



Microresistivity Log

Pioneer Energy Services

API No.

15-065-24006-00-00

Company H & C Oil Operating, Inc.

Well Bakel #30-2

Field Driel

County Graham State

Kansas

Location

NE SW NW NW
950' FNL / 620' FWL

Other Services
CNL/CDL
DIL

Sec: 30

Twp: 9S

Rge: 24

Elevation

Permanent Datum Ground Level Elevation 2558
Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date

2/28/2014

Run Number

Two

Depth Driller

4175

Depth Logger

4176

Bottom Logged Interval

4175

Top Log Interval

3500

Casing Driller

8.625 @ 263

Casing Logger

263

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

1400

Density / Viscosity

9.2 55

pH / Fluid Loss

10.0 6.0

Source of Sample

Flowline

Rm @ Meas. Temp

0.90 @ 54

Rmf @ Meas. Temp

0.68 @ 54

Rmc @ Meas. Temp

1.22 @ 54

Source of Rmf / Rmc

Charts

Rm @ BHT

0.41 @ 118

Operating Rig Time

4 Hours

Max Rec. Temp. F

118

Equipment Number

15

Location

Hays

Recorded By

R. Barnhart

Witnessed By

Marc Downing

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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.

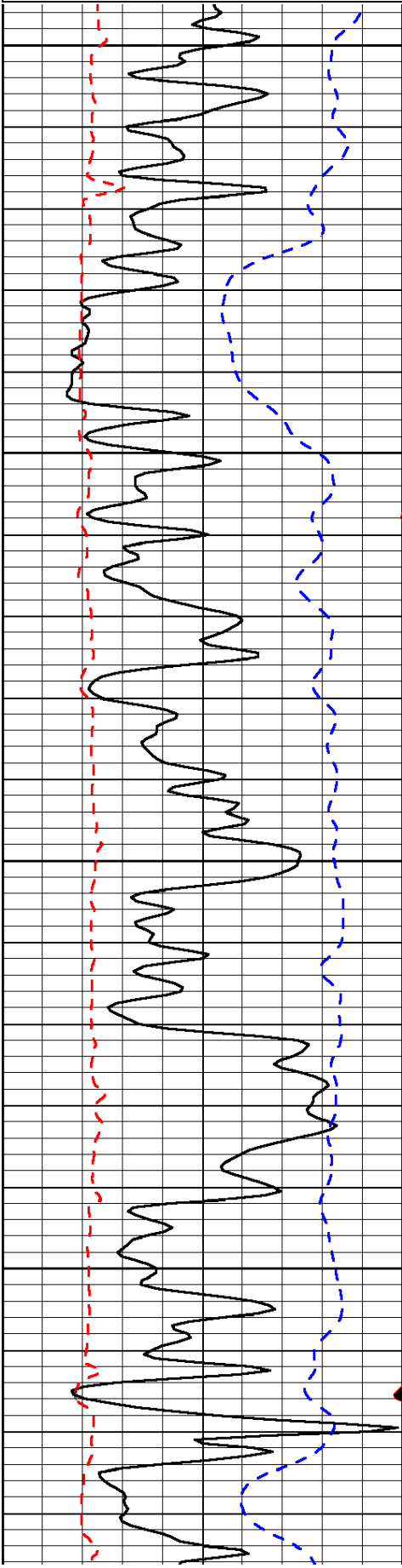
Comments

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

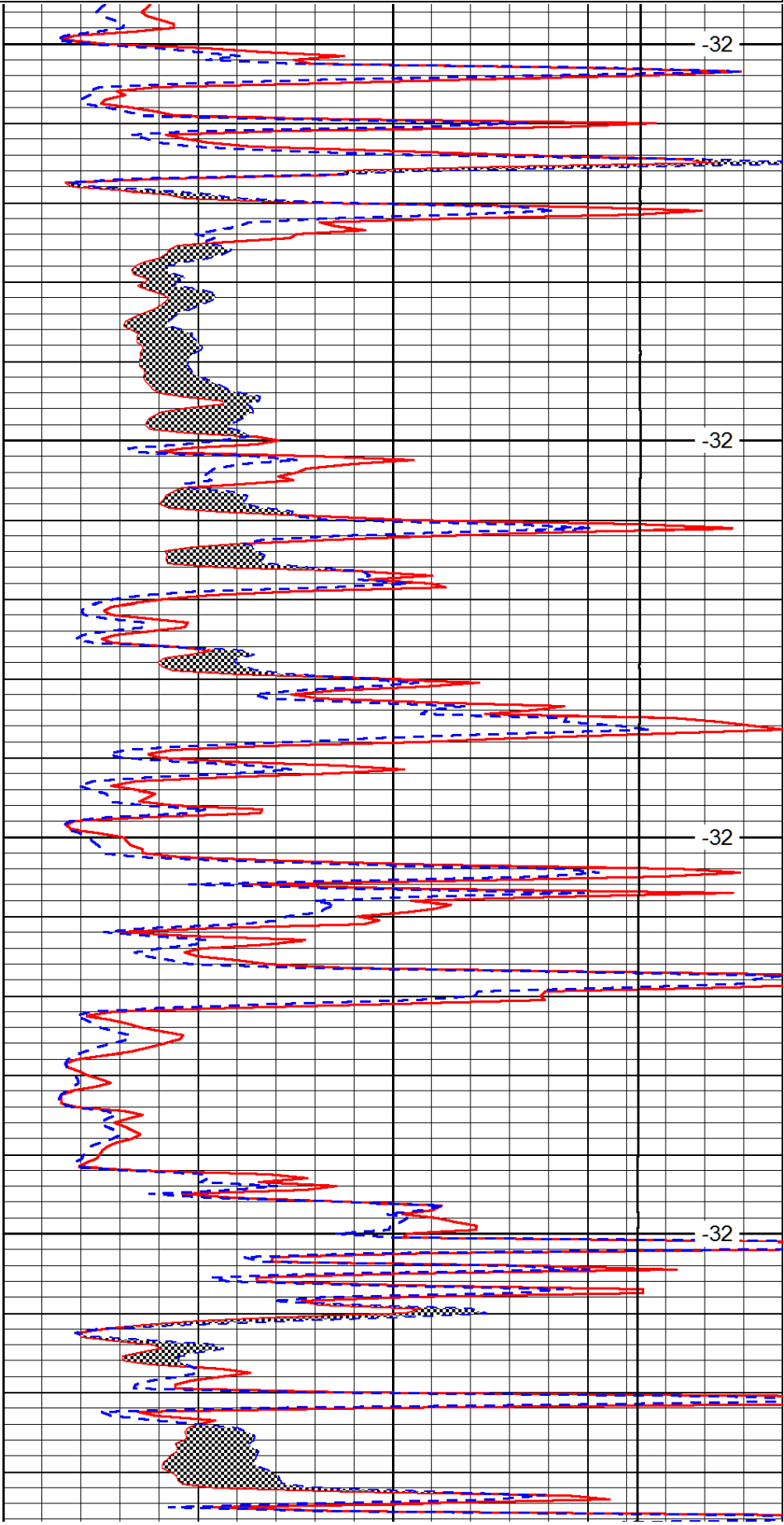
Wakeeney, KS:
N to Redline Rd., 10W, 1/2N, E into at tank batteries

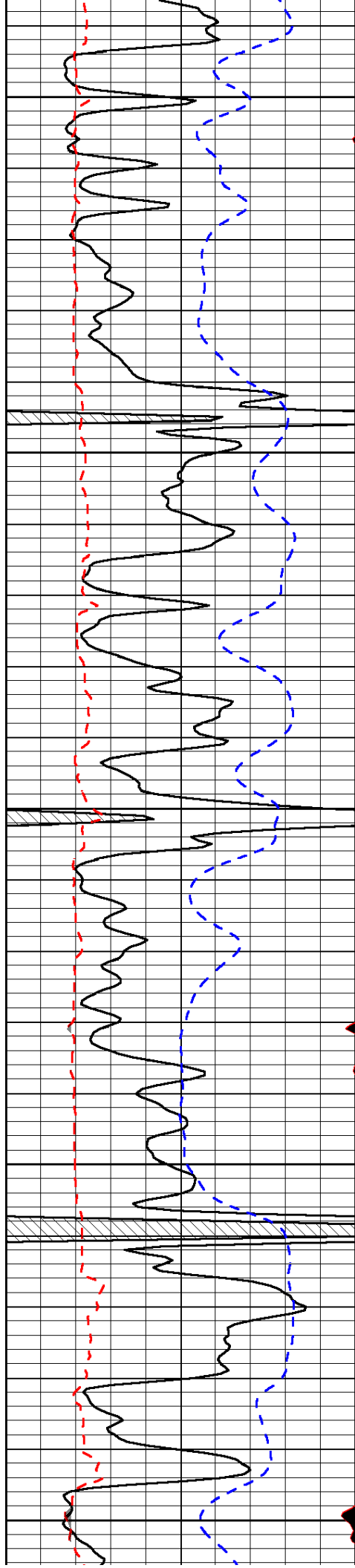
Database File: h&c_hd.db
Dataset Pathname: dil/hcmain
Presentation Format: micro
Dataset Creation: Fri Feb 28 21:08:19 2014
Charted by: Depth in Feet scaled 1:240

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



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





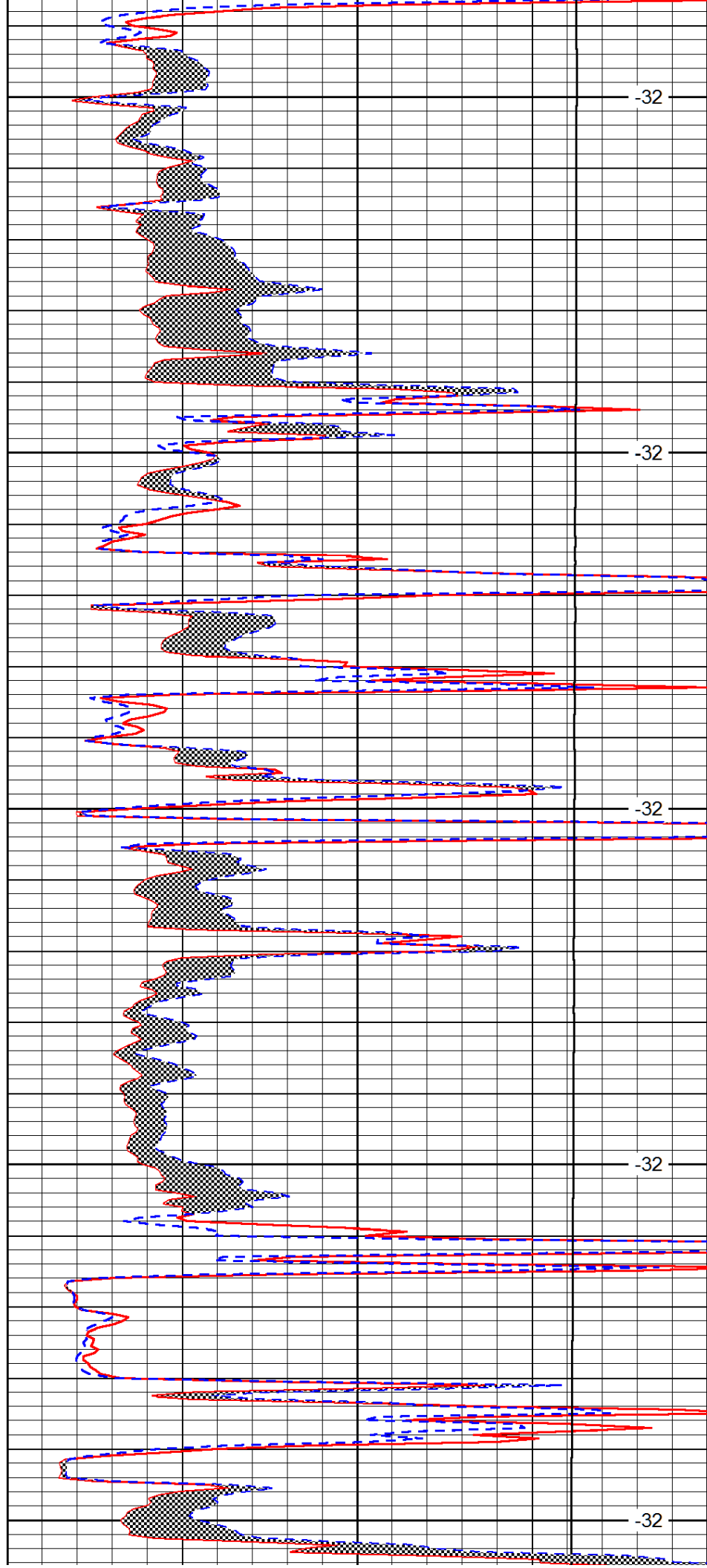
3700

3750

3800

3850

3900



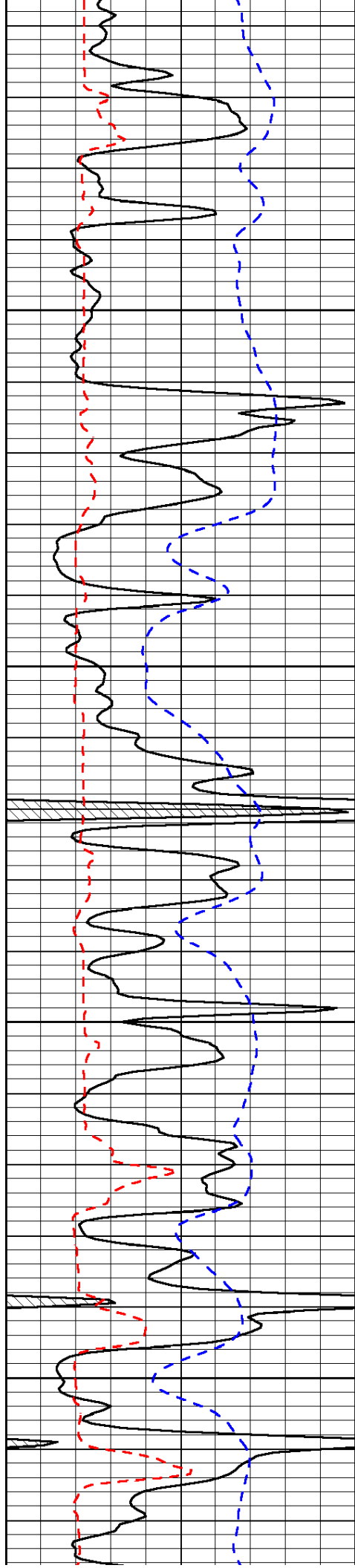
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-32

-32

-32

-32

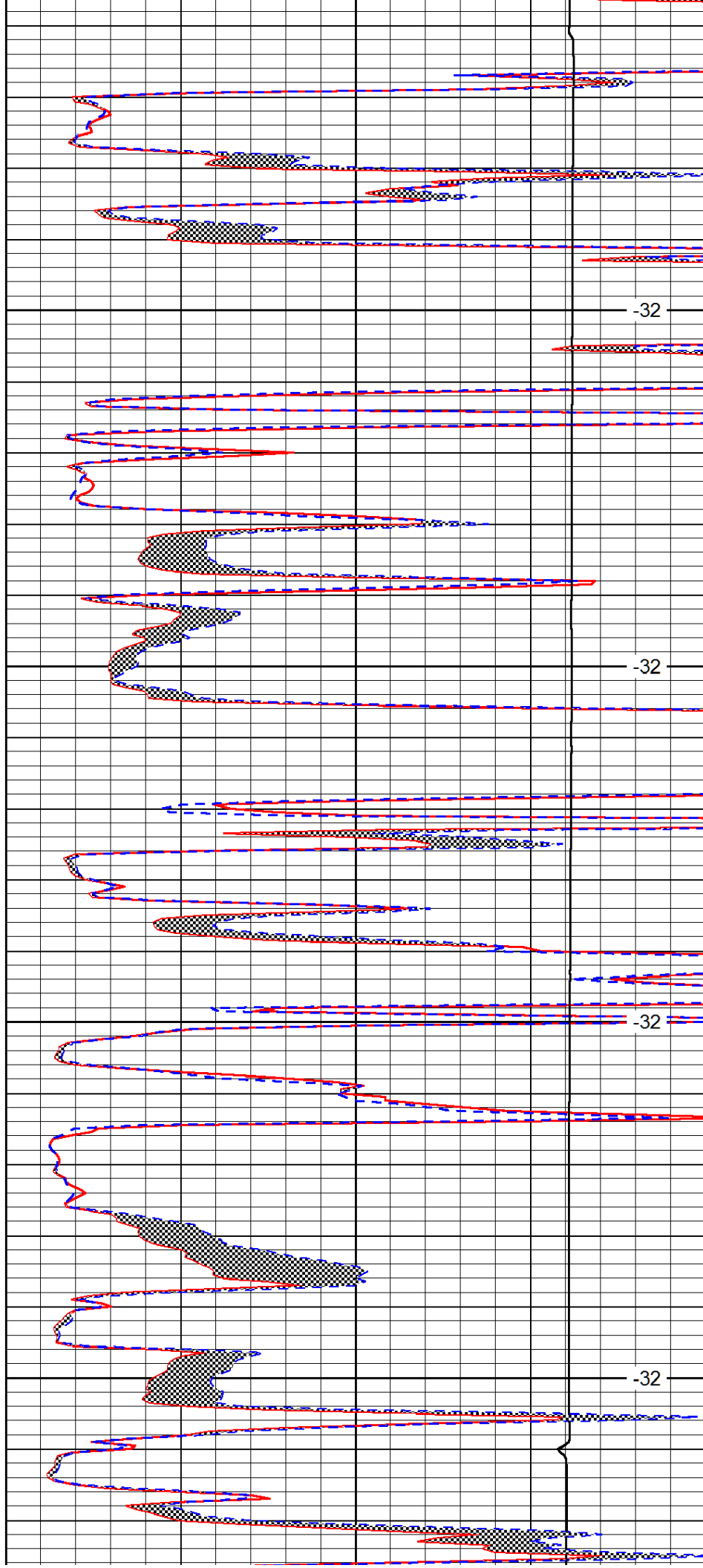


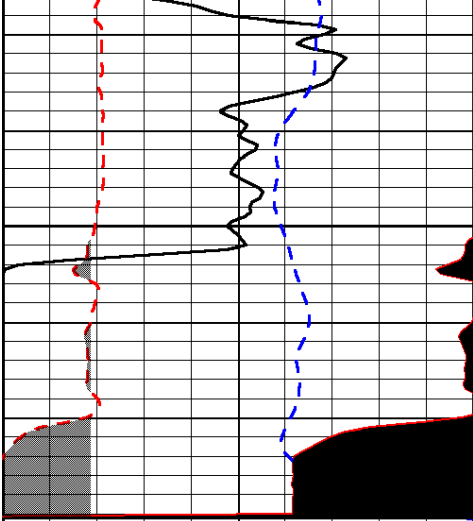
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4000

4050

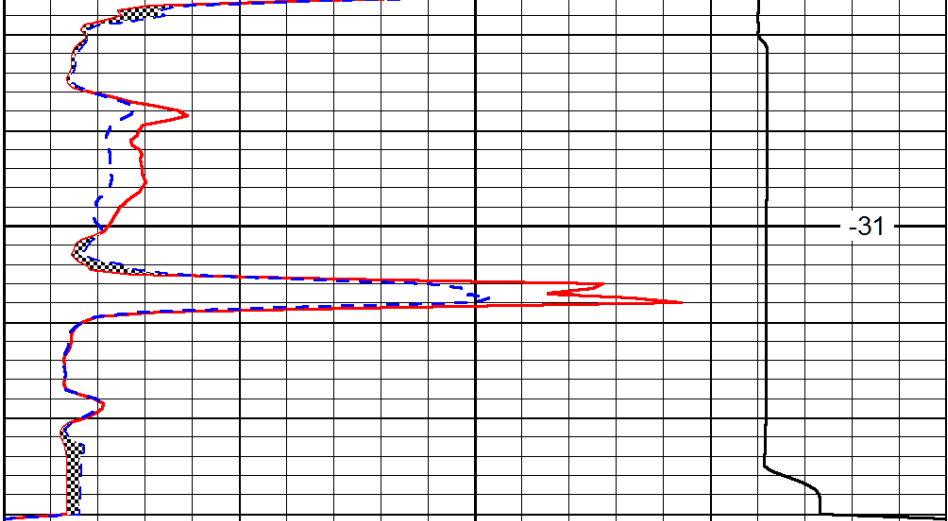
4100





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4150



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LSPD
(ft/min)