



**SUPERIOR
Hays,
Kansas**

**DUAL
INDUCTION
LOG**

Company **CMX, INC.**
Well **BOXCAR #1**
Field **WILDCAT**
County **SUMNER** State **KANSAS**

Company **CMX, INC.**
Well **BOXCAR #1**
Field **WILDCAT**
County **SUMNER**
State **KANSAS**

Location: **API # : 15-191-22636**
730' FSL & 600' FEL
SEC 6 TWP 32S RGE 1E
Permanent Datum **GROUND LEVEL** Elevation **1259**
Log Measured From **KELLY BUSHING 11' A.G.L.**
Drilling Measured From **KELLY BUSHING**

Other Services
**CDL/CNL/PE
SONIC/MEL**
Elevation
K.B. 1270
D.F.
G.L. 1259

Date	12-9-11
Run Number	ONE
Depth Driller	4090
Depth Logger	4090
Bottom Logged Interval	4088
Top Log Interval	00
Casing Driller	347
Casing Logger	346
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.0 / 53
pH / Fluid Loss	12.0 / 6.8
Source of Sample	FLOWLINE
Rim @ Meas. Temp	1.20 @ 76F
Rmf @ Meas. Temp	0.90 @ 76F
Rmc @ Meas. Temp	1.44 @ 76F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.790 @ 115F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	3:30 A.M.
Maximum Recorded Temperature	115F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	KEN LEBLANC

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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: WICHITA, S ON I-35 TO WELLINGTON EXIT, 1W, 1N, W & N INTO.



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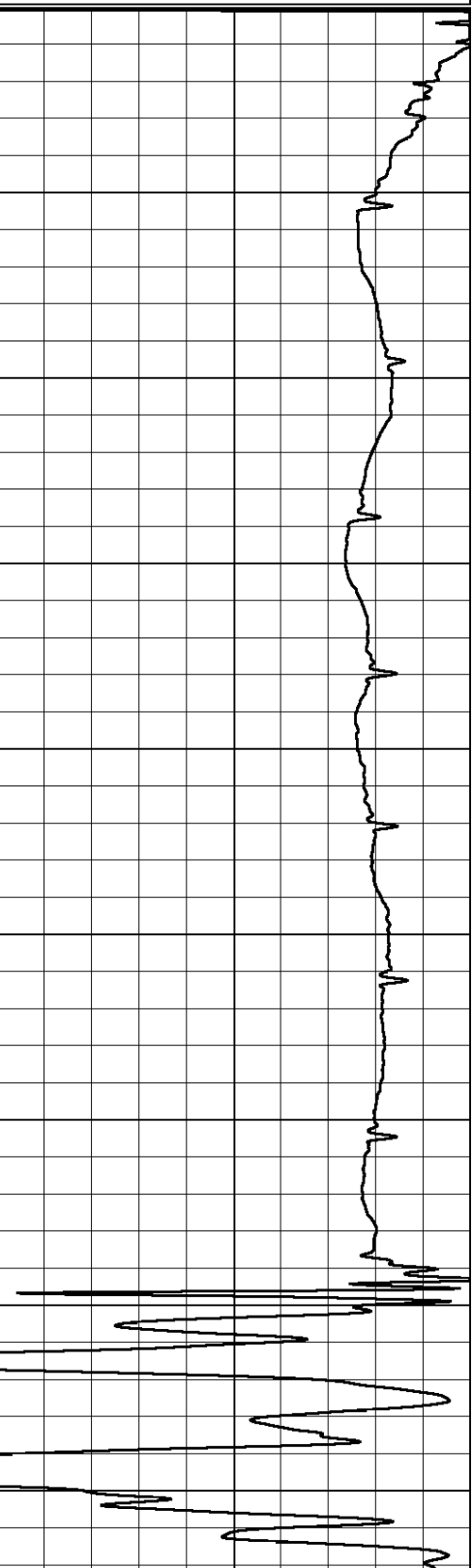
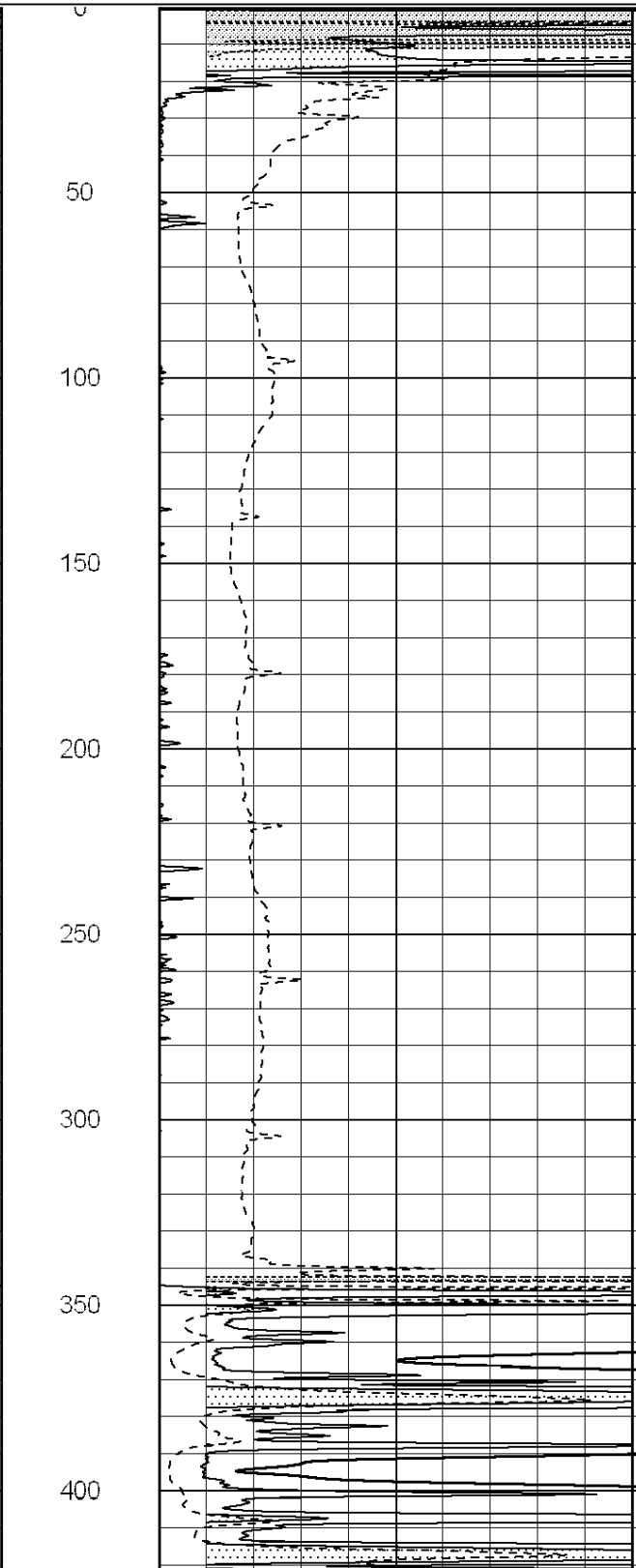
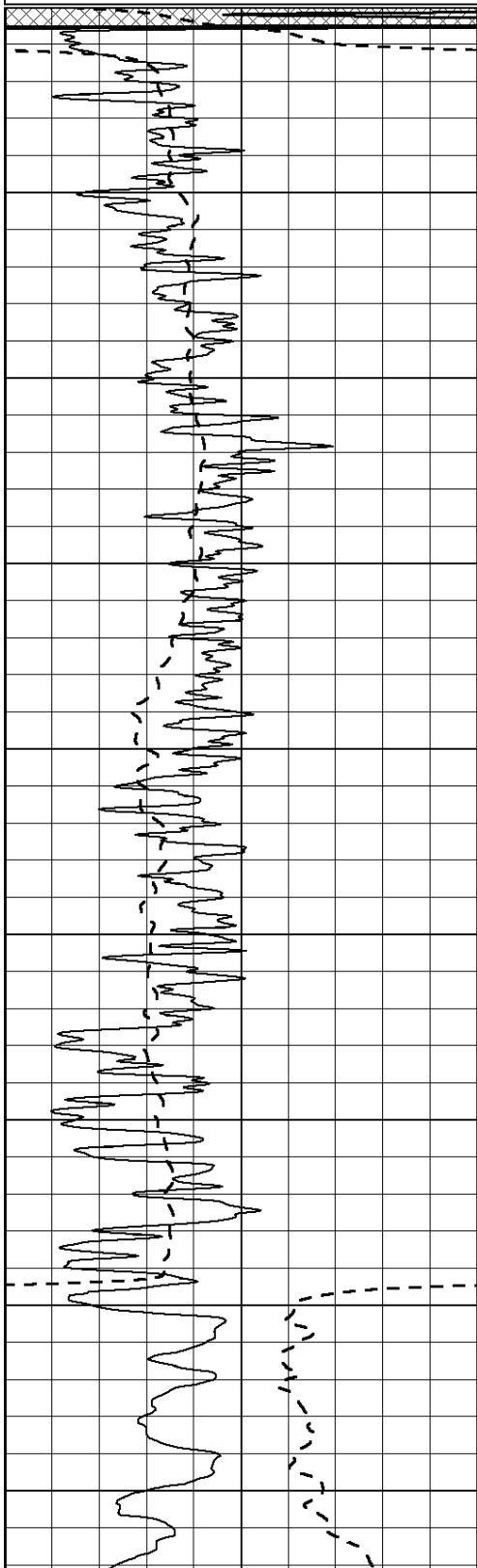
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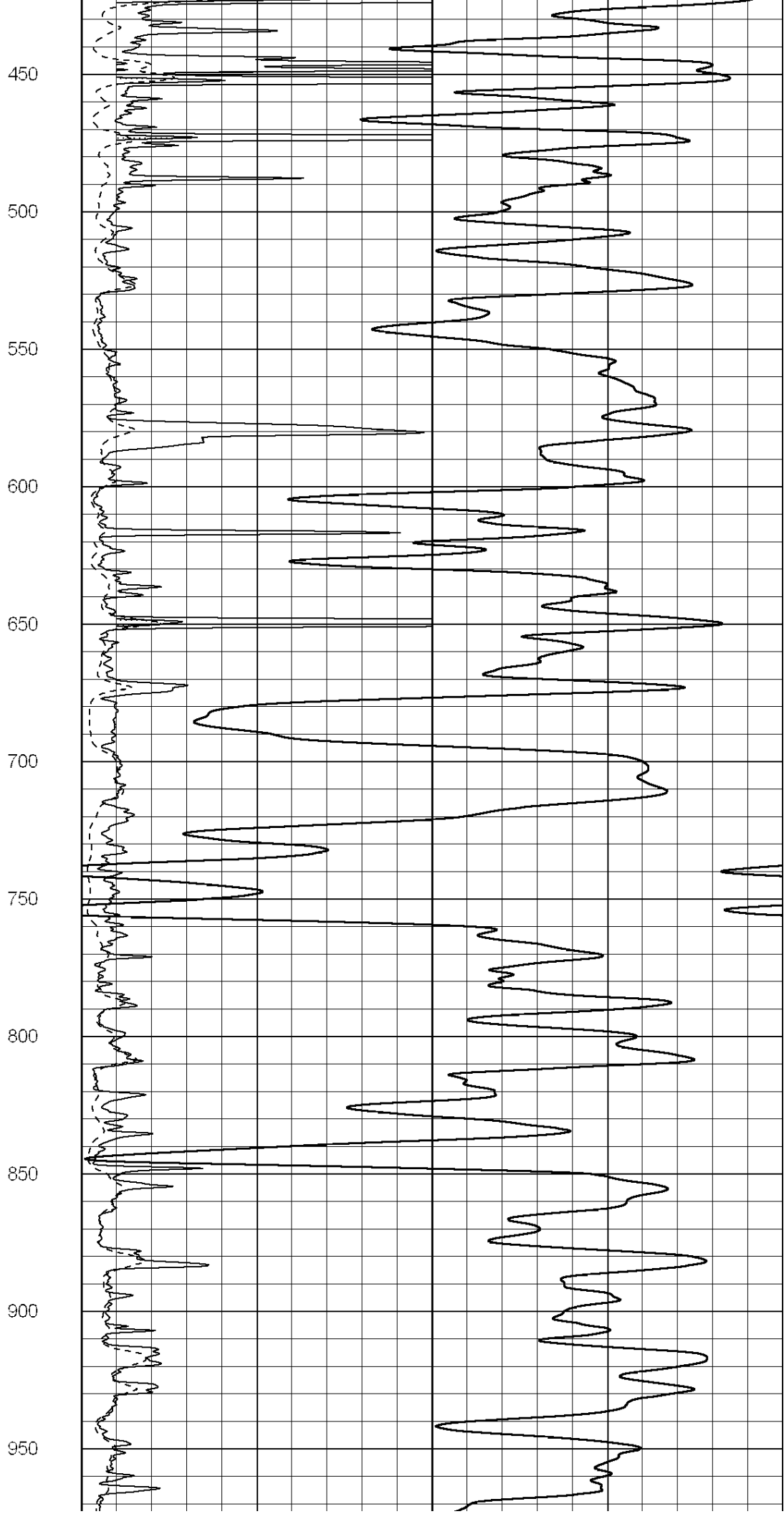
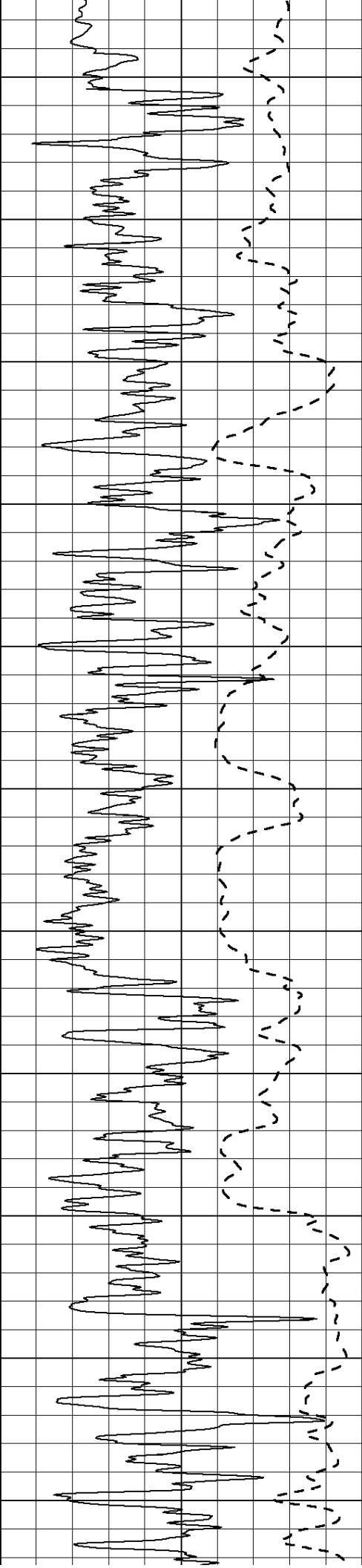
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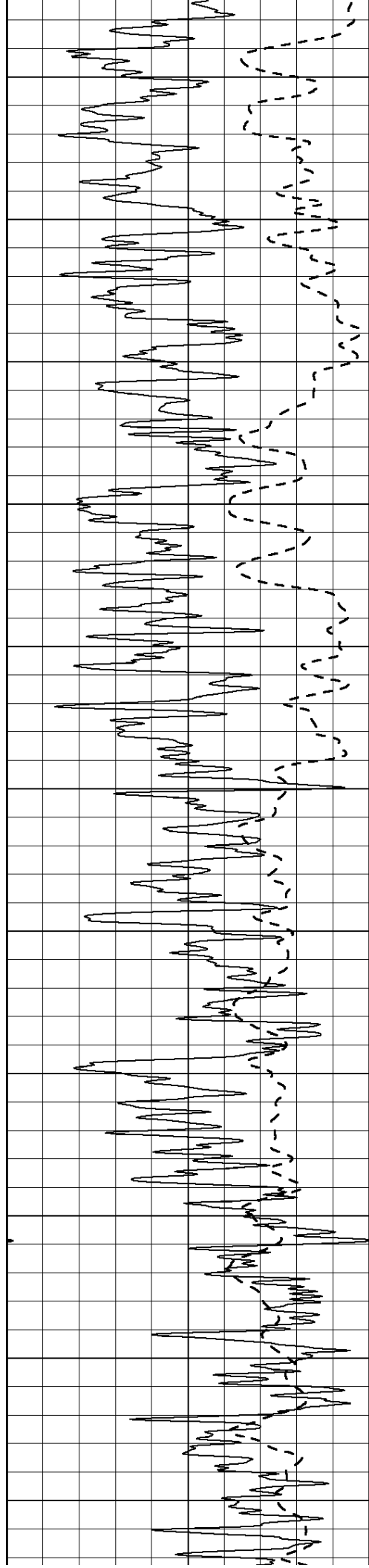
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-100	SP (mV)	100

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

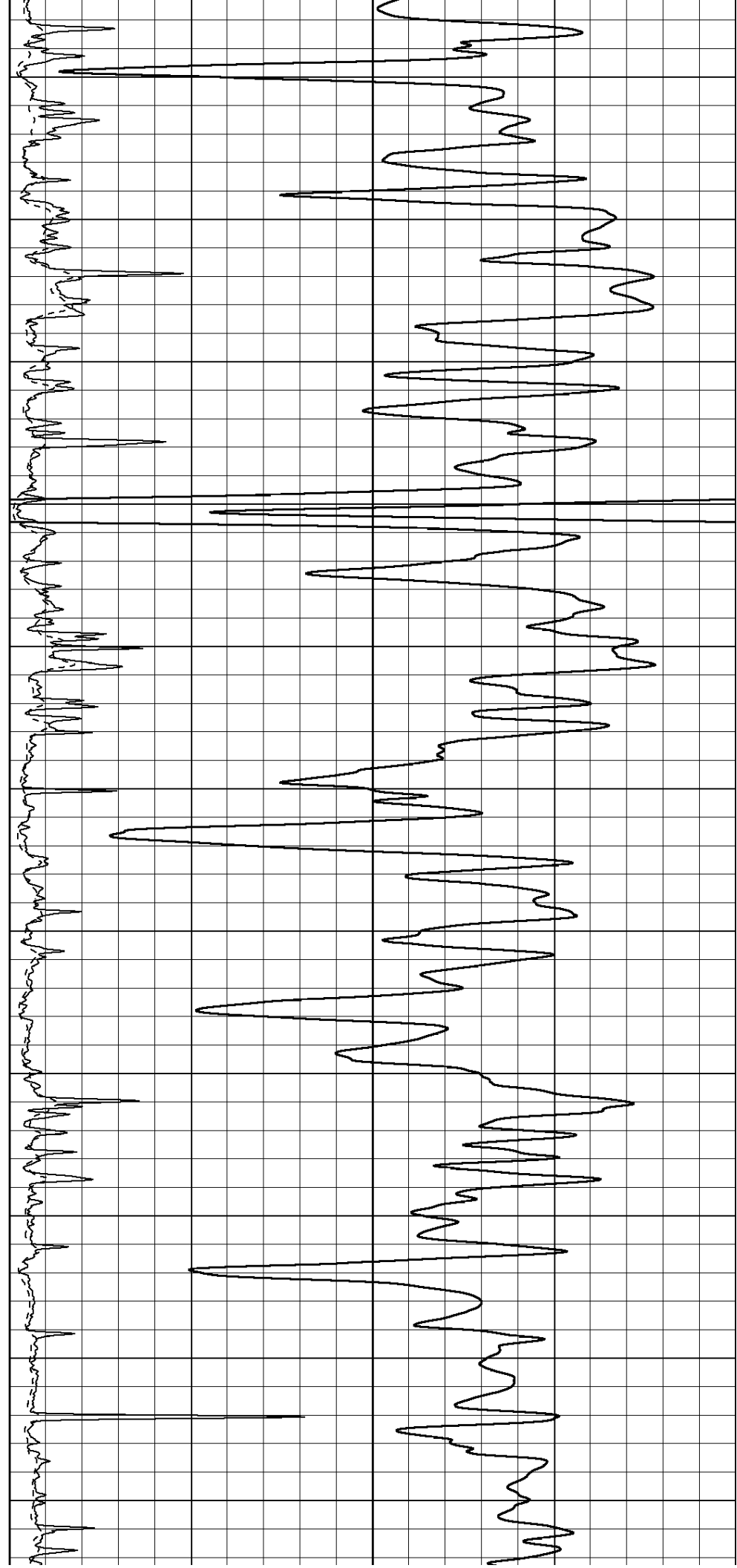
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50	RLL3 X10 (Ohm-m)	500

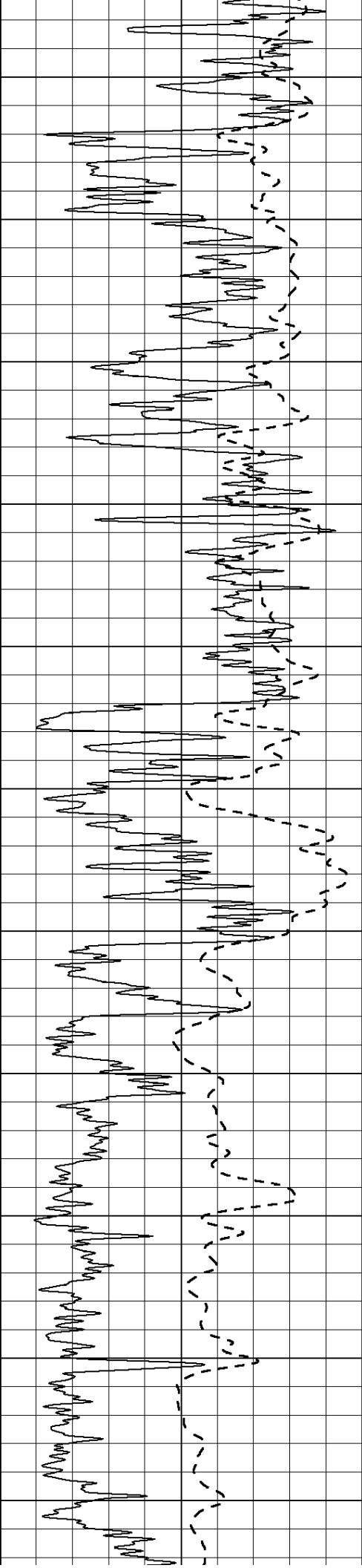




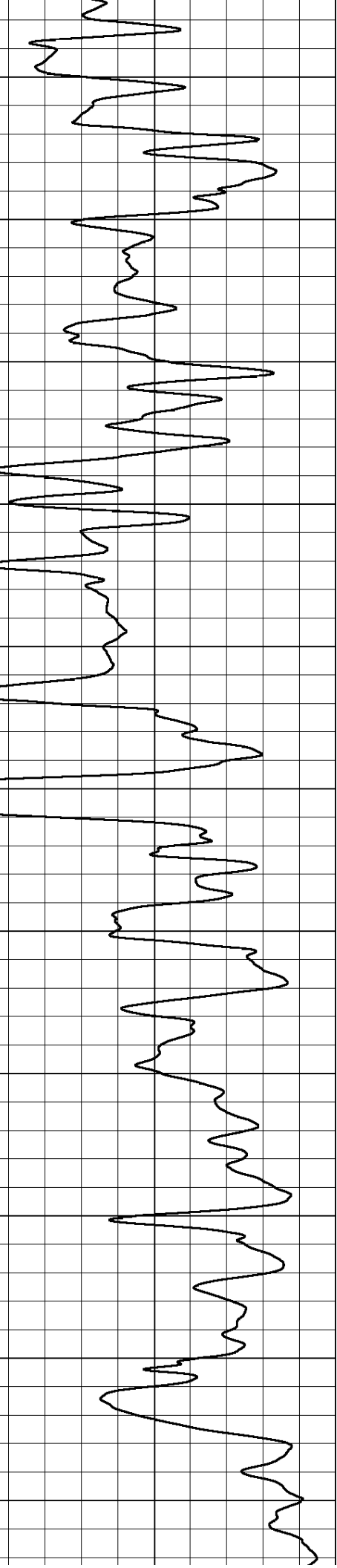
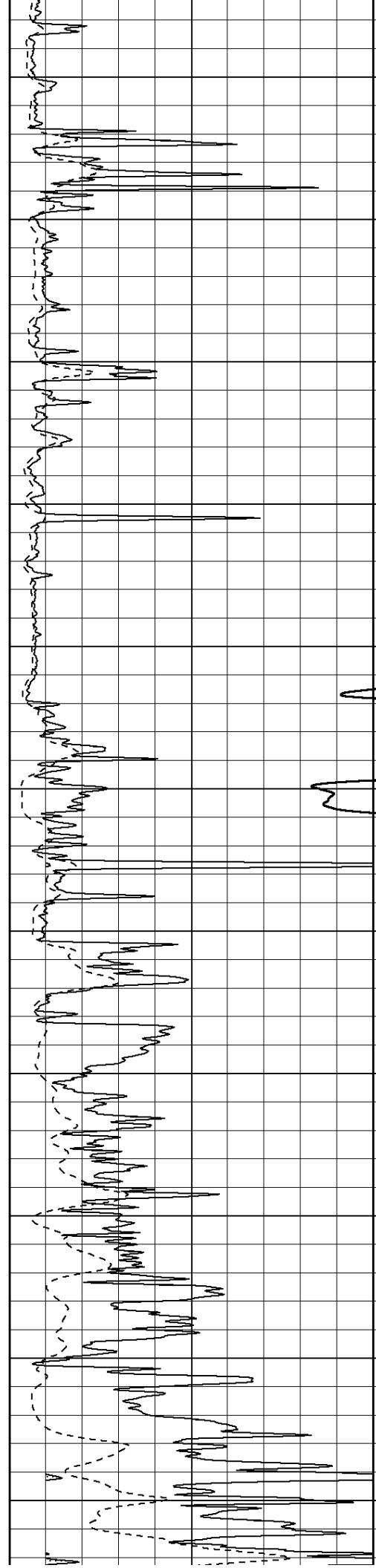


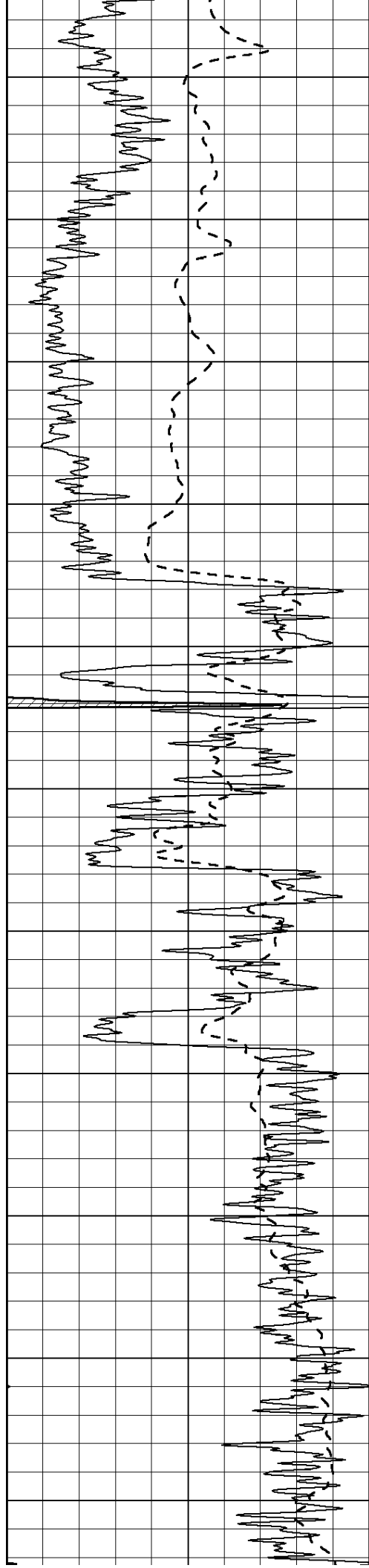
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1050
1100
1150
1200
1250
1300
1350
1400
1450
1500



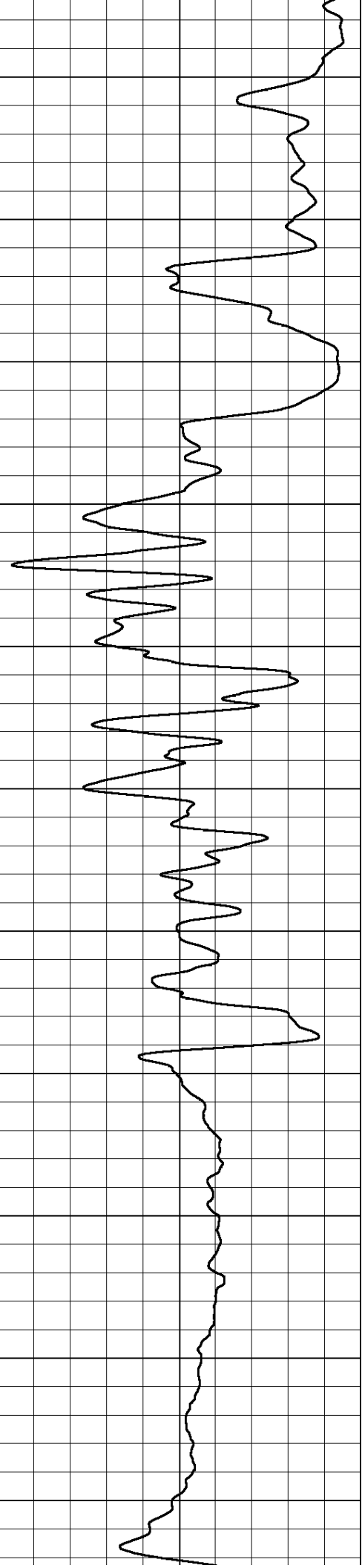
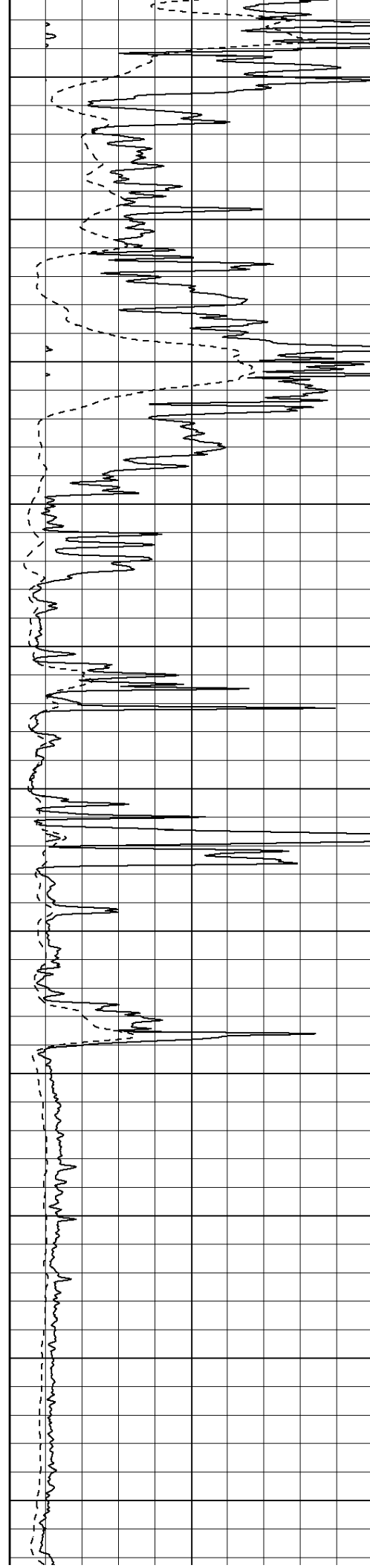


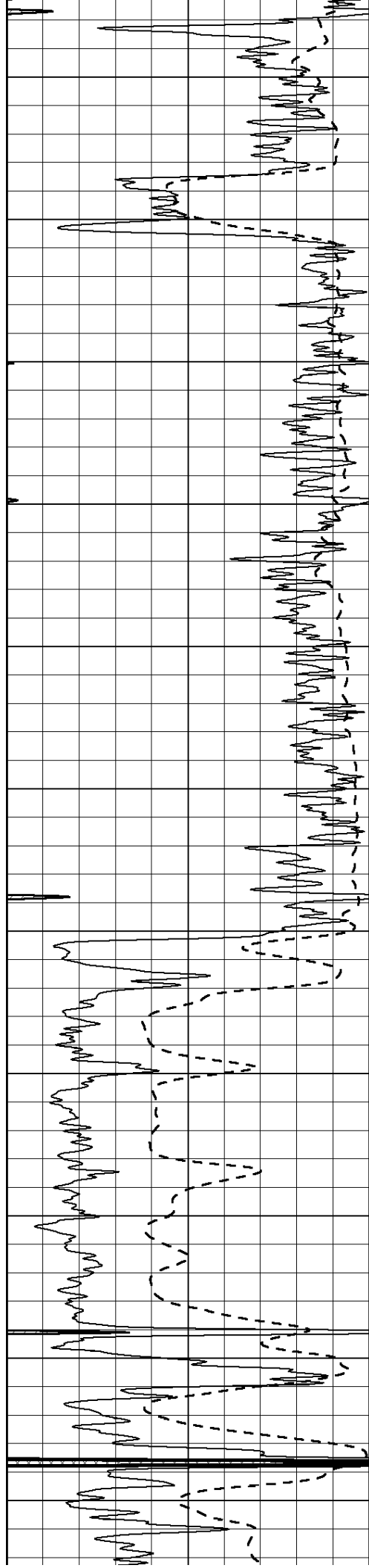
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1600
1650
1700
1750
1800
1850
1900
1950
2000
2050



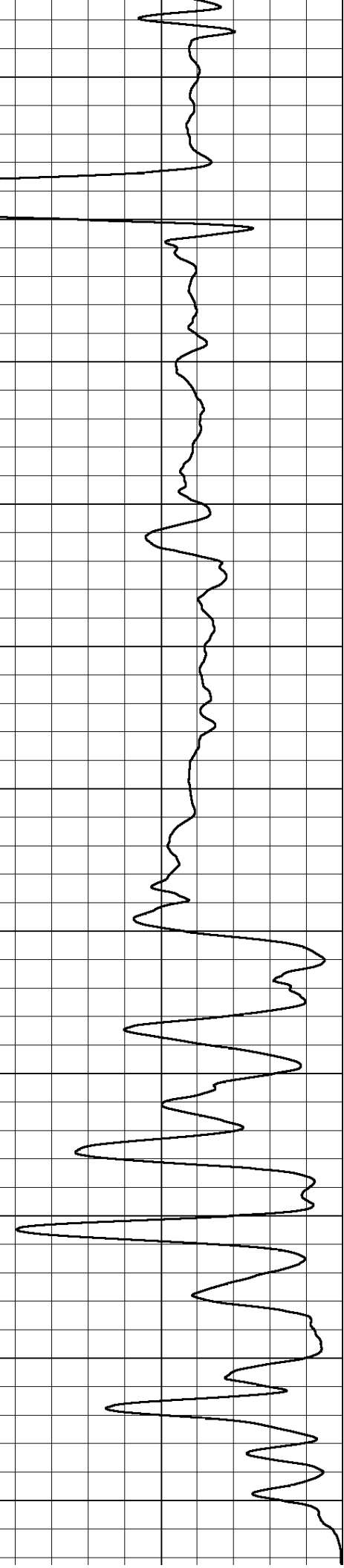
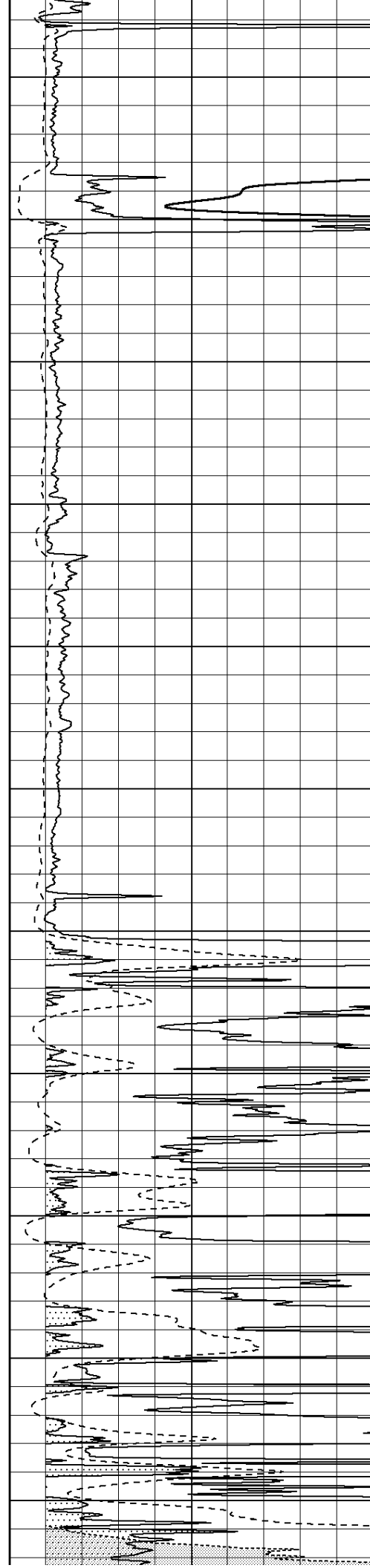


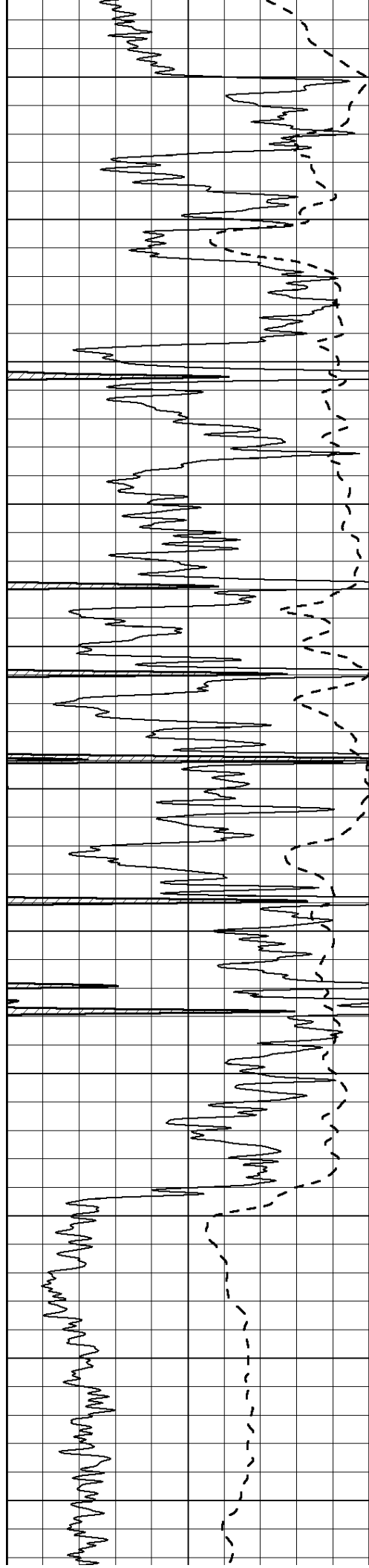
2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600





2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150





3200

3250

3300

3350

3400

3450

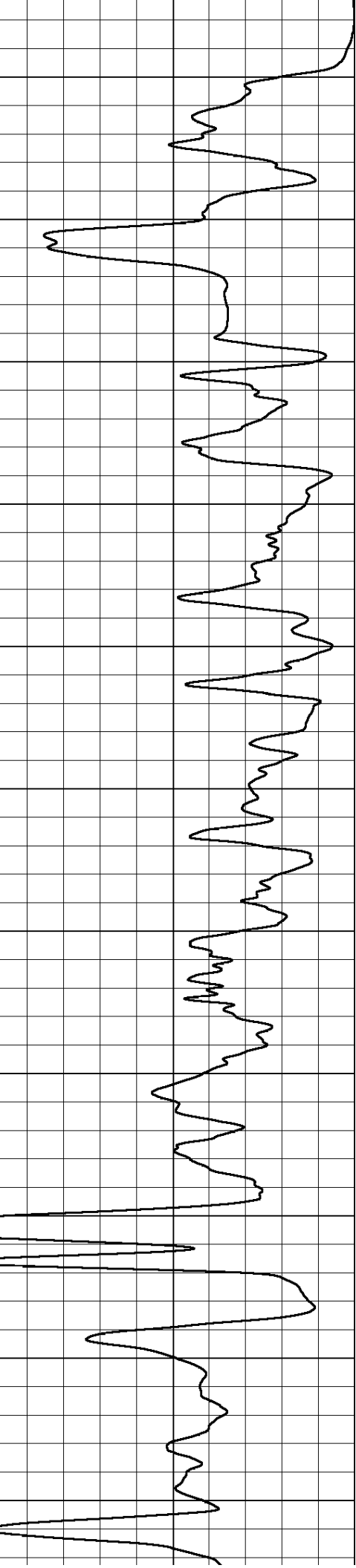
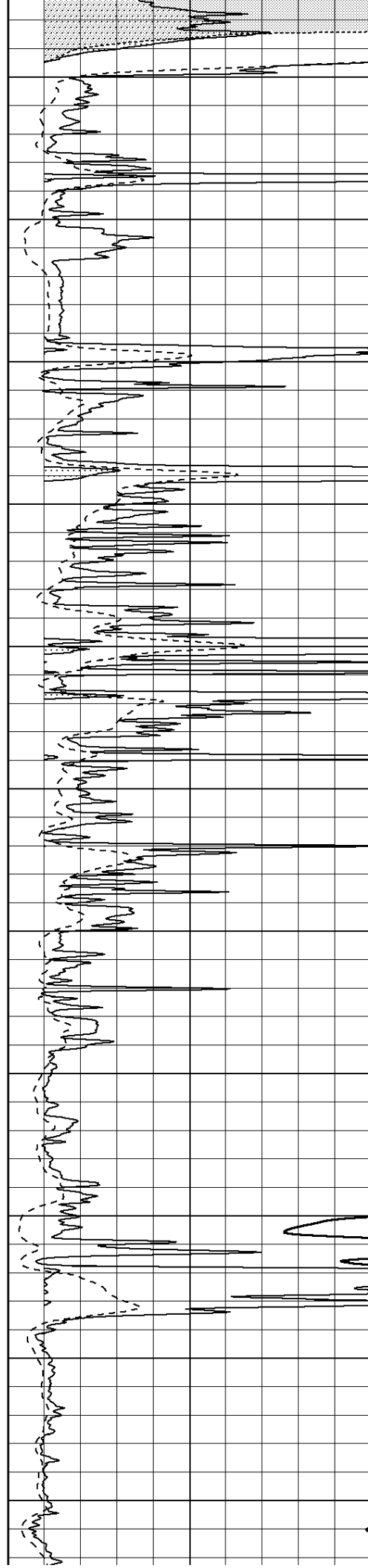
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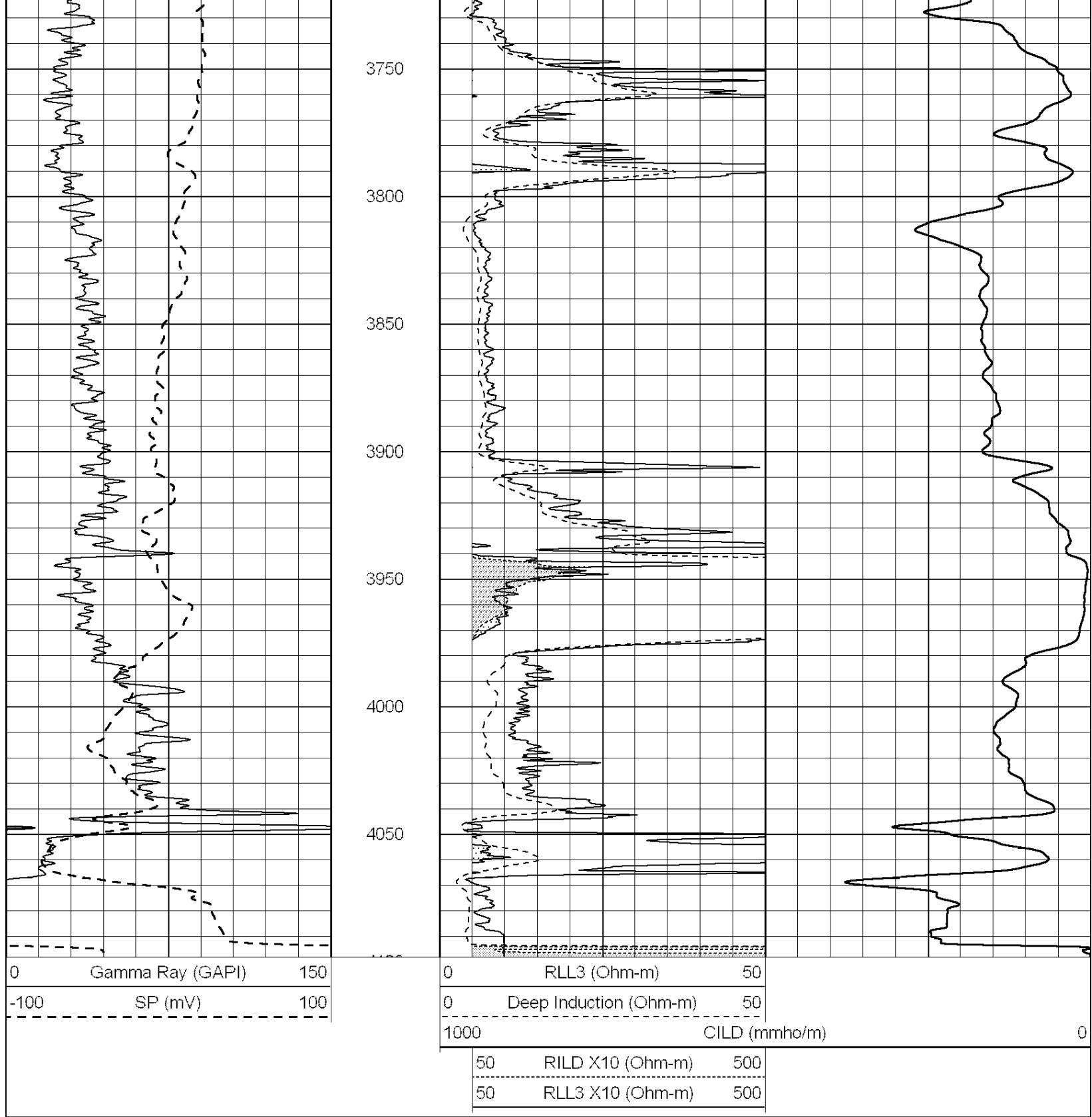
3550

3600

3650

3700





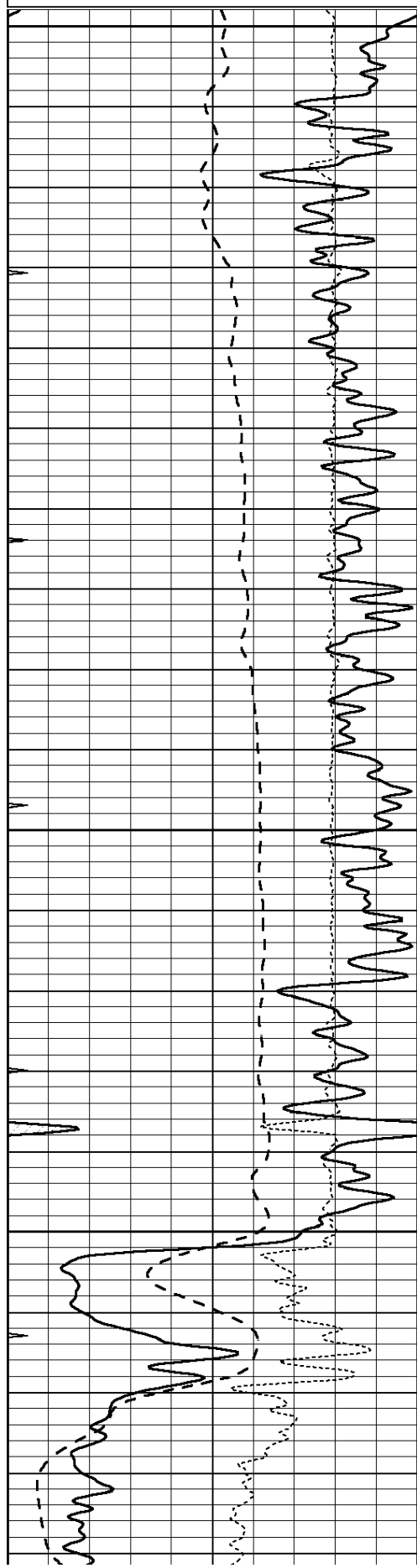
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MAIN SECTION

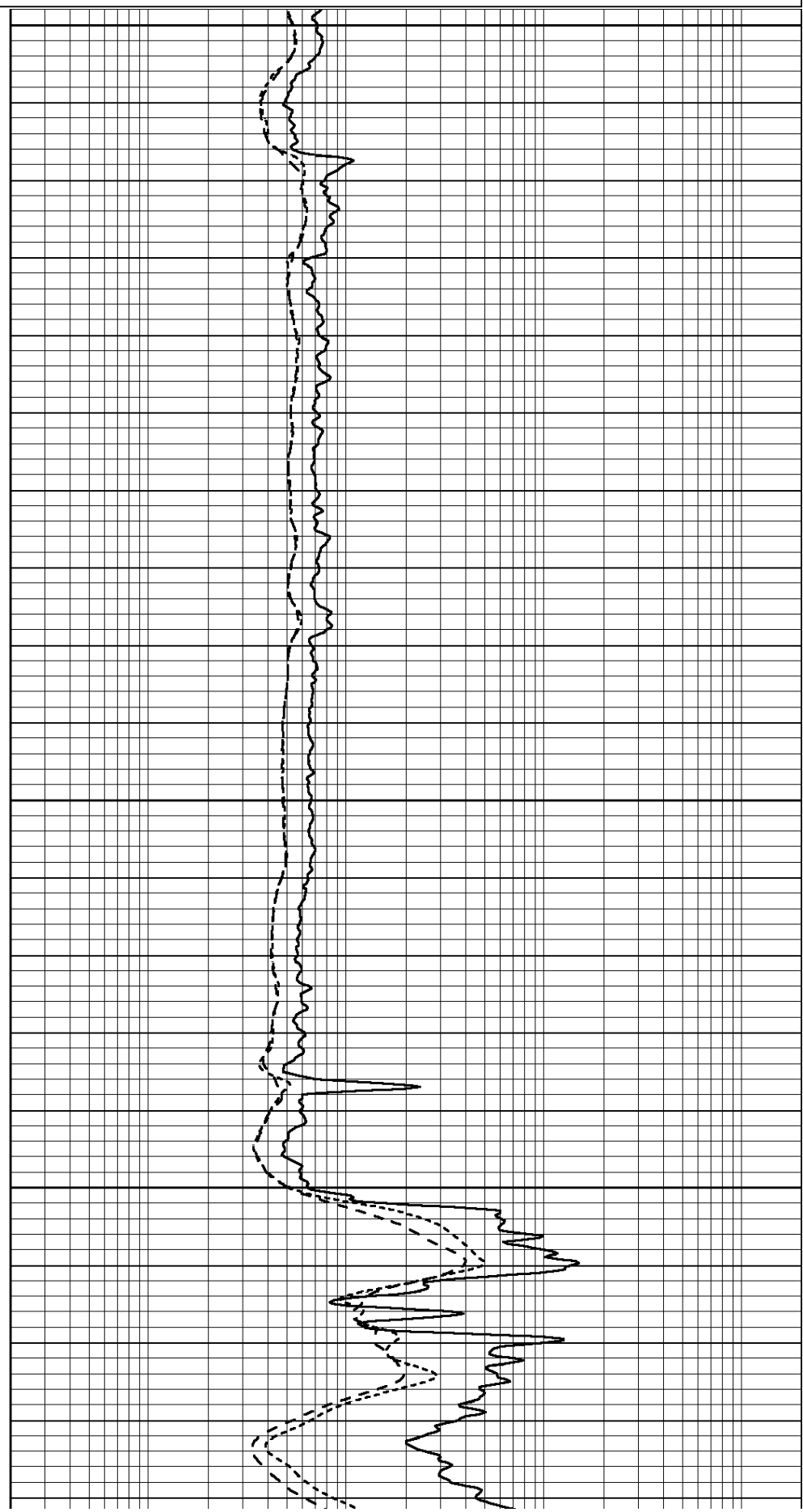
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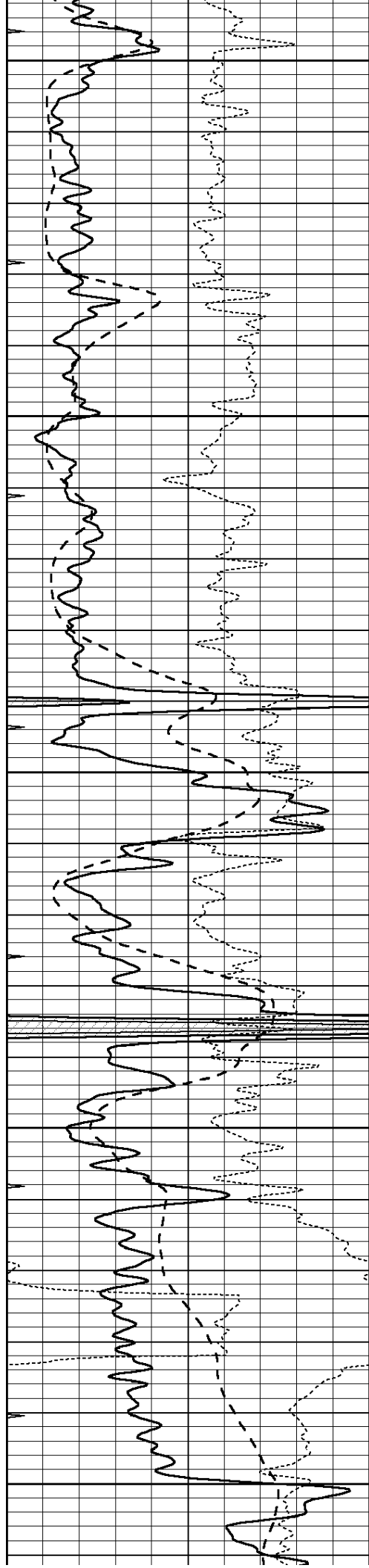
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

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



2800
2850
2900
2950





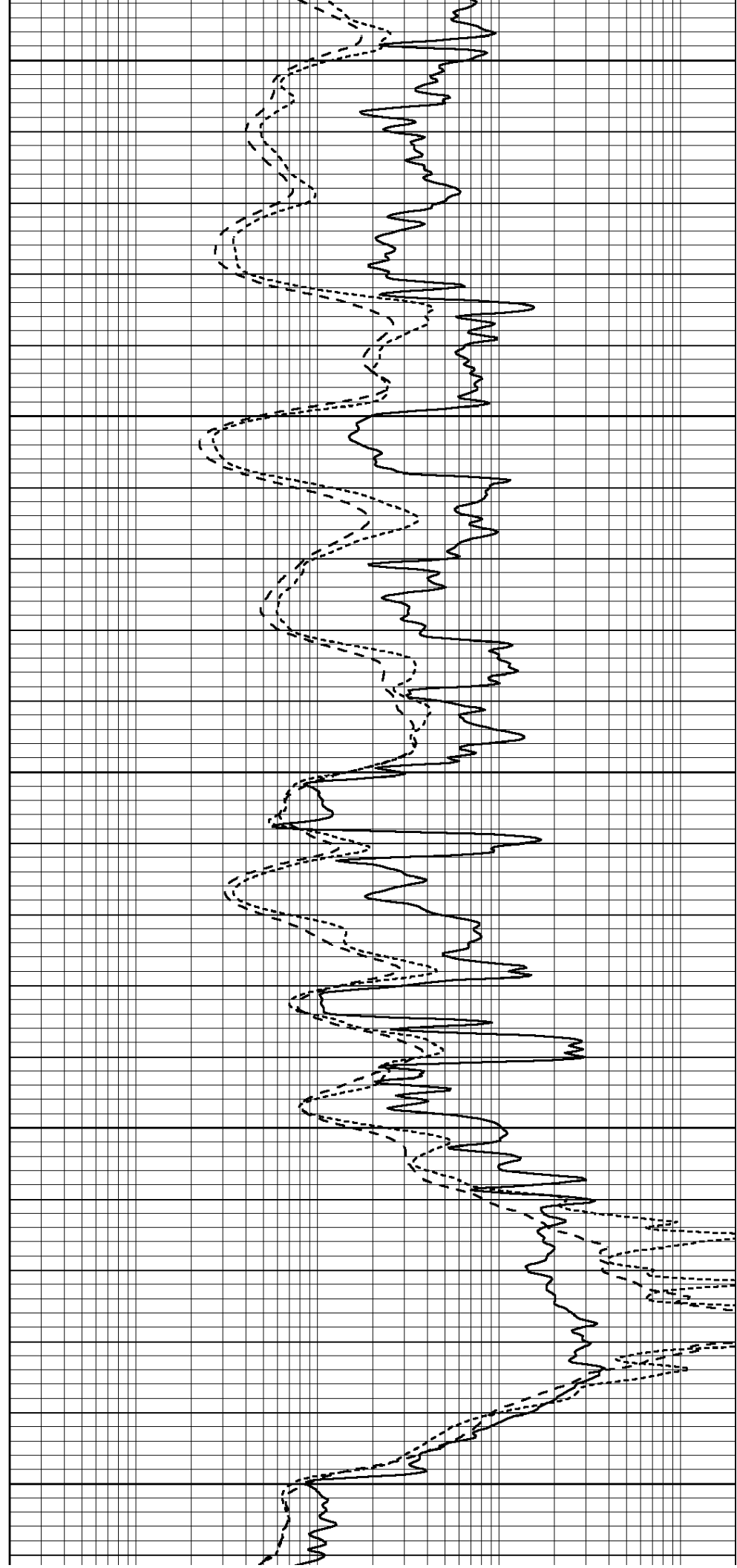
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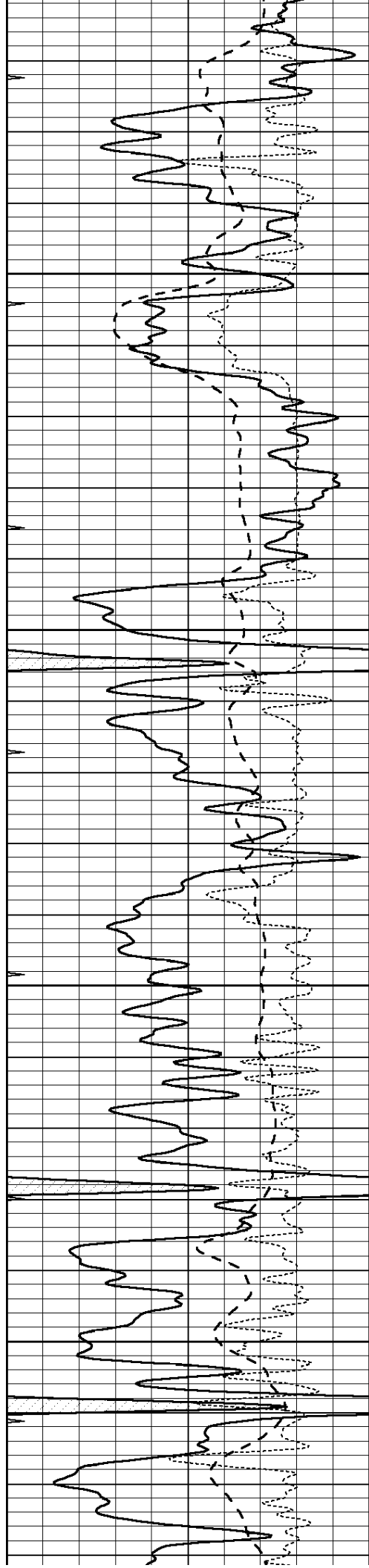
3050

3100

3150

3200



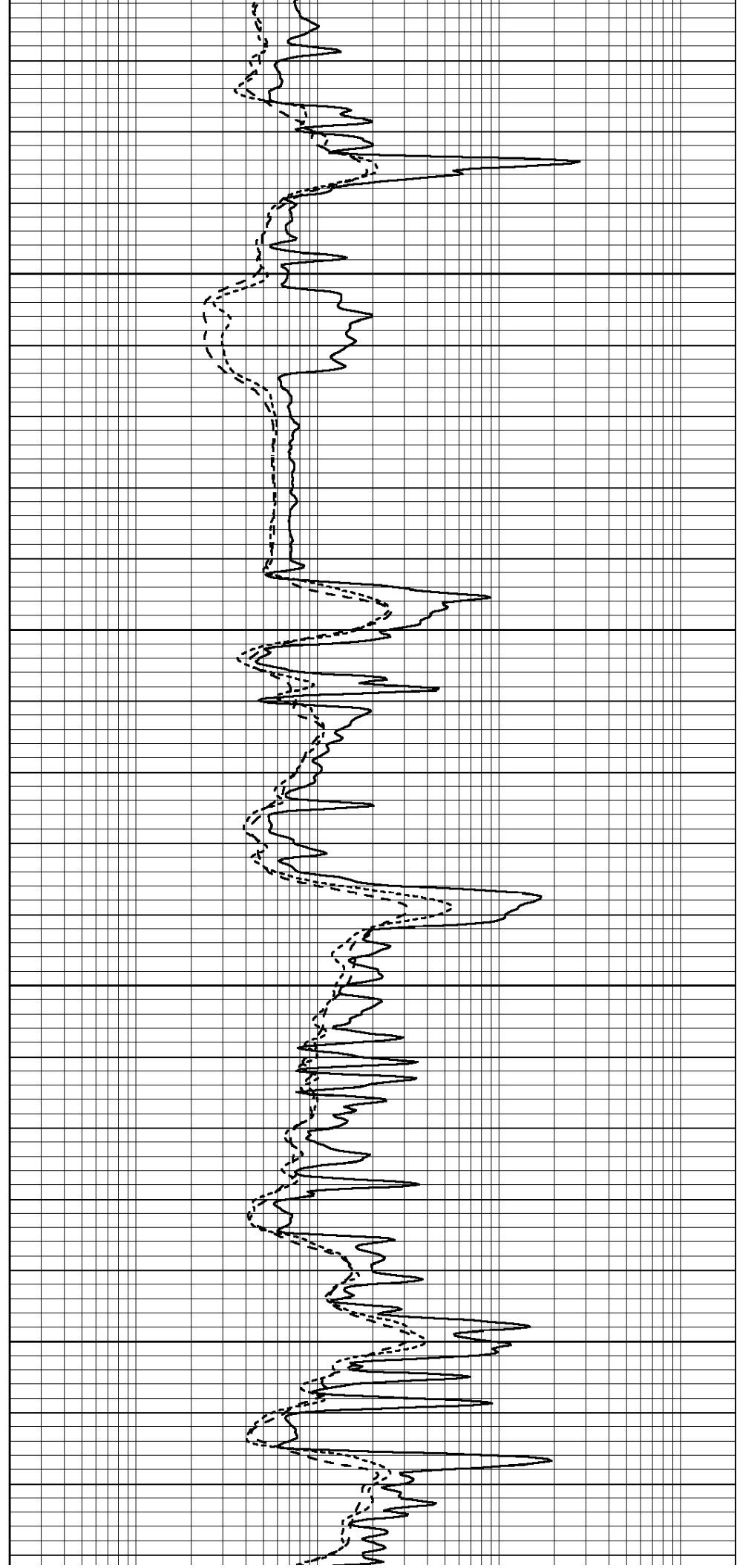


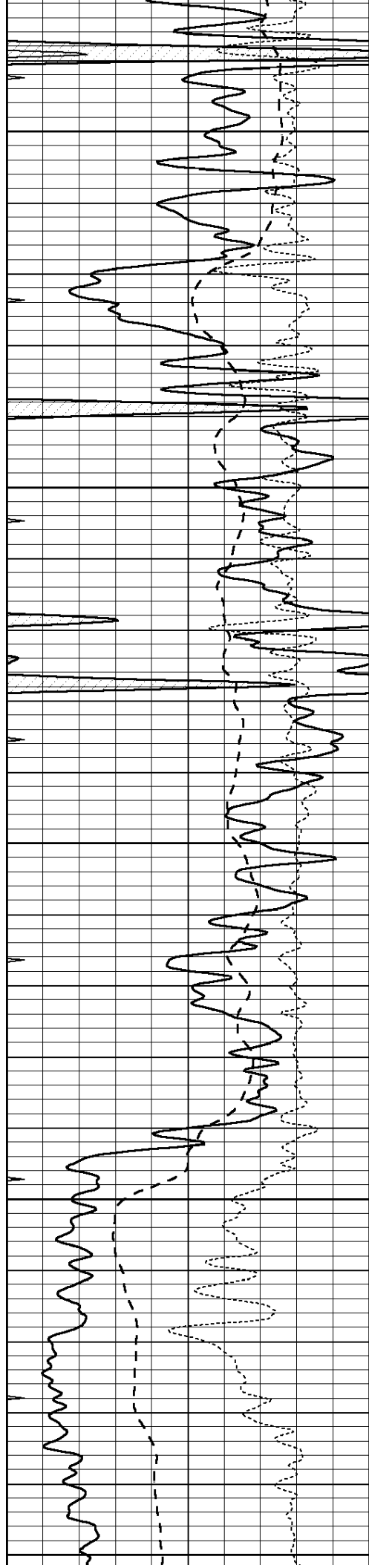
3250

3300

3350

3400





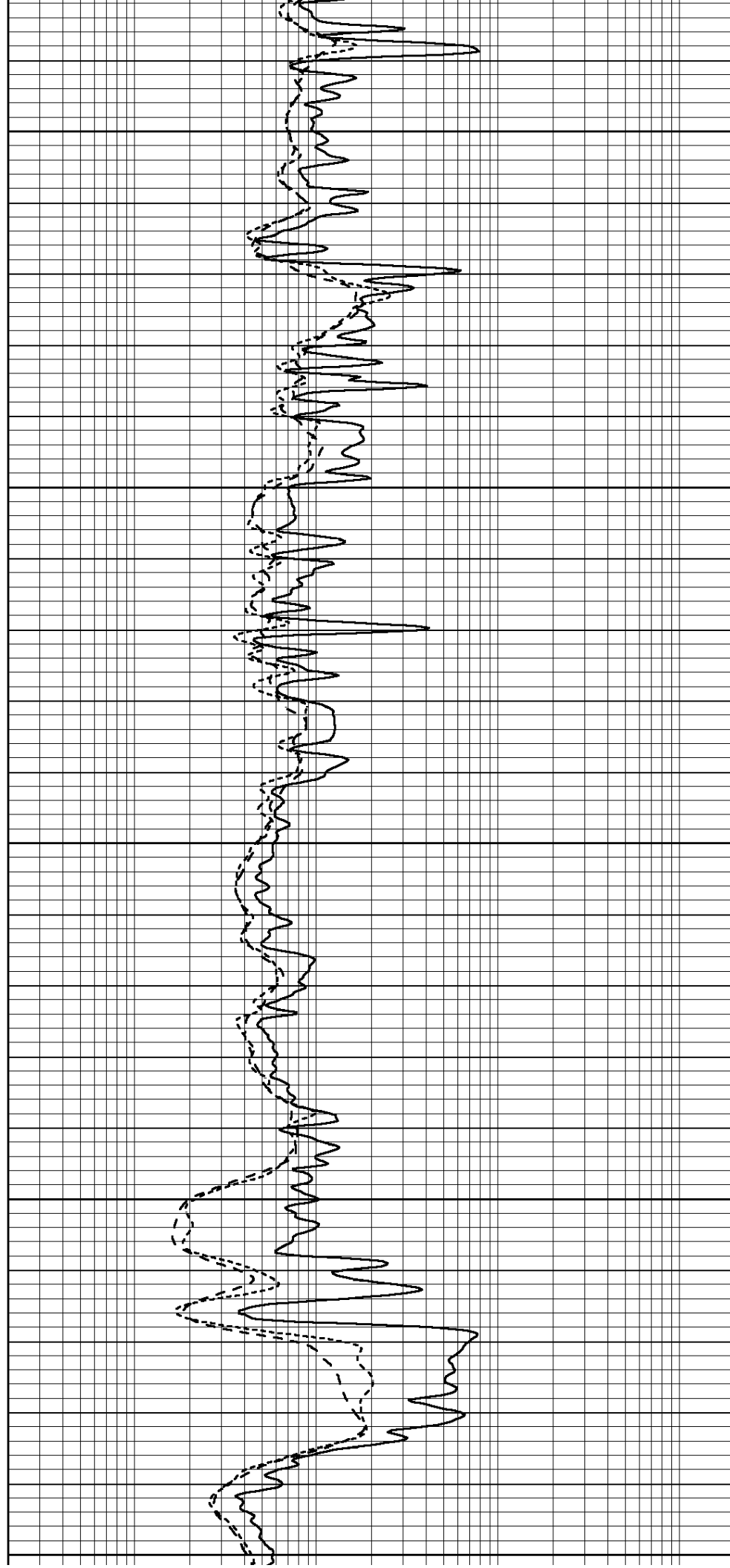
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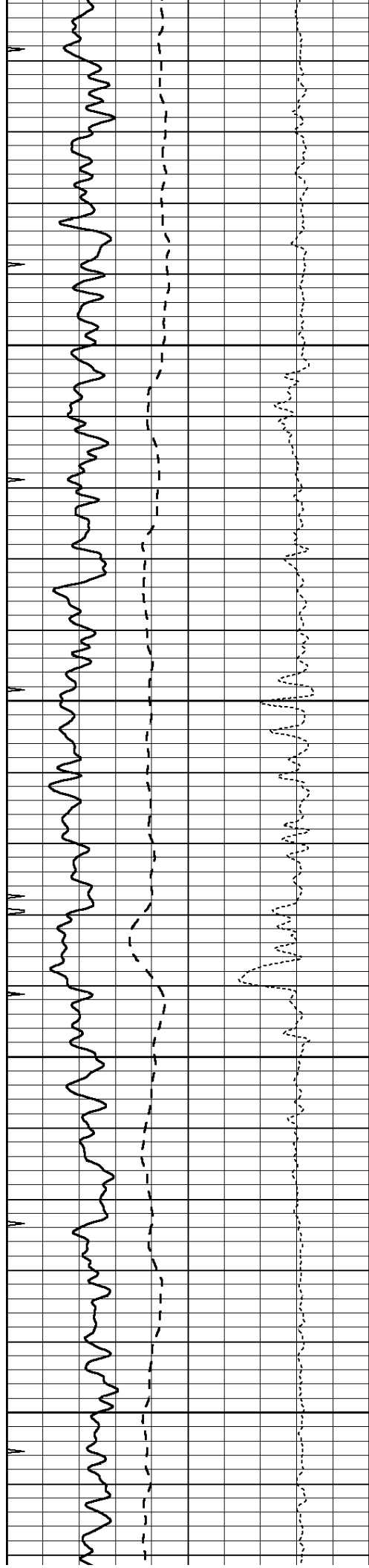
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3550

3600

3650



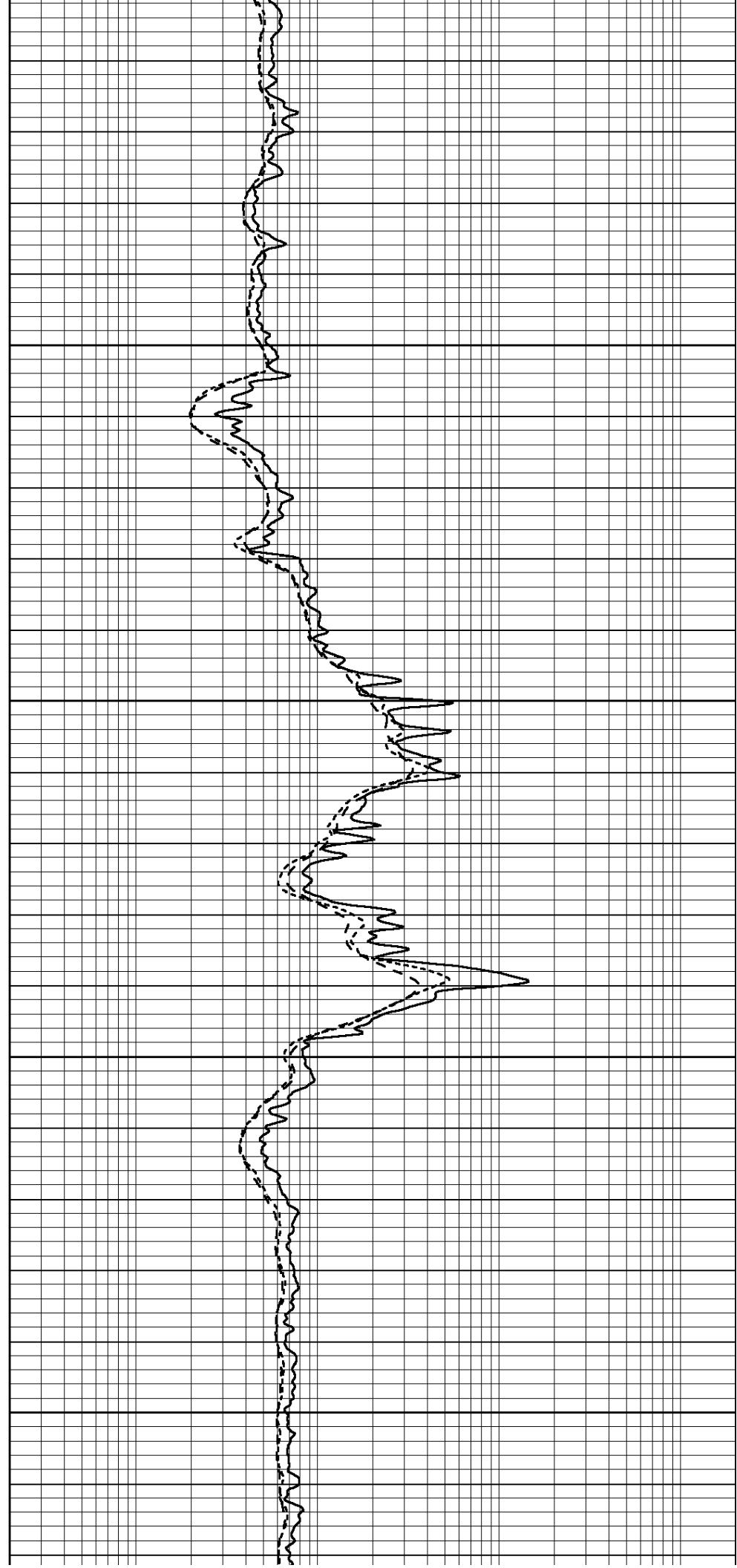


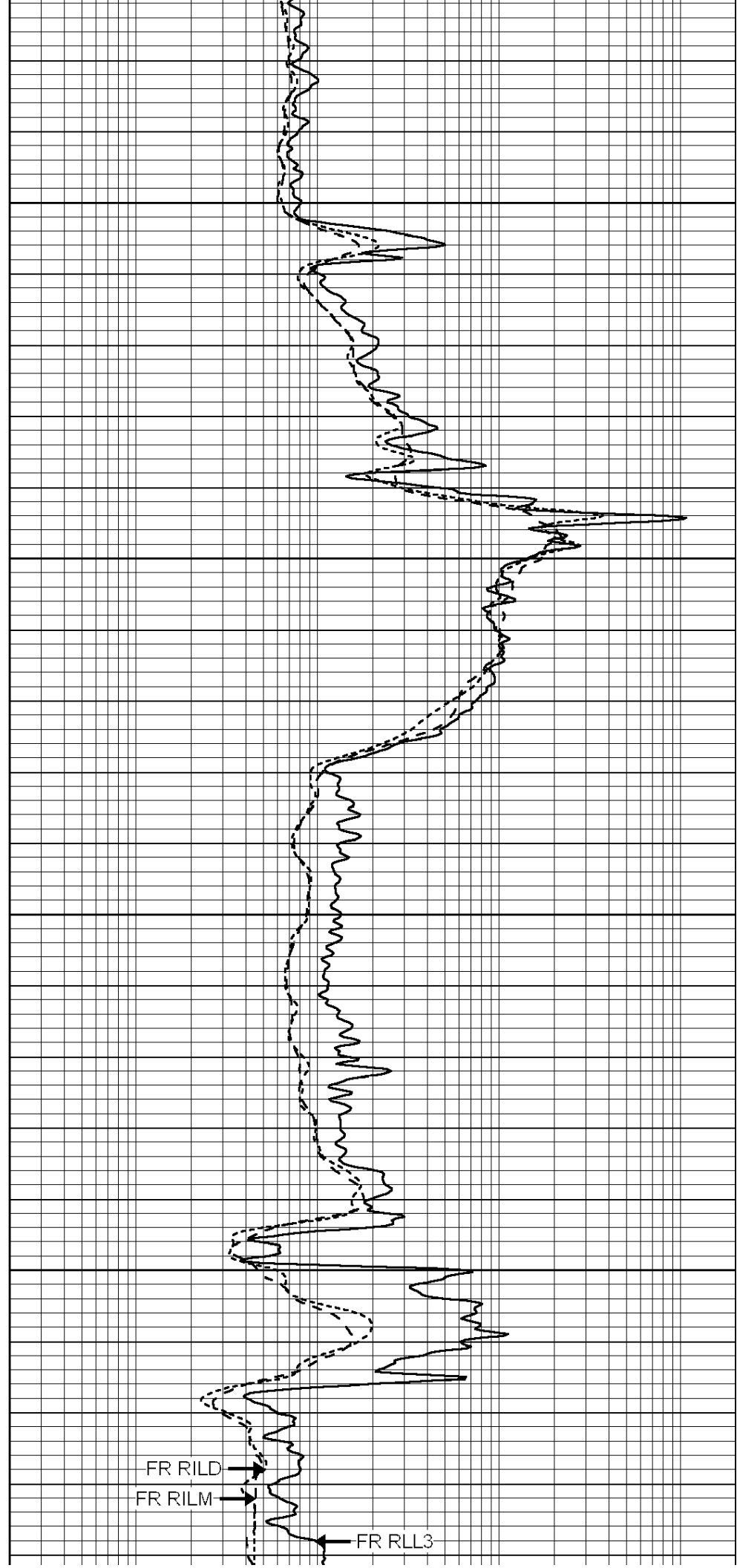
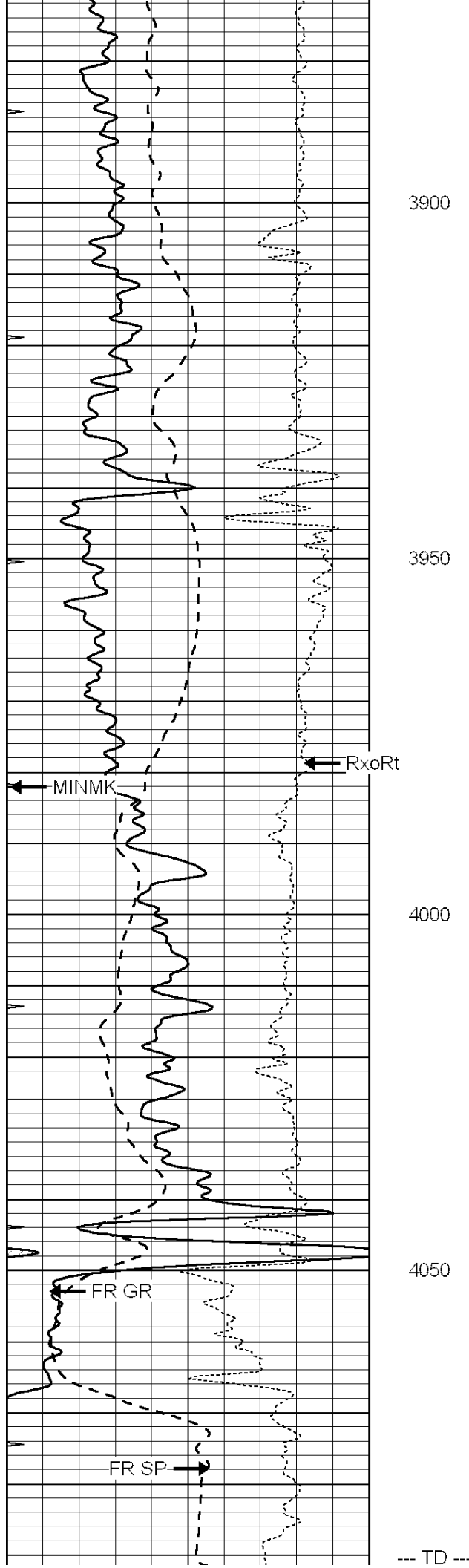
3700

3750

3800

3850





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



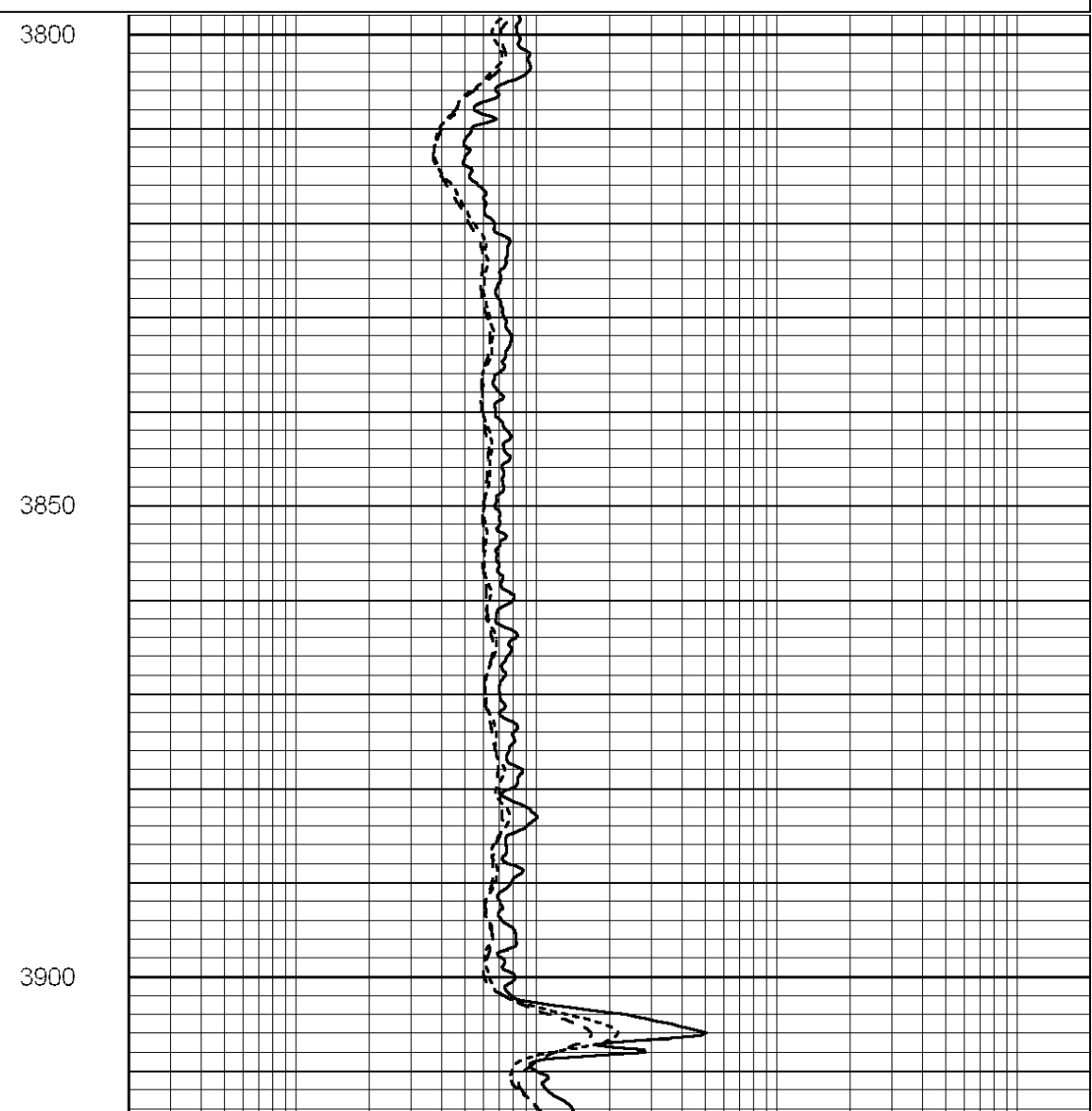
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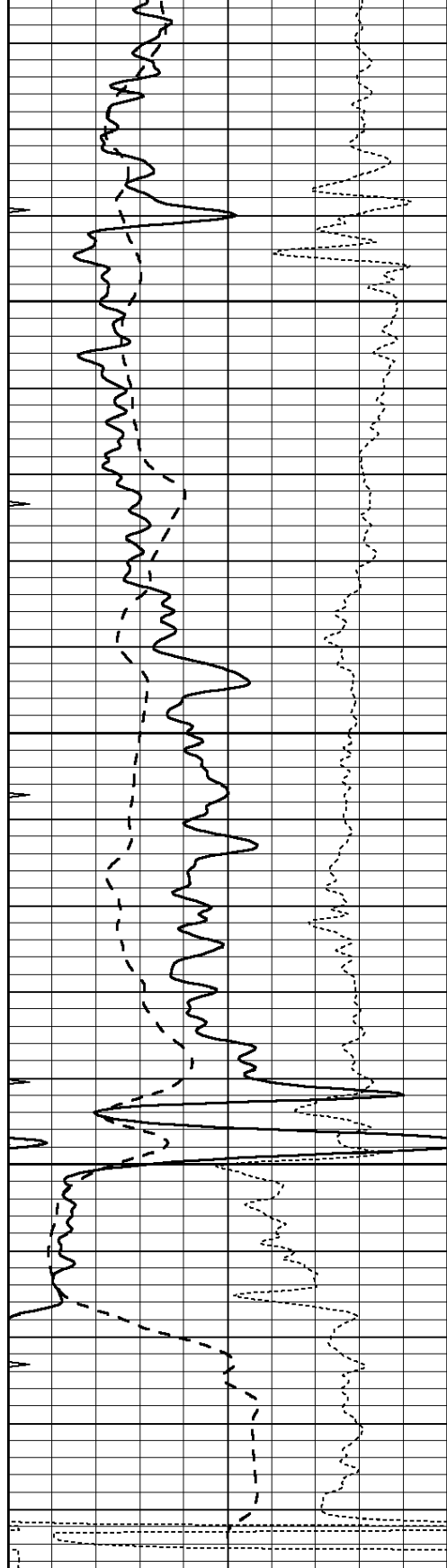
REPEAT SECTION

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 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



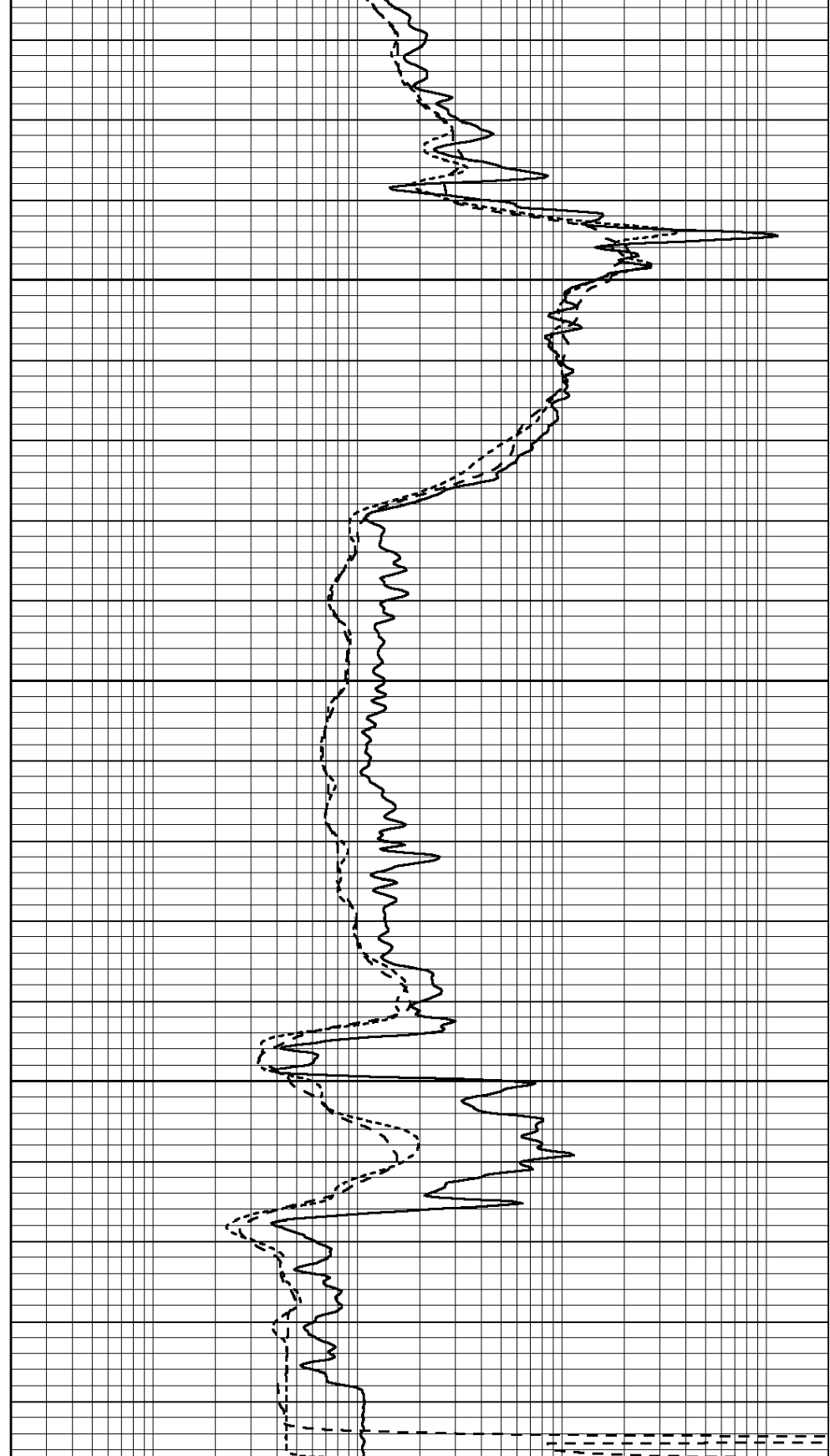


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

3950

4000

4050



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

Calibration Report

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Fri Dec 09 03:53:15 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	-16.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	550.000	-12.000
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	8.4
High Ref	4.9	12.0
	Gain: 3.2	Offset: -3.7

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: Fri Dec 09 03:52:22 2011

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps

Sensitivity:

0.6500

GAPI/cps