SONIC LOG

Company L. D. DRILLING, INC.
Well #1-20 McINTYRE
Field OTIS - ALBERT
County RUSH
State KANSAS

Company L. D. DRILLING, INC.
Well #1-20 McINTYRE
Field OTIS - ALBERT
County RUSH State KANSAS
Location: API # : 15-165-22163-0000
1980' FSL & 990' FEL
W/2 - NE - SE
SEC 20 TWP 18S RGE 16W

Other Services
CDL/CNL
MEL/DIL

Permanent Datum GROUND LEVEL Elevation 1998
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2003
D.F. 2001
G.L. 1998

Date	2/9/19		
Run Number	TWO		
Depth Driller	3705		
Depth Logger	3695		
Bottom Logged Interval	3687		
Top Log Interval	1000		
Casing Driller	8 5/8"@1040'		
Casing Logger	1040		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 9,100 PPM	
Density / Viscosity	9.3/51		
pH / Fluid Loss	9.5/11.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.20@60F		
Rmf @ Meas. Temp	.900@60F		
Rmc @ Meas. Temp	1.44@60F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.637@113F		
Time Circulation Stopped	5.5 HOURS		
Time Logger on Bottom	8:00 P.M.		
Maximum Recorded Temperature	113F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	KIM SHOEMAKER		

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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.

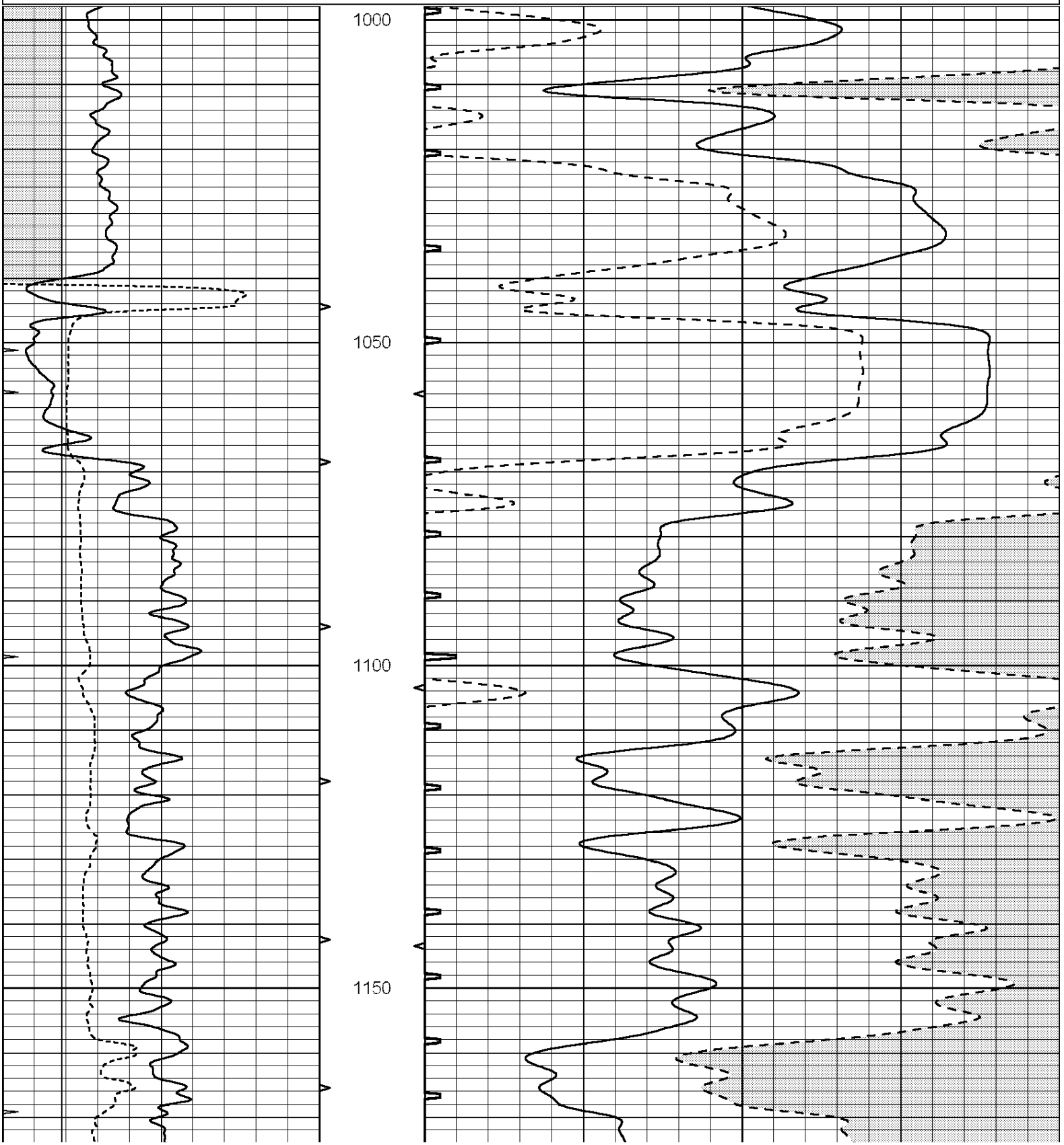
Comments

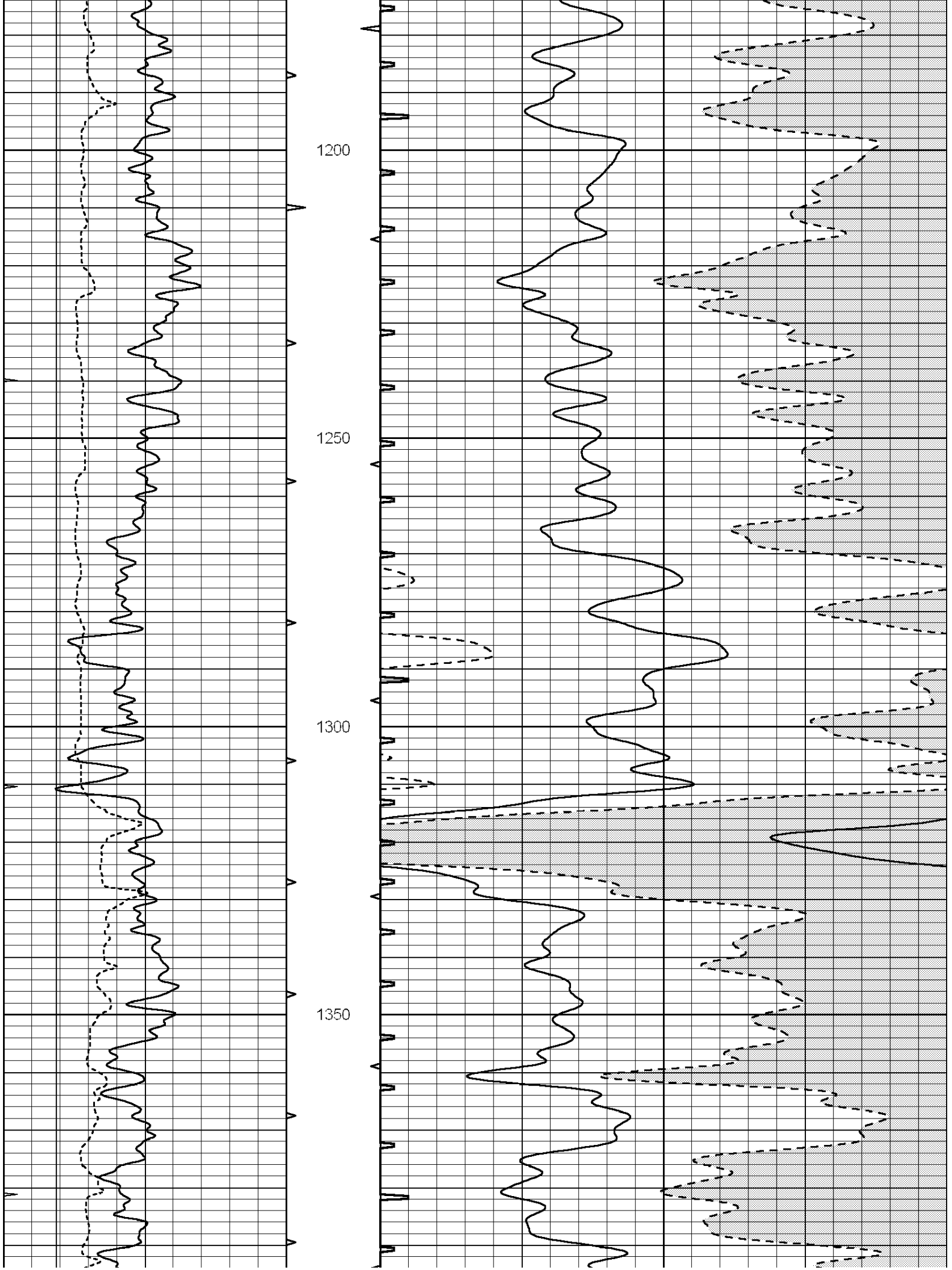
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
TIMKEN, KS., 3 1/2E. ON HWY 96, PAST MM #160, N. INTO PASTURE

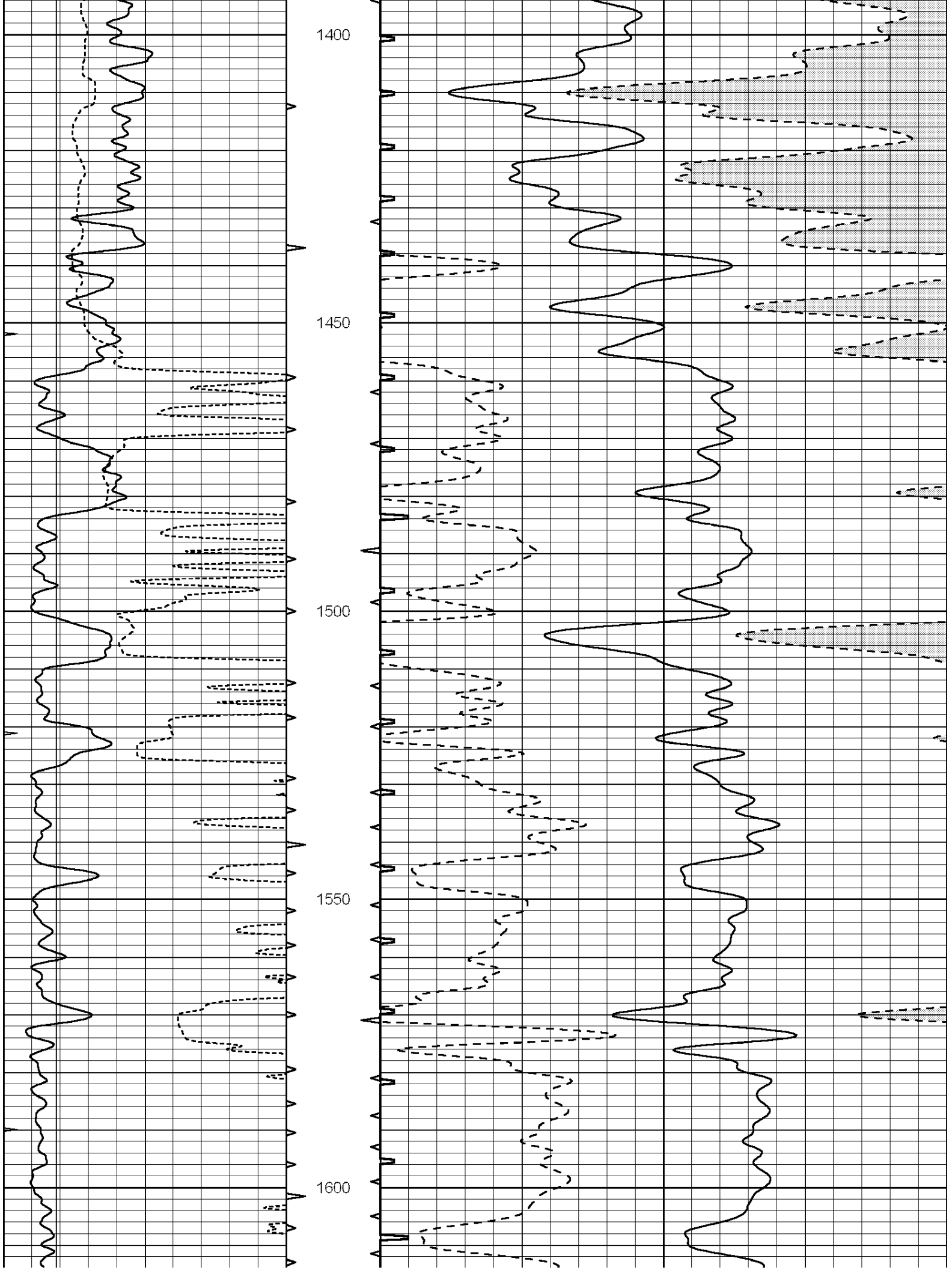
MAIN SECTION

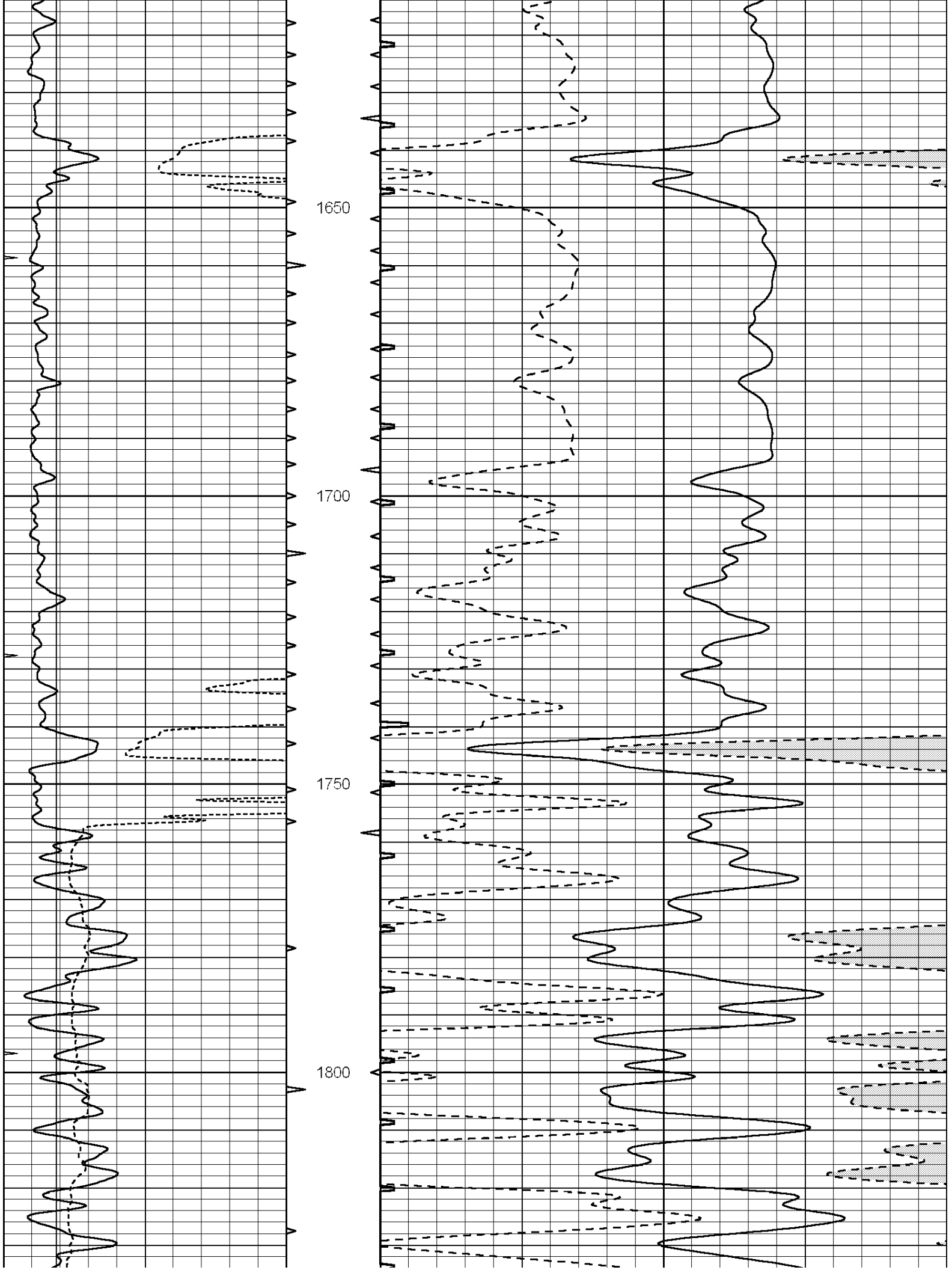
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Dataset Pathname:	pass6.5
Presentation Format:	slt
Dataset Creation:	Sat Feb 09 21:05:35 2019 by Calc SOC 120430
Charted by:	Depth in Feet scaled 1:240

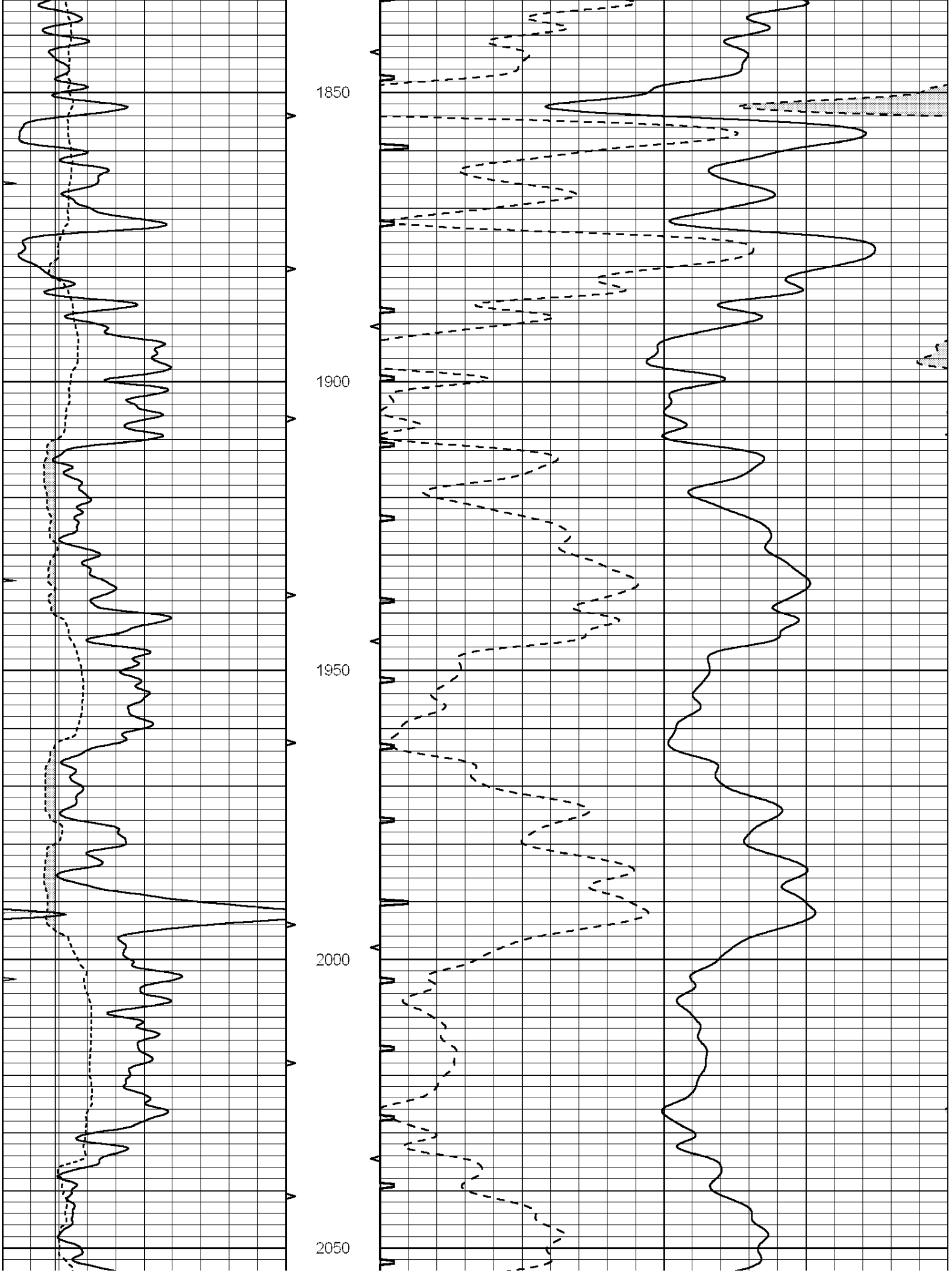
0 GAMMA RAY (GAPI) 150	ABHV	140 DELTA TIME (usec/ft) 40
6 CALIPER (in) 16	10 (ft3) 0	30 SONIC POROSITY (pu) -10
0 MINMK 20	TBHV	0 ITT (msec) 20
	0 (ft3) 10	

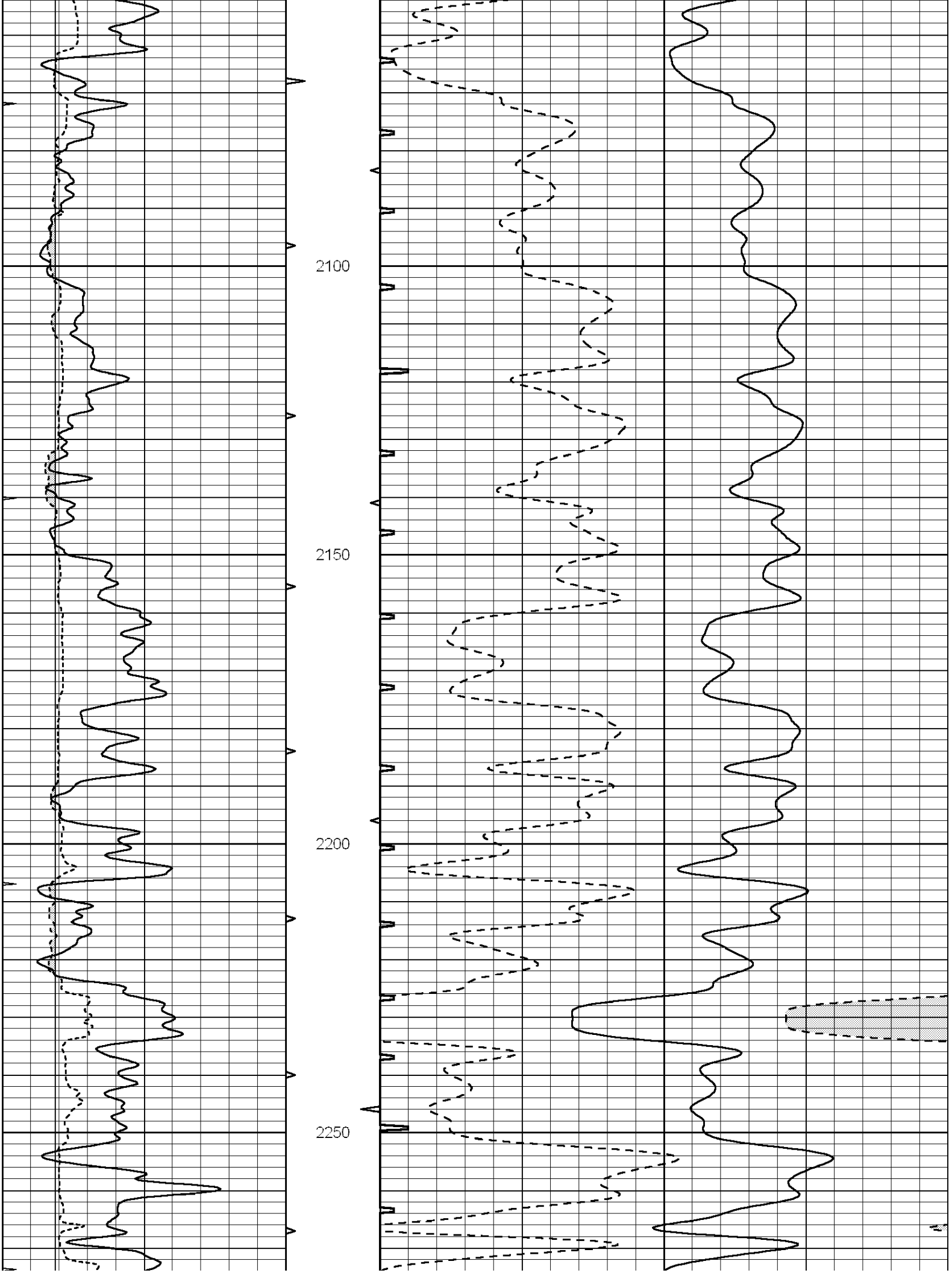


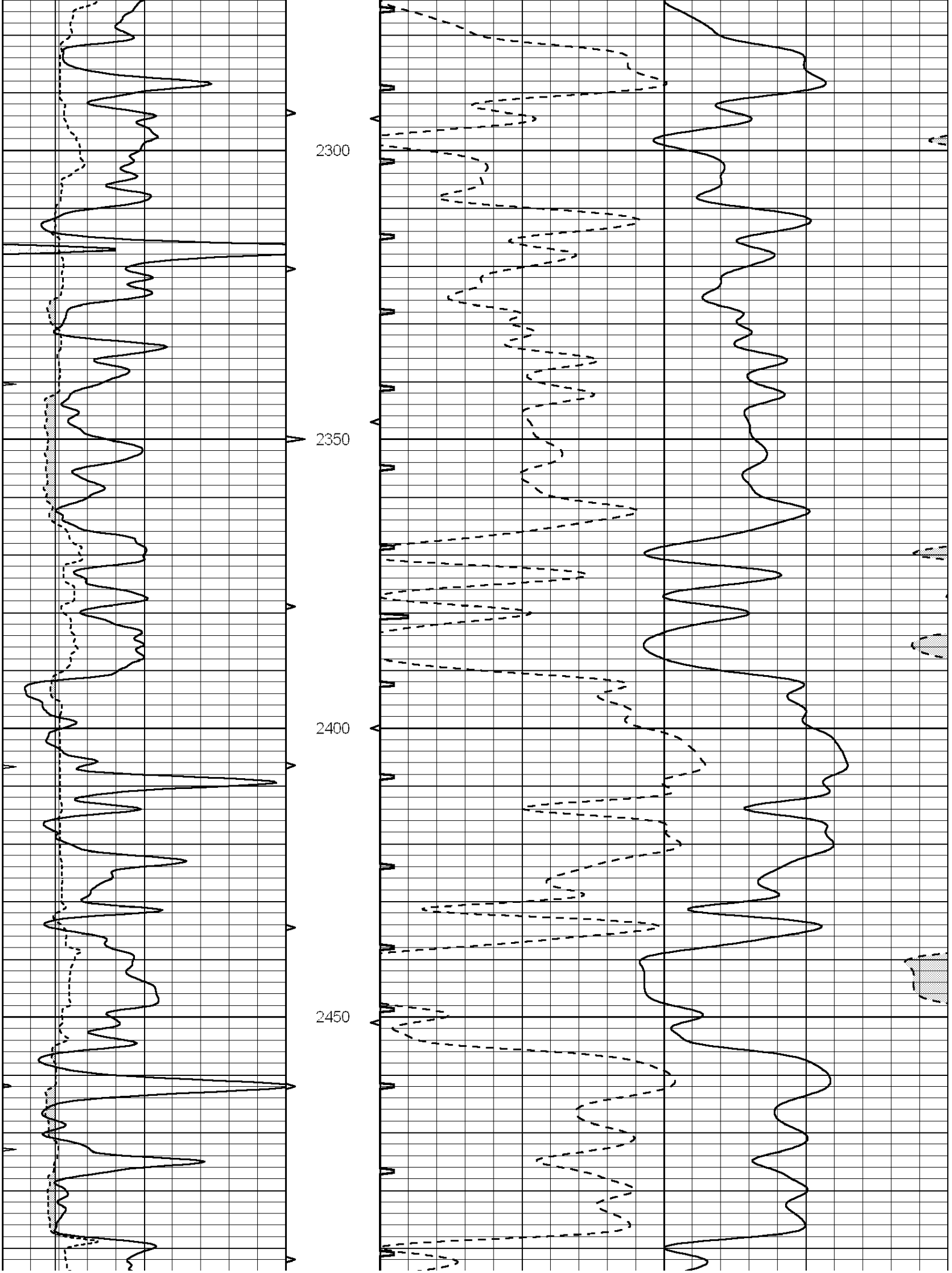

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1250
1300
1350

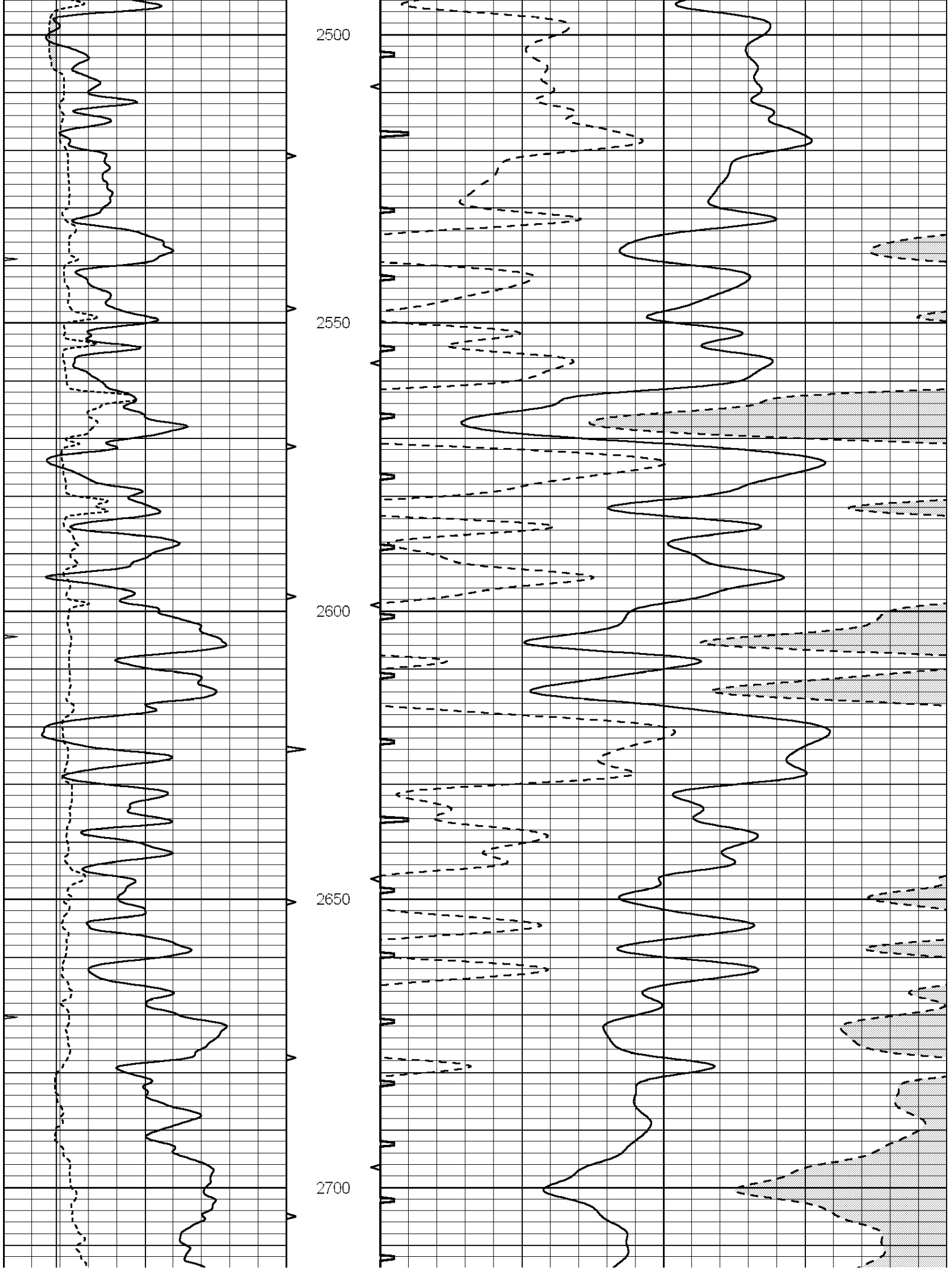

1400
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1500
1550
1600

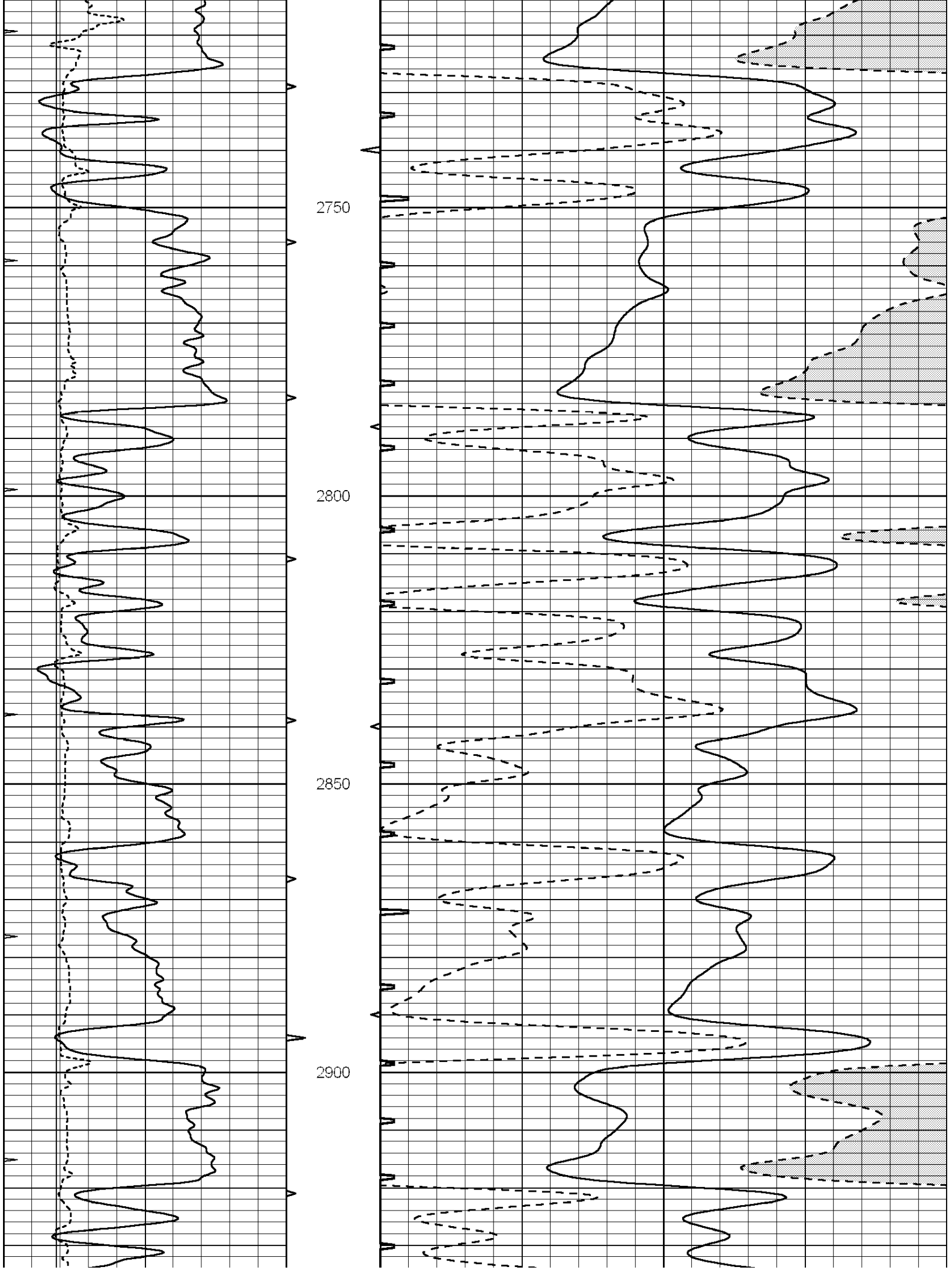

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1750
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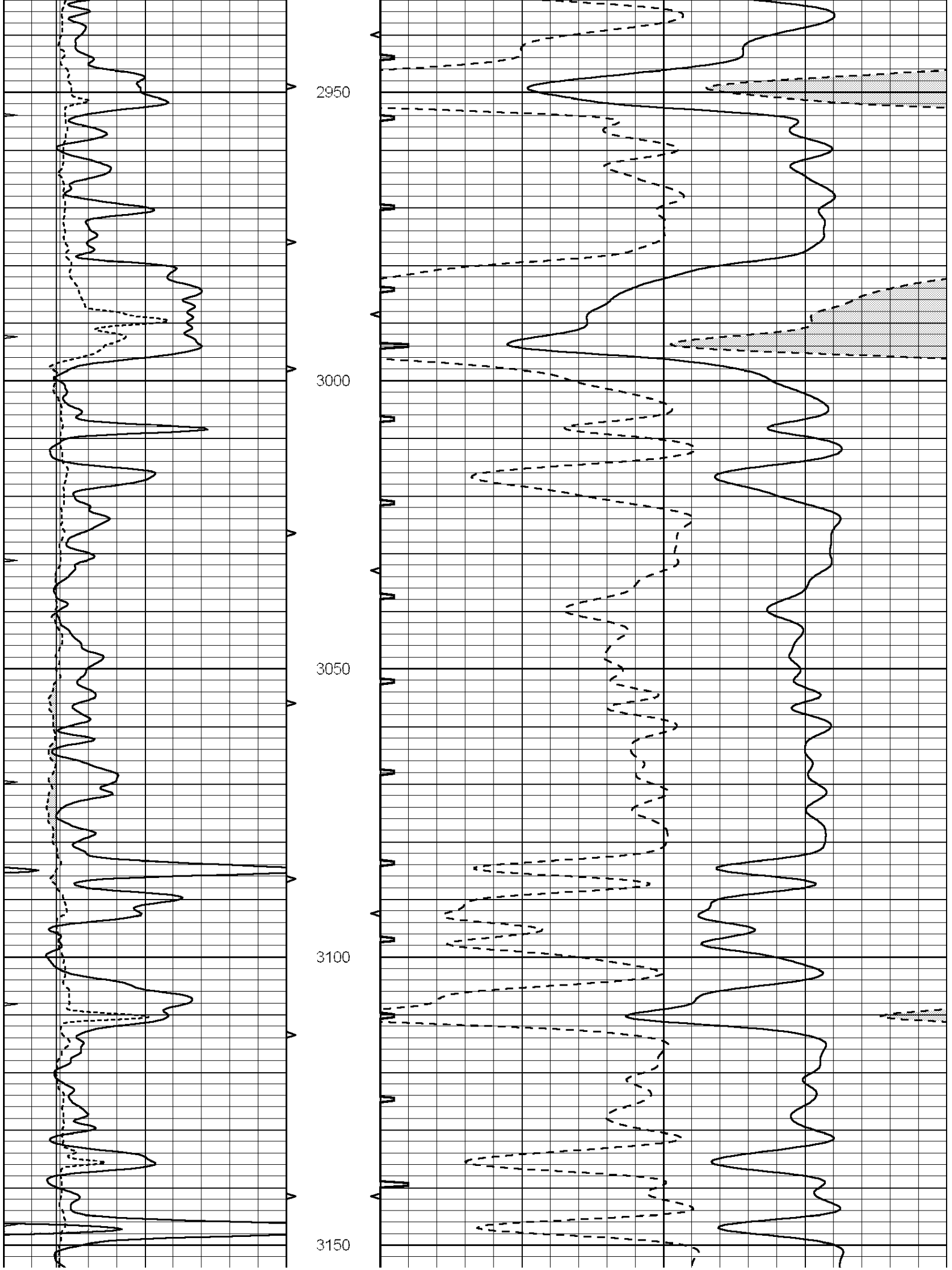

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1900
1950
2000
2050

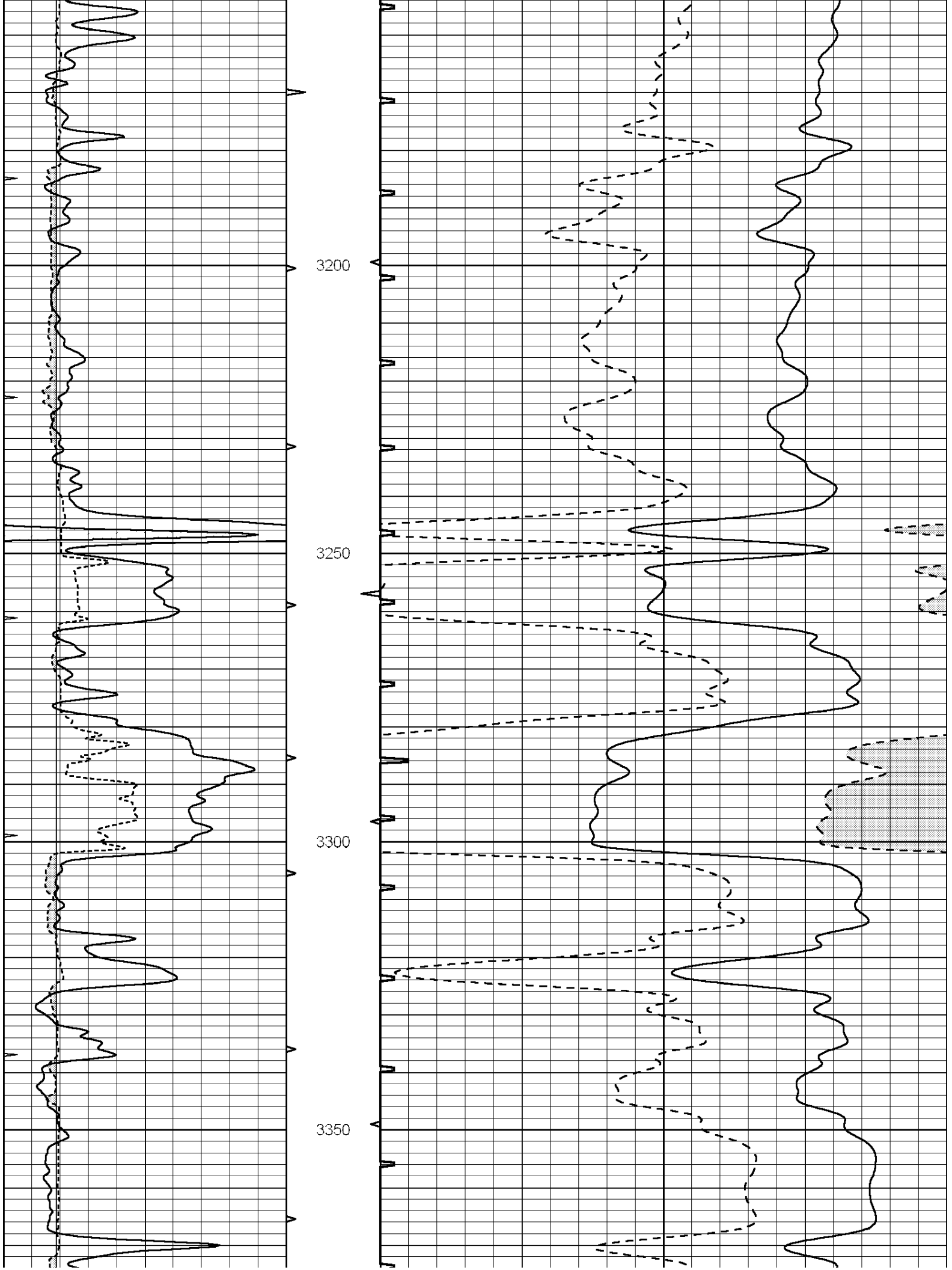

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2200
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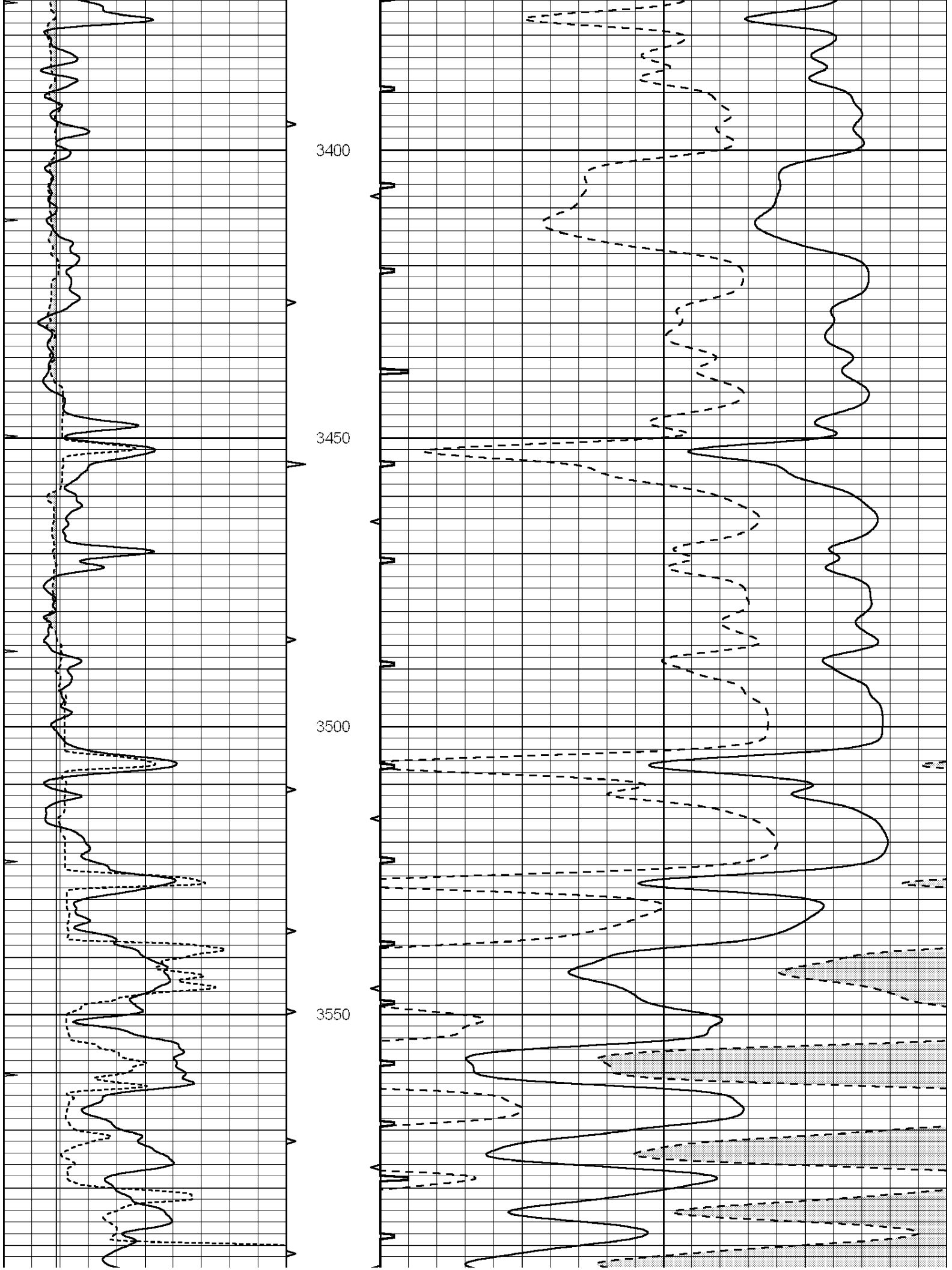

2300
2350
2400
2450

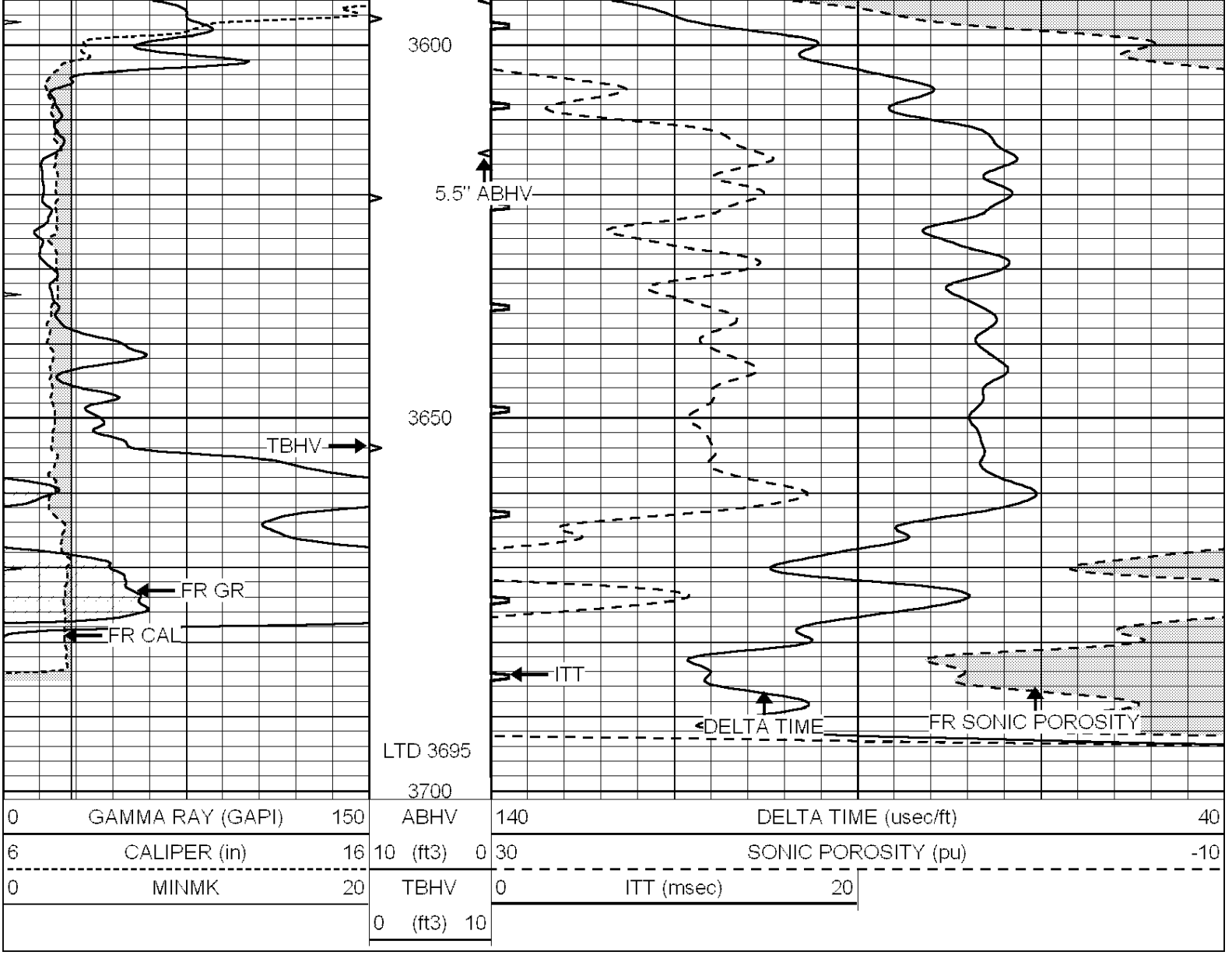

2500
2550
2600
2650
2700


2750
2800
2850
2900


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3000
3050
3100
3150


3200
3250
3300
3350


3400
3450
3500
3550

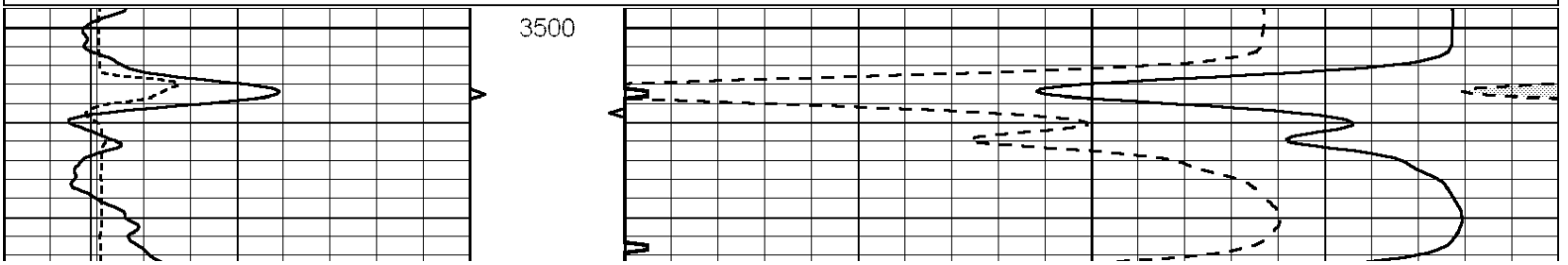


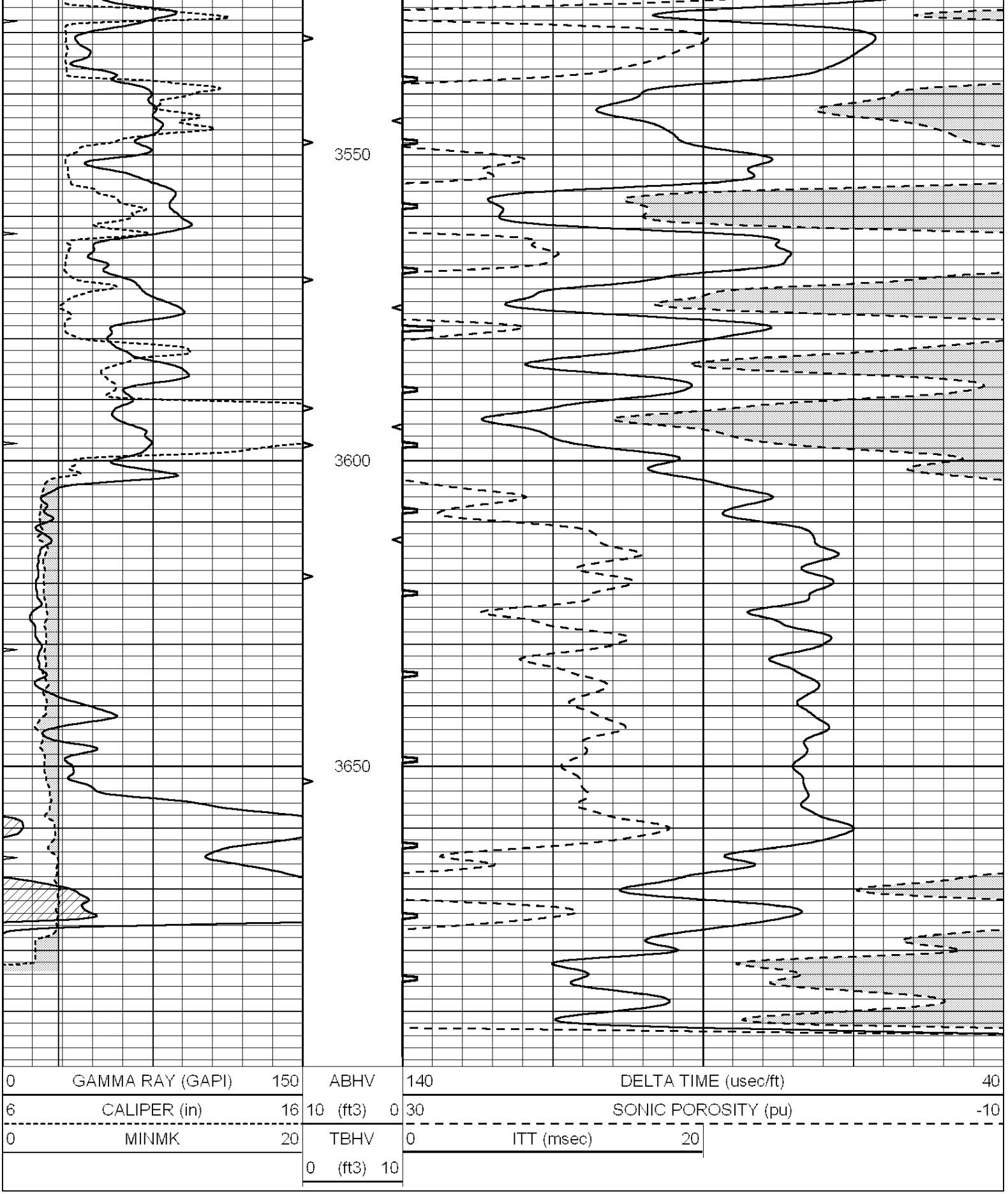
0	GAMMA RAY (GAPI) 150	ABHV	140	DELTA TIME (usec/ft)	40
6	CALIPER (in) 16	10 (ft3) 0	30	SONIC POROSITY (pu)	-10
0	MINMK 20	TBHV	0	ITT (msec) 20	
		0 (ft3) 10			

REPEAT SECTION

Database File: 3339ddn.db
Dataset Pathname: pass5.2
Presentation Format: slt
Dataset Creation: Sat Feb 09 21:14:07 2019
Charted by: Depth in Feet scaled 1:240

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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			




3550
3600
3650
0 GAMMA RAY (GAPI) 150
6 CALIPER (in) 16
0 MINMK 20
ABHV
10 (ft3) 0
TBHV
0 (ft3) 10
140 DELTA TIME (usec/ft) 40
30 SONIC POROSITY (pu) -10
0 ITT (msec) 20