



Dual Induction Log

Pioneer Energy Services

API No.

15-109-21,221-00-00

Company Lario Oil & Gas Company

Well Rose B Unit No. 1-4

Field Corinne

County Logan State

Kansas

Location S2-N2-N2-N2
400' FNL & 2640' FEL

Sec: 4 Twp: 15S Rge: 32W

Permanent Datum Ground Level Elevation 2758
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
MEL

Date 12/18/2013

Run Number One

Depth Driller 4500

Depth Logger 4500

Bottom Logged Interval 4499

Top Log Interval 250

Casing Driller 8.625 @ 252

Casing Logger 250

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity,ppm CL 4,500

Density / Viscosity 9.1 48

pH / Fluid Loss 10.5 7.2

Source of Sample Flowline

Rm @ Meas. Temp .56 @ 52

Rmf @ Meas. Temp .42 @ 52

Rmc @ Meas. Temp .76 @ 52

Source of Rmf / Rmc Charts

Rm @ BHT .24 @ 121

Operating Rig Time 4 Hours

Max Rec. Temp. F 121

Equipment Number 17

Location Hays

Recorded By J. Henrickson

Witnessed By Steve Davis

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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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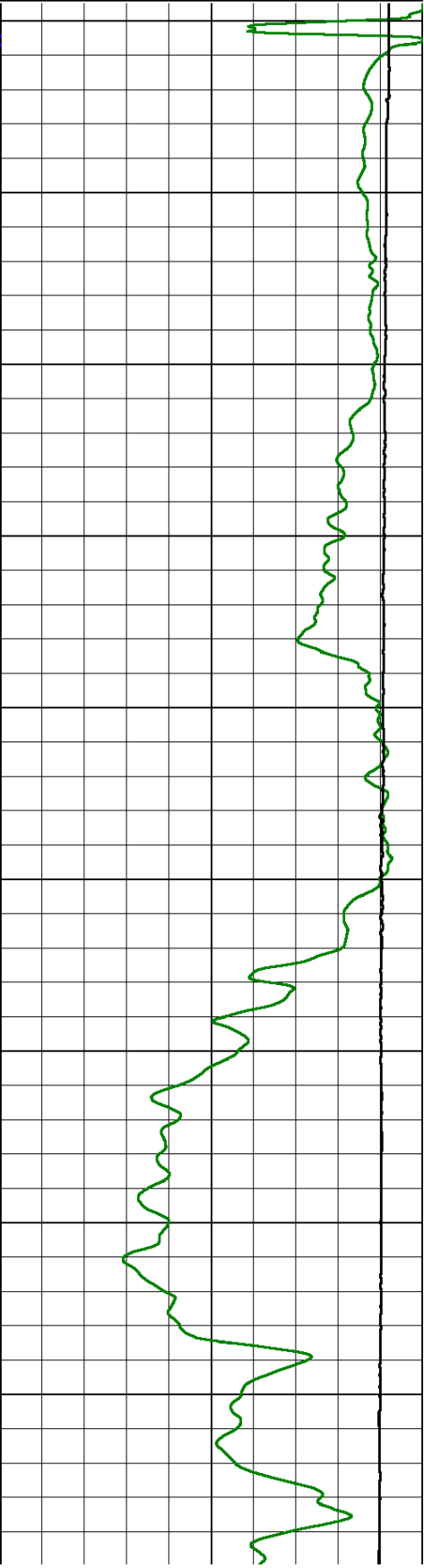
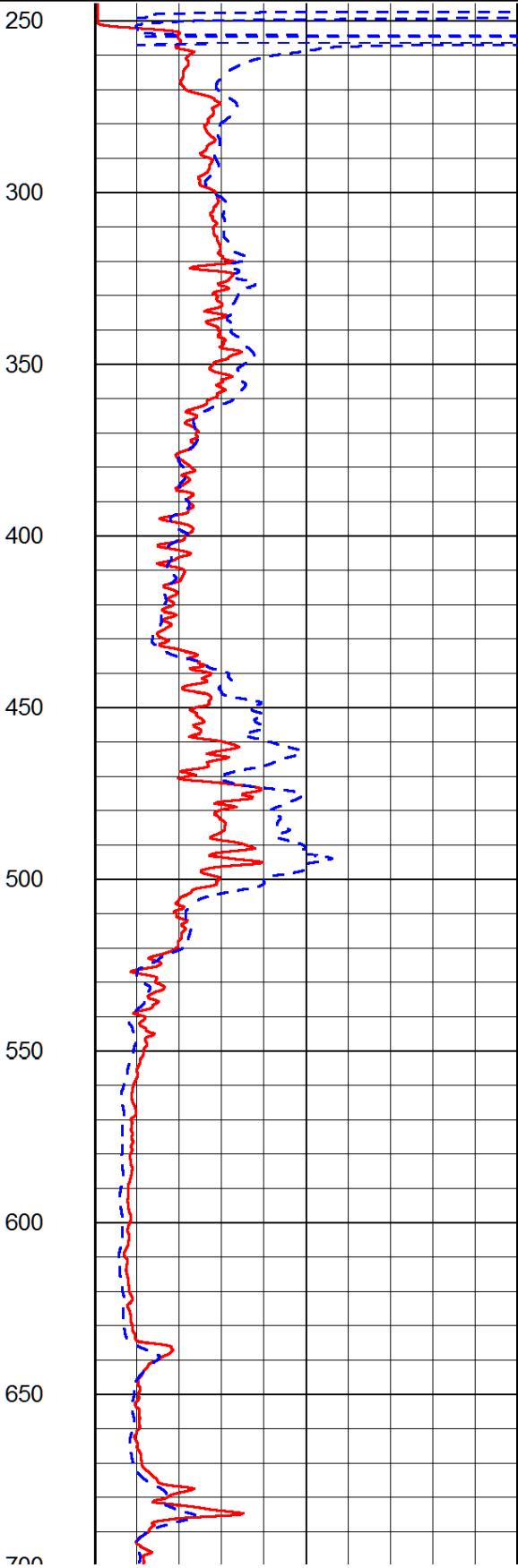
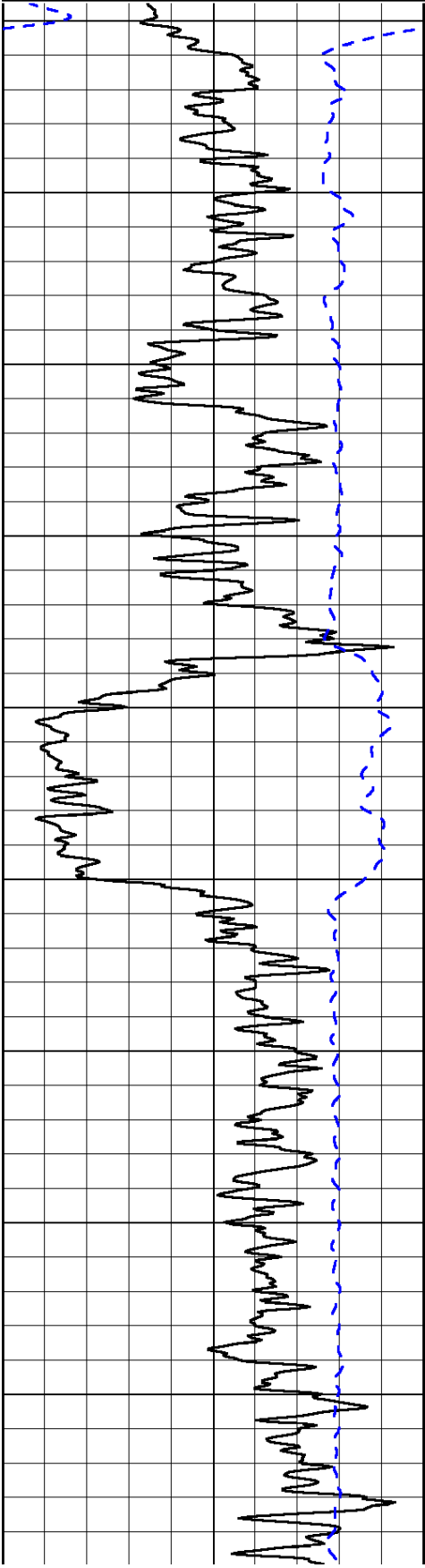
Oakley Kansas
South to Gold Rd, 1.2 West, South Into

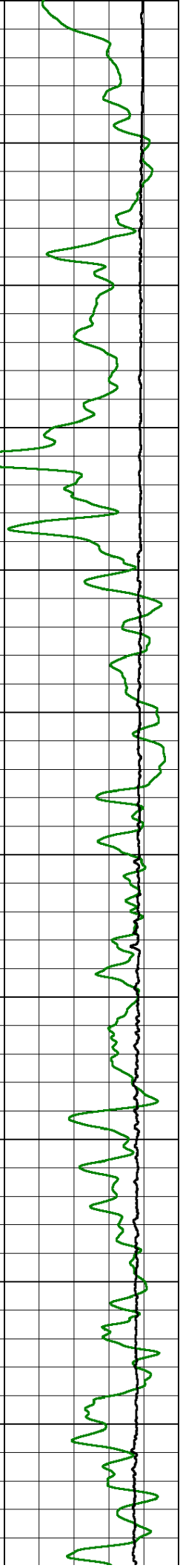
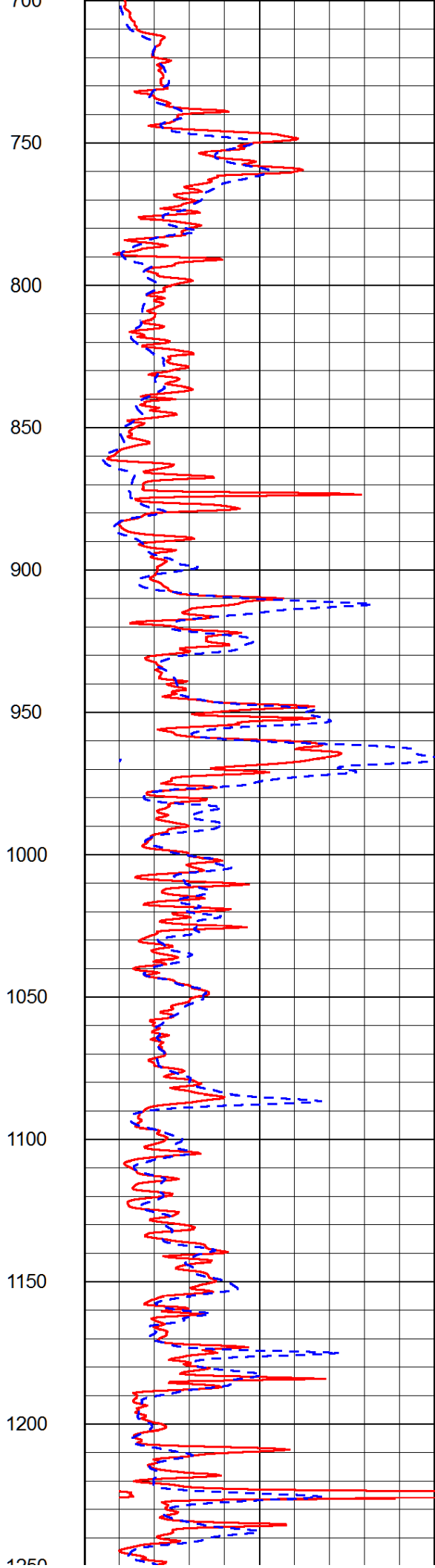
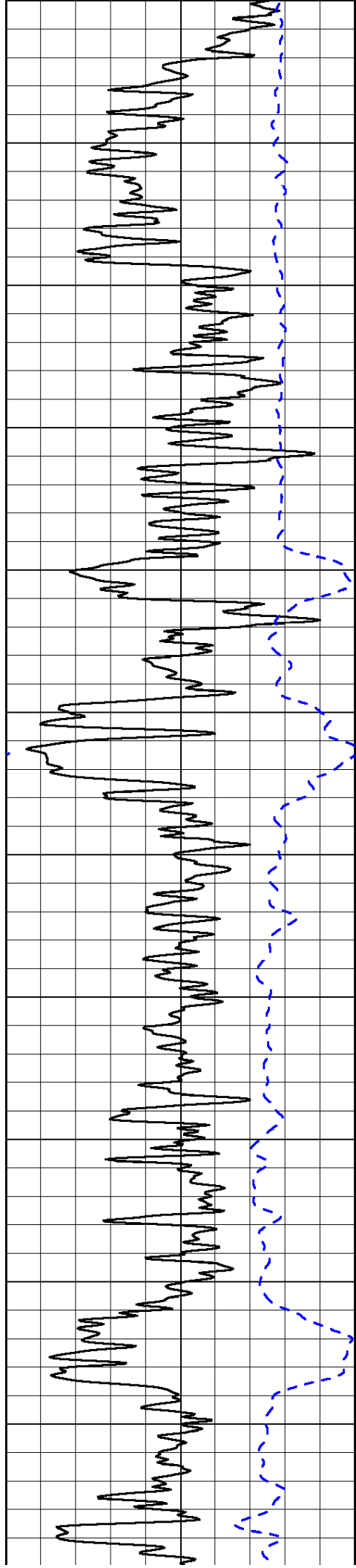
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Dataset Creation: Wed Dec 18 21:26:54 2013
Charted by: Depth in Feet scaled 1:600

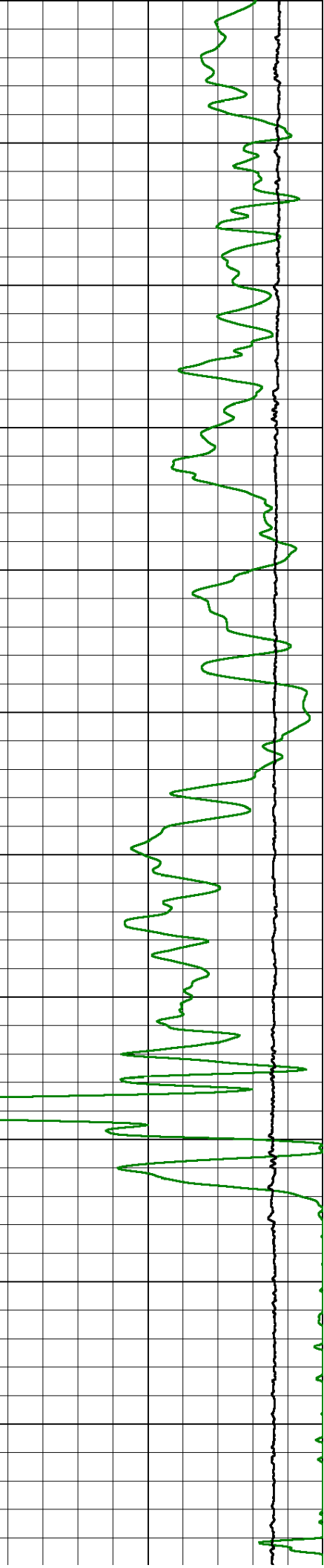
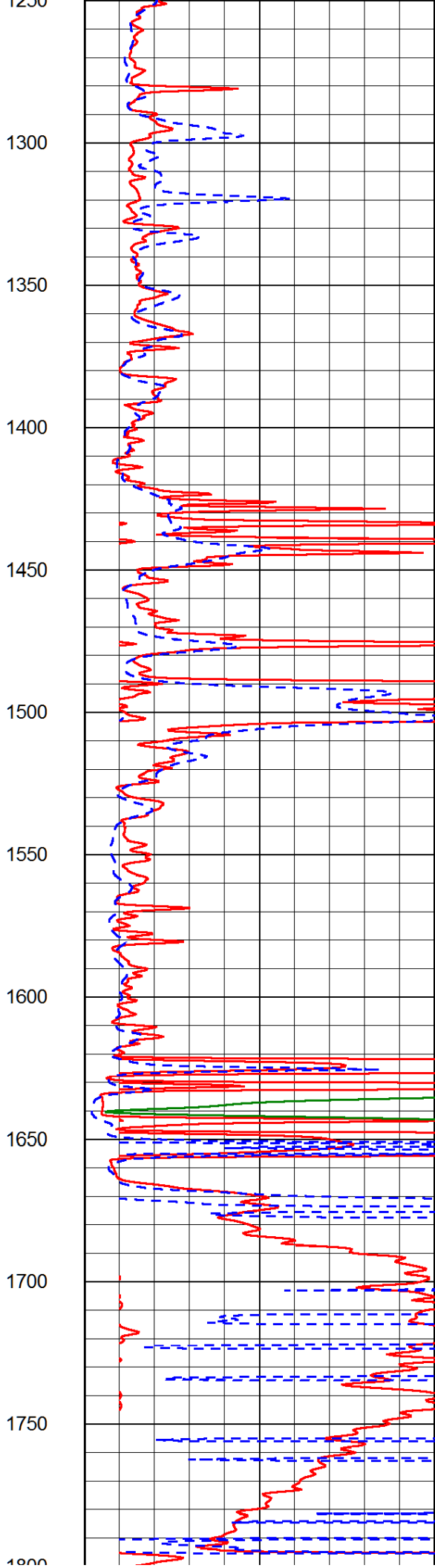
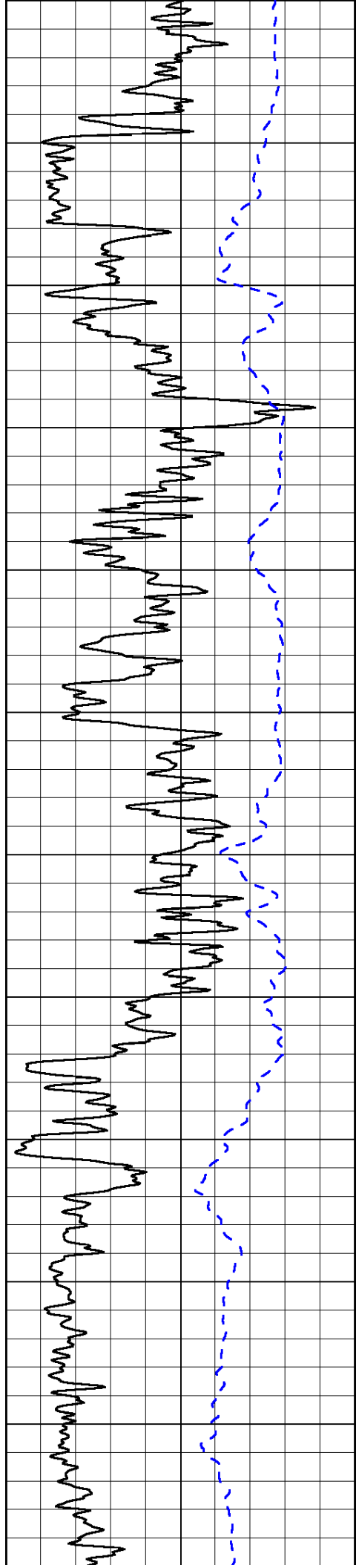
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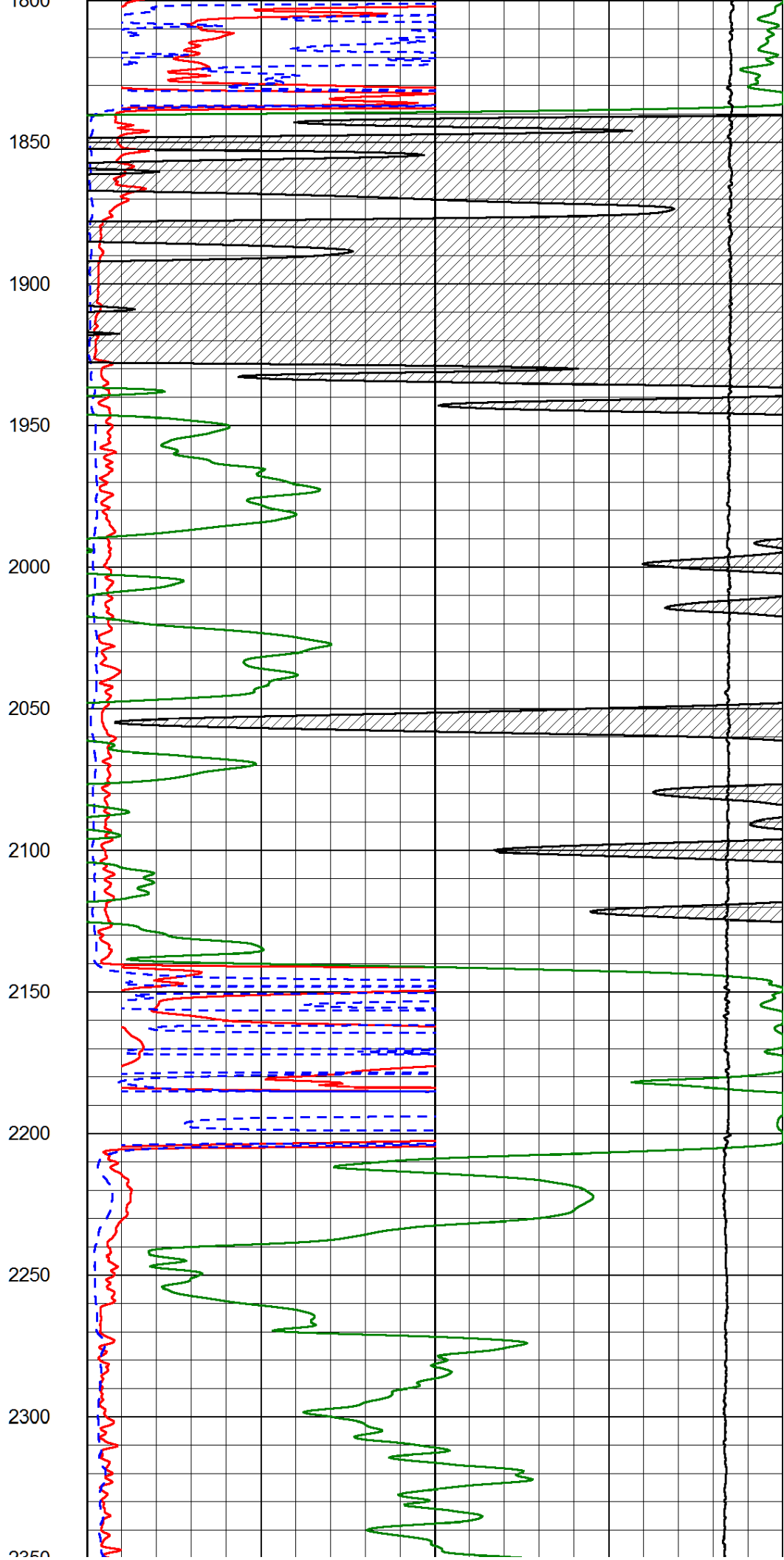
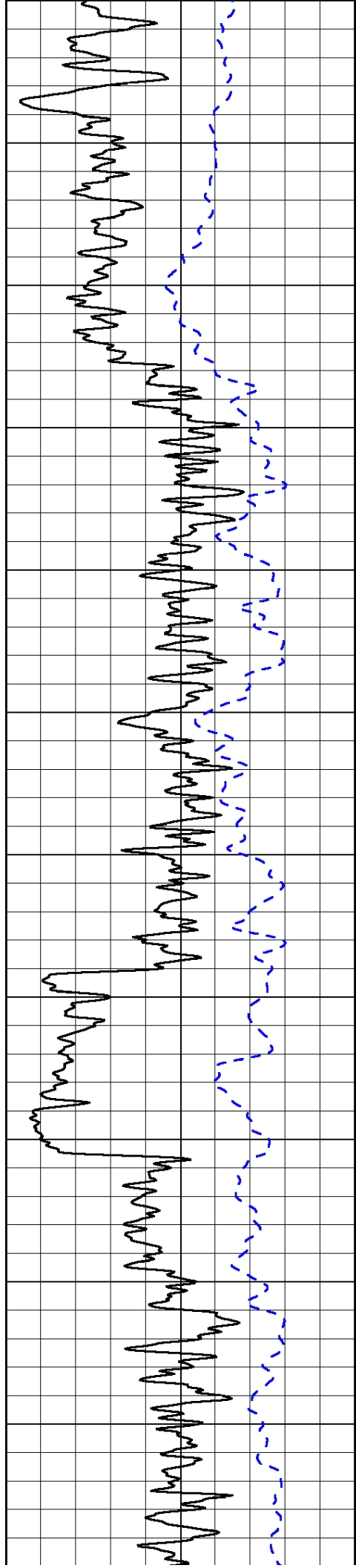
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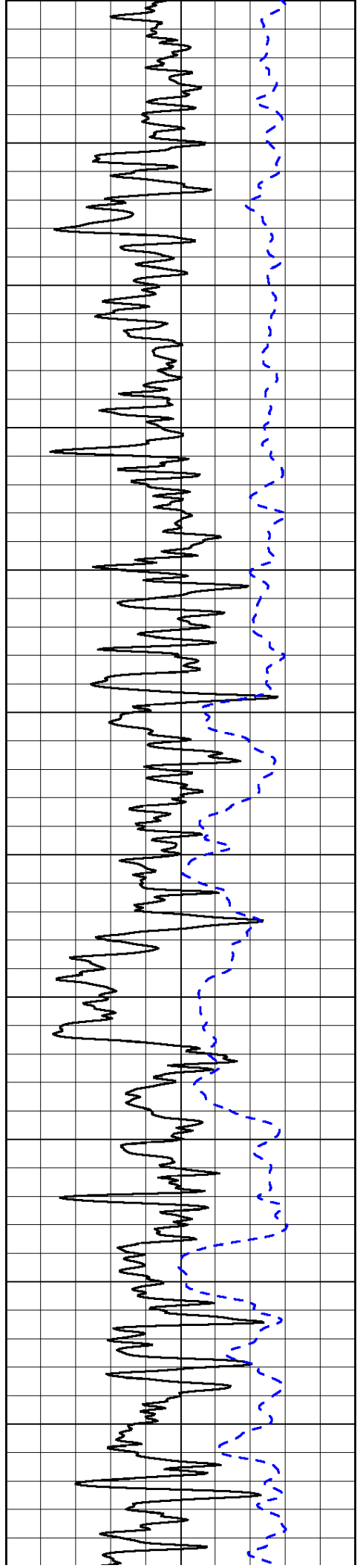
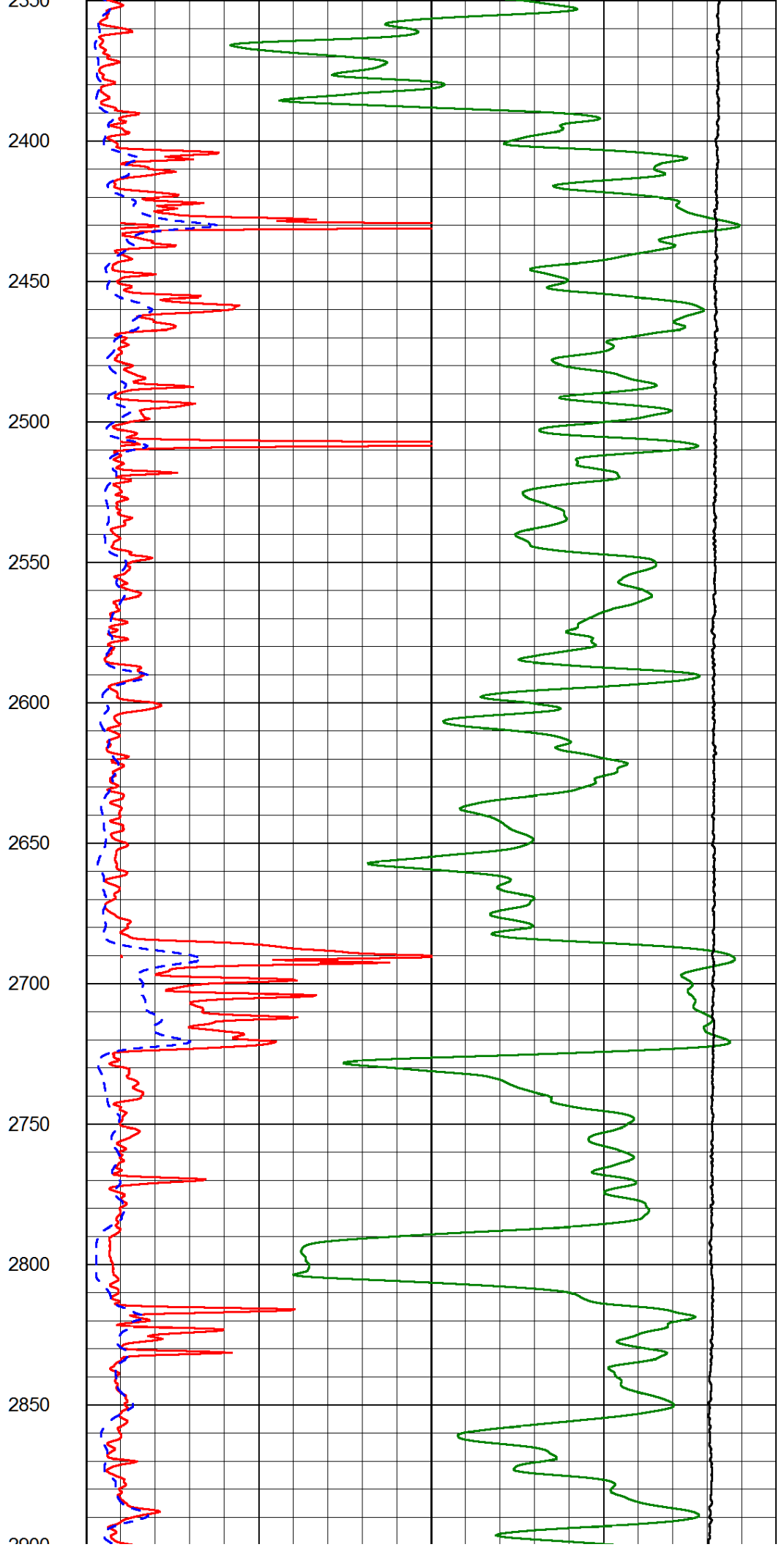
0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0
Shallow Resistivity		
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

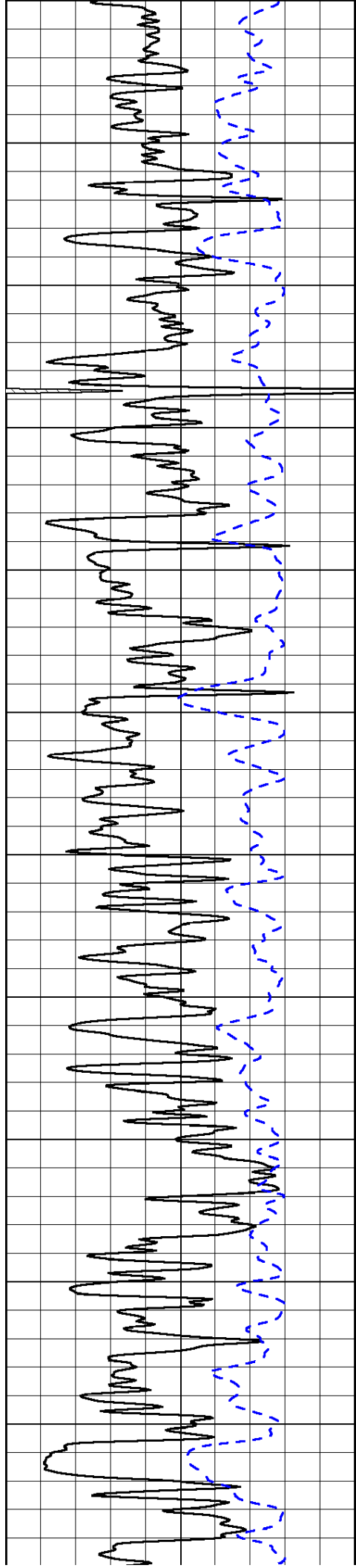




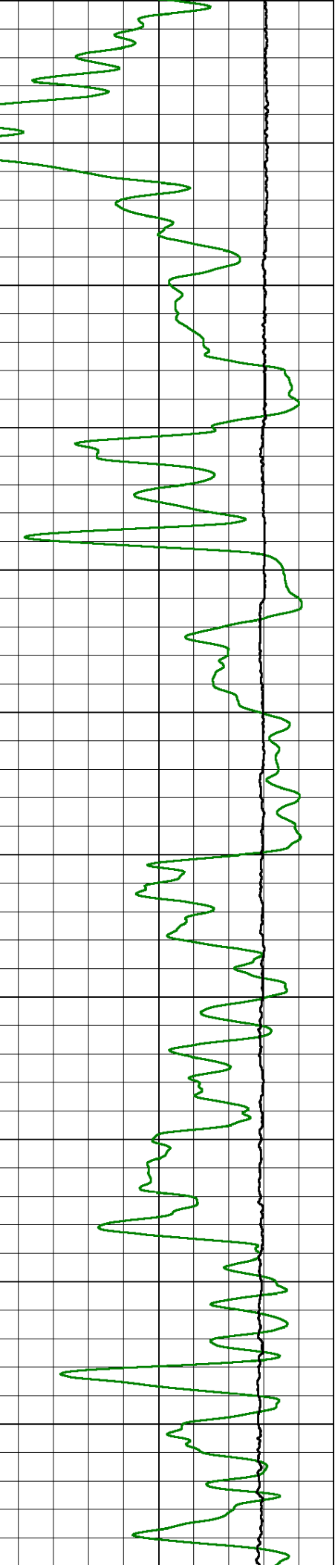
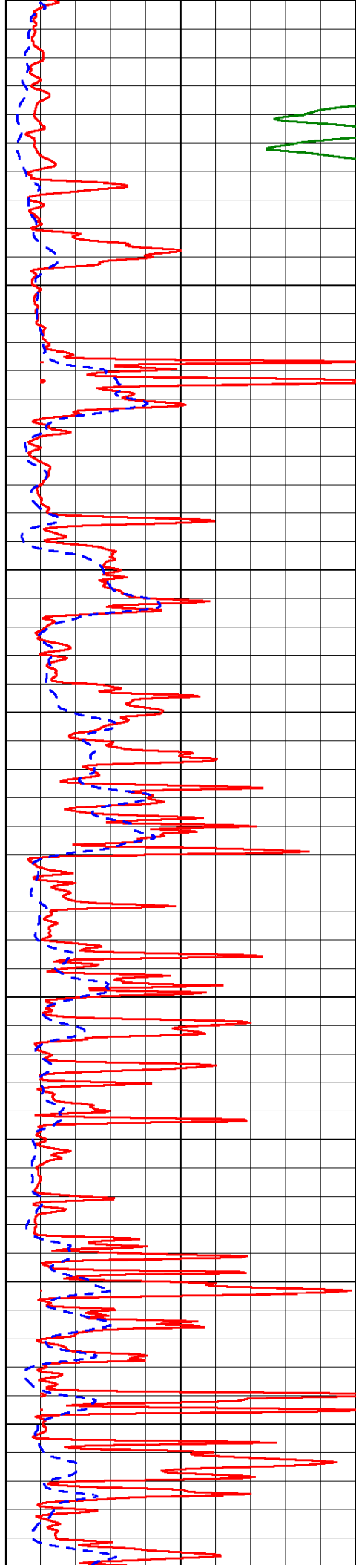


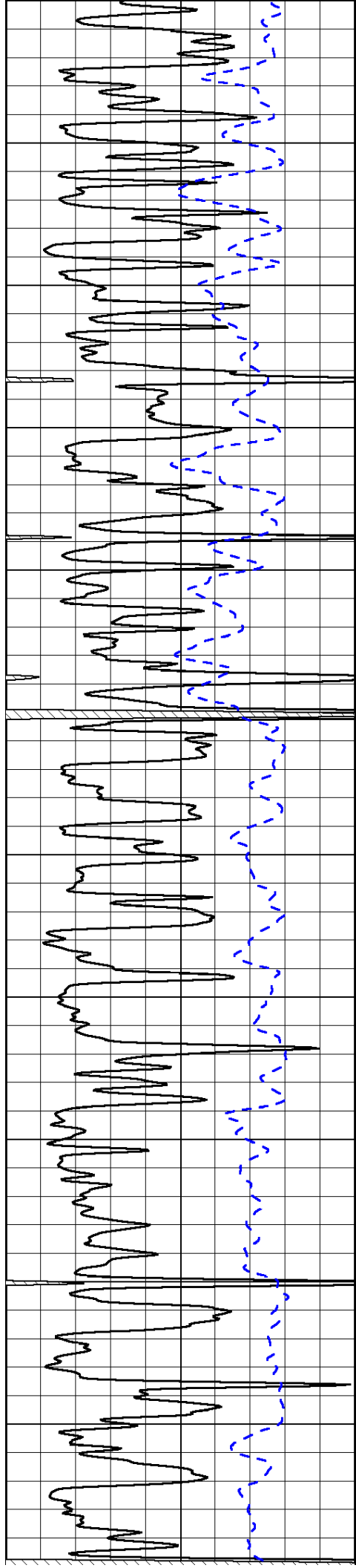




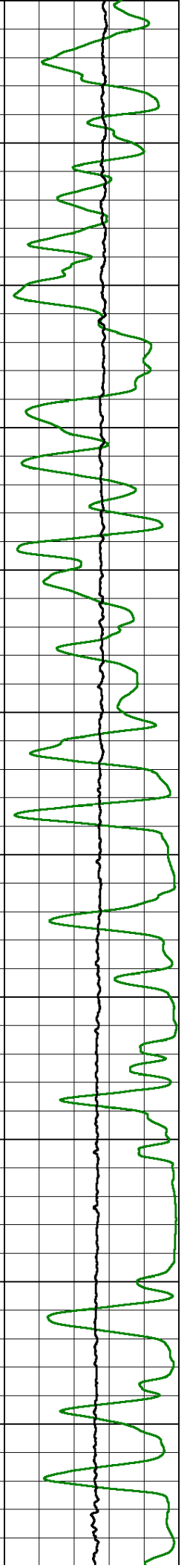
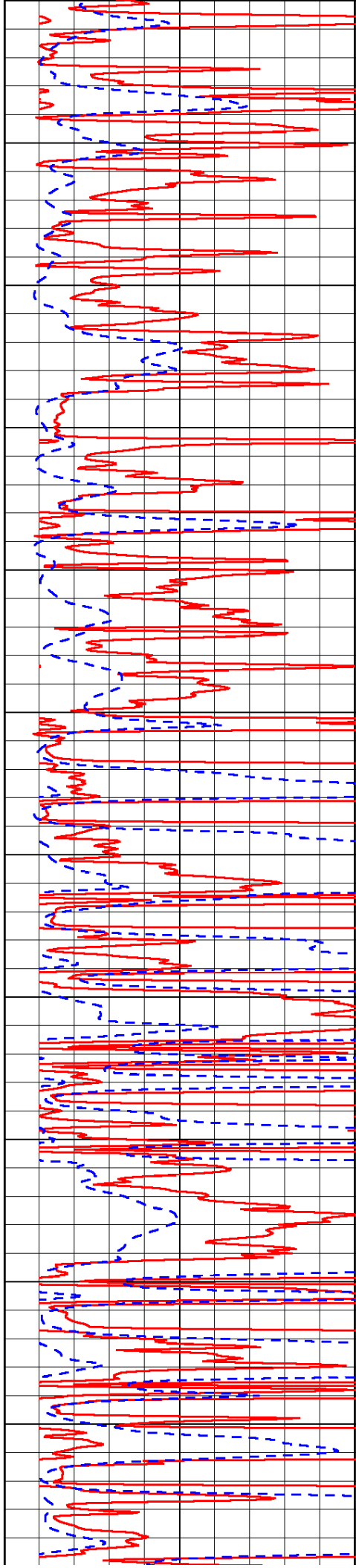


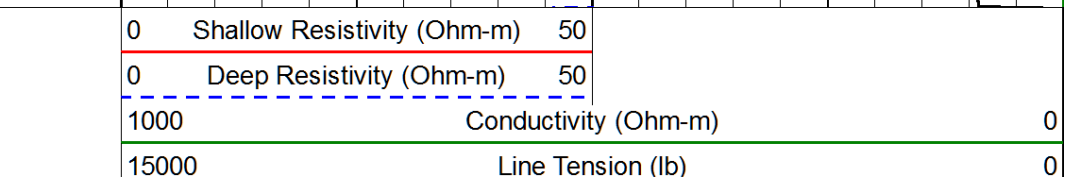
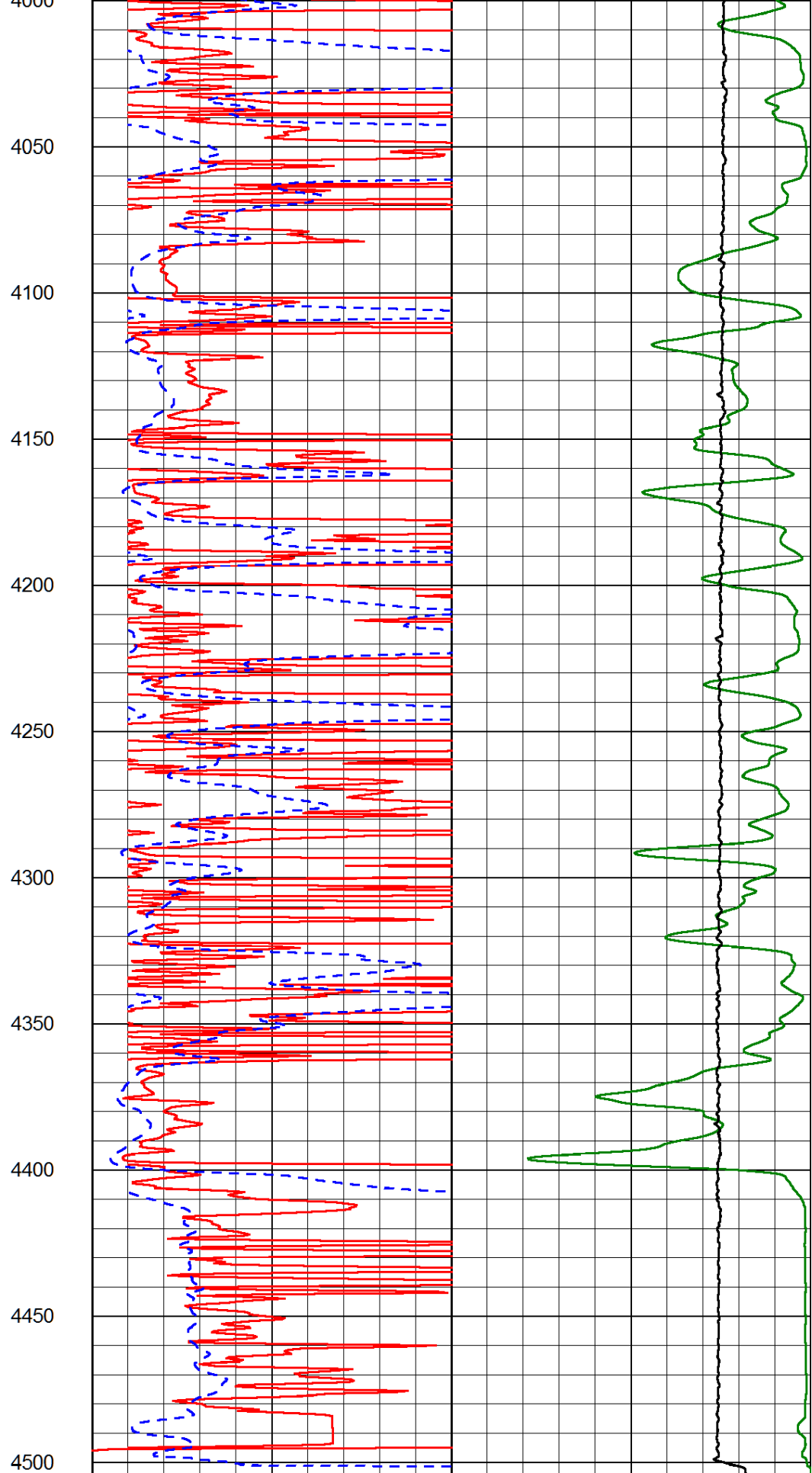
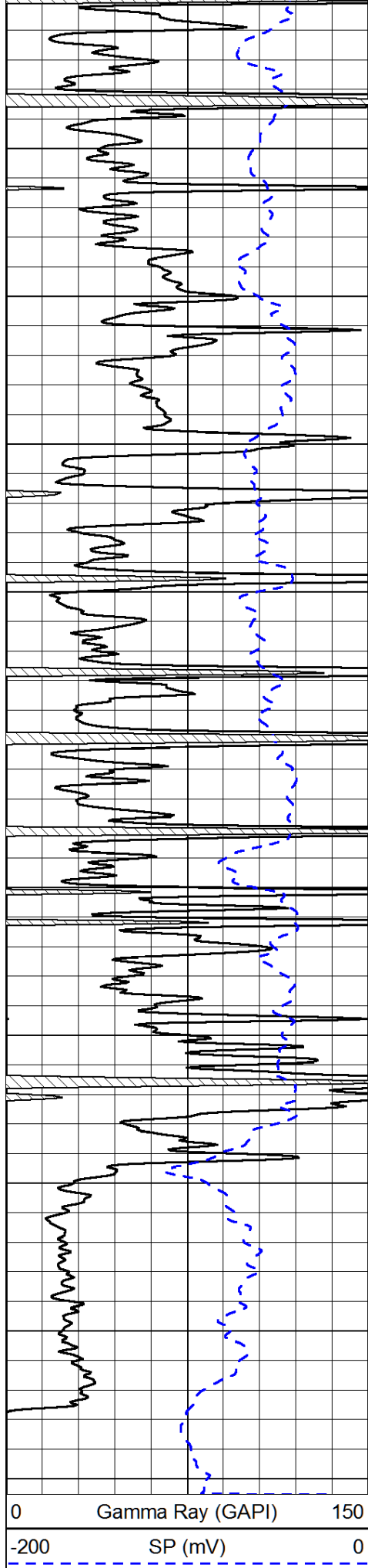
2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450





3450
3500
3550
3600
3650
3700
3750
3800
3850
3900
3950
4000





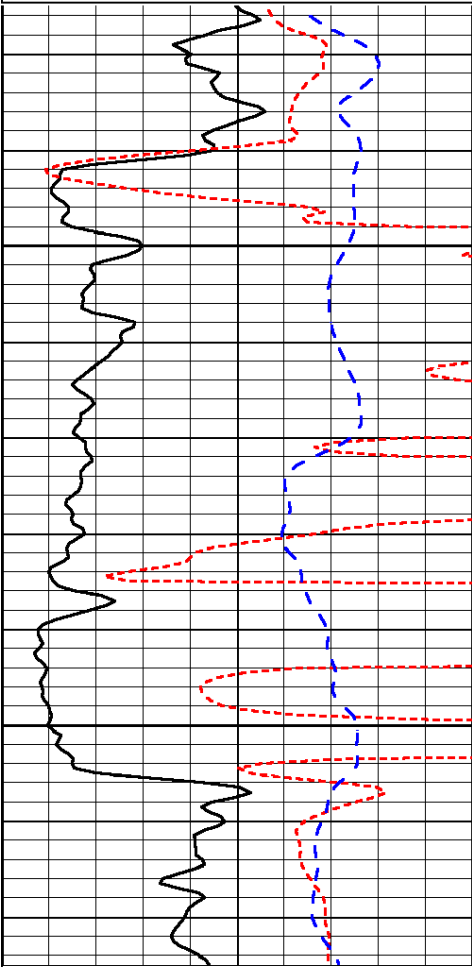
Shallow Resistivity		
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

Database File: c:\warrior\data\job bonus\lario_rose-b-unit_#1-4\lario_rose_b_unit_1_4hd.db
 Dataset Pathname: DIL/larstk
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 Dataset Creation: Wed Dec 18 21:26:54 2013
 Charted by: Depth in Feet scaled 1:240

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

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

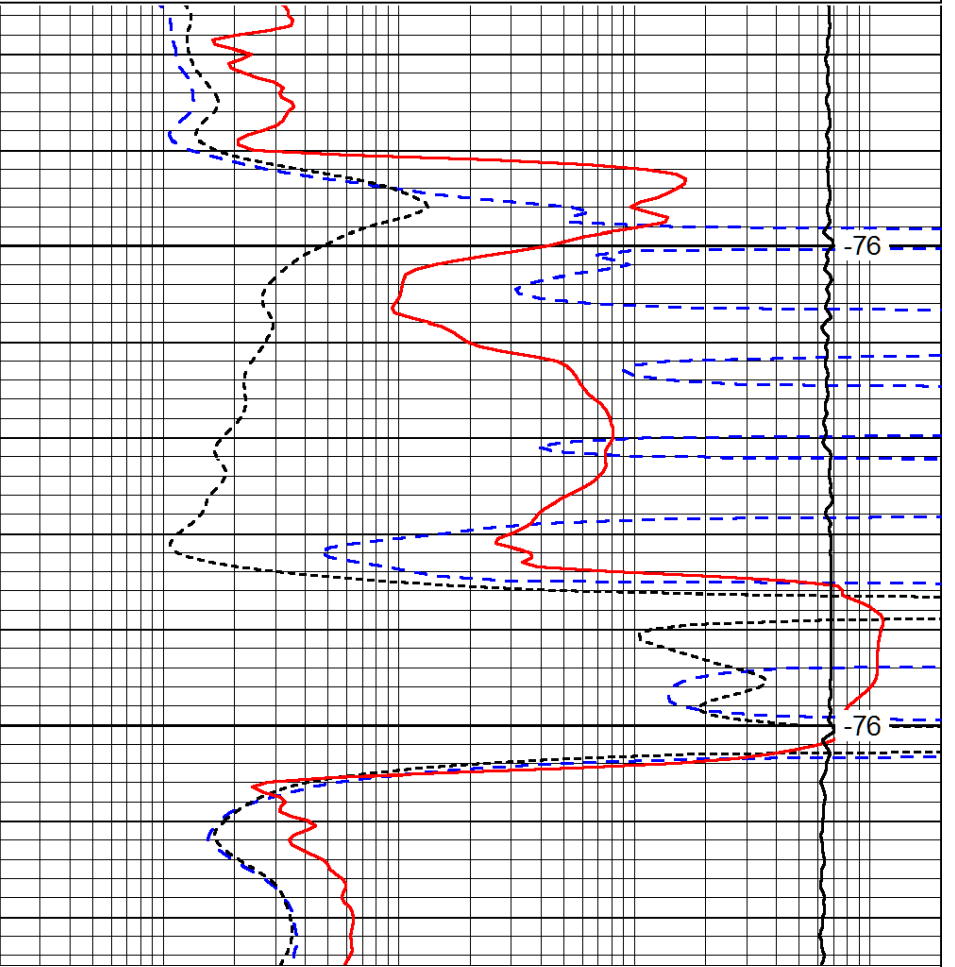
LSPD
(ft/min)



2150

2200

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



-76

-76

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

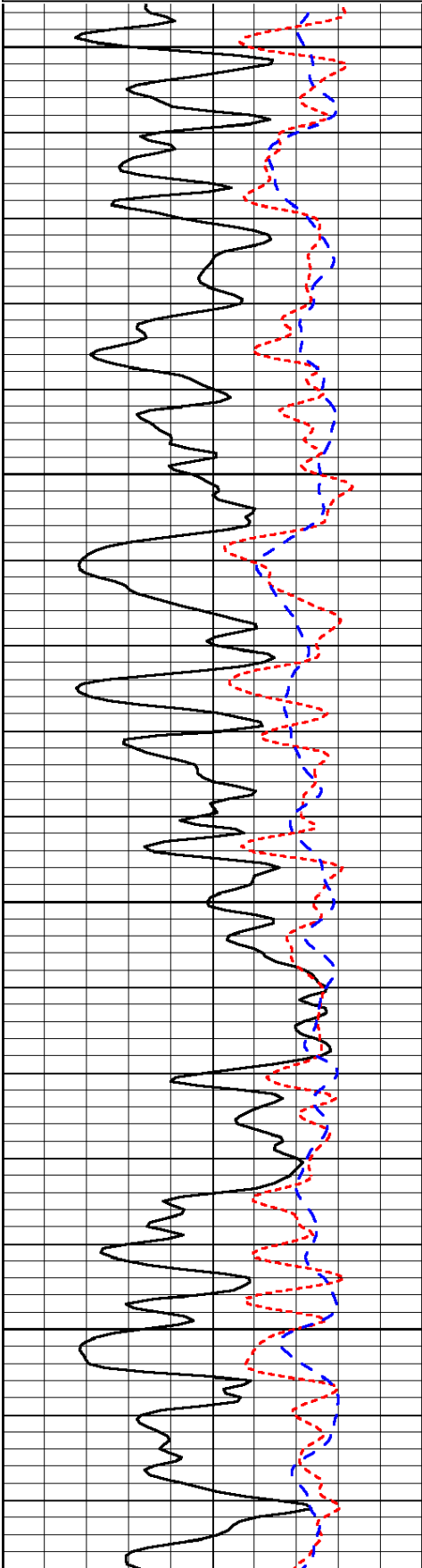
LSPD
(ft/min)

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

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)

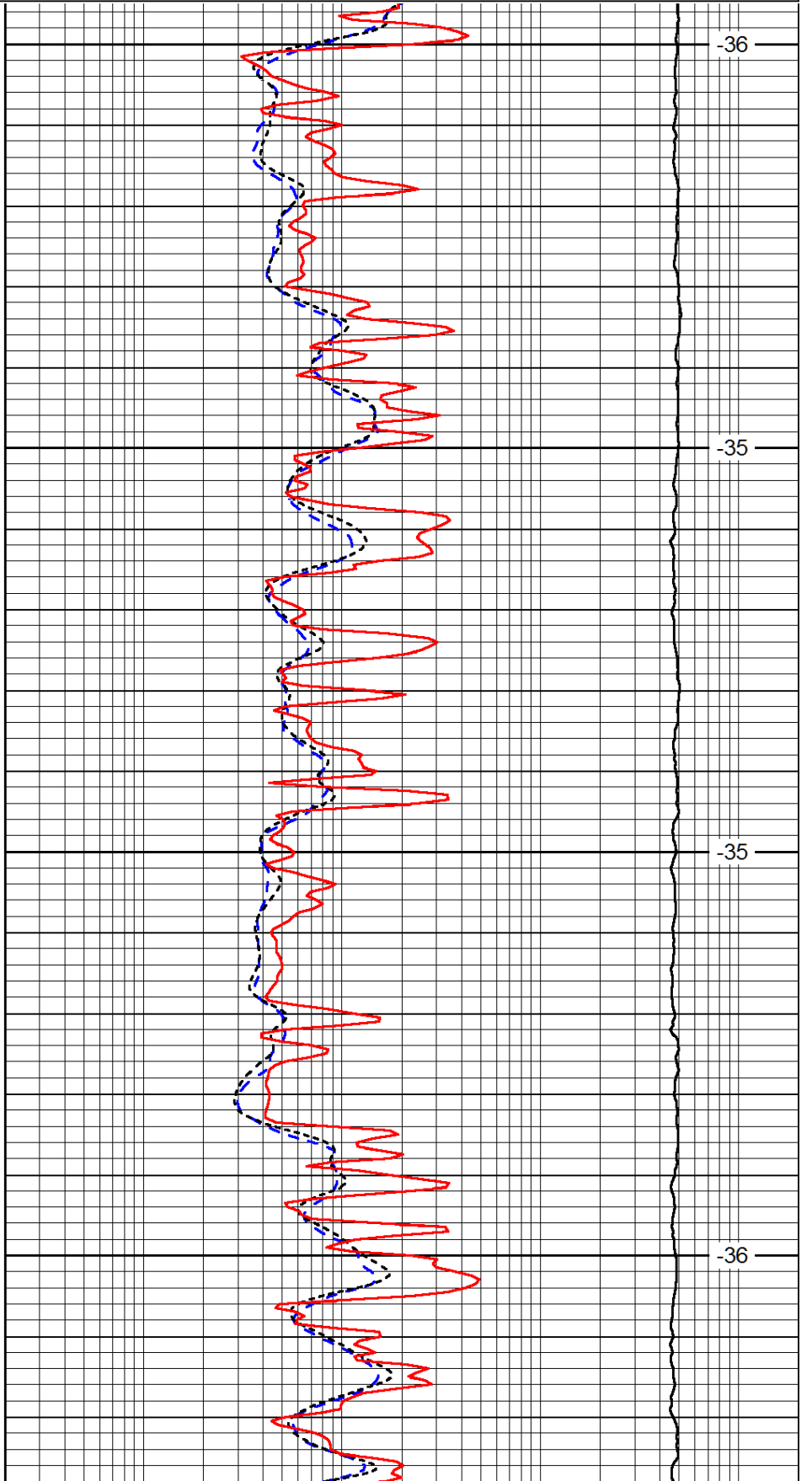


3200

3250

3300

3350

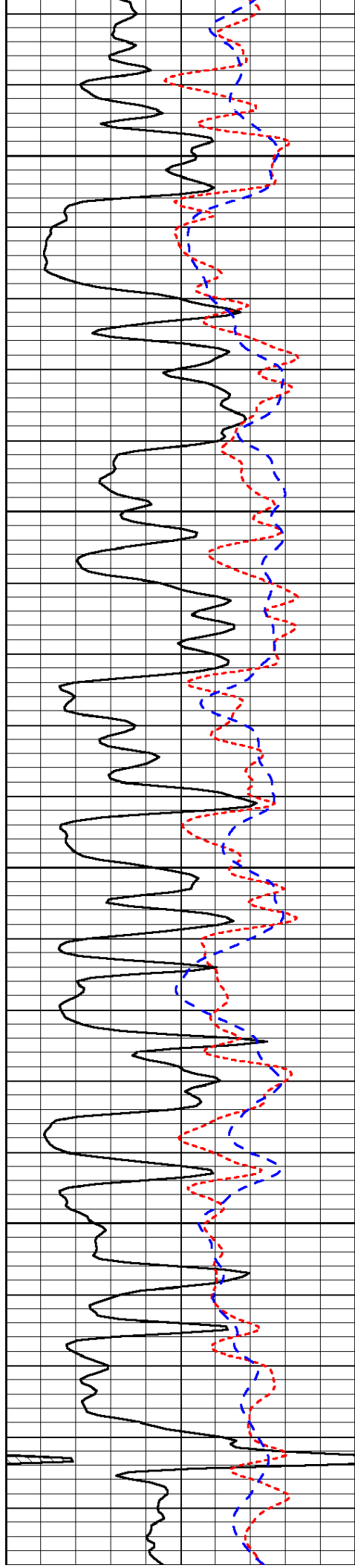


-36

-35

-35

-36

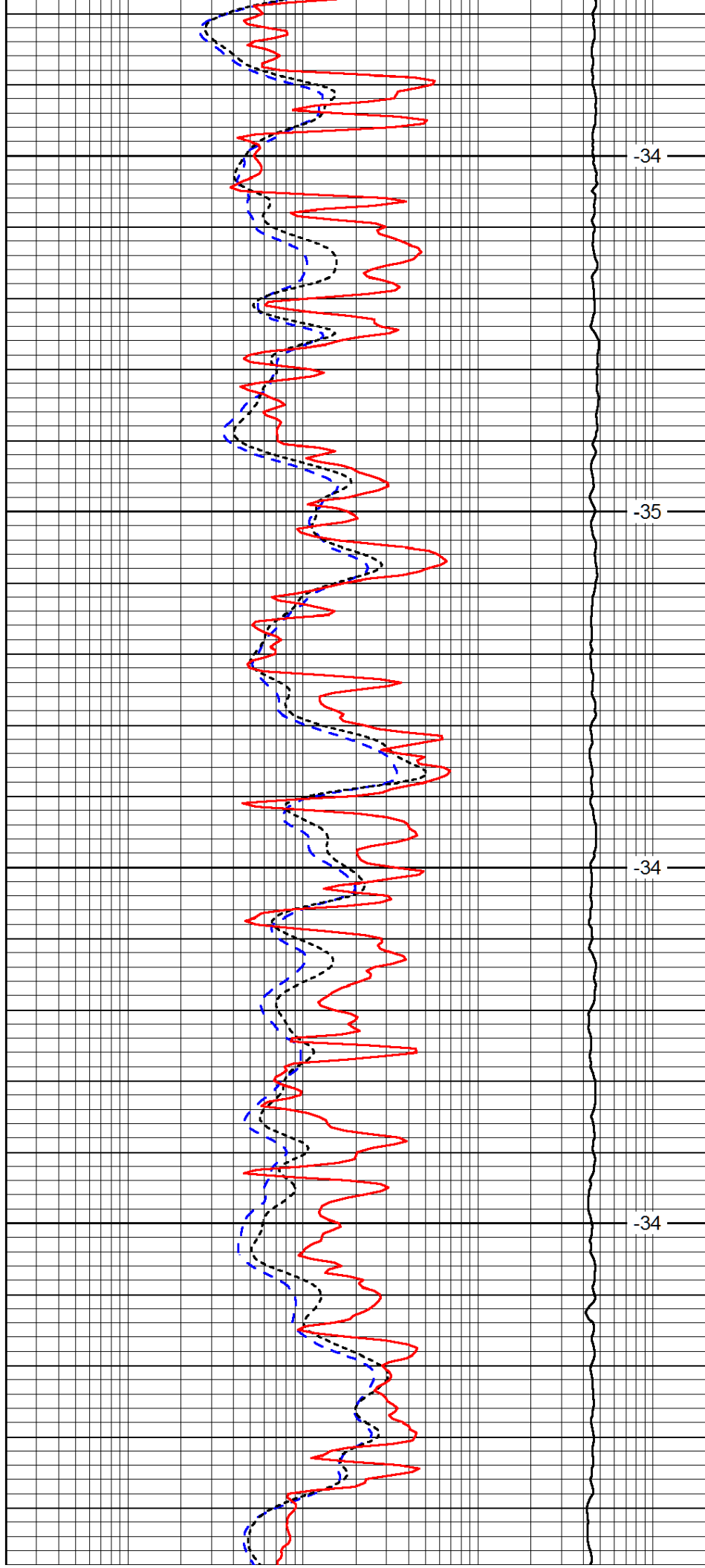


3400

3450

3500

3550

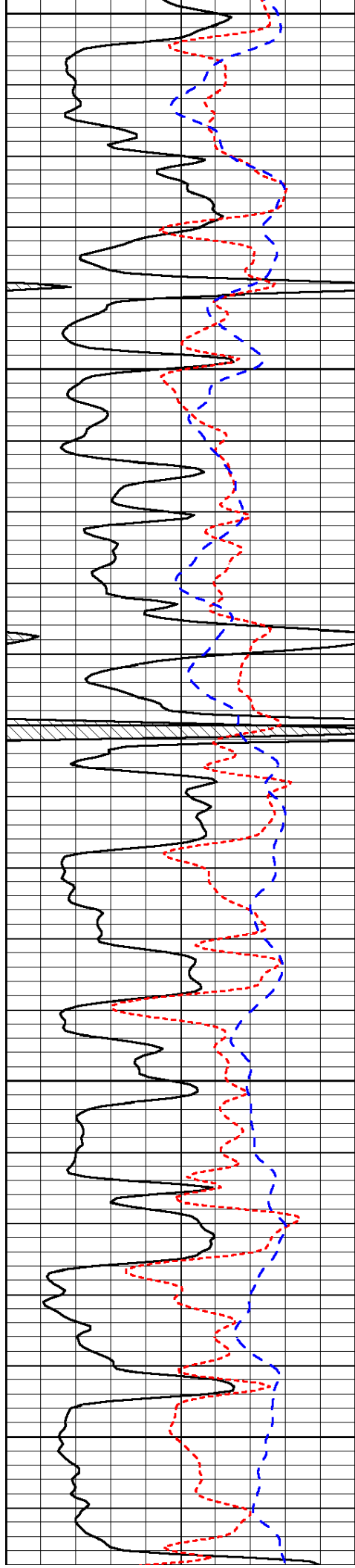


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-35

-34

-34



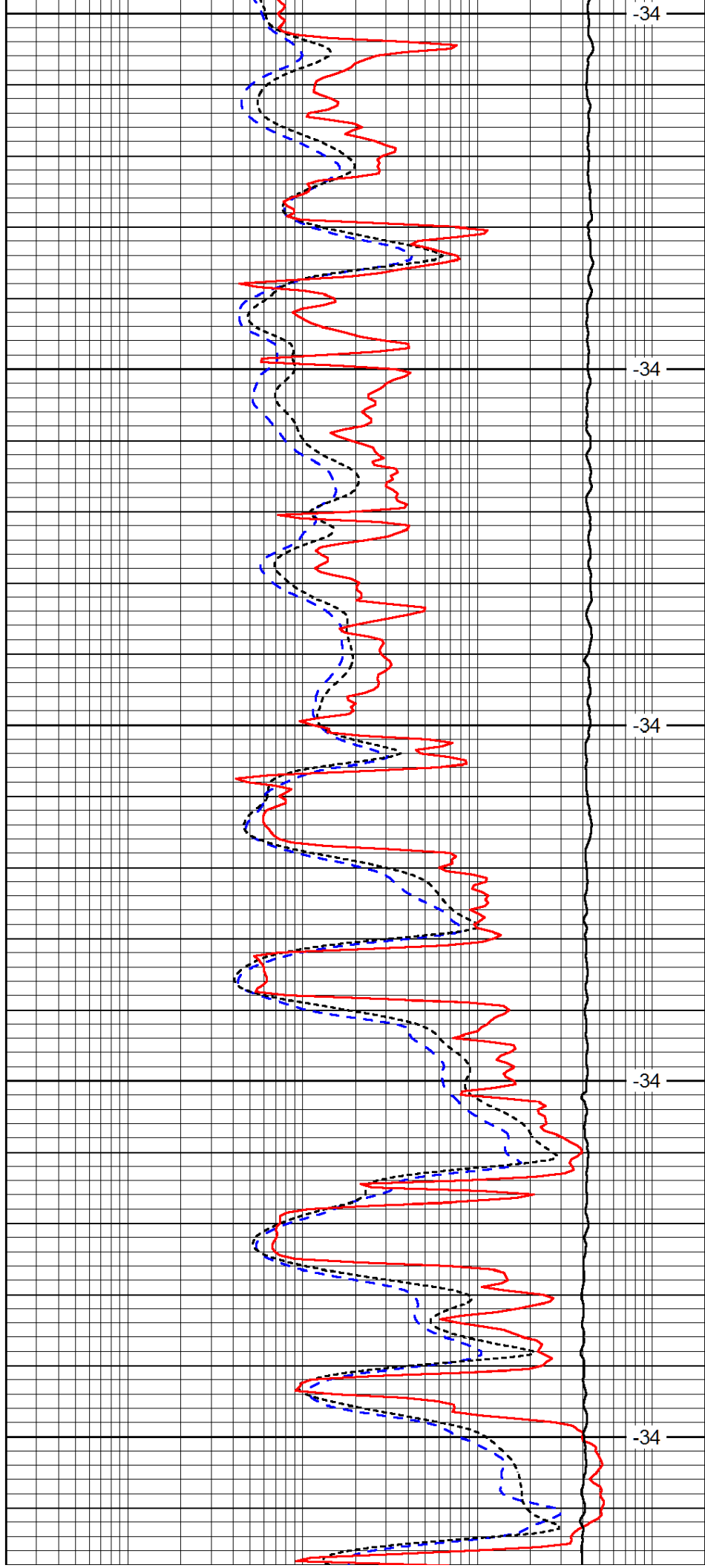
3600

3650

3700

3750

3800



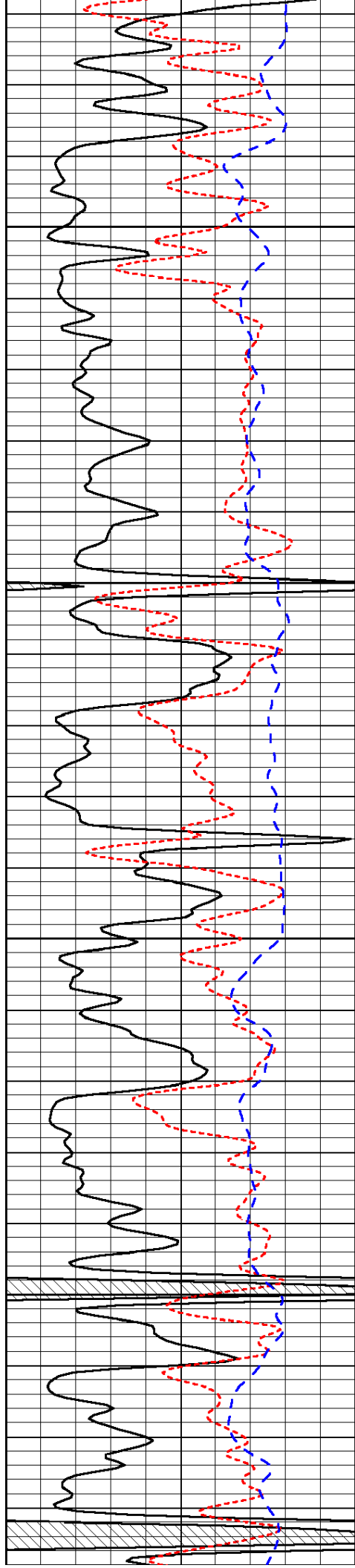
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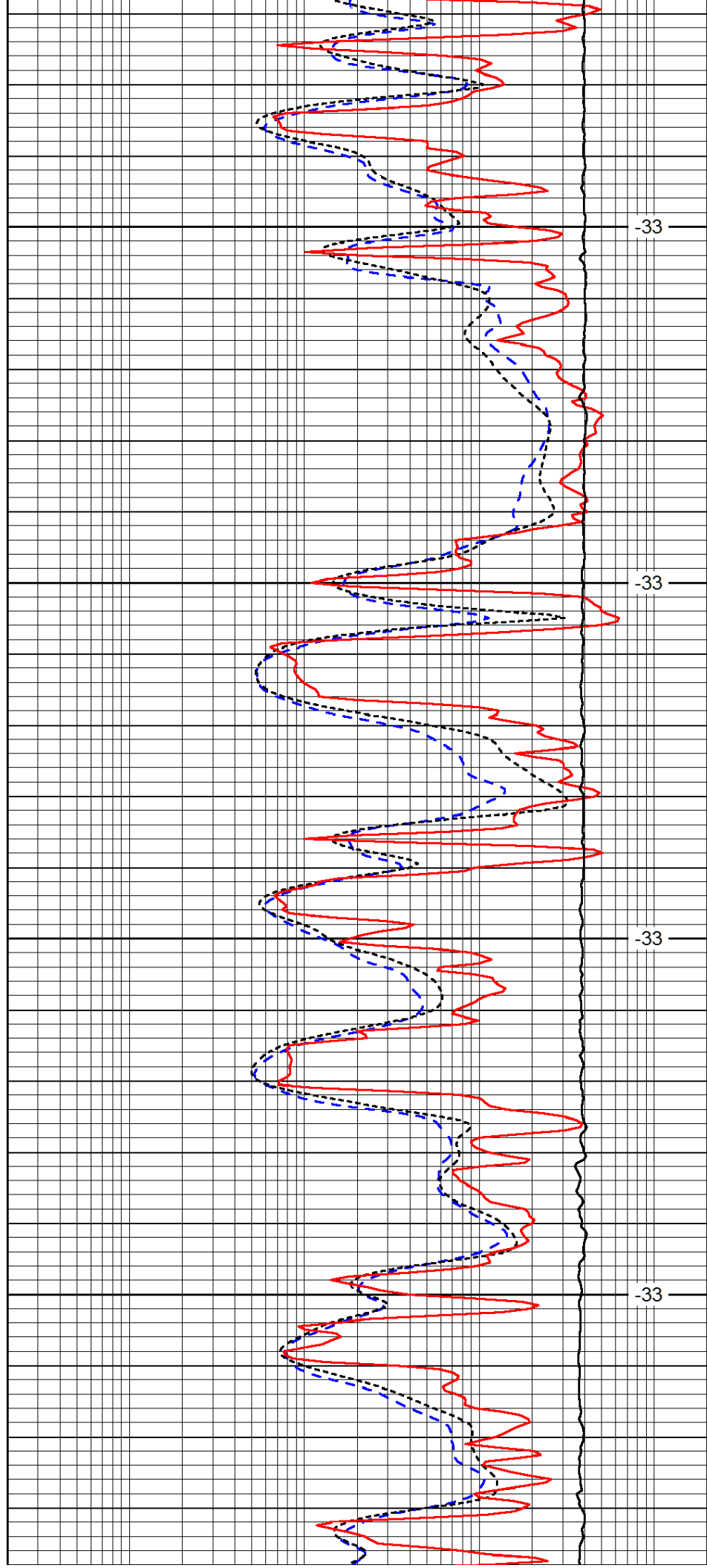


3850

3900

3950

4000

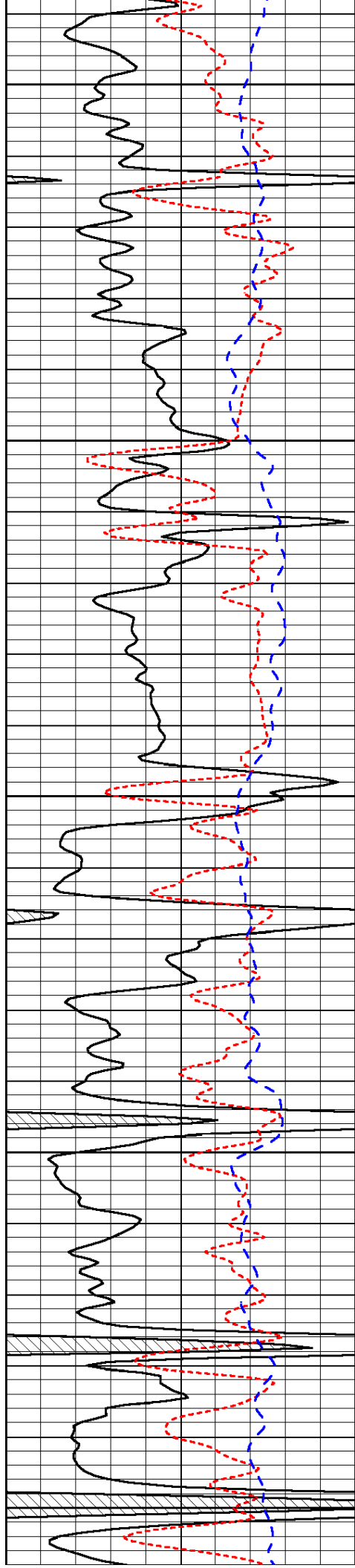


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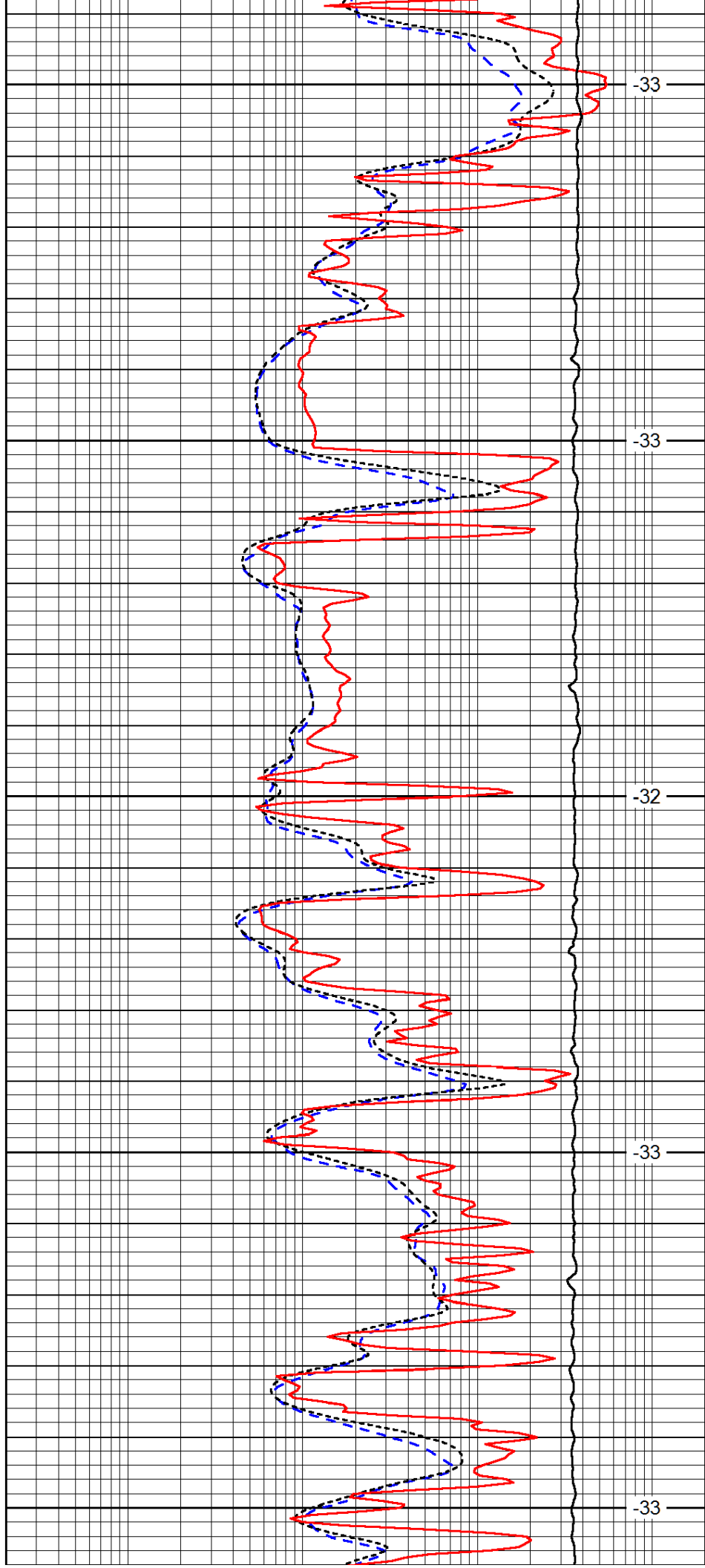
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4100

4150

4200

4250



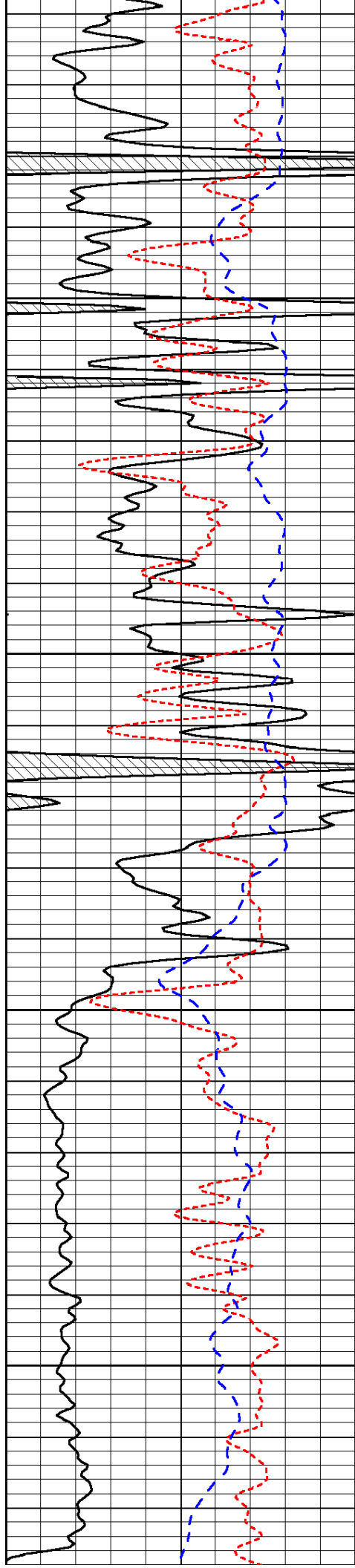
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-32

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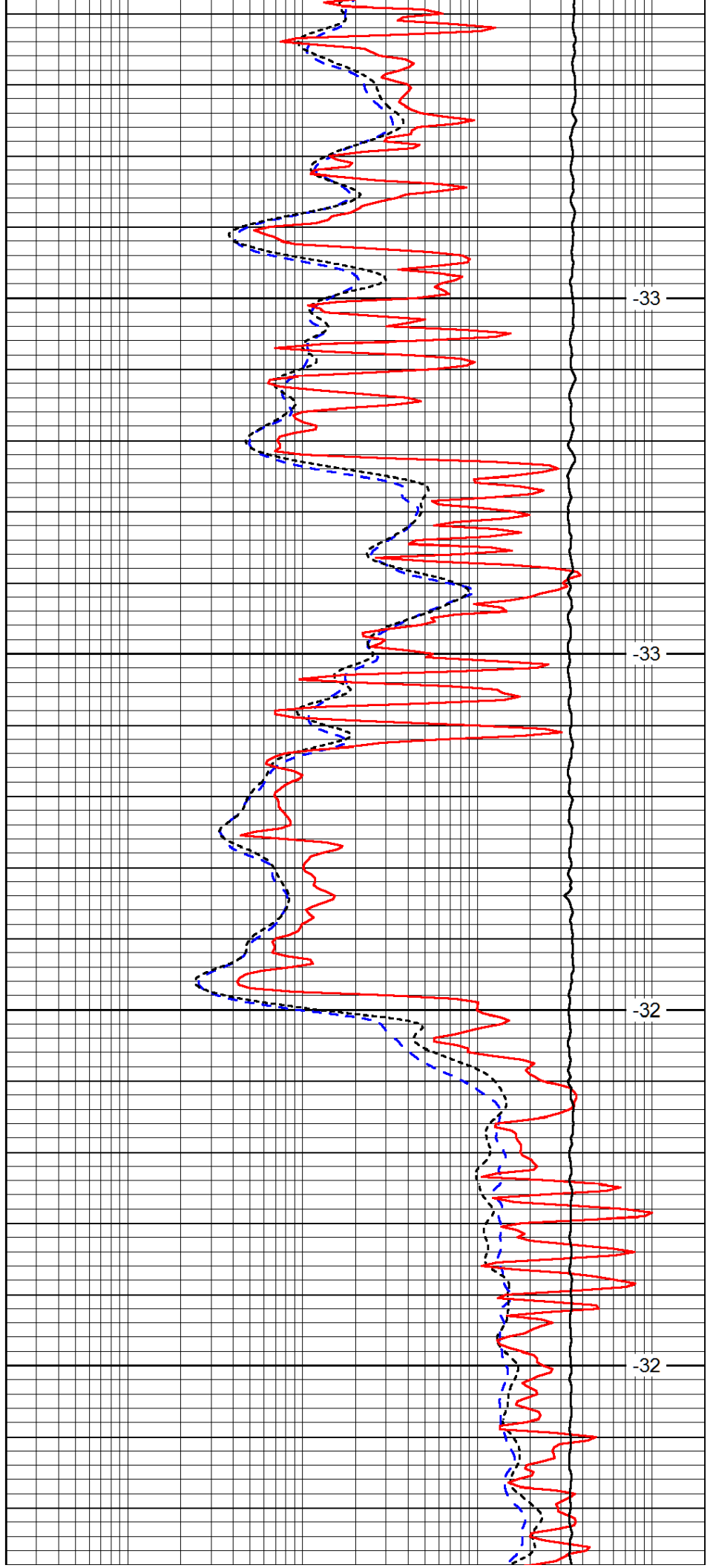


4300

4350

4400

4450

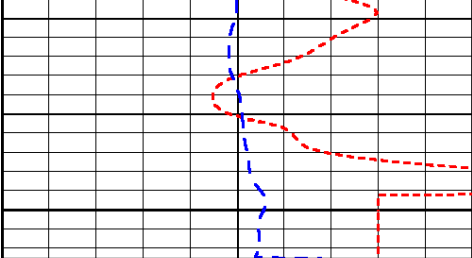


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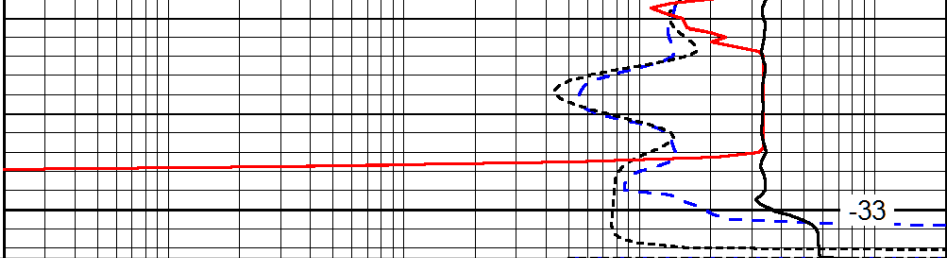
-32

-32



4500

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



0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)