



Pioneer Energy Services

Dual Induction Log

15-051-26,426-00-00

API No.

Company **E&B Natural Resources Management**

Well **Marshal A No. 43WD**

Field **Bemis-Shutts**

County **Eljis** State **Kansas**

Location **SW NE NE NW/4
350' FNL & 2,290' FWL**

Sec: **31** Twp: **11S** Rge: **17W**

Other Services
CNL/CDL
MEL

Elevation

Permanent Datum **Ground Level** Elevation **2122**
Log Measured From **Kelly Bushing** 5 Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

K.B. 2127
D.F.
G.L. 2122

Date	12/14/2012	
Run Number	One	
Depth Driller	3745	
Depth Logger	3742	
Bottom Logged Interval	3741	
Top Log Interval	250	
Casing Driller	13.375 @ 290	
Casing Logger	290	
Bit Size	9.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	4000	
Density / Viscosity	8.5 75	
pH / Fluid Loss	11.0 5.6	
Source of Sample	Flowline	
Rm @ Meas. Temp	.85 @ 68	
Rmf @ Meas. Temp	.64 @ 68	
Rmc @ Meas. Temp	1.15 @ 68	
Source of Rmf / Rmc	Charts	
Rm @ BHT	.51 @ 113	
Operating Rig Time	4 Hours	
Max Rec. Temp. F	113	
Equipment Number	108	
Location	Hays	
Recorded By	J. Long	
Witnessed By	Bob O'Dell	

<<< 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

Hays, North to Buckeye Road, 3 East to 180th Road, 3 North, 1/2 East, 3/4 North Into

Database File: c:\warrior\data\e&b natural res_marshall a #43wd\e&b_marshall_a_43wdhd.db
Dataset Pathname: dil/ebstck
Presentation Format: dil2in
Dataset Creation: Fri Dec 14 18:18:48 2012
Charted by: Depth in Feet scaled 1:600

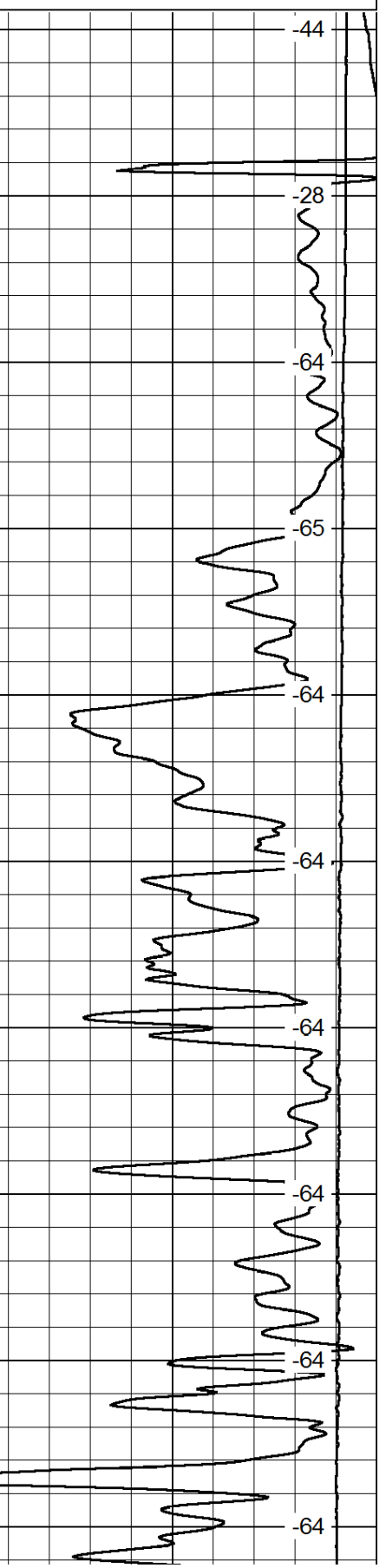
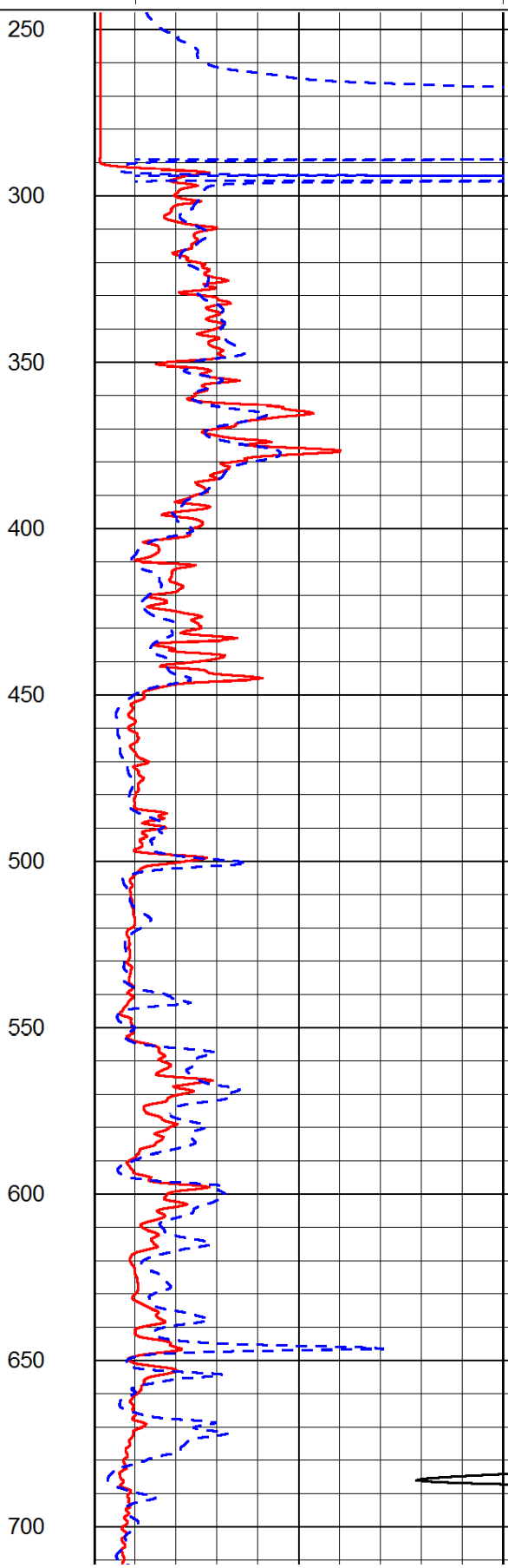
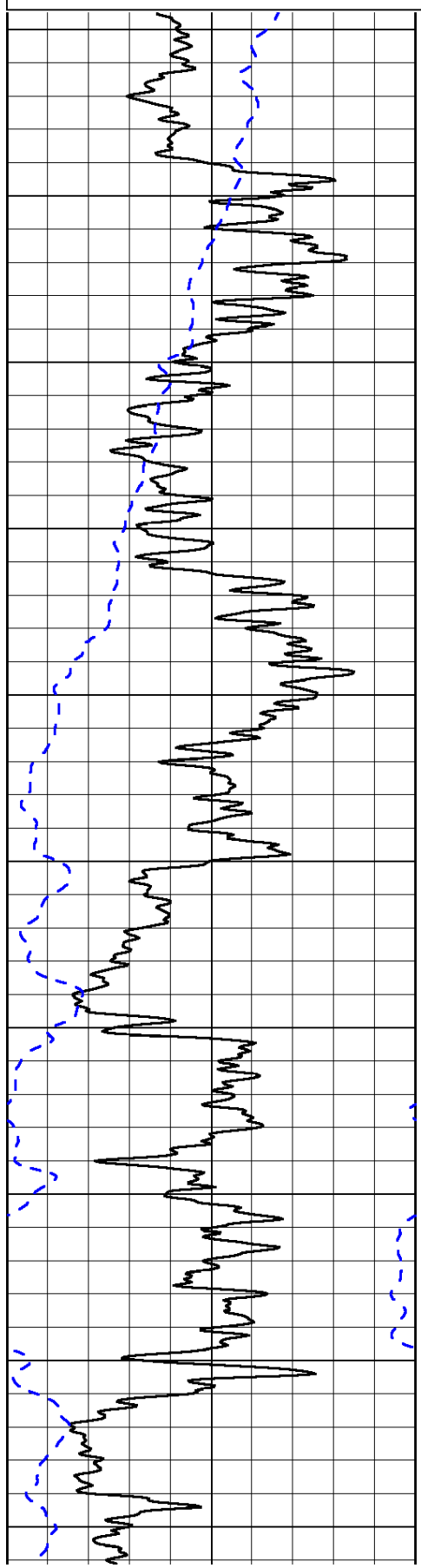
0	Gamma Ray	150
-200	SP (mV)	0

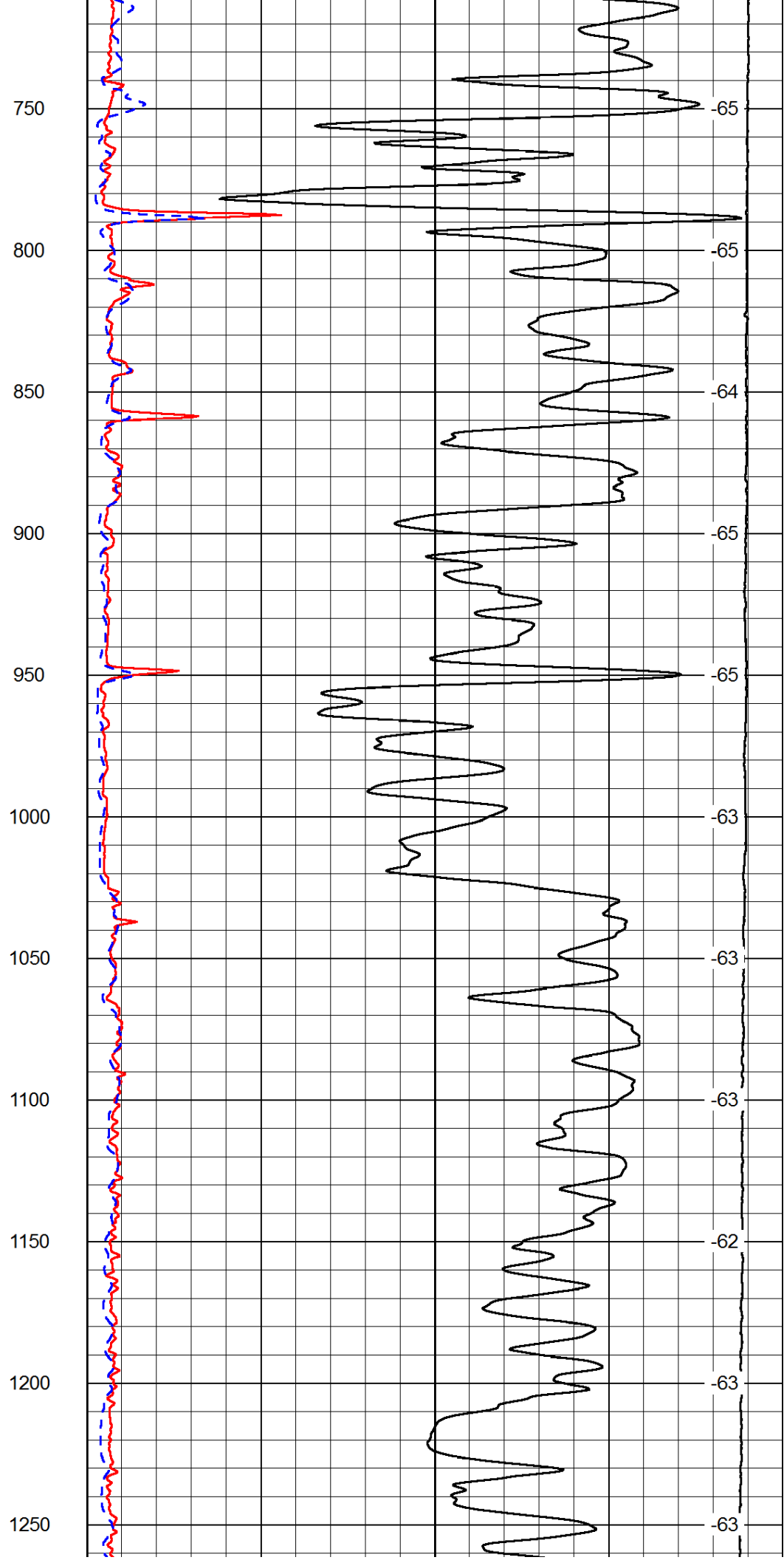
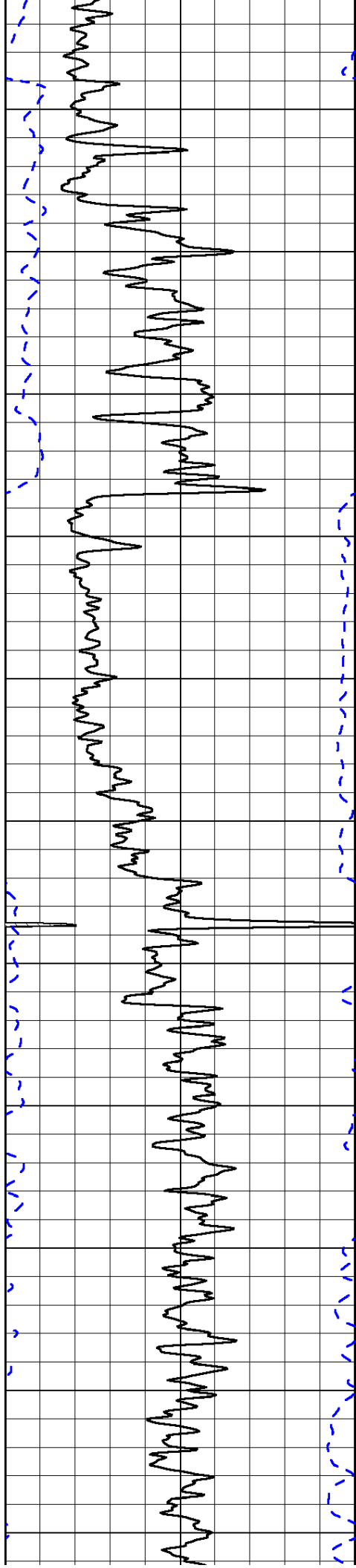
0	Shallow Resistivity	50
0	Deep Resistivity	50

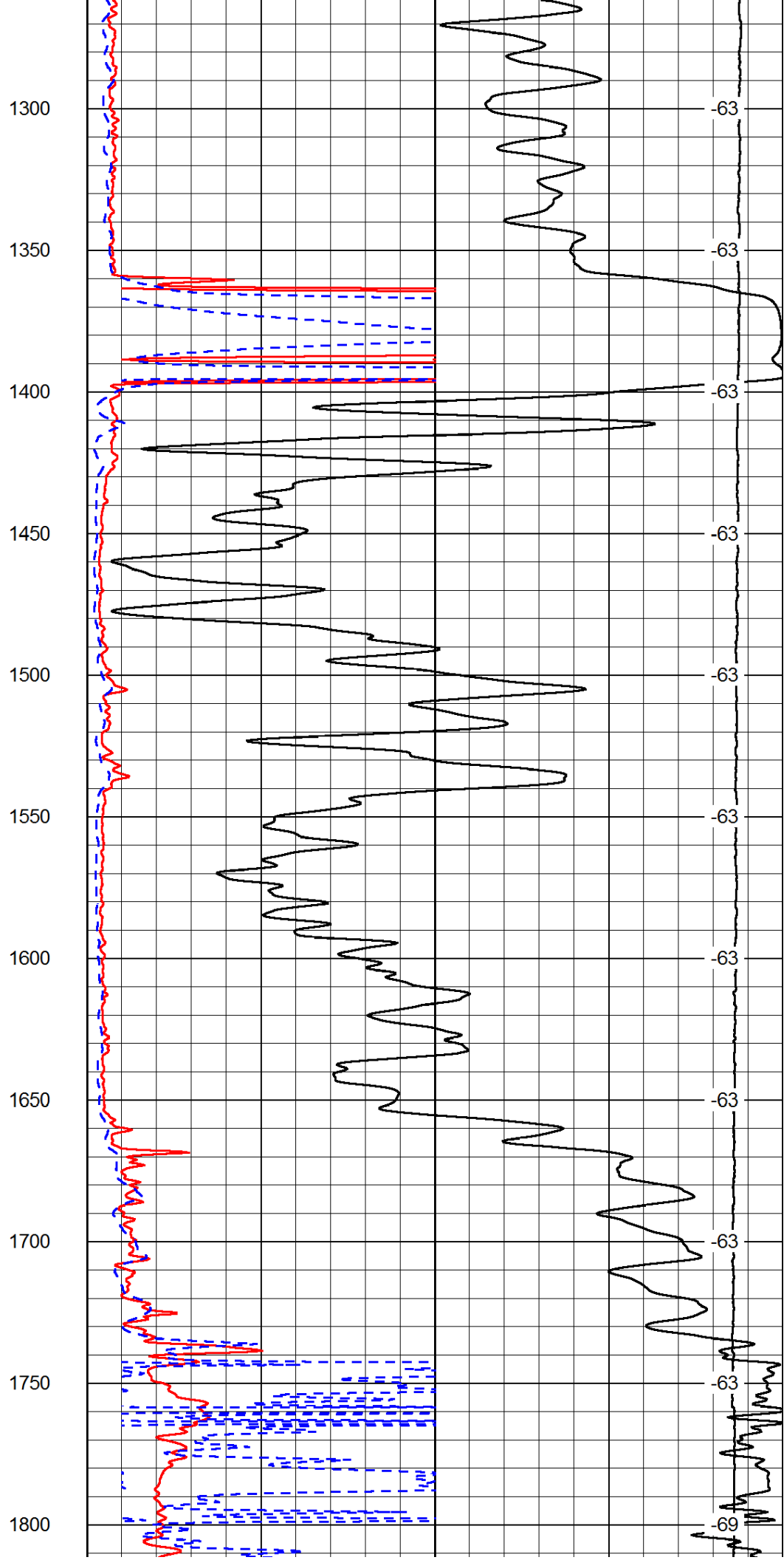
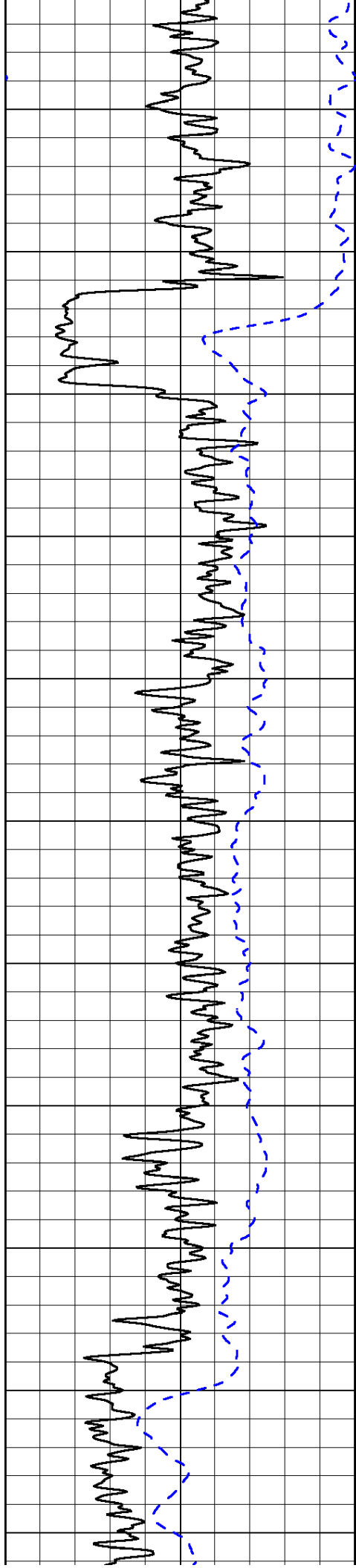
LSPD

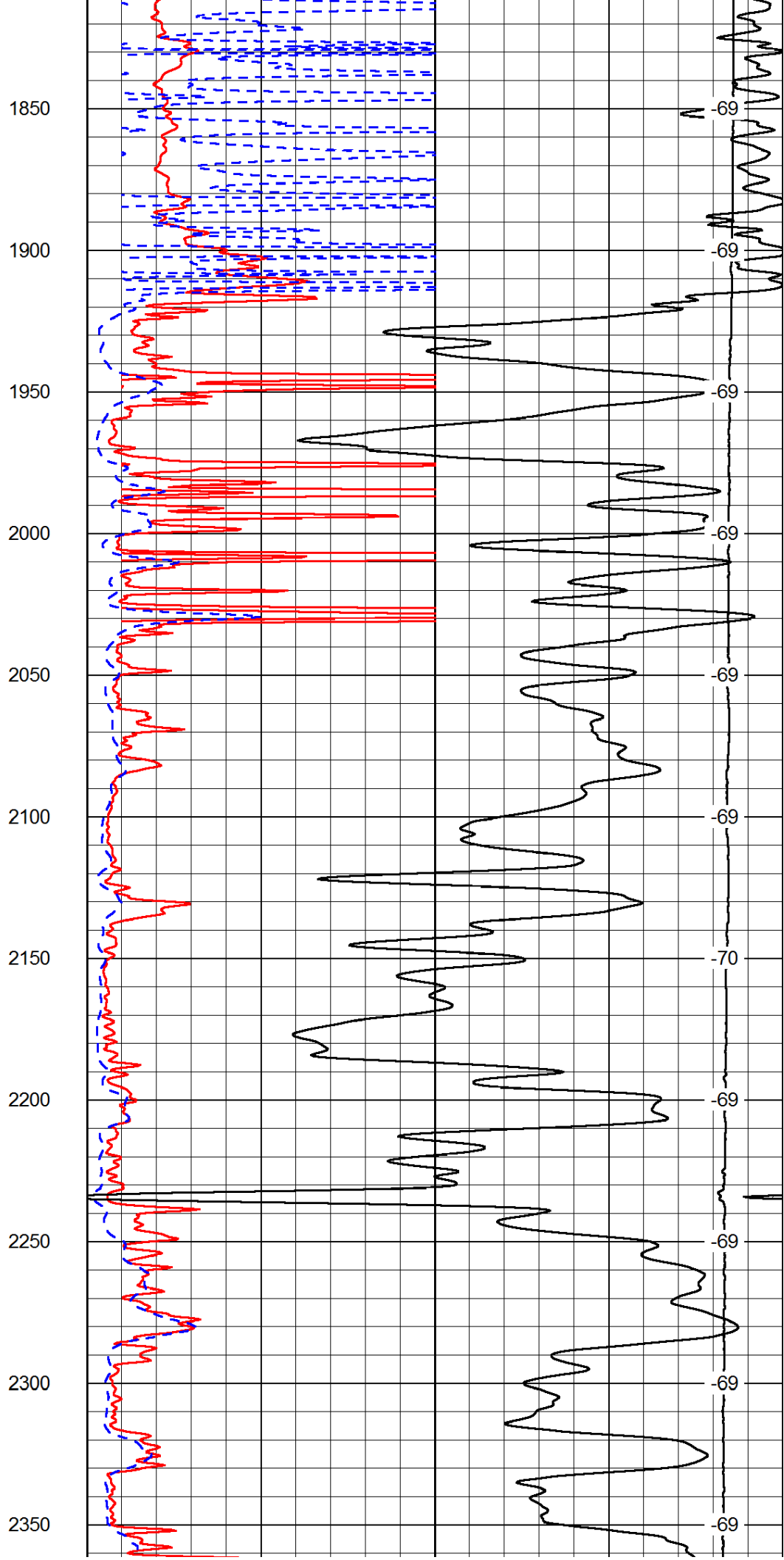
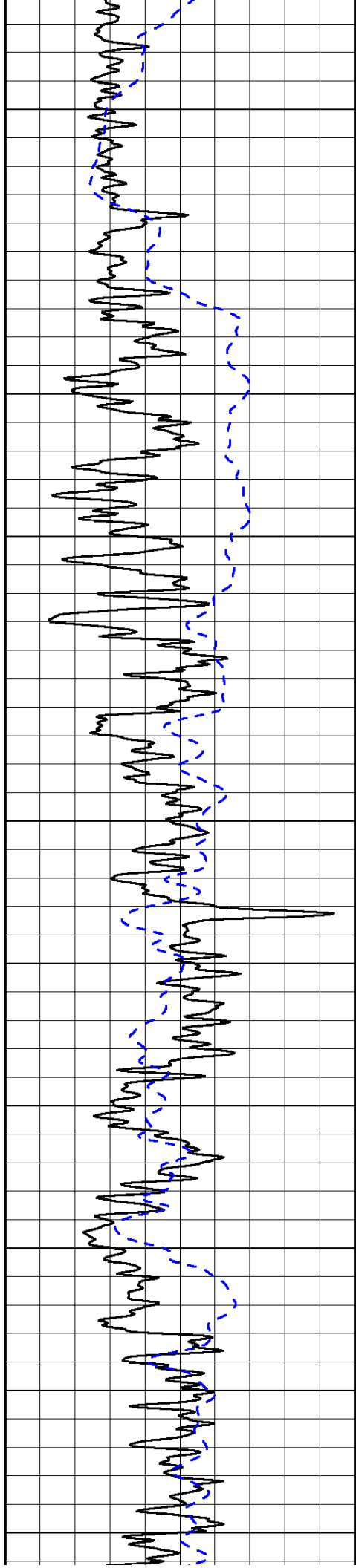
1000	Conductivity	0
15000	Line Tension	0

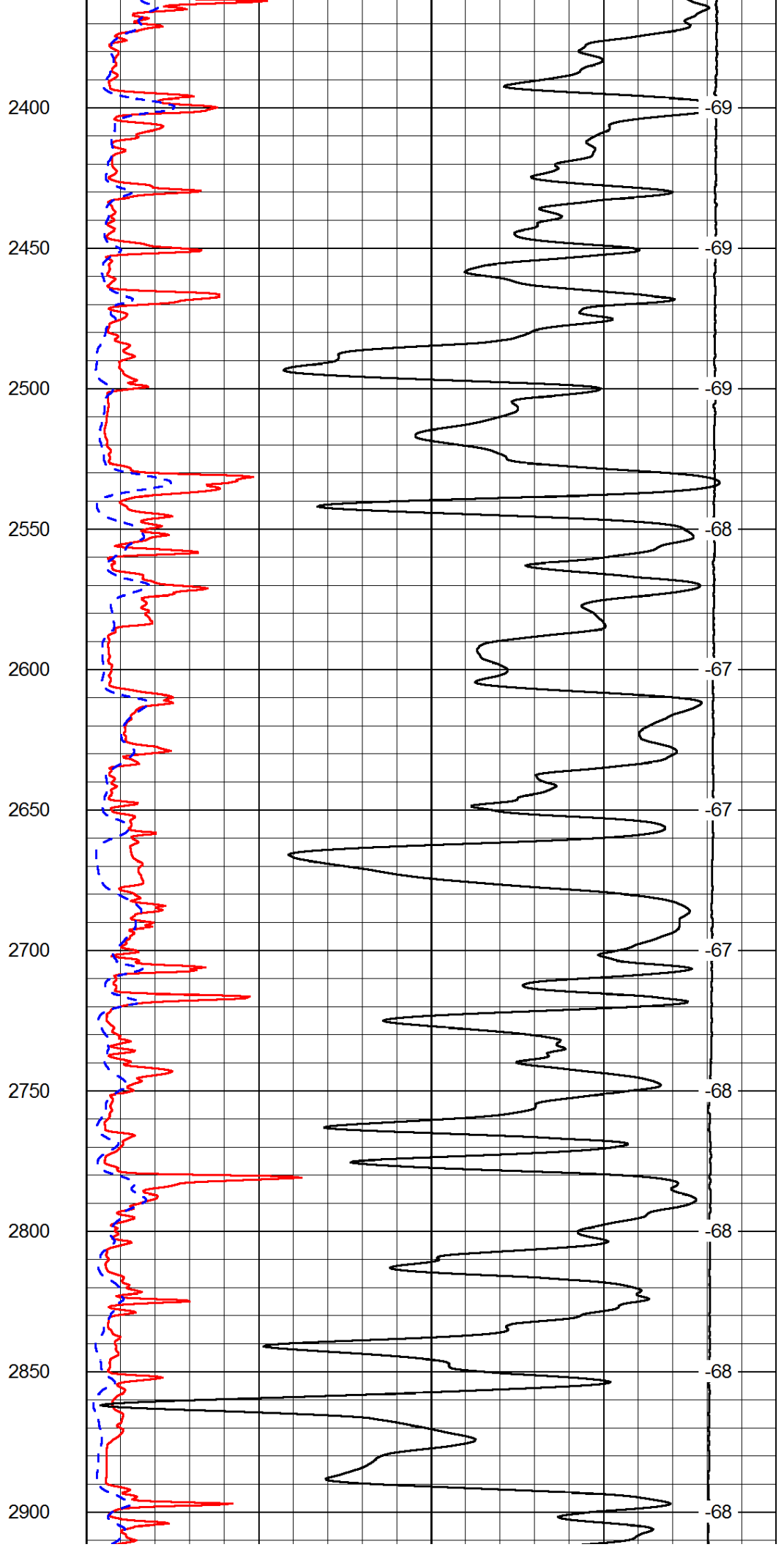
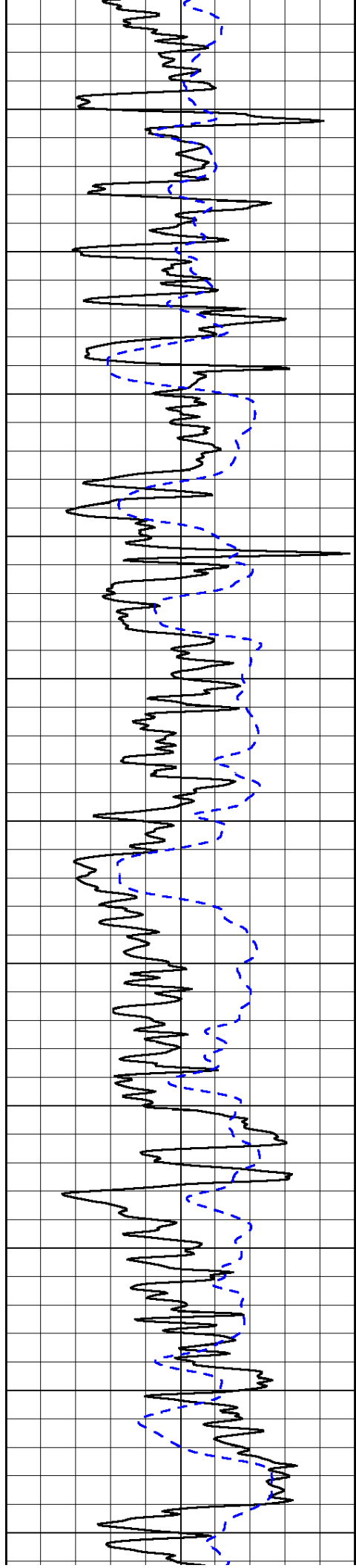
50	Shallow Resistivity	500
50	Deep Resistivity	500

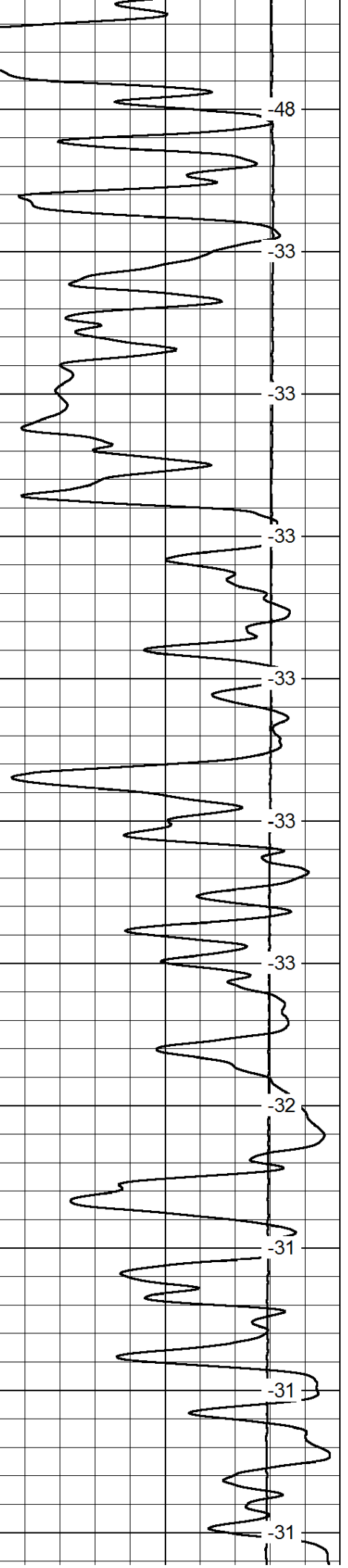
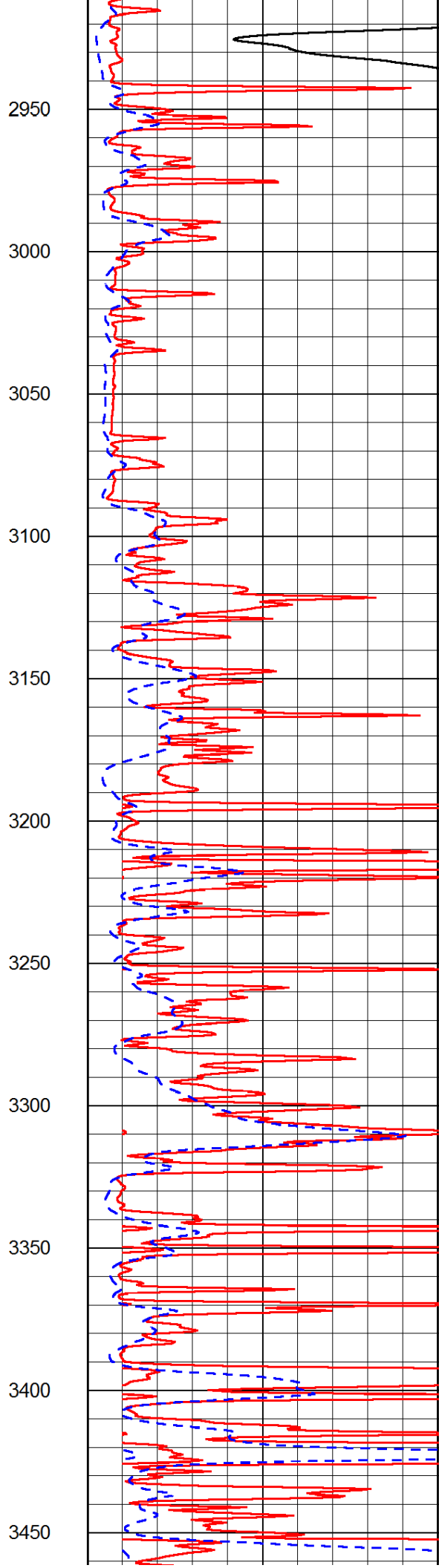
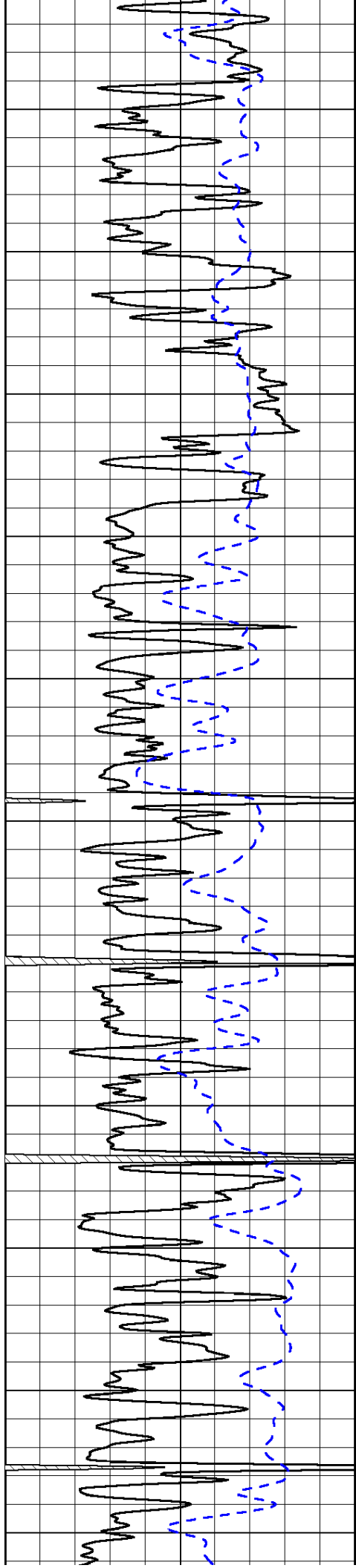


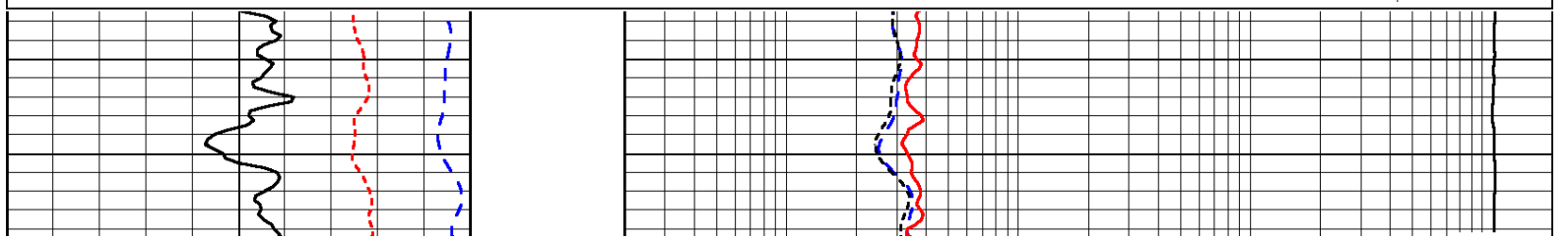
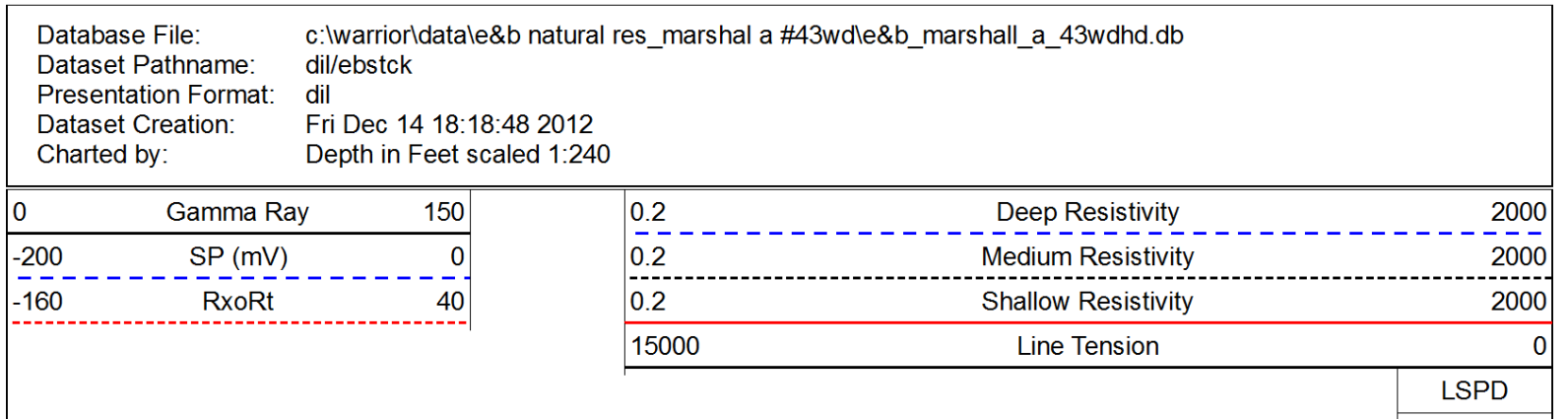
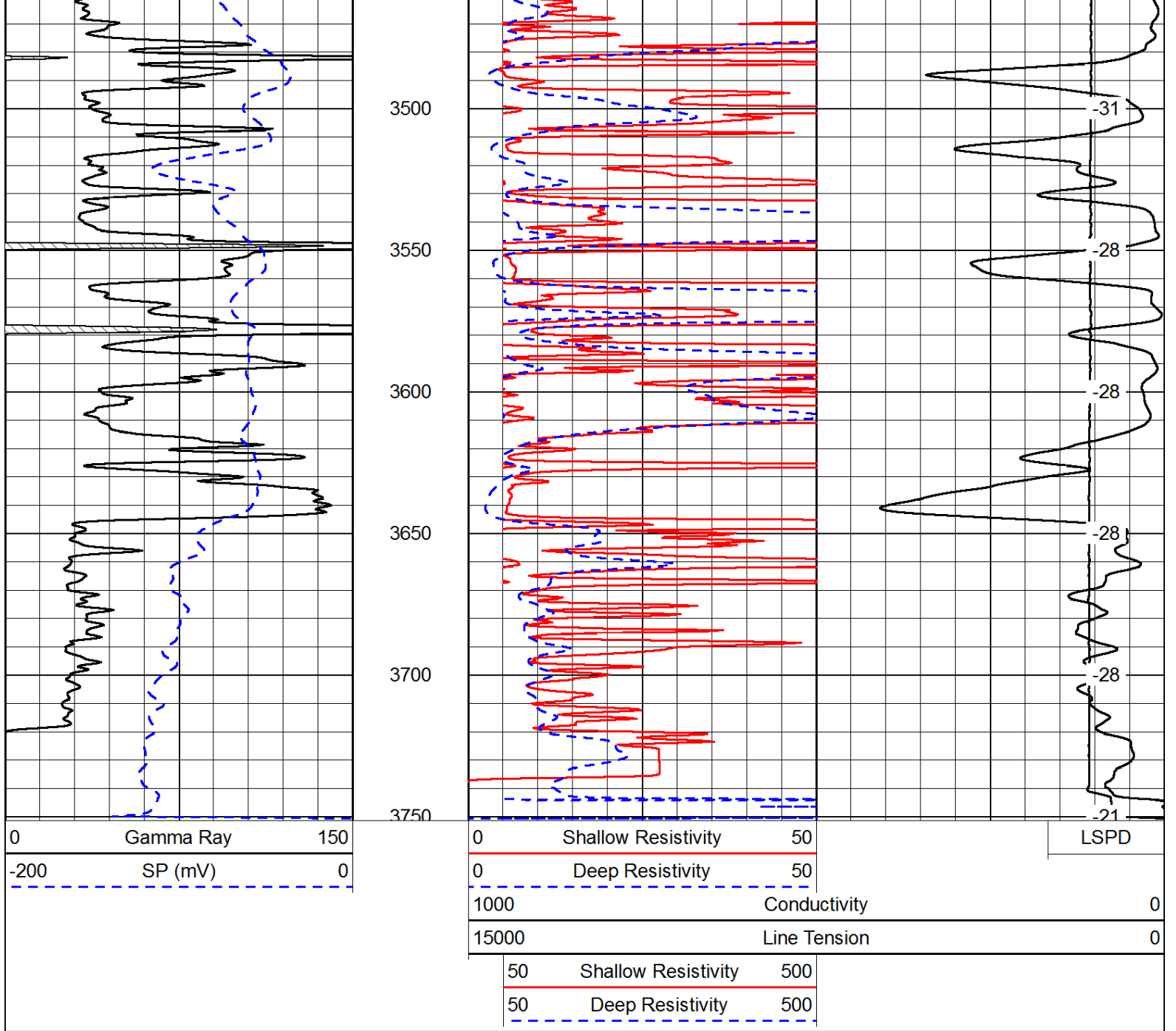


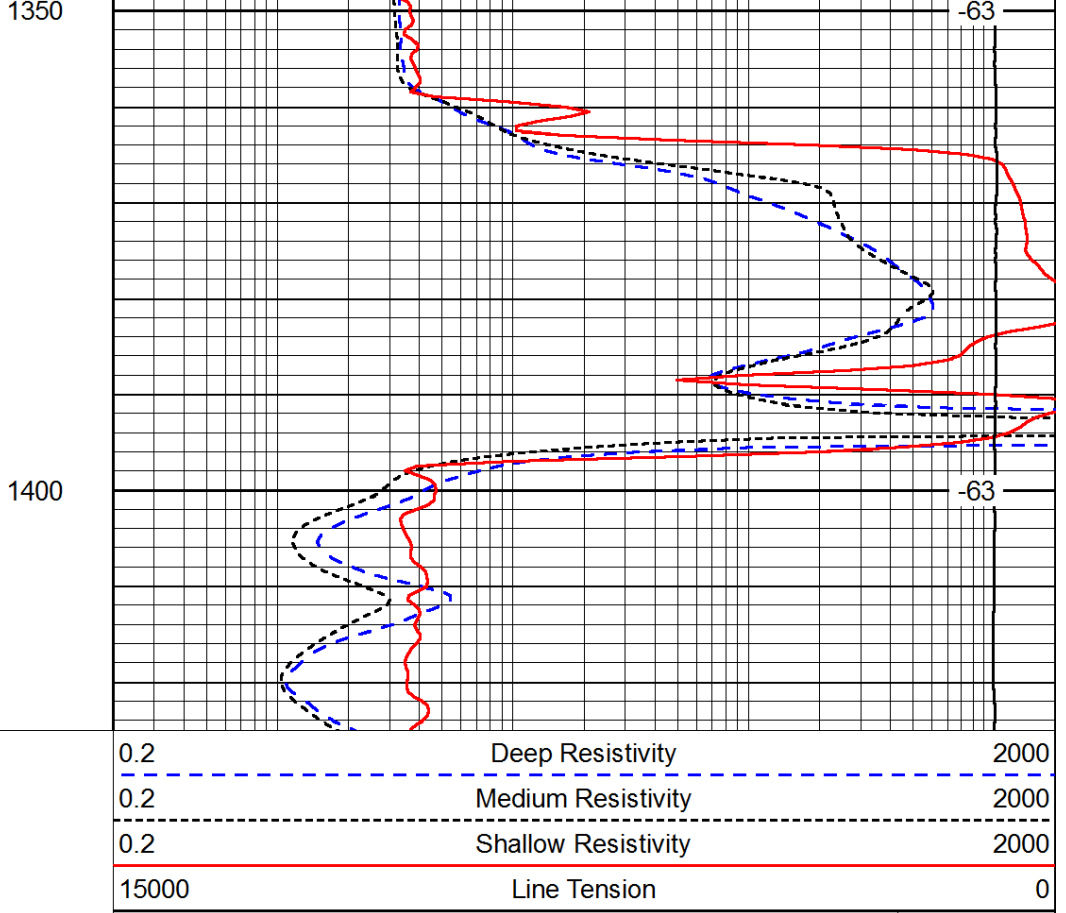
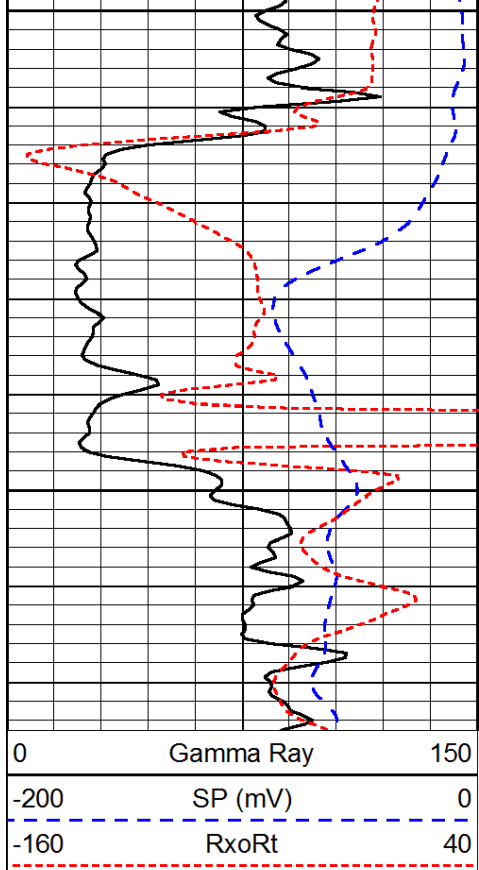






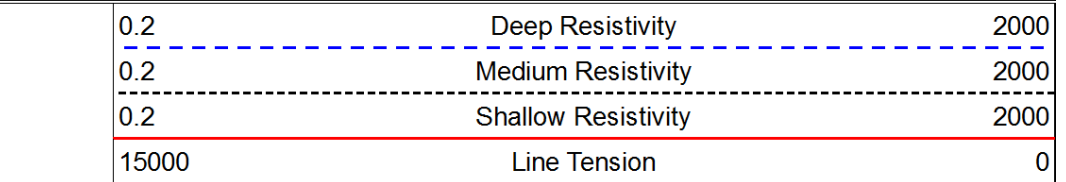
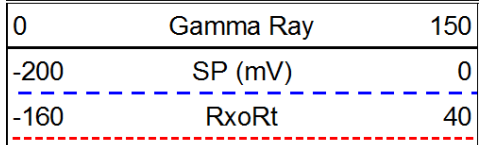




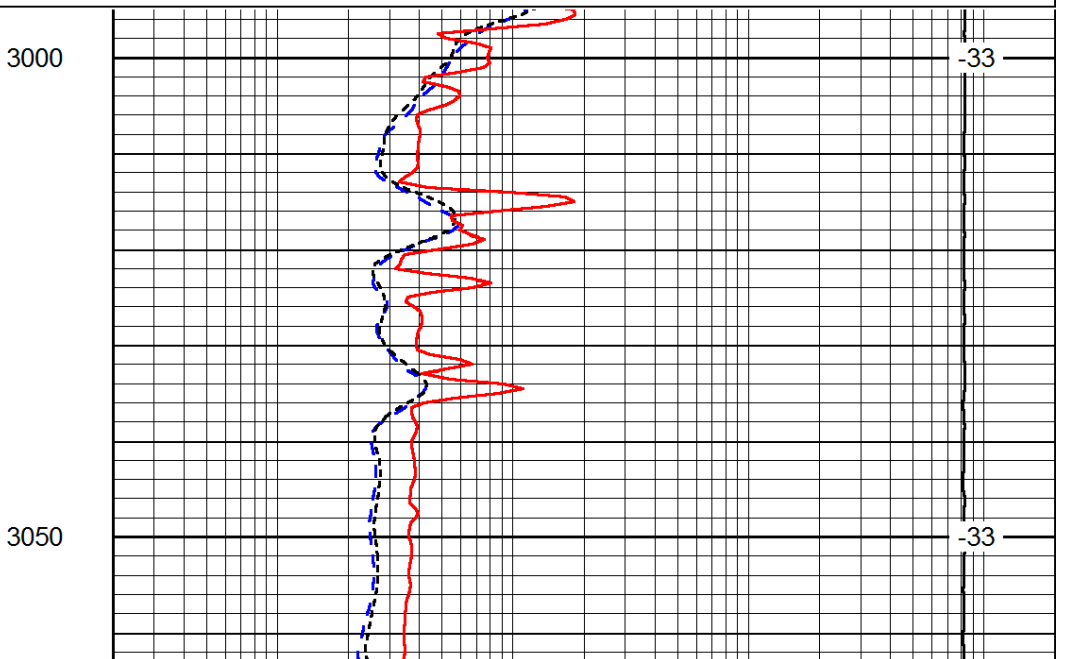
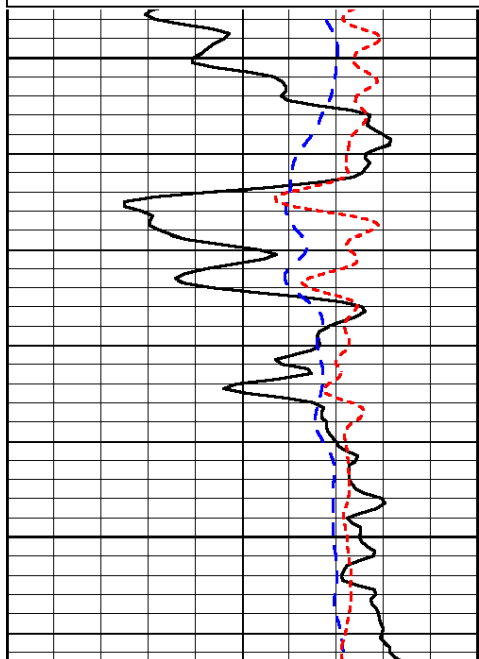


LSPD

Database File: c:\warrior\data\e&b natural res_marshall a #43wd\e&b_marshall_a_43wdhd.db
 Dataset Pathname: dil/ebstck
 Presentation Format: dil
 Dataset Creation: Fri Dec 14 18:18:48 2012
 Charted by: Depth in Feet scaled 1:240

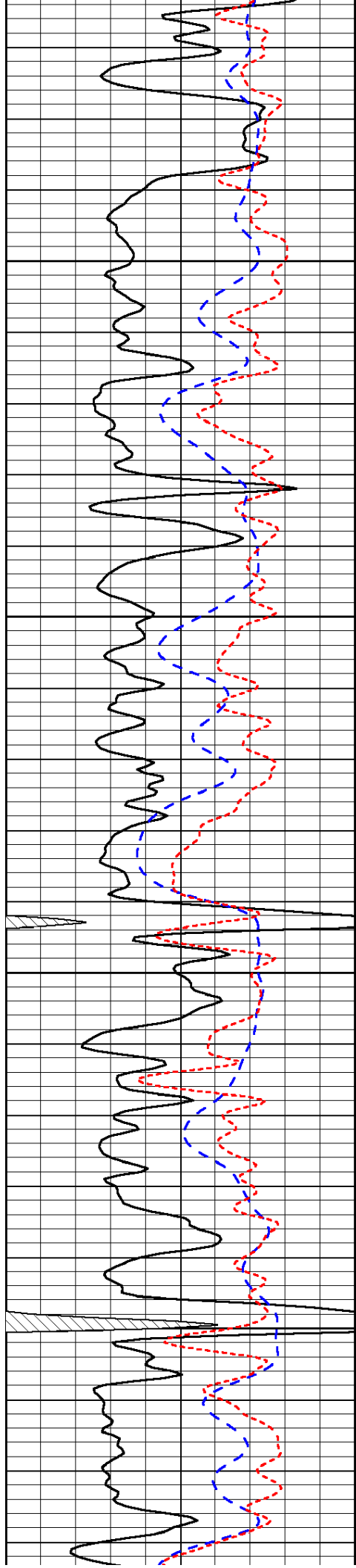


LSPD



-33

-33

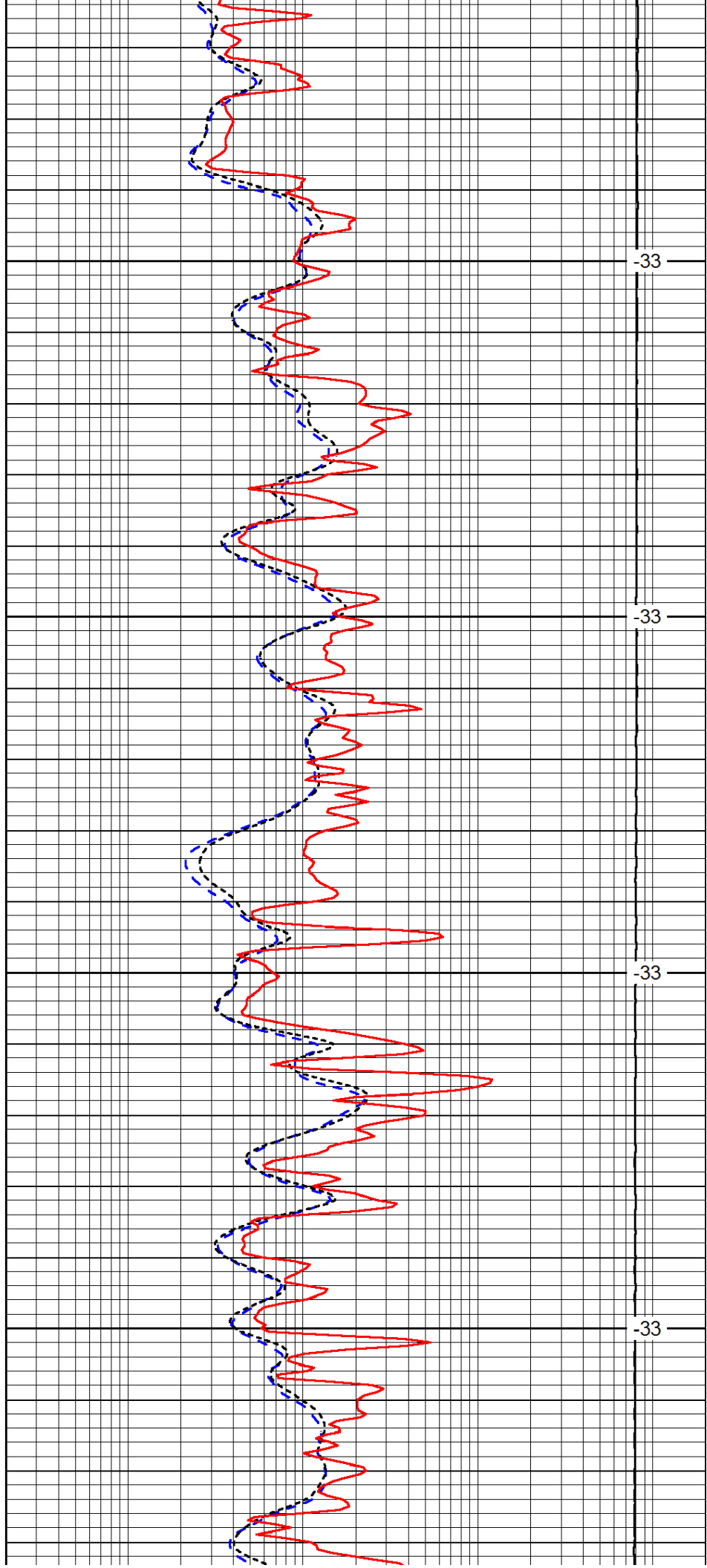


3100

3150

3200

3250

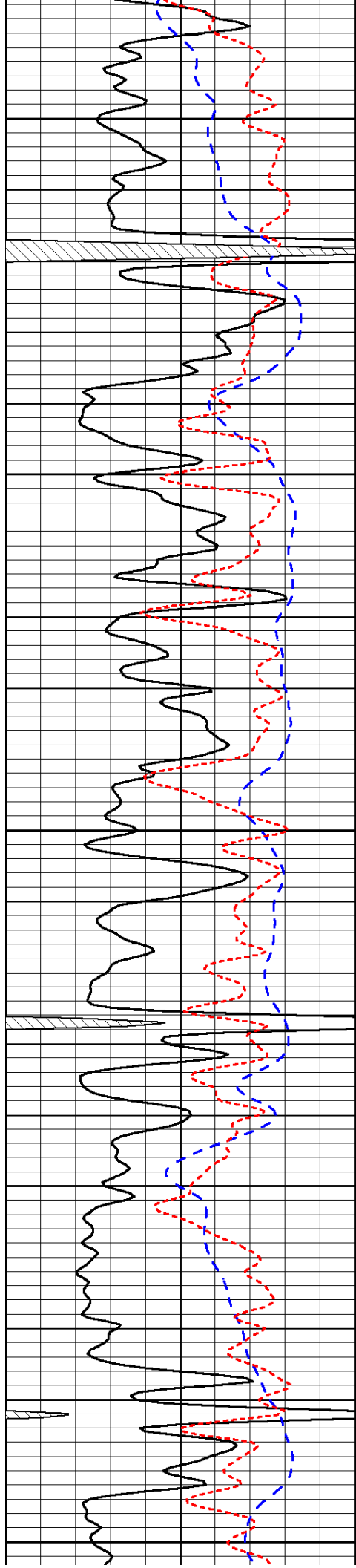


-33

-33

-33

-33



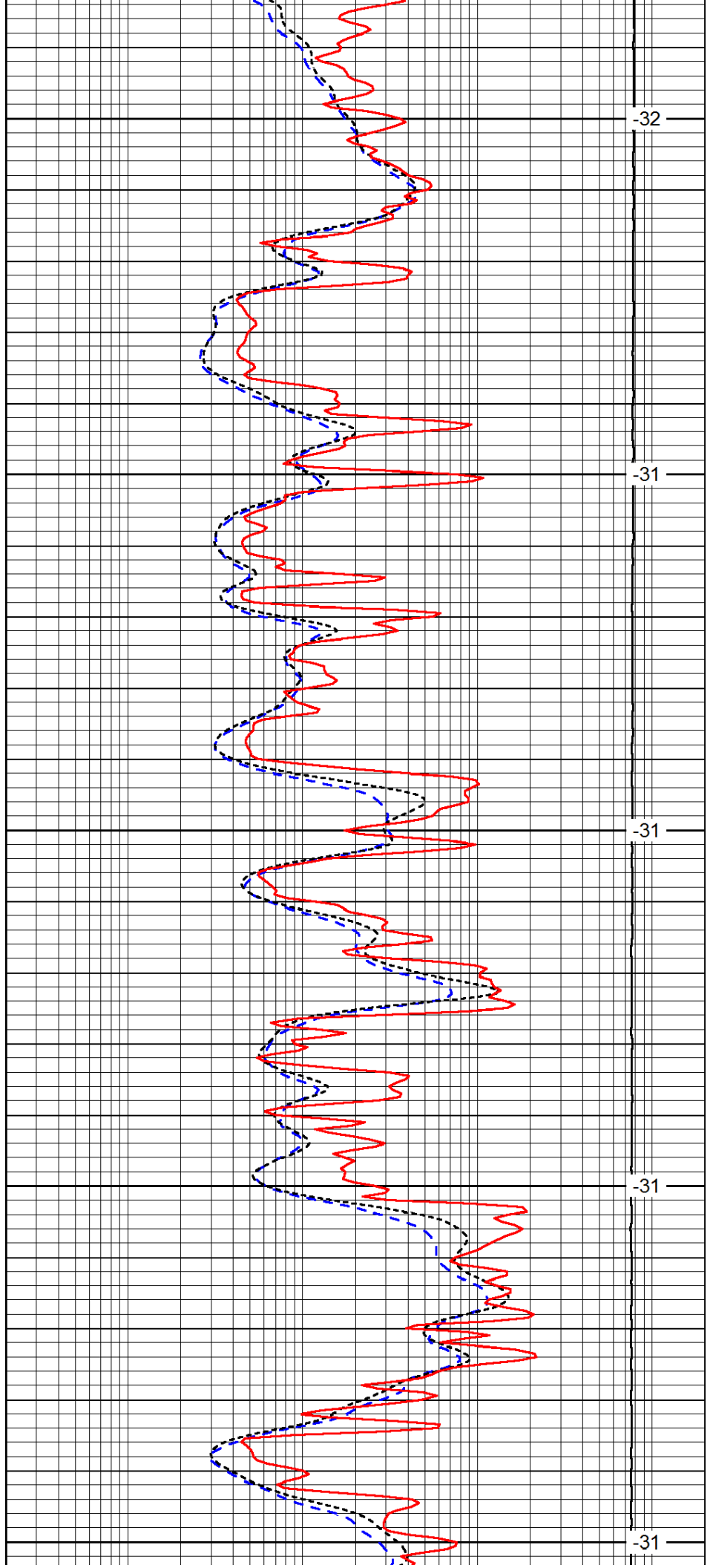
3300

3350

3400

3450

3500



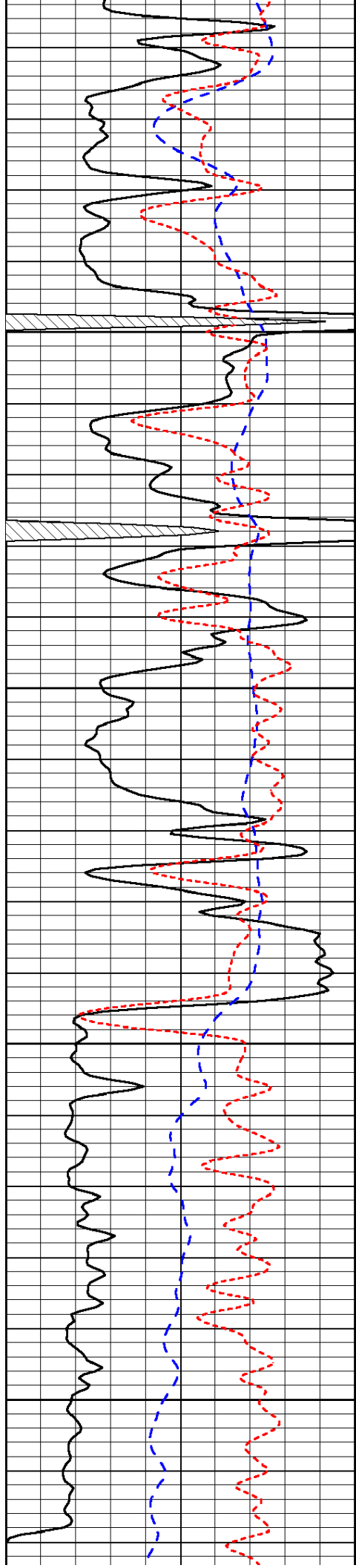
-32

-31

-31

-31

-31

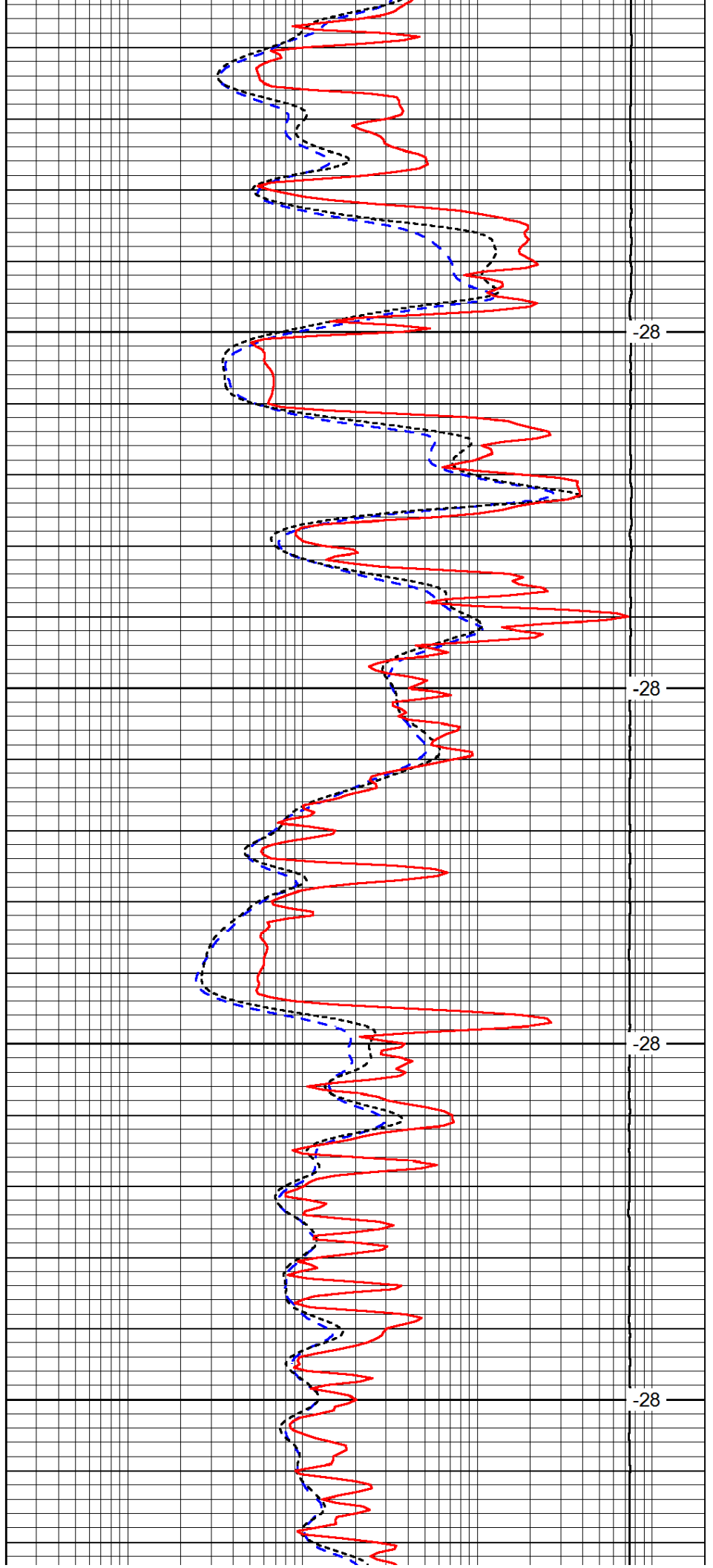


3550

3600

3650

3700

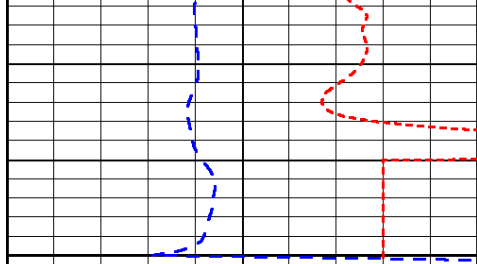


-28

-28

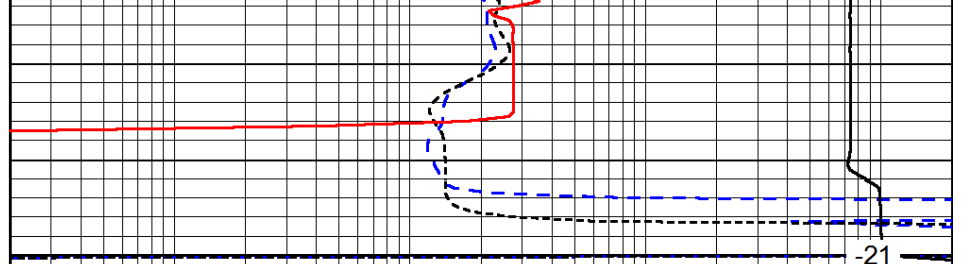
-28

-28



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

3750



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

LSPD