



**COMPENSATED
DENSITY/NEUTRON
LOG**

Company RAYMOND OIL COMPANY, INC.
Well KNEBEL-SHOPE #19-1
Field WILDCAT
County BUTLER State KANSAS

Location: API #: 15-015-24105-0000
1980' FNL & 1350' FWL
SEC 19 TWP 24S RGE 8E
Permanent Datum GROUND LEVEL Elevation 1514
Log Measured From KELLY BUSHING 6' A.G.L
Drilling Measured From KELLY BUSHING
Other Services DIL/MEL
Elevation K.B. 1520
D.F. 1518
G.L. 1514

Date	8/28/18	
Run Number	ONE	
Depth Driller	2790	
Depth Logger	2790	
Bottom Logged Interval	2766	
Top Log Interval	1300	
Casing Driller	8 5/8" @ 253	
Casing Logger	258	
Bit Size	7 7/8	
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 1300 PPM
Density / Viscosity	9.5/44	
PH / Fluid Loss	9.5/8.4	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp	1.2 @ 94F	
Rmt @ Meas. Temp	.90 @ 94F	
Rmc @ Meas. Temp	1.4 @ 94F	
Source of Rmf / Rmc	MEASUREMENT	
Rm @ BHT	1.0 @ 106F	
Time Circulation Stopped	2 HOURS	
Time Logger on Bottom	////	
Maximum Recorded Temperature	105F	
Equipment Number	3802	
Location	HAYS, KANSAS	
Recorded By	JASON CAPPELLUCCI	
Witnessed By	ROBERT TURNER	

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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

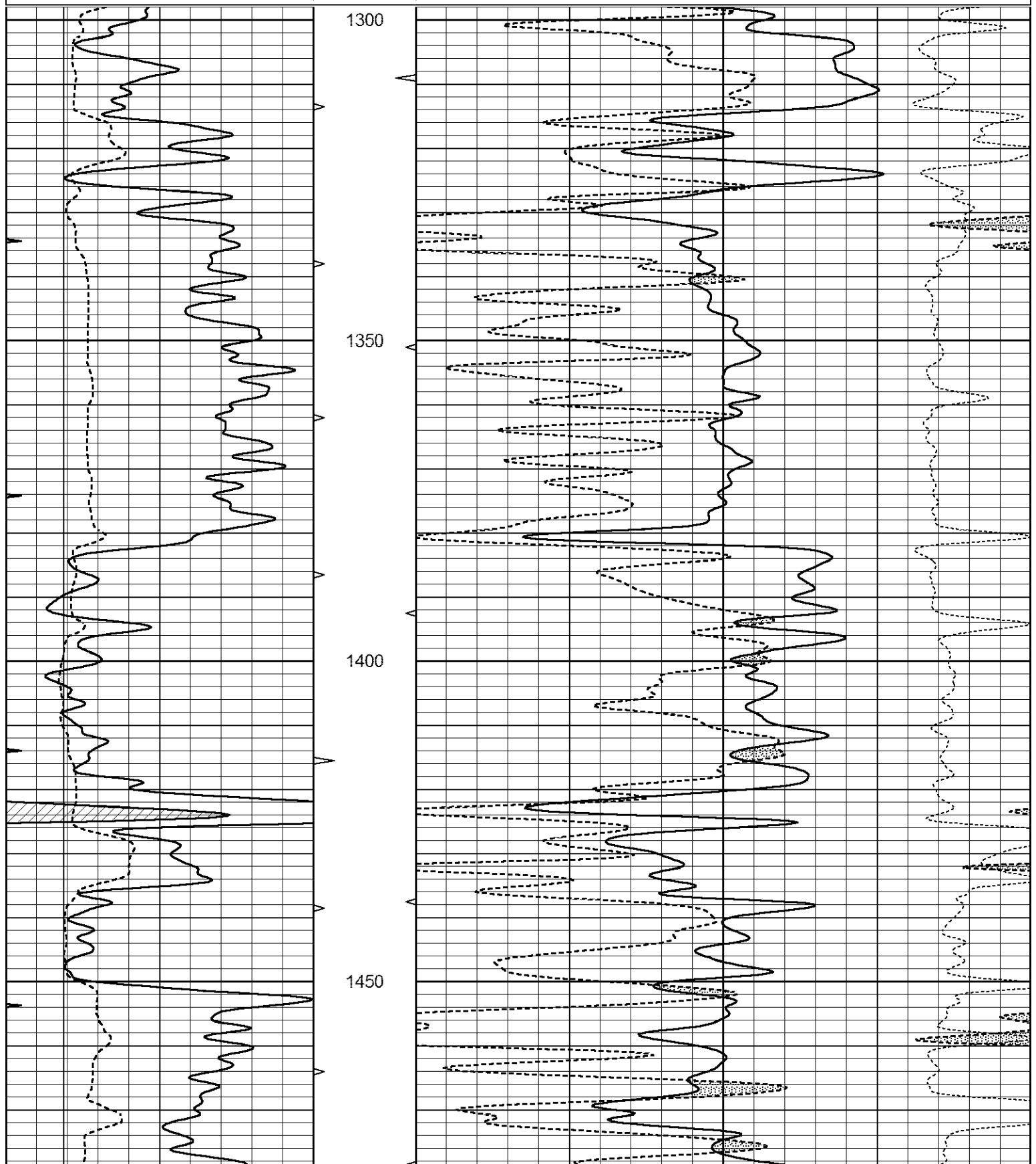
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
CASSODAY, KS. - 5 SOUTH TO JOG EAST 1 MILE - 2 SOUTH - EAST INTO

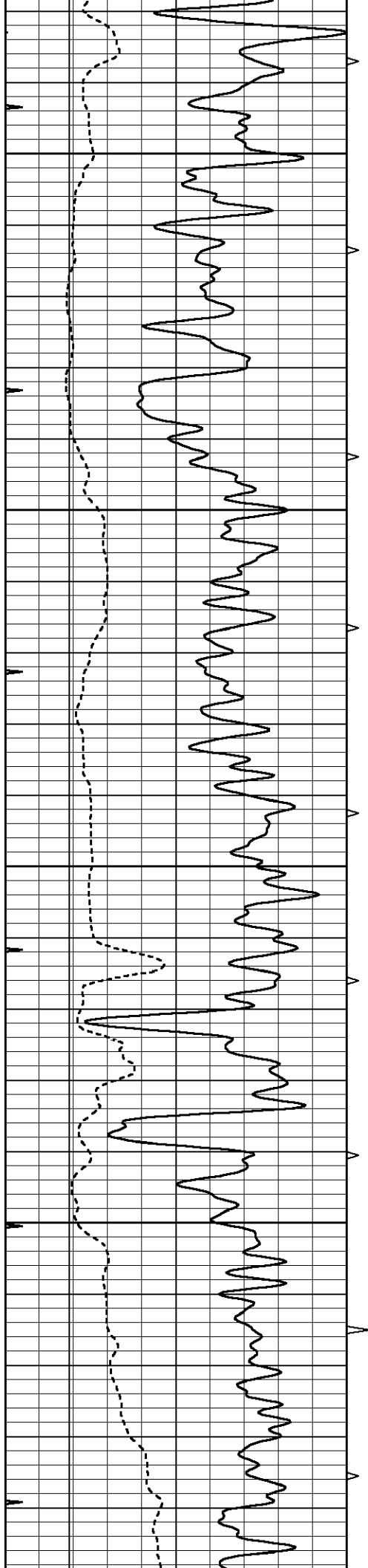


MAIN SECTION

Database File 3001ddn8.db
 Dataset Pathname pass3.1
 Presentation Format _den_neu
 Dataset Creation Tue Aug 28 14:31:00 2018
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
0	MINMK	20	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
6	CALIPER (in)	16	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3) 10			



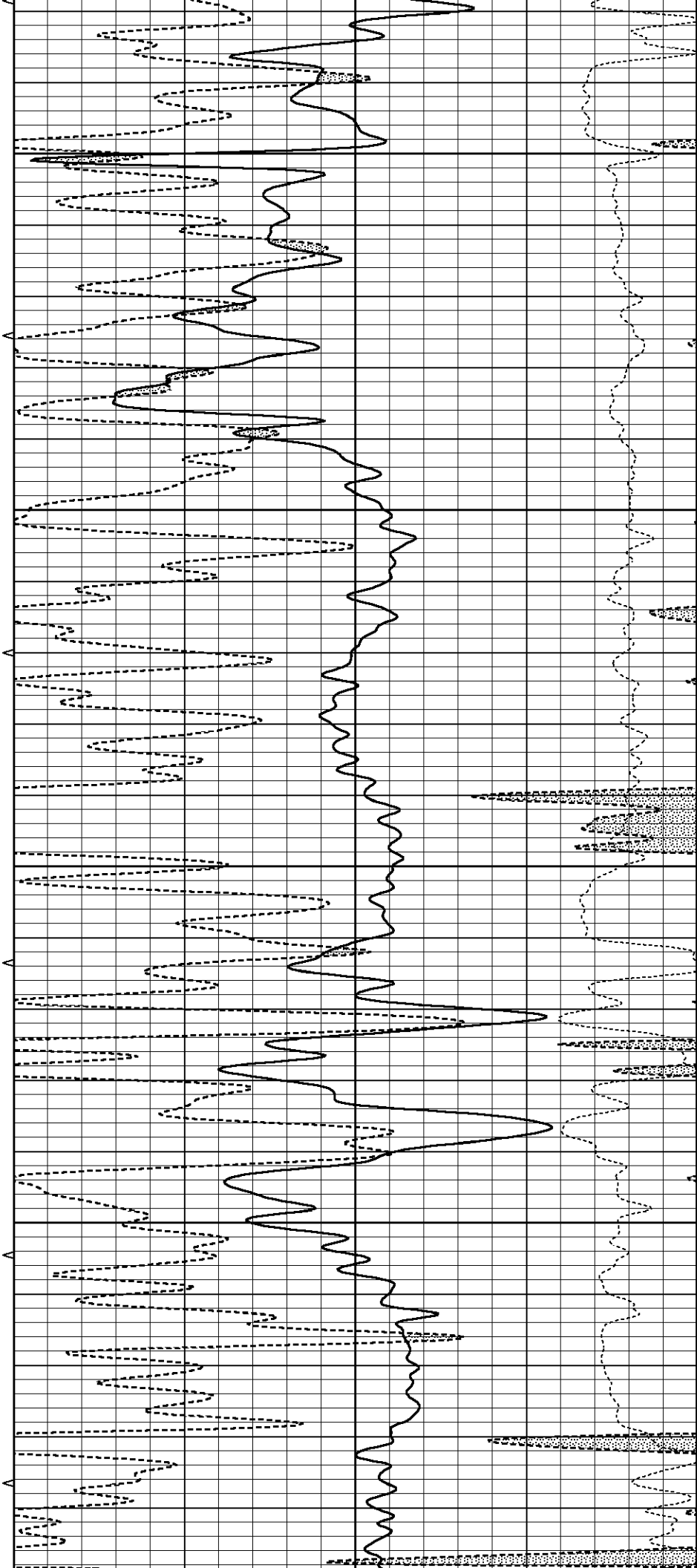


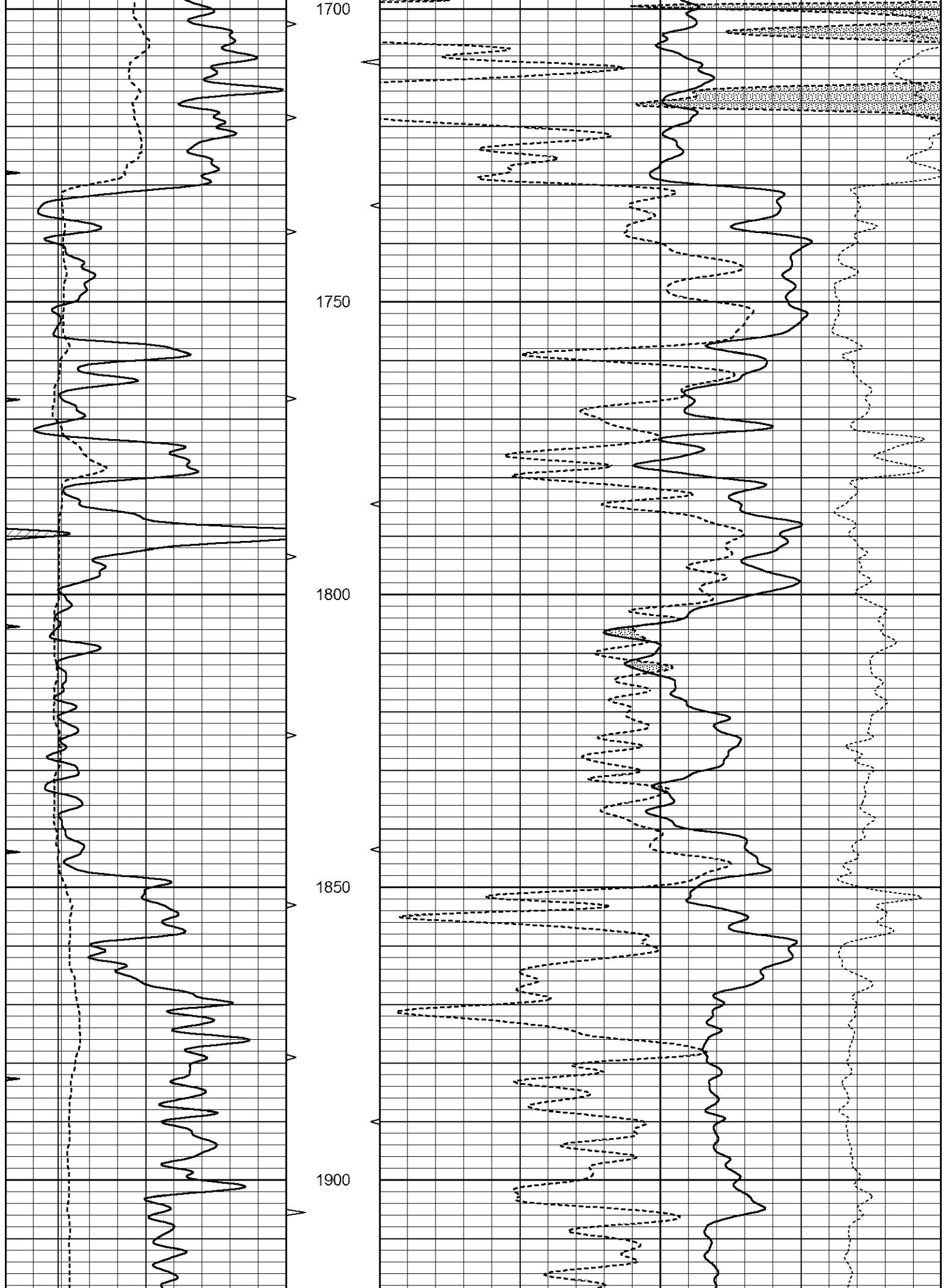
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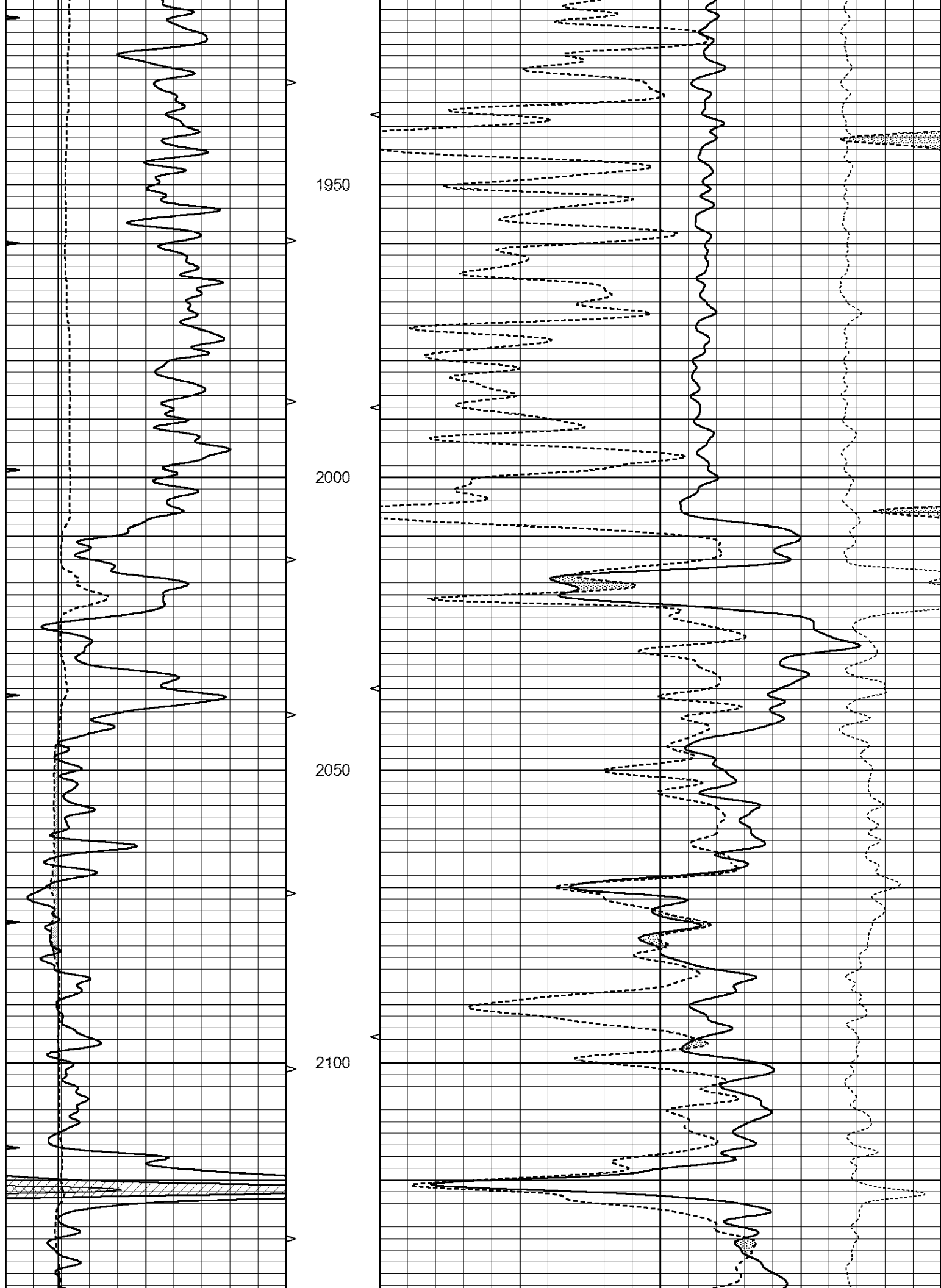
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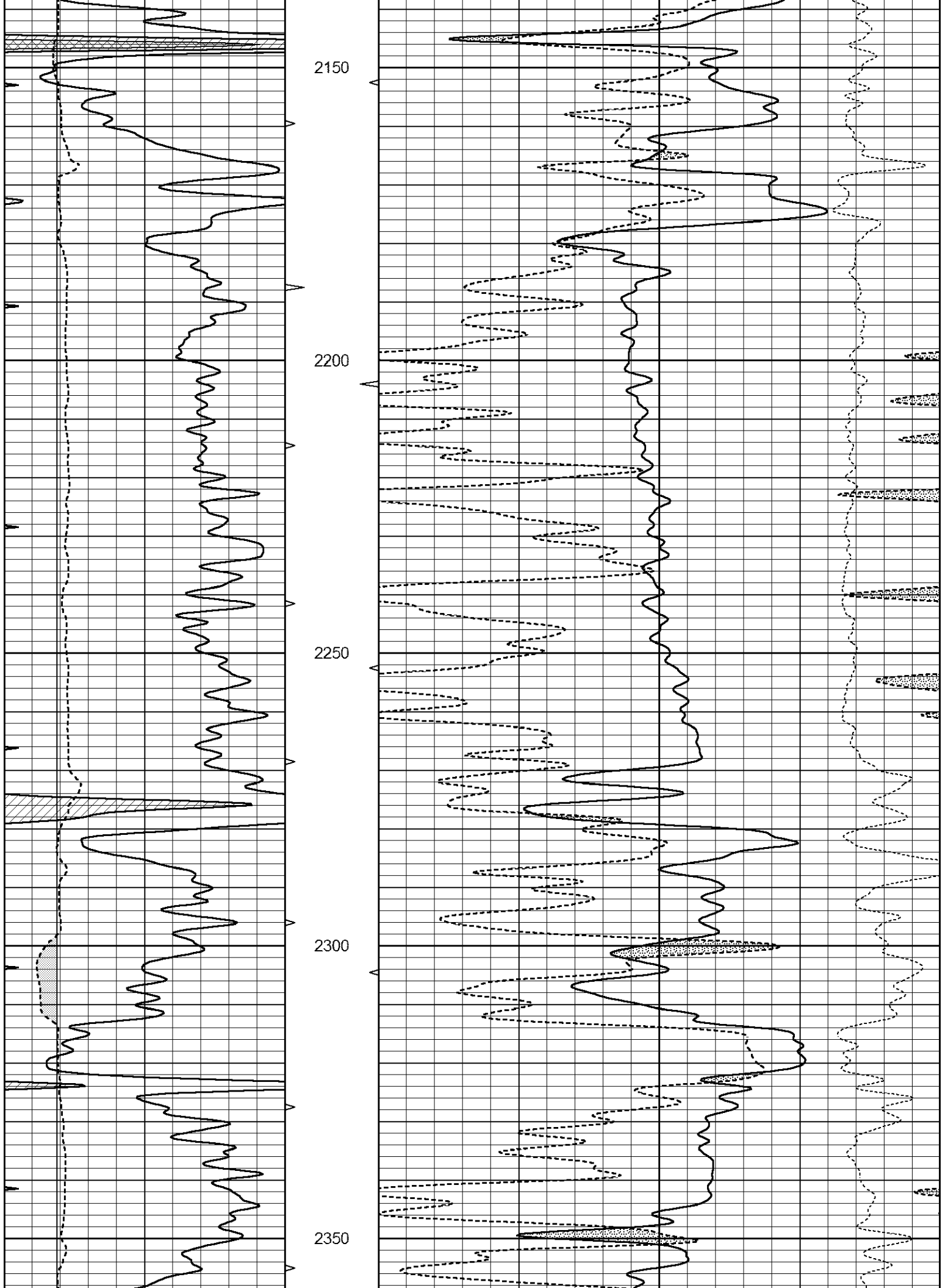
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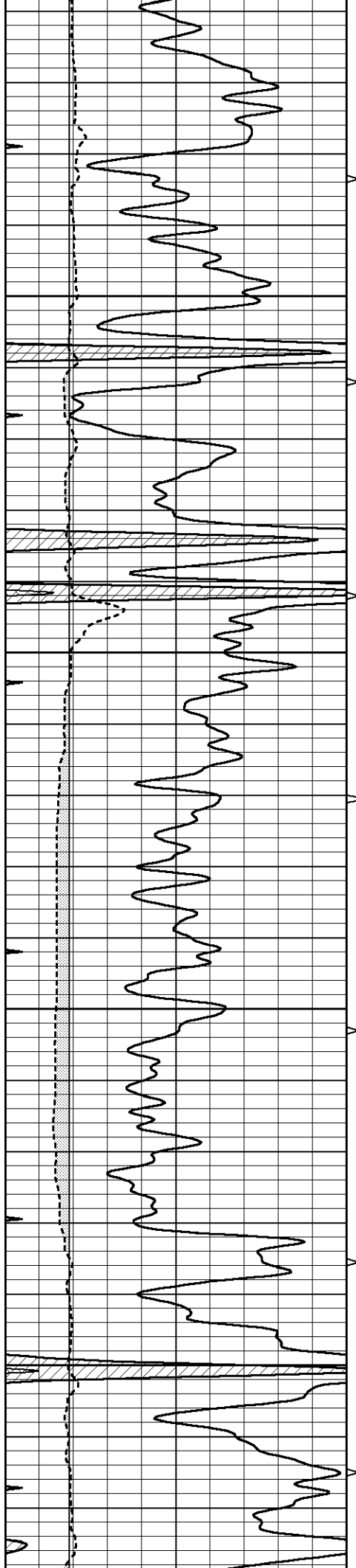
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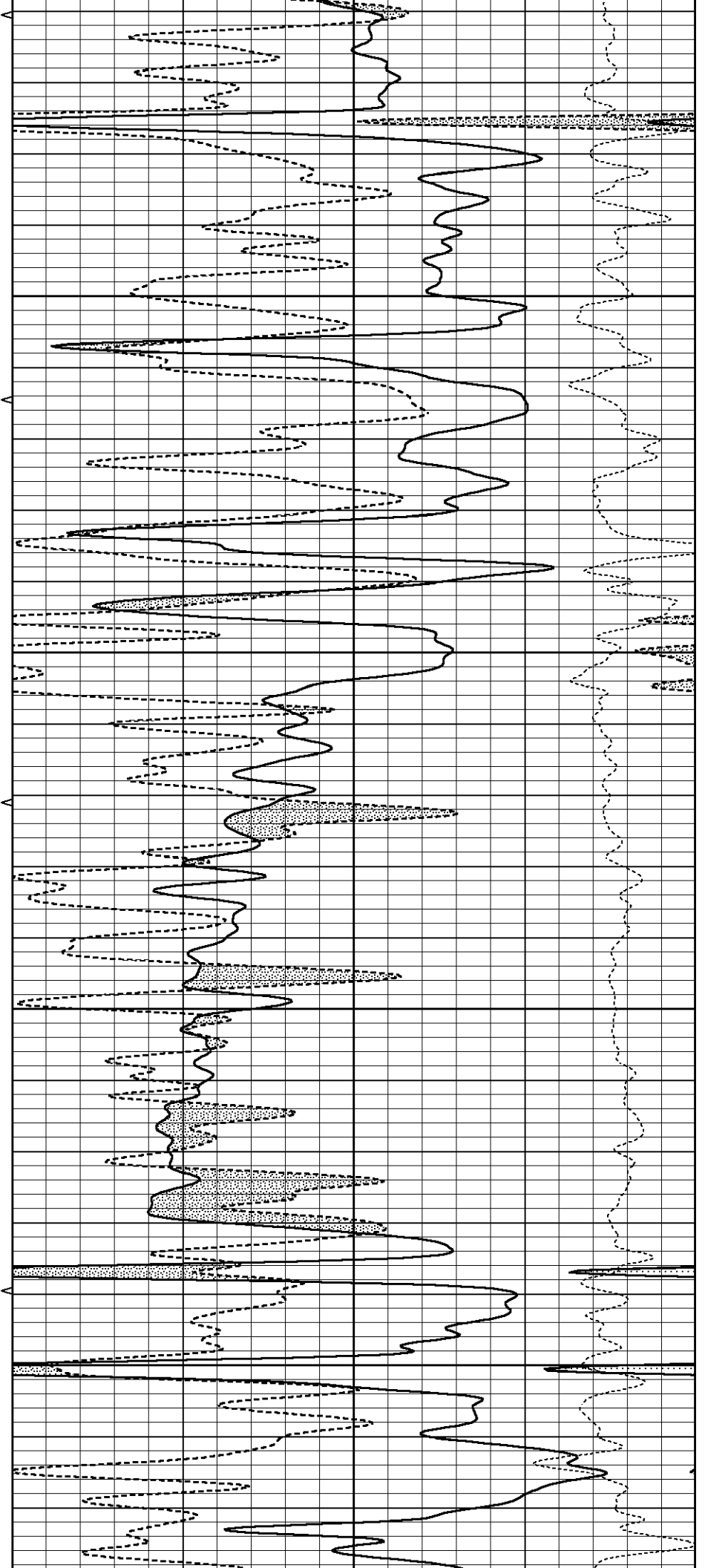


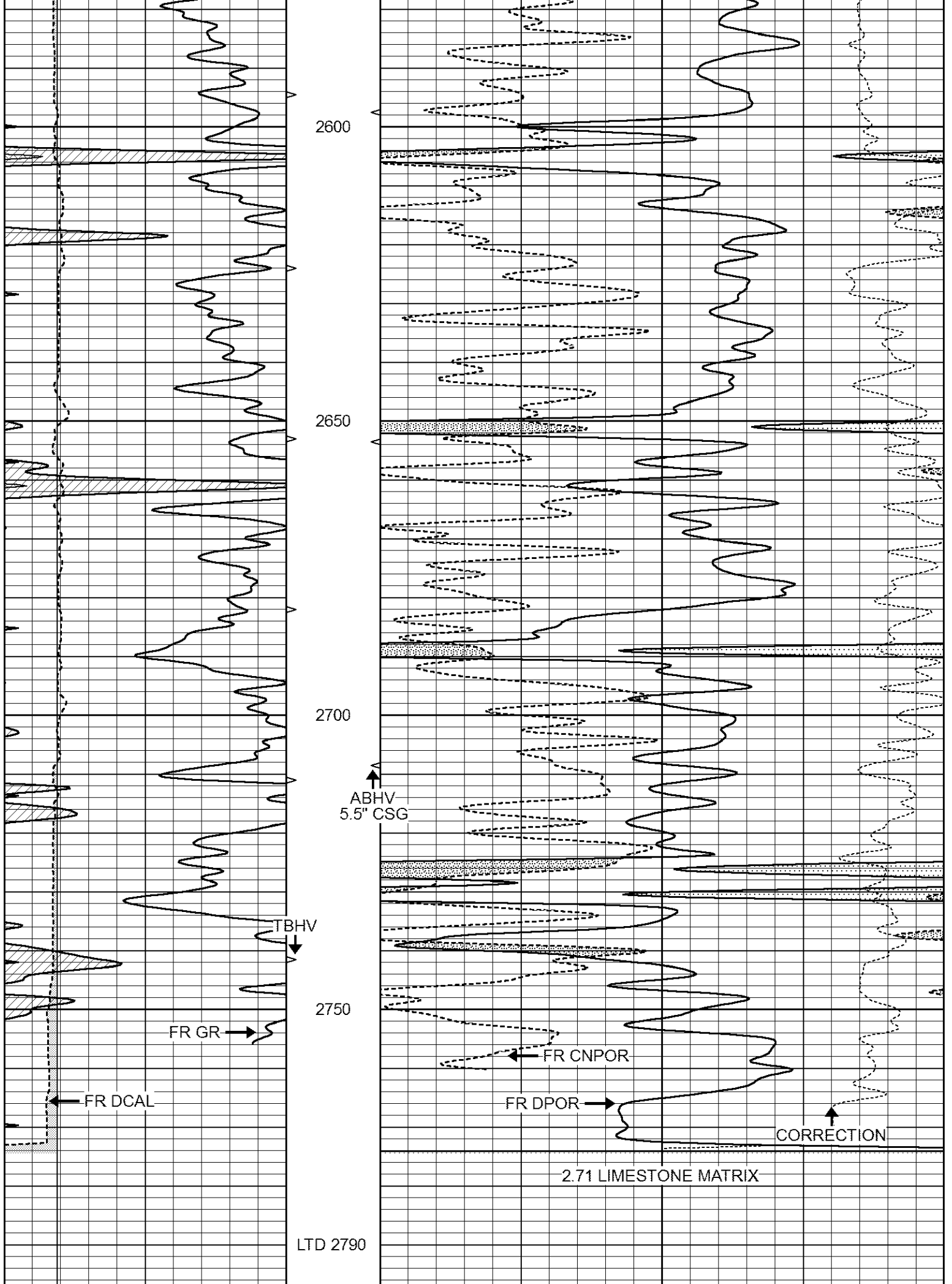
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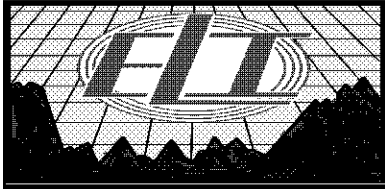
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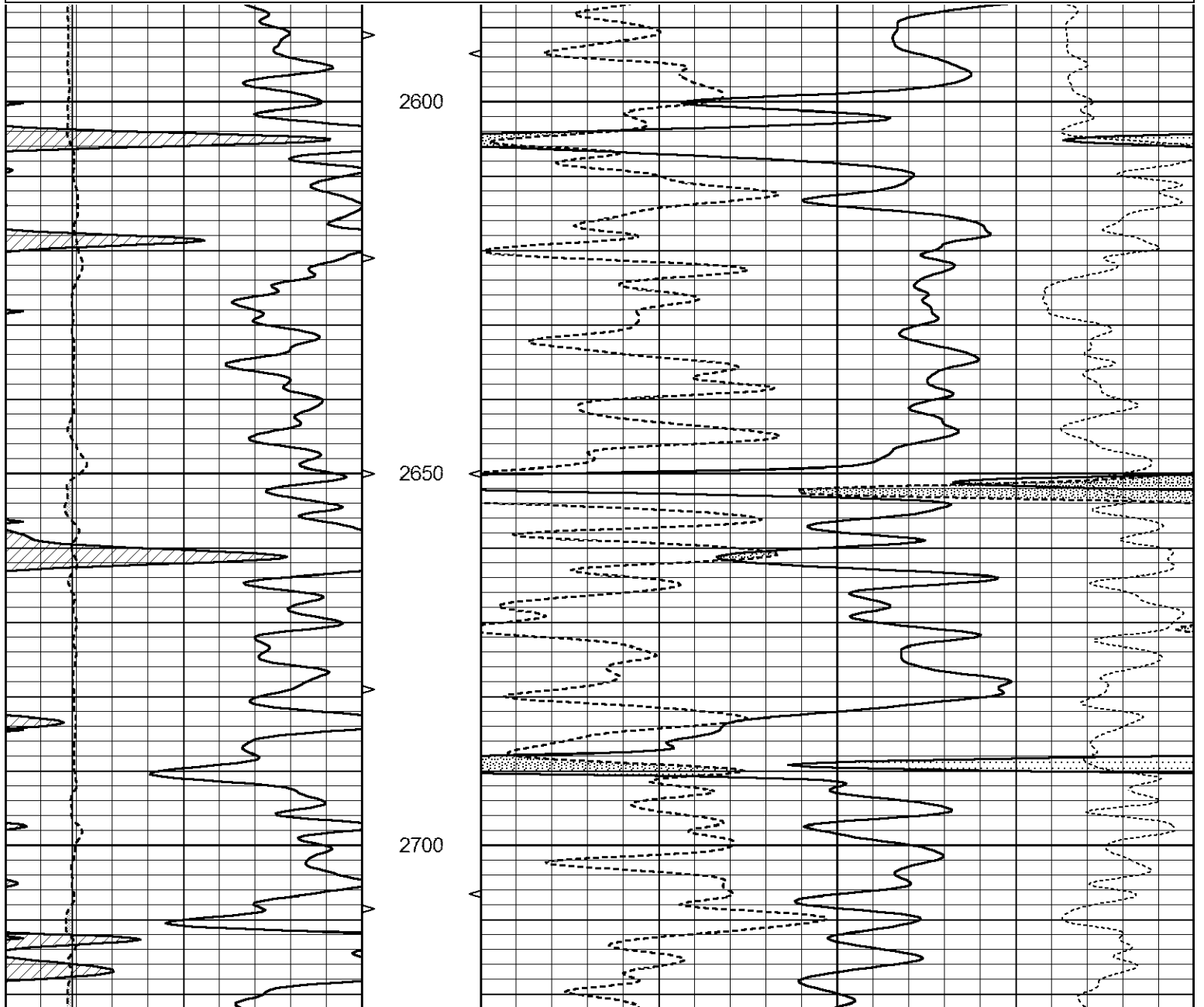
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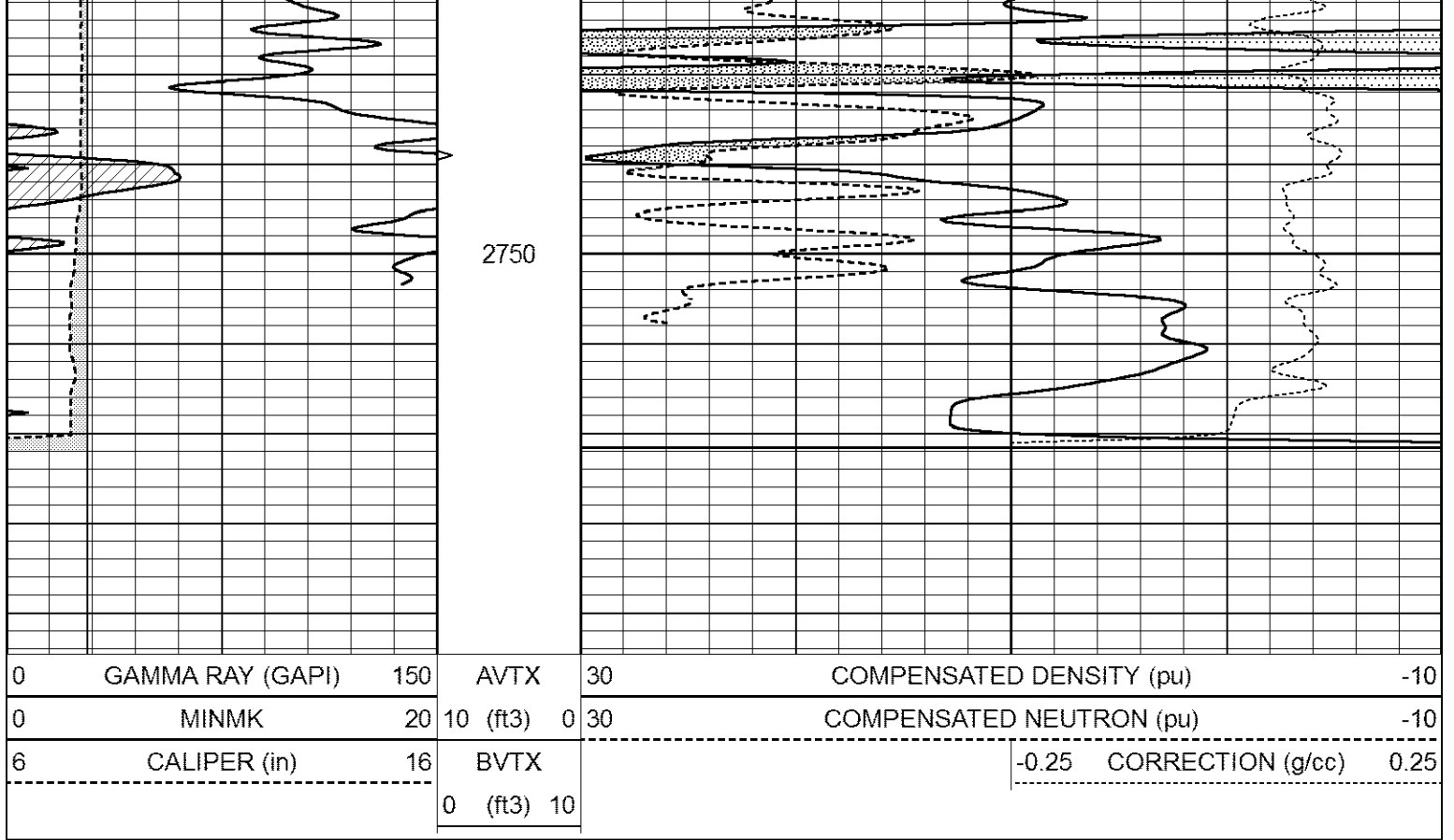


REPEAT SECTION

Database File 3001ddn8.db
 Dataset Pathname pass2.1
 Presentation Format _den_neu
 Dataset Creation Tue Aug 28 14:21:45 2018
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
0	MINMK	20	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
6	CALIPER (in)	16	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





Calibration Report

Database File 3001ddn8.db
 Dataset Pathname pass2.1
 Dataset Creation Tue Aug 28 14:21:45 2018

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
 Surface Cal Performed: Mon May 22 14:23:32 2017
 Downhole Cal Performed: Thu Mar 12 09:29:20 2015
 After Survey Verification Performed: Thu Mar 12 09:29:20 2015

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
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		

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: Wed Jun 29 11:10:58 2016

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.4300 GAPI/cps