



Dual Induction Log

Pioneer Energy Services

API No.

15-079-20707-00-00

Company W.D. Short Oil Company, LLC

Well Balzer # C 5

Field Annelly

County Harvey State

Kansas

Location

1650' FNL & 1750' FWL

Other Services
CNL/CDL
MEL/BHCS

Sec: 35 Twp: 23 S Rge: 2 E

Permanent Datum Ground Level Elevation 1397
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation

K.B. 1405
D.F. 1405
G.L. 1397

Date

9/18/2014

Run Number

One

Depth Driller

3010

Depth Logger

3004

Bottom Logged Interval

3003

Top Log Interval

200

Casing Driller

8.625 @ 203

Casing Logger

209

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

1600

Density / Viscosity

9.3 43

pH / Fluid Loss

9.0 8.8

Source of Sample

Flowline

Rm @ Meas. Temp

0.95 @ 75

Rmf @ Meas. Temp

0.71 @ 75

Rmc @ Meas. Temp

1.28 @ 75

Source of Rmf / Rmc

Charts

Rm @ BHT

0.66 @ 108

Operating Rig Time

4 Hours

Max Rec. Temp. F

108

Equipment Number

91

Location

Hays

Recorded By

Y. Ruiz

Witnessed By

Dan Johnson

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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

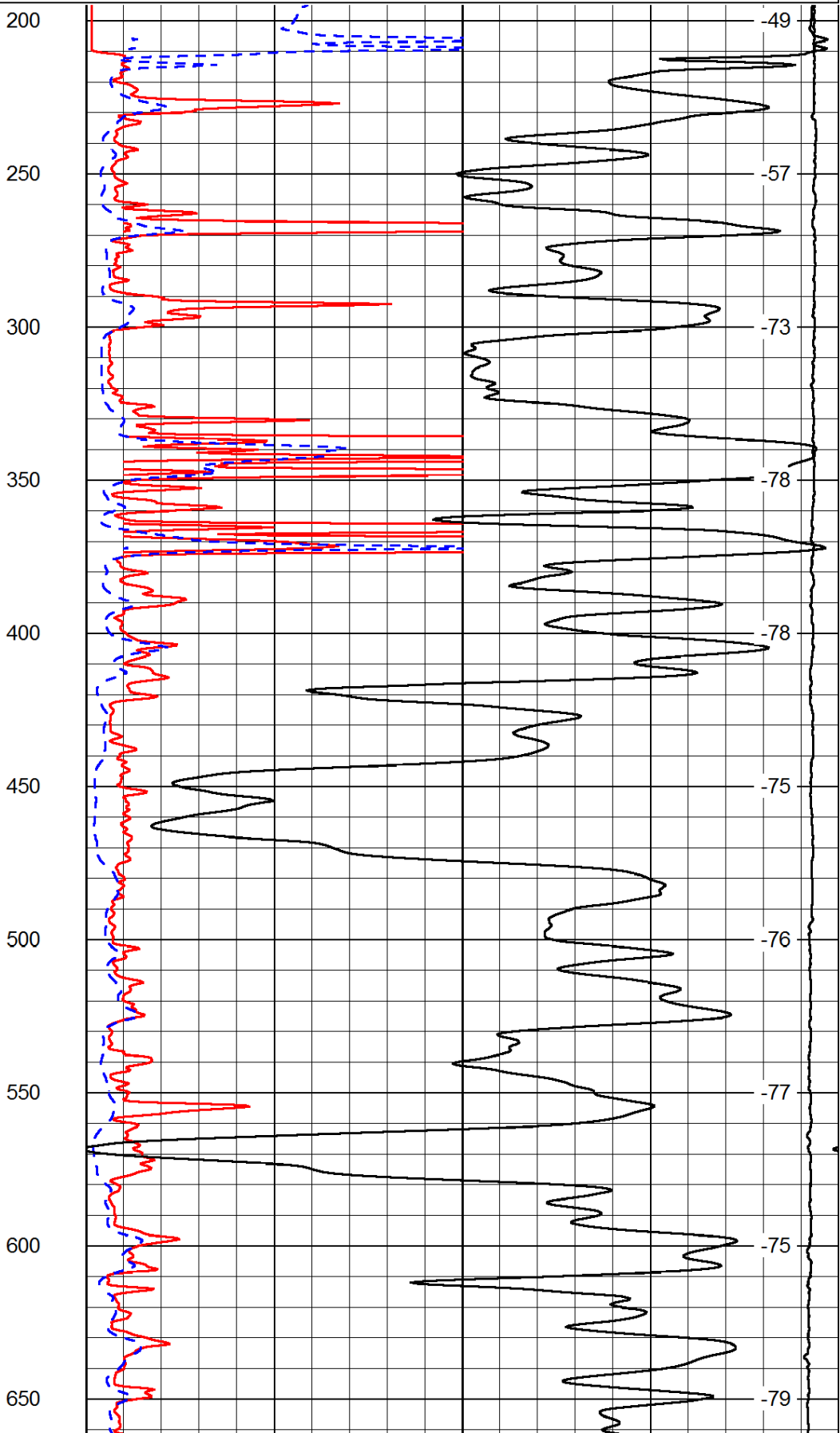
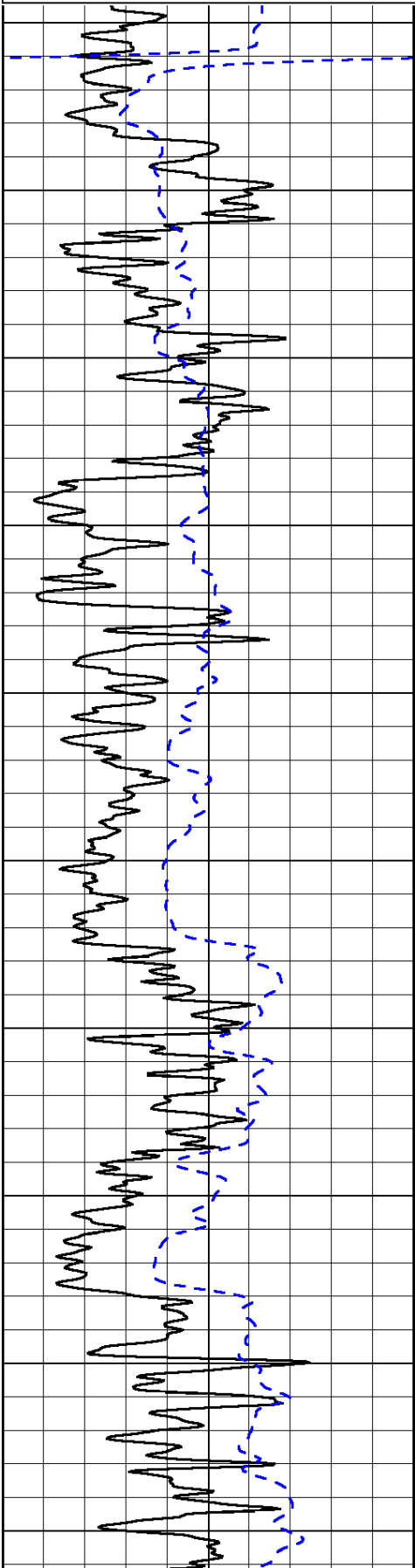
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Whitewater exit,
6 1/2 East to East Lake Rd, 3 North to 36 Rd,
3/4 East to Grace Hill Rd, 1/2 North,
(Just past the Bridge) East into

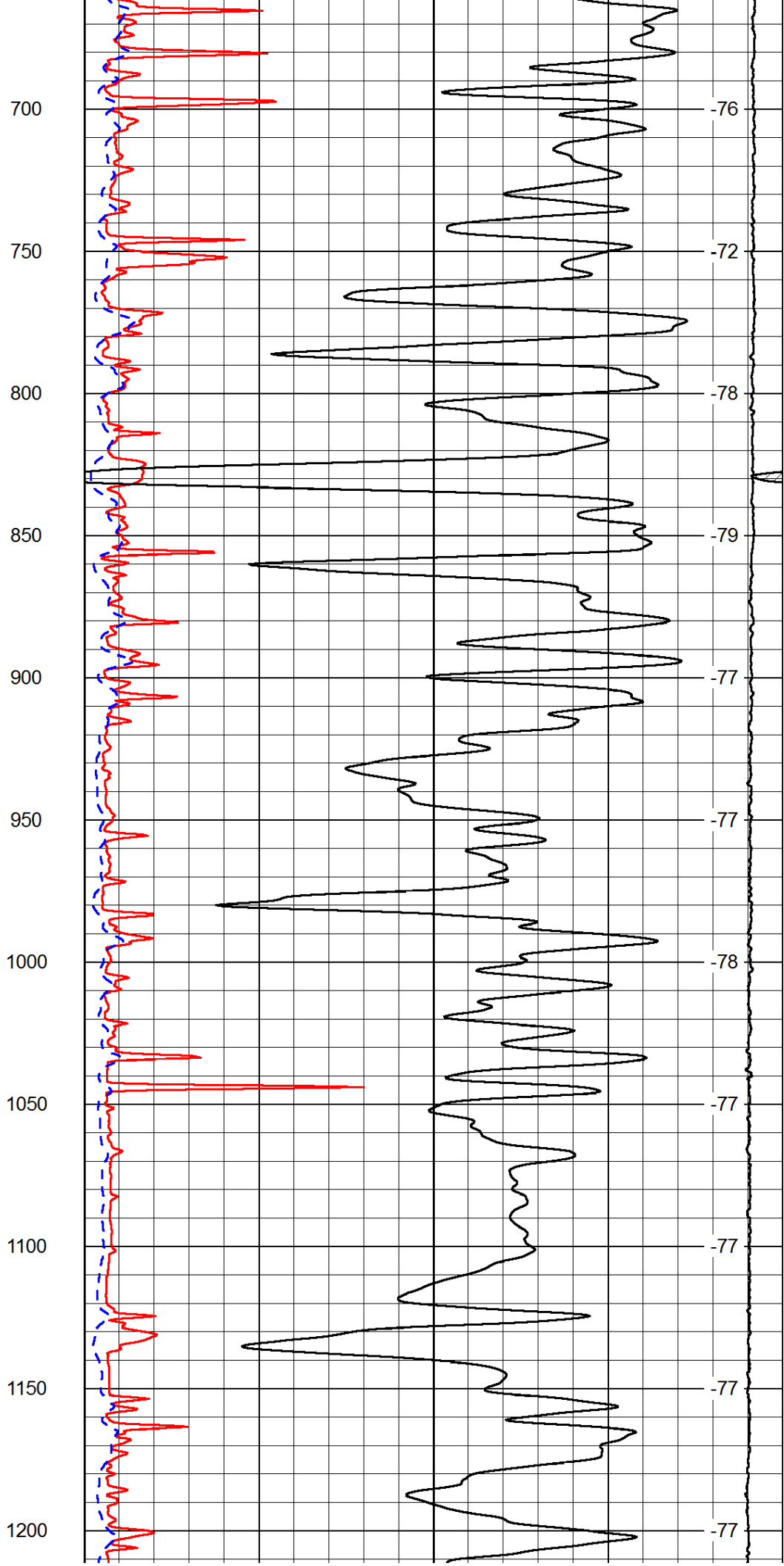
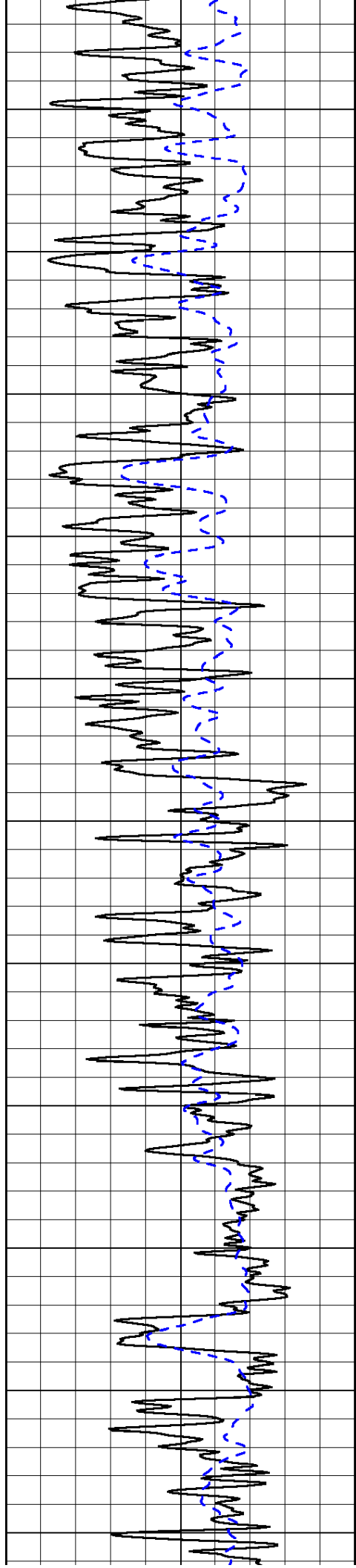
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Dataset Pathname: DIL\wdstk
Presentation Format: dil2in
Dataset Creation: Fri Sep 19 03:11:42 2014
Charted by: Depth in Feet scaled 1:600

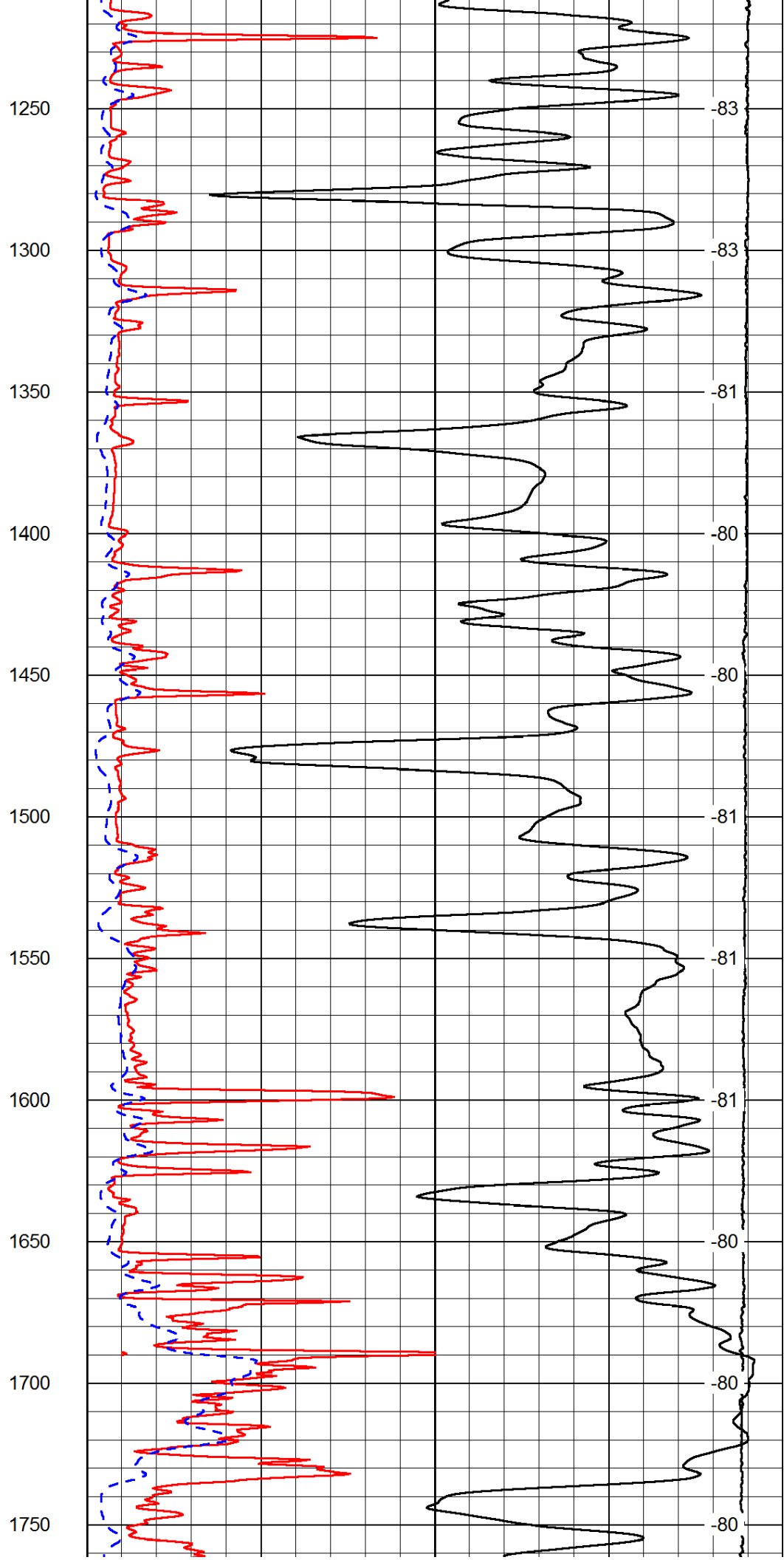
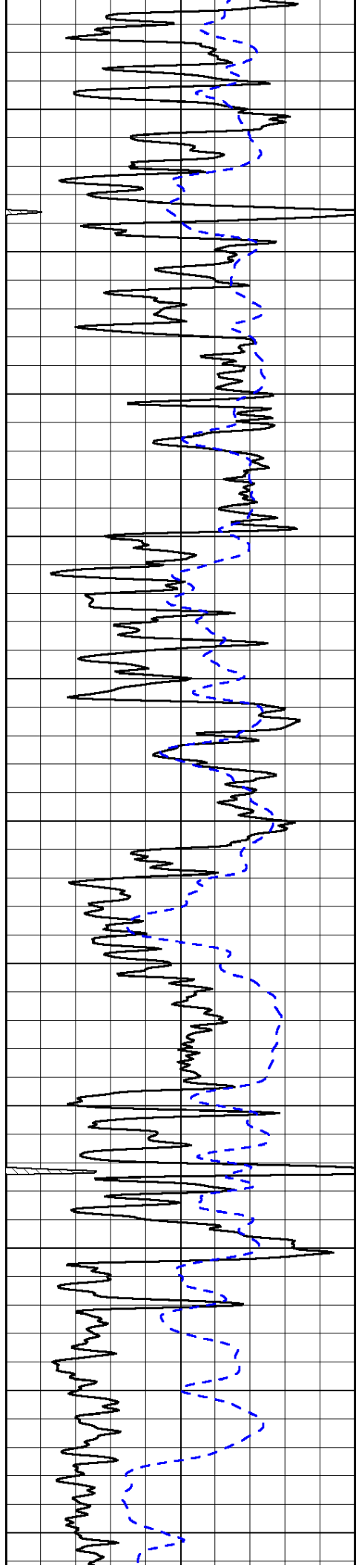
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-200	SP (mV)	0

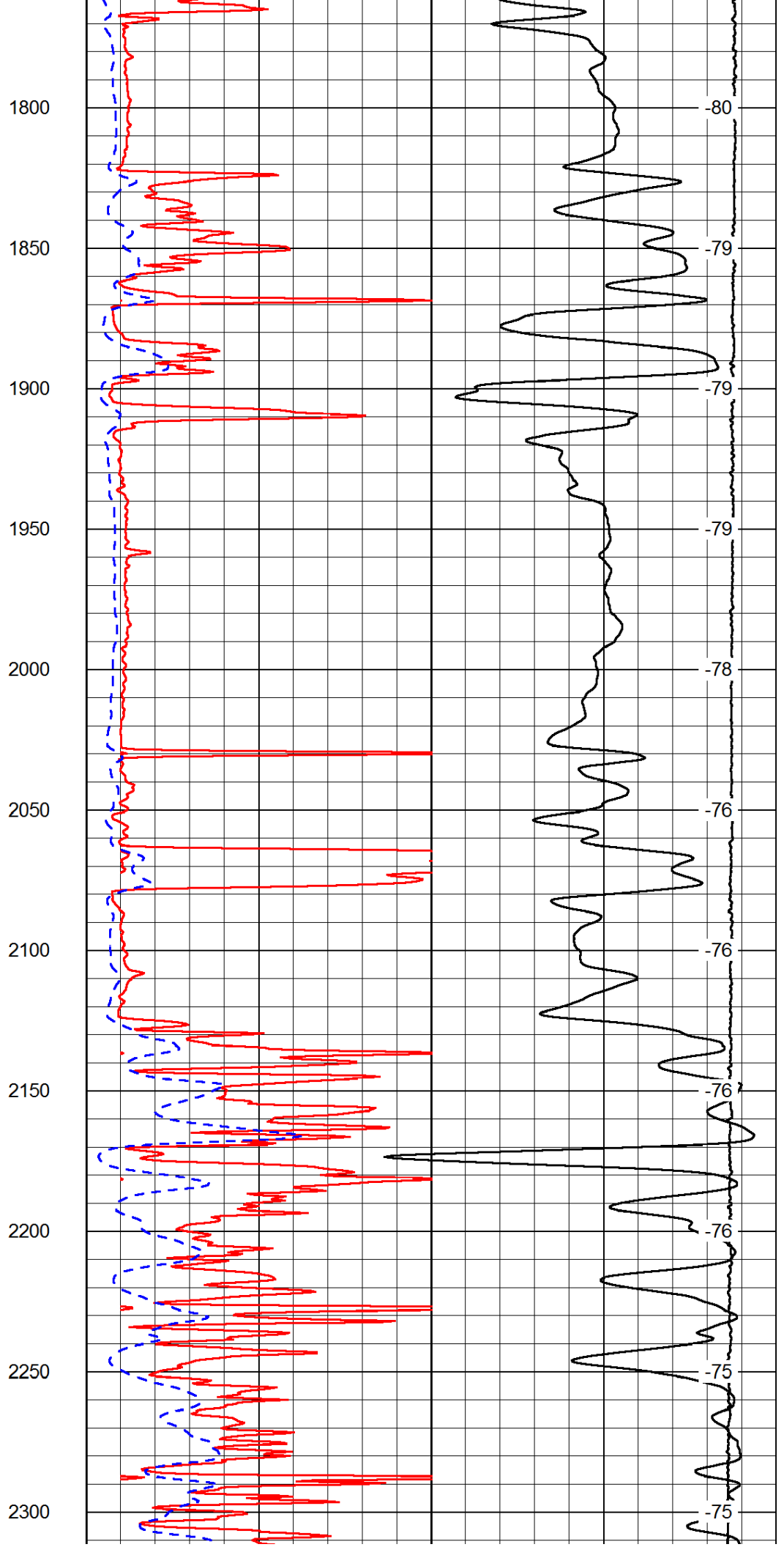
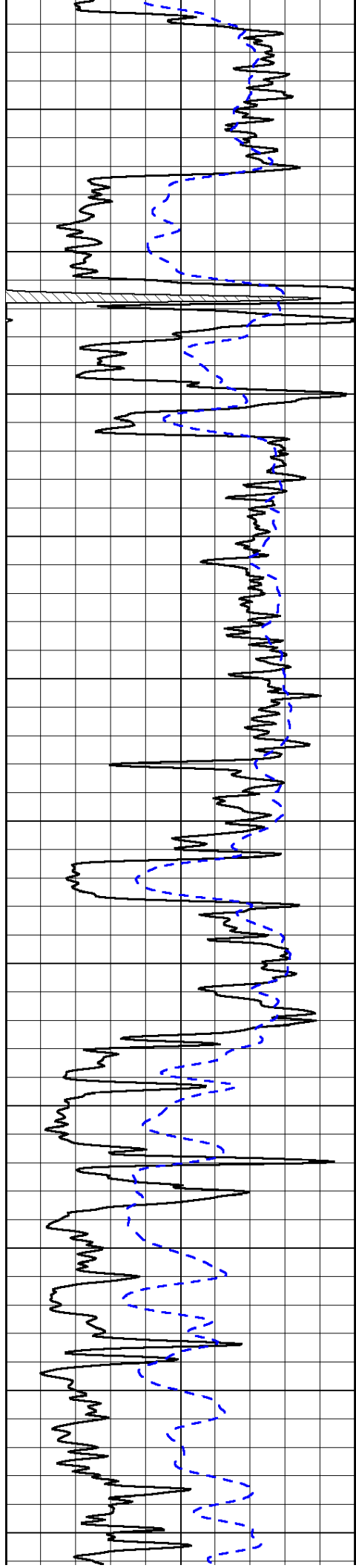
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

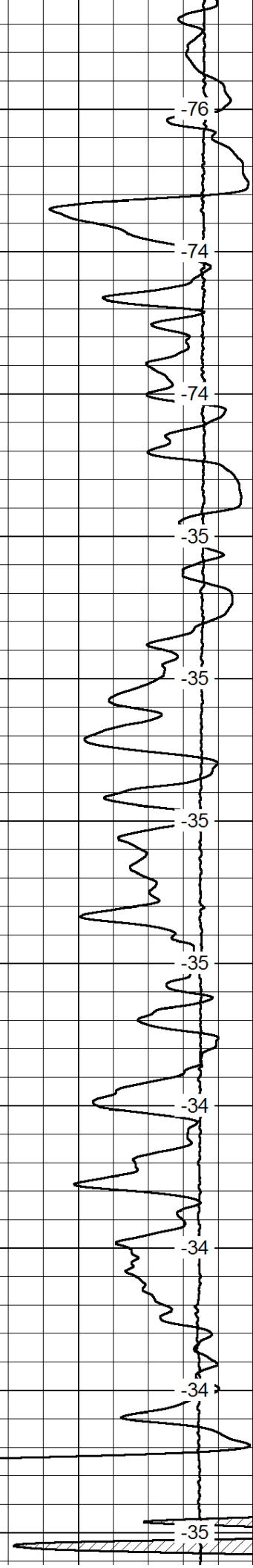
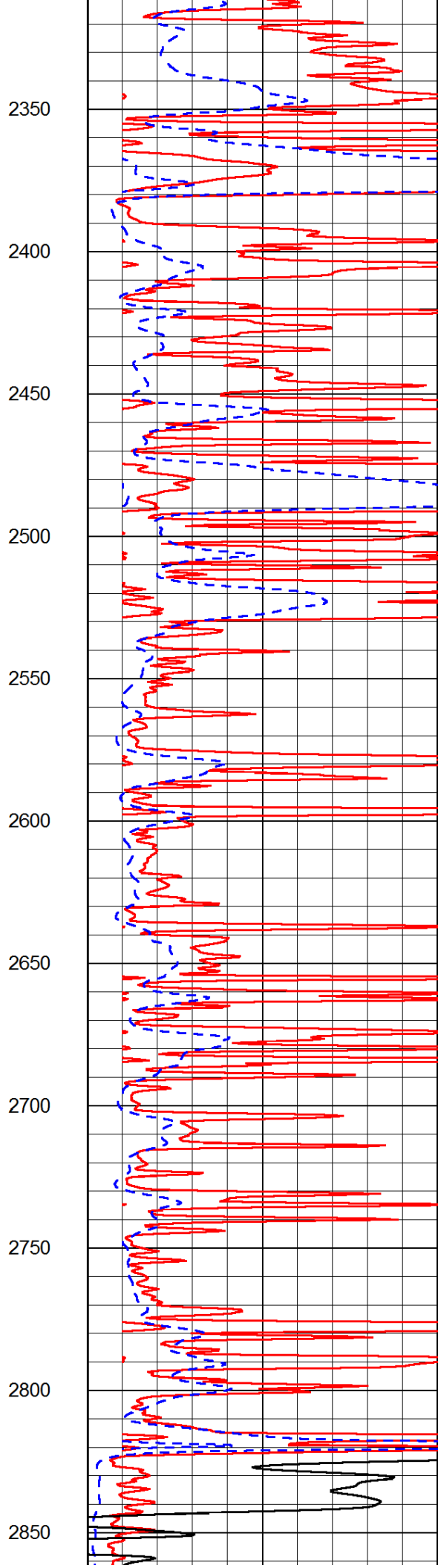
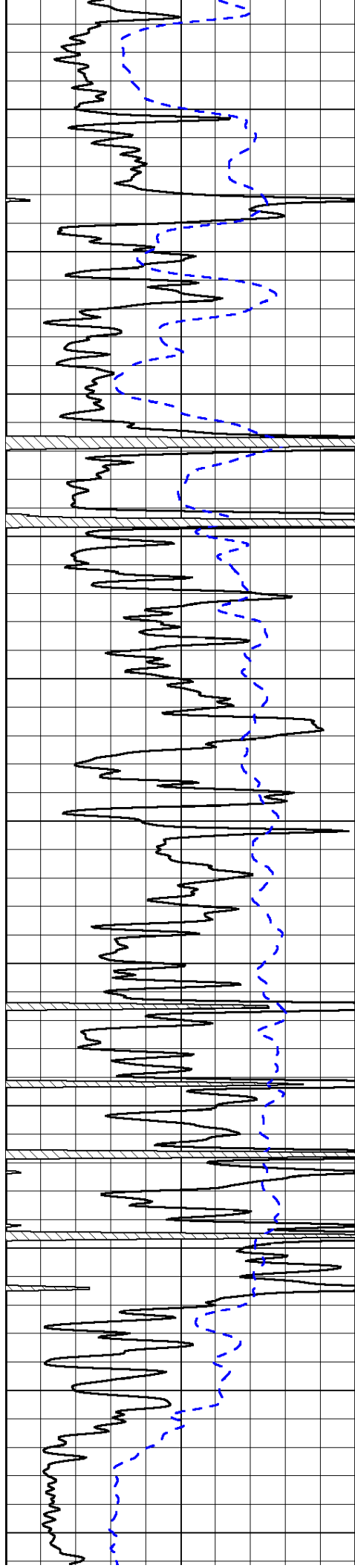
LSPD	0
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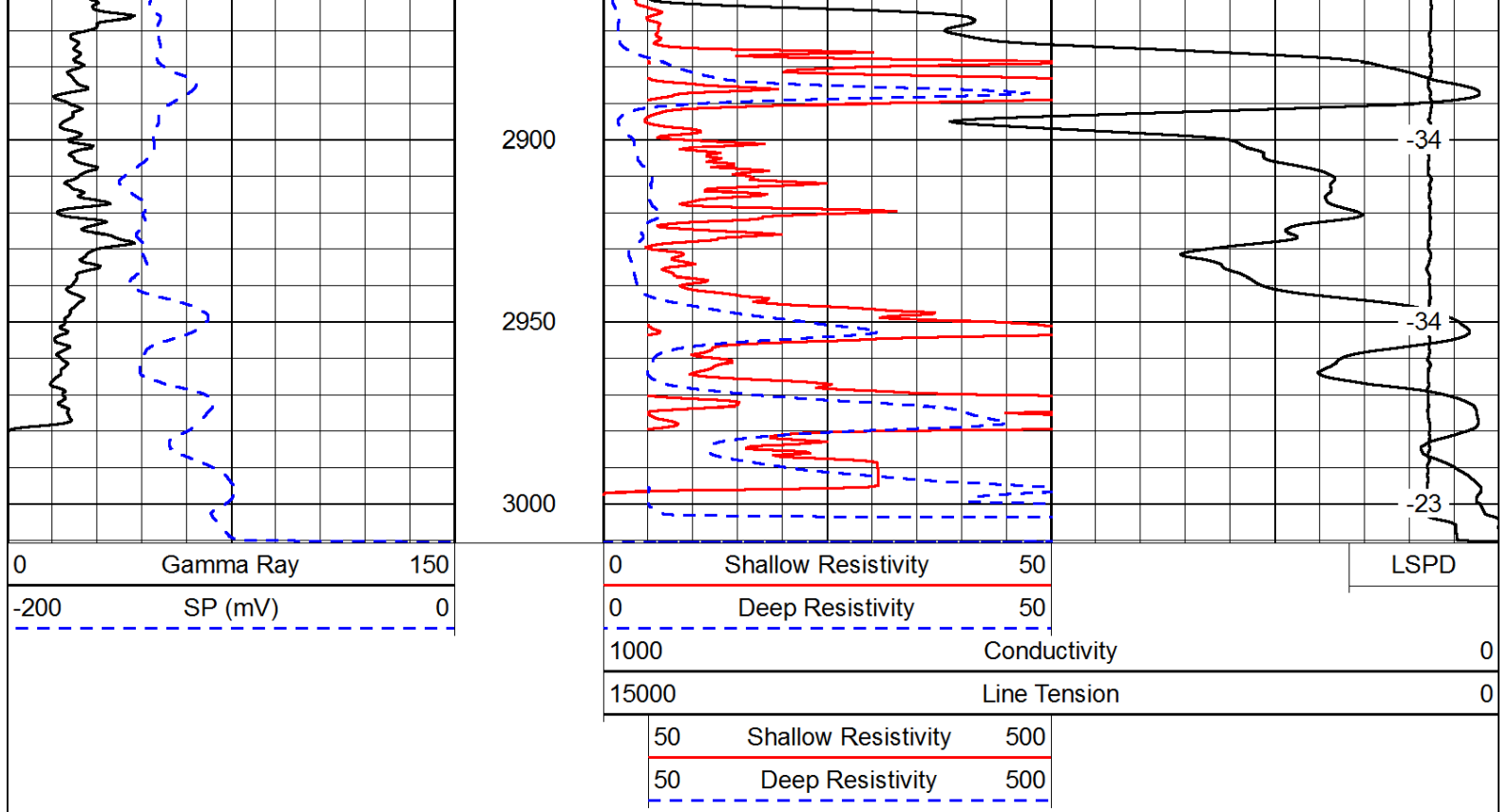




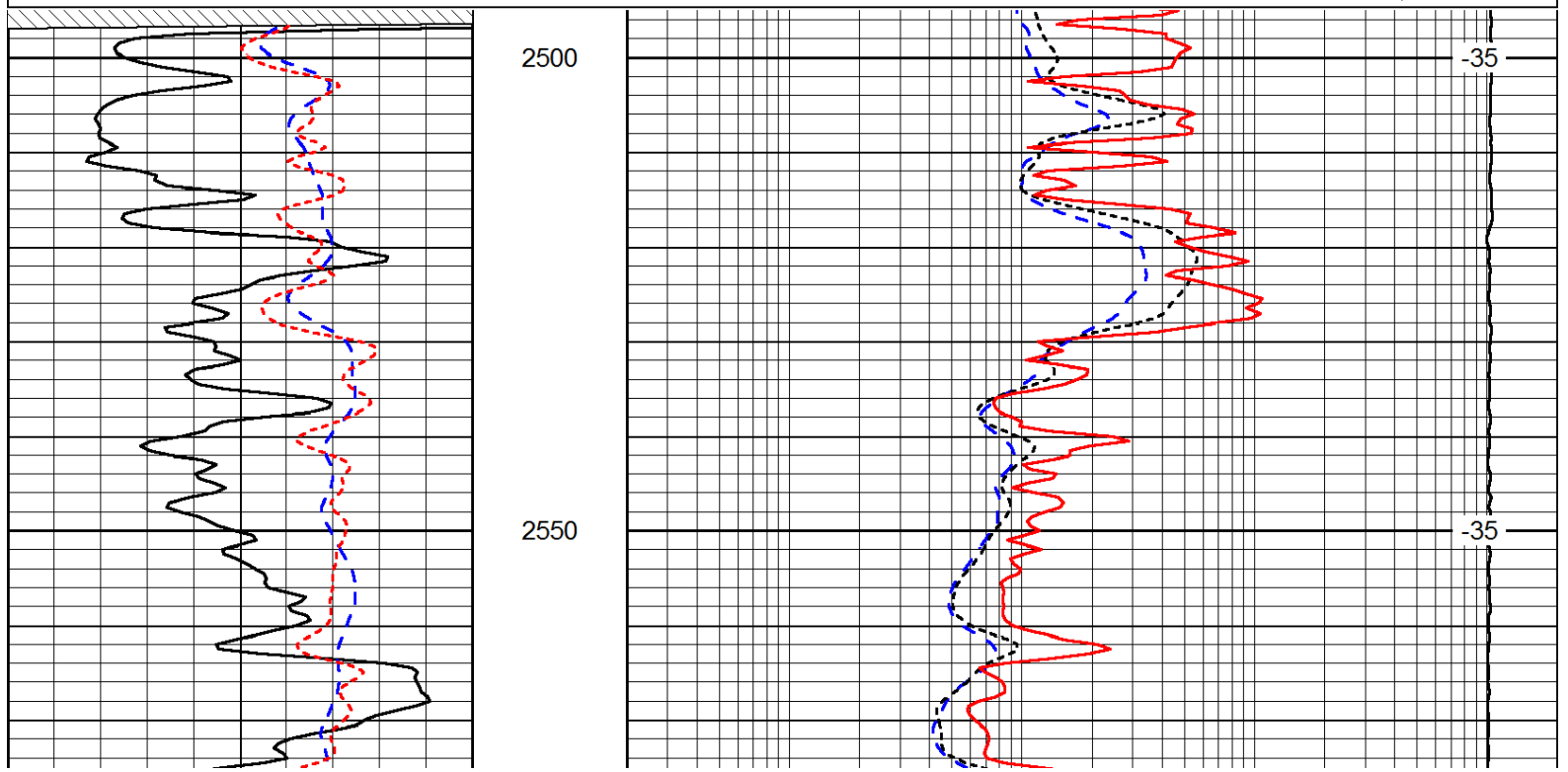


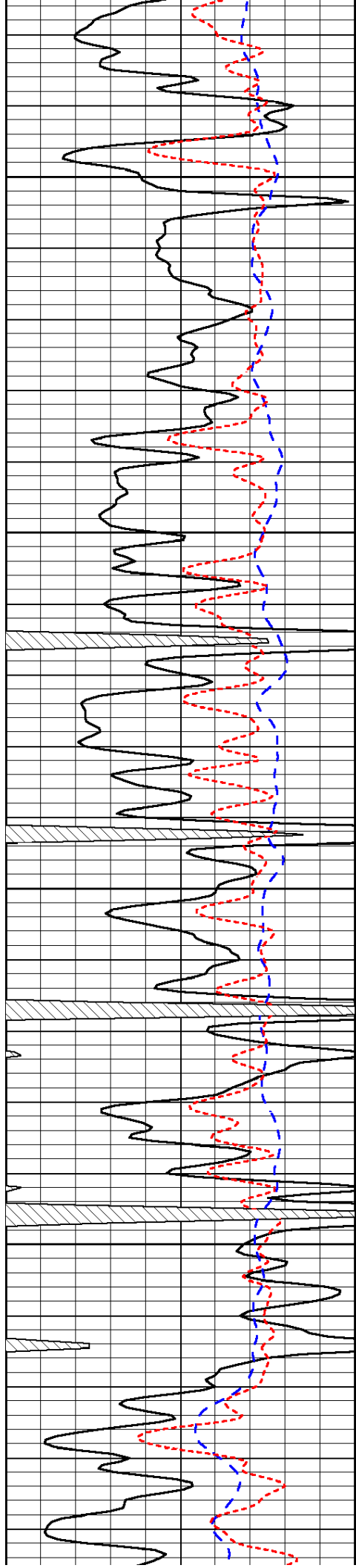






Database File: c:\warrior\data\w.d. short oil_balzer #c 5\wd_short_oil_balzer_#_c5_hd.db		
Dataset Pathname: DIL/wdstk		
Presentation Format: dil		
Dataset Creation: Fri Sep 19 03:11:42 2014		
Charted by: Depth in Feet scaled 1:240		
0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0
LSPD		



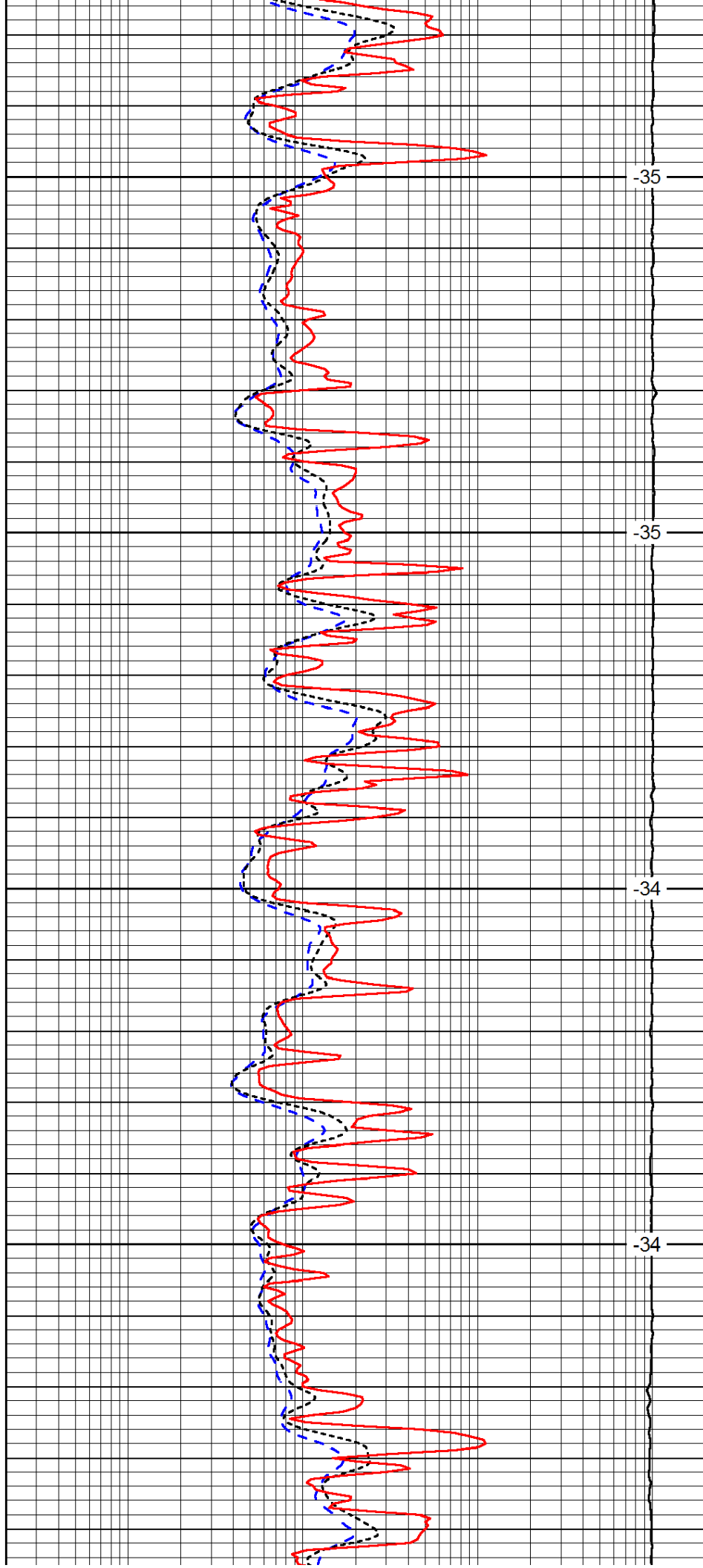


2600

2650

2700

2750

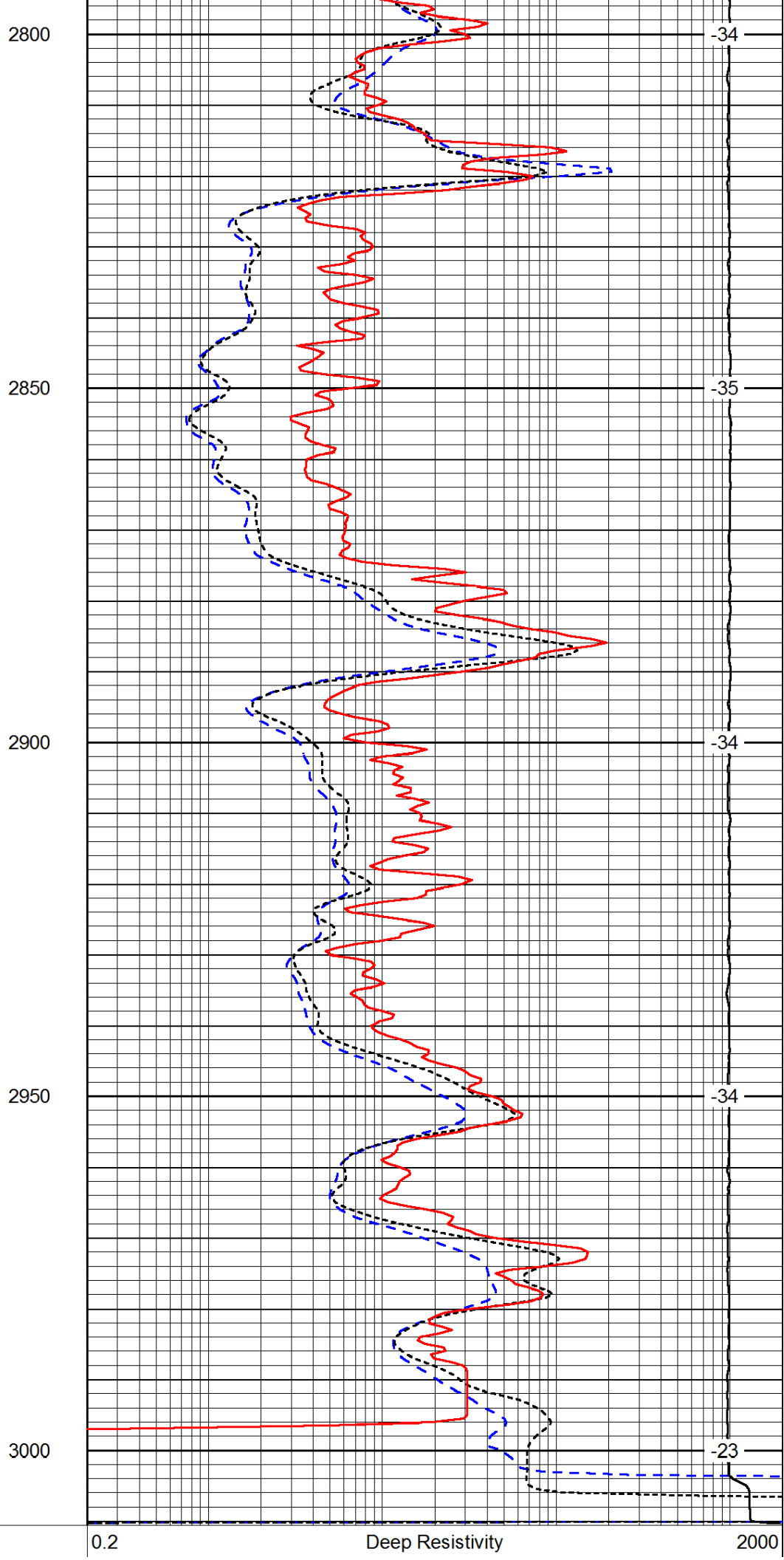
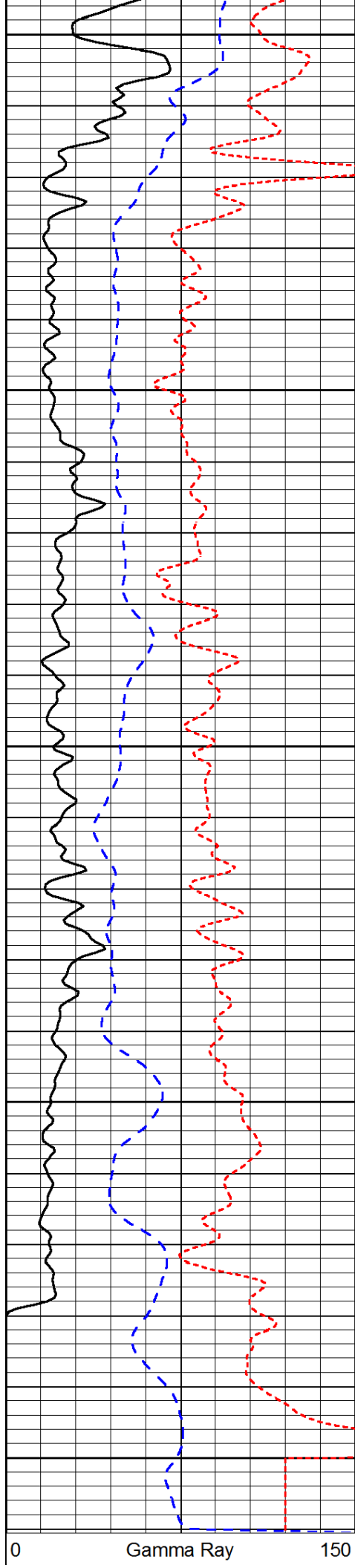


-35

-35

-34

-34



-200	SP (mV)	0
-160	RxoRt	40

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