



Pioneer Energy Services

Dual Induction Log

API No.

15-055-22,368-00-00

Company American Warrior, Inc.

Well Six-M No. 1-23

Field Hugoton Gas Area

County Finney

State

Kansas

Location

2309' FNL & 1345' FWL

Other Services
CNL/CDL
MEL/BHCS

Sec: 23

Twp: 22s

Rge: 34w

Elevation

Permanent Datum Ground Level Elevation 2929
Log Measured From Kelly Bushing 13 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 2942
D.F.
G.L. 2929

Date

12/22/2014

Run Number

One

Depth Driller

4950

Depth Logger

4951

Bottom Logged Interval

4950

Top Log Interval

1750

Casing Driller

8.625 @ 1768

Casing Logger

1764

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

1400

Density / Viscosity

9.2 46

pH / Fluid Loss

9.5 8.0

Source of Sample

Flowline

Rm @ Meas. Temp

1.20 @ 70

Rmf @ Meas. Temp

.90 @ 70

Rmc @ Meas. Temp

1.62 @ 70

Source of Rmf / Rmc

Charts

Rm @ BHT

.67 @ 126

Operating Rig Time

5 Hours

Max Rec. Temp. F

126

Equipment Number

108

Location

Hays

Recorded By

D. Fischer

Witnessed By

J. Long

<<< Fold Here >>>

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

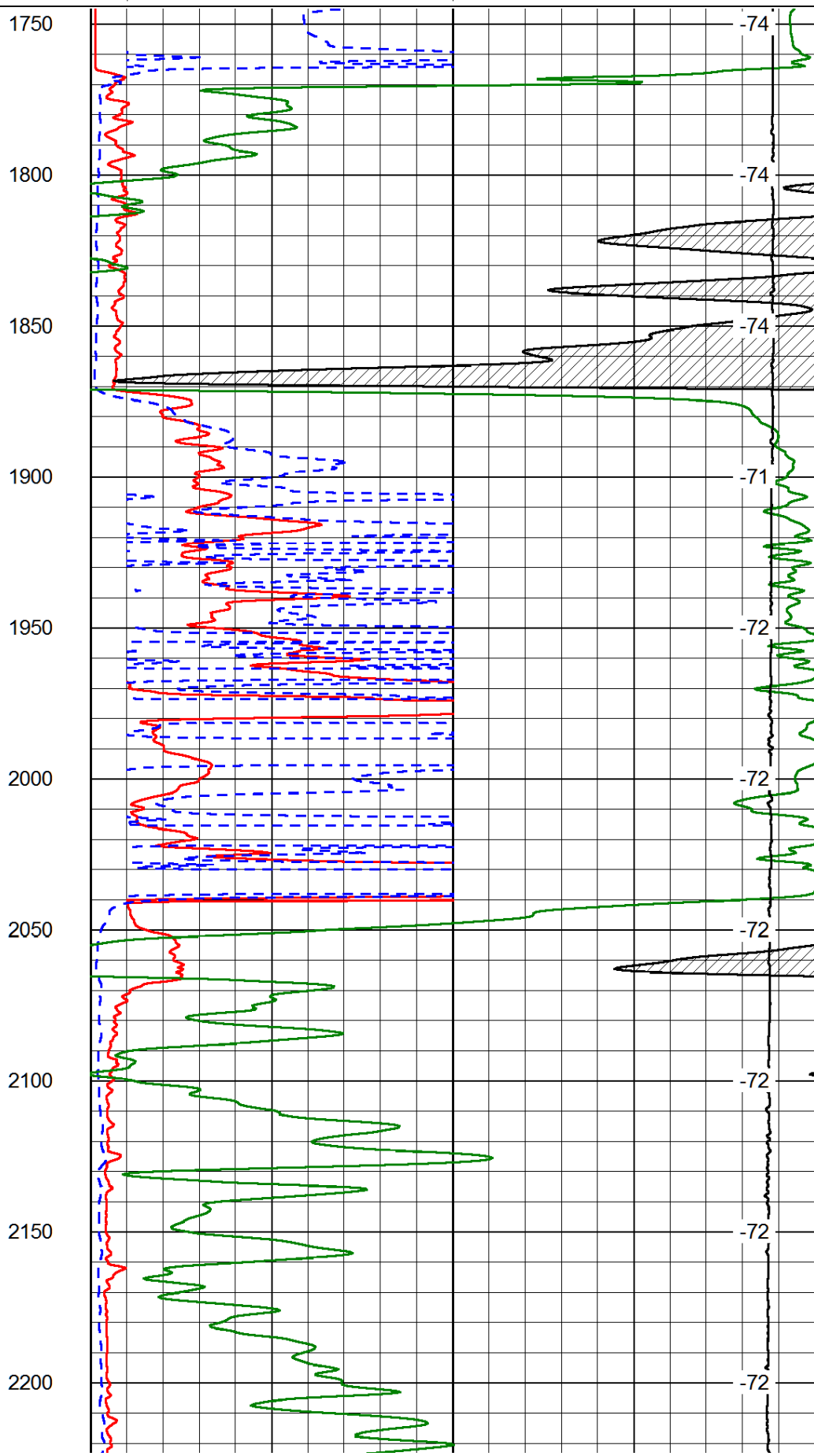
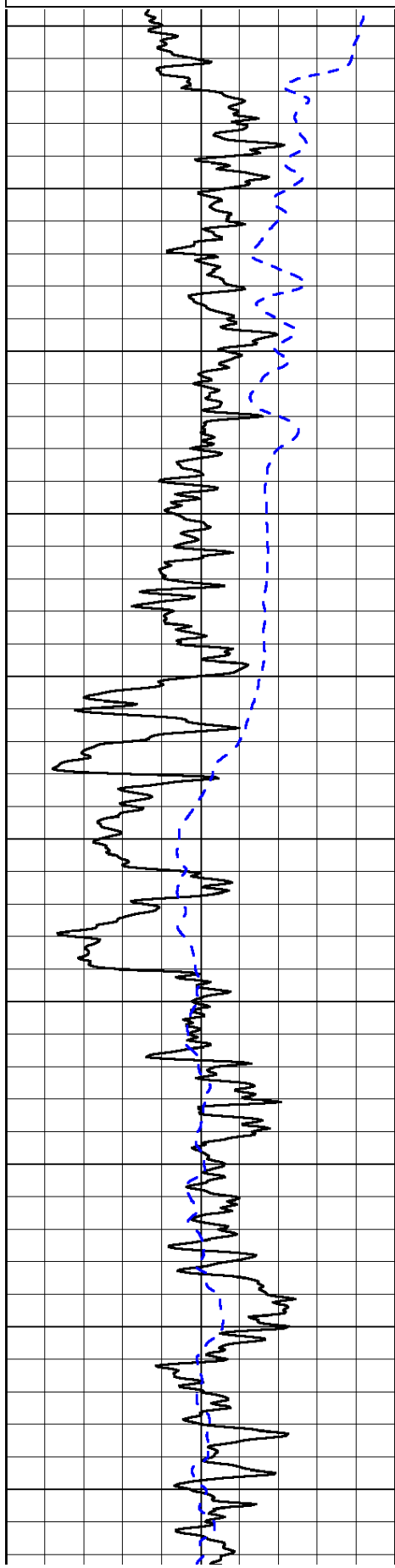
Scott City Ks., South to Tennis Rd., West to Big Lowe Rd., South to Miller Rd.,
2 West, 1/2 North, East Into.

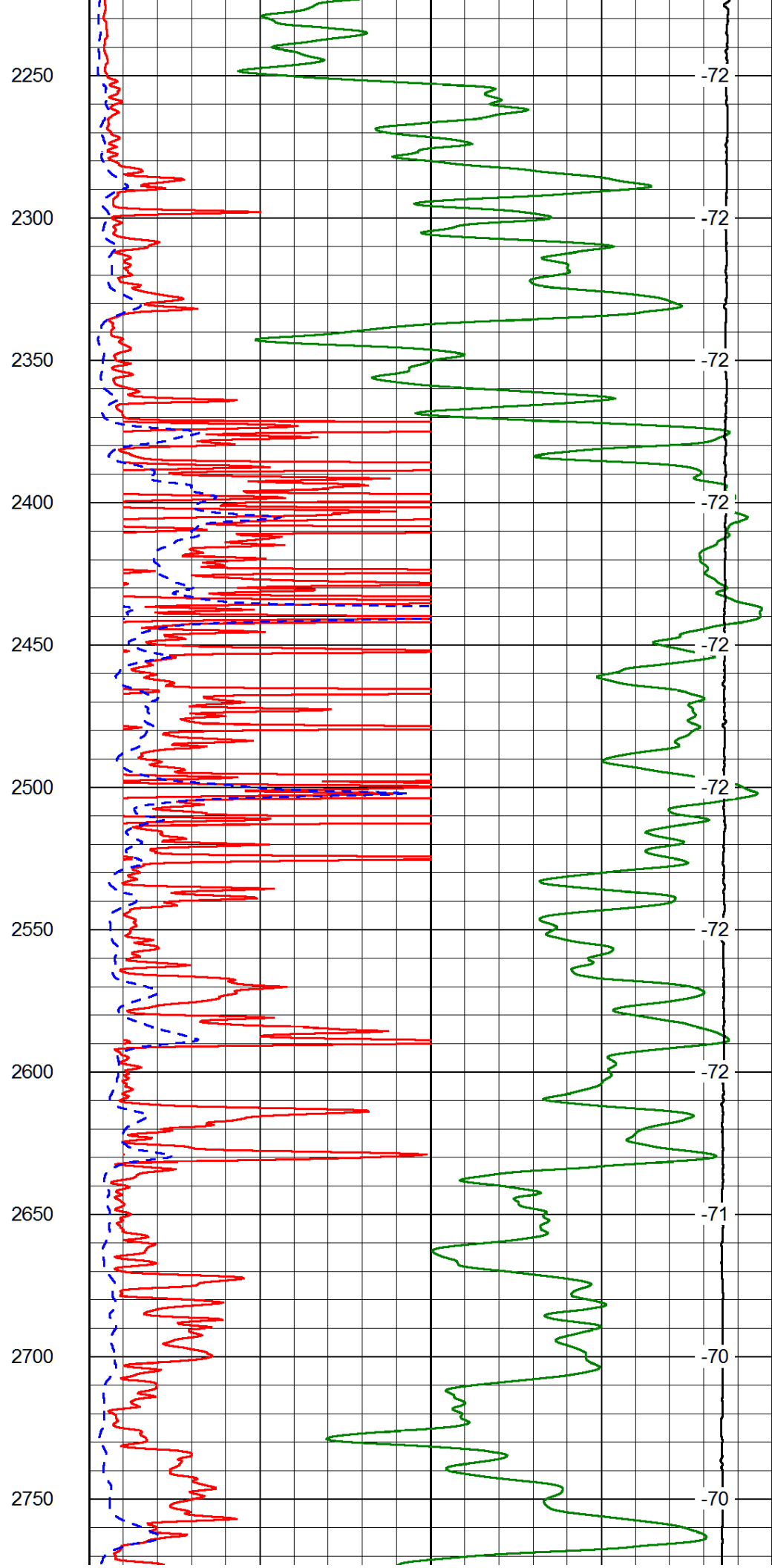
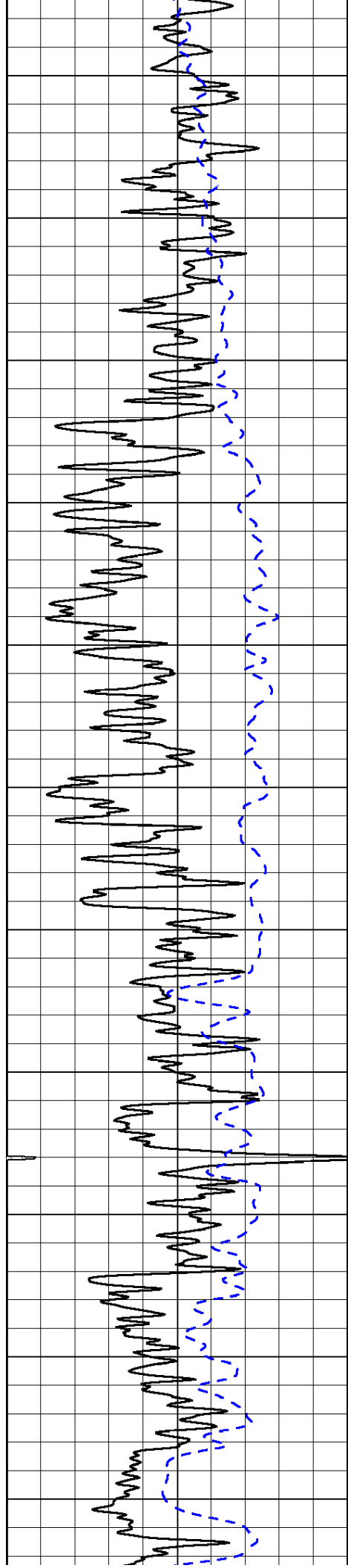
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Presentation Format: dil2in
Dataset Creation: Mon Dec 22 02:53:25 2014
Charted by: Depth in Feet scaled 1:600

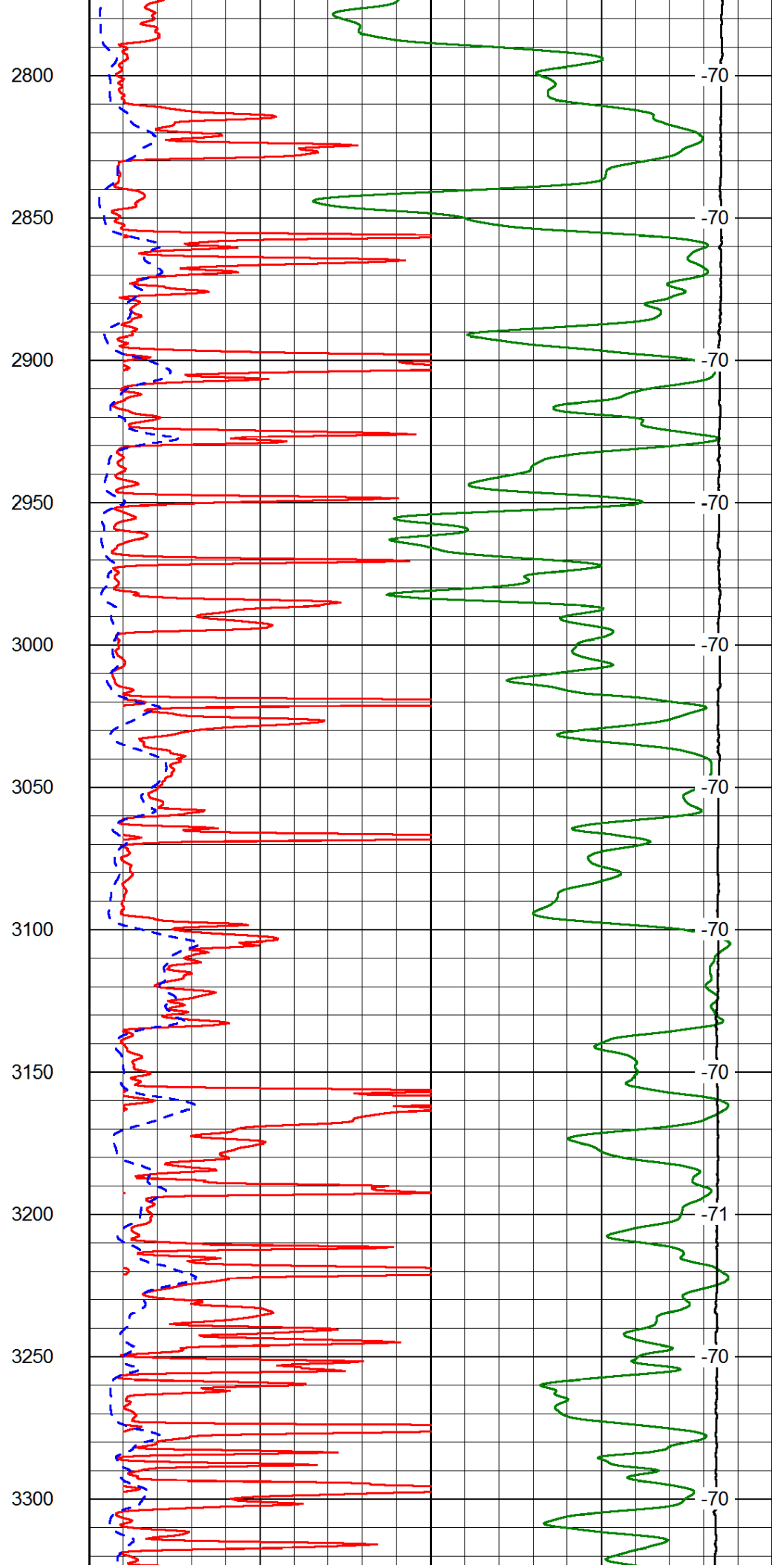
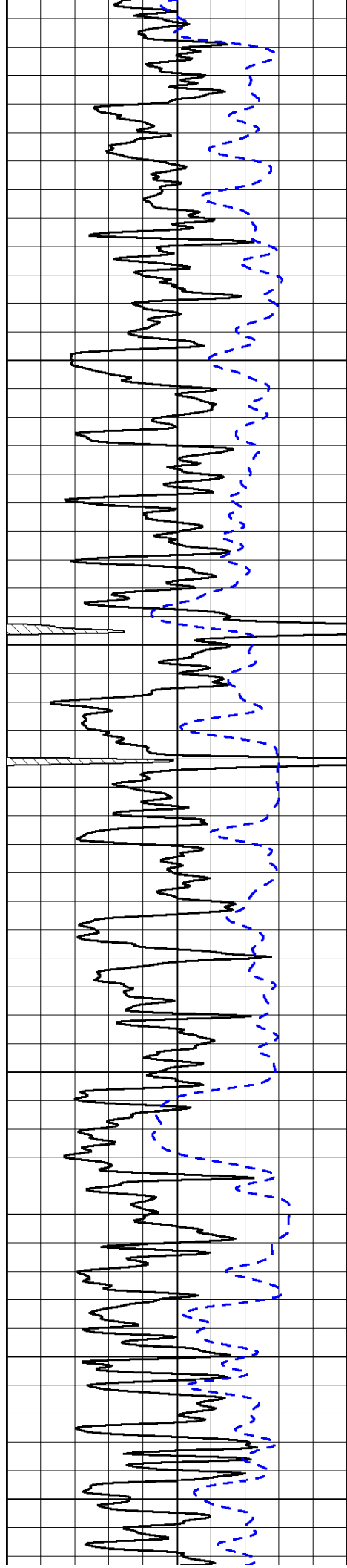
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-200	SP (mV)	0

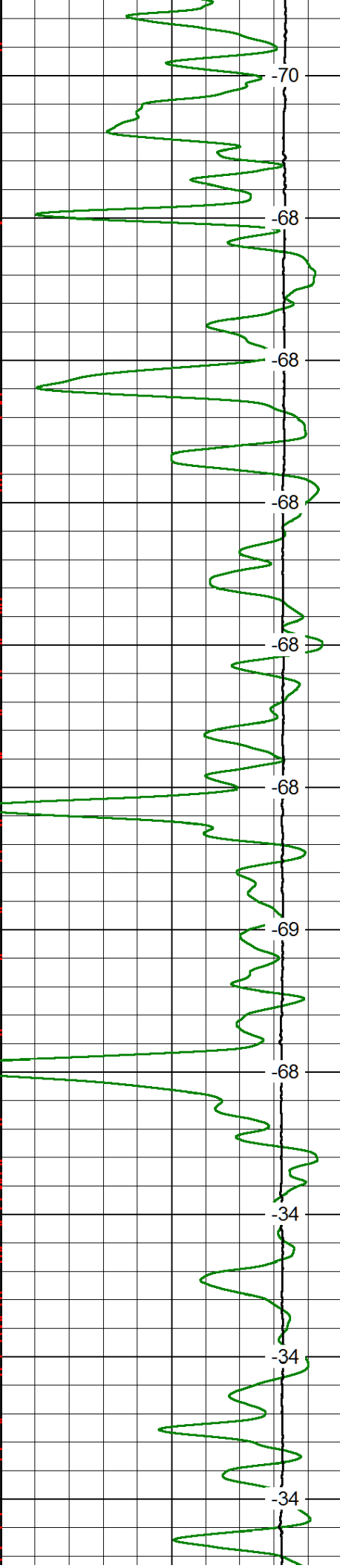
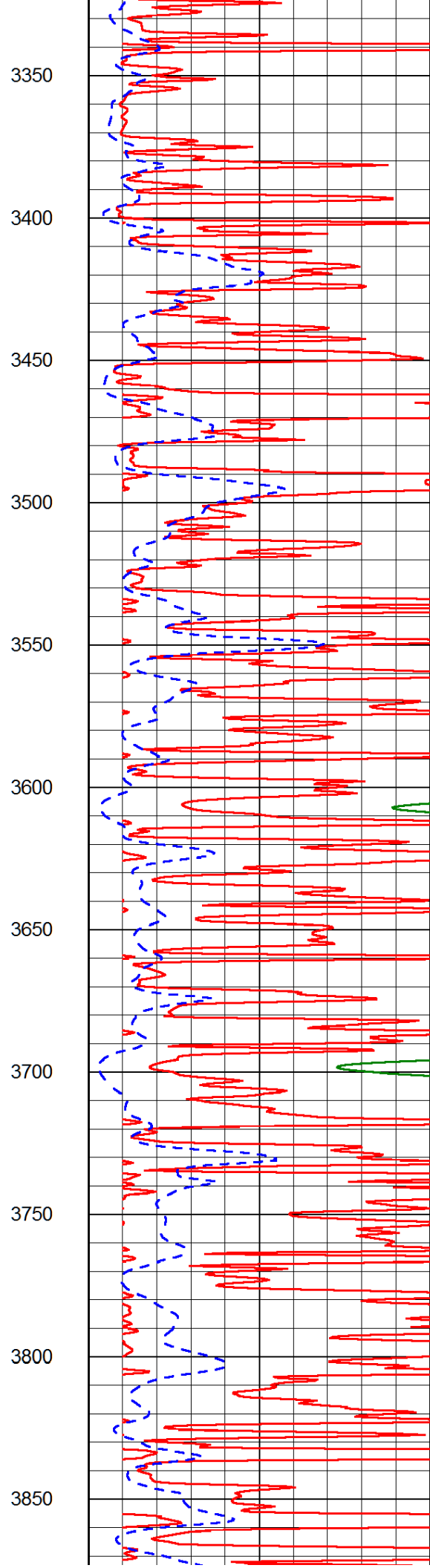
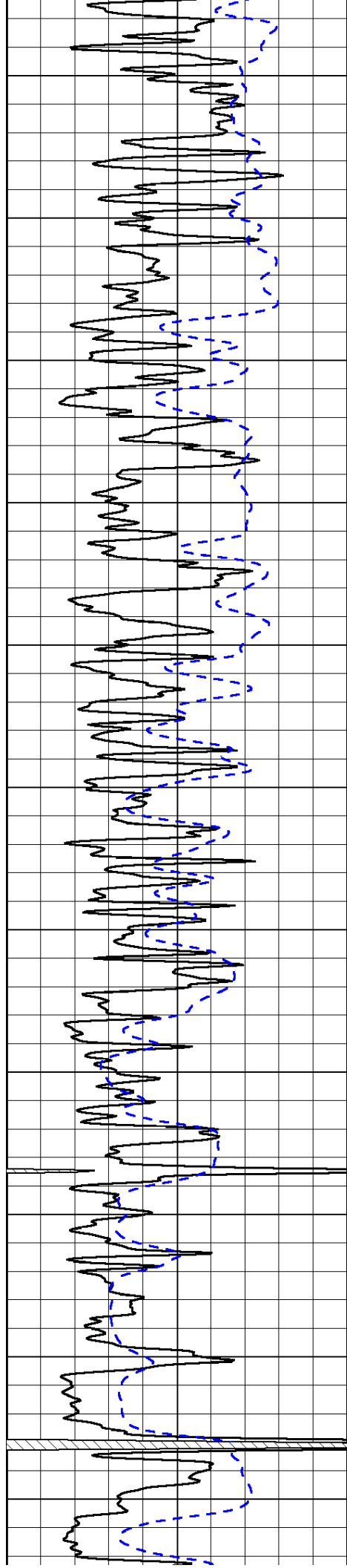
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

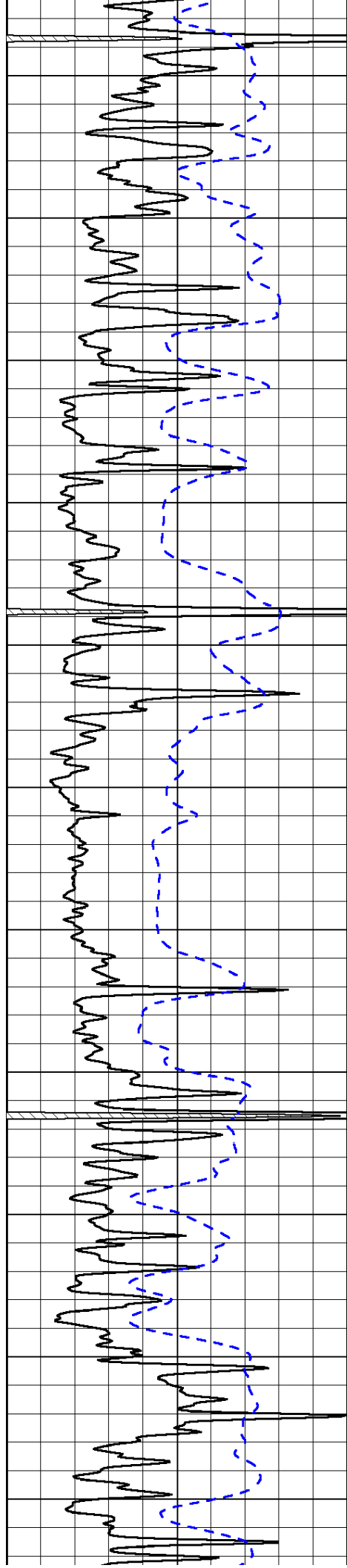
LSPD











3900

3950

4000

4050

4100

4150

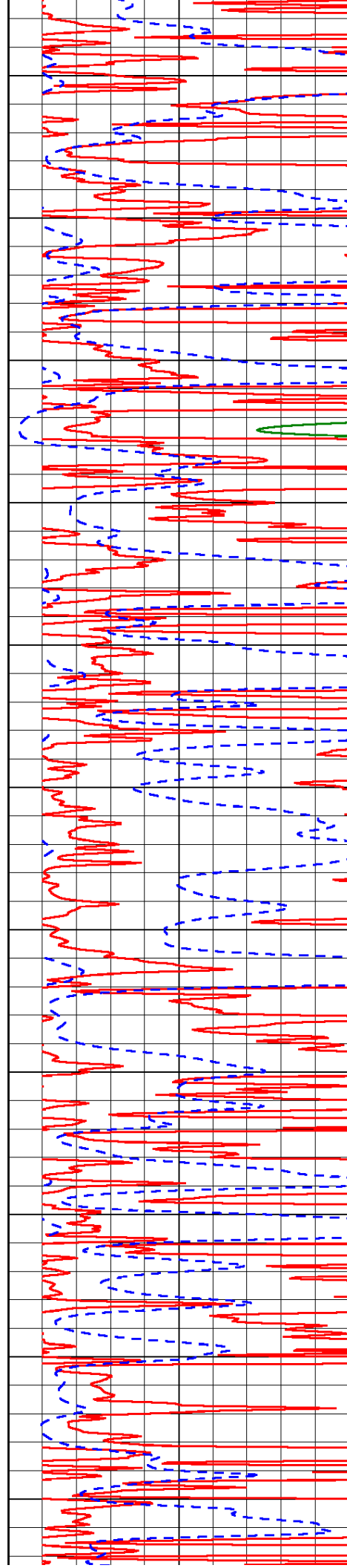
4200

4250

4300

4350

4400



-34

-34

-34

-34

-34

-33

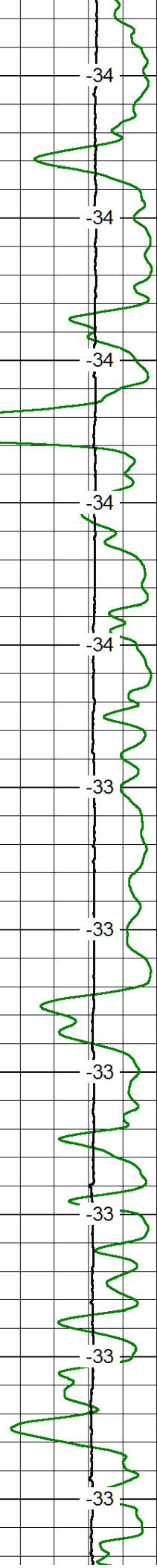
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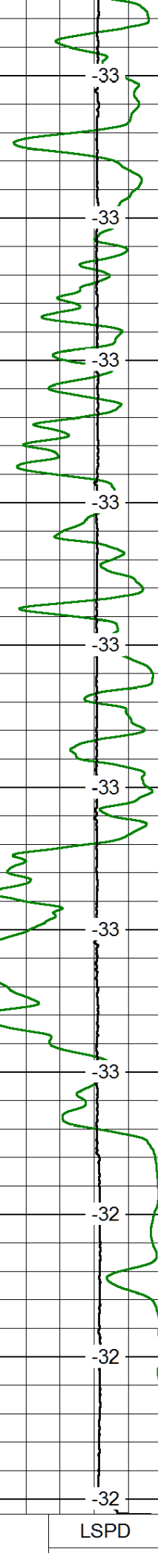
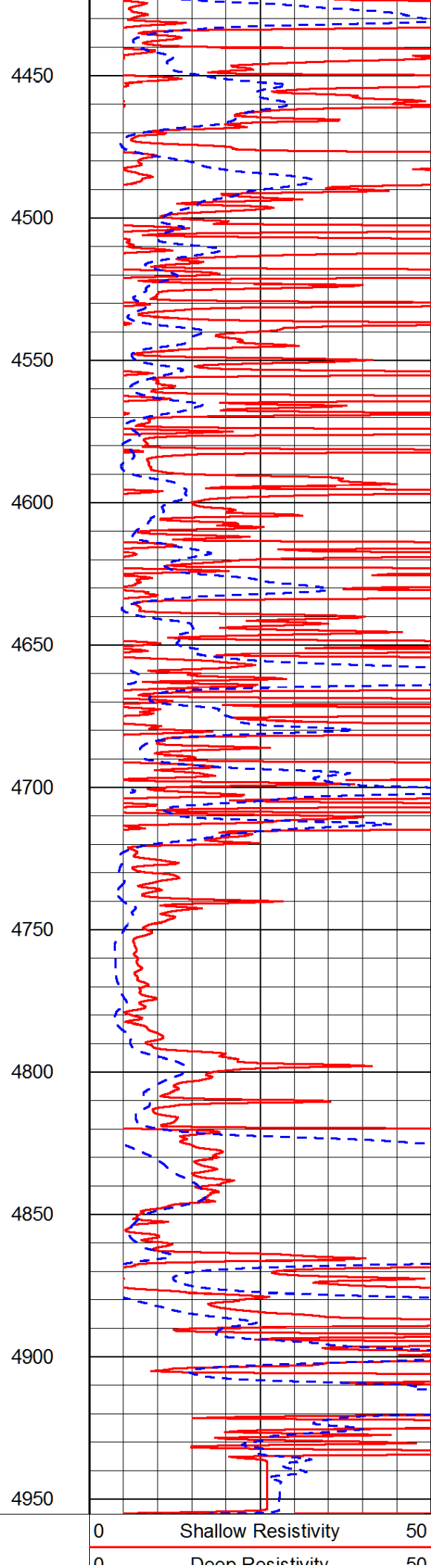
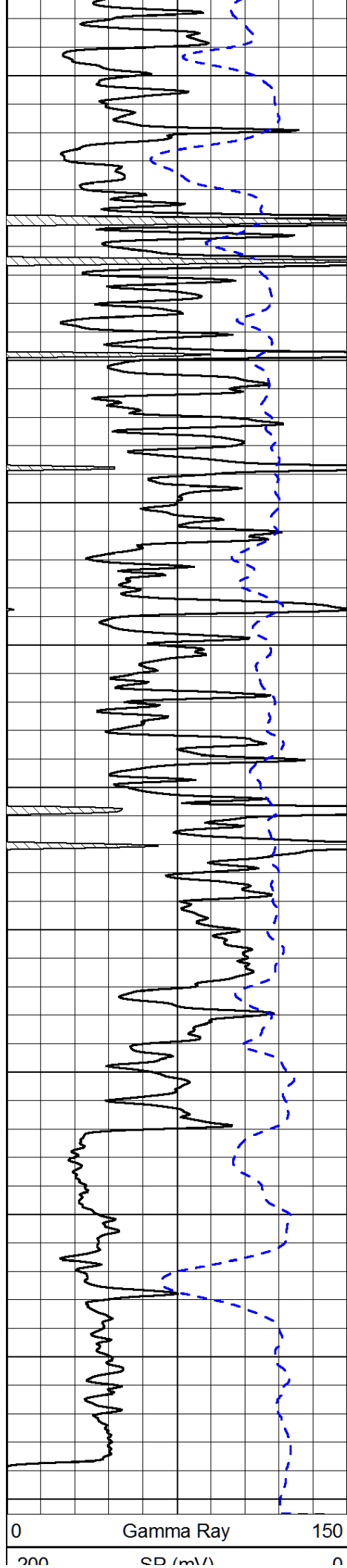
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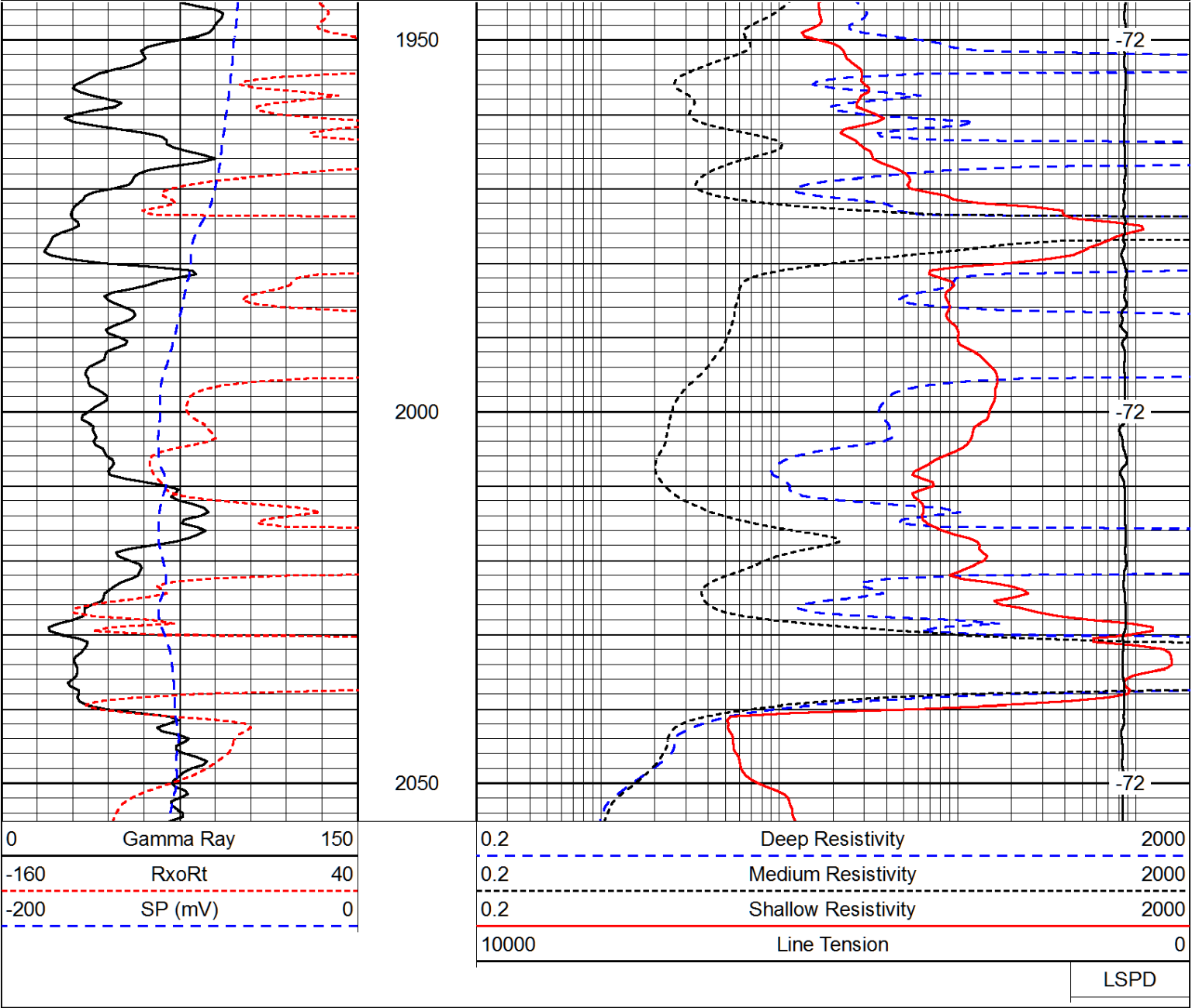




200	SP (mV)	0	0	Deep Resistivity	50
1000				Conductivity	0
15000				Line Tension	0
50				Shallow Resistivity	500
50				Deep Resistivity	500

Database File:	american_warrior_six_m_1-23hd.db
Dataset Pathname:	DIL/amstck
Presentation Format:	dil
Dataset Creation:	Mon Dec 22 02:53:25 2014
Charted by:	Depth in Feet scaled 1:240

0	Gamma Ray	150	0.2	Deep Resistivity	2000
-160	RxoRt	40	0.2	Medium Resistivity	2000
-200	SP (mV)	0	0.2	Shallow Resistivity	2000
			10000	Line Tension	0
					LSPD



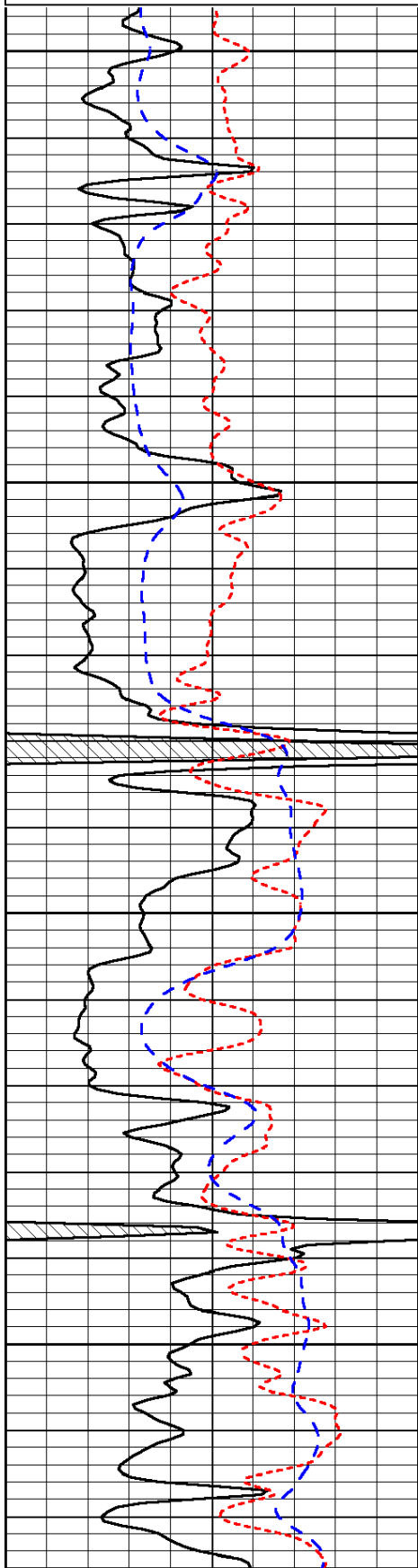
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Dataset Pathname:	DIL/amstck

Dataset Pathname: D:\Amistek
Presentation Format: dil
Dataset Creation: Mon Dec 22 02:53:25 2014
Charted by: Depth in Feet scaled 1:240

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD

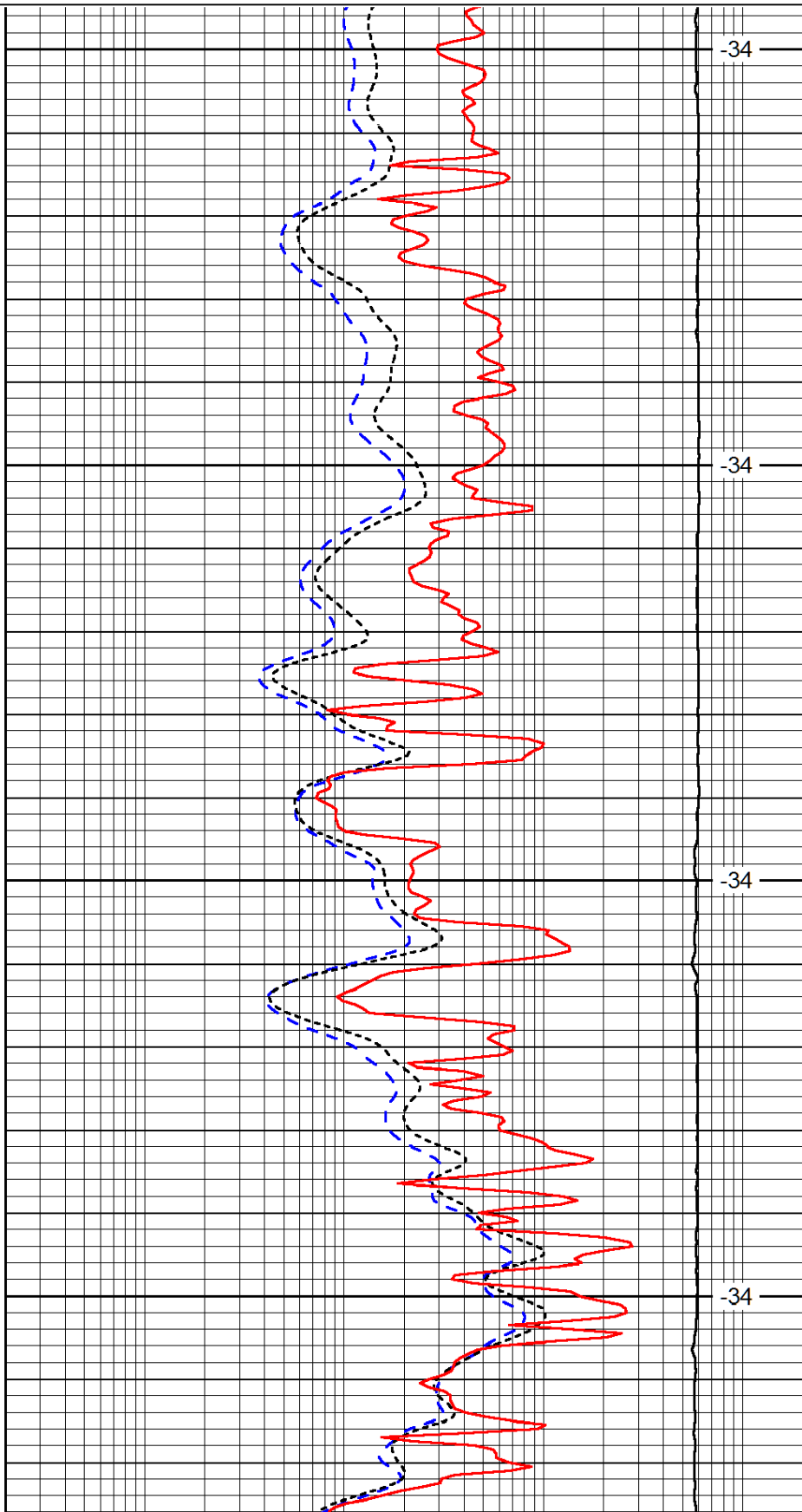


3750

3800

3850

3900

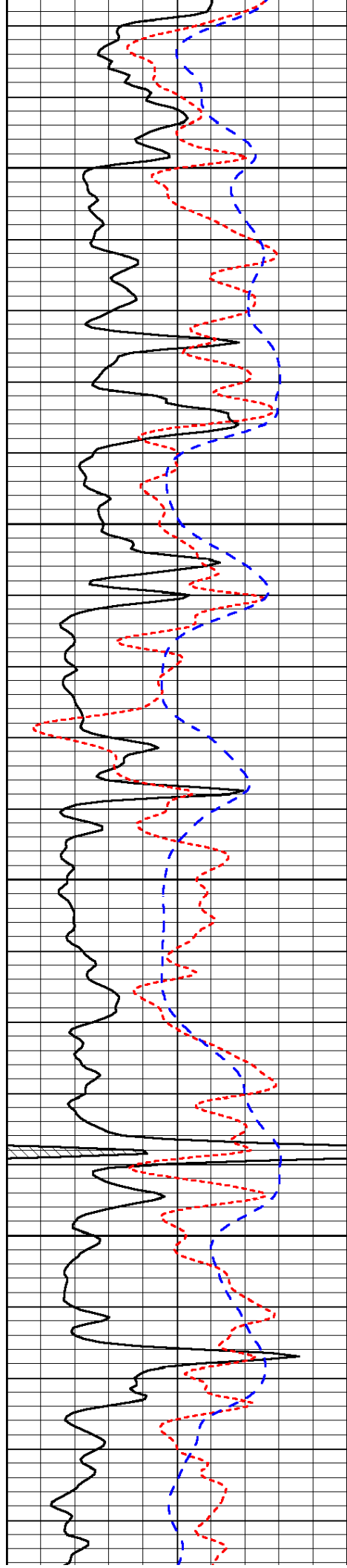


-34

-34

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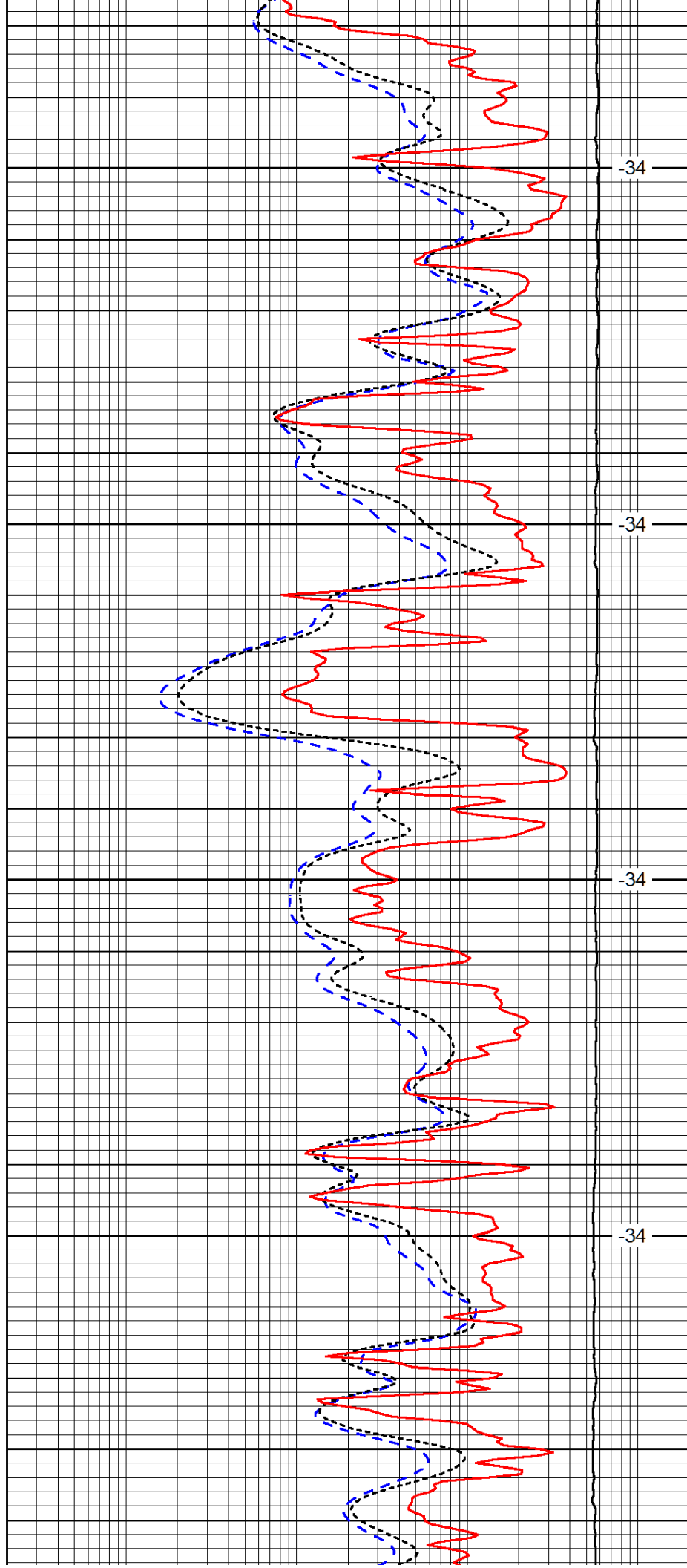


3950

4000

4050

4100

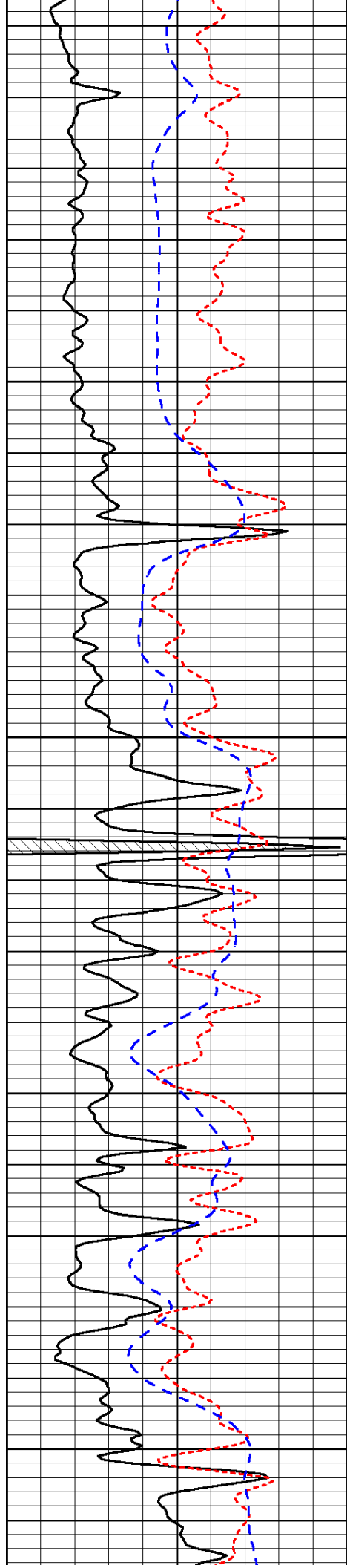


-34

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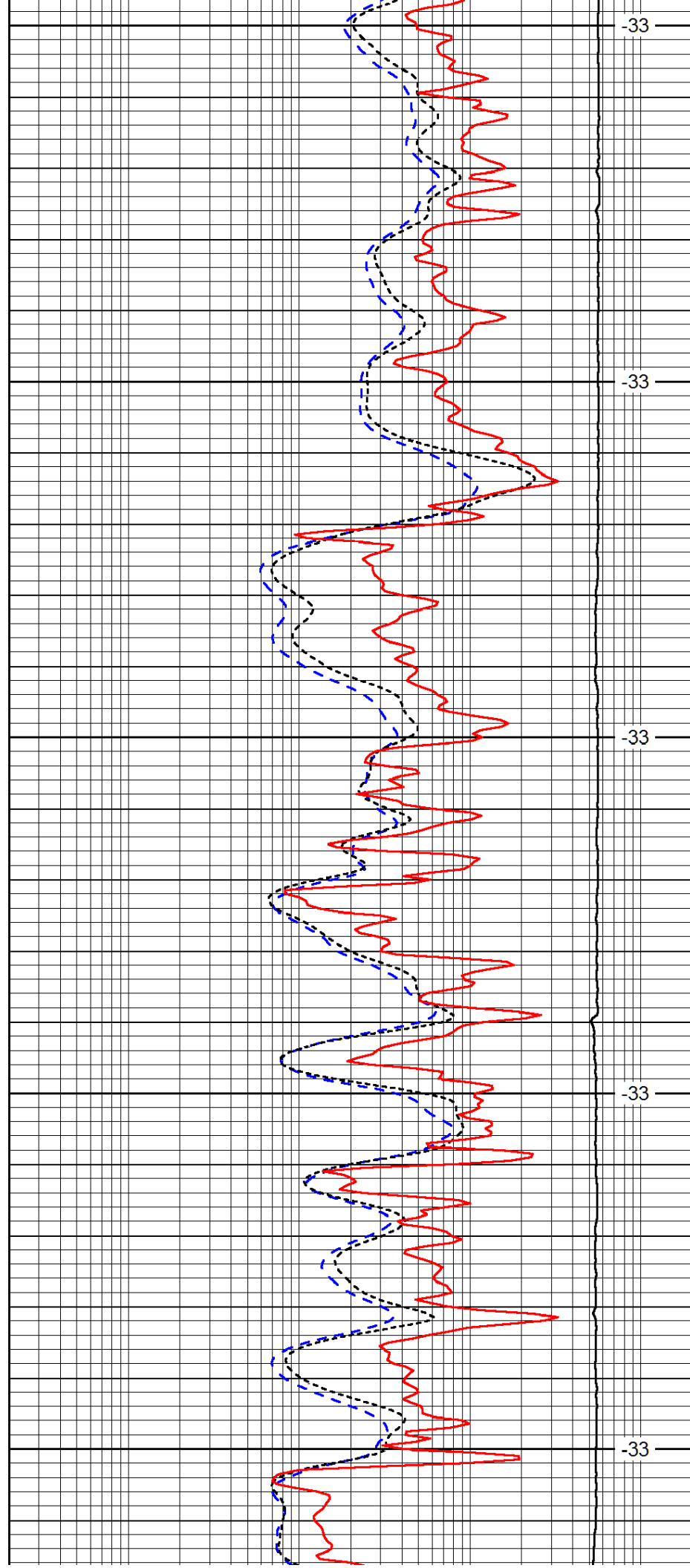
4150

4200

4250

4300

4350



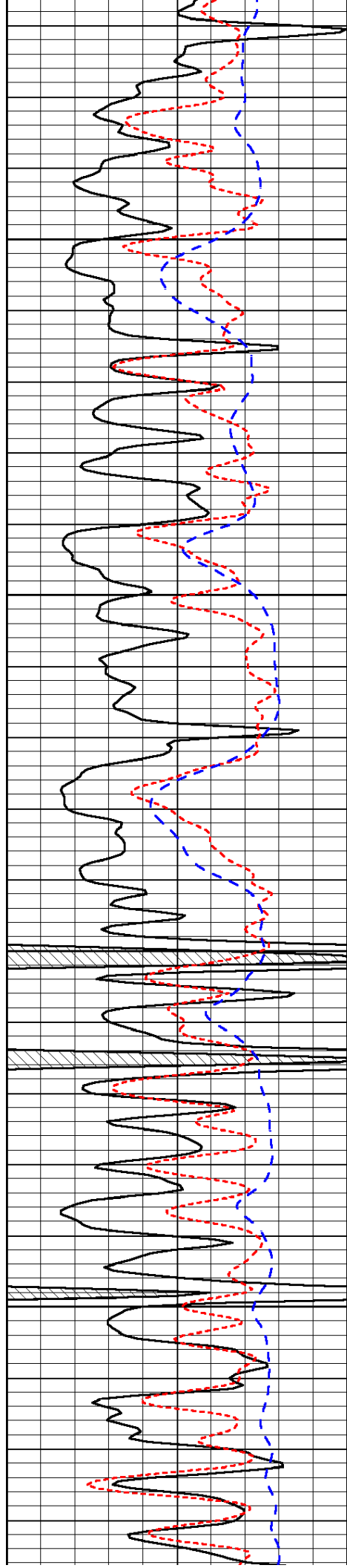
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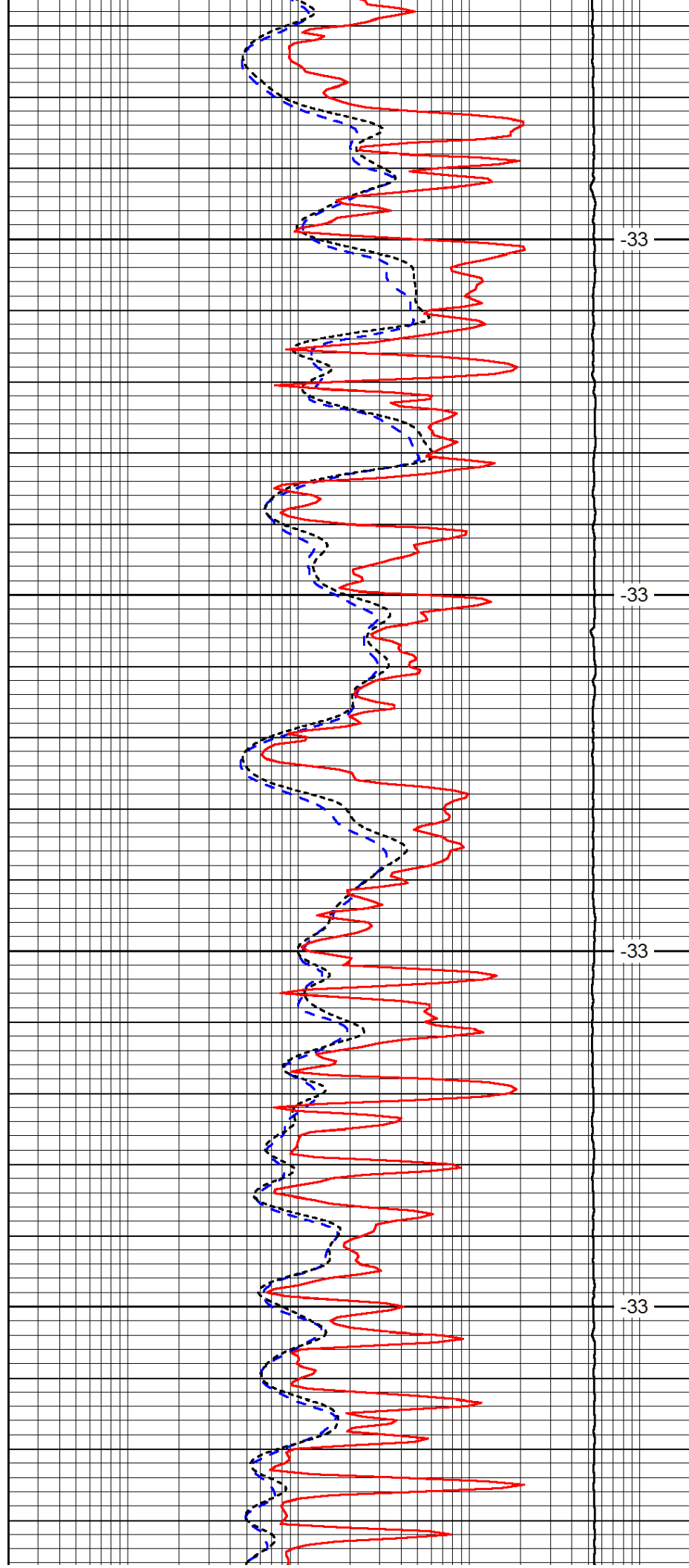


4400

4450

4500

4550

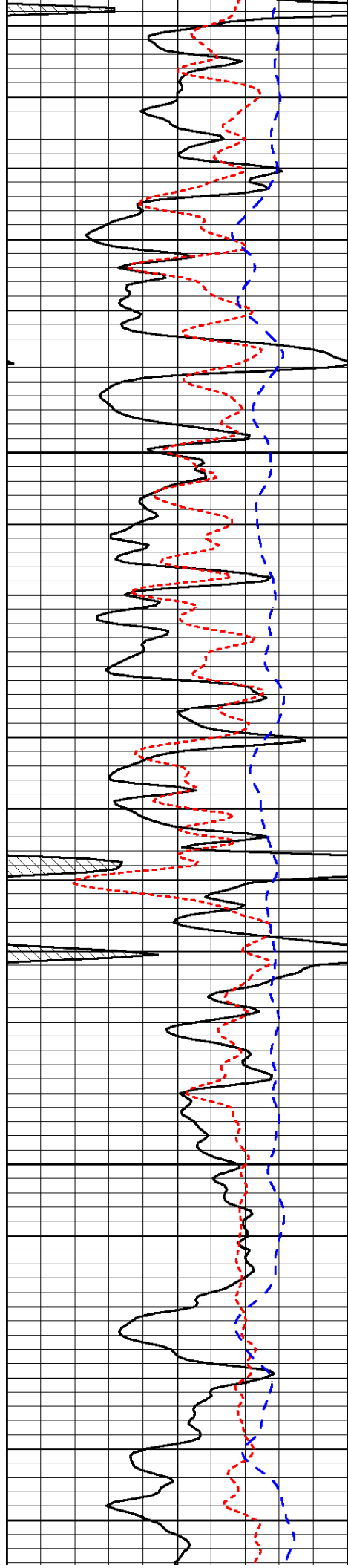


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-33



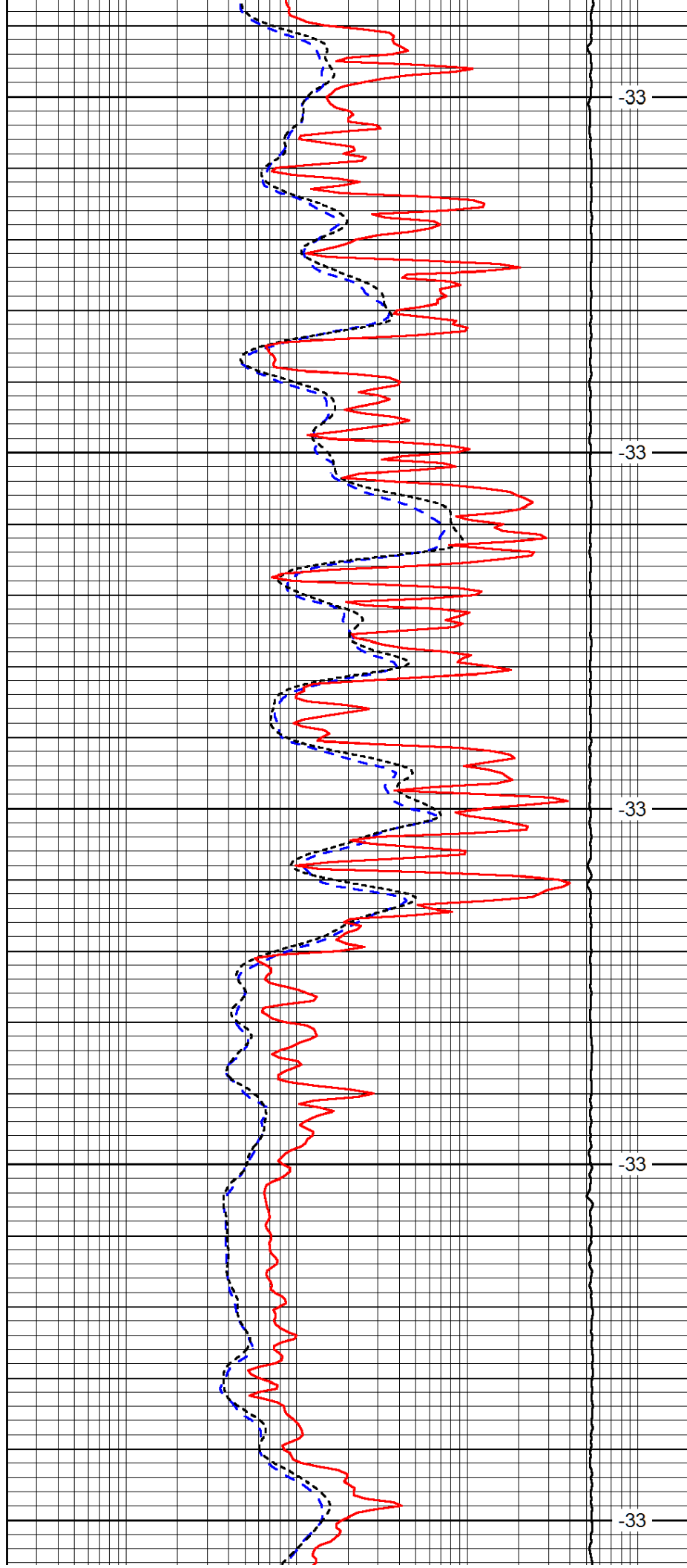
4600

4650

4700

4750

4800



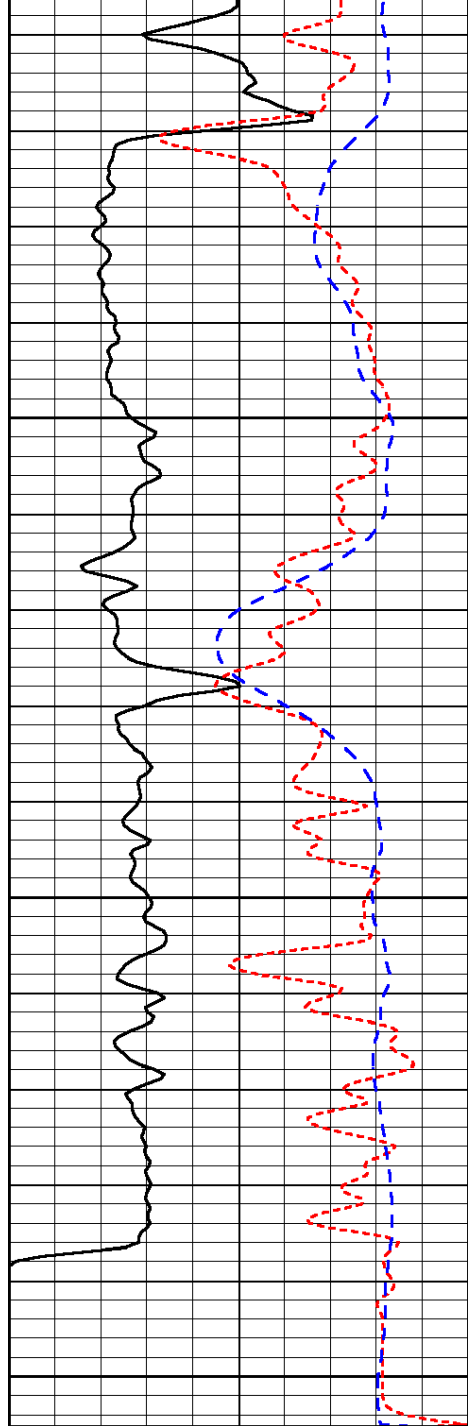
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-33

-33

-33

-33

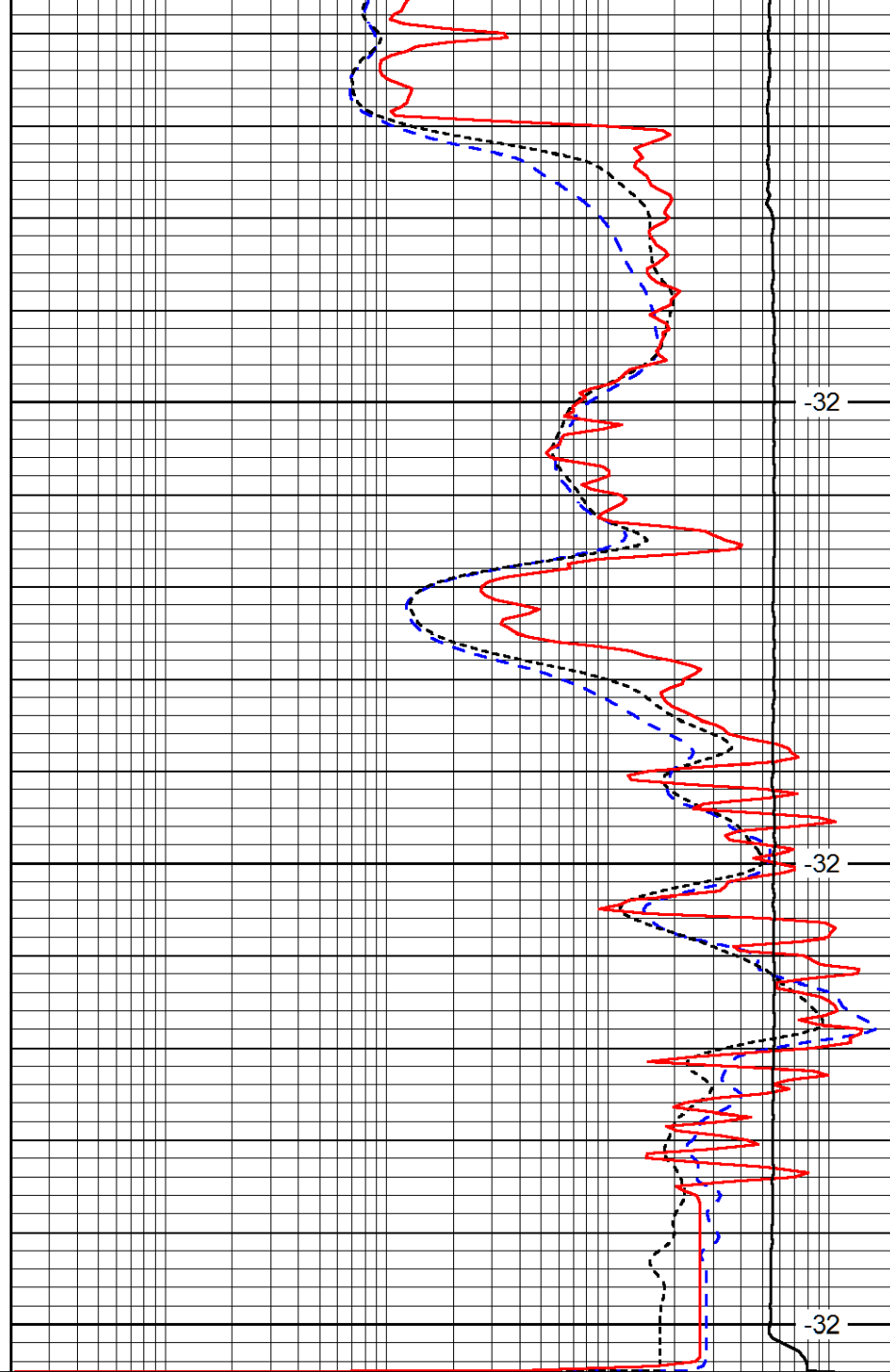


0	Gamma Ray	150
-160	RxoRt	40
-200	SP (mV)	0

4850

4900

4950



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD