



**DIGITAL LOG** (785) 625-3858

**Microresistivity  
Log**

API No. 15-009-25,582-00-00

Company **Empire Energy E&P LLC.**  
 Well **Esfeld No. 9**  
 Field **Kraft-Prusa**  
 County **Barton** State **Kansas**

Location **SW SW NE NE  
1100' FNL & 1220' FSL**

Sec: **28** Twp: **16 S** Rge: **11 W**

Other Services  
CNL/CDL  
DIL/BHCS

Permanent Datum **Ground Level** Elevation **1904**  
 Log Measured From **Kelly Bushing** 7 Ft. Above Perm. Datum  
 Drilling Measured From **Kelly Bushing**

Elevation **K.B. 1911  
D.F. 1904  
G.L. 1904**

Date	8/11/2011
Run Number	Two
Depth Driller	3430
Depth Logger	3430
Bottom Logged Interval	3429
Top Log Interval	2200
Casing Driller	8.625 @ 752
Casing Logger	751
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	7800
Density / Viscosity	9.4   53
pH / Fluid Loss	9.0   10.2
Source of Sample	Flowline
Rm @ Meas. Temp	.37 @ 82
Rmf @ Meas. Temp	.28 @ 82
Rmc @ Meas. Temp	.50 @ 82
Source of Rmf / Rmc	Charts
Rm @ BHT	.28 @ 110
Operating Rig Time	5 1/2 Hours
Max Rec. Temp. F	110
Equipment Number	10
Location	Hays
Recorded By	D. Kerr
Witnessed By	Kurt Talbott

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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

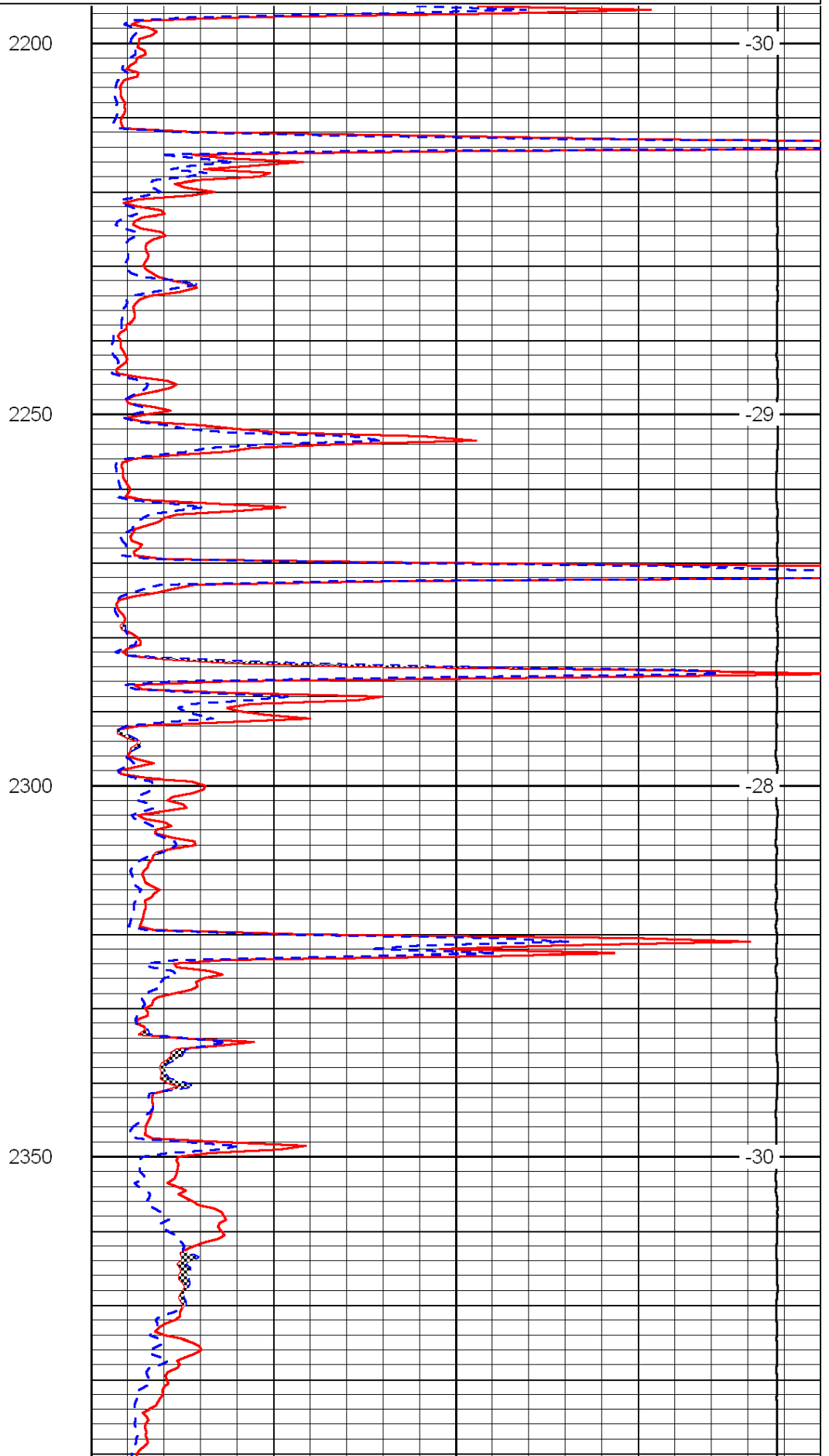
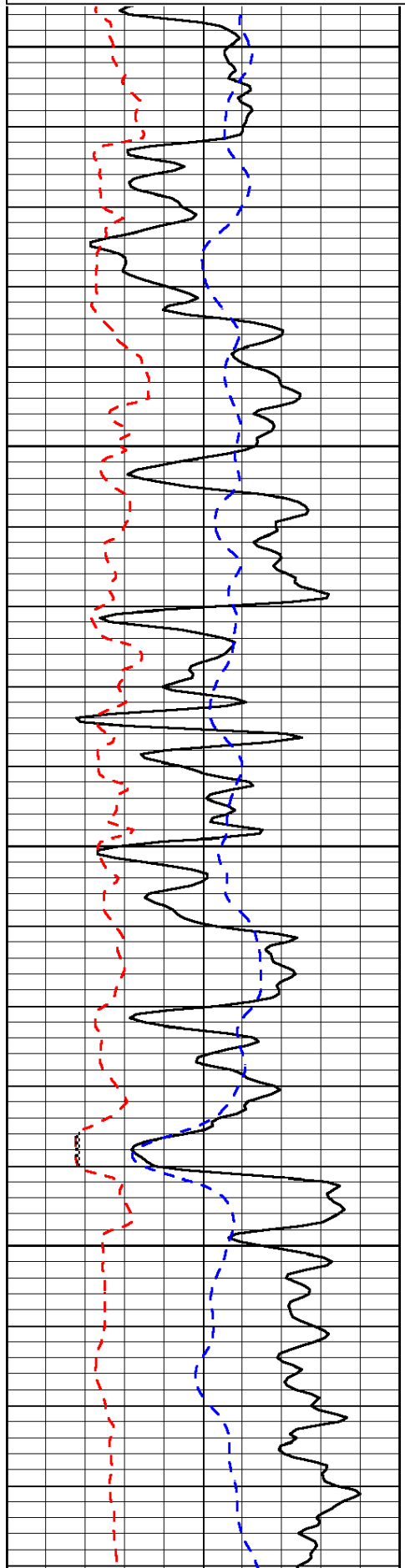
Beaver KS, 7 East to 130th Ave.  
 1/4 South, West Into

Database File: c:\warrior\data\empire energy\_esfeld no. 9\empire\_esfeld\_9hd.db  
 Dataset Pathname: dil/empstk  
 Presentation Format: micro  
 Dataset Creation: Thu Aug 11 15:58:31 2011  
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
15000	Line Weight	0

LSPD



2200

2250

2300

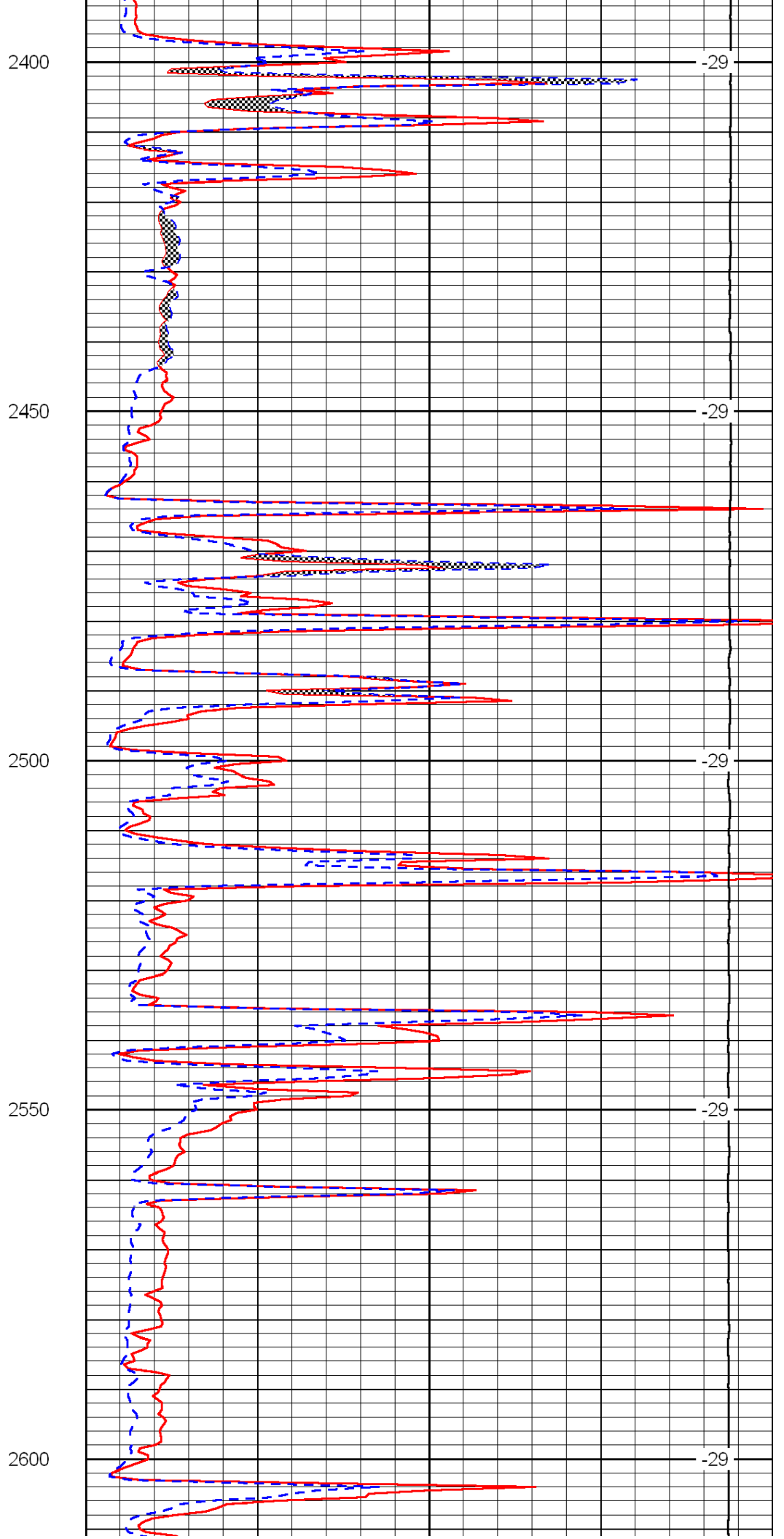
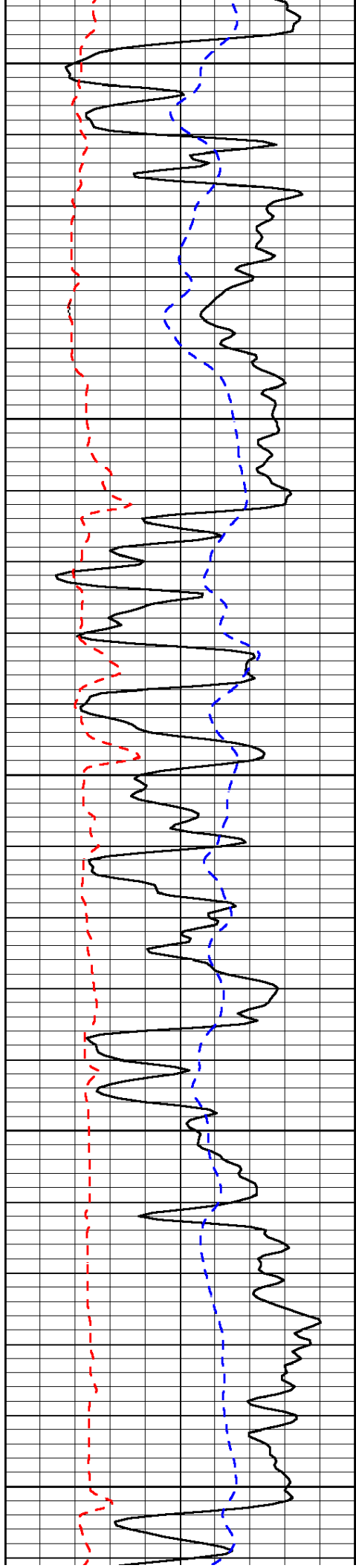
2350

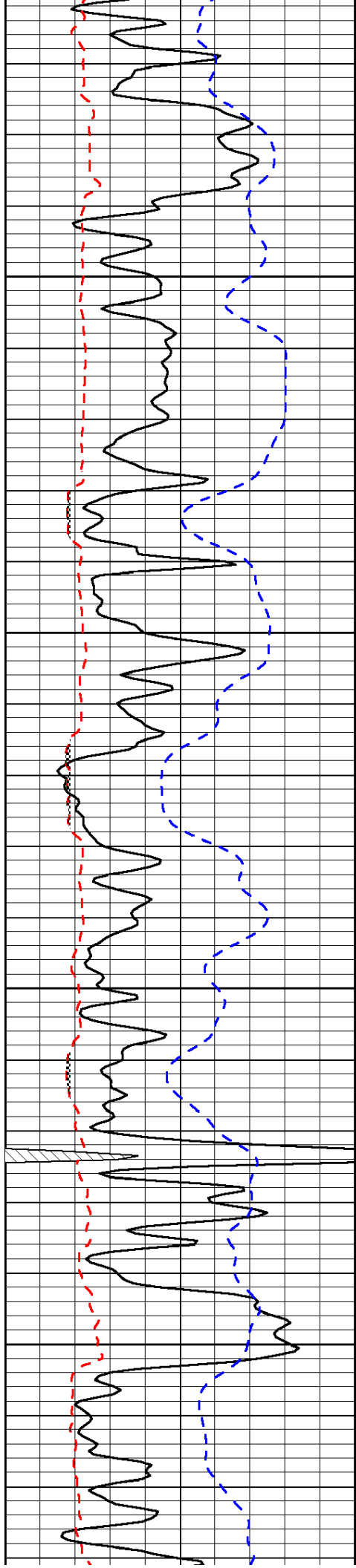
-30

-29

-28

-30



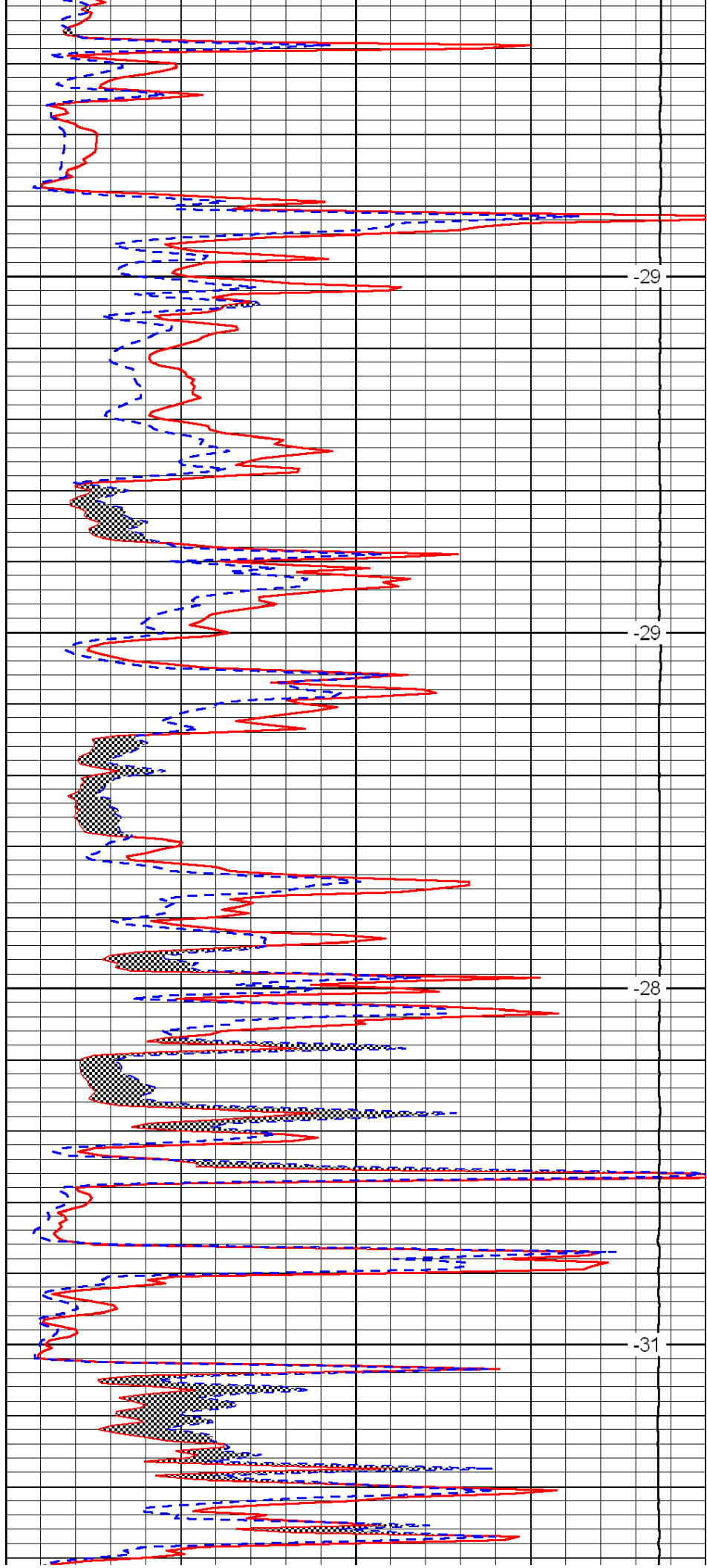


2650

2700

2750

2800

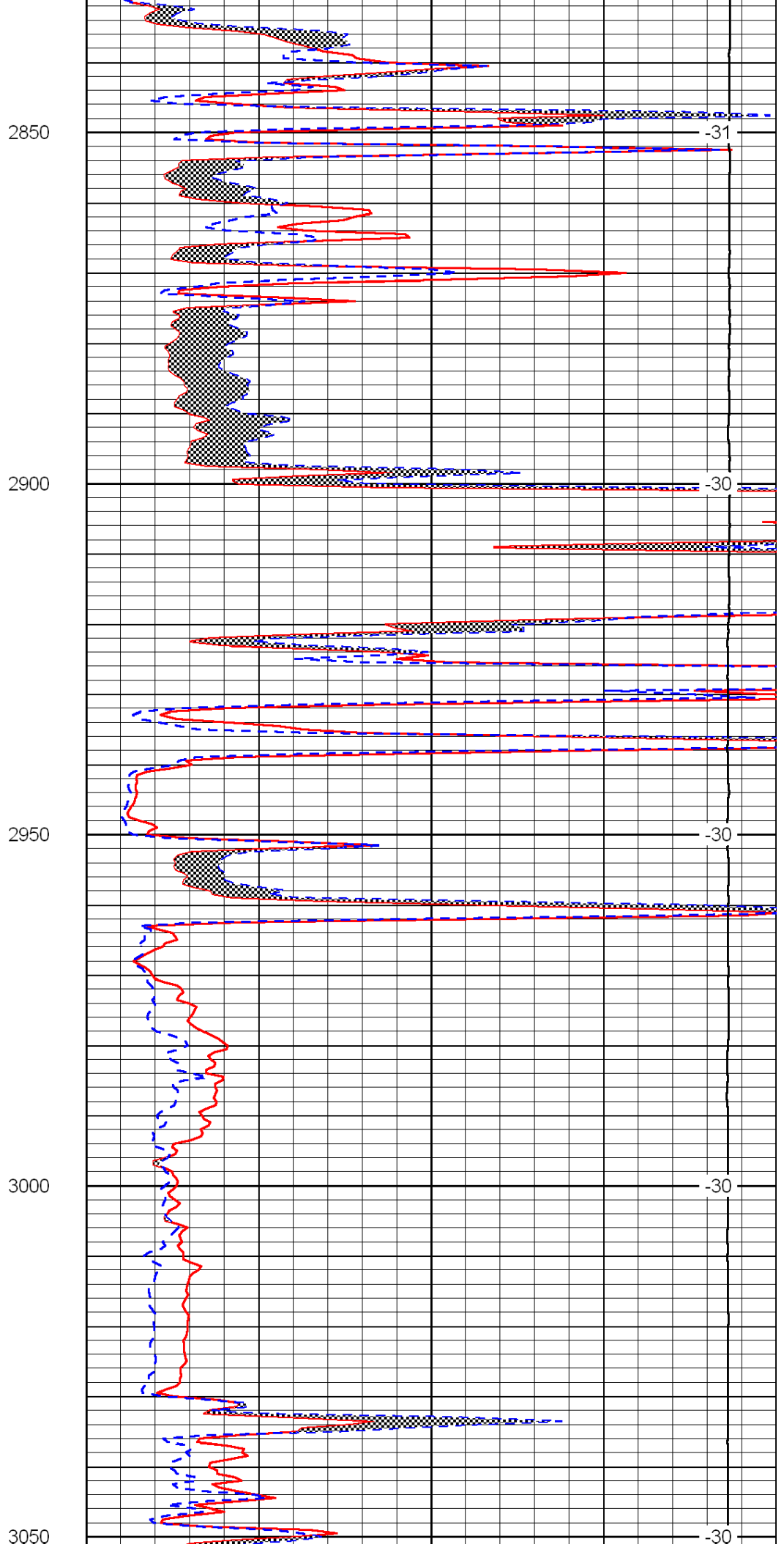
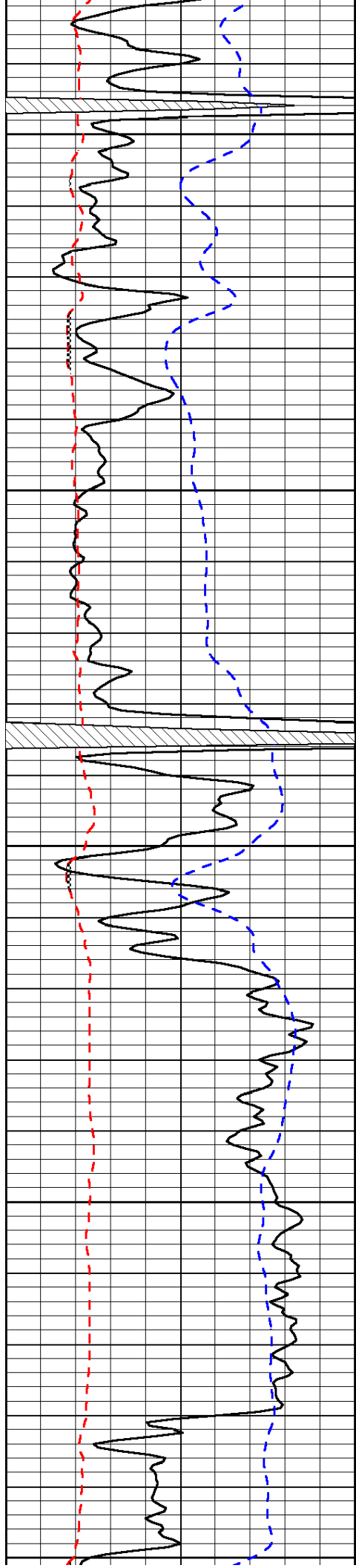


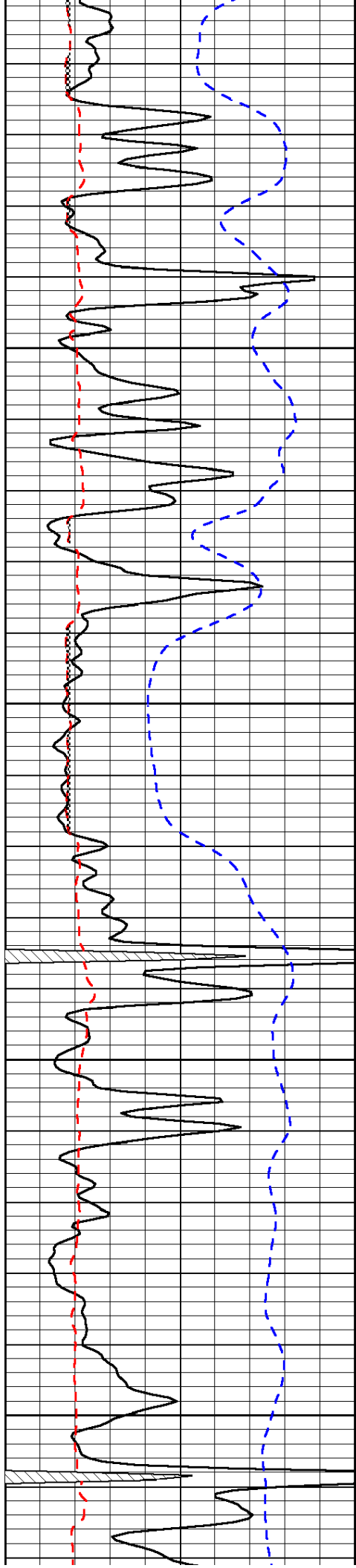
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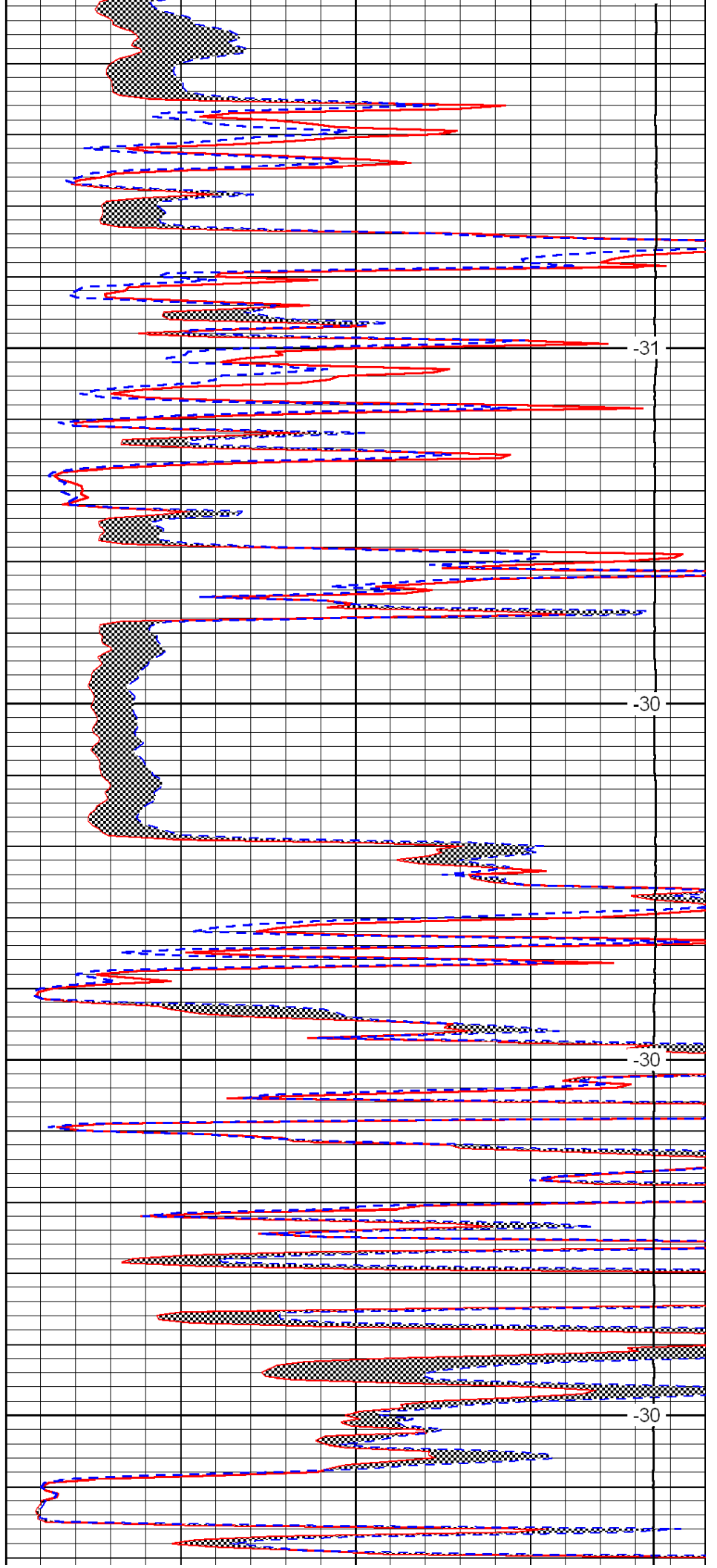


3100

3150

3200

3250

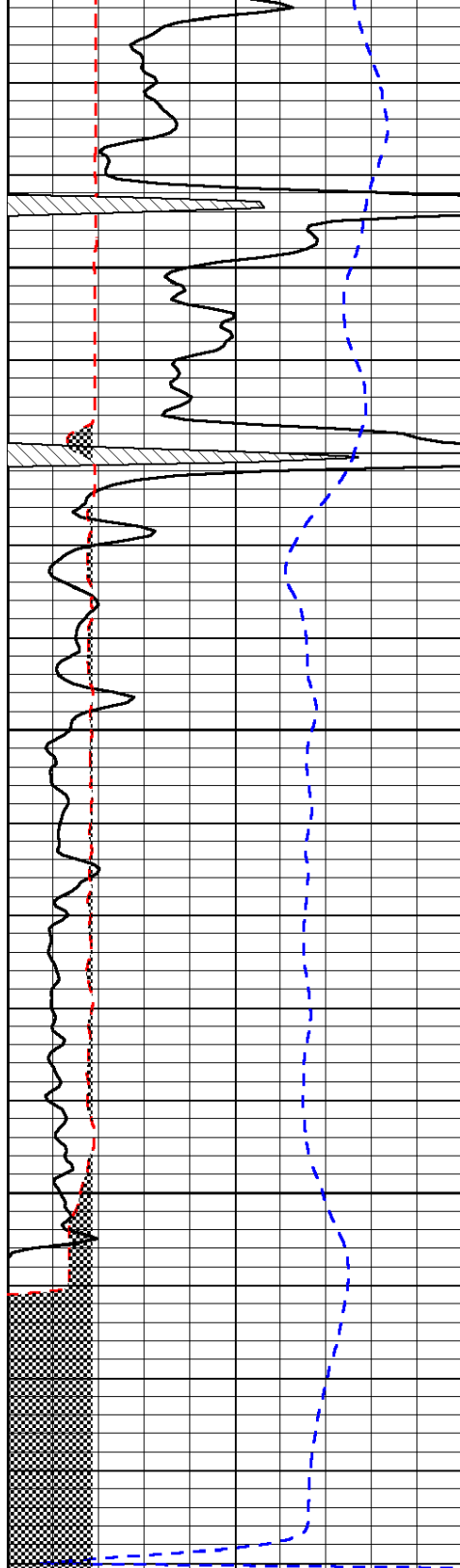


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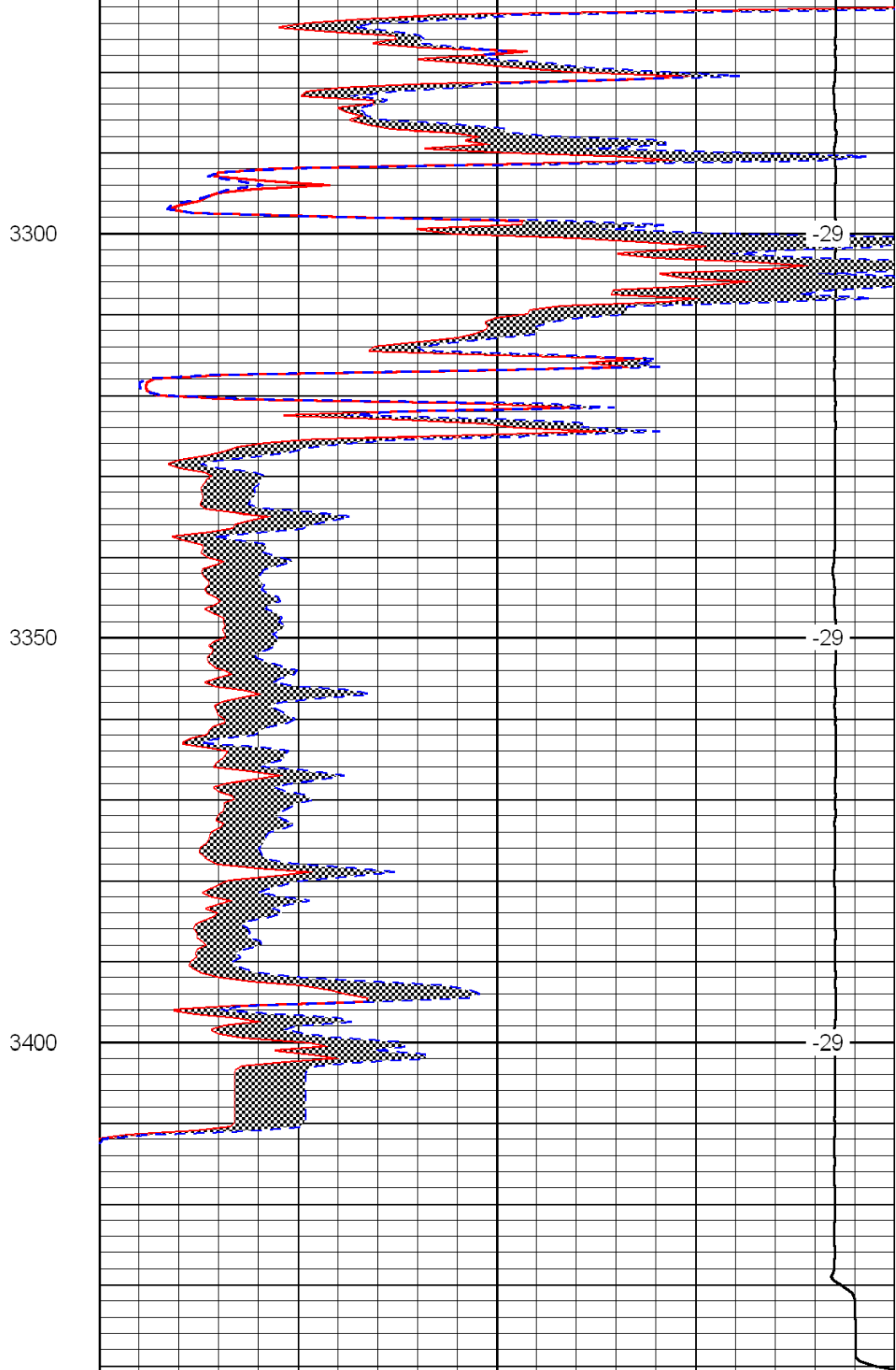
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