PIONEER

Pioneer Energy Services

Microresistivity Log

API No. 15-167-23,920-00-00

Company Jason Oil Company, Inc.

Well Patterson No. 3

Field Gorham

County Russell State Kansas

Location S2-SW-NW-NW
1210' FNL & 330' FWL
Sec: 36 Twp: 13S Rge: 15W

Other Services
CNL/CDL
DIL

Permanent Datum Ground Level Elevation 1875
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation
K.B. 1883
D.F.
G.L. 1875

Date	11/20/13			
Run Number	Two			
Depth Driller	3370			
Depth Logger	3371			
Bottom Logged Interval	3370			
Top Log Interval	2000			
Casing Driller	8.625 @ 473			
Casing Logger	472			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	7,000			
Density / Viscosity	9.4 55			
pH / Fluid Loss	8.5 9.6			
Source of Sample	Flowline			
Rm @ Meas. Temp	.56 @ 65			
Rmf @ Meas. Temp	.42 @ 65			
Rmc @ Meas. Temp	.76 @ 65			
Source of Rmf / Rmc	Charts			
Rm @ BHT	.33 @ 110			
Operating Rig Time	3 1/2 Hours			
Max. Rec. Temp. F	110			
Equipment Number	108			
Location	Hays			
Recorded By	J. Henrickson			
Witnessed By	Steve Reed			

<<< Fold Here >>>

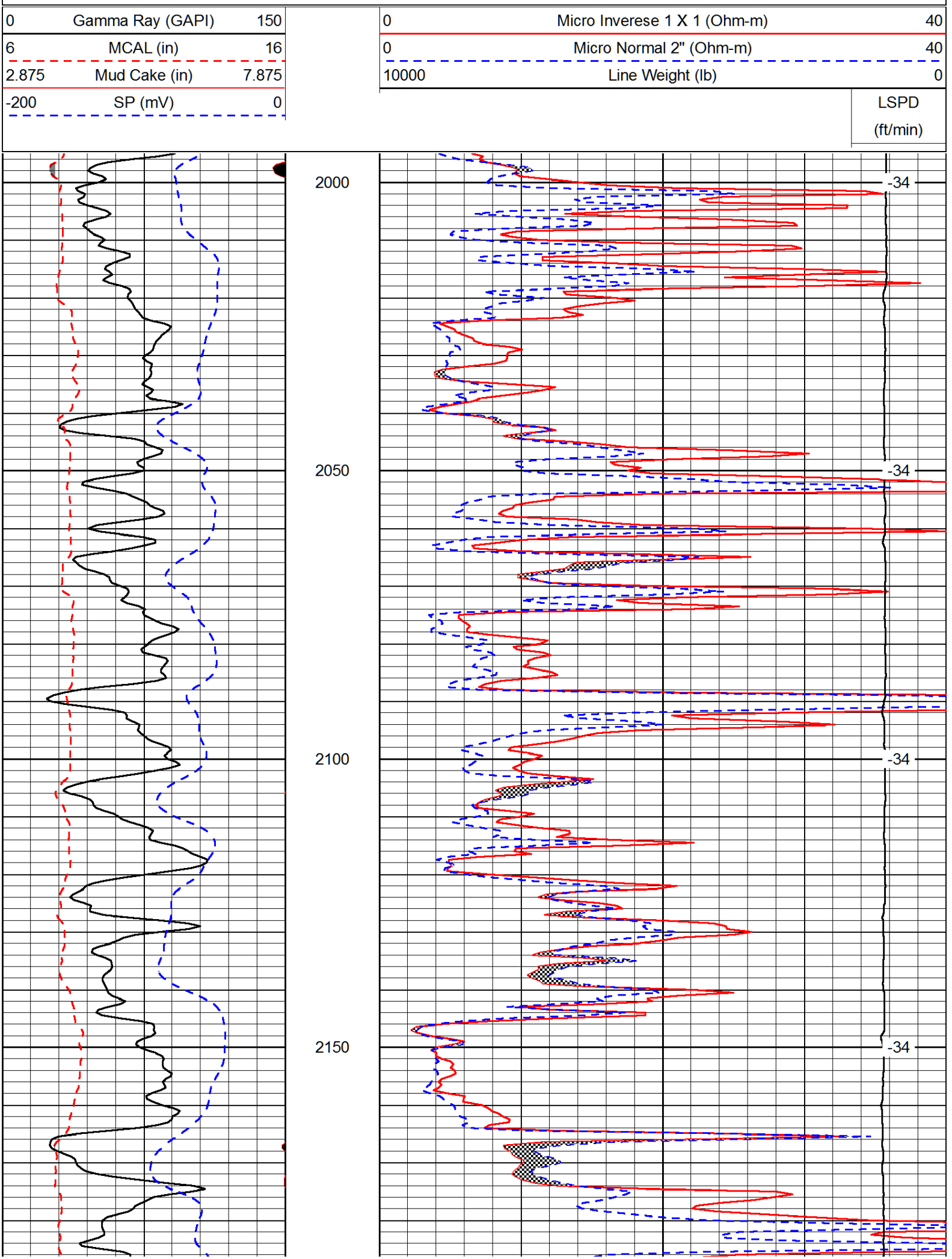
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

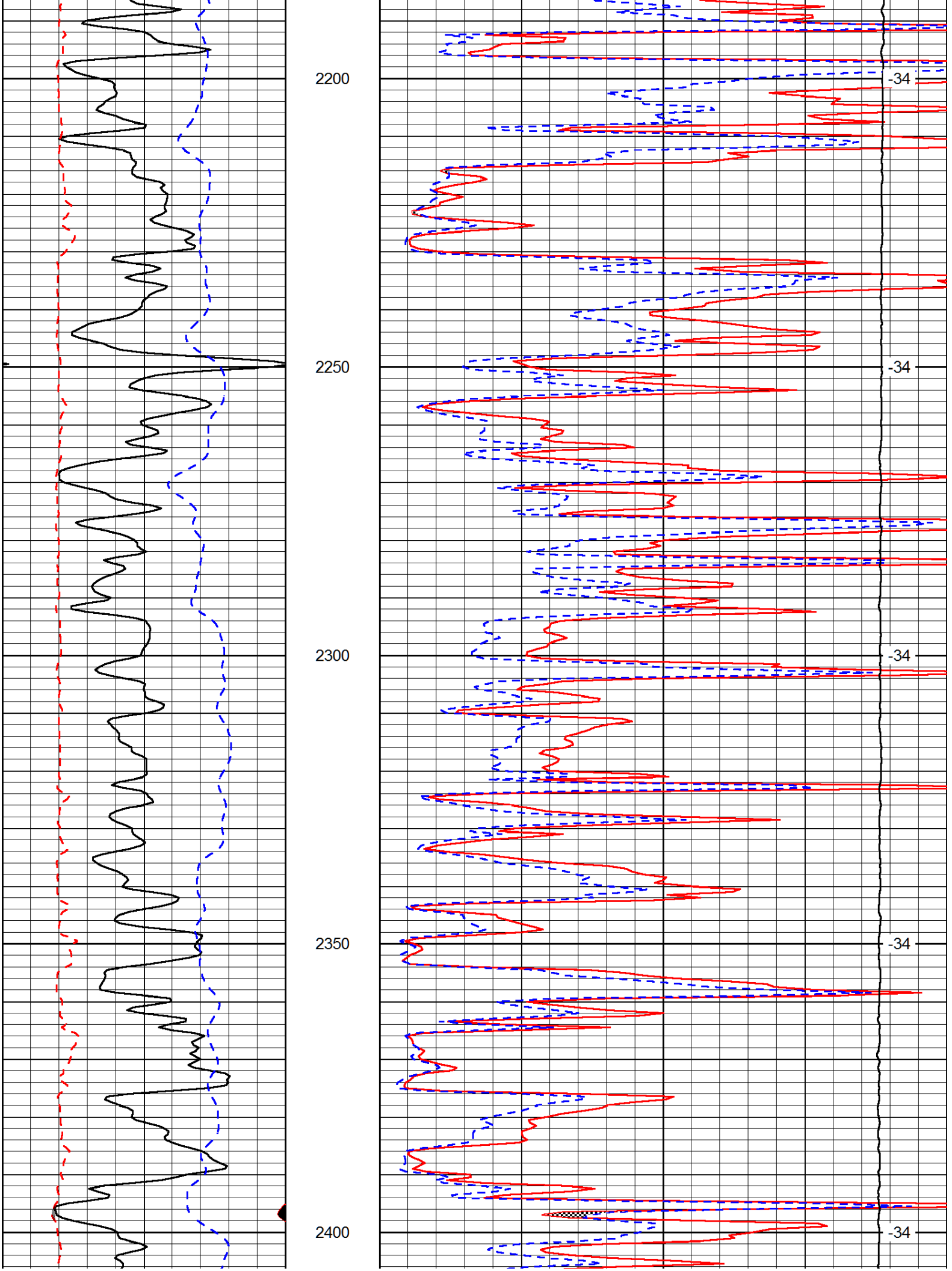
Comments

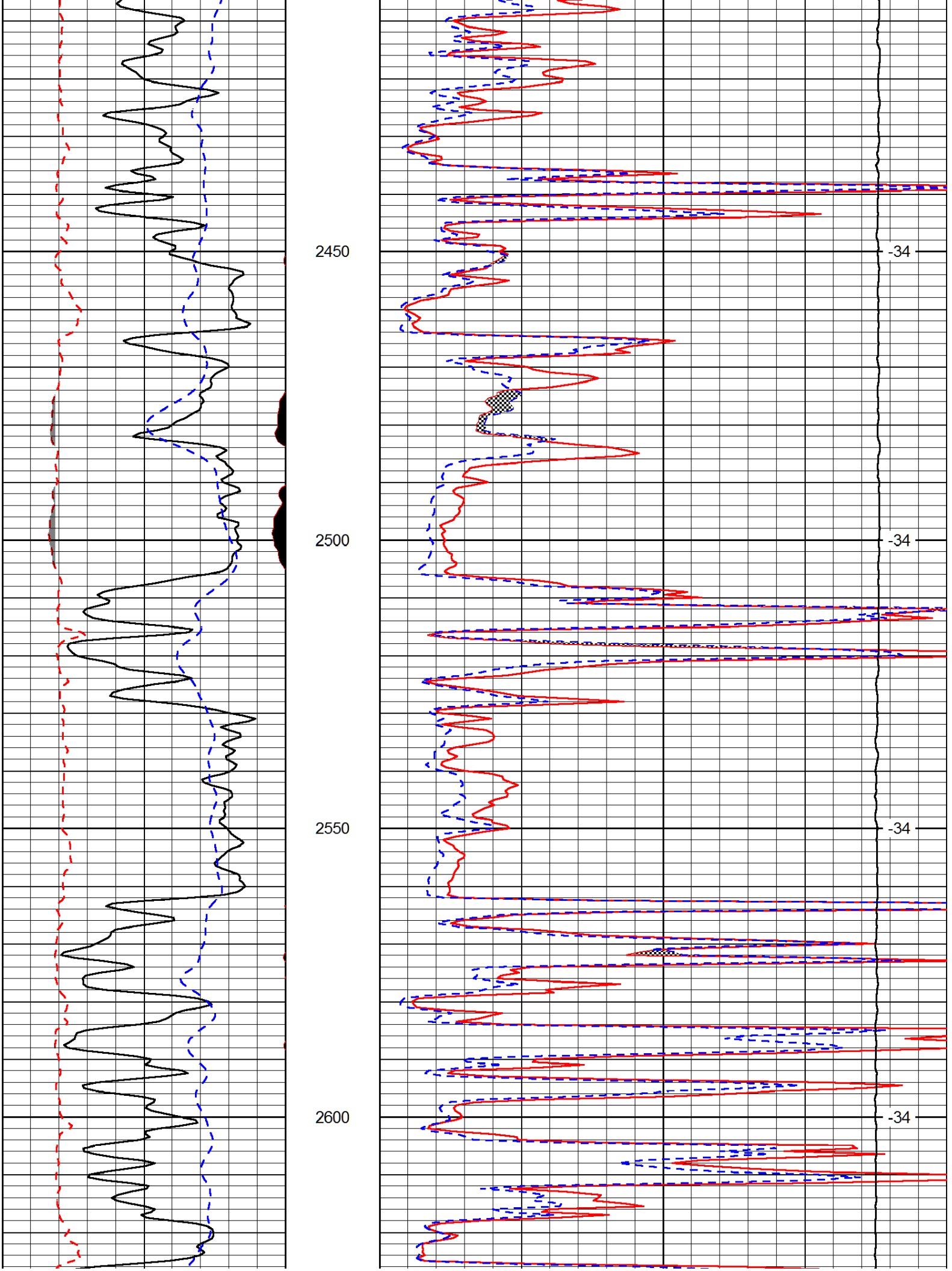
Thank you for using Log-Tech, Inc.
(785) 625-3858

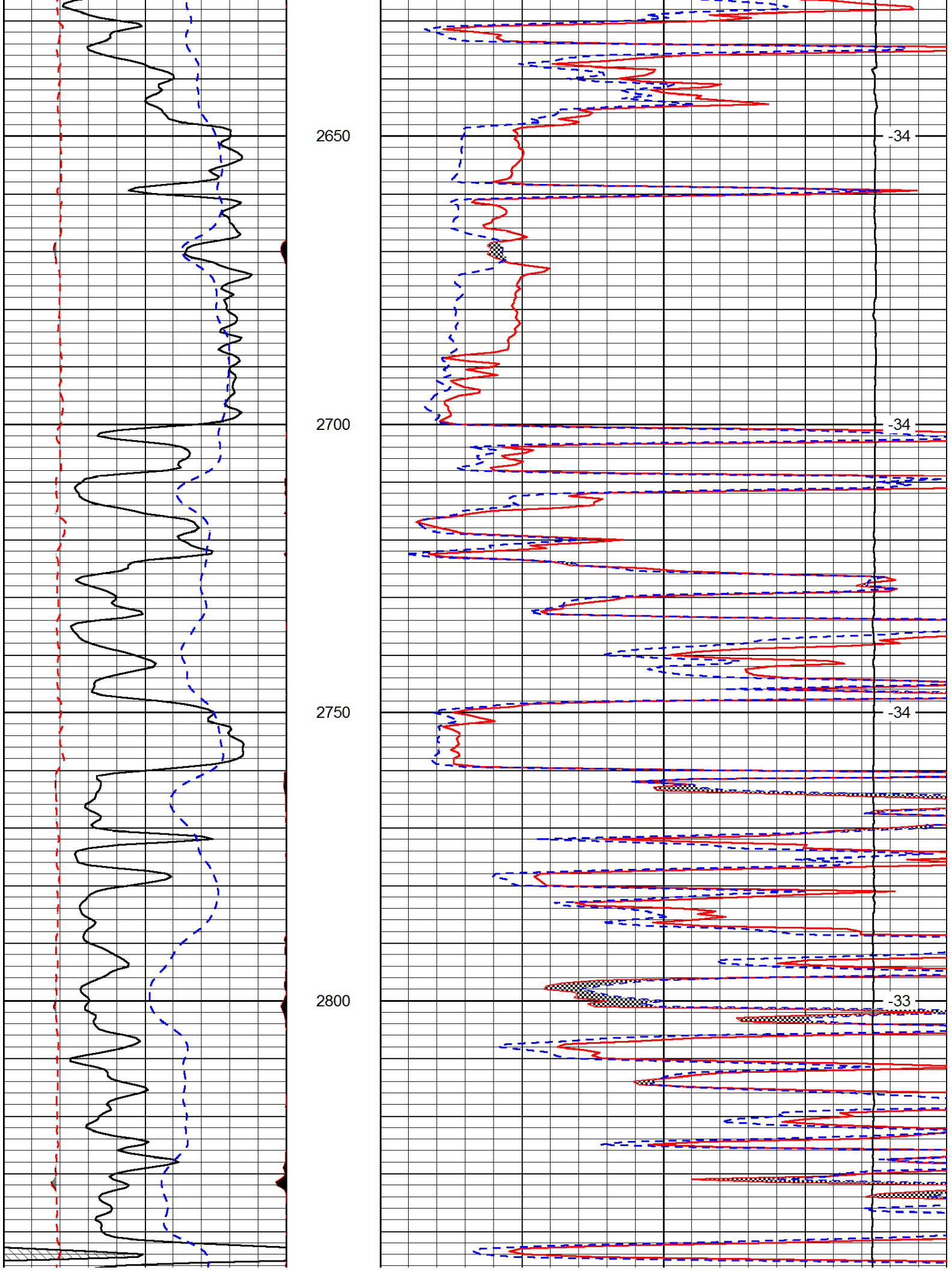
Gorham Kansas
4 East on Old 40, 1/8 South, East Into

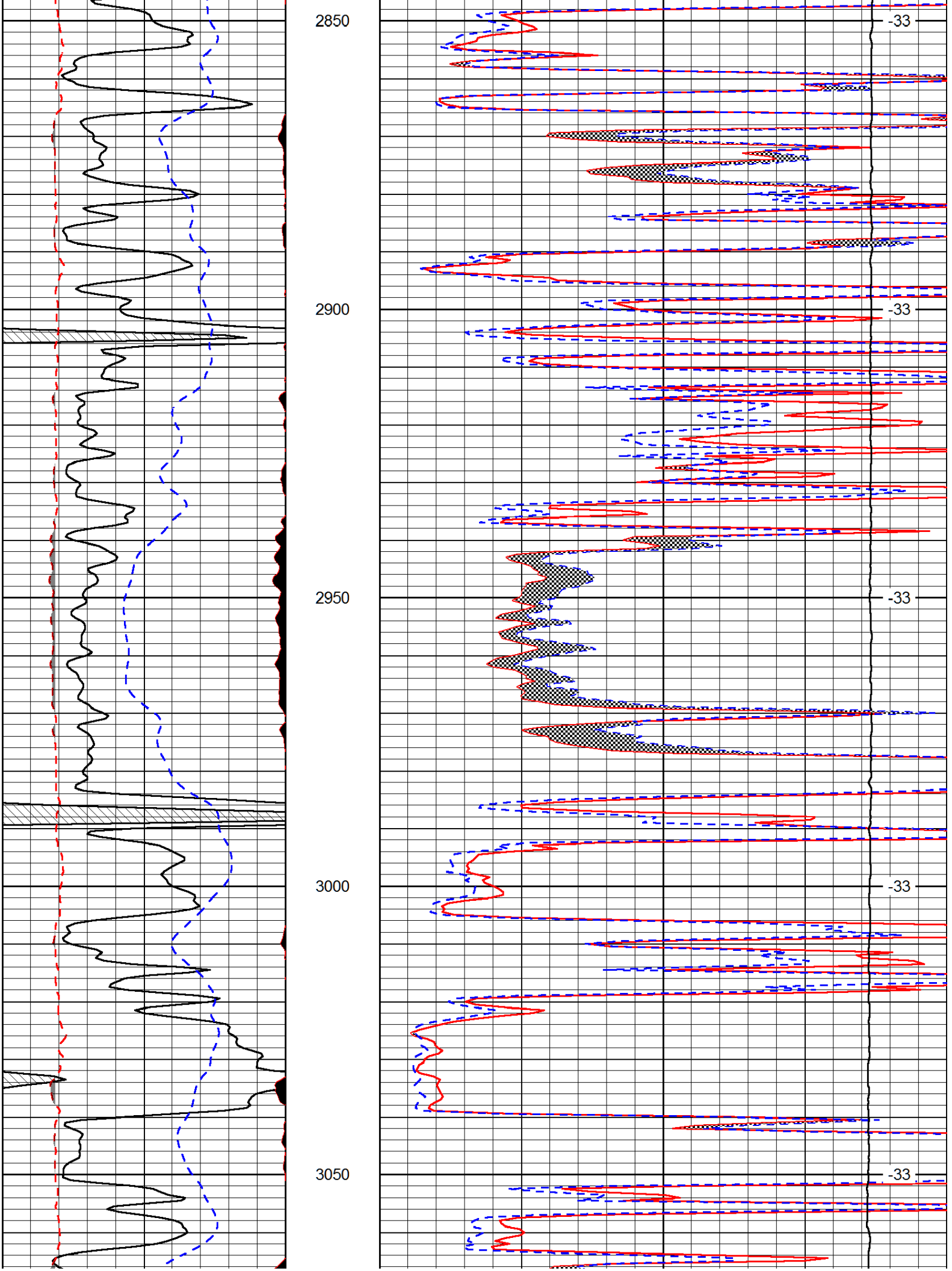
Database File: jason_oil_patterson_3hd.db
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Presentation Format: micro
Dataset Creation: Wed Nov 20 06:31:25 2013
Charted by: Depth in Feet scaled 1:240

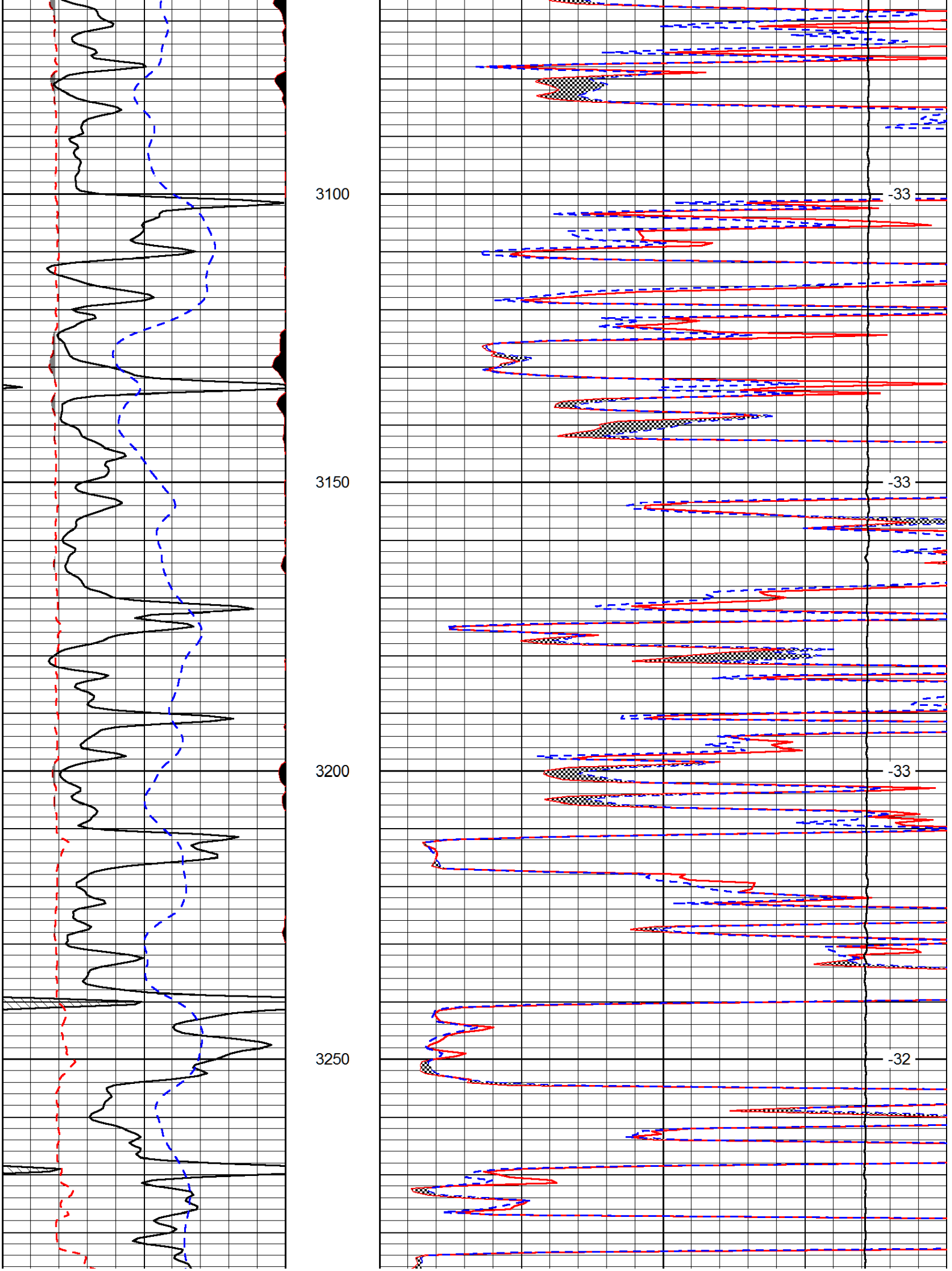

0 Gamma Ray (GAPI) 150
6 MCAL (in) 16
2.875 Mud Cake (in) 7.875
-200 SP (mV) 0
0 Micro Inverese 1 X 1 (Ohm-m) 40
0 Micro Normal 2" (Ohm-m) 40
10000 Line Weight (lb) 0
LSPD (ft/min)
2000
2050
2100
2150
-34
-34
-34
-34

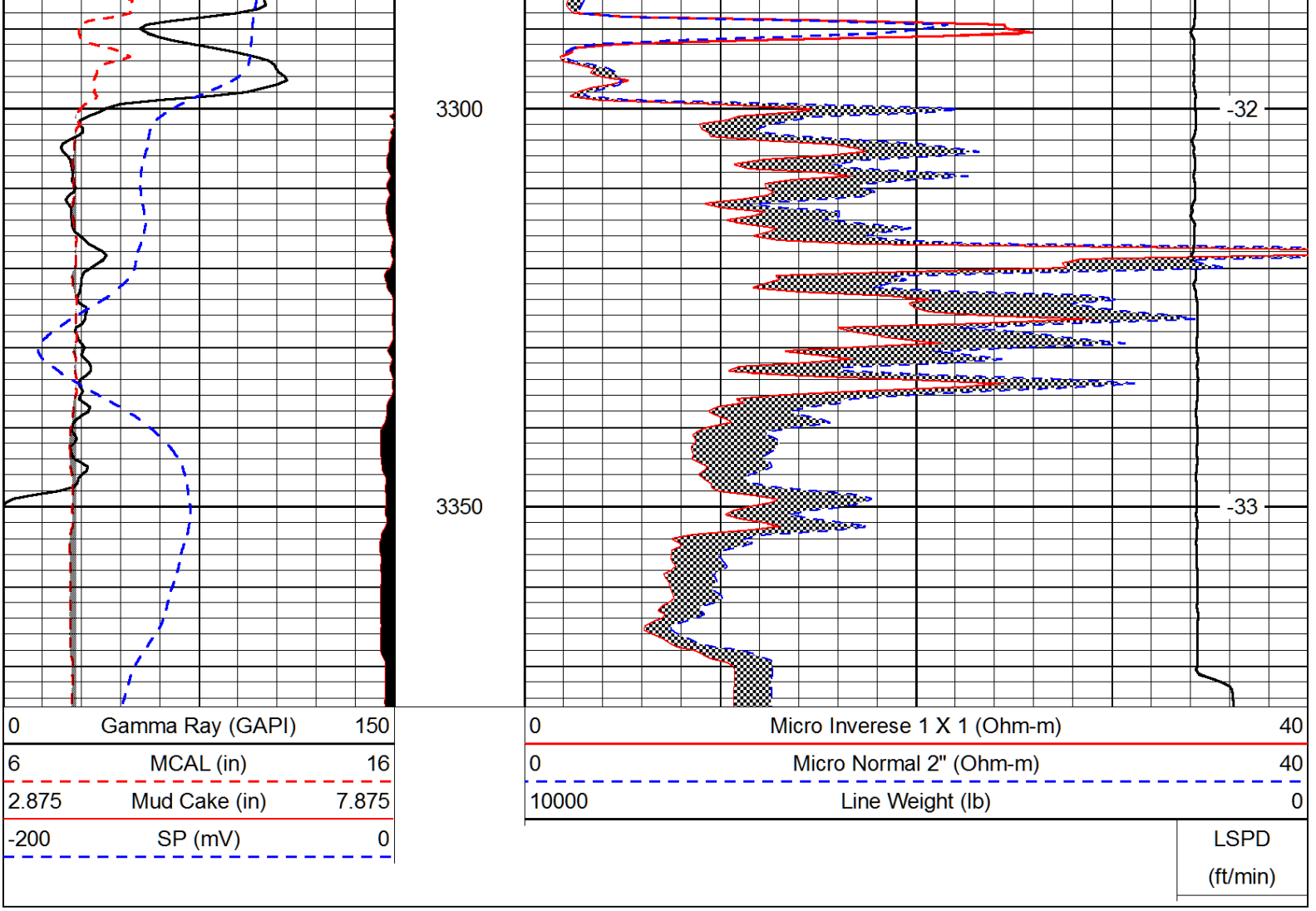

2200
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3100
3150
3200
3250
-33
-33
-33
-32



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LSPD
(ft/min)