



DUAL INDUCTION LOG

Company DOWNING NELSON OIL COMPANY, INC.
 Well CHARLENE C #1-17
 Field CHARLENE
 County RAWLINS
 State KANSAS

Company DOWNING NELSON OIL COMPANY, INC.
 Well CHARLENE C #1-17
 Field CHARLENE
 County RAWLINS State KANSAS

Location: API #: 15-153-21290-00-00
 2129' FNL & 908' FWL
 NW - SE - SW - NW
 SEC 17 TWP 5S RGE 36W
 Permanent Datum GROUND LEVEL Elevation 3347
 Log Measured From KELLY BUSHING1' A.G.L.
 Drilling Measured From KELLY BUSHING
 Other Services
 CDL/CNL
 MEL/SON
 Elevation
 K.B. 3358
 D.F. 3356
 G.L. 3347

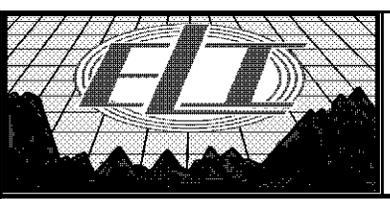
Date	6/1/22		
Run Number	ONE		
Depth Driller	4955		
Depth Logger	4954		
Bottom Logged Interval	4952		
Top Log Interval	00		
Casing Driller	8 5/8"@486'		
Casing Logger	482		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 800 PPM	
Density / Viscosity	9.1/62		
PH / Fluid Loss	10.0/7.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	2.10@75F		
Rmt @ Meas. Temp	1.58@75F		
Rmc @ Meas. Temp	2.52@75F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	1.26@125F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	6:00 P.M.		
Maximum Recorded Temperature	125F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	COLE ROBBEN	TJ DREILING	
Witnessed By	MARC DOWNING		

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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 ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
 DIRECTIONS:
 BREWSTER, KS. NORTH ON BLACKTOP TO CURVE WEST, THEN 3 MILES NORTH,
 1/2 MILE WEST, AND NORTH INTO EAST OF TANK BATTERY

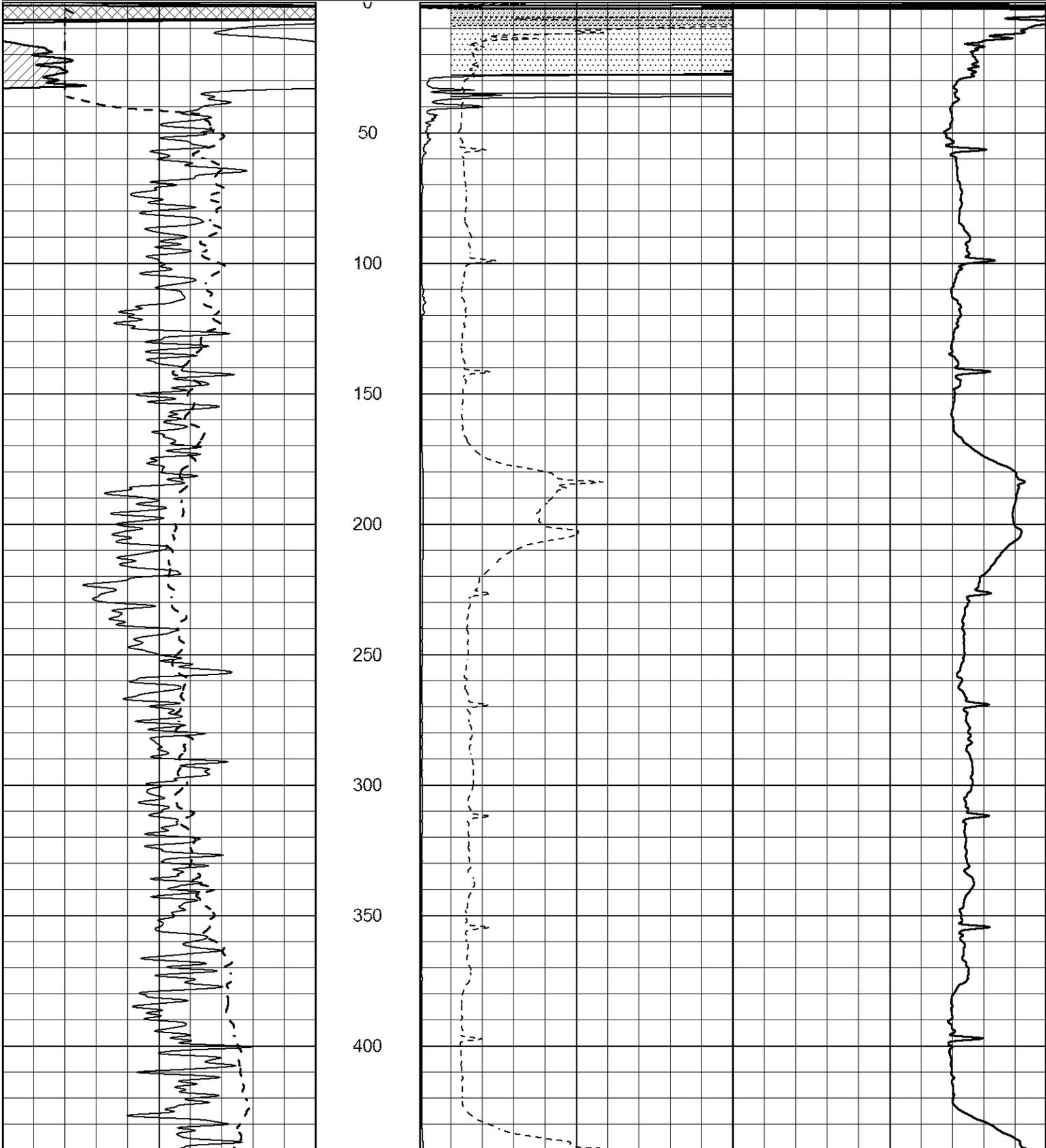


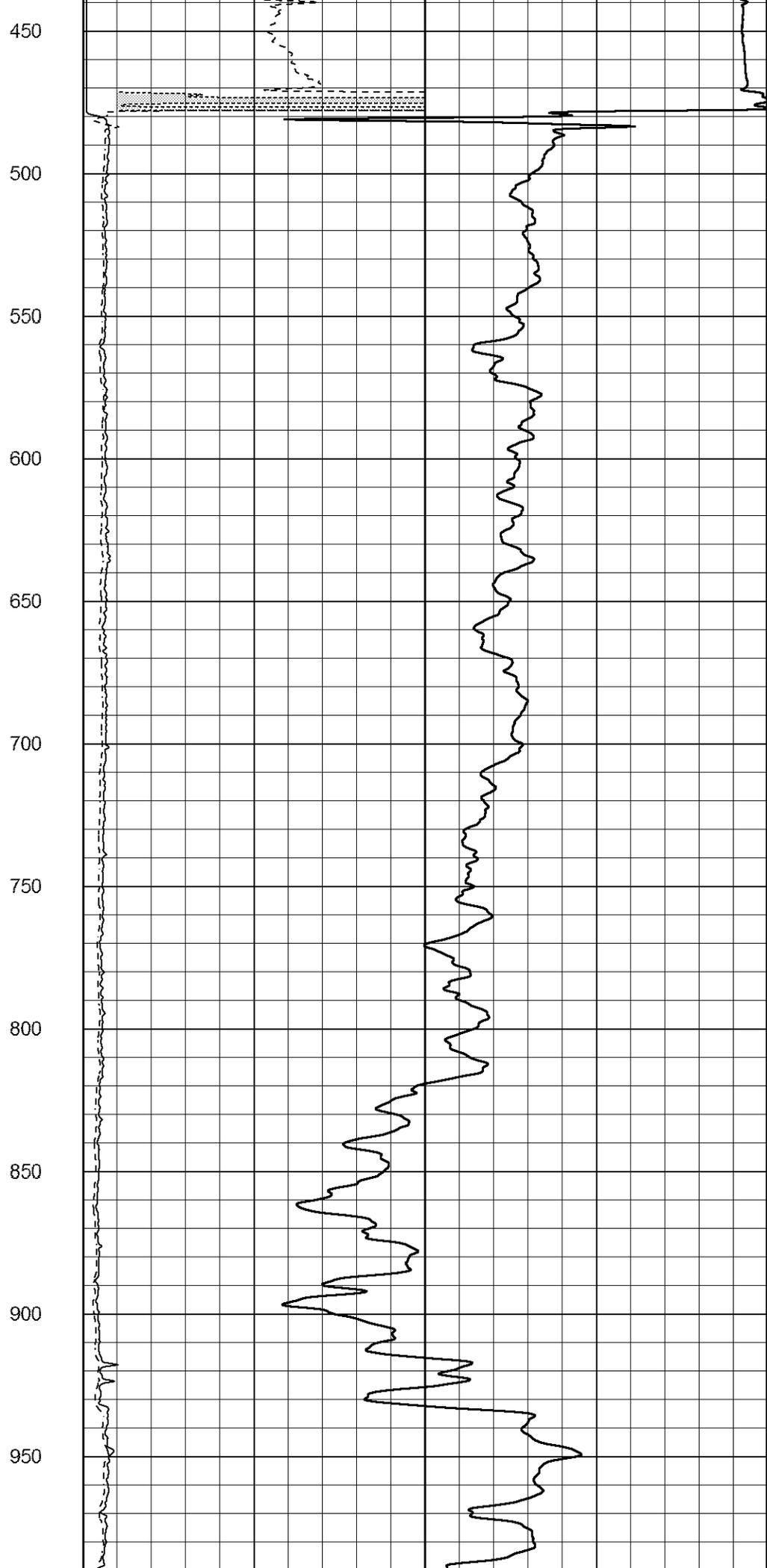
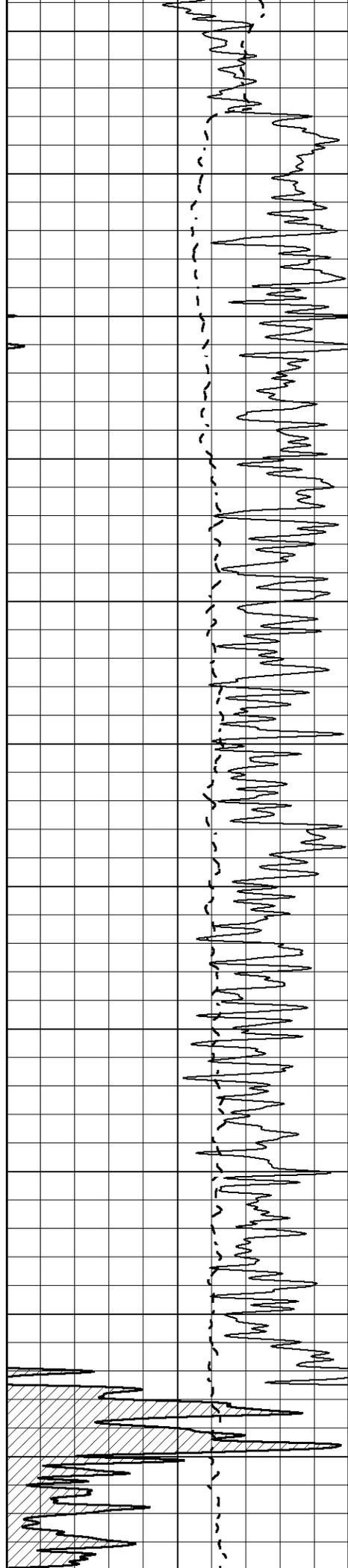
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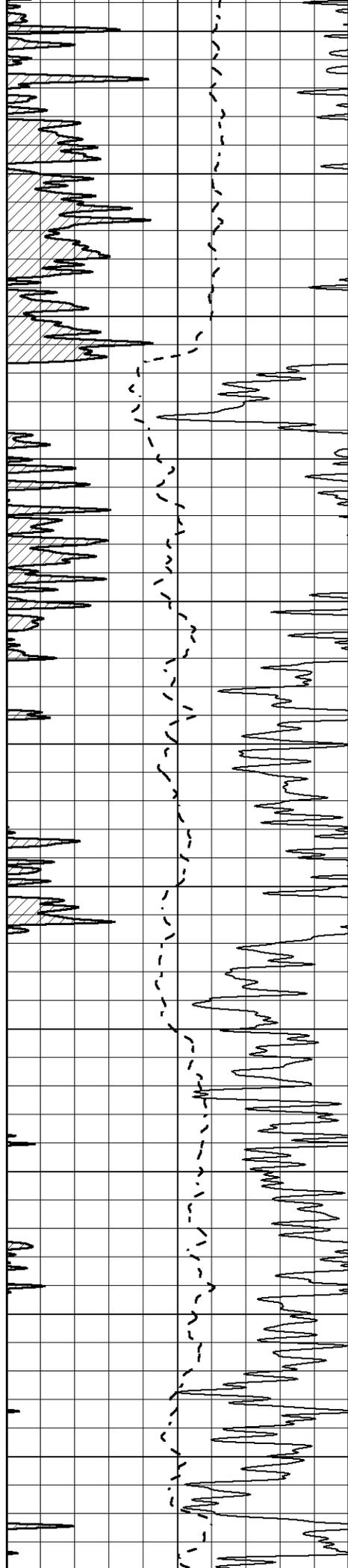
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 Dataset Pathname pass3.1M
 Presentation Format _dil2
 Dataset Creation Wed Jun 01 19:54:29 2022
 Charted by Depth in Feet scaled 1:600

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

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







1000

1050

1100

1150

1200

1250

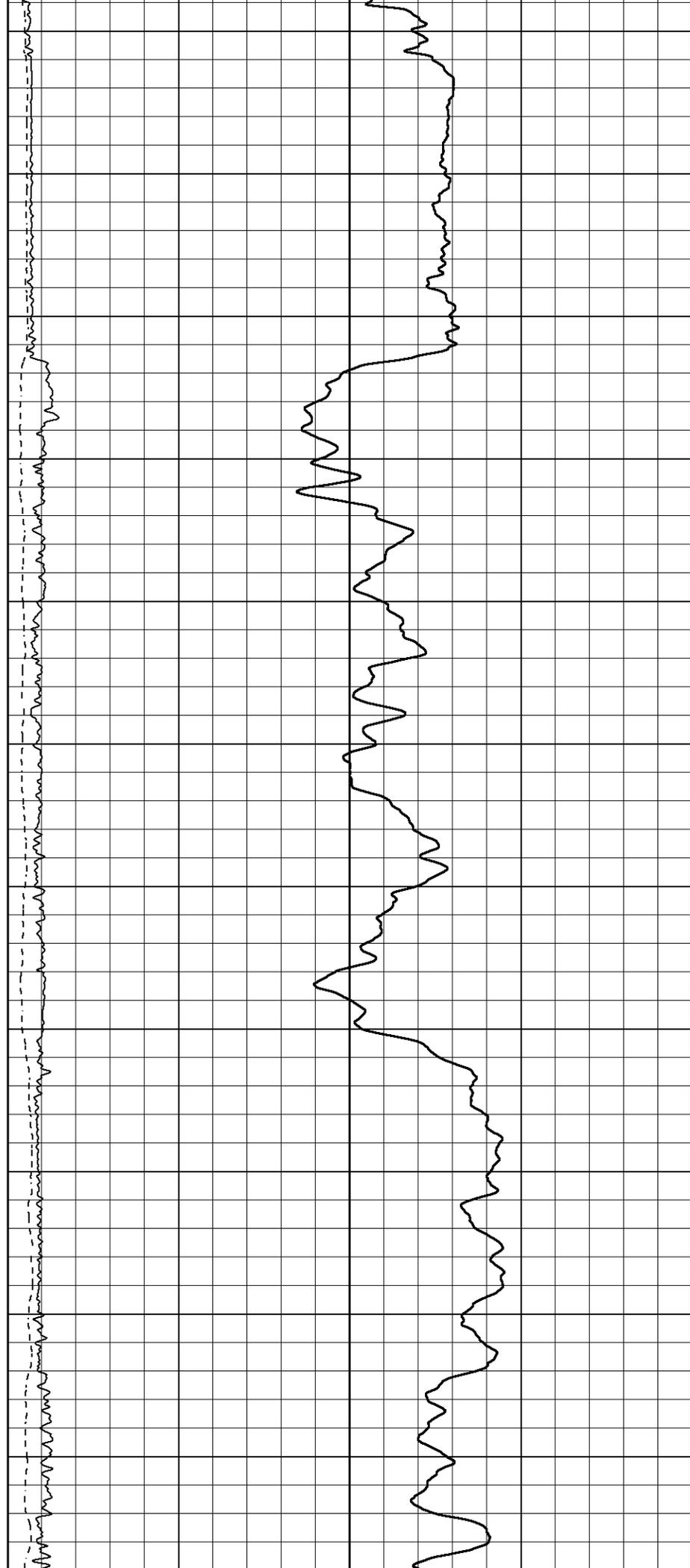
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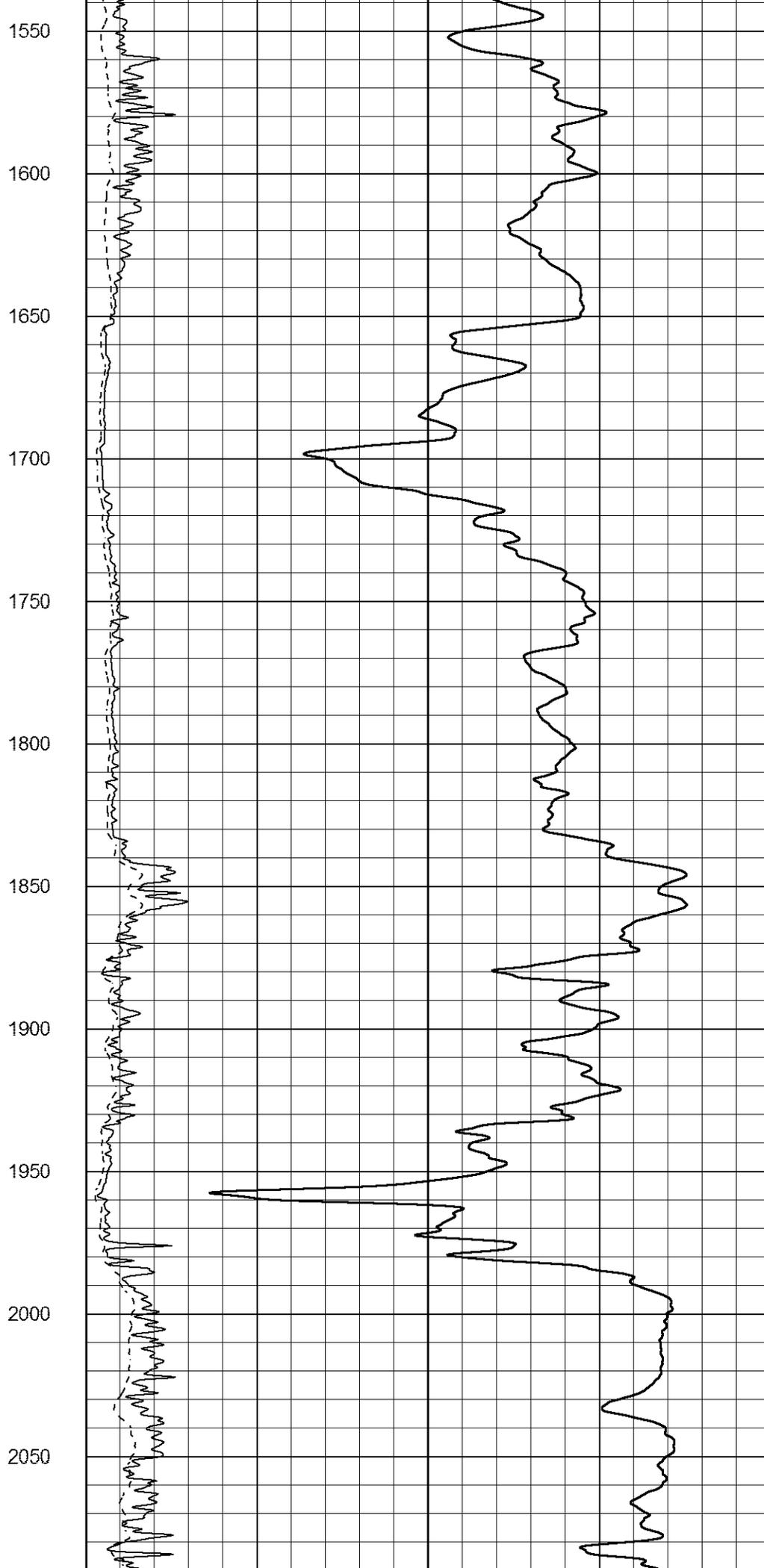
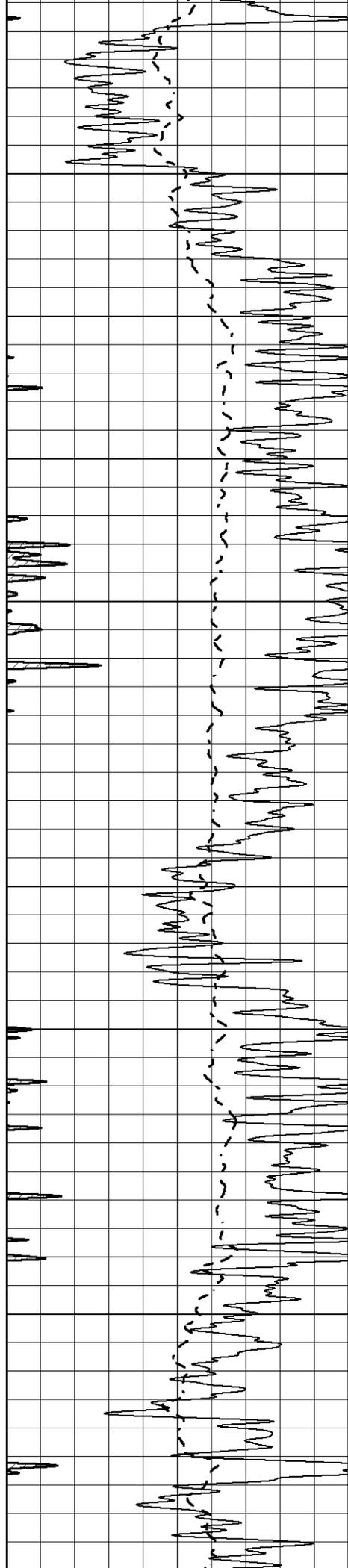
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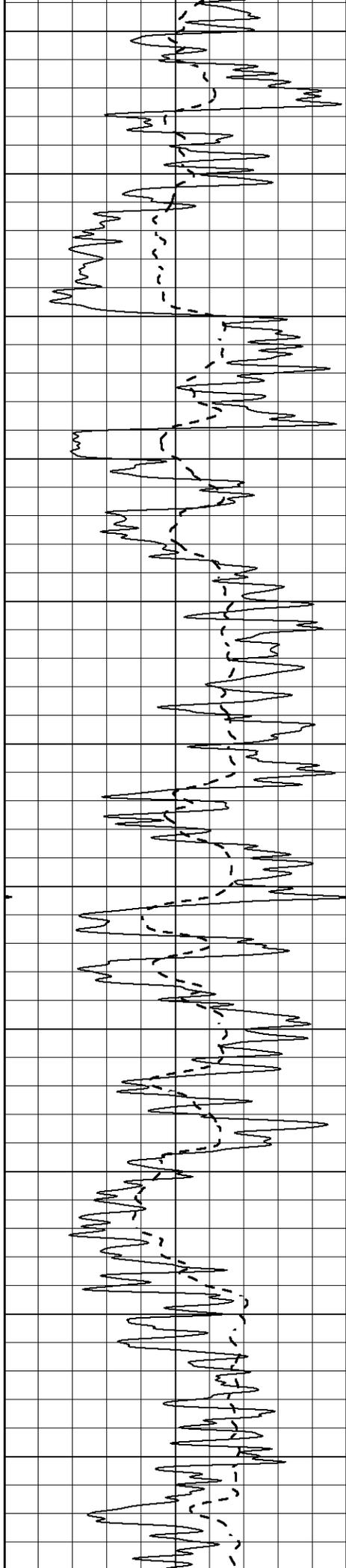
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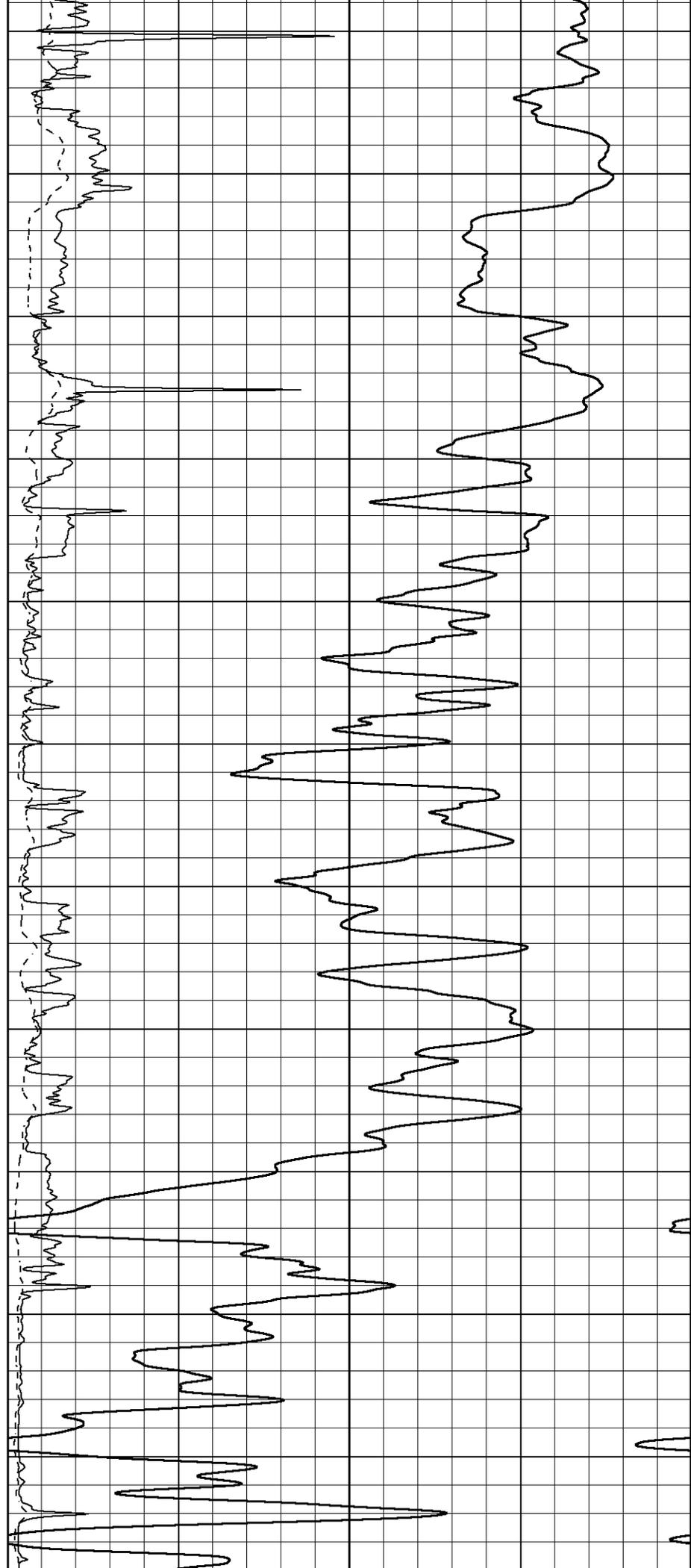
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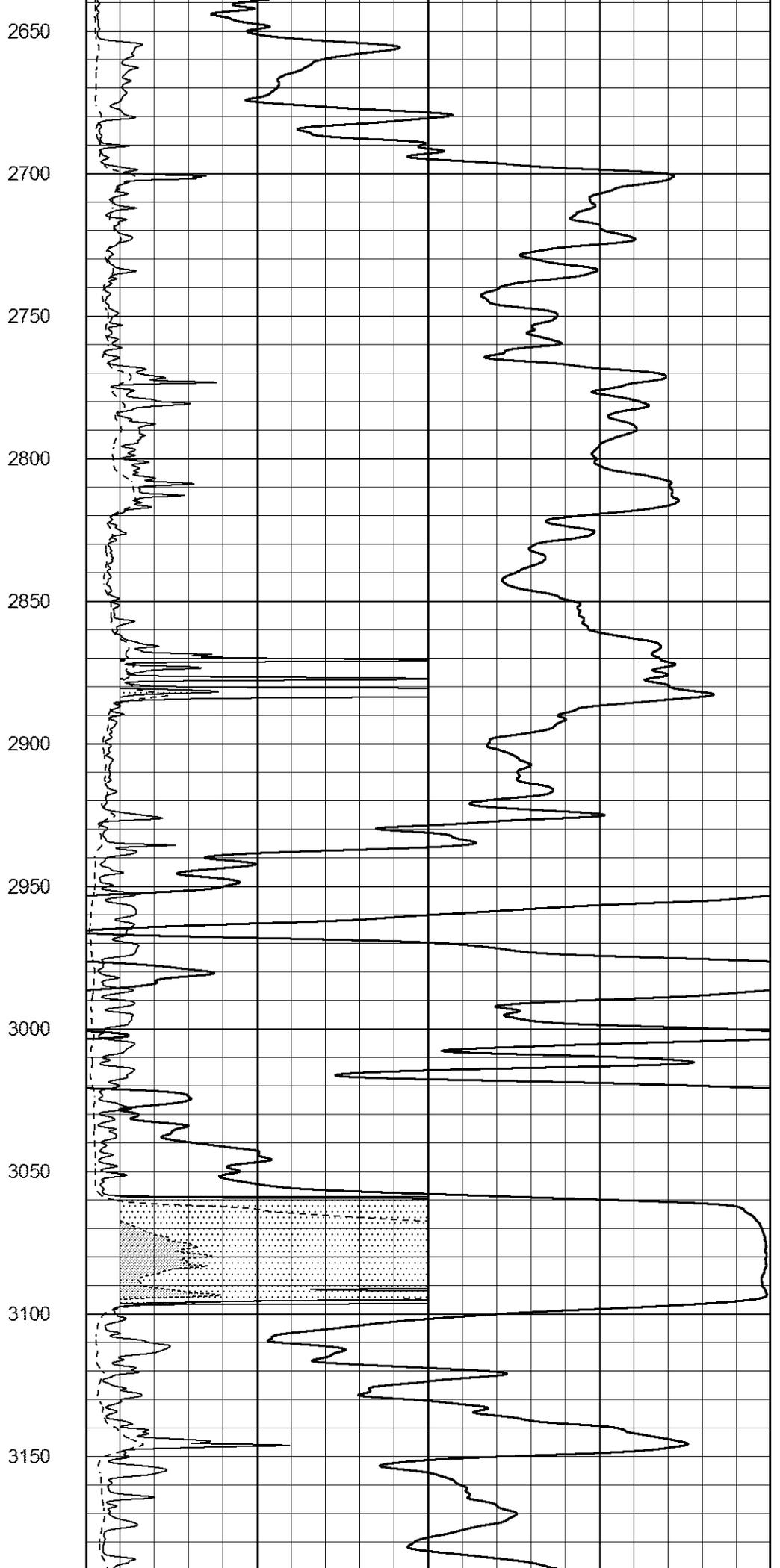
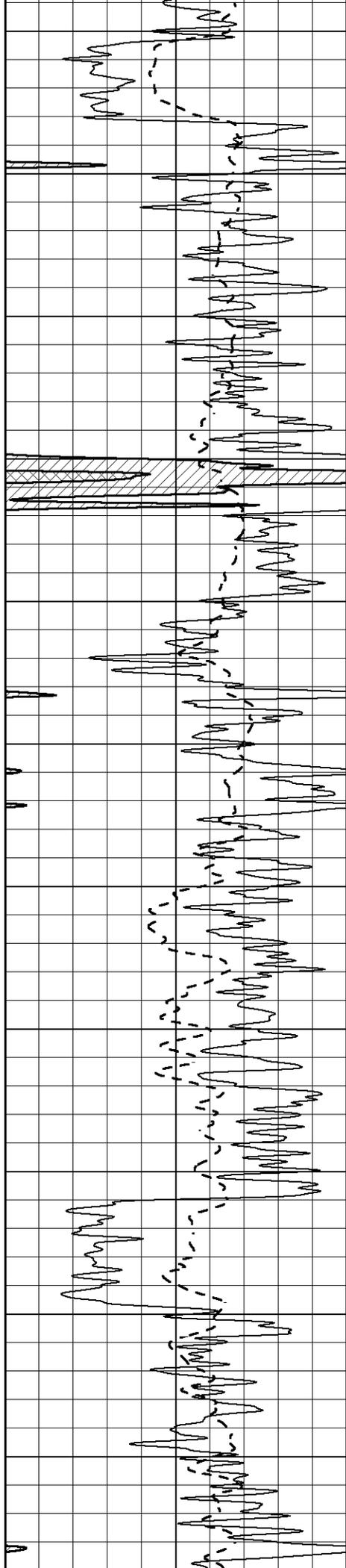


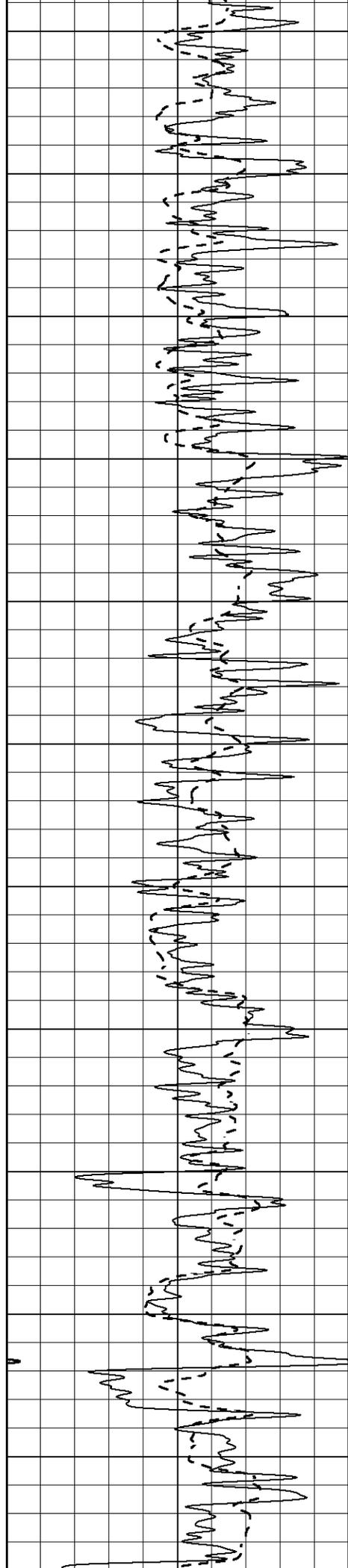




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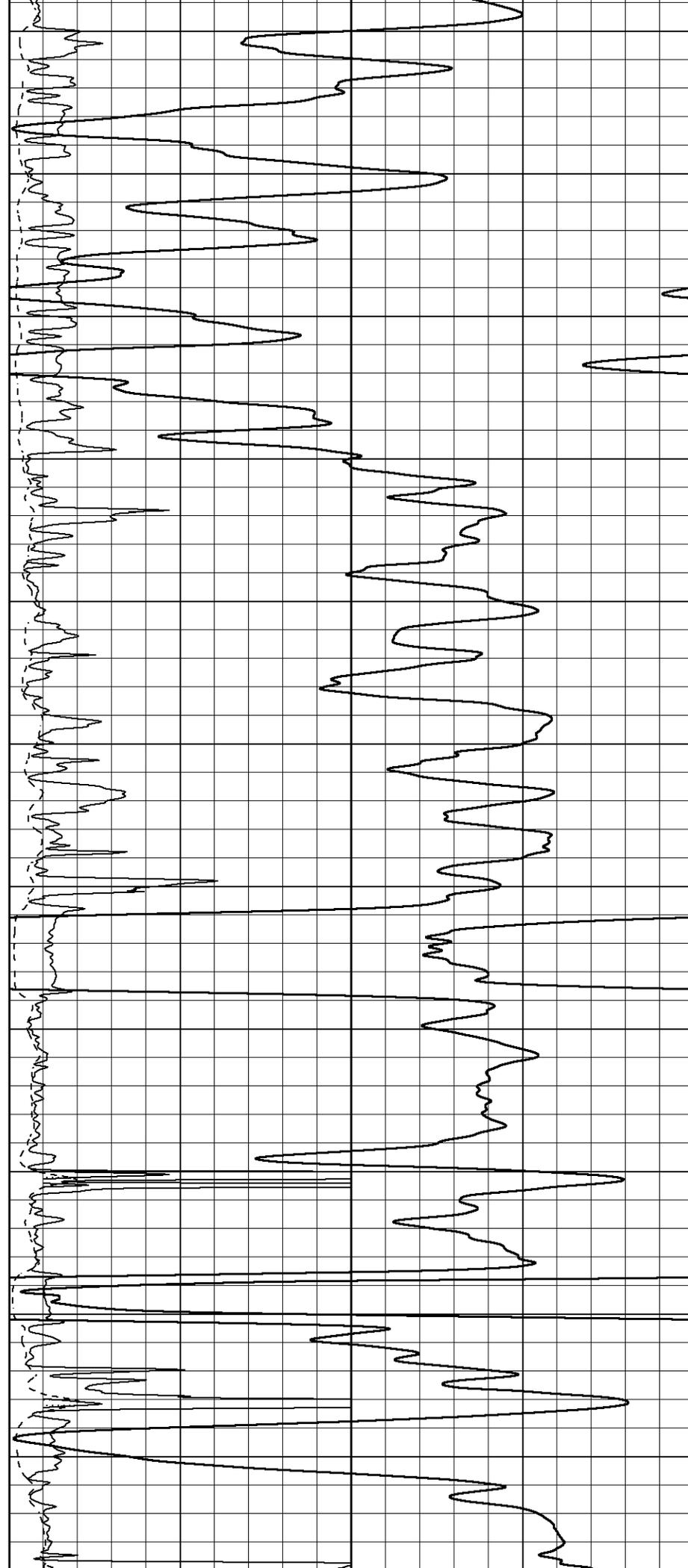
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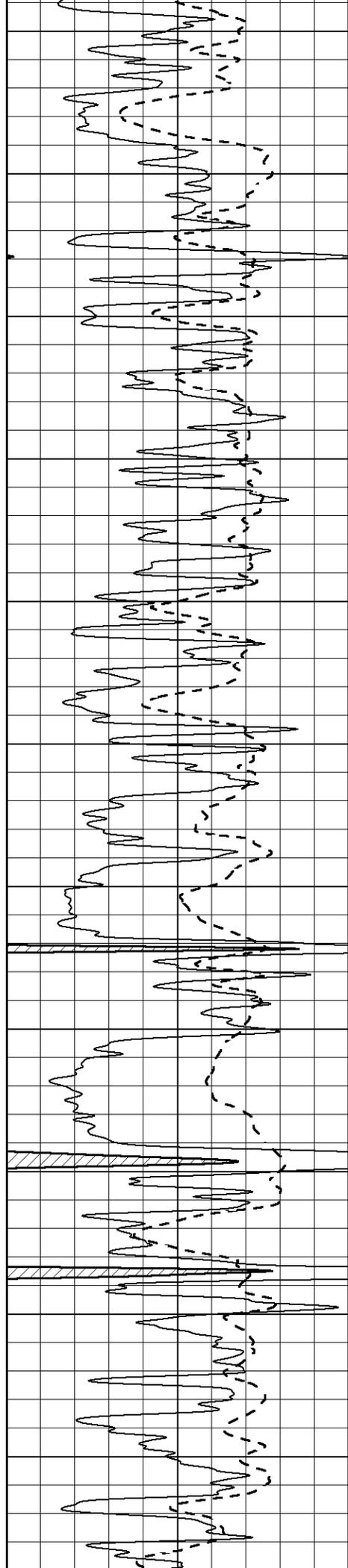
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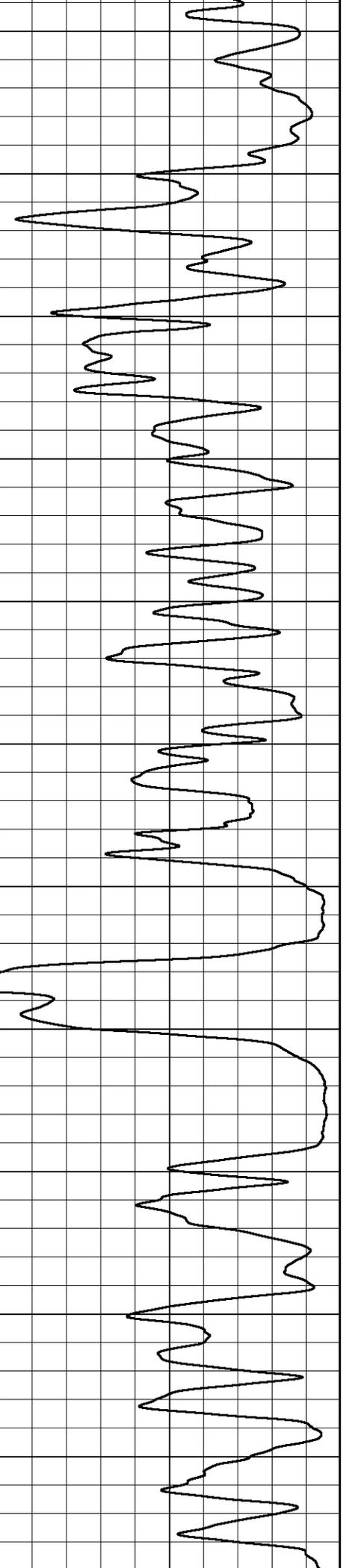
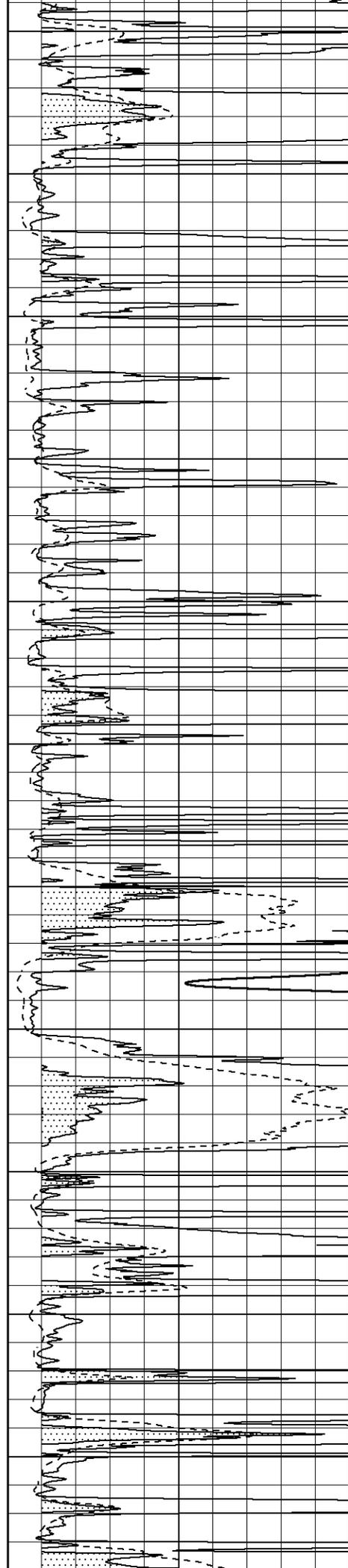
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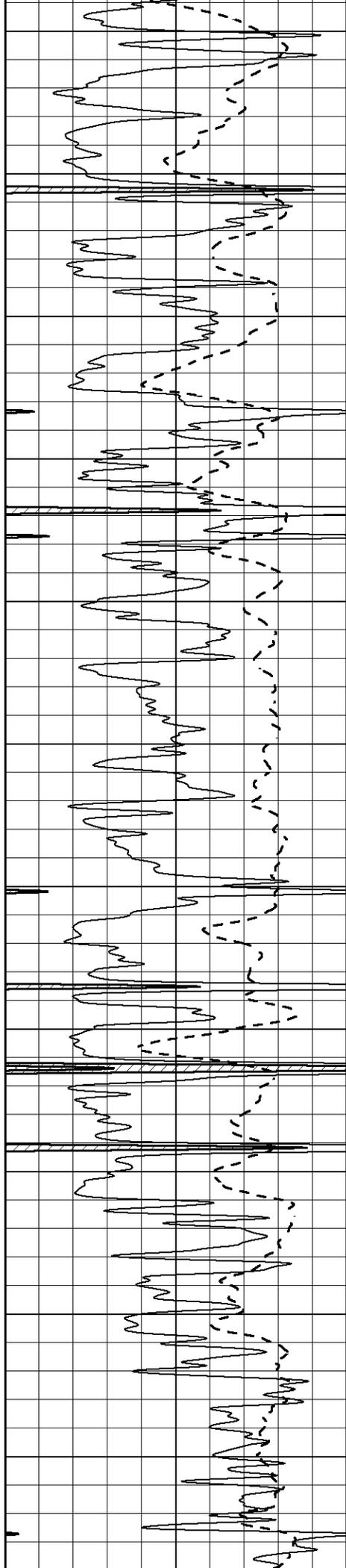
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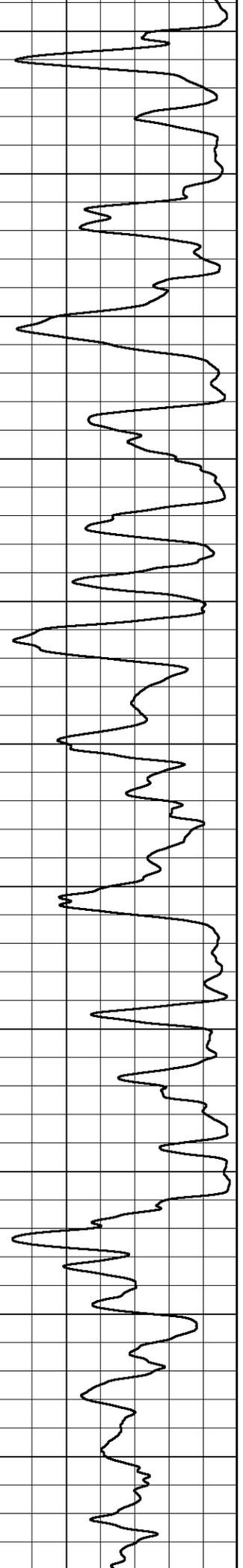
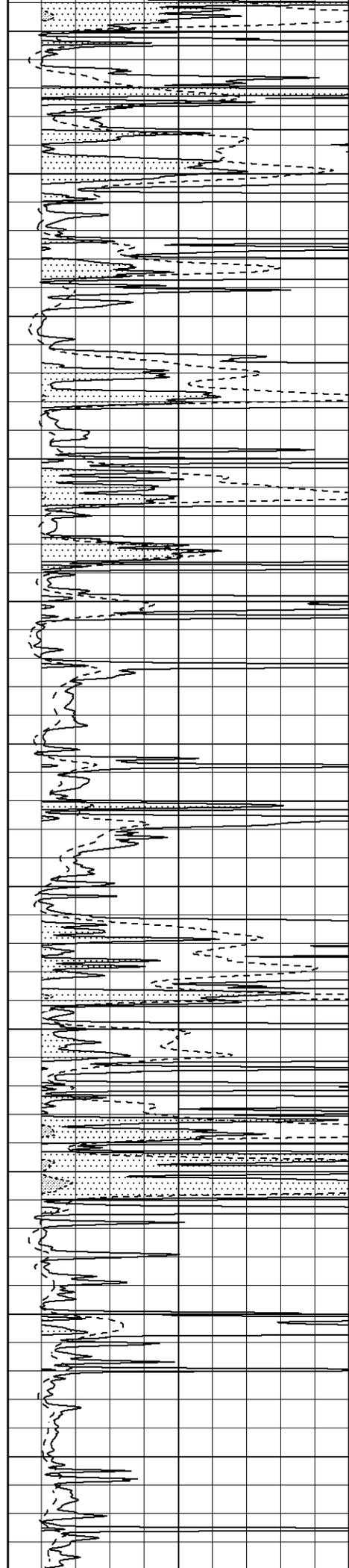
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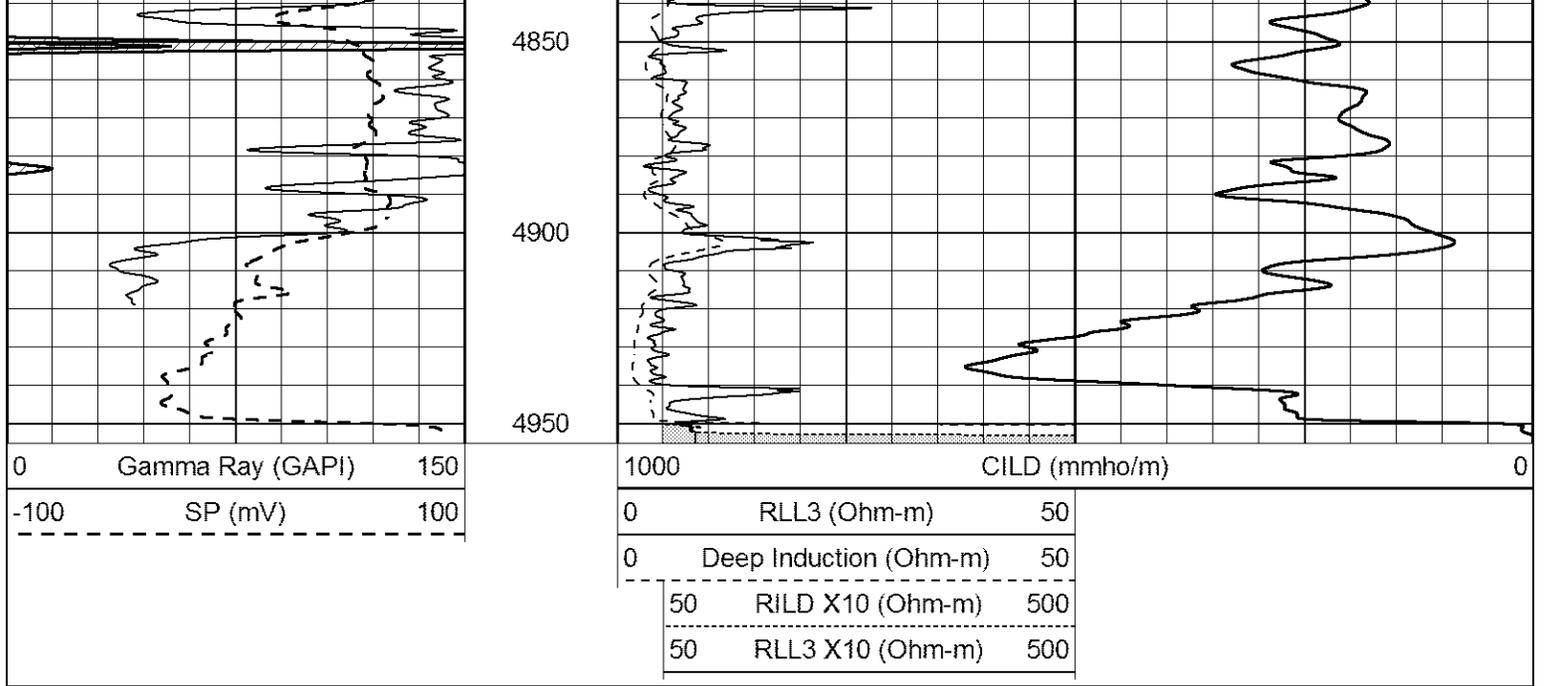
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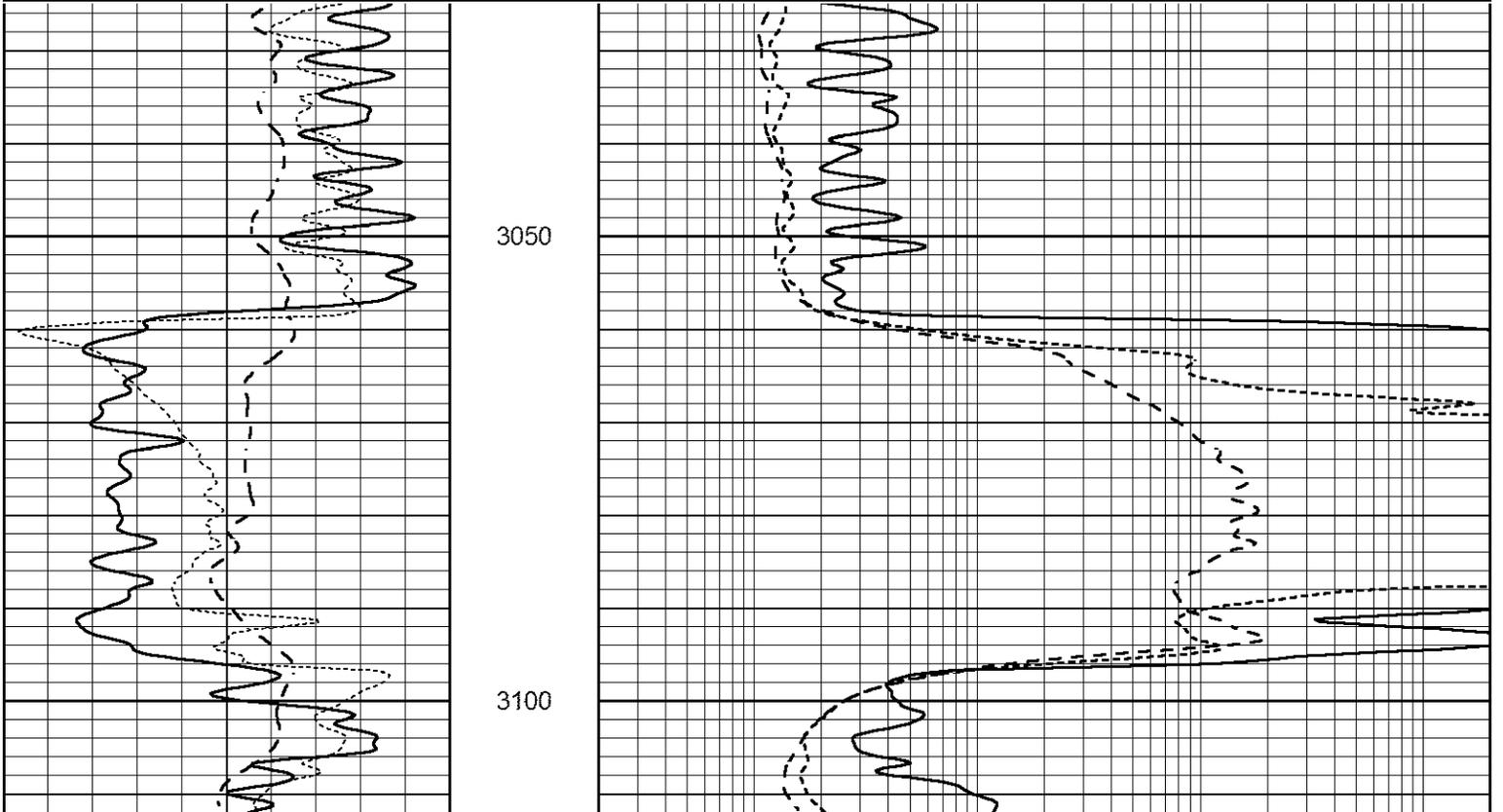


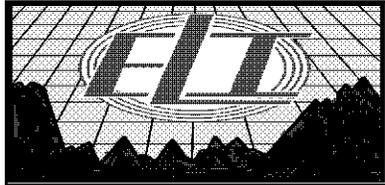
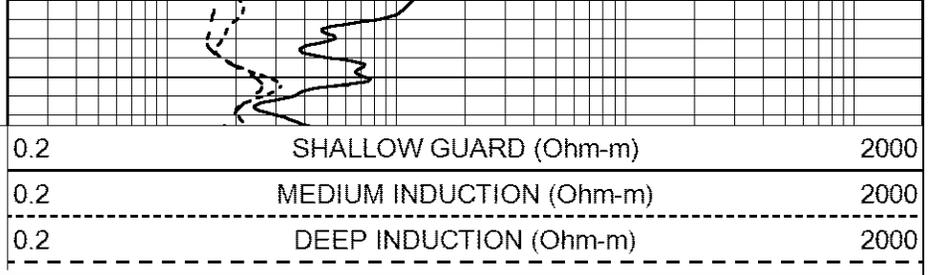
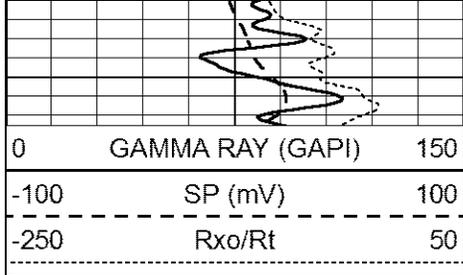


ANHYDRITE

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 Presentation Format _dil
 Dataset Creation Wed Jun 01 19:55:06 2022
 Charted by Depth in Feet scaled 1:240

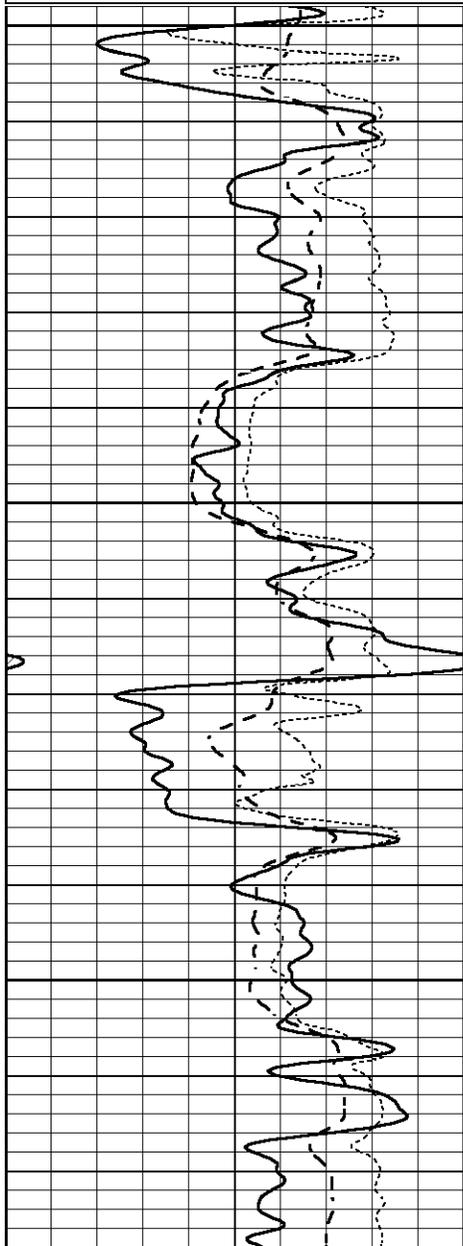
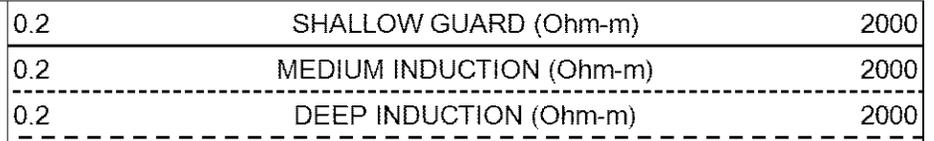
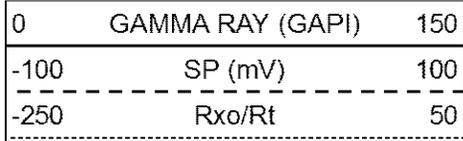
0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000





MAIN SECTION

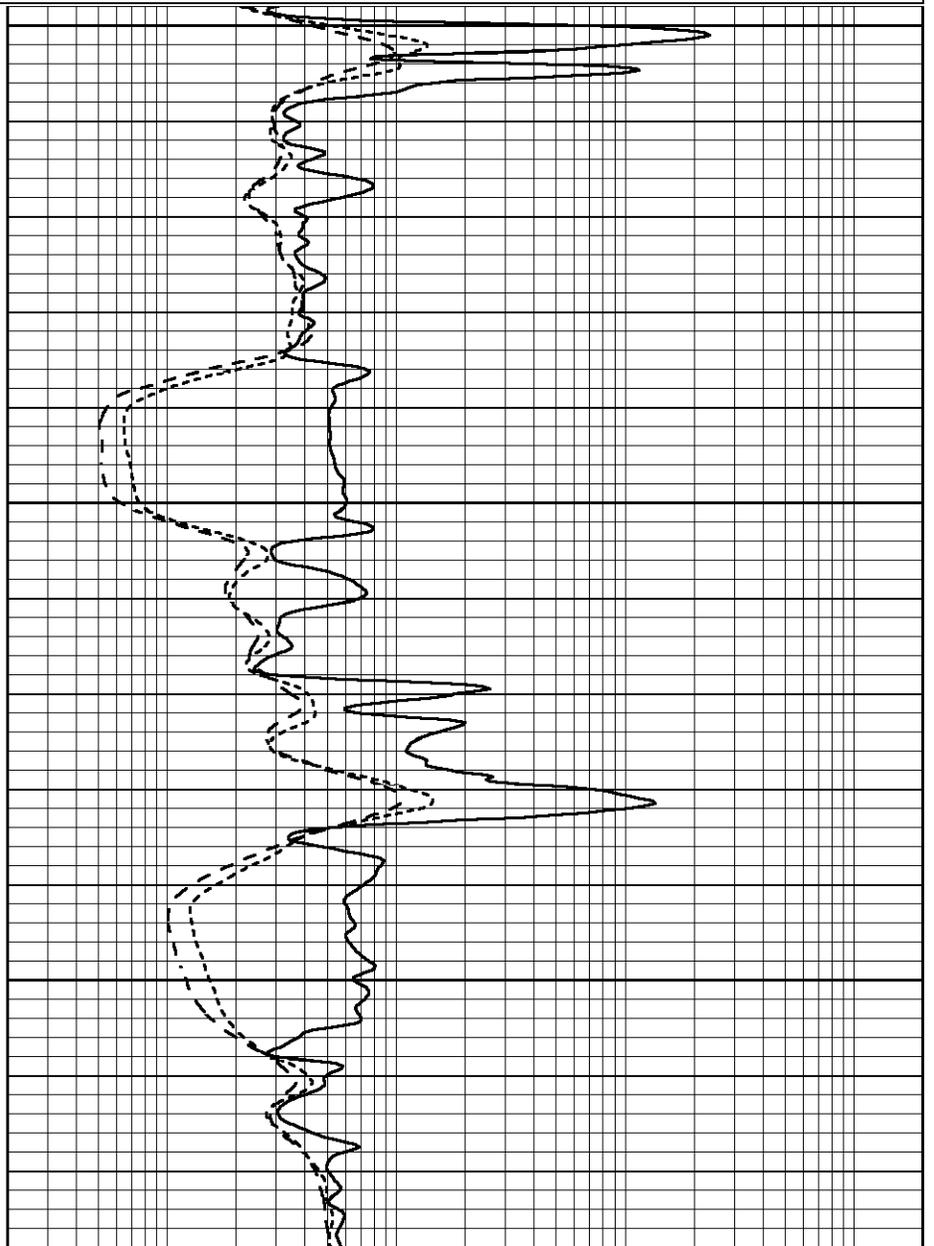
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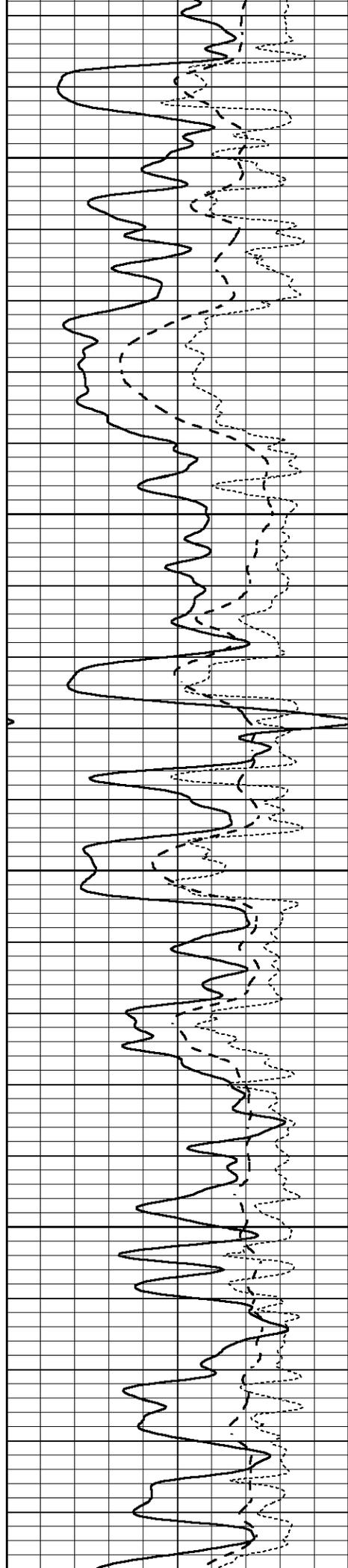


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3700



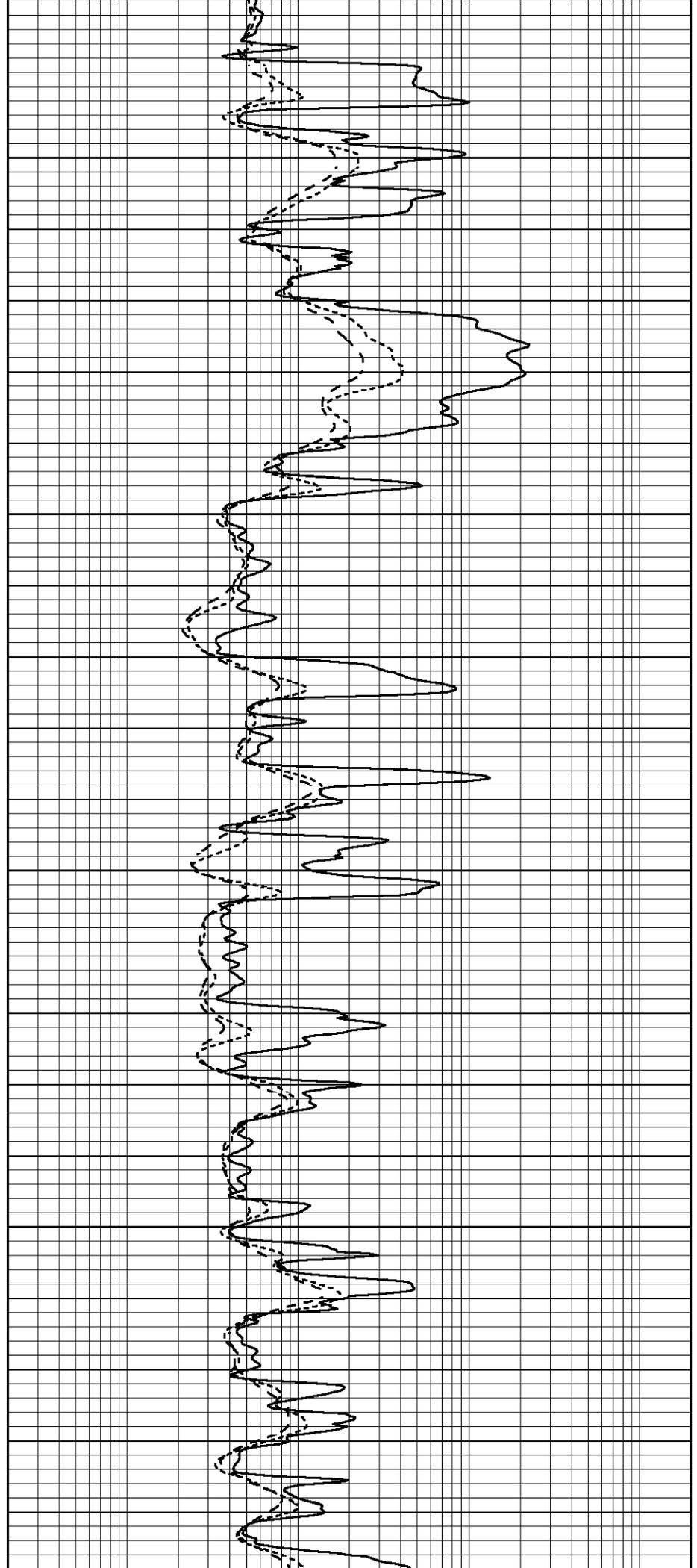


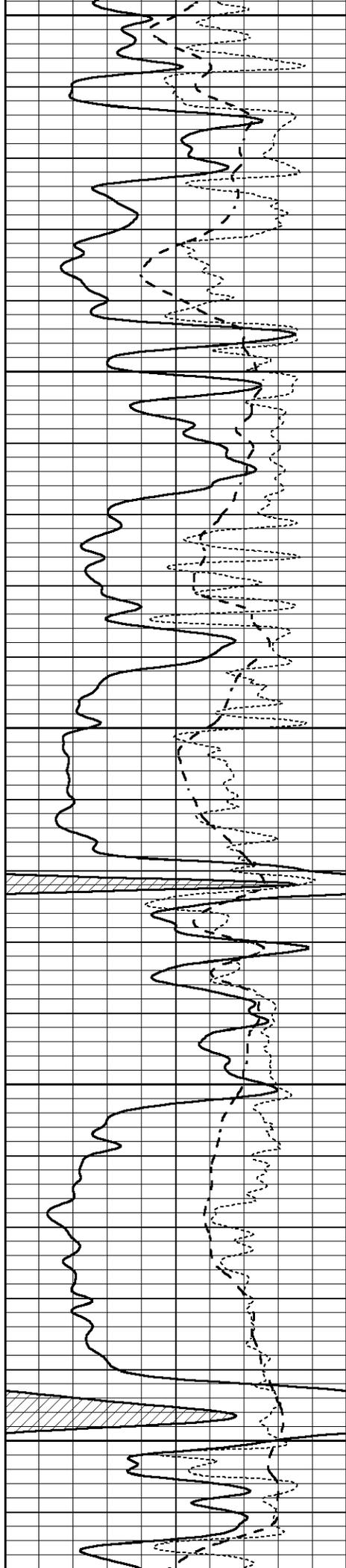
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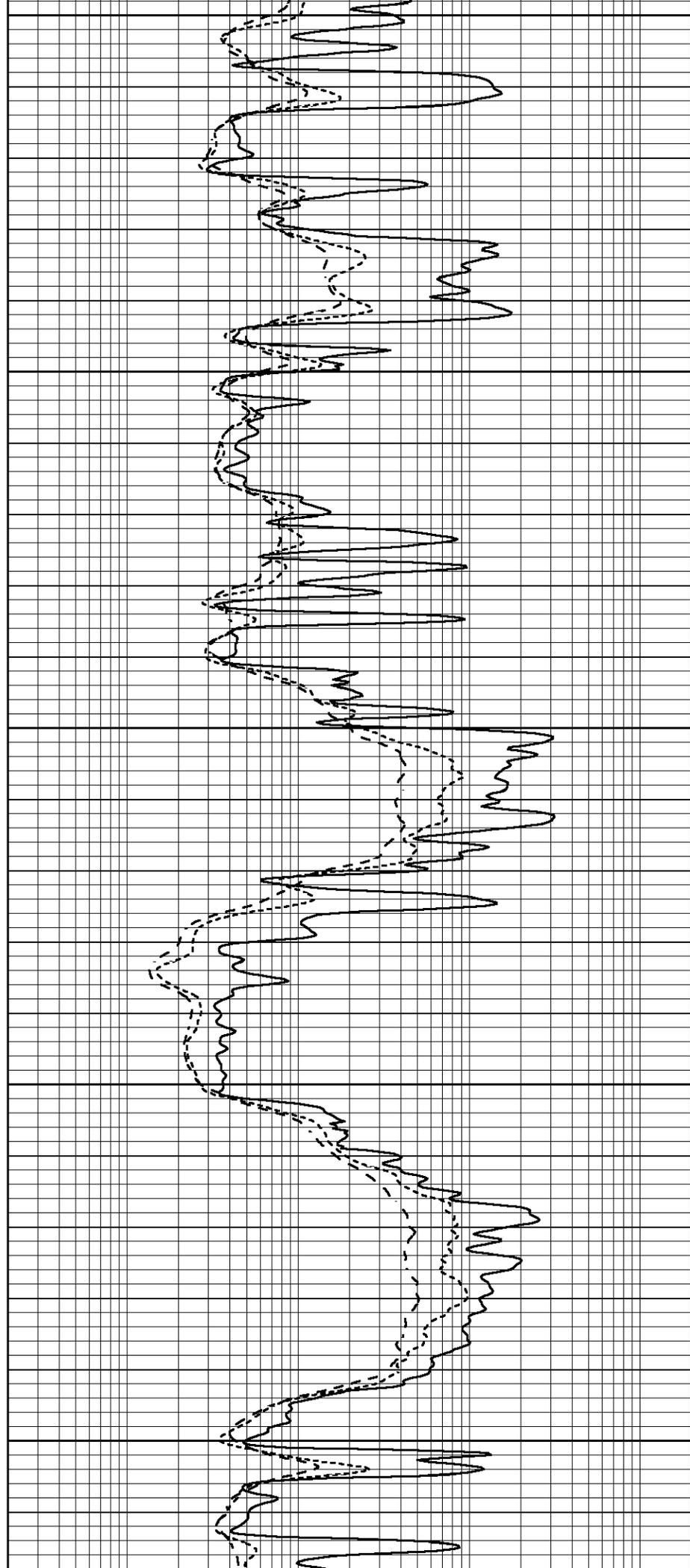
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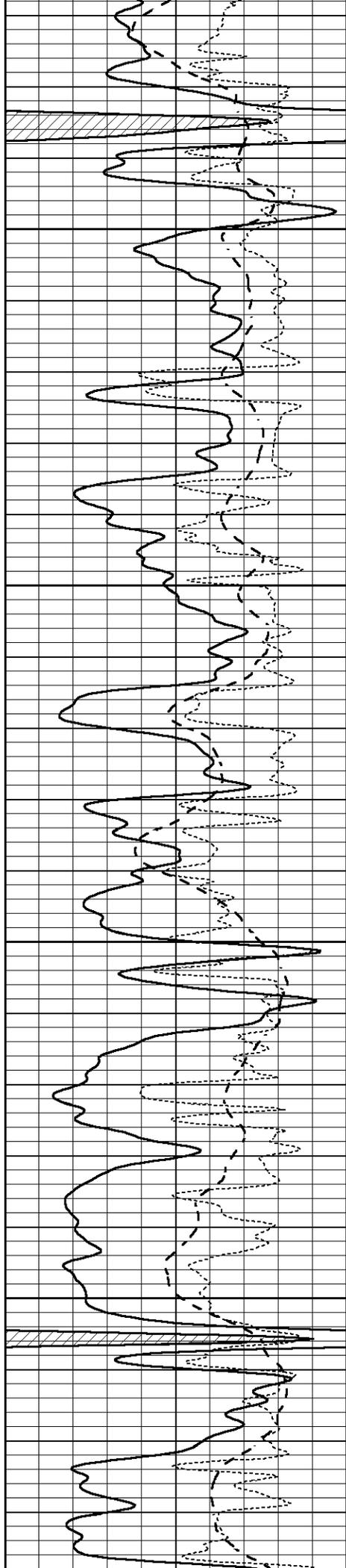
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4100

4150



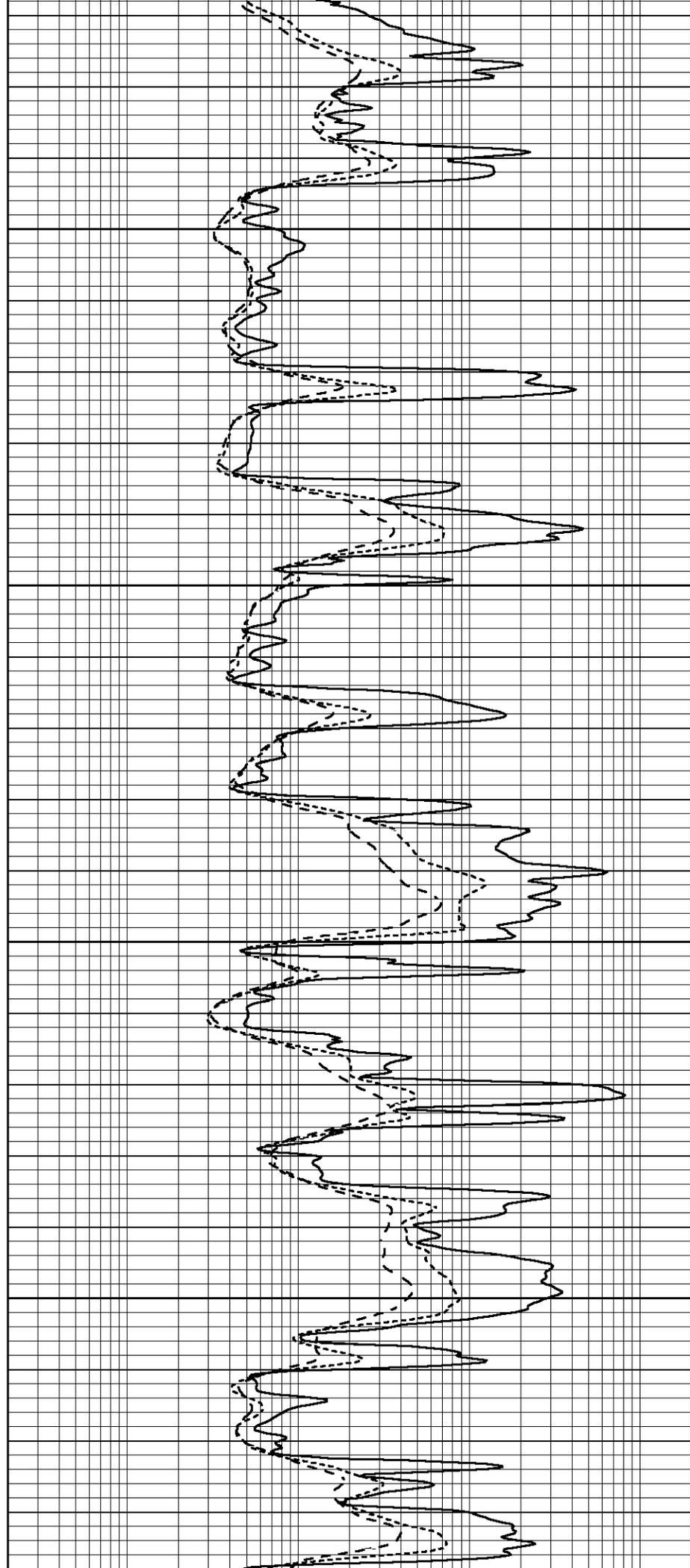


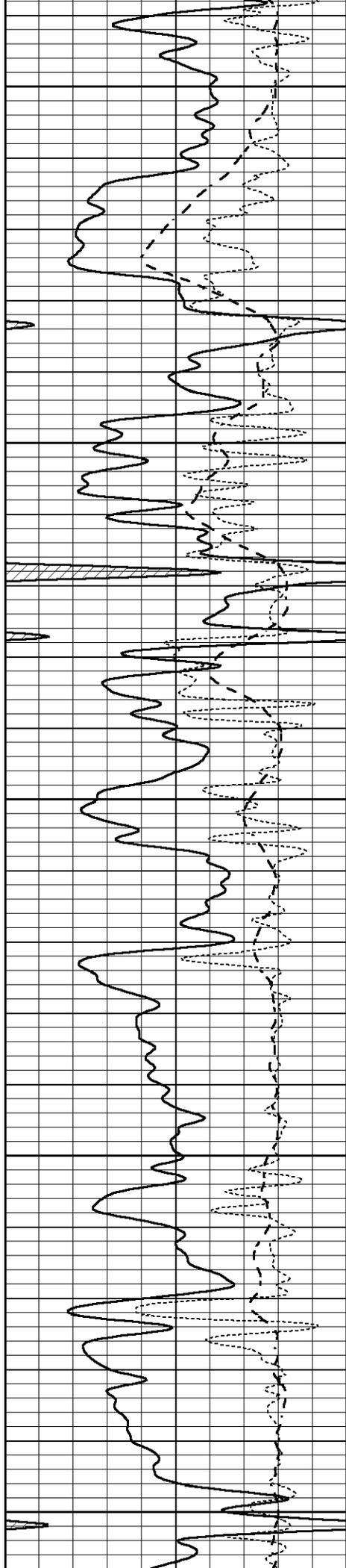
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4250

4300

4350





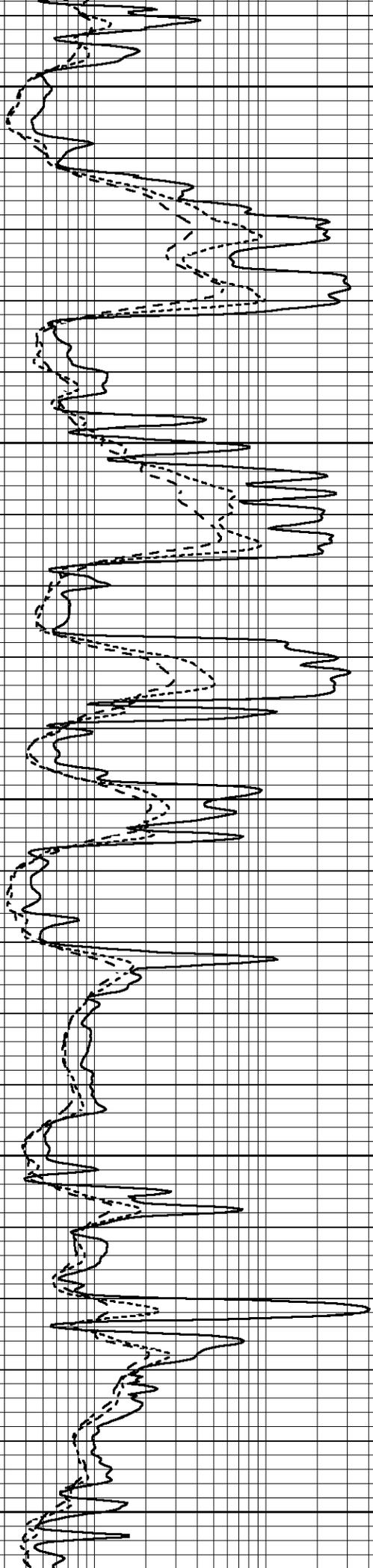
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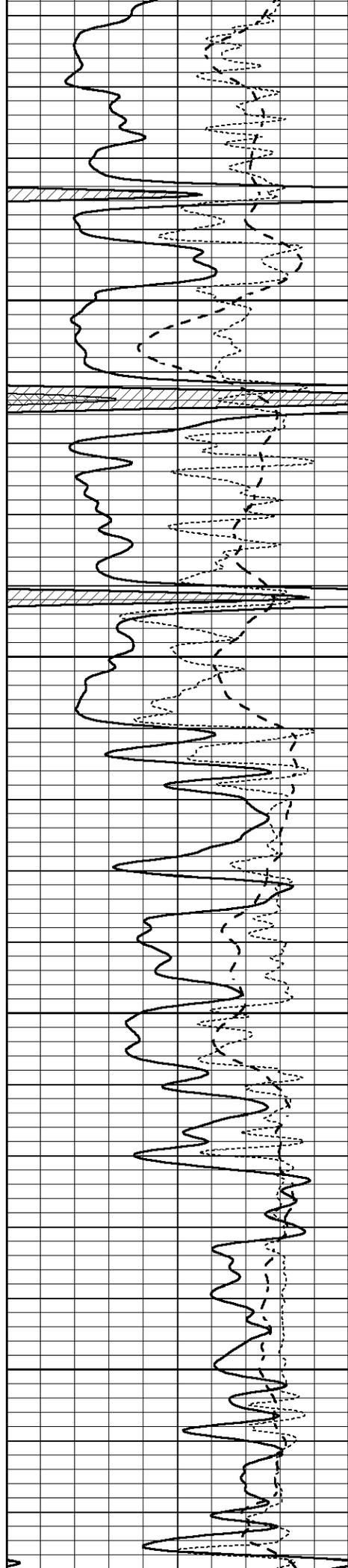
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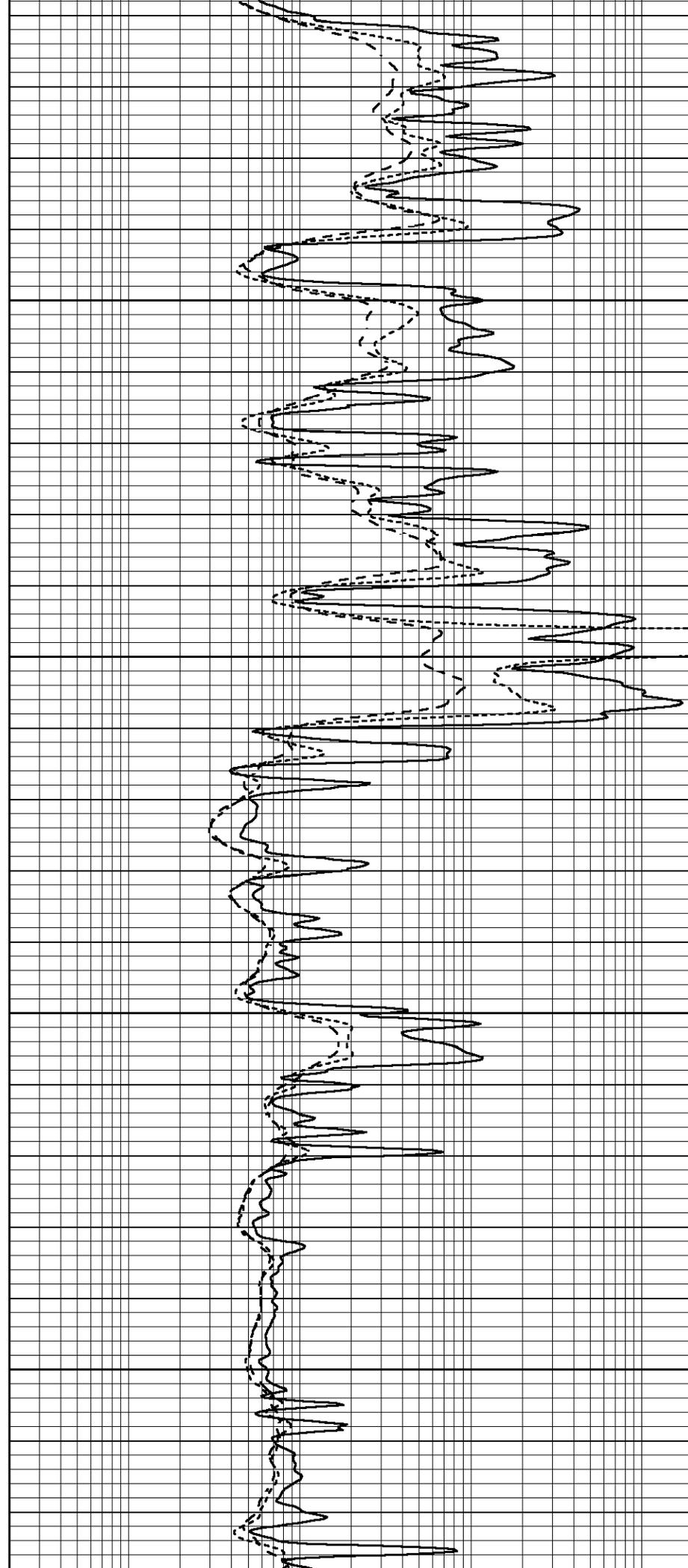


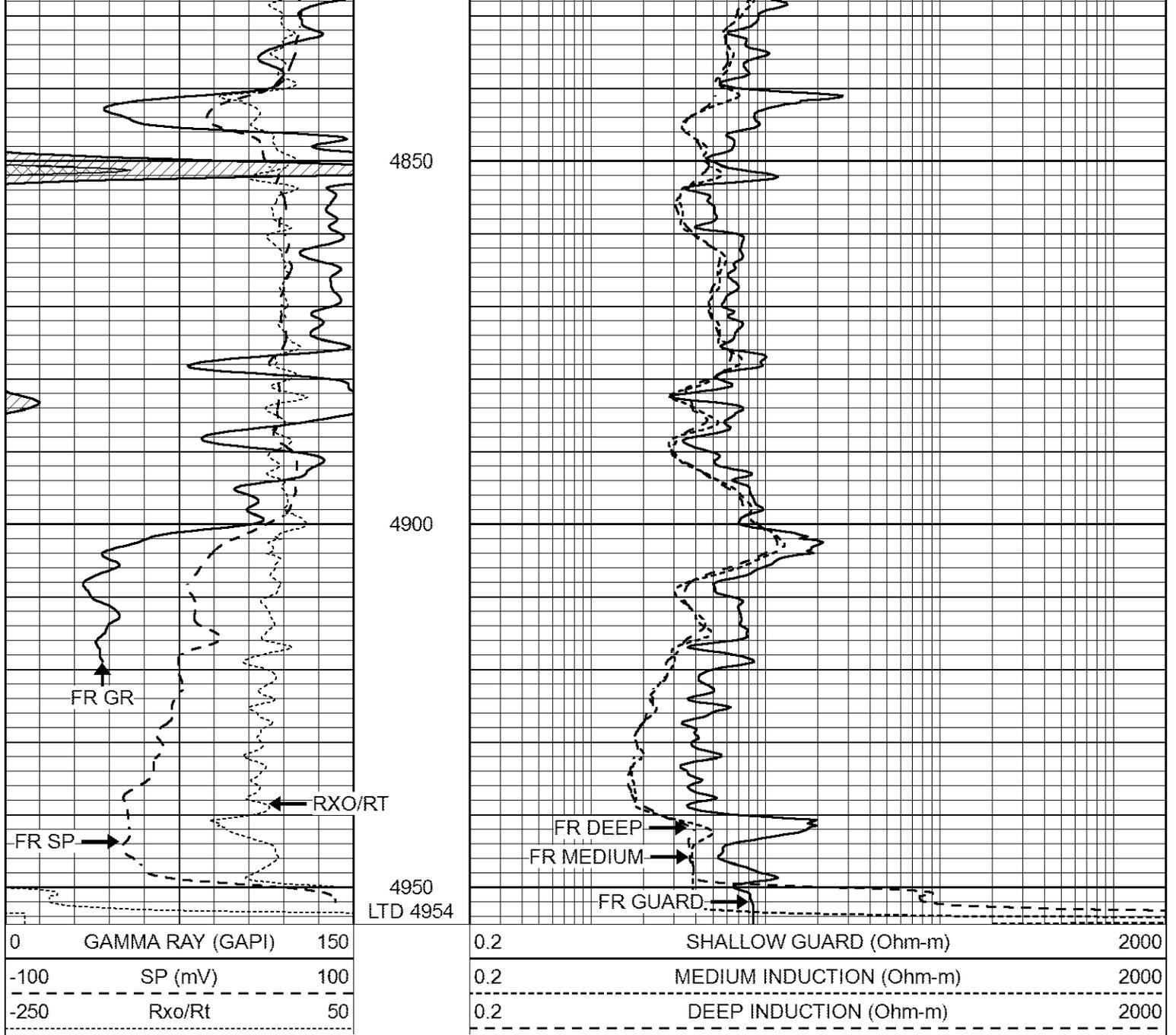
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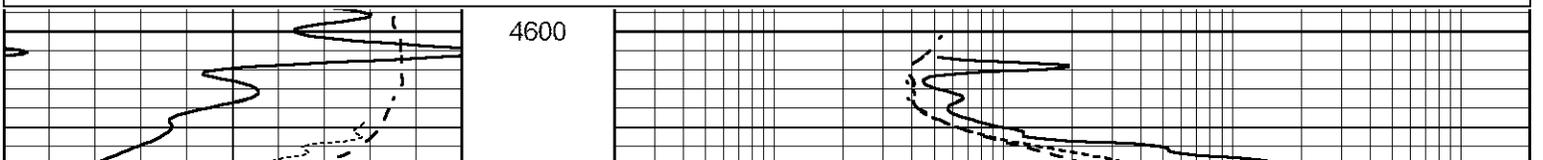


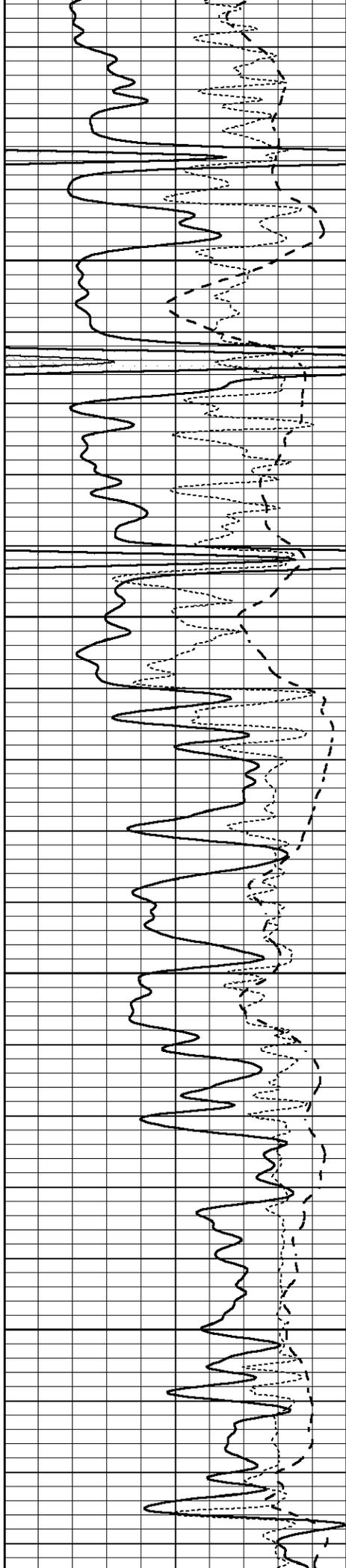
REPEAT SECTION

Database File 6537ddn.db
 Dataset Pathname pass2.1R
 Presentation Format _dil
 Dataset Creation Wed Jun 01 18:45:23 2022
 Charted by Depth in Feet scaled 1:240

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

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



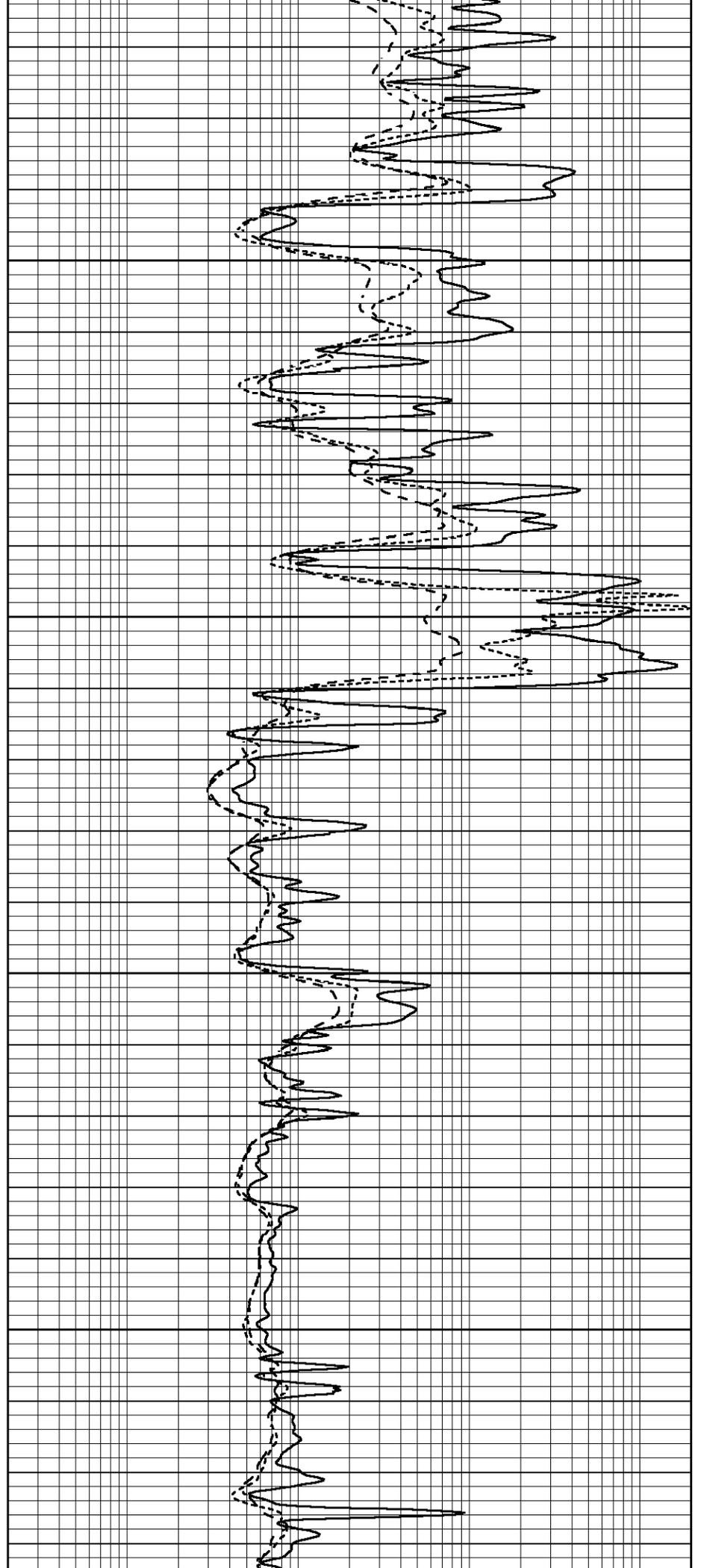


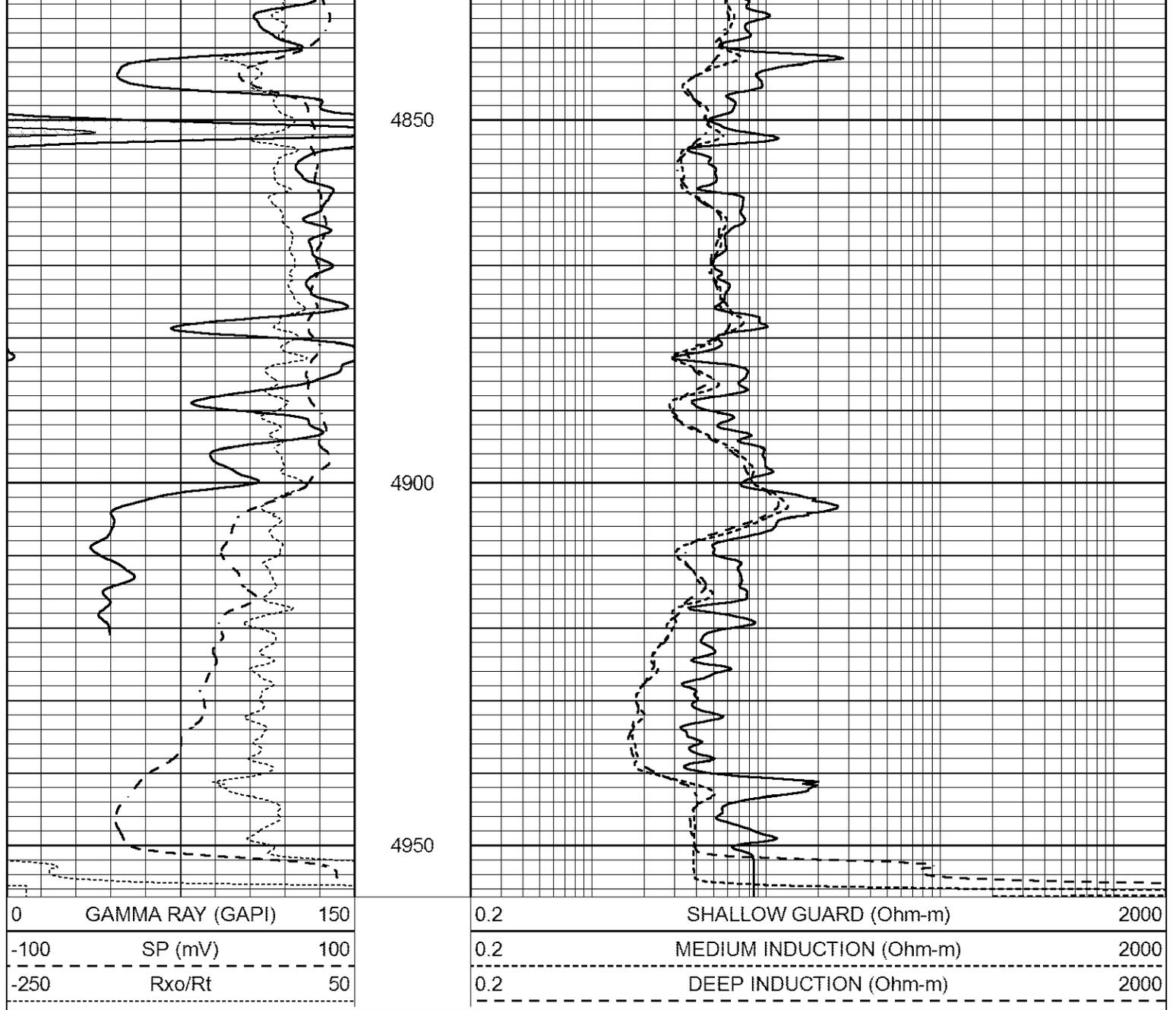
4650

4700

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4800





Calibration Report

Database File 6537ddn.db
 Dataset Pathname pass3.1M
 Dataset Creation Wed Jun 01 19:54:29 2022

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
 Surface Cal Performed: Sun May 15 19:17:36 2022
 Downhole Cal Performed: Tue Feb 19 11:44:24 2019
 After Survey Verification Performed: Tue Feb 19 11:44:27 2019

Surface Calibration

Loop:	Readings			V	References			Results	
	Air	Loop			Air	Loop	mmho/m	m	b
Deep	0.011	0.656			1.000	400.000	mmho/m	650.000	-2.000
Medium	-0.000	0.731			1.000	464.000	mmho/m	632.856	-11.000
Internal:	Zero			V	Cal			Results	
Deep	0.007	0.649				0.000	400.000	mmho/m	623.784

Medium 0.004 0.743 V 0.000 464.000 mmho/m 627.284 -2.251

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report
 Serial: 140704
 Model: V4_10P
 Source Number: 74GBq-19

Master Calibration				Performed: Mon May 23 14:22:47 2022			
	Background	Aluminum		Magnesium			
Window 1	511.07	5437.36		23664.68	cps		
Window 2	40.76	1220.39		5745.34	cps		
Window 4	223.73	1233.64		5301.27	cps		
Window 5	531.57	7878.13		15405.81	cps		
Window 6	48.52	1245.17		2497.97	cps		
Window 8	246.02	2578.14		4974.07	cps		
Bulk Density	-	2.6020		1.6830	g/cc		
Pe	-	3.0000		2.5070	b/e		
LS Alpha:	: -1.8413	SS Alpha:	: -0.8034	LS CPE:		: 1.1579	
LS Beta:	: 124864.8423	SS Beta:	: 19537.1506	SS CPE:		: 1.6371	

Before Survey Background Counts Verification				Performed: Wed Dec 31 18:00:00 1969			
Window 1	0.00	cps					
Window 2	0.00	cps					
Window 4	0.00	cps					
Window 5	0.00	cps					
Window 6	0.00	cps					
Window 8	0.00	cps					

After Survey Background Counts Verification				Performed: Wed Dec 31 18:00:00 1969			
Window 1	0.00	cps					
Window 2	0.00	cps					
Window 4	0.00	cps					
Window 5	0.00	cps					
Window 6	0.00	cps					
Window 8	0.00	cps					

Results	Readings		References (in)		Gain	Offset
	Low	High	Low	High		
	8210.8	12139.3	7.0	14.0	0.0	-7.5

Before Survey Caliper Verification

Performed:

	Reference	Reading
Caliper (in)	_____	_____

After Survey Caliper Verification

Performed:

	Reference	Reading
Caliper (in)	_____	_____

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

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: 7
Tool Model: Probe1
Performed: Thu May 26 08:56:46 2022

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5500 GAPI/cps