



Pioneer Energy Services

Dual Induction Log

API No.	15-051-26,557-00-00		
Company	TDL, Inc.		
Well	Frieda No. 1		
Field	Schoenchen Townsite		
County	Eljis	State	Kansas
Location	NE-SW-SW-NW 2050' FL & 615' FWL		
Sec: 28	Twp: 15S	Rge: 18W	Other Services CNL/CDL MEL

Permanent Datum	Ground Level	Elevation 1941	K.B. 1951 D.F. 1941 G.L. 1941
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing		
Date	9/11/13		
Run Number	One		
Depth Driller	3750		
Depth Logger	3750		
Bottom Logged Interval	3749		
Top Log Interval	1100		
Casing Driller	8.625 @ 1118		
Casing Logger	1113		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	4.800		
Density / Viscosity	9.4	53	
pH / Fluid Loss	10.0	8.4	
Source of Sample	Flowline		
Rm @ Meas. Temp	.30	@ 86	
Rmf @ Meas. Temp	.23	@ 86	
Rmc @ Meas. Temp	.41	@ 86	
Source of Rmf / Rmc	Charts		
Rm @ BHT	.23	@ 114	
Operating Rig Time	3 1/2 Hours		
Max Rec. Temp. F	114		
Equipment Number	10		
Location	Hays		
Recorded By	J. Henrickson		
Witnessed By	Herb Deines		

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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

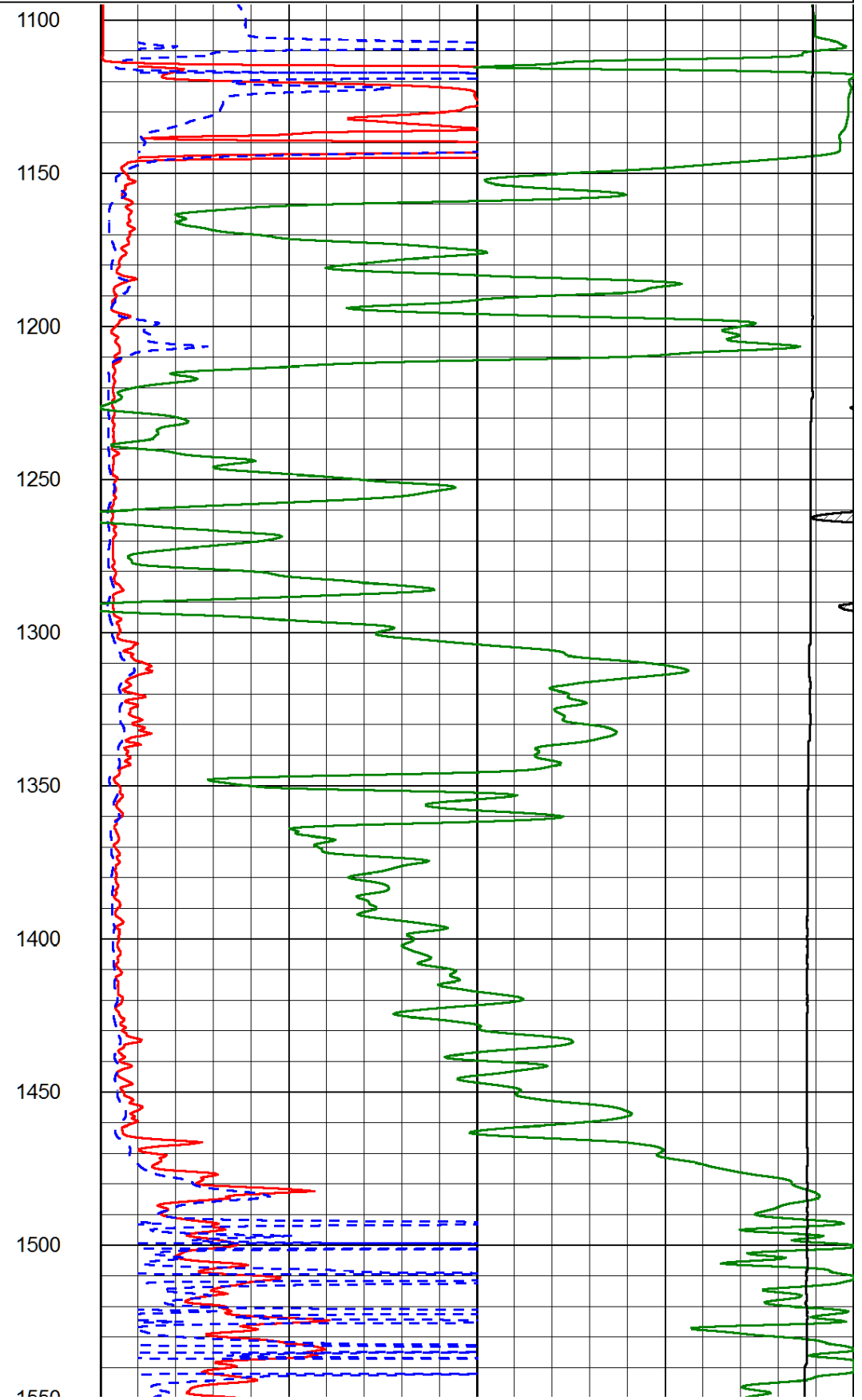
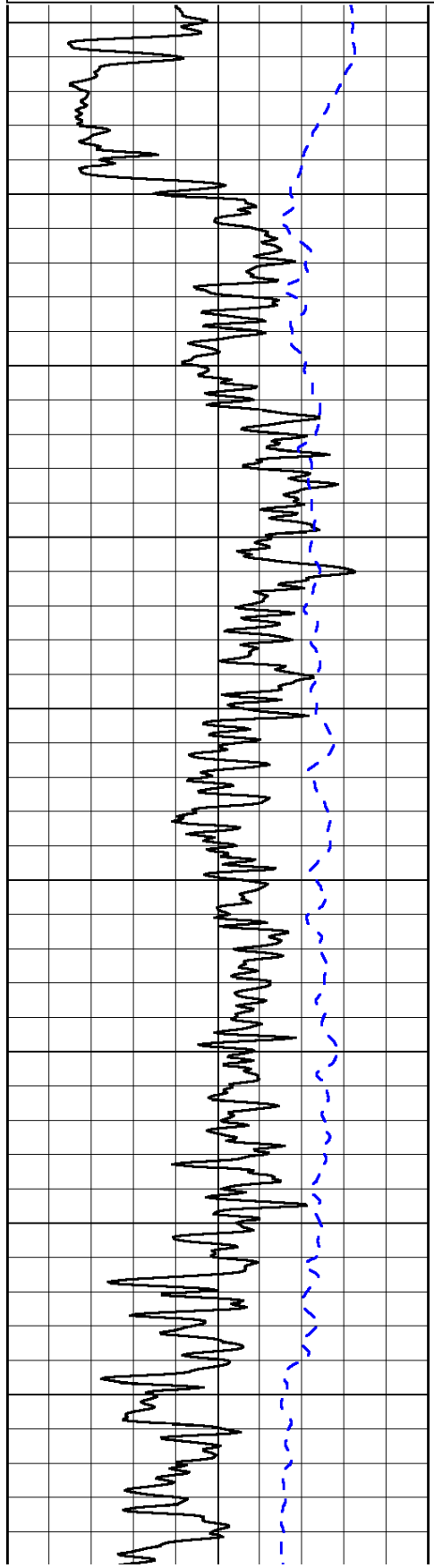
Thank you for using Log-Tech, Inc.
(785) 625-3858

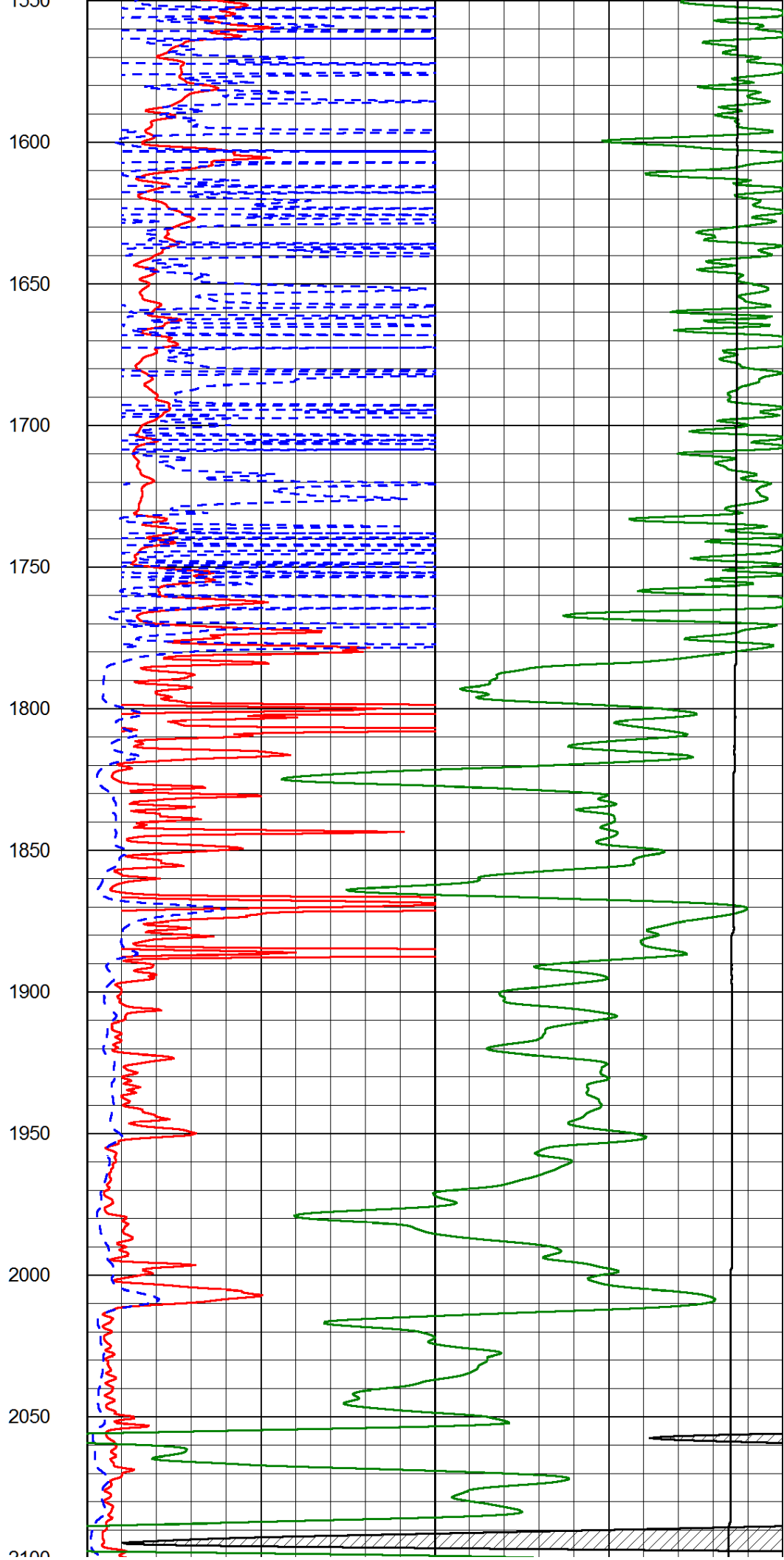
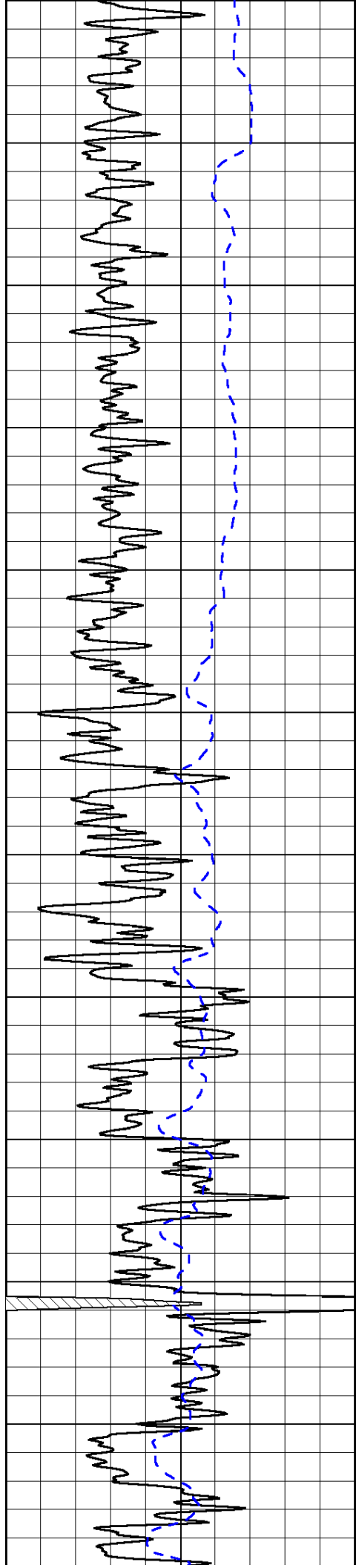
Hays Kansas
From Shop, South on 240th to Stop Sign, 4 1/4 South, East Into

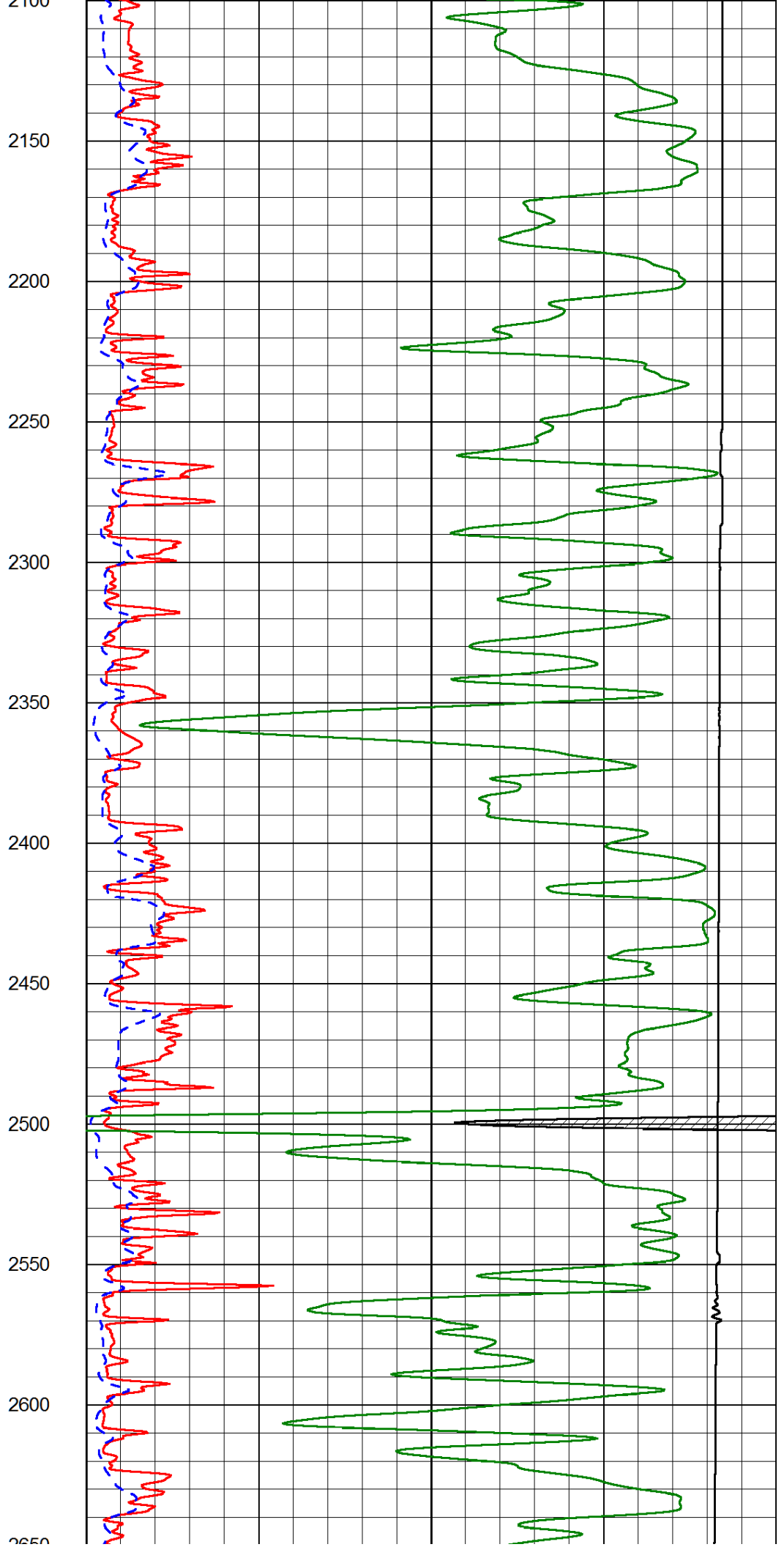
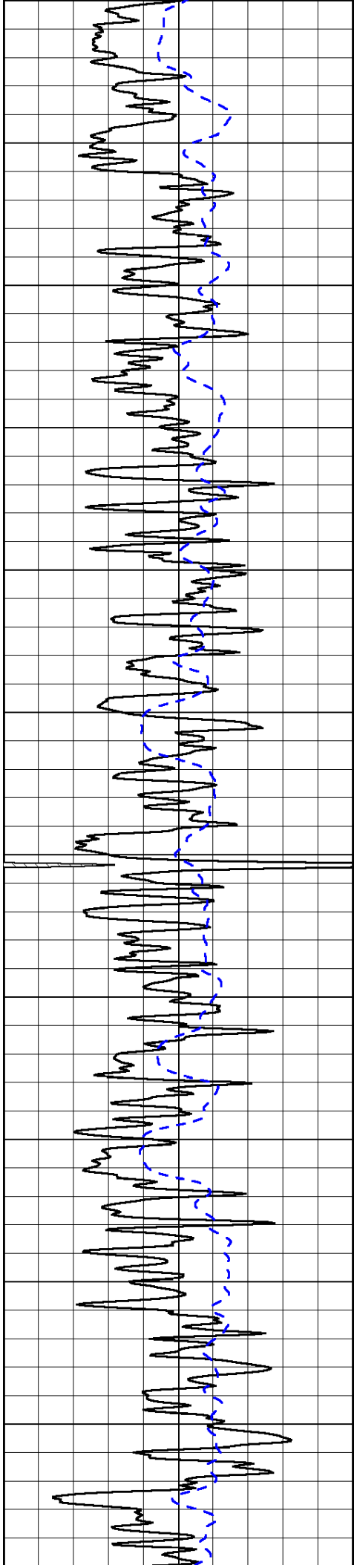
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 Presentation Format: dil2in
 Dataset Creation: Thu Sep 12 00:34:24 2013
 Charted by: Depth in Feet scaled 1:600

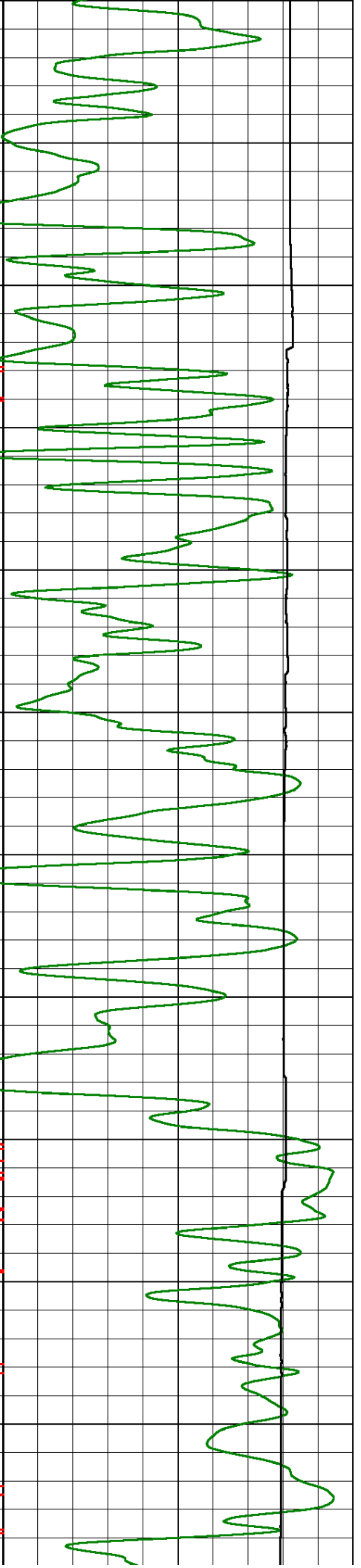
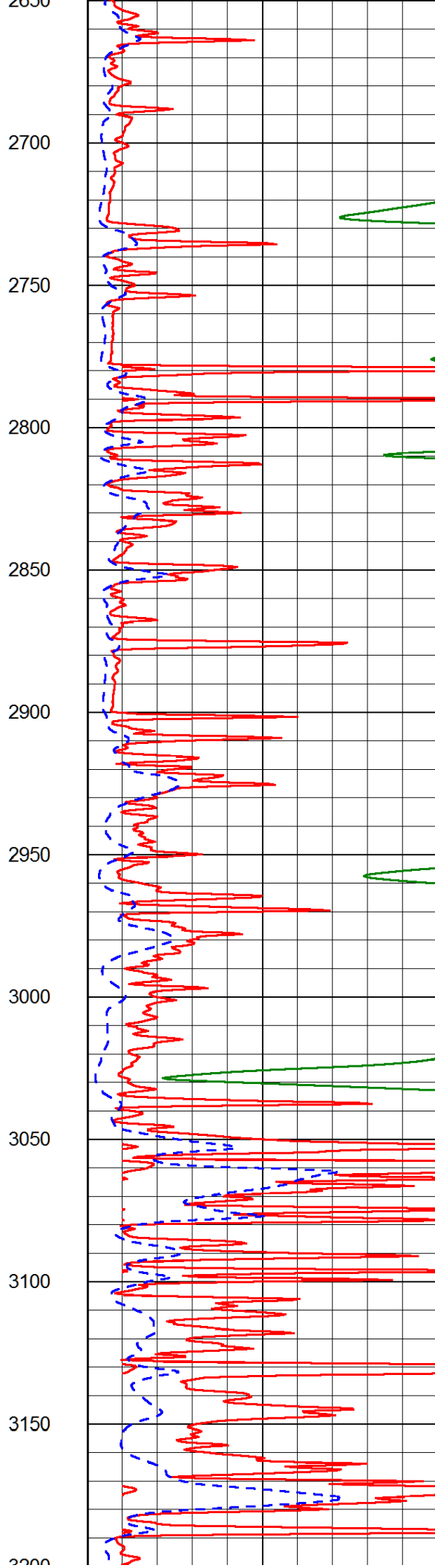
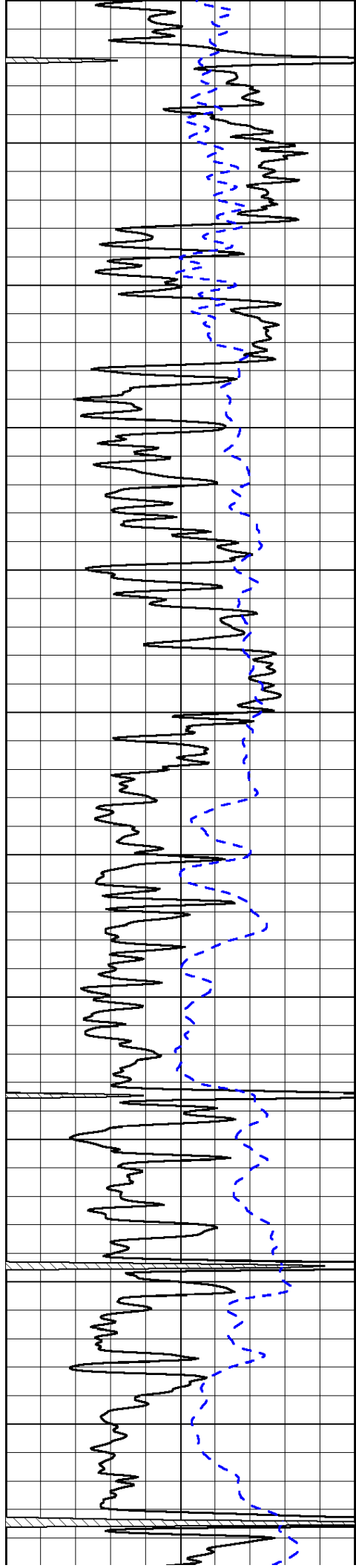
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-200	SP (mV)	0

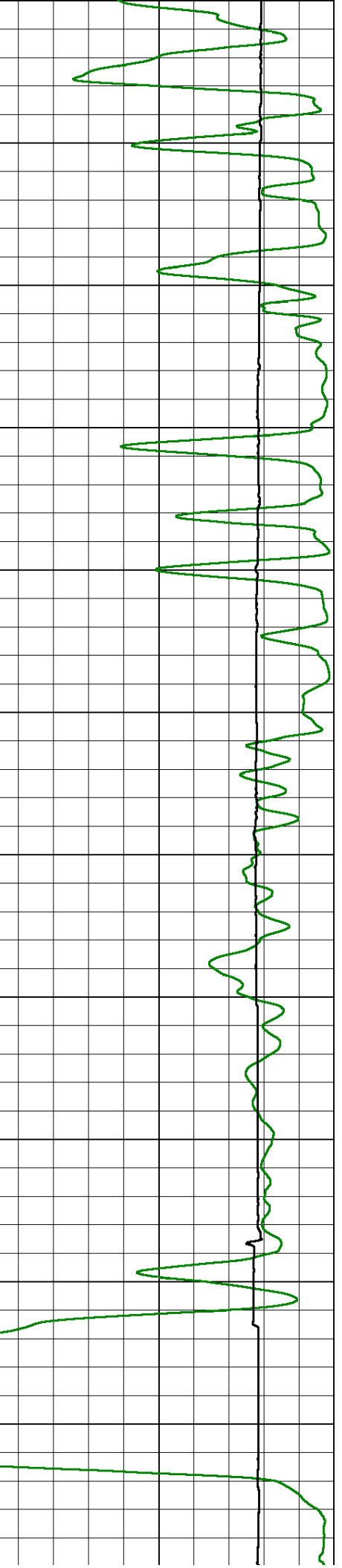
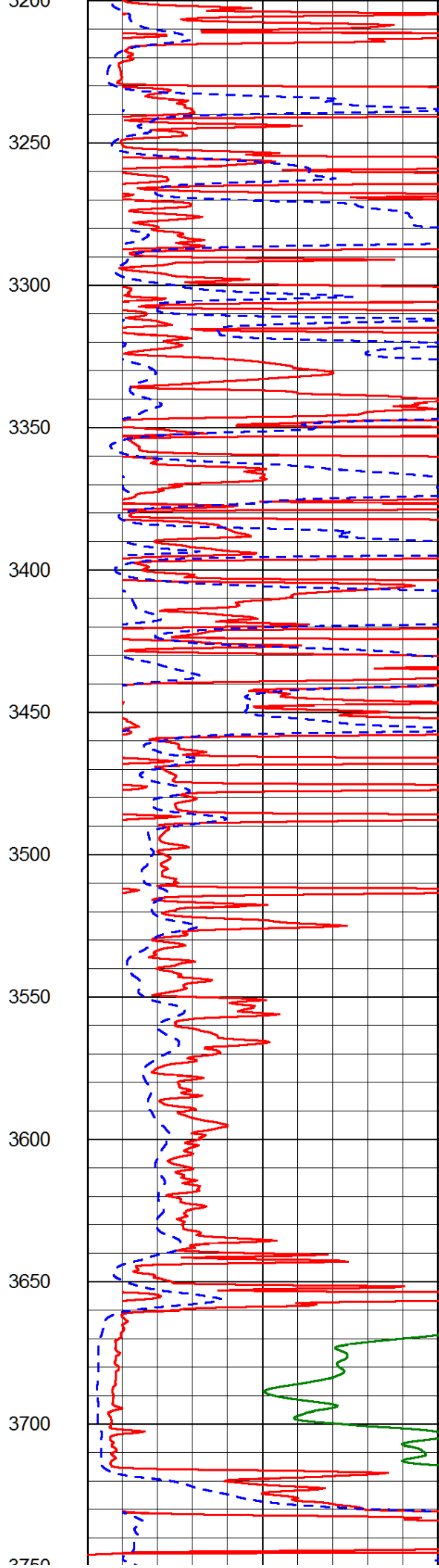
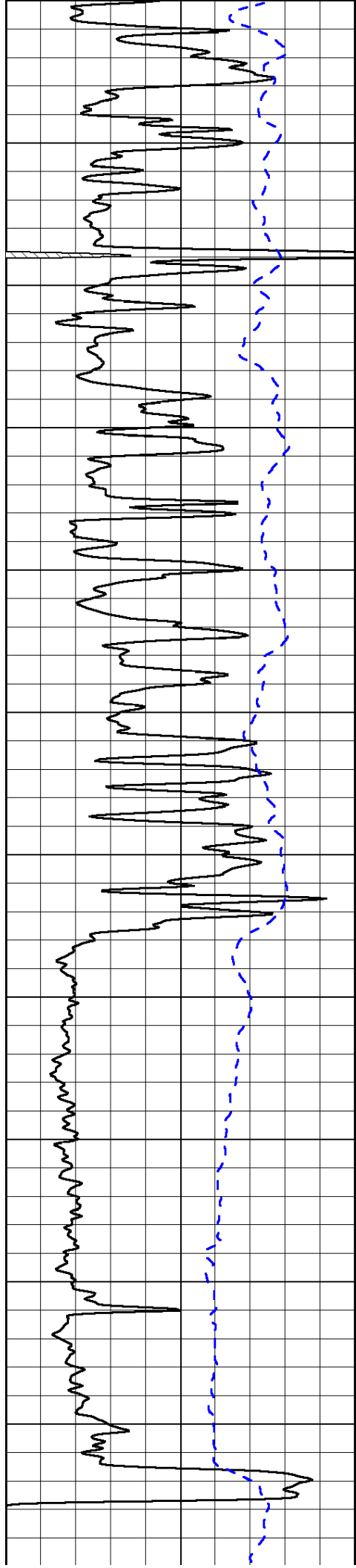
0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0
	Shallow Resistivity (Ohm-m)	50
	Deep Resistivity (Ohm-m)	50











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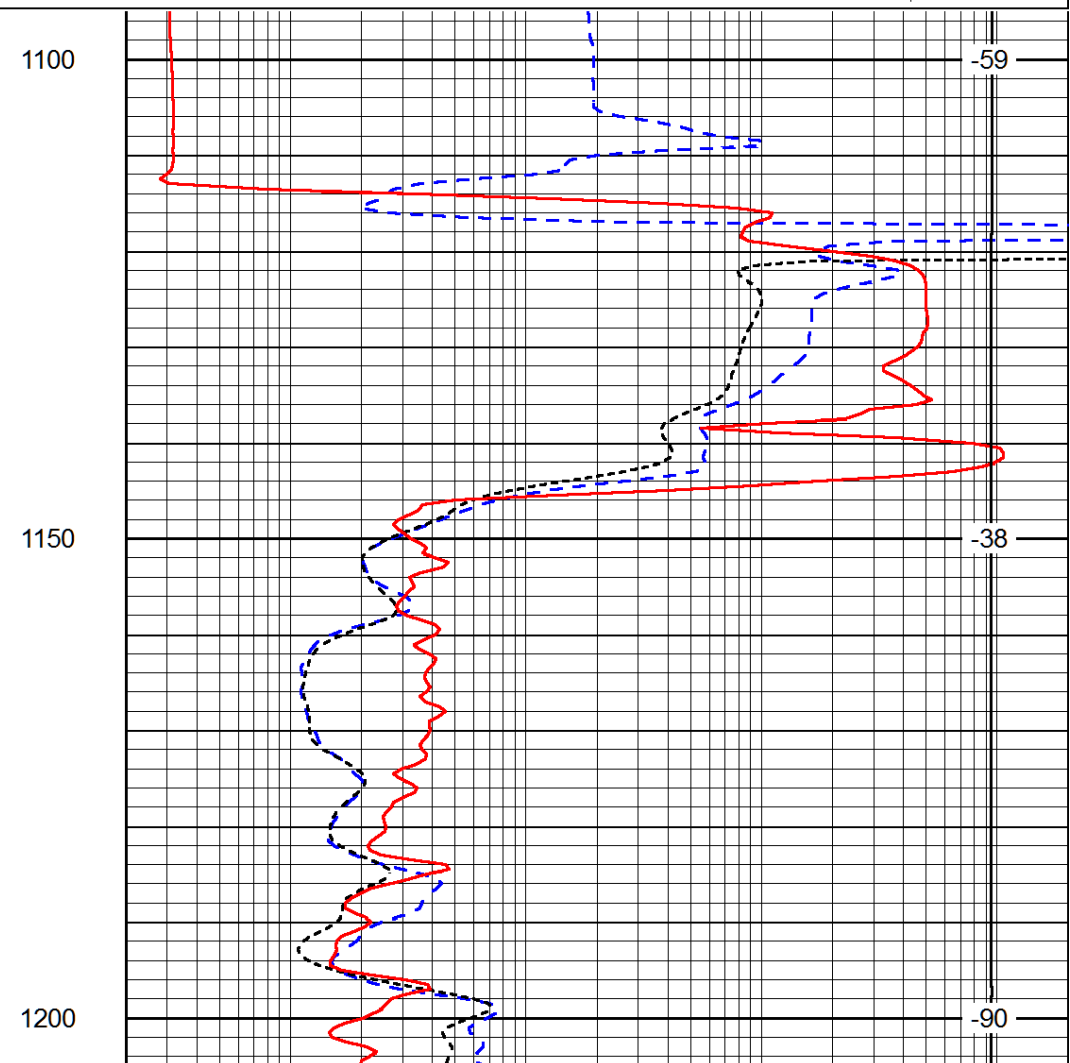
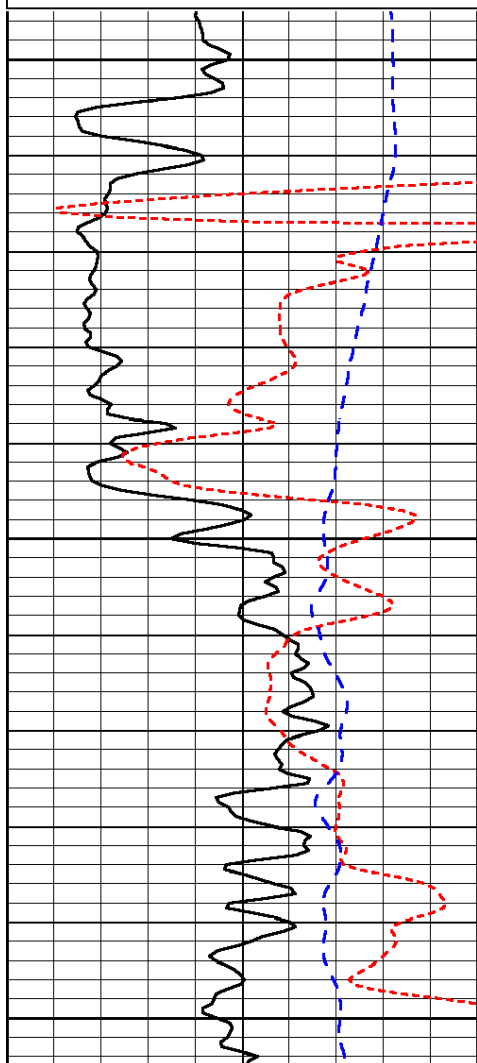
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15000	Line Tension (lb)	0
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50	Deep Resistivity (Ohm-m)	500

Database File: tdi_frieda_1hd.db
 Dataset Pathname: DIL/tdistk
 Presentation Format: dil
 Dataset Creation: Thu Sep 12 00:34:24 2013
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)



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-200	SP (mV)	0

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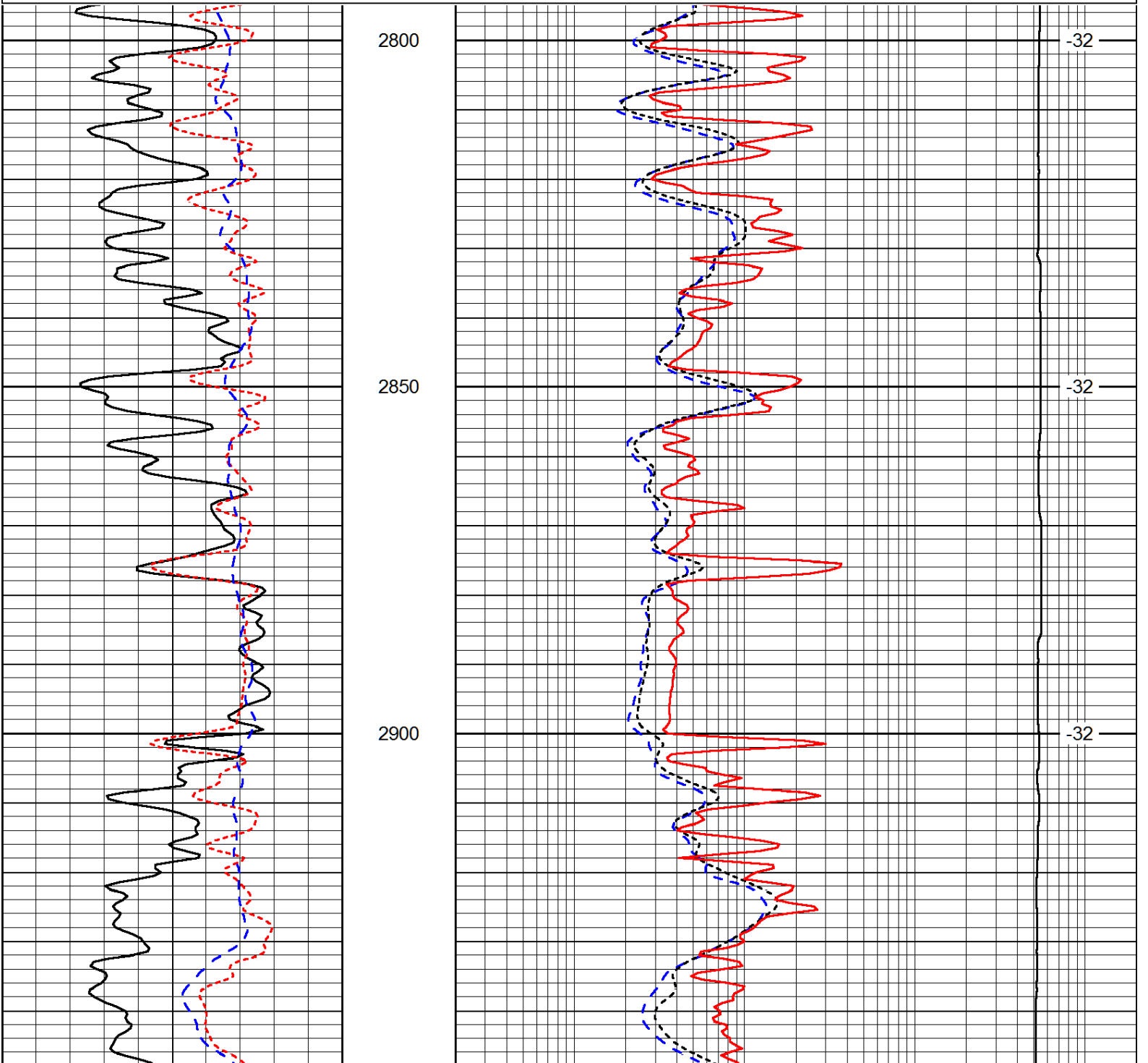
LSPD
(ft/min)

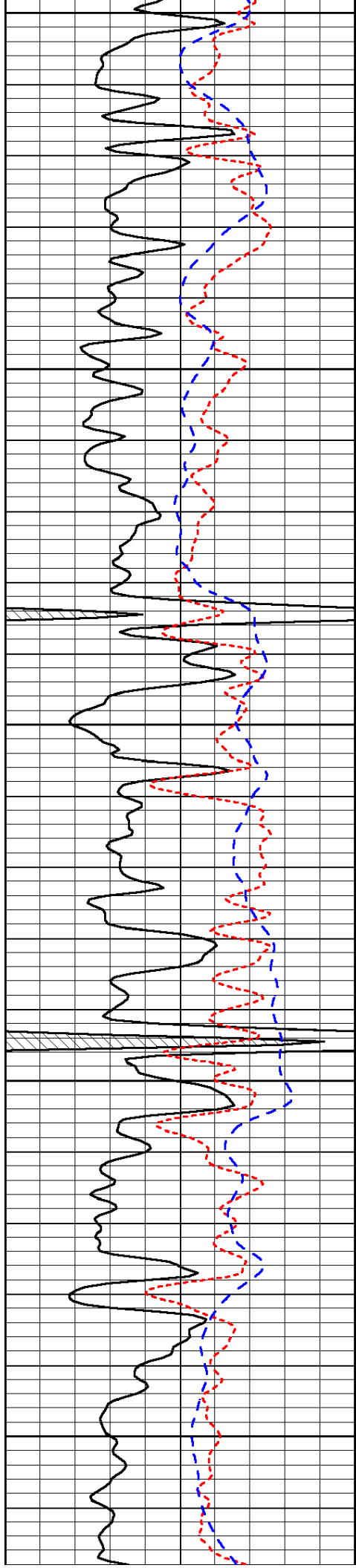
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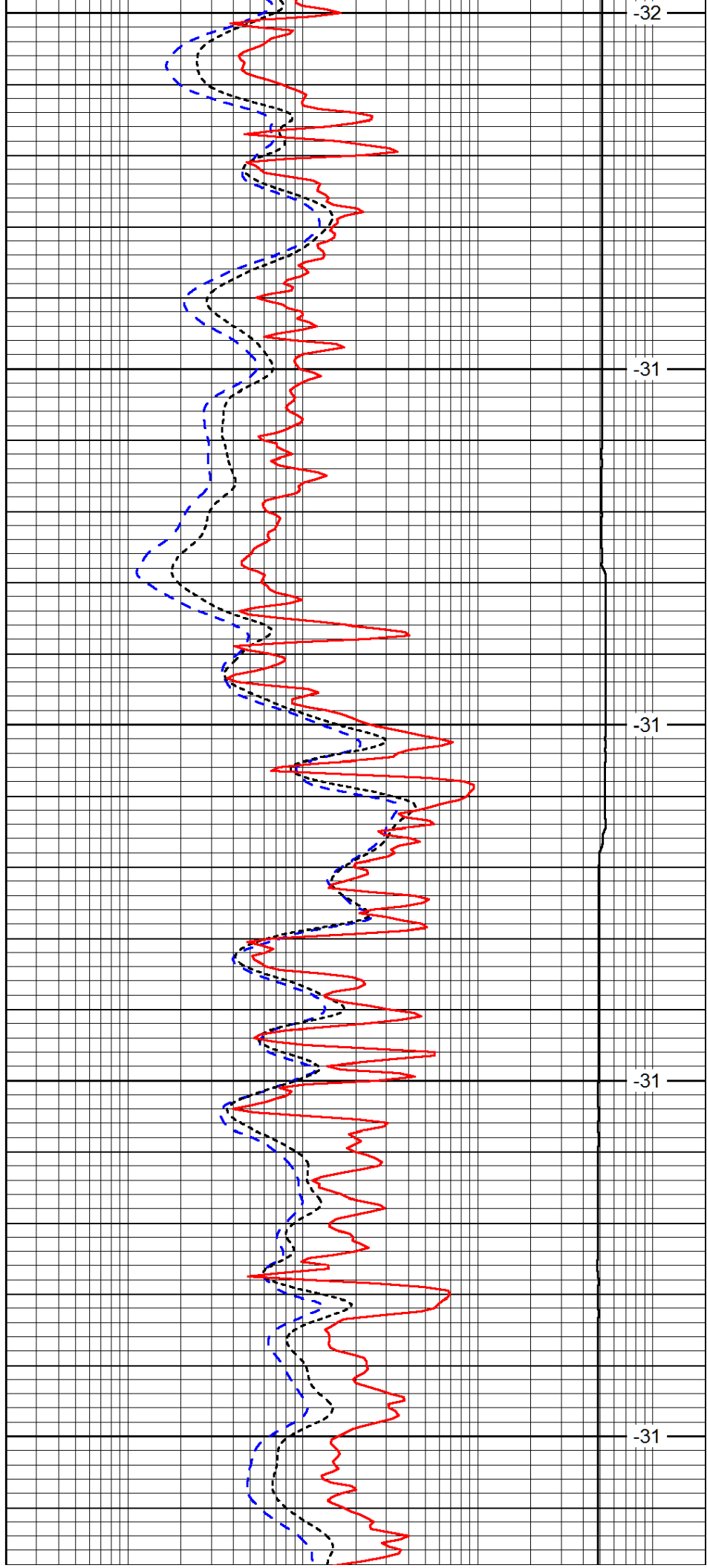
2950

3000

3050

3100

3150



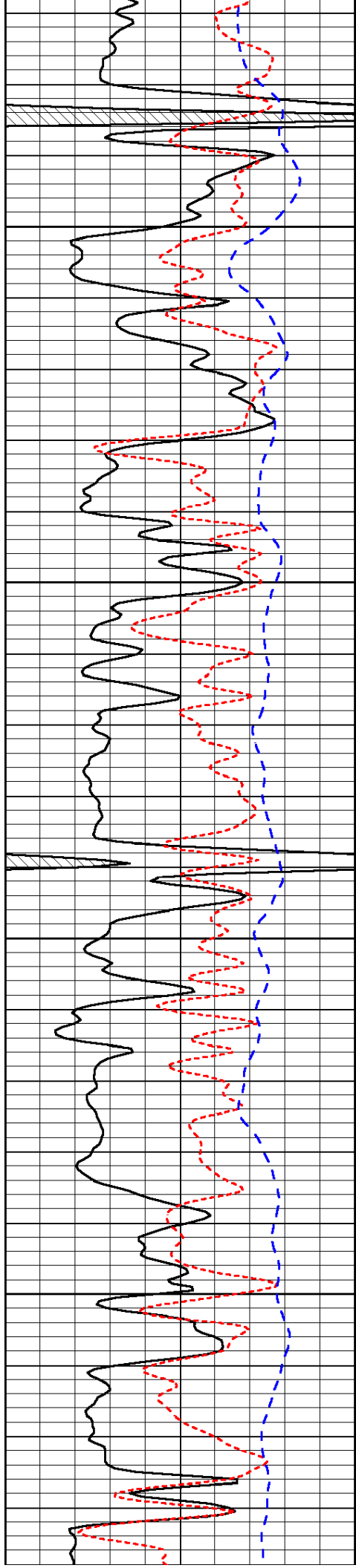
-32

-31

-31

-31

-31

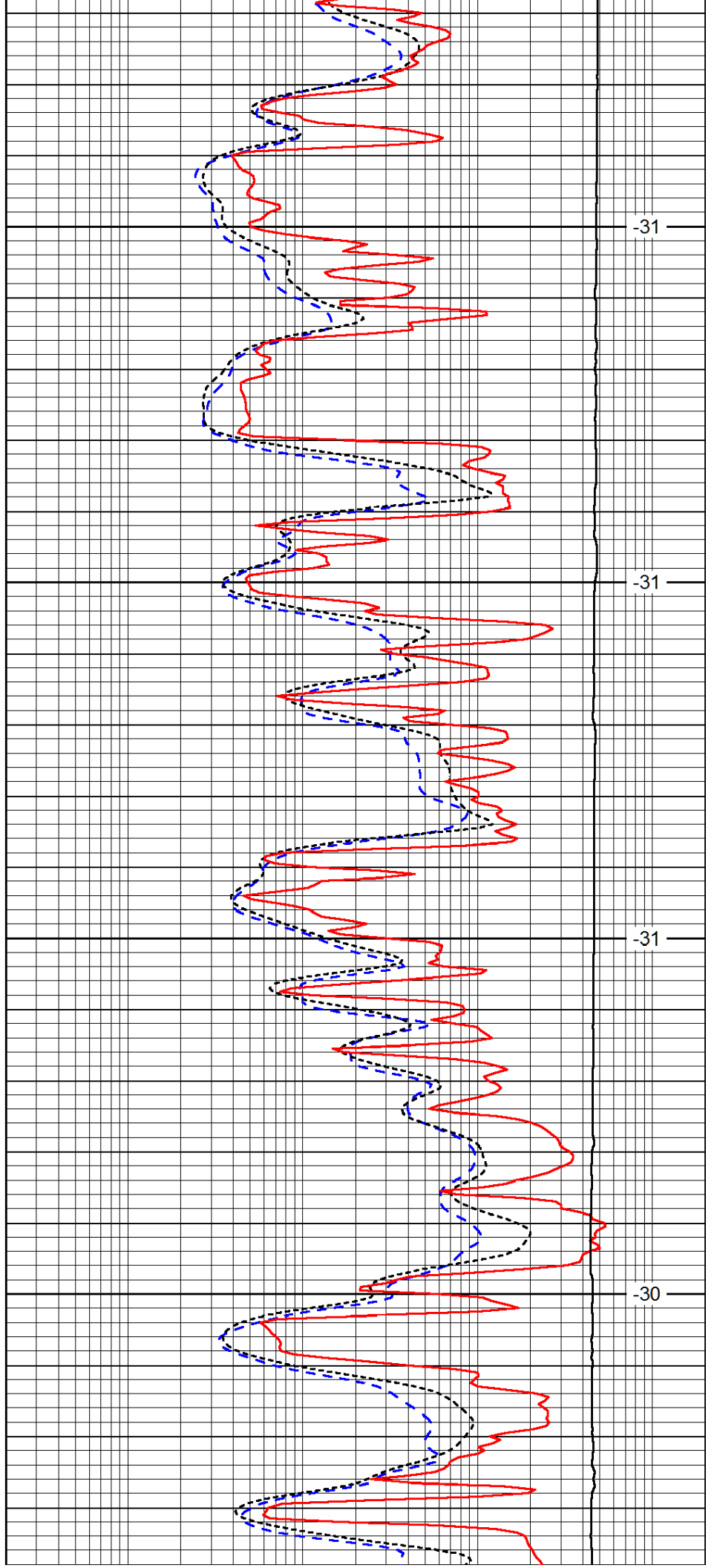


3200

3250

3300

3350

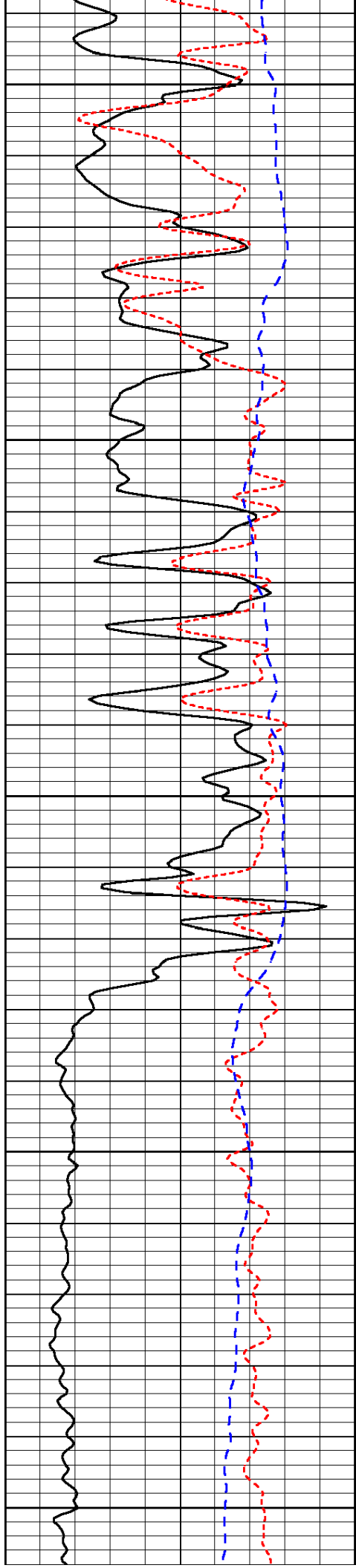


-31

-31

-31

-30



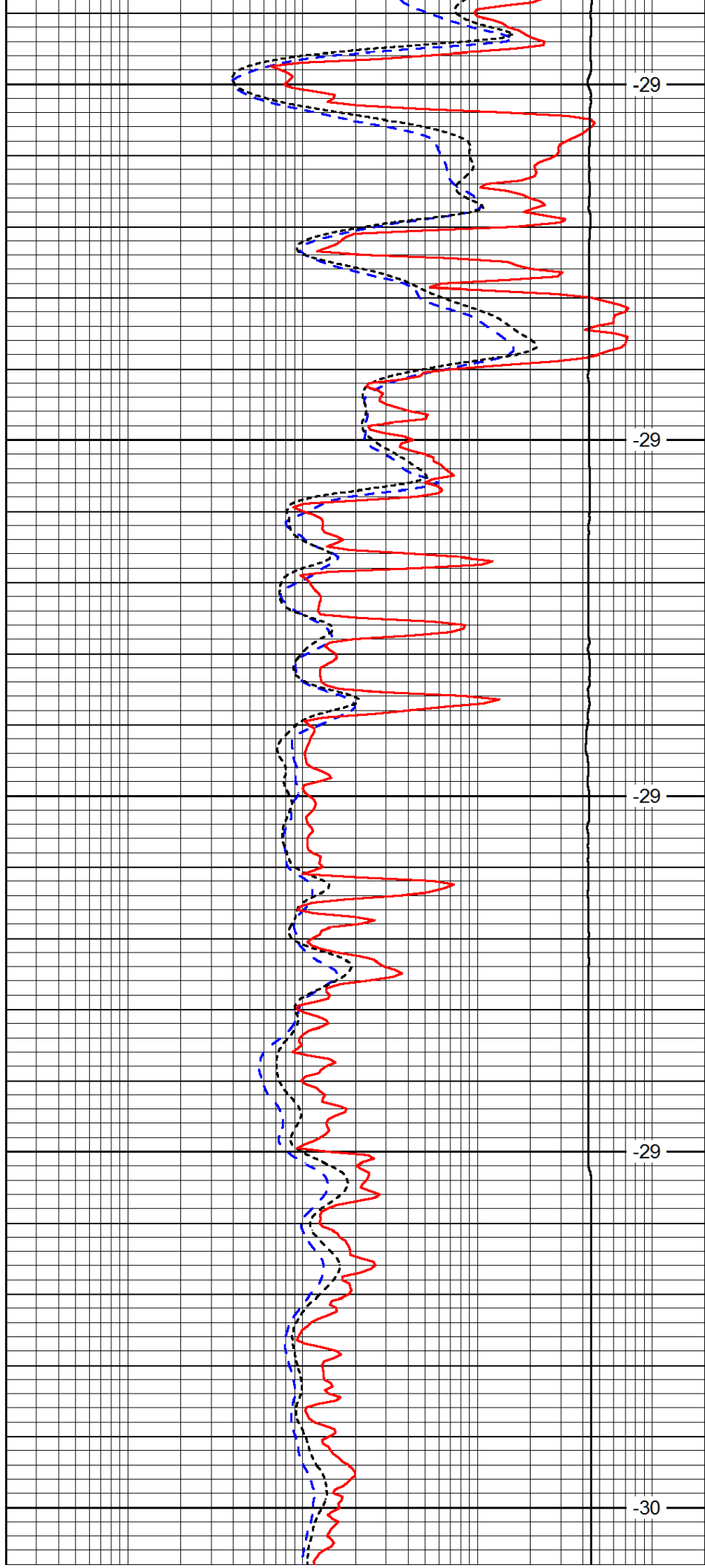
3400

3450

3500

3550

3600



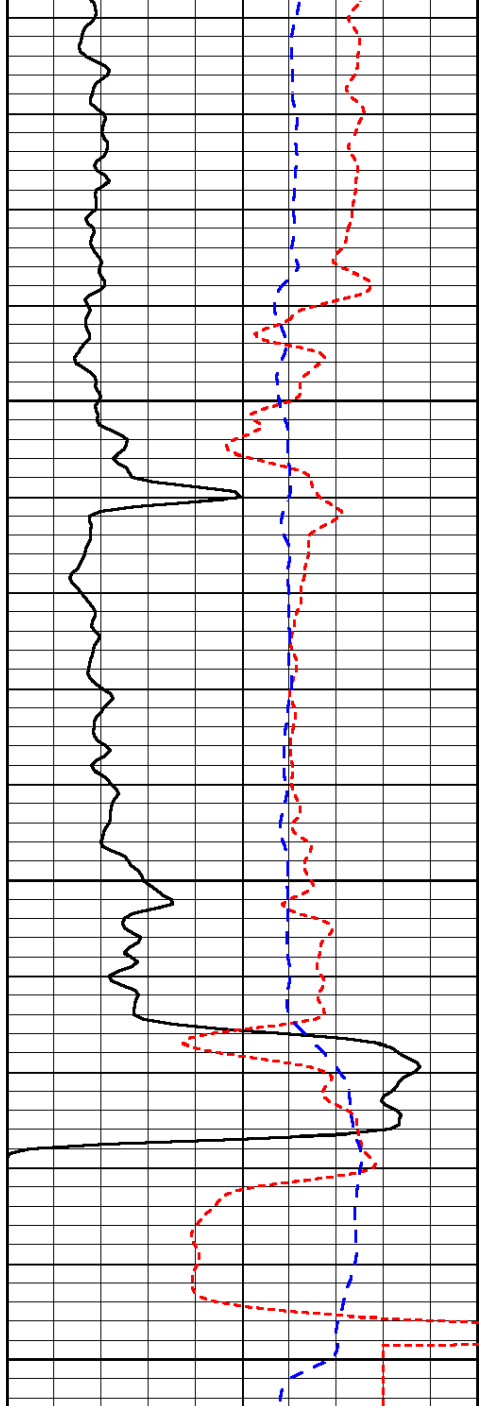
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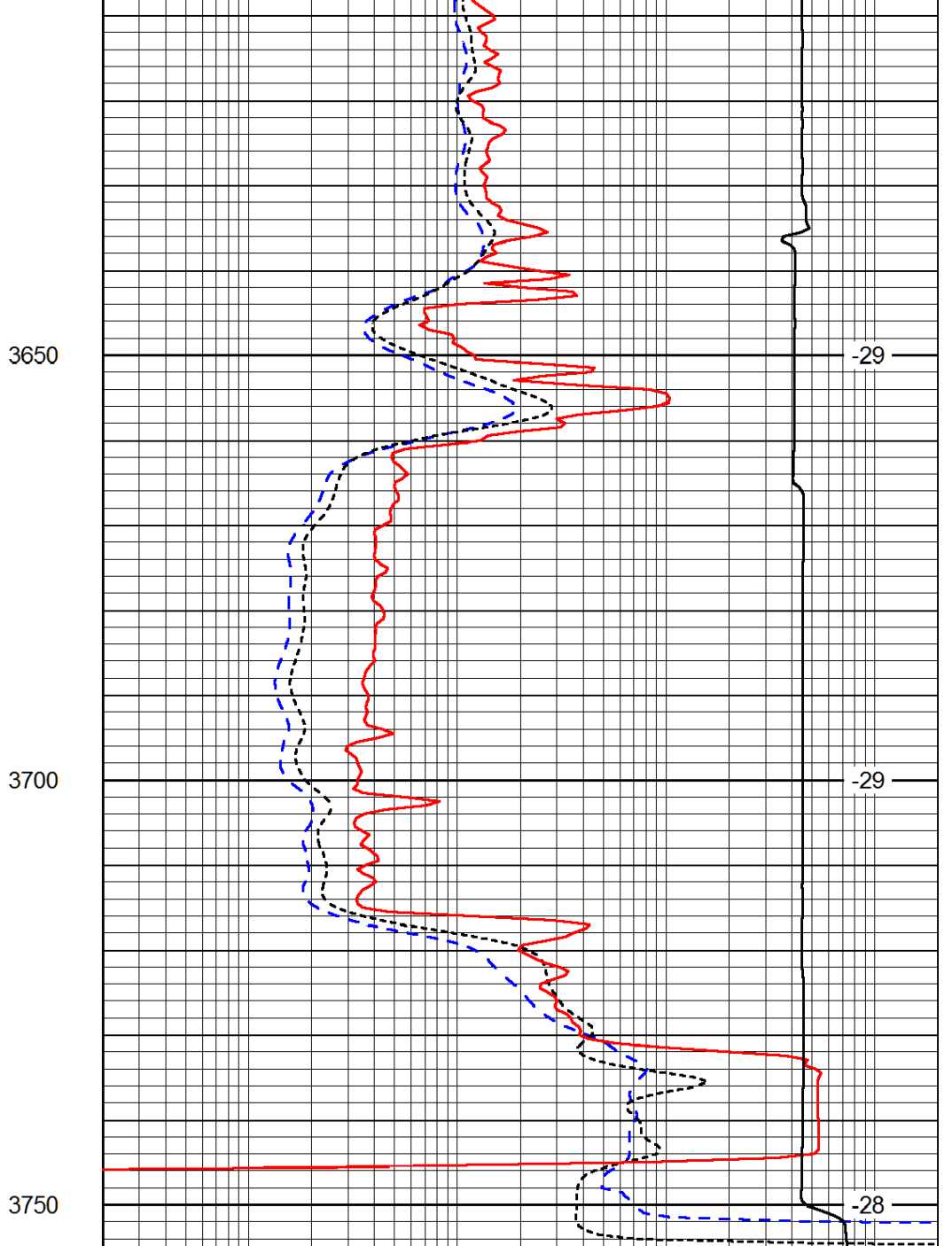
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-29

-30



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