



Dual Induction Log

Pioneer Energy Services

API No.

15-063-22,076-00-00

Company H & C Oil Operating, Inc.

Well Herl #27-2

Field Wildcat

County Gove State

Kansas

Location 460' FNL & 470' FEL

Other Services
CNL/CDL
MEL

Sec: 27 Twp: 13 S Rge: 26 W

Permanent Datum Ground Level Elevation 2381
Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation

K.B. 2392
D.F. 2381
G.L. 2381

Date 2/6/2013

Run Number One

Depth Driller 4290

Depth Logger 4289

Bottom Logged Interval 4288

Top Log Interval 250

Casing Driller 8.625 @ 270

Casing Logger 262

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 2000

Density / Viscosity 9.3 52

pH / Fluid Loss 9.5 8.0

Source of Sample Flowline

Rm @ Meas. Temp .70 @ 55

Rmf @ Meas. Temp .53 @ 55

Rmc @ Meas. Temp .95 @ 55

Source of Rmf / Rmc Charts

Rm @ BHT .32 @ 119

Operating Rig Time 4 Hours

Max Rec. Temp. F 119

Equipment Number 15

Location Hays

Recorded By D. Martin

Witnessed By Marc Downing

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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

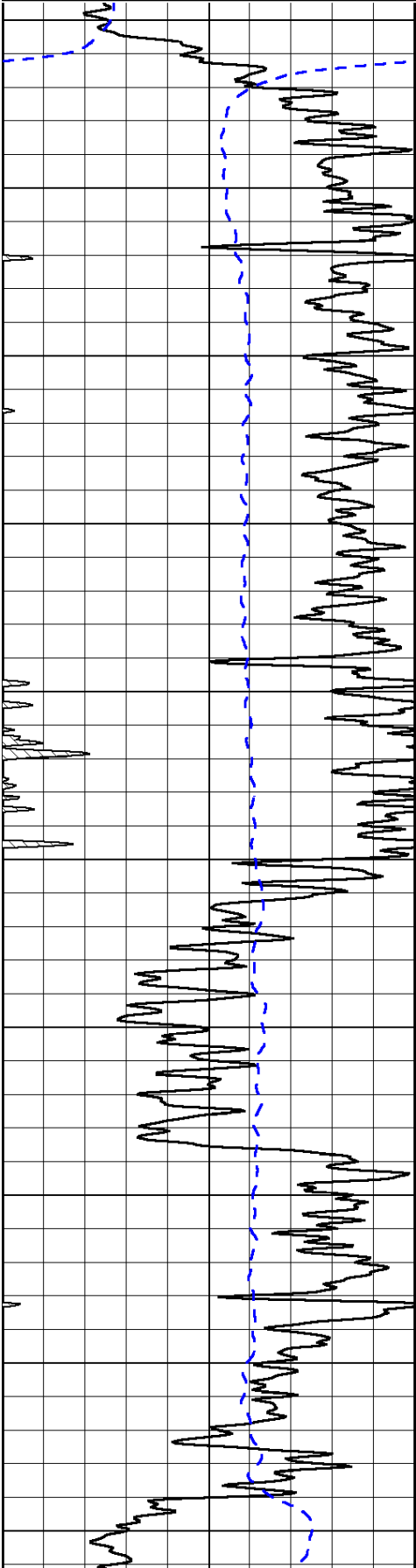
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858

Collyer, KS
8 1/2 S, 4 W, S Into

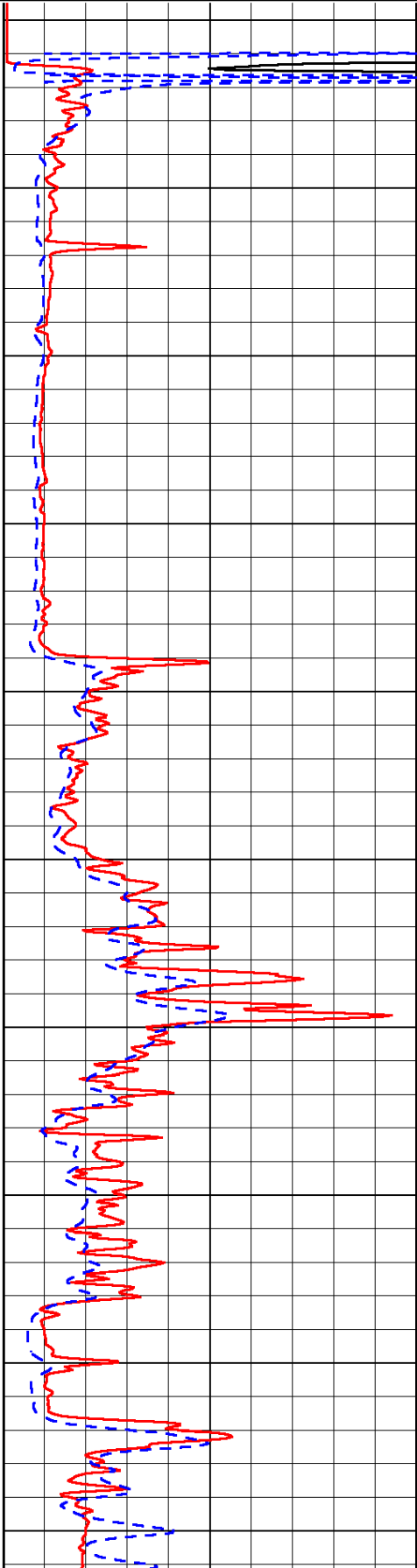
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Charted by: Depth in Feet scaled 1:600

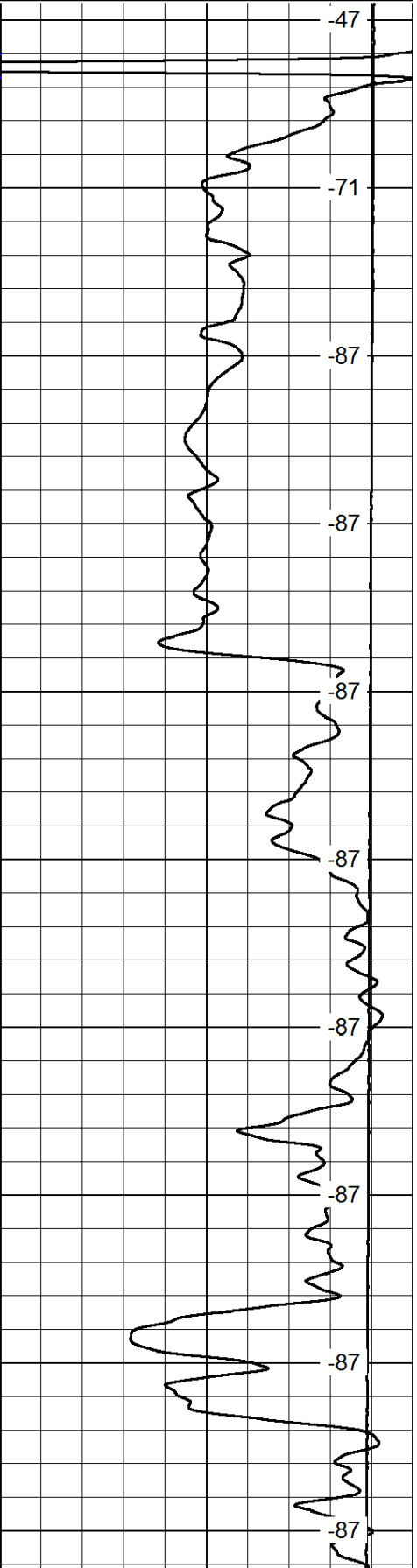
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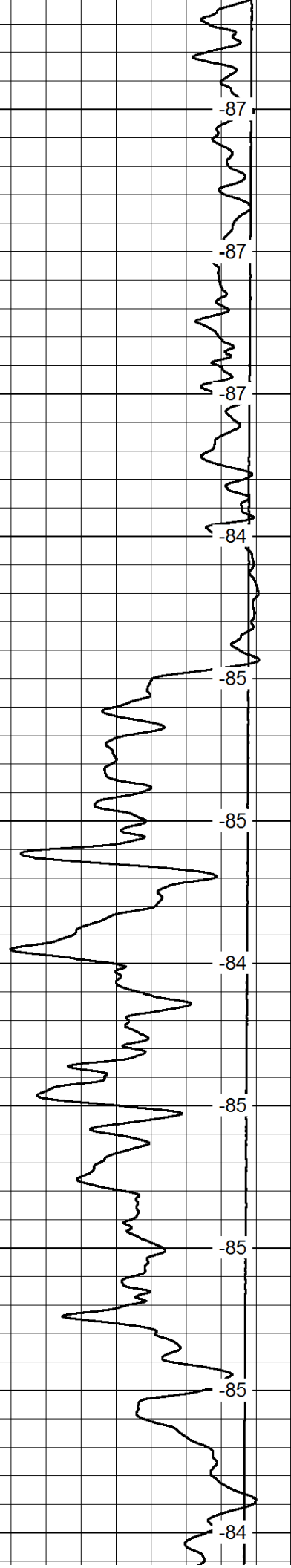
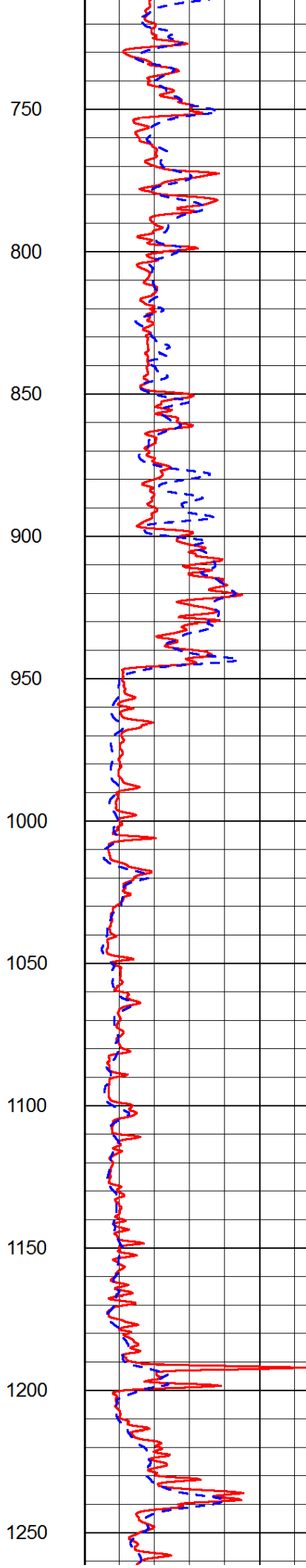
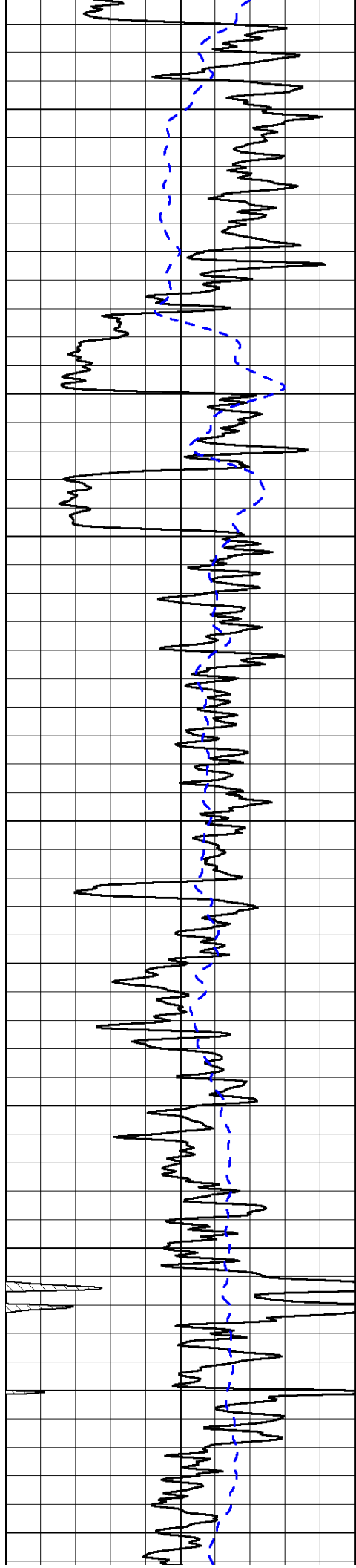


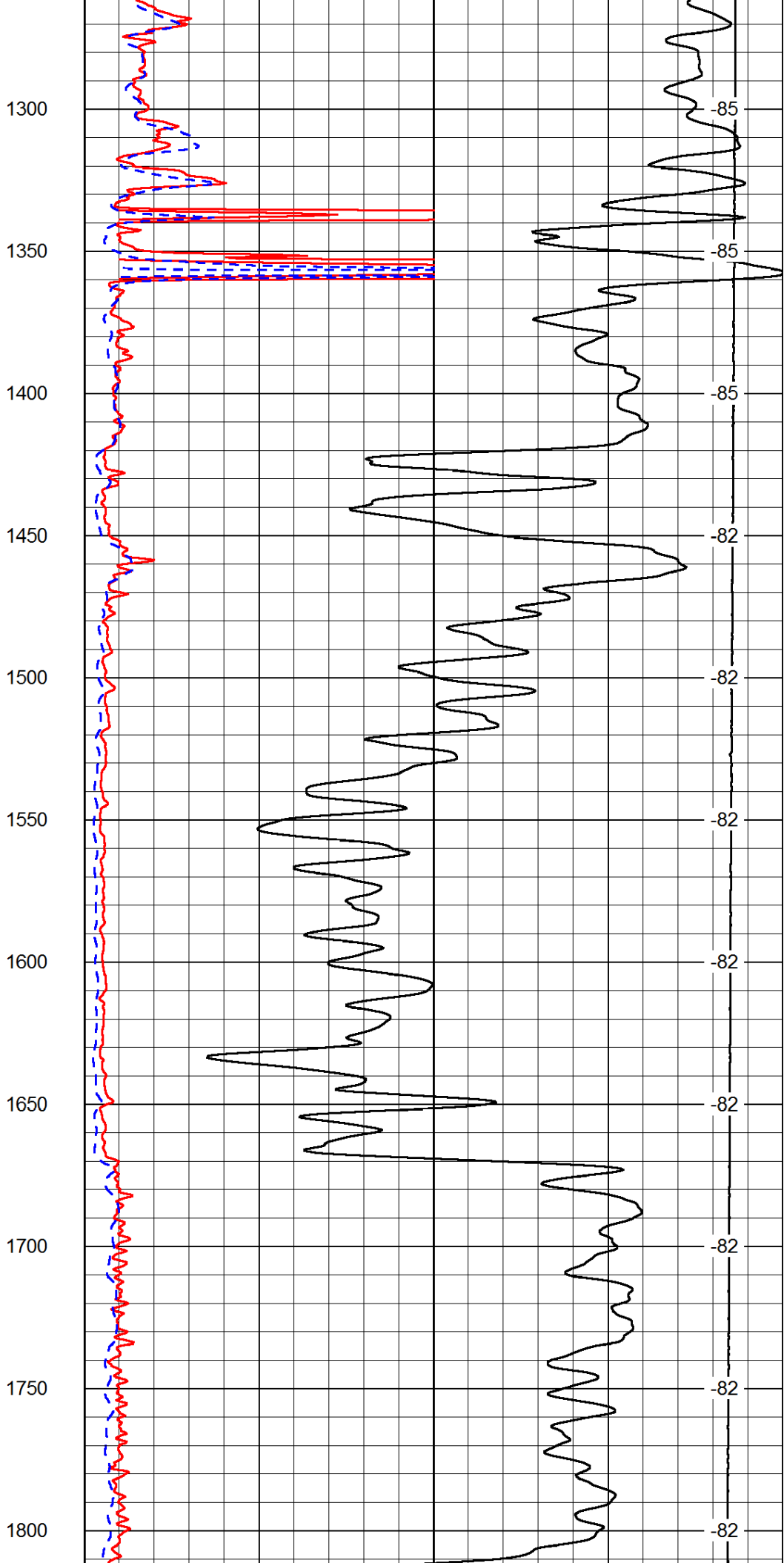
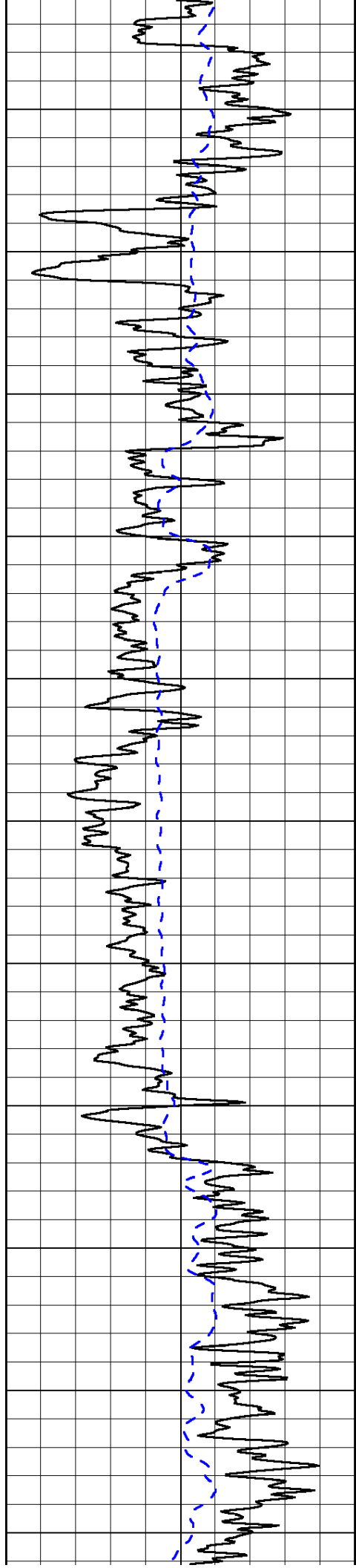
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

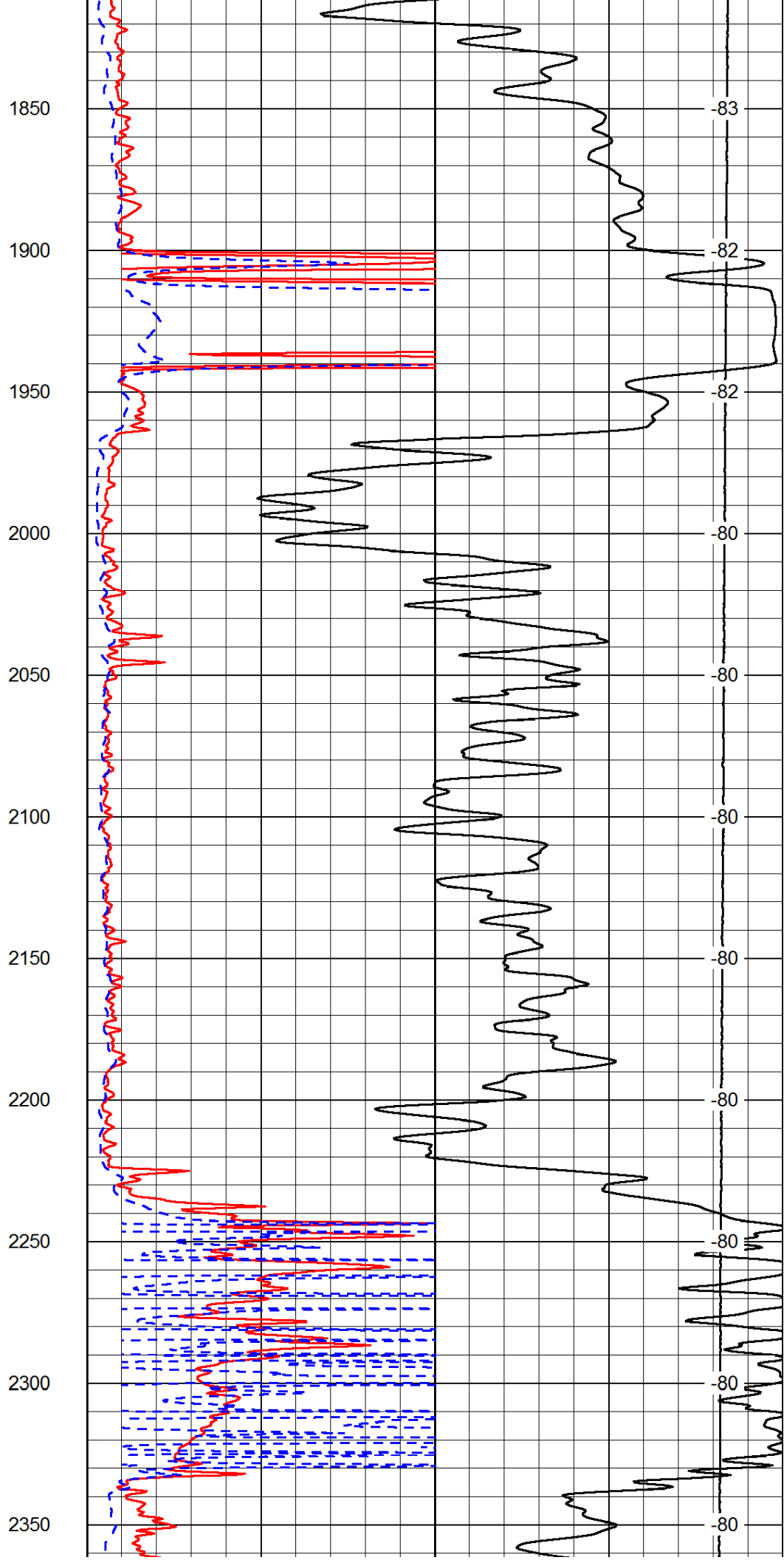
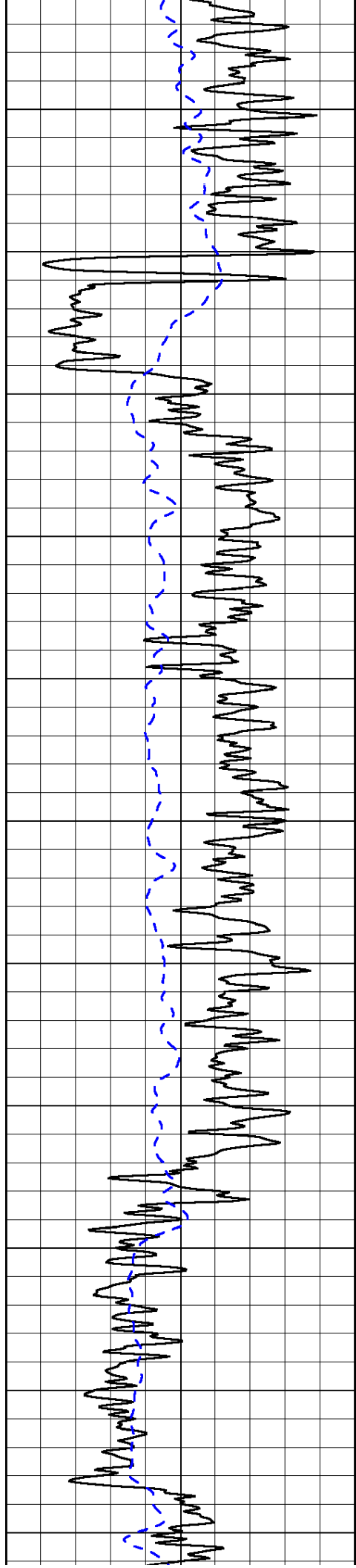


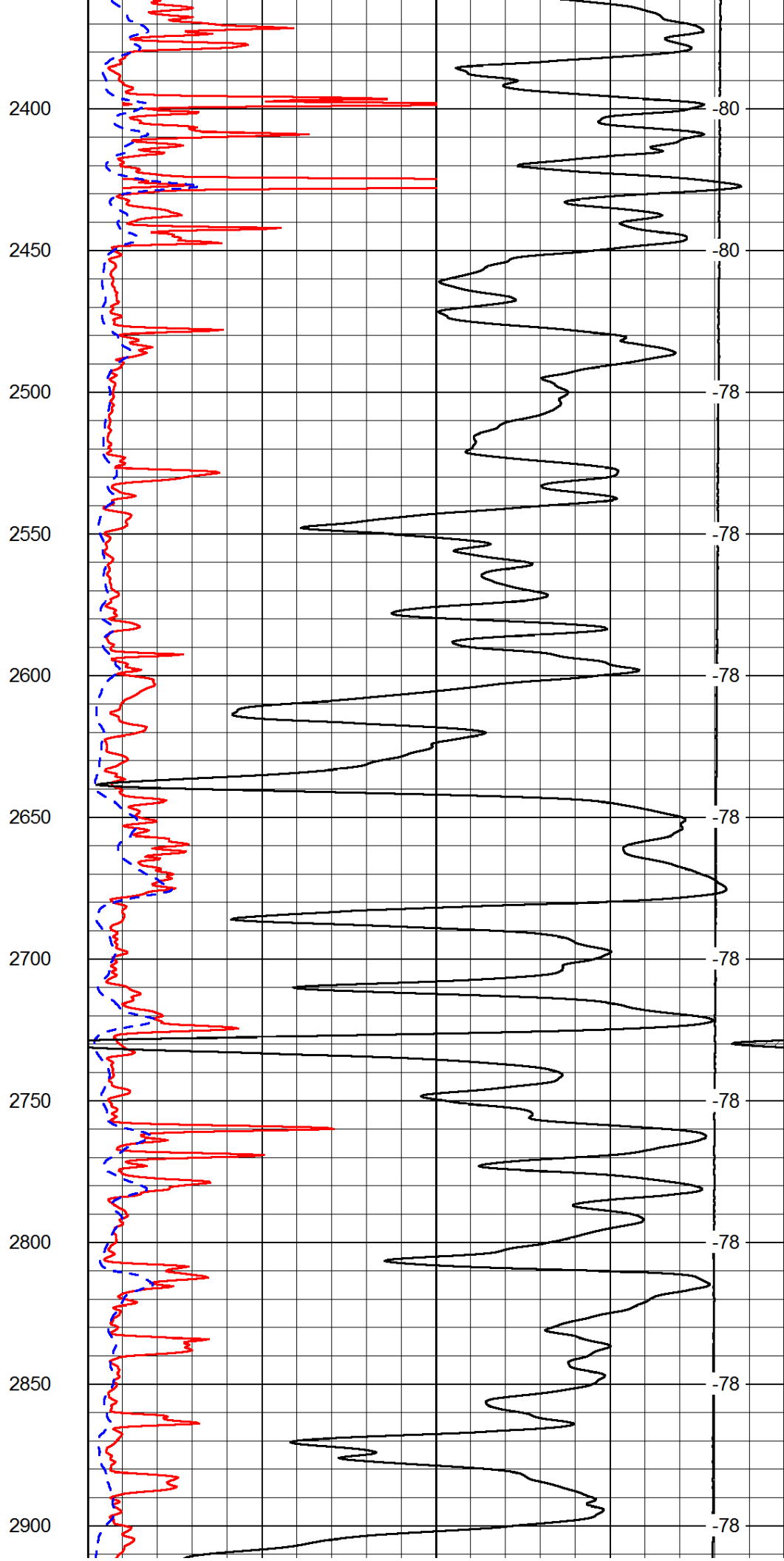
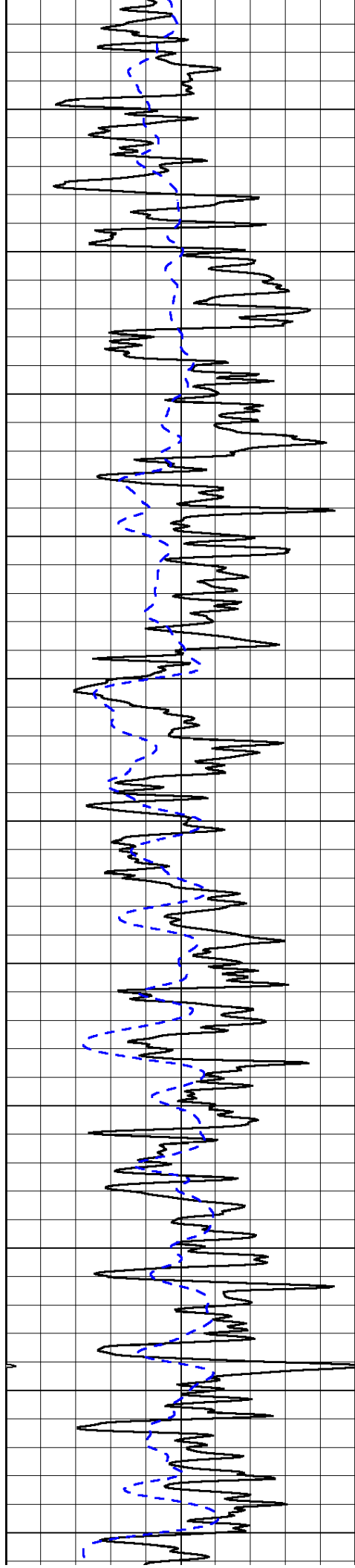
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Line Tension	0

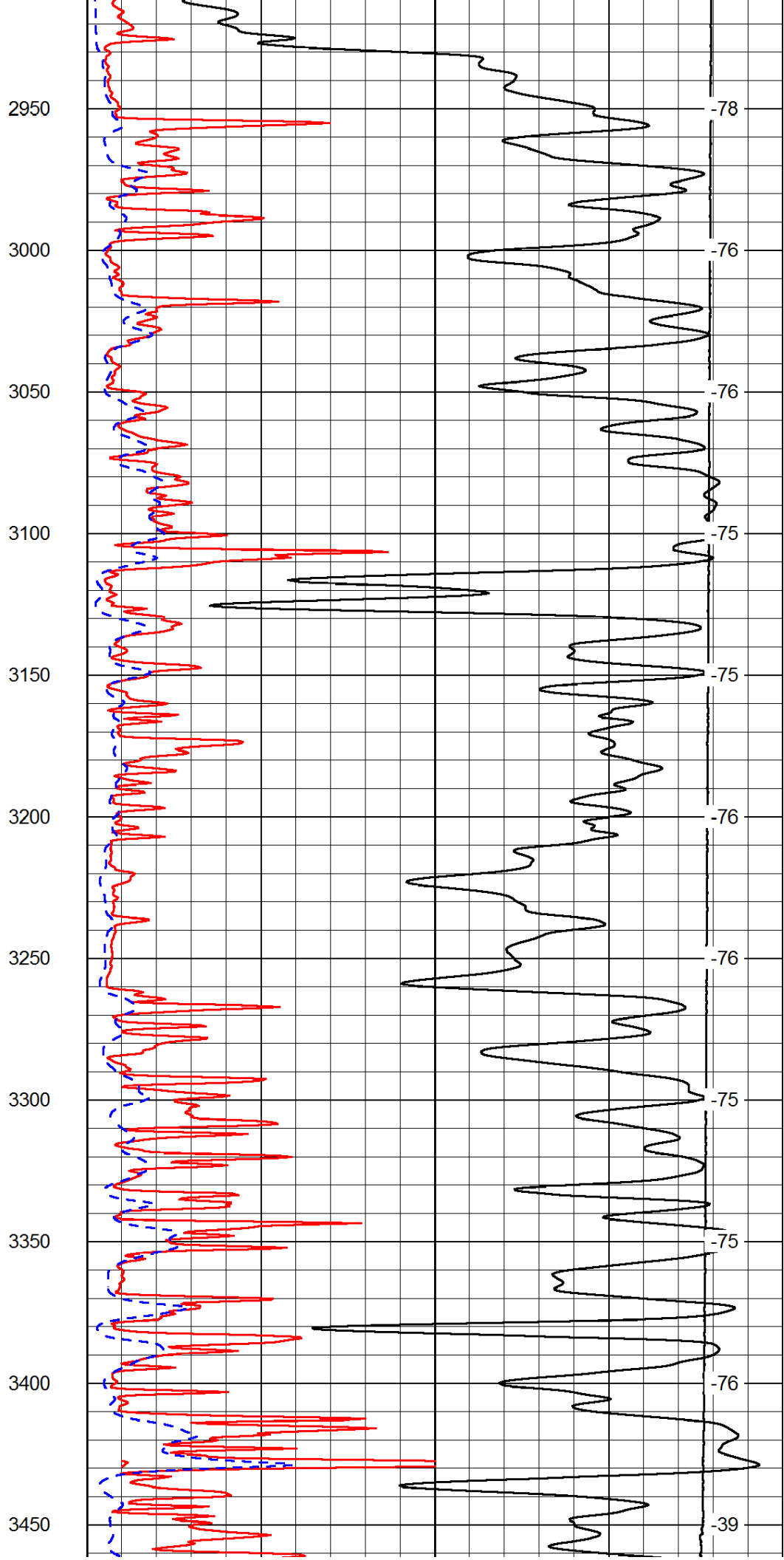
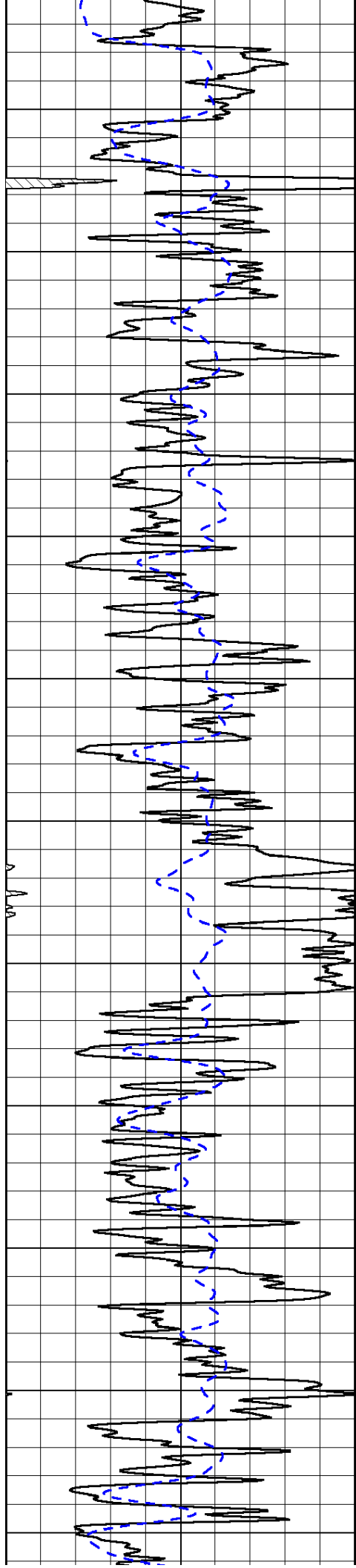


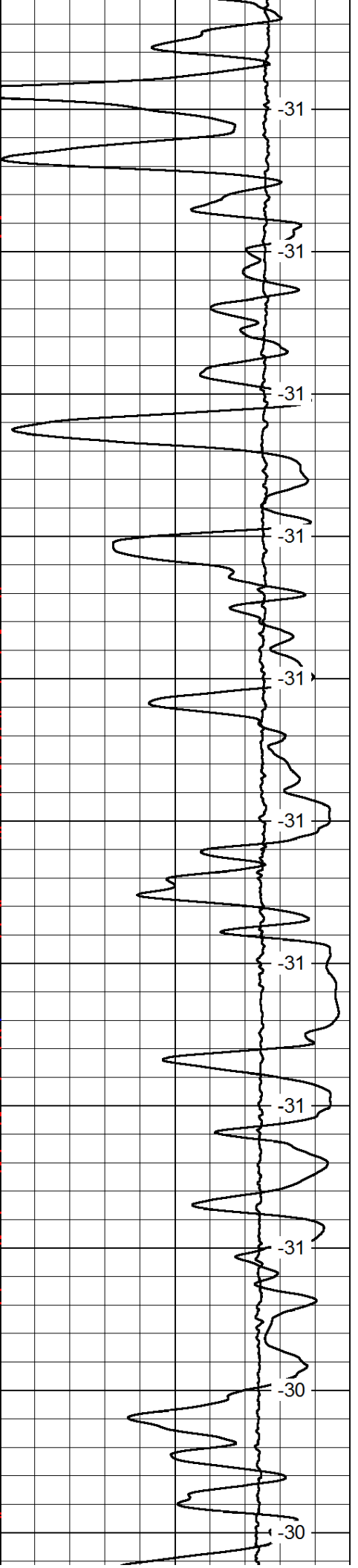
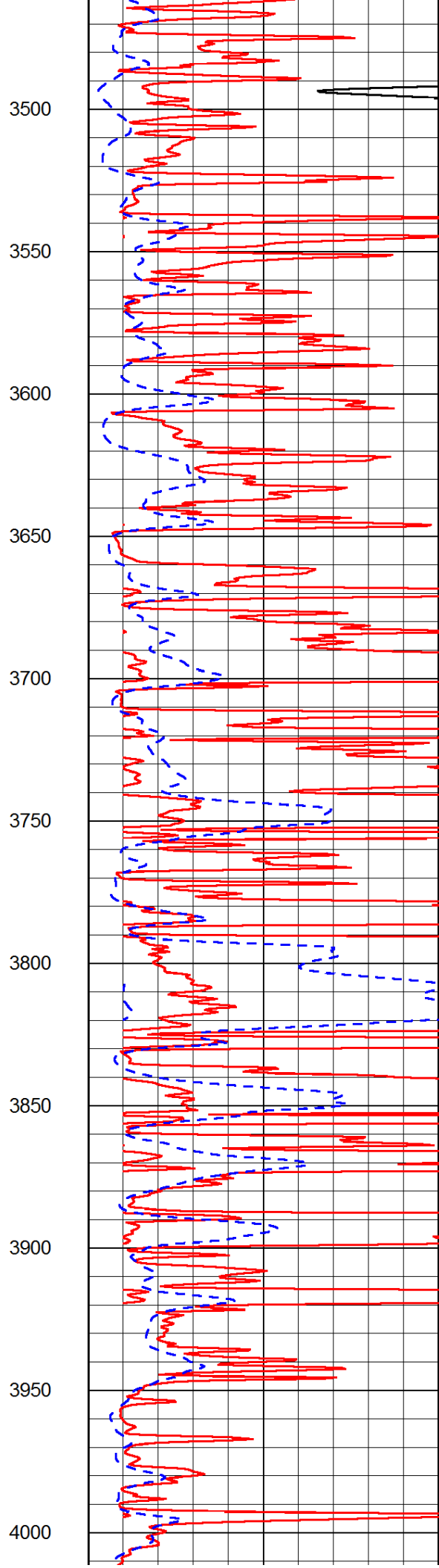
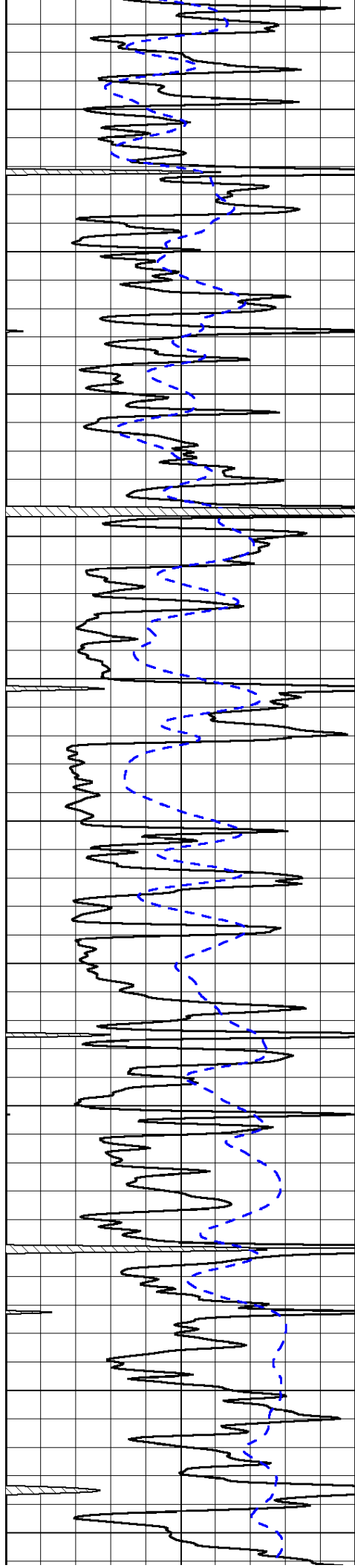


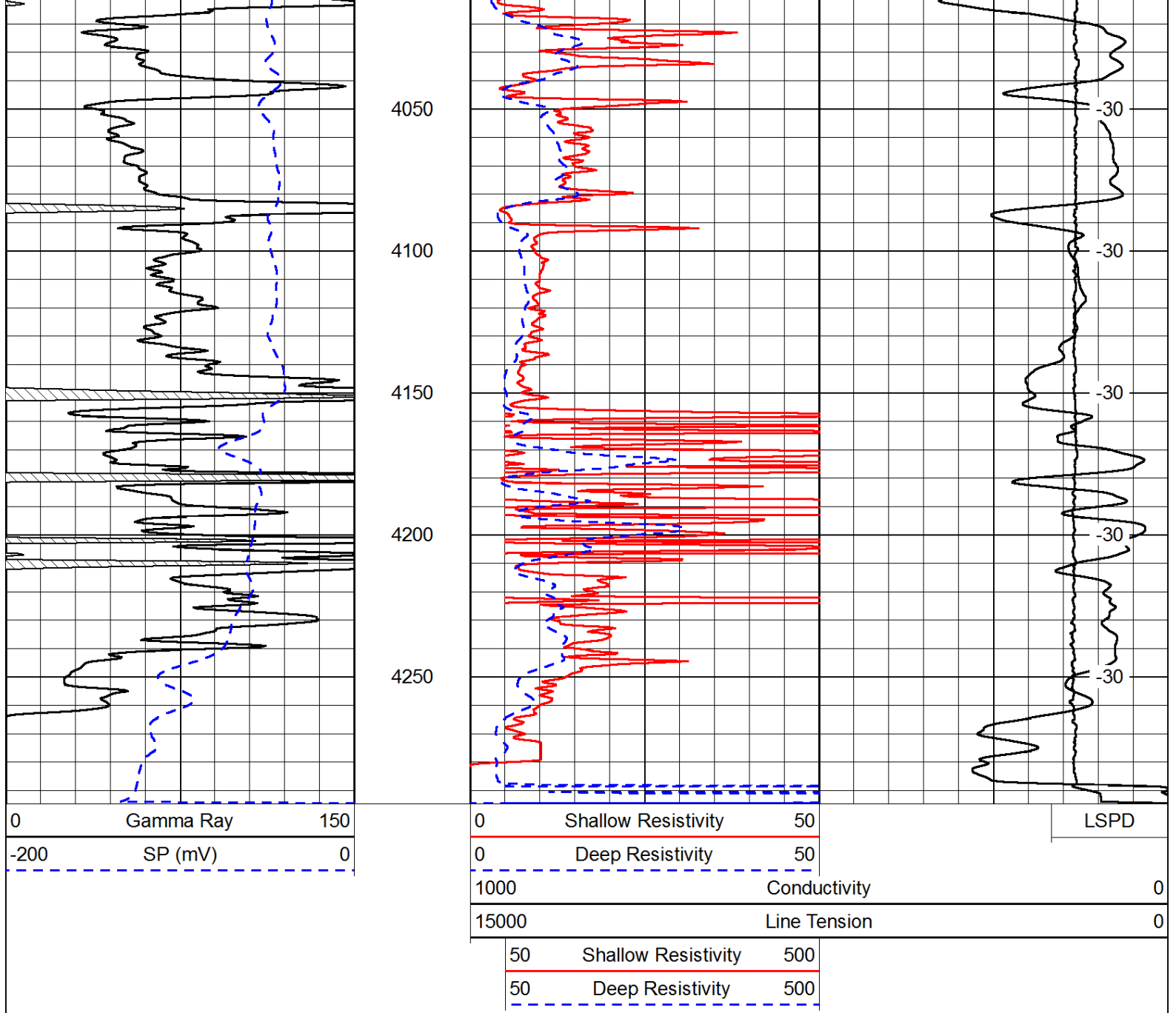




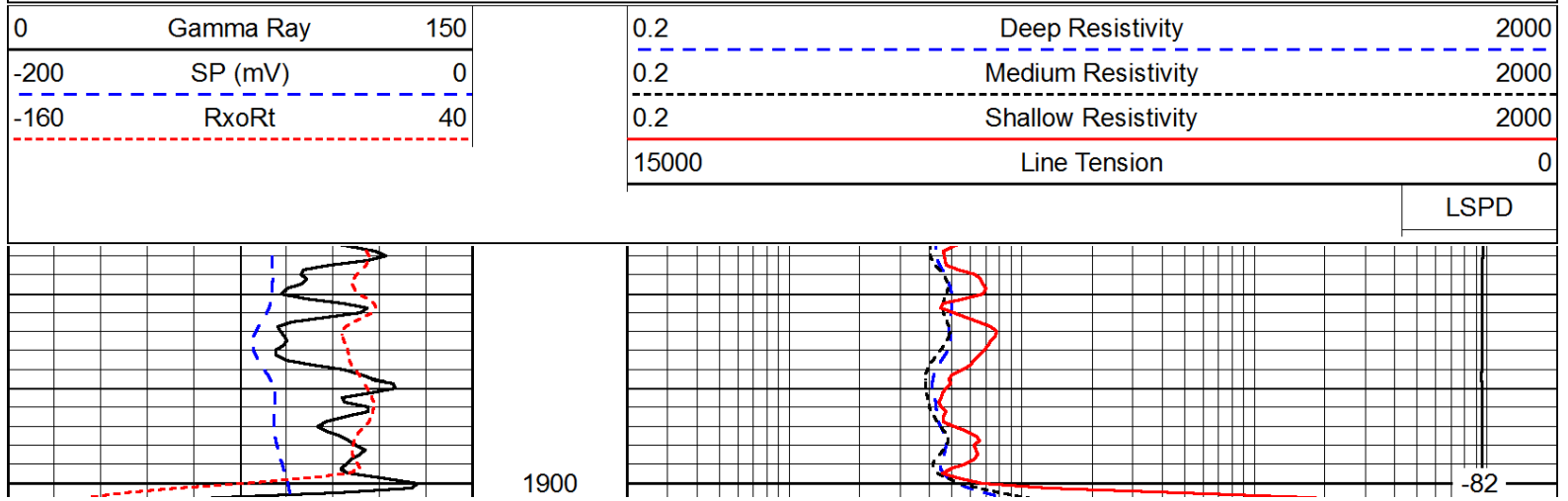


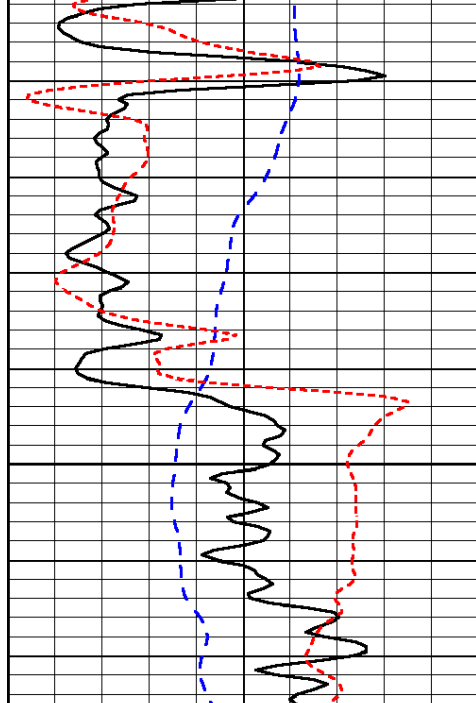






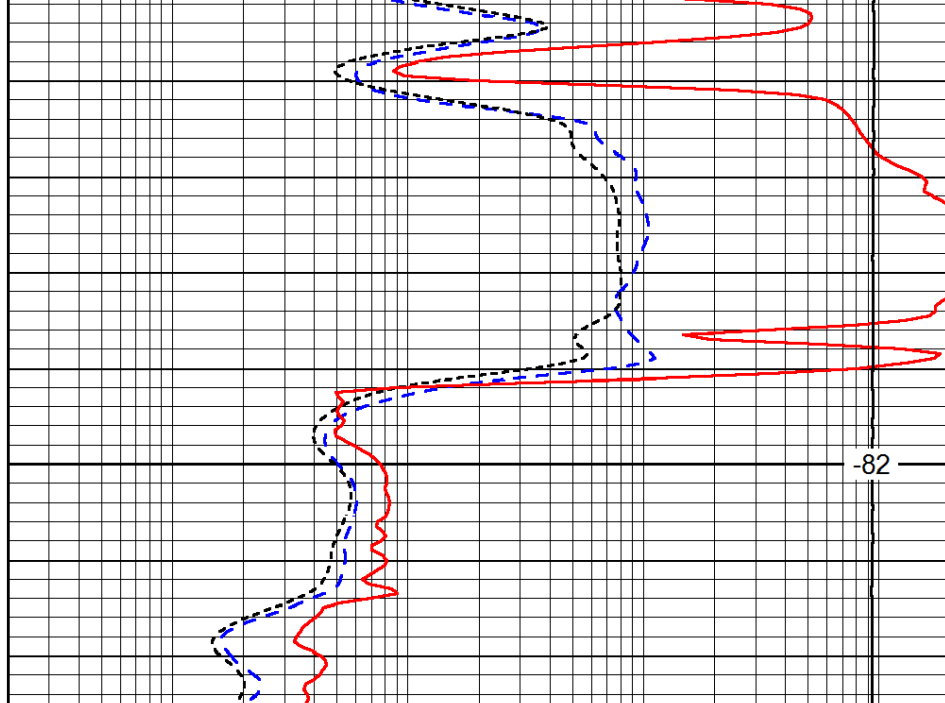
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Charted by: Depth in Feet scaled 1:240





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

1950



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

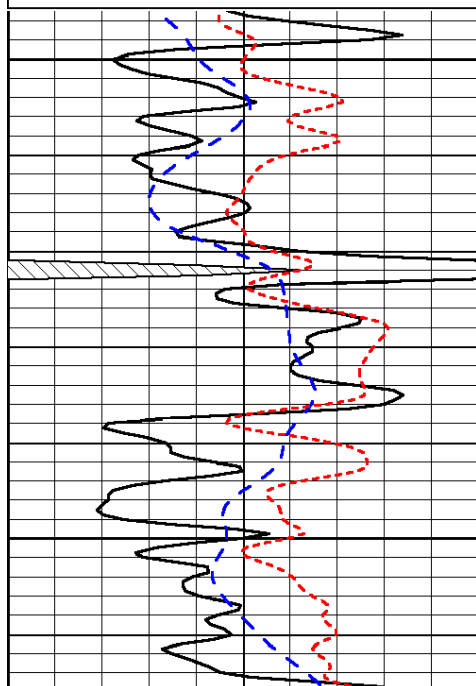
LSPD

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-200	SP (mV)	0
-160	RxoRt	40

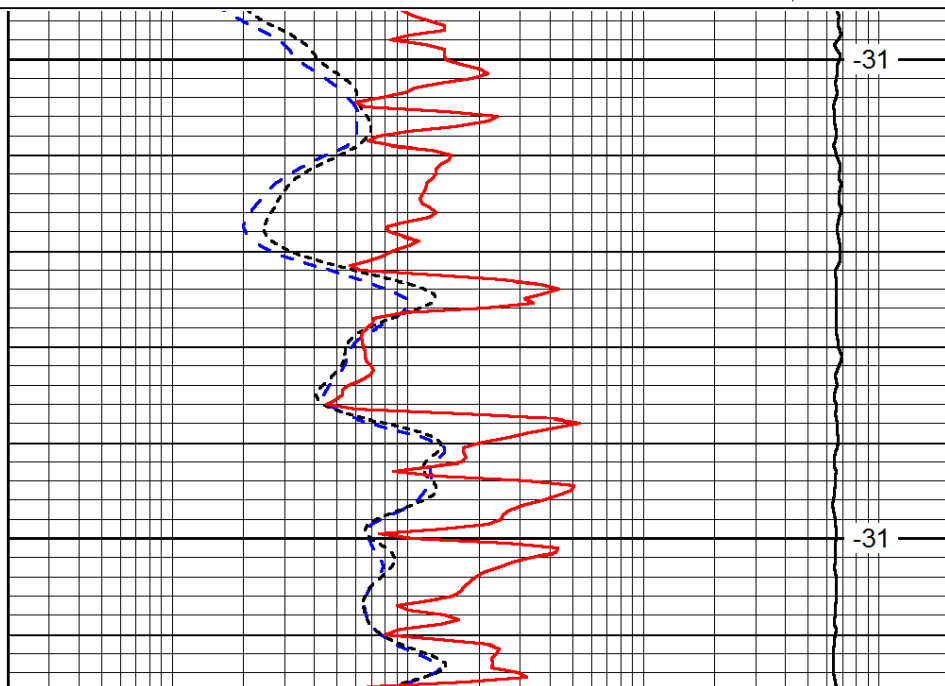
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



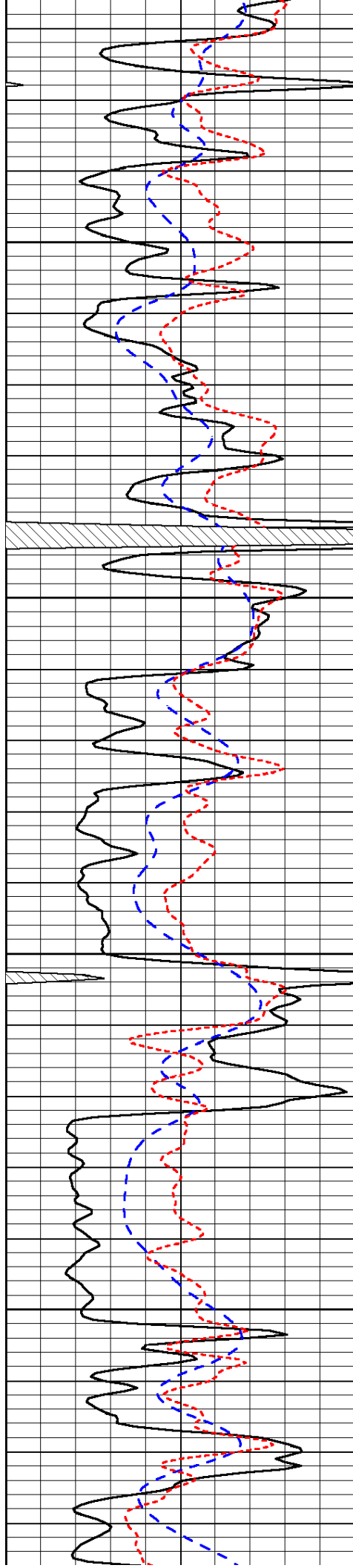
3500

3550



-31

-31

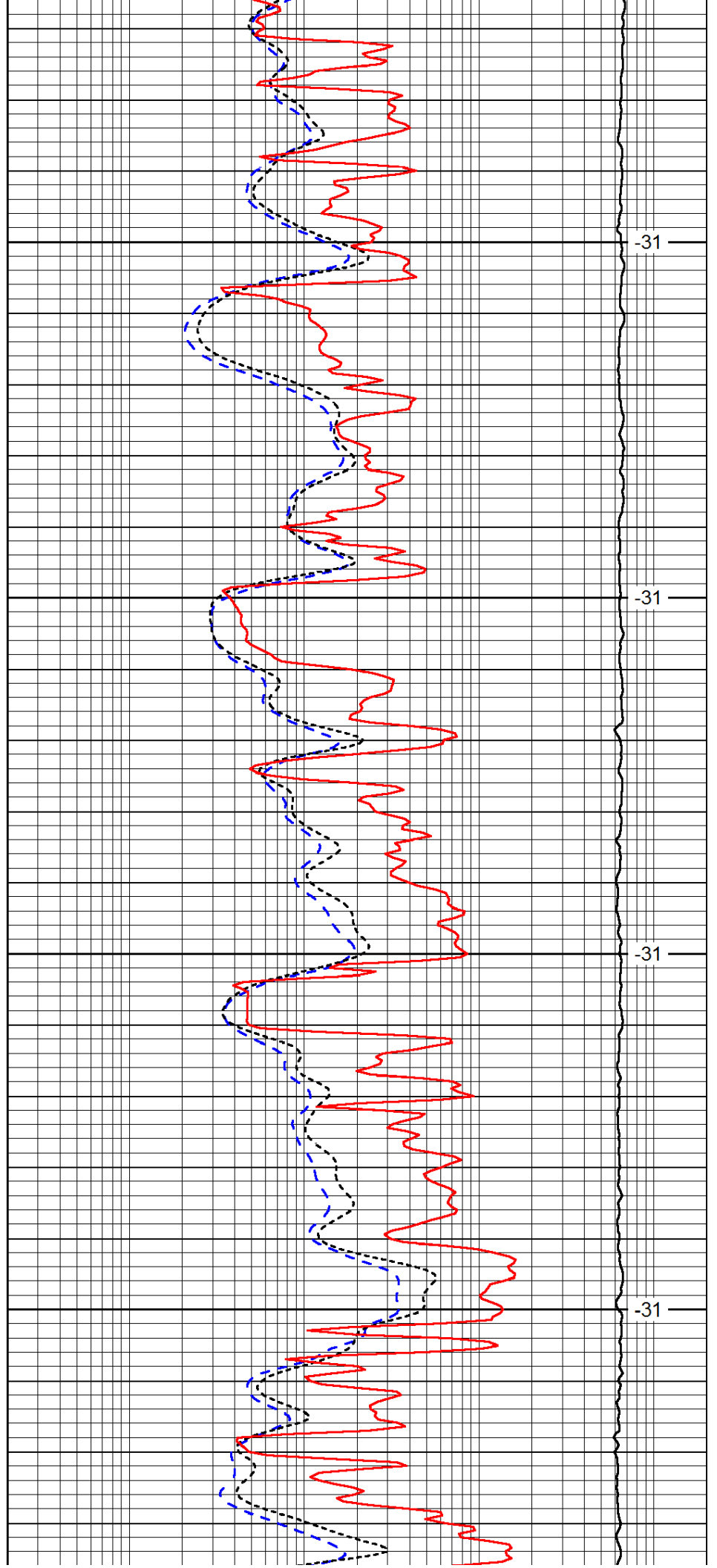


3600

3650

3700

3750

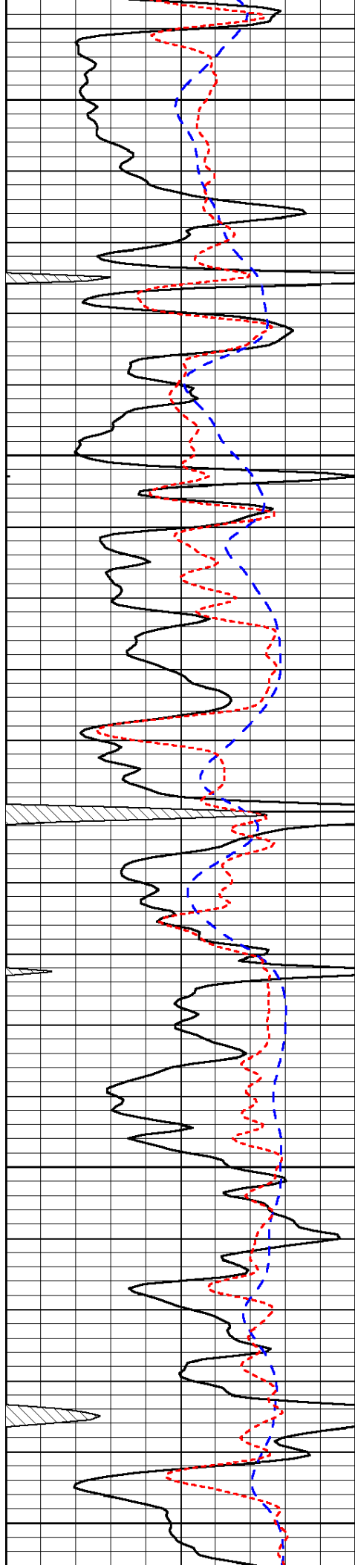


-31

-31

-31

-31



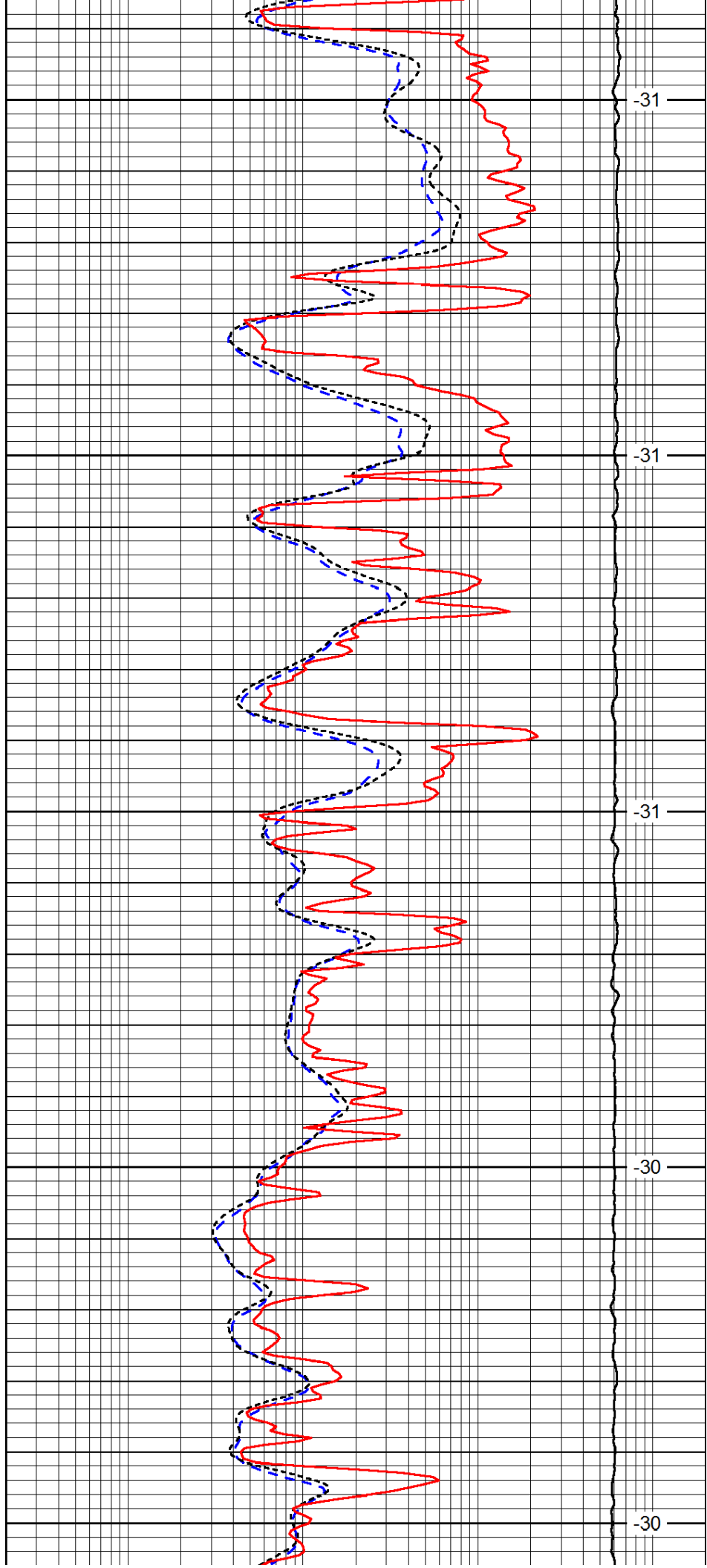
3800

3850

3900

3950

4000



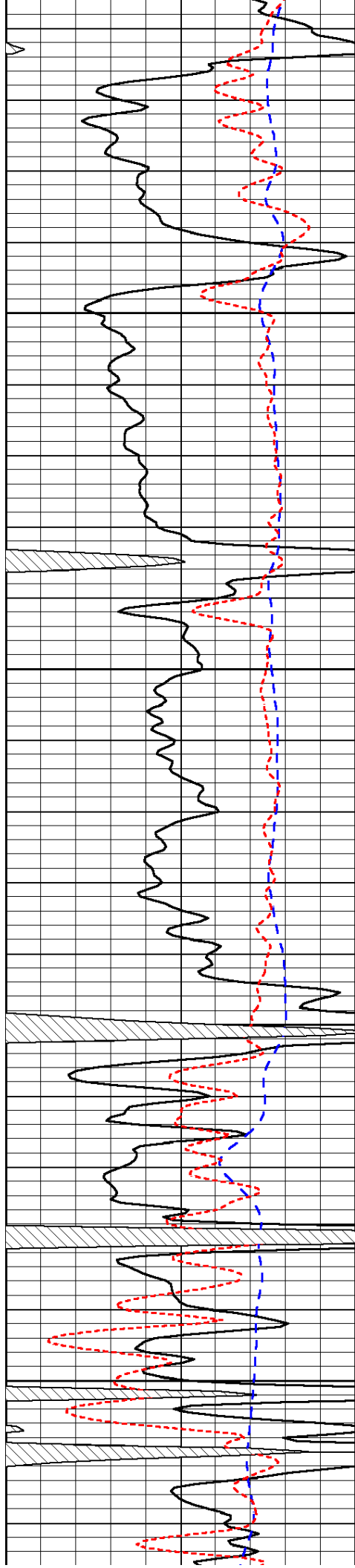
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-31

-31

-30

-30

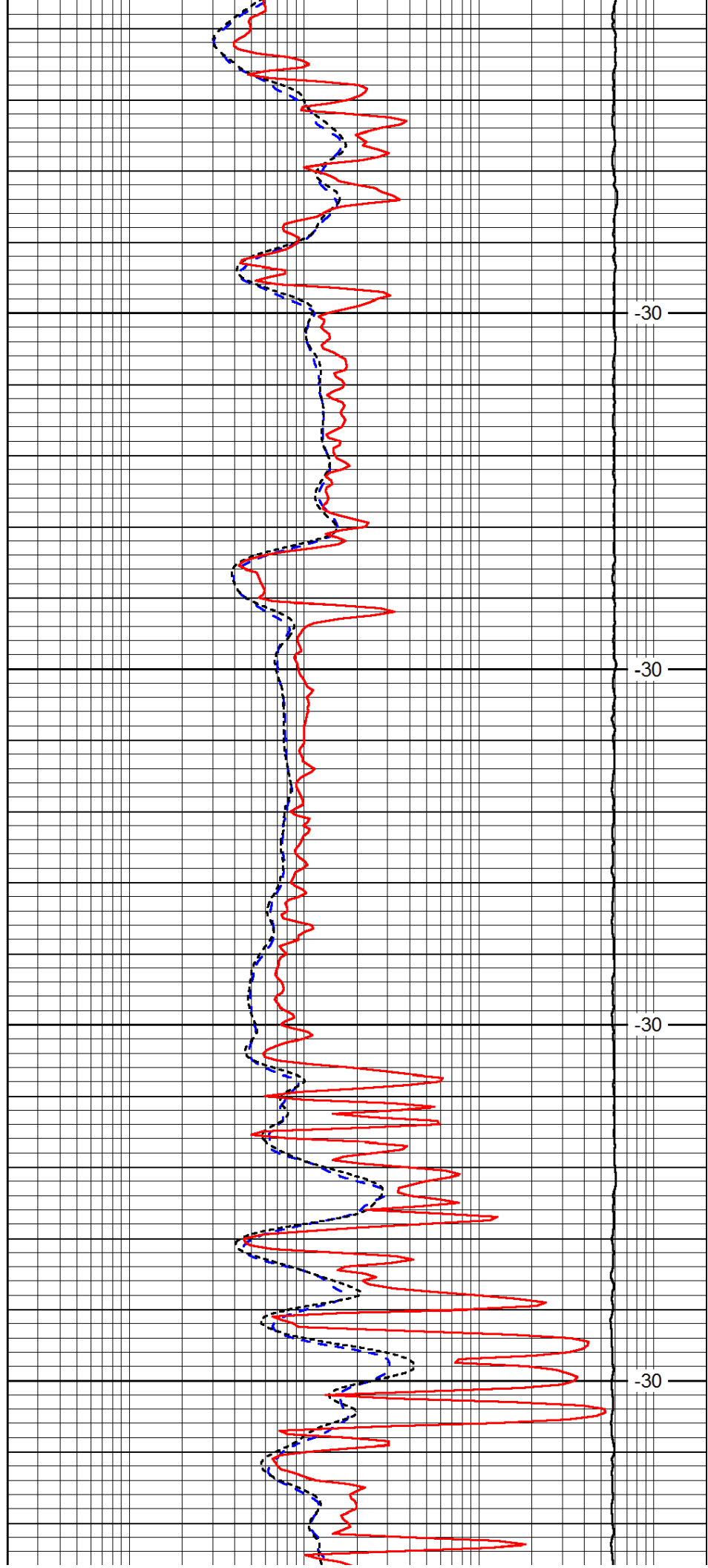


4050

4100

4150

4200

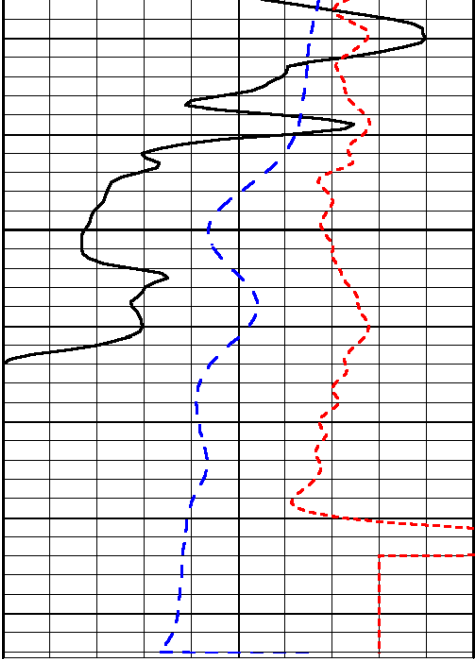


-30

-30

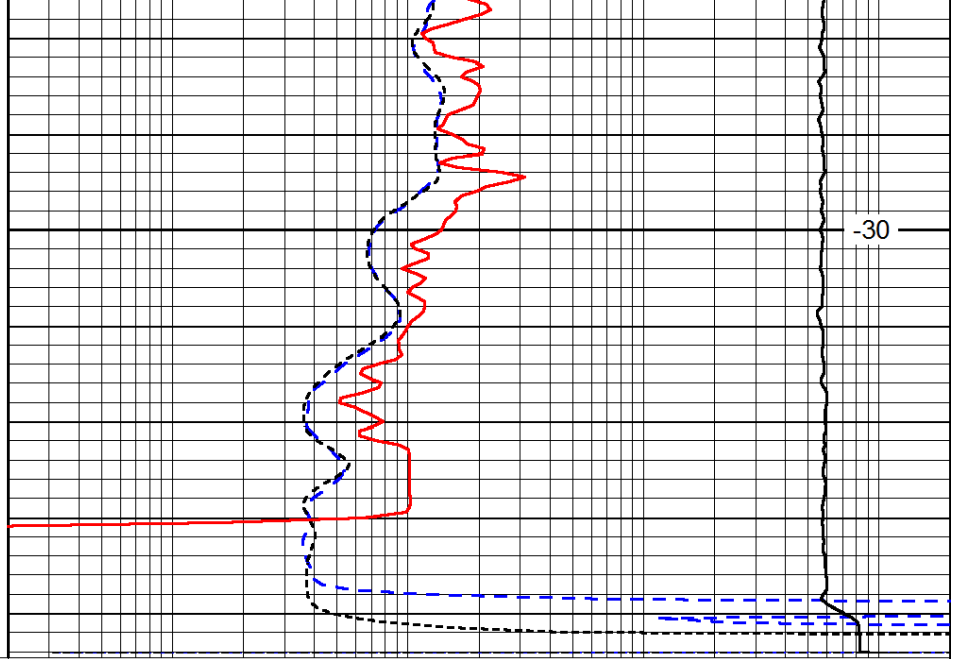
-30

-30



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

4250



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

LSPD