



Pioneer Energy Services

# Dual Induction Log

15-179-21312-00-00

API No.

Company **Culbreath Oil & Gas Company, Inc.**

Well **Coburn #3-8**

Field **Unnamed**

County **Sheridan** State

**Kansas**

Location **1980' FNL & 1320' FWL**

Other Services  
CNL/CDL  
MEL/BHCS

Sec: **8** Twp: **10S** Rge: **26W**

Permanent Datum **Ground Level** Elevation **2595**

Log Measured From **Kelly Bushing** 9 Ft. Above Perm. Datum

Elevation  
K.B. 2604  
D.F. 2595  
G.L. 2595

Date **9/4/2012**

Run Number **One**

Depth Driller **4120**

Depth Logger **4122**

Bottom Logged Interval **4121**

Top Log Interval **250**

Casing Driller **8.625 @ 263**

Casing Logger **259**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity,ppm CL **3000**

Density / Viscosity **9.3 49**

pH / Fluid Loss **9.5 8.4**

Source of Sample **Flowline**

Rm @ Meas. Temp **0.60 @ 85**

Rmf @ Meas. Temp **0.45 @ 85**

Rmc @ Meas. Temp **0.81 @ 85**

Source of Rmf / Rmc **Charts**

Rm @ BHT **0.43 @ 119**

Operating Rig Time **5 Hours**

Max Rec. Temp. F **119**

Equipment Number **91**

Location **Hays**

Recorded By **D. Schmidt**

Witnessed By **Kevin Howard**

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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.pioneerenergy.com](http://www.pioneerenergy.com)  
 785 625 3858  
 I-70 & Quinter,  
 9 North, 1 West, 1/2 North,  
 East into

Database File: c:\warrior\data\culbreath\_coburn #3-8\culbreath\_090412hd.db  
 Dataset Pathname: dil\culstack  
 Presentation Format: dil2in  
 Dataset Creation: Tue Sep 04 18:28:05 2012  
 Charted by: Depth in Feet scaled 1:600

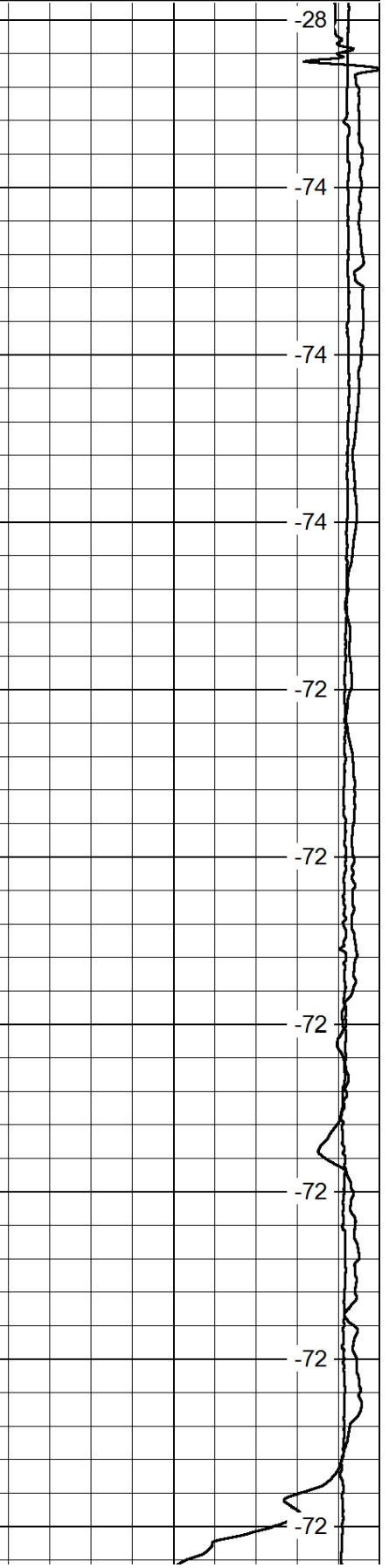
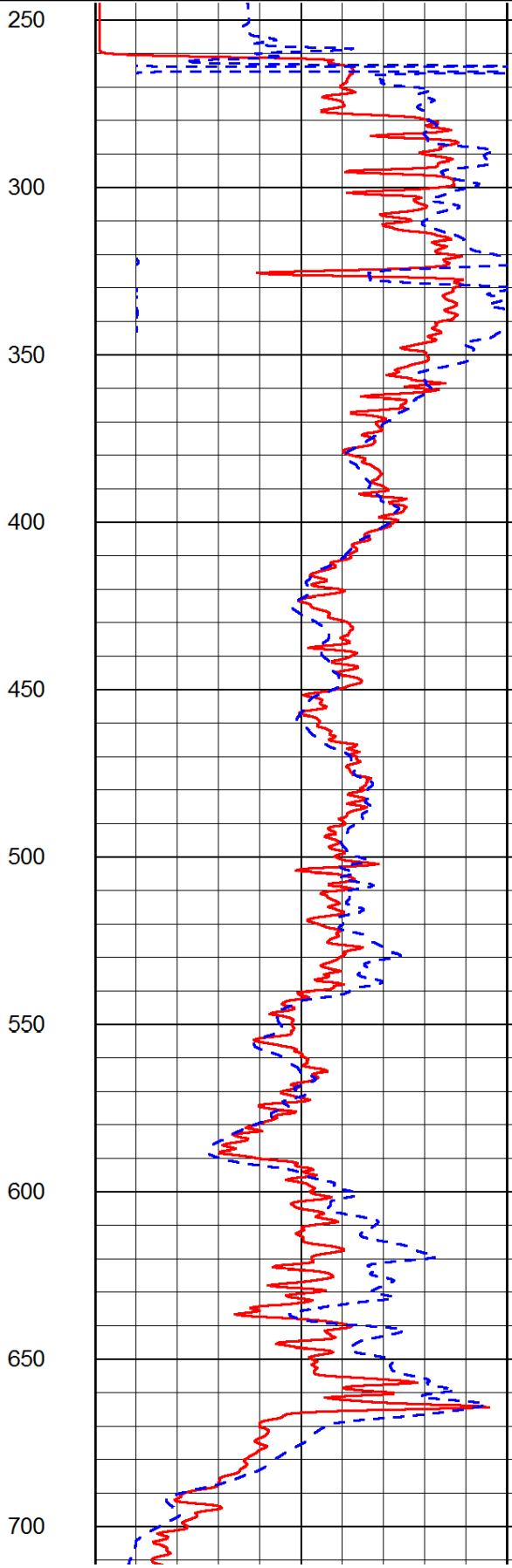
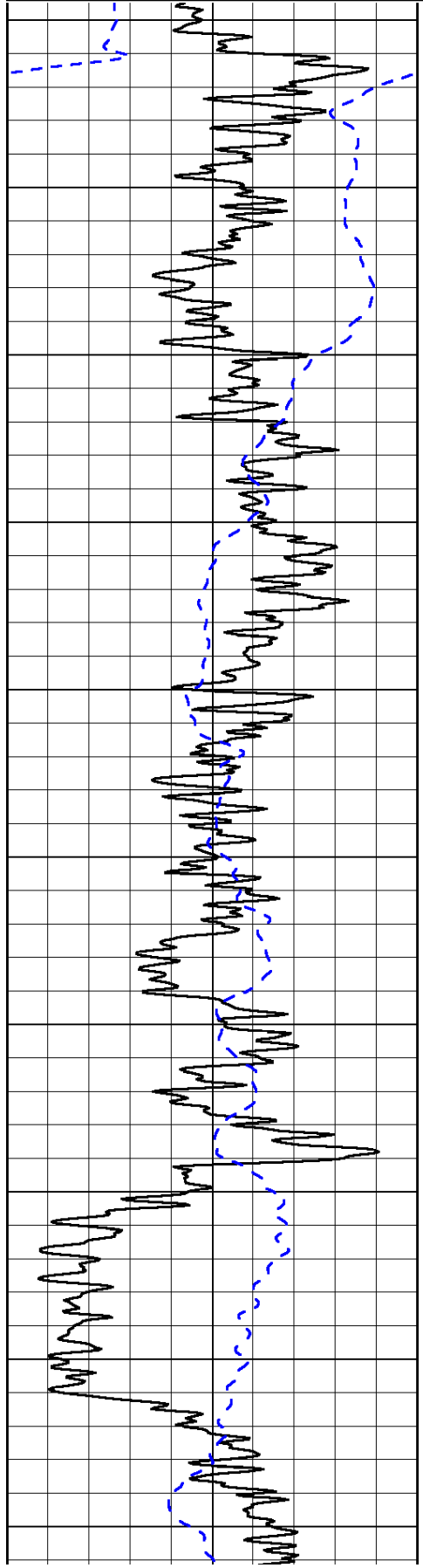
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-200	SP (mV)	0

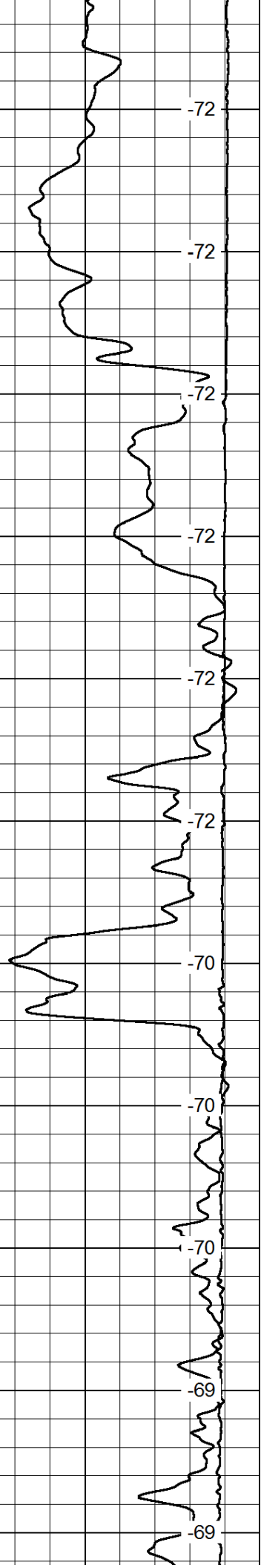
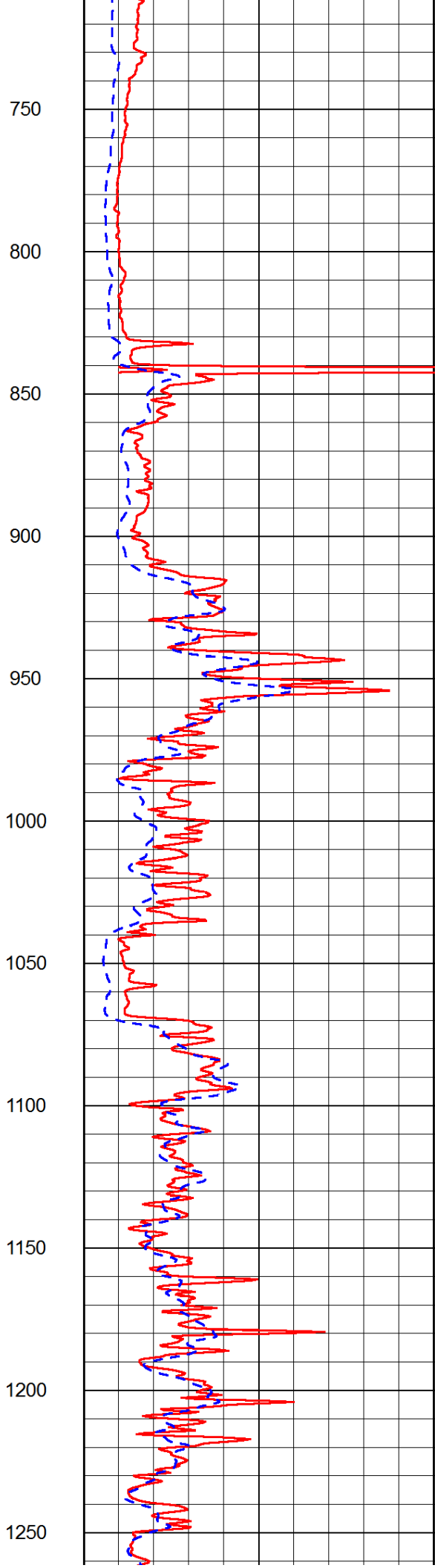
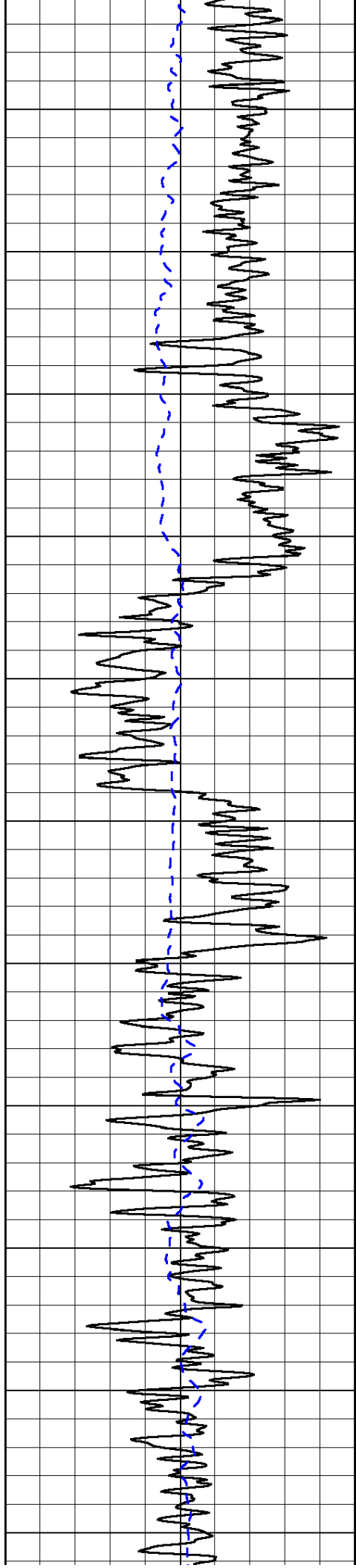
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0	Deep Resistivity	50

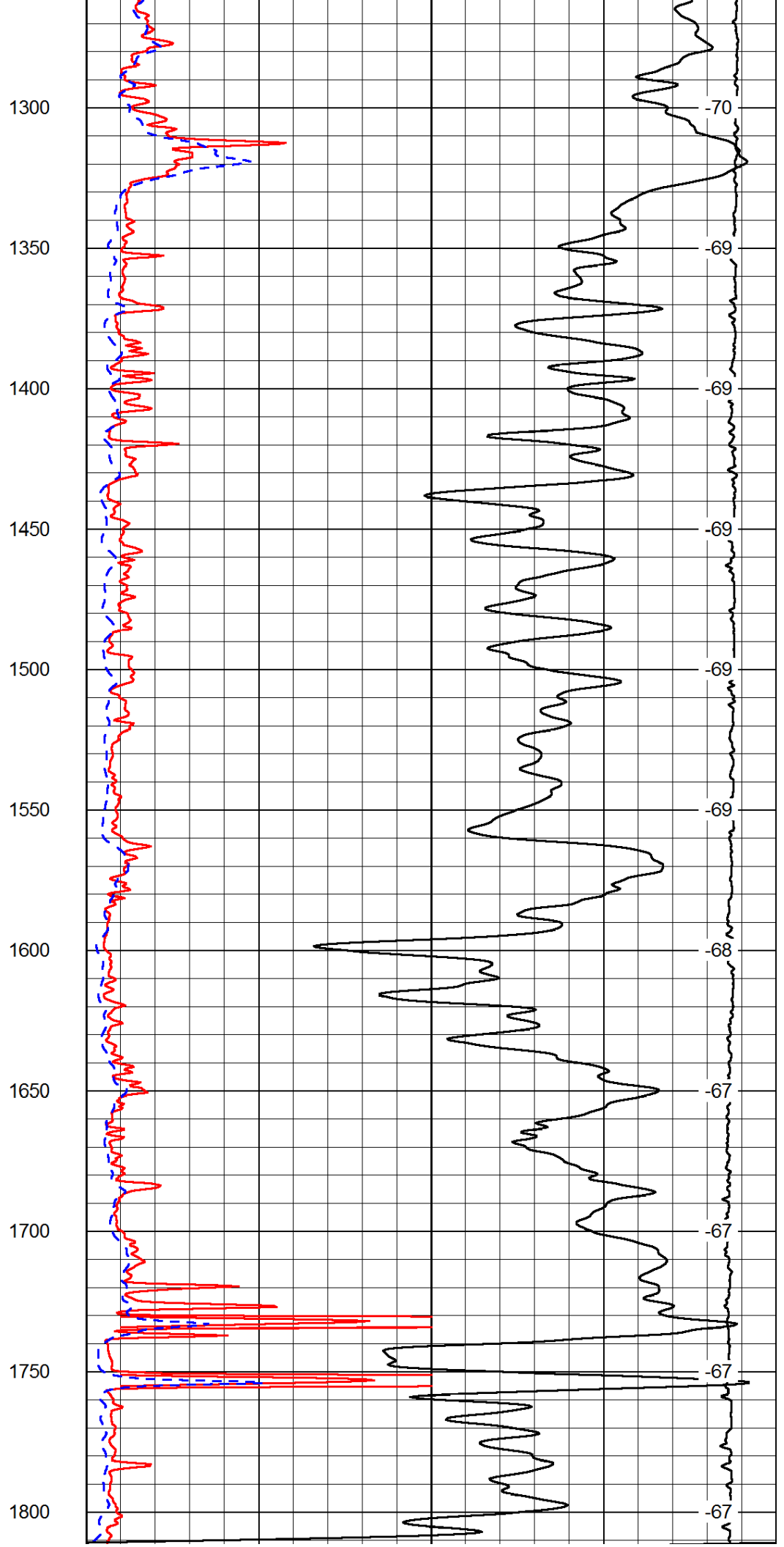
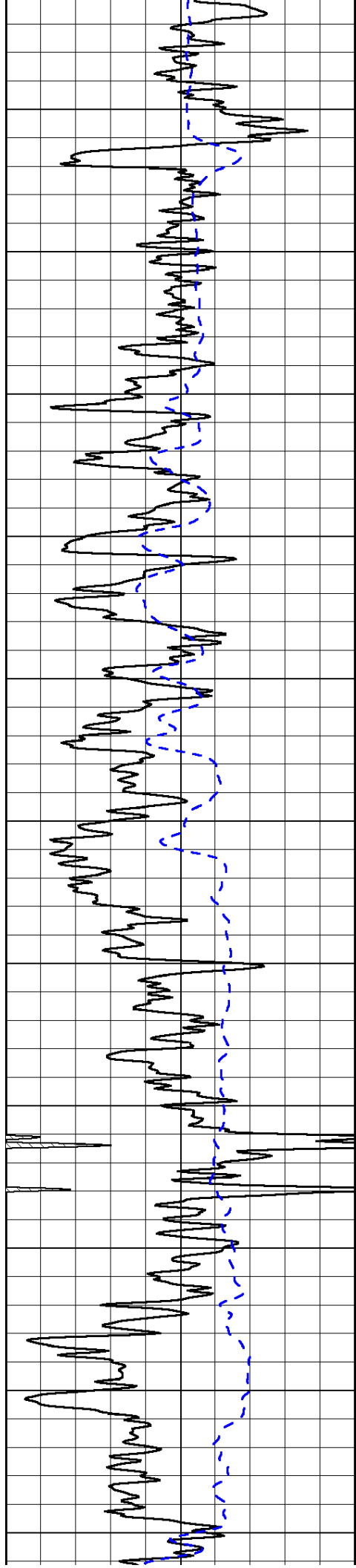
LSPD

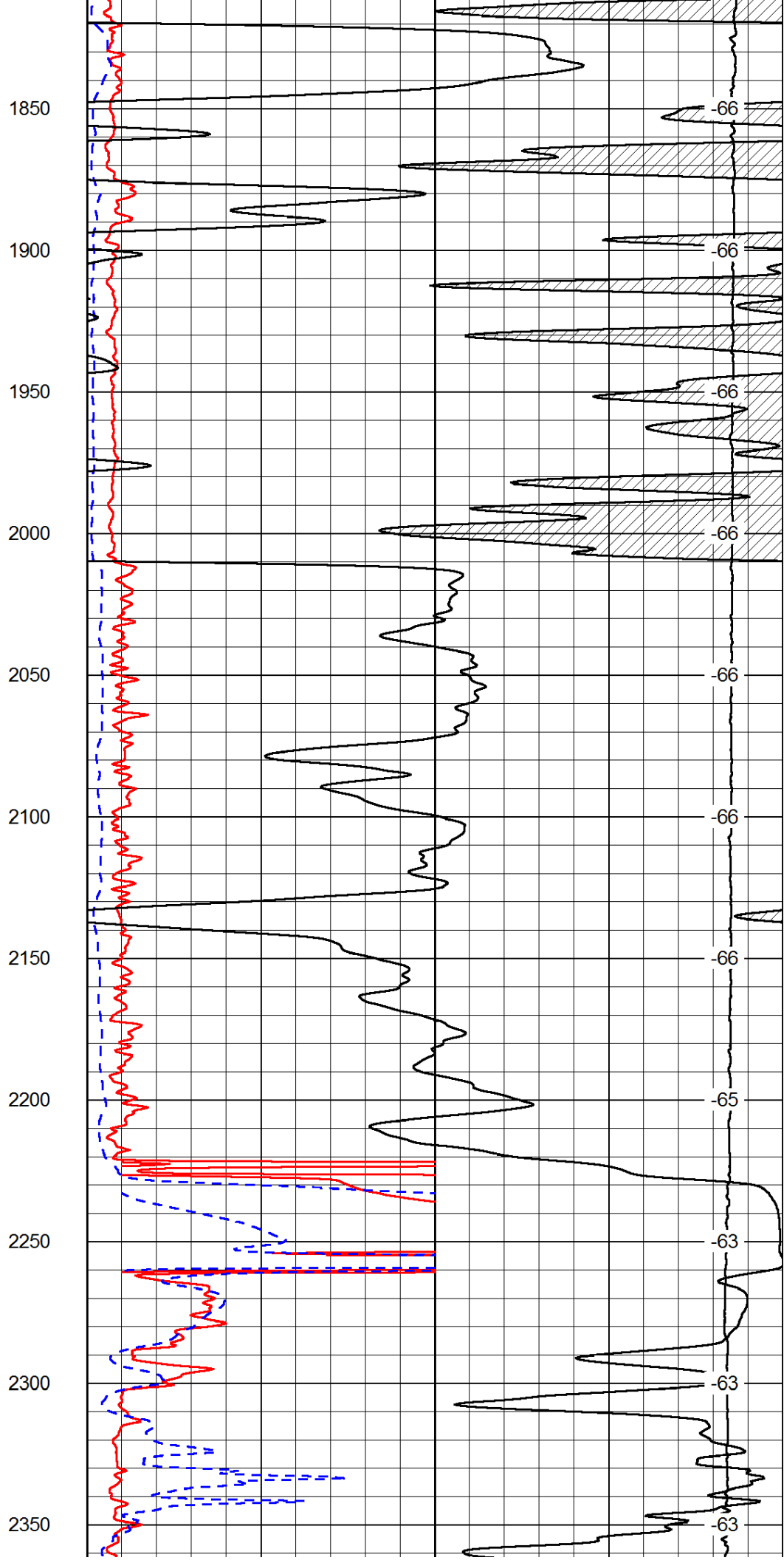
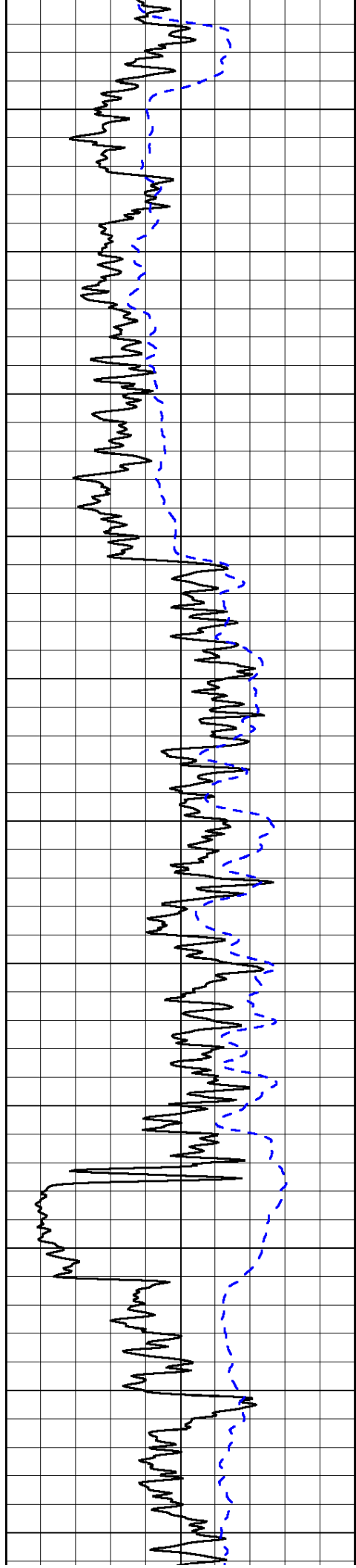
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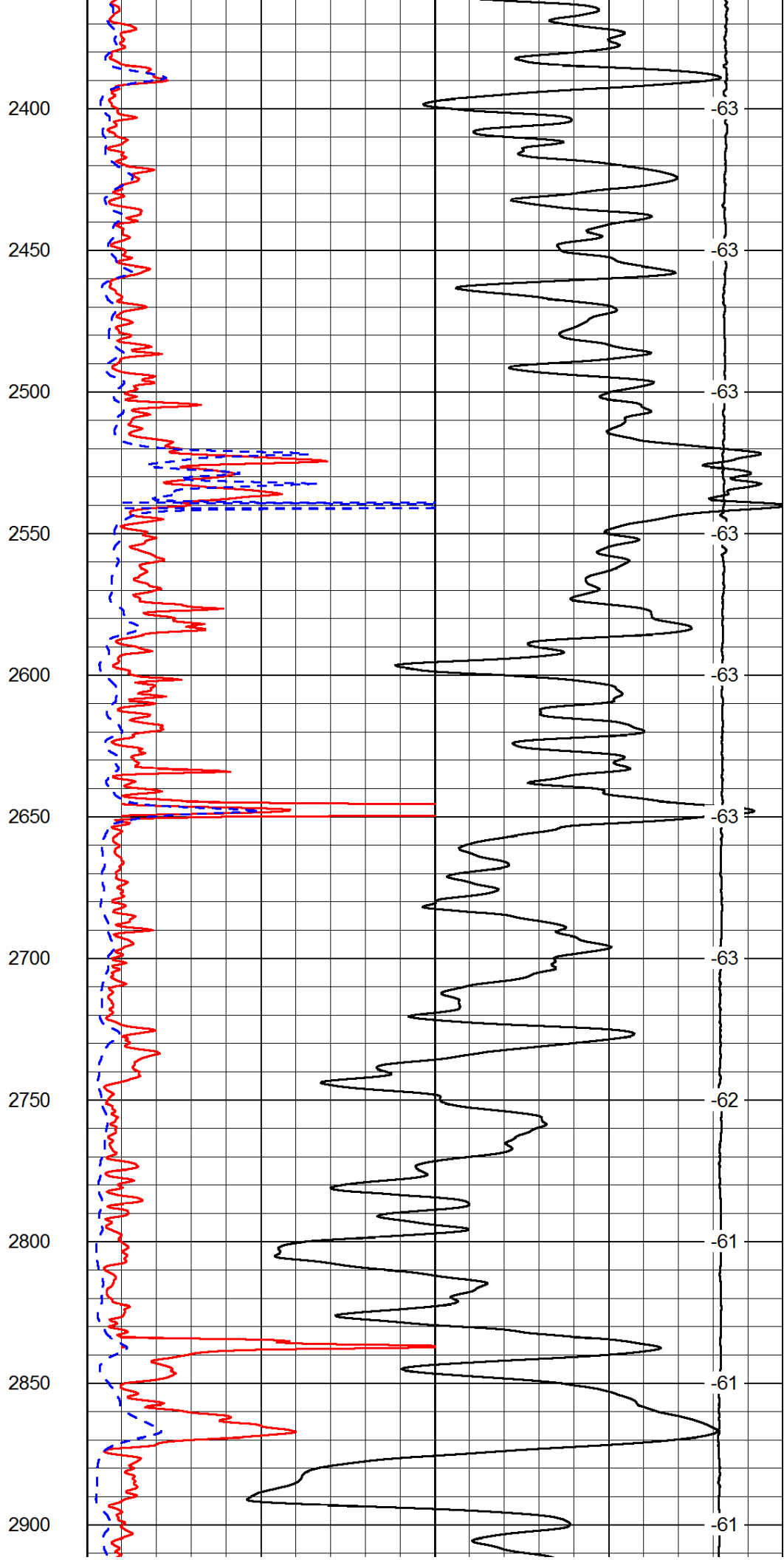
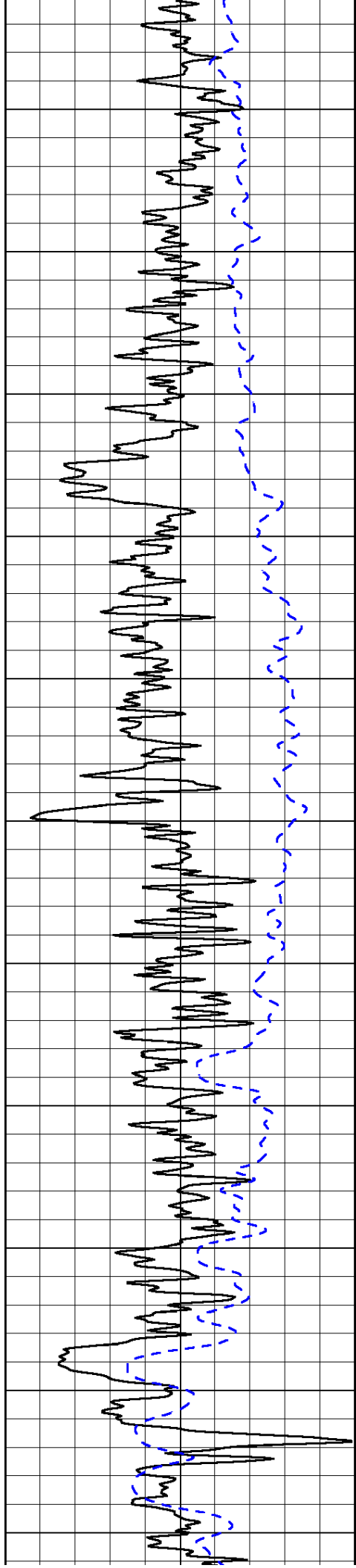
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50	Deep Resistivity	500

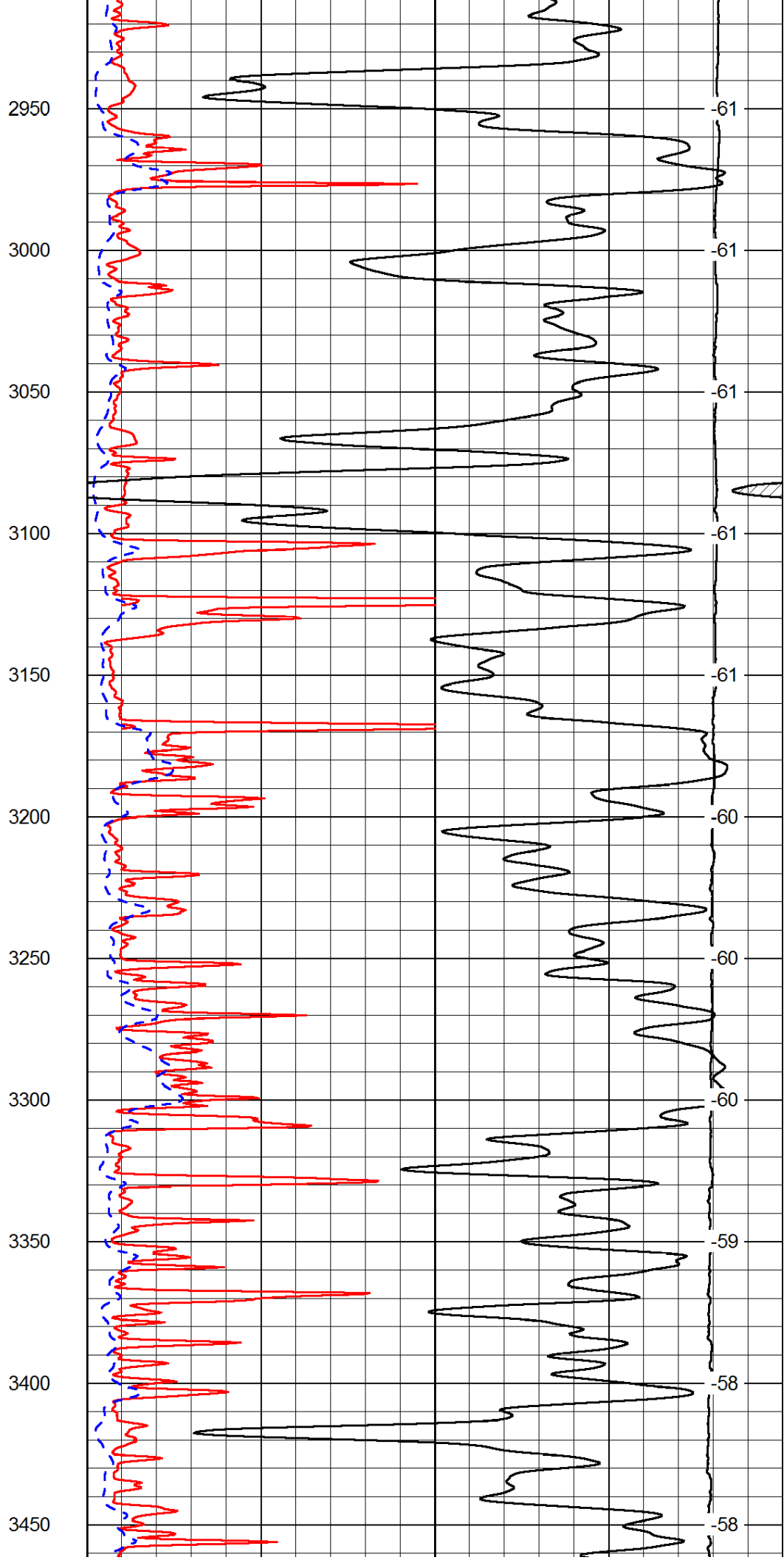
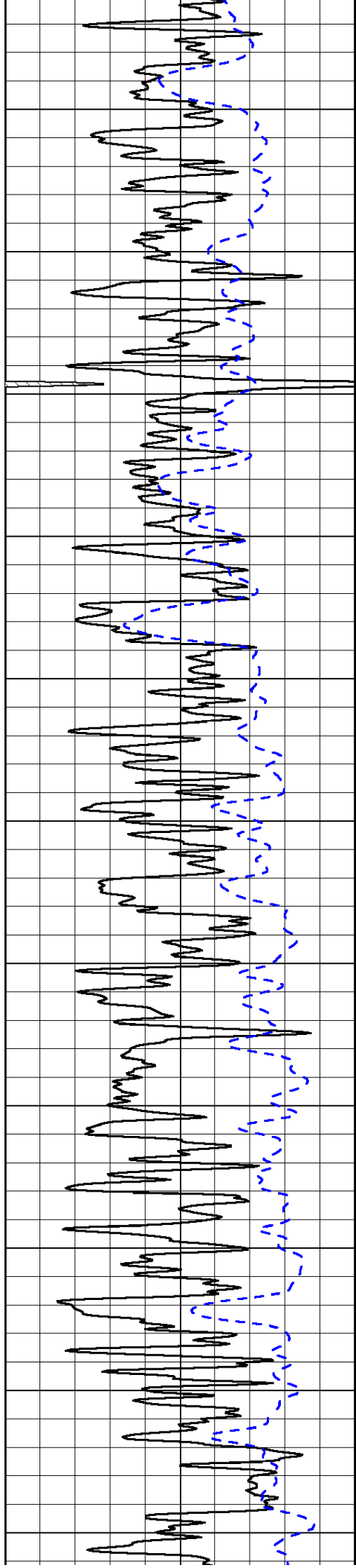


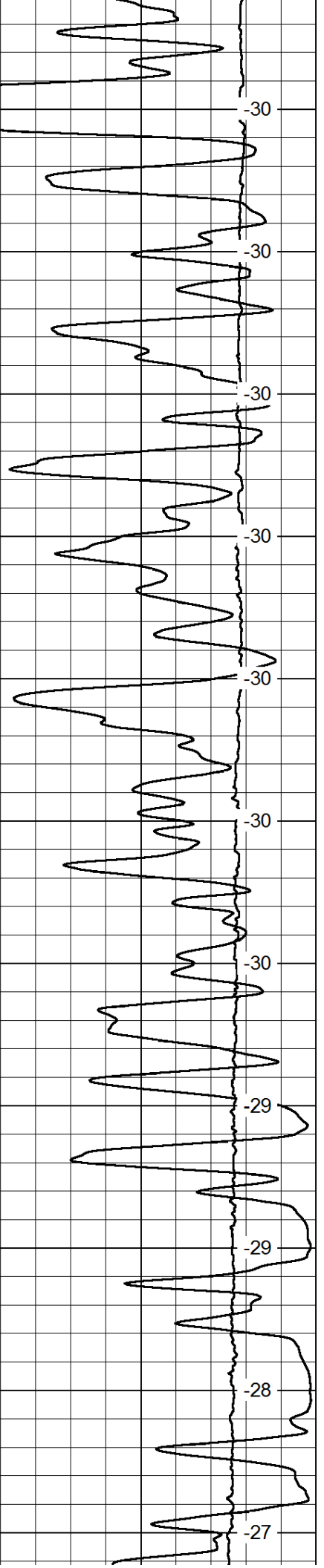
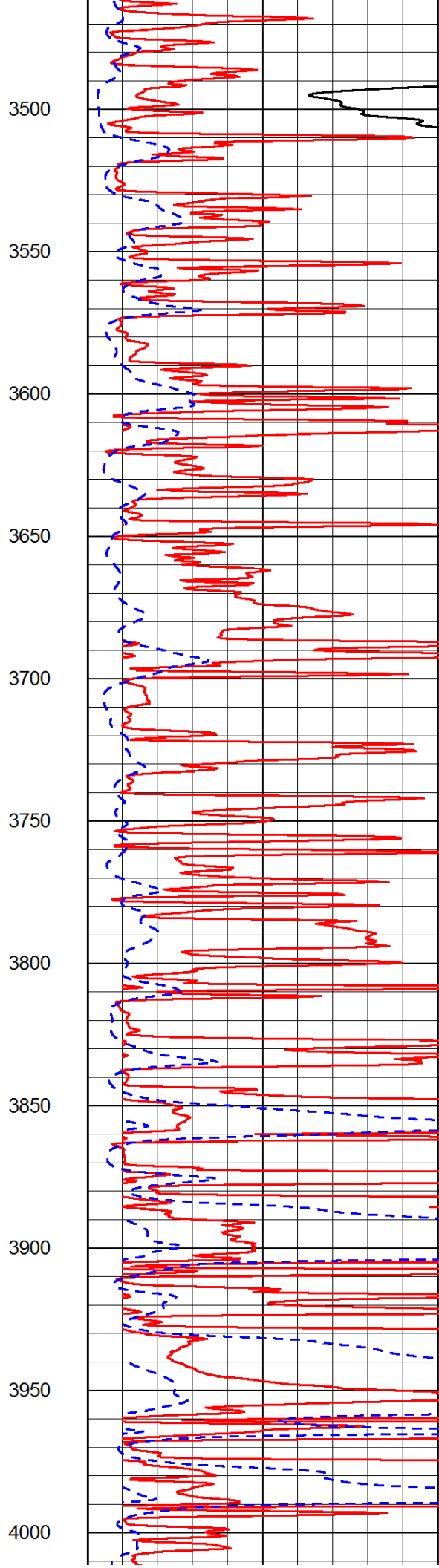
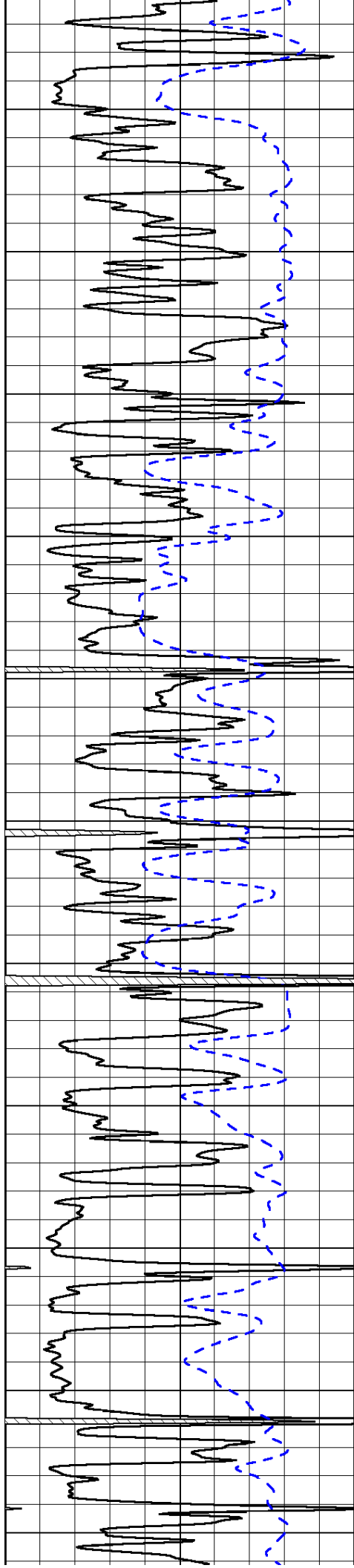


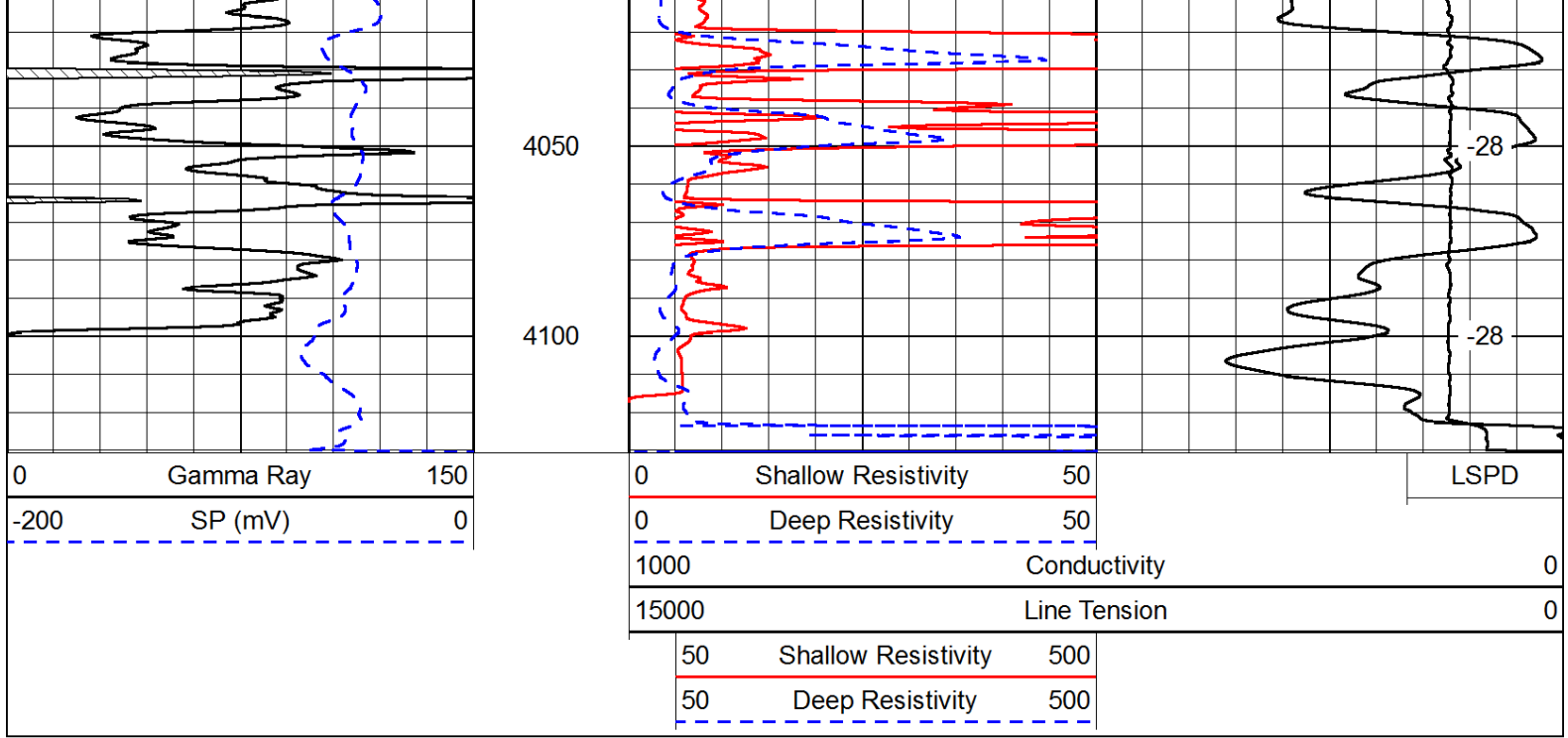




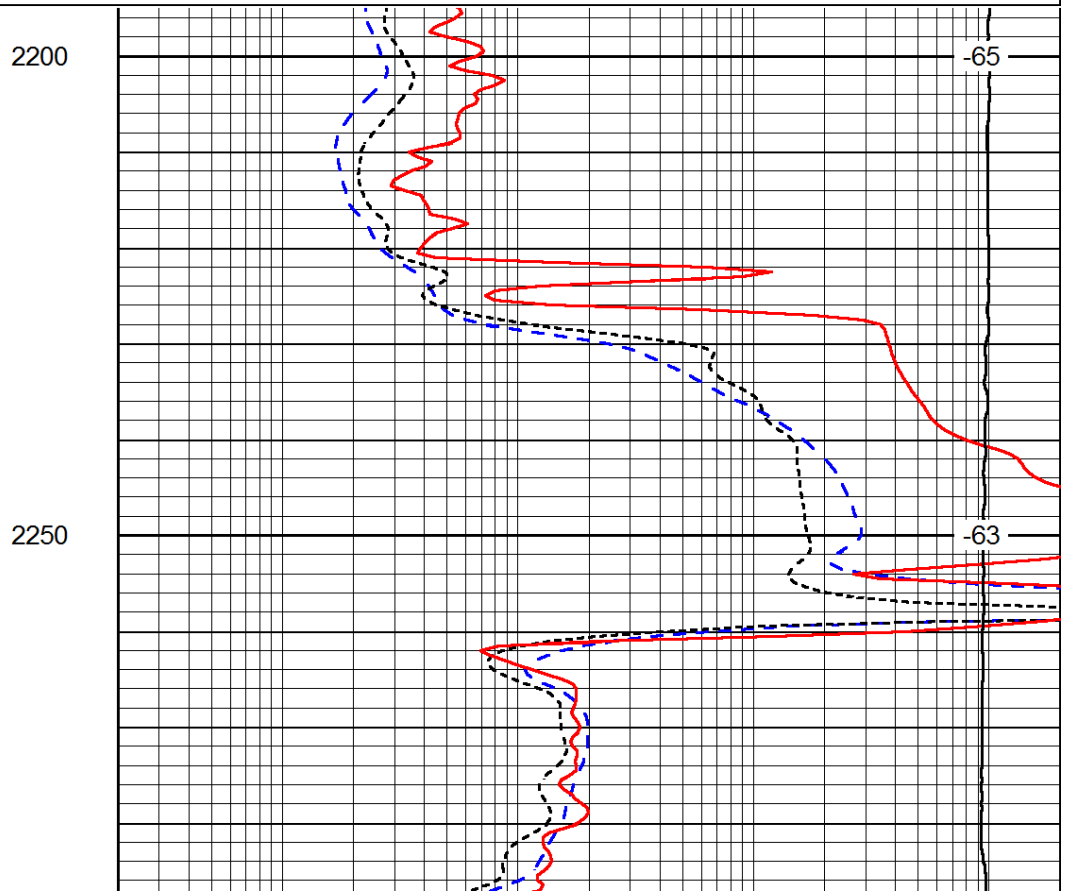
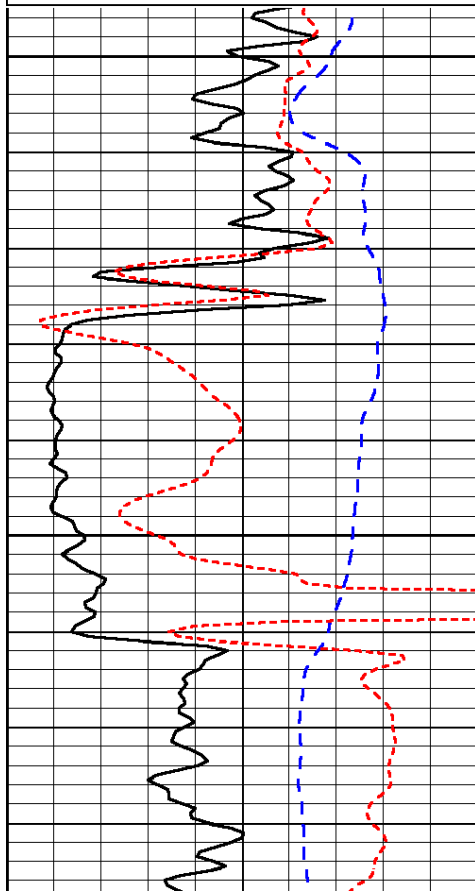
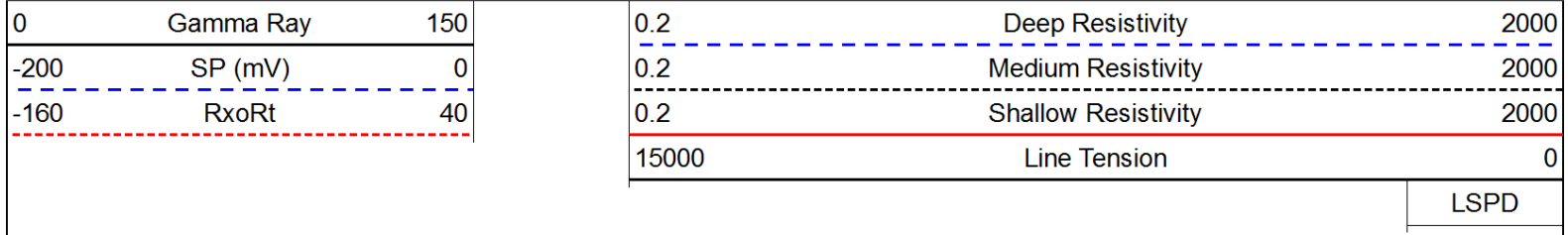


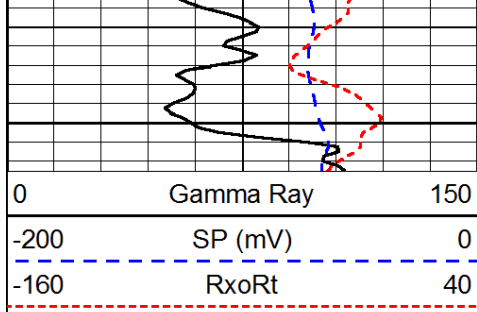




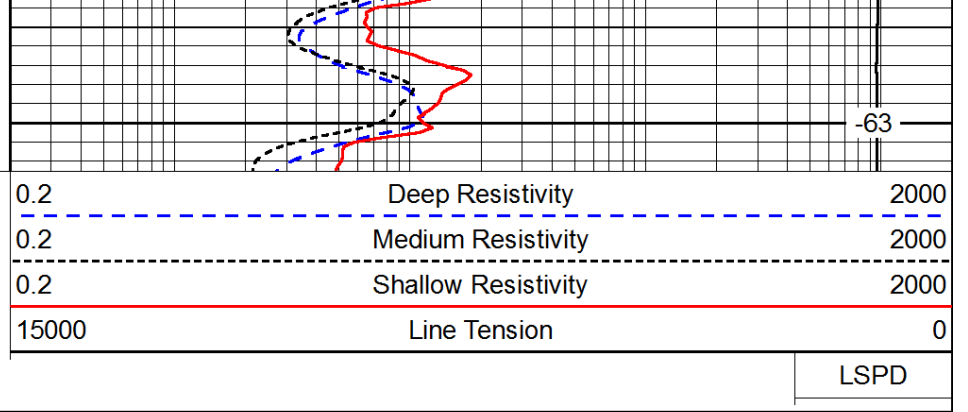


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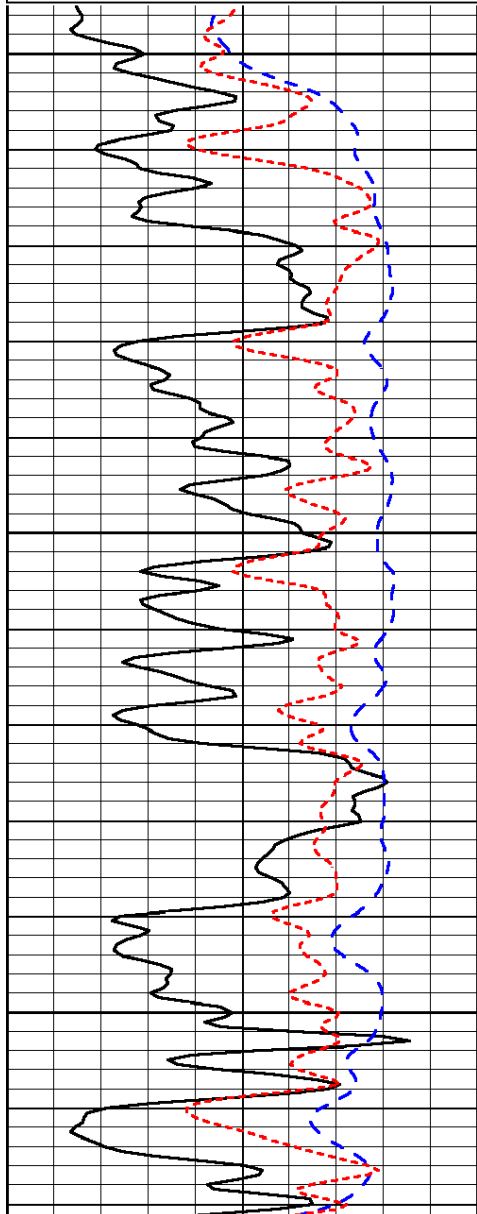
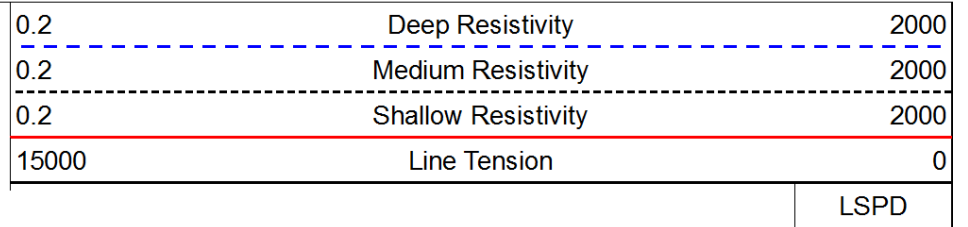
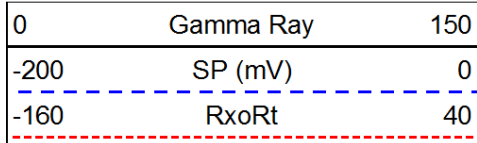




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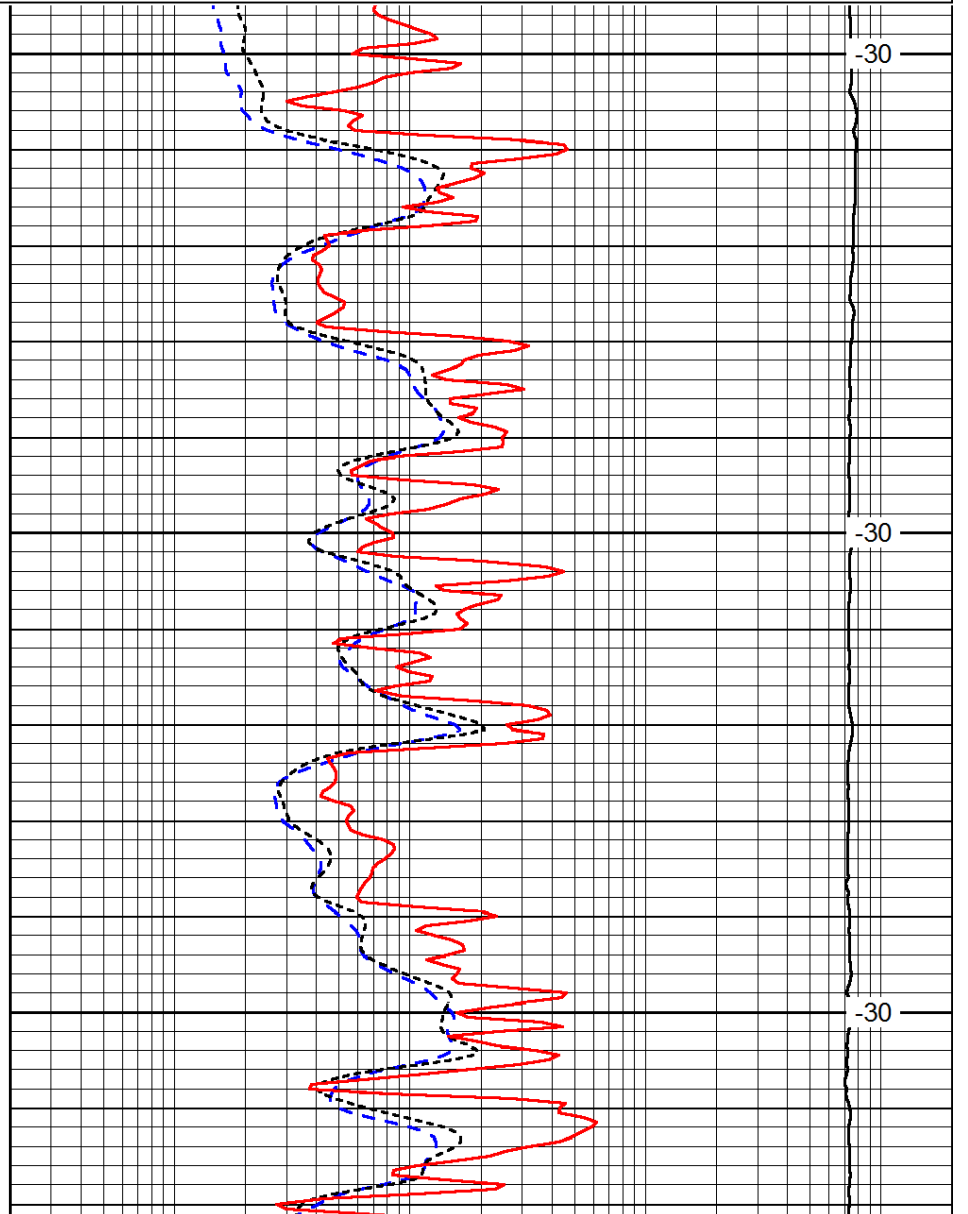
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3500

3550

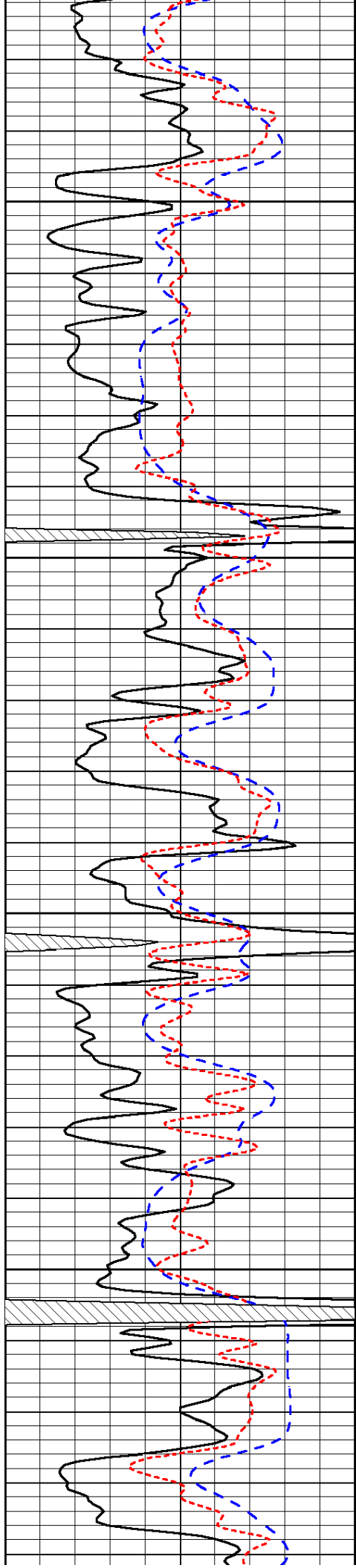
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-30

-30

-30

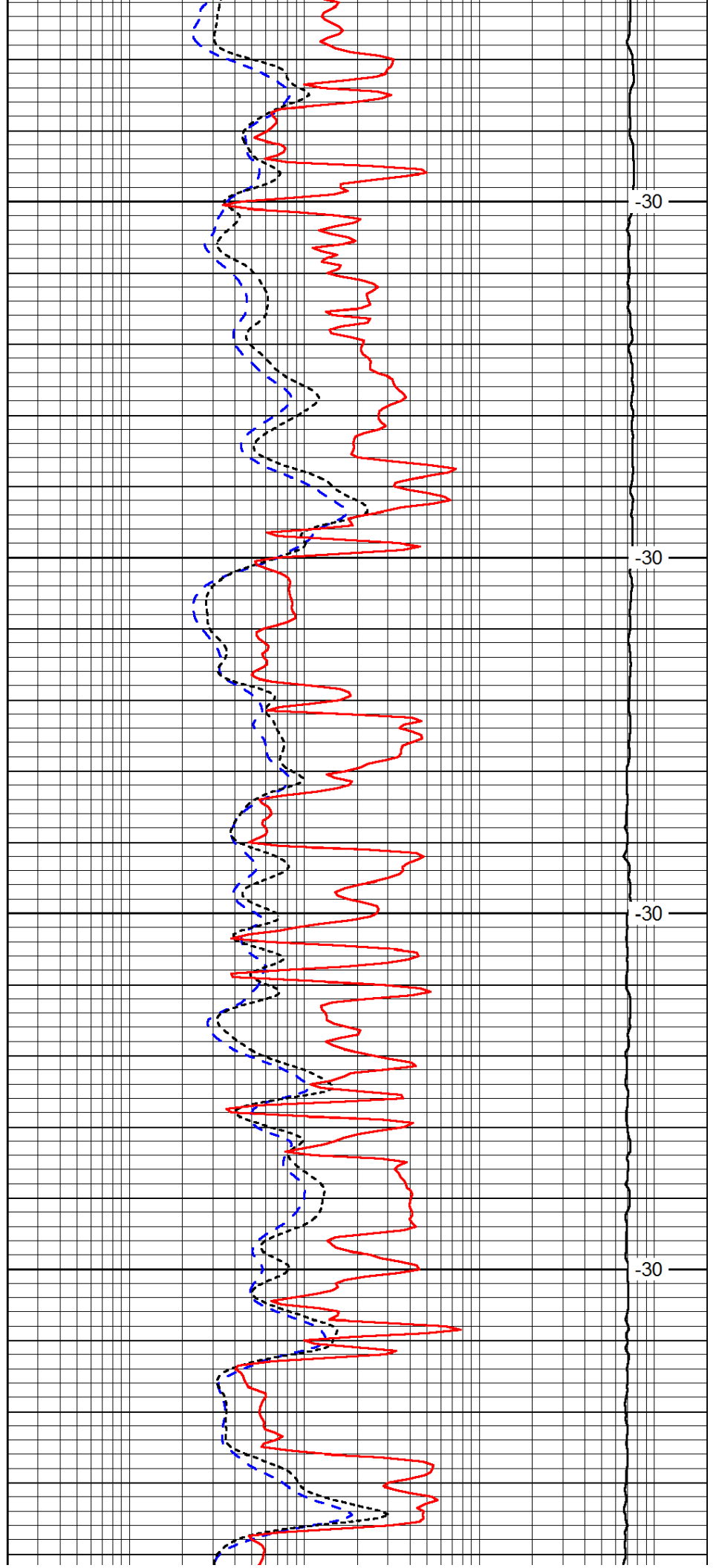


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3700

3750

3800

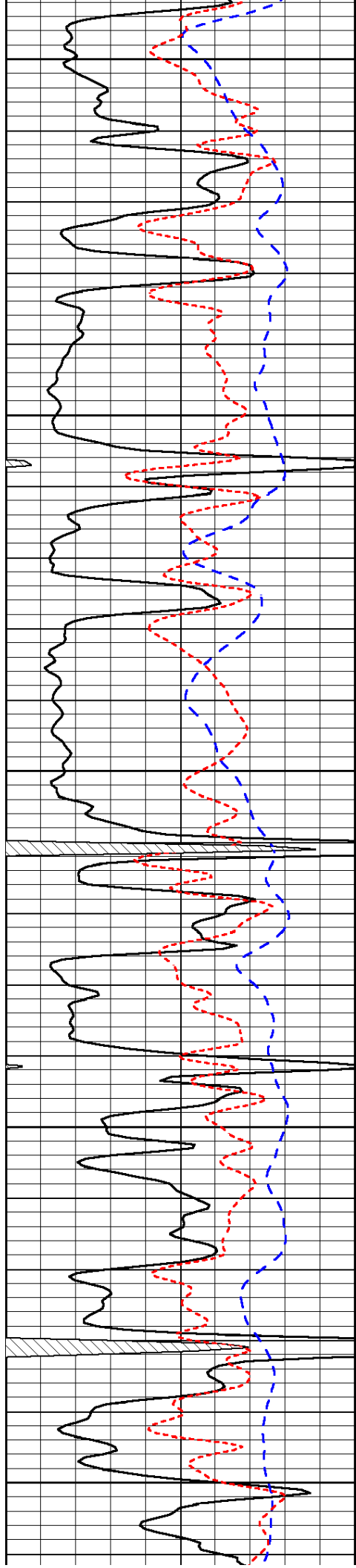


-30

-30

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-30



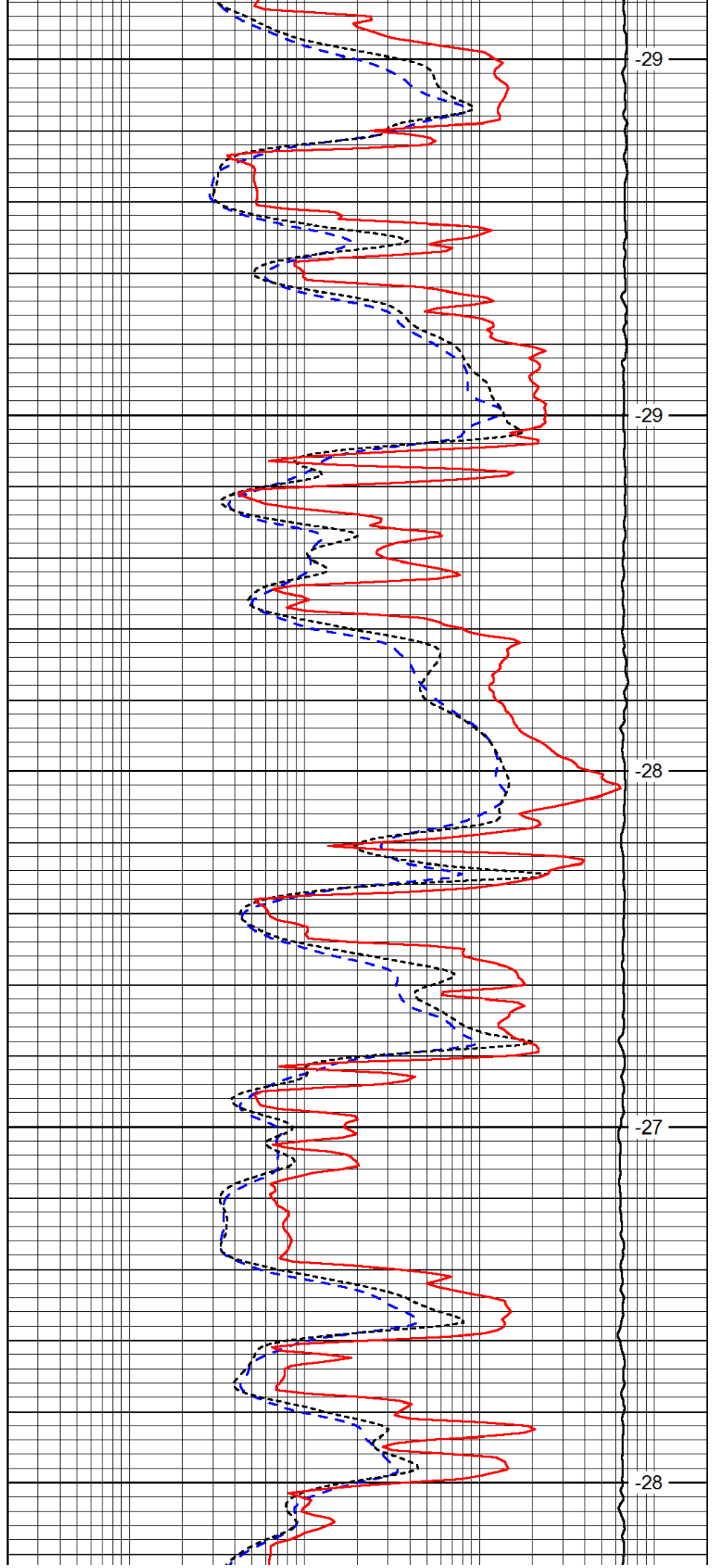
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3900

3950

4000

4050



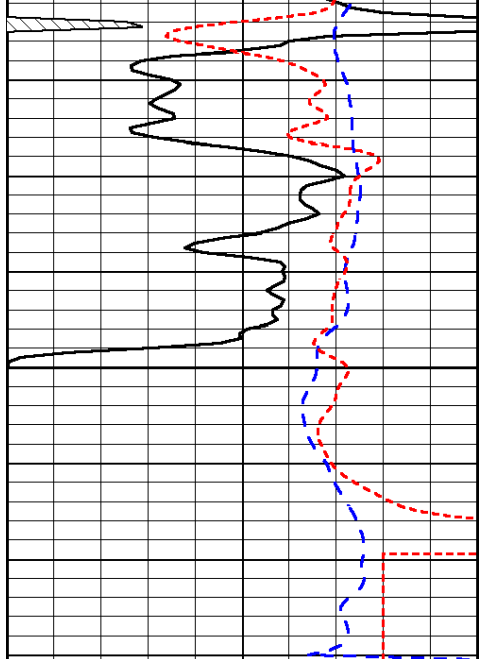
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-29

-28

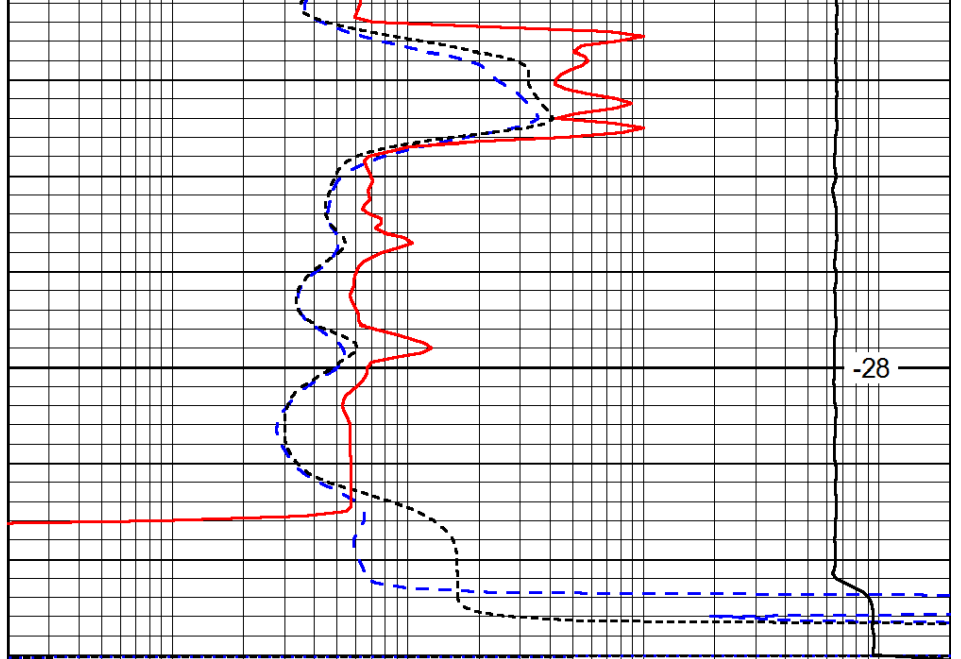
-27

-28



0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

4100



-28

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

LSPD