



Dual Induction Log

Pioneer Energy Services

API No.

15-167-24,013-00-00

Company TDI, Inc.

Well Zamecnik #1

Field

County Russell

State

Kansas

Location

820' FSL & 1005' FWL

Sec: 8

Twp: 11S

Rge: 11W

Permanent Datum Ground Level
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Elevation 1617
10 Ft. Above Perm. Datum

Other Services
CNL/CDL
MEL
Elevation
K.B. 1627
D.F. 1617
G.L. 1617

Date 11/15/2014

Run Number One

Depth Driller 3950

Depth Logger 3950

Bottom Logged Interval 3949

Top Log Interval 200

Casing Driller 8.625 @ 222

Casing Logger 221

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 9.800

Density / Viscosity 9.4 50

pH / Fluid Loss 11.0 7.4

Source of Sample Flowline

Rm @ Meas. Temp .45 @ 51

Rmf @ Meas. Temp .34 @ 51

Rmc @ Meas. Temp .61 @ 51

Source of Rmf / Rmc Charts

Rm @ BHT .2 @ 116

Operating Rig Time 4 Hours

Max Rec. Temp. F 116

Equipment Number 51

Location Hays

Recorded By C. Desaire

Witnessed By Tom Denning

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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.pioneerres.com
785 625 3858

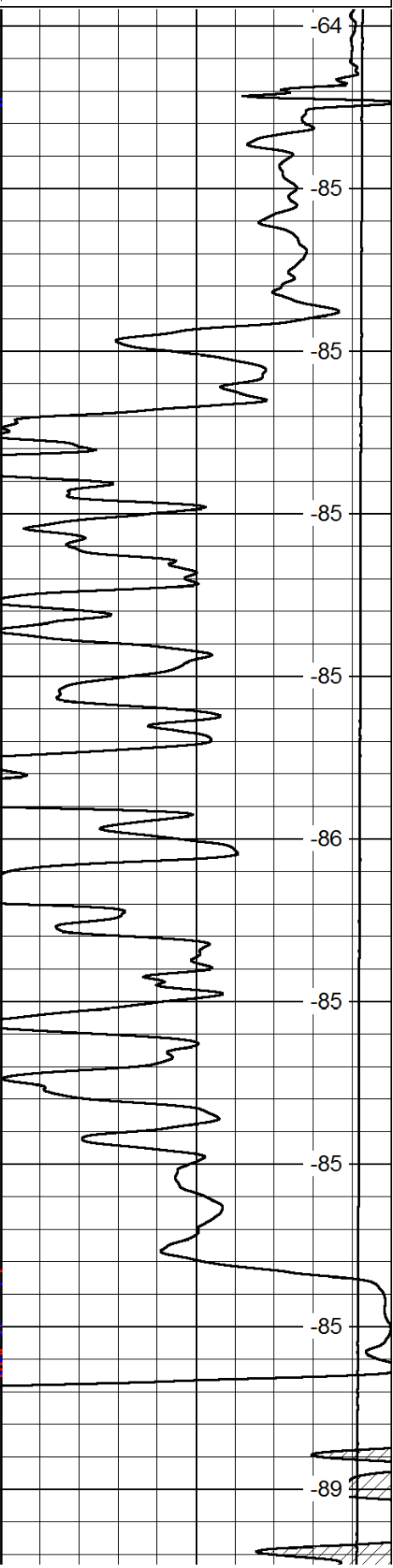
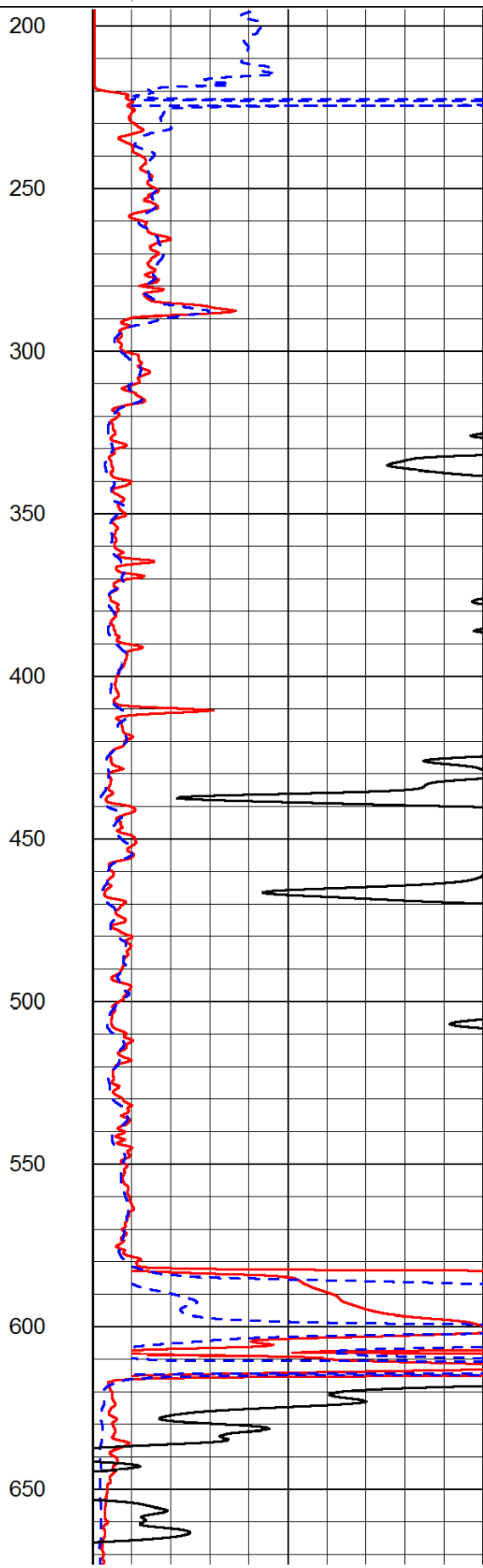
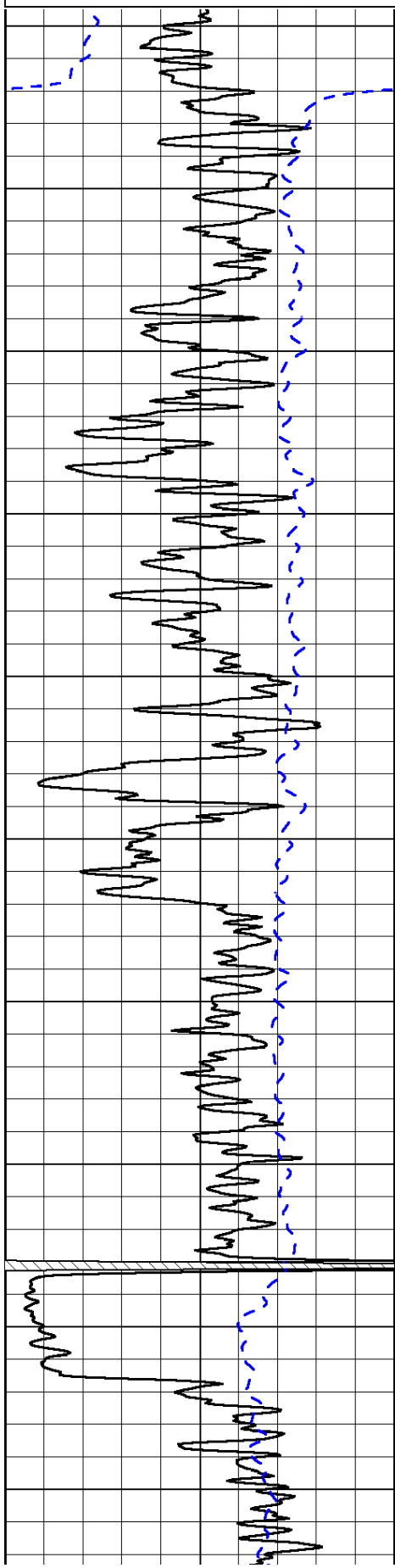
Lucas KS, W to 201 Rd, 2 1/2 N,
Left at Y thru 2 cattle guards, 1/8 N, 1/8 E, N Into

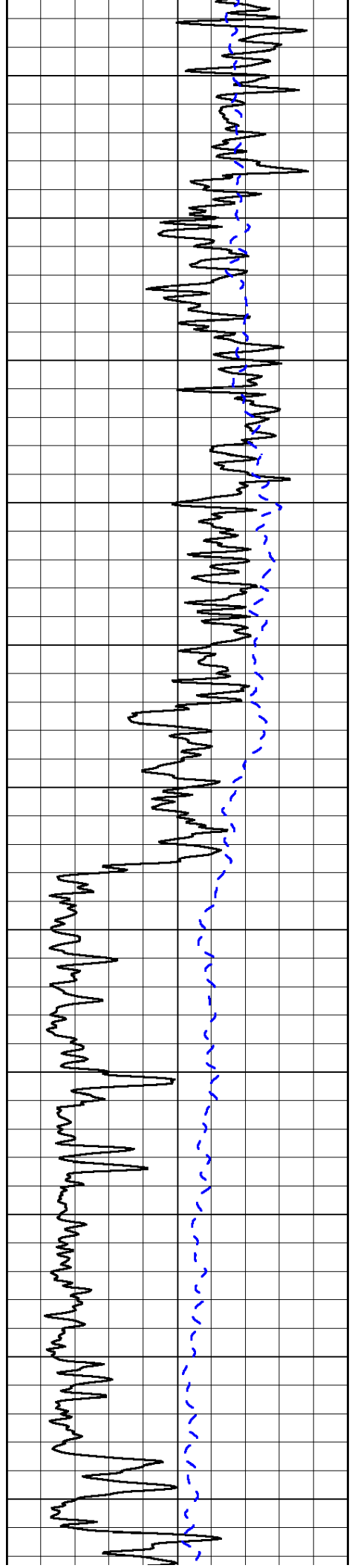
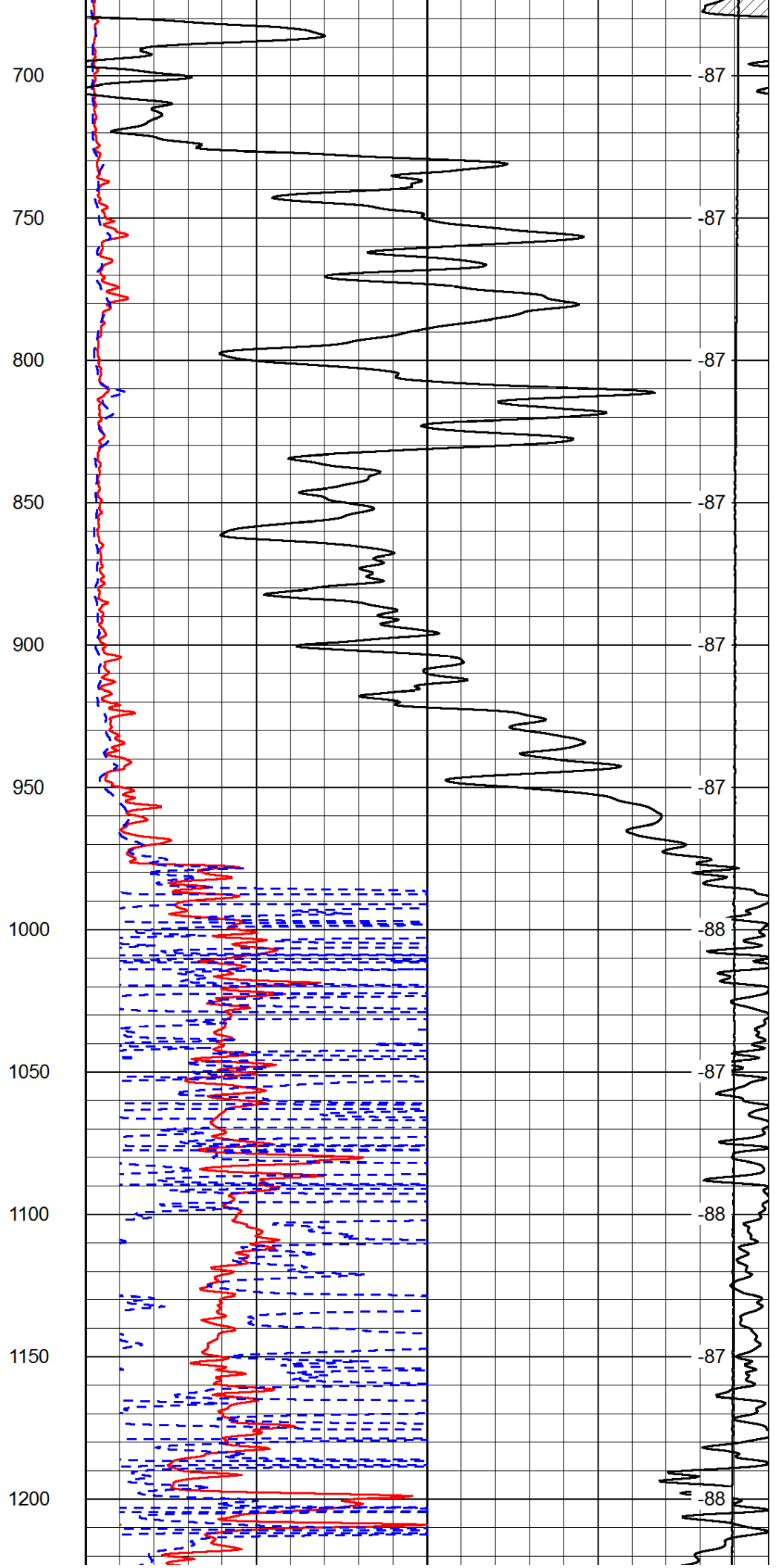
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Dataset Pathname: dil\tdistk
Presentation Format: dil2in
Dataset Creation: Sat Nov 15 11:20:28 2014
Charted by: Depth in Feet scaled 1:600

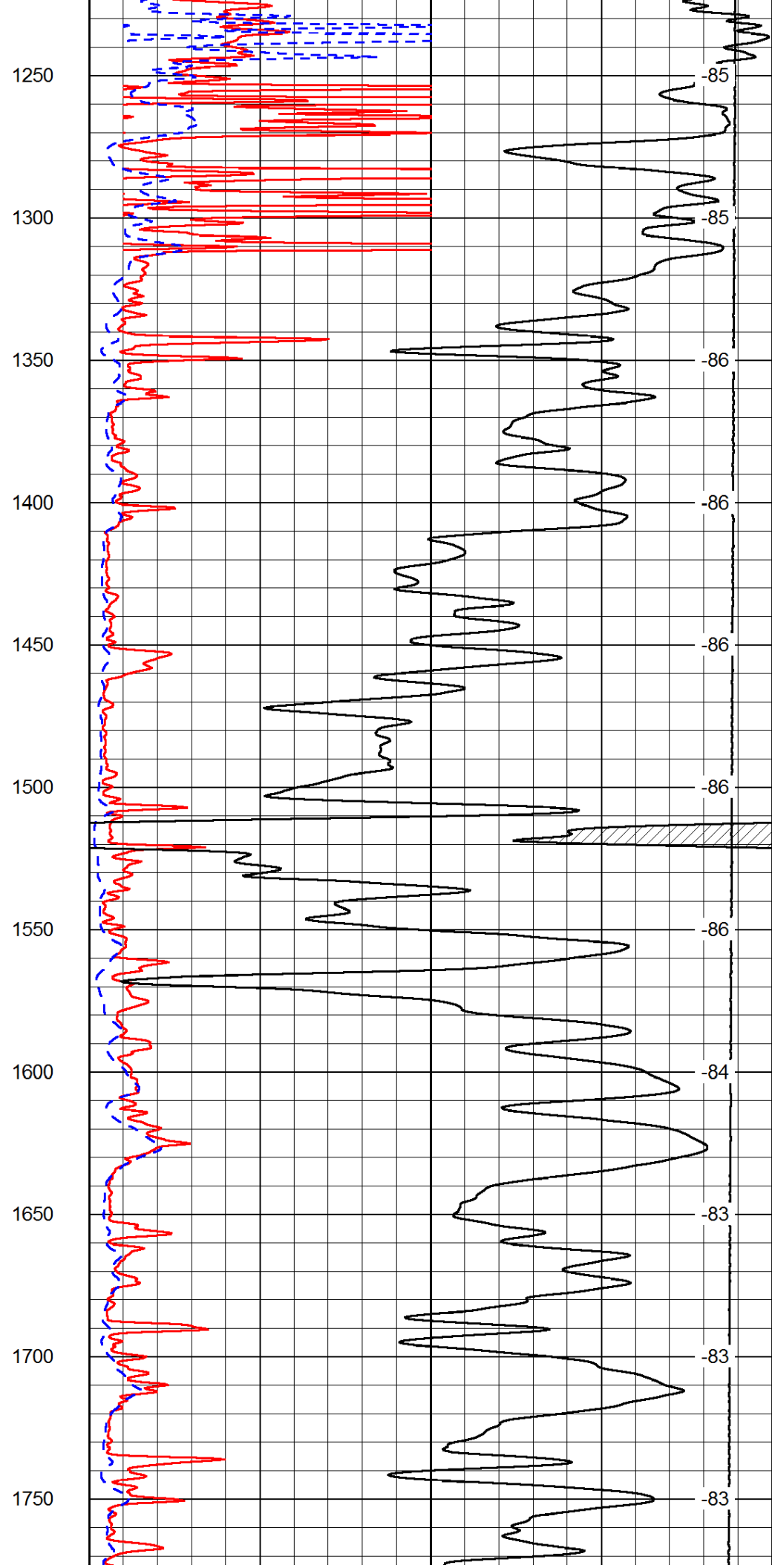
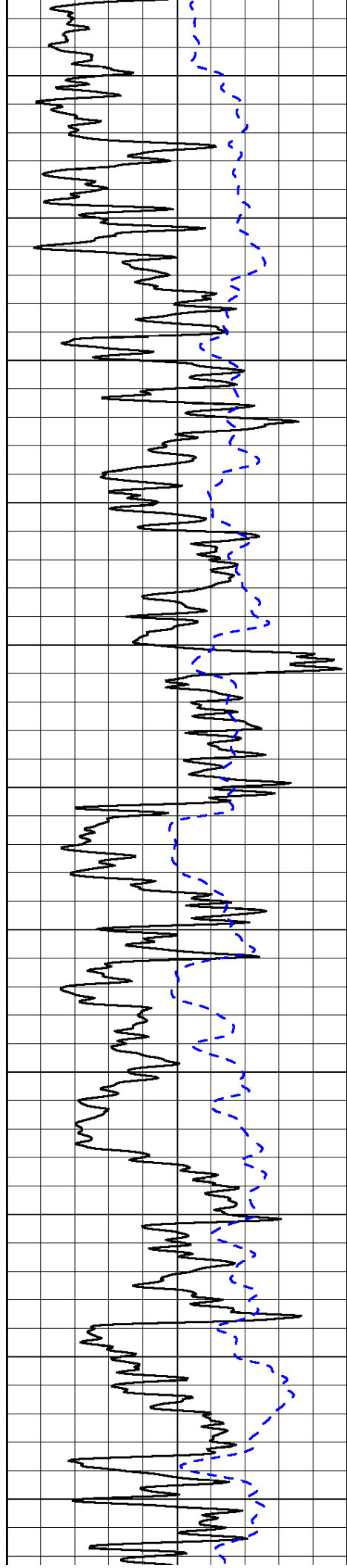
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-200	SP (mV)	0

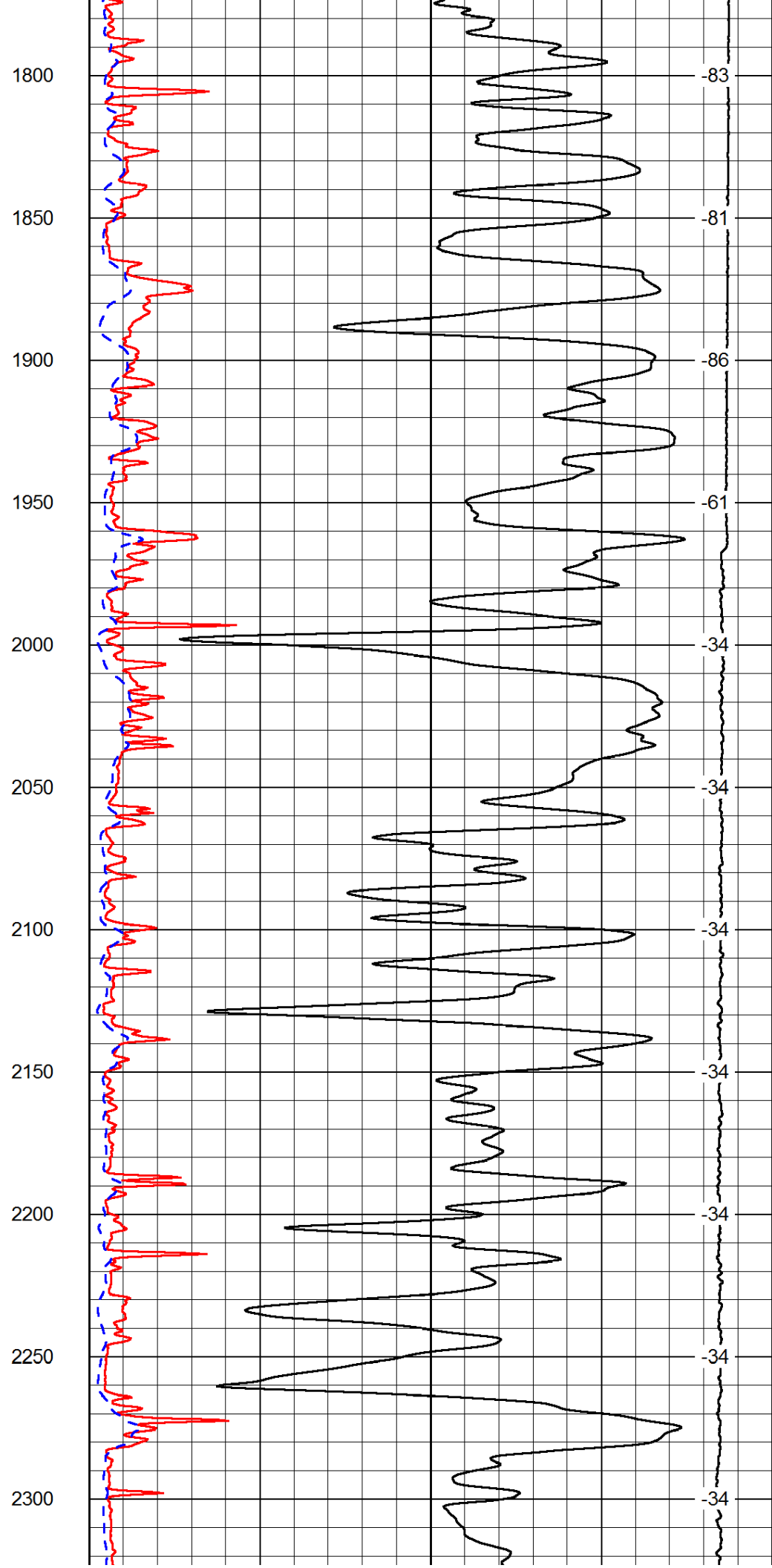
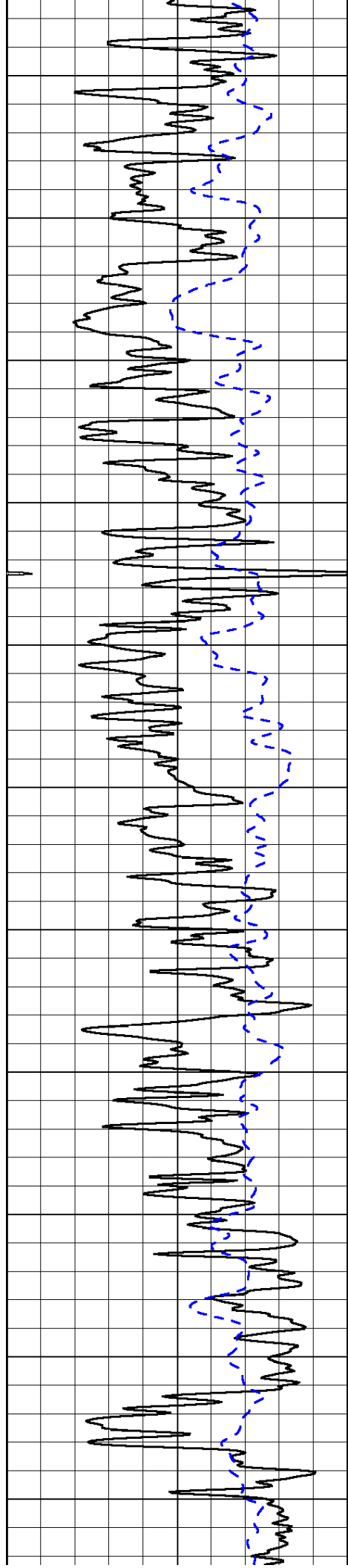
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

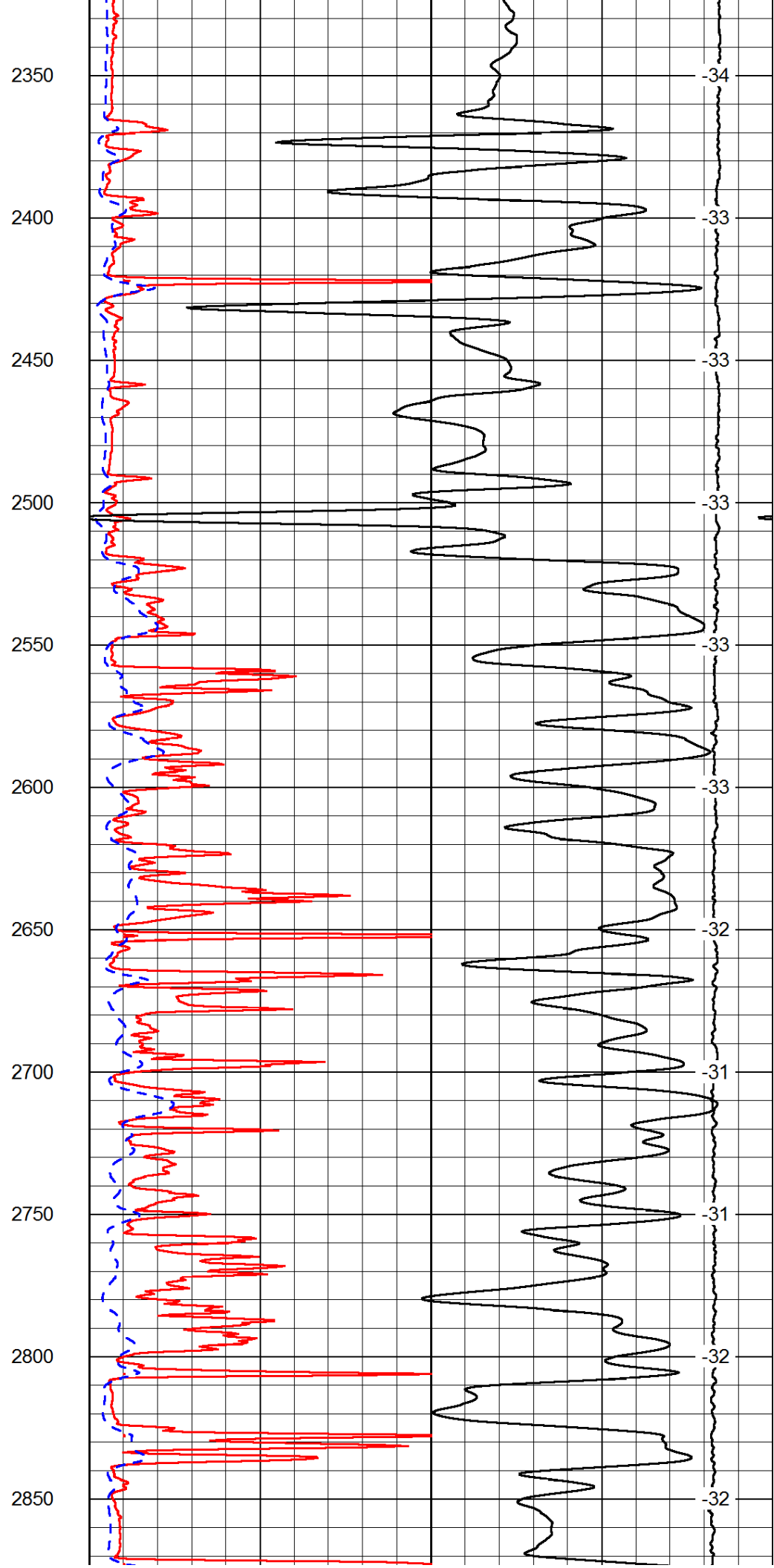
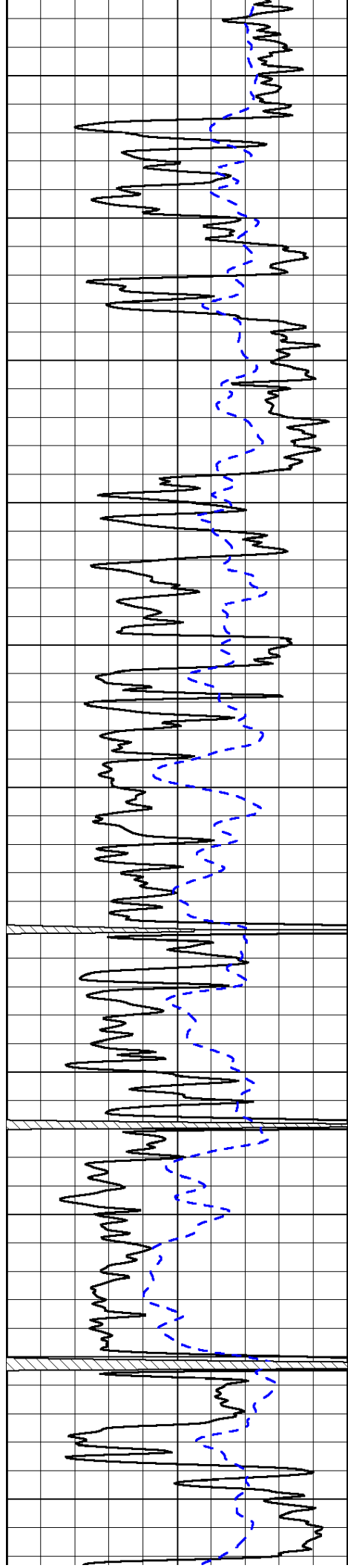
LSPD	0
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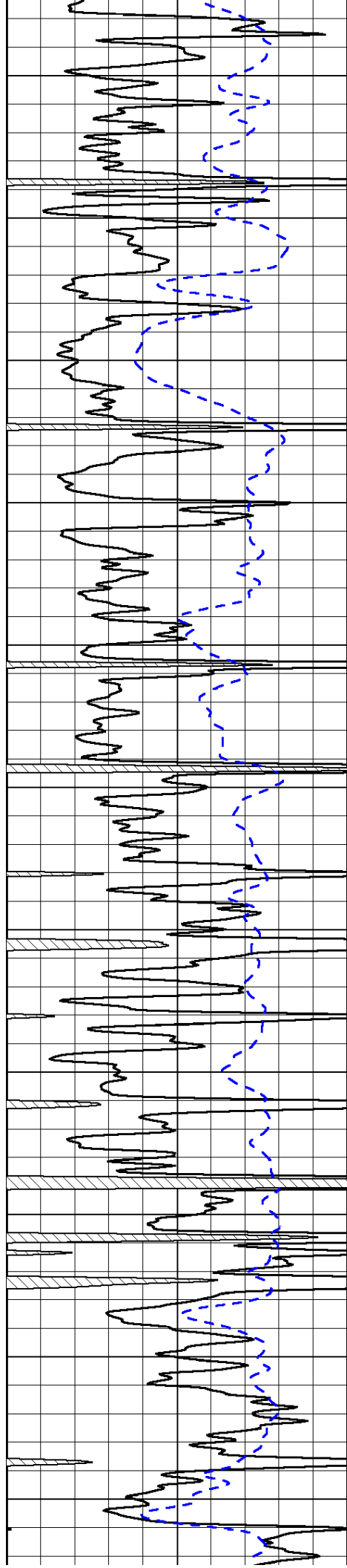












2900

2950

3000

3050

3100

3150

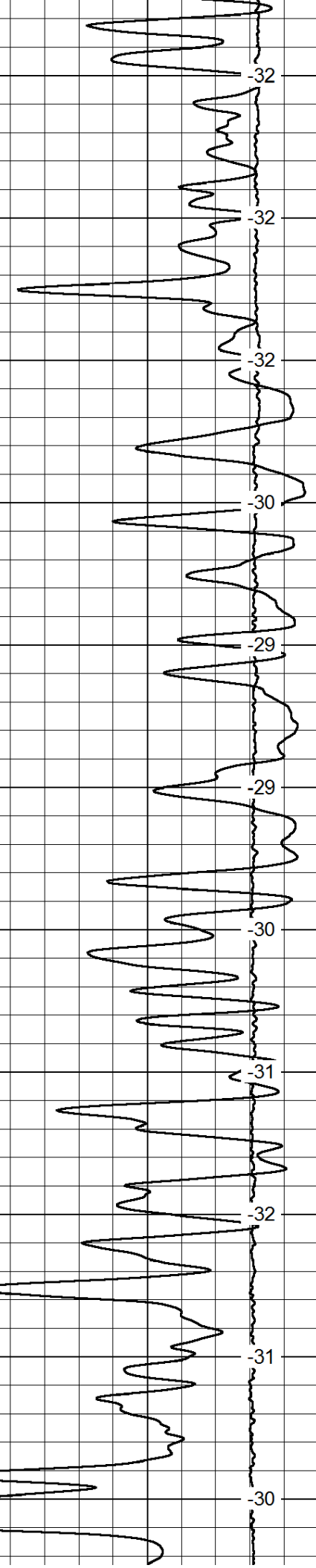
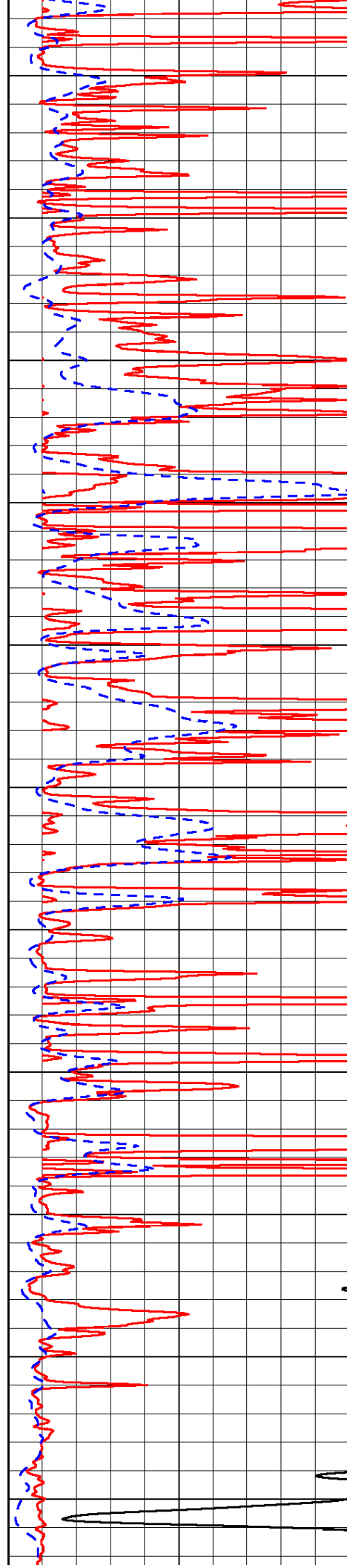
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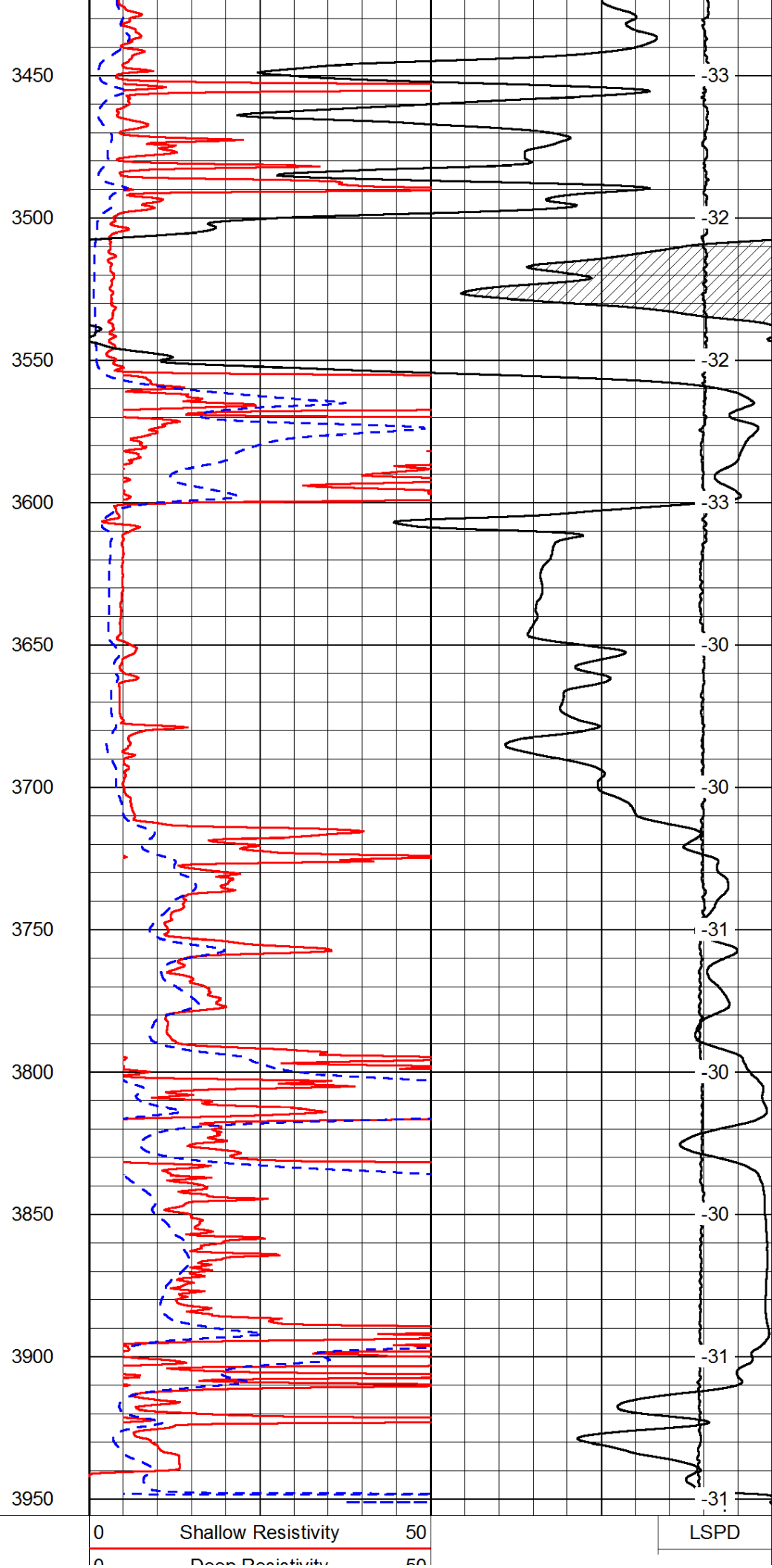
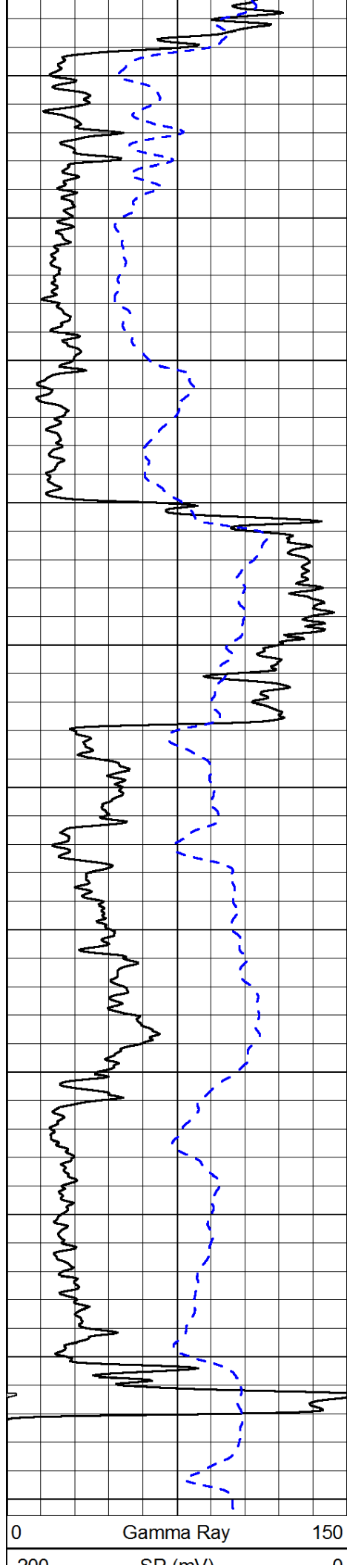
3250

3300

3350

3400





-200	SP (mV)	0
-160	RxoRt	40

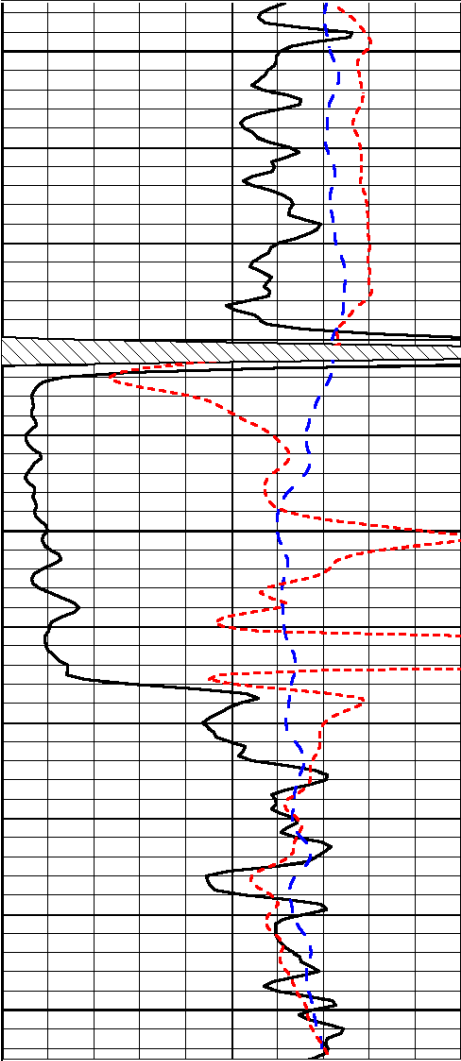
0	Deep Resistivity	500
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

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Dataset Pathname:	dil\tdistk
Presentation Format:	dil
Dataset Creation:	Sat Nov 15 11:20:28 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

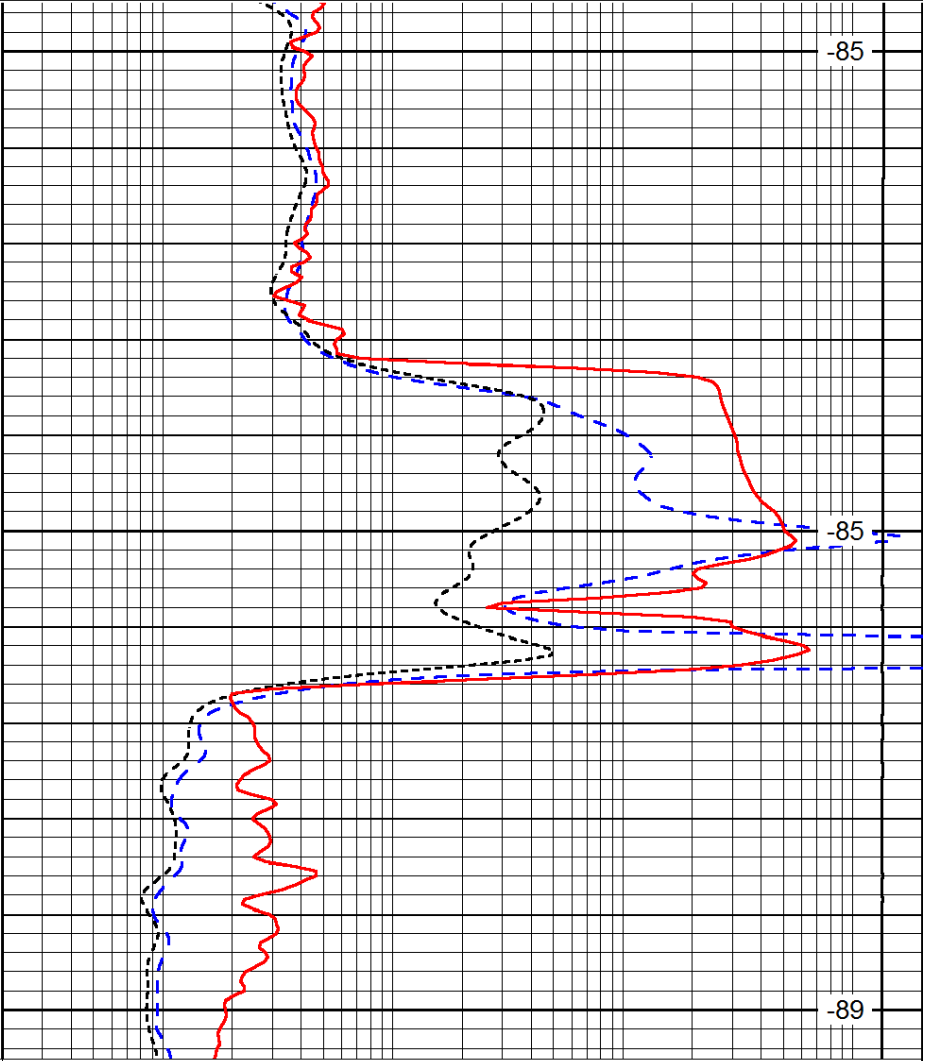
LSPD



550

600

650



-85

-85

-89

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

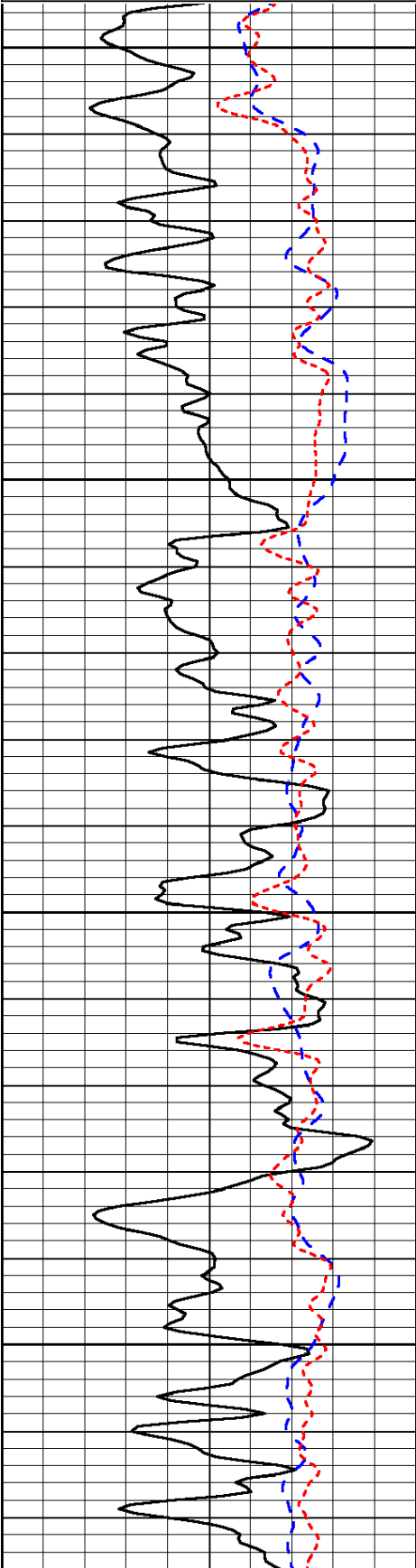
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Dataset Pathname:	dil\tdistk

Dataset Pathname: gll/tulstk
Presentation Format: dil
Dataset Creation: Sat Nov 15 11:20:28 2014
Charted by: Depth in Feet scaled 1:240

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-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

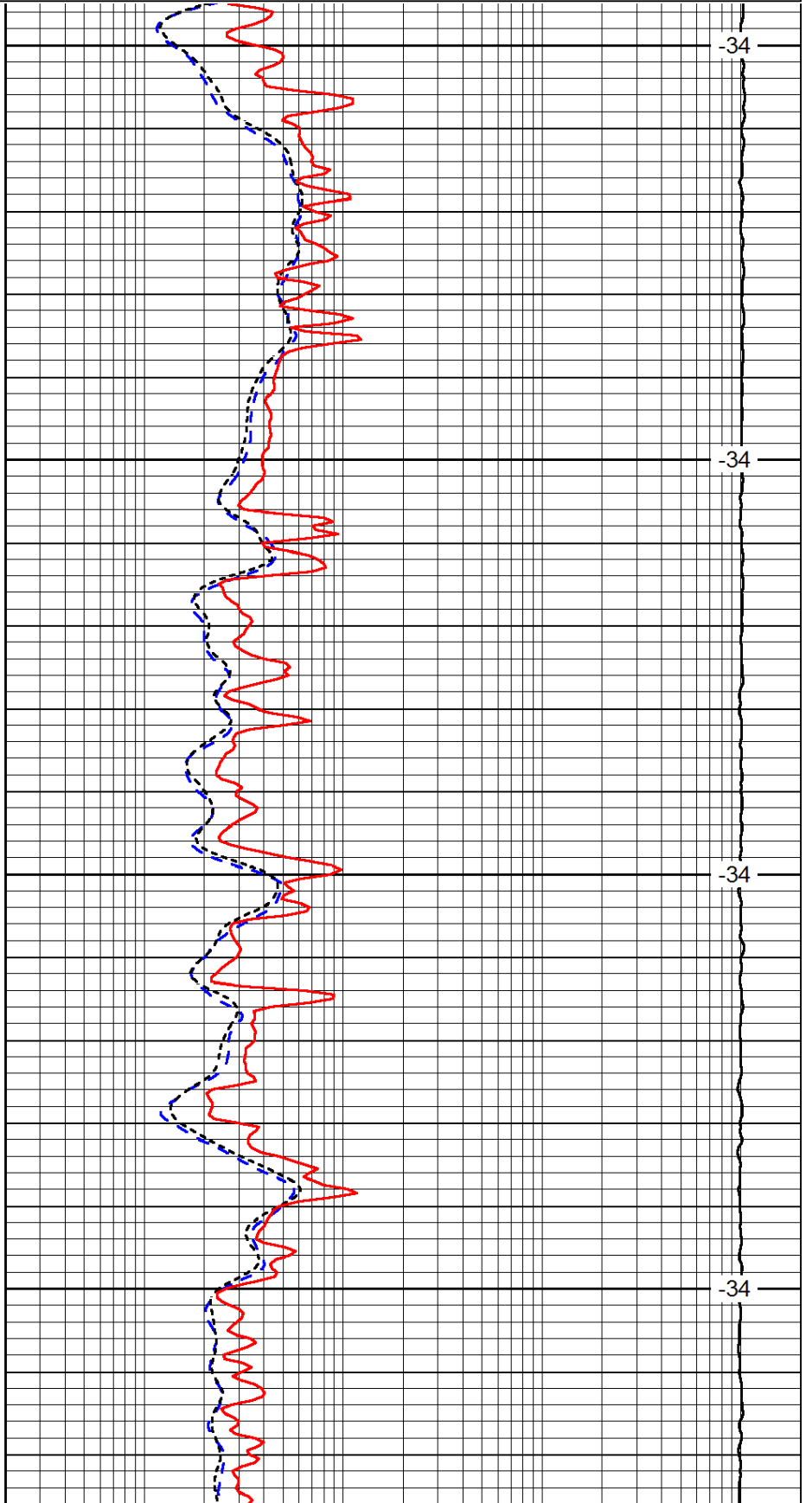


2000

2050

2100

2150

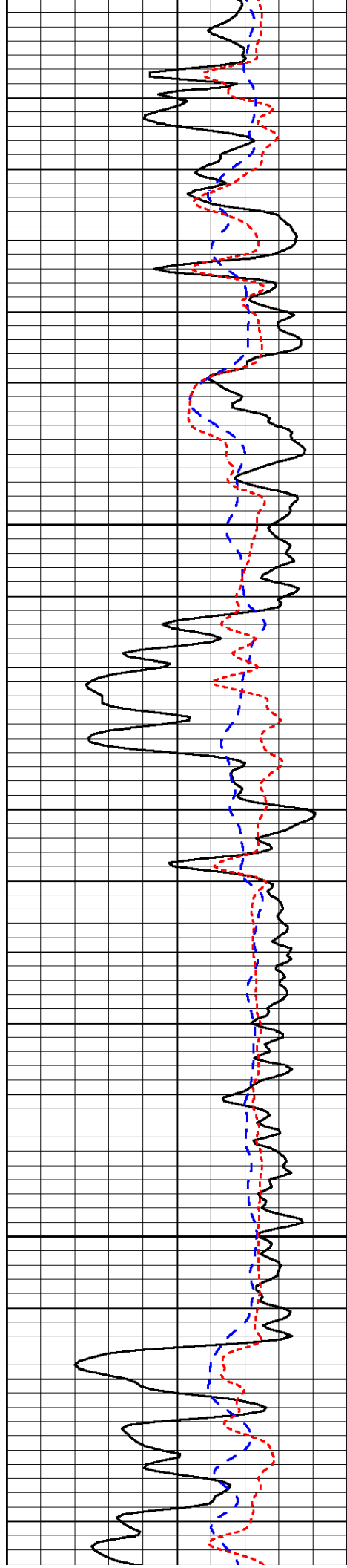


-34

-34

-34

-34

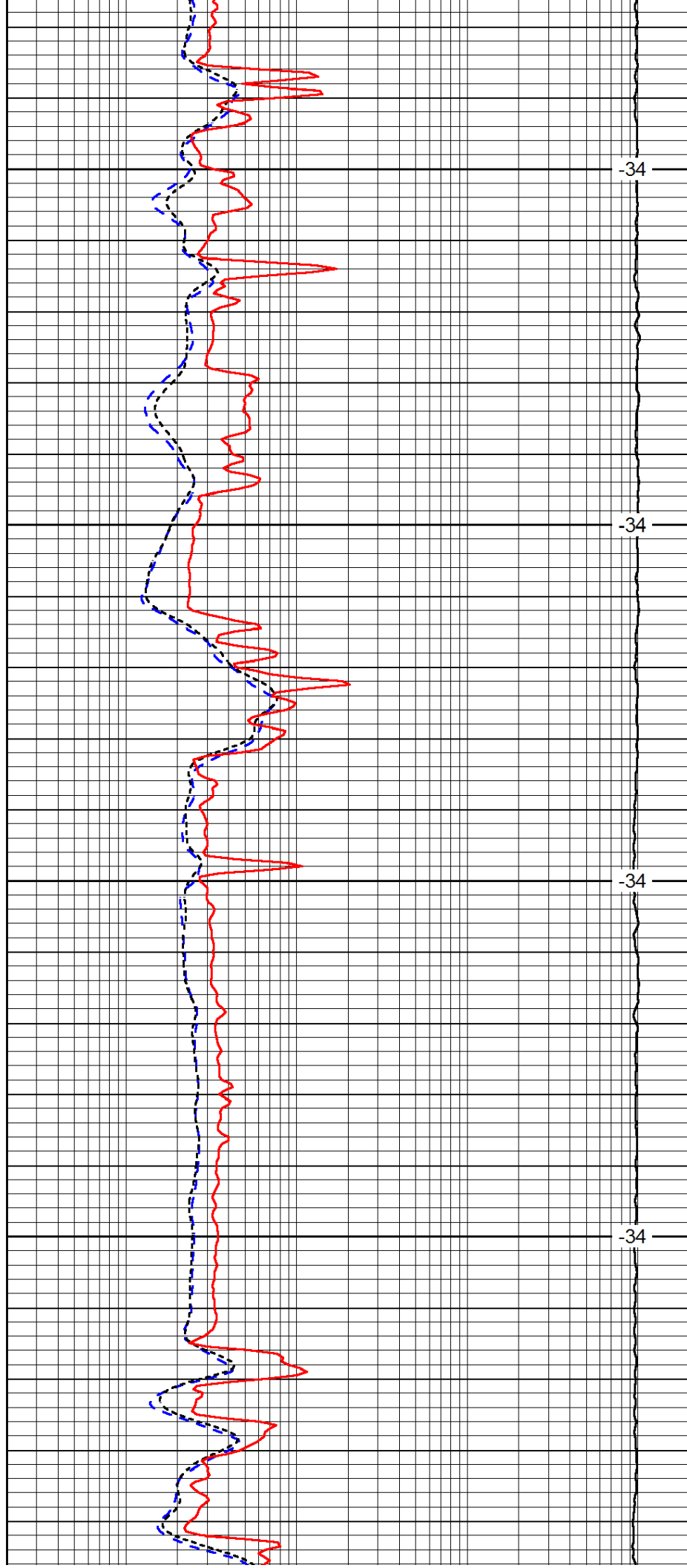


2200

2250

2300

2350

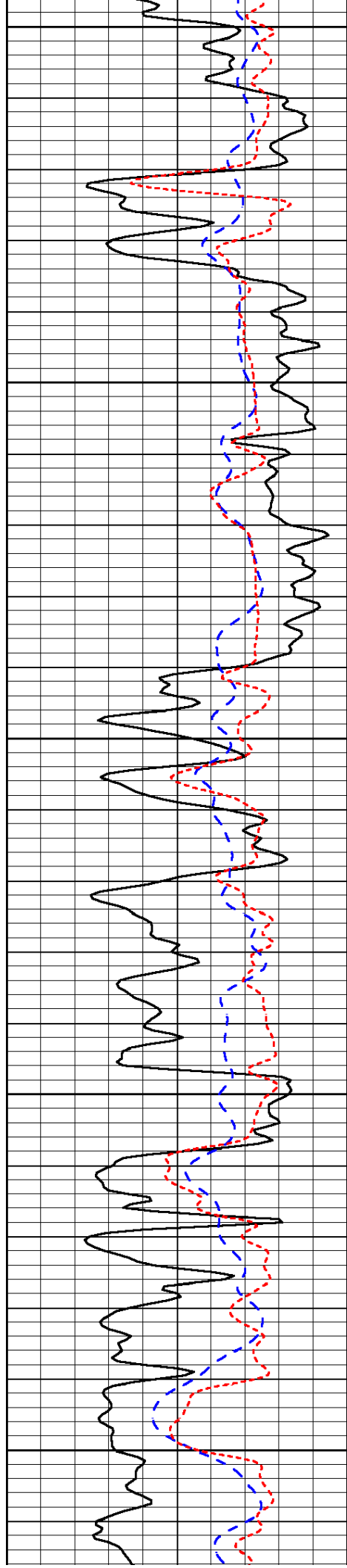


-34

-34

-34

-34



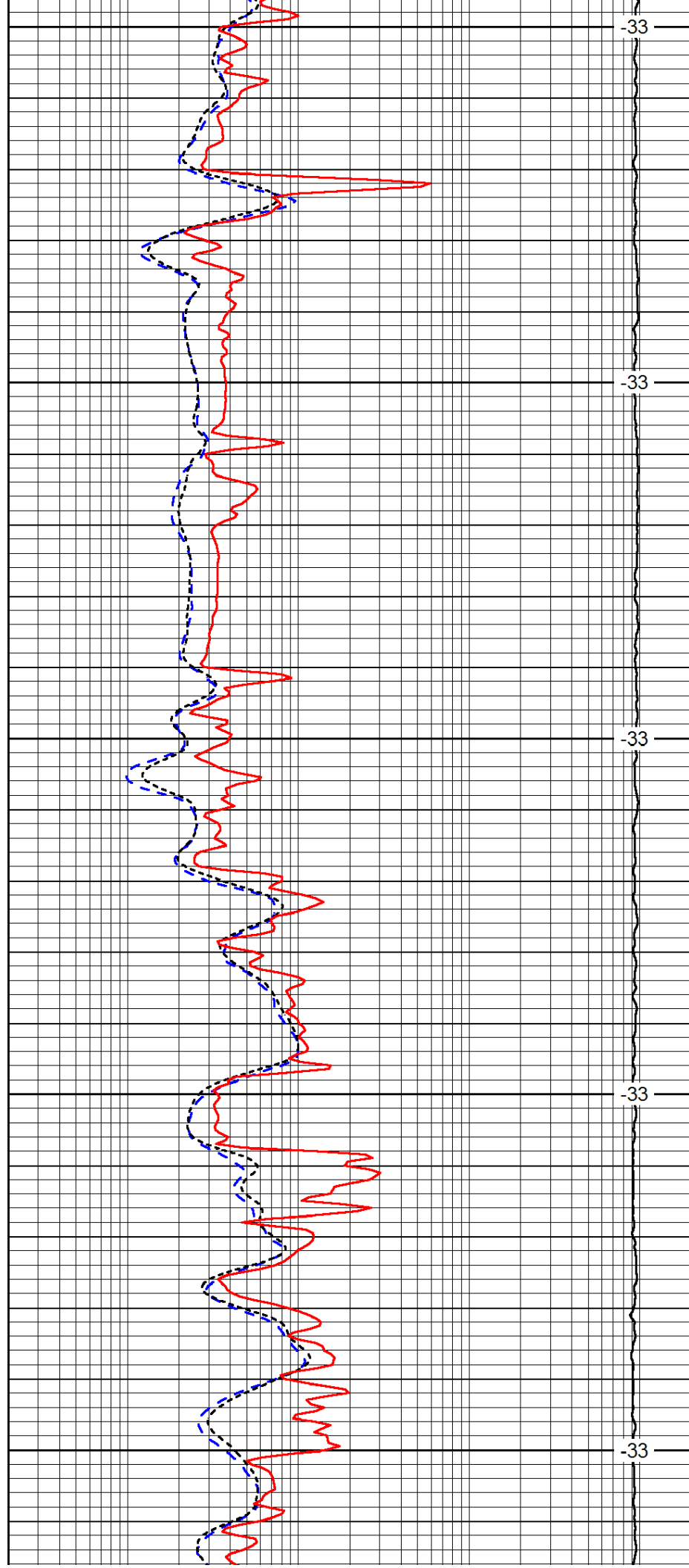
2400

2450

2500

2550

2600



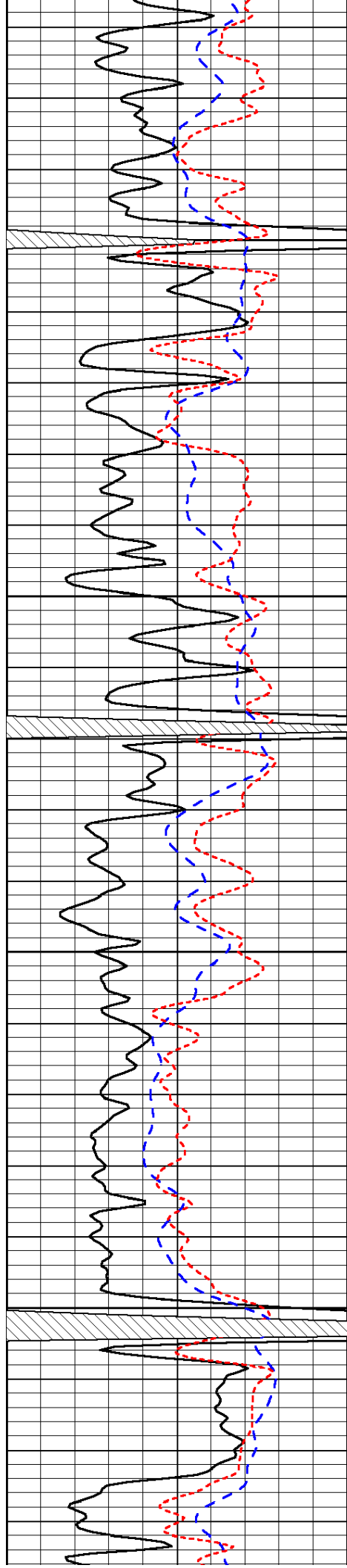
-33

-33

-33

-33

-33

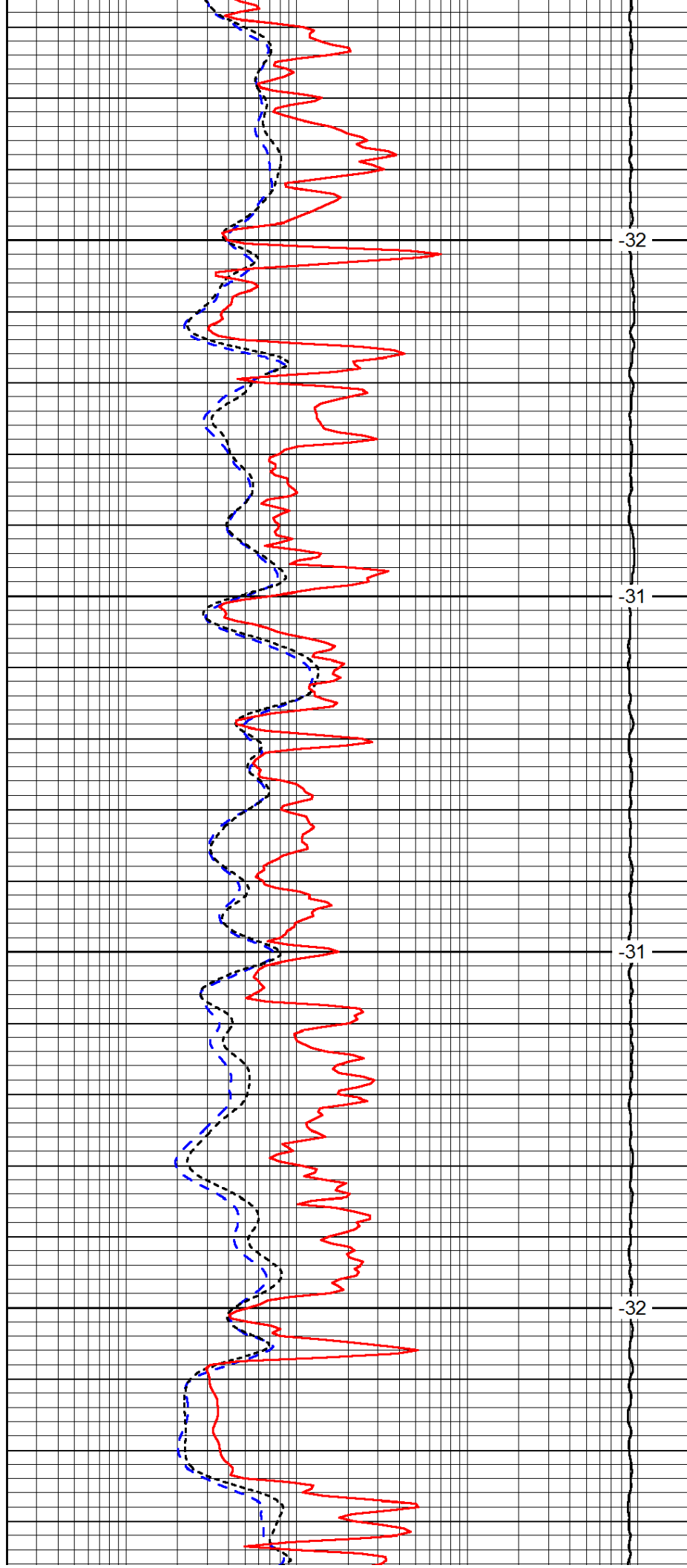


2650

2700

2750

2800

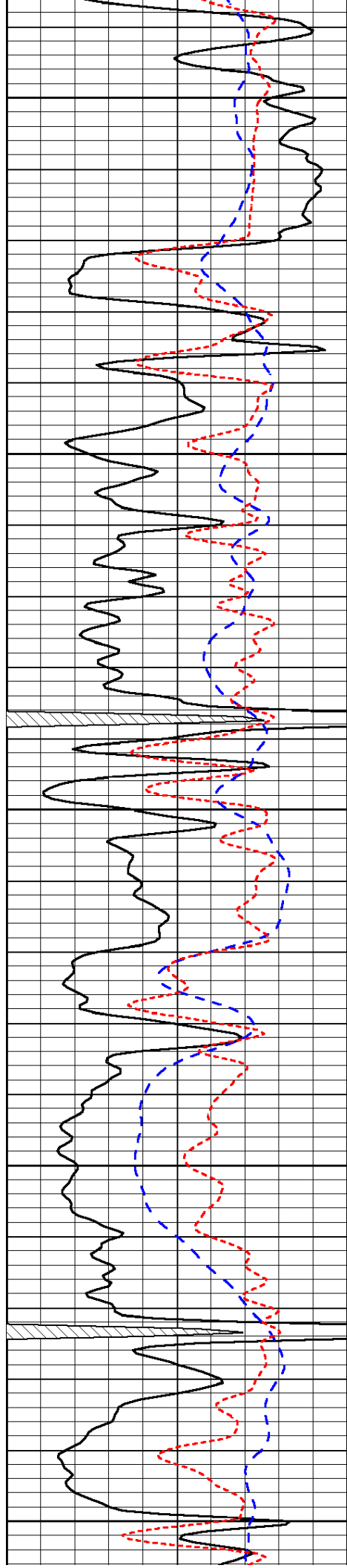


-32

-31

-31

-32



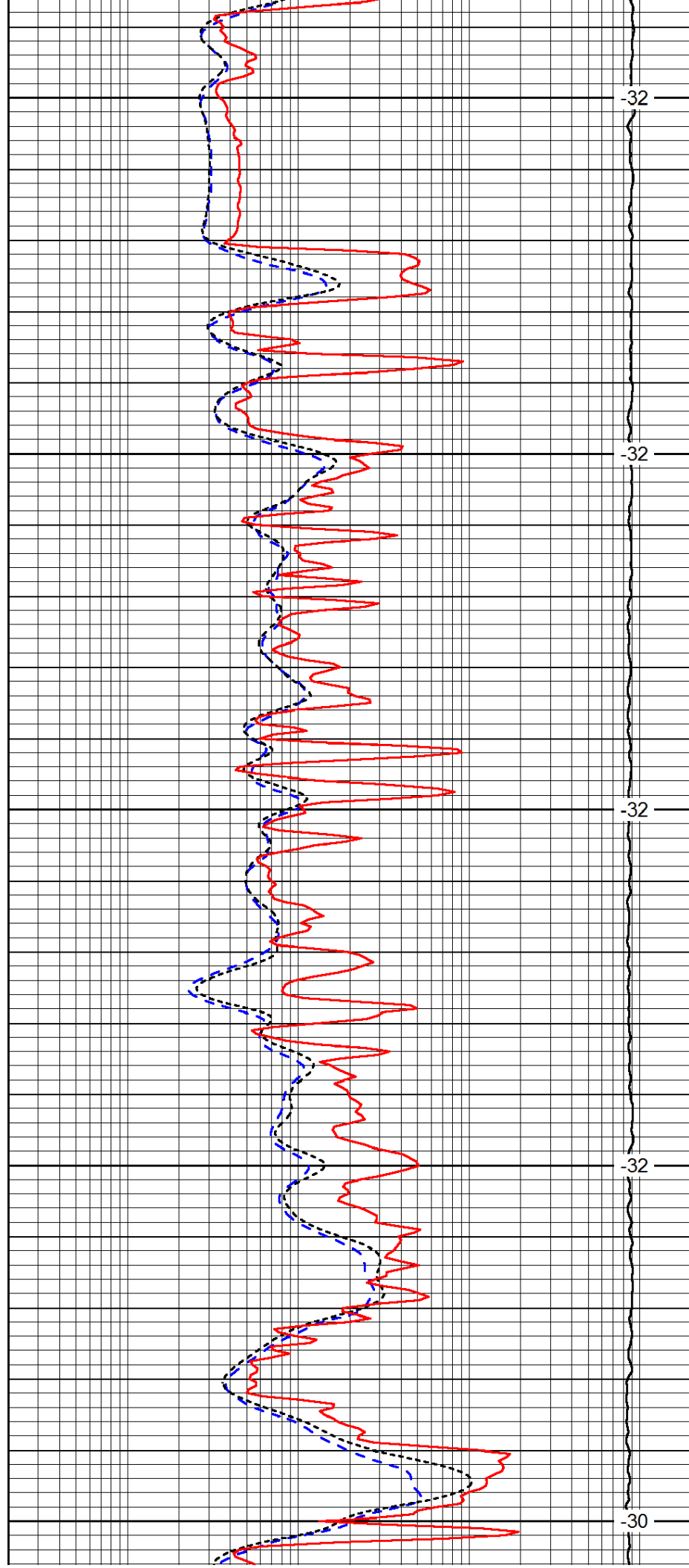
2850

2900

2950

3000

3050



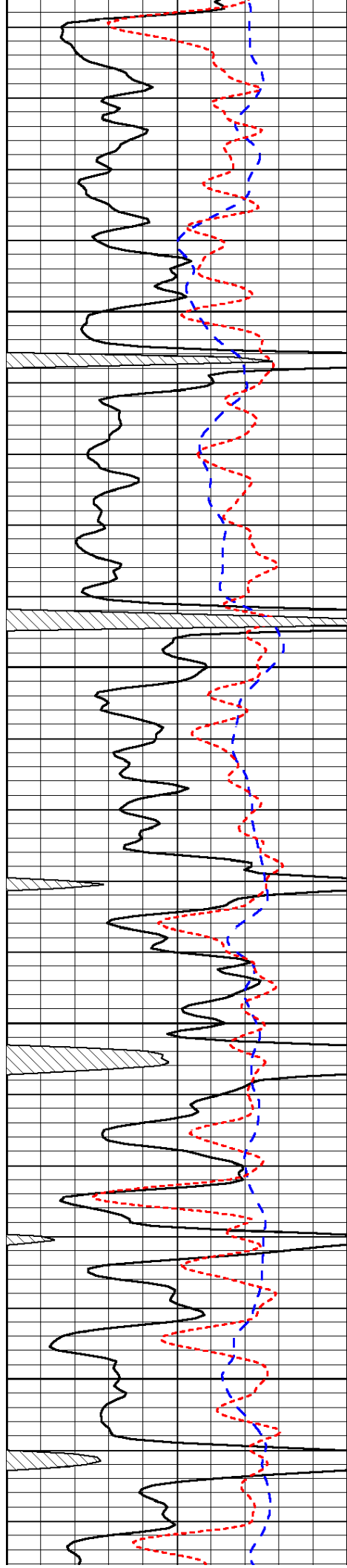
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-32

-32

-32

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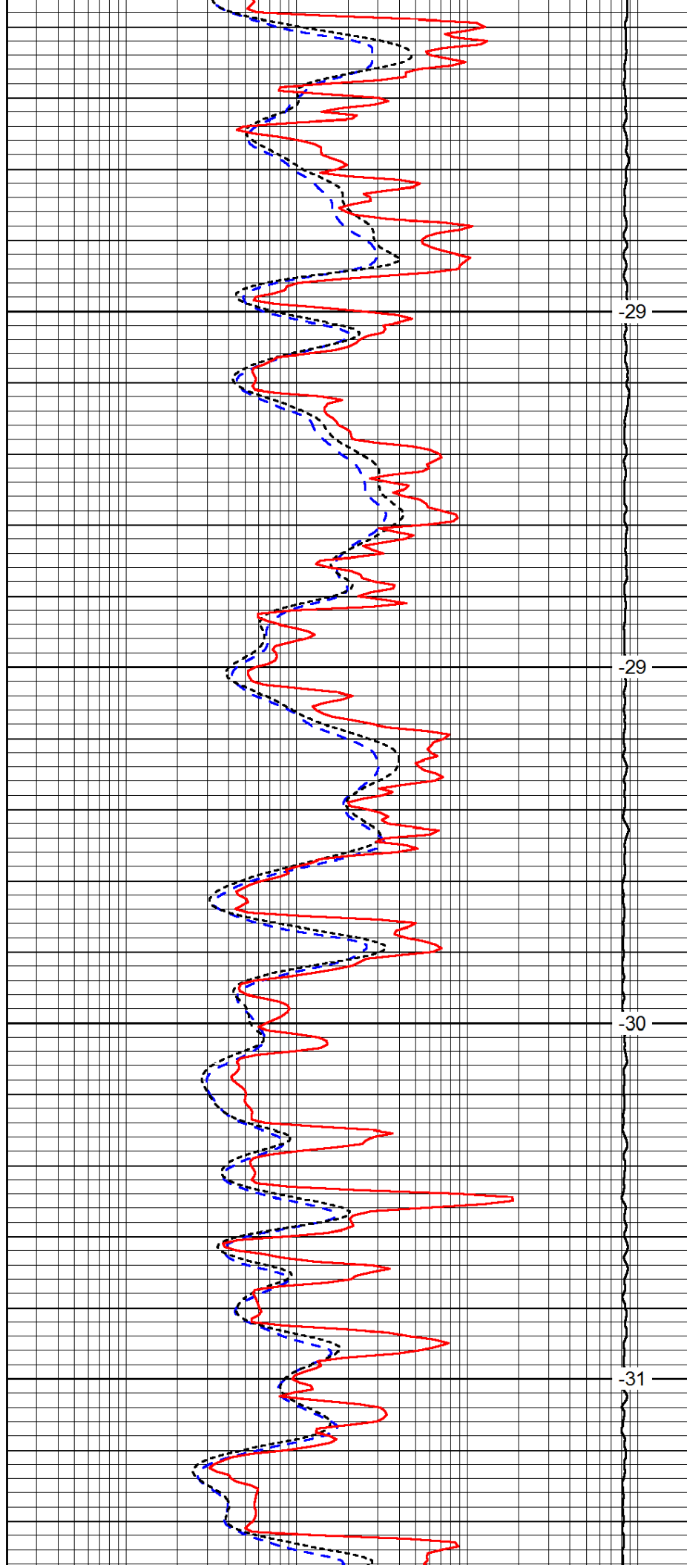


3100

3150

3200

3250

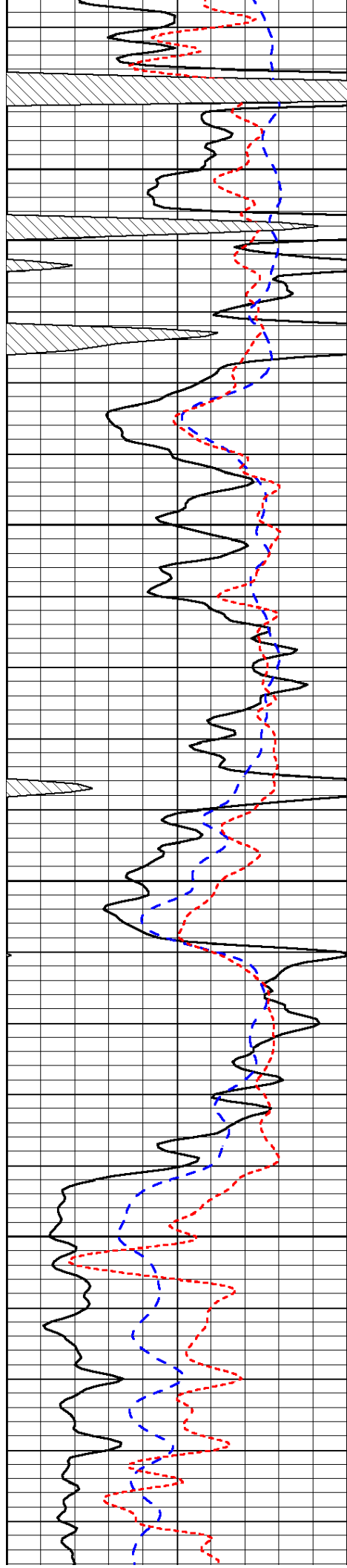


-29

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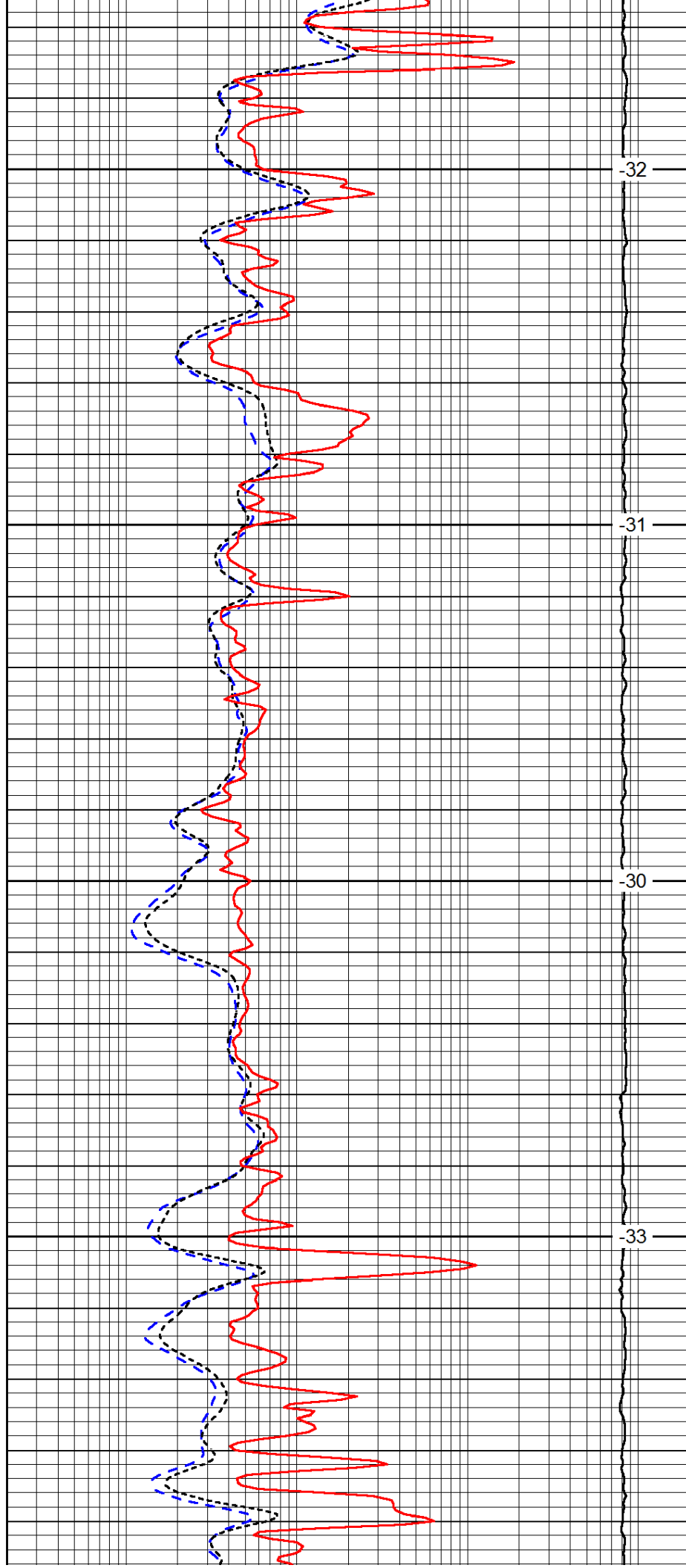


3300

3350

3400

3450

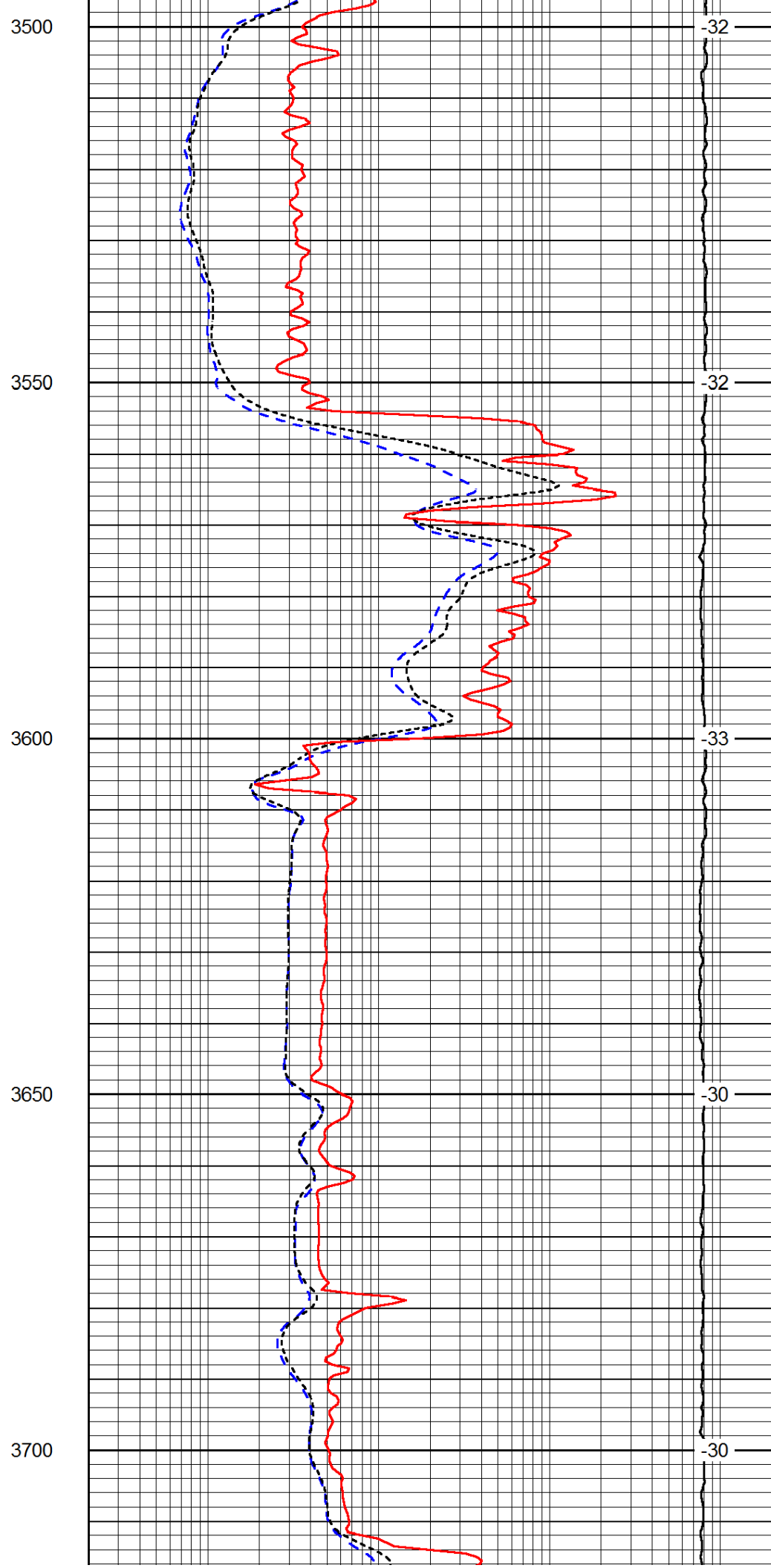
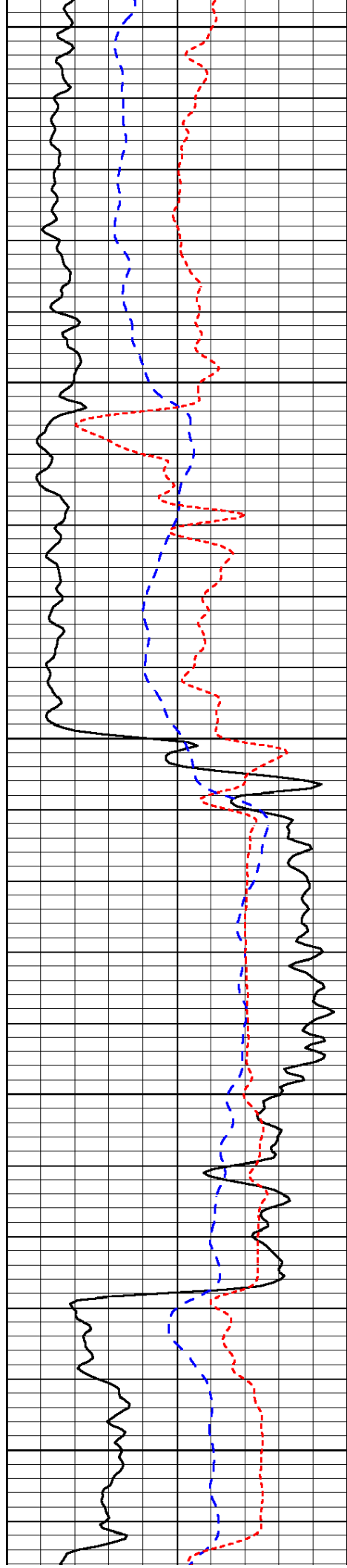


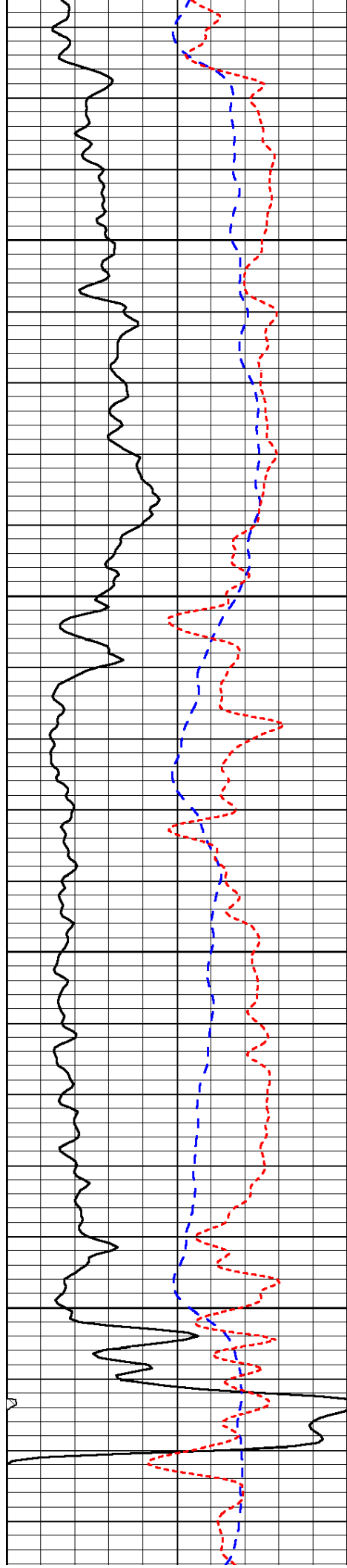
32

31

30

33



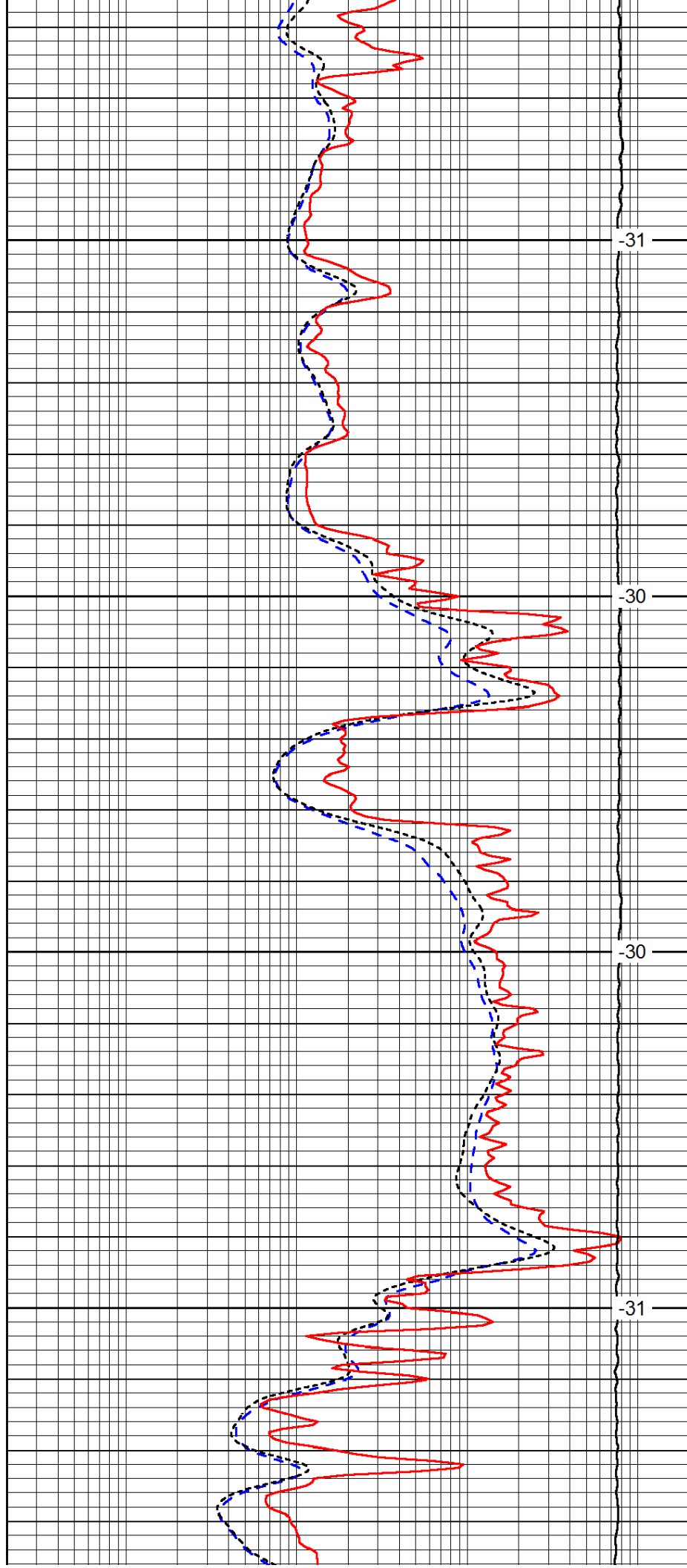


3750

3800

3850

3900

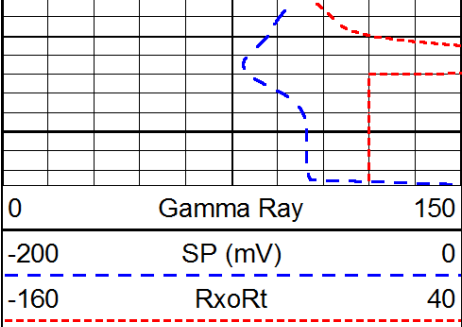


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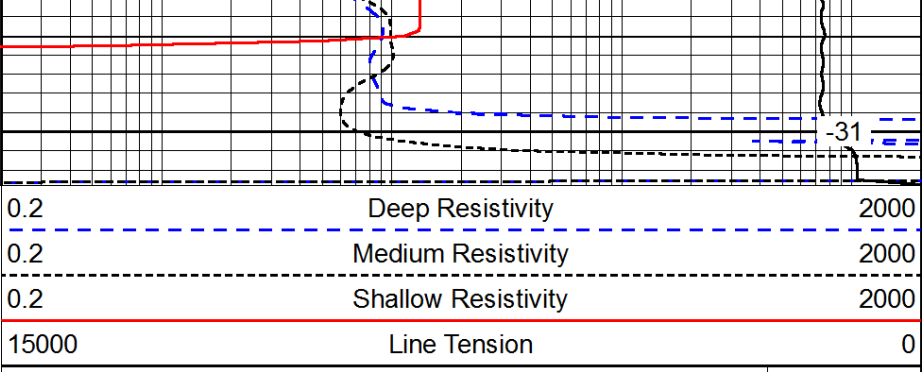
-30

-30

-31



3950



-31

LSPD