



Pioneer Energy Services

Dual Induction Log

API No.

15-047-21633-00-00

Company **Toto Energy, LLC**

Well **Bull Schultz #10-1**

Field **Wil**

County **Edwards**

State

Kansas

Location

1320' FNL & 1200' FWL

Sec: **10**

Twp: **26S**

Rge: **16W**

Permanent Datum **Ground Level** Elevation **2062**

Log Measured From **Kelly Bushing** 13 Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing**

Elevation

K.B. 2075

D.F. 2062

Other Services
CNL/CDL
MEL

Date

05-05-2014

Run Number

One

Depth Driller

4845

Depth Logger

4844

Bottom Logged Interval

4843

Top Log Interval

350

Casing Driller

8.625 @ 353

Casing Logger

350

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

8200

Density / Viscosity

9.6

67

pH / Fluid Loss

8.0

12.0

Source of Sample

Flowline

Rm @ Meas. Temp

0.40 @ 80

Rmf @ Meas. Temp

0.30 @ 80

Rmc @ Meas. Temp

0.54 @ 80

Source of Rmf / Rmc

Charts

Rm @ BHT

0.25 @ 126

Operating Rig Time

3 hours

Max Rec. Temp. F

126

Equipment Number

91

Location

Hays

Recorded By

D. Schmidt

Witnessed By

Sean Deenihan

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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

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(785) 625-3858

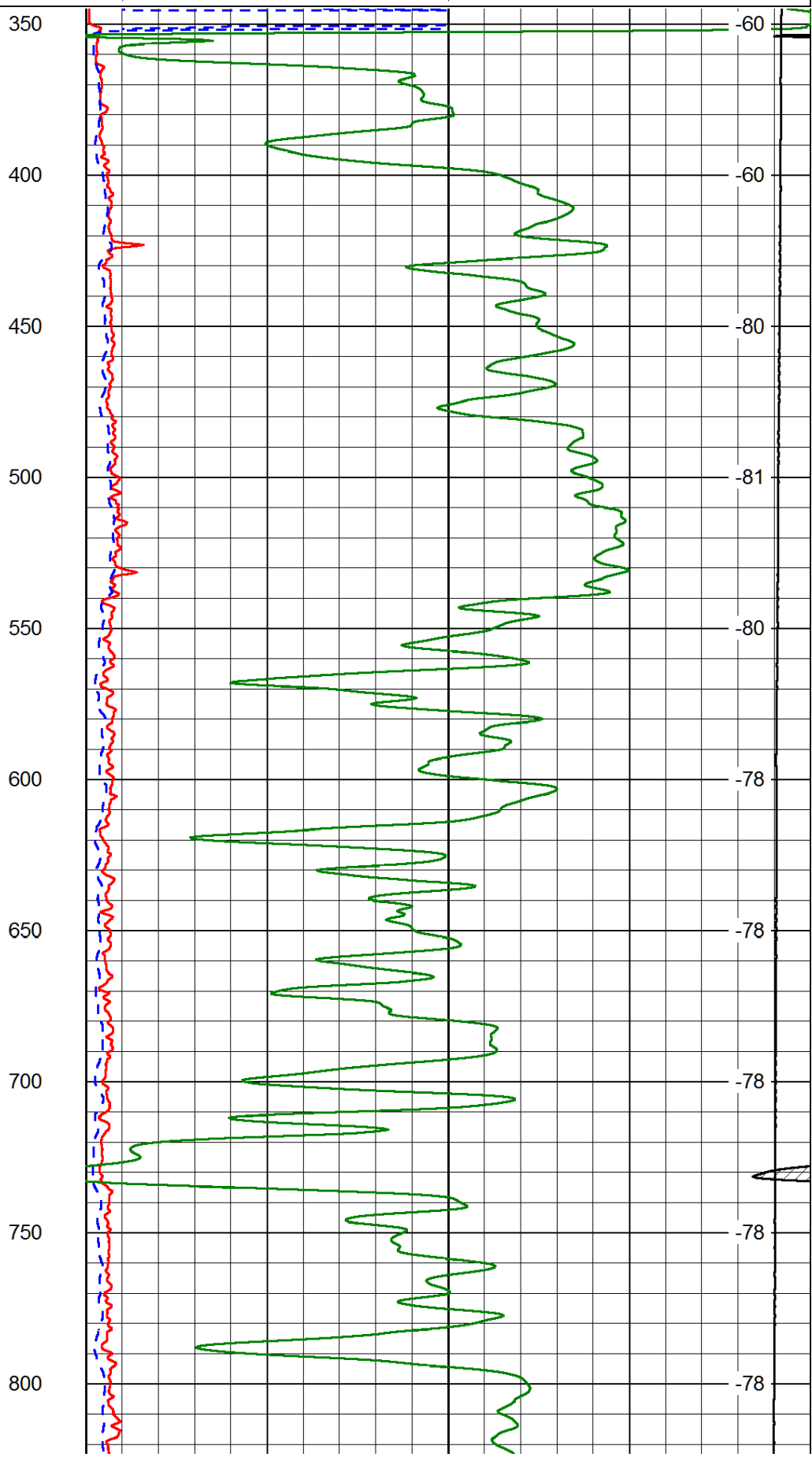
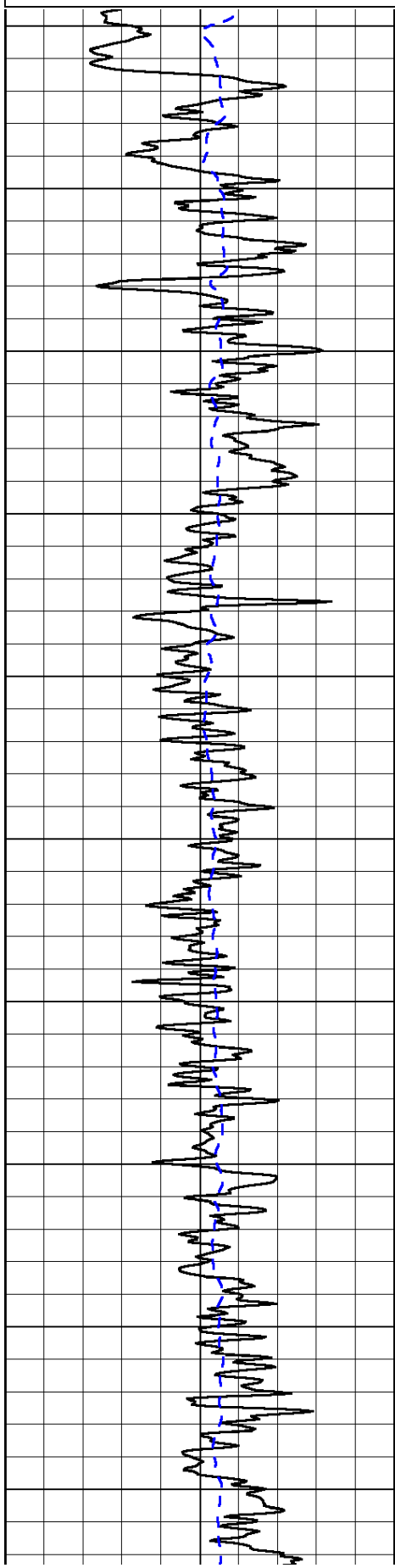
Trousdale,
South to T Rd, 1 East, 1/4 South,
East into

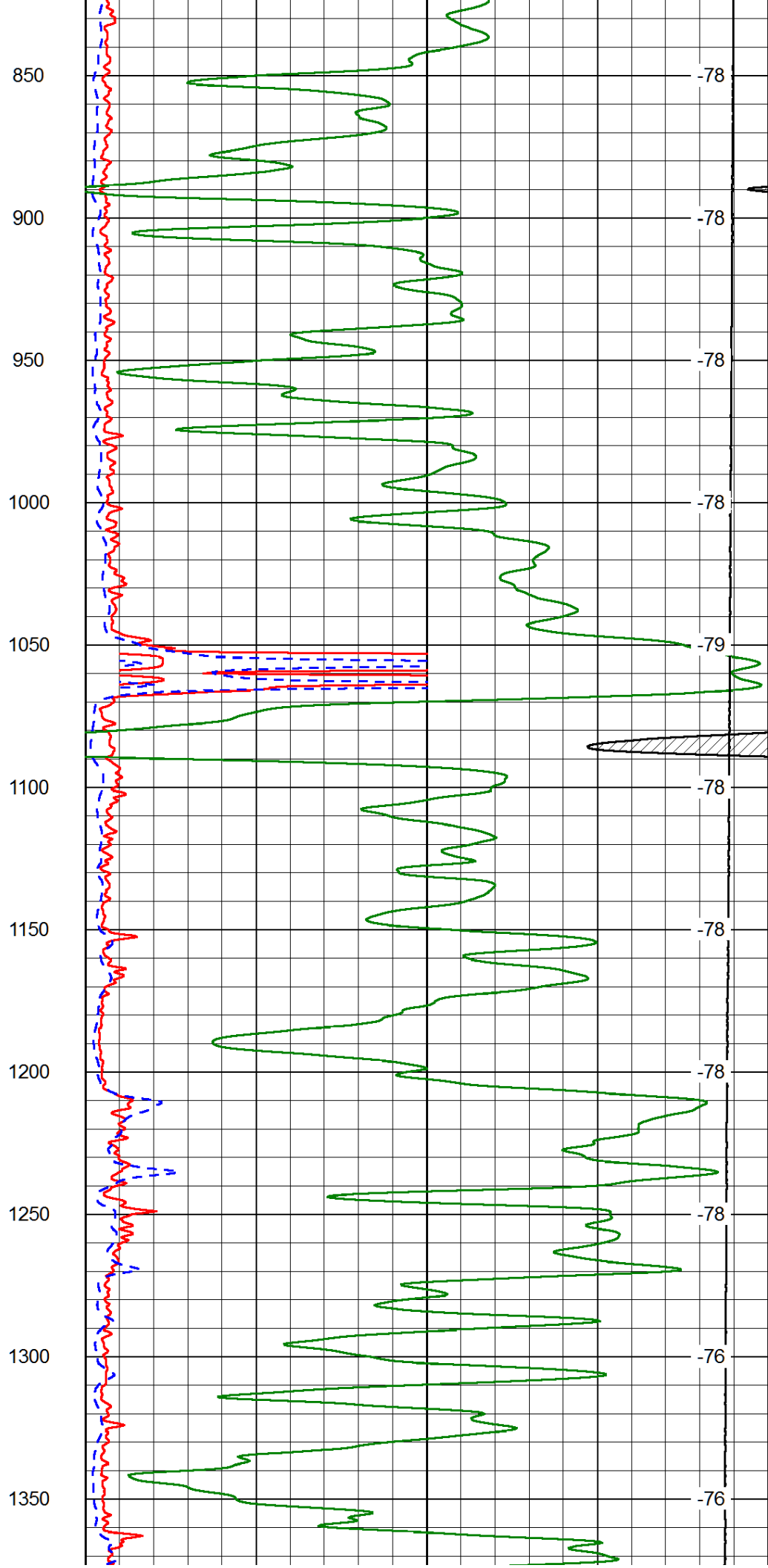
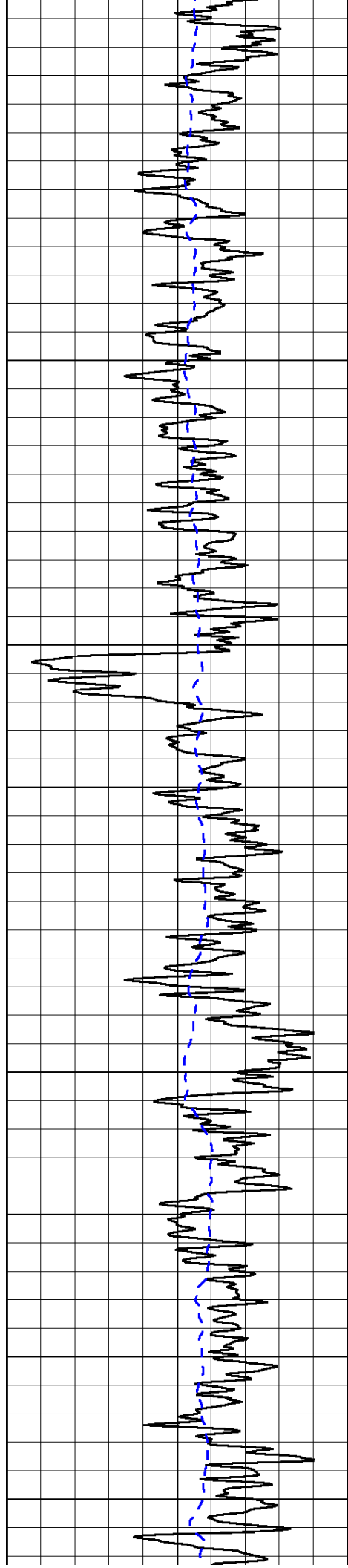
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Dataset Creation: Mon May 05 23:21:59 2014
Charted by: Depth in Feet scaled 1:600

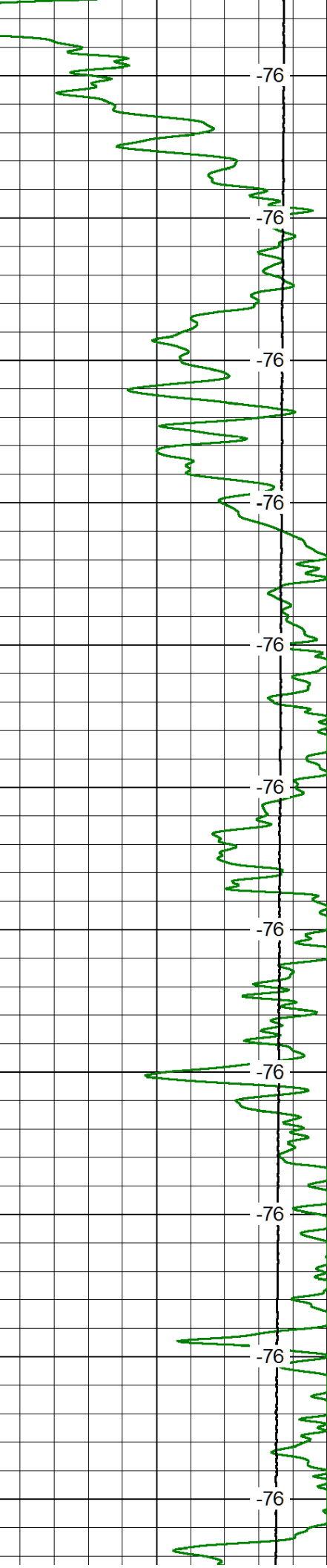
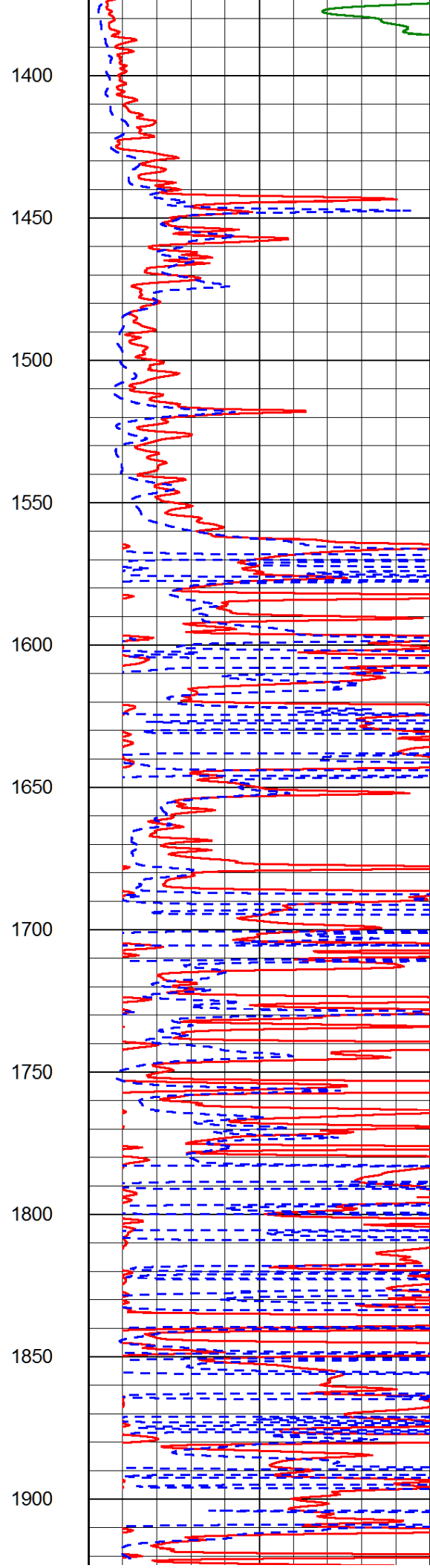
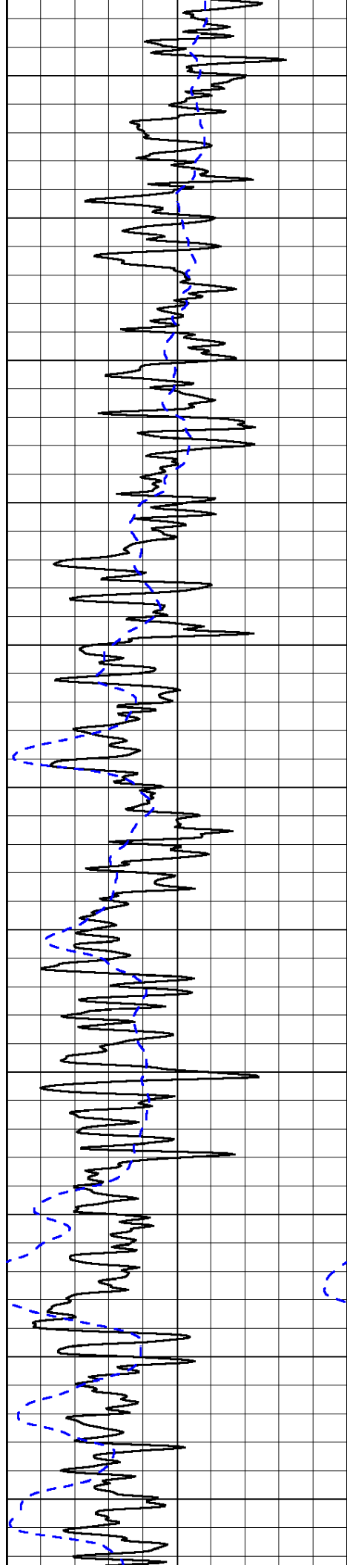
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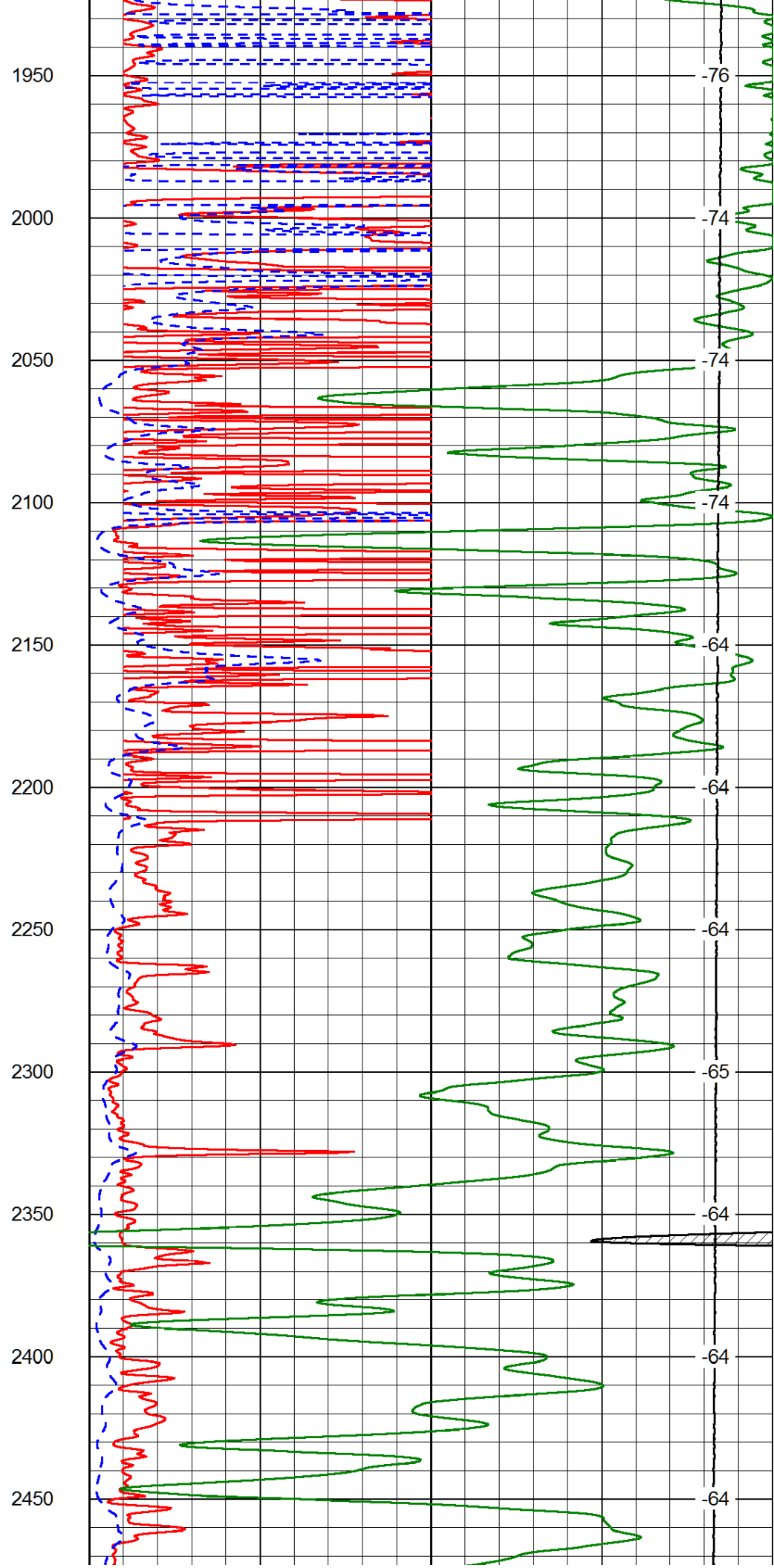
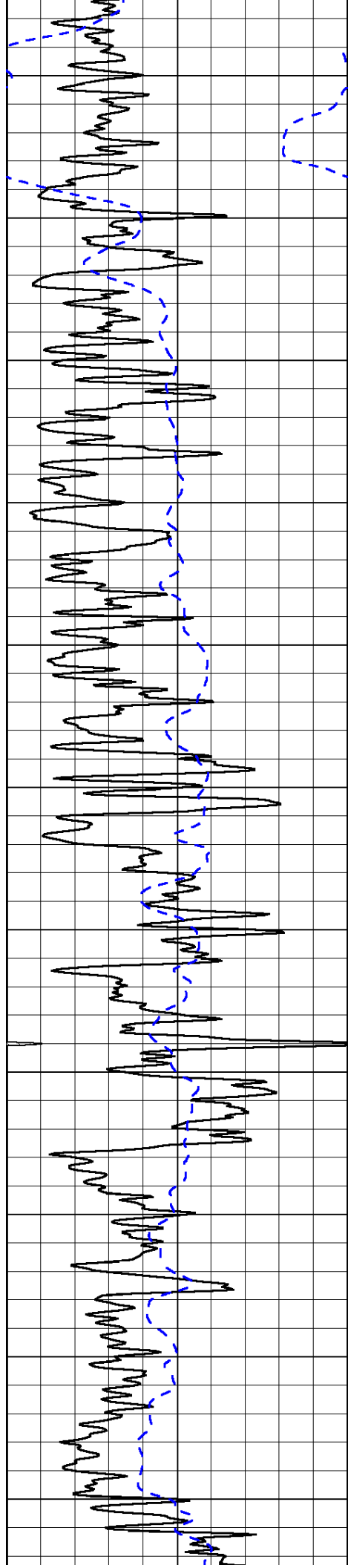
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

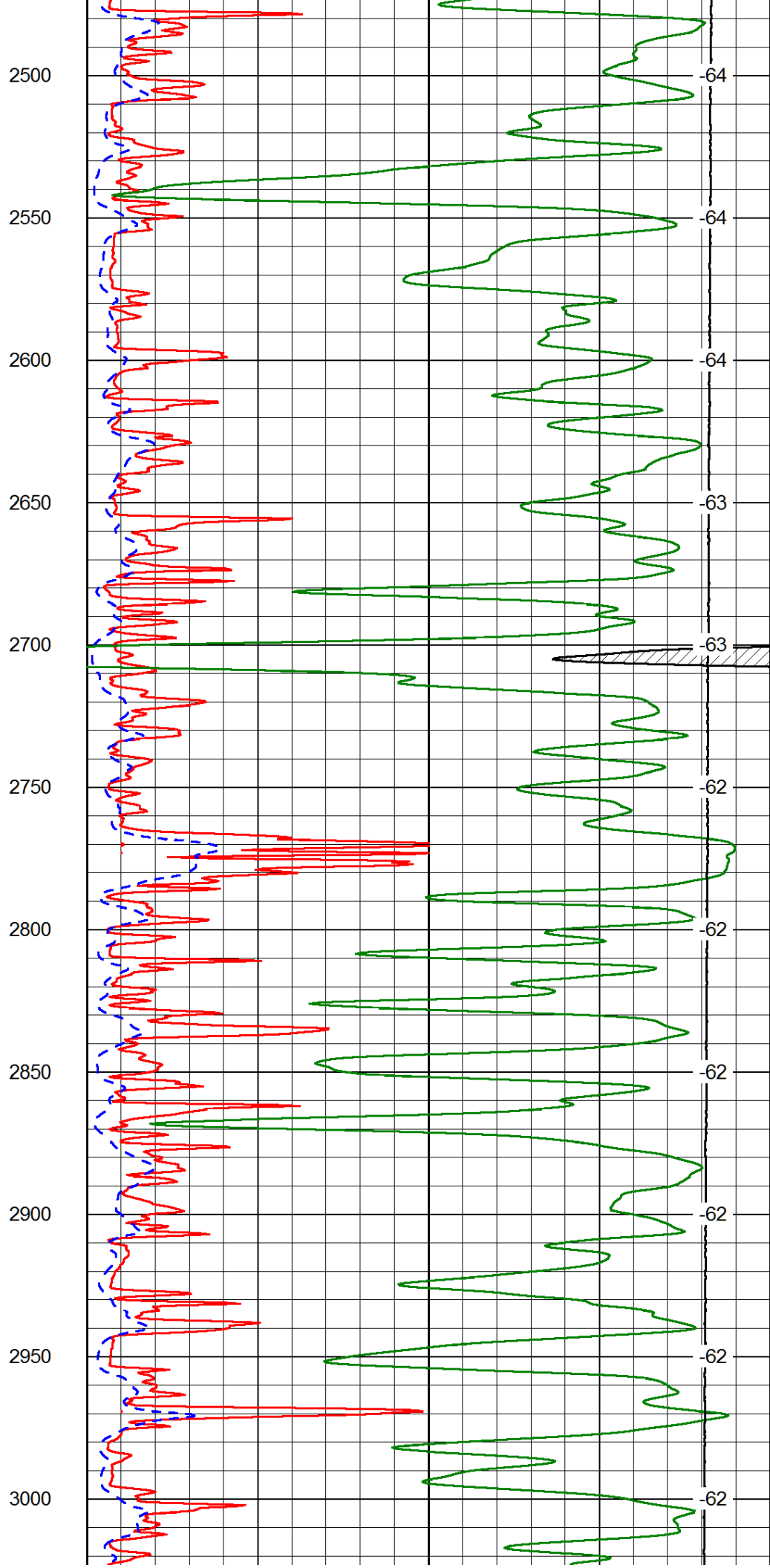
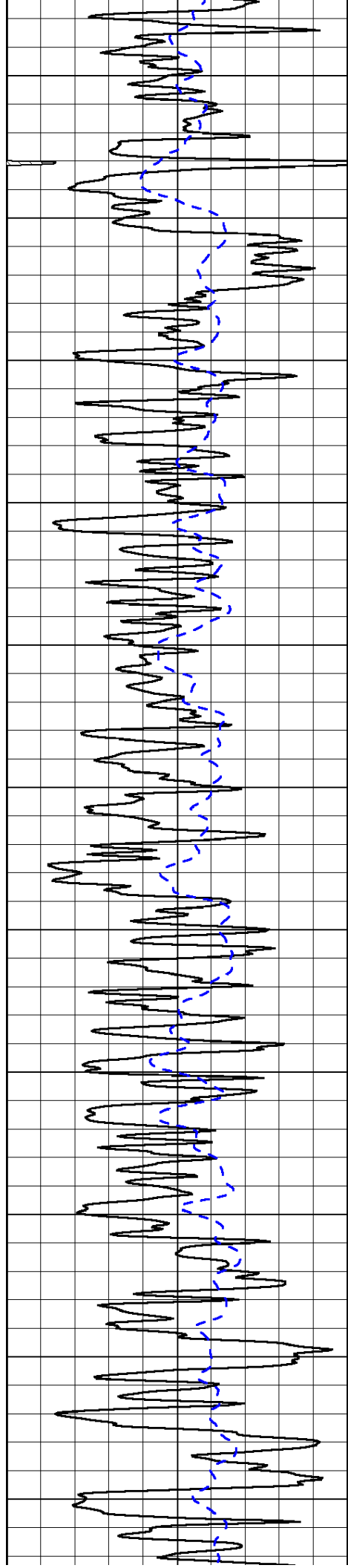
LSPD

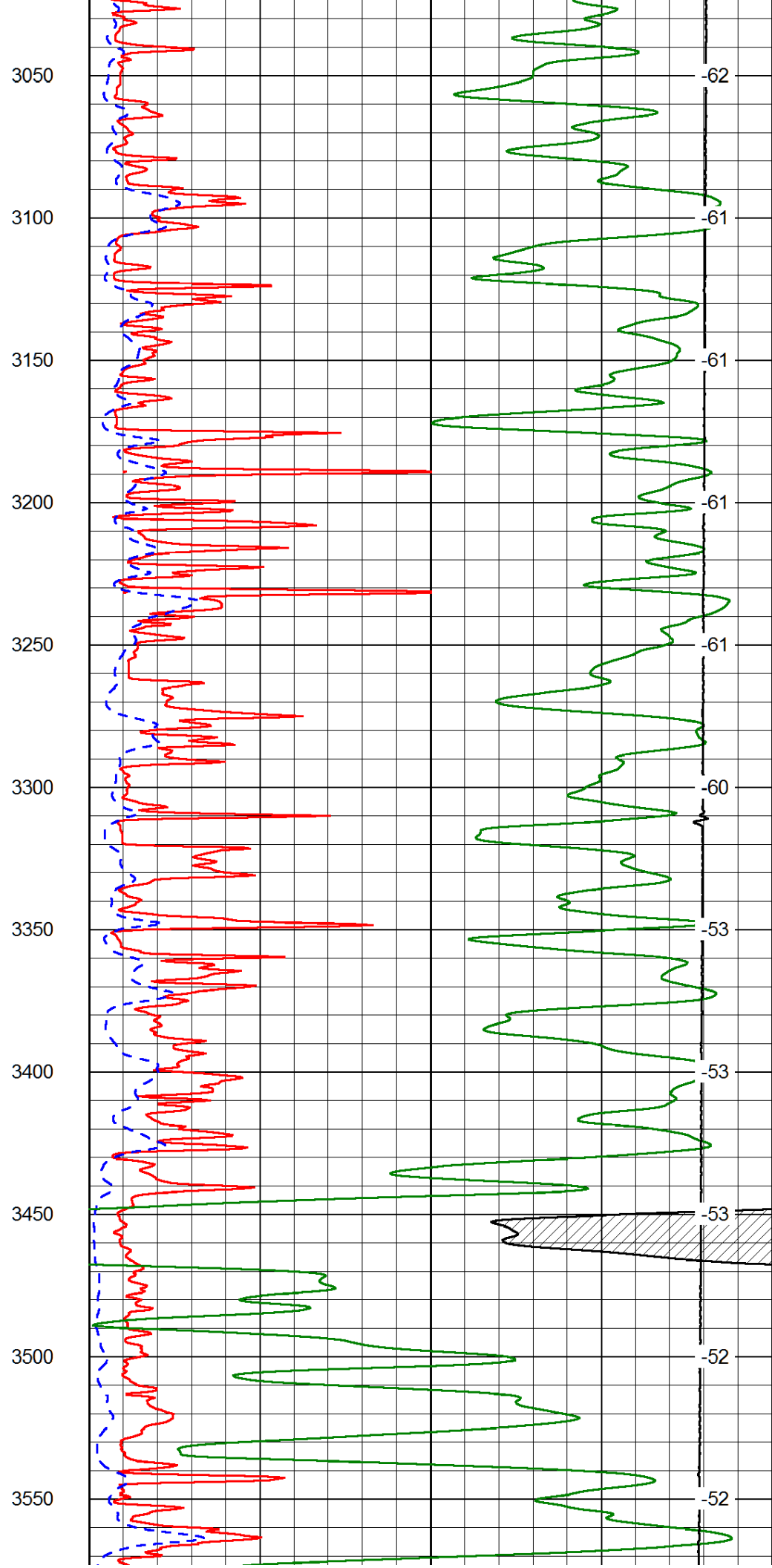
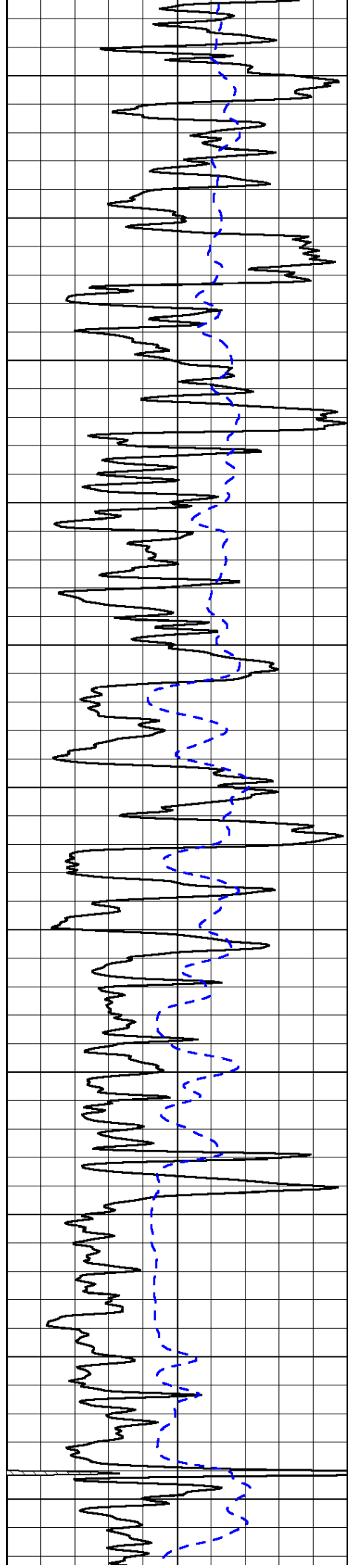


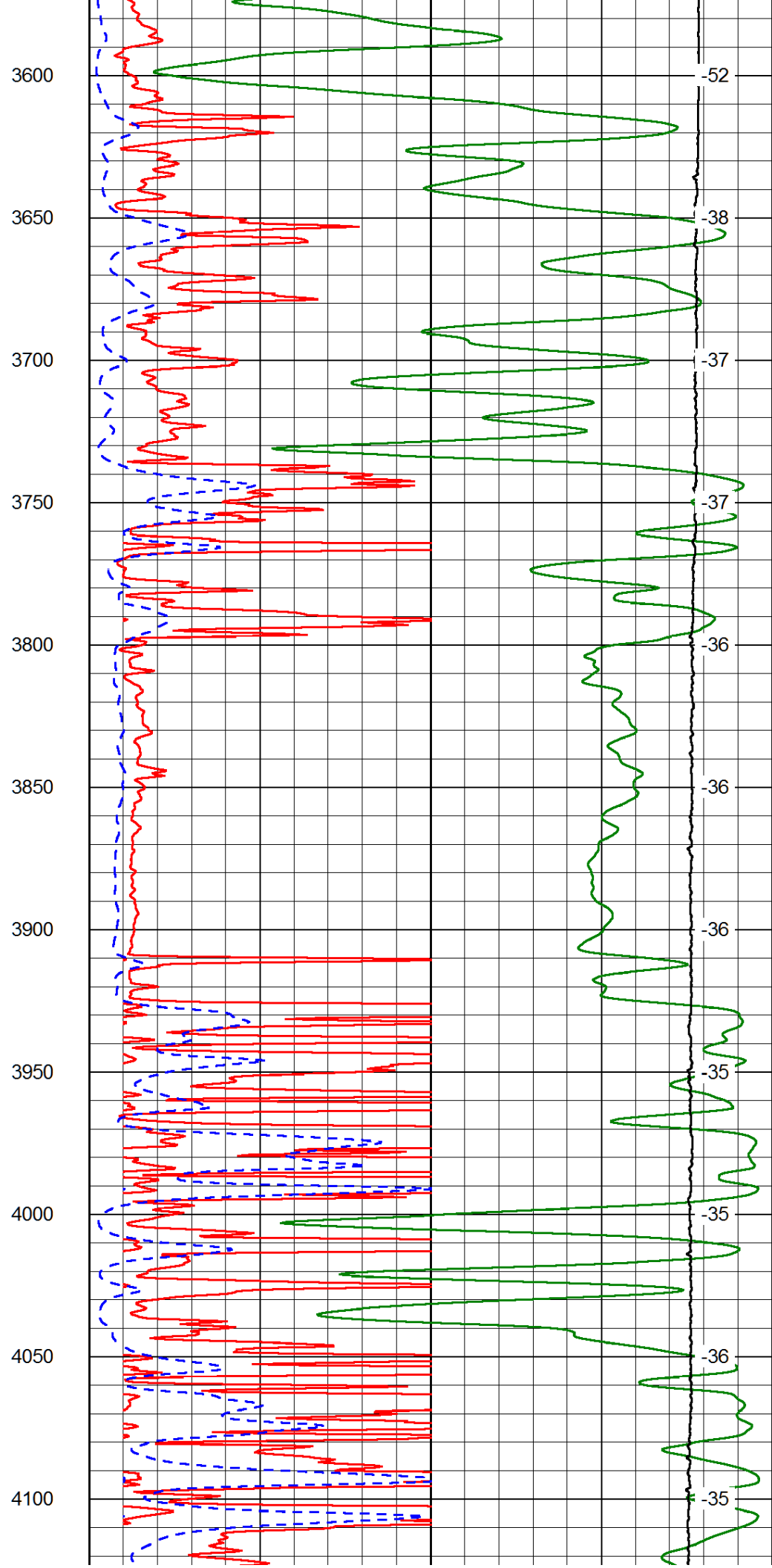
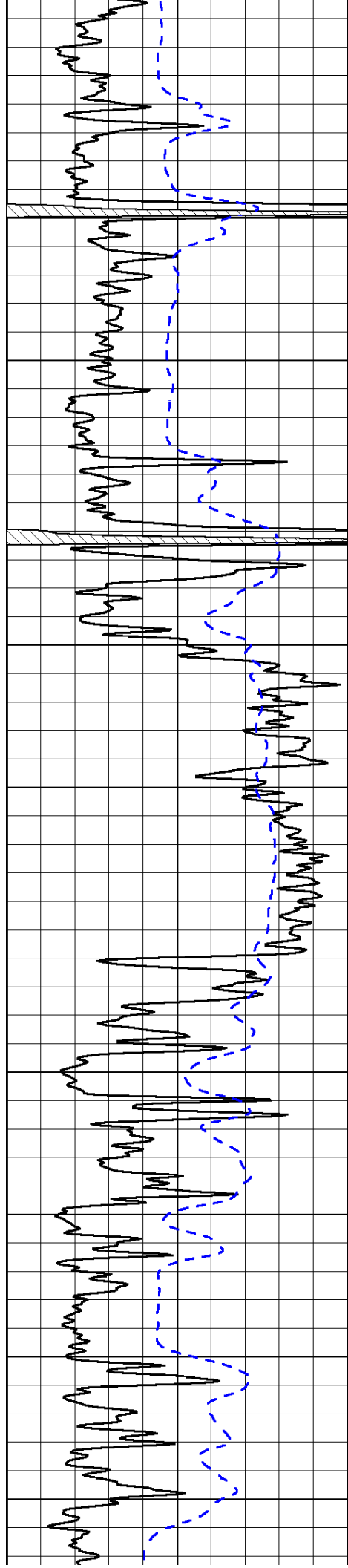


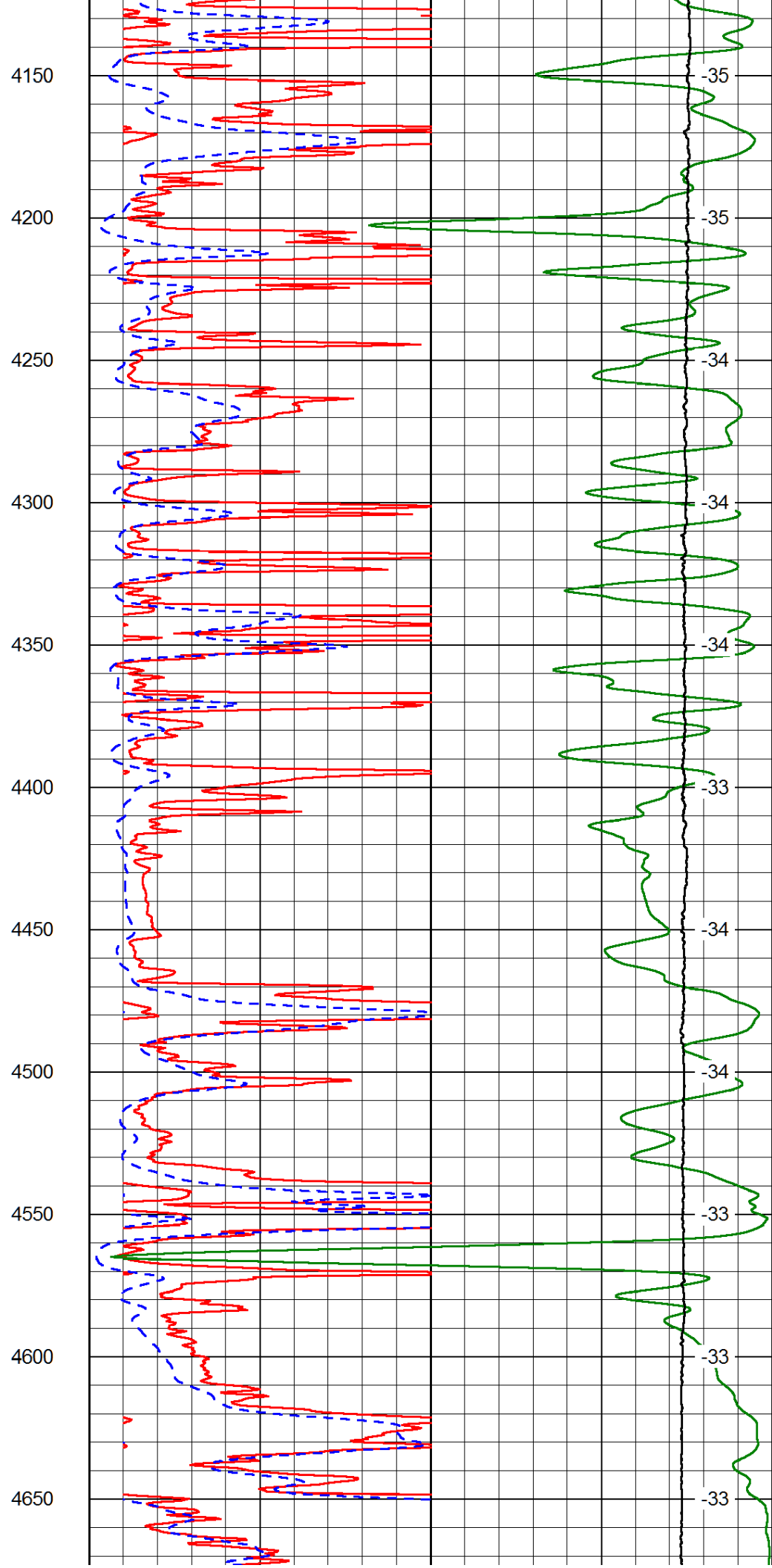
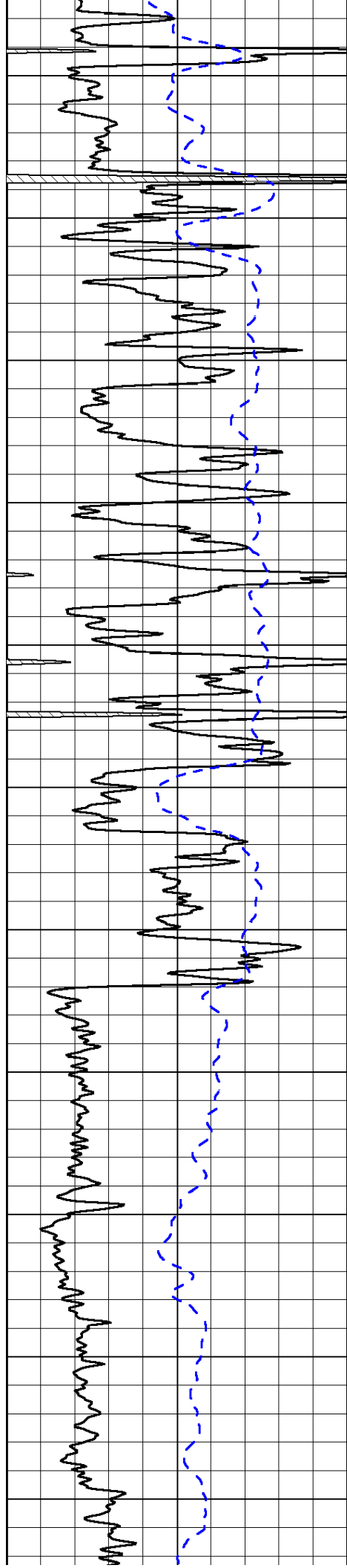


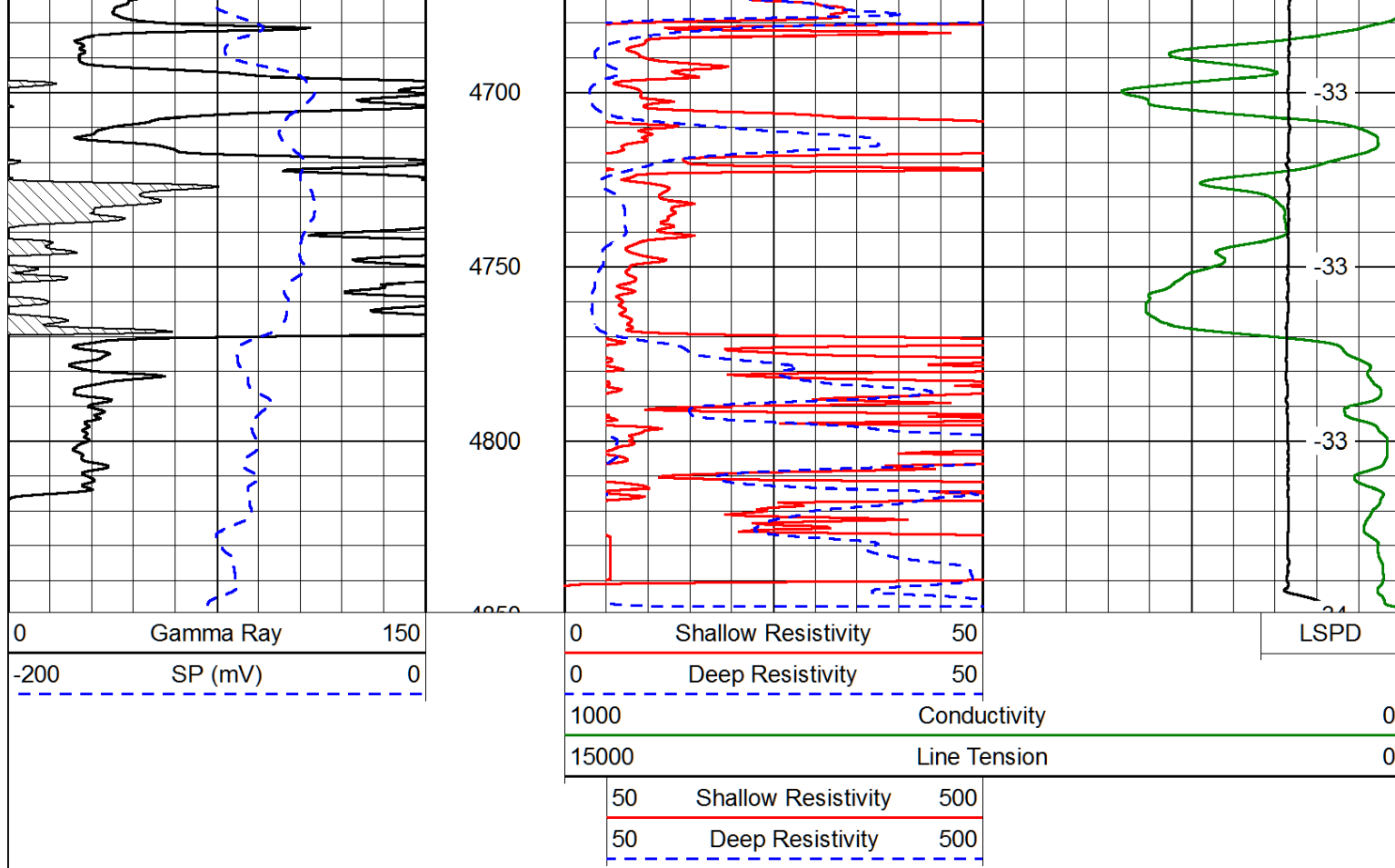




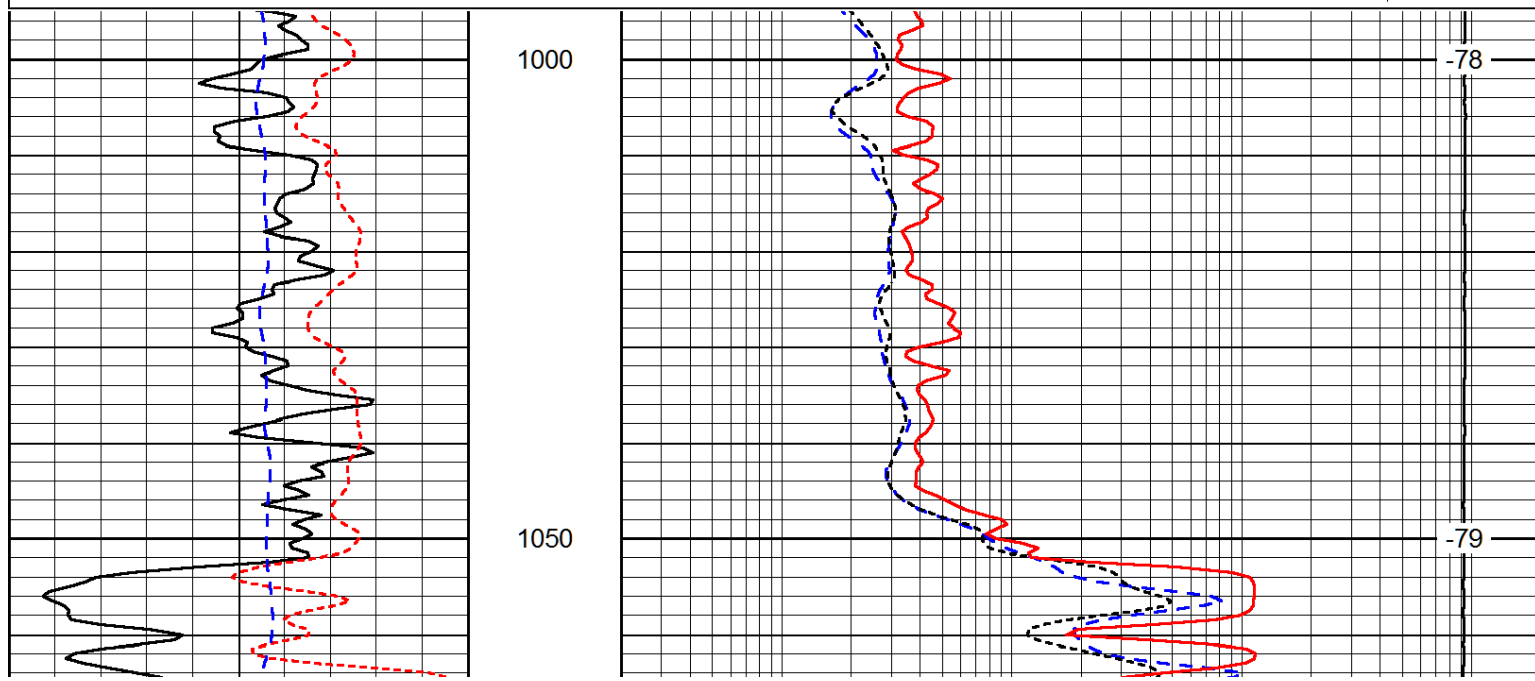
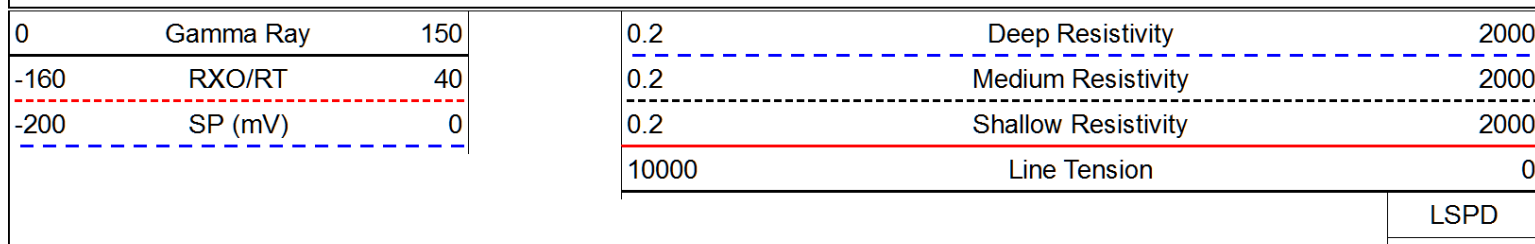


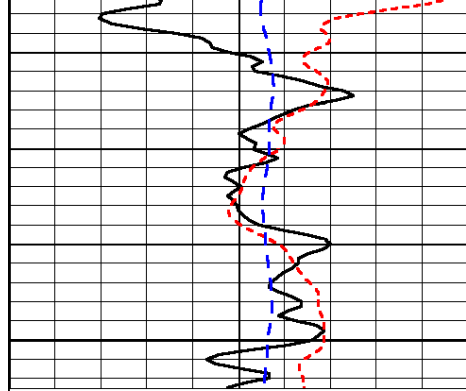






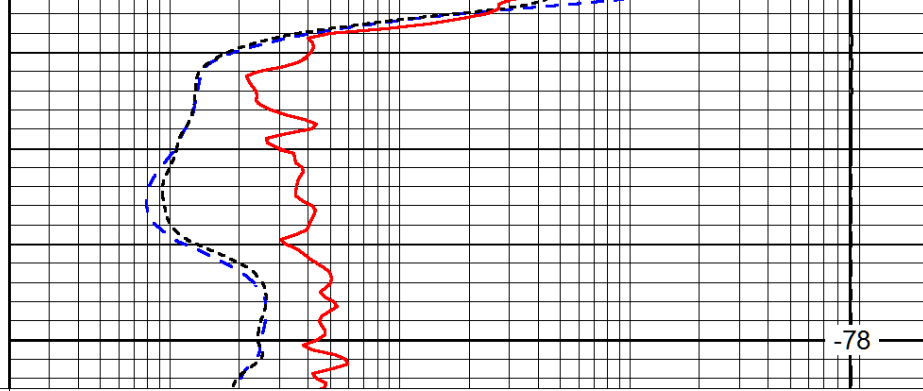
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Dataset Creation: Mon May 05 23:21:59 2014
Charted by: Depth in Feet scaled 1:240





0	Gamma Ray	150
-160	RXO/RT	40
-200	SP (mV)	0

1100



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000

10000	Line Tension	0
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LSPD

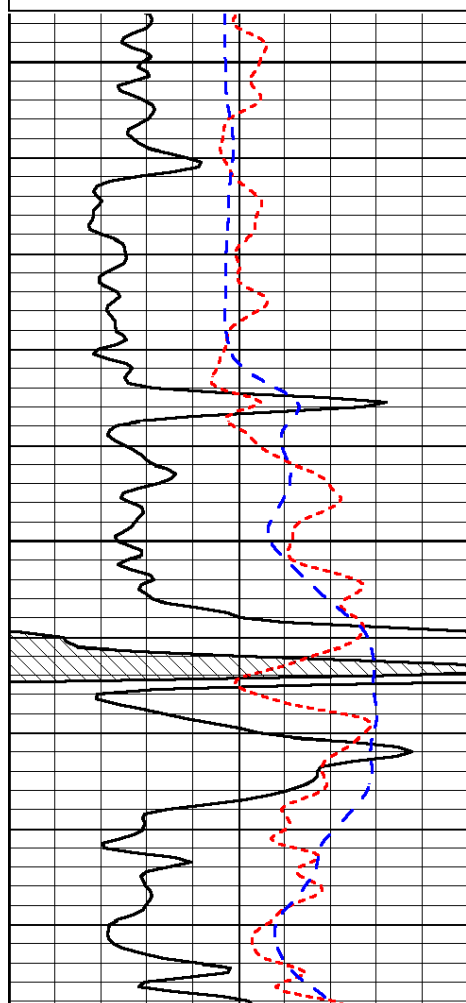
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0	Gamma Ray	150
-160	RXO/RT	40
-200	SP (mV)	0

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000

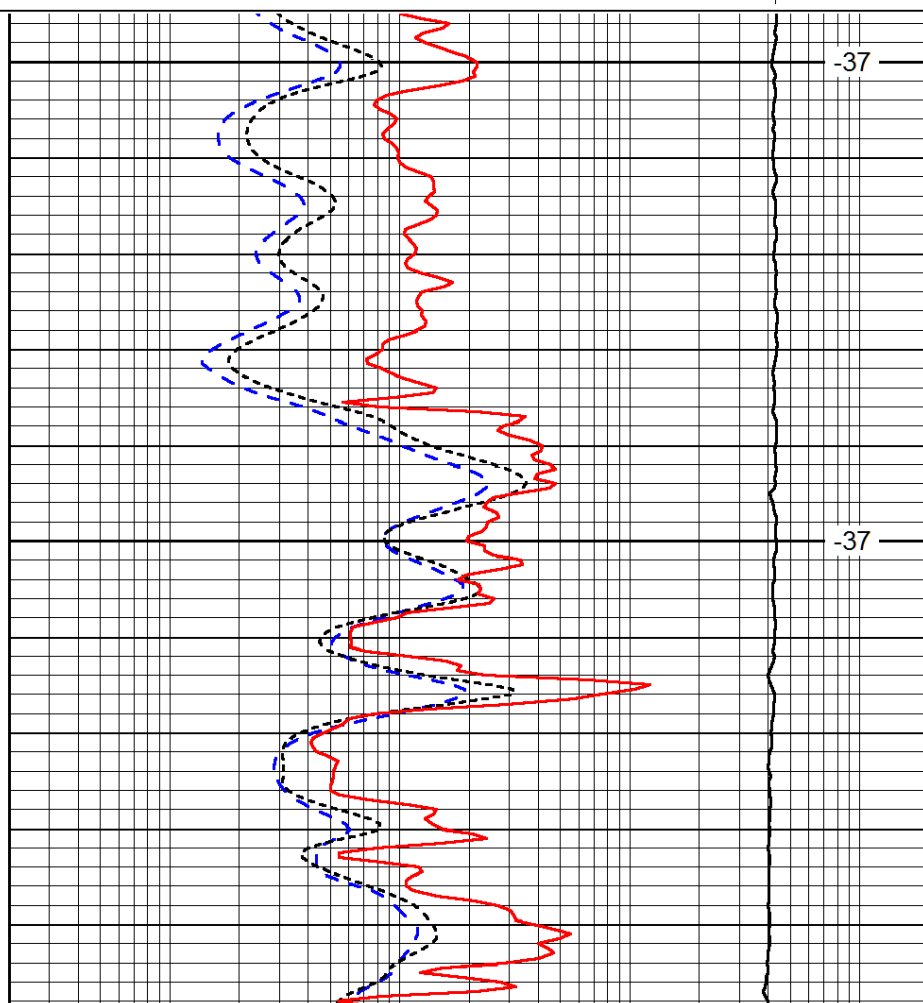
10000	Line Tension	0
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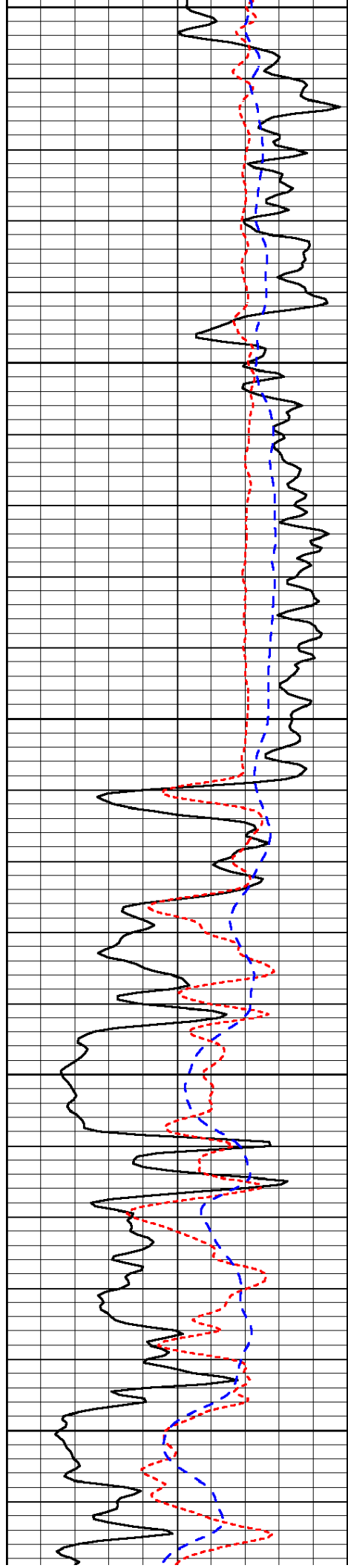
LSPD



3700

3750





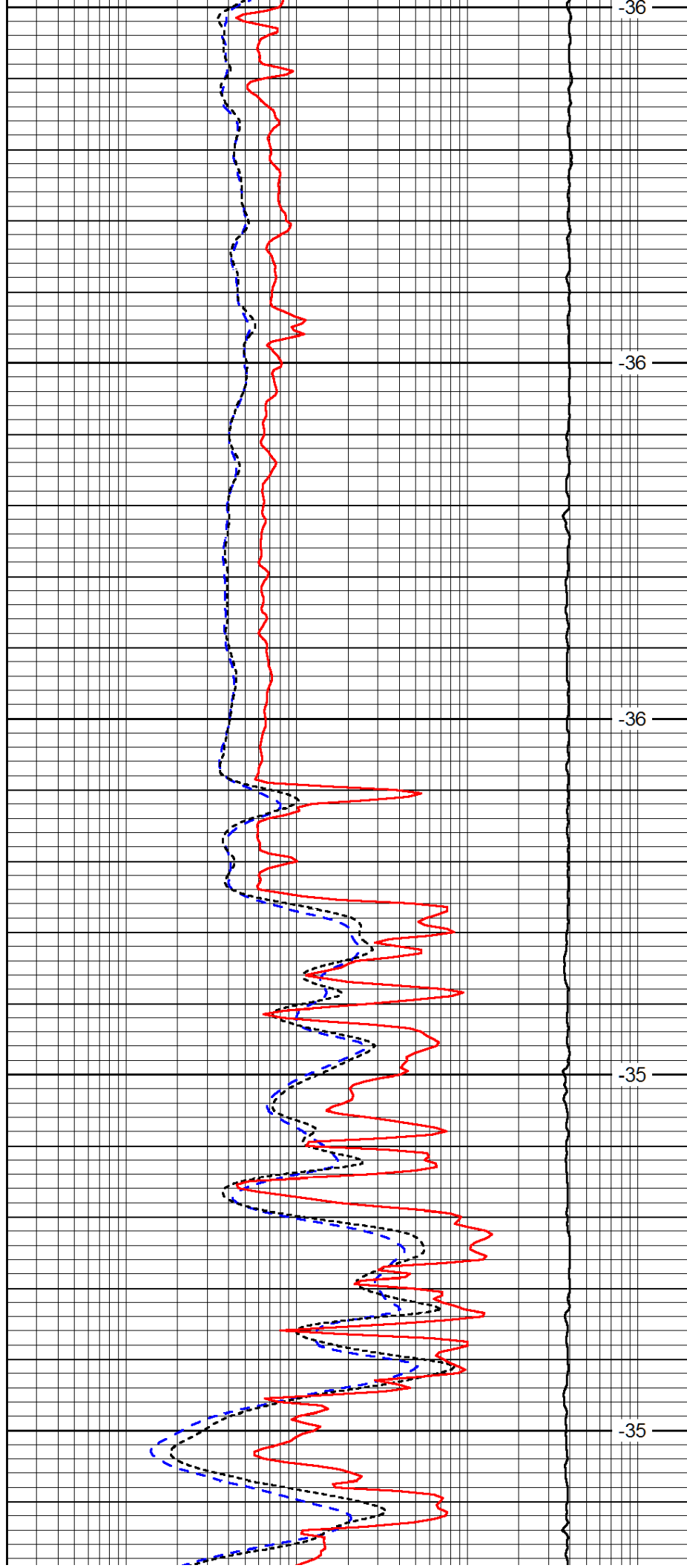
3800

3850

3900

3950

4000



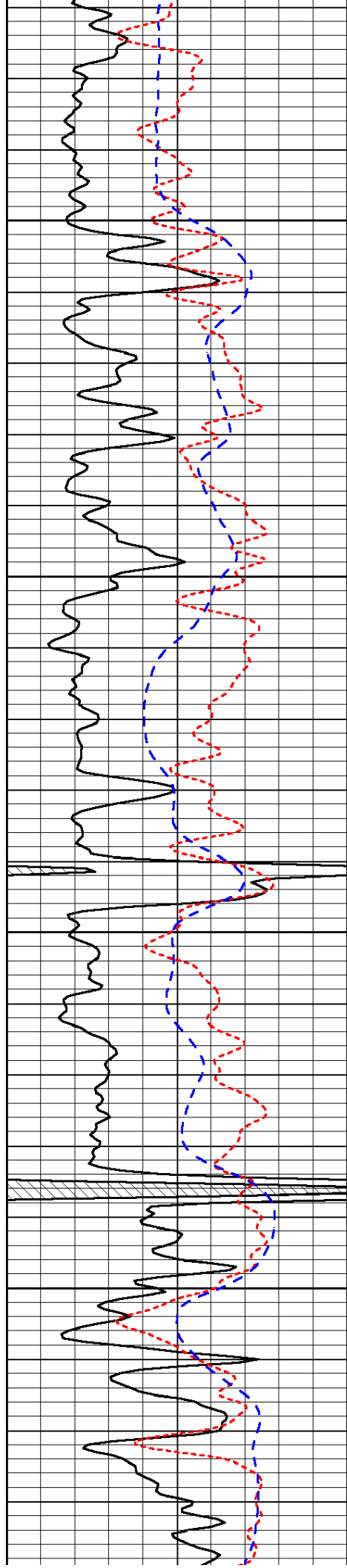
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-36

-36

-35

-35

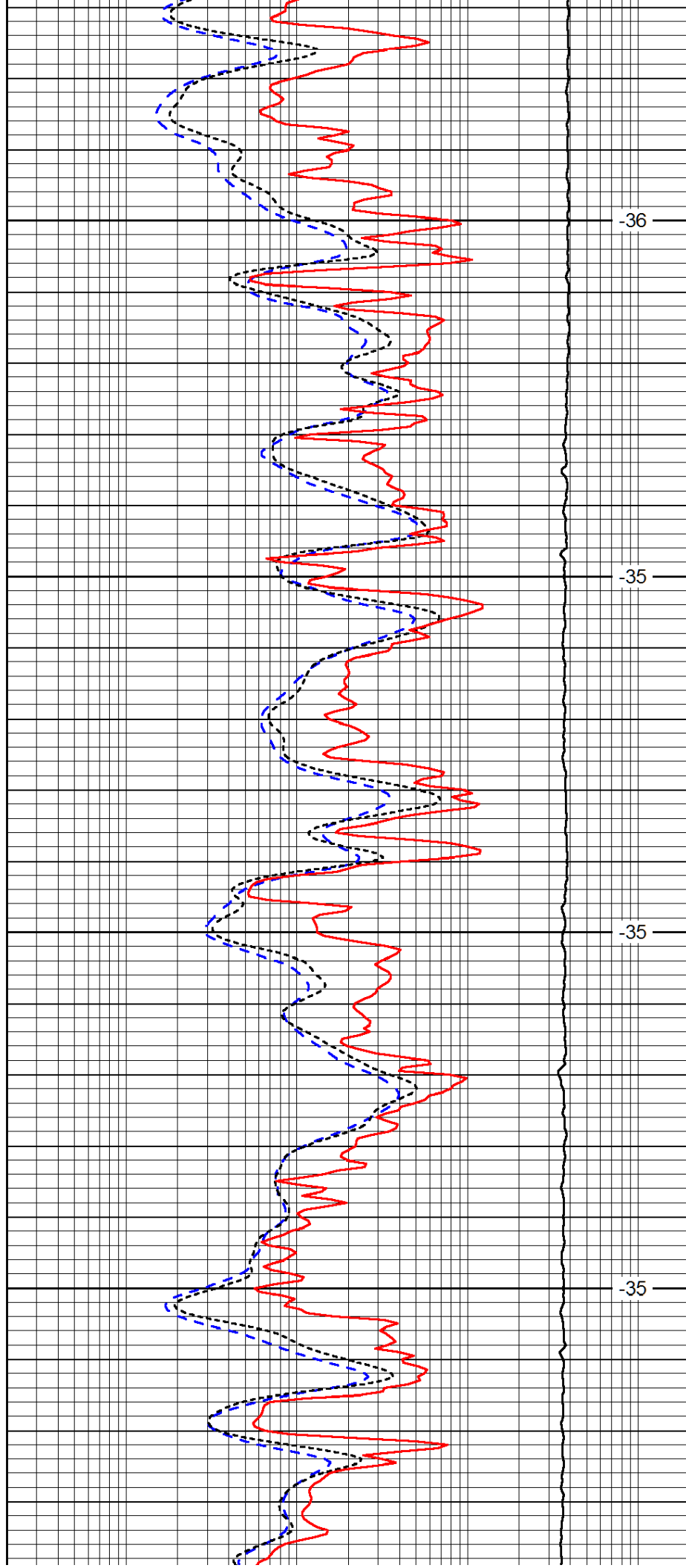


4050

4100

4150

4200

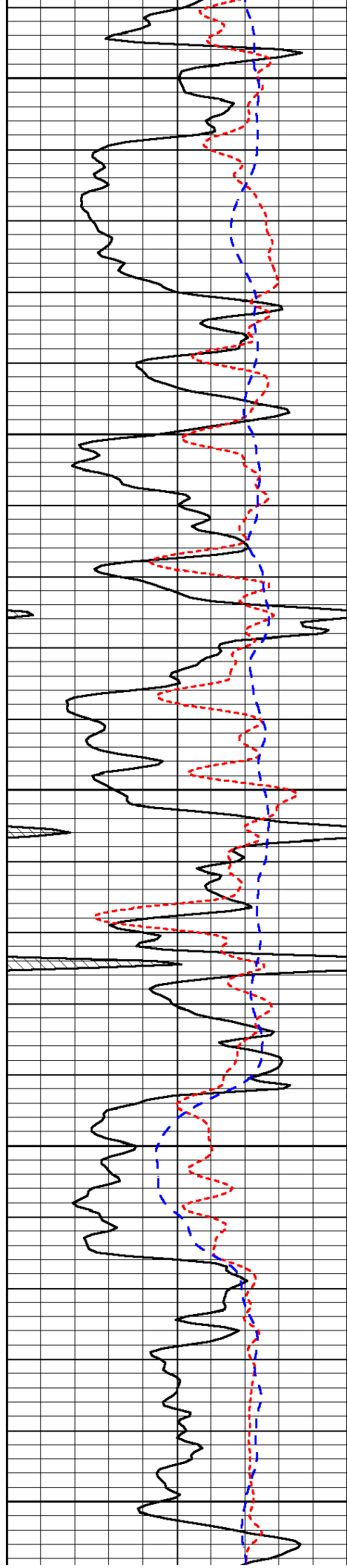


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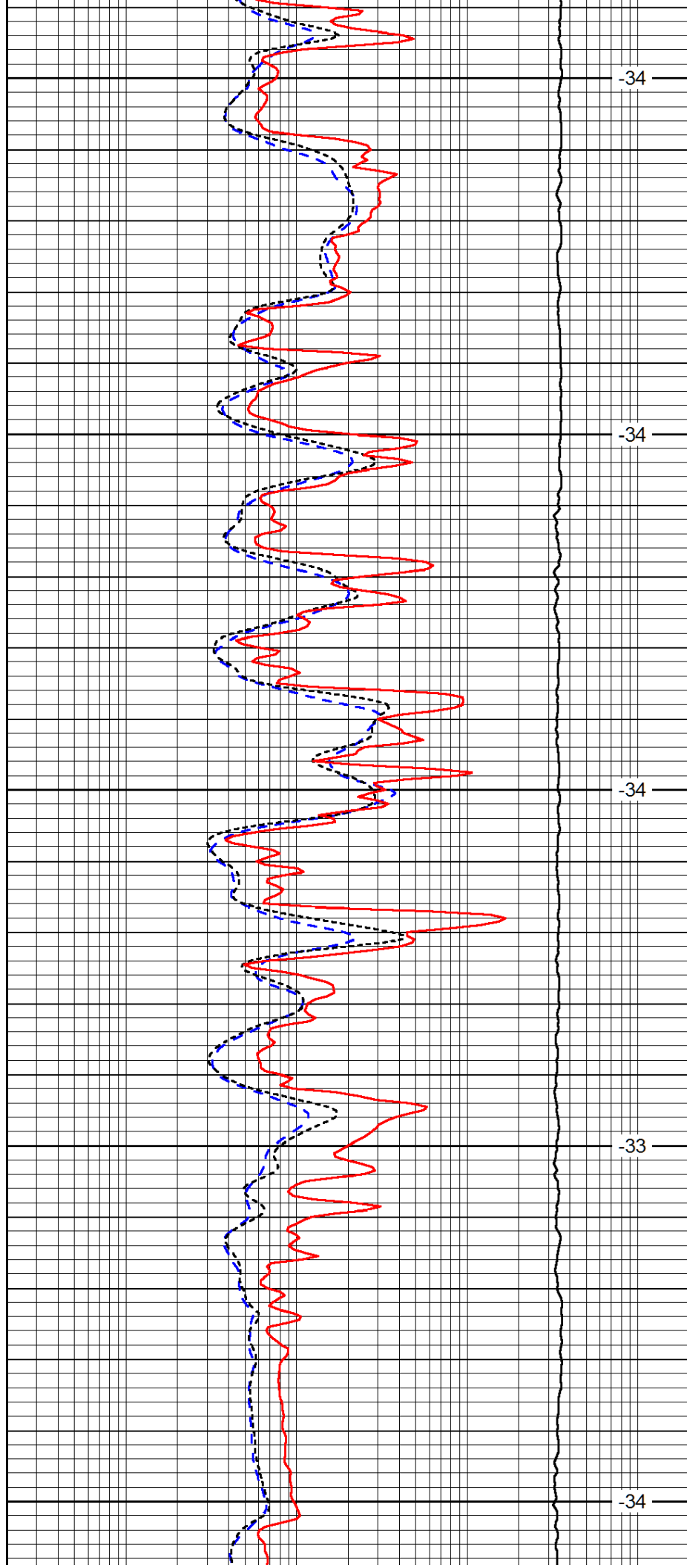
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4300

4350

4400

4450



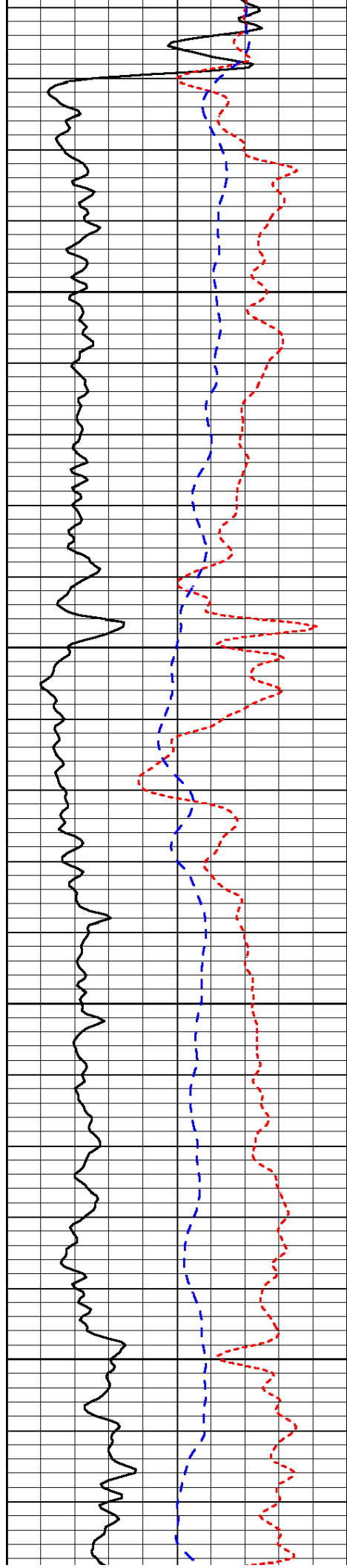
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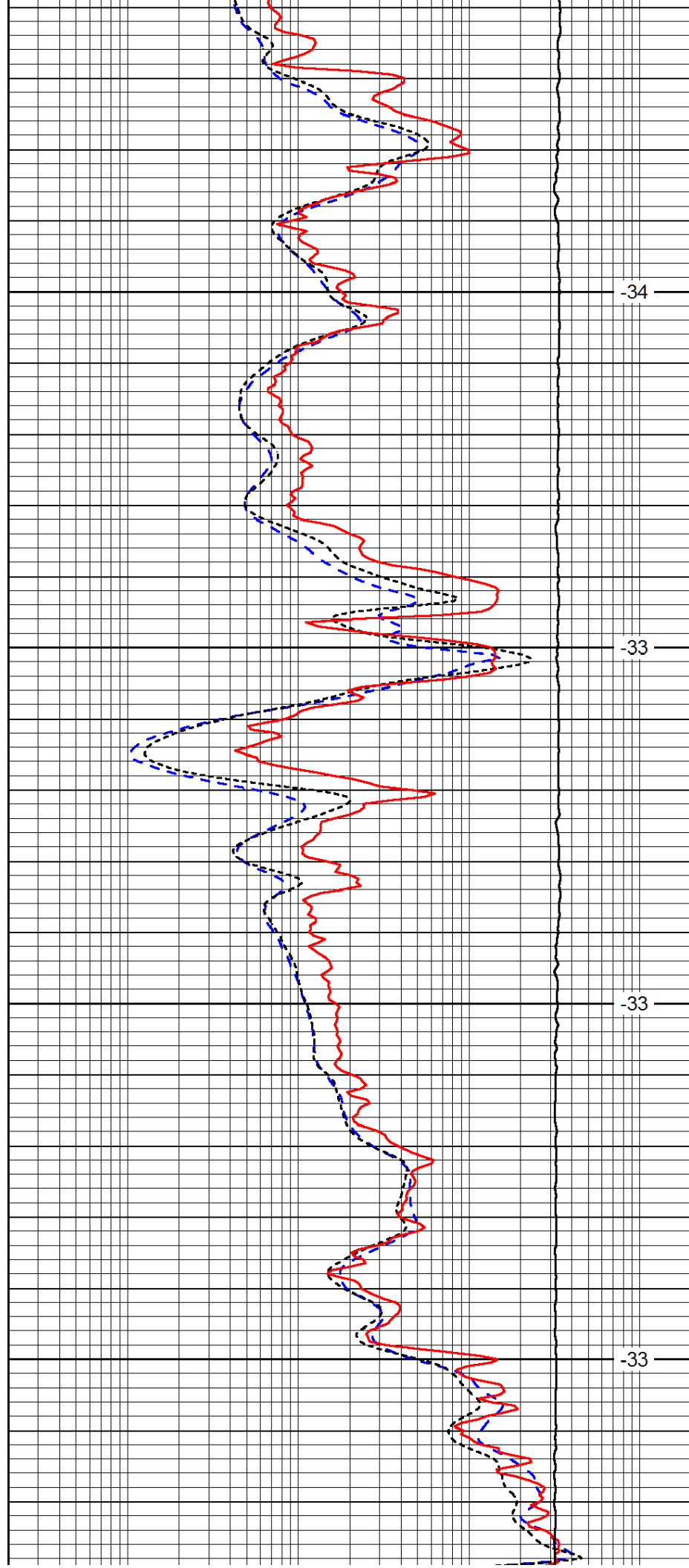


4500

4550

4600

4650

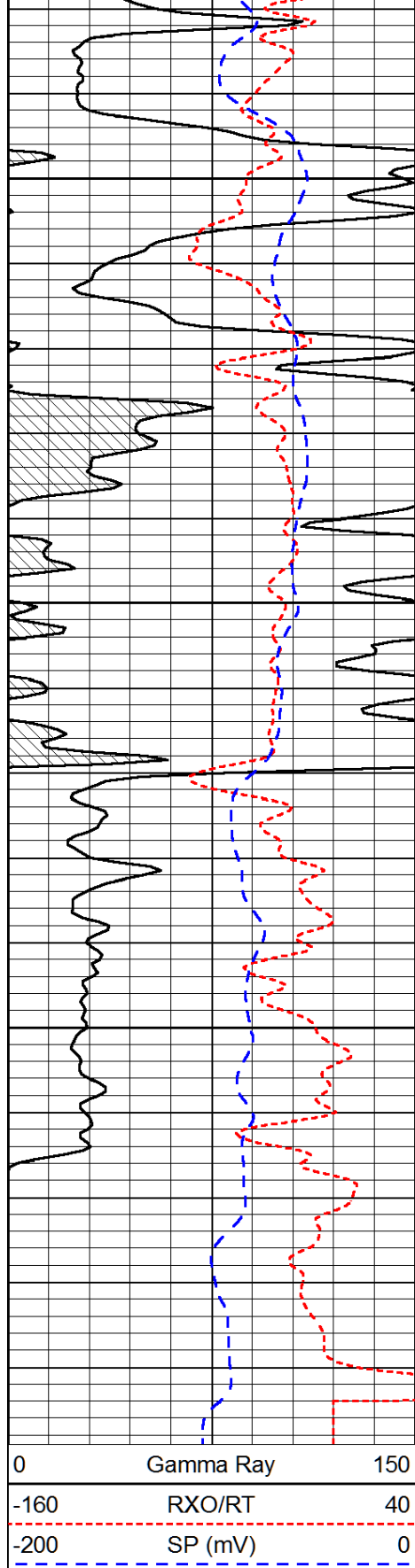


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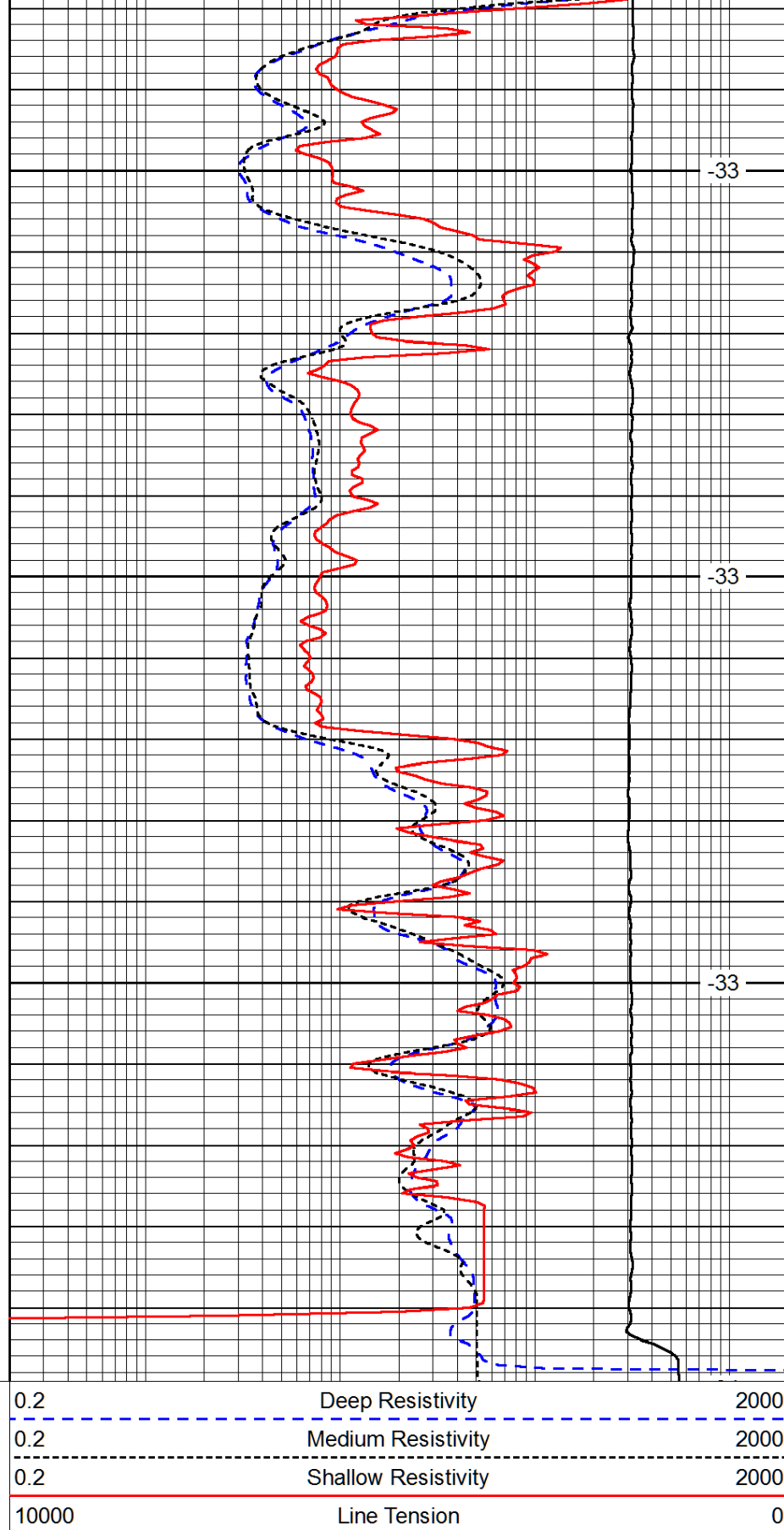
-33



4700

4750

4800



-33

-33

-33

LSPD