Ohm-m			
		-7.200	V		3800.000	mmho-m			
After Survey Verification									
Readings				Targets			Results		
	Zero	Cal		Zero	Cal		m'	b'	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu
Gamma Ray Calibration Report				
	Serial Number:	GR6		
	Tool Model:	OPEN		
	Performed:	Sun Jul 27 22:13:15 2014		
	Calibrator Value:	150.0	GAPI	
	Background Reading:	0.0	cps	
	Calibrator Reading:	276.0	cps	
	Sensitivity:	0.7500	GAPI/cps	