

Company RANGE OIL COMPANY, INC.		Company RANGE OIL COMPANY, INC.	
Well JACOBSON NO. 2		Well JACOBSON NO. 2	
Field PANTHER RANCH SW		Field PANTHER RANCH SW	
County CHASE		County CHASE	
State KANSAS		State KANSAS	
Location: API #: 15-017-20,923-00-00		Other Services	
2,350' FNL & 2,195' FWL		CNL/CDL DIL	
SEC 31 TWP 19S RGE 6E			
Permanent Datum	GROUND LEVEL	Elevation	1462'
Log Measured From	KELLY BUSHING	K.B.	1468'
Drilling Measured From	KELLY BUSHING	D.F.	N/A
		G.L.	1462'

Date	8/21/2015		
Run Number	TWO		
Depth Driller	2326'		
Depth Logger	2322'		
Bottom Logged Interval	2321'		
Top Log Interval	1300'		
Casing Driller	8.625" @ 210'		
Casing Logger	208'		
Bit Size	7.875"		
Type Fluid in Hole	CHEMICAL		
Salinity,ppm CL	1300		
Density / Viscosity	9.3	49	
pH / Fluid Loss	9.0	9.5	
Source of Sample	Flowline		
Rm @ Meas. Temp	.98 @ 78		
Rmt @ Meas. Temp	.74 @ 78		
Rmc @ Meas. Temp	1.32 @ 78		
Source of Rmt/ Rmc	Charts		
Rm @ BHT	.77 @ 99		
Operating Rig Time	3 1/2 HOURS		
Max Rec. Temp. F	99		
Equipment Number	108		
Location	Hays		
Recorded By	J. LONG		
Witnessed By	KEN WALLACE		

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

MARION, EAST TO HIGHWAY 56/77 AND HIGHWAY 150 INTERSECTION, 8 1/4 EAST, SOUTH INTO

Log Measured From: KELLY BUSHING

6 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES

www.pioneerres.com

785-625-3858

Your Pioneer Energy Services Crew

Engineer: J. LONG

Operator:

Operator:

Operator:

This Log Record Was Witnessed By

Primary Witness: KEN WALLACE

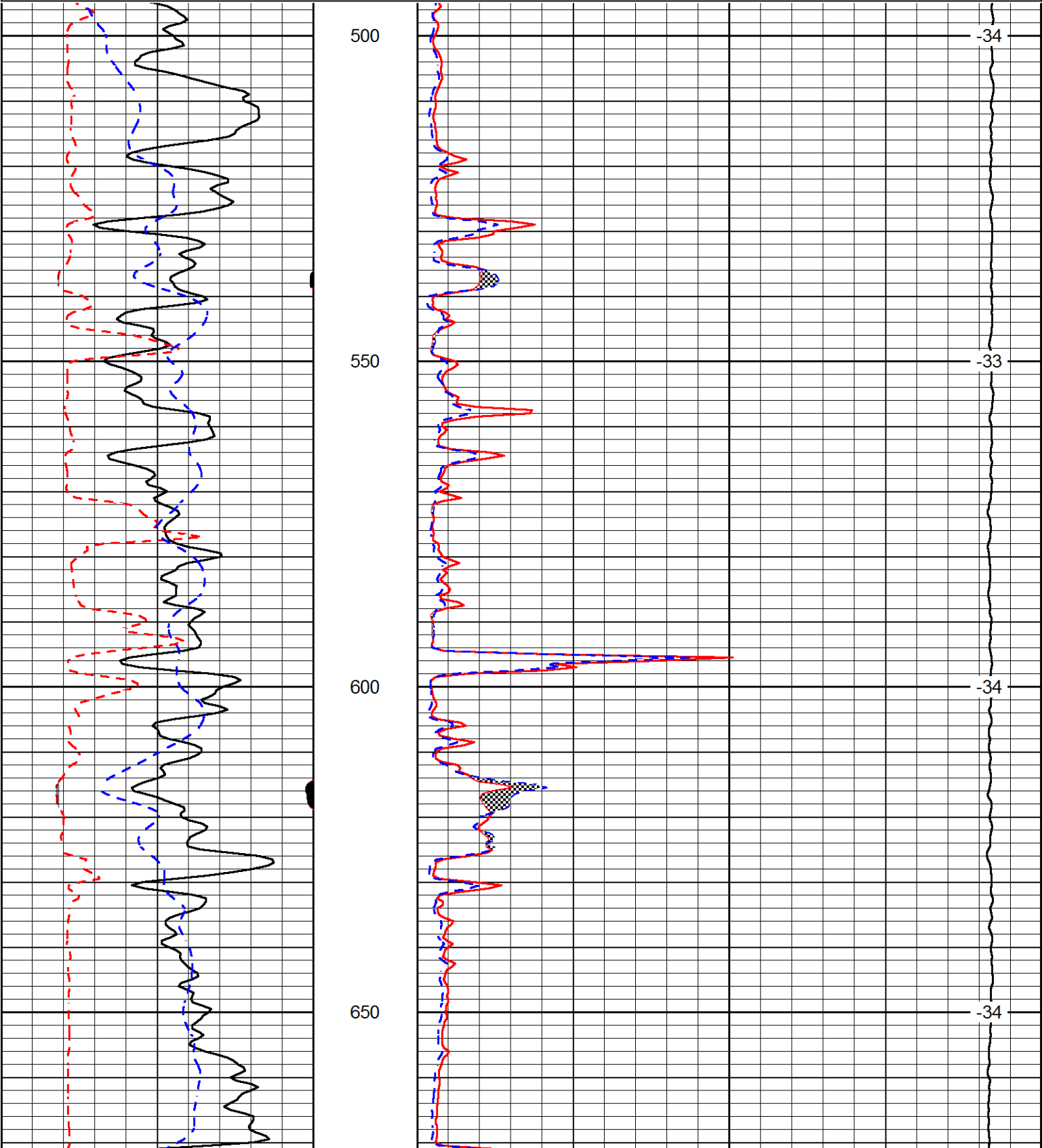
Secondary Witness:

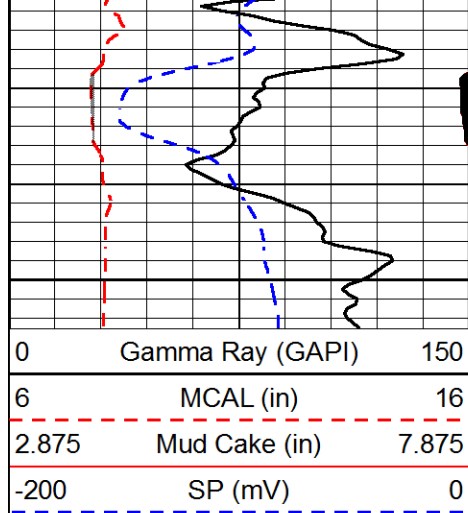
Secondary Witness:

Secondary Witness:

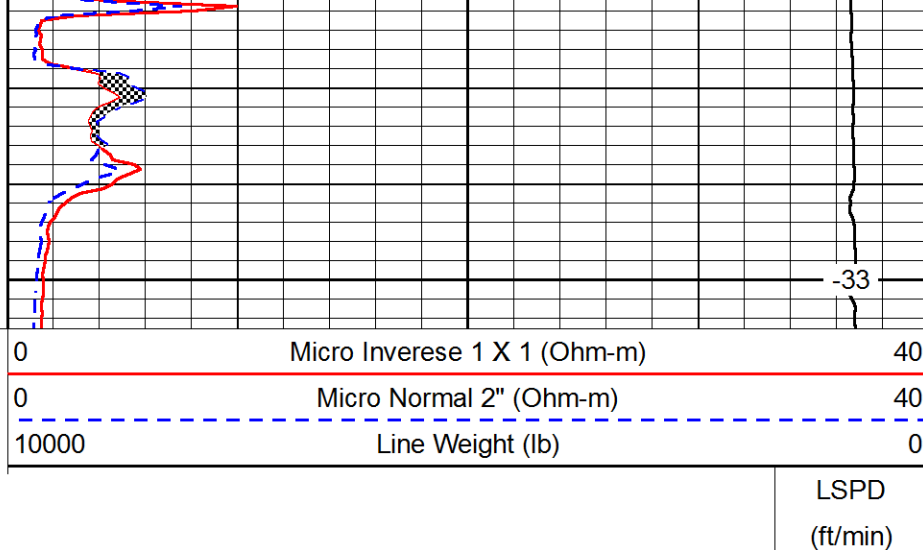
Database File	rangeoil_jacobson_2hd.db
Dataset Pathname	DIL/rangstck
Presentation Format	micro
Dataset Creation	Fri Aug 21 12:47:31 2015
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	0	Micro Inverese 1 X 1 (Ohm-m)	40
6	MCAL (in)	16	0	Micro Normal 2" (Ohm-m)	40
2.875	Mud Cake (in)	7.875	10000	Line Weight (lb)	0
-200	SP (mV)	0	LSPD (ft/min)		

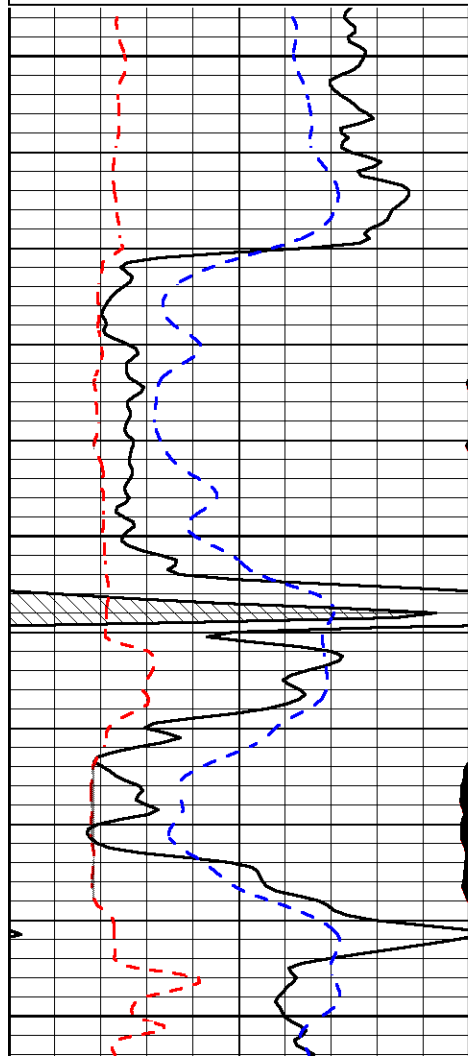
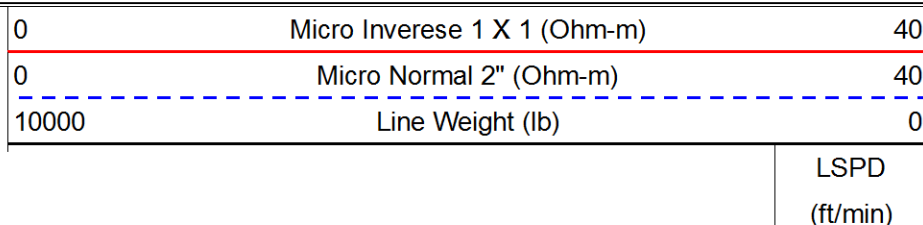
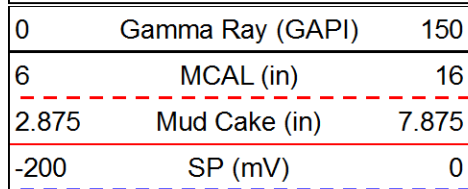




700



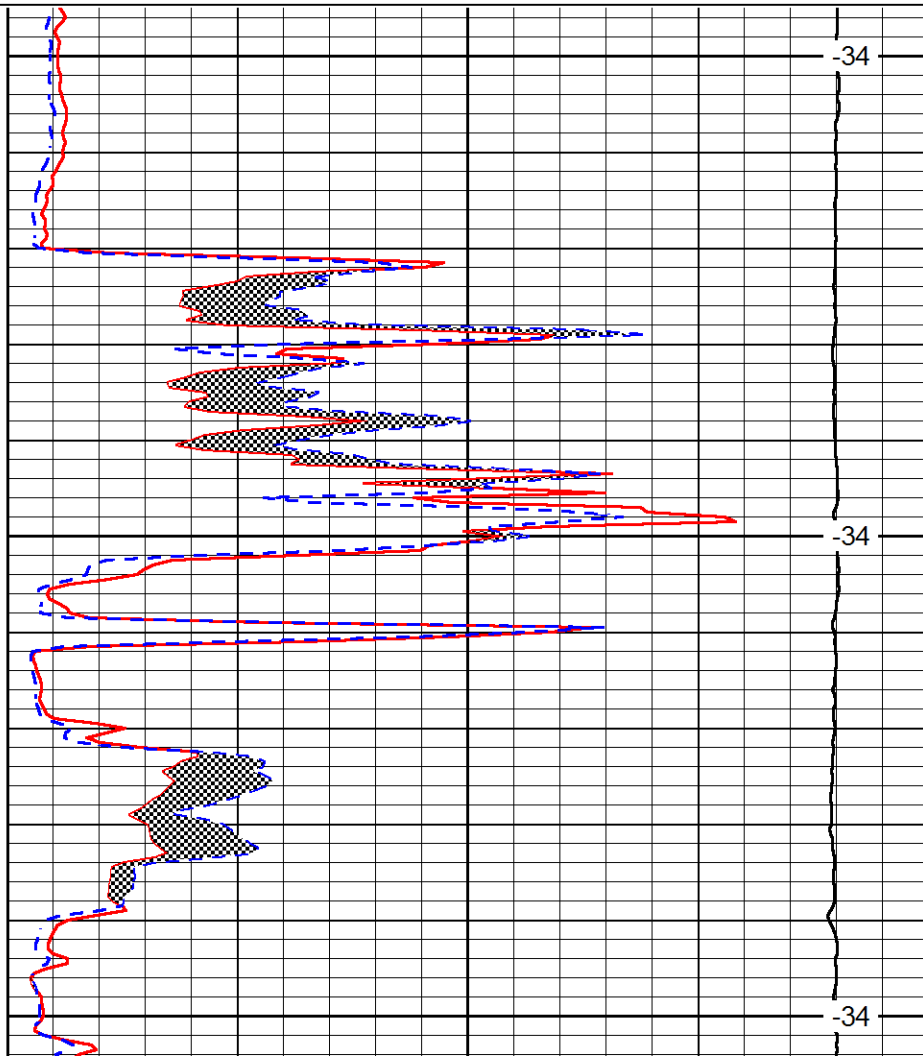
Database File rangeoil_jacobson_2hd.db
 Dataset Pathname DIL/rangstck
 Presentation Format micro
 Dataset Creation Fri Aug 21 12:47:31 2015
 Charted by Depth in Feet scaled 1:240

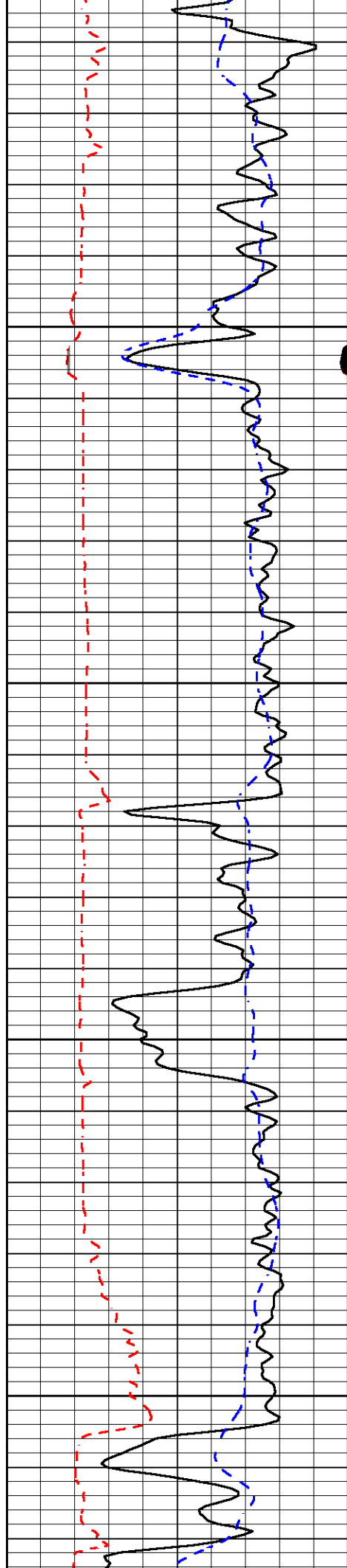


1300

1350

1400



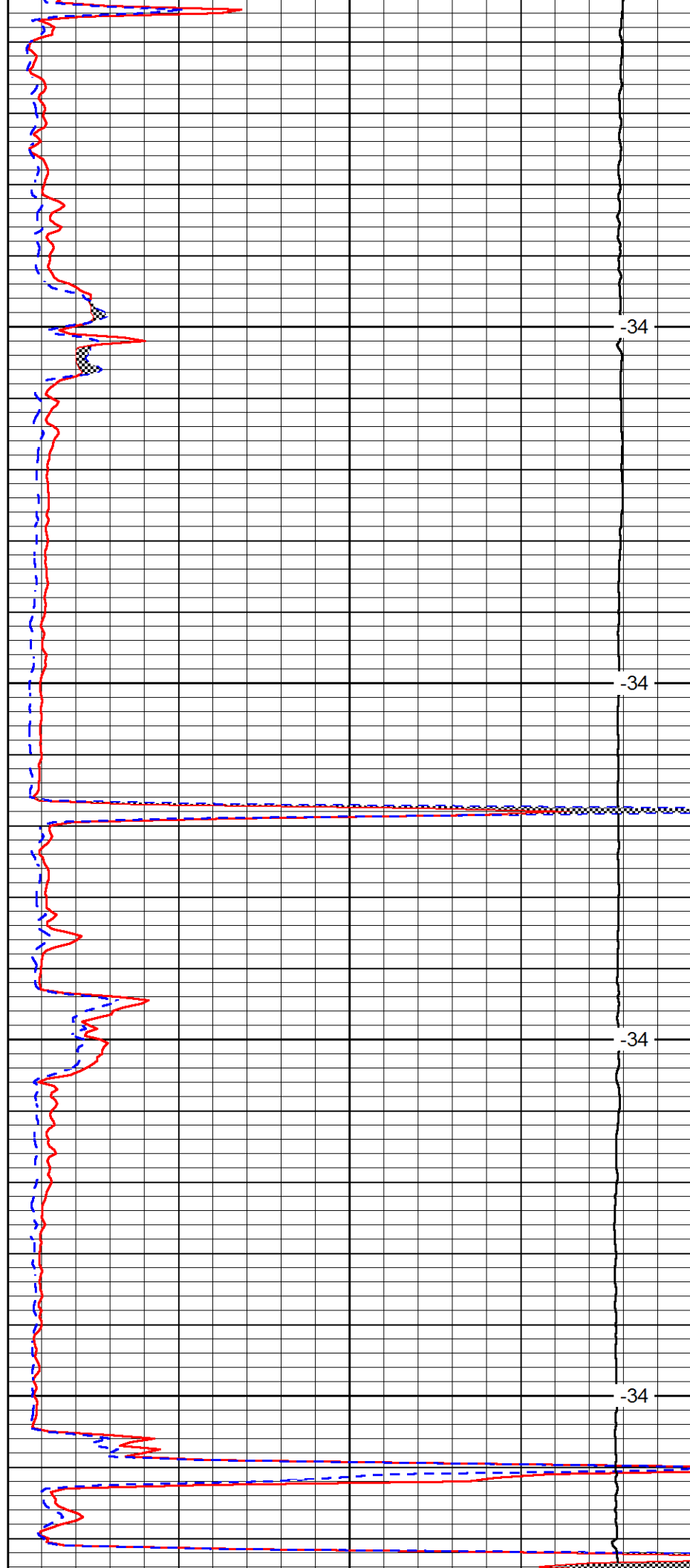


1450

1500

1550

1600

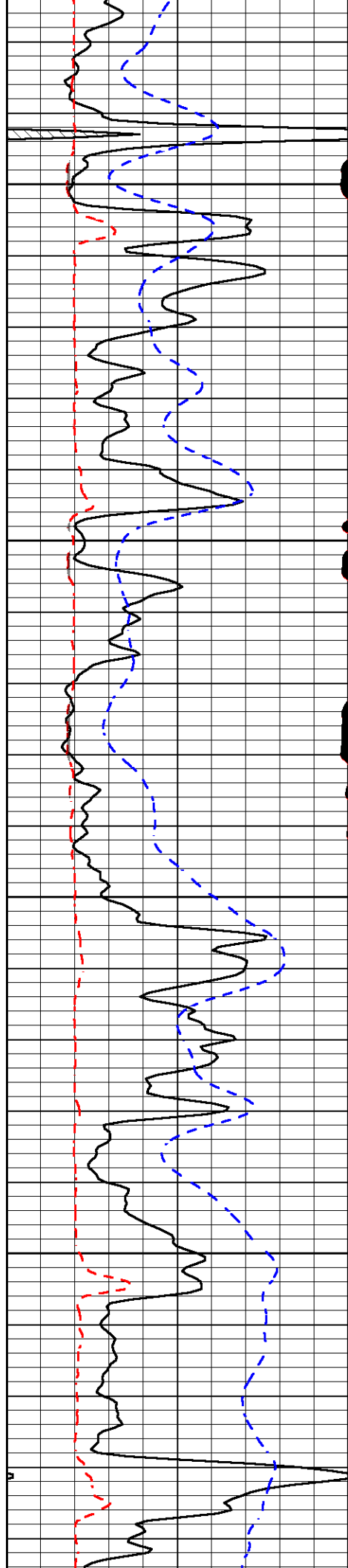


34

34

34

34

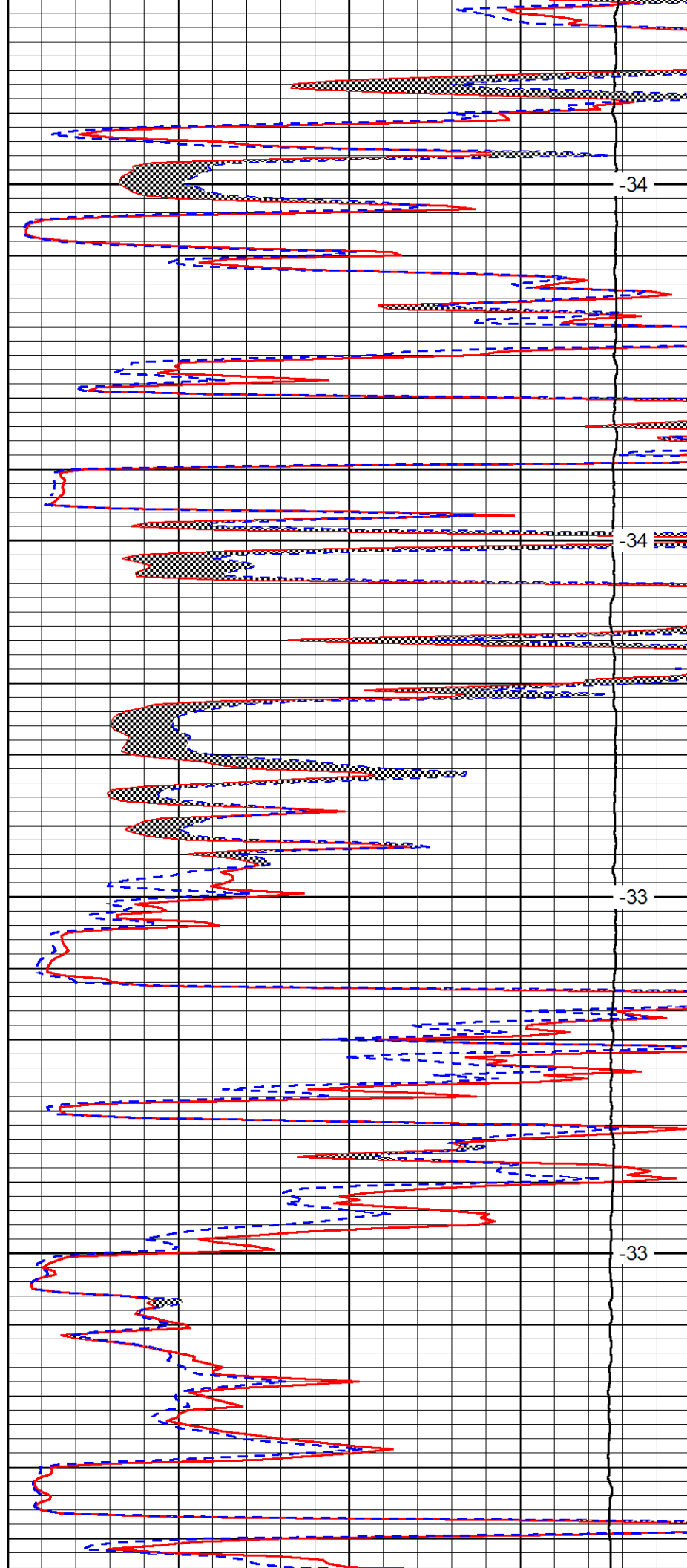


1650

1700

1750

1800

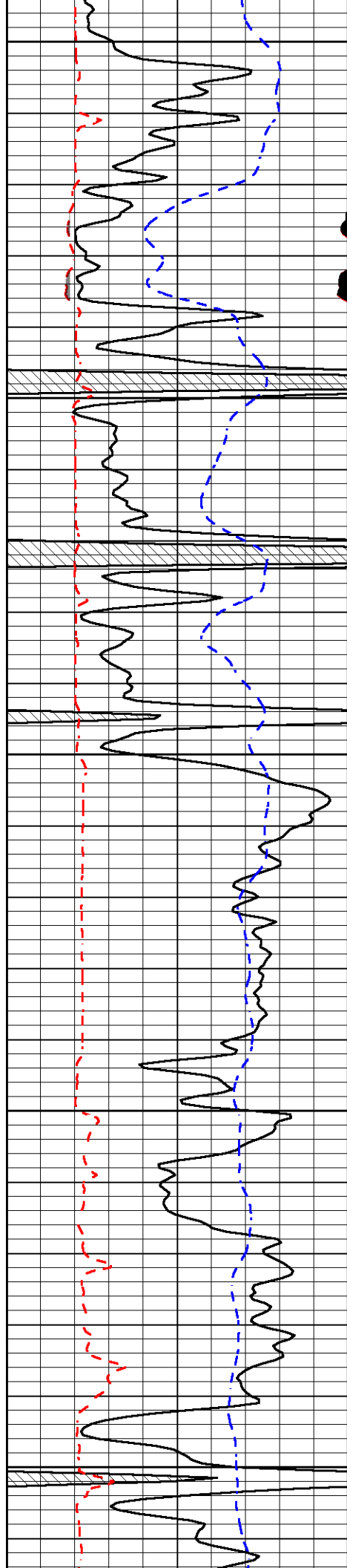


-34

-34

-33

-33



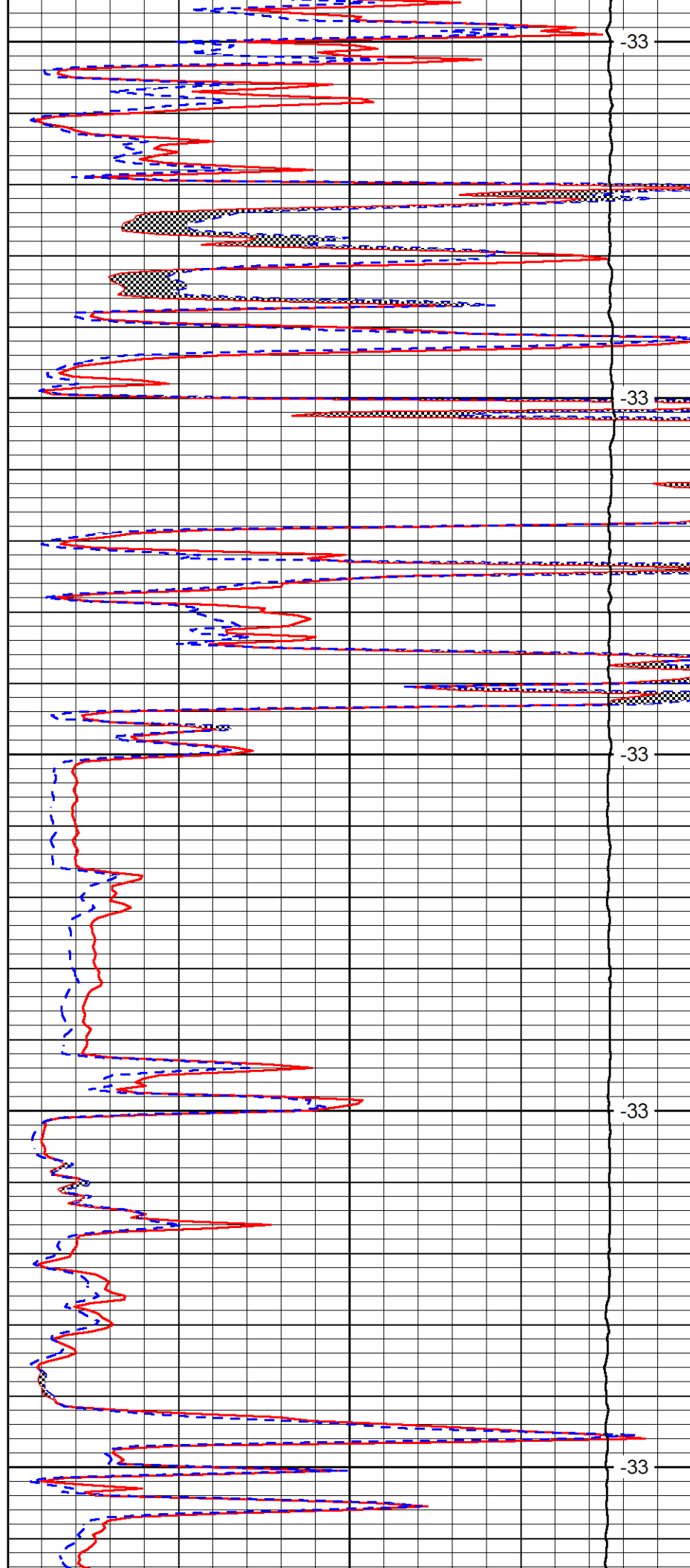
1850

1900

1950

2000

2050



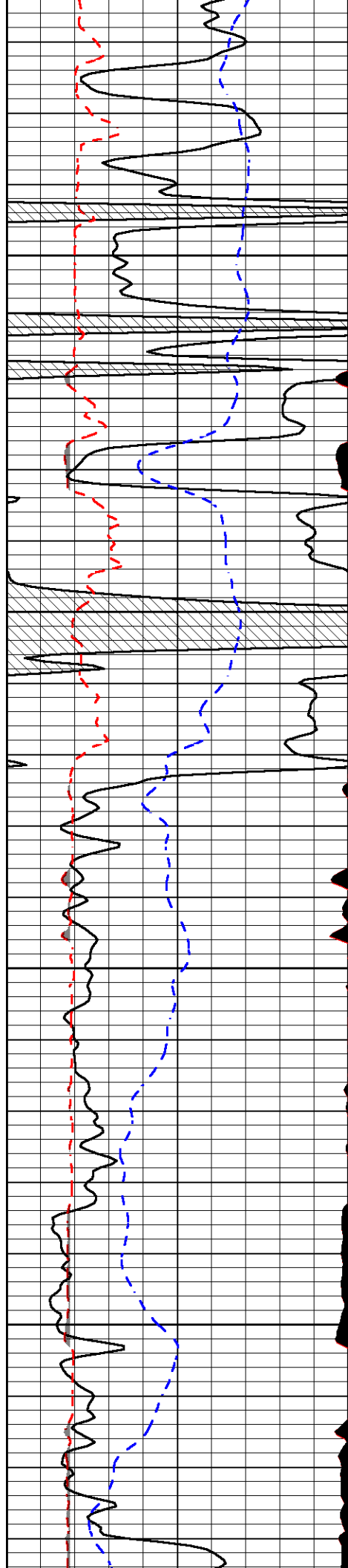
-33

-33

-33

-33

-33

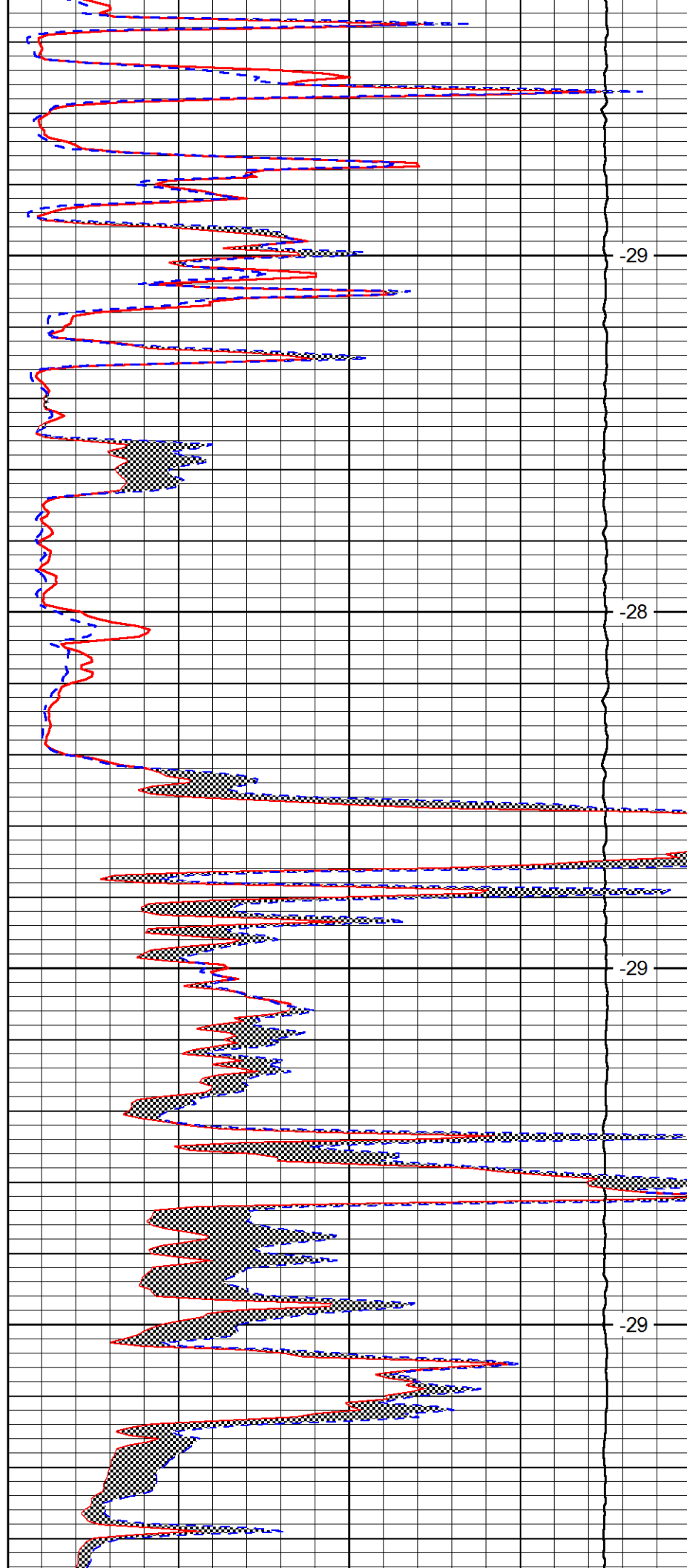


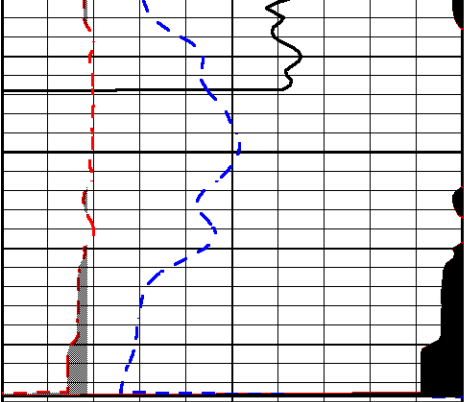
2100

2150

2200

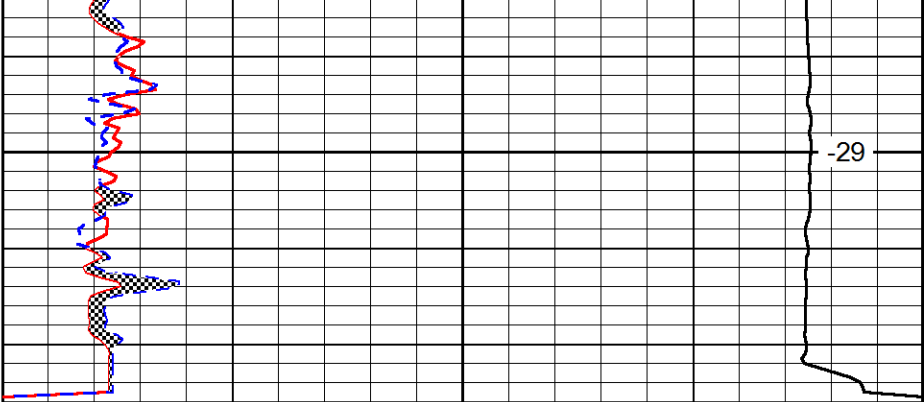
2250





2300

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



-29

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

LSPD
(ft/min)