SONIC LOG

Company	BLACK STONE PETROLEUM, LLC
Well	SWOB #3
Field	OTIS-ALBERT
County	RUSH
State	KANSAS

Company BLACK STONE PETROLEUM, LLC
Well SWOB #3
Field OTIS-ALBERT
County RUSH State KANSAS
Location: API # : 15-165-22147-00-00
564' FSL & 2310' FWL
SEC 26 TWP 18S RGE 16W

Other Services
CDL/CNL
DIL/MEL

Permanent Datum GROUND LEVEL Elevation 1941'
Log Measured From KELLY BUSHING 9' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1950
D.F. 1948
G.L. 1941

Date	07/09/17		
Run Number	TWO		
Depth Driller	3637		
Depth Logger	3644		
Bottom Logged Interval	3638		
Top Log Interval	900		
Casing Driller	10 3/4" @ 970		
Casing Logger	970		
Bit Size	8 3/4"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 10000 PPM	
Density / Viscosity	9.0/48		
pH / Fluid Loss	10.8/10.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.50@78		
Rmf @ Meas. Temp	.38@78		
Rmc @ Meas. Temp	.60@78		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.34@112		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	112F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	GUS PFANENSTIEL		
Witnessed By	CHRIS LEIKER		

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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

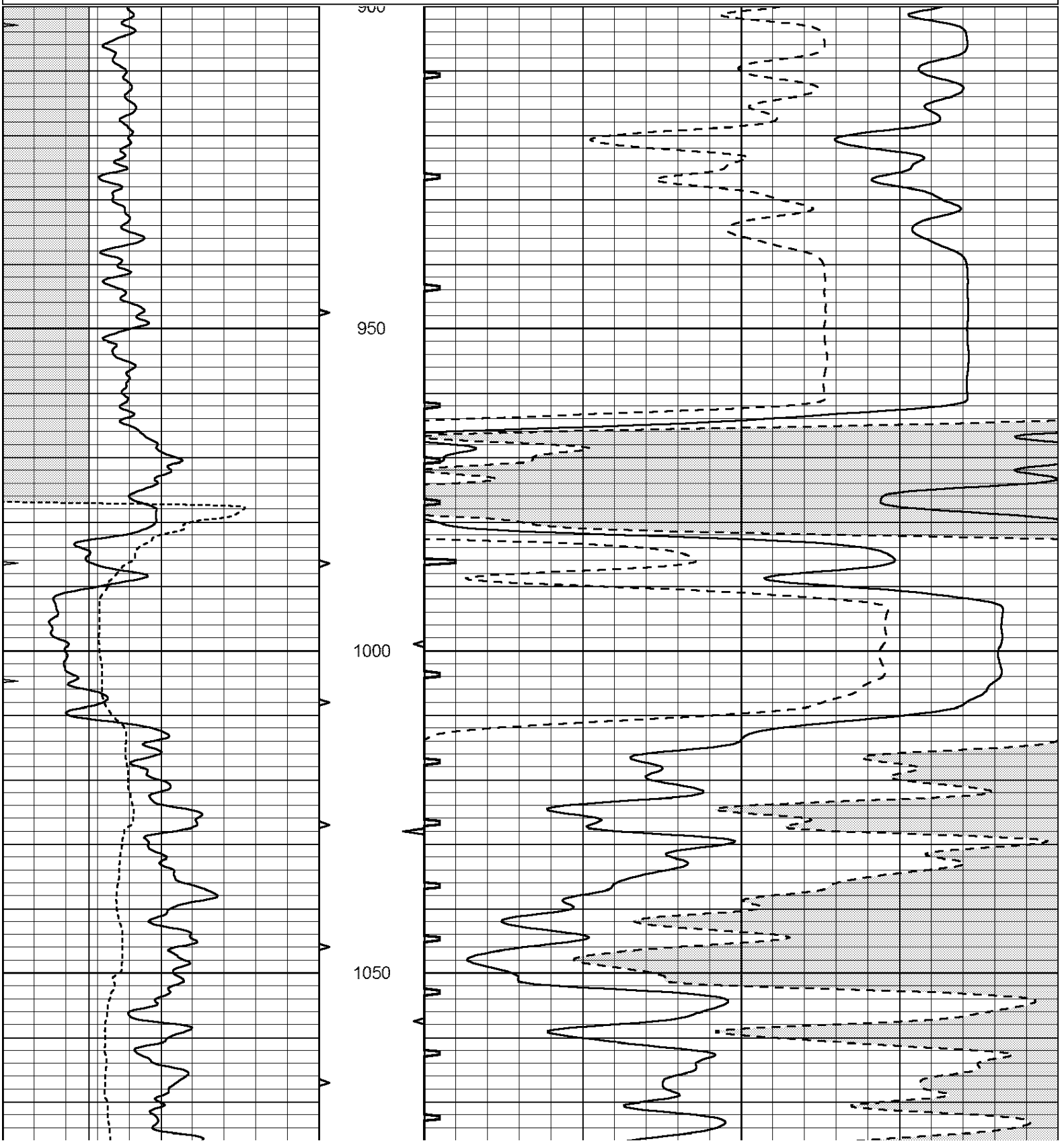
THANK YOU FOR USING ELI WIRELINE, HAYS, KS. (785) 628-6395

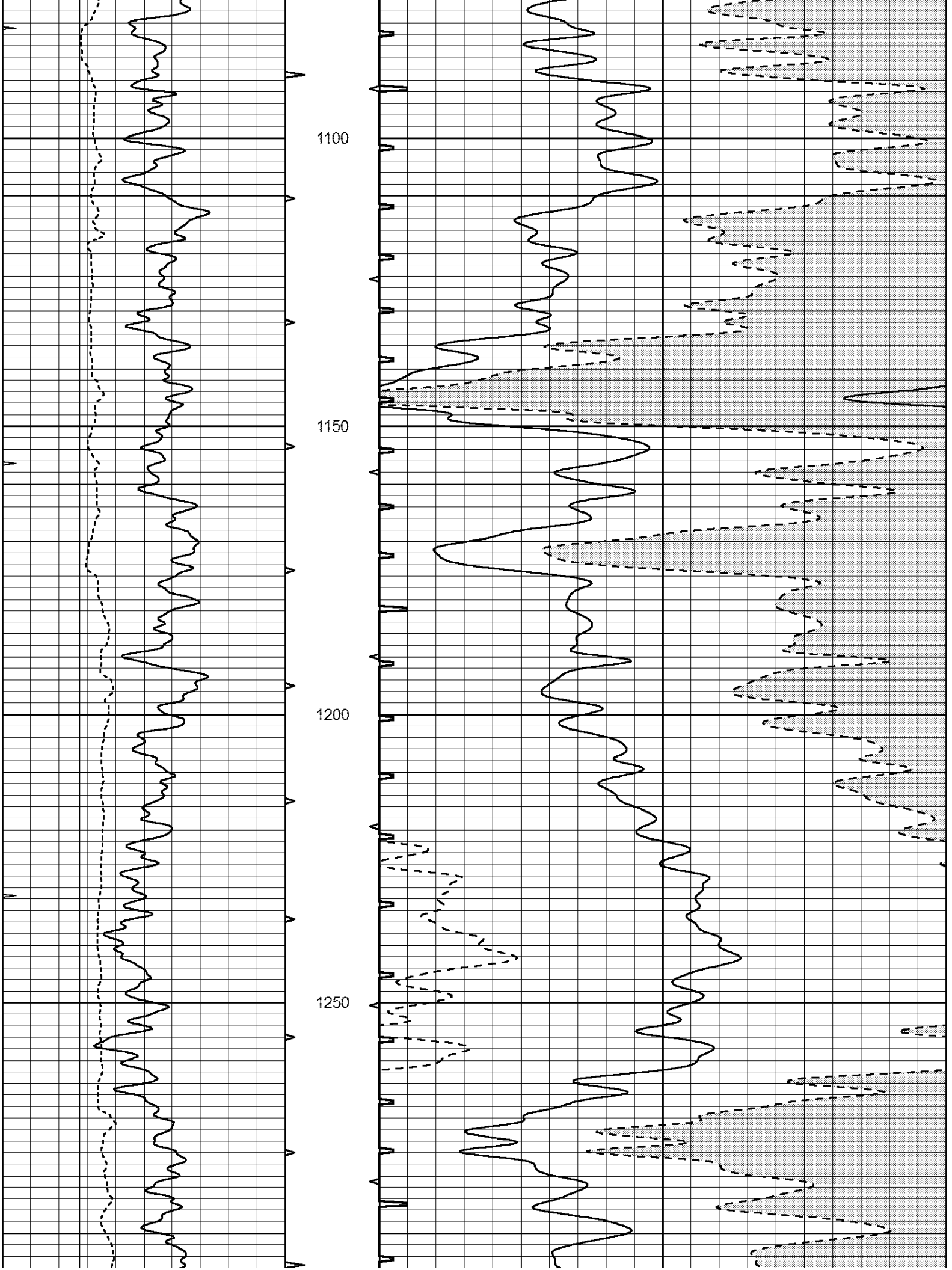
DIRECTIONS
96 HIGHWAY OUT OF RUSH CENTER EAST TO 380 RD.
SOUTH 1 MILE
EAST 3/4 MILE, NORTH INTO.

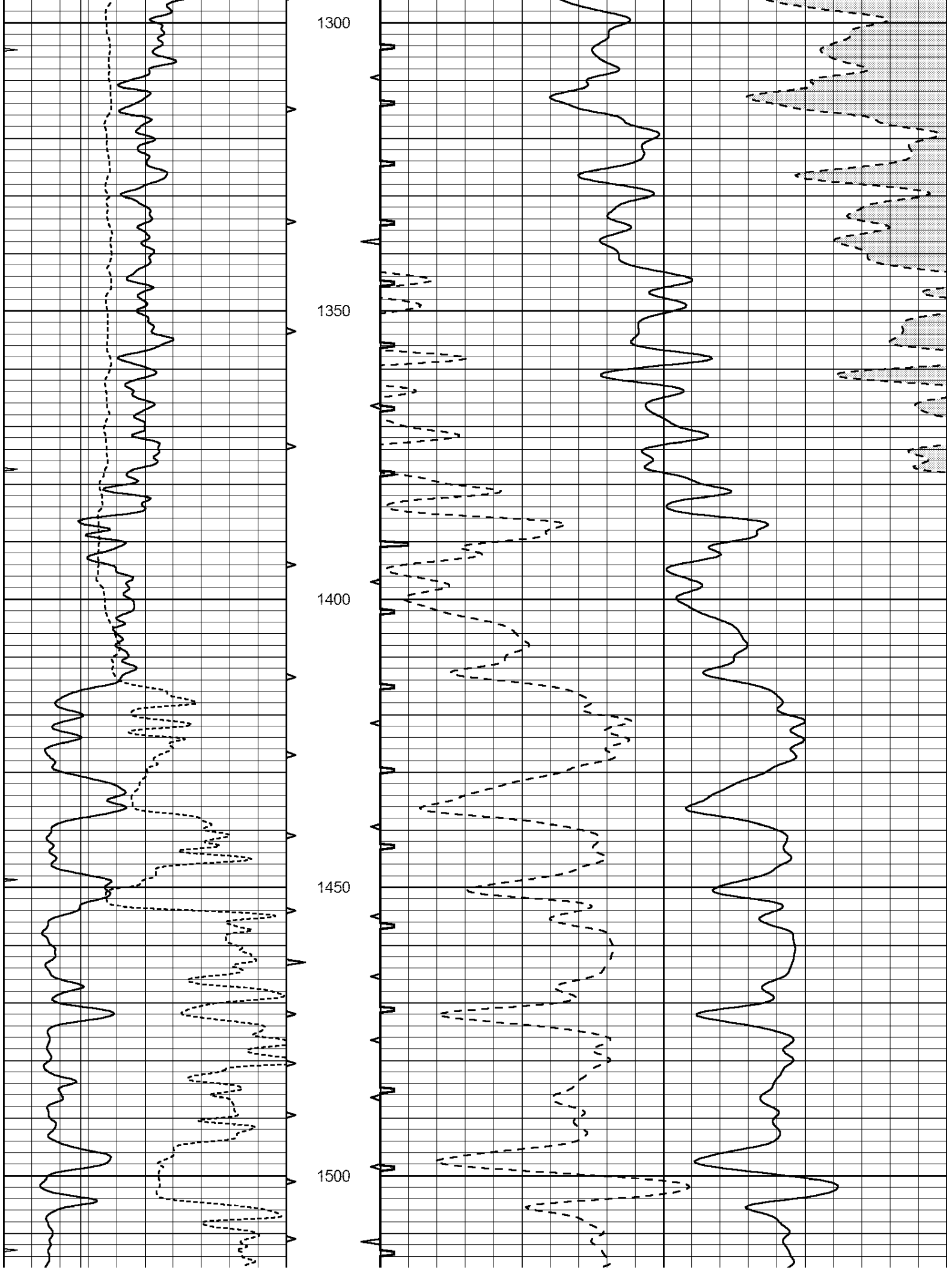
MAIN PASS

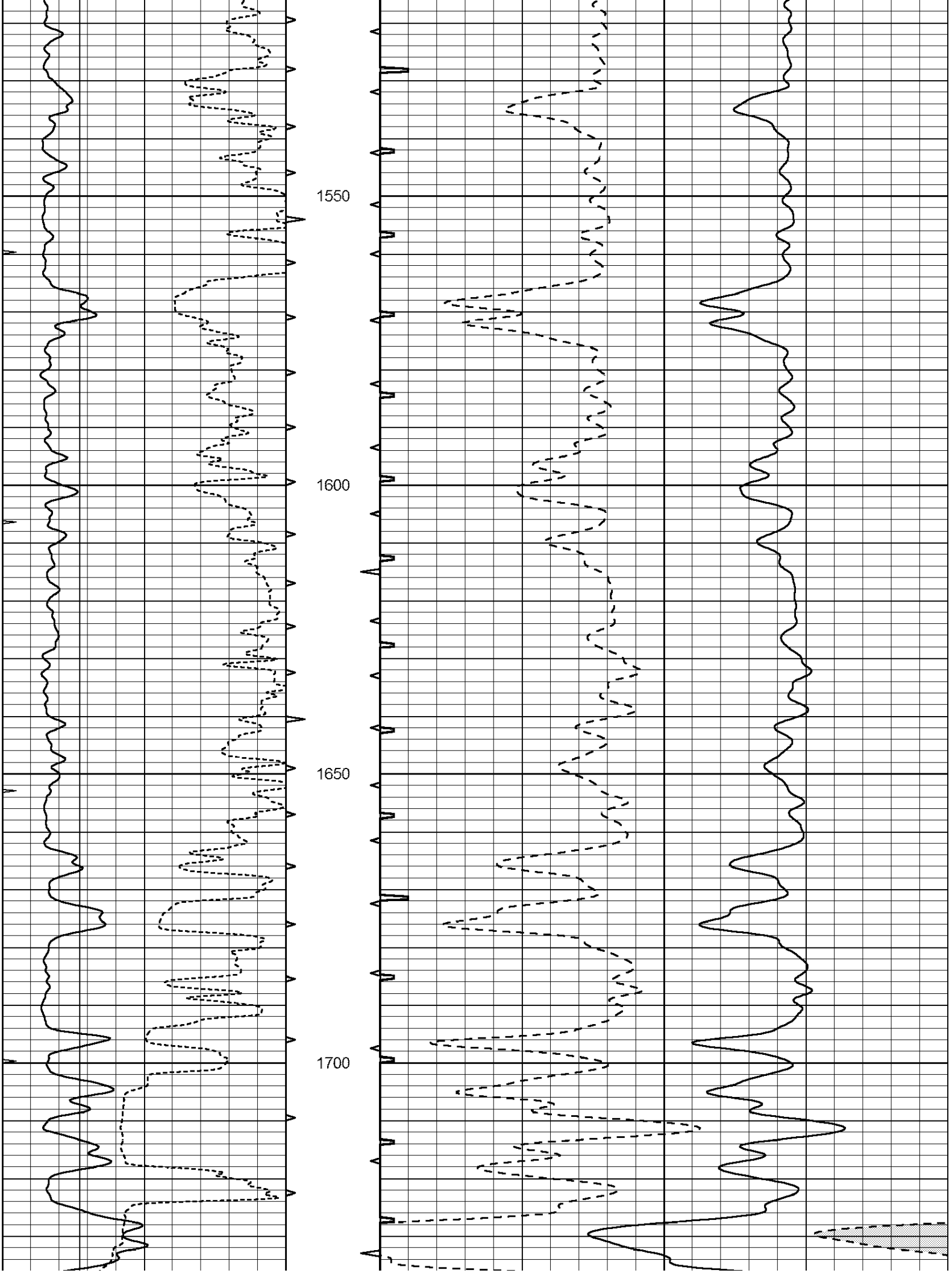
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Dataset Pathname: pass5.1
Presentation Format: _slt
Dataset Creation: Sun Jul 09 13:14:36 2017 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

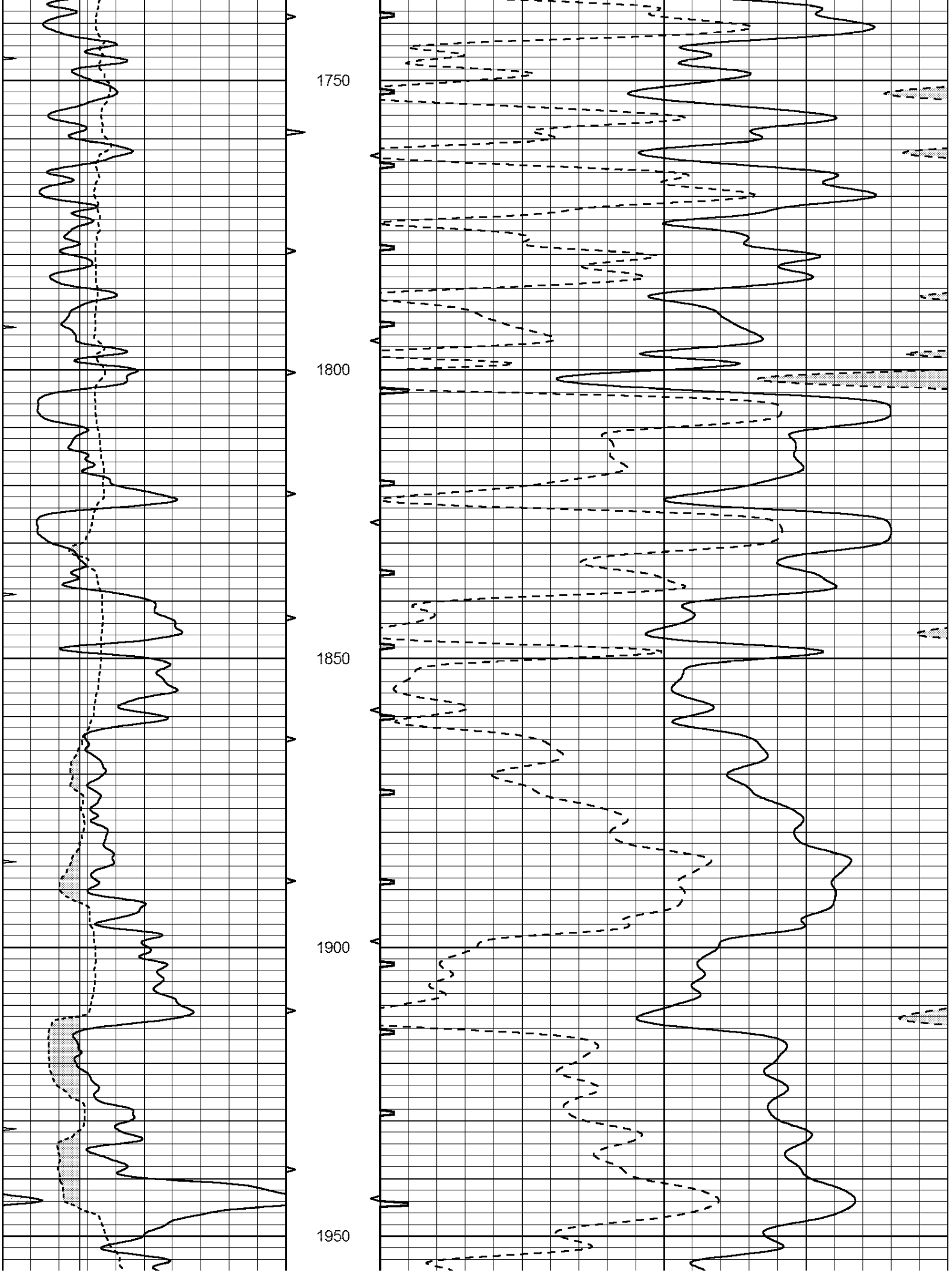
0	GAMMA RAY (GAPI) 150	ABHV	140	DELTA TIME (usec/ft)	40
6	CALIPER (in) 16	10 (ft3) 0	30	SONIC POROSITY (pu)	-10
0	MINMK 20	TBHV	0	ITT (msec) 20	
		0 (ft3) 10			

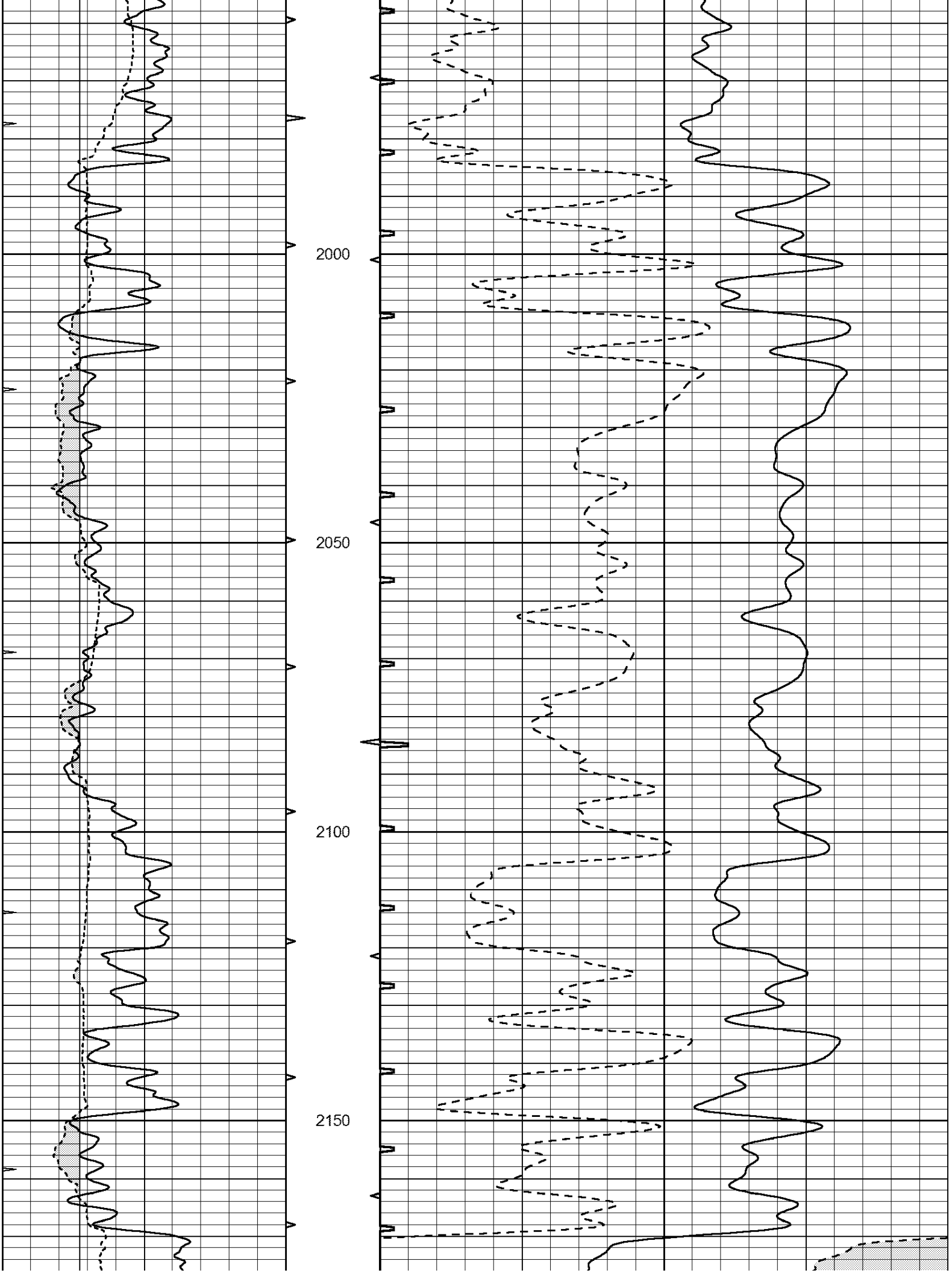


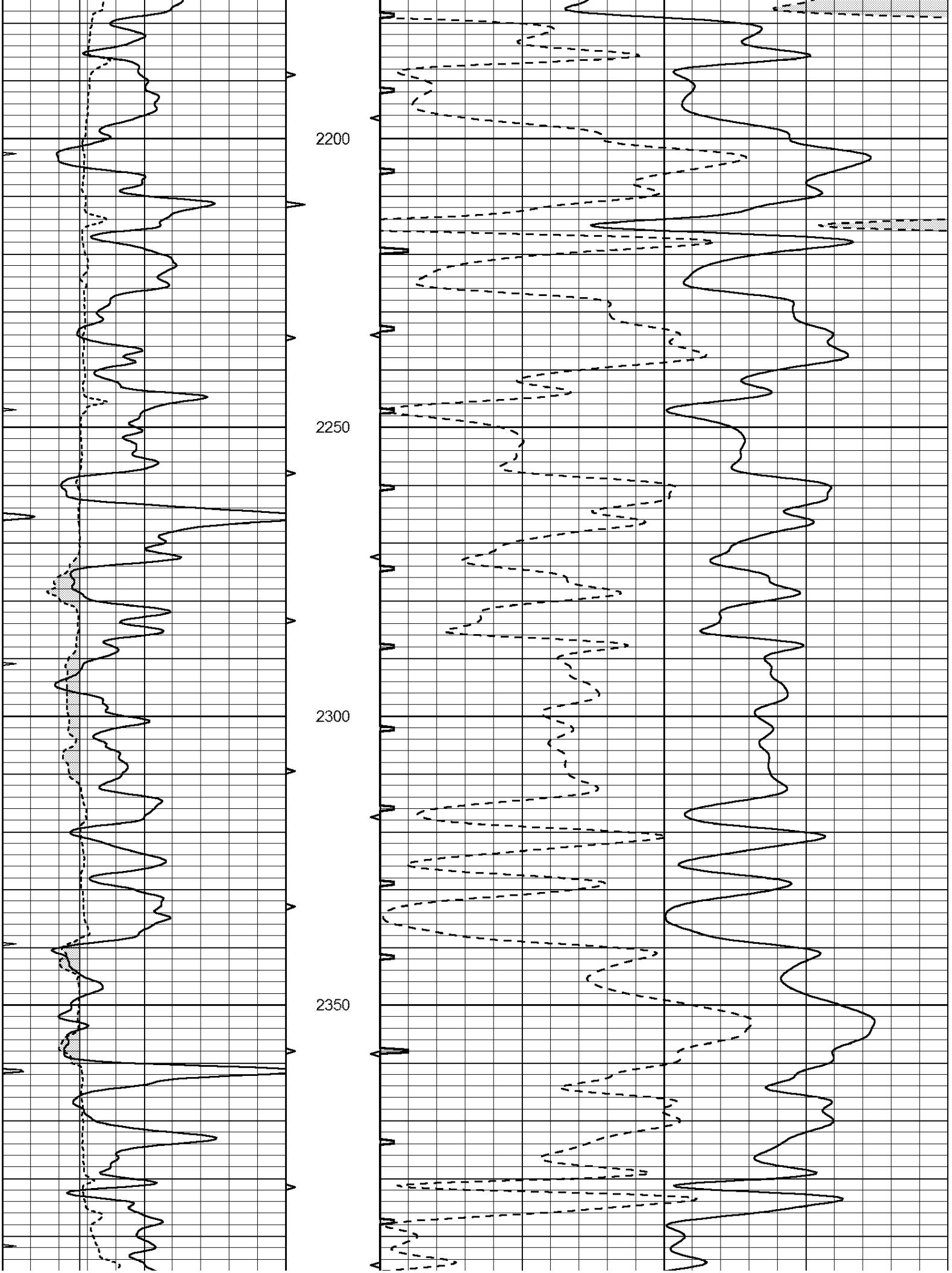

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1150
1200
1250

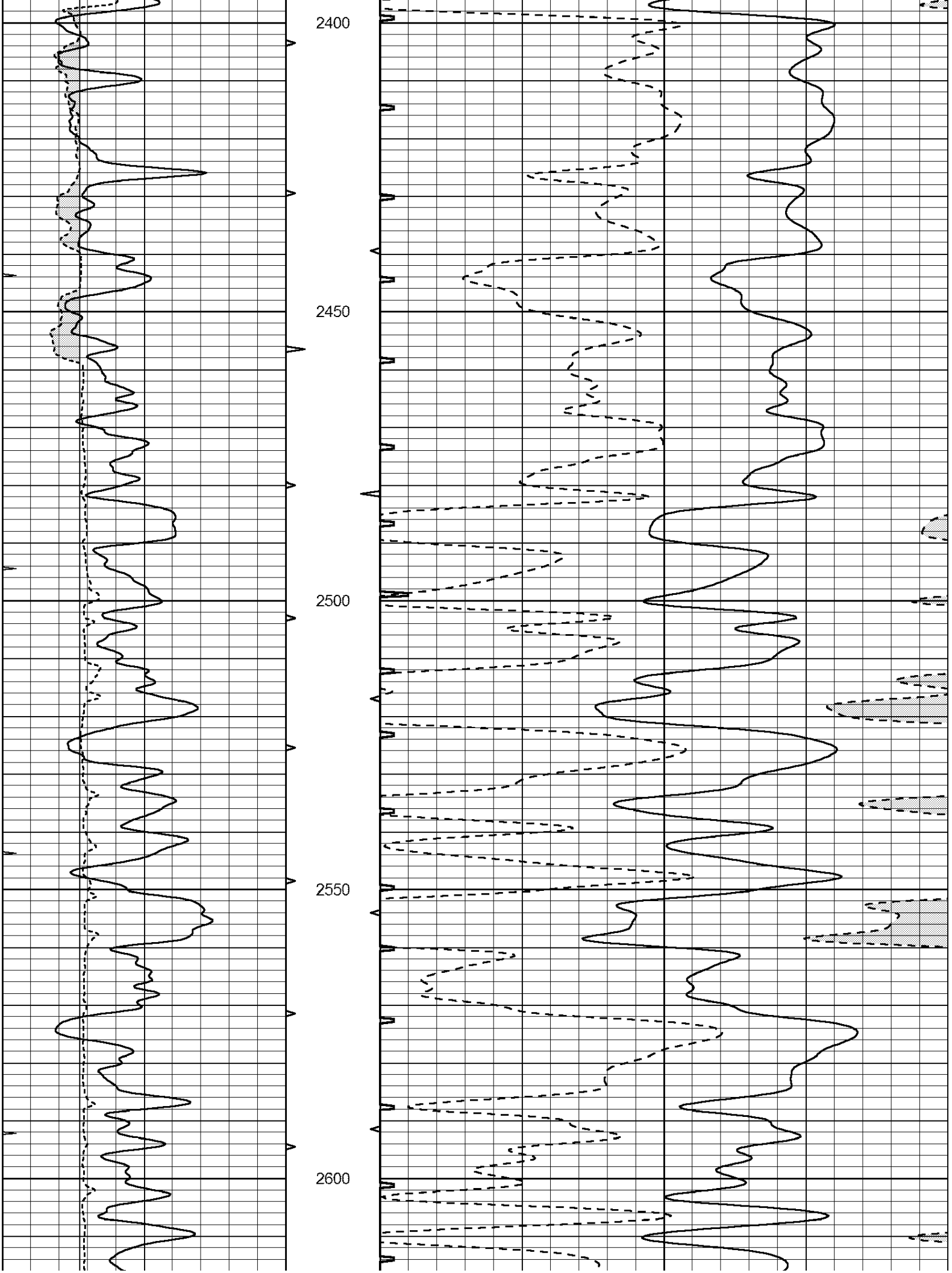

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1400
1450
1500

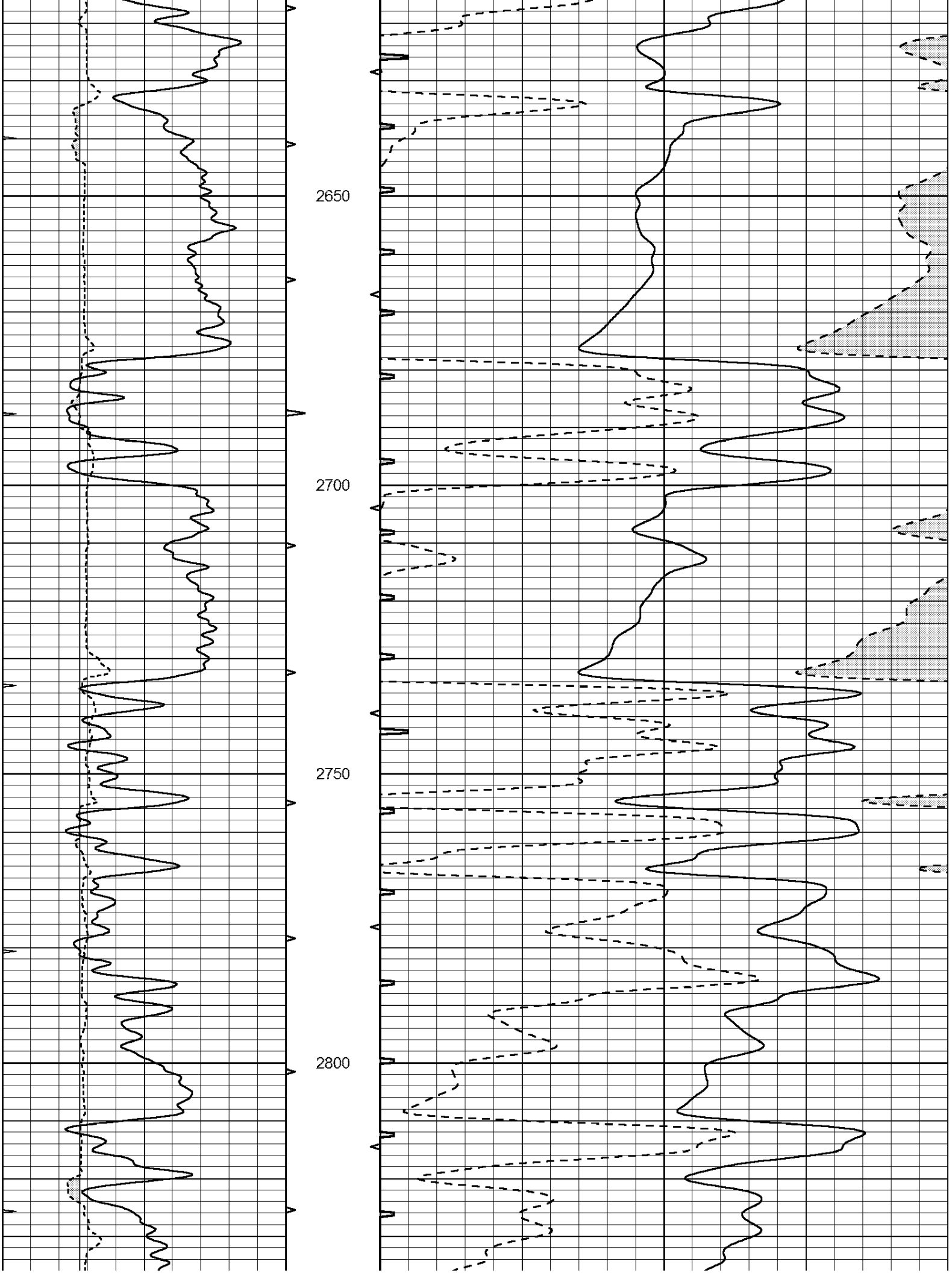

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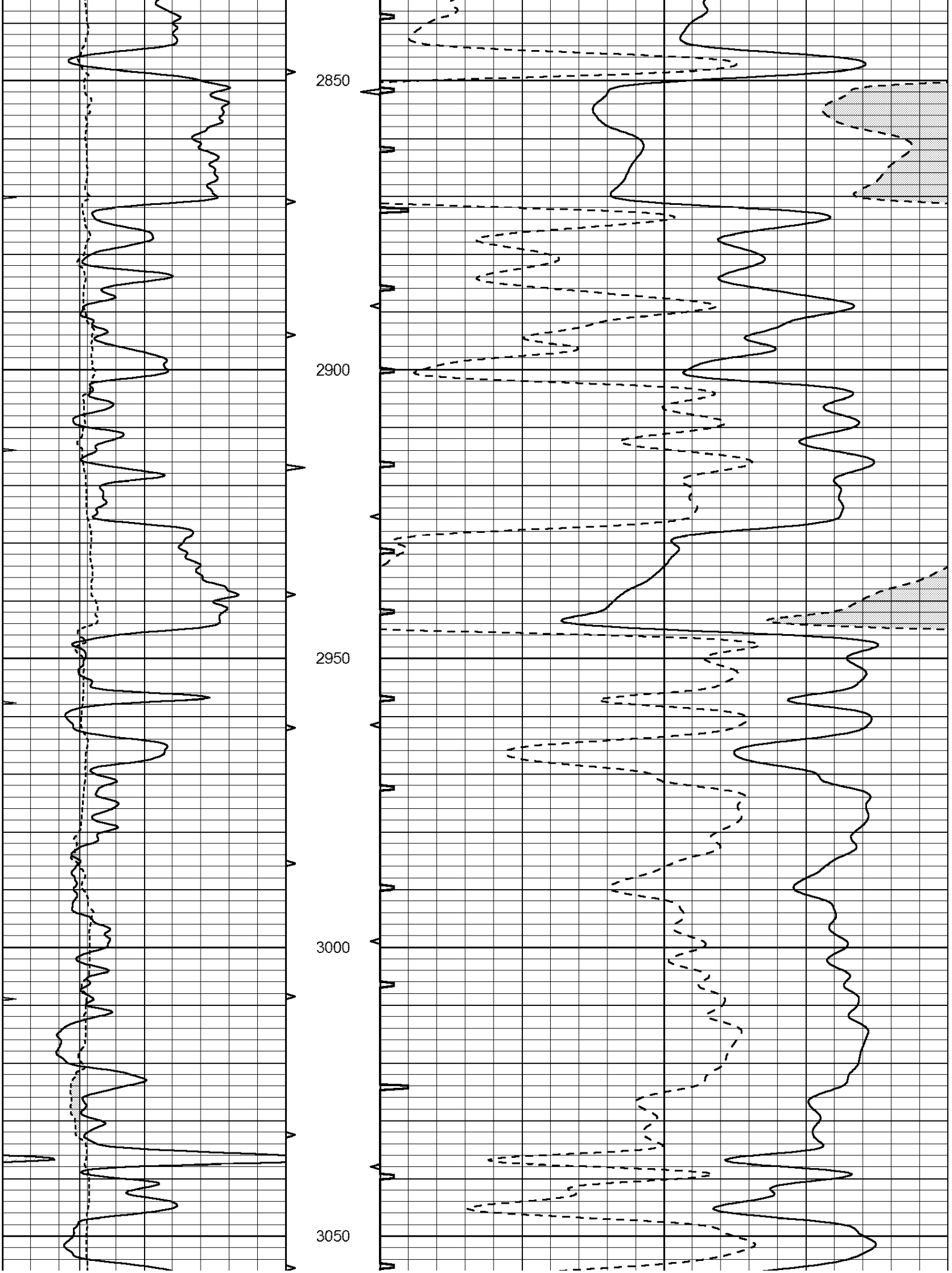

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1900
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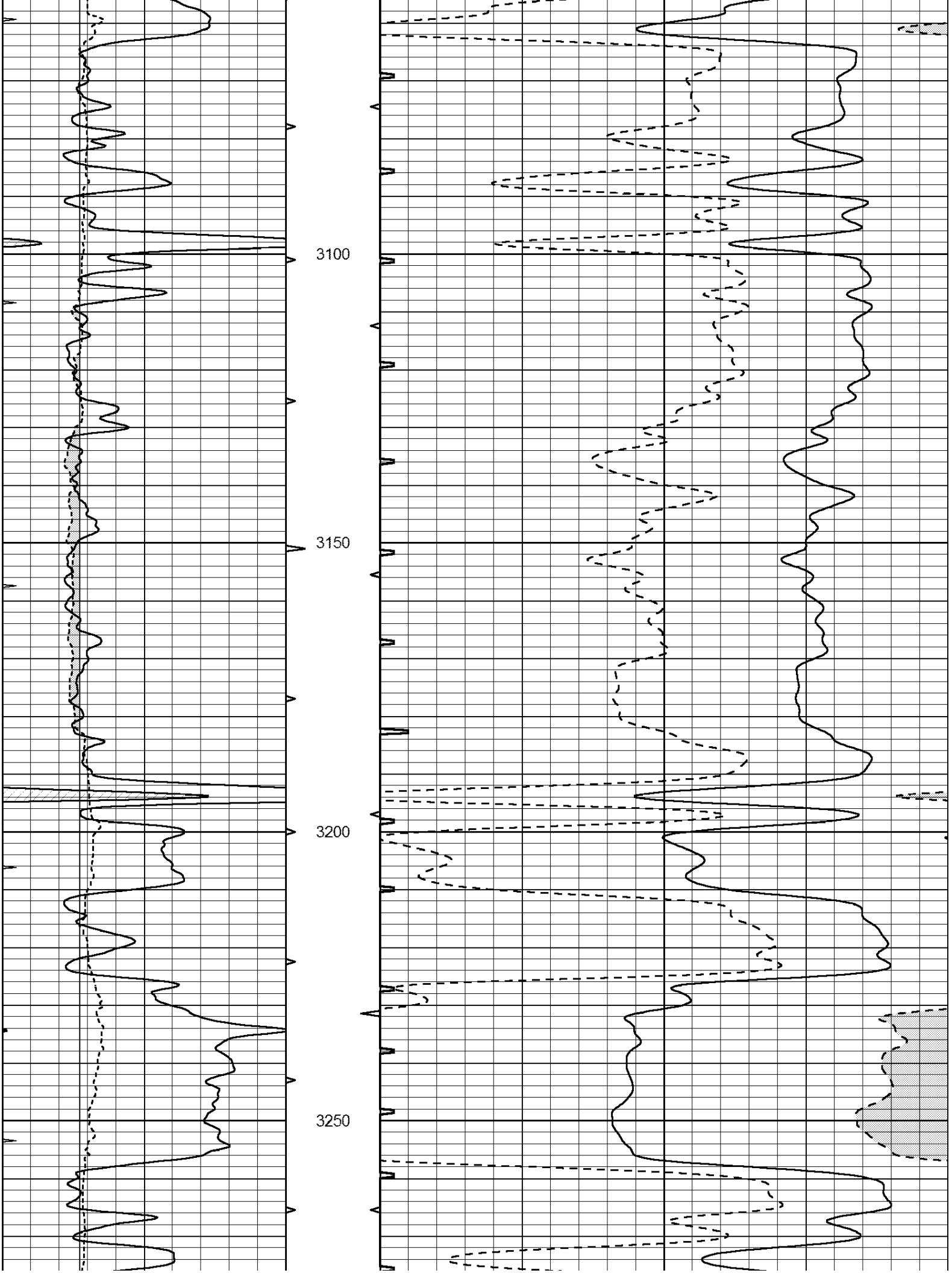

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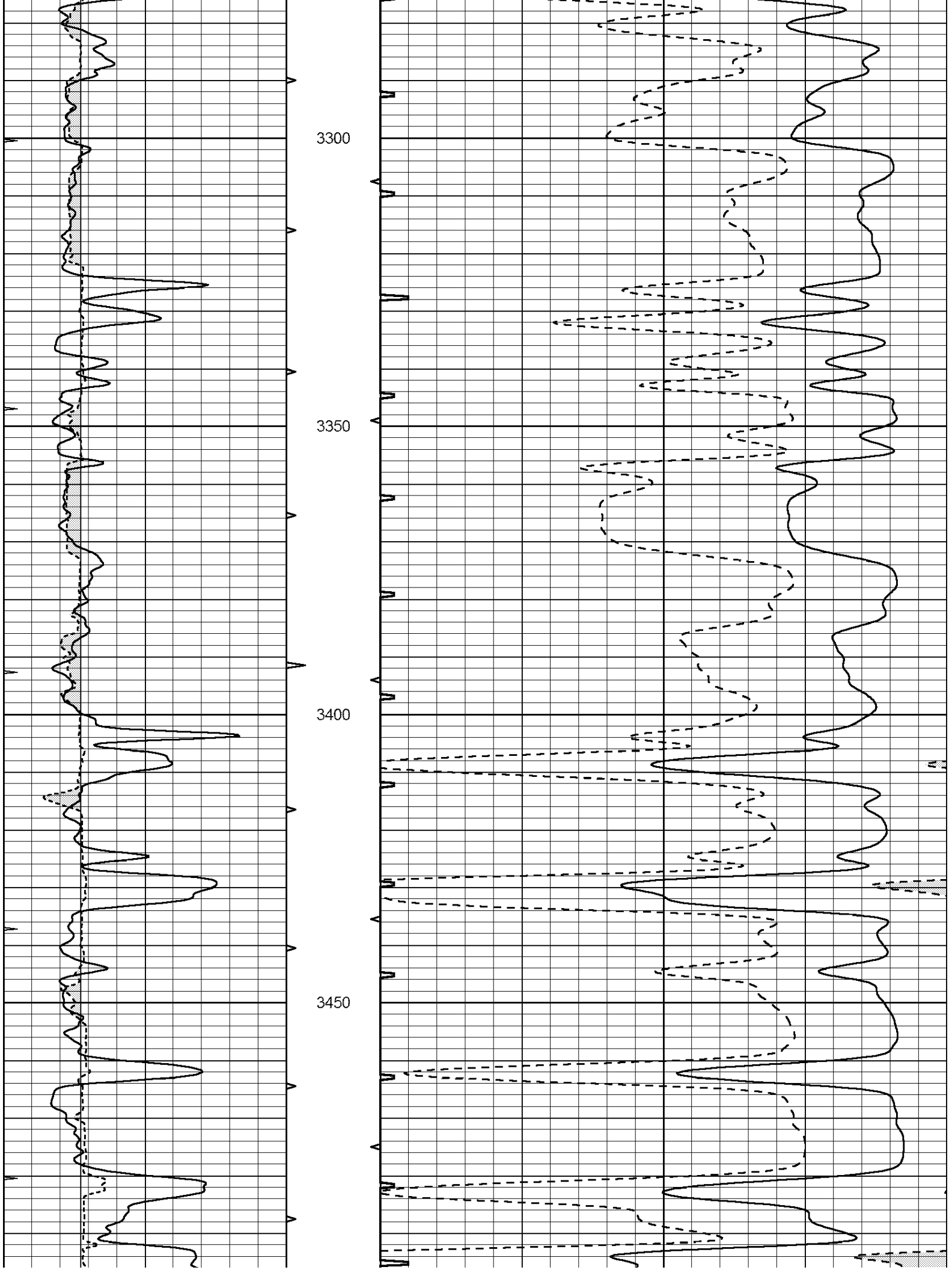

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2350

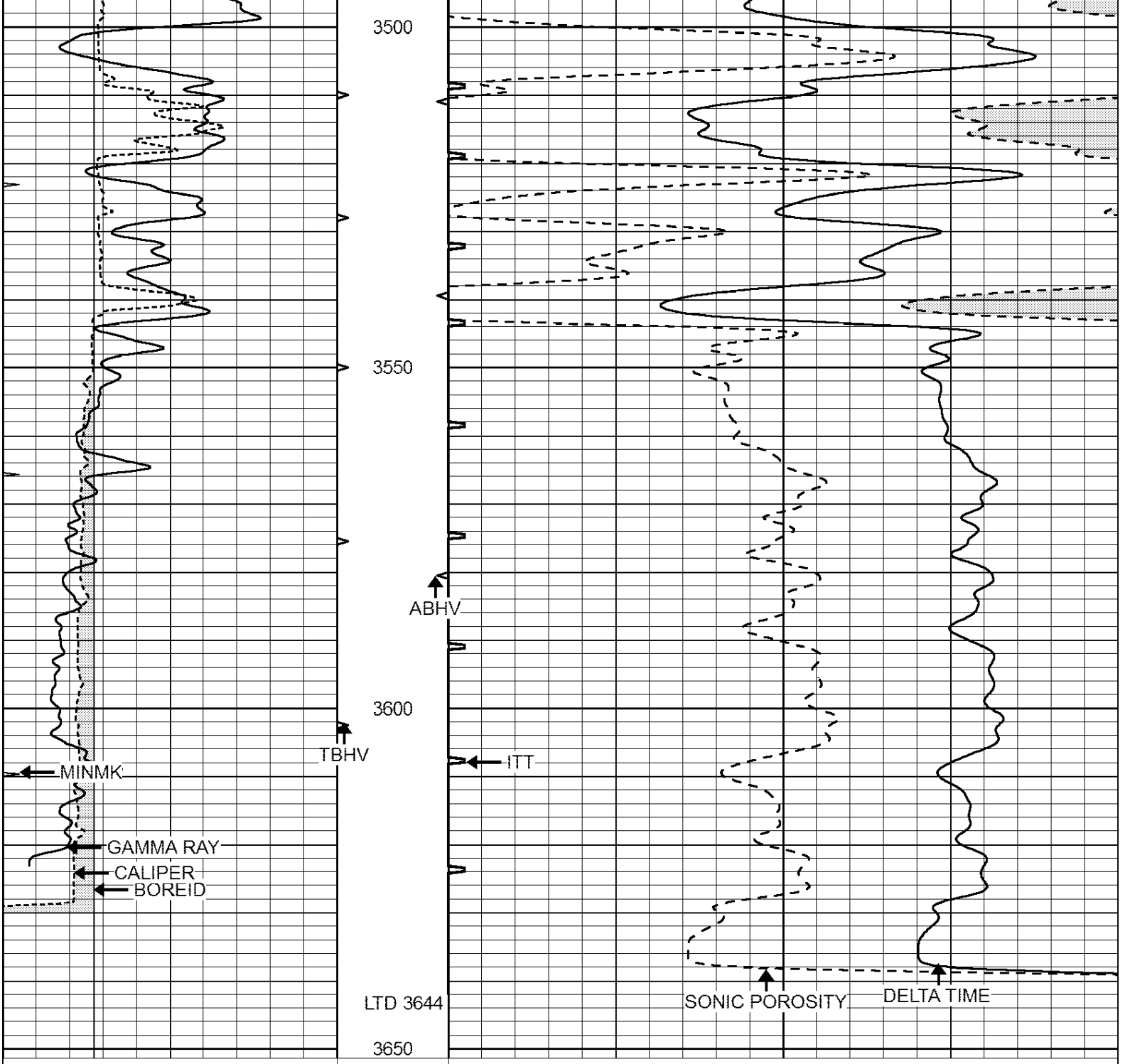

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2600


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2900
2950
3000
3050


3100
3150
3200
3250

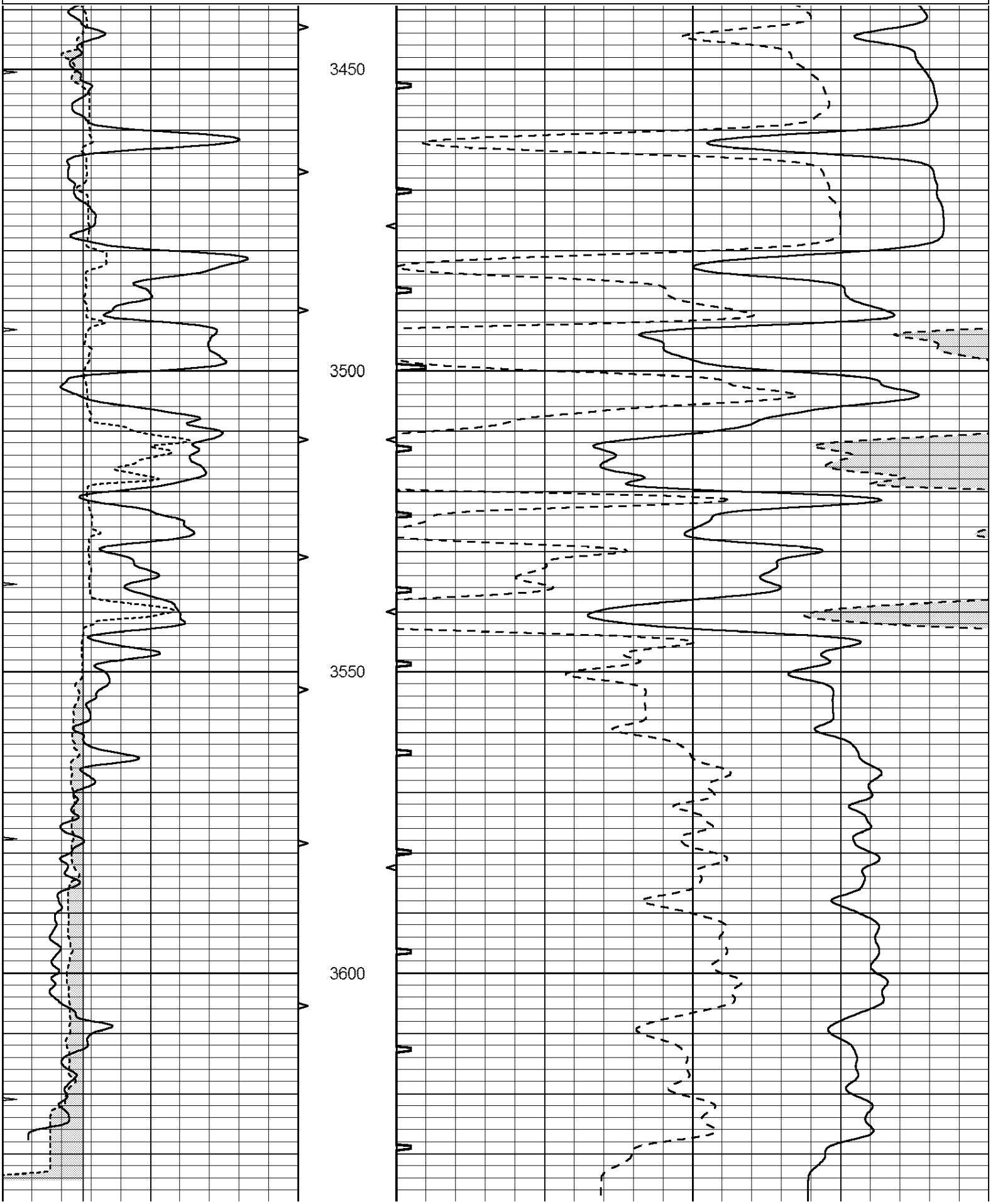

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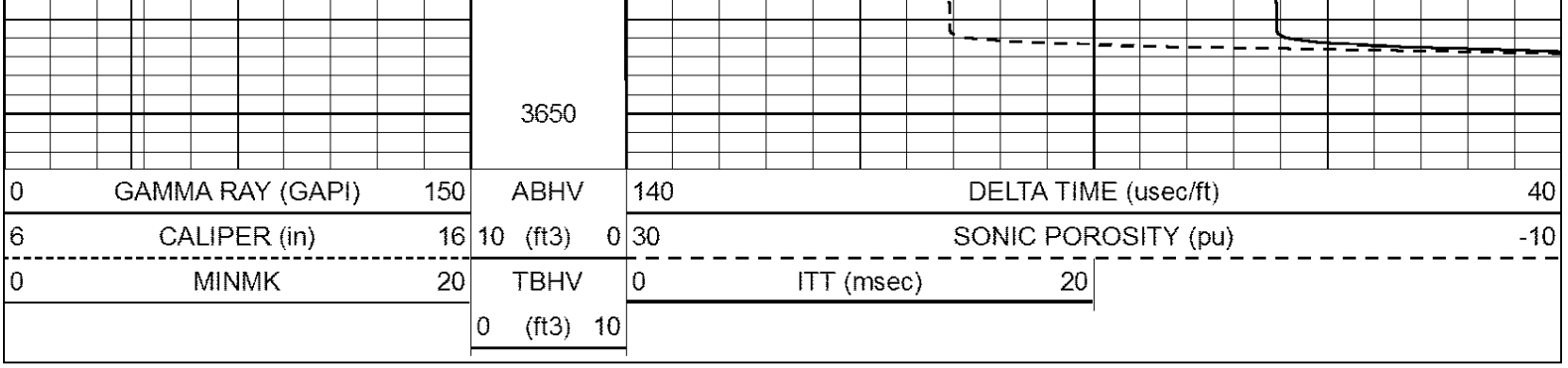


REPEAT SECTION

Database File:	1801ddn.db
Dataset Pathname:	pass4R
Presentation Format:	_slt
Dataset Creation:	Sun Jul 09 12:20:12 2017 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		





Calibration Report

Database File: 1801ddn.db
Dataset Pathname: pass4R
Dataset Creation: Sun Jul 09 12:20:12 2017 by Calc Open-Cased 090629

MICRO Calibration Report

Serial Number:	MICRO6	
Tool Model:	PROBE	
Performed:	Mon Apr 10 10:24:59 2017	
Caliper Calibration:	Gain=3.960	Offset=4.551
	Low Cal	High Cal
References	7.000	14.000
Readings	0.555	2.323
1.5" Calibration:	Gain=46.075	Offset=-0.400
	Low Cal	High Cal
References	0.000	20.000
Readings	0.004	1.196
2" Calibration:	Gain=48.000	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 Jun 07 21:43:13 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3200	GAPI/cps