



Pioneer Energy Services

Dual Induction Log

15-051-26,727-00-00

API No.

Company **TDI, Inc.**

Well **Marsha No. 2**

Field **Schoenchen West**

County **Ellis** State **Kansas**

Location **S2-NW-NW-SW
2300' FSL & 330' FWL**

Sec: **21** Twp: **15S** Rge: **18W**

Permanent Datum **Ground Level** Elevation **2003**

Log Measured From **Kelly Bushing** 10 Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing** Elevation **2013**
G.I.L. **2003**

Date **9/22/14**

Run Number **One**

Depth Driller **3700**

Depth Logger **3692**

Bottom Logged Interval **3691**

Top Log Interval **1150**

Casing Driller **8.625 @ 1178**

Casing Logger **1172**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **3.500**

Density / Viscosity **9.3 55**

pH / Fluid Loss **10.0 8.0**

Source of Sample **Flowline**

Rm @ Meas. Temp **.67 @ 69**

Rmf @ Meas. Temp **.50 @ 69**

Rmc @ Meas. Temp **.90 @ 69**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.41 @ 113**

Operating Rig Time **3 Hours**

Max Rec. Temp. F **113**

Equipment Number **15**

Location **Hays**

Recorded By **J. Henrickson**

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

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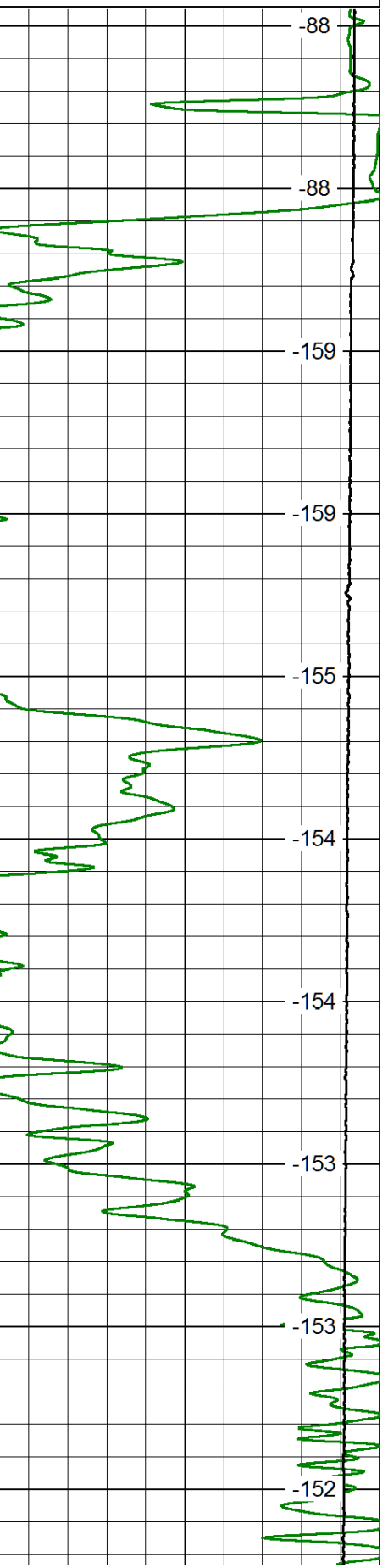
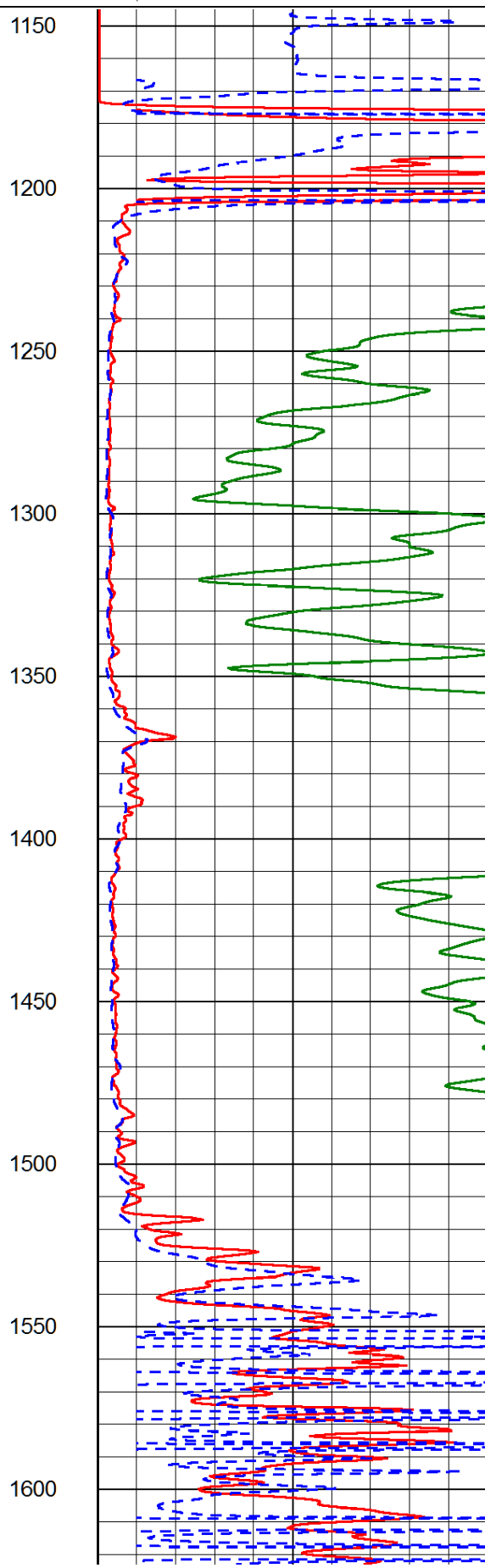
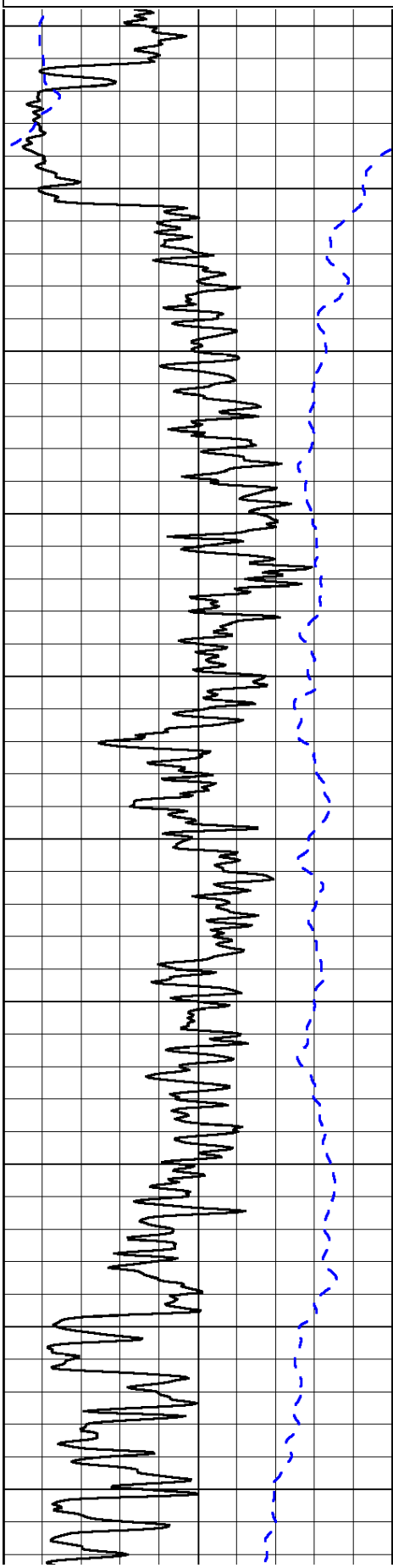
Hays Kansas
South on 240th to Antonino Rd, 3 1/2 South, East Into

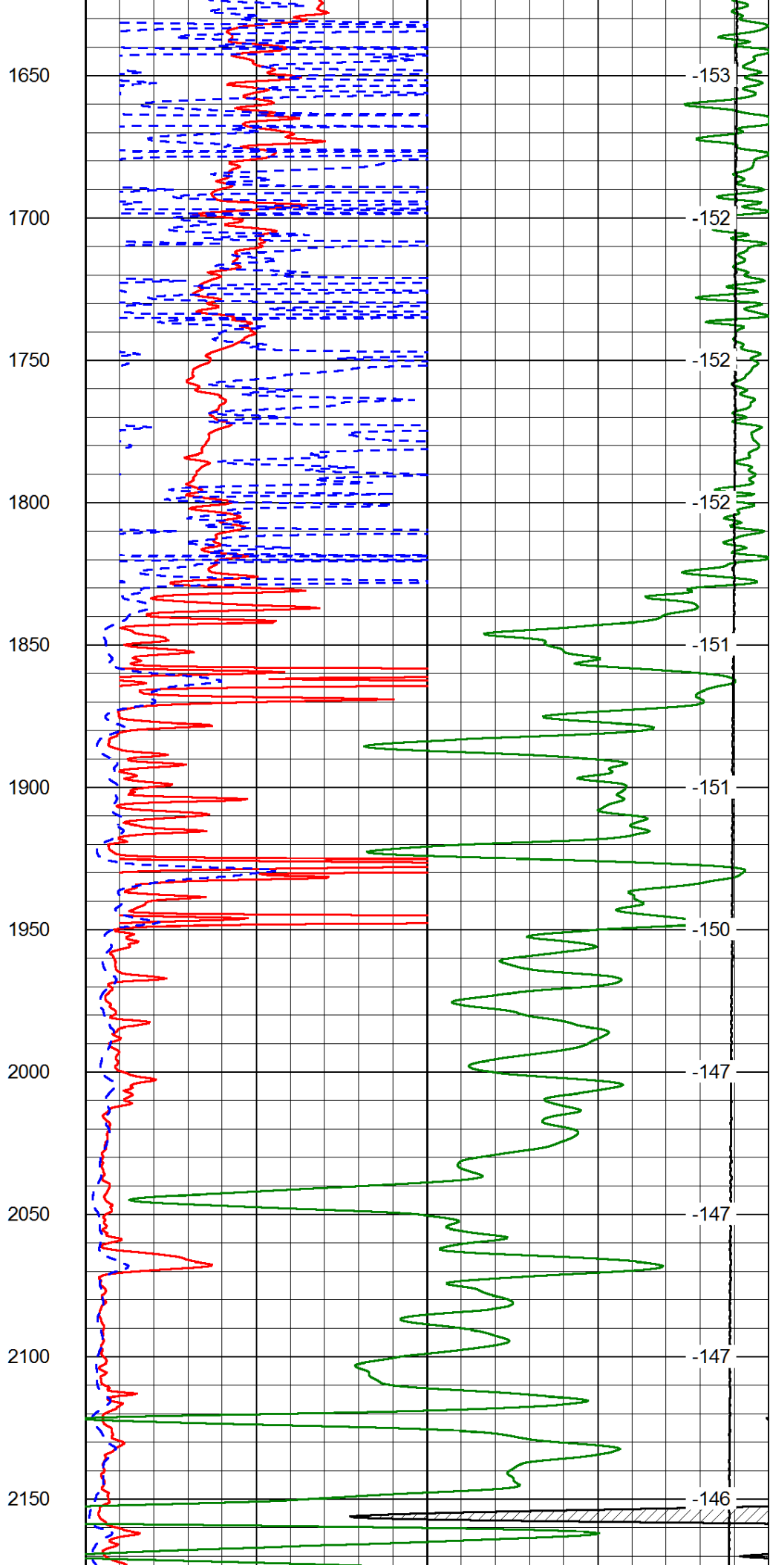
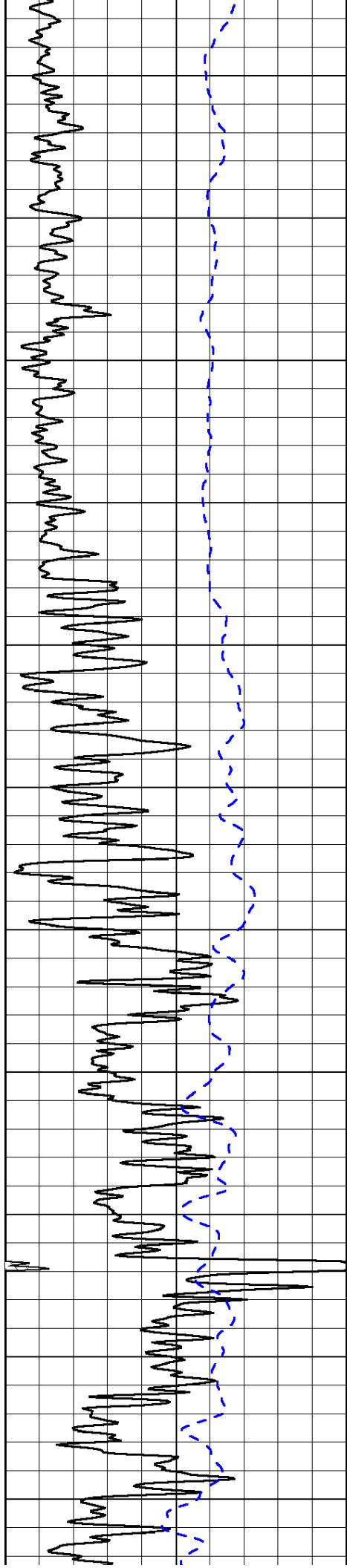
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Presentation Format: dil2in
Dataset Creation: Mon Sep 22 14:31:07 2014
Charted by: Depth in Feet scaled 1:600

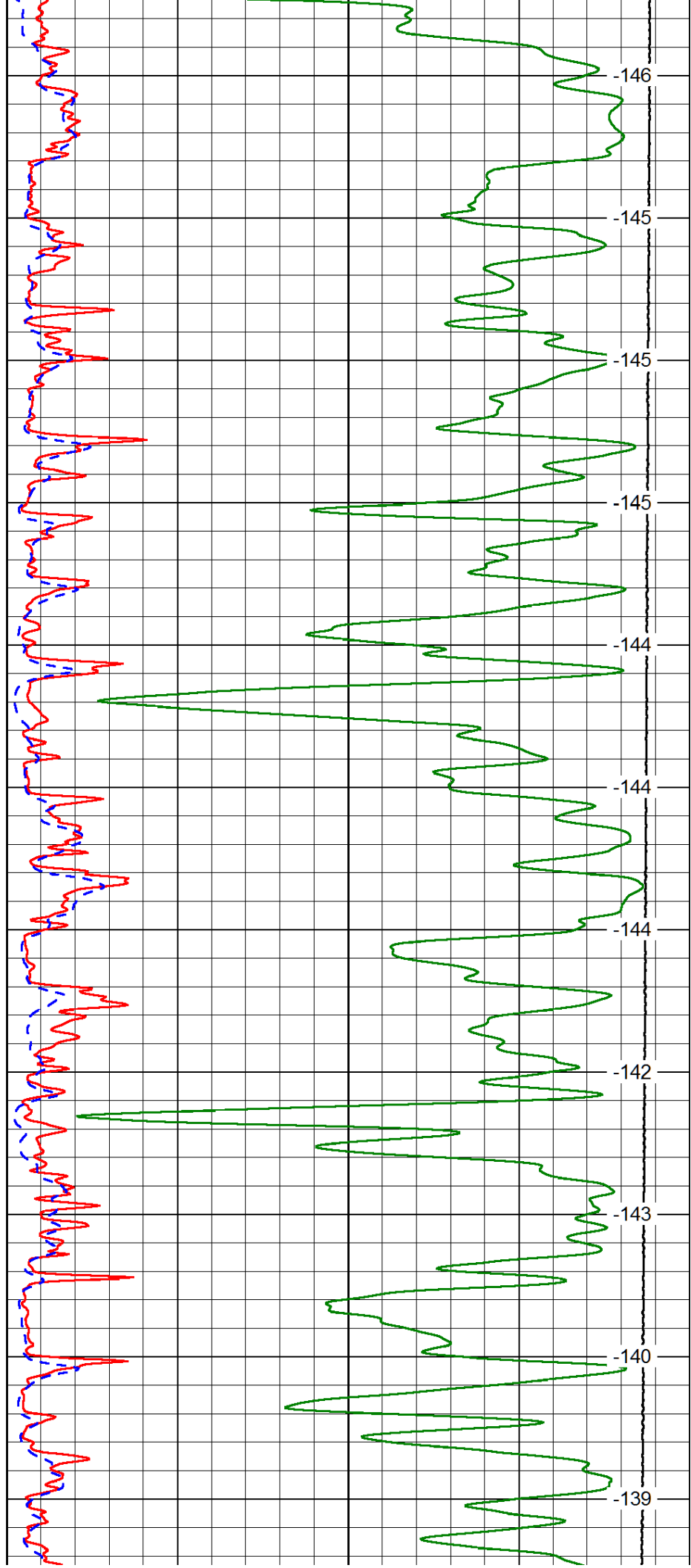
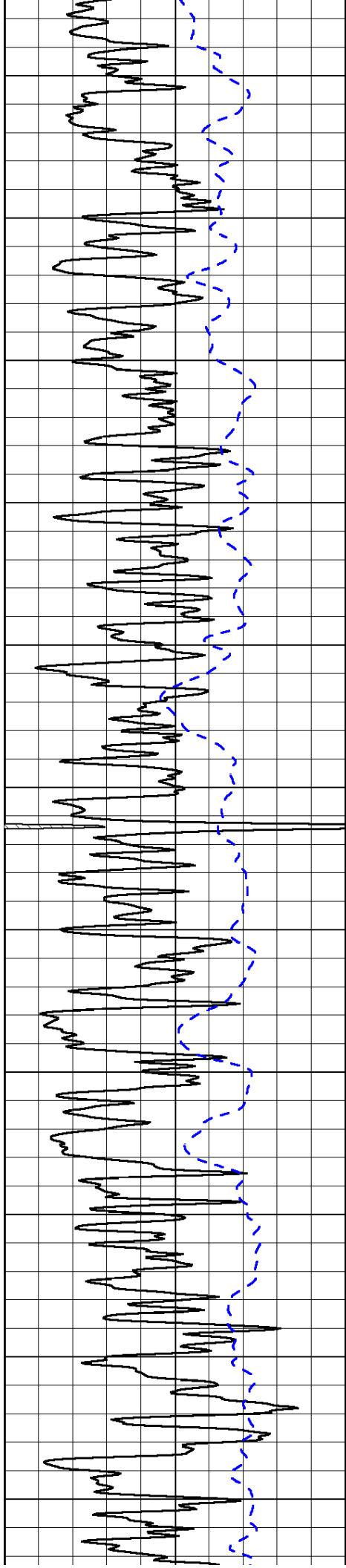
0 Gamma Ray 150
-200 SP (mV) 0

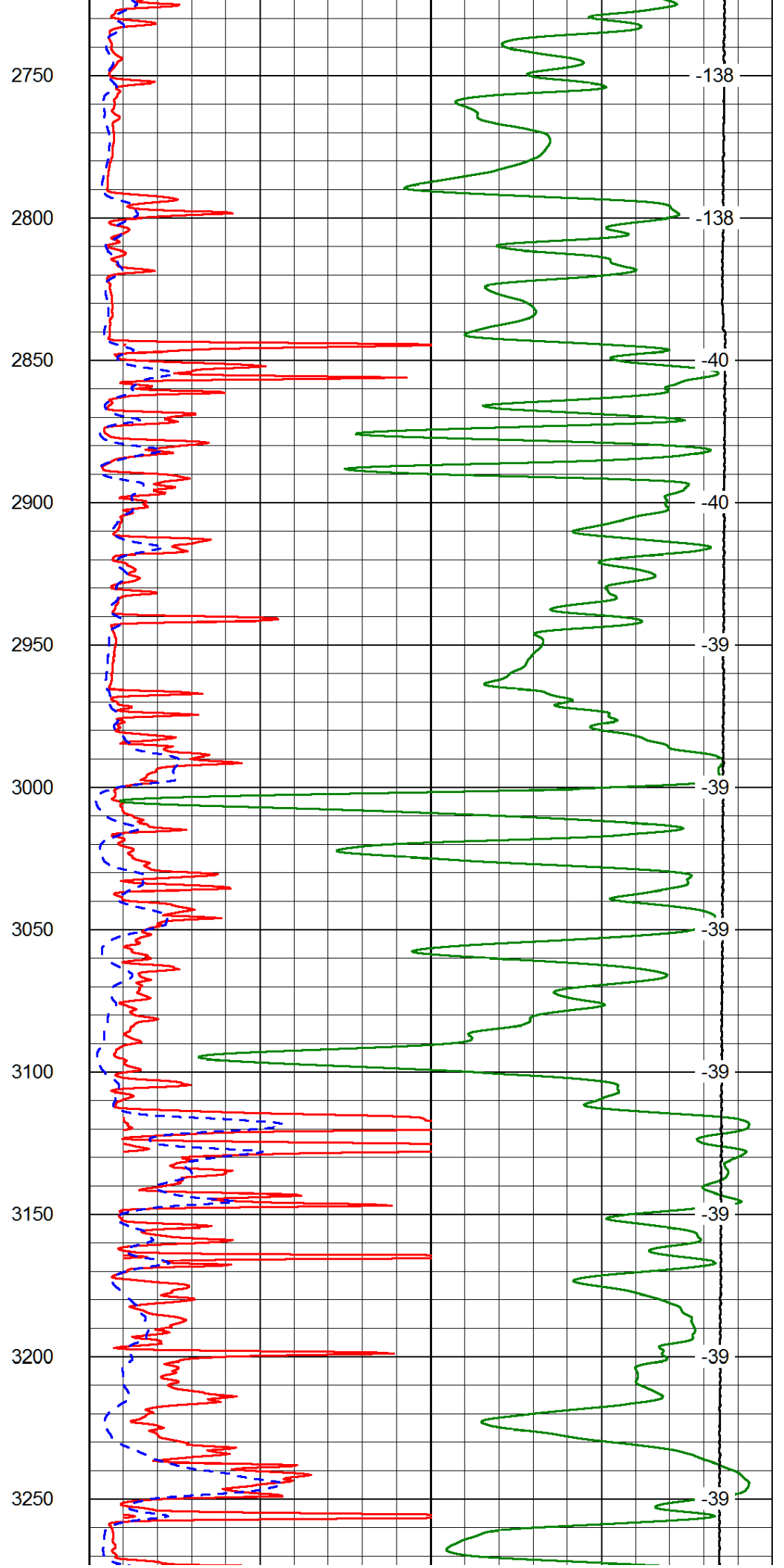
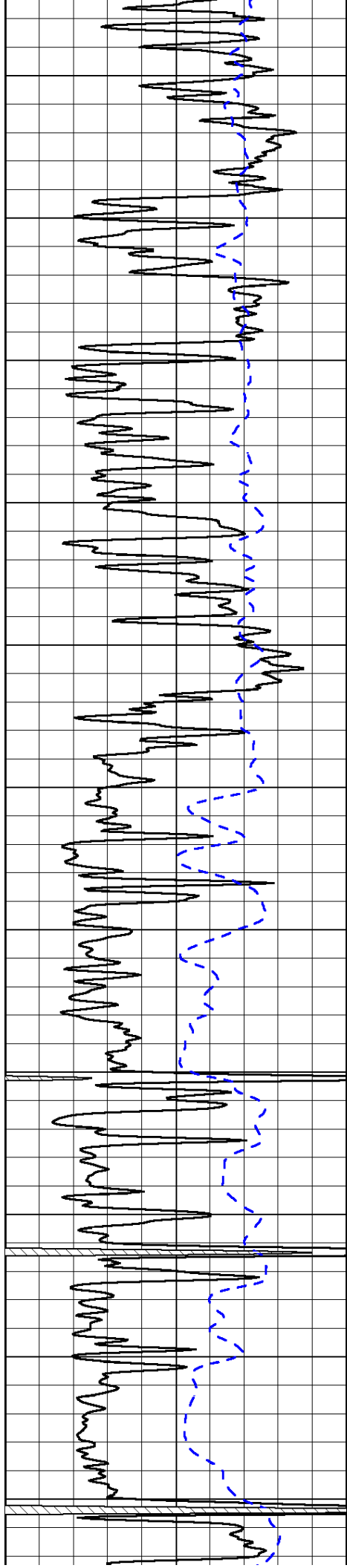
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0 Deep Resistivity 50
1000 Conductivity 0
15000 Line Tension 0
50 Shallow Resistivity 500
50 Deep Resistivity 500

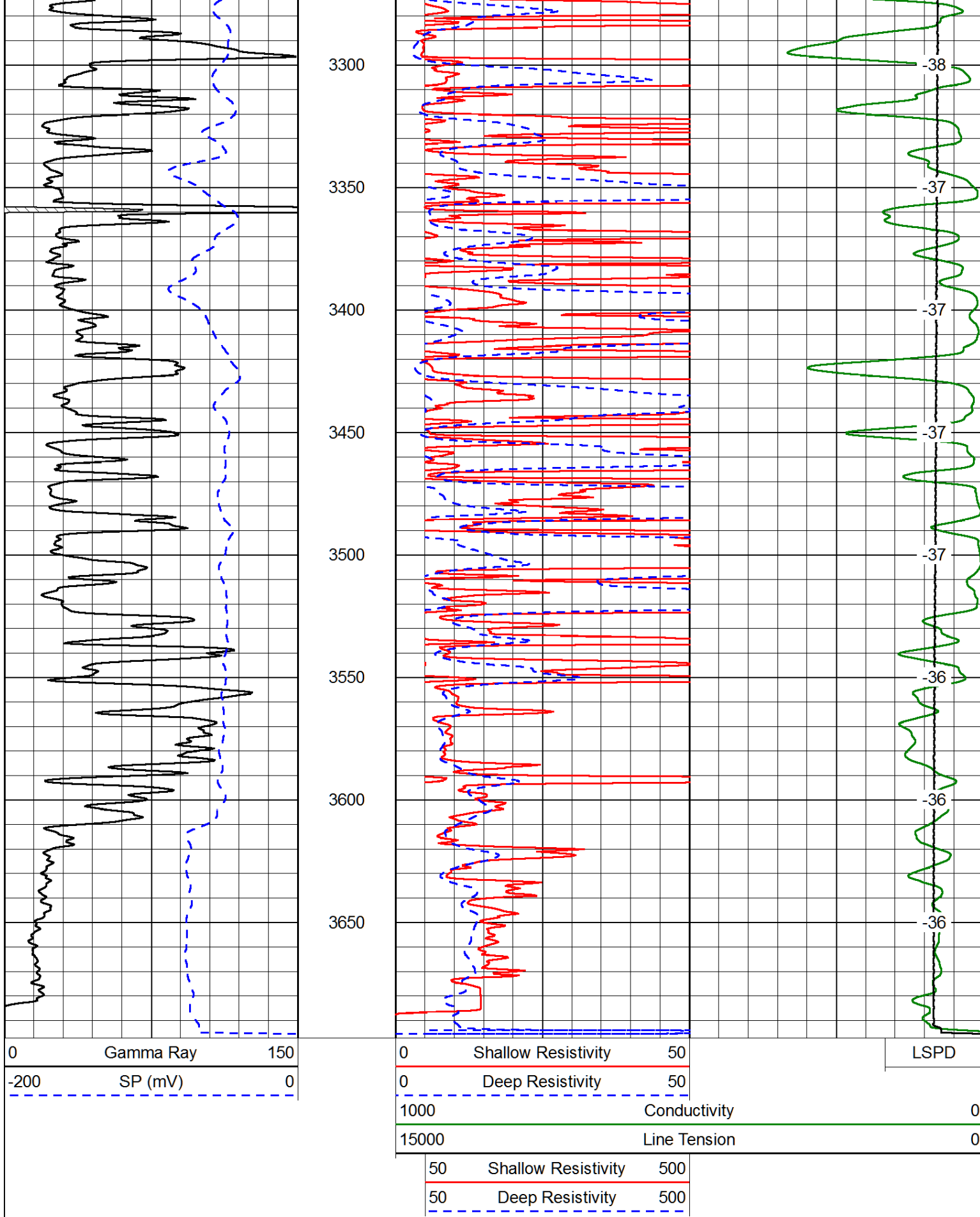
LSPD
0
0











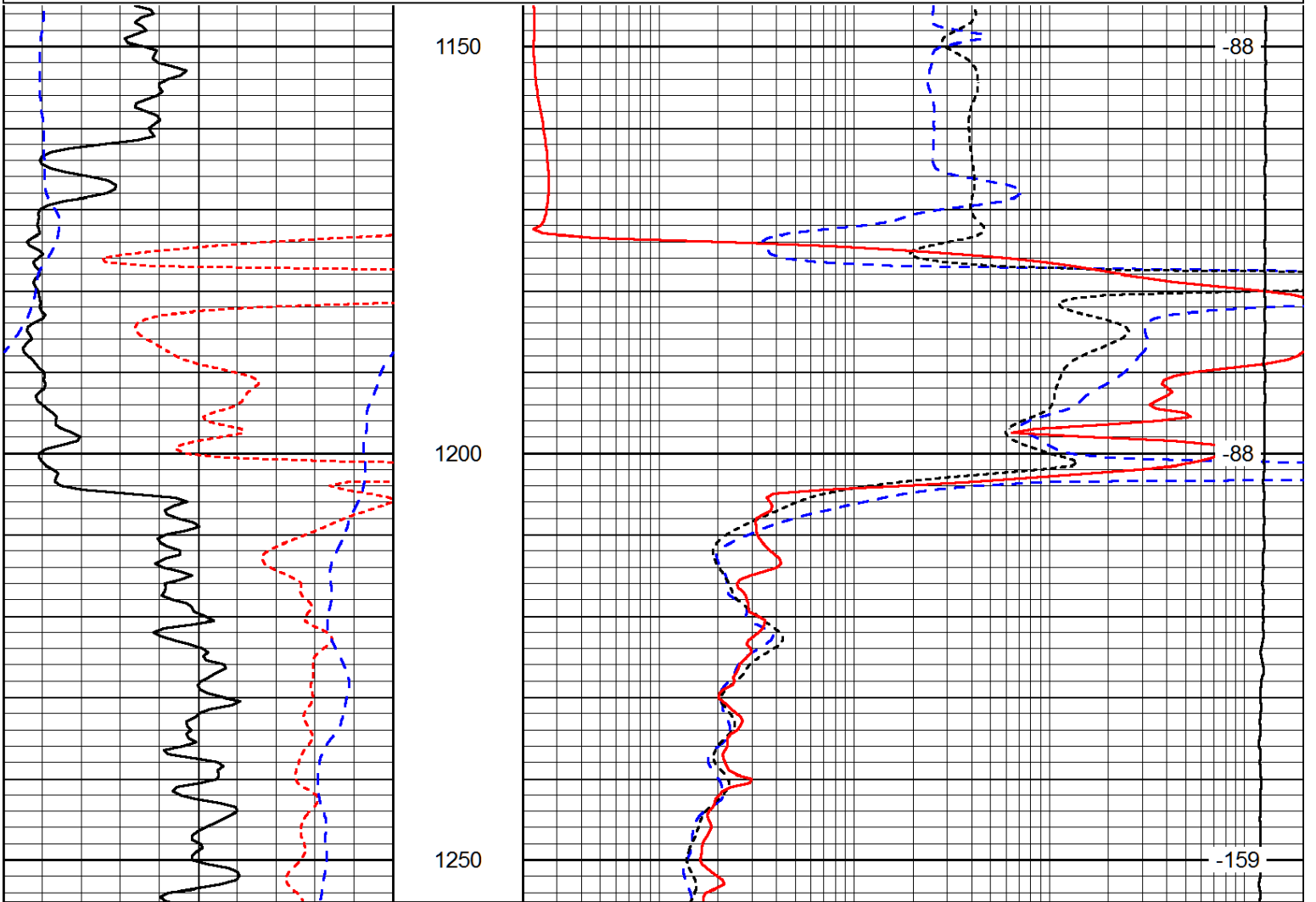
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 Presentation Format: dil
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Charted by: Depth in Feet scaled 1:240

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD



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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

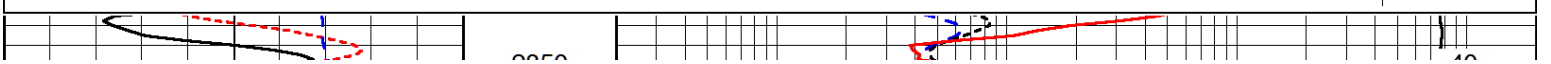
LSPD

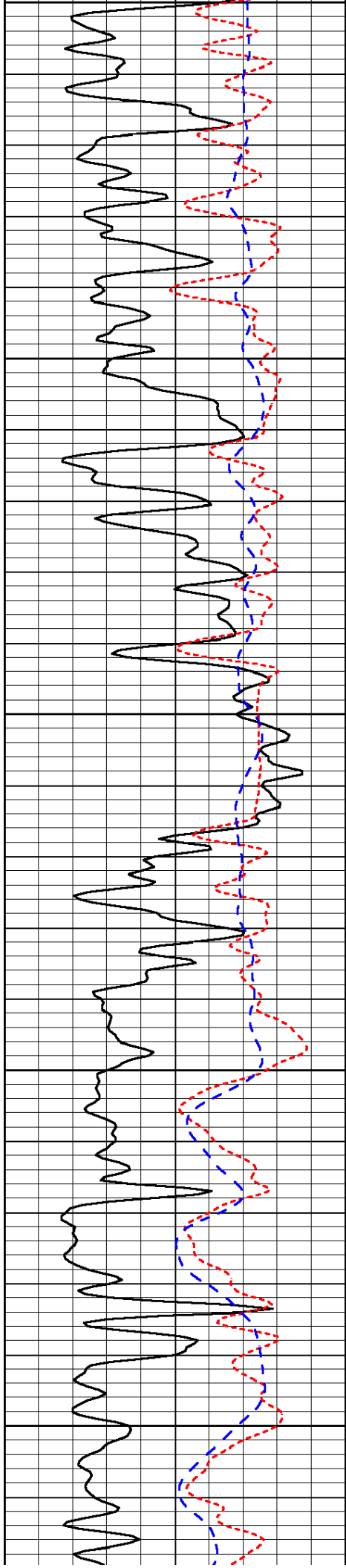
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0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD





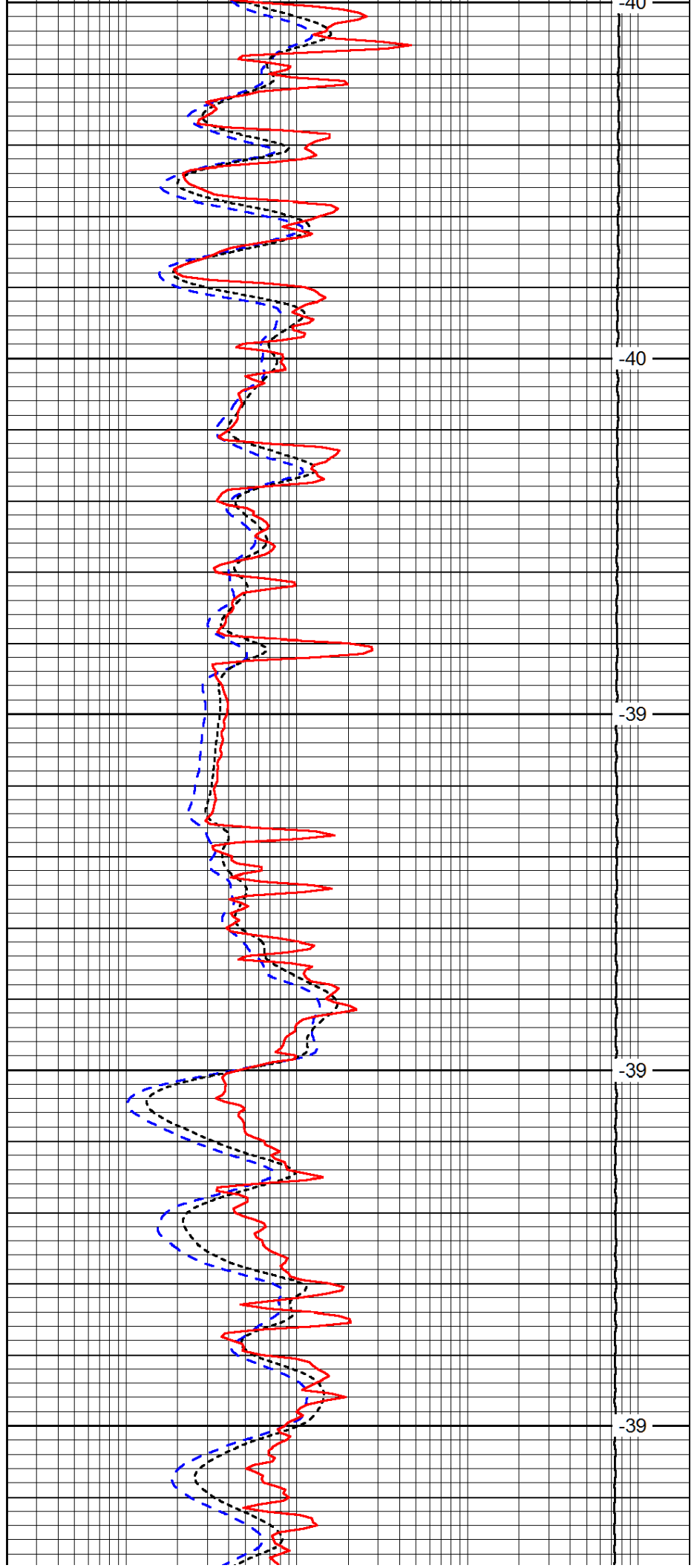
2850

2900

2950

3000

3050



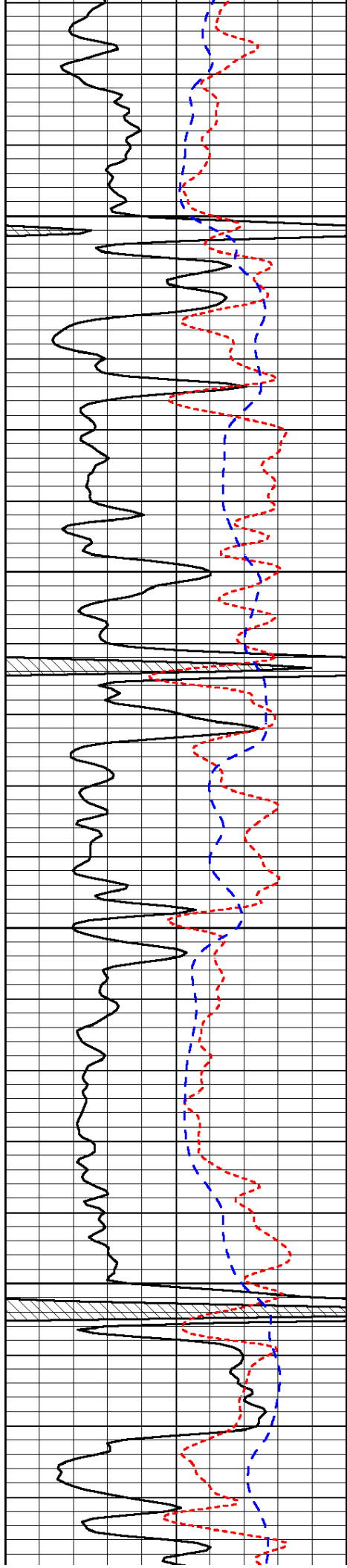
-40

-40

-39

-39

-39

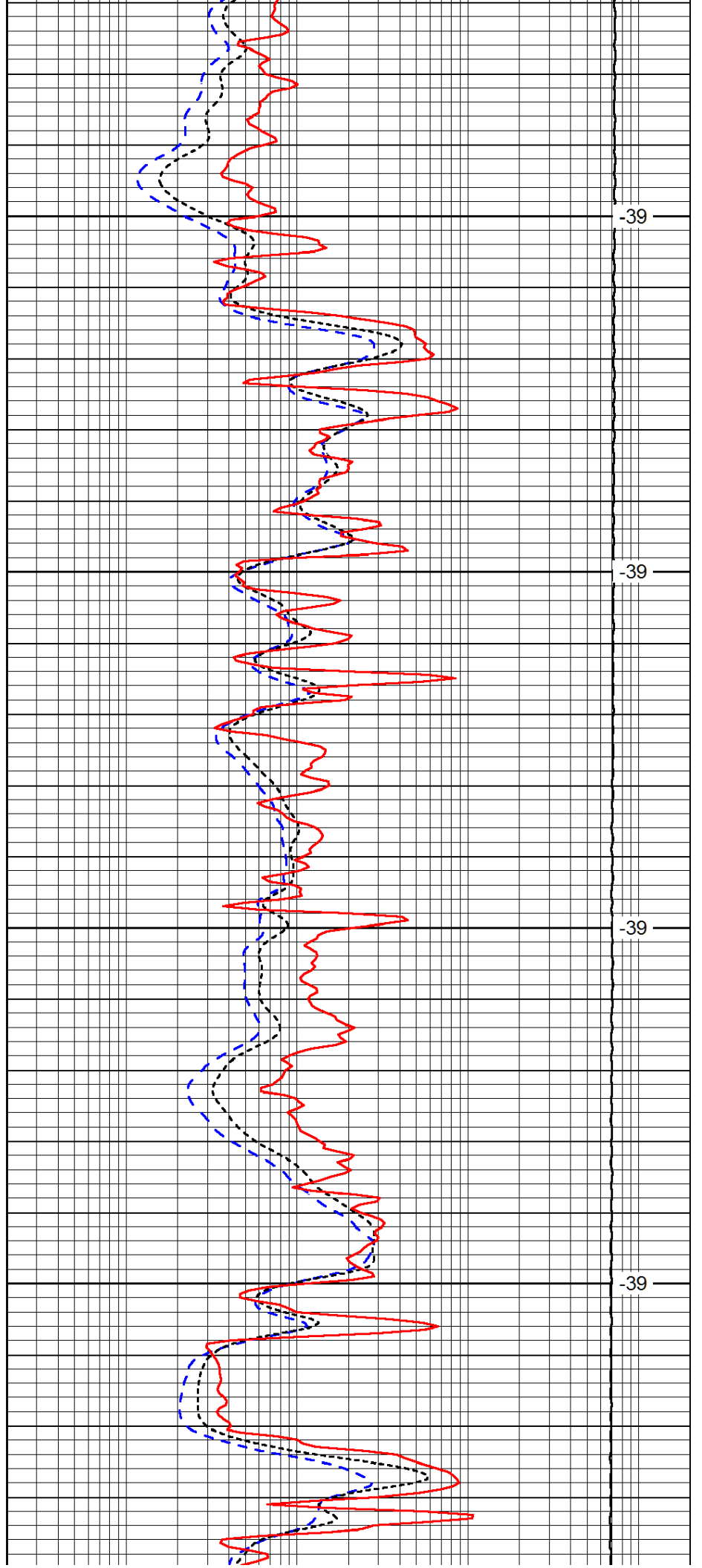


3100

3150

3200

3250

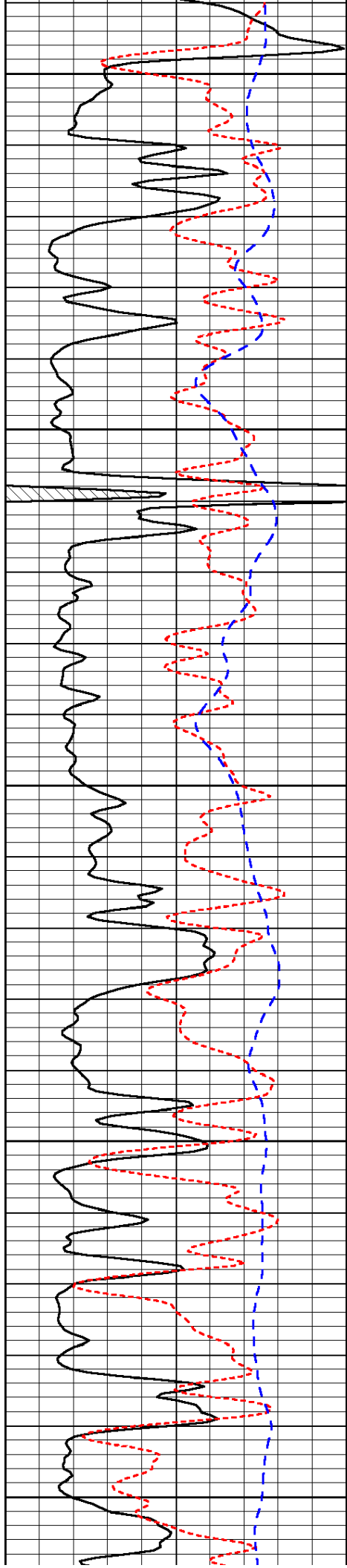


-39

-39

-39

-39



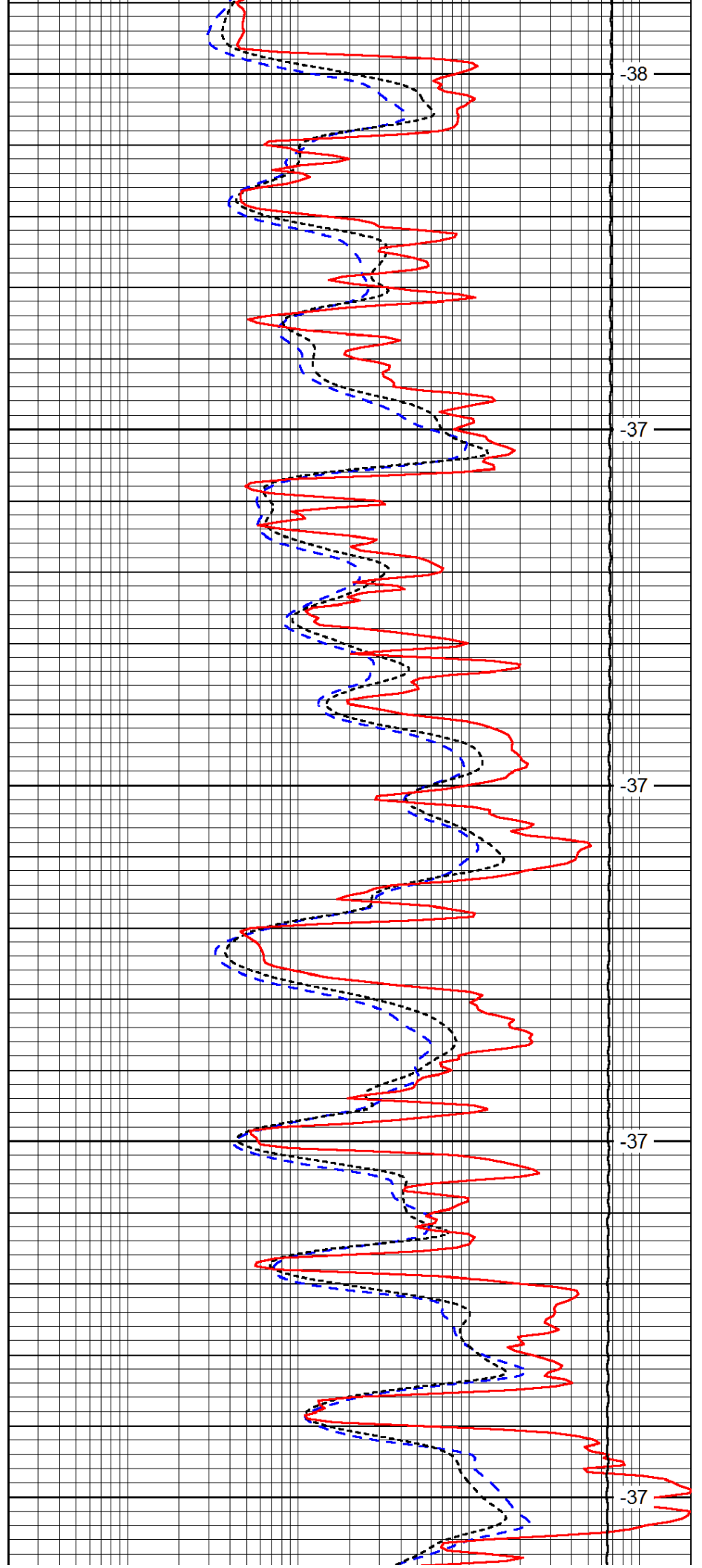
3300

3350

3400

3450

3500



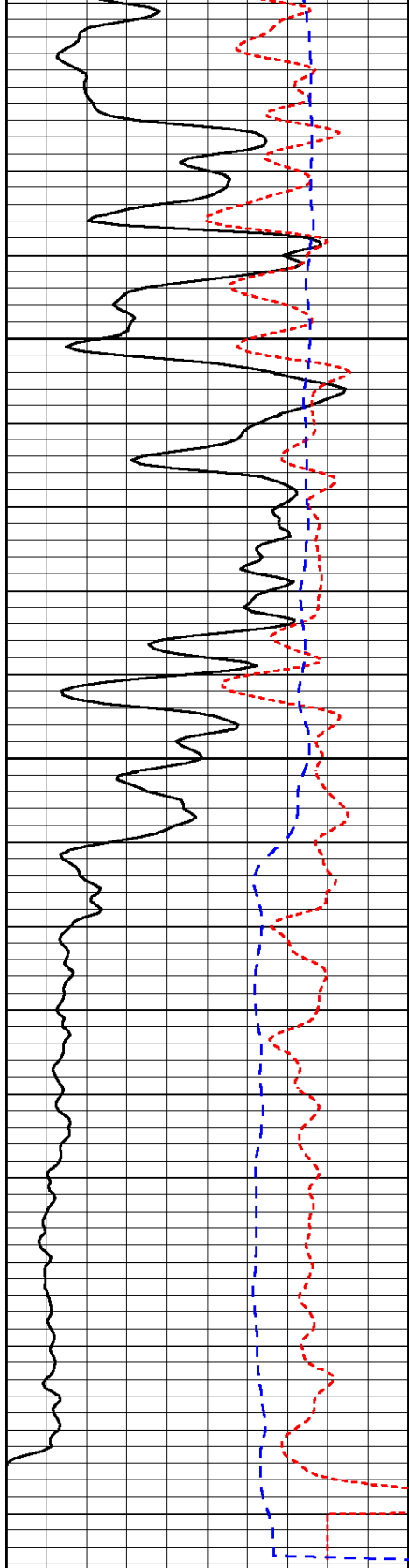
-38

-37

-37

-37

-37

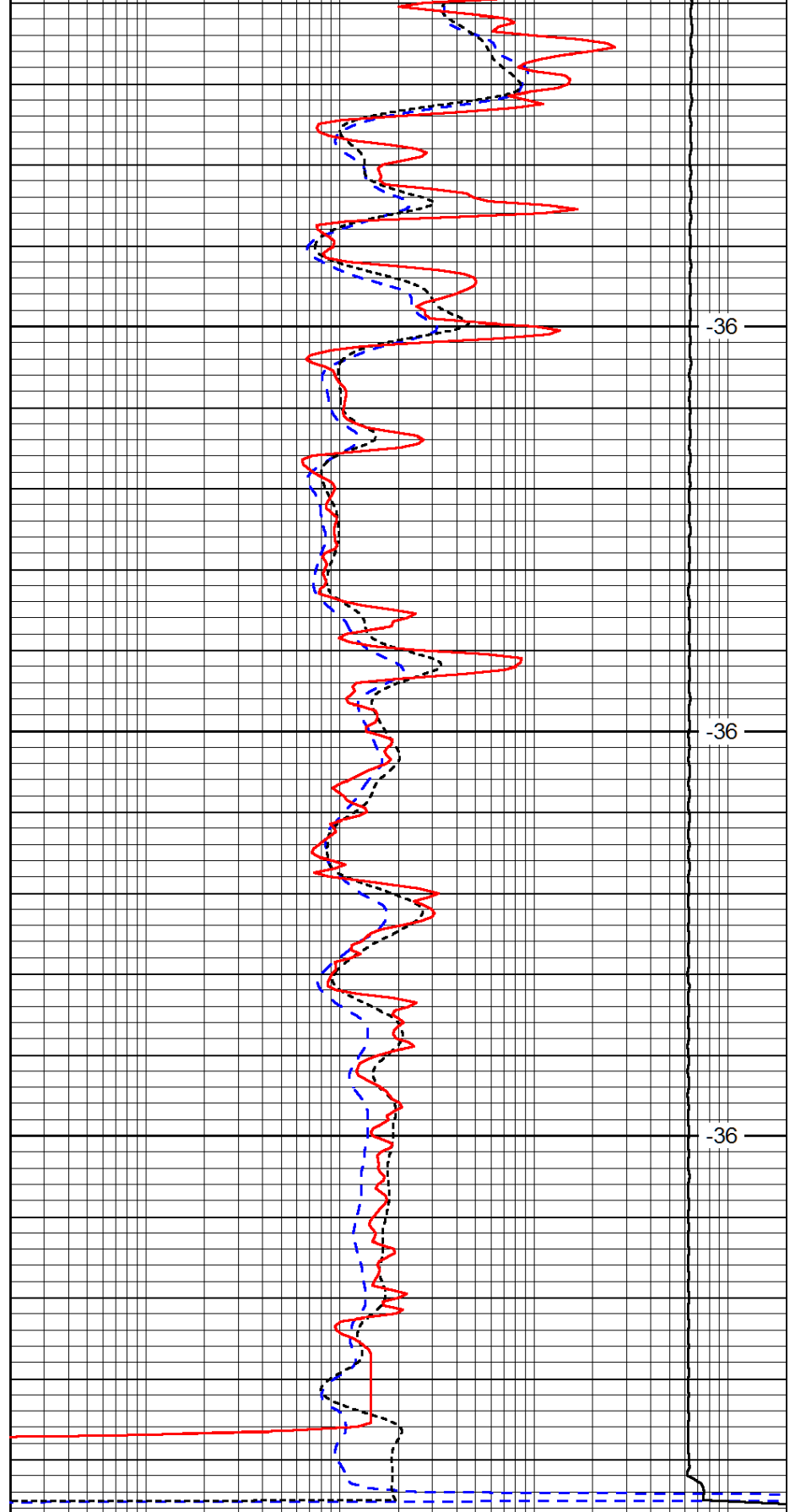


0	Gamma Ray	150
-160	RxoRt	40
-200	SP (mV)	0

3550

3600

3650



-36

-36

-36

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD