



Dual Induction Log

Pioneer Energy Services

API No.	Company American Warrior, Inc.			
	Well BCB Unit #1			
	Field Schoolhouse North			
	County	Ness	State	Kansas
	Location	1150' FSL & 220' FWL		
	Sec: 20	Twp: 17S	Rge: 21W	Other Services CNL/CDL
Permanent Datum	Ground Level	Elevation 2227		Elevation
Log Measured From	Kelly Bushing	6 Ft. Above Perm. Datum		K.B. 2233
Drilling Measured From	Kelly Bushing			D.F. 2227
Date	5/12/2014			
Run Number	One			
Depth Driller	4320			
Depth Logger	4318			
Bottom Logged Interval	4317			
Top Log Interval	200			
Casing Driller	8.625 @ 221			
Casing Logger	217			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity, ppm CL	3000			
Density / Viscosity	9.5 54			
pH / Fluid Loss	10.5 8.0			
Source of Sample	Flowline			
Rm @ Meas. Temp	0.45 @ 79			
Rmf @ Meas. Temp	0.34 @ 79			
Rmc @ Meas. Temp	0.61 @ 79			
Source of Rmf / Rmc	Charts			
Rm @ BHT	0.30 @ 119			
Operating Rig Time	2 1/2 Hours			
Max Rec. Temp. F	119			
Equipment Number	108			
Location	Hays			
Recorded By	D. Kerr			
Witnessed By	Jason Alm			

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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

McCracken KS, South Edge, 5 West to GG RD,
1 South, 2 West to EE RD, 3/4 South, East Into

Database File: c:\warrior\data\amwar_bcb unit #1\amwarrior_bcbunit_1hd.db
Dataset Pathname: DIL\awstk
Presentation Format: dil2in
Dataset Creation: Tue May 13 00:06:14 2014
Charted by: Depth in Feet scaled 1:600

Charted by: Depth in Feet scaled 1:600

0	Gamma Ray	150
-200	SP (mV)	0

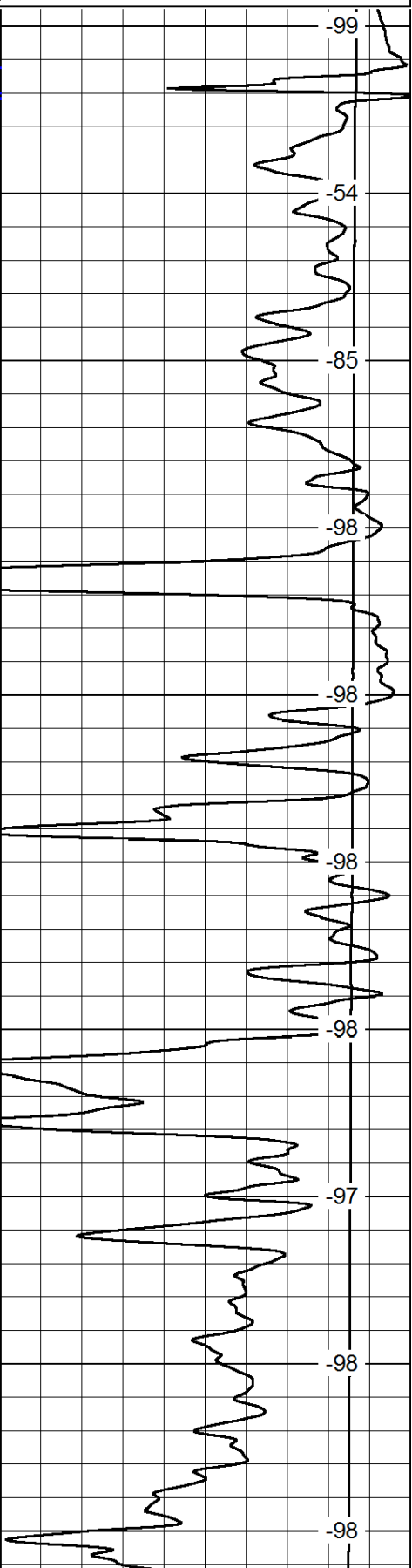
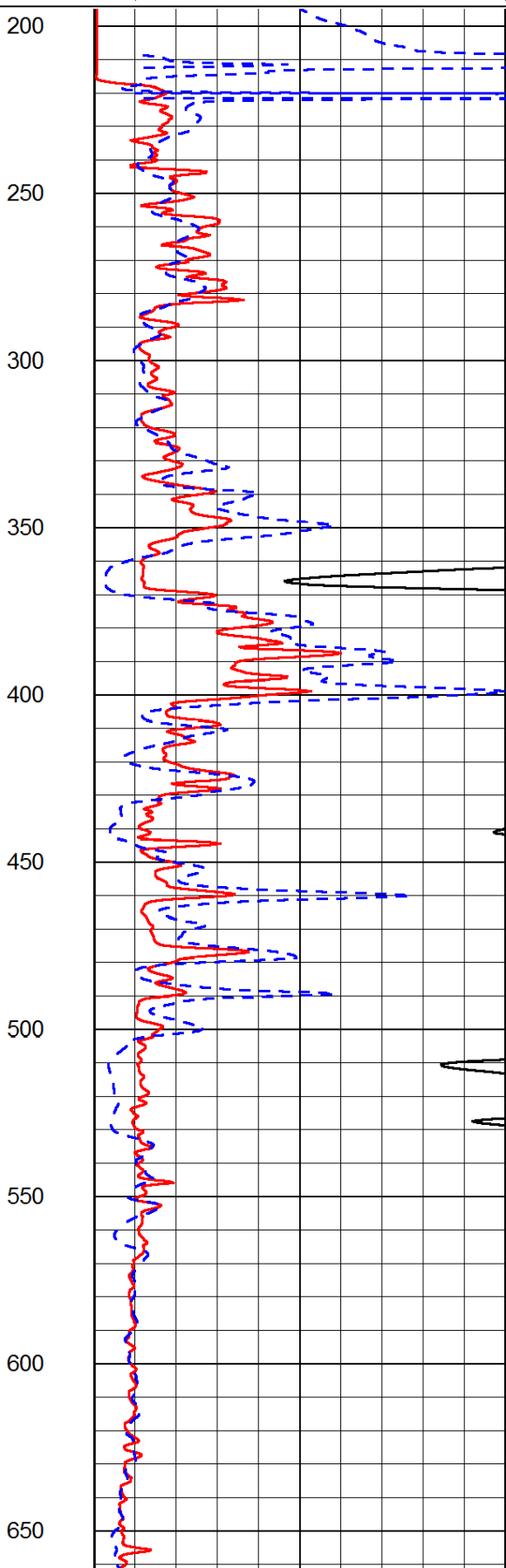
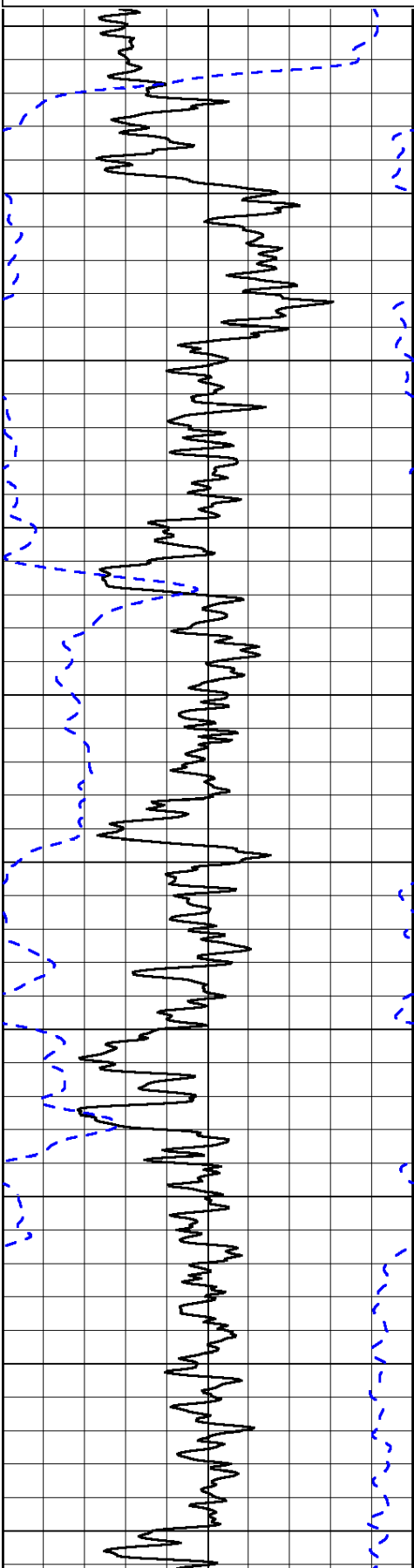
0	Shallow Resistivity	50
0	Deep Resistivity	50

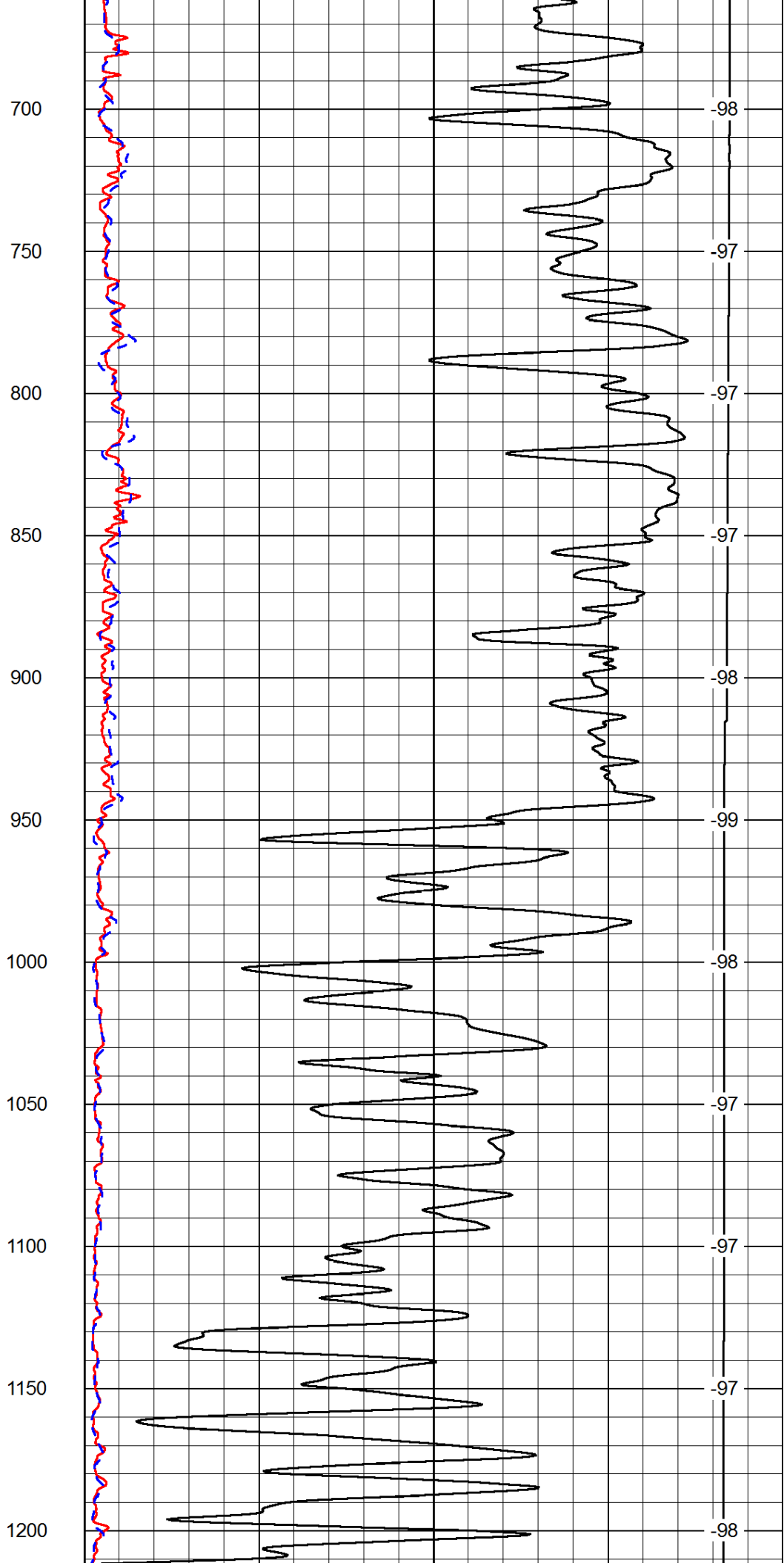
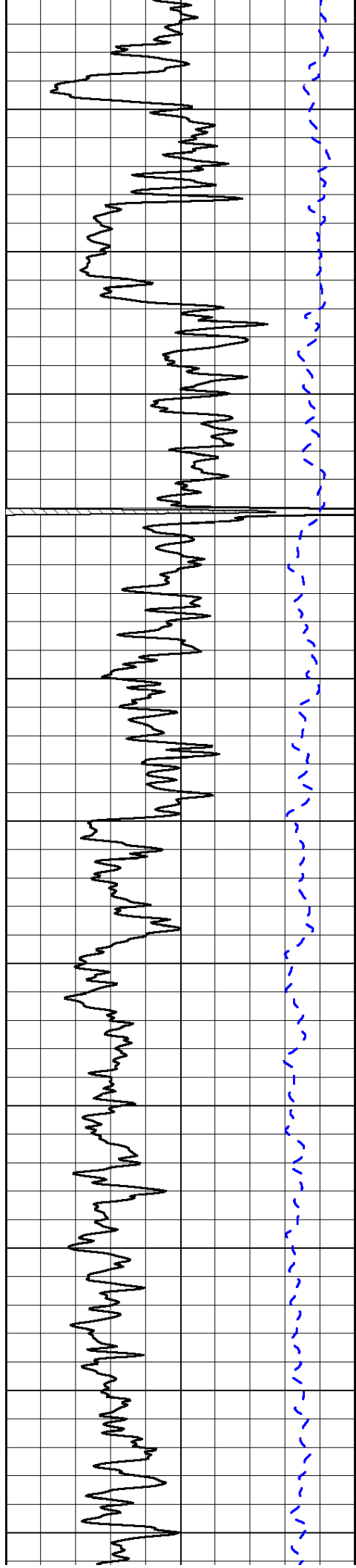
LSPD

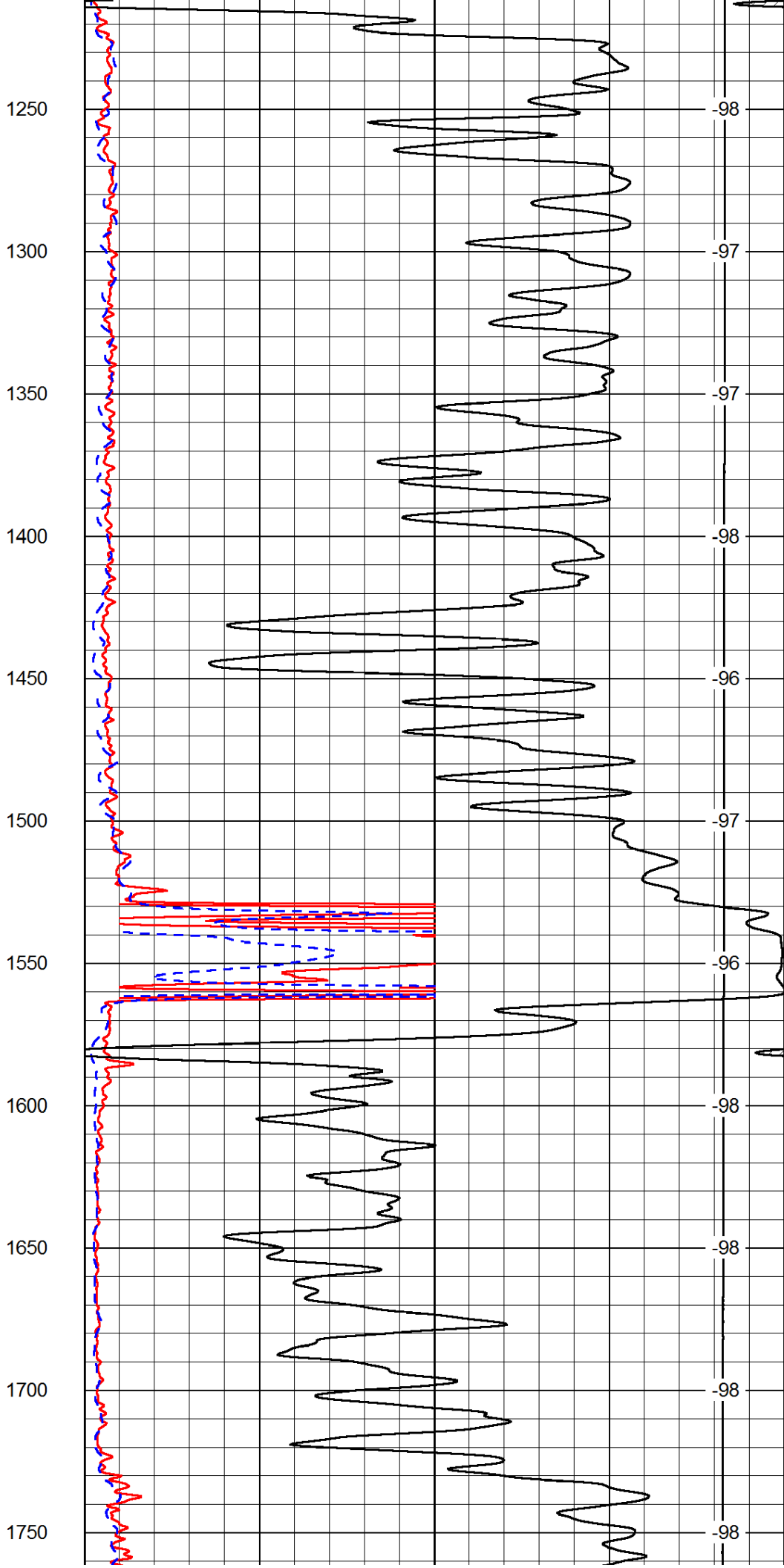
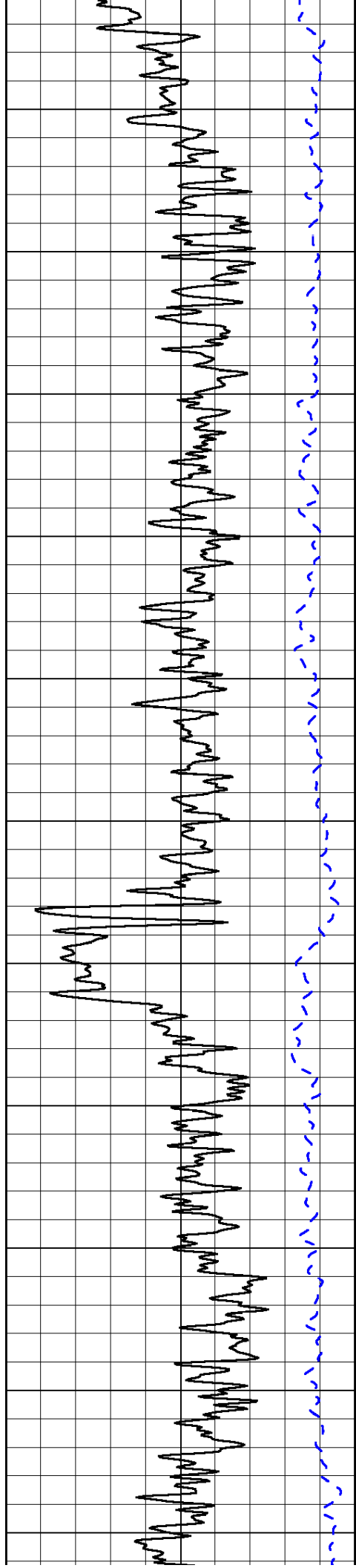
1000	Conductivity	0
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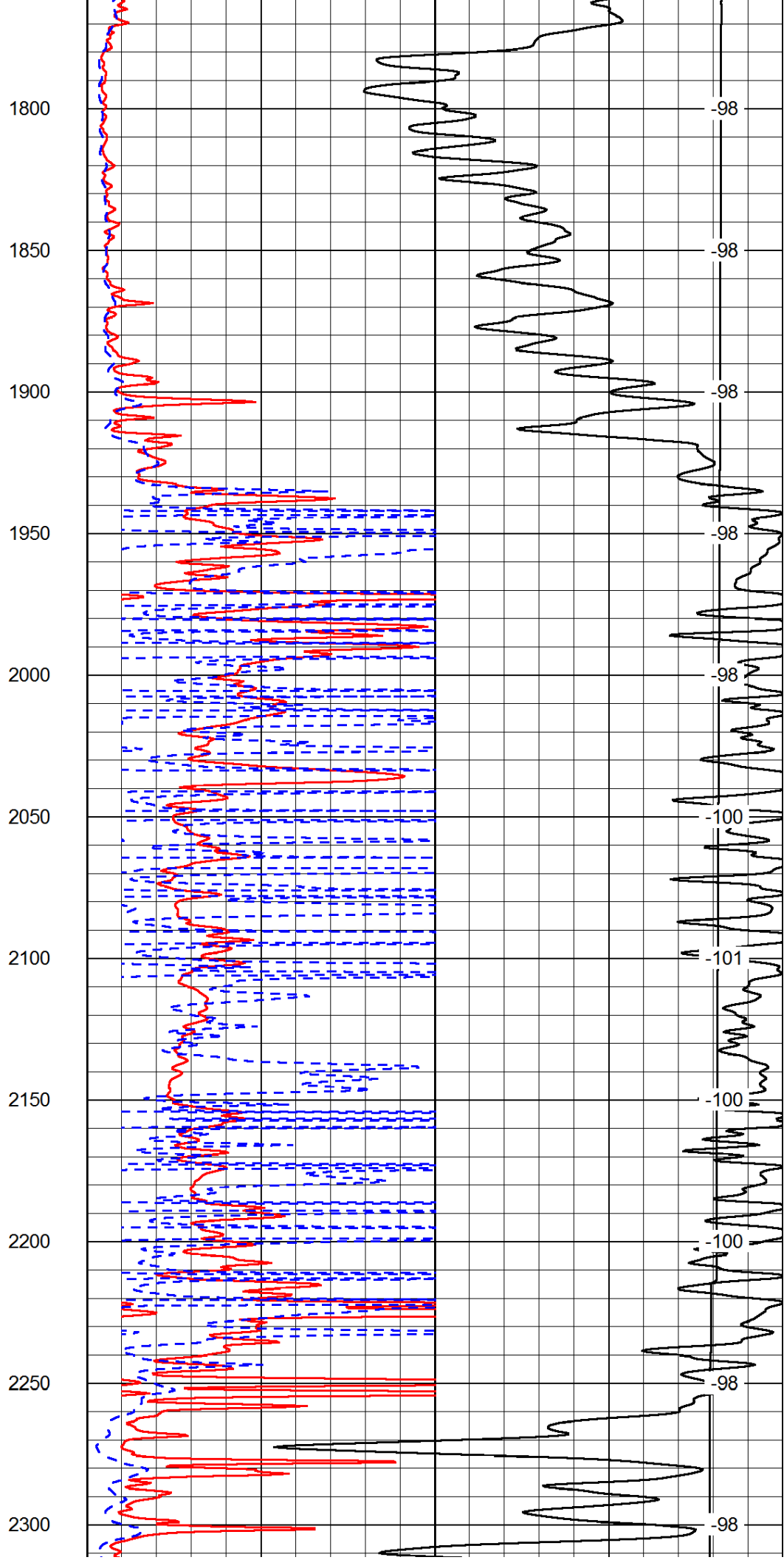
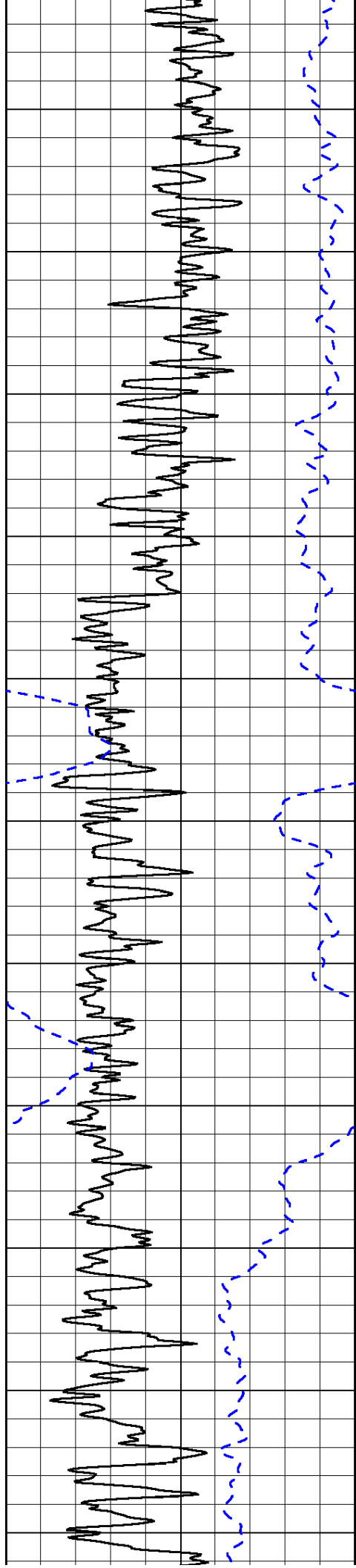
15000	Line Tension	0
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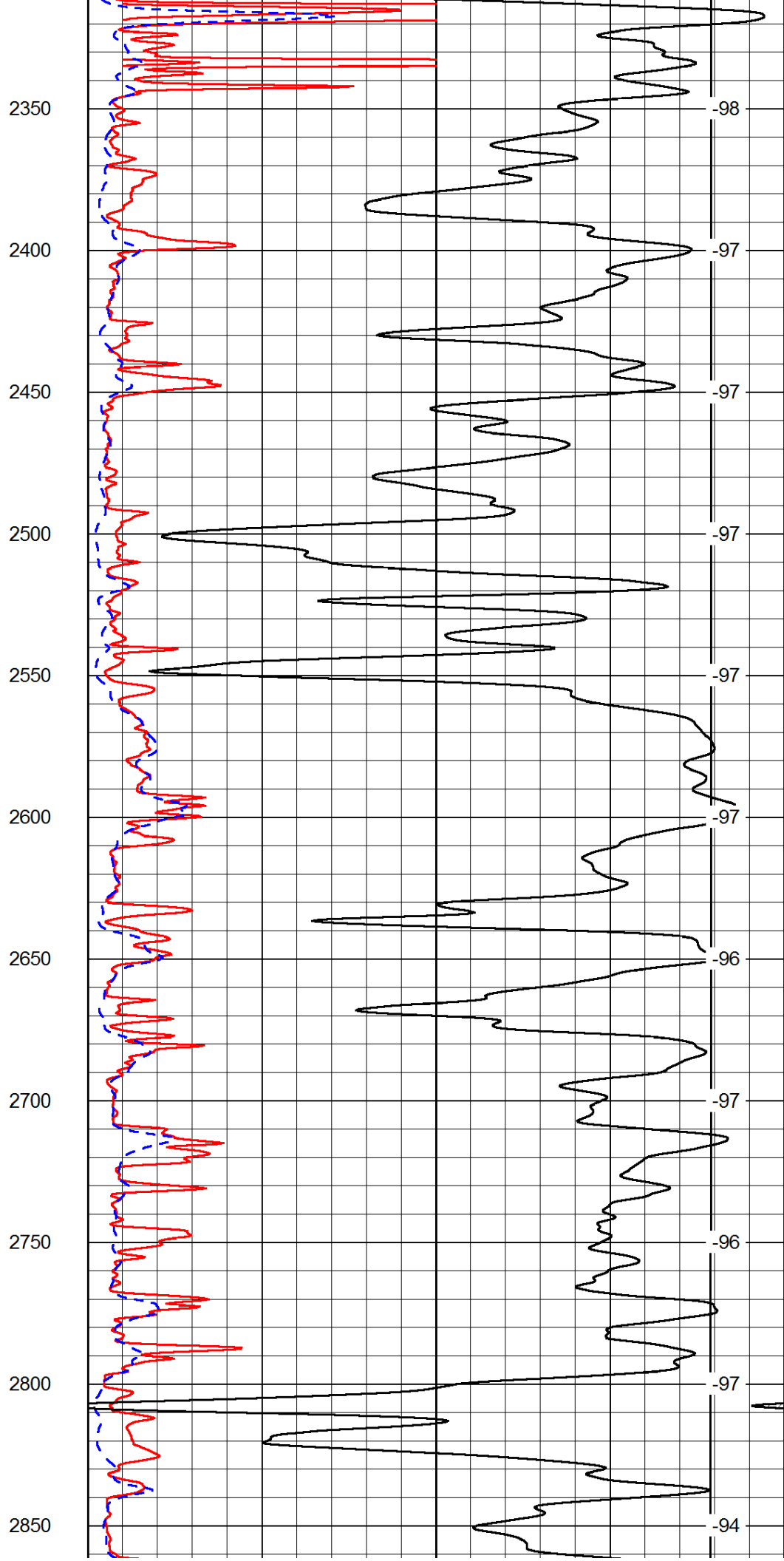
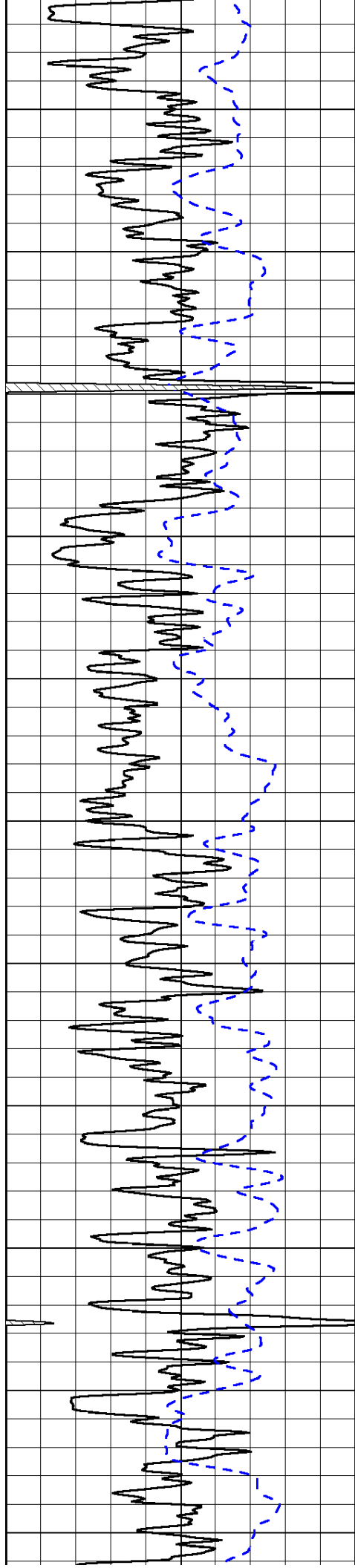
50	Shallow Resistivity	500
50	Deep Resistivity	500

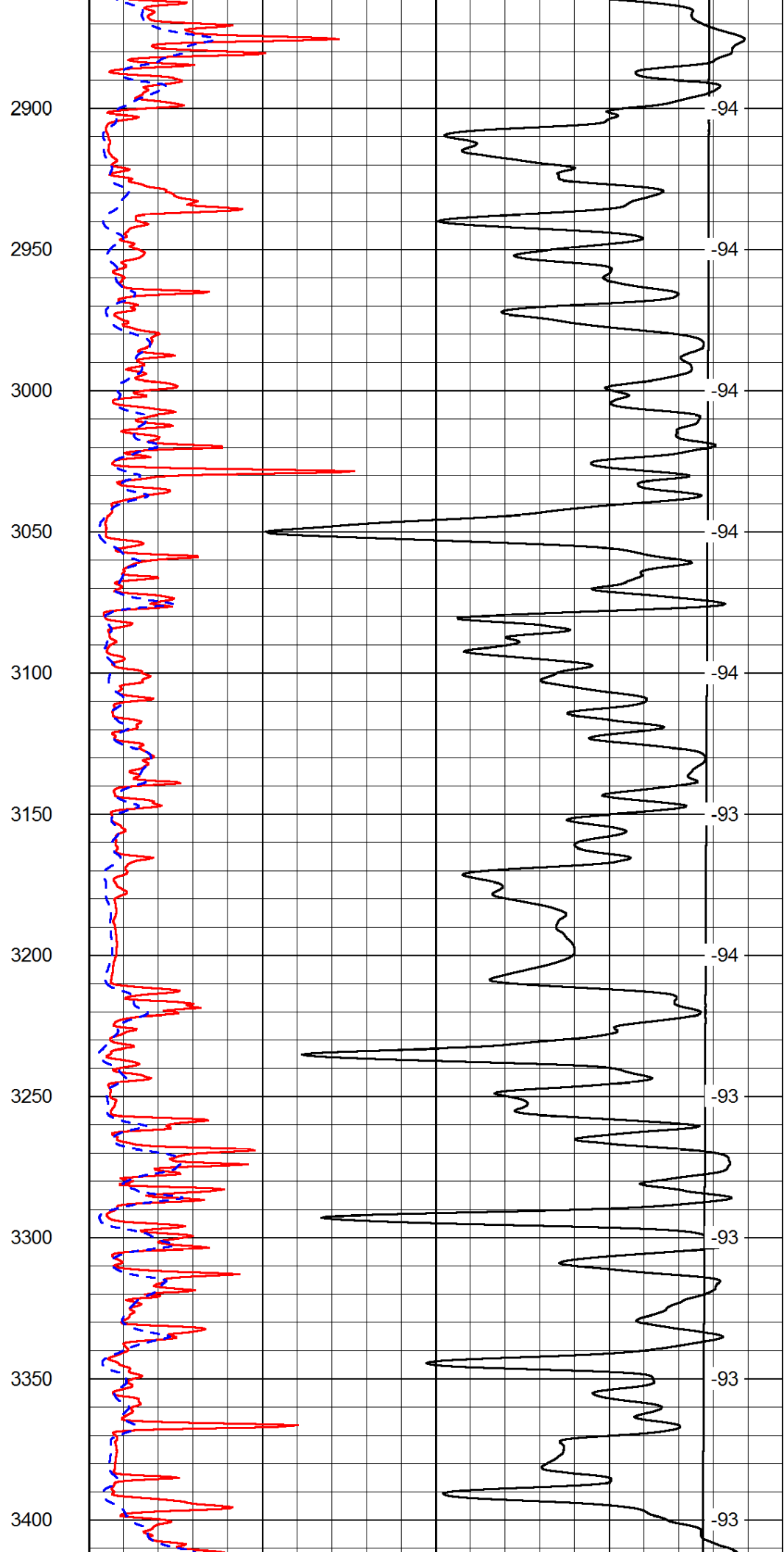
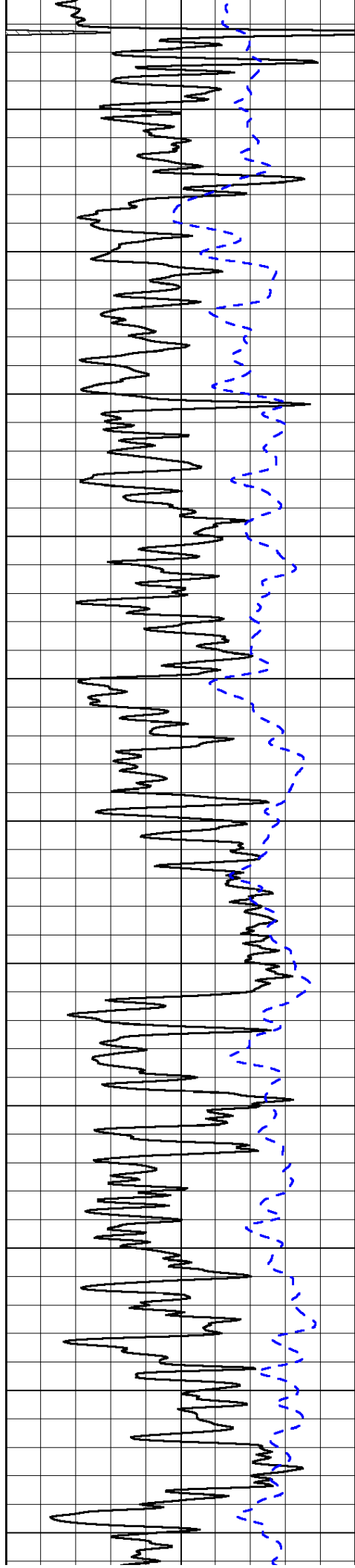


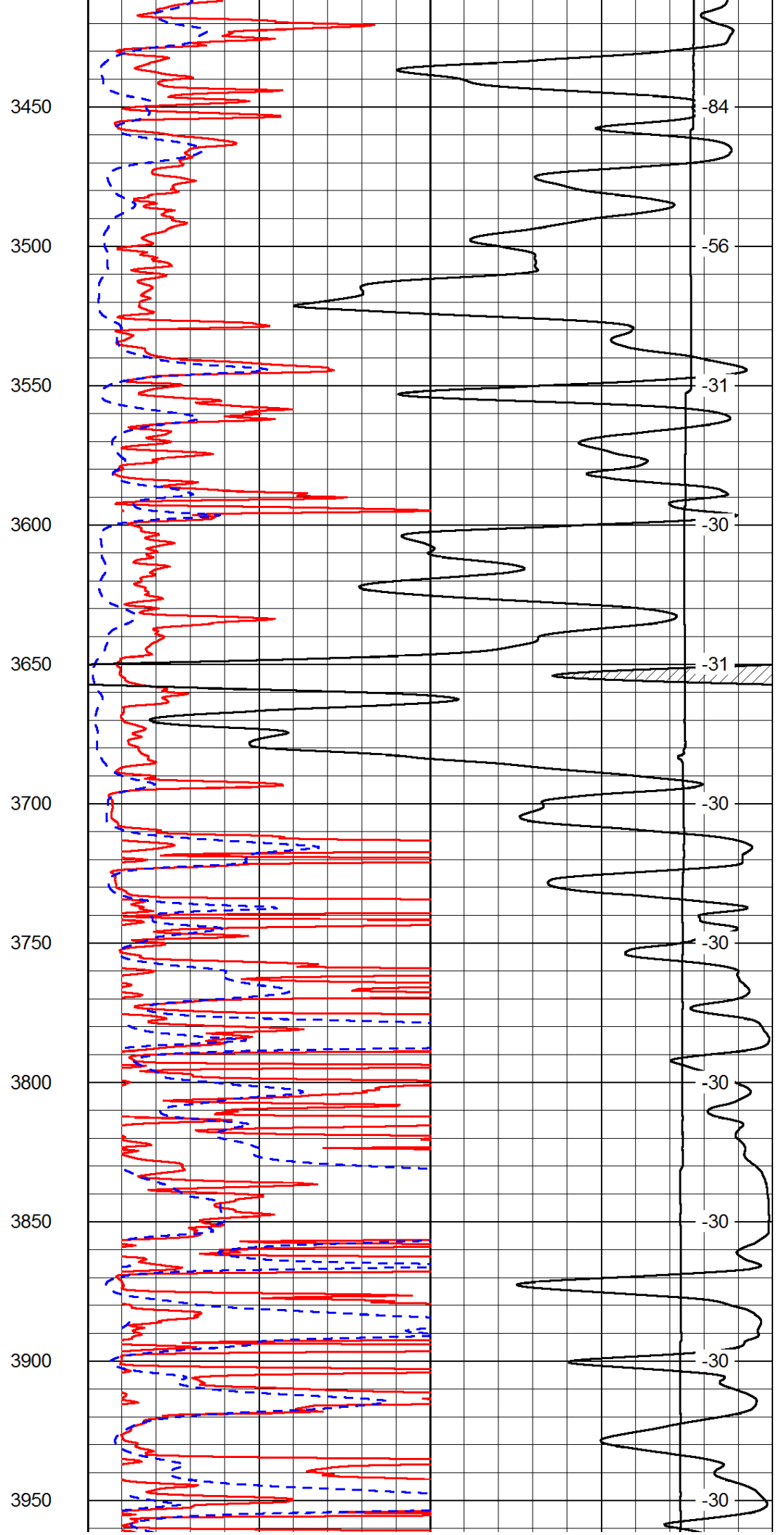
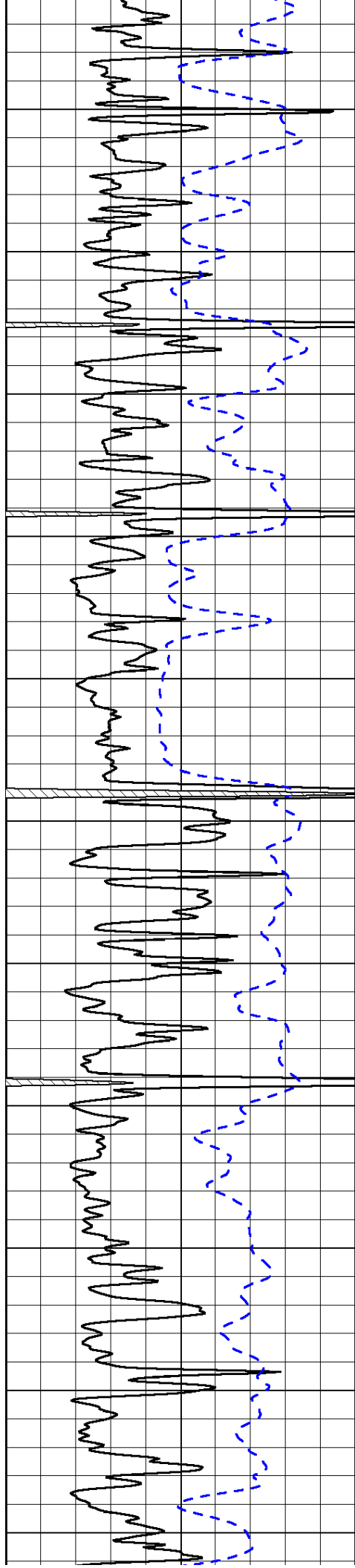


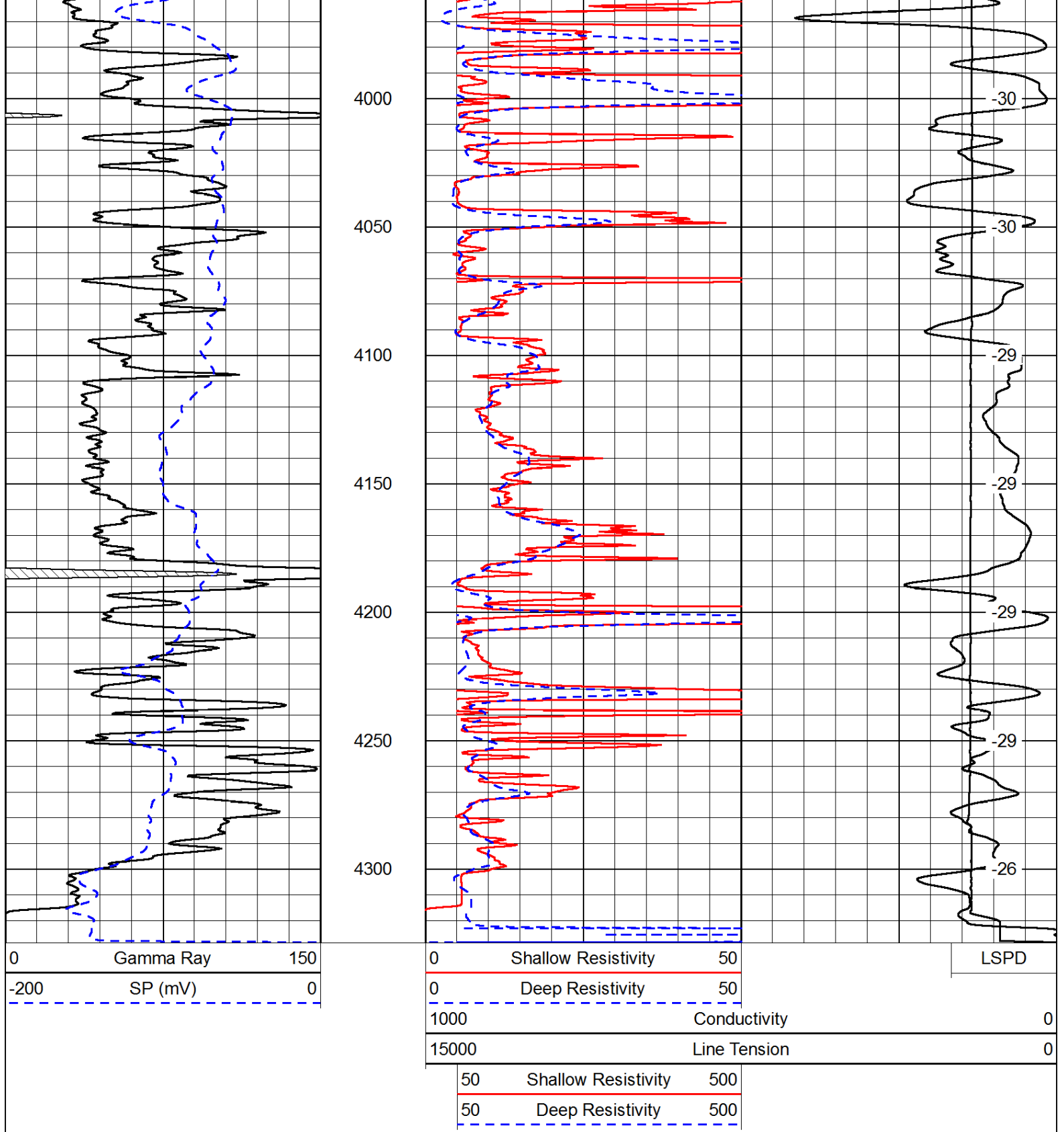






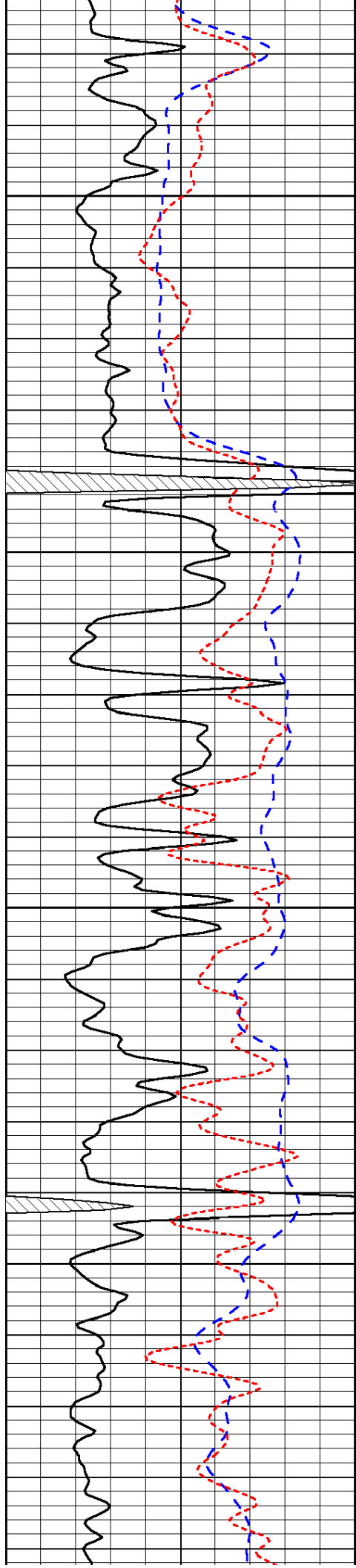






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 Dataset Pathname: DIL\awstk
 Presentation Format: dil
 Dataset Creation: Tue May 13 00:06:14 2014
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150	0.2	Deep Resistivity	2000
-200	SP (mV)	0	0.2	Medium Resistivity	2000
-160	RxoRt	40	0.2	Shallow Resistivity	2000
			15000	Line Tension	0

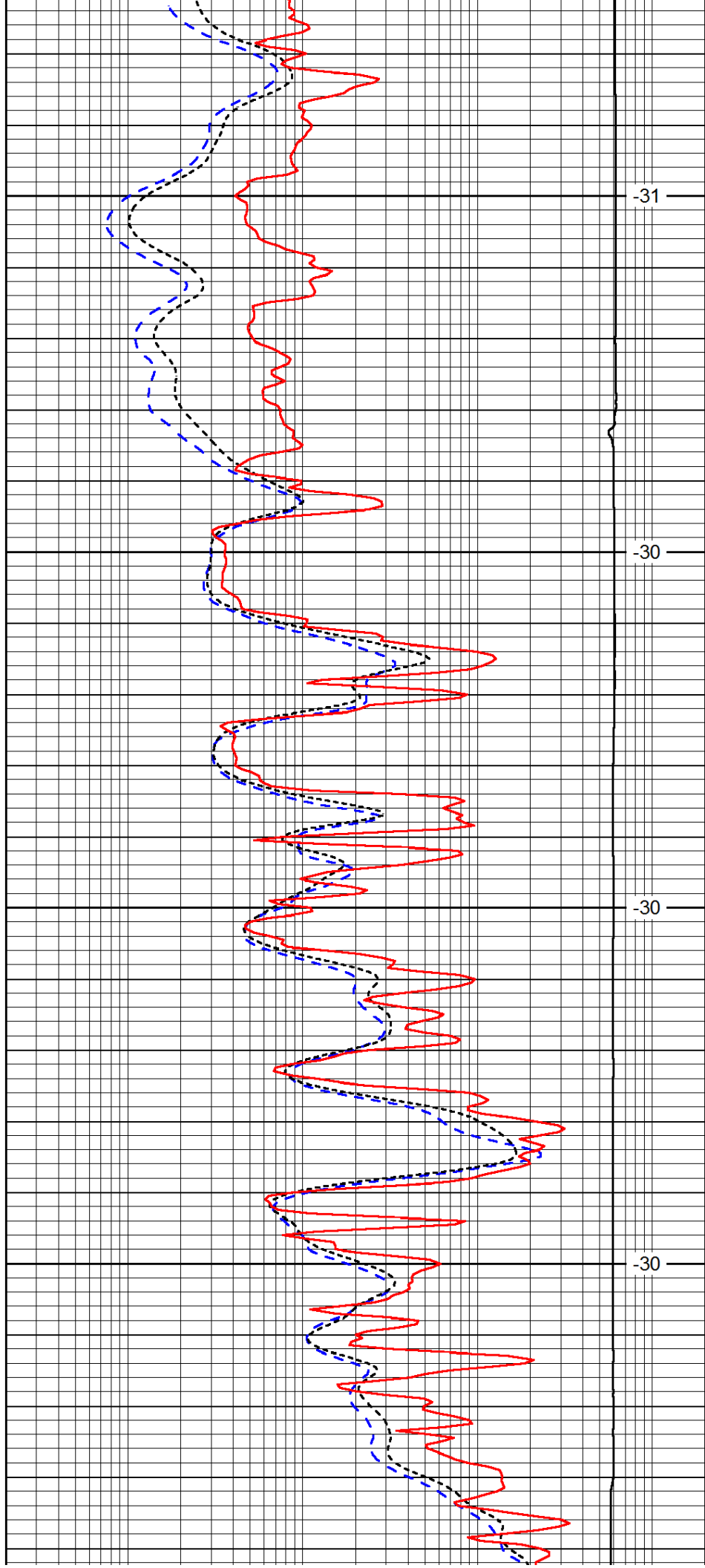


3650

3700

3750

3800

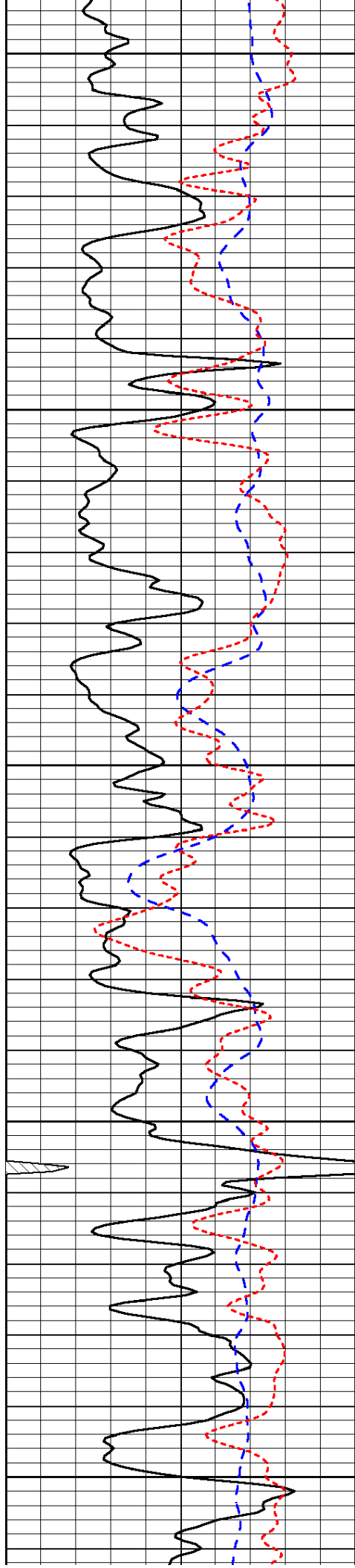


-31

-30

-30

-30



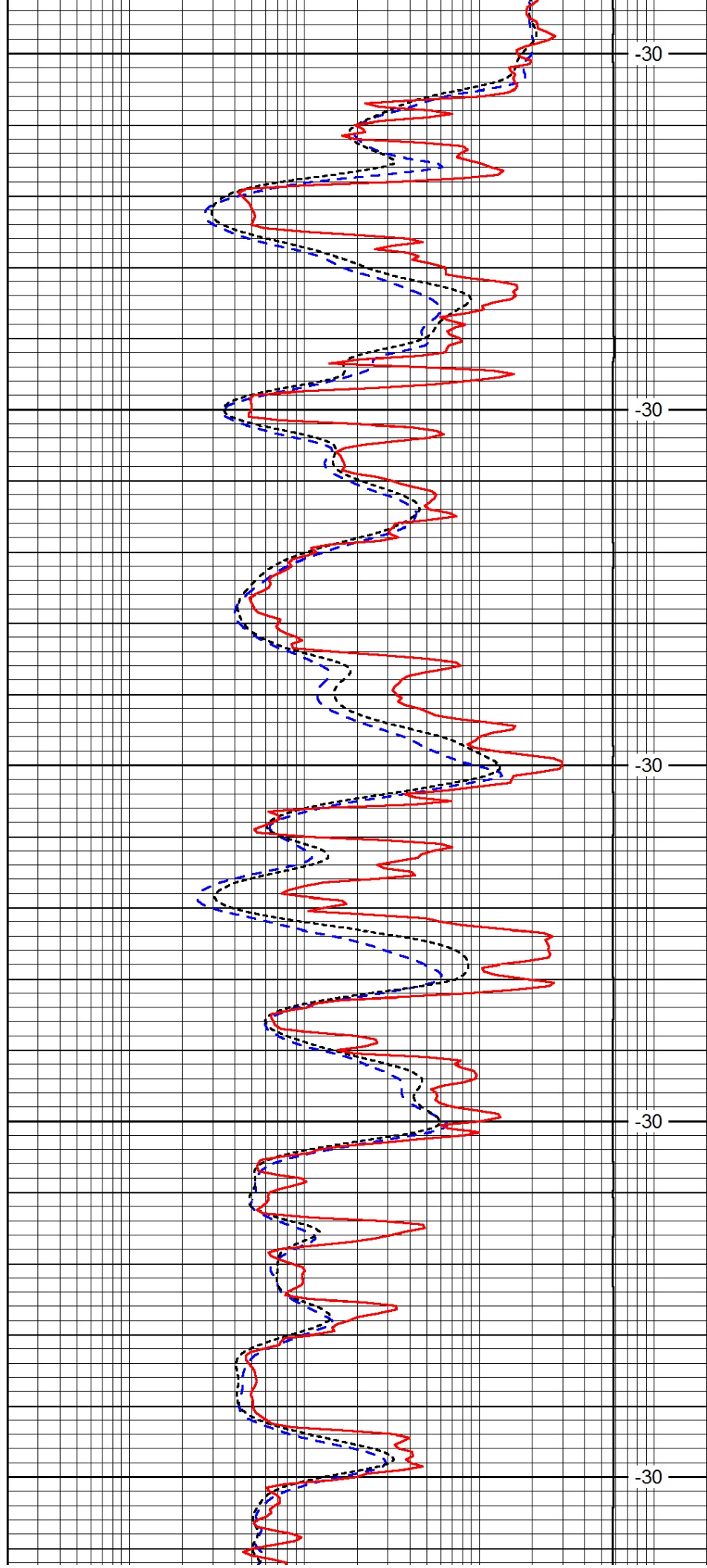
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3900

3950

4000

4050



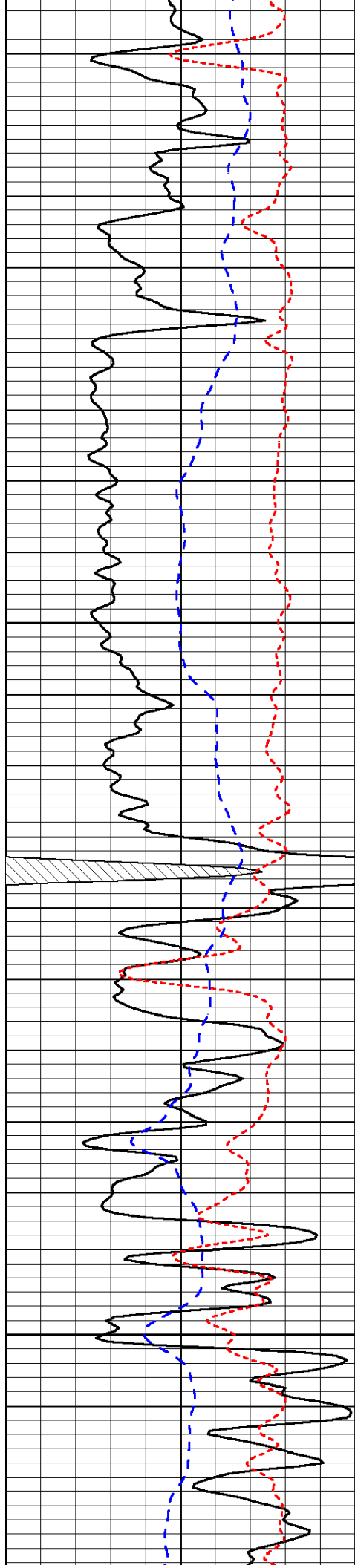
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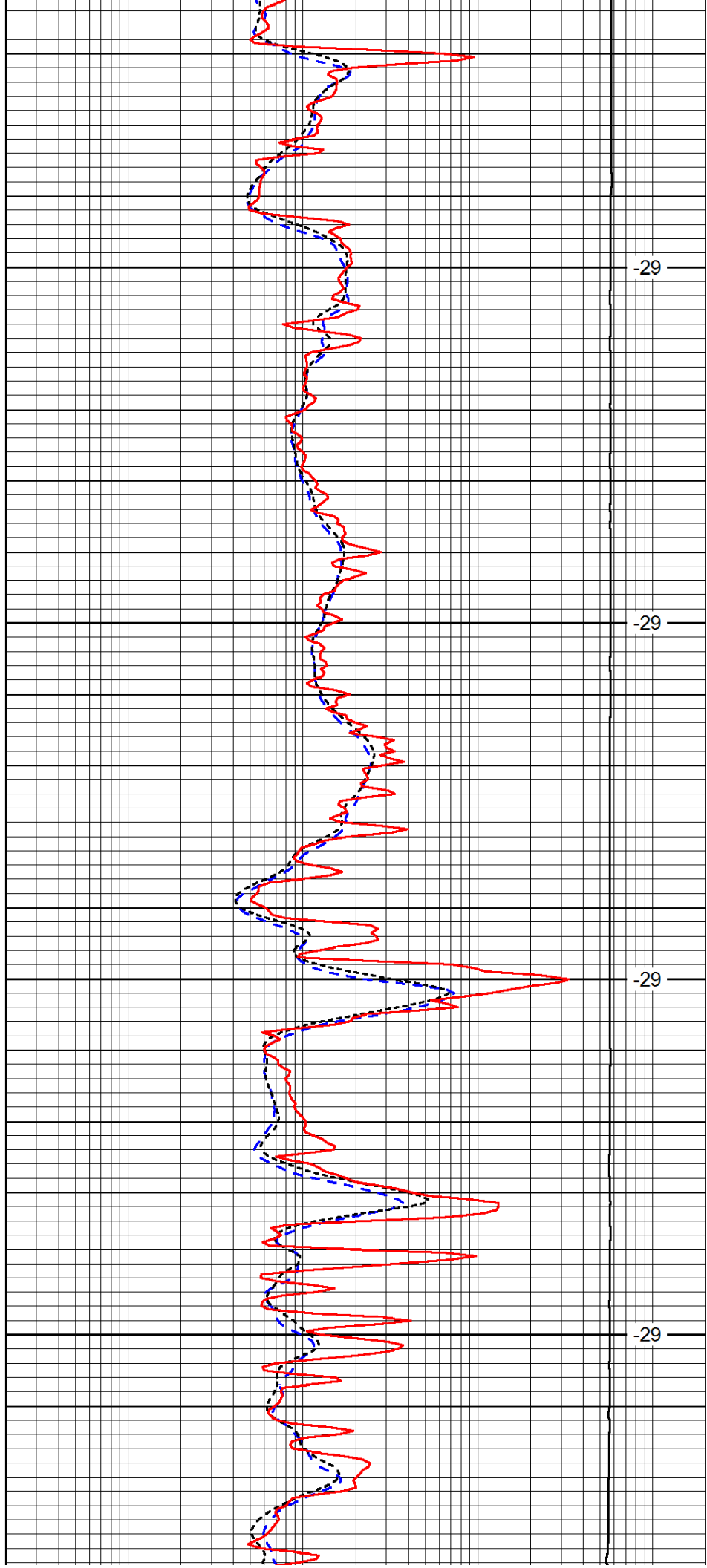


4100

4150

4200

4250

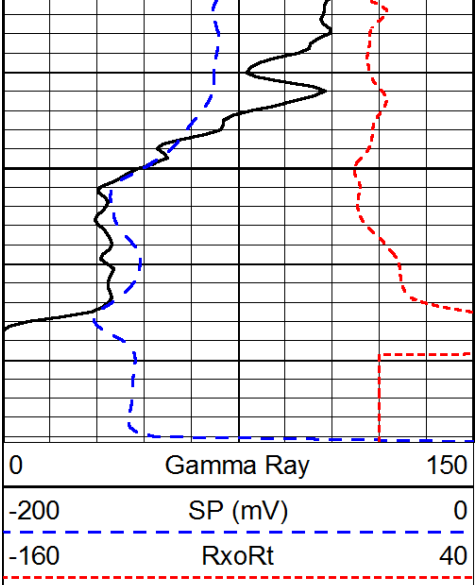


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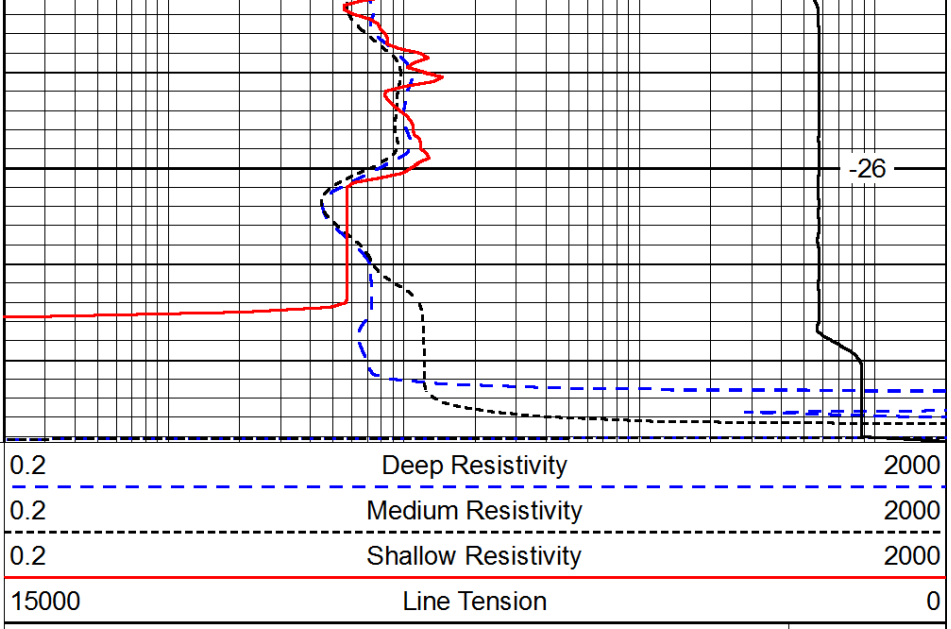
-29

-29

-29



4300



-26

LSPD