



DIGITAL LOG (785) 625-3858

Dual Induction Log

API No. 15-109-20,912-00-00

Company **MAK-J Energy Operating Company, L.L.C.**
 Well **BH Berggren No. 13-5**
 Field
 County **Logan** State **Kansas**

Location **707' FSL & 707' FWL**

Sec: 5 Twp: 14S Rge: 32W

Permanent Datum **Ground Level** Elevation **2870**
 Log Measured From **Kelly Bushing** 11 Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Other Services
 CNL/CDL
 MEL/BHCS

Date	6/6/2010		Elevation	K.B. 2881
Run Number	One		D.F.	G.L. 2870
Depth Driller	4220			
Depth Logger	4220			
Bottom Logged Interval	4219			
Top Log Interval	350			
Casing Driller	8.625 @ 352			
Casing Logger	346			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity, ppm CL	5300			
Density / Viscosity	9.3 54			
pH / Fluid Loss	10.0 8.8			
Source of Sample	Flowline			
Rm @ Meas. Temp	.45 @ 78			
Rmf @ Meas. Temp	.34 @ 78			
Rmc @ Meas. Temp	.61 @ 78			
Source of Rmf / Rmc	Charts			
Rm @ BHT	.29 @ 120			
Operating Rig Time	4 1/2 Hours			
Max Rec. Temp. F	120			
Equipment Number	10			
Location	Hays			
Recorded By	J. Long			
Witnessed By	Justin Carter			

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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

Oakley, 17 South to Mustang Rd, 3 West, 1 South, East Into at Tank Batteries

Database File: c:\warrior\data\mak-j_bh berggren no. 13-5\makhd.db
 Dataset Pathname: dil/makjstck
 Presentation Format: dil2in
 Dataset Creation: Sun Jun 06 11:45:45 2010
 Charted by: Depth in Feet scaled 1:600

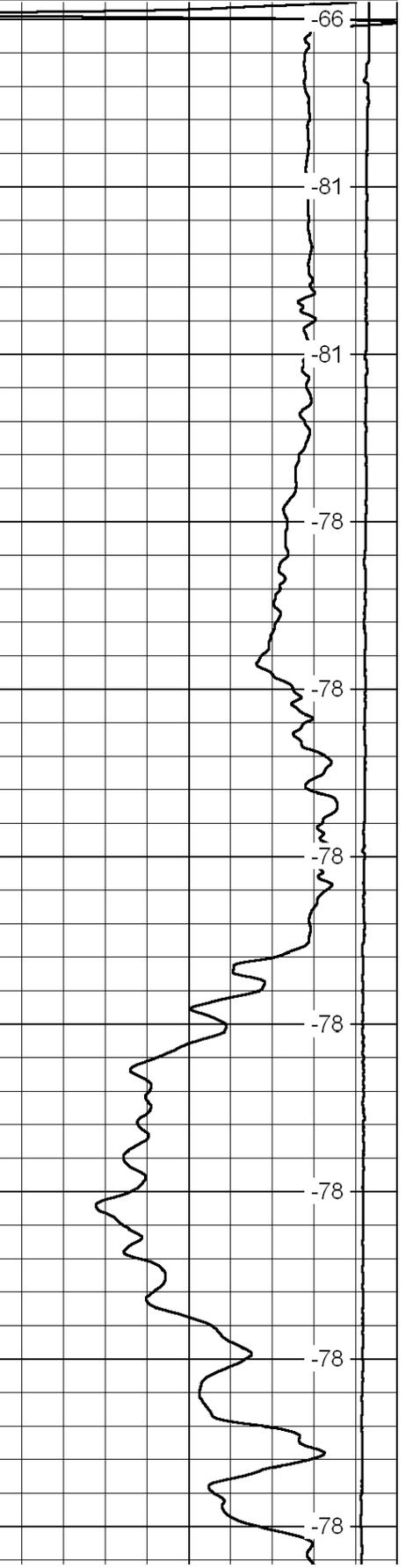
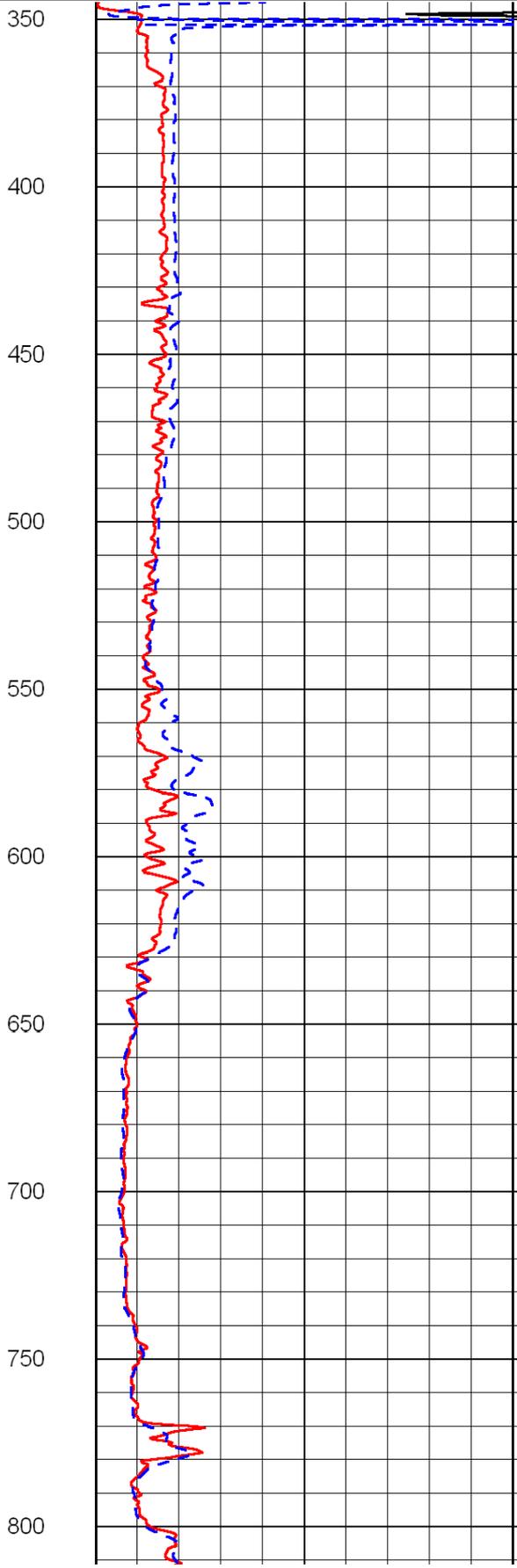
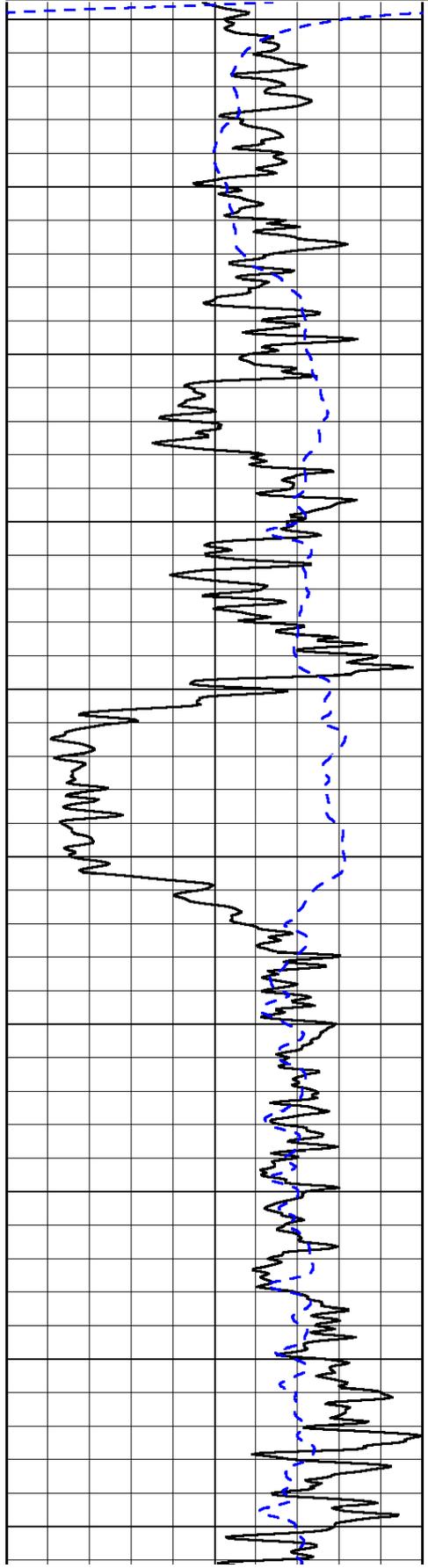
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-200	SP (mV)	0

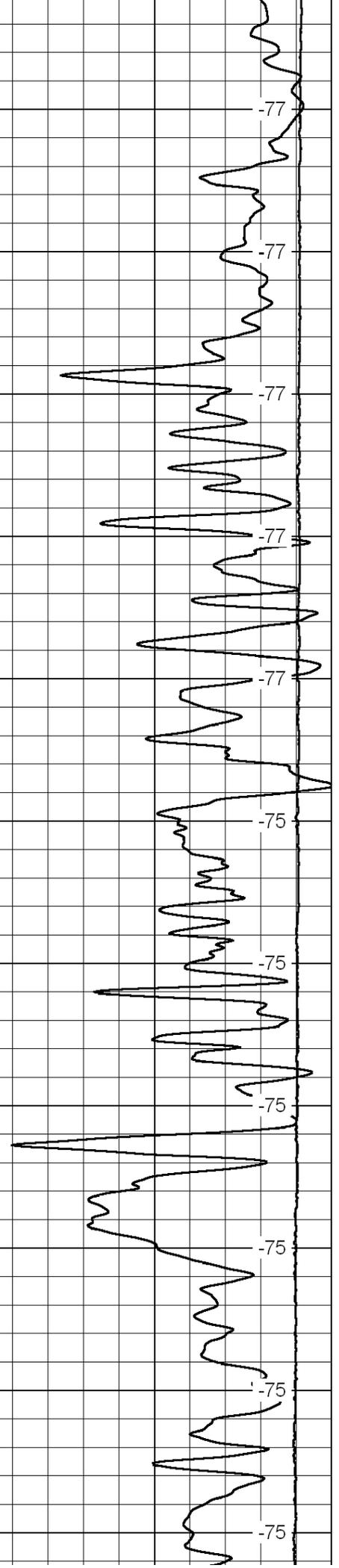
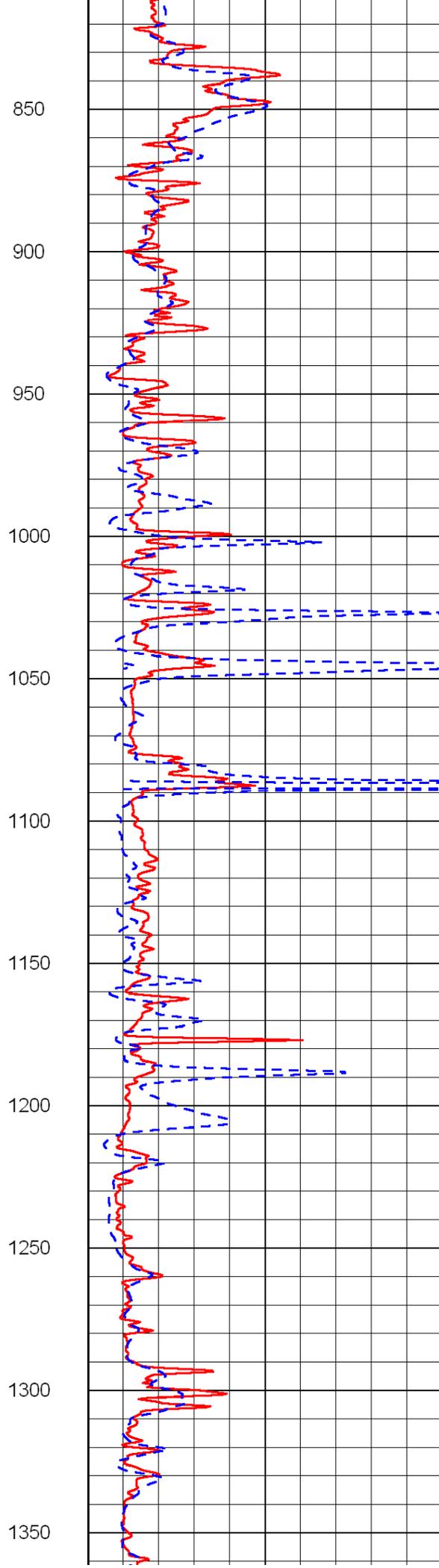
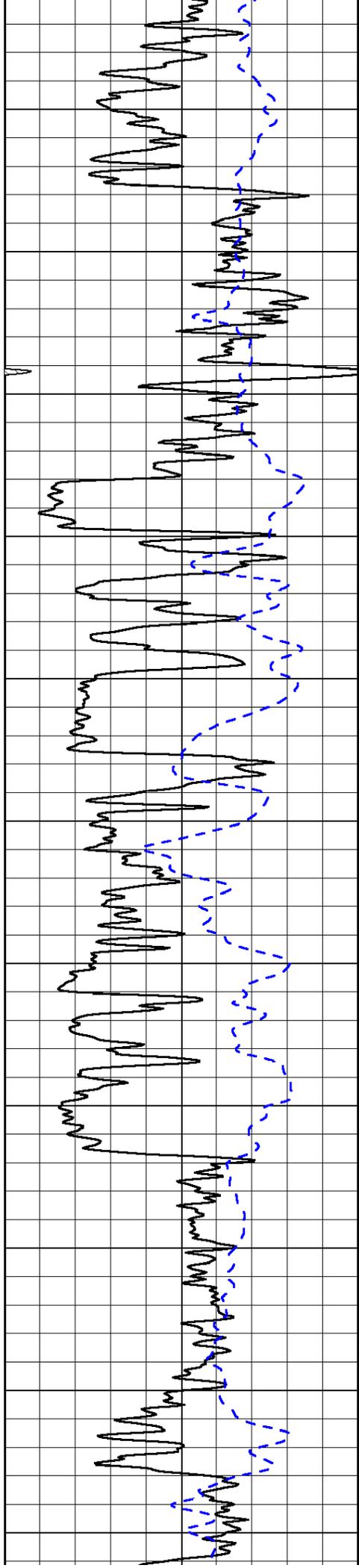
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0	Deep Resistivity	50

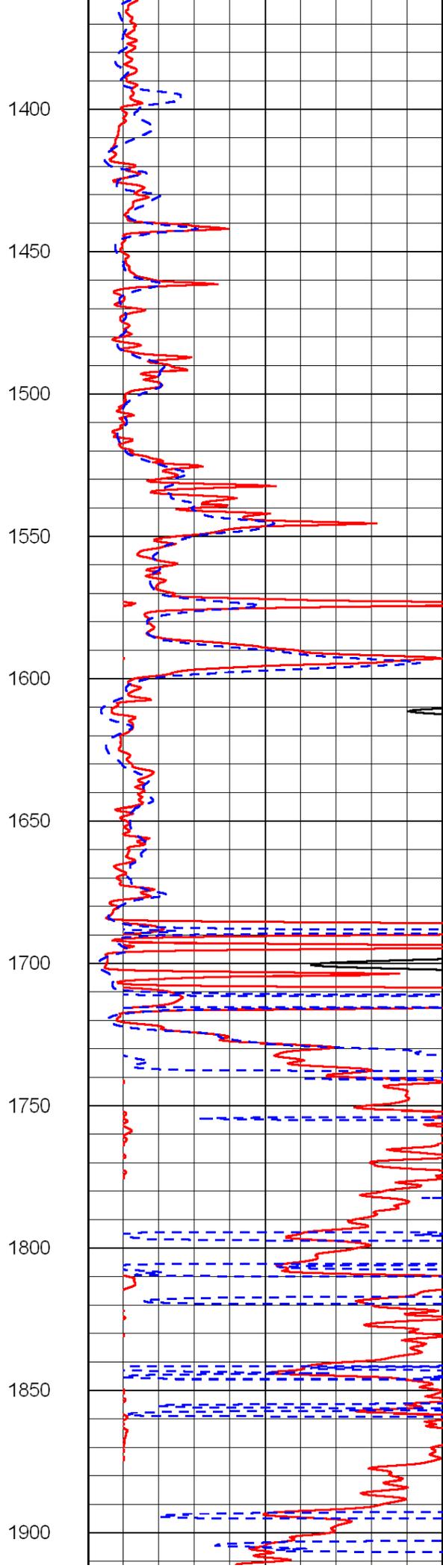
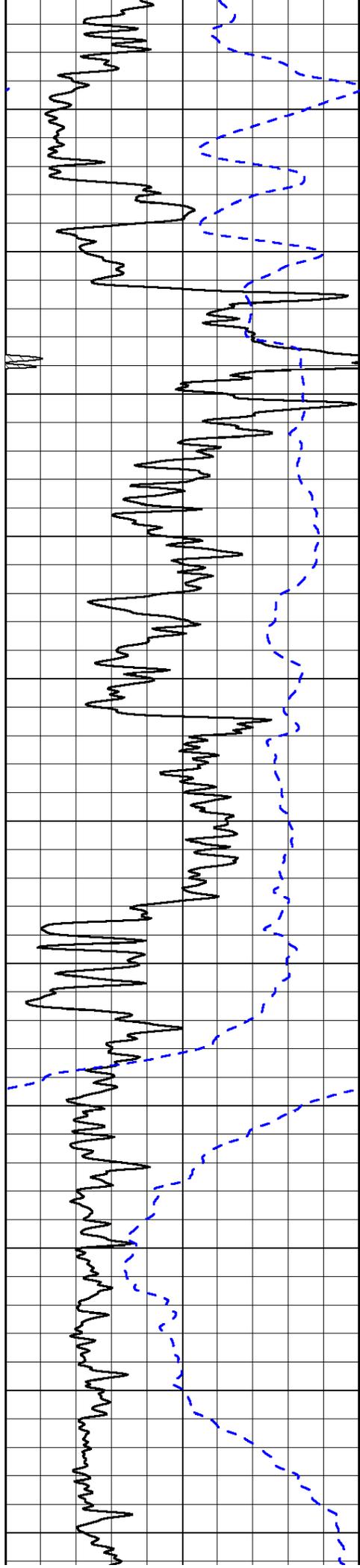
LSPD

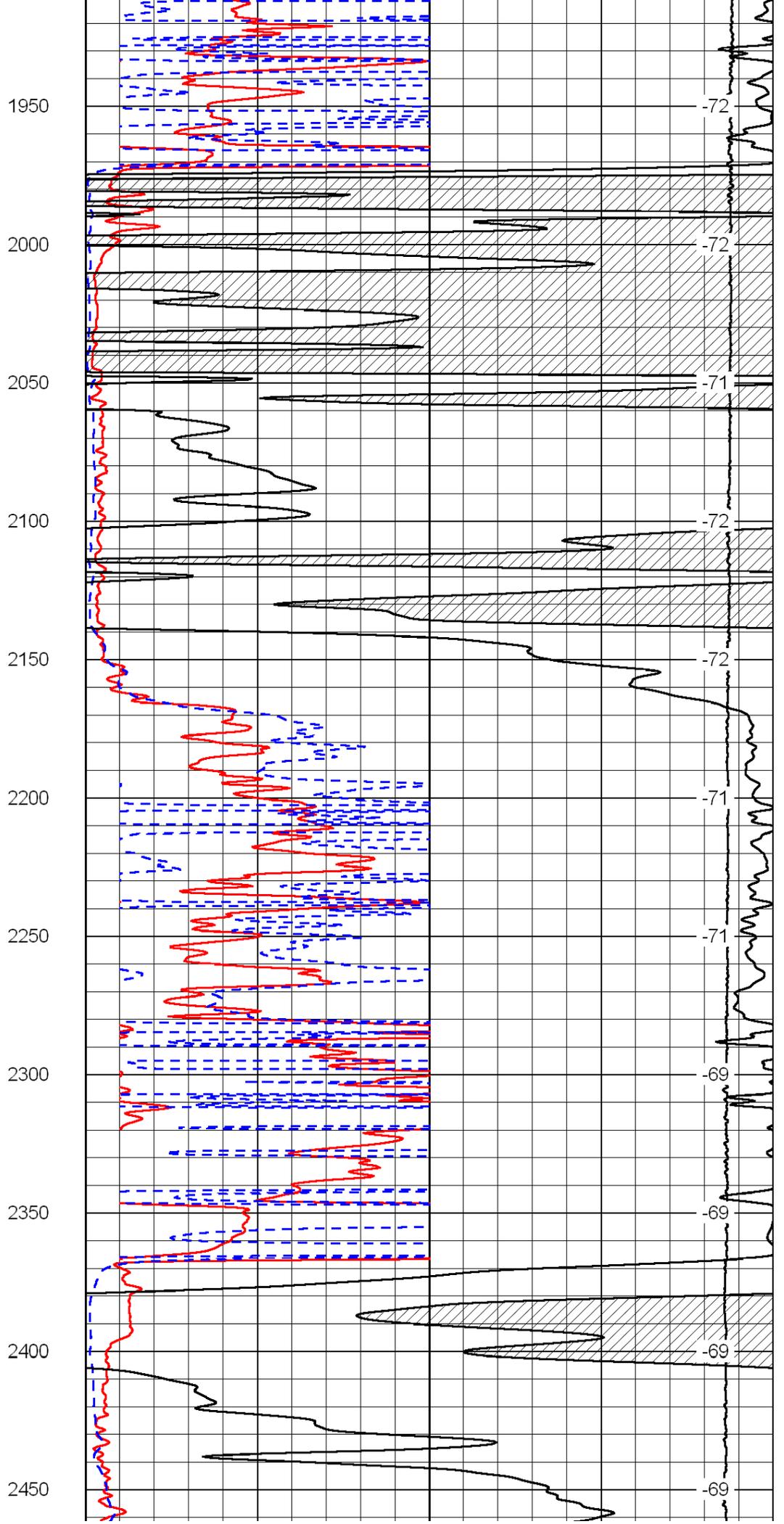
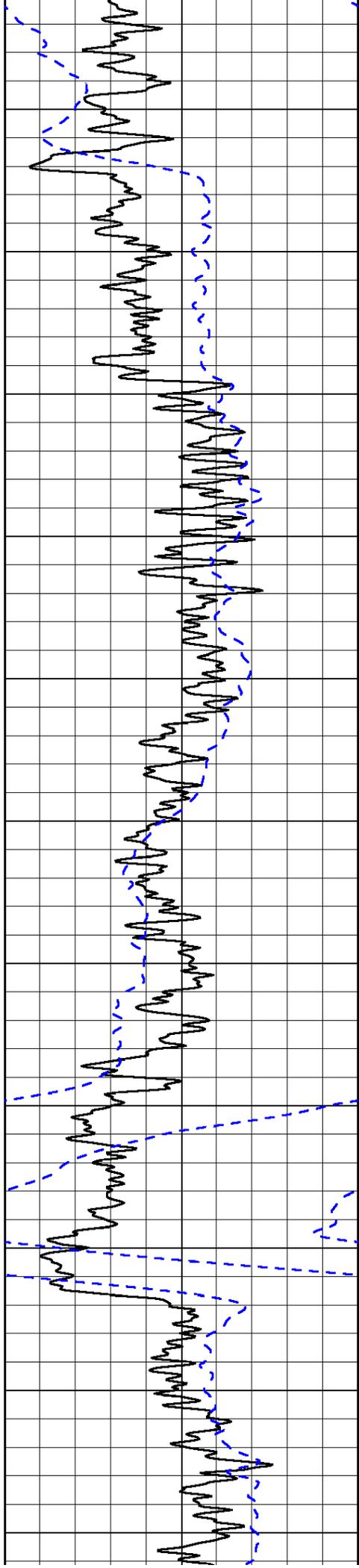
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15000	Line Tension	0

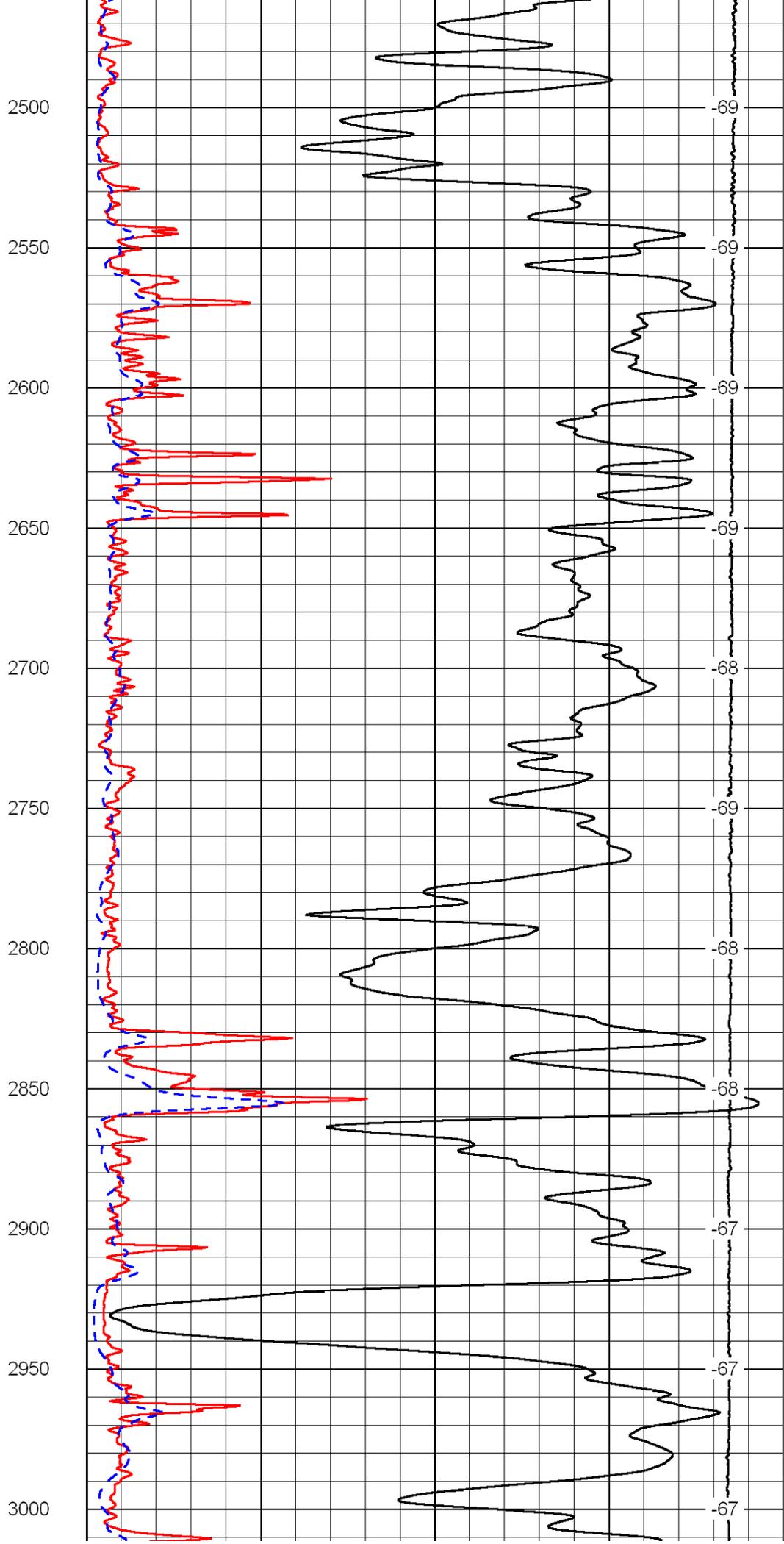
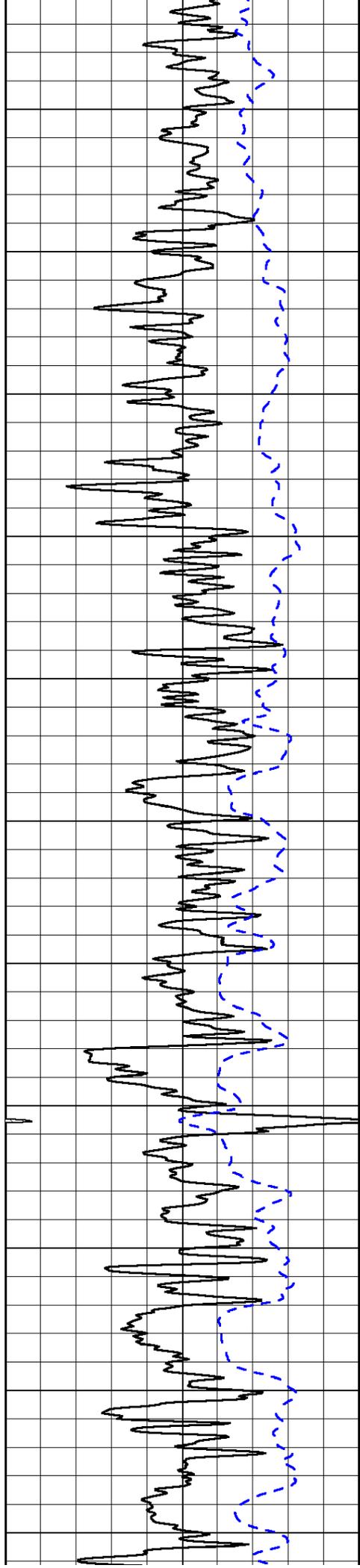
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50	Deep Resistivity	500

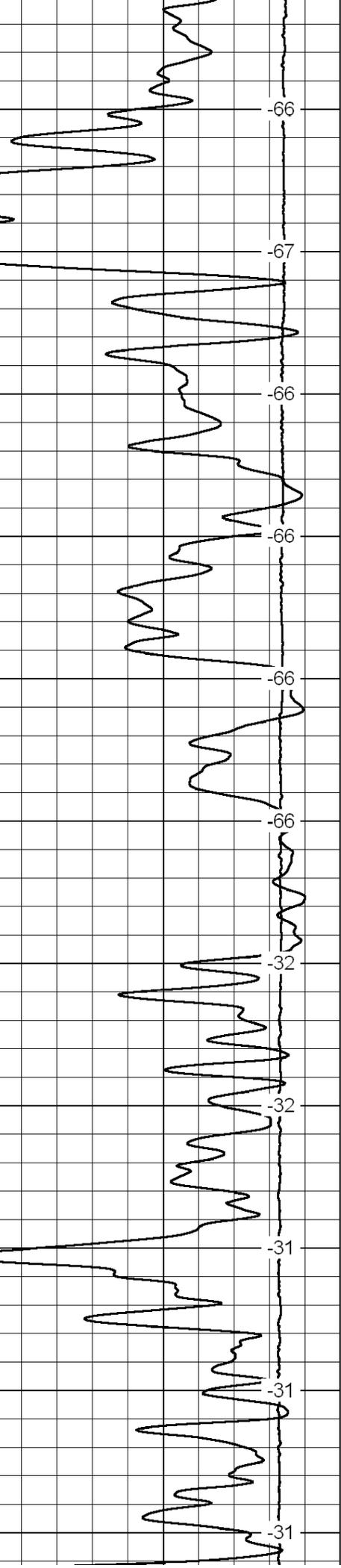
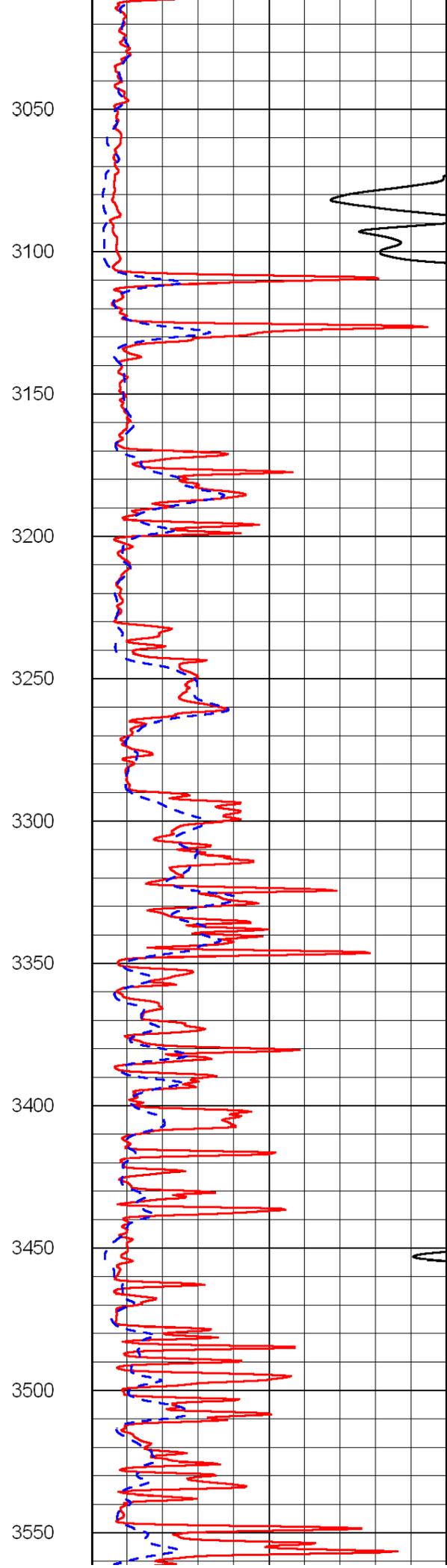
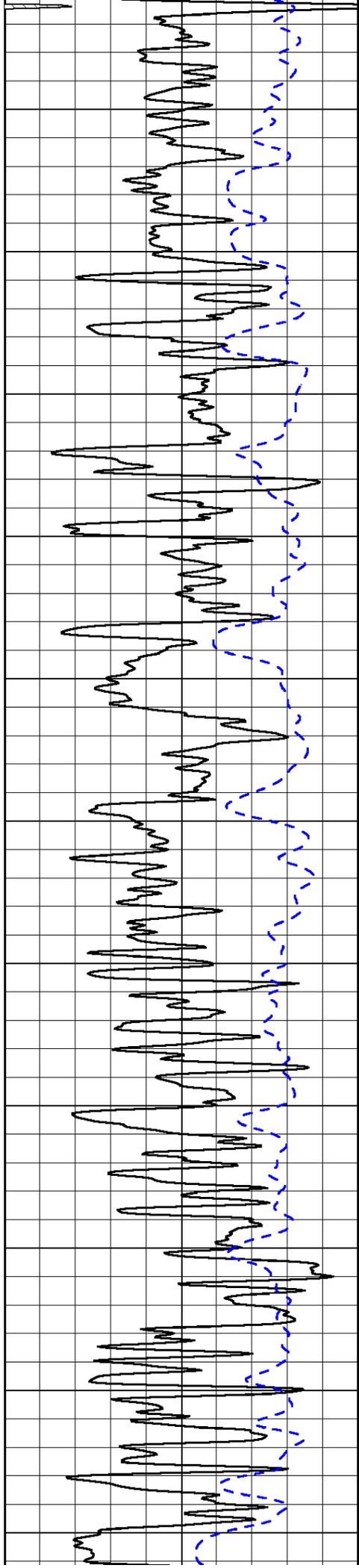


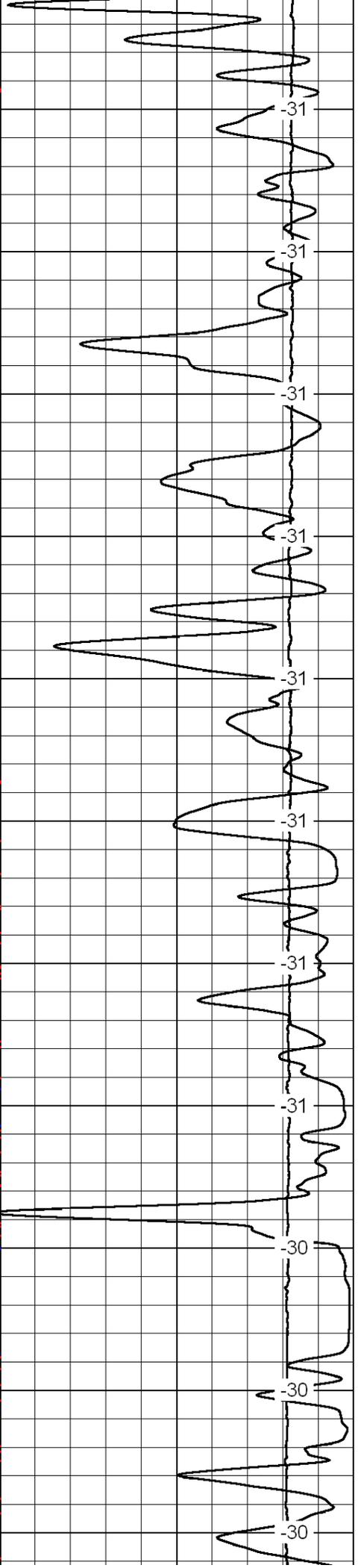
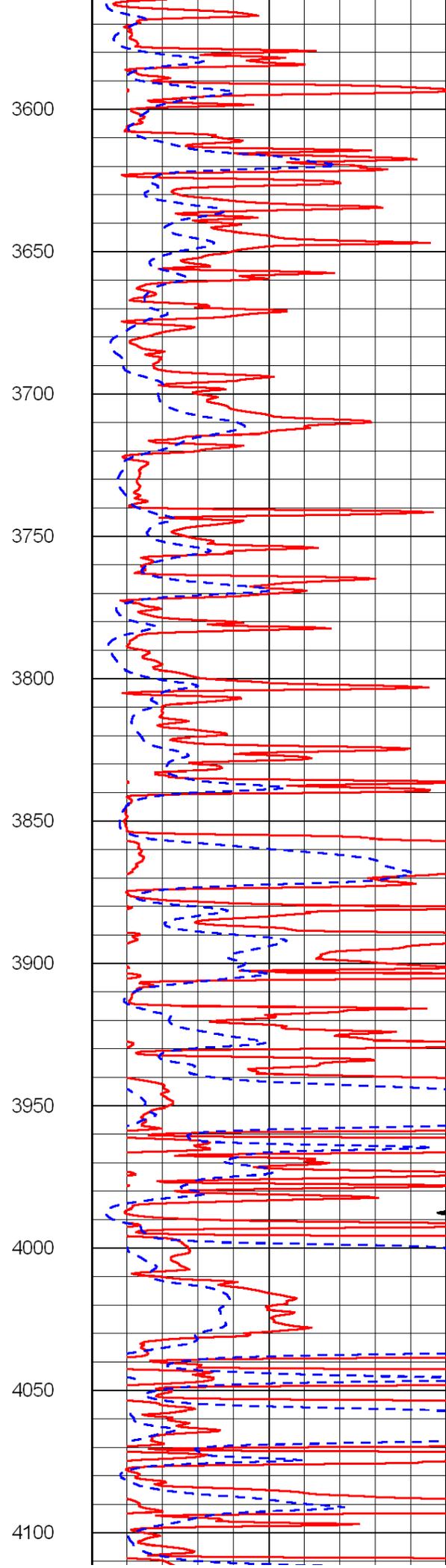
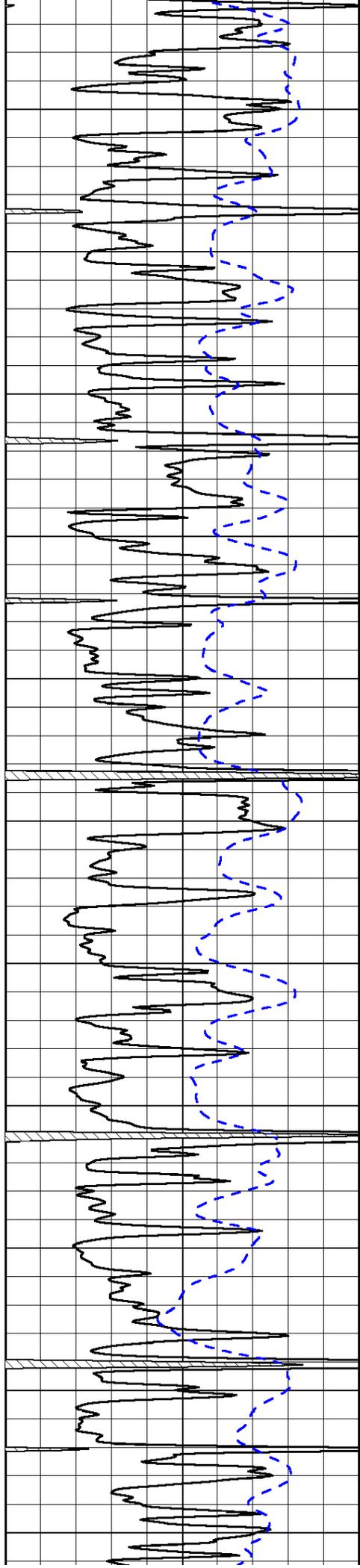


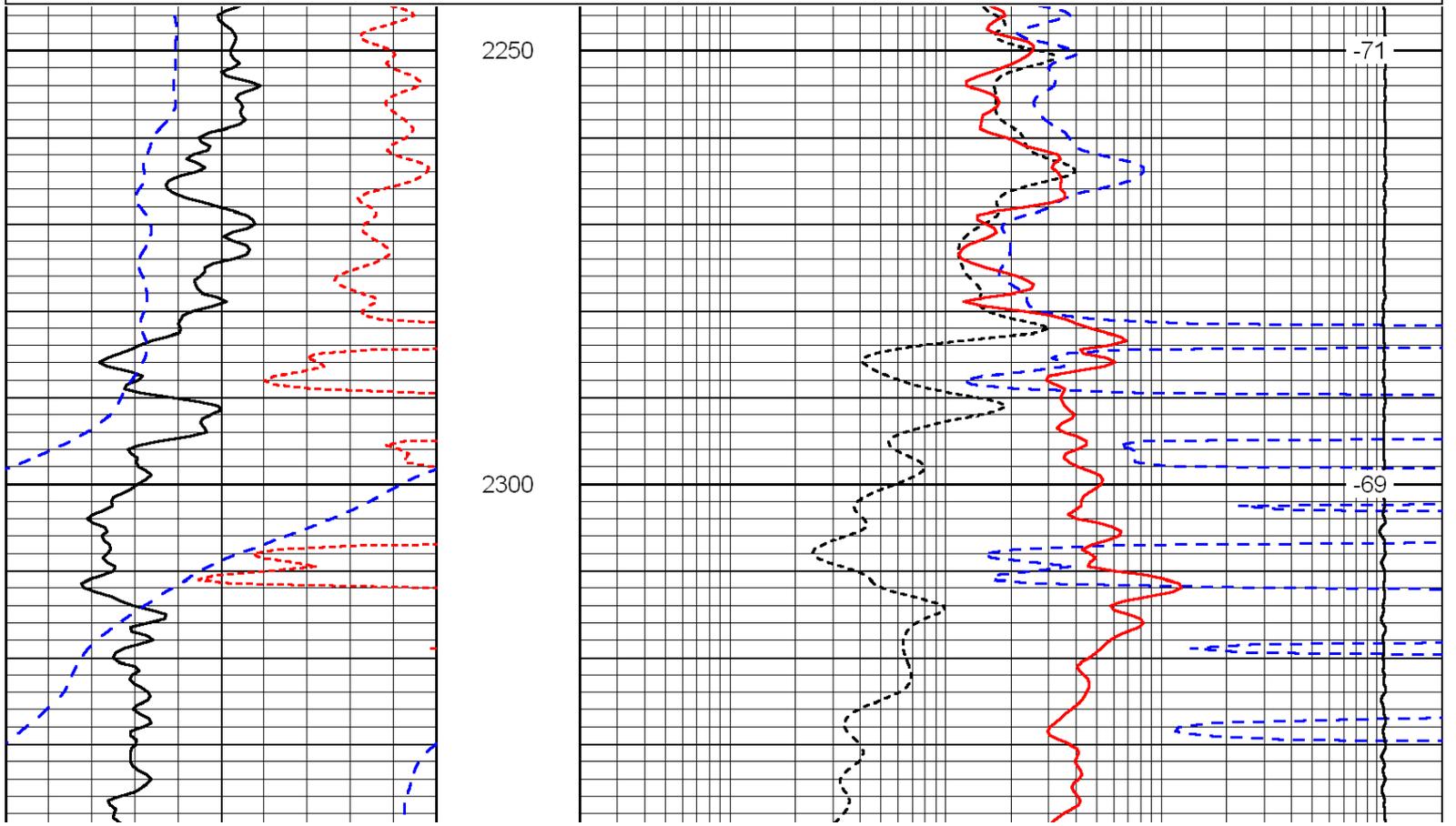
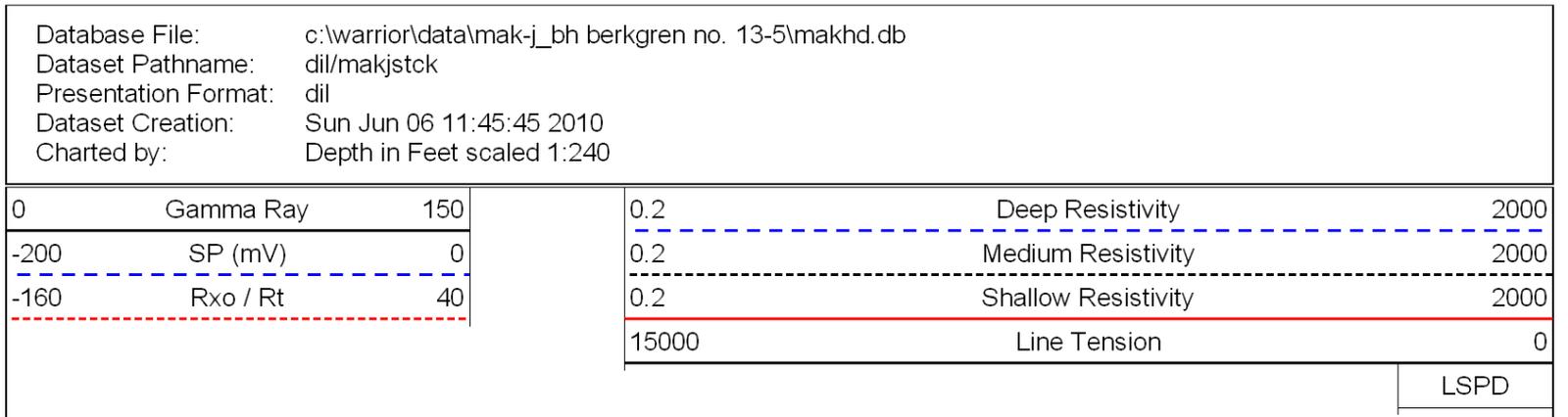
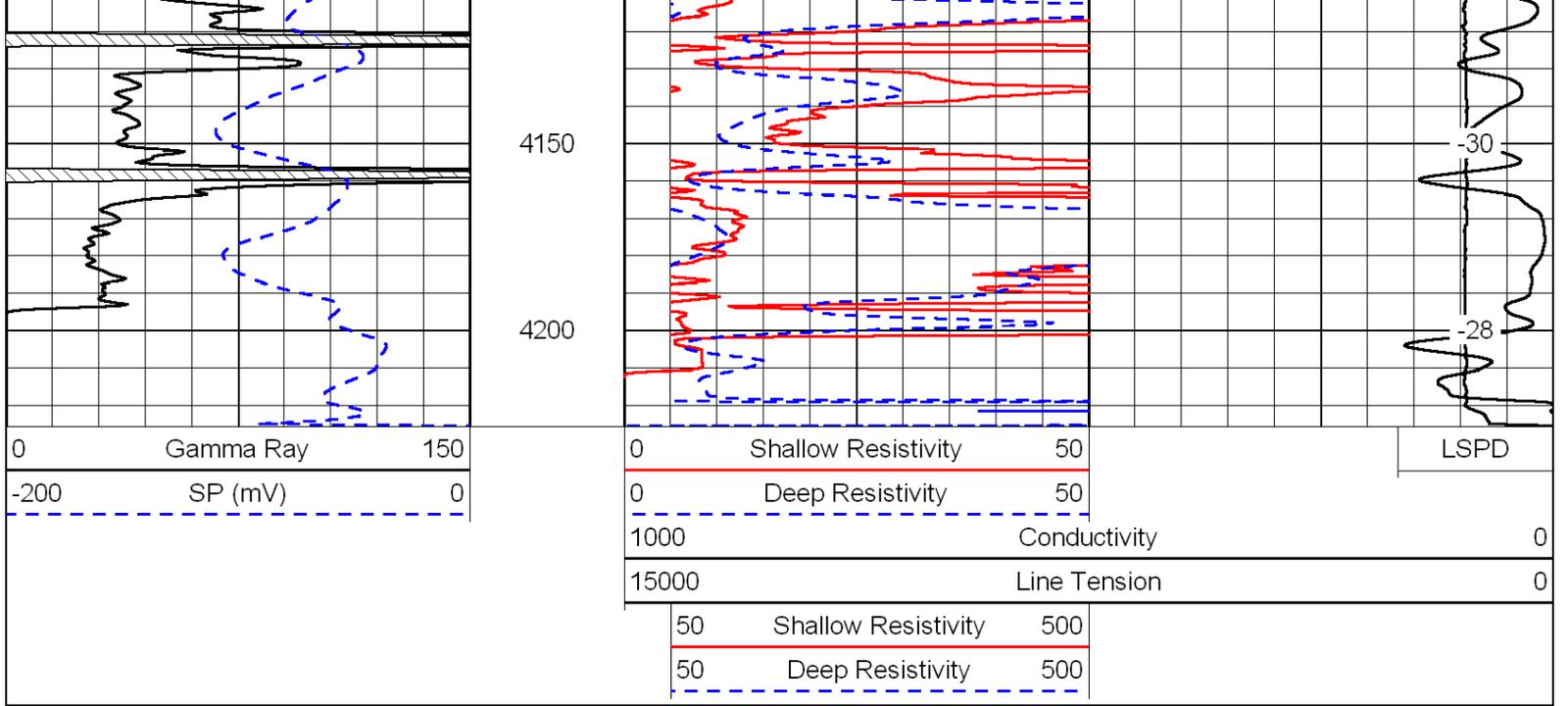


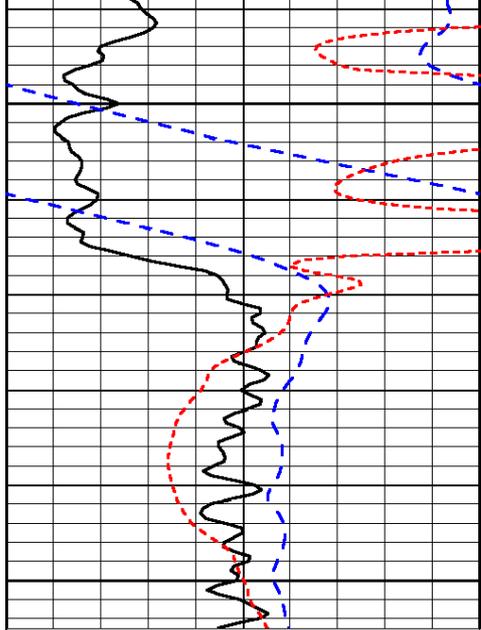








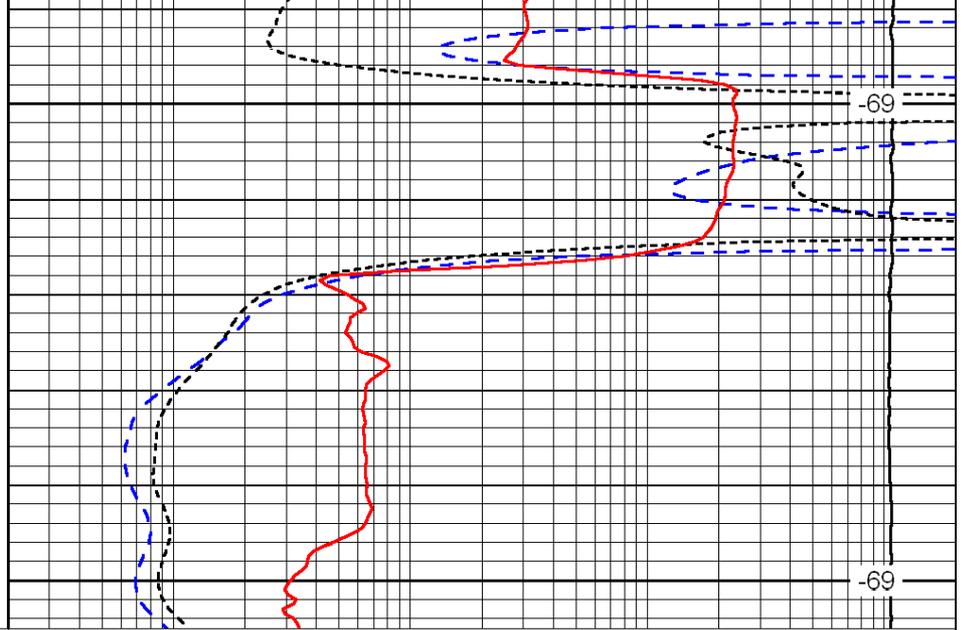




2350

2400

0	Gamma Ray	150
-200	SP (mV)	0
-160	Rxo / Rt	40



-69

-69

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

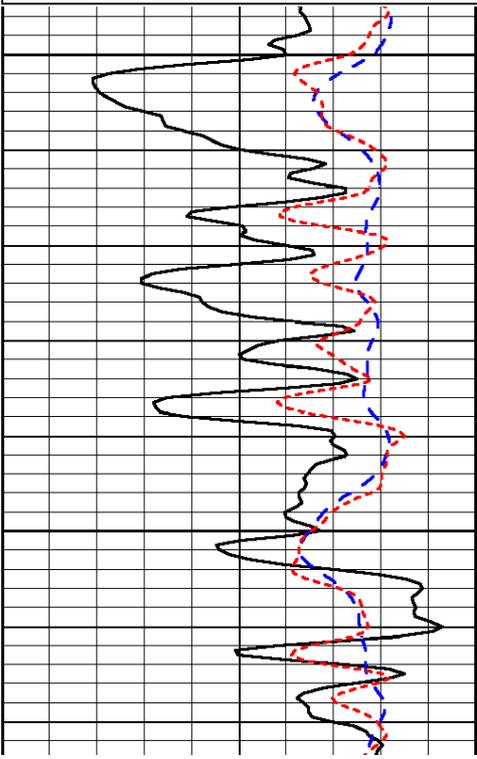
LSPD

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 Dataset Pathname: dil/makjstck
 Presentation Format: dil
 Dataset Creation: Sun Jun 06 11:45:45 2010
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-200	SP (mV)	0
-160	Rxo / Rt	40

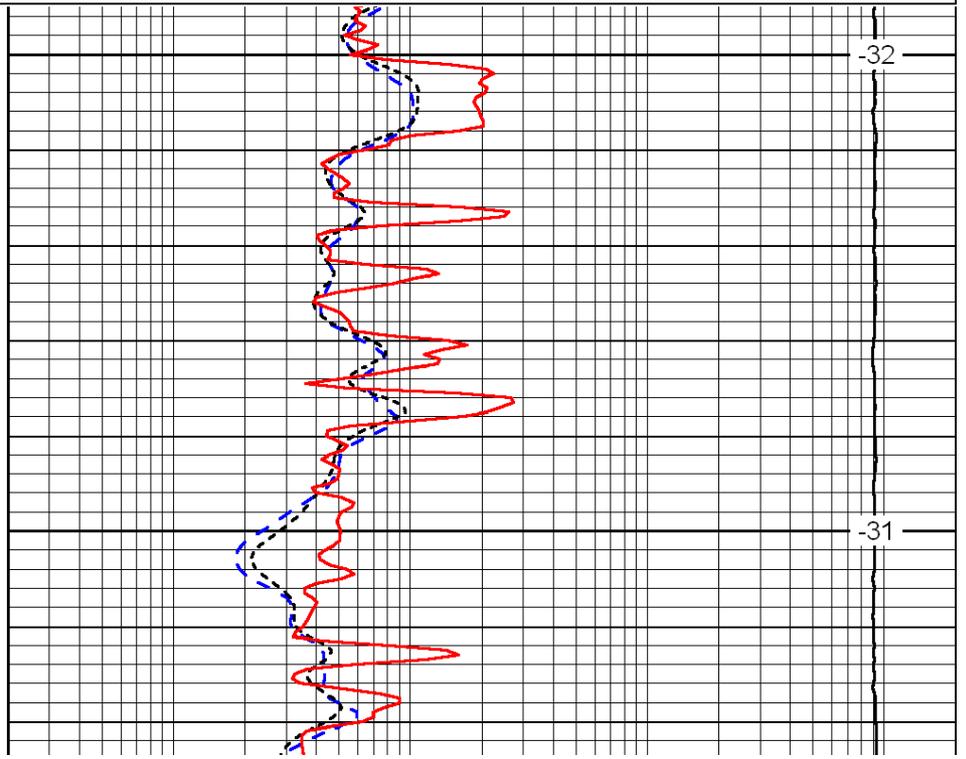
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



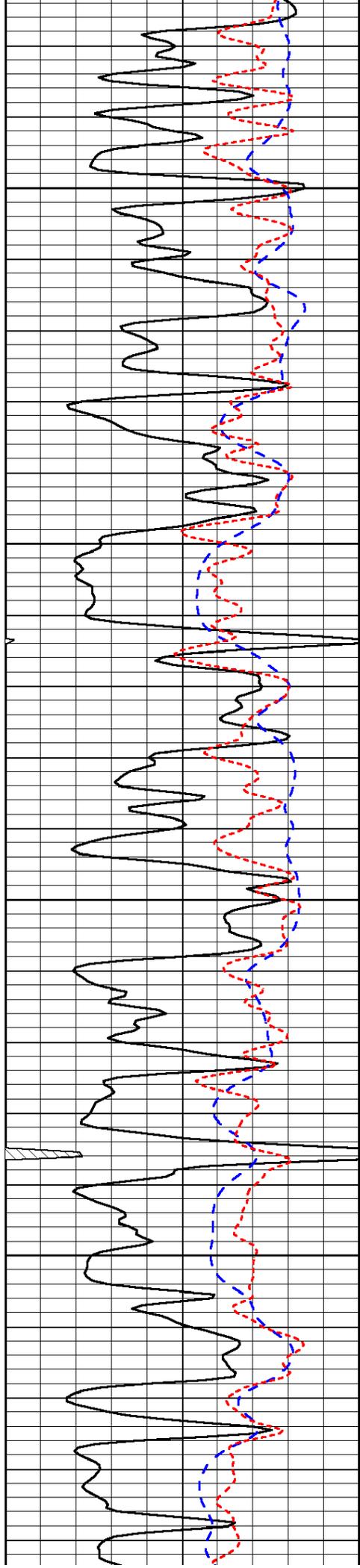
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3450



-32

-31

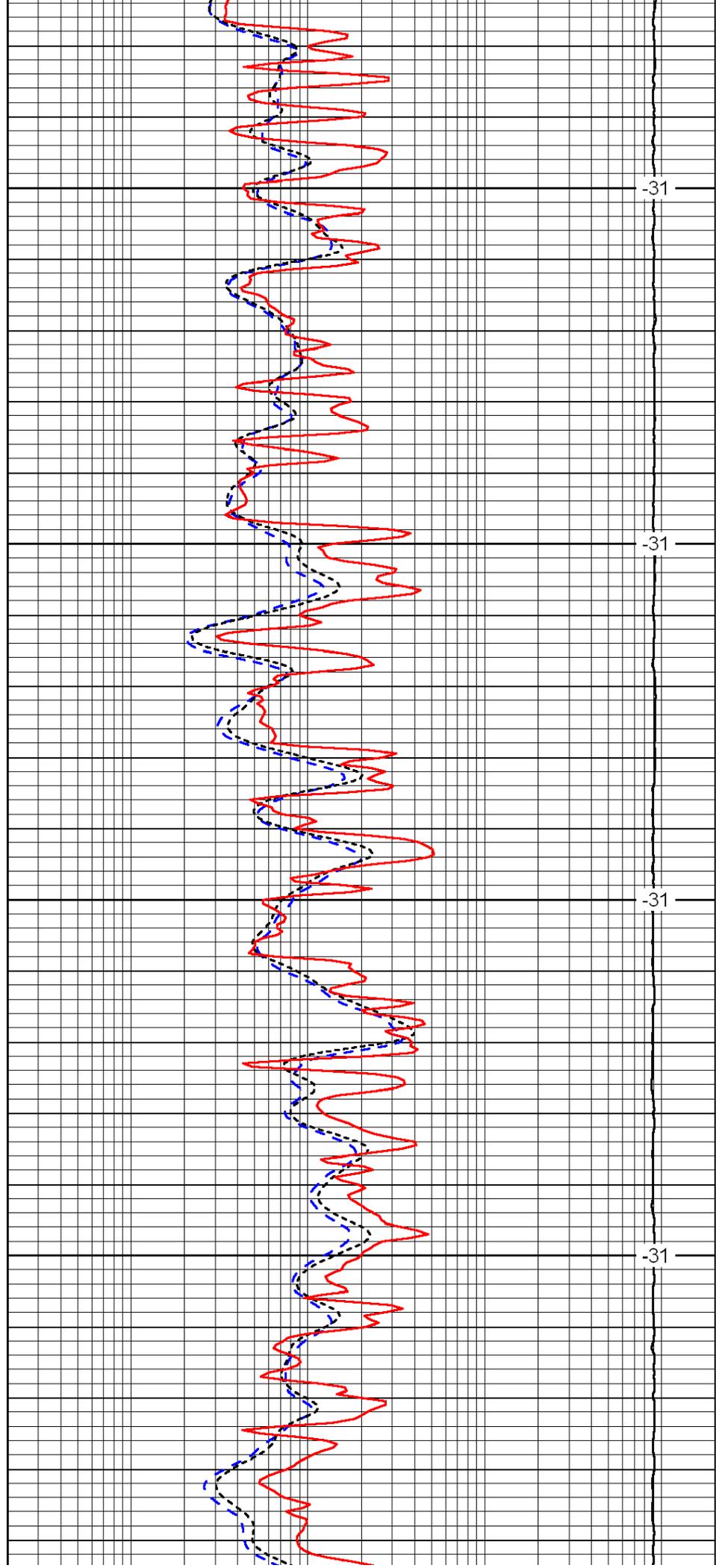


3500

3550

3600

3650

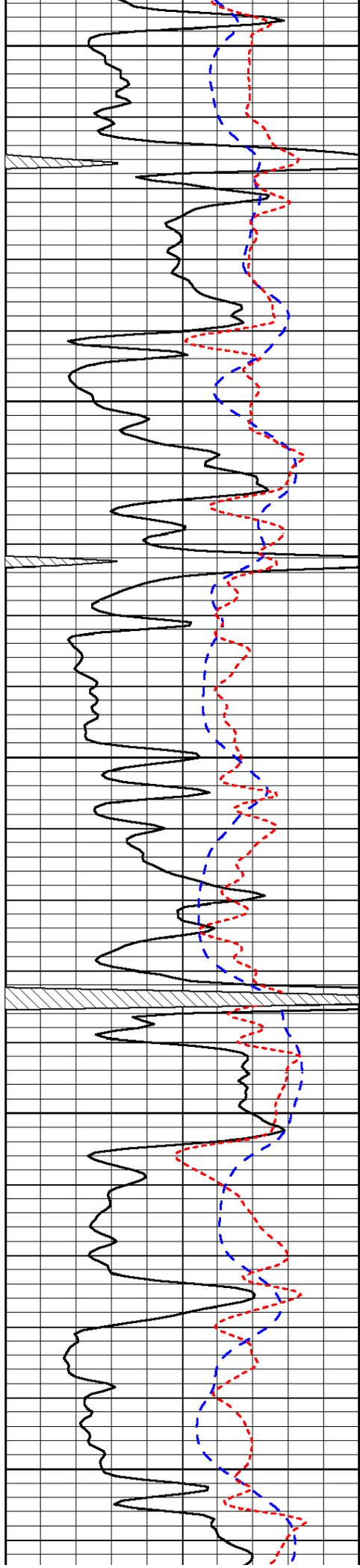


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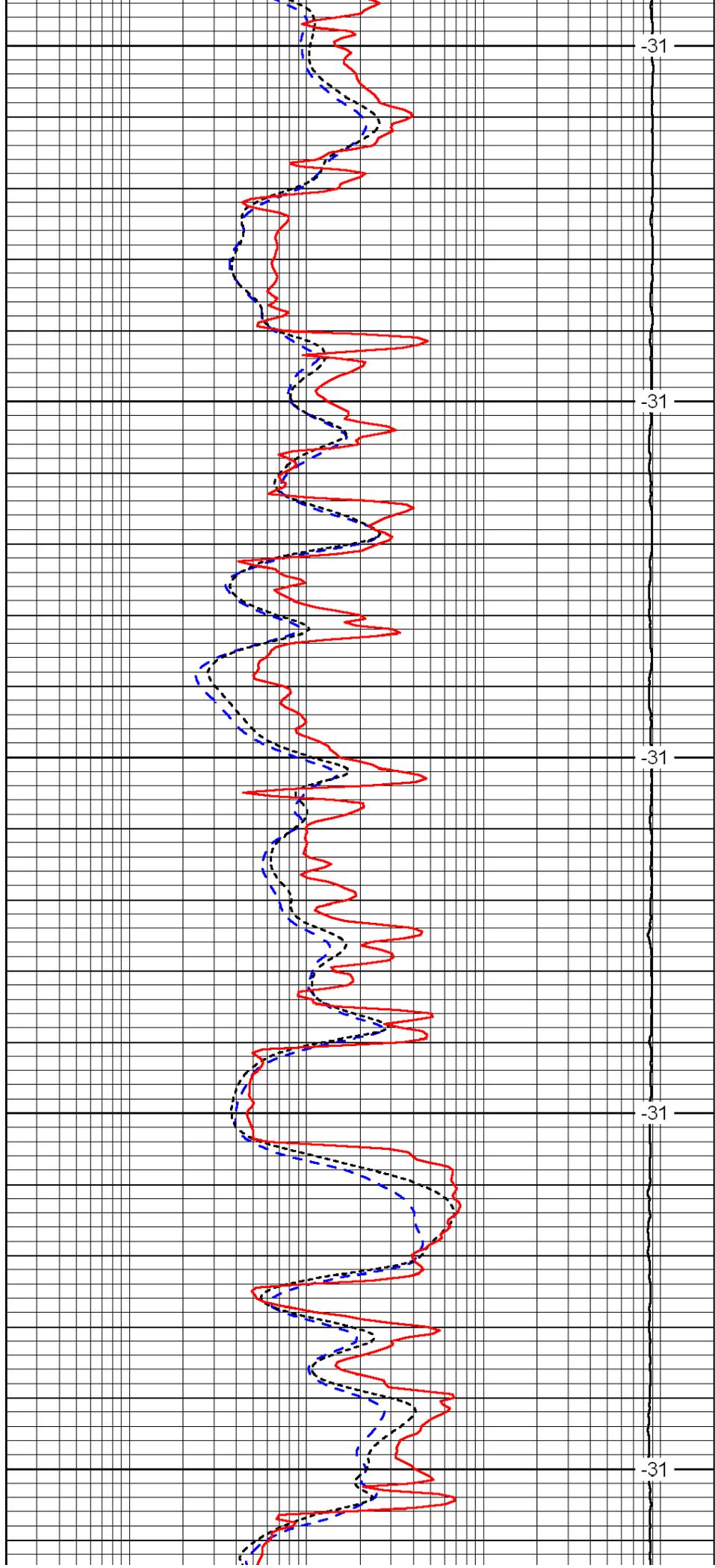
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3750

3800

3850

3900



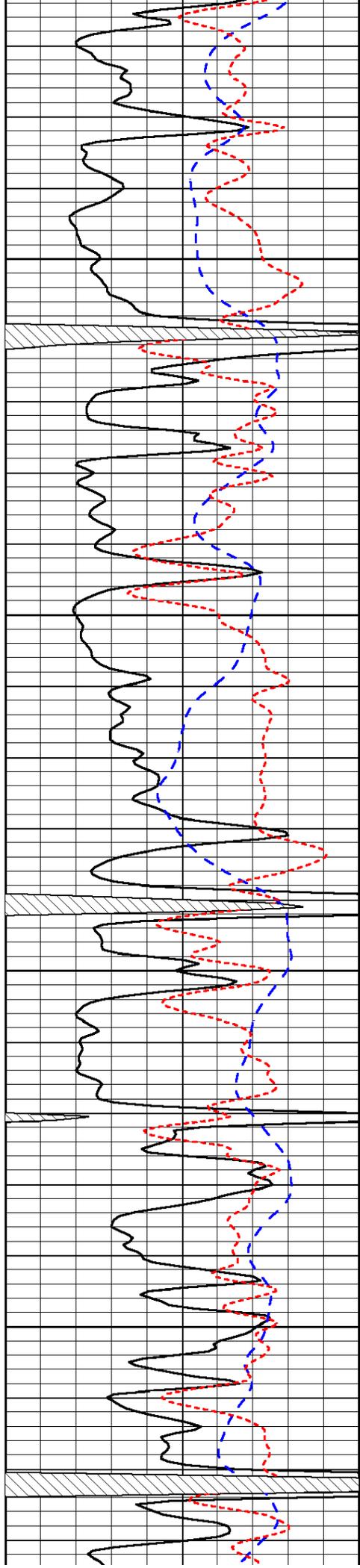
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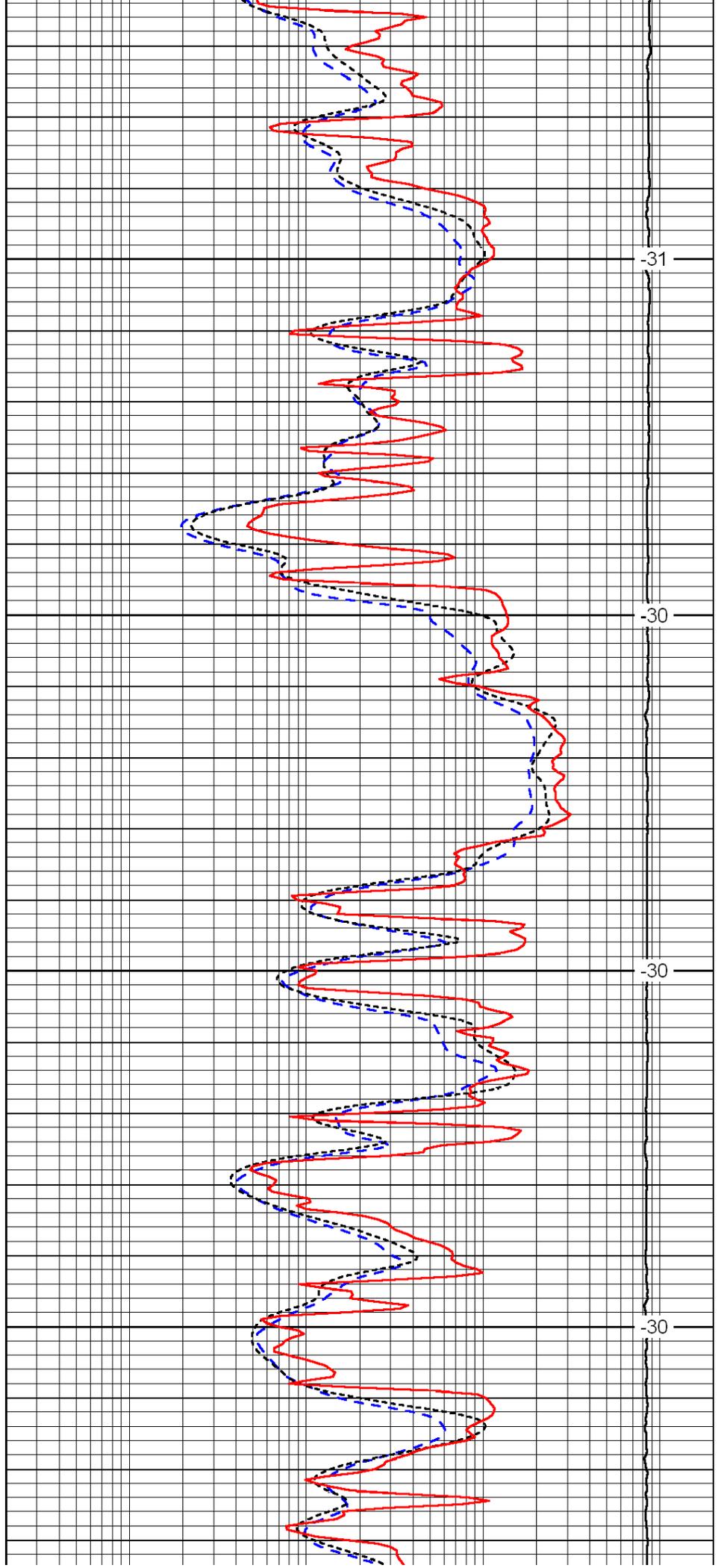


3950

4000

4050

4100

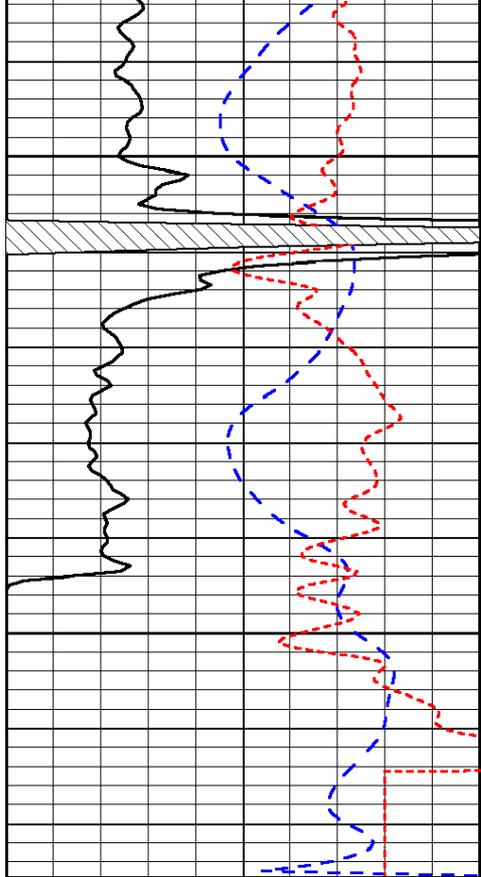


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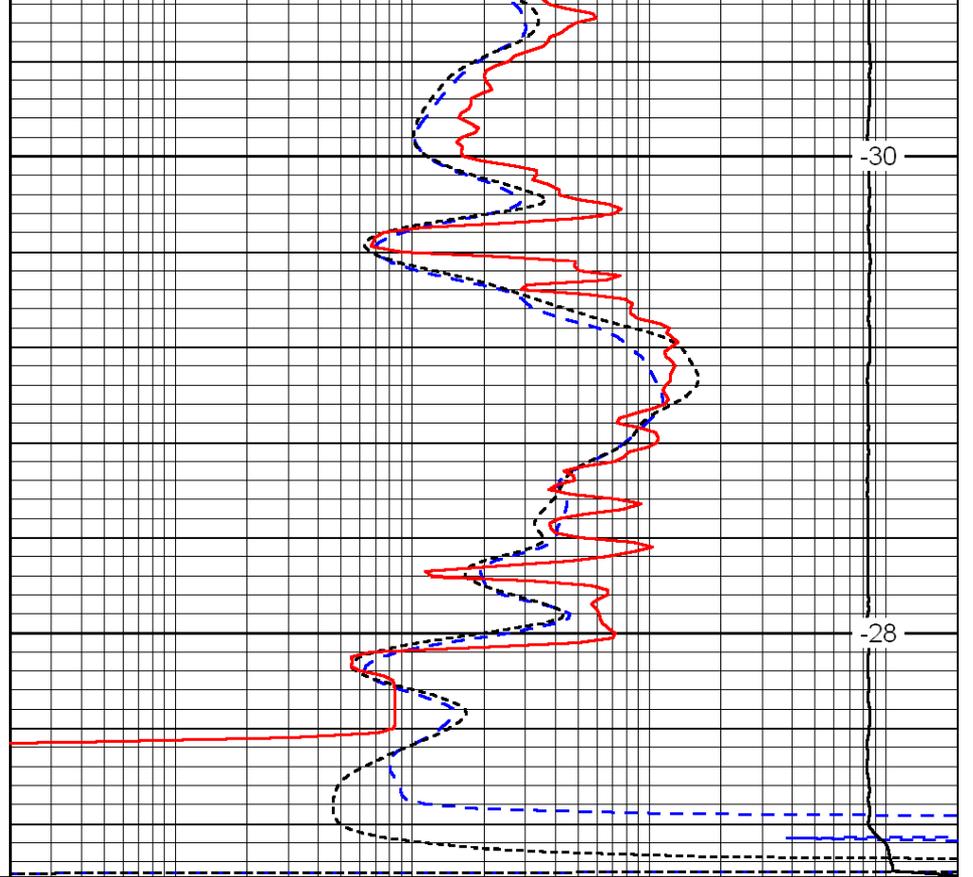
-30



0	Gamma Ray	150
-200	SP (mV)	0
-160	Rxo / Rt	40

4150

4200



-30

-28

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

LSPD