



Pioneer Energy Services

Microresistivity Log

API No.	15-065-23,866-00-00	
Company	H&C Oil Operating, Inc.	
Well	Workman Trust No. 13-1	
Field	Wildcat	
County	Graham	State
		Kansas
Location	990' FNL & 2,310' FEL	
Sec: 13	Twp: 6S	Rge: 24W
Permanent Datum	Ground Level	Elevation 2459
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
		Other Services CNL/CDL DIL
		Elevation K.B. 2464 D.F. 2459 G.L. 2459

Date	10/28/2012
Run Number	Two
Depth Driller	3950
Depth Logger	3949
Bottom Logged Interval	3948
Top Log Interval	3350
Casing Driller	8.625 @ 280
Casing Logger	277
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	2000
Density / Viscosity	9.2 71
pH / Fluid Loss	10.0 7.6
Source of Sample	Flowline
Rm @ Meas. Temp	.88 @ 62
Rmf @ Meas. Temp	.66 @ 62
Rmc @ Meas. Temp	1.19 @ 62
Source of Rmf / Rmc	Charts
Rm @ BHT	.47 @ 116
Operating Rig Time	4 Hours
Max Rec. Temp. F	116
Equipment Number	108
Location	Hays
Recorded By	J. Long
Witnessed By	Marc Downing

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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

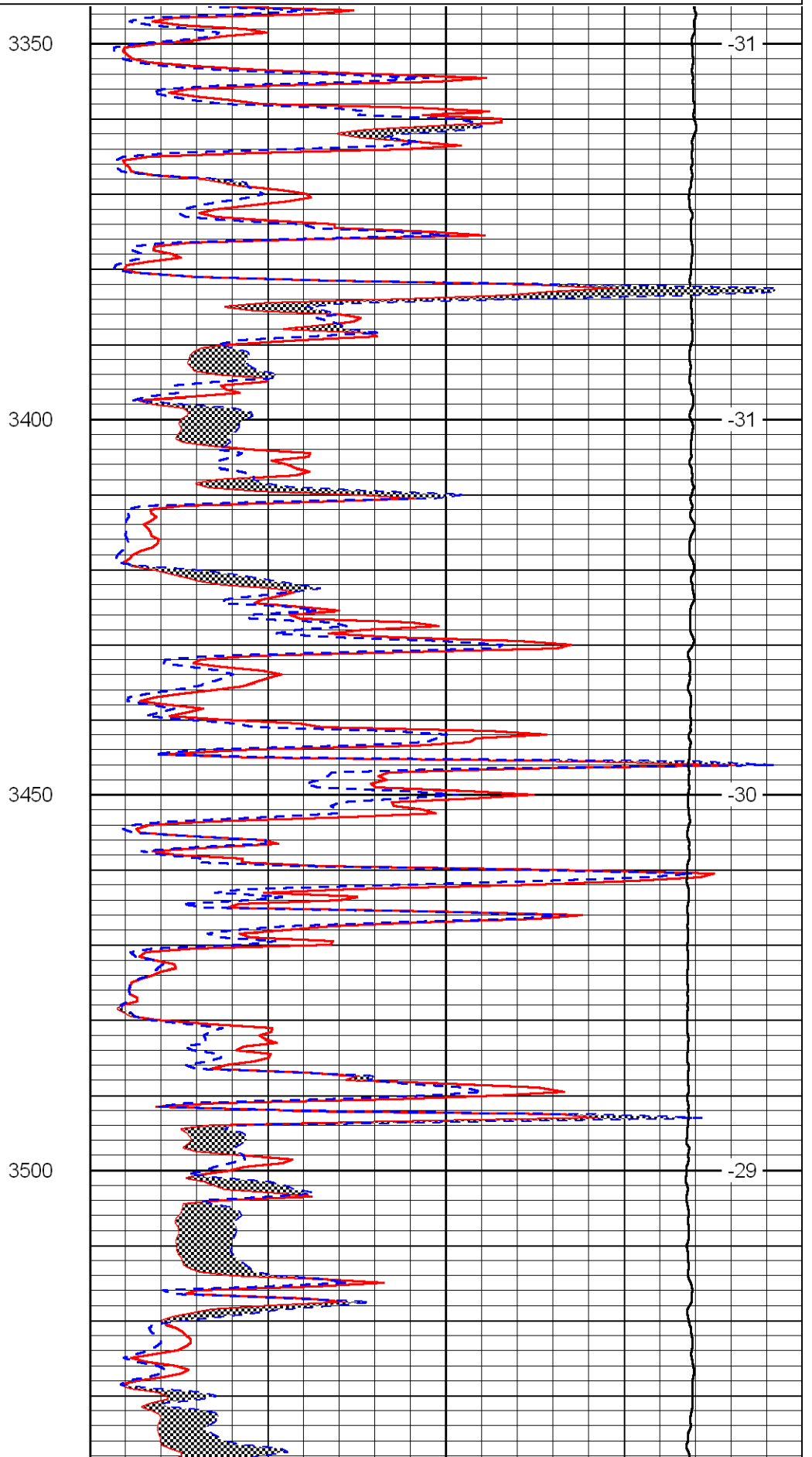
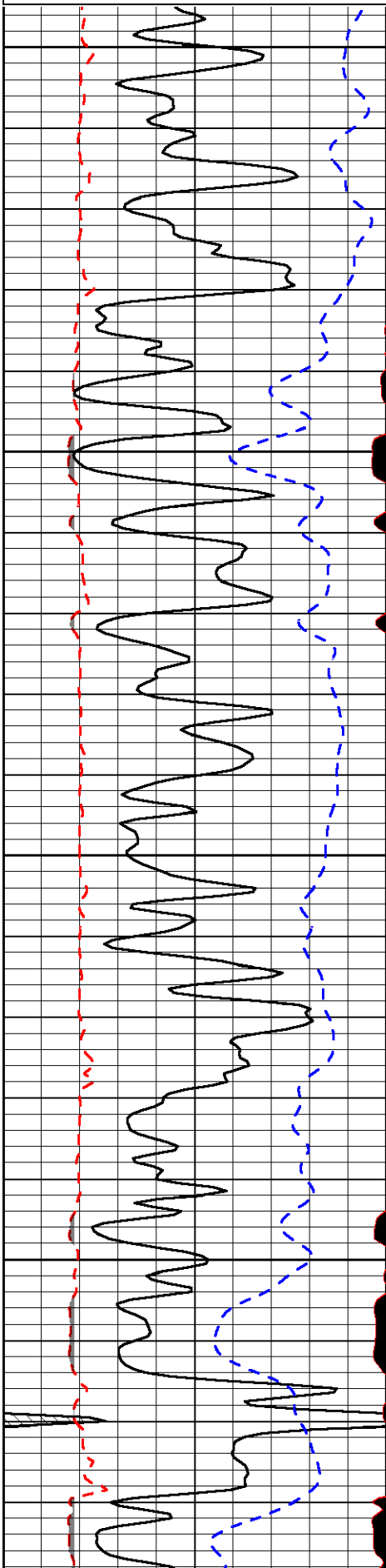
Thank you for using Log-Tech, Inc.
(785) 625-3858

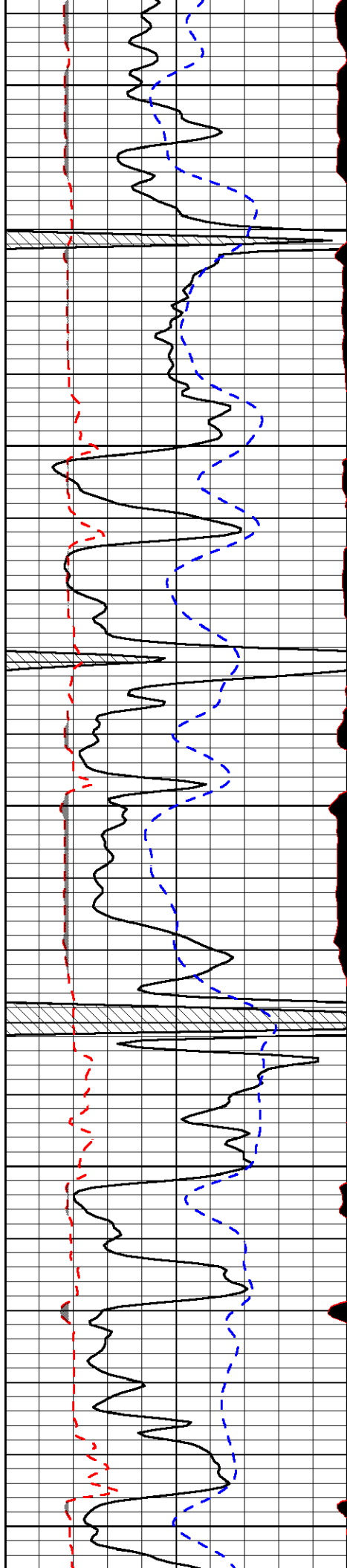
Hill City, 12 North to CC Road, 5 1/2 West, South Into

Database File: h&c_workmantrust_13-1hd.db
 Dataset Pathname: dil/hcstck
 Presentation Format: micro
 Dataset Creation: Sun Oct 28 04:14:08 2012
 Charted by: Depth in Feet scaled 1:240

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

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
10000	Line Weight	0
	LSPD	





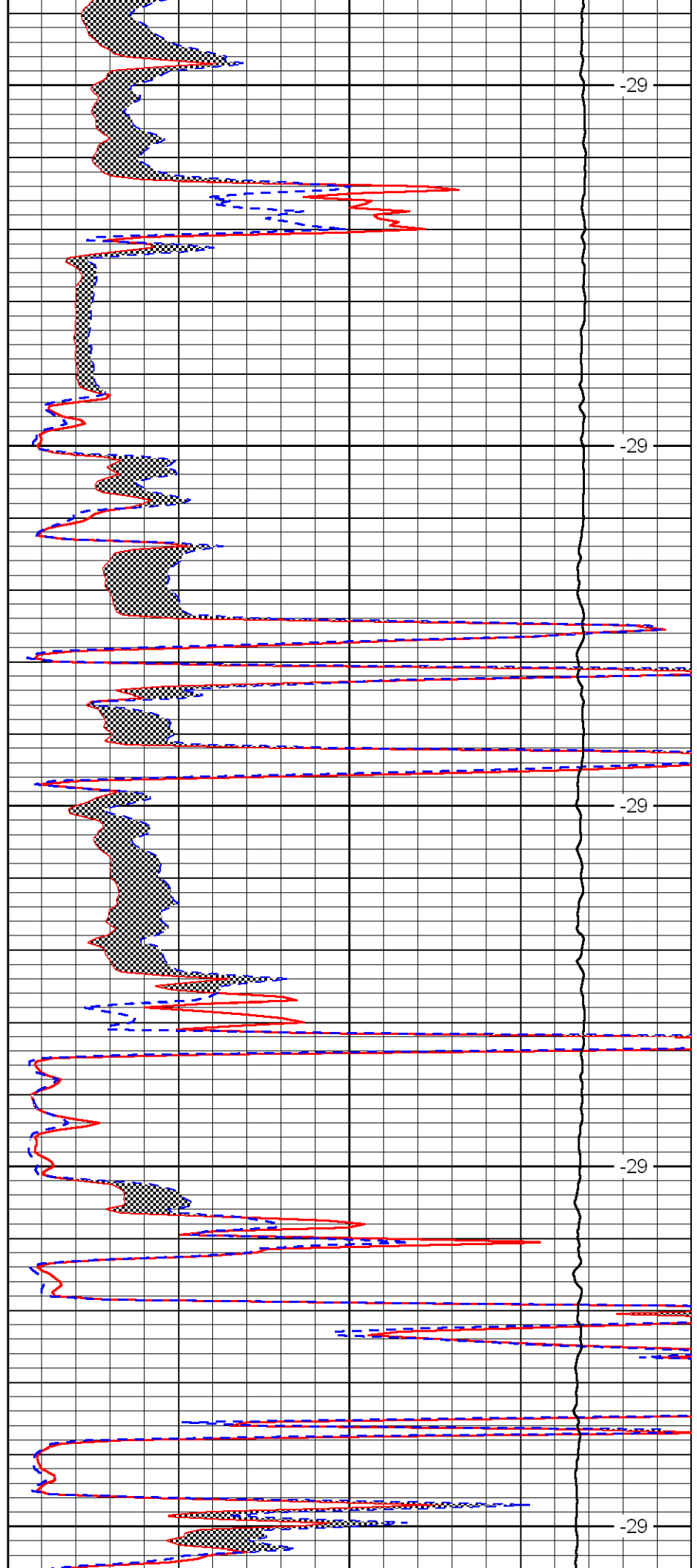
3550

3600

3650

3700

3750



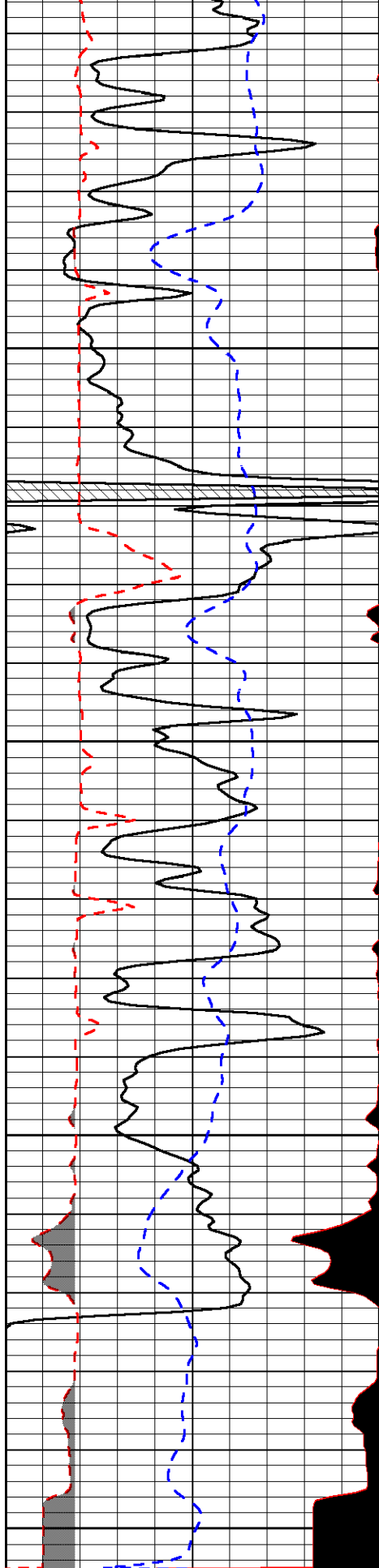
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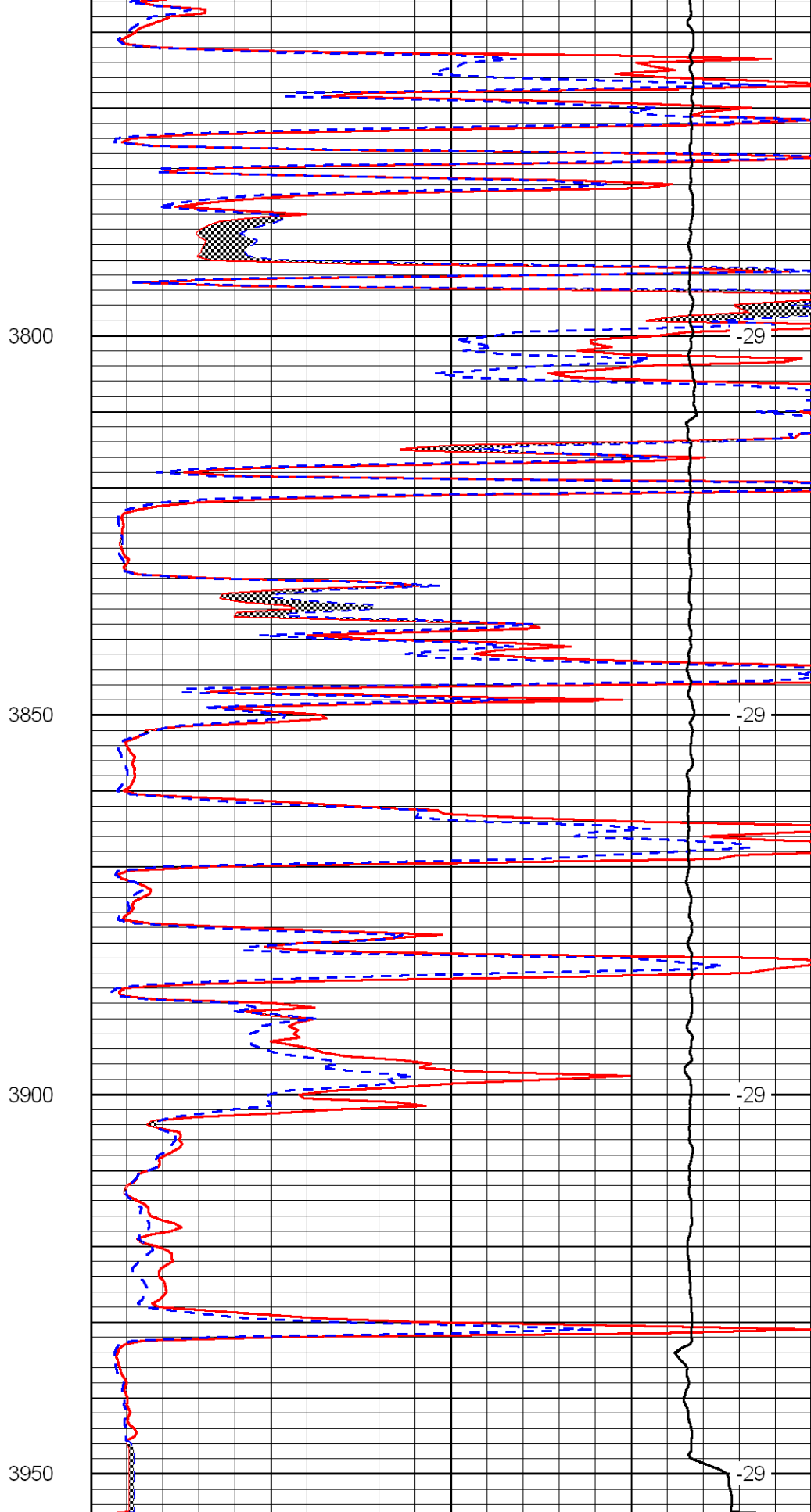
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