



Dual Induction Log

Pioneer Energy Services

API No.

15-145-21,767-00-00

Company **Wausau Development Corporation**

Well **Hammeke #1**

Field

County

Pawnee

State

Kansas

Location **1980' FNL & 3300' FEL**

Other Services
CNL/CDL
MEL/ BHCS

Sec: **23**

Twp: **23S**

Rge: **17W**

Elevation

Permanent Datum **Ground Level**

Elevation 2078

Log Measured From **Kelly Bushing**

7 Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing**

K.B. 2085
D.F.
G.L. 2078

Date

7/13/2014

Run Number

One

Depth Driller

4320

Depth Logger

4323

Bottom Logged Interval

4322

Top Log Interval

250

Casing Driller

8.625 @ 285

Casing Logger

285

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

6,500

Density / Viscosity

8.9 53

pH / Fluid Loss

10.0 12.0

Source of Sample

Flowline

Rm @ Meas. Temp

.54 @ 82

Rmf @ Meas. Temp

.41 @ 82

Rmc @ Meas. Temp

.73 @ 82

Source of Rmf / Rmc

Charts

Rm @ BHT

.37 @ 119

Operating Rig Time

4 1/2 Hours

Max Rec. Temp. F

119

Equipment Number

17

Location

Hays

Recorded By

C. Desaire

Witnessed By

Steve VanBuskirk

Nash Evans

Layon Evans

<<< Fold Here >>>

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.

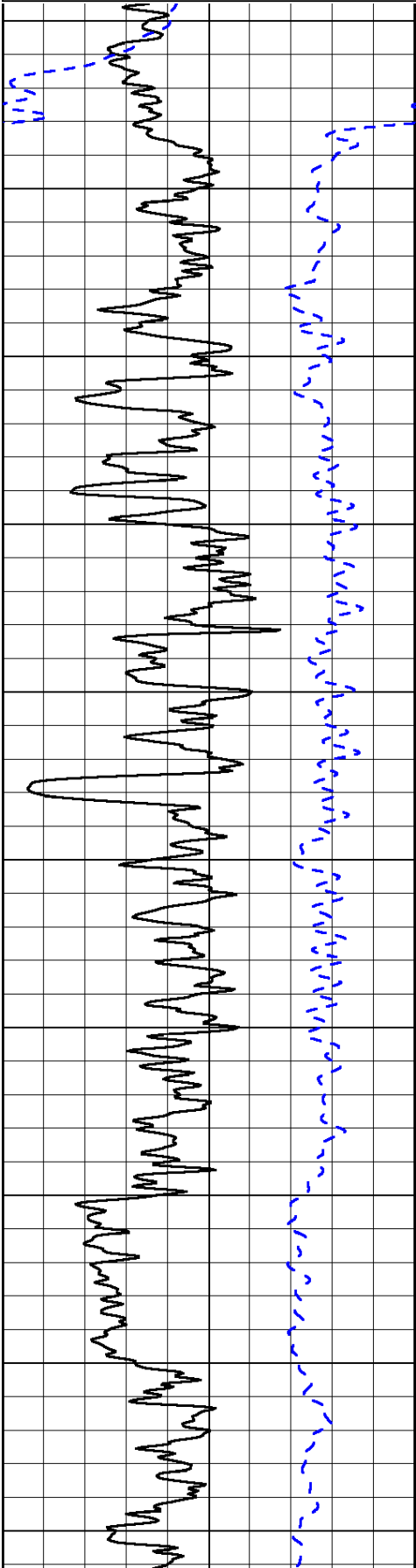
Comments

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

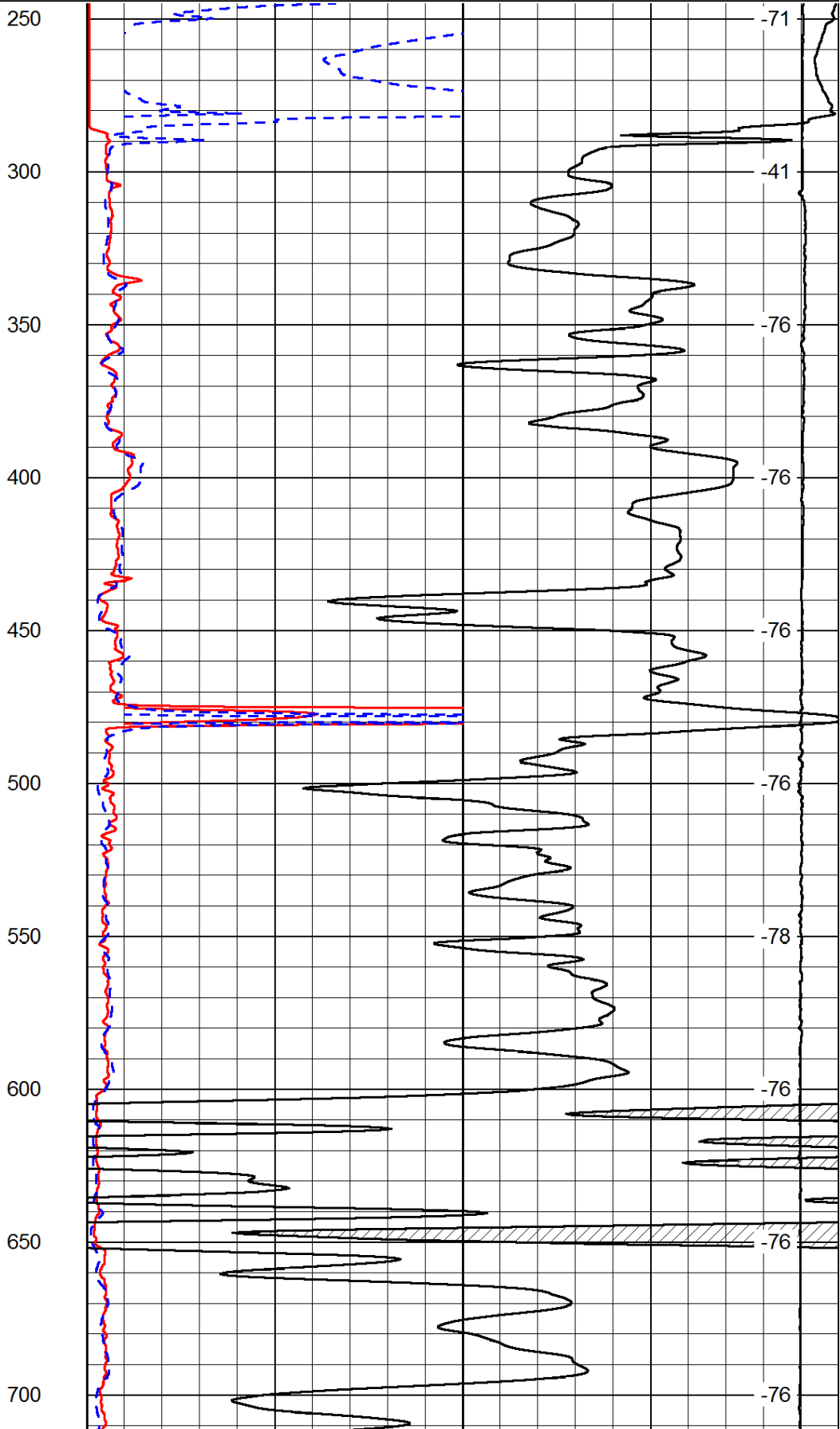
Zook KS, 1 S,
4 W, 1/2 S, E Into

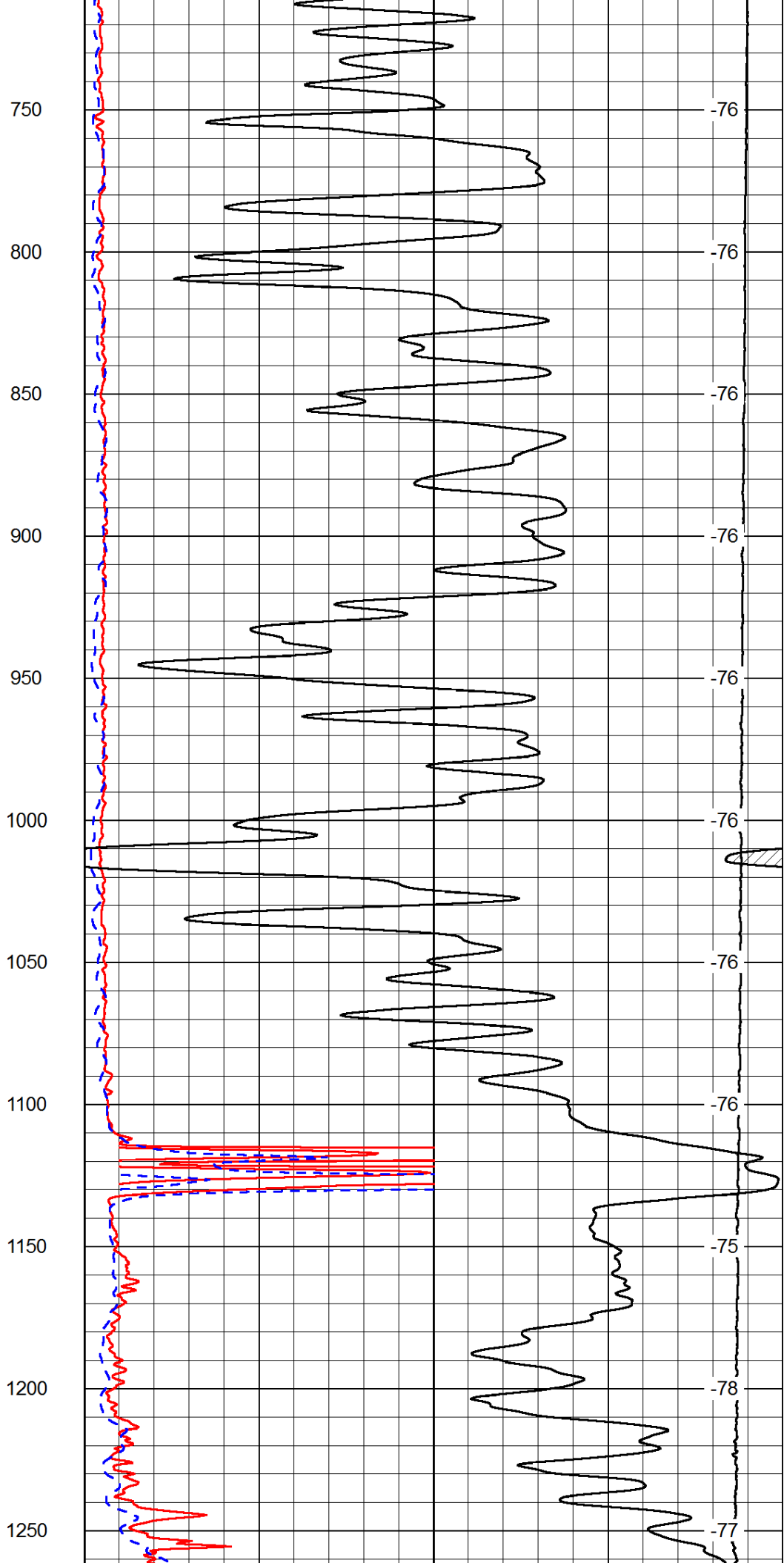
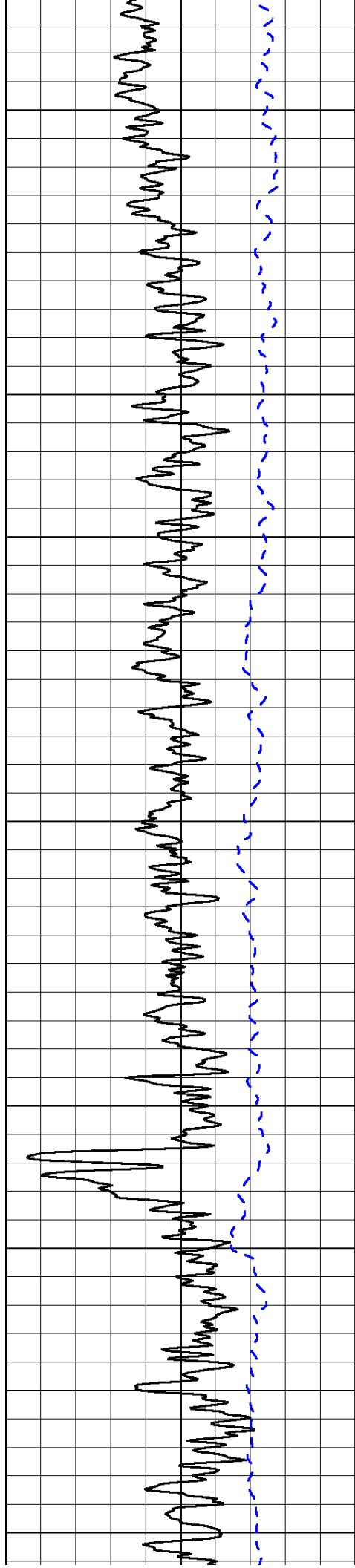
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Dataset Creation: Sun Jul 13 16:08:58 2014
Charted by: Depth in Feet scaled 1:600

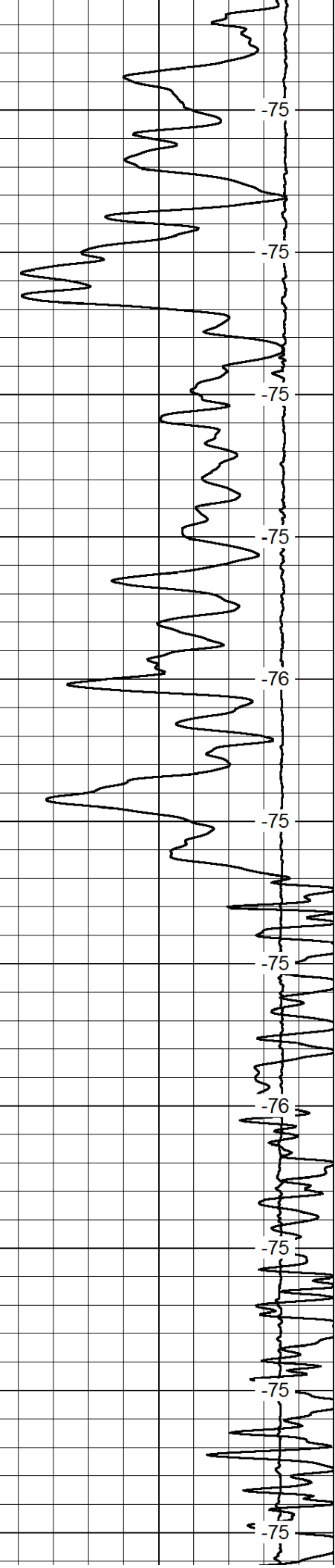
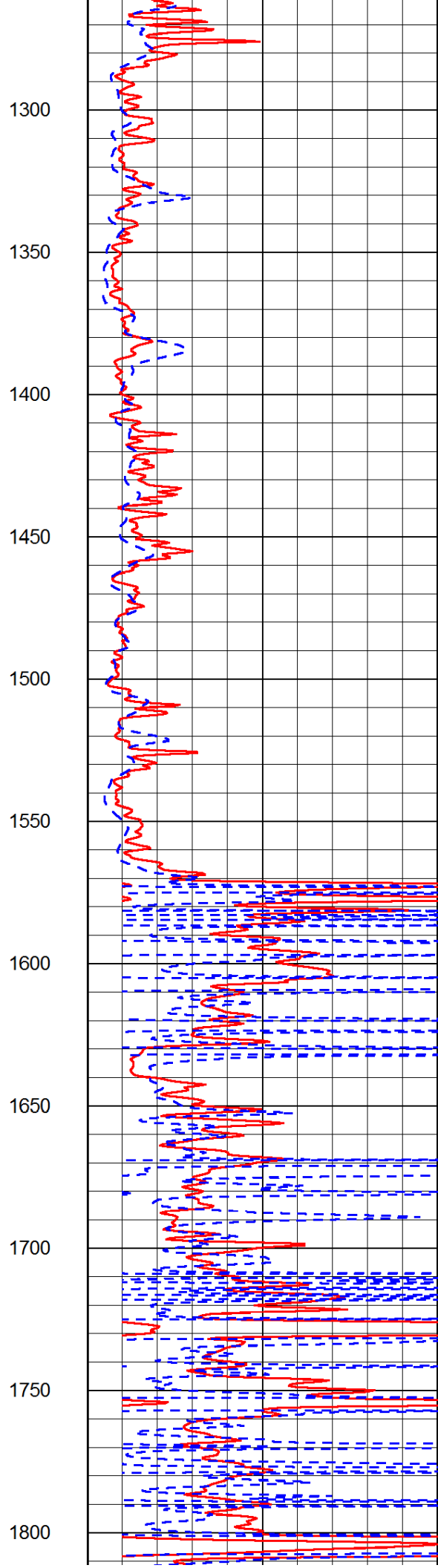
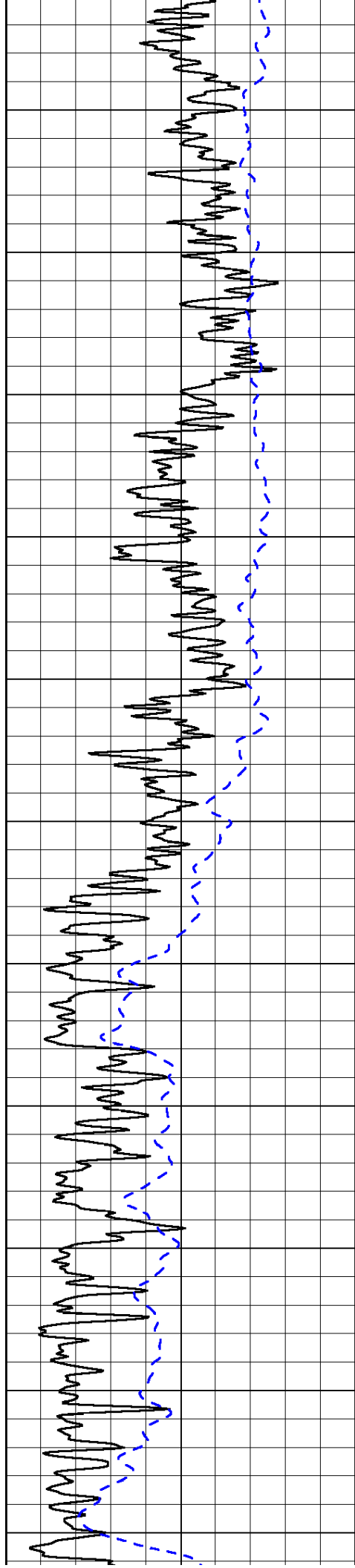
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-200	SP (mV)	0

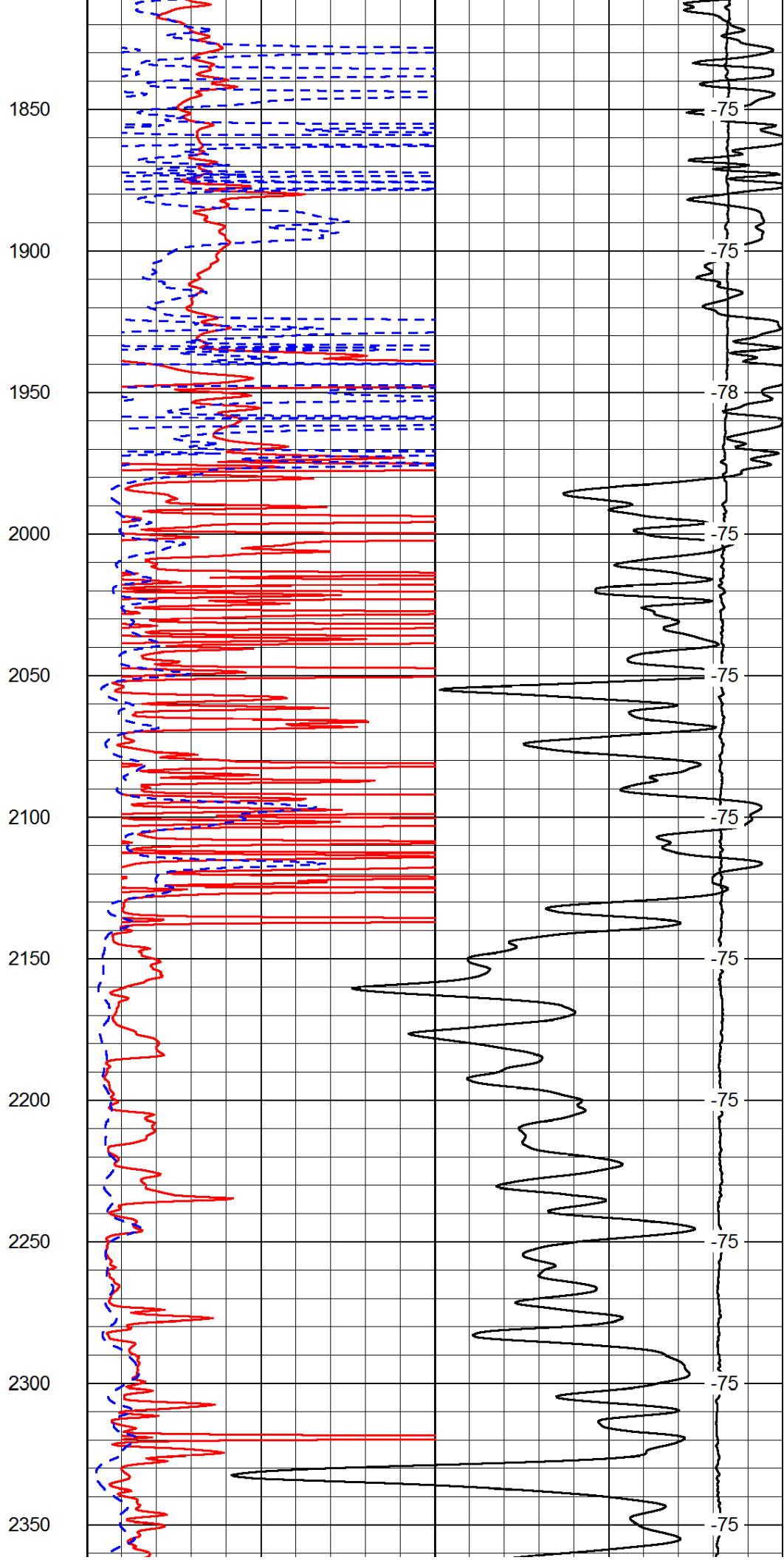
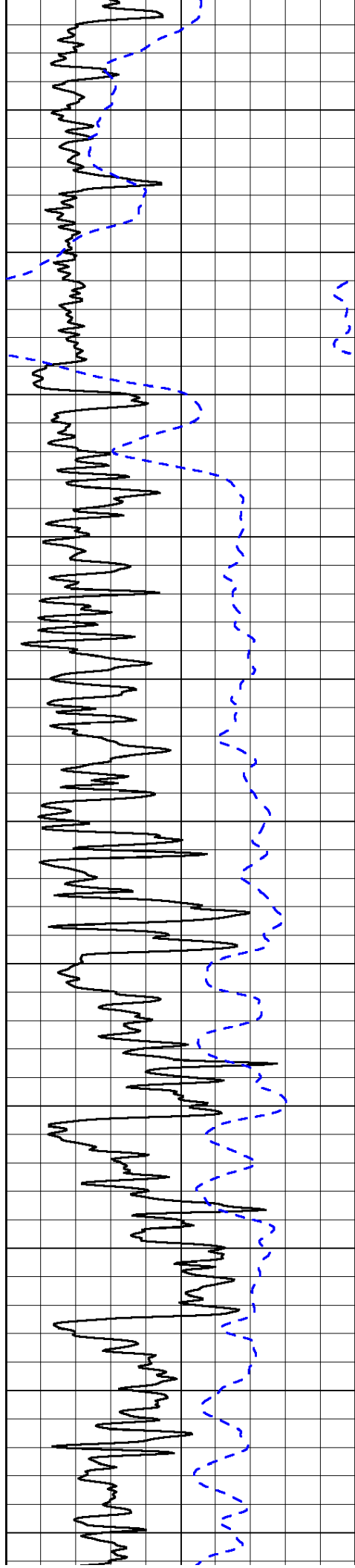


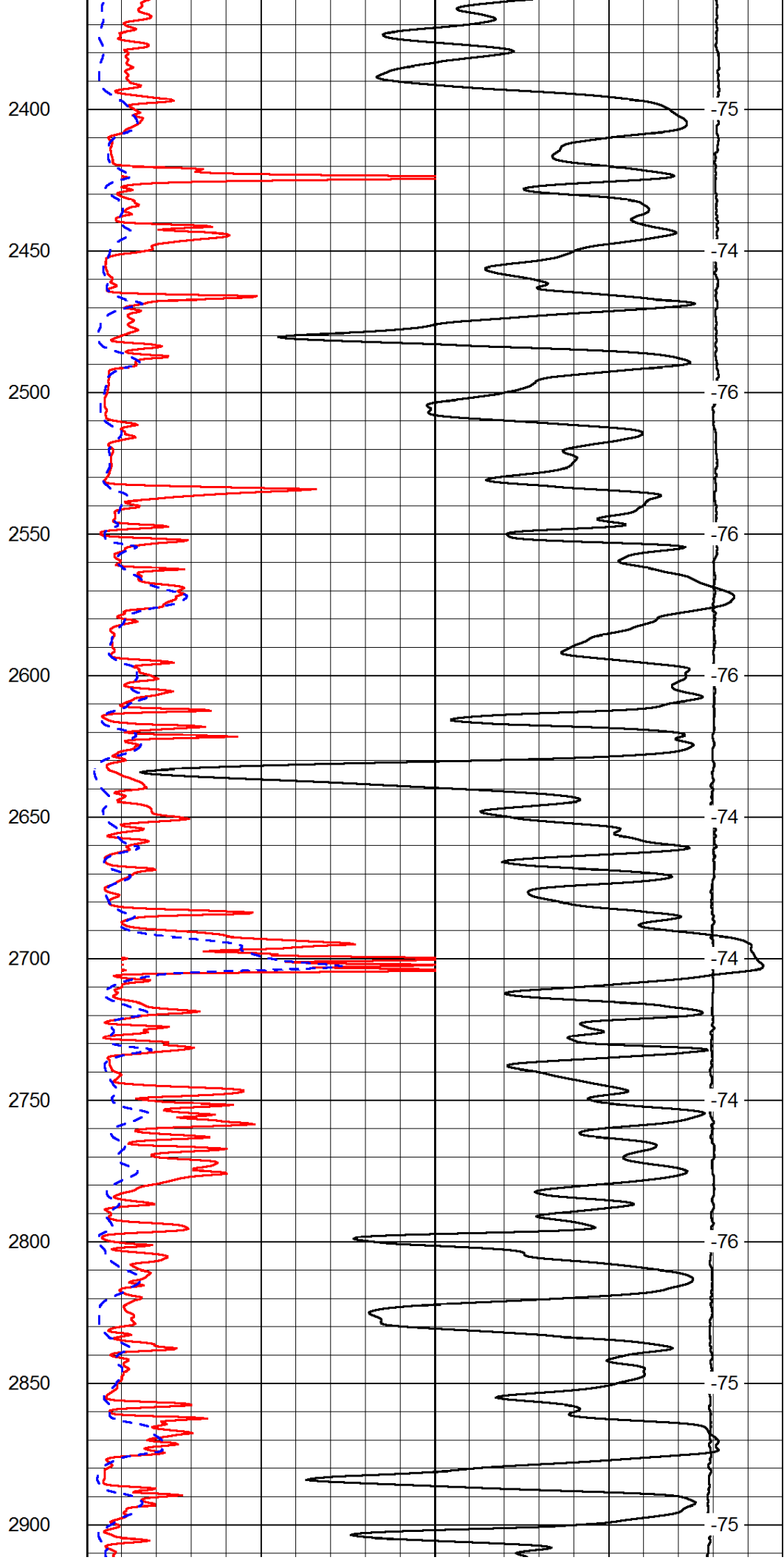
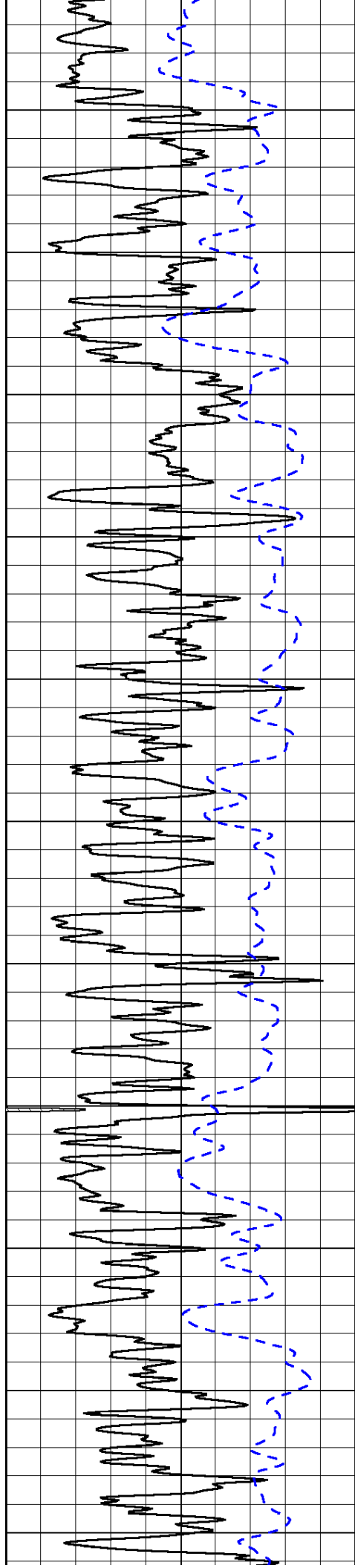
0	Shallow Resistivity	50	LSPD
0	Deep Resistivity	50	
1000	Conductivity		0
15000	Line Tension		0
50	Shallow Resistivity	500	
50	Deep Resistivity	500	

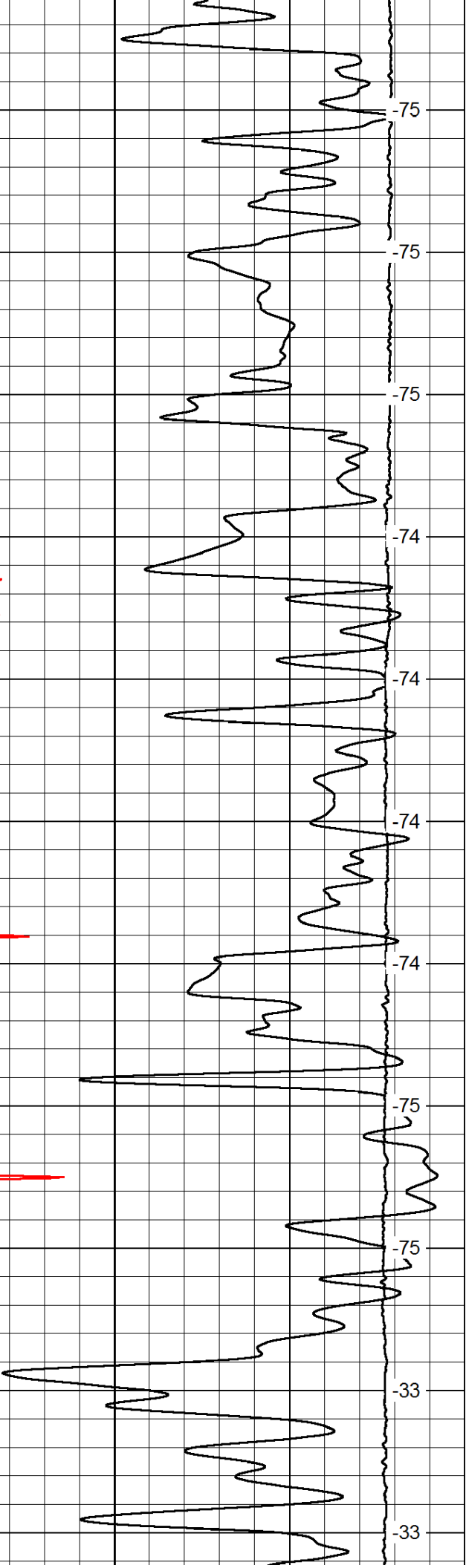
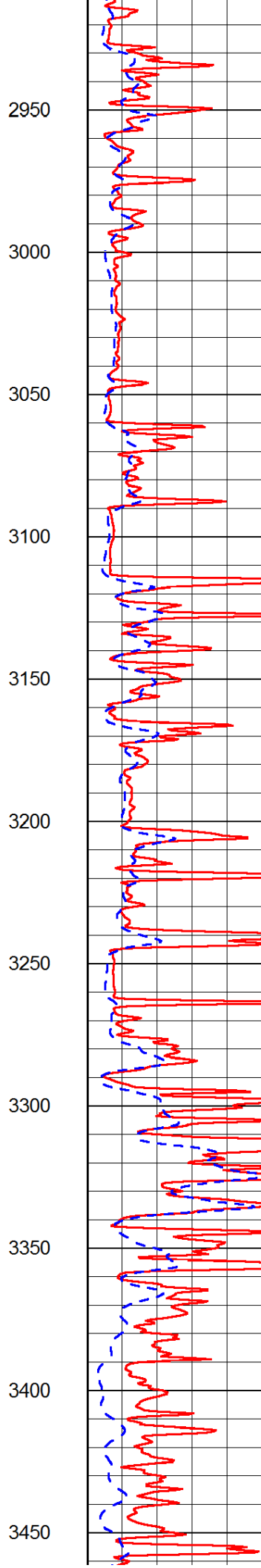
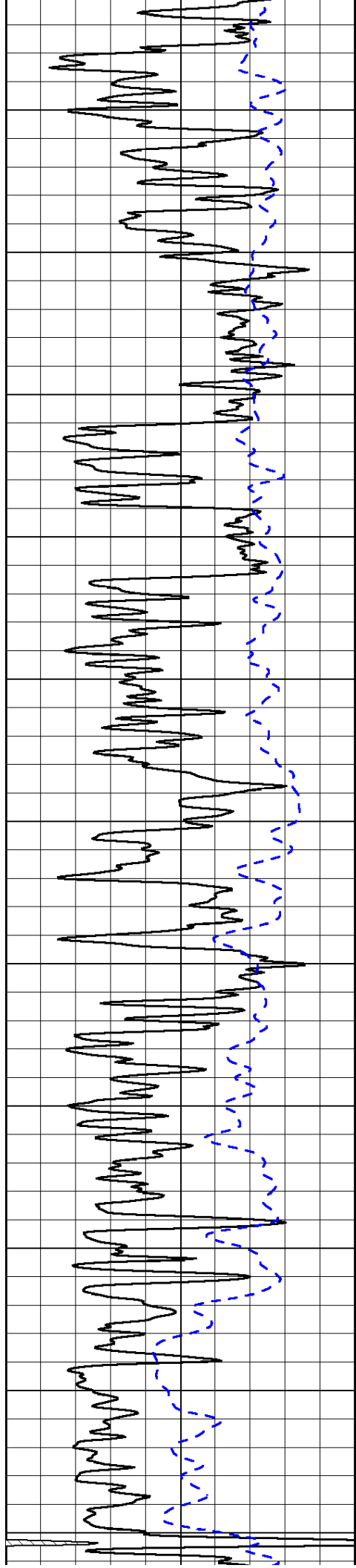


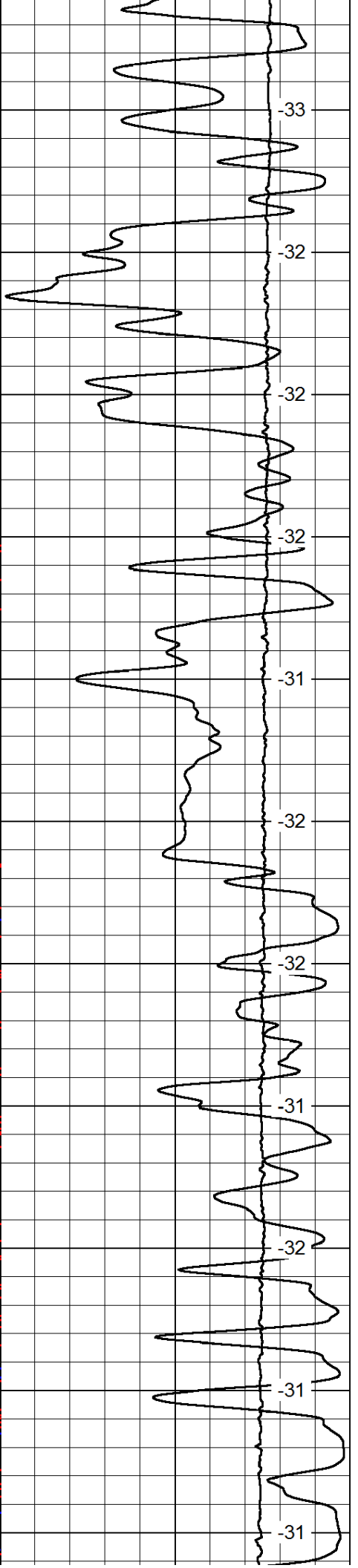
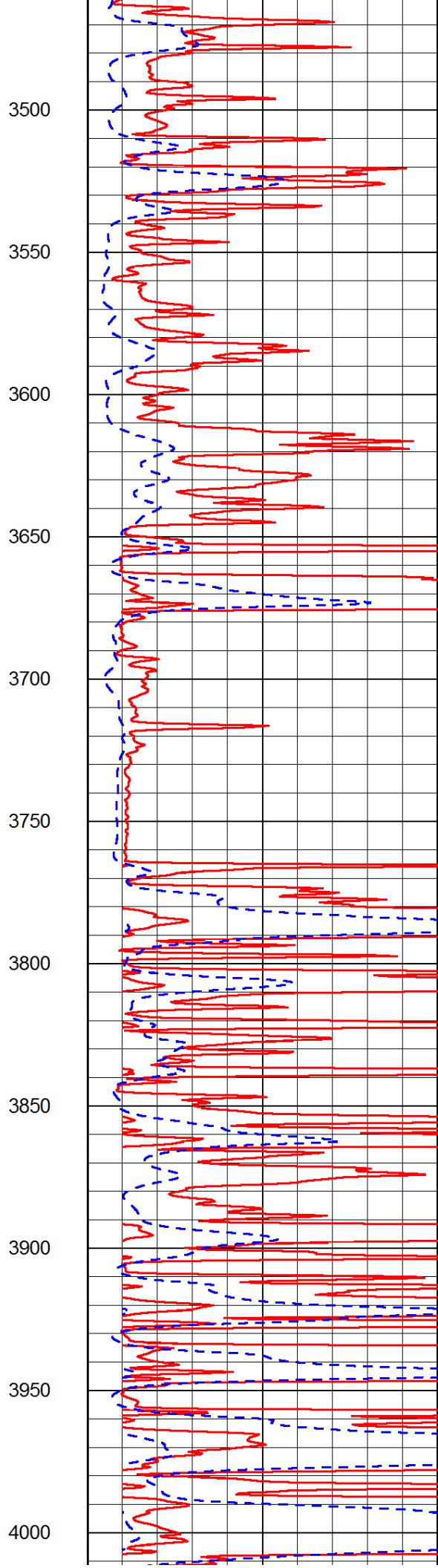
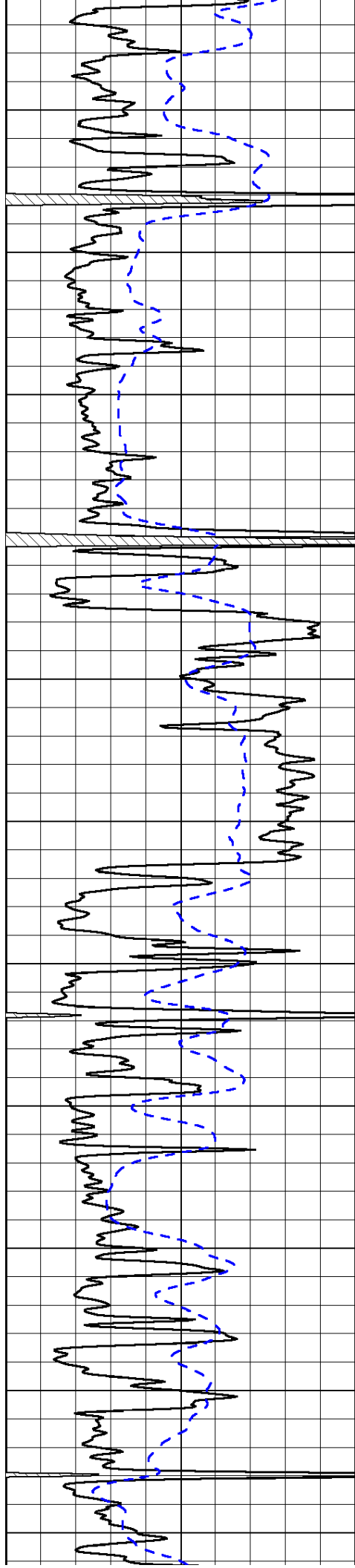


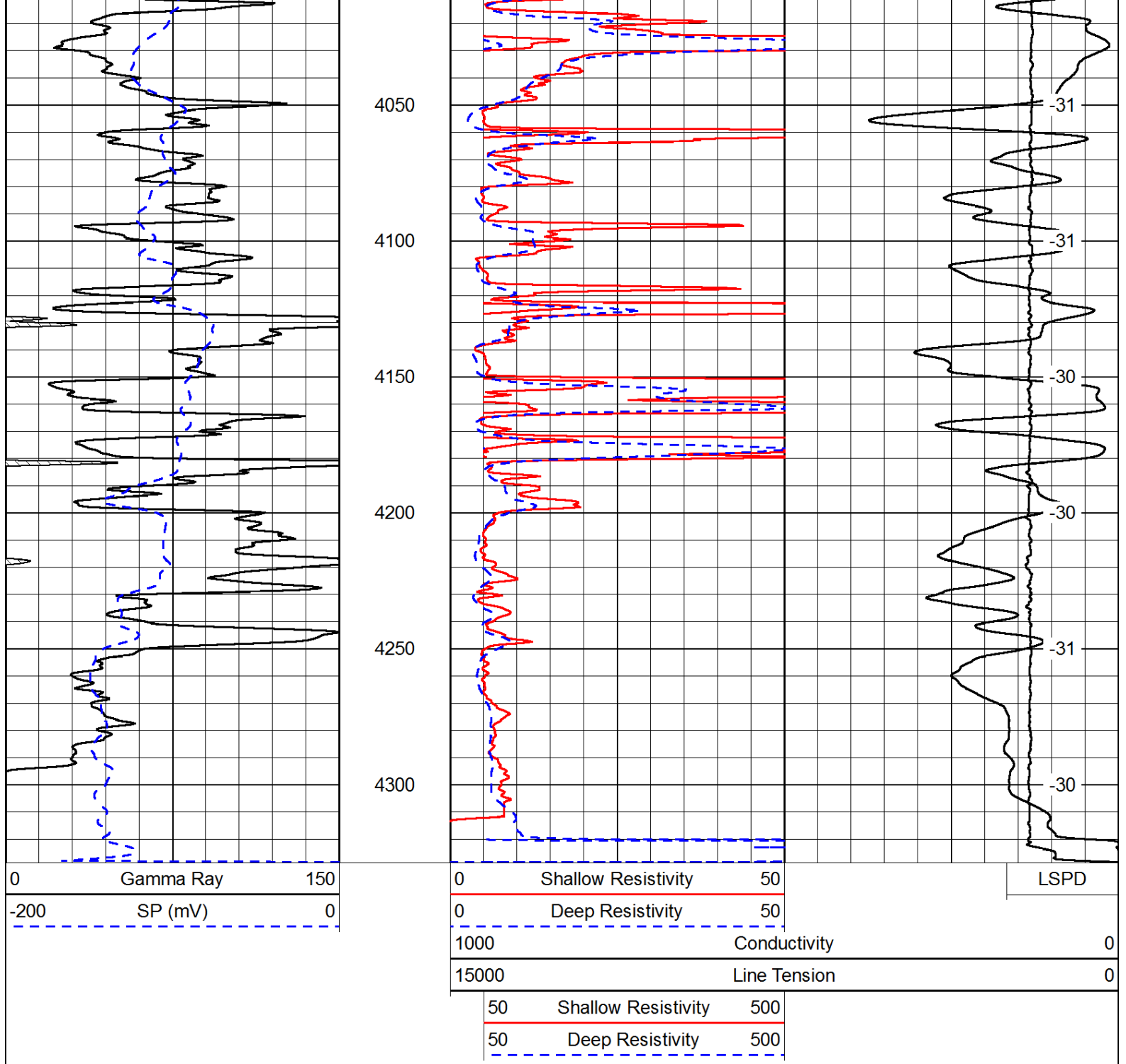




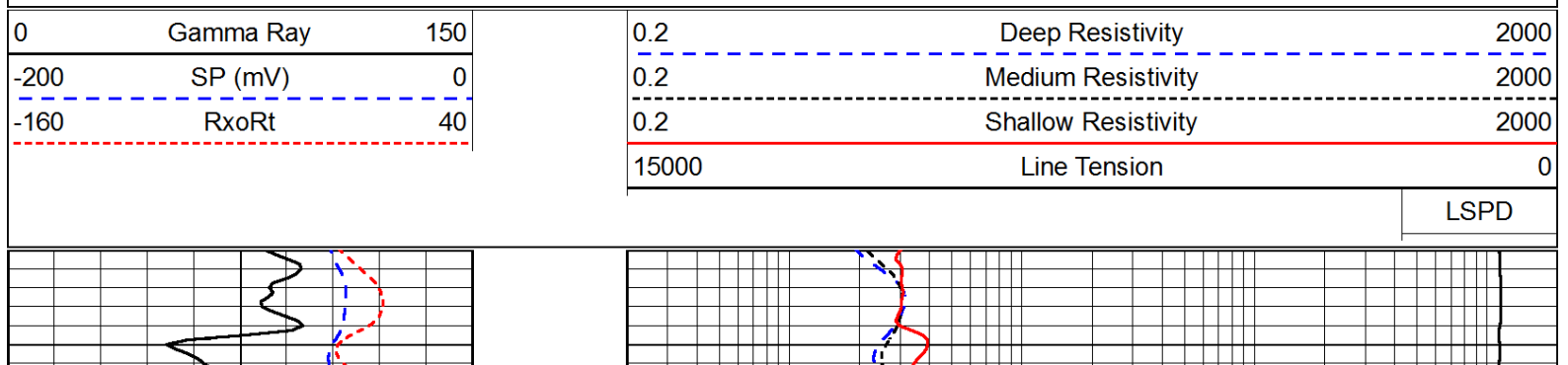


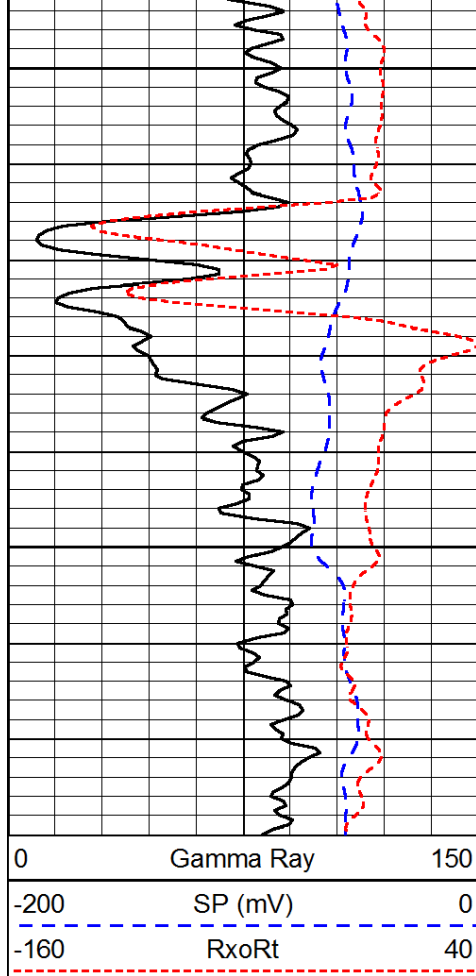






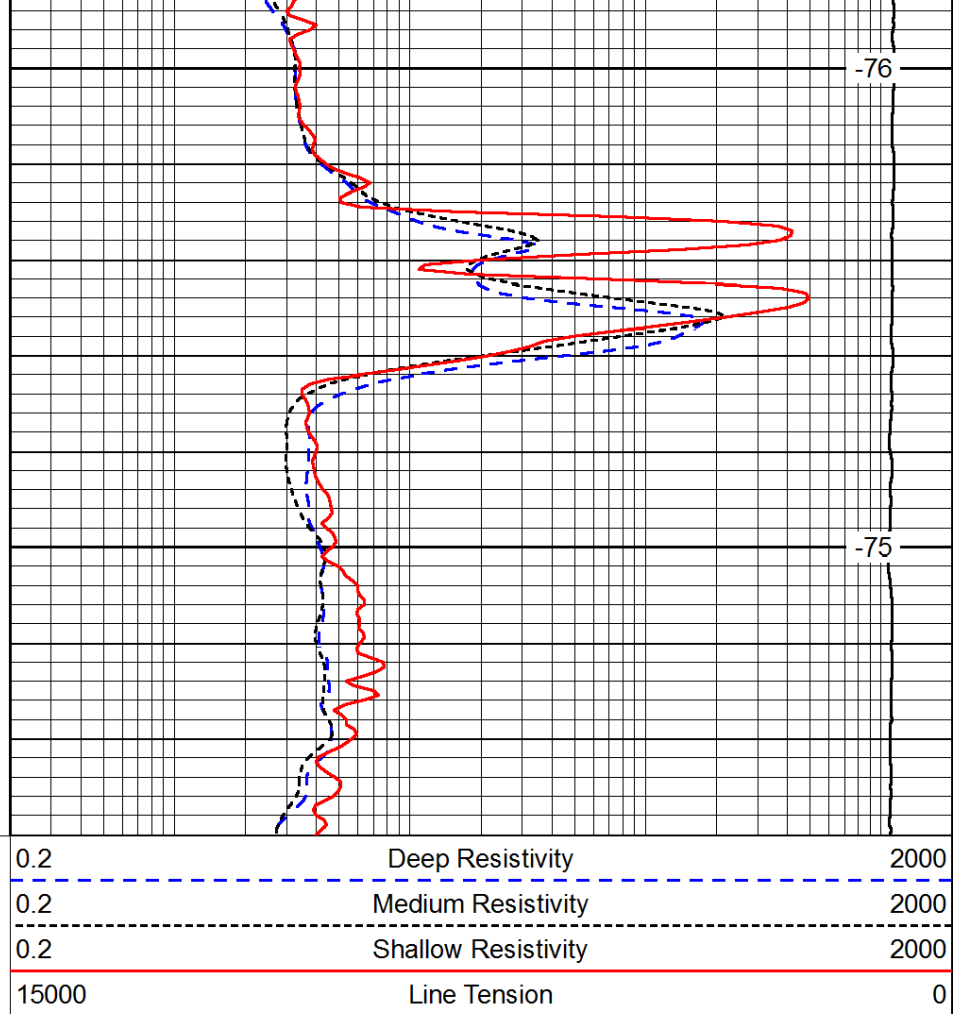
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 Presentation Format: dil
 Dataset Creation: Sun Jul 13 16:08:58 2014
 Charted by: Depth in Feet scaled 1:240





1100

1150

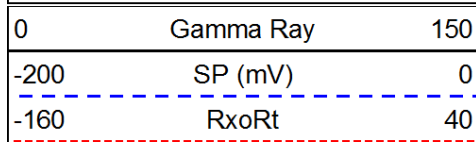


-76

-75

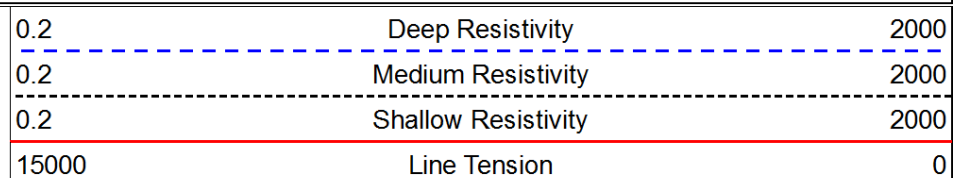
LSPD

Database File: c:\warrior\data\wausau development_hammeke #1\wauhd.db
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3400

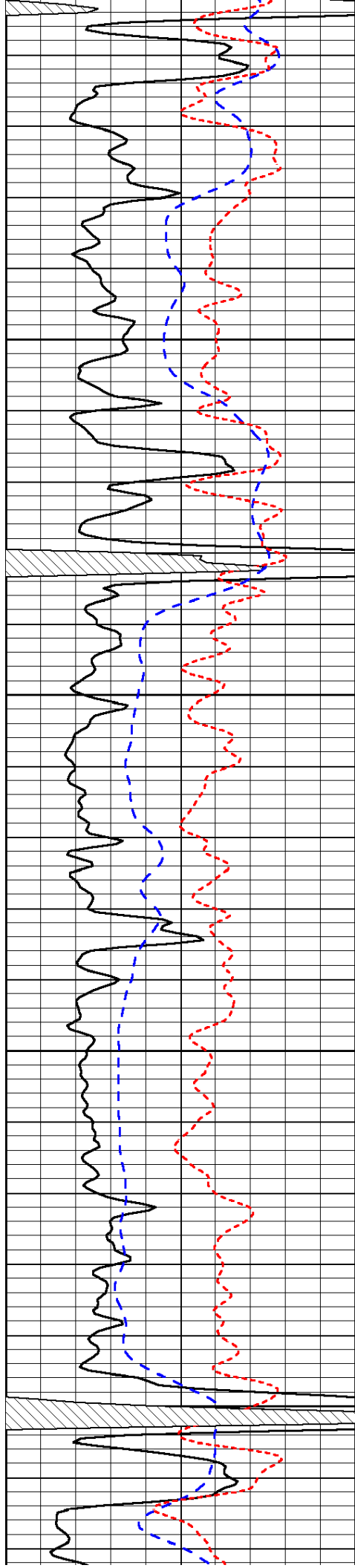
3450



-33

-33

LSPD

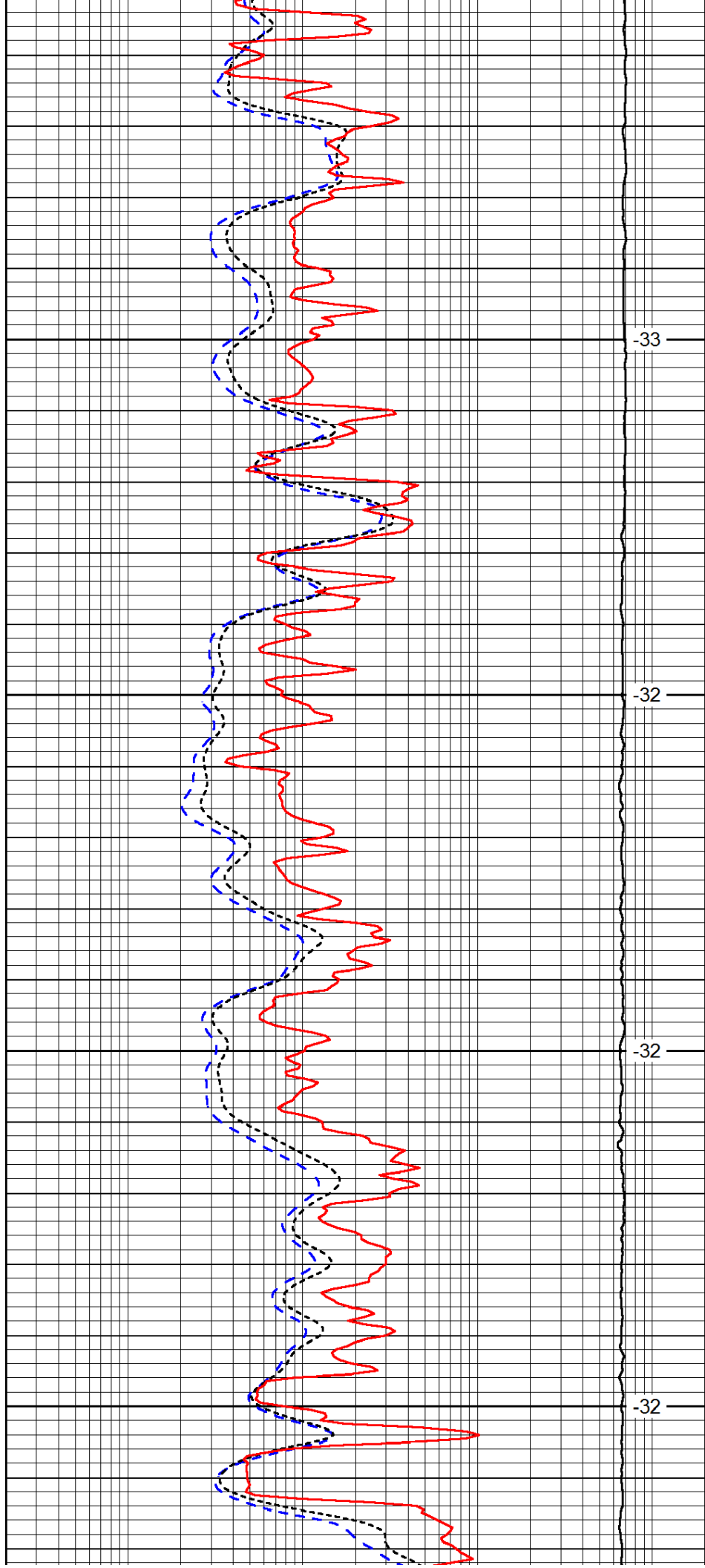


3500

3550

3600

3650

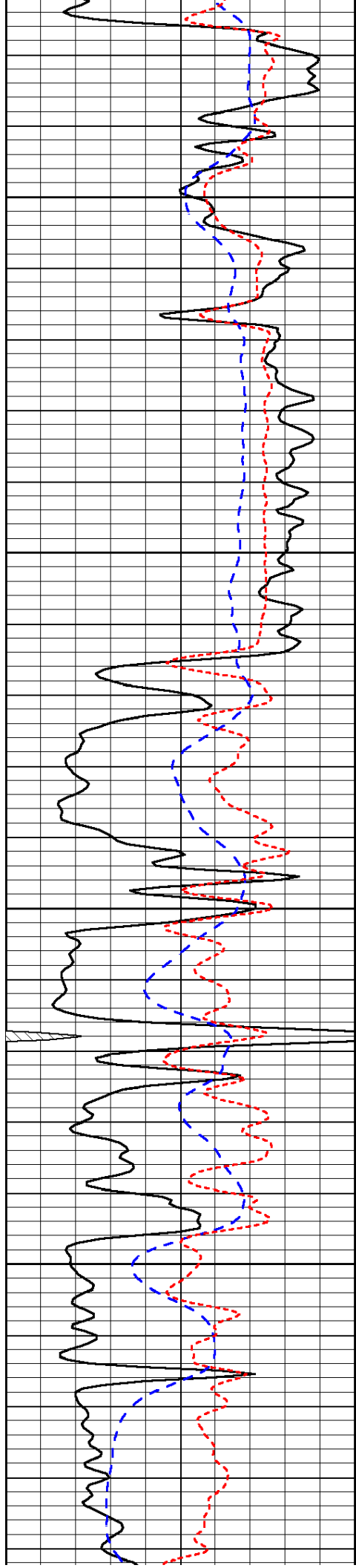


-33

-32

-32

-32

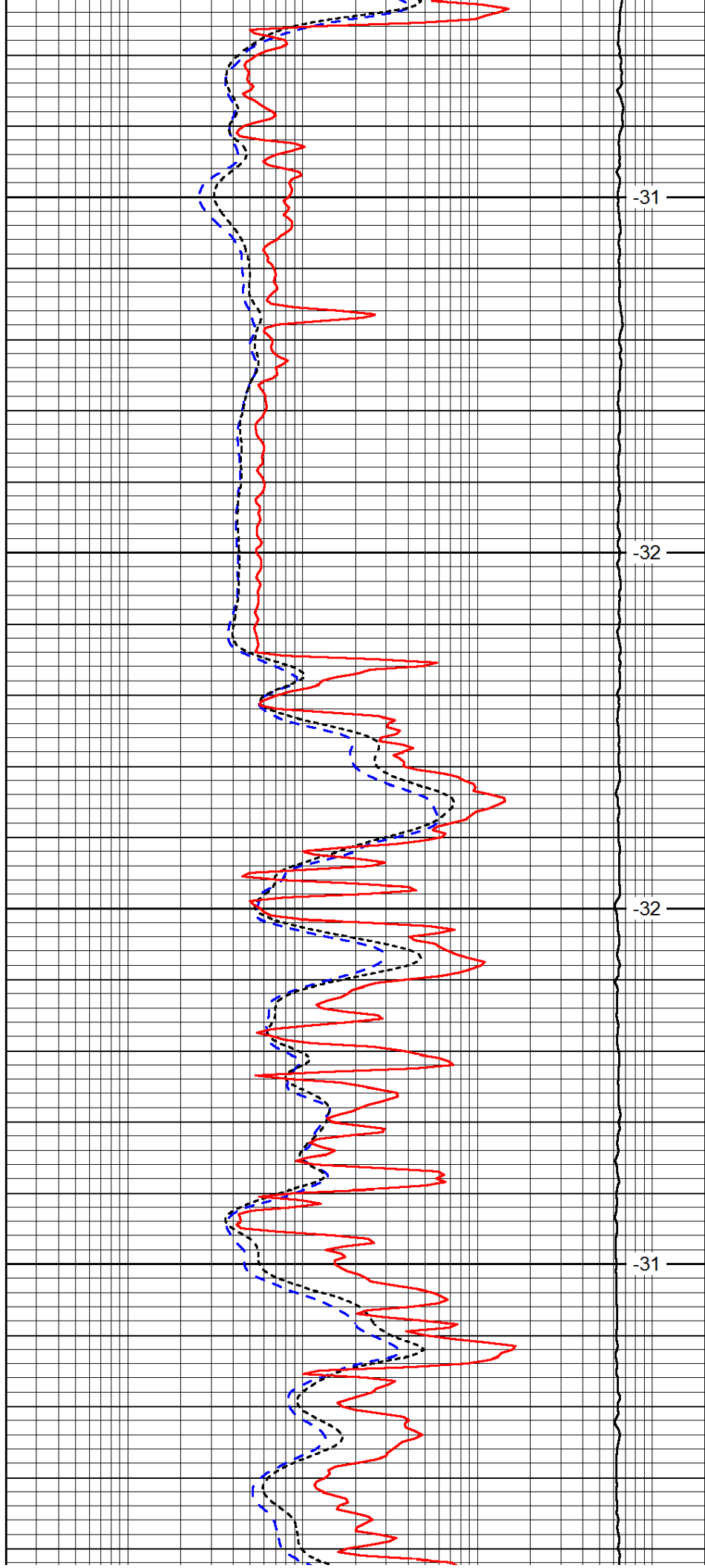


3700

3750

3800

3850

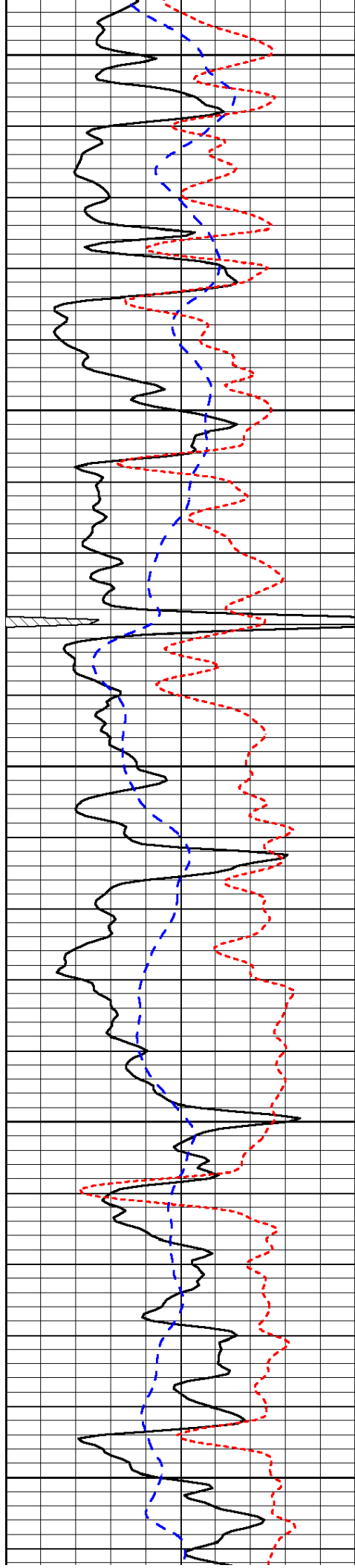


-31

-32

-32

-31



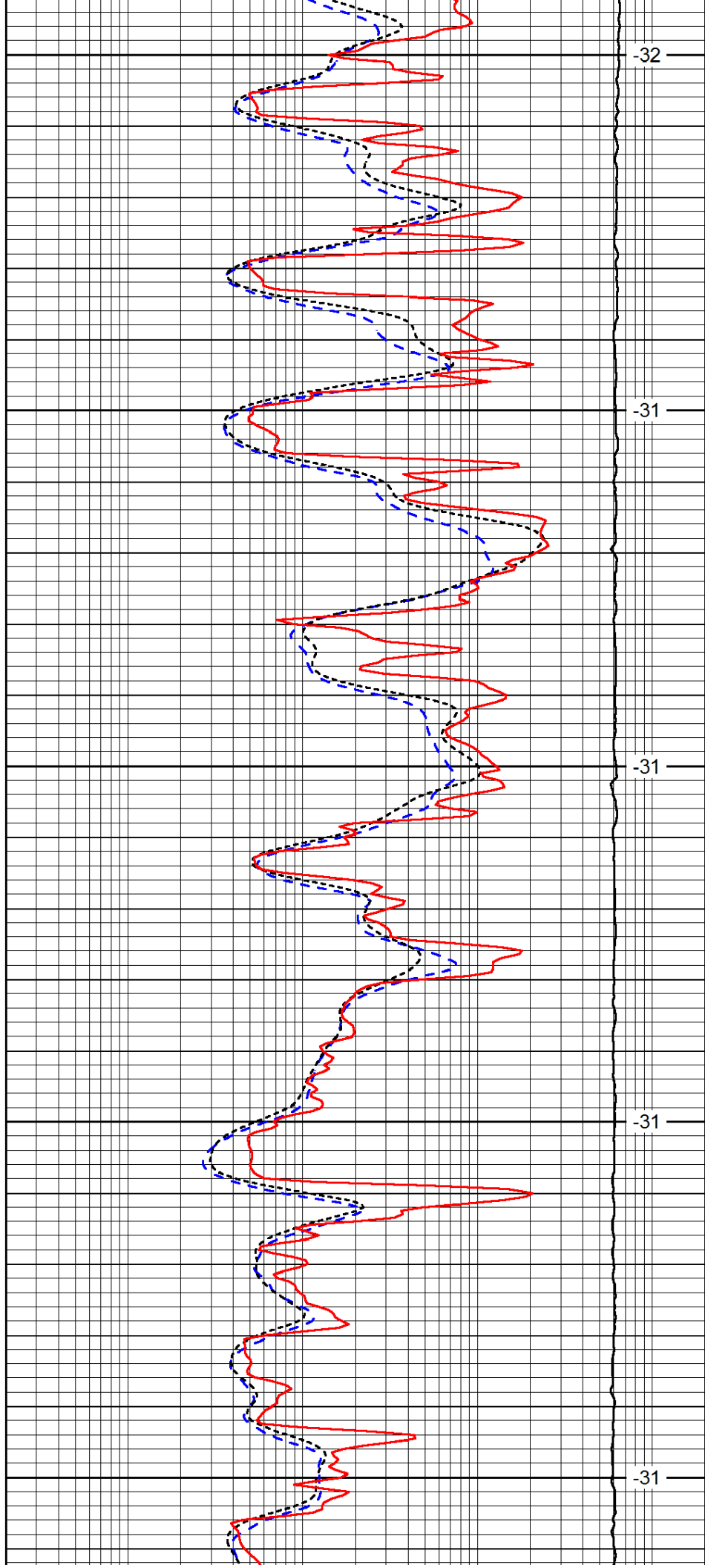
3900

3950

4000

4050

4100



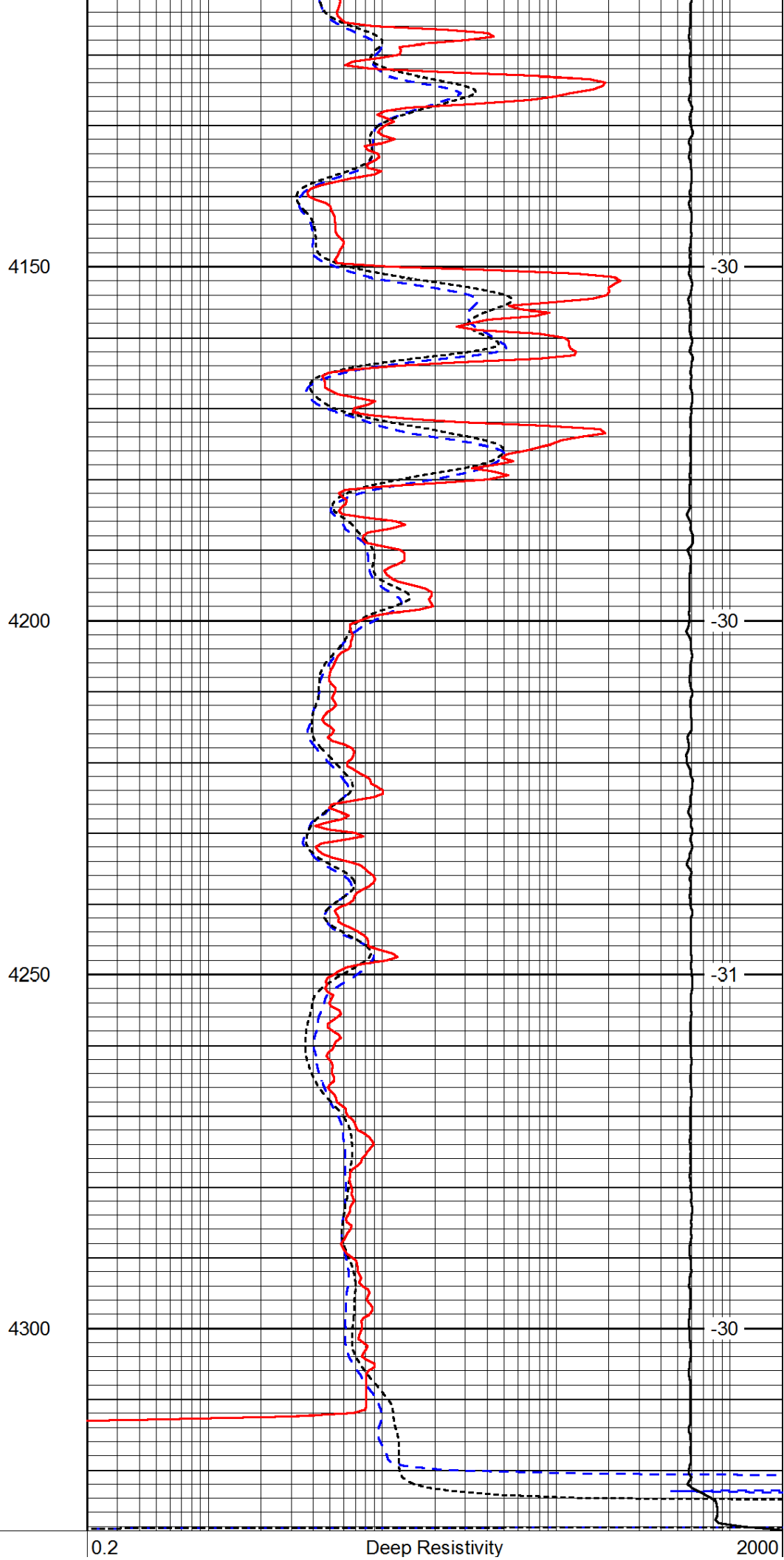
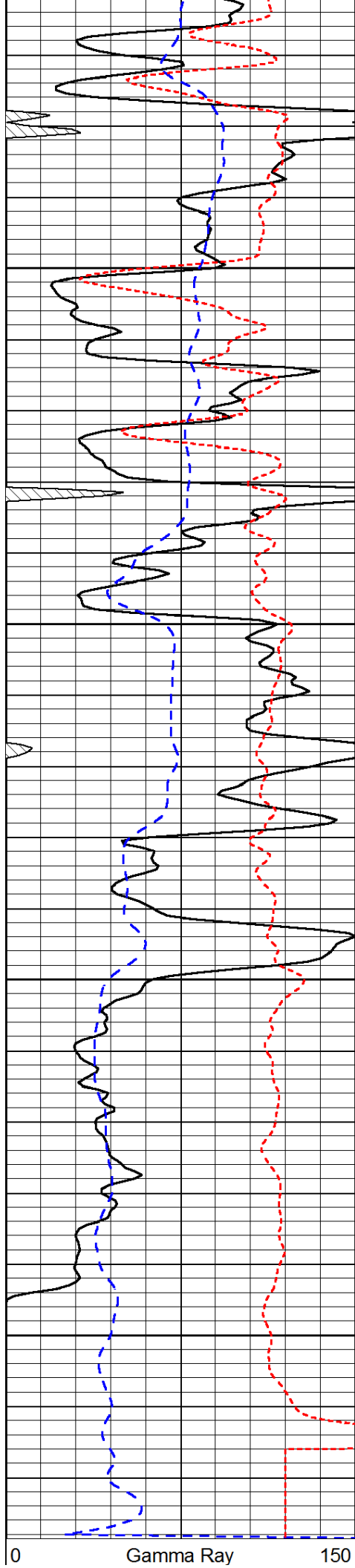
-32

-31

-31

-31

-31



-200	SP (mV)	0
-160	RxoRt	40

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