



Pioneer Energy Services

Dual Induction Log

15-051-26773-00-00

Company Pioneer Resources
Well Schmeidler-Amrein Unit #1
Field Crathorne East
County Ellis State **Kansas**
Location SE SE SW SW
 90' FSL & 1065' FWL
Sec: 21 **Twp:** 12S **Rge:** 19W

Other Services
 CNL/CDL
 MEL

Permanent Datum Ground Level Elevation 2159
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date	4/28/2015	Elevation	K.B. 2164 D.F. 2159 G.L. 2159
Run Number	One		
Depth Driller	3882		
Depth Logger	3881		
Bottom Logged Interval	3880		
Top Log Interval	200		
Casing Driller	8.625 @ 217		
Casing Logger	220		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	5000		
Density / Viscosity	9.5	65	
pH / Fluid Loss	10.5	7.6	
Source of Sample	Flowline		
Rm @ Meas. Temp	0.70 @ 60		
Rmf @ Meas. Temp	0.53 @ 60		
Rmc @ Meas. Temp	0.95 @ 60		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.37 @ 115		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	115		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Janel Staab		

<<< 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

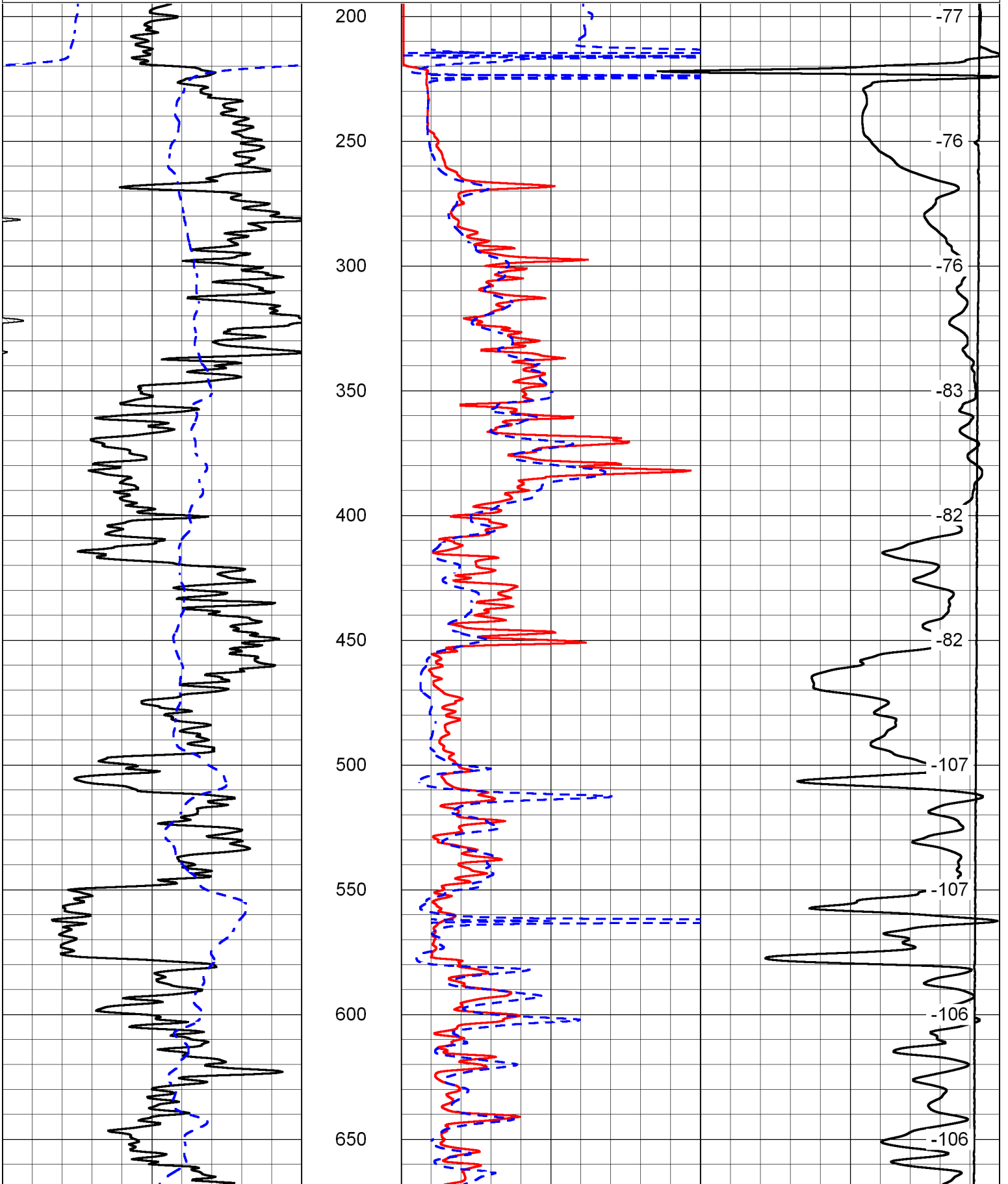
Thank you for using Pioneer Energy Services
www.pioneerres.com
 785 625 3858
 Hays,
 West on I-70 to Yocemento Rd,
 4 1/2 North to Locust Grove, 3/4 West,
 North into

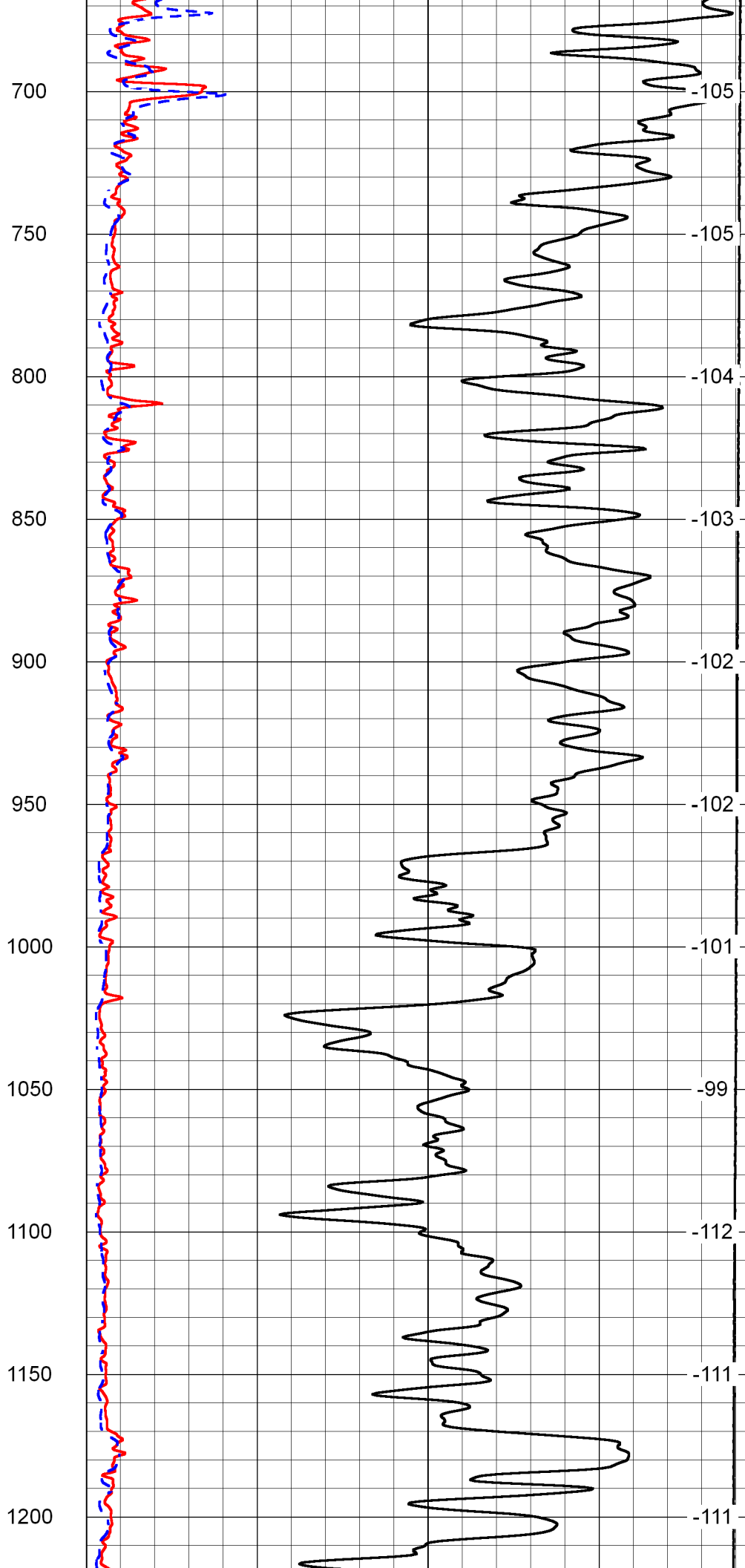
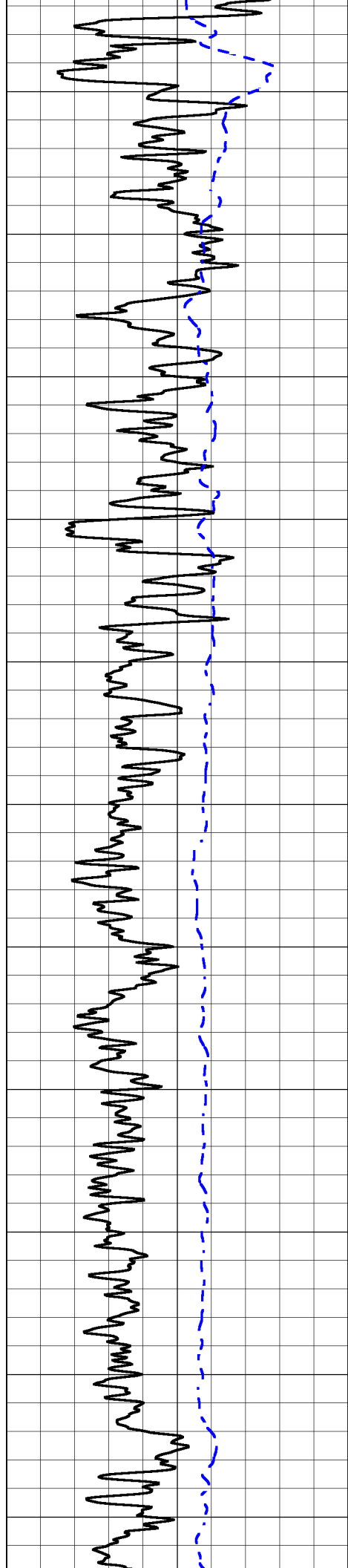
Database File	pioneer res_schmeidler-amrein unit #1\pioneer resources_amrein unit 1hd.db
Dataset Pathname	dil/prstkml
Presentation Format	dil2in
Dataset Creation	Tue Apr 28 22:18:32 2015
Charted by	Depth in Feet scaled 1:600

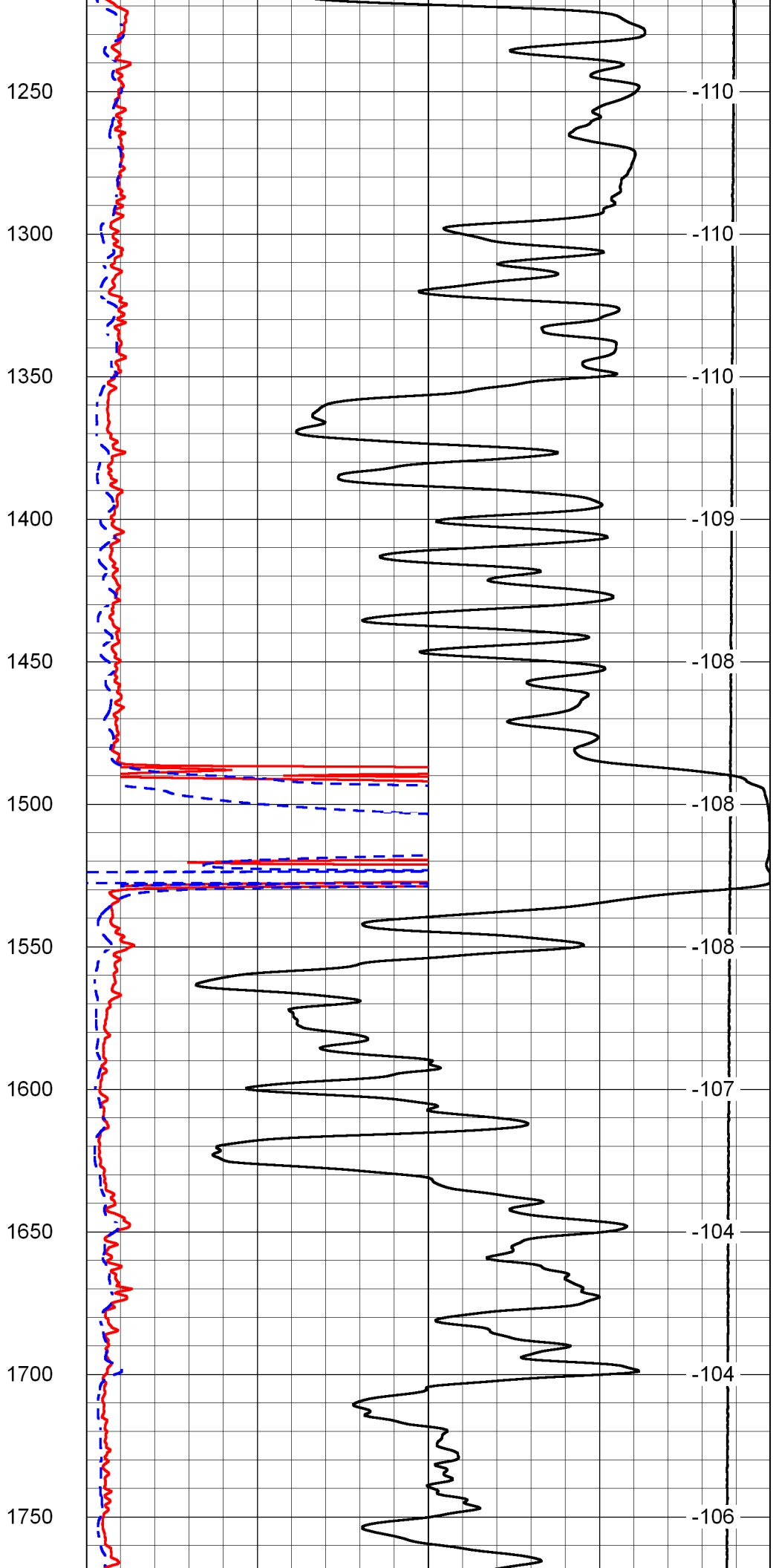
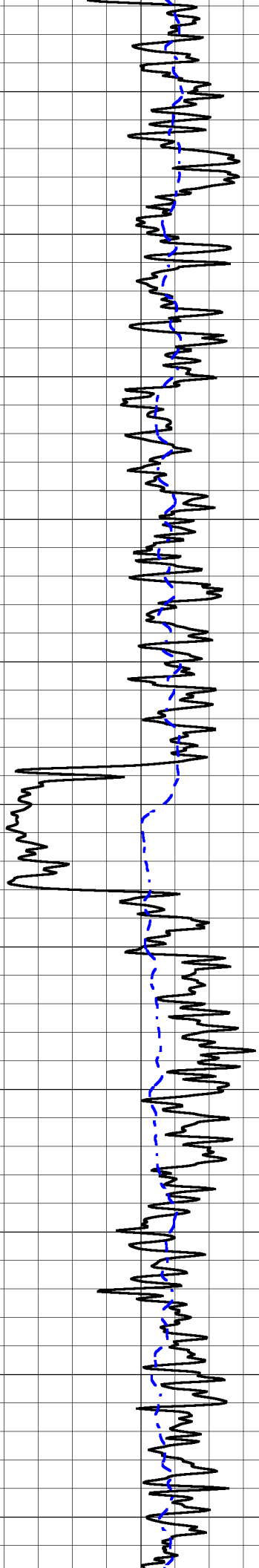
0	Gamma Ray	150
-200	SP (mV)	0

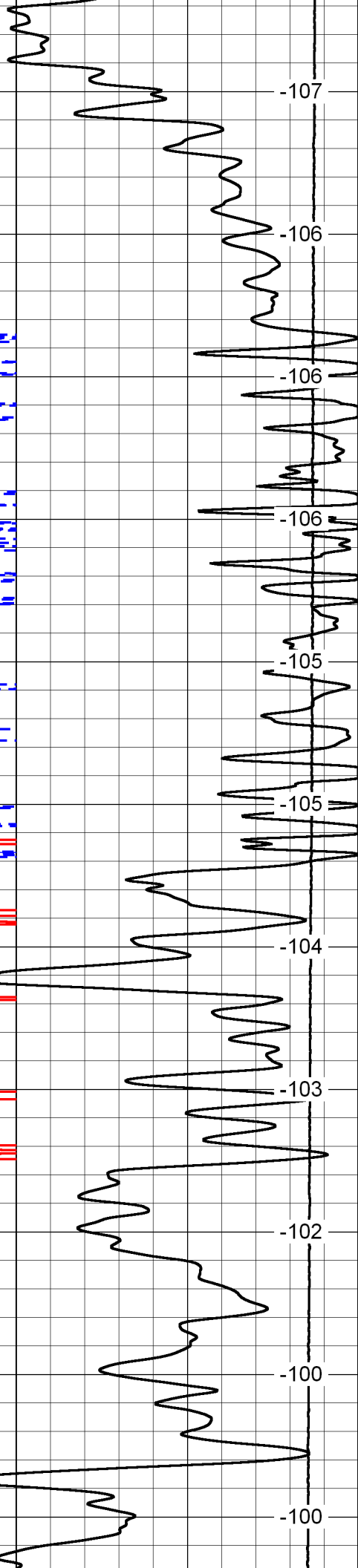
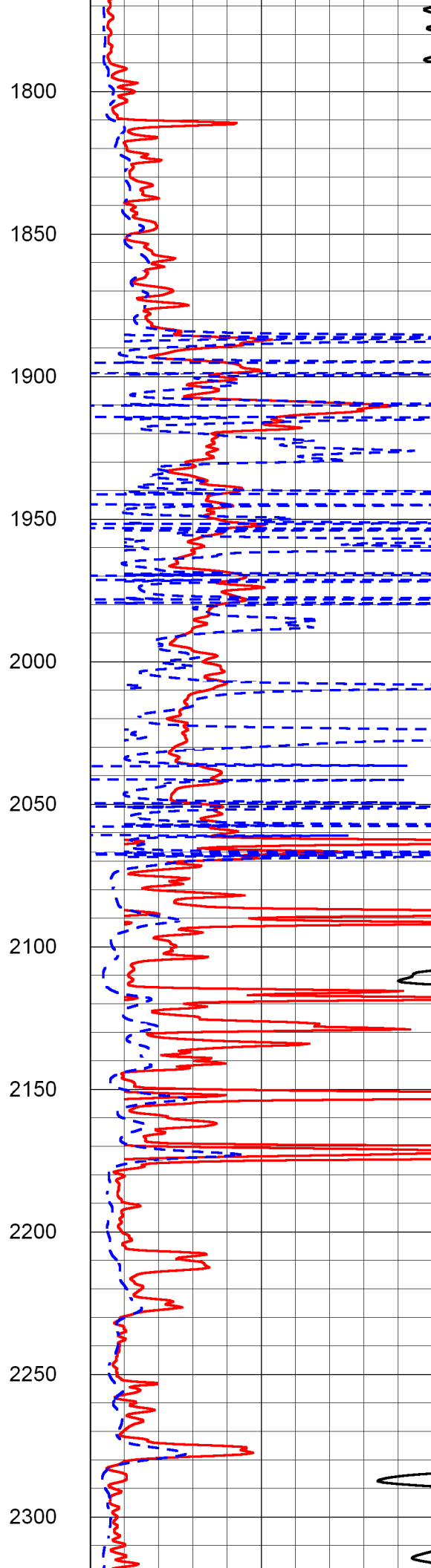
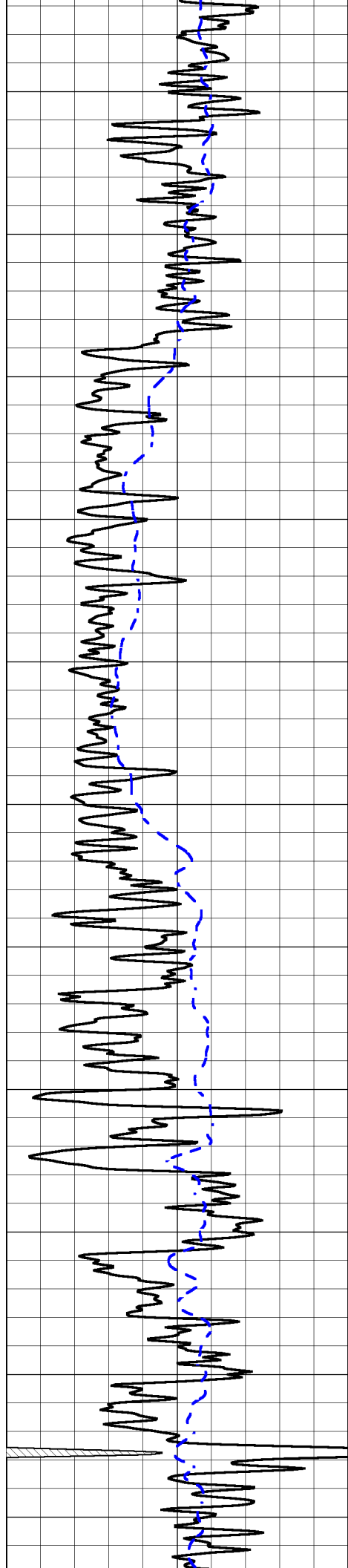
1000	Conductivity	0
15000	Line Tension	0
0	Shallow Resistivity	50
0	Deep Resistivity	50
50	Shallow Resistivity	500
50	Deep Resistivity	500

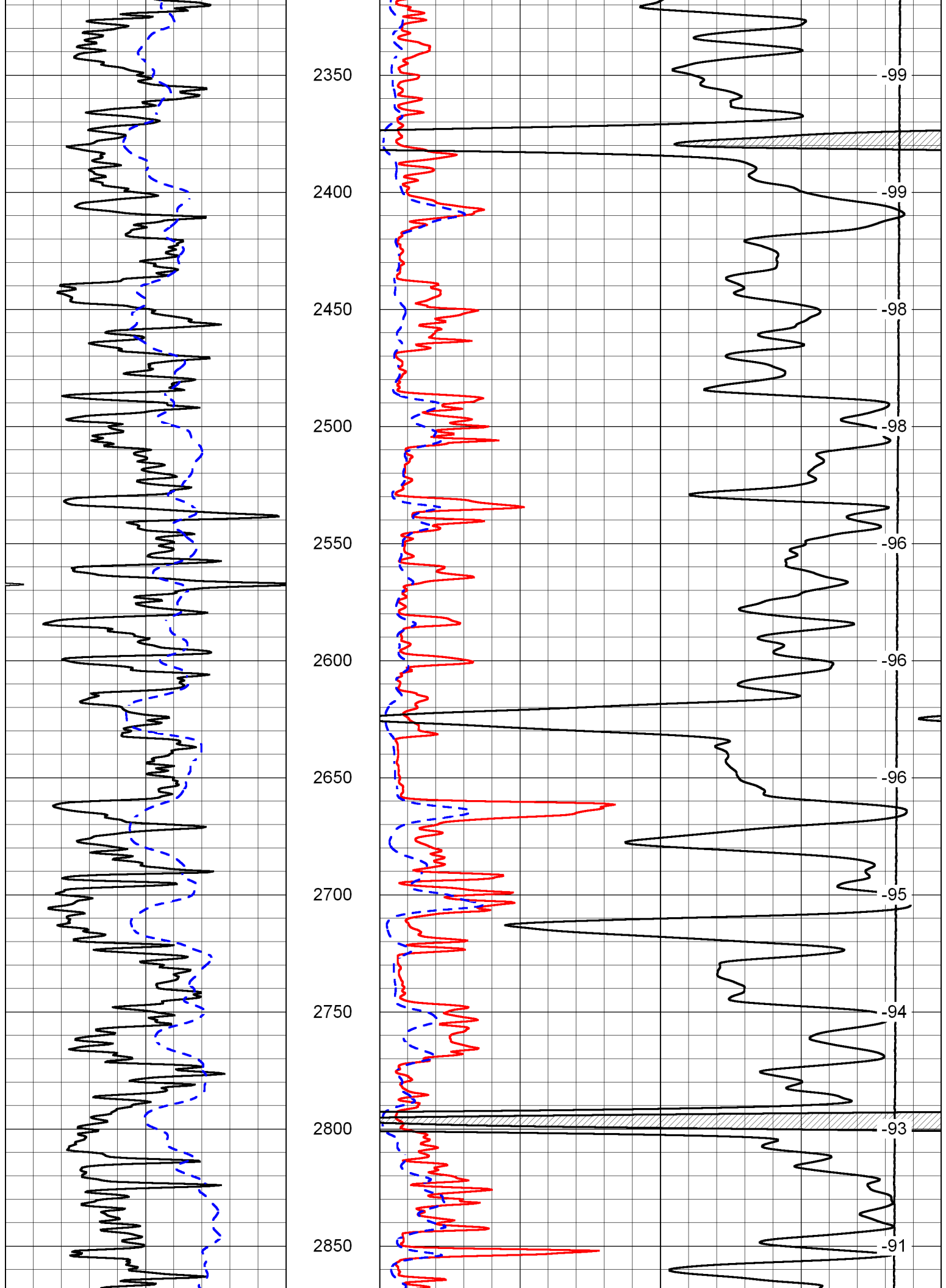
LSPD

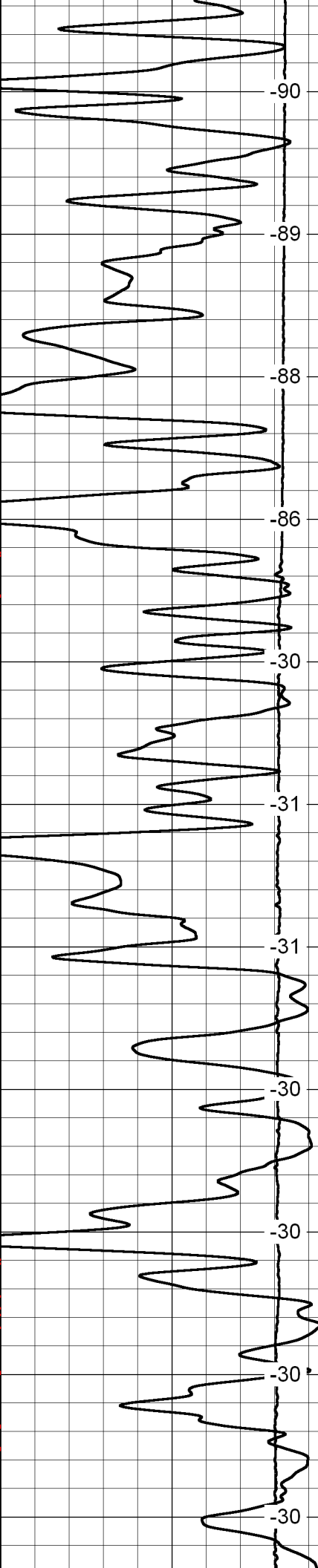
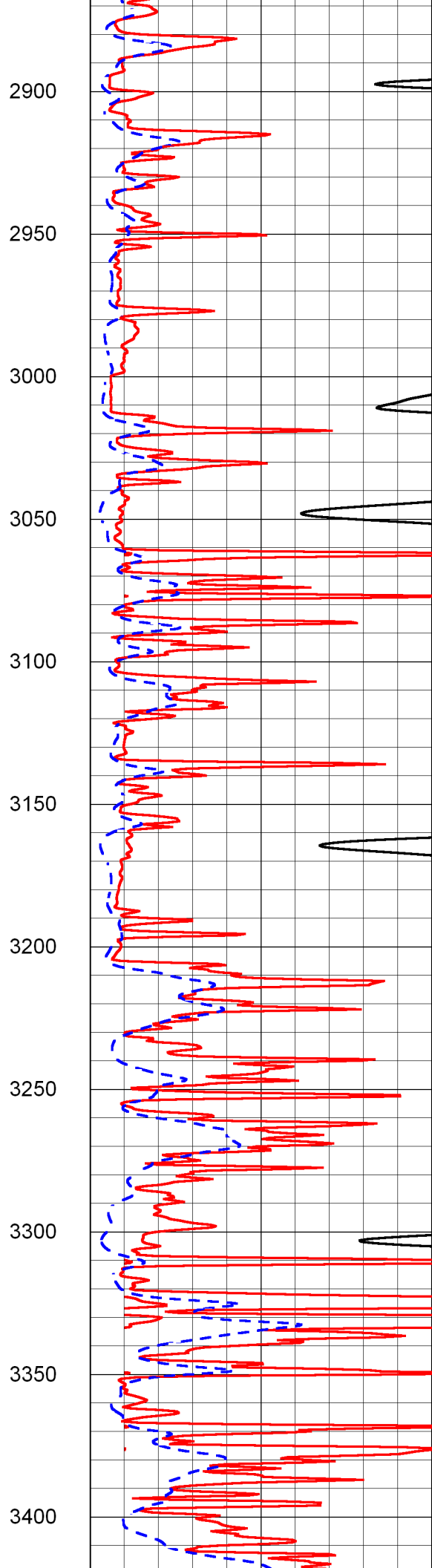
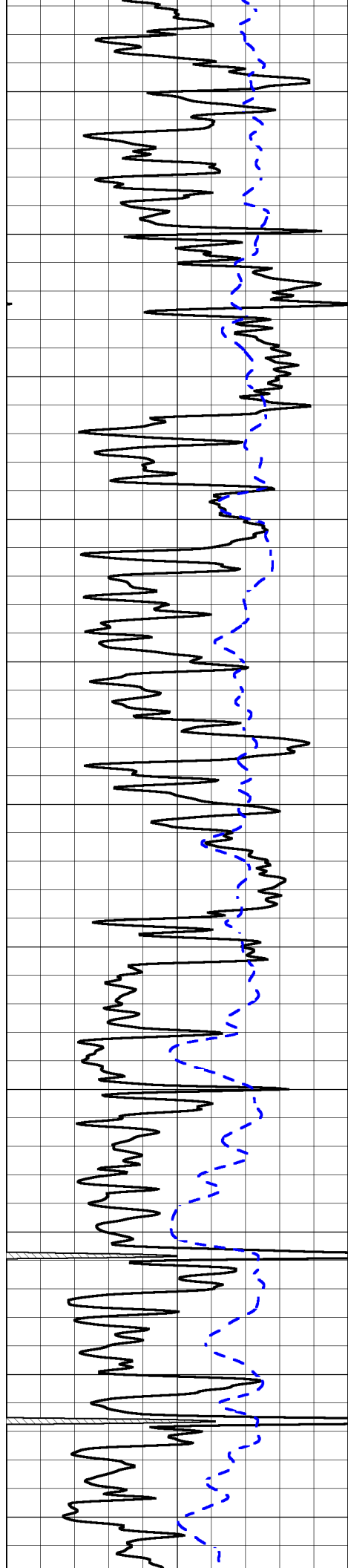


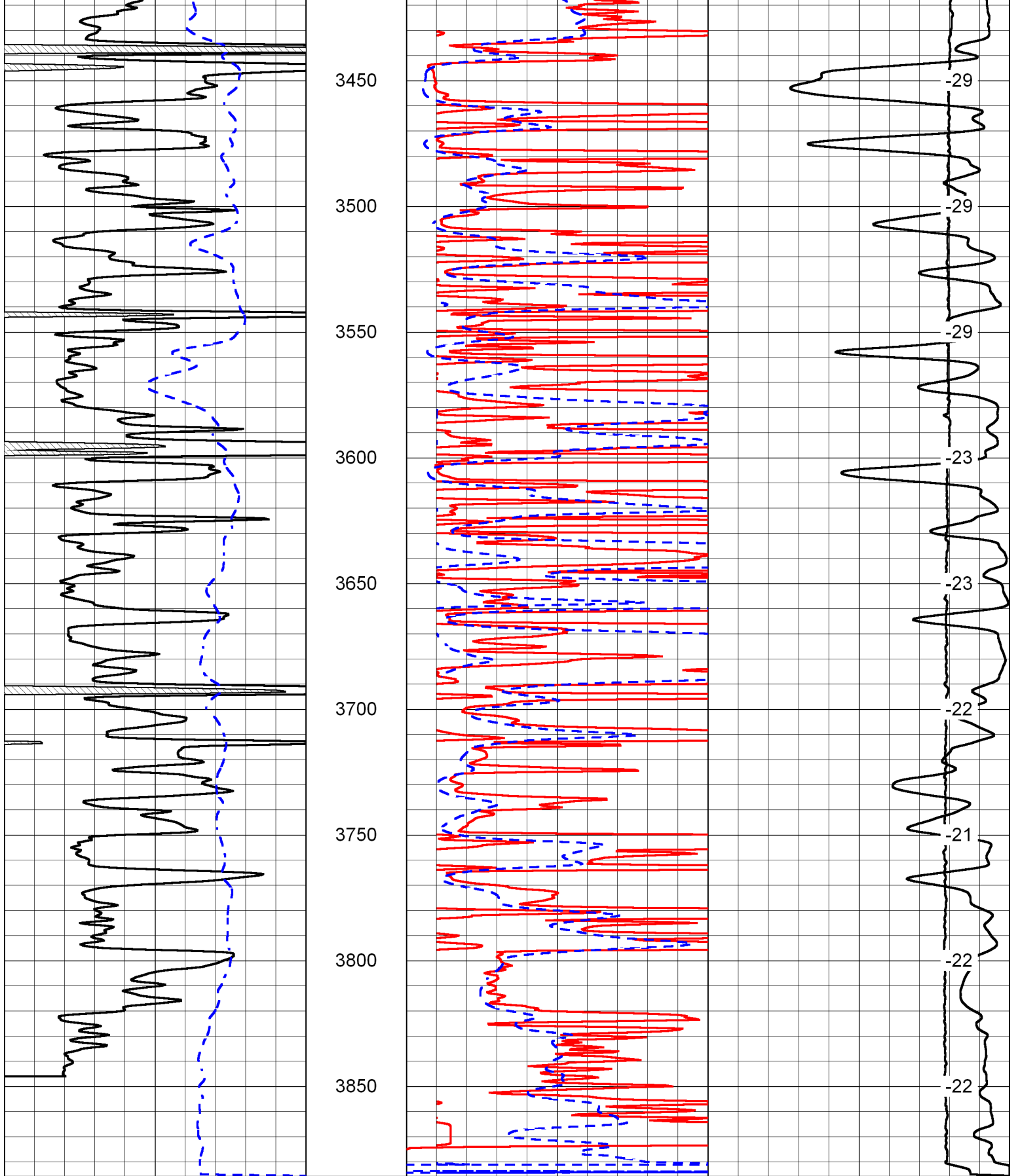












0 Gamma Ray 150
 -200 SP (mV) 0

1000 Conductivity 0
 15000 Line Tension 0

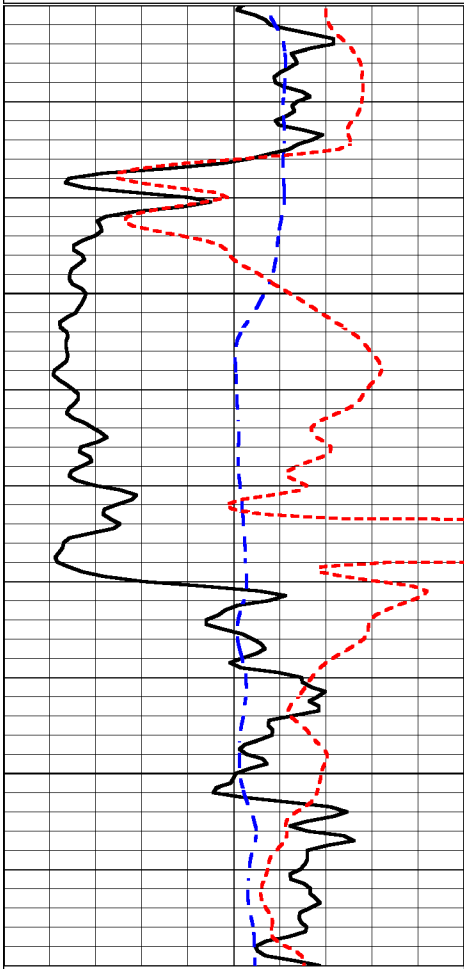
0	Shallow Resistivity	50	LSPD
0	Deep Resistivity	50	
50	Shallow Resistivity	500	
50	Deep Resistivity	500	

Database File pioneer res_schmeidler-amrein unit #1|pioneer resources_amrein unit 1hd.db
 Dataset Pathname dil/prstkml
 Presentation Format dil
 Dataset Creation Tue Apr 28 22:18:32 2015
 Charted by Depth in Feet scaled 1:240

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

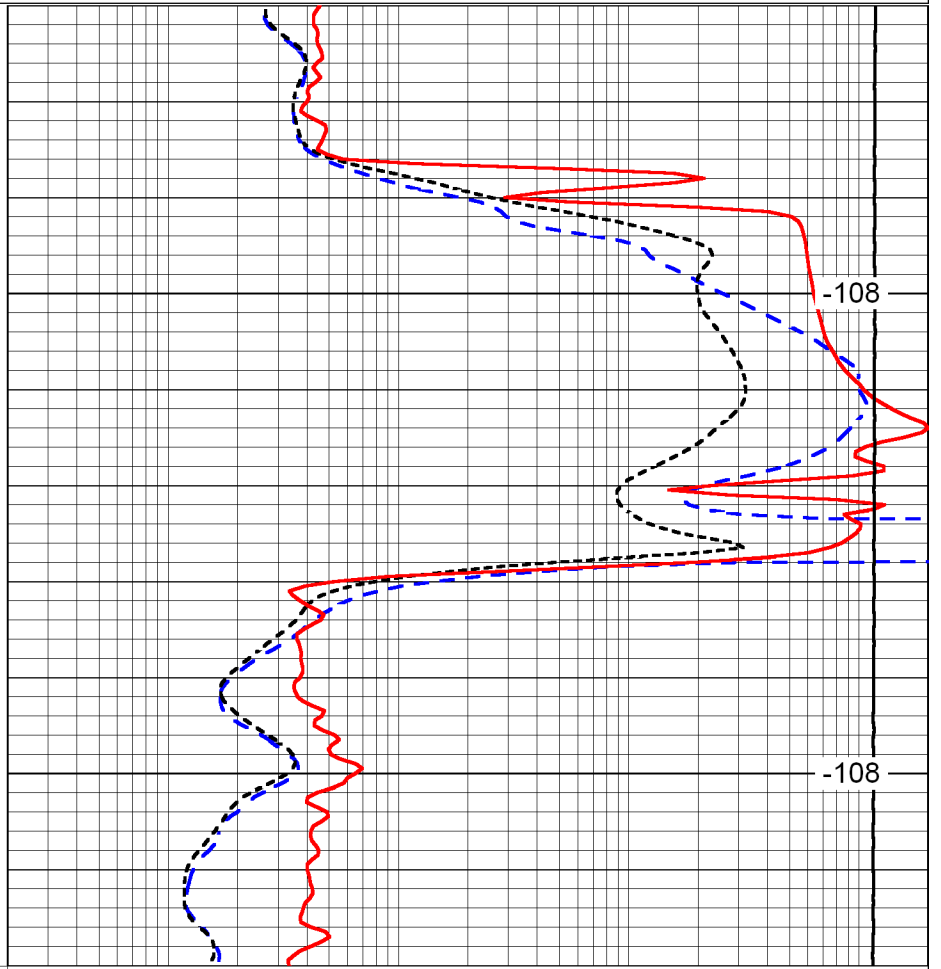
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



1500

1550



-108

-108

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

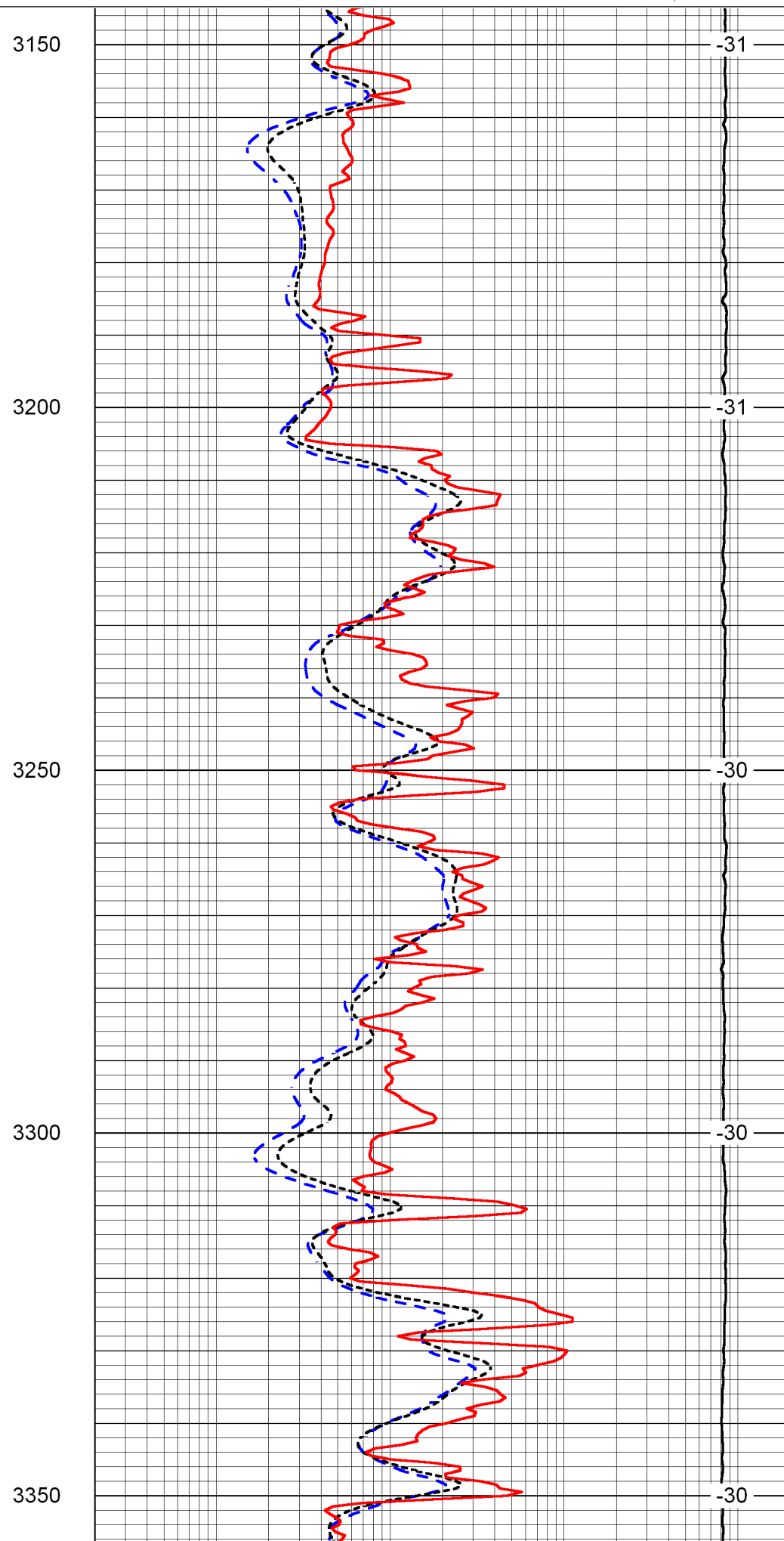
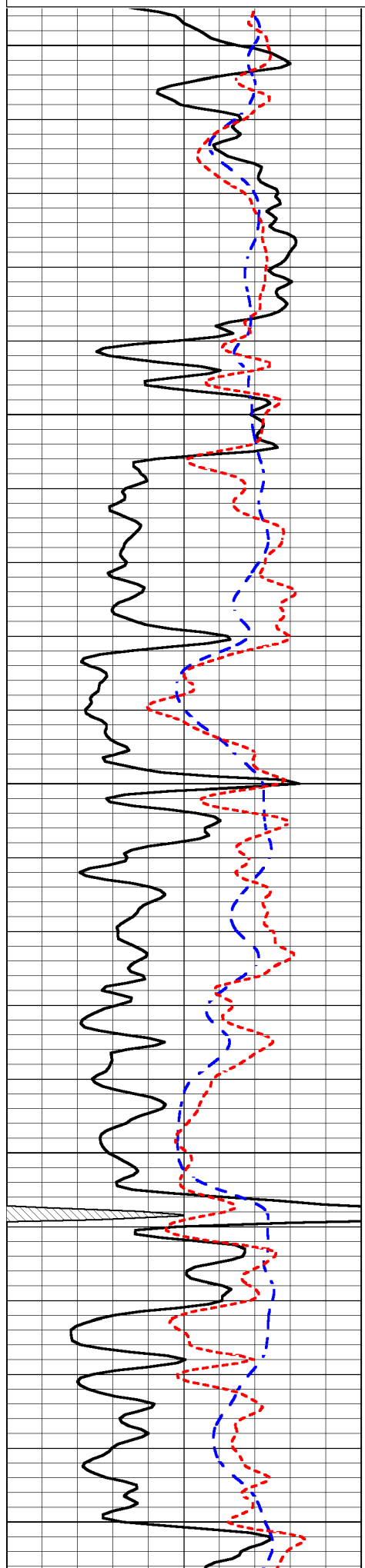
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

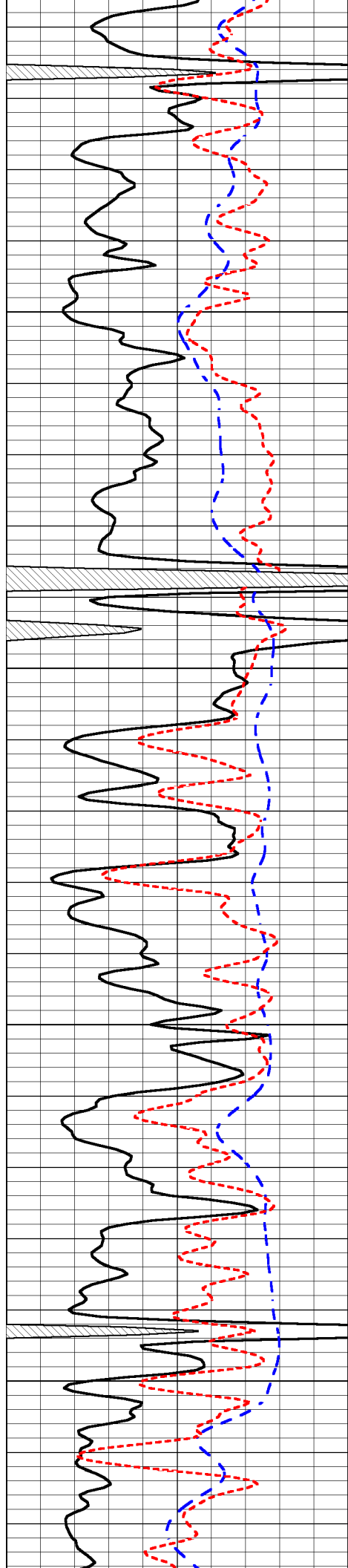
LSPD

Database File pioneer res_schmeidler-amrein unit #1|pioneer resources_amrein unit 1hd.db
 Dataset Pathname dil/prstkml
 Presentation Format dil
 Dataset Creation Tue Apr 28 22:18:32 2015
 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



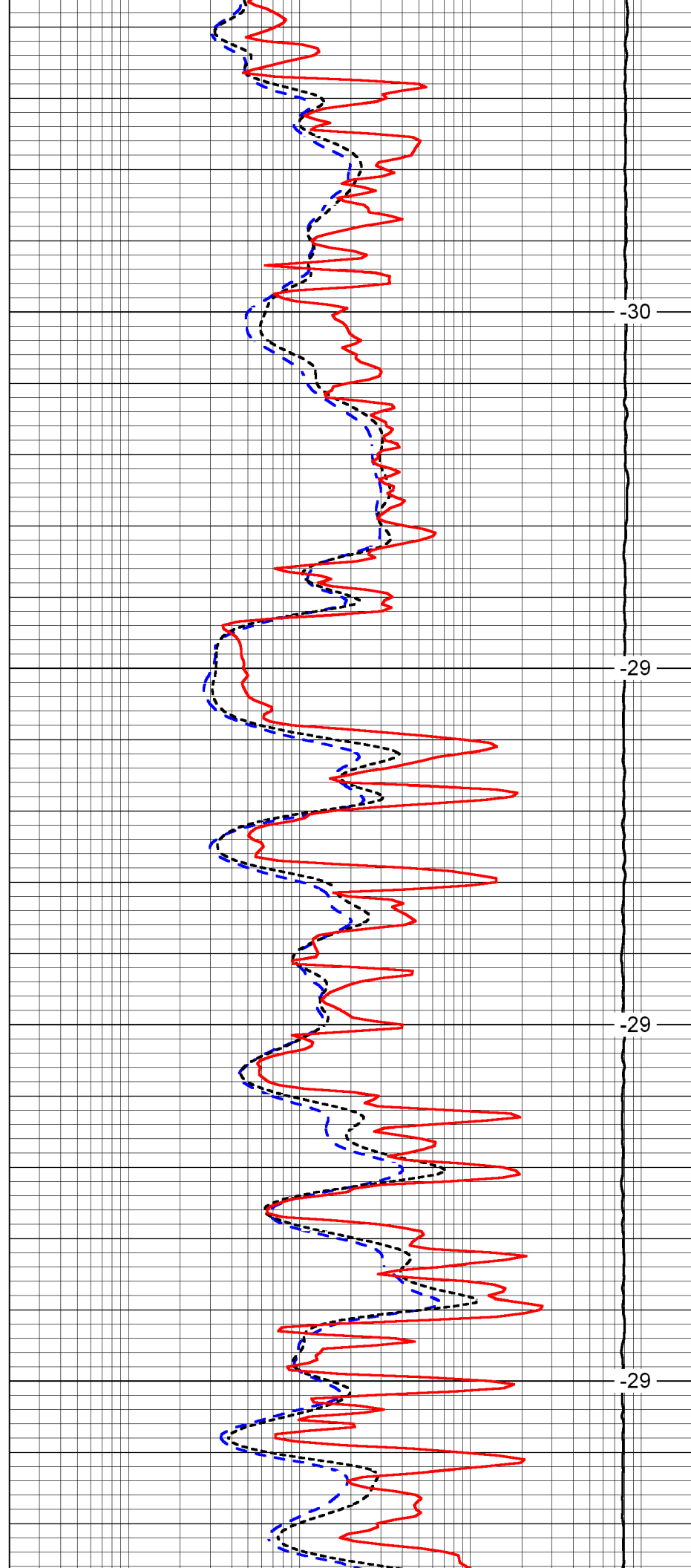


3400

3450

3500

3550

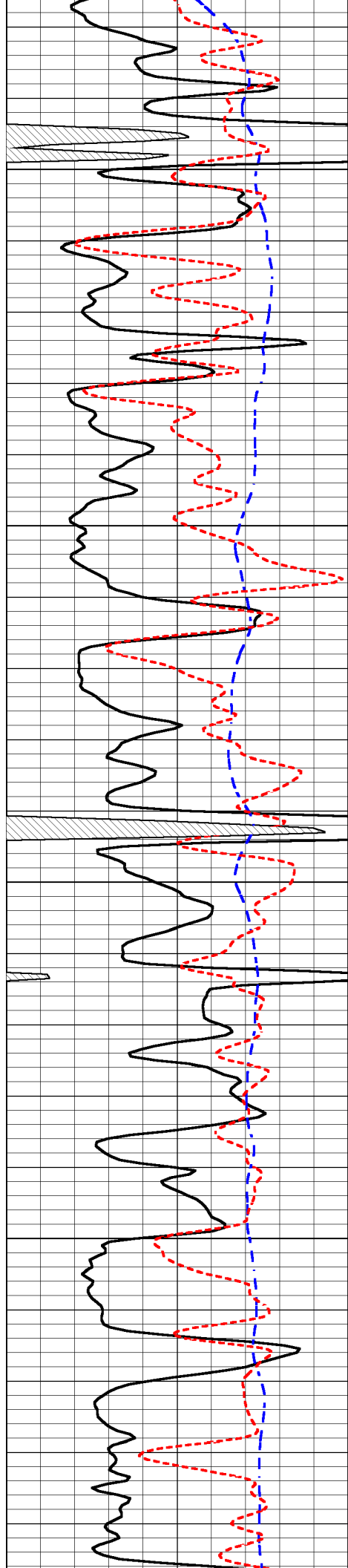


-30

-29

-29

-29

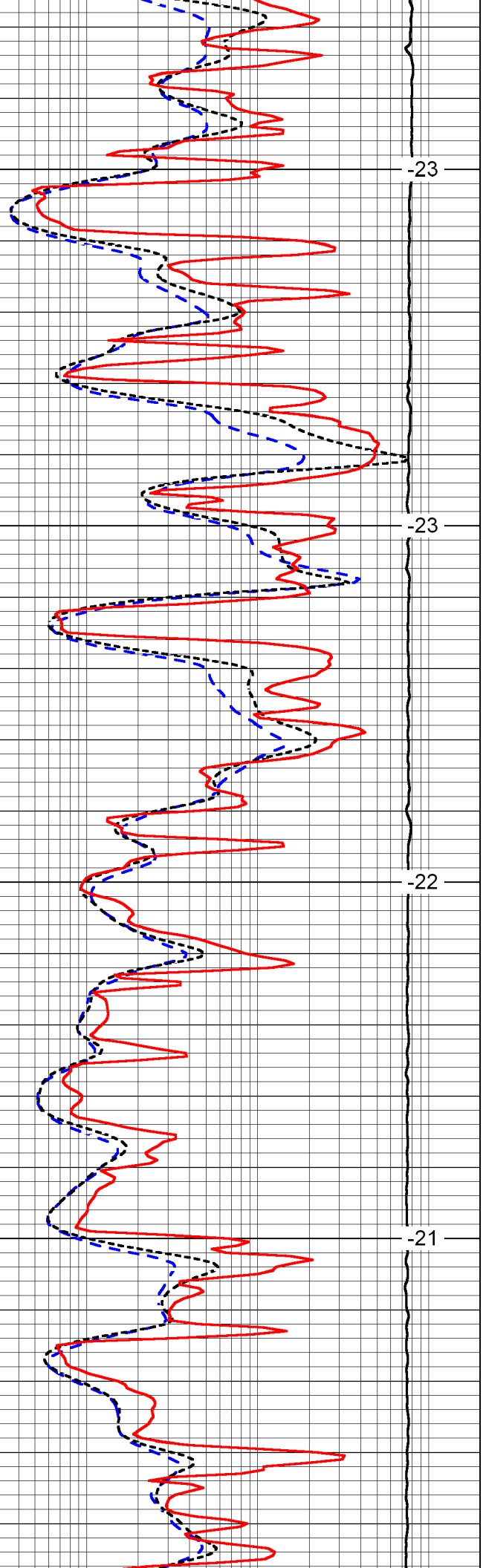


3600

3650

3700

3750

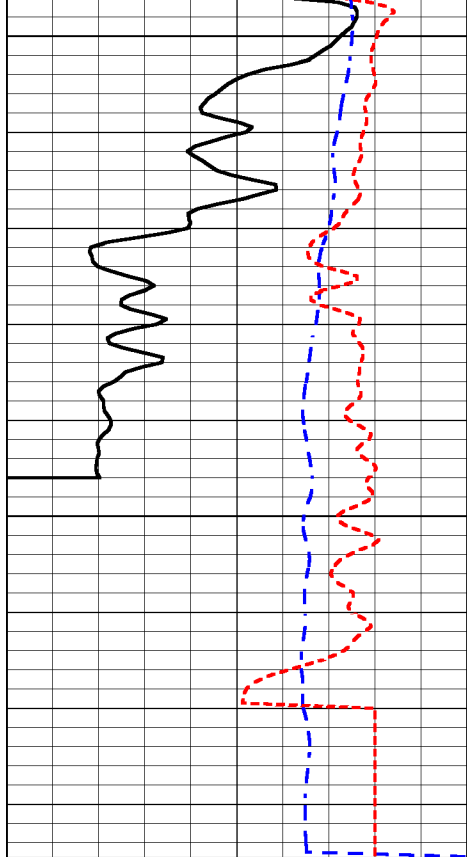


-23

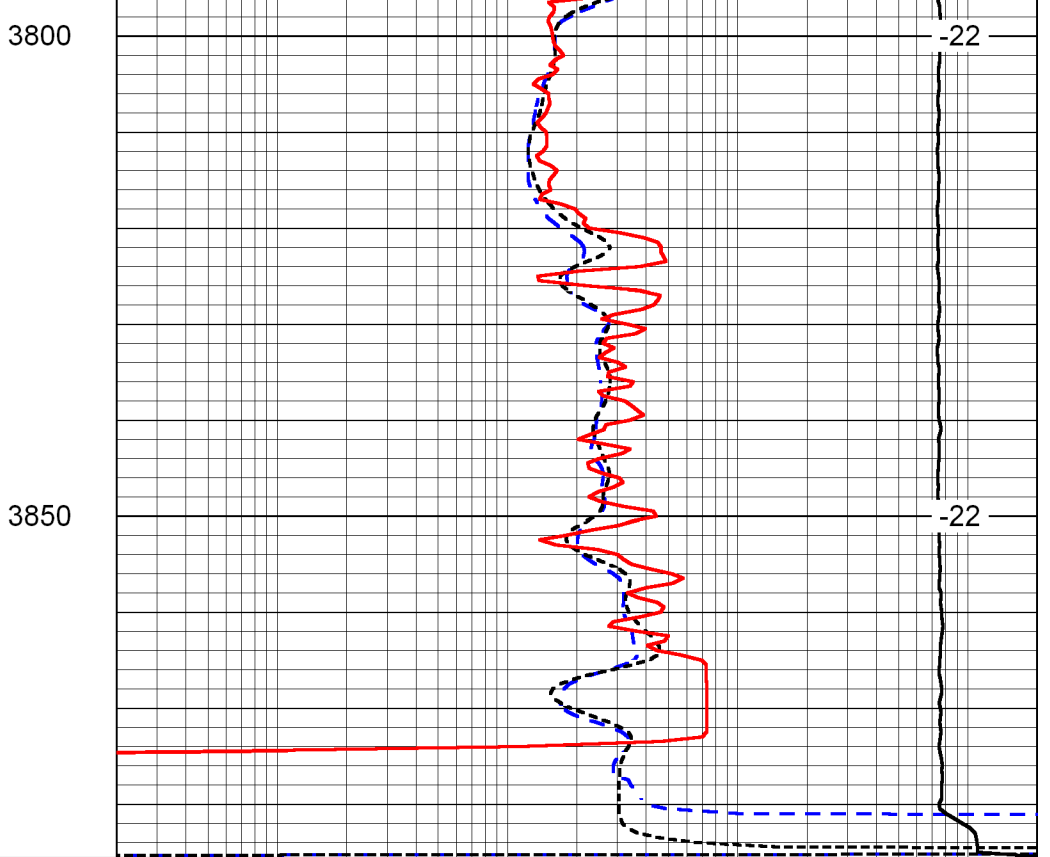
-23

-22

-21



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