



Pioneer Energy Services

# Microresistivity Log

**Company** Tomlinson Operating, LLC  
**Well** Cleaveland #1  
**Field** Leinmiller  
**County** Ellis **State** Kansas

**Location** 1650' FSL & 2310' FWL  
**Sec:** 2 **Twp:** 12 S **Rge:** 19 W  
**Elevation** 2112  
**Log Measured From** Kelly Bushing **12 Ft. Above Perm. Datum**  
**Drilling Measured From** Kelly Bushing

**Date** 04-09-2013  
**Run Number** Two  
**Depth Driller** 3750  
**Depth Logger** 3749  
**Bottom Logged Interval** 3748  
**Top Log Interval** 3000  
**Casing Driller** 8.625 @ 303  
**Casing Logger** 303  
**Bit Size** 7.875  
**Type Fluid in Hole** Chemical  
**Salinity, ppm CL** 4000  
**Density / Viscosity** 9.2 | 48  
**pH / Fluid Loss** 10.5 | 7.8

Other Services	RAG/BHCS
Elevation	K.B. 2124 D.F. 2112 G.L. 2112
Source of Sample	Flowline
Rm @ Meas. Temp	0.60 @ 44
Rmf @ Meas. Temp	0.45 @ 44
Rmc @ Meas. Temp	0.81 @ 44
Source of Rmf / Rmc	Charts
Rm @ BHT	0.23 @ 116
Operating Rig Time	4 Hours
Max Rec. Temp. F	116
Equipment Number	91
Location	Hays
Recorded By	Y. Ruiz
Witnessed By	Bob O'Dell

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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

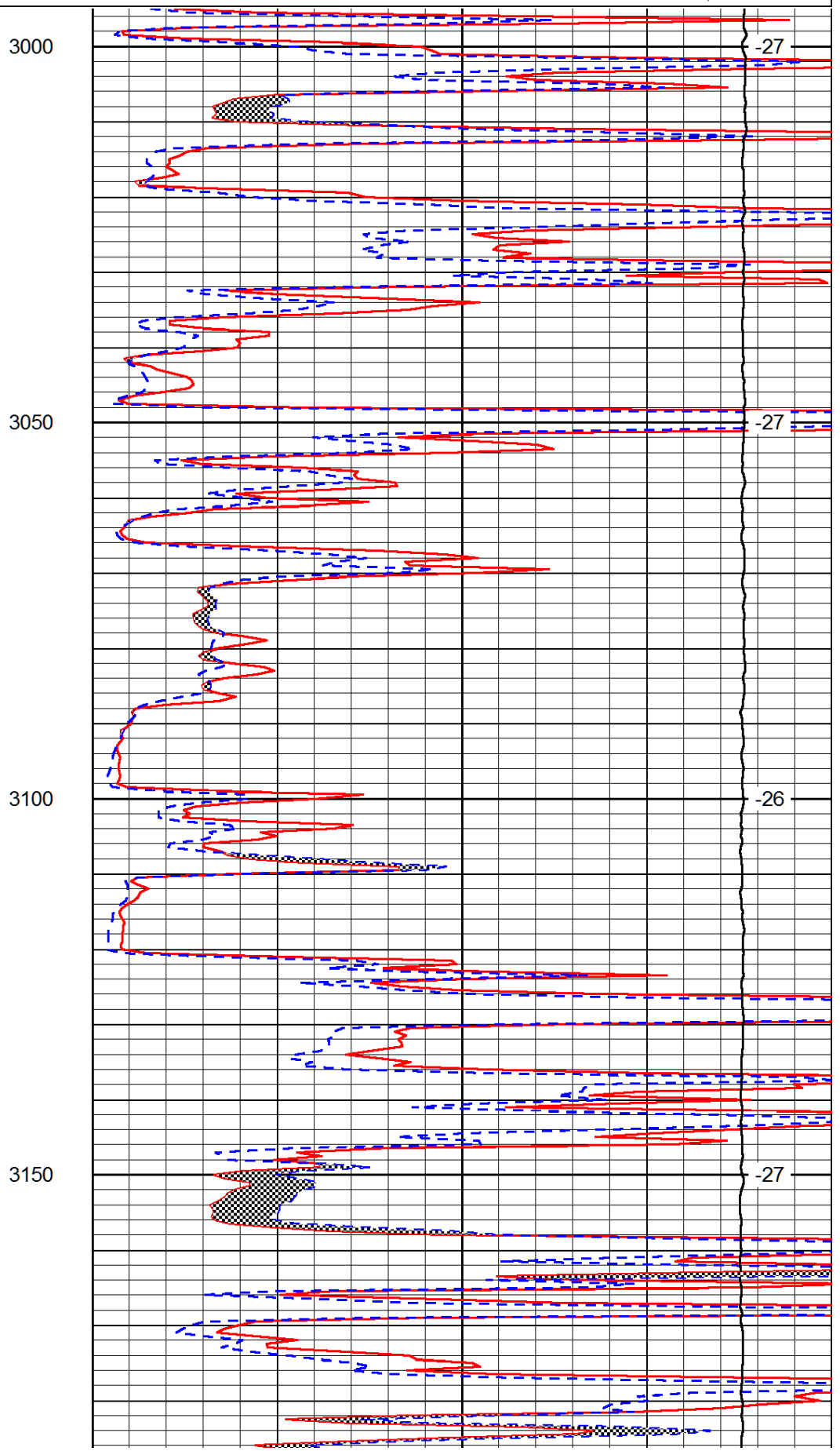
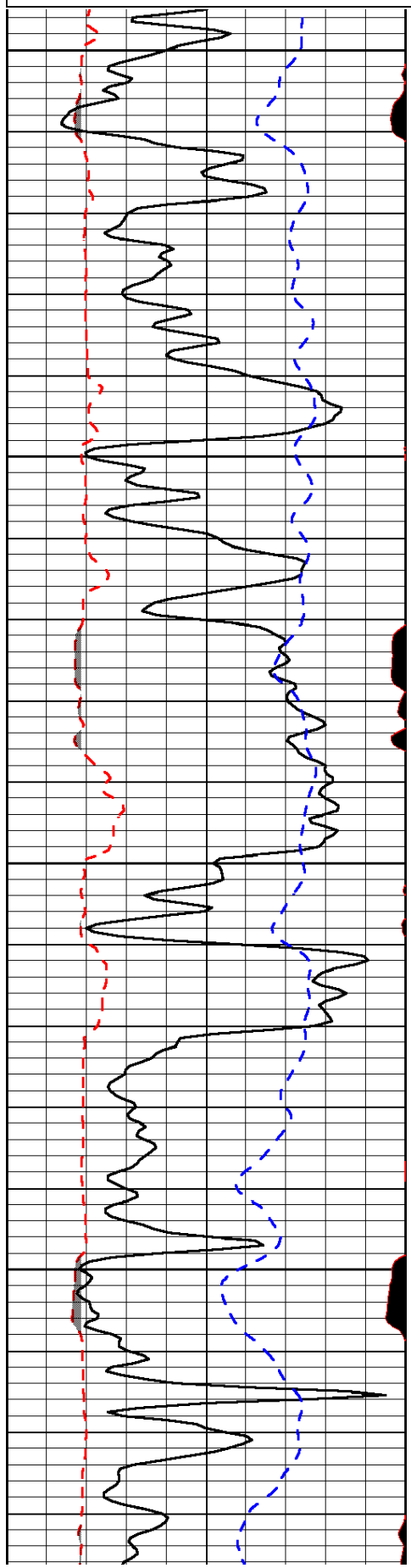
Thank you for using Log-Tech, Inc.  
 (785) 625-3858  
 Hays,  
 North to Buckeye, 4 West to Hyacinth Ave,  
 2 North, 1/2 West,  
 North into

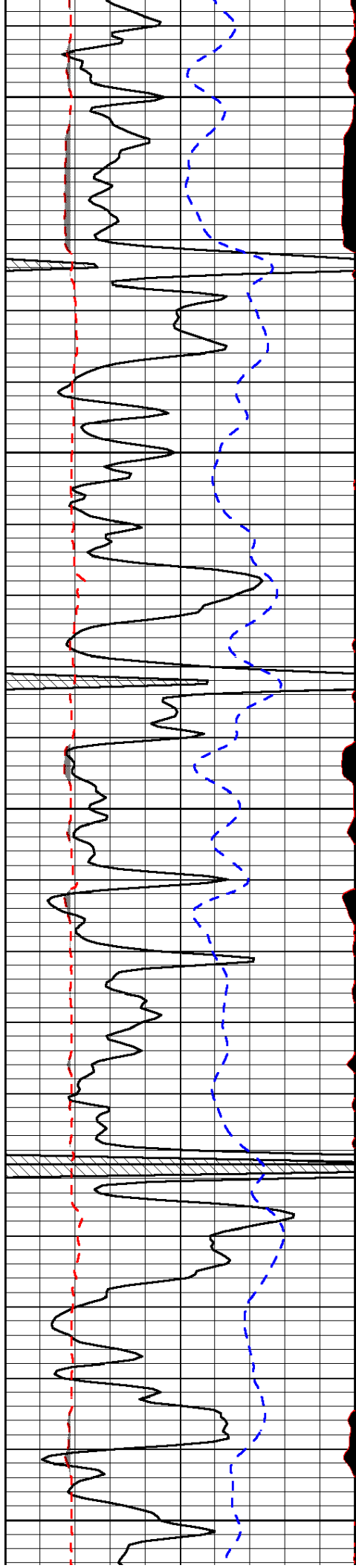
Database File:	tomlinson_040913hd.db
Dataset Pathname:	rag/tomrag
Presentation Format:	micro
Dataset Creation:	Tue Apr 09 14:35:33 2013
Charted by:	Depth in Feet scaled 1:240

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)





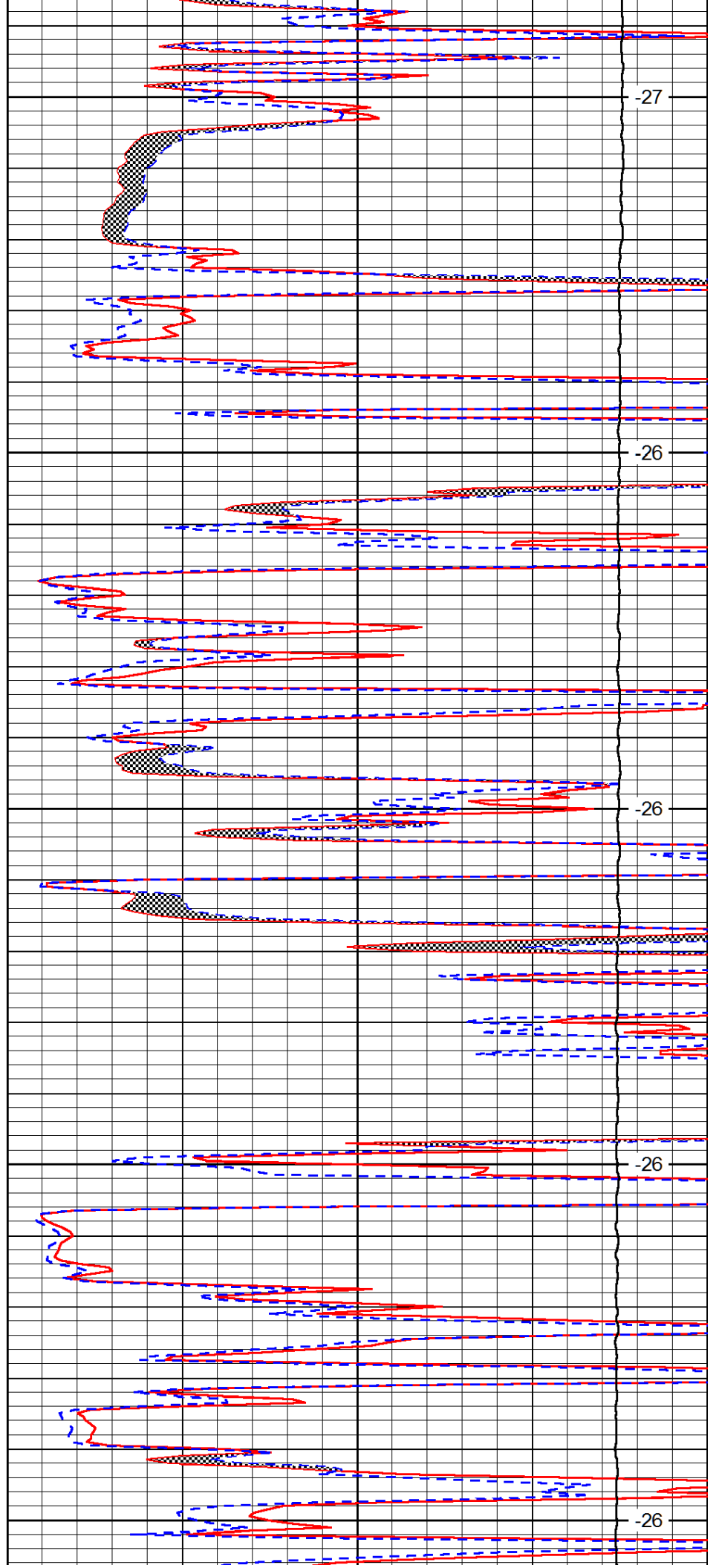
3200

3250

3300

3350

3400



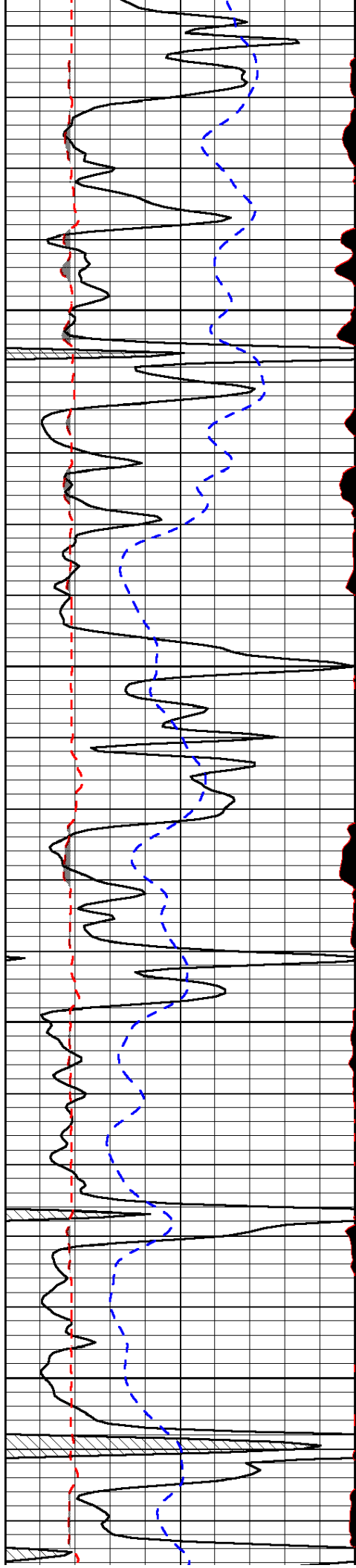
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-26

-26

-26

-26

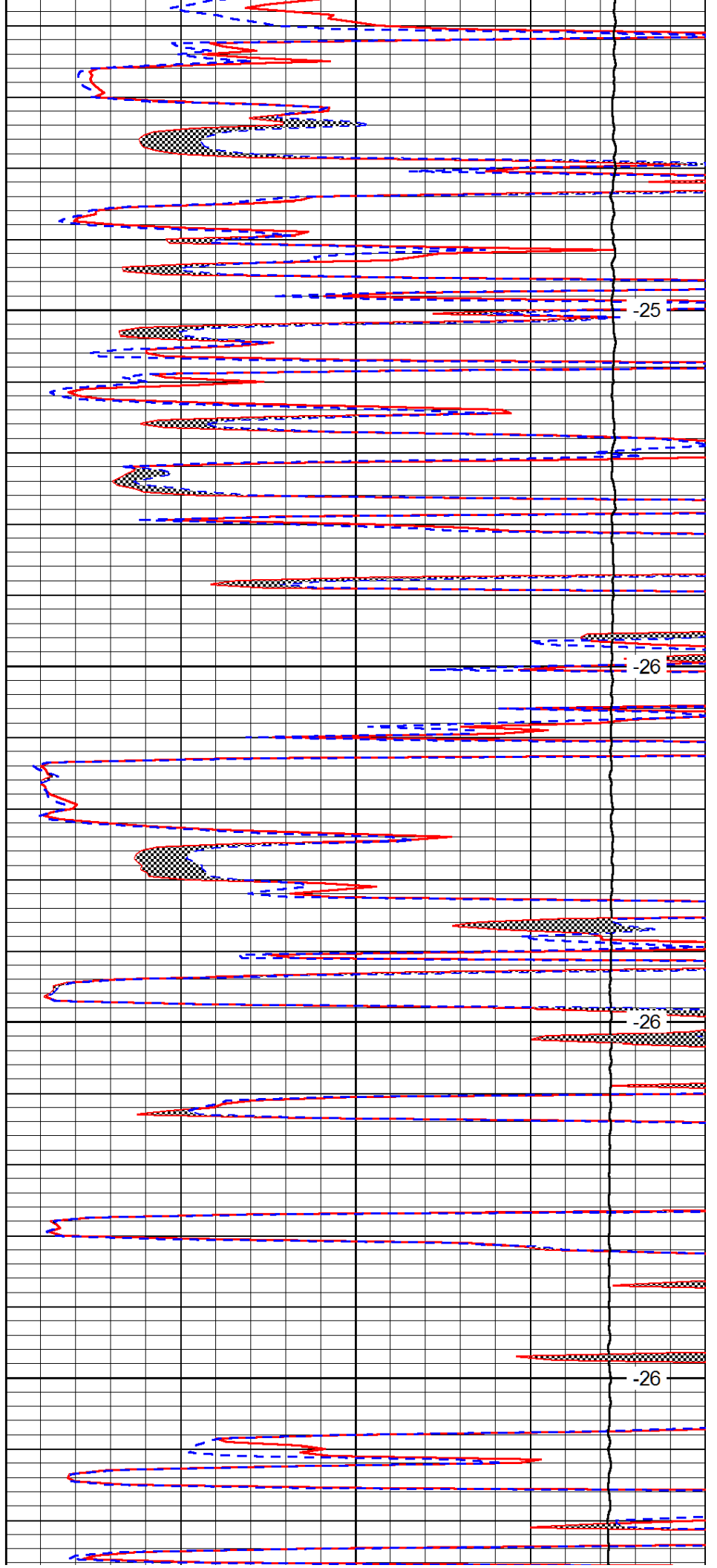


3450

3500

3550

3600

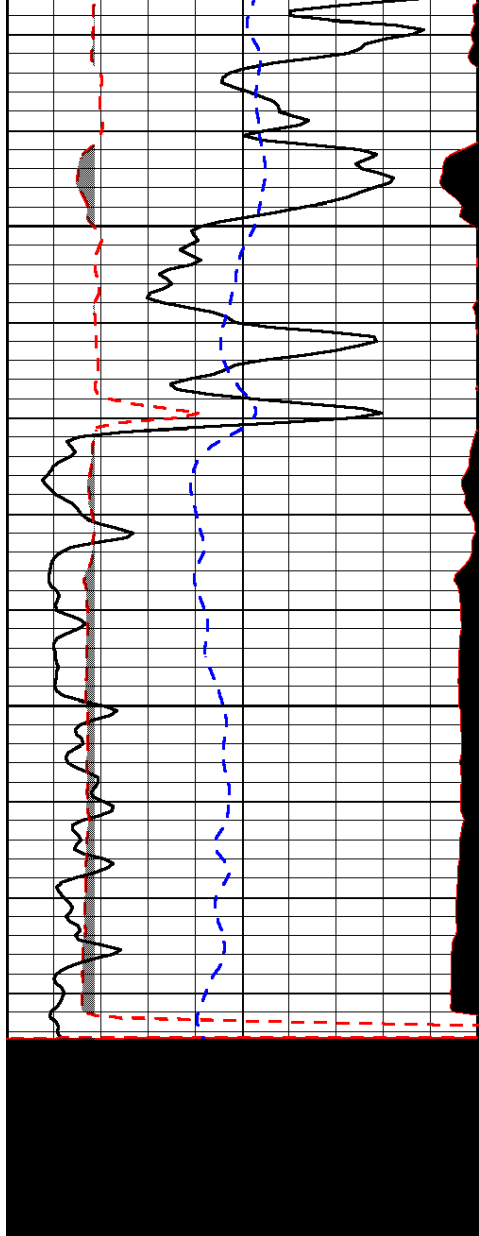


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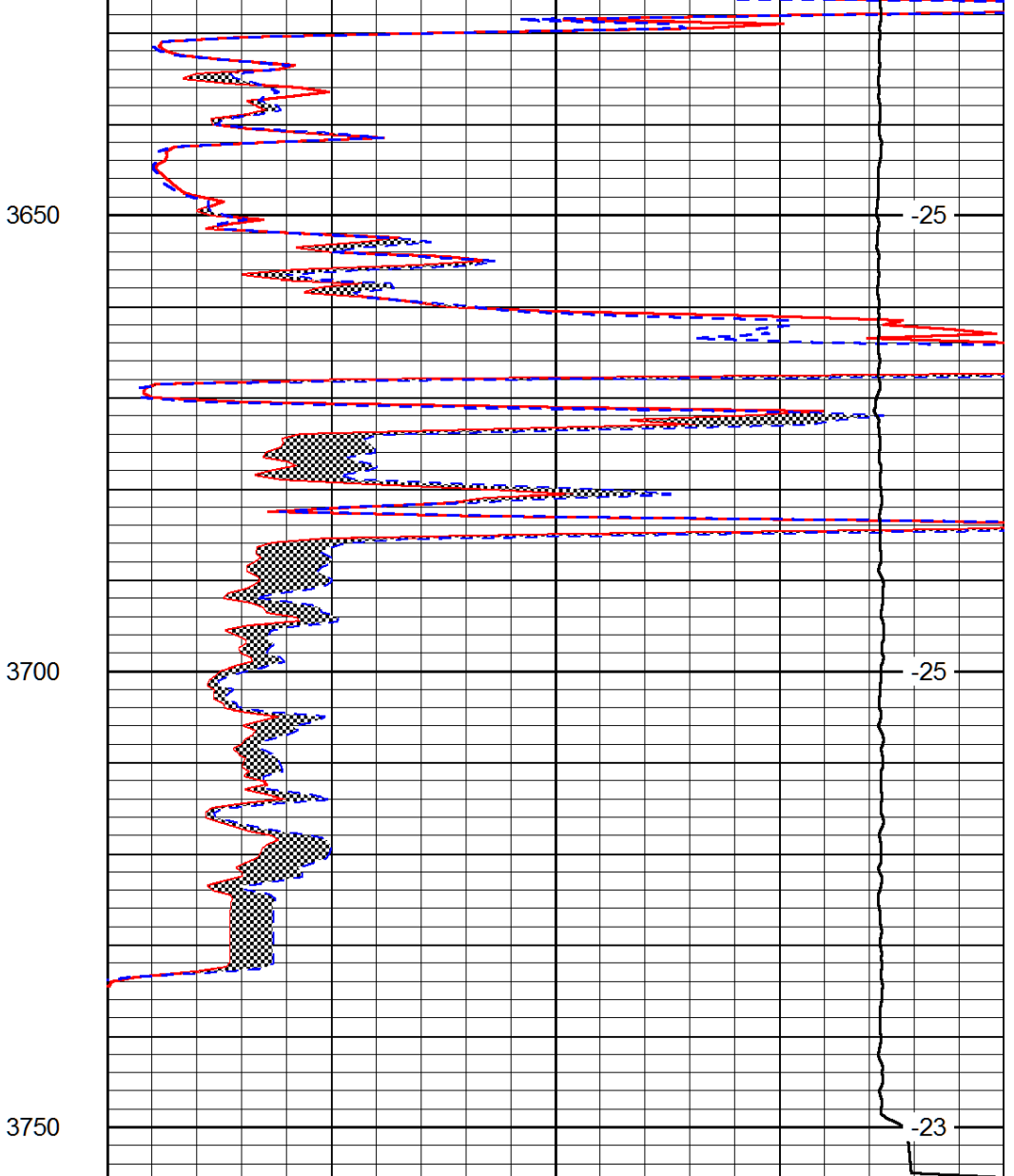
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