



Pioneer Energy Services

Microresistivity Log

API No.	Company RJM Company Well Grasmick # 1 Field Trapp County Russell State Kansas				
15-167-23962-00-00	Location 330' FNL & 1250' FEL			Other Services CNL/CDL DIL/BHCS	
	Sec: 34	Twp: 15 S	Rge: 13 W	Elevation K.B. 1870 D.F. 1862 G.L. 1862	
Permanent Datum	Ground Level	Elevation 1862			
Log Measured From	Kelly Bushing	8	Ft. Above Perm. Datum		
Drilling Measured From	Kelly Bushing				
Date	04-22-2014				
Run Number	Two				
Depth Driller	3325				
Depth Logger	3320				
Bottom Logged Interval	3319				
Top Log Interval	2700				
Casing Driller	8.625 @ 389				
Casing Logger	388				
Bit Size	7.875				
Type Fluid in Hole	Chemical				
Salinity,ppm CL	9000				
Density / Viscosity	9.2	48			
pH / Fluid Loss	9.5	8.8			
Source of Sample	Flowline				
Rm @ Meas. Temp	1.40 @ 65				
Rmf @ Meas. Temp	1.05 @ 65				
Rmc @ Meas. Temp	1.89 @ 65				
Source of Rmf / Rmc	Charts				
Rm @ BHT	0.83 @ 109				
Operating Rig Time	4 1/2 Hours				
Max Rec. Temp. F	109				
Equipment Number	17				
Location	Hays				
Recorded By	Y. Ruiz				
Witnessed By	Jim Musgrove				

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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.

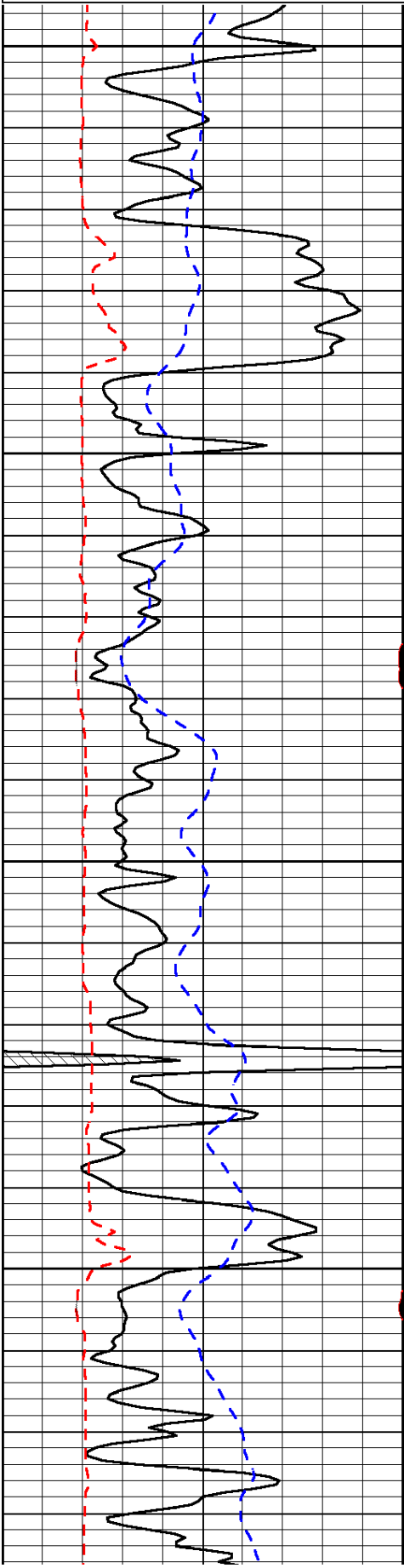
Comments

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

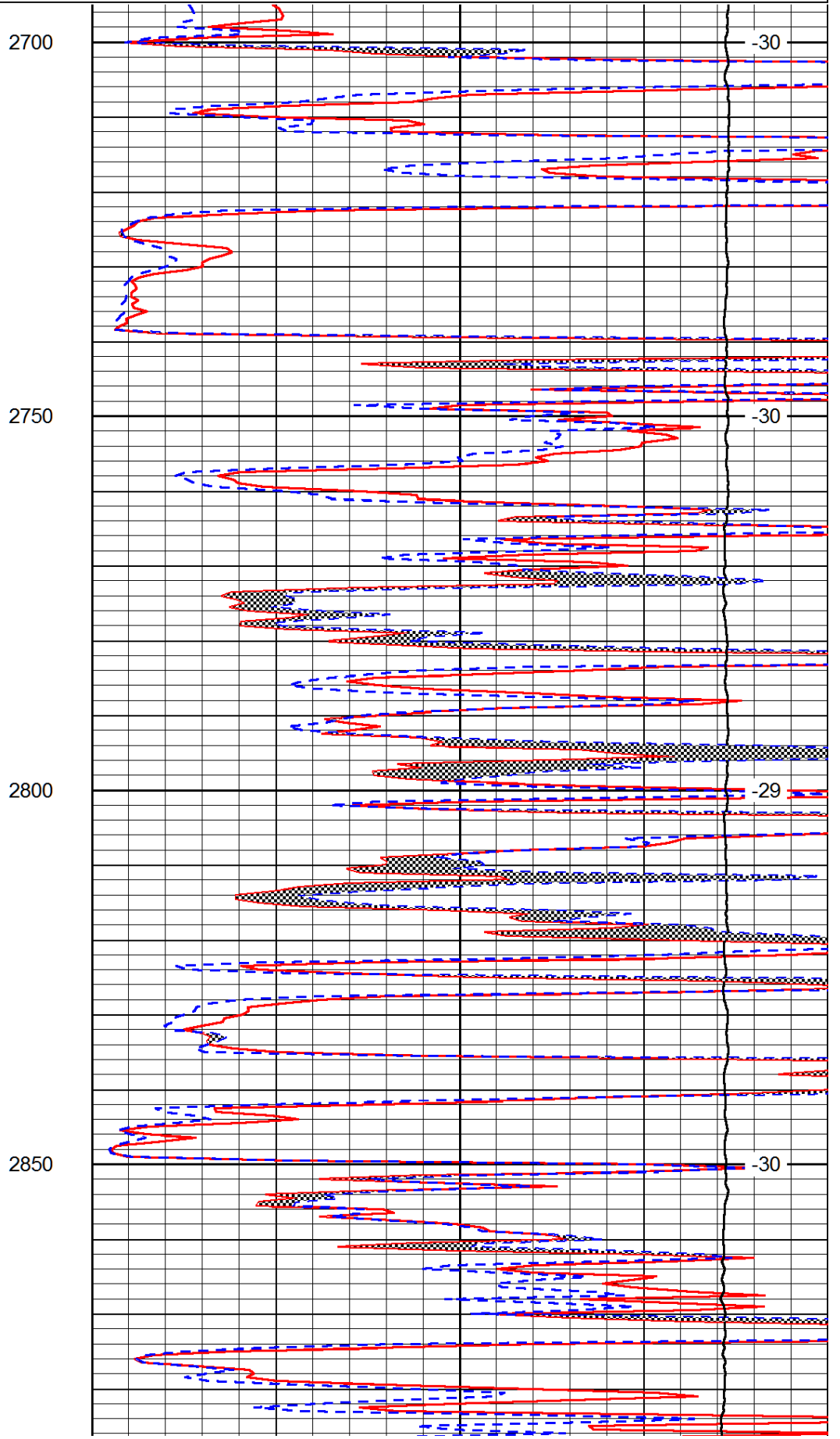
Susank,
North to 230 Rd, 1/2 East, 1 North, 3/4 East,
South into

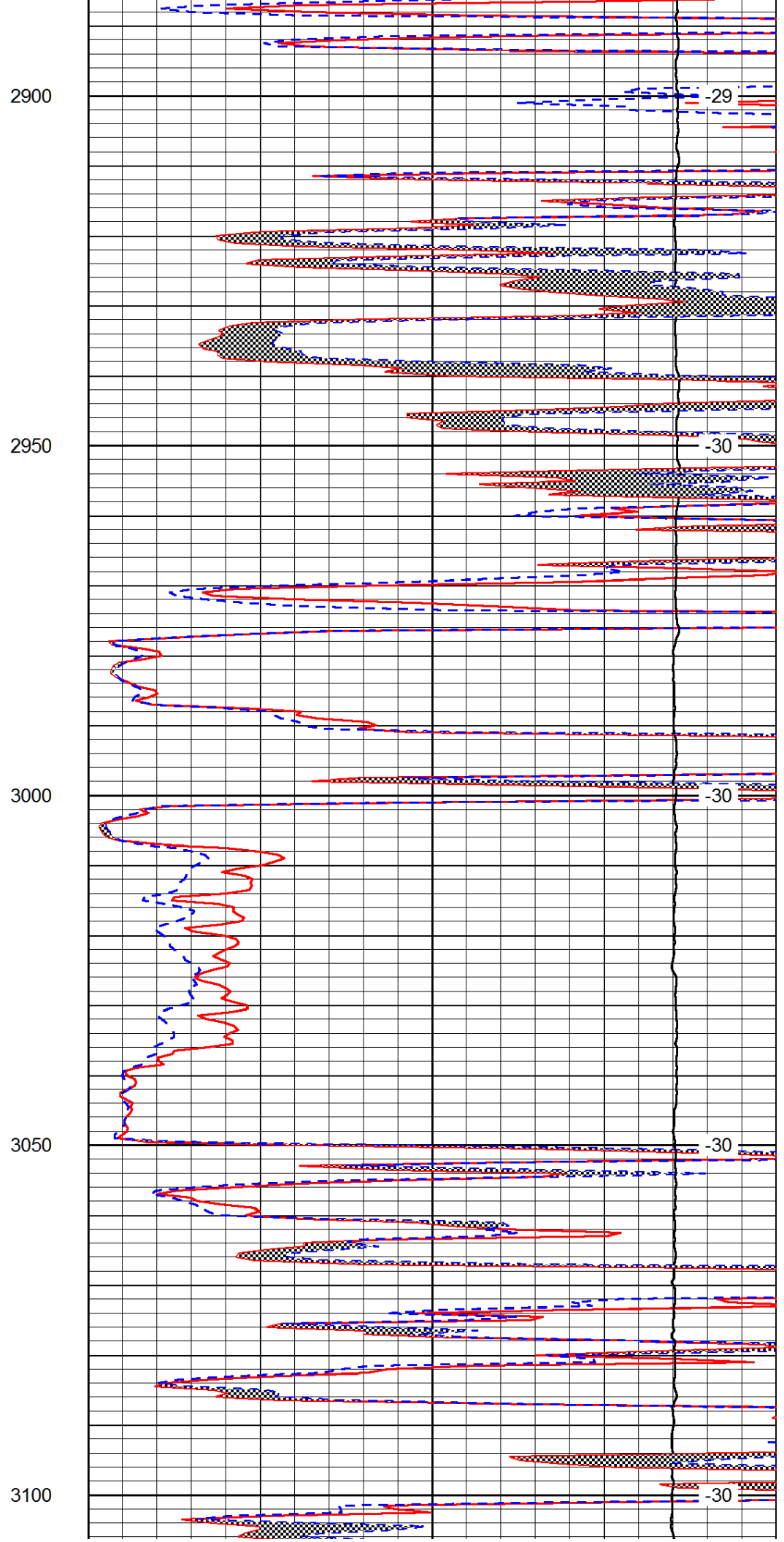
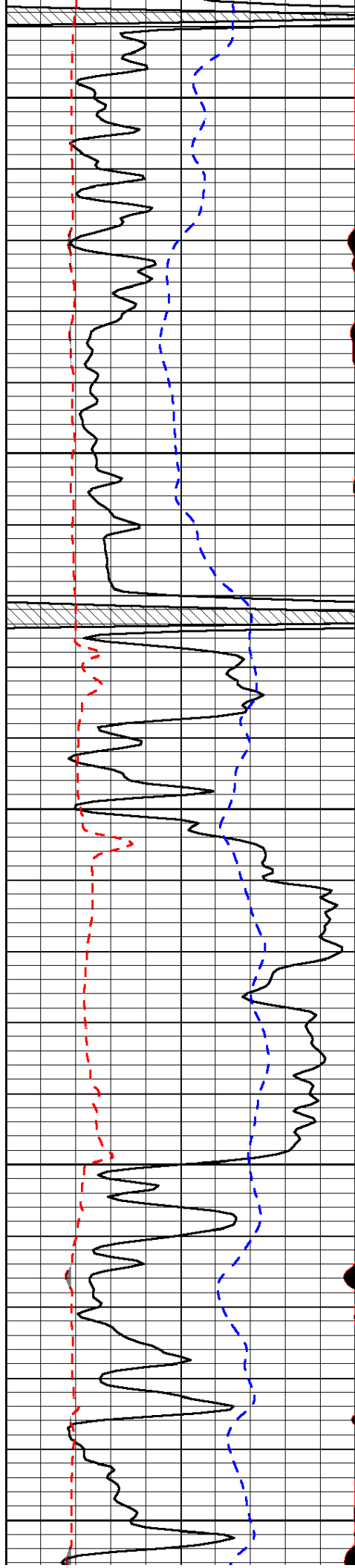
Database File: rjm_042214hd.db
Dataset Pathname: DIL/rjmstk
Presentation Format: micro
Dataset Creation: Tue Apr 22 23:56:10 2014
Charted by: Depth in Feet scaled 1:240

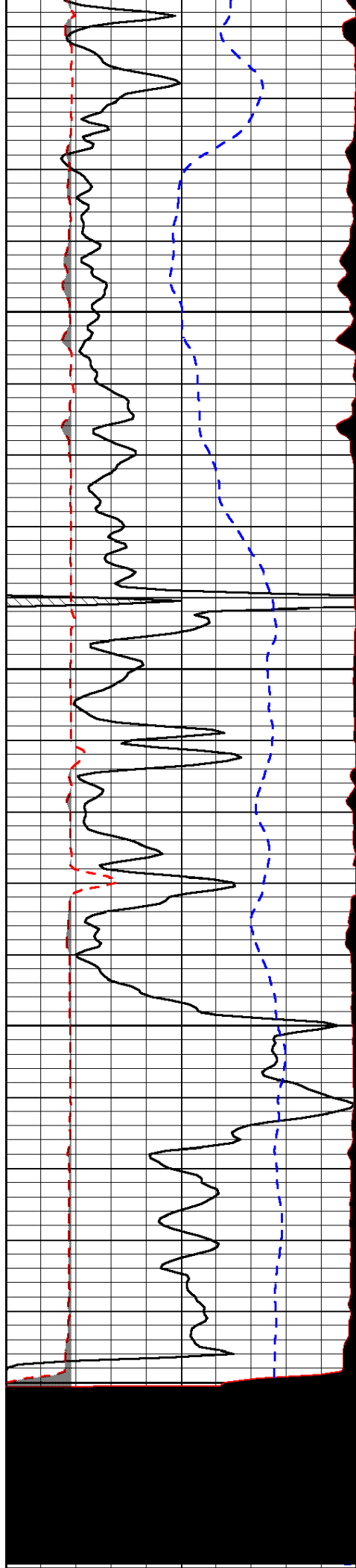
0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-200	SP (mV)	0



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





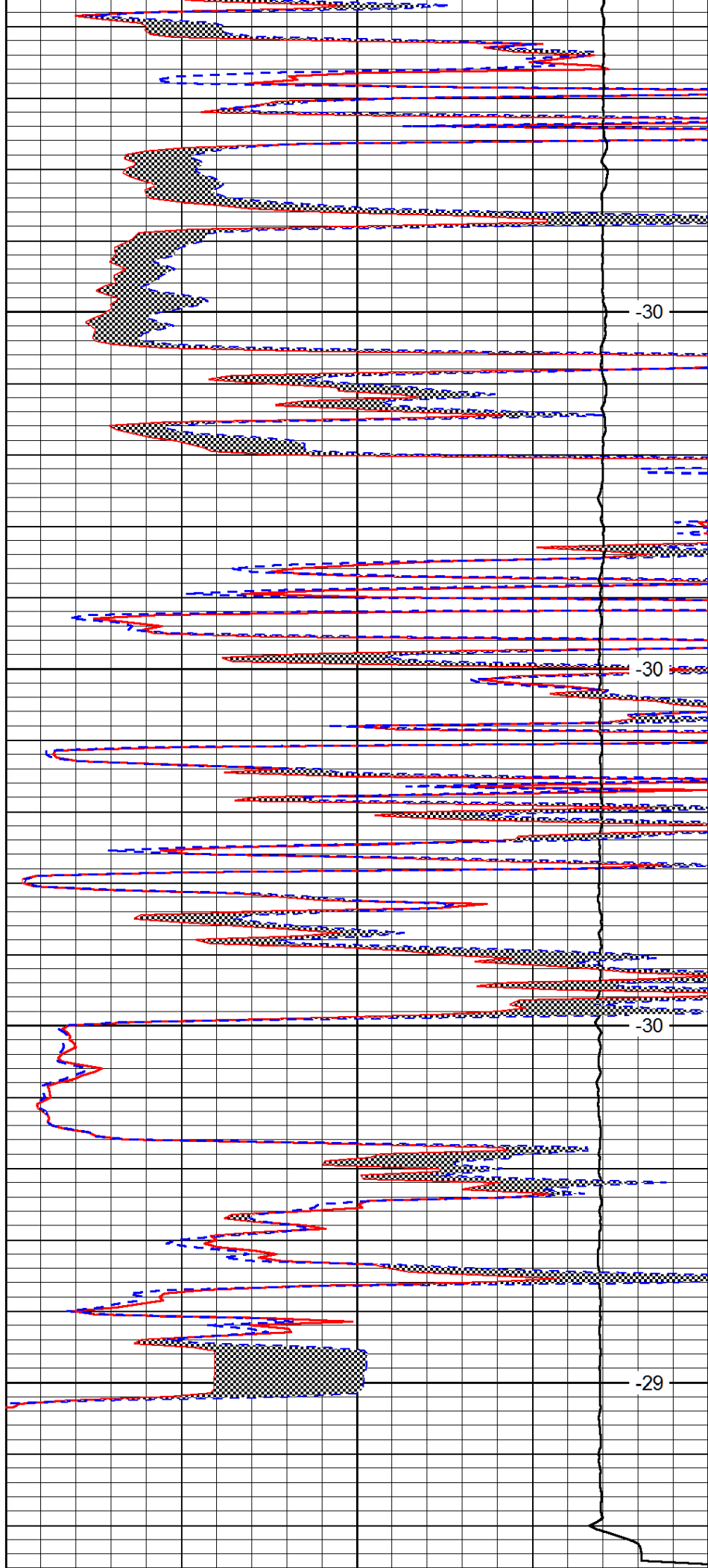


3150

3200

3250

3300



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)