



Pioneer Energy Services

Dual Induction Log

API No.

15-185-23887-00-00

Company **Murfin Drilling Company, Inc.**

Well **JTT #1-24**

Field **Wildcat**

County **Stafford**

State

Kansas

Location

**W2 NE NW NE
330' FNL / 1700' FEL**

Sec: **24**

Twp: **23S**

Rge: **12W**

Elevation

Other Services
CNL/CDL
DIL/BHCS

Permanent Datum Ground Level Elevation 1848

Log Measured From Kelly Bushing 9 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Date 7/3/2014

Run Number Two

Depth Driller 3900

Depth Logger 3900

Bottom Logged Interval 3899

Top Log Interval 2700

Casing Driller 8.625 @ 654

Casing Logger 648

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 7300

Density / Viscosity 9.5 72

pH / Fluid Loss 11.0 8.4

Source of Sample Flowline

Rm @ Meas. Temp 0.20 @ 72

Rmf @ Meas. Temp 0.15 @ 72

Rmc @ Meas. Temp 0.27 @ 72

Source of Rmf / Rmc Charts

Rm @ BHT 0.14 @ 115

Operating Rig Time 4 Hours

Max Rec. Temp. F 115

Equipment Number 17

Location Hays

Recorded By R. Barnhart

Witnessed By Chuck Schmalz

<<< 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

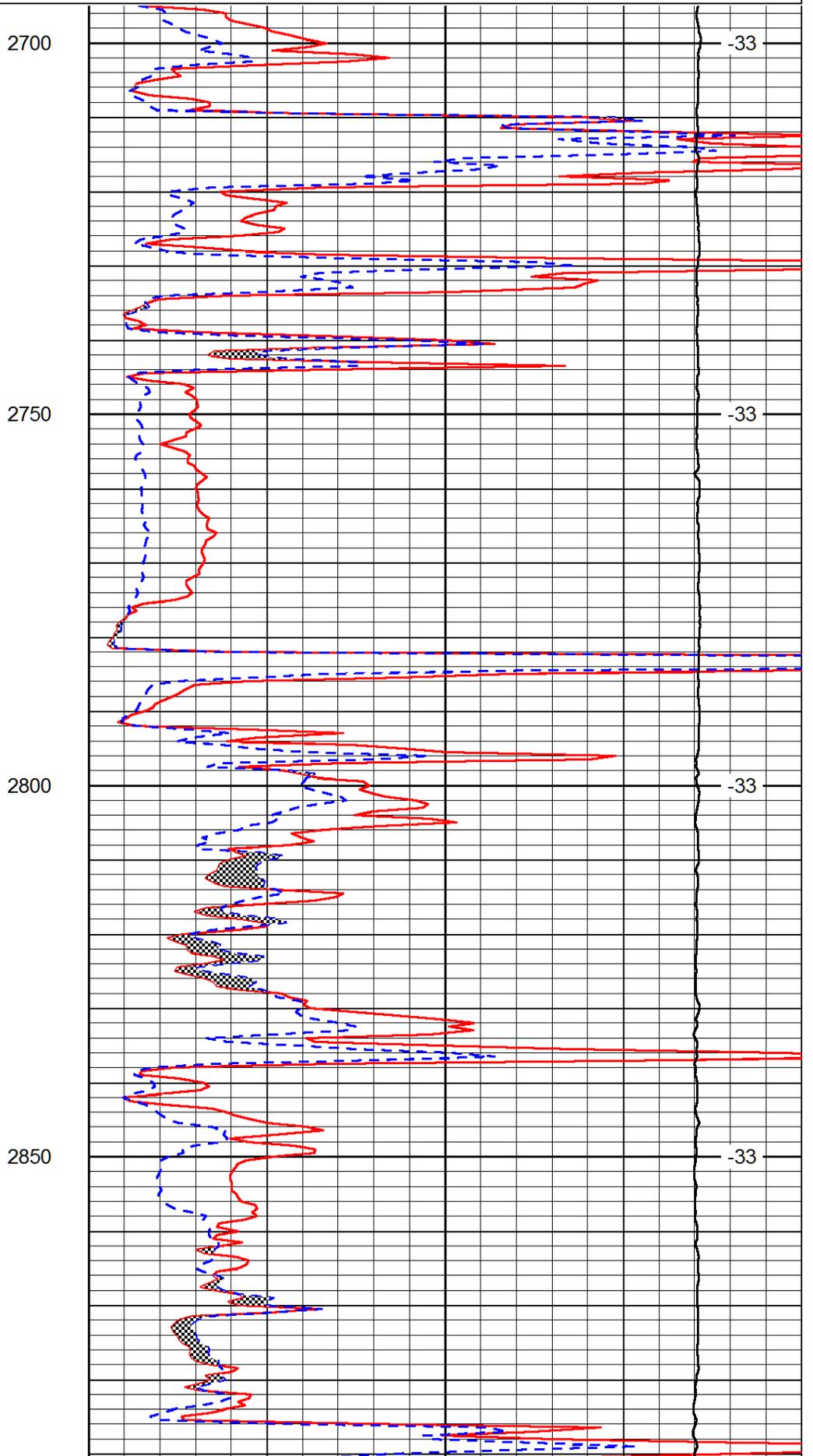
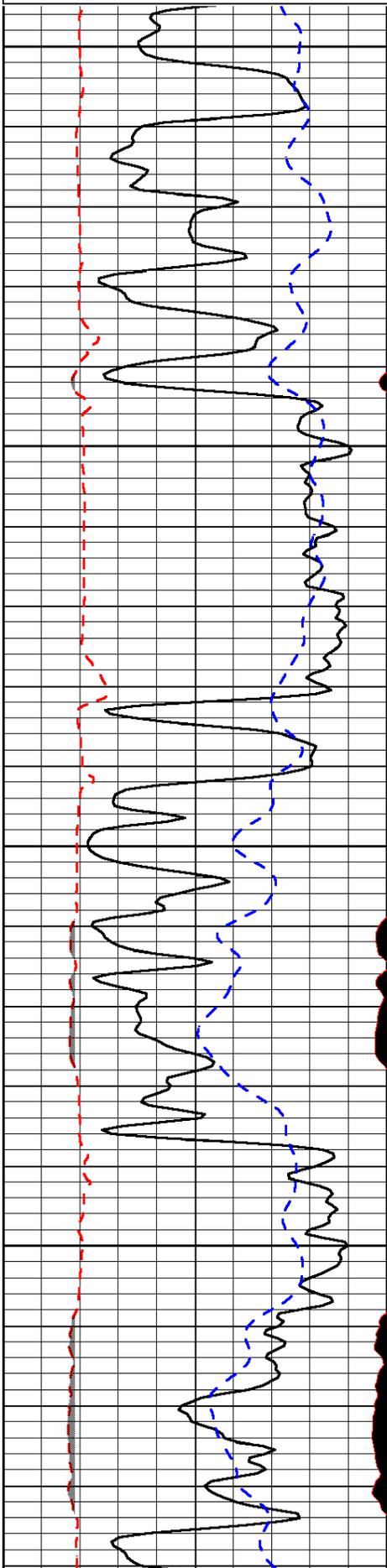
St. John, KS:
N to NE 70, E to Stafford Blktop, 1S, 1/2E, S into

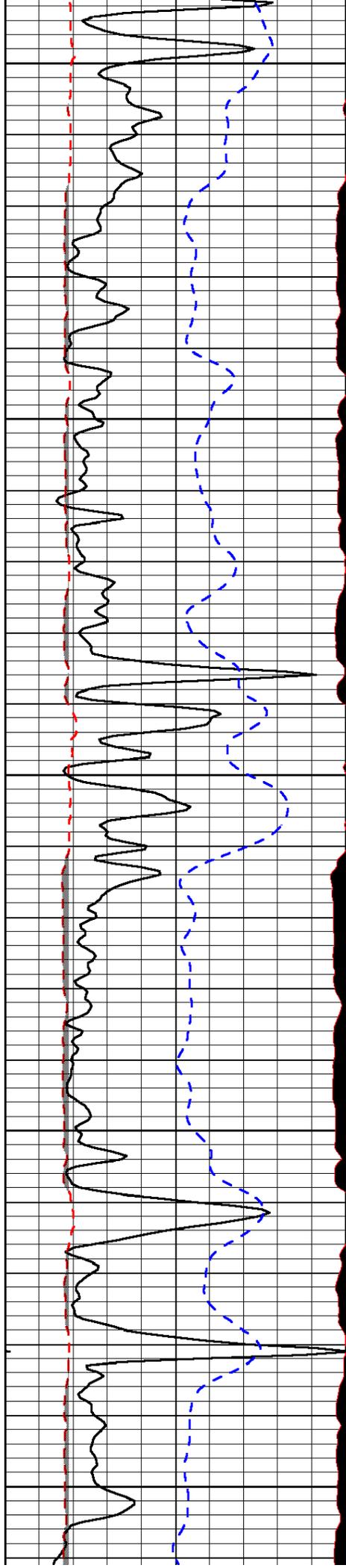
Database File: murfinhd.db
Dataset Pathname: dil/mrnmain
Presentation Format: micro
Dataset Creation: Thu Jul 03 20:28:20 2014
Charted by: Depth in Feet scaled 1:240

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





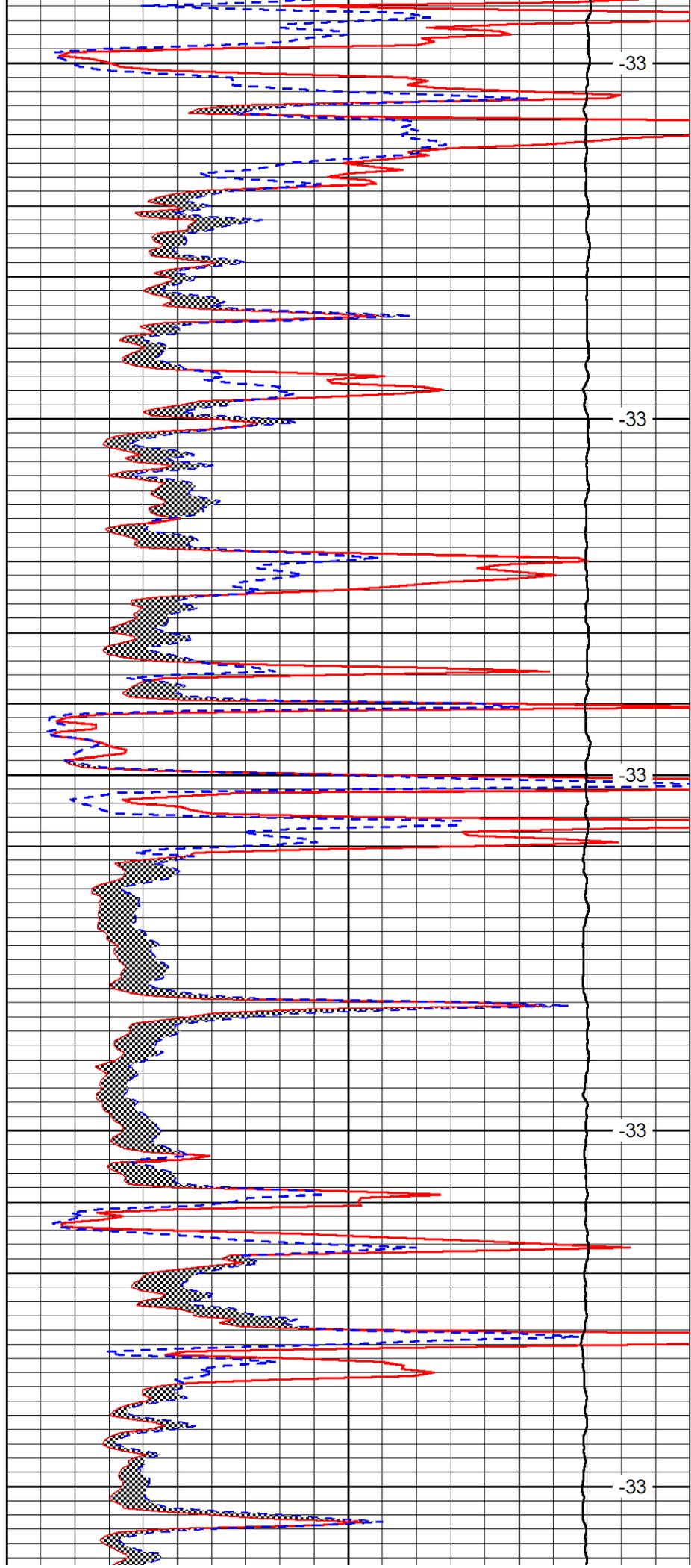
2900

2950

3000

3050

3100



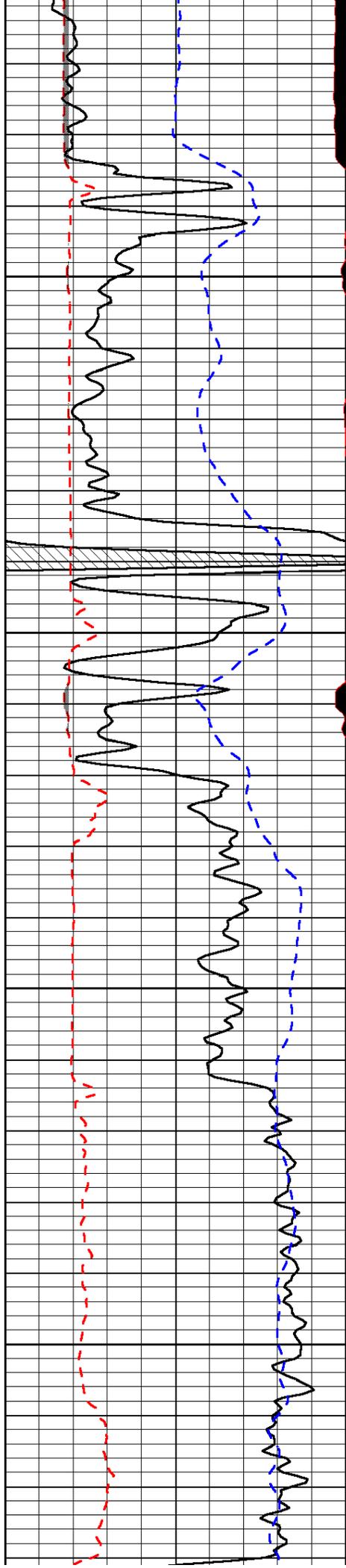
-33

-33

-33

-33

-33

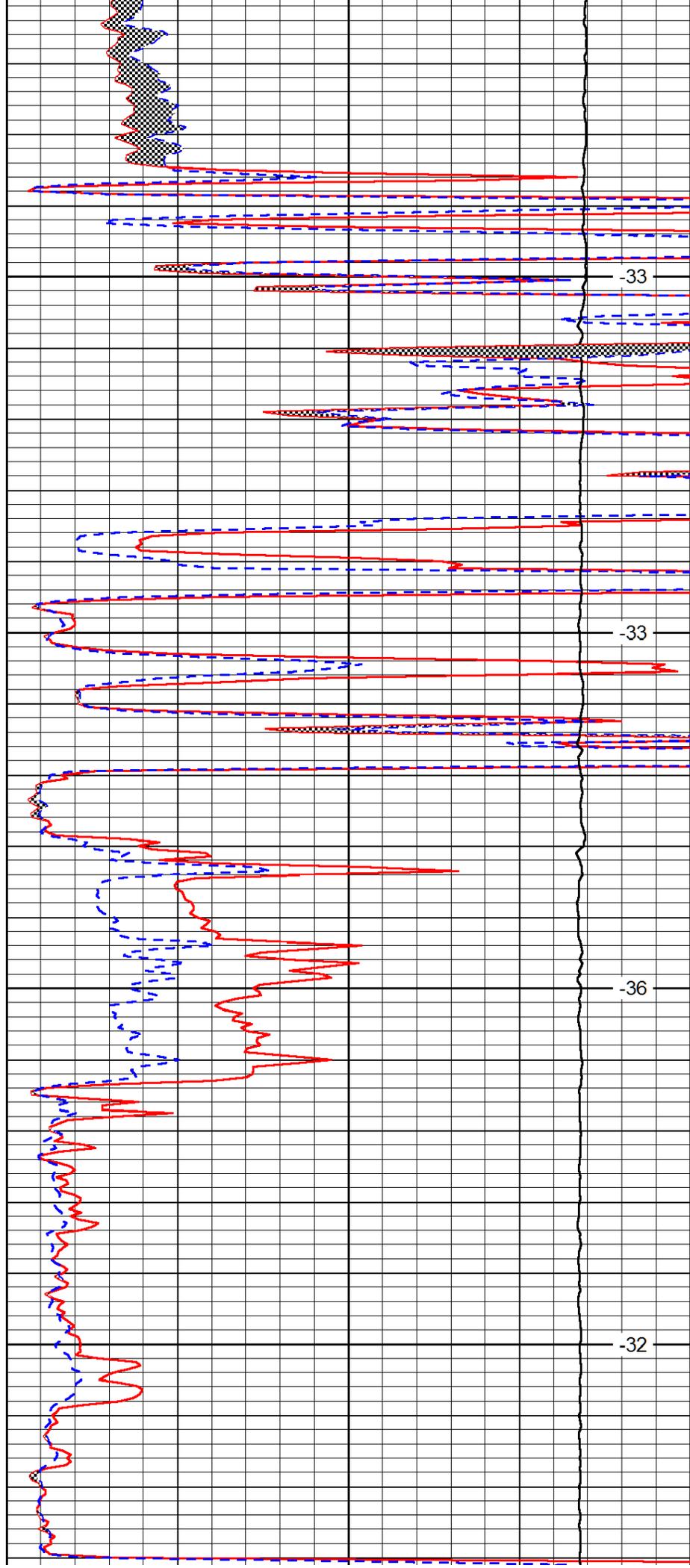


3150

3200

3250

3300

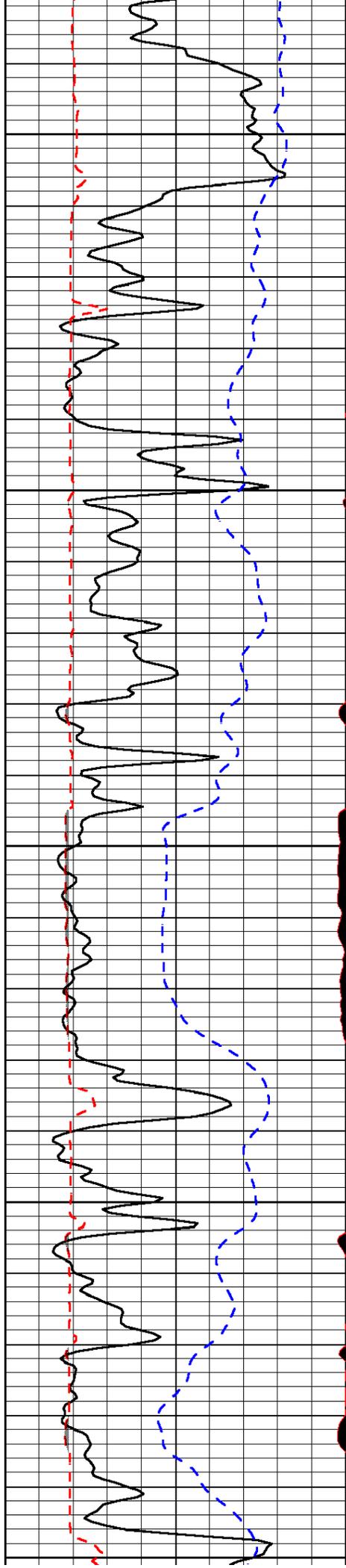


-33

-33

-36

-32



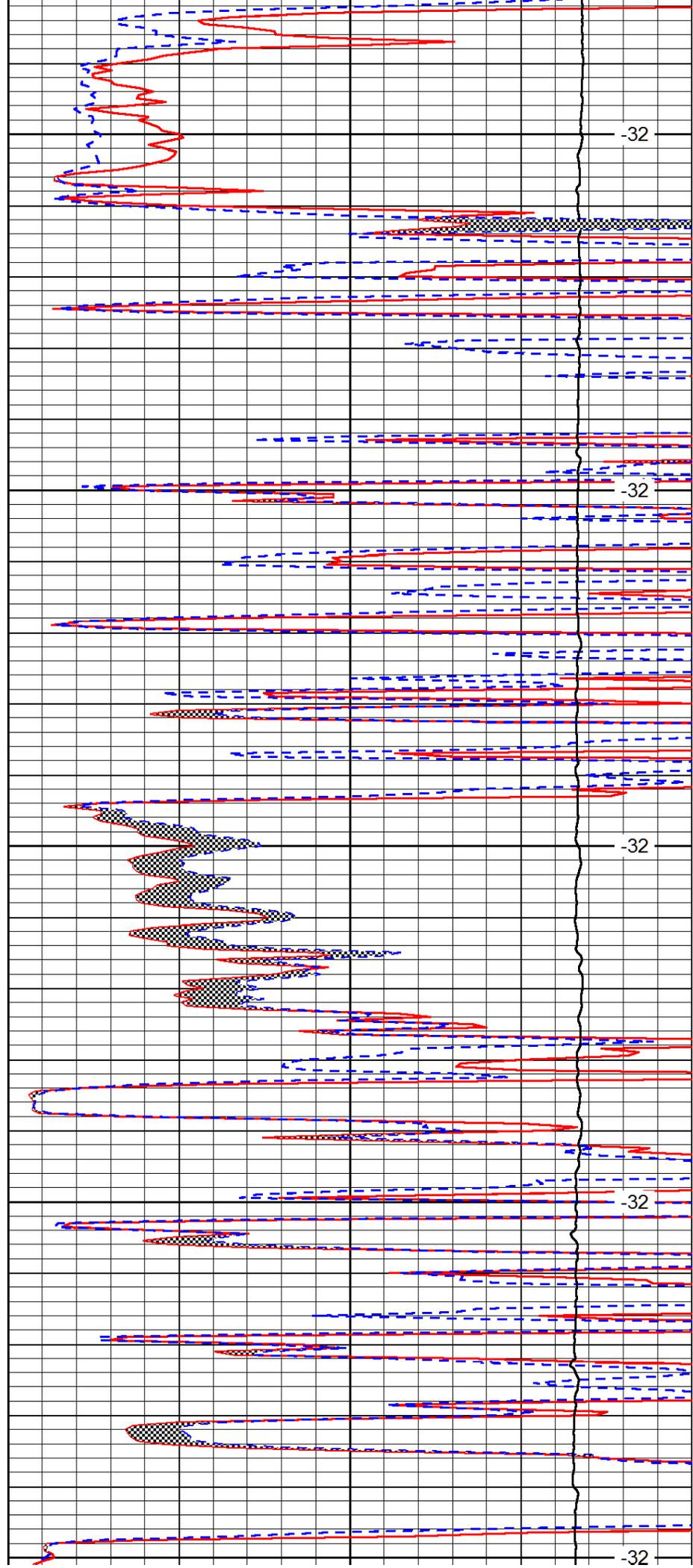
3350

3400

3450

3500

3550



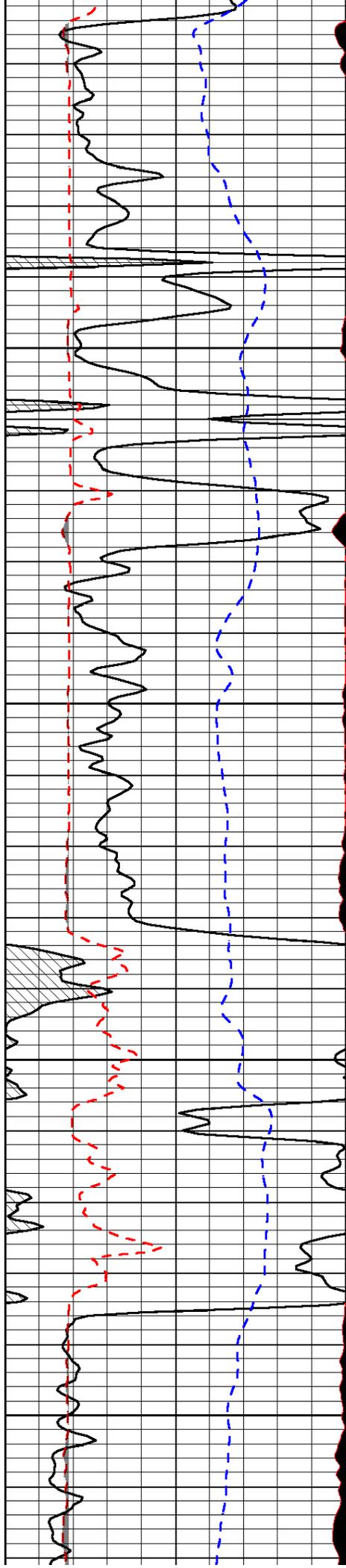
-32

-32

-32

-32

-32

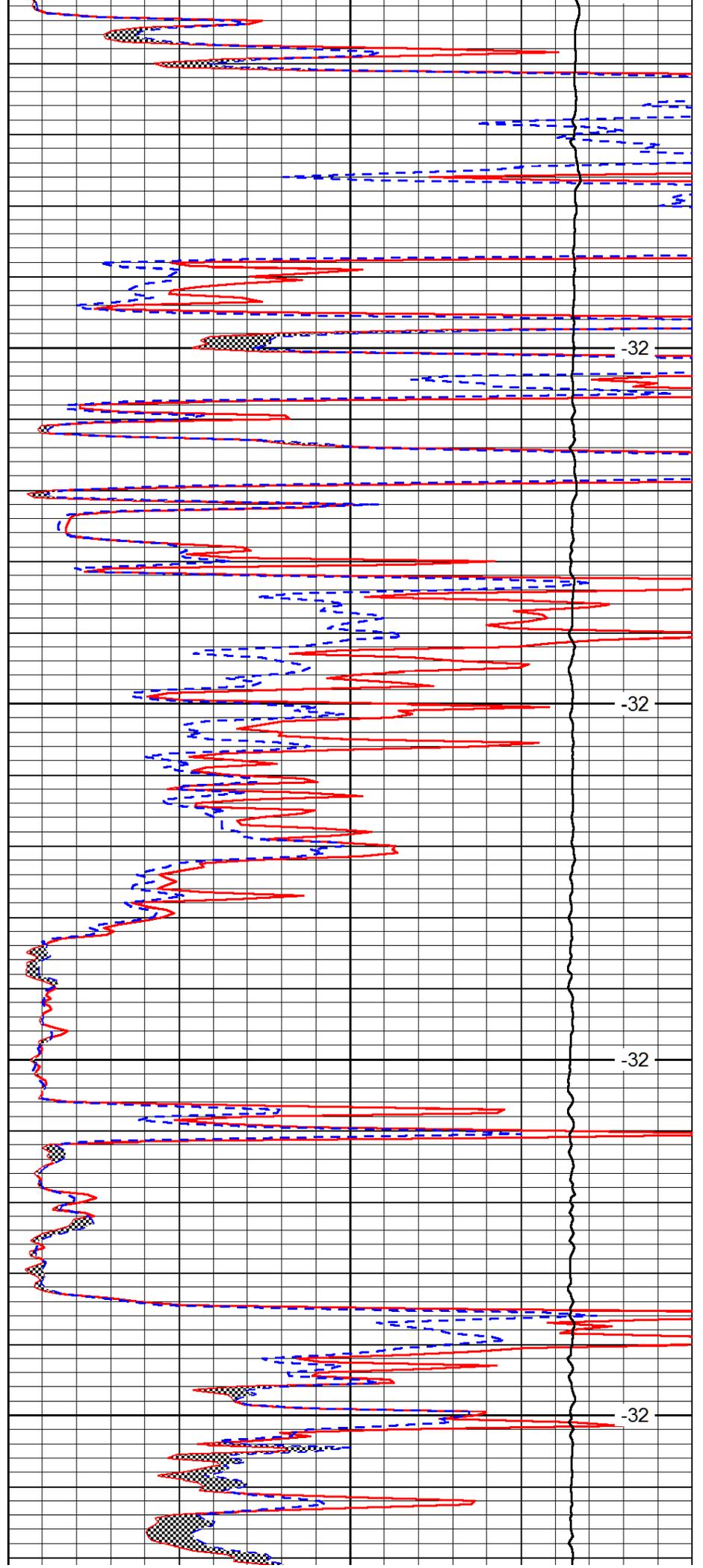


3600

3650

3700

3750

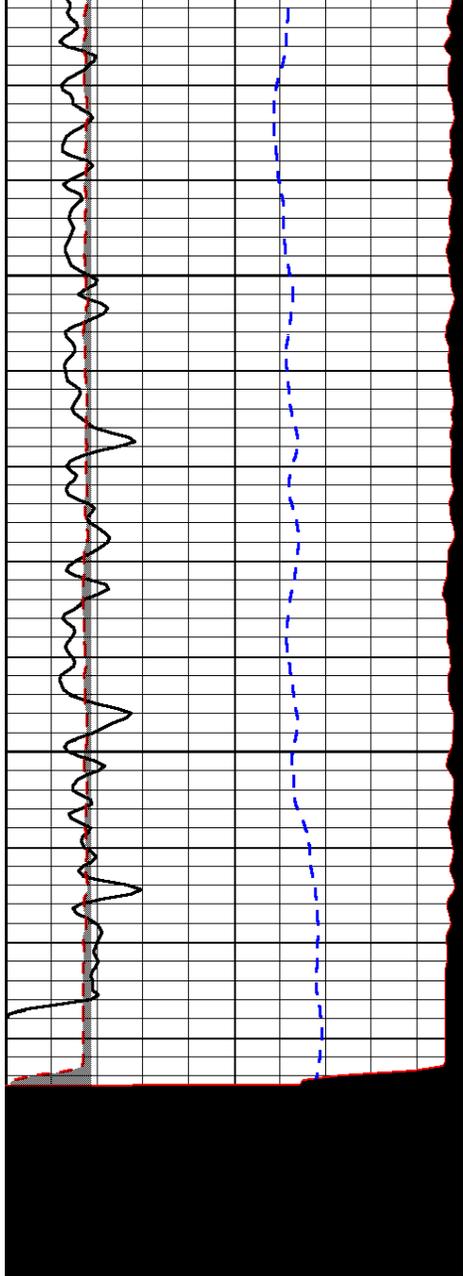


-32

-32

-32

-32

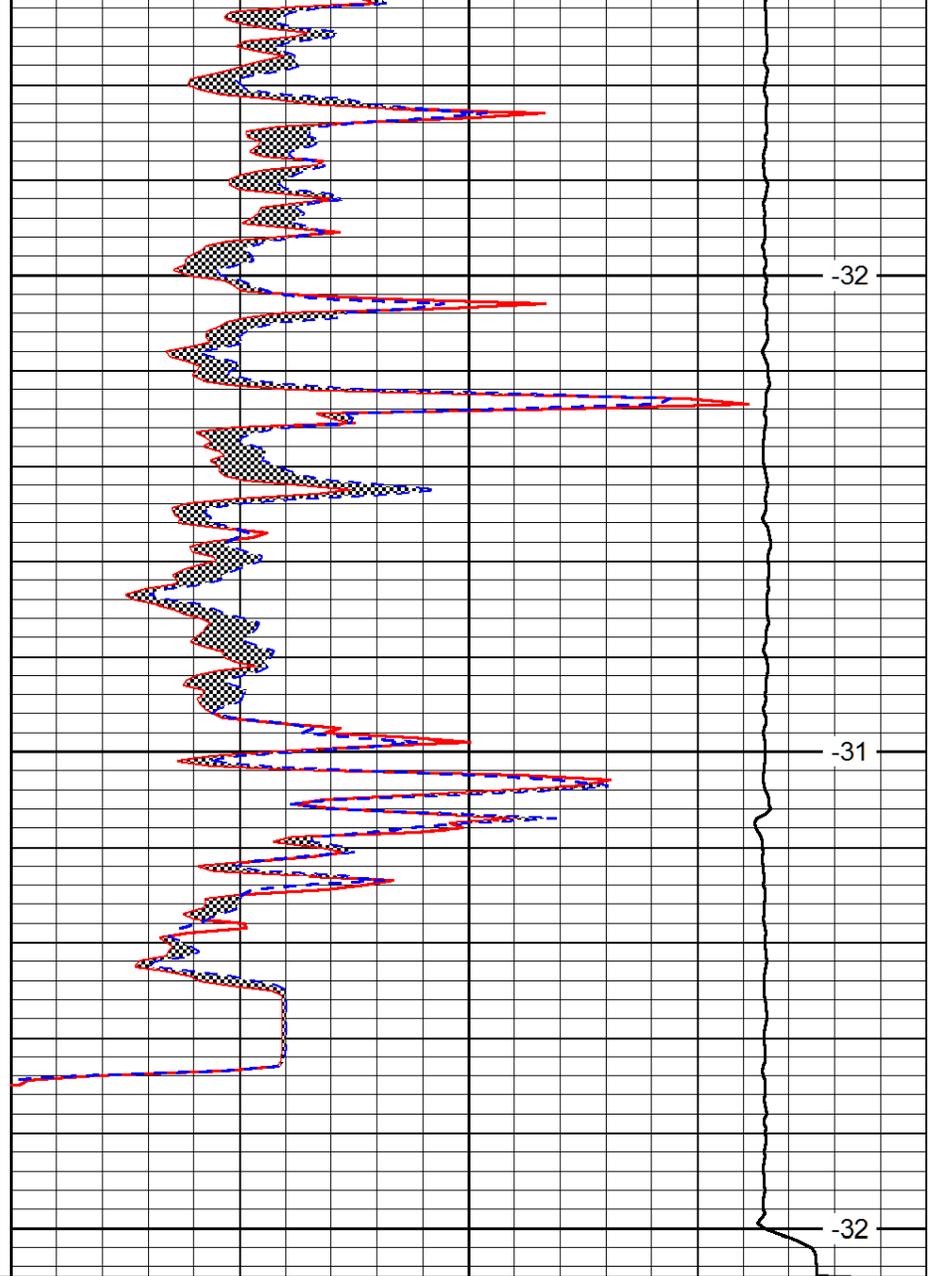


0	Gamma Ray	150
6	MCAL (GAPI)	16
2.875	Mud Cake (GAPI)	7.875
-200	SP (mV)	0

3800

3850

3900



-32

-31

-32

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

LSPD