MIDWEST WIRELINE

BOREHOLE COMPENSATED SONIC LOG

Company Black Oak Exploration LLC
Well Threlkel Et Al #1-23
Field Wildcat
County Rawlins State Kansas

Location: API # : 15-153-21275-00-00
NE NE NE SE
2485 FSL & 200 FEL
SEC 23 TWP 3S RGE 35W

Other Services
CNL/CDL
MEL/DIL

Permanent Datum Ground Level Elevation 2996
Log Measured From Kelly Bushing
Drilling Measured From KellyBushing

Elevation
K.B. 3002
D.F.
G.L. 2996

Date	12/19/2021		
Run Number	One		
Type Log	BHCS		
Depth Driller	4670		
Depth Logger	4674		
Bottom Logged Interval	4662		
Top Logged Interval	200		
Type Fluid In Hole	Chemical		
Salinity, PPM CL	3700		
Density	9.2		
Level	Full		
Max. Rec. Temp. F	123		
Operating Rig Time	6 Hours		
Equipment -- Location	P-108 HAYS		
Recorded By	T. Martin		
Witnessed By	Clayton Camozzi		

Borehole Record

Run No.	Bit	From	To
One	12.25	00	239
Two	7.875	239	TD

Casing Record

Size	Wgt.	From	To
8.625	23	00	239

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Midwest Wireline LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Midwest Wireline LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Atwood, KS, W to Rd 12,
1/2 S, W into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew	This Log Record Was Witnessed By
Engineer: T. Martin	Primary Witness: Clayton Camozzi
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\black oak_threlkel et al #1-23.db
Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	123	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	1090	50	Off	4674

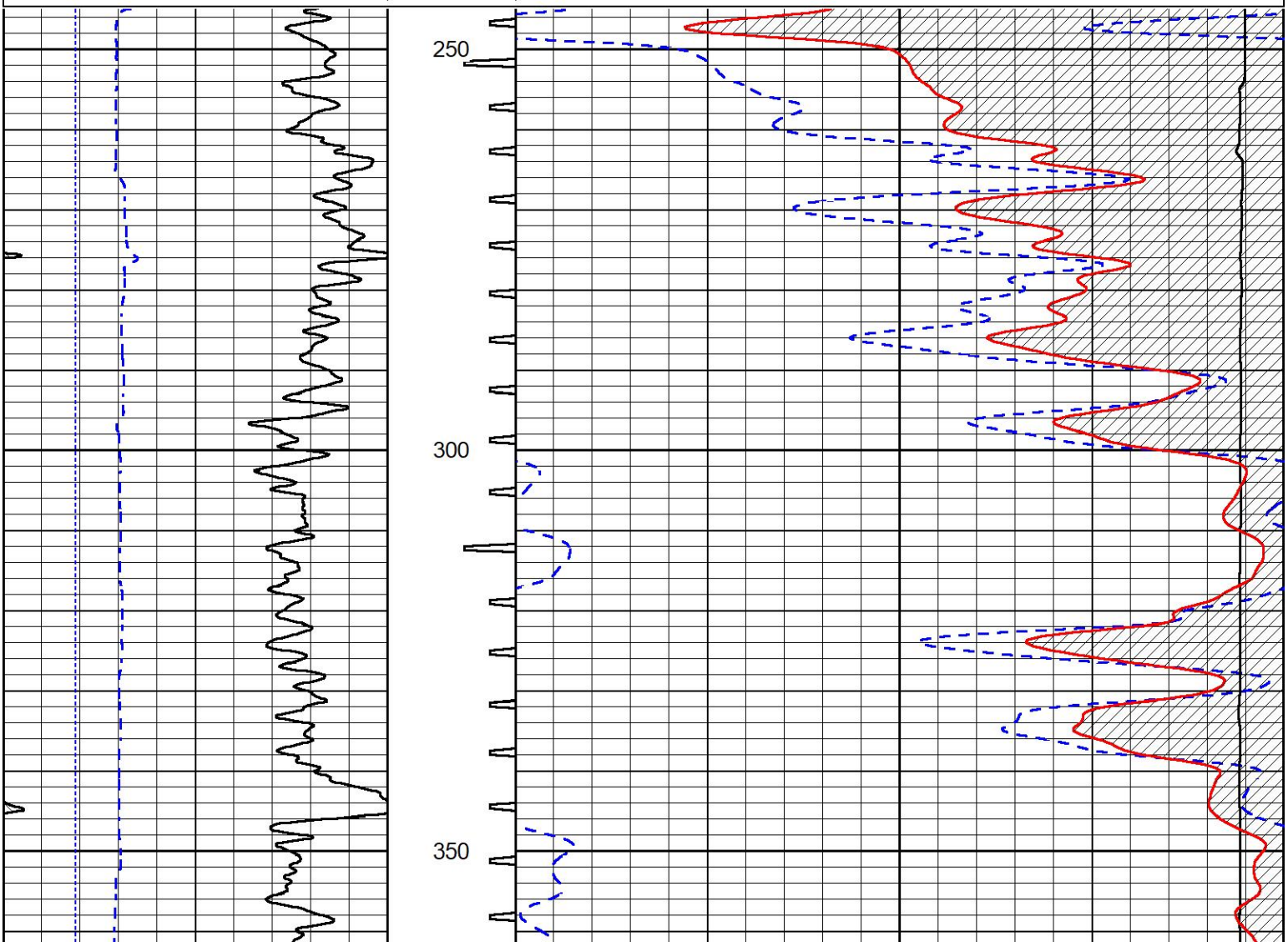
MIDWEST WIRELINE

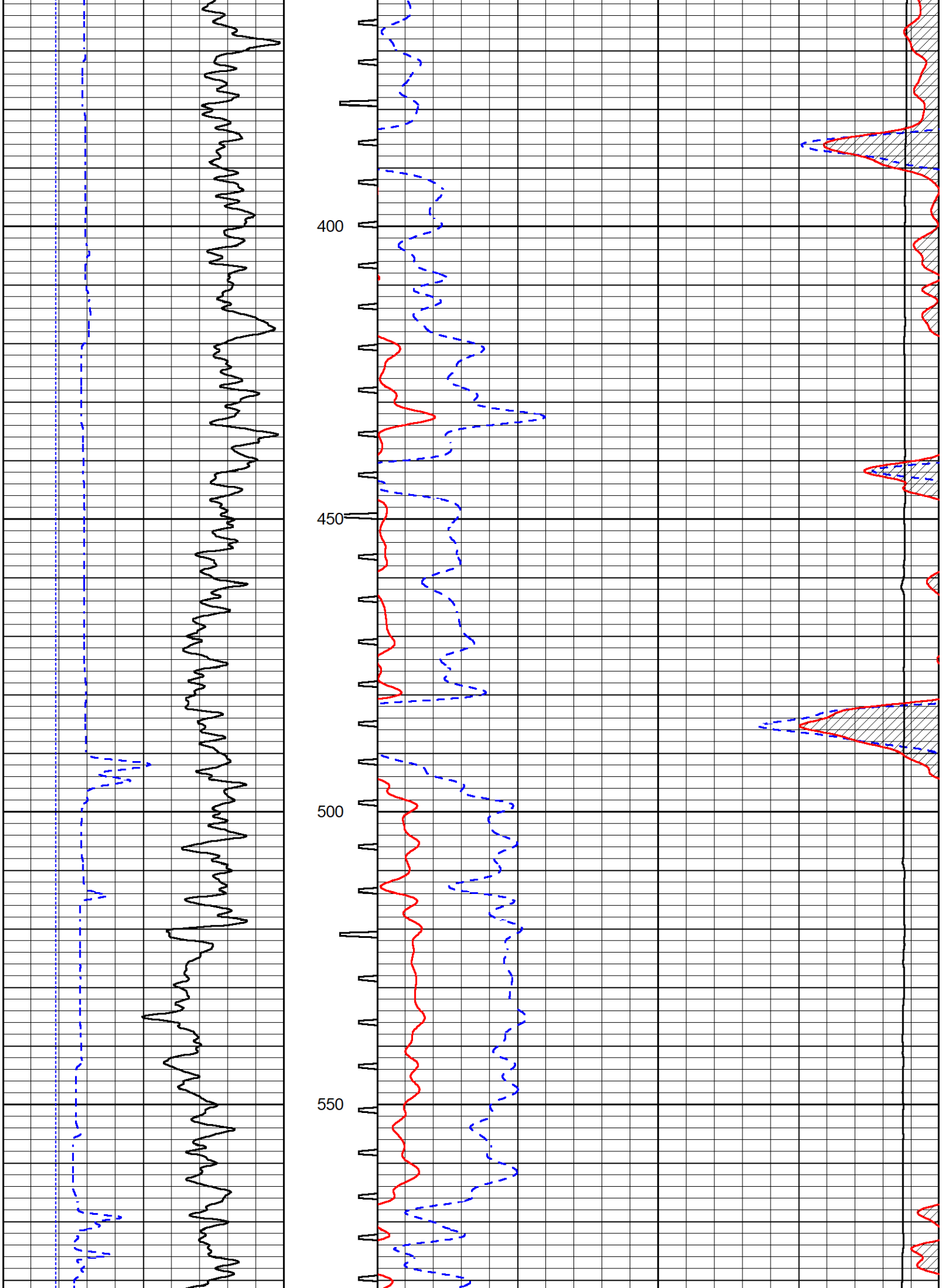
DETAIL SECTION

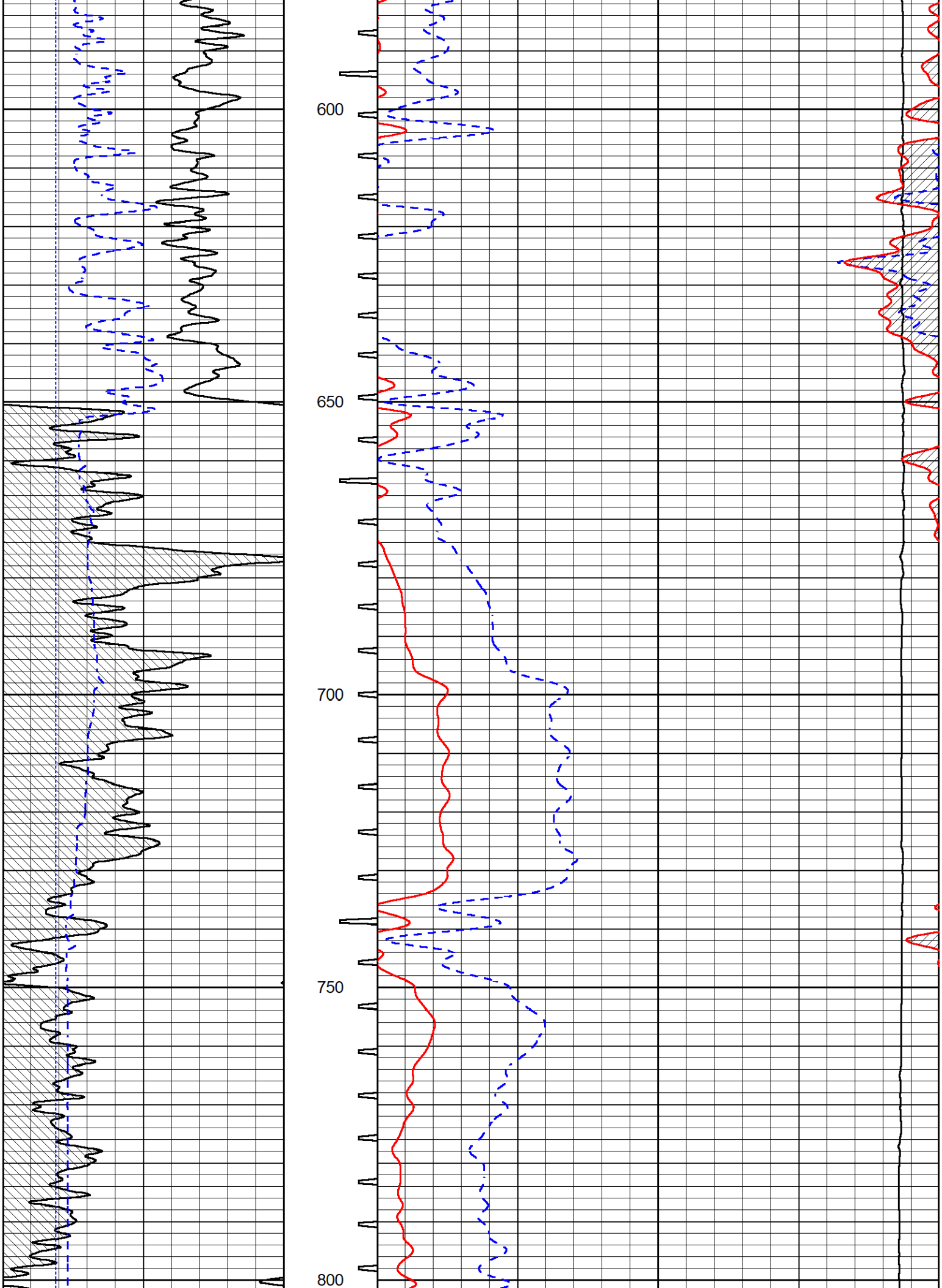
MAIN PASS

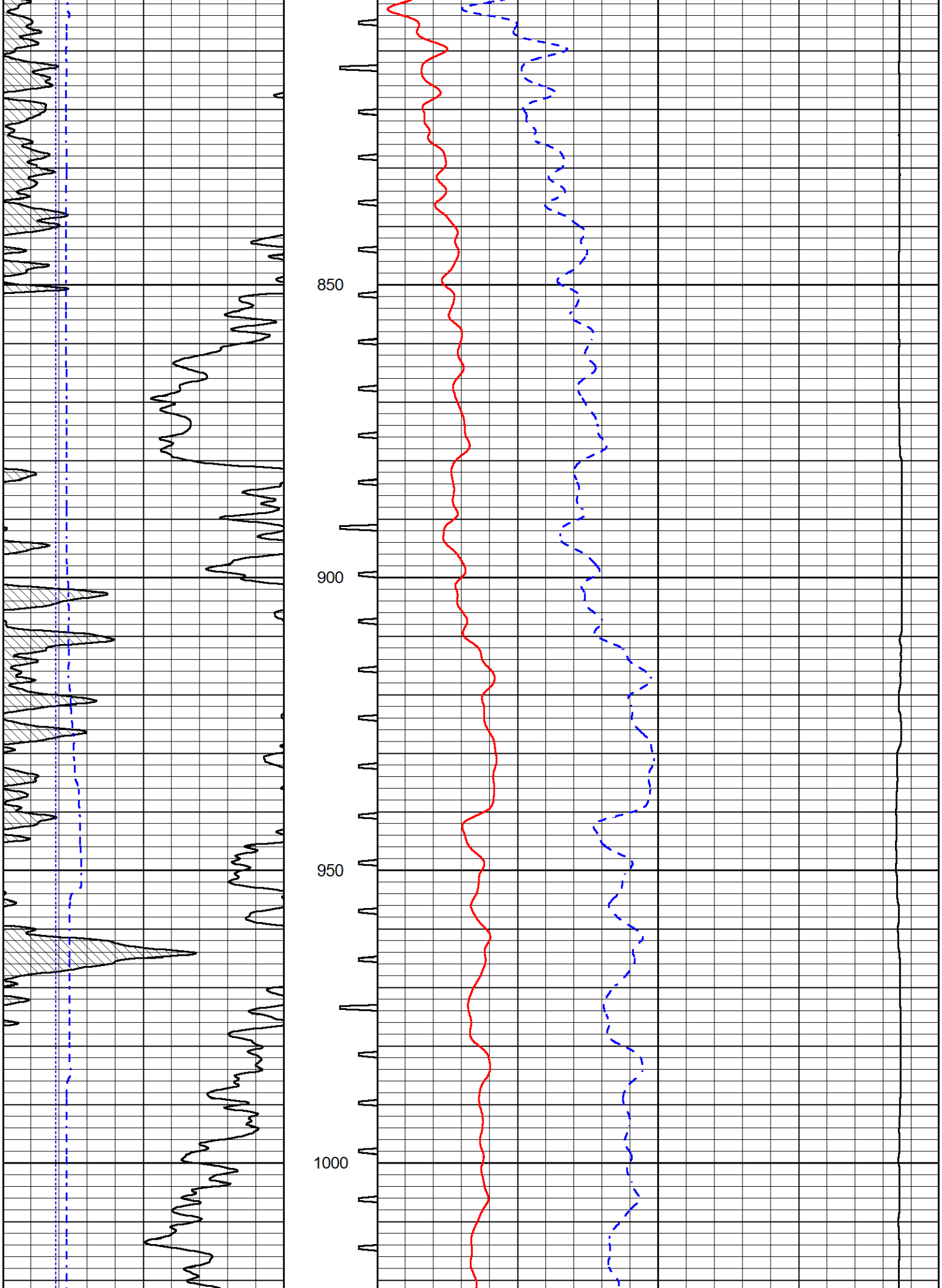
Database File	black oak_threlkel et al #1-23.db
Dataset Pathname	StkMI/pass3.1
Presentation Format	_sonic
Dataset Creation	Sun Dec 19 07:46:59 2021
Charted by	Depth in Feet scaled 1:240

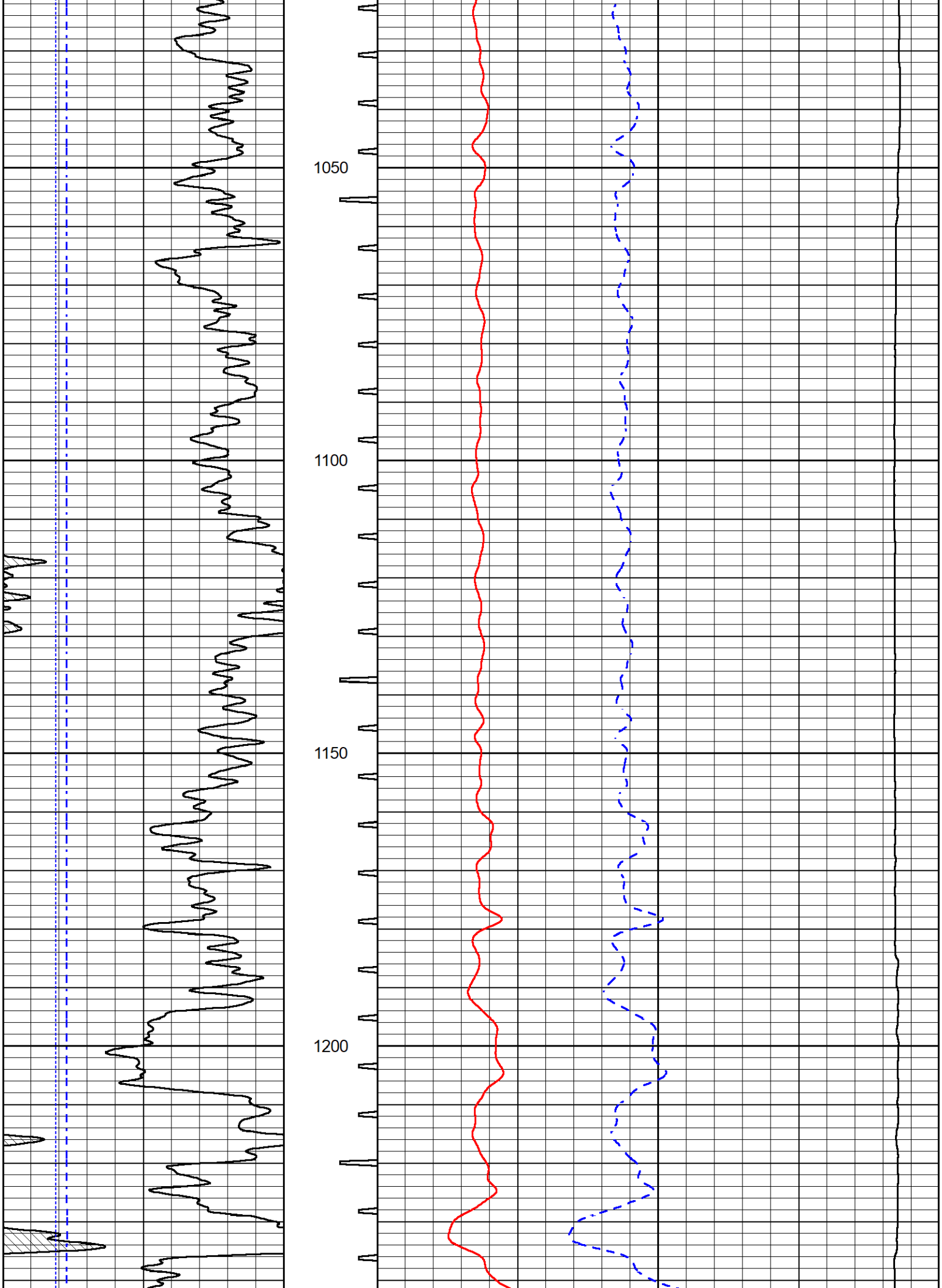
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft) 40
150	GR (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu) (pu) -10
6	Caliper (in)	16		15000	Line Tension (lb) 0

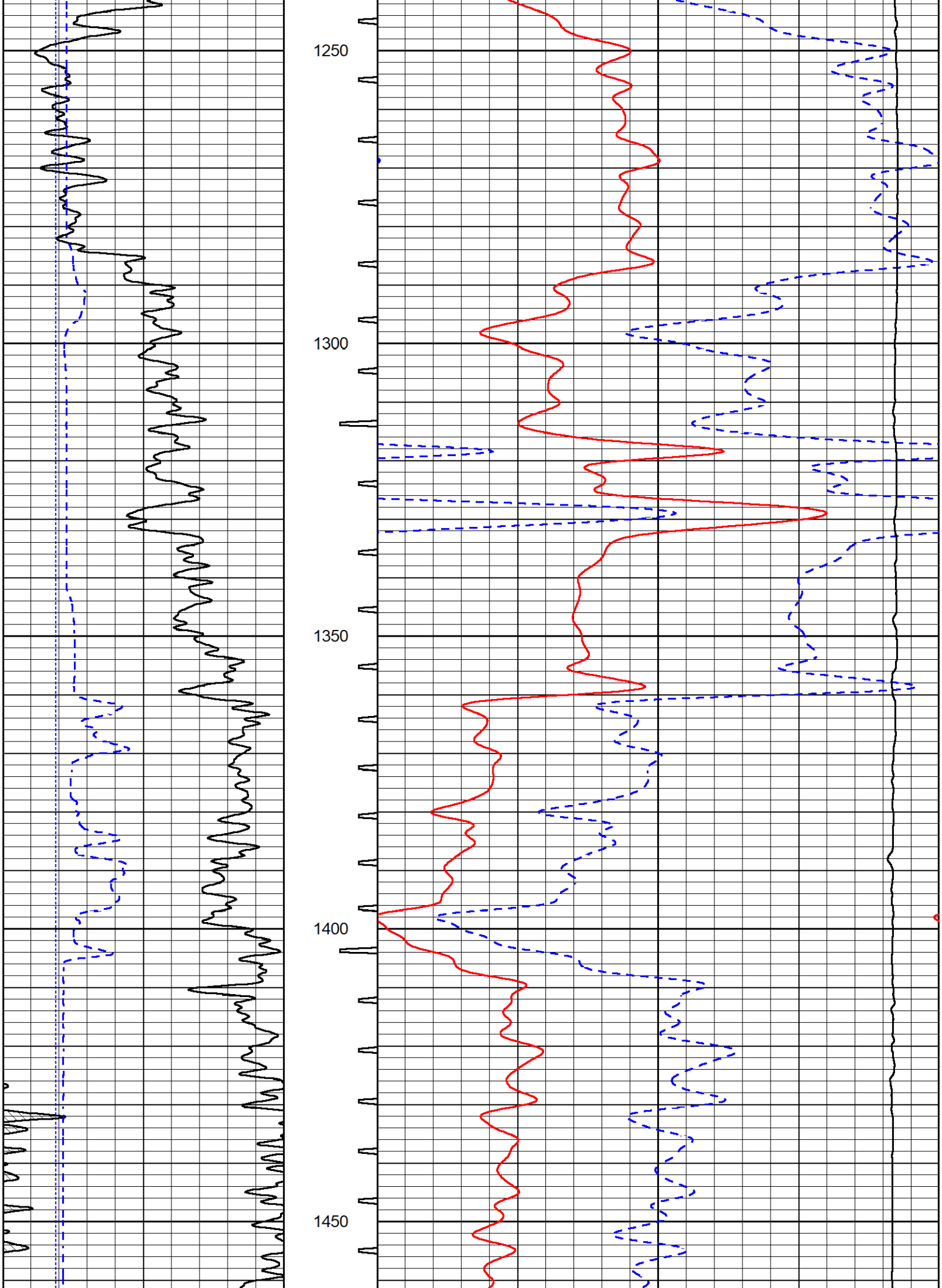


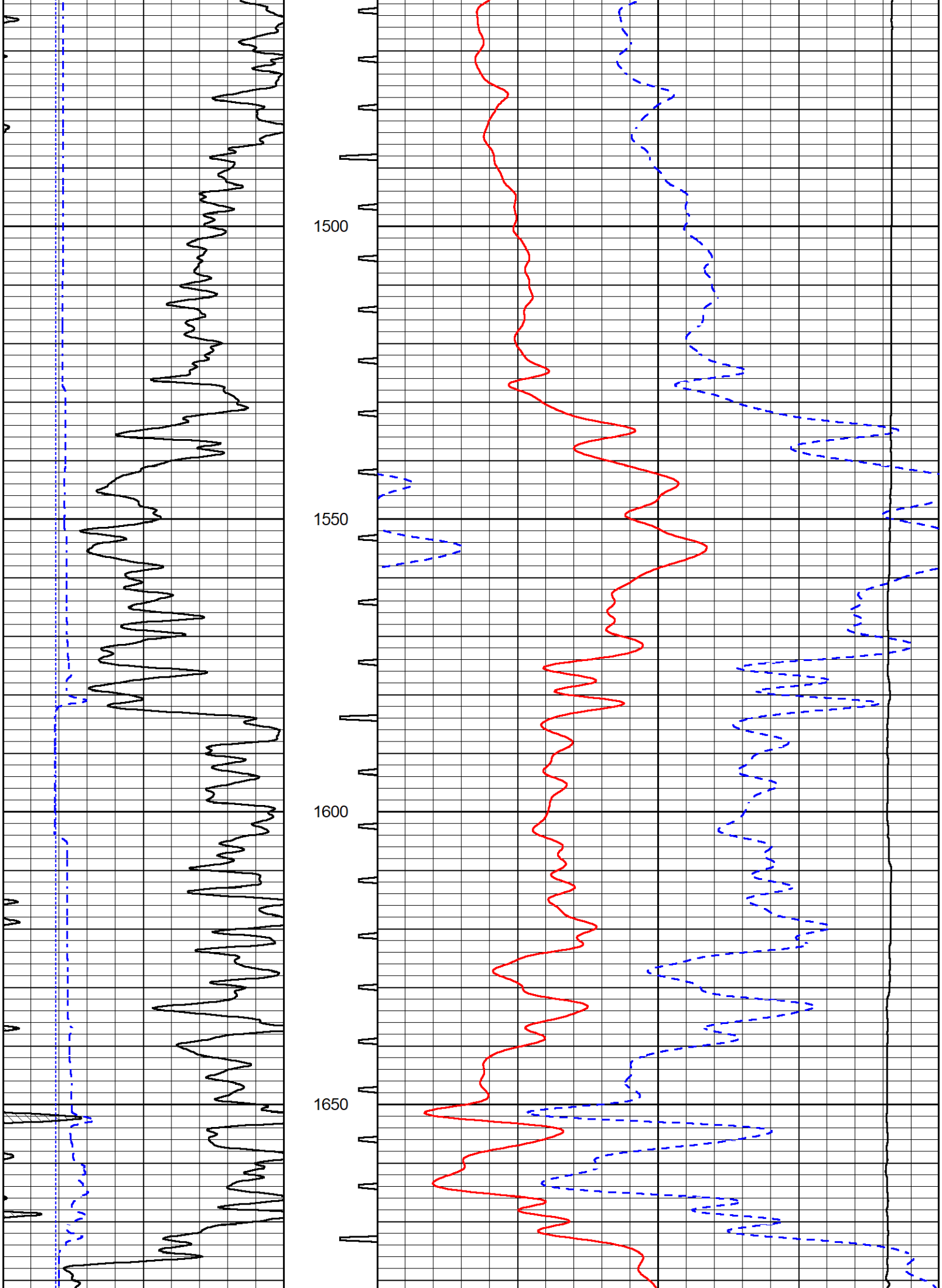

400
450
500
550

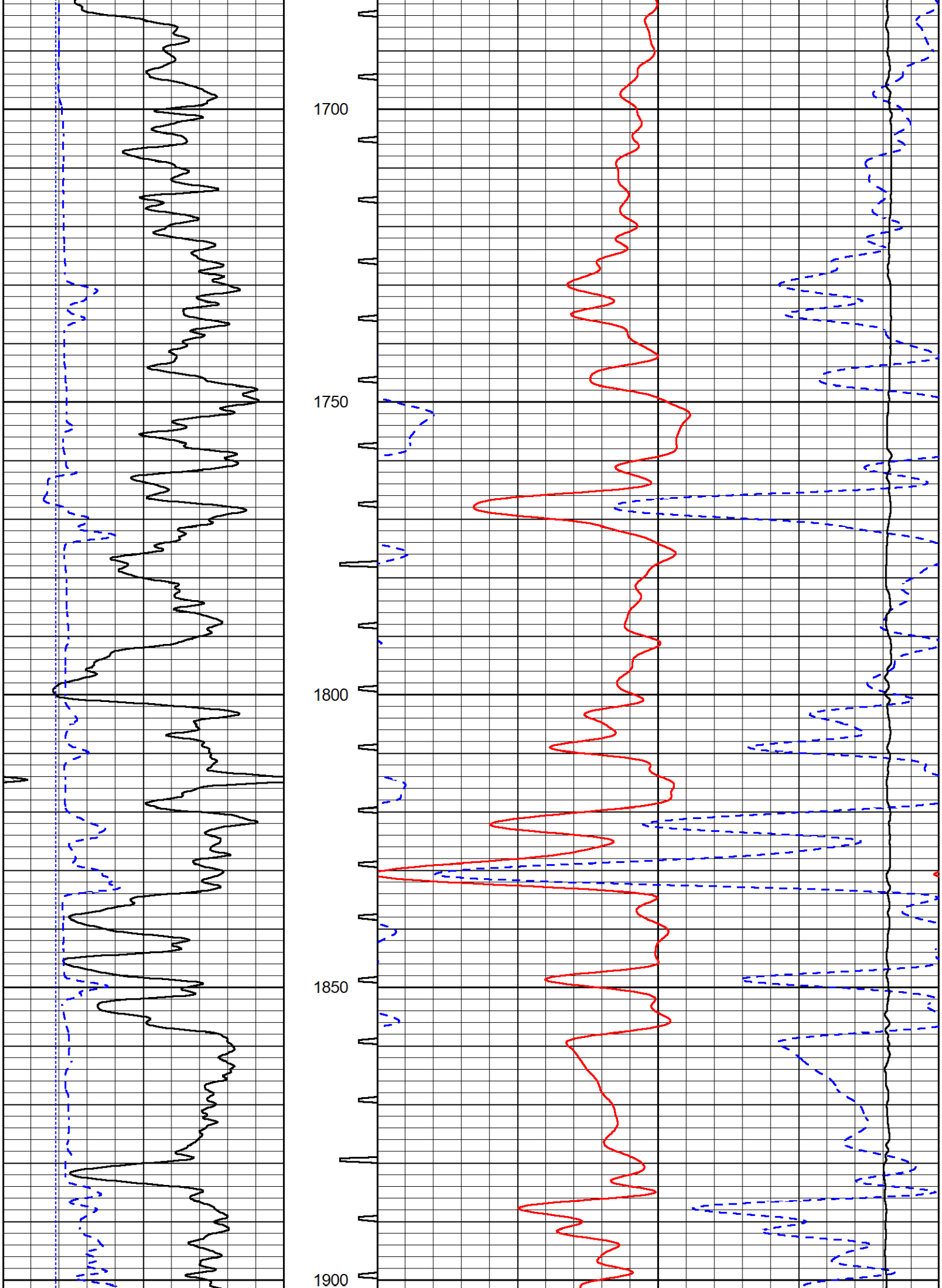

600
650
700
750
800

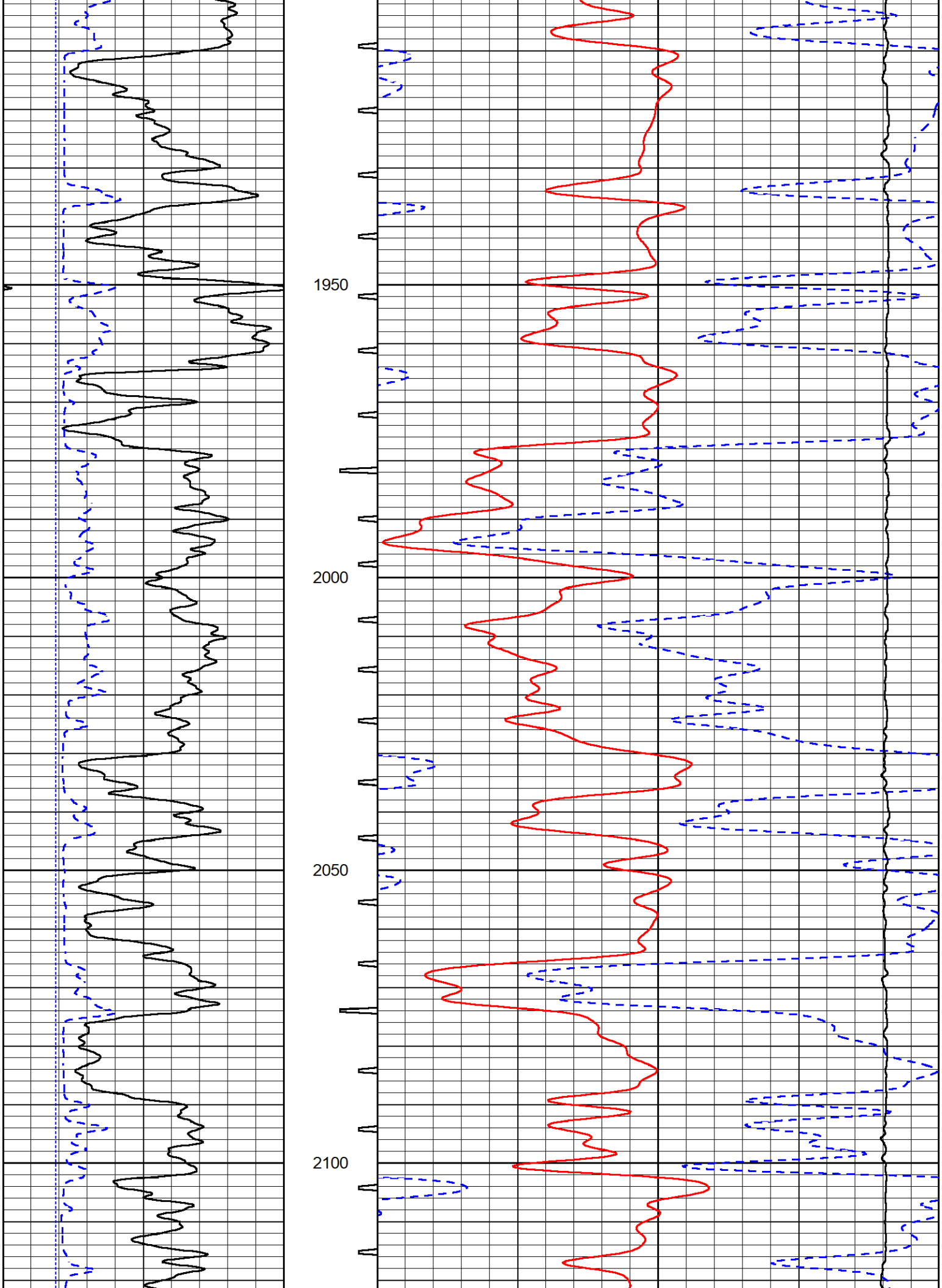

850
900
950
1000

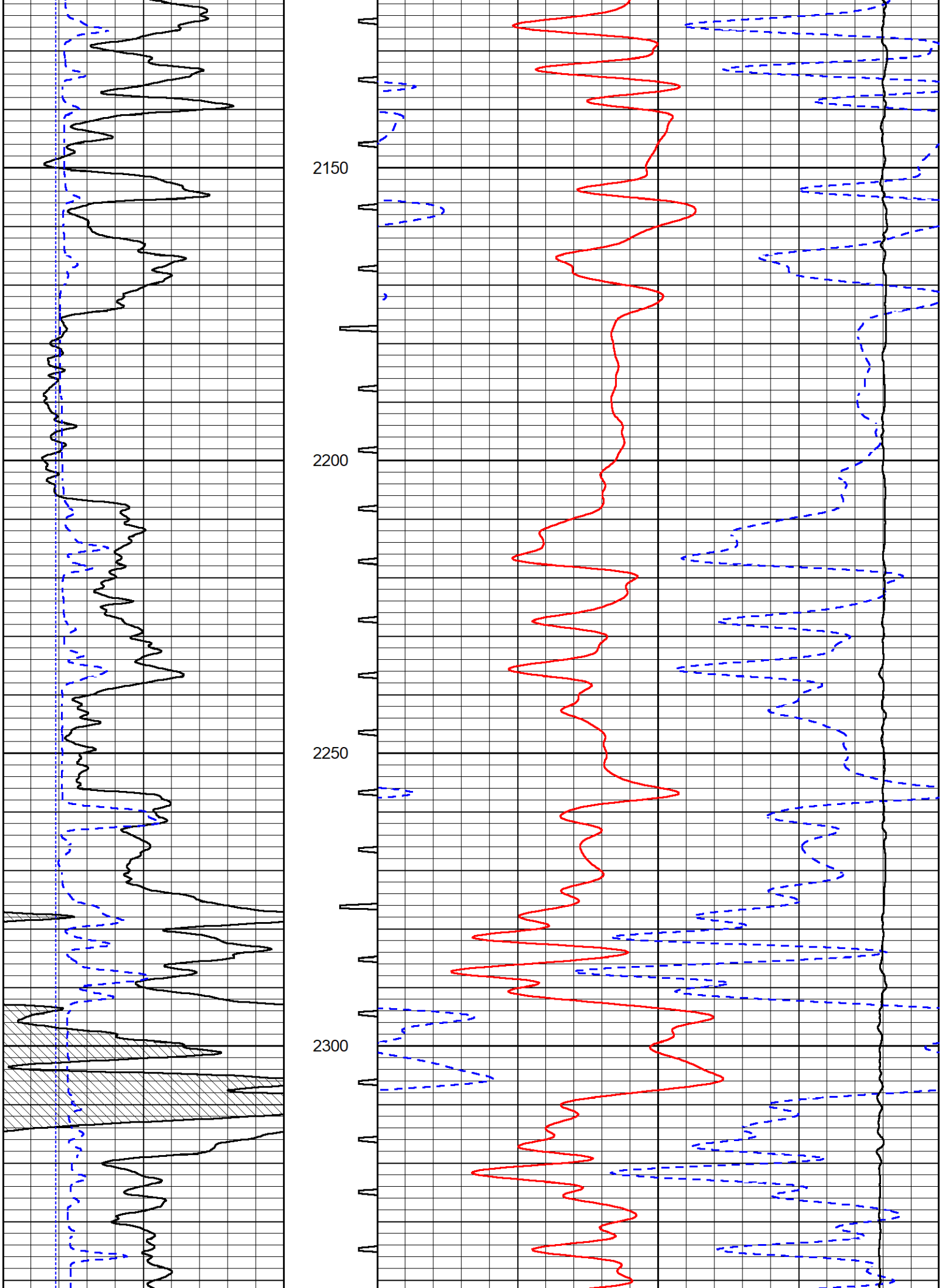

1050
1100
1150
1200

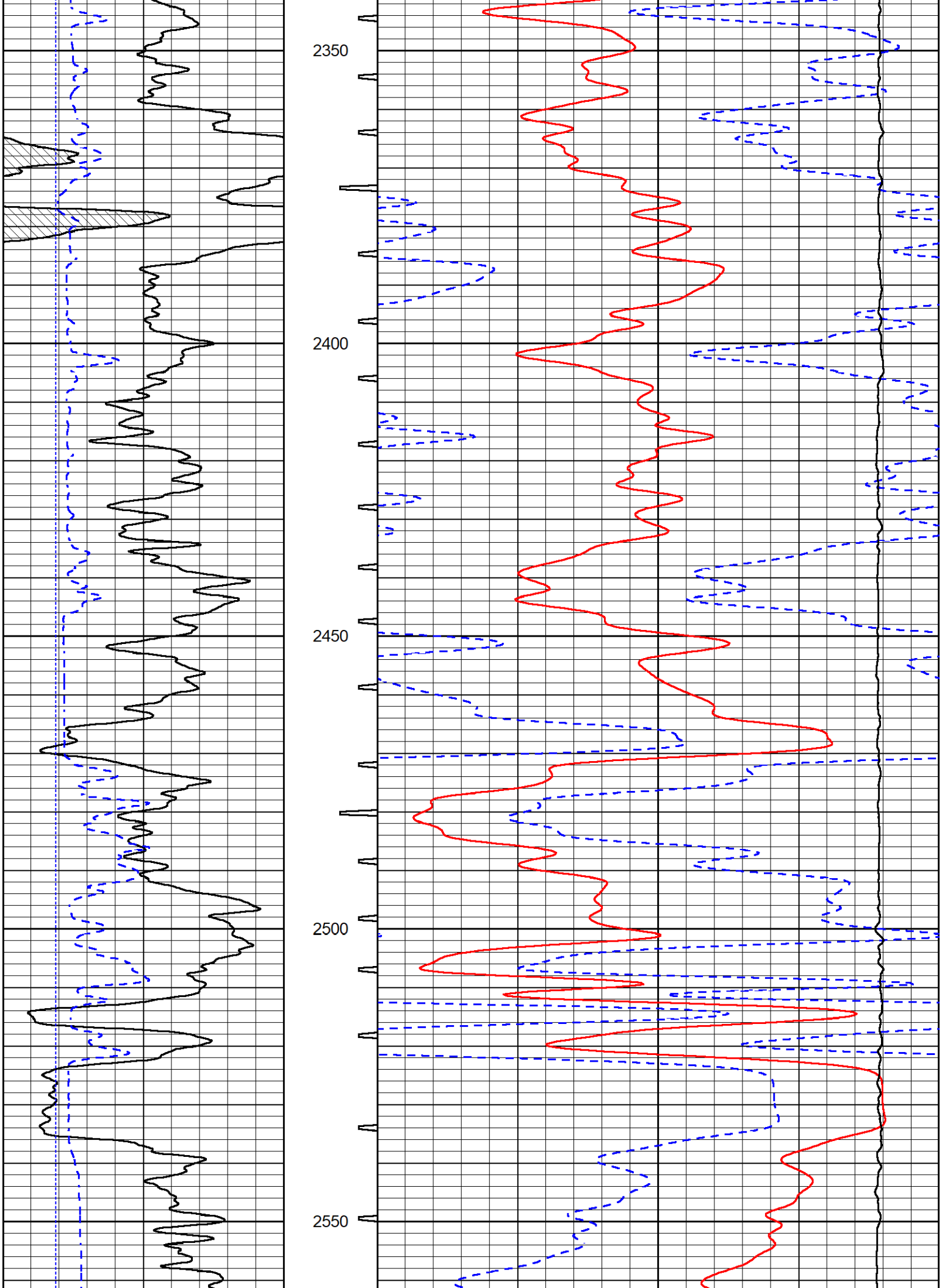

1250
1300
1350
1400
1450

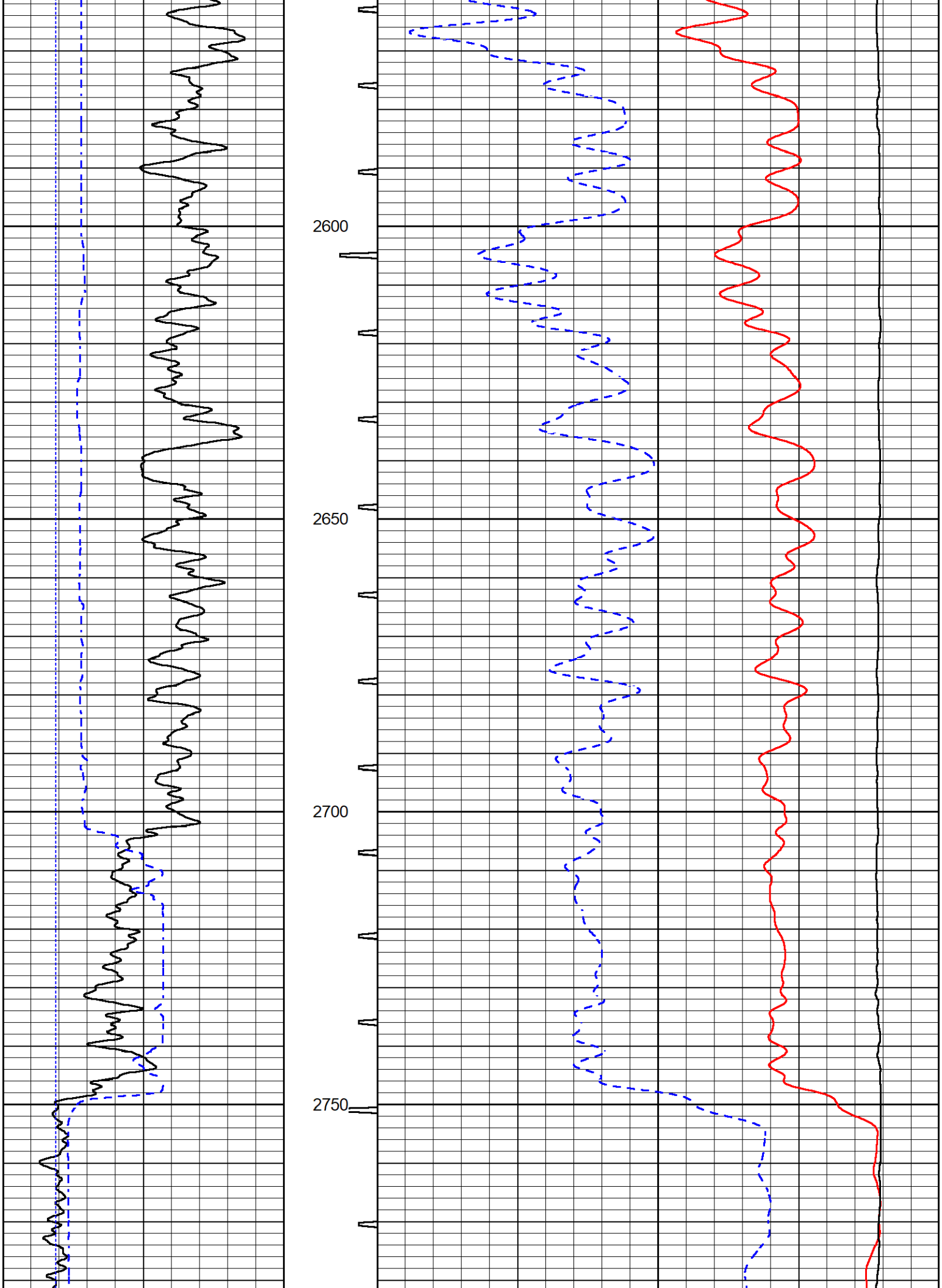

1500
1550
1600
1650

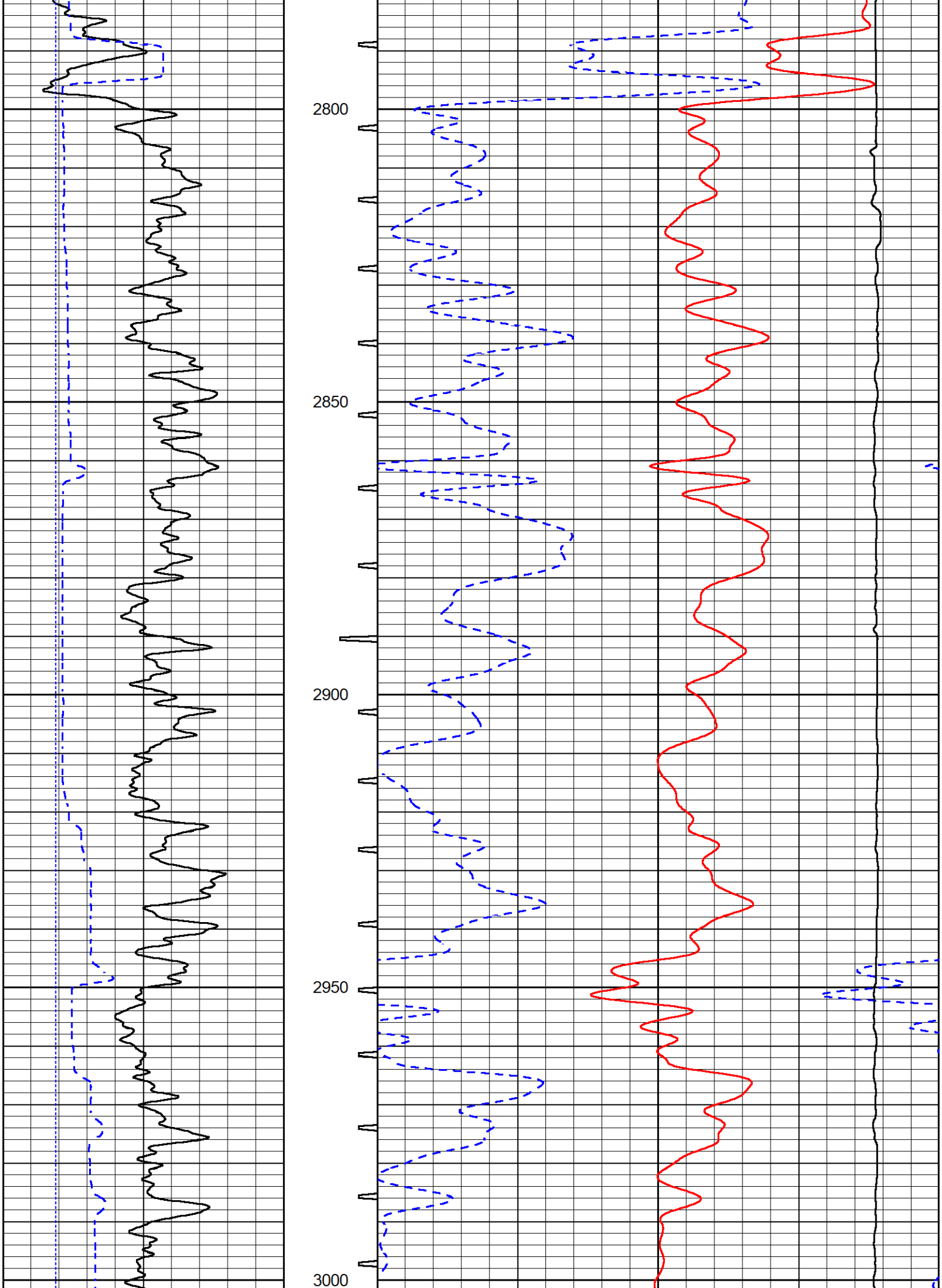

1700
1750
1800
1850
1900

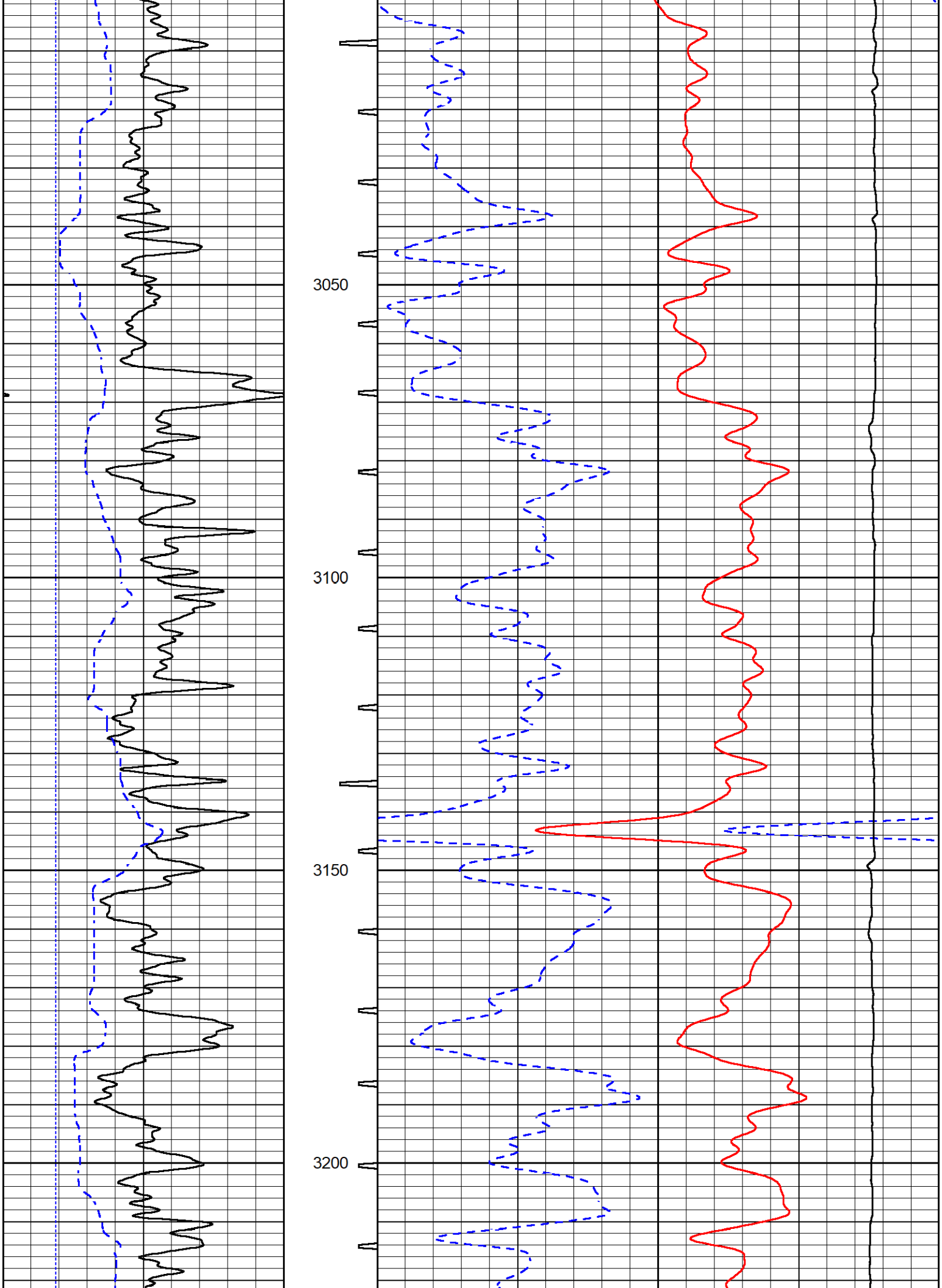

1950
2000
2050
2100

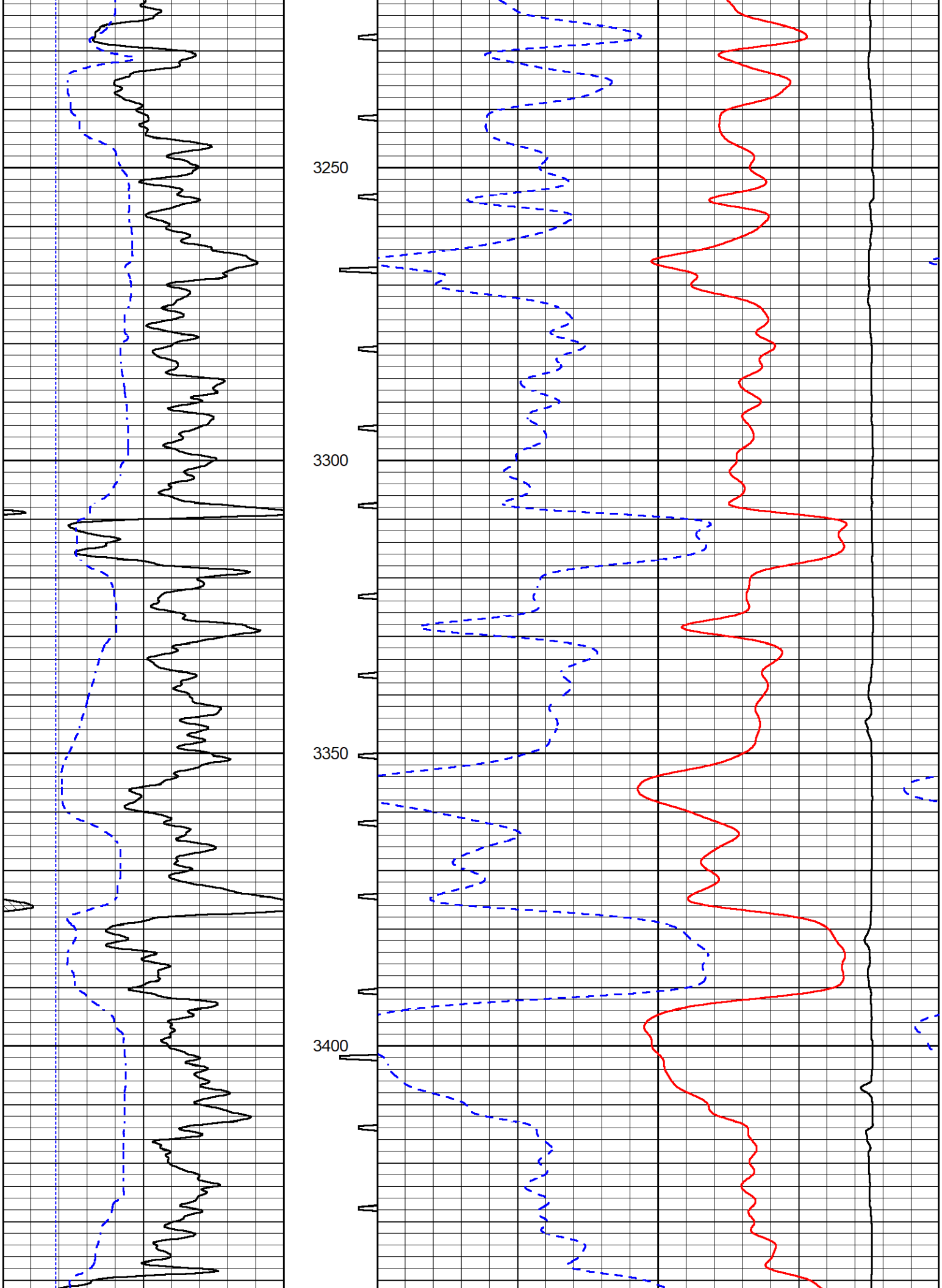

2150
2200
2250
2300

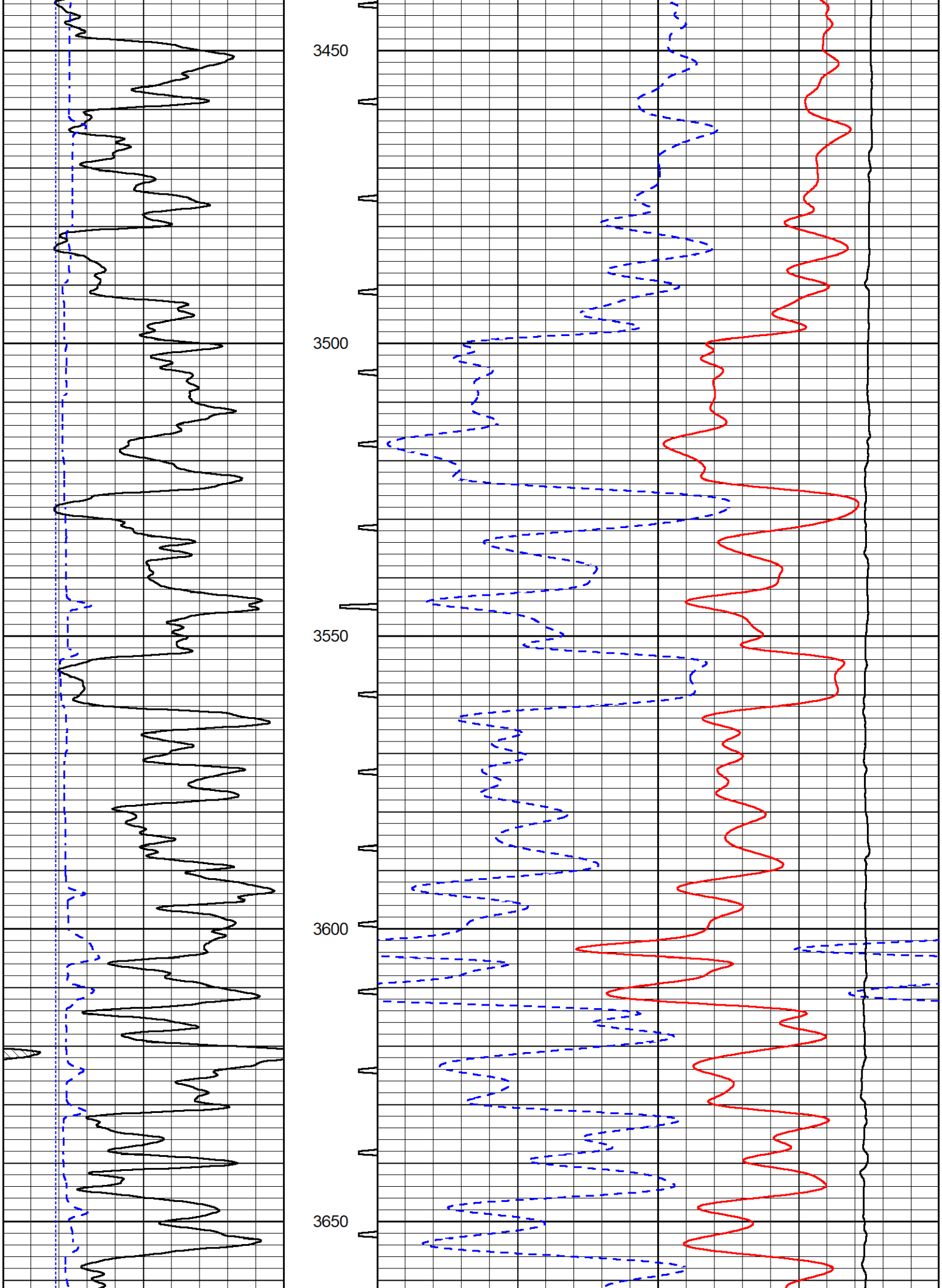

2350
2400
2450
2500
2550

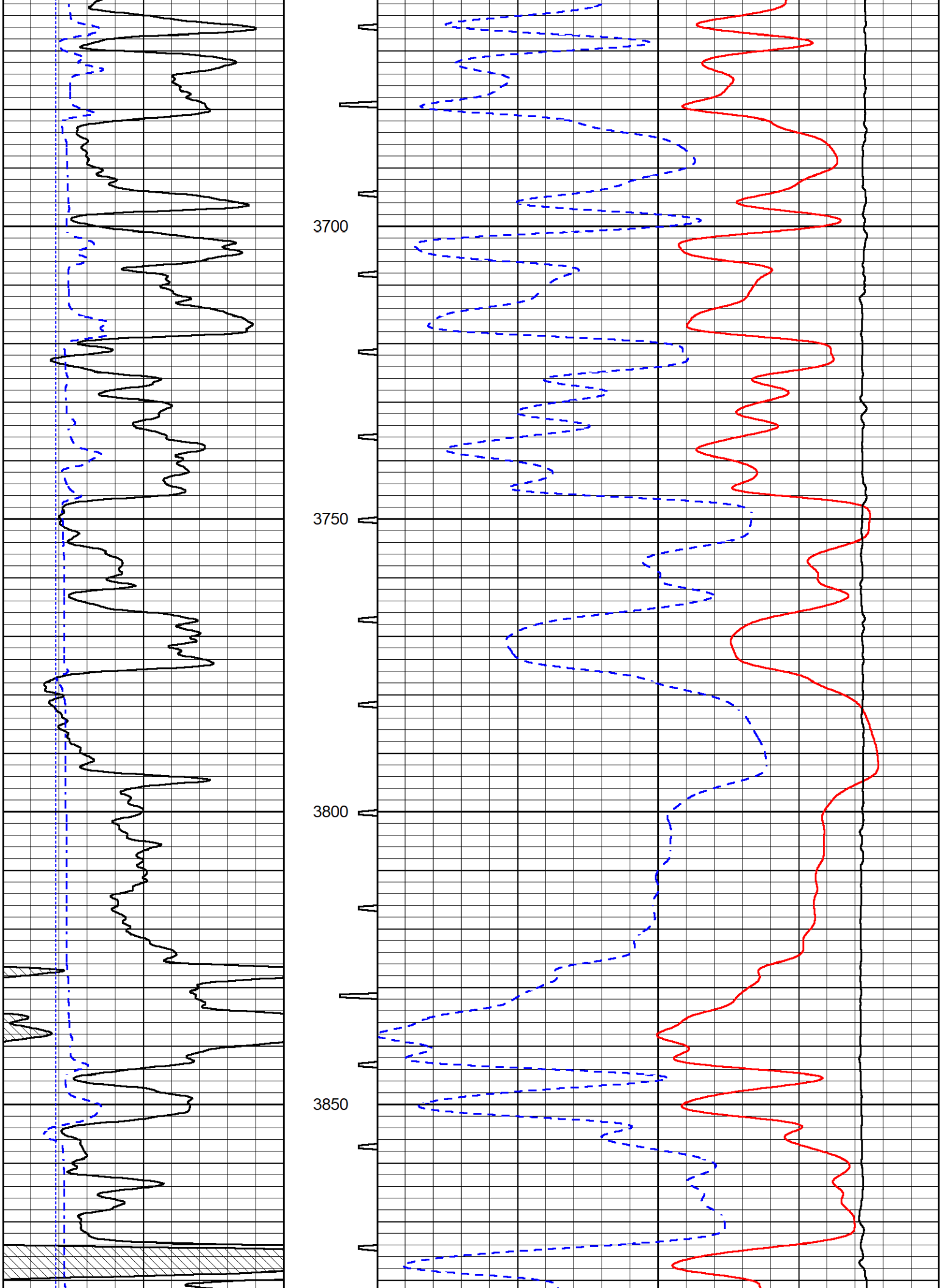

2600
2650
2700
2750

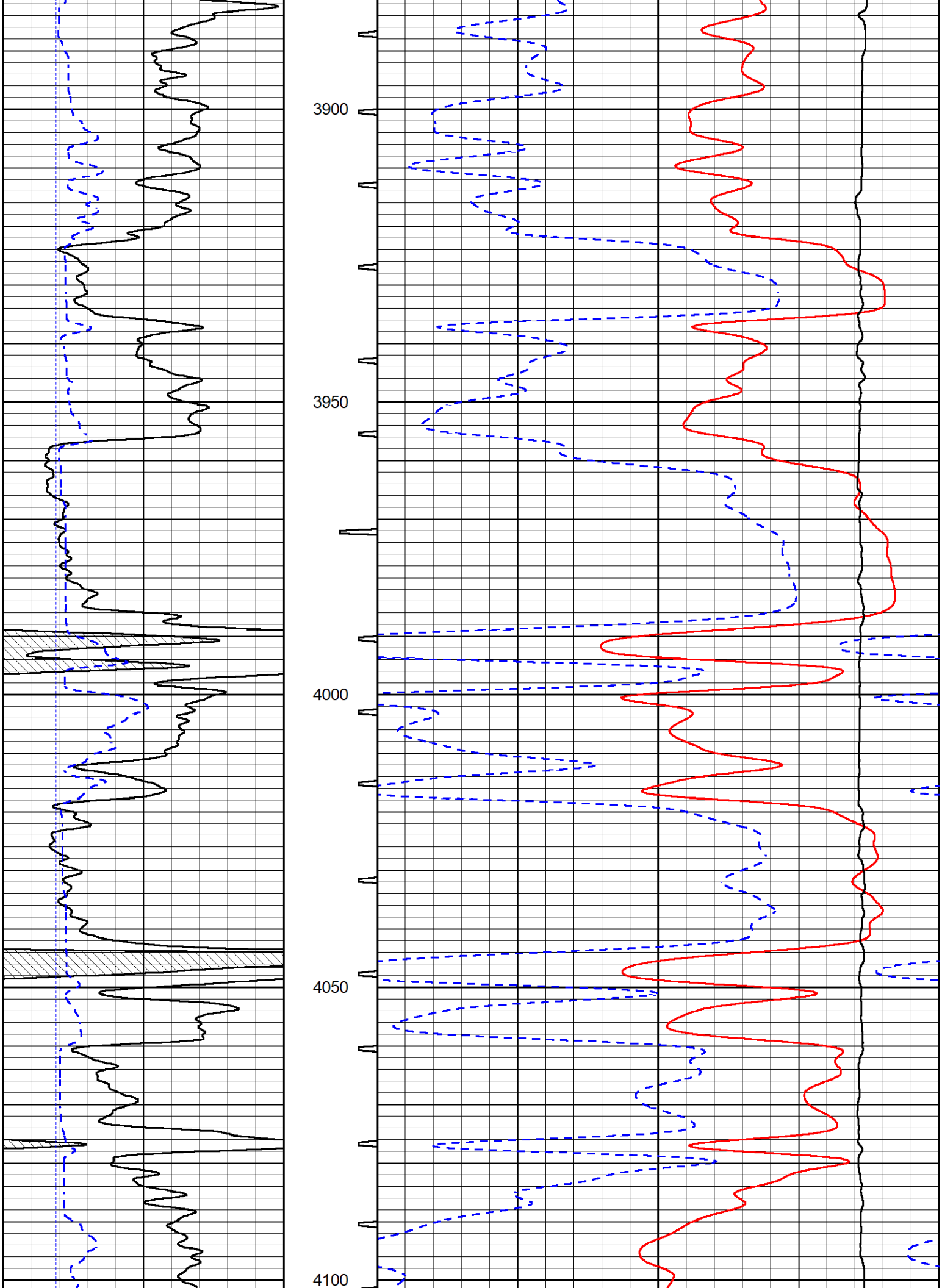

2800
2850
2900
2950
3000

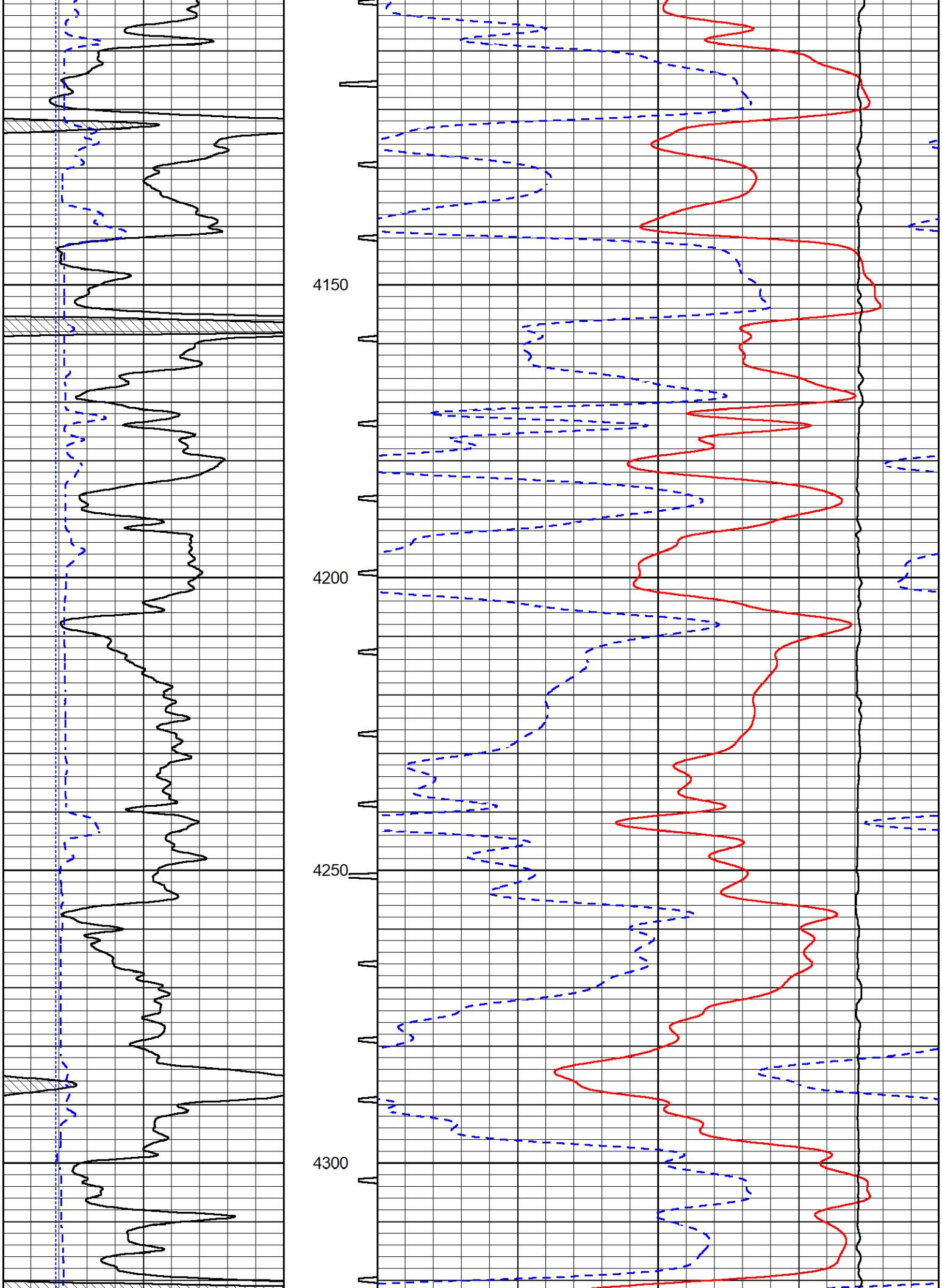

3050
3100
3150
3200

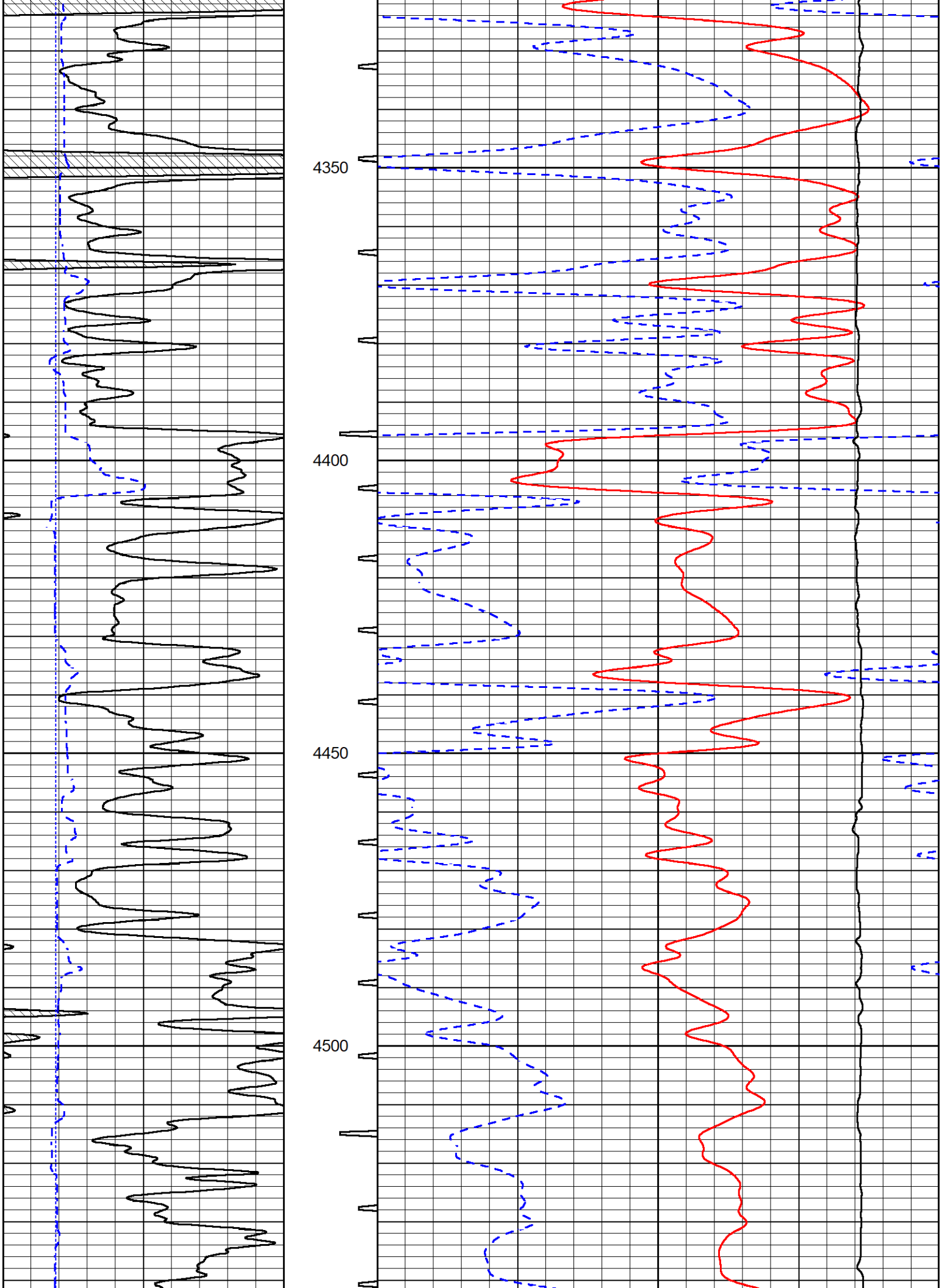

3250
3300
3350
3400

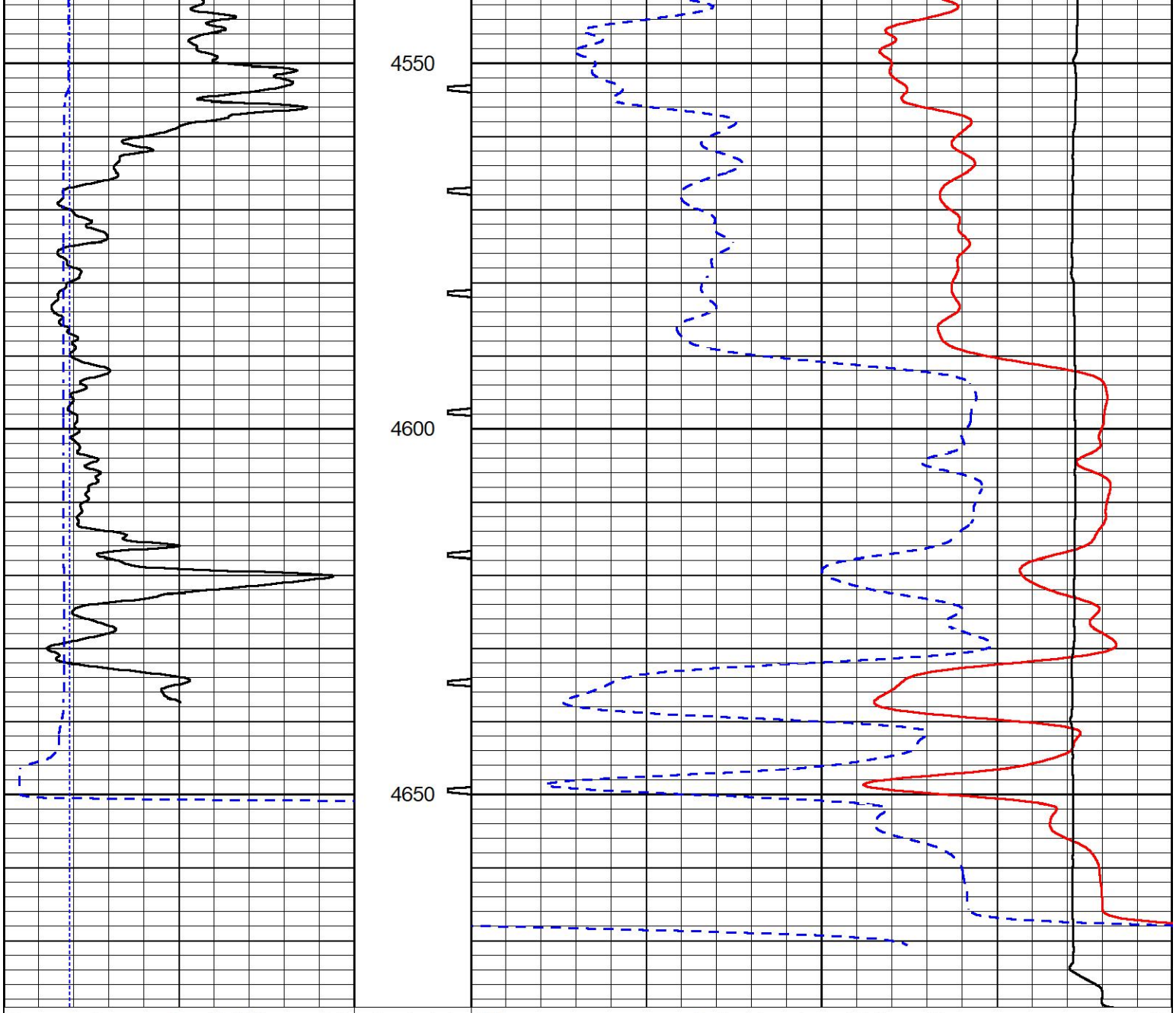

3450
3500
3550
3600
3650


3700
3750
3800
3850


3900
3950
4000
4050
4100


4150
4200
4250
4300


4350
4400
4450
4500

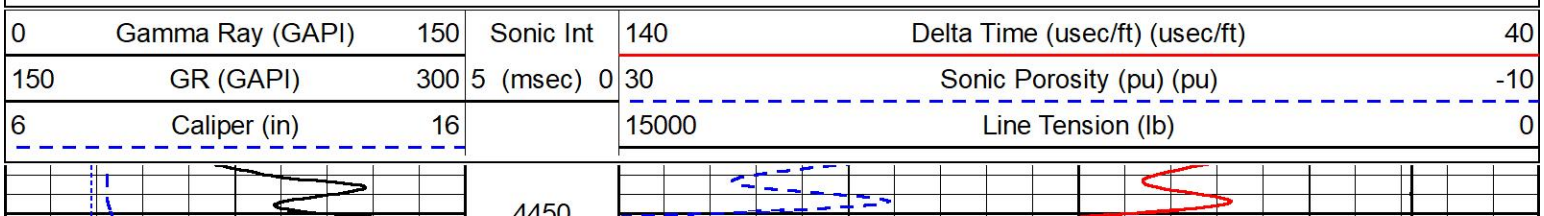


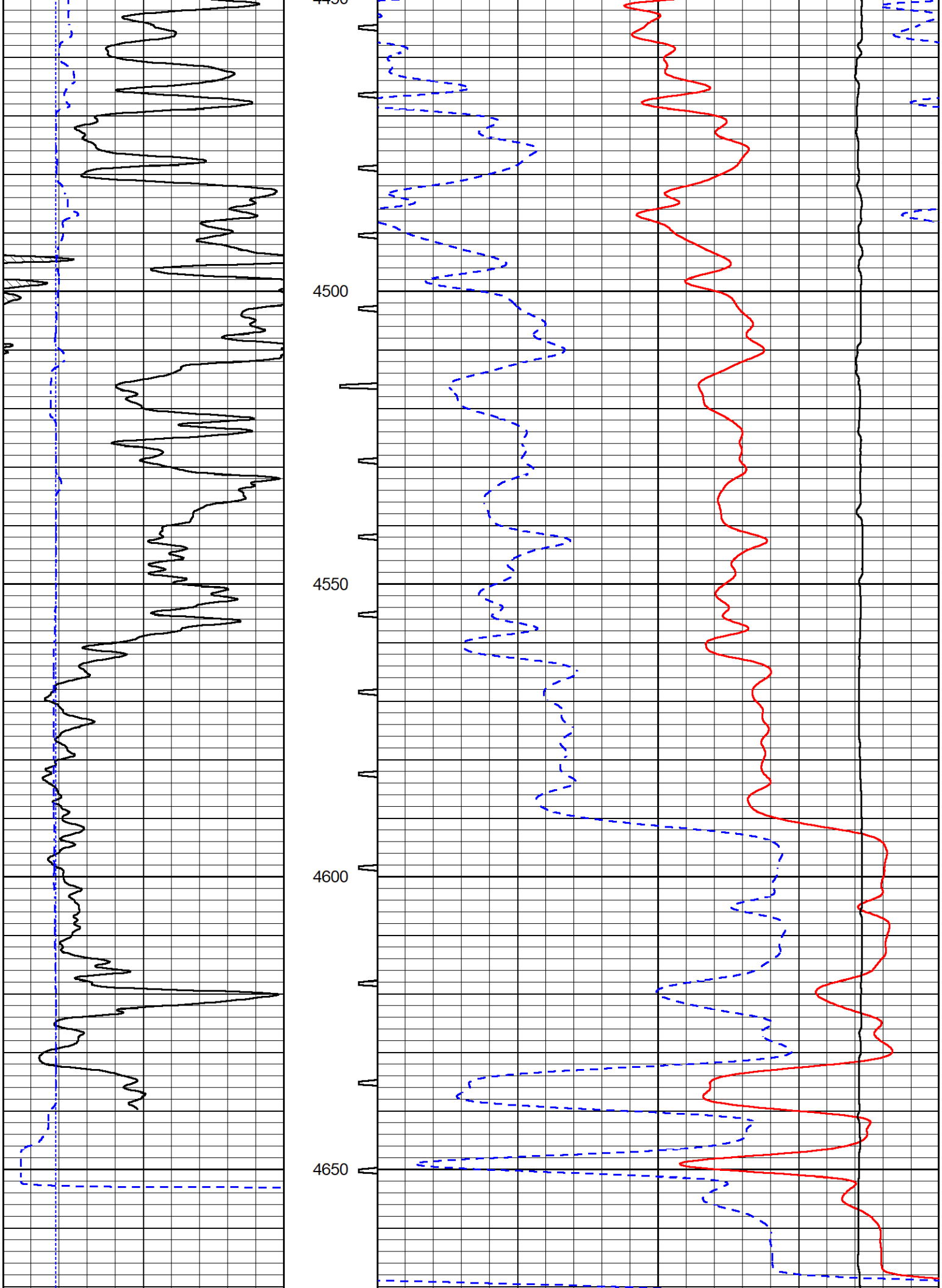
REPEAT SECTION

REPEAT PASS

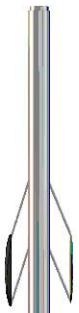
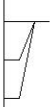
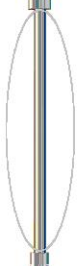
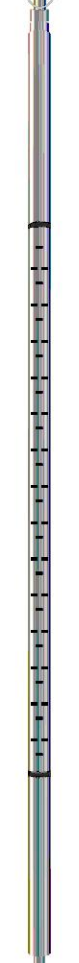
MIDWEST WIRELINE

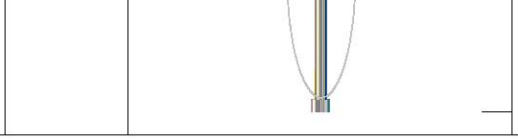
Database File	black oak_threlkel et al #1-23.db
Dataset Pathname	StkMI/pass2.11
Presentation Format	_sonic
Dataset Creation	Sun Dec 19 06:40:36 2021
Charted by	Depth in Feet scaled 1:240




4500
4550
4600
4650

0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	GR (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu) (pu)	-10
6	Caliper (in)	16		15000	Line Tension (lb)	0

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			ML-PENGO (P003)	5.50	3.50	100.00
MCAL	25.42					
MI	25.42					
MN	25.42					
			CENT-PENGO	4.25	3.00	70.00
						
WVF4	12.50		SLT-PENGO (602)	15.92	3.50	300.00
WVF1	12.50					
WVF3	10.50					
WVF2	10.50					
			CENT-PENGO	4.25	3.00	70.00



Dataset:	black oak_threlkel et al #1-23.db: field/well/SonMel/pass3
Total length:	29.92 ft
Total weight:	540.00 lb
O.D.:	3.50 in

MIDWEST WIRELINE

Company	Black Oak Exploration LLC
Well	Threlkel Et Al #1-23
Field	Wildcat
County	Rawlins
State	Kansas