



Pioneer Energy Services

Microresistivity Log

API No.	15-065-23,918-00-00		
Company	H&C Oil Operating, Inc.		
Well	McGrath Unit No. 36 - 1		
Field	Wildcat		
County	Graham	State	Kansas
Location	2310' FSL & 2640' FWL		
Sec:	36	Twp:	9 S Rge: 25 W
Permanent Datum	Ground Level	Elevation	2497
Log Measured From	Kelly Bushing	5	Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing		
		Other Services	CNL/CDL DIL
		Elevation	K.B. 2502 D.F. 2497 G.L. 2497

Date	4/22/2013
Run Number	Two
Depth Driller	4100
Depth Logger	4104
Bottom Logged Interval	4103
Top Log Interval	3450
Casing Driller	8.625 @ 326
Casing Logger	323
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity,ppm CL	1500
Density / Viscosity	9.3 59
pH / Fluid Loss	10.5 6.8
Source of Sample	Flowline
Rm @ Meas. Temp	.80 @ 60
Rmf @ Meas. Temp	.60 @ 60
Rmc @ Meas. Temp	1.08 @ 60
Source of Rmf / Rmc	Charts
Rm @ BHT	.41 @ 117
Operating Rig Time	4 Hours
Max Rec. Temp. F	117
Equipment Number	15
Location	Hays
Recorded By	D. Martin
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

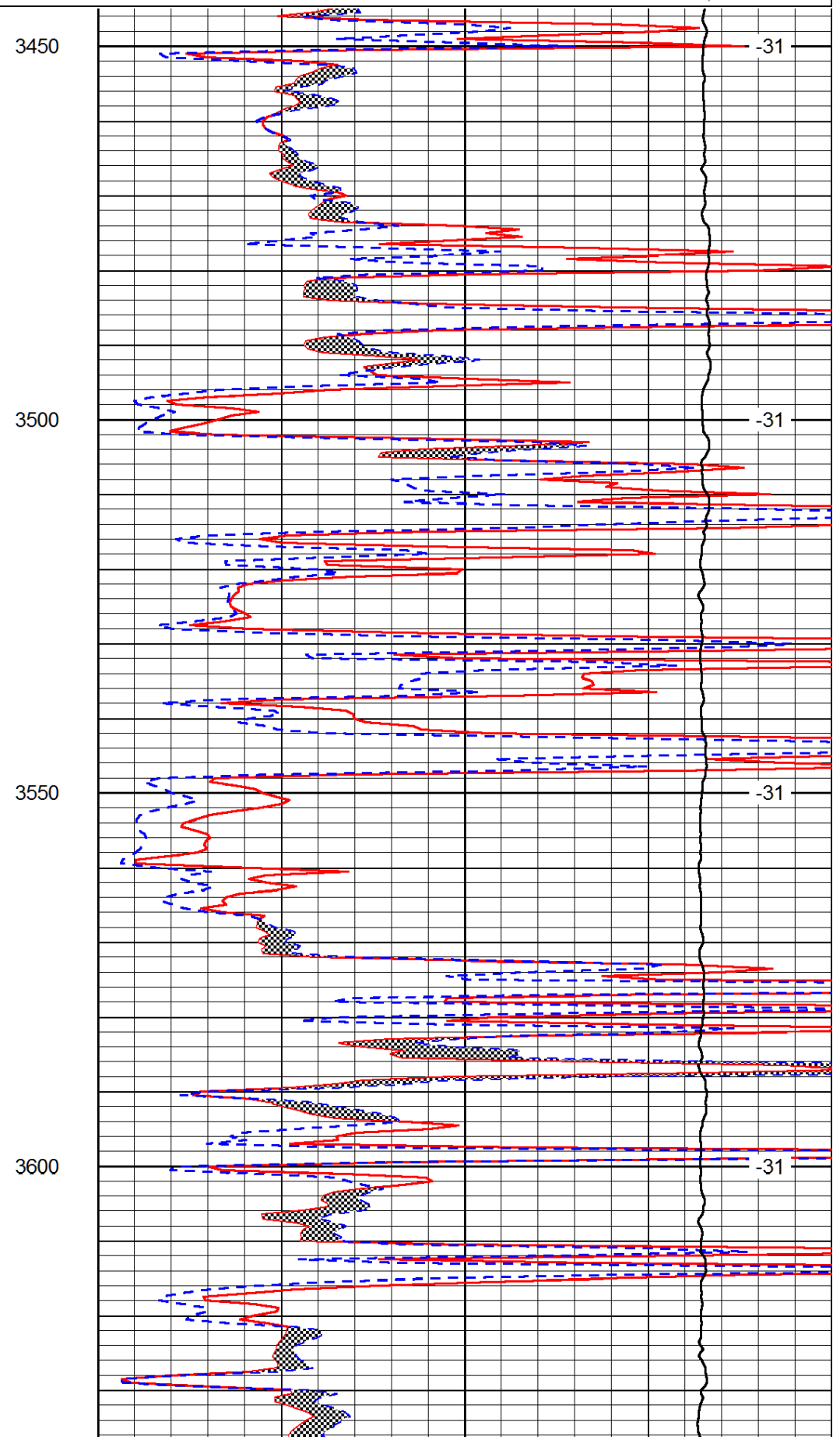
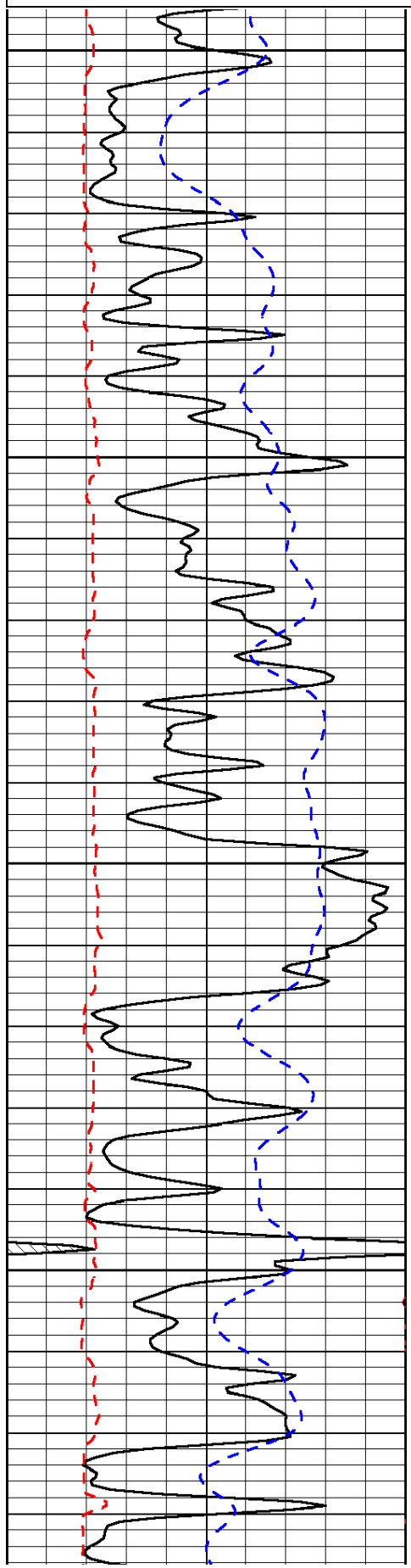
Wakeeney, KS
N to Redline Rd.(H Rd.),
10 W to 160 Rd., 1 S, 1/2 W, N Into

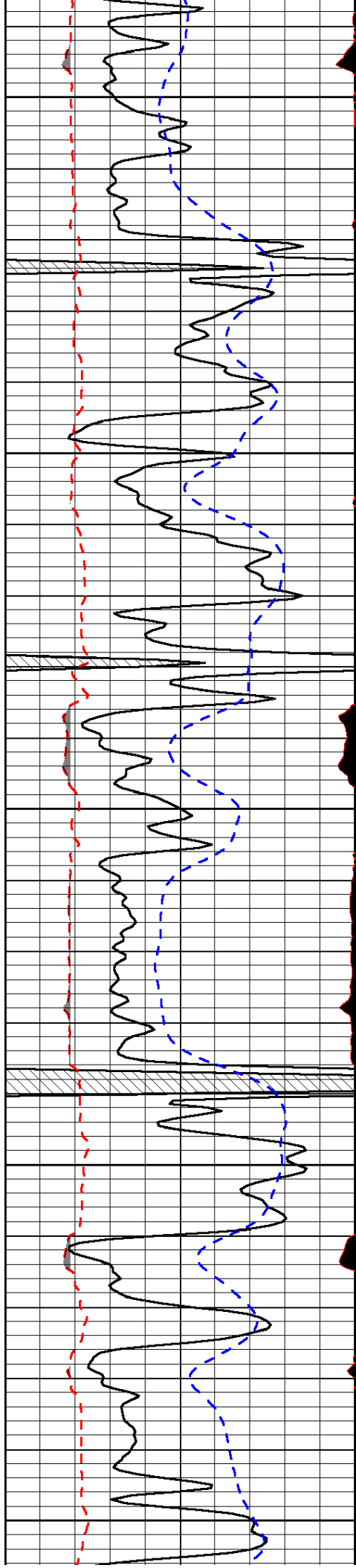
Database File: h&c_mcgrathunit_36_1hd.db
 Dataset Pathname: DIL/h&cstk
 Presentation Format: micro
 Dataset Creation: Mon Apr 22 11:37:58 2013
 Charted by: Depth in Feet scaled 1:240

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)





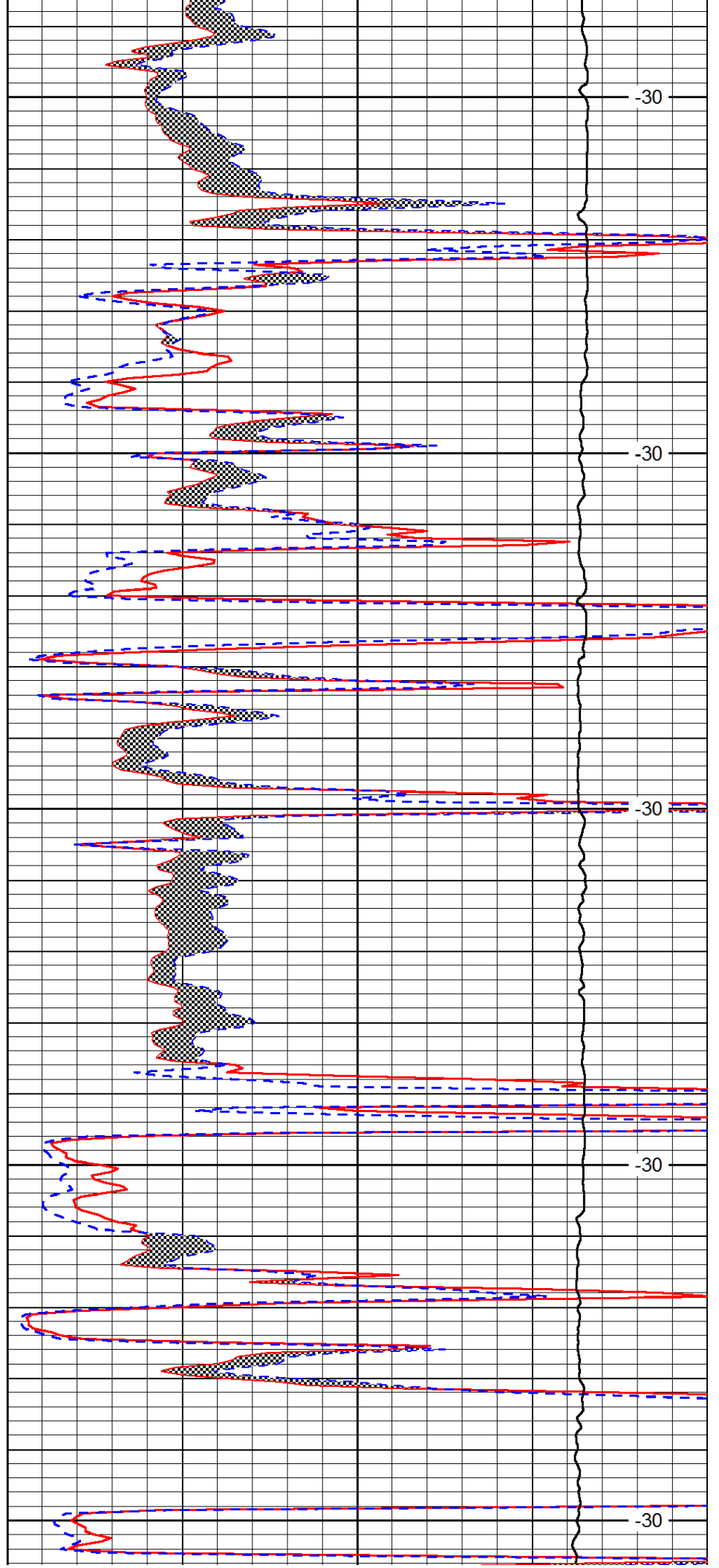
3650

3700

3750

3800

3850



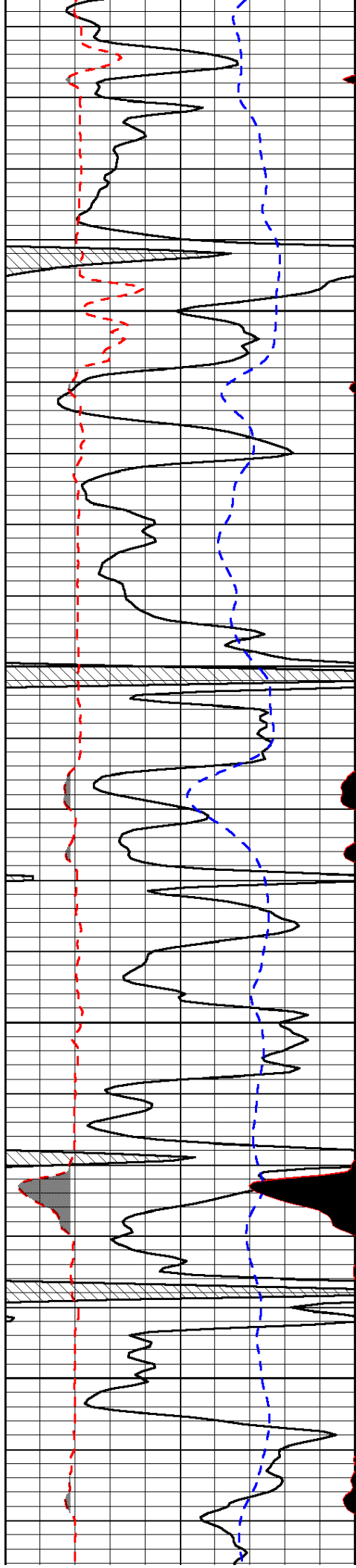
-30

-30

-30

-30

-30

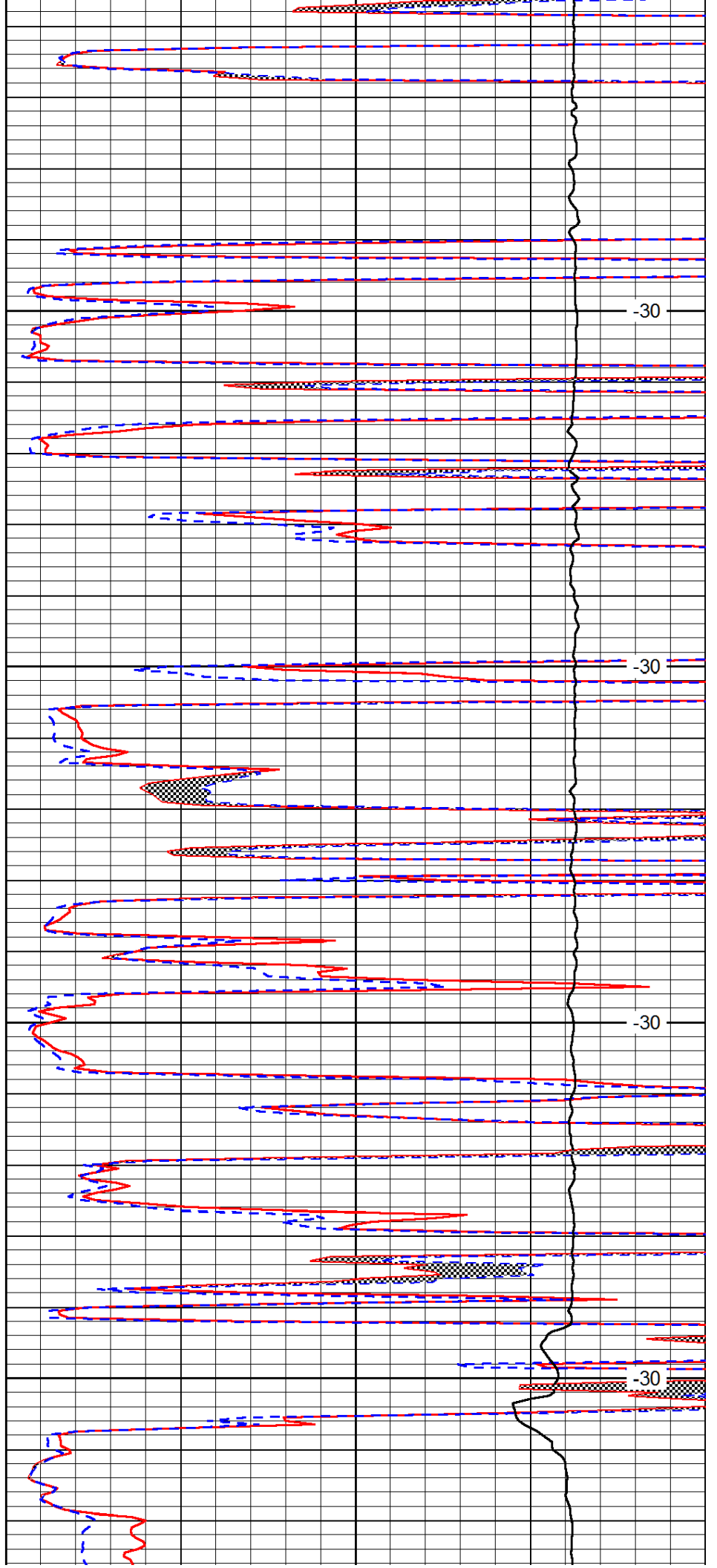


3900

3950

4000

4050

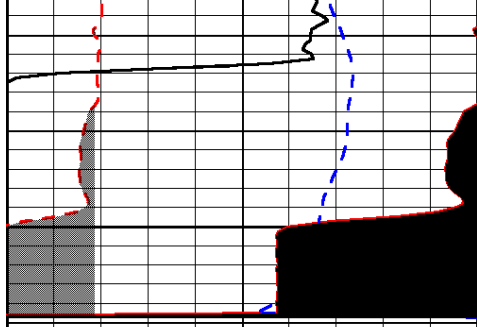


-30

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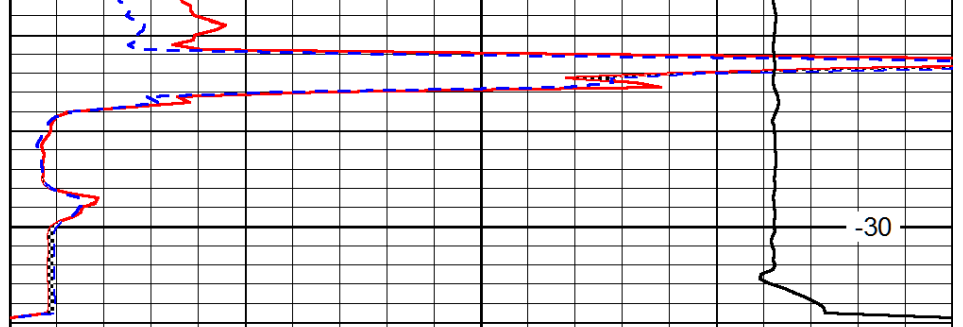
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-30



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4100



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