



Pioneer Energy Services

Dual Induction Log

15-065-23942-00-00

API No.

Company **H&C Oil Operating, Inc.**

Well **Minium #26-1**

Field **Wildcat**

County **Graham** State

Kansas

Location

890' FSL & 1650' FWL

Other Services
CNL/CDL
MEL

Sec: 26 Twp: 8S Rge: 25W

Permanent Datum Ground Level Elevation 2388
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation

K.B. 2393
D.F.
G.L. 2388

Date 6/16/2013

Run Number One

Depth Driller 3980

Depth Logger 3982

Bottom Logged Interval 3981

Top Log Interval 250

Casing Driller 8.625 @ 263

Casing Logger 263

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 1200

Density / Viscosity 9.4 61

pH / Fluid Loss 10.0 7.8

Source of Sample Flowline

Rm @ Meas. Temp 1.10 @ 74

Rmf @ Meas. Temp 0.83 @ 74

Rmc @ Meas. Temp 1.49 @ 74

Source of Rmf / Rmc Charts

Rm @ BHT 0.64 @ 128

Operating Rig Time 4 Hours

Max Rec. Temp. F 128

Equipment Number 91

Location Hays

Recorded By D. Schmidt

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.pioneerenergy.com
785 625 3858

Morland,
2 South, East & North into

Database File: c:\warrior\data\h&c_minium #26-1\h&c_061613hd1.db
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Presentation Format: dil2in
Dataset Creation: Mon Jun 17 00:58:32 2013
Charted by: Depth in Feet scaled 1:600

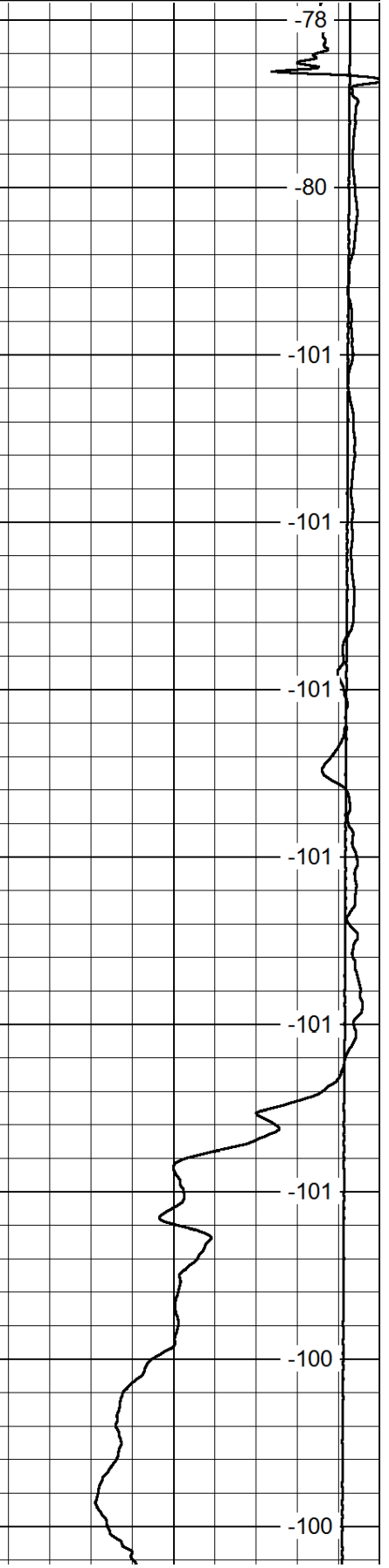
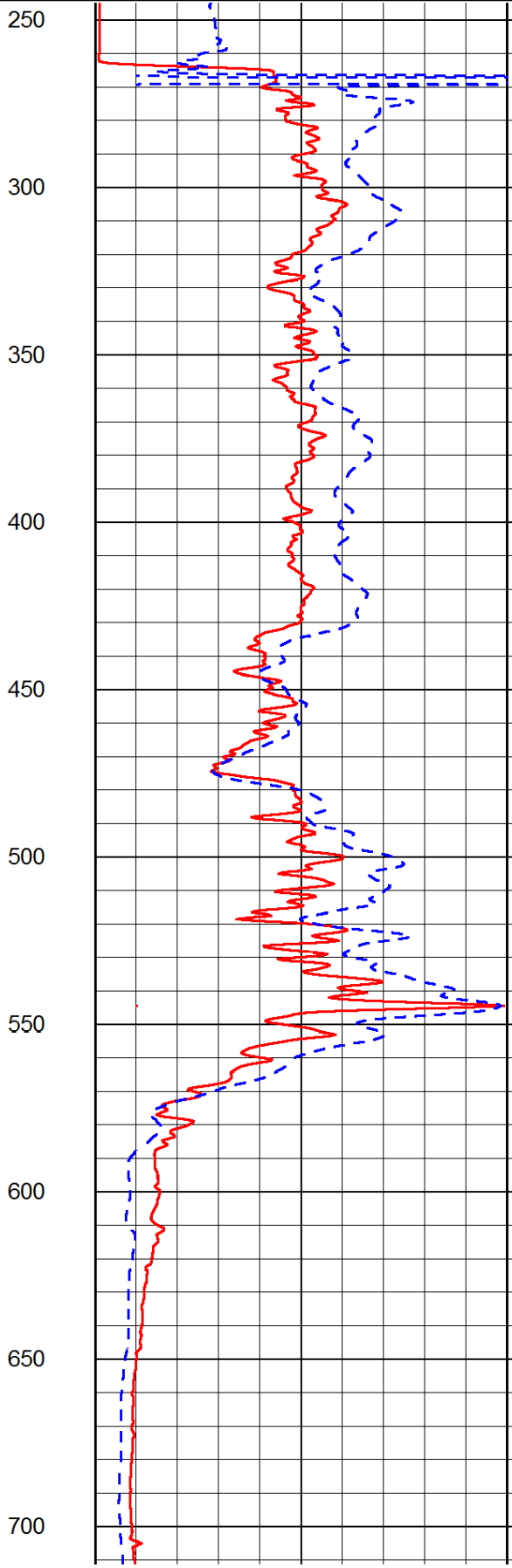
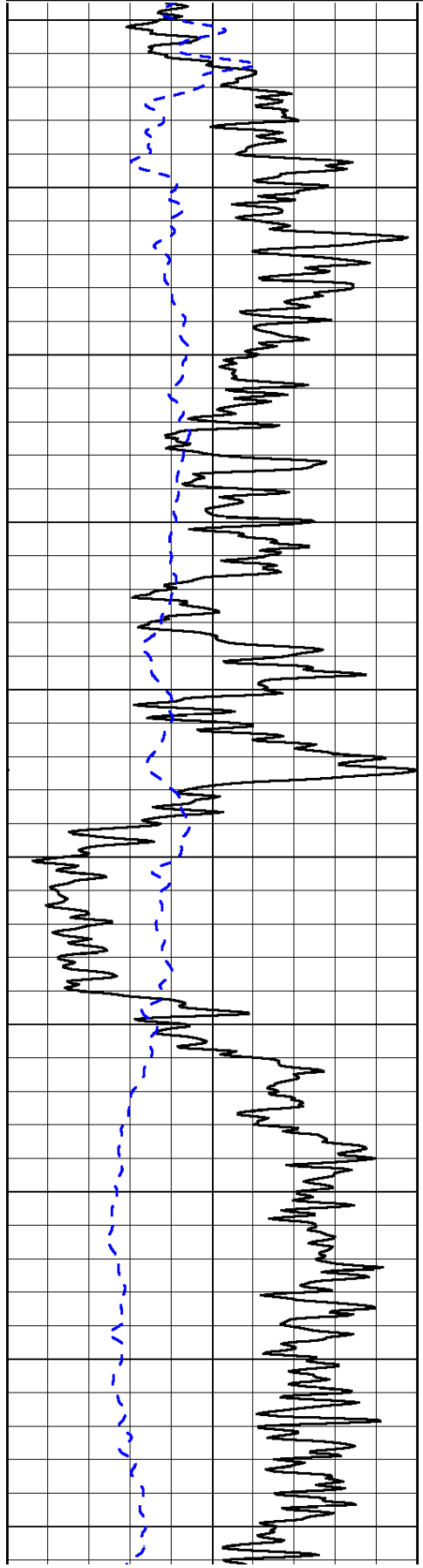
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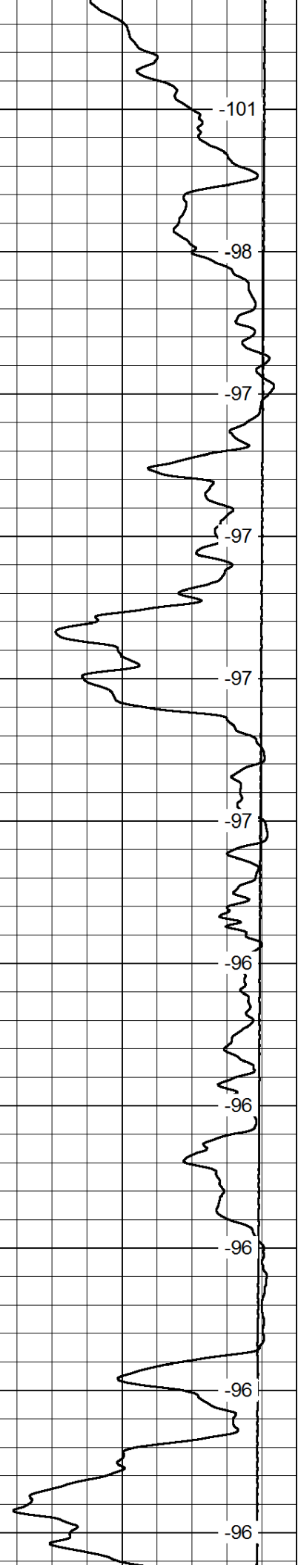
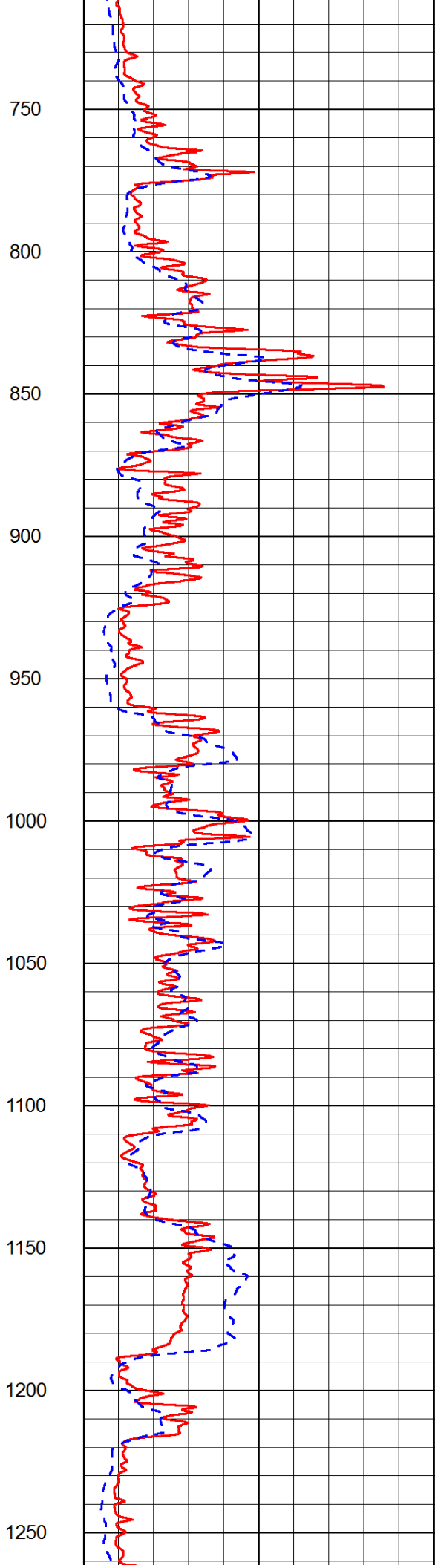
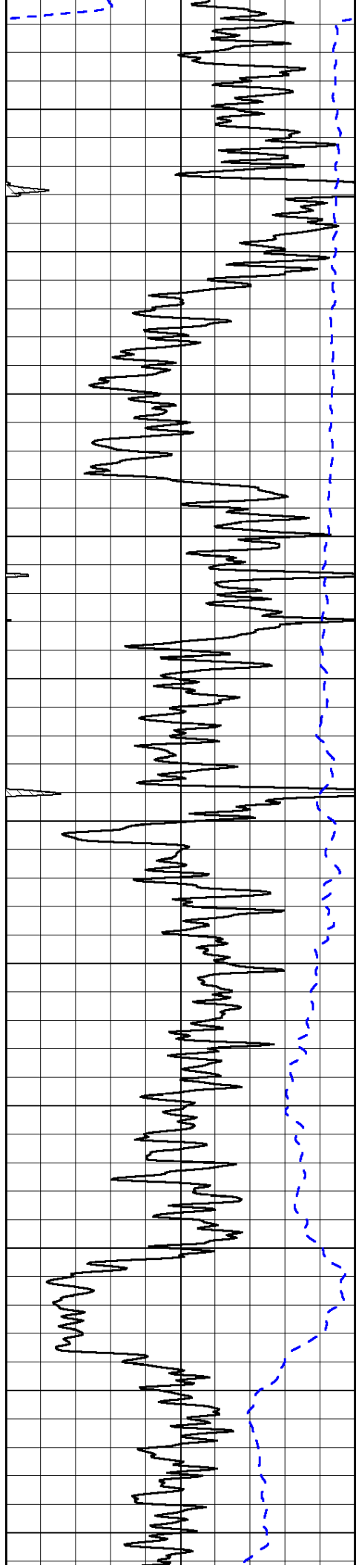
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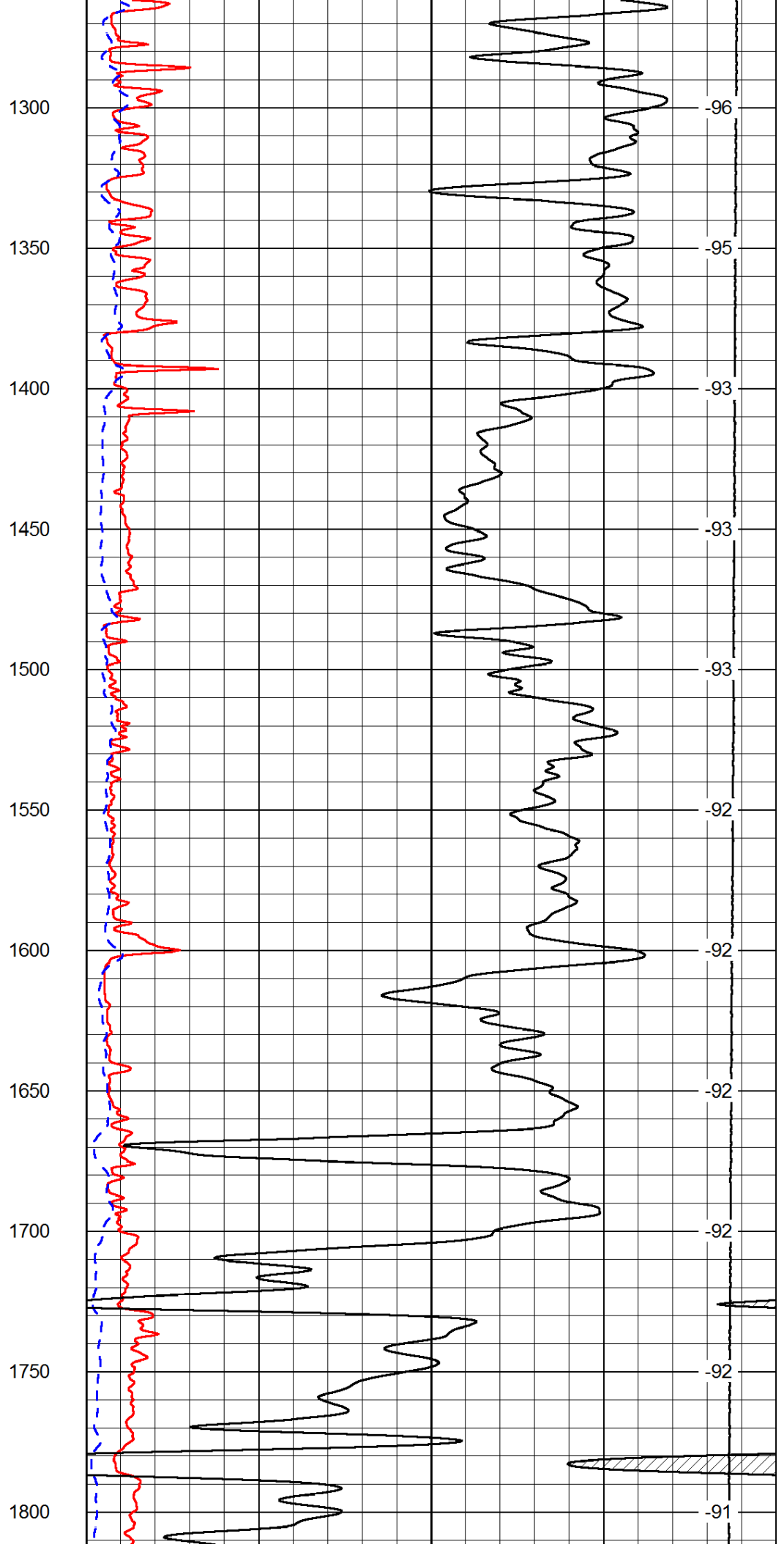
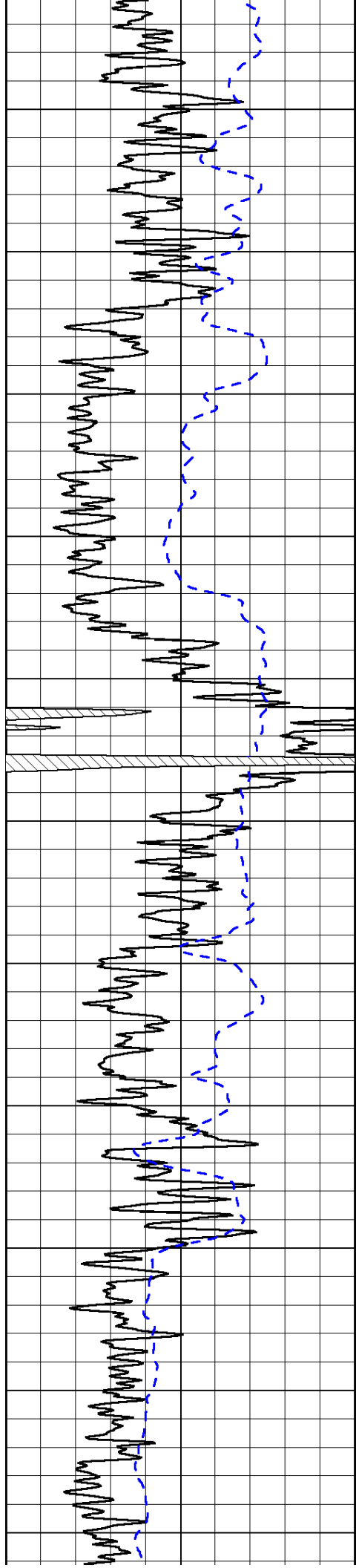
LSPD

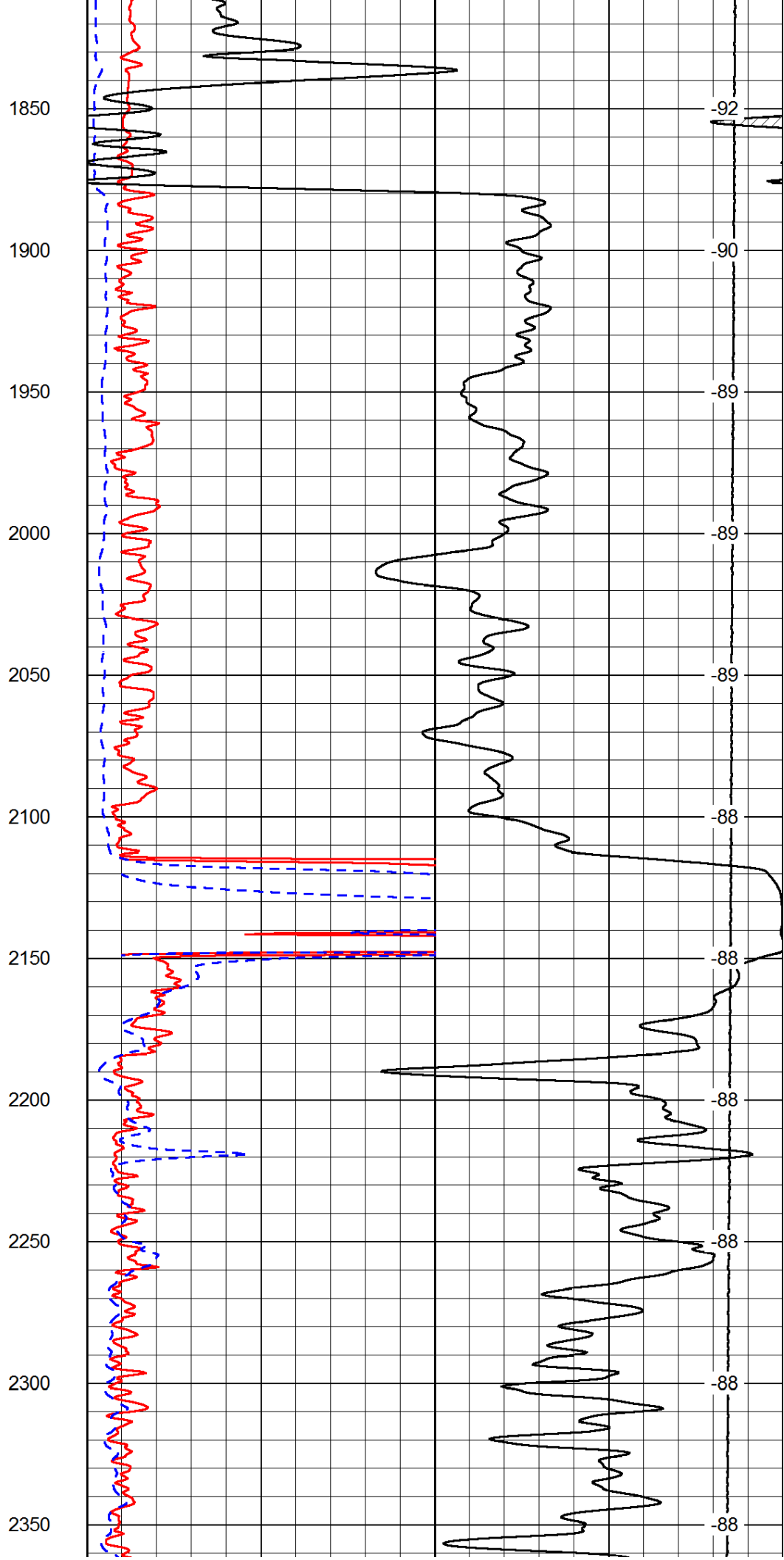
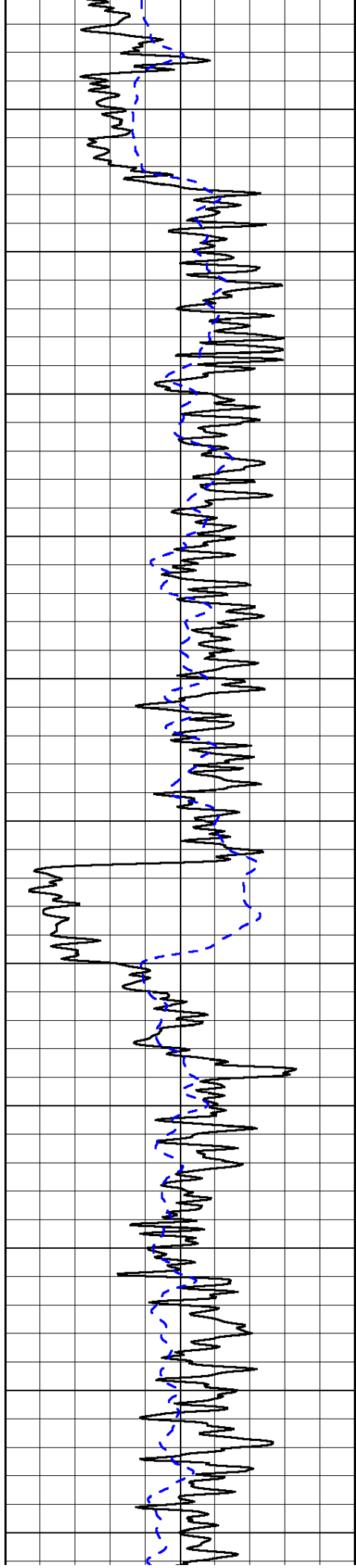
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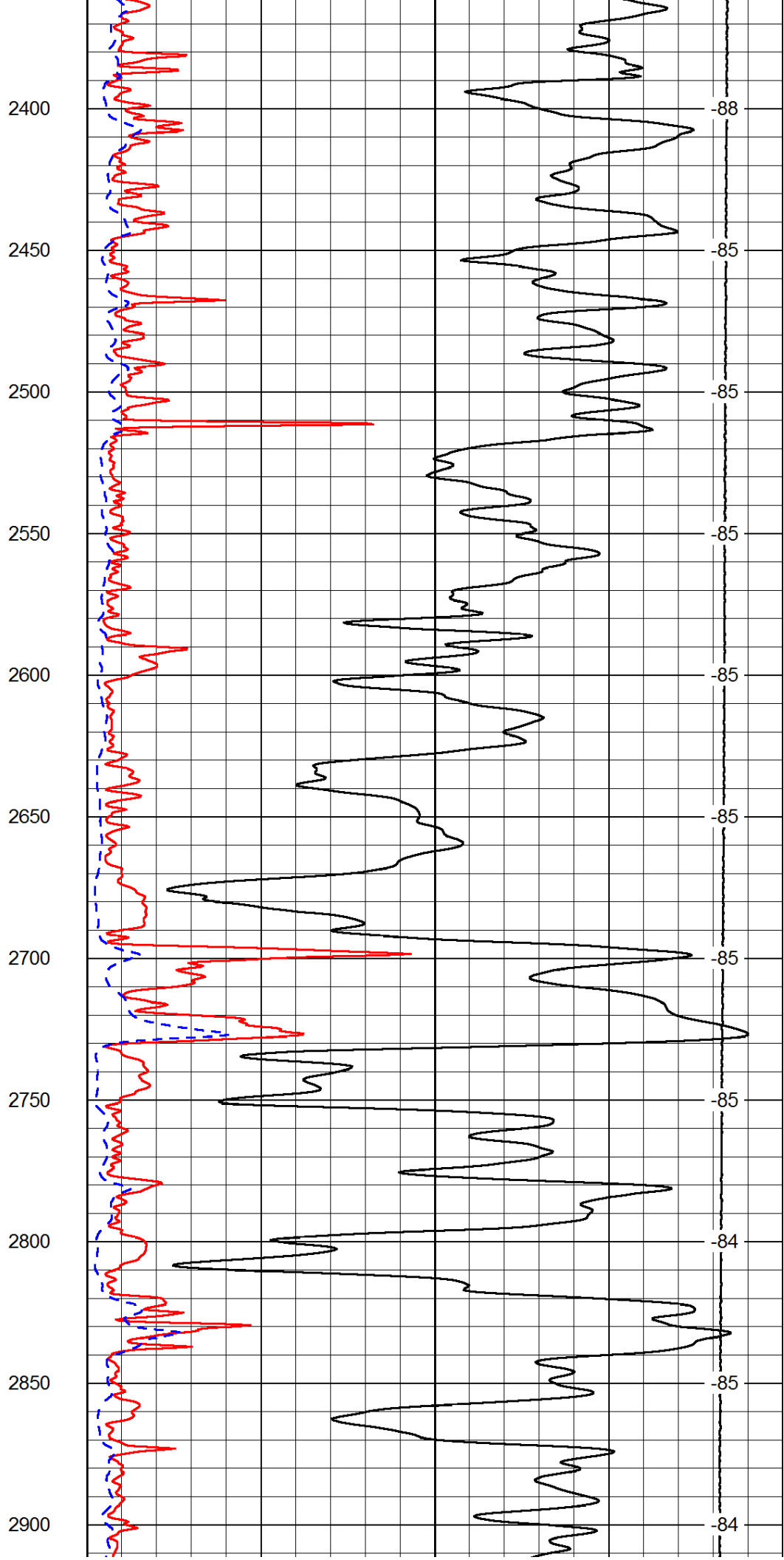
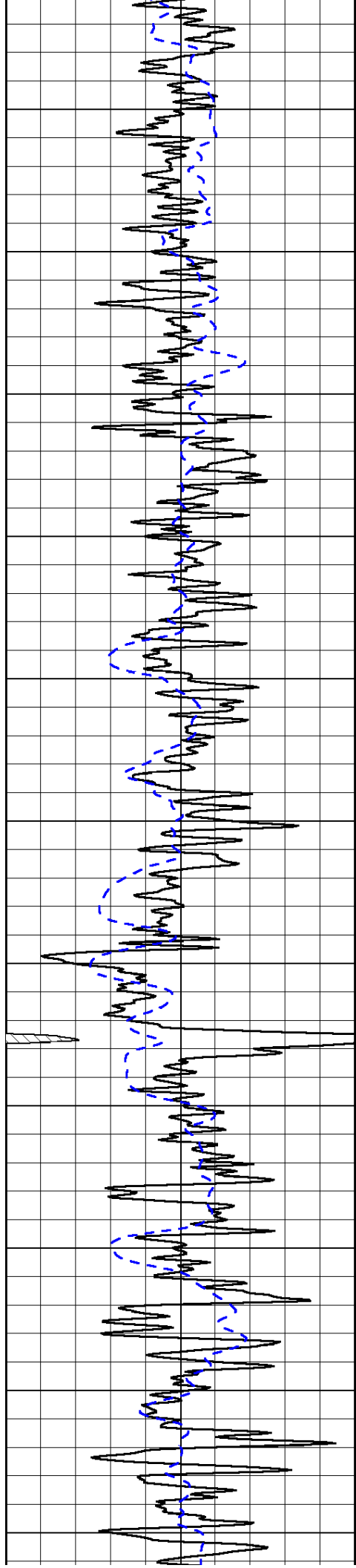
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50	Deep Resistivity	500

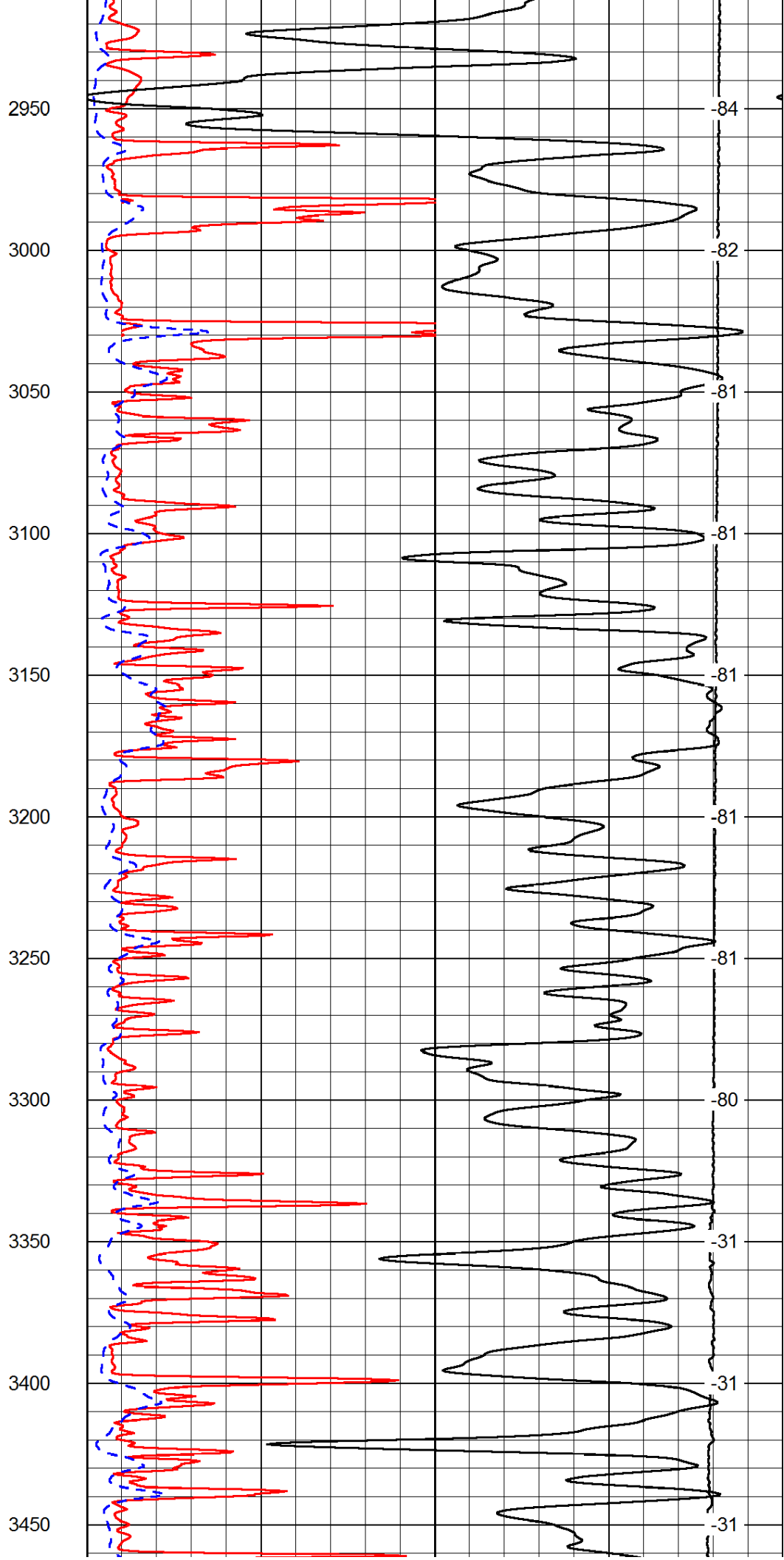
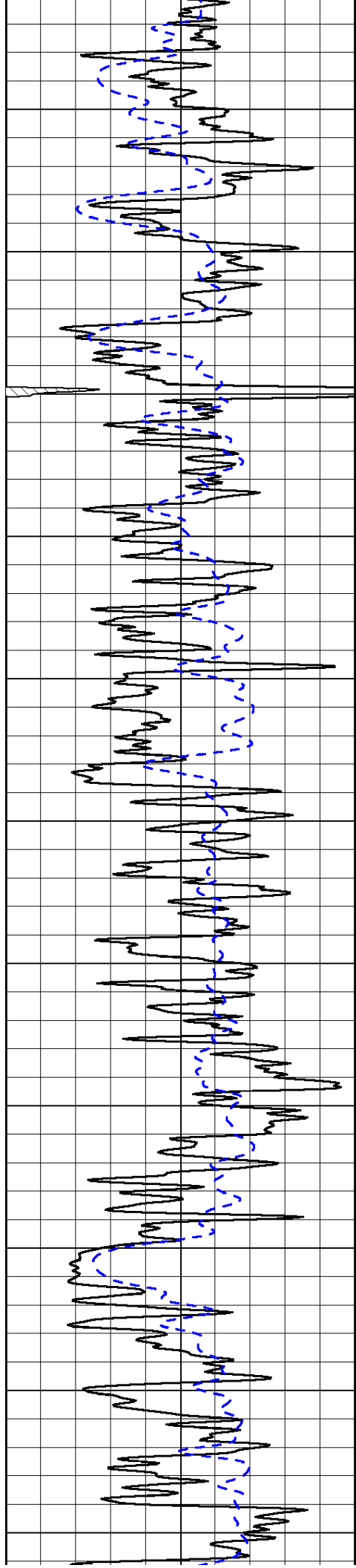


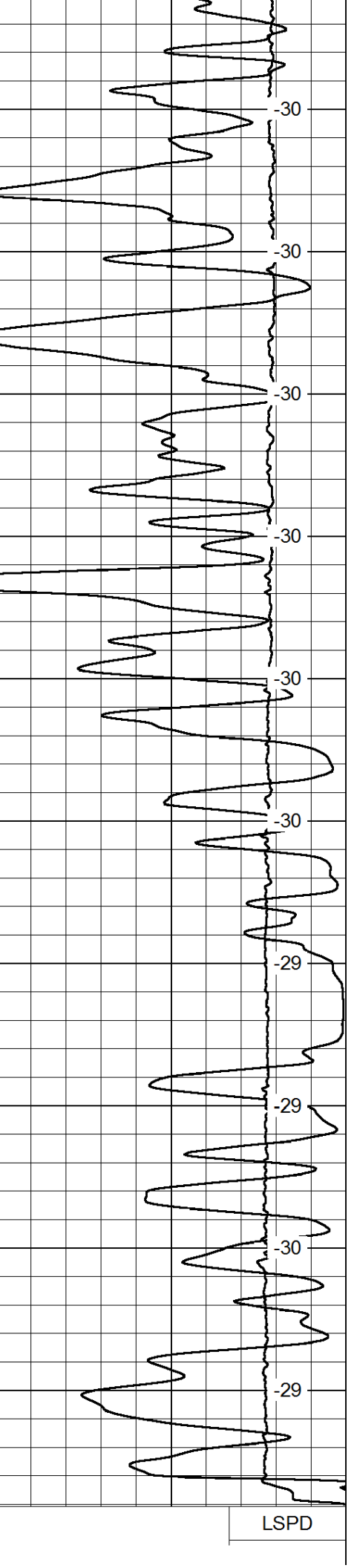
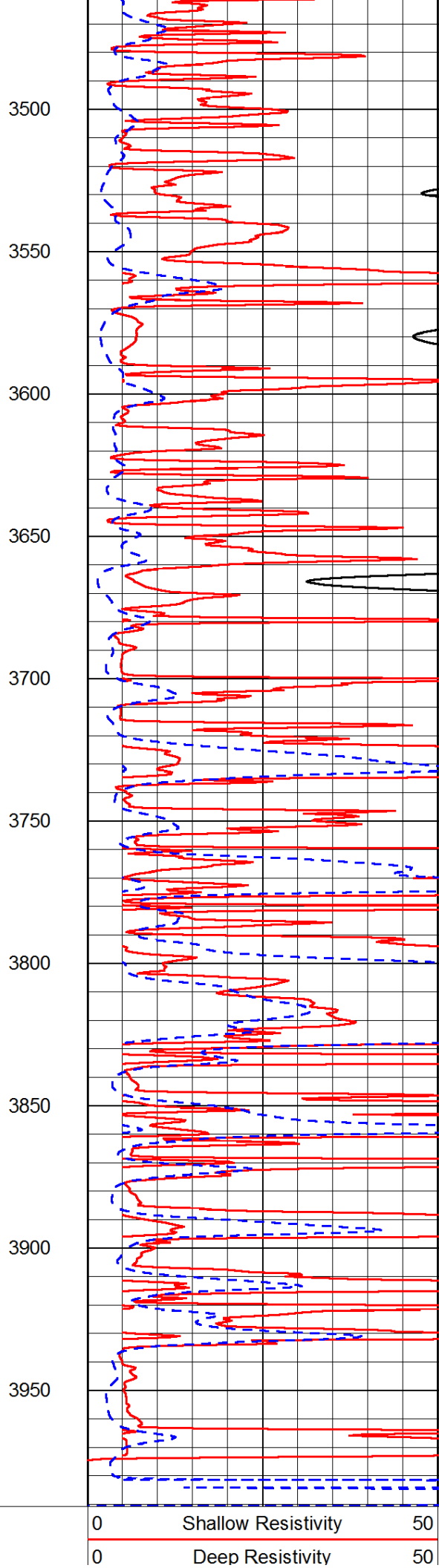
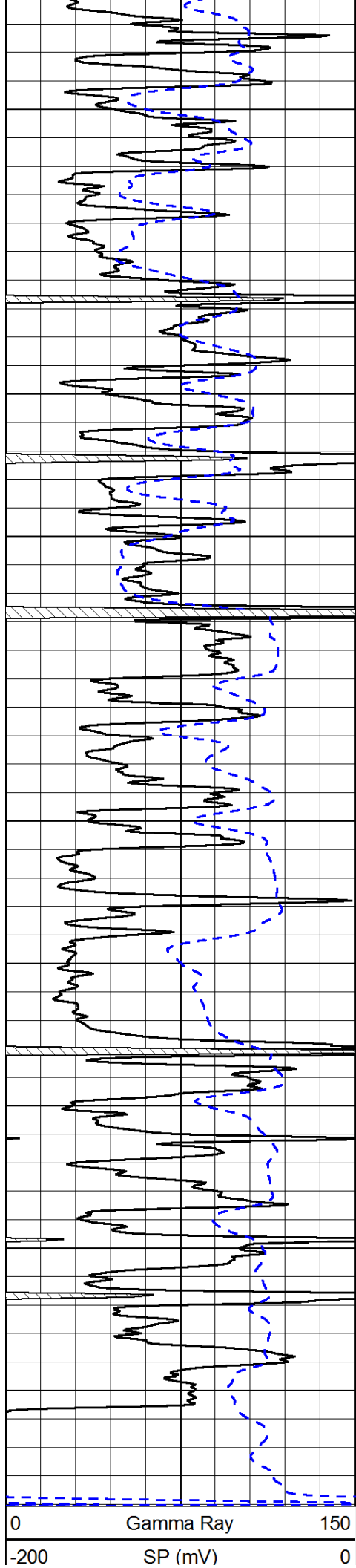










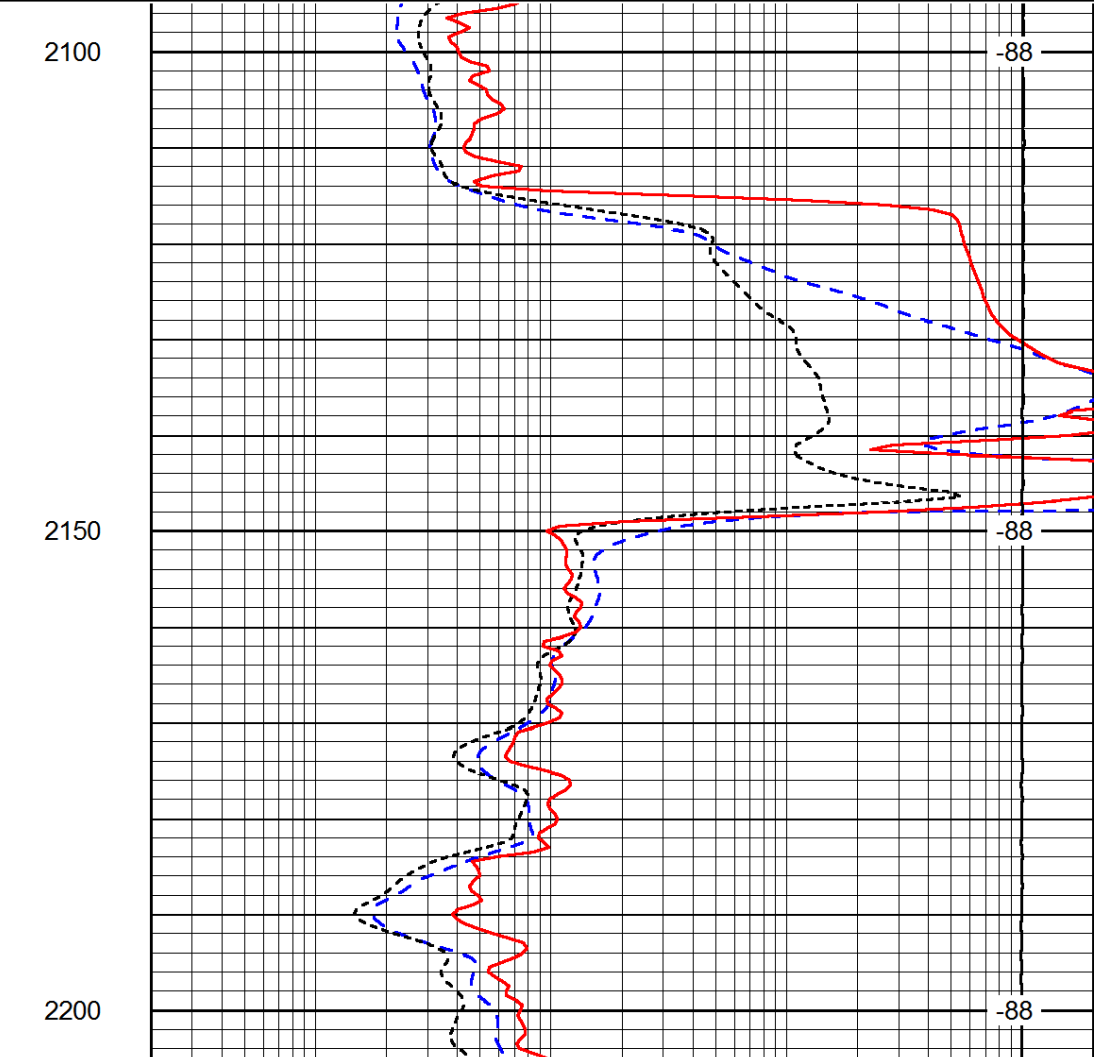
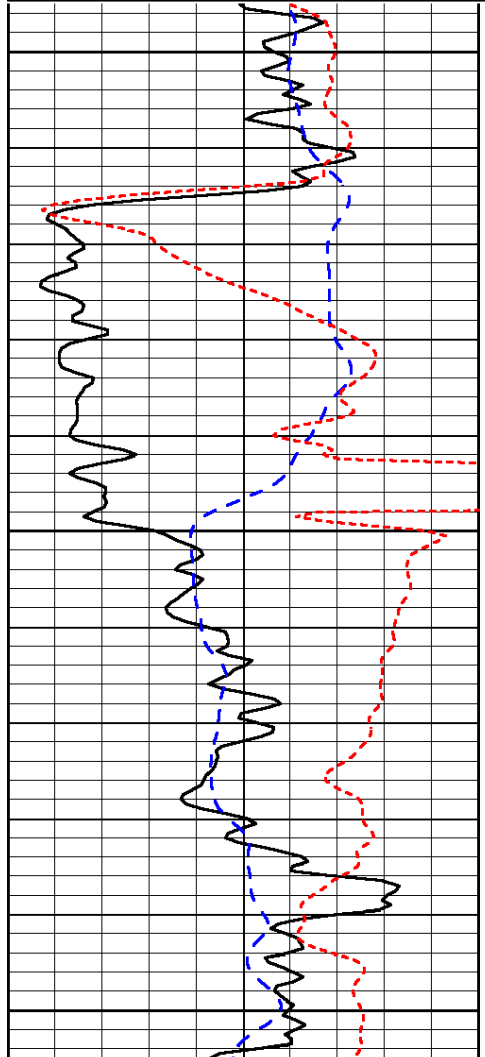


1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

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 Presentation Format: dil
 Dataset Creation: Mon Jun 17 00:58:32 2013
 Charted by: Depth in Feet scaled 1:240

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-200	SP (mV)	0	0.2	Medium Resistivity	2000
-160	RxoRt	40	0.2	Shallow Resistivity	2000
			15000	Line Tension	0

LSPD



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-200	SP (mV)	0	0.2	Medium Resistivity	2000
-160	RxoRt	40	0.2	Shallow Resistivity	2000
			15000	Line Tension	0

LSPD

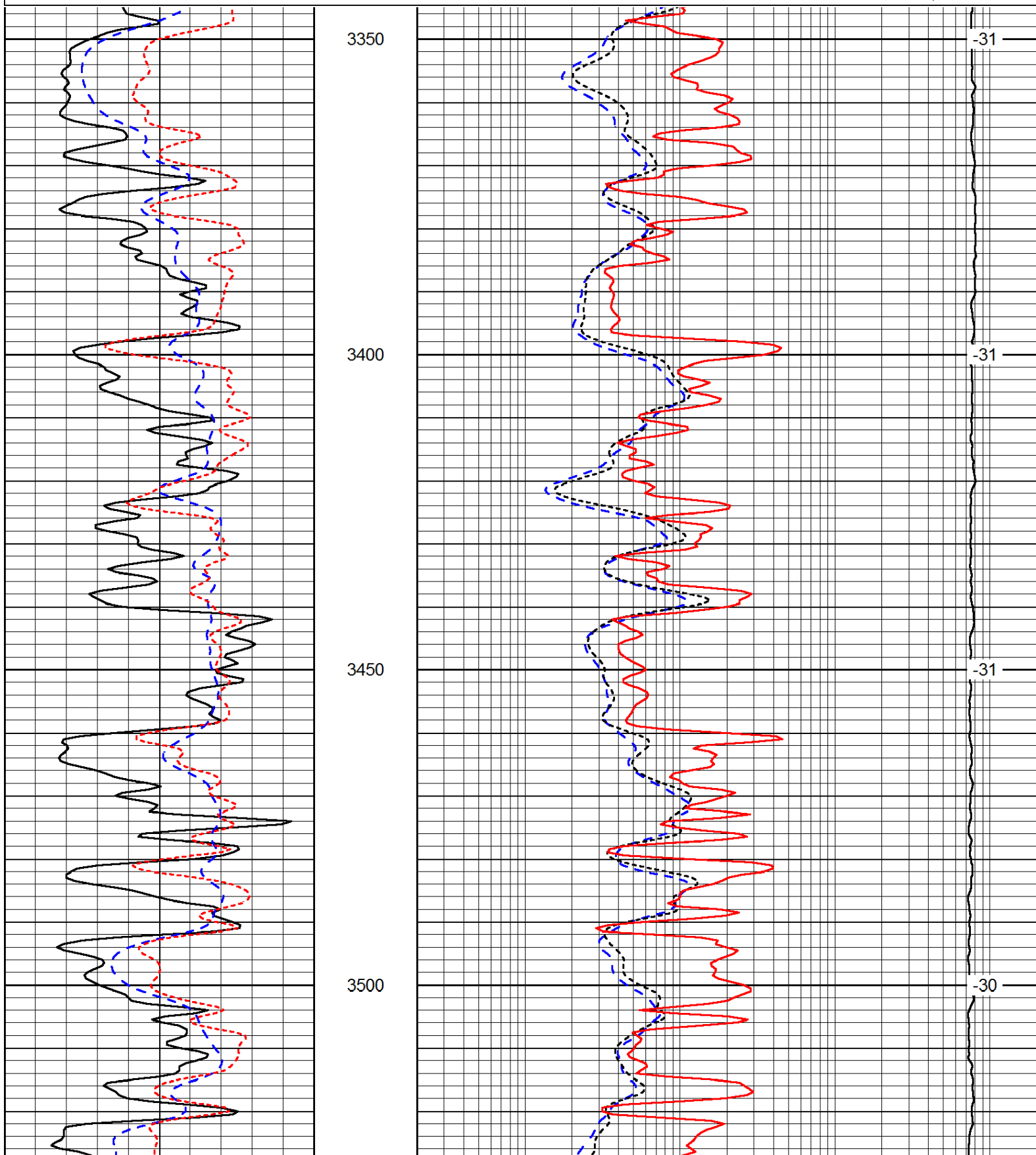
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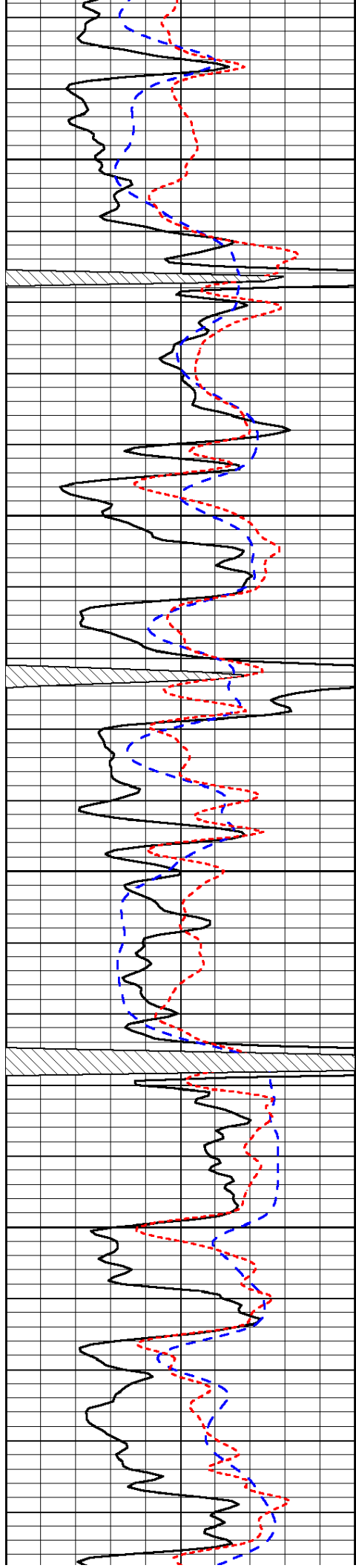
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0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

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

LSPD



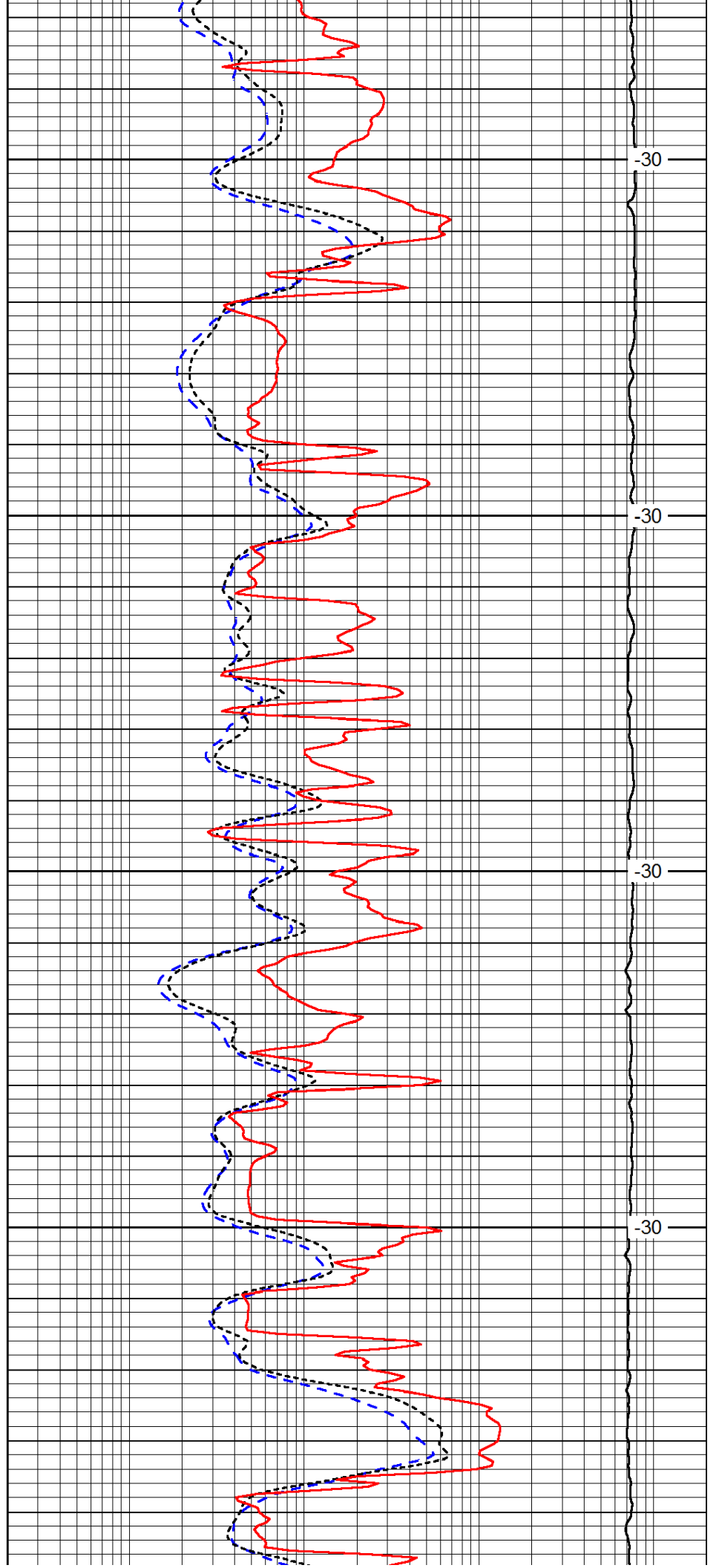


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3600

3650

3700

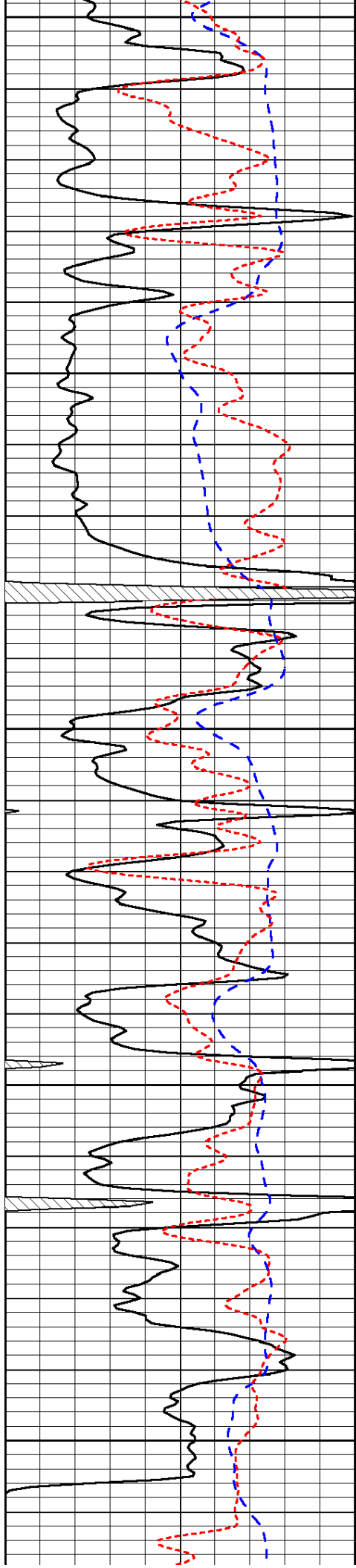


-30

-30

-30

-30



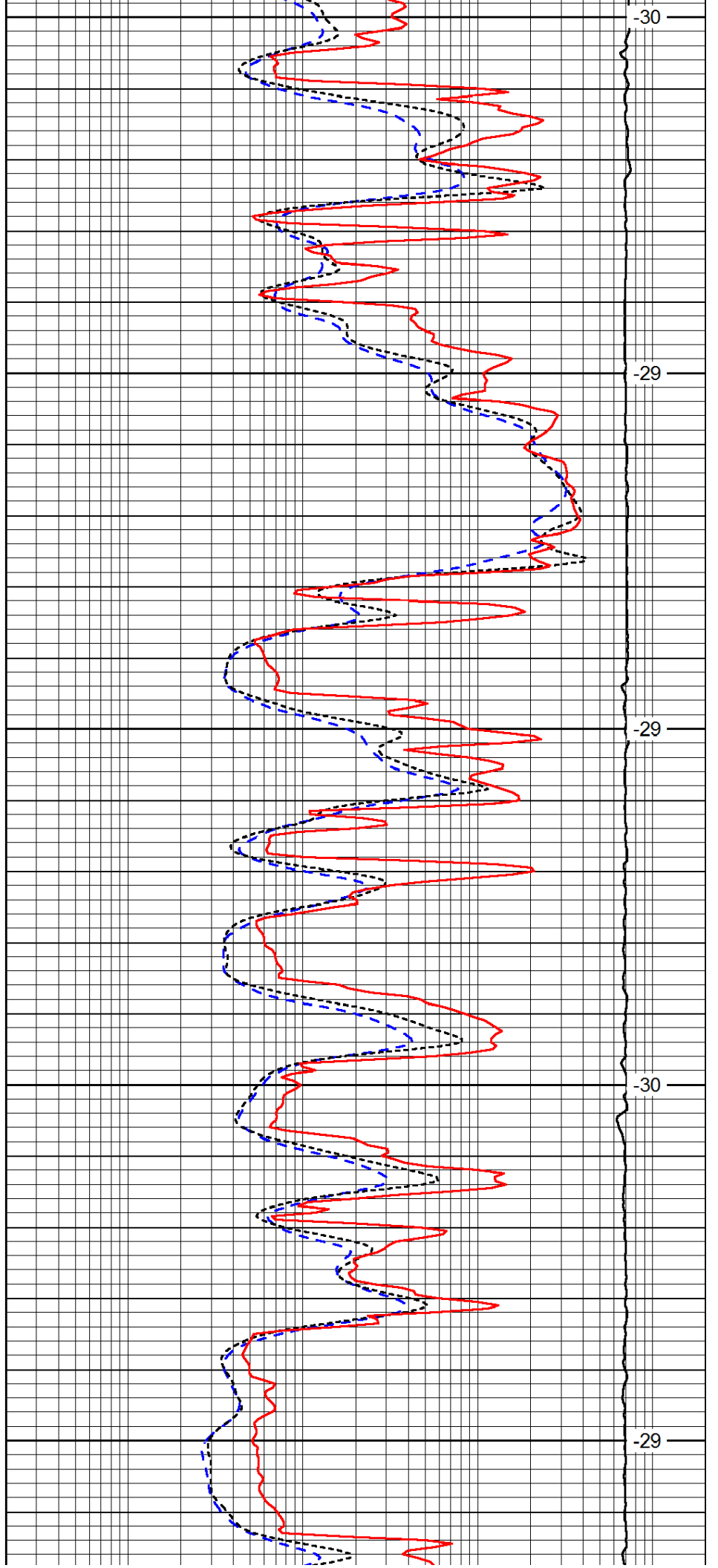
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3800

3850

3900

3950



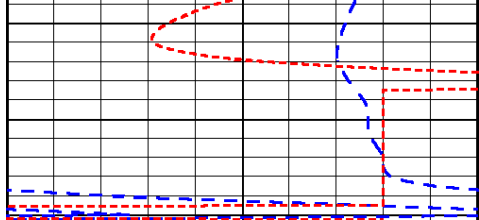
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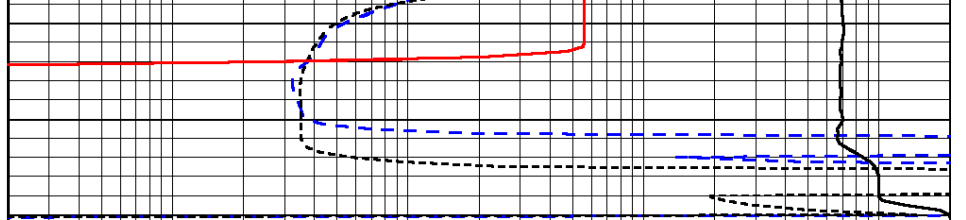
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-30

-29



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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