



Microresistivity Log

Pioneer Energy Services

API No.

15-101-22,551-00-00

Company Cobalt Energy, LLC

Well Williams-Hess "A" #1-15

Field Paris West

County Lane State Kansas

Location 330' FNL & 1250' FEL

Sec: 15 Twp: 19S Rge: 29W

Other Services
CNL/CDL
DIL

Elevation

K.B. 2833

D.F. 2821

G.L. 2821

Elevation 2821

12 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Permanent Datum Ground Level

Log Measured From Kelly Bushing

Drilling Measured From Kelly Bushing

Top Log Interval 3700

Bottom Logged Interval 4701

Depth Logger 4702

Depth Driller 4700

Run Number Two

Date 12/12/2014

Bit Size 7.875

Casing Logger 264

Casing Driller 8.625 @ 265

Type Fluid in Hole Chemical

Salinity, ppm CL 2.200

Density / Viscosity 9.3 54

pH / Fluid Loss 9.0 7.6

Source of Sample Flowline

Rm @ Meas. Temp 1.1 @ 55

Rmf @ Meas. Temp .83 @ 55

Rmc @ Meas. Temp 1.49 @ 55

Source of Rmf / Rmc Charts

Rm @ BHT .49 @ 123

Operating Rig Time 3 Hours

Max Rec. Temp. F 123

Equipment Number 10

Location Hays

Recorded By C. Desaire

Witnessed By Terry McCleod

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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

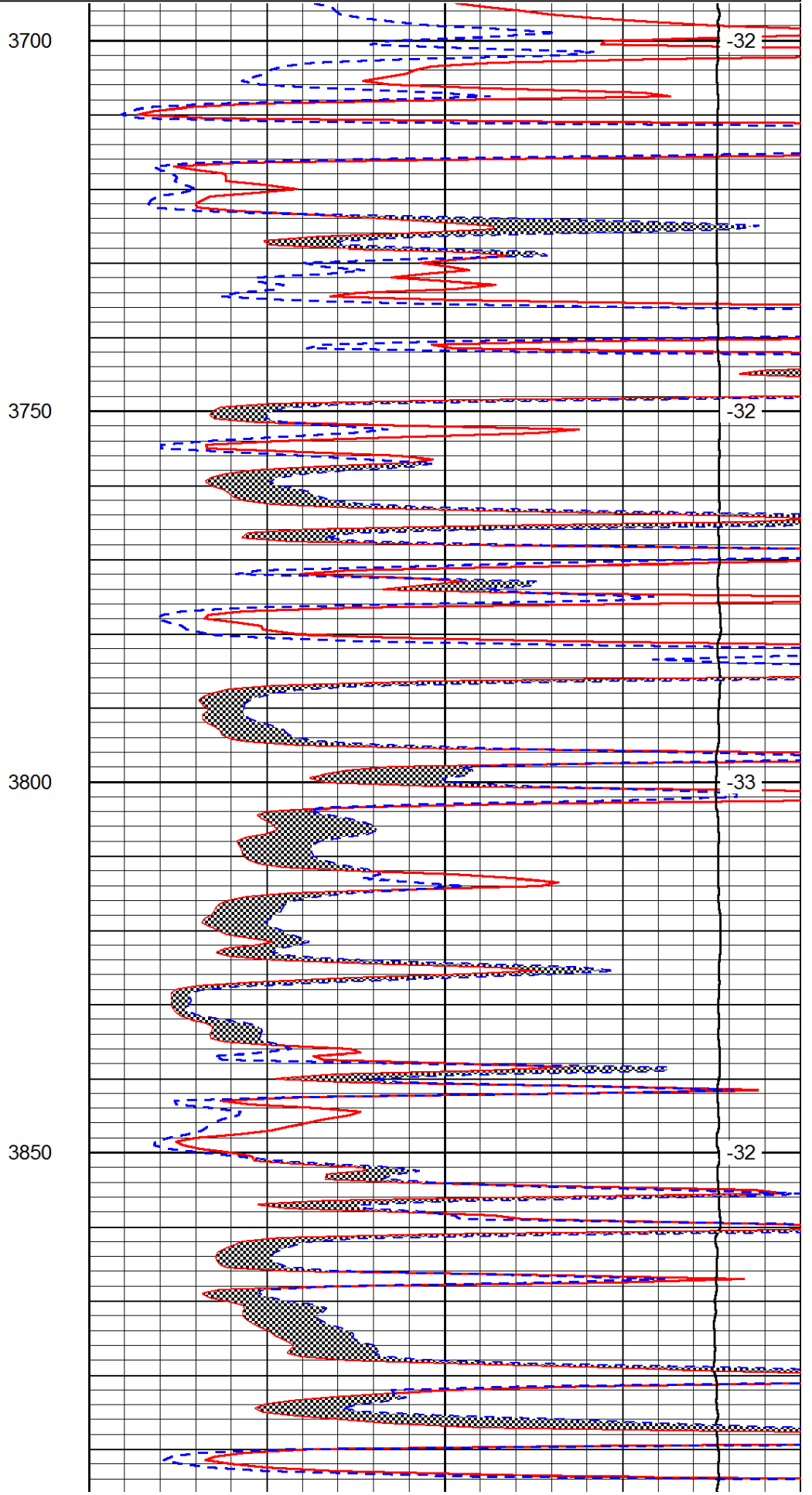
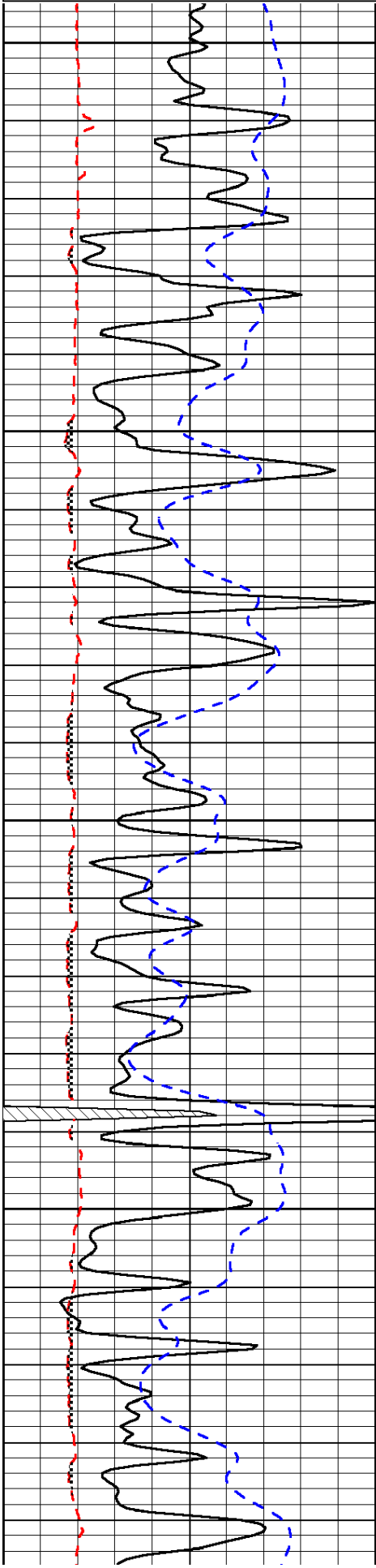
Dighton KS, 6 S to 90 Rd, 2 W, 1 N,
1/4 W, S Into

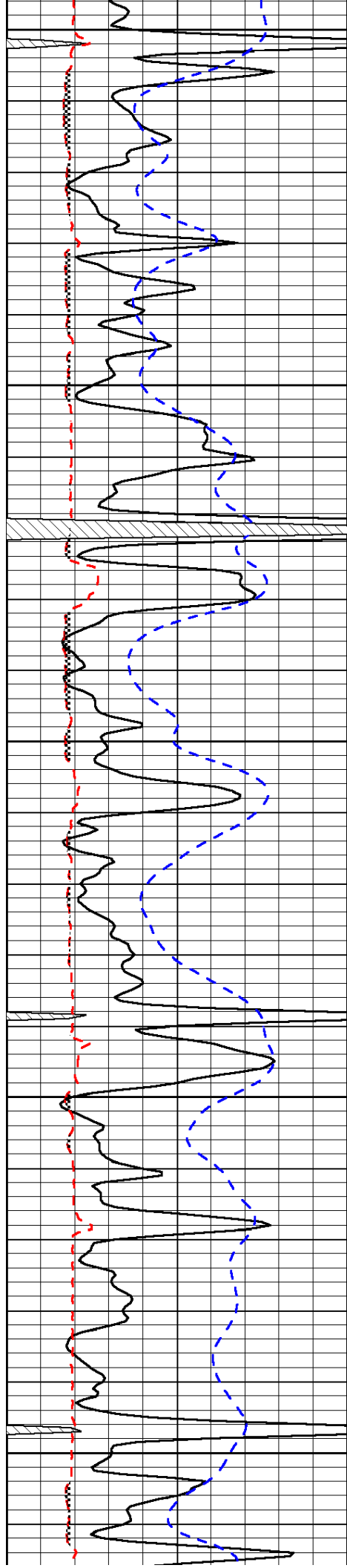
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Dataset Pathname: dil/cobstk
Presentation Format: micro
Dataset Creation: Fri Dec 12 23:23:47 2014
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	MCAL (GAPI)	16
-200	SP (mV)	0

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

LSPD





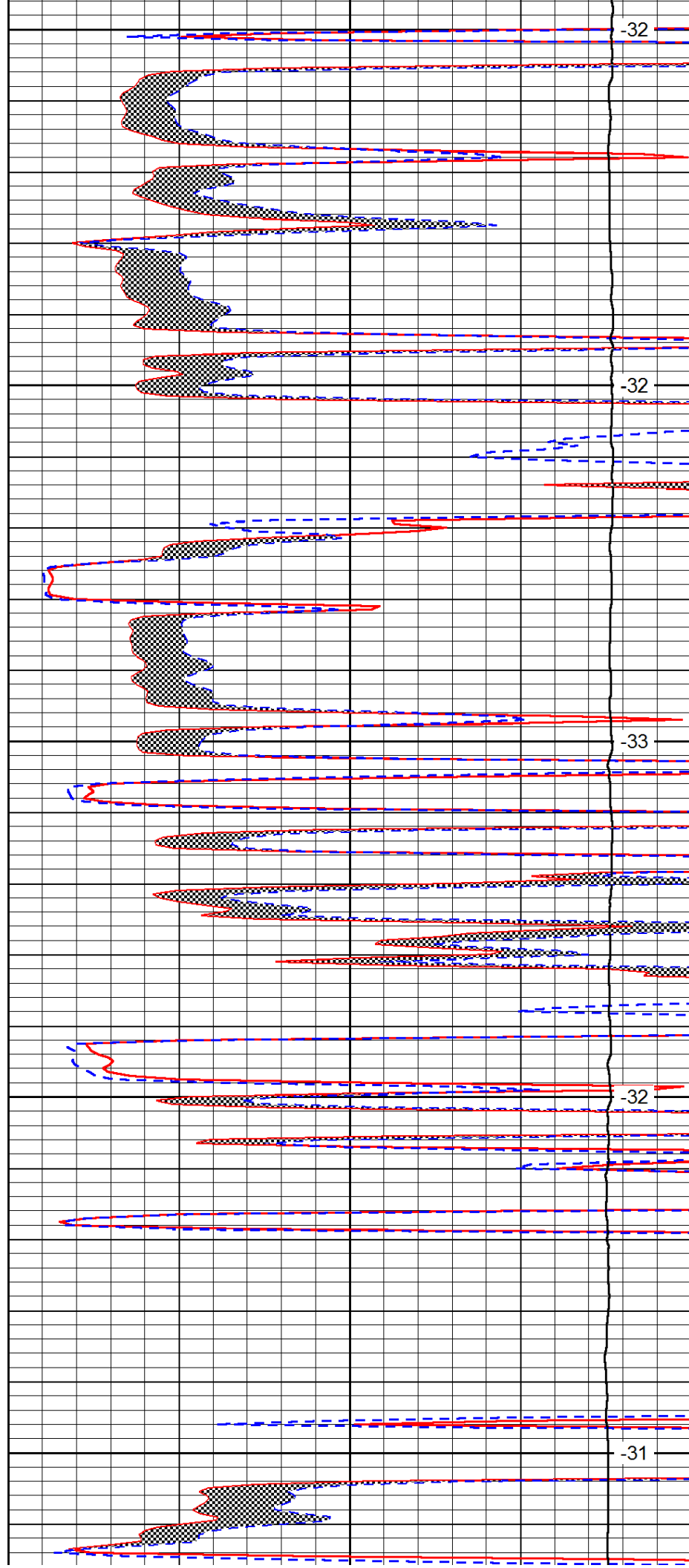
3900

3950

4000

4050

4100



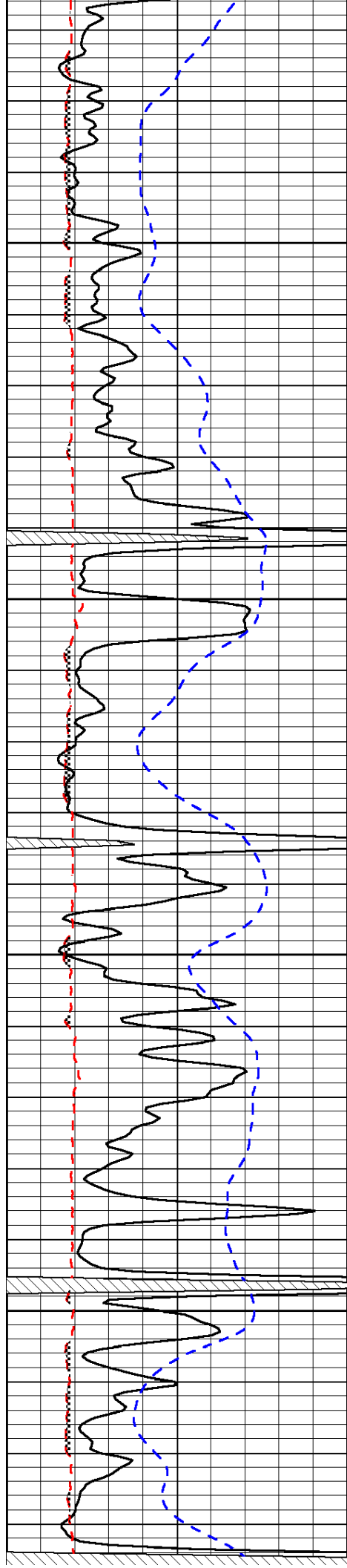
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-32

-33

-32

-31

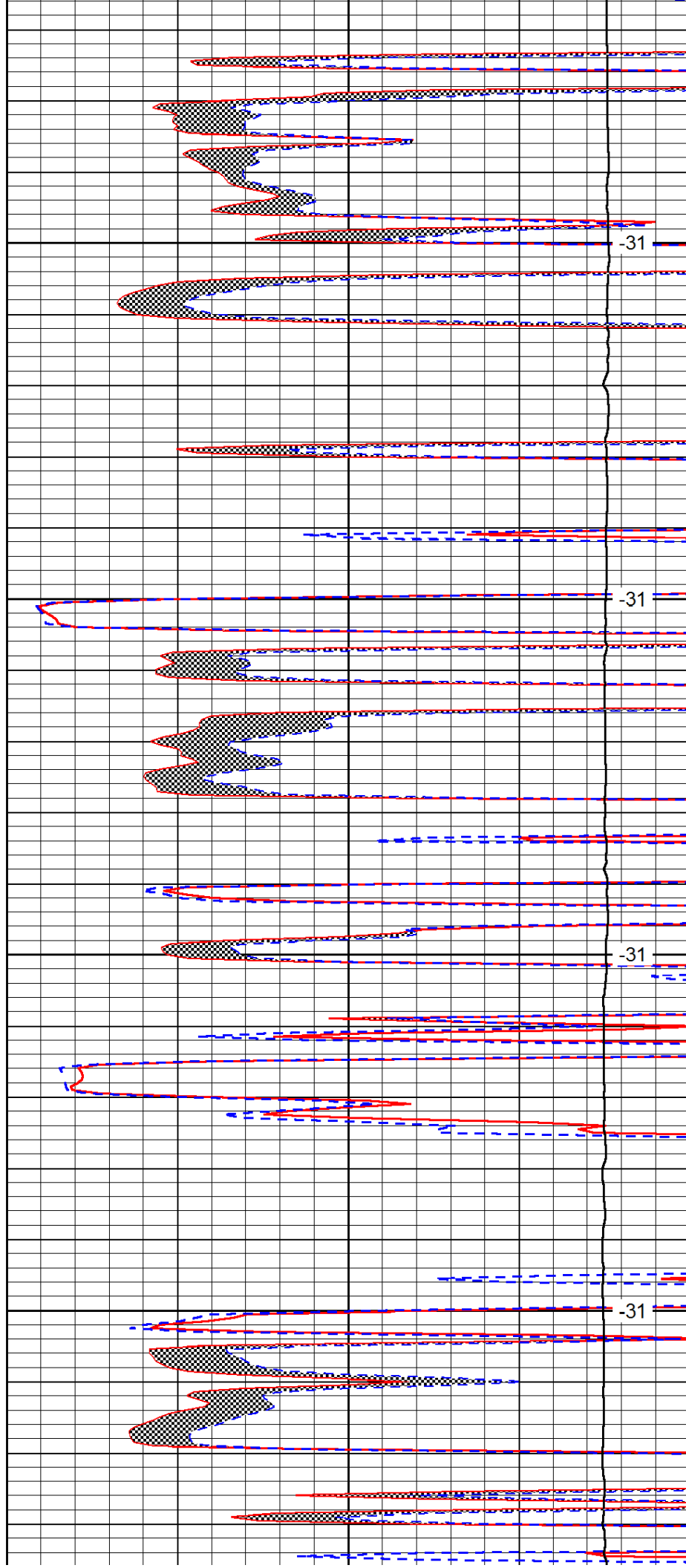


4150

4200

4250

4300

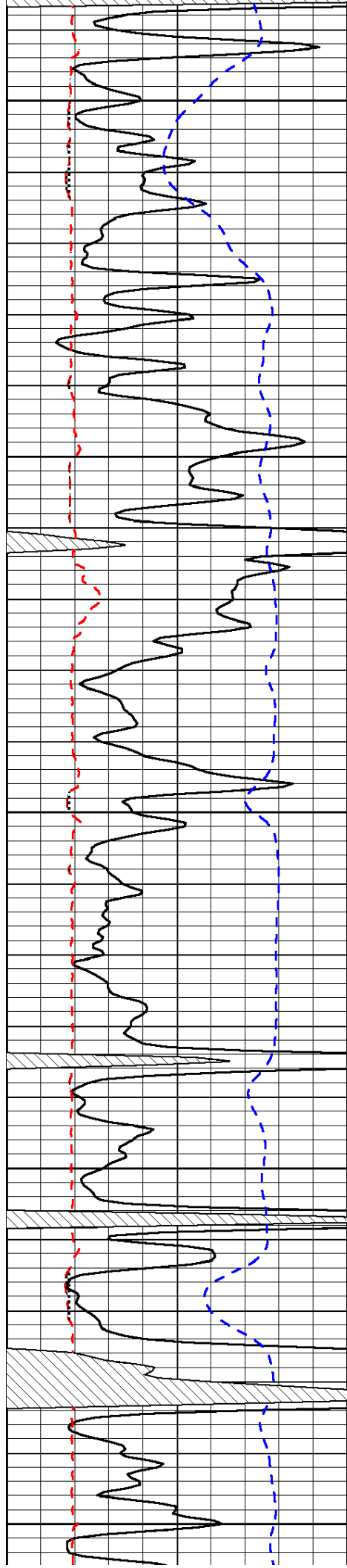


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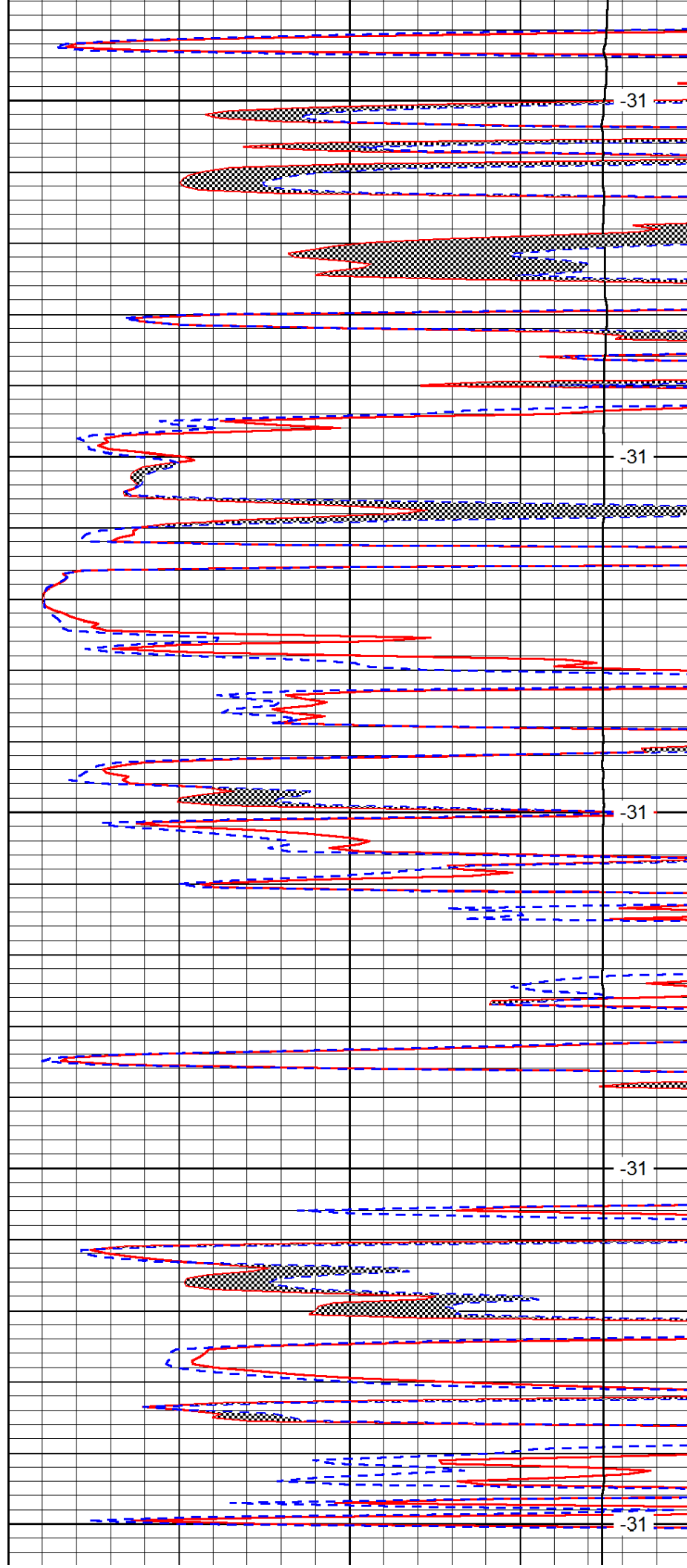
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4400

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4500

4550



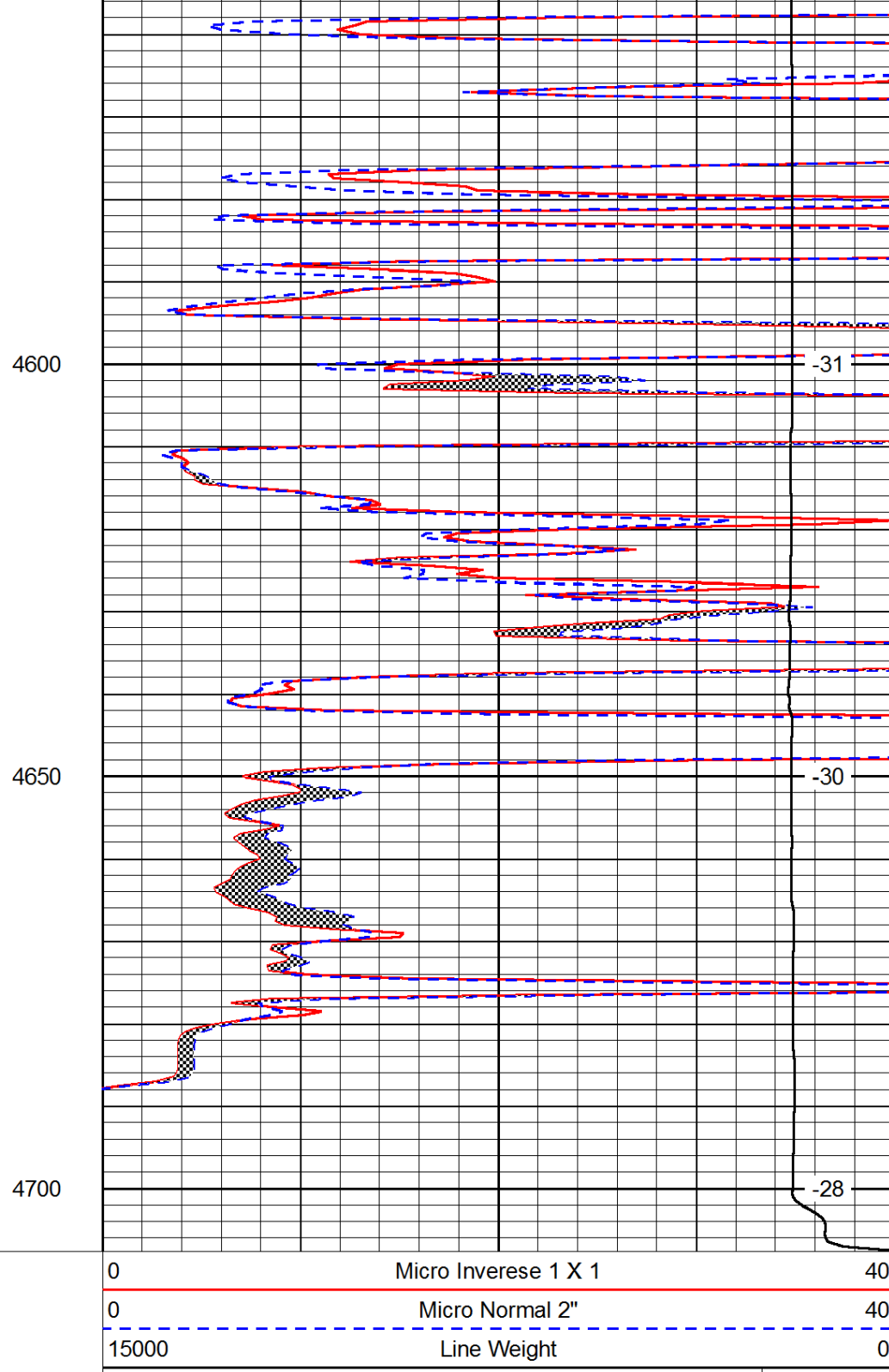
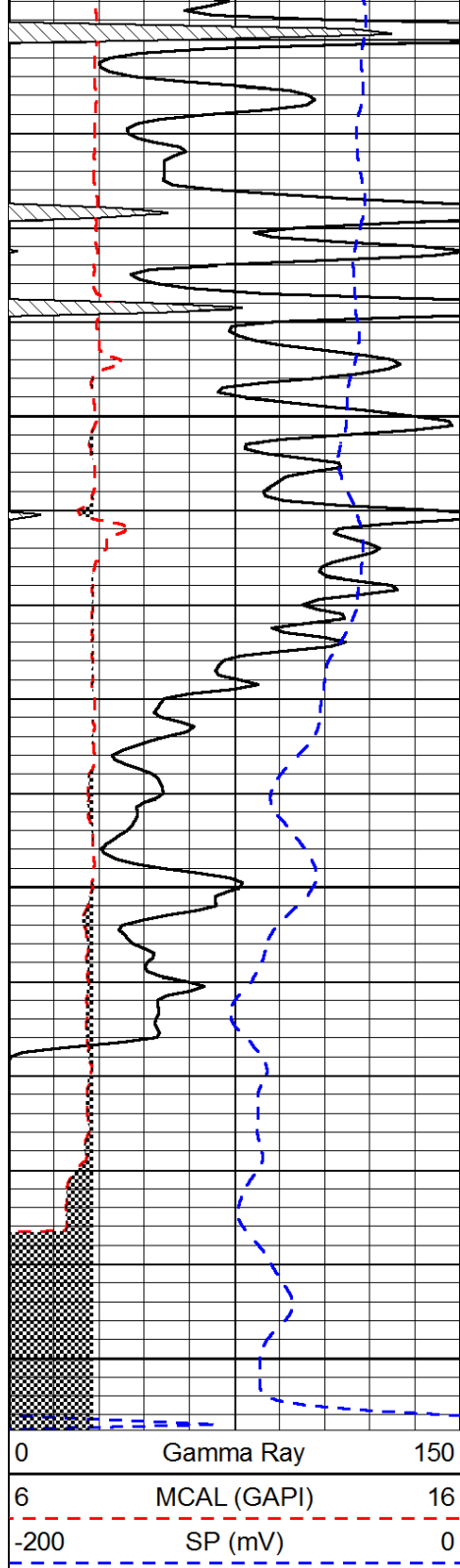
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LSPD