



Pioneer Energy Services

Dual Induction Log

15-051-26,683-00-00

API No.

Company **Richland Oil Investments, LLC**

Well **Schonthalder #4**

Field **Lucky Lady**

County **Ellis** State **Kansas**

Location **SE-NW-SW-NW
1813' FNL & 390' FWL**

Sec: **30** Twp: **11S** Rge: **19W**

Permanent Datum **Ground Level** Elevation **2035**

Log Measured From **Kelly Bushing** 6 Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing**

Other Services
CNL/CDL
MEL

Elevation

K.B. 2041
D.F. 2035
G.L. 2035

Date **5/1/2014**

Run Number **One**

Depth Driller **3690**

Depth Logger **3692**

Bottom Logged Interval **3691**

Top Log Interval **250**

Casing Driller **8.625 @ 270**

Casing Logger **262**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity,ppm CL **2,500**

Density / Viscosity **9.3 49**

pH / Fluid Loss **10.0 6.8**

Source of Sample **Flowline**

Rm @ Meas. Temp **.68 @ 59**

Rmf @ Meas. Temp **.51 @ 59**

Rmc @ Meas. Temp **.91 @ 59**

Source of Rmf / Rmc	Charts
Rm @ BHT	.35 @ 115
Operating Rig Time	2 1/2 Hours
Max Rec. Temp. F	115
Equipment Number	91
Location	Hays
Recorded By	J. Hennickson
Witnessed By	Steve Murphy

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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
 785 625 3858
 Yocemento Exit on I70
 North to Buskeye Rd, West to 170th Ave, North to Curves,
 West Into at Cattle Guard(Tank Batteries)

Database File: c:\warrior\data\richland_schonthalder #4\richland_050114hd.db
 Dataset Pathname: DIL/richstk
 Presentation Format: dil2in
 Dataset Creation: Thu May 01 22:59:14 2014
 Charted by: Depth in Feet scaled 1:600

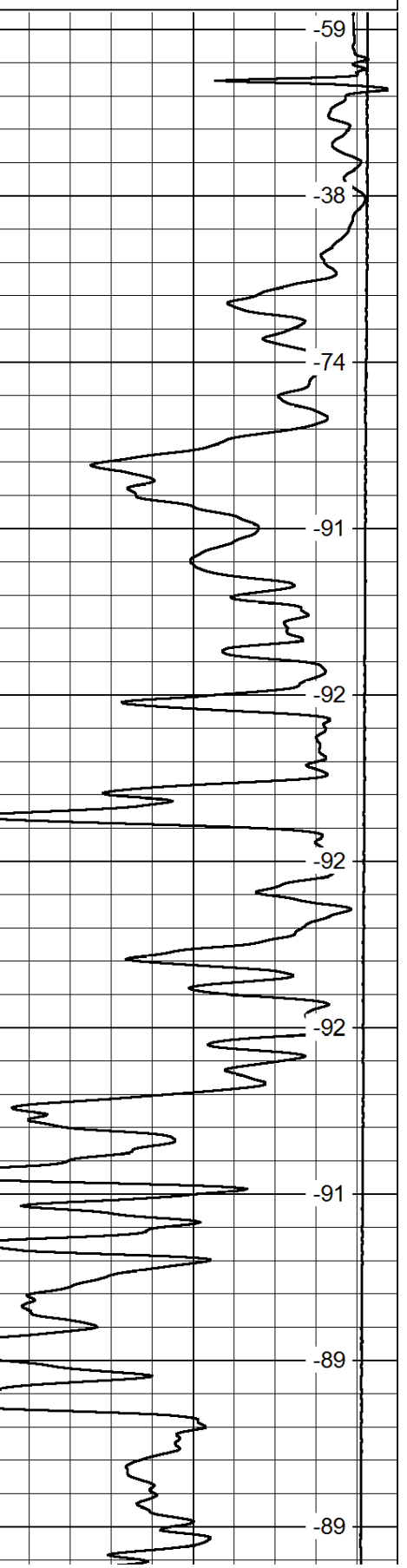
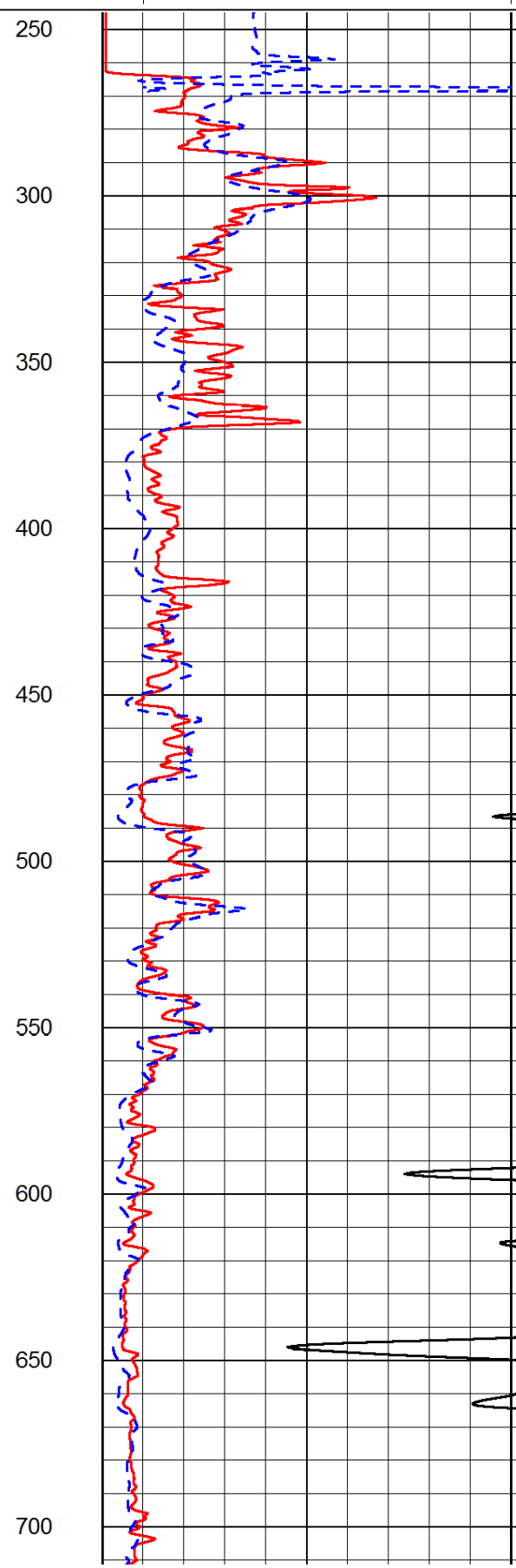
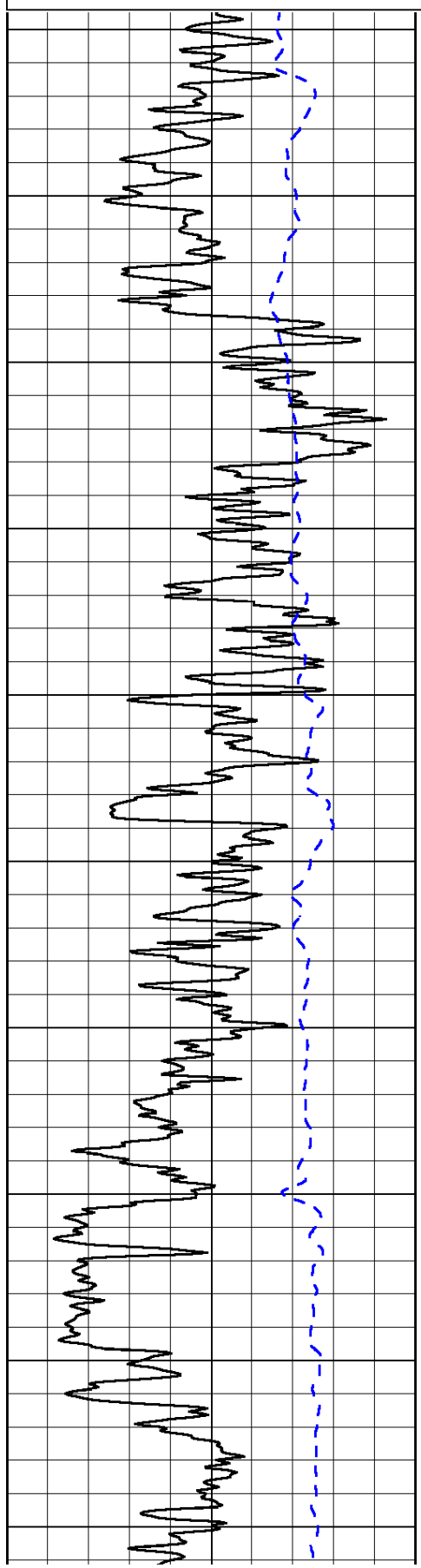
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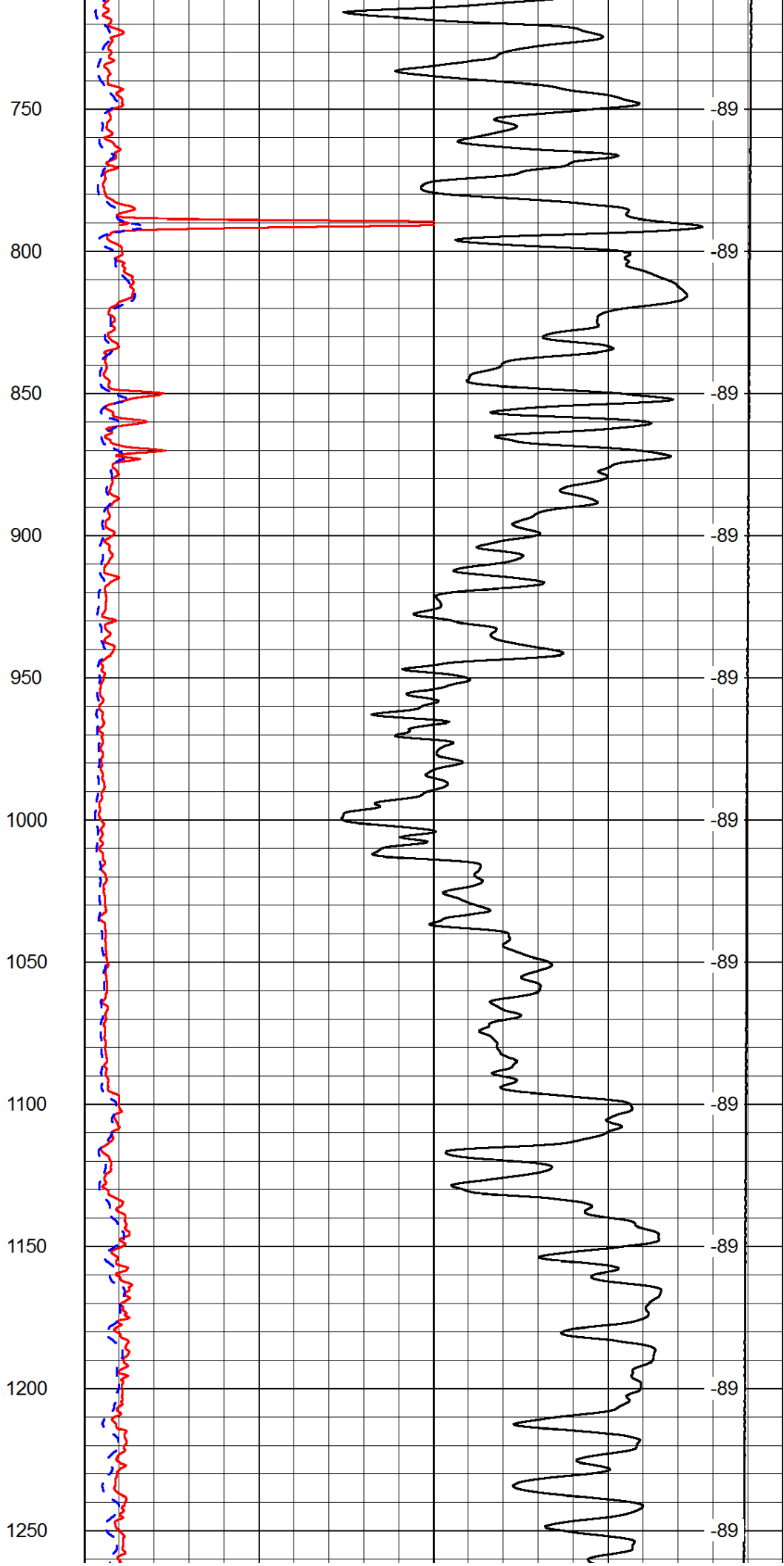
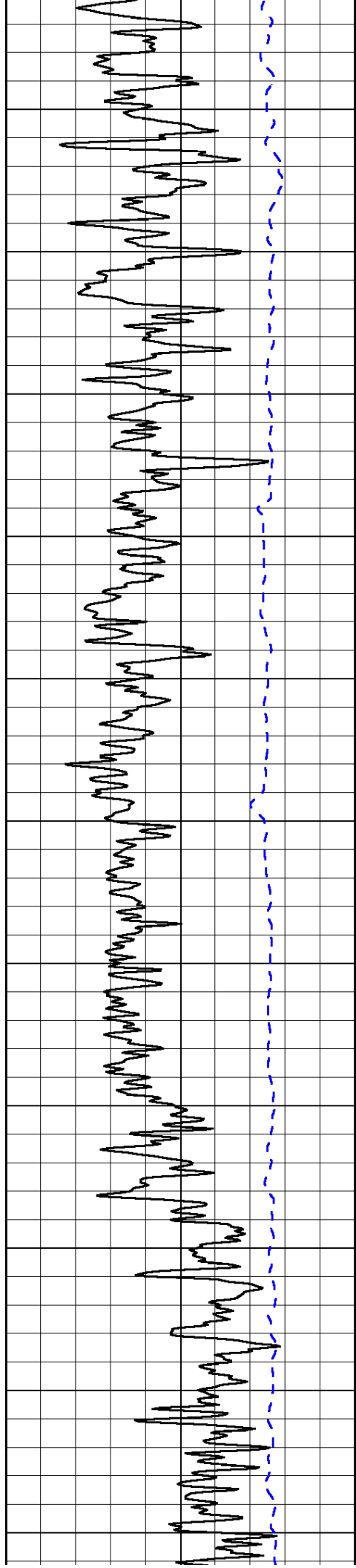
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0	Deep Resistivity	50

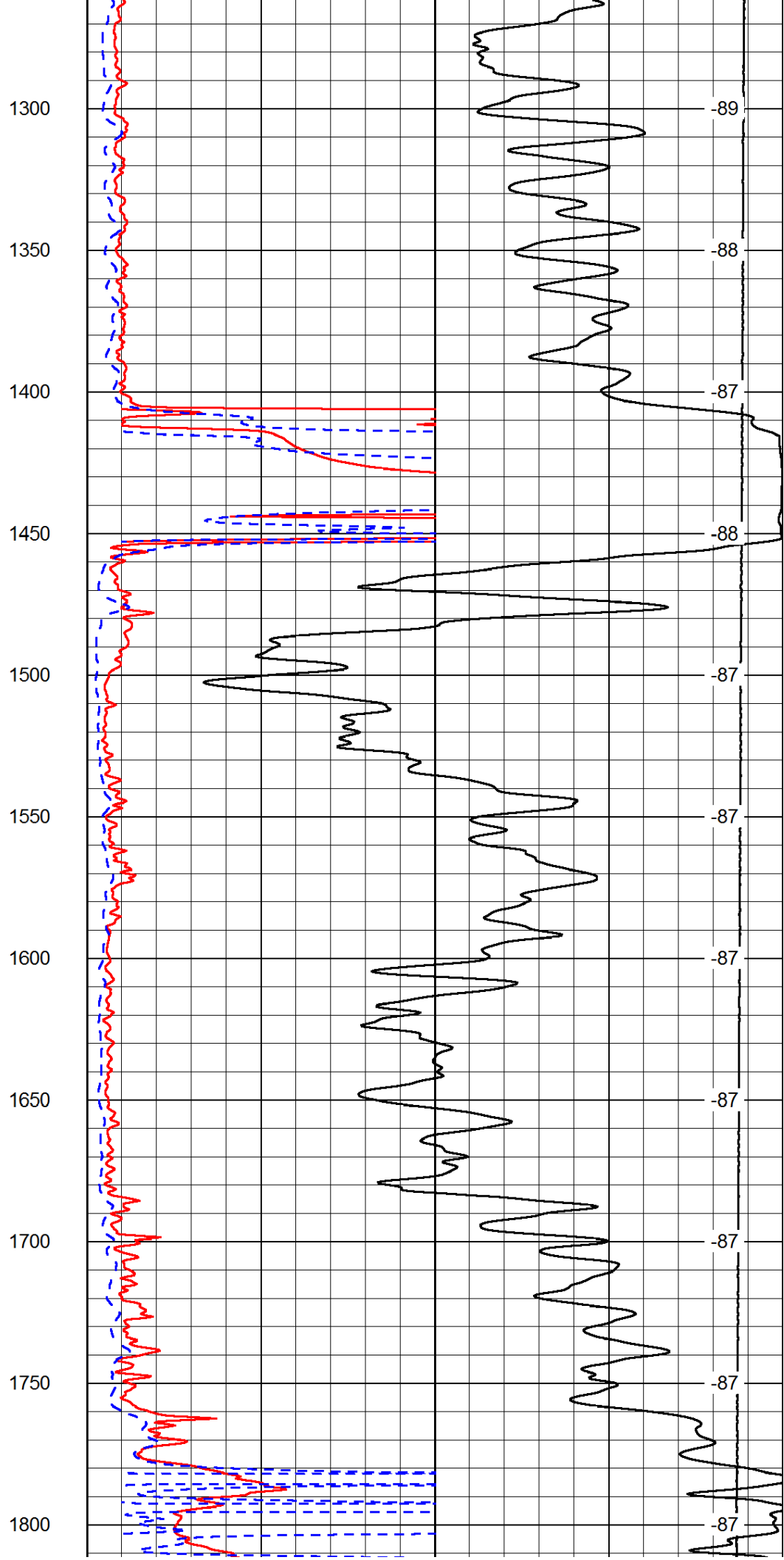
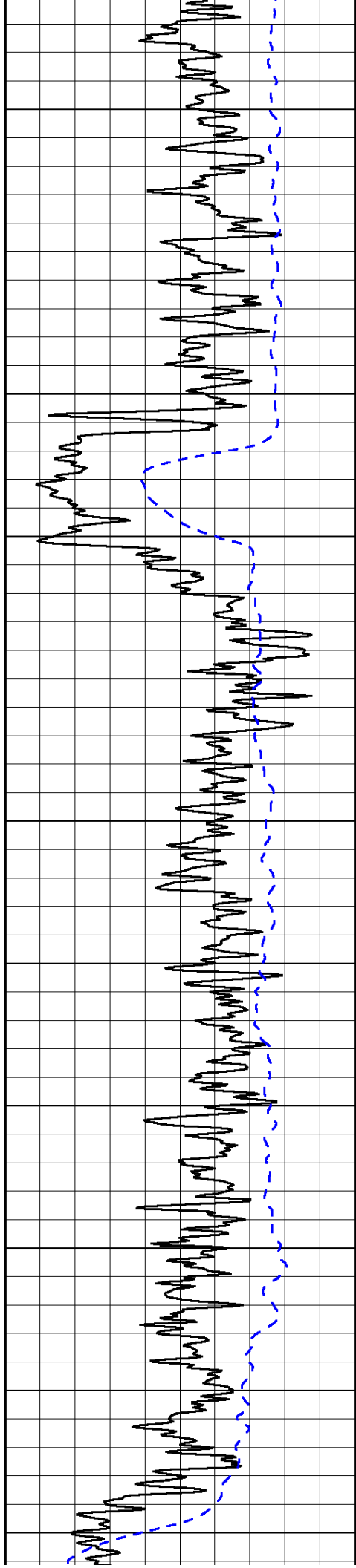
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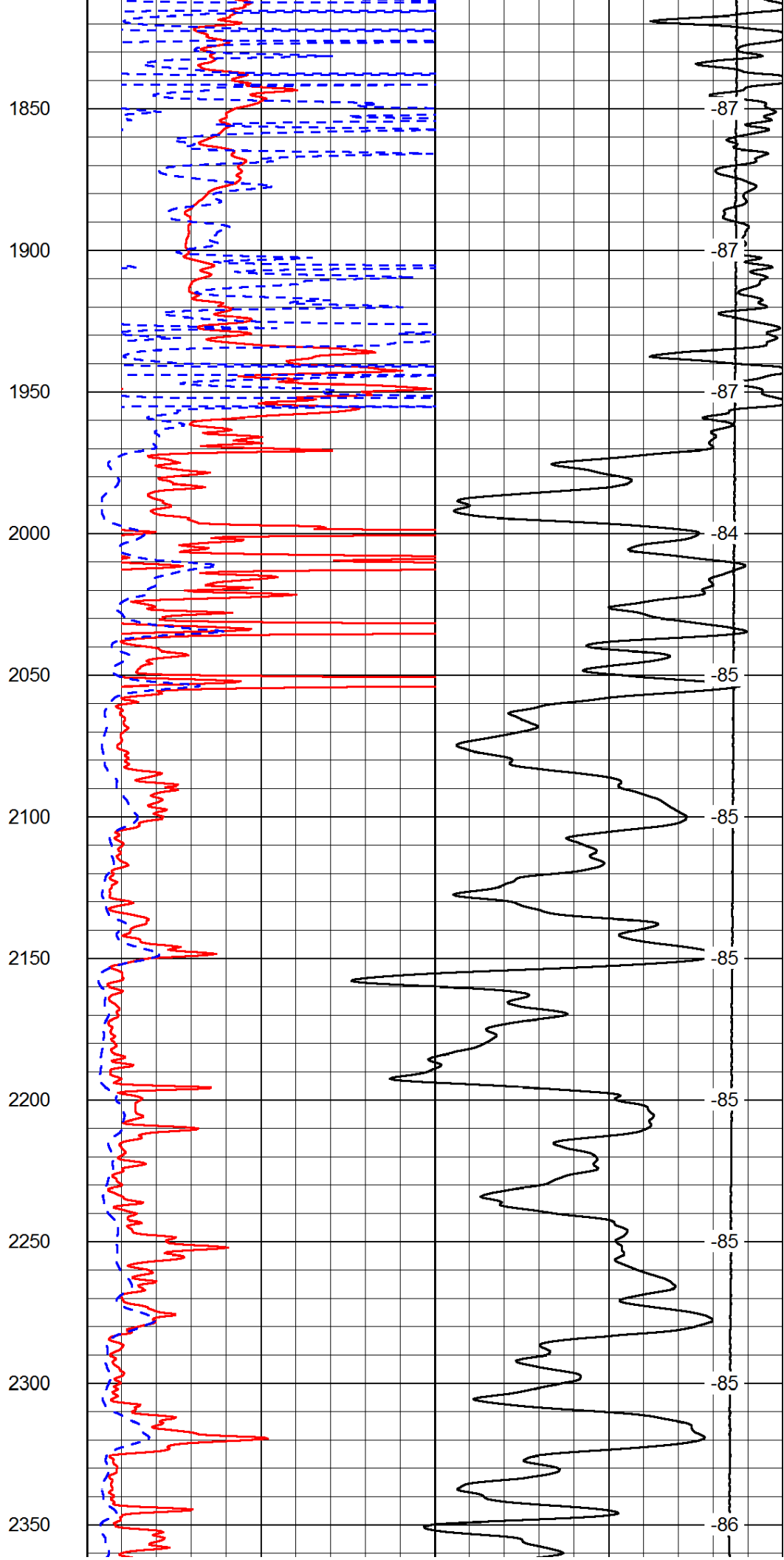
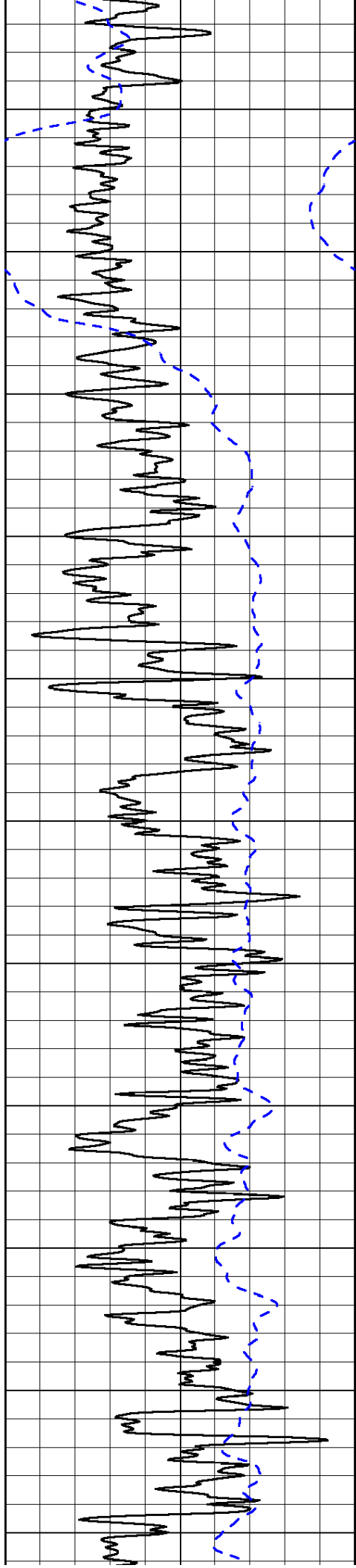
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15000	Line Tension	0

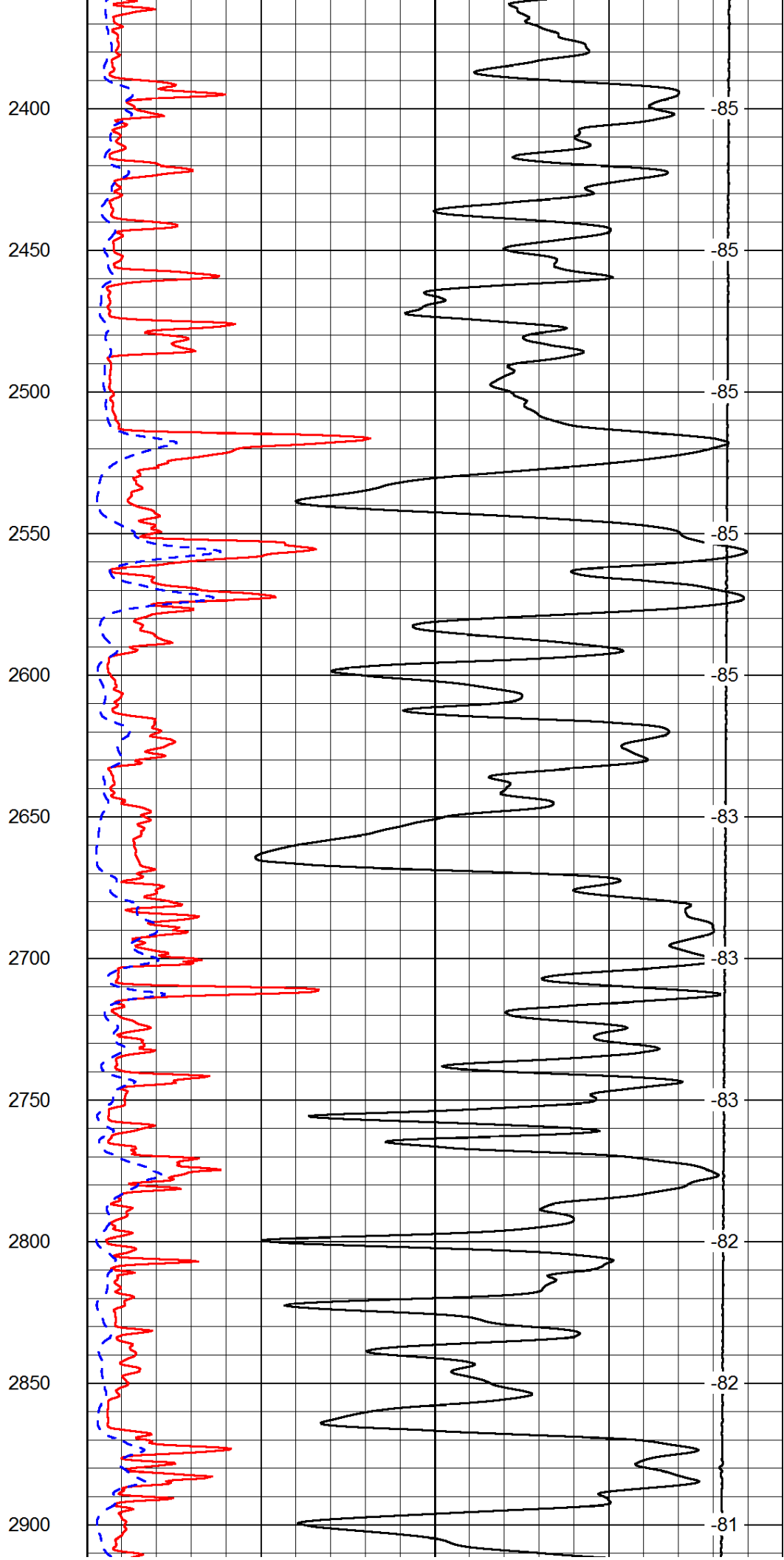
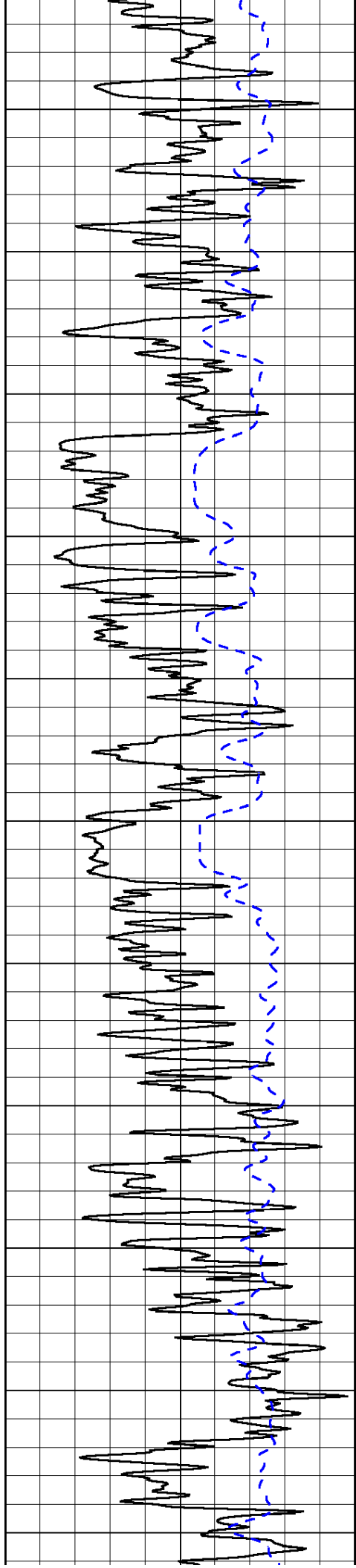
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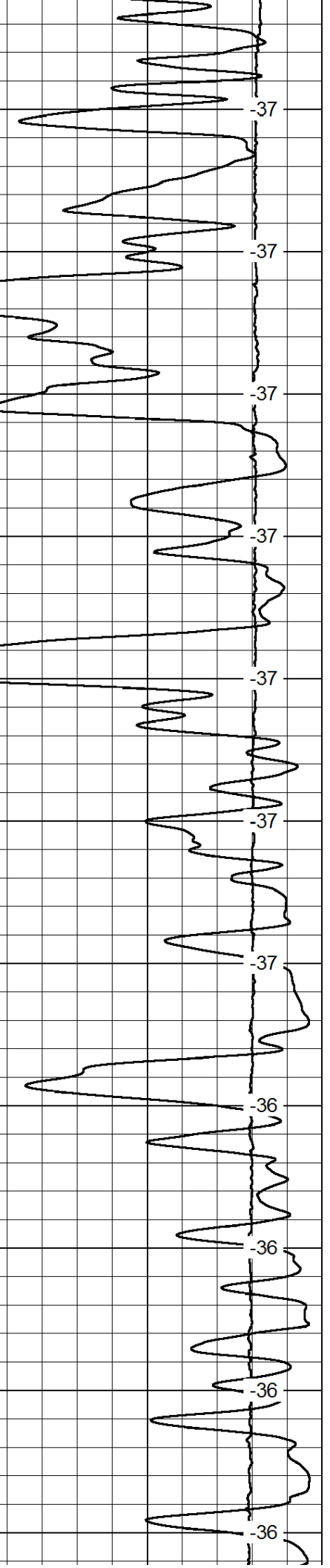
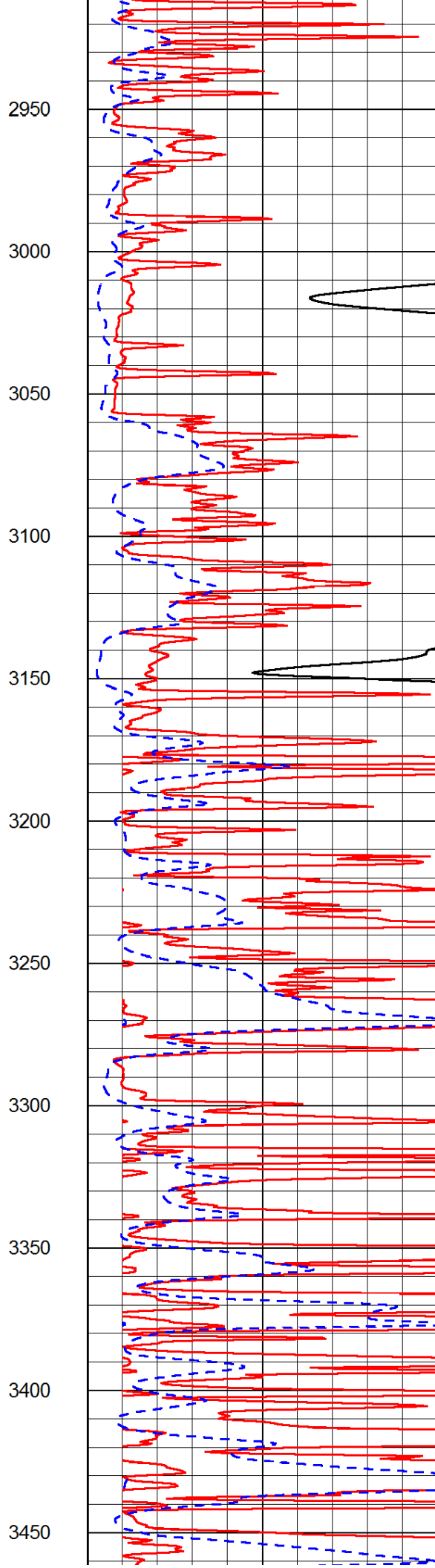
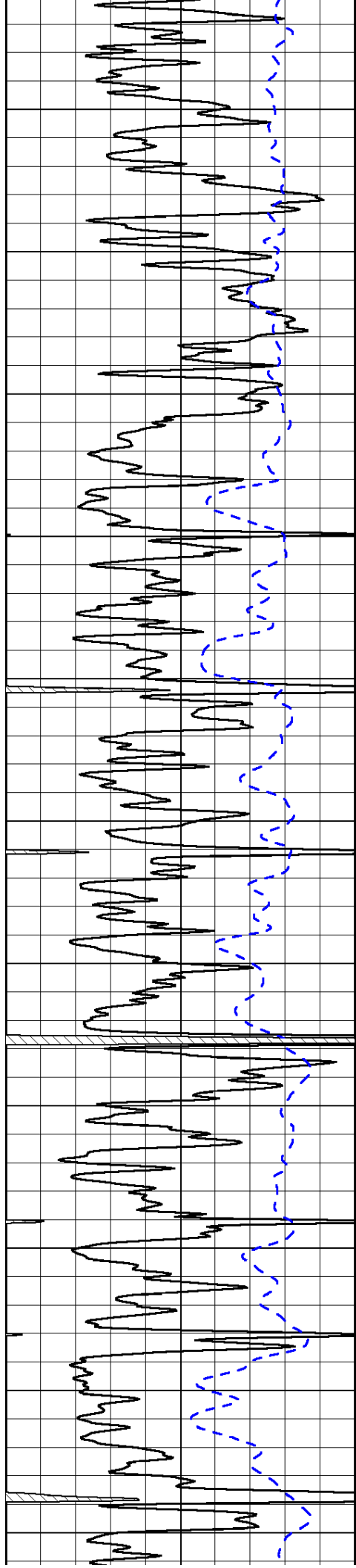


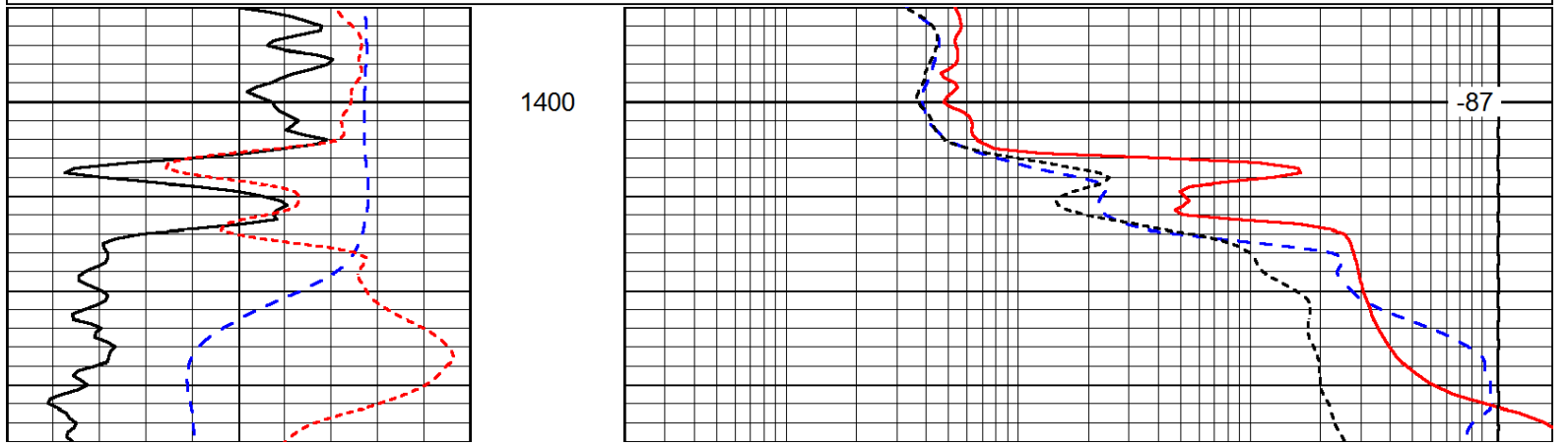
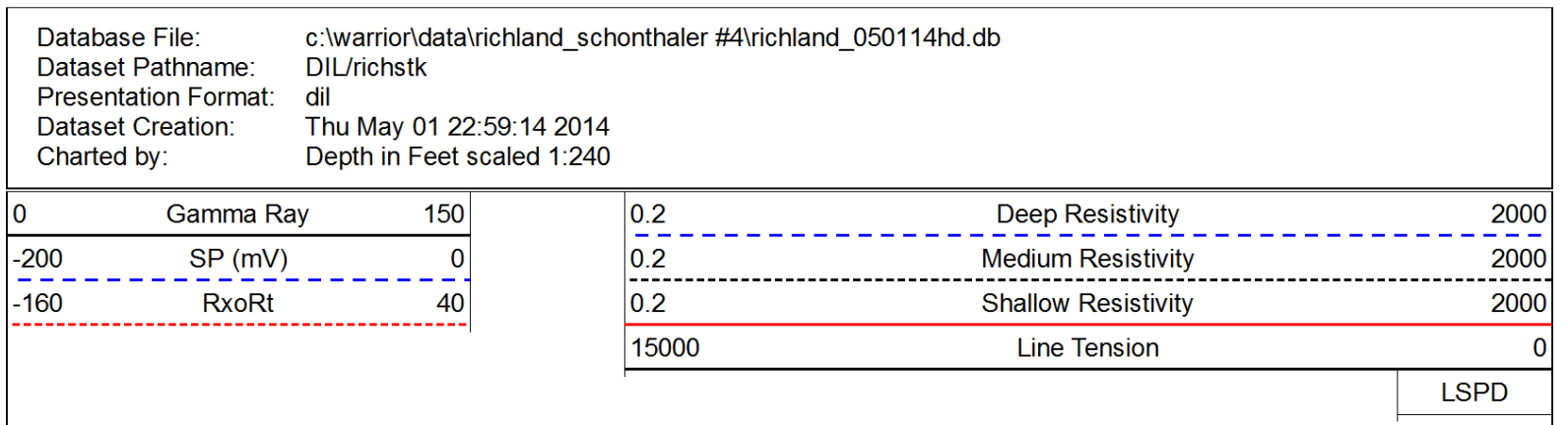
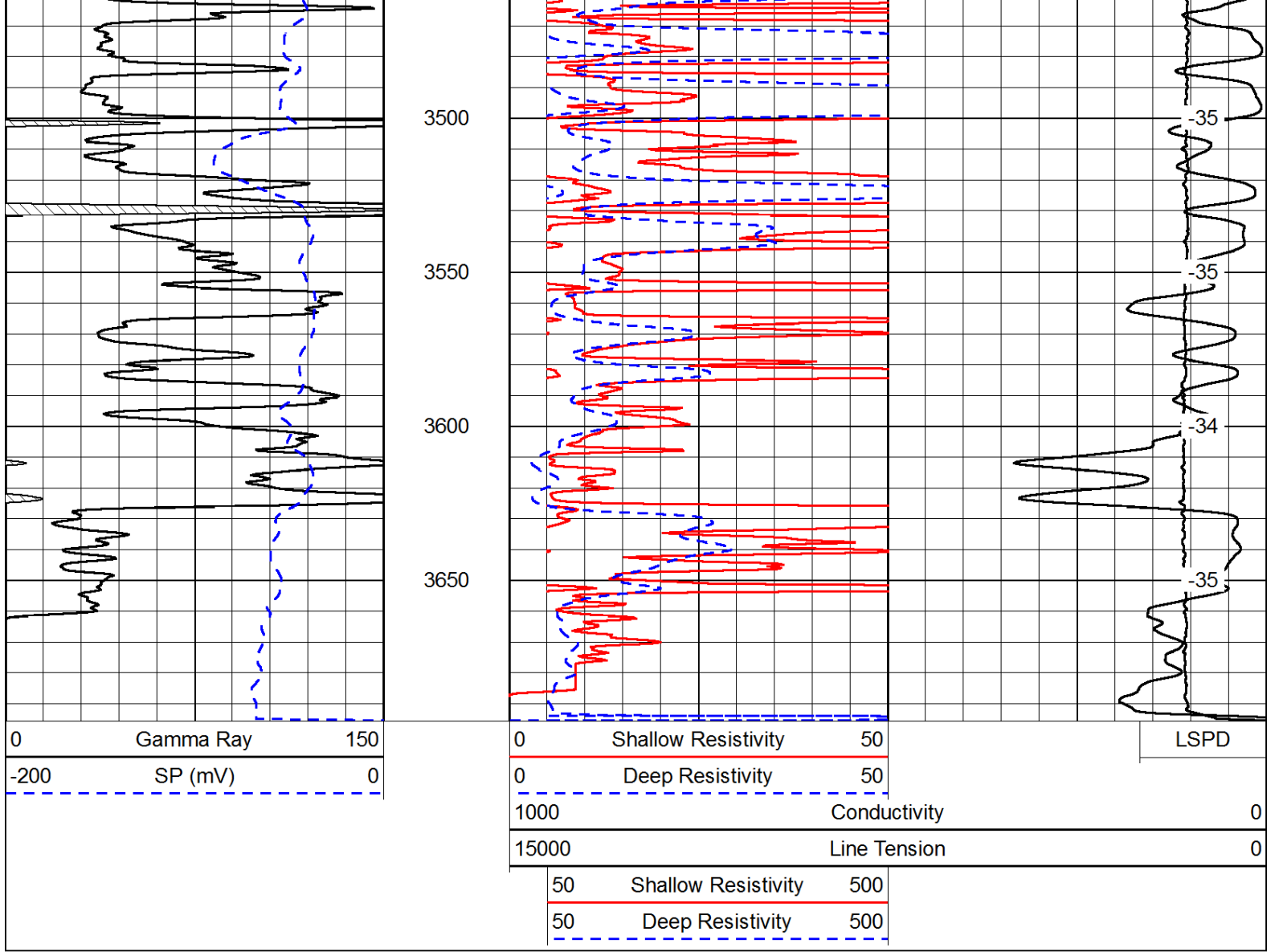


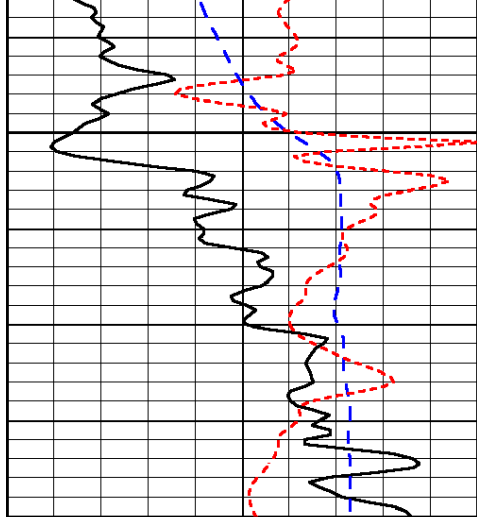






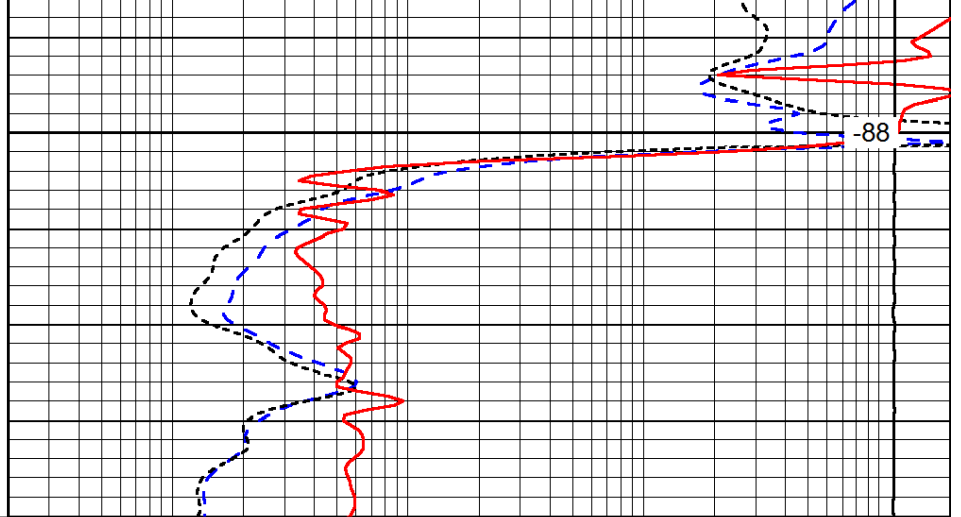






1450

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



88

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

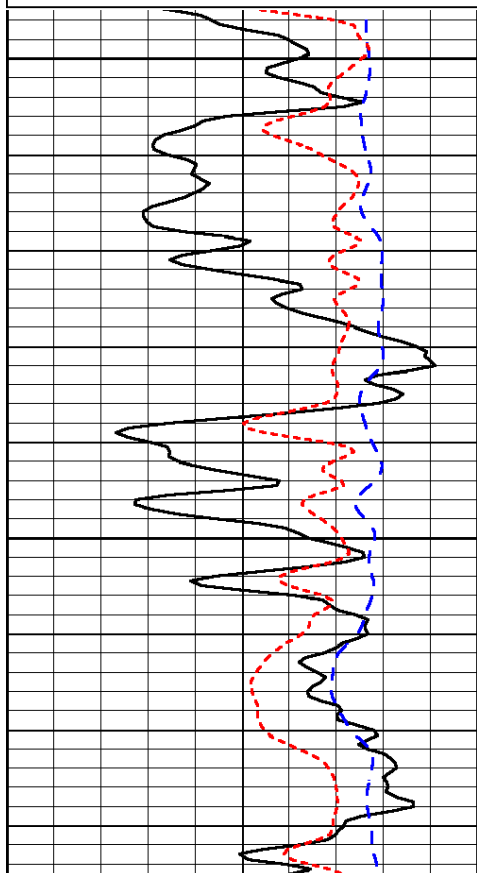
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-200	SP (mV)	0
-160	RxoRt	40

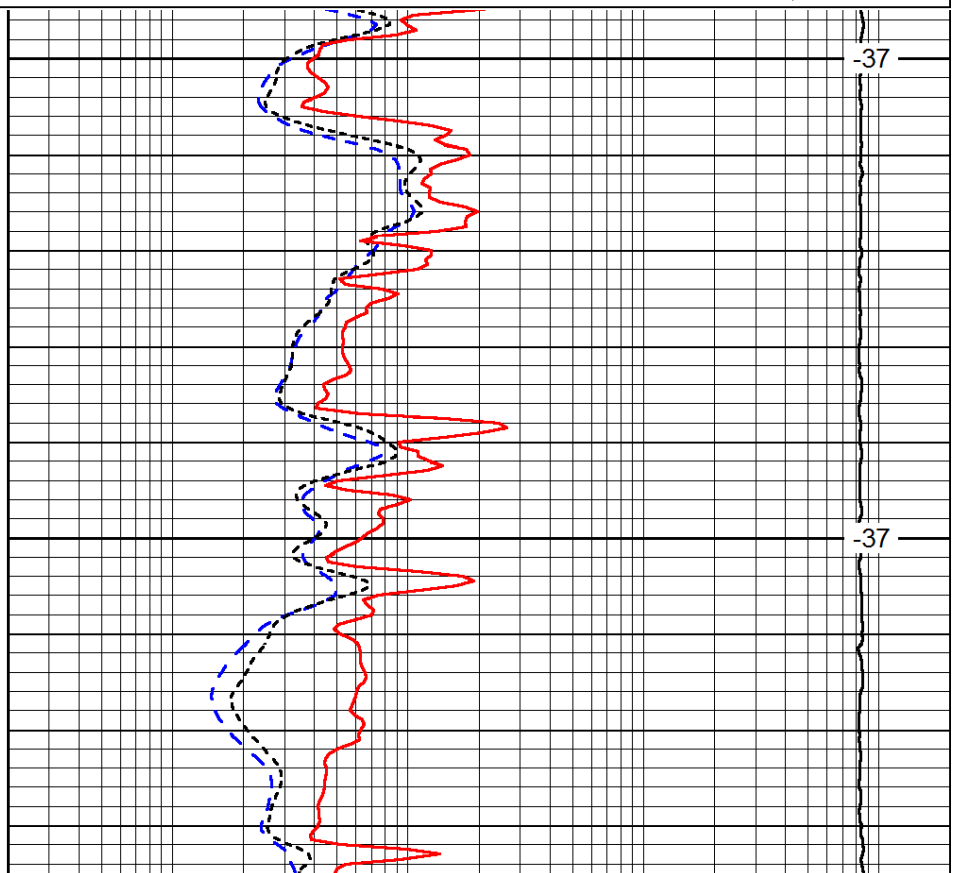
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



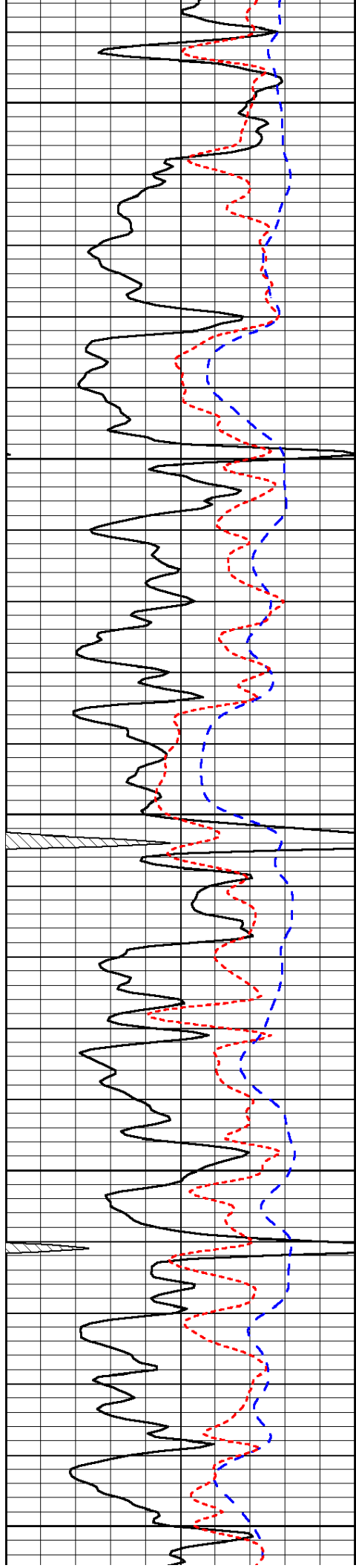
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3000



-37

-37



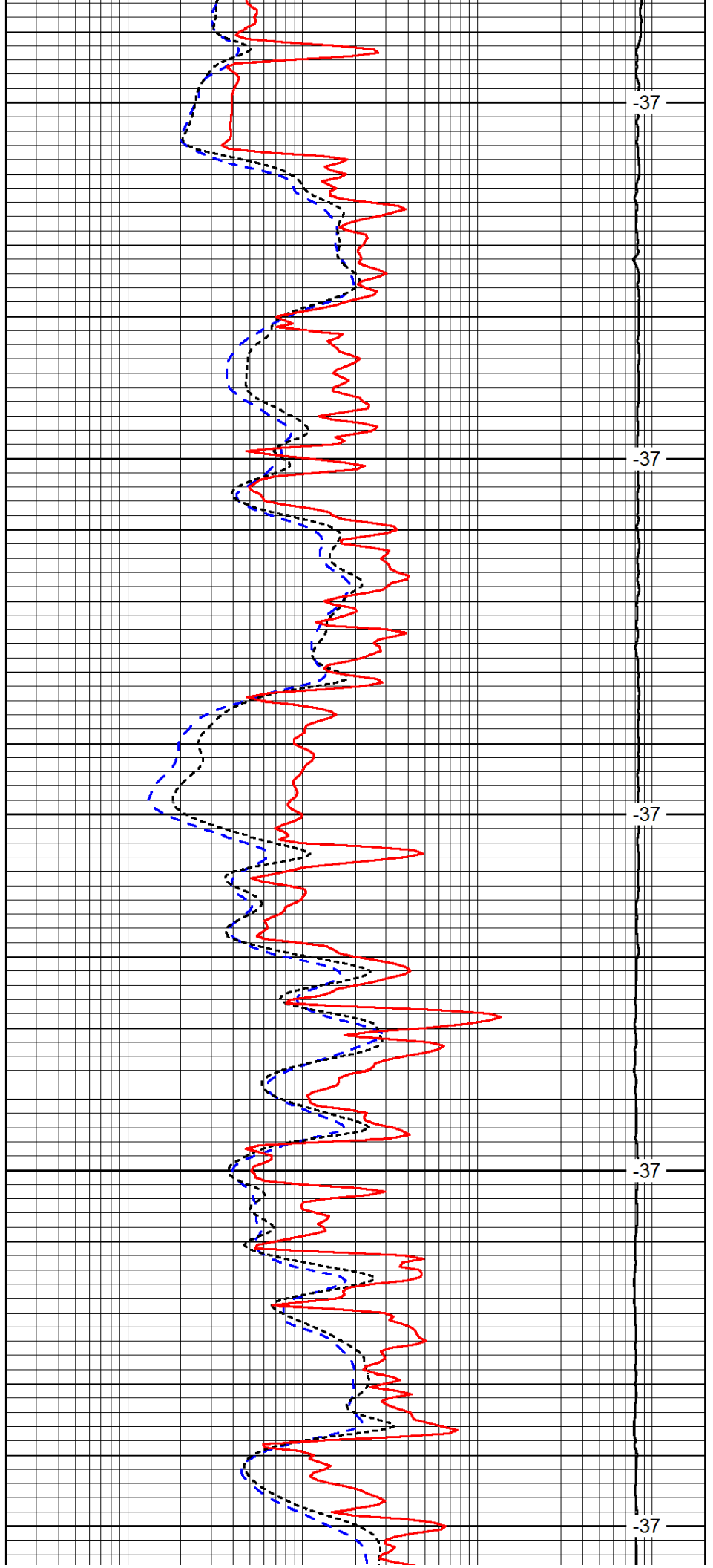
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3100

3150

3200

3250



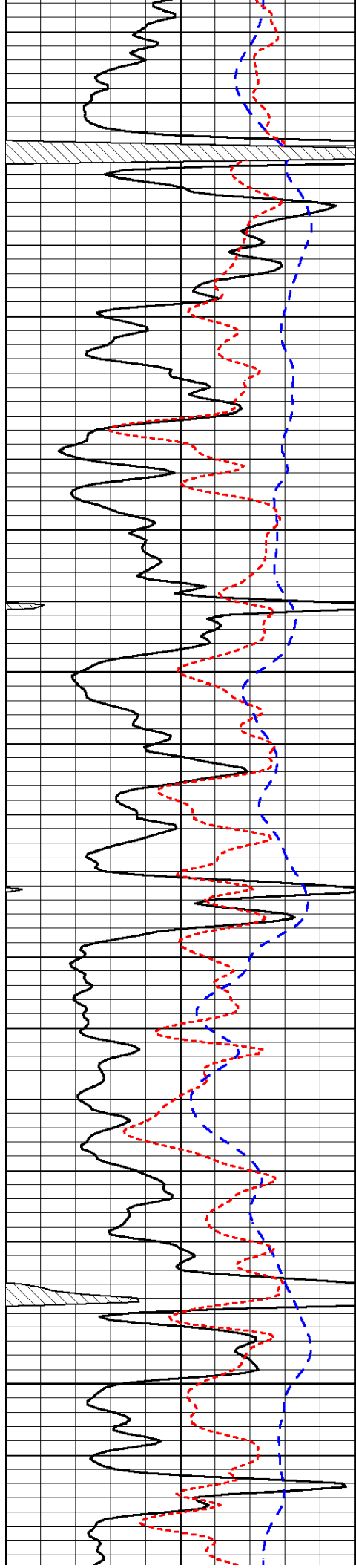
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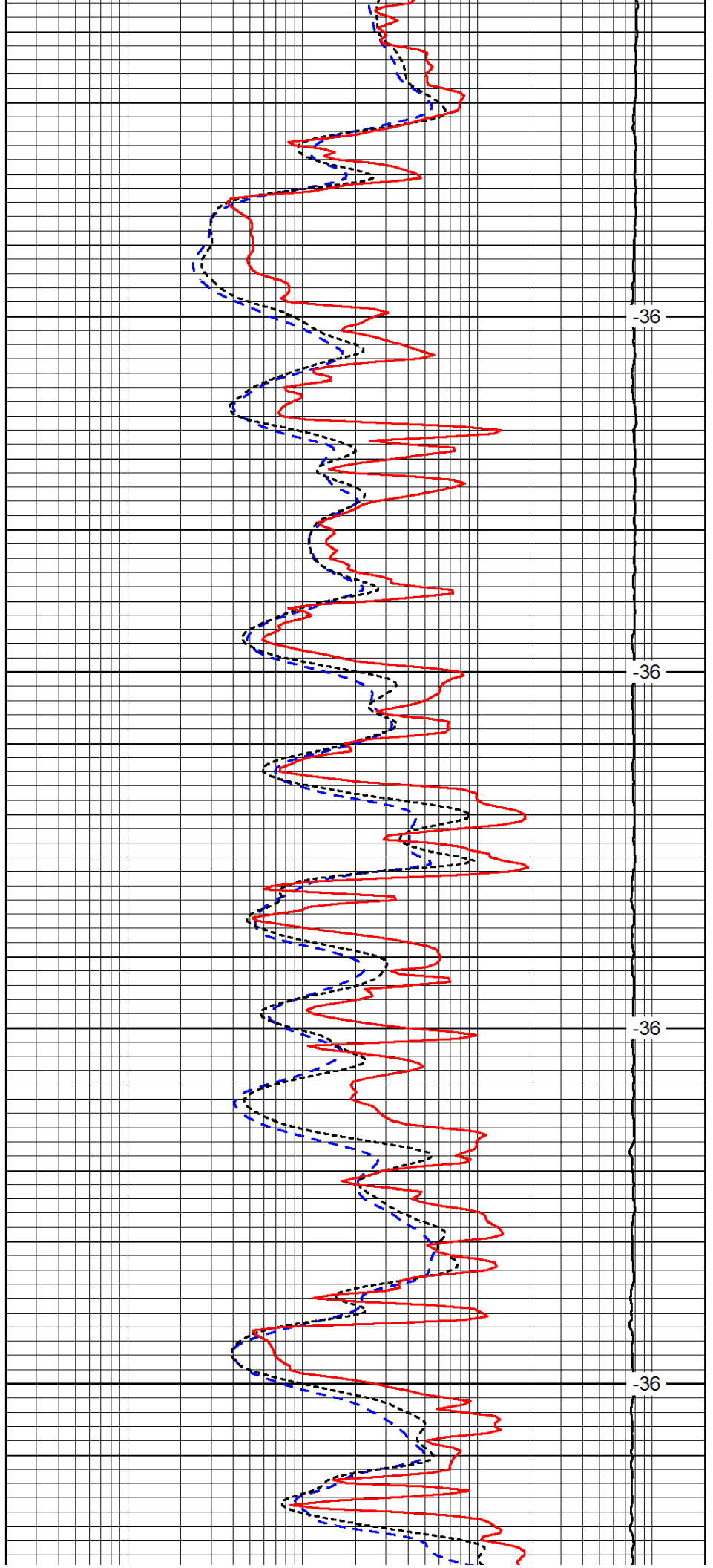


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3350

3400

3450

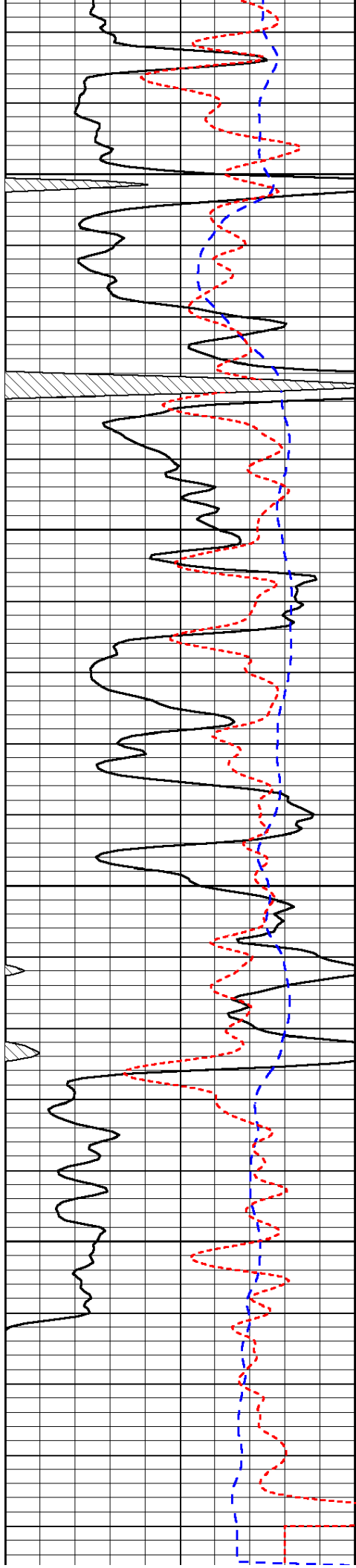


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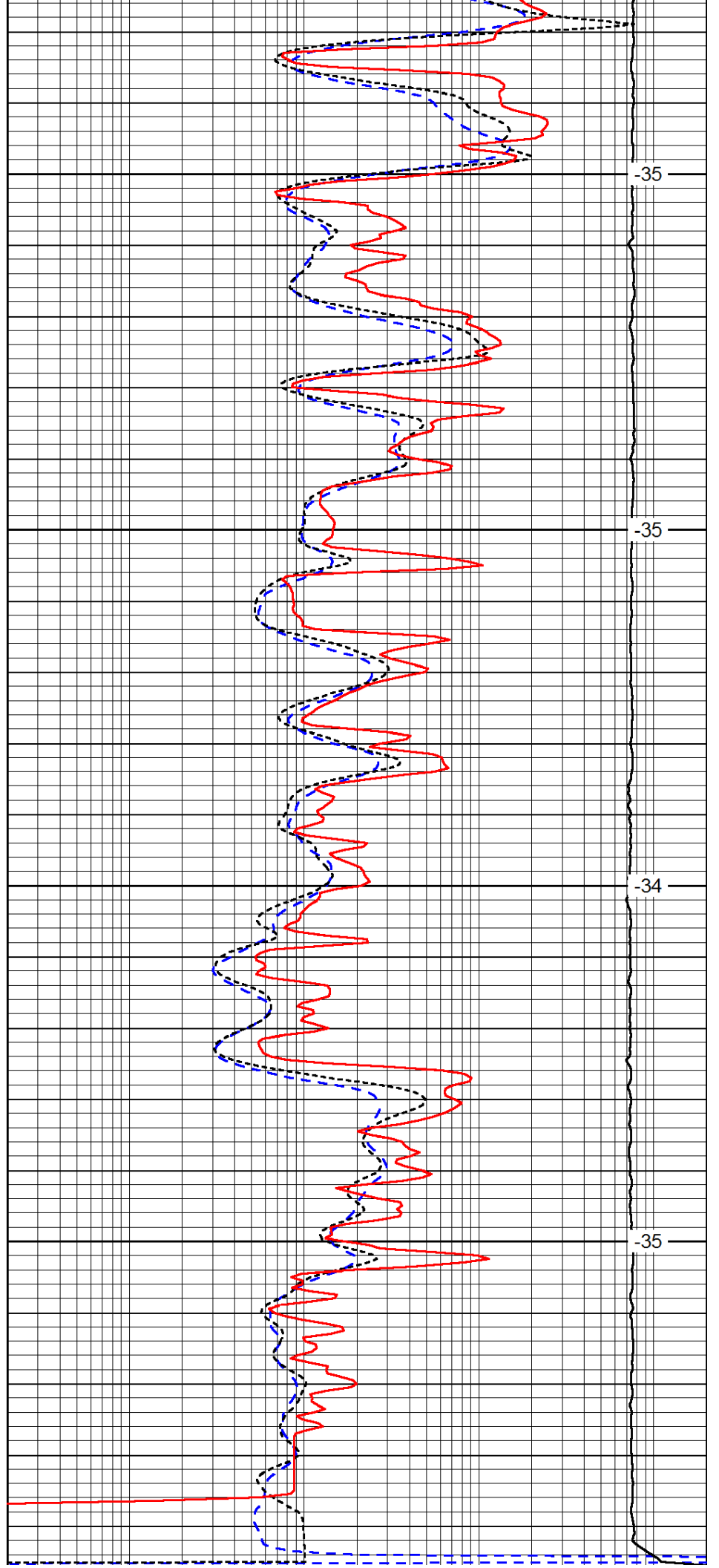


3500

3550

3600

3650



-35

-35

-34

-35

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

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