



Microresistivity Log

Pioneer Energy Services

API No.

15-167-23,906-00-00

Company H&D Exploration, LLC

Well Staudinger No. 1

Field Driscoll West

County Russell State Kansas

Location W/2-SE-SE-SW
330' FSL & 2179' FWL

Sec: 25 Twp: 15S Rge: 12W

Other Services
CNL/CDL
DIL/BHCS

Permanent Datum Ground Level Elevation 1854
Log Measured From Kelly Bushing 9 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing Elevation
K.B. 1863
D.F. 1854
G.L. 1854

Date

9/29/13

Run Number

Two

Depth Driller

3375

Depth Logger

3376

Bottom Logged Interval

3375

Top Log Interval

2700

Casing Driller

8.625 @ 760

Casing Logger

761

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

3,700

Density / Viscosity

9.2 46
11.0 8.8

pH / Fluid Loss

Flowline

Source of Sample

Flowline

Rm @ Meas. Temp

.42 @ 55

Rmf @ Meas. Temp

.32 @ 55

Rmc @ Meas. Temp

.57 @ 55

Source of Rmf / Rmc

Charts

Rm @ BHT

.21 @ 110

Operating Rig Time

5 Hours

Max Rec. Temp. F

110

Equipment Number

17

Location

Hays

Recorded By

J. Henrickson

Witnessed By

Jim Musgrove

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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.

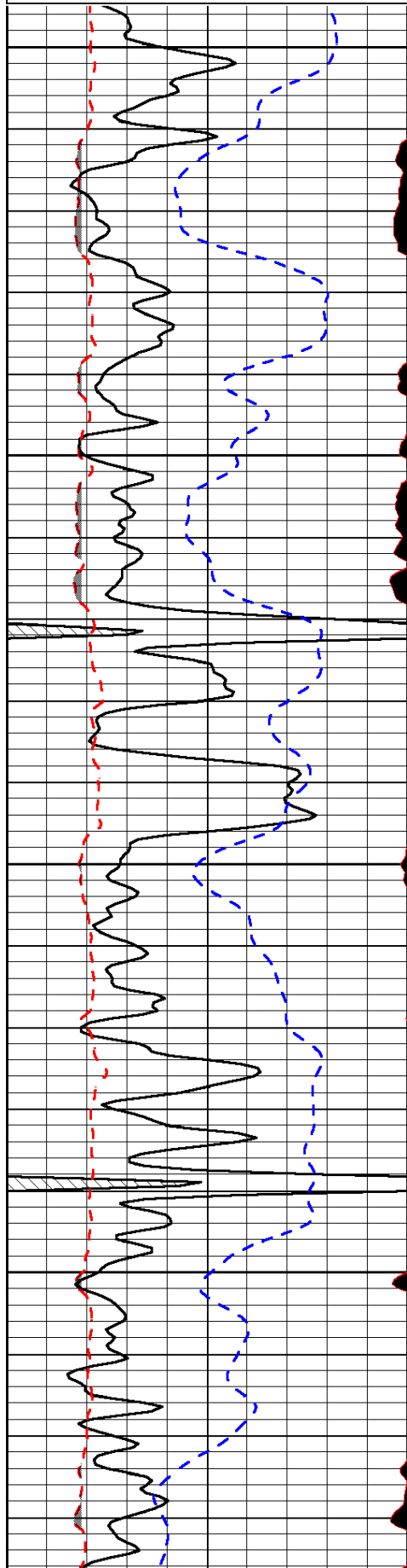
Comments

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

Odin Kansas
North to Church(Several Miles), 1/2 West, 1 North, 1/2 East, North Into

Database File: hd_staudinger_1hd.db
Dataset Pathname: DIL/hdstk
Presentation Format: micro
Dataset Creation: Sun Sep 29 06:39:20 2013
Charted by: Depth in Feet scaled 1:240

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



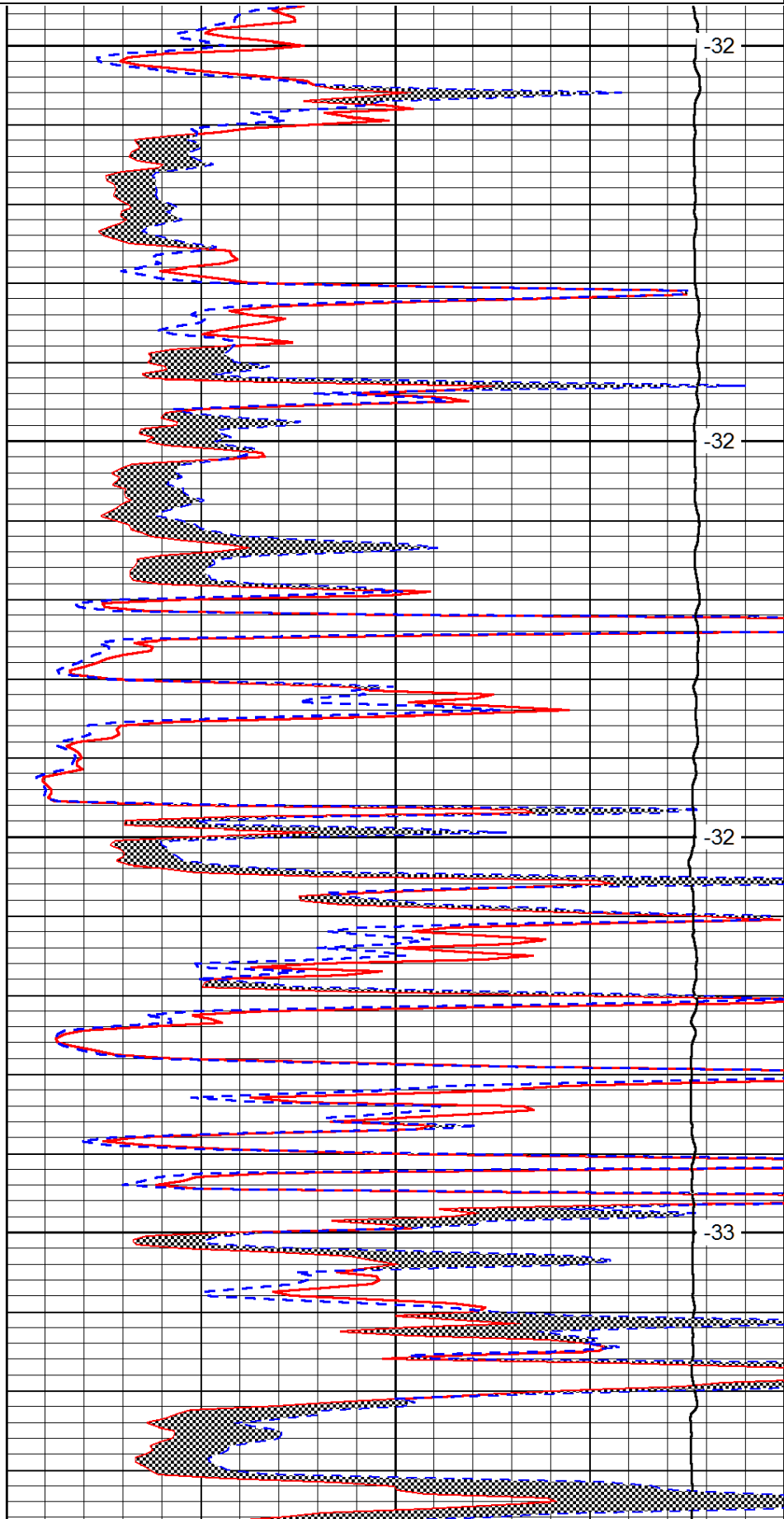
2700

2750

2800

2850

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

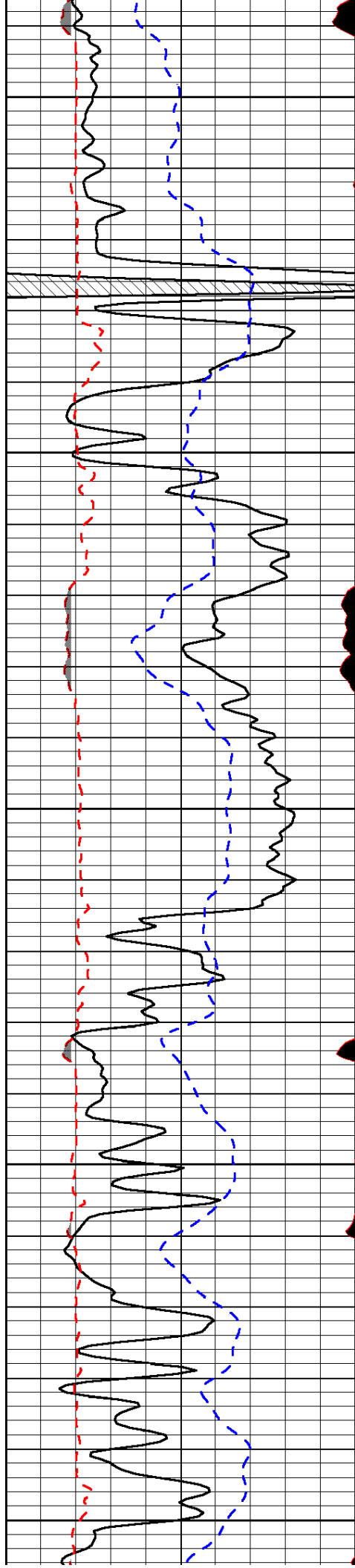


-32

-32

-32

-33



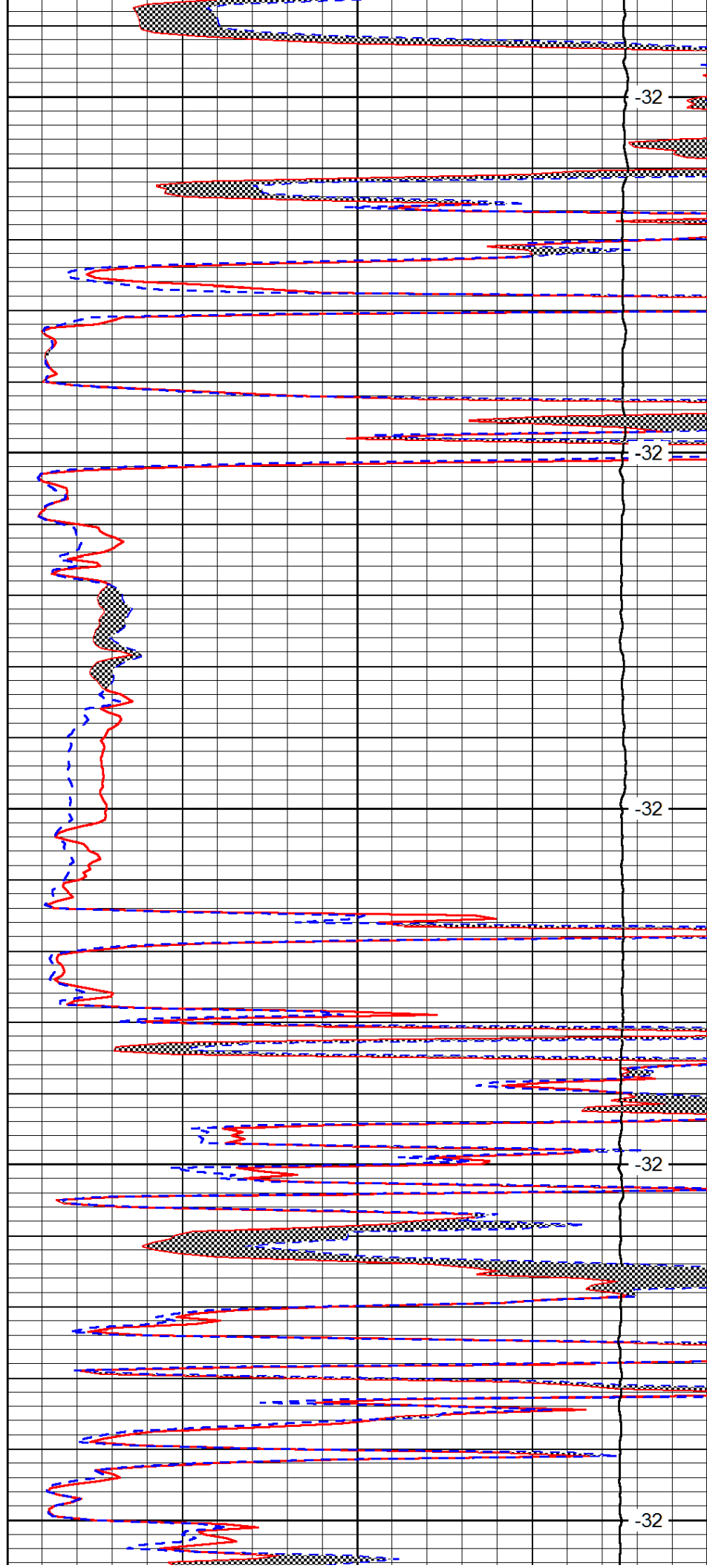
2900

2950

3000

3050

3100



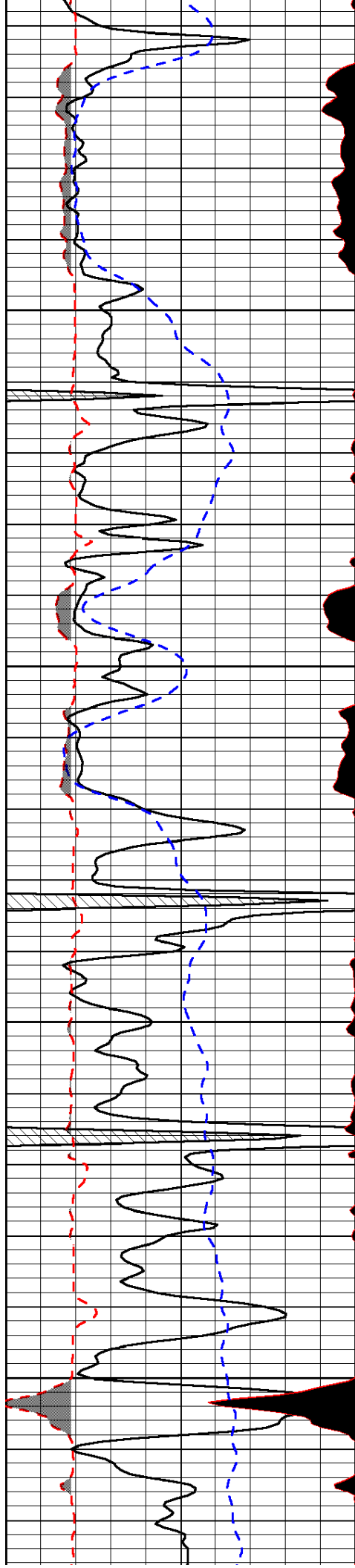
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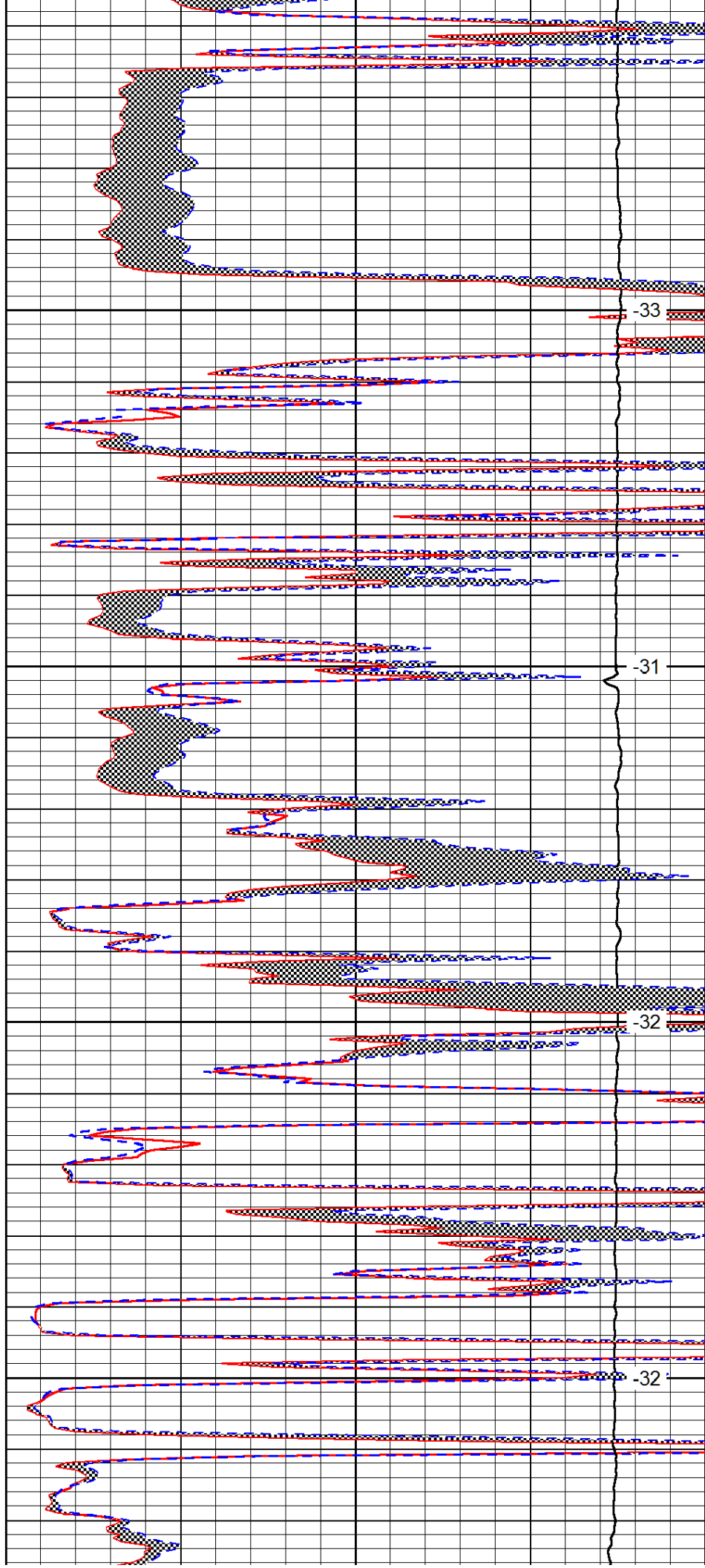


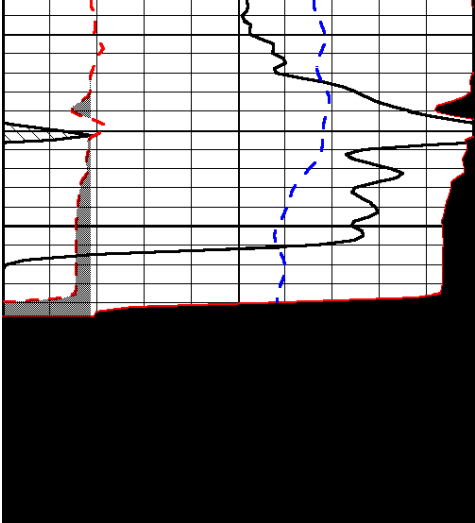
3150

3200

3250

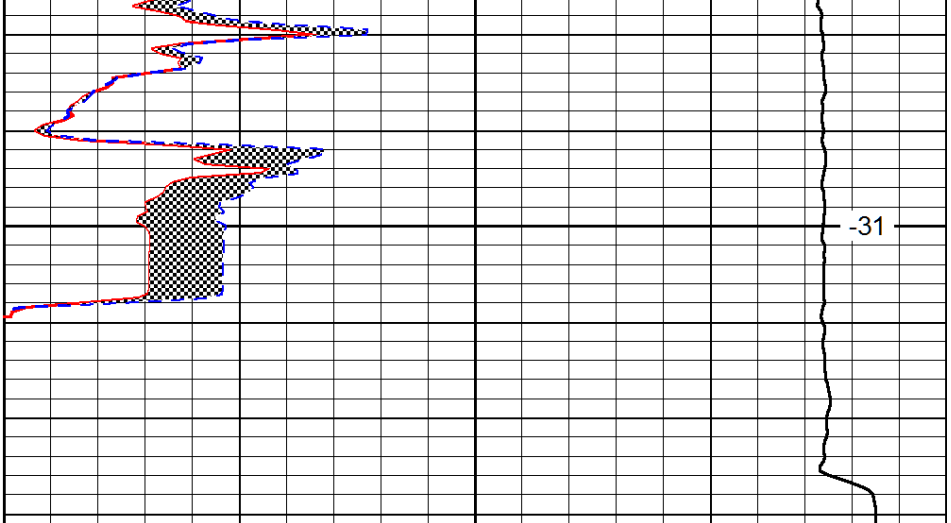
3300





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(ft/min)