

**SUPERIOR
Hays,
Kansas**

**DUAL
INDUCTION
LOG**

Company RITCHIE EXPLORATION, INC.
Well WYCOFF UNIT #1
Field
County FORD State KANSAS

Location: API #: 15-057-20797
2700' FSL & 2000' FEL
SEC 2 TWP 26S RGE 22W
Other Services
CDL/CNL
Elevation
K.B. 2398
D.F.
G.L. 2387

Date	5-6-12
Run Number	ONE
Depth Driller	4970
Depth Logger	4969
Bottom Logged Interval	4967
Top Log Interval	00
Casing Driller	355
Casing Logger	355
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1 / 44
pH / Fluid Loss	10.5 / 10.8
Source of Sample	FLOWLINE
Rim @ Meas. Temp	0.75 @ 72F
Rmf @ Meas. Temp	0.56 @ 72F
Rmc @ Meas. Temp	0.90 @ 72F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.430 @ 125F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	6:45 A.M.
Maximum Recorded Temperature	125F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	TERRY McCLEOD

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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

SUPERIOR WELL SERVICES
 785-628-6395
 THANK YOU FOR YOUR BUSINESS
 DIRECTIONS: SPEARVILLE, 3S TO GARNETT RD., E TO 129 RD., 1/2S, W INTO.

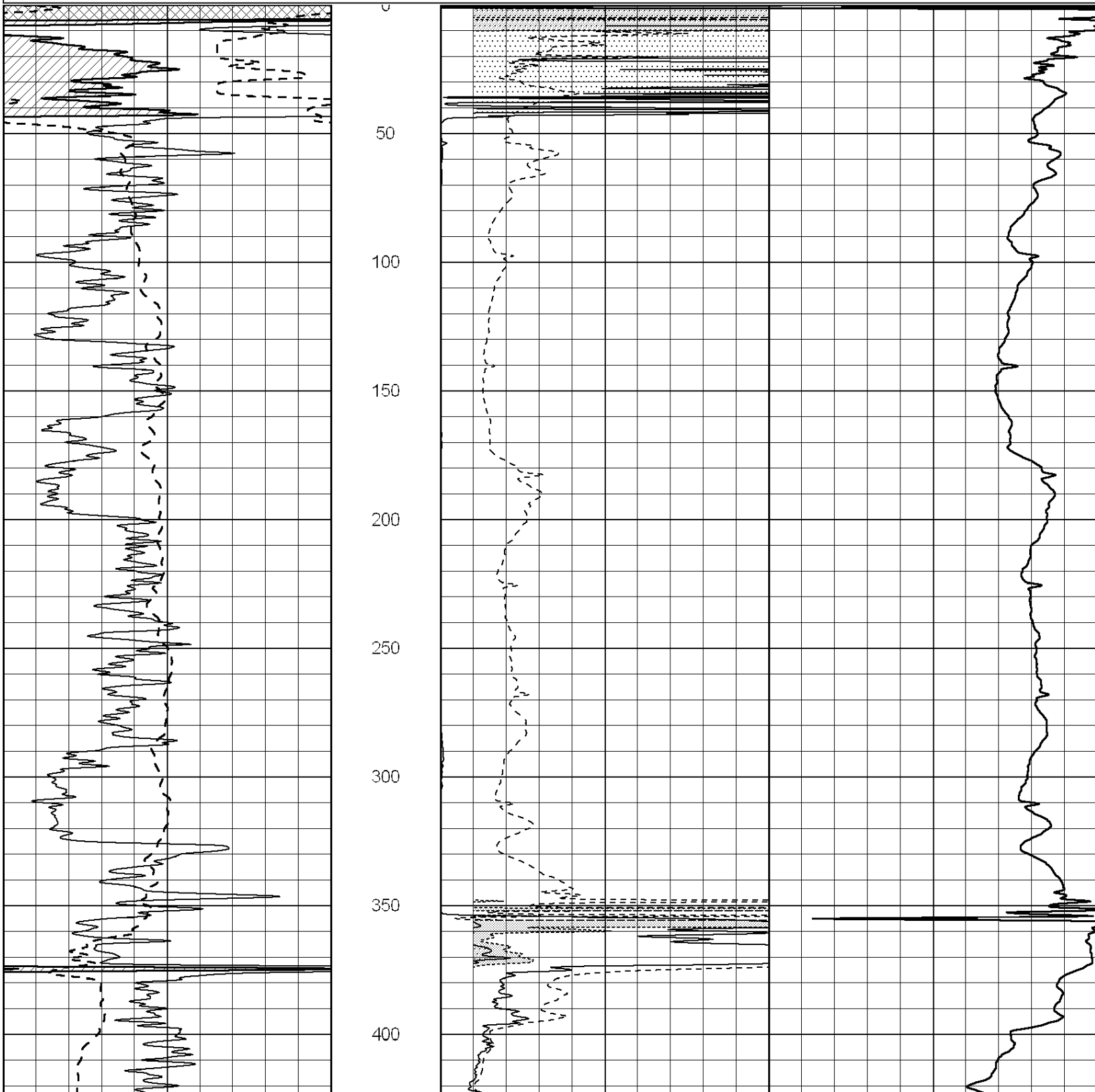


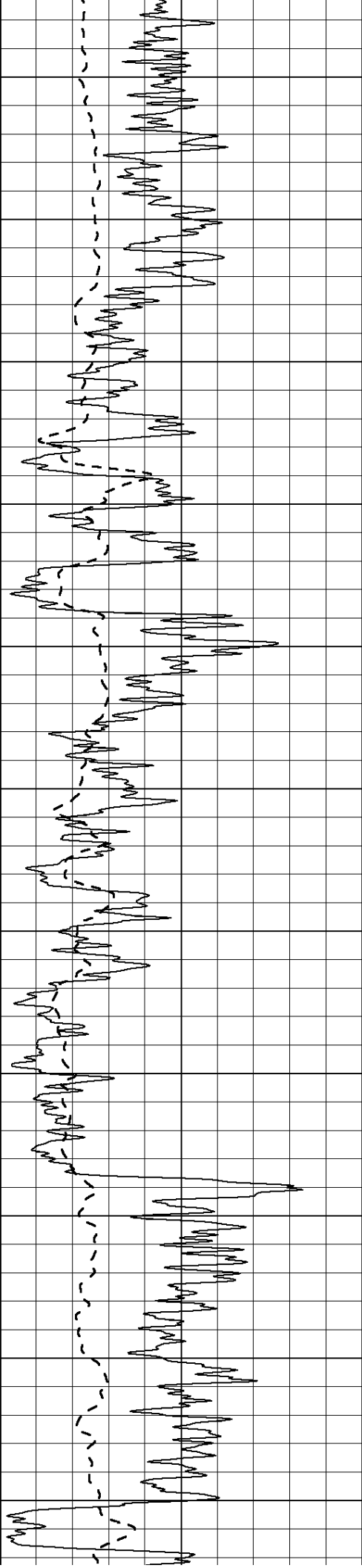
**SUPERIOR
Hays,
Kansas**

MAIN SECTION

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 Dataset Pathname: pass3.1A
 Presentation Format: dil2
 Dataset Creation: Sun May 06 09:23:26 2012
 Charted by: Depth in Feet scaled 1:600

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





450

500

550

600

650

700

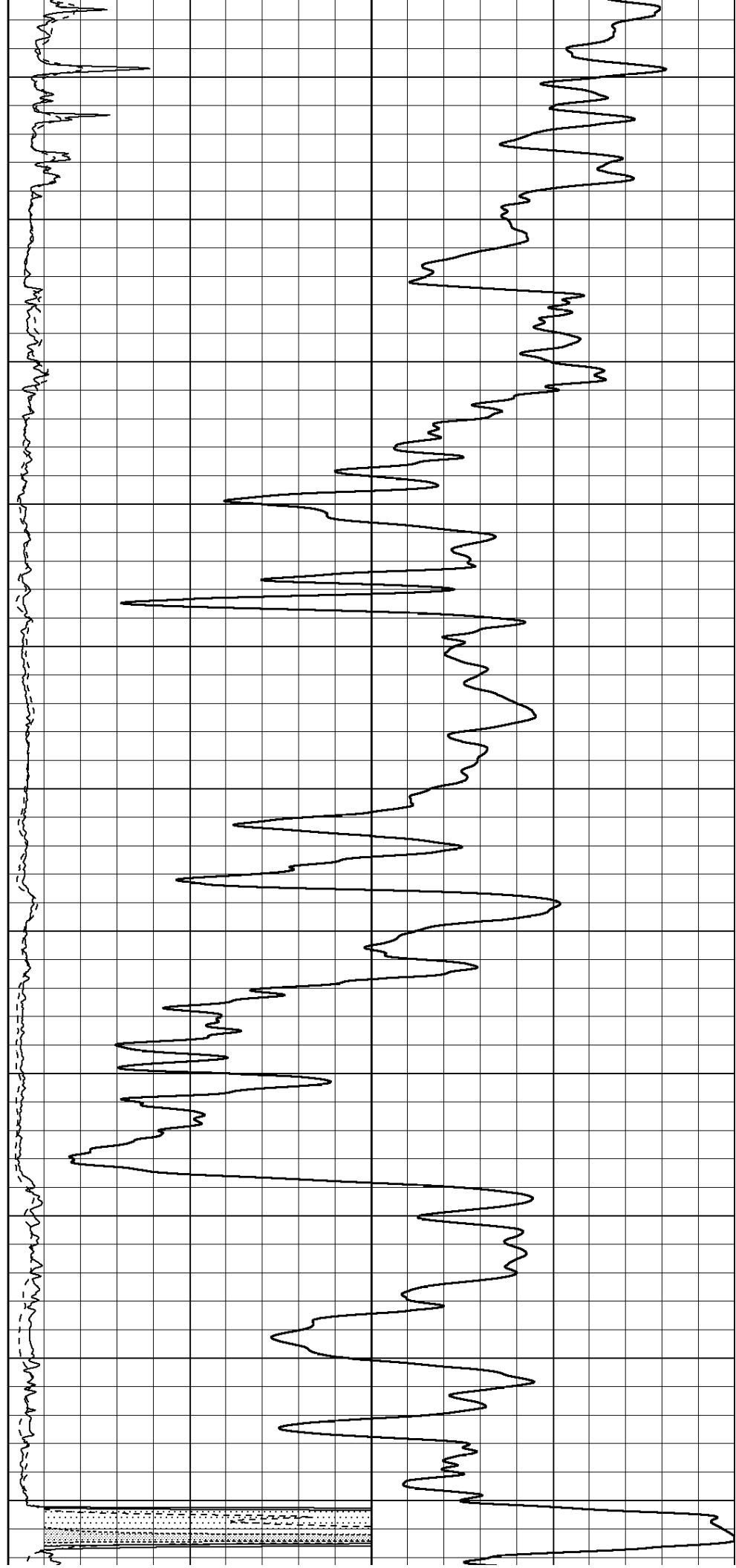
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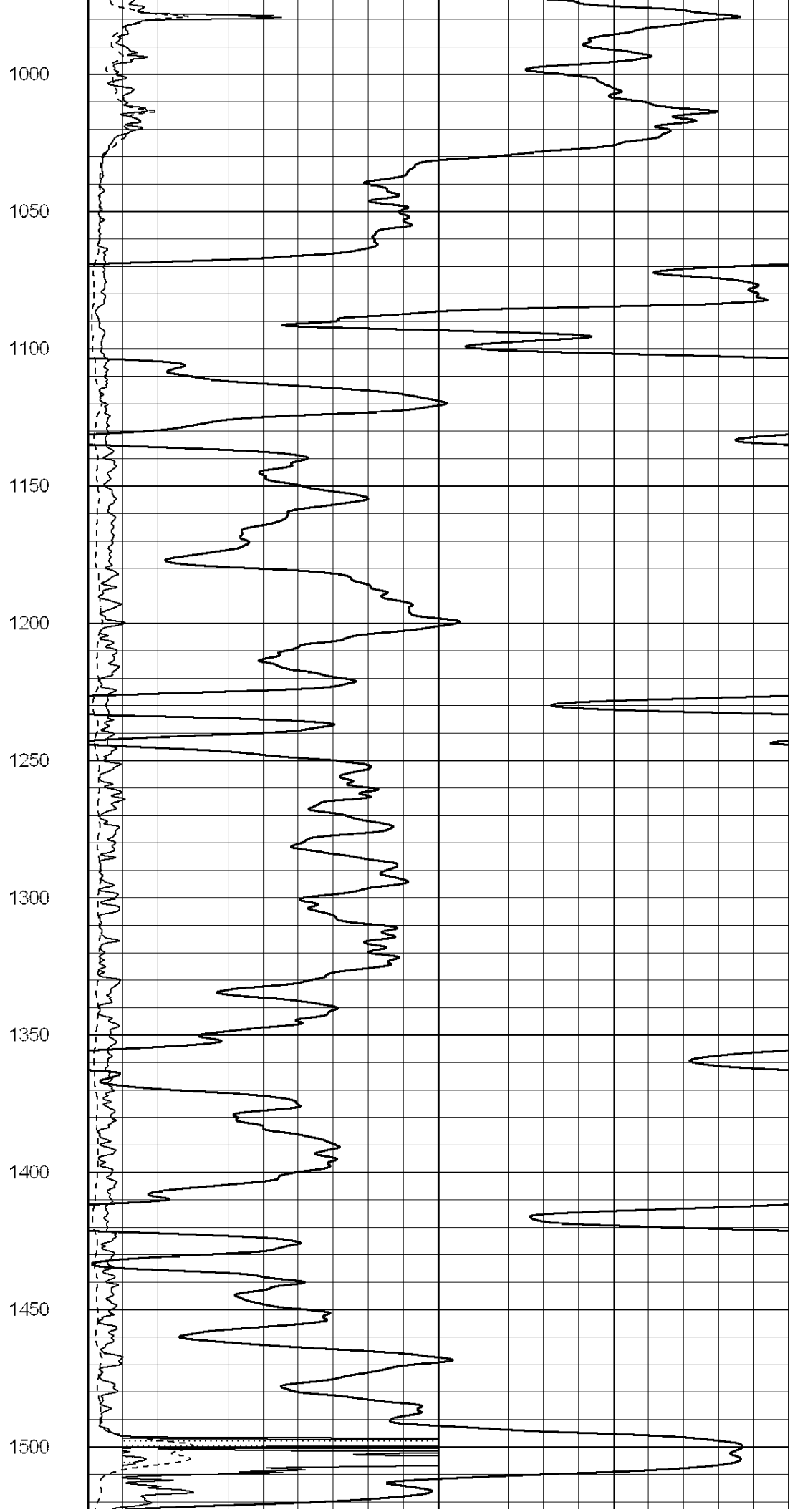
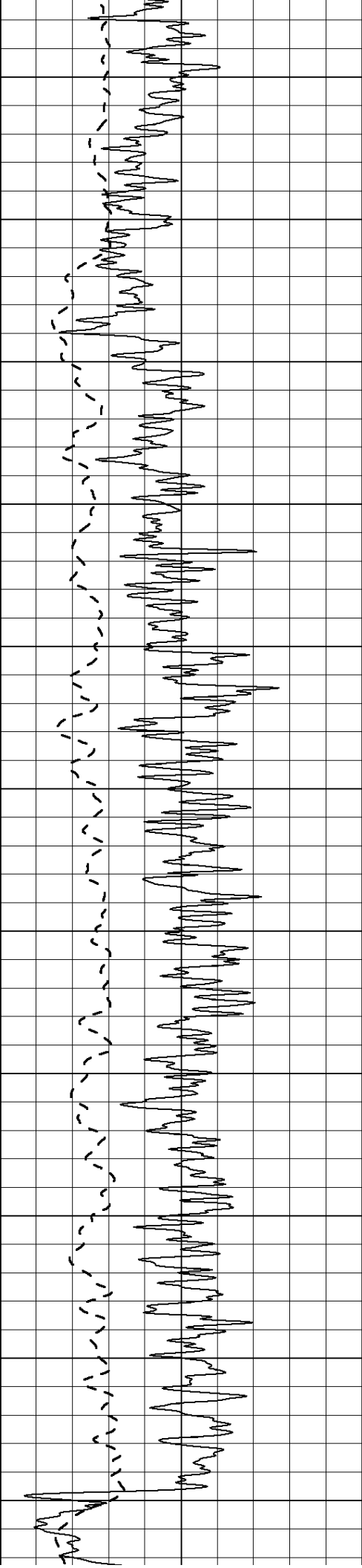
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850

900

950





1550

1600

1650

1700

1750

1800

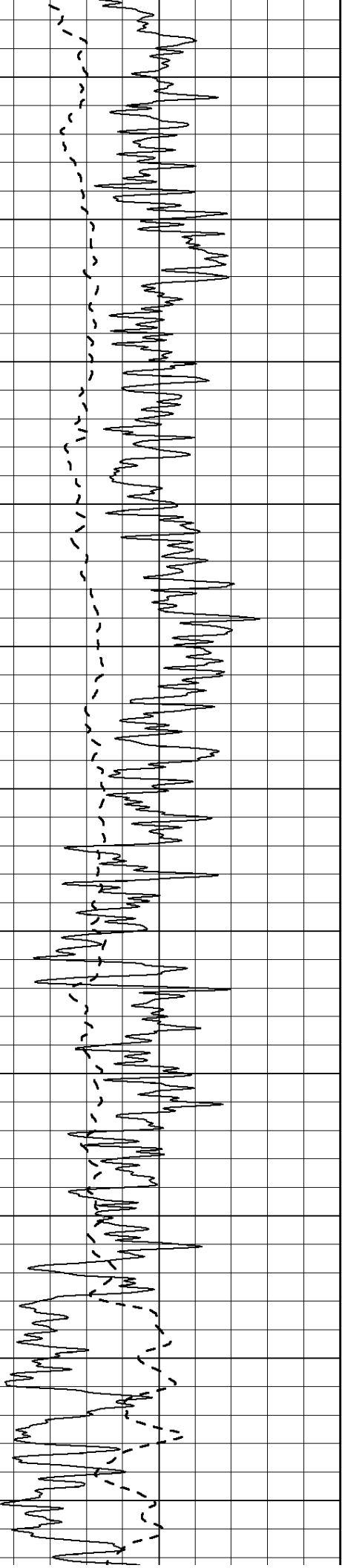
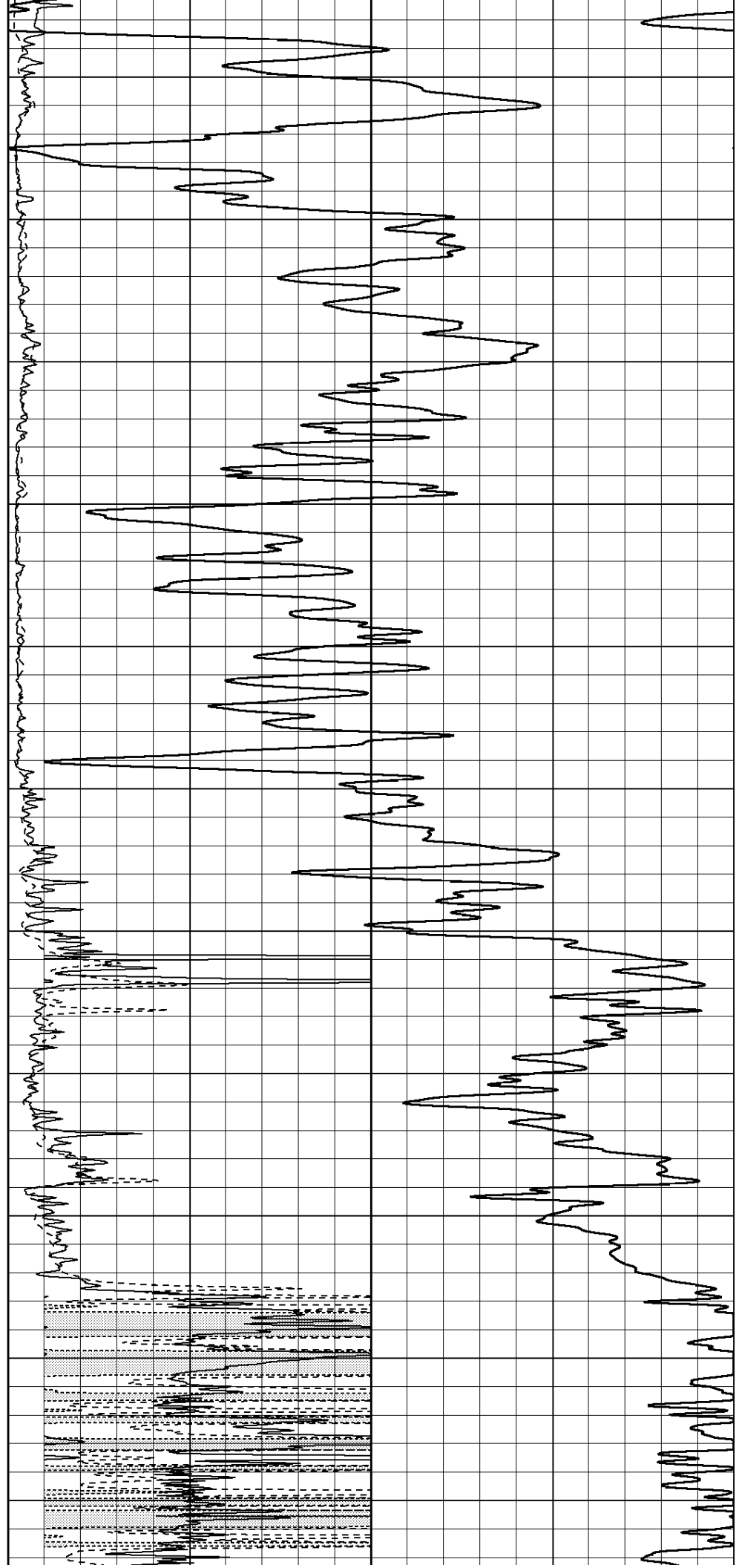
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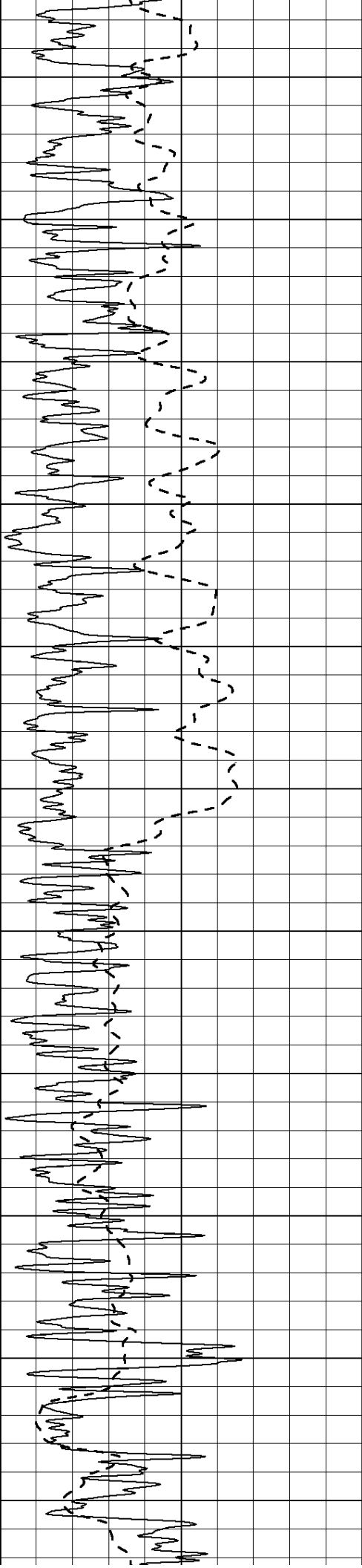
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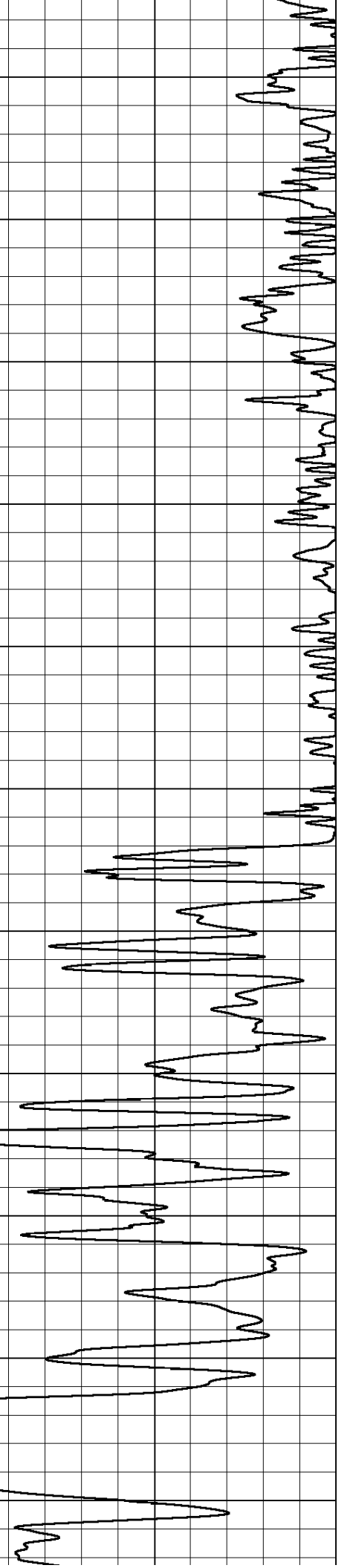
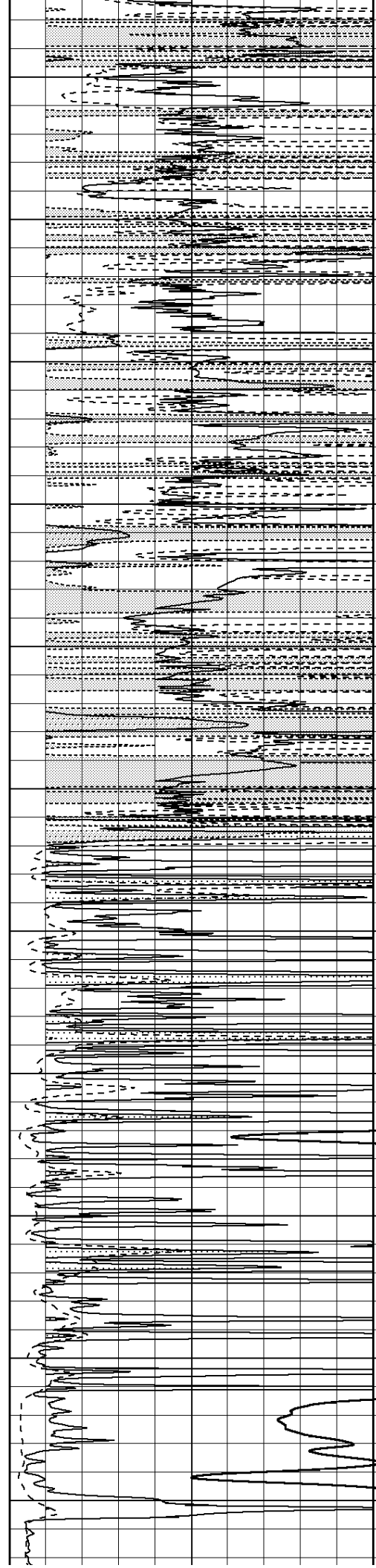
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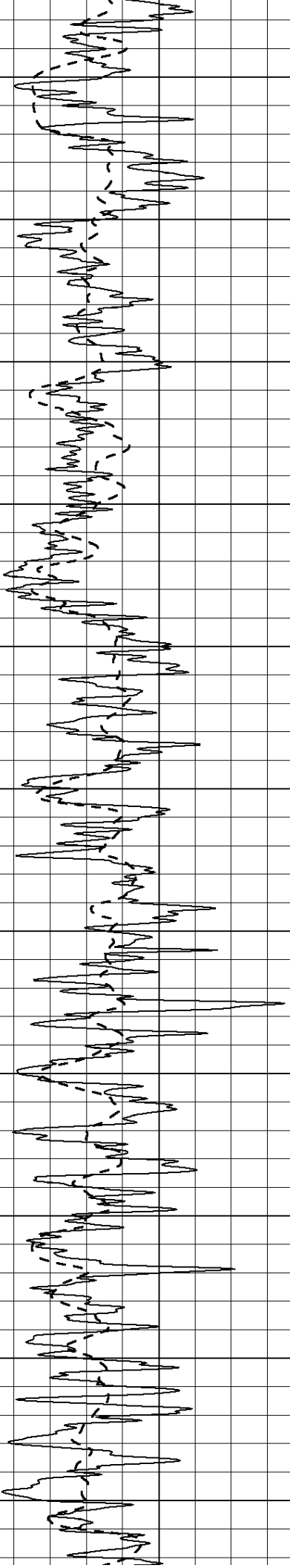
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2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600





2650

2700

2750

2800

2850

2900

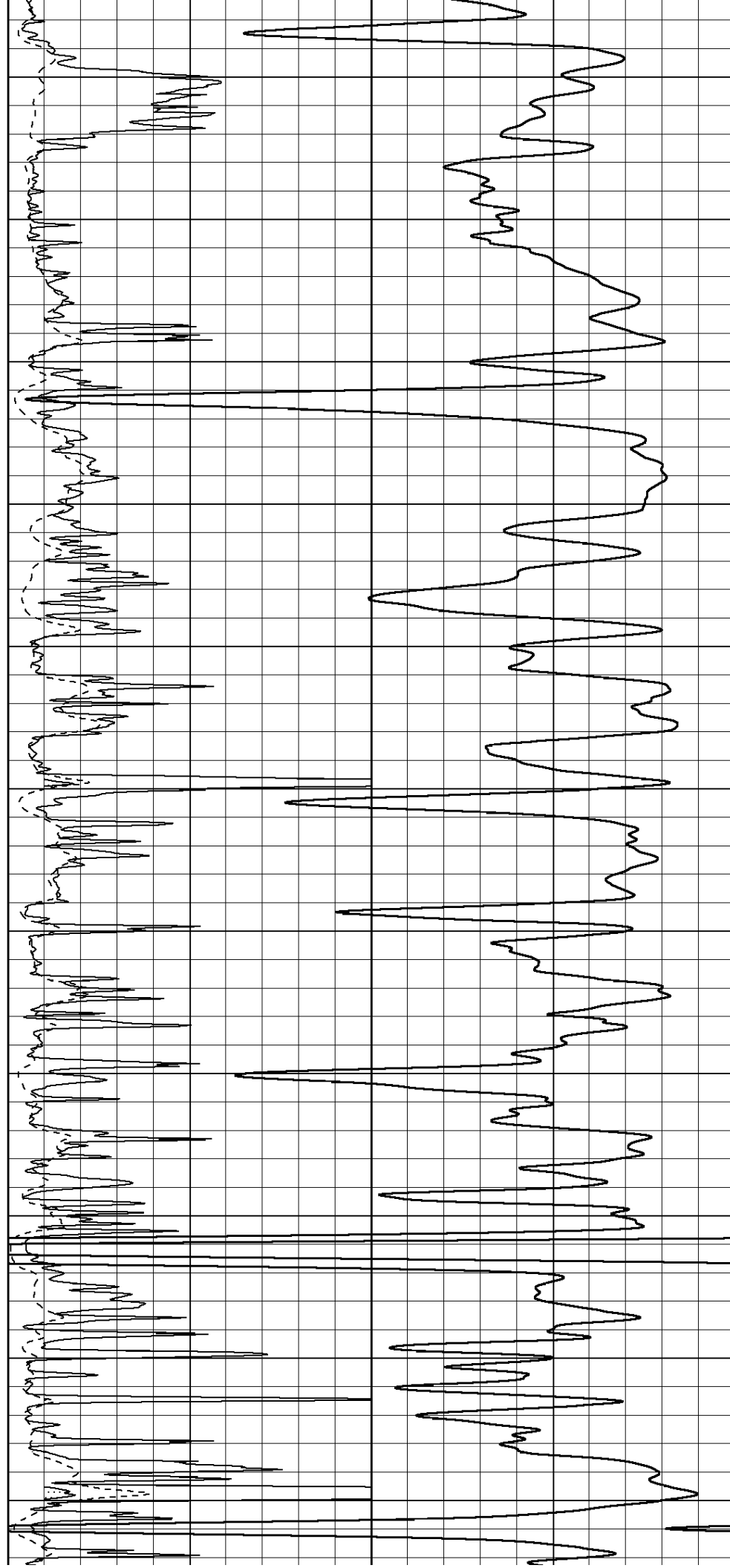
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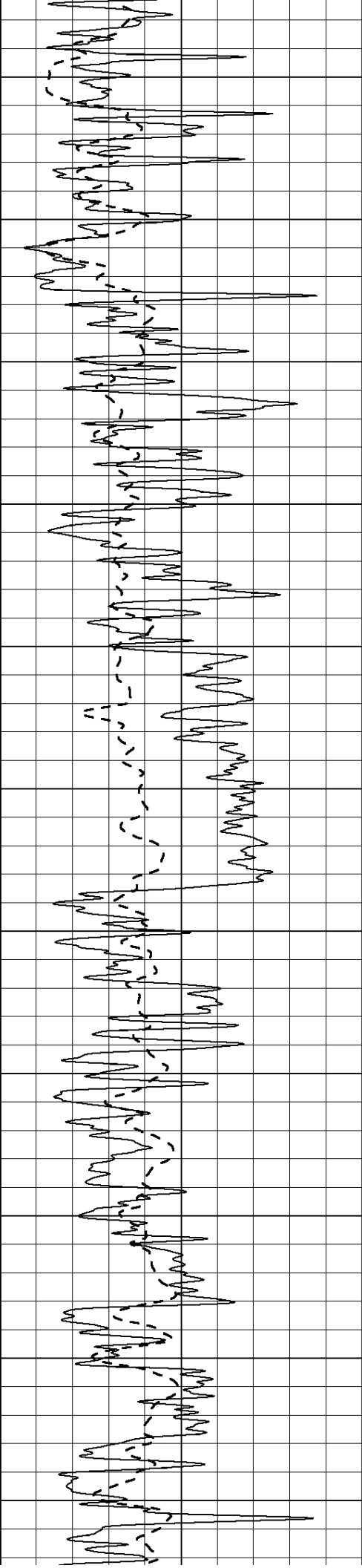
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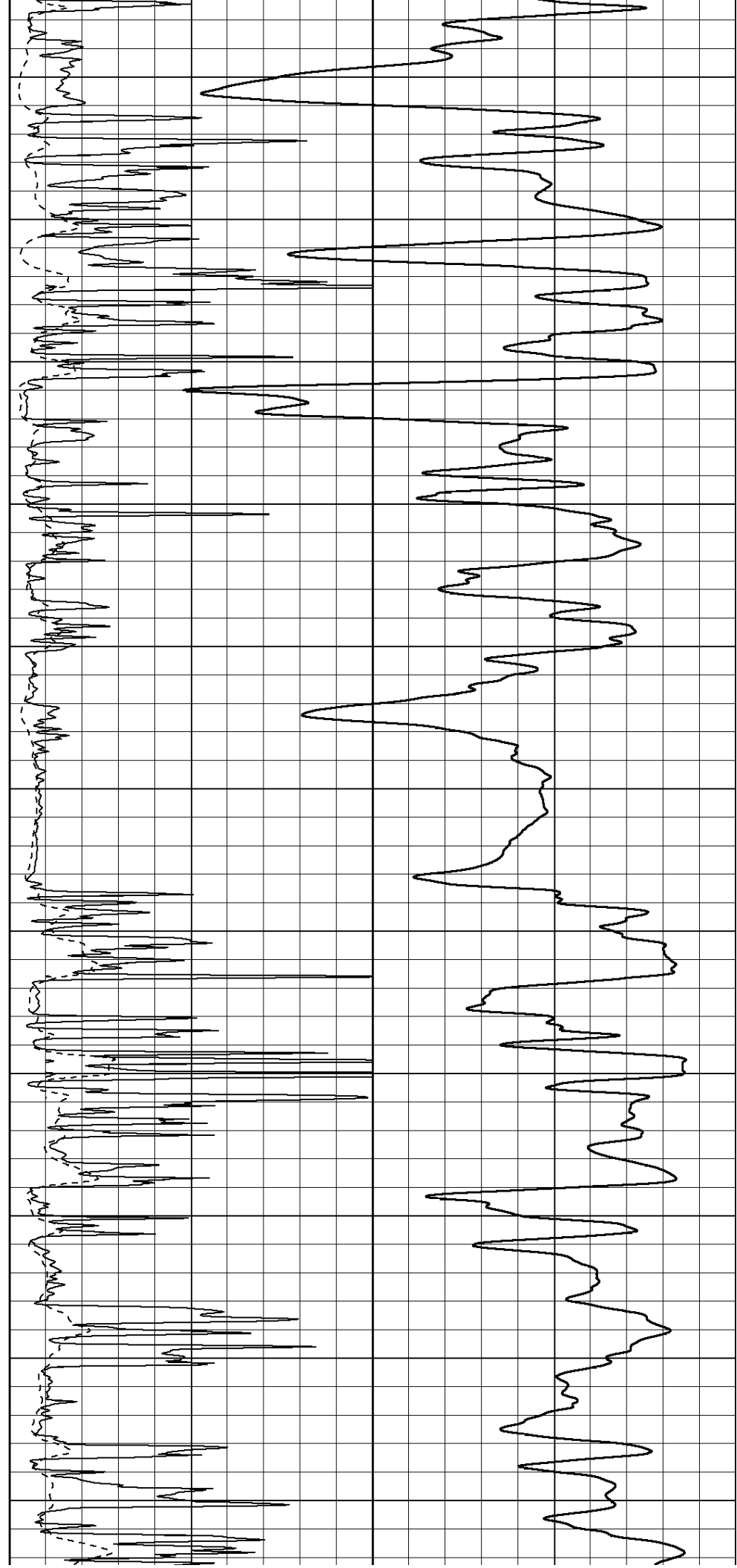
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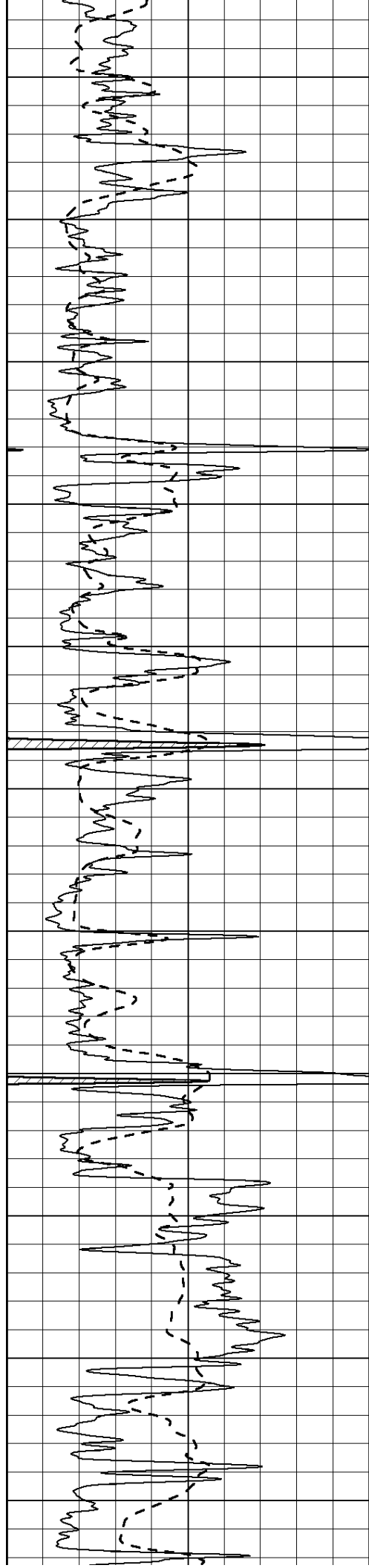
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3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700





3750

3800

3850

3900

3950

4000

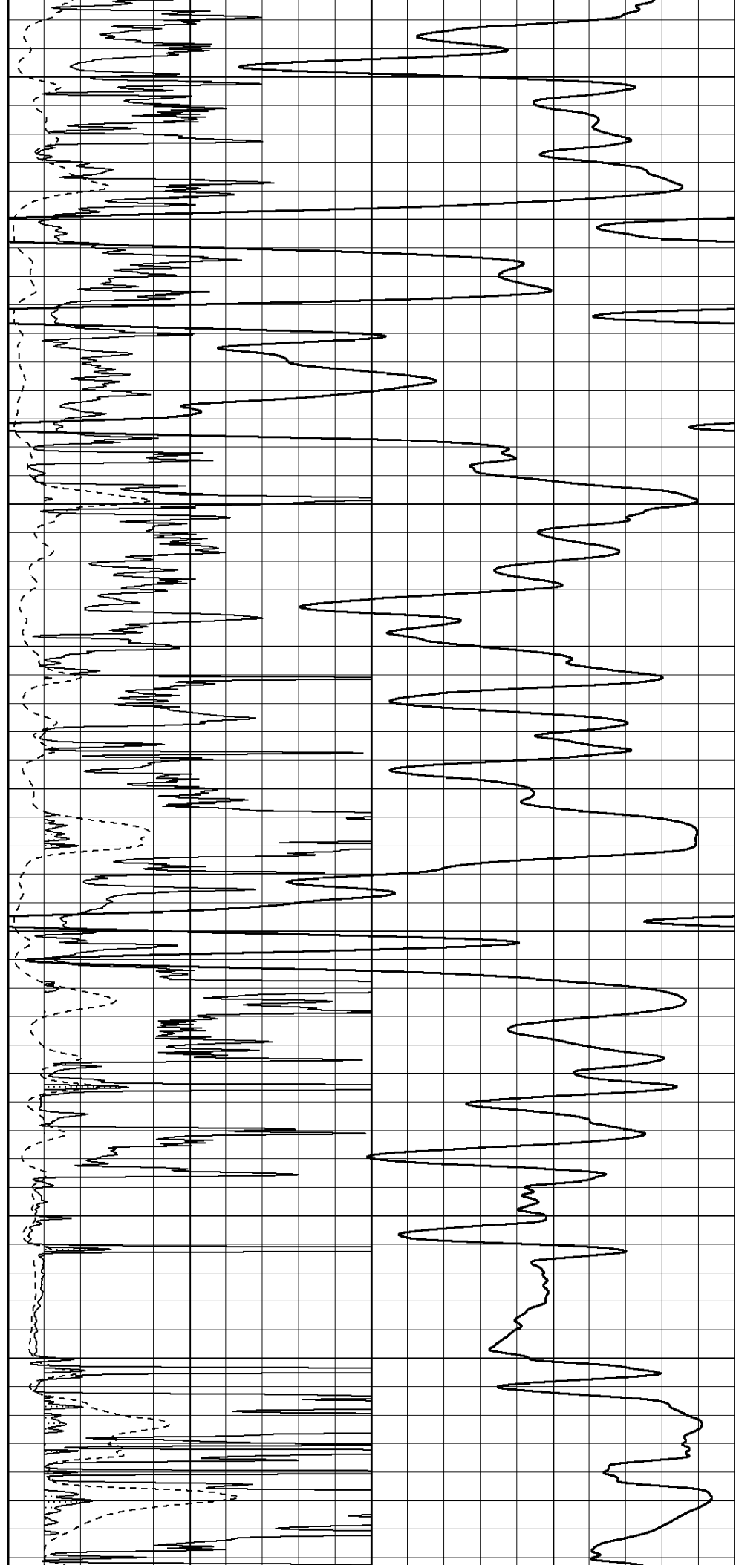
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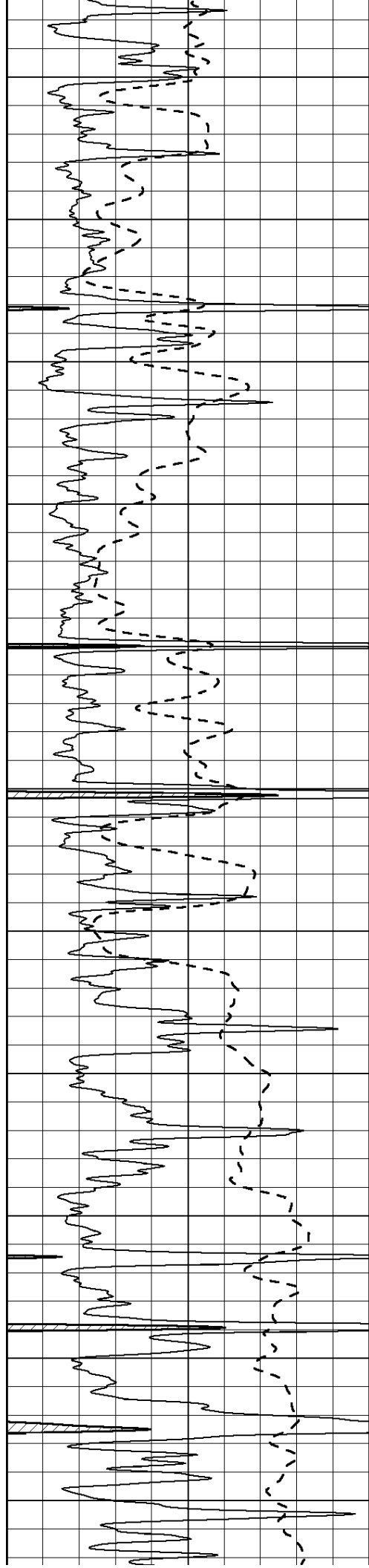
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4150

4200

4250





4300

4350

4400

4450

4500

4550

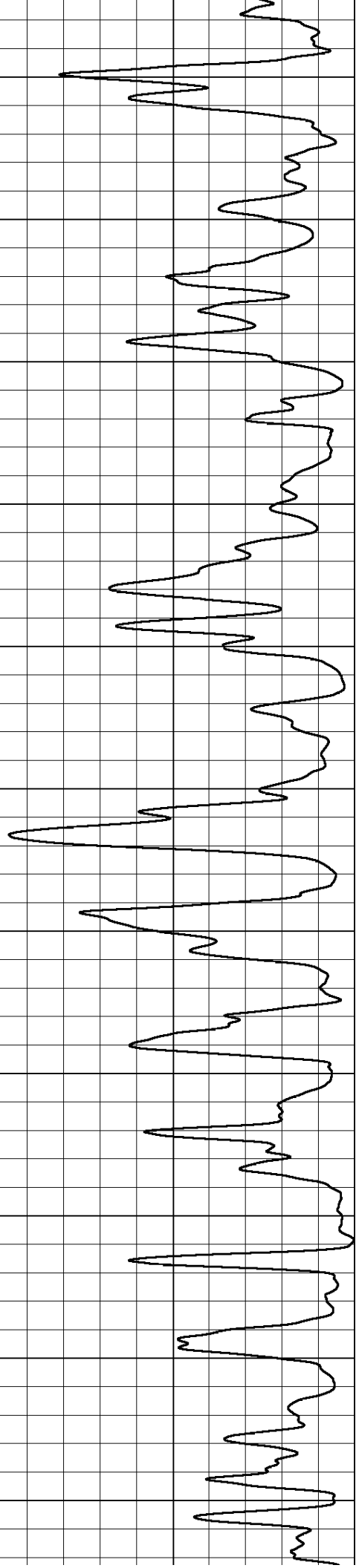
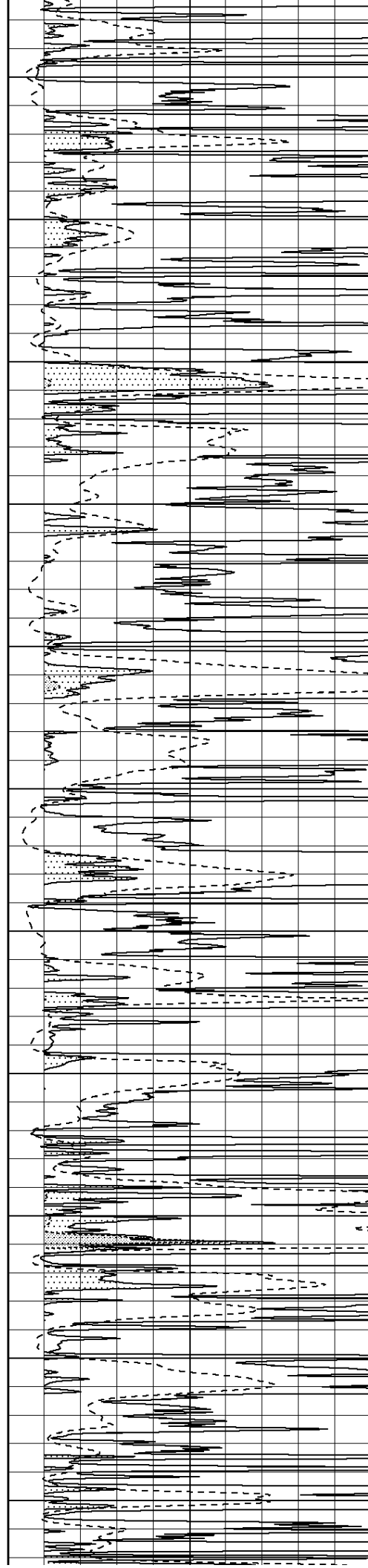
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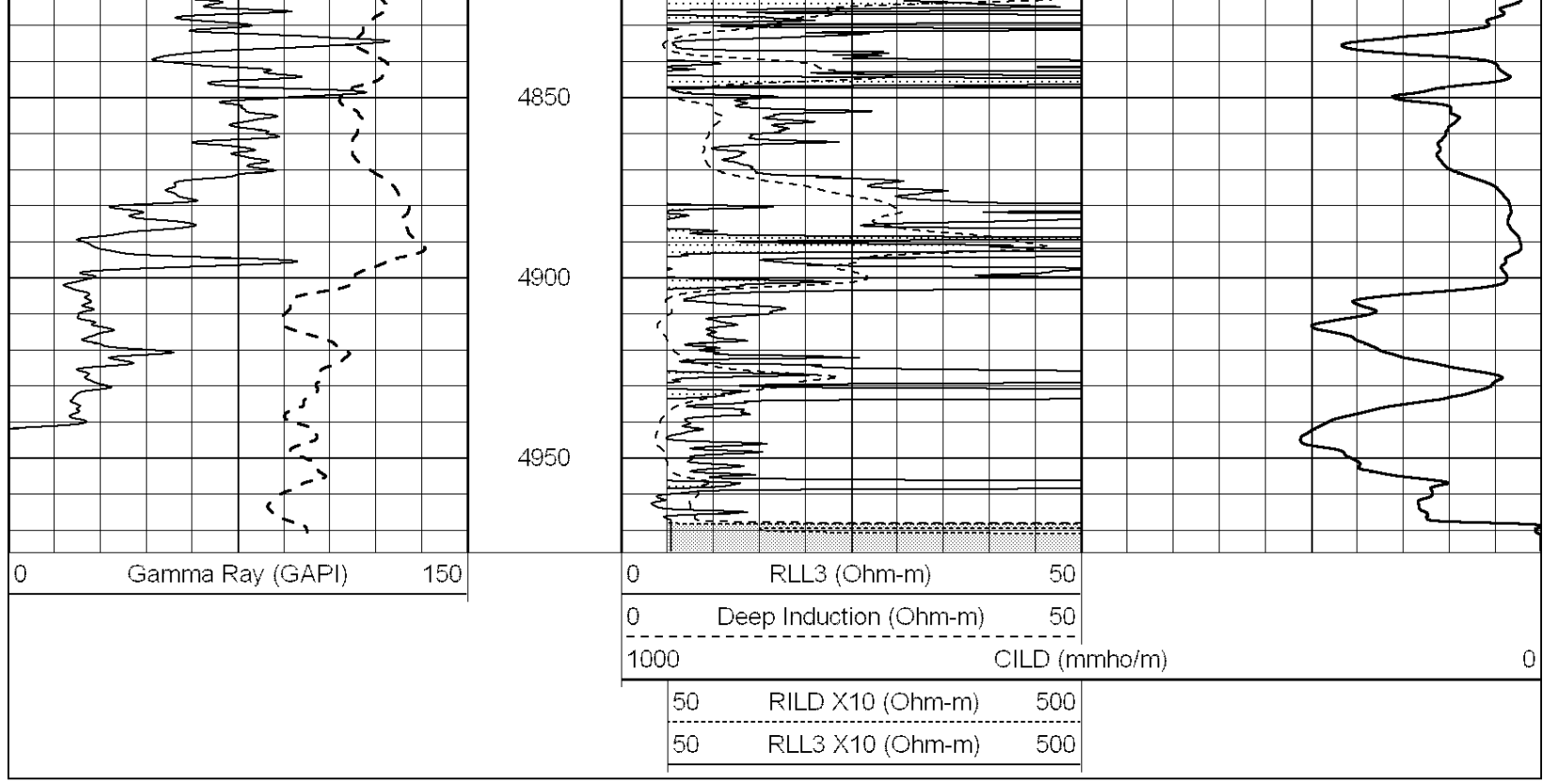
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4700

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4800



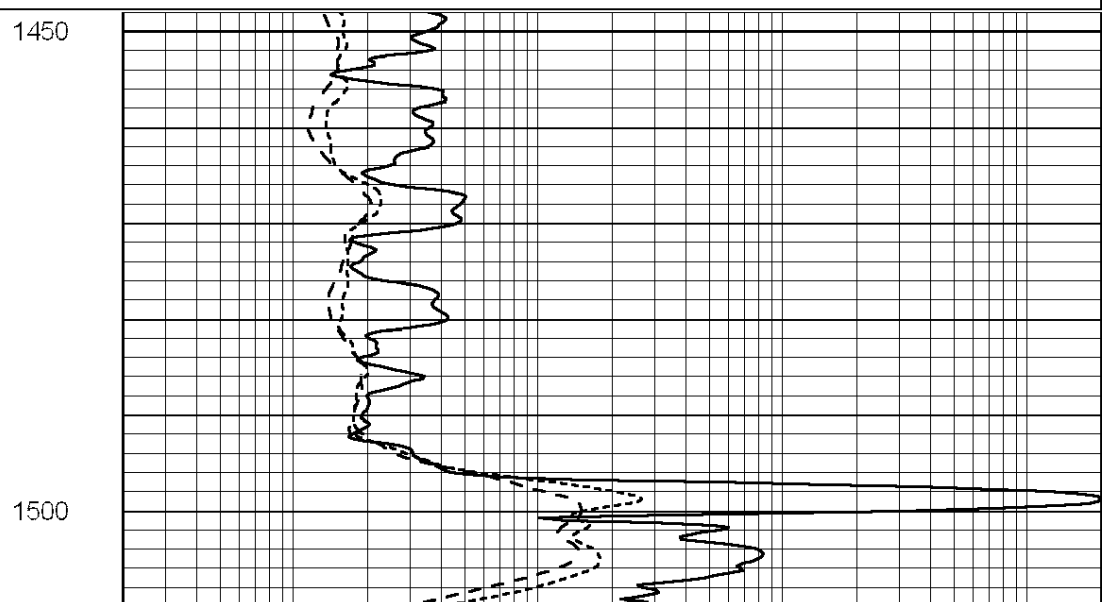
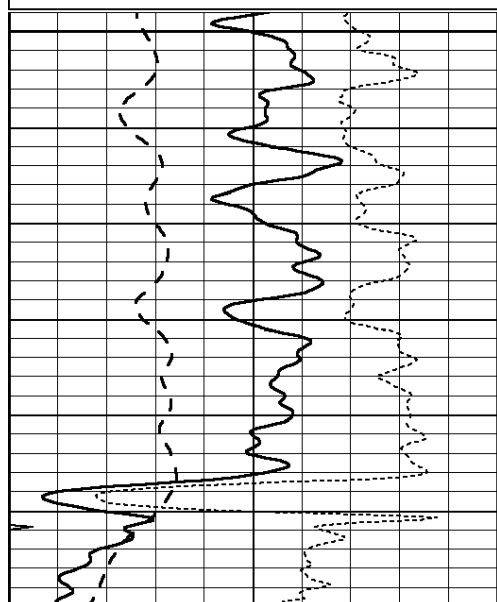


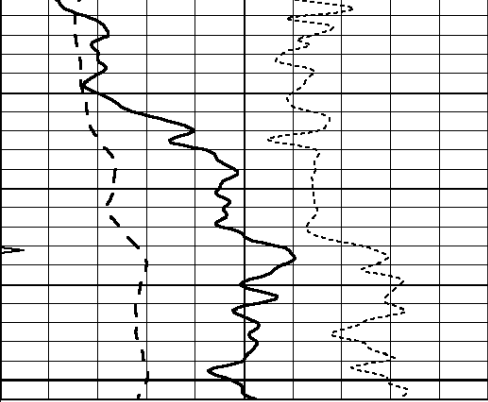
SUPERIOR
Hays,
Kansas

MAIN SECTION

Database File: 009112ddn.db
 Dataset Pathname: pass3.1A
 Presentation Format: dil
 Dataset Creation: Sun May 06 09:23:26 2012
 Charted by: Depth in Feet scaled 1:240

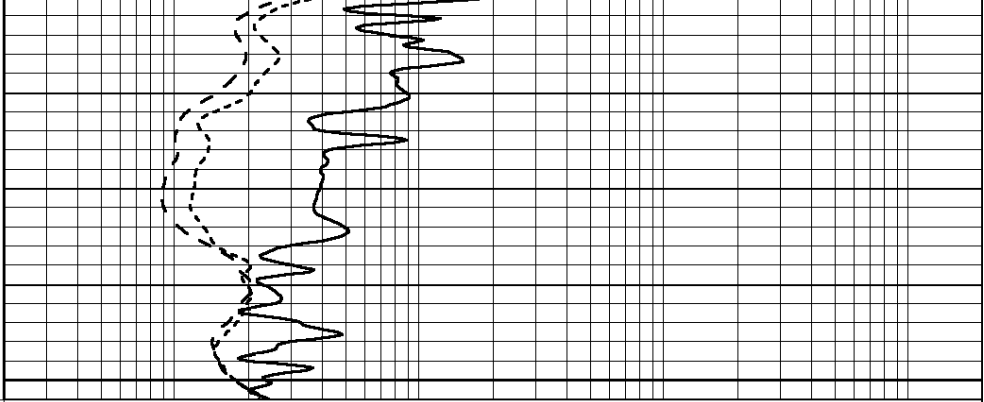
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-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	RxoRt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			





1550

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20



0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



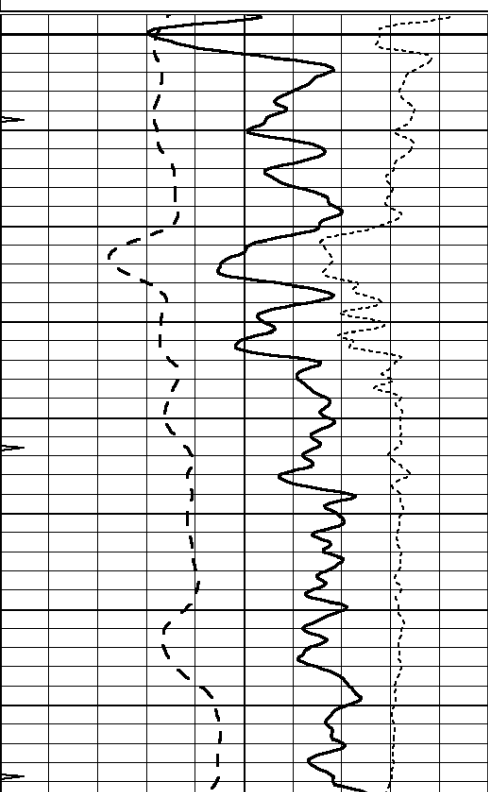
SUPERIOR
Hays,
Kansas

MAIN SECTION

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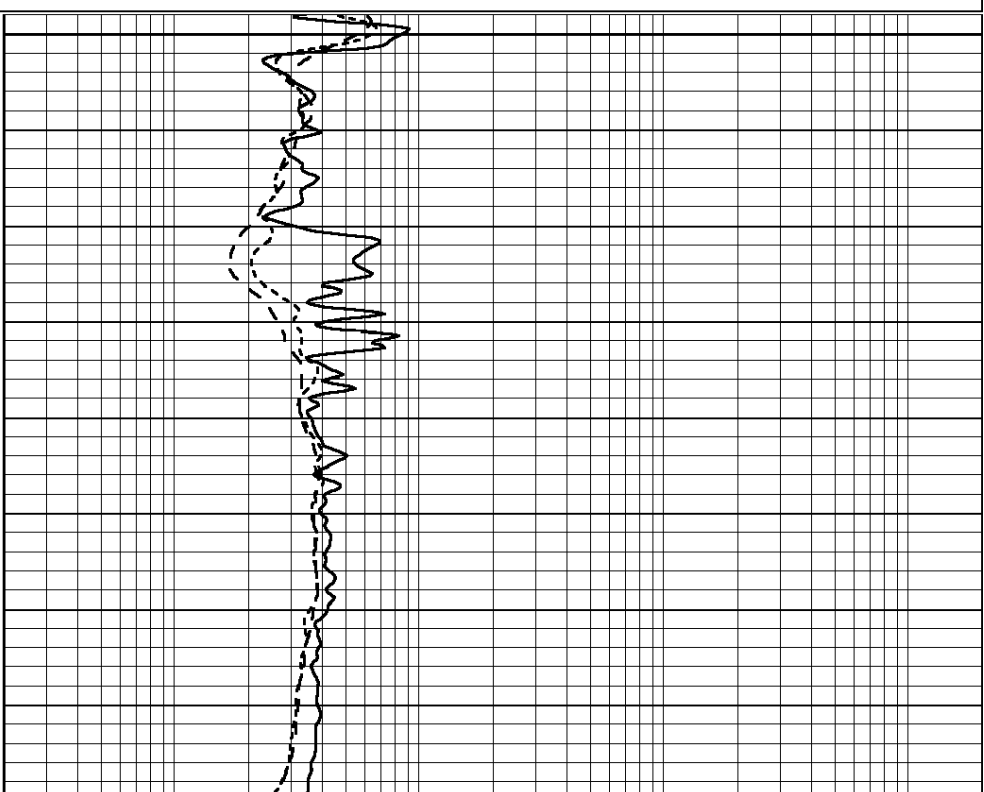
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-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

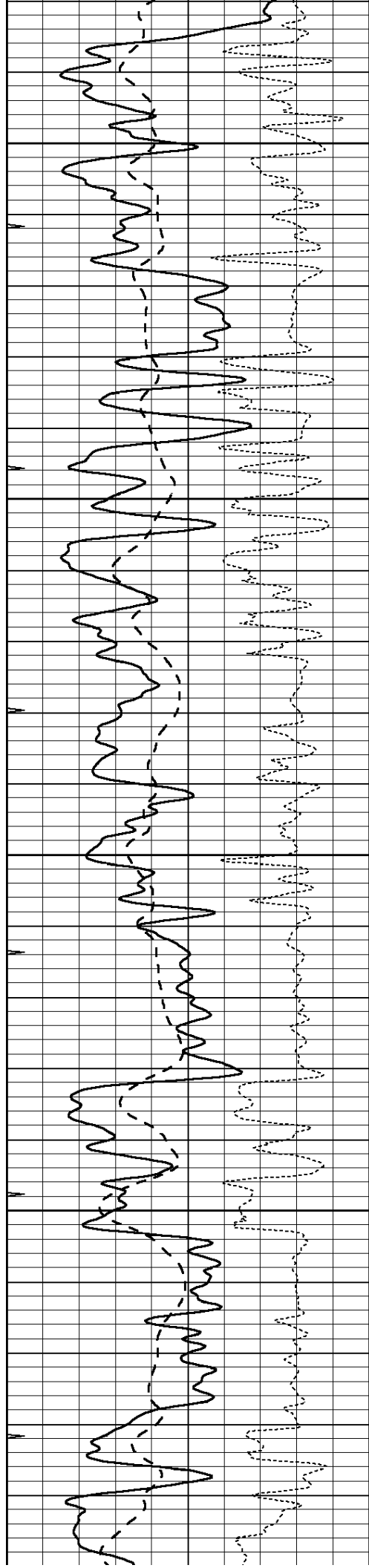
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0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



3400

3450





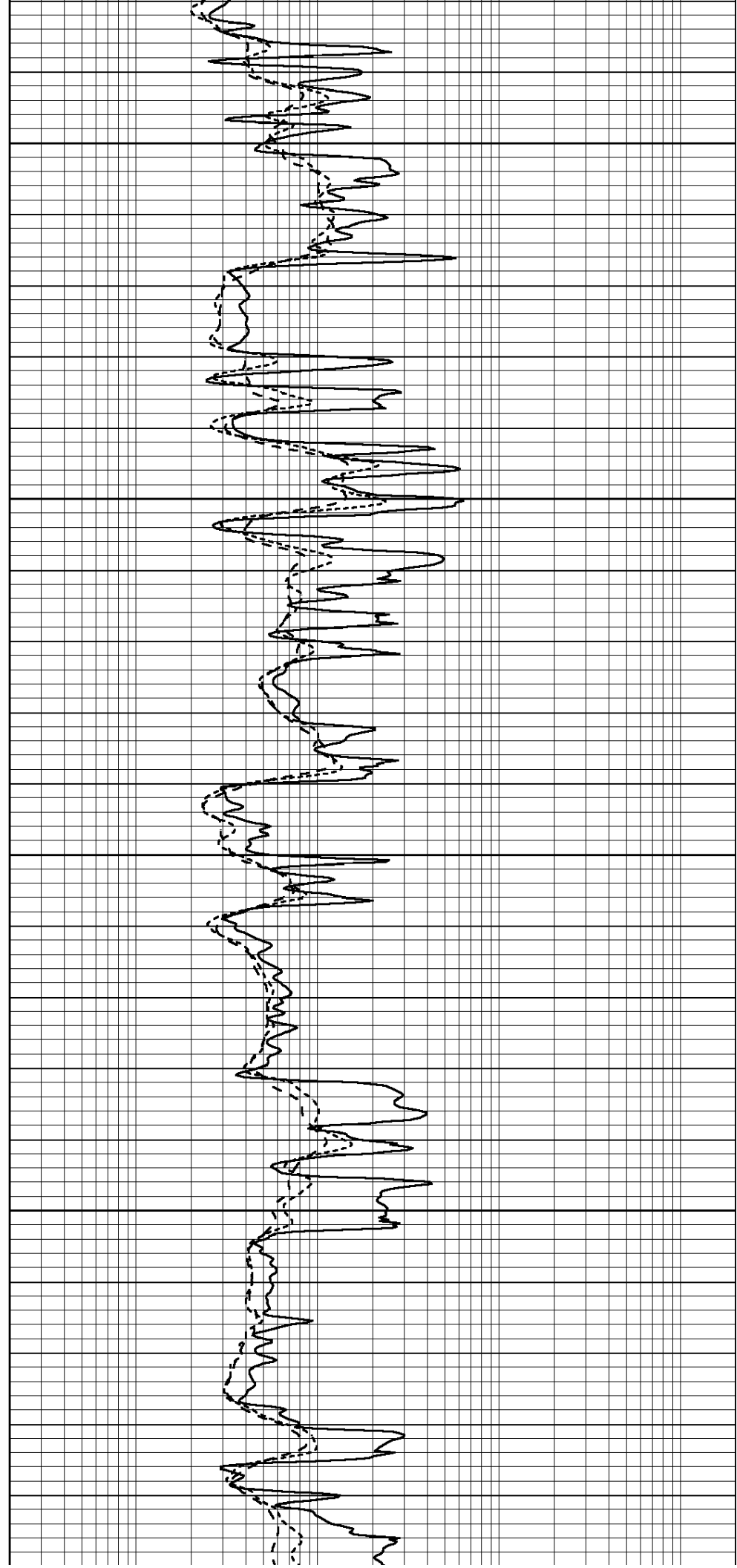
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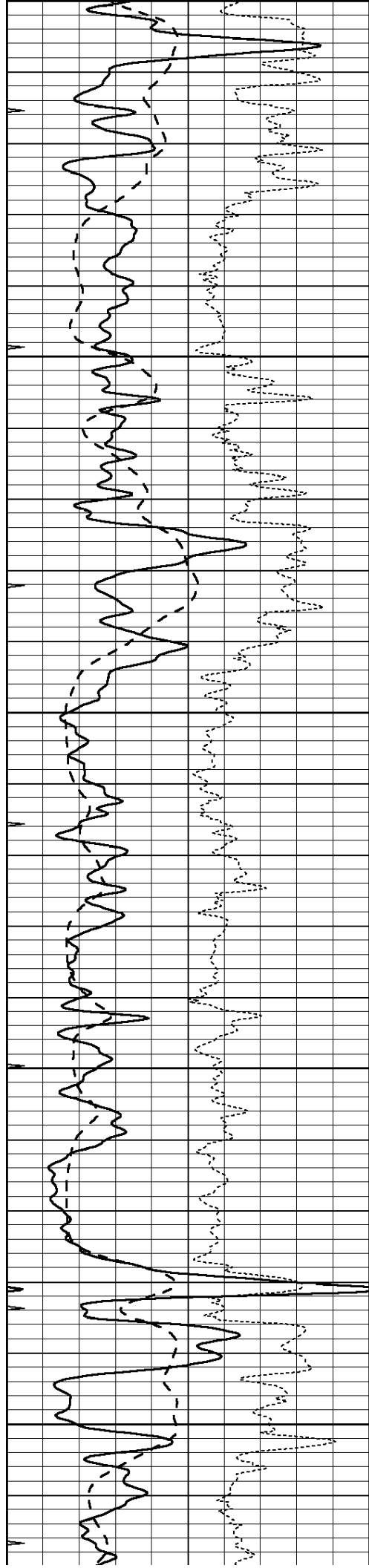
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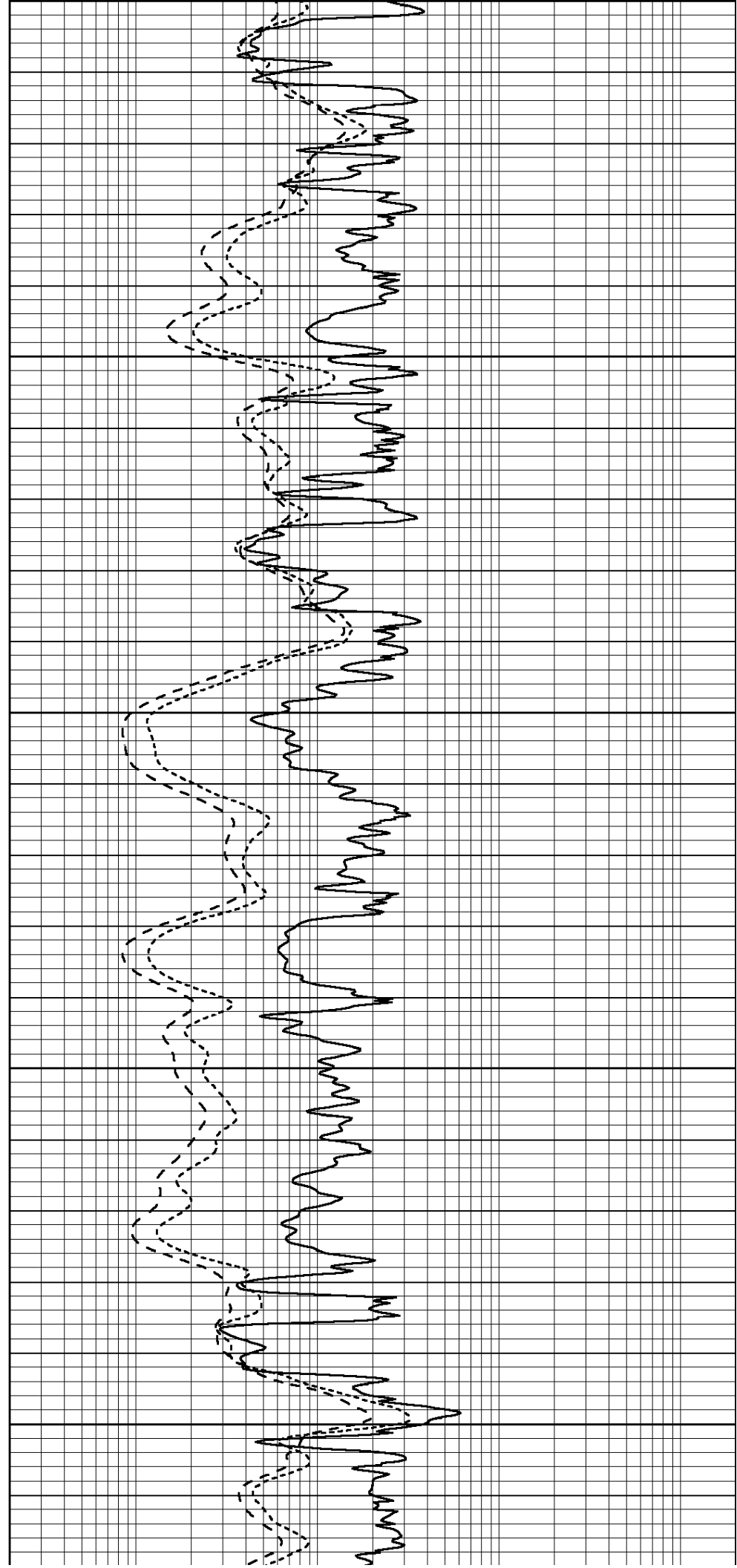
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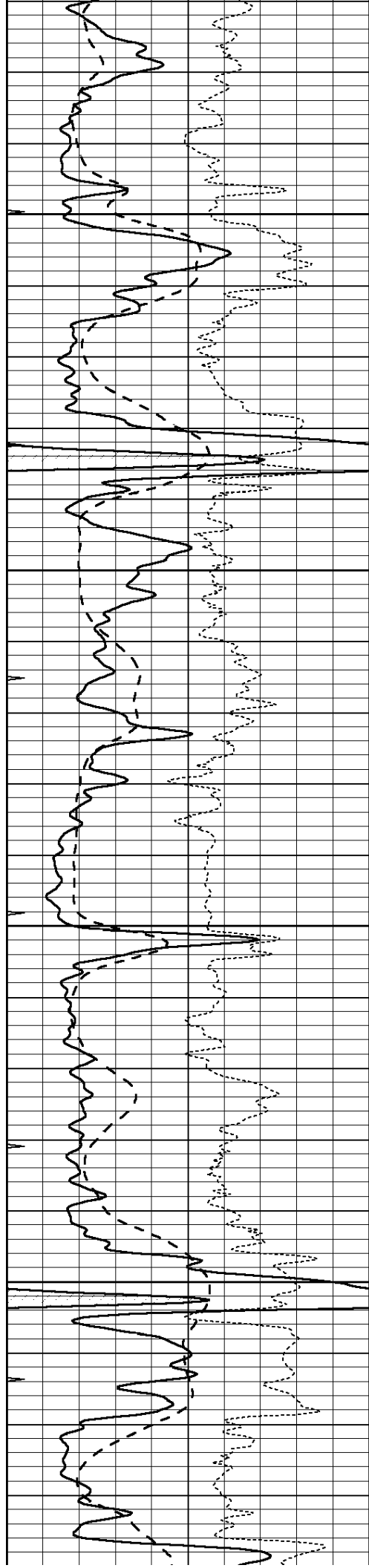
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3850

3900



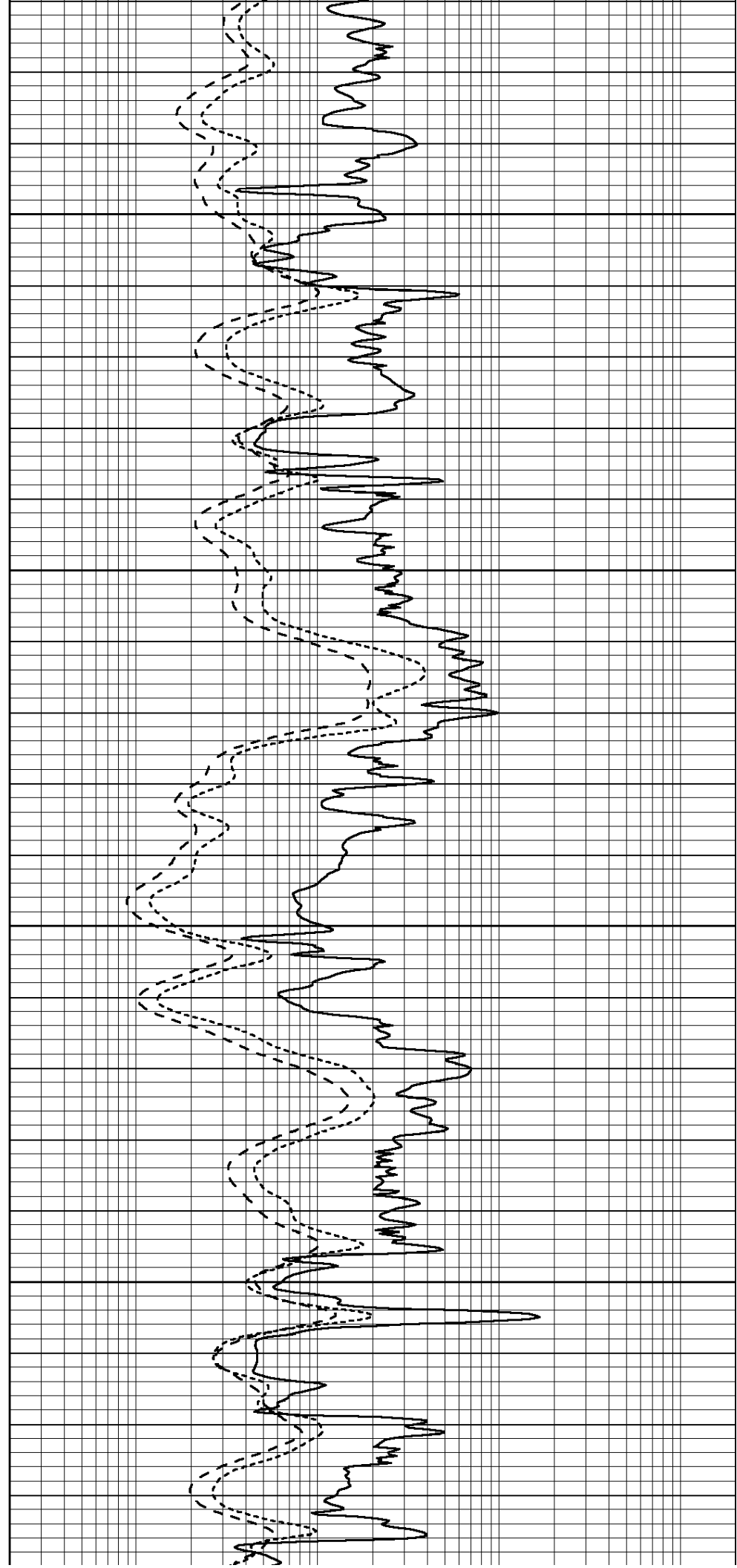


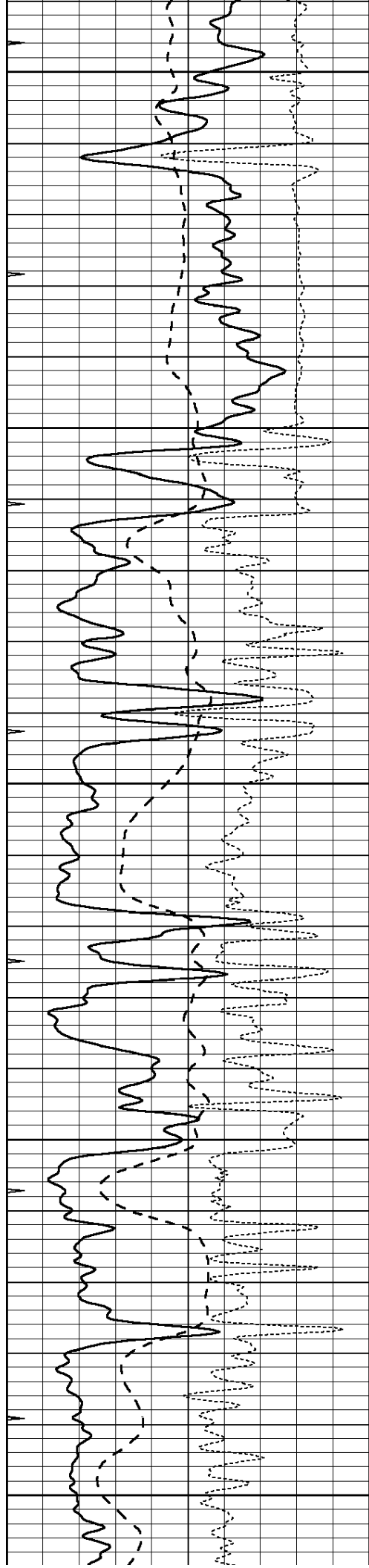
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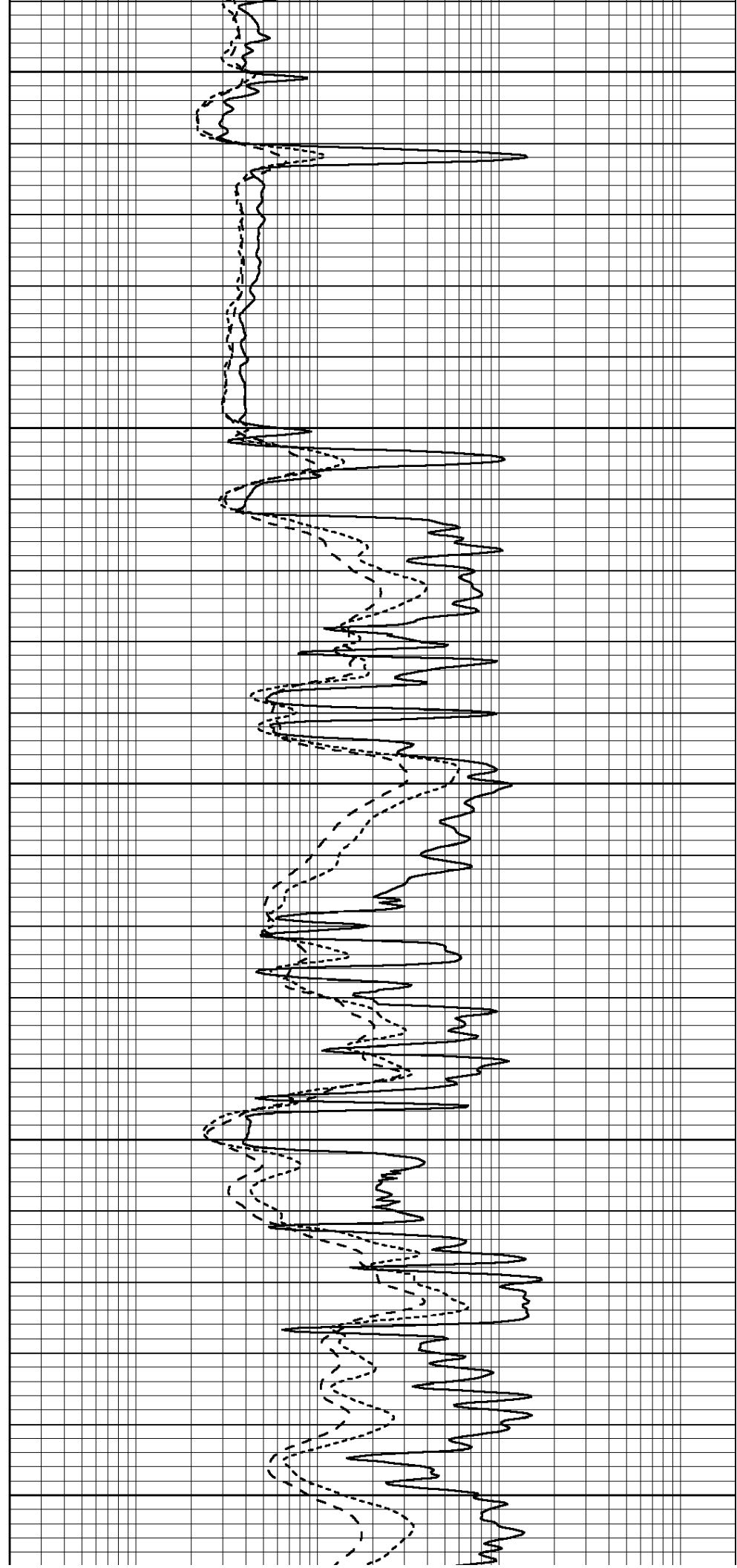
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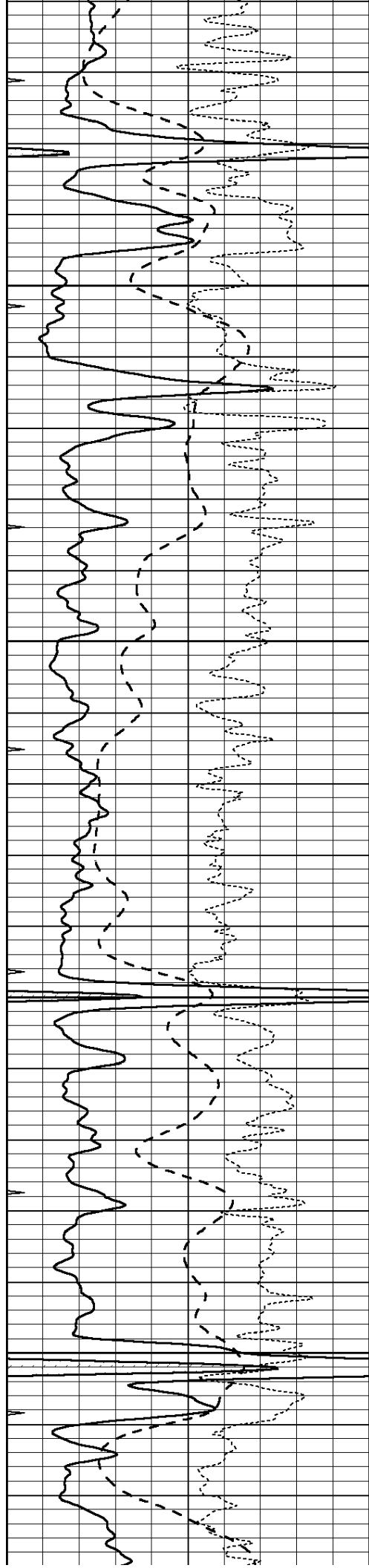
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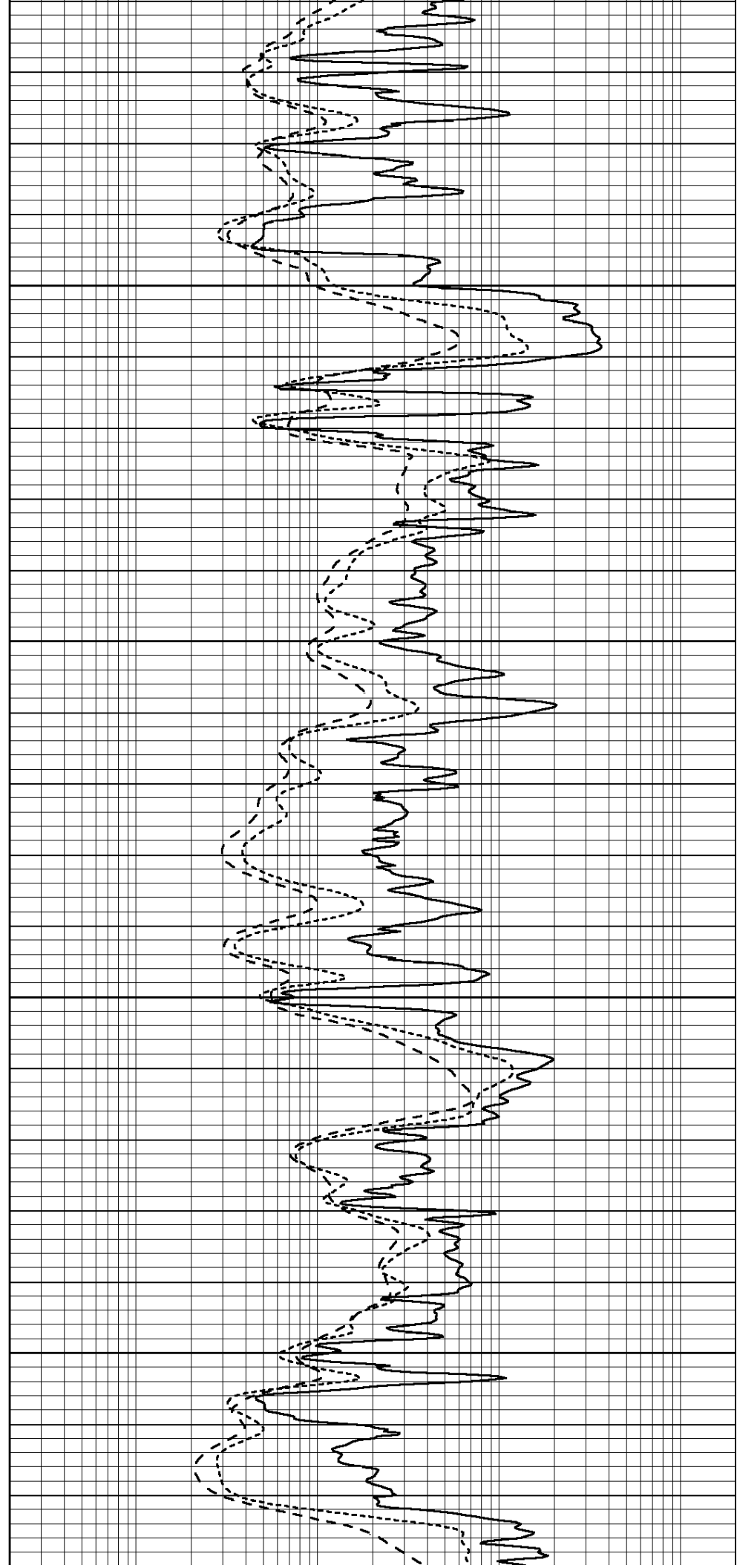


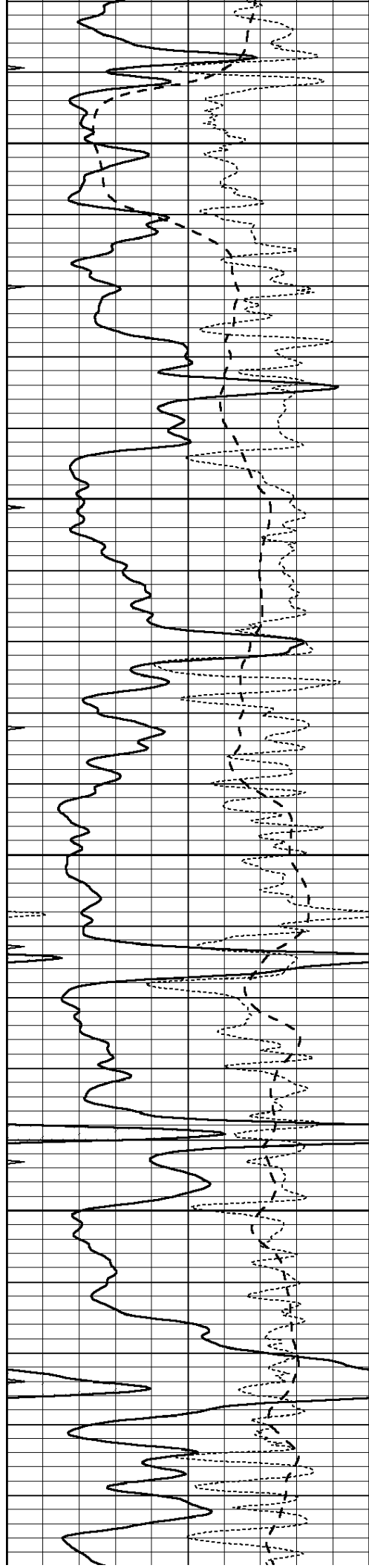
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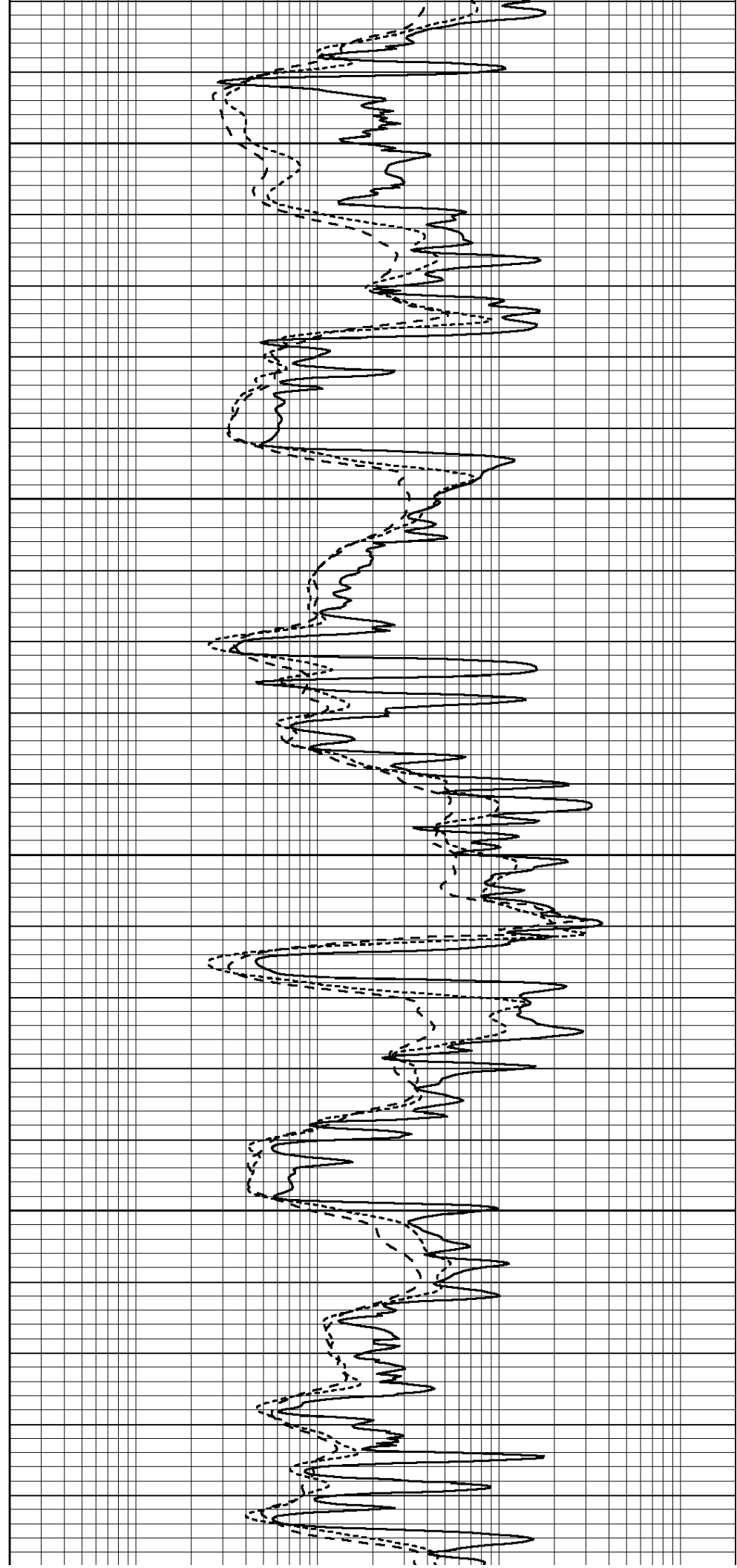
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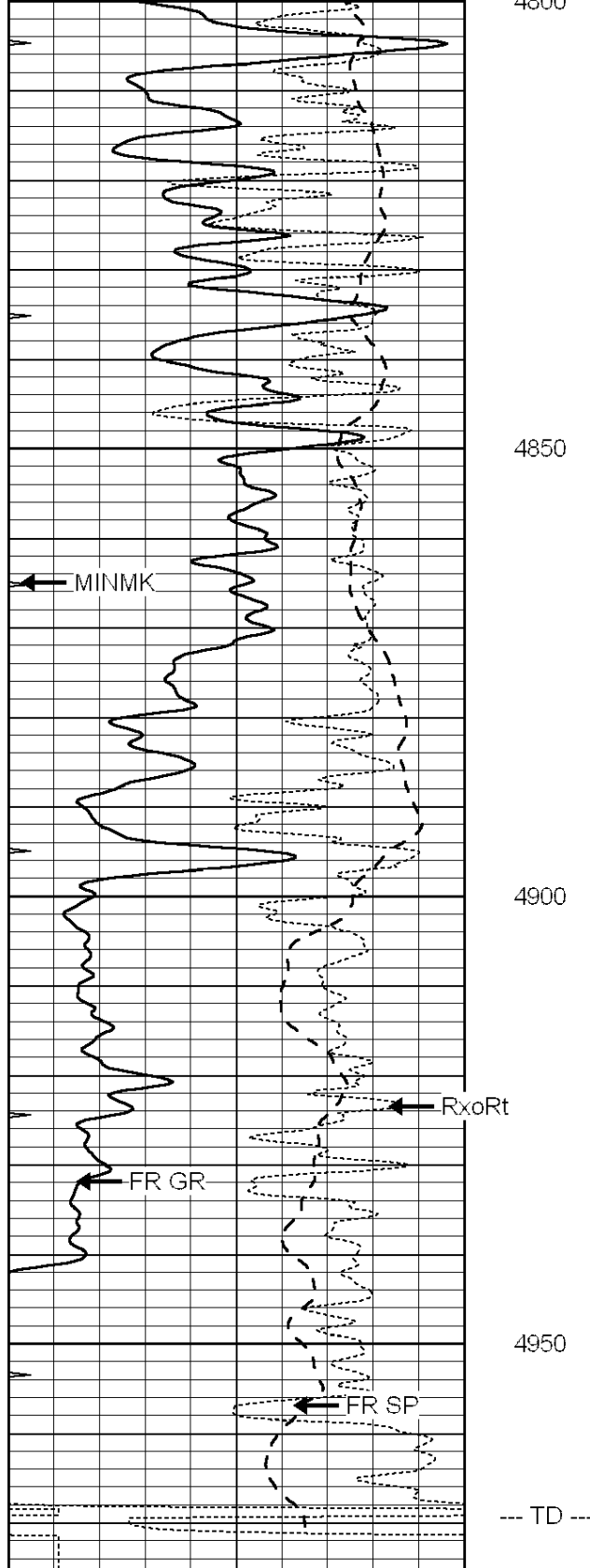
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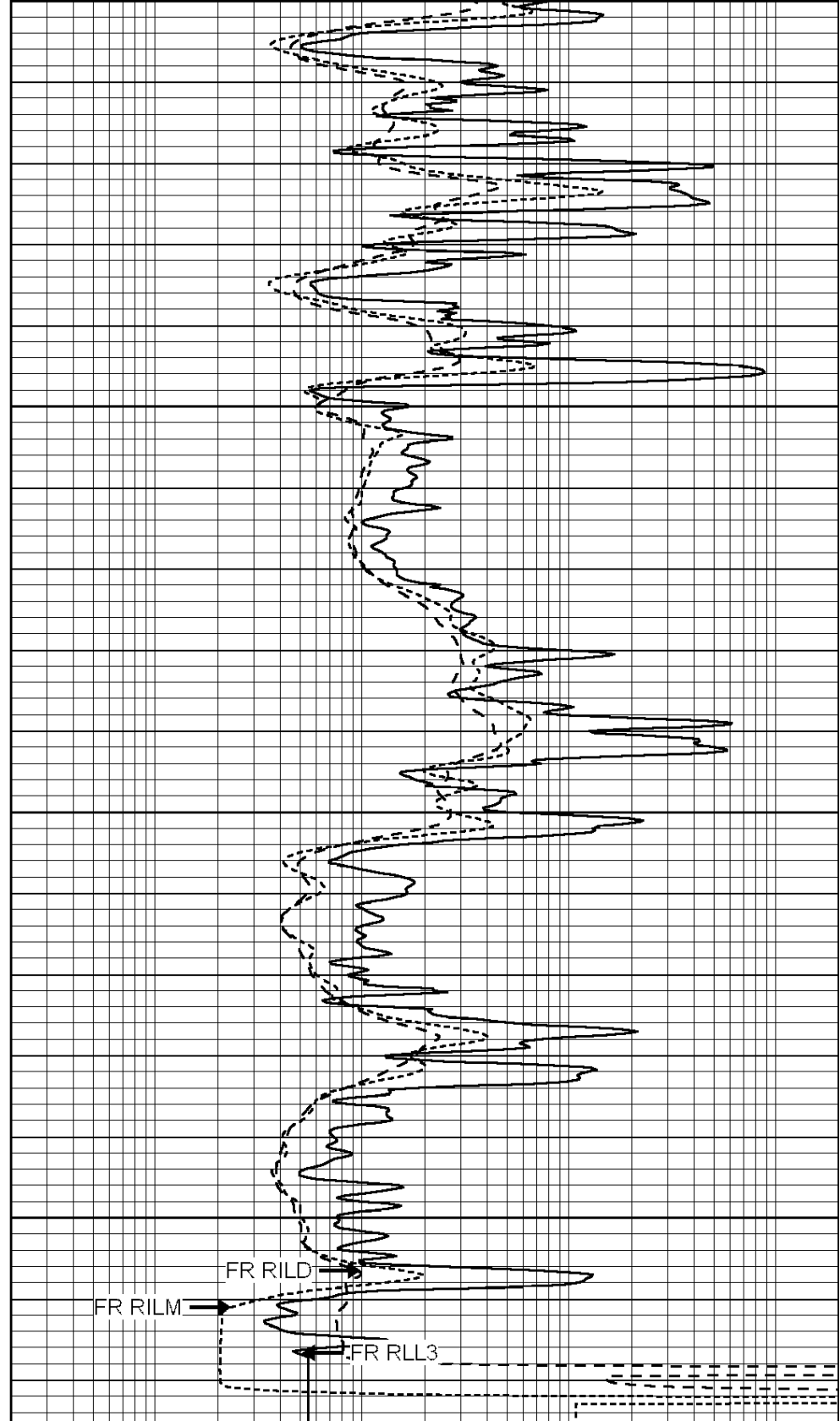
4750

4800





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20



0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



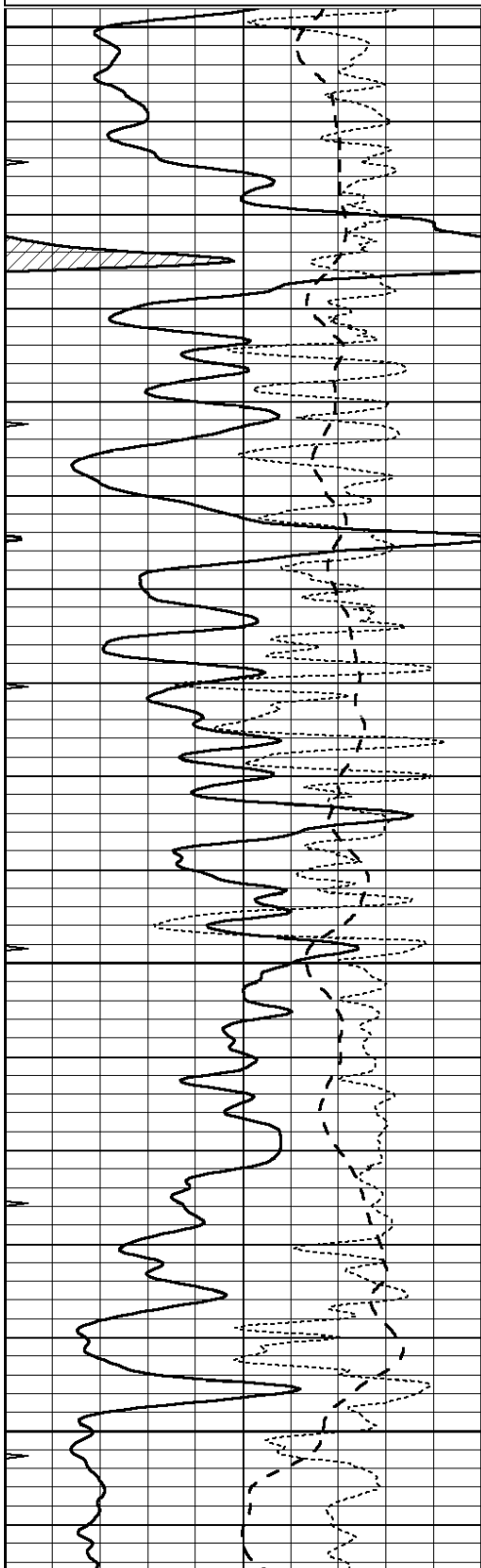
SUPERIOR
WELL SERVICES
Hays,

REPEAT SECTION

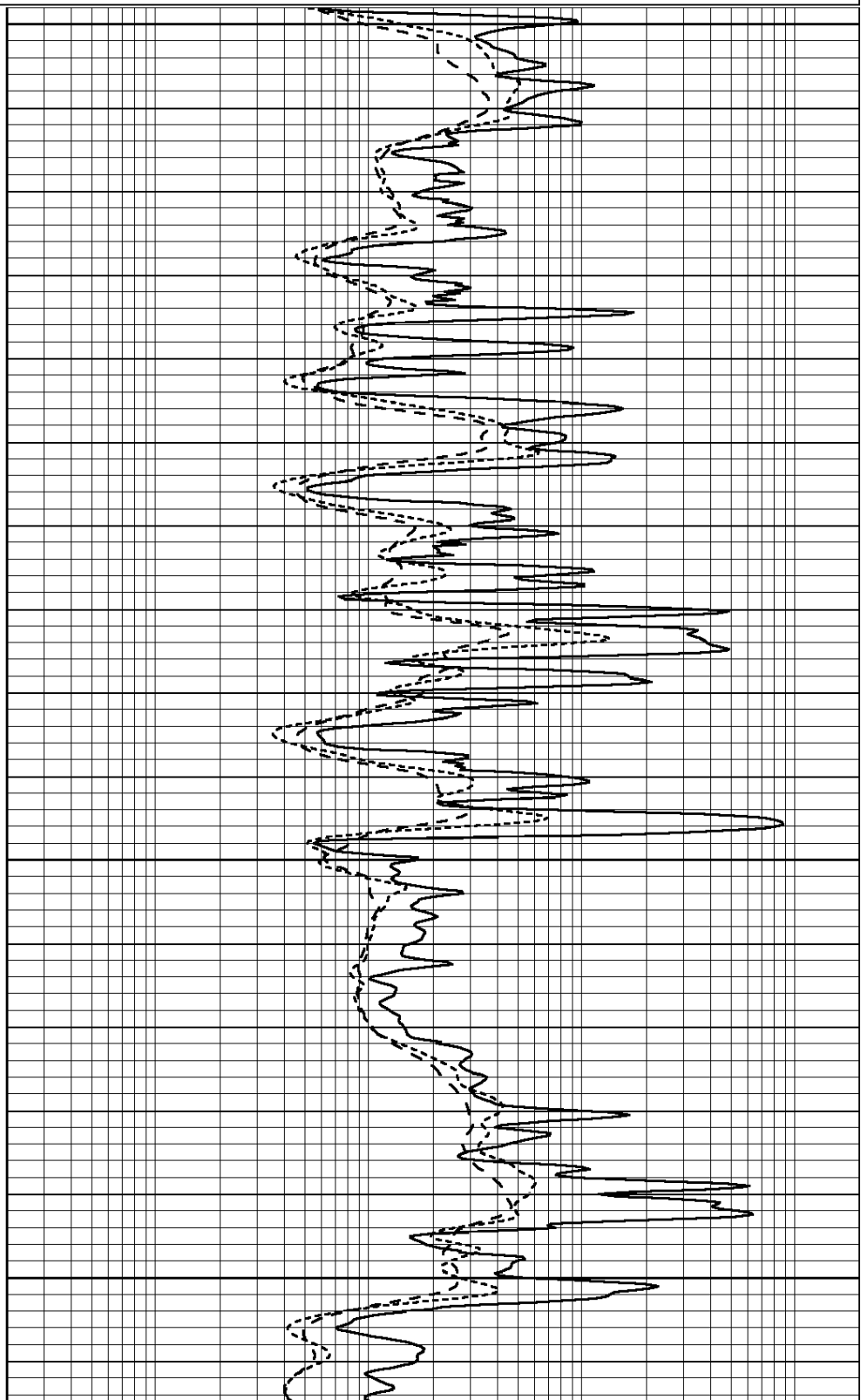
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-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



4750
 4800
 4850
 4900



Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
Source / Verifier: 147 / 147
Master Calibration Performed: Sun May 06 07:06:47 2012

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1243.76	629.14	cps
Aluminum	2.580	g/cc	282.16	435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.569		
	Size		Reading		
Small Ring	10.00	in	3.50	V	
Large Ring	16.00	in	5.30	V	

Compensated Neutron Calibration Report

Serial Number: NUE_2I
Tool Model: G

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: GR5
Tool Model: OPEN
Performed: Sun May 06 07:34:58 2012

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.7000 GAPI/cps