



Pioneer Energy Services

Microresistivity Log

15-039-21,161-00-00

API No.

Company **Murfin Drilling Company, Inc.**

Well **Phillips "A" No. 1-22**

Field **None**

County **Decatur** State

Kansas

Location **1,800' FNL & 1,800' FEL**

Sec: **22** Twp: **4 S** Rge: **30 W**

Other Services
CNL/CDL
DIL/BHCS

Elevation

K.B. 2743
D.F. 2738
G.L. 2738

Permanent Datum **Ground Level** Elevation **2738**
Log Measured From **Kelly Bushing** 5 Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

Date **10/18/2012**

Run Number **Two**

Depth Driller **4450**

Depth Logger **4451**

Bottom Logged Interval **4450**

Top Log Interval **3500**

Casing Driller **8.625 @ 221**

Casing Logger **216**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **1,000**

Density / Viscosity **9.1 69**

pH / Fluid Loss **11.5 4.8**

Source of Sample **Flowline**

Rm @ Meas. Temp **1.20 @ 70**

Rmf @ Meas. Temp **.90 @ 70**

Rmc @ Meas. Temp **1.62 @ 70**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.70 @ 121**

Operating Rig Time **5 Hours**

Max Rec. Temp. F **121**

Equipment Number **15**

Location **Hays**

Recorded By **D.Kerr**

Witnessed By **Rocky Milford**

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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

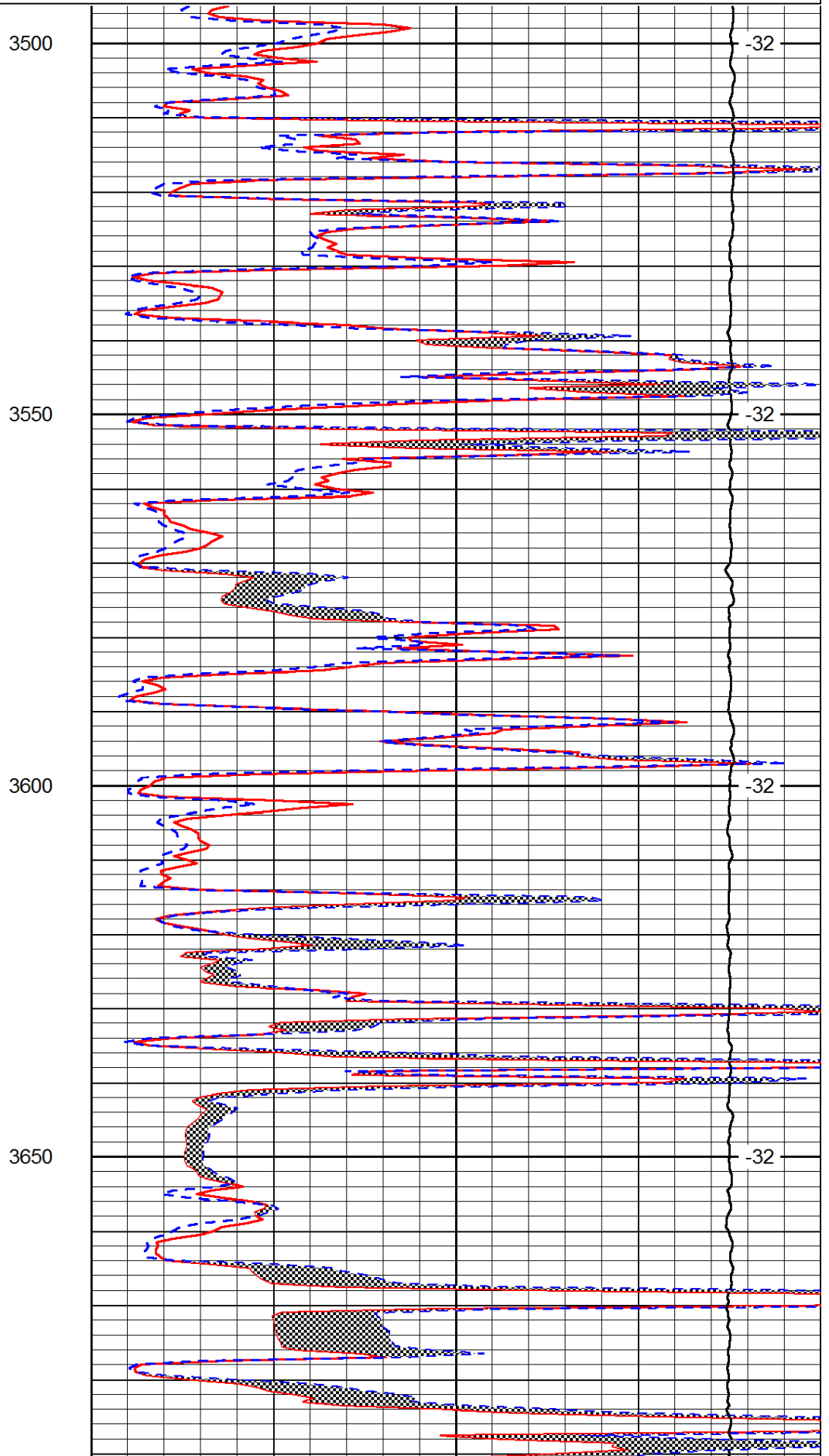
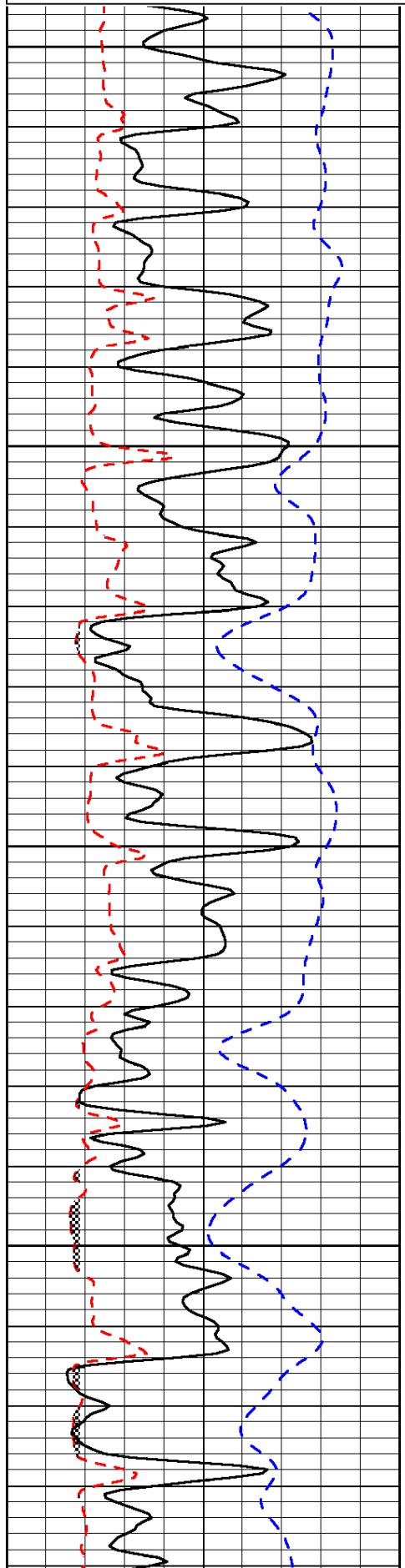
Selden KS, East to Hwy Junction 83 & Hwy 23,
7 1/2 North to 11 S Rd., 8 West, 1 3/4 North,
East Into, 1 Mile Into

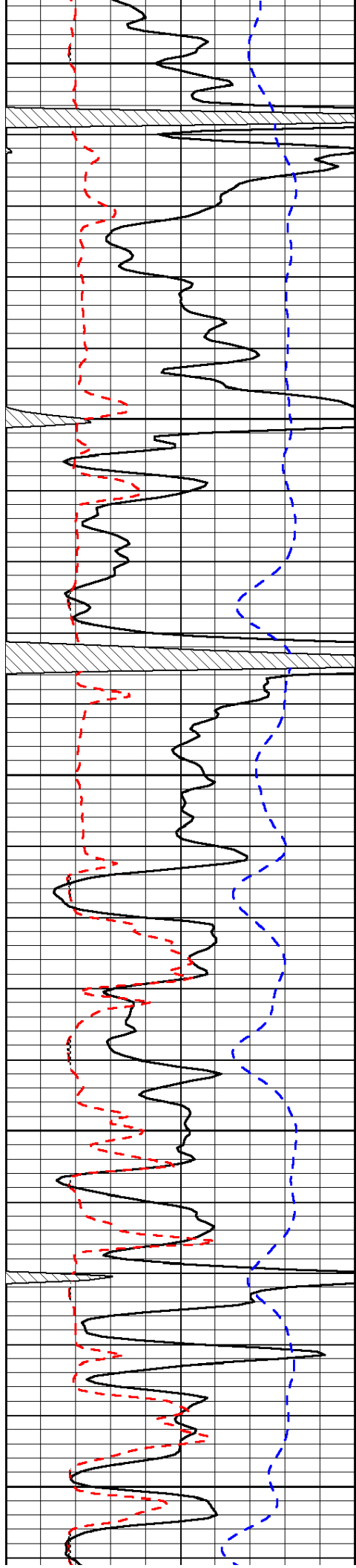
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Dataset Pathname: DIL\murfstk
Presentation Format: micro
Dataset Creation: Fri Oct 19 00:08:57 2012
Charted by: Depth in Feet scaled 1:240

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





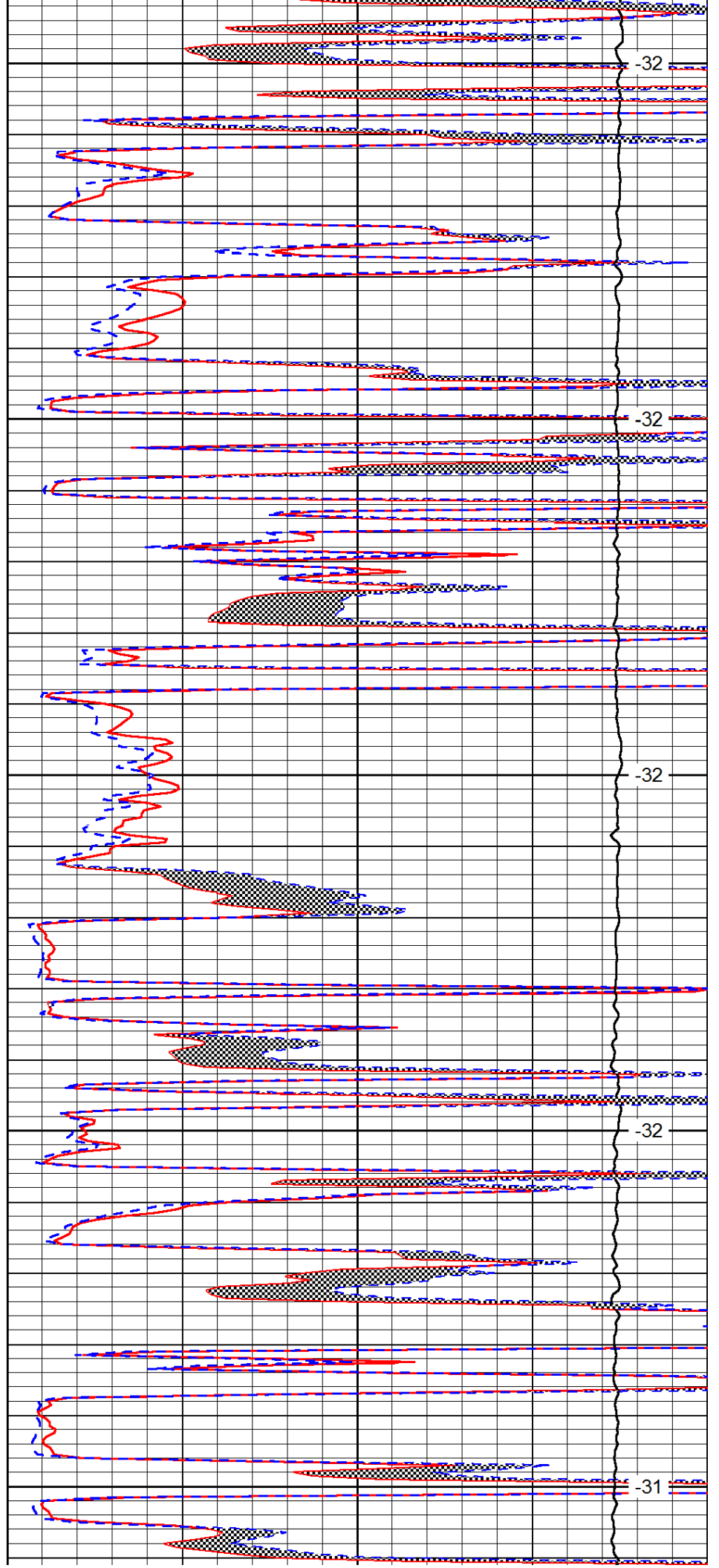
3700

3750

3800

3850

3900



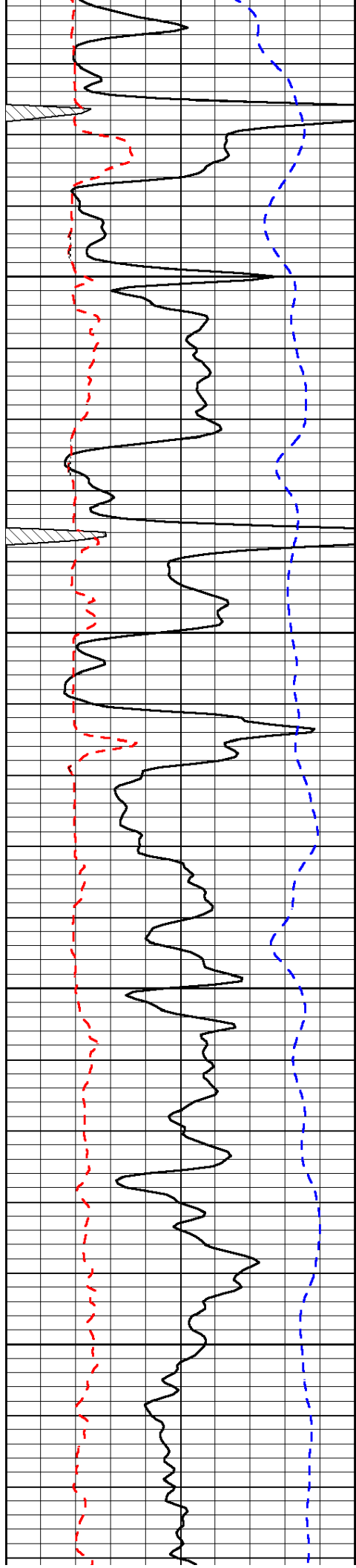
-32

-32

-32

-32

-31

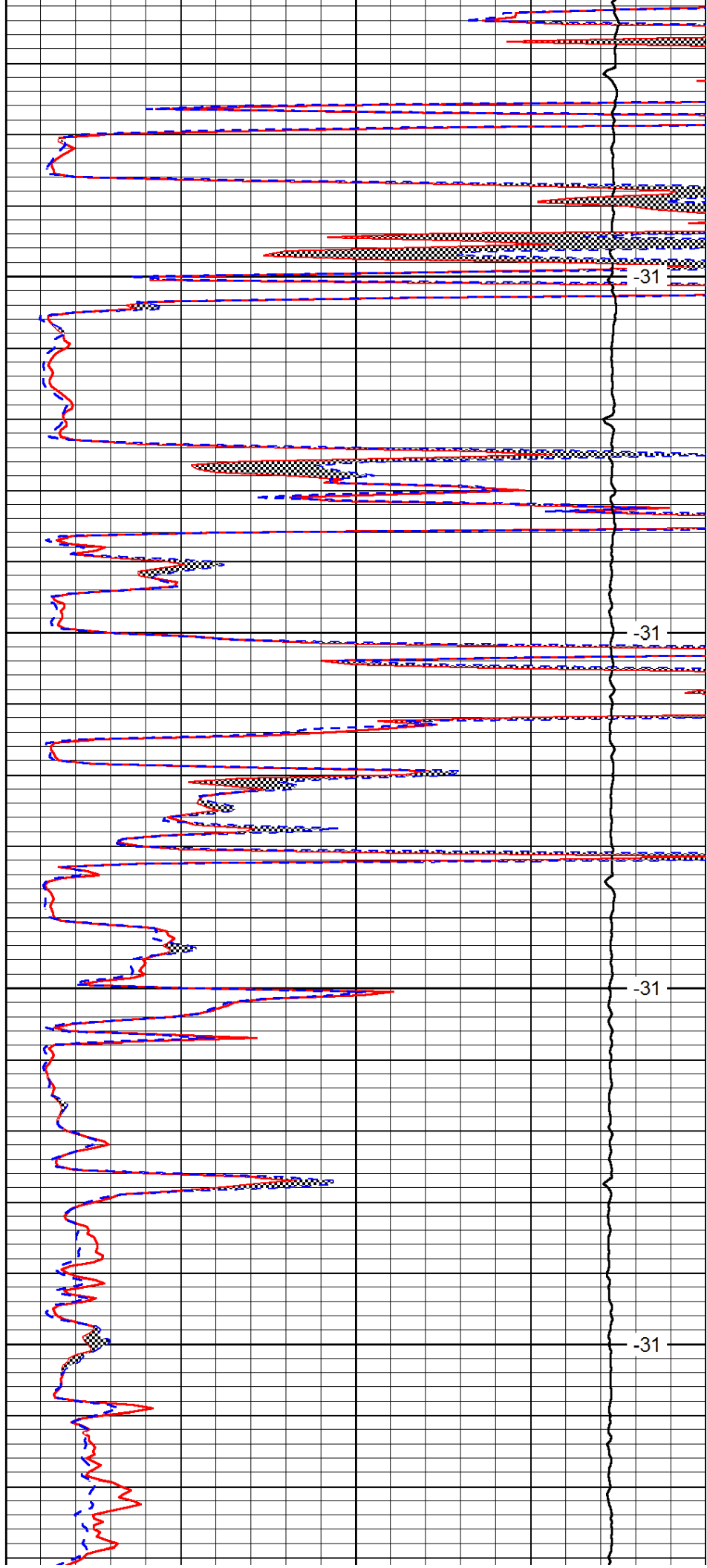


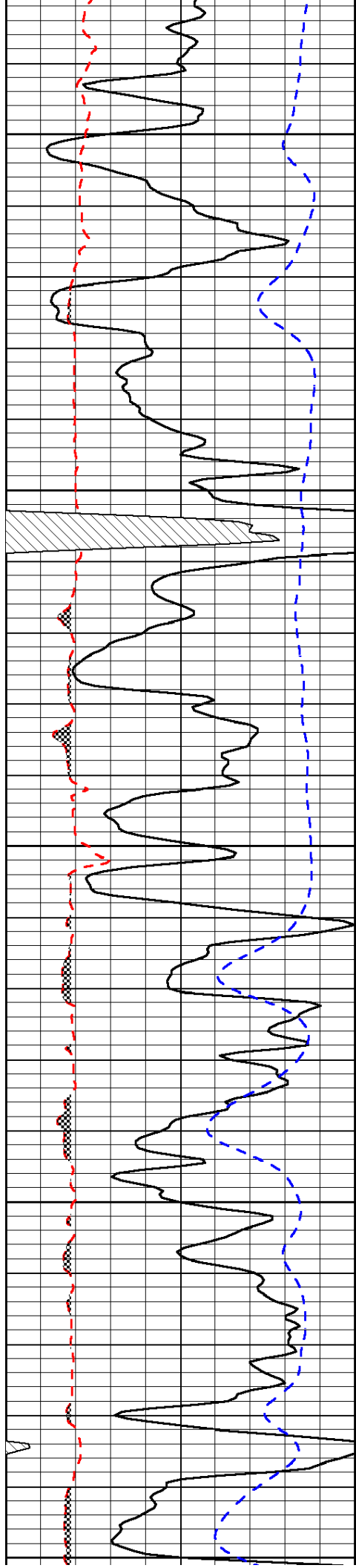
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4000

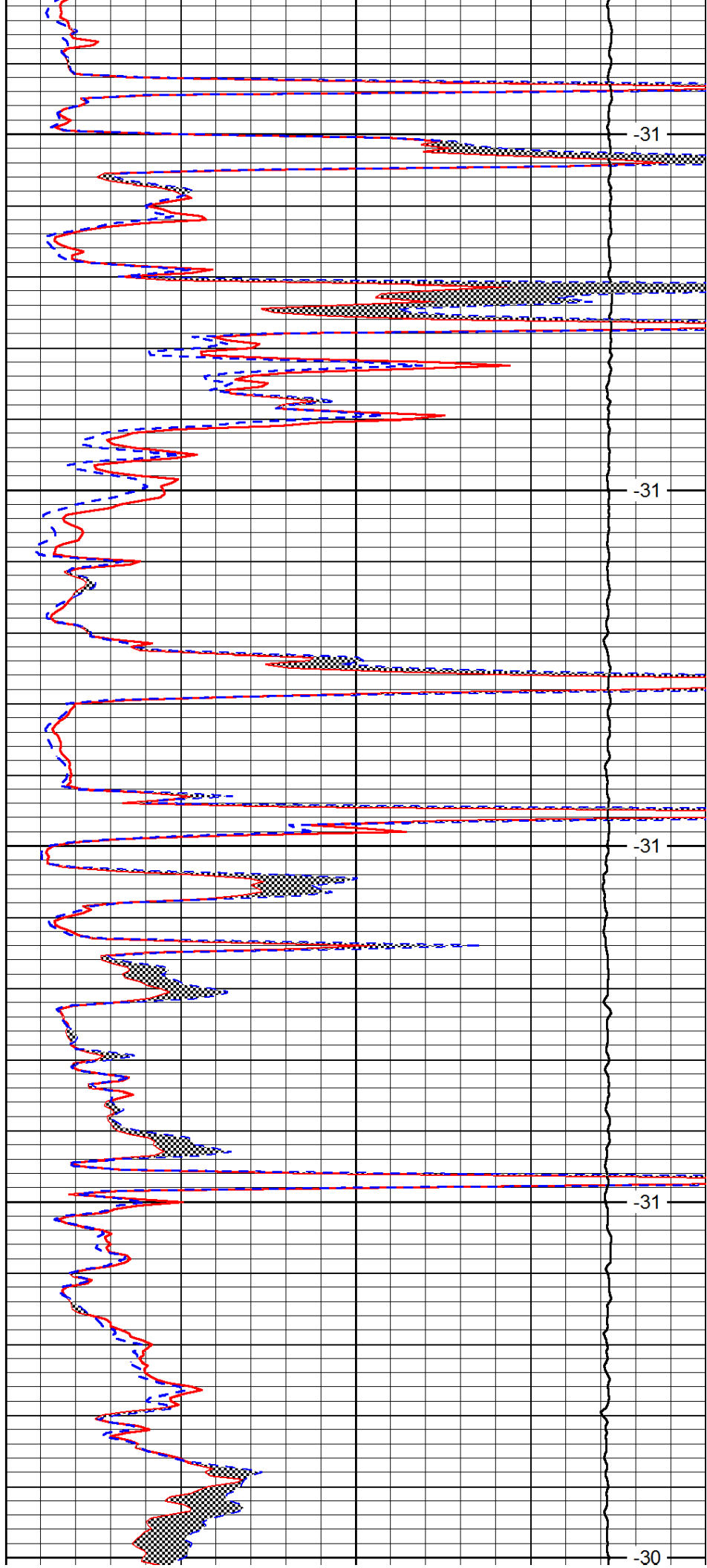
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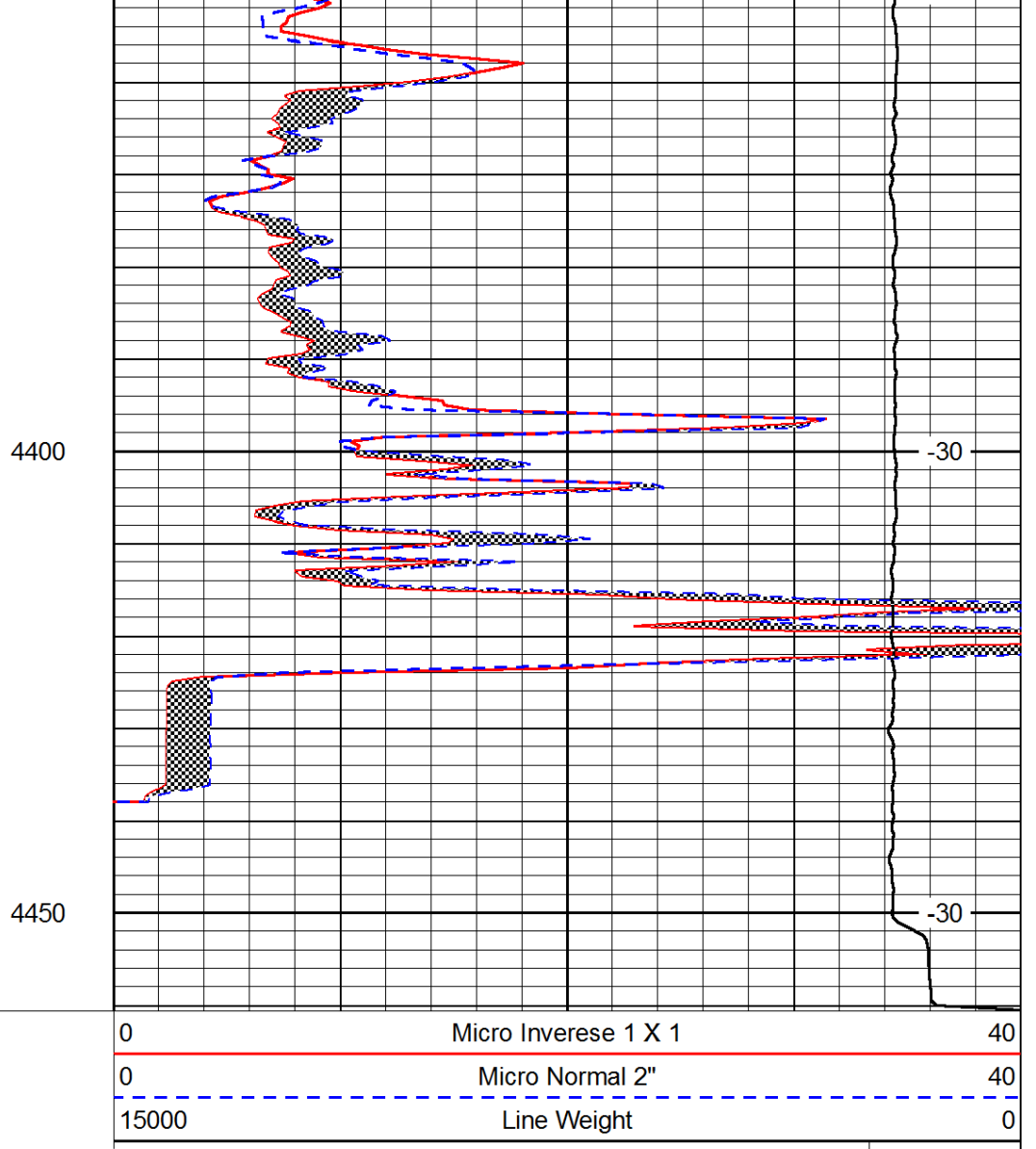
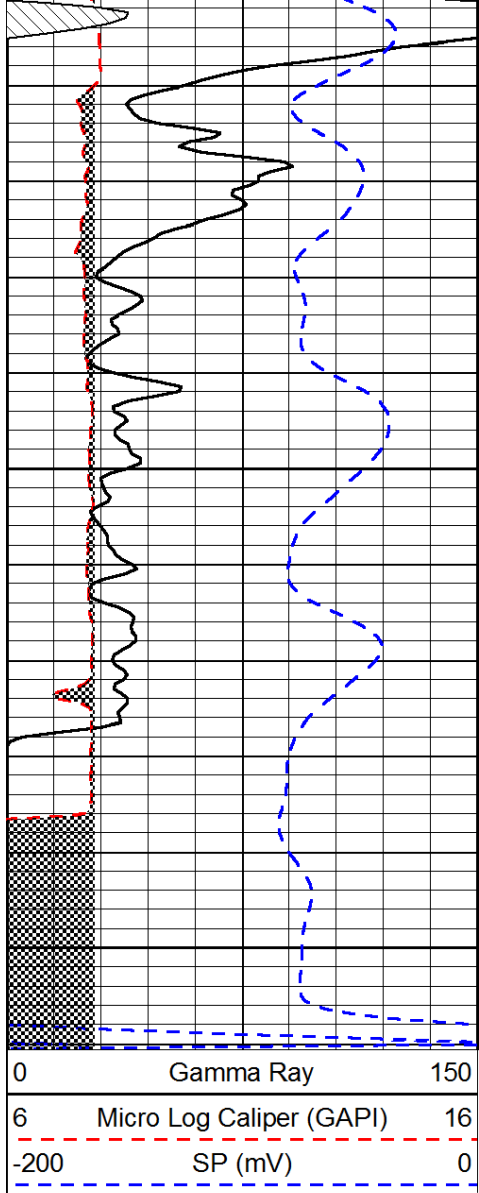




4150
4200
4250
4300
4350



-31
-31
-31
-31
-30



LSPD