PIONEER

Pioneer Energy Services

Microresistivity Log

API No. 15-063-22152-00-00

Company H&C Oil Operating, Inc.

Well Bentley #36-3

Field Shanline Northeast

County Gove State Kansas

Location 2180' FSL & 1880' FWL

Sec: 36 Twp: 15S Rge: 28W

Other Services
CNL/CDL
DIL

Elevation
K.B.: 2552
D.F.:
G.L.: 2541

Permanent Datum Ground Level Elevation 2541
Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date	11/21/2013		
Run Number	Two		
Depth Driller	4450		
Depth Logger	4451		
Bottom Logged Interval	4450		
Top Log Interval	3600		
Casing Driller	8.625 @ 265		
Casing Logger	265		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	4000		
Density / Viscosity	9.2 60		
pH / Fluid Loss	10.5 7.2		
Source of Sample	Flowline		
Rm @ Meas. Temp	1.00 @ 54		
Rmf @ Meas. Temp	0.75 @ 54		
Rmc @ Meas. Temp	1.35 @ 54		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.44 @ 123		
Operating Rig Time	4 Hours		
Max. Rec. Temp. F	123		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Marc Downing		

<<< Fold Here >>>

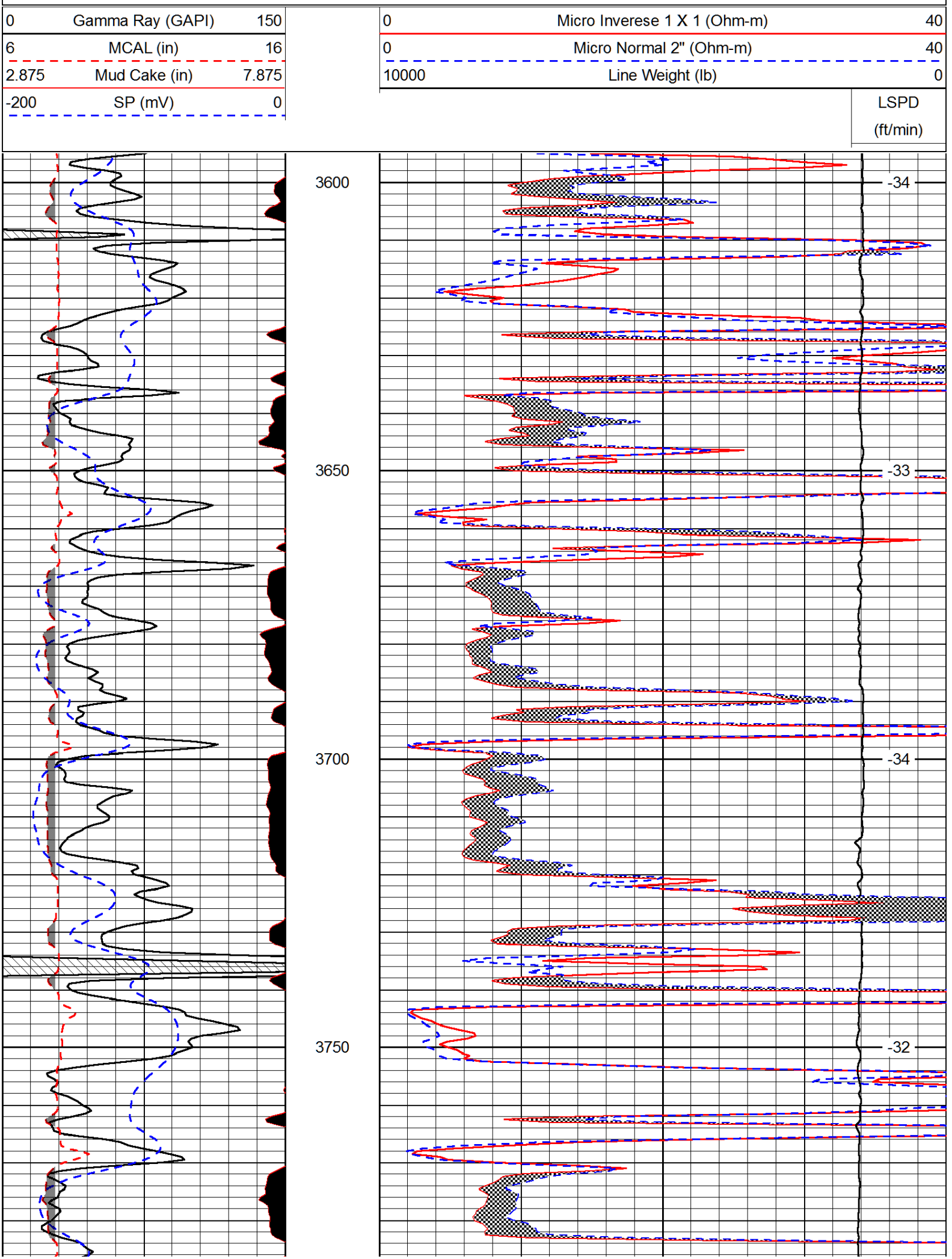
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

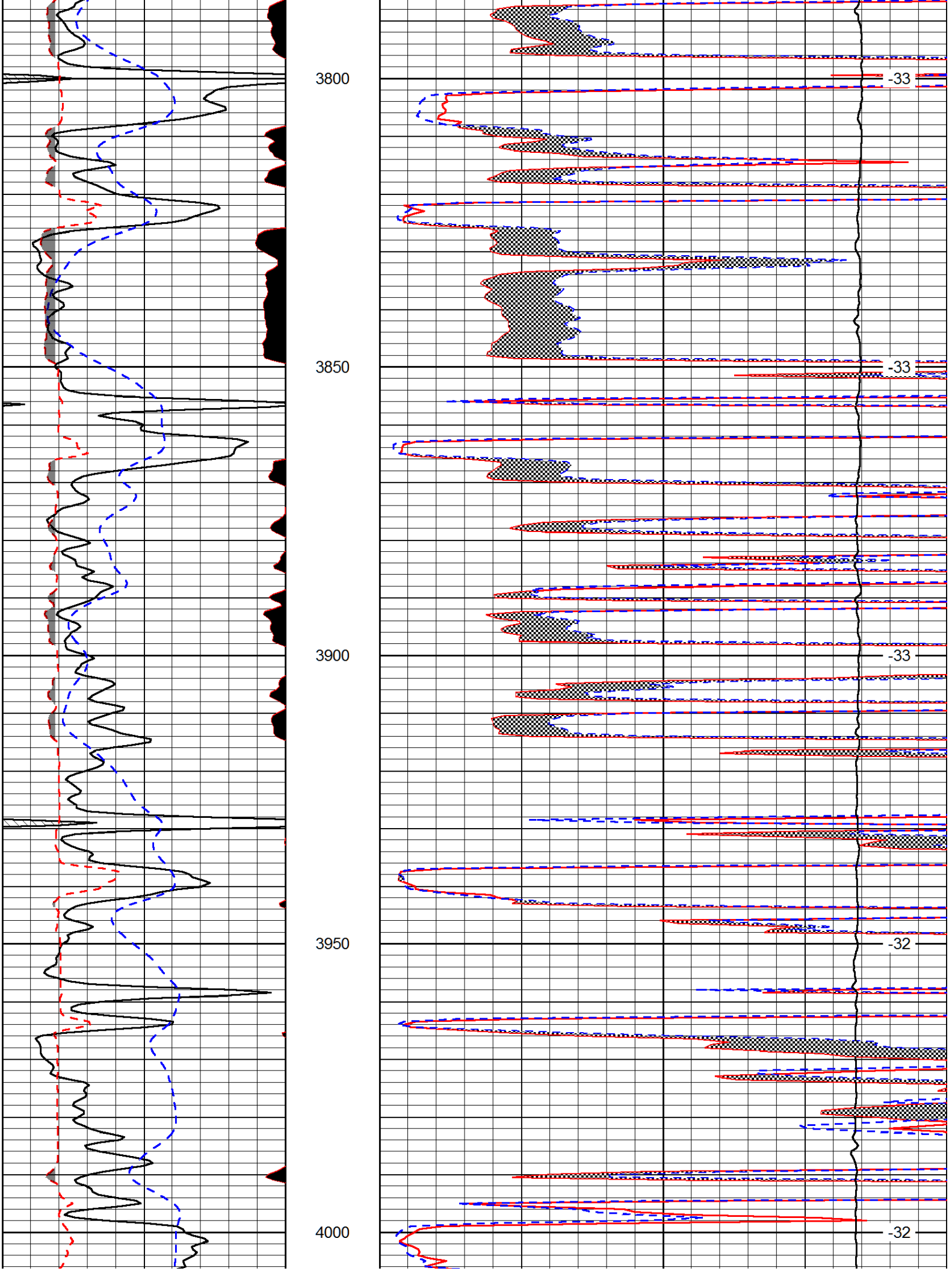
Comments

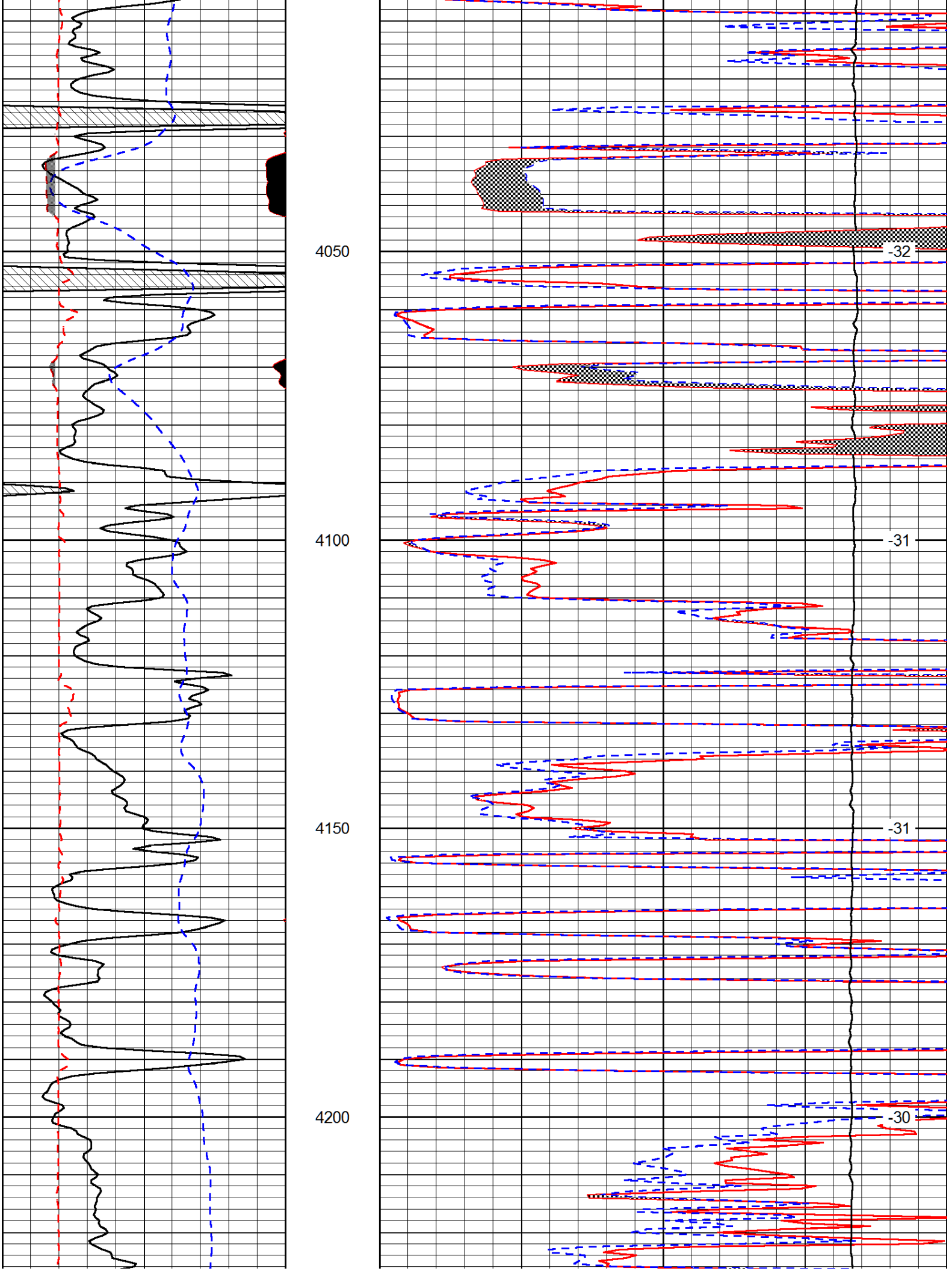
Thank you for using Log-Tech, Inc.
(785) 625-3858

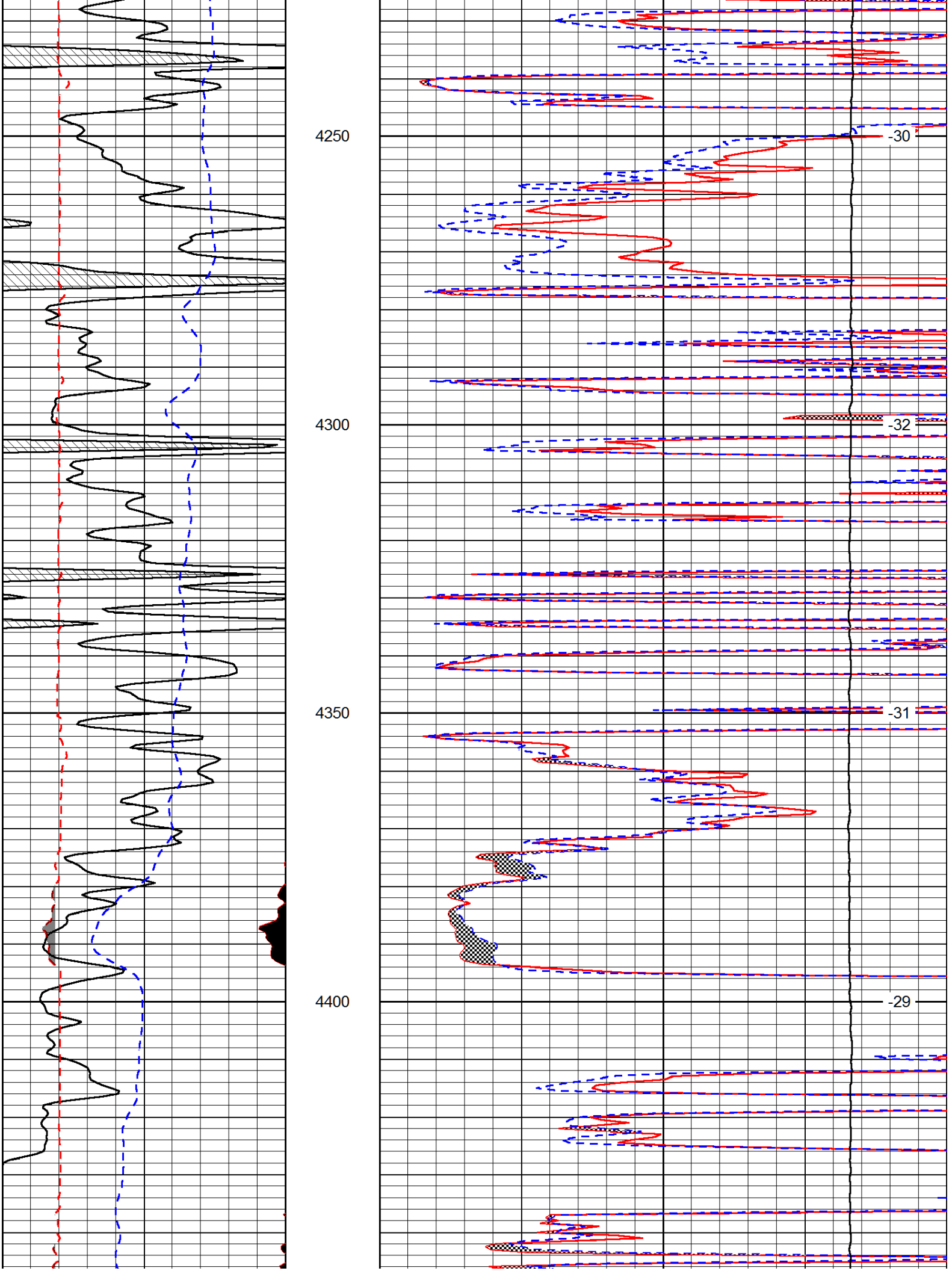
Pendennis,
2 West, 4 1/2 North, 3/4 West,
North into

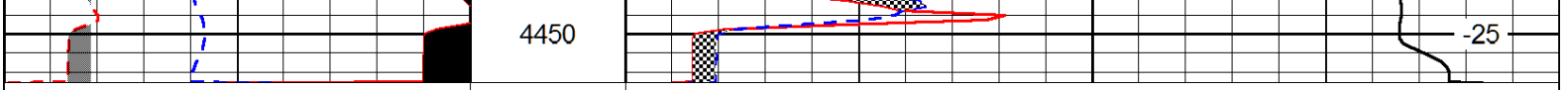
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Dataset Pathname: dil/hcstck
Presentation Format: micro
Dataset Creation: Thu Nov 21 14:04:57 2013
Charted by: Depth in Feet scaled 1:240


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)
3600
3650
3700
3750
-34
-33
-34
-32


3800
3850
3900
3950
4000
-33
-33
-33
-32
-32


4050
4100
4150
4200
-32
-31
-31
-30


4250
4300
4350
4400
-30
-32
-31
-29



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LSPD
(ft/min)