



Microresistivity Log

Pioneer Energy Services

API No.

15-167-23979-00-00

Company Yale Oil Association, Inc.

Well Bernard #3-31

Field Trapp

County Russell

State

Kansas

Location

1980' FSL & 1320' FEL

Sec: 31

Twp: 15S

Rge: 13W

Elevation

Permanent Datum Ground Level Elevation 1915
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 1925
D.F. 1915
G.L. 1915

Date

06/18/2014

Run Number

Two

Depth Driller

3329

Depth Logger

3328

Bottom Logged Interval

3327

Top Log Interval

2600

Casing Driller

8.625 @ 478

Casing Logger

477

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

3100

Density / Viscosity

9.1 60

pH / Fluid Loss

10.5 7.6

Source of Sample

Flowline

Rm @ Meas. Temp

0.76 @ 88

Rmf @ Meas. Temp

0.57 @ 88

Rmc @ Meas. Temp

1.03 @ 88

Source of Rmf / Rmc

Charts

Rm @ BHT

0.60 @ 111

Operating Rig Time

4 Hours

Max Rec. Temp. F

111

Equipment Number

91

Location

Hays

Recorded By

M. Beougher

D. Schmidt

Witnessed By

Kurt Talbott

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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.

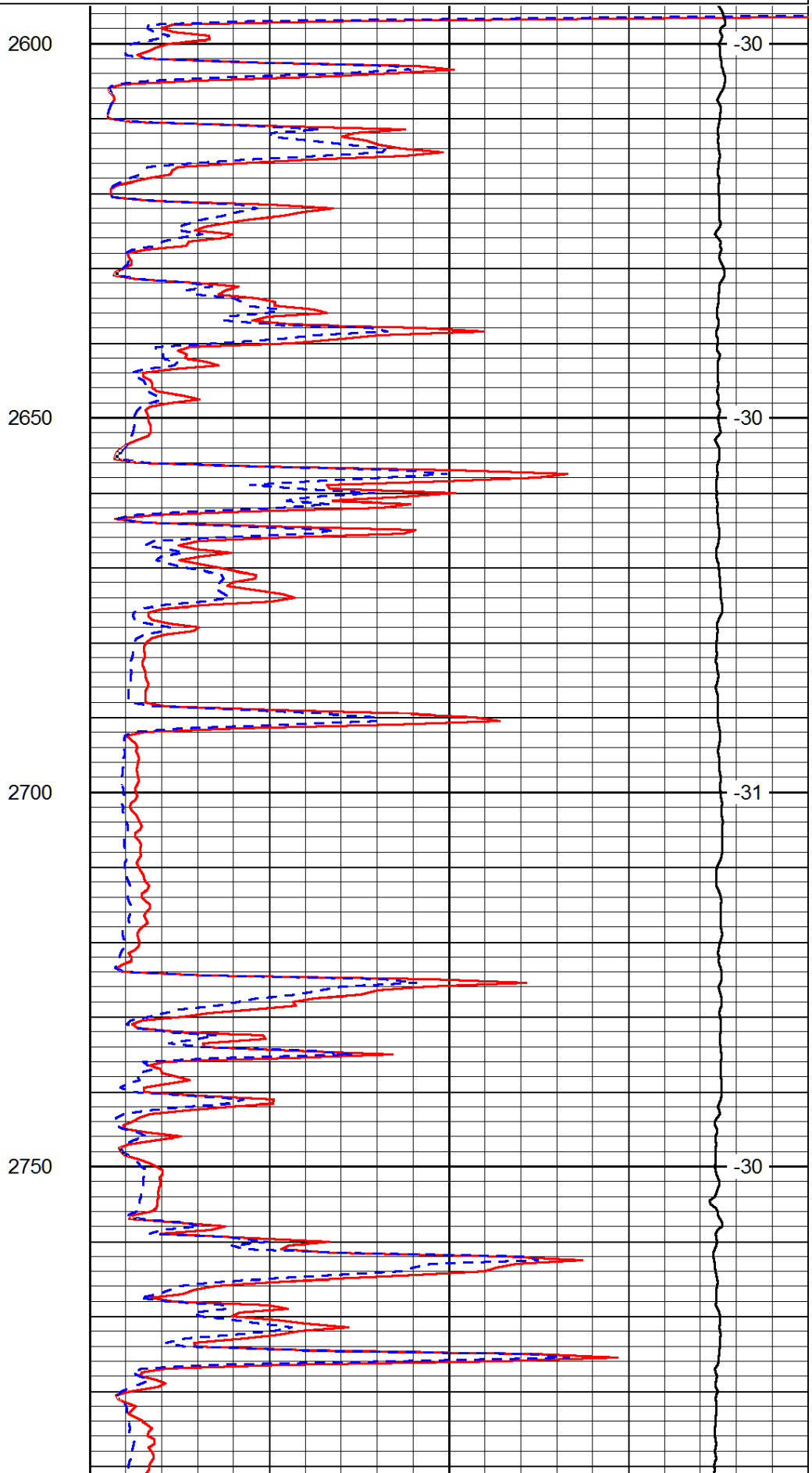
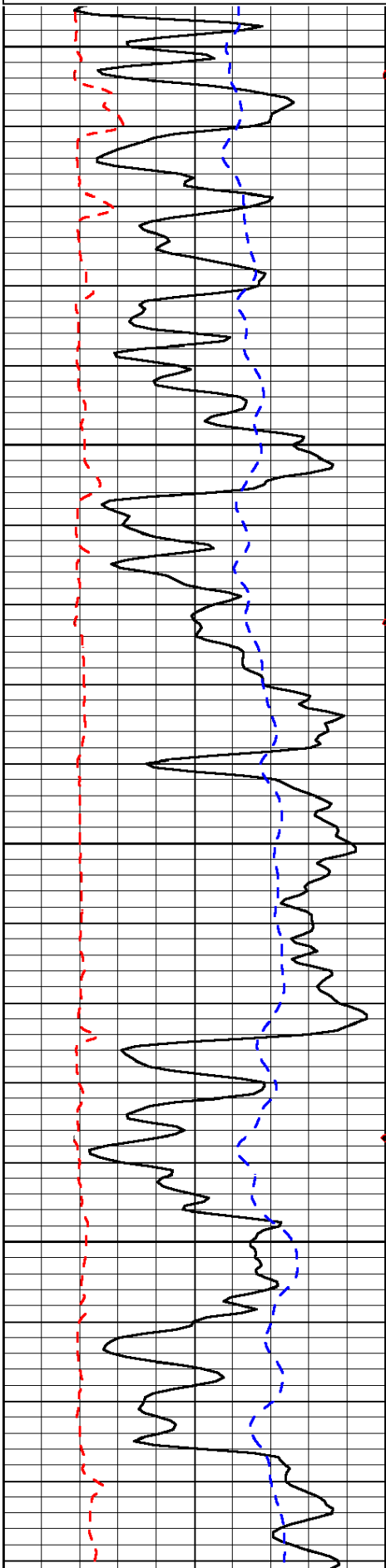
Comments

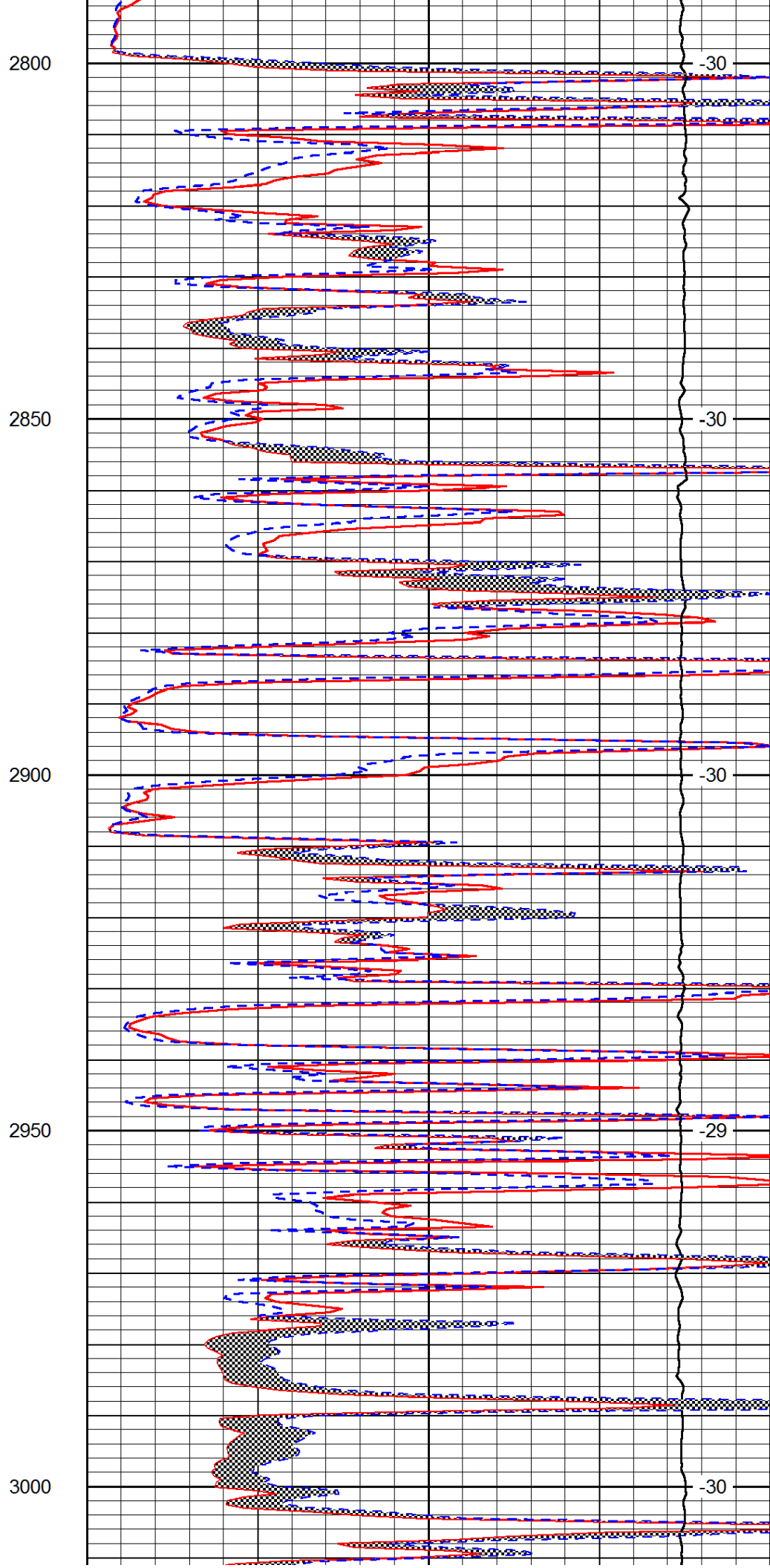
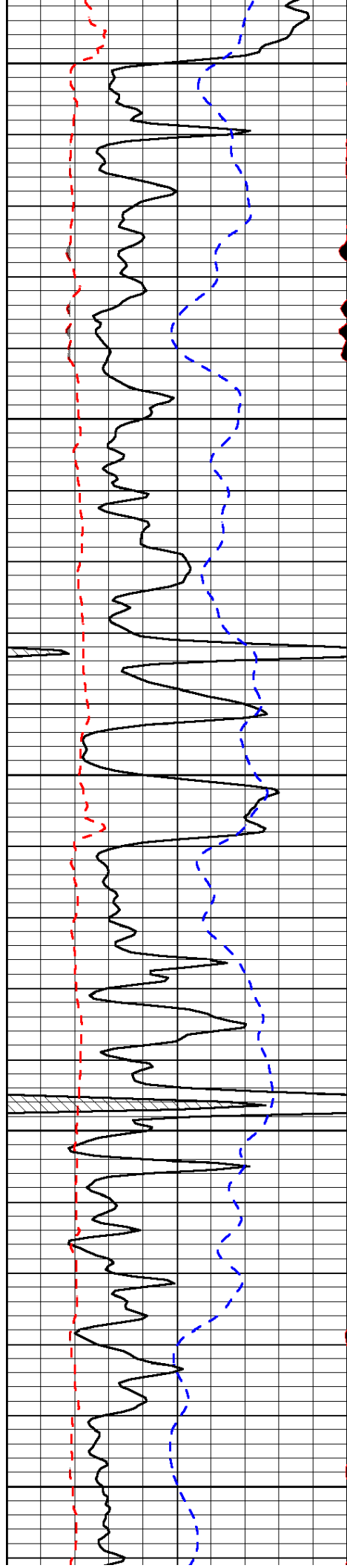
Thank you for using Log-Tech, Inc.
(785) 625-3858
Russell,
South to 230th Rd,
East 2 1/4 miles,
North Into

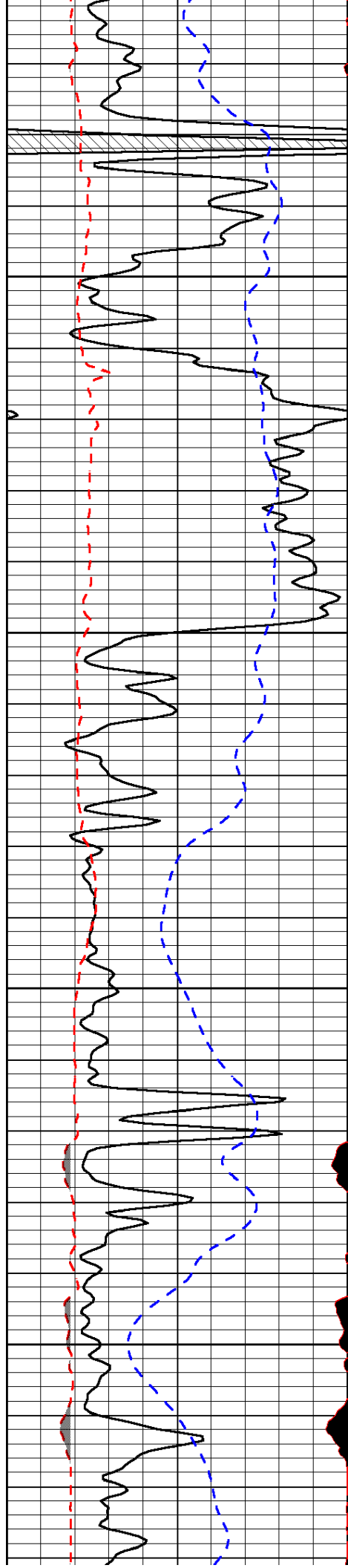
Database File: yale_bernard_3-31hd.db
Dataset Pathname: dil/yastack
Presentation Format: micro
Dataset Creation: Wed Jun 18 15:24:06 2014
Charted by: Depth in Feet scaled 1:240

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





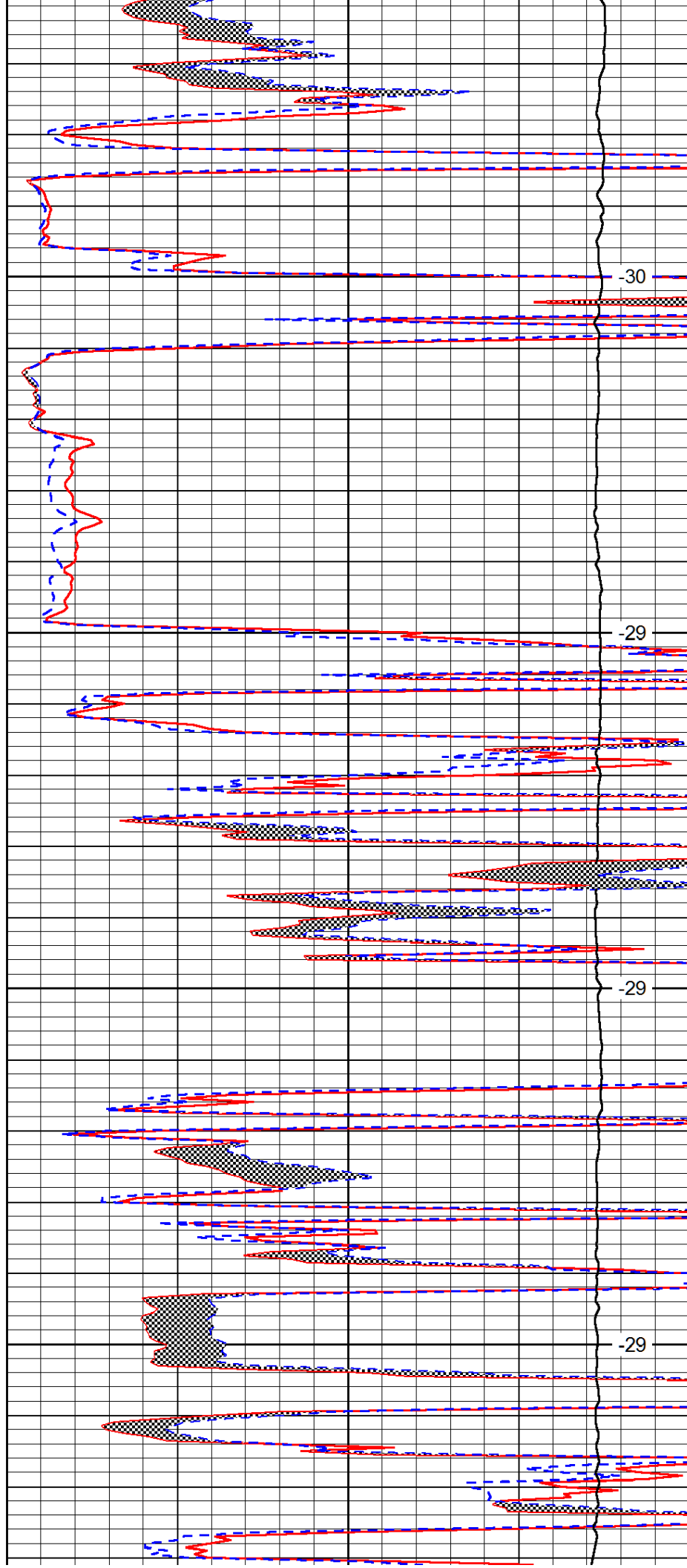


3050

3100

3150

3200

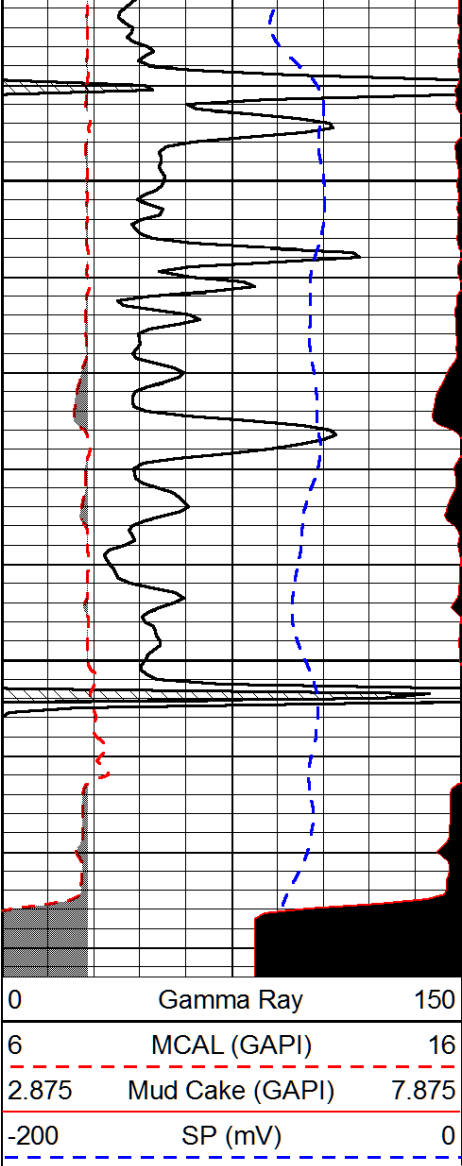


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-29

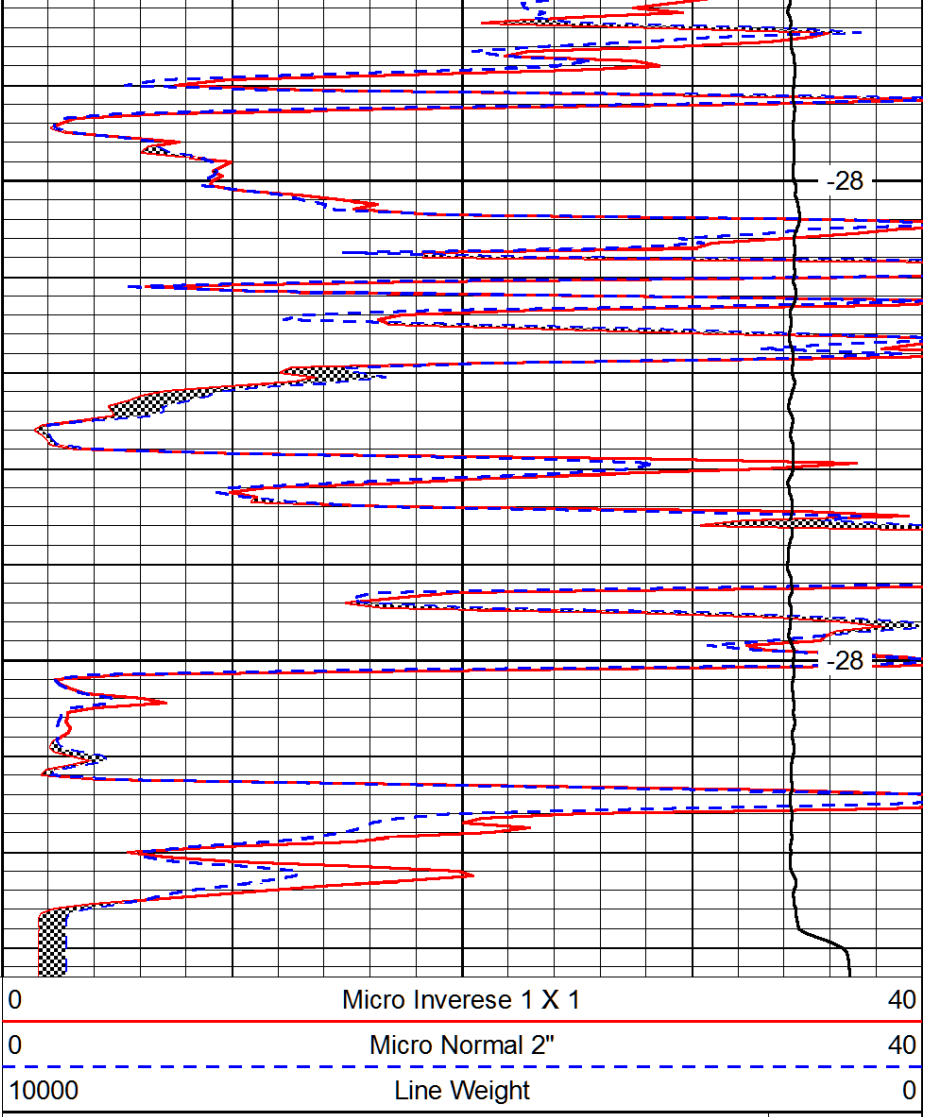
-29

-29



3250

3300



-28

-28

LSPD