



Pioneer Energy Services

Microresistivity Log

15-145-21,720-00-00

API No.

Company **Toto Energy, LLC**
 Well **Greene Machine #23-1**
 Field **Carpenter**
 County **Pawnee** State **Kansas**

Location
 S2-NE-NE-SE
 2290' FSL & 330' FEL

Sec: 23 Twp: 23S Rge: 17W

Other Services
 CNL/CDL
 DIL

Permanent Datum Ground Level Elevation 2077
 Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum
 Drilling Measured From Kelly Bushing

Elevation
 K.B. 2088
 D.F. 2077
 G.L. 2077

Date	4/2/2014	
Run Number	Two	
Depth Driller	4560	
Depth Logger	4559	
Bottom Logged Interval	4558	
Top Log Interval	3400	
Casing Driller	8.625 @ 270	
Casing Logger	264	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	7,100	
Density / Viscosity	9.5 78	
pH / Fluid Loss	11.0 8.0	
Source of Sample	Flowline	
Rm @ Meas. Temp	.27 @ 57	
Rmf @ Meas. Temp	.20 @ 57	
Rmc @ Meas. Temp	.36 @ 57	
Source of Rmf / Rmc	Charts	
Rm @ BHT	.13 @ 122	
Operating Rig Time	4 Hours	
Max Rec. Temp. F	122	
Equipment Number	15	
Location	Hays	
Recorded By	J. Hennickson	
Witnessed By	Sean Deenihan	

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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

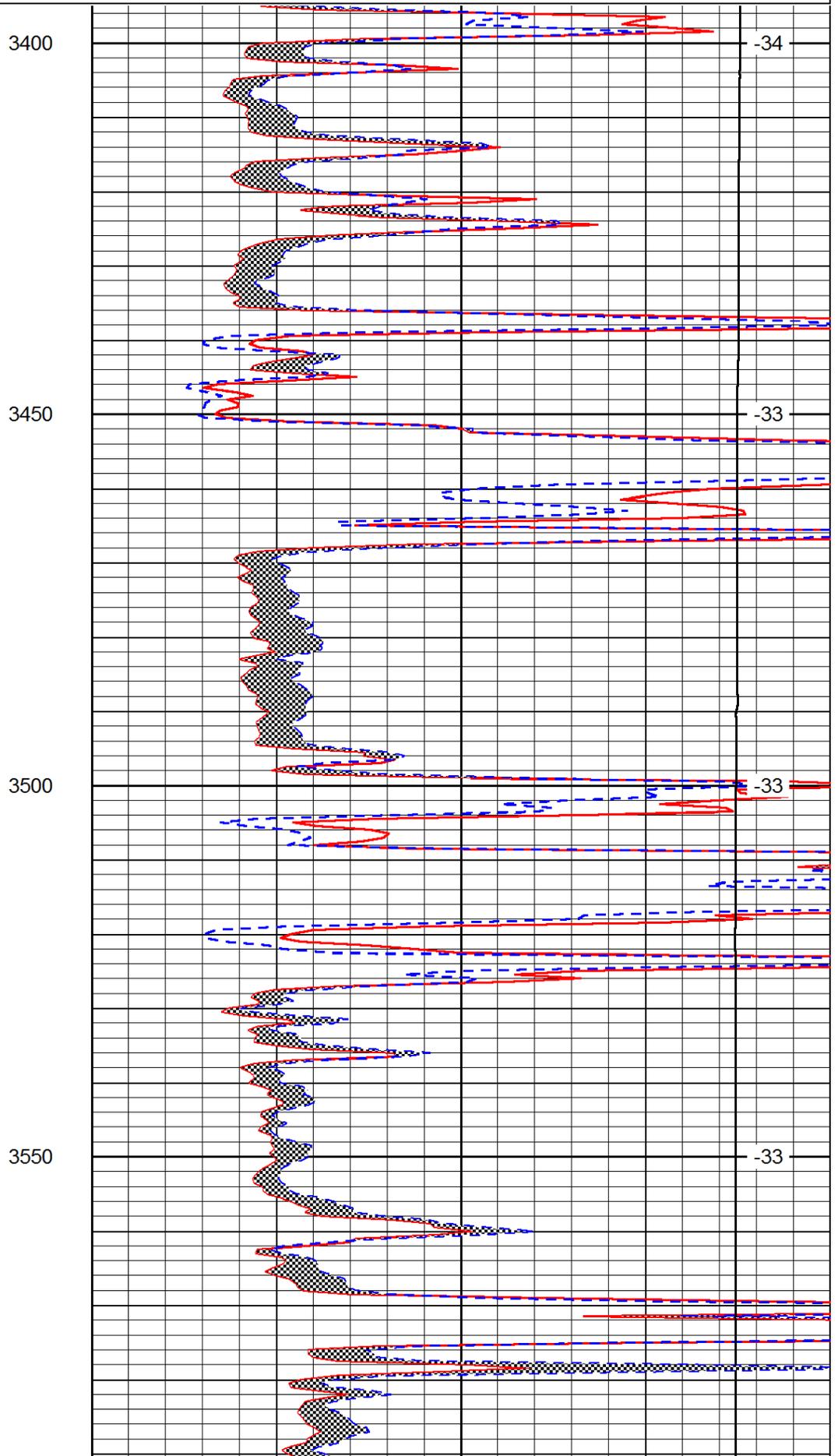
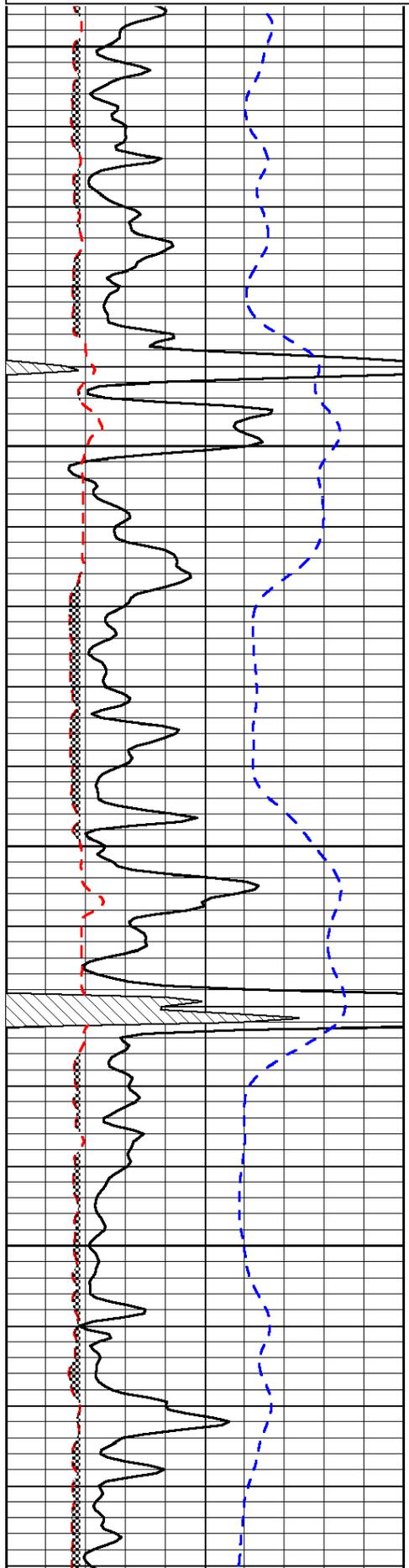
Larned Kansas
 South on HWY 19 to D Rd, 3 West, 1/2 South, West Into

Database File: c:\warrior\data\toto_greene machine #23-1\toto_greene_machine_23_1hd.db
 Dataset Pathname: DIL\totostk
 Presentation Format: micro
 Dataset Creation: Wed Apr 02 22:35:21 2014
 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



3400

-34

3450

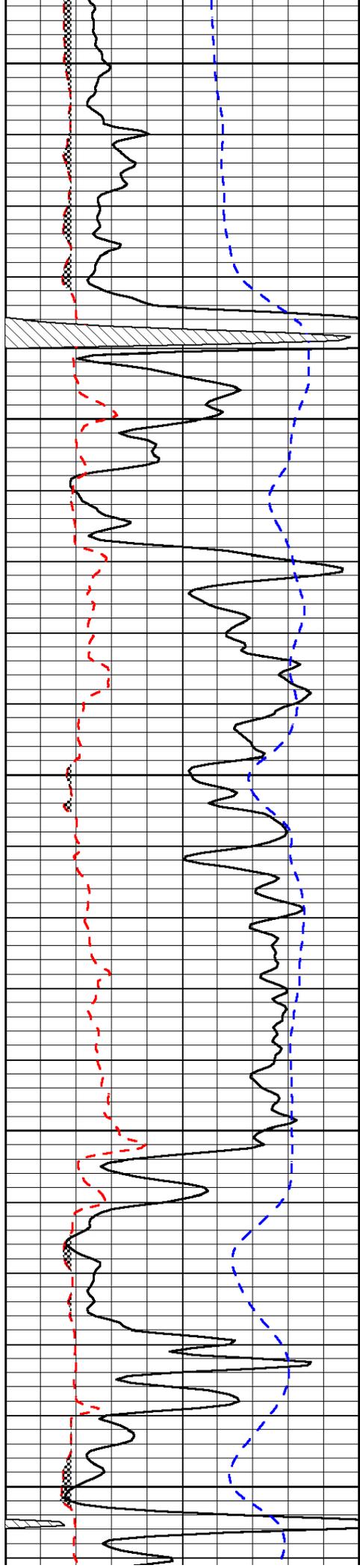
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3500

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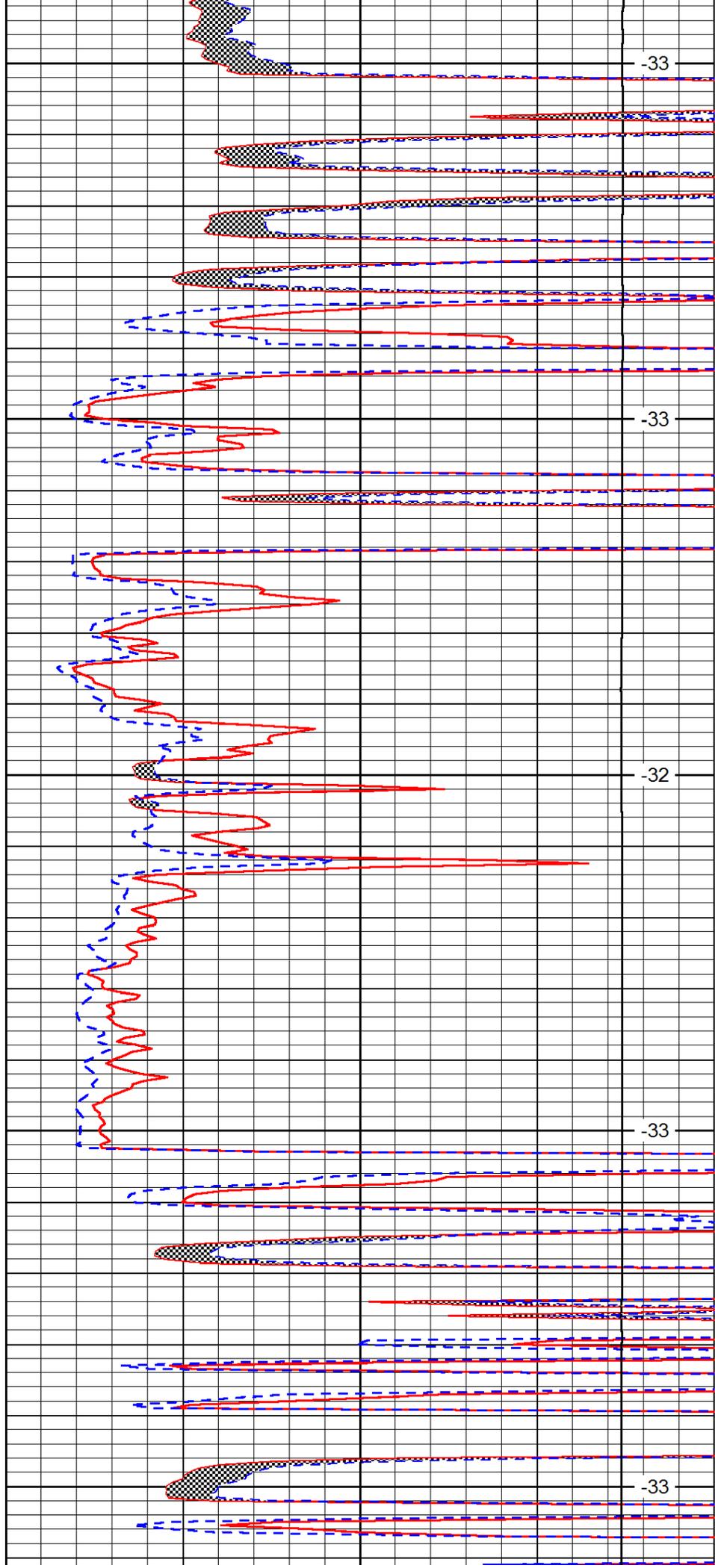
3600

3650

3700

3750

3800



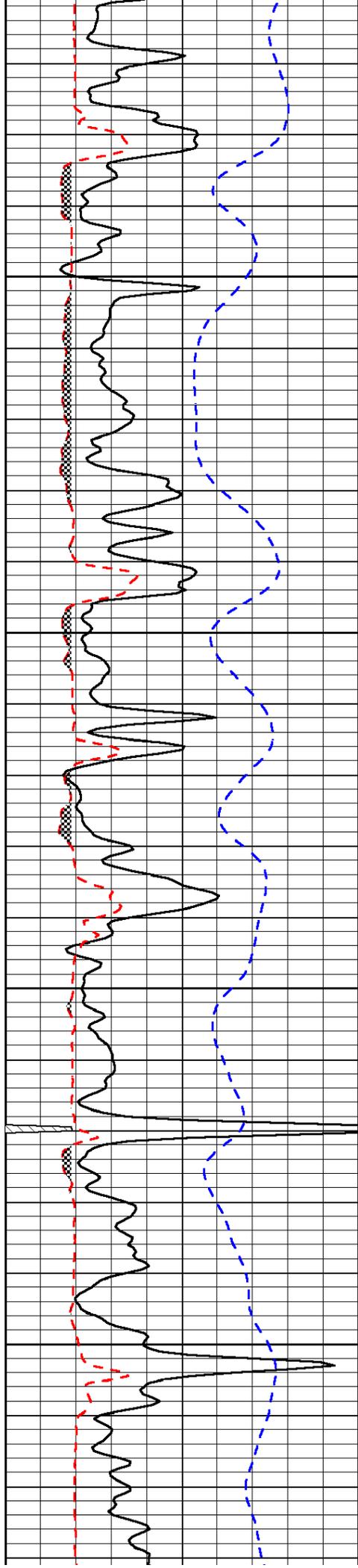
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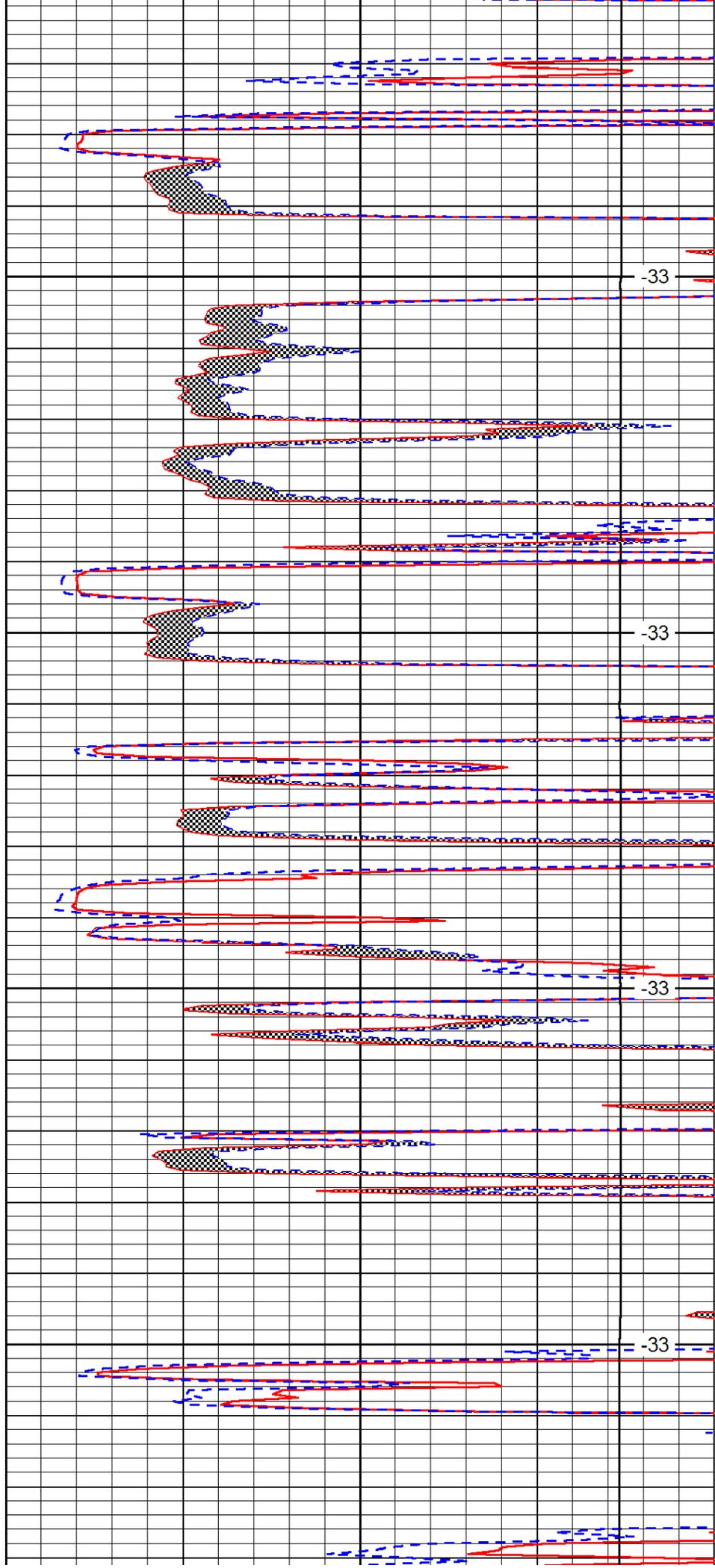


3850

3900

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4000

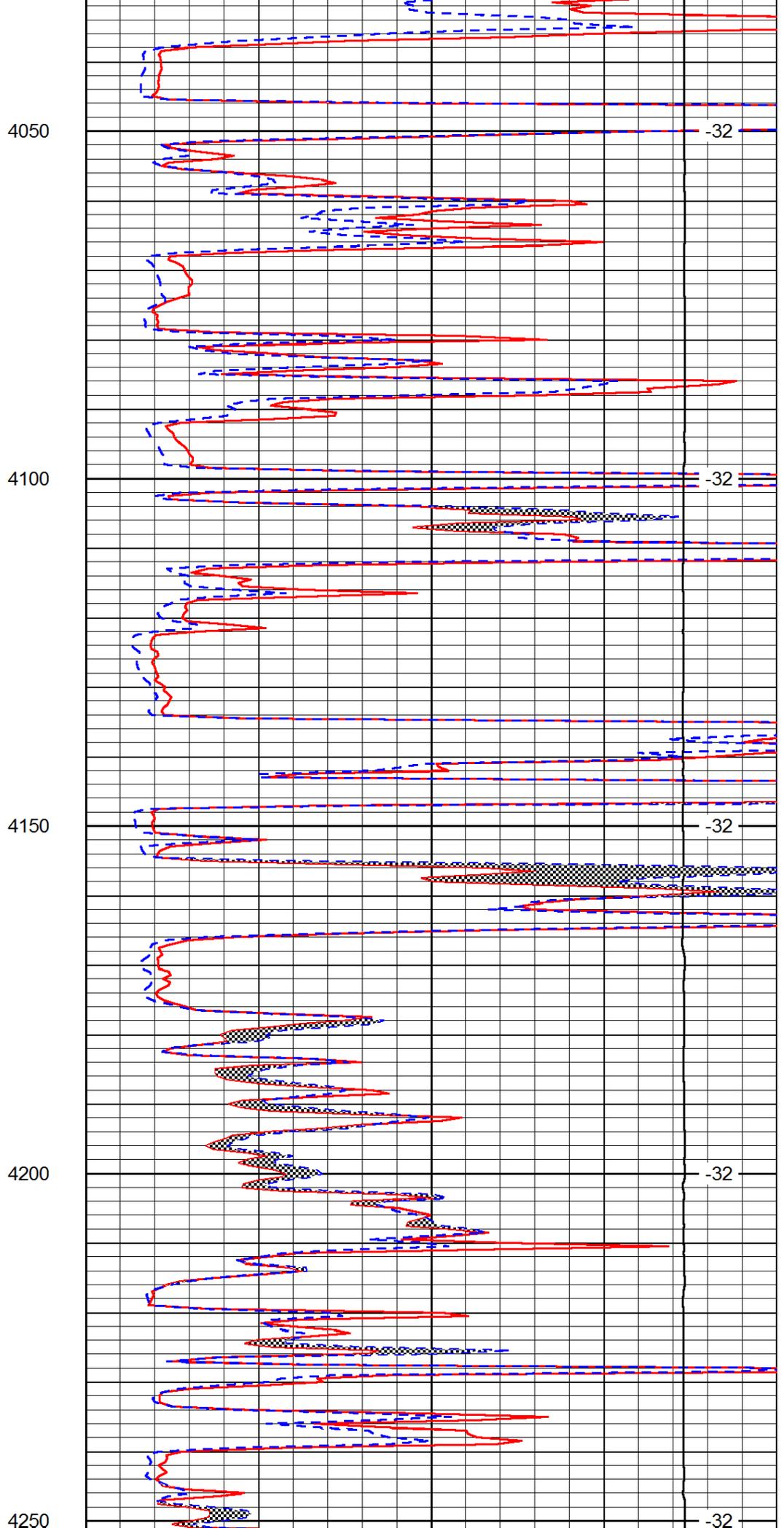
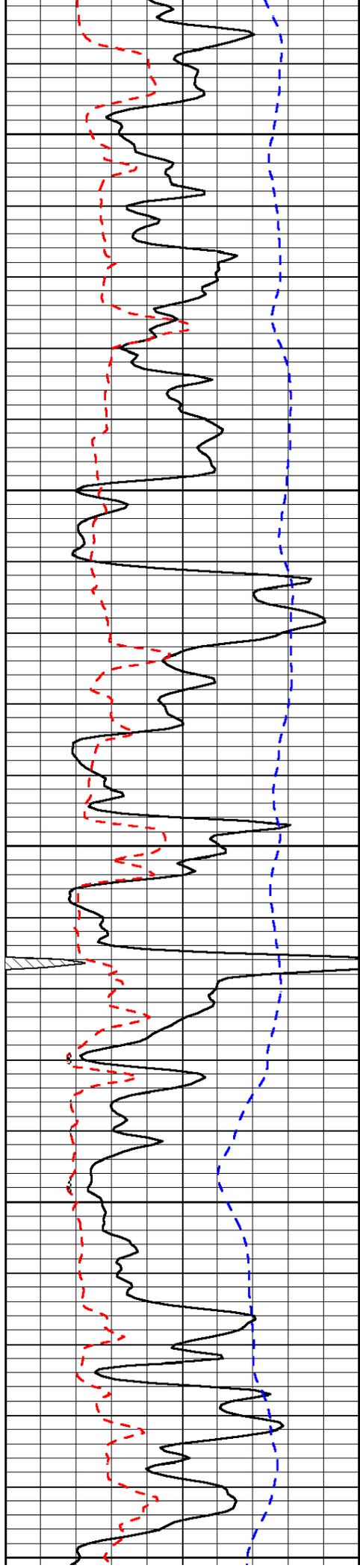


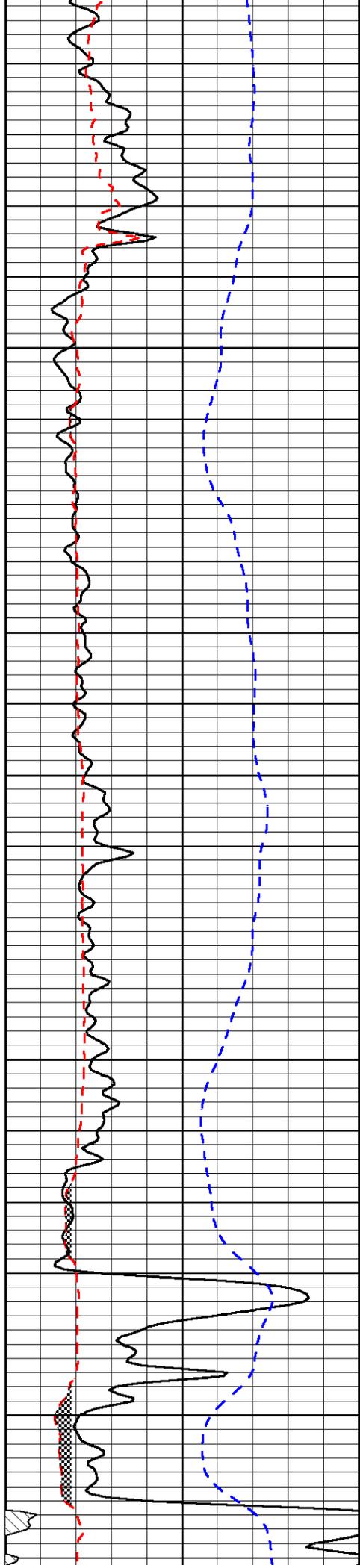
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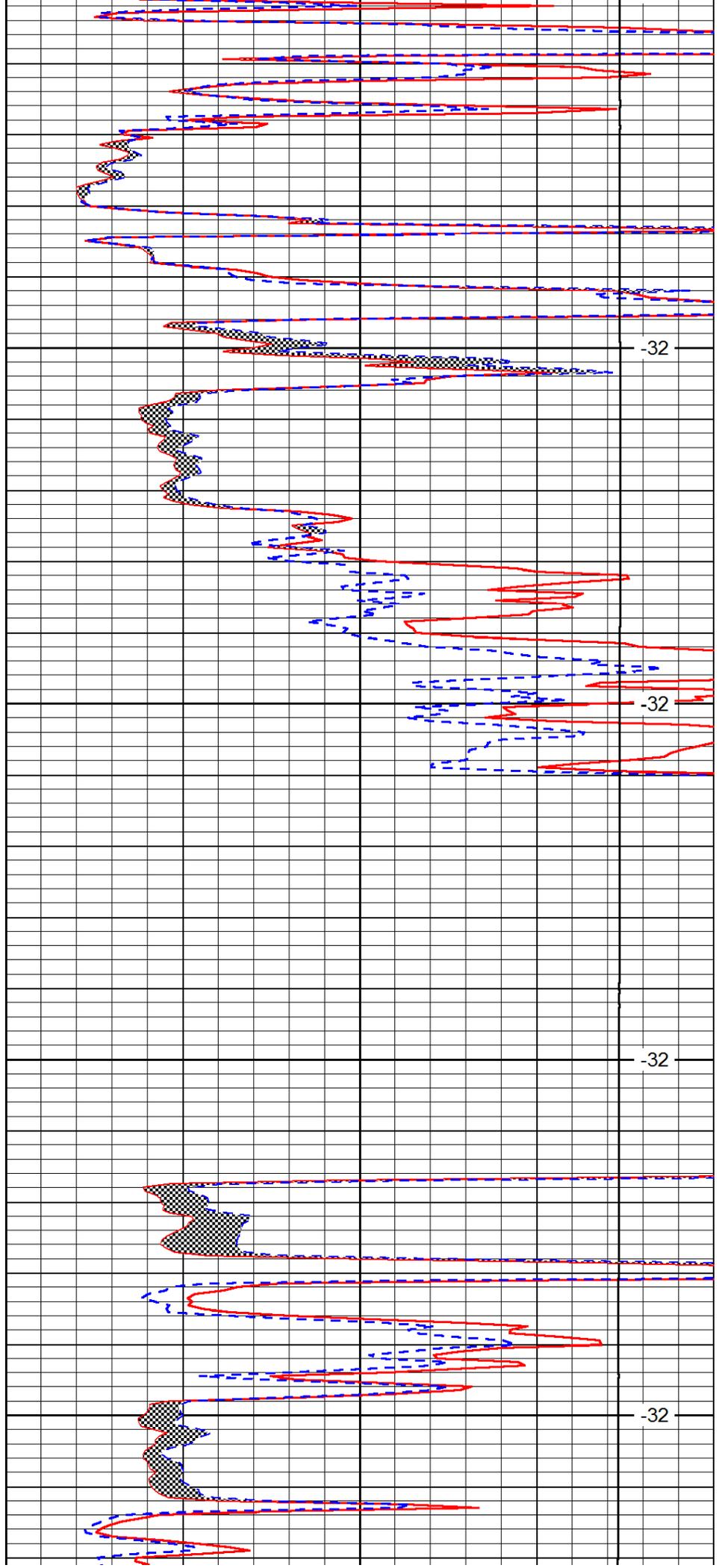


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4350

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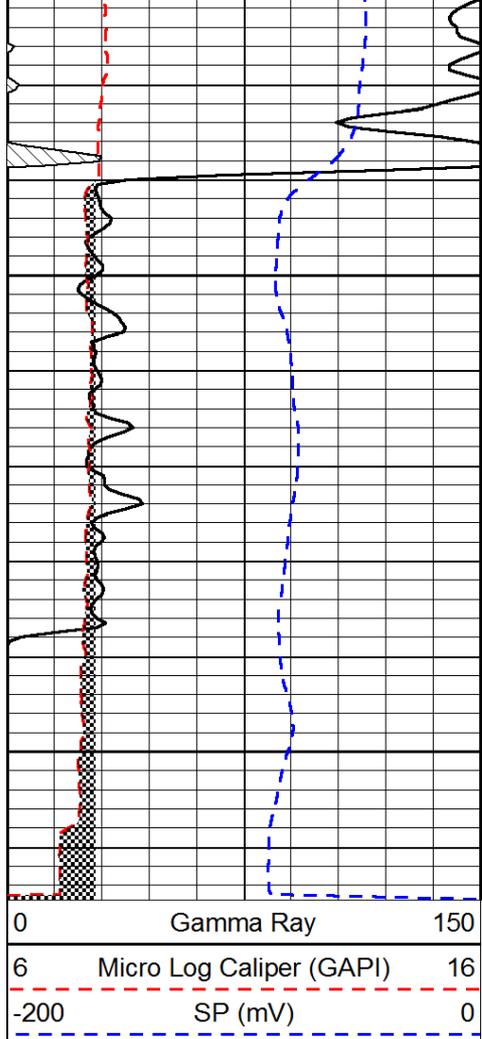


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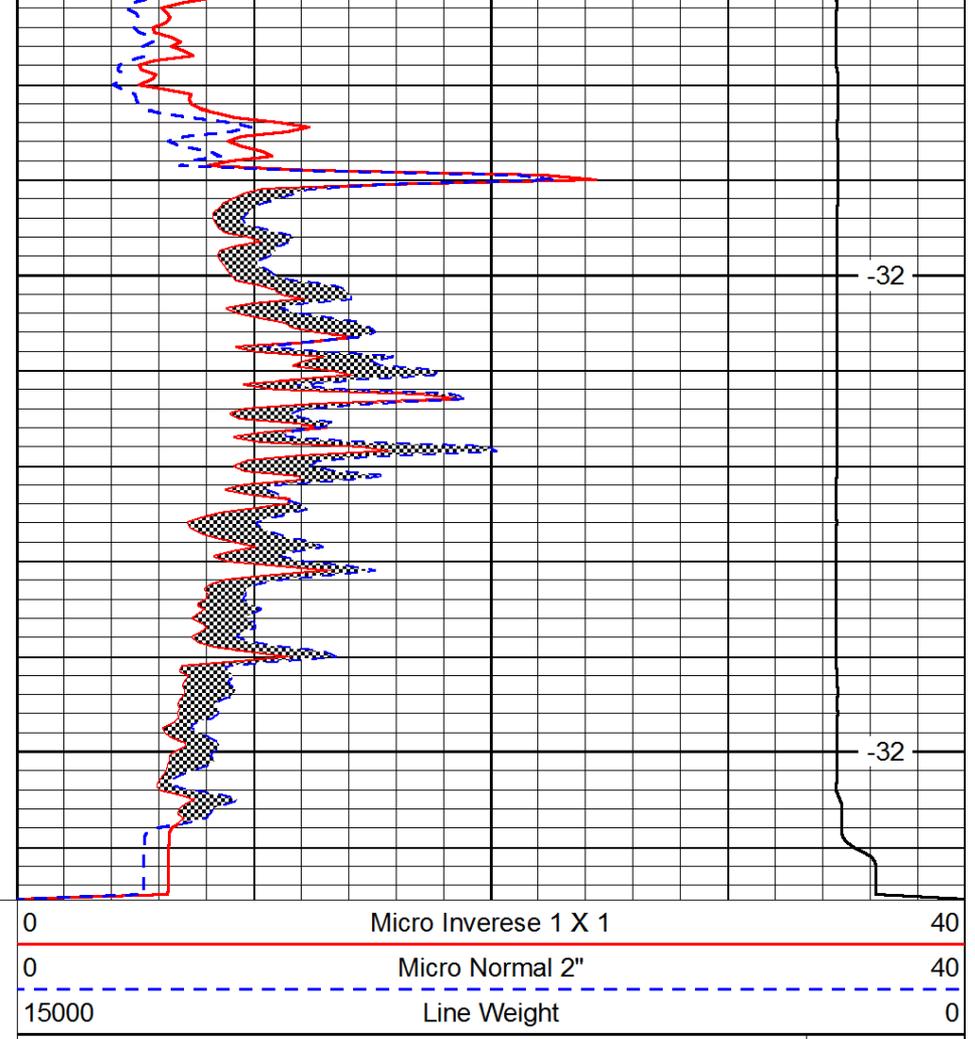
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4500

4550



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LSPD