



PIONEER

Pioneer Energy Services

Dual Induction Log

API No.	15-017-20921-00-00			
Company	Range Oil Company, Inc.			
Well	Madden 'A' Unit #2			
Field	Panther Ranch SW			
County	Chase	State	Kansas	
Location	250' FNL & 2260' FWL		Other Services CNL/CDL MEL	
Sec: 31	Twp: 19S	Rge: 6E	Elevation	
Permanent Datum	Ground Level	Elevation 1453	K.B. 1459	
Log Measured From	Kelly Bushing	6 Ft. Above Perm. Datum	D.F. 1453	
Drilling Measured From	Frorkely Bushing		G.L. 1453	
Date	4/17/2015			
Run Number	One			
Depth Driller	2280			
Depth Logger	2278			
Bottom Logged Interval	2277			
Top Log Interval	200			
Casing Driller	8.625 @ 209			
Casing Logger	209			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity, ppm CL	1250			
Density / Viscosity	9.3	48		
pH / Fluid Loss	9.0	10.2		
Source of Sample	Flowline			
Rm @ Meas. Temp	1.20 @ 55			
Rmf @ Meas. Temp	0.90 @ 55			
Rmc @ Meas. Temp	1.62 @ 55			
Source of Rmf / Rmc	Charts			
Rm @ BHT	0.67 @ 99			
Operating Rig Time	2 Hours			
Max Rec. Temp. F	99			
Equipment Number	91			
Location	Hays			
Recorded By	D. Schmidt			
Witnessed By	Ken Wallace			

<<< 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

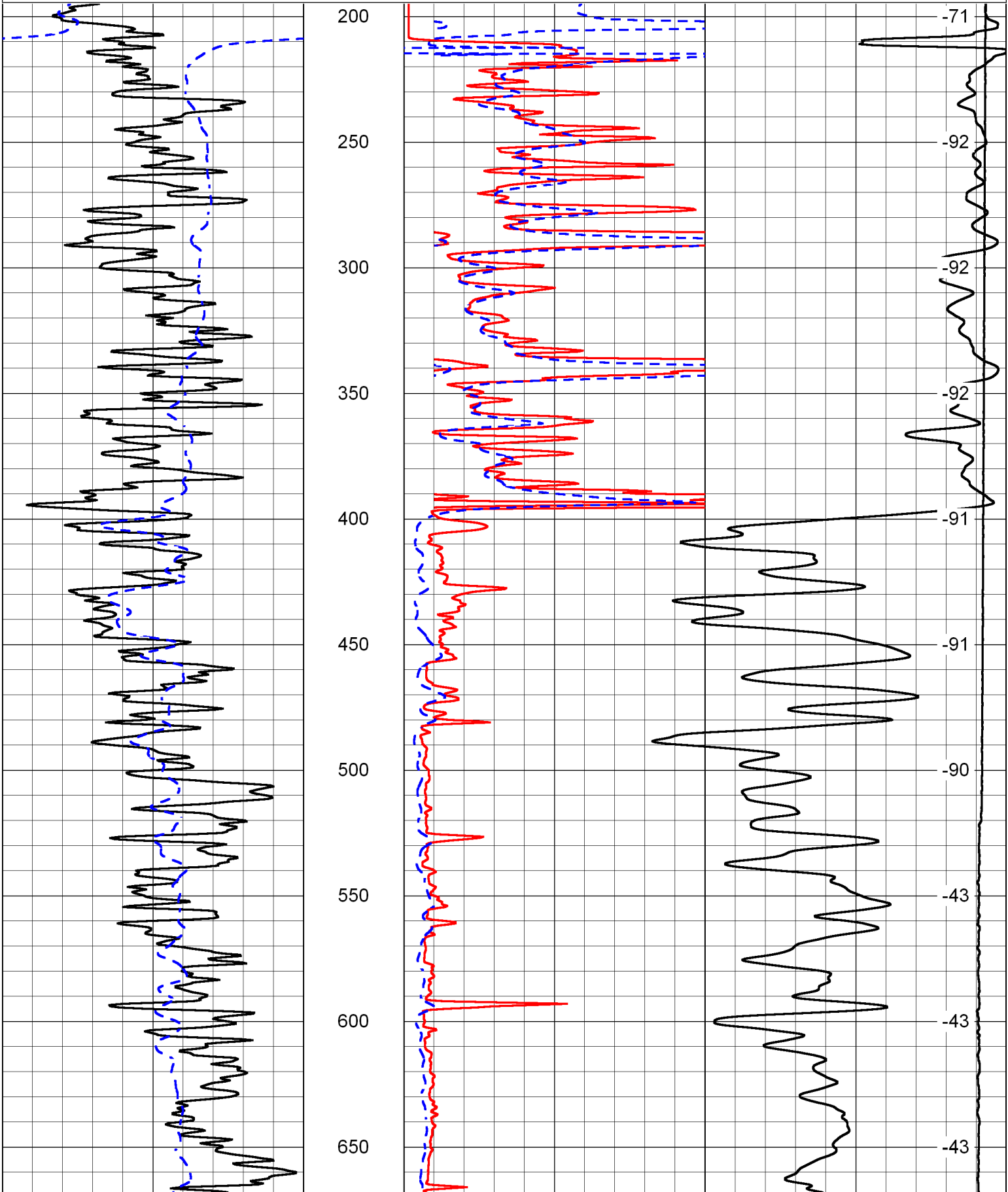
Thank you for using Pioneer Energy Services
www.pioneeres.com
785 625 3858
Marion,
East to Hwy 150 & Hwy 77 junction, 8 1/4 East,
South and East into

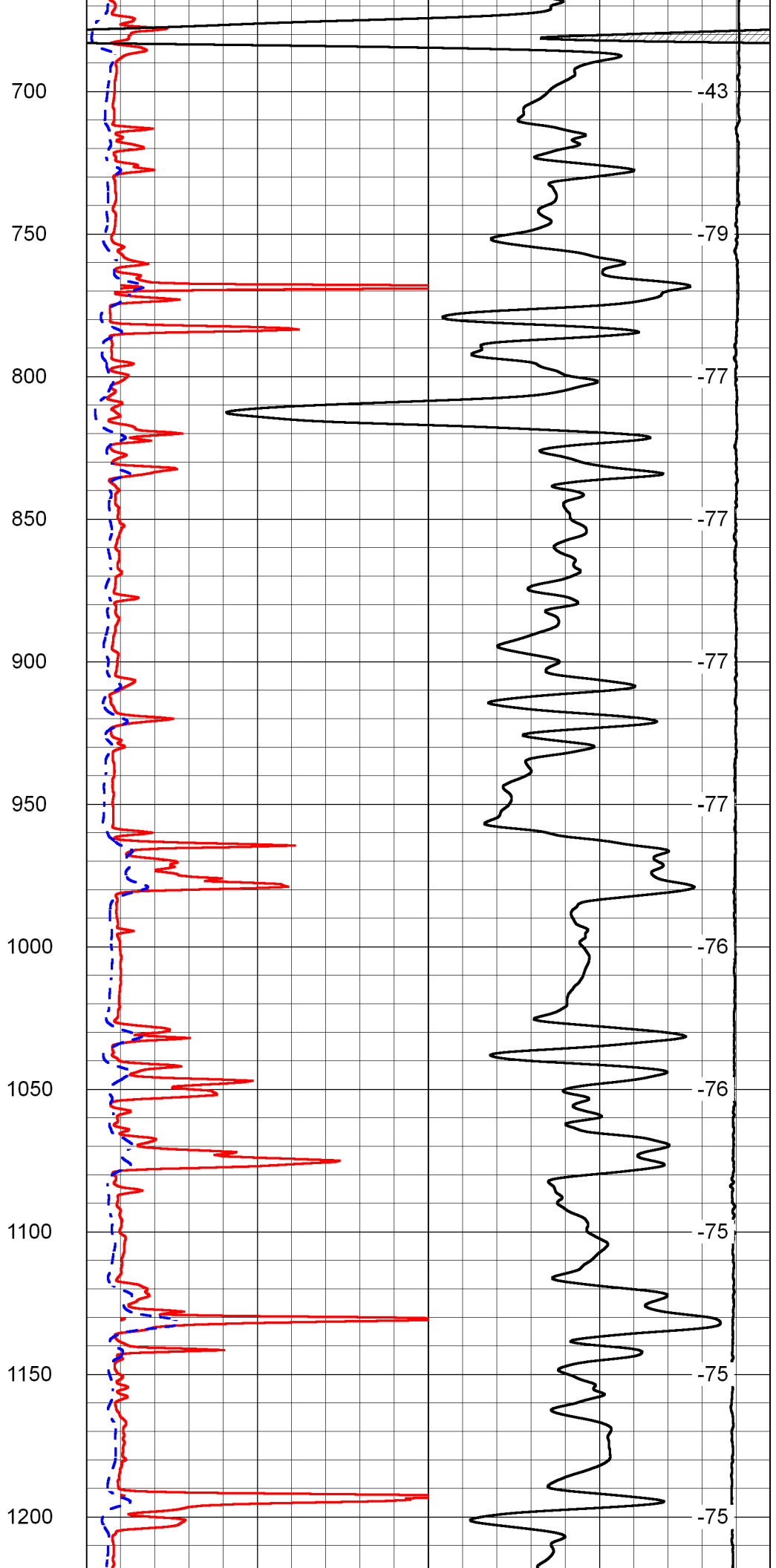
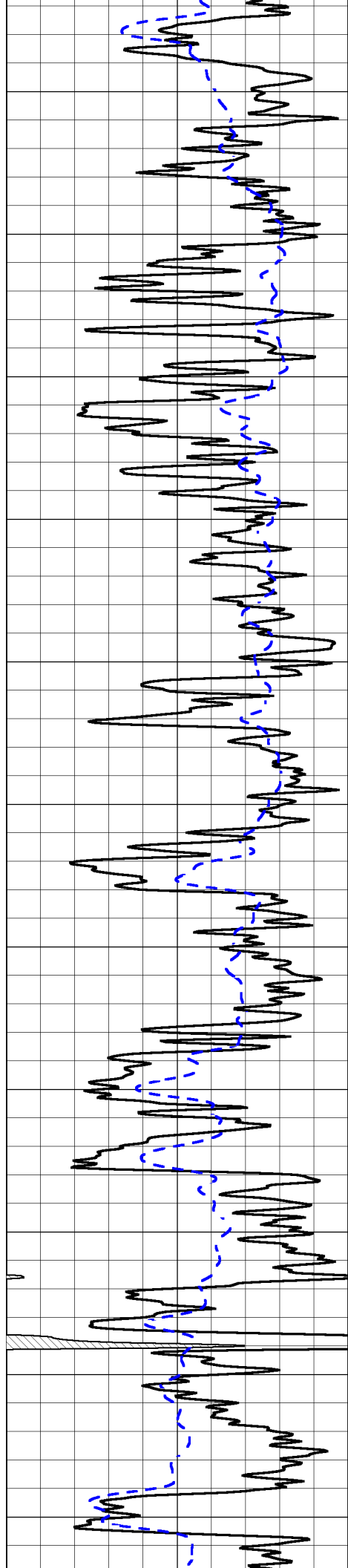
Database File range_madden 'a' unit #2\range_madden a unit 2hd.db
Dataset Pathname dil\rastkml
Presentation Format dil2in
Dataset Creation Fri Apr 17 05:01:34 2015
Charted by Depth in Feet scaled 1:600

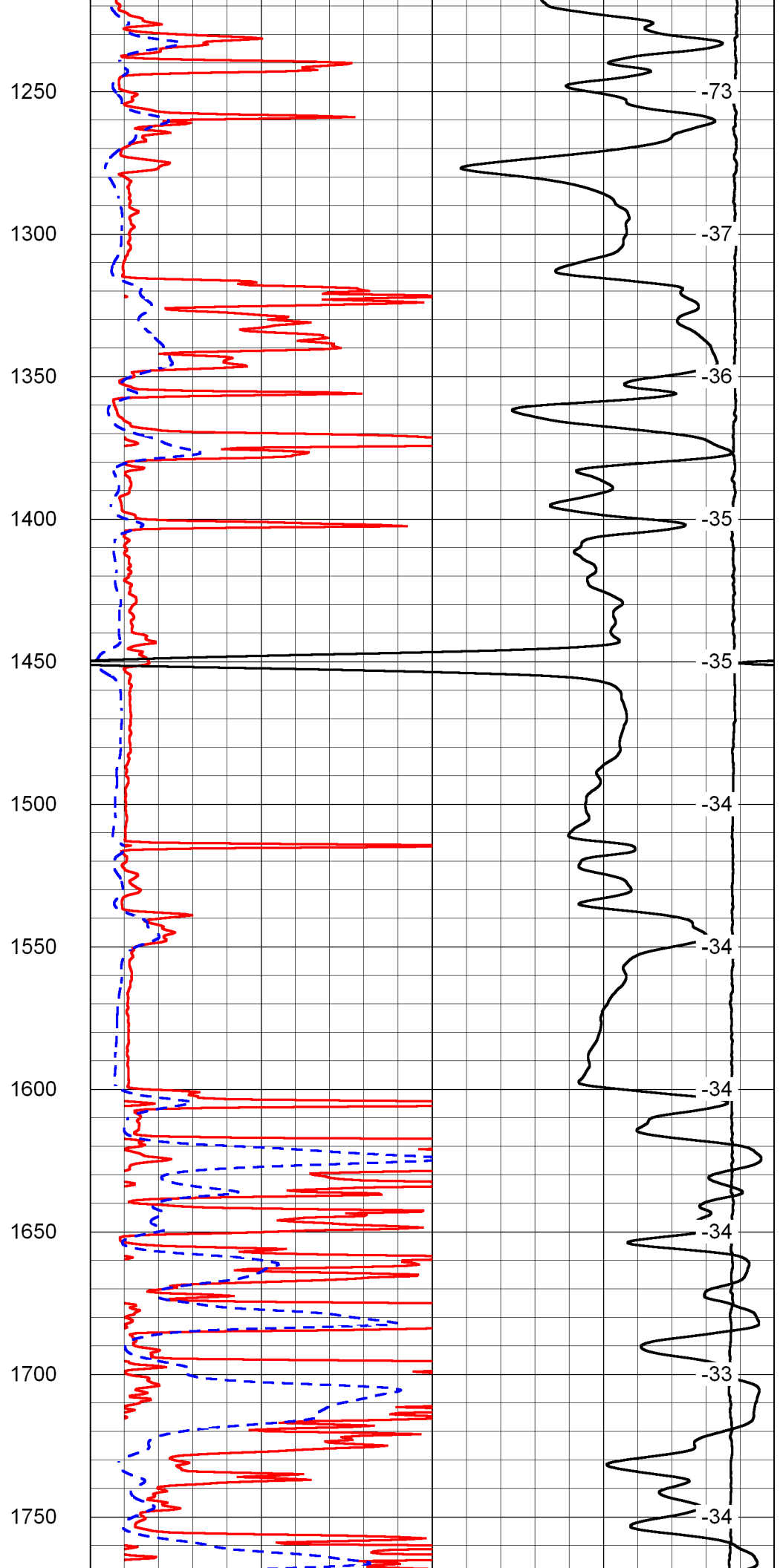
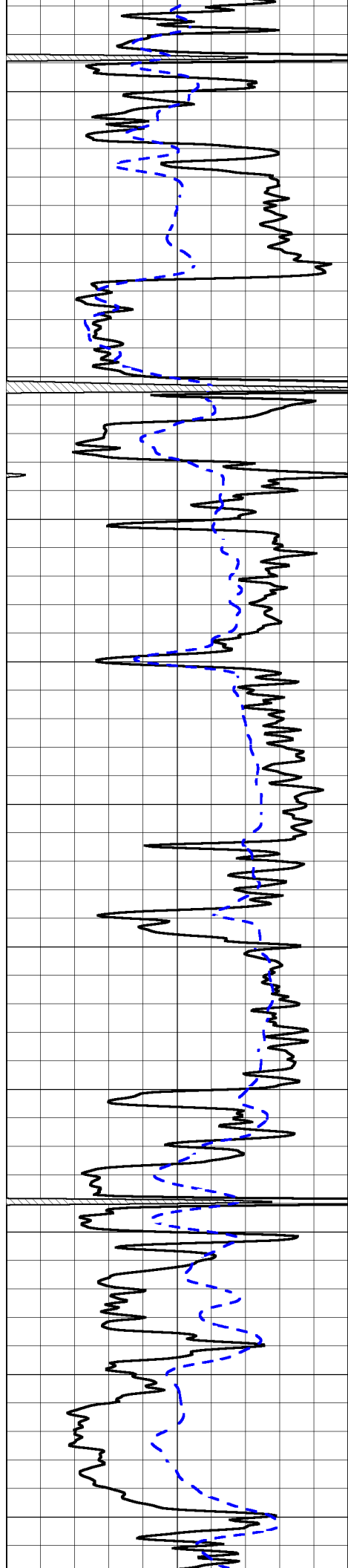
0	Gamma Ray	150
-200	SP (mV)	0

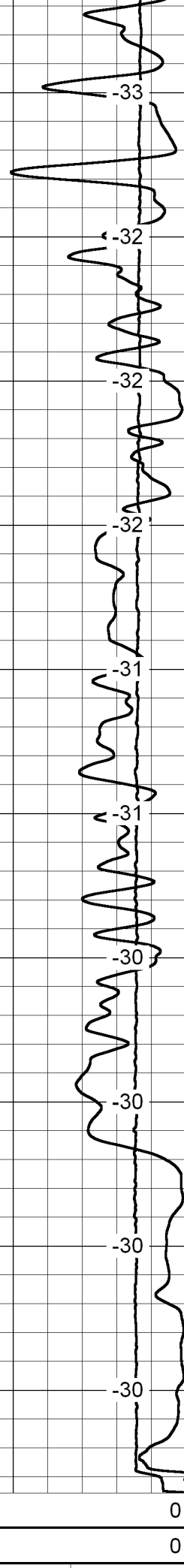
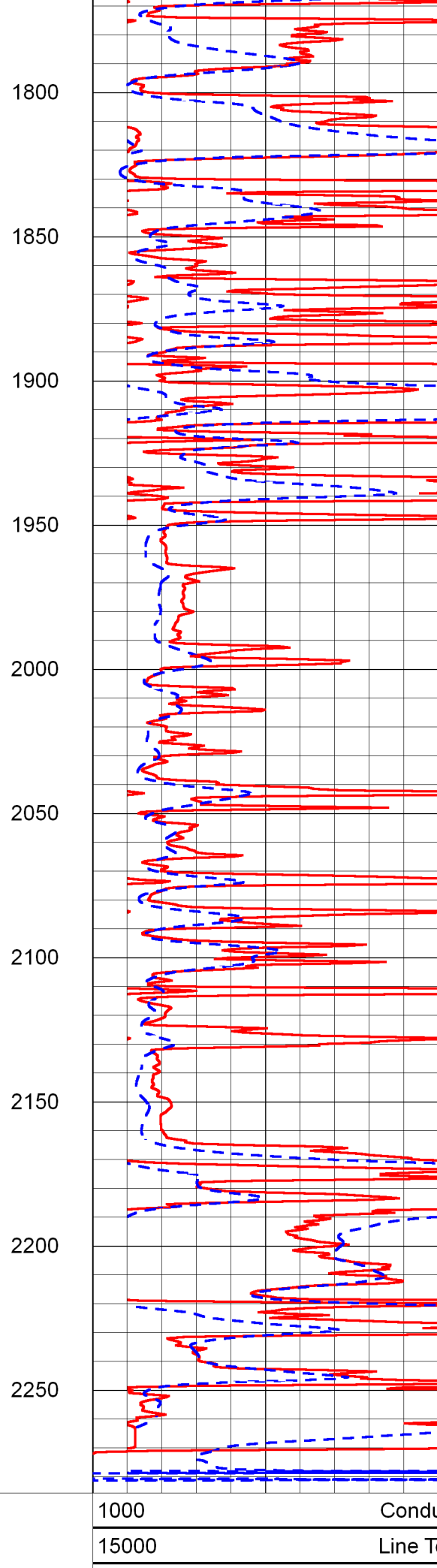
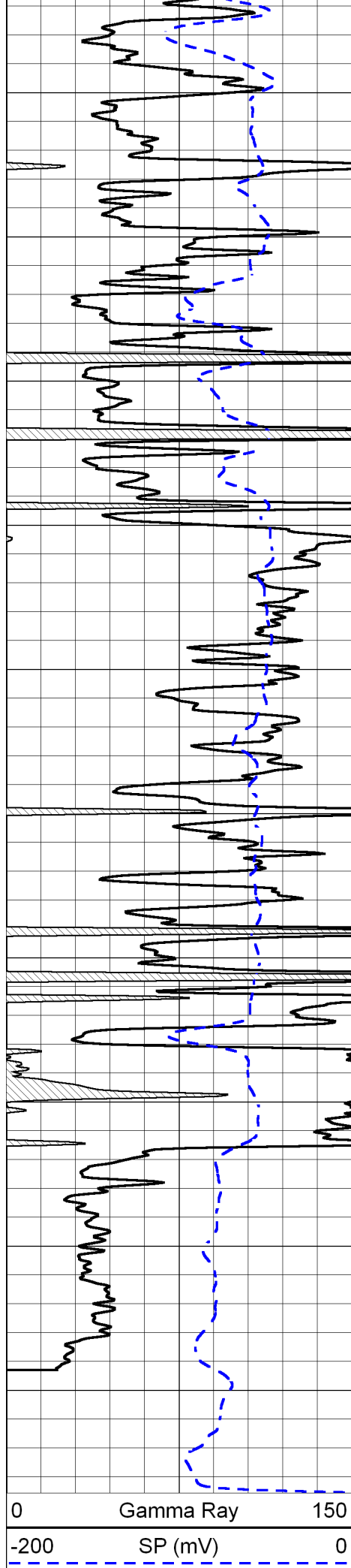
1000	Conductivity	0
15000	Line Tension	0
0	Shallow Resistivity	50
0	Deep Resistivity	50
50	Shallow Resistivity	500
50	Deep Resistivity	500

LSPD









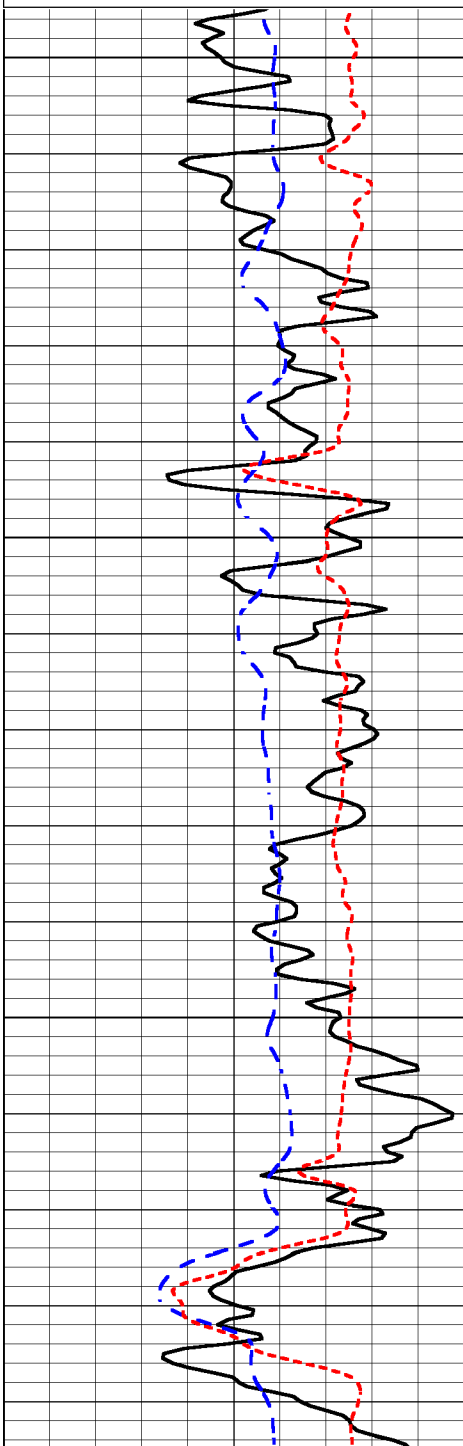
0	Shallow Resistivity	50
0	Deep Resistivity	50
50	Shallow Resistivity	500
50	Deep Resistivity	500

Database File range_madden 'a' unit #2\range_madden a unit 2hd.db
Dataset Pathname dil/rastkml
Presentation Format dil
Dataset Creation Fri Apr 17 05:01:34 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

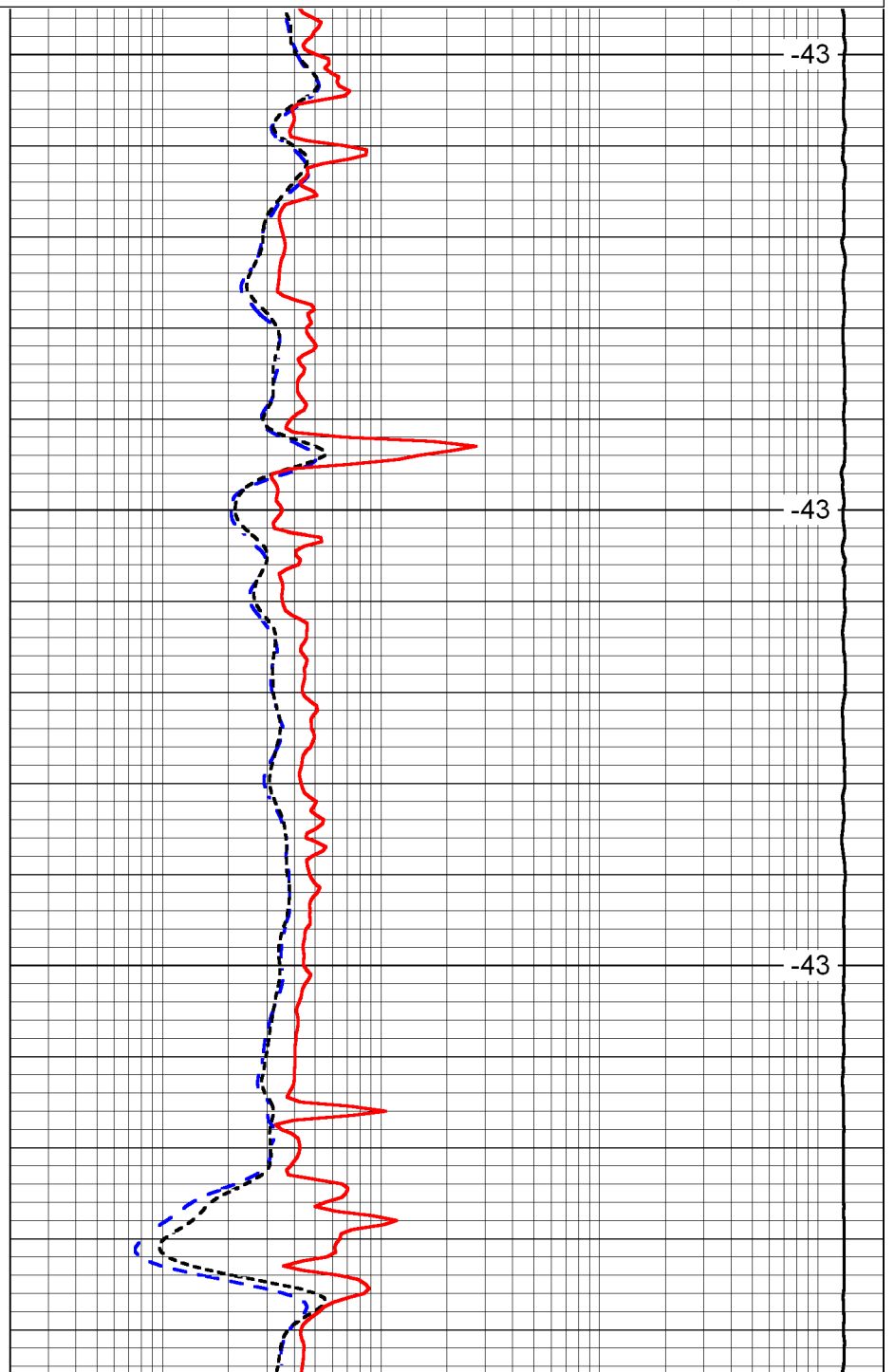
LSPD



550

600

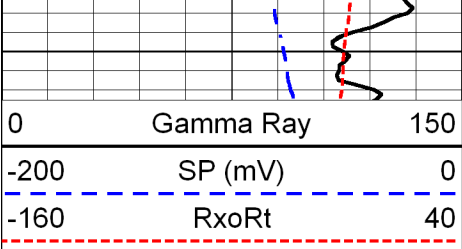
650



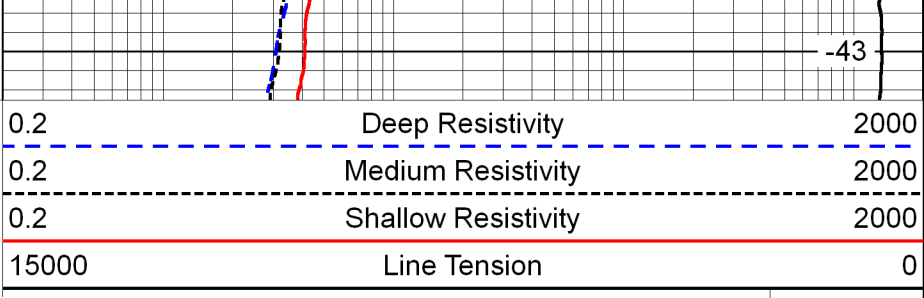
-43

-43

-43

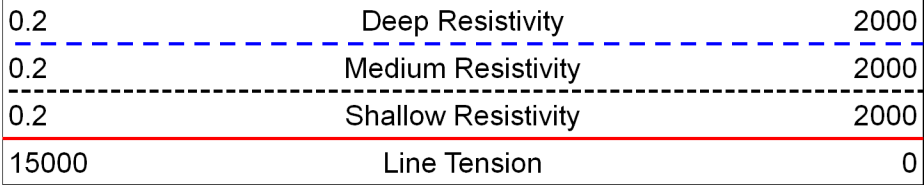
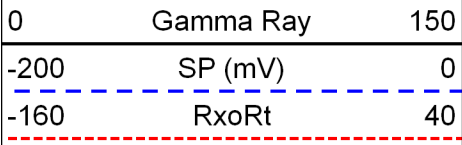


700

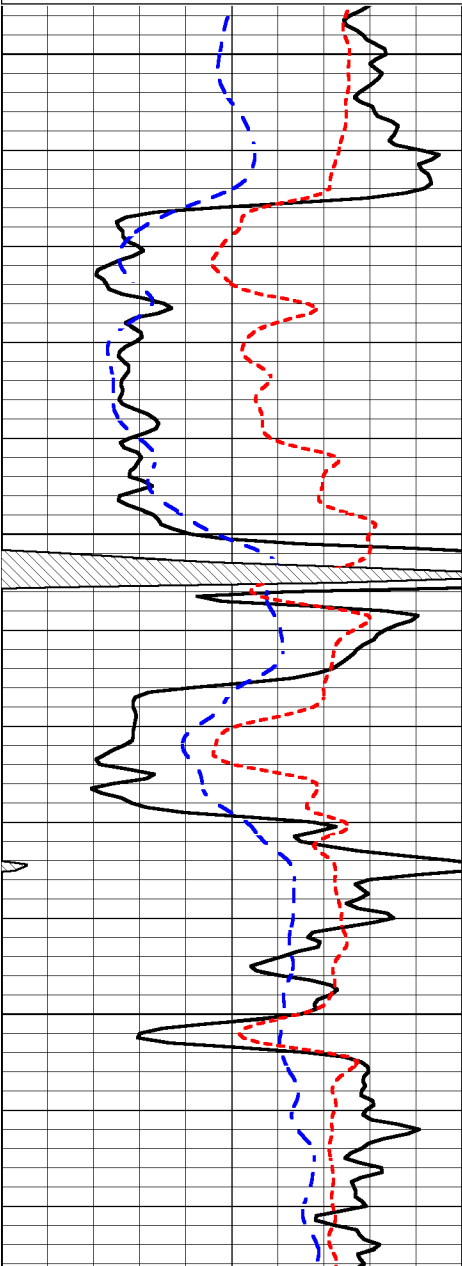


LSPD

Database File range_madden 'a' unit #2\range_madden a unit 2hd.db
Dataset Pathname dil/rastkml
Presentation Format dil
Dataset Creation Fri Apr 17 05:01:34 2015
Charted by Depth in Feet scaled 1:240



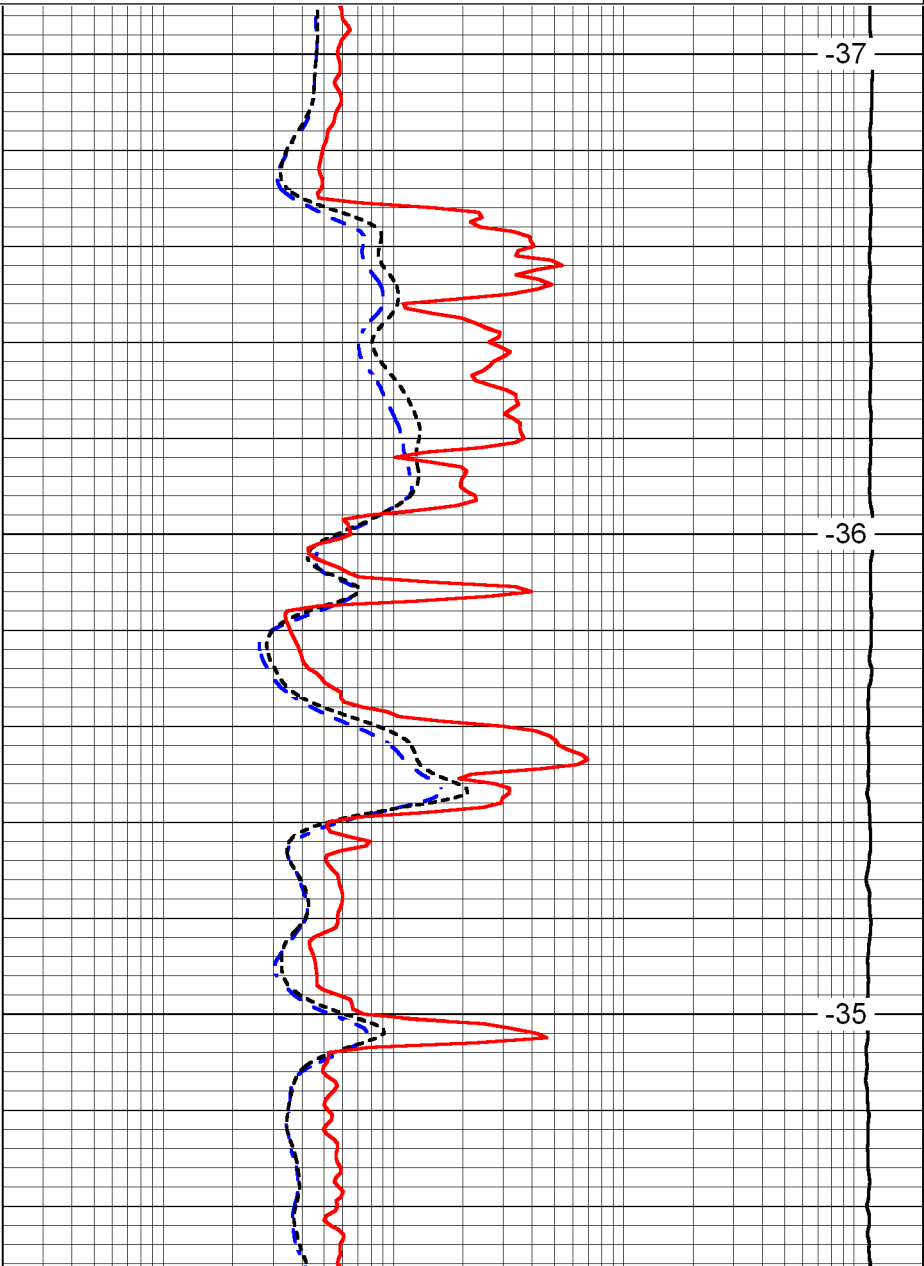
LSPD



1300

1350

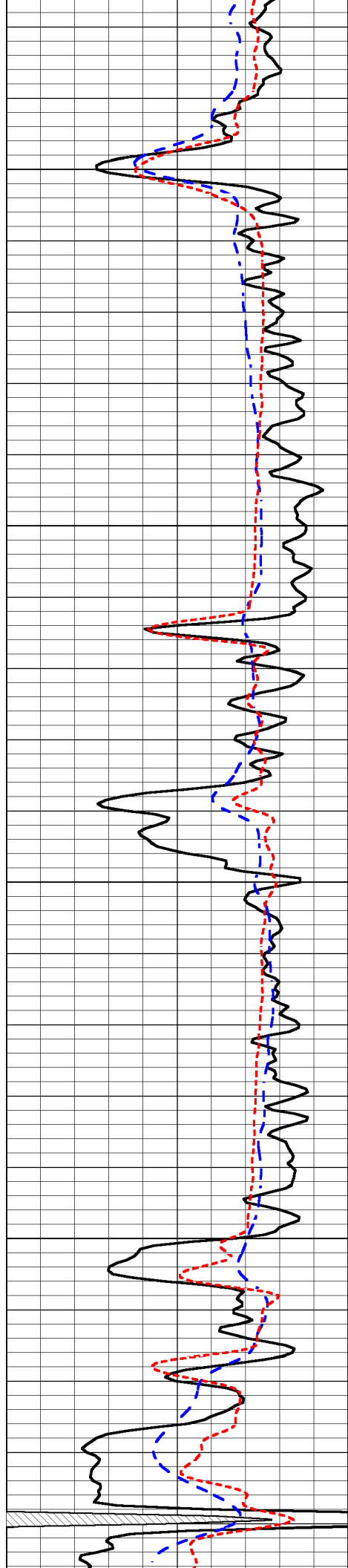
1400



-37

-36

-35

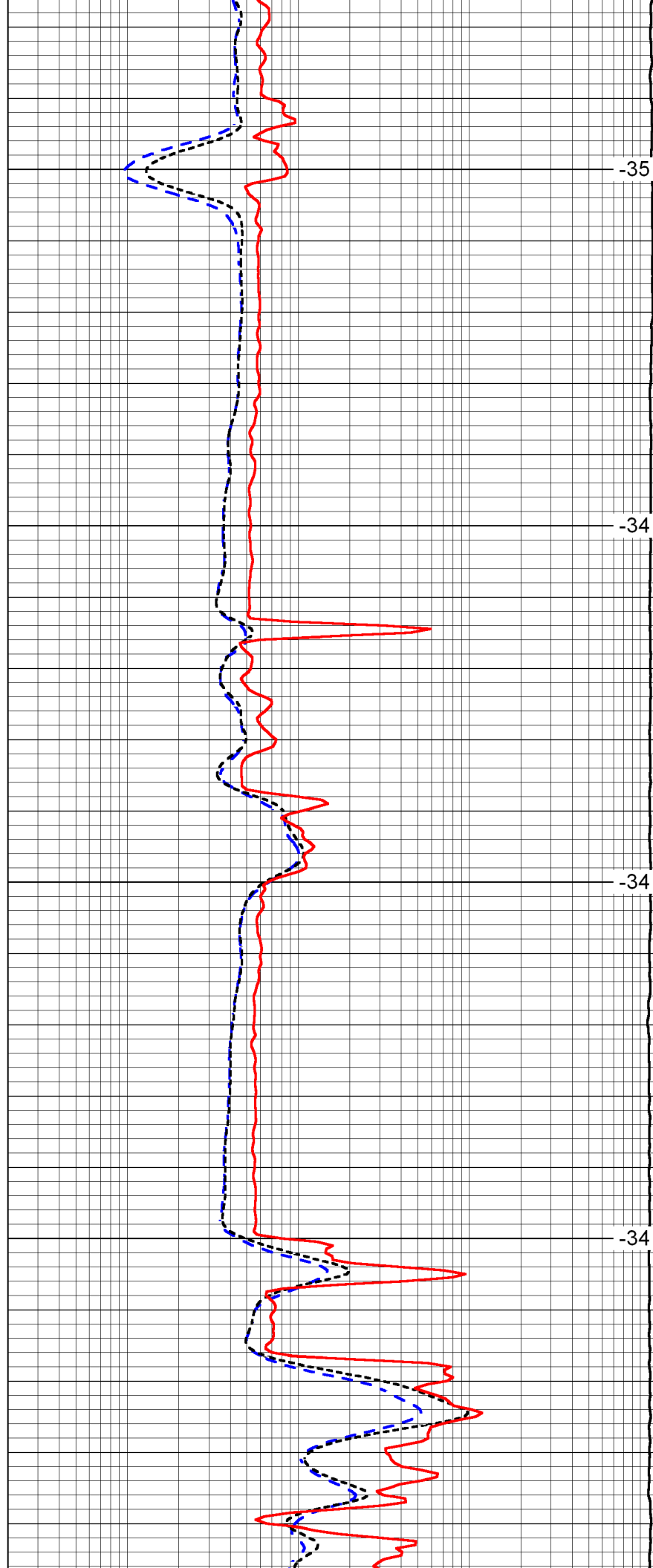


1450

1500

1550

1600

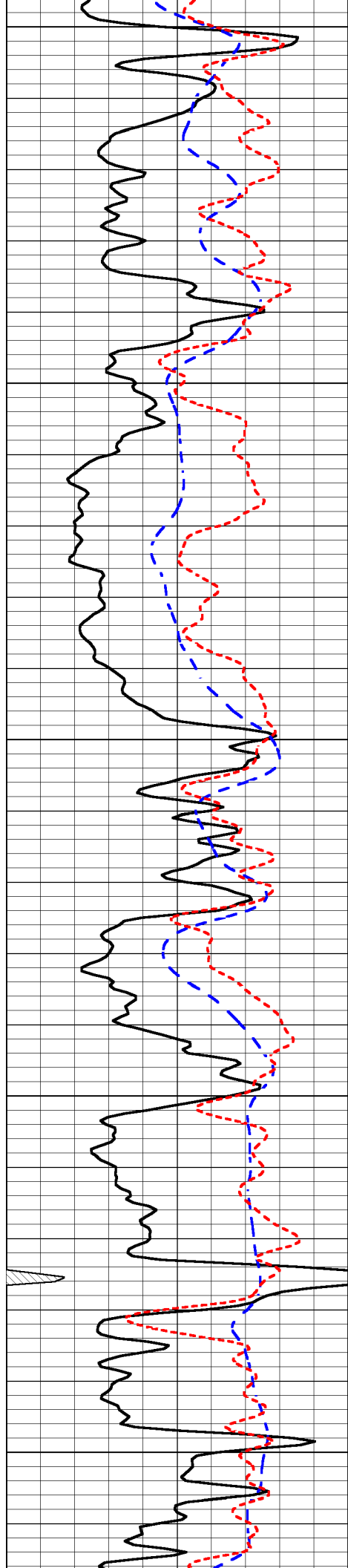


-35

-34

-34

-34



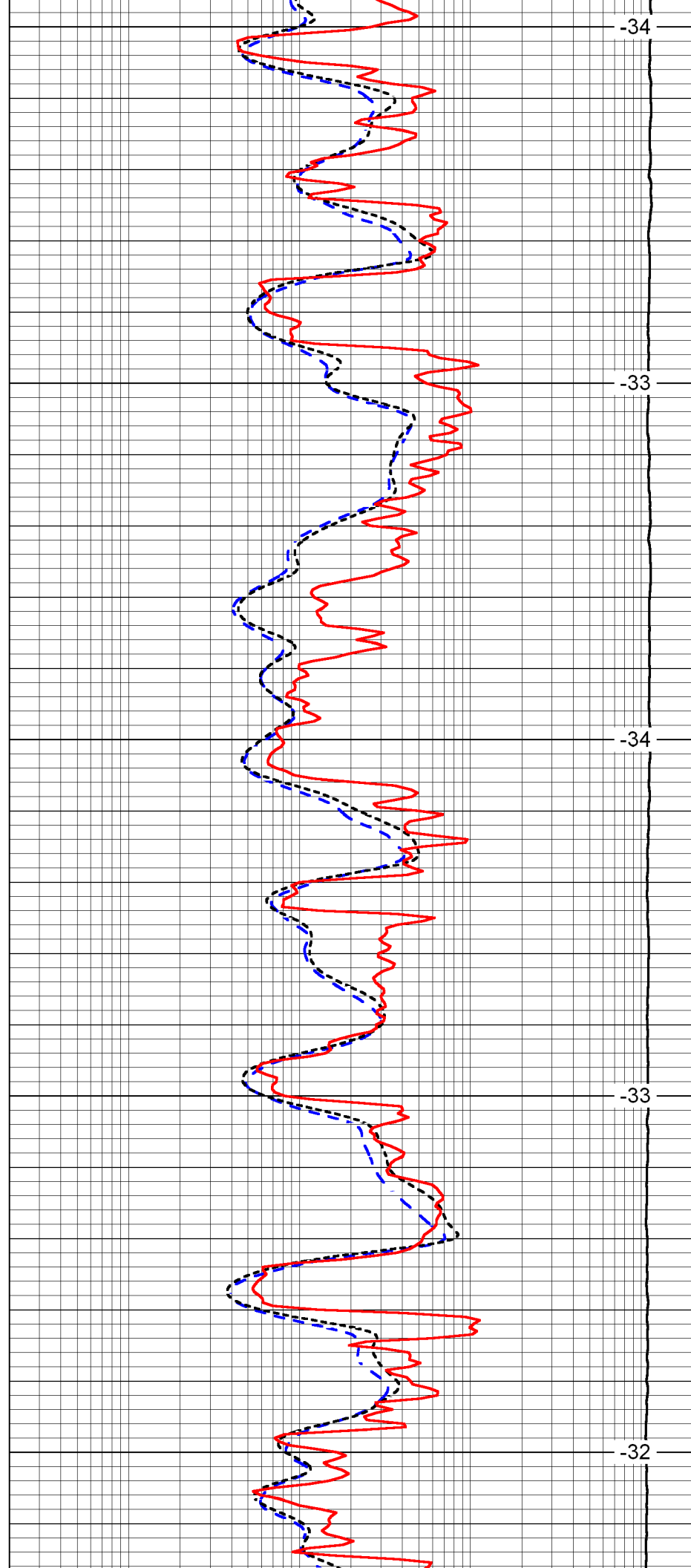
1650

1700

1750

1800

1850



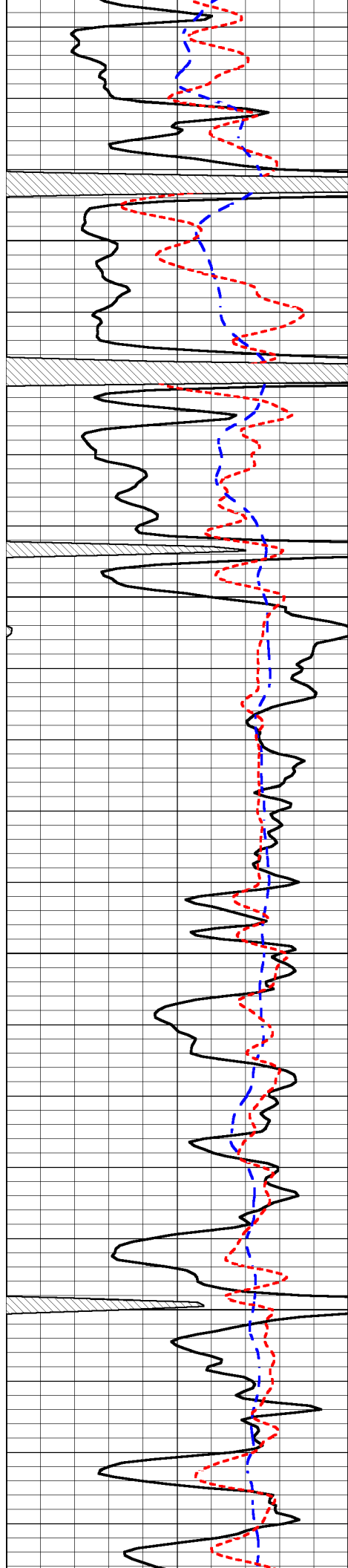
-34

-33

-34

-33

-32

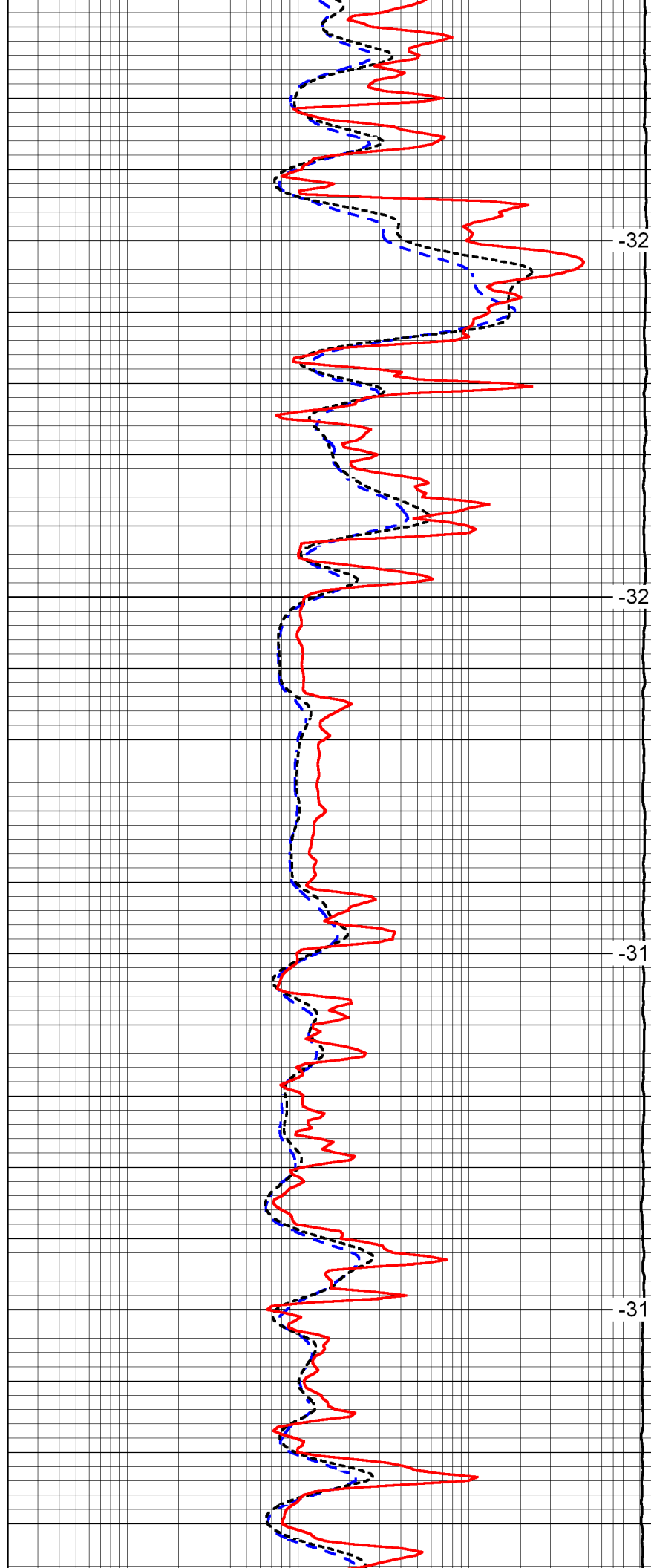


1900

1950

2000

2050

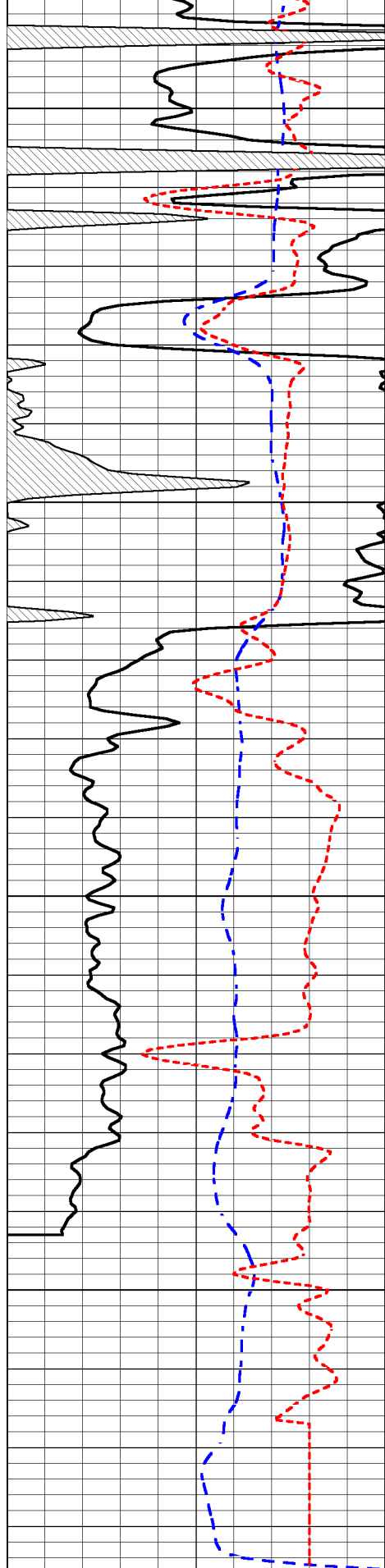


-32

-32

-31

-31



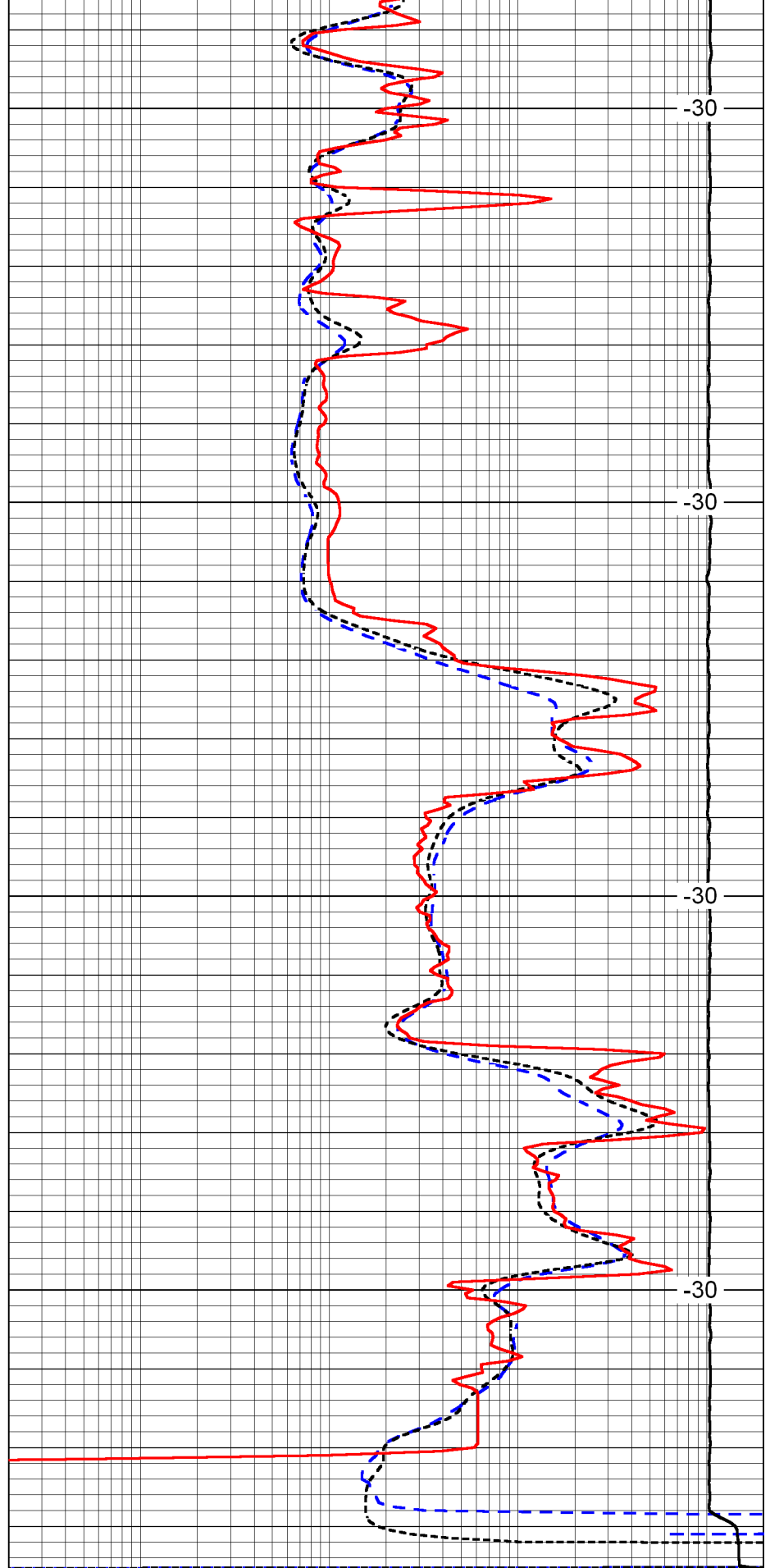
0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

2100

2150

2200

2250



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

