



Pioneer Energy Services

# Dual Induction Log

15-185-23,851-00-00

API No.

Company **H&D Exploration, LLC**

Well **Fisher #1**

Field

County **Stafford**

State

**Kansas**

Location

NE NE NE  
330' FNL & 330' FEL

Sec: 21

Twp: 25S

Rge: 12W

Other Services  
CNL/CDL  
MEL/BHCS

Permanent Datum Ground Level

Elevation 1860

Log Measured From Kelly Bushing

8 Ft. Above Perm. Datum

K.B. 1868  
D.F.  
G.L. 1860

Drilling Measured From Kelly Bushing

1/20/2014

Run Number

One

Depth Driller

4225

Depth Logger

4223

Bottom Logged Interval

4222

Top Log Interval

650

Casing Driller

8.625 @ 680

Casing Logger

678

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

13000

Density / Viscosity

9.0 64

pH / Fluid Loss

9.5 13.2

Source of Sample

Flowline

Rm @ Meas. Temp

.50 @ 58

Rmf @ Meas. Temp

.38 @ 58

Rmc @ Meas. Temp

.68 @ 58

Source of Rmf / Rmc

Charts

Rm @ BHT

.25 @ 118

Operating Rig Time

4 Hours

Max Rec. Temp. F

118

Equipment Number

108

Location

Hays

Recorded By

J. Long

Witnessed By

Scott Alberg

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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

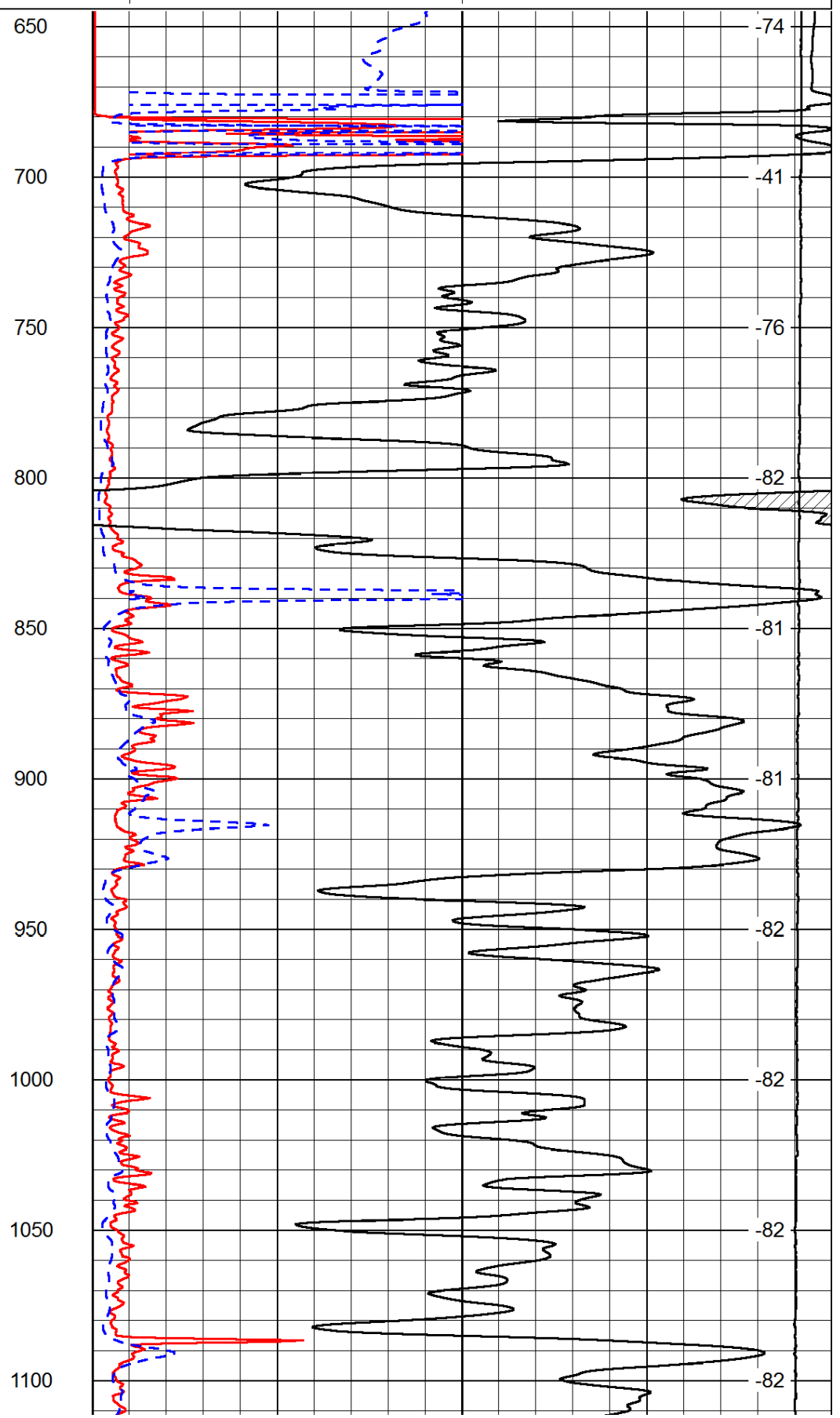
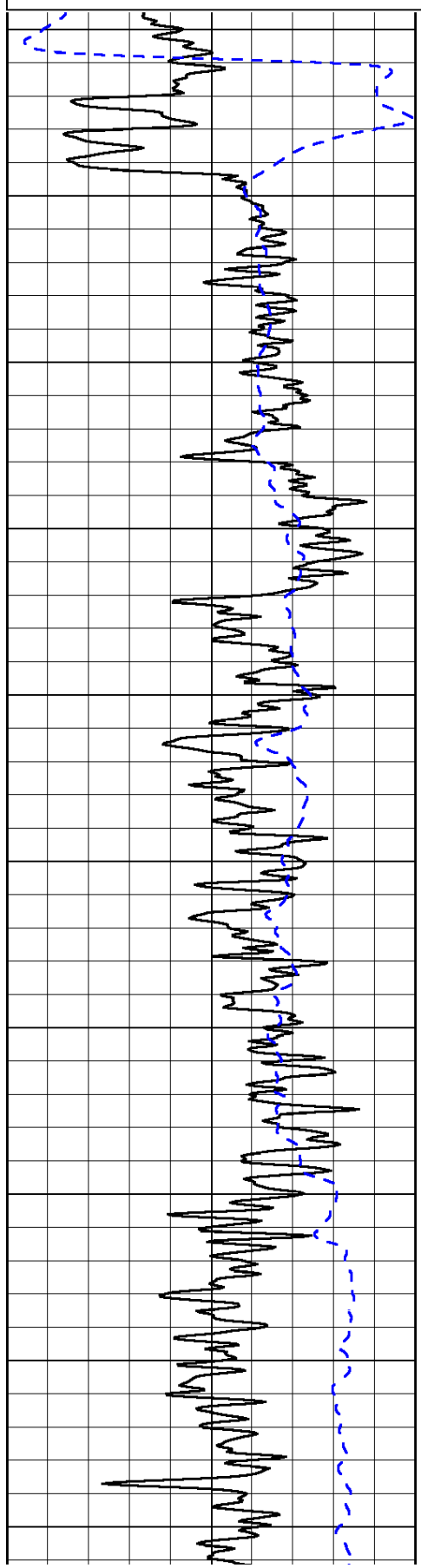
Stafford, 6 South to 60th Road, 2 West, 300' South, West Into

Database File: c:\warrior\data\h&d\_fisher #1\h&d\_fisher\_1hd.db  
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Presentation Format: dil2in  
Dataset Creation: Mon Jan 20 21:28:38 2014  
Charted by: Depth in Feet scaled 1:600

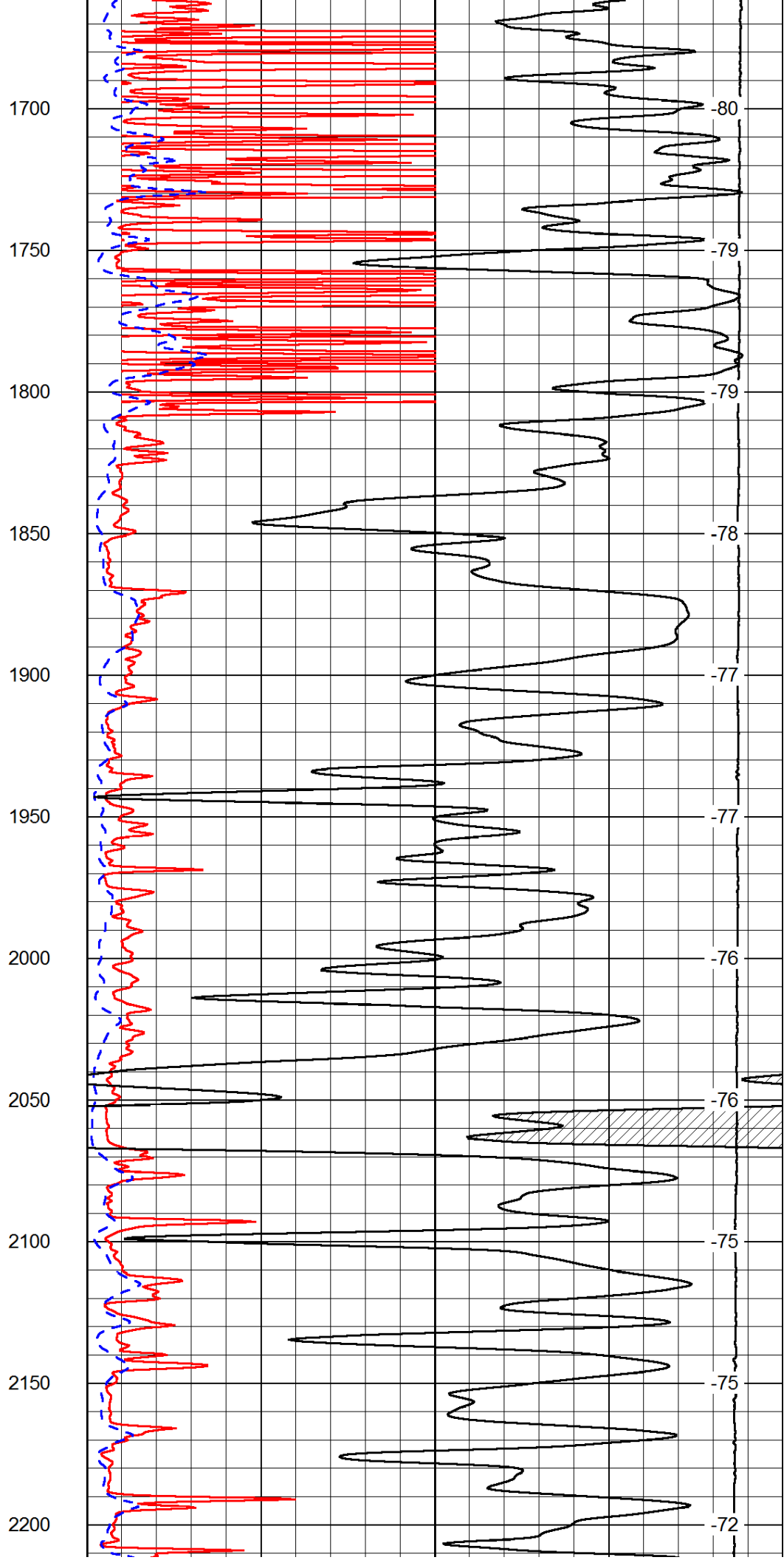
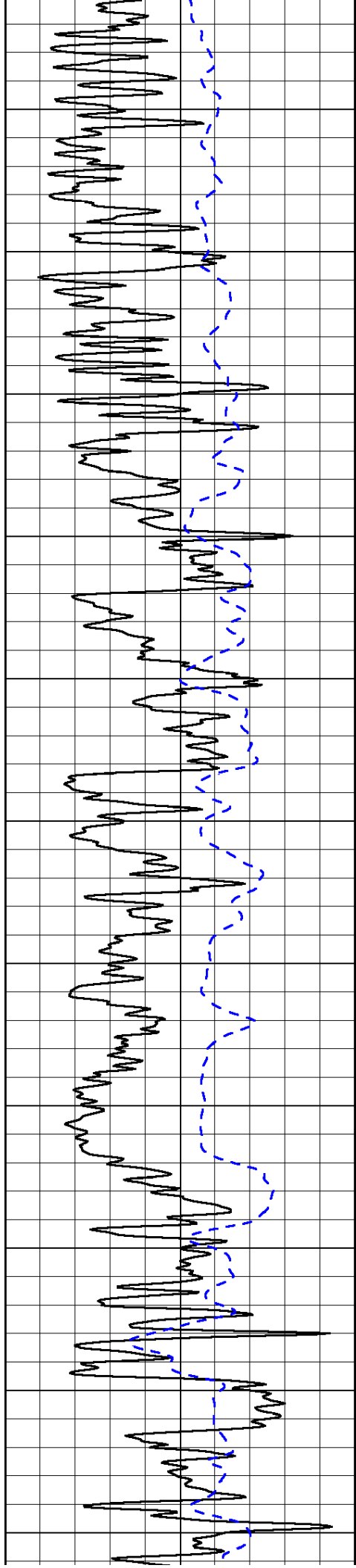
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-200	SP (mV)	0

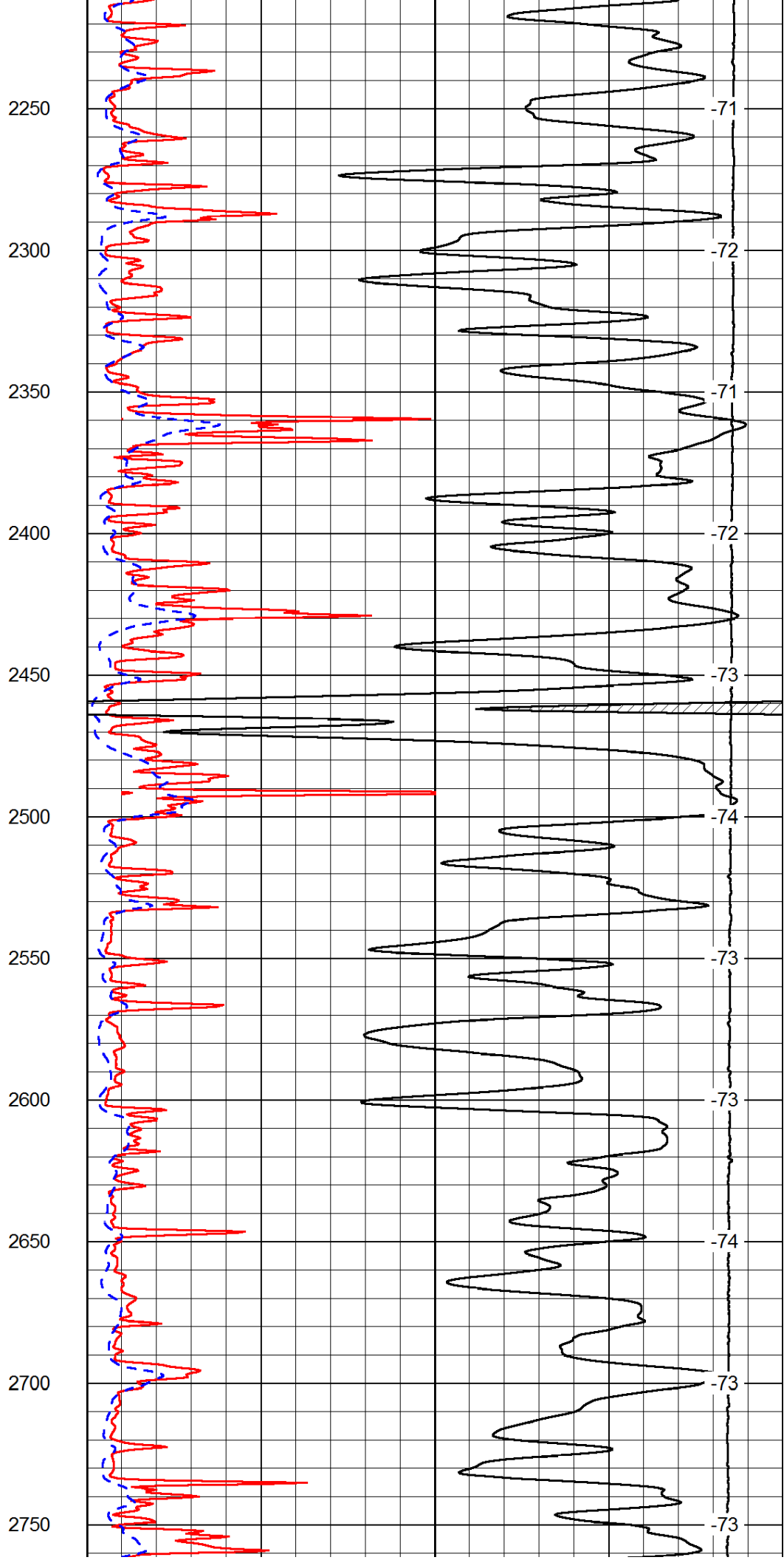
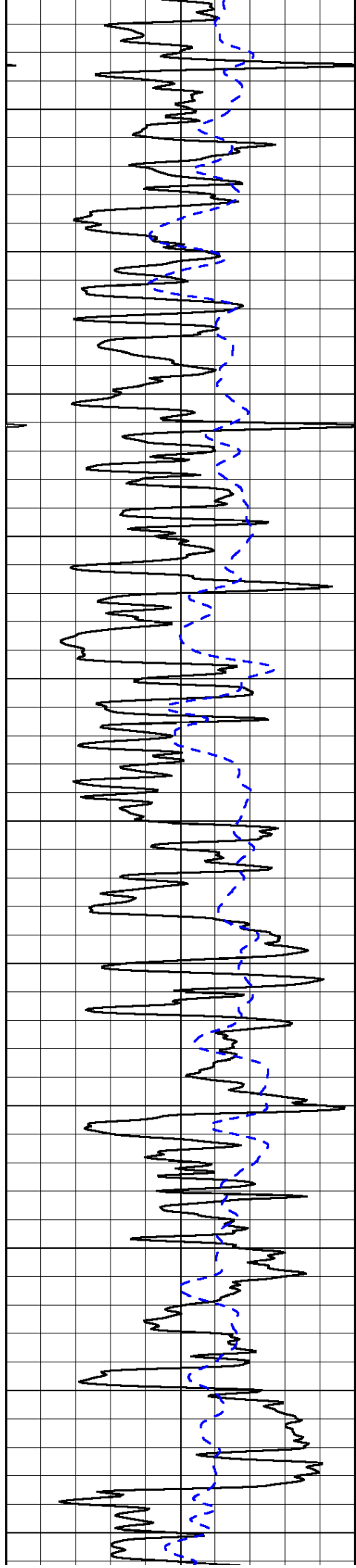
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0	Deep Resistivity	50
1000	Conductivity	
15000	Line Tension	
50	Shallow Resistivity	500
50	Deep Resistivity	500

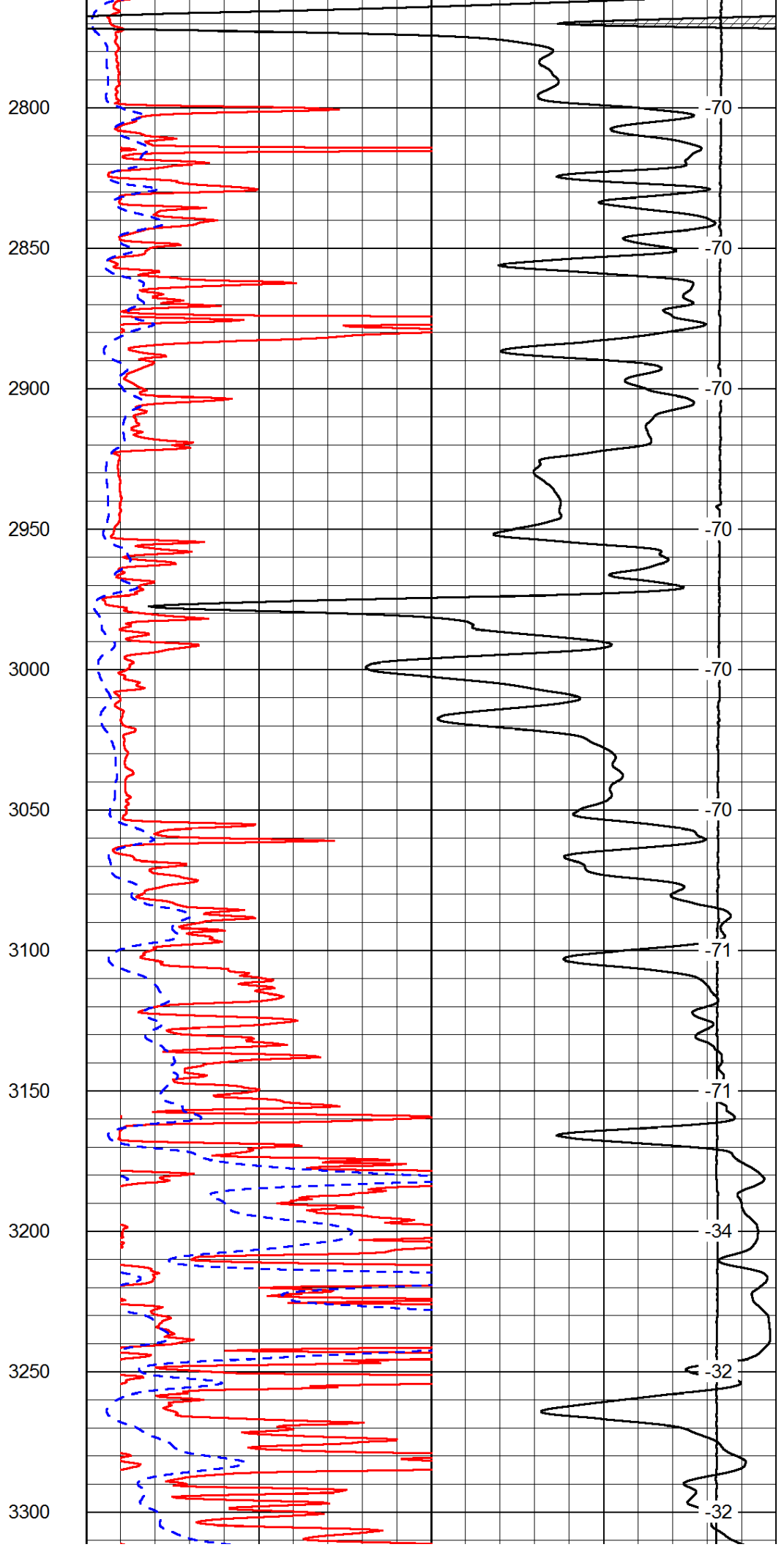
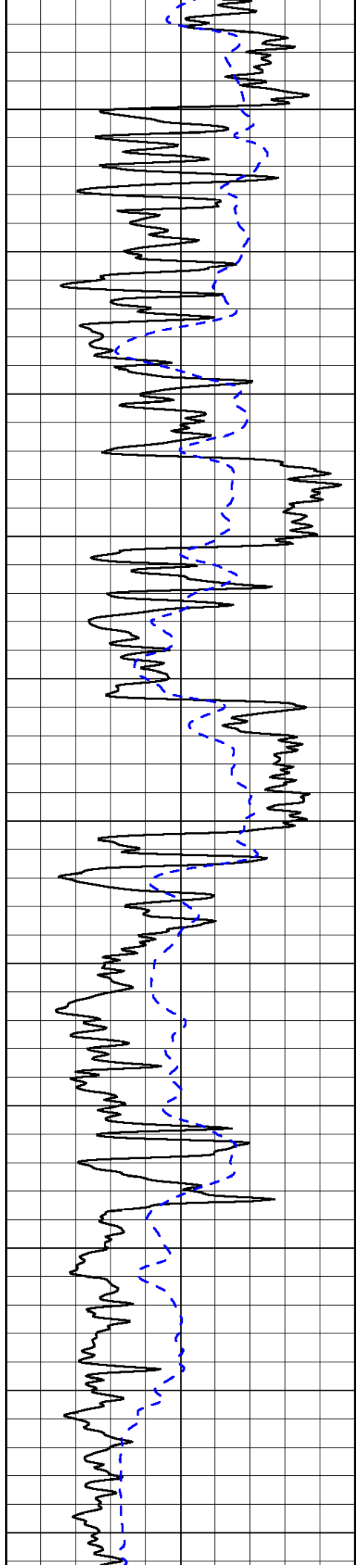
LSPD	0
	0

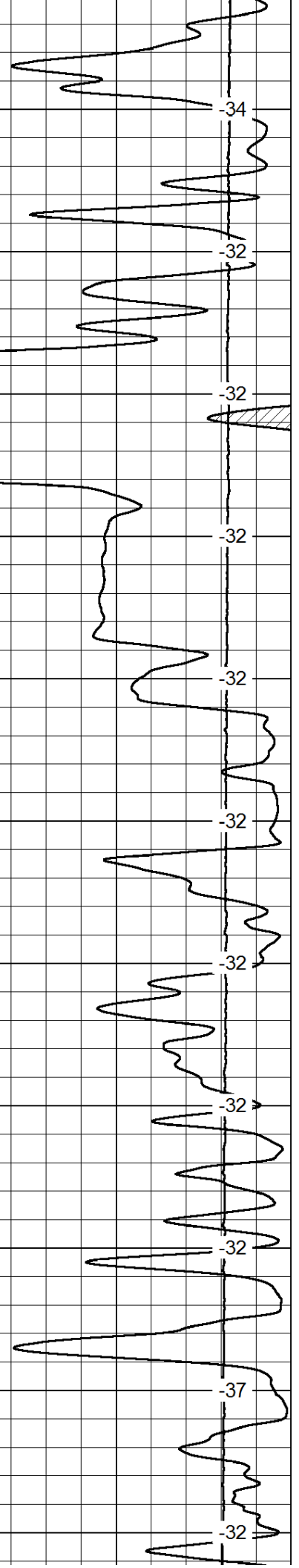
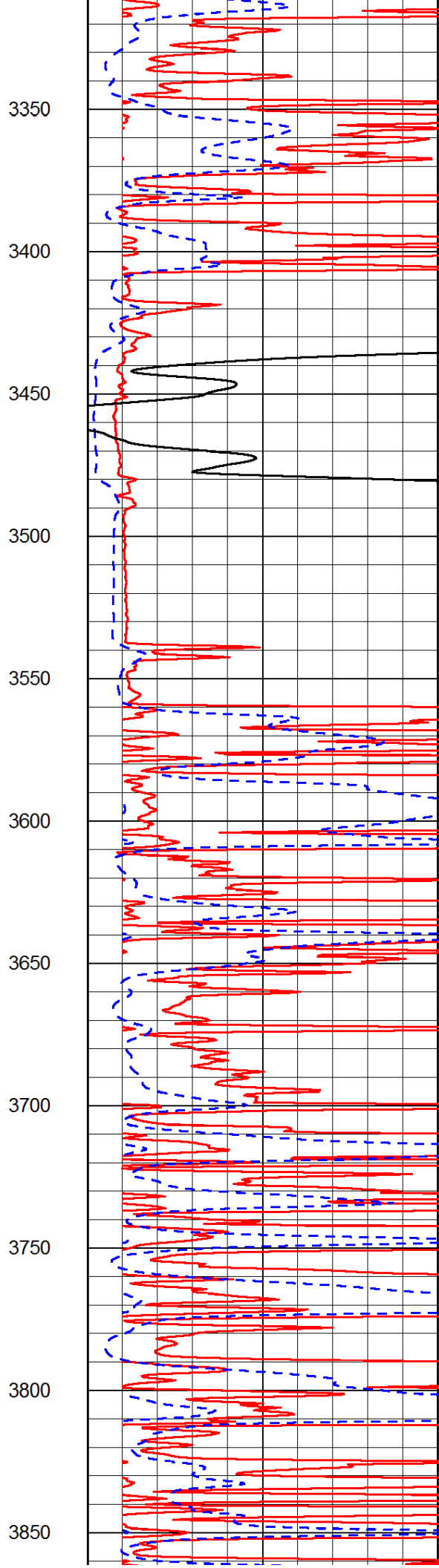
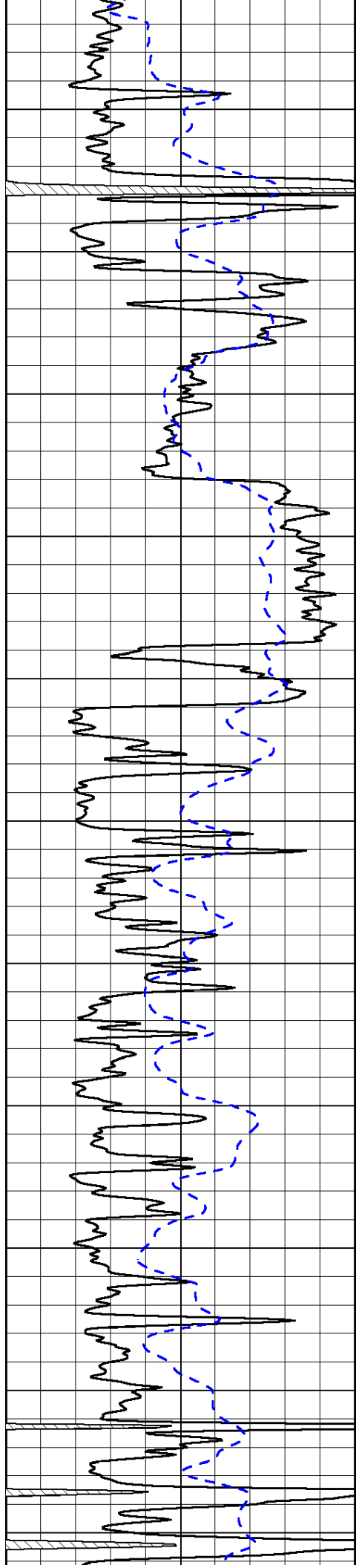


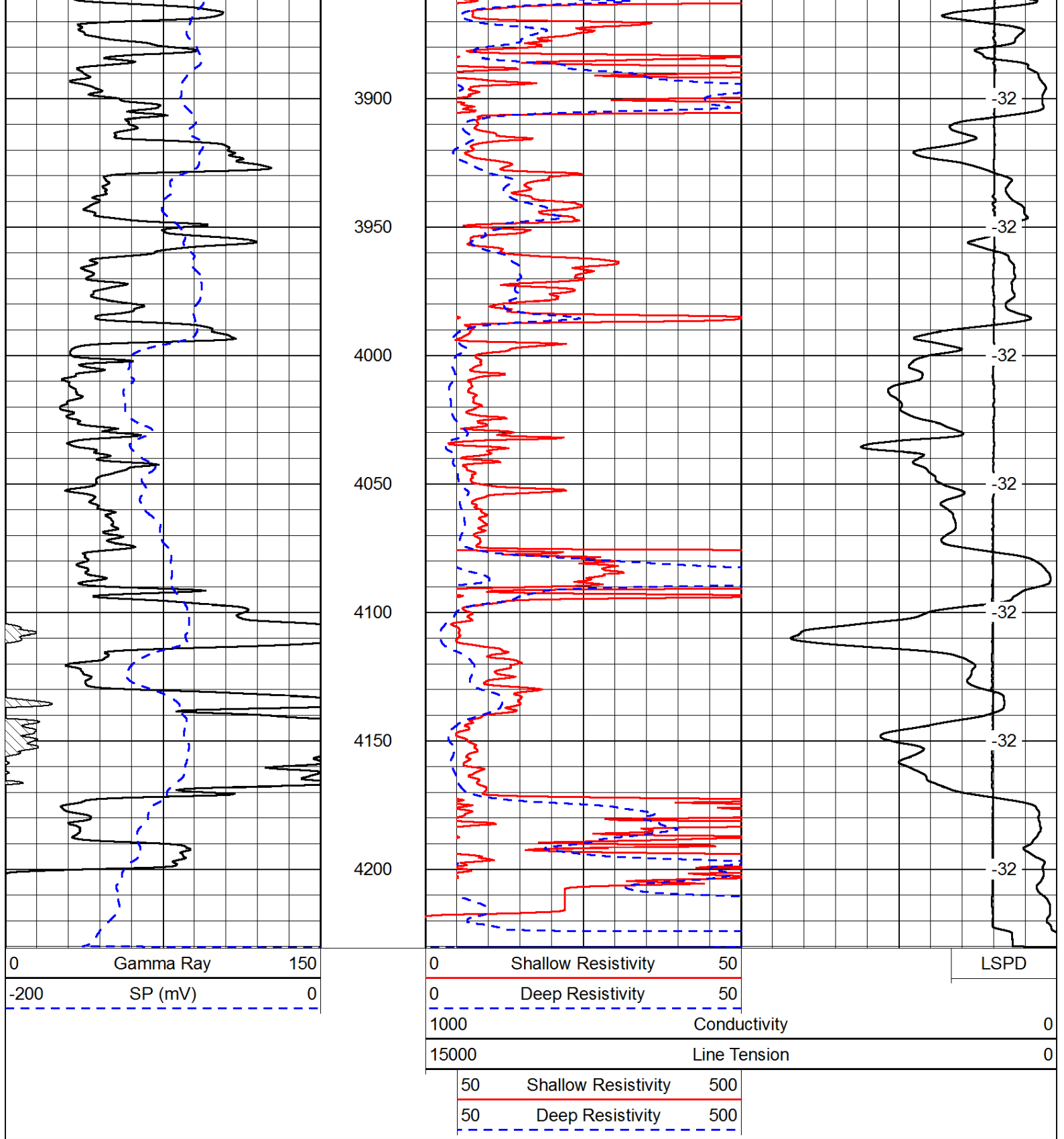




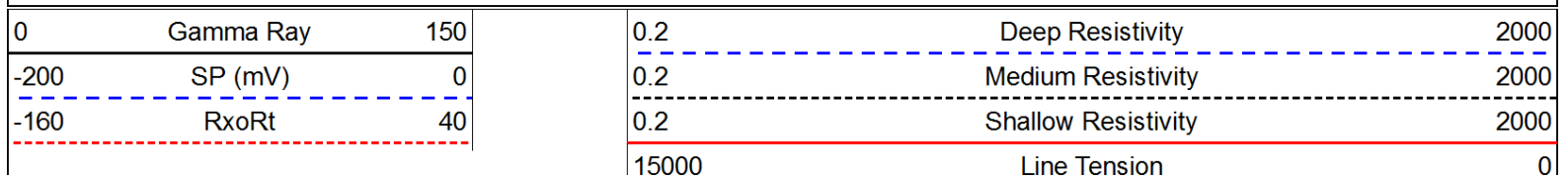


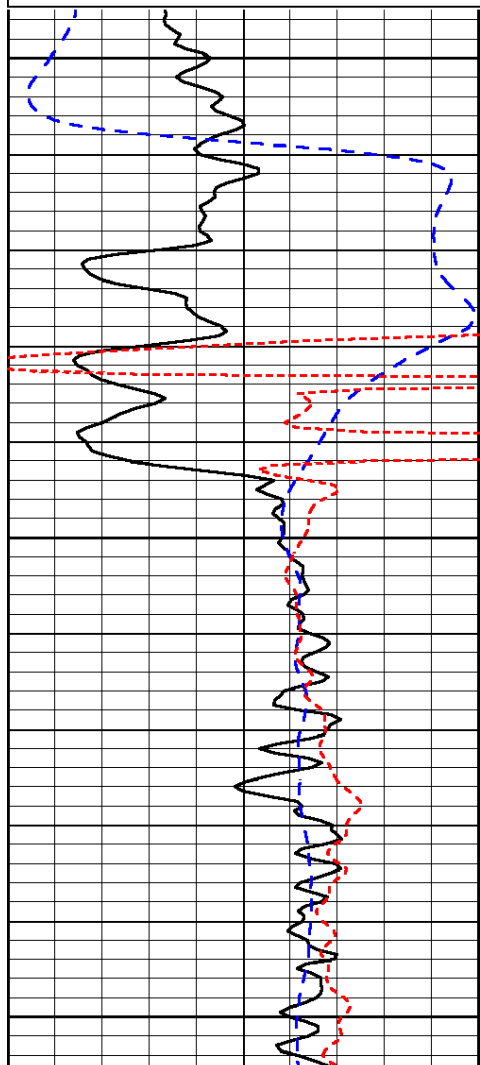






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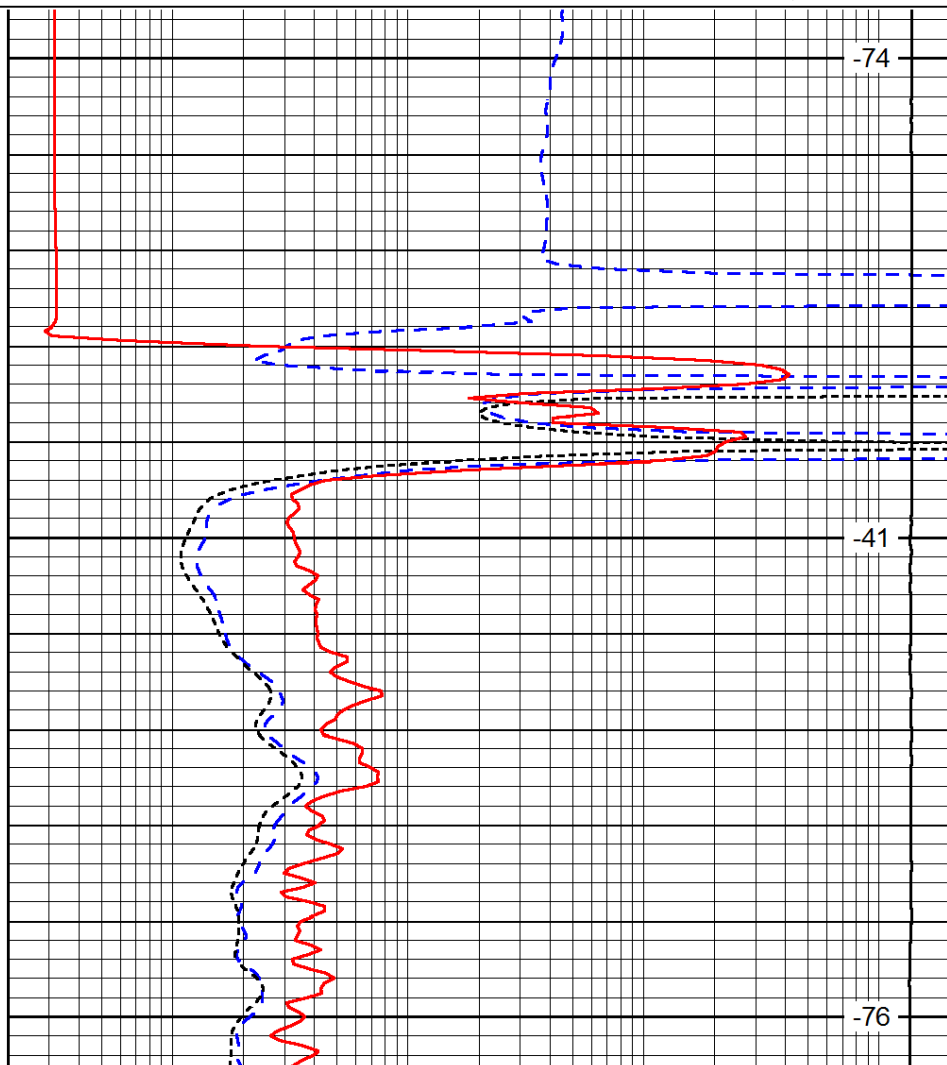


650

700

750

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



-74

-41

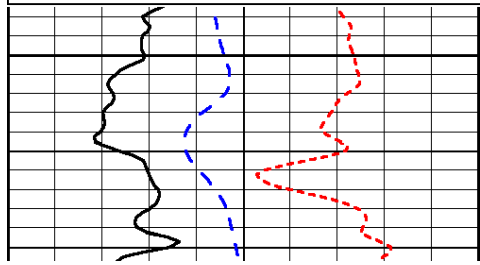
-76

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

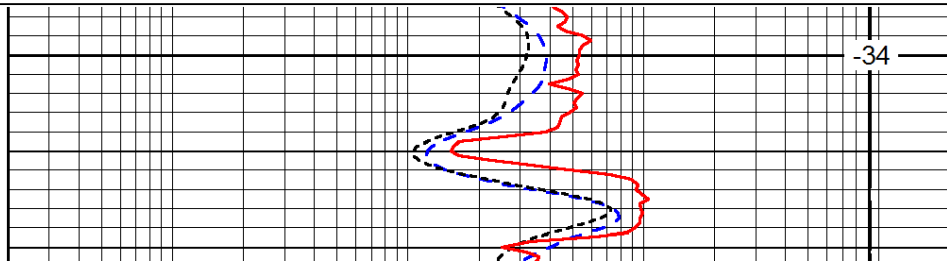
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 Charted by: Depth in Feet scaled 1:240

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

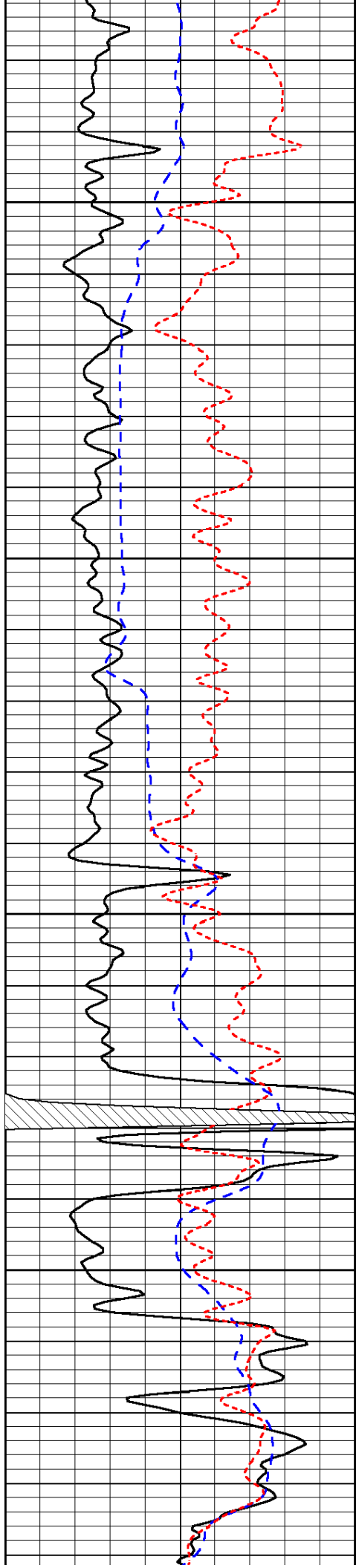
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0



3200



-34

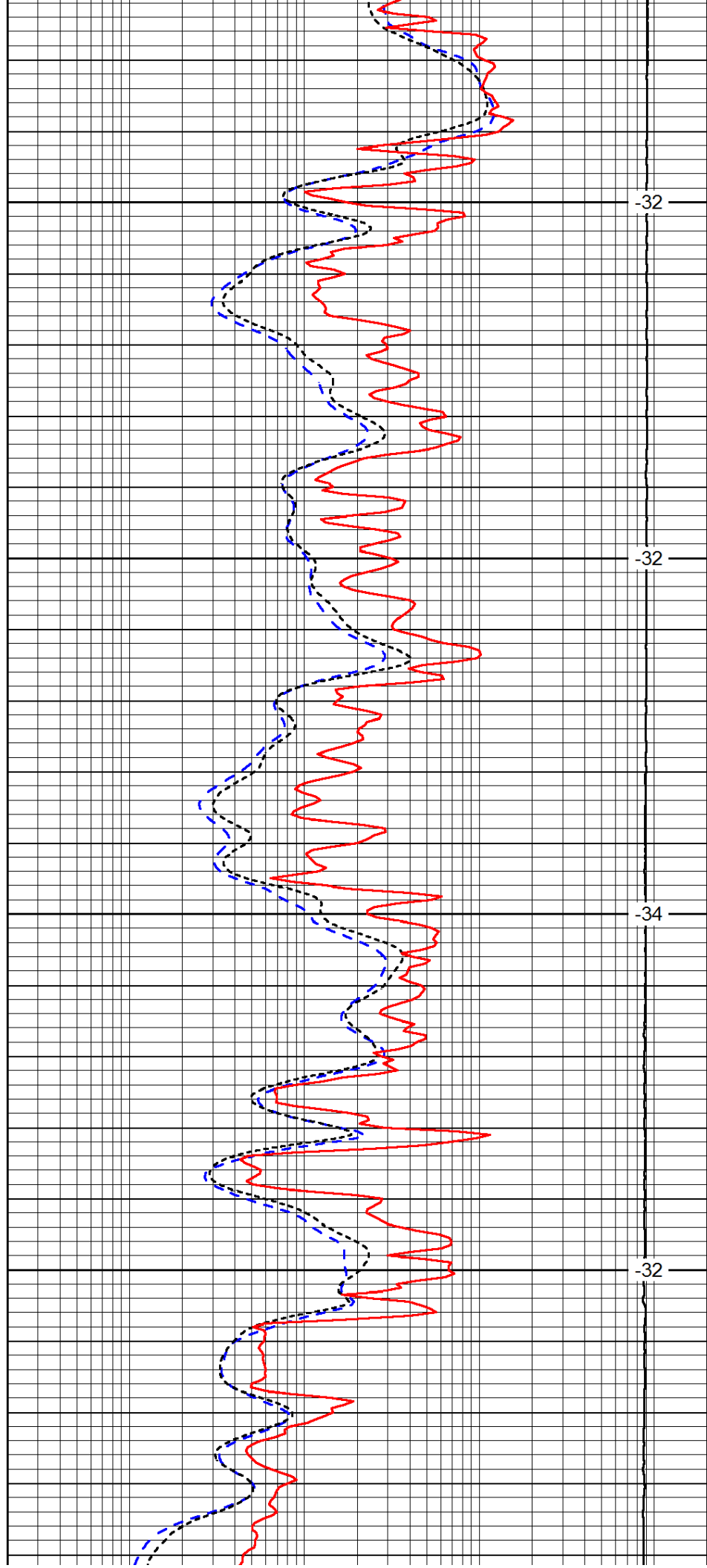


3250

3300

3350

3400

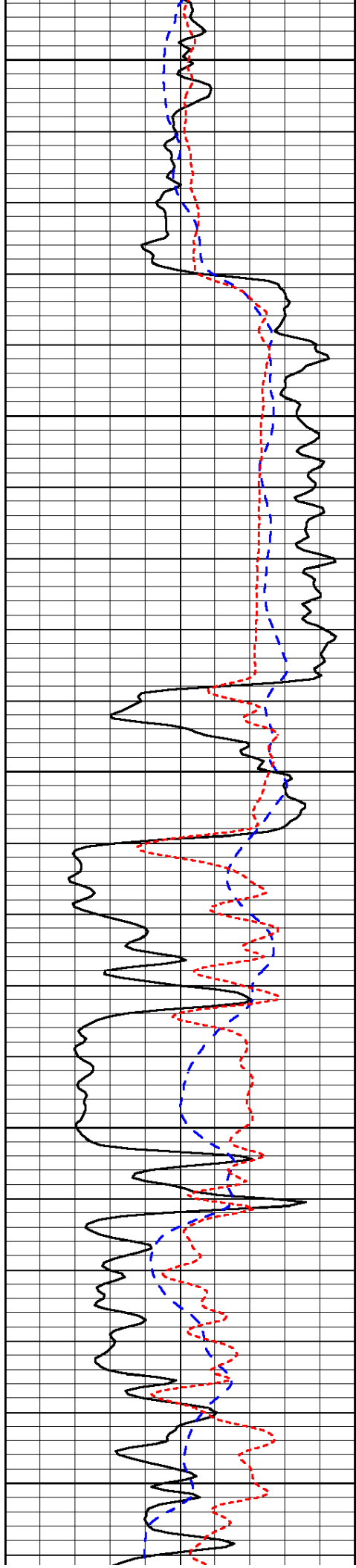


-32

-32

-34

-32



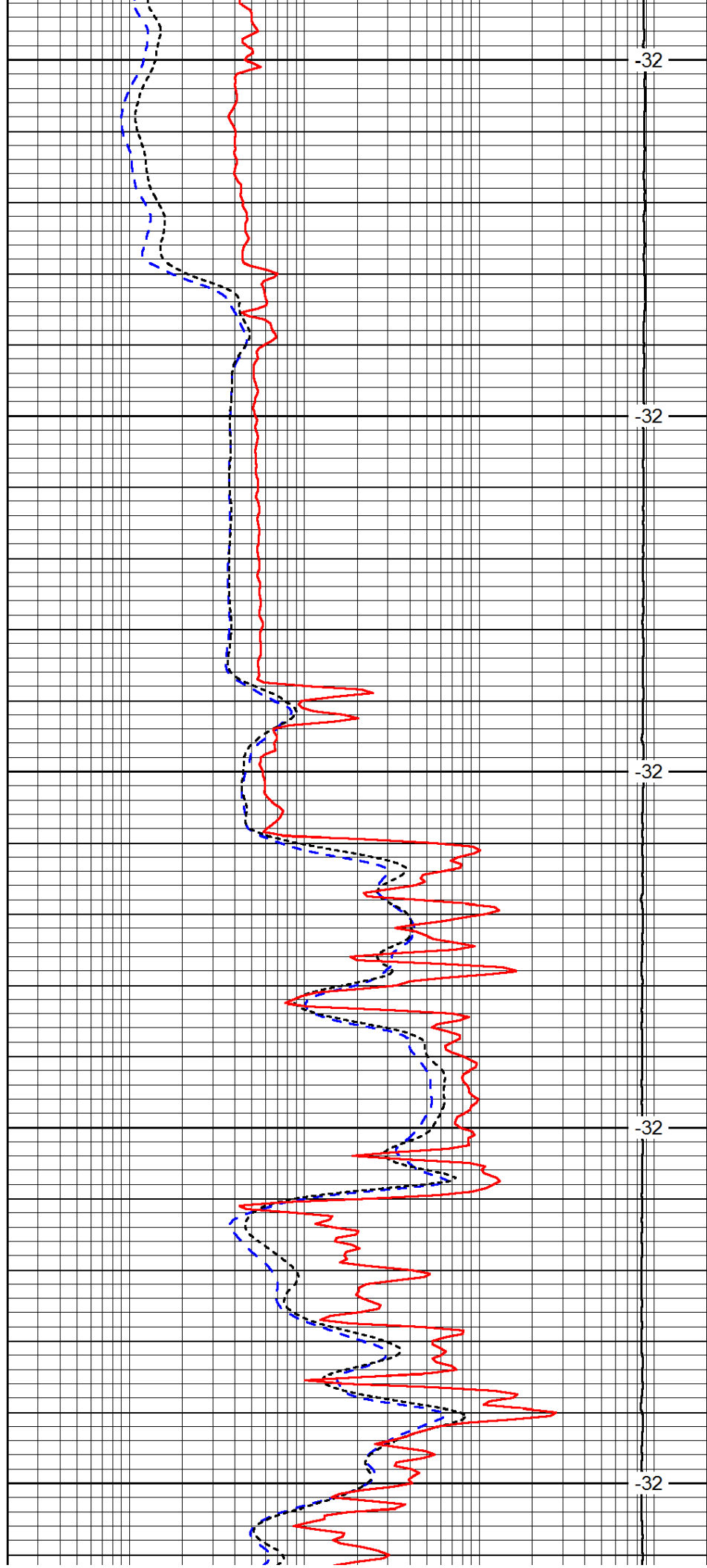
3450

3500

3550

3600

3650



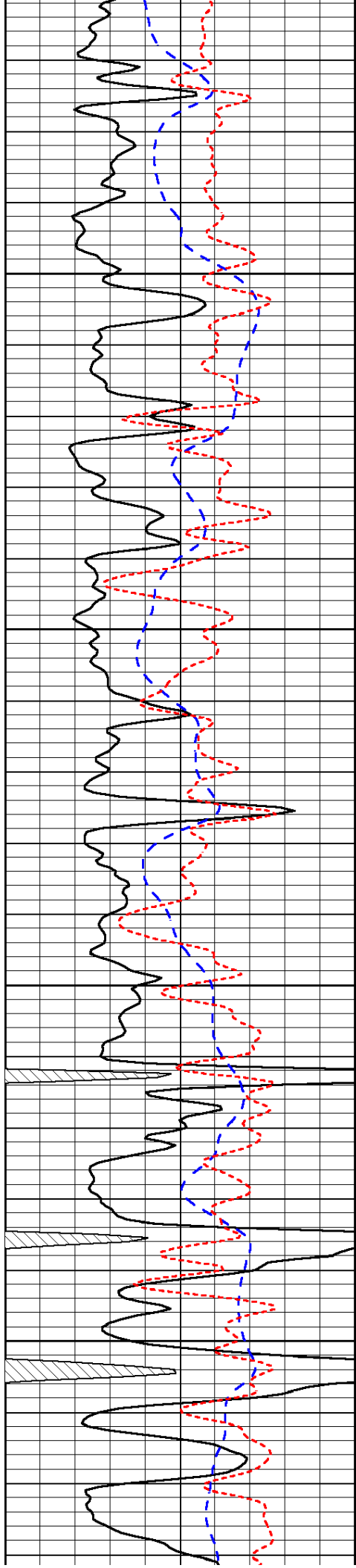
-32

-32

-32

-32

-32

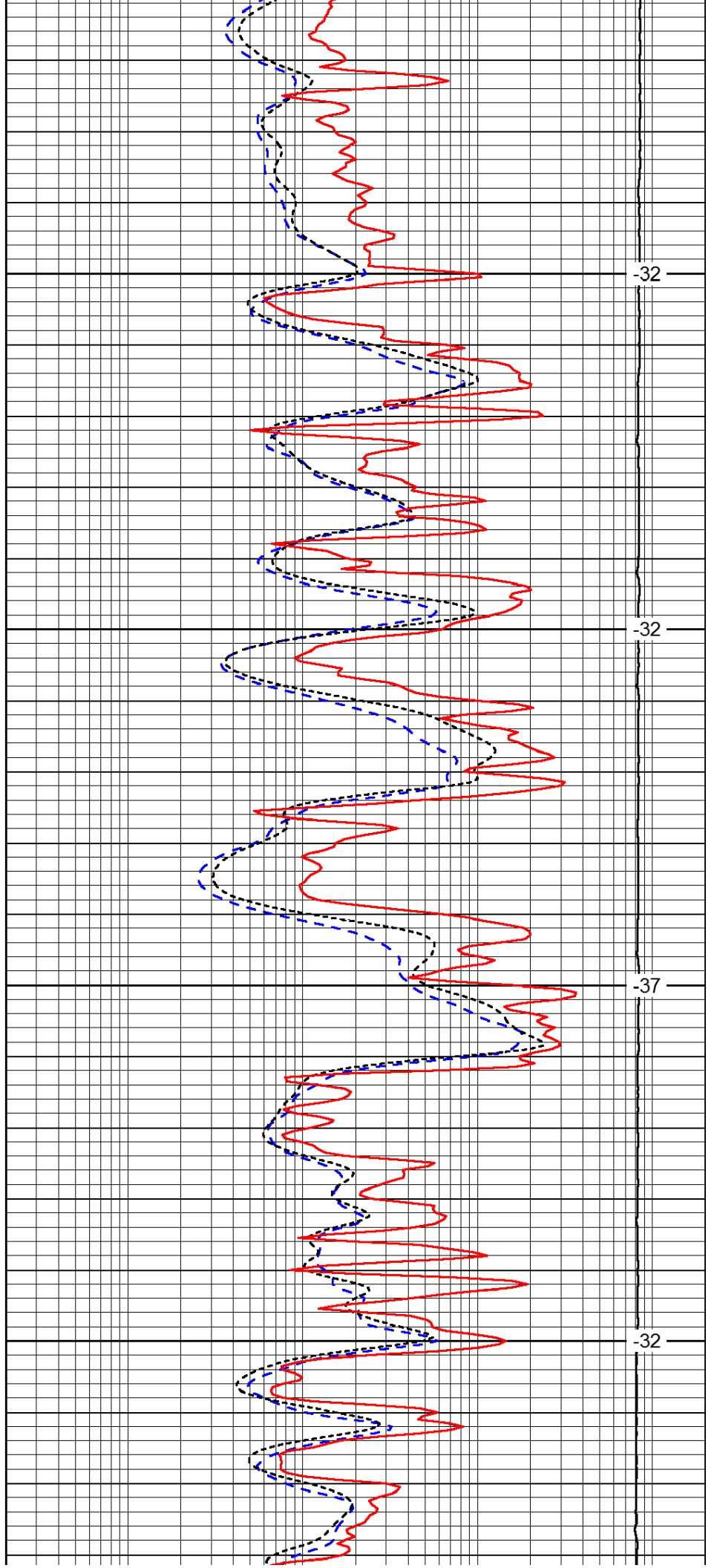


3700

3750

3800

3850

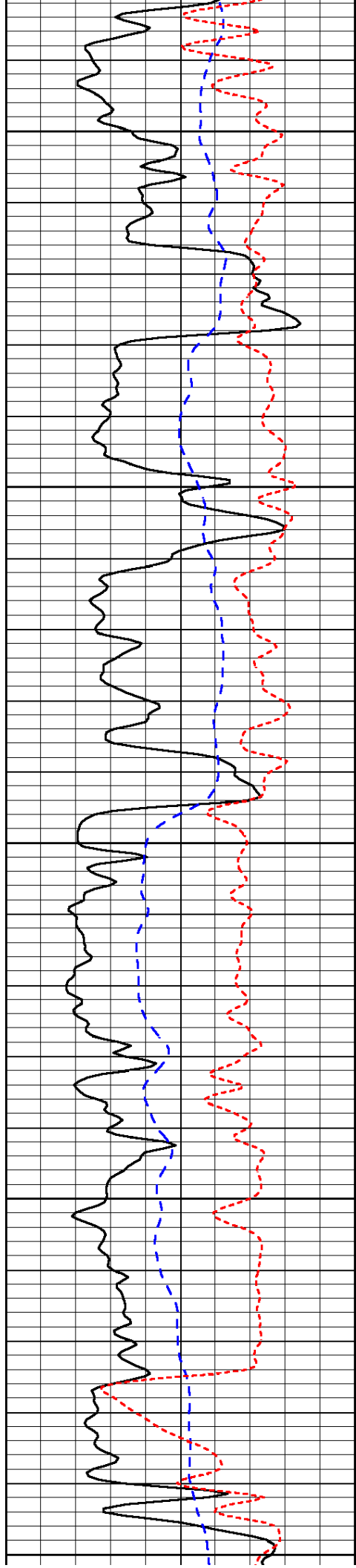


-32

-32

-37

-32



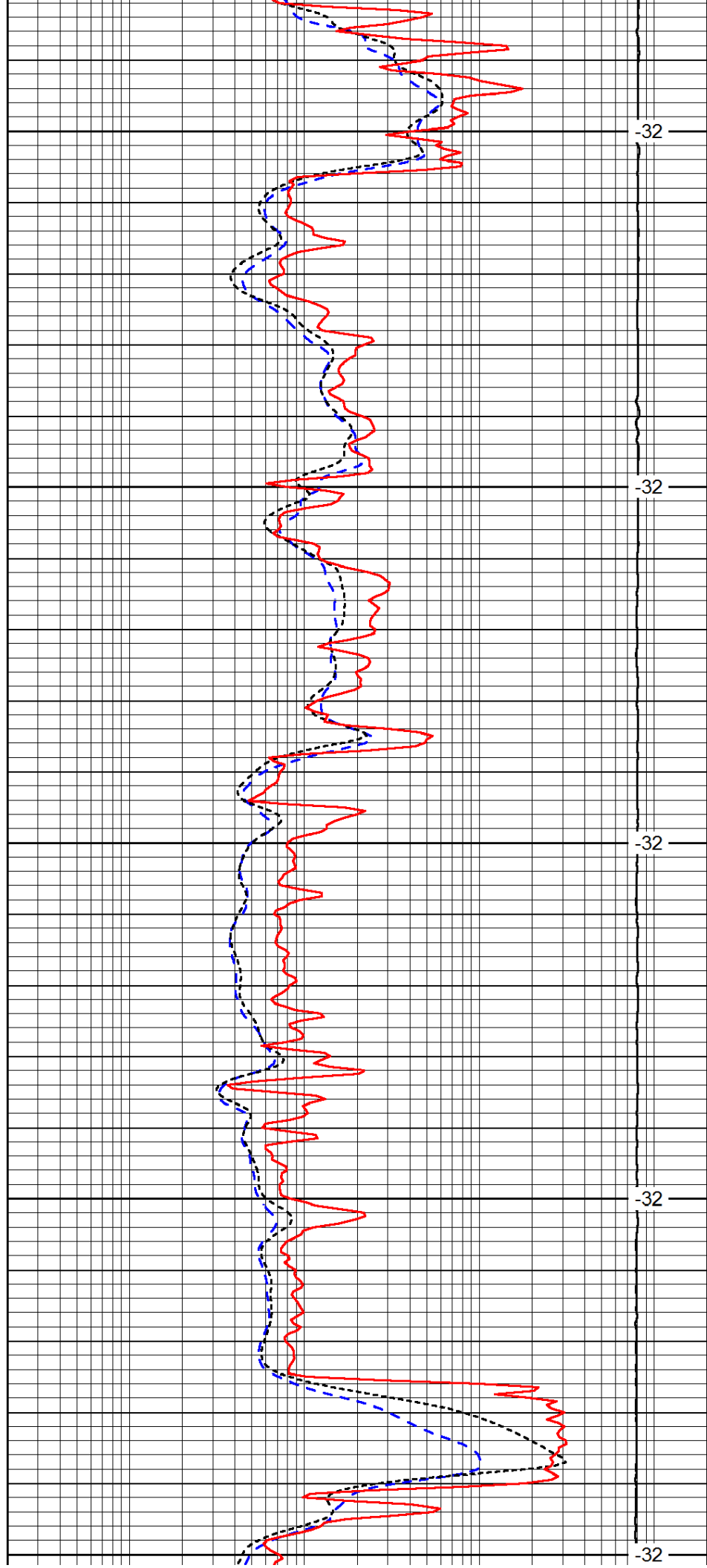
3900

3950

4000

4050

4100



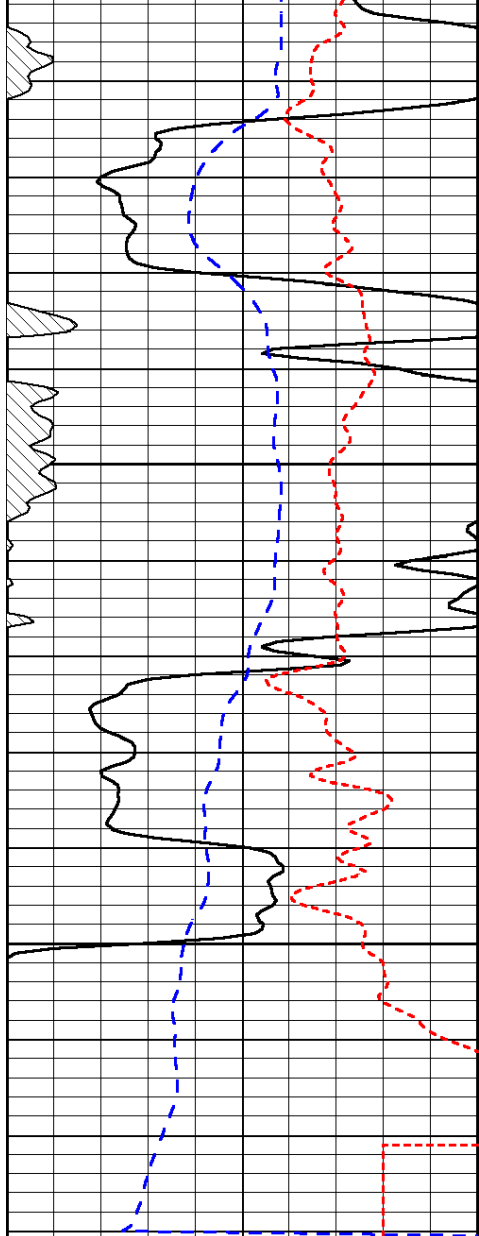
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-32

-32

-32

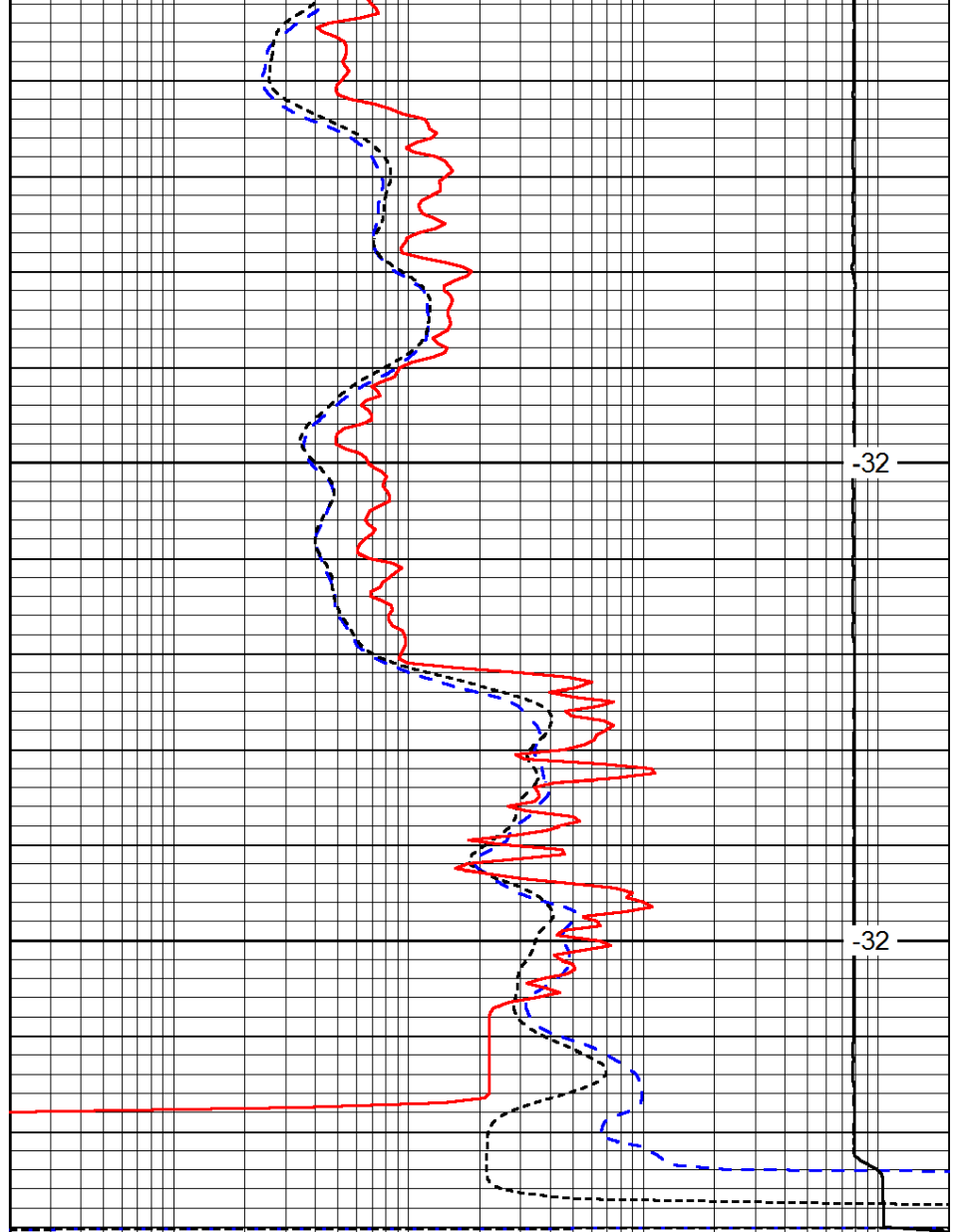
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0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

4150

4200



-32

-32

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

LSPD