



Dual Induction Log

Pioneer Energy Services

API No.	Company Darrah Oil Co.		
	Well Kratzler #10		
	Field Geneseo-Edwards		
	County Ellsworth	State	Kansas
	Location	1730' FNL & 840' FEL	
	Sec: 21	Twp: 17S	Rge: 8W
	Permanent Datum	Ground Level	Elevation 1788
	Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum
	Drilling Measured From	From Kelly Bushing	
Date		8/8/2012	
Run Number		One	
Depth Driller		3293	
Depth Logger		3293	
Bottom Logged Interval		3292	
Top Log Interval		250	
Casing Driller		8.625 @ 288	
Casing Logger		288	
Bit Size		7.875	
Type Fluid in Hole		Chemical	
Salinity, ppm CL		5000	
Density / Viscosity		9.2 50	
pH / Fluid Loss		10.0 9.0	
Source of Sample		Flowline	
Rm @ Meas. Temp		0.95 @ 80	
Rmf @ Meas. Temp		0.71 @ 80	
Rmc @ Meas. Temp		1.28 @ 80	
Source of Rmf / Rmc		Charts	
Rm @ BHT		0.70 @ 109	
Operating Rig Time		5 Hours	
Max Rec. Temp. F		109	
Equipment Number		17	
Location		Hays	
Recorded By		D. Schmidt	
Witnessed By		Seth Evenson	

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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.

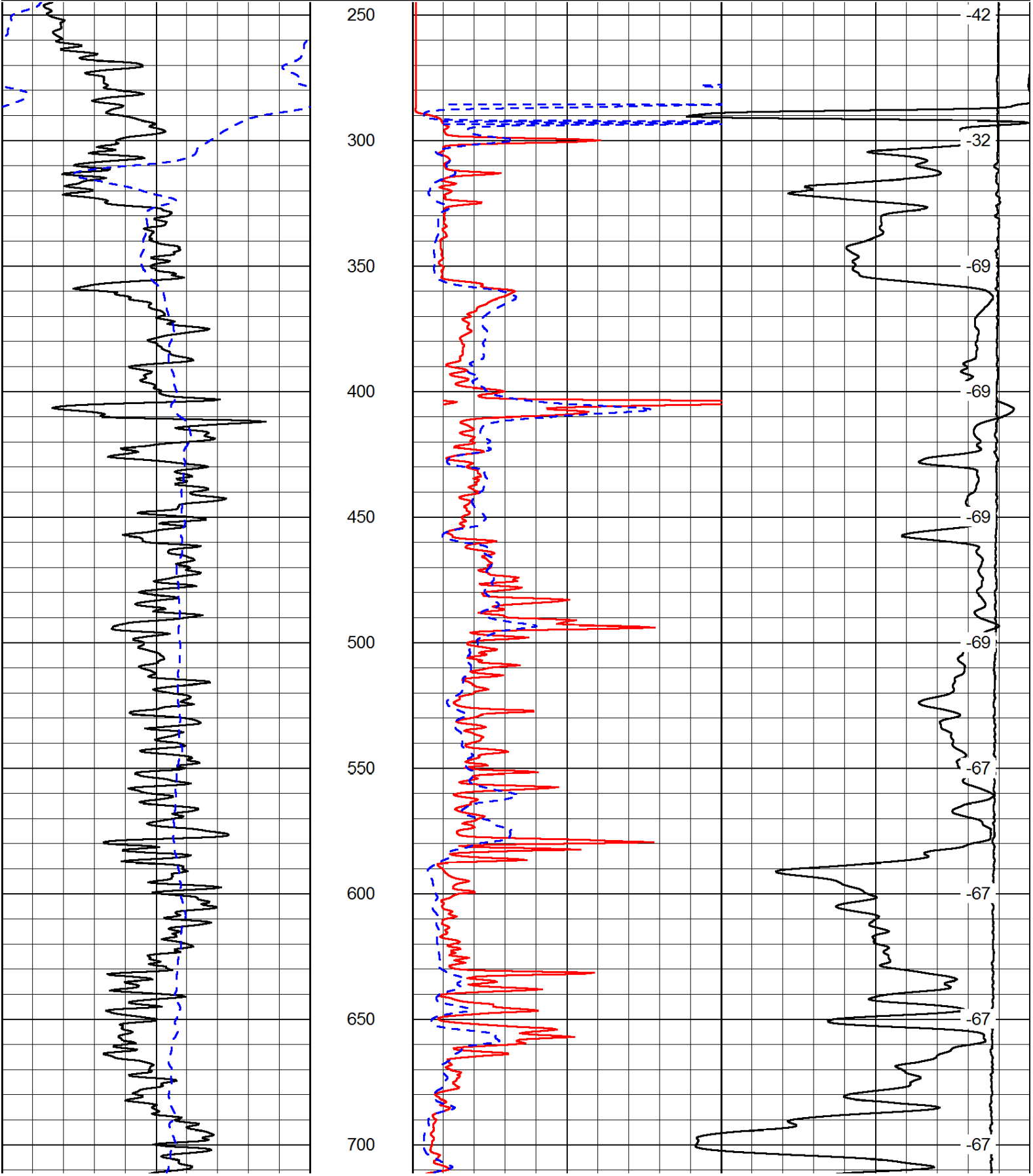
Comments

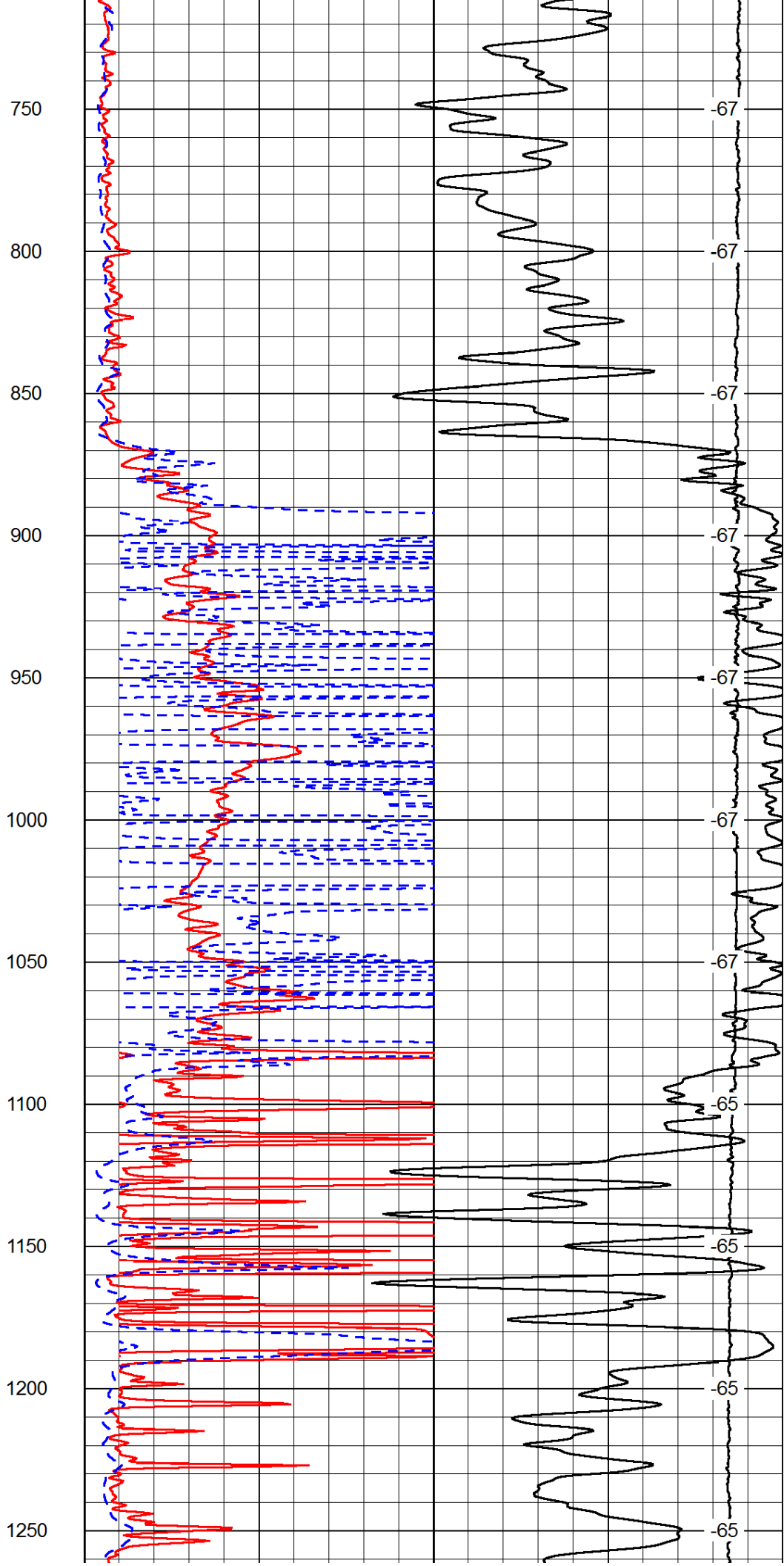
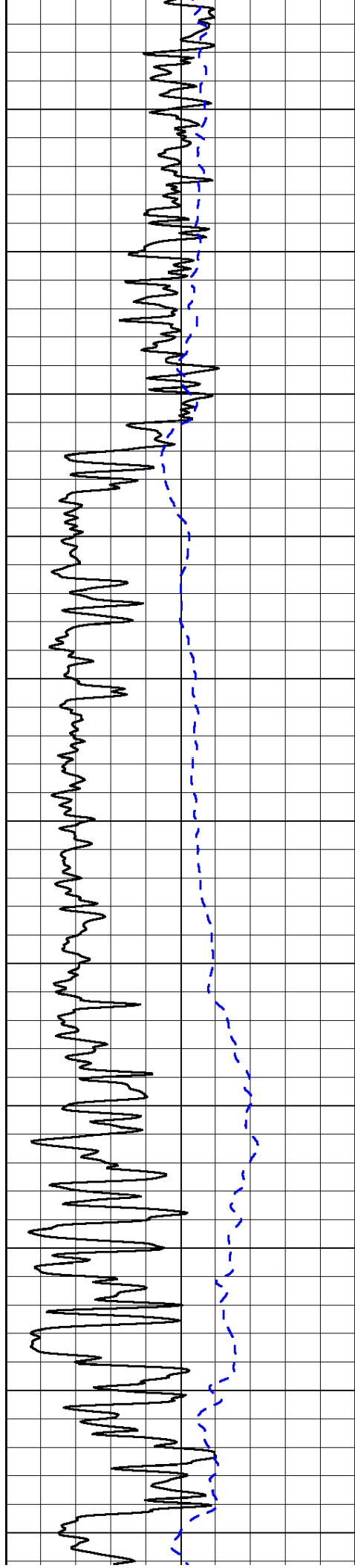
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858

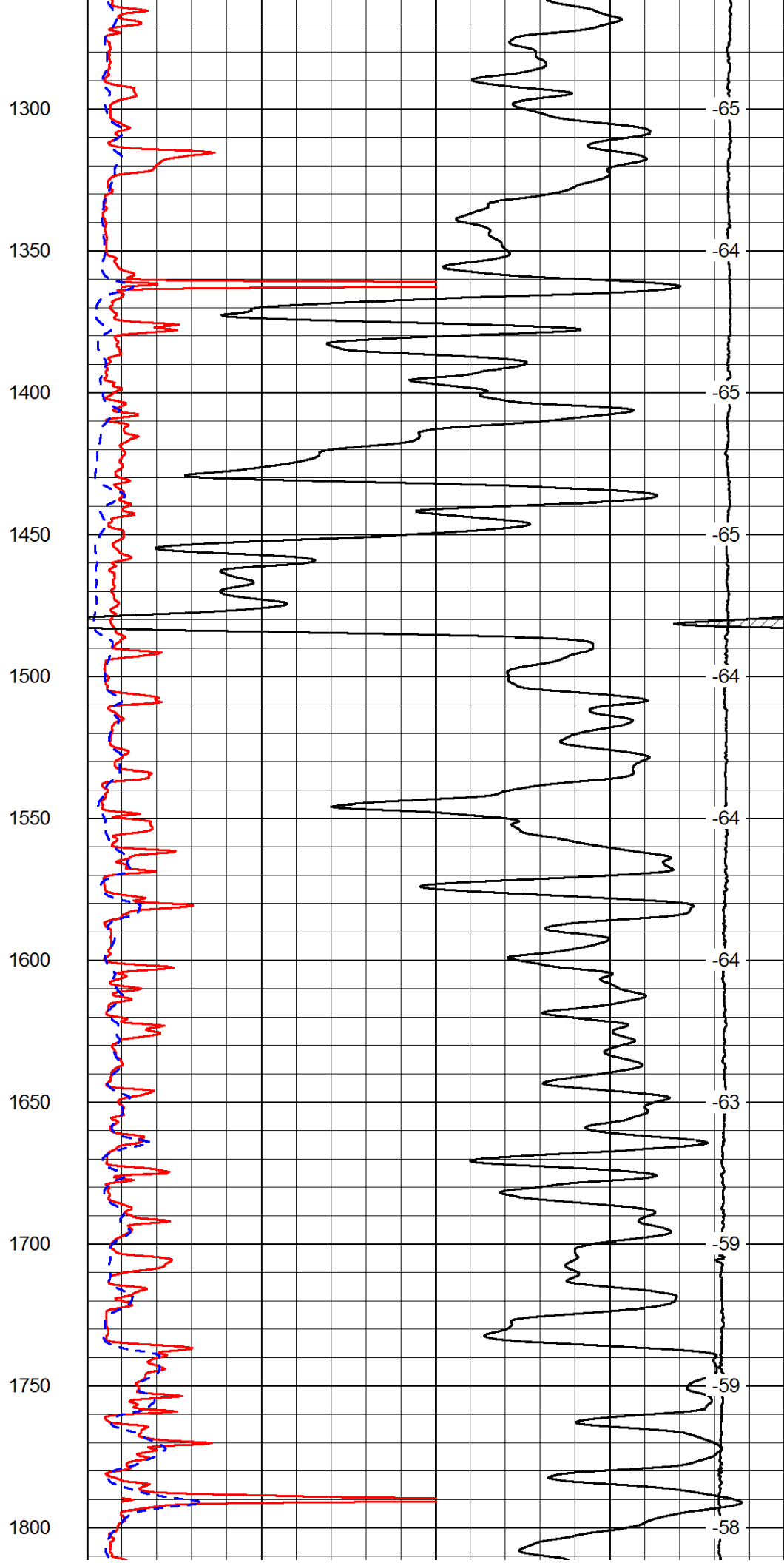
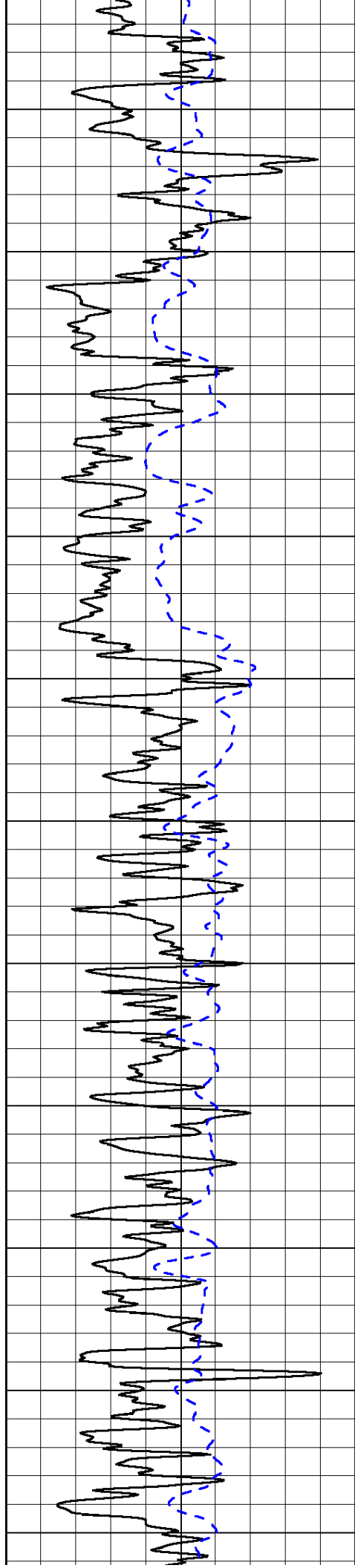
Hwy 4 & Hwy 14,
2 3/4 North, West into

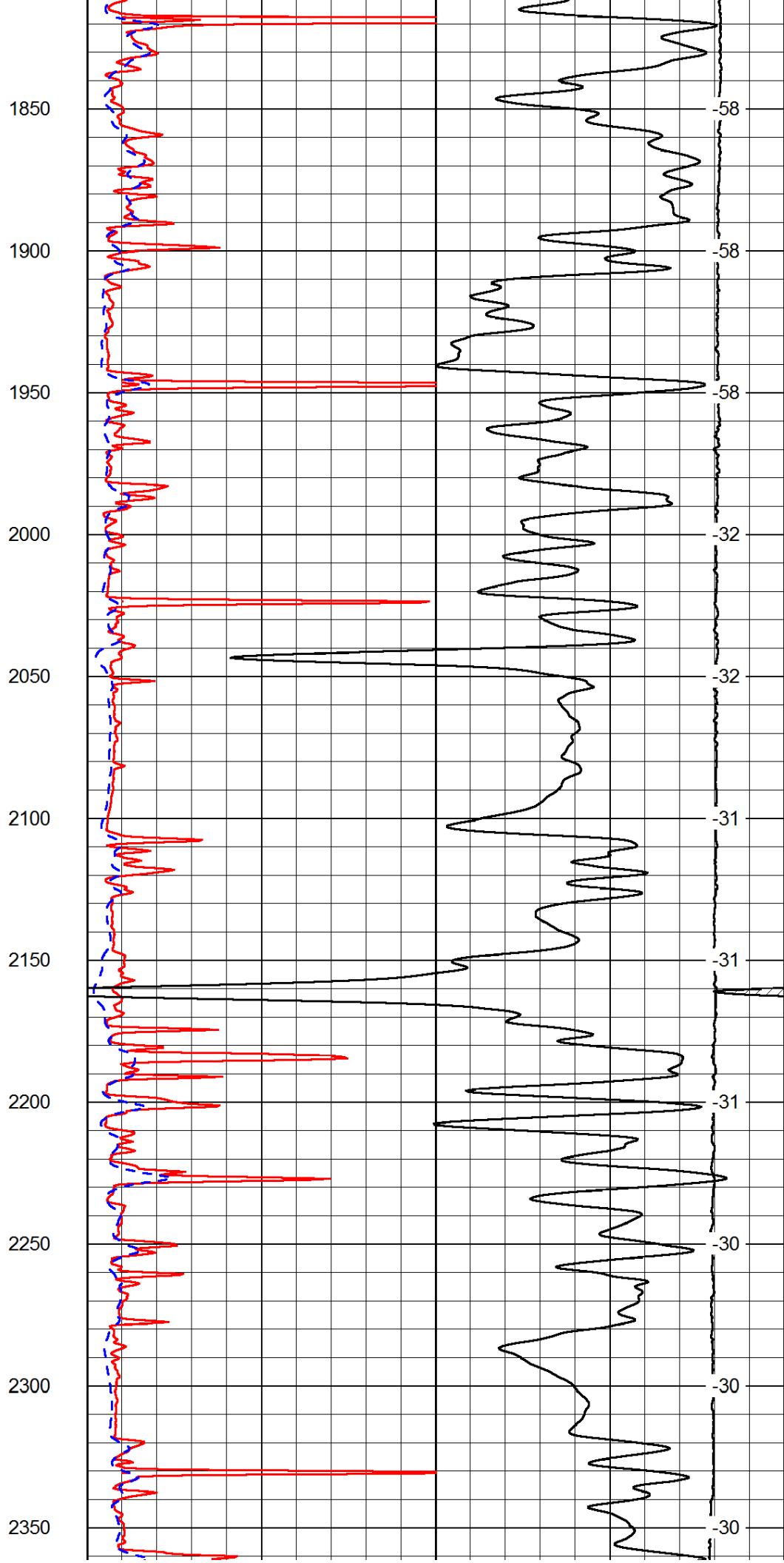
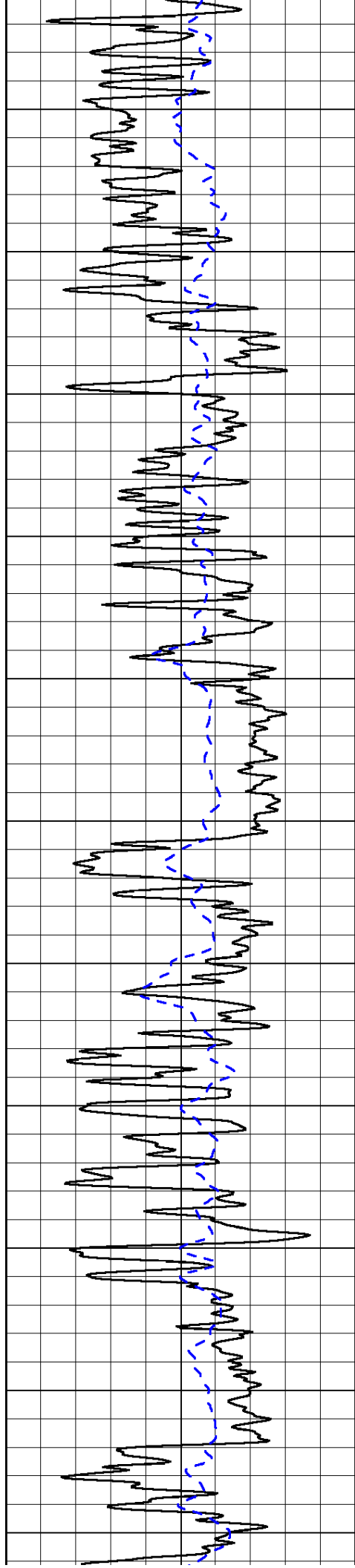
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Presentation Format: dil2in
Dataset Creation: Wed Aug 08 03:29:46 2012
Charted by: Depth in Feet scaled 1:600

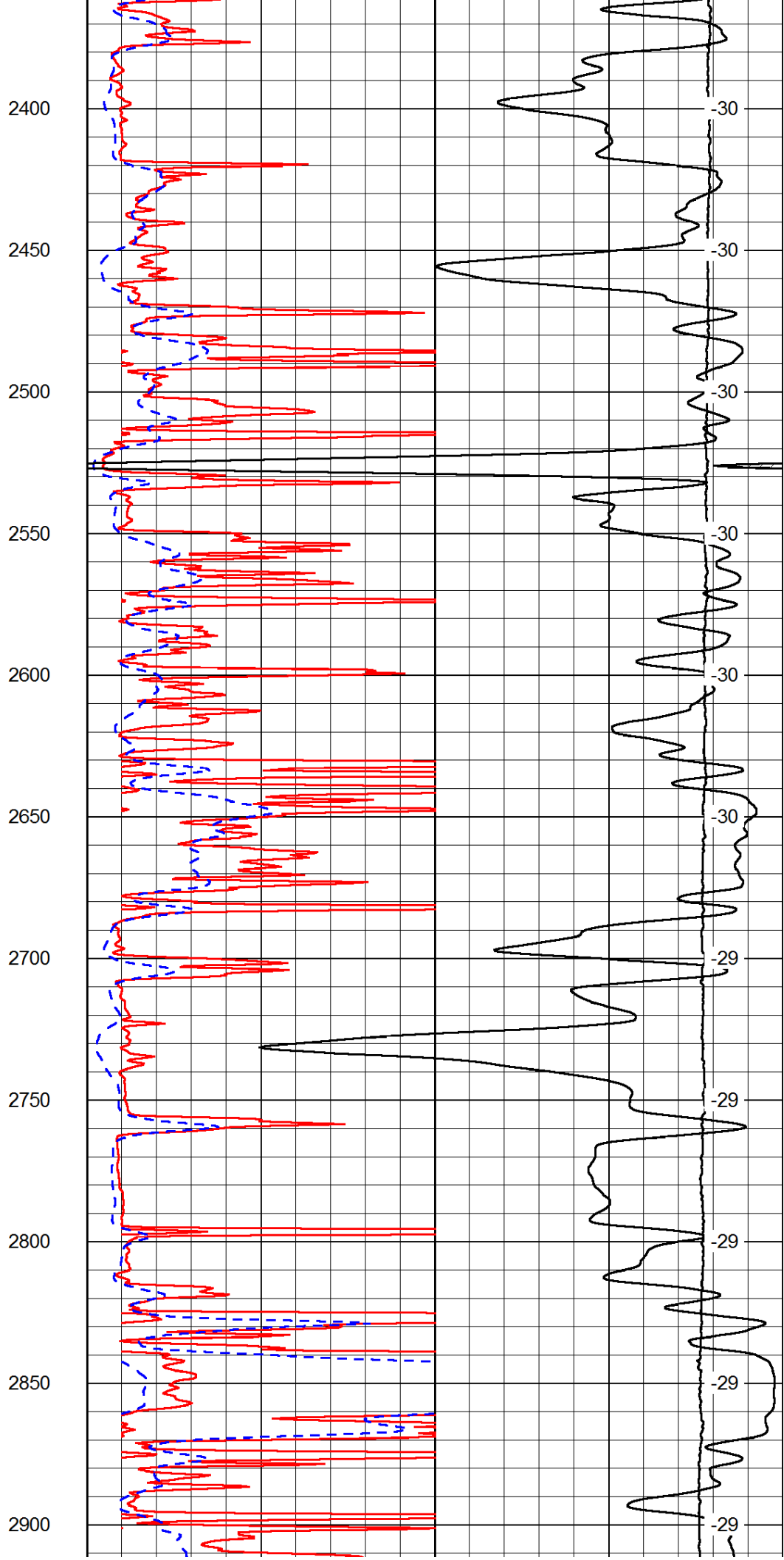
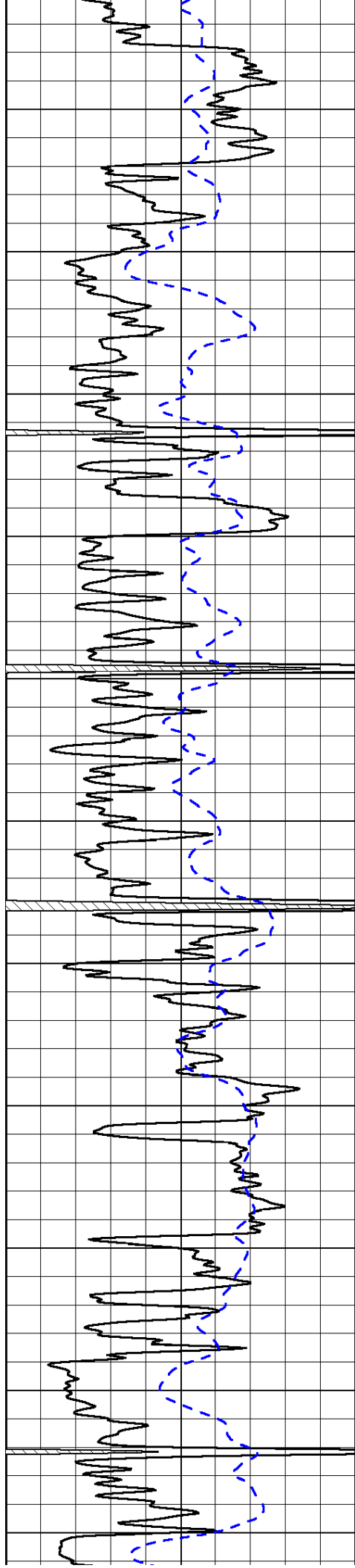
0	Gamma Ray	150	0	Shallow Resistivity	50	LSPD
-200	SP (mV)	0	0	Deep Resistivity	50	
			1000	Conductivity		0
			15000	Line Tension		0
			50	Shallow Resistivity	500	
			50	Deep Resistivity	500	

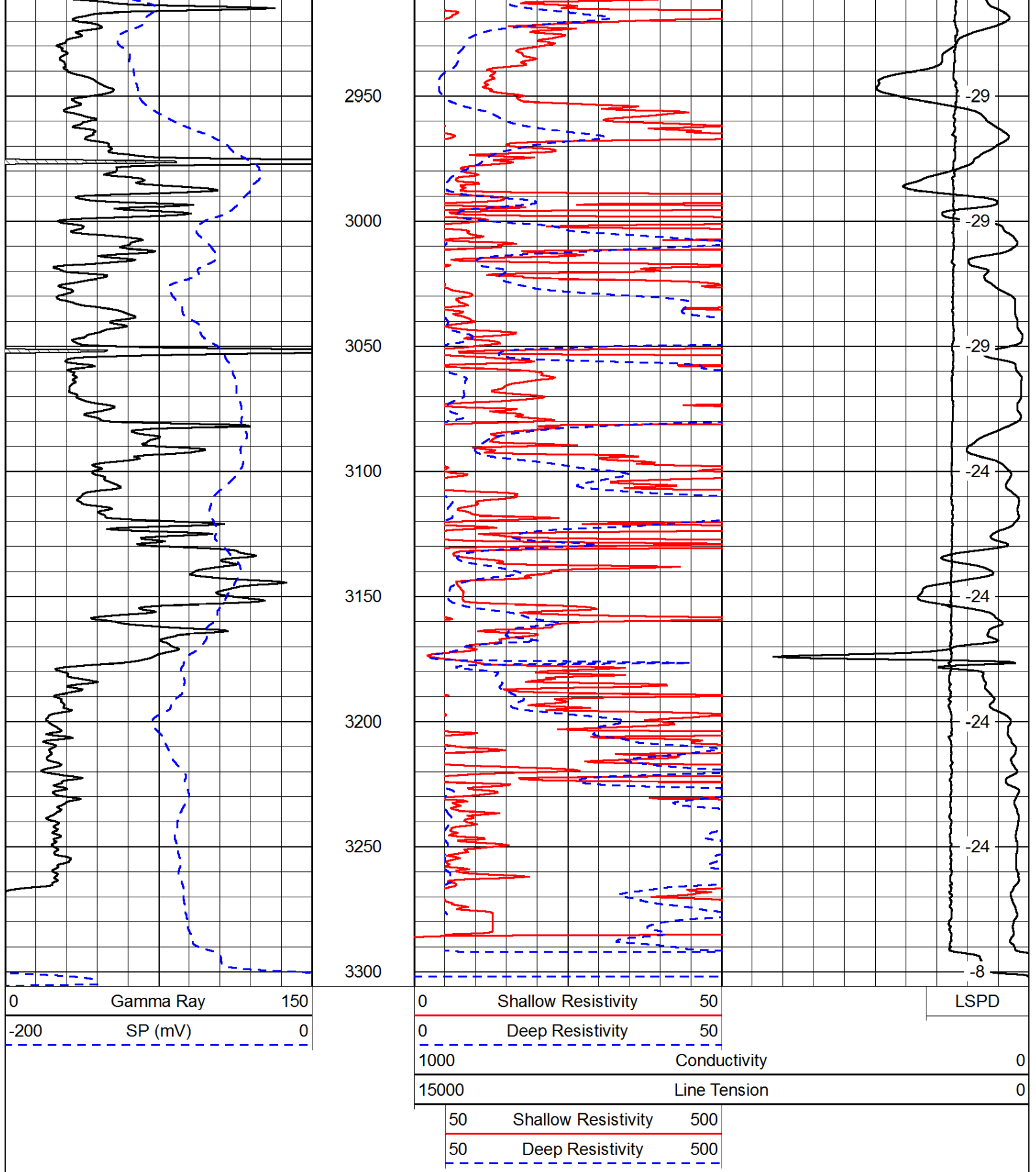












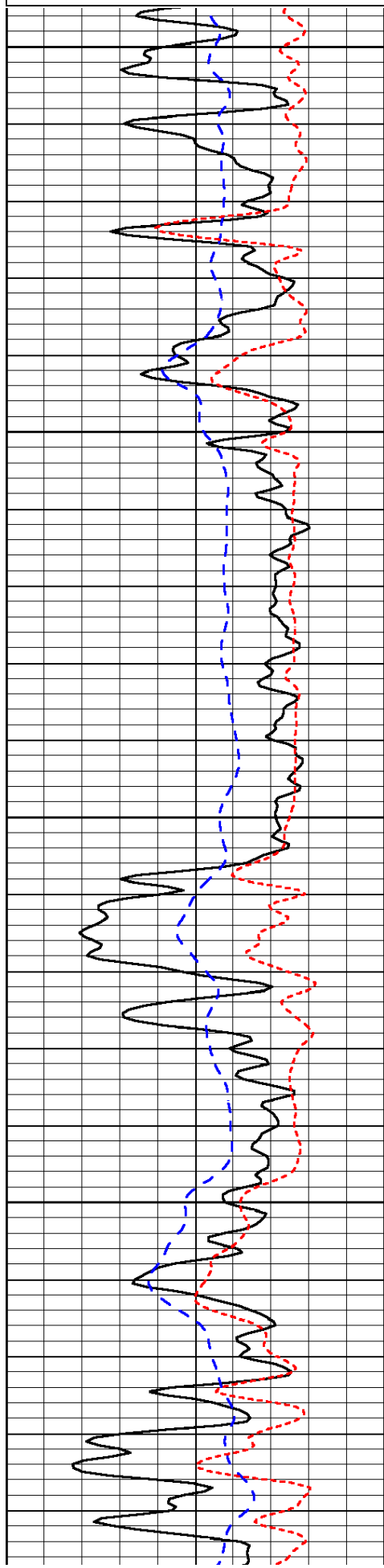
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Charted by: Depth in Feet scaled 1:240



200 0.2 (mV)
-160 RxoRt 40

0.2 Medium Resistivity 2000
0.2 Shallow Resistivity 2000
15000 Line Tension 0

LSPD

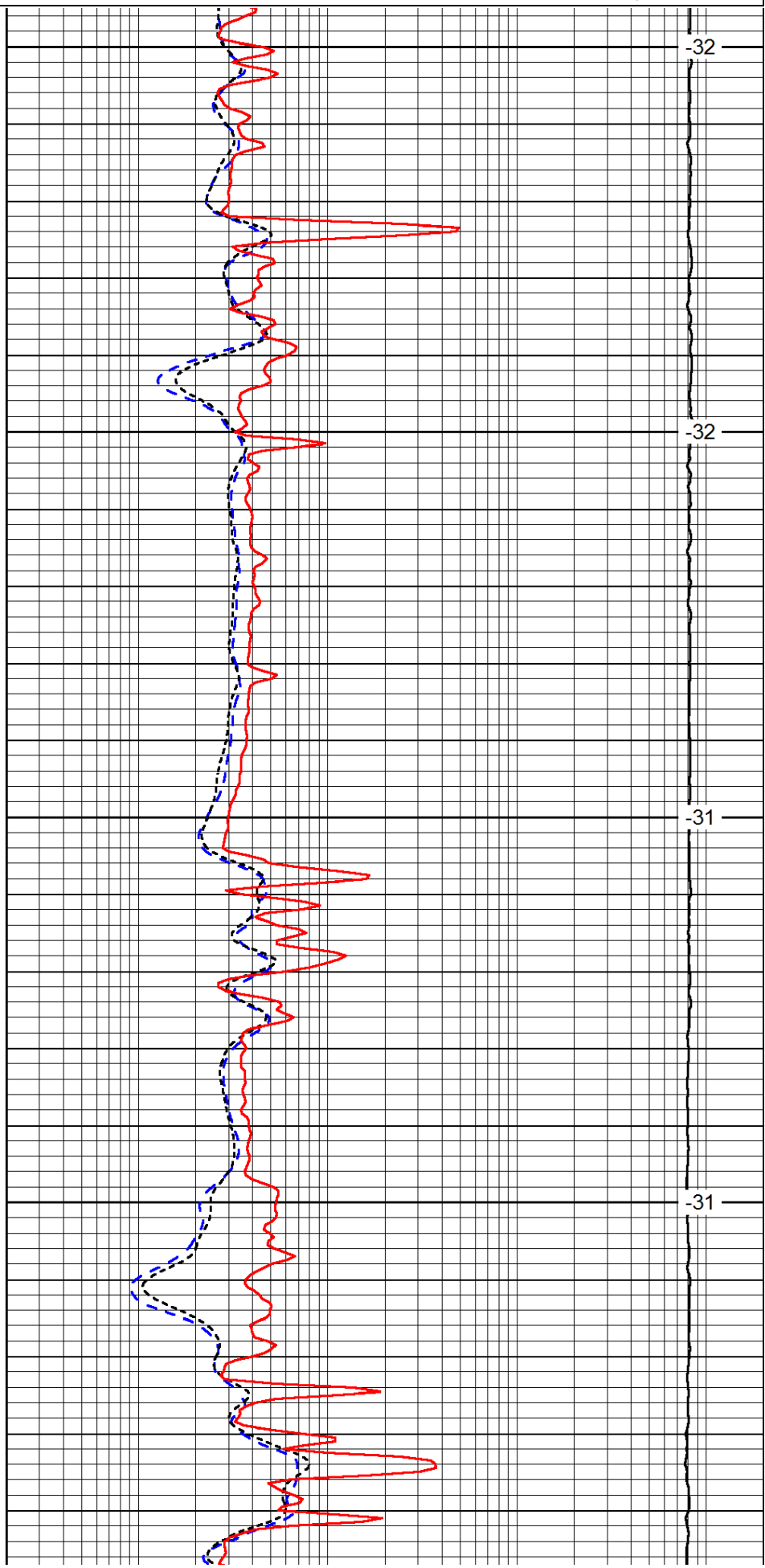


2000

2050

2100

2150

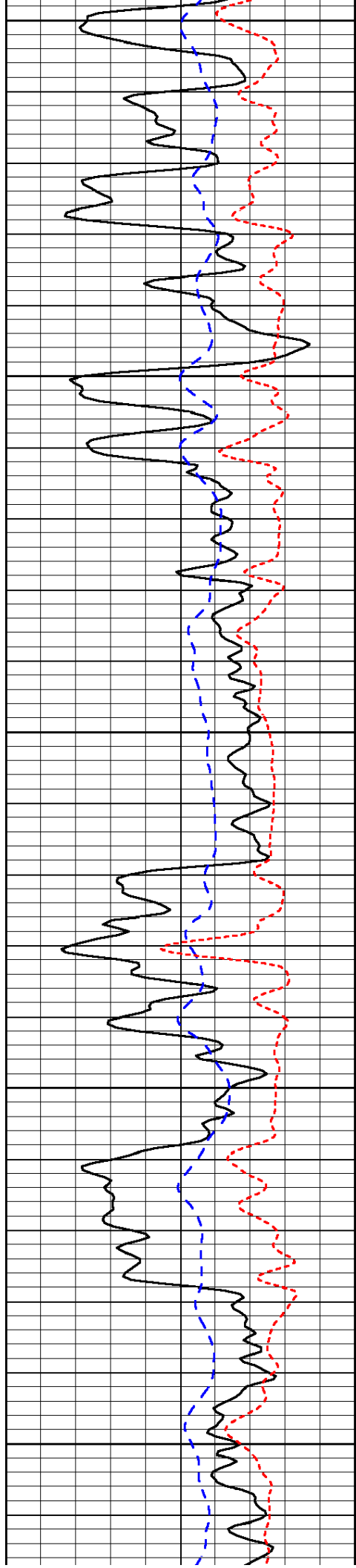


-32

-32

-31

-31



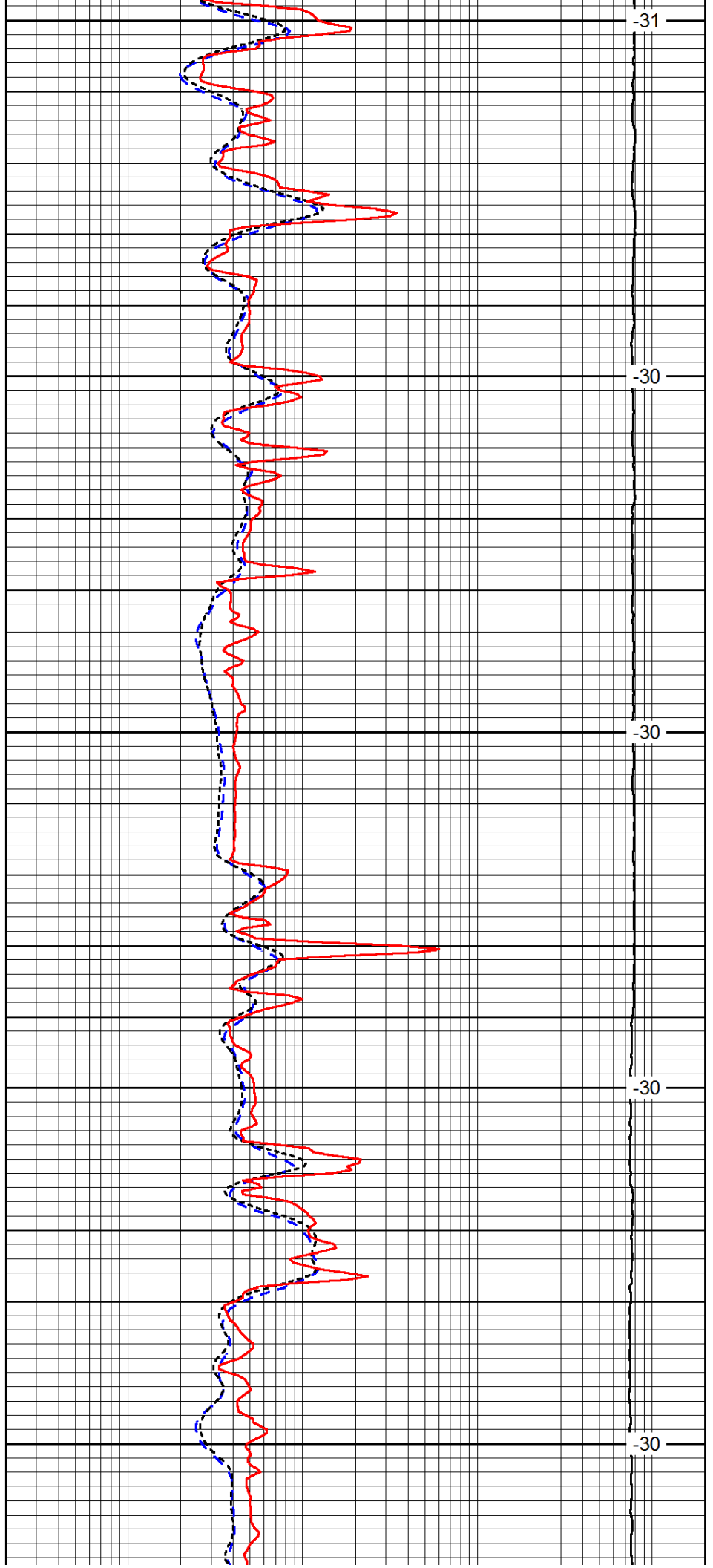
2200

2250

2300

2350

2400



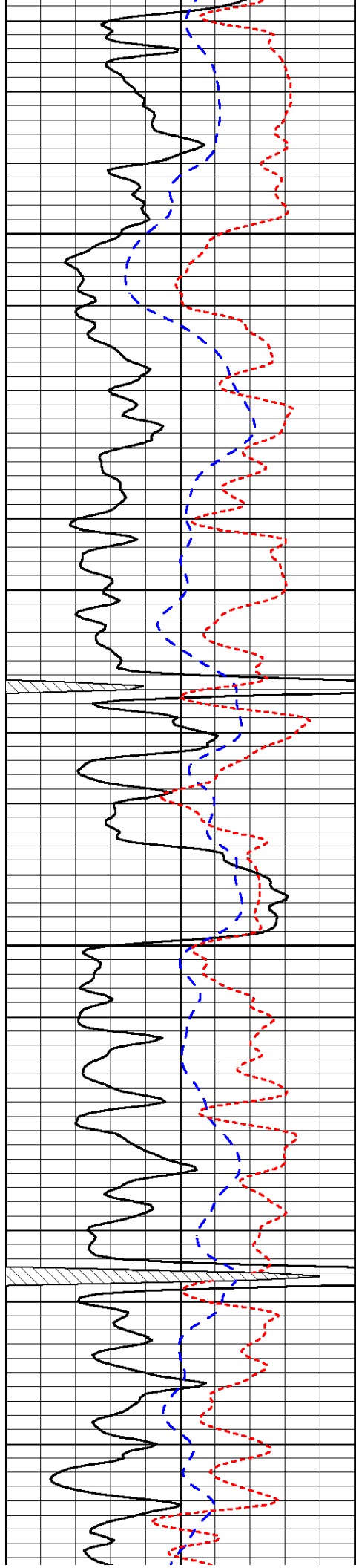
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-30

-30

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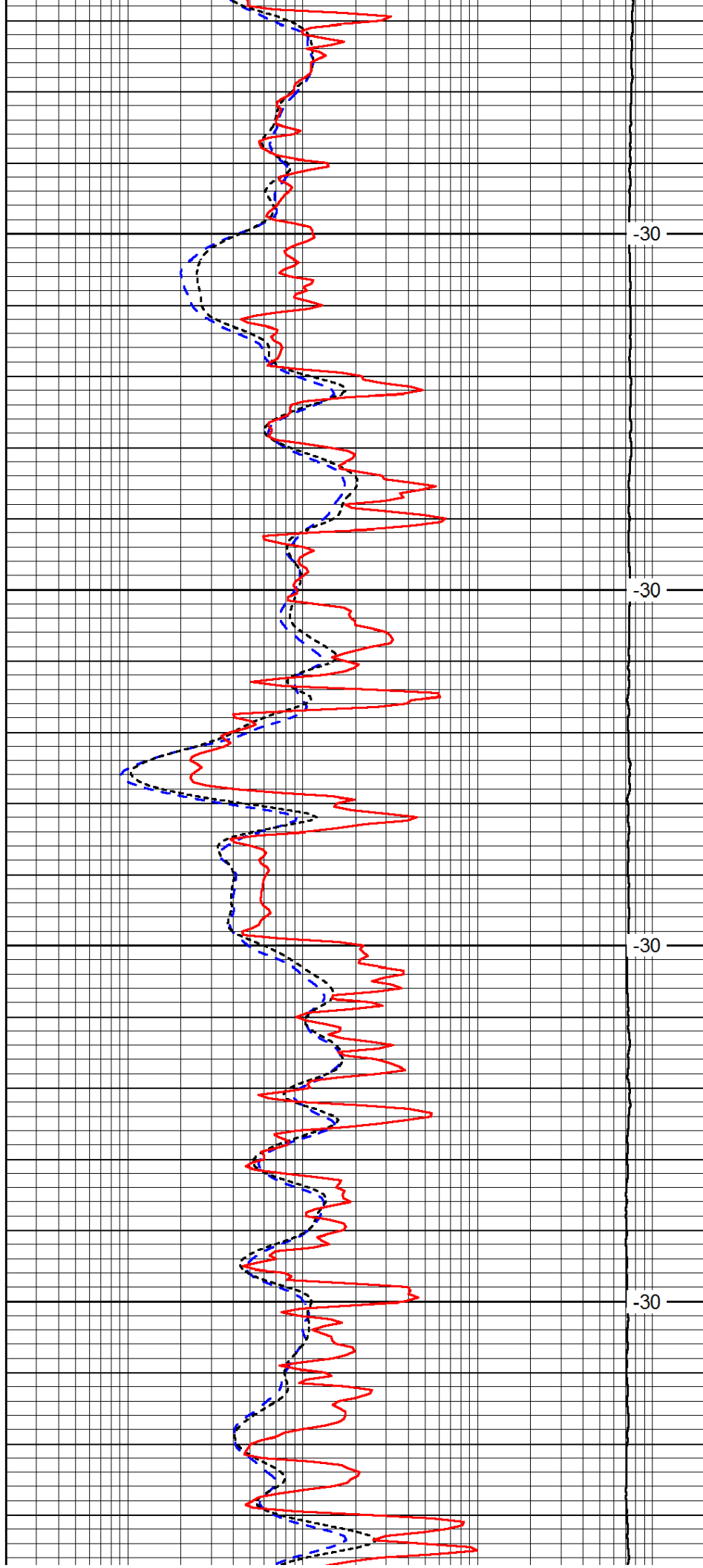


2450

2500

2550

2600

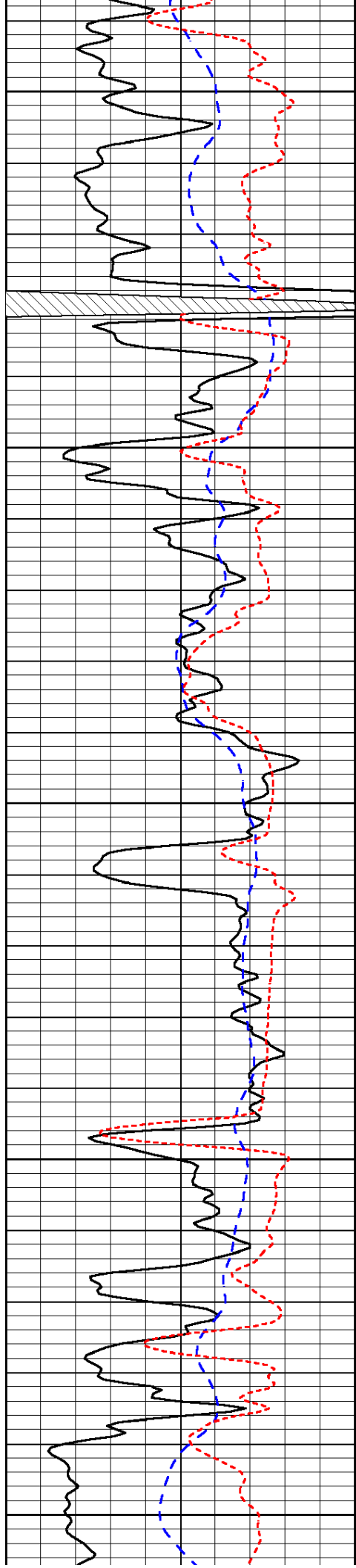


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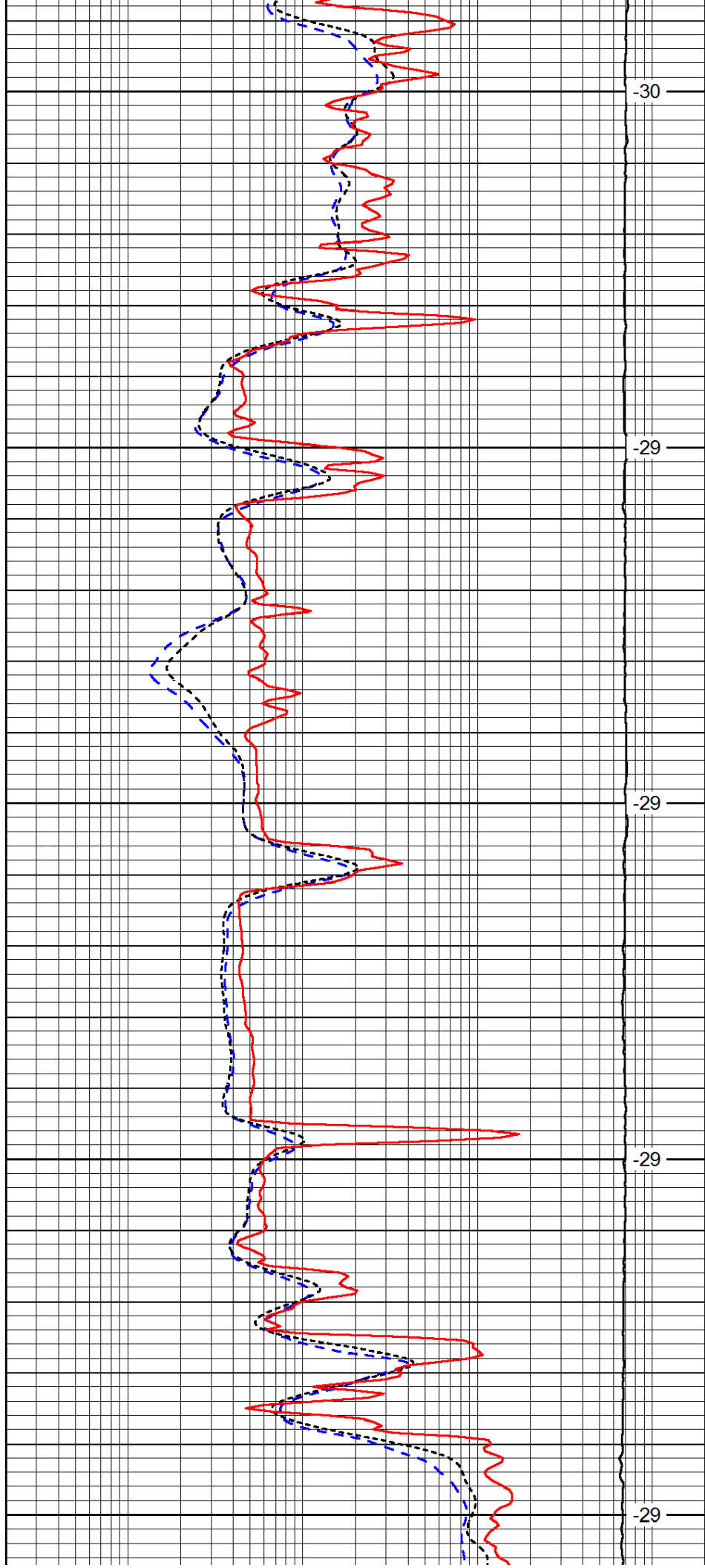
2650

2700

2750

2800

2850



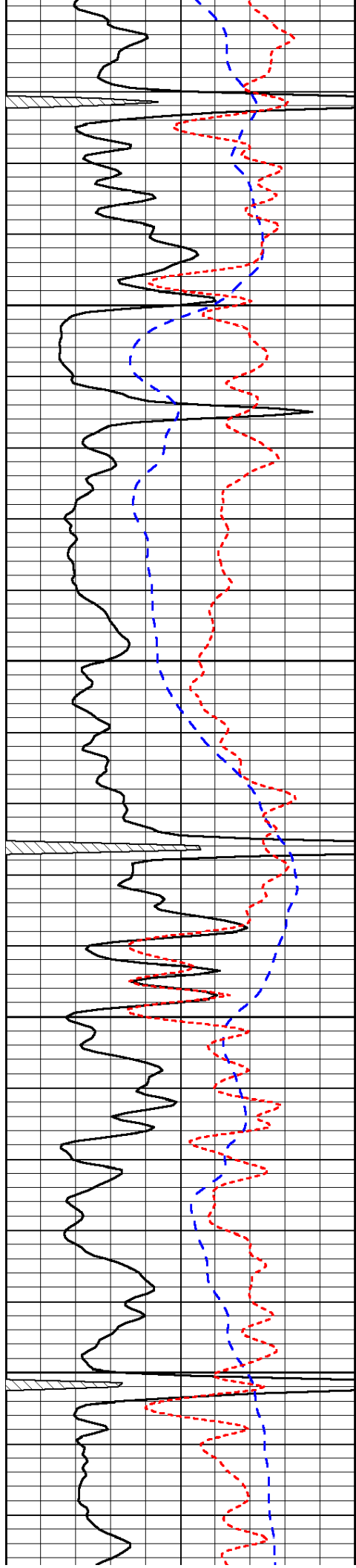
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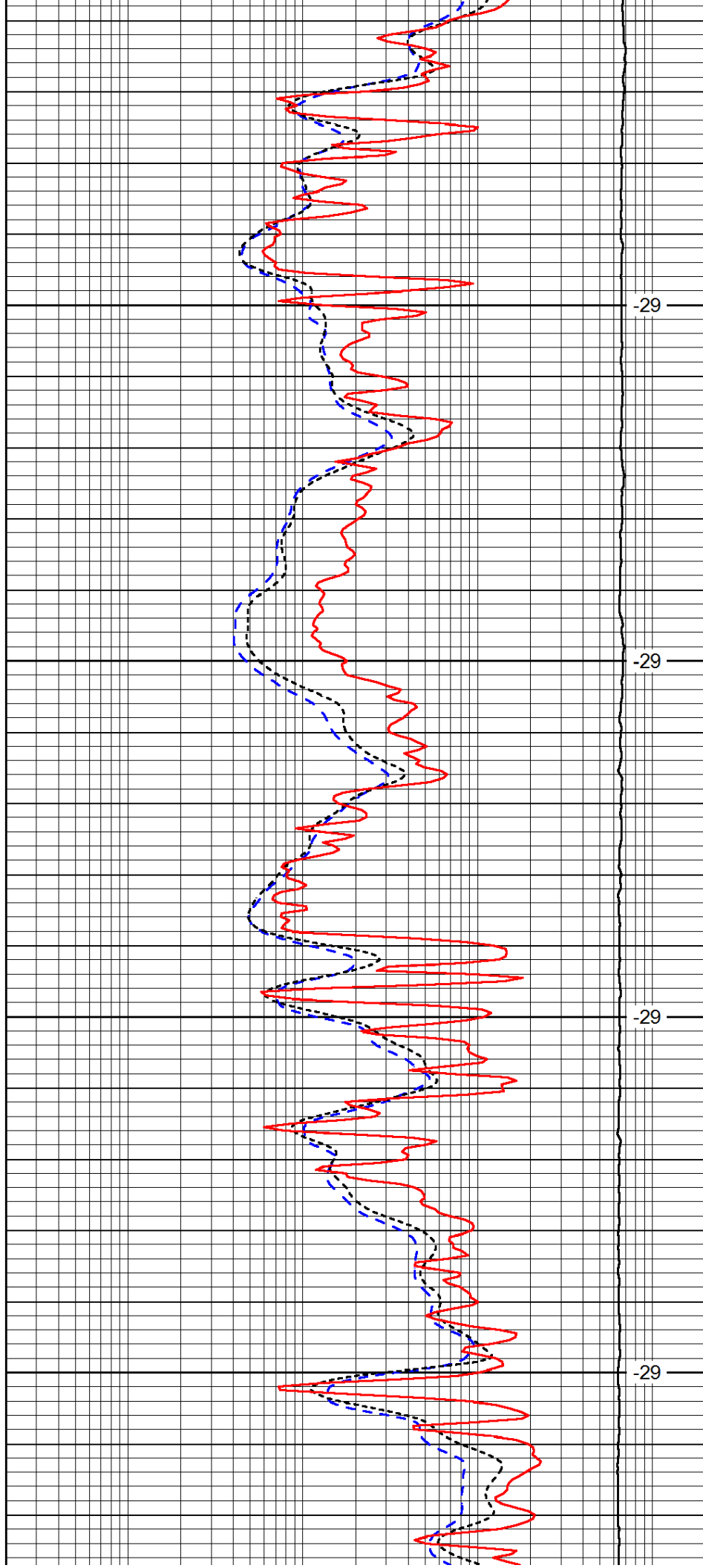


2900

2950

3000

3050

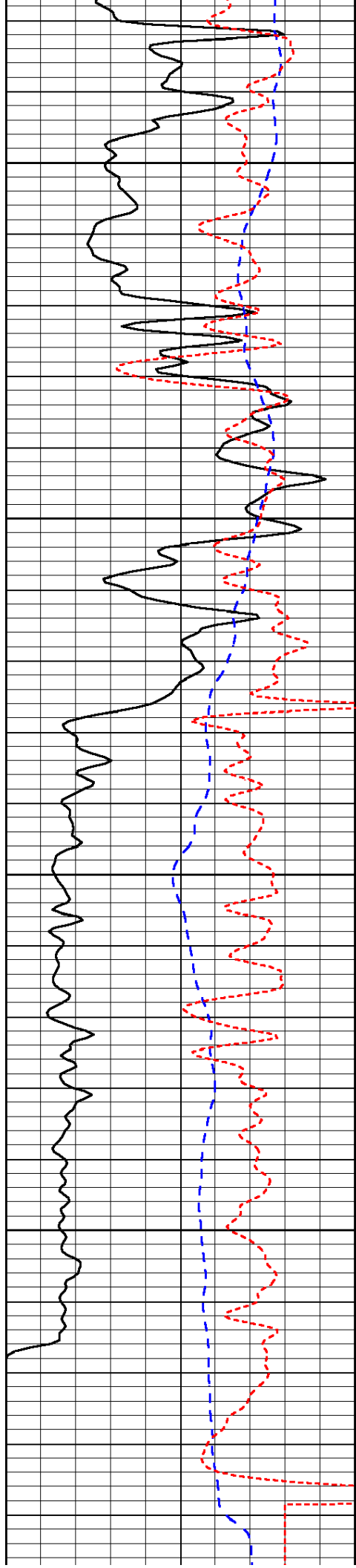


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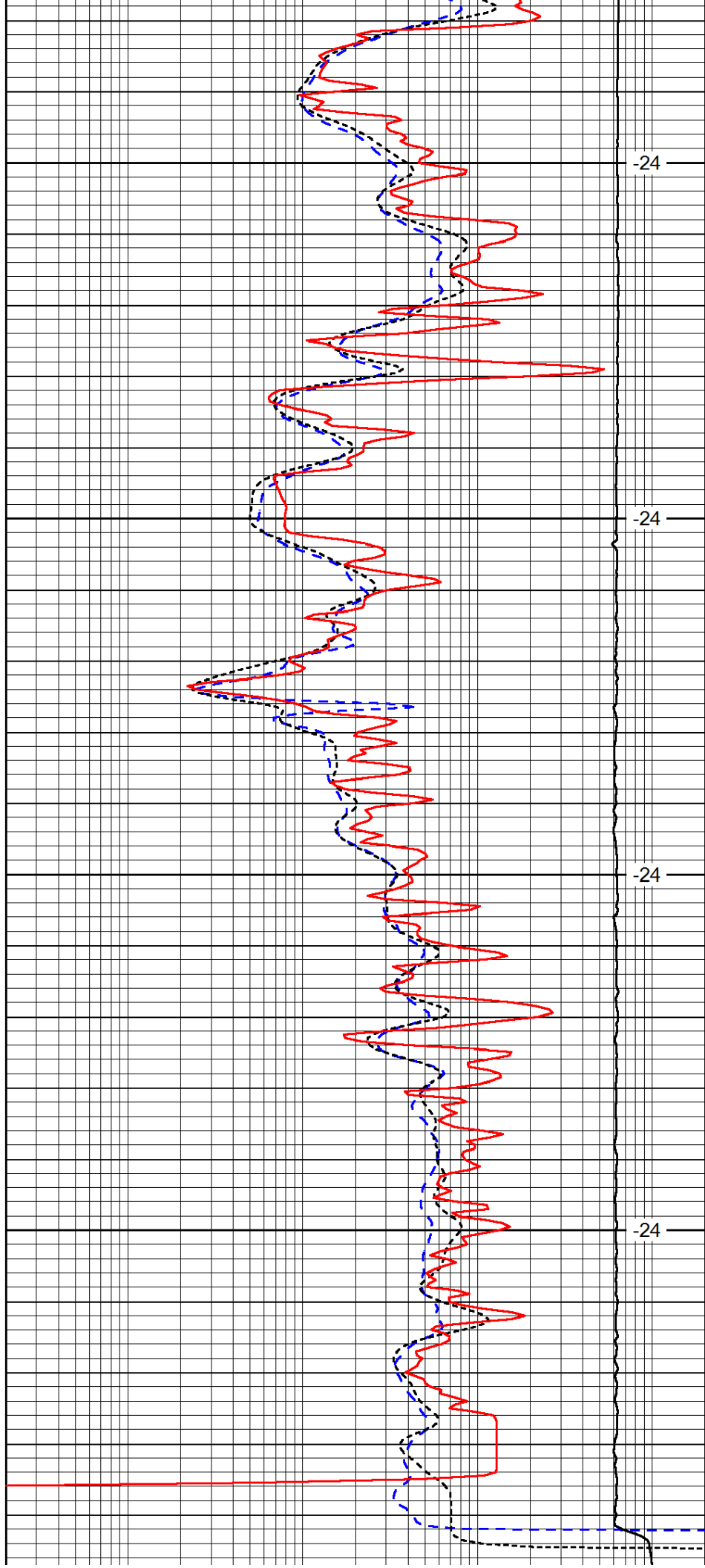


3100

3150

3200

3250



-24

-24

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