



Pioneer Energy Services

Dual Induction Log

API No. 15-101-22,394-00-00	Company Larson Engineering, Inc. Well Busst Unit No. 1-27 Field Wildcat County Lane State Kansas	Location 2540' FSL & 93' FEL	Other Services CNL/CDL MEL
Permanent Datum Log Measured From Drilling Measured From	Ground Level Kelly Bushing Kelly Bushing	Elevation 2761 7 Ft. Above Perm. Datum	Elevation K.B. 2768 D.F. G.L. 2761
Sec: 27	Twp: 19 S	Rge: 28 W	

Date	8/5/2012
Run Number	One
Depth Driller	4700
Depth Logger	4700
Bottom Logged Interval	4699
Top Log Interval	200
Casing Driller	8.625 @ 240
Casing Logger	257
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	3200
Density / Viscosity	9.4 53
pH / Fluid Loss	10.0 9.2
Source of Sample	Flowline
Rm @ Meas. Temp	.86 @ 67
Rmf @ Meas. Temp	.65 @ 67
Rmc @ Meas. Temp	1.16 @ 67
Source of Rmf / Rmc	Charts
Rm @ BHT	.47 @ 123
Operating Rig Time	4 Hours
Max Rec. Temp. F	123
Equipment Number	17
Location	Hays
Recorded By	D. Martin
Witnessed By	Bob Lewellvn

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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

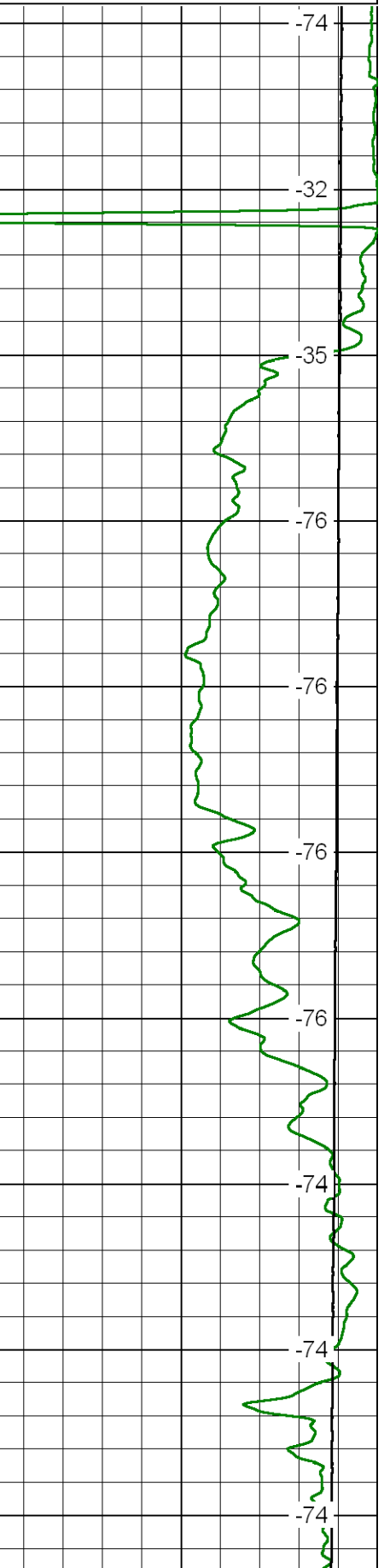
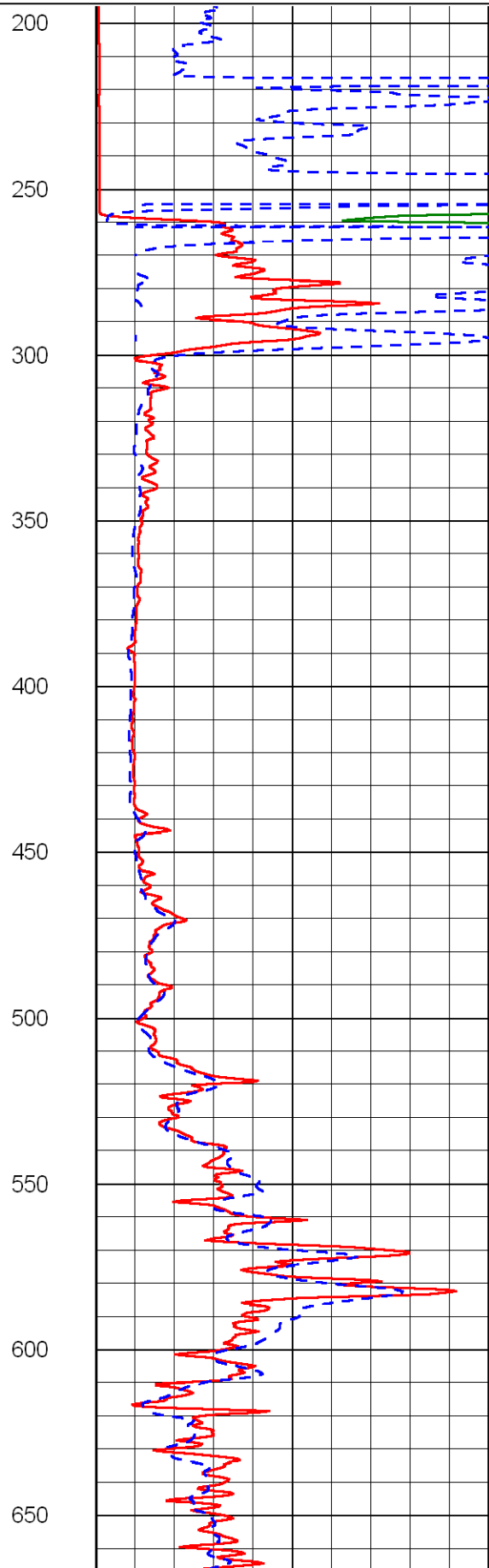
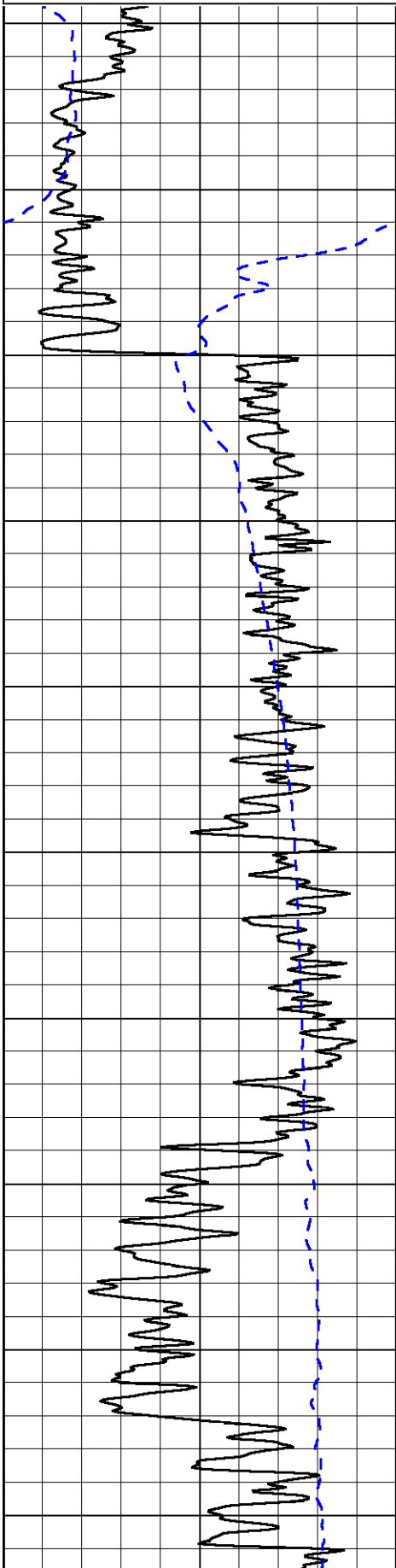
Thank you for using Log-Tech, Inc.
 (785) 625-3858
 Dighton, KS
 8 S to Rd. 70, 4 E,
 3/4 N, W Into

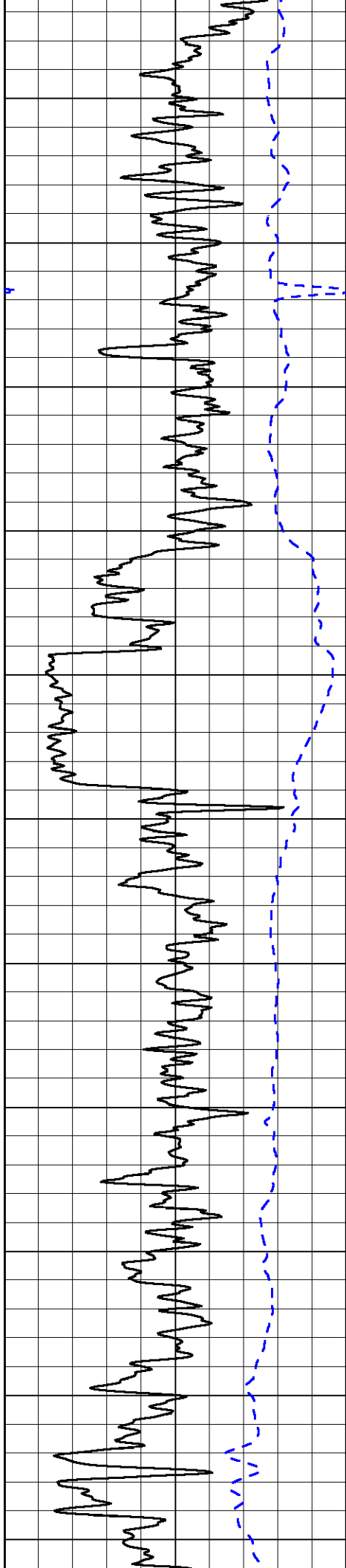
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0 Gamma Ray 150
-200 SP 0

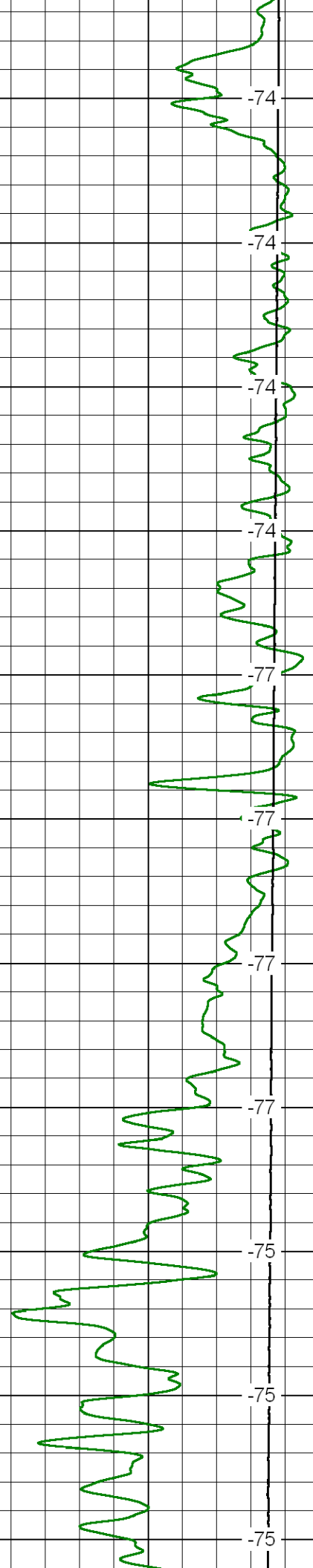
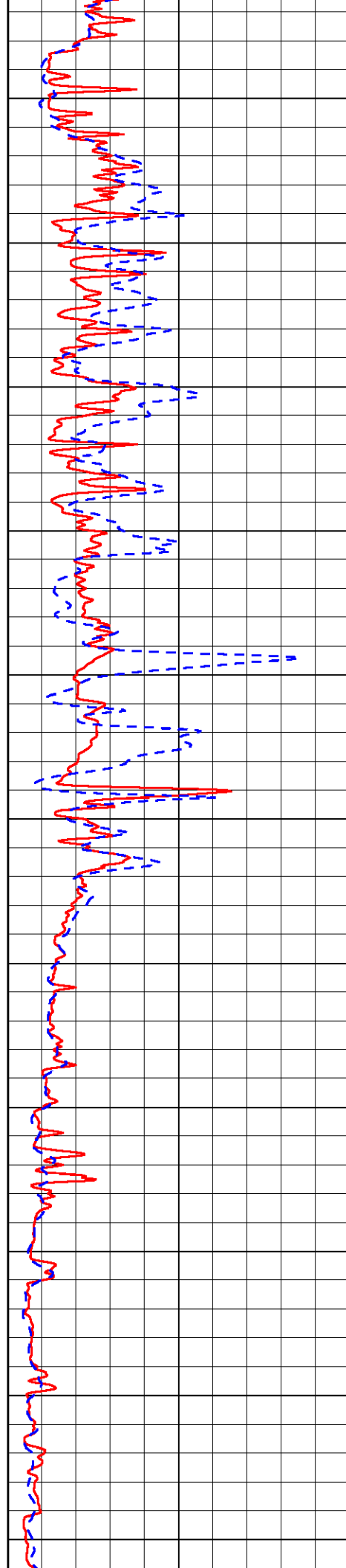
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0 Deep Resistivity 50
1000 Conductivity 0
15000 Line Tension 0
50 Shallow Resistivity 50
50 Deep Resistivity 50

LSPD

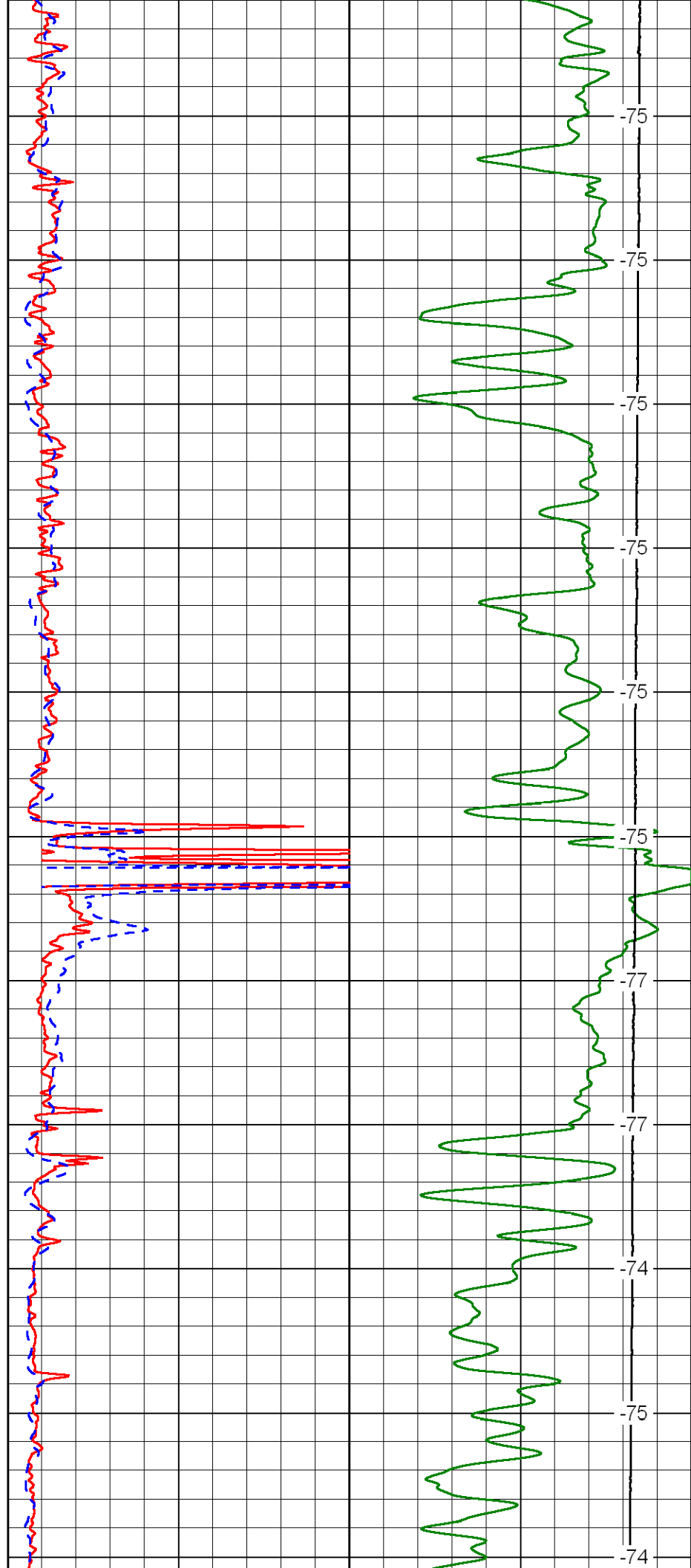
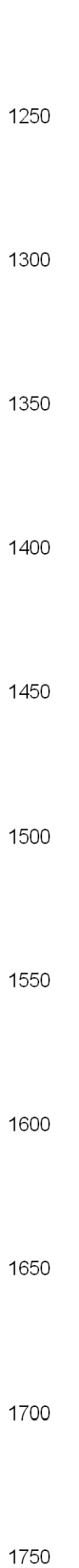
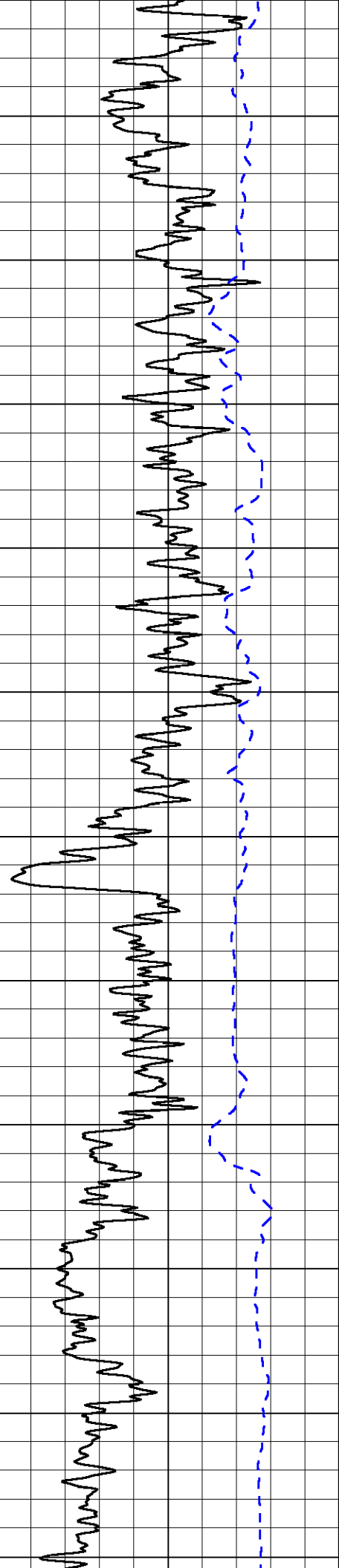


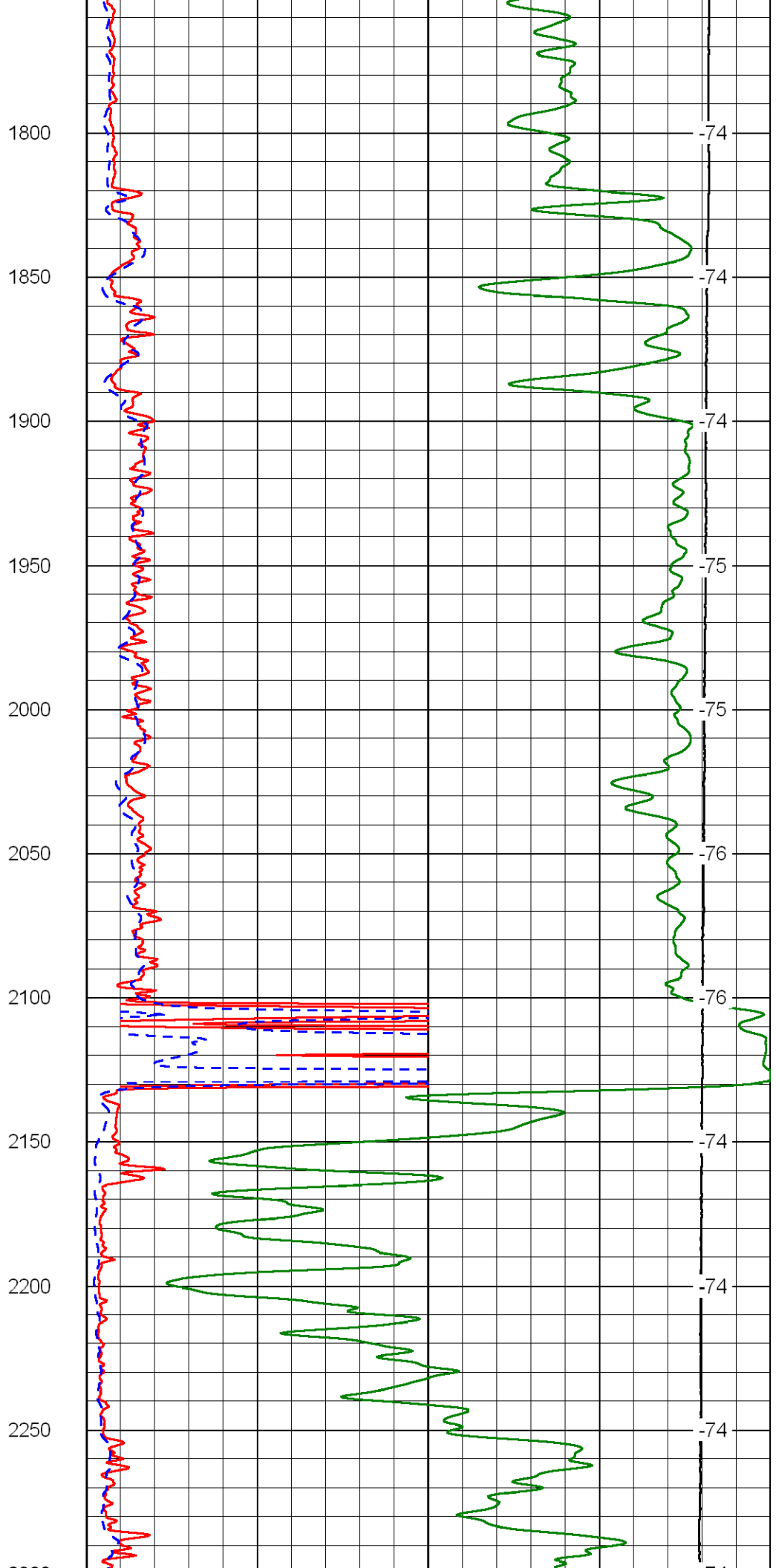
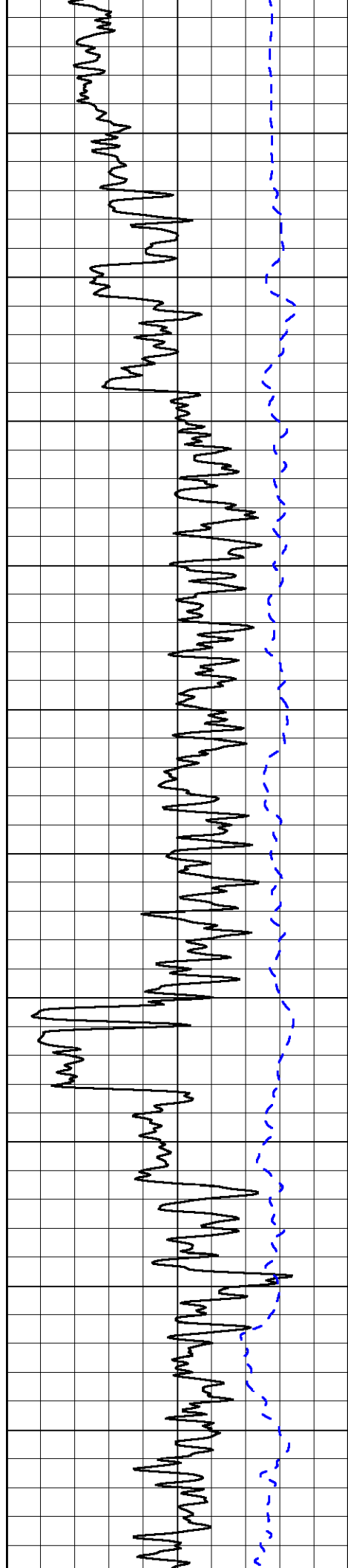


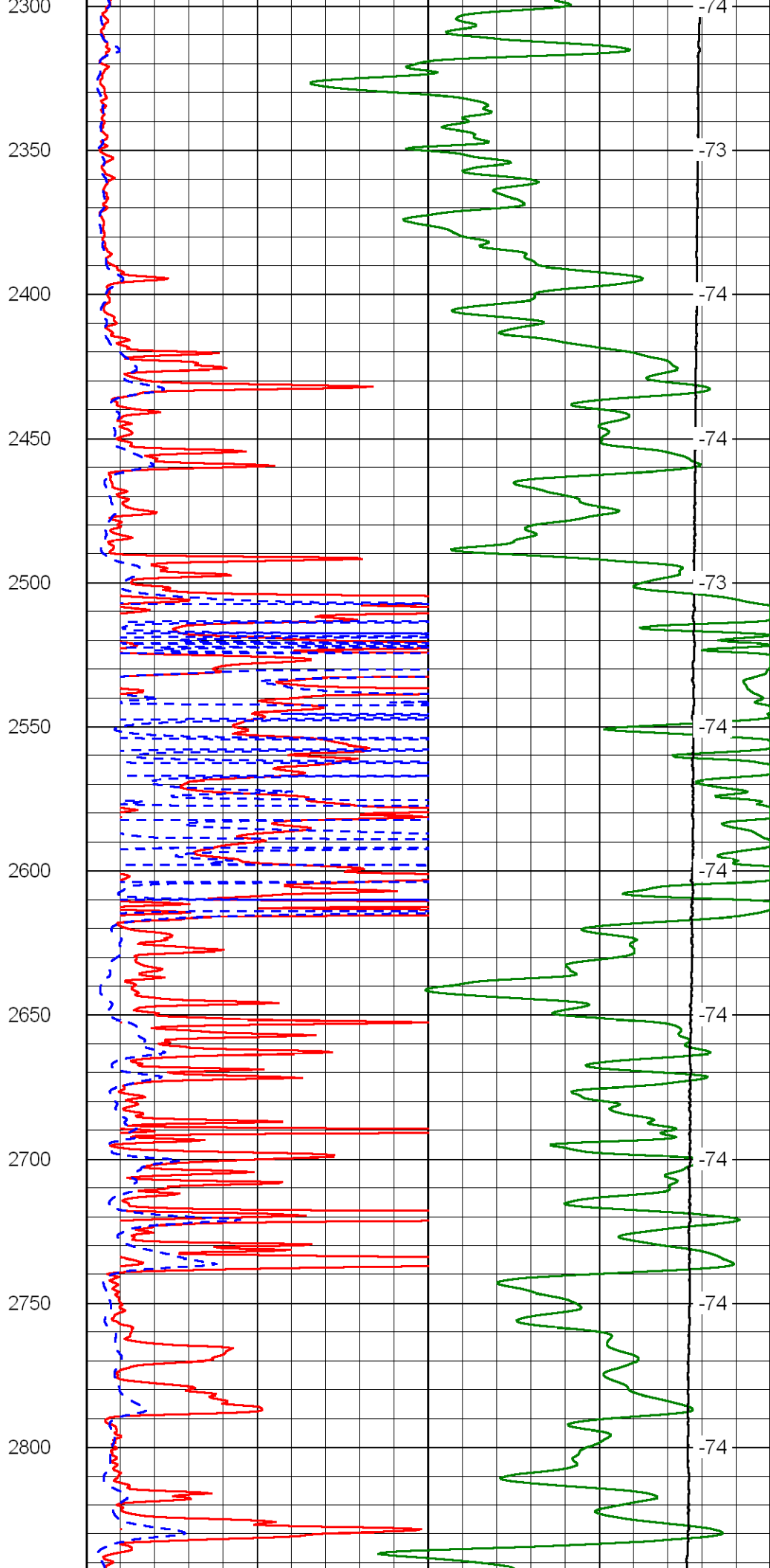
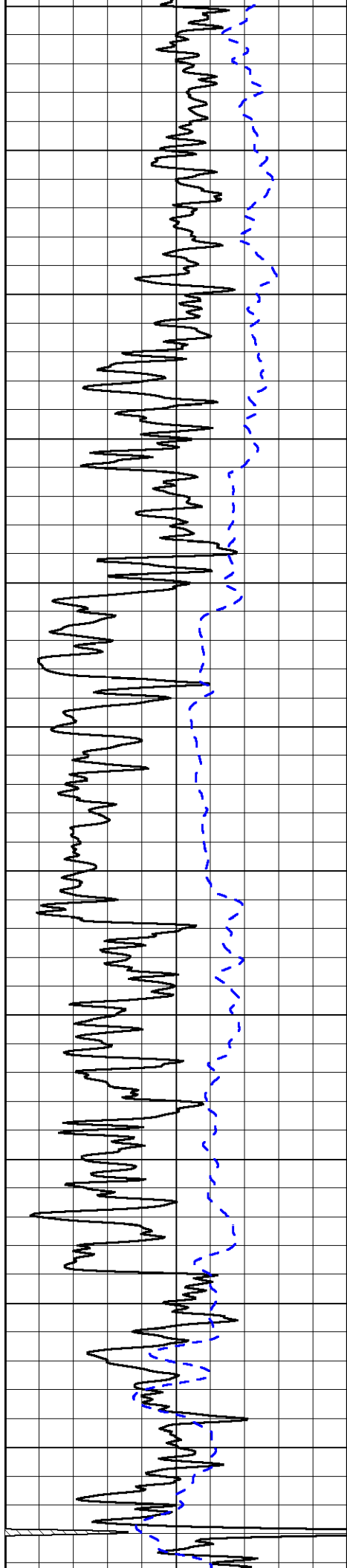
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1100
1150
1200

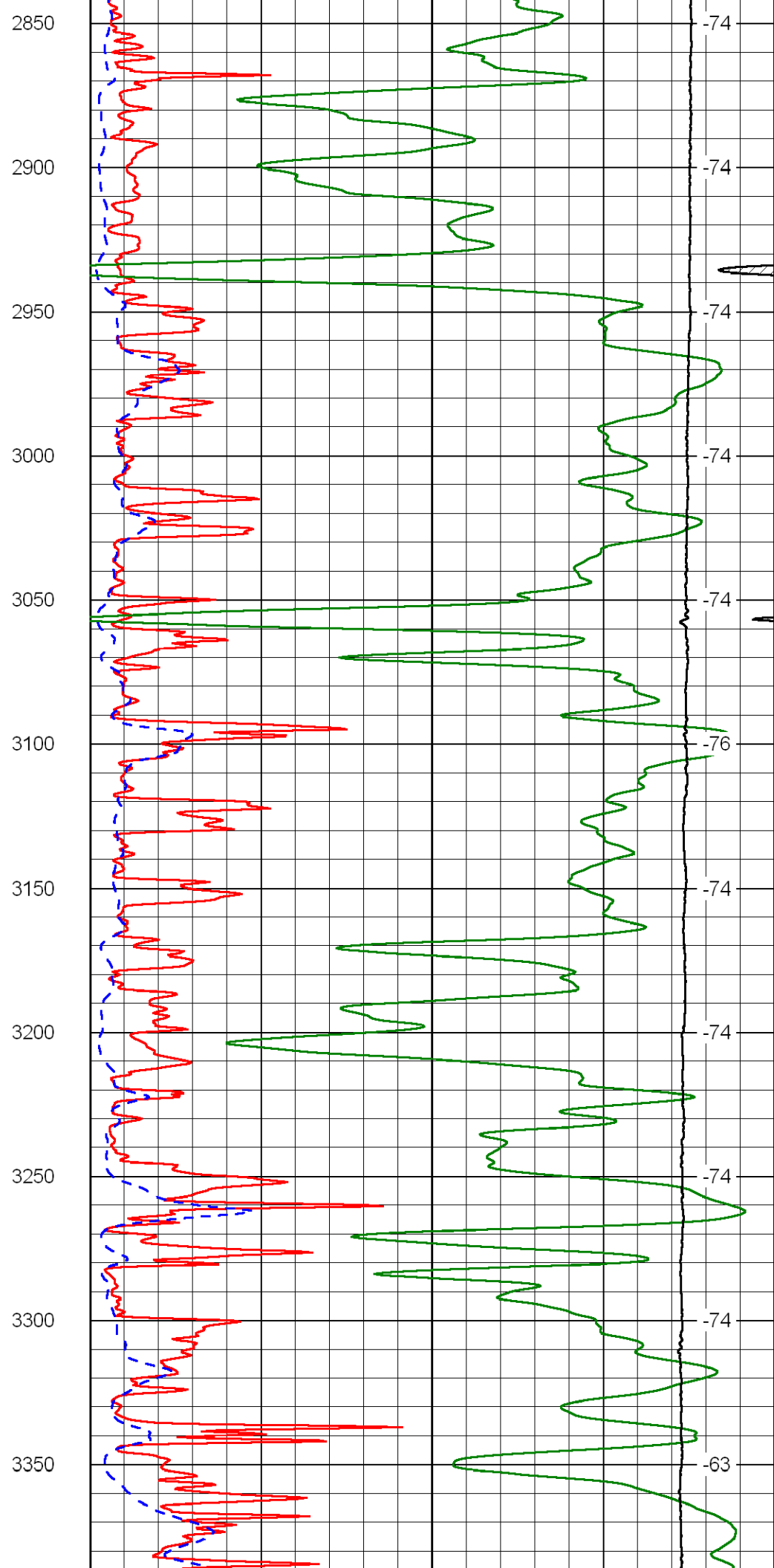
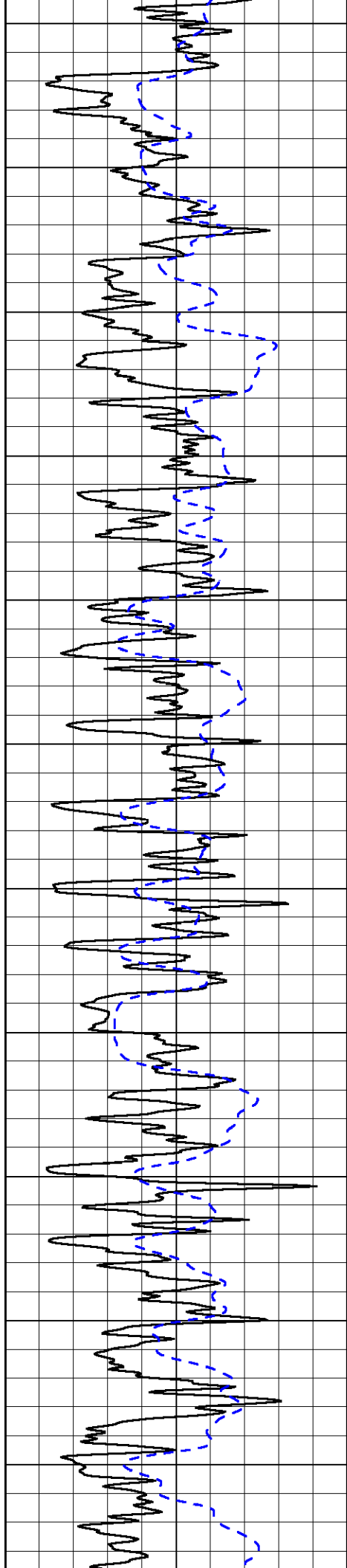


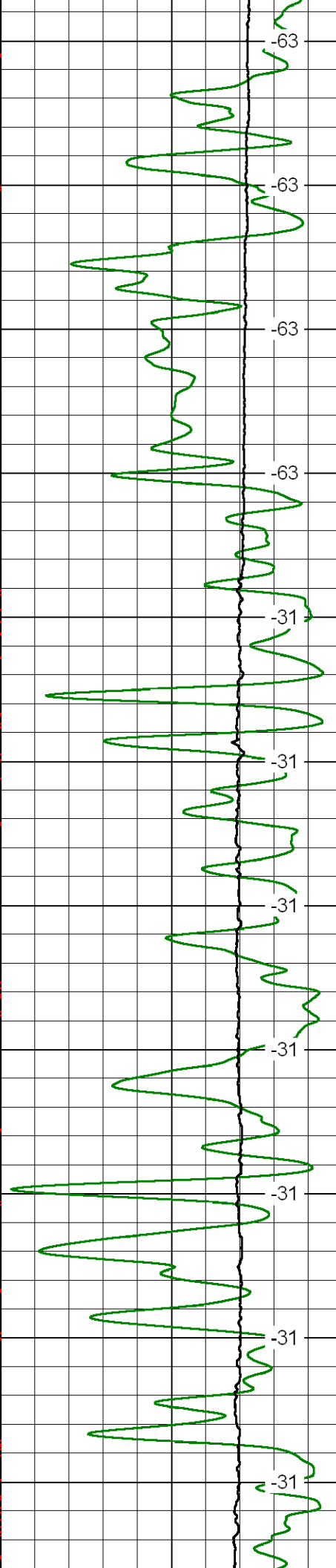
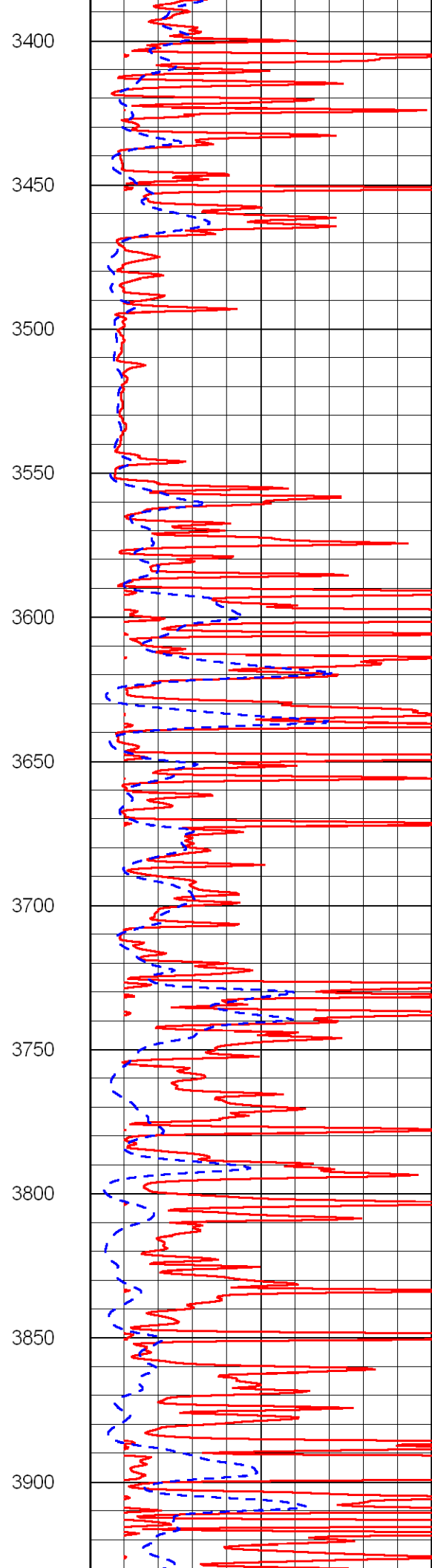
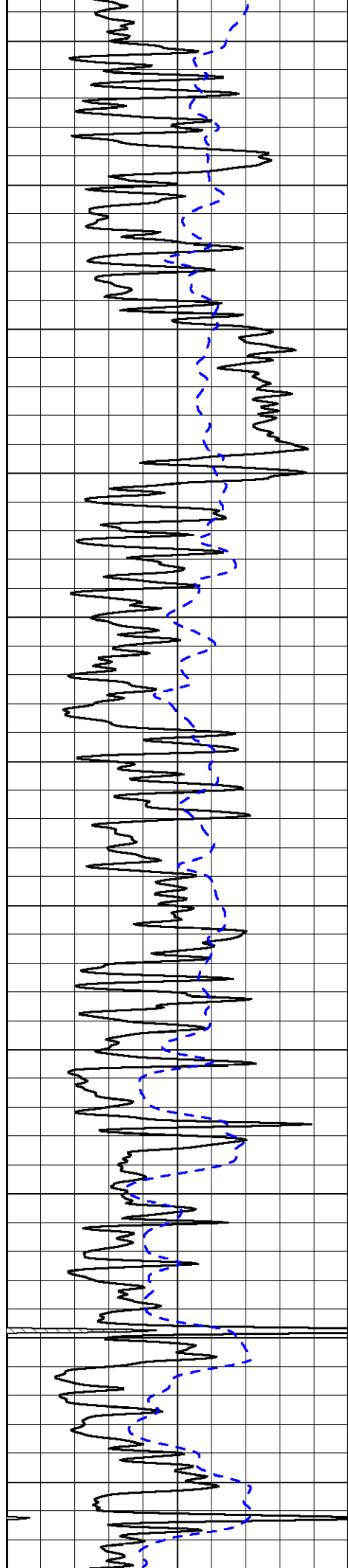
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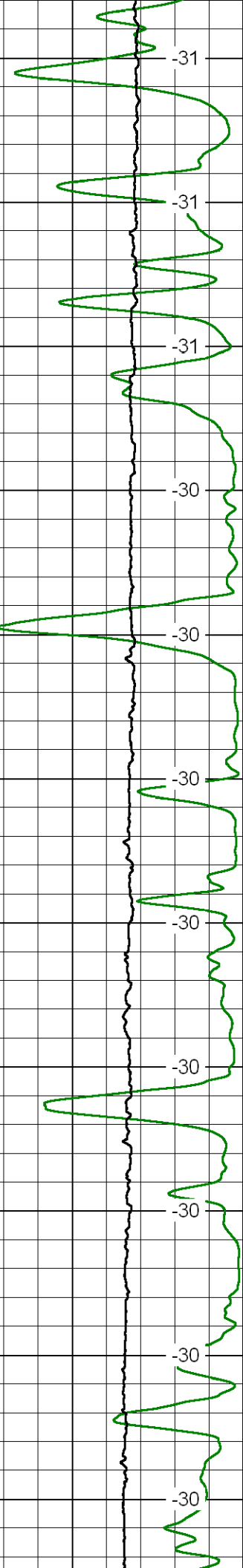
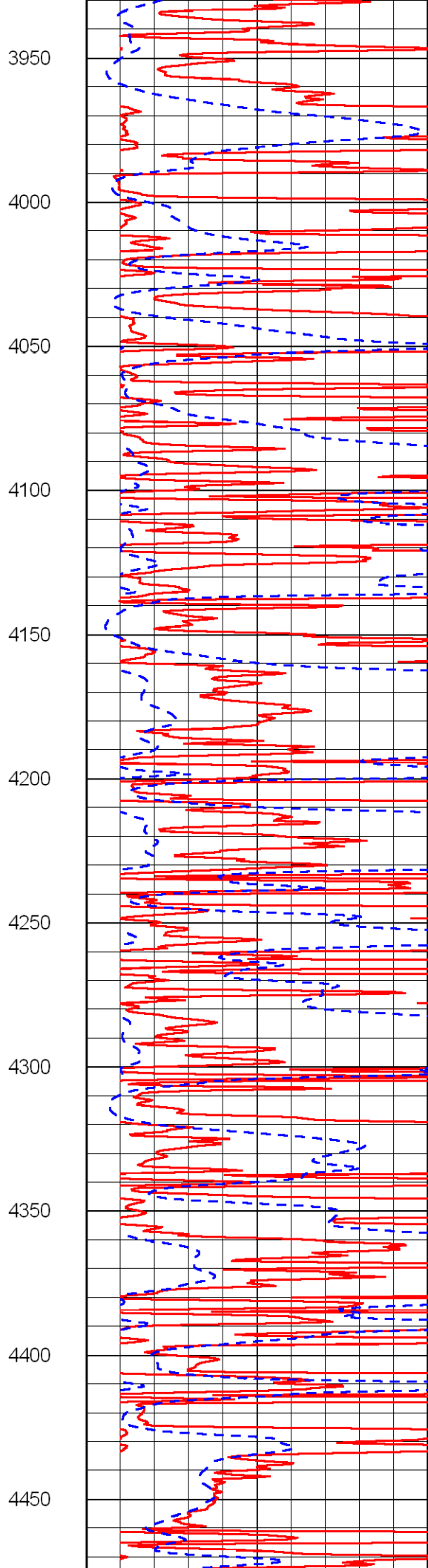
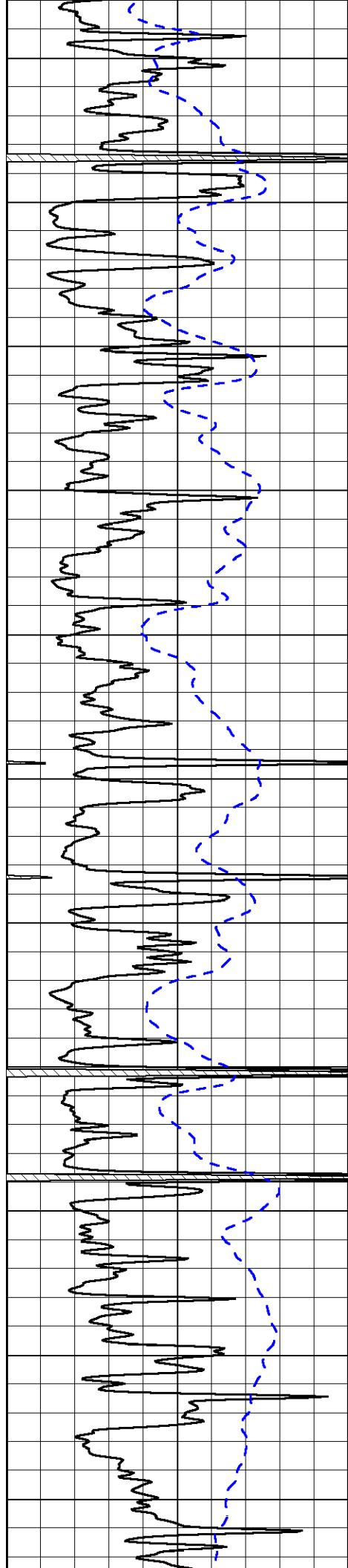


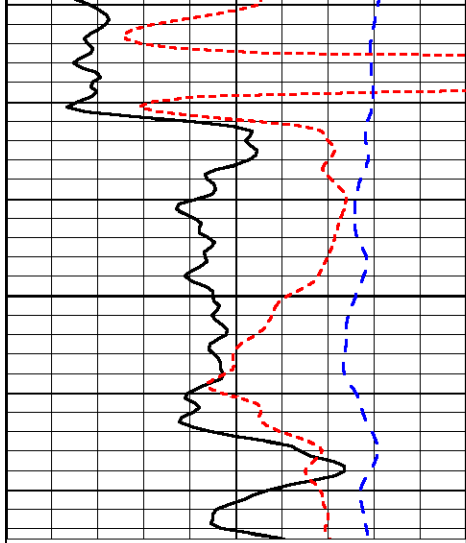






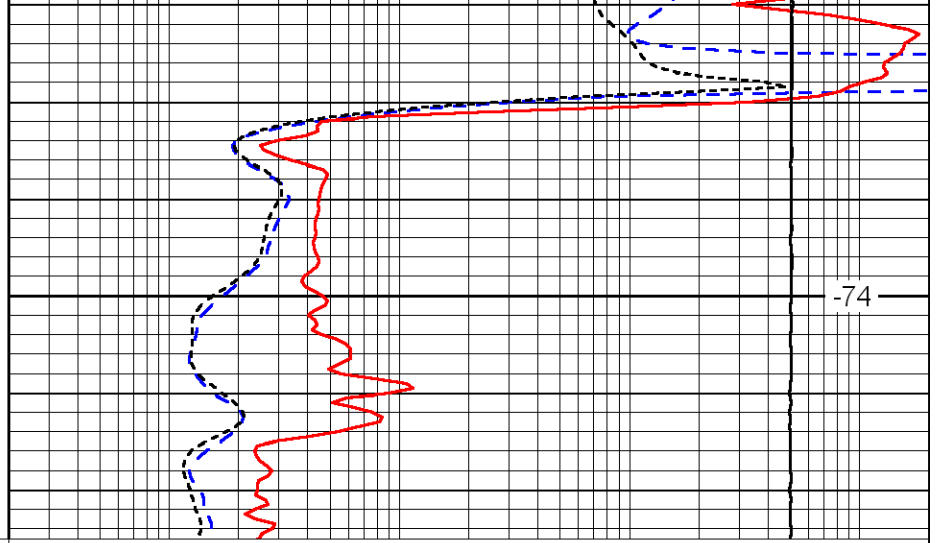






0	Gamma Ray	150
-160	RXO/RT	40
-200	SP	0

2150



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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

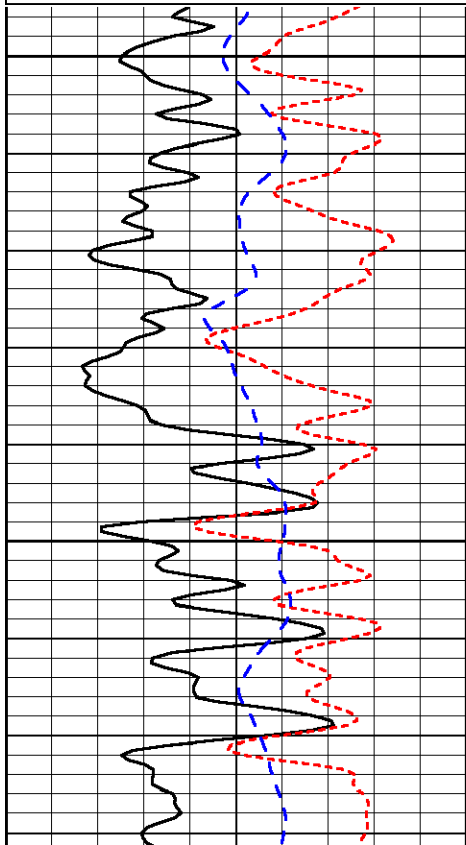
LSPD

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 Dataset Pathname: DIL/larstk
 Presentation Format: dil
 Dataset Creation: Sun Aug 05 03:11:40 2012
 Charted by: Depth in Feet scaled 1:240

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-160	RXO/RT	40
-200	SP	0

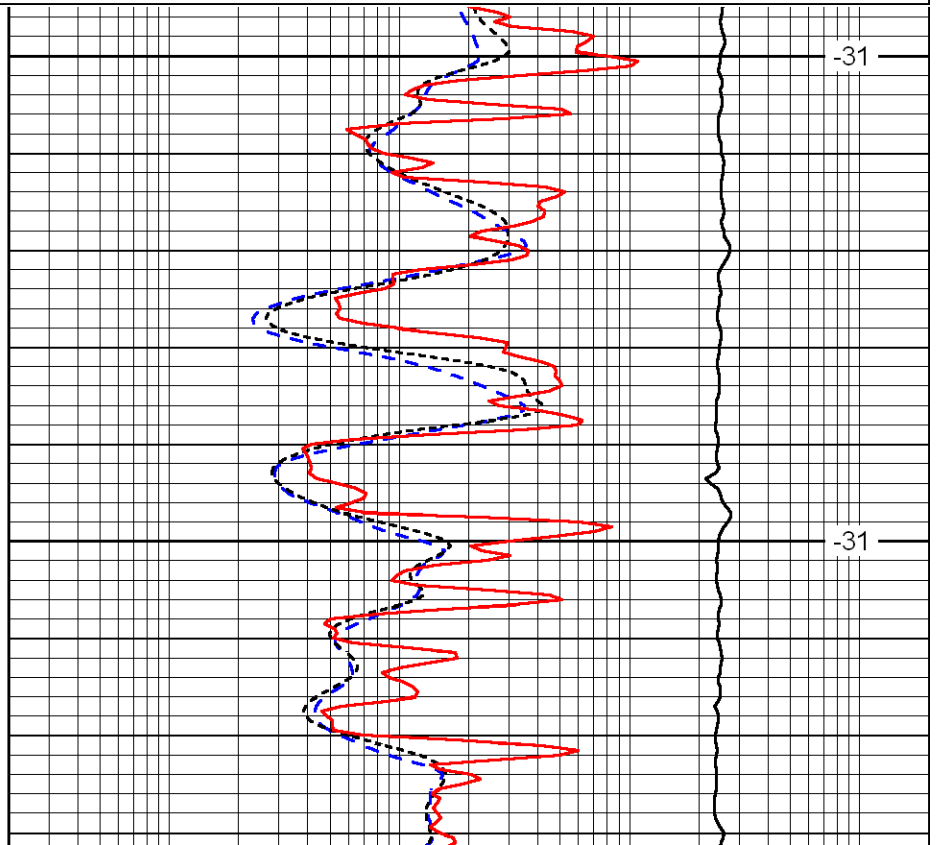
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD



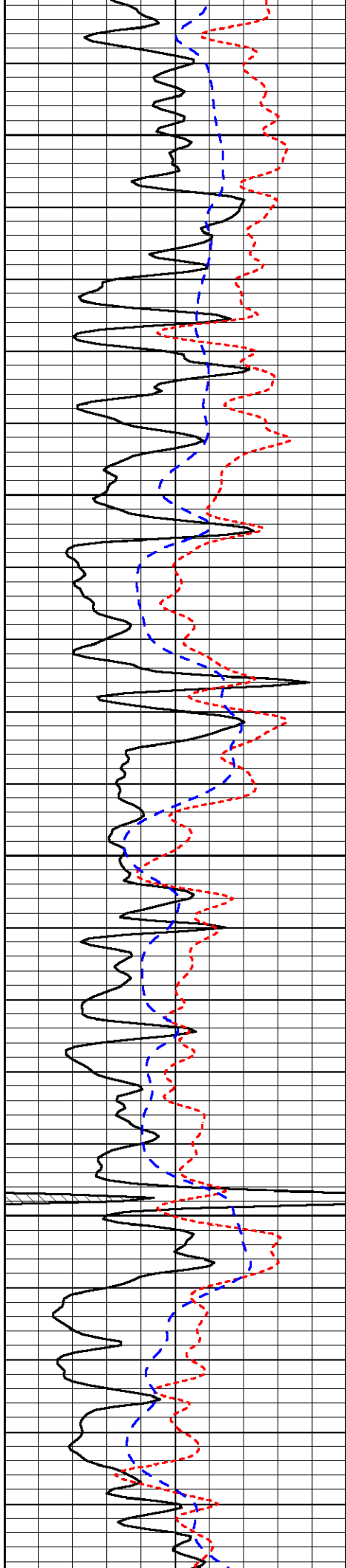
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3650



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-31

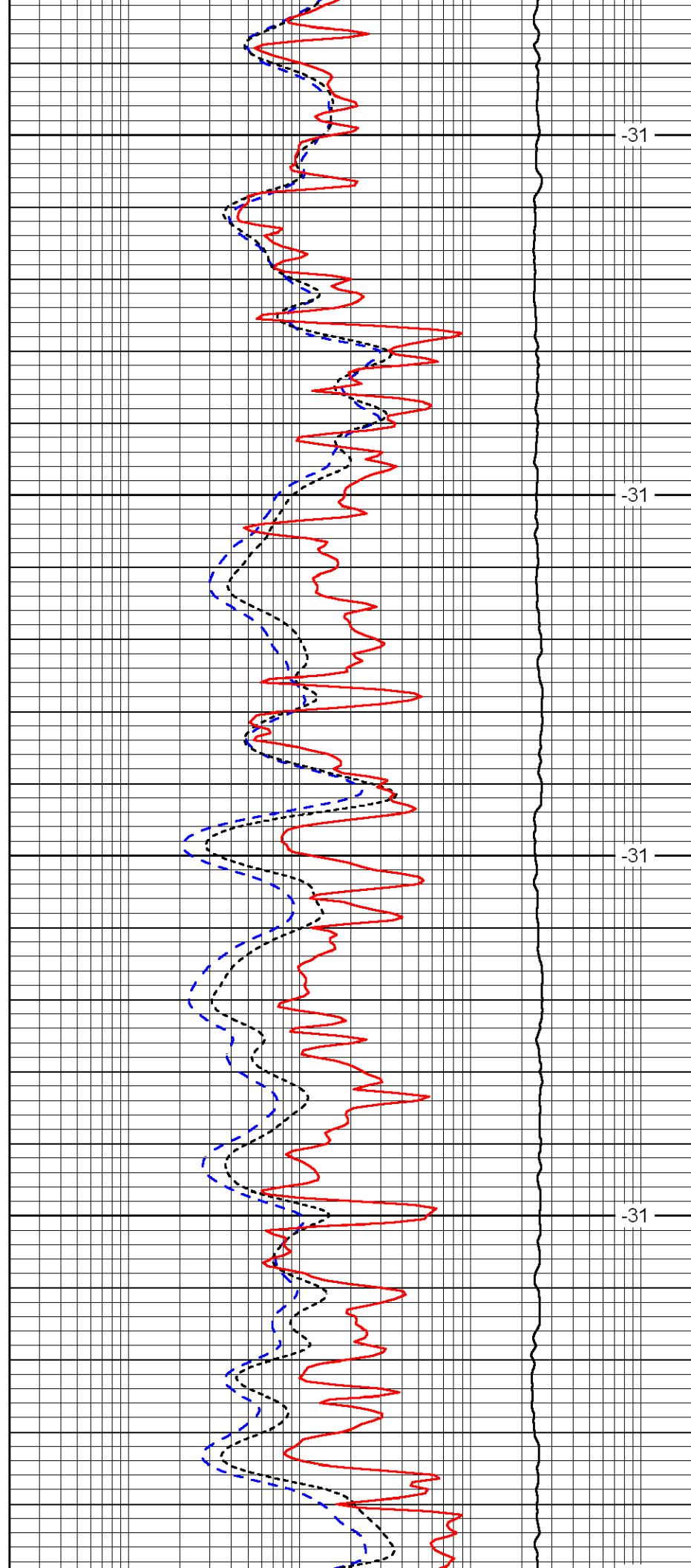


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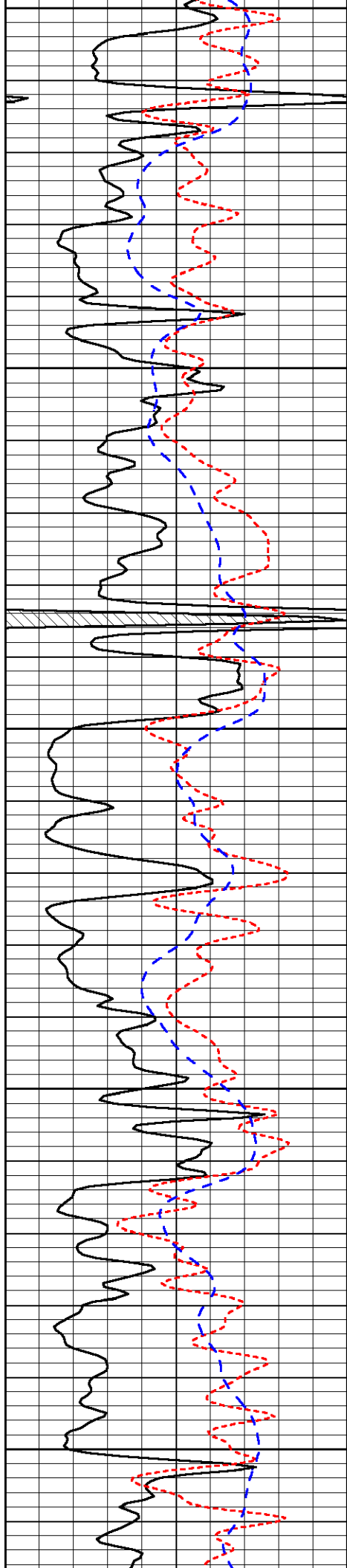


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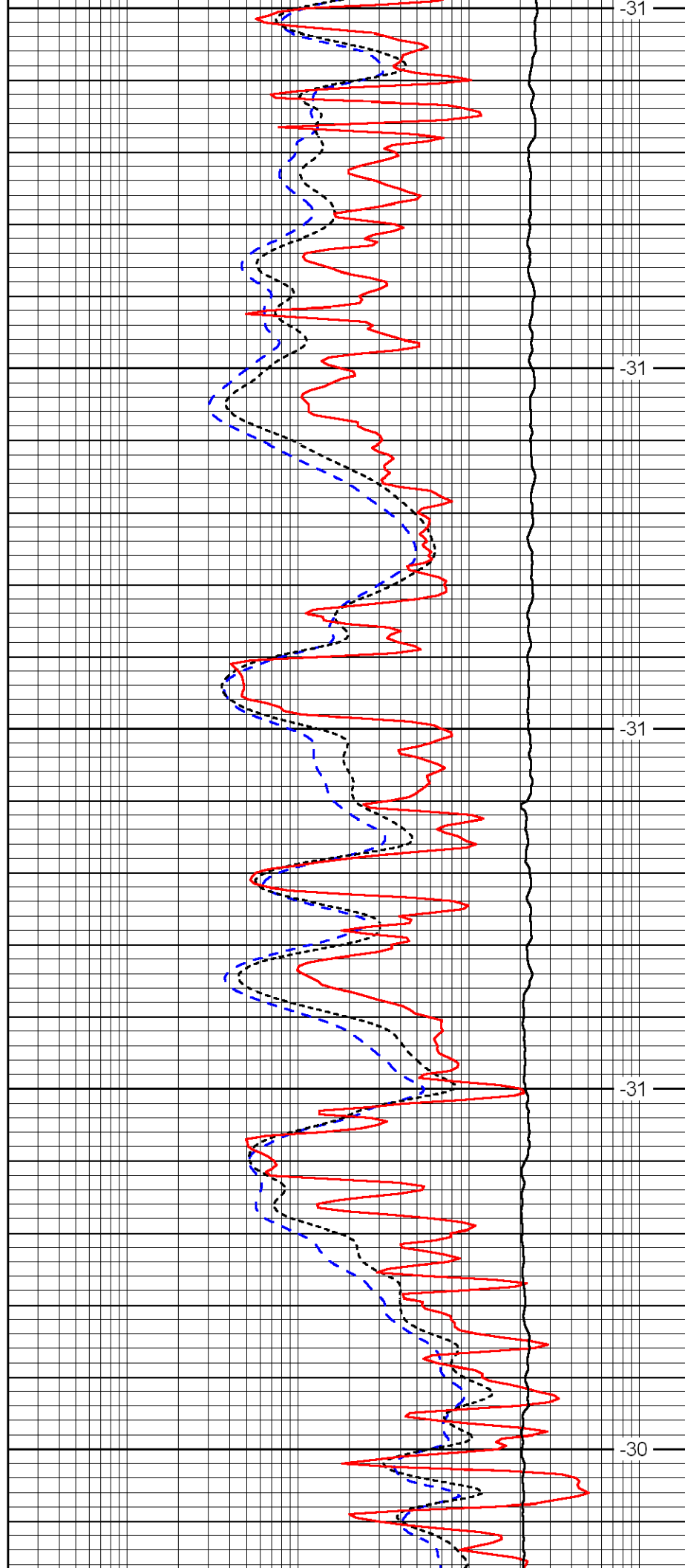
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4000

4050

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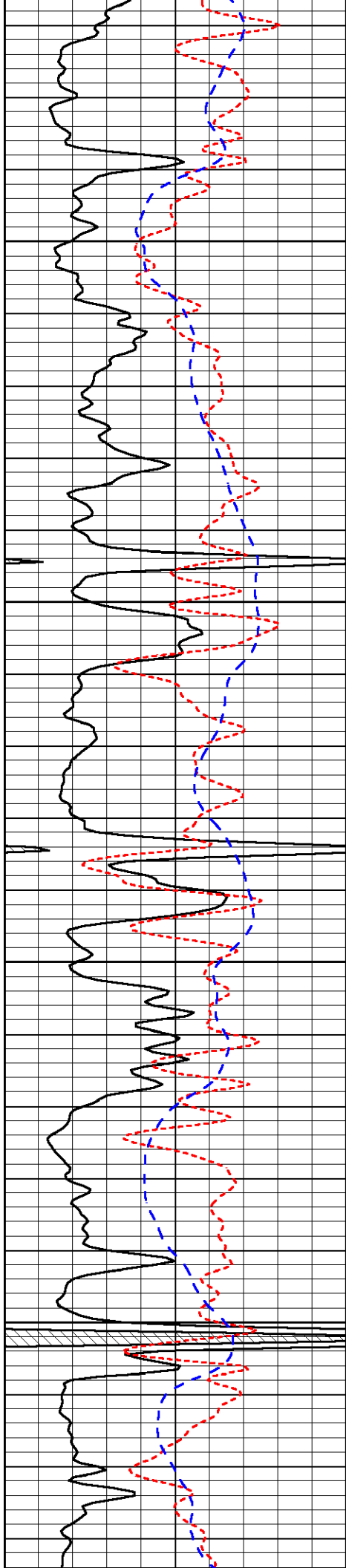
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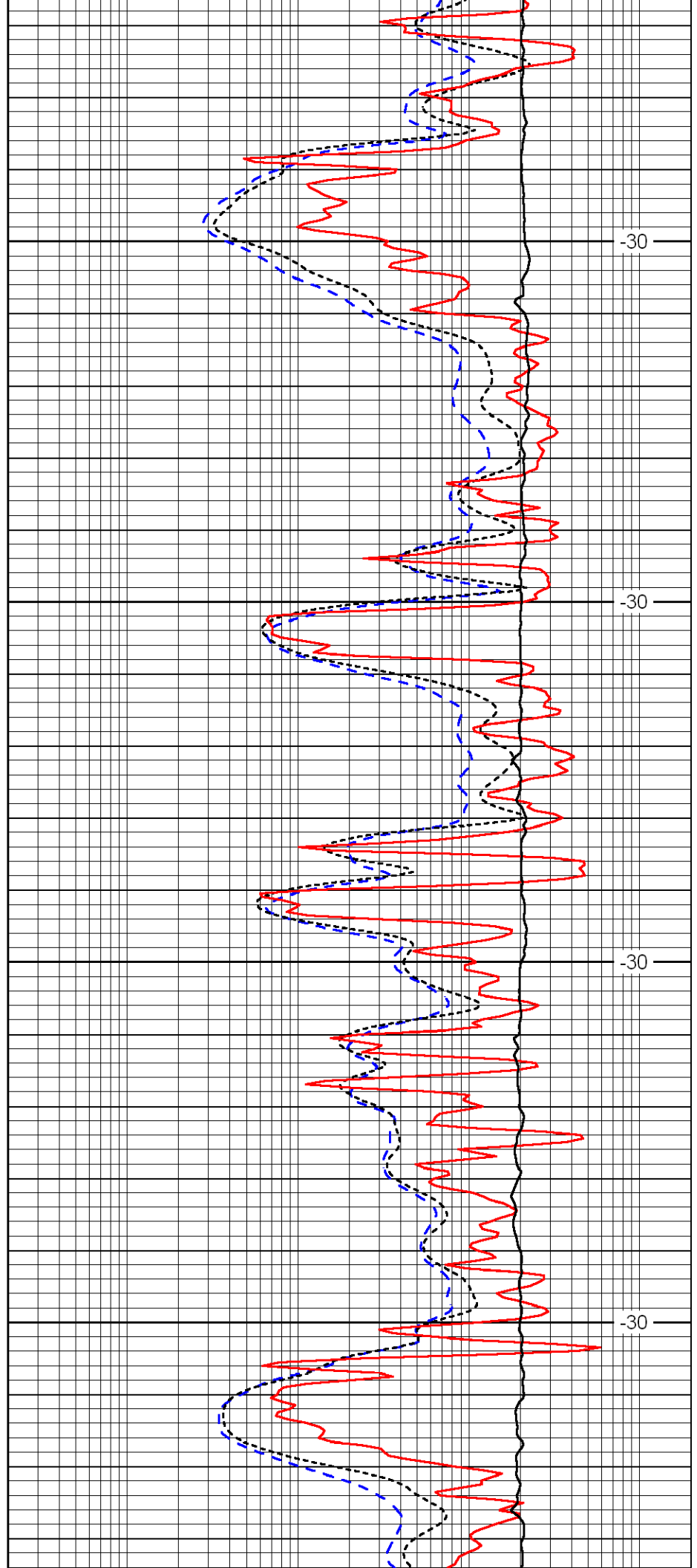


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4200

4250

4300

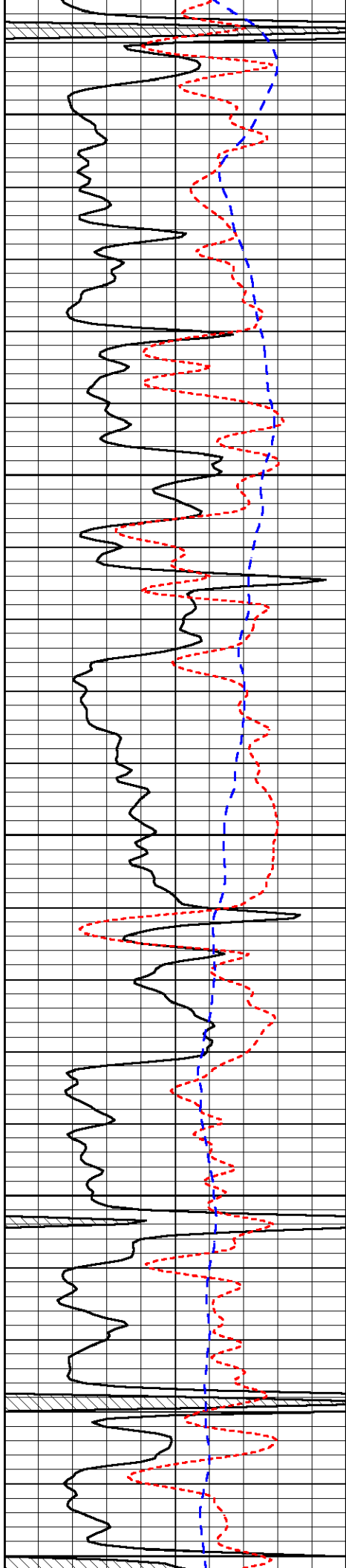


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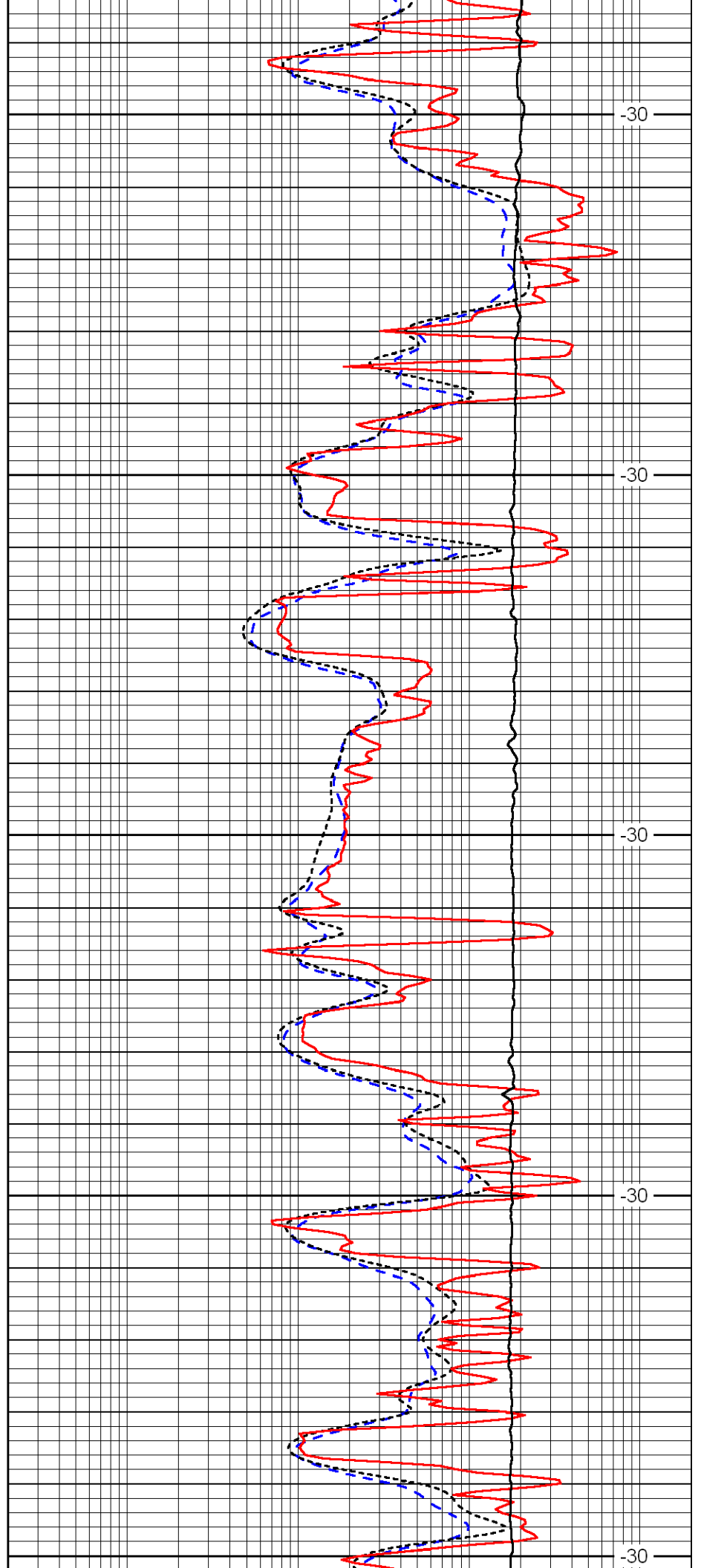
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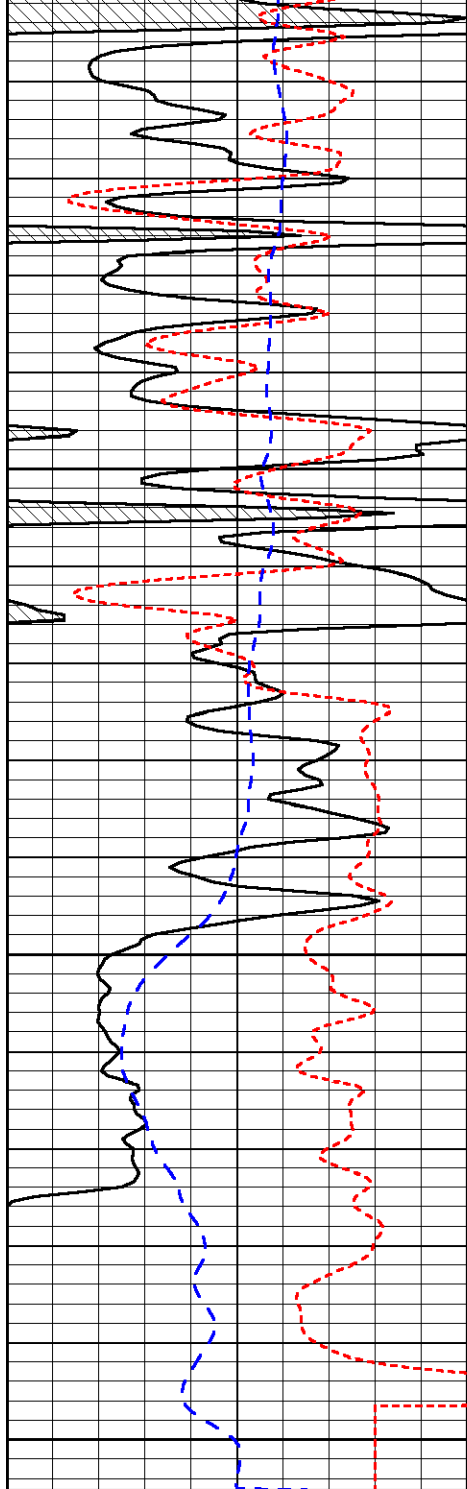
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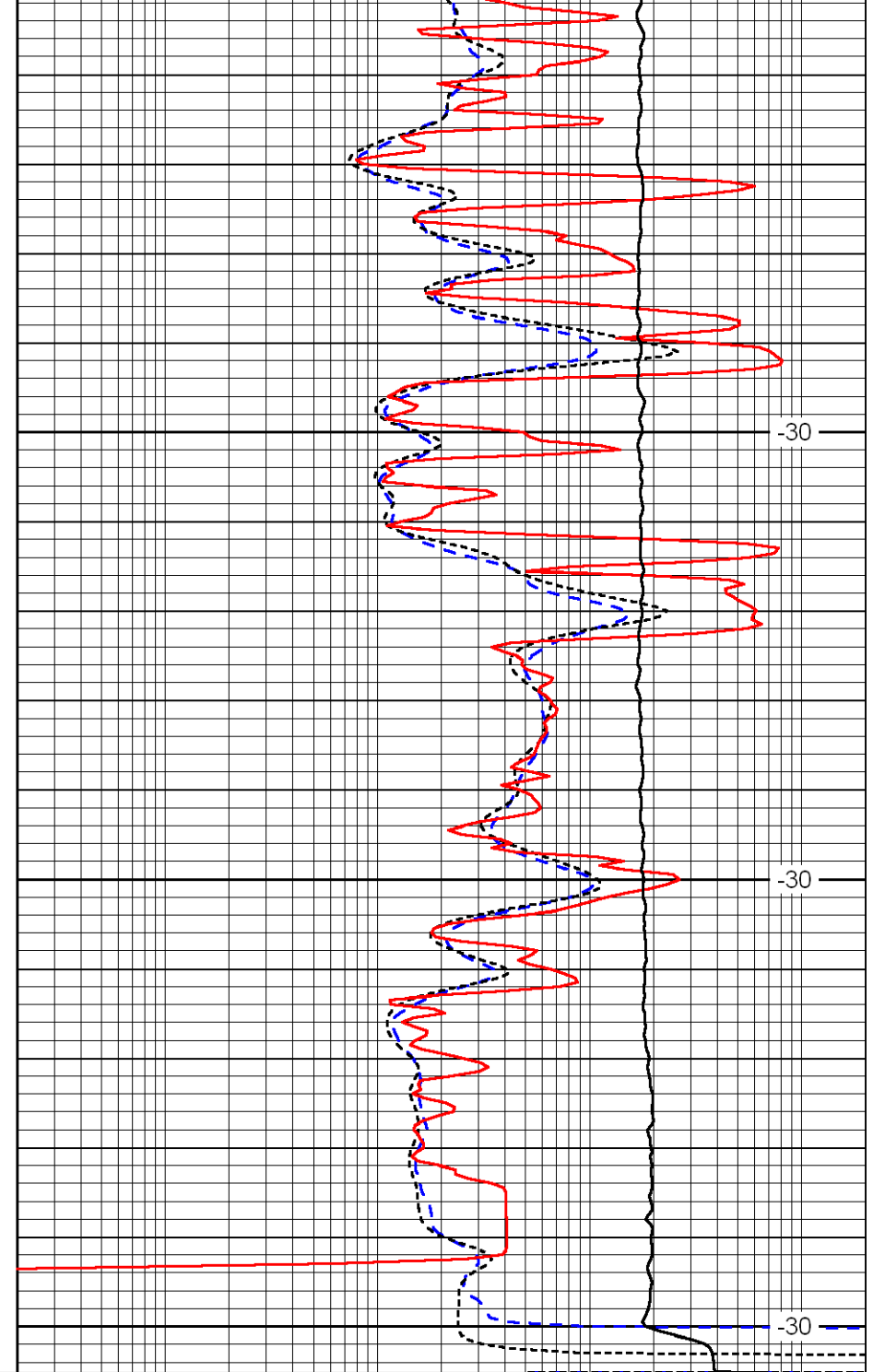


0	Gamma Ray	150
-160	RXO/RT	40
-200	SP	0

4600

4650

4700



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD