



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company SHELBY RESOURCES LLC.
Well ARKANSAS RIVER UNIT #1-3
Field
County PAWNEE
State KANSAS

Company SHELBY RESOURCES LLC.
Well ARKANSAS RIVER UNIT #1-3
Field
County PAWNEE State KANSAS

Location: API # : 15-145-21792-0000
2206' FNL & 1382' FEL
SEC 3 TWP 22S RGE 16W
Permanent Datum GROUND LEVEL Elevation 1986
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL
MEL/SON
Elevation
K.B. 1999
D.F. 1997
G.L. 1986

Date	12/14/14		
Run Number	ONE		
Depth Driller	4100		
Depth Logger	4101		
Bottom Logged Interval	4099		
Top Log Interval	00		
Casing Driller	8 5/8" @ 1039		
Casing Logger	1038		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5200 PPM	
Density / Viscosity	9.2/52		
pH / Fluid Loss	11.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.80 @ 60F		
Rmt @ Meas. Temp	.60 @ 60F		
Rmc @ Meas. Temp	.96 @ 60F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.43 @ 117F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	117F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	JEREMY SCHWARTZ		

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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 NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
LARNED, KS. - SOUTH TO HWY 19 - 2 EAST - 1 NORTH - WEST INTO



MAIN SECTION

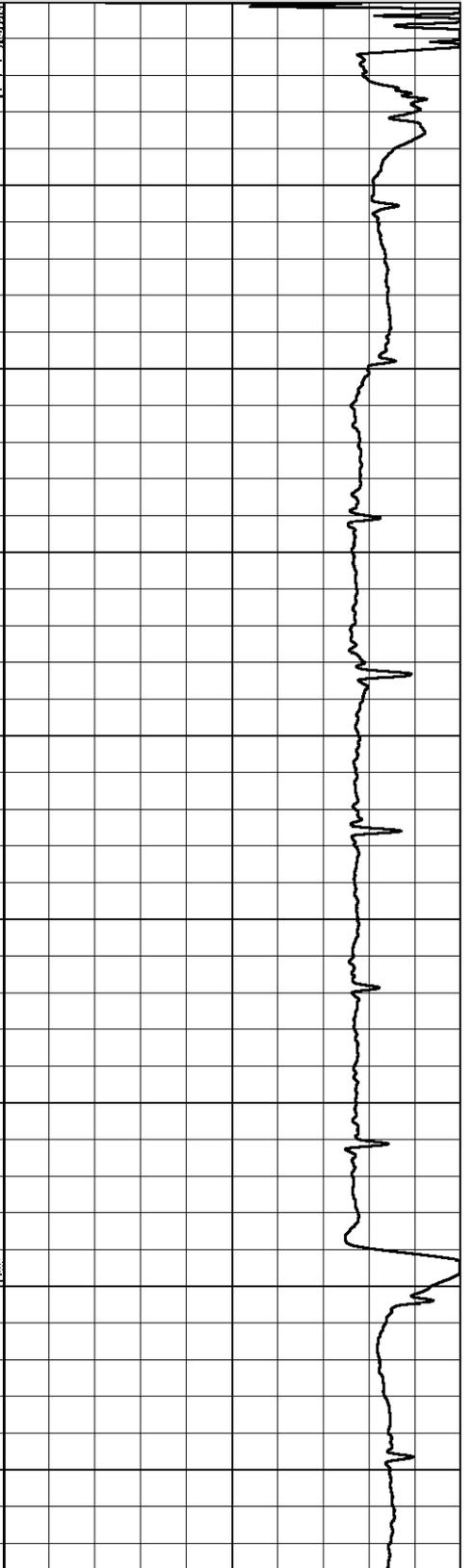
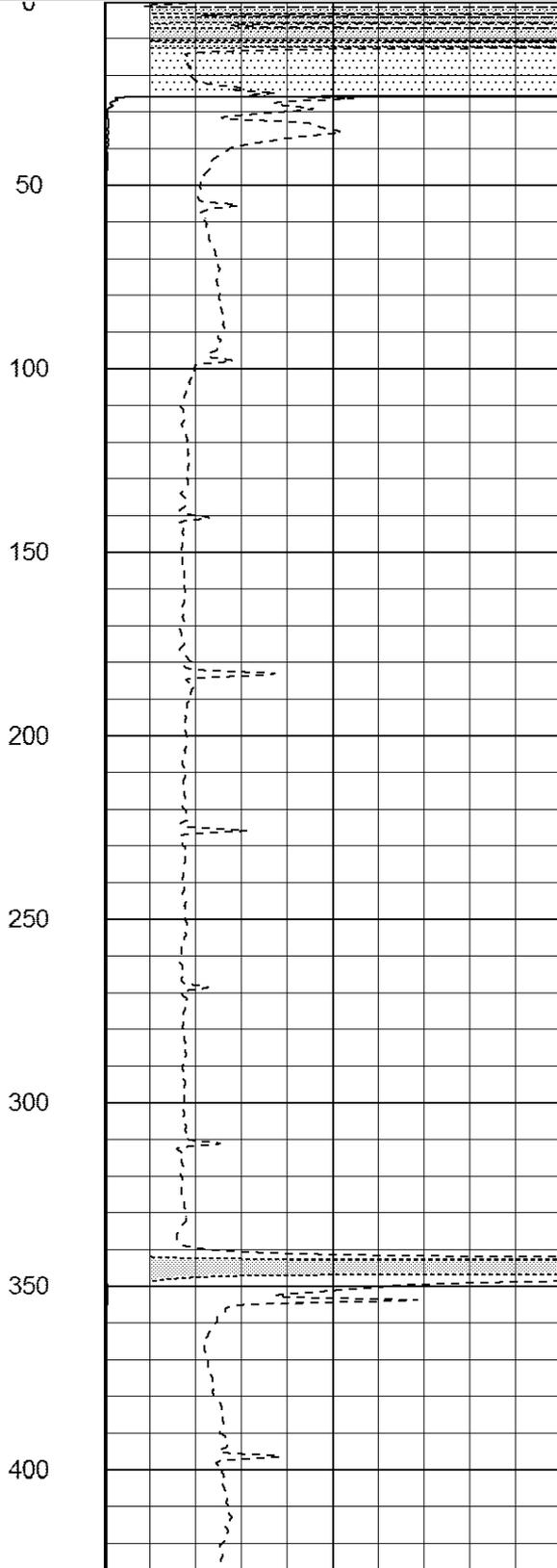
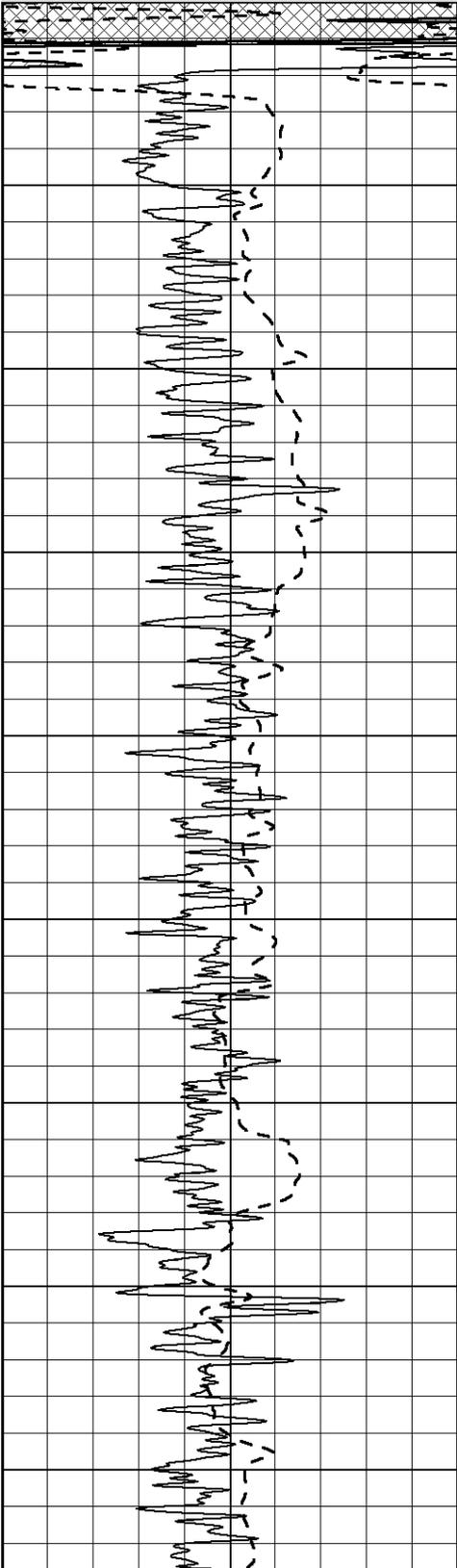
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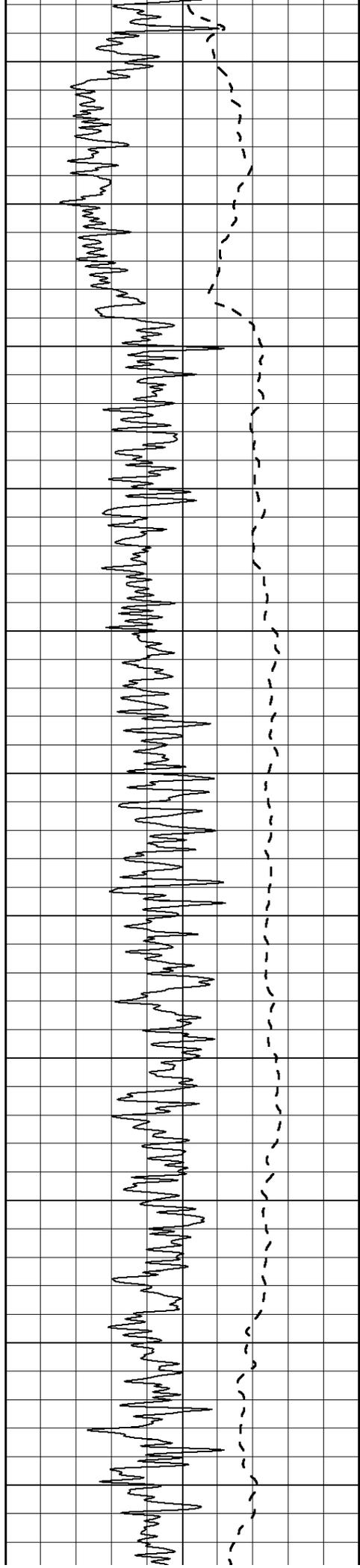
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50

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





450

500

550

600

650

700

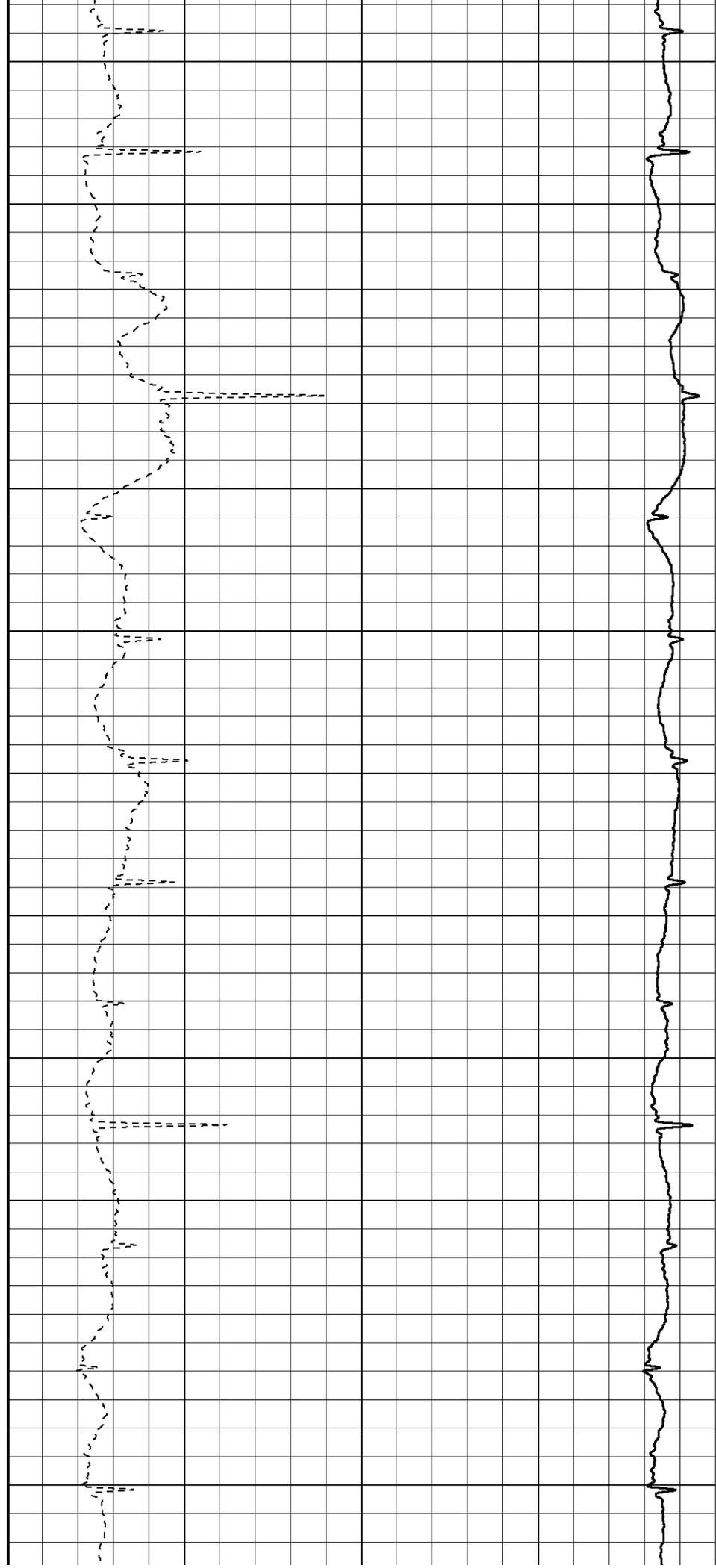
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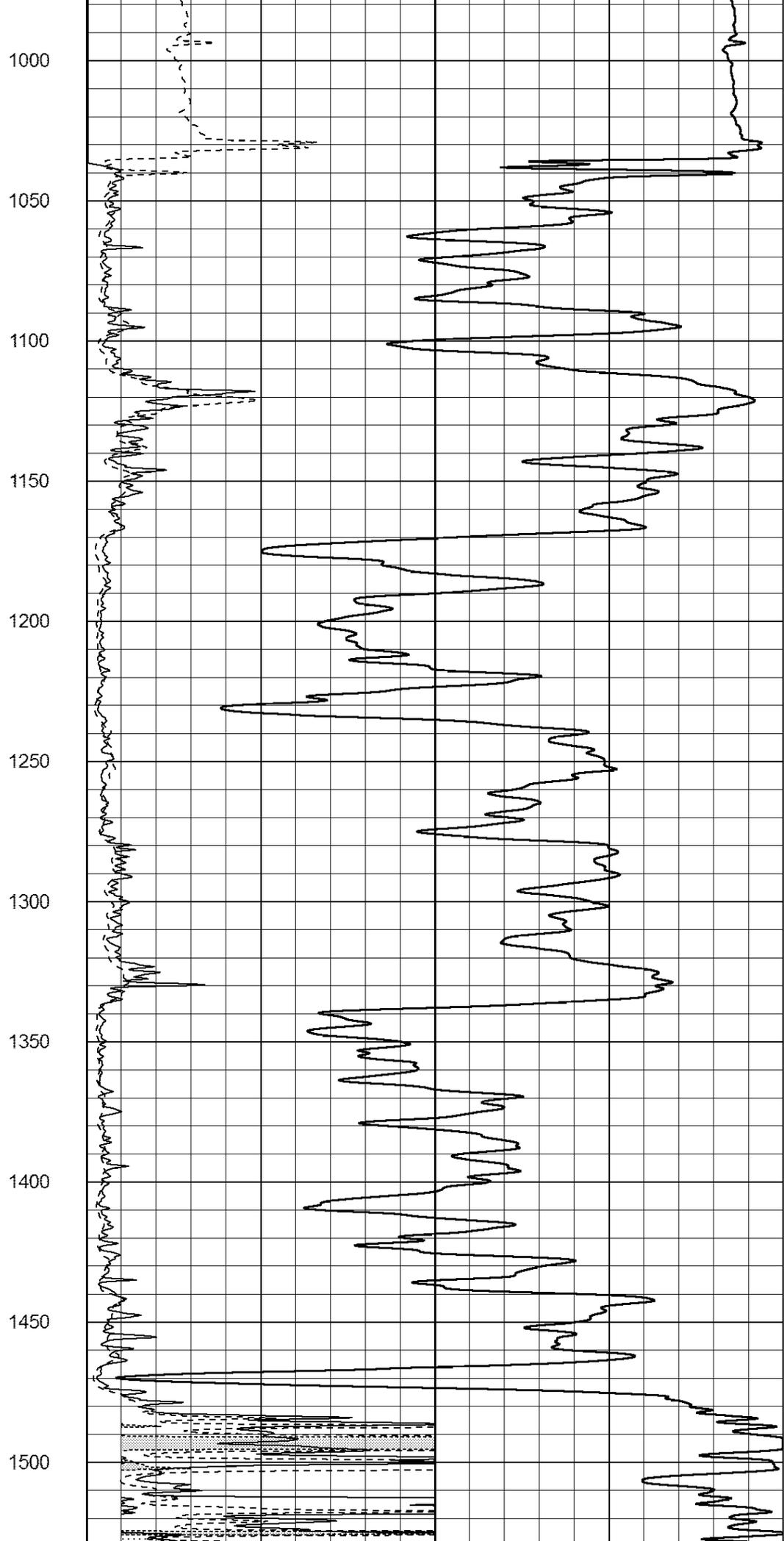
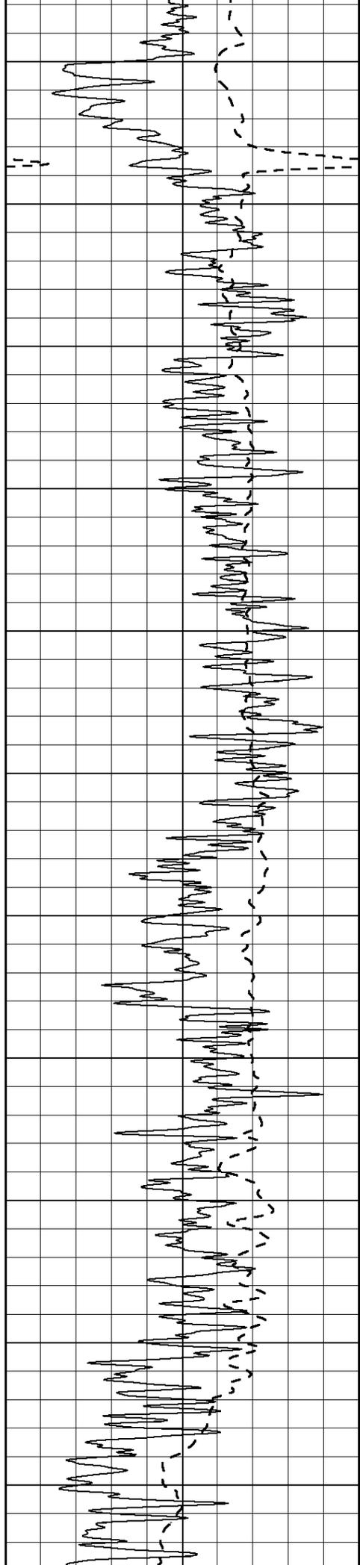
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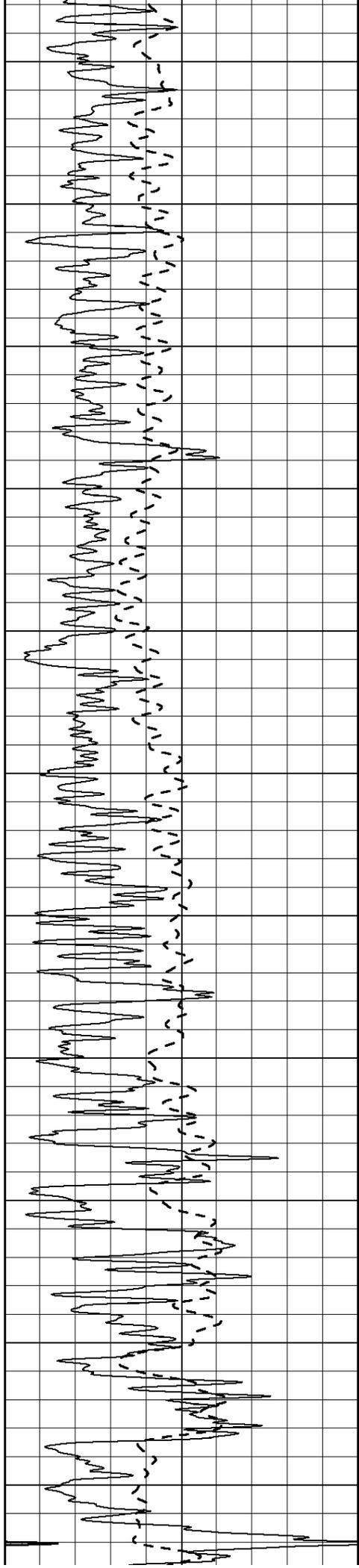
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900

950







1550

1600

1650

1700

1750

1800

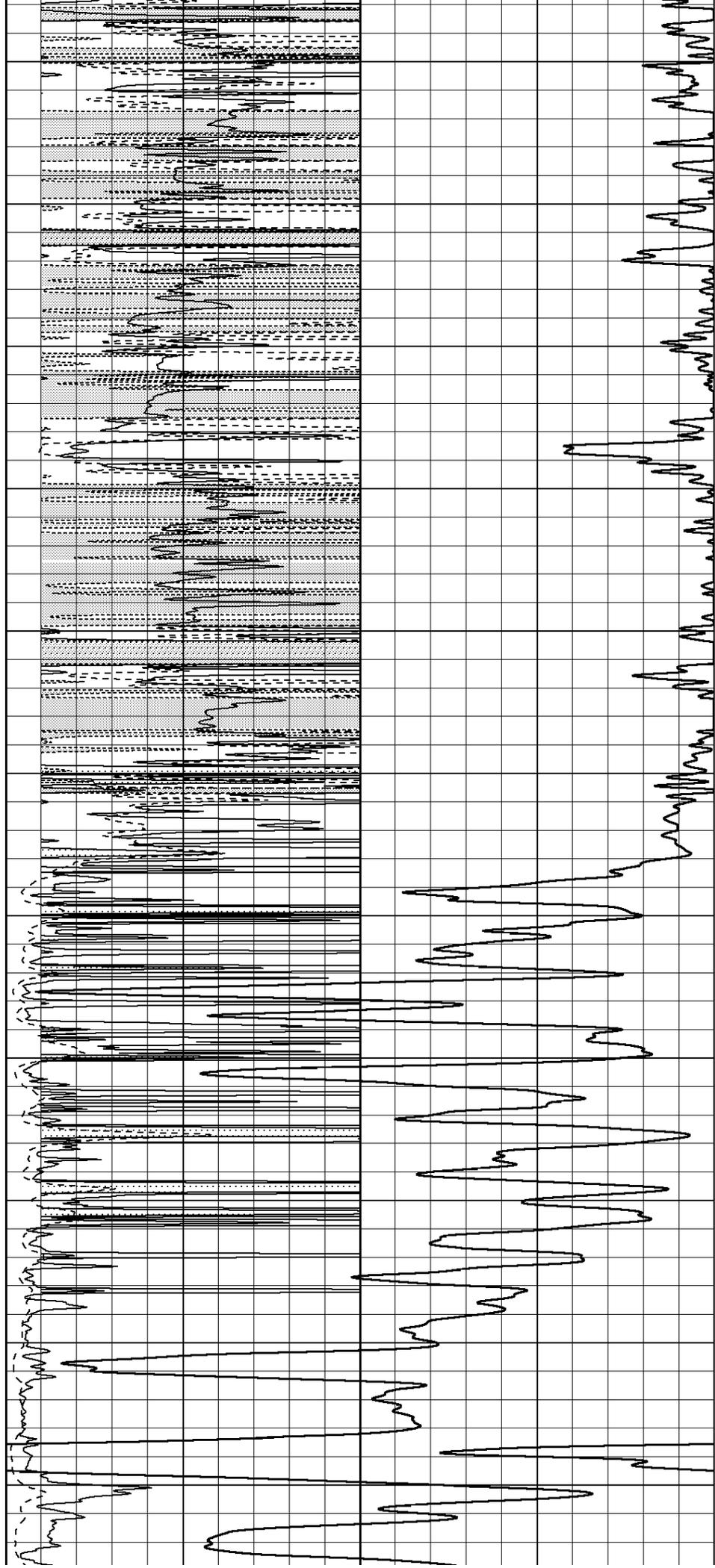
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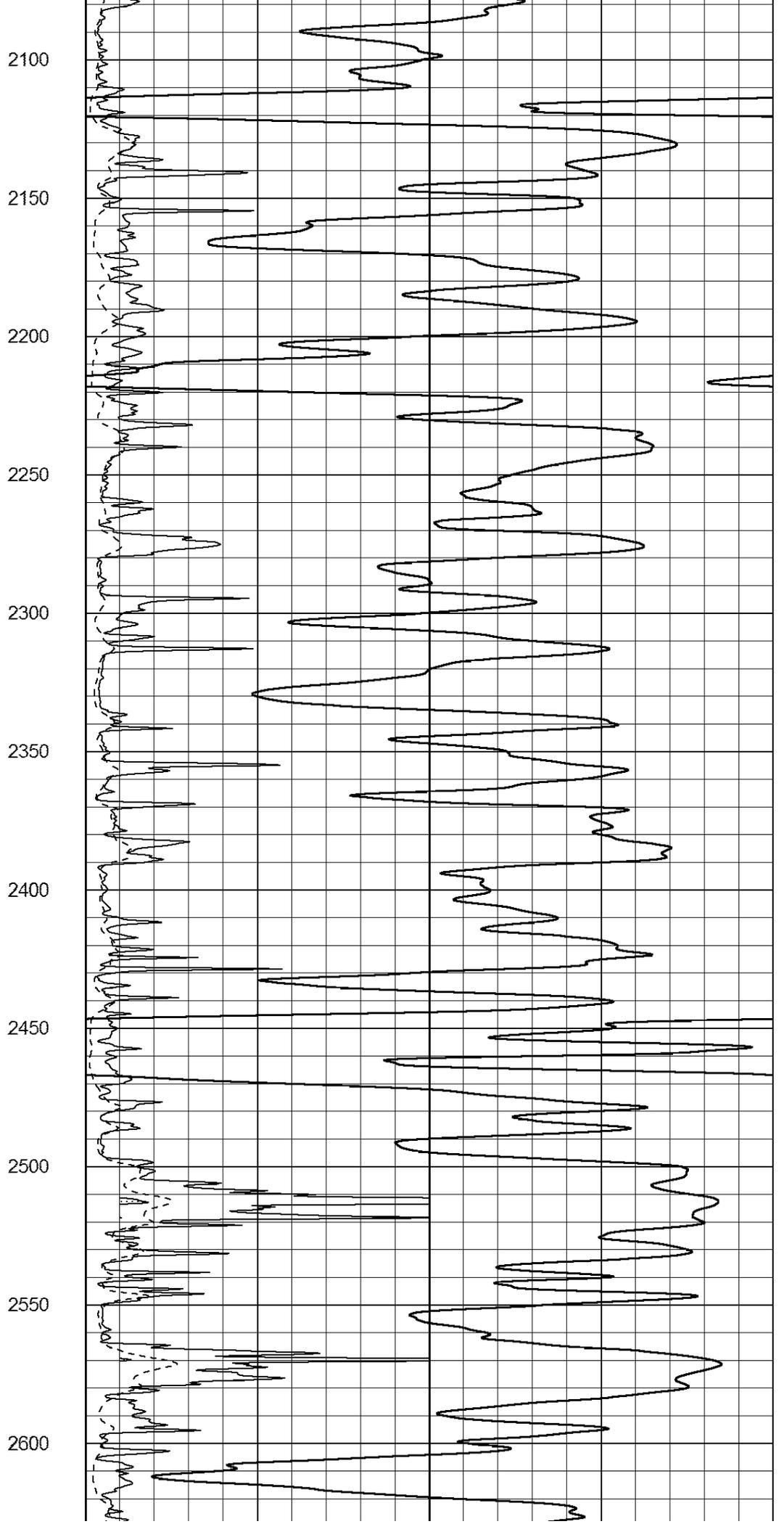
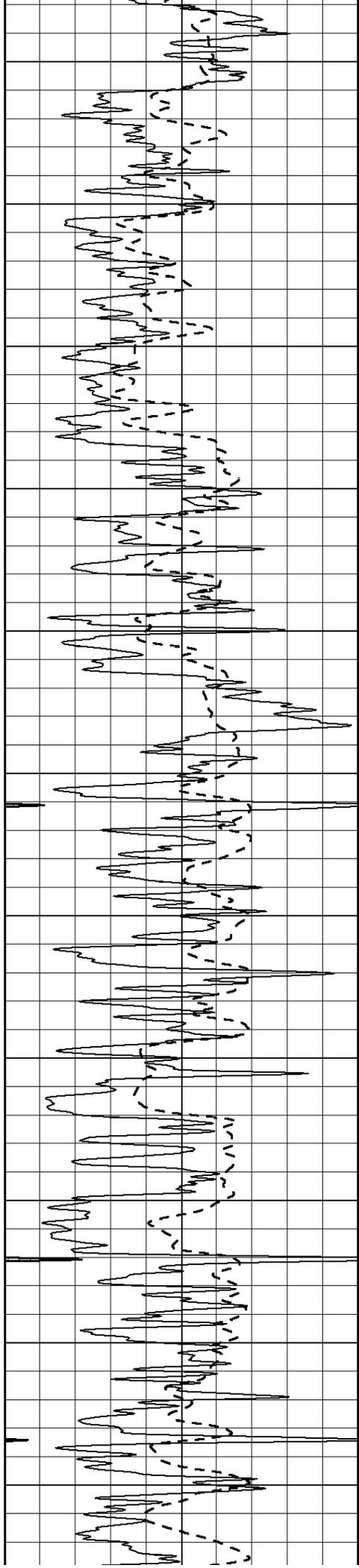
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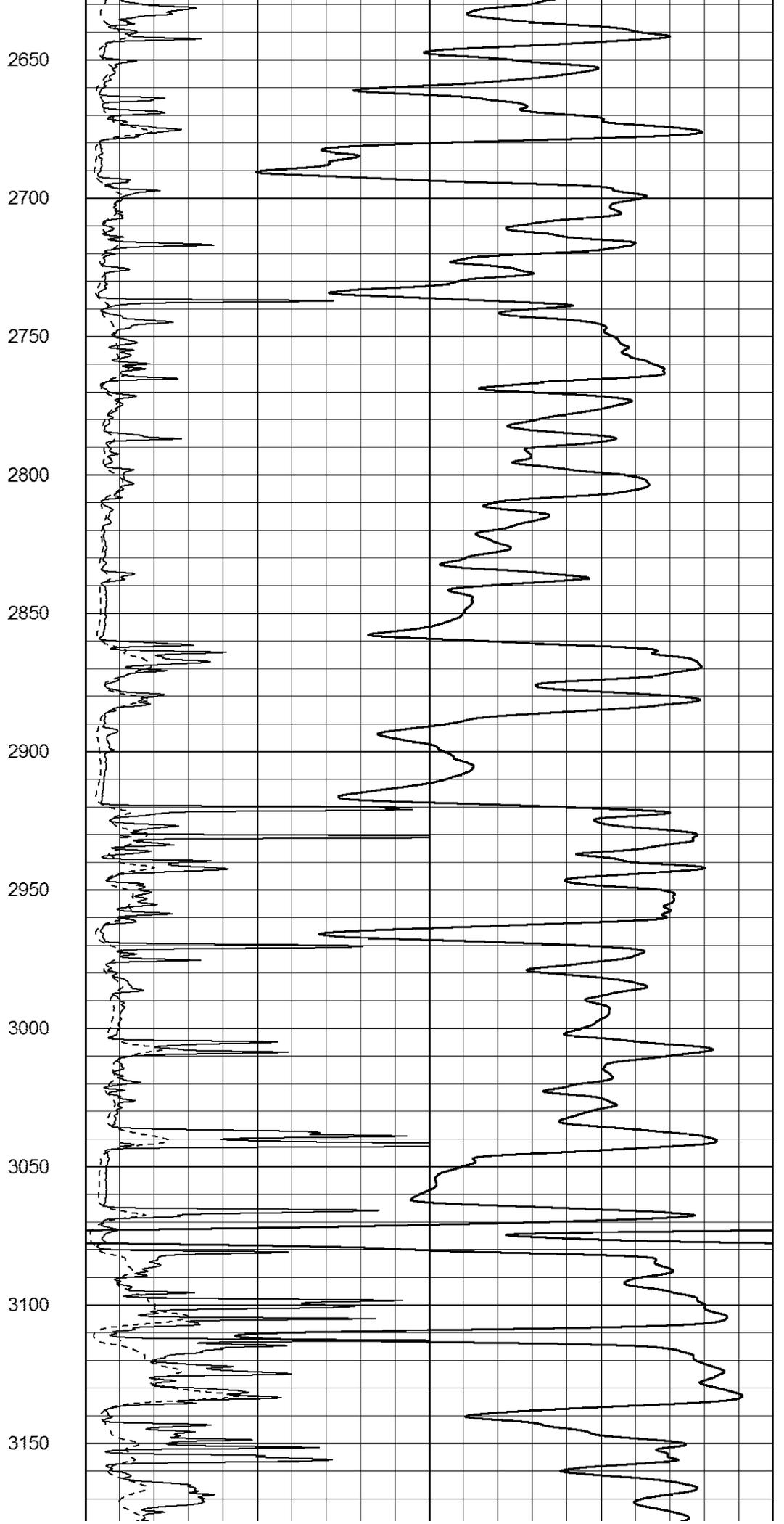
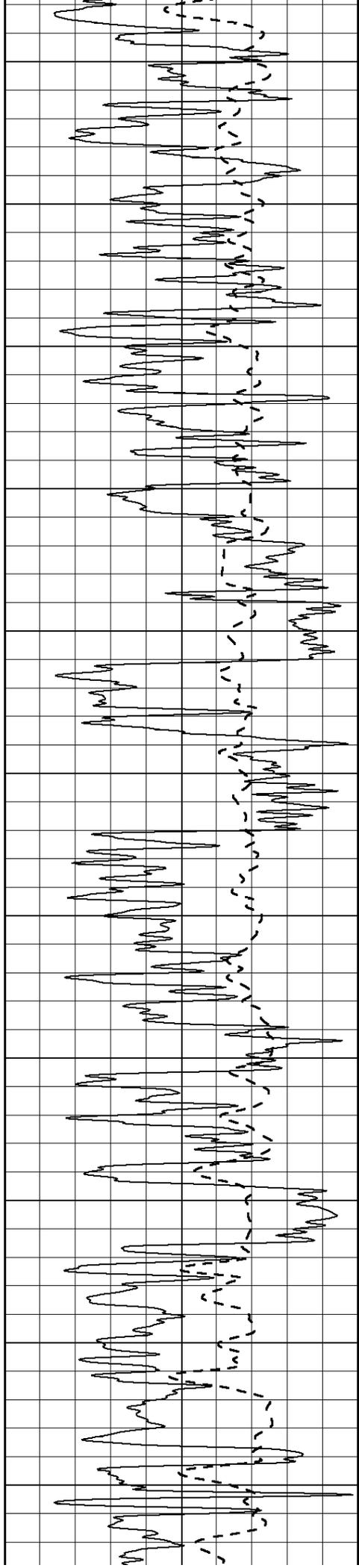
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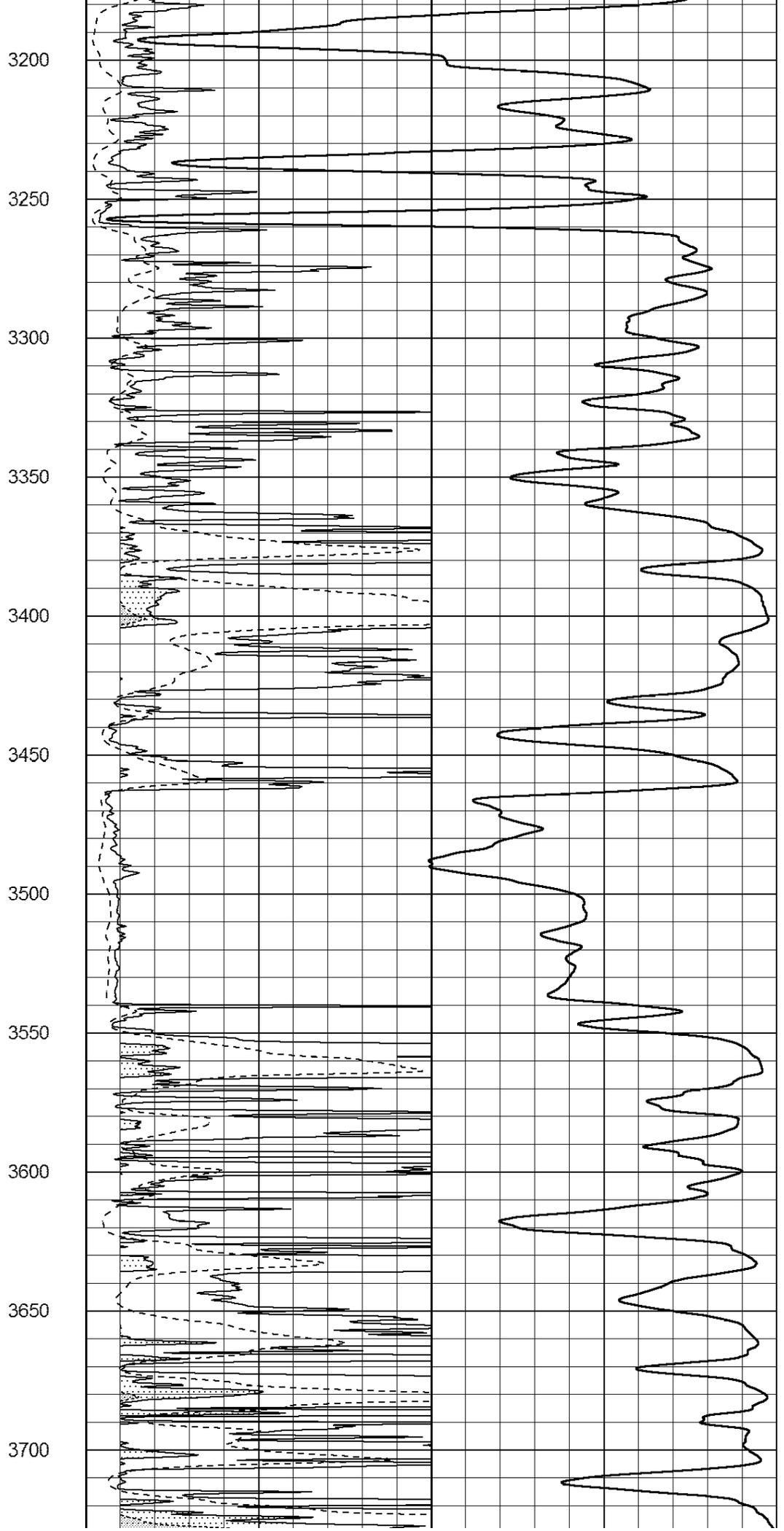
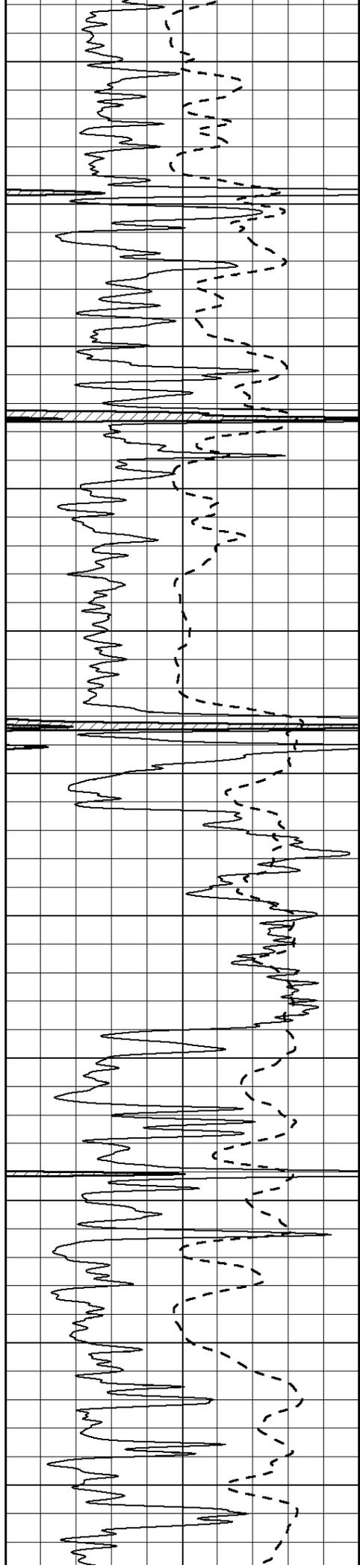
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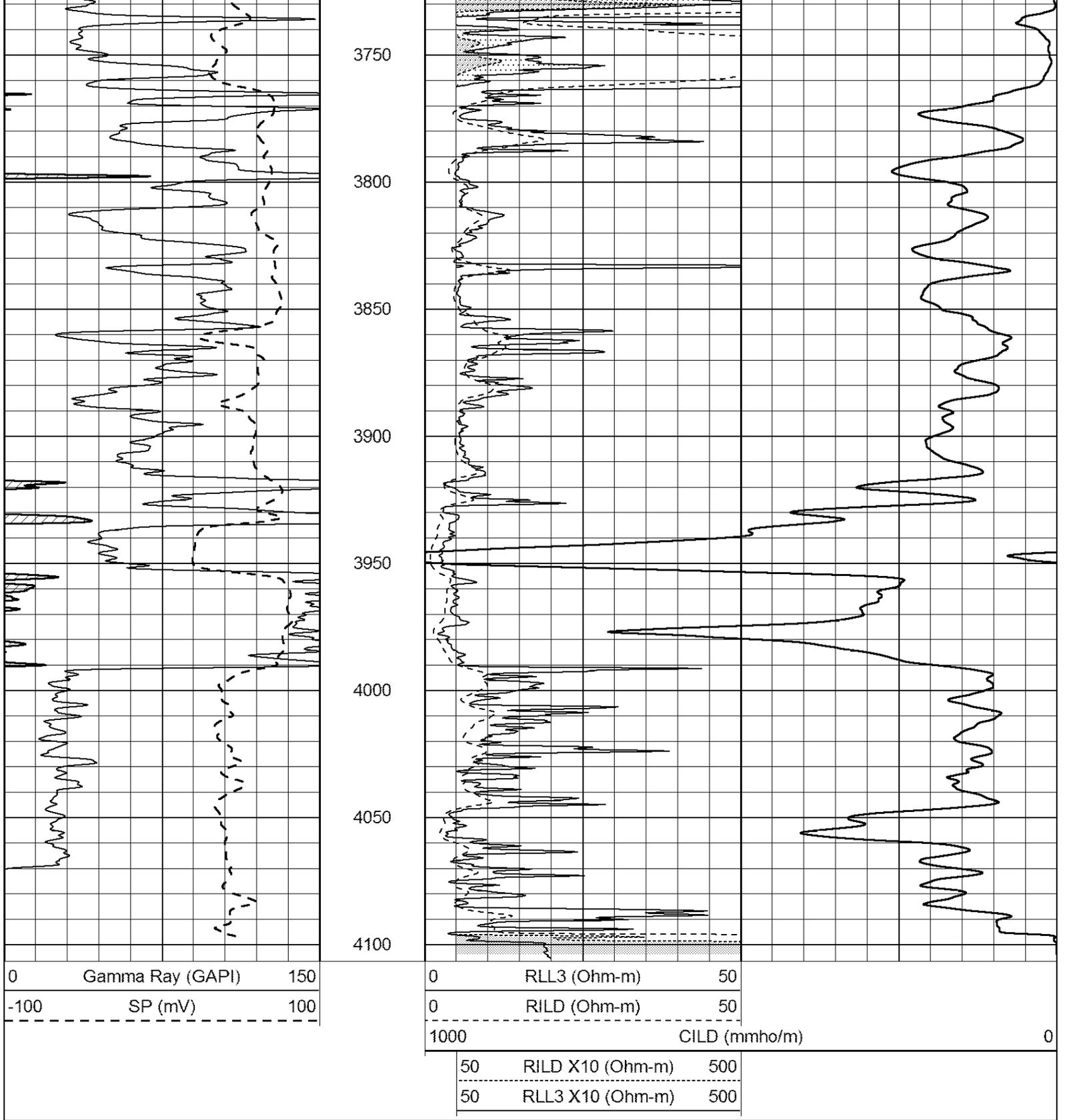
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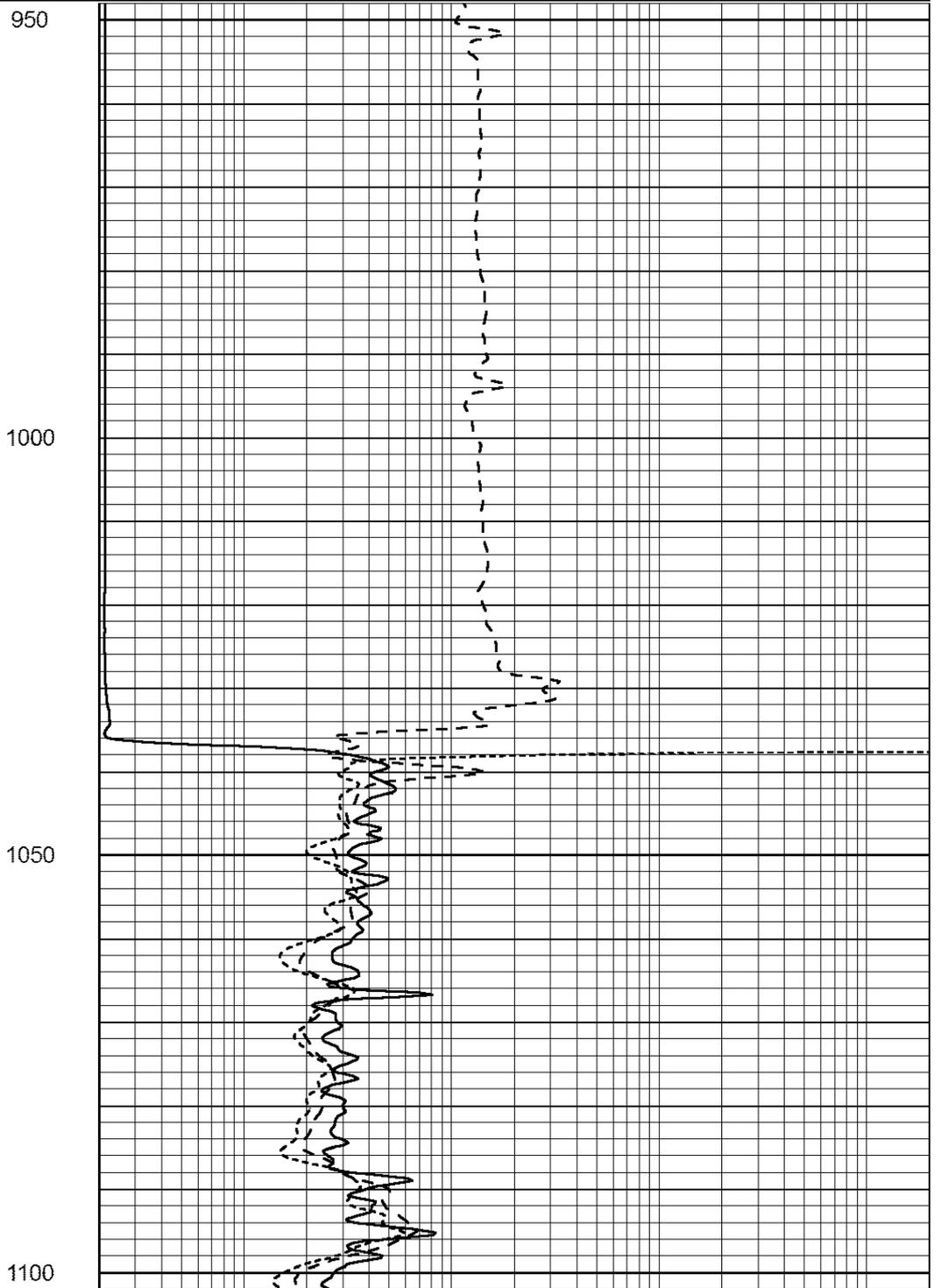
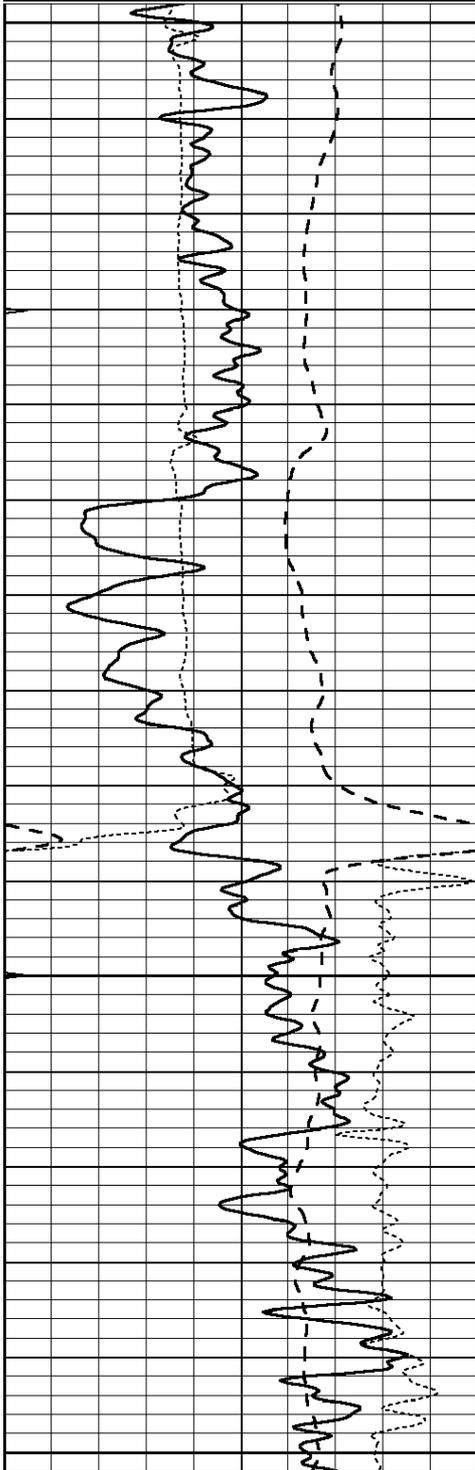
**COMPLETION
& PRODUCTION
SERVICES CO.**

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



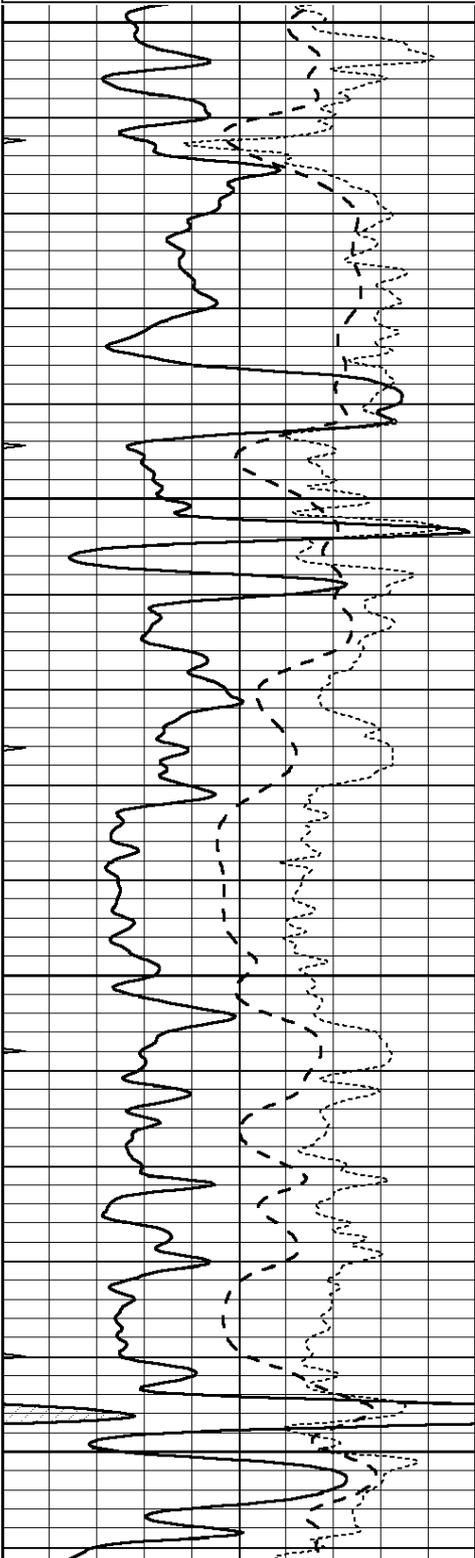
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-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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

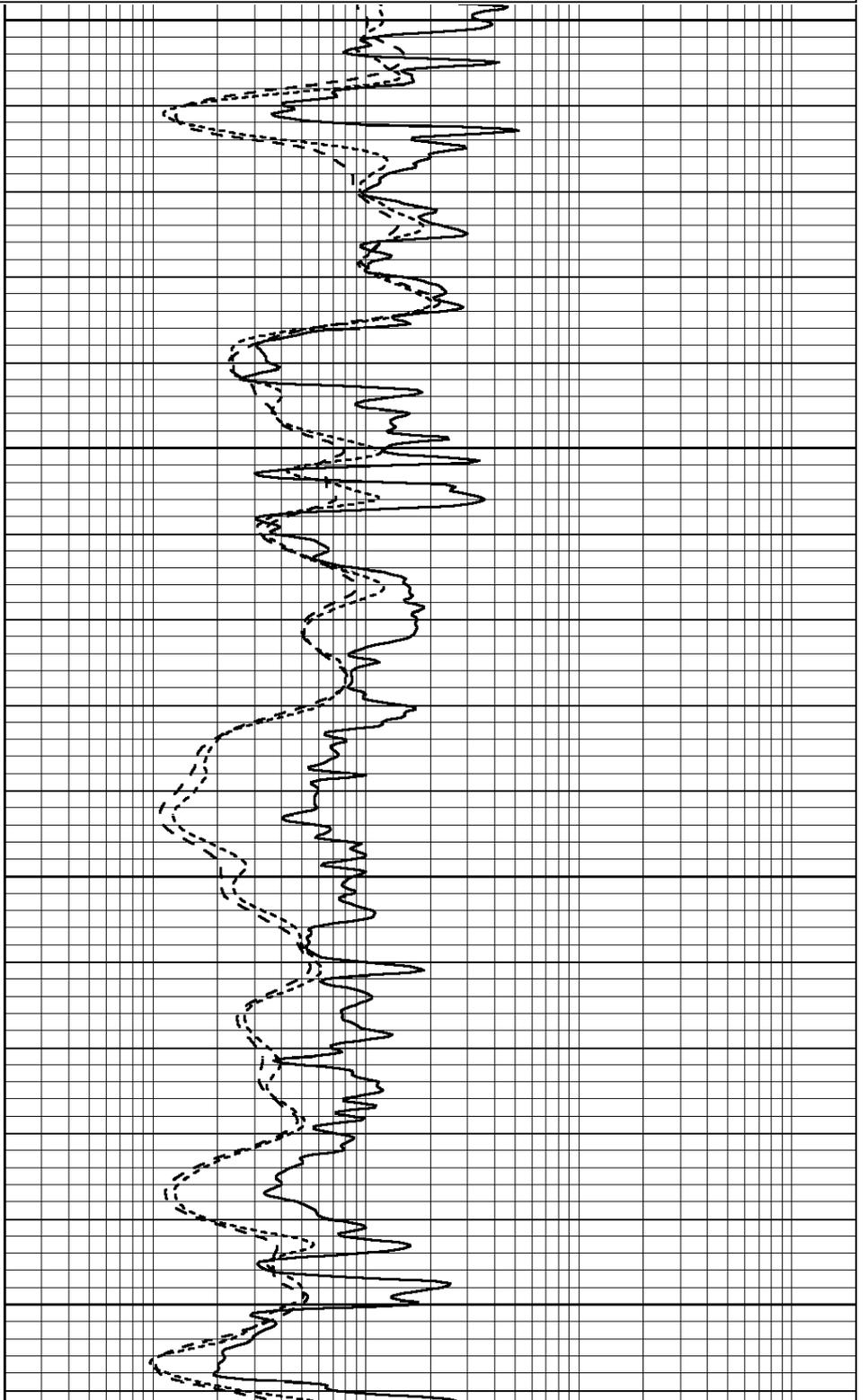
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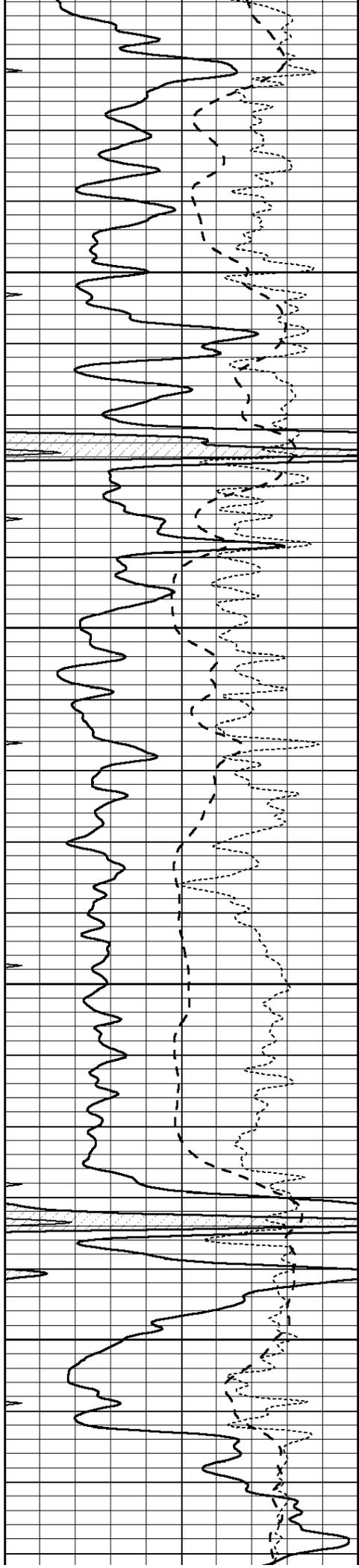
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



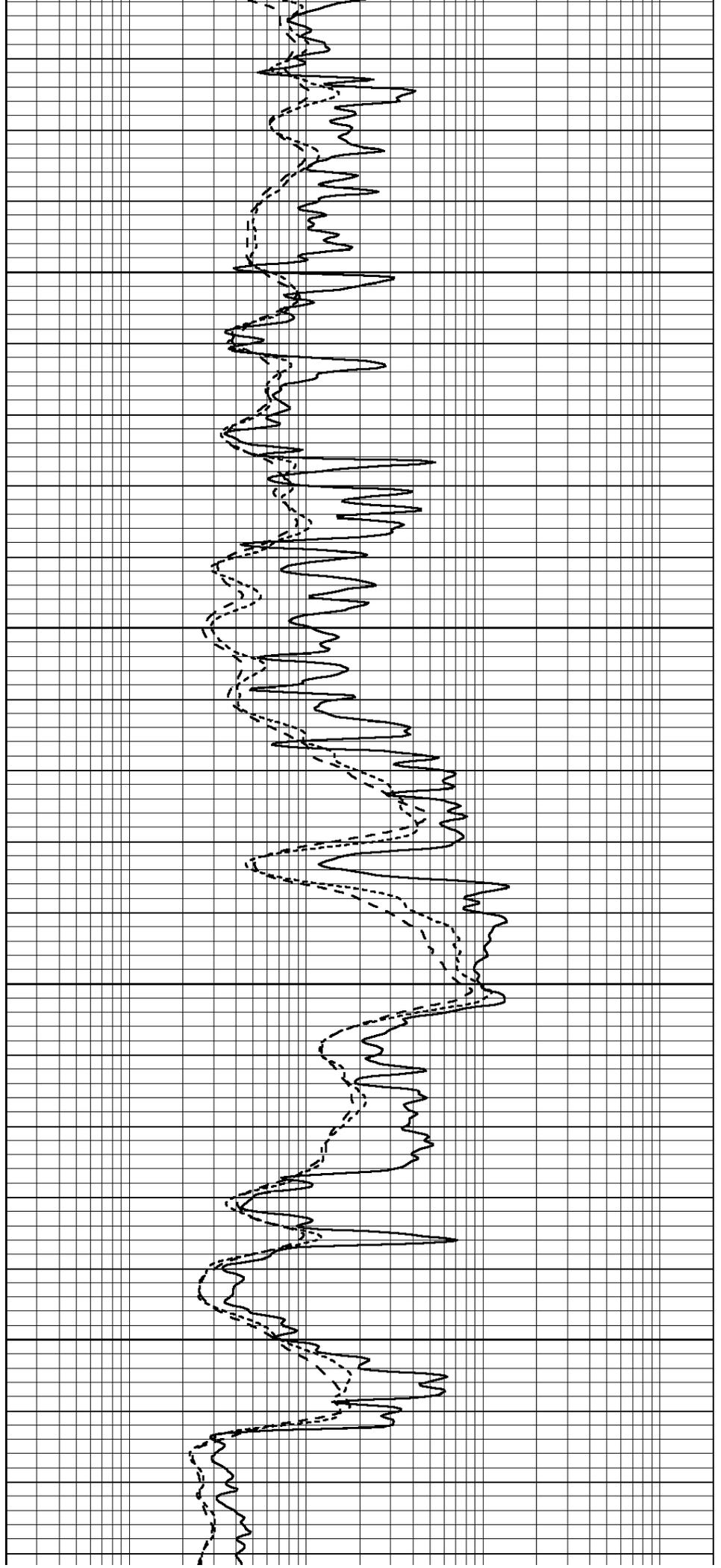


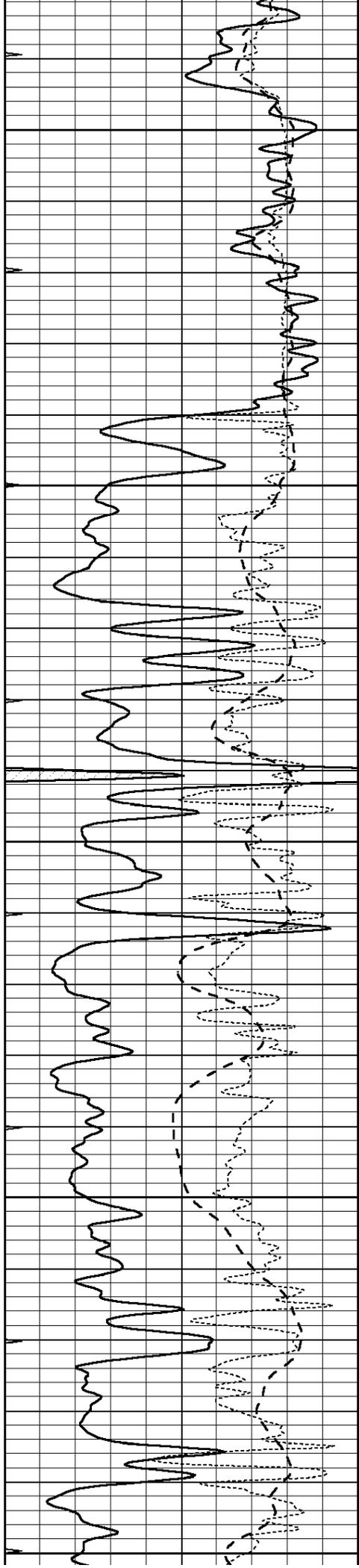
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3350

3400

3450





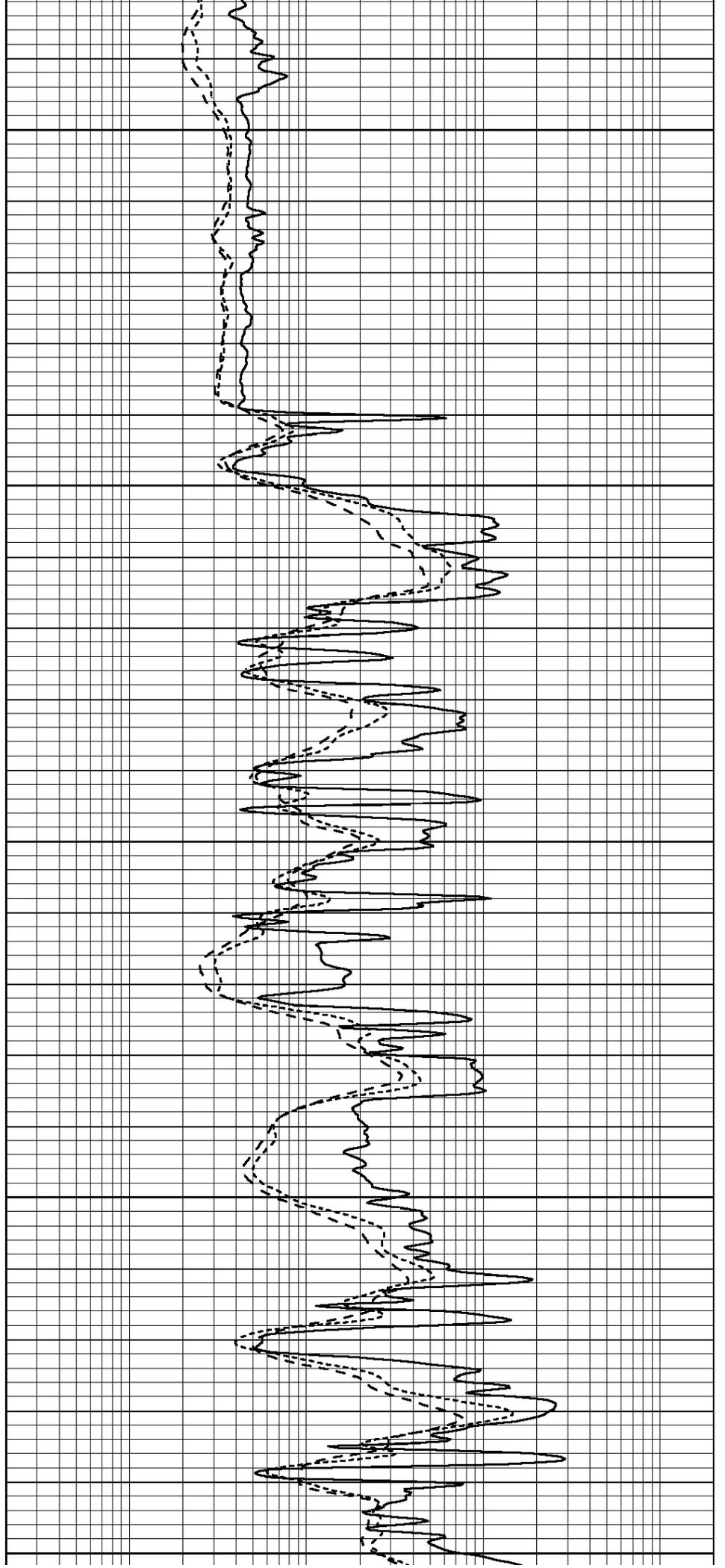
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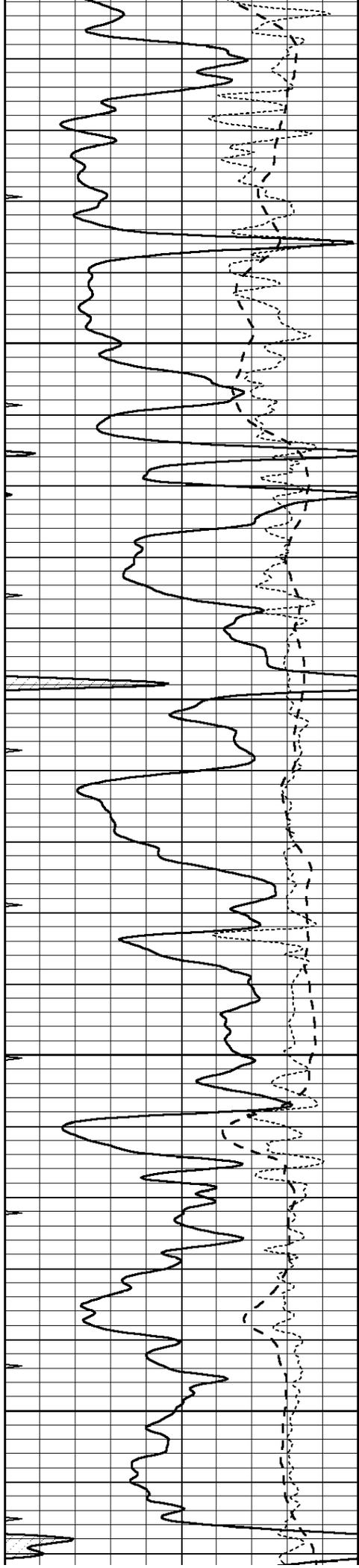
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3600

3650

3700



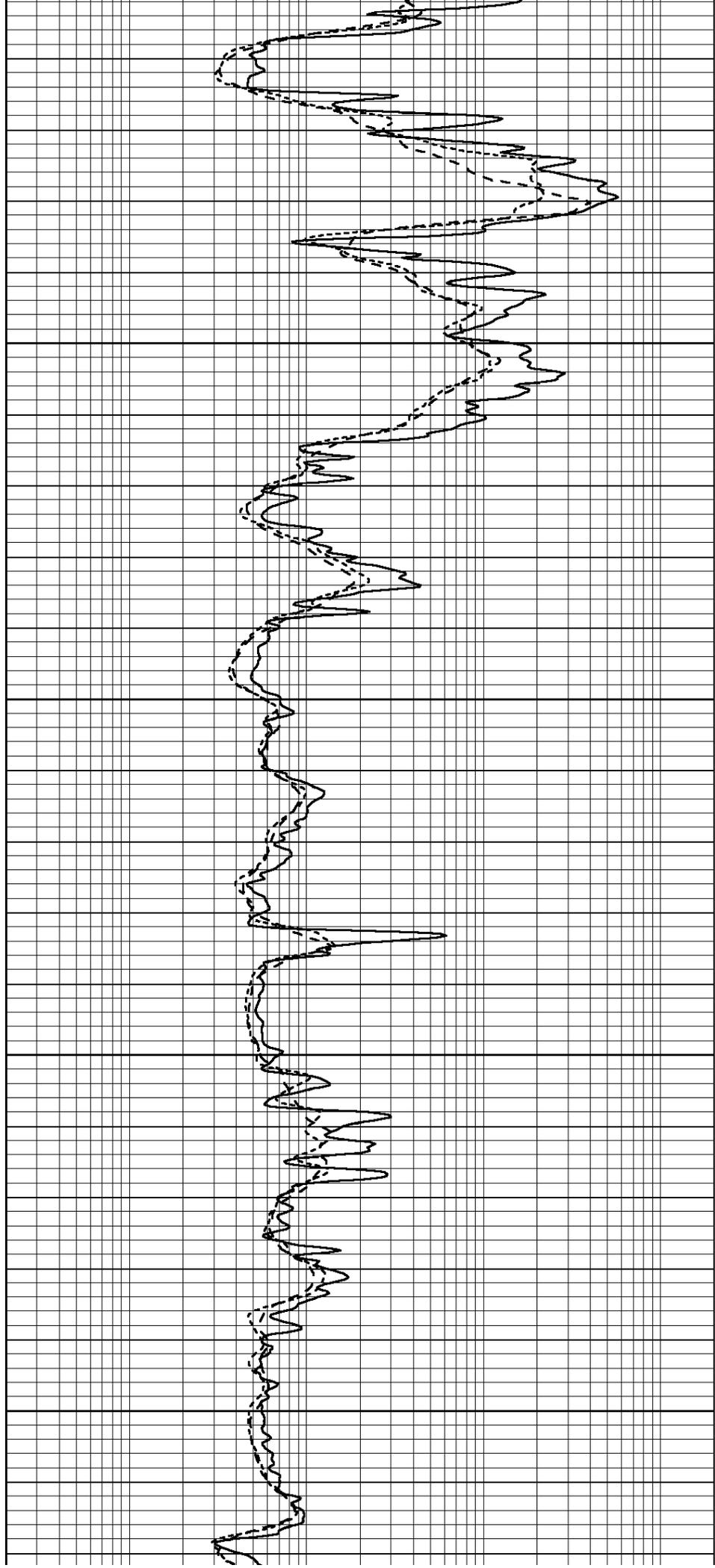


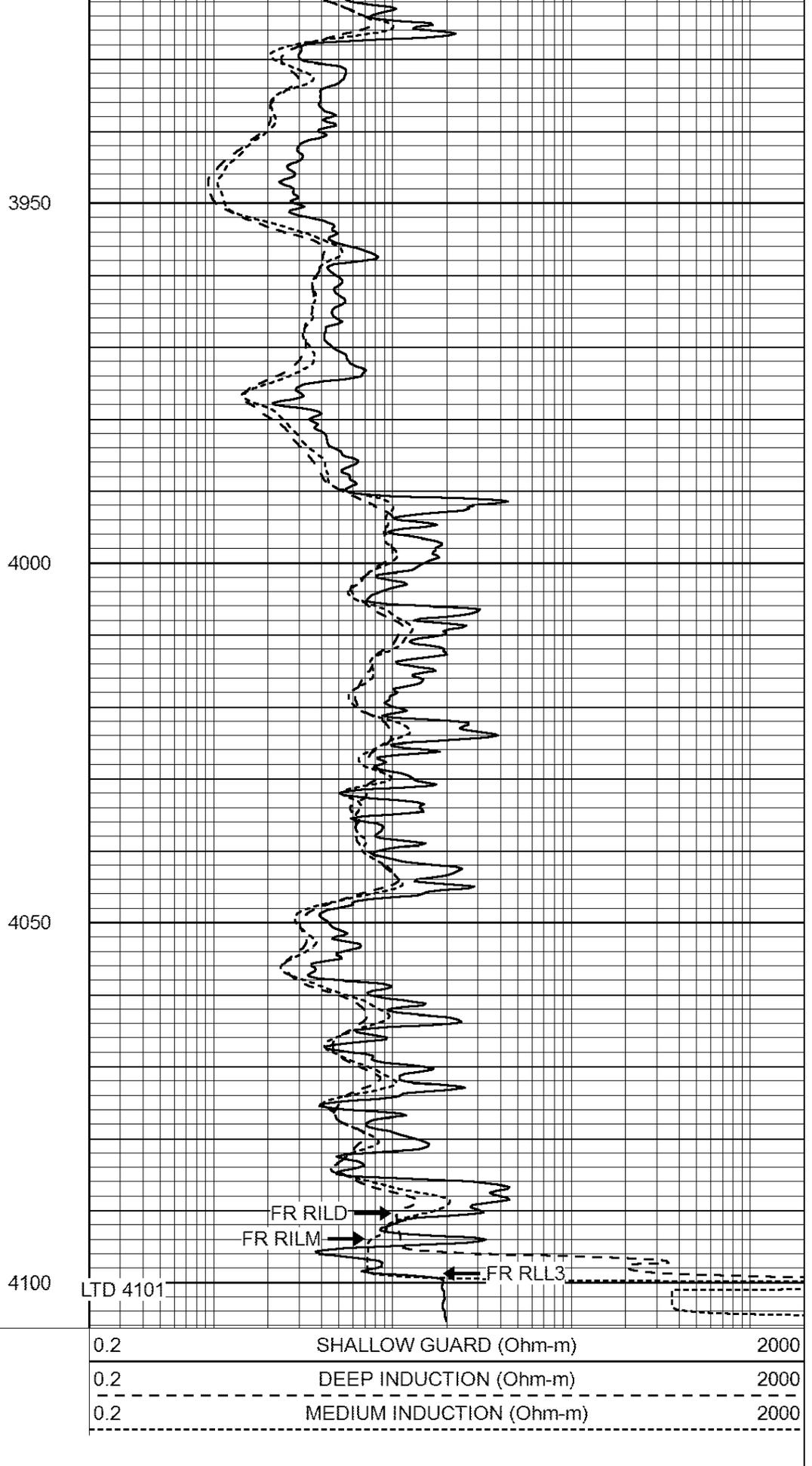
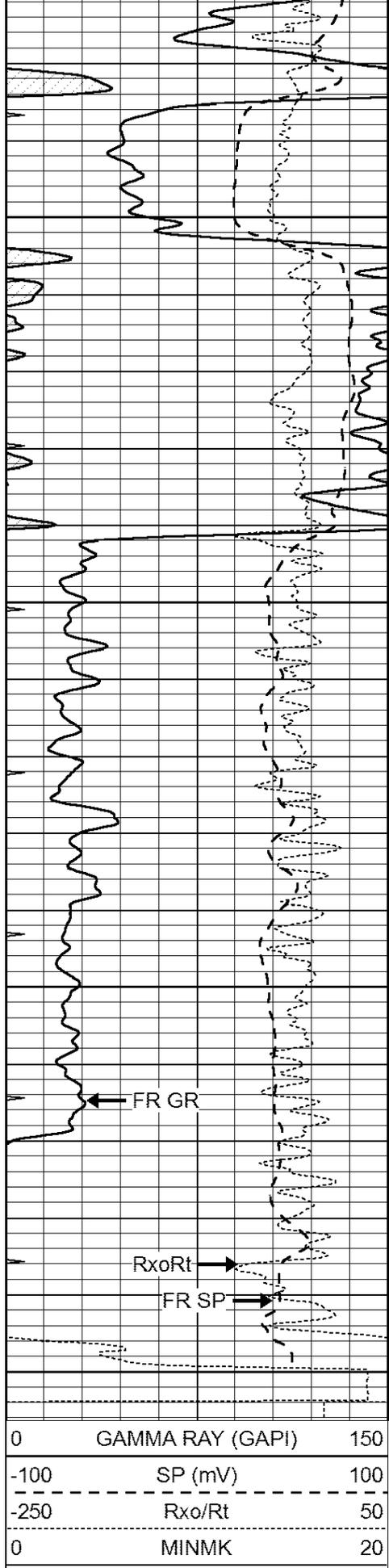
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3800

3850

3900



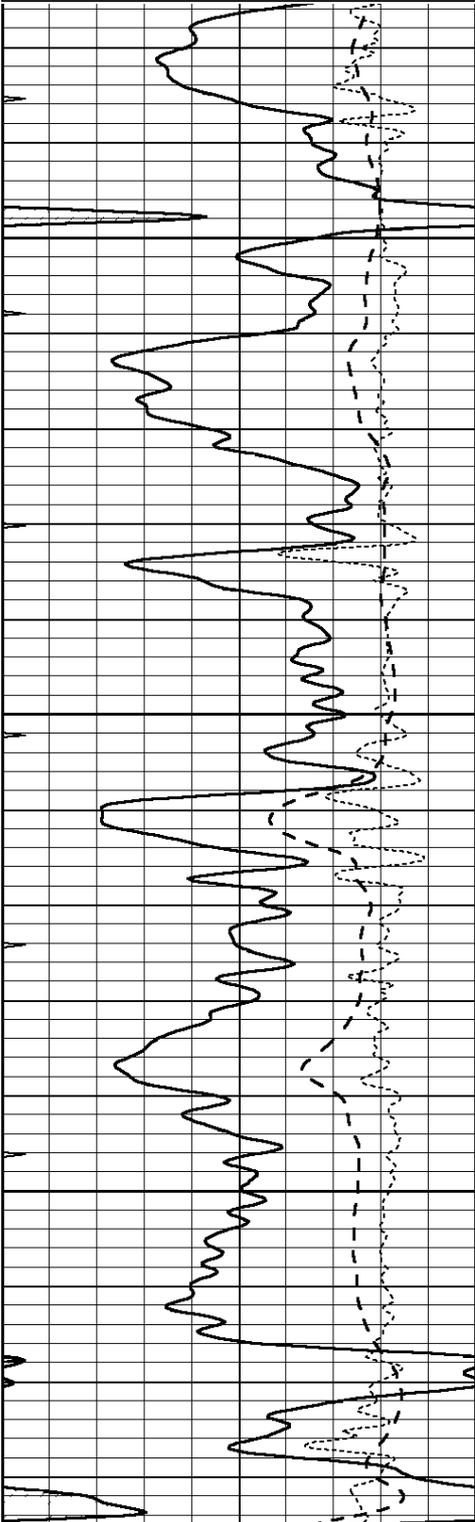


REPEAT SECTION

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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

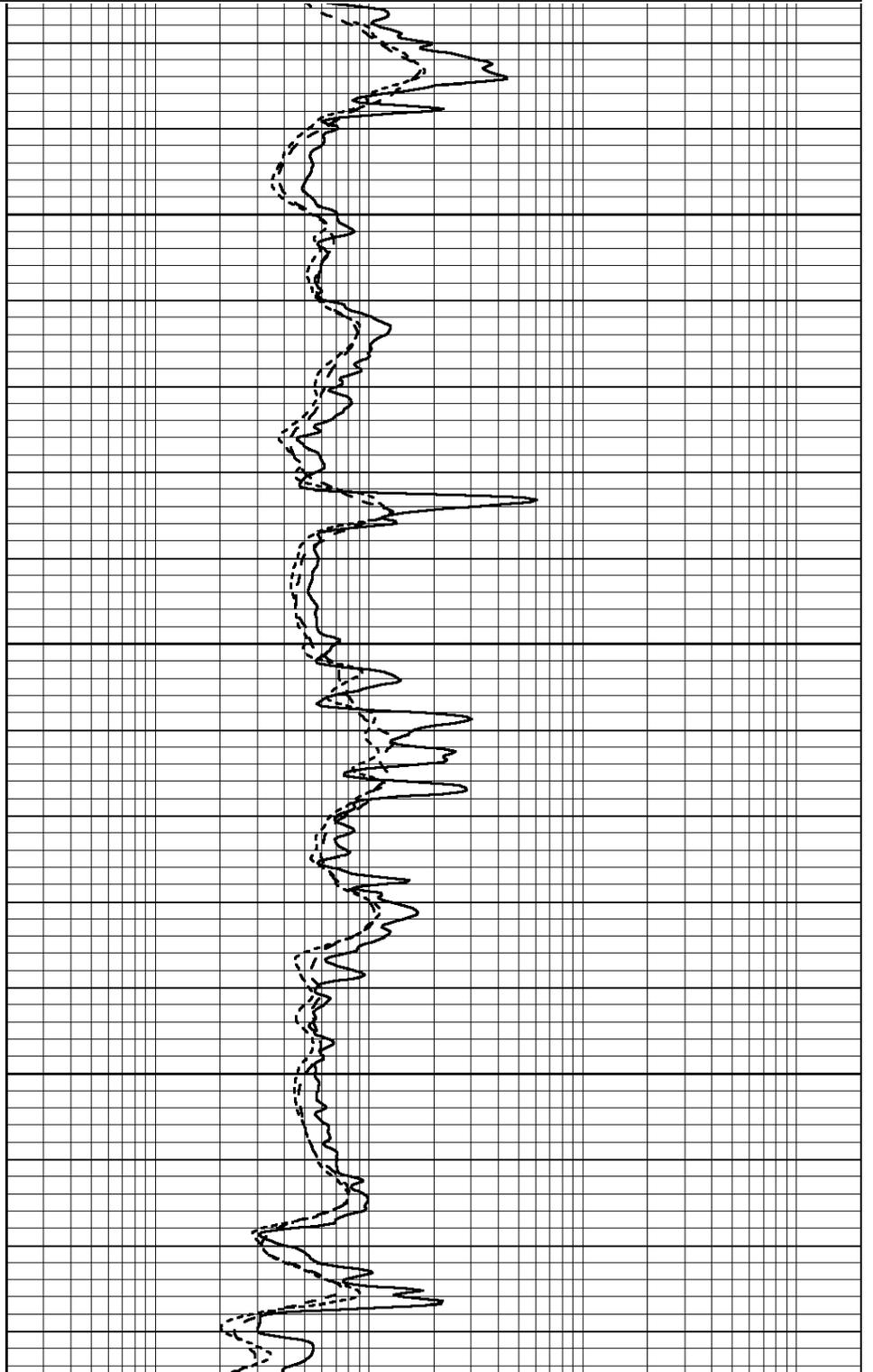
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0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

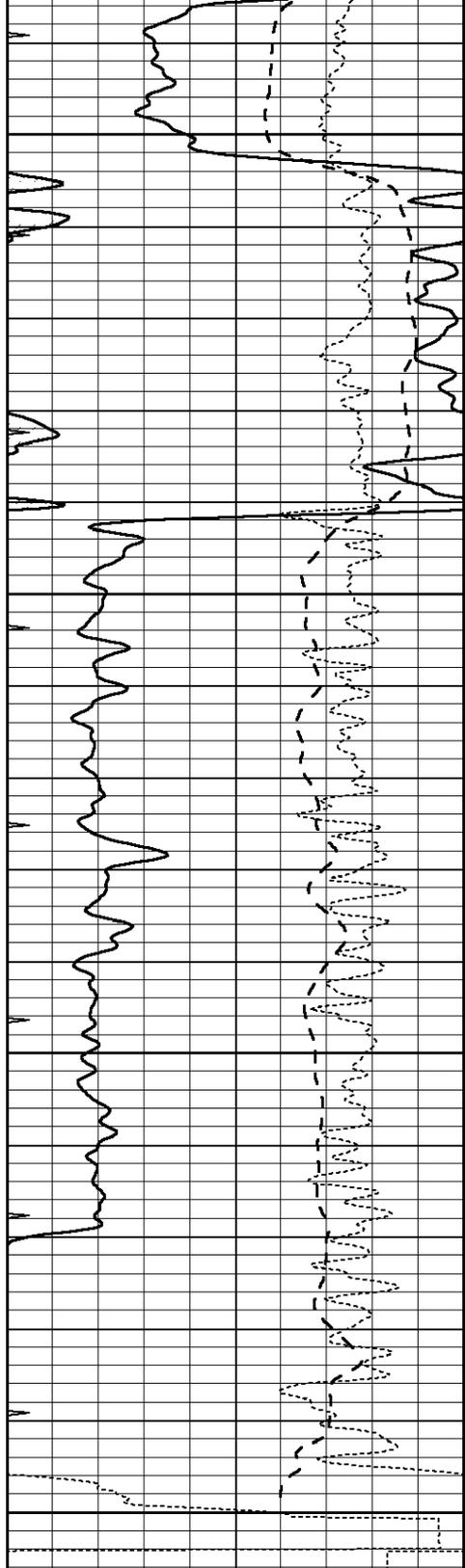


3800

3850

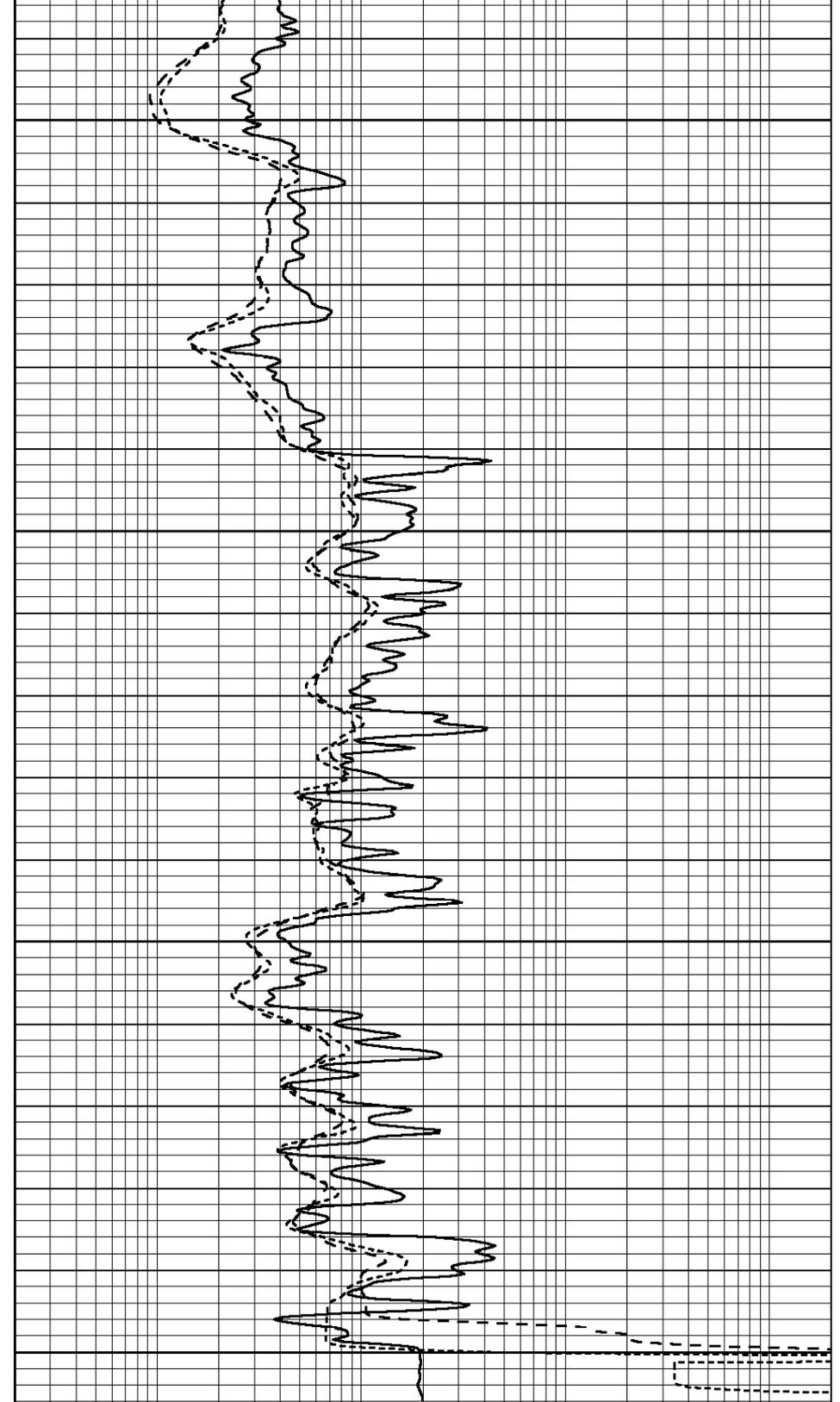
3900





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

3950
4000
4050
4110



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: 26418ddn.db
 Dataset Pathname: pass2.1
 Dataset Creation: Sun Dec 14 12:49:39 2014 by Calc Open-Cased 090629

g/cc	g/cc
After Survey Verification	
<u>Target</u>	<u>Measured</u>
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

Compensated Neutron Calibration Report

Serial Number:	6I
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	

PRE-SURVEY VERIFICATION						
Detector	Readings		Measured		Target	
1) Short Space		cps				
Long Space		cps		pu		pu
2) Short Space		cps				
Long Space		cps		pu		
3) Short Space		cps				
Long Space		cps		pu		

POST-SURVEY VERIFICATION						
Detector	Readings		Measured		Target	
1) Short Space		cps				
Long Space		cps		pu		pu
2) Short Space		cps				
Long Space		cps		pu		pu
3) Short Space		cps				
Long Space		cps		pu		pu

Gamma Ray Calibration Report

Serial Number:	GR6
Tool Model:	OPEN
Performed:	Wed Dec 10 11:09:24 2014
Calibrator Value:	150.0 GAPI
Background Reading:	0.0 cps
Calibrator Reading:	276.0 cps
Sensitivity:	0.8000 GAPI/cps