



**SUPERIOR  
Hays,  
Kansas**

**DUAL  
INDUCTION  
LOG**

Company **CAPTIVA II**  
Well **EAKIN UNIT #4-7**  
Field **WILDCAT**  
County **PAWNEE** State **KANSAS**

Company **CAPTIVA II**  
Well **EAKIN UNIT #4-7**  
Field **WILDCAT**  
County **PAWNEE**  
State **KANSAS**

Location: **API # : 15-145-21642**  
**1580' FNL & 607' FEL**  
**SEC 7 TWP 22S RGE 16W**  
Permanent Datum **GROUND LEVEL** Elevation **2005**  
Log Measured From **KELLY BUSHING 11' A.G.L.**  
Drilling Measured From **KELLY BUSHING**

Other Services  
**CDL/CNL  
SONIC/MEL**  
Elevation  
**K.B. 2016  
D.F.  
G.L. 2005**

Date	6-18-11
Run Number	ONE
Depth Driller	4025
Depth Logger	4026
Bottom Logged Interval	4024
Top Log Interval	00
Casing Driller	1027
Casing Logger	1027
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4 / 54
pH / Fluid Loss	10.0 / 11.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.50 @ 98F
Rmf @ Meas. Temp	0.38 @ 98F
Rmc @ Meas. Temp	0.60 @ 98F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.430 @ 115F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	2:15 P.M.
Maximum Recorded Temperature	115F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	CHARLIE STURDAVANT

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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: LARNED & #56, 1W, 1S, W INTO.**



**SUPERIOR  
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**MAIN SECTION**

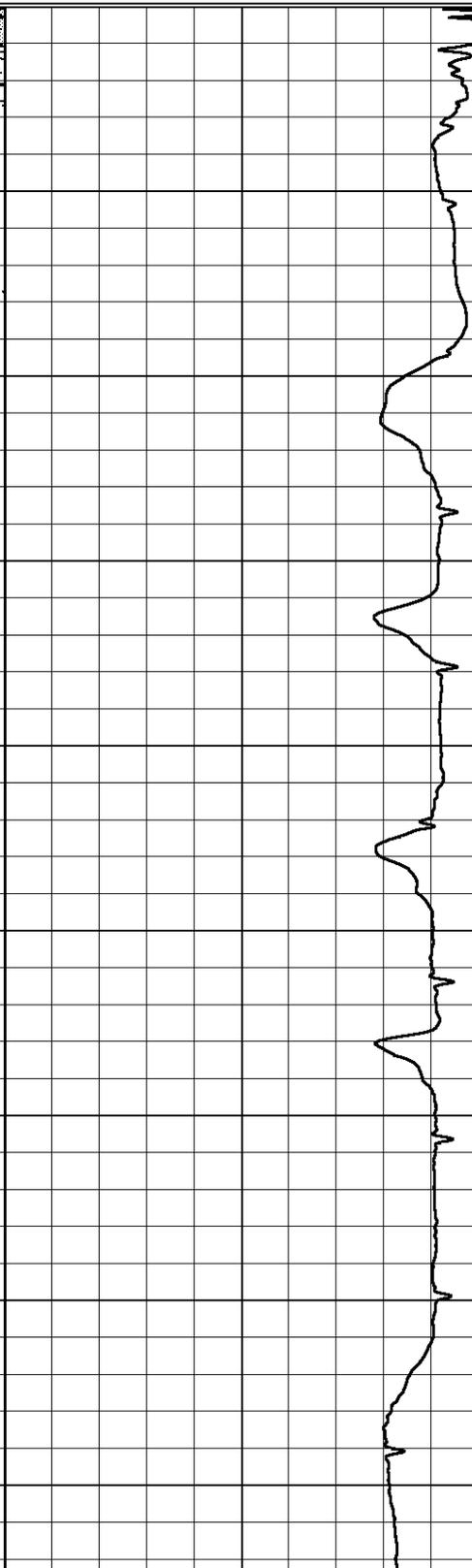
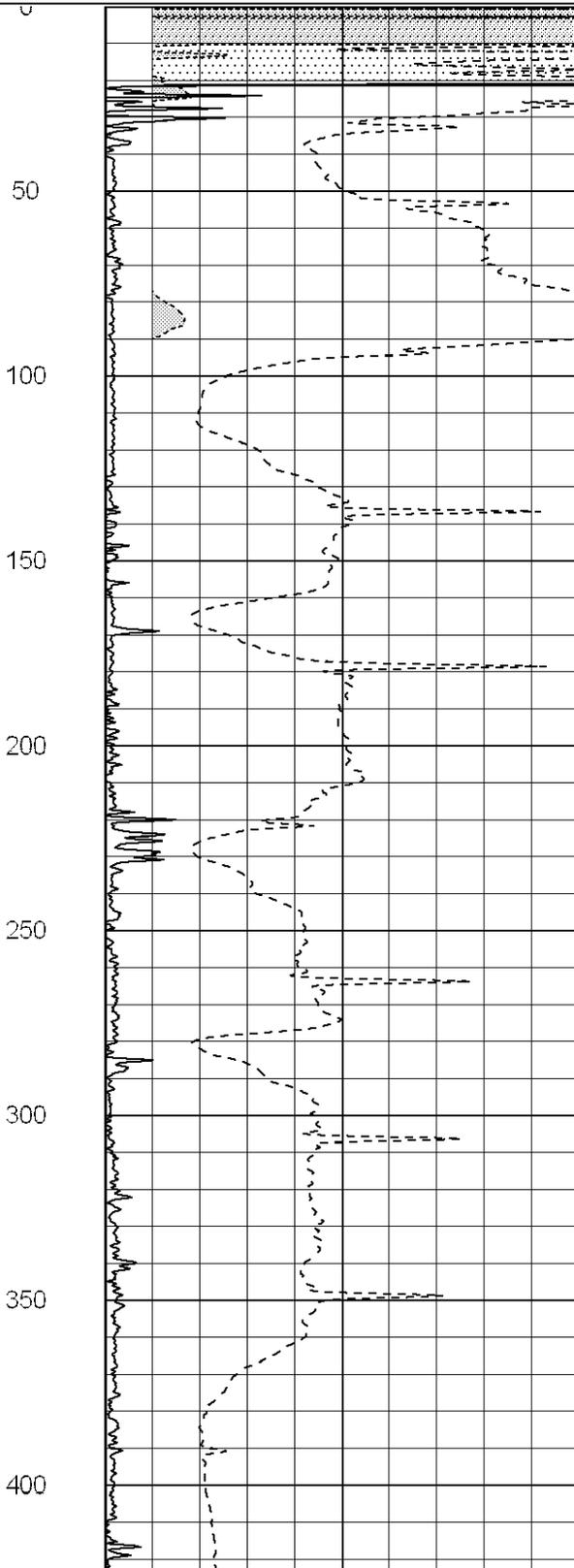
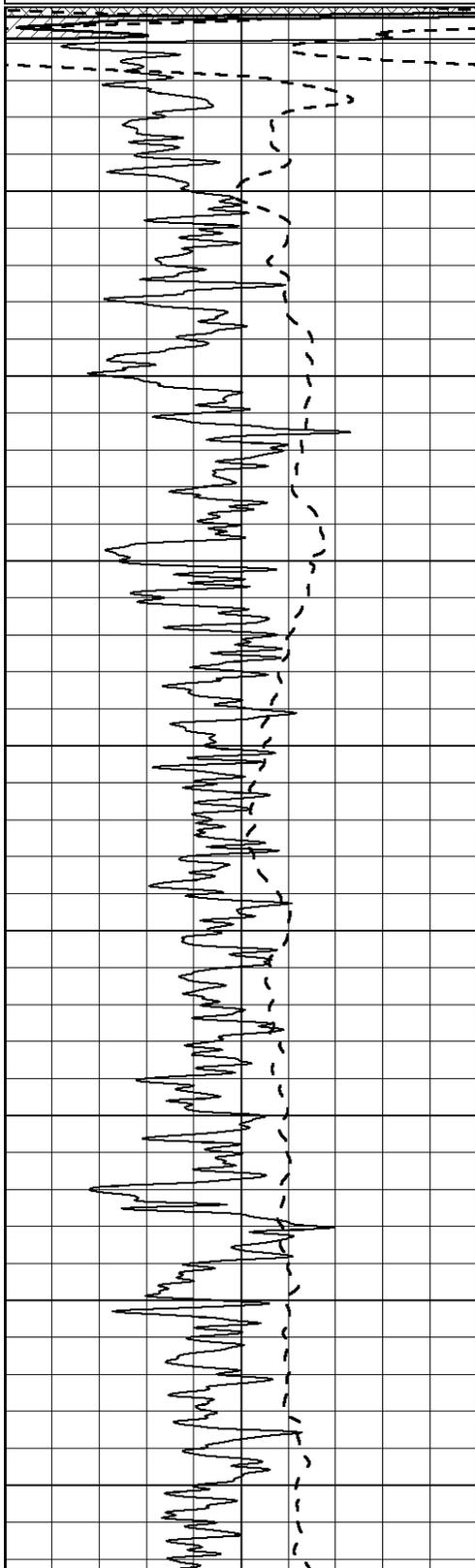
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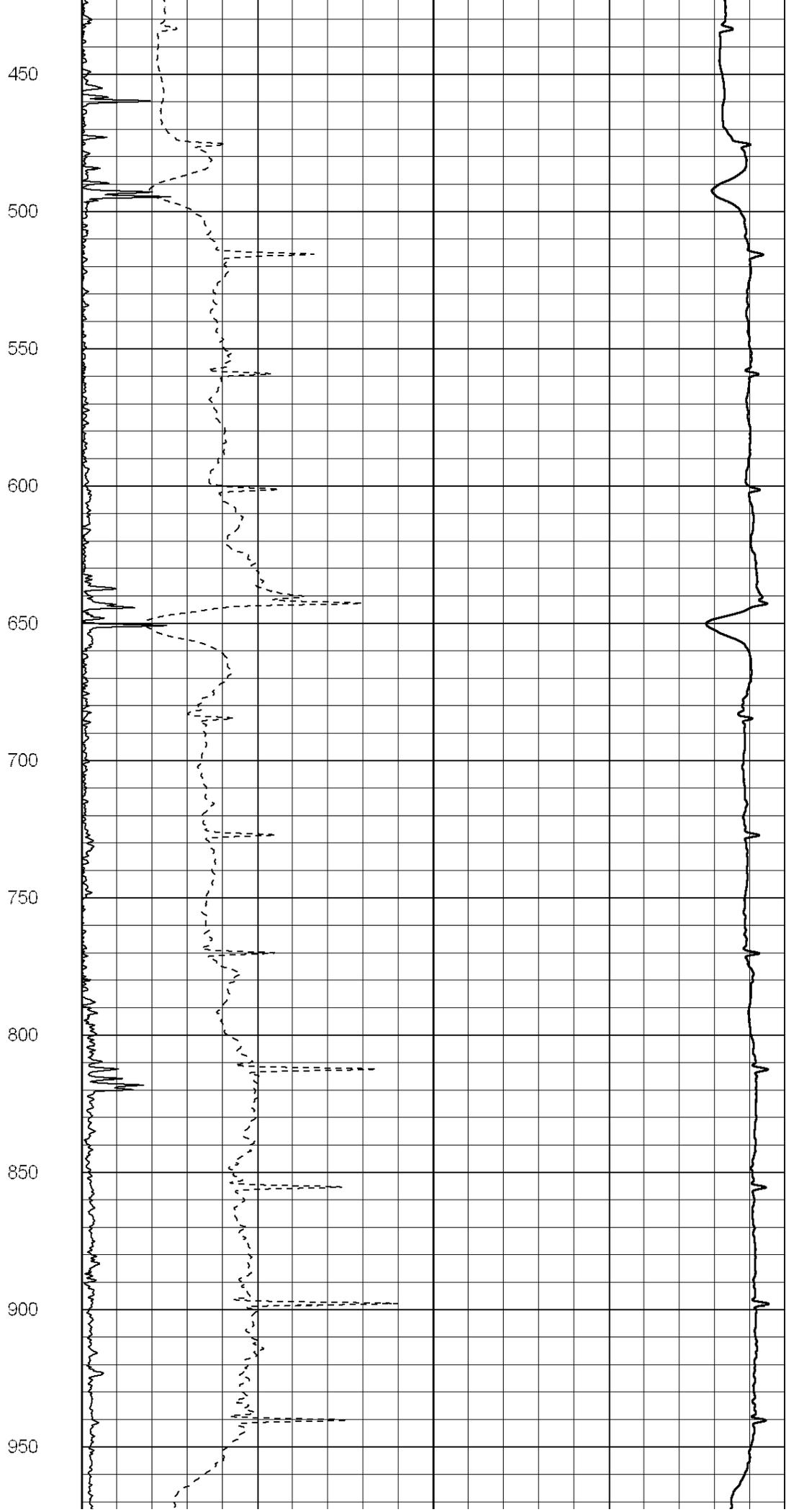
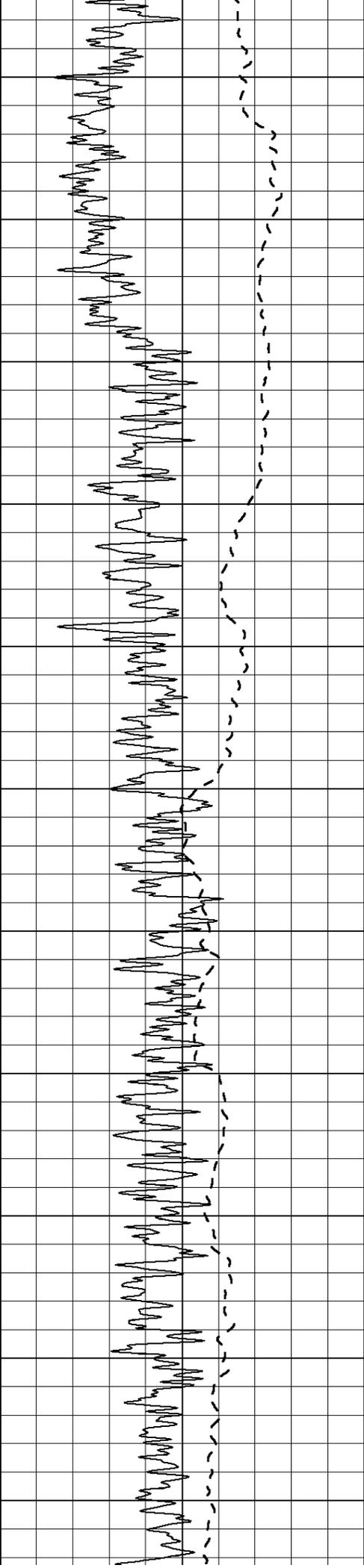
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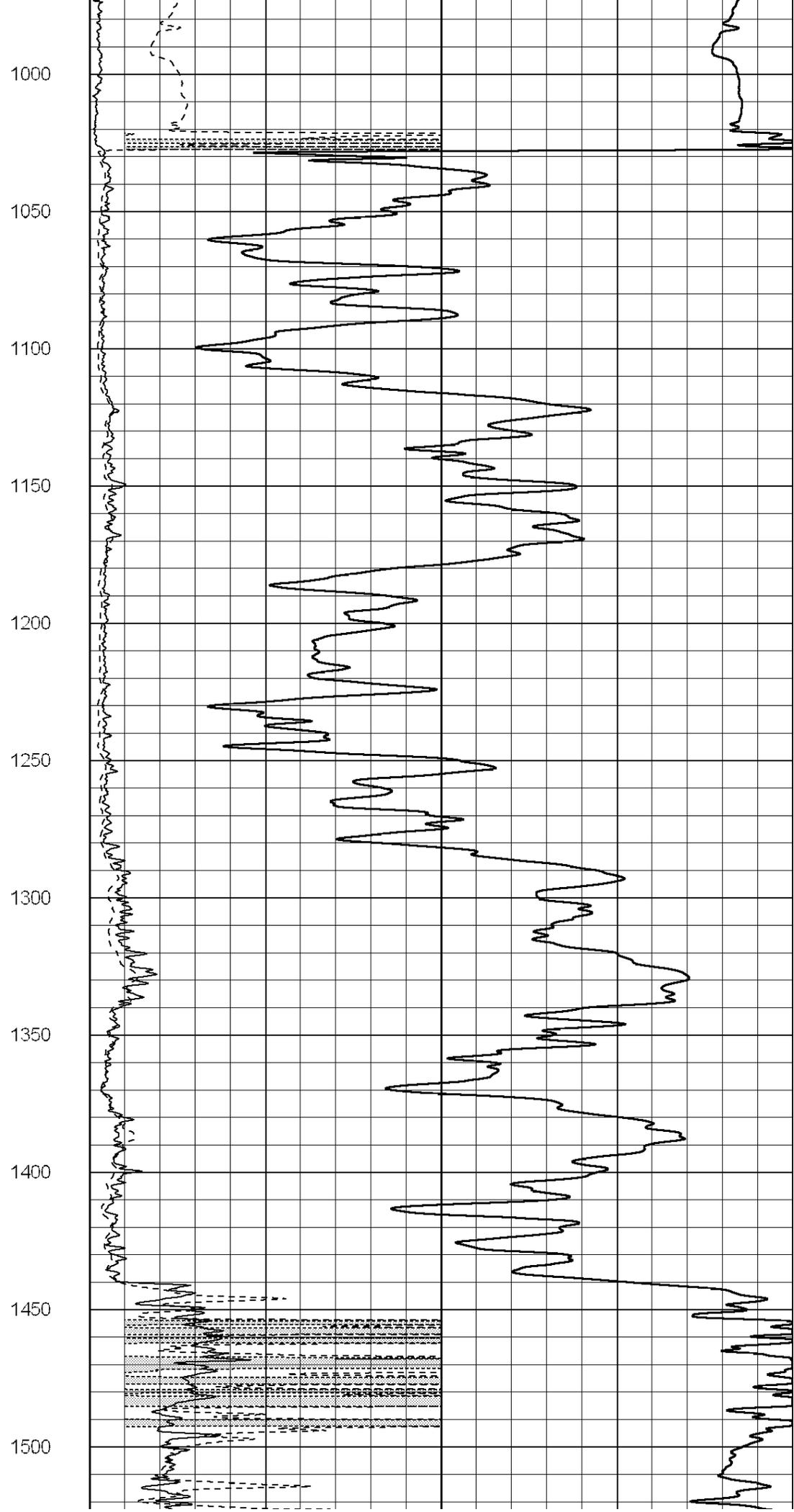
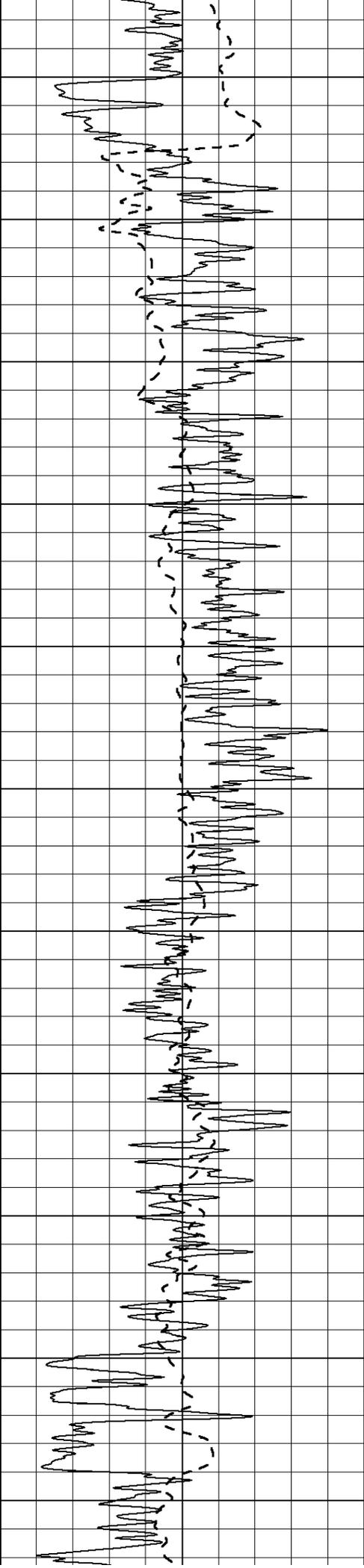
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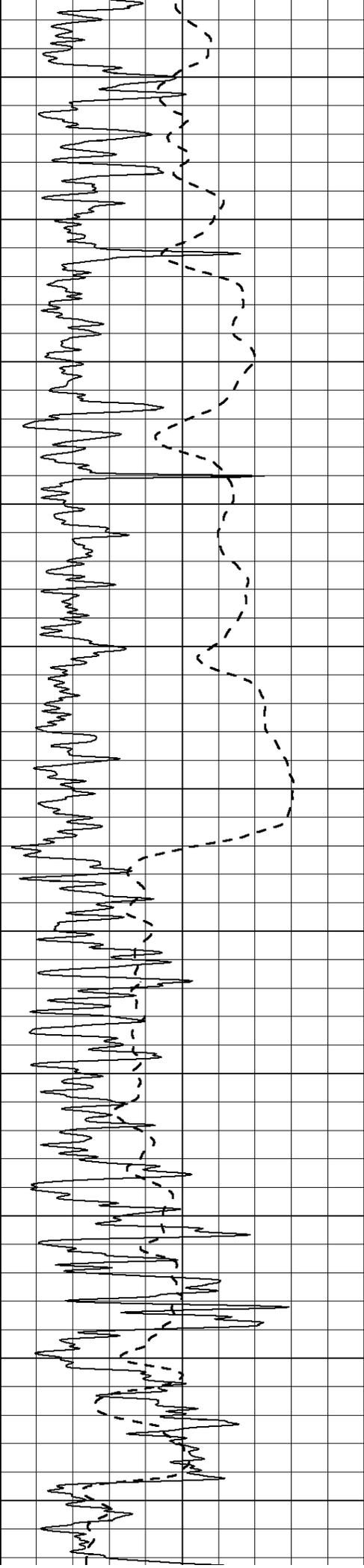
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50	RLL3 X10 (Ohm-m)	500

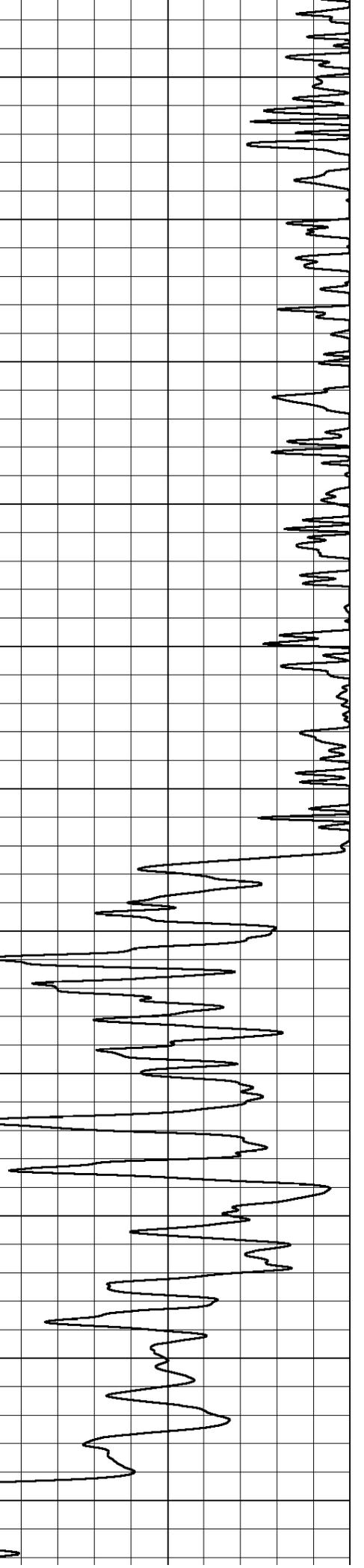
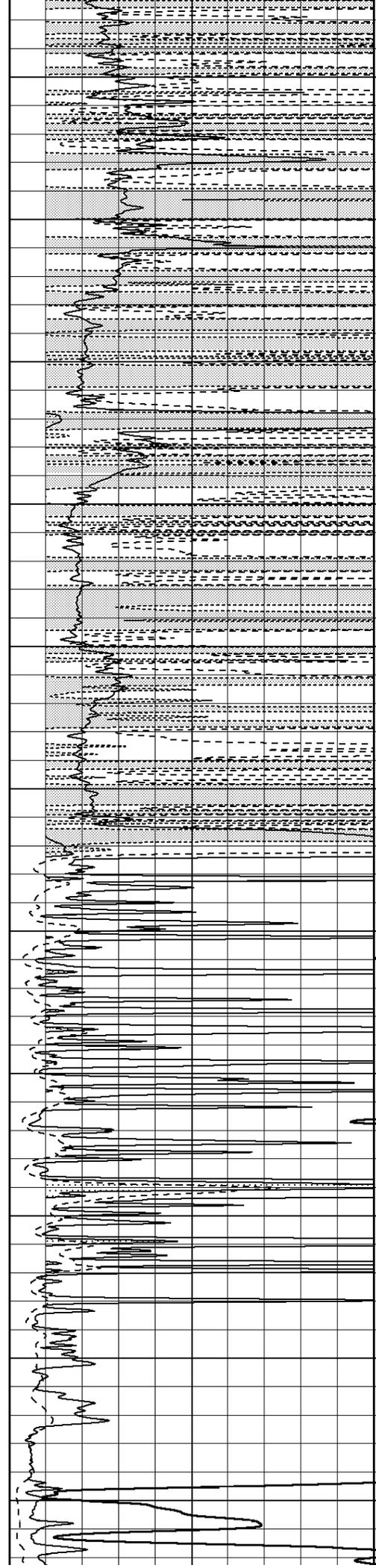


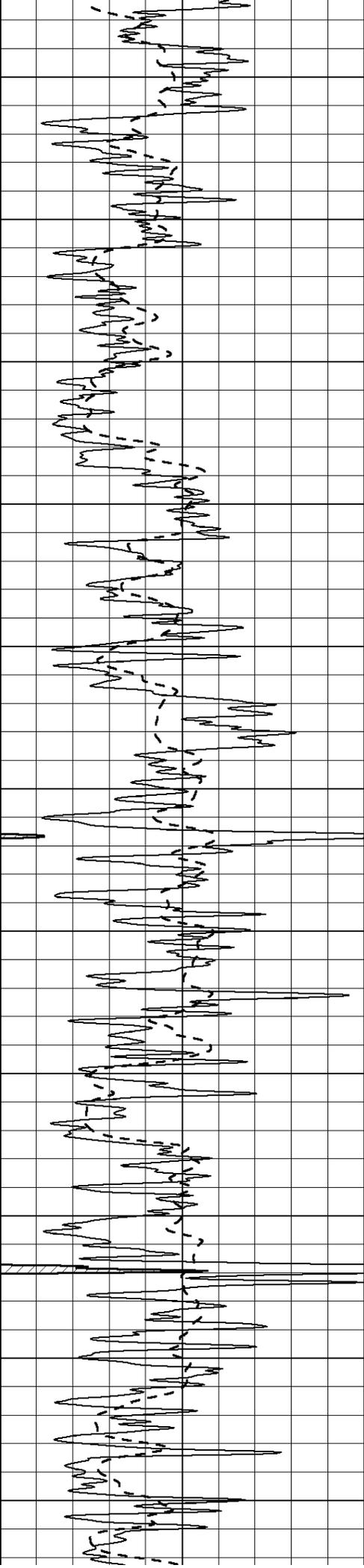






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2100

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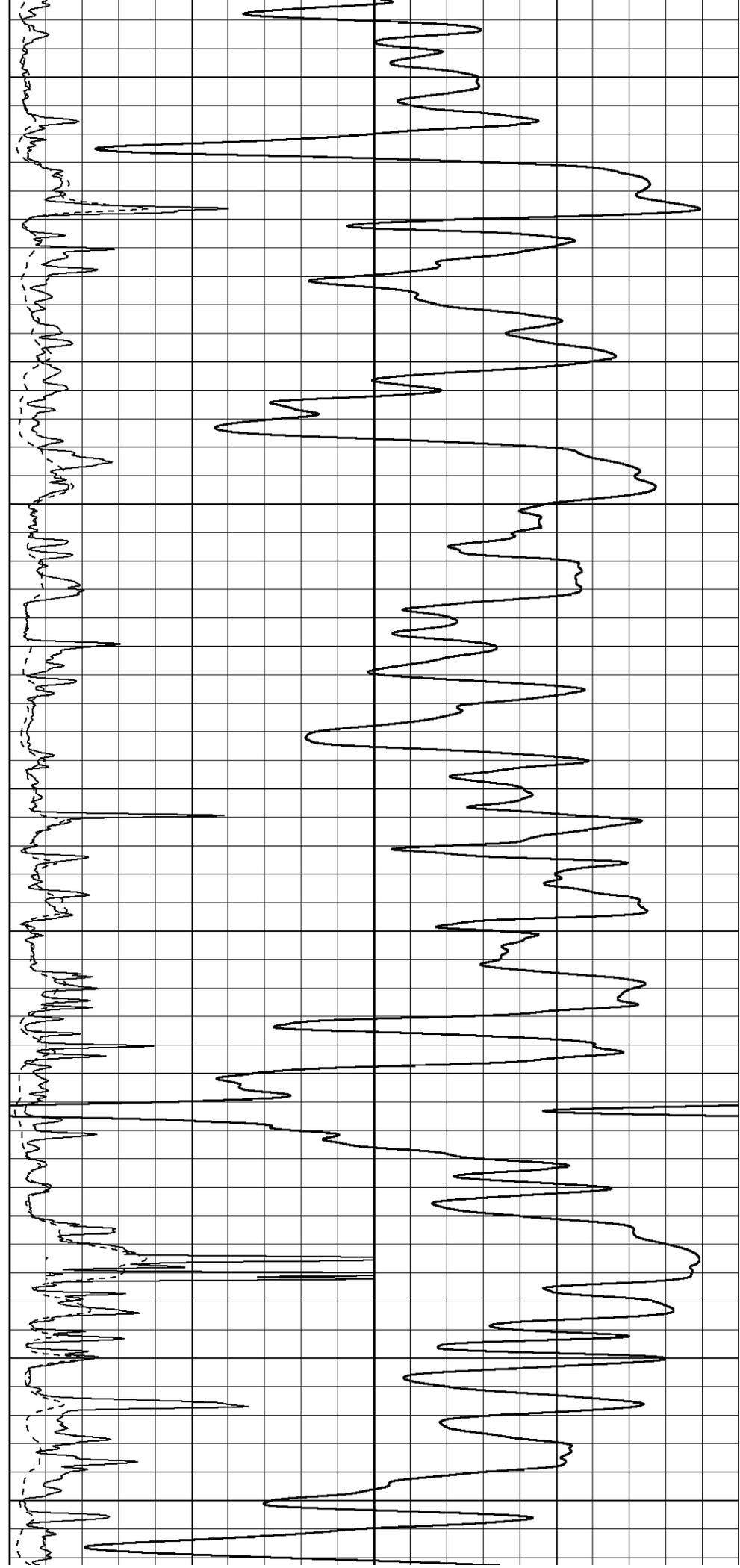
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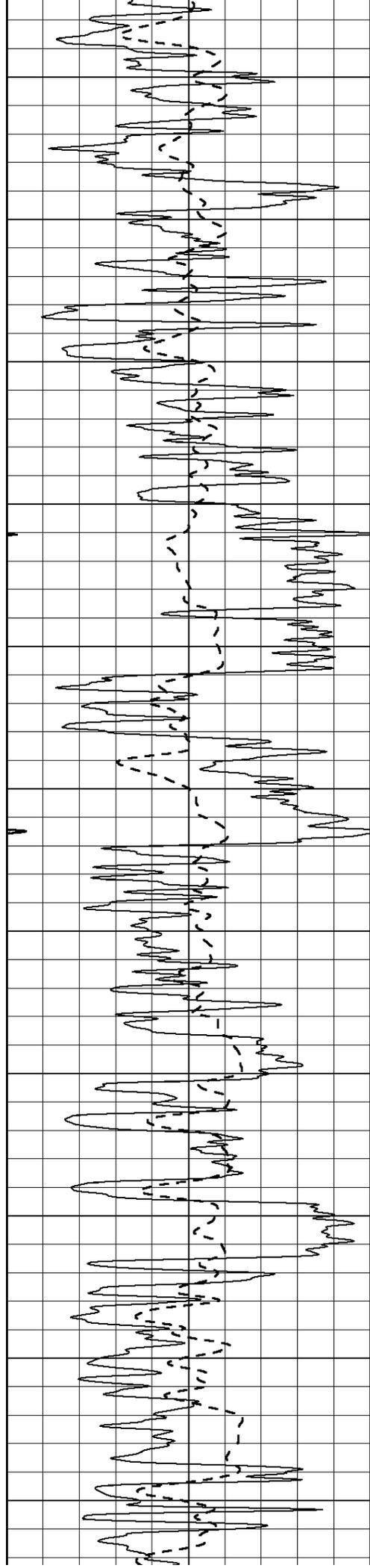
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2800

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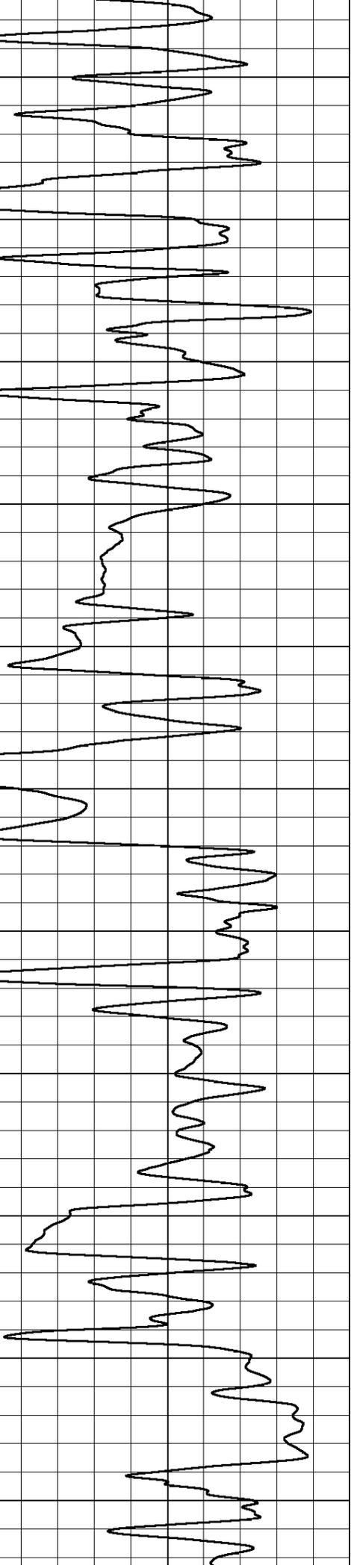
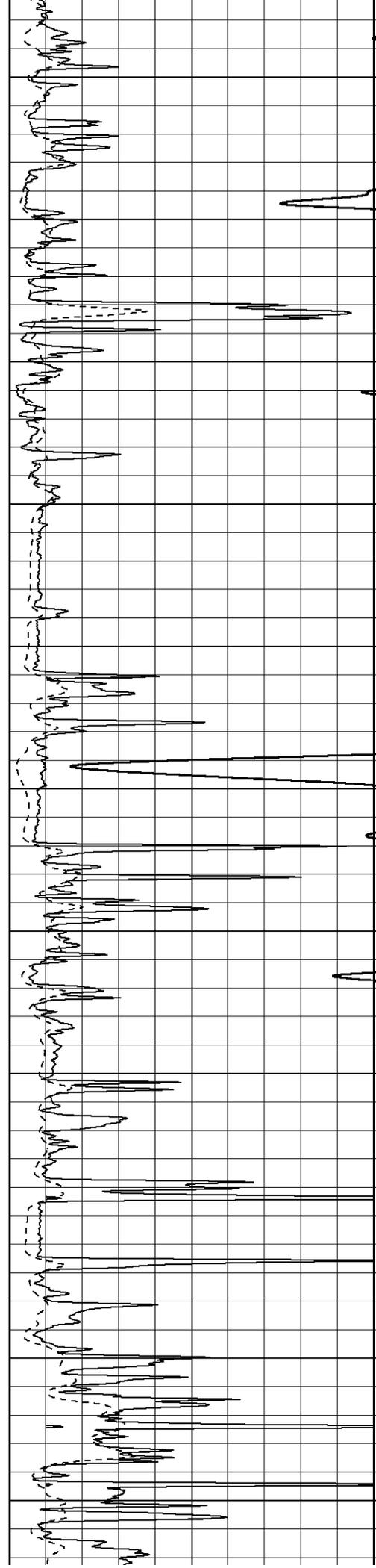
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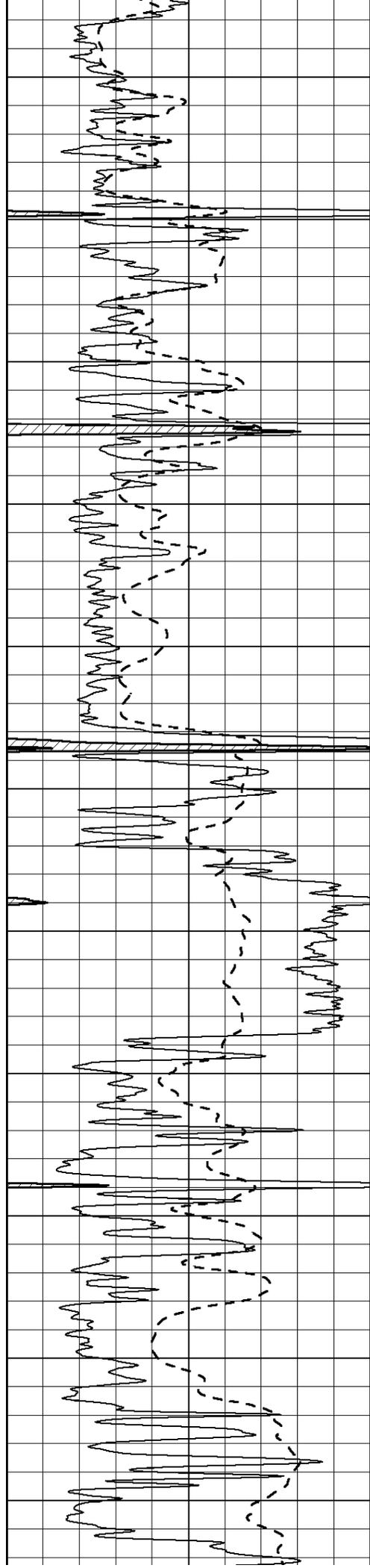
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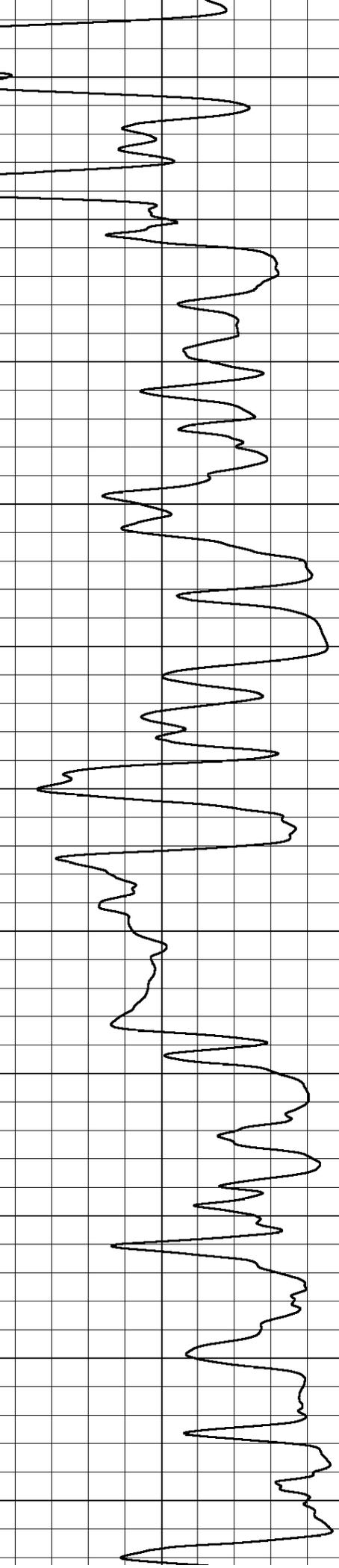
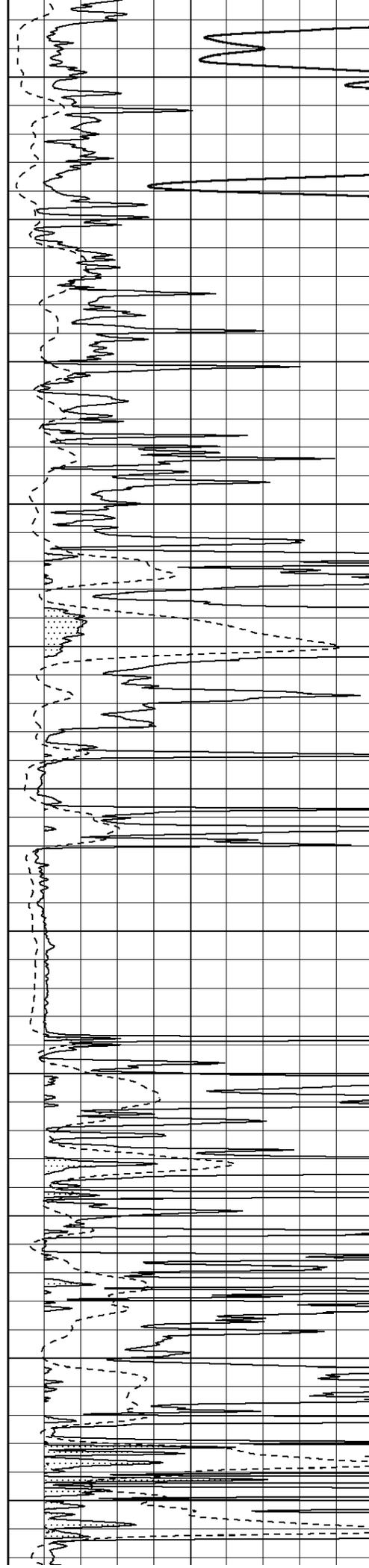
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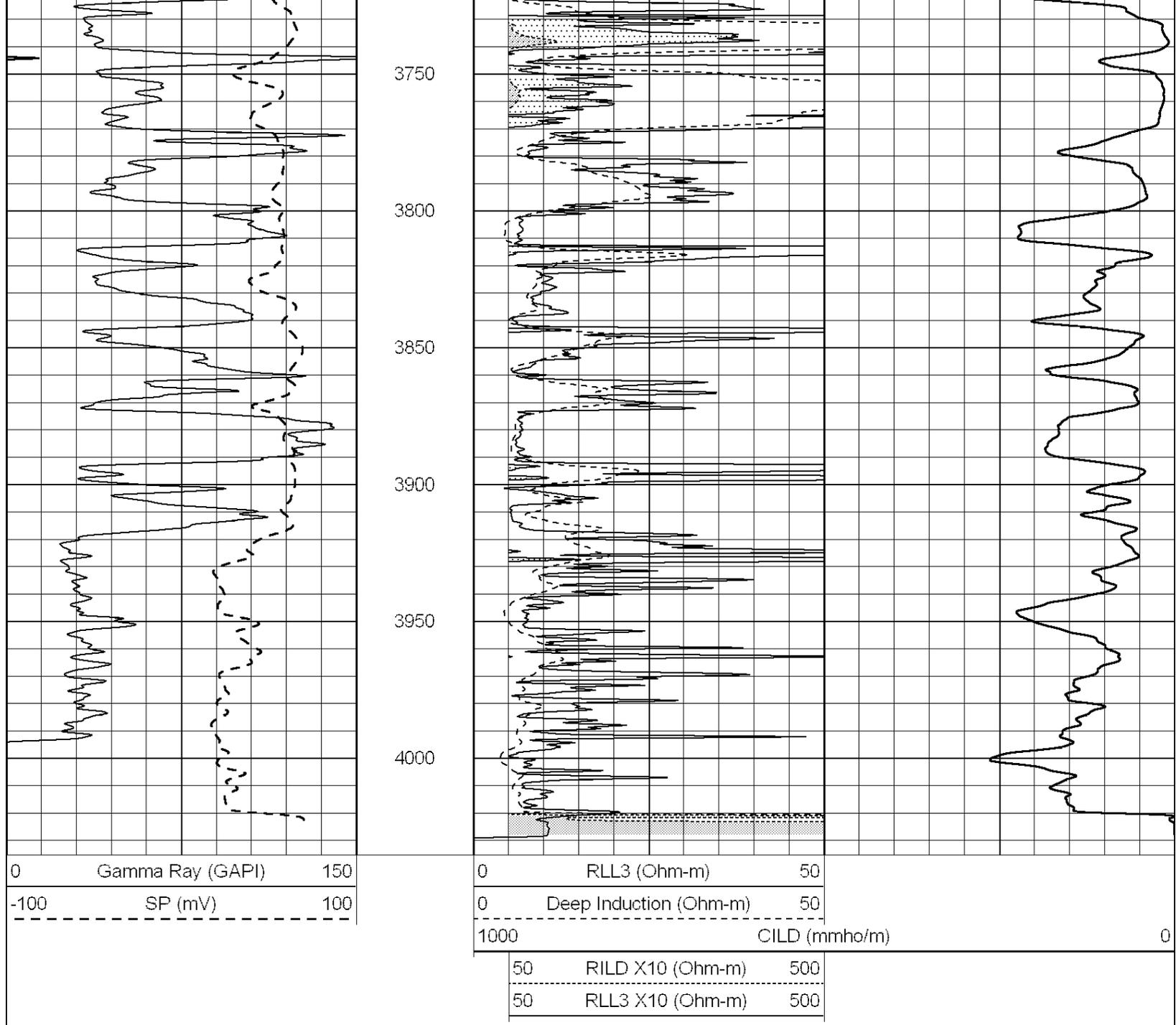
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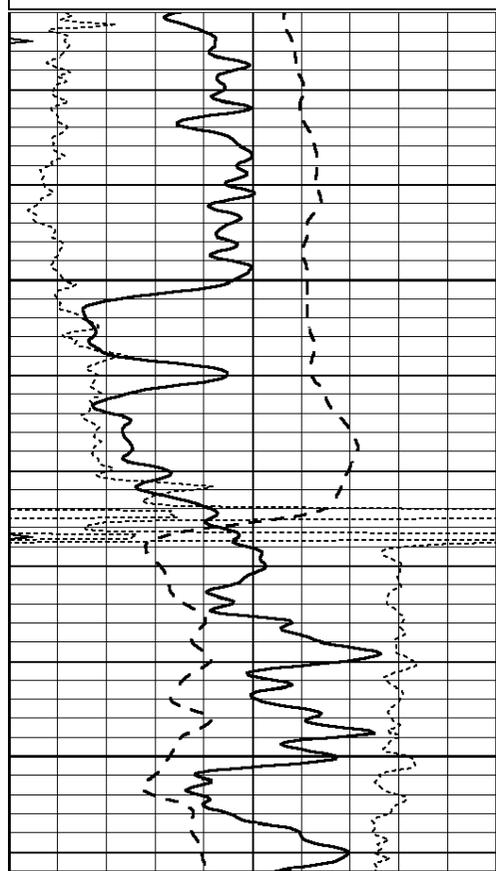


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# MAIN SECTION

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 Charted by: Depth in Feet scaled 1:240

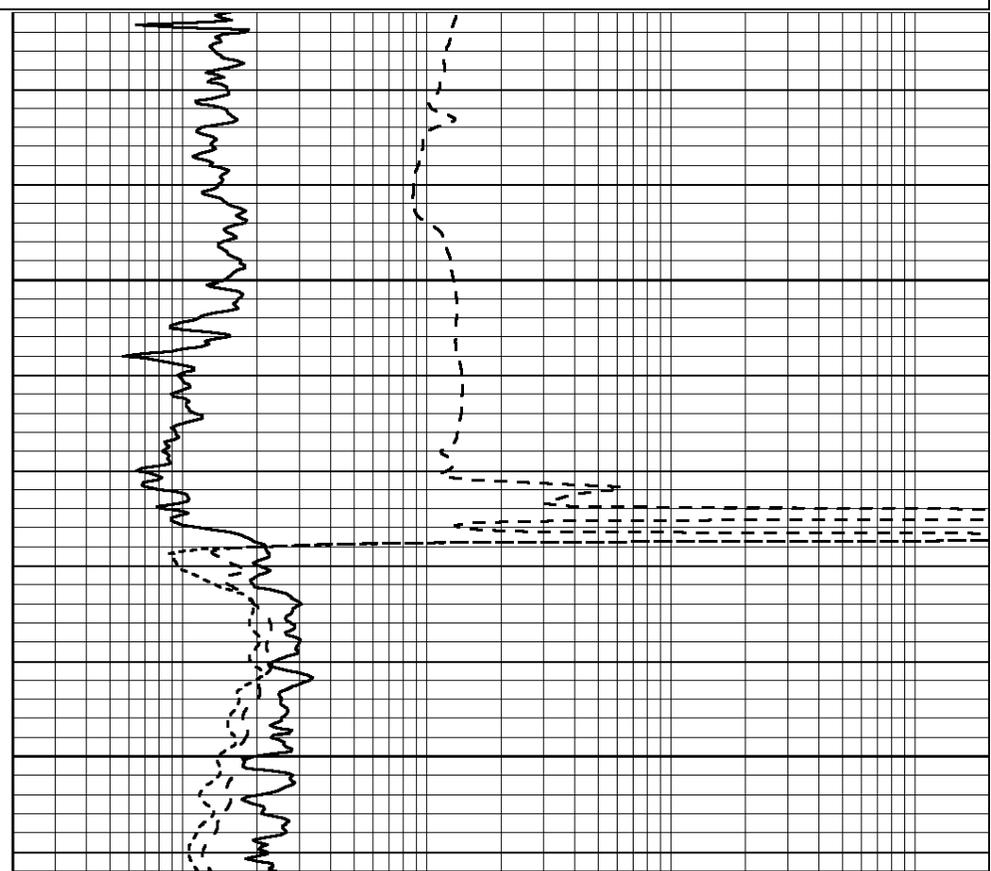
0	GAMMA RAY (GAPI)	150	0.2	RLL3 (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	RxoRt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			



1000

1050

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



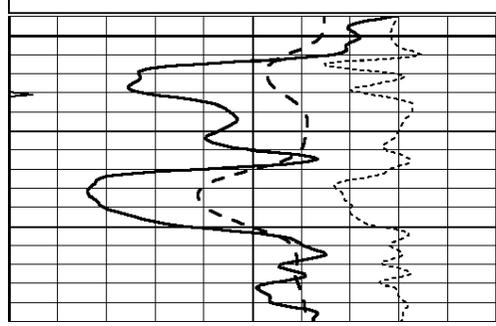
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# MAIN SECTION

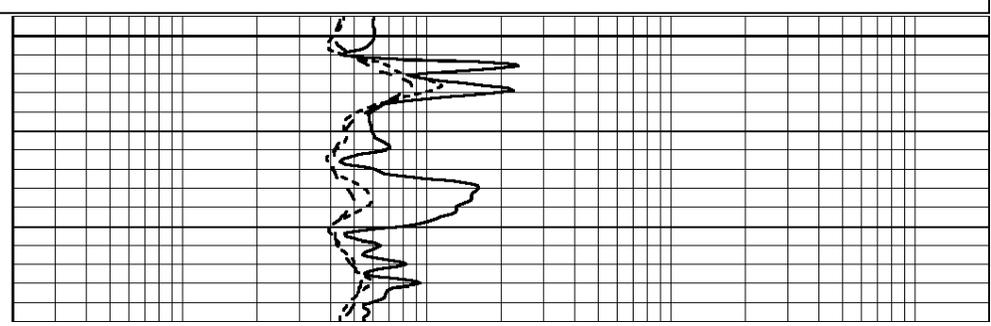
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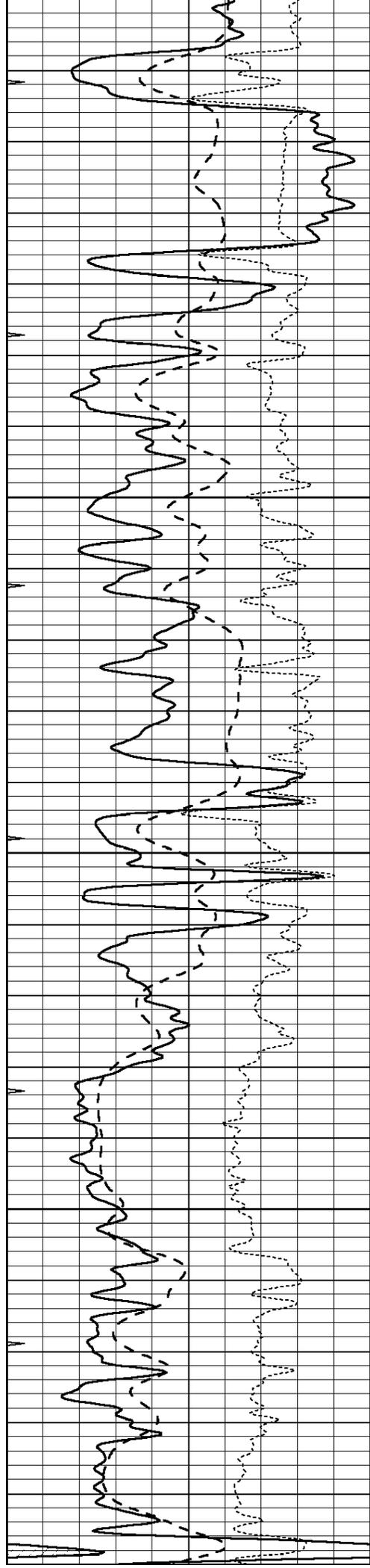
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-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

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



3000





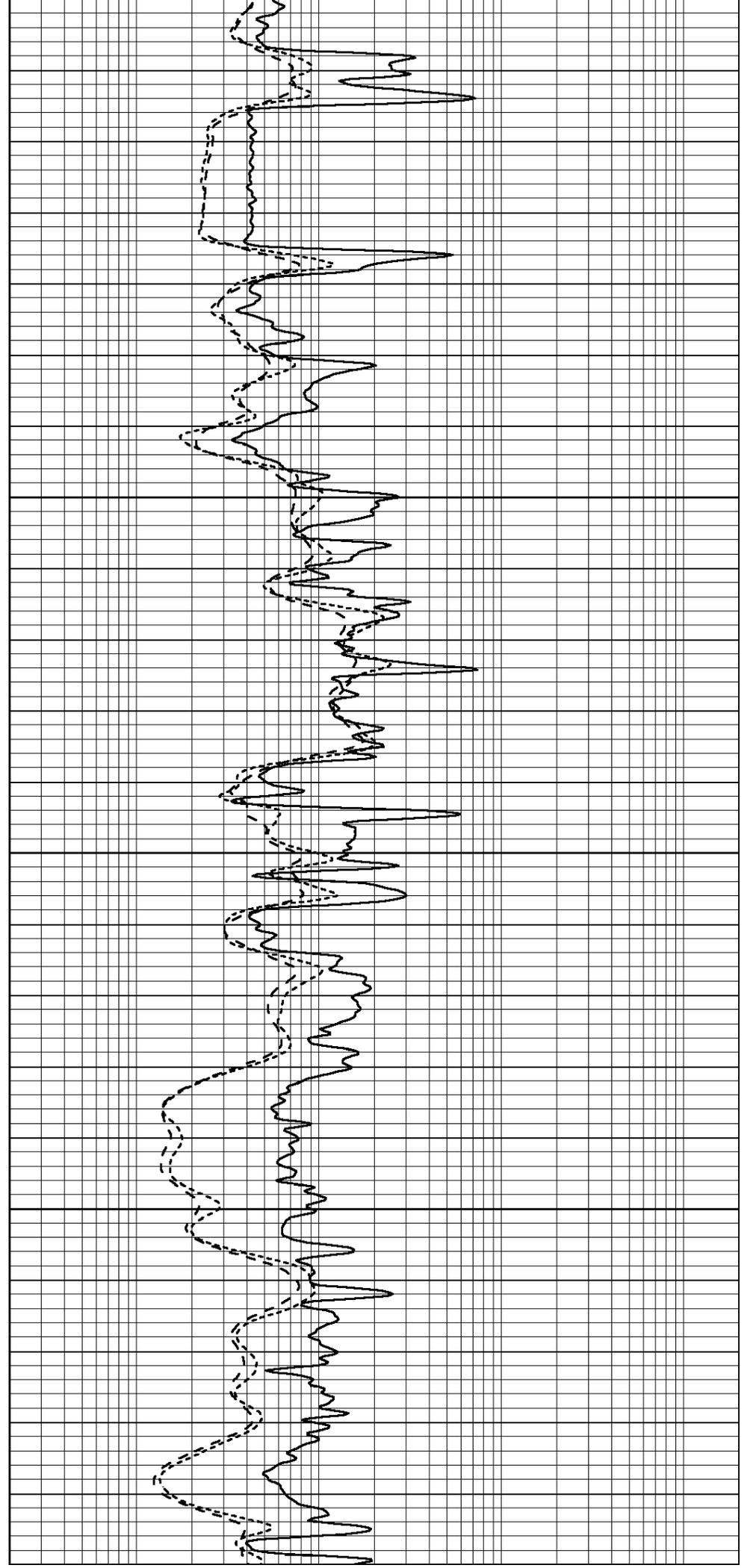
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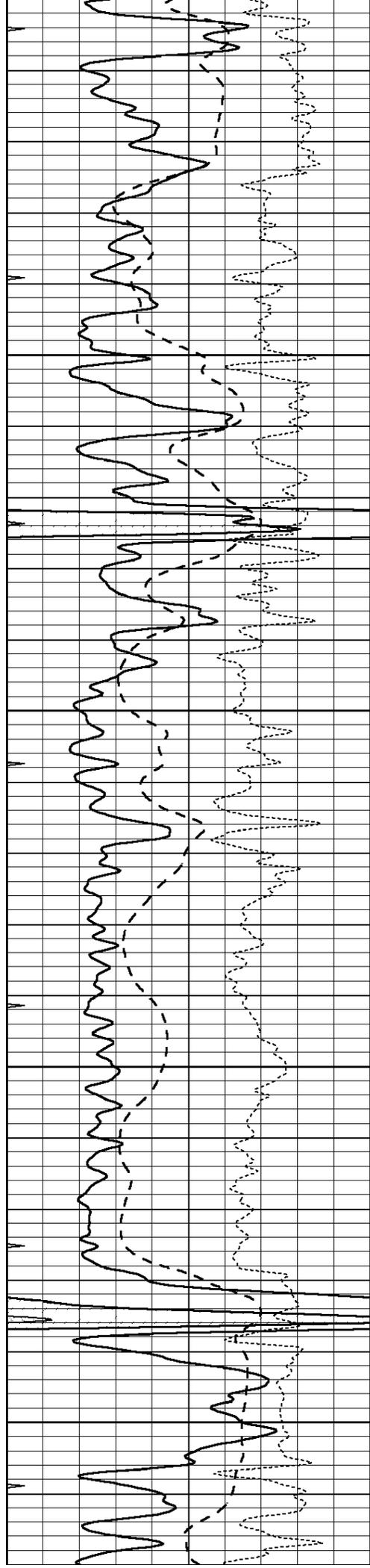
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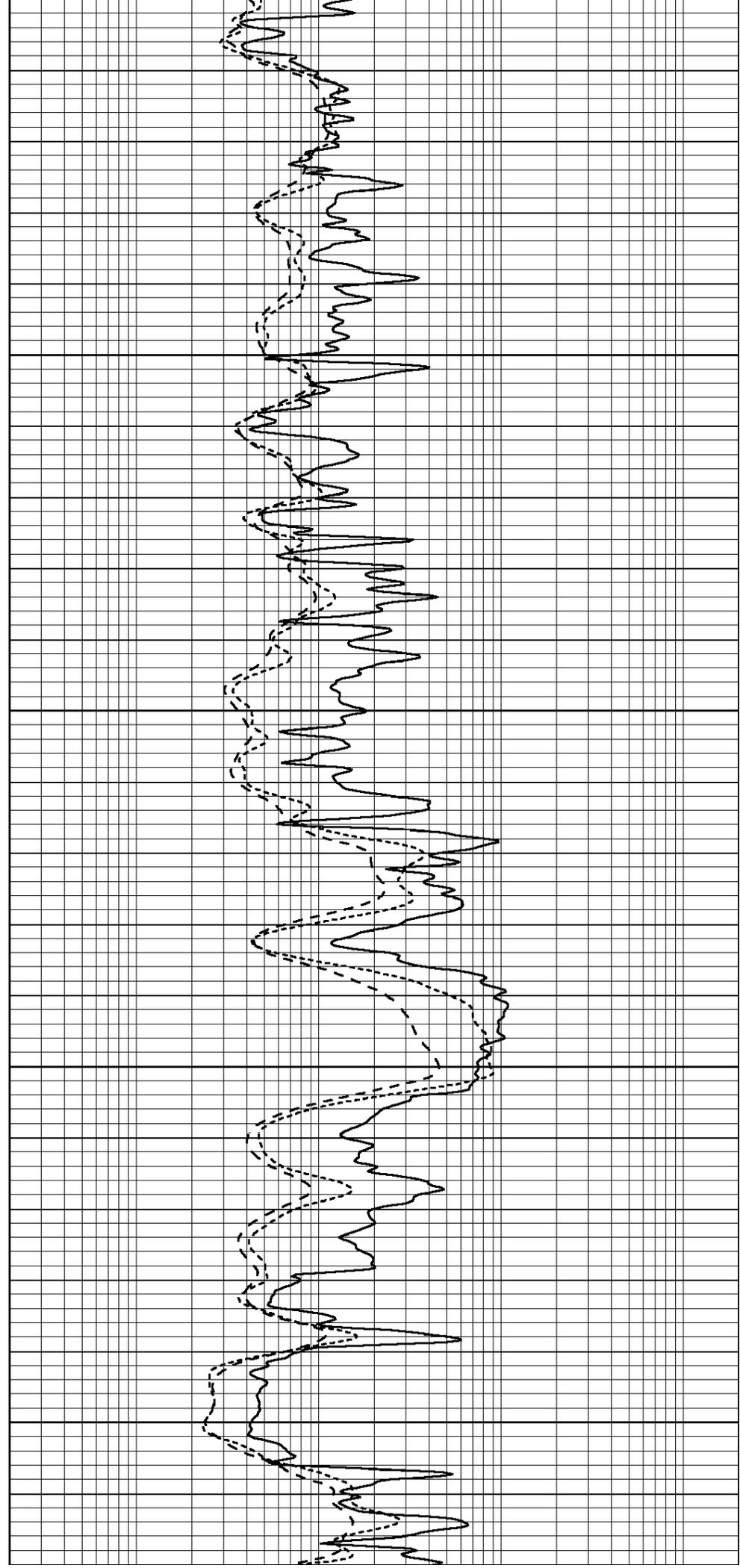
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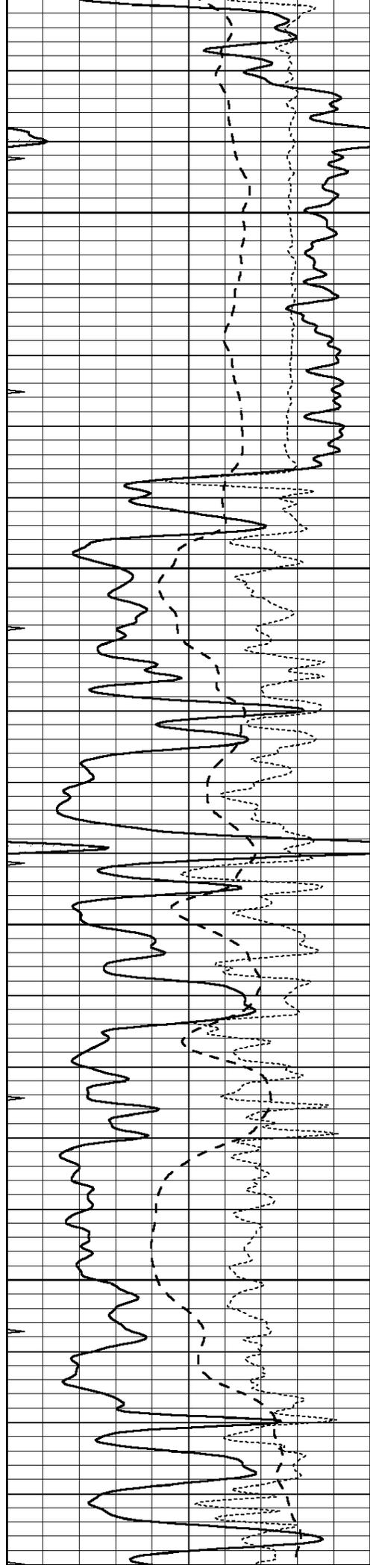
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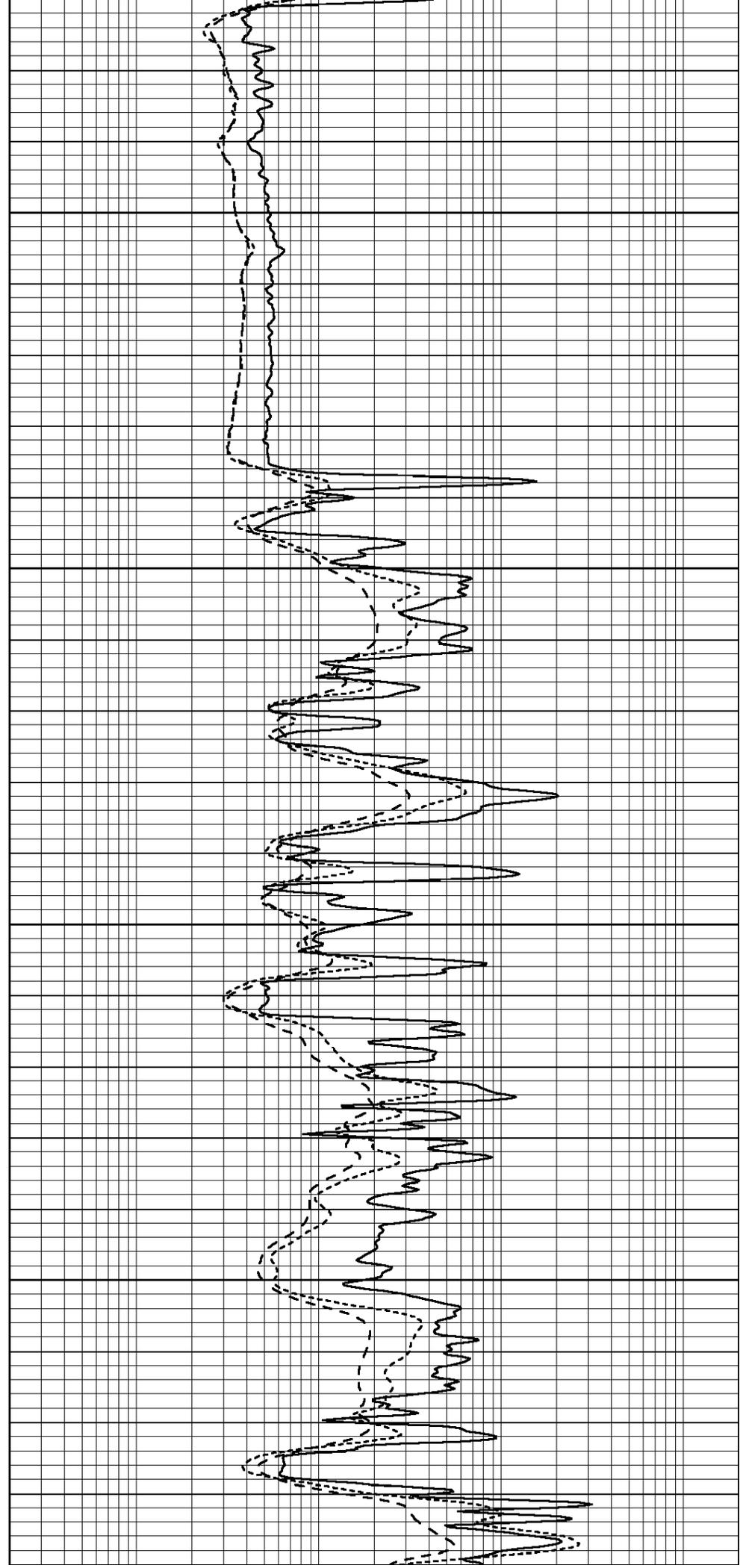


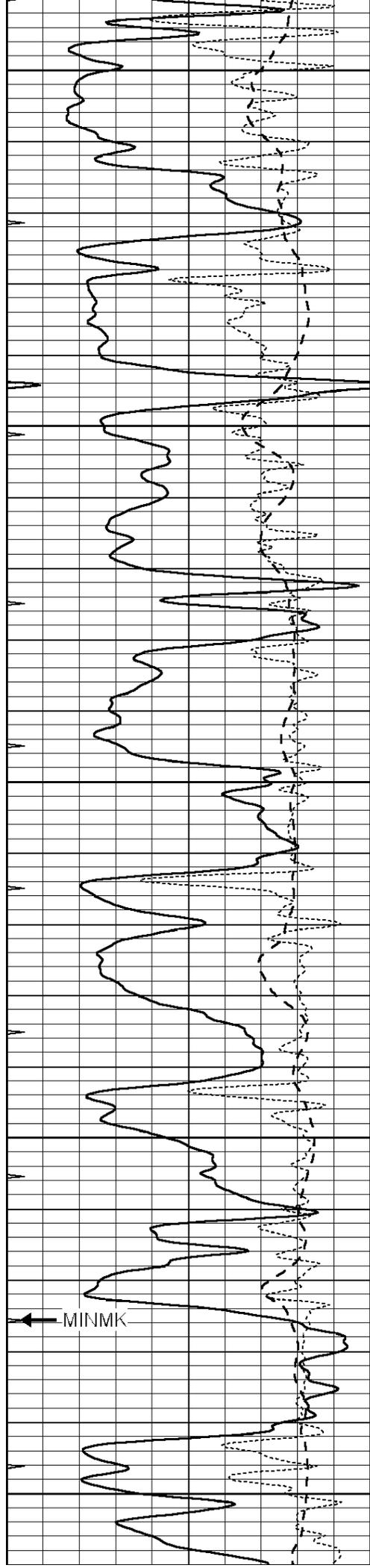
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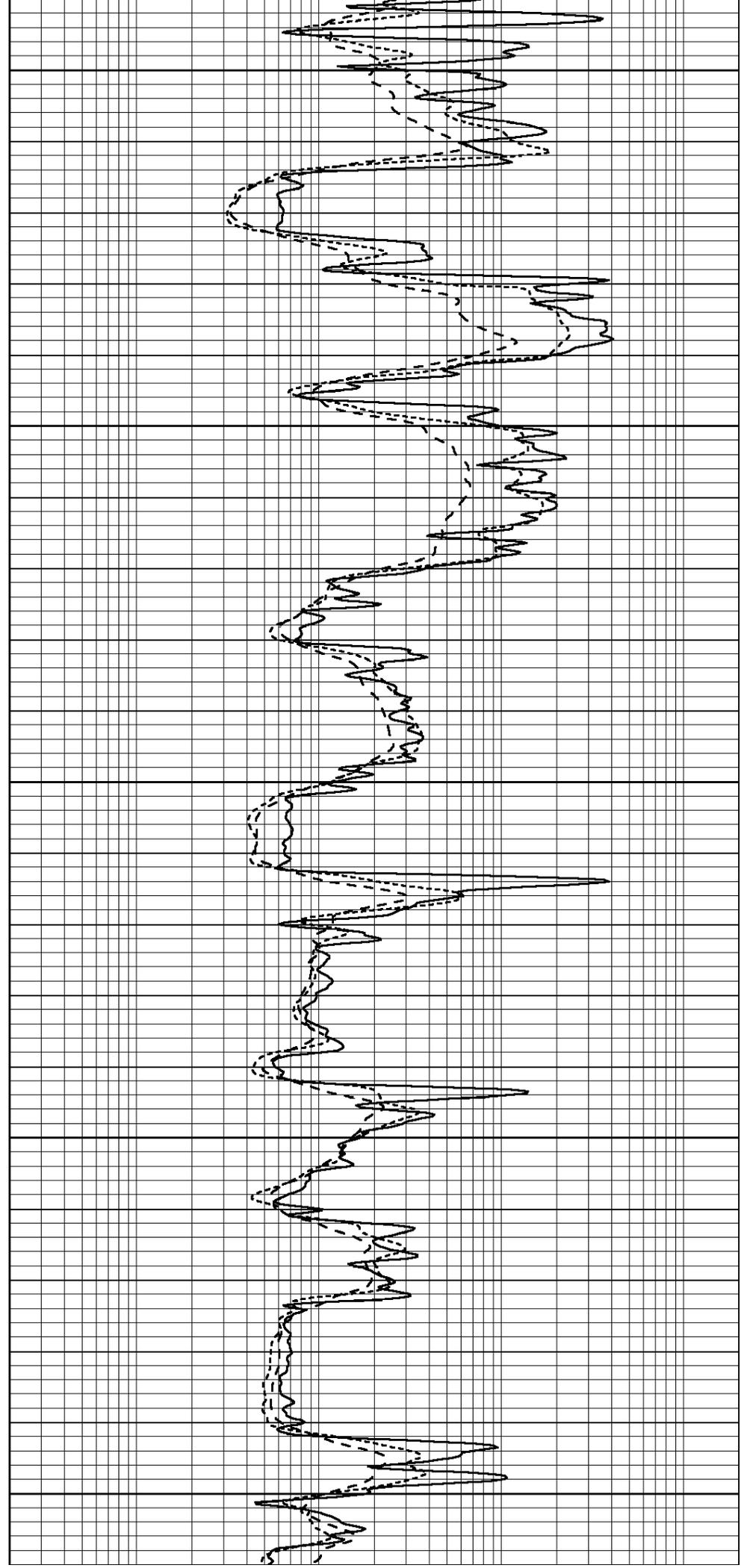
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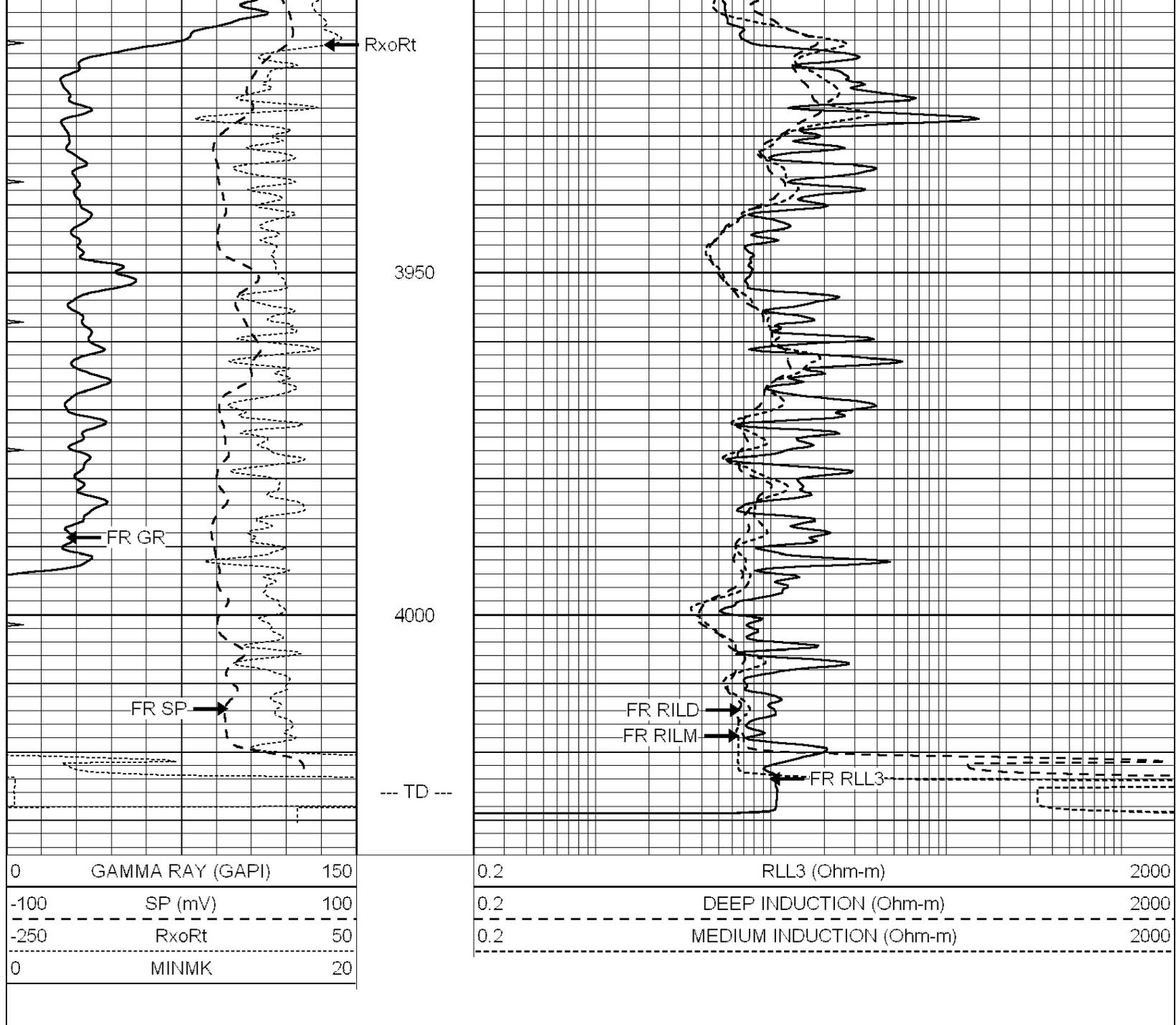
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3850

3900

← MINMK



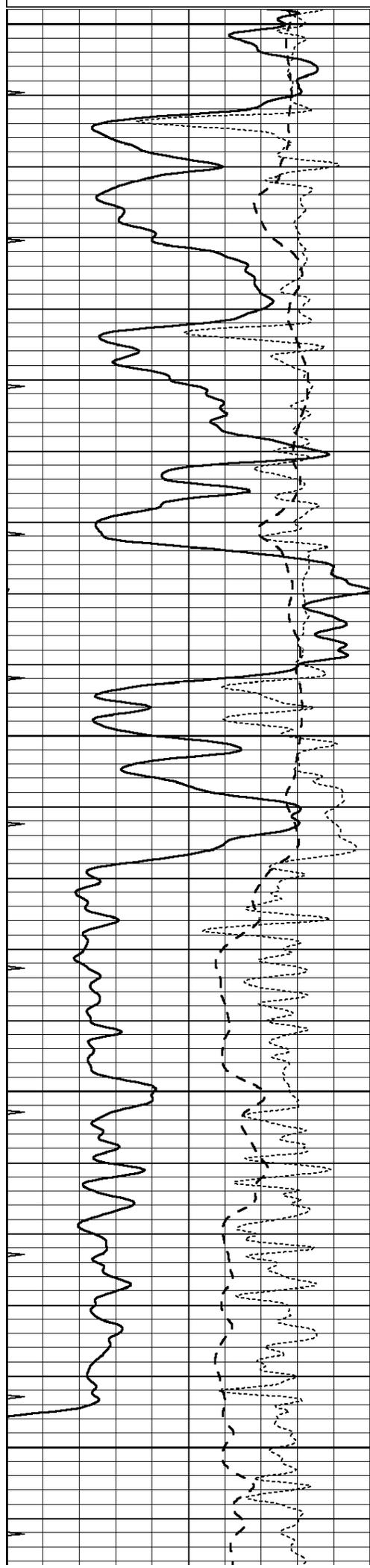


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# REPEAT SECTION

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 Presentation Format: dil  
 Dataset Creation: Sat Jun 18 18:03:18 2011 by Calc Open-Cased 090629  
 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			



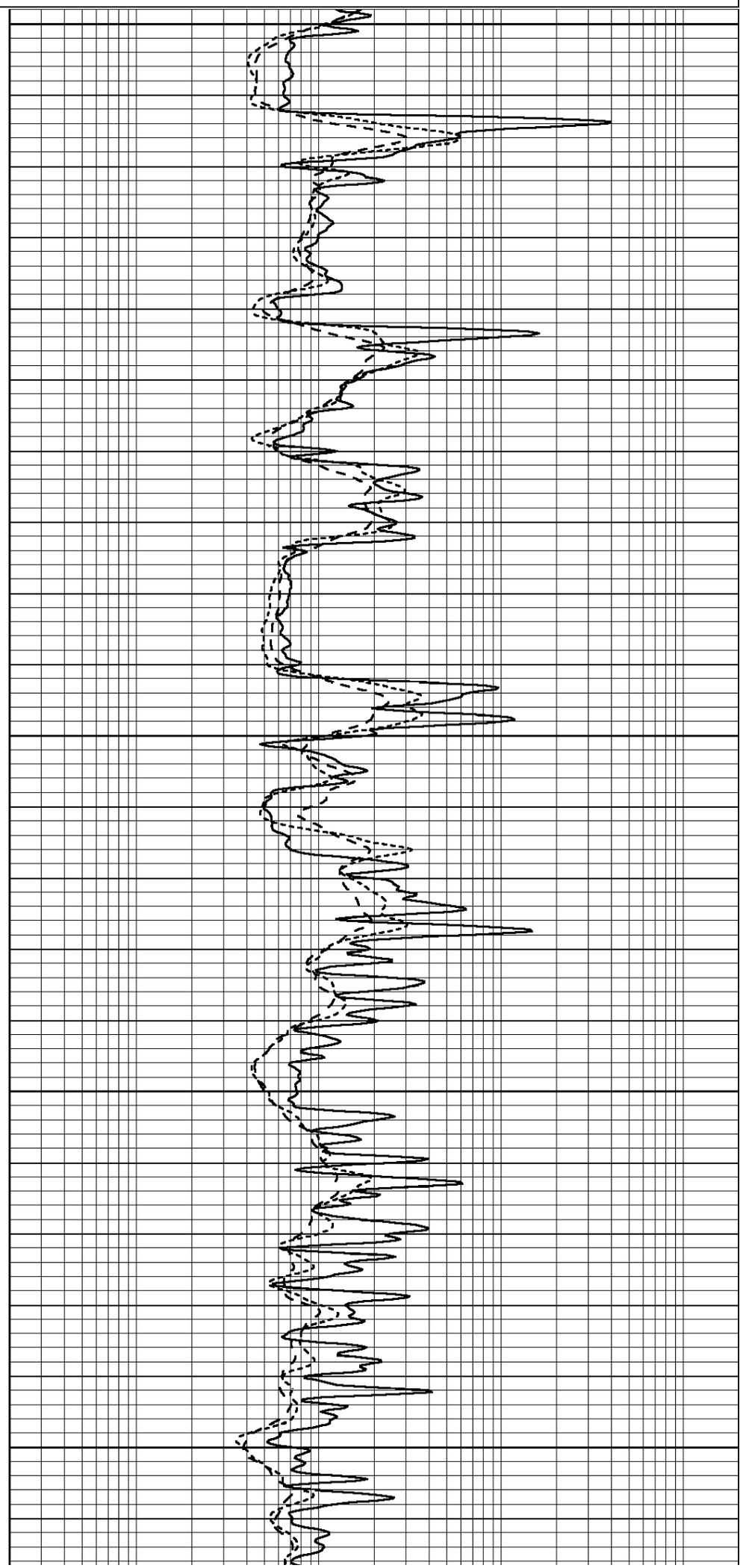
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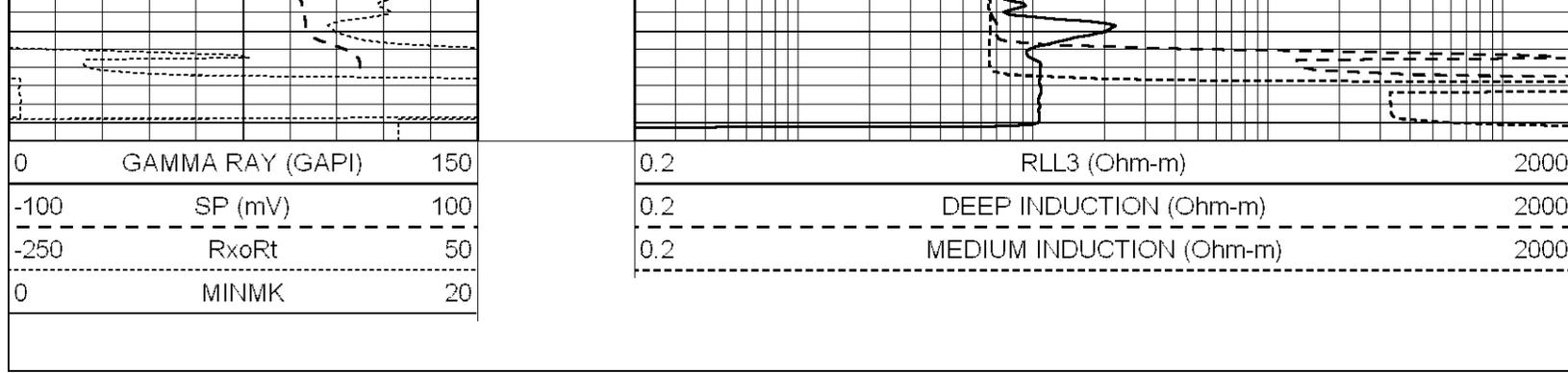
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3900

3950

4000





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

**Calibration Report**

Database File: 006939ddn.db  
 Dataset Pathname: pass3.1A  
 Dataset Creation: Sat Jun 18 16:49:28 2011

**Dual Induction Calibration Report**

Serial-Model: DIL4-GEAR  
 Performed: Sat Jun 18 14:19:18 2011

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.006	0.665	V	0.000	400.000	mmho/m	490.000	-7.000
Medium	-0.005	0.748	V	0.000	462.500	mmho/m	490.000	-13.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.650	V	0.000	400.000	mmho/m	621.890	-4.289
Medium	0.012	0.750	V	0.000	462.500	mmho/m	626.134	-7.000

**Compensated Density Calibration Report**

Serial-Model: GEAR1-GEARHART  
 Source / Verifier: 147 / 147  
 Master Calibration Performed: Sat Jun 18 15:23:57 2011

**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	9.20	in	3.82	V	
Large Ring	14.20	in	6.37	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: Sat Jun 18 15:13:35 2011

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 1.0 cps

Sensitivity: 0.6500 GAPI/cps