



SONIC LOG

Company	DOWNING-NELSON OIL CO., INC.	Company	DOWNING-NELSON OIL CO., INC.
Well	MARK ARMBRISTER#1-27	Well	MARK ARMBRISTER#1-27
Field	FLAX	Field	FLAX
County	TREGO	County	TREGO
State	KANSAS	State	KANSAS
Location:	AP1 # : 15-195-23034-00-00 2000 FNL & 2560 FEL	Other Services	CDL/CNL DIL/MEL
Permanent Datum	GROUND LEVEL	Elevation	2359'
Log Measured From	KELLY BUSHING 8' A.G.L.	K.B.	2367
Drilling Measured From	KELLY BUSHING	D.F.	2365
		G.L.	2359

Date	01/21/18
Run Number	TWO
Depth Driller	4245
Depth Logger	4246
Bottom Logged Interval	4237
Top Log Interval	00
Casing Driller	8 5/8@ 221
Casing Logger	221
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/57
pH / Fluid Loss	10.0/7.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.90@58
Rmt @ Meas. Temp	.68@58
Rmc @ Meas. Temp	1.08@58
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.44@118
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	///
Maximum Recorded Temperature	118F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
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, HAYS, KS. (785) 628-6395

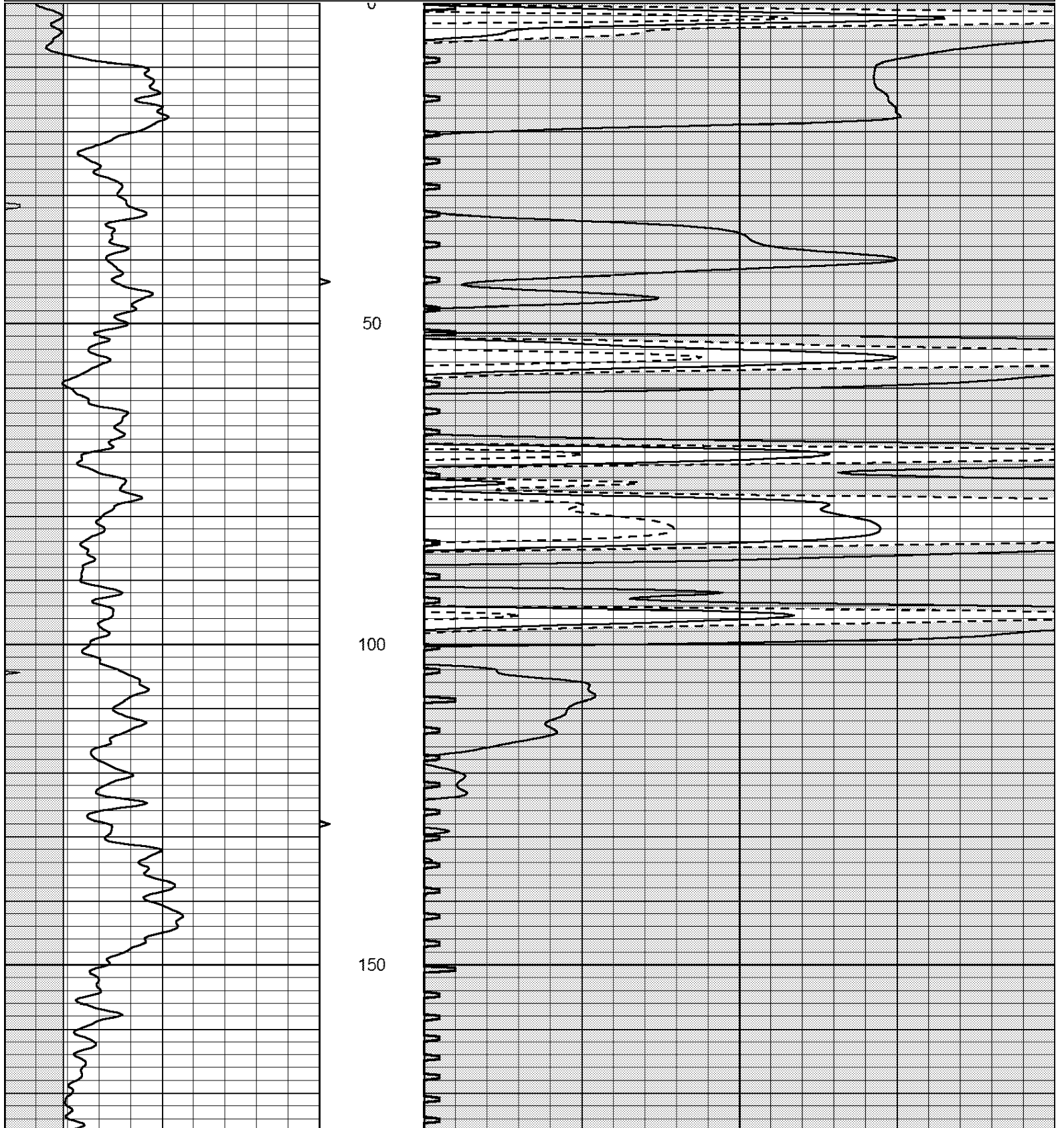
DIRECTIONS
I 70 RIGGA EXIT SOUTH TO P RD. GO SOUTH ABOUT 3/4 MILE,
EAST INTO.

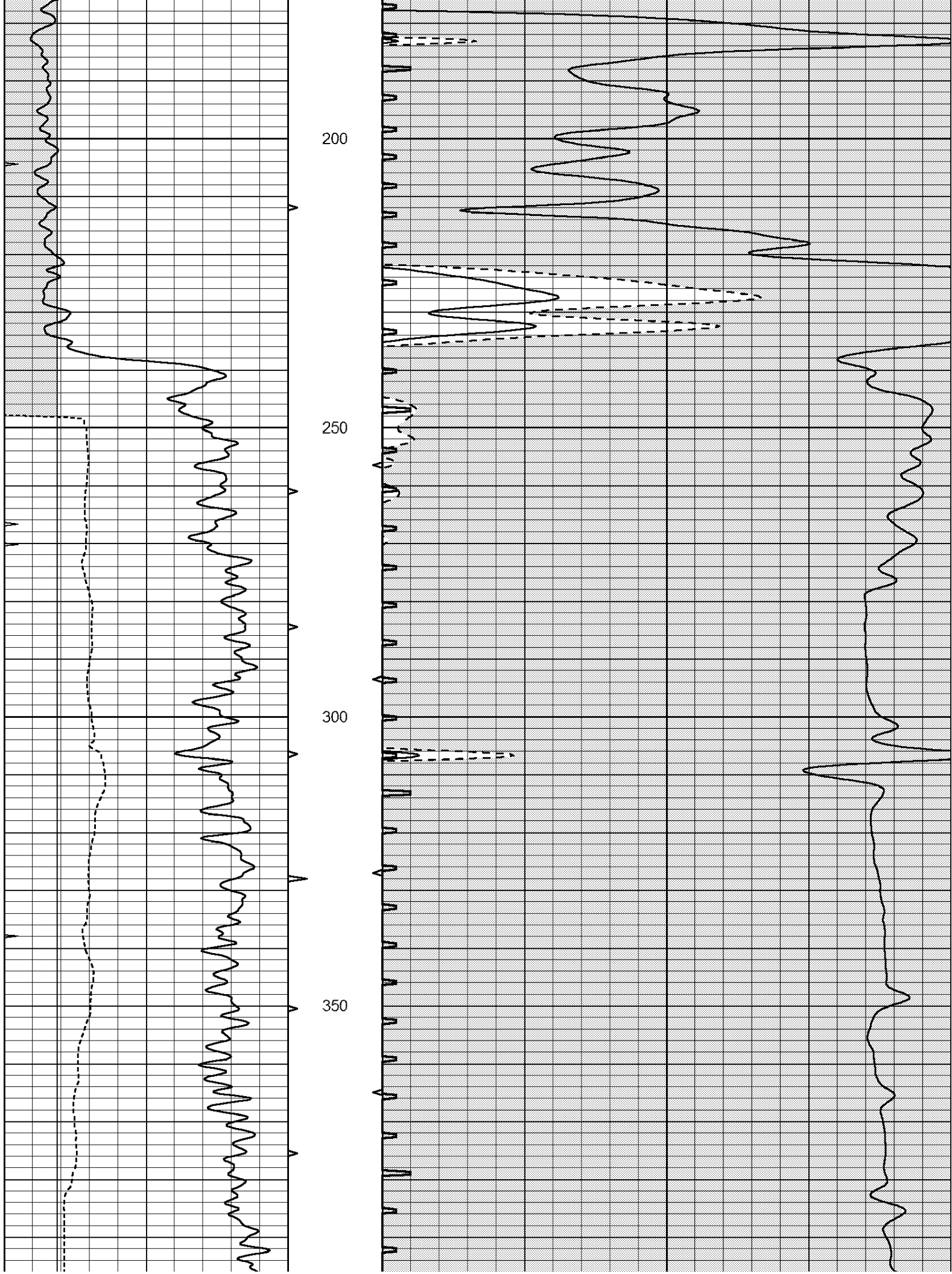


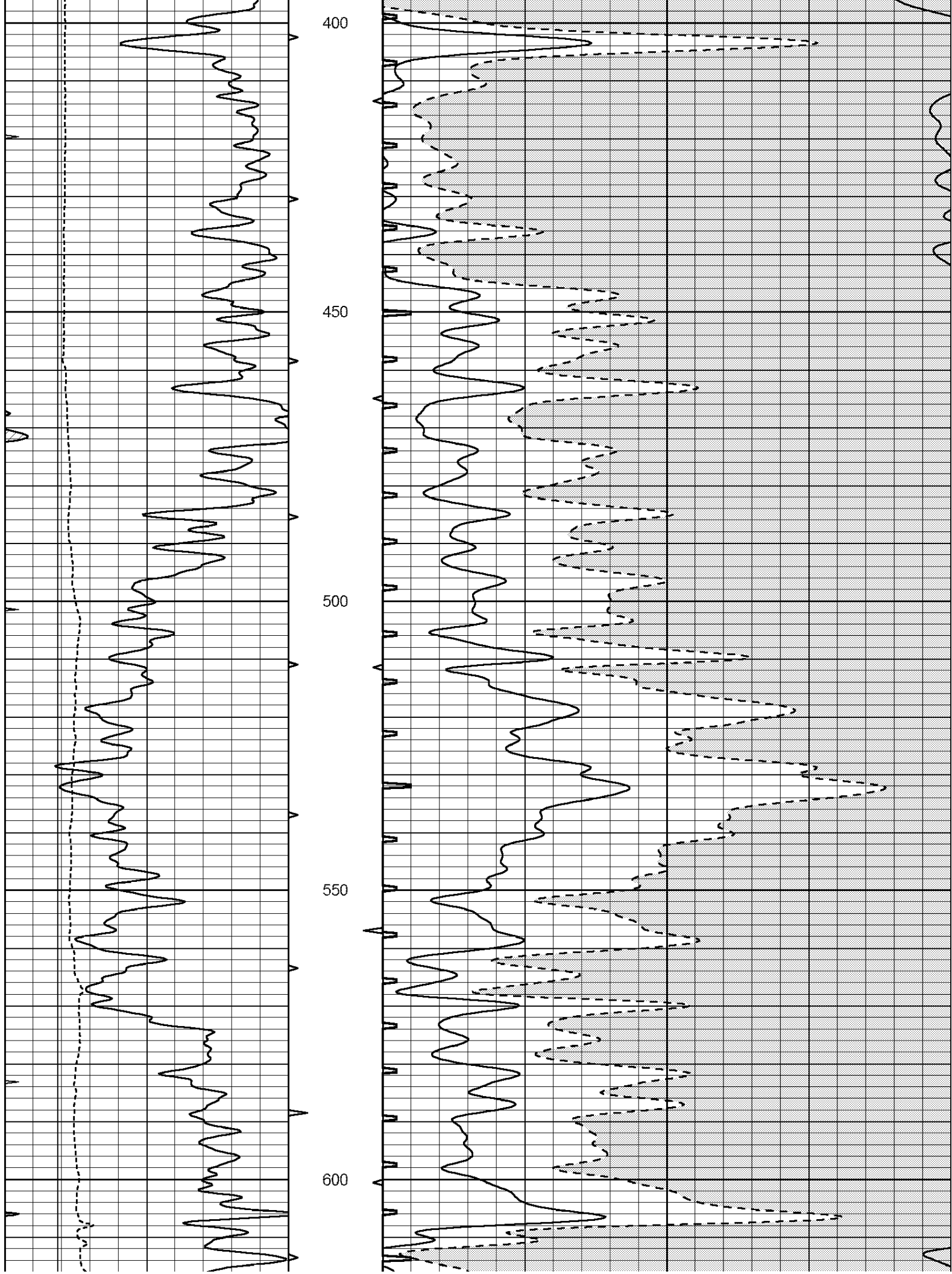
MAIN PASS

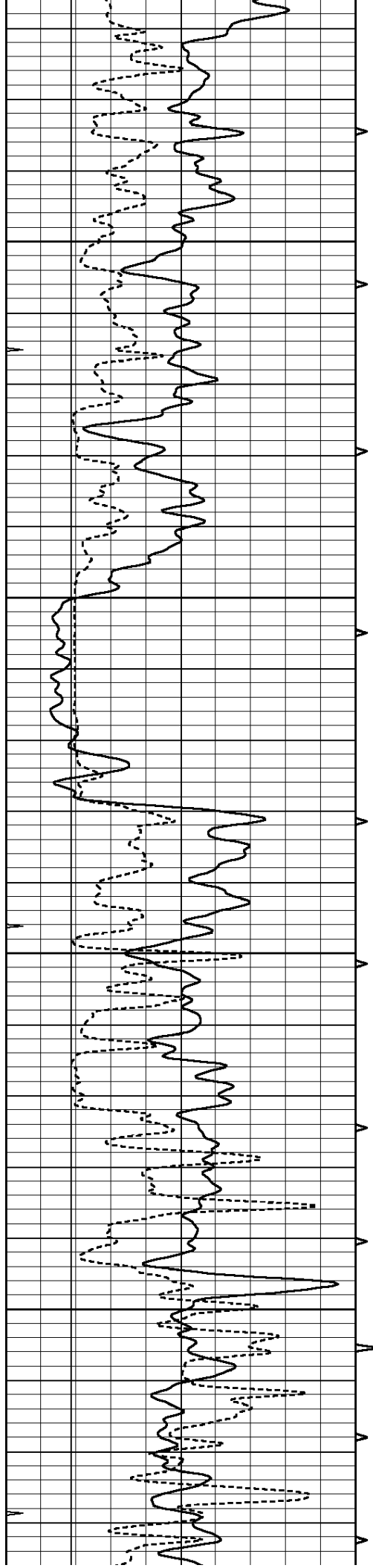
Database File: 2401ddn.db
 Dataset Pathname: pass5
 Presentation Format: _slt
 Dataset Creation: Sun Jan 21 11:24:09 2018 by Log Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	140	DELTA TIME (usec/ft)	40
6	CALIPER (in)	16	10 (ft3) 0	30	SONIC POROSITY (pu)	-10
0	MINMK	20	TBHV	0	ITT (msec)	20
			0 (ft3) 10			







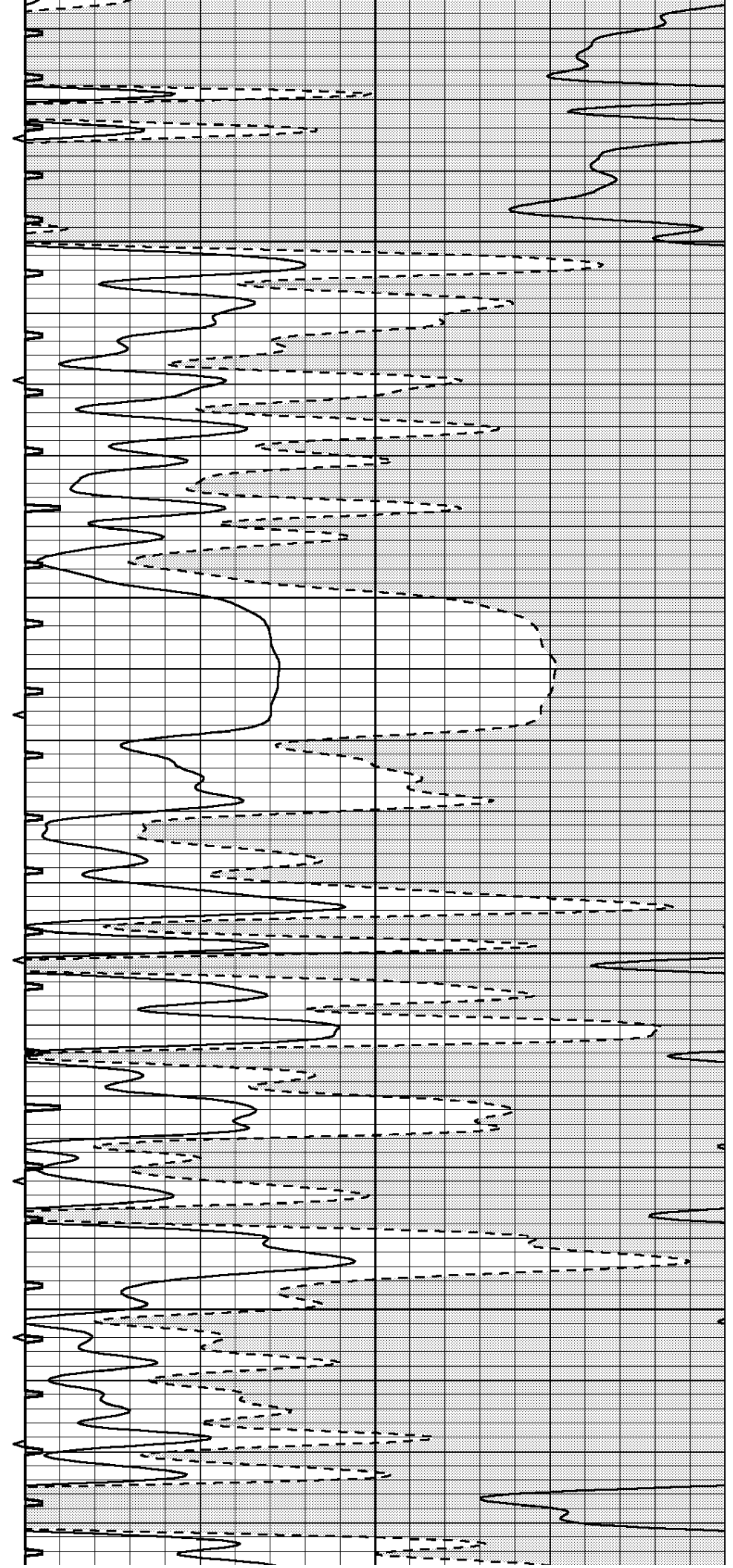


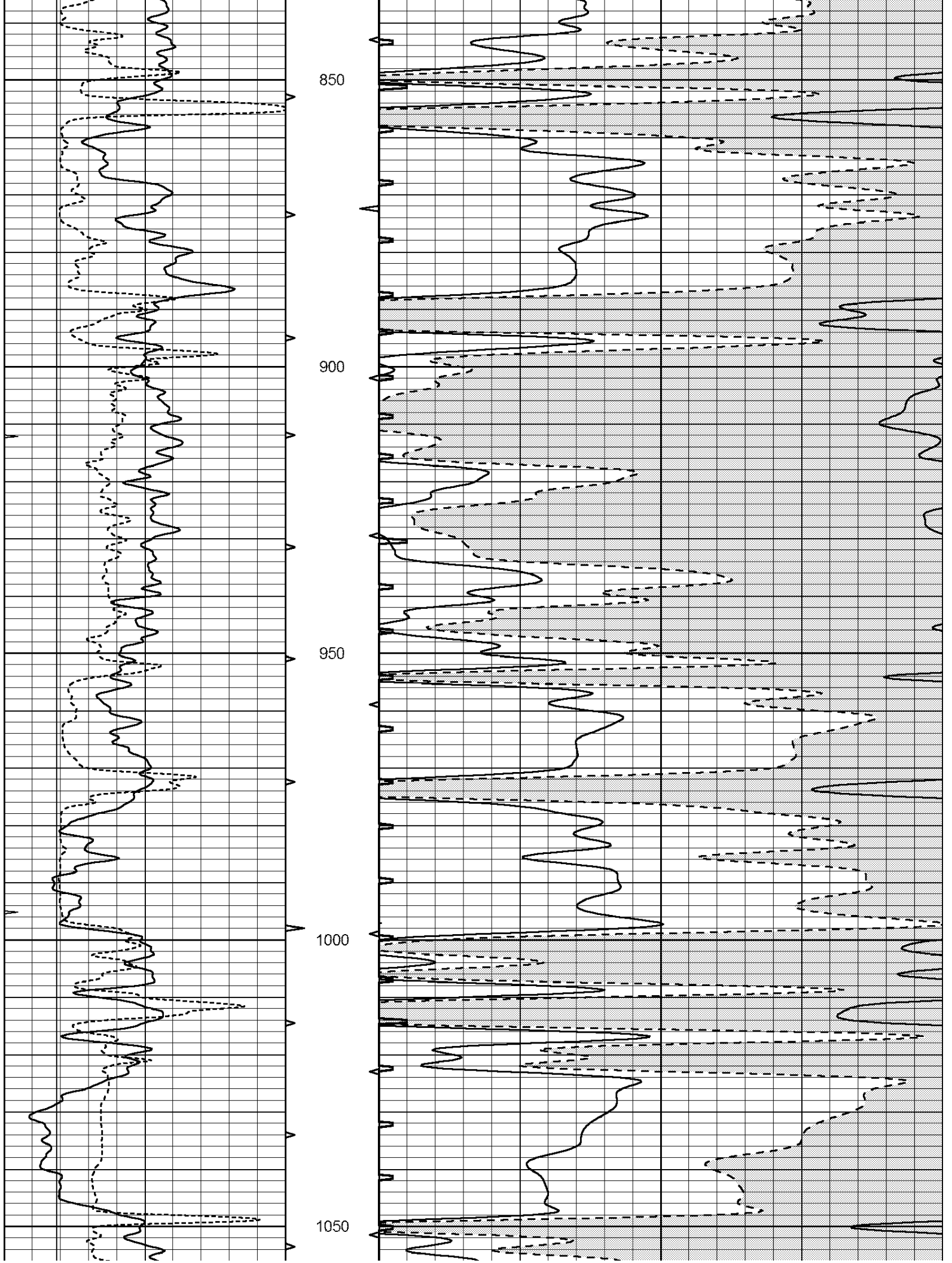
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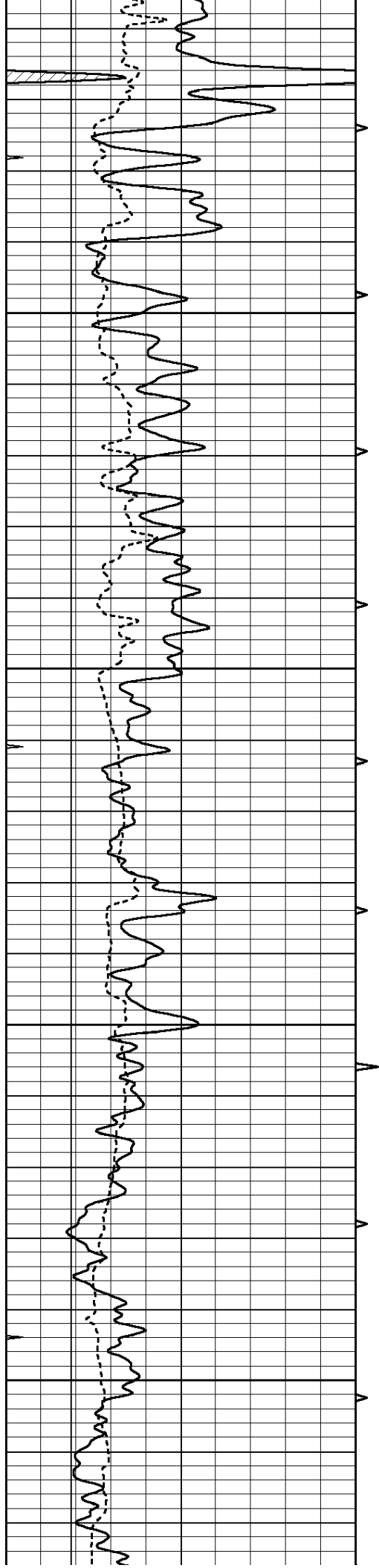
700

750

800





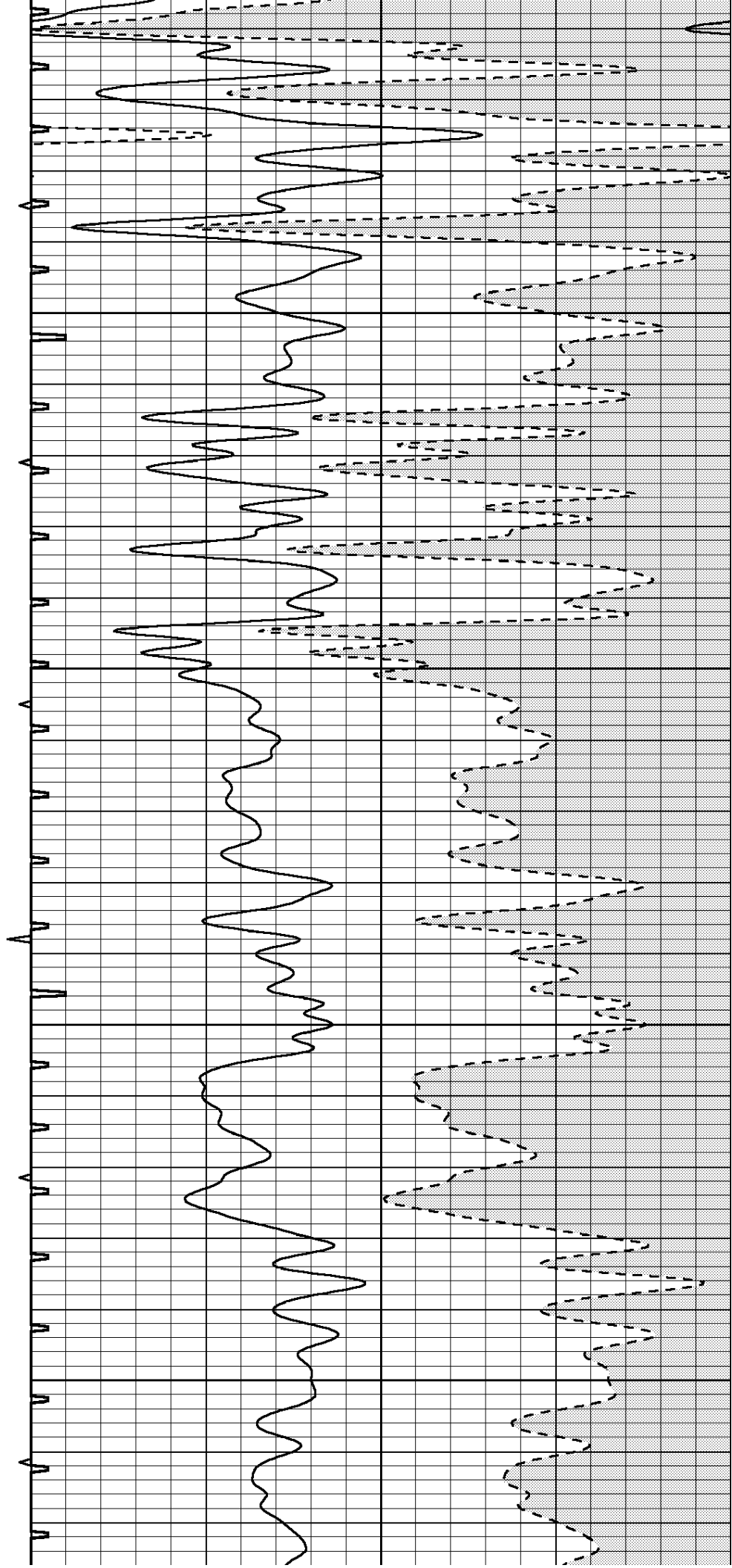


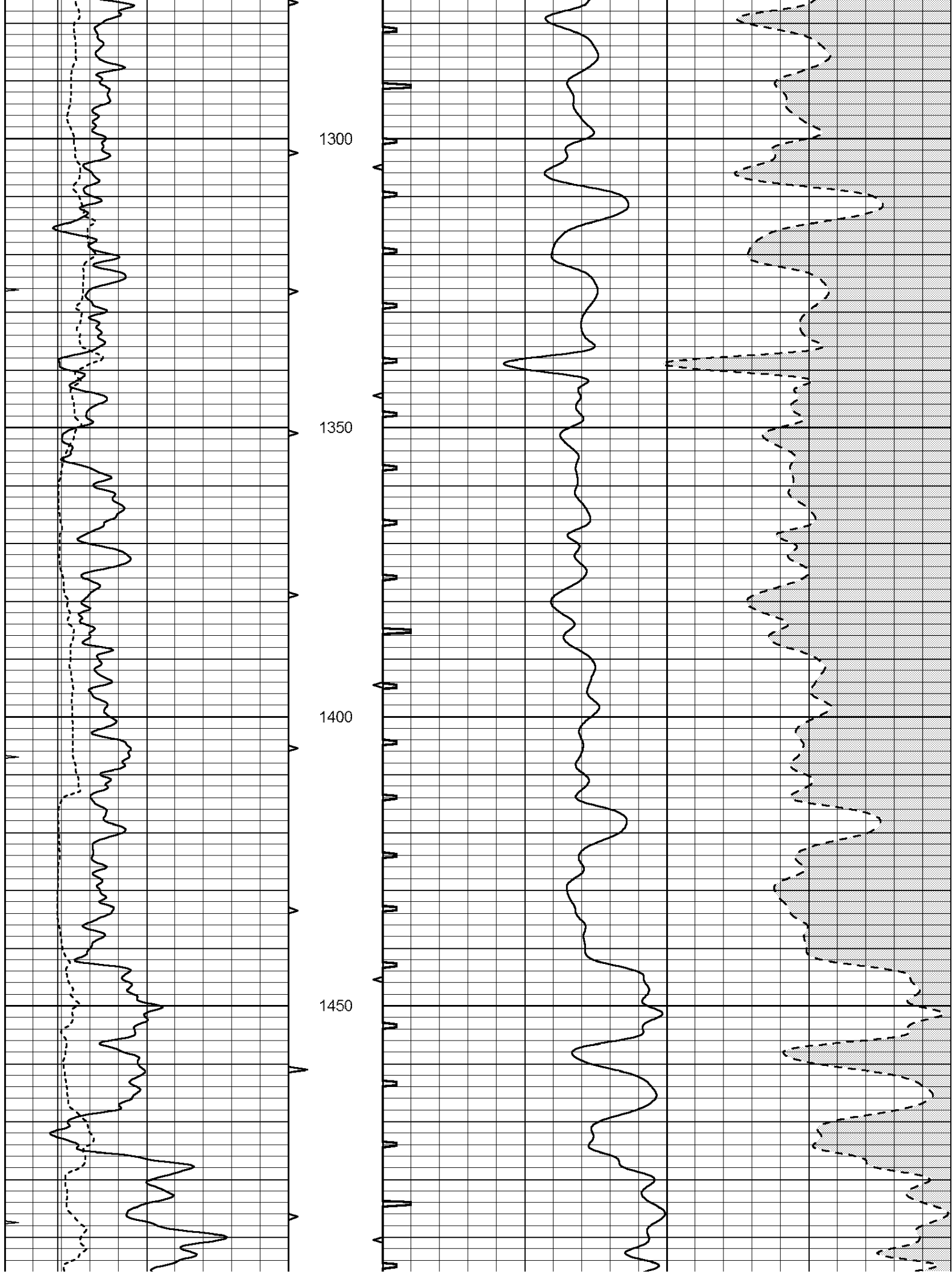
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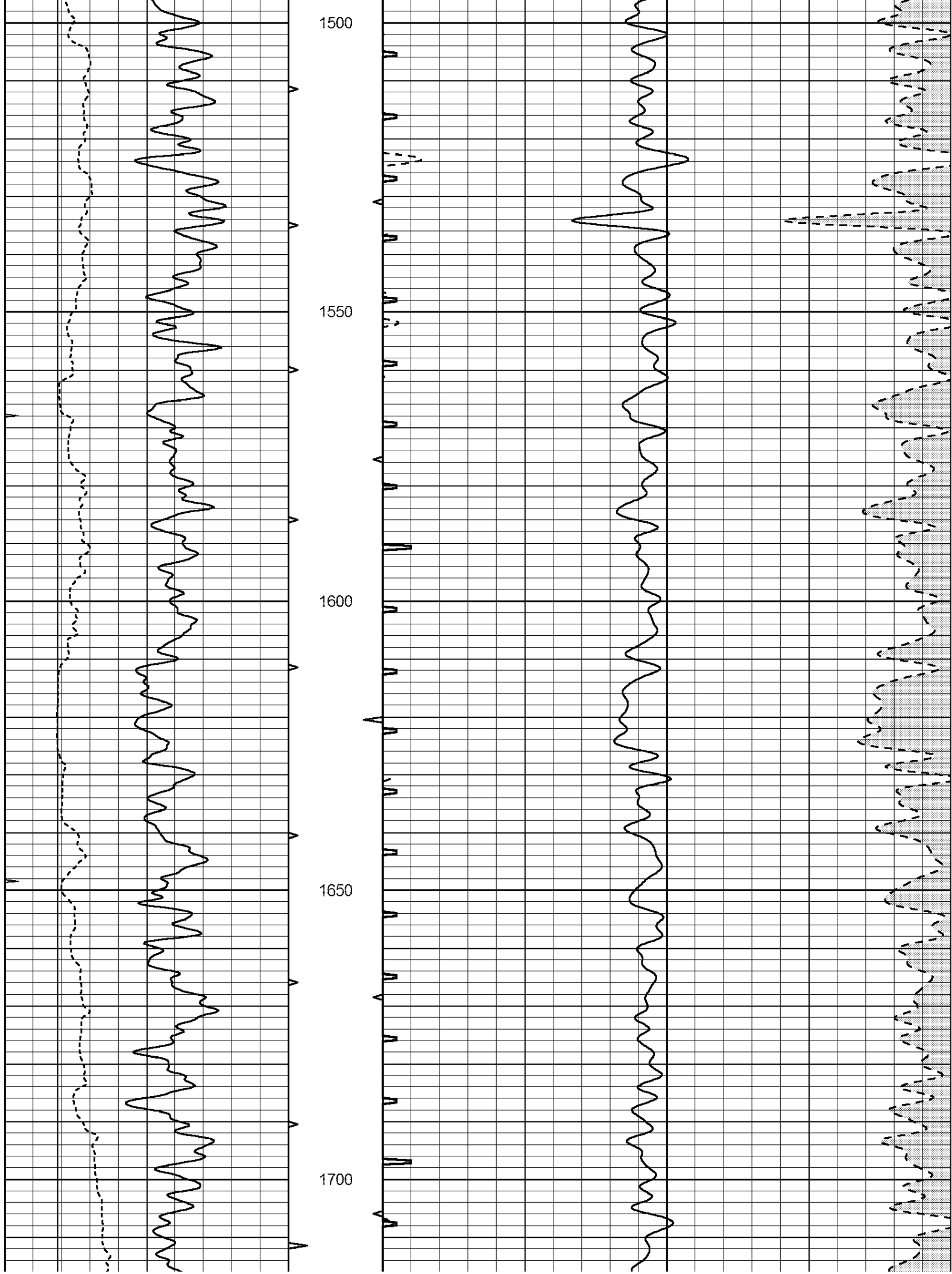
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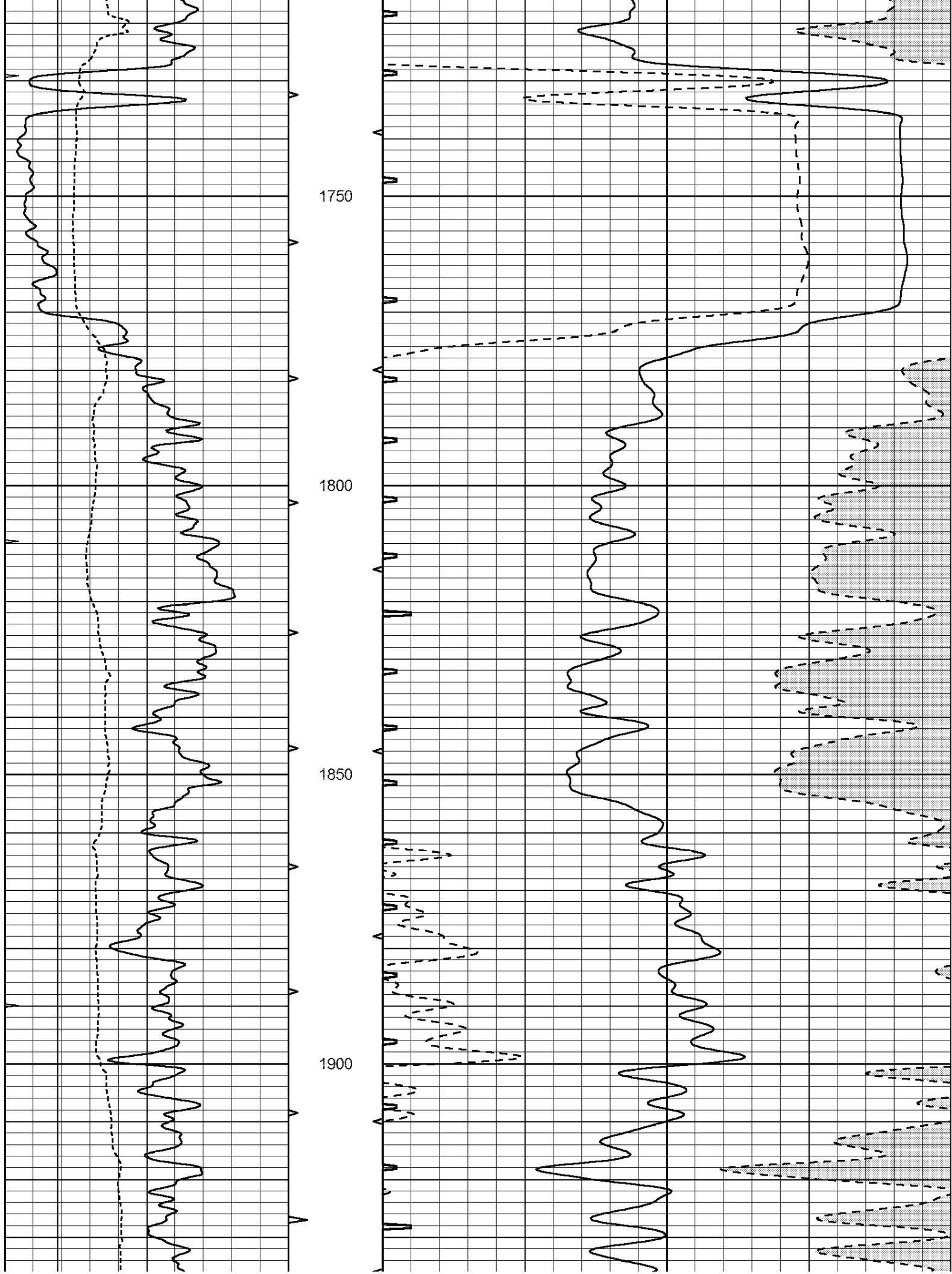
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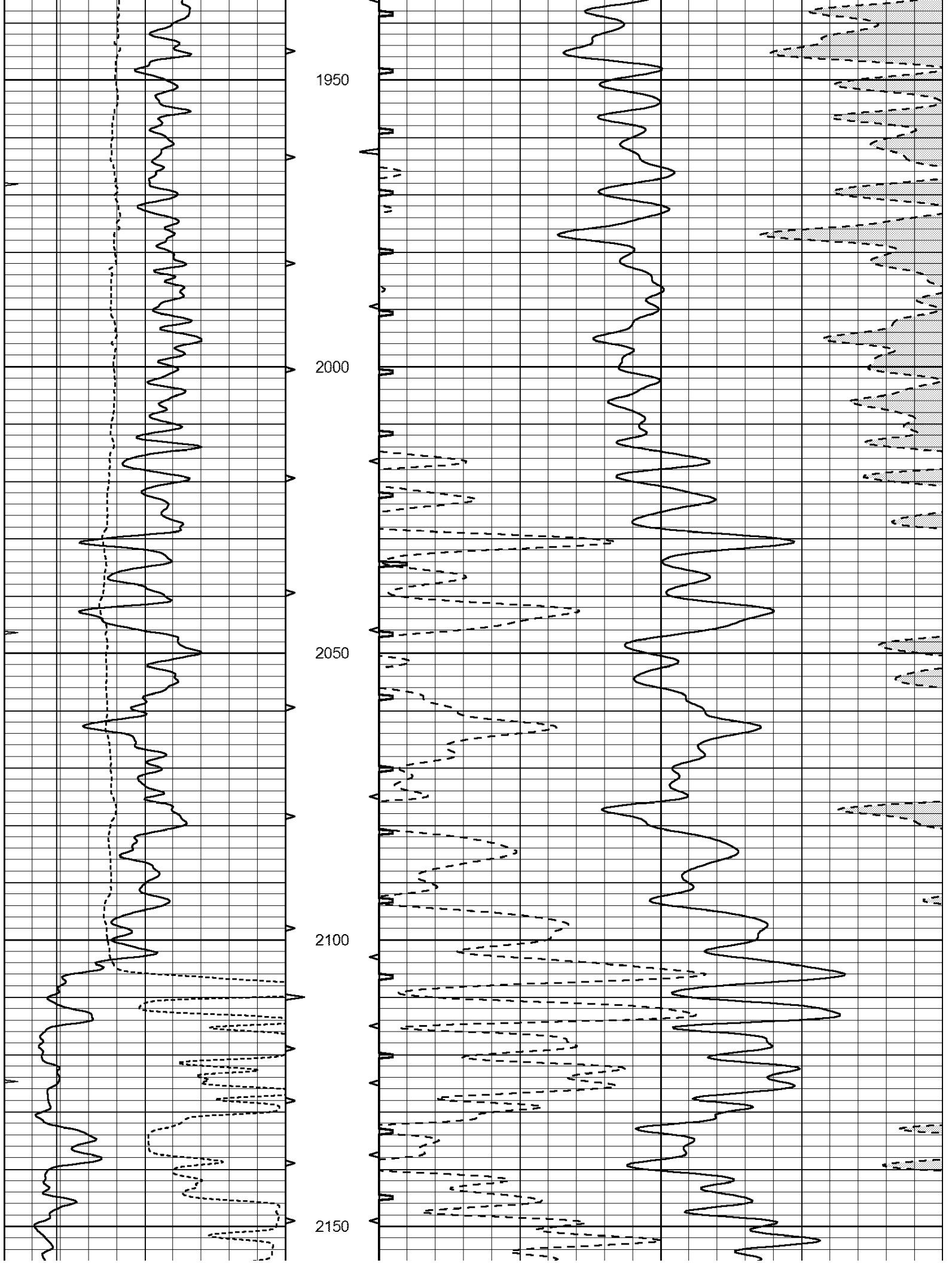
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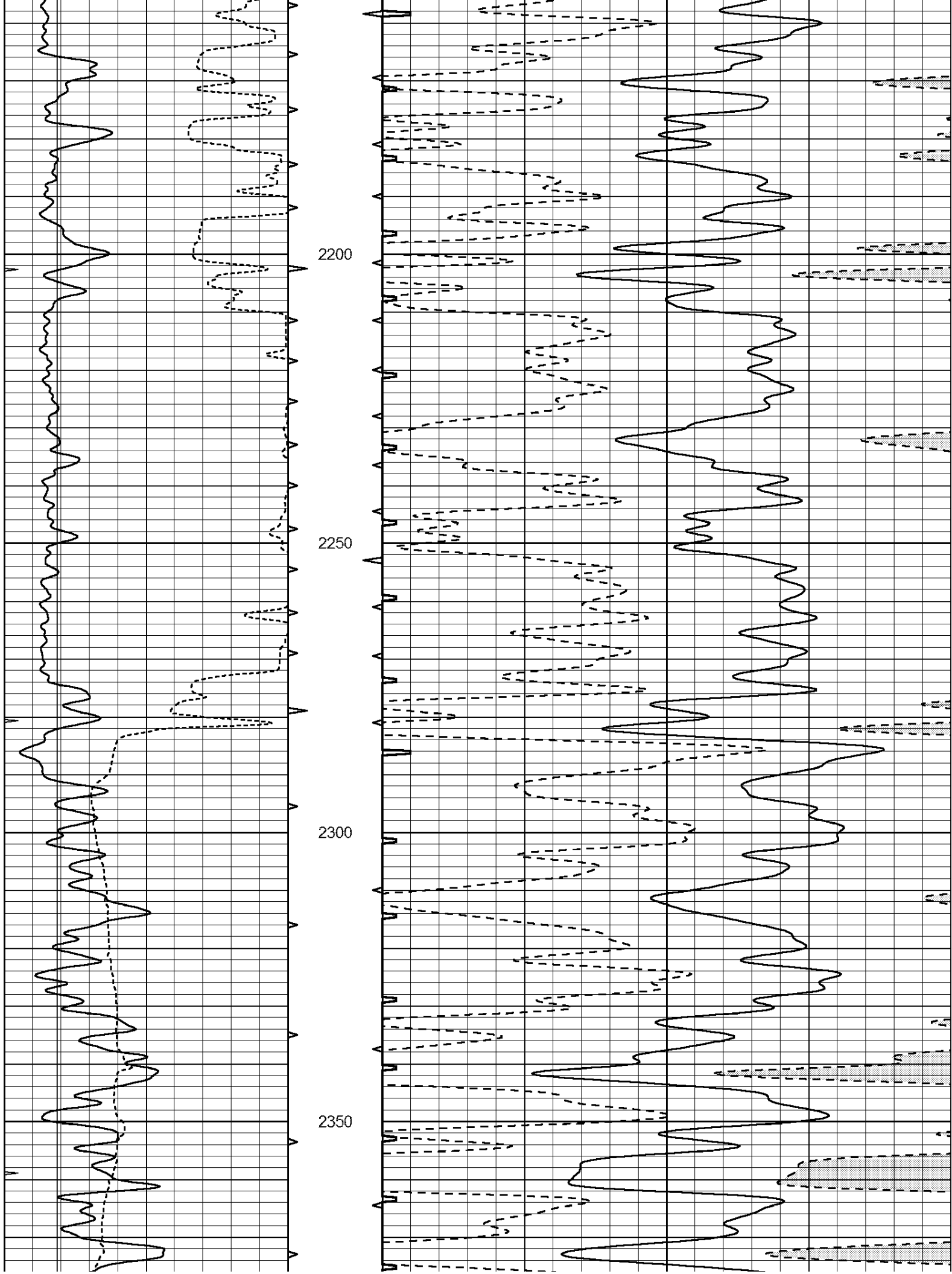


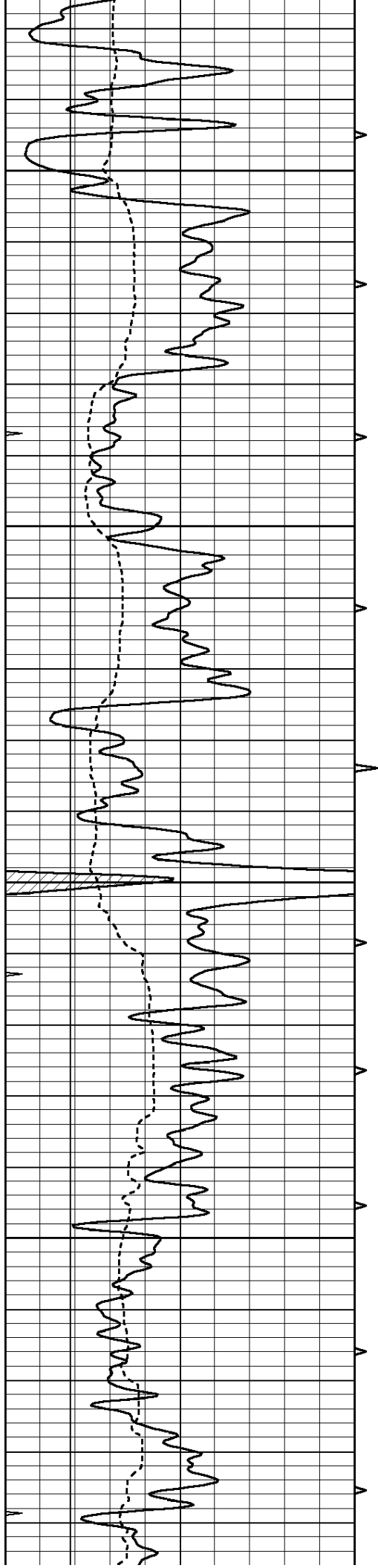










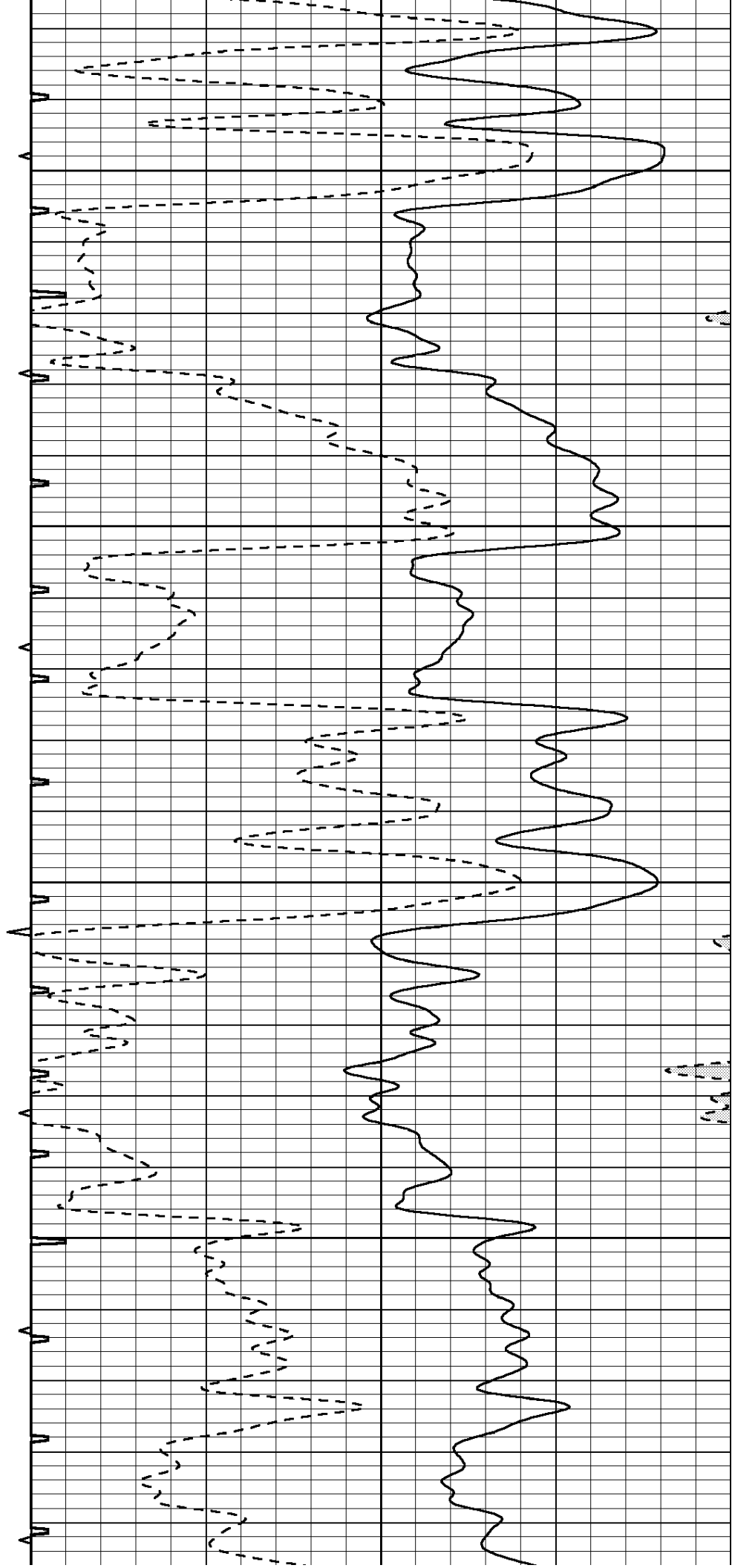


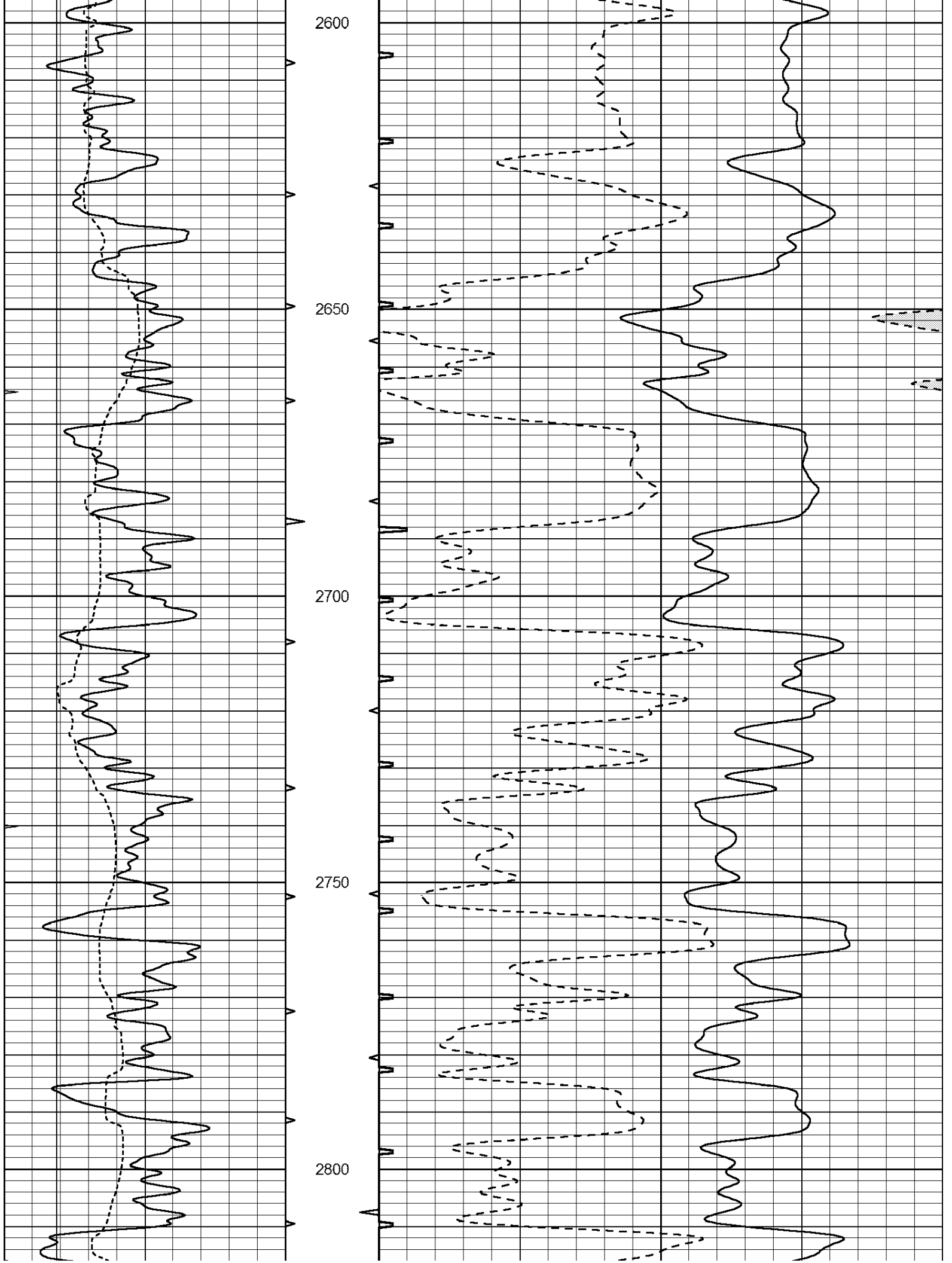
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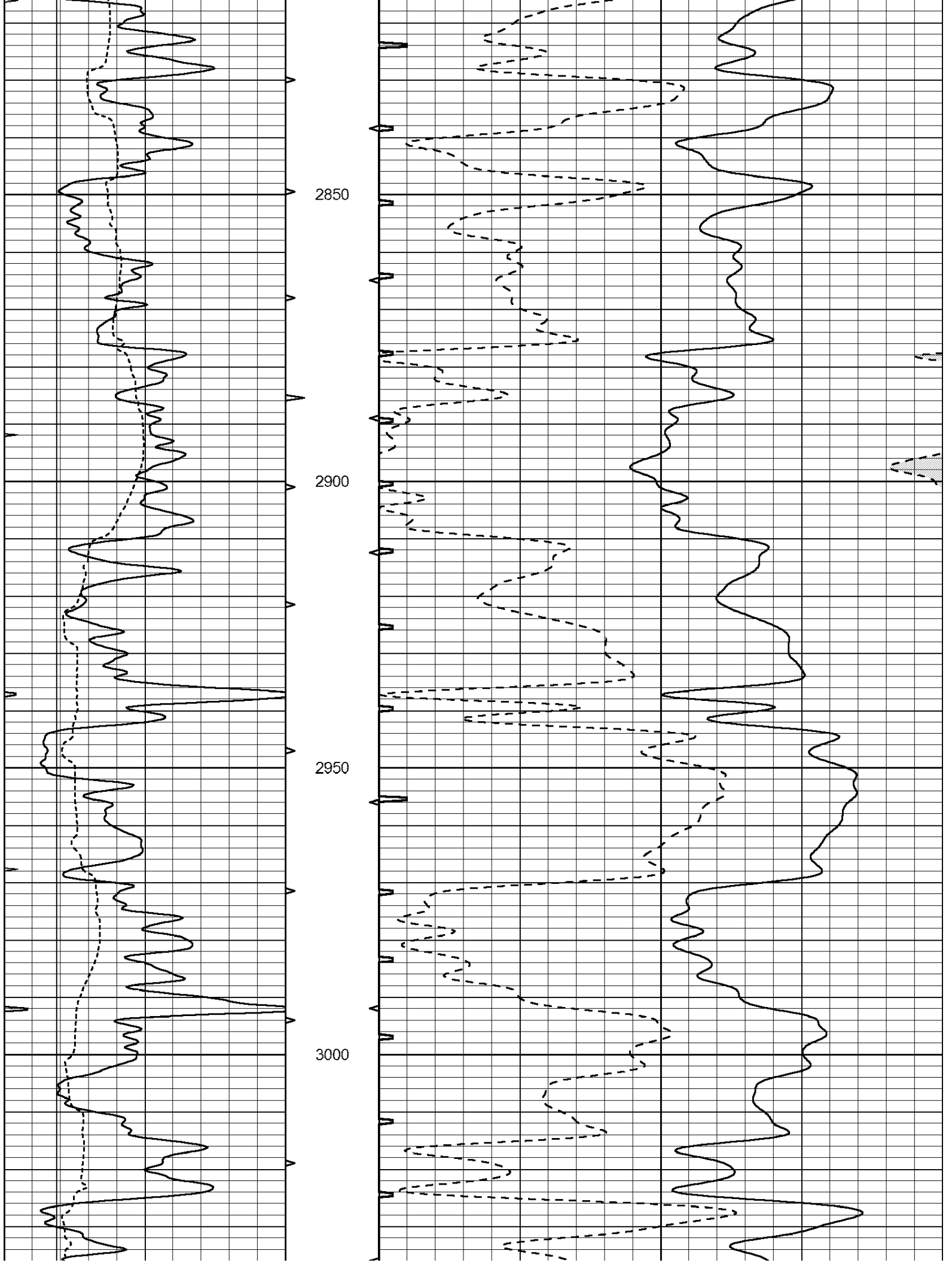
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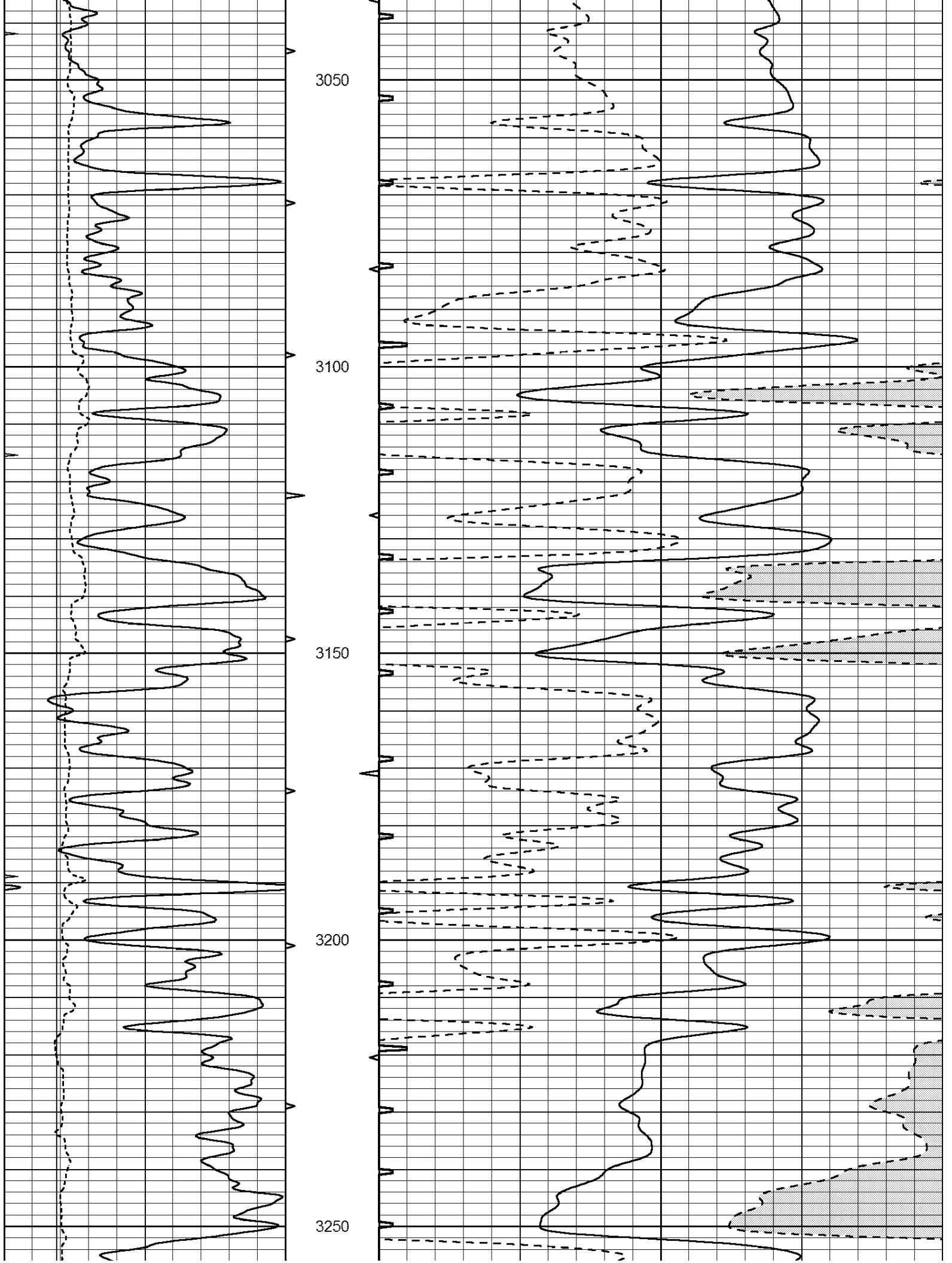
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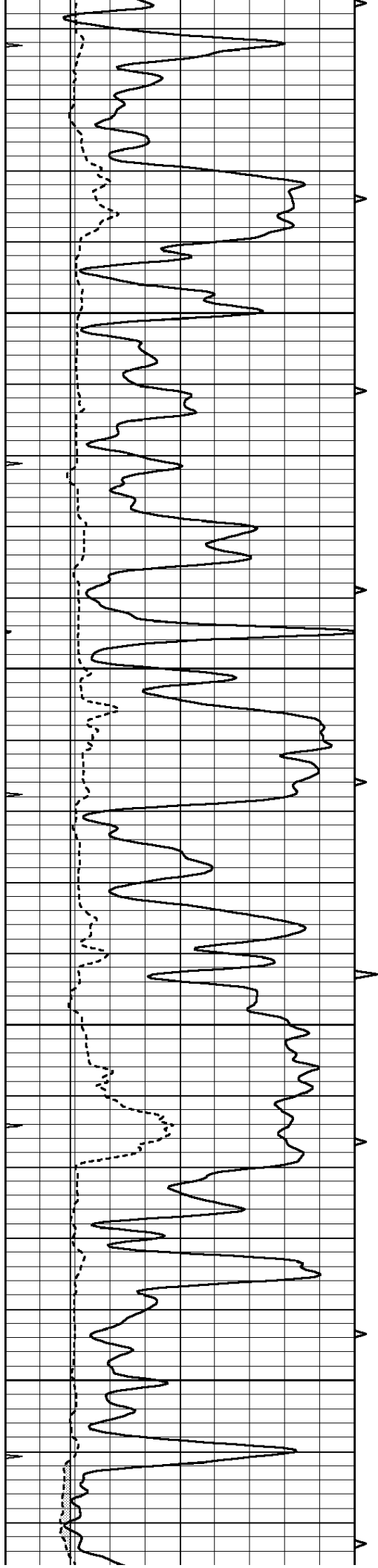
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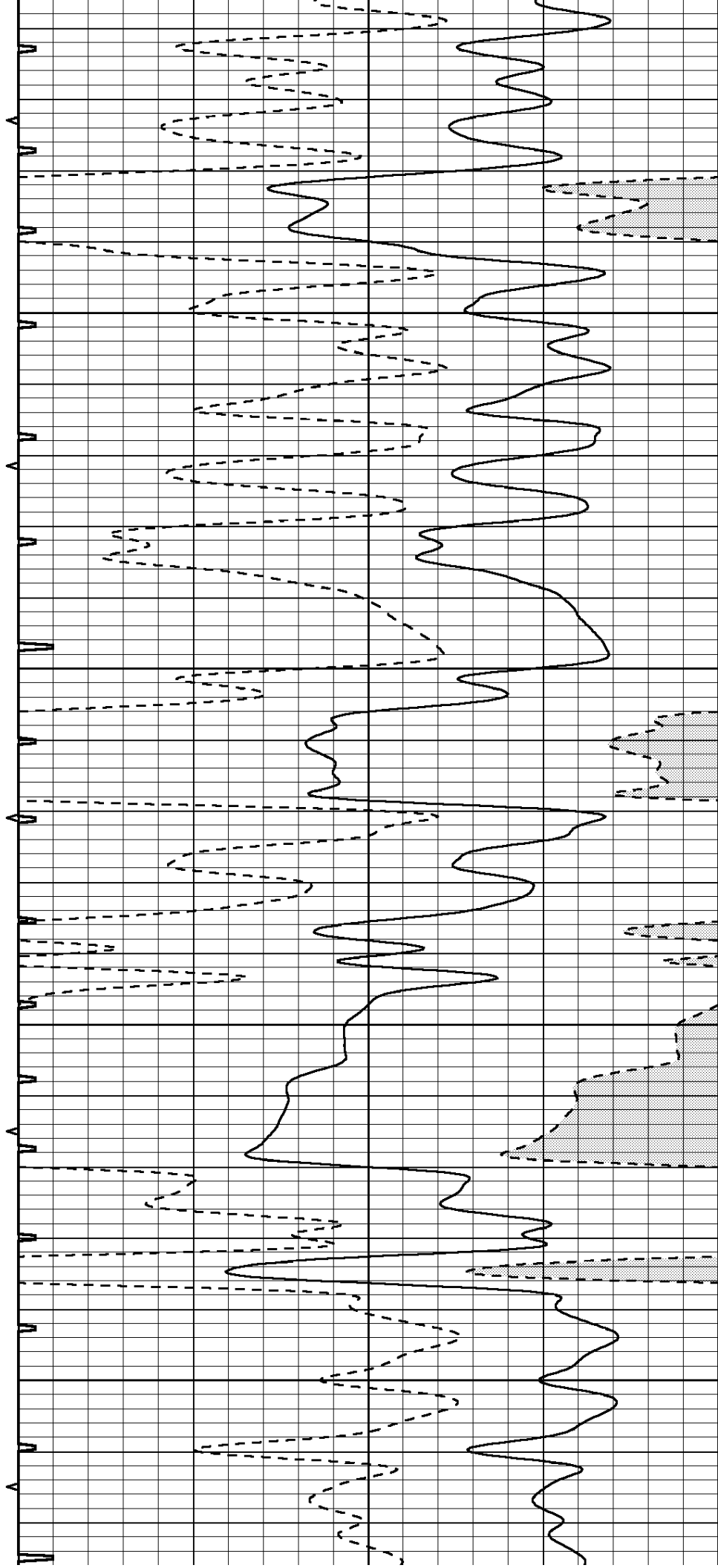


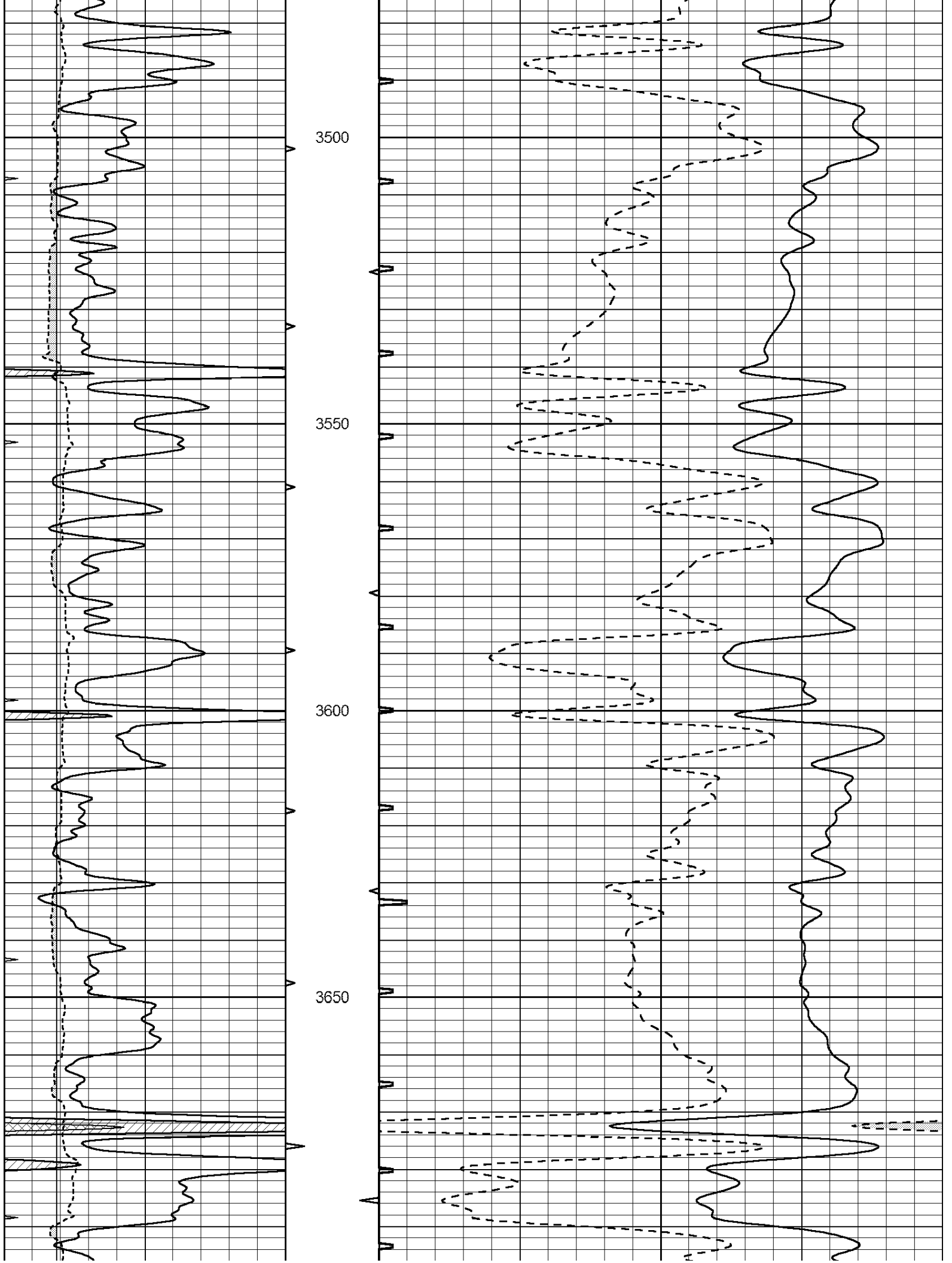
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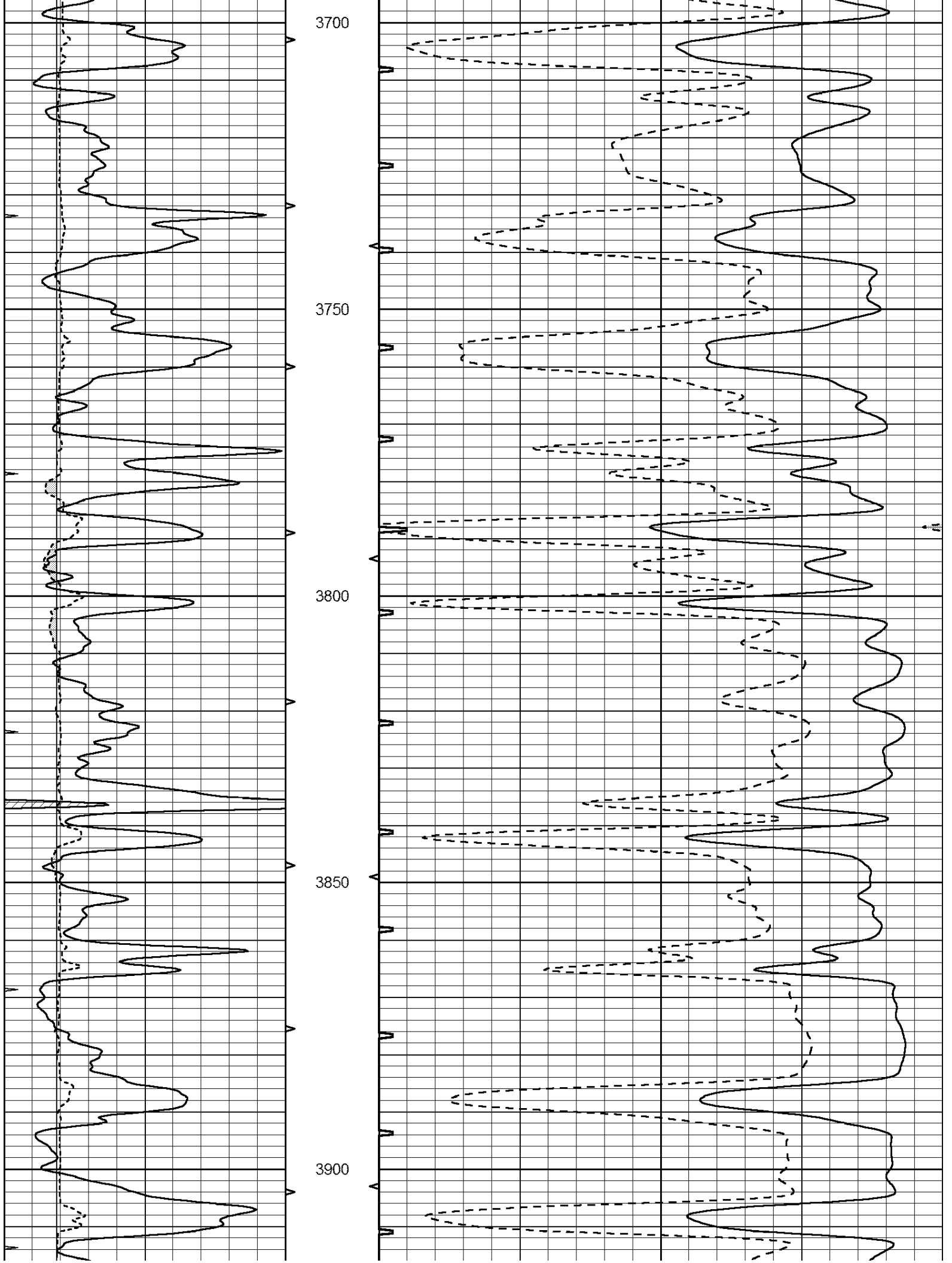
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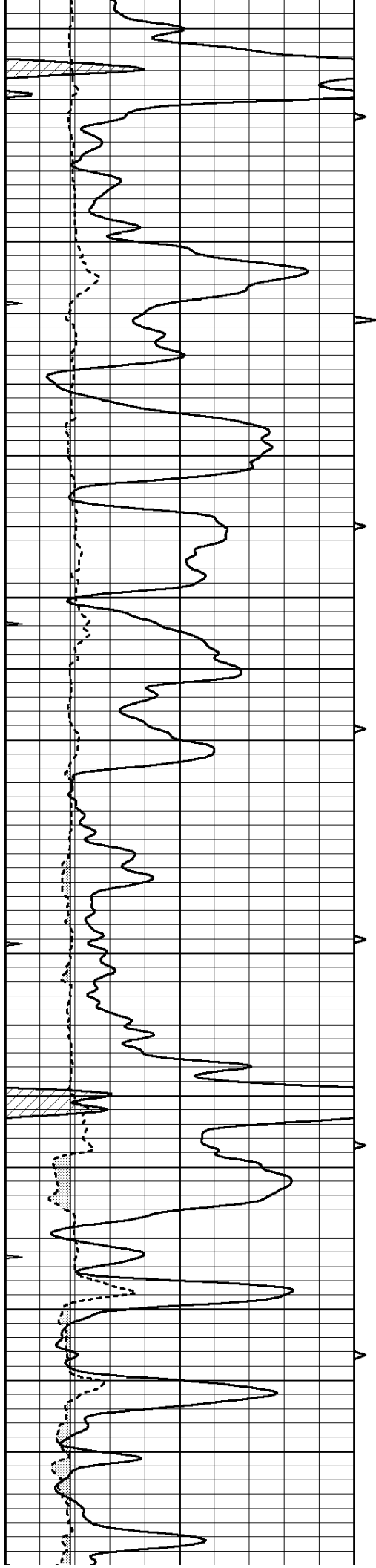
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3450







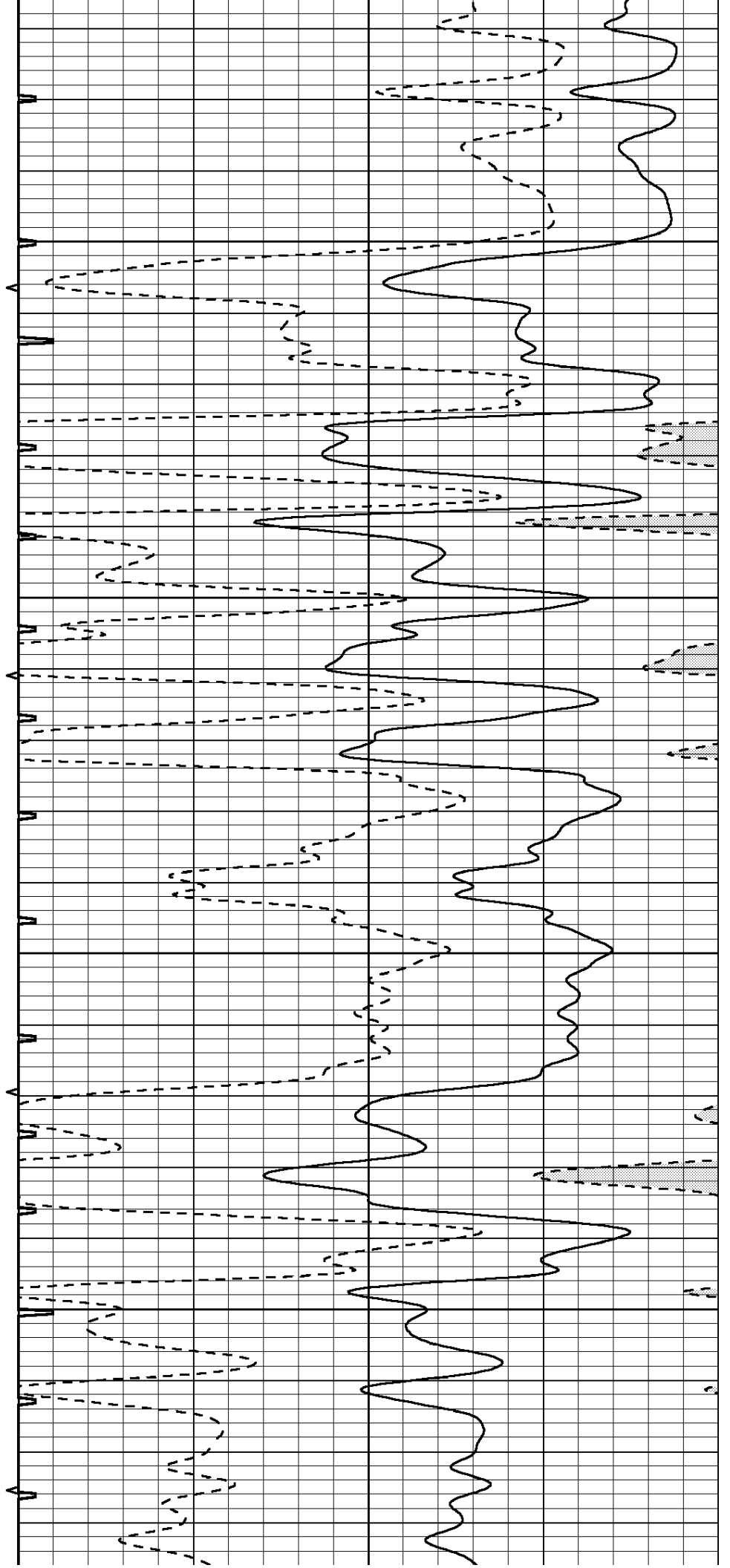


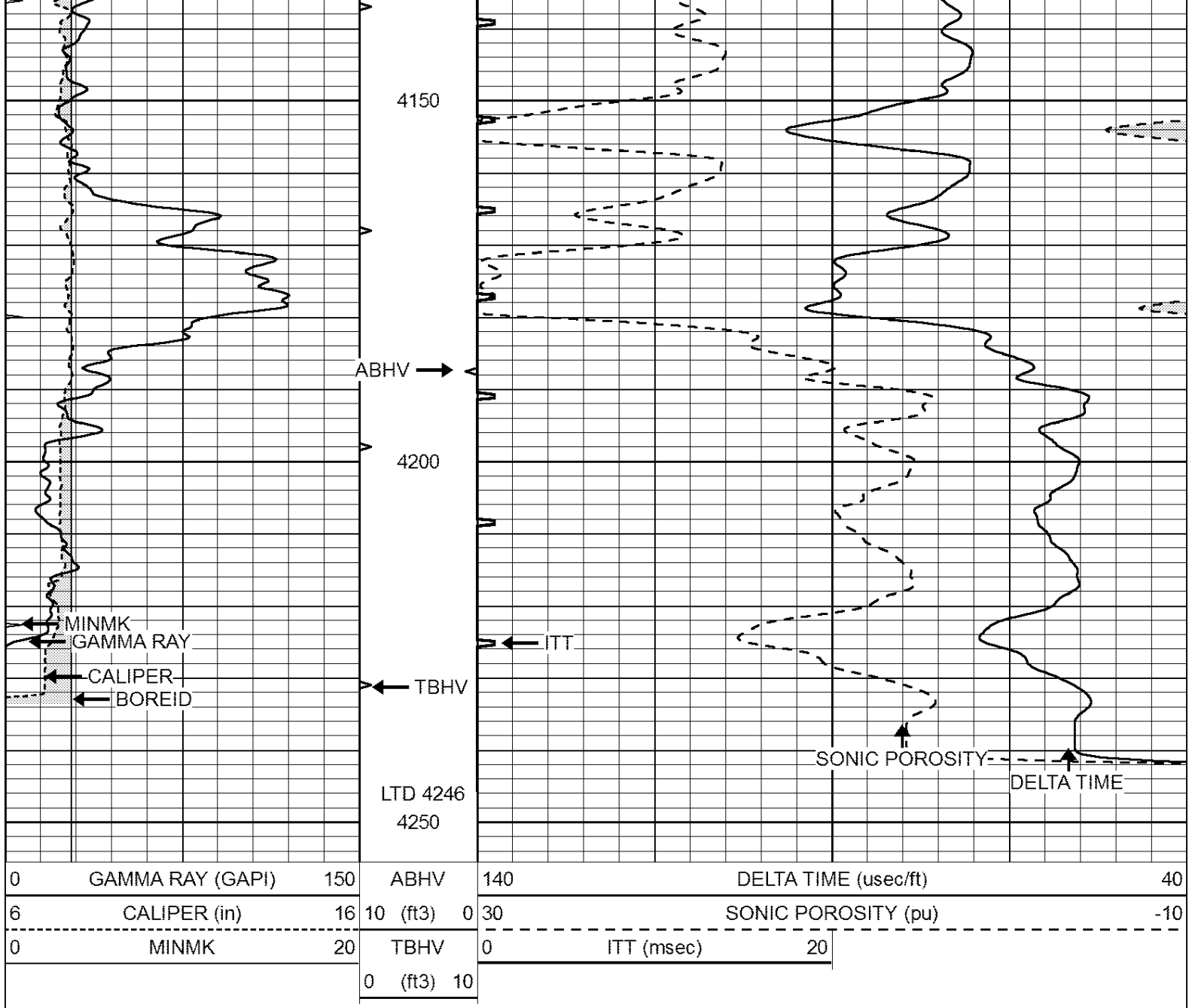
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4050

4100

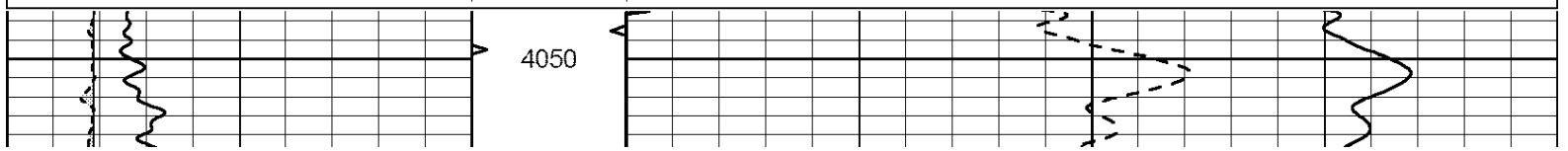


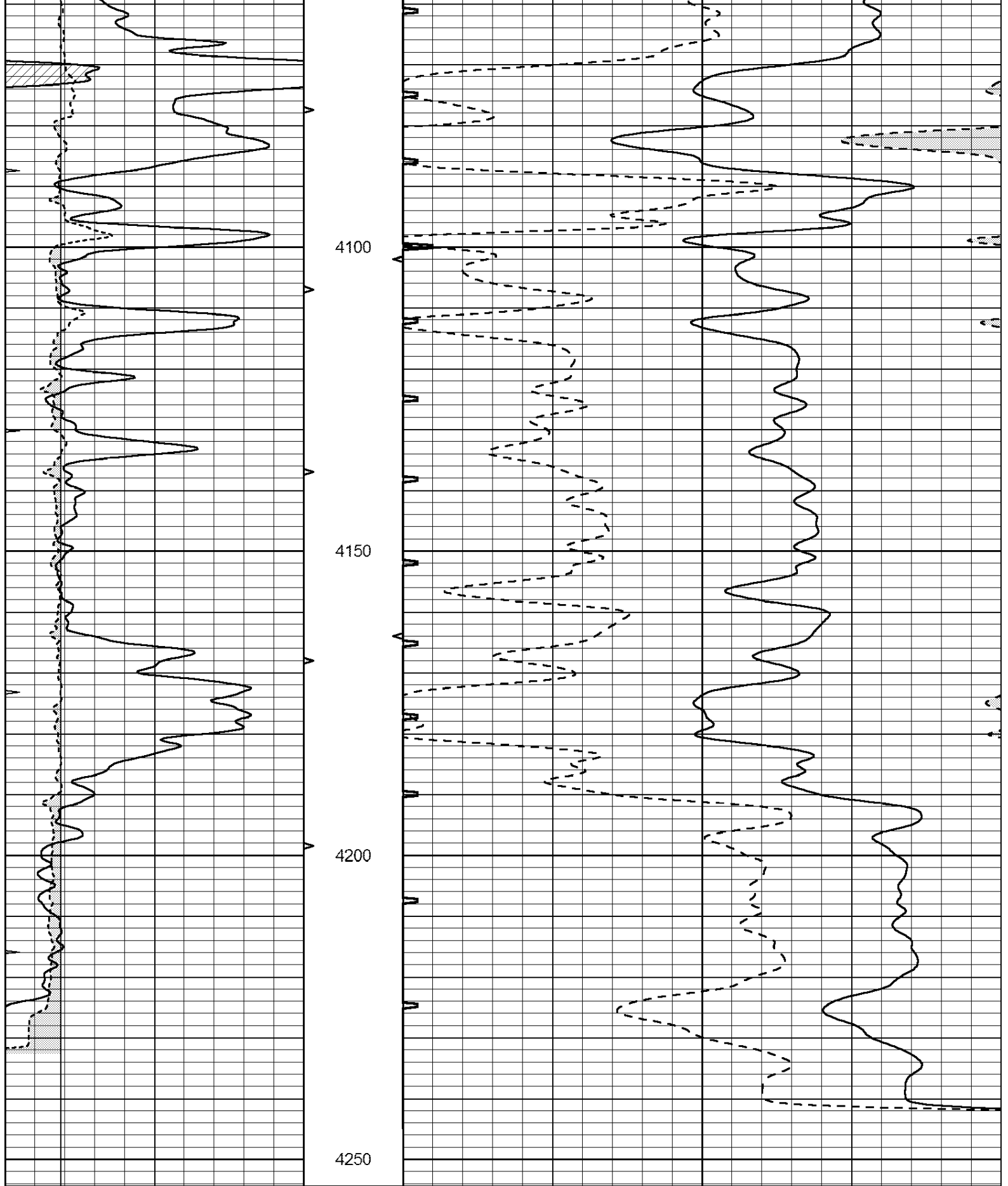


REPEAT SECTION

Database File: 2401ddn.db
 Dataset Pathname: pass4.1
 Presentation Format: _slt
 Dataset Creation: Sun Jan 21 11:54:41 2018 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	140	DELTA TIME (usec/ft)	40	
6	CALIPER (in)	16	10 (ft3)	0	30	SONIC POROSITY (pu)	-10
0	MINMK	20	TBHV	0	ITT (msec)	20	
			0 (ft3)	10			





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6	CALIPER (in)	16	10 (ft3)	0 30	SONIC POROSITY (pu)	-10
0	MINMK	20	TBHV	0	ITT (msec)	20
			0 (ft3)	10		

Calibration Report

Database File: 2401ddn.db
 Dataset Pathname: pass4.1
 Dataset Creation: Sun Jan 21 11:54:41 2018 by Calc Open-Cased 090629

MICRO Calibration Report

Serial Number: MICRO6
 Tool Model: PROBE
 Performed: Wed Aug 16 17:13:39 2017

Caliper Calibration:	Gain=3.960	Offset=4.651
	Low Cal	High Cal
References	7.000	14.000
Readings	0.555	2.323

1.5" Calibration:	Gain=38.075	Offset=-0.400
	Low Cal	High Cal
References	0.000	20.000
Readings	0.004	1.196

2" Calibration:	Gain=45.000	Offset=-1.000
	Low Cal	High Cal
References	0.000	20.000
Readings	0.006	0.913

Gamma Ray Calibration Report

Serial Number: GR2
 Tool Model: OPEN
 Performed: Wed Aug 16 17:13:40 2017

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3800	GAPI/cps