



Pioneer Energy Services

# Microresistivity Log

15-179-21,333-00-00

API No.

Company **Dennis F. Roberts**

Well **Werth #7**

Field **Fuller NE**

County **Sheridan** State

**Kansas**

Location **3109' FSL & 3914' FEL**

Other Services  
CNL/CDL  
DIL

Sec: **2** Twp: **10S** Rge: **26W**

Permanent Datum **Ground Level** Elevation **2586**

Log Measured From **Kelly Bushing** 5 Ft. Above Perm. Datum

Elevation  
K.B. 2591  
D.F. 2586  
G.L. 2586

Date **5/15/2013**

Run Number **Two**

Depth Driller **4100**

Depth Logger **4101**

Bottom Logged Interval **4100**

Top Log Interval **3600**

Casing Driller **8.625 @ 346**

Casing Logger **345**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity,ppm CL **1,000**

Density / Viscosity **9.1 60**

pH / Fluid Loss **10.0 8.0**

Source of Sample **Flowline**

Rm @ Meas. Temp **1.2 @ 71**

Rmf @ Meas. Temp **.9 @ 71**

Rmc @ Meas. Temp **1.62 @ 71**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.73 @ 117**

Operating Rig Time **4 Hours**

Max Rec. Temp. F **117**

Equipment Number **17**

Location **Hays**

Recorded By **C. Desai**

Witnessed By **Bob Hopkins**

Dennis Roberts

<<< 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.pioneerenergy.com  
785 625 3858

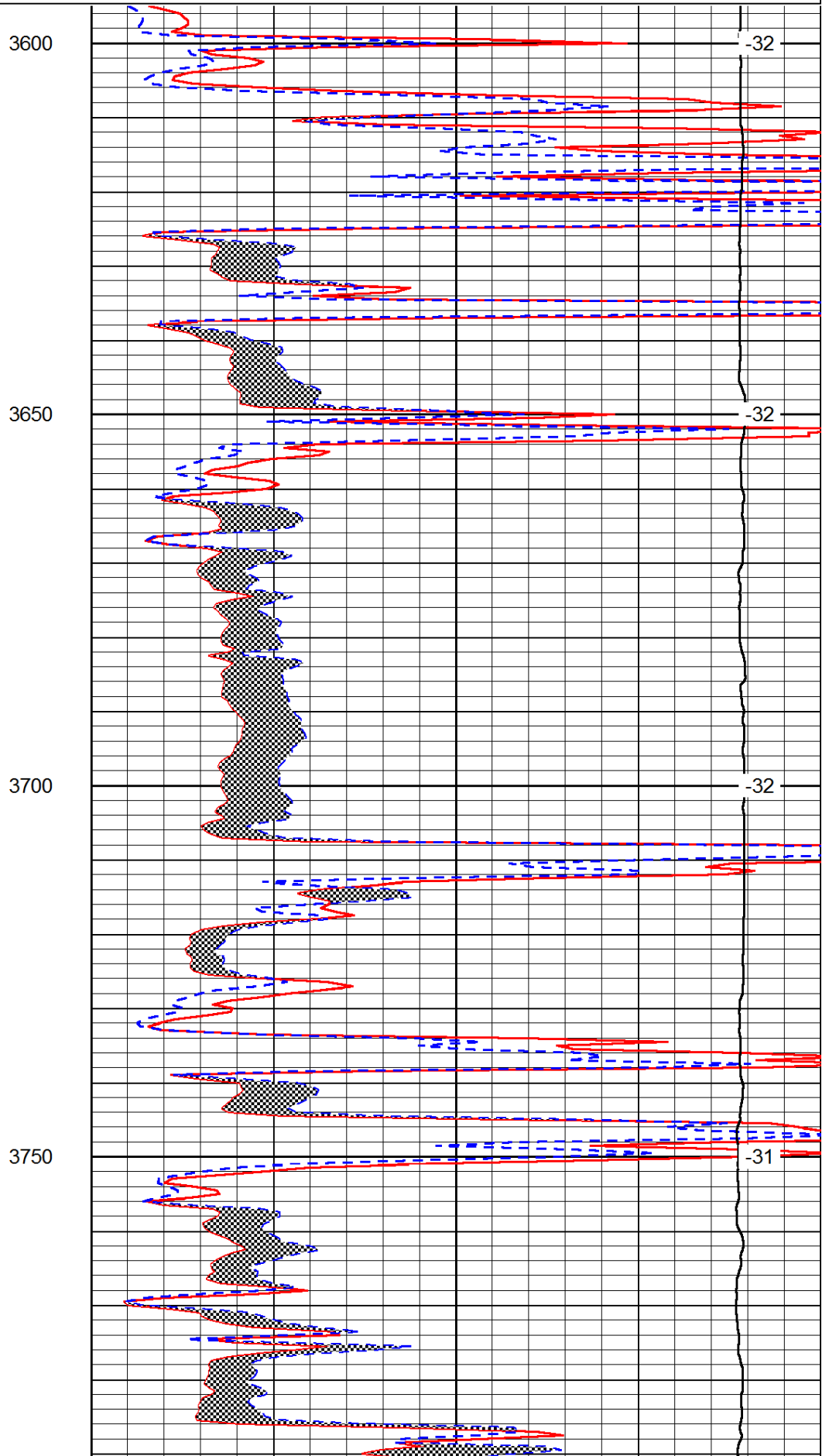
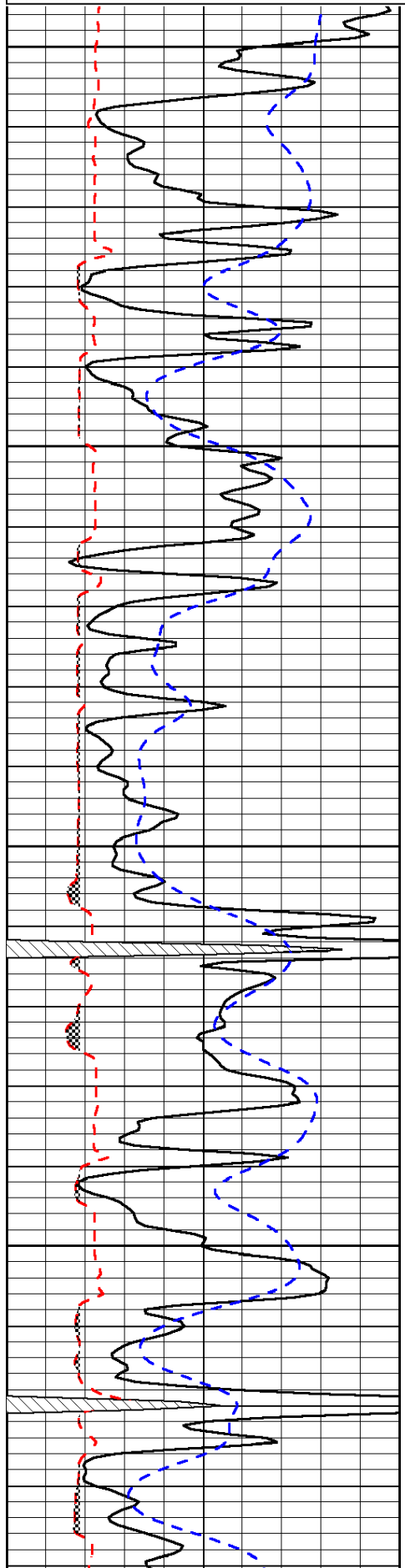
St. Peter KS, 5 W,  
1 N, 3/4 W, S Into

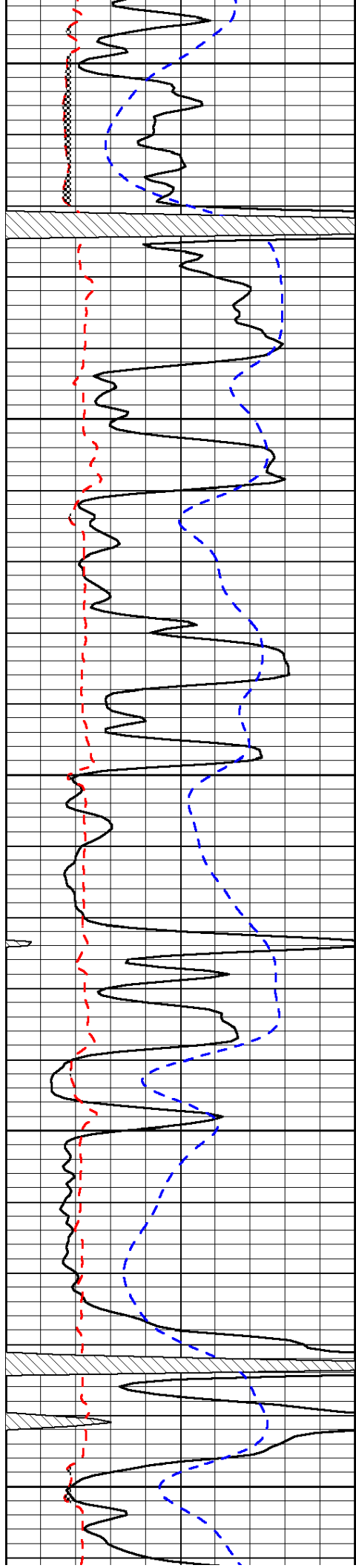
Database File: c:\warrior\data\dennis f. roberts\_werth #7\drhd.db  
Dataset Pathname: dil/drstk  
Presentation Format: micro  
Dataset Creation: Wed May 15 13:55:08 2013  
Charted by: Depth in Feet scaled 1:240

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





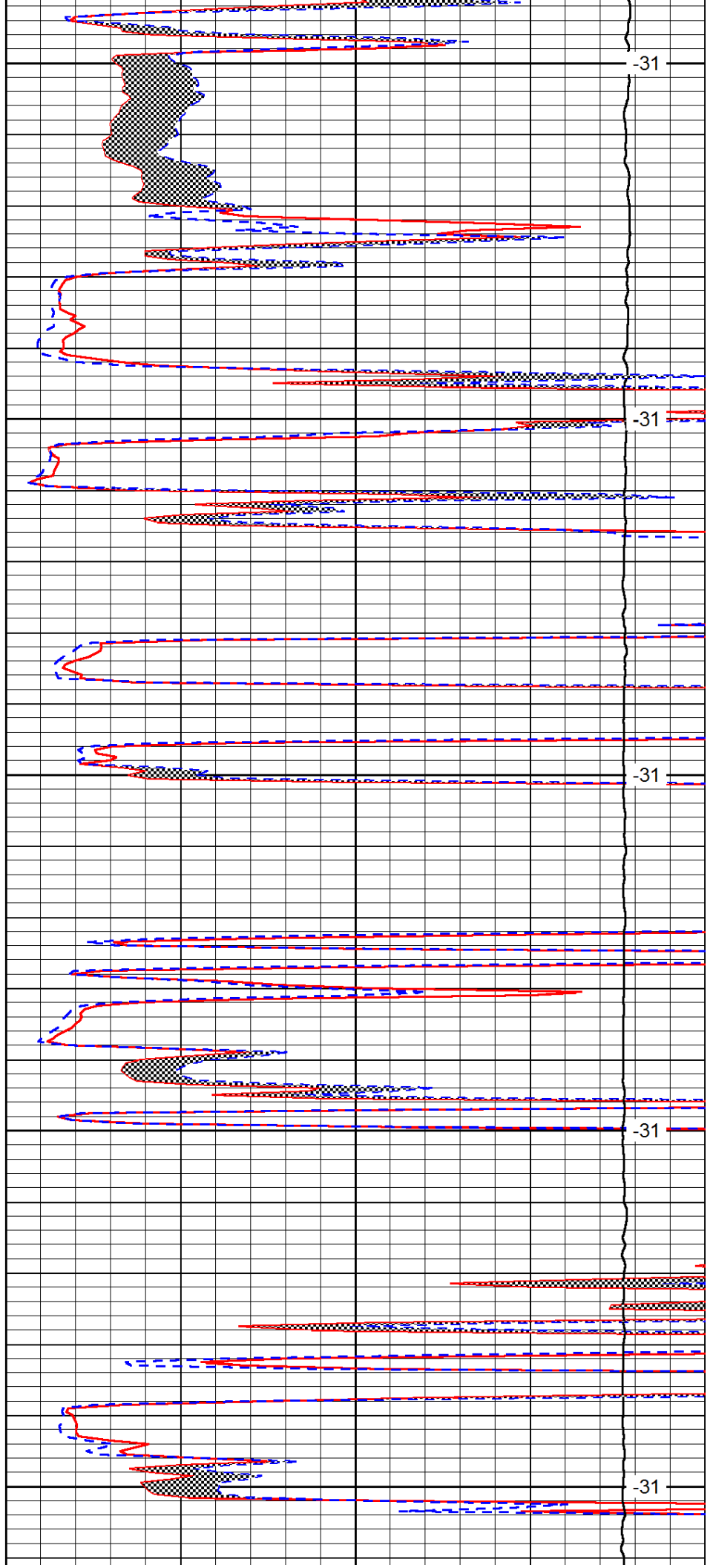
3800

3850

3900

3950

4000



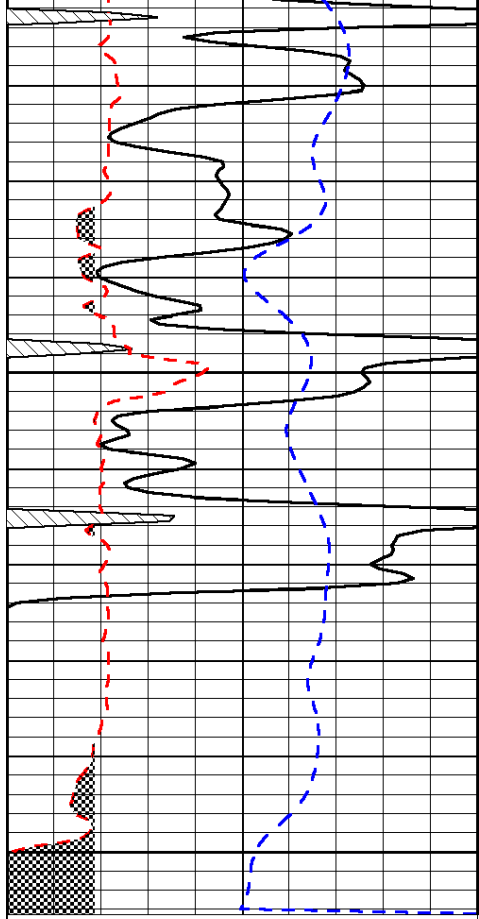
-31

-31

-31

-31

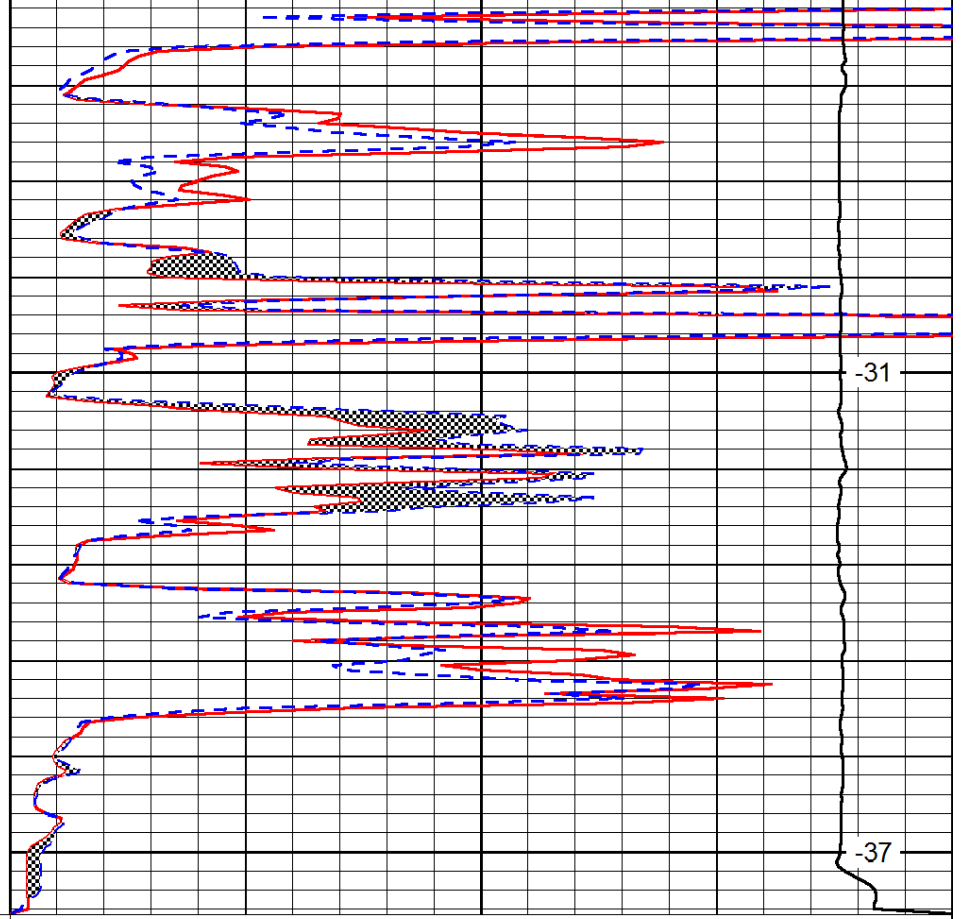
-31



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

4050

4100



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

-31

-37

LSPD