



Microresistivity Log

Pioneer Energy Services

API No.

15-051-26776-00-00

Company BRUNGARDT OIL AND LEASING, INC.

Well GRABBE A #1

Field SHOENCHEN WEST

County ELLIS State KANSAS

Location 430' FNL & 1850' FWL

Sec: 21 Twp: 15S Rge: 18W

Permanent Datum GROUND LEVEL Elevation 2047

Log Measured From KELLY BUSHING 5 Ft. Above Perm. Datum

Drilling Measured From KELLY BUSHING

Elevation

K.B. 2052

D.F. 2047

Other Services
CNL/CDL
DIL

Date

5/19/2015

Run Number

ONE

Depth Driller

3699

Depth Logger

3697

Bottom Logged Interval

3696

Top Log Interval

2900

Casing Driller

8.625 @ 1209

Casing Logger

1209

Bit Size

7.875

Type Fluid in Hole

CHEMICAL

Salinity, ppm CL

6000

Density / Viscosity

9.2 46

pH / Fluid Loss

10.0 6.4

Source of Sample

Flowline

Rm @ Meas. Temp

0.60 @ 50

Rmf @ Meas. Temp

0.45 @ 50

Rmc @ Meas. Temp

0.81 @ 50

Source of Rmf / Rmc

Charts

Rm @ BHT

0.27 @ 113

Operating Rig Time

3 HOURS

Max Rec. Temp. F

113

Equipment Number

91

Location

HAYS

Recorded By

D. SCHMIDT

Witnessed By

ROGER FISHER

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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.

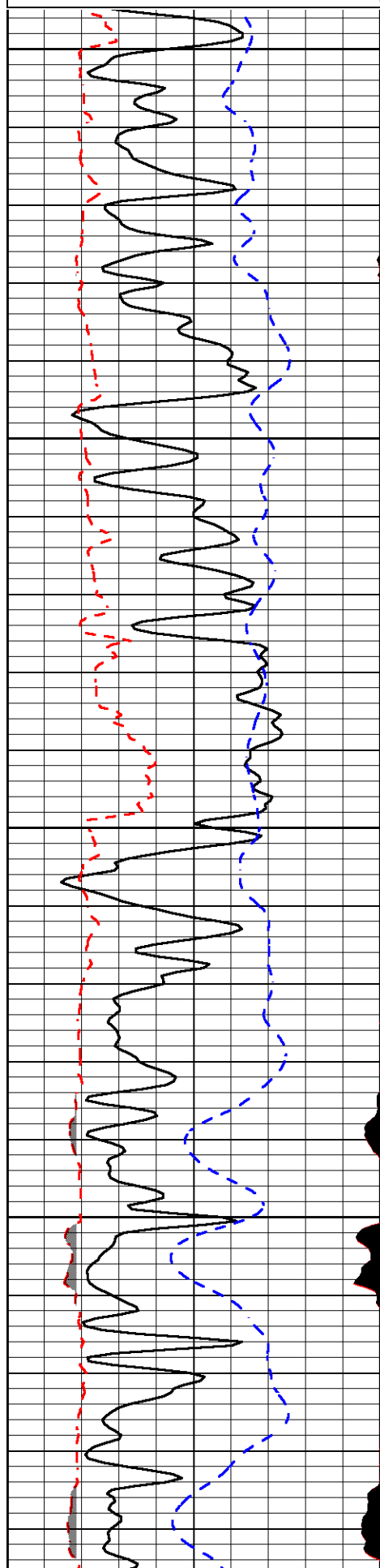
Comments

Thank you for using Pioneer Energy Services
785.625.3858

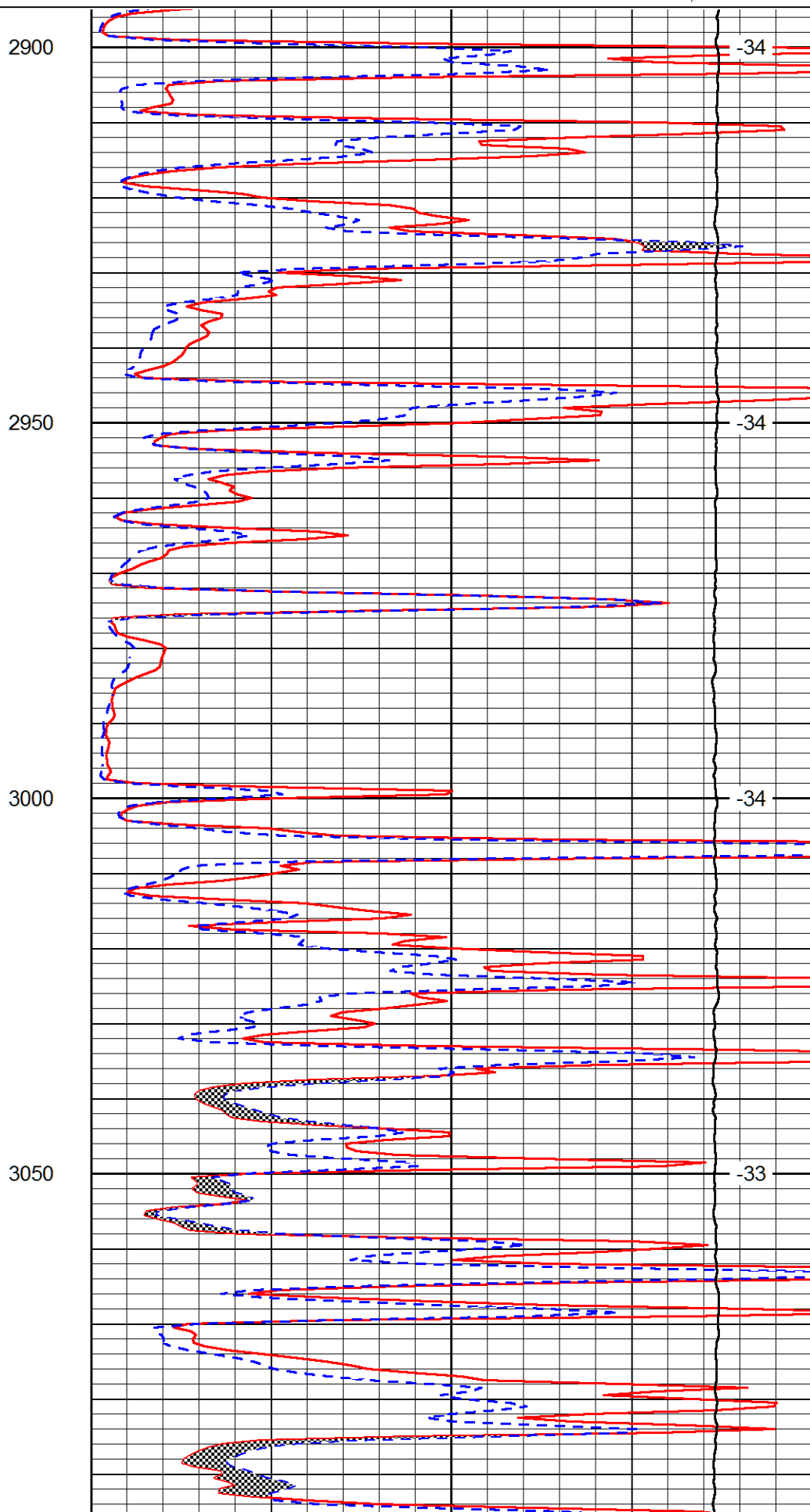
HAYS,
SOUTH ON HWY 183 TO CHETOLA GOLD RD,
3/4 WEST, SOUTH INTO

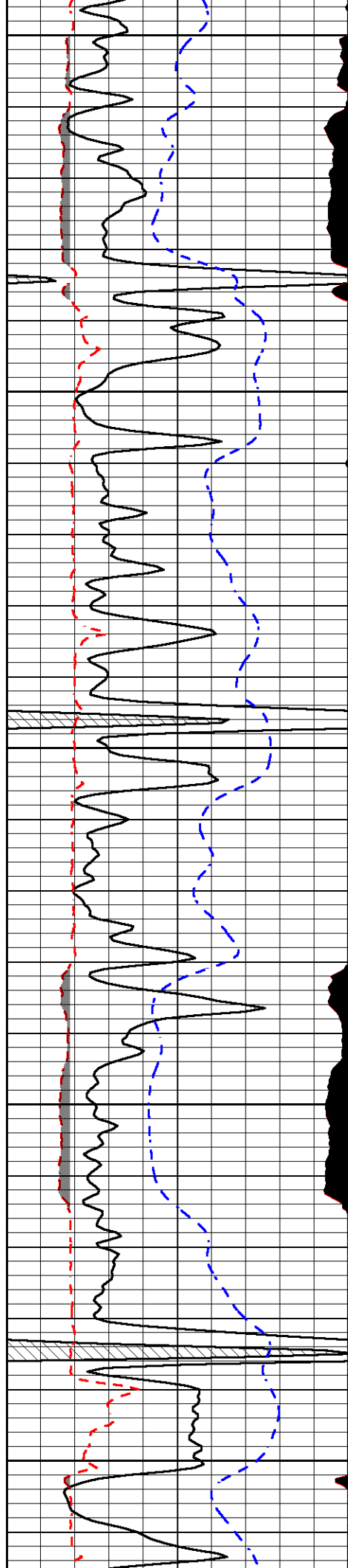
Database File brungardt_grabbe a_1hd.db
Dataset Pathname DIL/brstkml2
Presentation Format micro
Dataset Creation Tue May 19 16:10:22 2015
Charted by Depth in Feet scaled 1:240

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





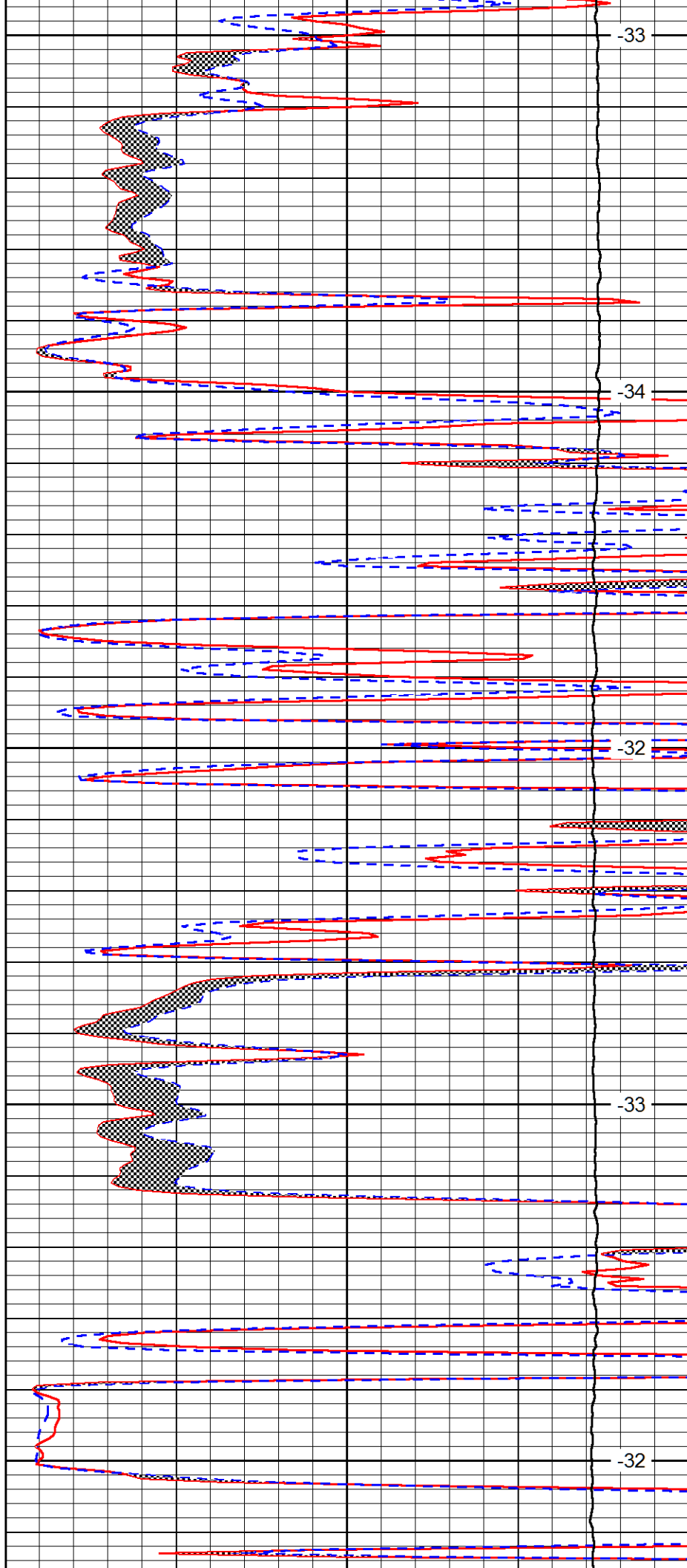
3100

3150

3200

3250

3300



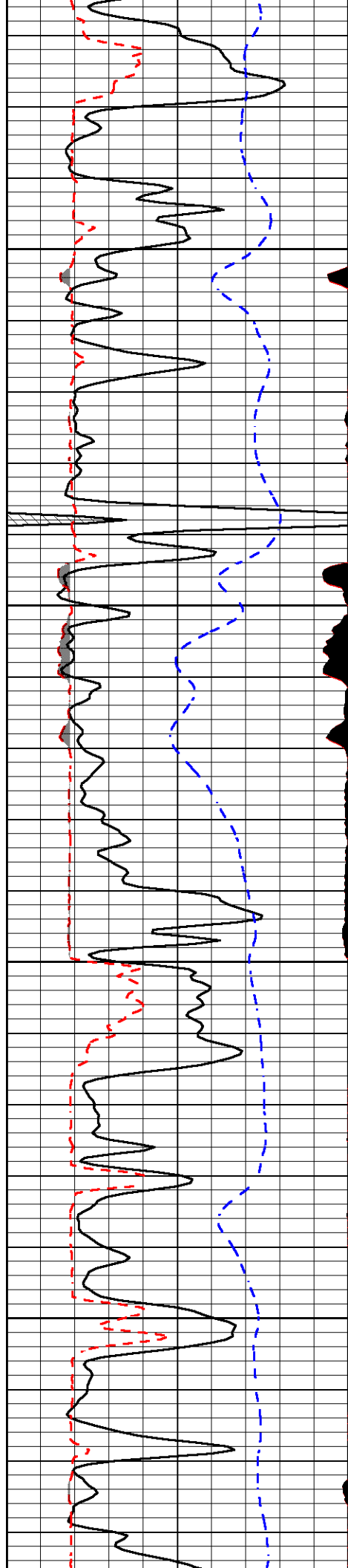
-33

-34

-32

-33

-32

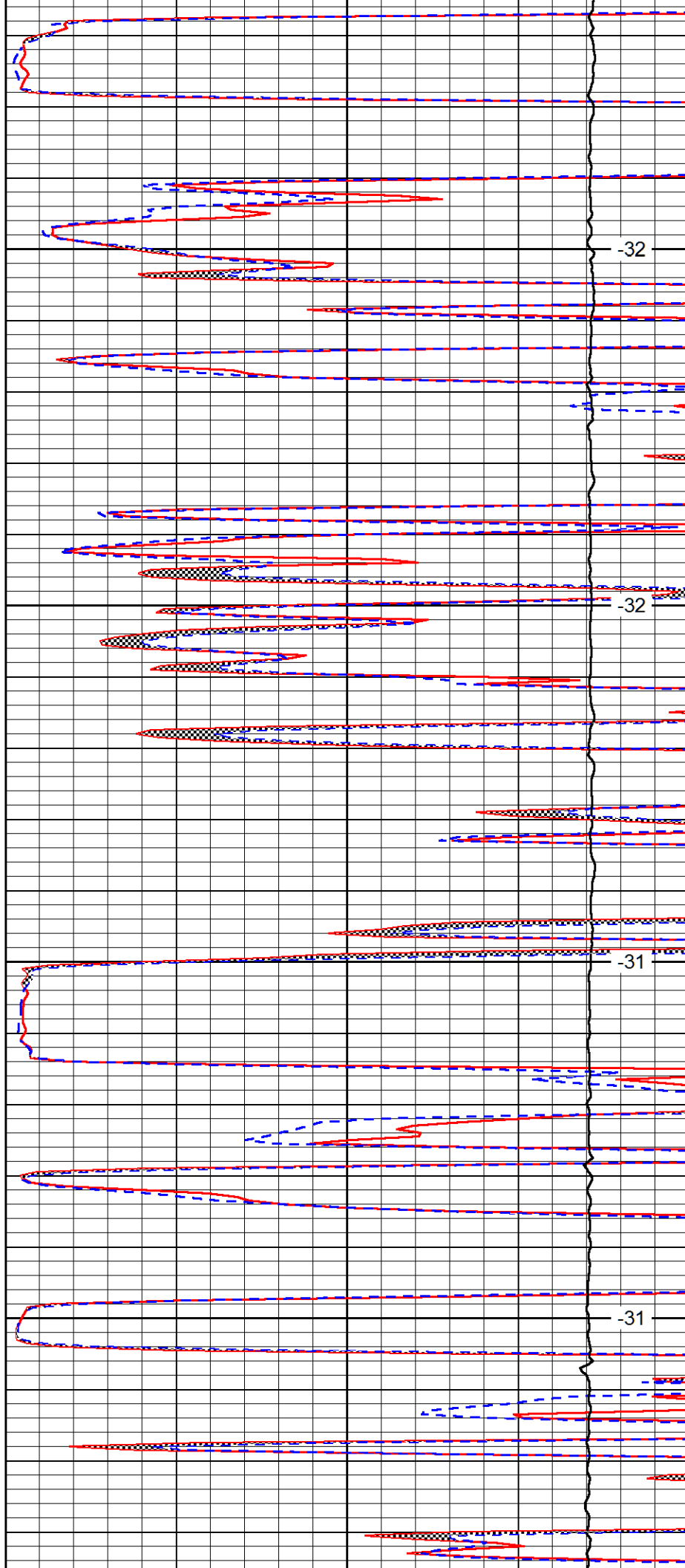


3350

3400

3450

3500

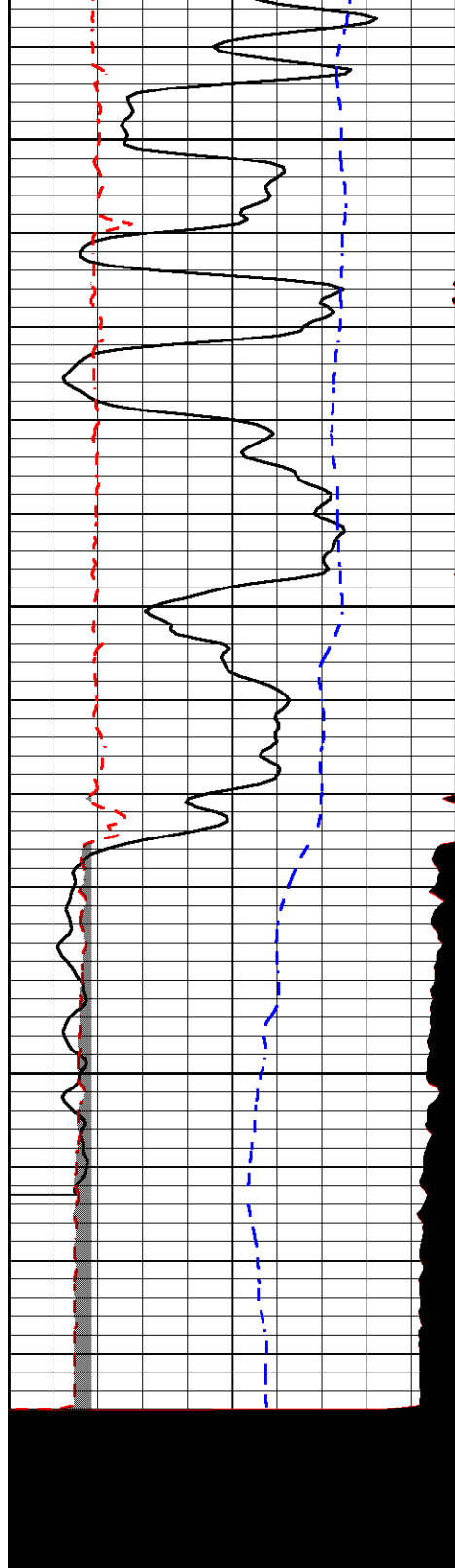


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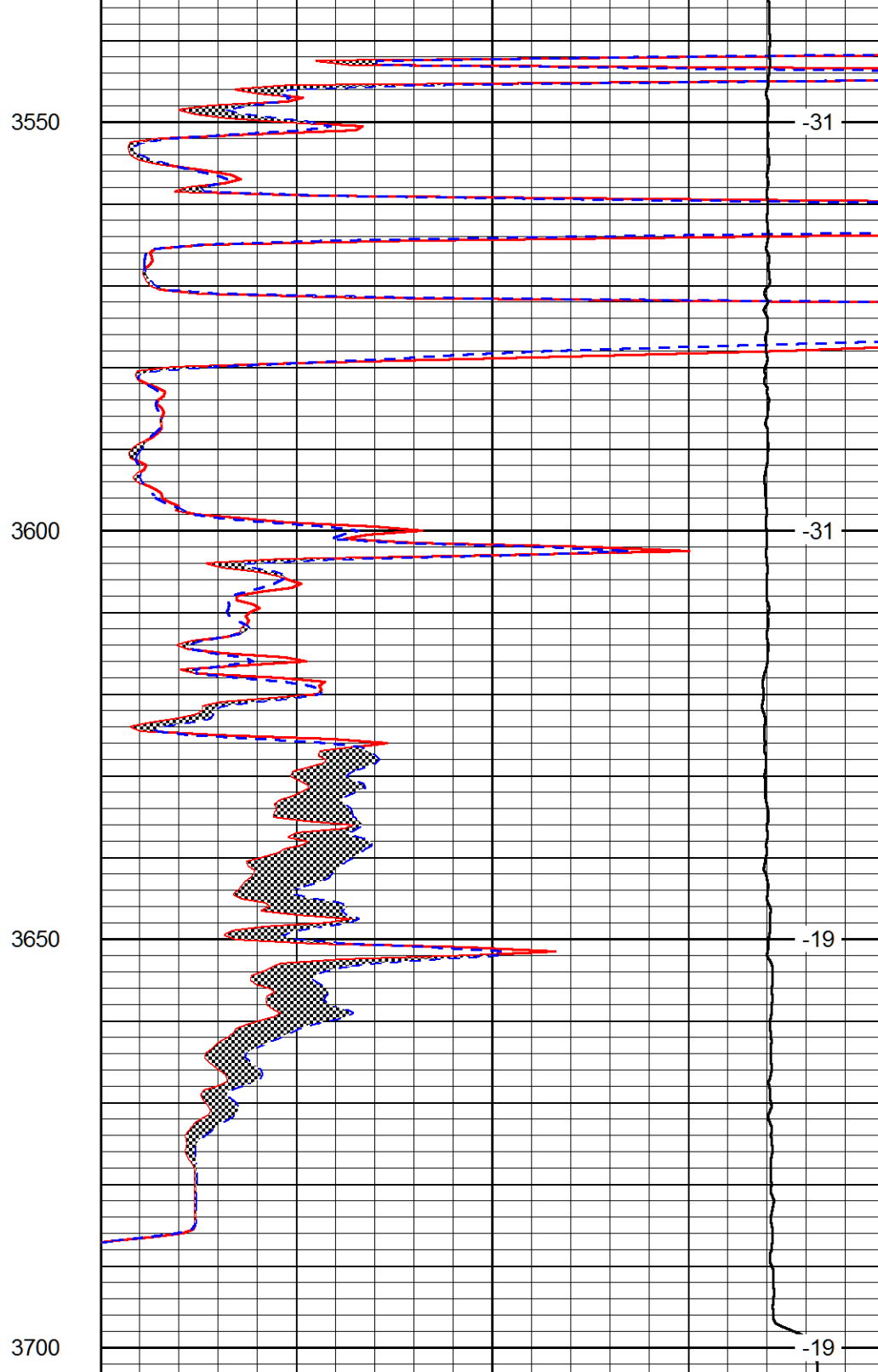
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