



Pioneer Energy Services

# Microresistivity Log

API No. 15-159-25,789-00-00

Company **Bird Dog Oil, LLC**  
 Well **Lakin-Wendel #1-18**  
 Field **Chase-Silica**  
 County **Rice** State **Kansas**

Location **330' FNL & 2310' FWL**

Sec: **18** Twp: **19S** Rge: **10W**

Other Services  
 CNL/CDL  
 DIL/BHCS

Permanent Datum	Ground Level	Elevation 1772
Log Measured From	Kelly Bushing	8 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
Date		K.B. 1780 D.F. 1772 G.L. 1772
Run Number	Two	
Depth Driller	3430	
Depth Logger	3428	
Bottom Logged Interval	3427	
Top Log Interval	2600	
Casing Driller	8.625 @ 347	
Casing Logger	344	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	7800	
Density / Viscosity	9.25   58	
pH / Fluid Loss	11.0   9.2	
Source of Sample	Flowline	
Rm @ Meas. Temp	0.50 @ 80	
Rmf @ Meas. Temp	0.38 @ 80	
Rmc @ Meas. Temp	0.68 @ 80	
Source of Rmf / Rmc	Charts	
Rm @ BHT	0.36 @ 110	
Operating Rig Time	5 Hours	
Max Rec. Temp. F	110	
Equipment Number	10	
Location	Hays	
Recorded By	D.Kerr	
Witnessed By	Adam Nighswonger	

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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

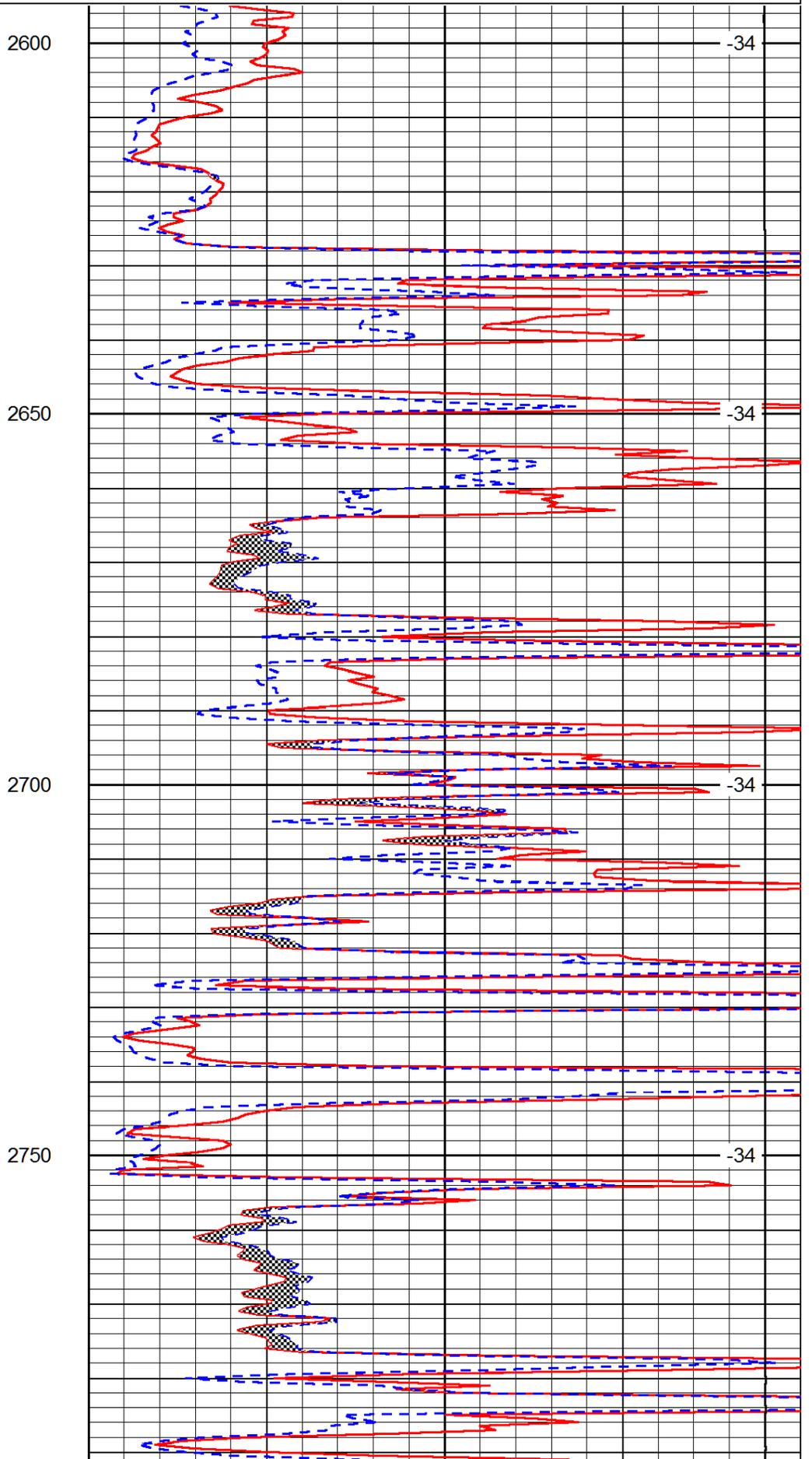
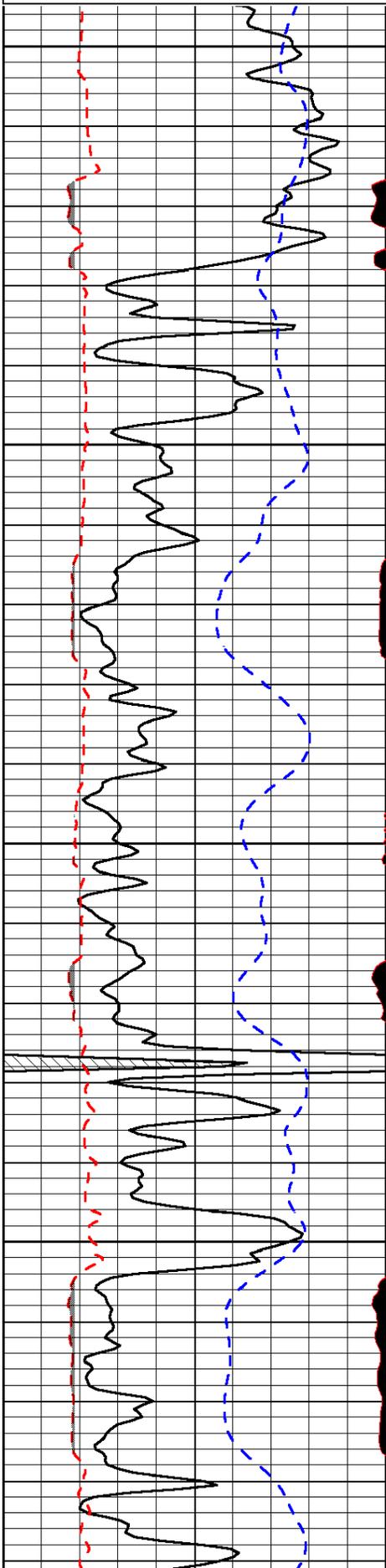
Ellinwood KS, East to County Line,  
 4 North to I RD, 1/2 East, South Into

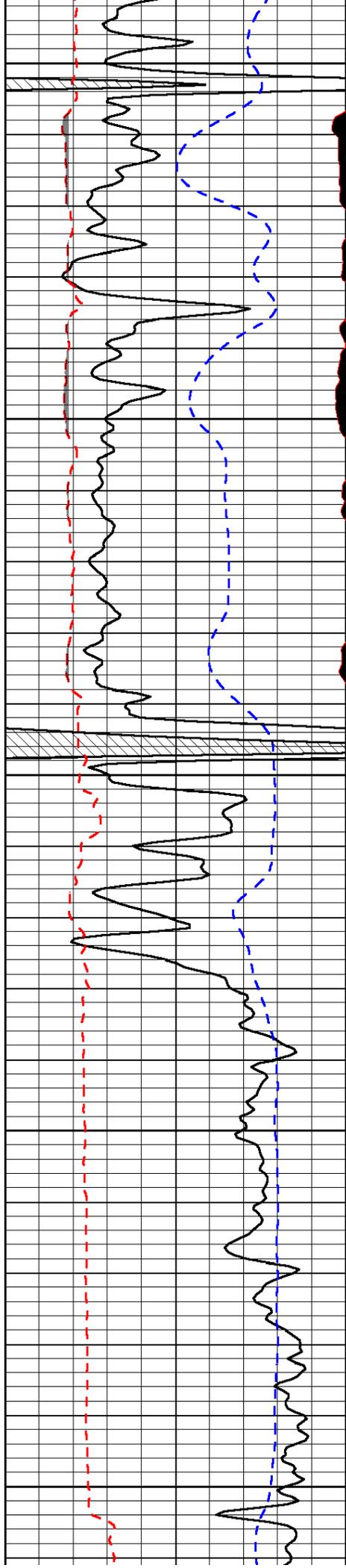
Database File: birddog\_lakinwendel\_1\_18hd.db  
 Dataset Pathname: DIL/bdstk  
 Presentation Format: micro  
 Dataset Creation: Thu Jul 31 12:39:38 2014  
 Charted by: Depth in Feet scaled 1:240

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

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
10000	Line Weight	0

LSPD





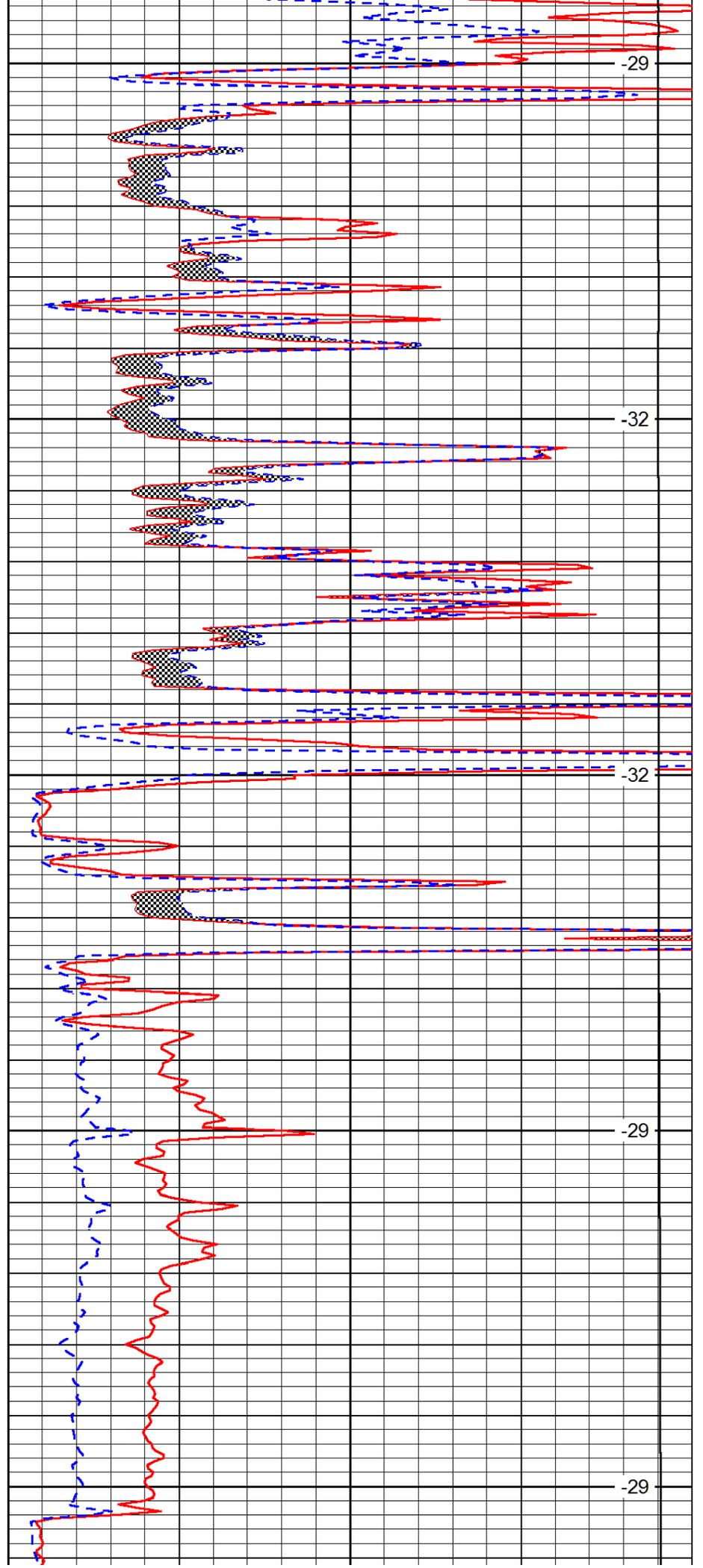
2800

2850

2900

2950

3000



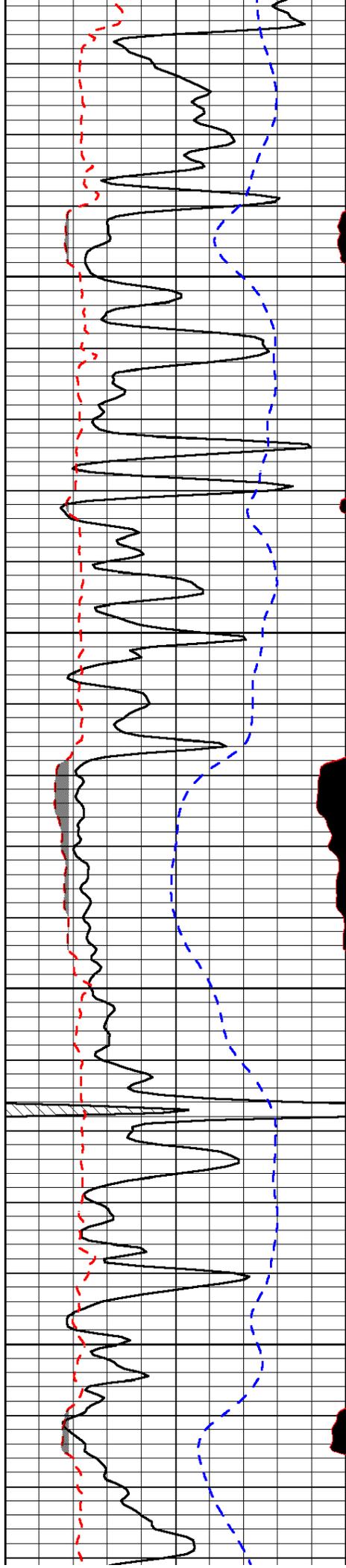
-29

-32

-32

-29

-29

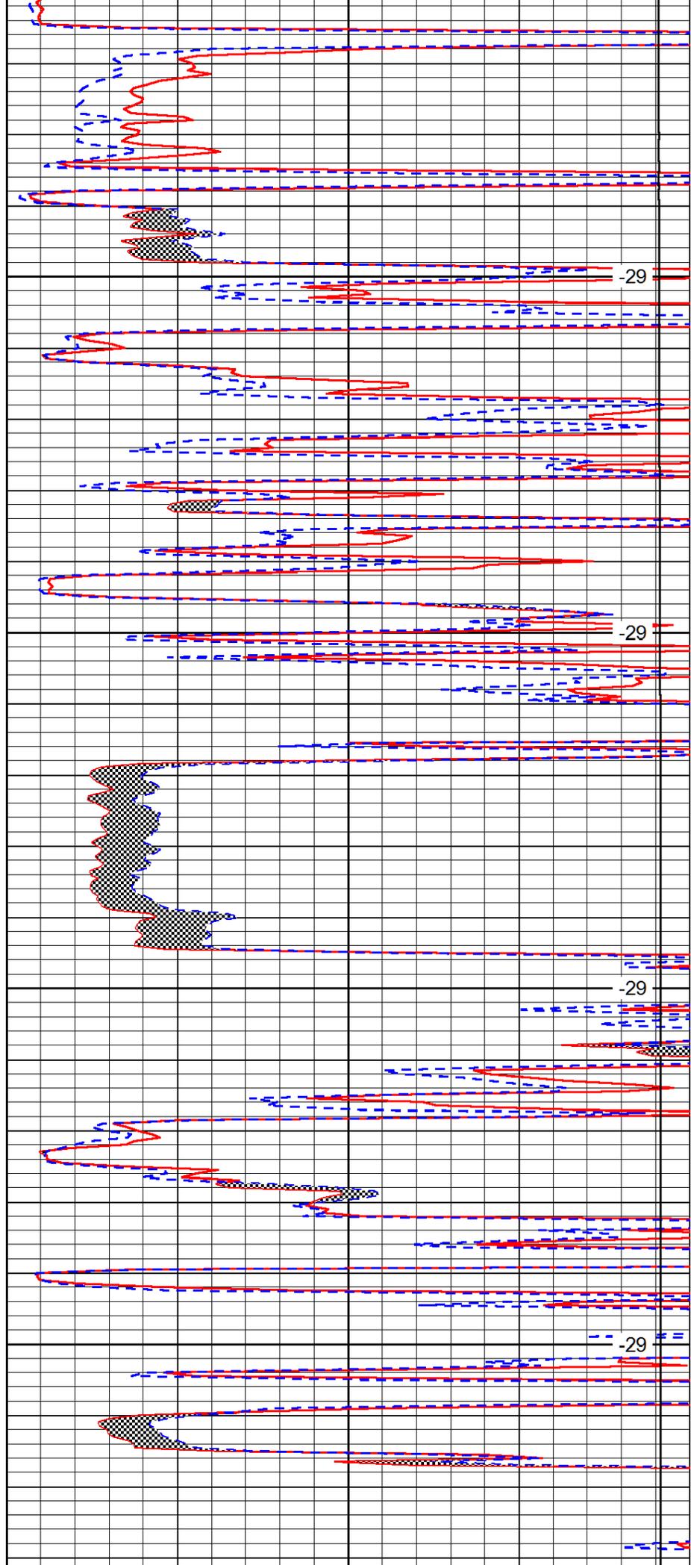


3050

3100

3150

3200

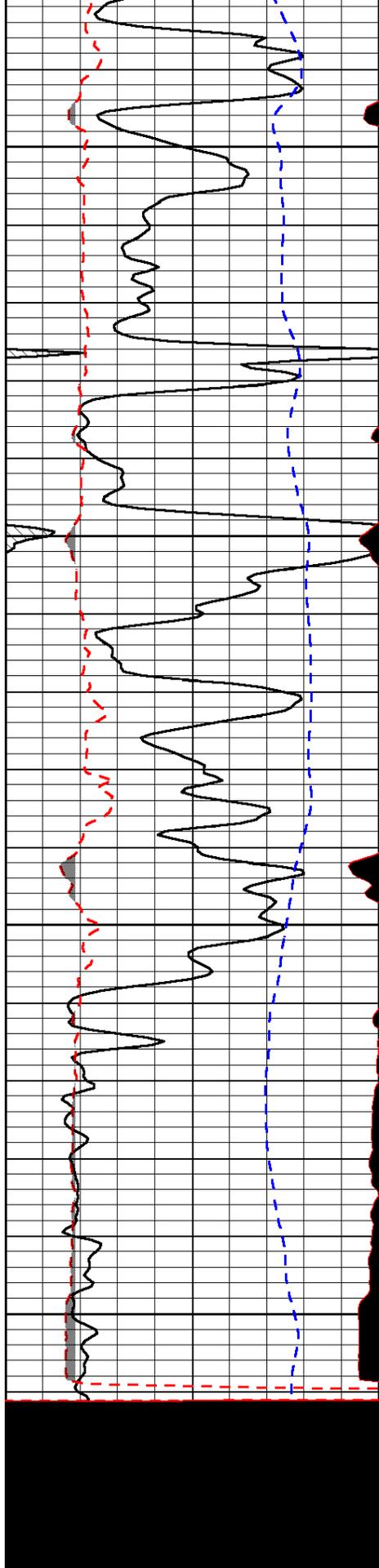


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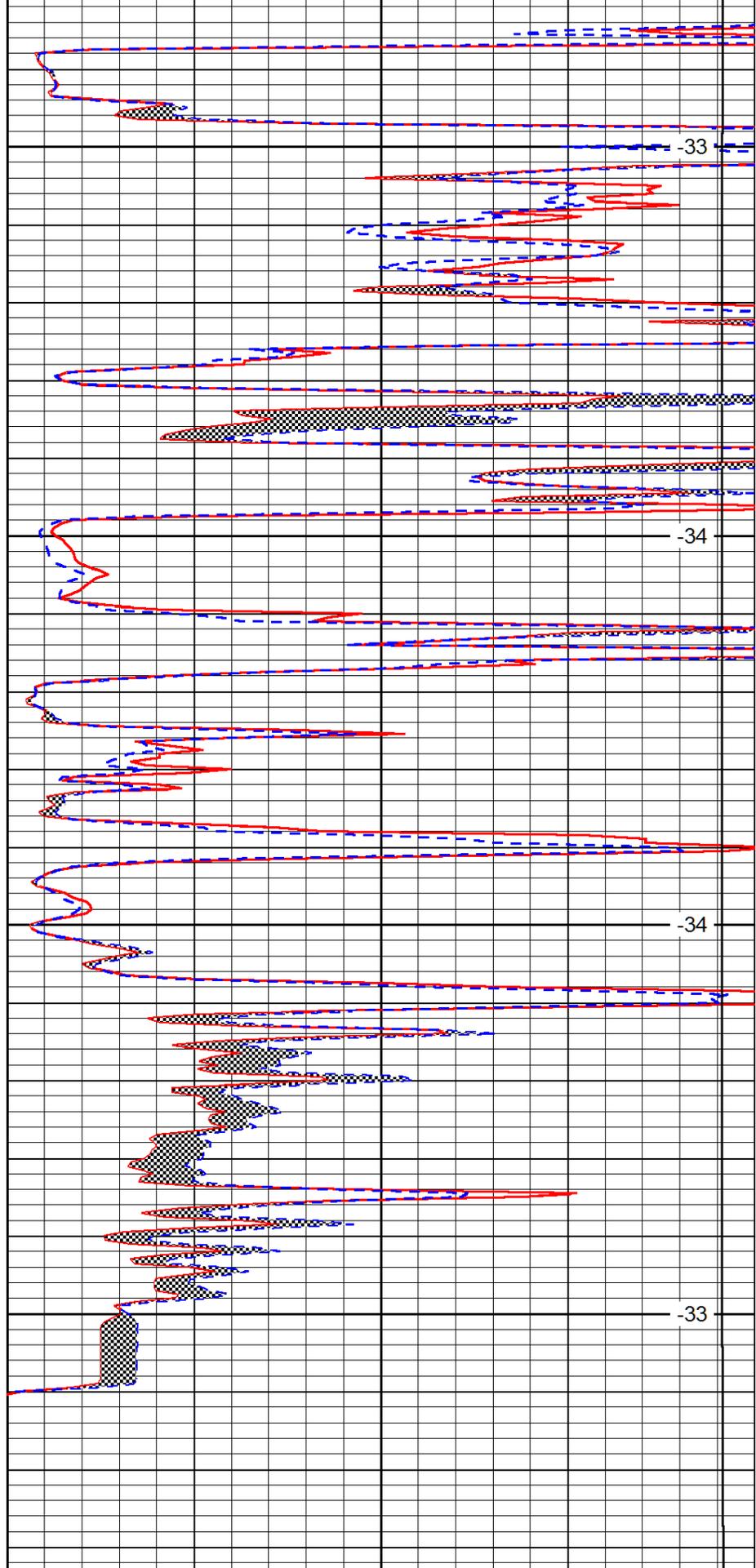
0	Gamma Ray	150
6	MCAL (GAPI)	16
2.875	Mud Cake (GAPI)	7.875
-200	SP (mV)	0

3250

3300

3350

3400



-33

-34

-34

-33

0	Micro Inverse 1 X 1	40
0	Micro Normal 2''	40
10000	Line Weight	0

LSPD

