



Pioneer Energy Services

# Dual Induction Log

15-049-22,599-00-00

API No.

Company Lone Wolf Oil

Well Cain #1

Field Love

County Elk State

Kansas

Location 1980' FSL & 2970' FEL

Sec: 36

Tw: 30S

Rge: 9E

Other Services  
CNL/CDL  
MEL

Permament Datum Ground Level

Elevation 1284

Log Measured From Kelly Bushing

6 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

K.B. 1290  
D.F. 1284  
G.L. 1284

Date 9/5/2014

Run Number One

Depth Driller 2695

Depth Logger 2689

Bottom Logged Interval 2688

Top Log Interval 40

Casing Driller 8.625 @ 42

Casing Logger 42

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity,ppm CL 550

Density / Viscosity 9.1 39

pH / Fluid Loss 9.0 10.4

Source of Sample Flowline

Rm @ Meas. Temp 1.65 @ 71

Rmf @ Meas. Temp 1.24 @ 71

Rmc @ Meas. Temp 2.23 @ 71

Source of Rmf / Rmc Charts

Rm @ BHT 1.14 @ 103

Operating Rig Time 3 Hours

Max Rec. Temp. F 103

Equipment Number 10

Location Hays

Recorded By C. Desai

Witnessed By Joe Baker

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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

Grenola KS, E on Hwy 160 to 10 Rd,  
2 N, 1/2 W, N Into

Database File: c:\warrior\data\lone wolf\_cain #1\lonehd.db  
Dataset Pathname: dil/lonestk2  
Presentation Format: dil2in  
Dataset Creation: Fri Sep 05 21:10:15 2014  
Charted by: Depth in Feet scaled 1:600

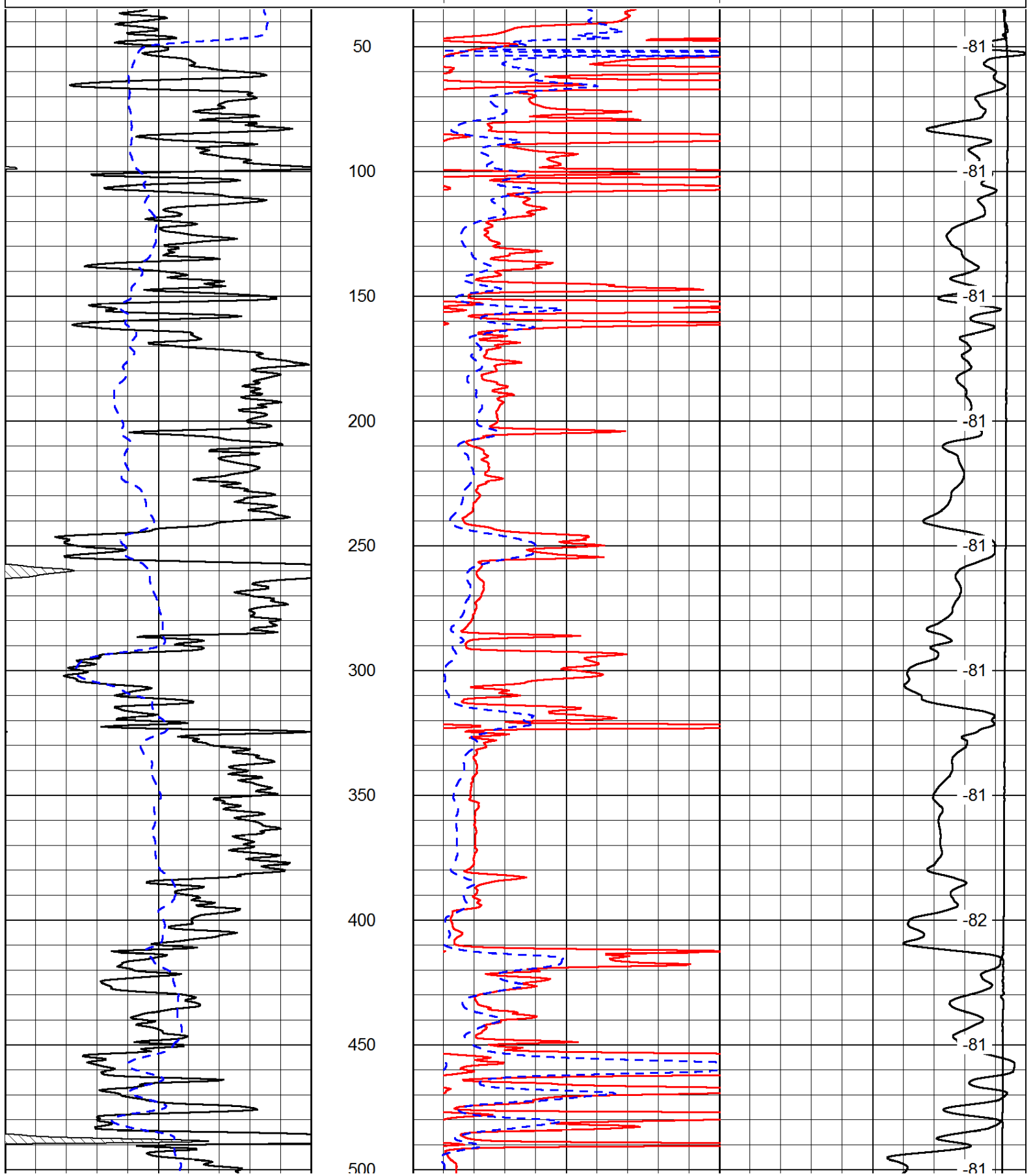
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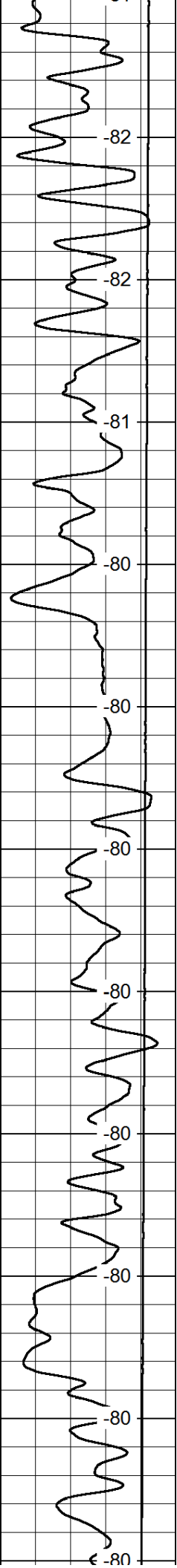
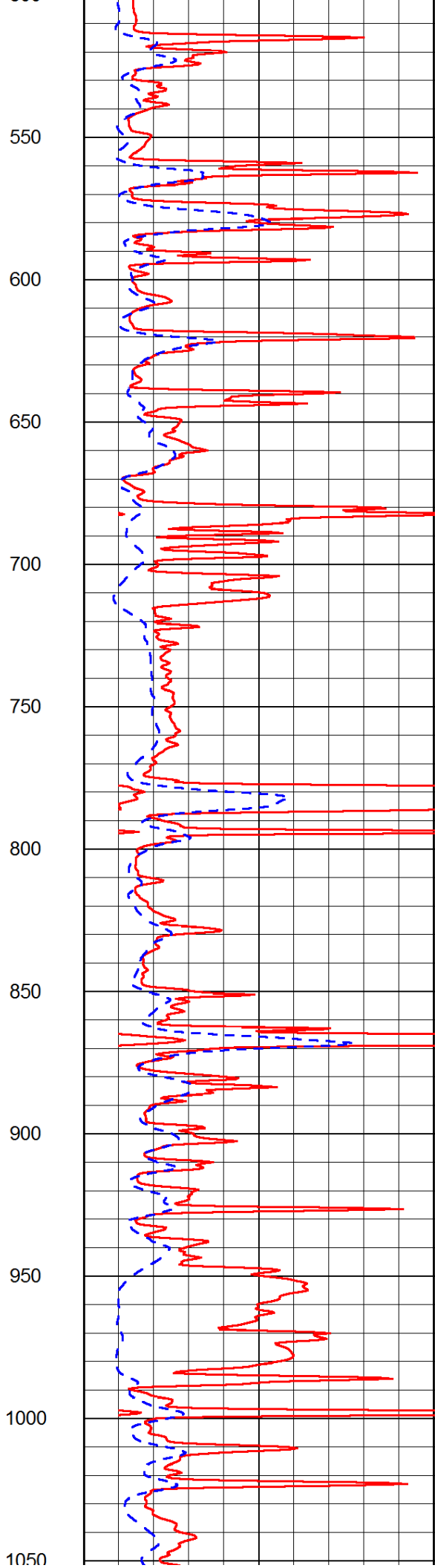
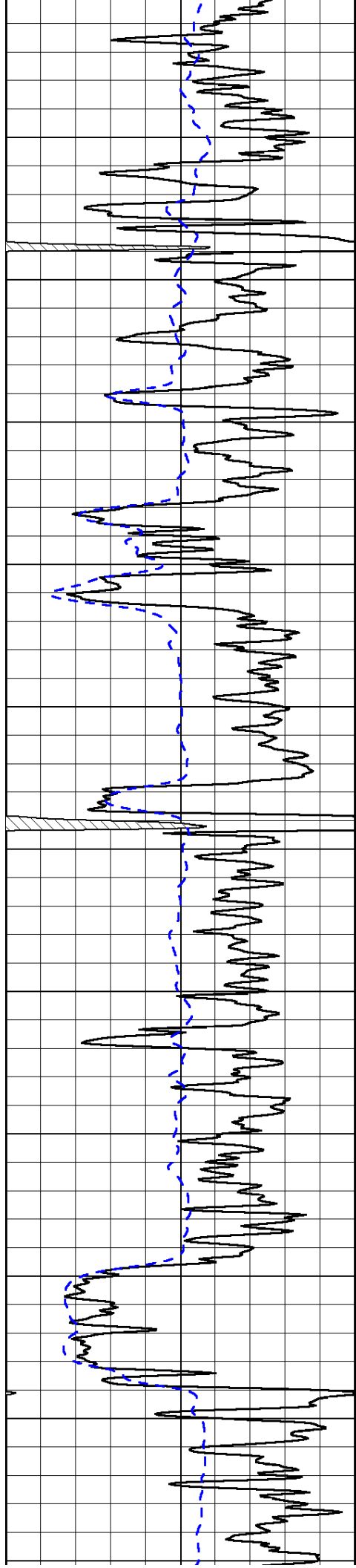
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0	Deep Resistivity	50

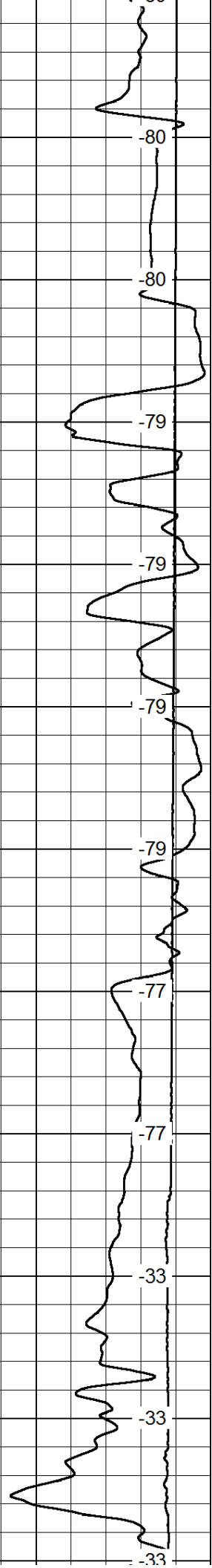
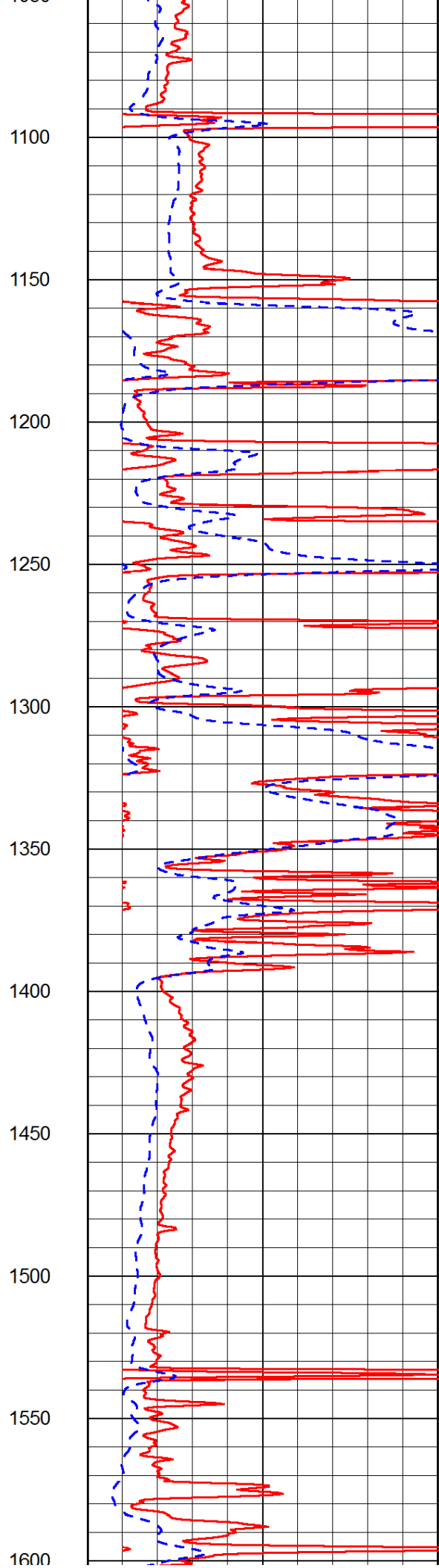
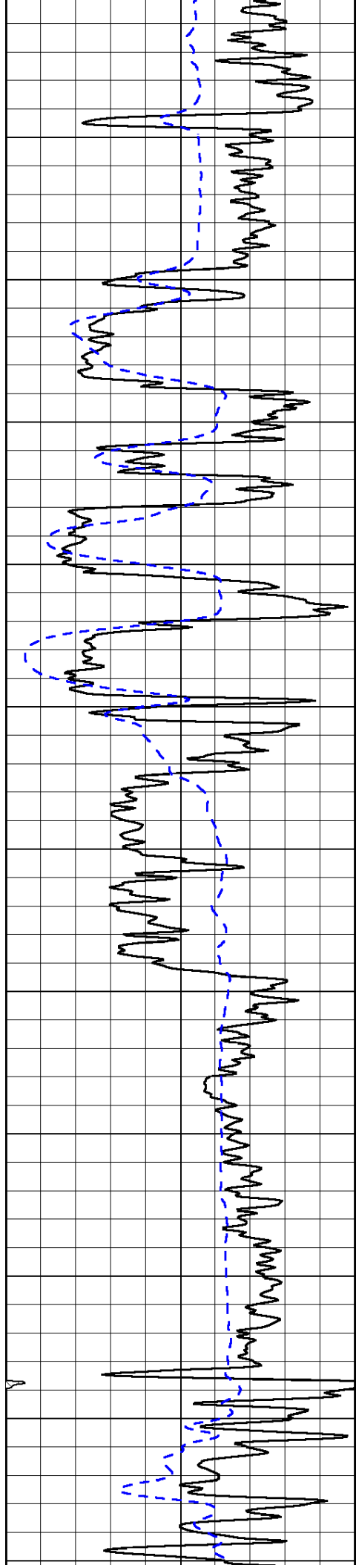
LSPD

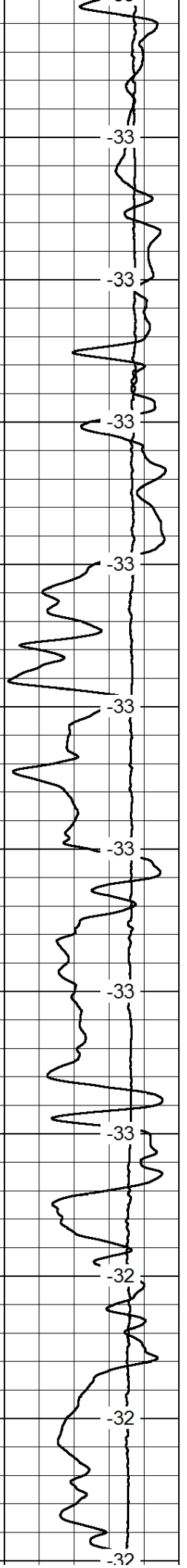
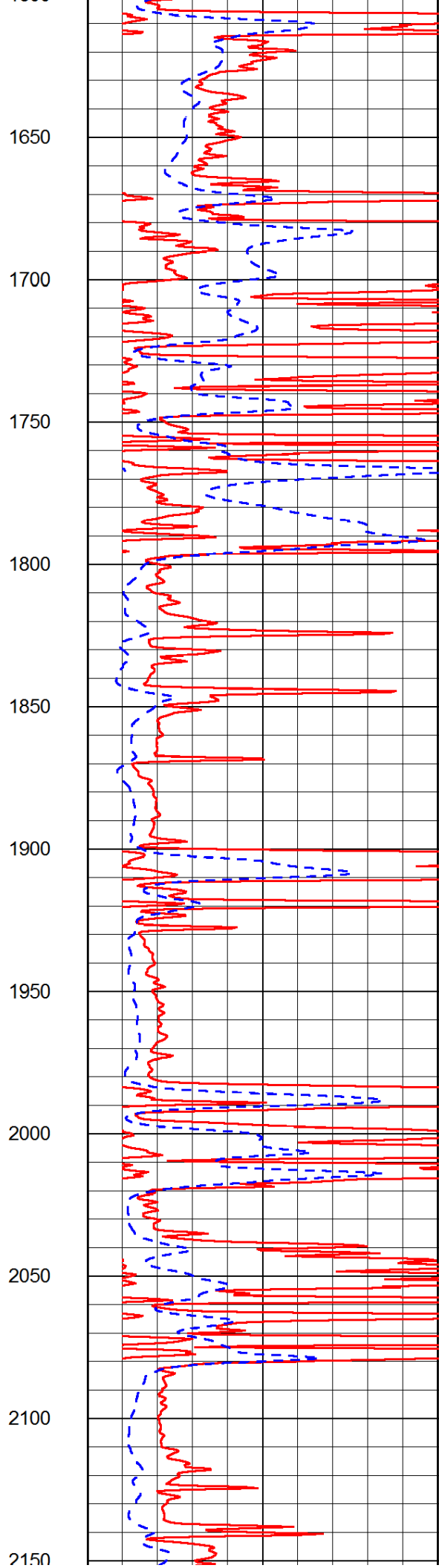
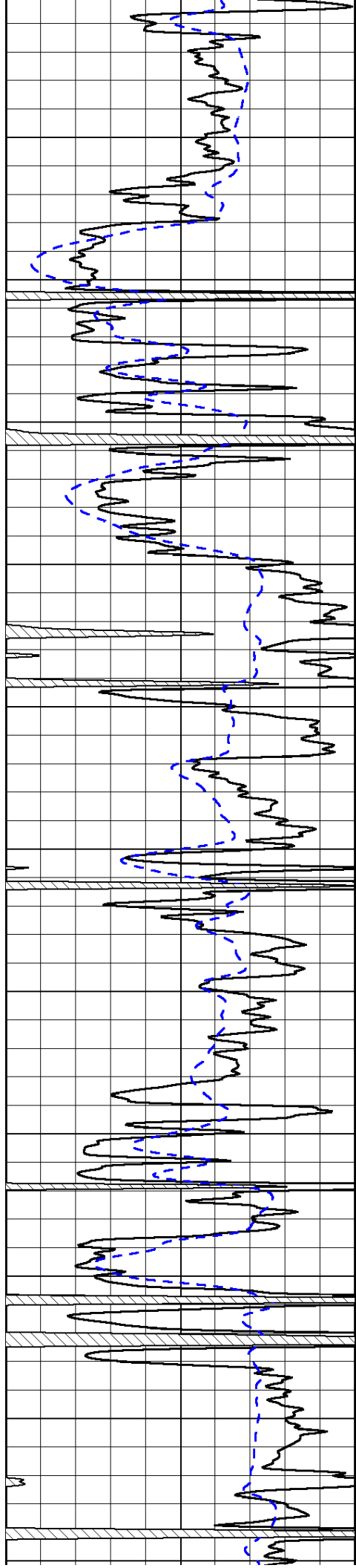
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15000	Line Tension	0

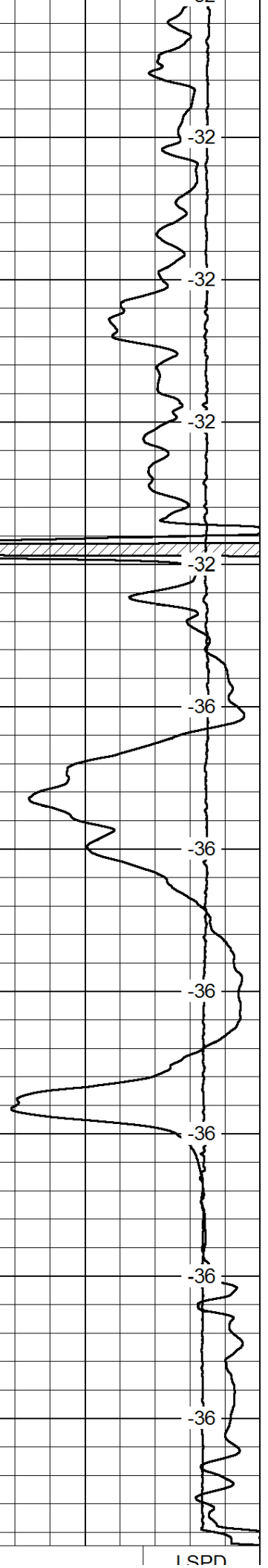
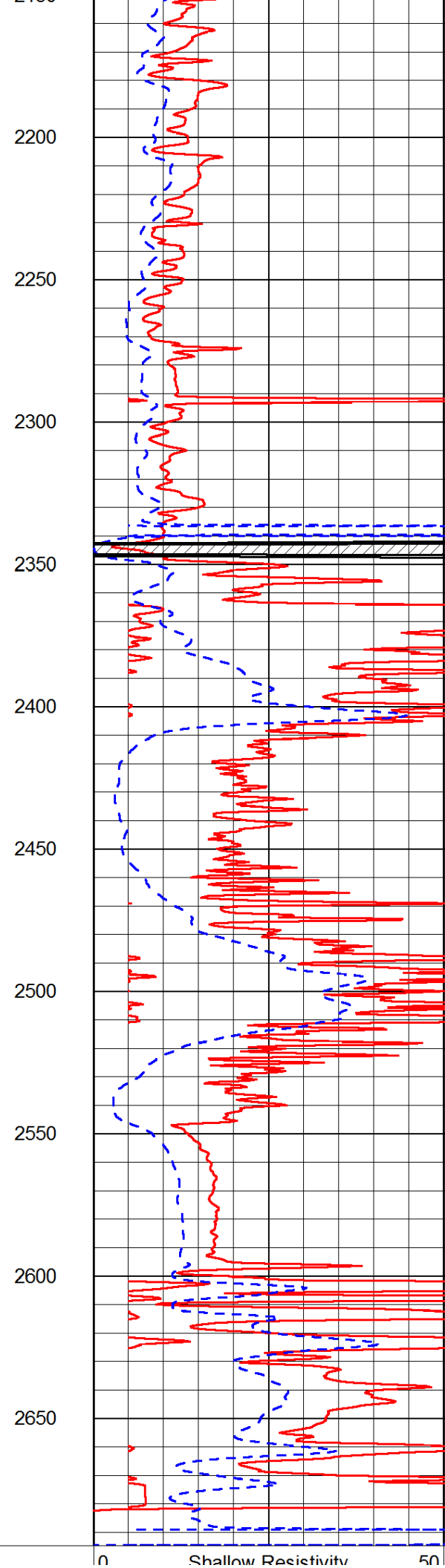
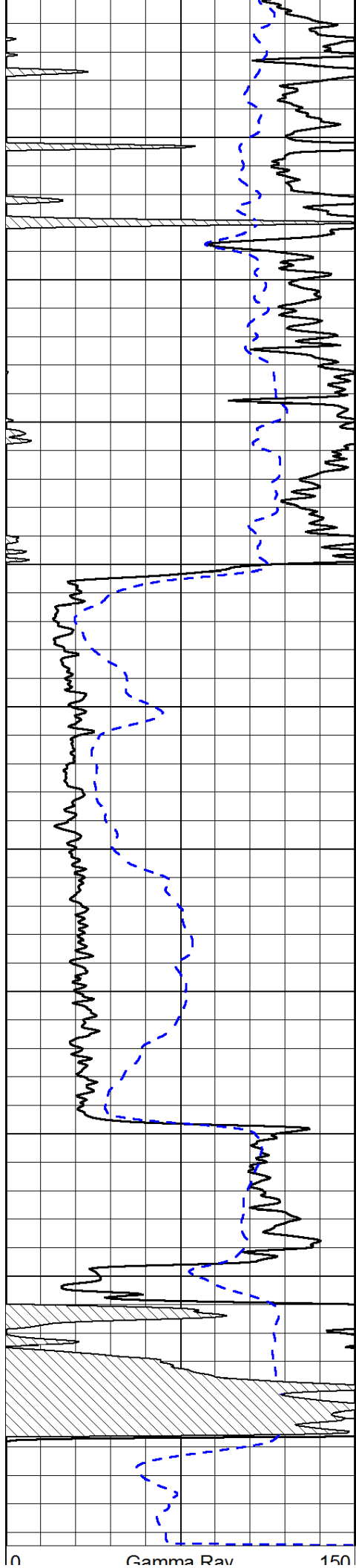
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50	Deep Resistivity	500











0	Gamma Ray	150
-200	SP (mV)	0

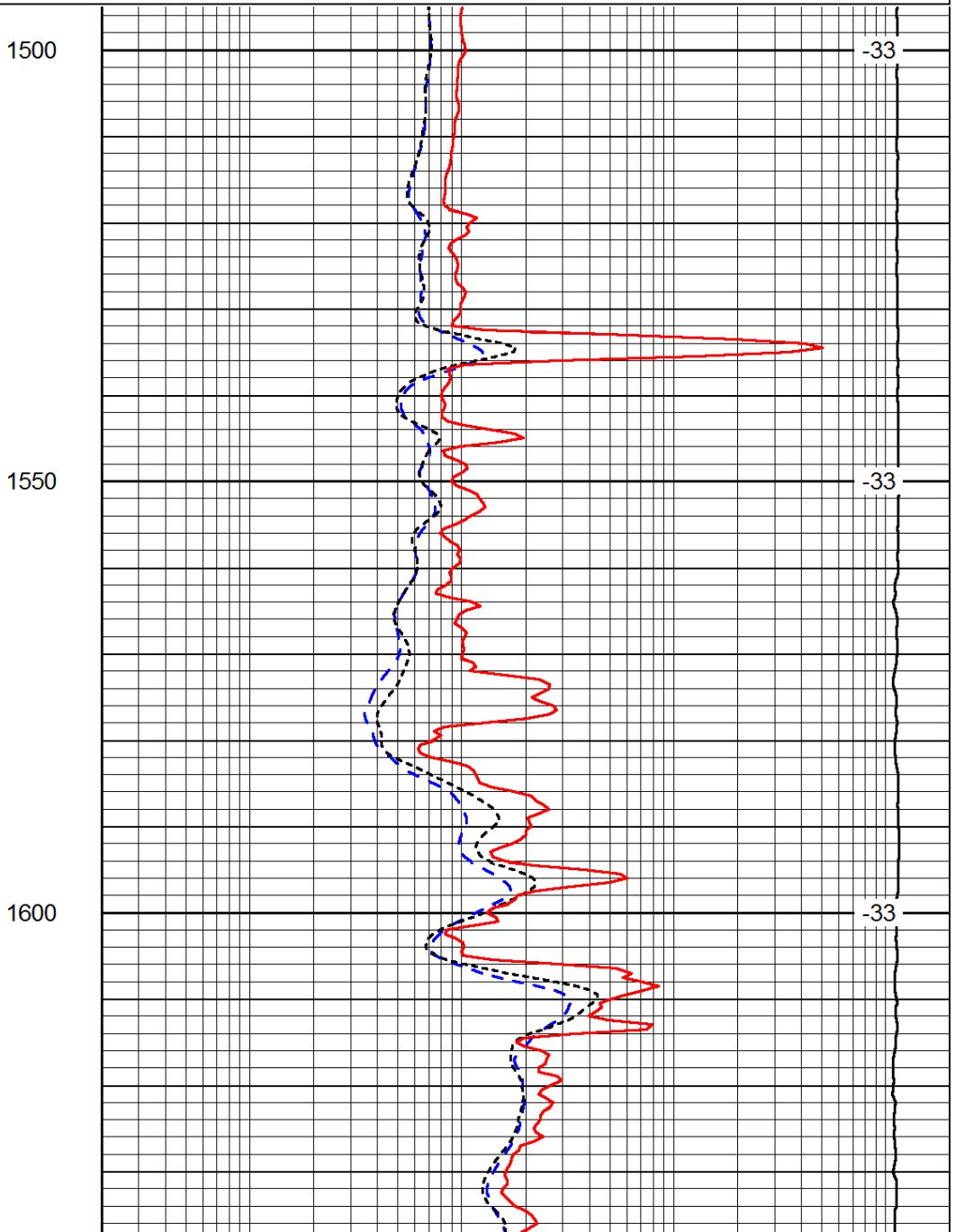
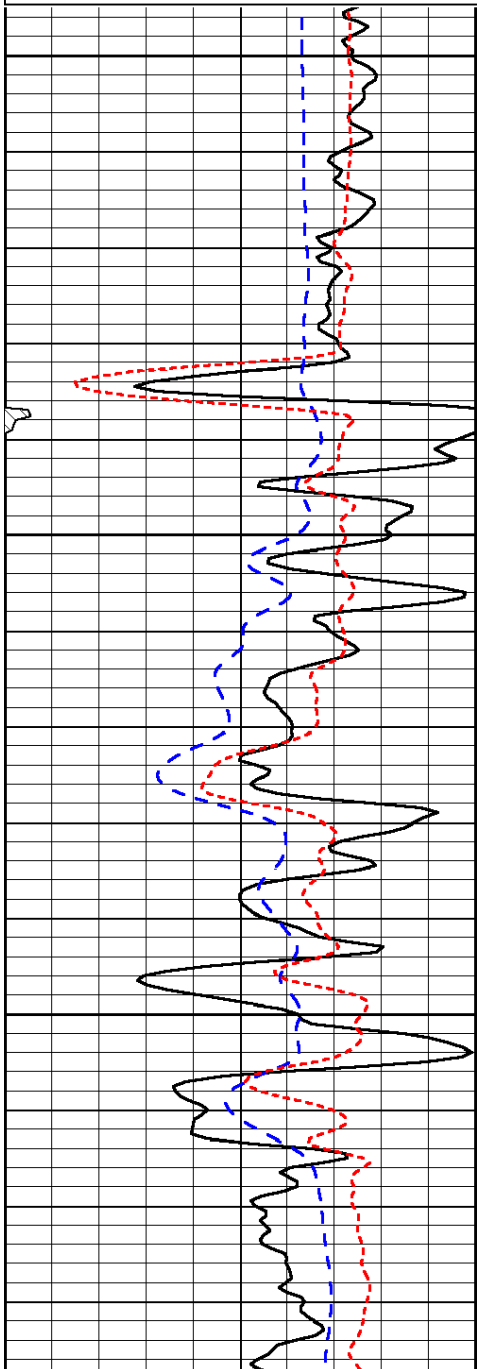
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

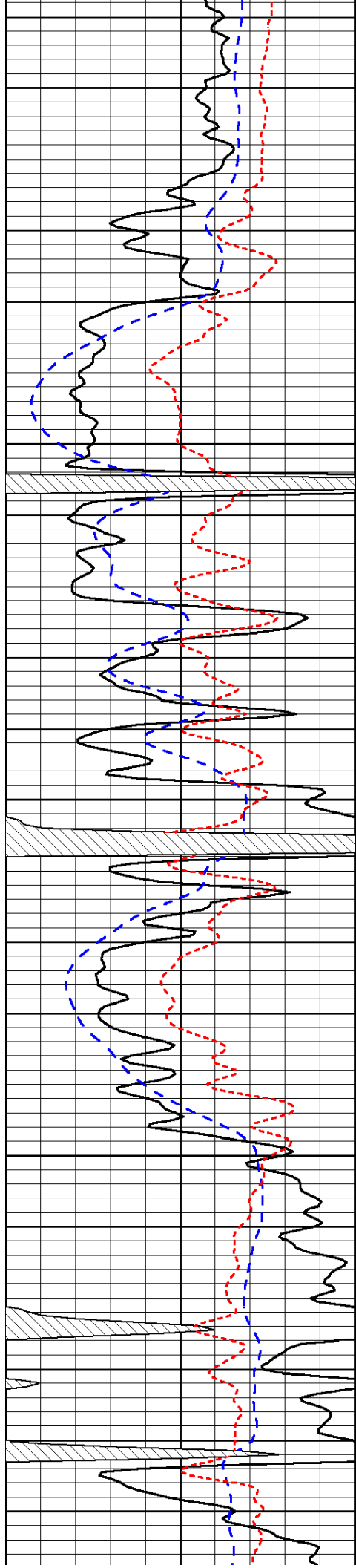
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 Presentation Format: dil  
 Dataset Creation: Fri Sep 05 21:10:15 2014  
 Charted by: Depth in Feet scaled 1:240

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





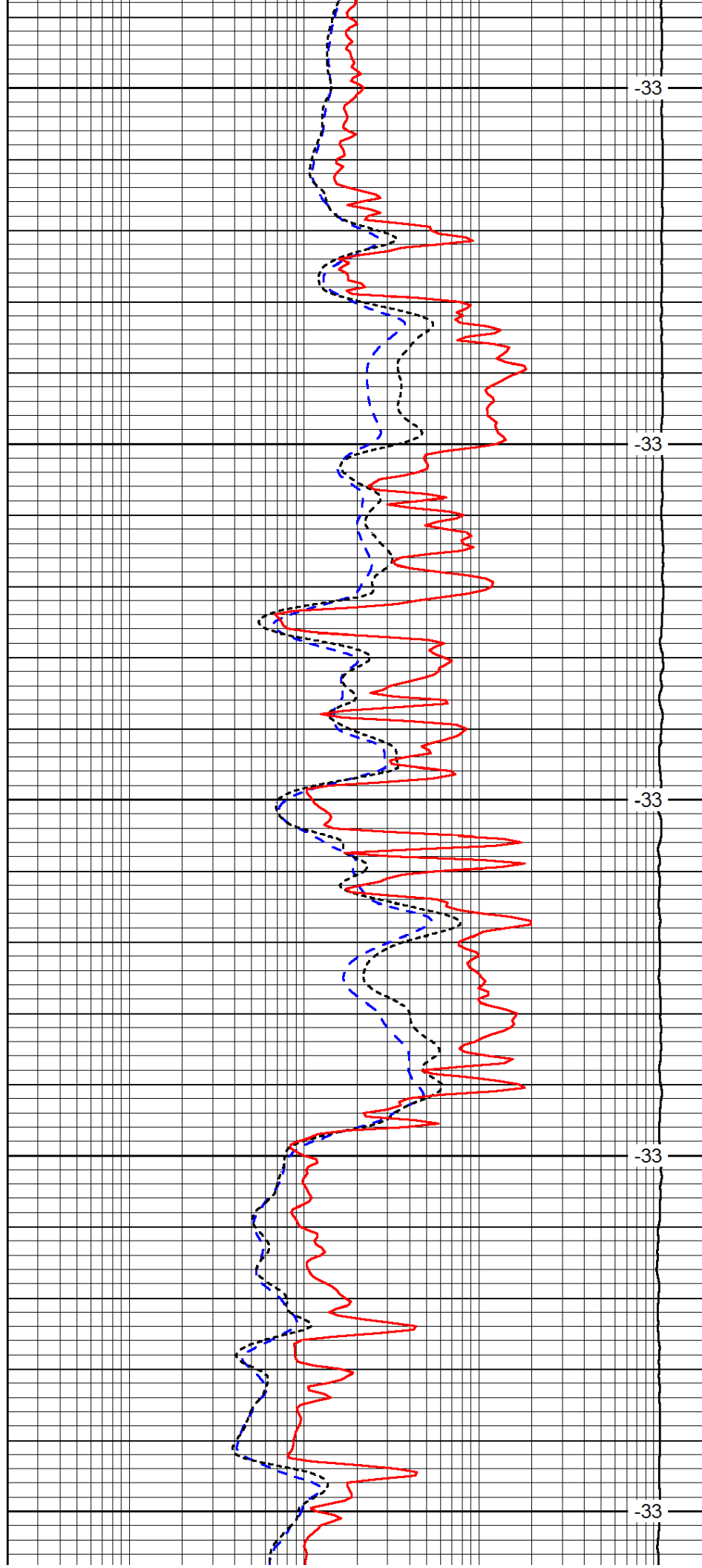
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1700

1750

1800

1850



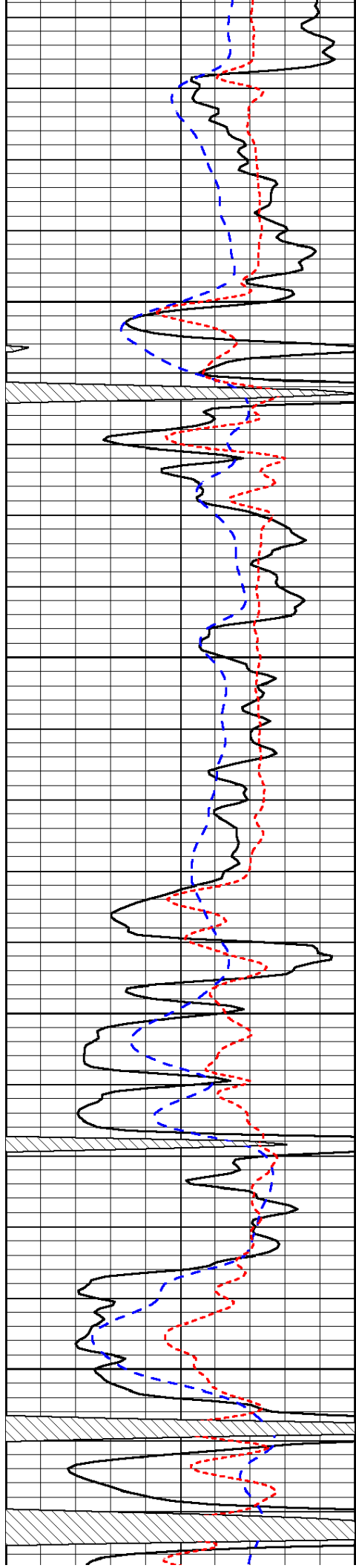
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-33

-33

-33

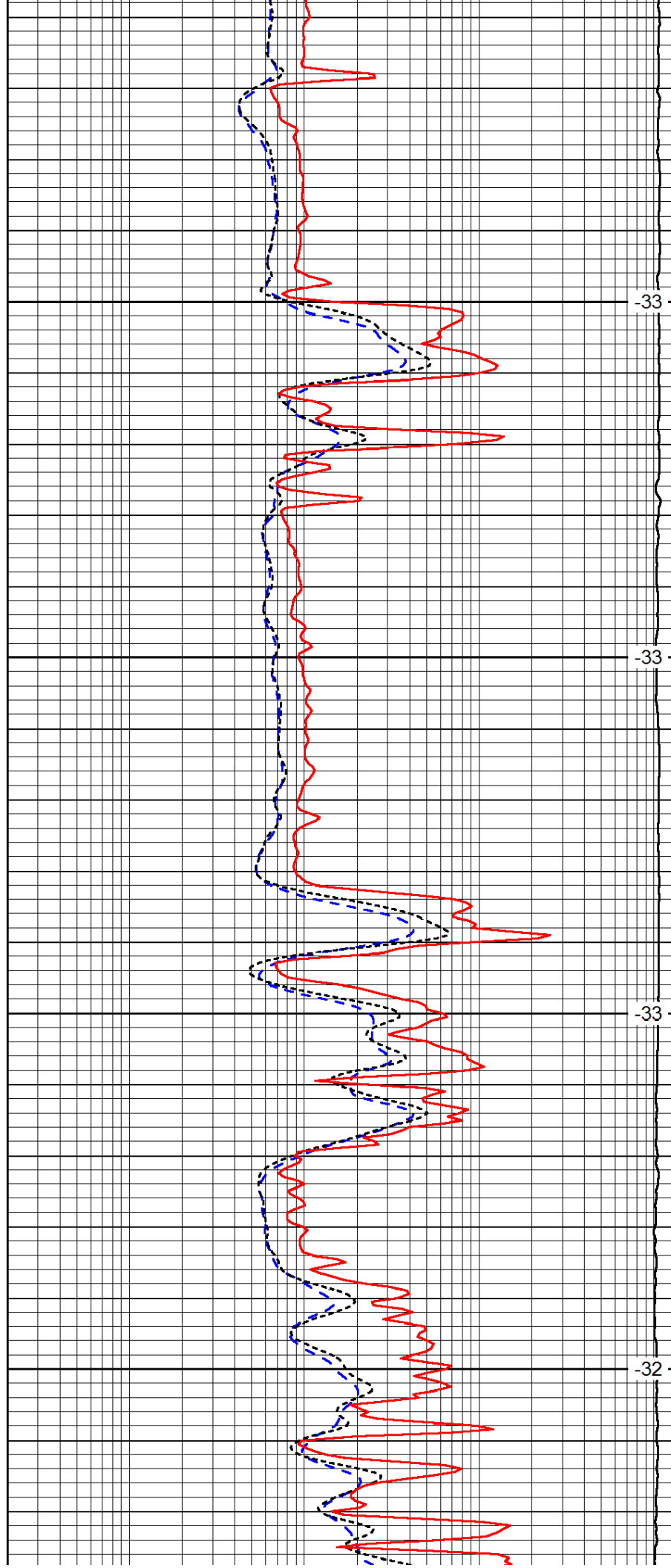


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1950

2000

2050

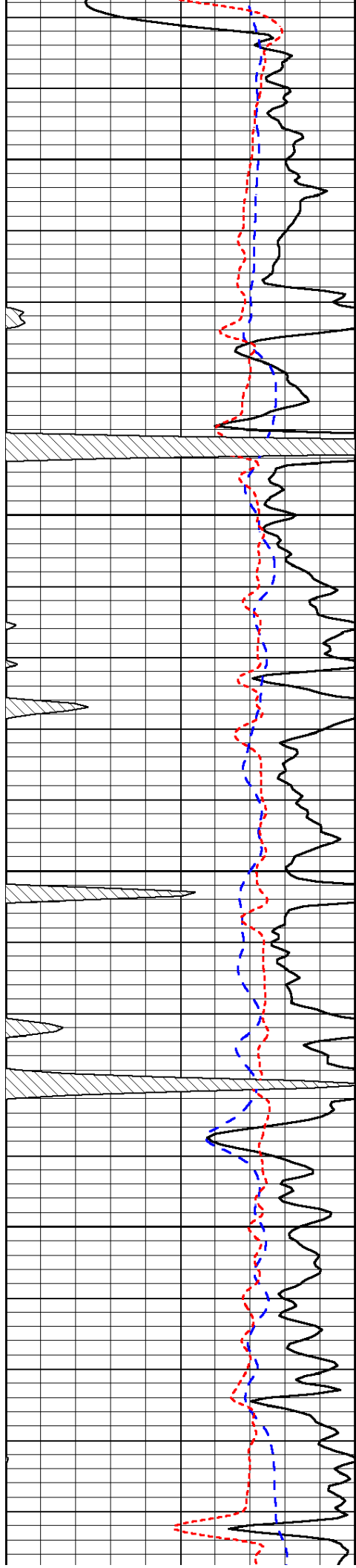


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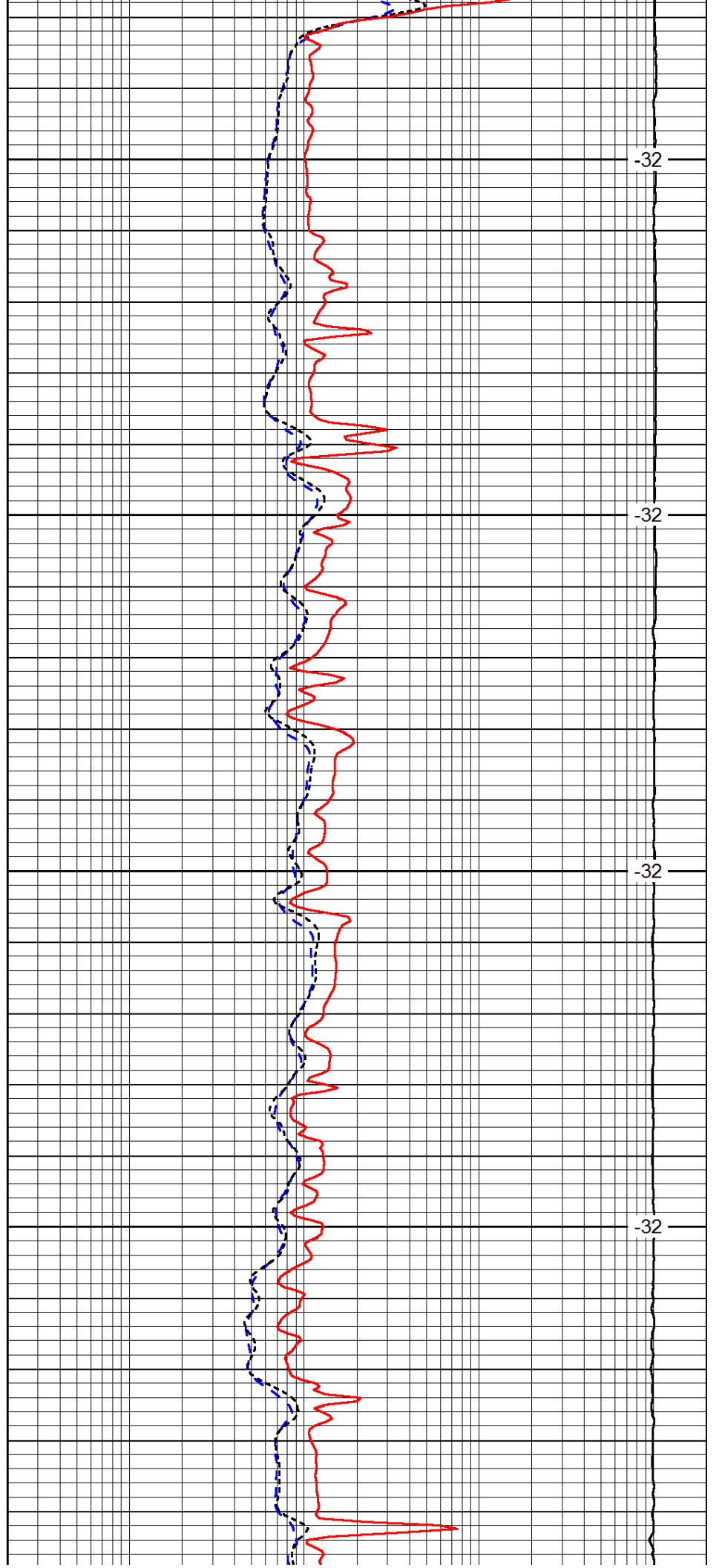


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2150

2200

2250

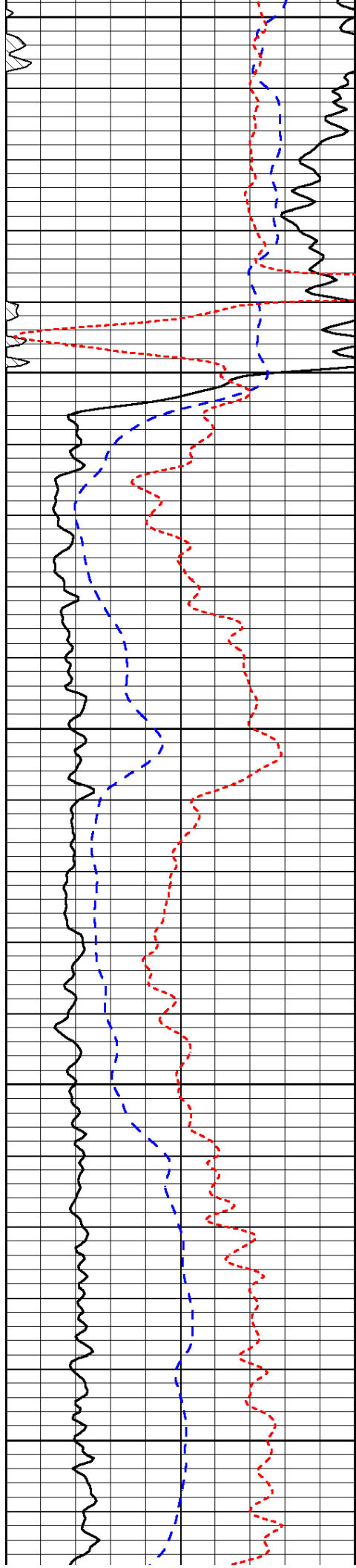


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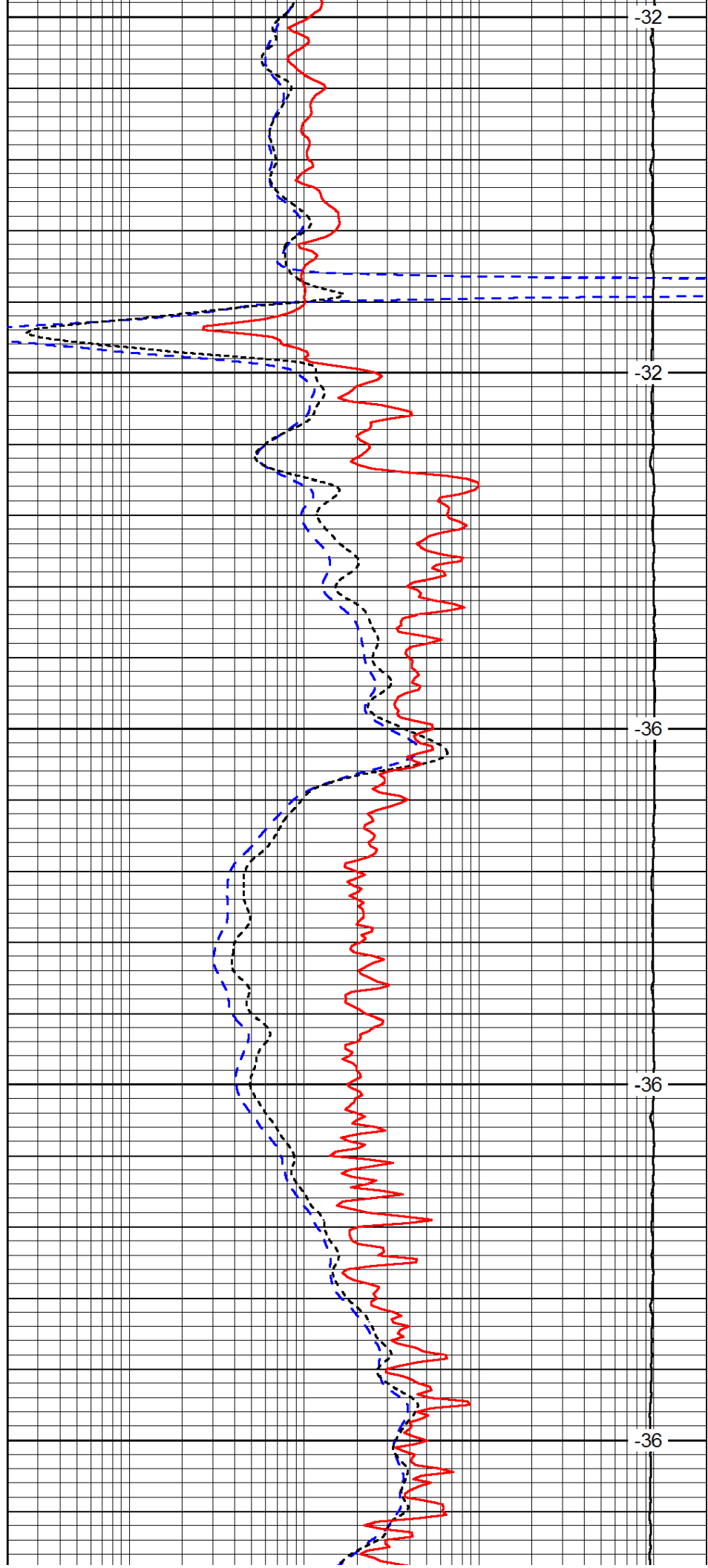
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2350

2400

2450

2500



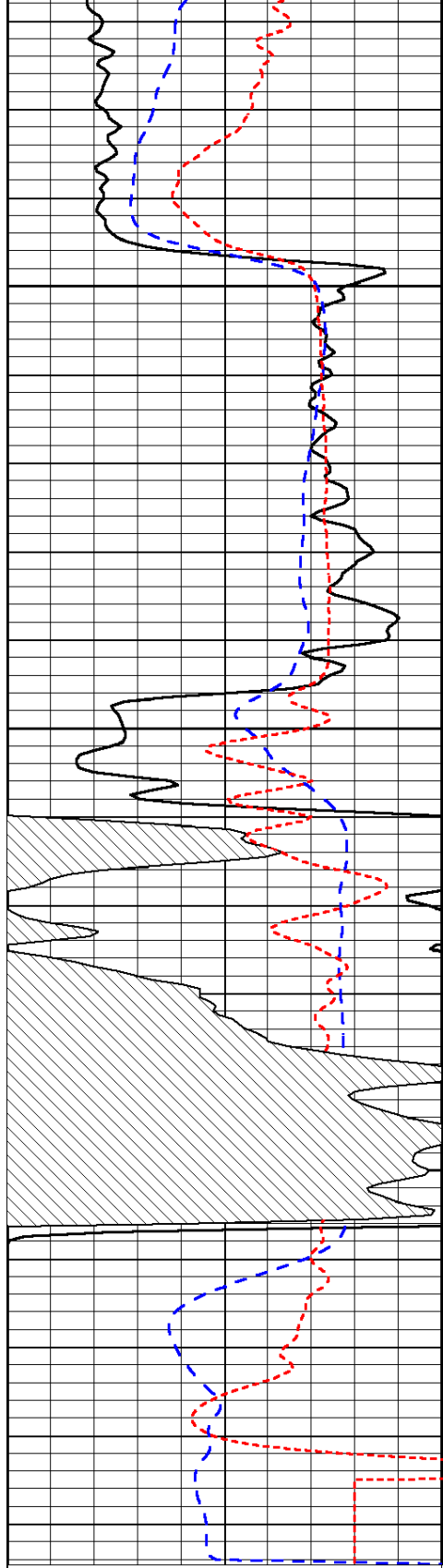
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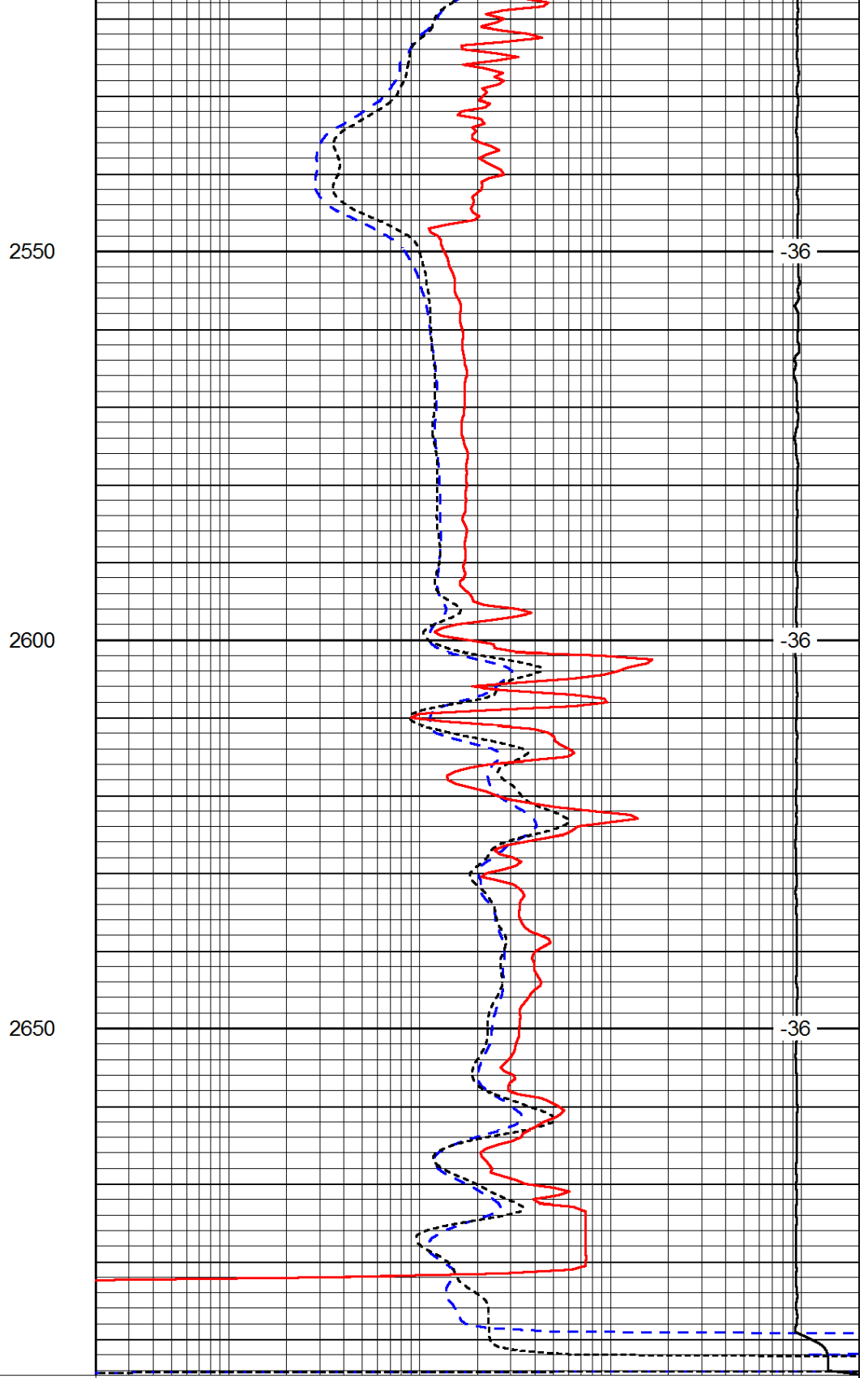
-36

-36

-36



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