



Pioneer Energy Services

# Microresistivity Log

API No.	15-051-26429-00-00		
Company	TDL, Inc.		
Well	GR #1		
Field	Wildcat		
County	Eljis	State	Kansas
Location	NE SW SW NW 2060' FNL / 570' FWL		
Sec: 14	Twp: 15S	Rge: 19W	Other Services CNL / CDL DIL

Permanent Datum	Ground Level	Elevation 2011	K.B. 2021
Log Measured From	Kelly Bushing	10 Ft. Above Perm. Datum	D.F. 2011
Drilling Measured From	Kelly Bushing		G.L. 2011
Date	12/6/2012		
Run Number	Two		
Depth Driller	3750		
Depth Logger	3747		
Bottom Logged Interval	3746		
Top Log Interval	2900		
Casing Driller	8.625 @ 1221		
Casing Logger	1220		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	3800		
Density / Viscosity	9.1	60	
pH / Fluid Loss	10.0	6.8	
Source of Sample	Flowline		
Rm @ Meas. Temp	0.40 @	60	
Rmf @ Meas. Temp	0.30 @	60	
Rmc @ Meas. Temp	0.54 @	60	
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.21 @	114	
Operating Rig Time	4 Hours		
Max Rec. Temp. F	114		
Equipment Number	15		
Location	Hays		
Recorded By	R. Barnhart		
Witnessed By	Herb Deines	Tom Denning	

<<< 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

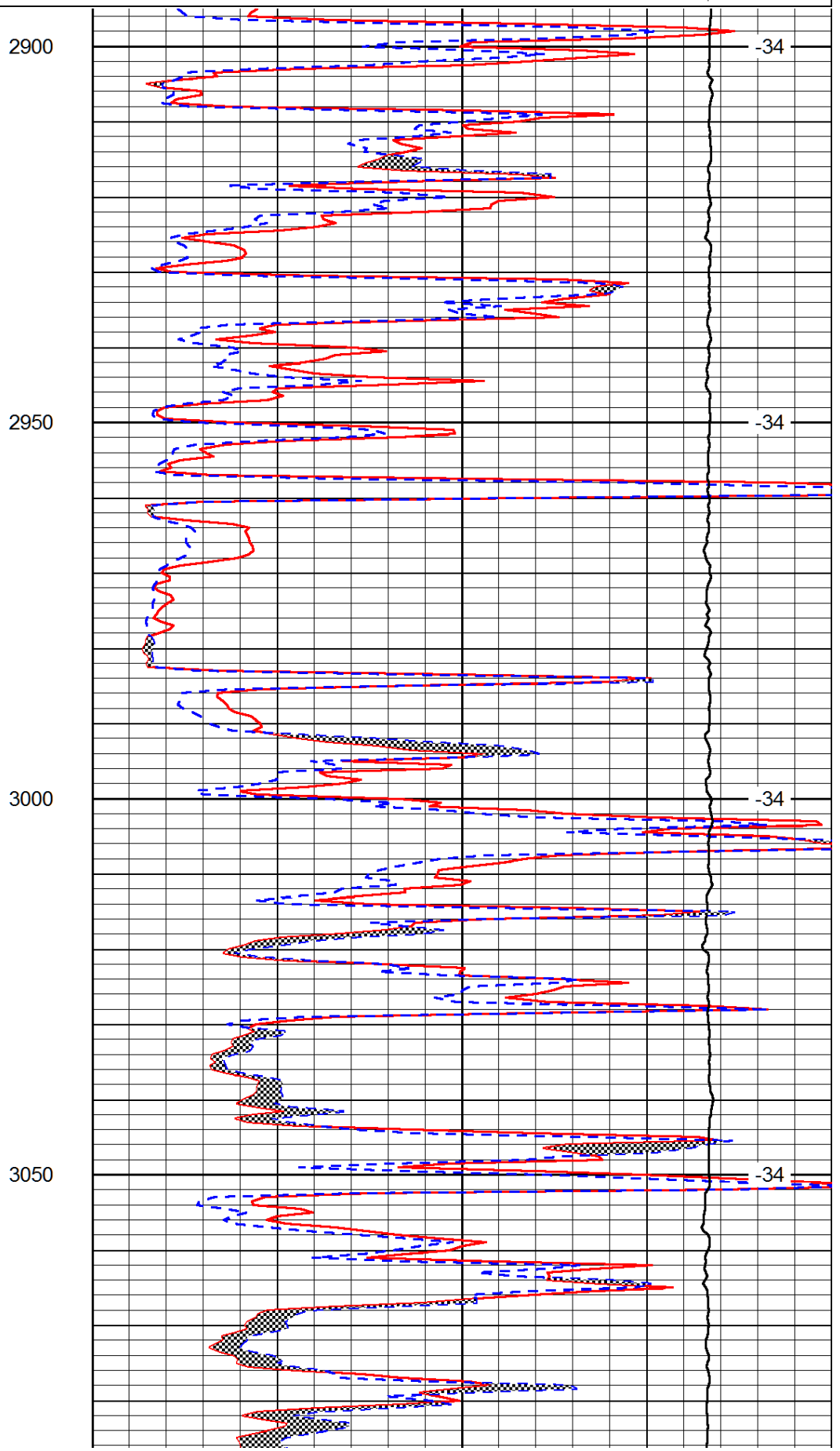
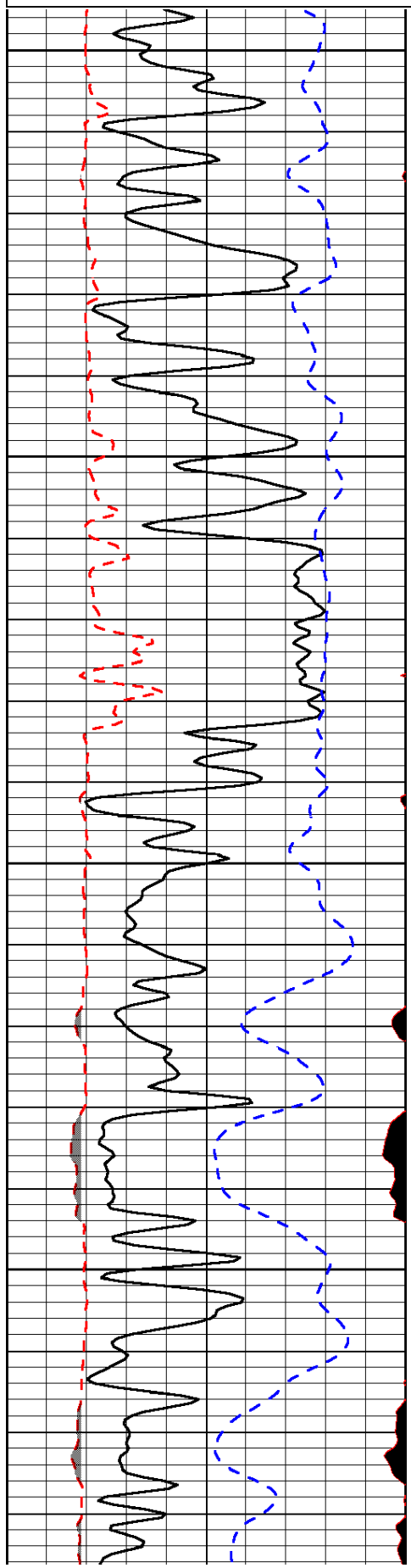
Thank you for using Log-Tech, Inc.  
(785) 625-3858

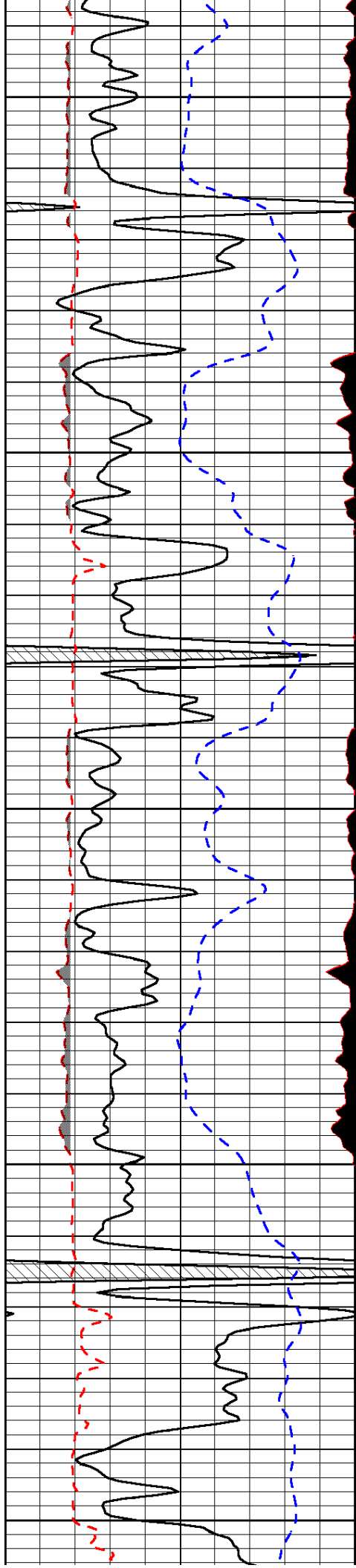
Antonino, KS:  
1W, 2.1S, E into

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)





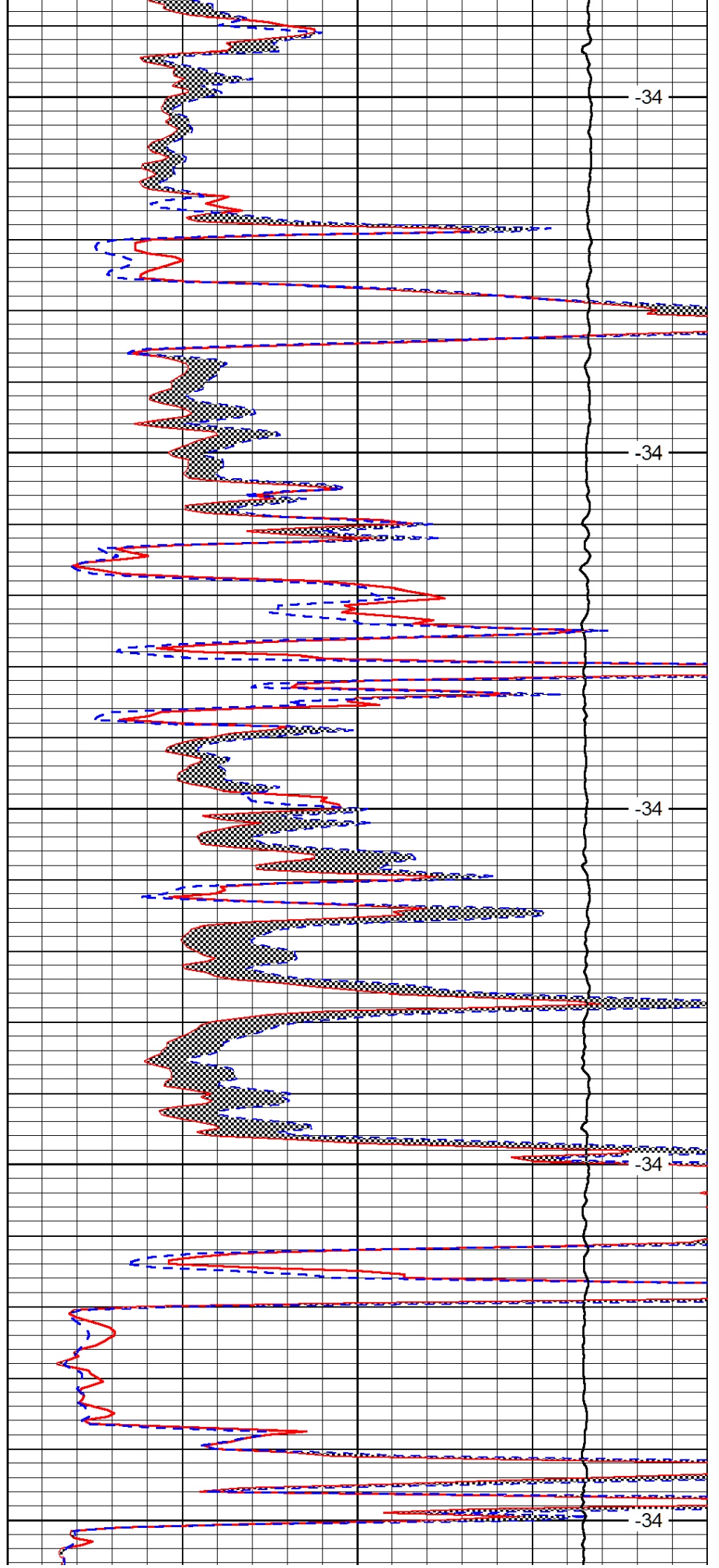
3100

3150

3200

3250

3300



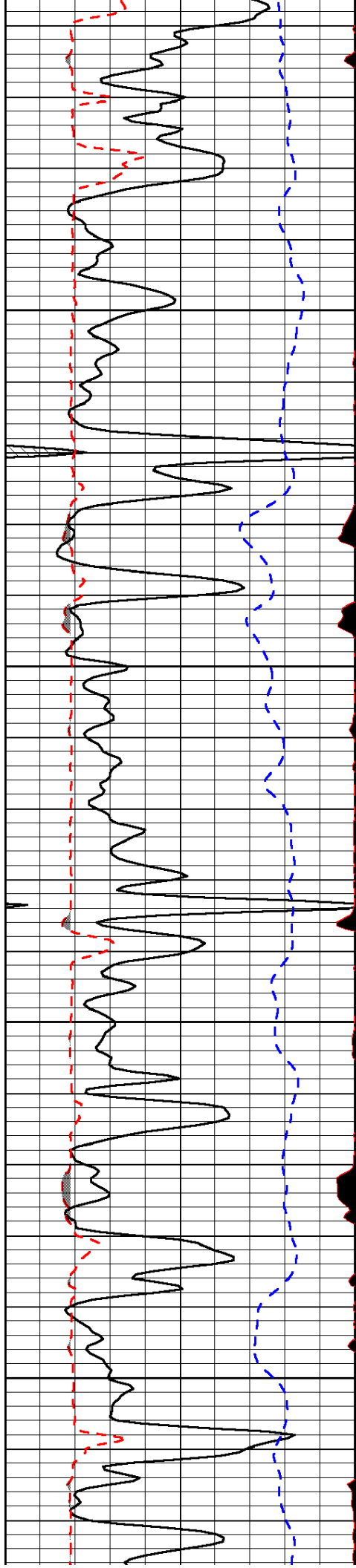
-34

-34

-34

-34

-34

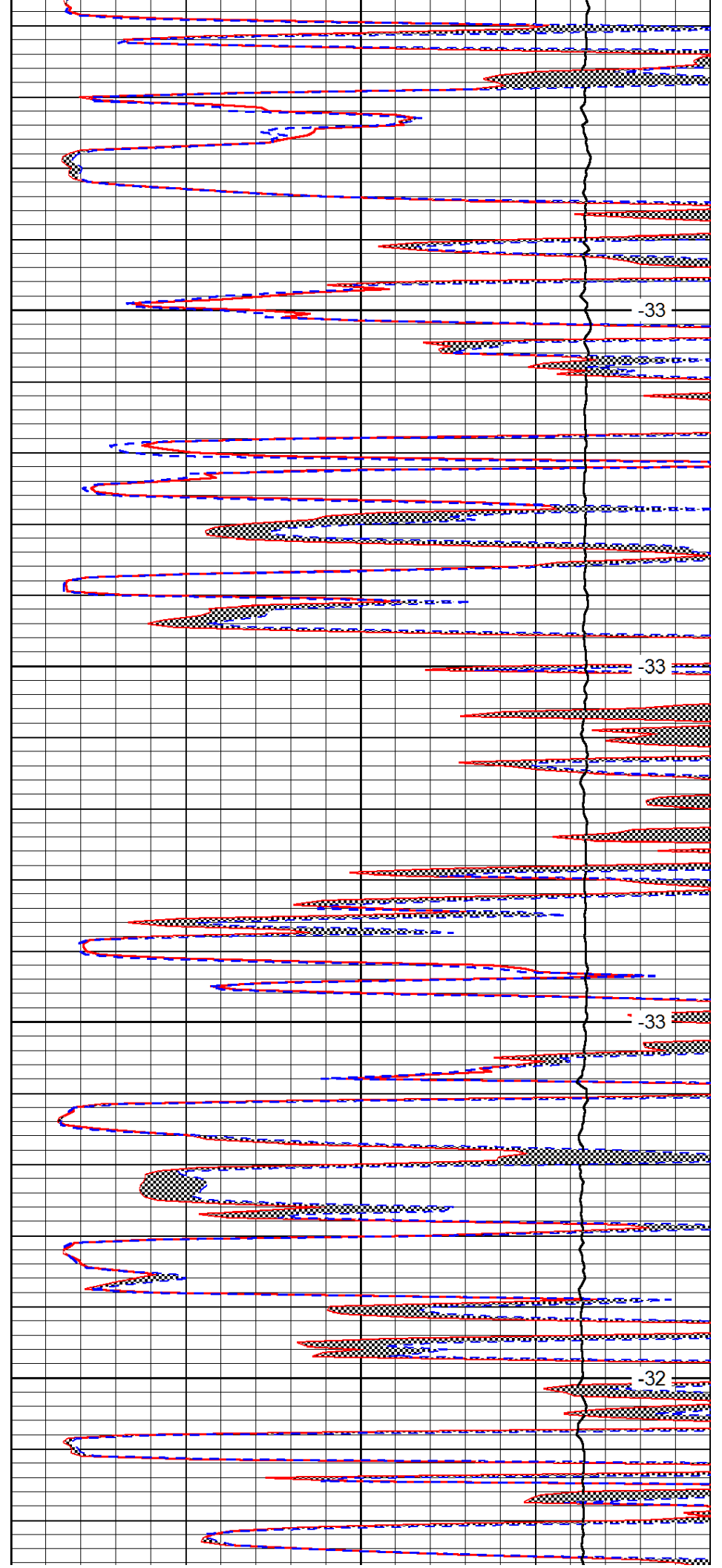


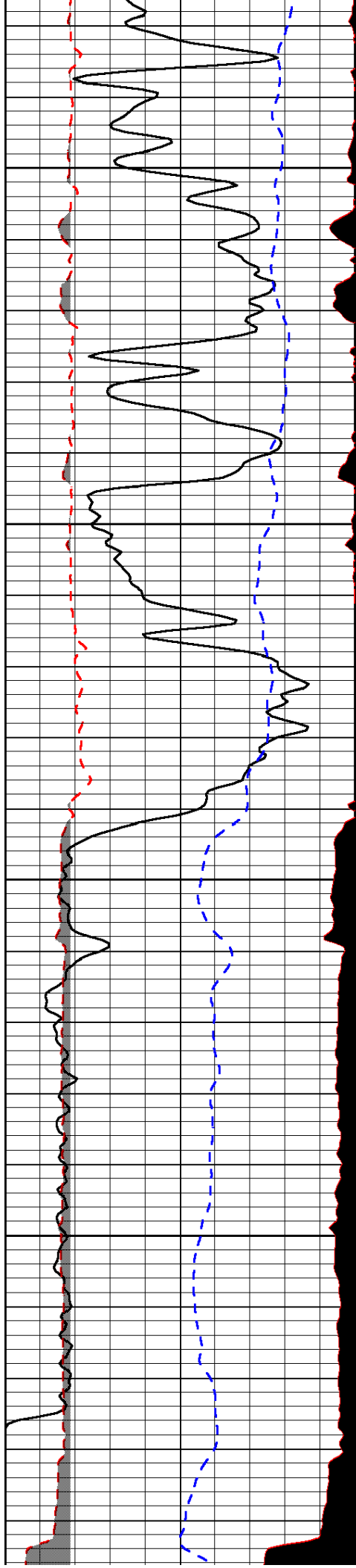
3350

3400

3450

3500



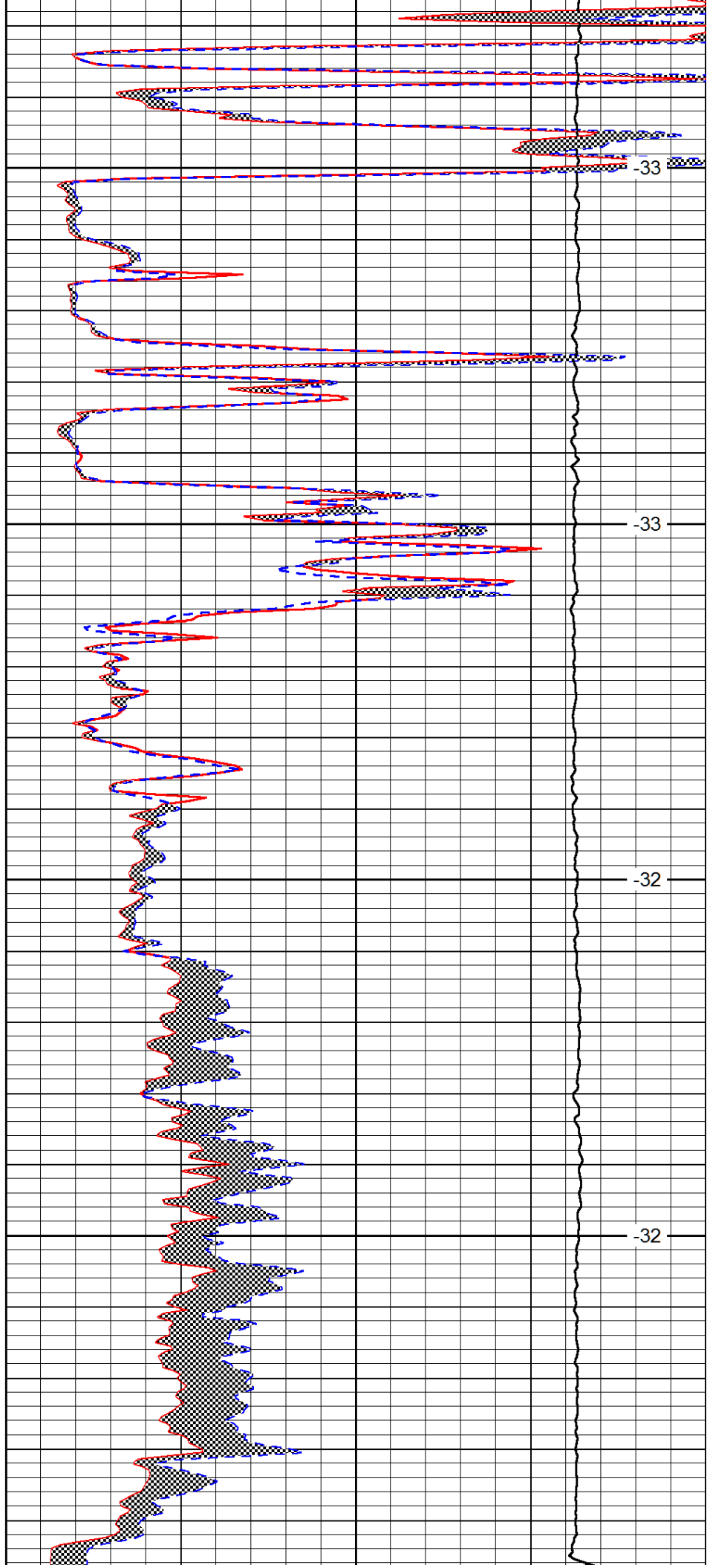


3550

3600

3650

3700



-33

-33

-32

-32

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

3750

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