



Pioneer Energy Services

Microresistivity Log

15-065-23,917-00-00

API No.

Company **H & C Oil Operating, Inc.**
 Well **Steelsmith No. 25 - 2**
 Field **Unnamed**
 County **Graham** State **Kansas**

Location **NW SE NE
1650' FNL & 990' FEL**
 Sec: **25** Twp: **9 S** Rge: **25 W**

Other Services
CNL/CDL
DIL

Permanent Datum **Ground Level** Elevation **2585**
 Log Measured From **Kelly Bushing** **5** Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Elevation
K.B. 2590
D.F. 2585
G.L. 2585

Date	4/12/2013
Run Number	Two
Depth Driller	4200
Depth Logger	4199
Bottom Logged Interval	4198
Top Log Interval	3550
Casing Driller	8.625 @ 292
Casing Logger	289
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity,ppm CL	1100
Density / Viscosity	9.2 61
pH / Fluid Loss	10.5 6.8
Source of Sample	Flowline
Rm @ Meas. Temp	.32 @ 54
Rmf @ Meas. Temp	.24 @ 54
Rmc @ Meas. Temp	.43 @ 54
Source of Rmf / Rmc	Charts
Rm @ BHT	.15 @ 118
Operating Rig Time	4 Hours
Max Rec. Temp. F	118
Equipment Number	17
Location	Hays
Recorded By	D. Martin
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

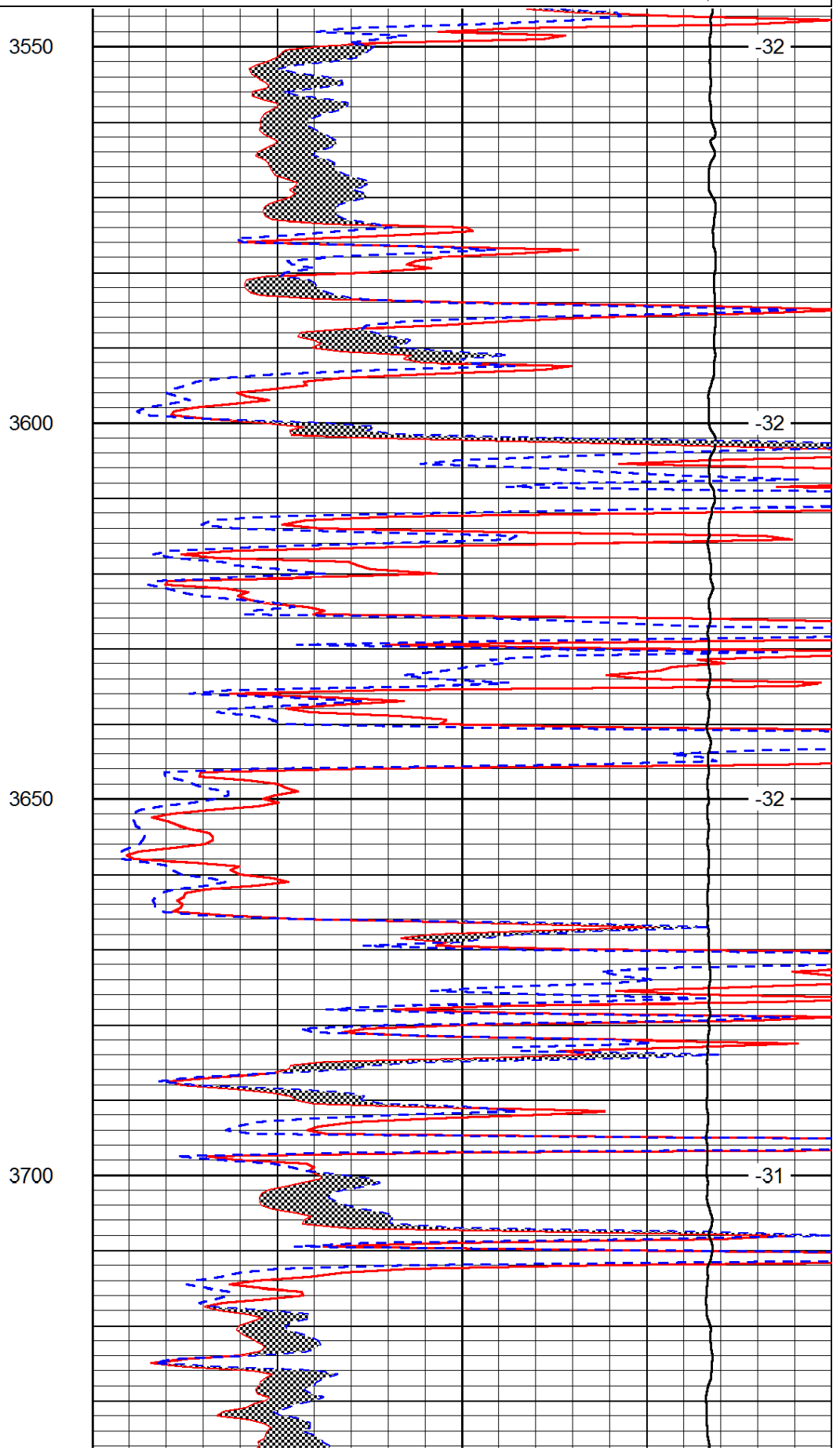
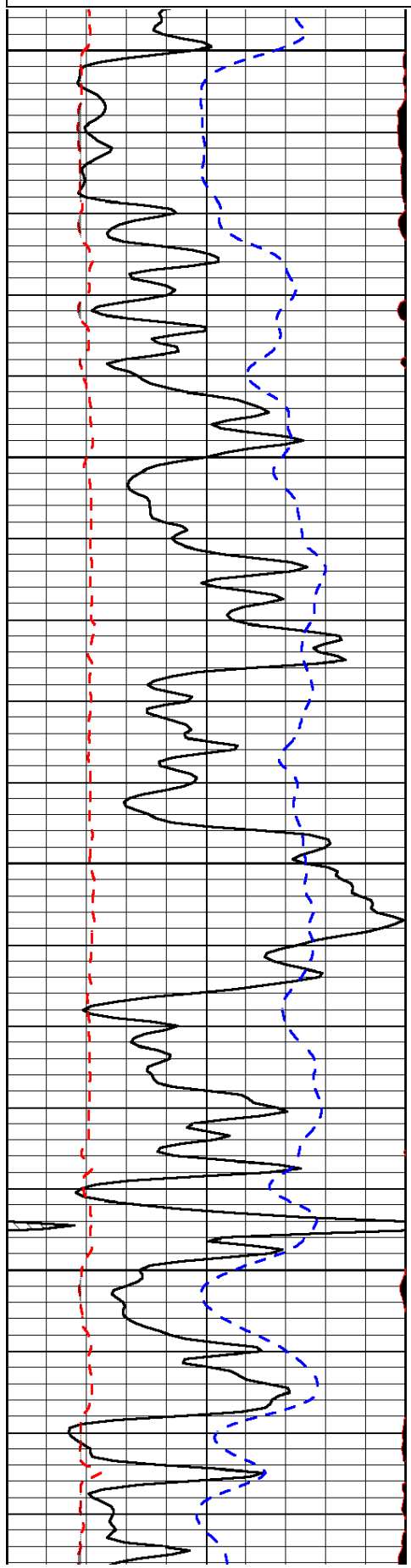
 Wakeeney, KS
 N to Red Line Rd.(H Rd.),
 10 W to 160 Rd., 1/2 N, W Into

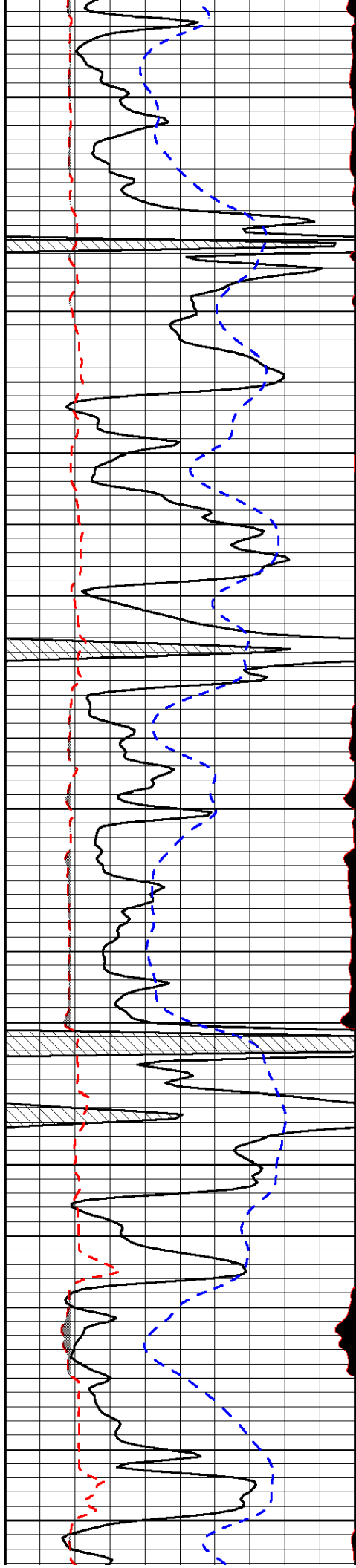
Database File: h&c_steelsmith_25-2hd.db
 Dataset Pathname: DIL/h&cstk
 Presentation Format: micro
 Dataset Creation: Sat Apr 13 01:12:17 2013
 Charted by: Depth in Feet scaled 1:240

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)





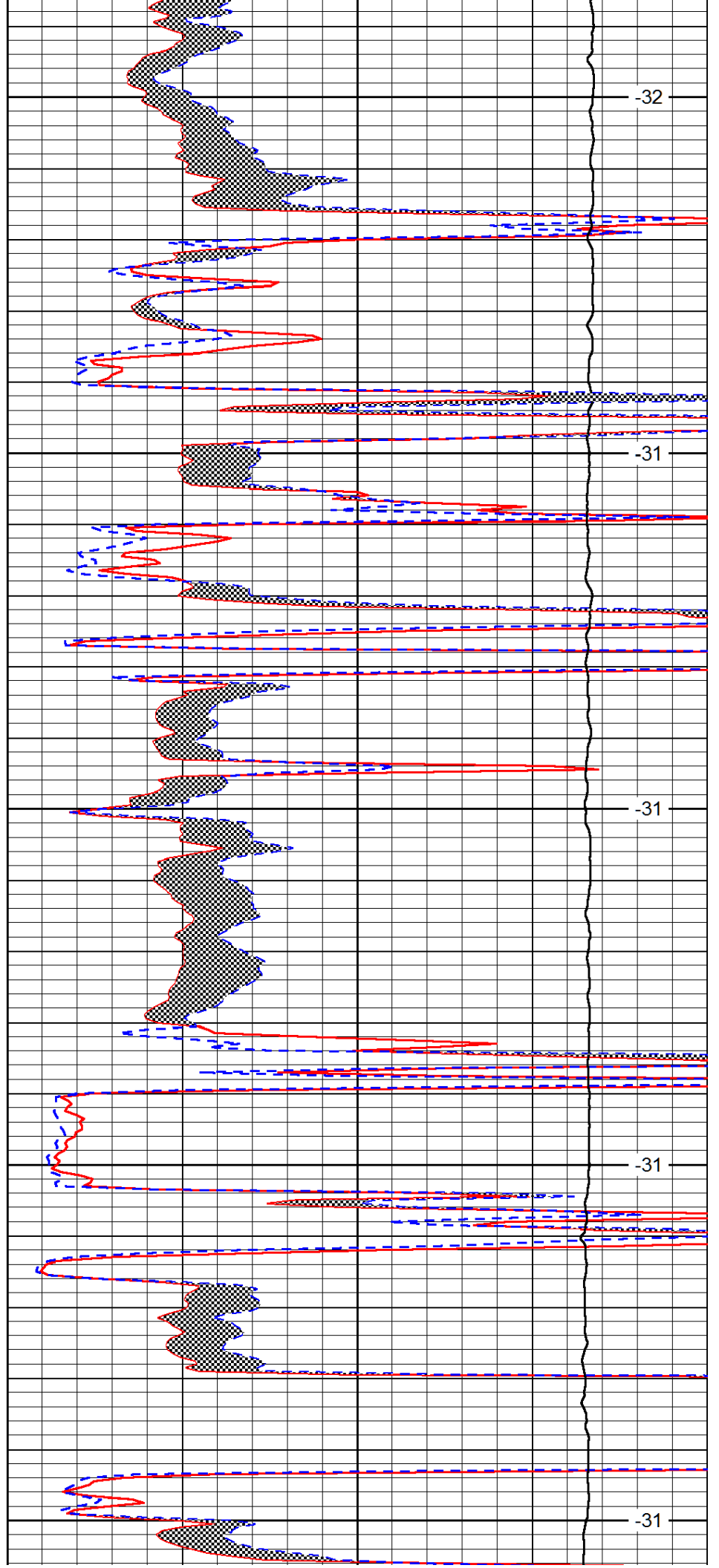
3750

3800

3850

3900

3950



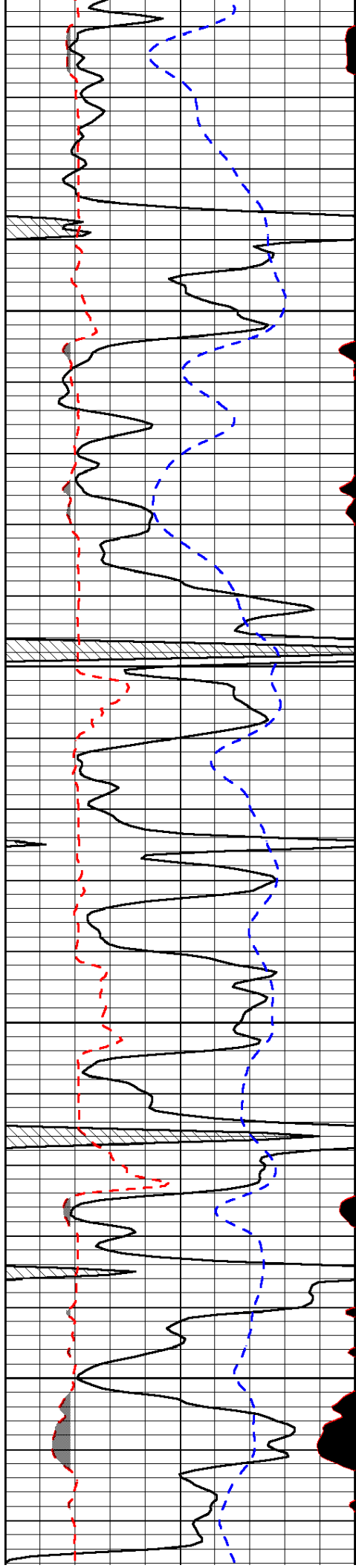
-32

-31

-31

-31

-31

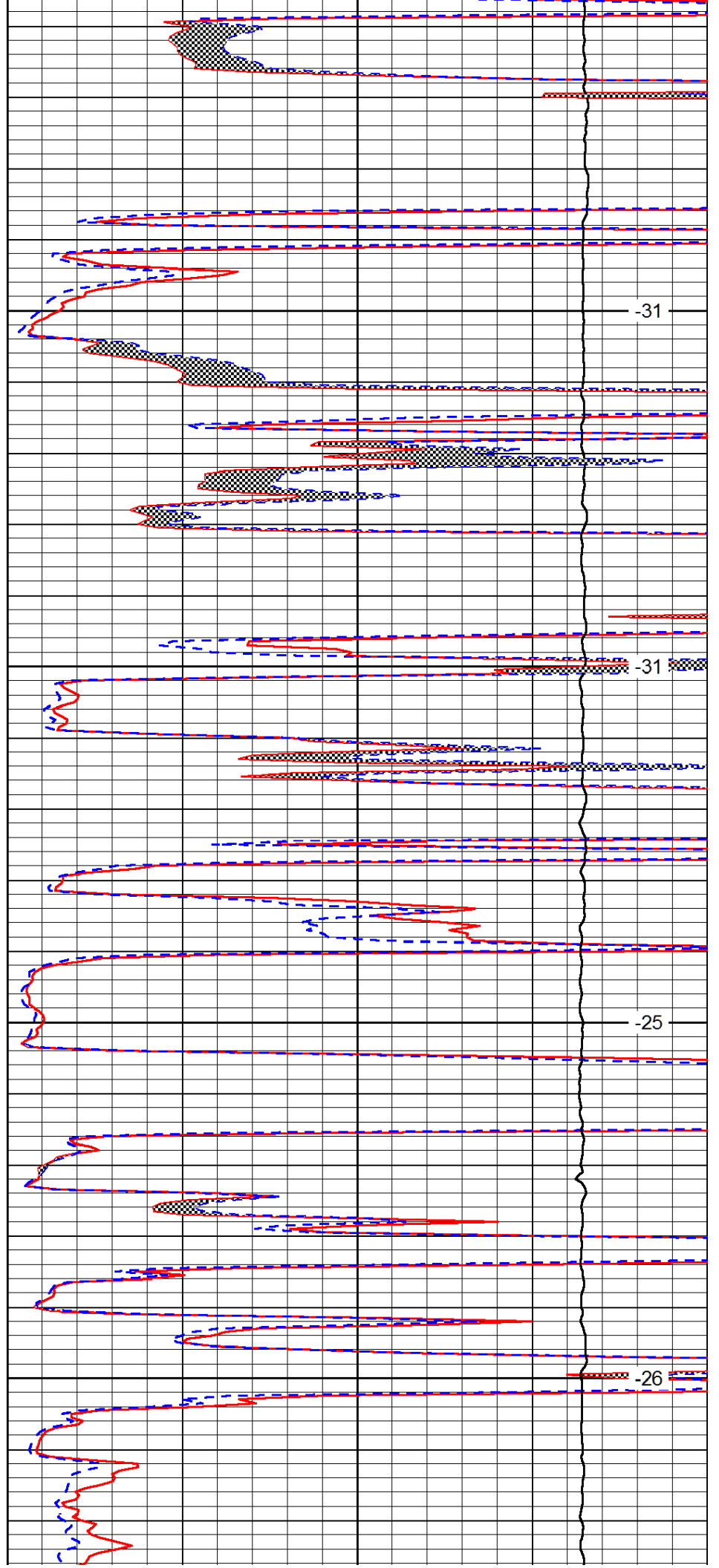


4000

4050

4100

4150

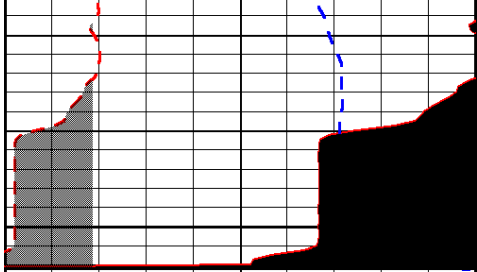


-31

-31

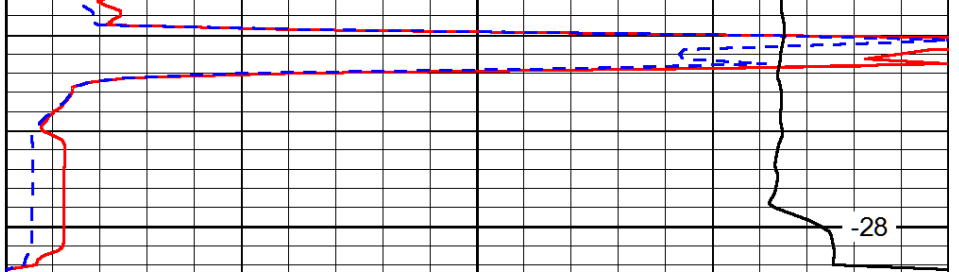
-25

-26



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

4200



0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

LSPD
(ft/min)