PIONEER

Pioneer Energy Services

Borehole Compensated Sonic Log

API No. 15-195-22,971-00-00

Company H&C Oil Operating, Inc.

Well North Fork Farms #36-1

Field Shaw Creek Southeast

County Trego State Kansas

Location 1320' FSL & 500' FEL

Sec: 36 Twp: 11S Rge: 22W

Other Services
CNL/CDL
MEL/DIL

Elevation
K.B. 2372
D.F.
G.L. 2364

Permanent Datum	Ground Level
Log Measured From	Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing
Date	11/16/2014
Run Number	Two
Type Log	BHC Sonic
Depth Driller	4154
Depth Logger	4154
Bottom Logged Interval	4143
Top Logged Interval	200
Type Fluid In Hole	Chemical
Salinity, PPM CL	4000
Density	9.3
Level	Full
Max. Rec. Temp. F	118
Operating Rig Time	4 1/2 Hours
Equipment -- Location	15 Hays
Recorded By	D.Kerr
Witnessed By	Al Downing

Borehole Record

Run No.	Bit	From	To
1	12.25	00	223
2	7.875	223	4154

Casing Record

Size	Wgt.	From	To
8.625	24#	00	223

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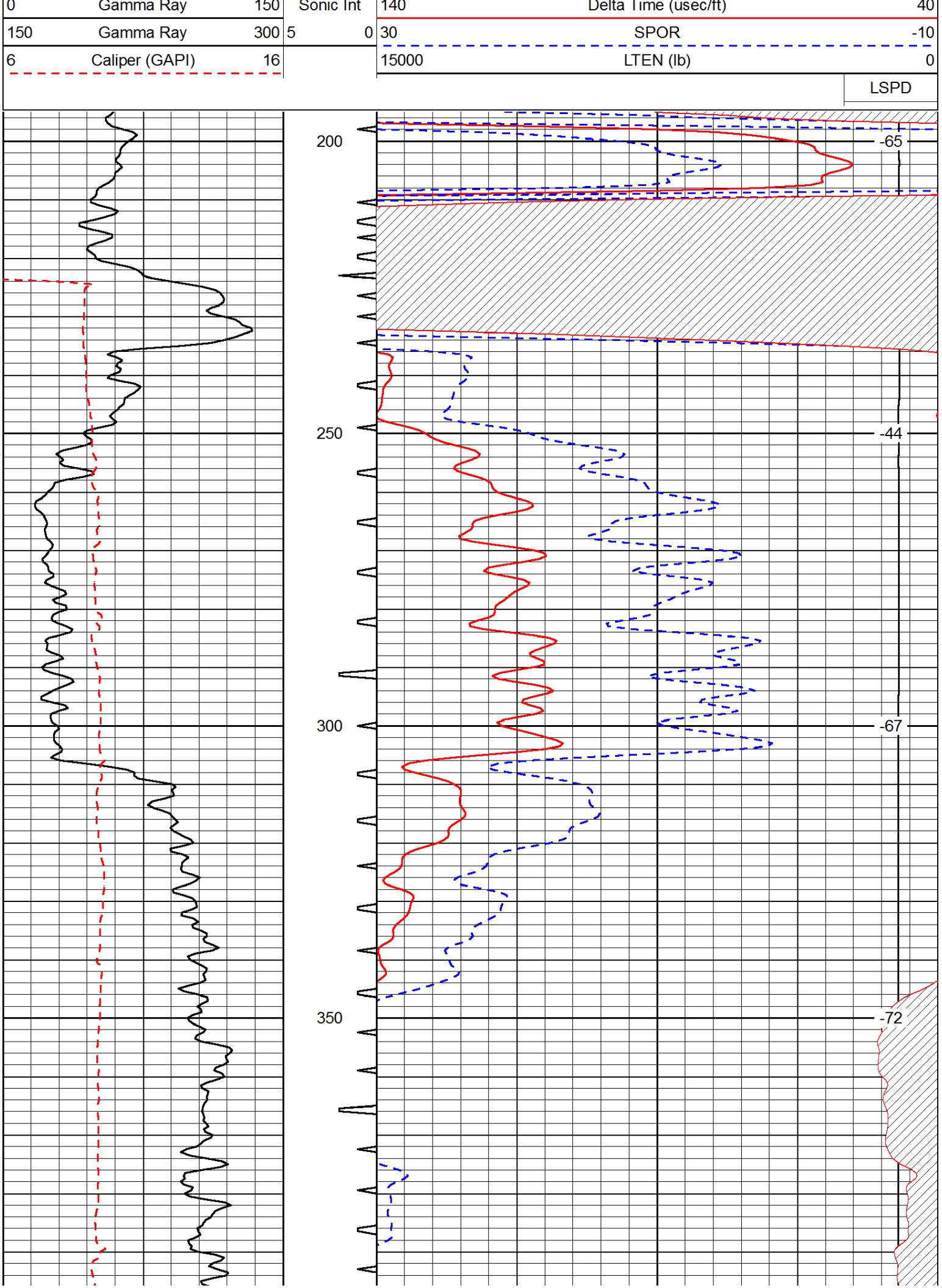
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

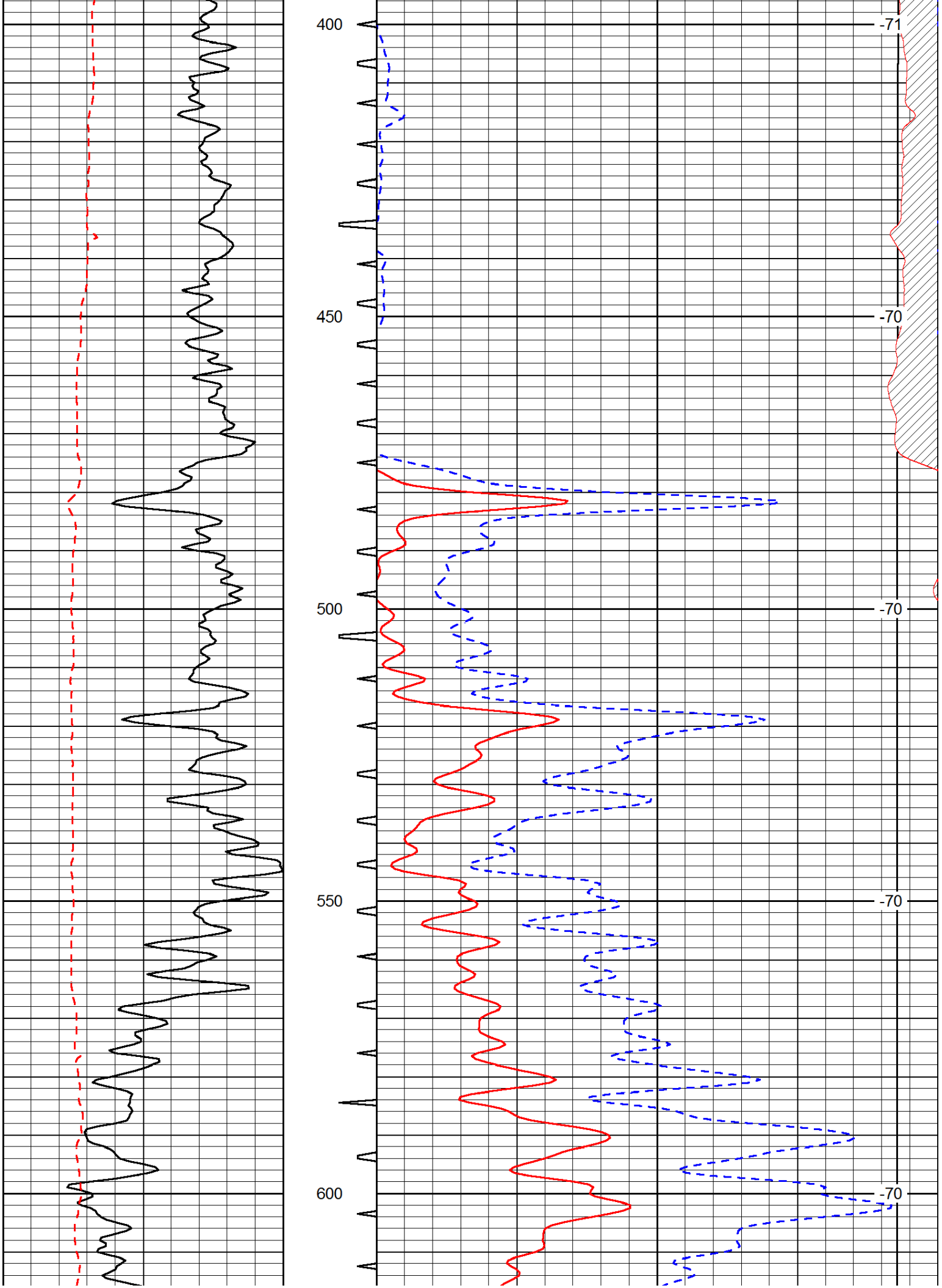
Comments

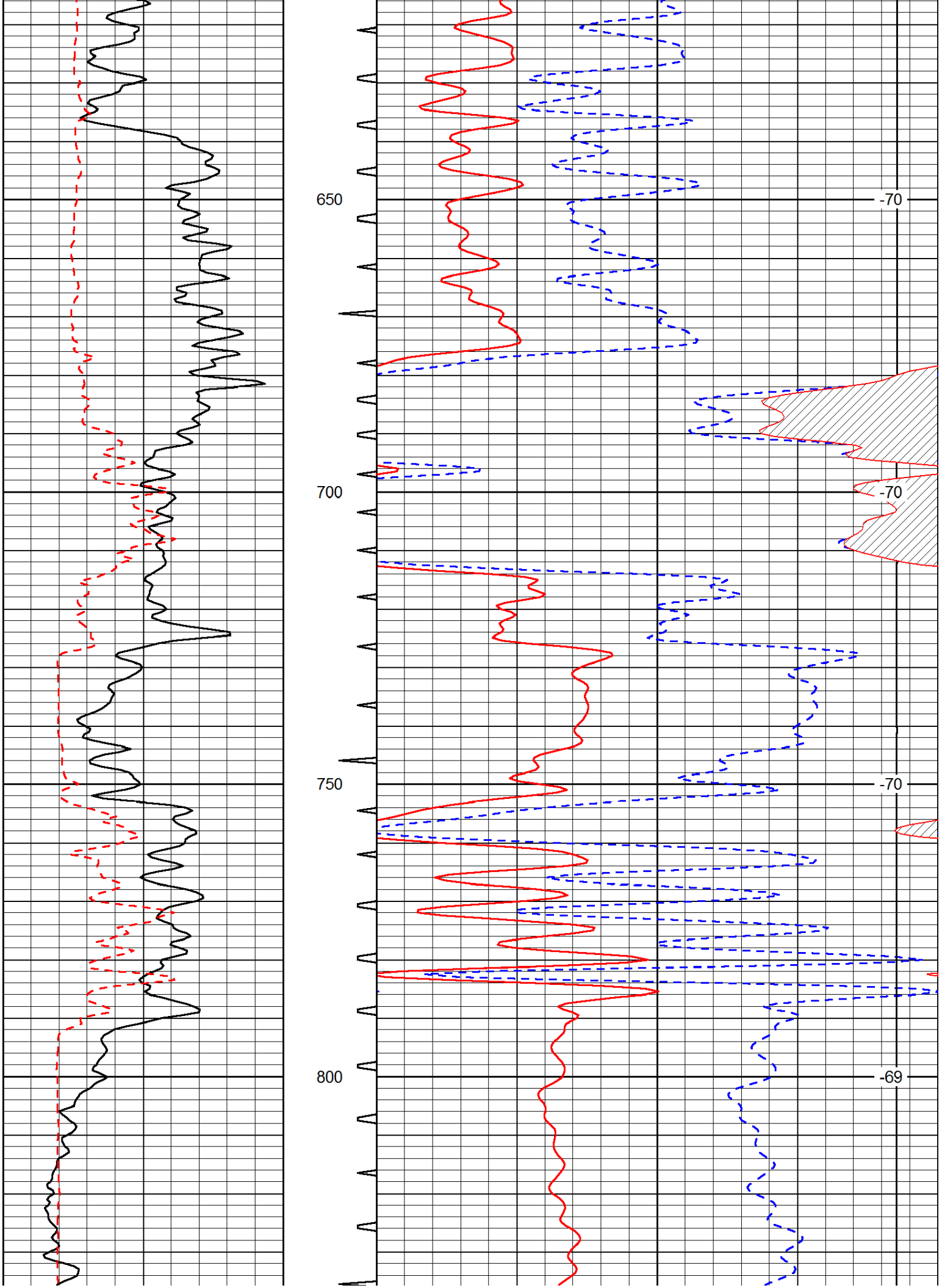
Thank you for using Pioneer Energy Services
www.pioneeres.com
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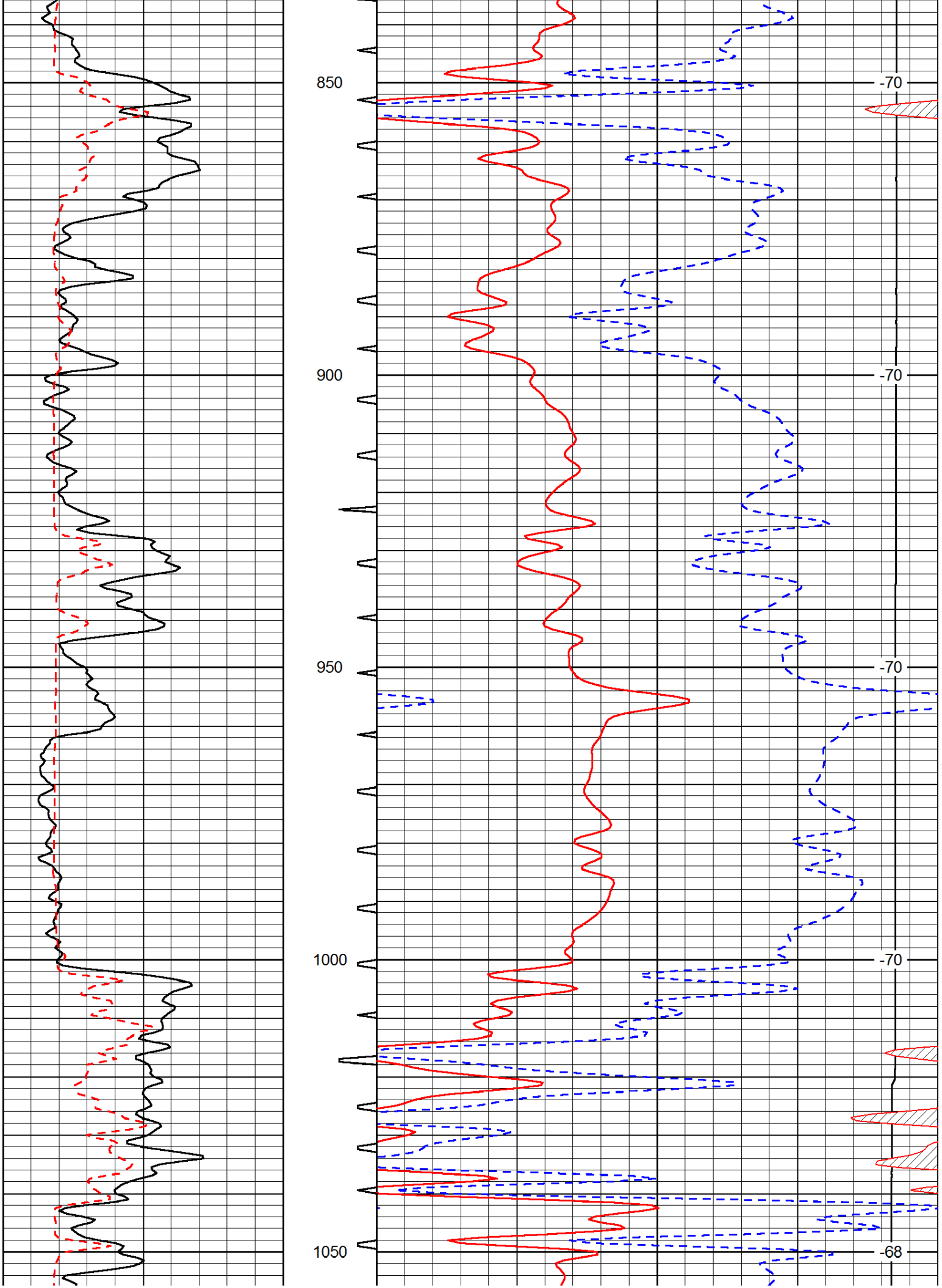
I-70 and Riga RD Exit, North to H RD,
West to 350 RD, 1 North, 1/8 West, North Into

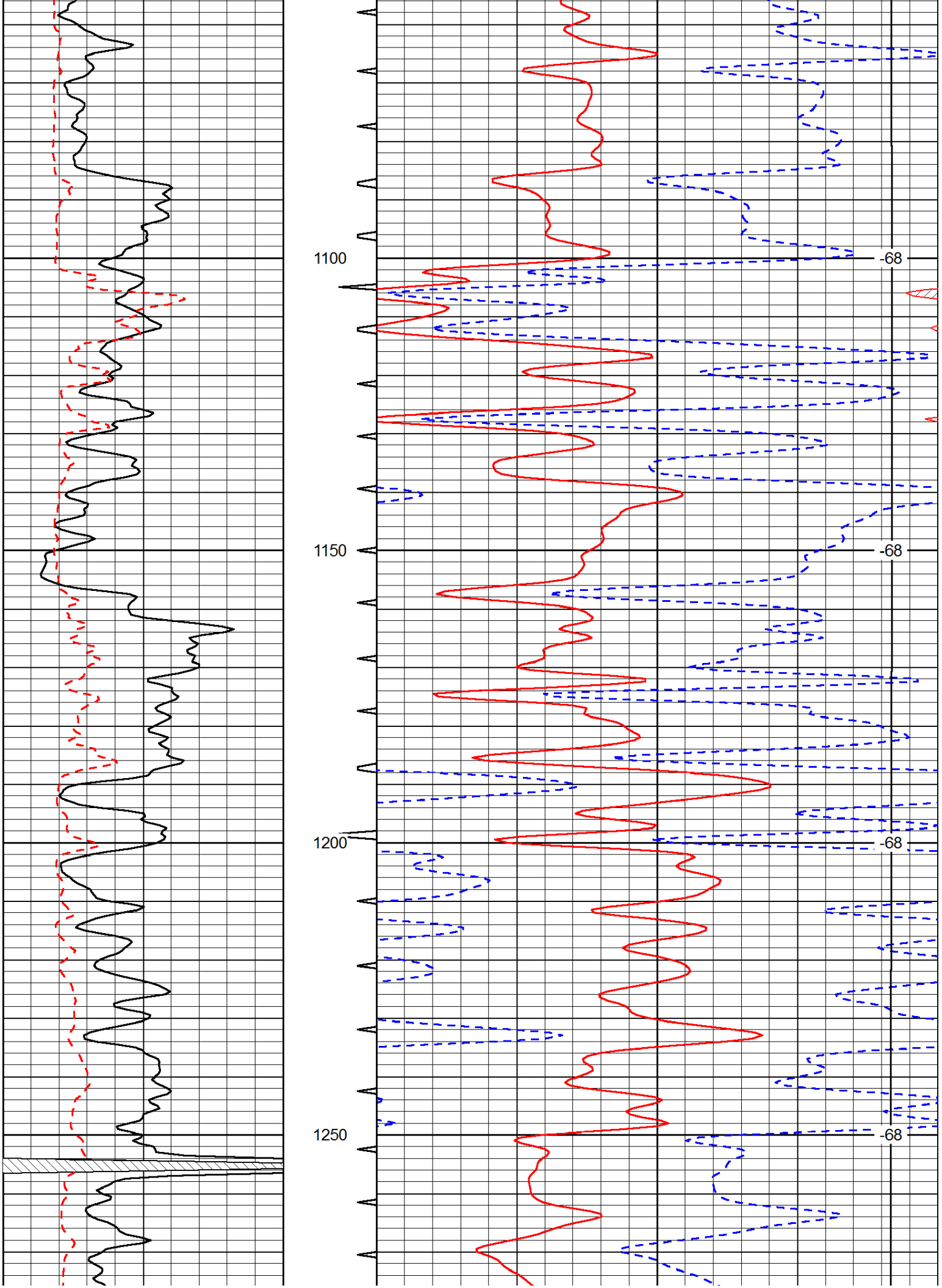
Database File:	c:\warrior\data\h&c_north fork farms #36-1\h&c_northforkfarms_36_1hd.db
Dataset Pathname:	DIL/hcstk
Presentation Format:	sonic
Dataset Creation:	Sun Nov 16 03:39:25 2014
Charted by:	Depth in Feet scaled 1:240

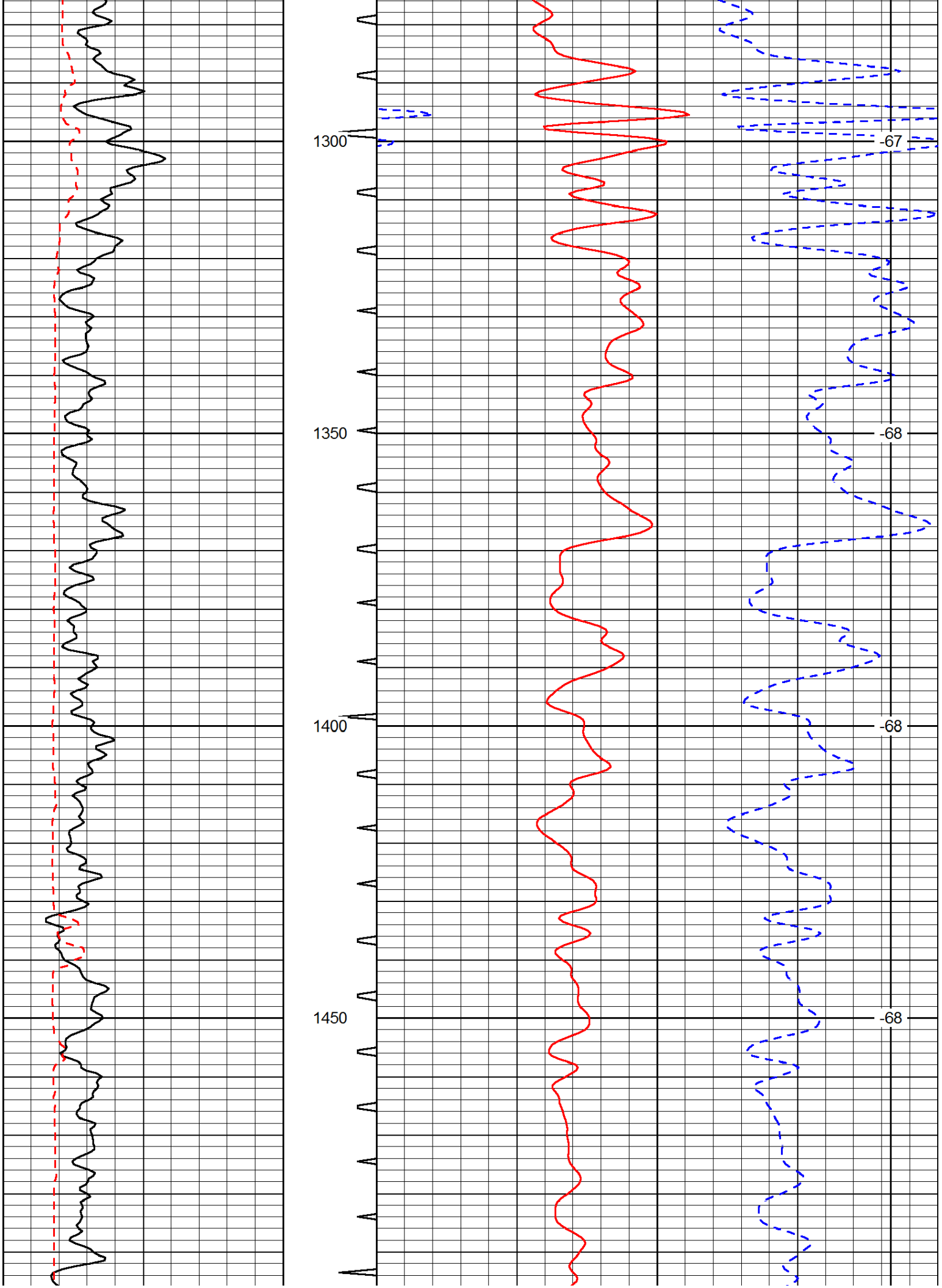

0 Gamma Ray 150
150 Gamma Ray 300
6 Caliper (GAPI) 16
Sonic Int
5 0
140 Delta Time (usec/ft) 40
30 SPOR -10
15000 LTEN (lb) 0
LSPD
200
250
300
350
-65
-44
-67
-72

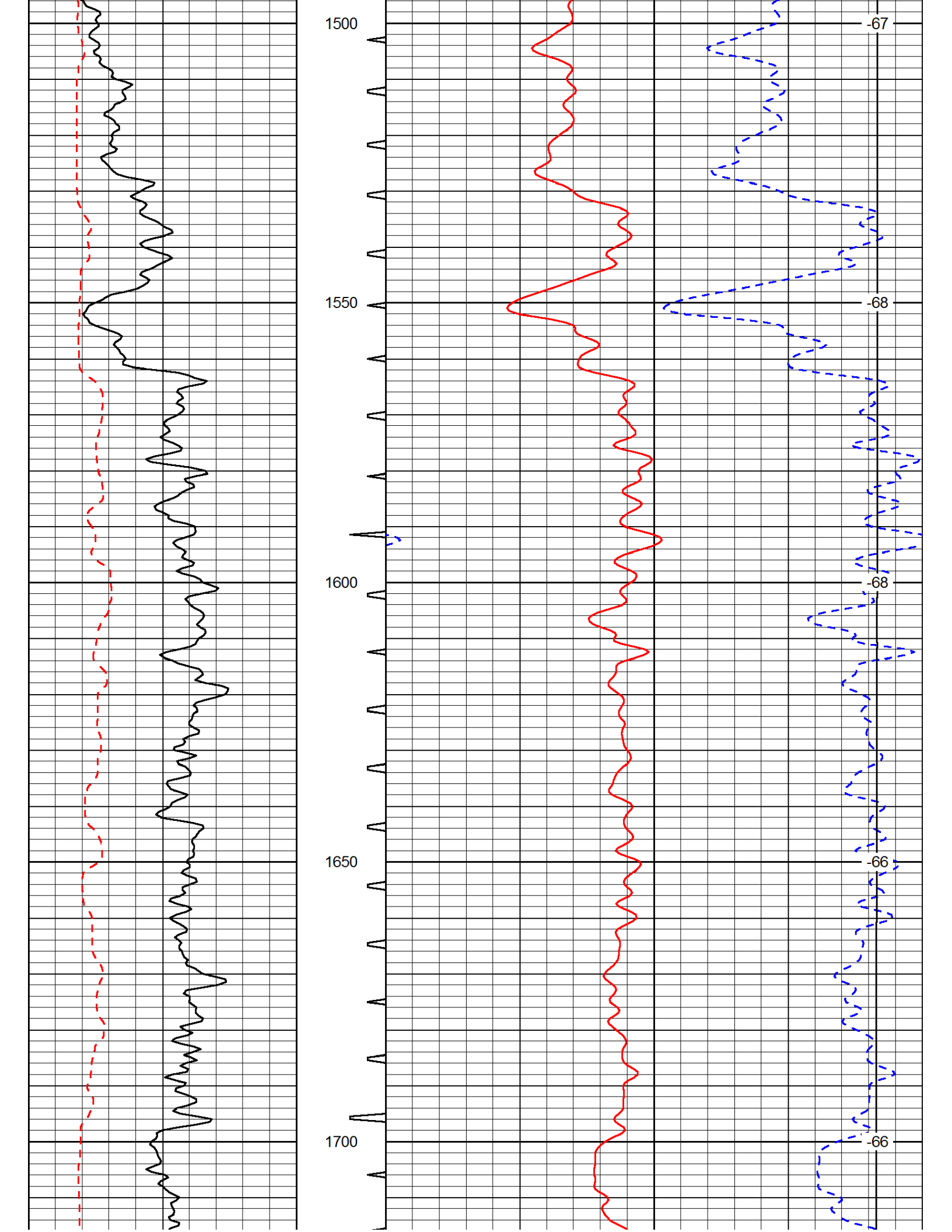

400
450
500
550
600
-71
-70
-70
-70
-70

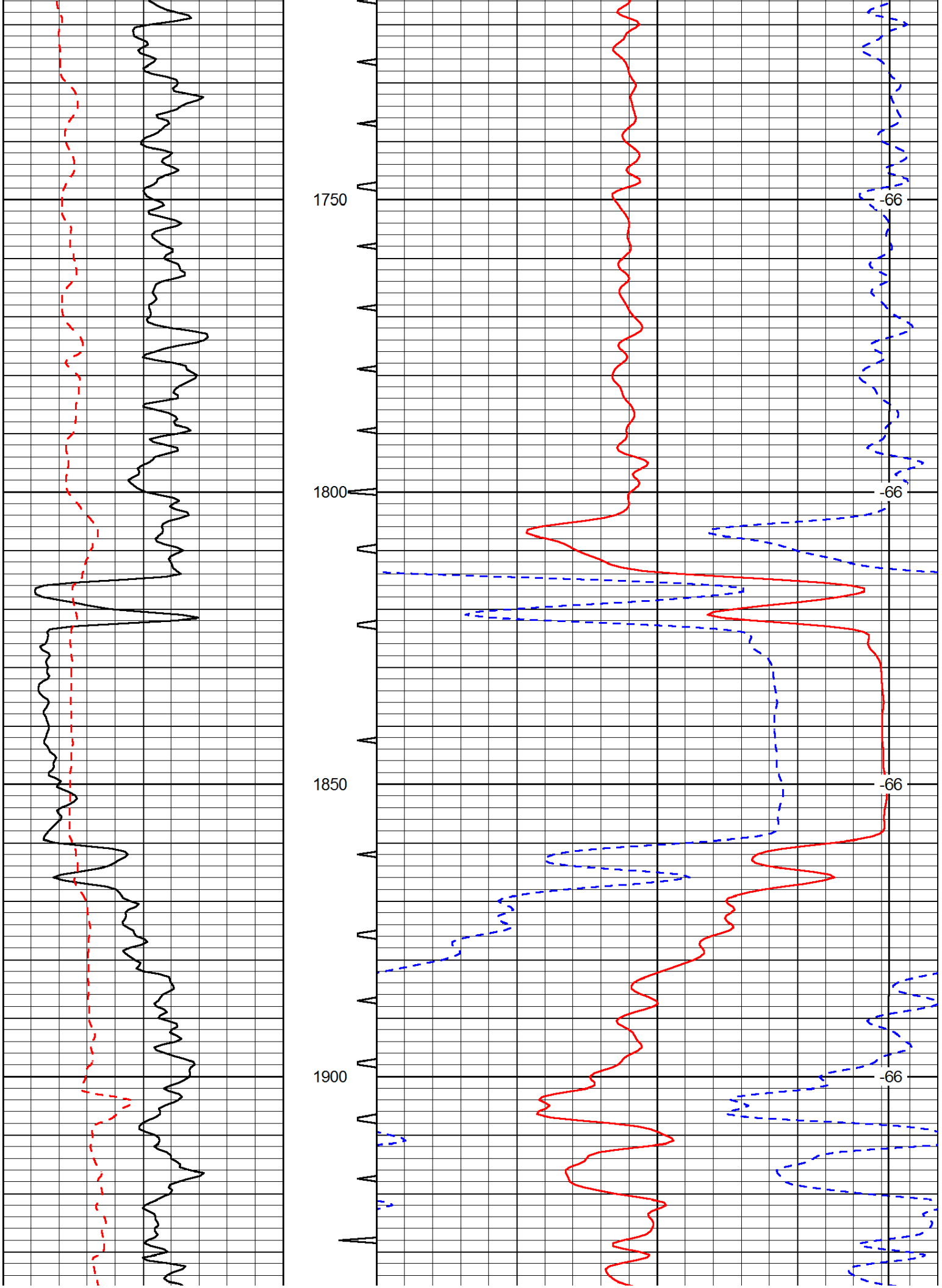

650
700
750
800
-70
-70
-70
-69

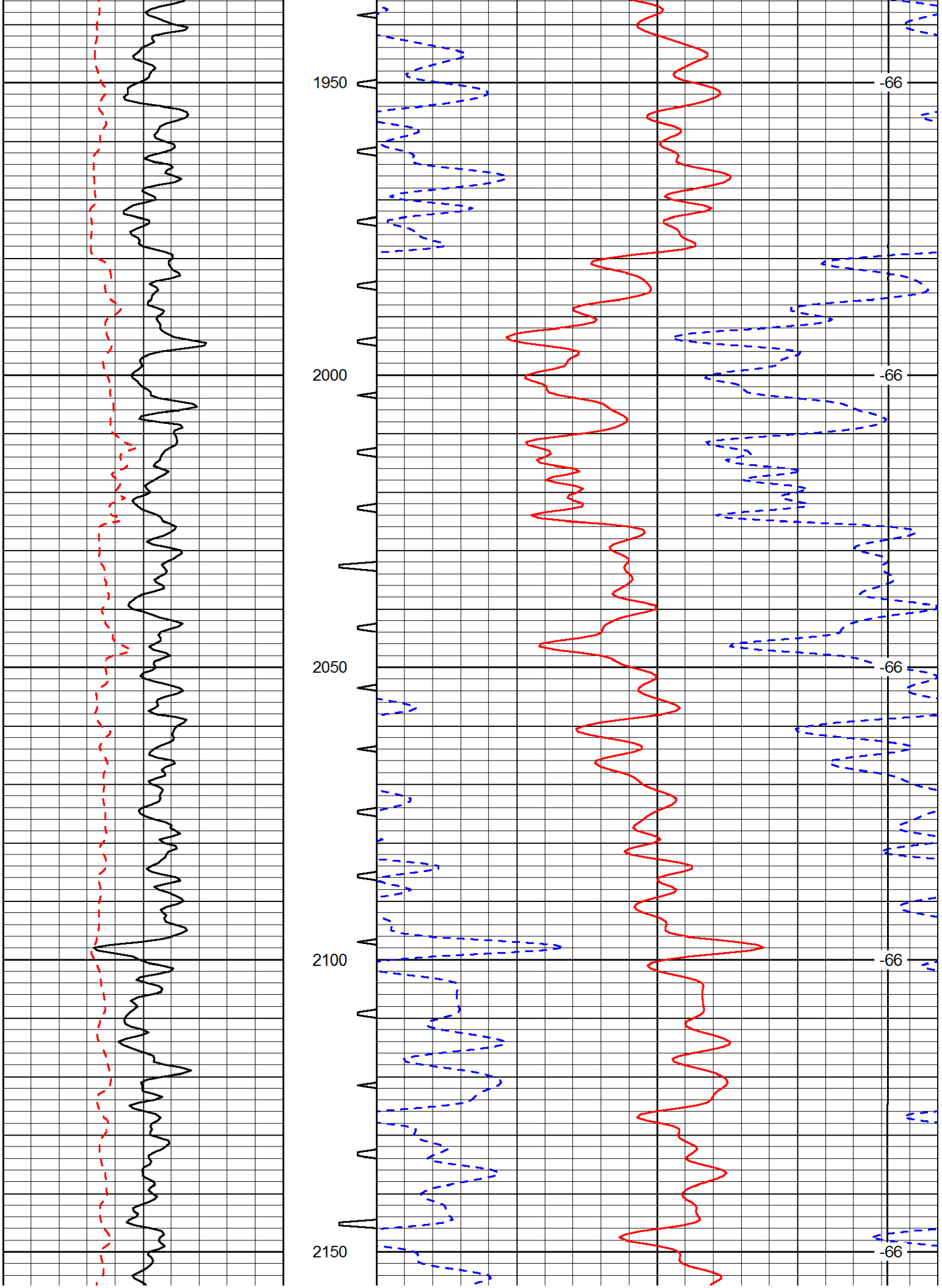

850
900
950
1000
1050
-70
-70
-70
-70
-68

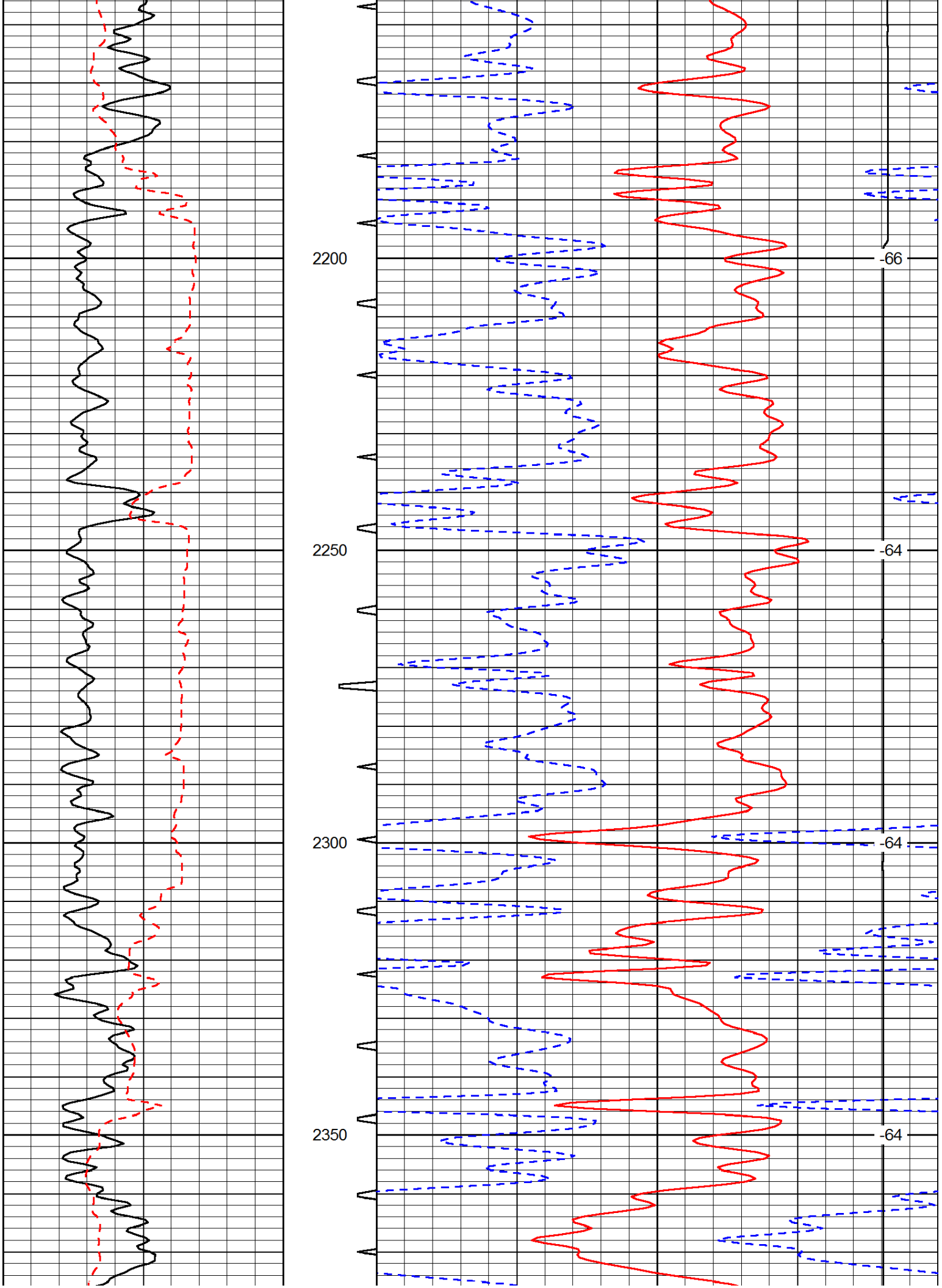

1100
1150
1200
1250
-68
-68
-68
-68

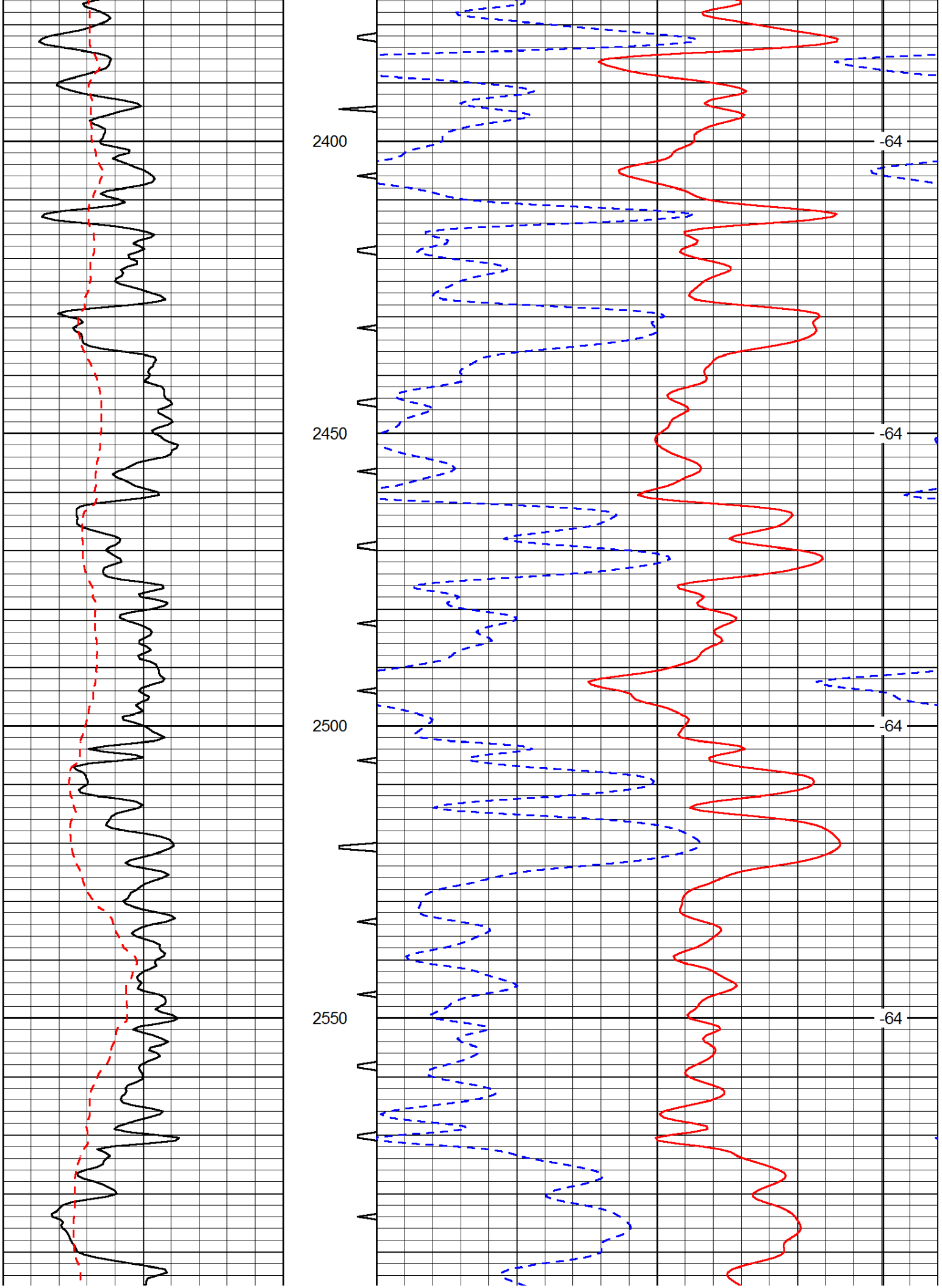

1300
1350
1400
1450
-67
-68
-68
-68

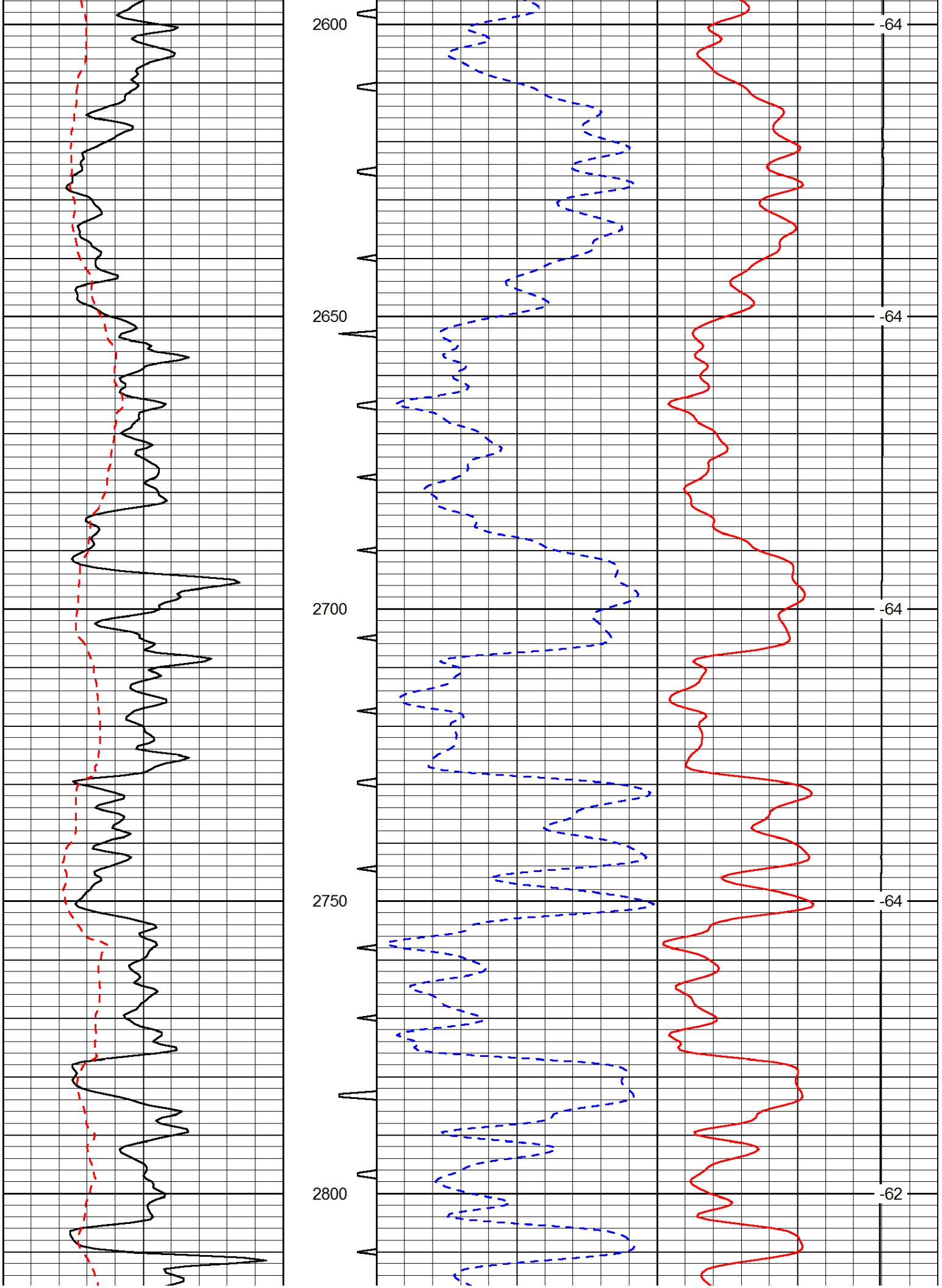

1500
1550
1600
1650
1700
-67
-68
-68
-66
-66

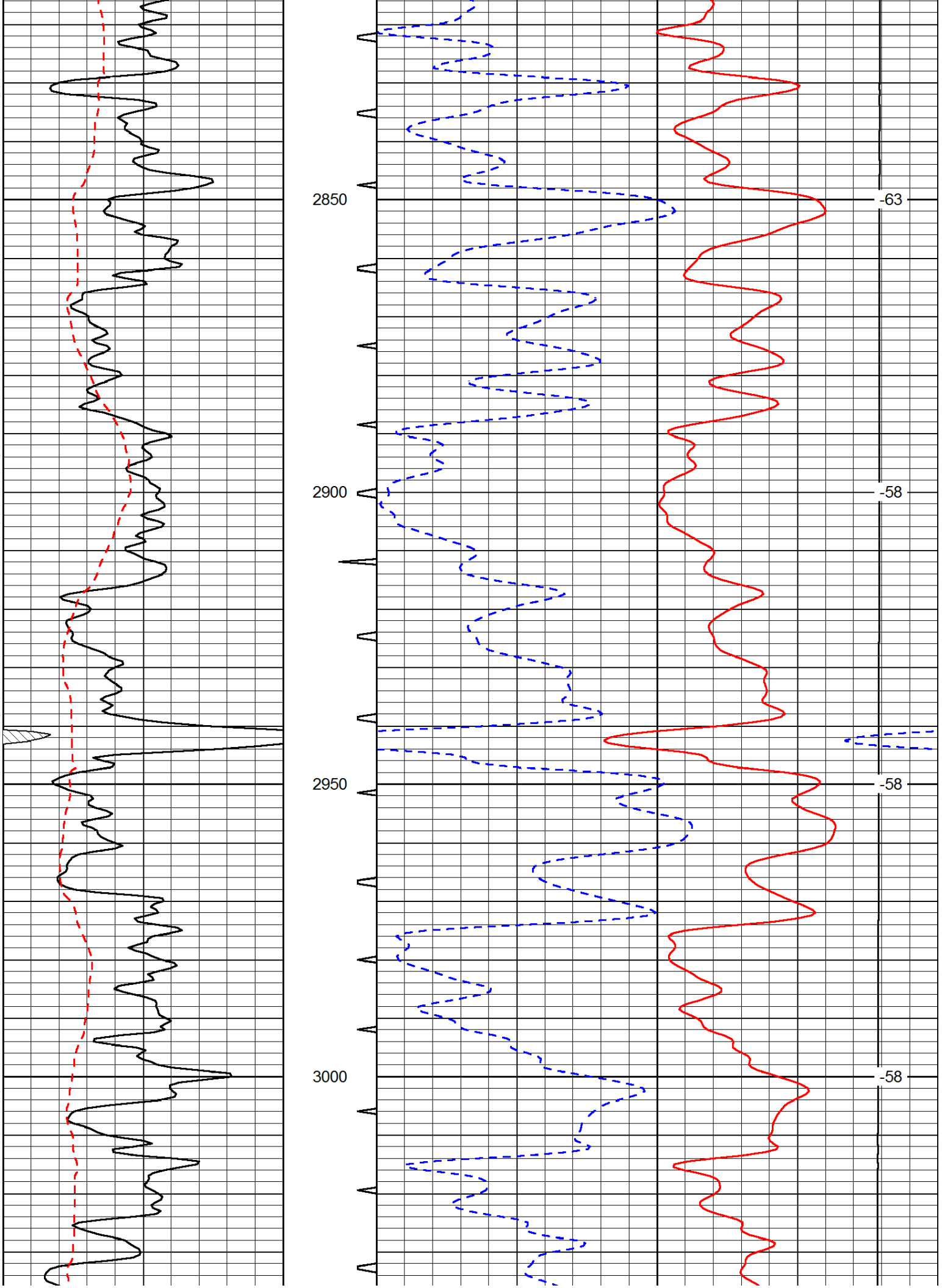

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-66
-66
-66

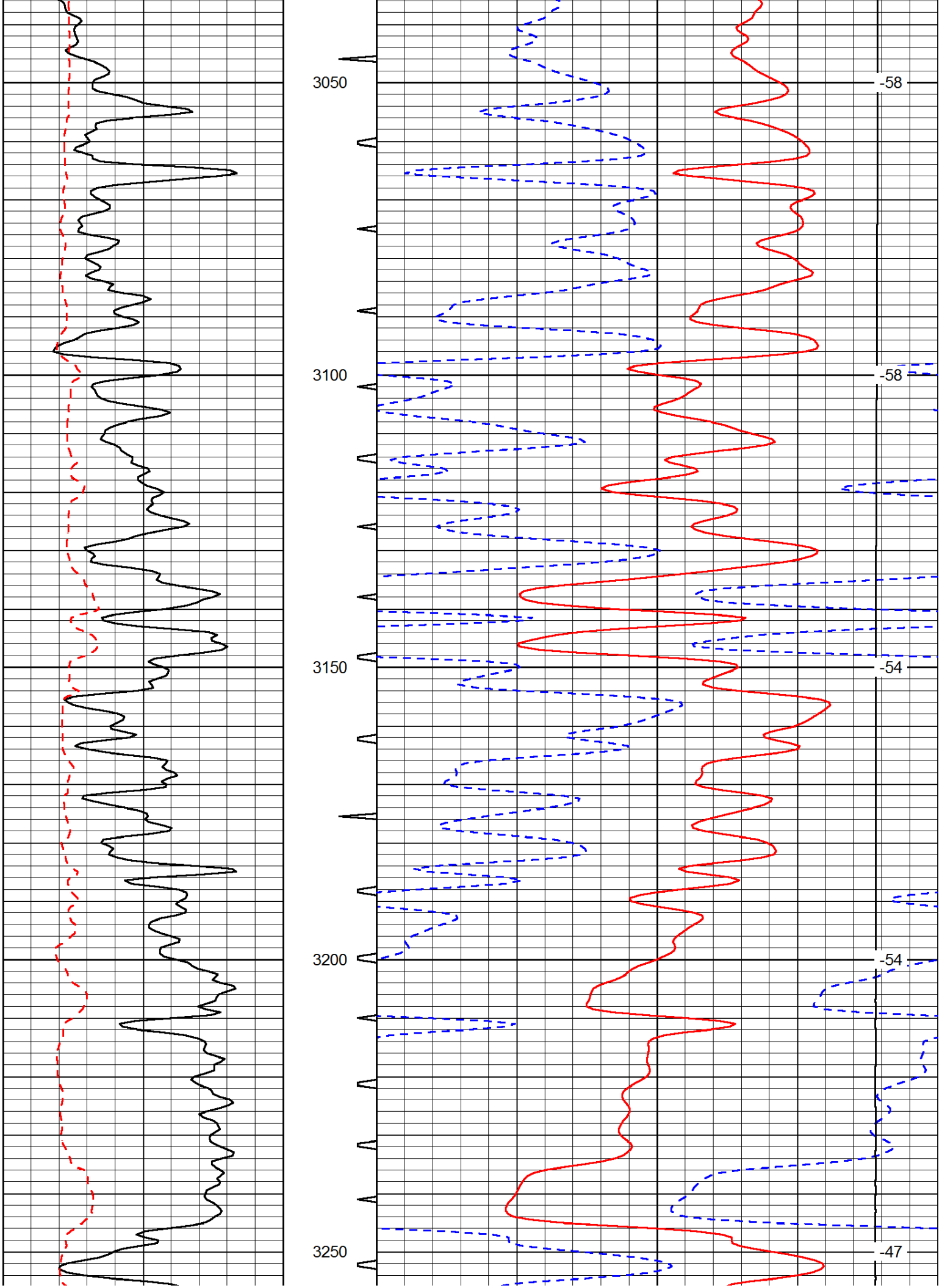

1950
2000
2050
2100
2150
-66
-66
-66
-66
-66

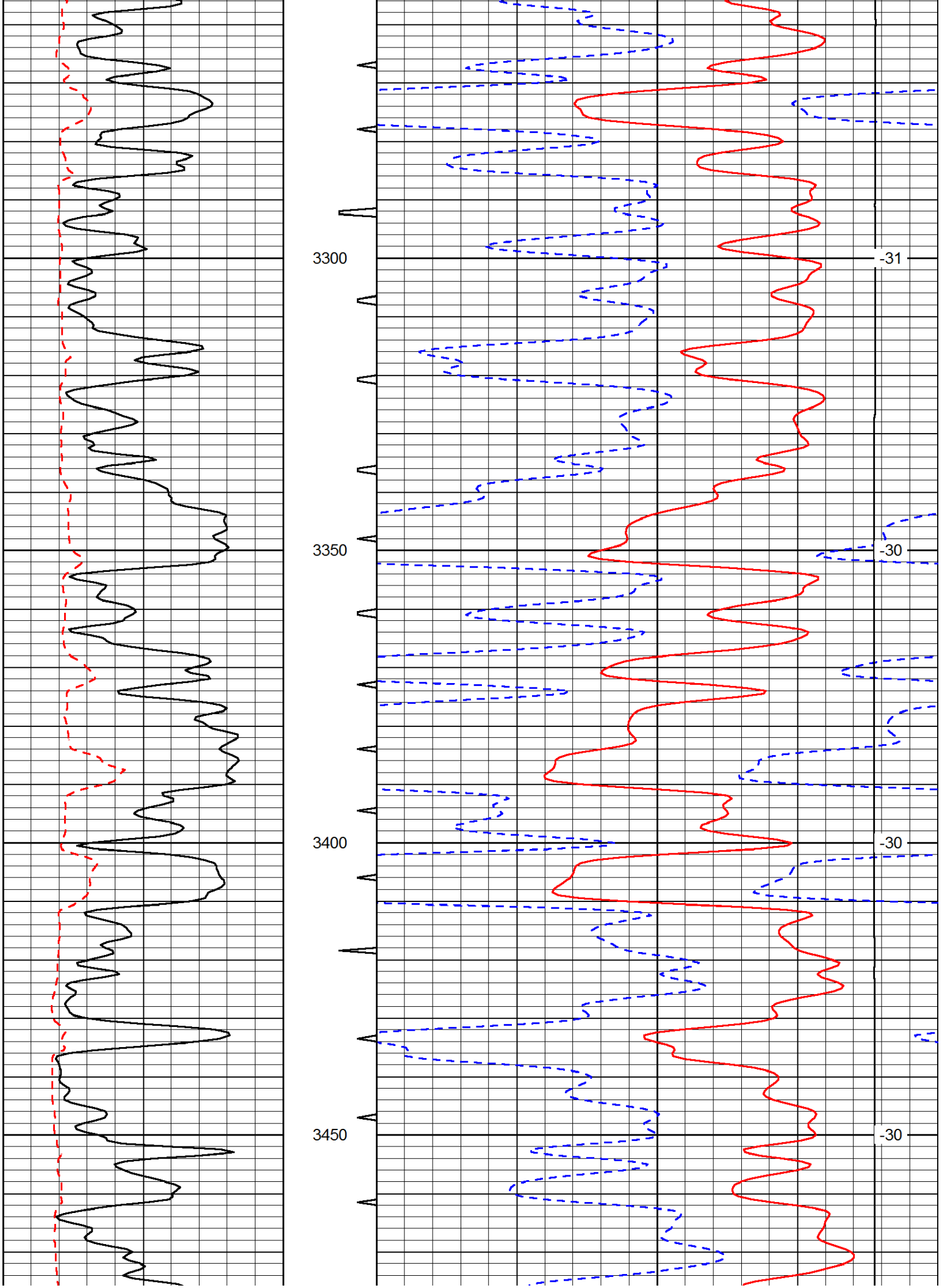

2200
2250
2300
2350
-66
-64
-64
-64

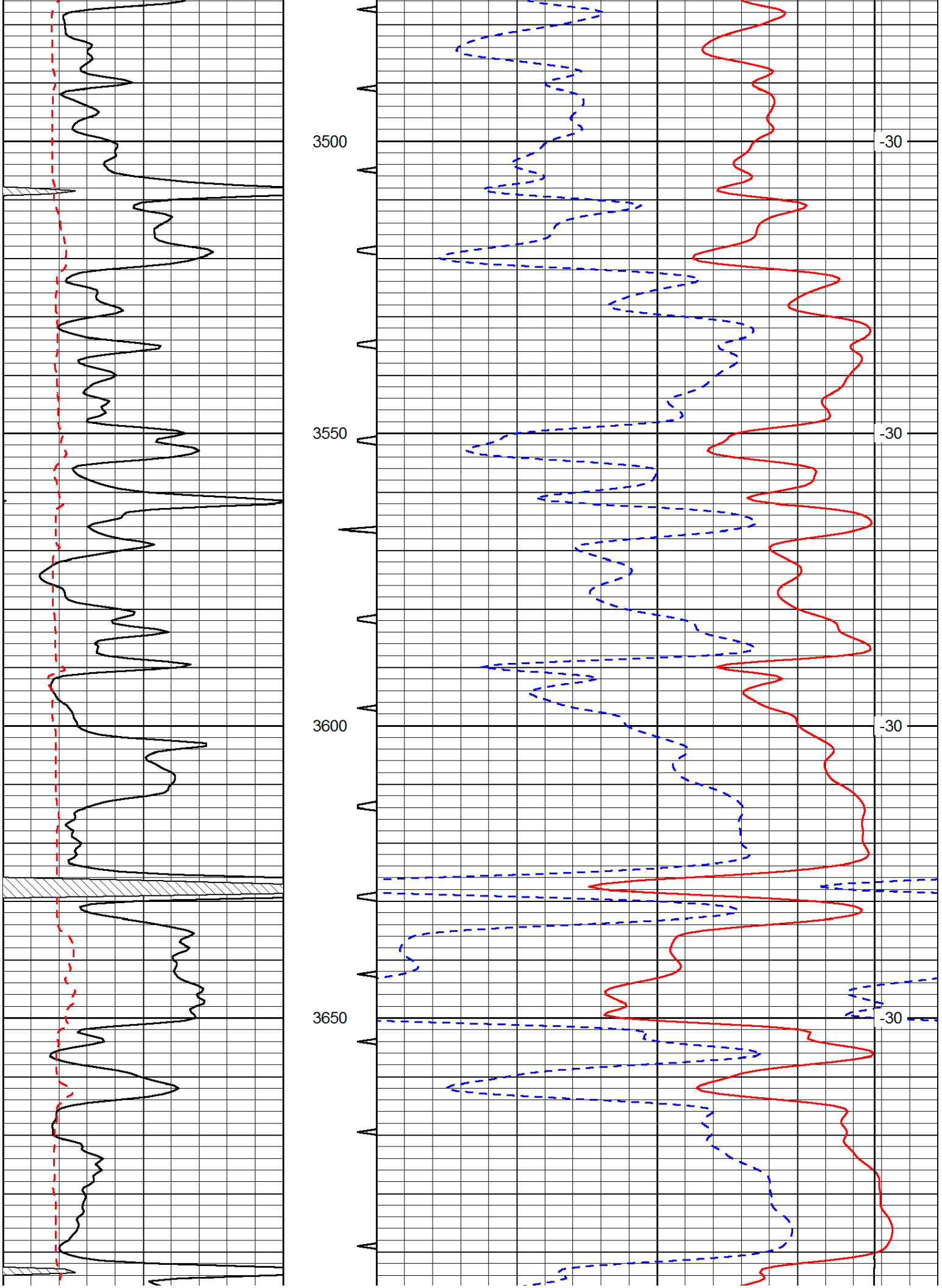

2400
2450
2500
2550
-64
-64
-64

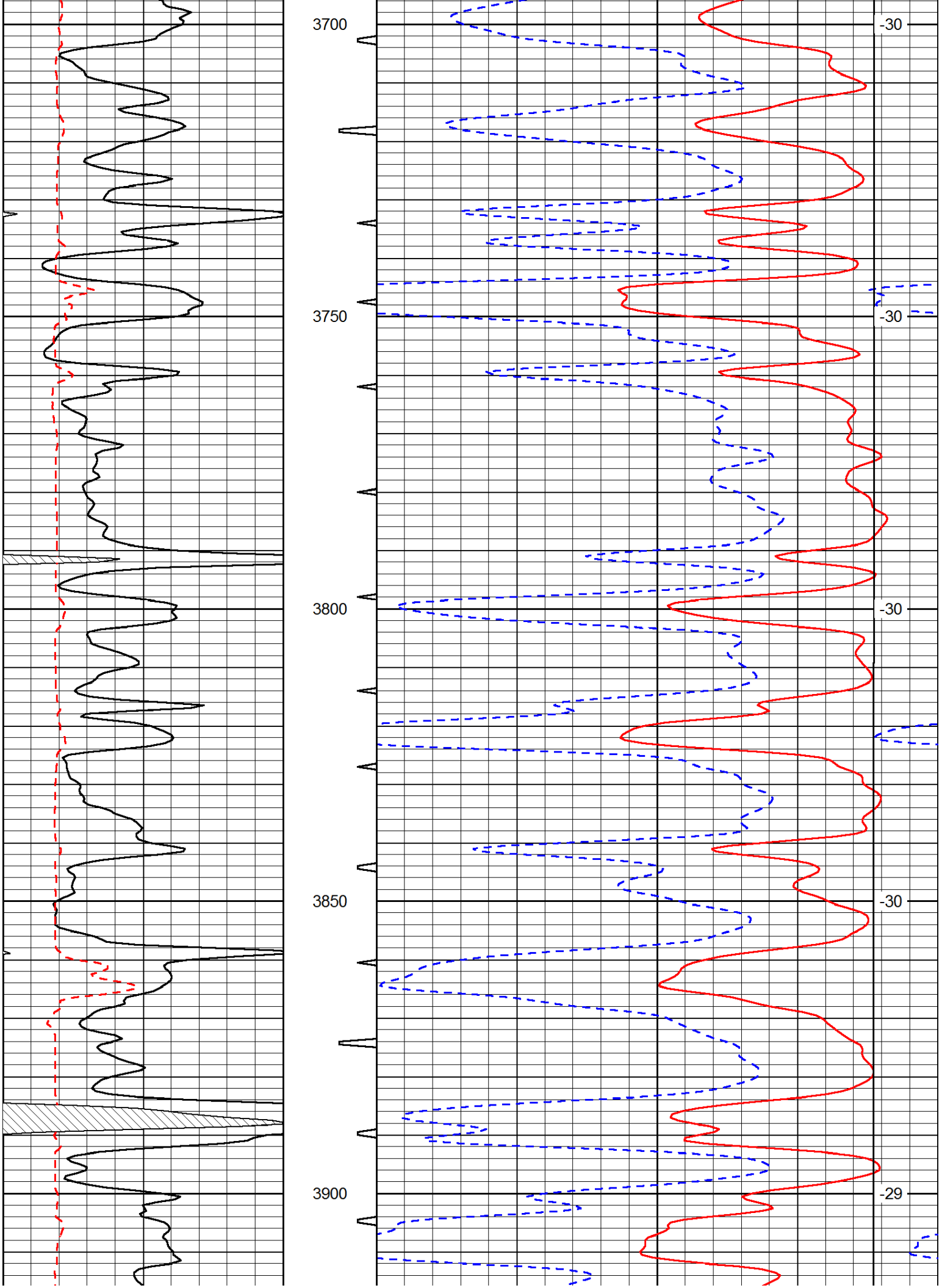

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2650
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2750
2800
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-64
-64
-64
-62

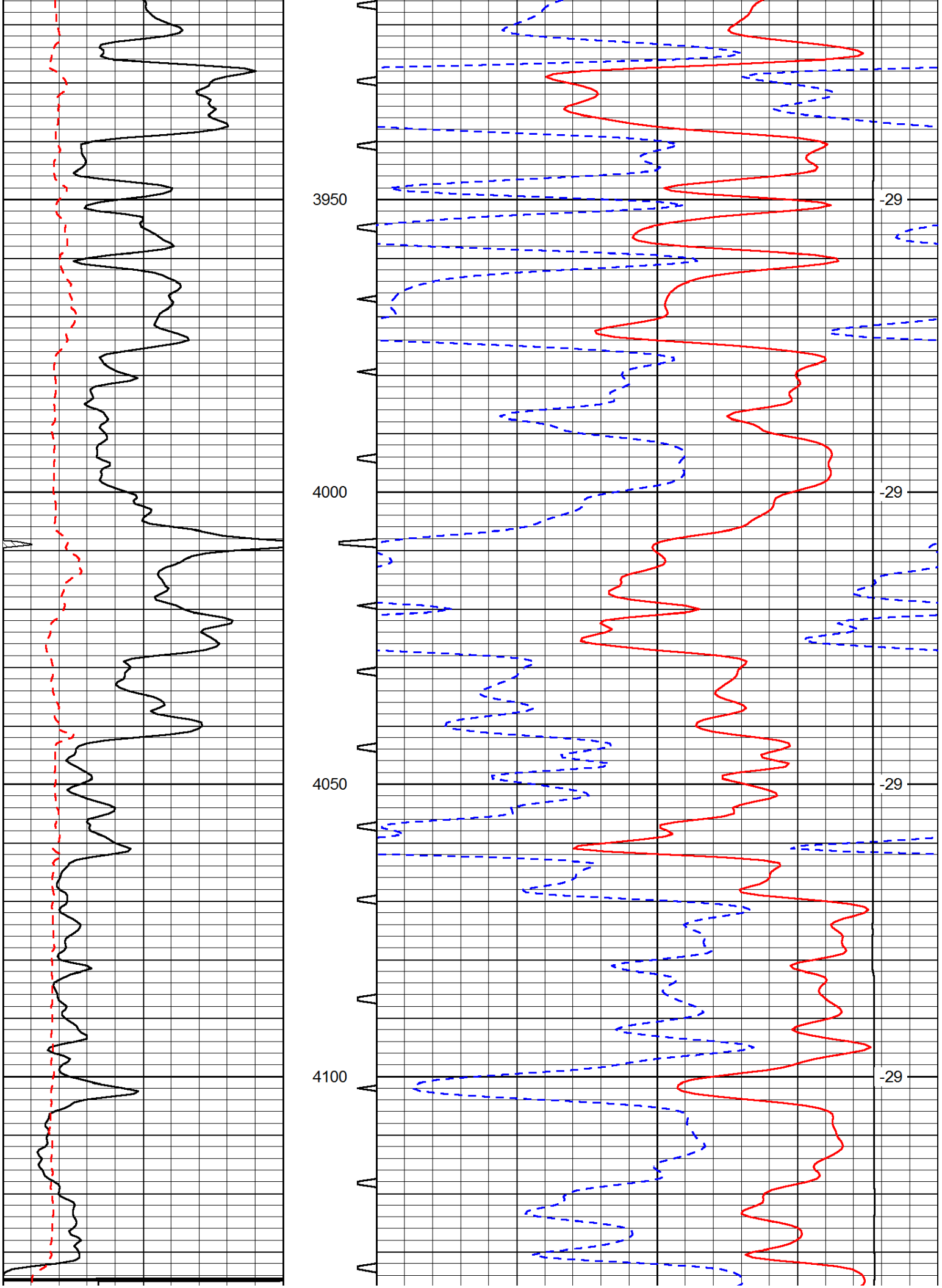

2850
2900
2950
3000
-63
-58
-58
-58

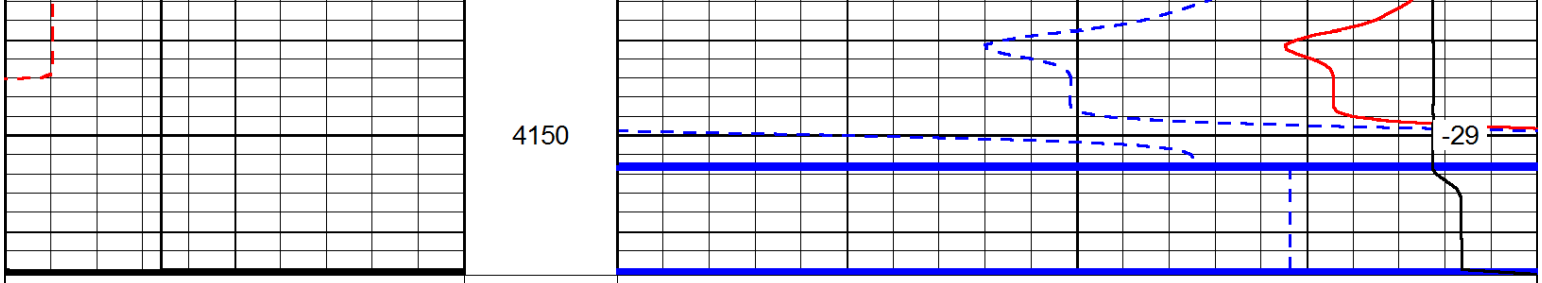

3050
3100
3150
3200
3250
-58
-58
-54
-54
-47


3300
3350
3400
3450
-31
-30
-30
-30


3500
3550
3600
3650
-30
-30
-30


3700
3750
3800
3850
3900
-30
-30
-30
-30
-29


3950
4000
4050
4100
-29
-29
-29



0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5 0	30	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0
						LSPD