



Microresistivity Log

Pioneer Energy Services

API No.

15-051-26667-00-00

Company American Warrior, Inc.

Well Riedel C # 1-31

Field Irvin

County Ellis

State

Kansas

Location

2170' FNL & 2304' FEL

Sec: 31

Twp: 13 S

Rge: 19 W

Permanent Datum Ground Level
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Elevation 2271

8 Ft. Above Perm. Datum

Elevation

K.B. 2279

D.F. 2271

Other Services
CNL/CDL
DIL

Date

2/17/2014

Run Number

Two

Depth Driller

3993

Depth Logger

3995

Bottom Logged Interval

3994

Top Log Interval

3100

Casing Driller

8.625 @ 211

Casing Logger

211

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

5000

Density / Viscosity

8.8

57

pH / Fluid Loss

10.0

6.0

Source of Sample

Flowline

Rm @ Meas. Temp

0.52 @ 48

Rmf @ Meas. Temp

0.39 @ 48

Rmc @ Meas. Temp

0.70 @ 48

Source of Rmf / Rmc

Charts

Rm @ BHT

0.21 @ 118

Operating Rig Time

4 Hours

Max Rec. Temp. F

118

Equipment Number

91

Location

Hays

Y. Ruiz

Recorded By

Jason Alm

Witnessed By

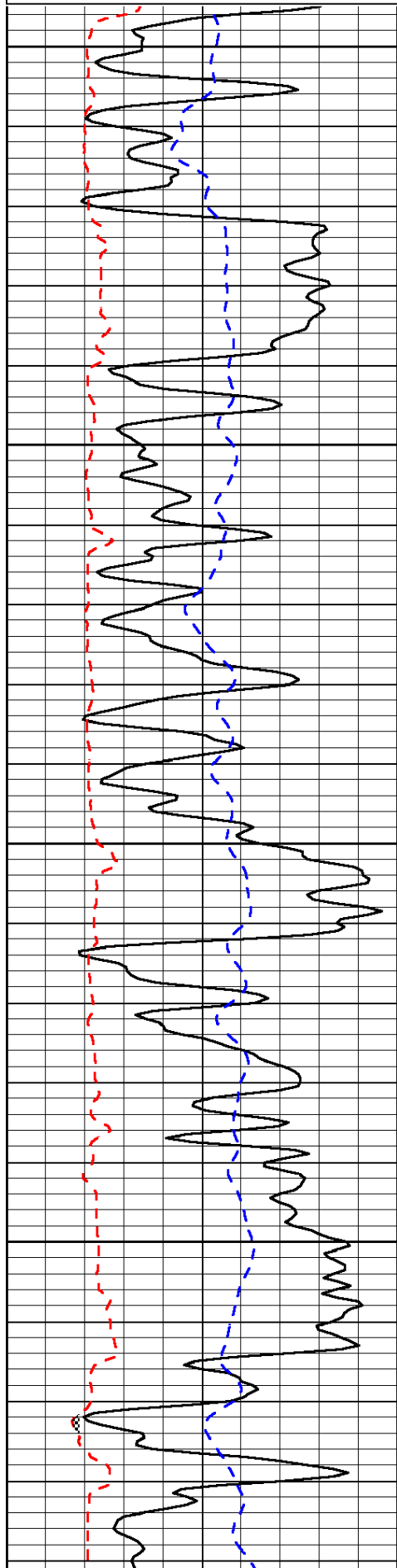
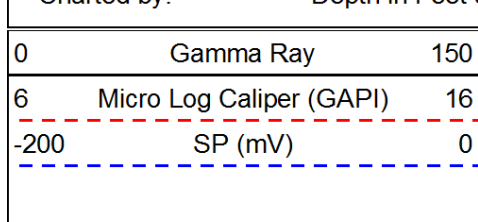
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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.

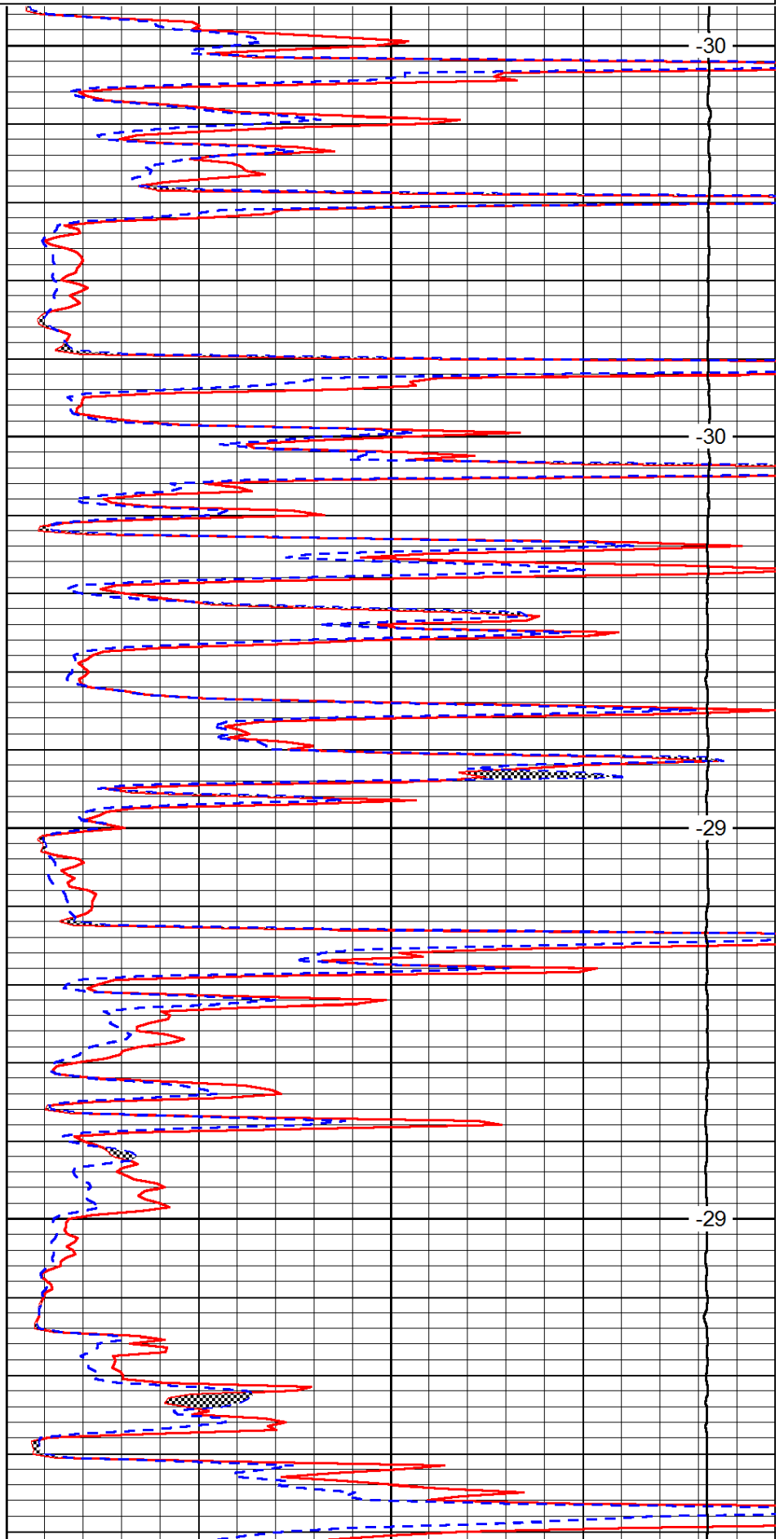
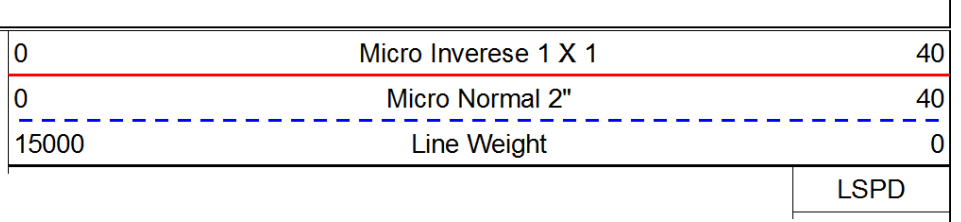
Comments

Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Hays,
7 West on Golf Course, 1 North on 170th Rd, 1/2 West,
North to the Y, East and North,
West into

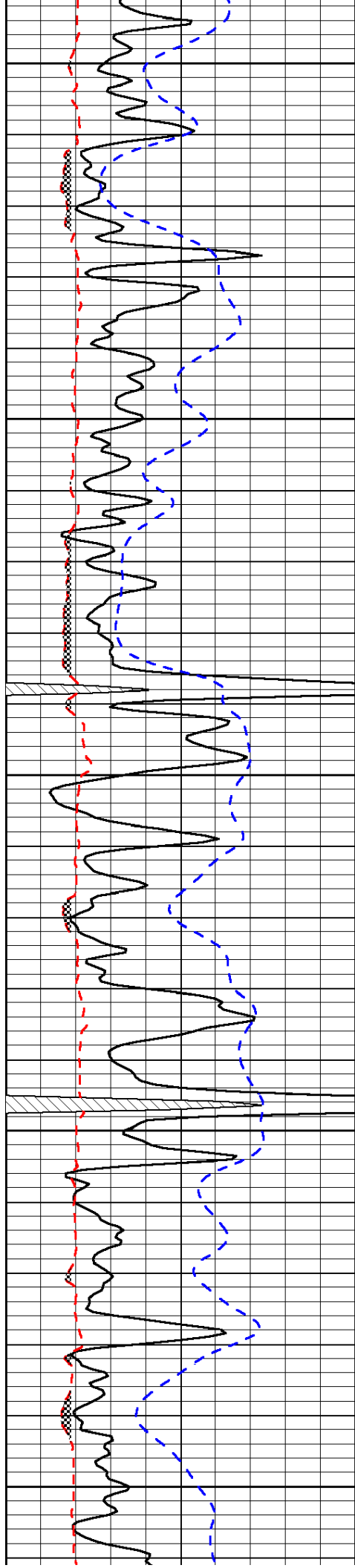
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Dataset Pathname: DIL\awstk
Presentation Format: micro
Dataset Creation: Mon Feb 17 23:11:28 2014
Charted by: Depth in Feet scaled 1:240



3100
3150
3200
3250



-30
-30
-29
-29



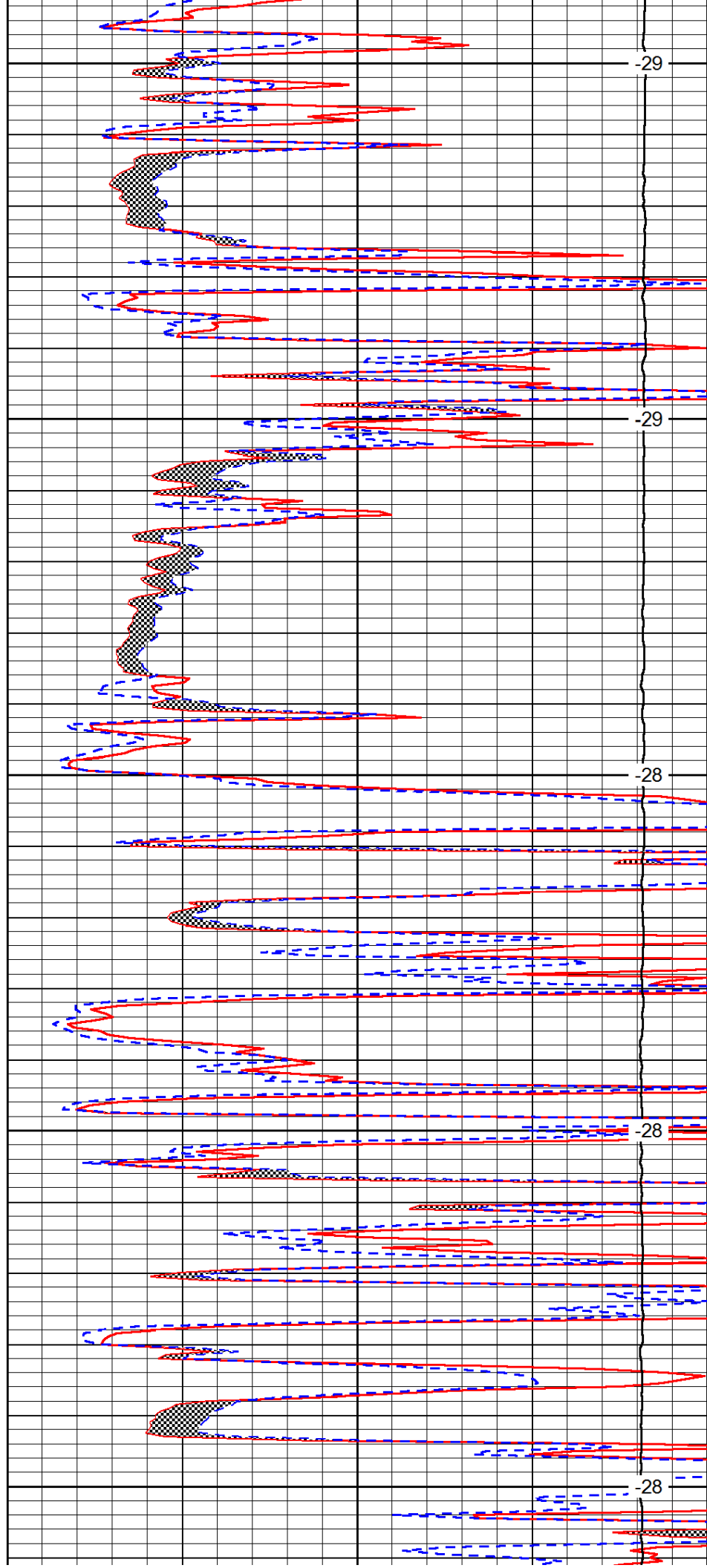
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3350

3400

3450

3500



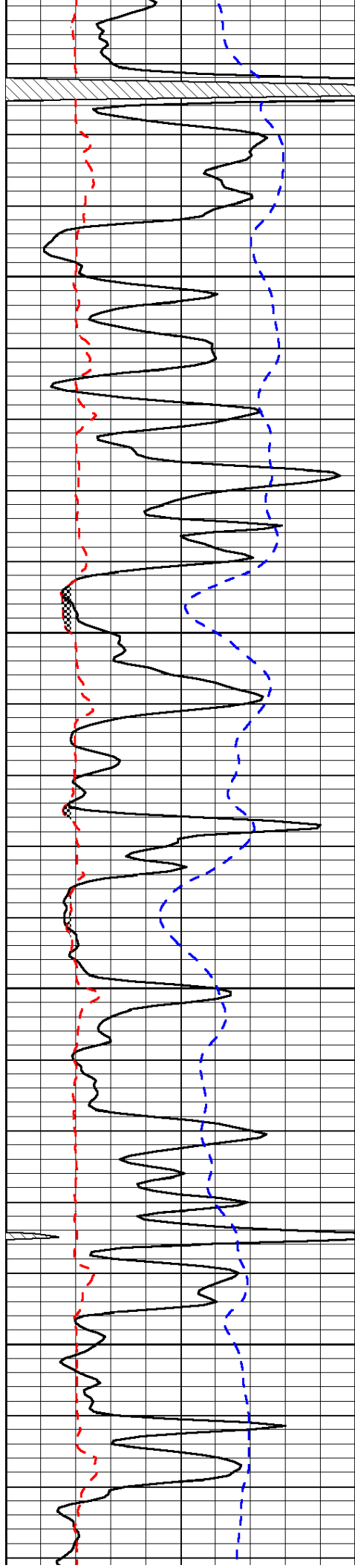
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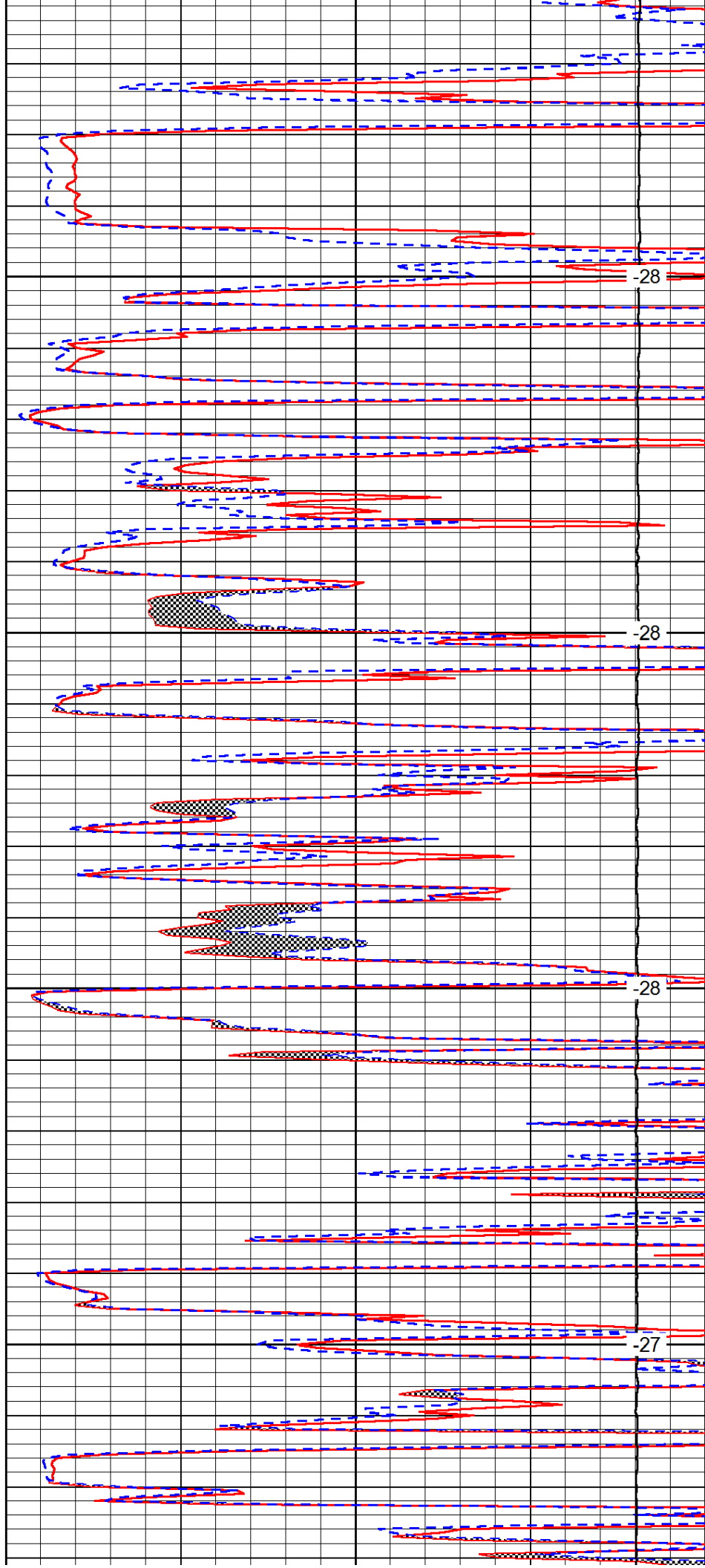


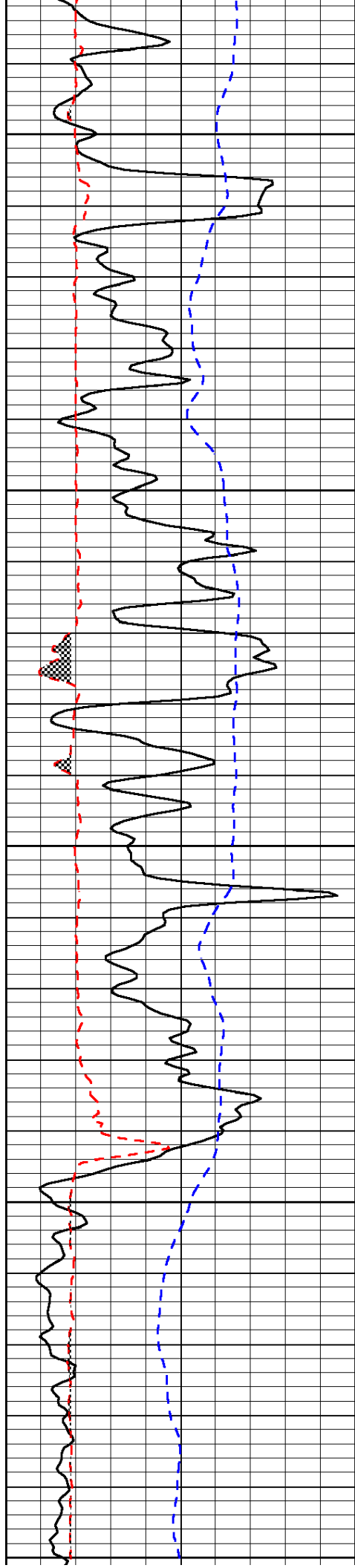
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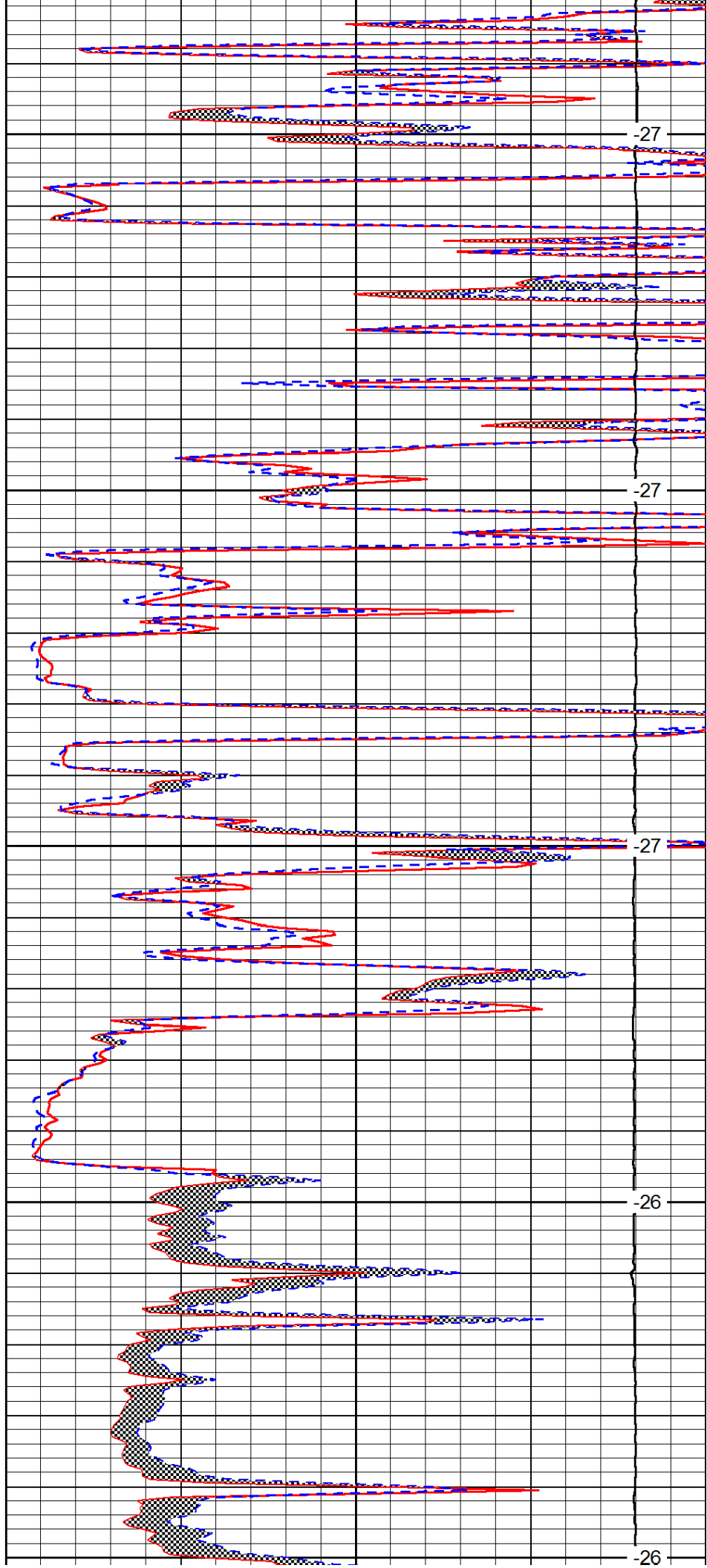
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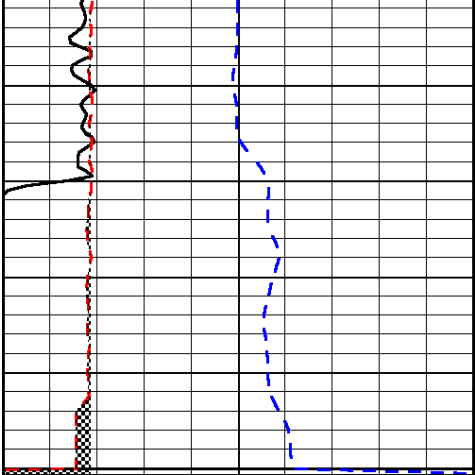
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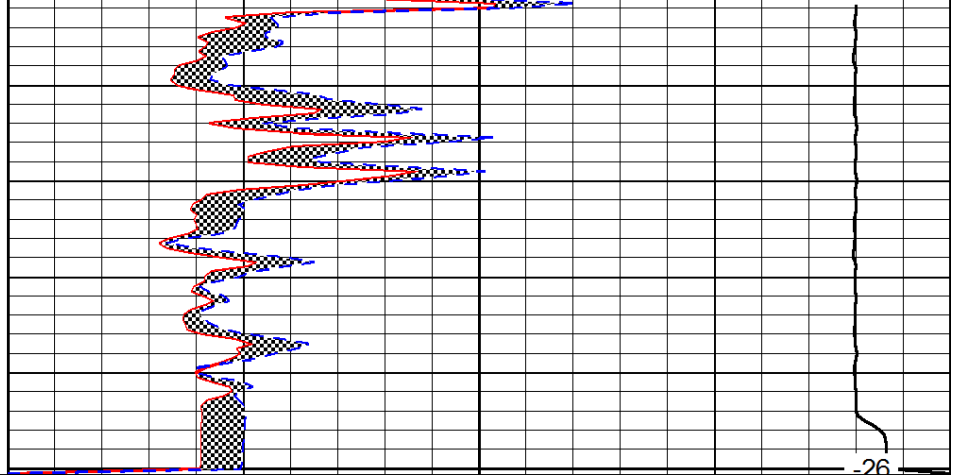
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0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

4000



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

LSPD