



Pioneer Energy Services

Microresistivity Log

Company **Culbreath Oil & Gas, Inc.**

Well **Mader No. 1-12**

County **Sheridan** State **Kansas**

15-179-21,362-00-00

Location **990' FNL & 990' FEL**

Sec: **12** Twp: **10s** Rge: **26w**

Other Services
CNL/CDL
DIL

Permanent Datum **Ground Level** Elevation **2544**

Log Measured From **Kelly Bushing** **7** Ft. Above Perm. Datum

Drilling Measured From **Kelly Bushing**

Date **7/4/2014**

Run Number **Two**

Depth Driller **4100**

Depth Logger **4096**

Bottom Logged Interval **4095**

Top Log Interval **3600**

Casing Driller **8,625 @ 262**

Casing Logger **263**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **5000**

Density / Viscosity **9.4 44**

pH / Fluid Loss **9.0 9.6**

Source of Sample **Flowline**

Rm @ Meas. Temp	.24 @ 76
Rmf @ Meas. Temp	.18 @ 76
Rmc @ Meas. Temp	.32 @ 76
Source of Rmf / Rmc	Charts
Rm @ BHT	.16 @ 117
Operating Rig Time	4 Hours
Max Rec. Temp. F	117
Equipment Number	108
Location	Hays
Recorded By	J. Henrickson
Witnessed By	Anthony Luna

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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

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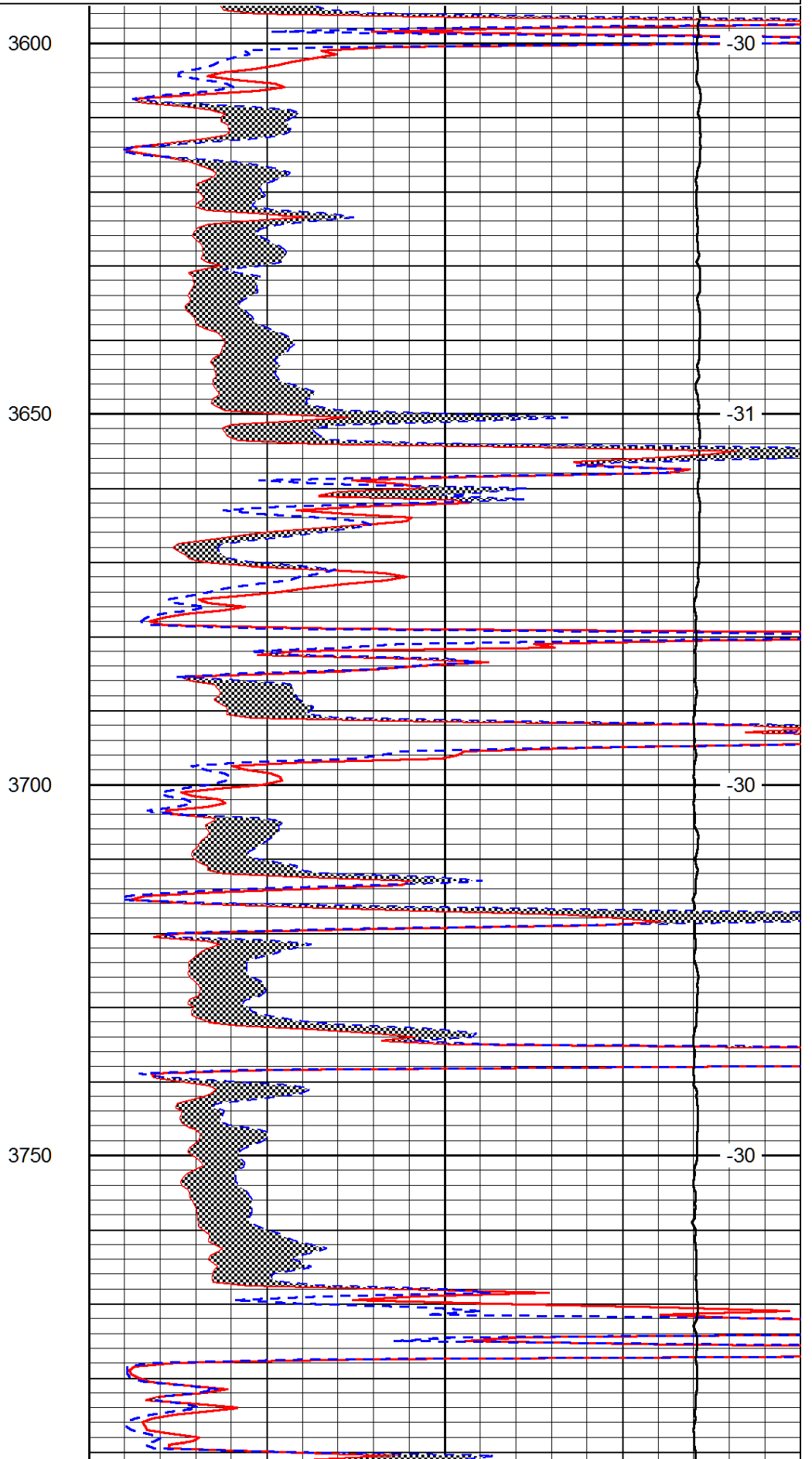
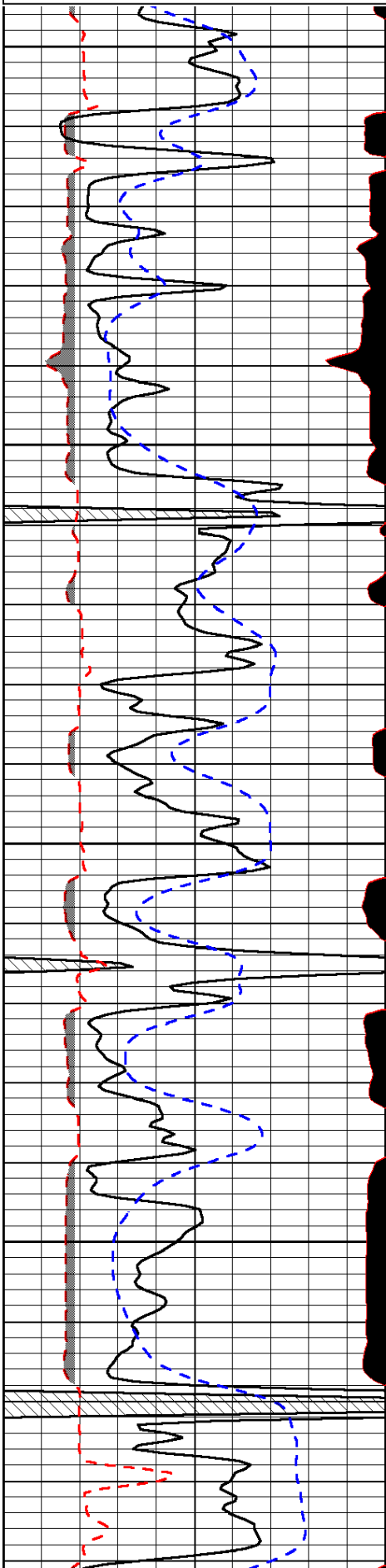
Collyer KS, West to 78 Rd., North to 110 Rd., East Into.

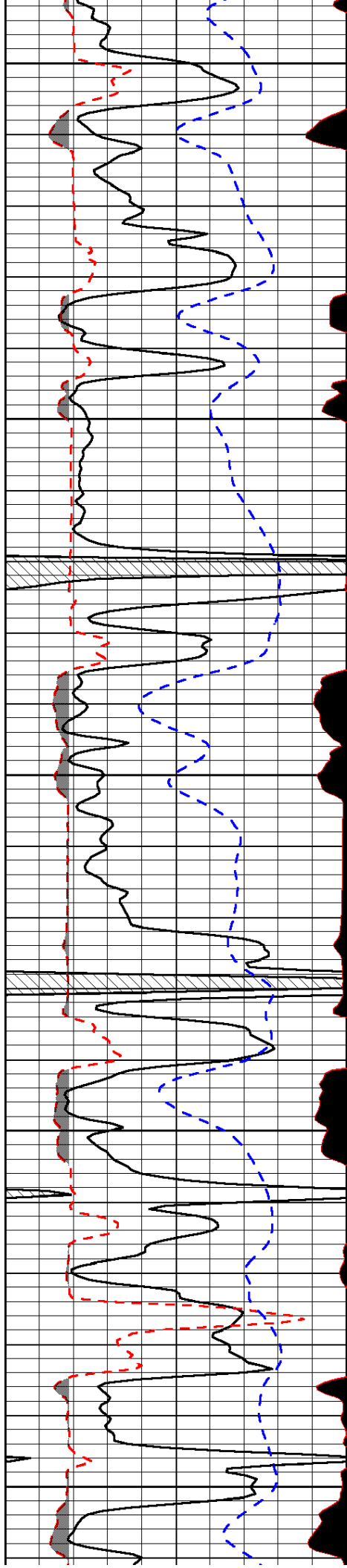
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 Dataset Pathname: DIL/culstk
 Presentation Format: micro
 Dataset Creation: Fri Jul 04 12:57:50 2014
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	MCAL (GAPI)	16
2.875	Mud Cake (GAPI)	7.875
-200	SP (mV)	0

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
10000	Line Weight	0

LSPD





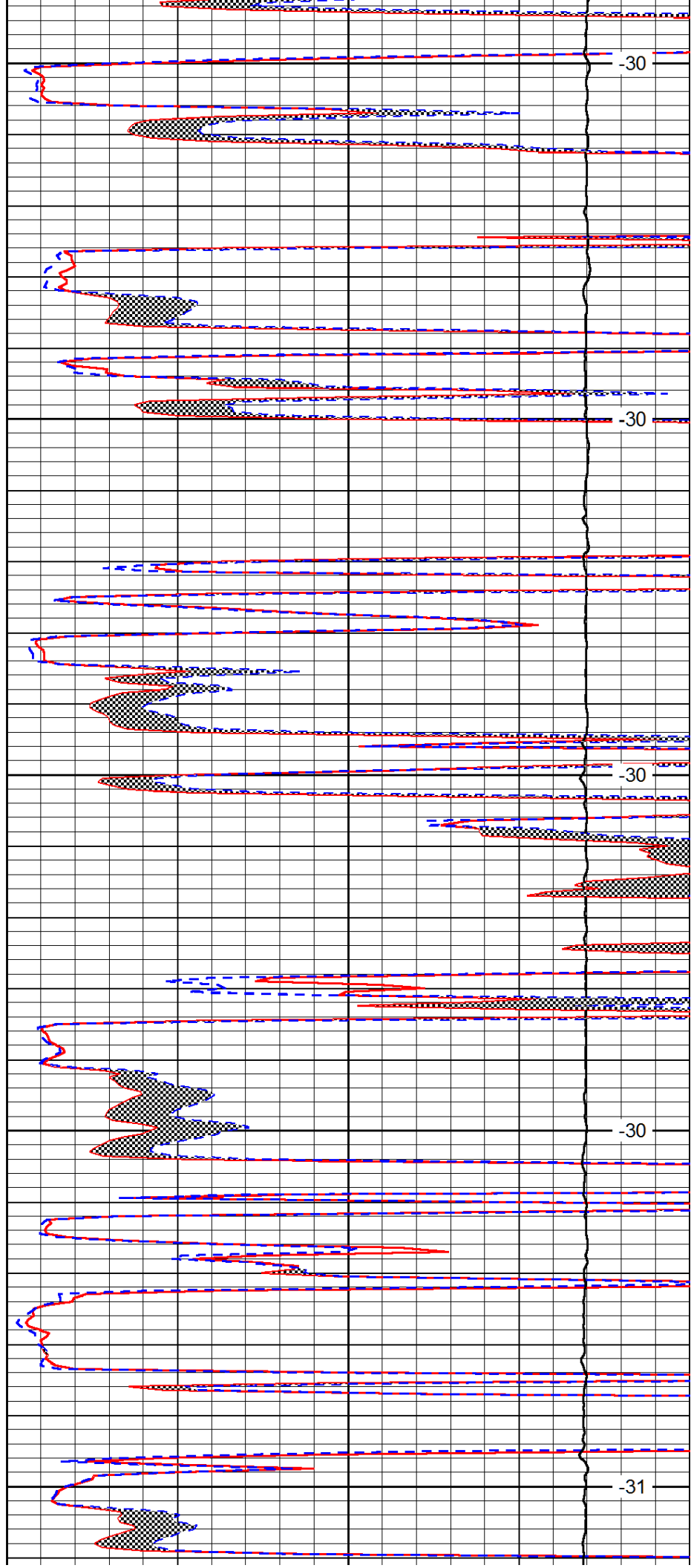
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3850

3900

3950

4000



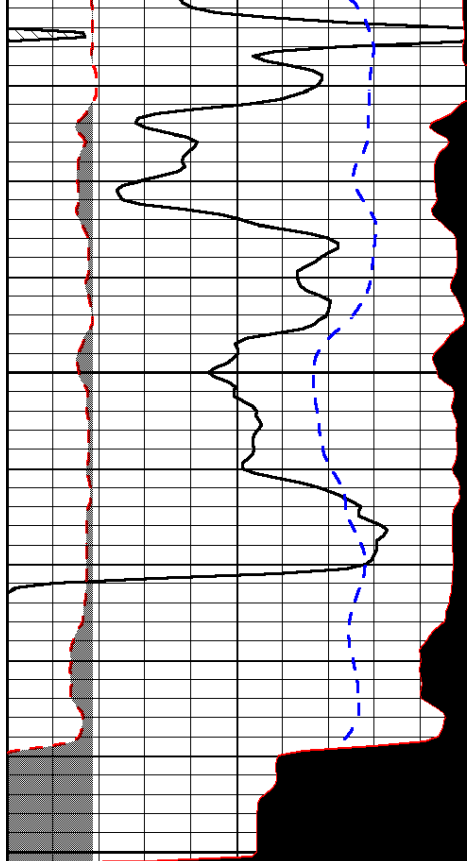
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-30

-30

-30

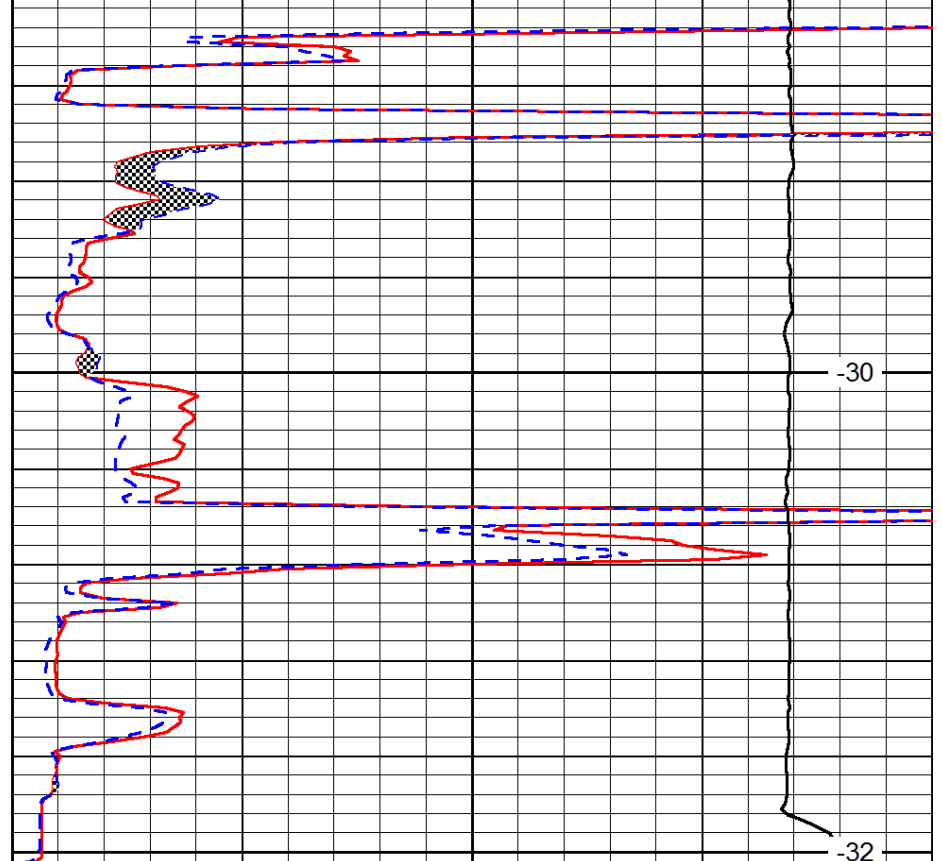
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-30

-32

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