



Dual Induction Log

DIGITAL LOG (785) 625-3858

API No.	15-065-23,562-00-00		
Company	H&C Oil Operating		
Well	Worcester No 4-1		
Field	Wildcat		
County	Graham	State	Kansas
Location	990' FNL & 990' FWL		
Sec:	4	Twp:	7S Rge: 23W
Permanent Datum	Ground Level	Elevation	2467
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing		
		Other Services	CNL/CDL MEL/BHCS
		Elevation	K.B. 2472 D.F. 2467 G.L. 2467

Date	08/10/2009	
Run Number	One	
Depth Driller	3985	
Depth Logger	3984	
Bottom Logged Interval	3983	
Top Log Interval	300	
Casing Driller	8.625 @ 302	
Casing Logger	297	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	1,000	
Density / Viscosity	9.3	46
pH / Fluid Loss	10.4	8.0
Source of Sample	Flowline	
Rm @ Meas. Temp	1.4 @ 76	
Rmf @ Meas. Temp	1.05 @ 76	
Rmc @ Meas. Temp	1.89 @ 76	
Source of Rmf / Rmc	Charts	
Rm @ BHT	.90 @ 118	
Operating Rig Time	4 1/2 Hours	
Max Rec. Temp. F	118	
Equipment Number	17	
Location	Hays	
Recorded By	Mike Garrison	
Witnessed By	Clayton Erickson	

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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

Thank you for using Log-Tech, Inc.
(785) 625-3858

Hill City, 8 North to Y Rd., 2 1/2 West, South Into

Database File: c:\warrior\data\h & c_worcester no 4-1\h&c4-1hd.db
 Dataset Pathname: dil/h&cstck
 Presentation Format: dil2in
 Dataset Creation: Mon Aug 10 08:47:12 2009
 Charted by: Depth in Feet scaled 1:600

0 Gamma Ray 150
-200 SP (MV) 0

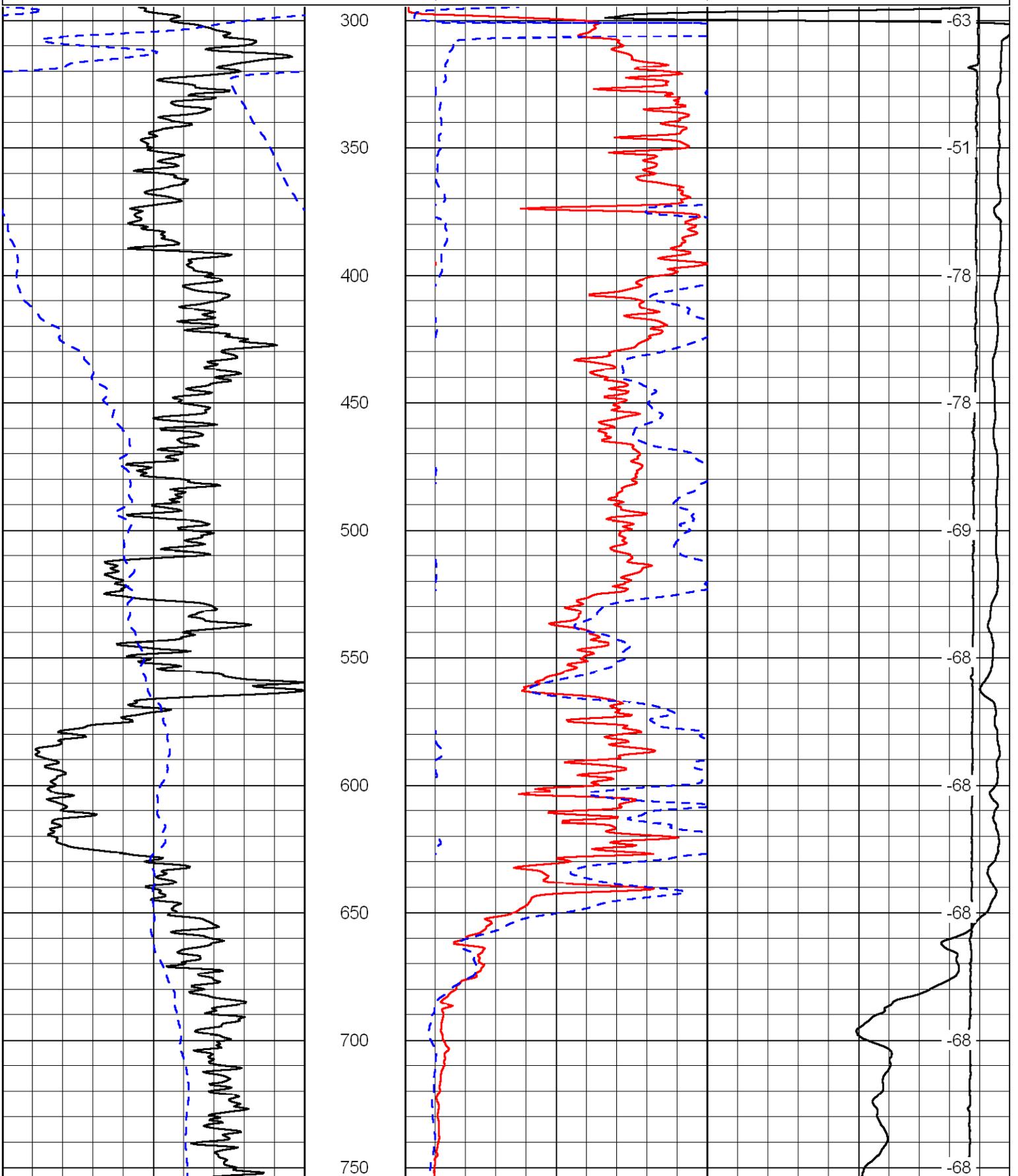
0 Shallow Resistivity (Ohm-m) 50
0 Deep Resistivity (Ohm-m) 50

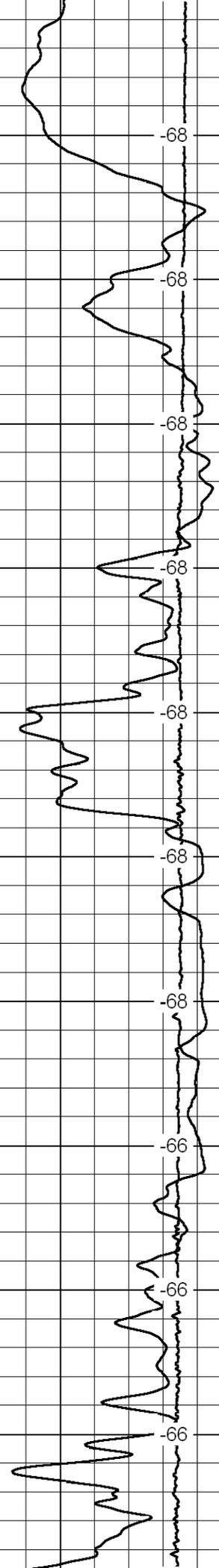
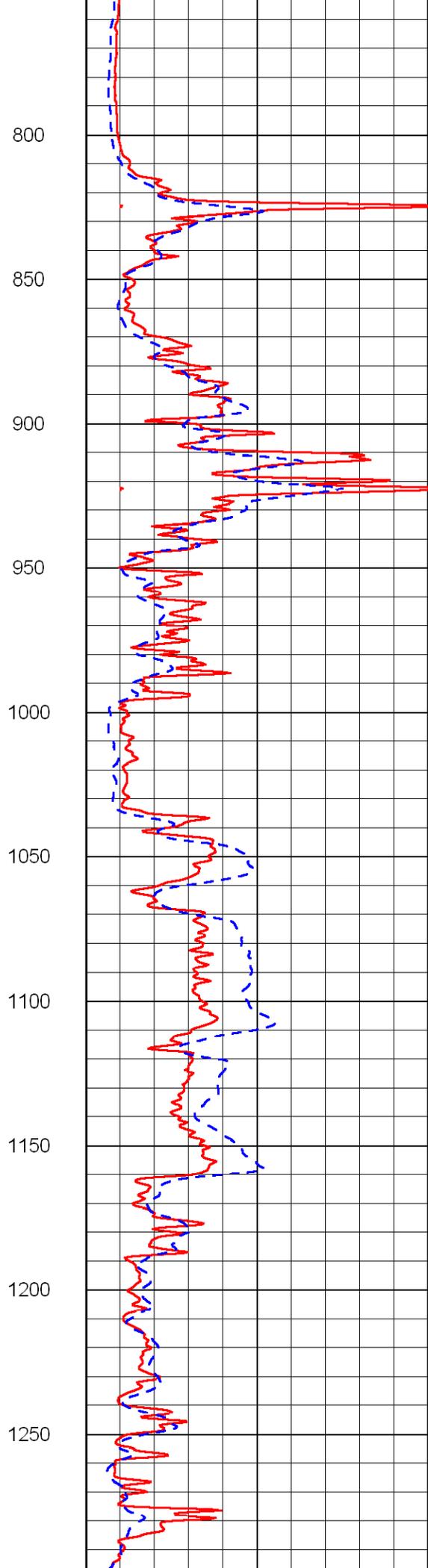
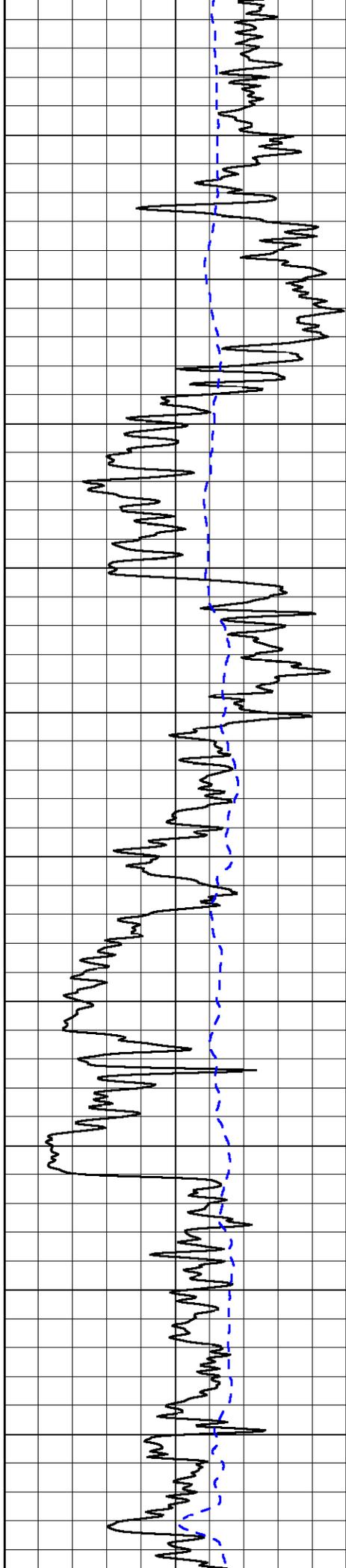
LSPD
(ft/min)

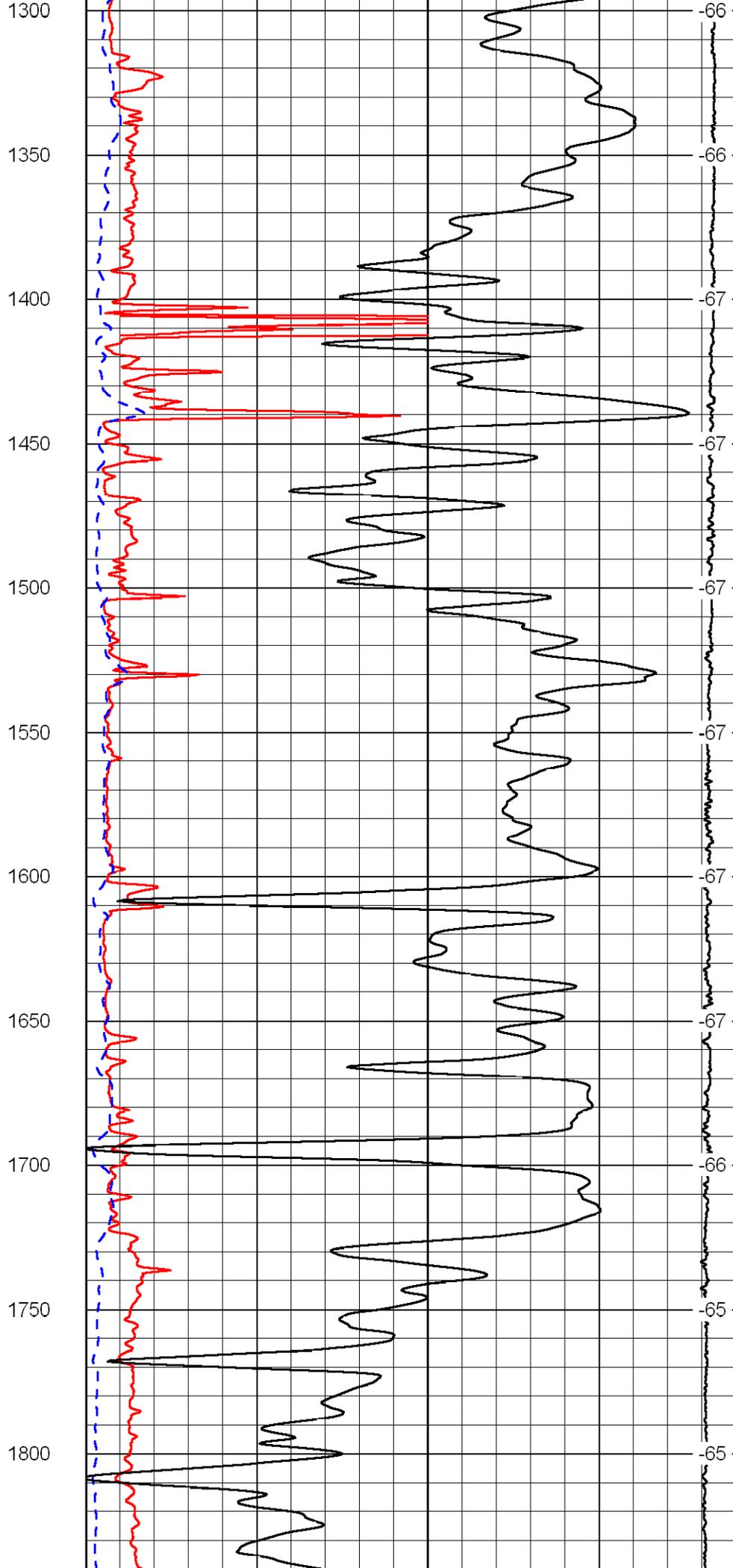
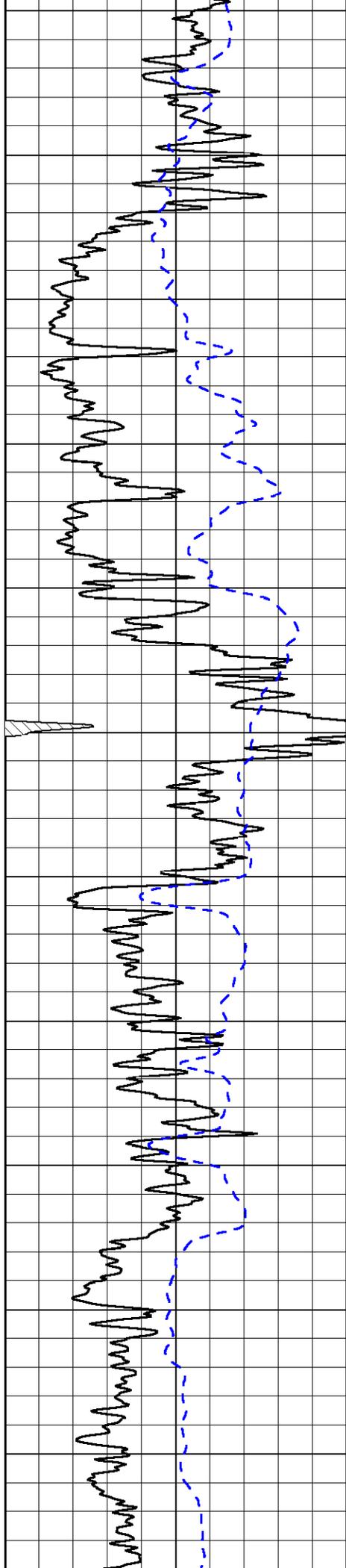
1000 Conductivity (mmho/m) 0

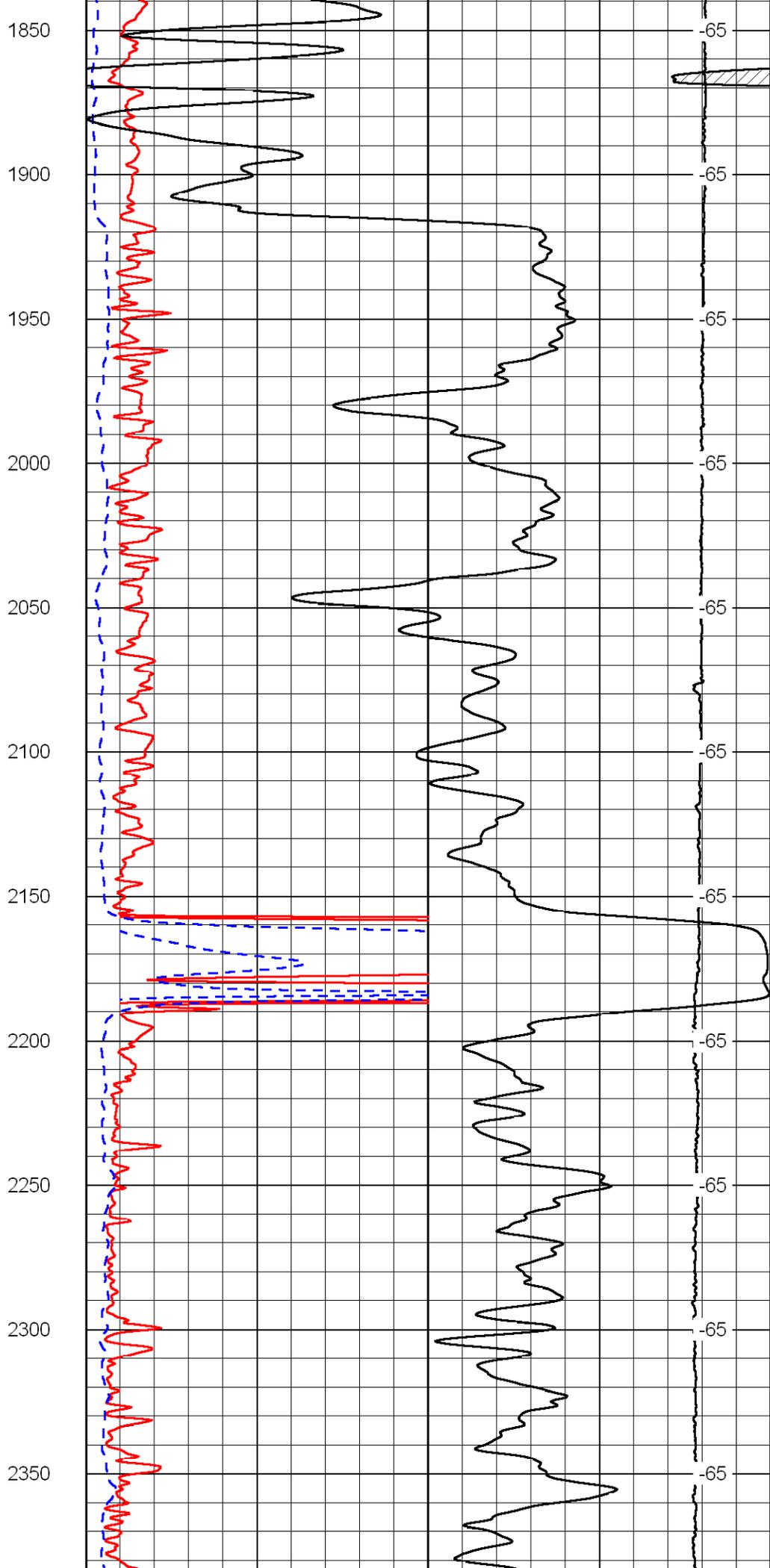
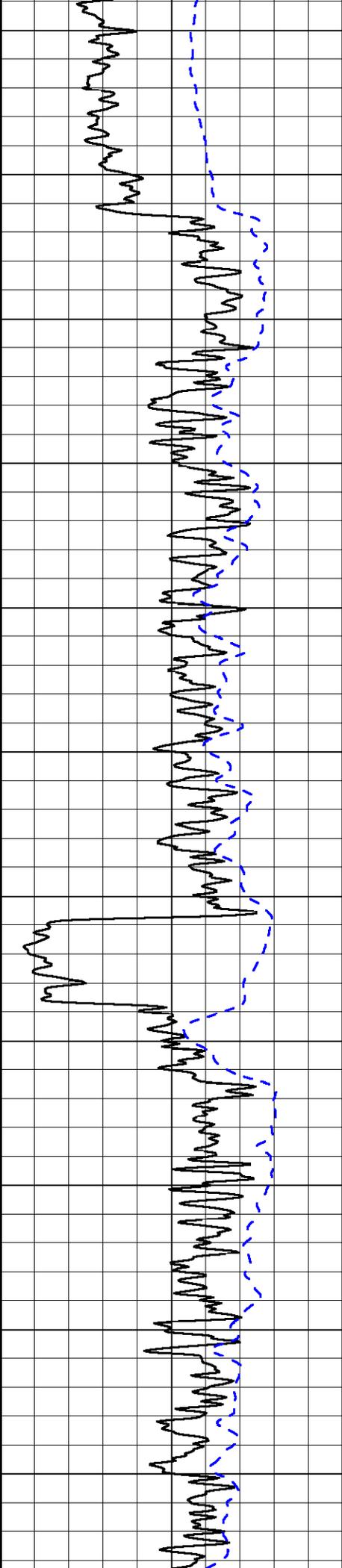
15000 Line Tension (lb) 0

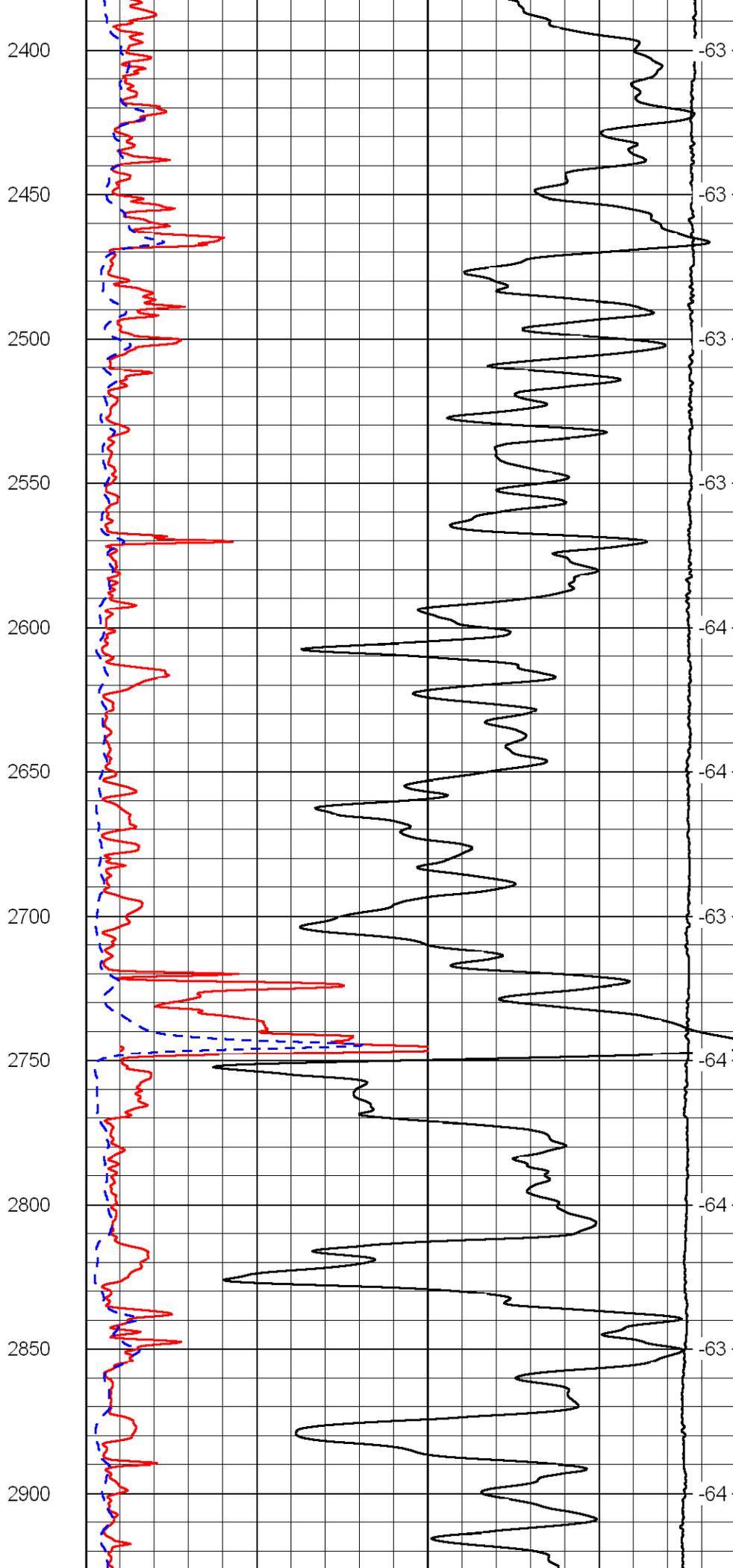
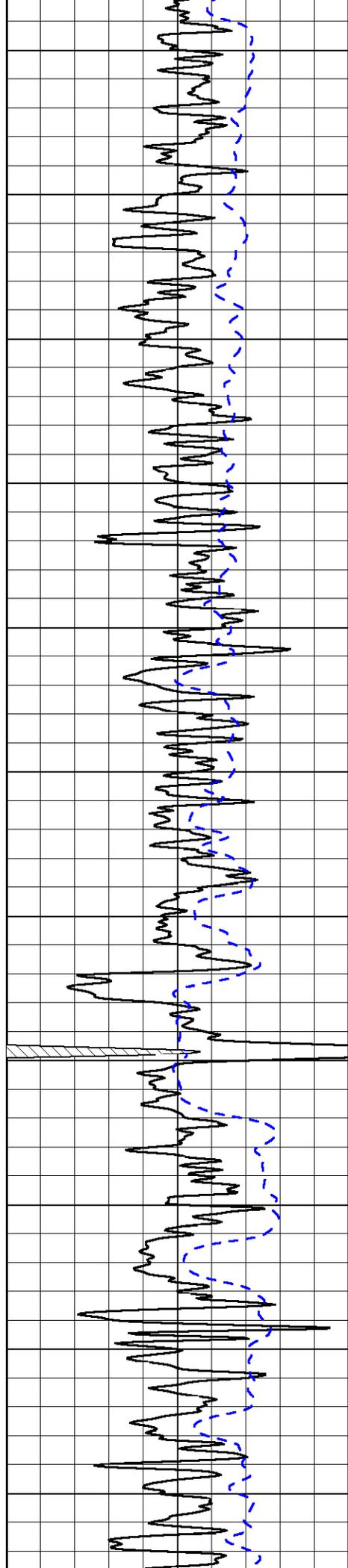
Shallow Resistivity
50 (Ohm-m) 500
50 Deep Resistivity (Ohm-m) 500

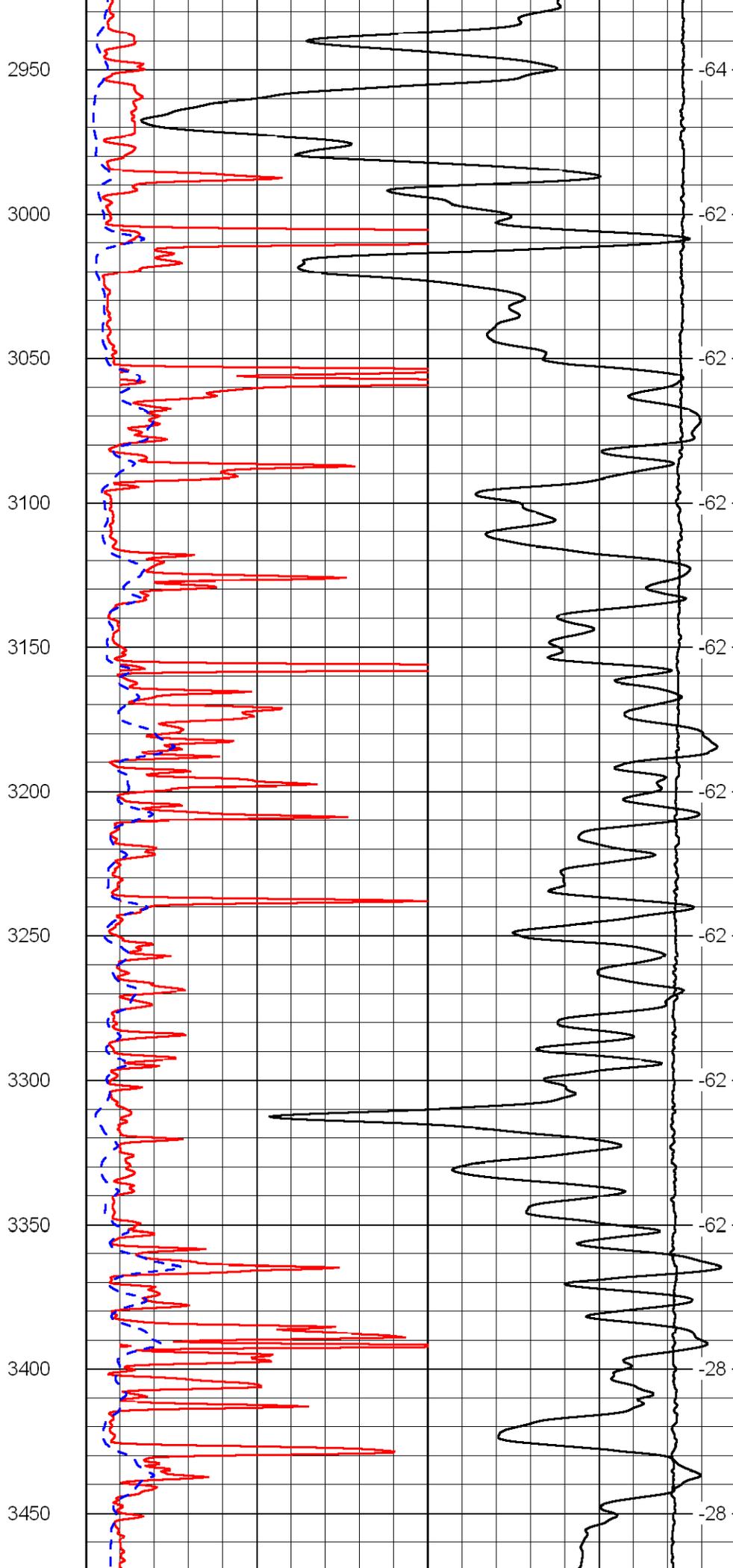
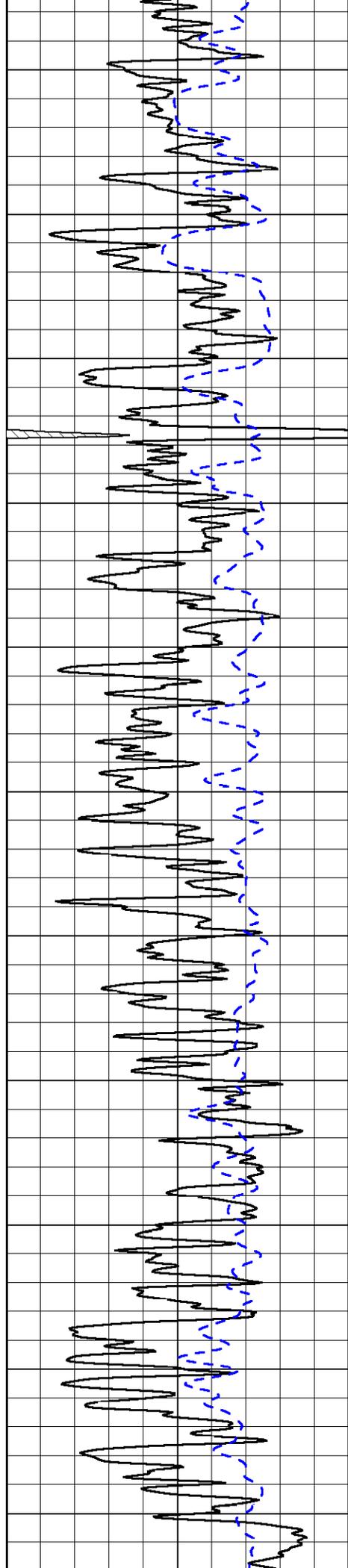


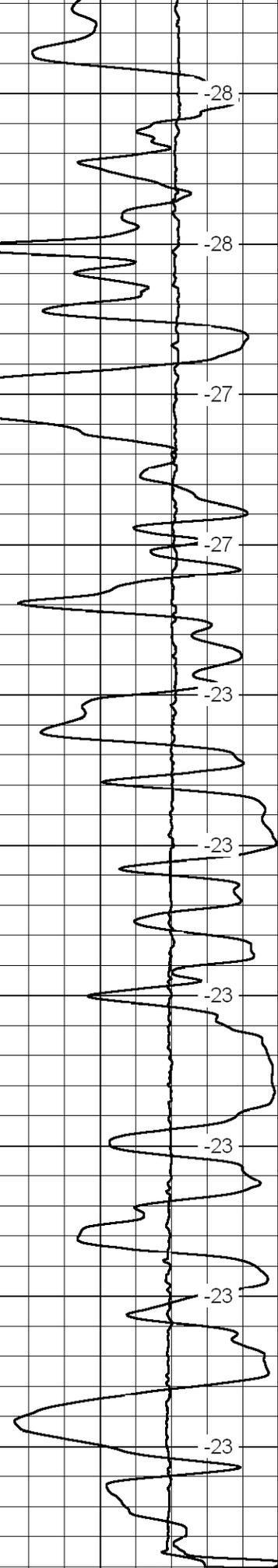
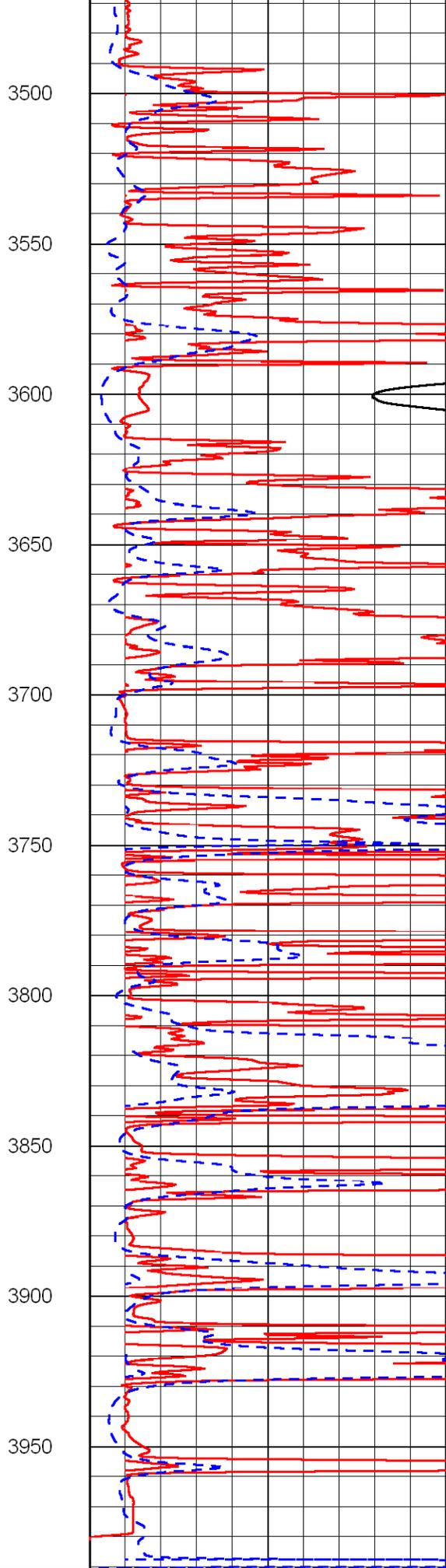
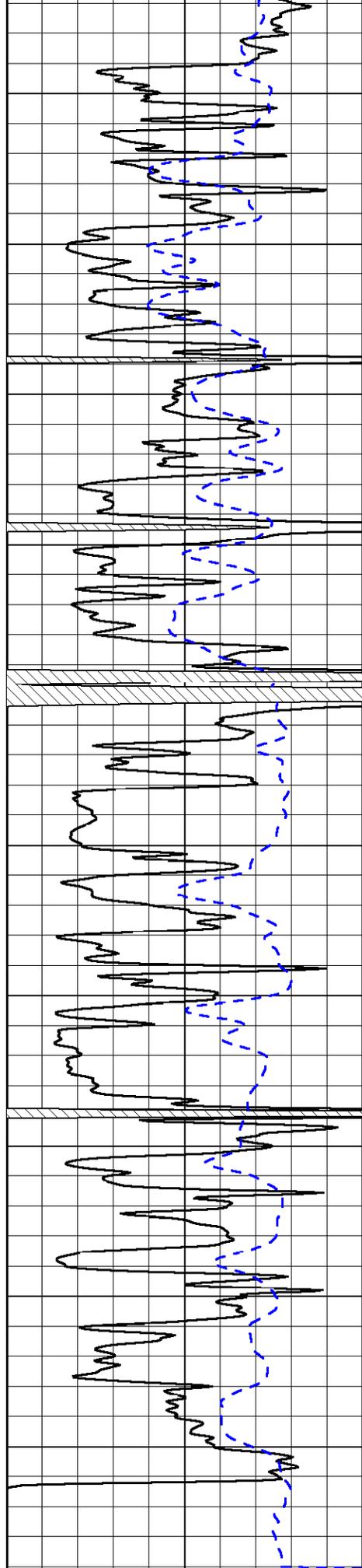












0 150
-200 0

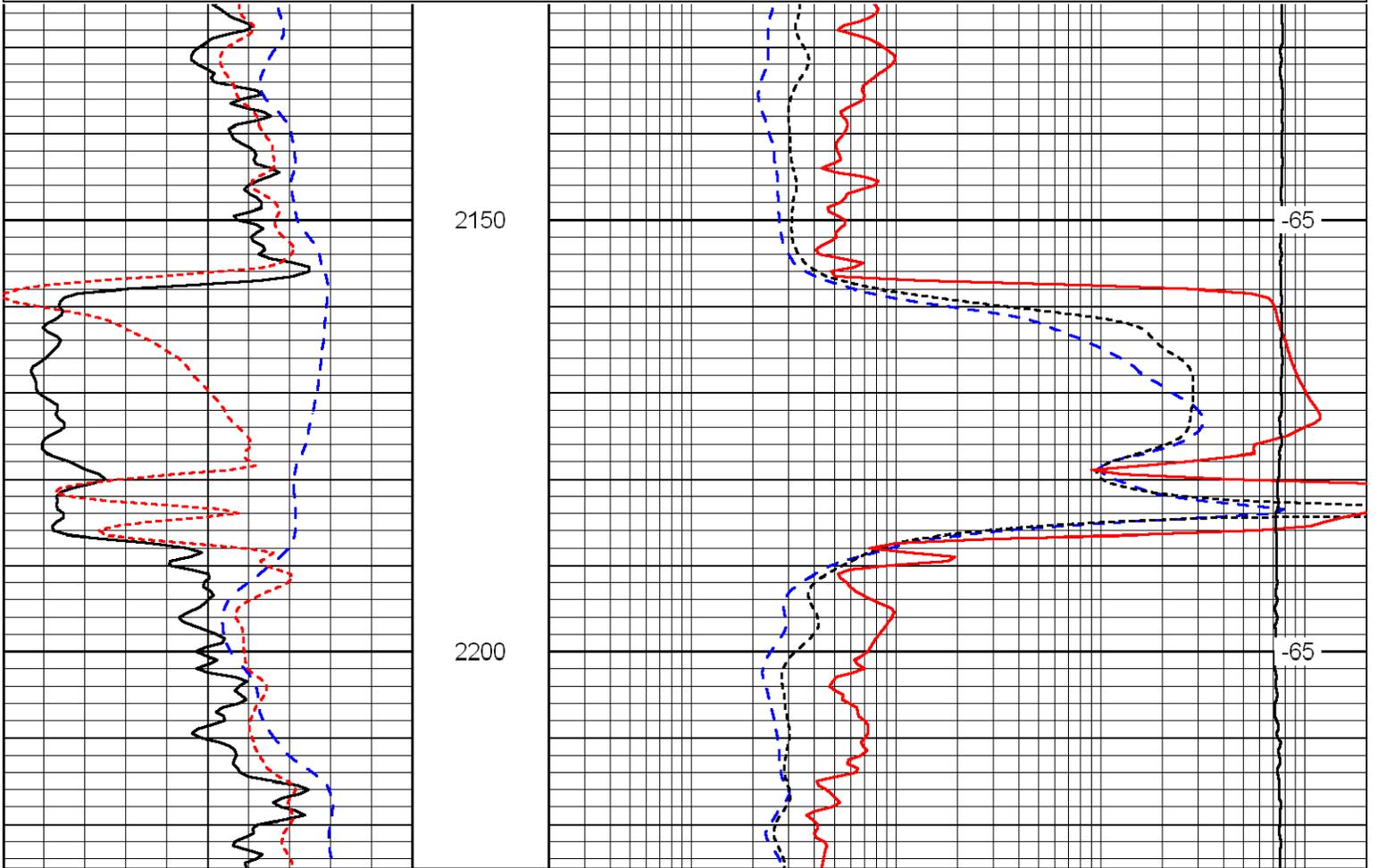
0 50
0 50

LSPD
(ft/min)

1000	Conductivity (mmho/m)	0
15000	Line Tension (lb)	0
Shallow Resistivity		
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

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 Dataset Pathname: dil/h&cstck
 Presentation Format: dil
 Dataset Creation: Mon Aug 10 08:47:12 2009
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150	0.2	Deep Resistivity (Ohm-m)	2000
-200	SP (MV)	0	0.2	Medium Resistivity (Ohm-m)	2000
-160	Rxo / Rt	40	0.2	Shallow Resistivity (Ohm-m)	2000
			15000	Line Tension (lb)	0
					LSPD (ft/min)



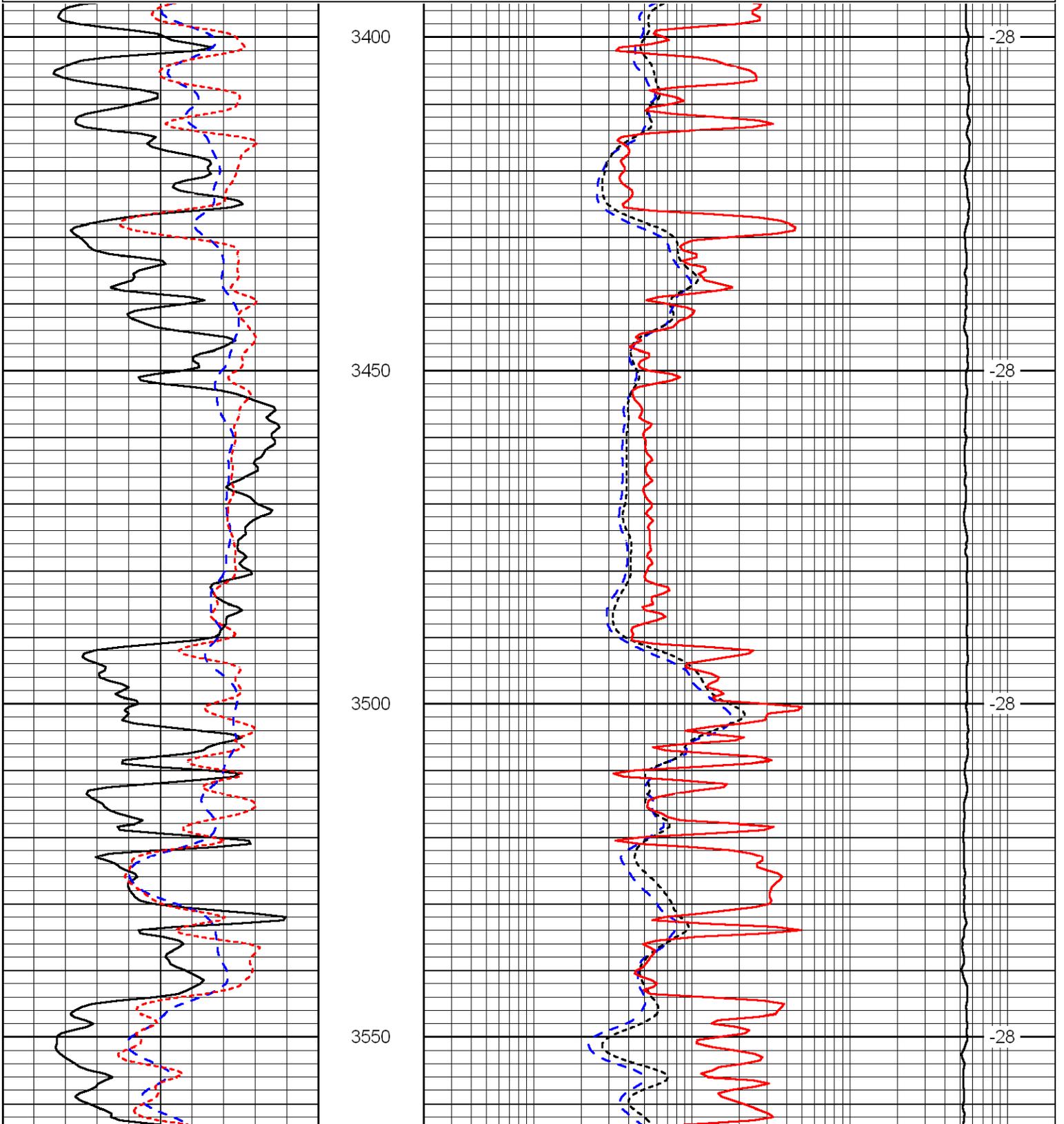
0	Gamma Ray	150	0.2	Deep Resistivity (Ohm-m)	2000
-200	SP (MV)	0	0.2	Medium Resistivity (Ohm-m)	2000
-160	Rxo / Rt	40	0.2	Shallow Resistivity (Ohm-m)	2000
			15000	Line Tension (lb)	0
					LSPD (ft/min)

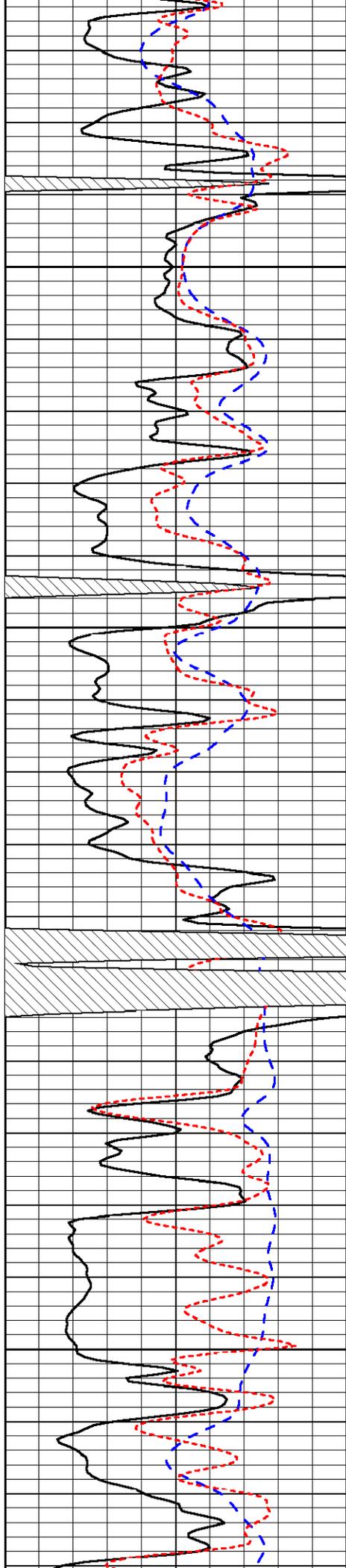
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-200	SP (MV)	0
-160	Rxo / Rt	40

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
15000	Line Tension (lb)	0

LSPD
(ft/min)



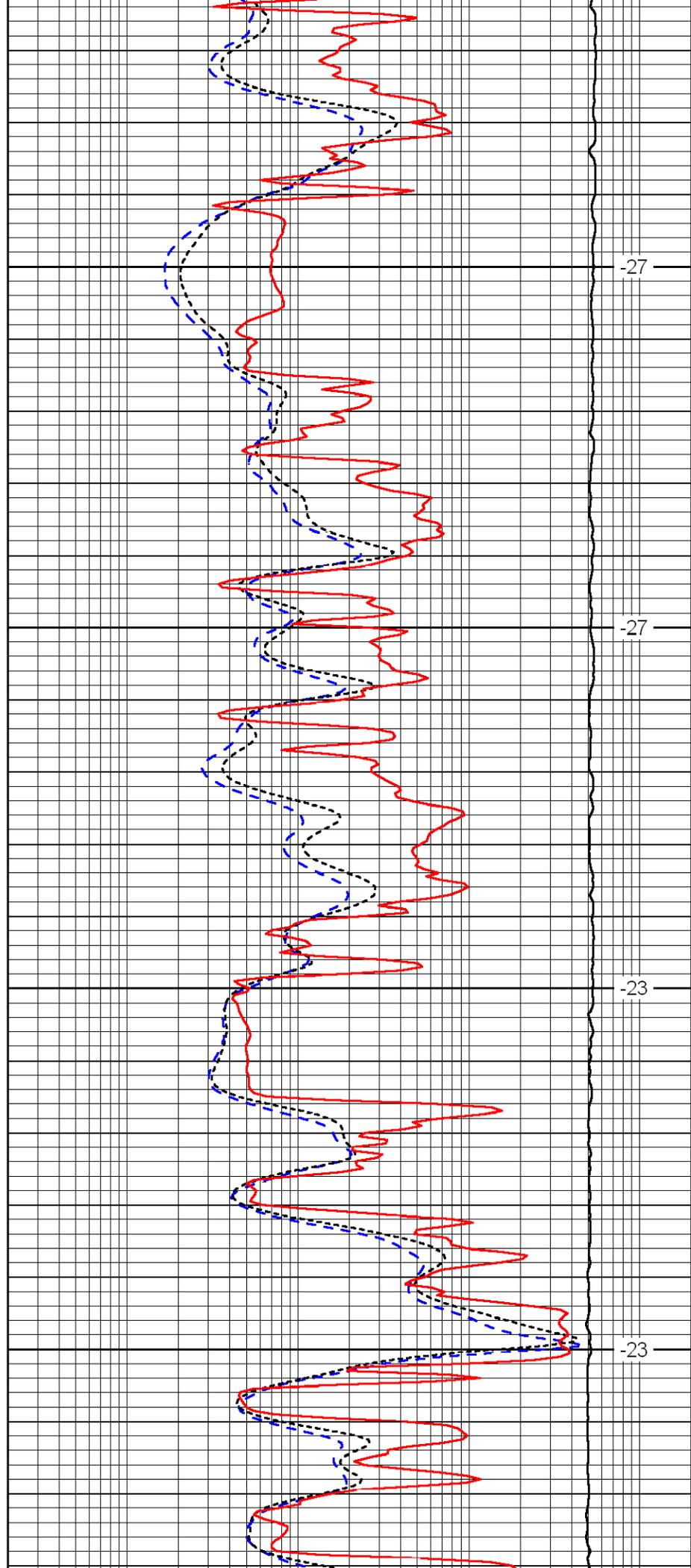


3600

3650

3700

3750

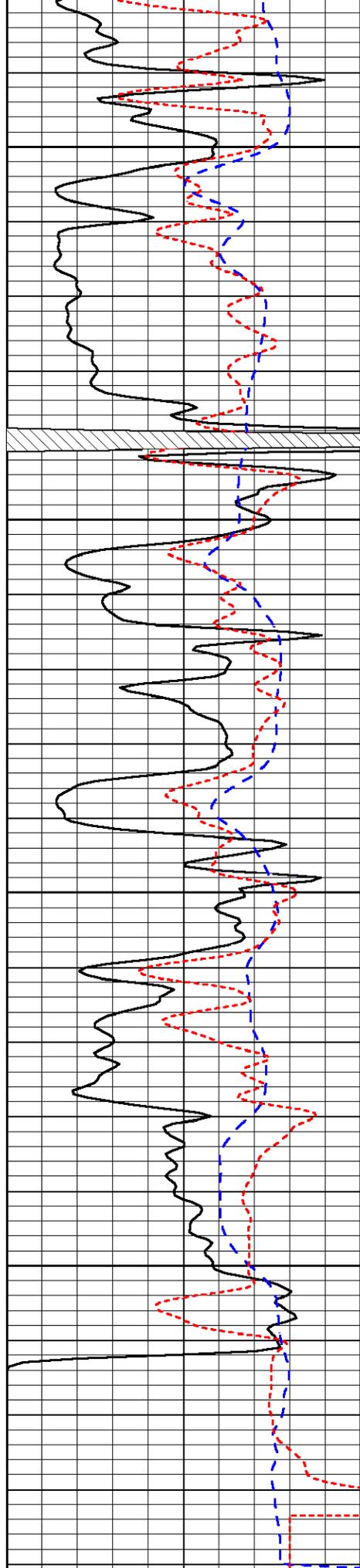


-27

-27

-23

-23



3800

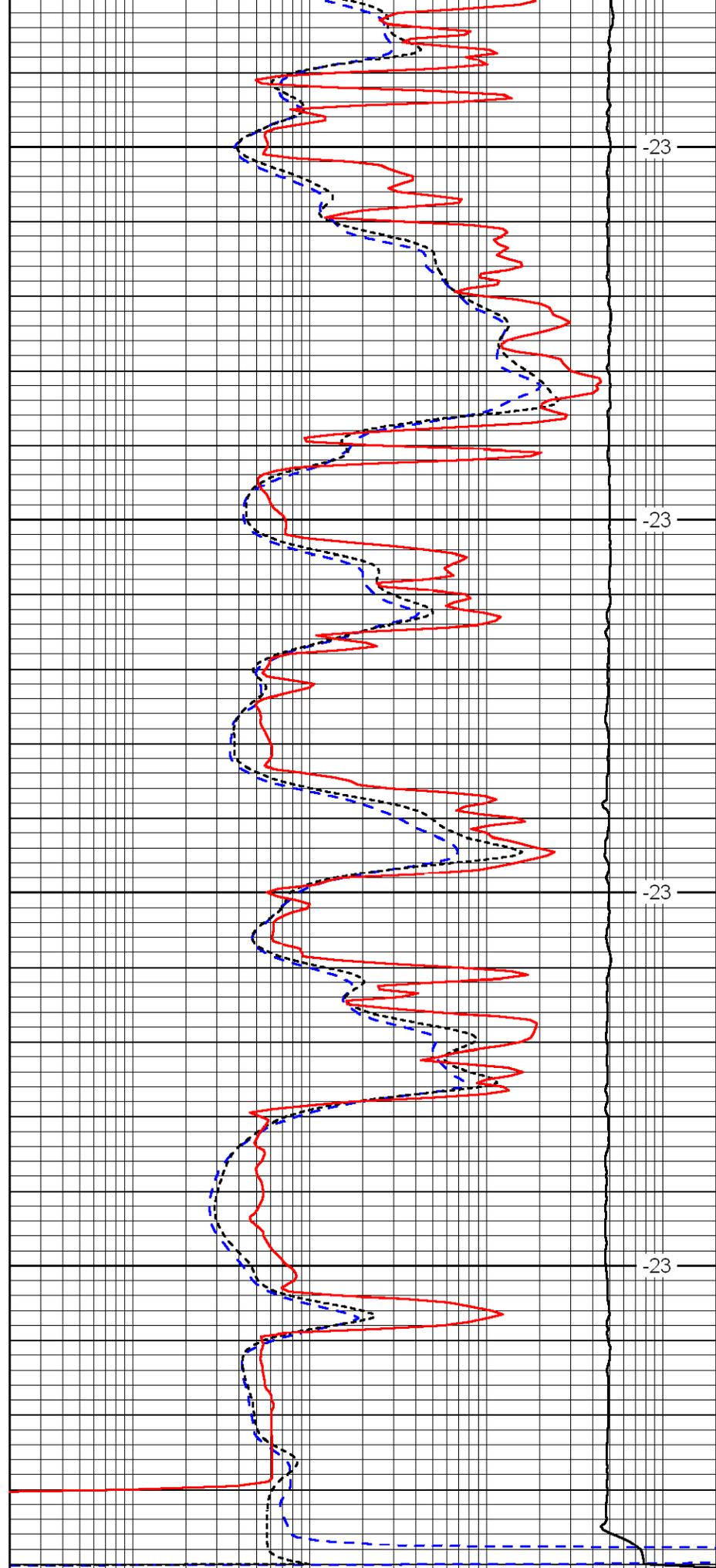
3850

3900

3950

0 Gamma Ray 150

200 SP (MV) 0



-23

-23

-23

-23

0.2 Deep Resistivity (Ohm-m) 2000

0.2 Medium Resistivity (Ohm-m) 2000

-200	SP (mv)	0
-160	Rxo / Rt	40

0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
15000	Line Tension (lb)	0

LSPD
(ft/min)