



Pioneer Energy Services

Microresistivity Log

15-159-22,721-00-00

API No.

Company **American Warrior, Inc.**

Well **Vokland No.2-32**

Field **Chase-Silica**

County **Rice** State **Kansas**

Location **1050' FSL & 2292' FWL**

Sec: **32** Twp: **18S** Rge: **9W**

Permanent Datum **Ground Level** Elevation **1712**

Log Measured From **Kelly Bushing** 8 Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing**

Other Services
CNL/CDL
DIL/BHCS

Elevation

K.B. 1720
D.F. 1712
G.L. 1712

Date **12/29/2012**

Run Number **Two**

Depth Driller **3340**

Depth Logger **3338**

Bottom Logged Interval **3337**

Top Log Interval **2600**

Casing Driller **8.625 @ 335**

Casing Logger **327**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity,ppm CL **7.600**

Density / Viscosity **9.1 46**

pH / Fluid Loss **10.5 8.8**

Source of Sample **Flowline**

Rm @ Meas. Temp **.45 @ 41**

Rmf @ Meas. Temp **.34 @ 41**

Rmc @ Meas. Temp **.61 @ 41**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.17 @ 109**

Operating Rig Time **4 Hours**

Max Rec. Temp. F **109**

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.pioneerenergy.com
785 625 3858

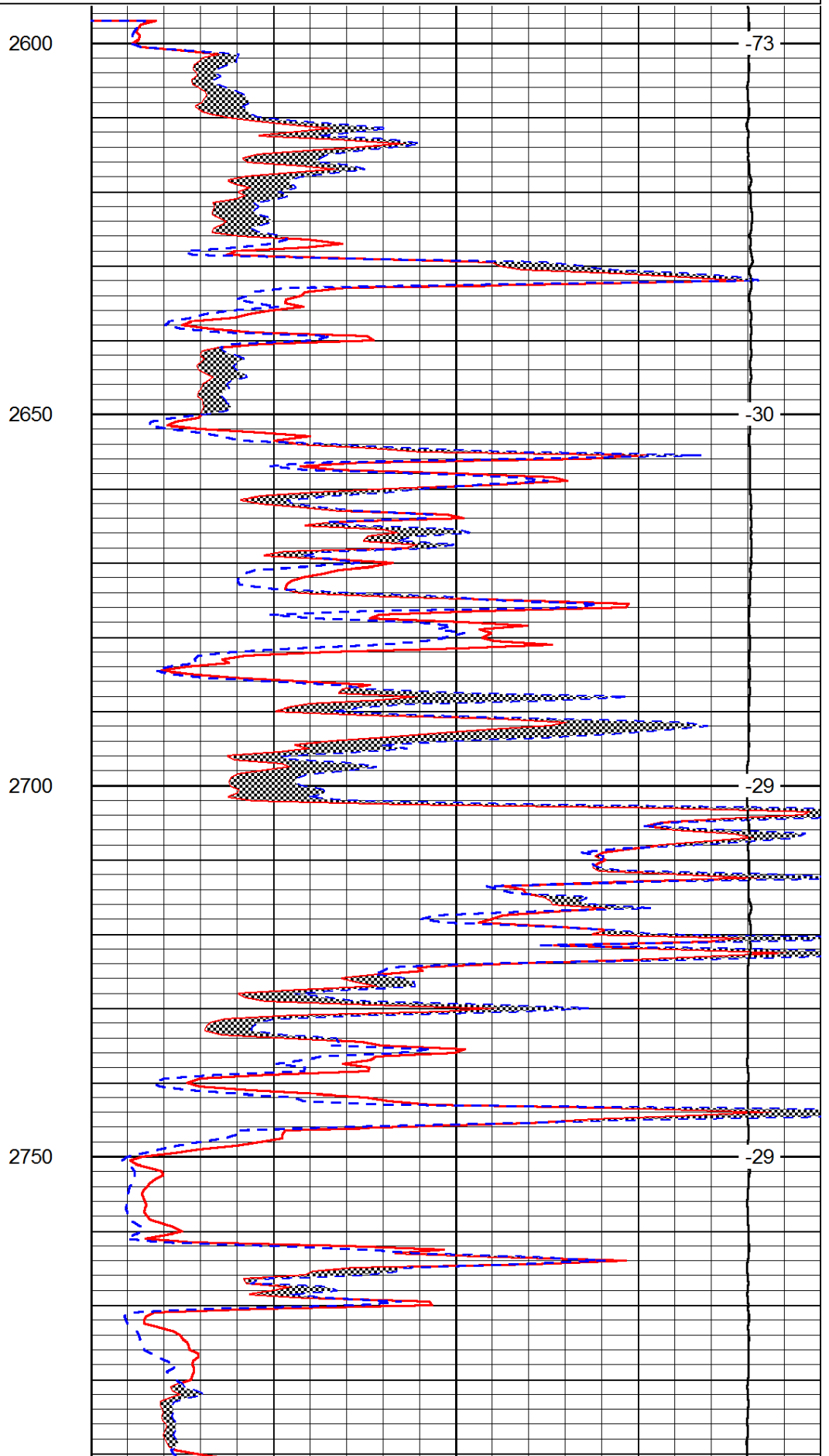
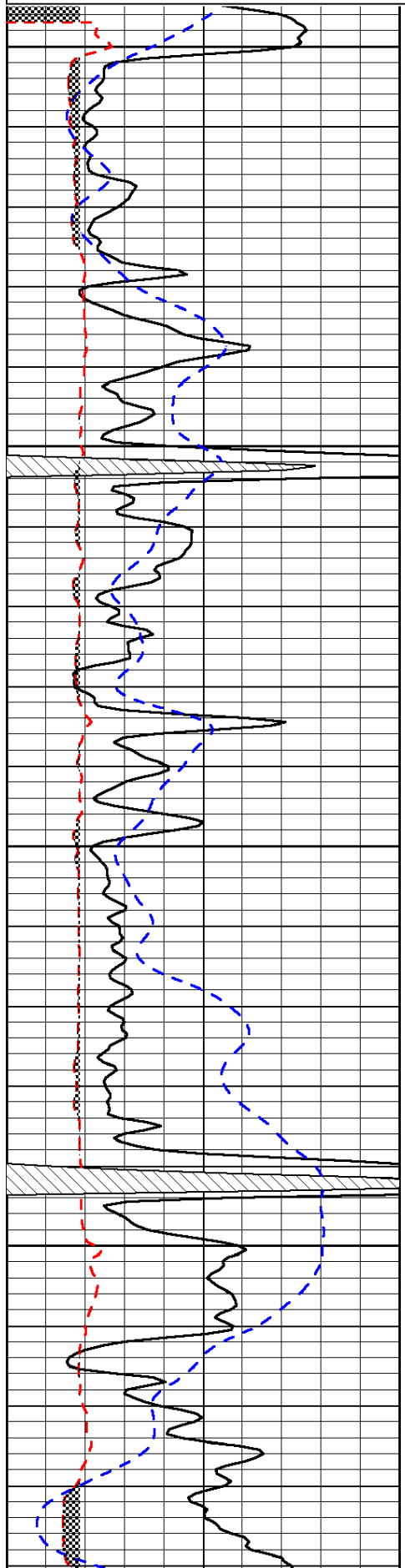
Chase KS, 5 1/2 N, 1/2 E, N Into

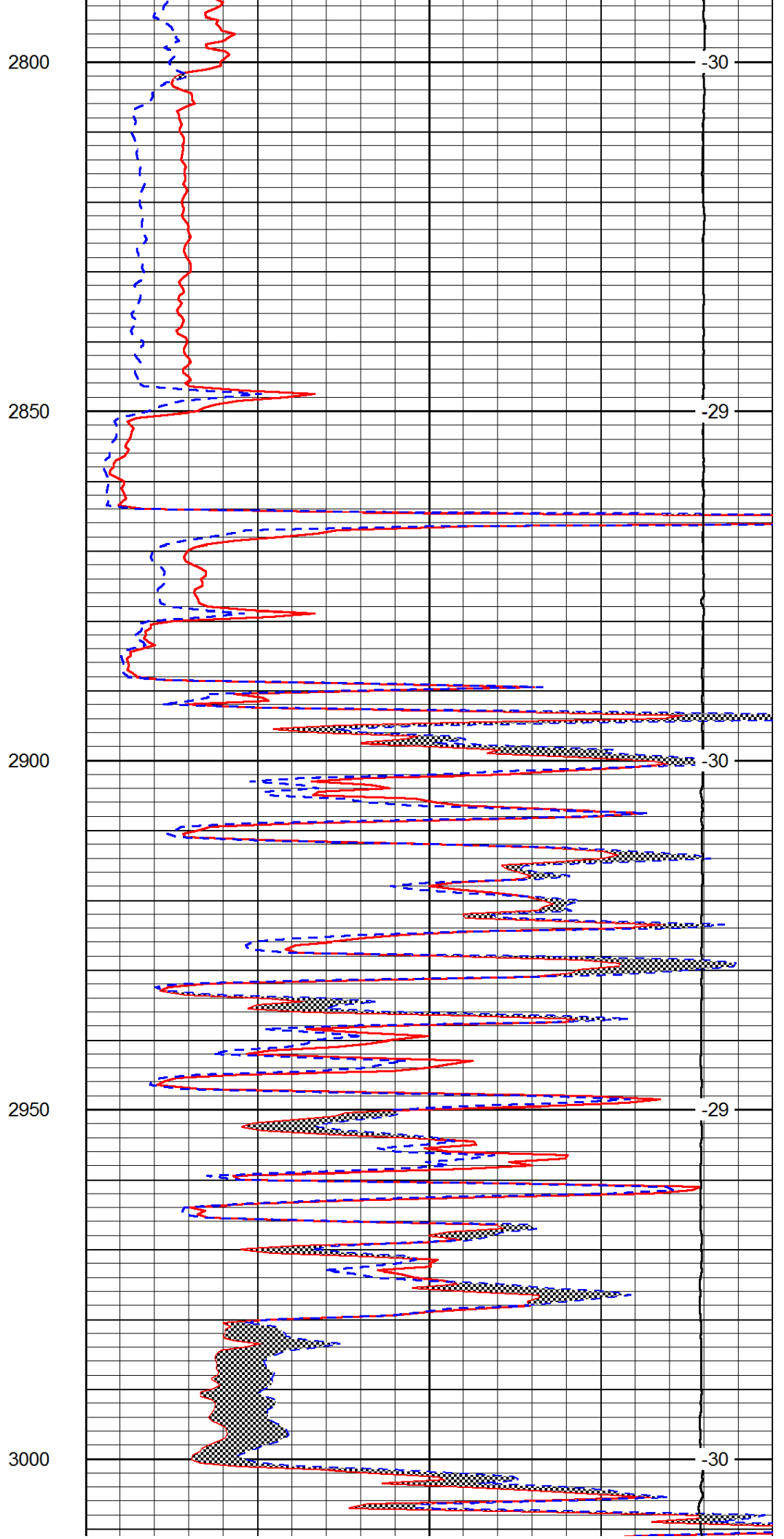
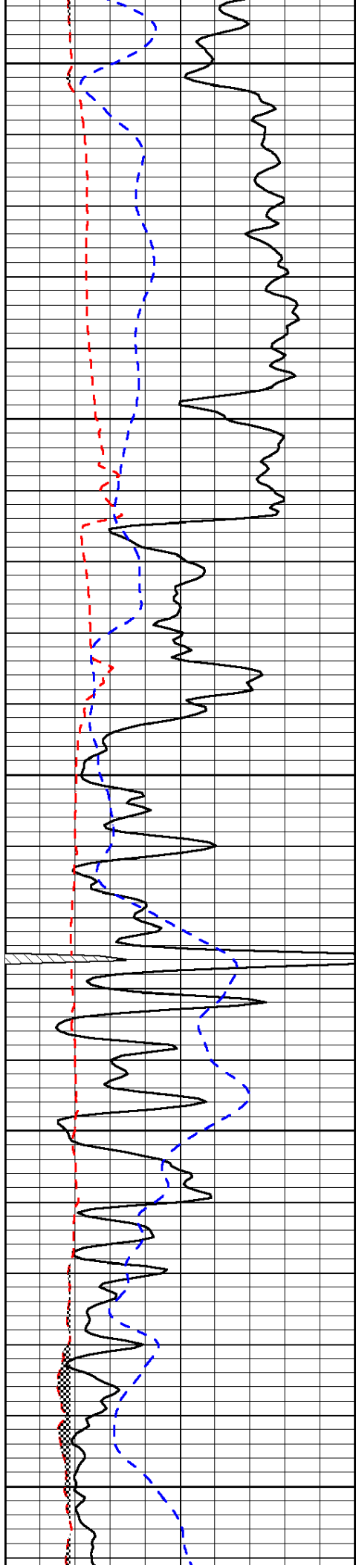
Database File: c:\warrior\data\amwar_vokland no.2-32\awhd.db
Dataset Pathname: dil/awstk
Presentation Format: micro
Dataset Creation: Sat Dec 29 16:56:24 2012
Charted by: Depth in Feet scaled 1:240

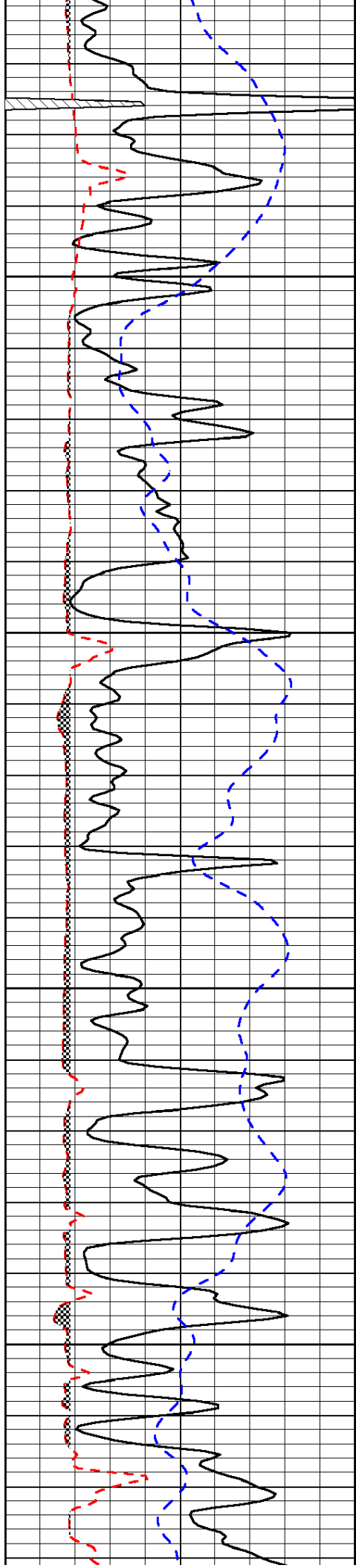
0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

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

LSPD





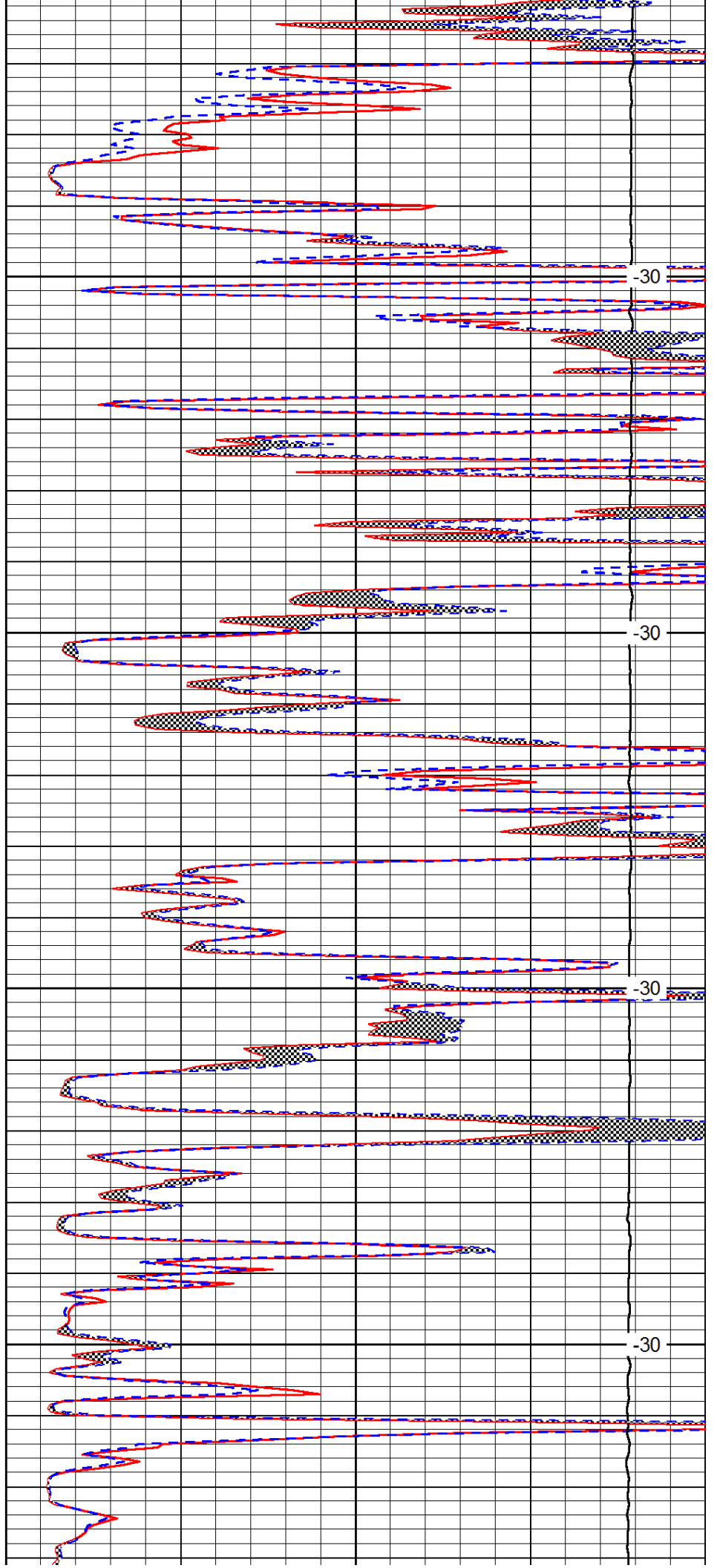


3050

3100

3150

3200

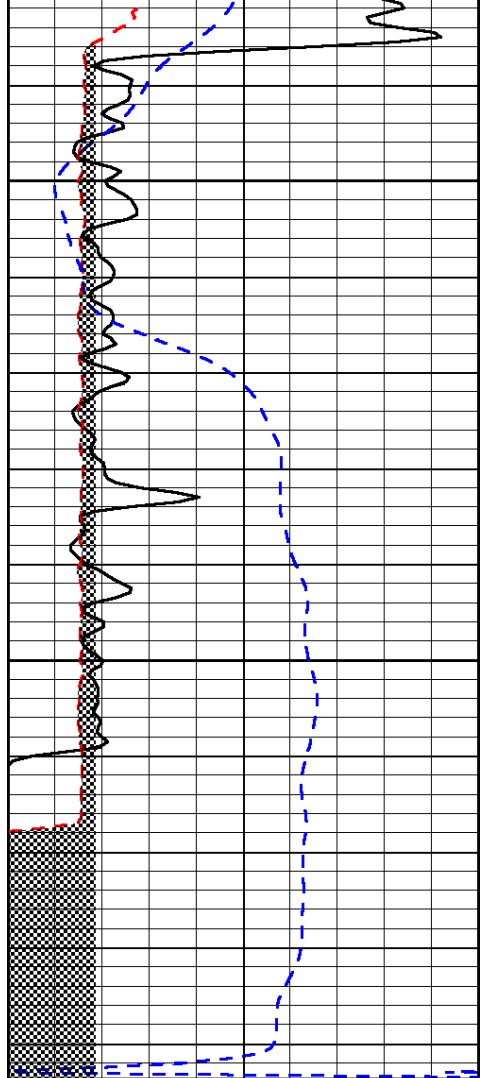


-30

-30

-30

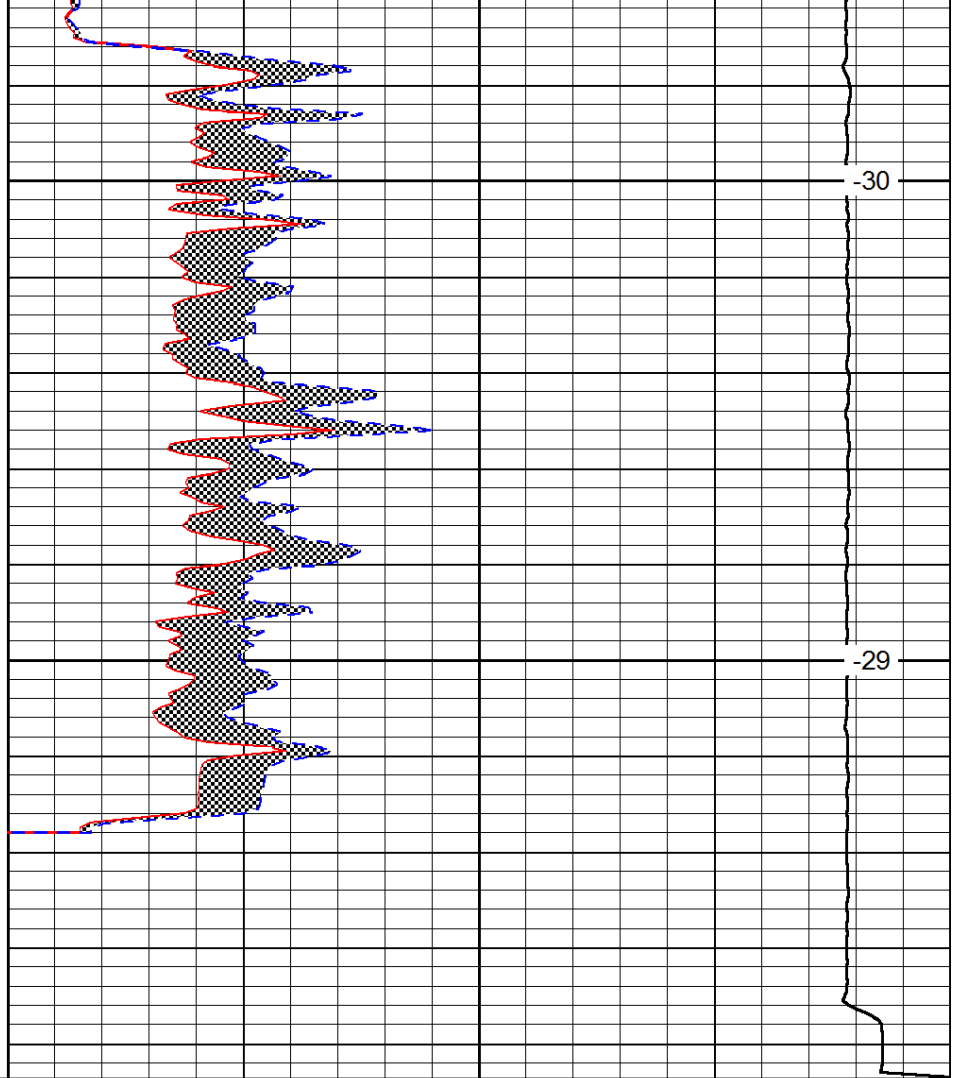
-30



3250

3300

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



-30

-29

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

LSPD