



Pioneer Energy Services

# Microresistivity Log

API No.	15-135-25509-00-00		
Company	Palomino Petroleum, Inc.		
Well	B & P #1		
Field	Dumler		
County	Ness	State	Kansas
Location	789' FNL & 654' FWL		
Sec: 12	Twp: 17S	Rge: 26W	Other Services RAG

Permanent Datum	Ground Level	Elevation 2504	K.B. 2514
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum	D.F. 2504
Drilling Measured From	Kelly Bushing		G.L. 2504
Date	1/3/2013		
Run Number	Two		
Depth Driller	4565		
Depth Logger	4564		
Bottom Logged Interval	4563		
Top Log Interval	3600		
Casing Driller	8.625 @ 221		
Casing Logger	222		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	3000		
Density / Viscosity	9.4	57	
pH / Fluid Loss	10.5	6.8	
Source of Sample	Flowline		
Rm @ Meas. Temp	0.85	@ 43	
Rmf @ Meas. Temp	0.64	@ 43	
Rmc @ Meas. Temp	1.15	@ 43	
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.30	@ 124	
Operating Rig Time	4 Hours		
Max Rec. Temp. F	124		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Ken Wallace		

<<< 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.

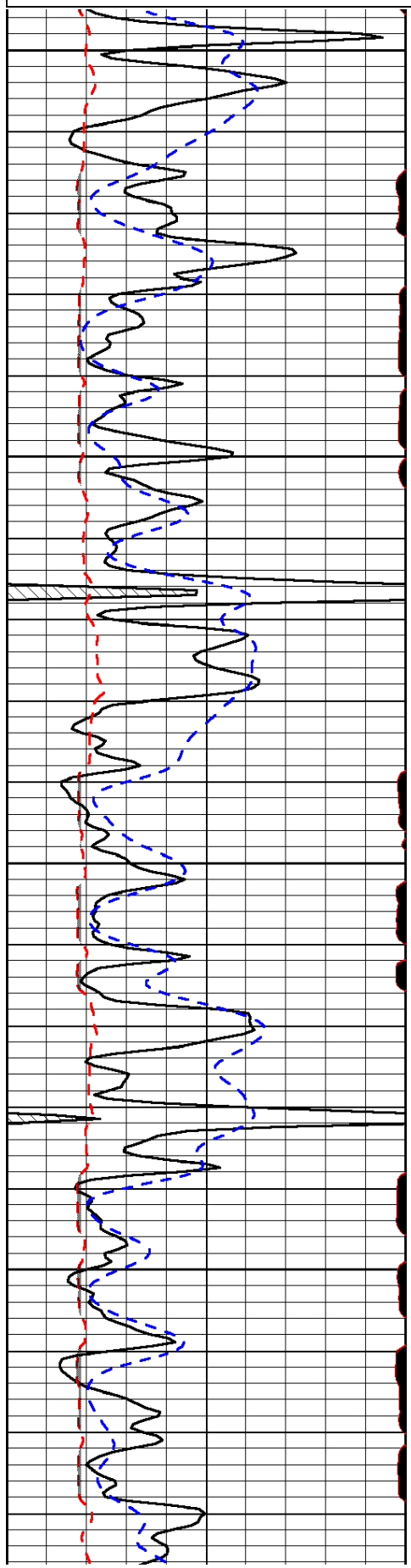
### Comments

Thank you for using Log-Tech, Inc.  
(785) 625-3858  
  
Utica,  
East to E Rd, 3 South,  
East into

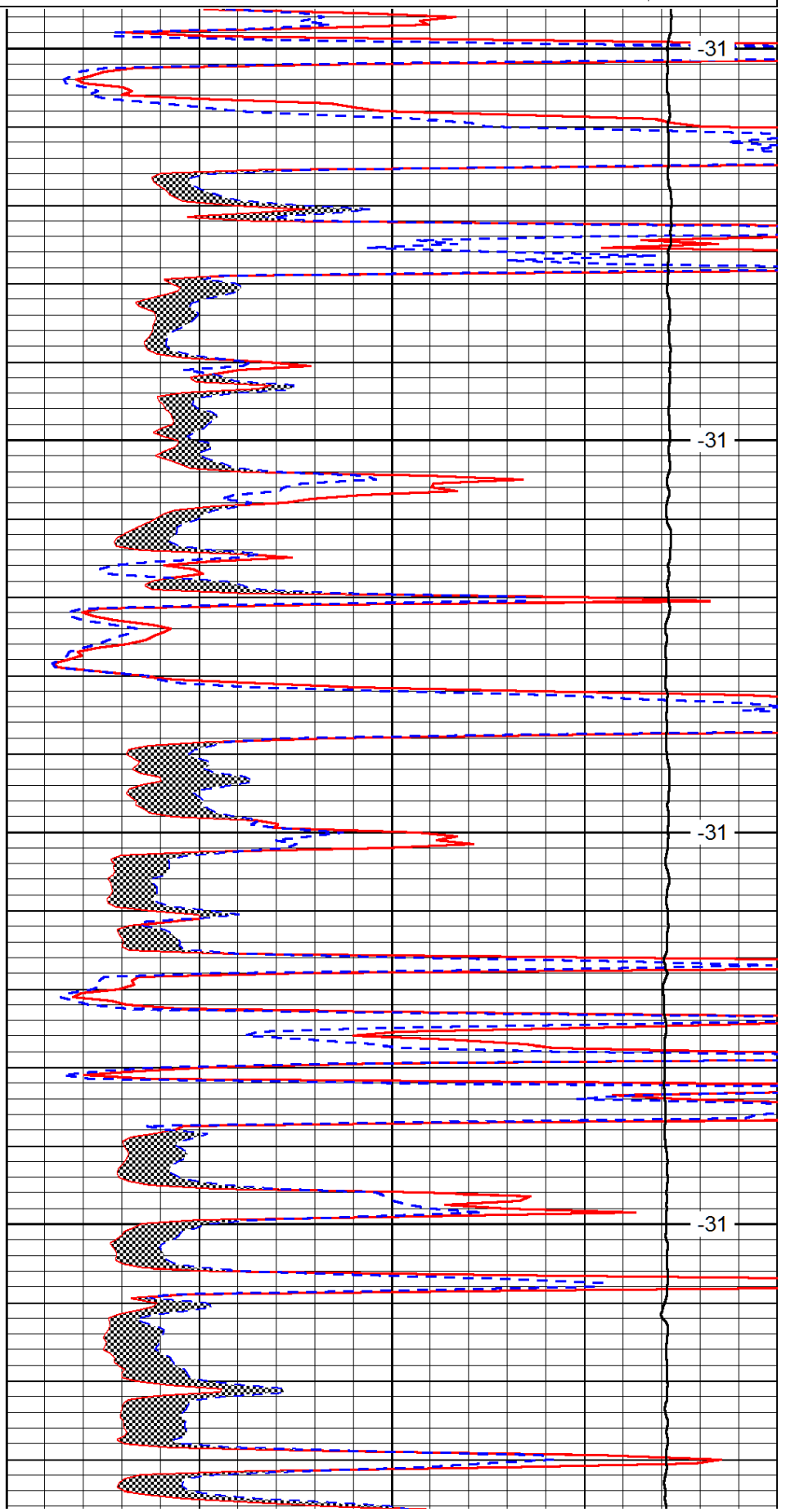
0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-200	SP (mV)	0

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

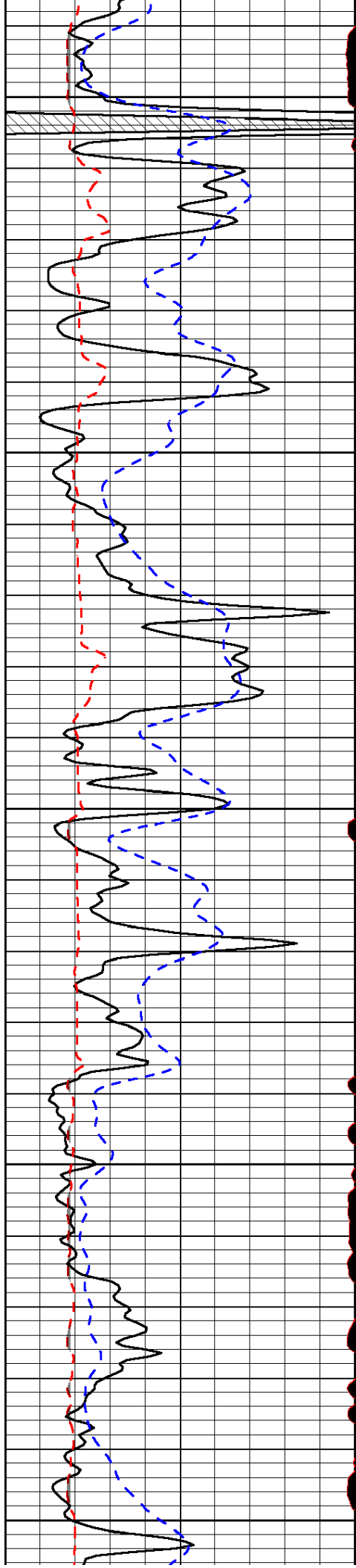
LSPD  
(ft/min)



3600  
3650  
3700  
3750



-31  
-31  
-31  
-31



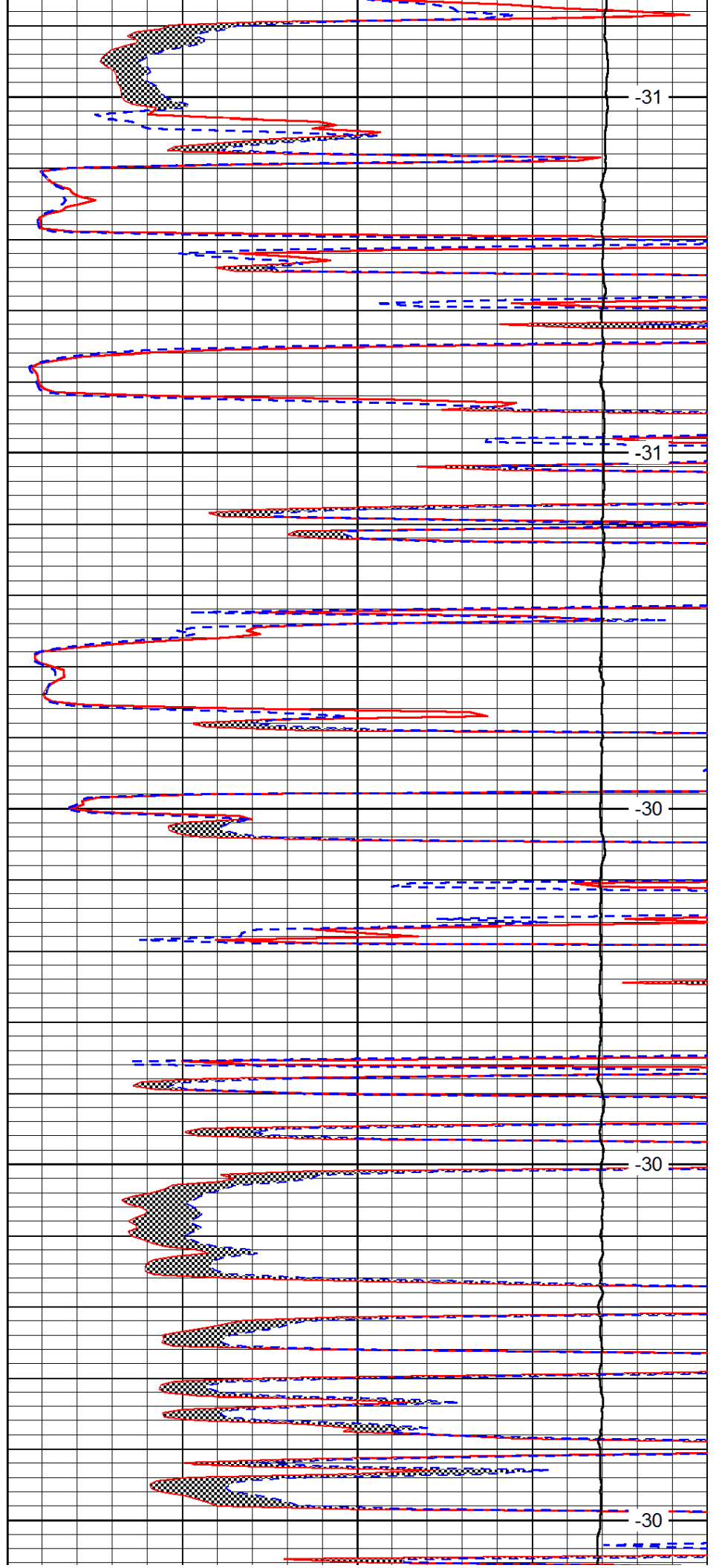
3800

3850

3900

3950

4000



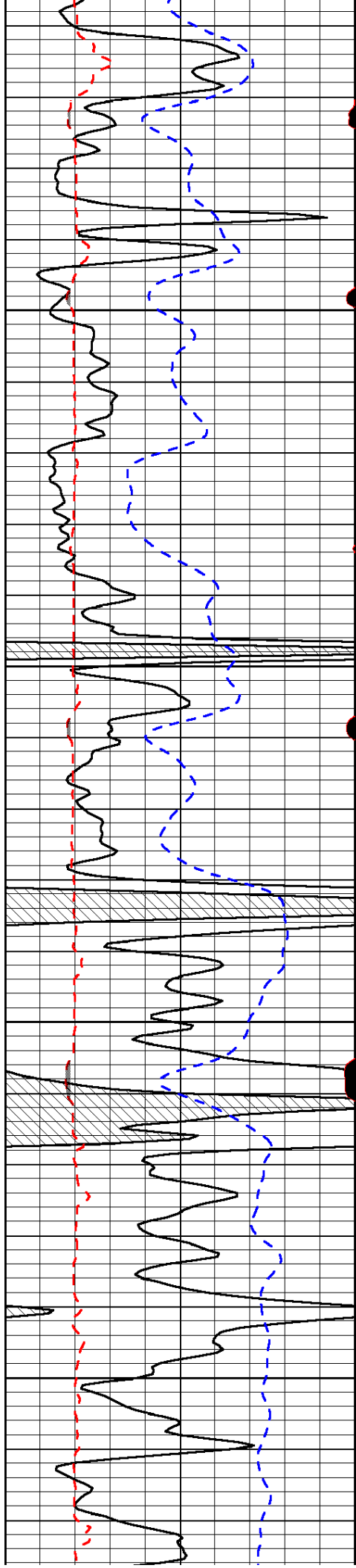
-31

-31

-30

-30

-30

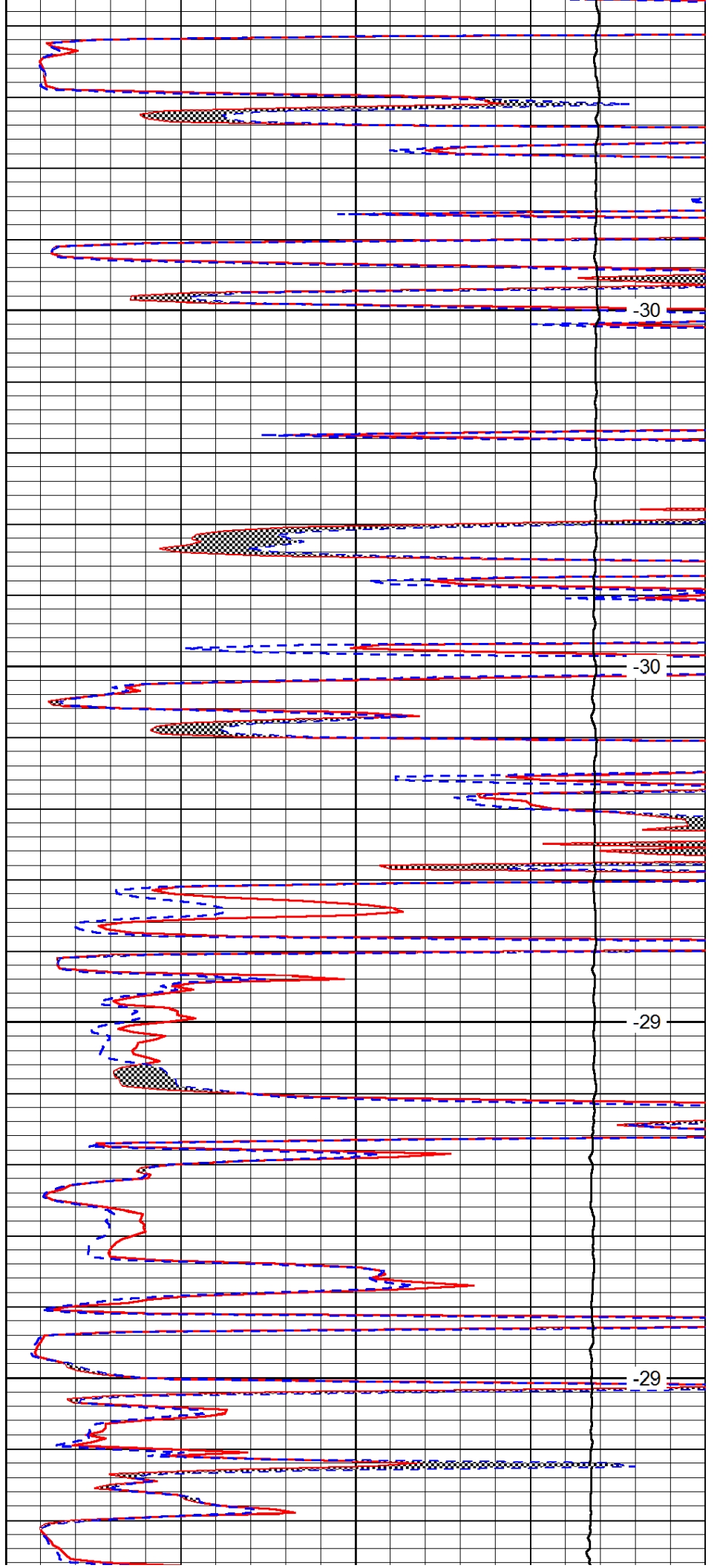


4050

4100

4150

4200

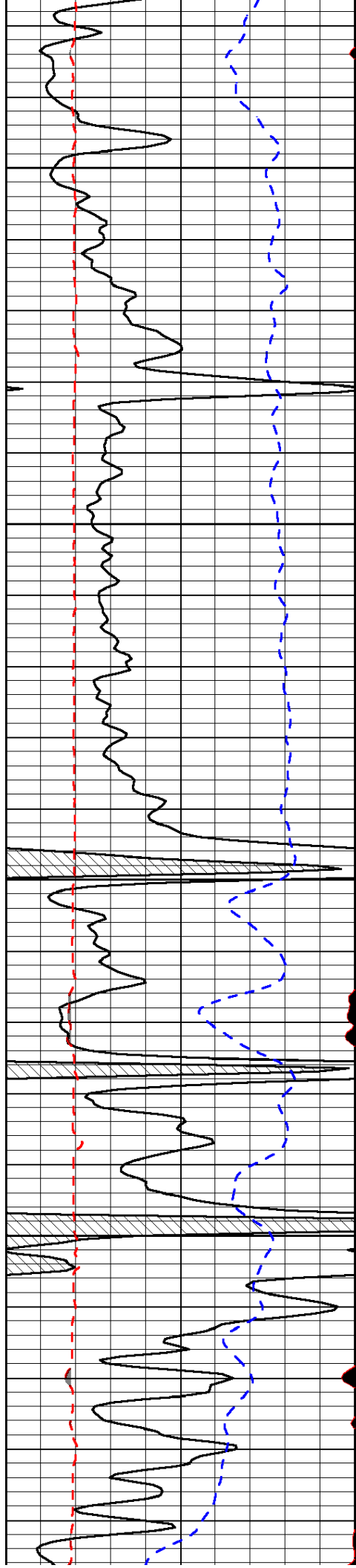


-30

-30

-29

-29

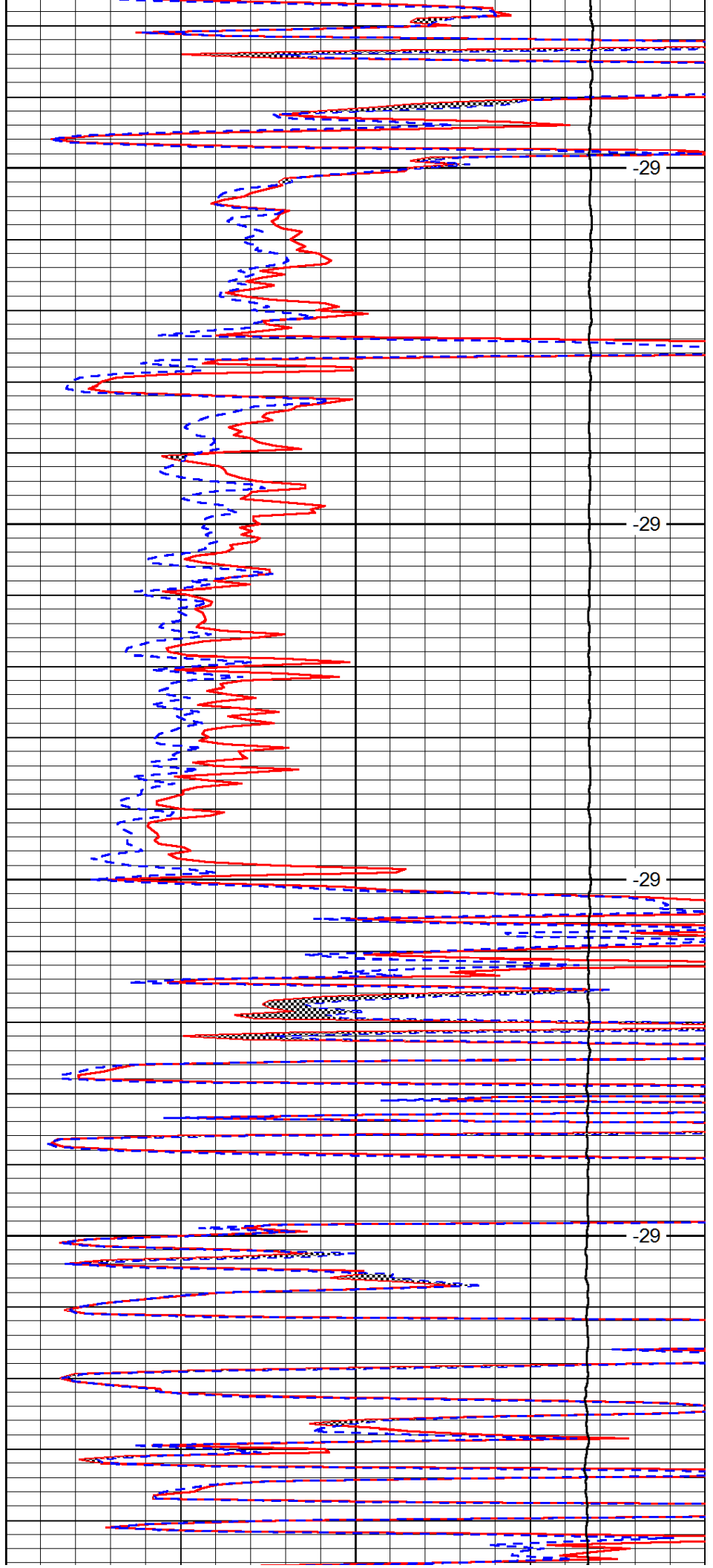


4250

4300

4350

4400

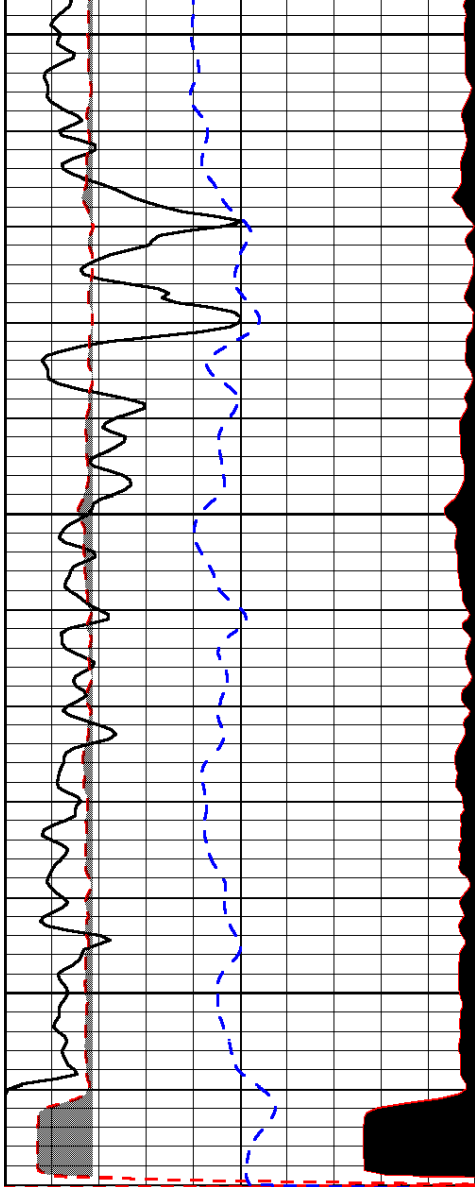


-29

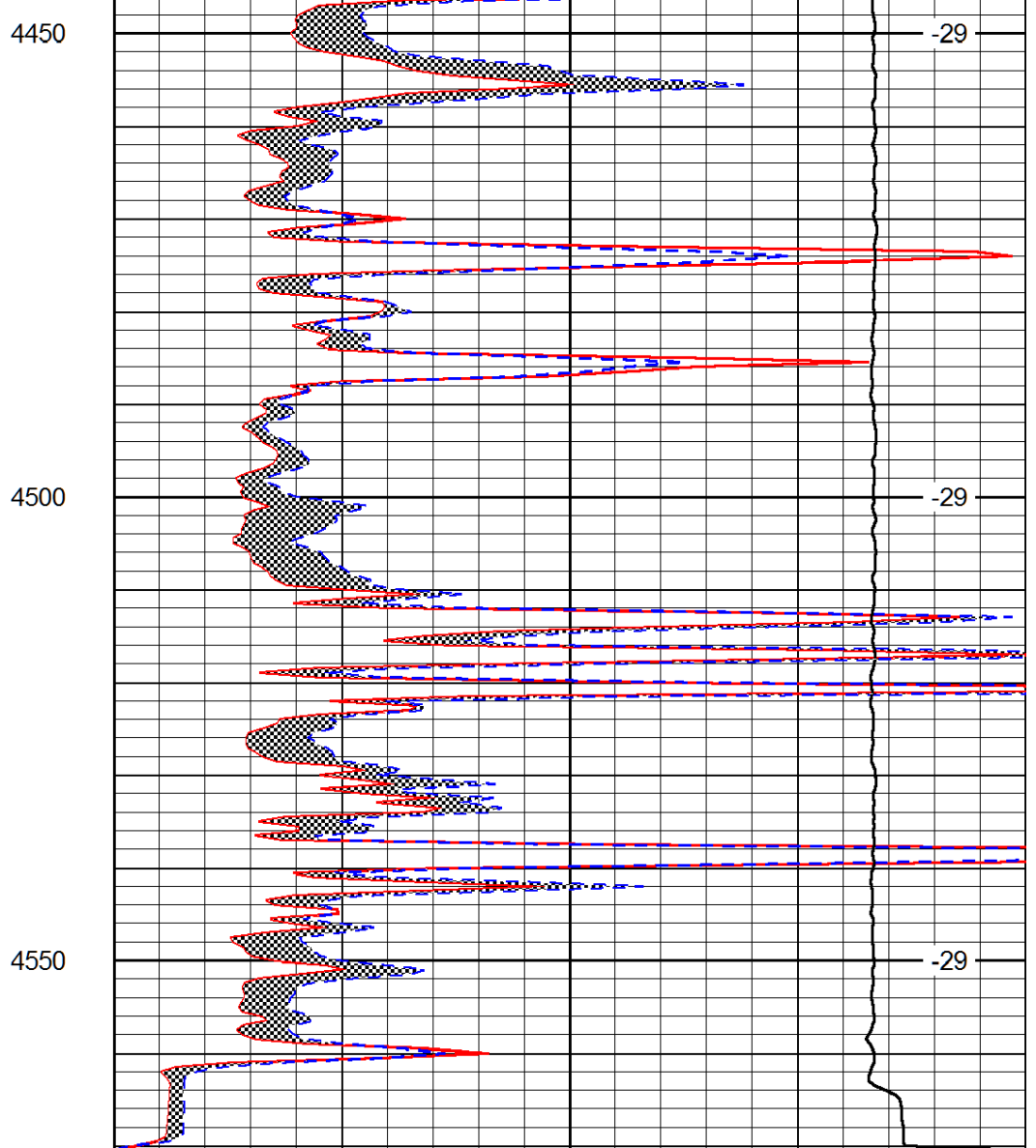
-29

-29

-29



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)