



**SUPERIOR
Hays,
Kansas**

**DUAL
INDUCTION
LOG**

Company CHIEFTAIN OIL CO., INC.
Well BLEVINS "A" #1
Field MAYBERRY
County BARBER
State KANSAS

Company CHIEFTAIN OIL COMPANY, INC.
Well BLEVINS "A" #1
Field MAYBERRY
County BARBER State KANSAS

Location: API #: 15-007-23804
2300' FSL & 450' FWL
SEC 25 TWP 34S RGE 11W
Permanent Datum GROUND LEVEL Elevation 1362
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL/PE
Elevation
K.B. 1370
D.F.
G.L. 1362

Date	11-20-11
Run Number	ONE
Depth Driller	5390
Depth Logger	5388
Bottom Logged Interval	5386
Top Log Interval	00
Casing Driller	307
Casing Logger	307
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.3 / 57
pH / Fluid Loss	9.5 / 11.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.58 @ 80F
Rmf @ Meas. Temp	0.44 @ 80F
Rmc @ Meas. Temp	0.70 @ 80F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.360 @ 128F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	7:30 P.M.
Maximum Recorded Temperature	128F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	DAVE BARKER

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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: KIOWA & HIGHWAY #2, 2 NE TO RATTLESNAKE RD., 1W, 1/N, E INTO.



SUPERIOR
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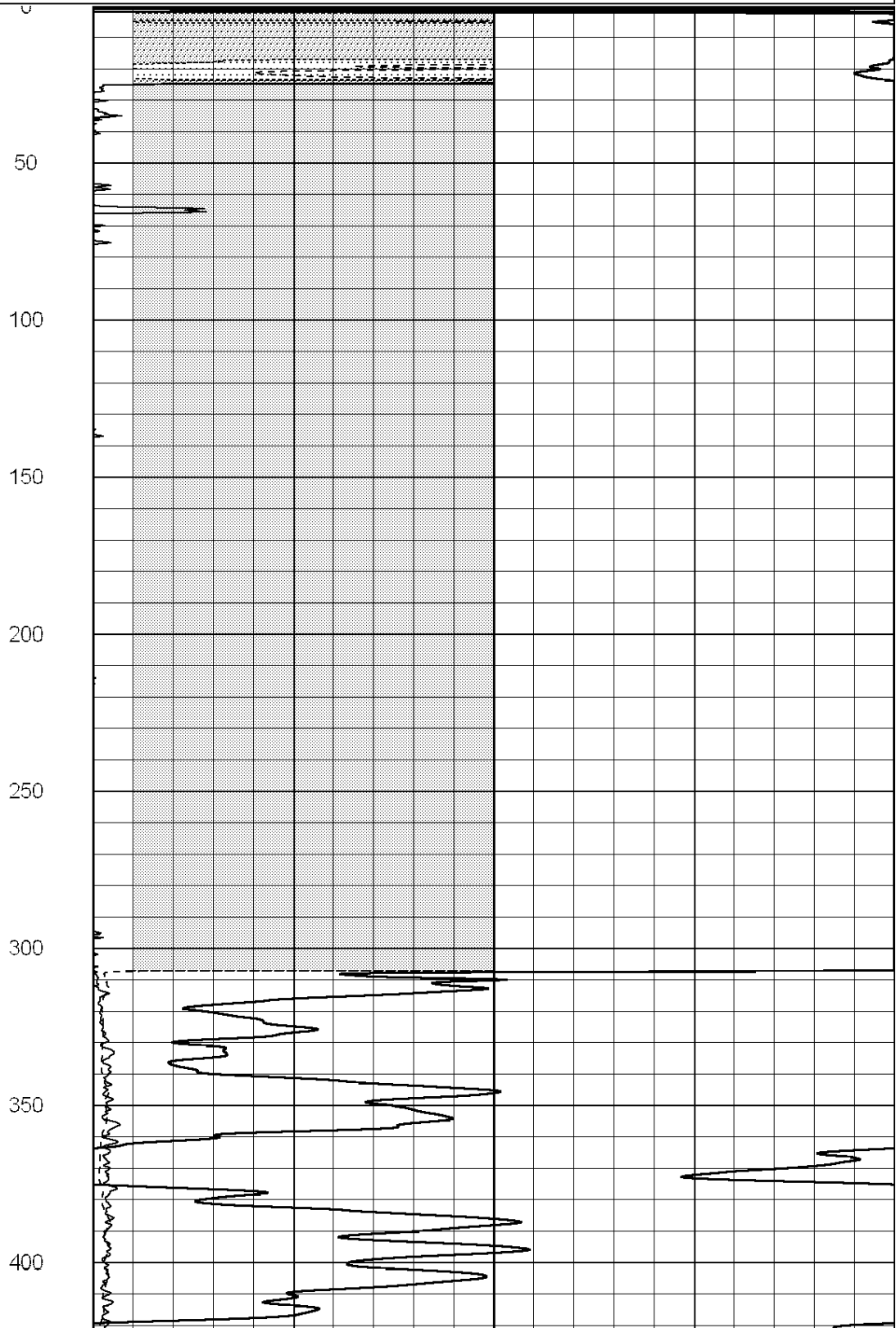
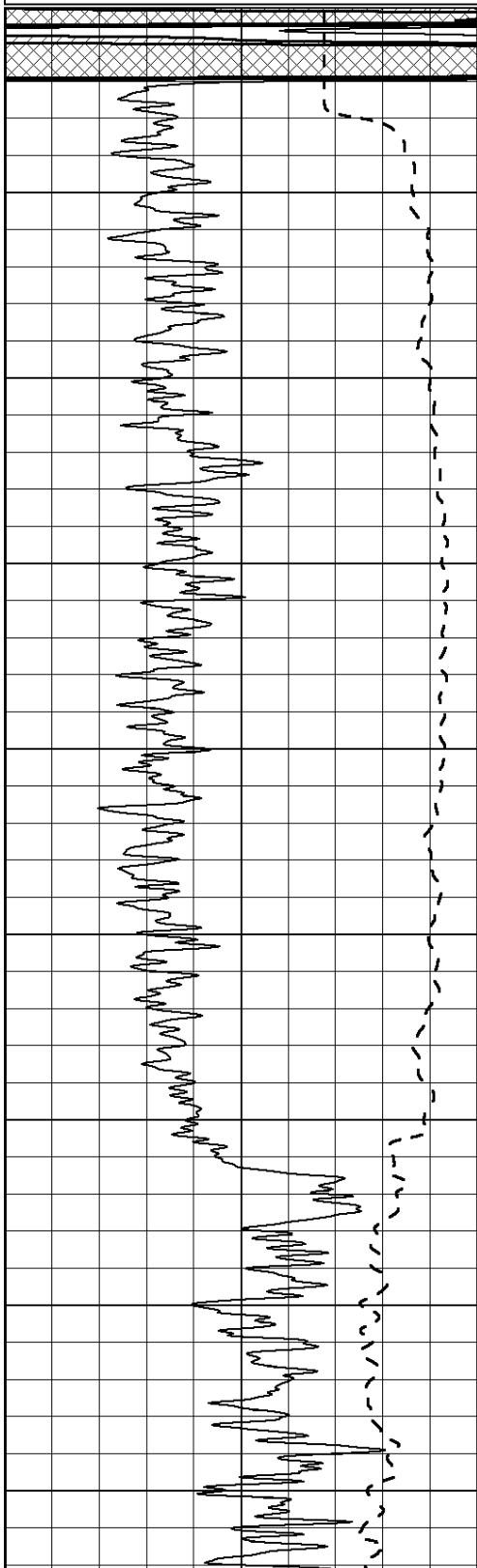
MAIN SECTION

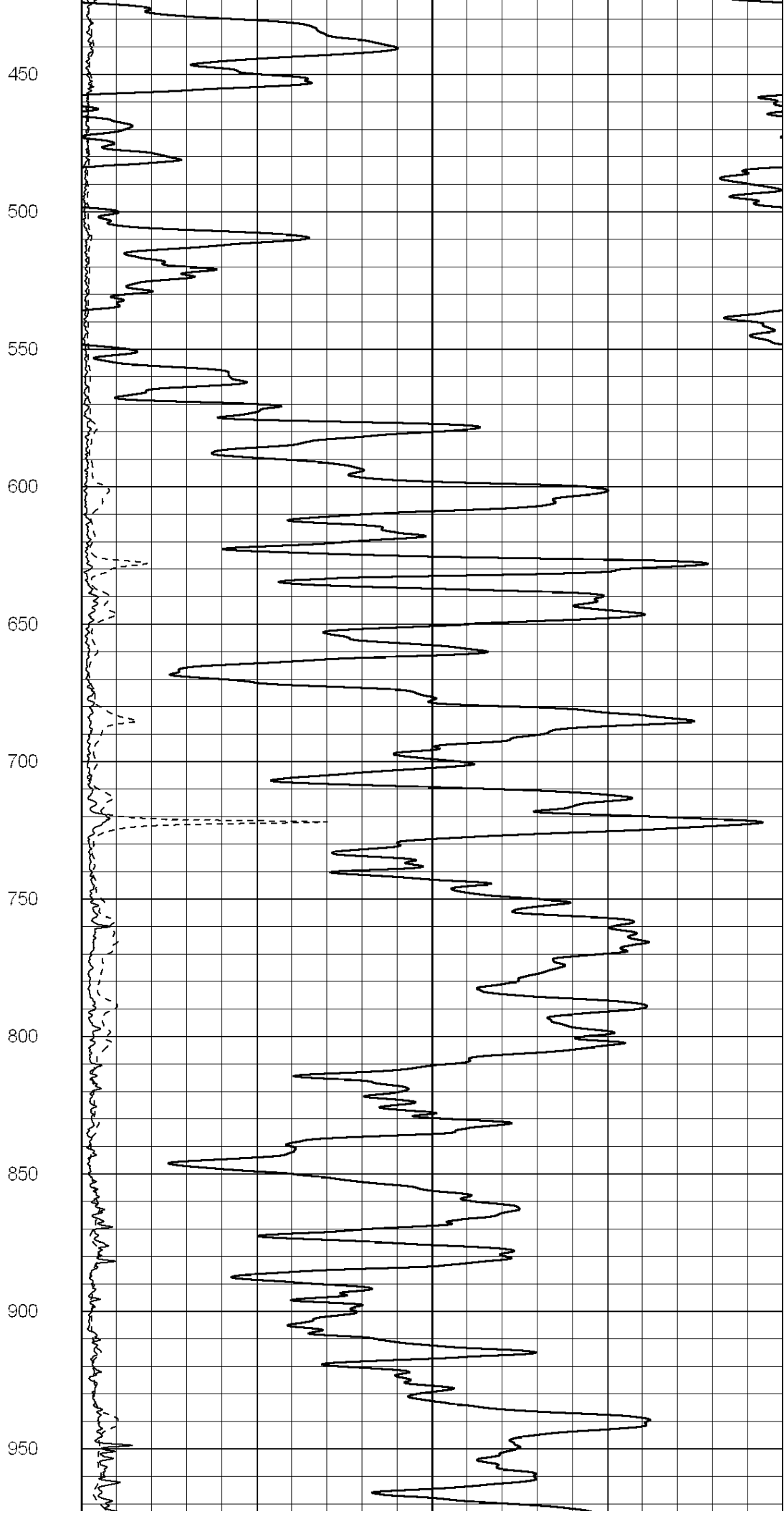
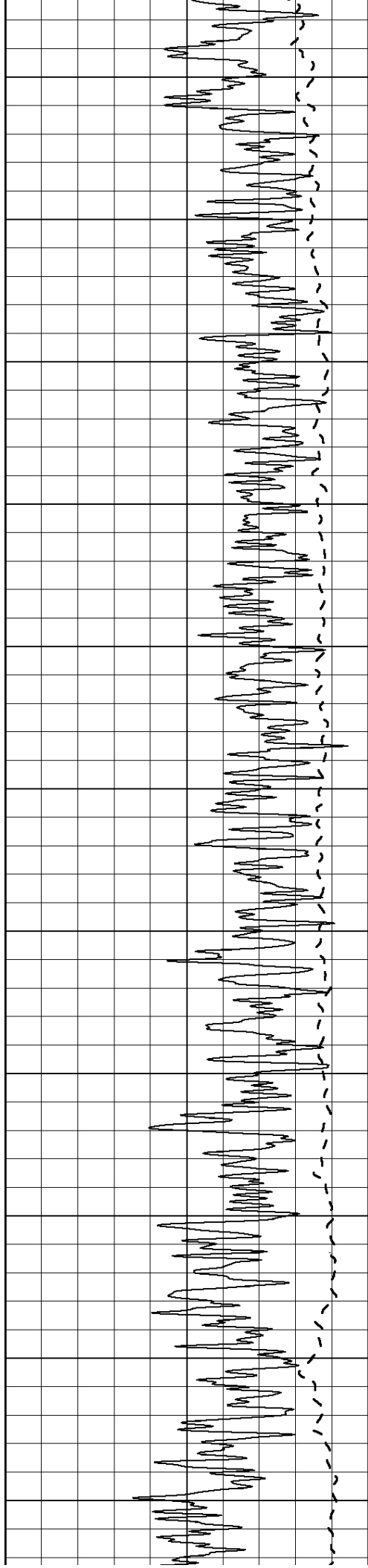
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 Dataset Pathname: pass3.A
 Presentation Format: dil2
 Dataset Creation: Sun Nov 20 22:15:40 2011
 Charted by: Depth in Feet scaled 1:600

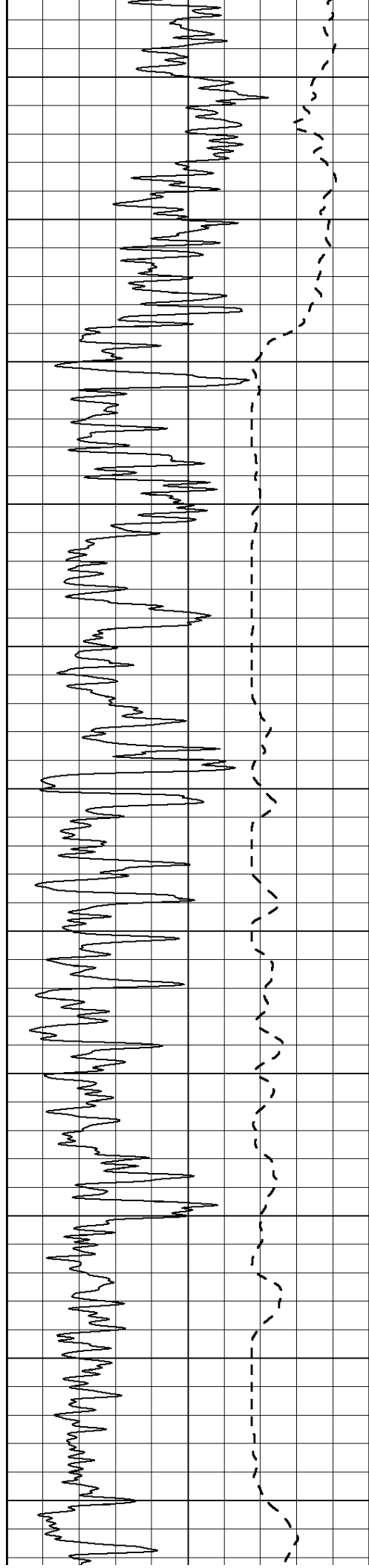
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50

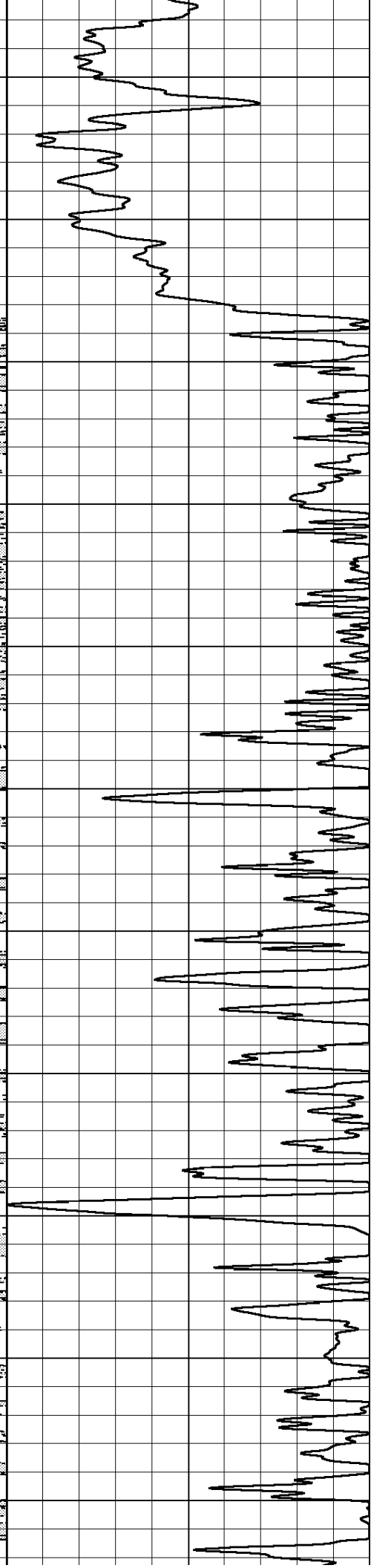
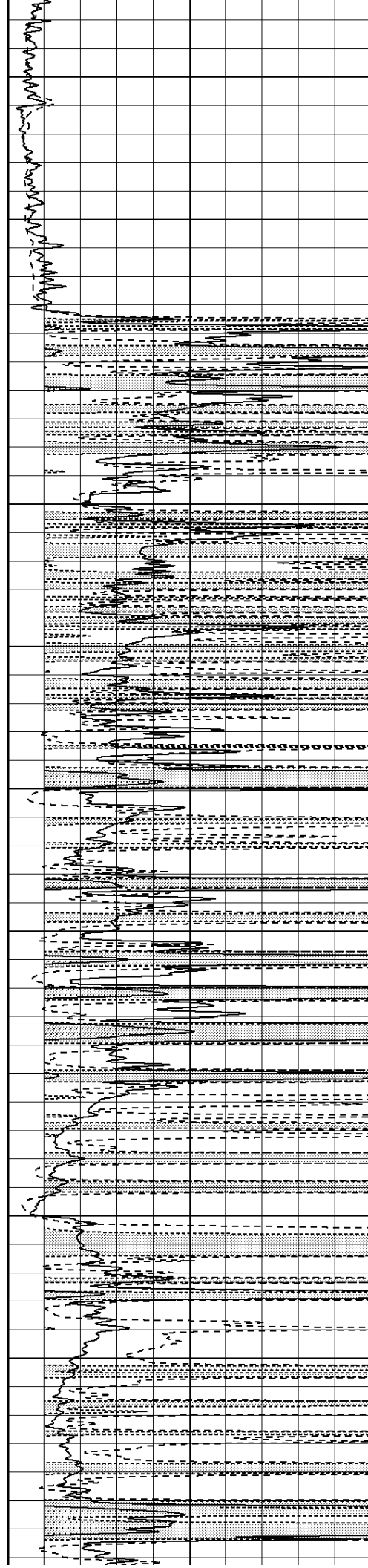
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

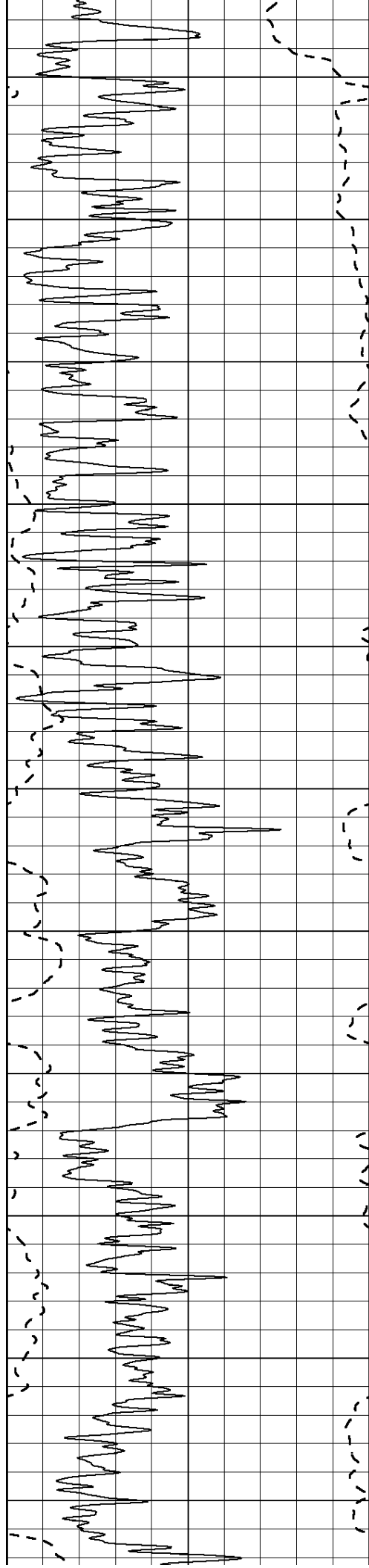




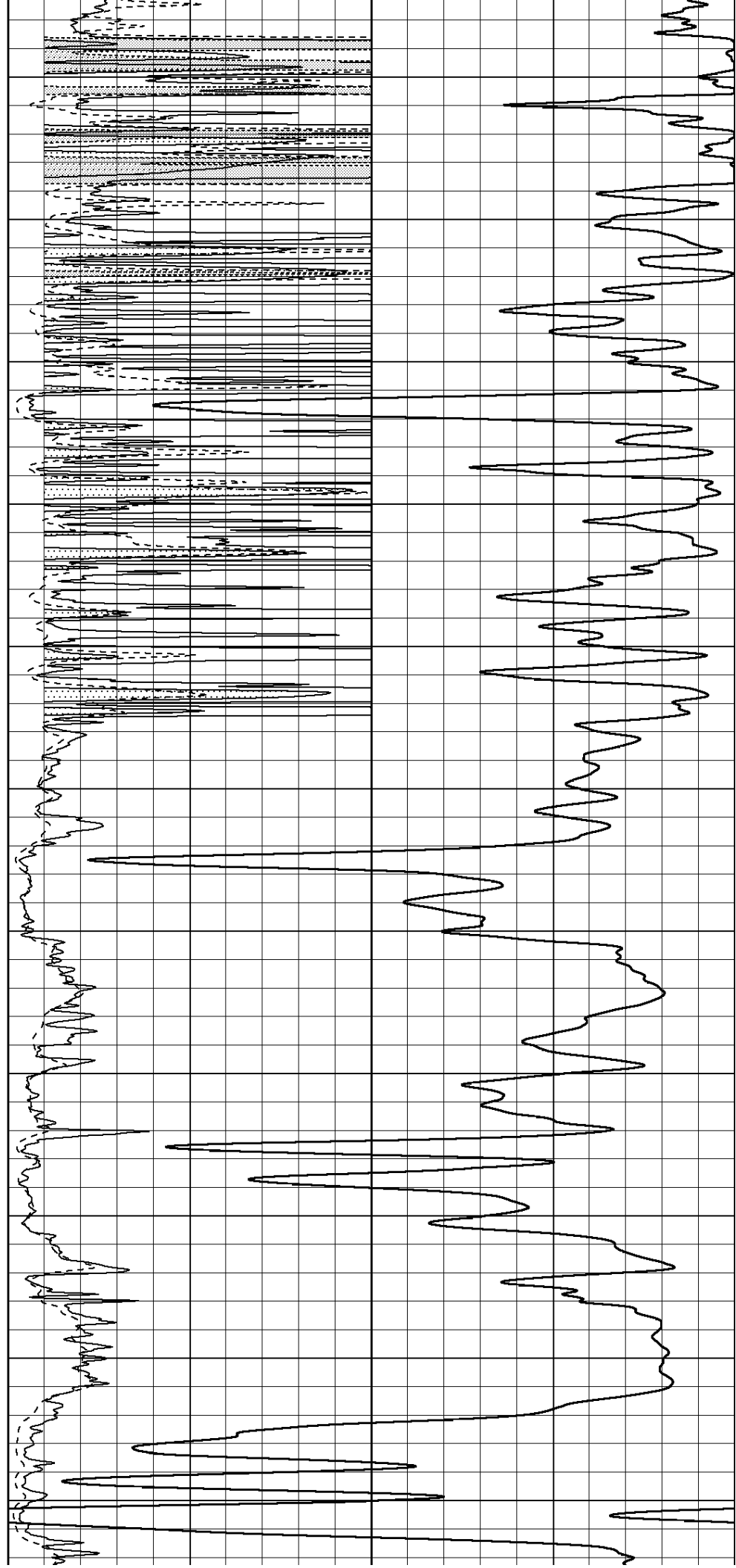


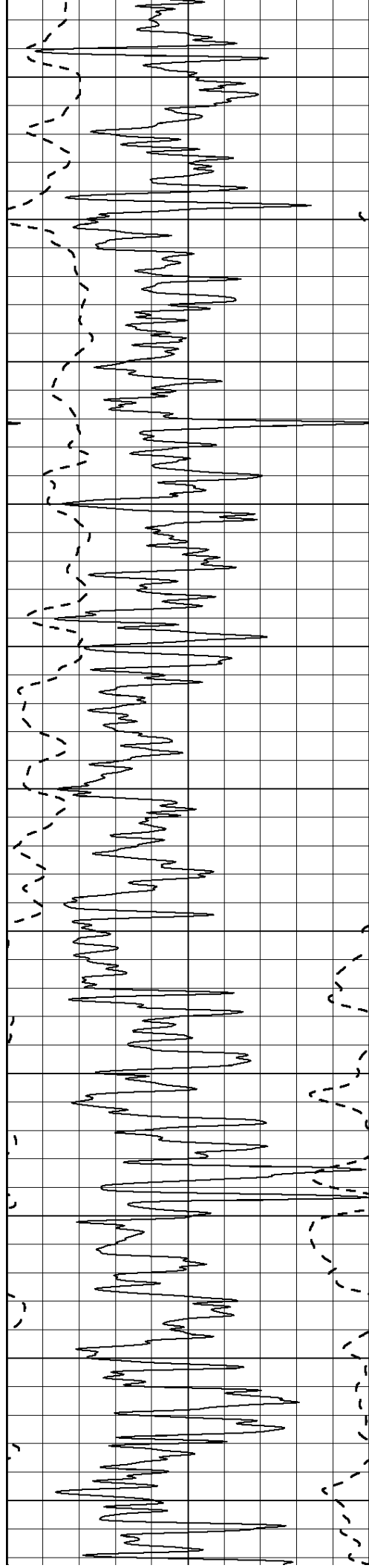
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500





1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050





2100

2150

2200

2250

2300

2350

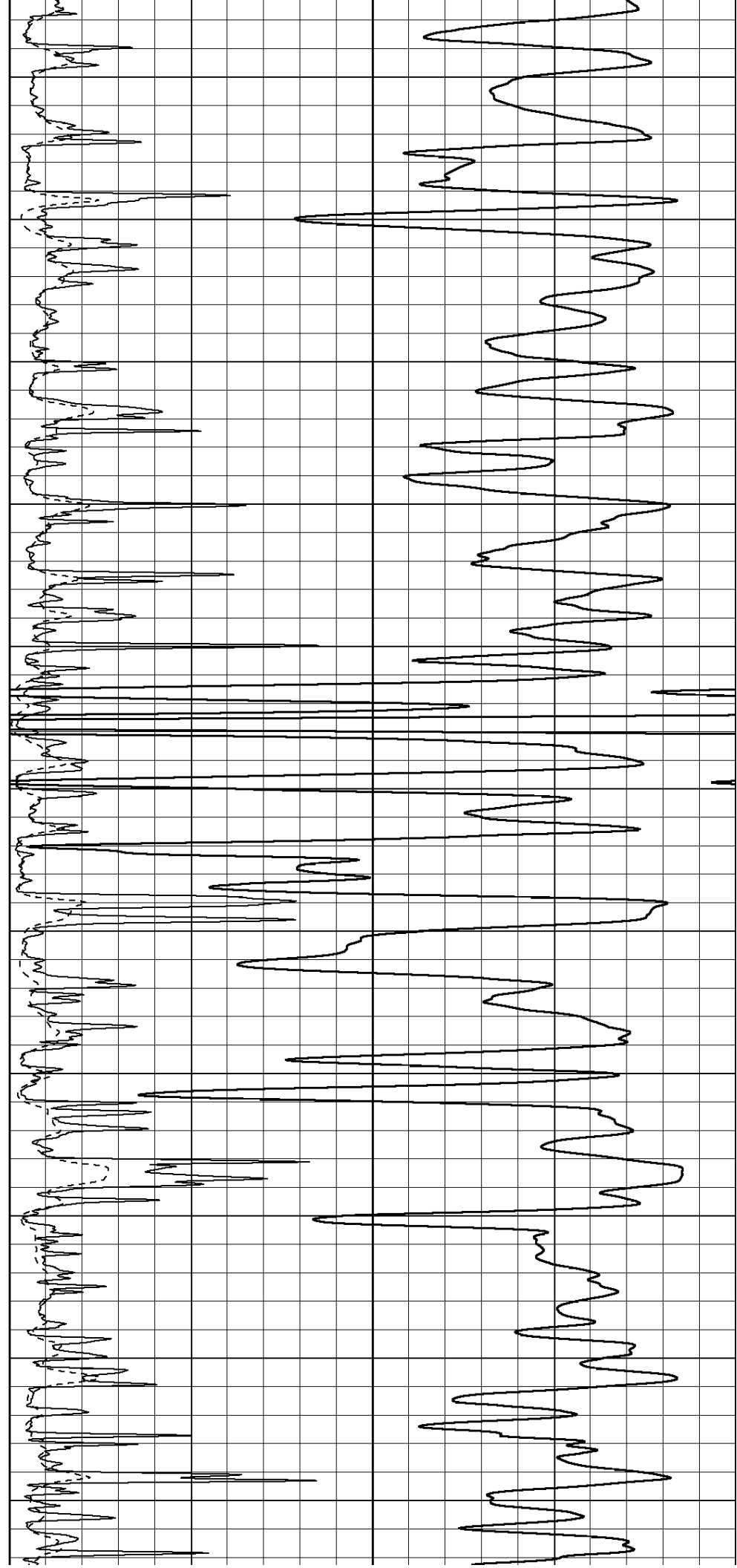
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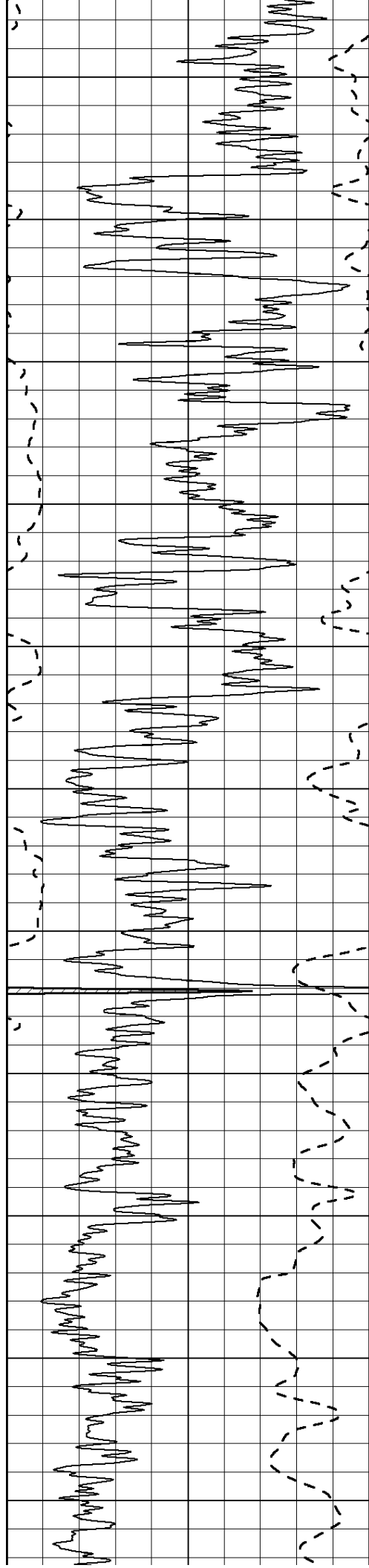
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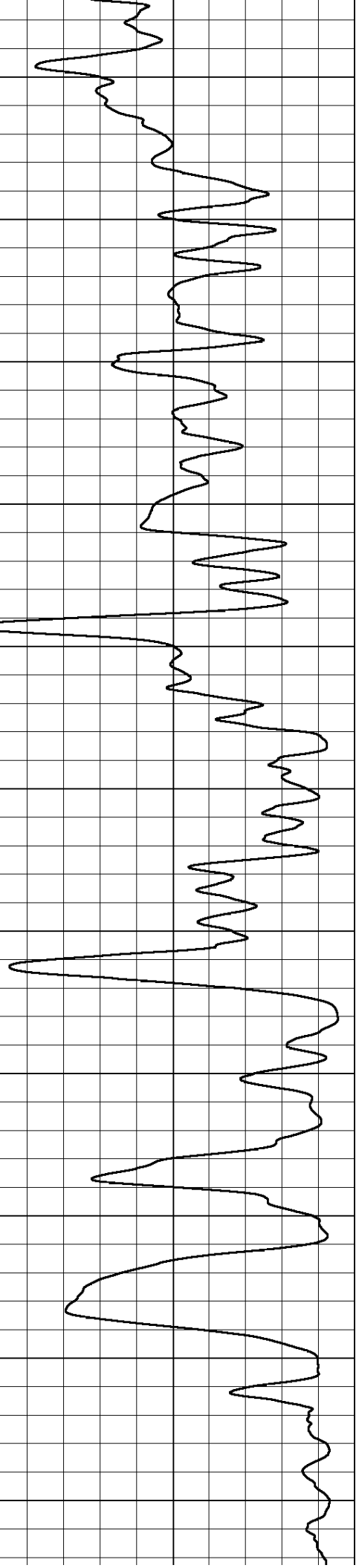
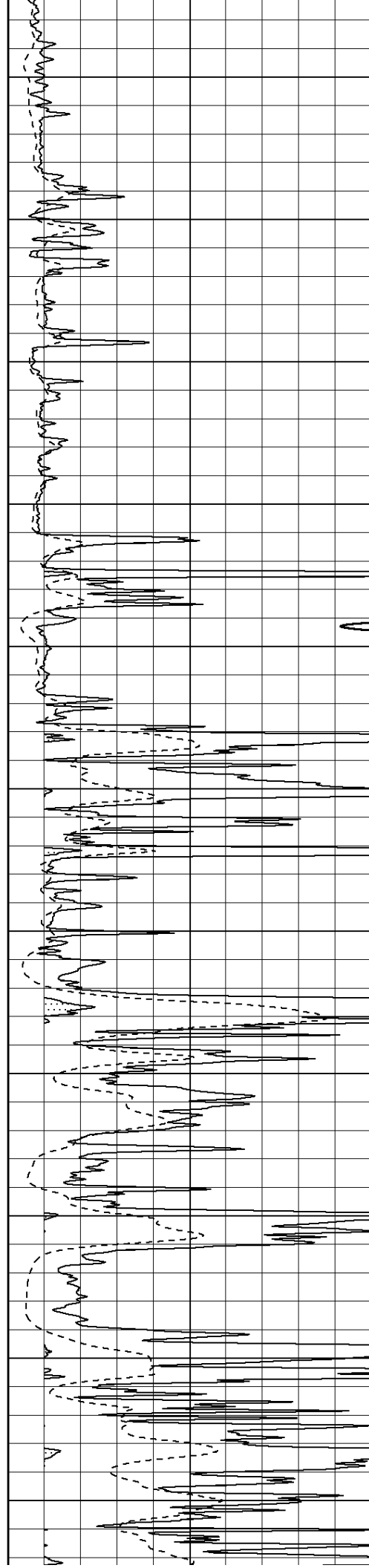
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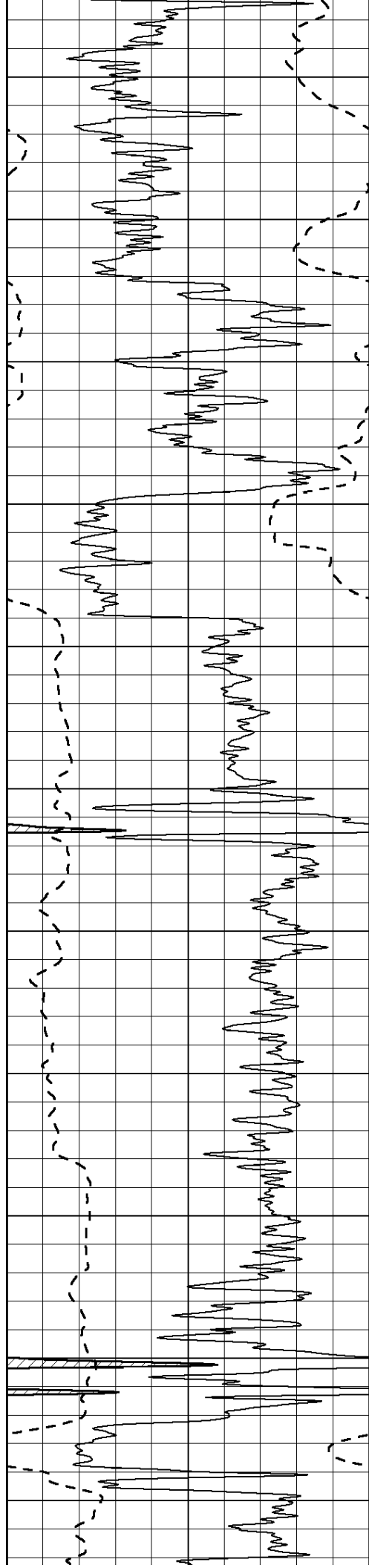
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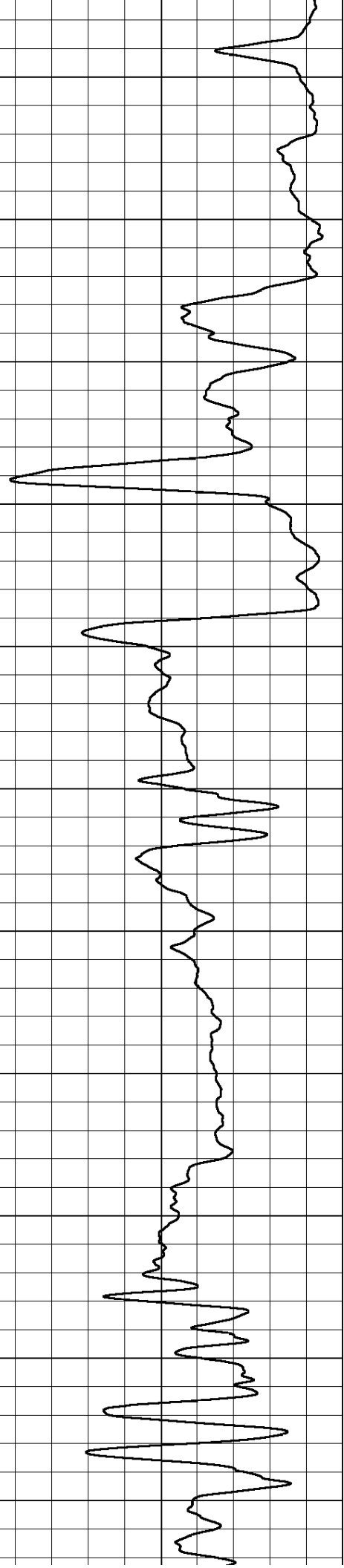
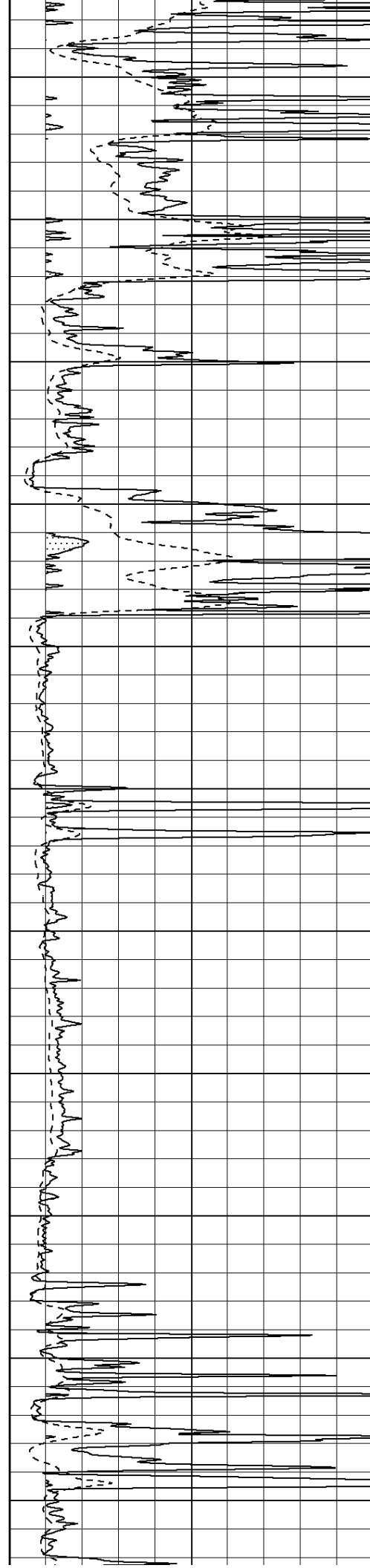


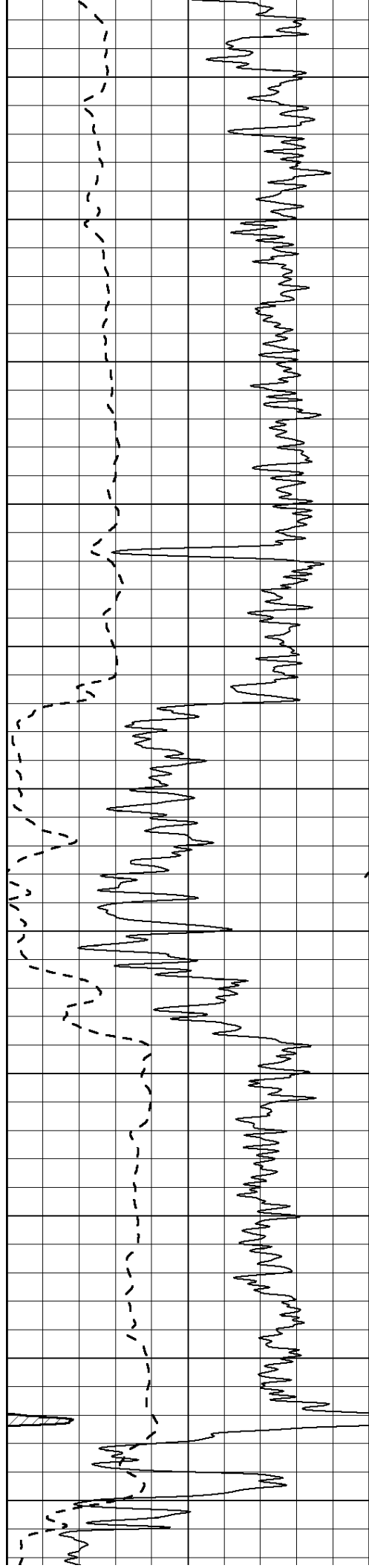
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2700
2750
2800
2850
2900
2950
3000
3050
3100
3150



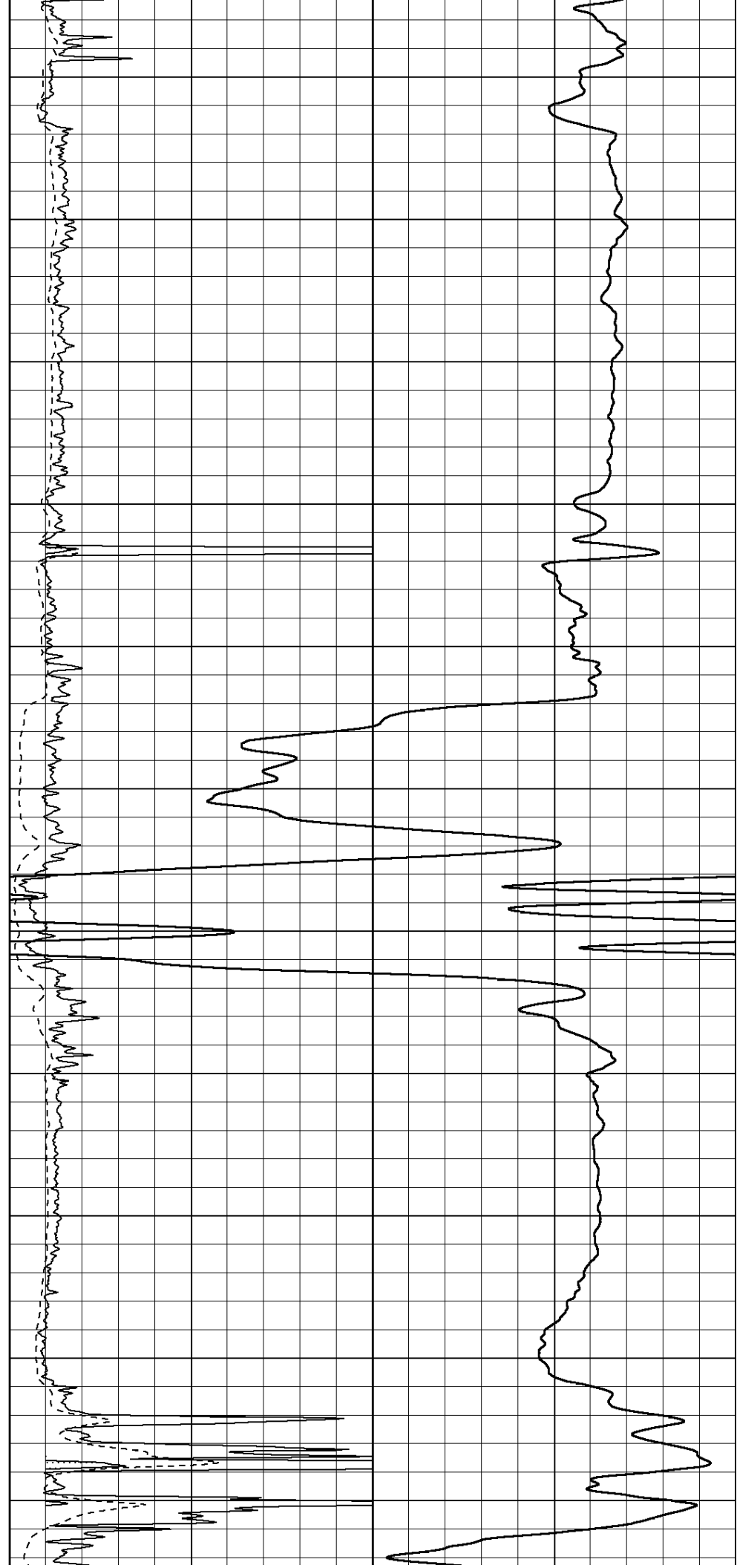


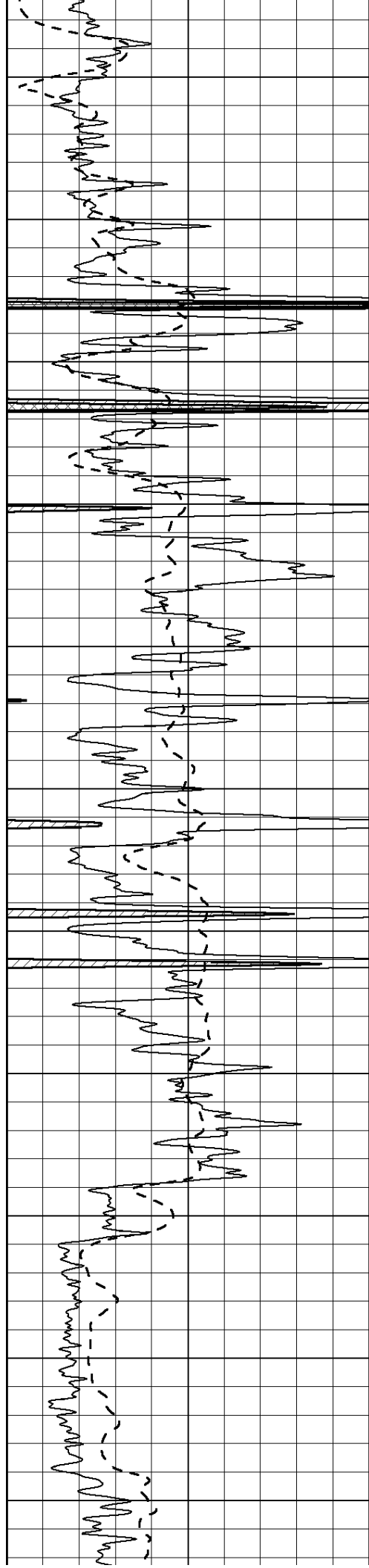
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3350
3400
3450
3500
3550
3600
3650
3700



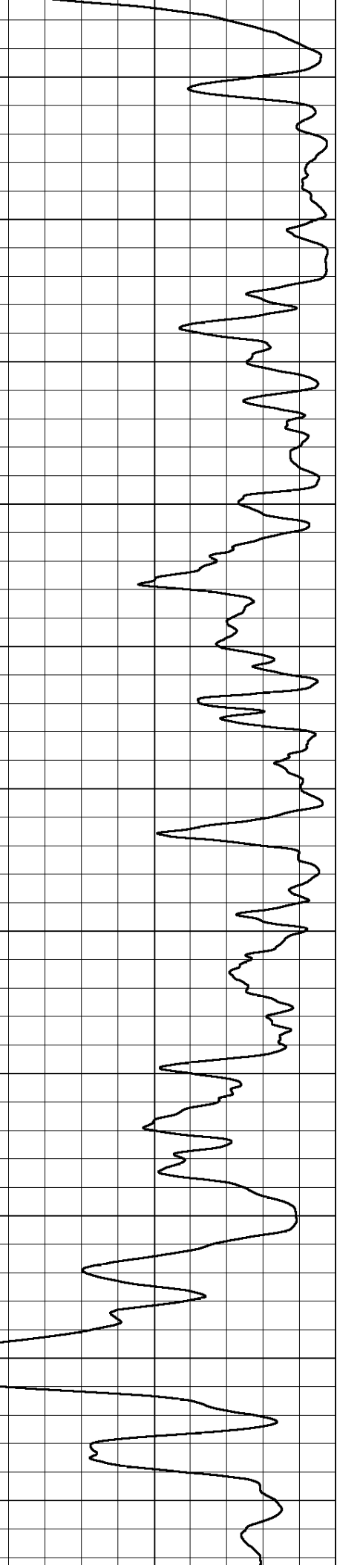
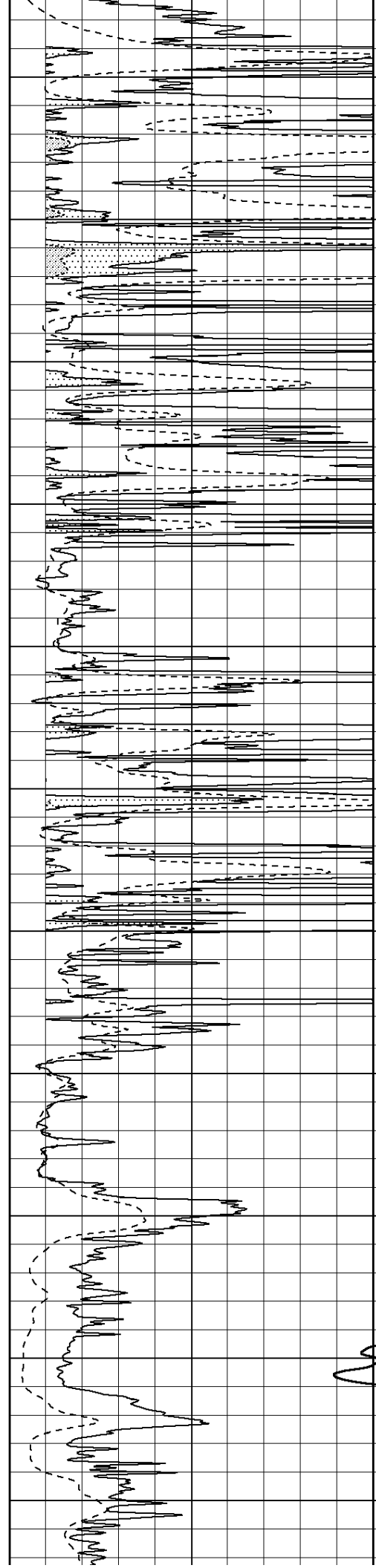


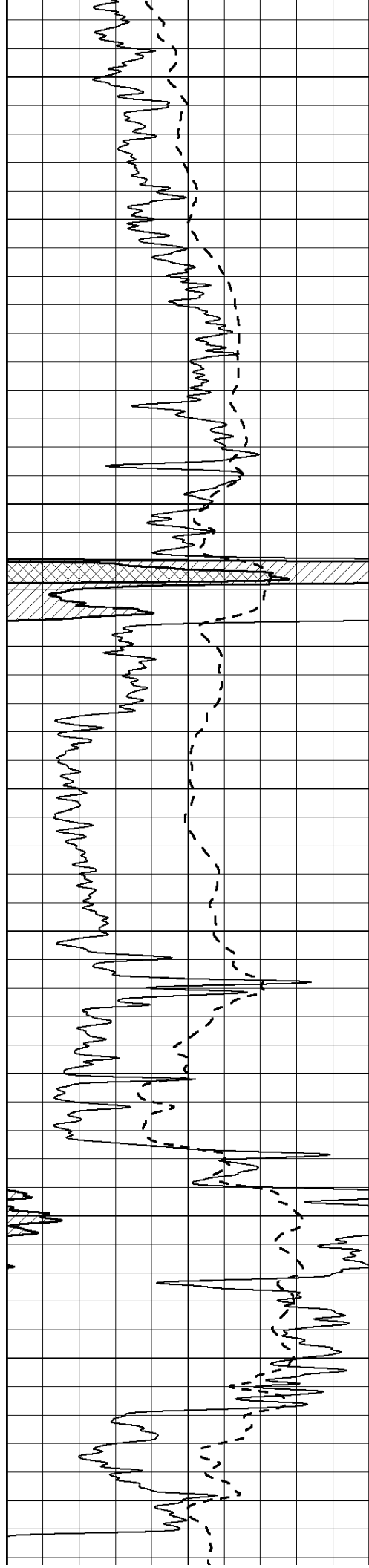
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3950
4000
4050
4100
4150
4200
4250



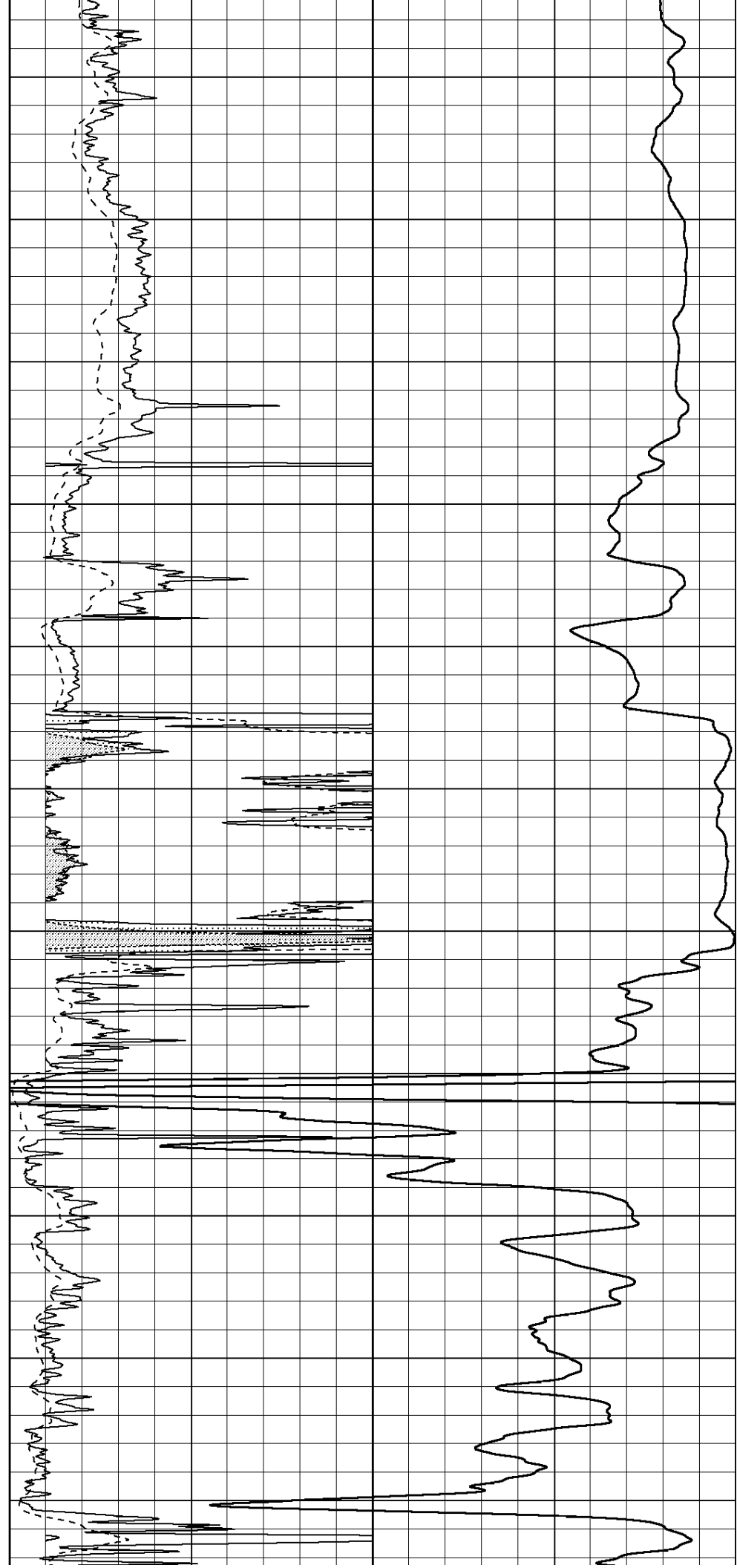


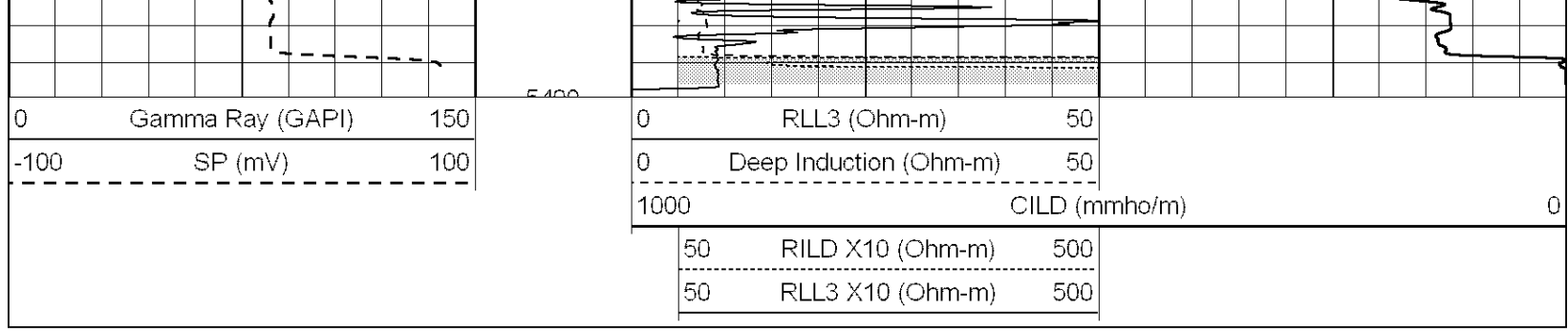
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4400
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4500
4550
4600
4650
4700
4750
4800





4850
4900
4950
5000
5050
5100
5150
5200
5250
5300
5350



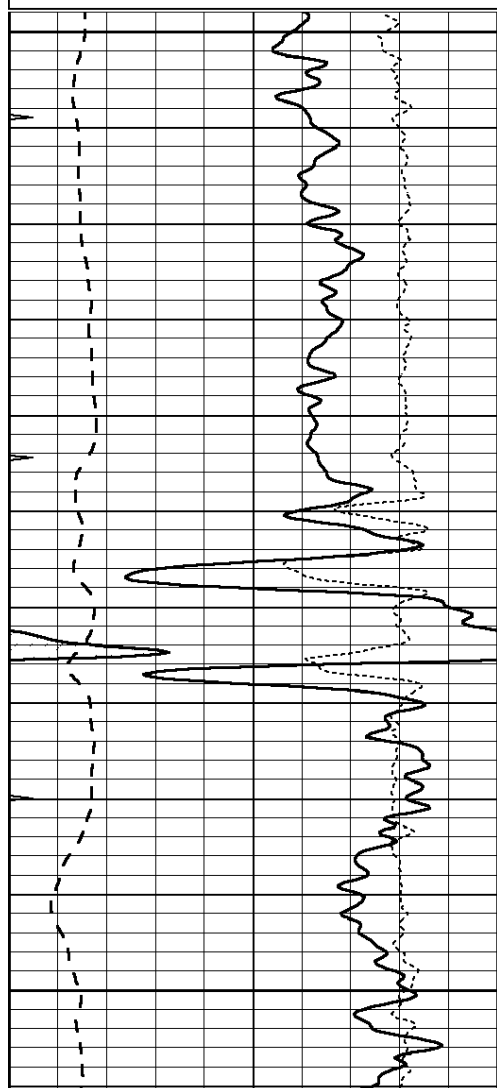


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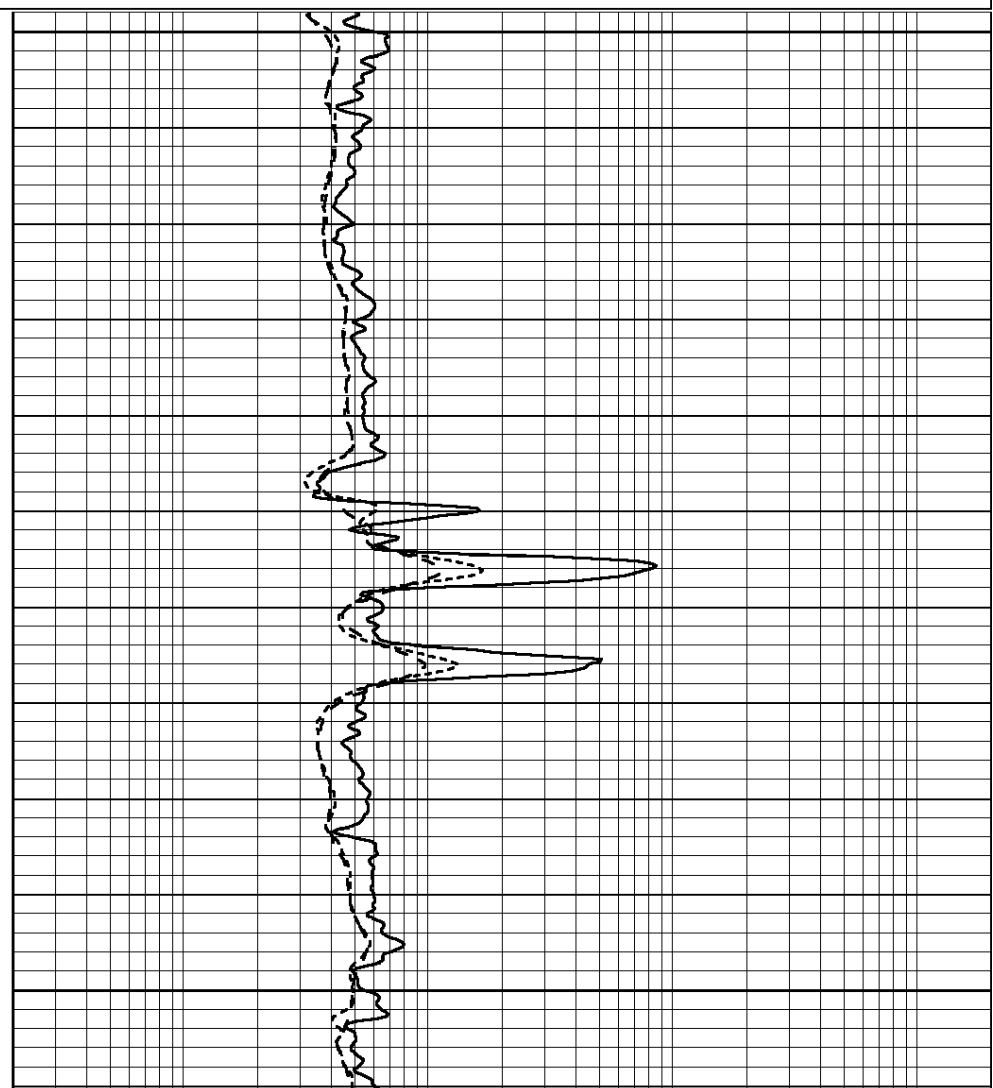
MAIN SECTION

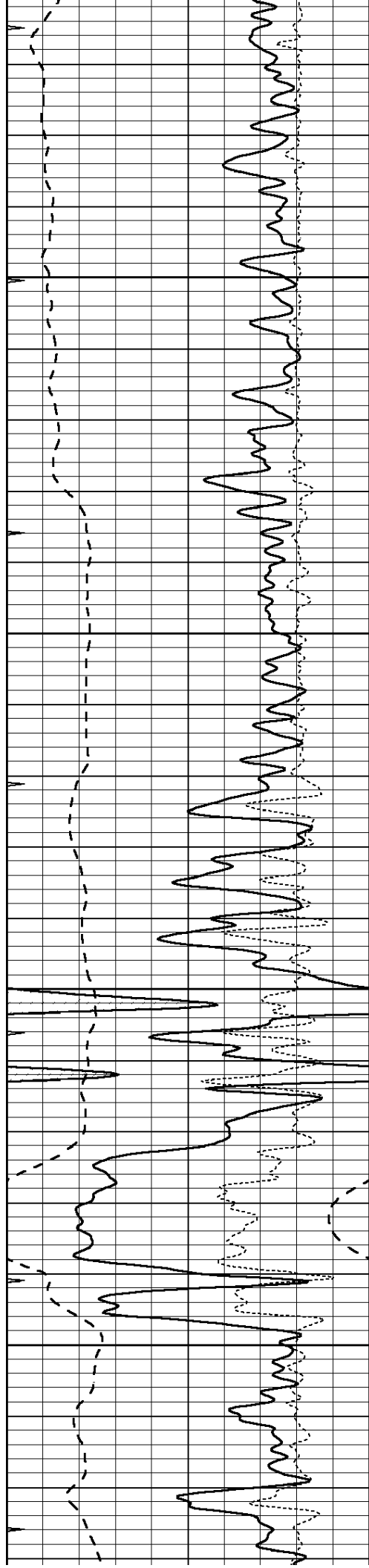
Database File: 008015pdn.db
 Dataset Pathname: pass3.A
 Presentation Format: dil
 Dataset Creation: Sun Nov 20 22:15:40 2011
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	RLL3 (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	RxoRt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			



3400
3450
3500



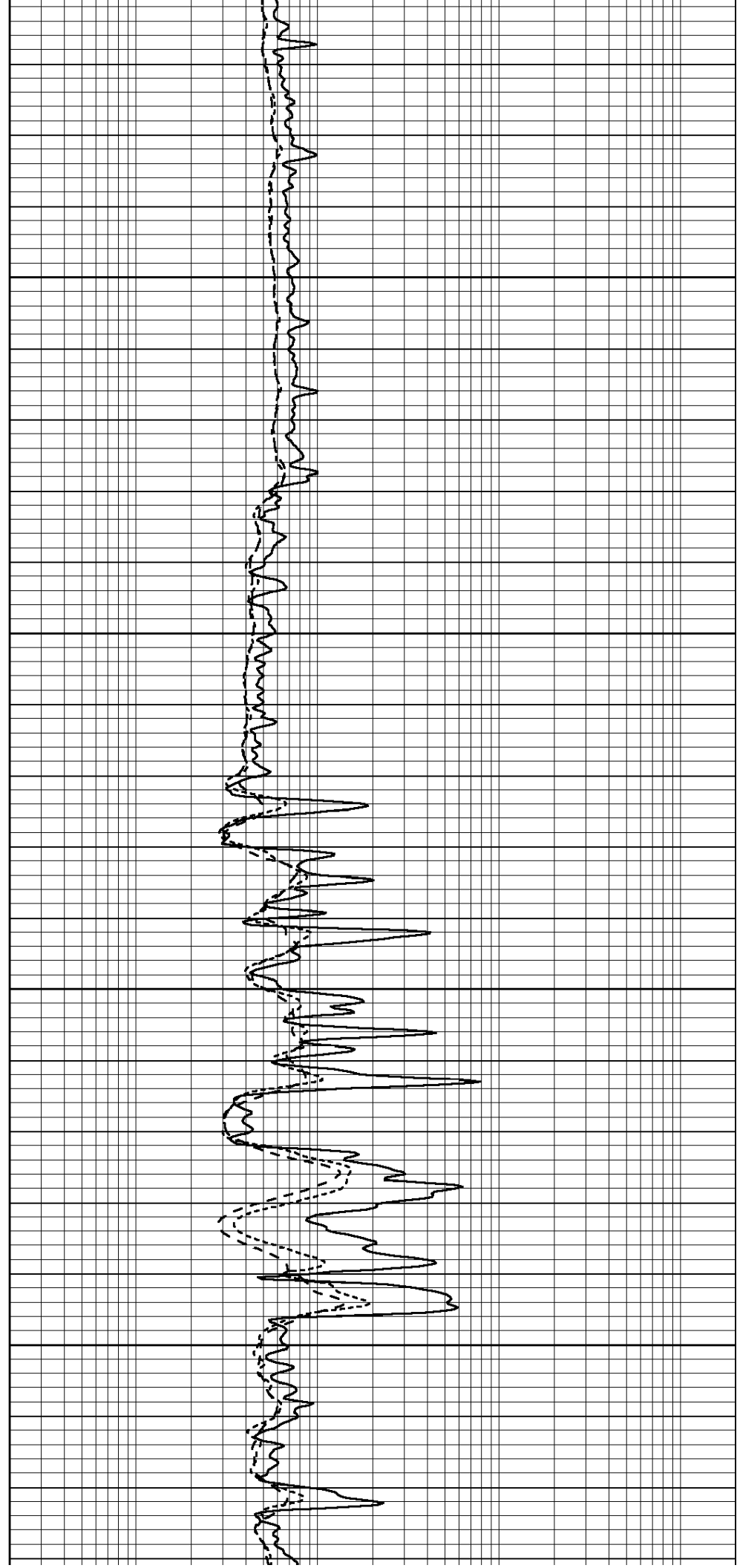


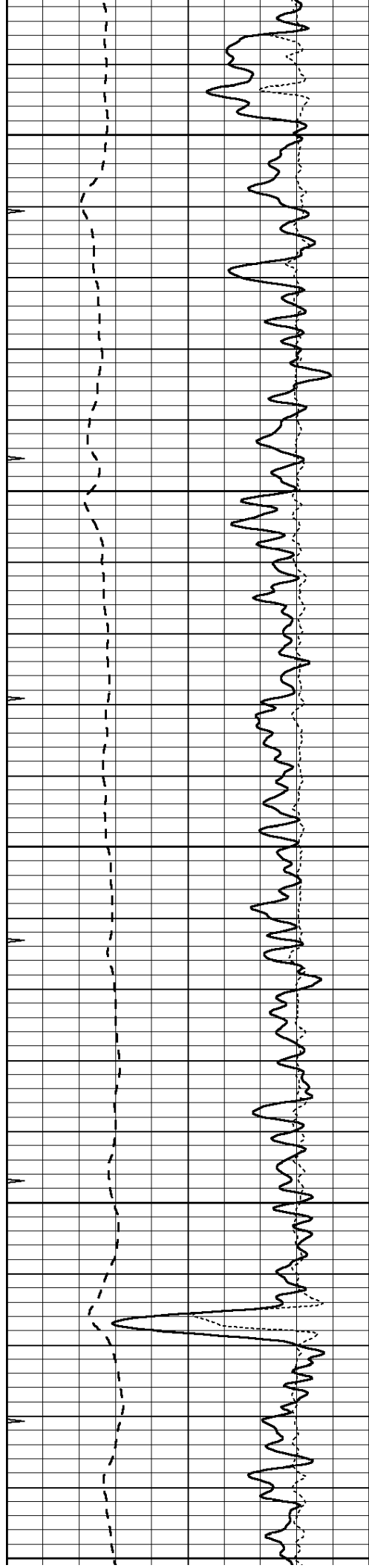
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3600

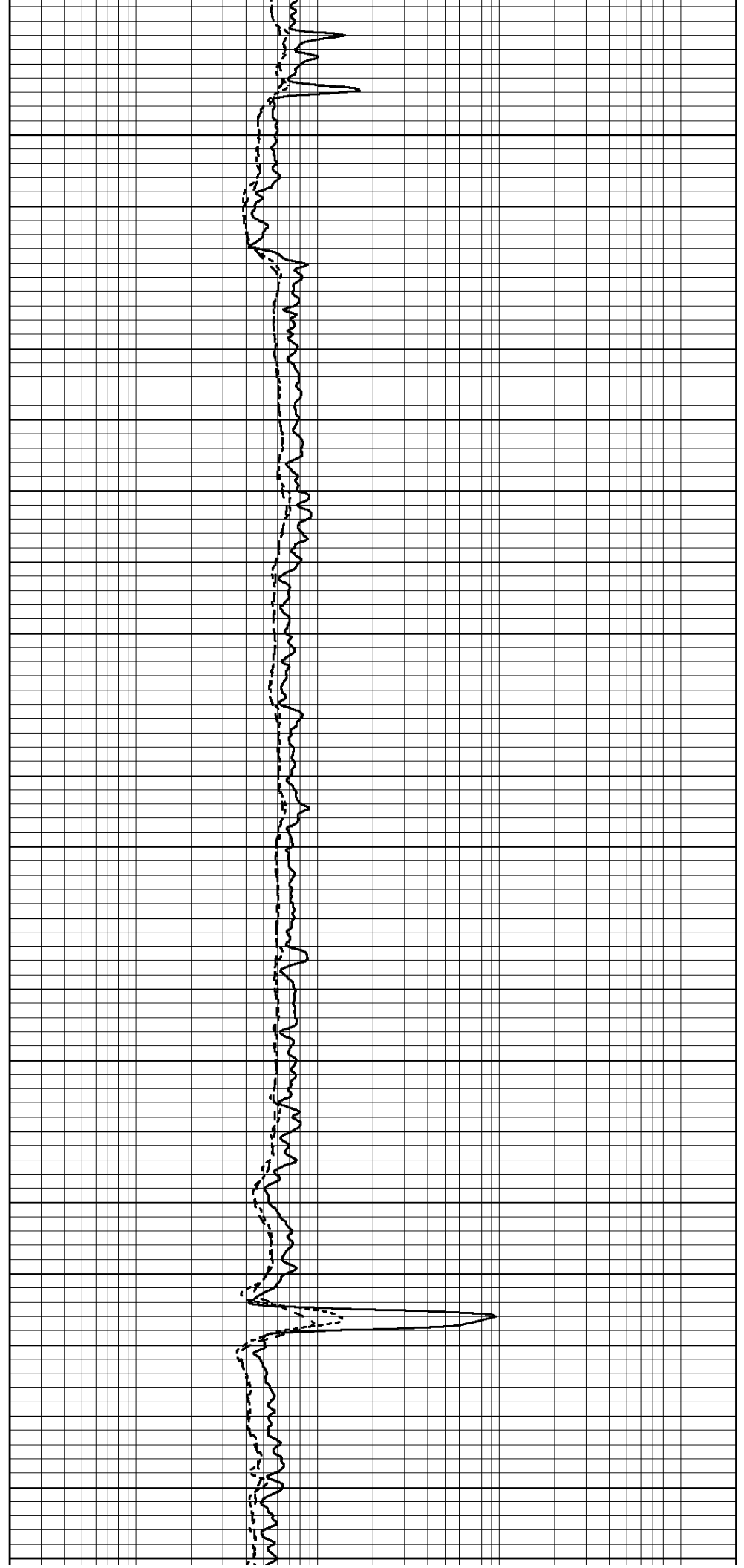
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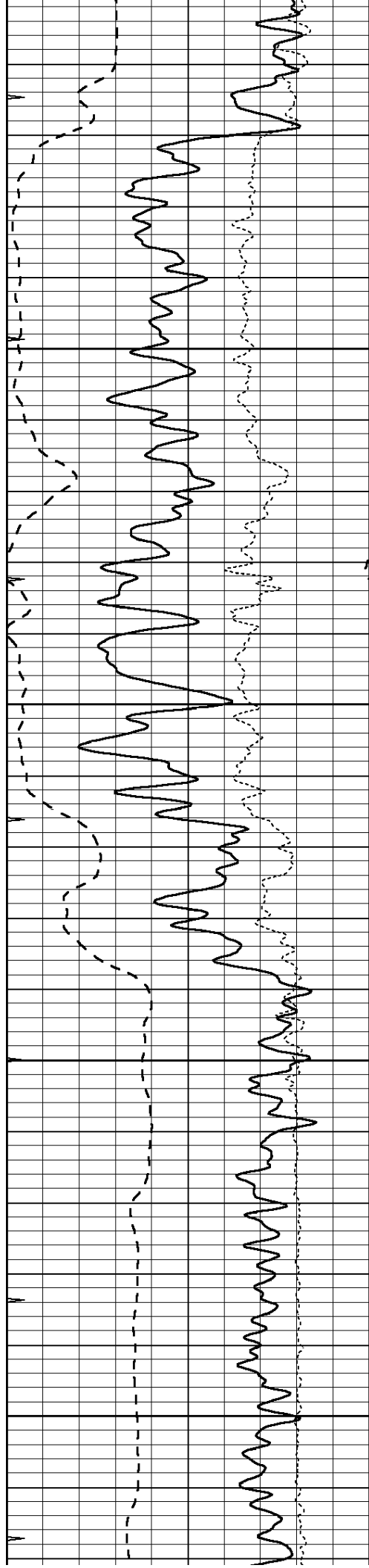
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3750
3800
3850
3900
3950



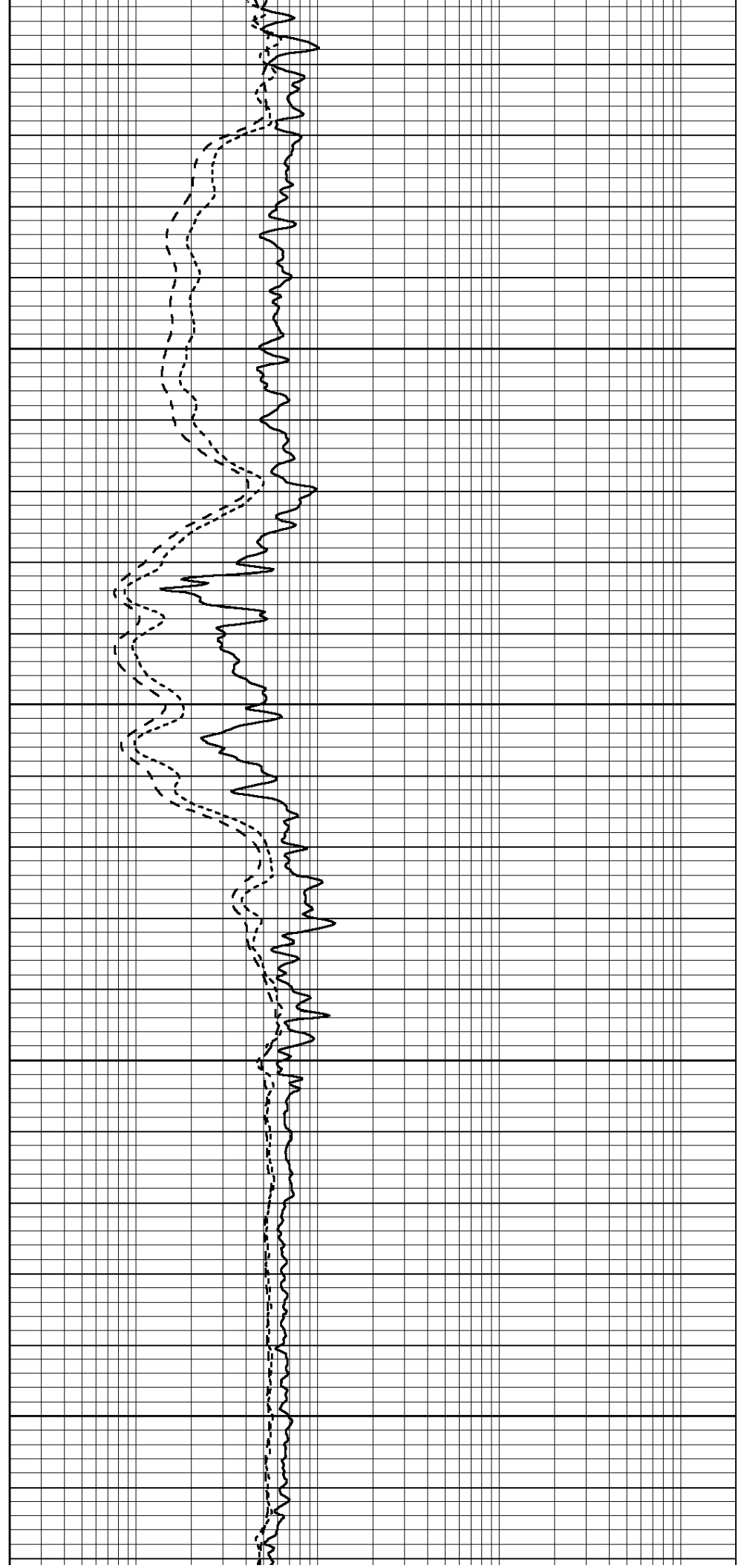


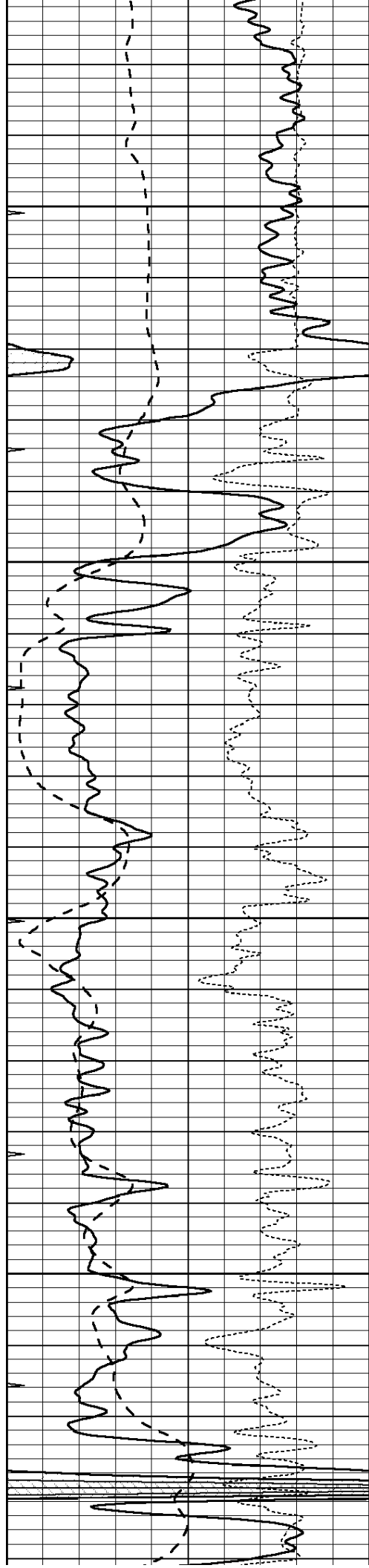
4000

4050

4100

4150



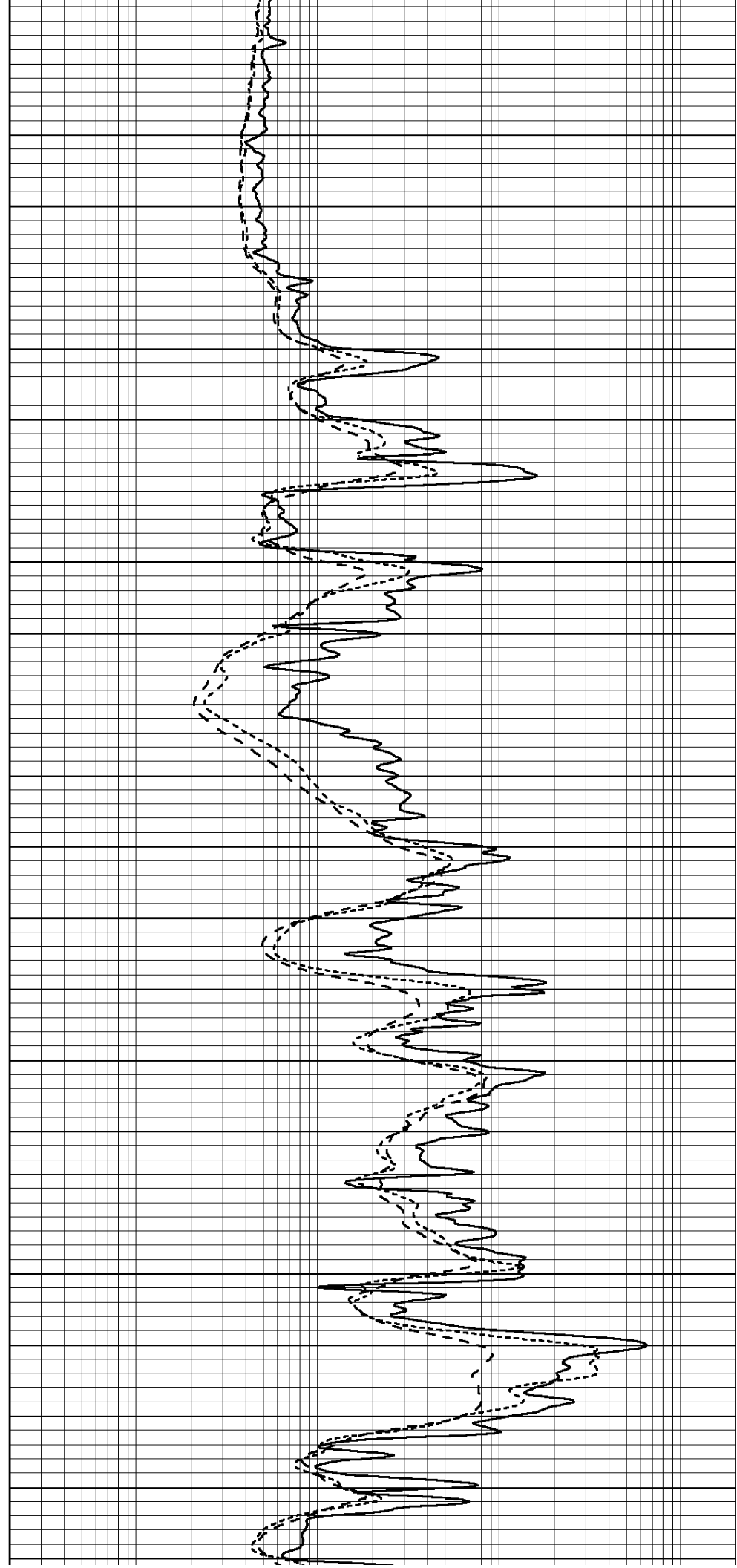


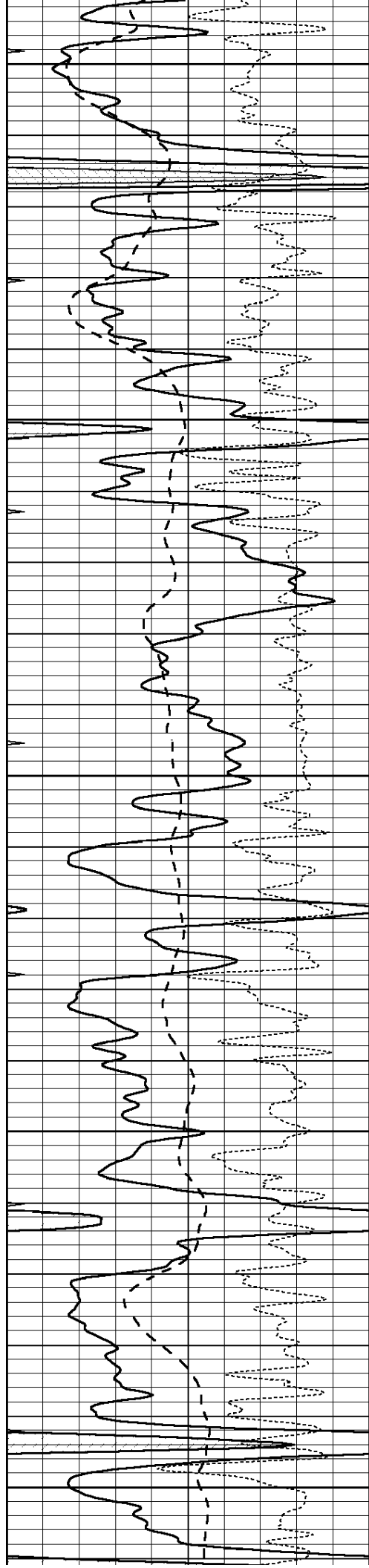
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4250

4300

4350





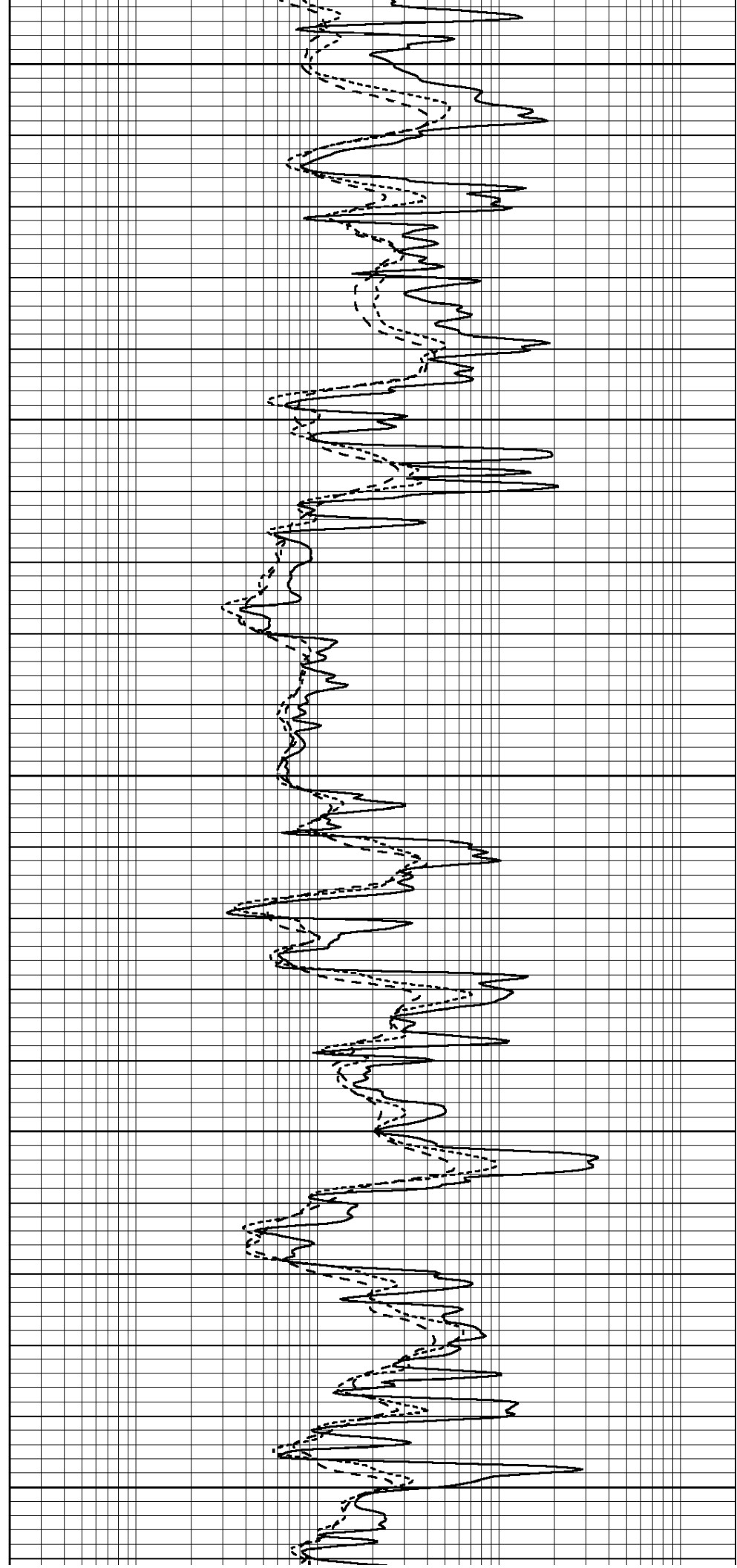
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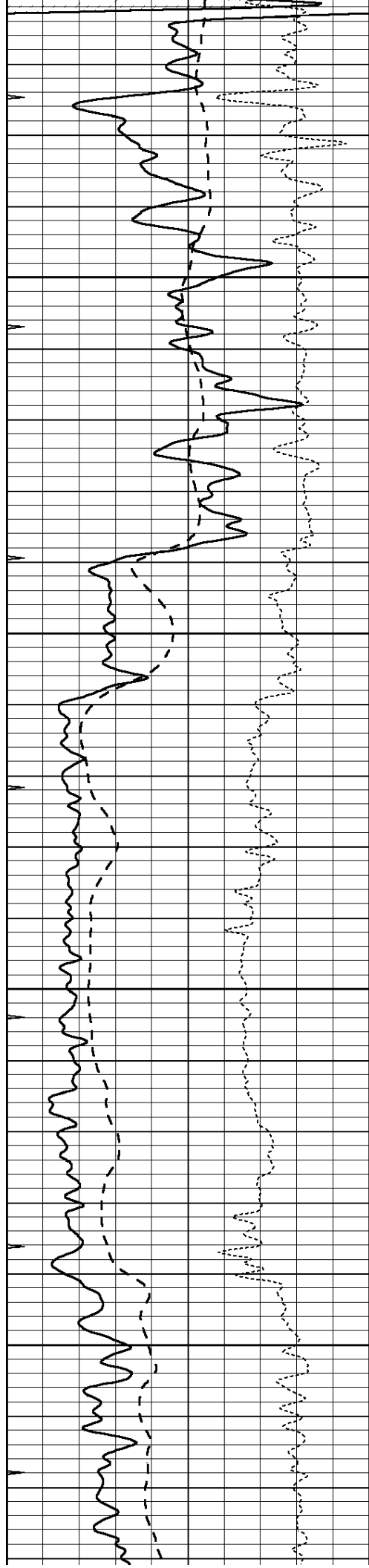
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4500

4550

4600



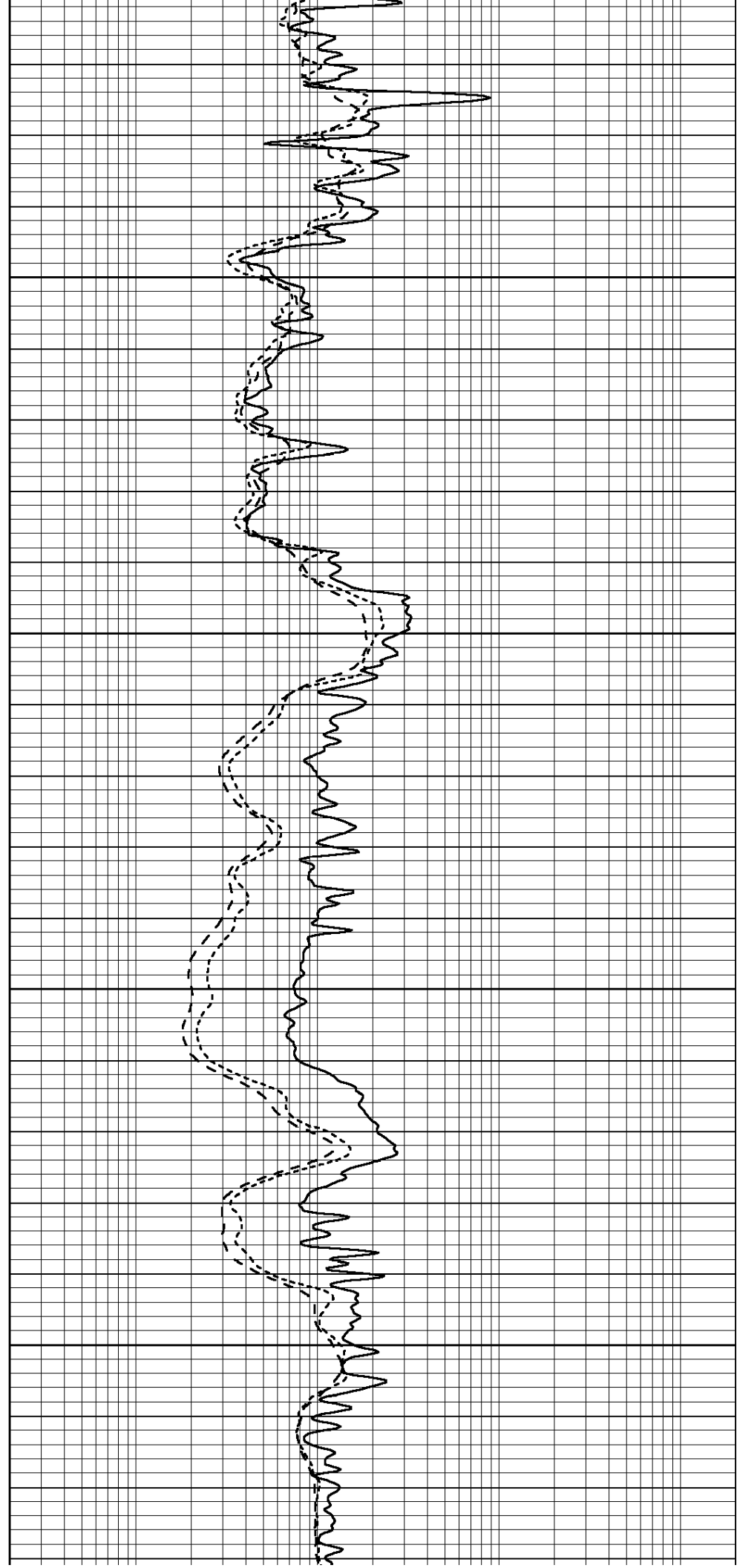


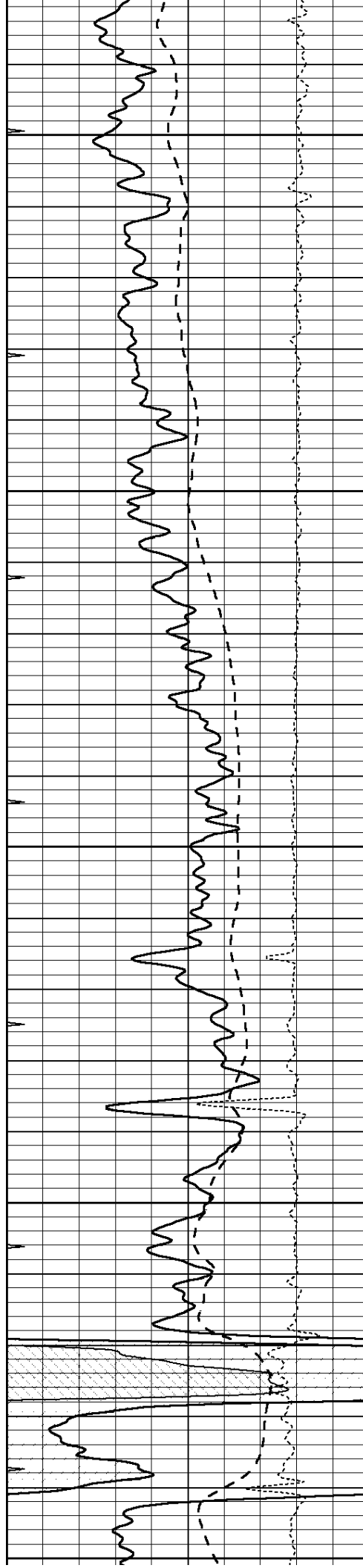
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4800





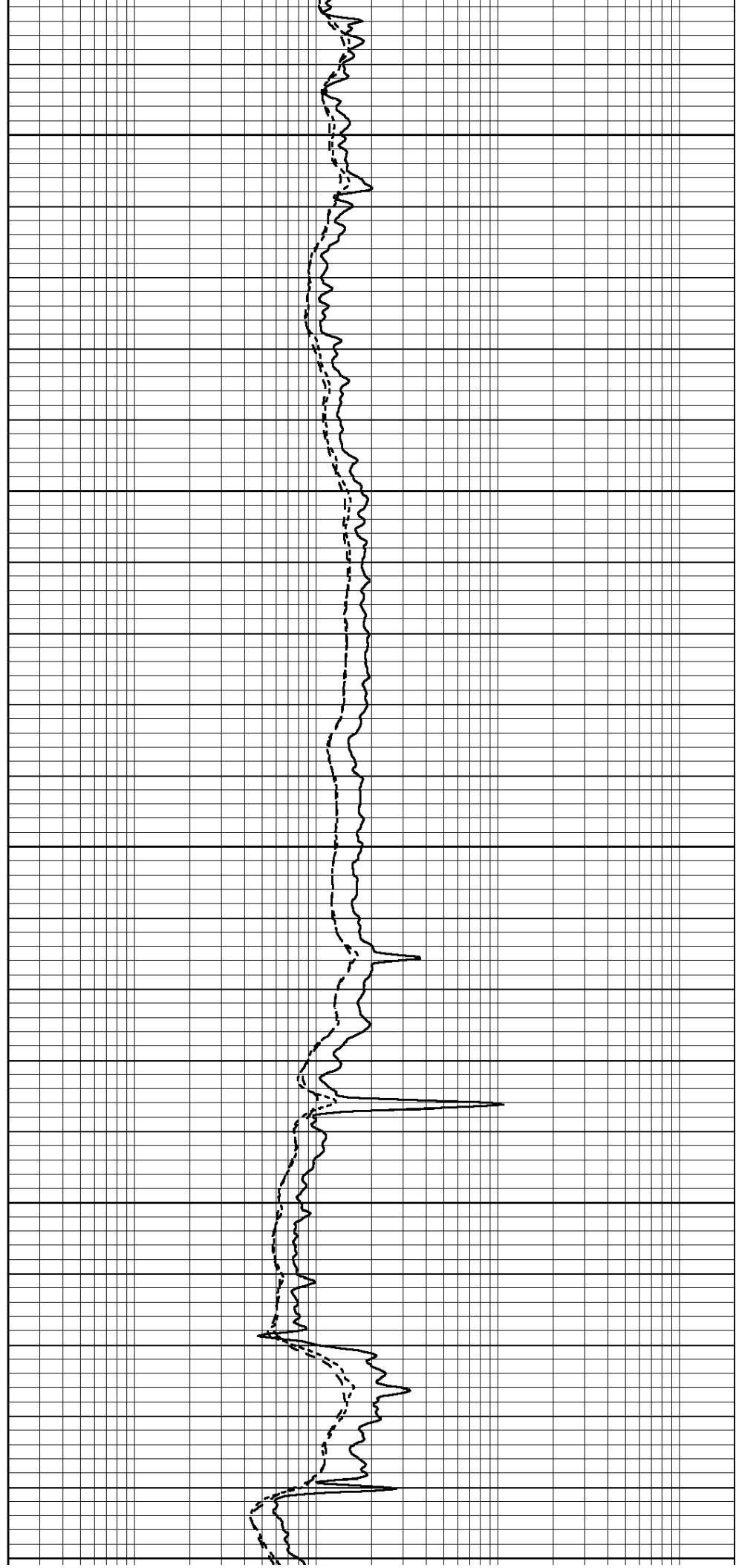
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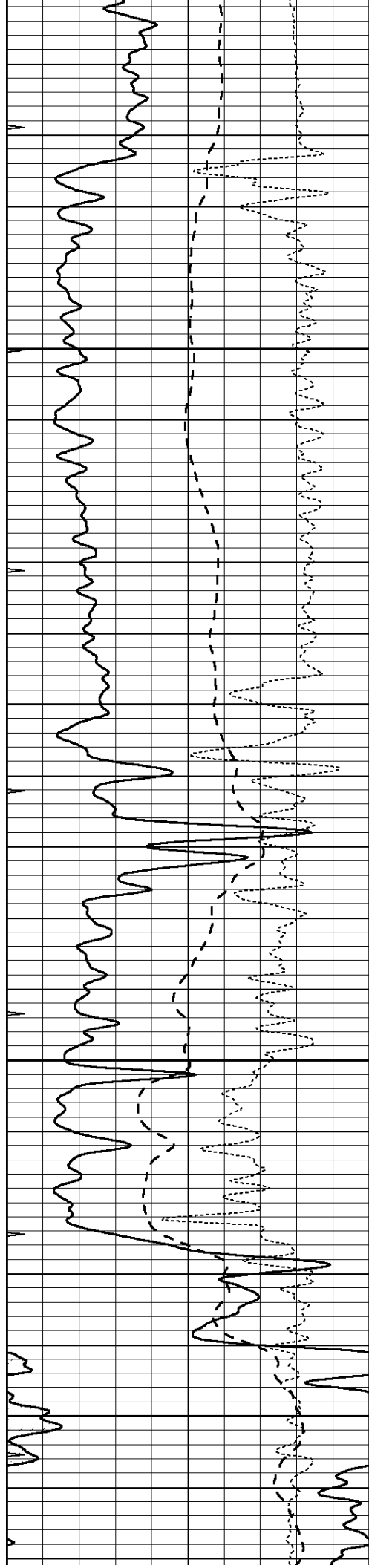
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4950

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5050



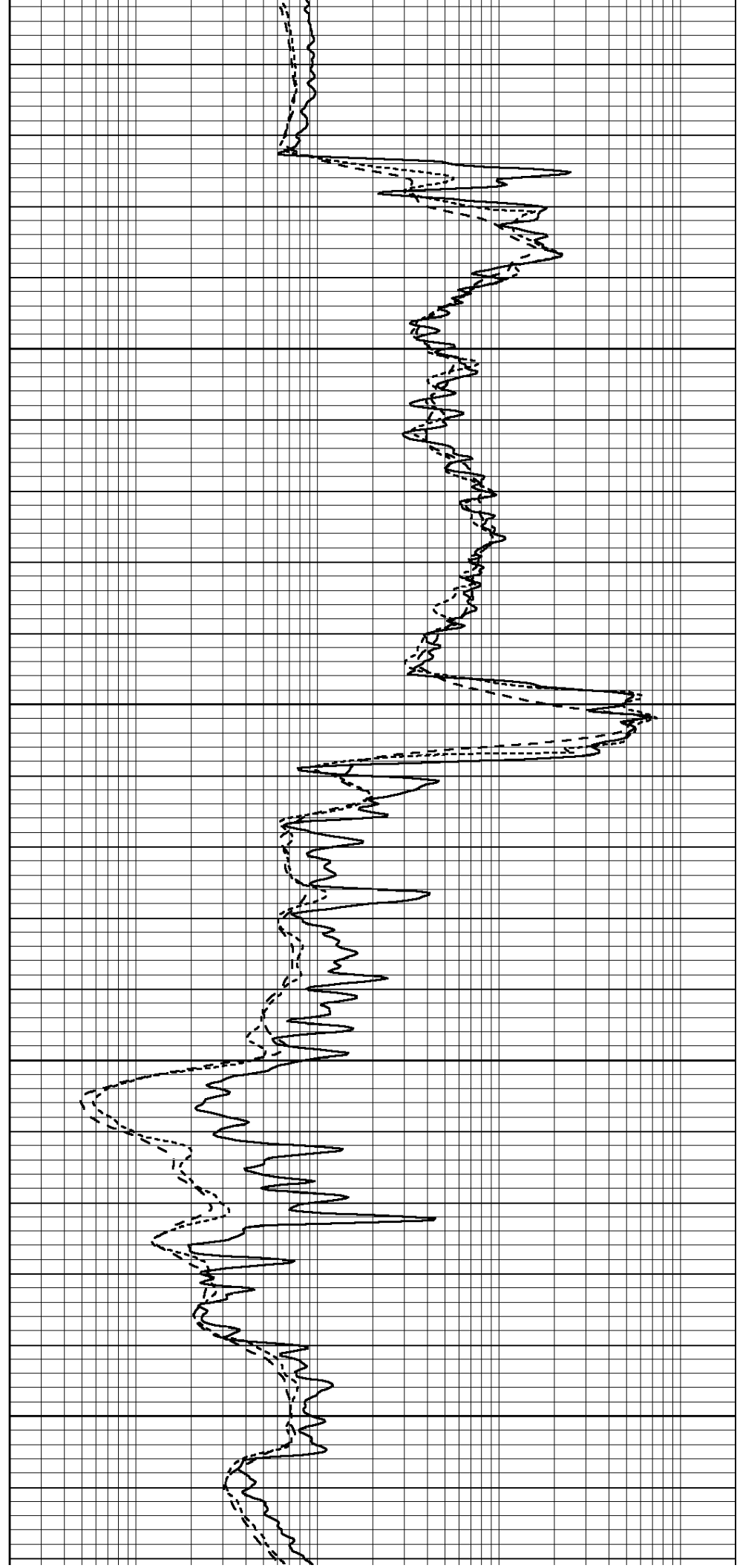


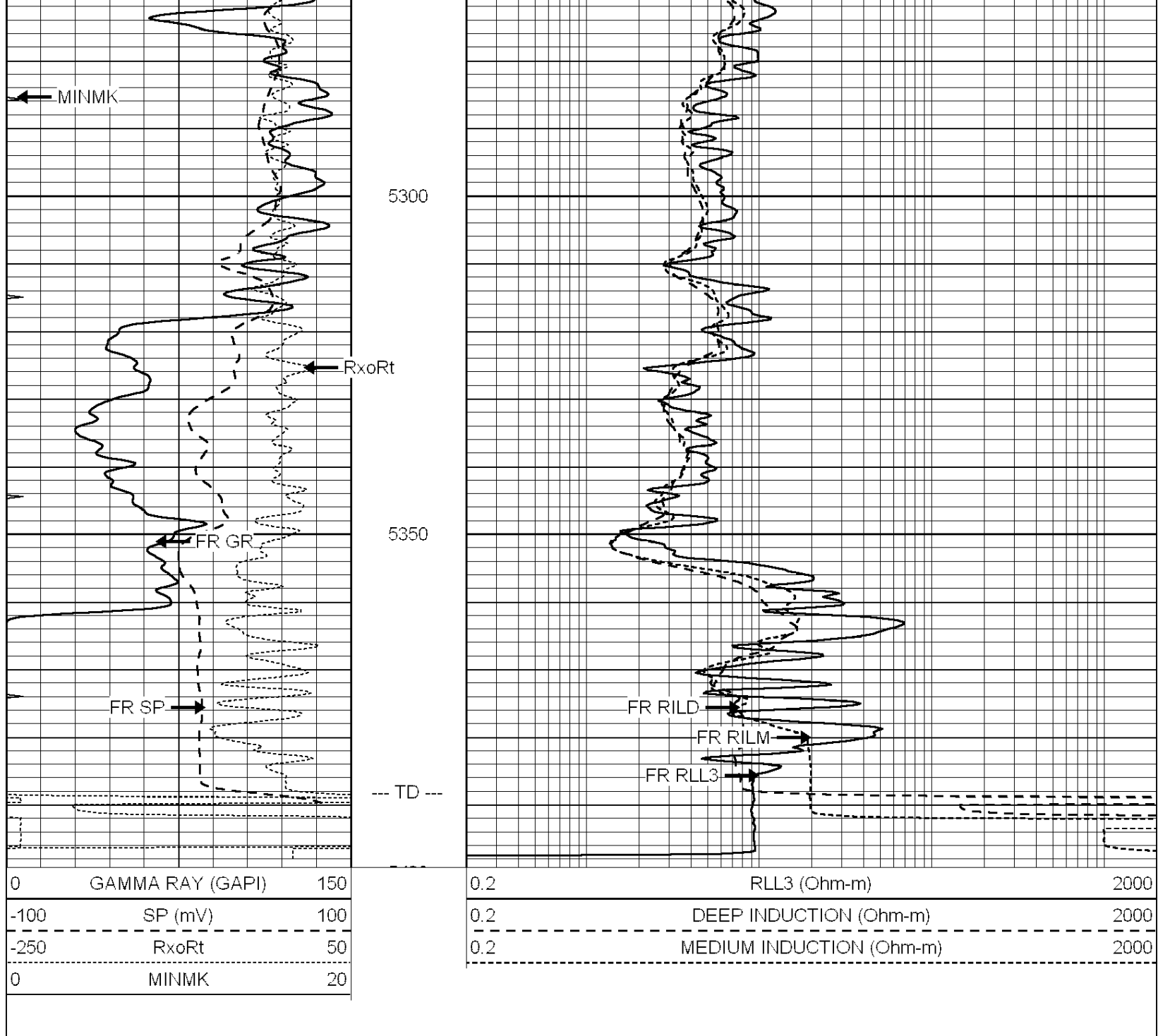
5100

5150

5200

5250





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



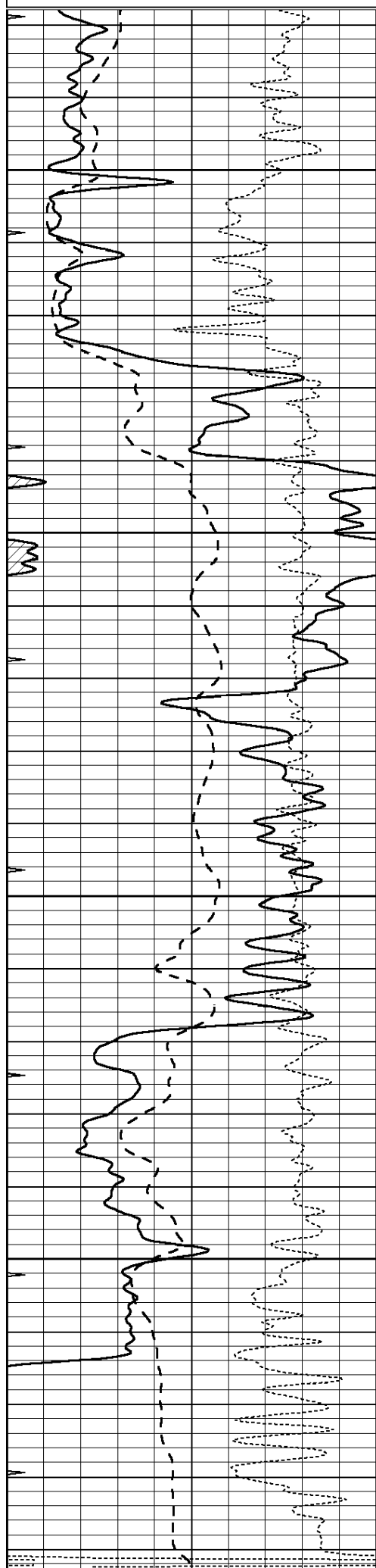
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 008015pdn.db
 Dataset Pathname: pass2.1
 Presentation Format: dil
 Dataset Creation: Sun Nov 20 20:08:44 2011 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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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

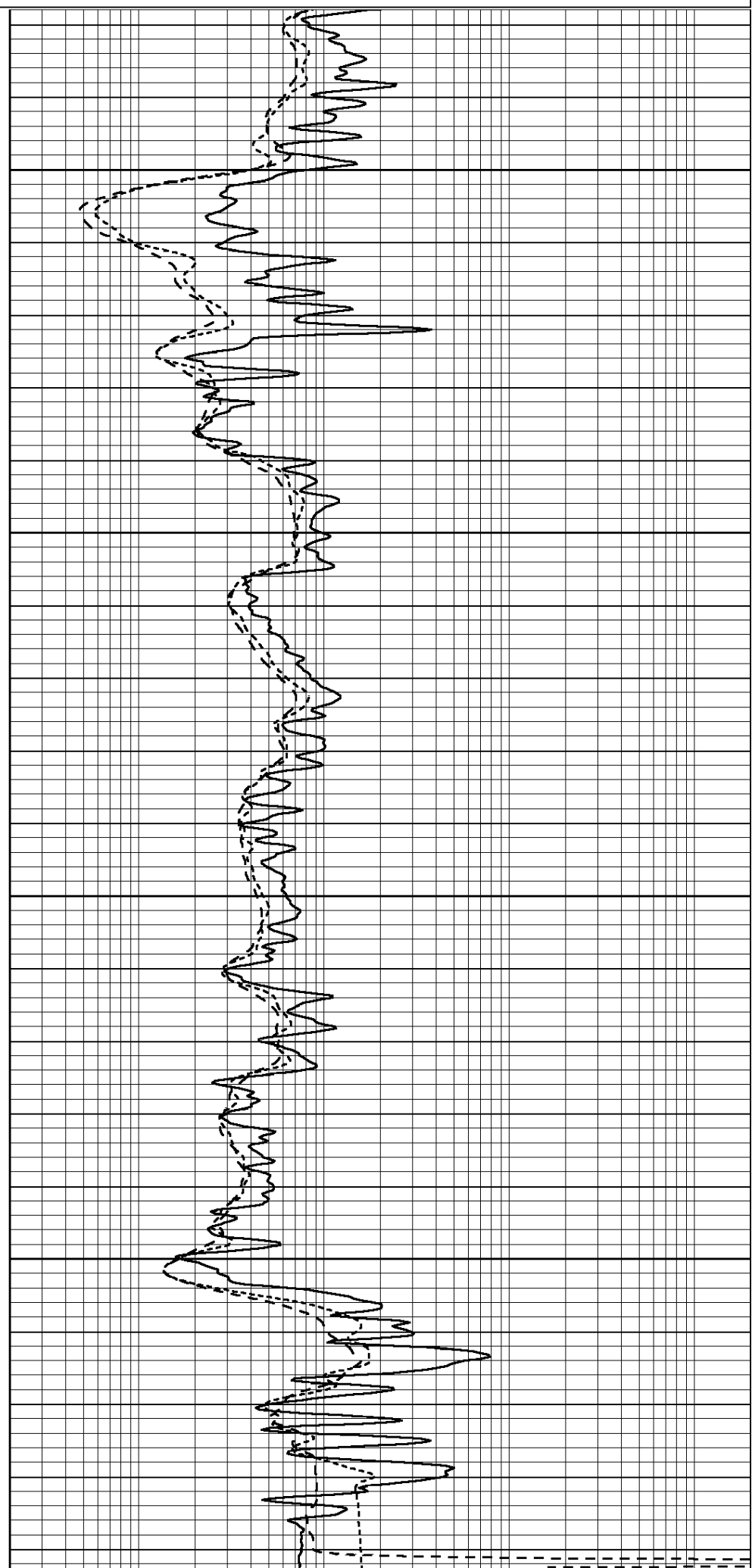


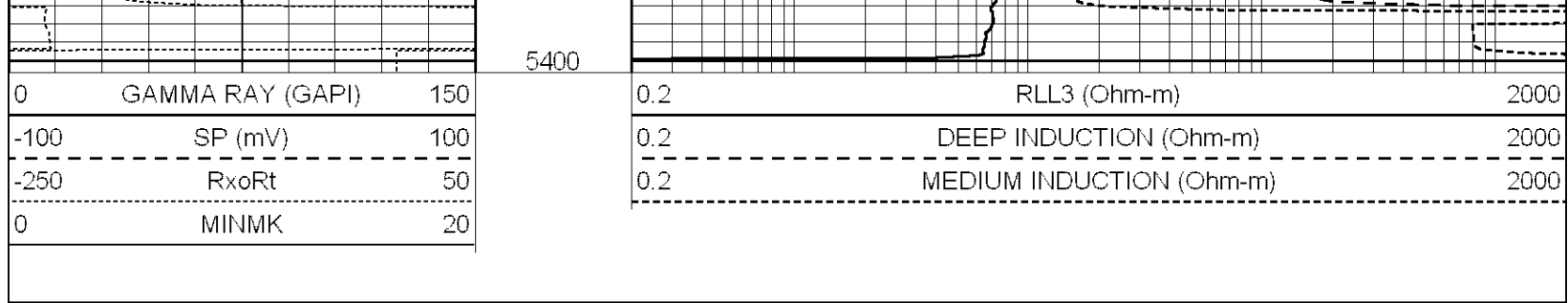
5200

5250

5300

5350





Calibration Report

Database File: 008015pdm.db
 Dataset Pathname: pass3.A
 Dataset Creation: Sun Nov 20 22:15:40 2011

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Sun Nov 20 21:15:16 2011

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	520.000	-20.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	550.000	-16.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Litho Density Calibration Report
 Serial: 002 Model: PRB
 Performed Tue Jul 03 11:12:28 2007

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1059.5	9172.0	2859.6	10210.6	cps
Window 2	976.0	7793.2	2486.1	8515.6	cps
Window 3	689.8	2930.5	1159.0	3096.2	cps
Window 4	231.9	237.2	231.1	234.0	cps
Long Space	0.0	6817.1	1510.1	7539.6	cps
Short Space	1.6	1758.1	1188.6	1898.8	cps
Rho		1.7100	2.5960	1.3800	g/cc
Pe			2.5700	1.5500	
Rib Angle	: 45.4	Rib Slope	: 1.015	Density/Spine Ratio	: 0.569
Spine Angle	: 75.4	Spine Slope	: 3.850	Spine Intercept	: -19.9

Caliper

	Readings	Reference
Low Ref	3.8	8.5
High Ref	4.9	12.0
Gain:	3.1	Offset: -3.3

Compensated Neutron Calibration Report

Serial Number: NUE_2I
 Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
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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 Nov 20 20:12:33 2011	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6500	GAPI/cps