



Microresistivity Log

Pioneer Energy Services

API No.

15-009-25,907-00-00

Company American Warrior, Inc.

Well Eberhardt #3-24

Field Eberhardt

County Barton State

Kansas

Location

1254' FNL & 985' FWL

Other Services
CNL/CDL
DIL

Sec: 24

Twp: 19S

Rge: 11W

Elevation

K.B. 1782

D.F. 1774

G.L. 1774

Permanent Datum Ground Level

Elevation 1774

Log Measured From Kelly Bushing

8 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Date

11/14/2013

Run Number

Two

Depth Driller

3450

Depth Logger

3452

Bottom Logged Interval

3451

Top Log Interval

2800

Casing Driller

8.625 @ 310

Casing Logger

304

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

8.200

Density / Viscosity

9.4 61

pH / Fluid Loss

10.0 8.8

Source of Sample

Flowline

Rm @ Meas. Temp

.32 @ 45

Rmf @ Meas. Temp

.24 @ 45

Rmc @ Meas. Temp

.43 @ 45

Source of Rmf / Rmc

Charts

Rm @ BHT

.13 @ 111

Operating Rig Time

3 Hours

Max Rec. Temp. F

111

Equipment Number

17

Location

Hays

Recorded By

C. Desaire

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.

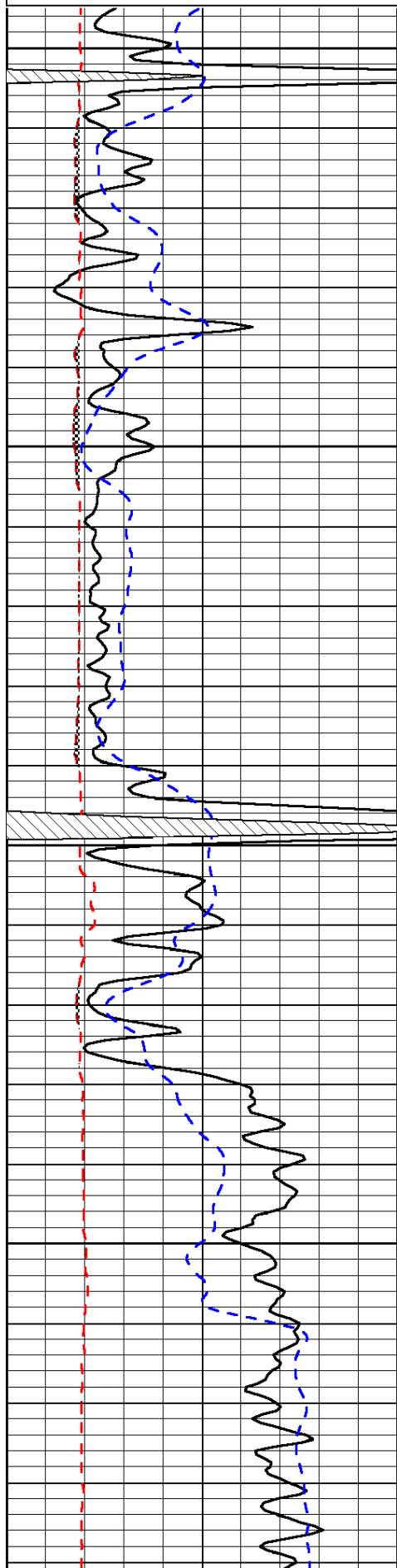
Comments

Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858

Ellinwood KS,
1 1/2 N on Hirsch St, 4 E, 1/2 N, E Into

Database File: c:\warrior\data\amwar_eberhardt #3-24\awhd.db
Dataset Pathname: dil\awstk
Presentation Format: micro
Dataset Creation: Fri Nov 15 00:08:49 2013
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0



2800

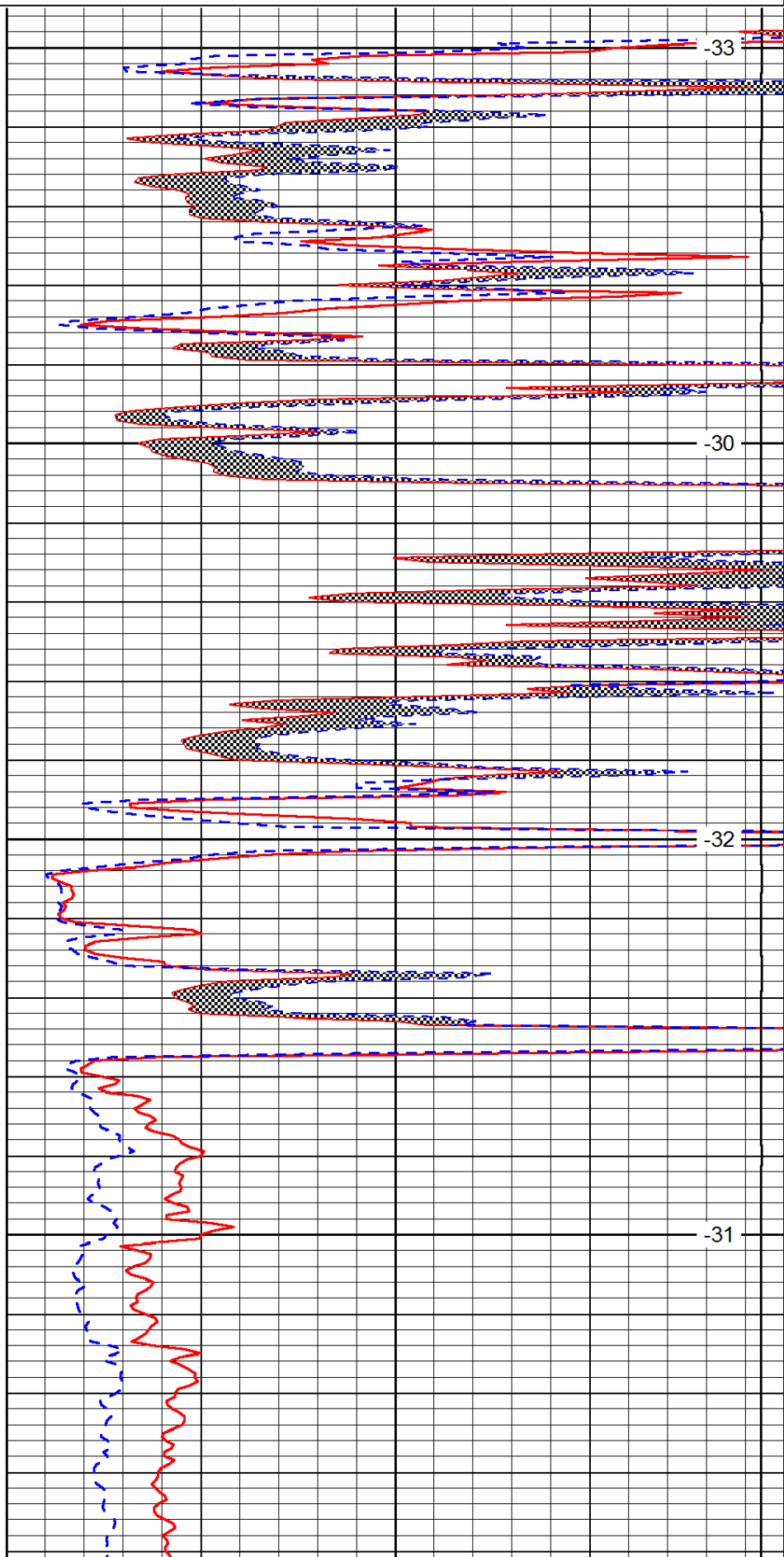
2850

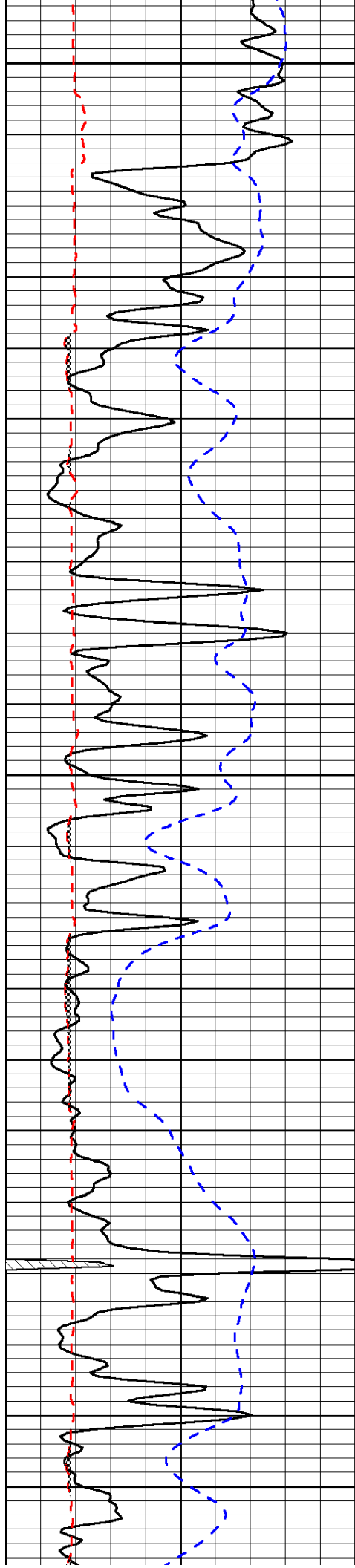
2900

2950

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
15000	Line Weight	0

LSPD





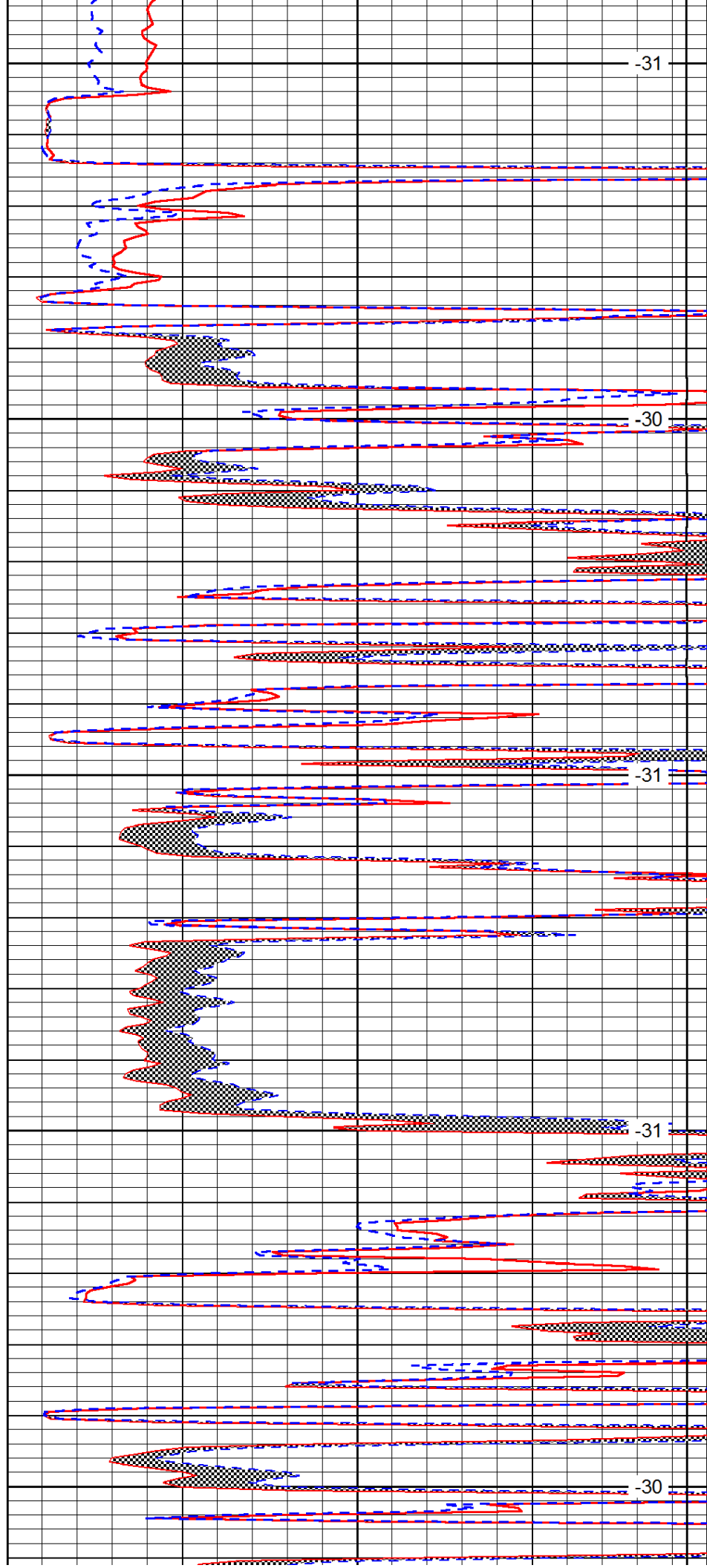
3000

3050

3100

3150

3200



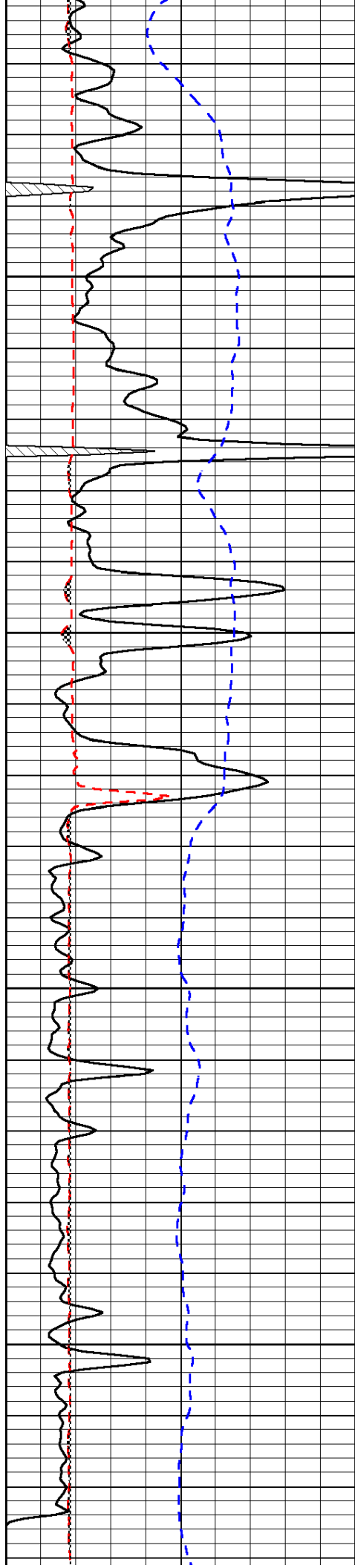
-31

-30

-31

-31

-30

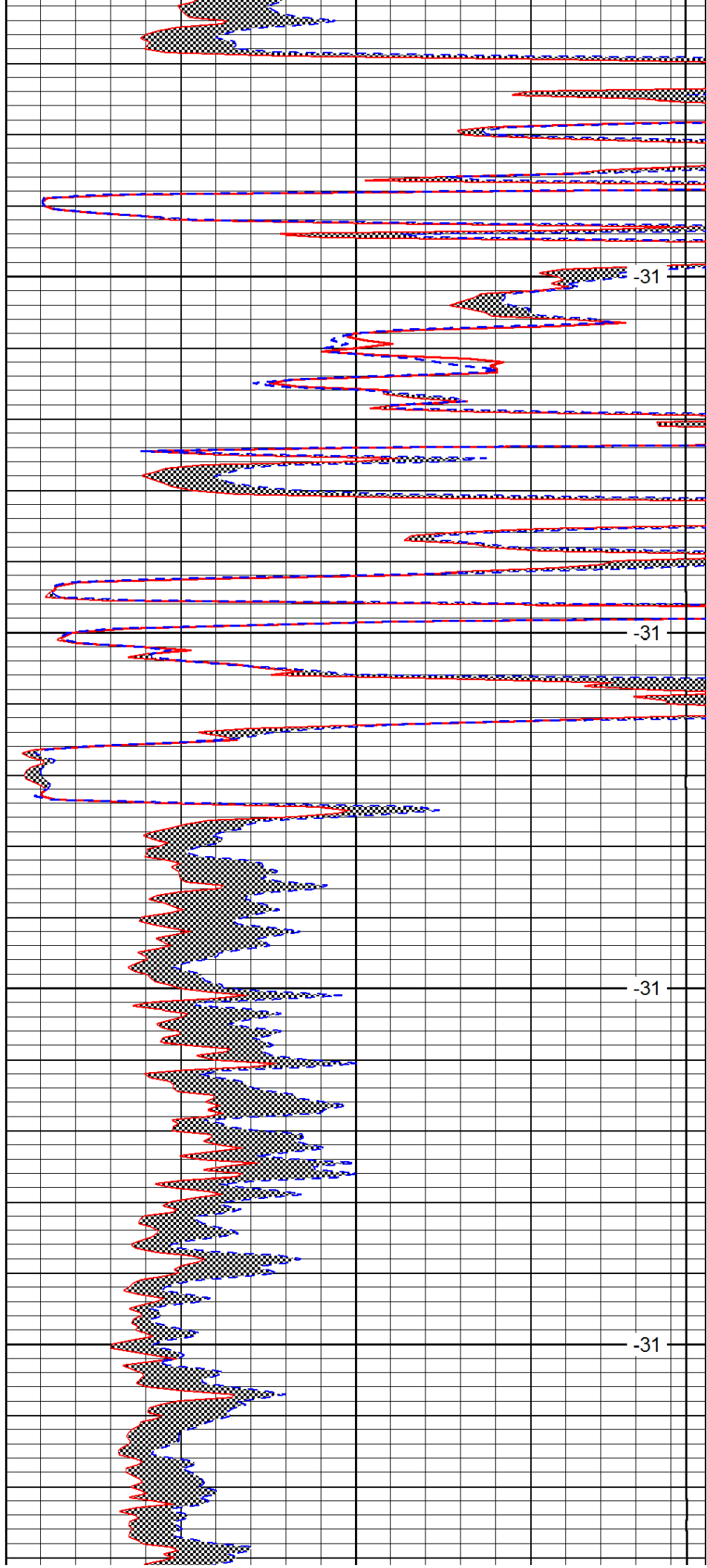


3250

3300

3350

3400

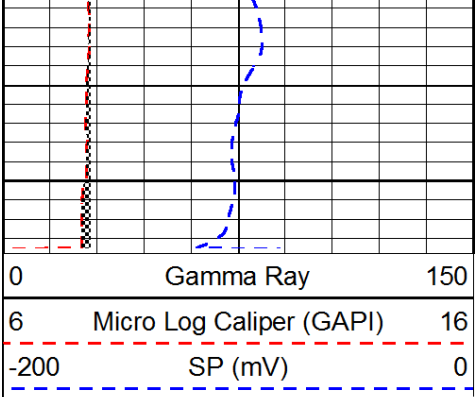


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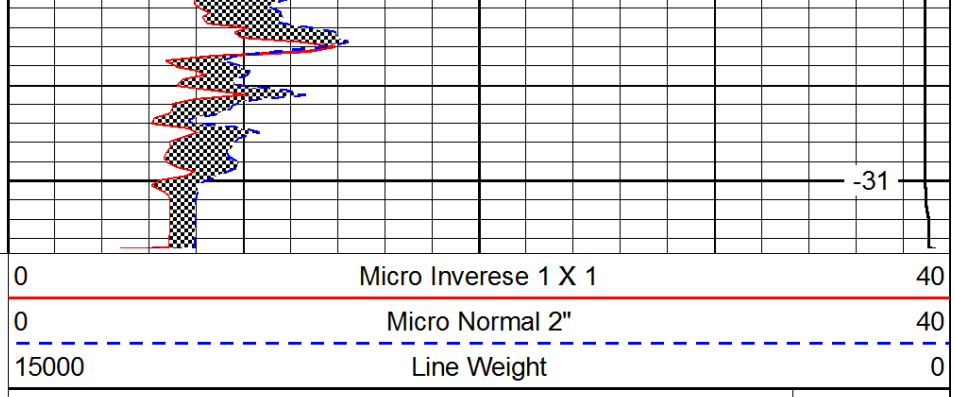
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3450



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LSPD