



Microresistivity Log

Pioneer Energy Services

API No.

15-009-25,846-00-00

Company American Warrior, Inc.

Well Eberhardt #2-24

Field Chase-Silica

County Barton State Kansas

Location SW NE SW NW
1930' FNL & 957' FWL

Sec: 24 Twp: 19S Rge: 11W

Permanent Datum Ground Level Elevation 1772
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
DIL/BHCS
Elevation
K.B. 1780
D.F. 1772
G.L. 1772

Date 7/11/2013

Run Number Two

Depth Driller 3400

Depth Logger 3401

Bottom Logged Interval 3400

Top Log Interval 2800

Casing Driller 8.625 @ 321

Casing Logger 312

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 7400

Density / Viscosity 9.0 45

pH / Fluid Loss 10.5 10.2

Source of Sample Flowline

Rm @ Meas. Temp 0.25 @ 76

Rmf @ Meas. Temp 0.19 @ 76

Rmc @ Meas. Temp 0.34 @ 76

Source of Rmf / Rmc Charts

Rm @ BHT 0.17 @ 110

Operating Rig Time 4 1/2 Hours

Max Rec. Temp. F 110

Equipment Number 15

Location Hays

Recorded By D. Kerr

Witnessed By Wyatt Urban

<<< Fold Here >>>

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.

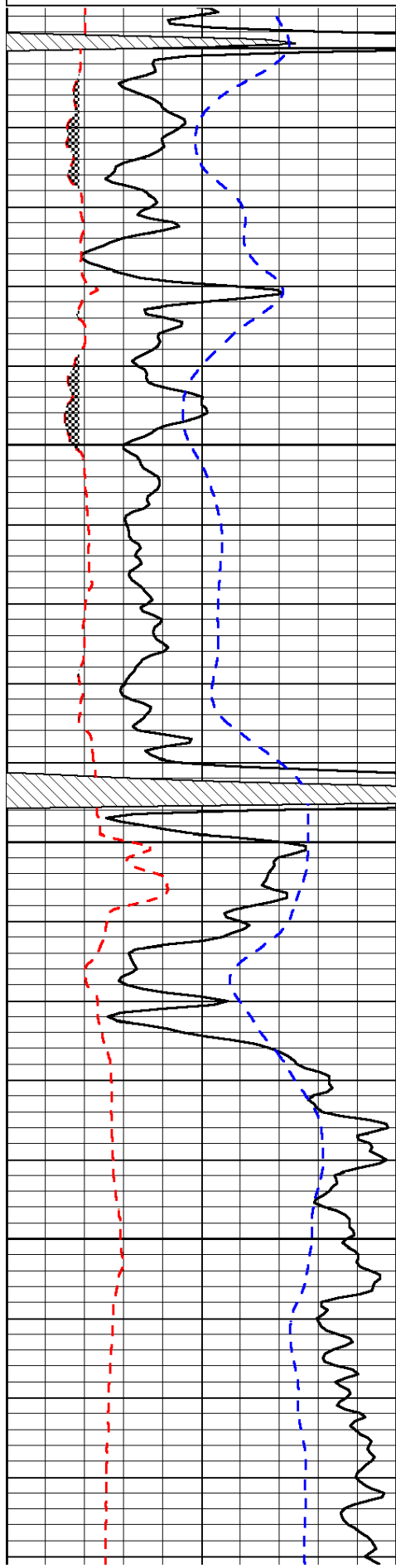
Comments

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

Ellinwood KS, 1 North on Hirsh RD,
4 East to 150 RD, 1/2 North, East Into

Database File: c:\warrior\data\amwar_eberhardt #2-24\amwarrior_eberhardt_2_24hd.db
Dataset Pathname: DIL\awstk
Presentation Format: micro
Dataset Creation: Thu Jul 11 09:07:23 2013
Charted by: Depth in Feet scaled 1:240

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



2800

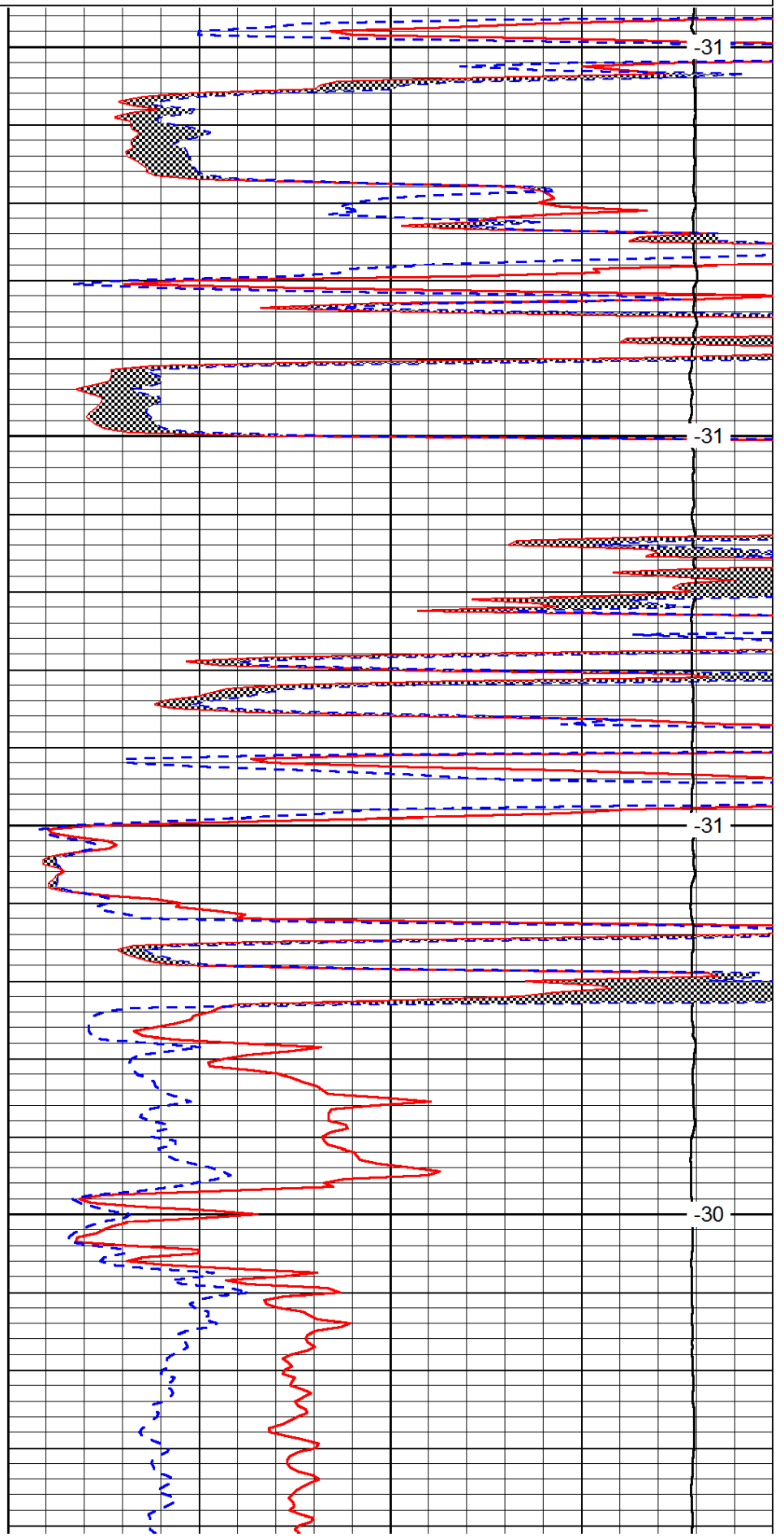
2850

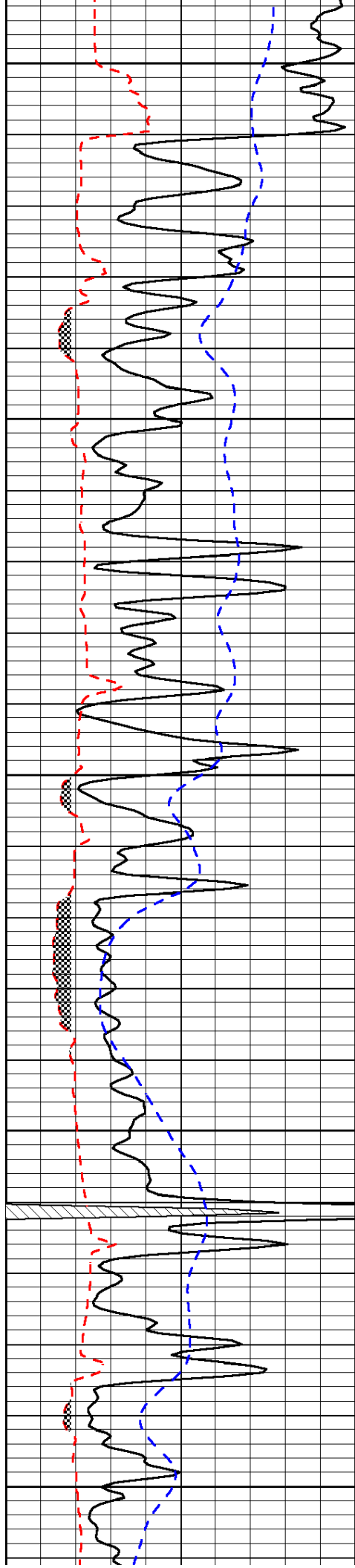
2900

2950

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

LSPD





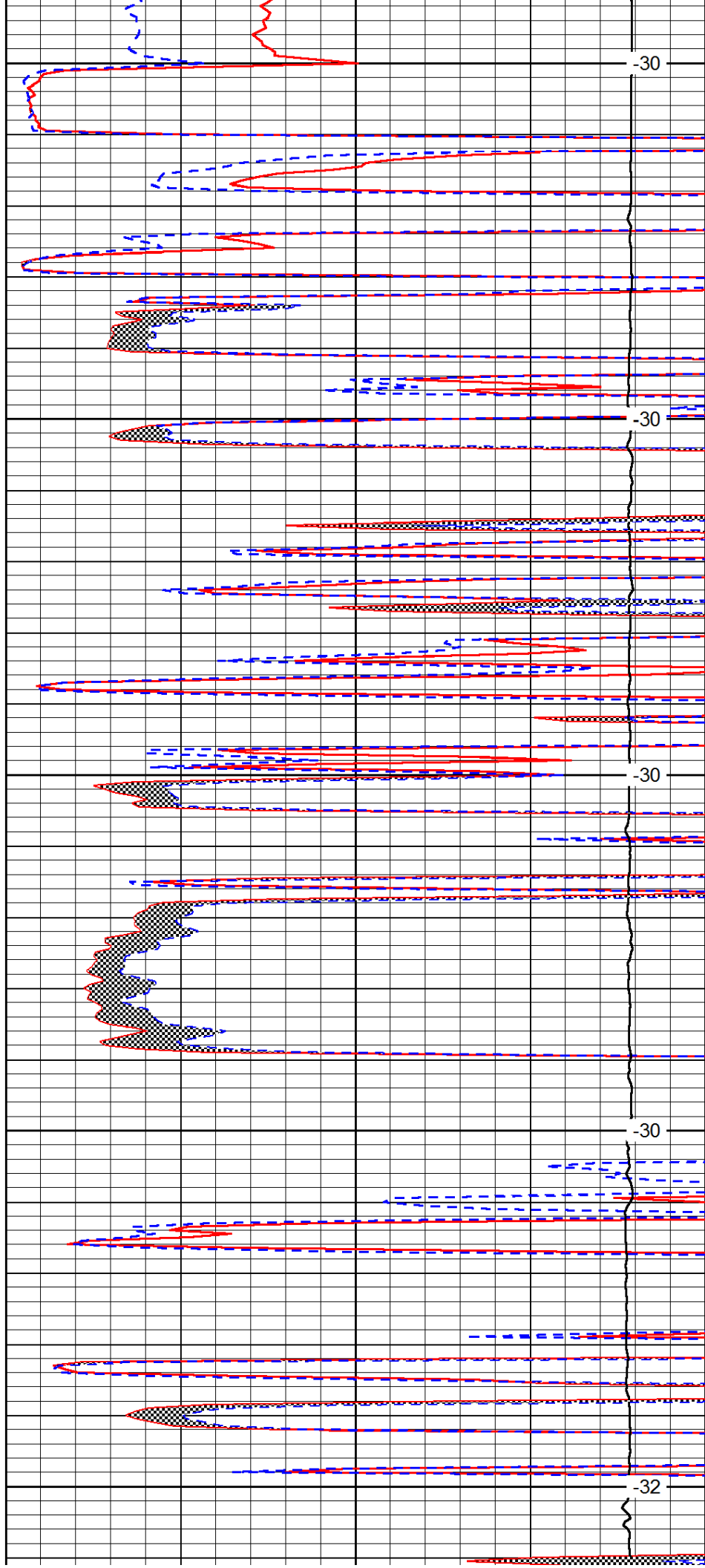
3000

3050

3100

3150

3200



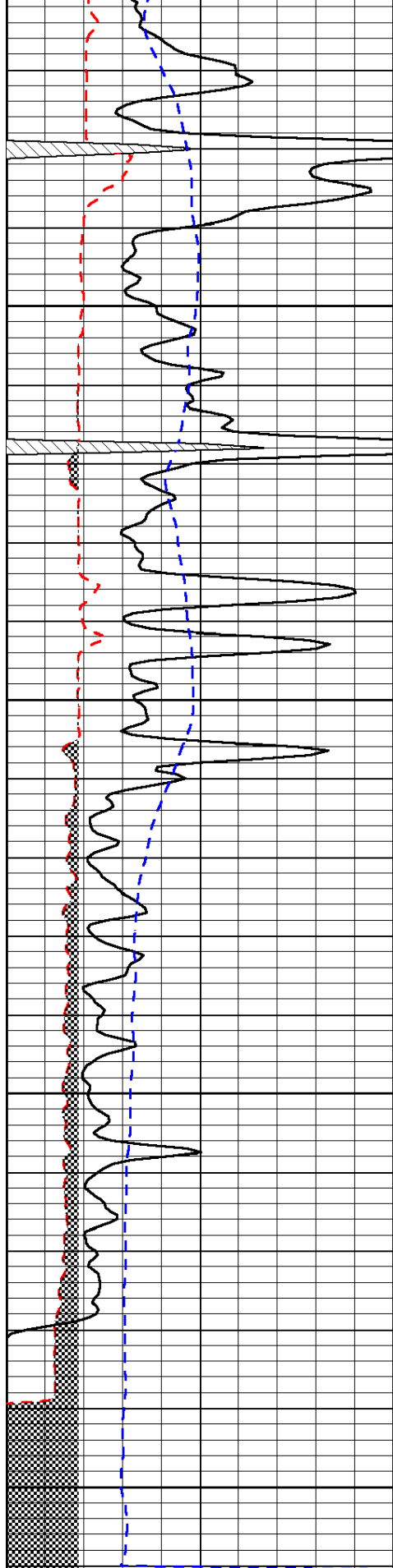
-30

-30

-30

-30

-32



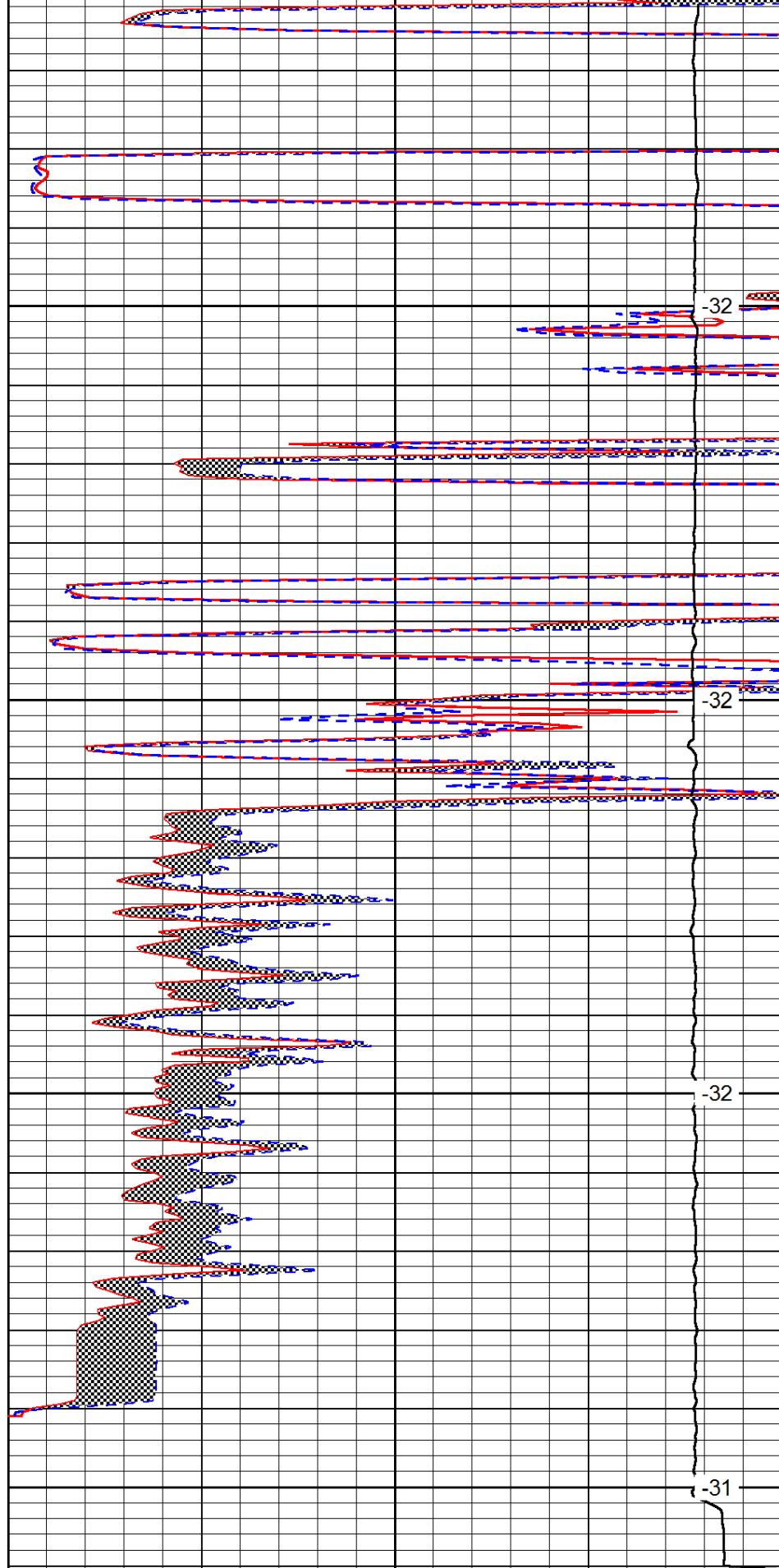
0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

3250

3300

3350

3400



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

LSPD

