



SUPERIOR
Hays,
Kansas

**DUAL INDUCTION
LOG**

Company MAI OIL OPERATIONS, INC.
Well SCHMITT #1
Field KENNEBEC
County RUSSELL
State KANSAS

Company MAI OIL OPERATIONS, INC.
Well SCHMITT #1
Field KENNEBEC
County RUSSELL State KANSAS

Location: API # : 15-167-23772-0000
1975' FSL & 1355' FEL
NE - SE - NW - SE
SEC 4 TWP 15S RGE 14W
Permanent Datum GROUND LEVEL Elevation 1758
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL
MEL
Elevation
K.B. 1766
D.F. 1764
G.L. 1758

Date	2/21/12		
Run Number	ONE		
Depth Driller	3315		
Depth Logger	3314		
Bottom Logged Interval	3312		
Top Log Interval	00		
Casing Driller	8 5/8"@390'		
Casing Logger	388		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,800 PPM	
Density / Viscosity	9.2/66		
pH / Fluid Loss	10.0/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.500@70F		
Rmt @ Meas. Temp	.375@70F		
Rmc @ Meas. Temp	.600@70F		
Source of Rm/f / Rmc	MEASUREMENT		
Rm @ BHT	.318@110F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	12:30 P.M.		
Maximum Recorded Temperature	110F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	JOSH AUSTIN		

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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
RUSSELL, KS. & I-70, 7S. ON HWY 281 TO "WALTERS RD.", 1 1/4W., S. INTO



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MAIN SECTION

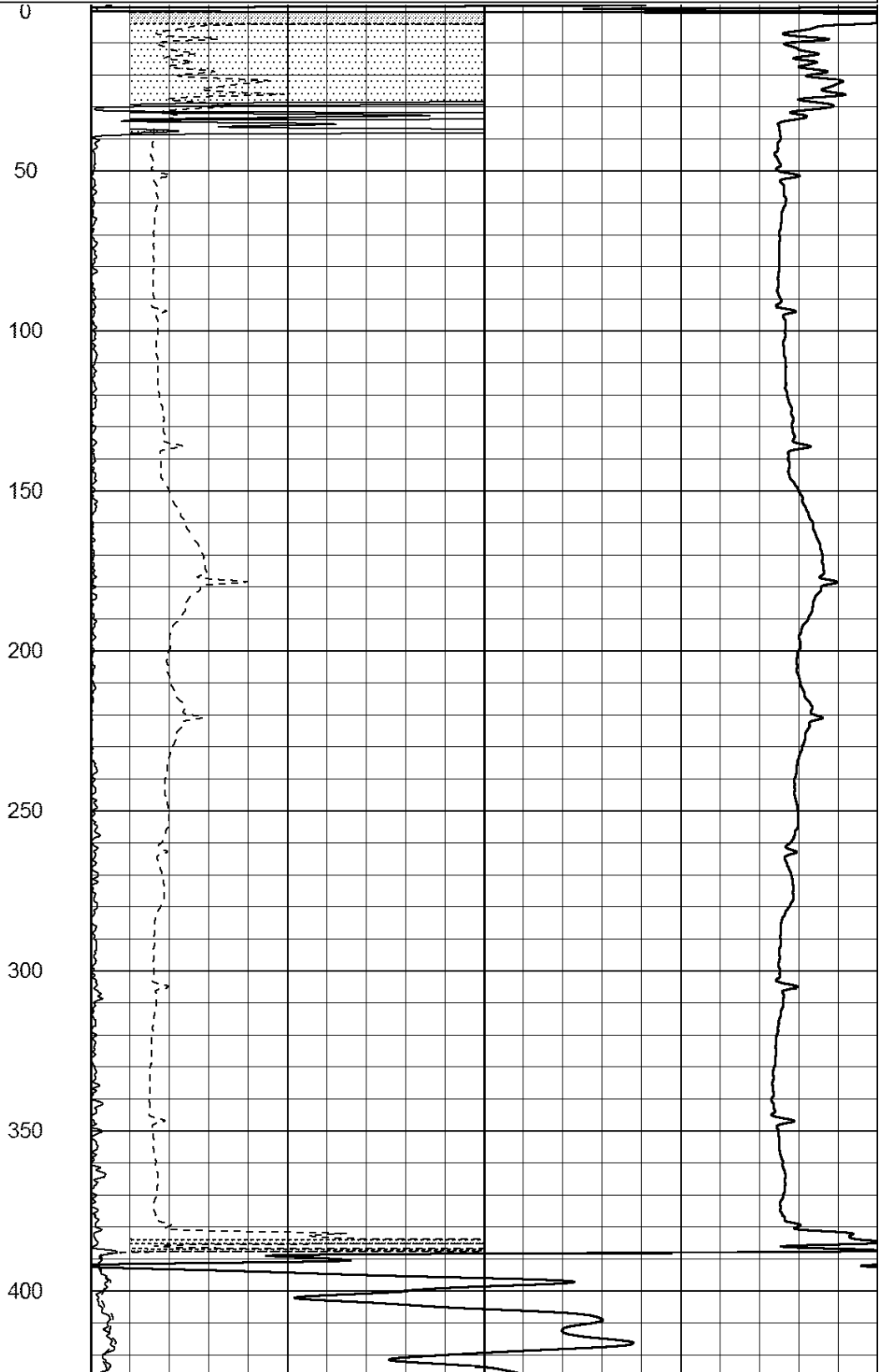
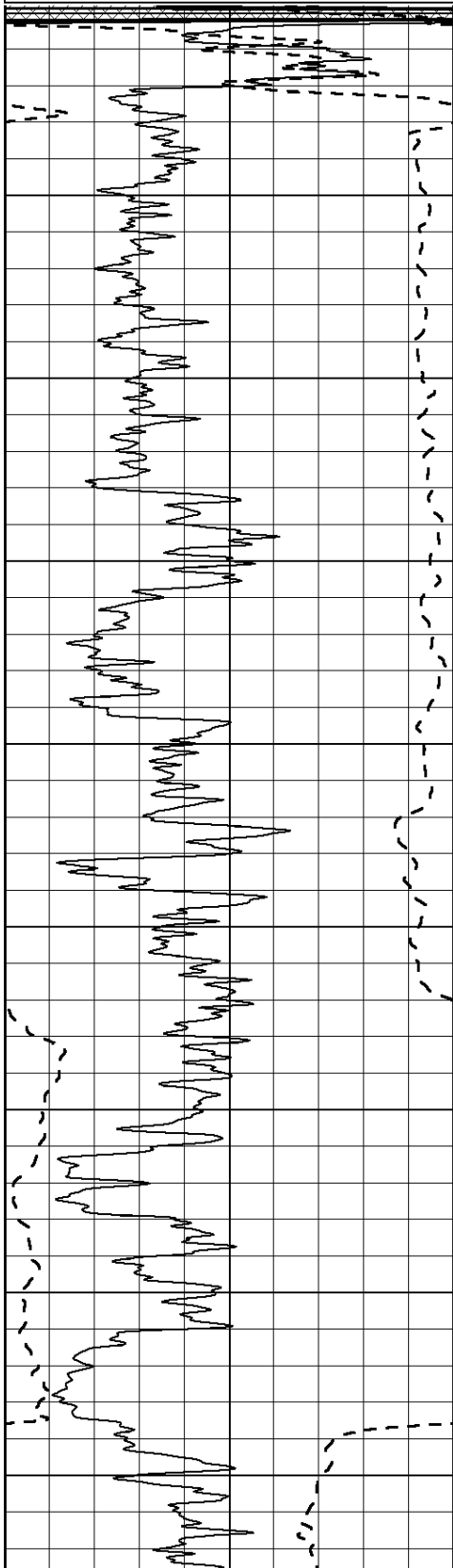
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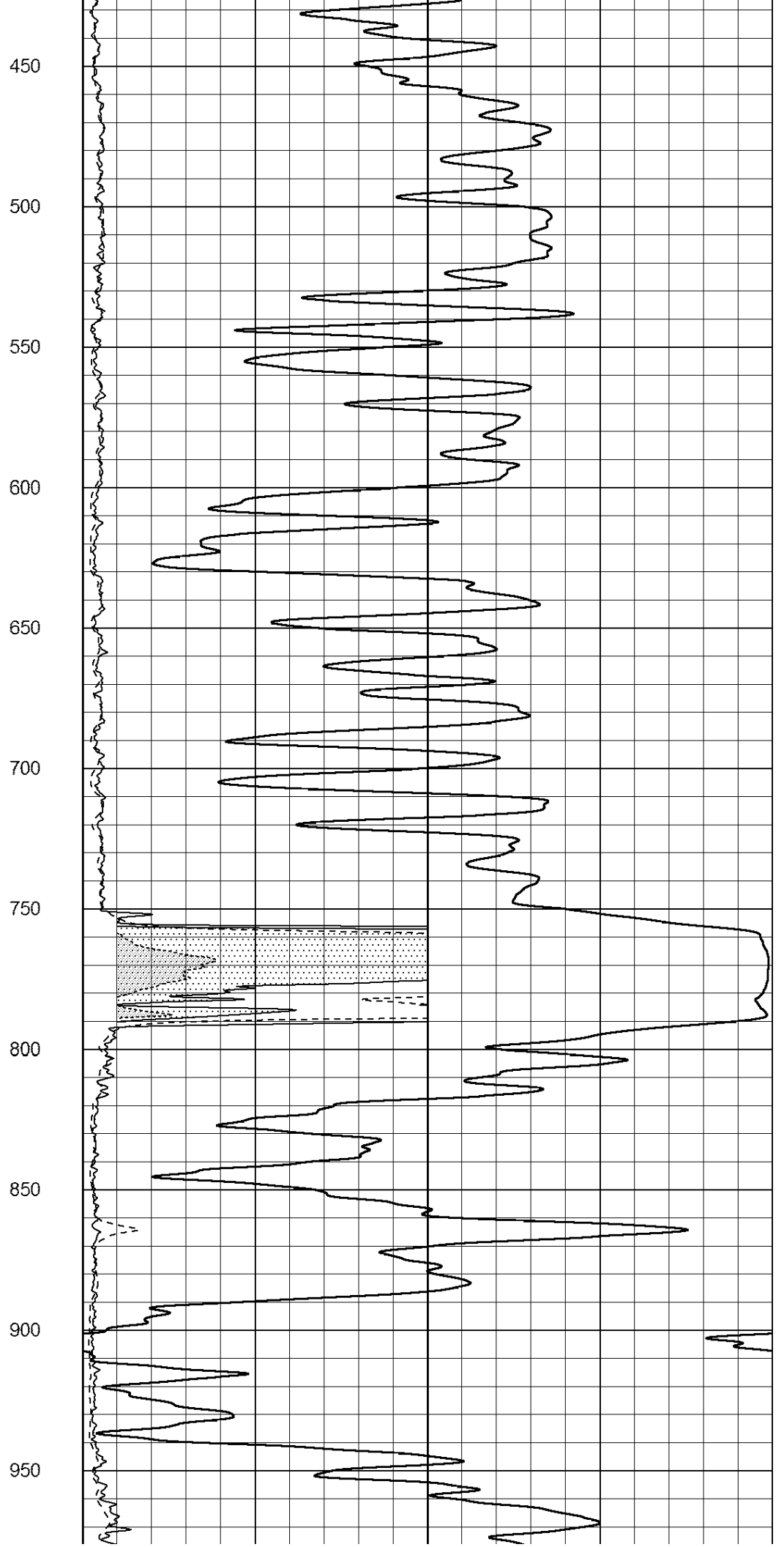
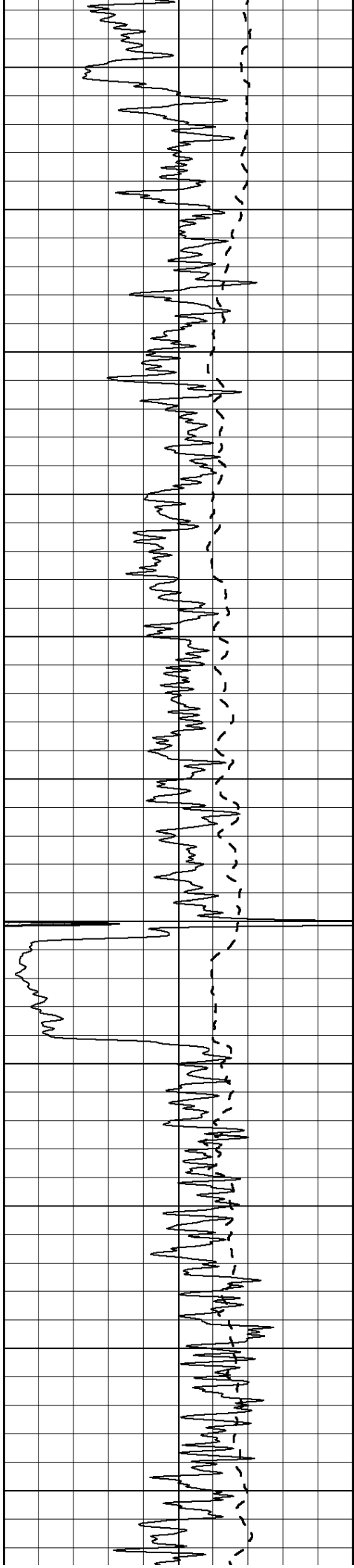
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-100	SP (mV)	100

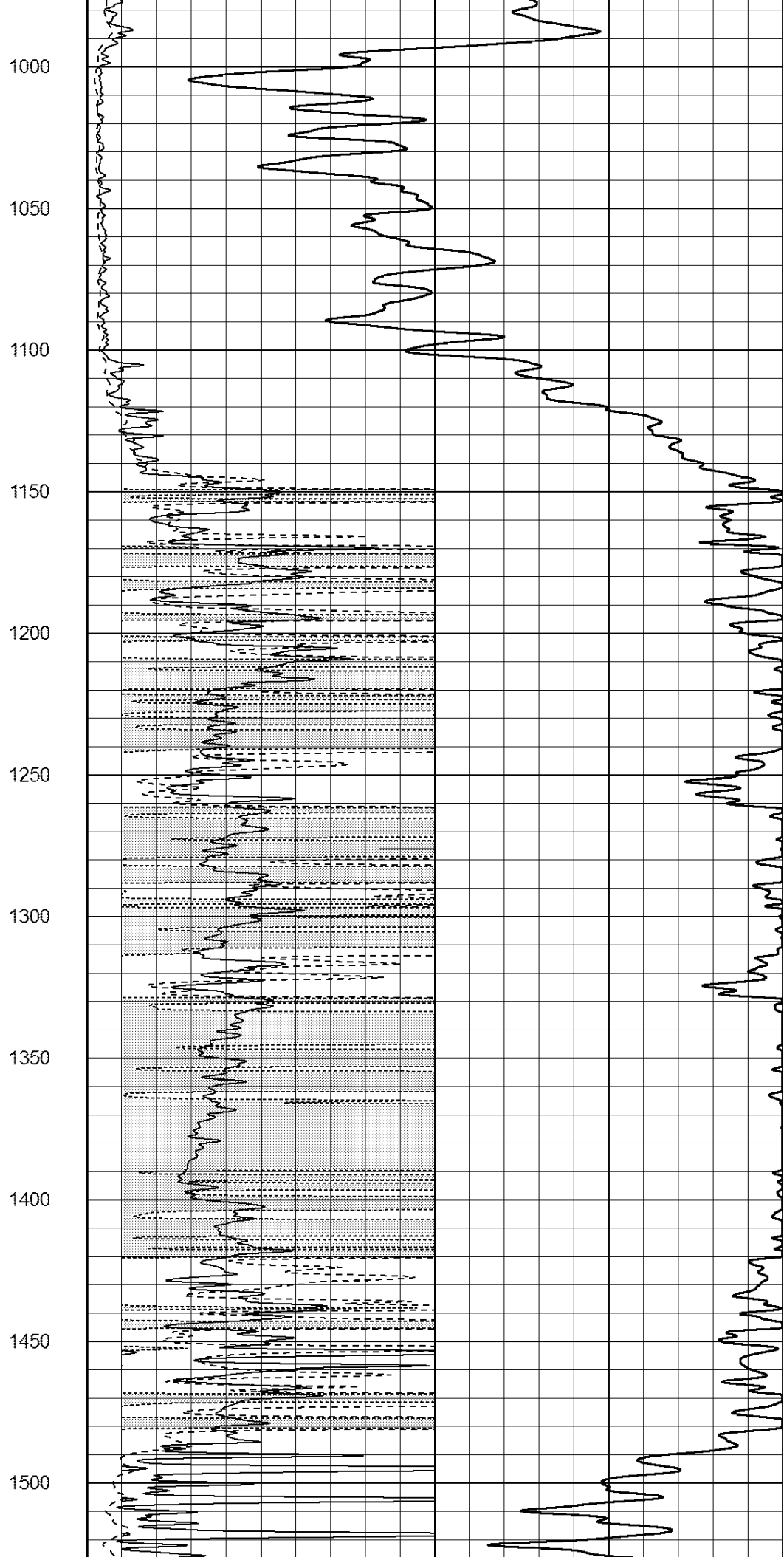
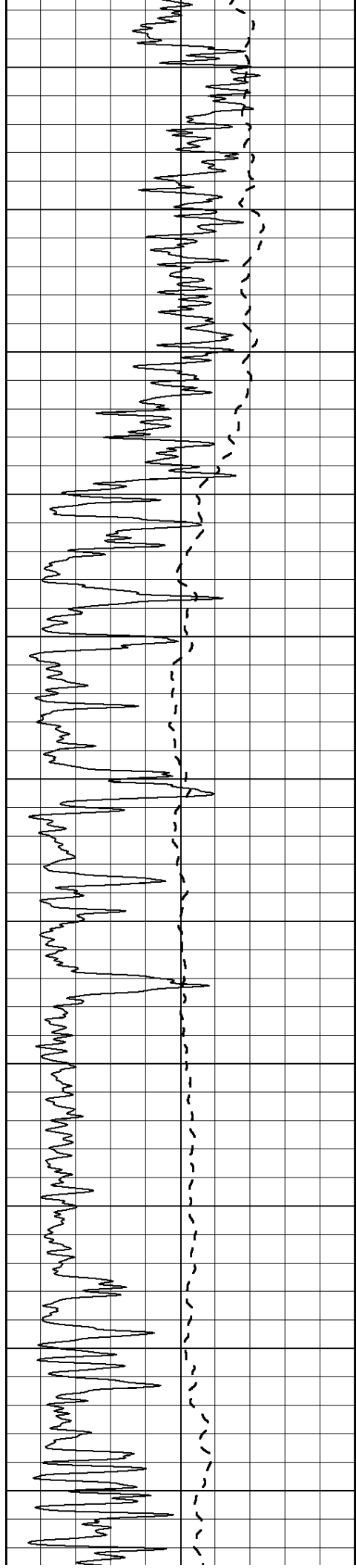
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0	RILD (Ohm-m)	50

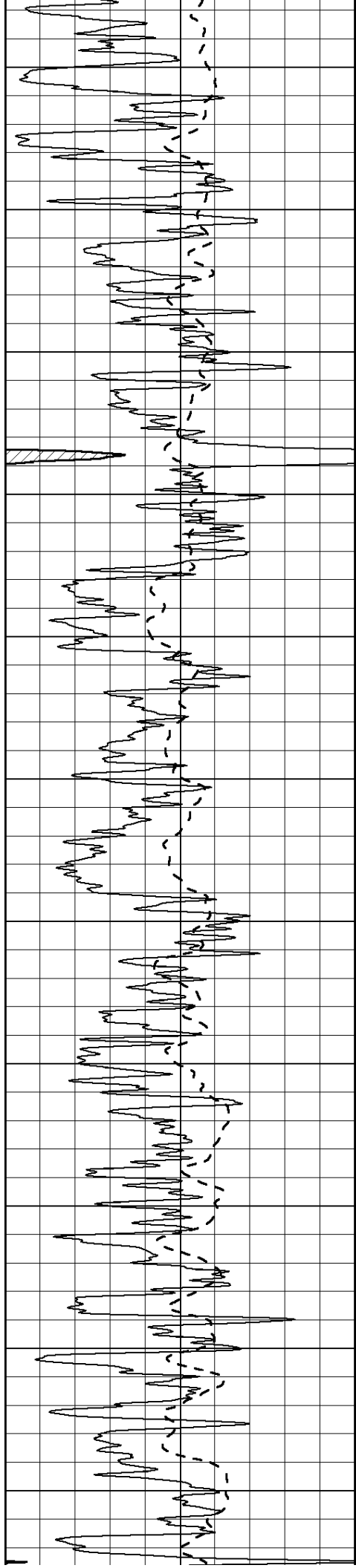
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

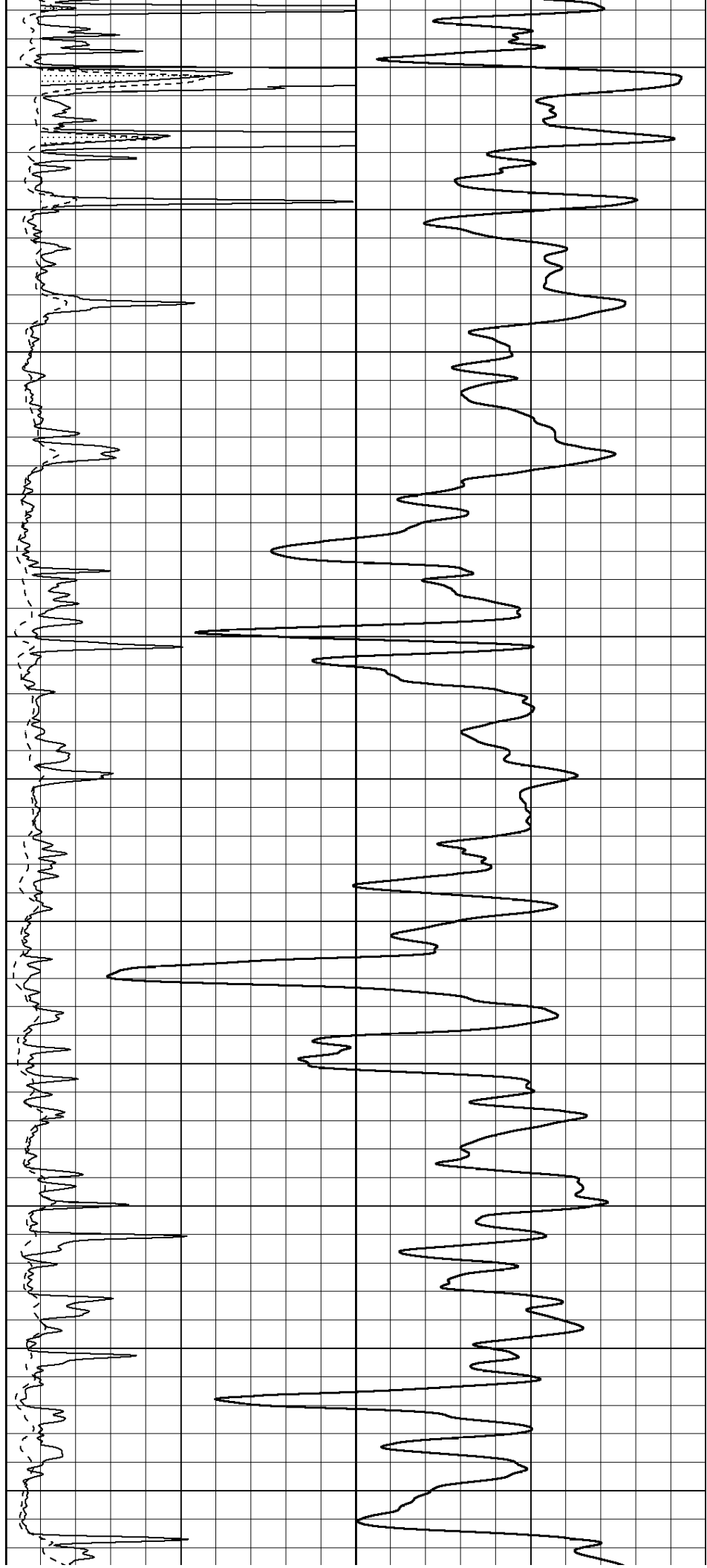


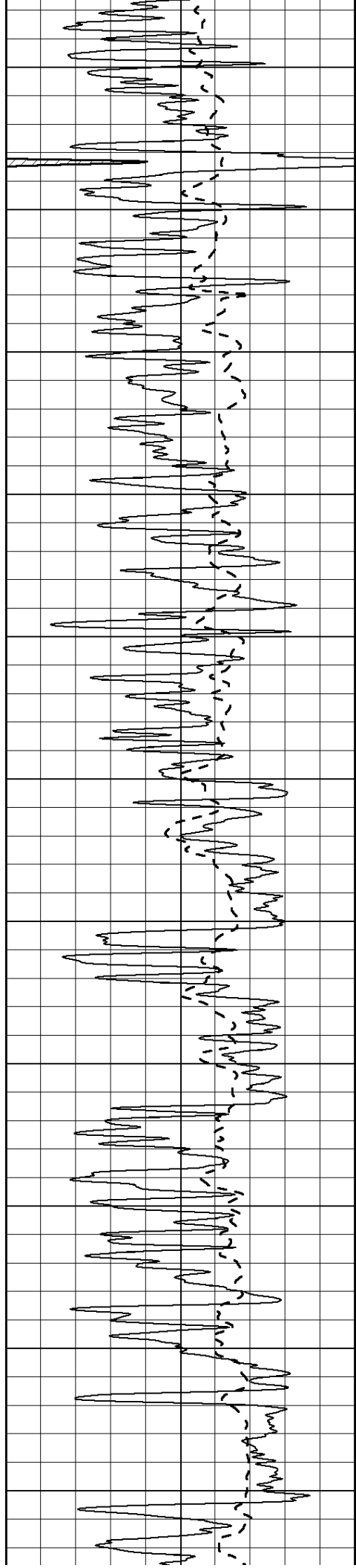






1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050





2100

2150

2200

2250

2300

2350

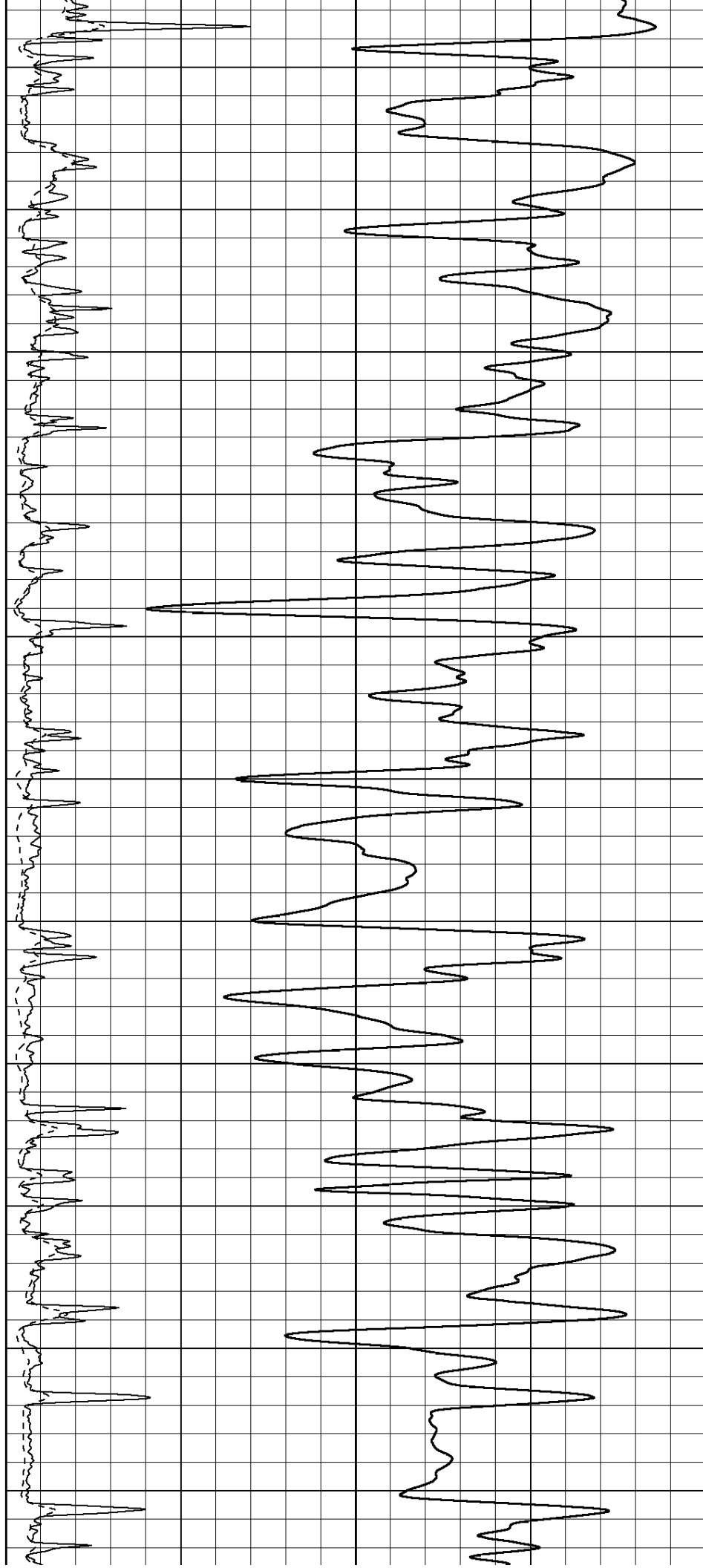
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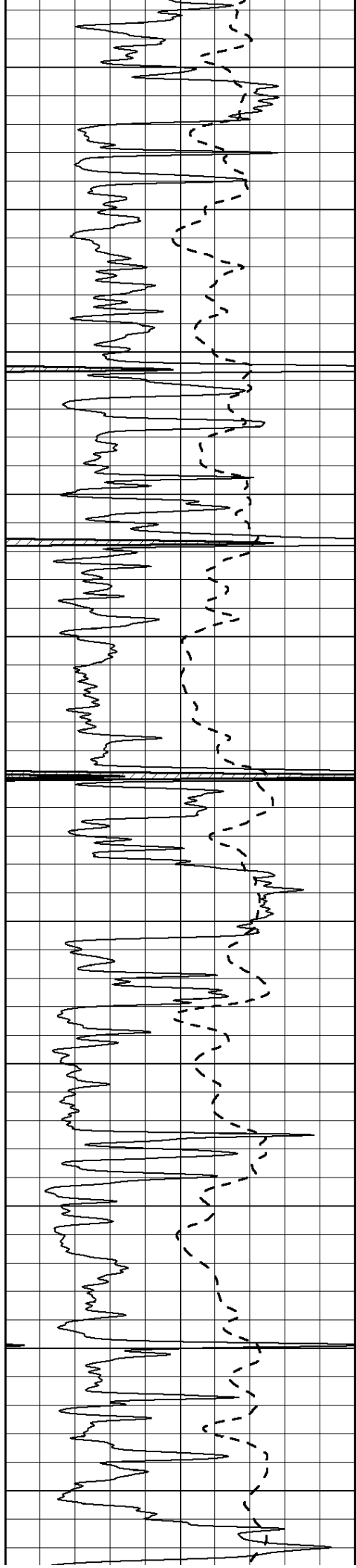
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2500

2550

2600





2650

2700

2750

2800

2850

2900

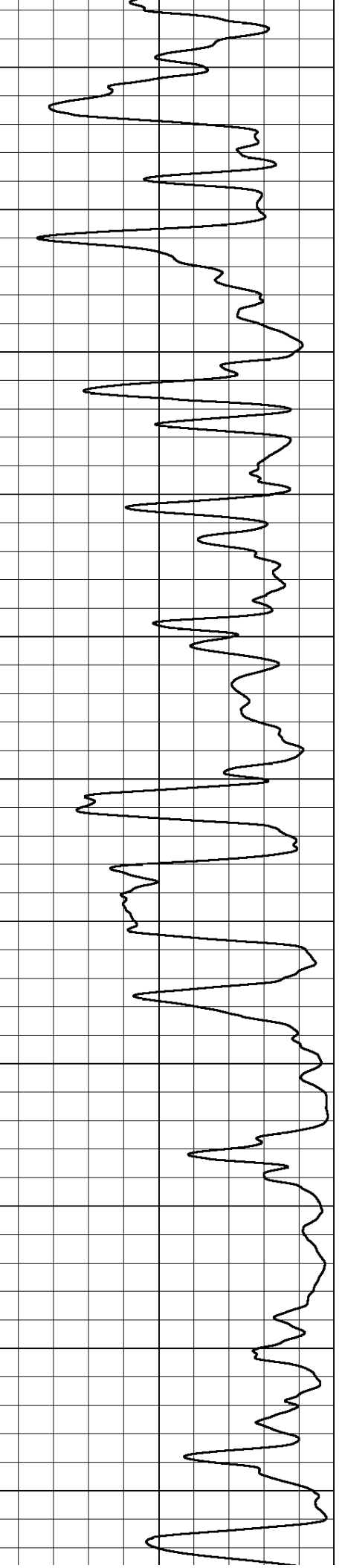
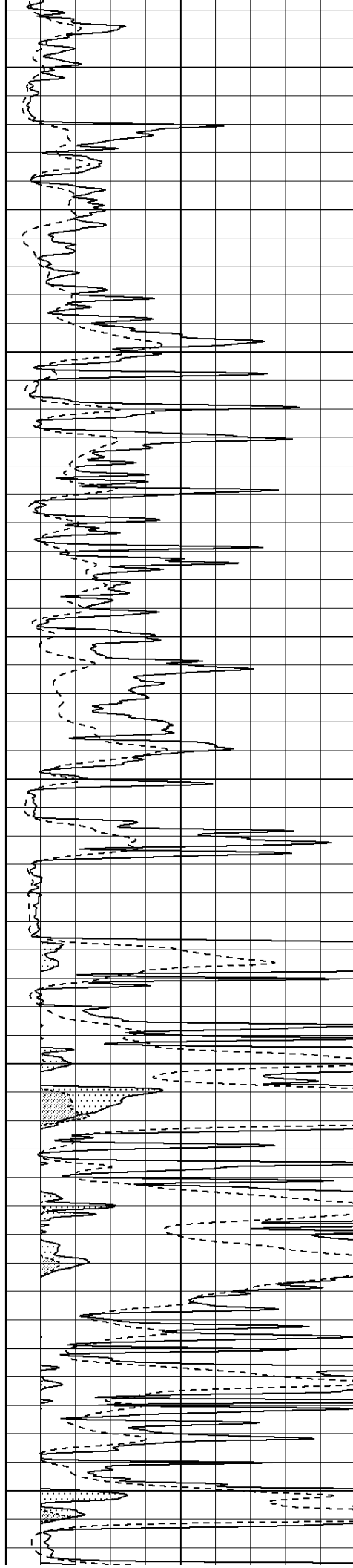
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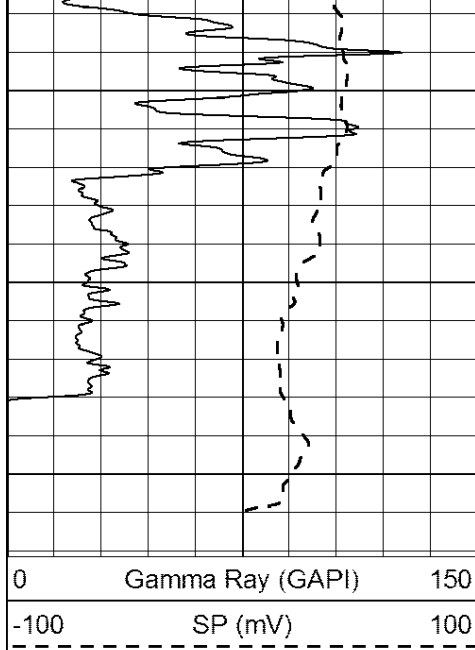
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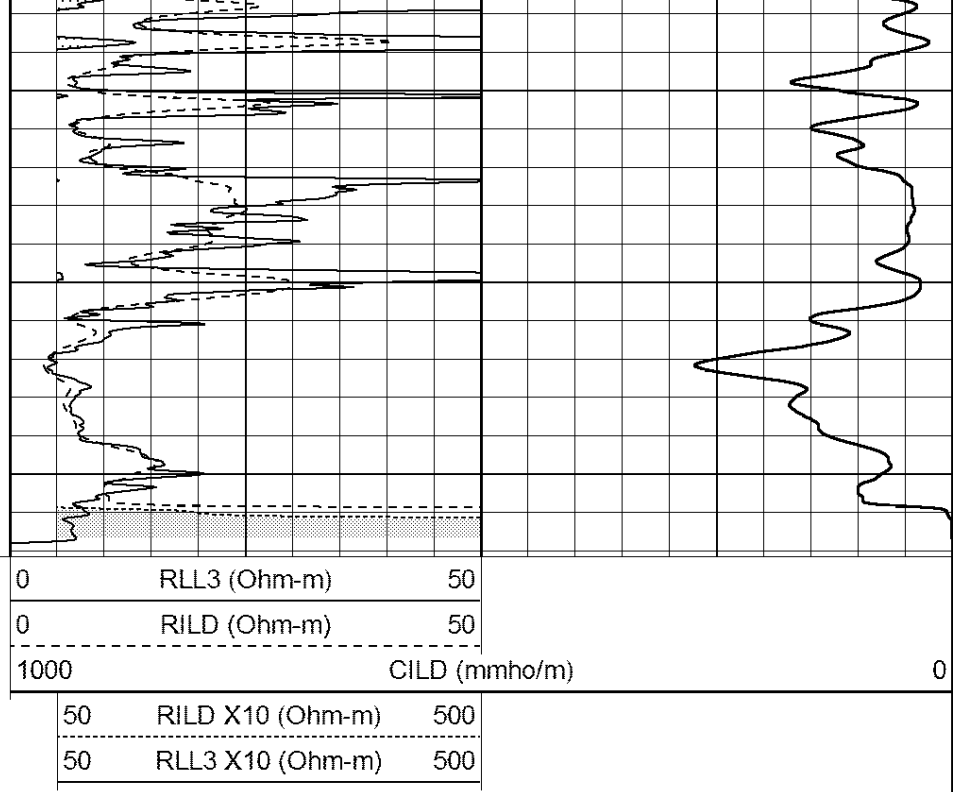
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3150





3200
3250
3300



0 Gamma Ray (GAPI) 150
-100 SP (mV) 100

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



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ANHYDRITE

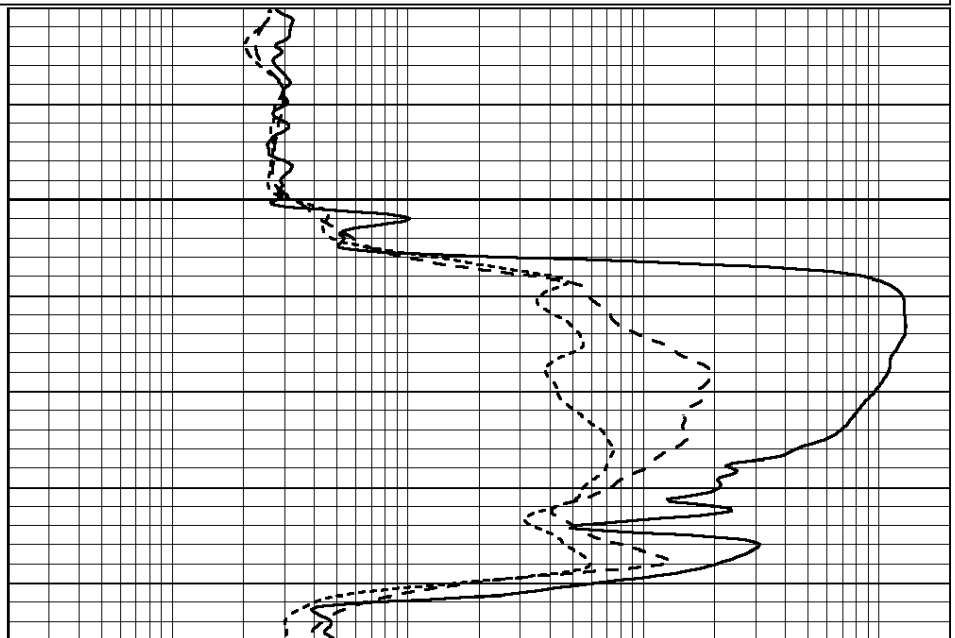
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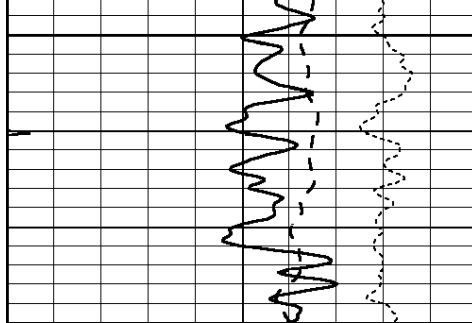
0 GAMMA RAY (GAPI) 150
-100 SP (mV) 100
-250 Rxo/Rt 50
0 MINMK 20

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



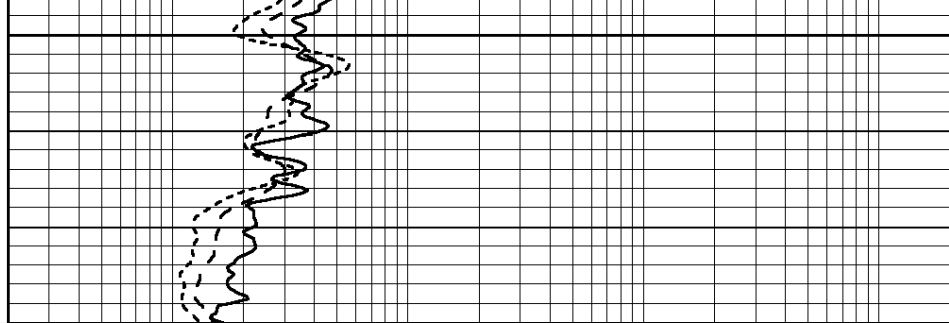
750





800

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



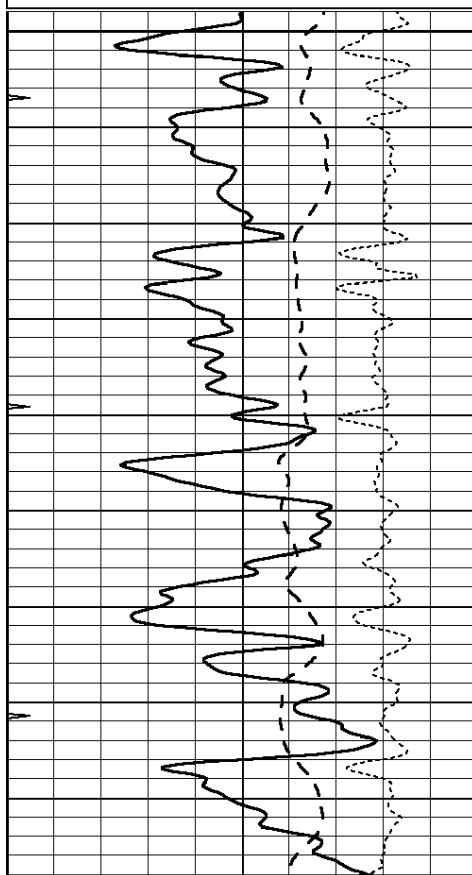
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MAIN SECTION

Database File: 408415ddn.db
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 Dataset Creation: Tue Feb 21 13:48:32 2012
 Charted by: Depth in Feet scaled 1:240

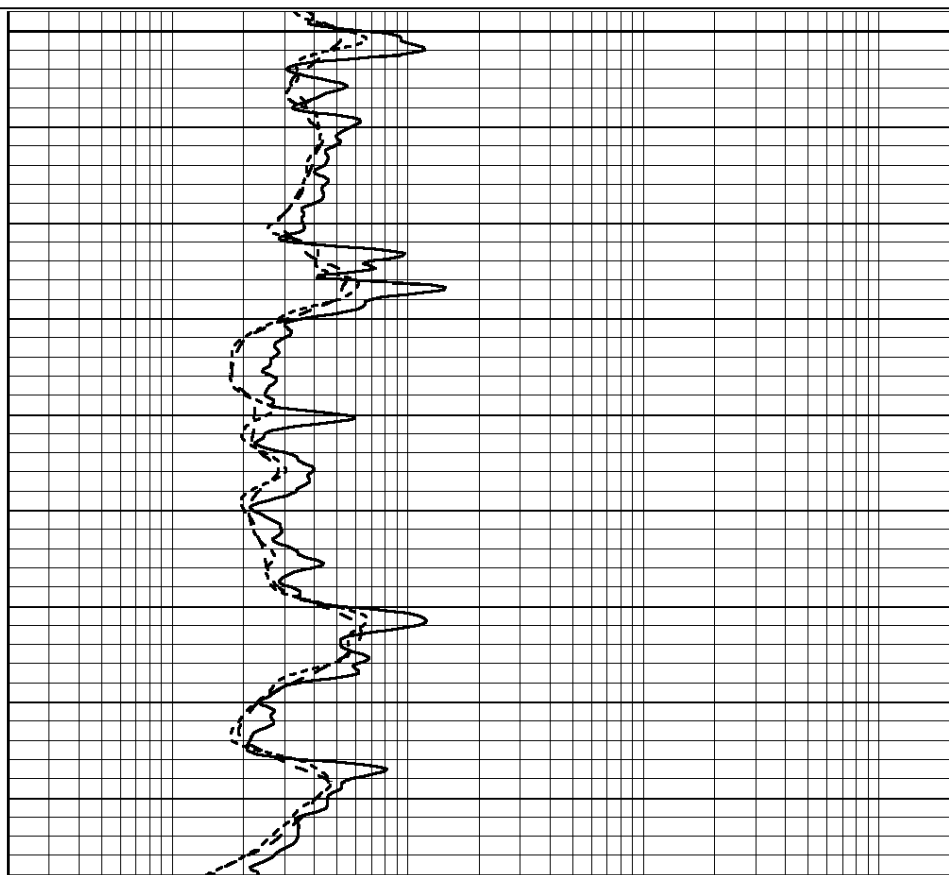
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-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

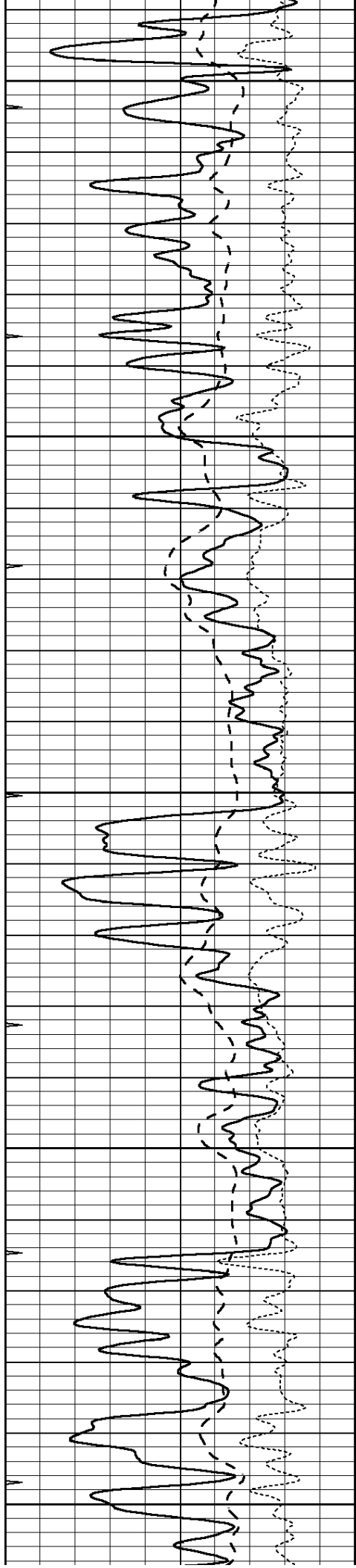
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0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



2200

2250





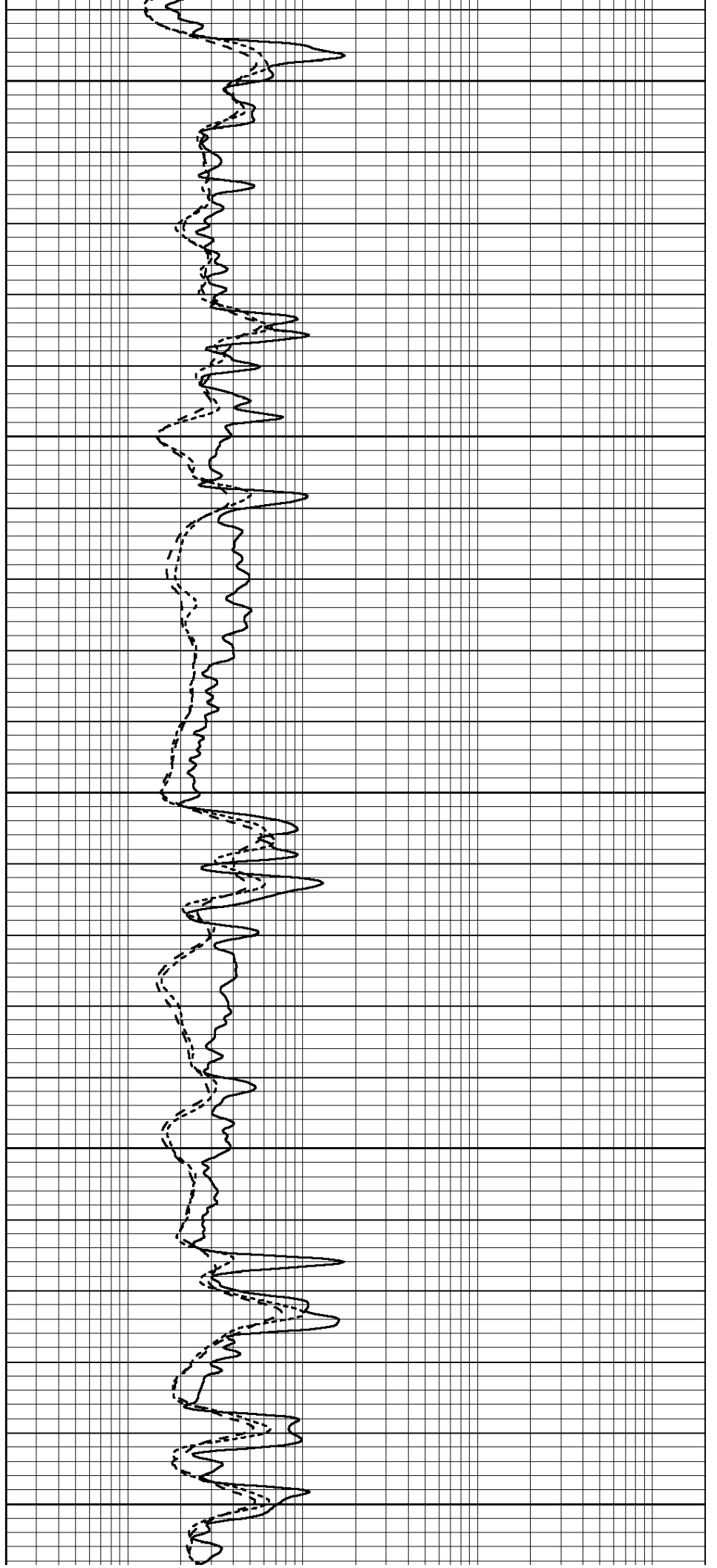
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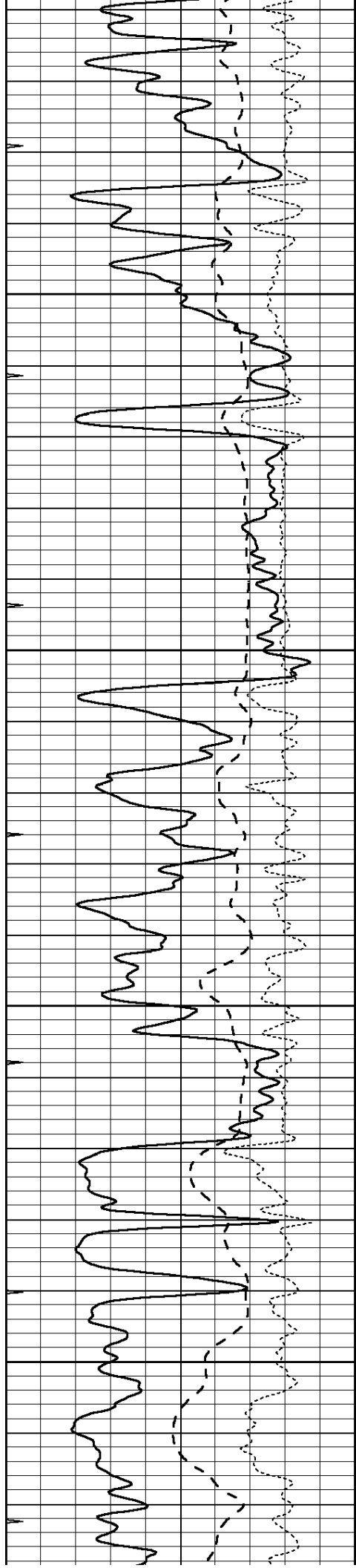
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2400

2450

2500



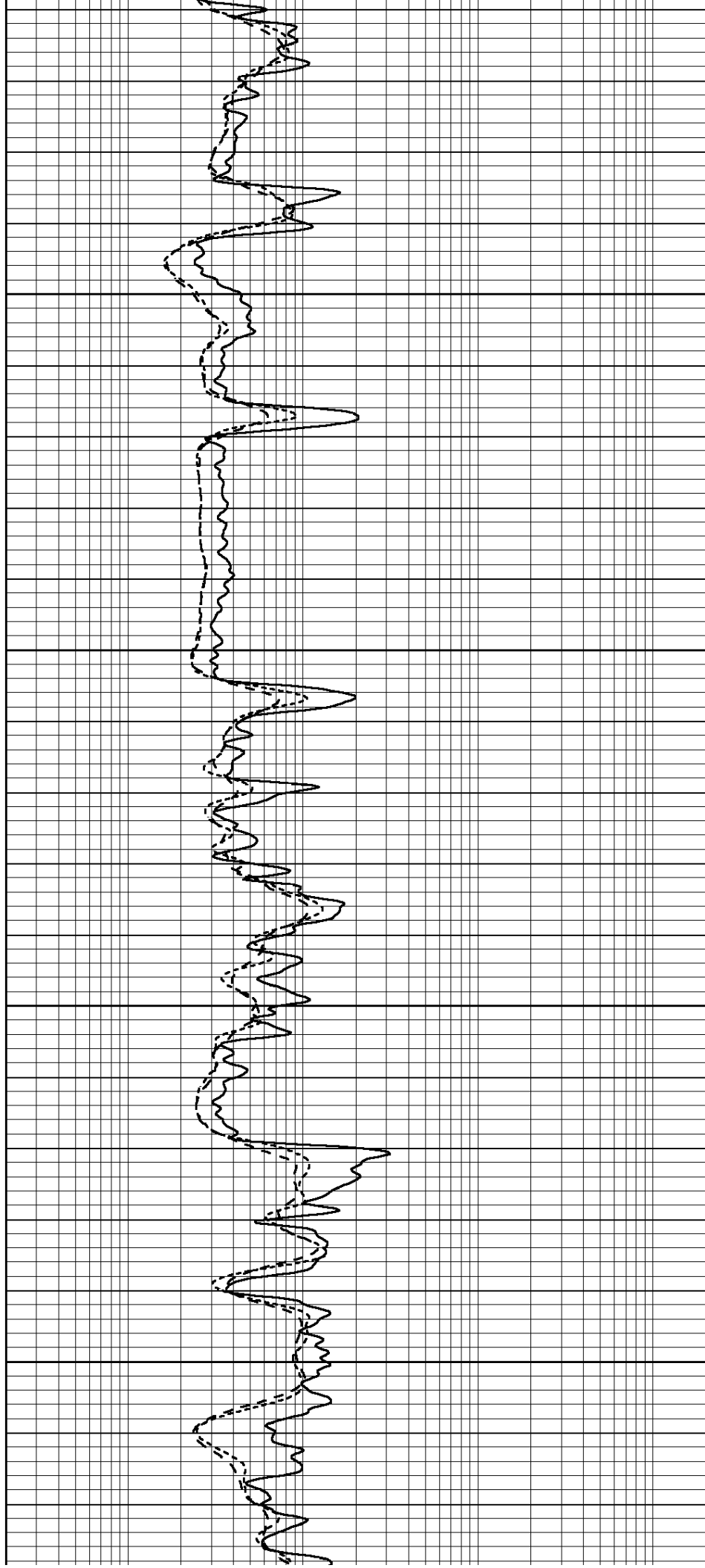


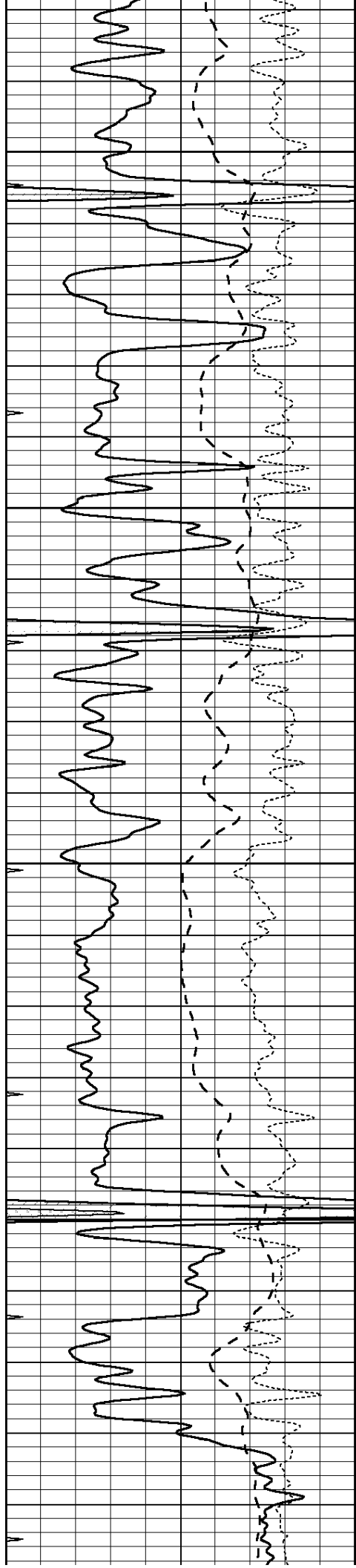
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2600

2650

2700



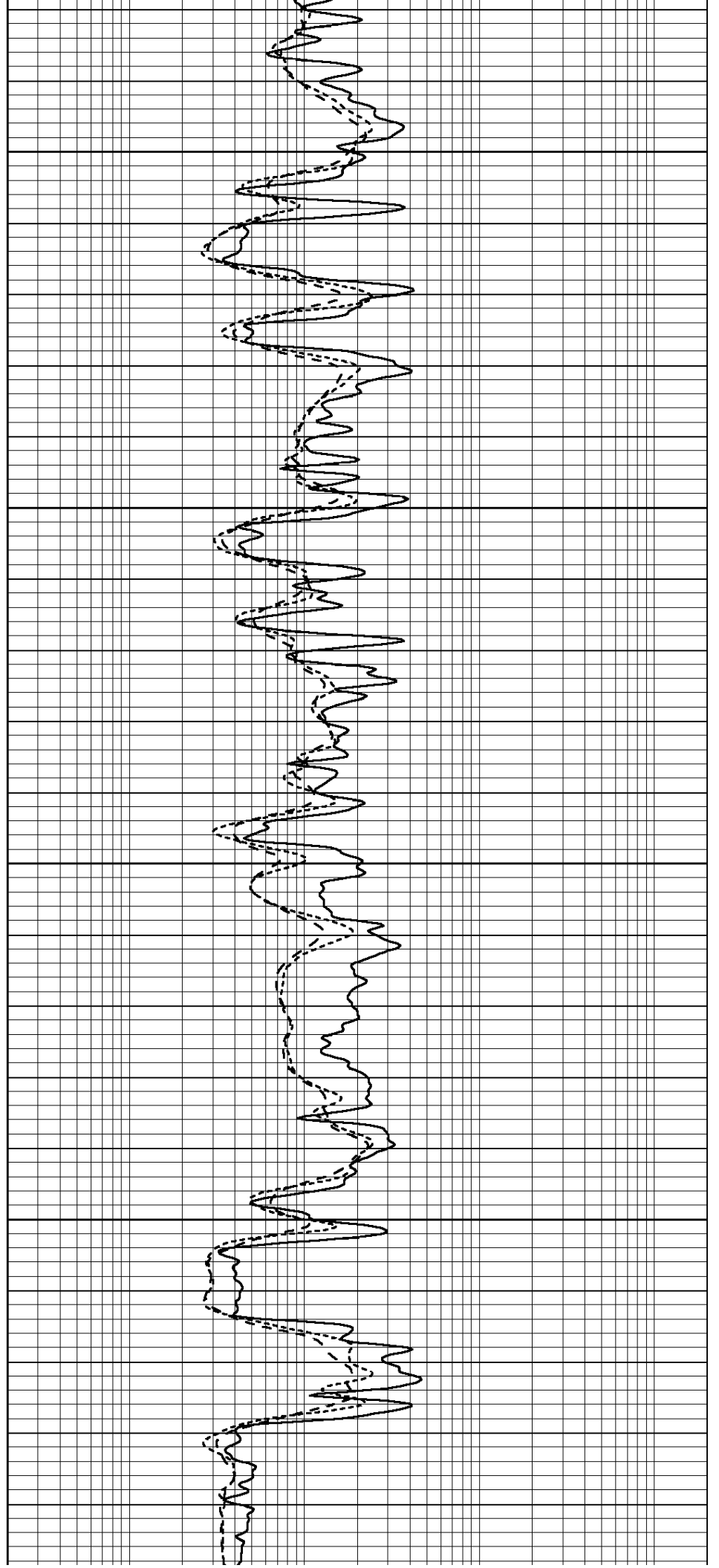


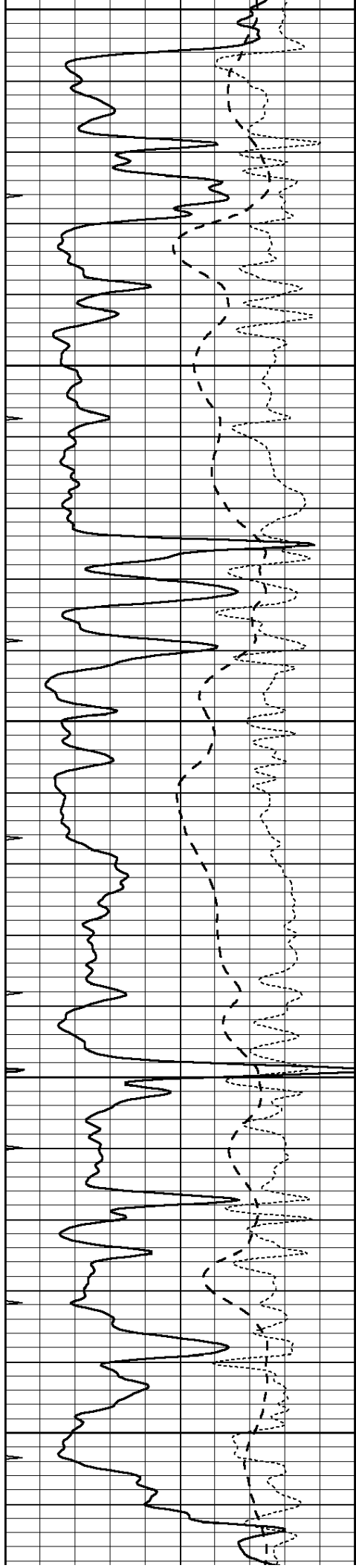
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2800

2850

2900





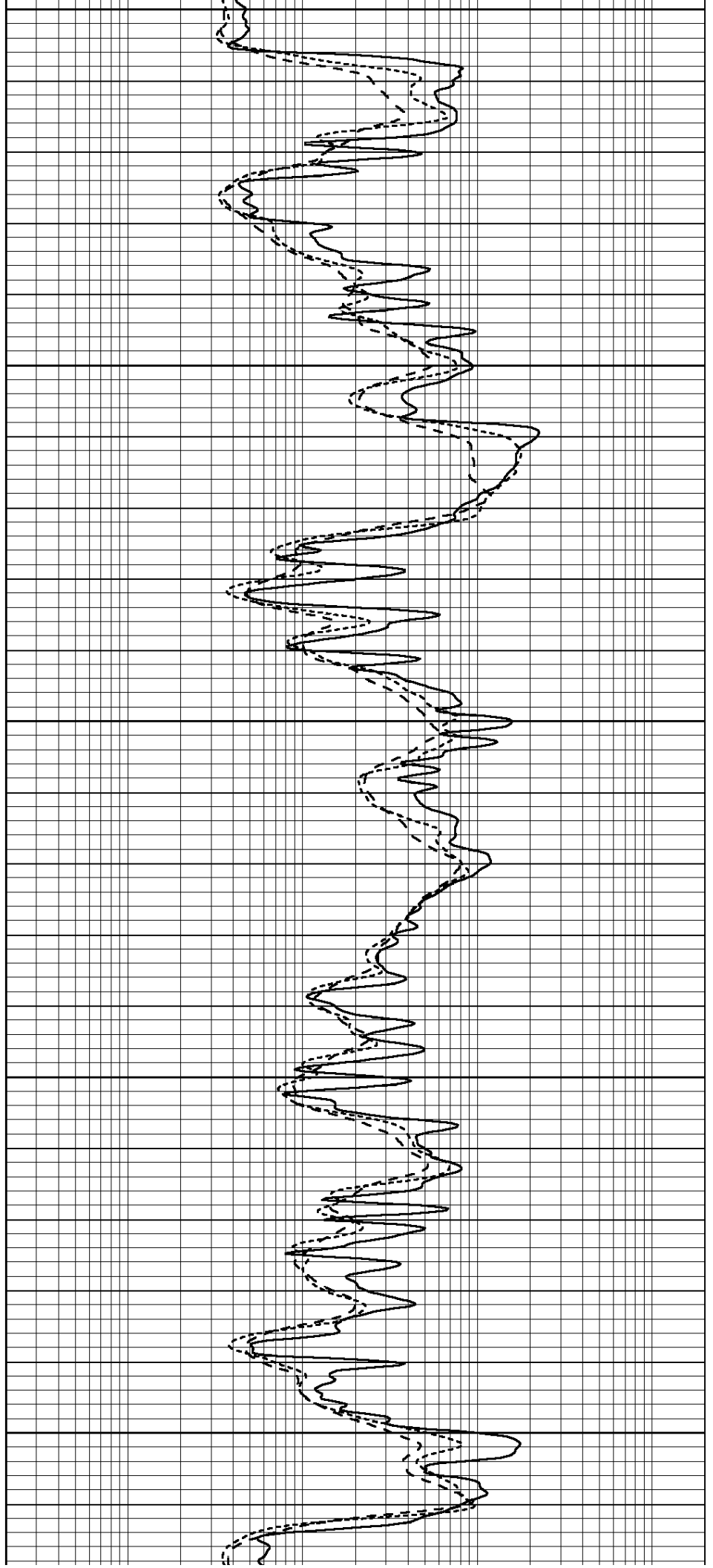
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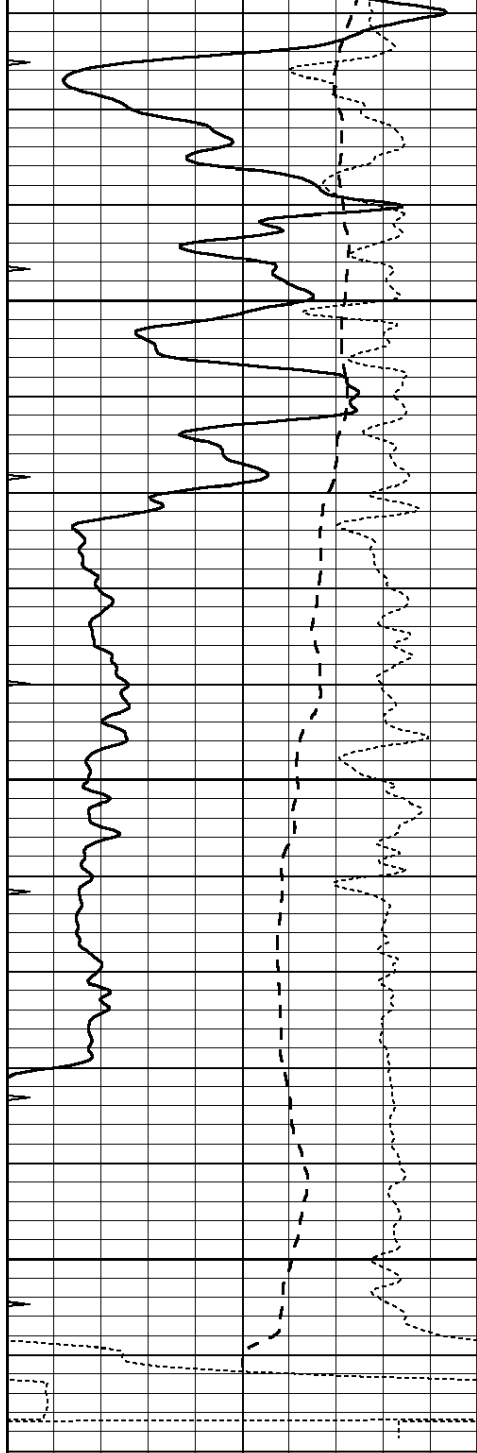
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3050

3100

3150



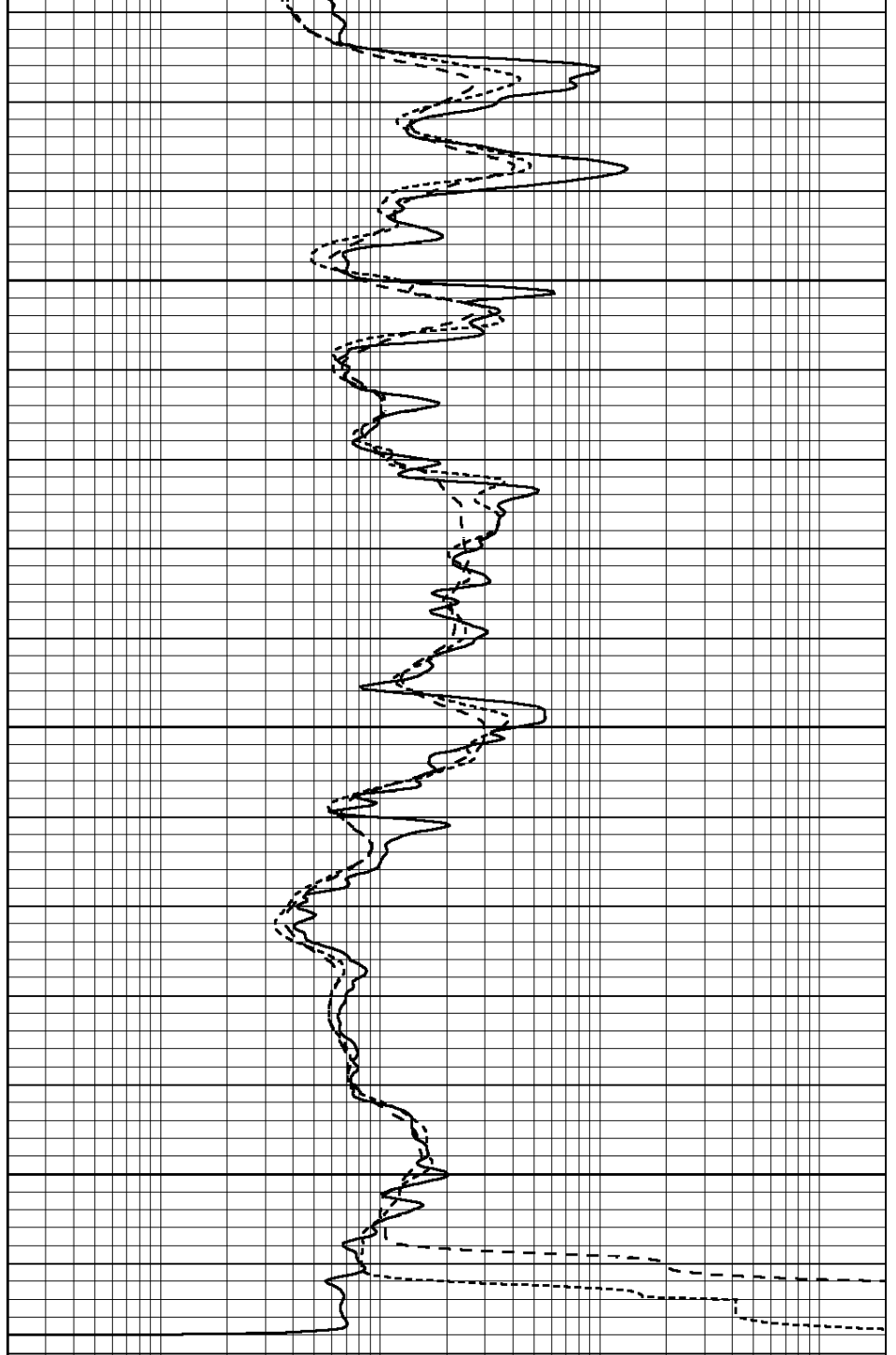


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

3200

3250

3300



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



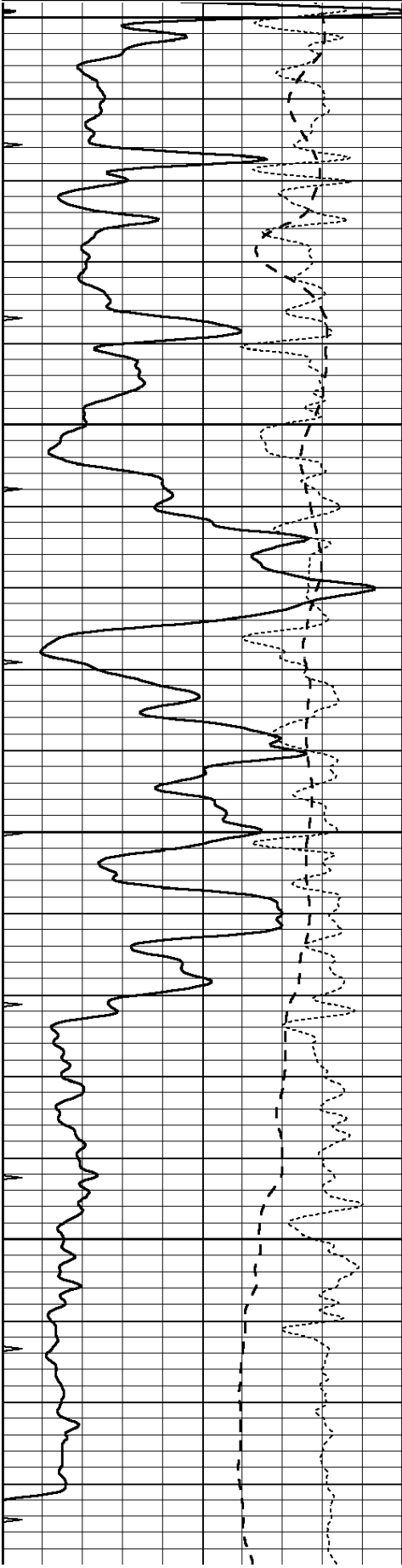
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REPEAT SECTION

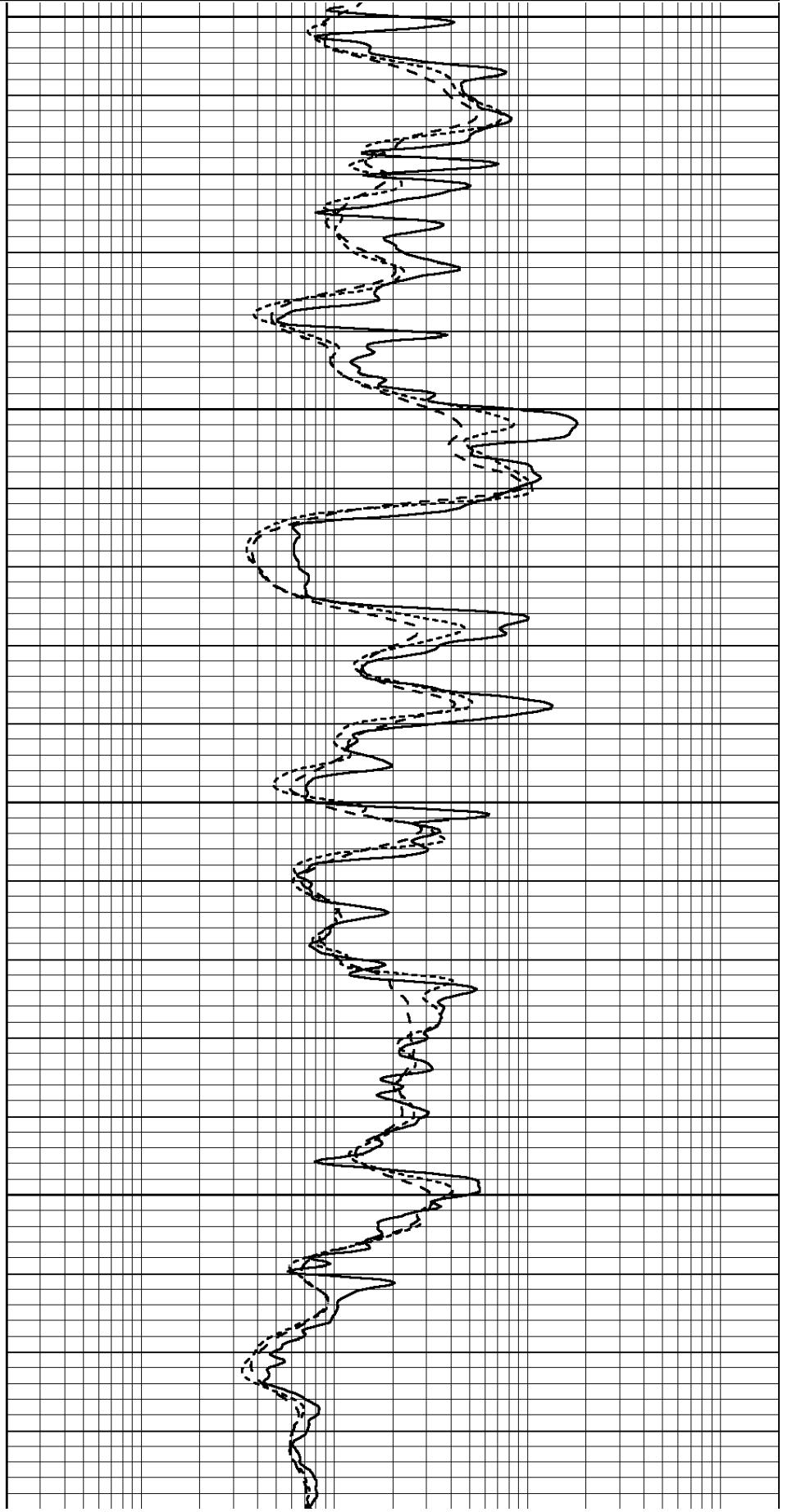
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 Charted by: Depth in Feet scaled 1:240

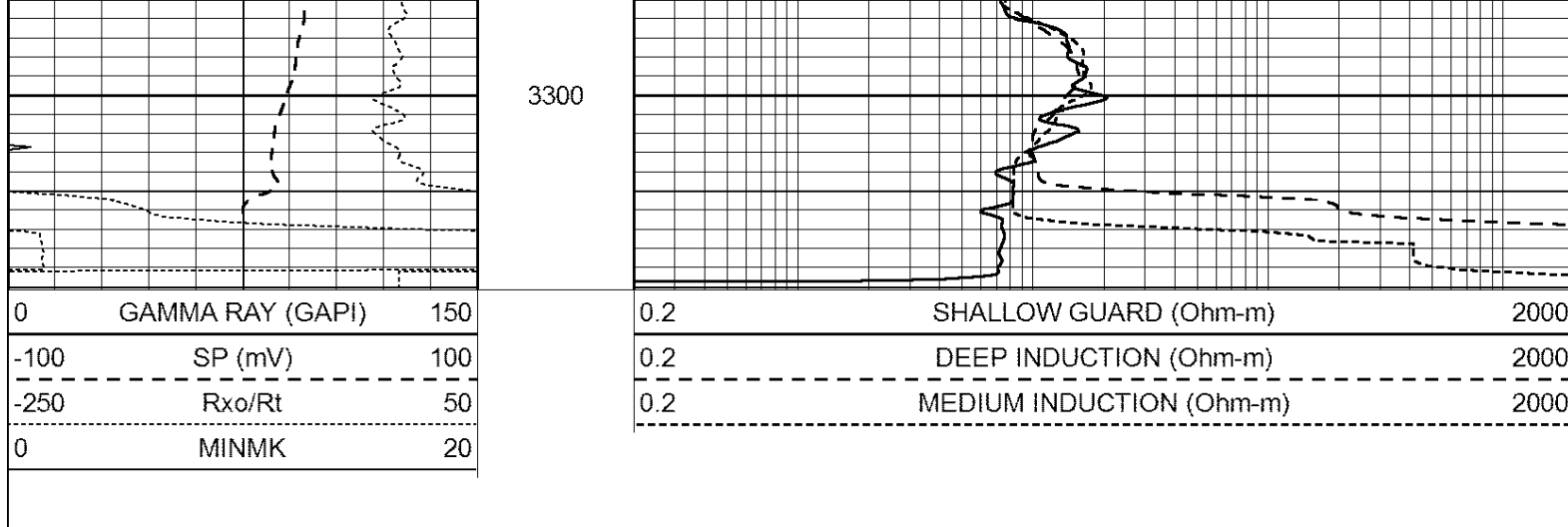
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



3100
3150
3200
3250





Calibration Report

Database File: 408415ddn.db
 Dataset Pathname: pass3.4
 Dataset Creation: Tue Feb 21 13:48:32 2012

Dual Induction Calibration Report

Serial-Model: DIL4-GEAR
 Performed: Tue Feb 14 15:45:17 2012

Loop:	Readings				References			Results	
	Air	Loop			Air	Loop		m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	0.000	
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	

Litho Density Calibration Report

Serial: 003N Model: PRB
 Performed Tue Sep 08 14:14:44 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
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

	Readings	Reference
Low Ref	2.0	7.3
High Ref	4.0	15.0
Gain:	3.8	Offset: -0.1

Serial Number:	070808
Tool Model:	Probe

PRE-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION			
Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	070559
Tool Model:	OPEN_GR
Performed:	Tue Feb 21 13:32:46 2012
Calibrator Value:	1.0 GAPI
Background Reading:	0.0 cps
Calibrator Reading:	1.0 cps
Sensitivity:	0.3000 GAPI/cps