



SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	RAYMOND OIL COMPANY, INC.		
Well	#1 TERNS		
Field	WILDCAT		
County	SUMNER	State	KANSAS
Company	RAYMOND OIL COMPANY, INC.		
Well	#1 TERNS		
Field	WILDCAT		
County	SUMNER	State	KANSAS
Location:	AP1 # : 15-191-22645-0000		Other Services
SEC 25 TWP 30S RGE 1W		CDL/CNL	
Permanent Datum	GROUND LEVEL	Elevation	1275
Log Measured From	KELLY BUSHING 10' A.G.L.	K.B. 1285	
Drilling Measured From	KELLY BUSHING	D.F. 1283	
		G.L. 1275	
Date	5/9/12		
Run Number	ONE		
Depth Driller	4060		
Depth Logger	4059		
Bottom Logged Interval	4057		
Top Log Interval	00		
Casing Driller	8 5/8"@345'	13 3/8"@83'	
Casing Logger	338		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 7,000 PPM	
Density / Viscosity	9.1/42		
pH / Fluid Loss	9.0/13.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.550@72F		
Rmt @ Meas. Temp	.413@72F		
Rmc @ Meas. Temp	.660@72F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.338@117F		
Time Circulation Stopped	2.5 HOURS		
Time Logger on Bottom	8:45 P.M.		
Maximum Recorded Temperature	117F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KEVIN KESSLER	TED McHENRY	

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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

MULVANE, KS. EXIT & I-35, (CASINO) 1W. TO HWY 81,3S. TO "RD. 120", 1W. TO "SENECA RD.",1S. TO
"RD. 110",3W. TO "WEST RD.",1/4S., E. INTO



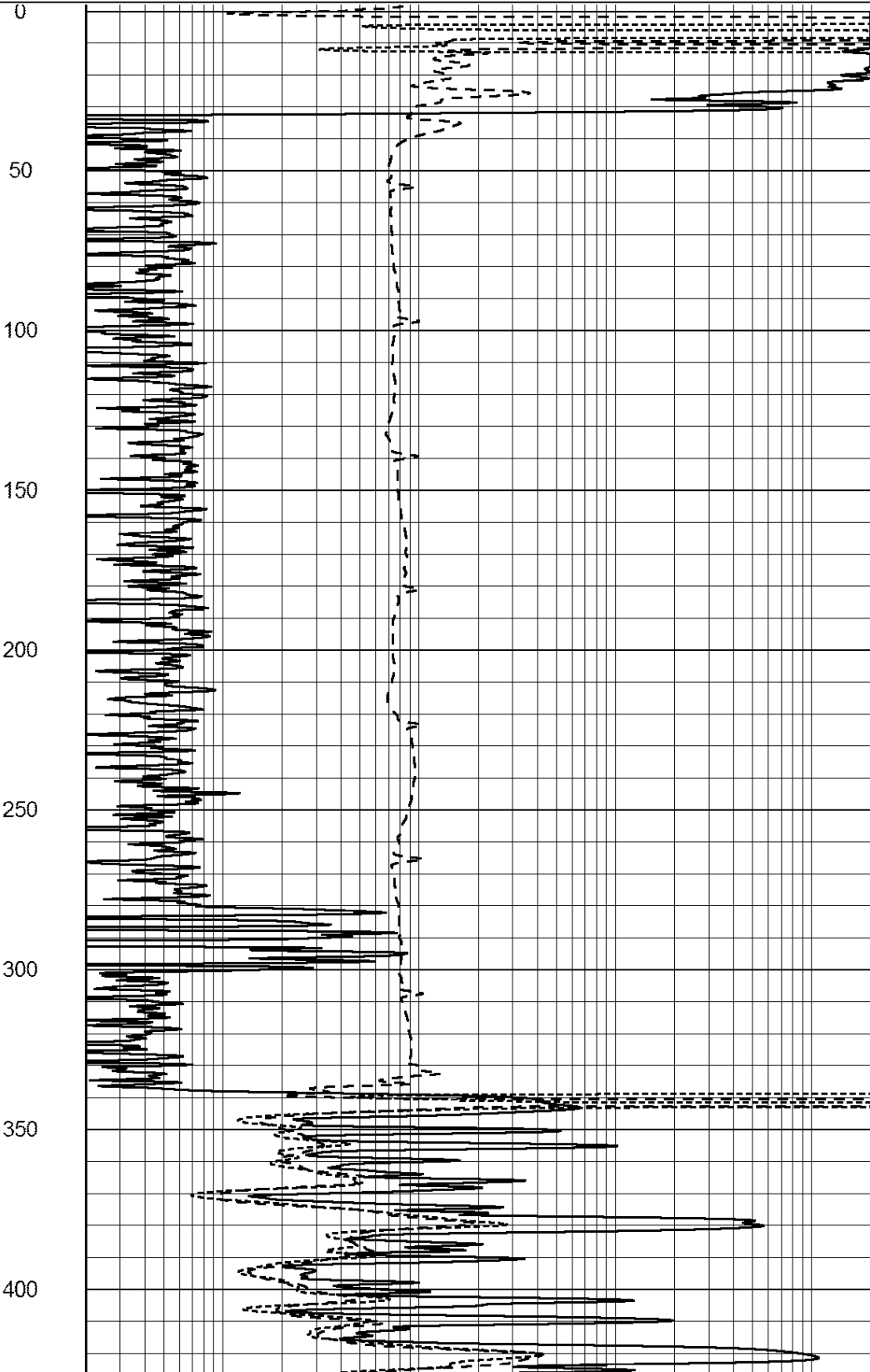
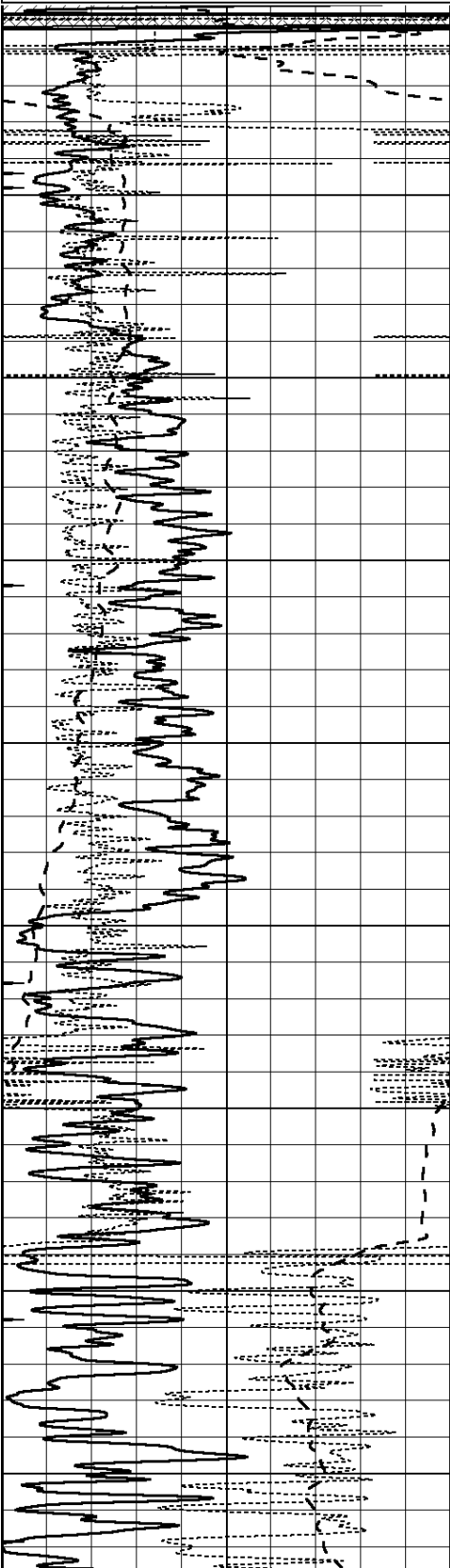
SUPERIOR
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Kansas

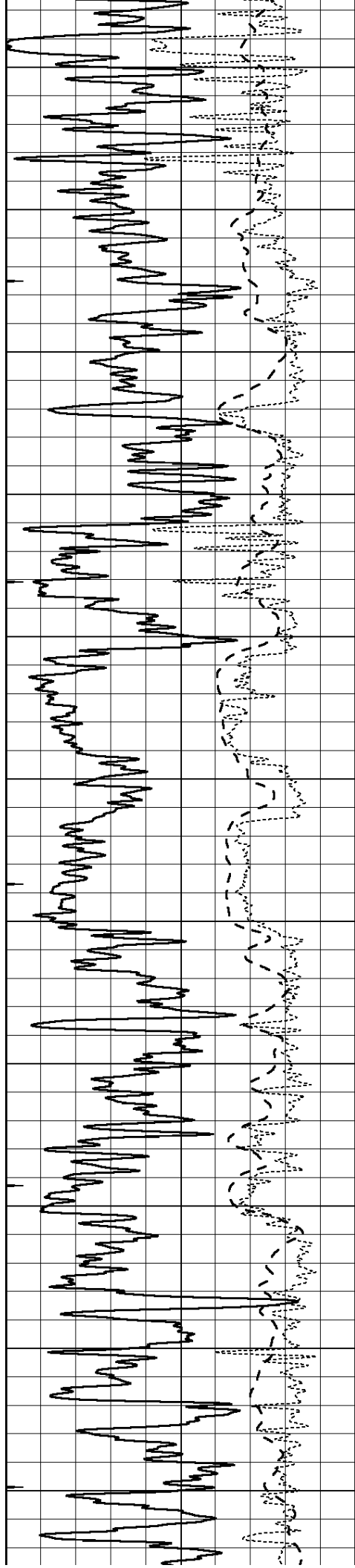
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Dataset Pathname: pass3.11
Presentation Format: dil
Dataset Creation: Wed May 09 23:07:08 2012
Charted by: Depth in Feet scaled 1:600

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





450

500

550

600

650

700

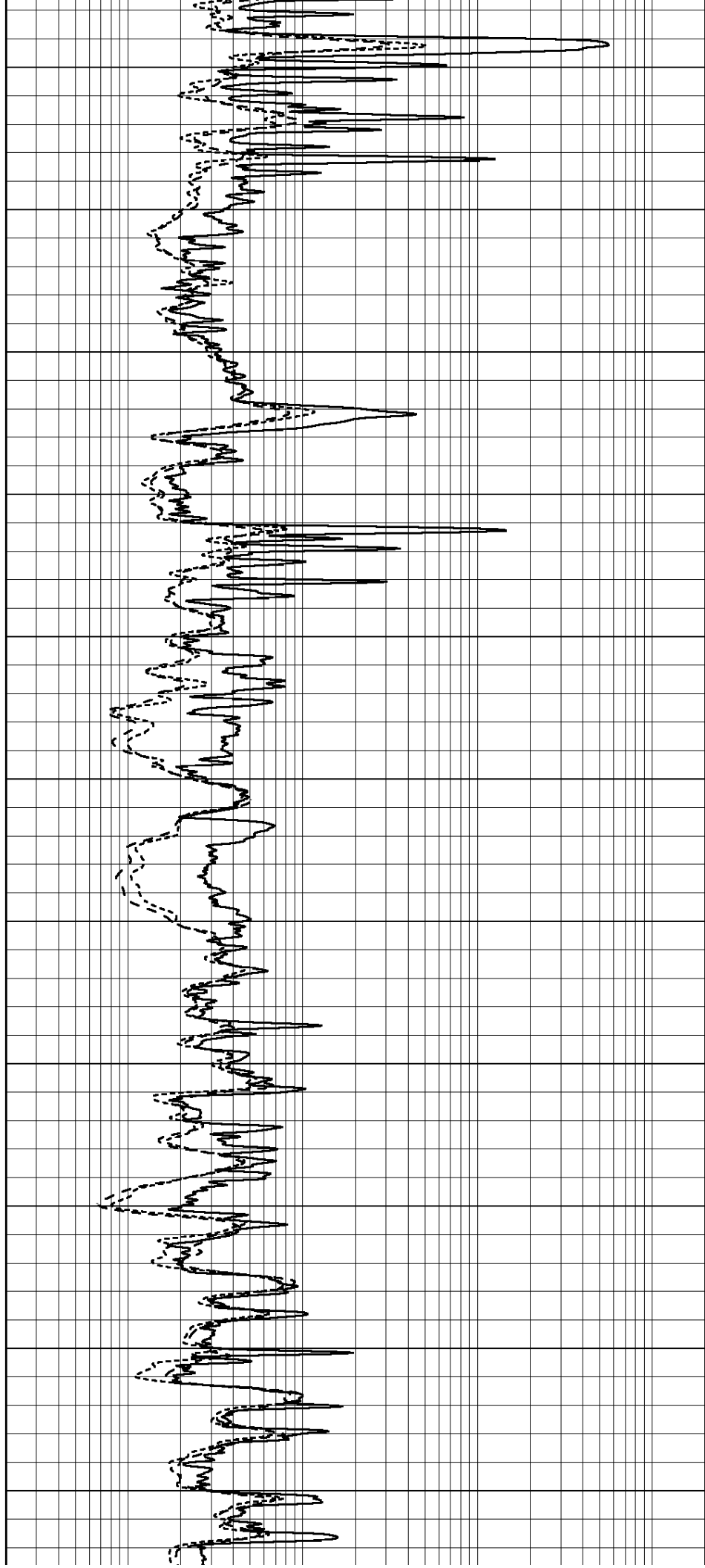
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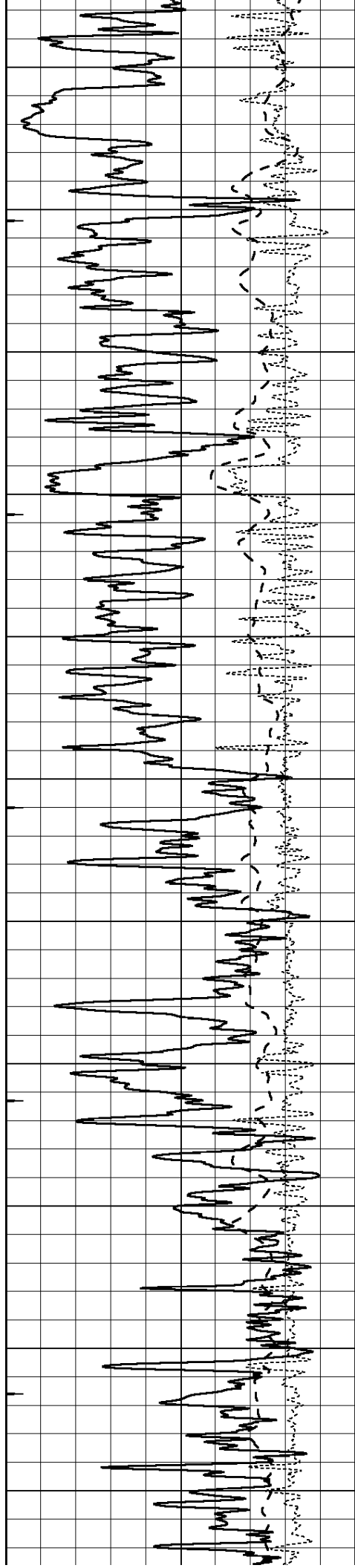
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950





1000

1050

1100

1150

1200

1250

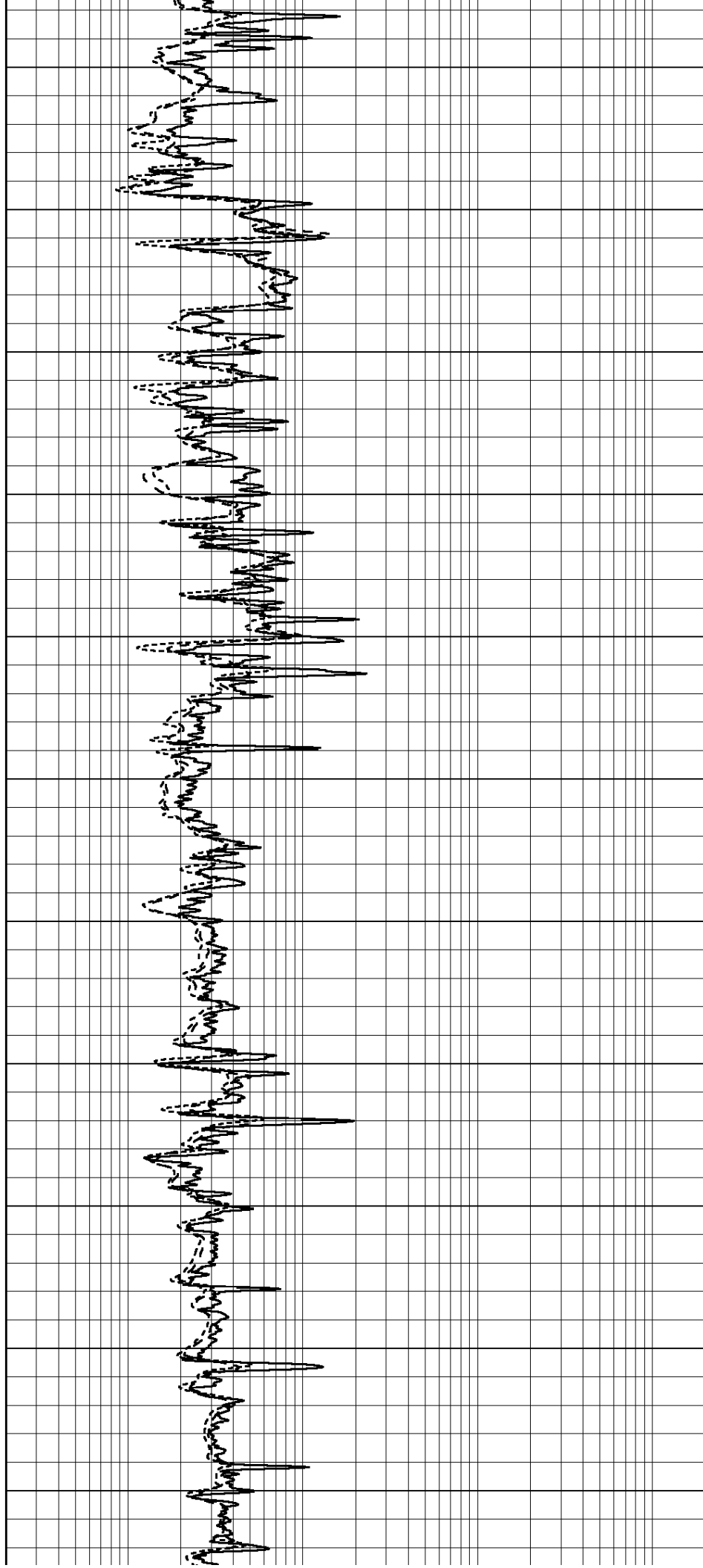
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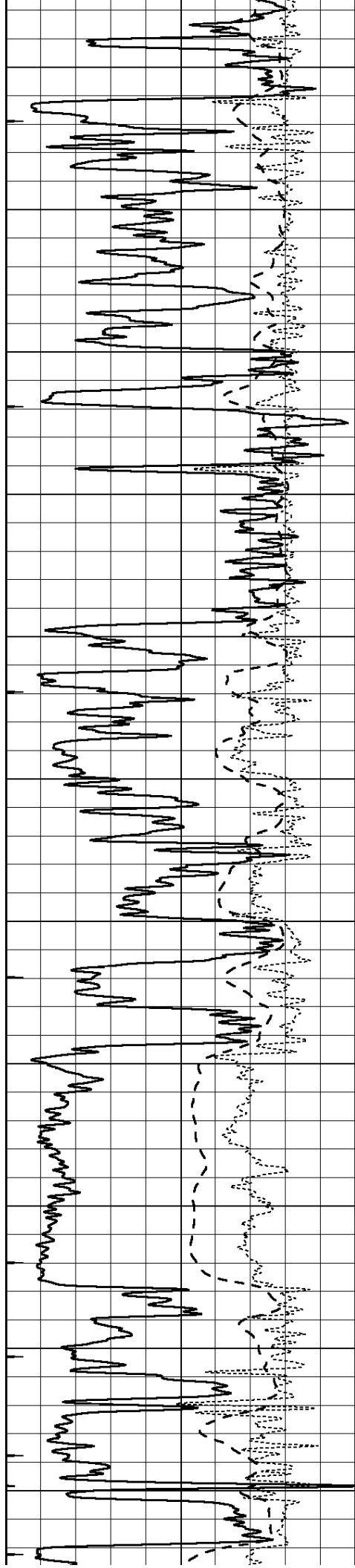
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1500





1550

1600

1650

1700

1750

1800

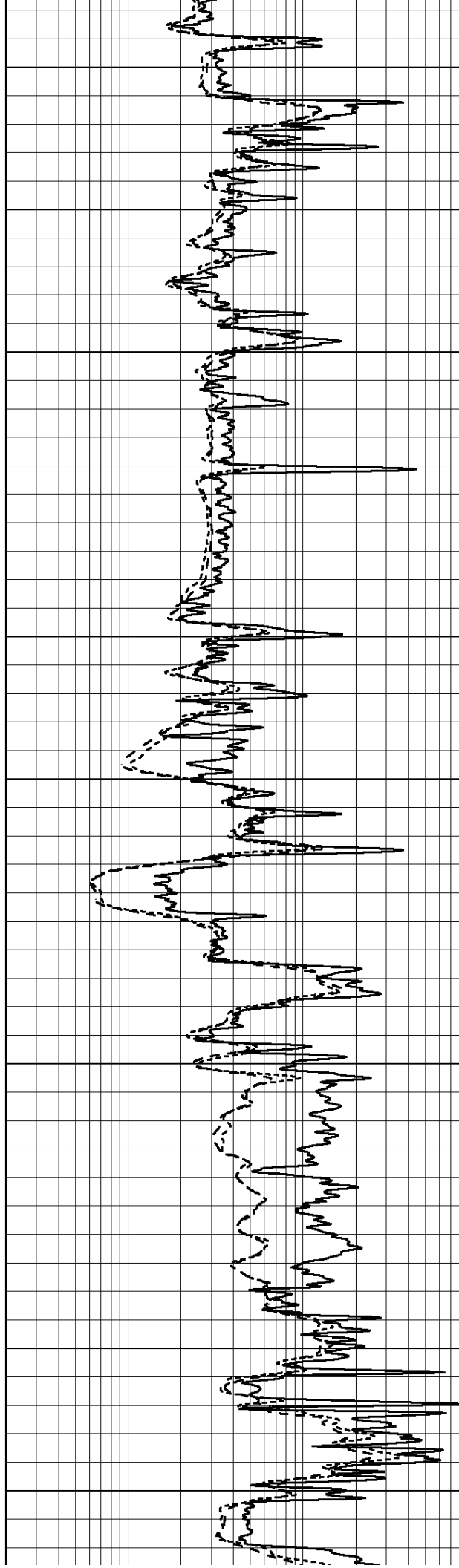
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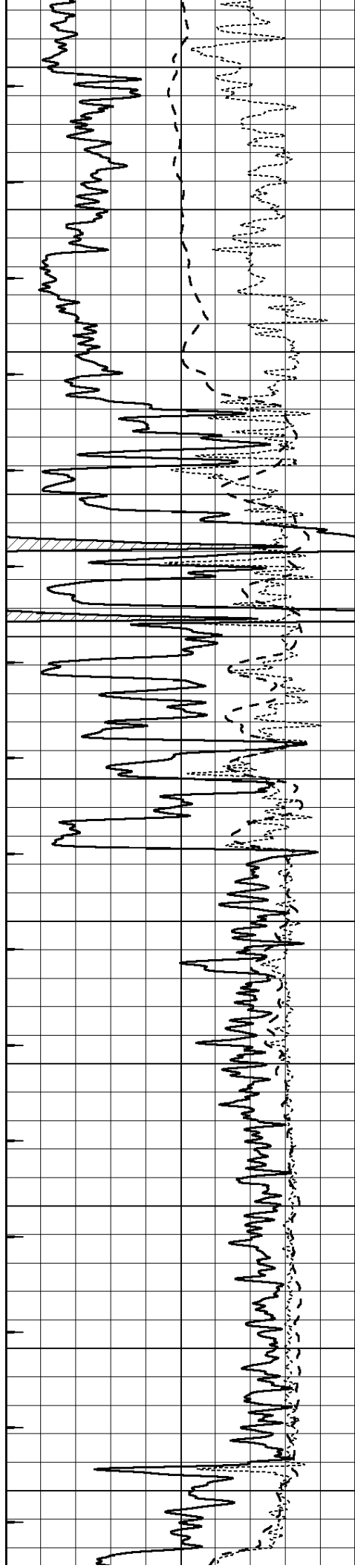
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2150

2200

2250

2300

2350

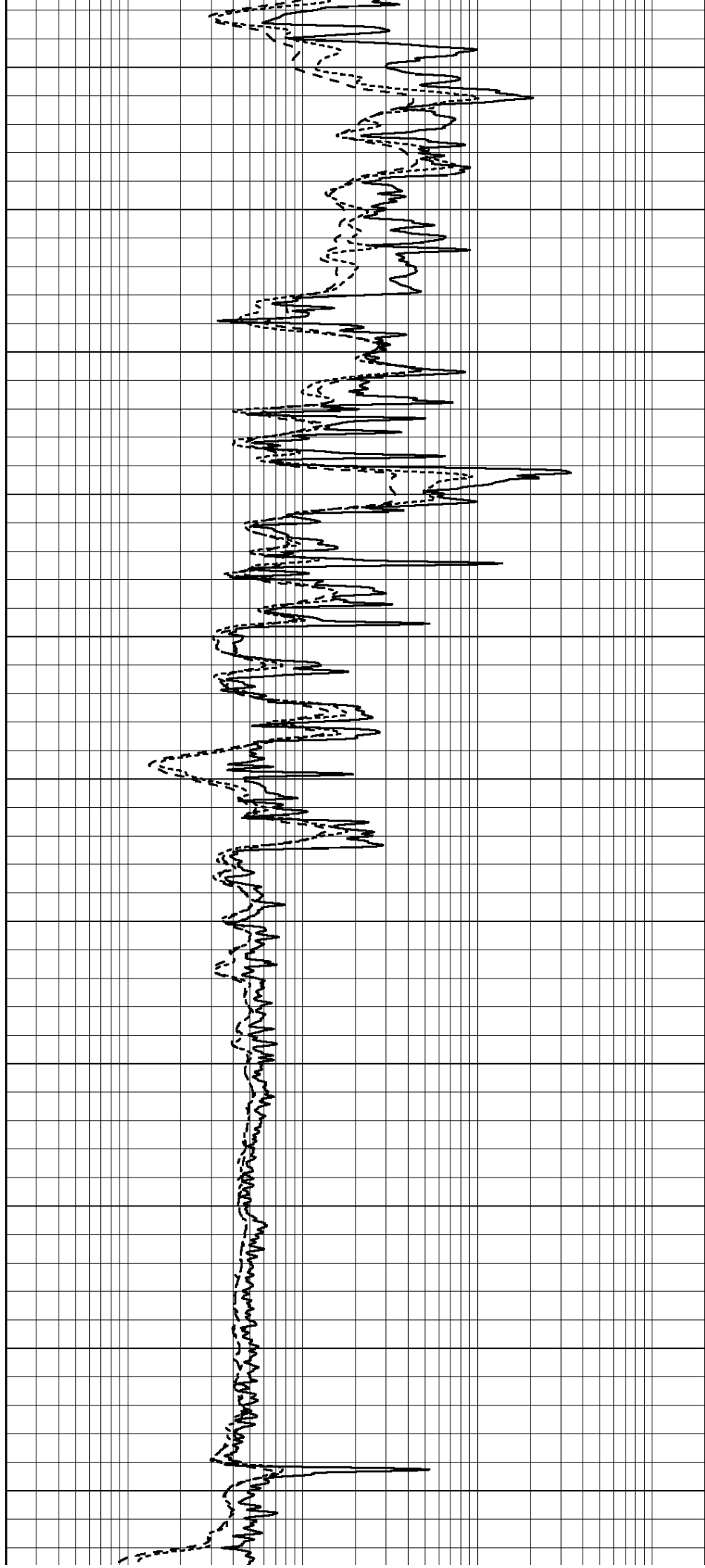
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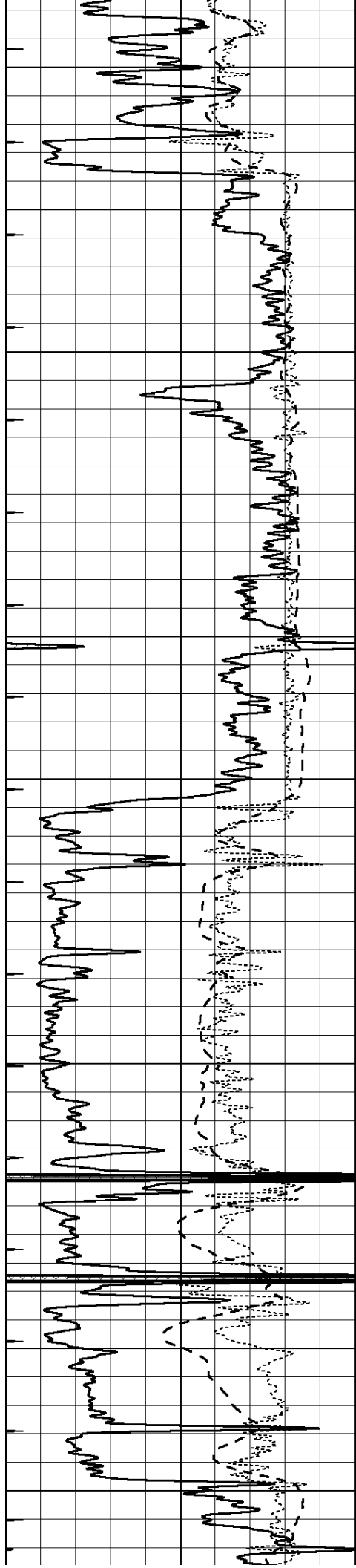
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2650

2700

2750

2800

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2900

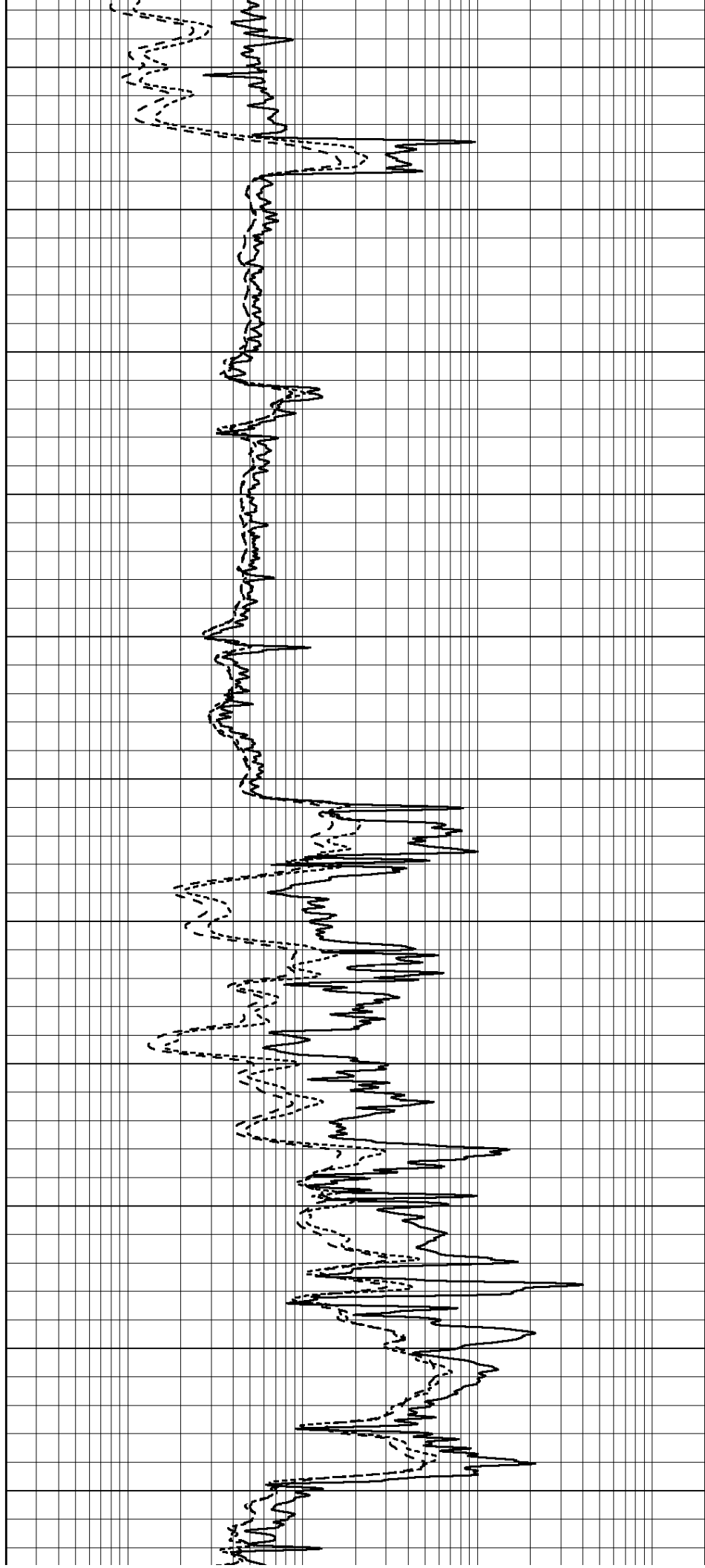
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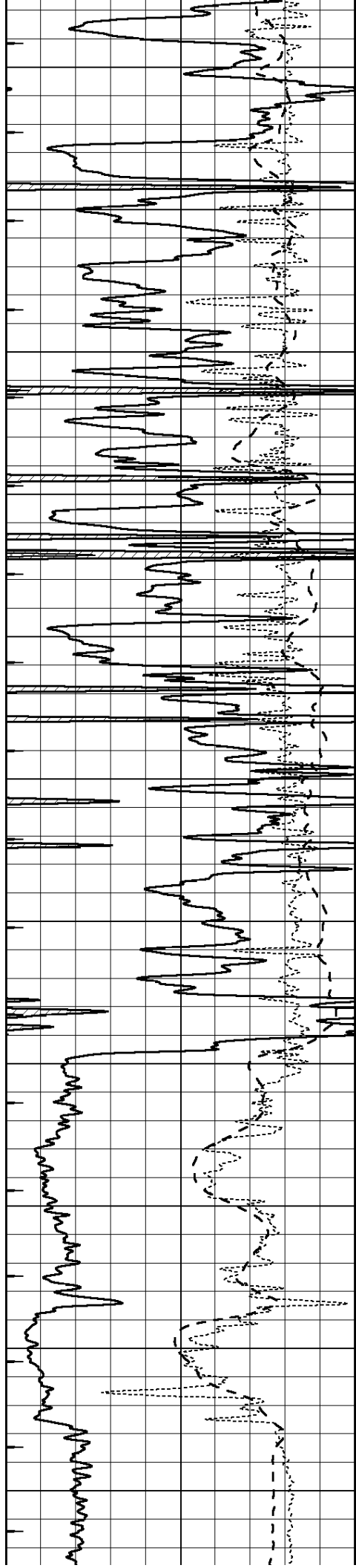
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3150





3200

3250

3300

3350

3400

3450

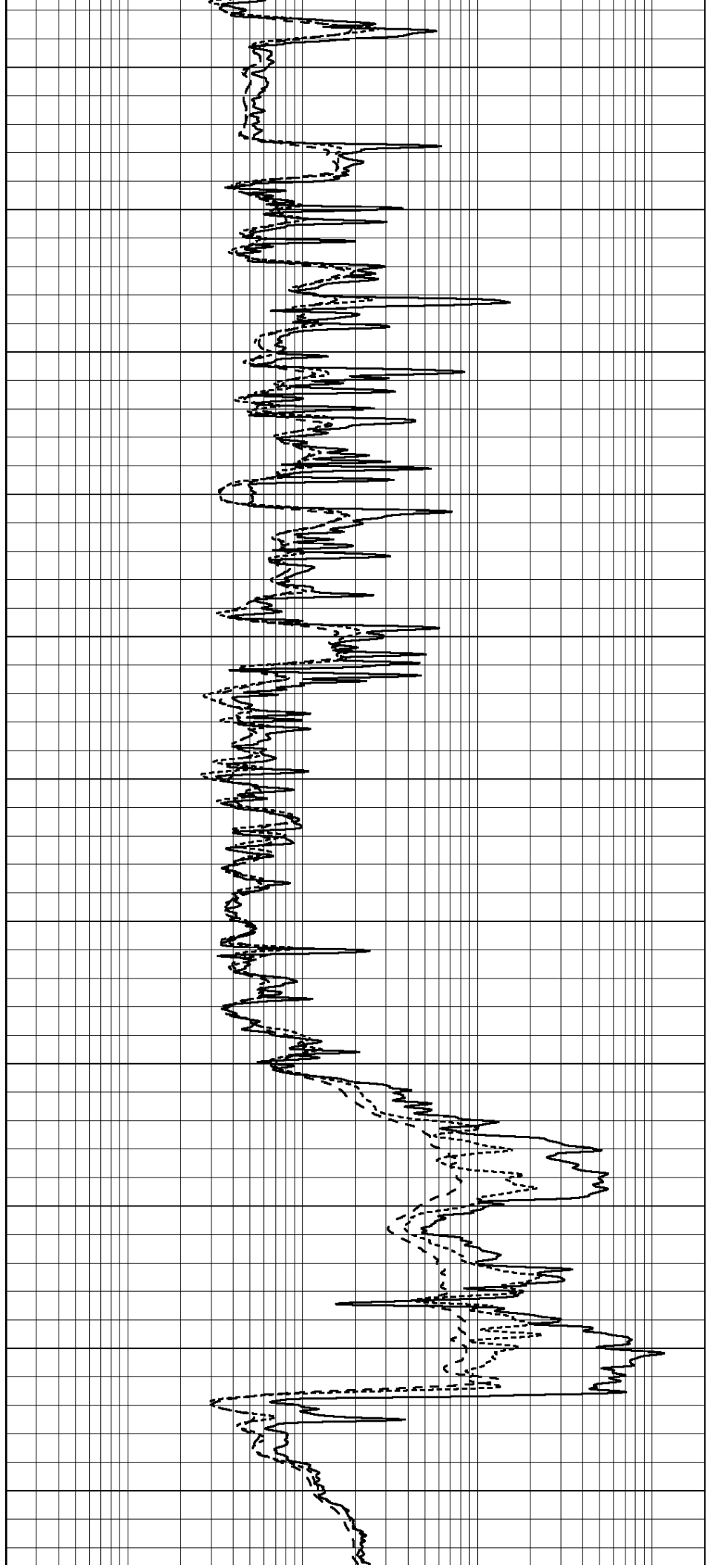
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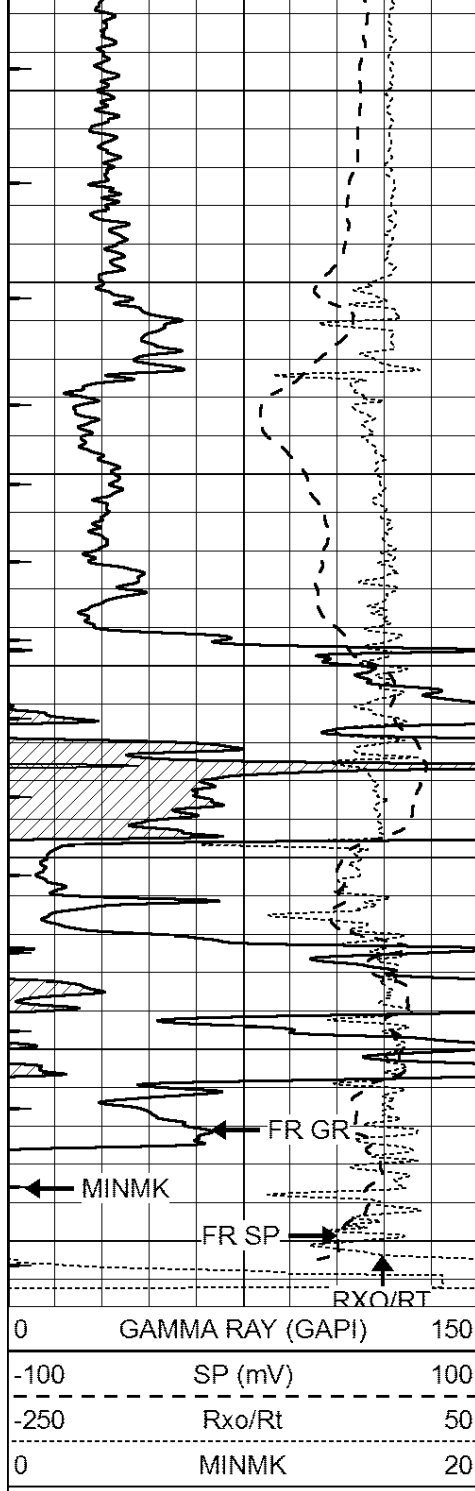
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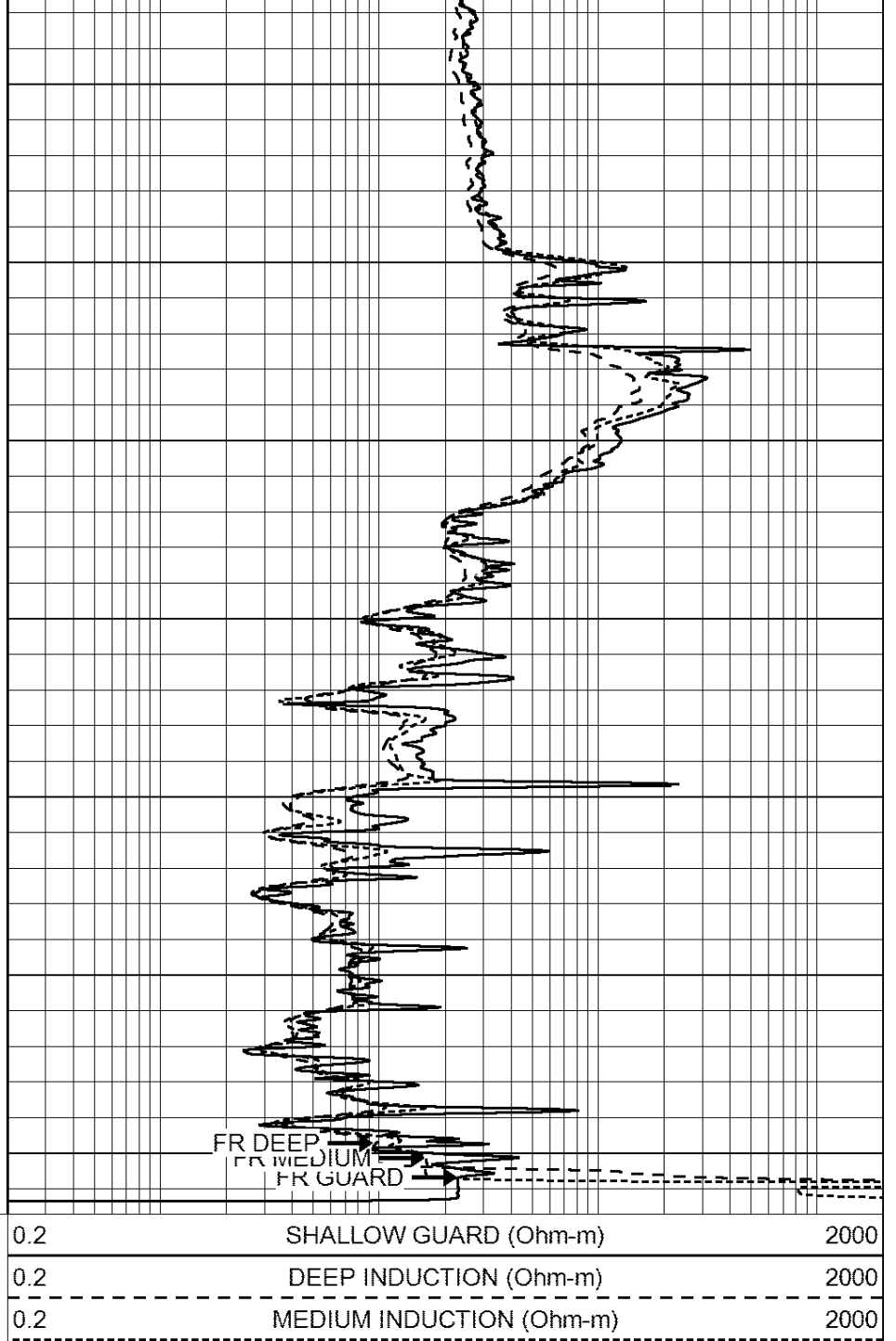
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3700





3750
3800
3850
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4000
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LTD 4059



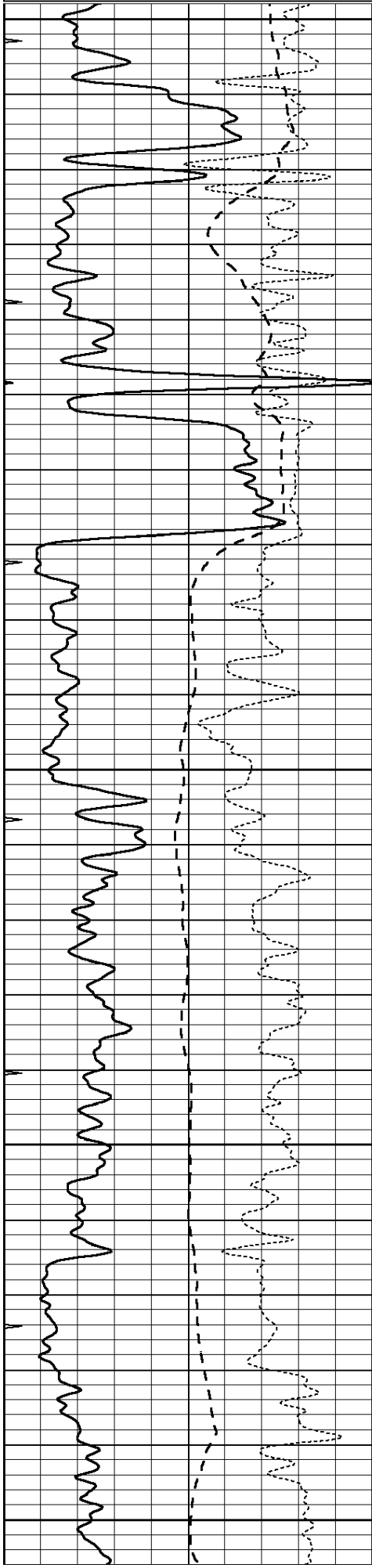
SUPERIOR
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MAIN SECTION

Database File: 408764ddn.db
Dataset Pathname: pass3.11
Presentation Format: dil
Dataset Creation: Wed May 09 23:07:08 2012
Charted by: Depth in Feet scaled 1:240

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

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



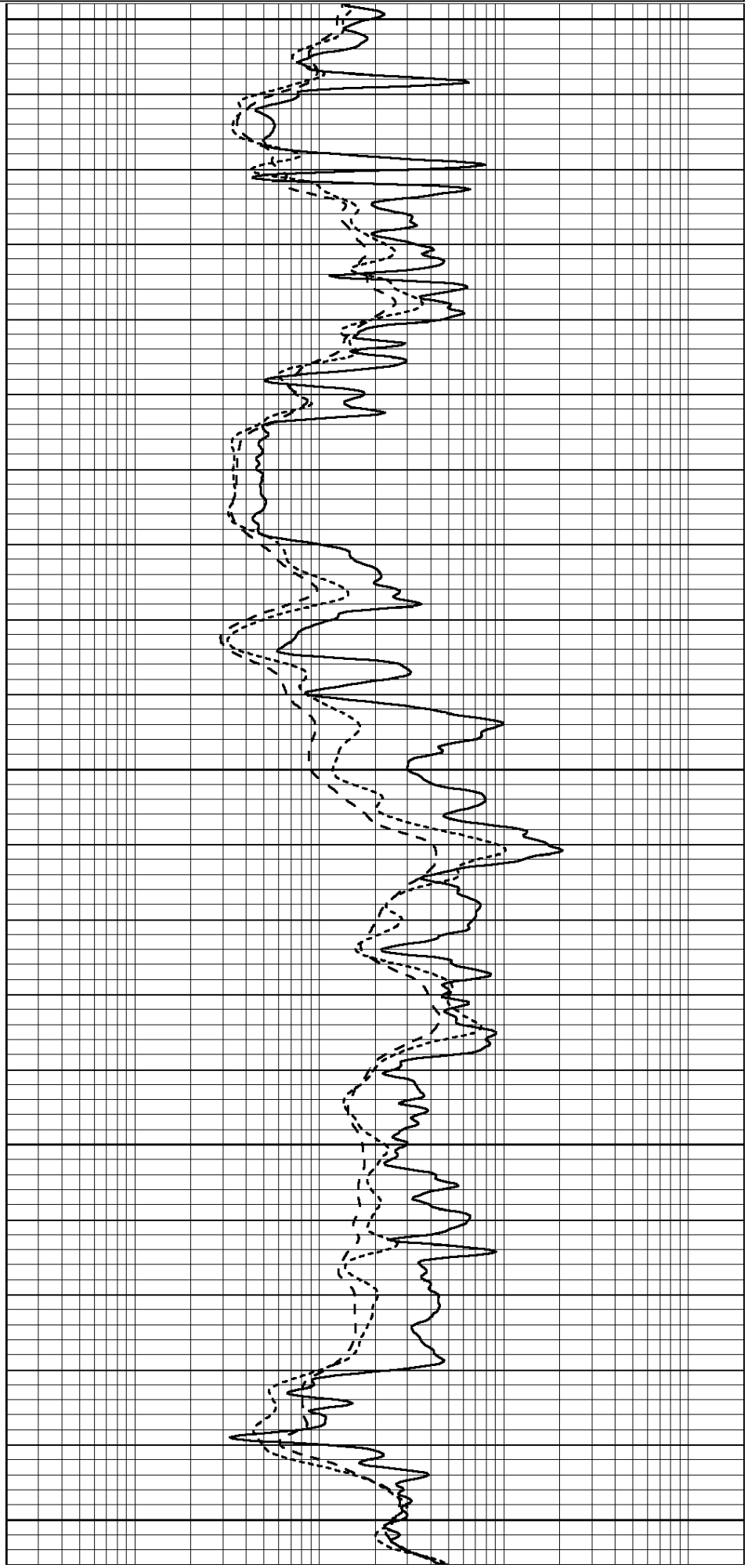
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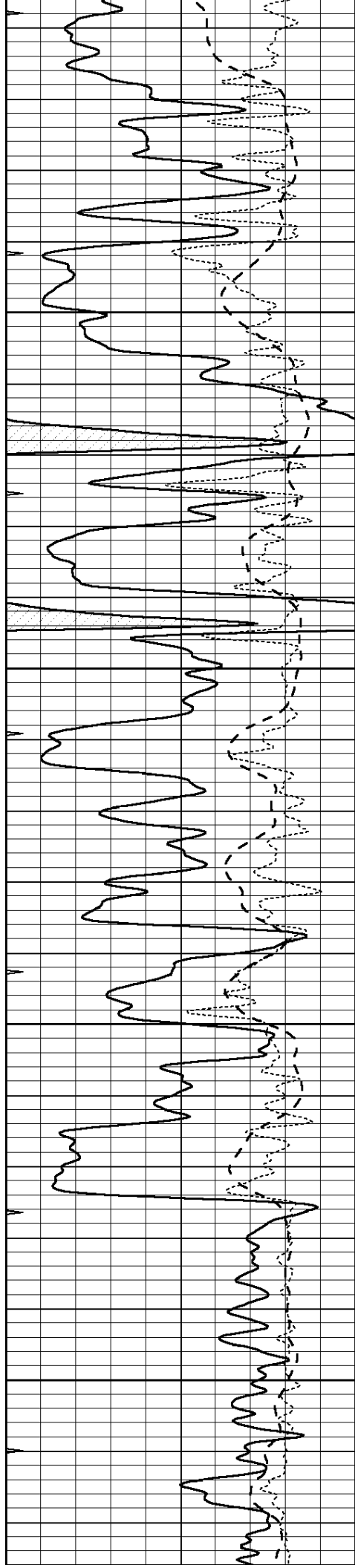
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2100

2150

2200



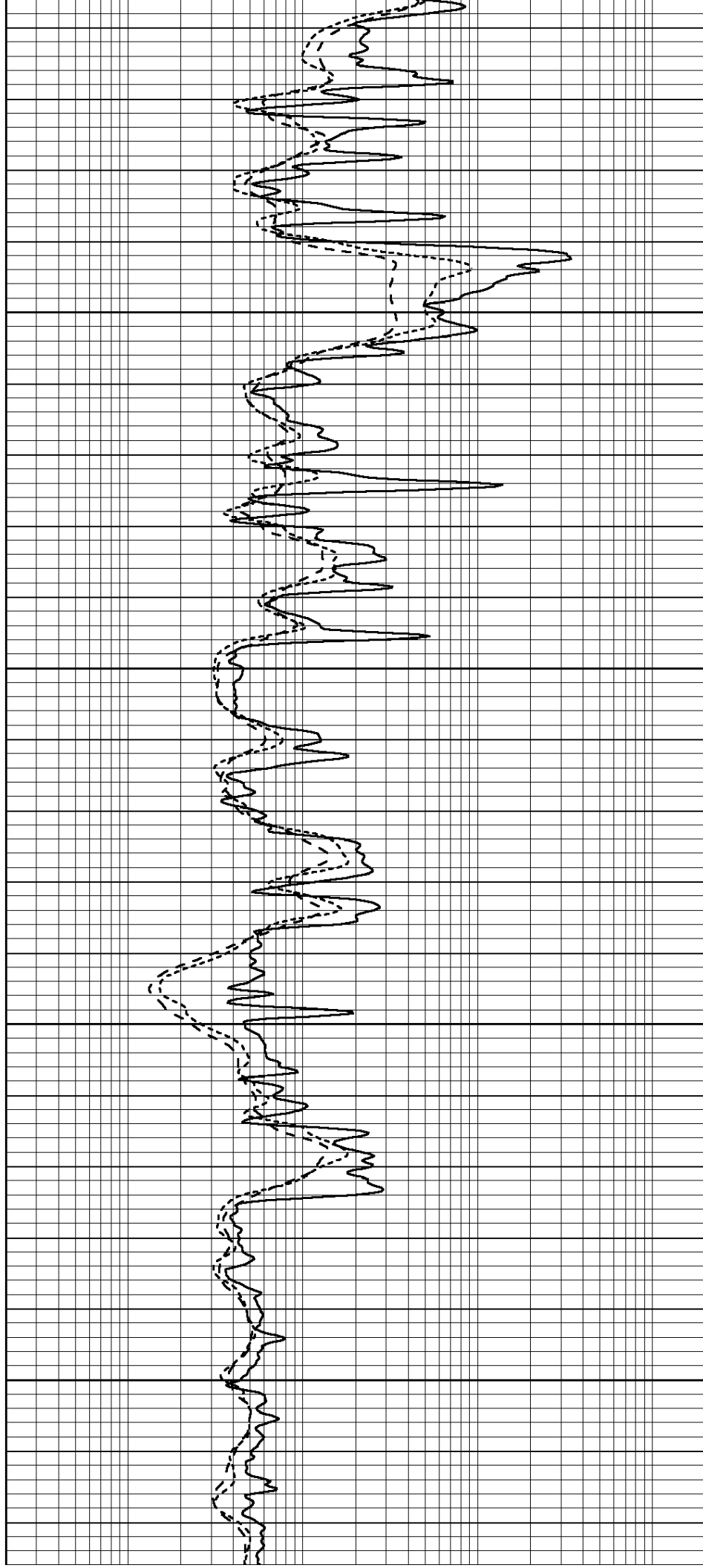


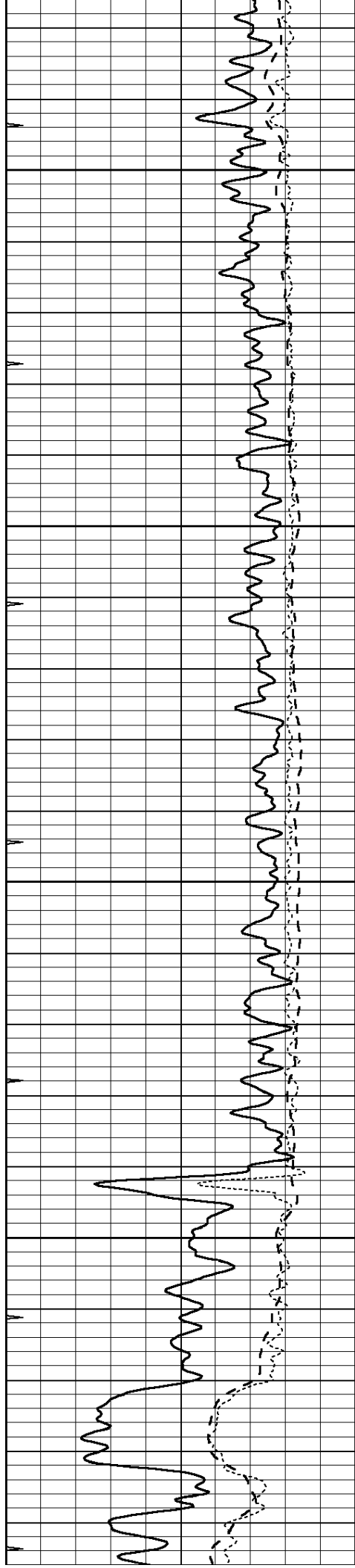
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2350

2400



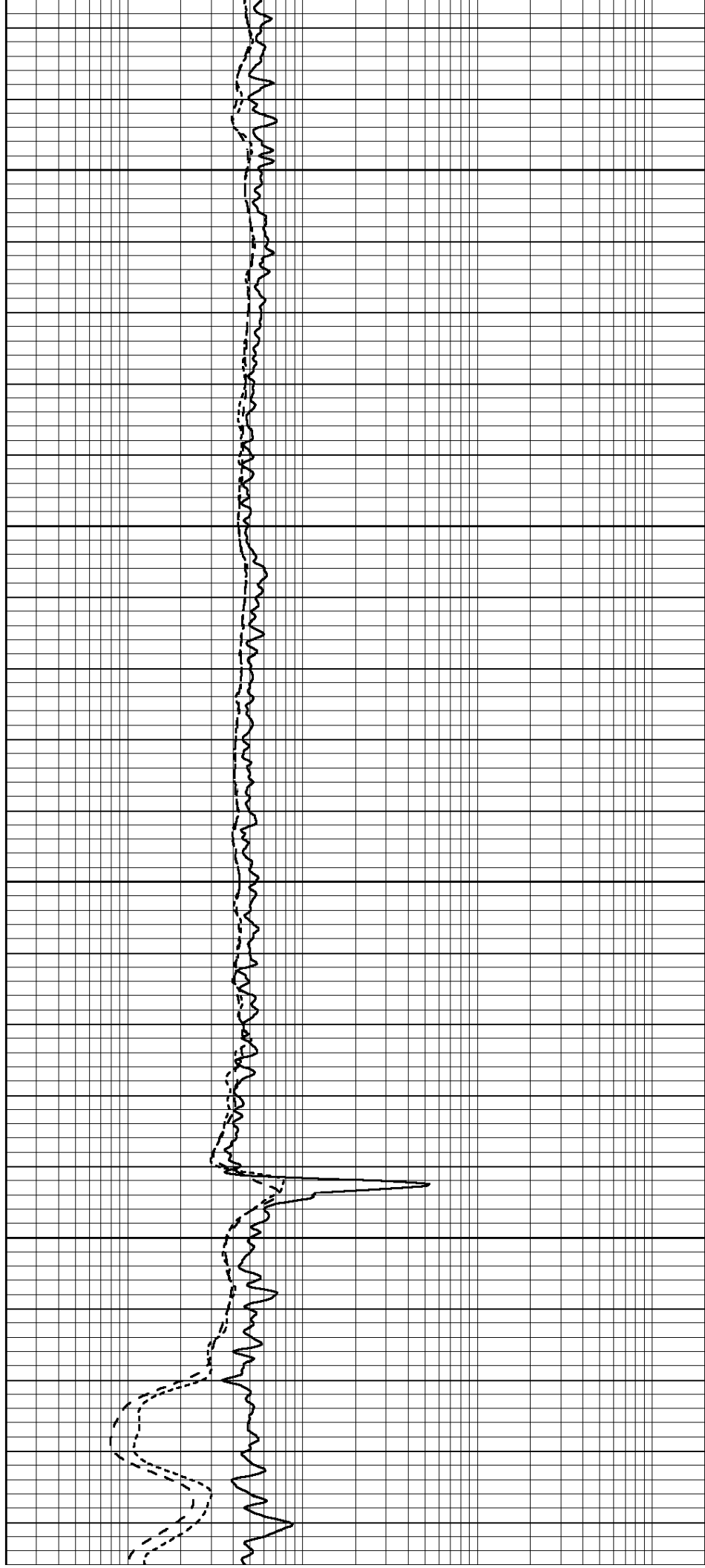


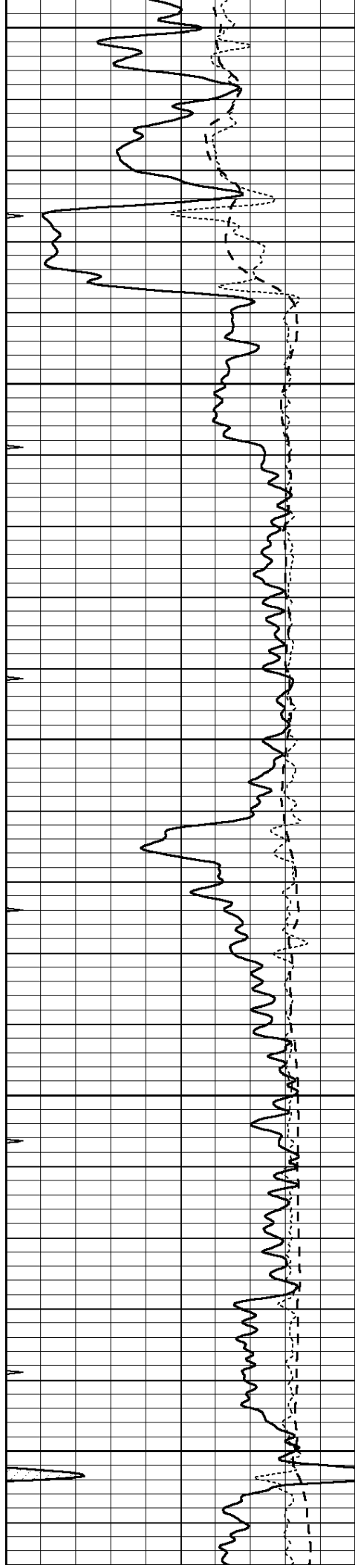
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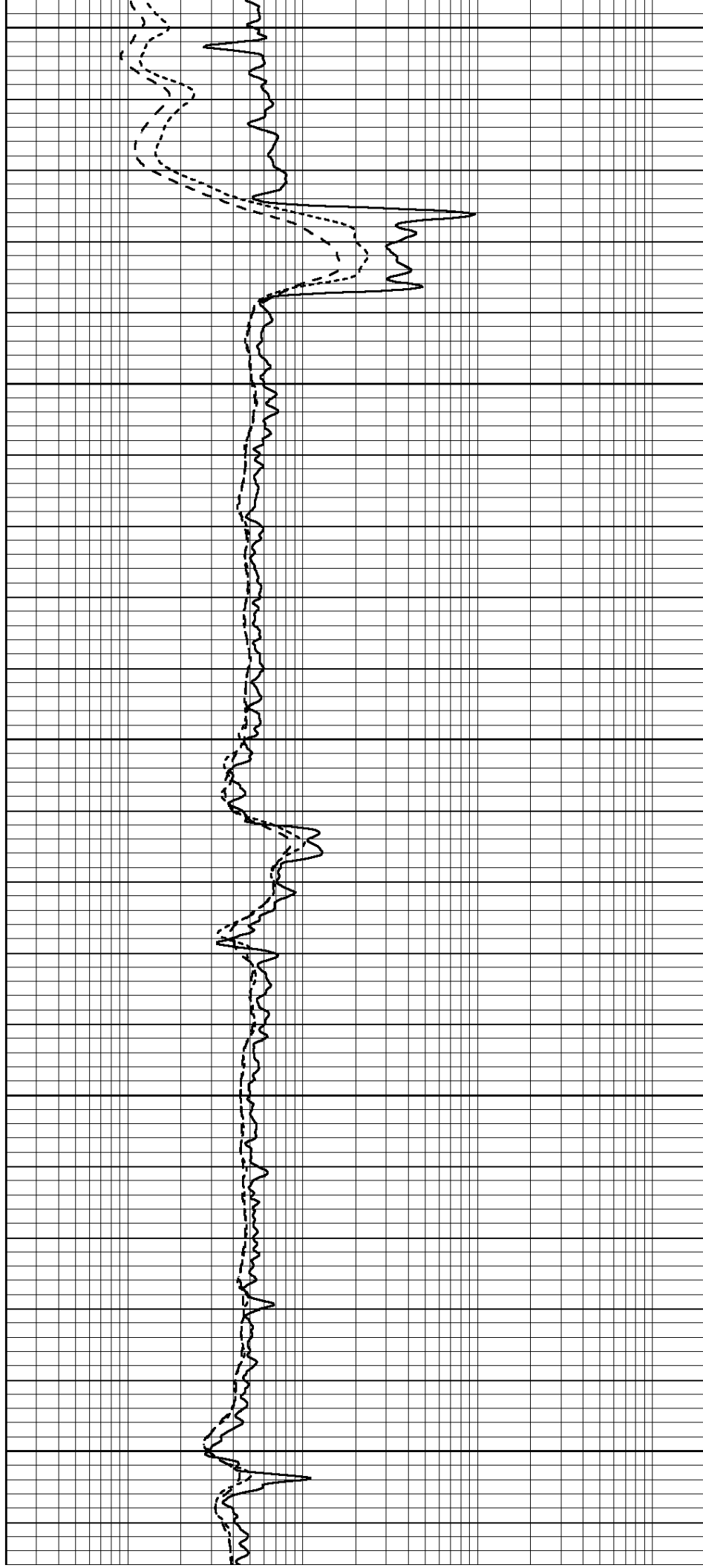
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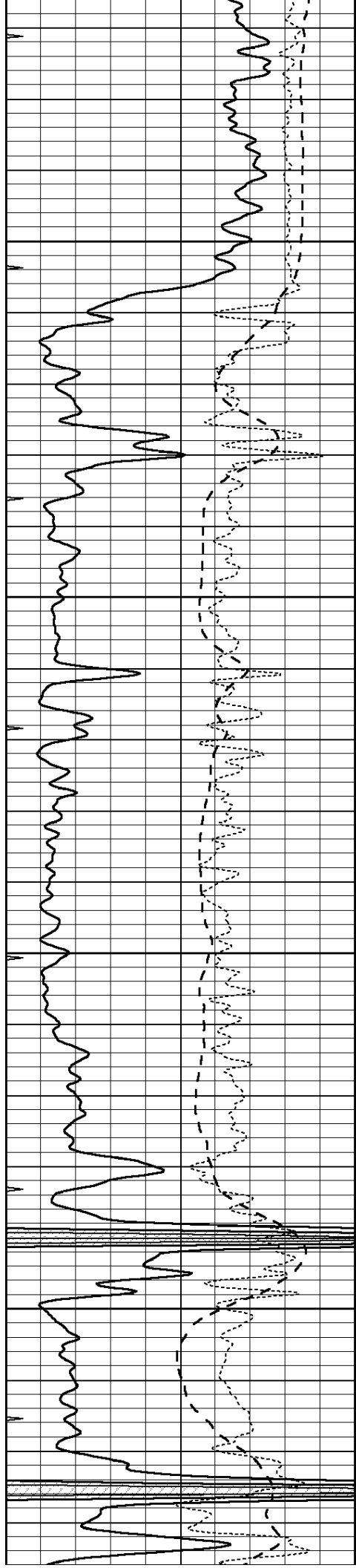
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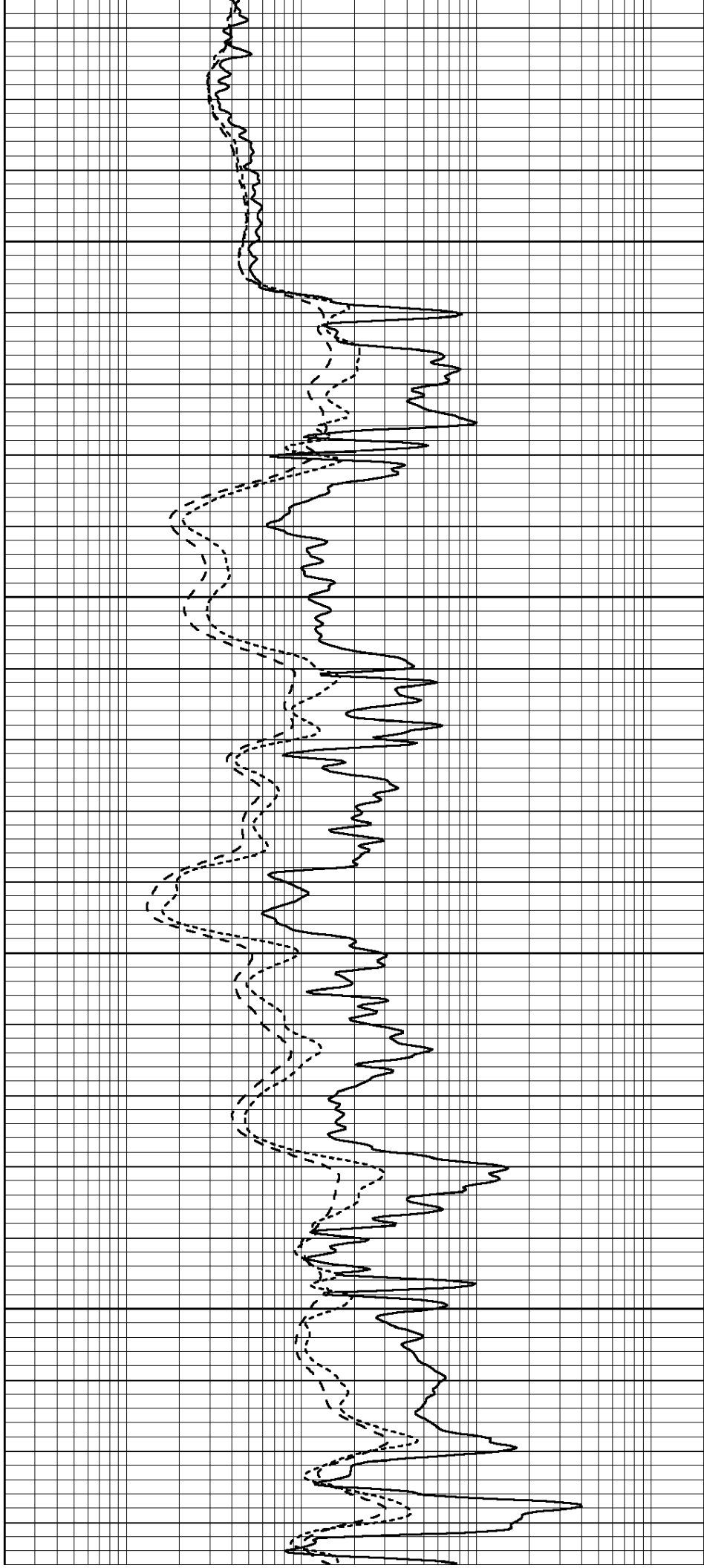


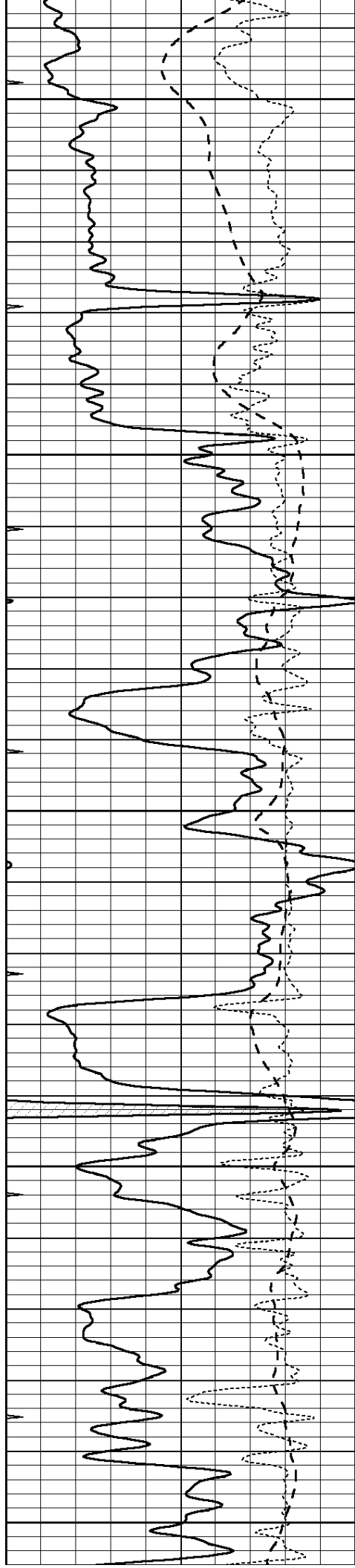
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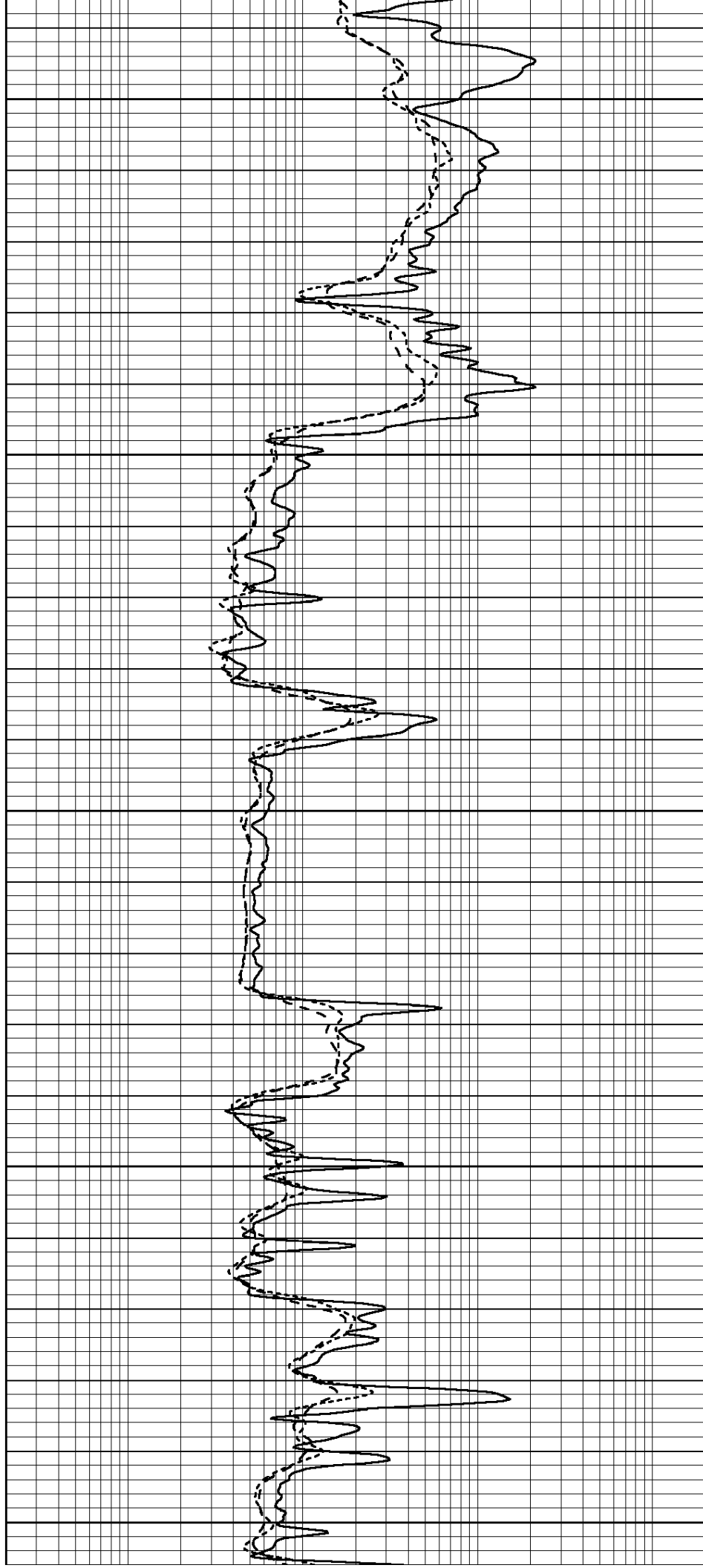
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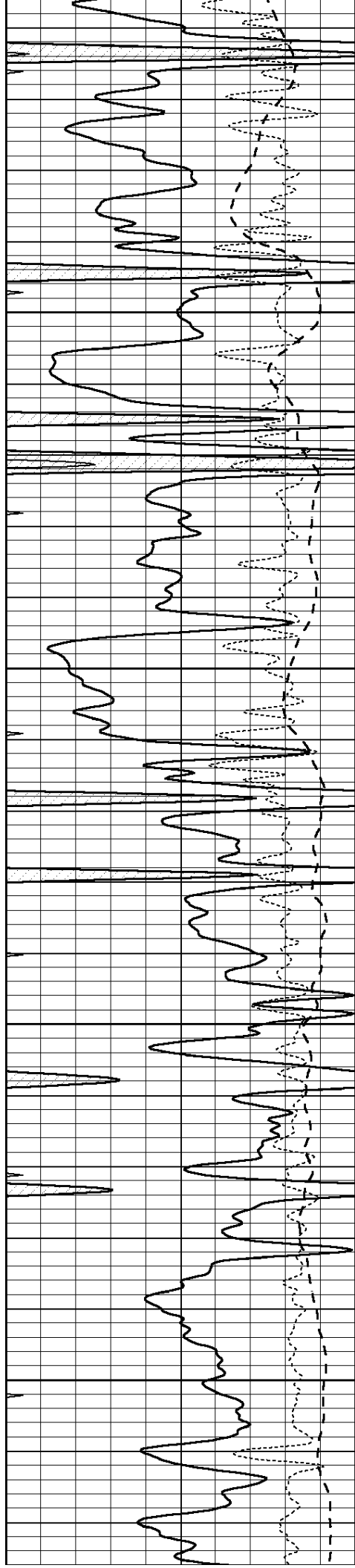
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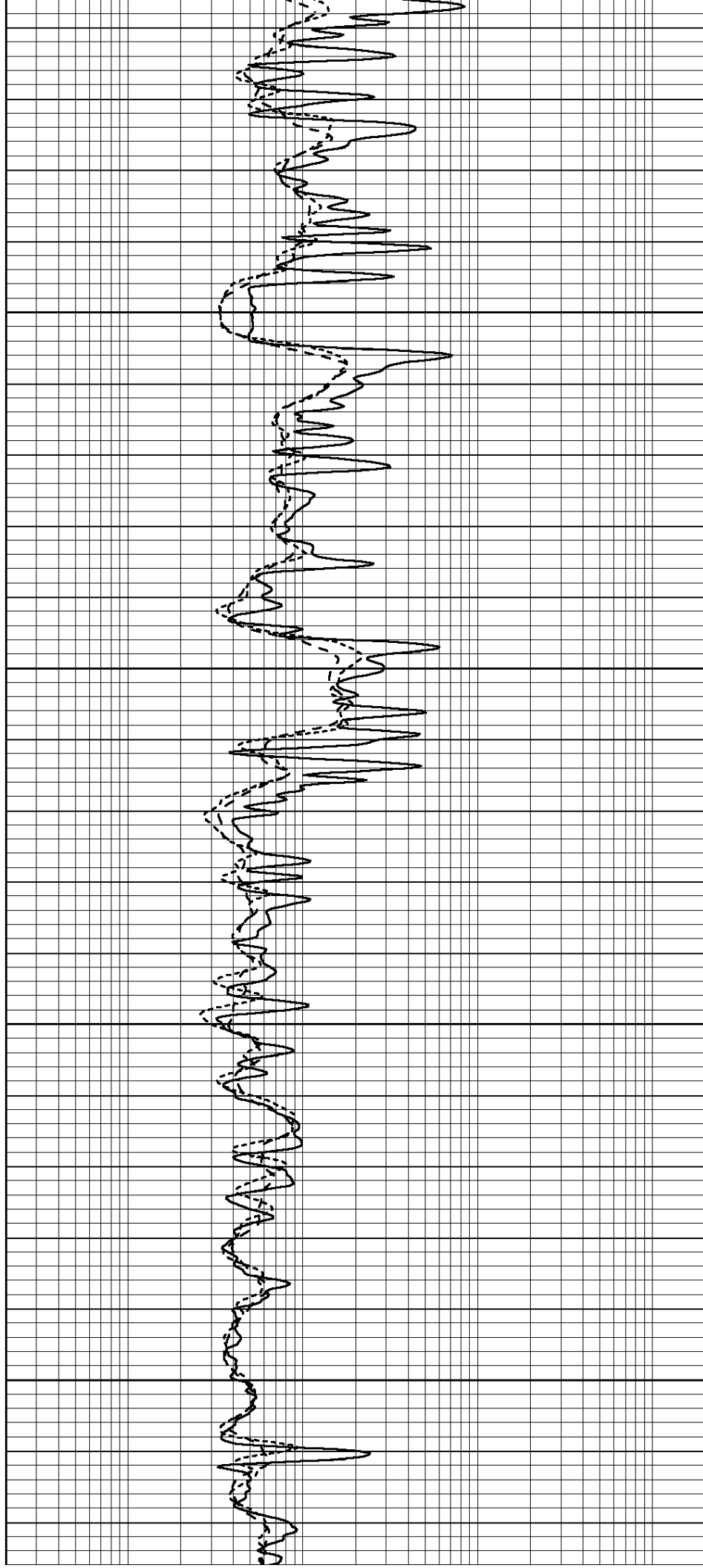


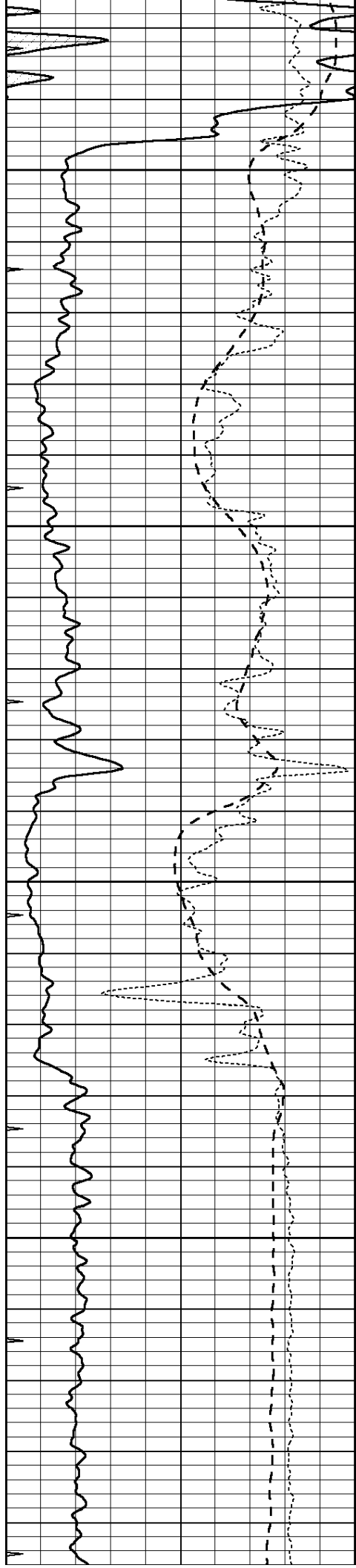
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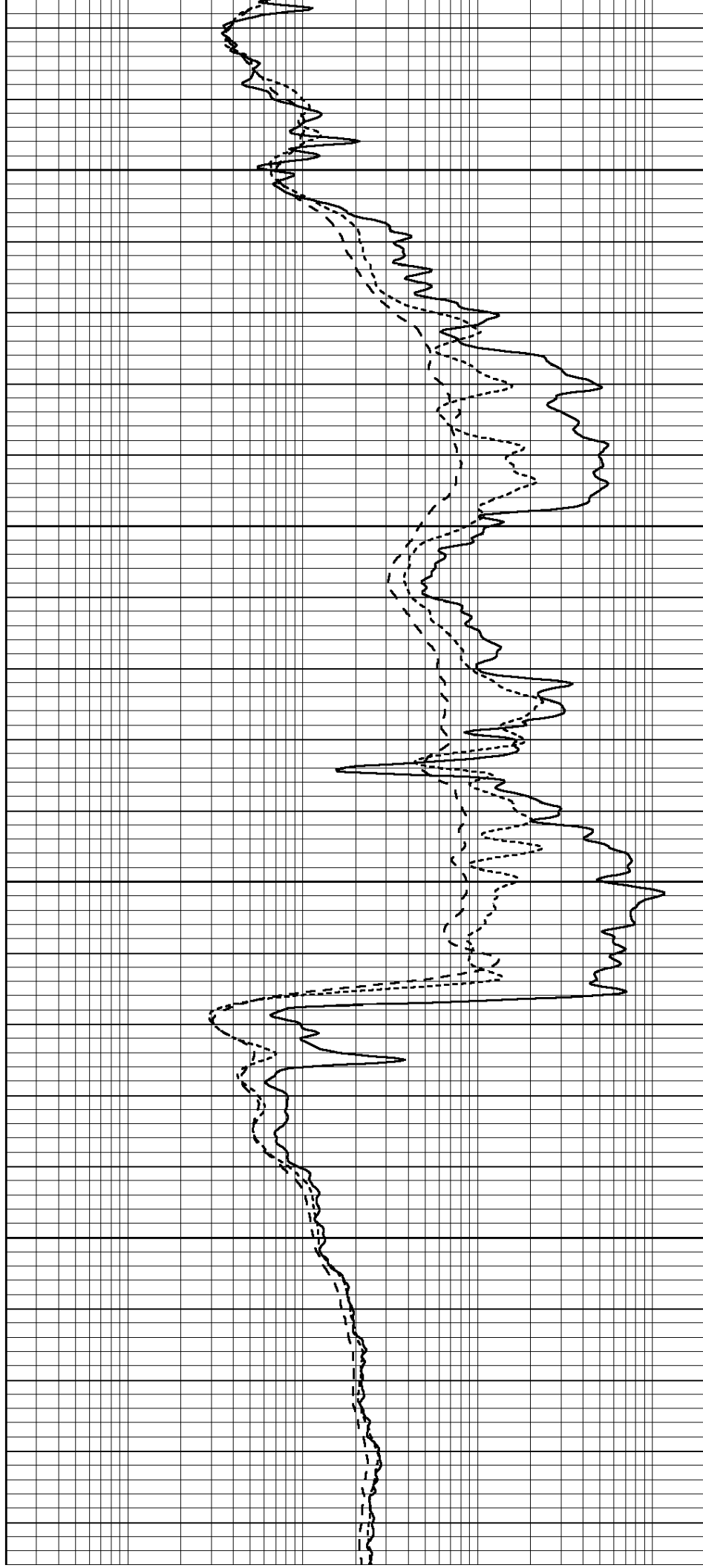


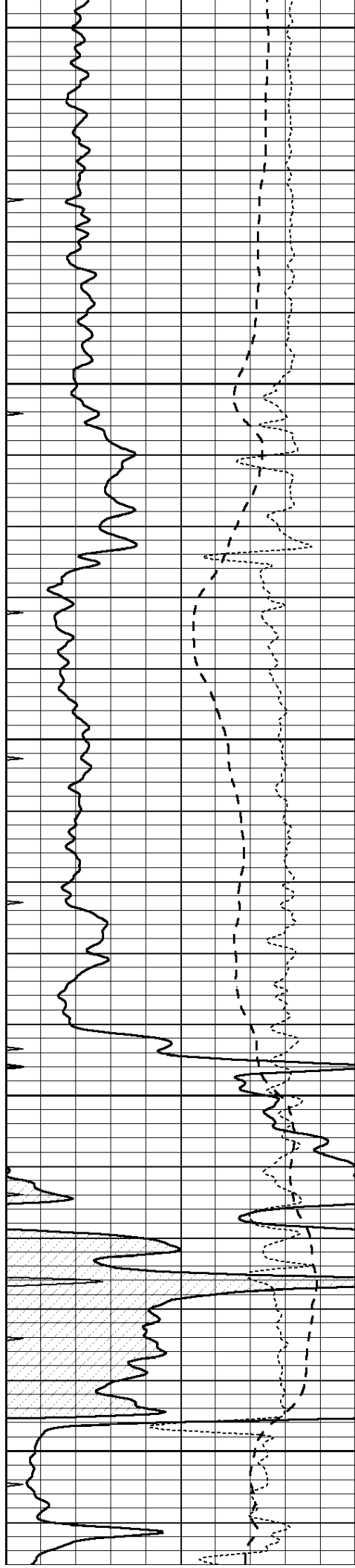
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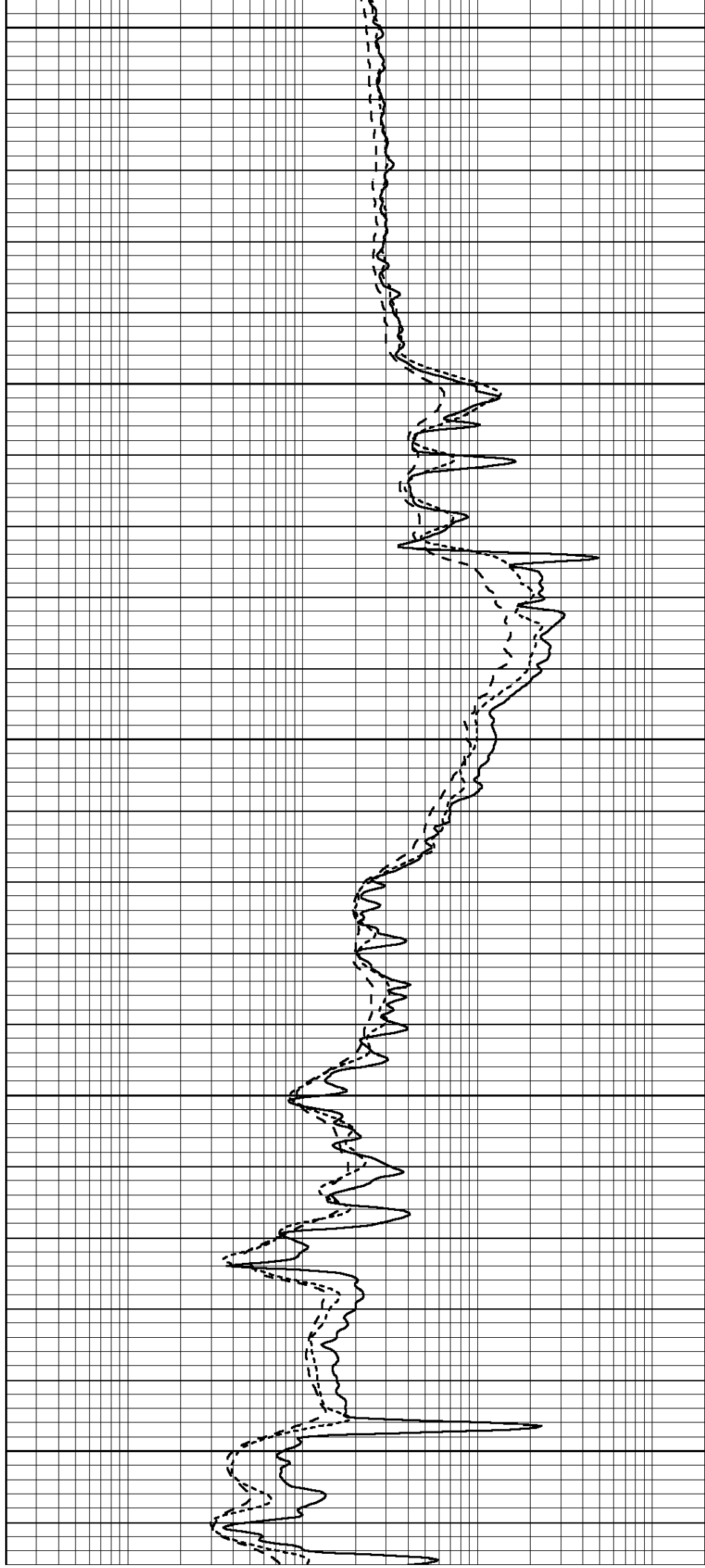
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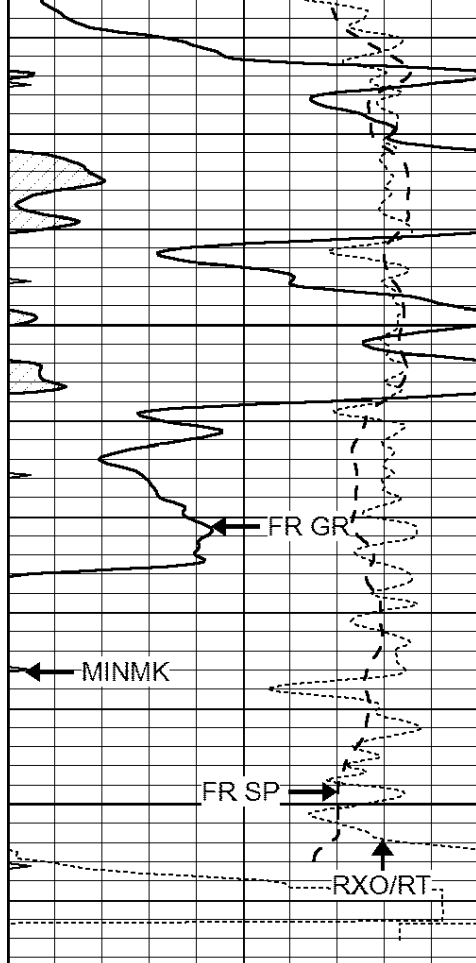
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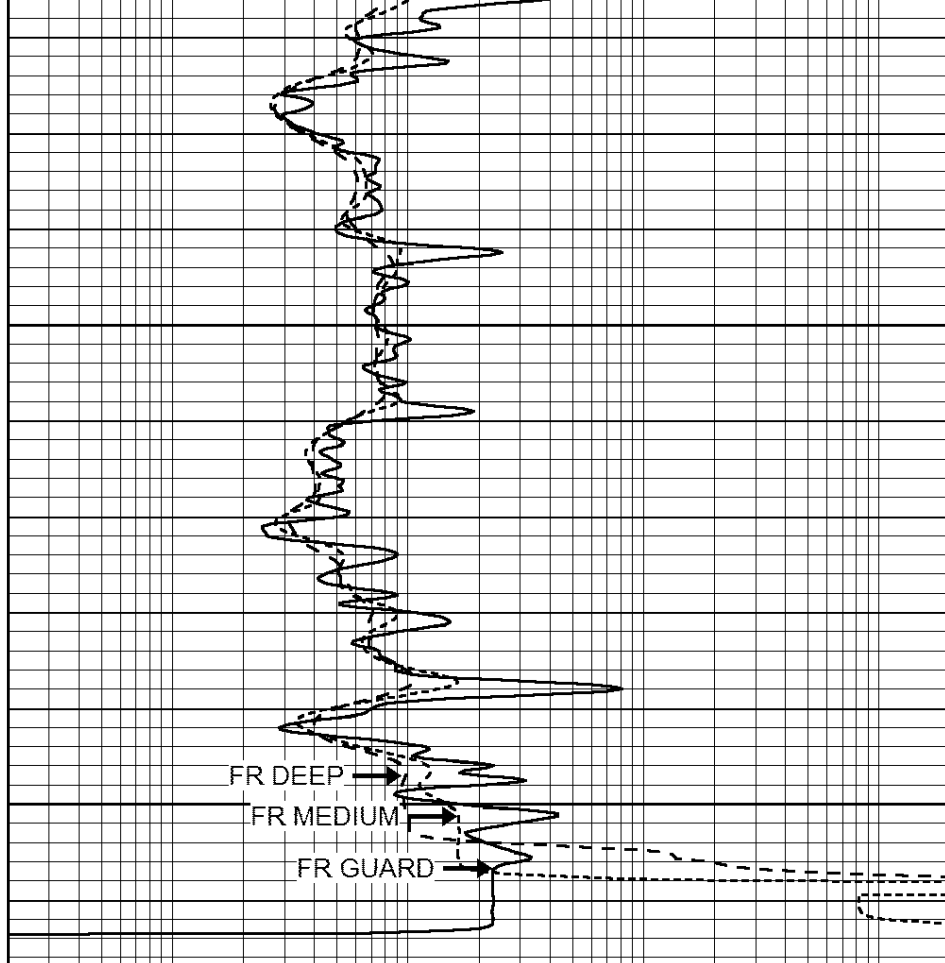


4000

4050

LTD 4059

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



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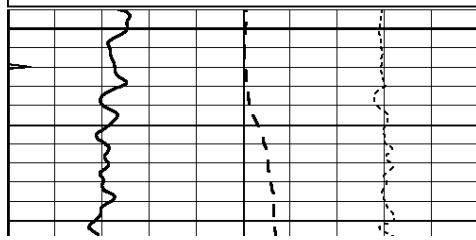
SUPERIOR
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REPEAT SECTION

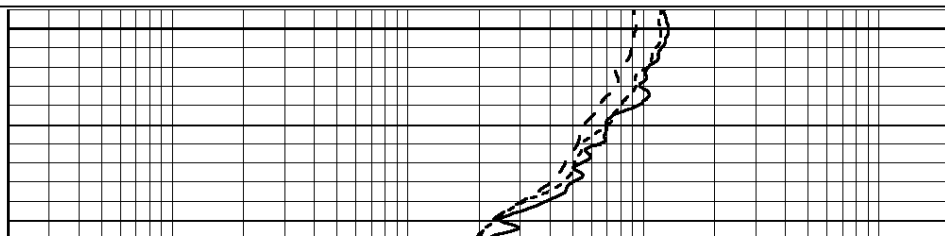
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 Charted by: Depth in Feet scaled 1:240

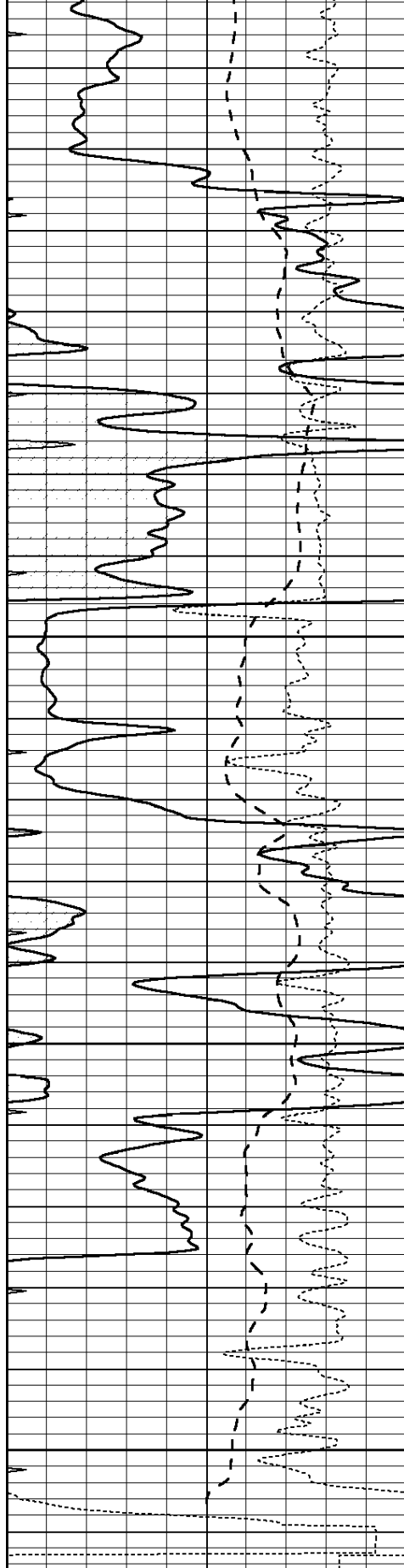
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



3850





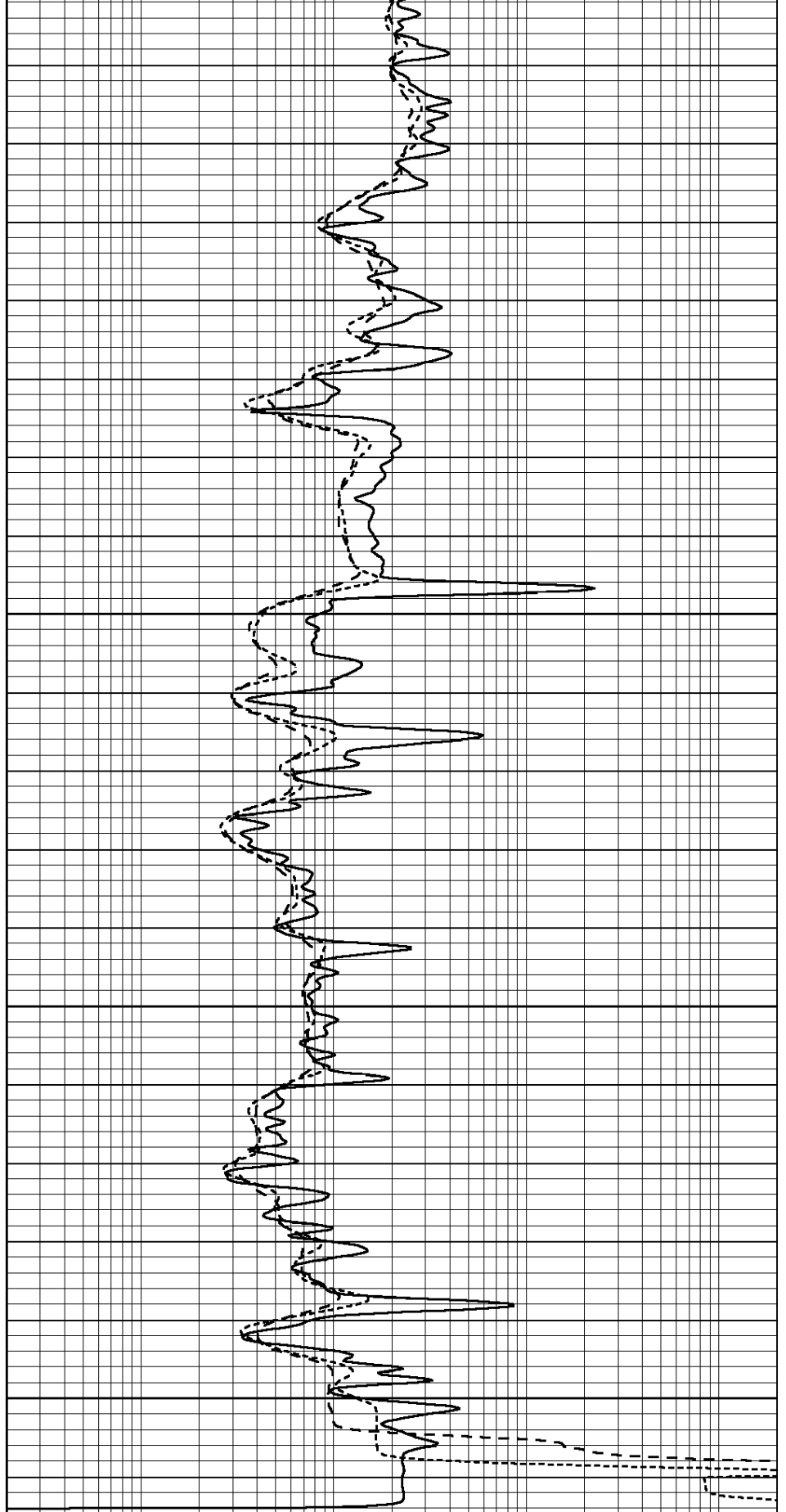
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

3900

3950

4000

4050



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

Calibration Report																																																																																																			
Database File:		408764ddn.db																																																																																																	
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Serial-Model: Performed:				DIL4-GEAR Wed May 09 20:50:59 2012																																																																																															
<table><tr><td colspan="2"></td><td colspan="2">Readings</td><td colspan="3"></td><td colspan="2">References</td><td colspan="2"></td><td colspan="2">Results</td></tr><tr><td>Loop:</td><td></td><td>Air</td><td>Loop</td><td></td><td>Air</td><td>Loop</td><td></td><td></td><td></td><td>m</td><td></td><td>b</td></tr><tr><td>Deep</td><td></td><td>0.008</td><td>0.666</td><td>V</td><td>0.000</td><td>400.000</td><td>mmho/m</td><td></td><td></td><td>570.000</td><td></td><td>2.000</td></tr><tr><td>Medium</td><td></td><td>-0.003</td><td>0.769</td><td>V</td><td>0.000</td><td>462.500</td><td>mmho/m</td><td></td><td></td><td>560.000</td><td></td><td>-4.000</td></tr><tr><td>Internal:</td><td></td><td>Zero</td><td>Cal</td><td></td><td>Zero</td><td>Cal</td><td></td><td></td><td></td><td>m</td><td></td><td>b</td></tr><tr><td>Deep</td><td></td><td>0.013</td><td>0.651</td><td>V</td><td>0.000</td><td>400.000</td><td>mmho/m</td><td></td><td></td><td>627.541</td><td></td><td>-8.365</td></tr><tr><td>Medium</td><td></td><td>0.020</td><td>0.754</td><td>V</td><td>0.000</td><td>462.500</td><td>mmho/m</td><td></td><td></td><td>630.311</td><td></td><td>-12.549</td></tr></table>											Readings					References				Results		Loop:		Air	Loop		Air	Loop				m		b	Deep		0.008	0.666	V	0.000	400.000	mmho/m			570.000		2.000	Medium		-0.003	0.769	V	0.000	462.500	mmho/m			560.000		-4.000	Internal:		Zero	Cal		Zero	Cal				m		b	Deep		0.013	0.651	V	0.000	400.000	mmho/m			627.541		-8.365	Medium		0.020	0.754	V	0.000	462.500	mmho/m			630.311		-12.549
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Window 2	1855.8		10134.7		3624.2		11113.1		cps																																																																																										
Window 3	1639.4		6760.2		2716.3		7260.3		cps																																																																																										
Window 4	466.4		469.2		466.1		476.5		cps																																																																																										
Long Space	0.0		8278.9		1768.4		9257.4		cps																																																																																										
Short Space	2.2		2377.3		1544.1		2574.2		cps																																																																																										
Rho			1.7100		2.5900		1.3800		g/cc																																																																																										
Pe					2.5700		1.5500																																																																																												
Rib Angle	: 44.4		Rib Slope		: 0.979		Density/Spine Ratio		: 0.549																																																																																										
Spine Angle	: 74.4		Spine Slope		: 3.577		Spine Intercept		: -18.8																																																																																										
Caliper																																																																																																			
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High Ref	5.5		15.0																																																																																																
	Gain: 3.2		Offset: -2.7																																																																																																
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Detector		Readings		Measured		Target																																																																																													
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Short Space		cps																																																																																																	
Long Space		cps		pu		pu																																																																																													

Gamma Ray Calibration Report

Serial Number:	070559	
Tool Model:	OPEN_GR	
Performed:	Wed May 09 19:59:59 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps