



Pioneer Energy Services

# Microresistivity Log

15-009-26,074-00-00

**Company** Russell Oil, Inc.  
**Well** Charles #1-16  
**Field** Deines  
**County** Barton **State** Kansas  
**Location** 330' FNL & 1100' FWL  
**Sec:** 16 **Twp:** 16S **Rge:** 14W  
**Permanent Datum** Ground Level **Elevation** 1945  
**Log Measured From** Kelly Bushing **9 Ft. Above Perm. Datum**  
**Drilling Measured From** Kelly Bushing

Other Services  
CNL/CDL  
DIL

**Elevation**  
 K.B. 1954  
 D.F. 1945  
 G.L. 1945

Date	2/18/2015
Run Number	Two
Depth Driller	3490
Depth Logger	3484
Bottom Logged Interval	3483
Top Log Interval	2850
Casing Driller	8.625 @ 412
Casing Logger	416
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	9.700
Density / Viscosity	9.3 61
pH / Fluid Loss	9.0 10.4
Source of Sample	Flowline
Rm @ Meas. Temp	.3 @ 50
Rmf @ Meas. Temp	.23 @ 50
Rmc @ Meas. Temp	.41 @ 50
Source of Rmf / Rmc	Charts
Rm @ BHT	.14 @ 111
Operating Rig Time	3 1/2 Hours
Max Rec. Temp. F	111
Equipment Number	51
Location	Hays
Recorded By	C. Desai
Witnessed By	Kitt Noah

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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 Pioneer Energy Services  
[www.pioneeres.com](http://www.pioneeres.com)  
 785 625 3858

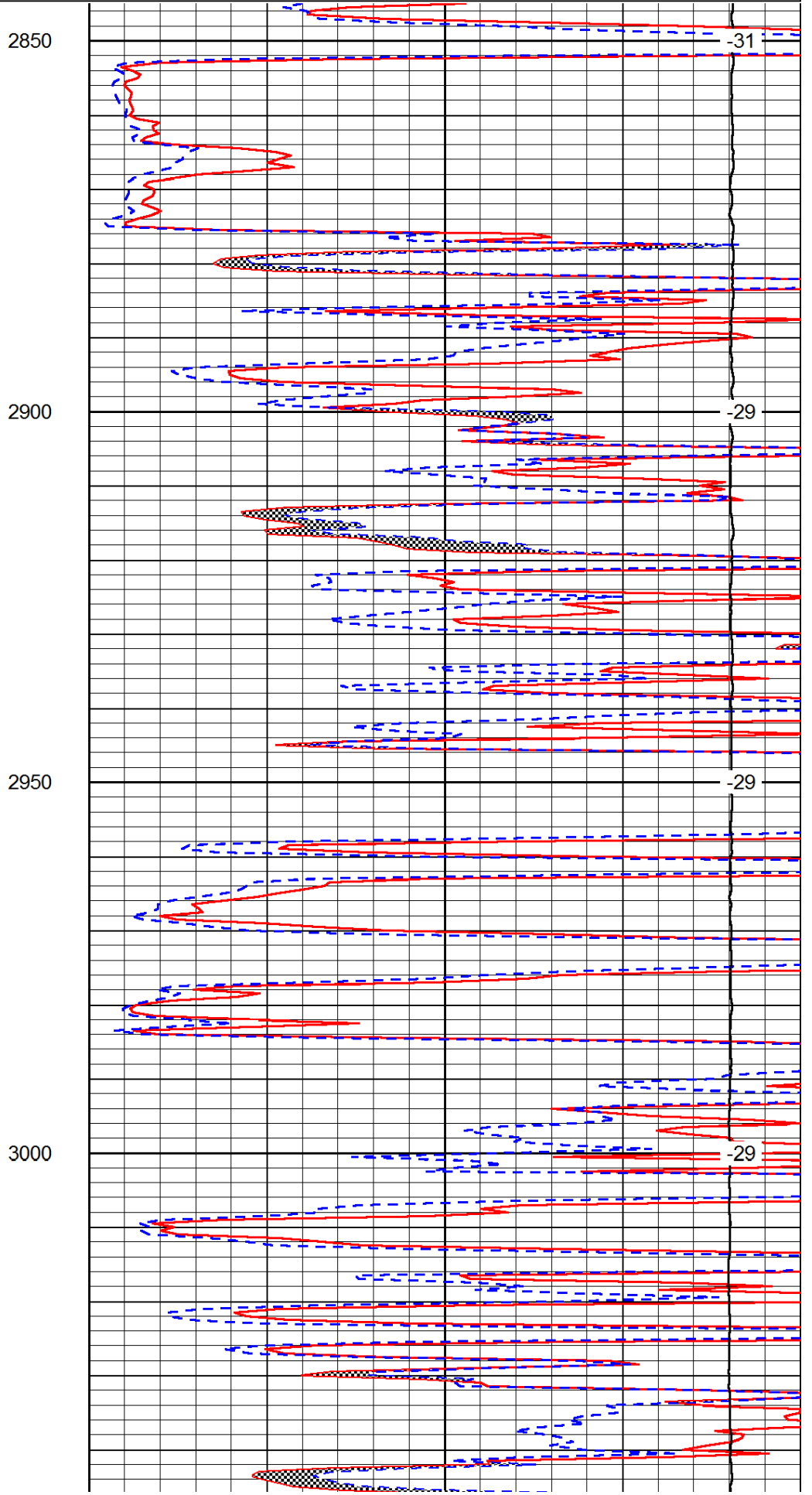
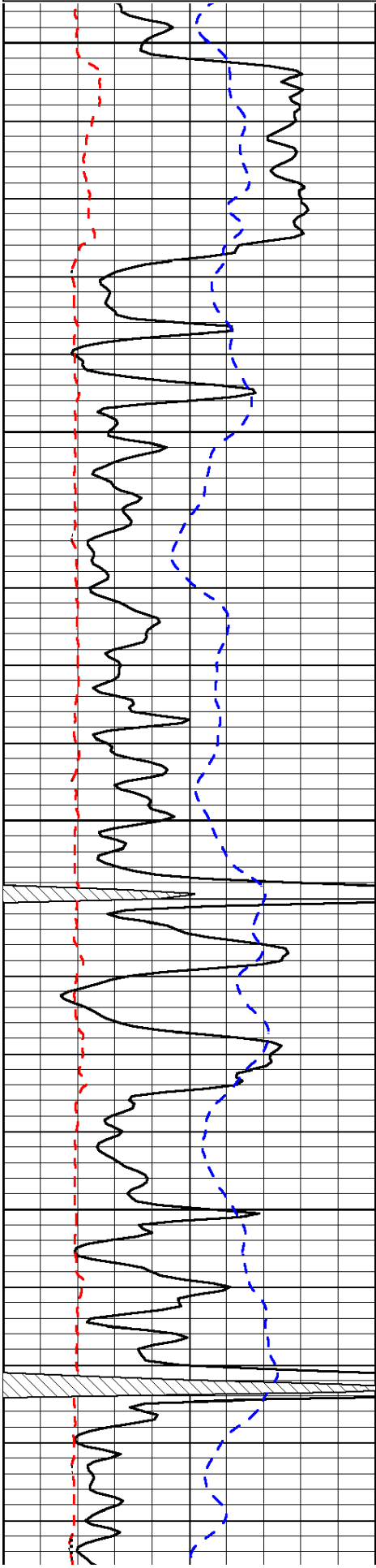
Russell KS, S to County Line,  
 2 S to 210 Rd, 1 3/4 W, S Into

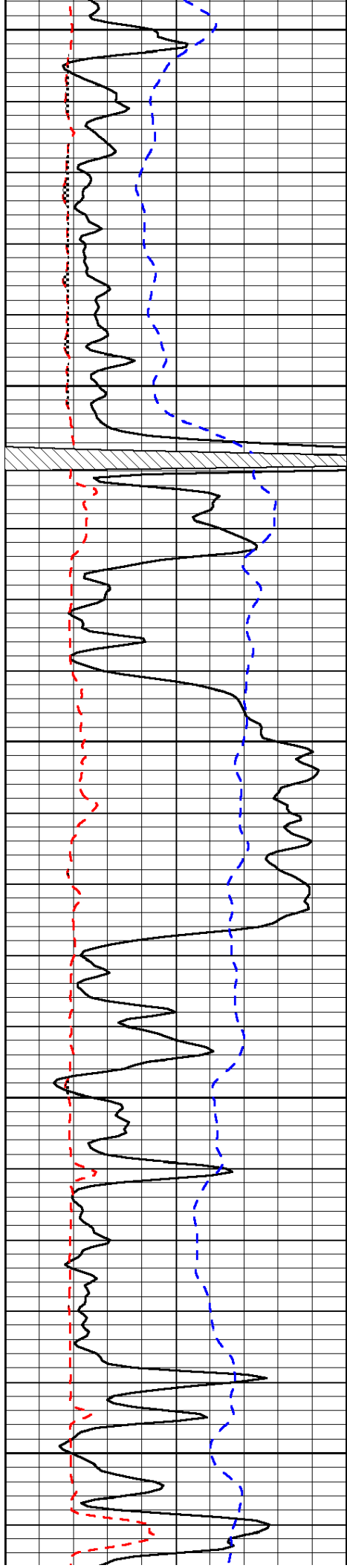
Database File: c:\warrior\data\russell\_charles #1-16\rohd.db  
 Dataset Pathname: dil/russstk  
 Presentation Format: micro  
 Dataset Creation: Wed Feb 18 09:38:42 2015  
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	MCAL (GAPI)	16
-200	SP (mV)	0

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

LSPD





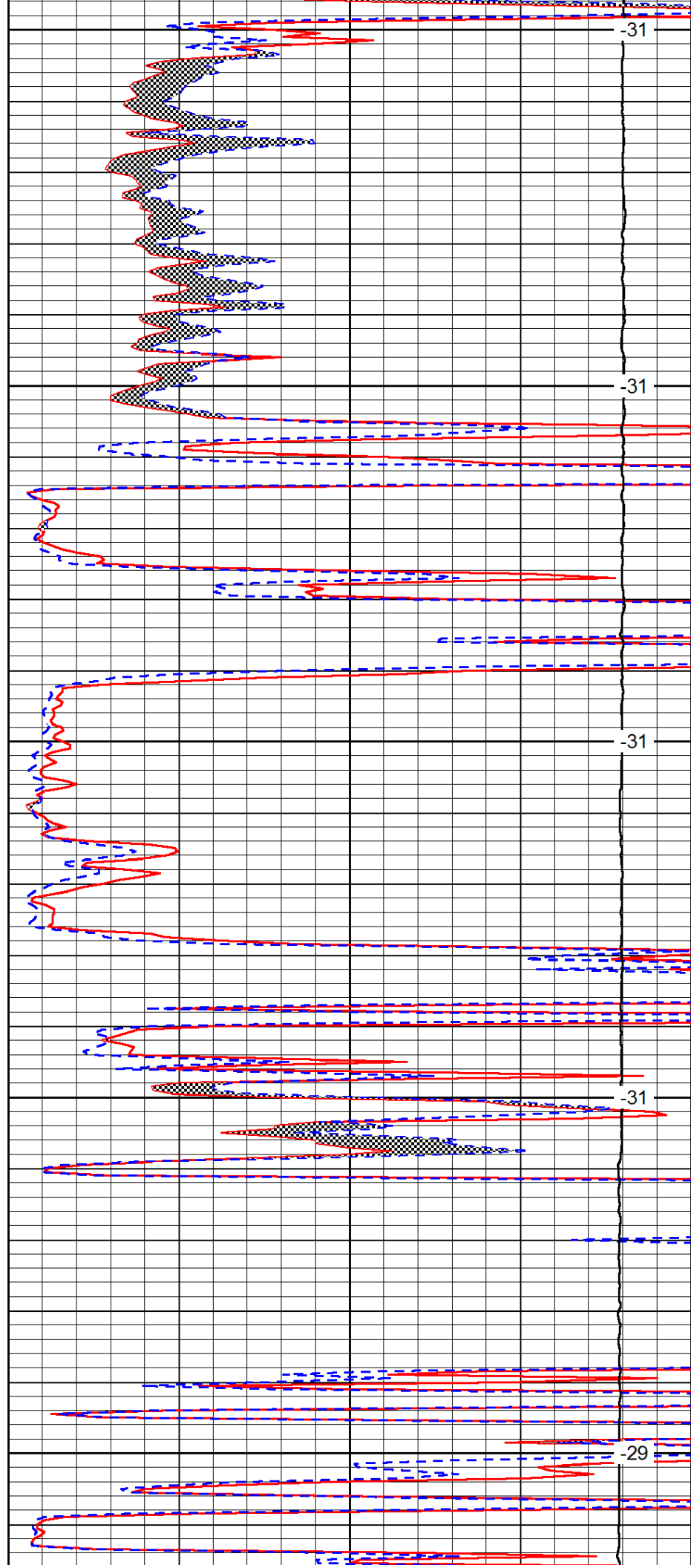
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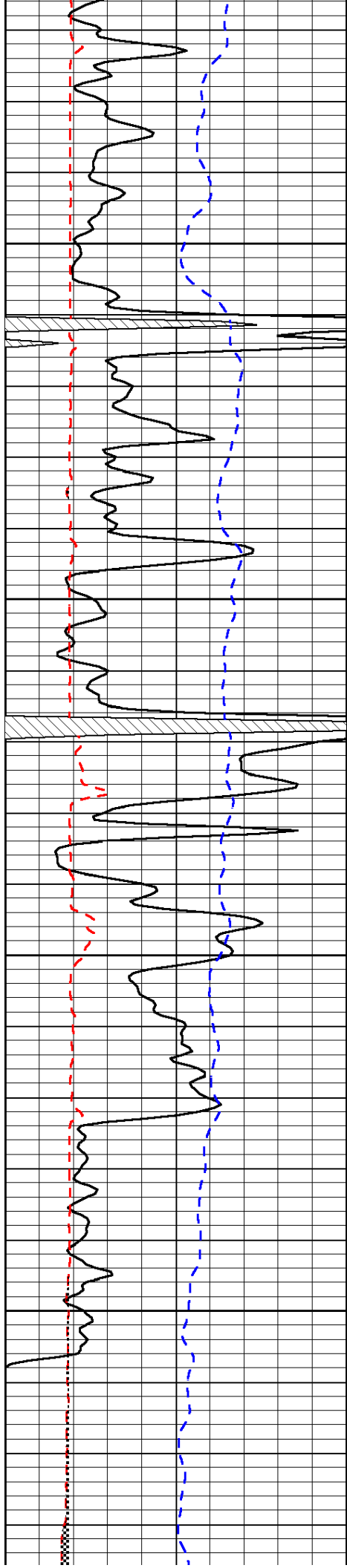
3100

3150

3200

3250



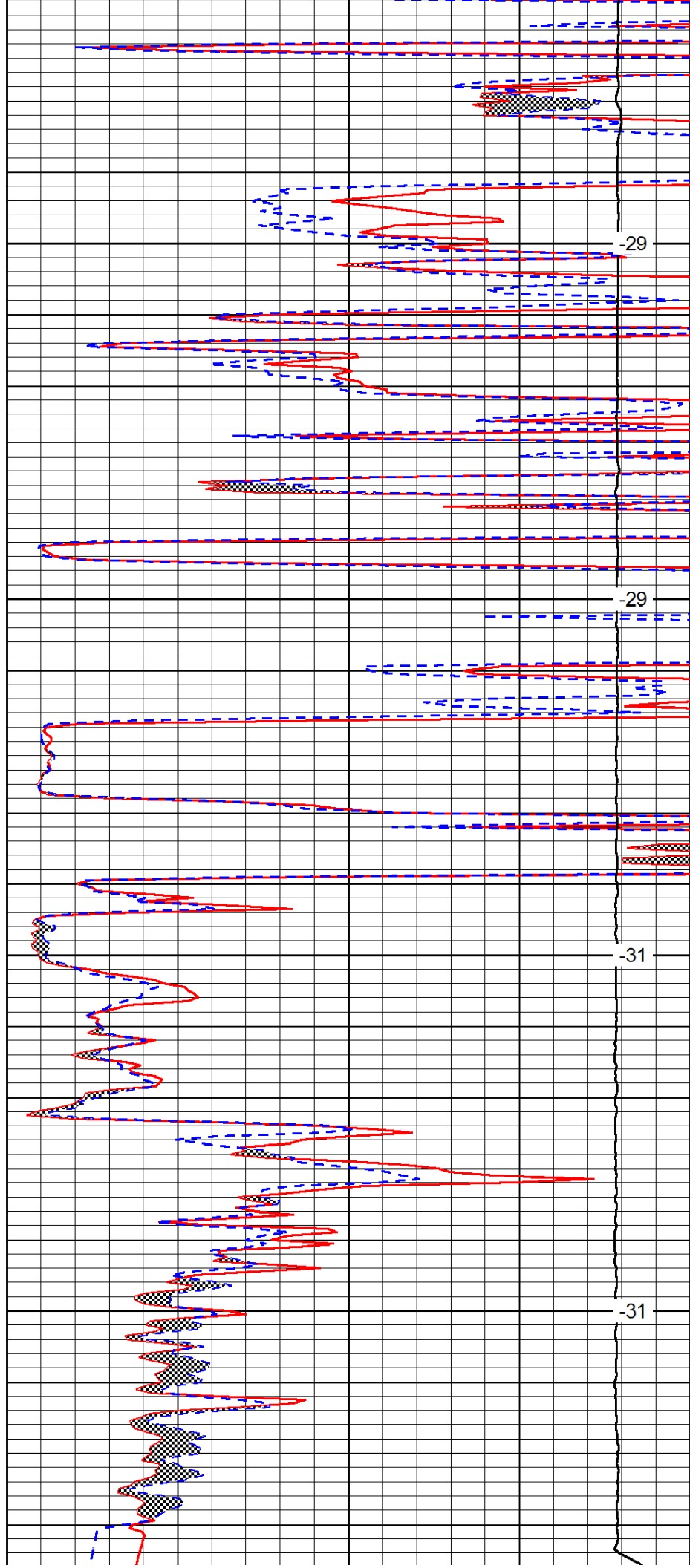


3300

3350

3400

3450



-29

-29

-31

-31

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