



Pioneer Energy Services

Microresistivity Log

API No.	15-159-22,775-00-00		
Company	RAMA Operating Company, Inc.		
Well	Knop No. 7-30		
Field	Chase-Silica		
County	Rice	State	Kansas
Location	NE-NE-SW 2310' FSL & 2310' FWL		
Sec: 30	Twp: 19S	Rge: 10W	Other Services CNL/CDL DIL
Permanent Datum	Ground Level	Elevation 1769	Elevation
Log Measured From	Kelly Bushing	9 Ft. Above Perm. Datum	K.B. 1778
Drilling Measured From	Kelly Bushing		D.F. 1769
			G.L. 1769

Date	4/27/14
Run Number	Two
Depth Driller	3700
Depth Logger	3695
Bottom Logged Interval	3694
Top Log Interval	2600
Casing Driller	8.625 @ 372
Casing Logger	366
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	3,000
Density / Viscosity	9.2 46
pH / Fluid Loss	9.5 8.8
Source of Sample	Flowline
Rm @ Meas. Temp	.21 @ 64
Rmf @ Meas. Temp	.16 @ 64
Rmc @ Meas. Temp	.28 @ 64
Source of Rmf / Rmc	Charts
Rm @ BHT	.12 @ 113
Operating Rig Time	3 Hours
Max Rec. Temp. F	113
Equipment Number	15
Location	Hays
Recorded By	J. Henrickson
Witnessed By	Josh Austin

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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

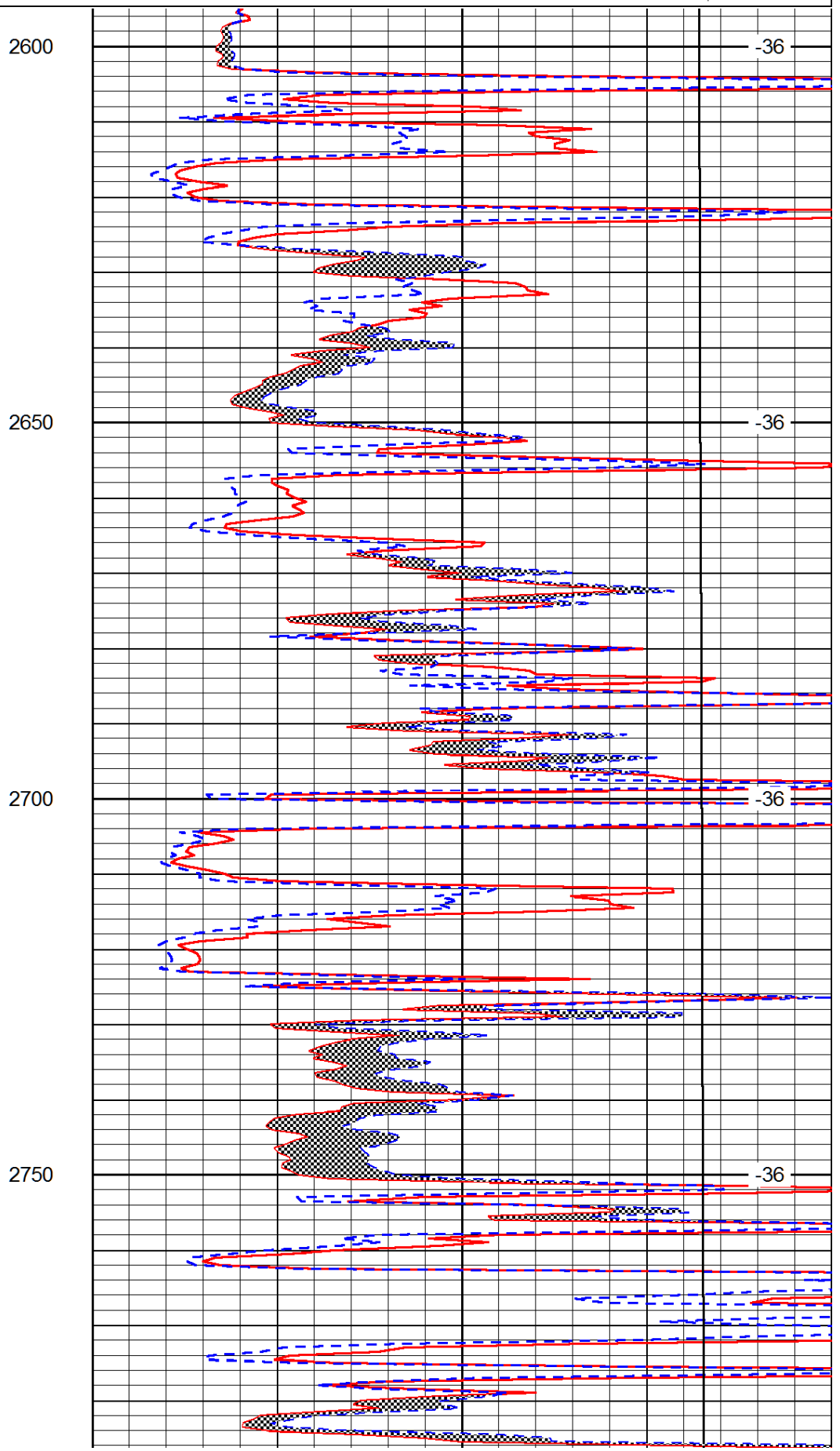
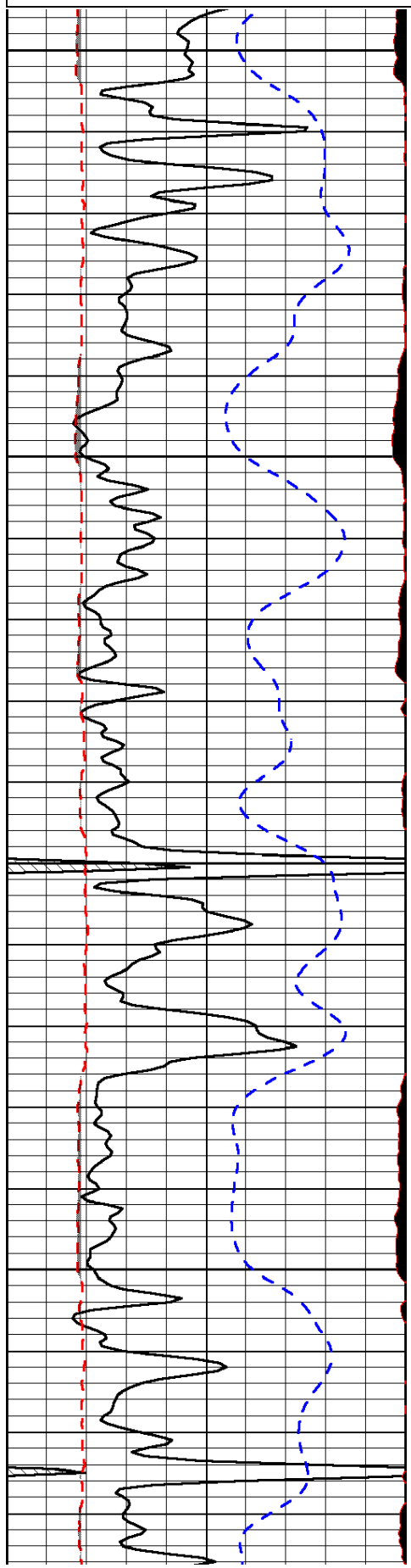
Thank you for using Log-Tech, Inc.
(785) 625-3858

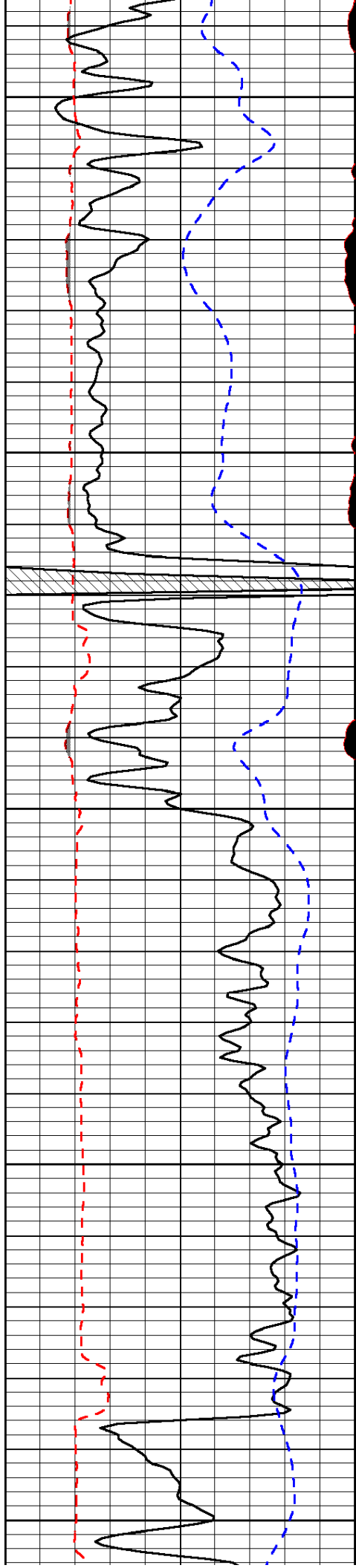
Ellinwood Kansas
East to County Line, 1 North, 1/2 East, North Into

Database File: rama_knop_7_30hd.db
 Dataset Pathname: DIL/ramastk
 Presentation Format: micro
 Dataset Creation: Sun Apr 27 08:47:57 2014
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-200	SP (mV)	0

0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0
		LSPD (ft/min)





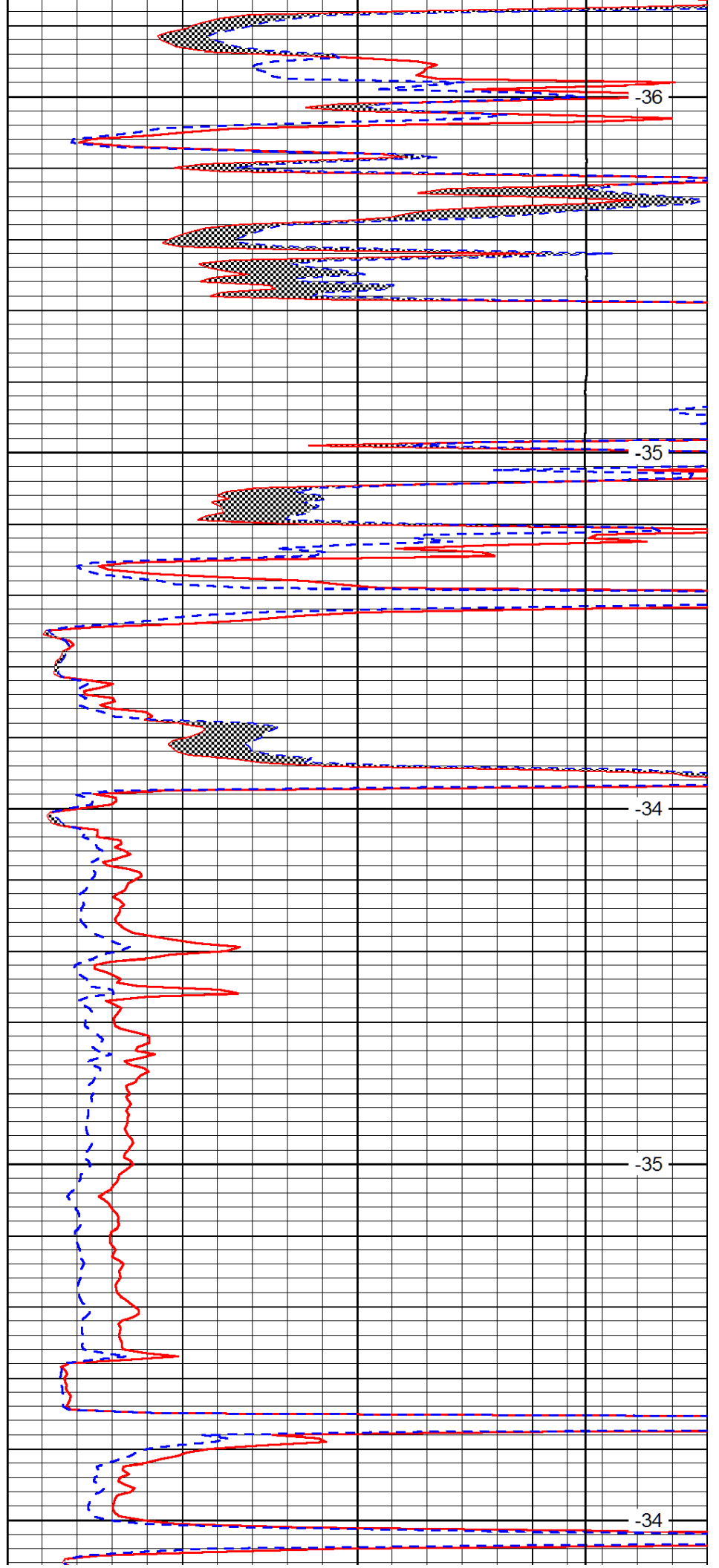
2800

2850

2900

2950

3000



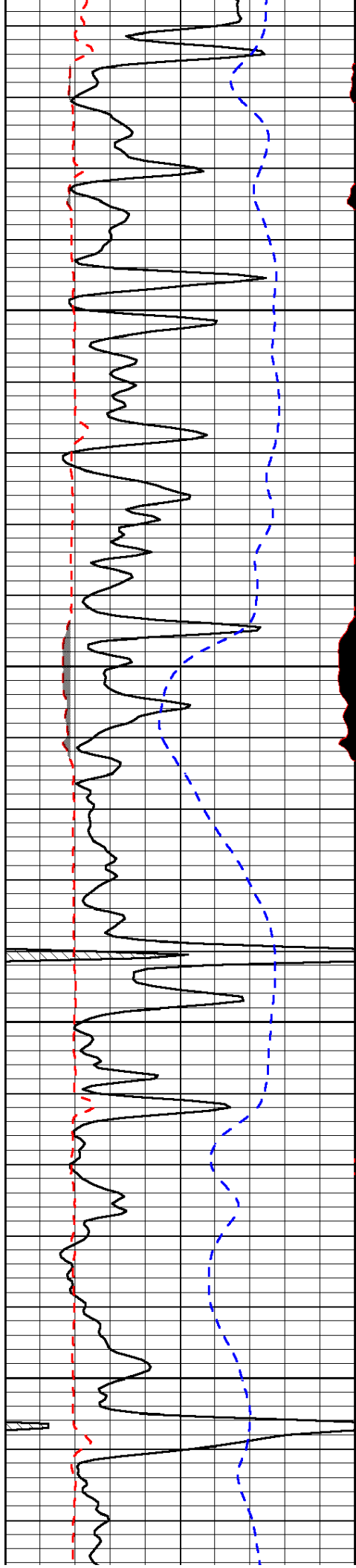
-36

-35

-34

-35

-34

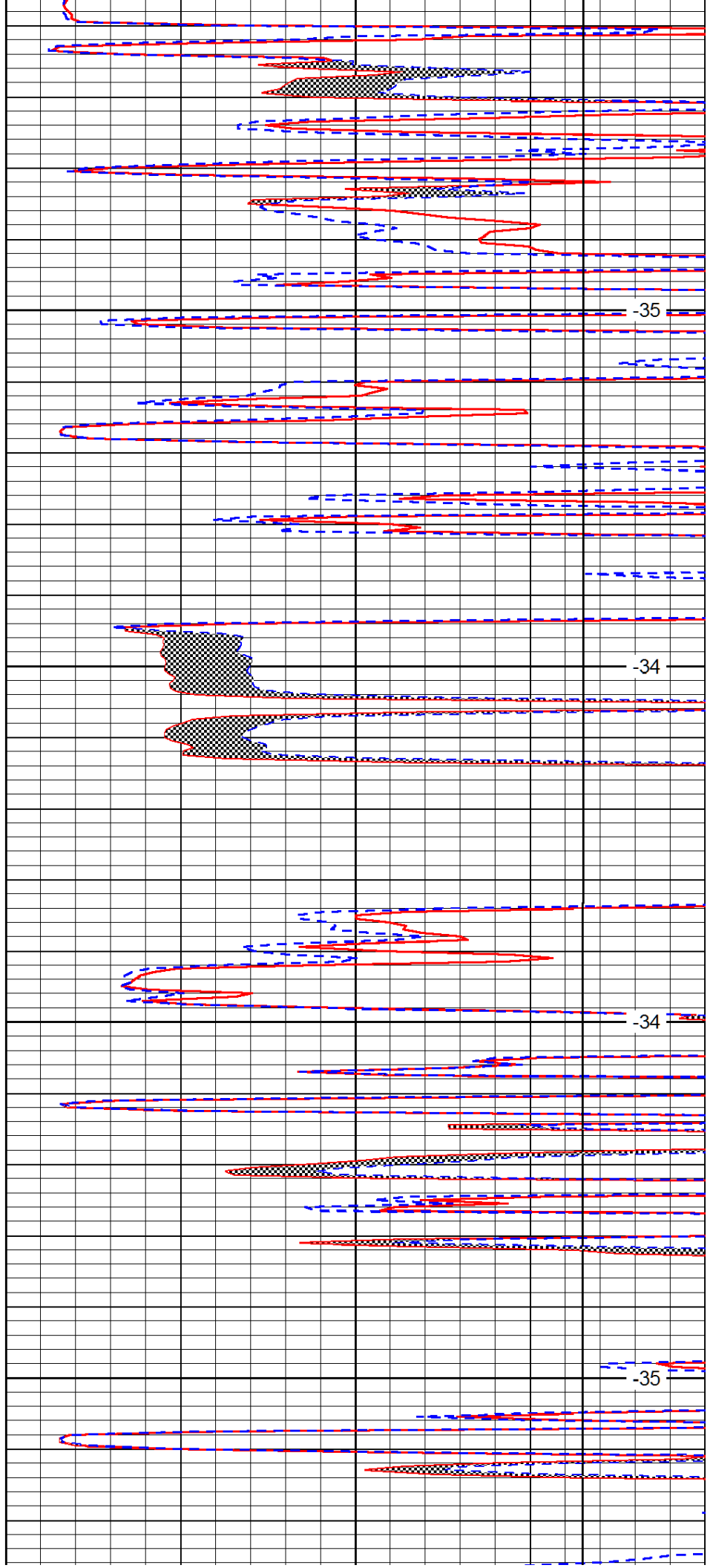


3050

3100

3150

3200

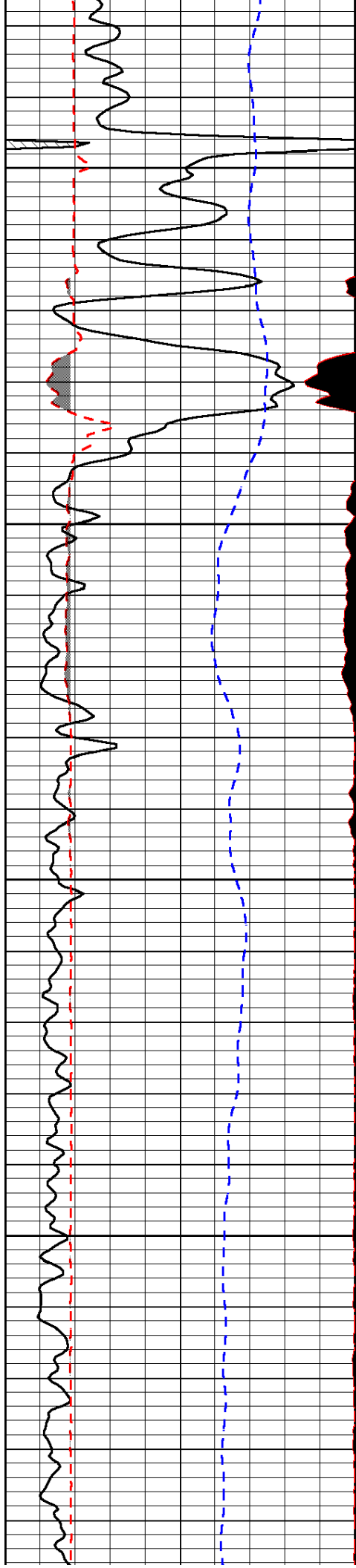


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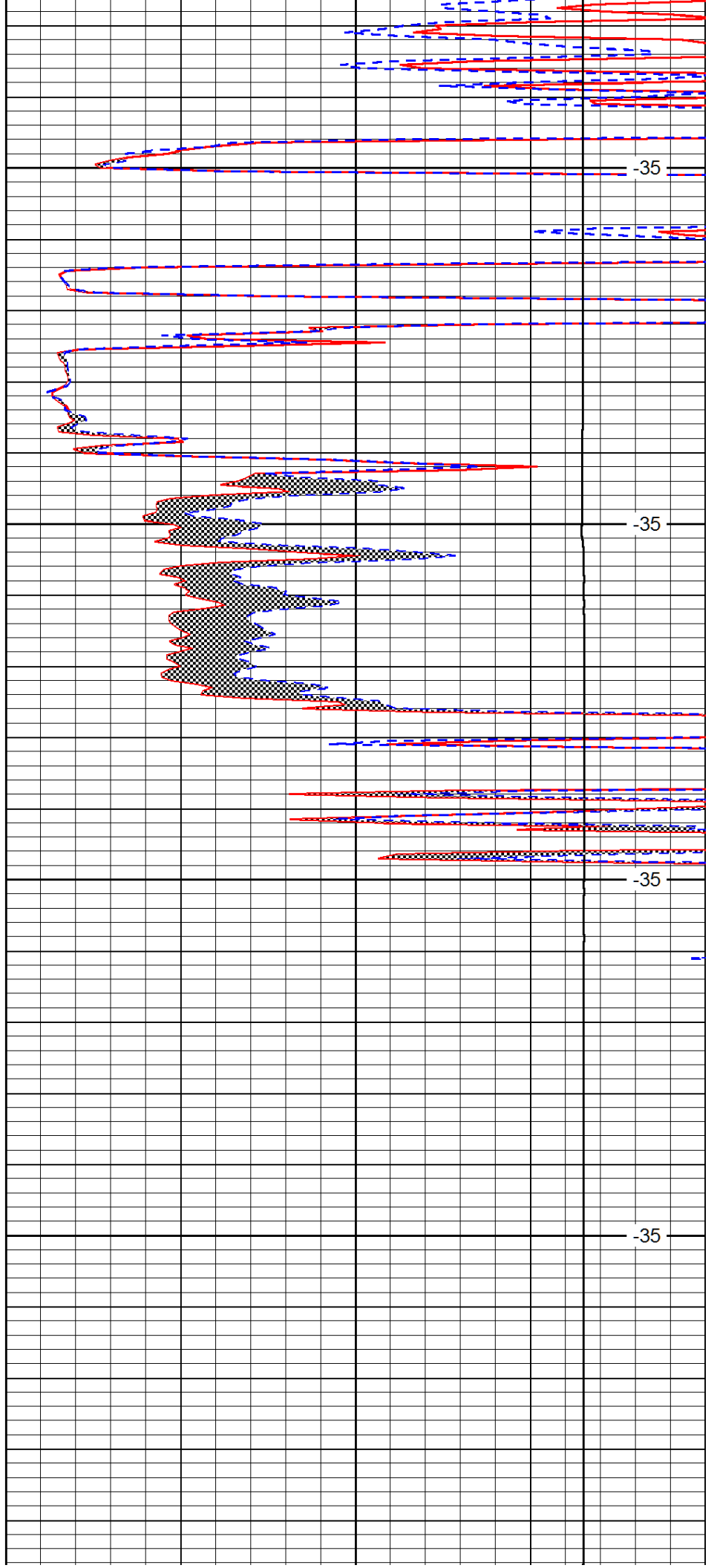


3250

3300

3350

3400

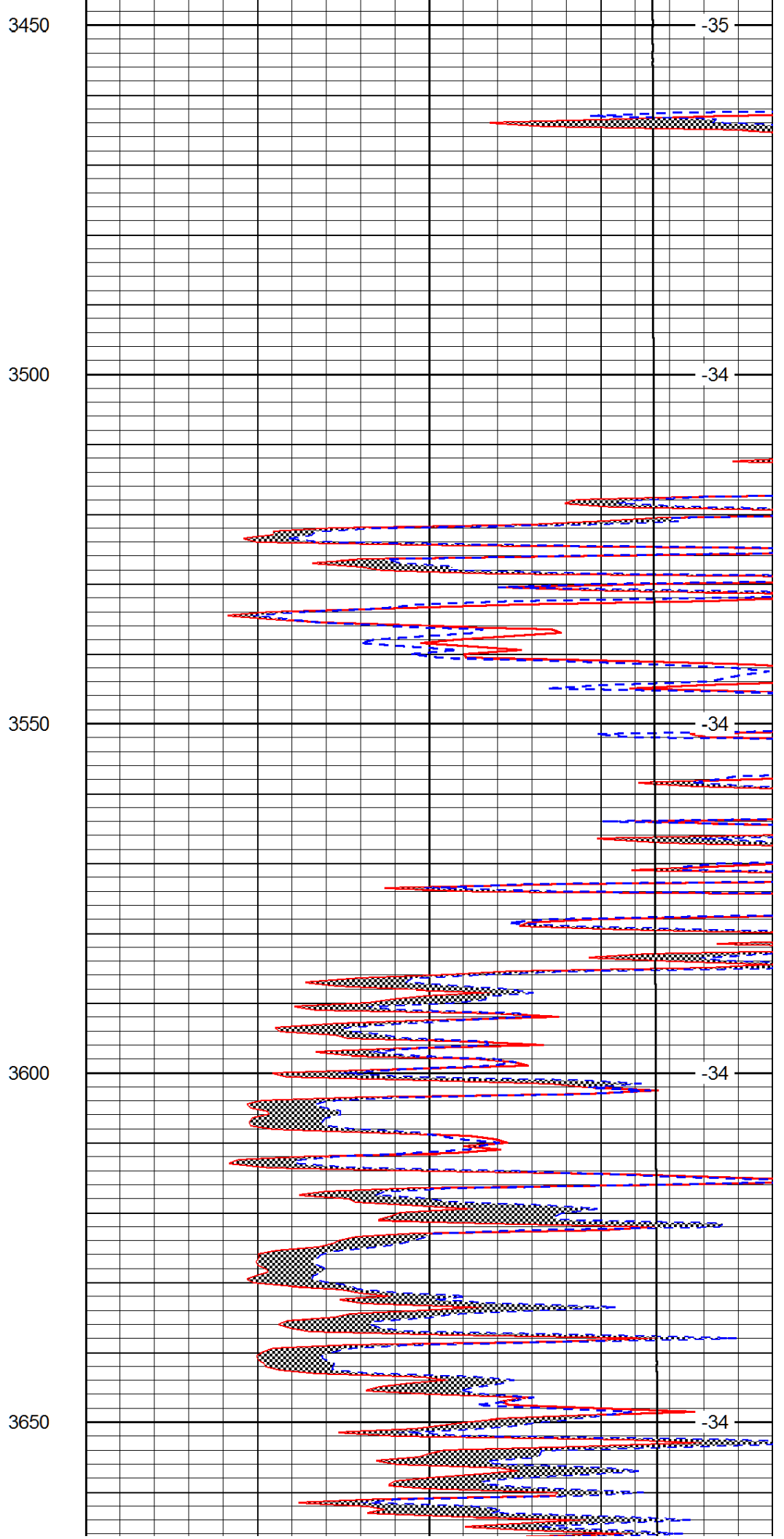
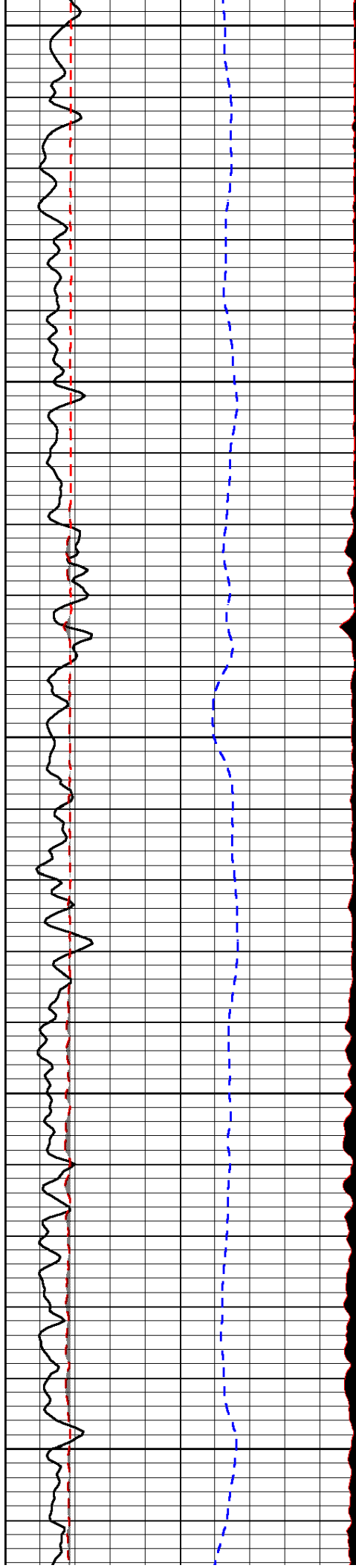


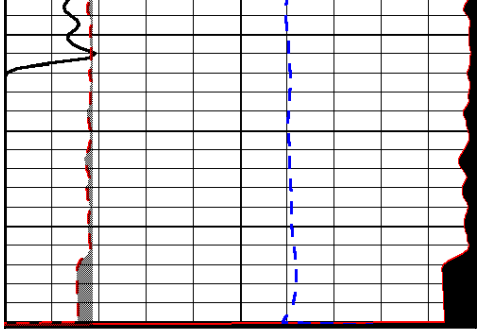
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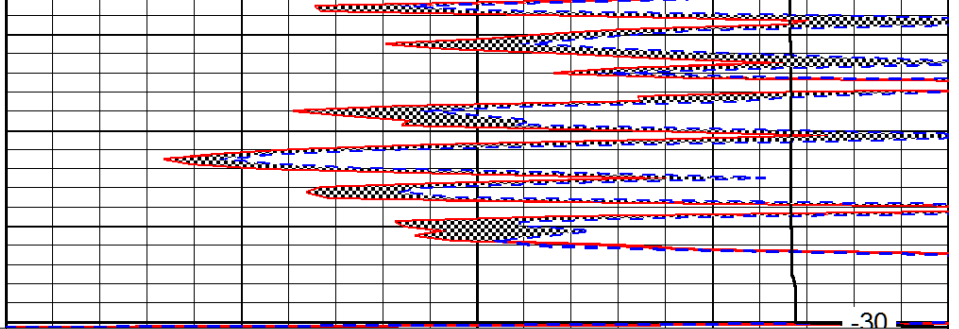
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