



Pioneer Energy Services

Radiation Guard Log

API No.

15-083-21,870-00-00

Company Palomino Petroleum, Inc.
Well Mullen Trust 1
Field Unnamed
County Hodgeman State Kansas

Location

1033' FSL & 1120' FEL

Other Services

None

Sec: 18 Twp: 22 S Rge: 21 W

Permanent Datum Ground Level Elevation 2180
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation

K.B. 2190
D.F. 2180
G.L. 2180

Date 1/5/2013

Run Number One

Depth Driller 4480

Depth Logger 4478

Bottom Logged Interval 4477

Top Log Interval 1350

Casing Driller 8.625 @ 1360

Casing Logger 1357

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 5,900

Density / Viscosity 9.45 48

pH / Fluid Loss 9.0 9.6

Source of Sample Flowline

Rm @ Meas. Temp .60 @ 70

Rmf @ Meas. Temp .45 @ 70

Rmc @ Meas. Temp .81 @ 70

Source of Rmf / Rmc Charts

Rm @ BHT .35 @ 121

Operating Rig Time 3 Hours

Max Rec. Temp. F 121

Equipment Number 108

Location Hays

Recorded By D. Martin

Witnessed By Kevin Bailey

<<< Fold Here >>>

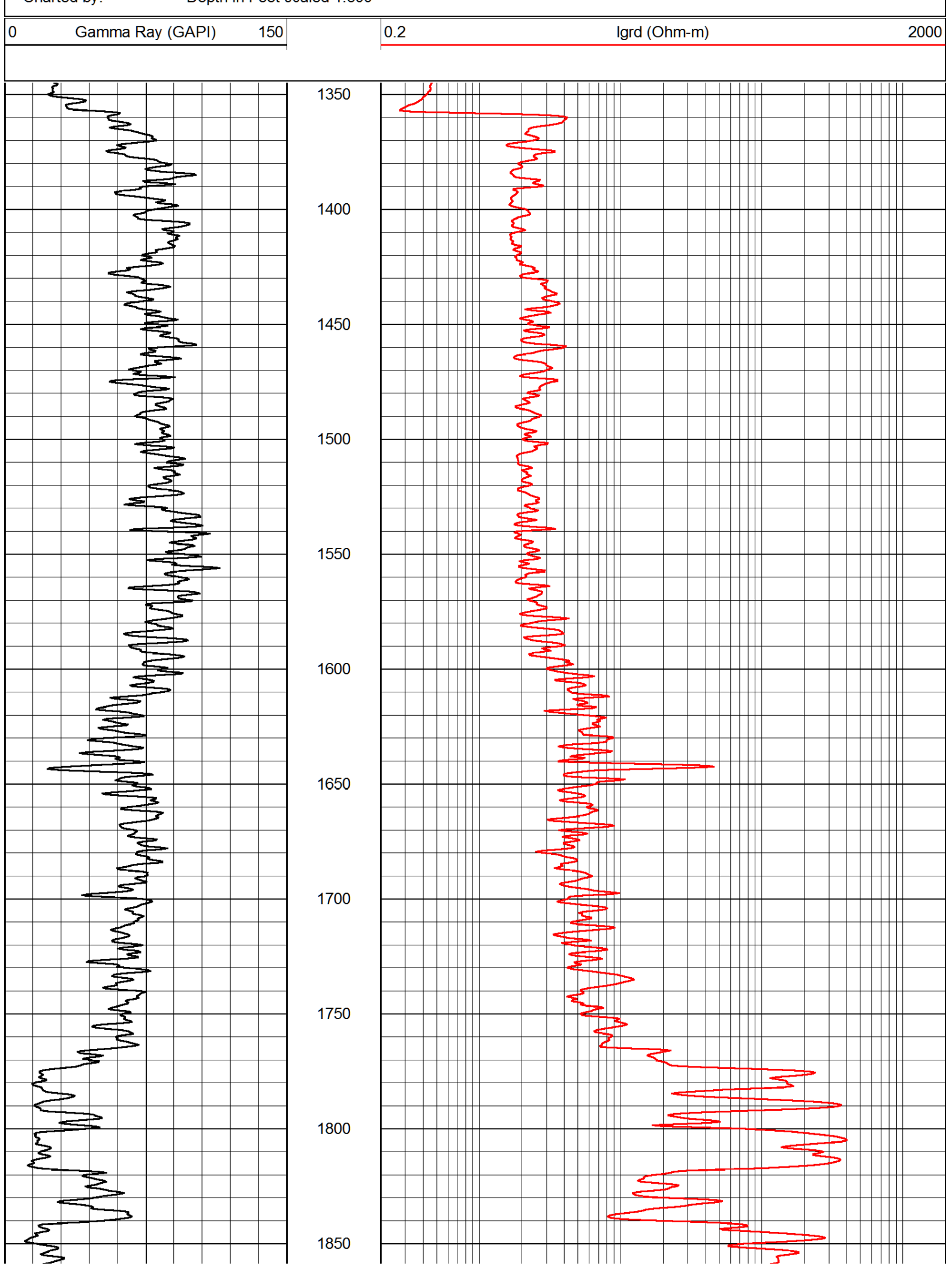
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

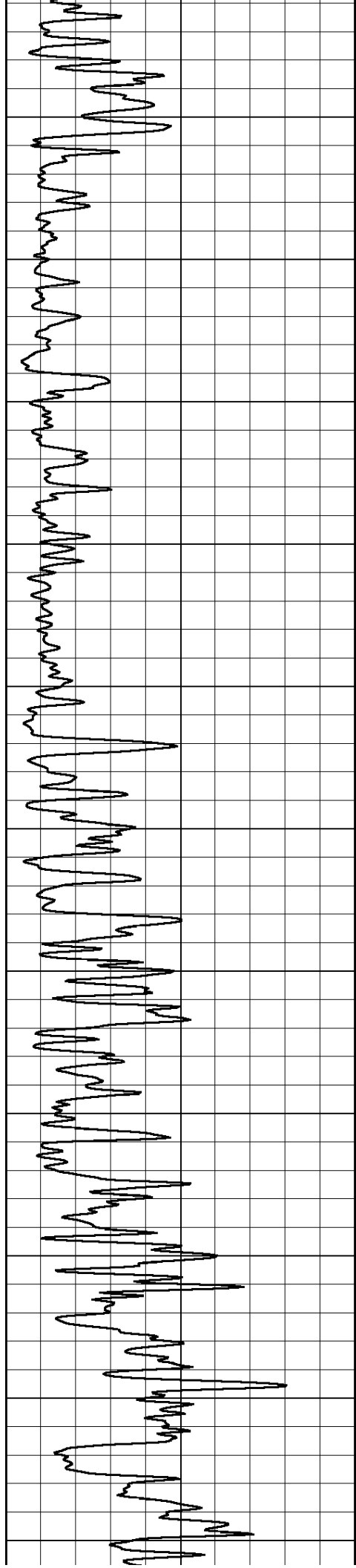
Comments

Thank you for using Log-Tech, Inc.
(785) 625-3858

Hanston, KS
1 1/2 E to Curve, Continue 1 1/2 E on Dirt Rd, N Into

Database File: palohd.db
Dataset Pathname: RAG/palorag
Presentation Format: rag2in
Dataset Creation: Sat Jan 05 16:25:56 2013
Charted by: Depth in Feet scaled 1:600





1900

1950

2000

2050

2100

2150

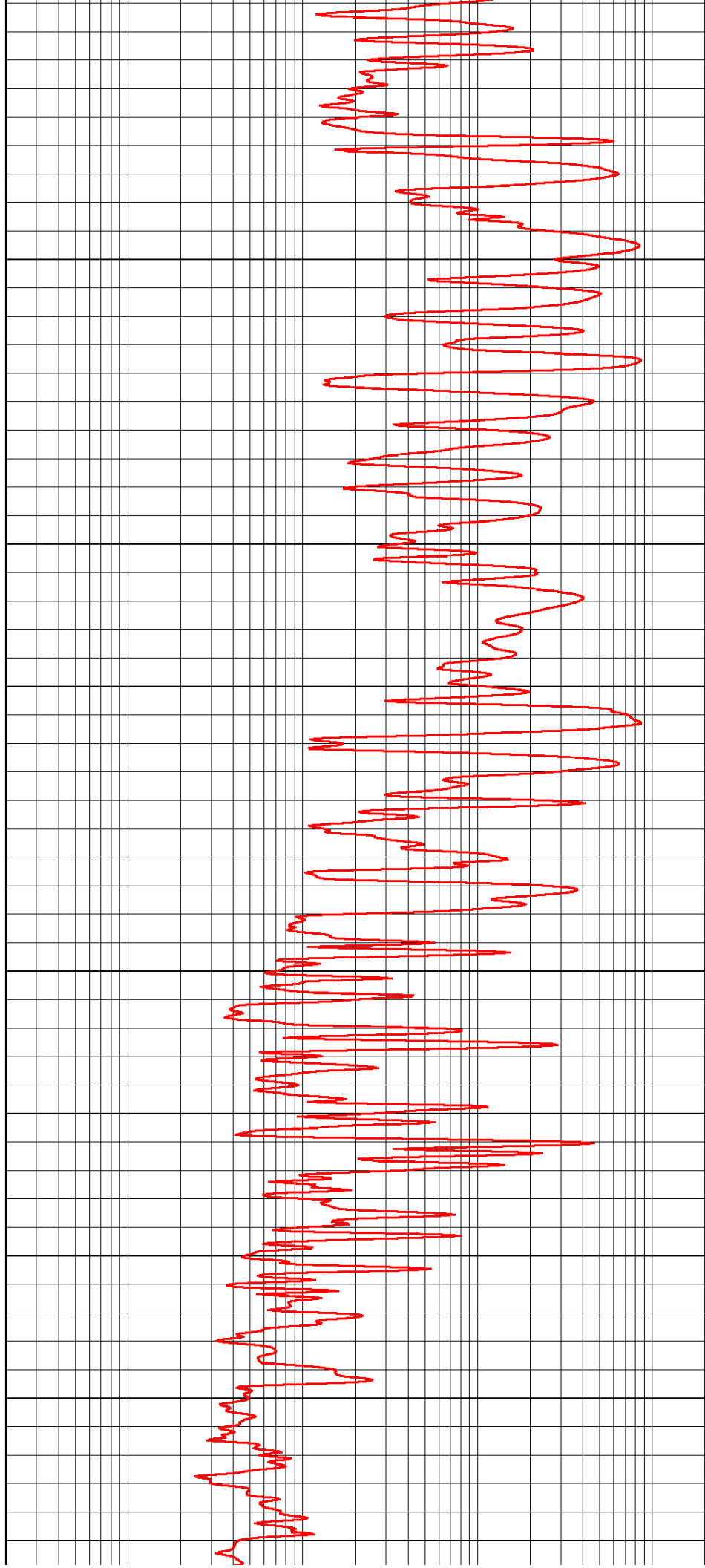
2200

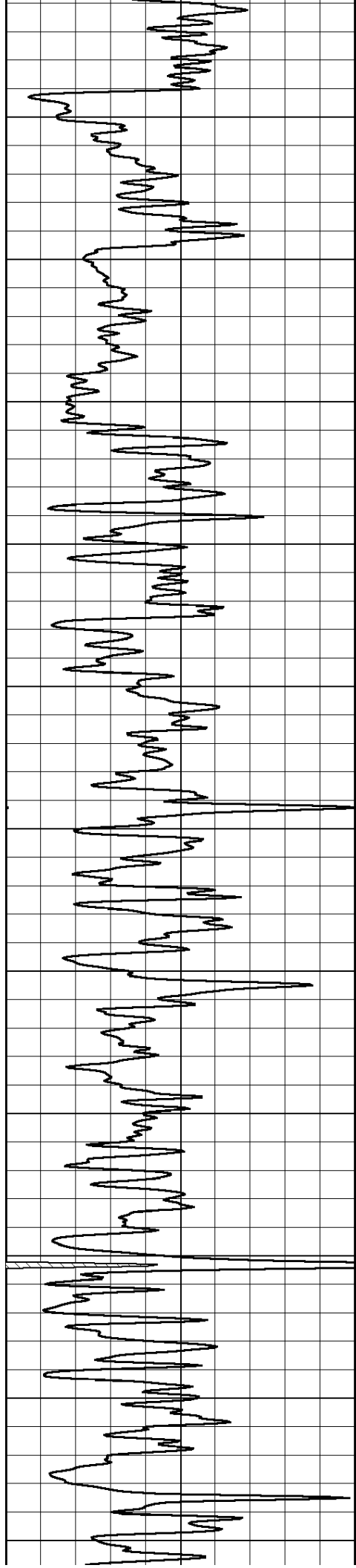
2250

2300

2350

2400





2450

2500

2550

2600

2650

2700

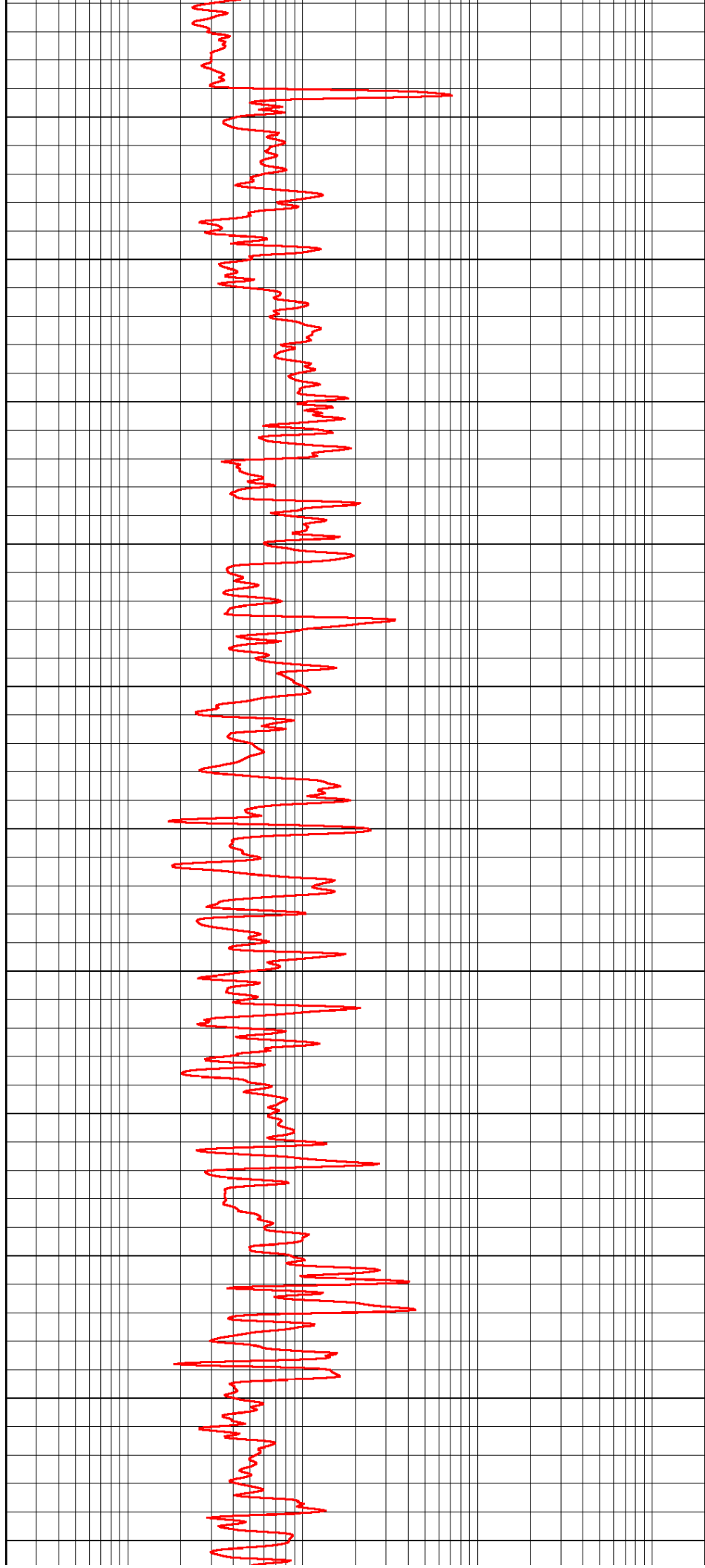
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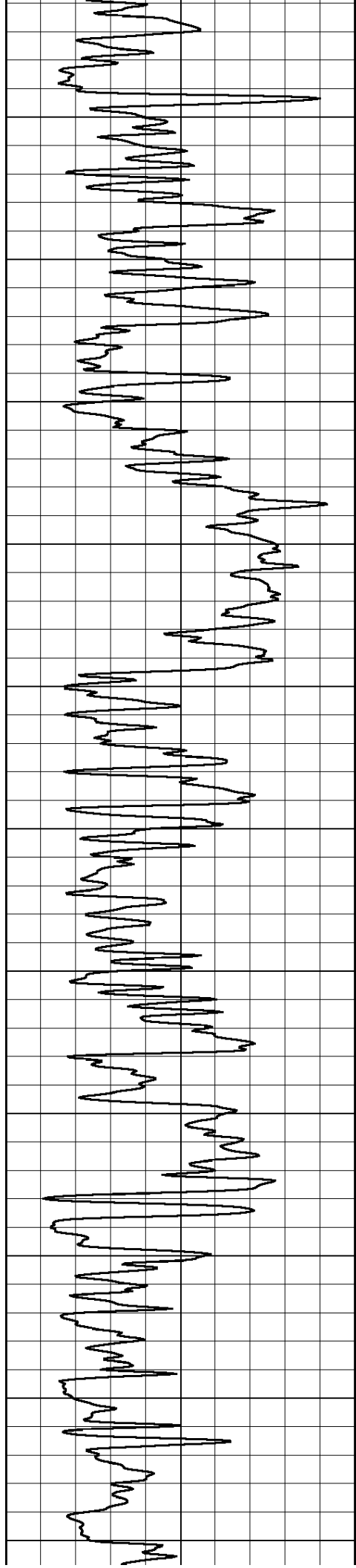
2800

2850

2900

2950





3000

3050

3100

3150

3200

3250

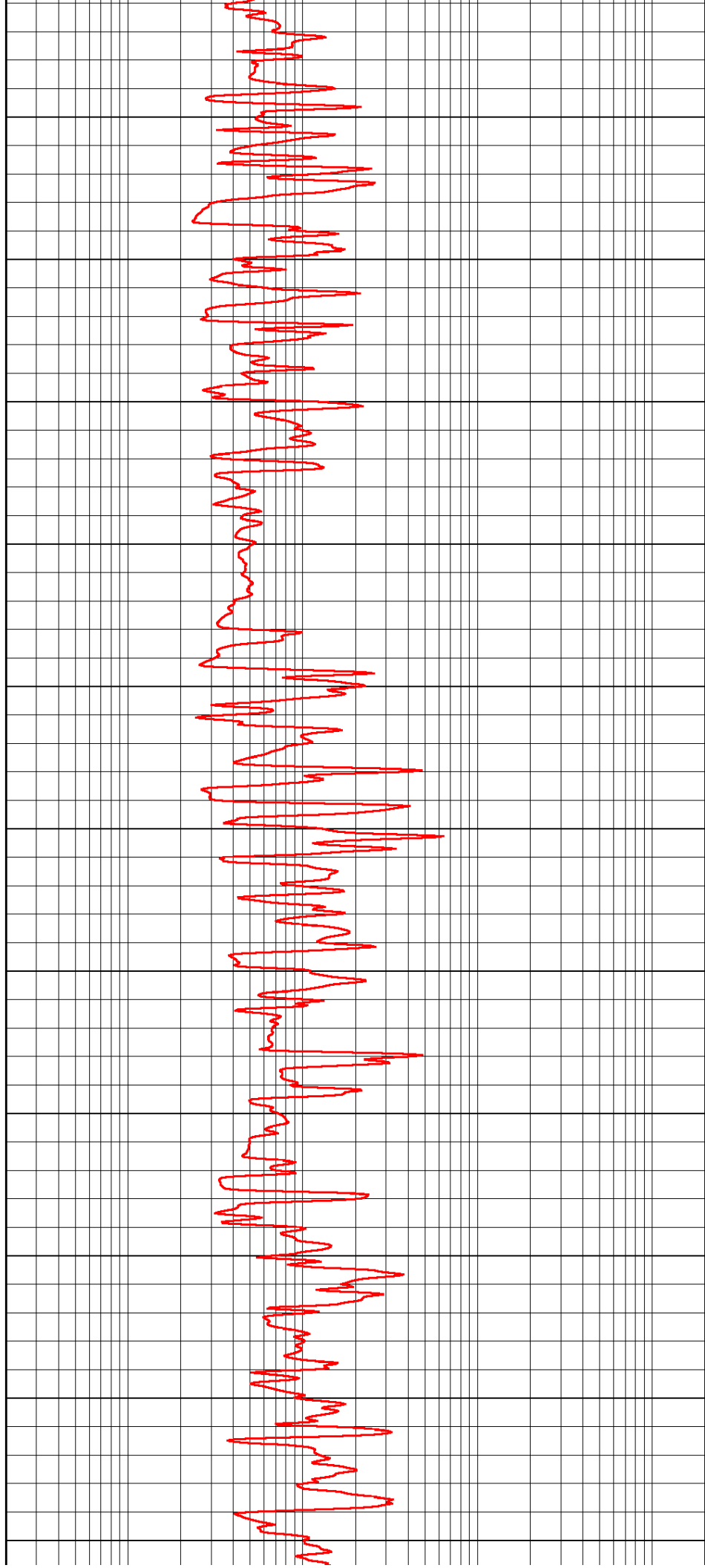
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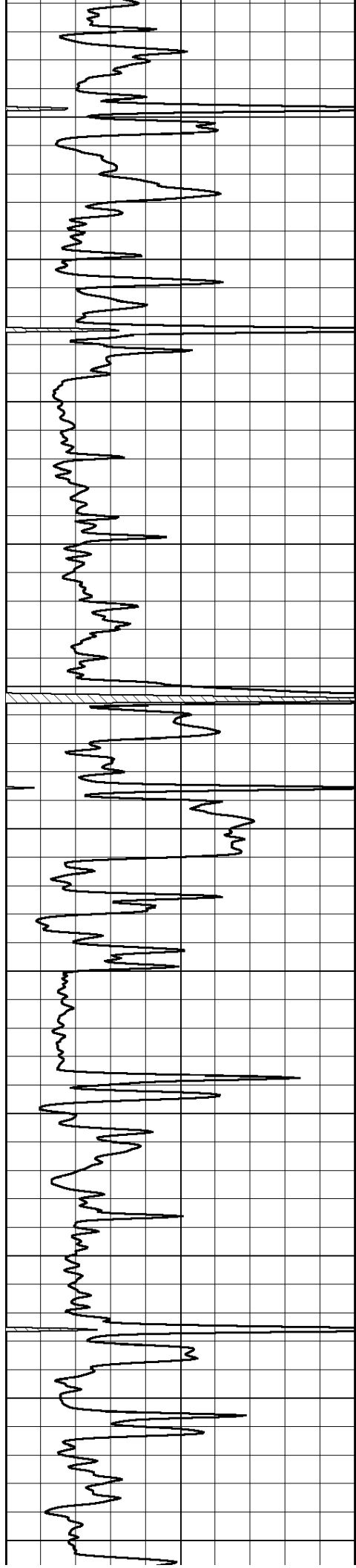
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3400

3450

3500





3550

3600

3650

3700

3750

3800

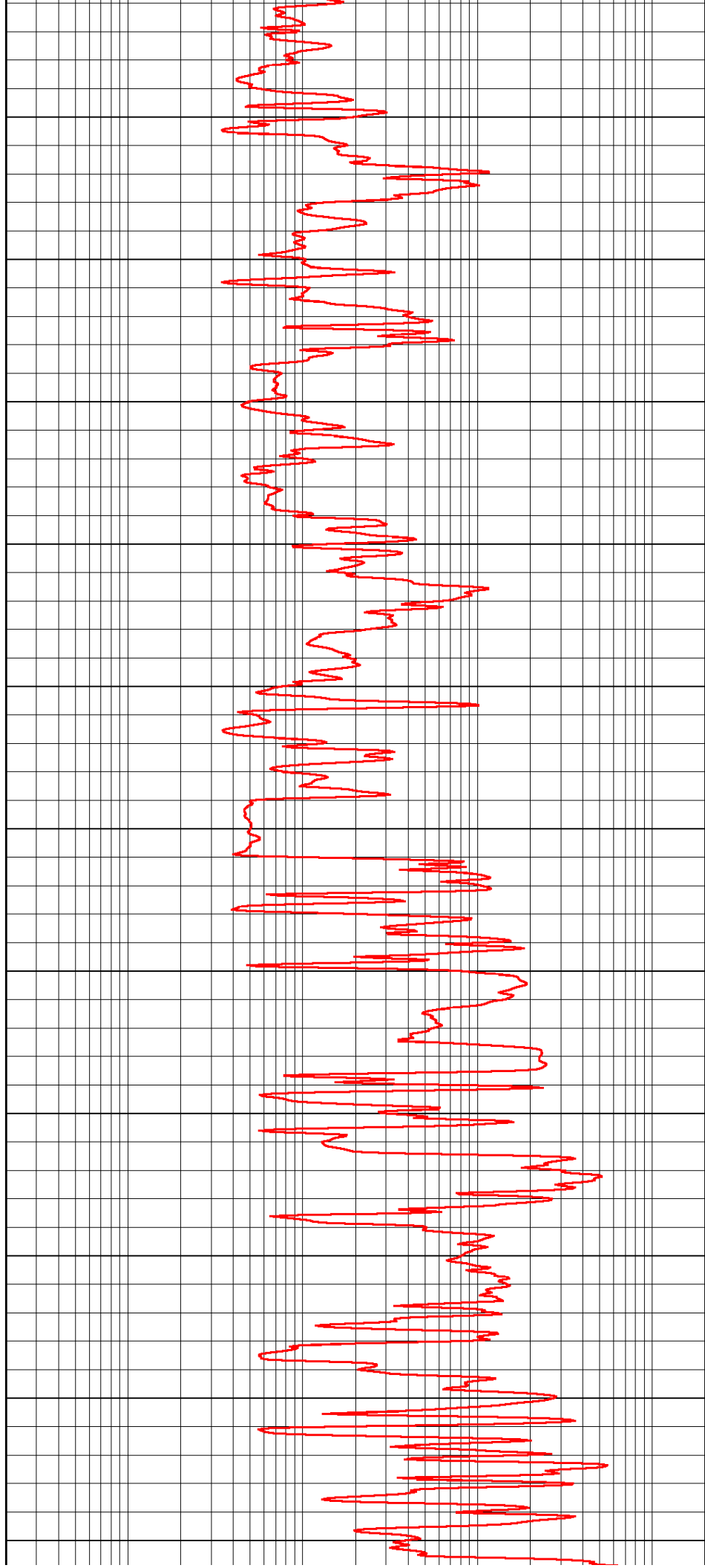
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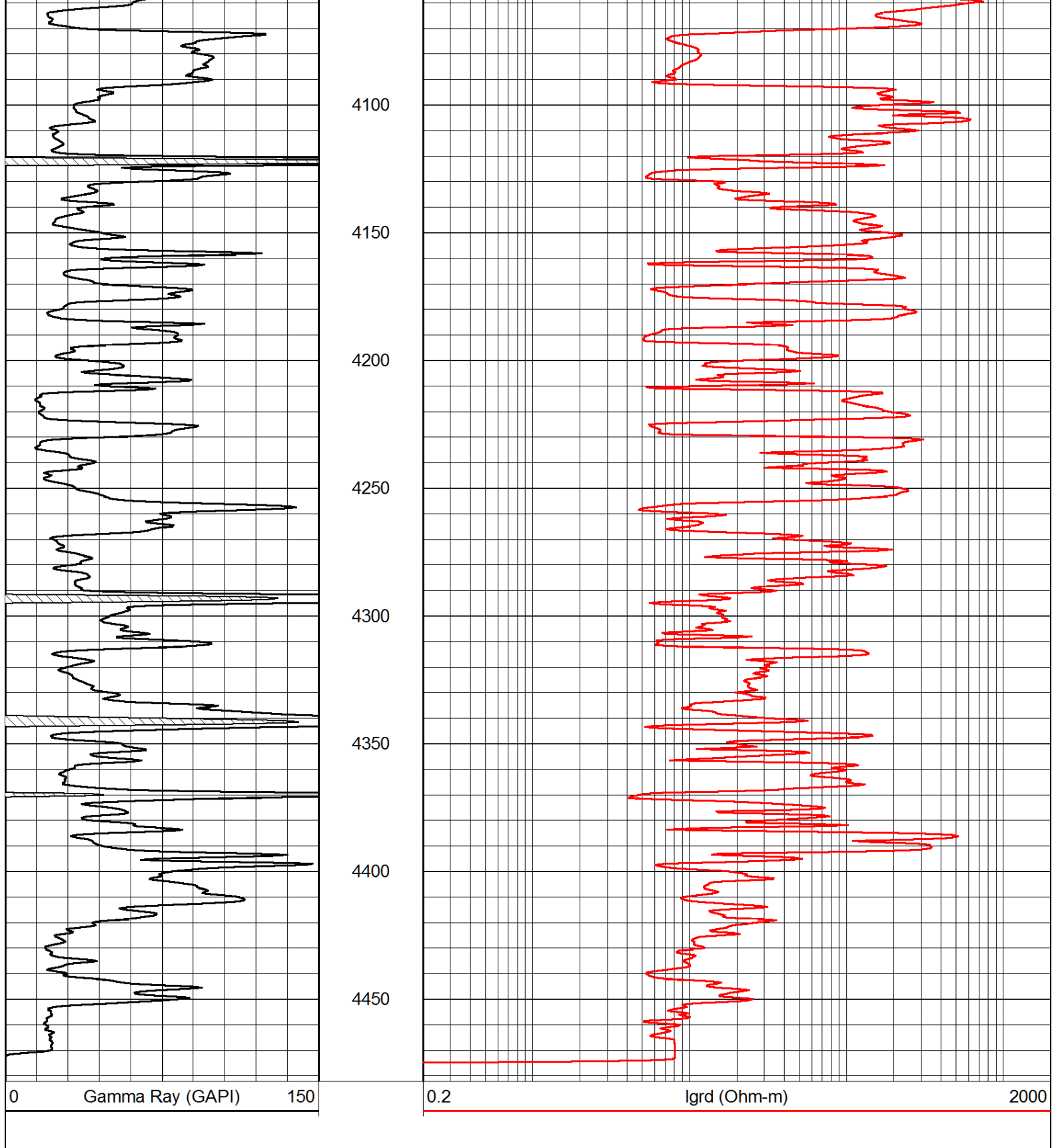
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3950

4000

4050

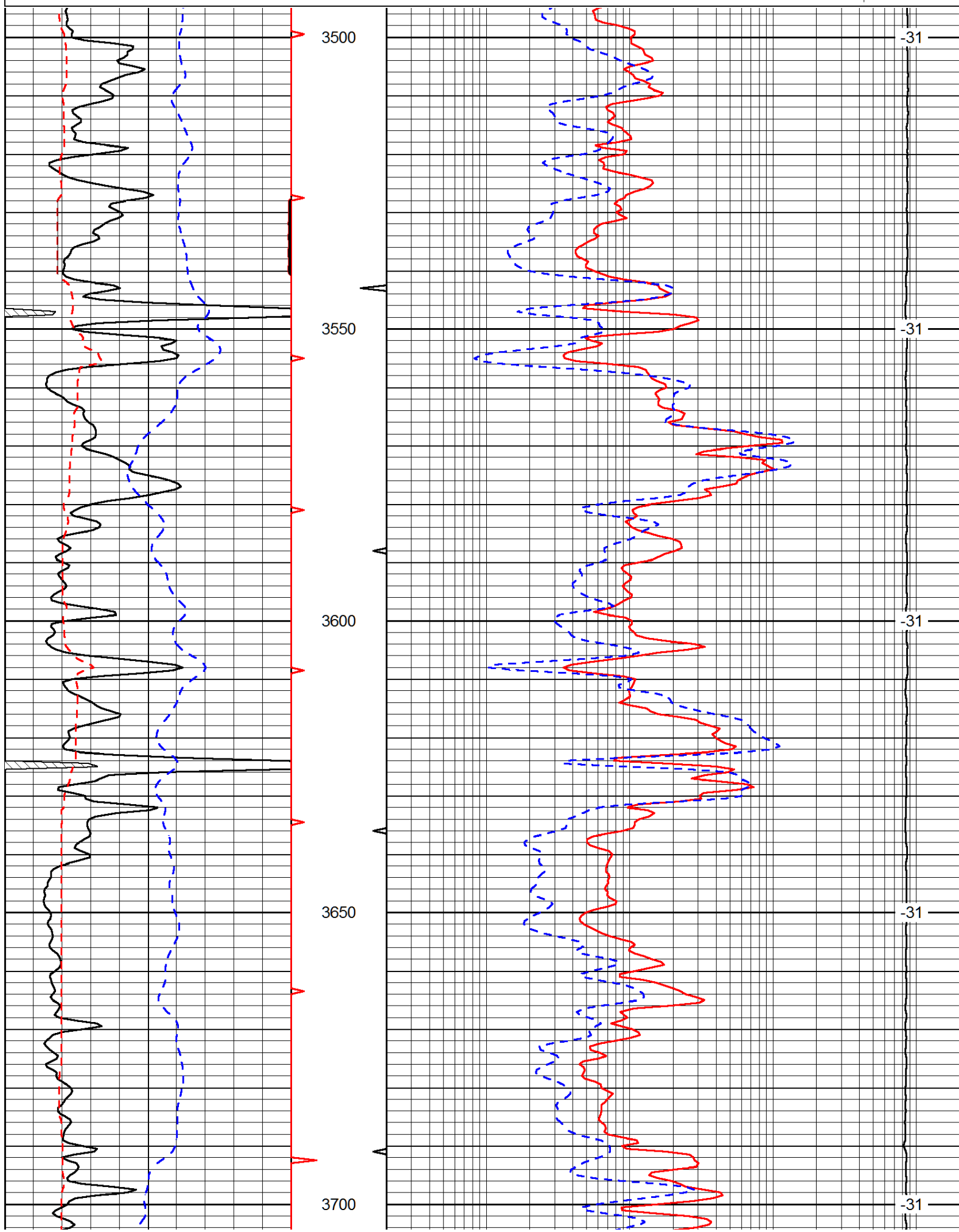


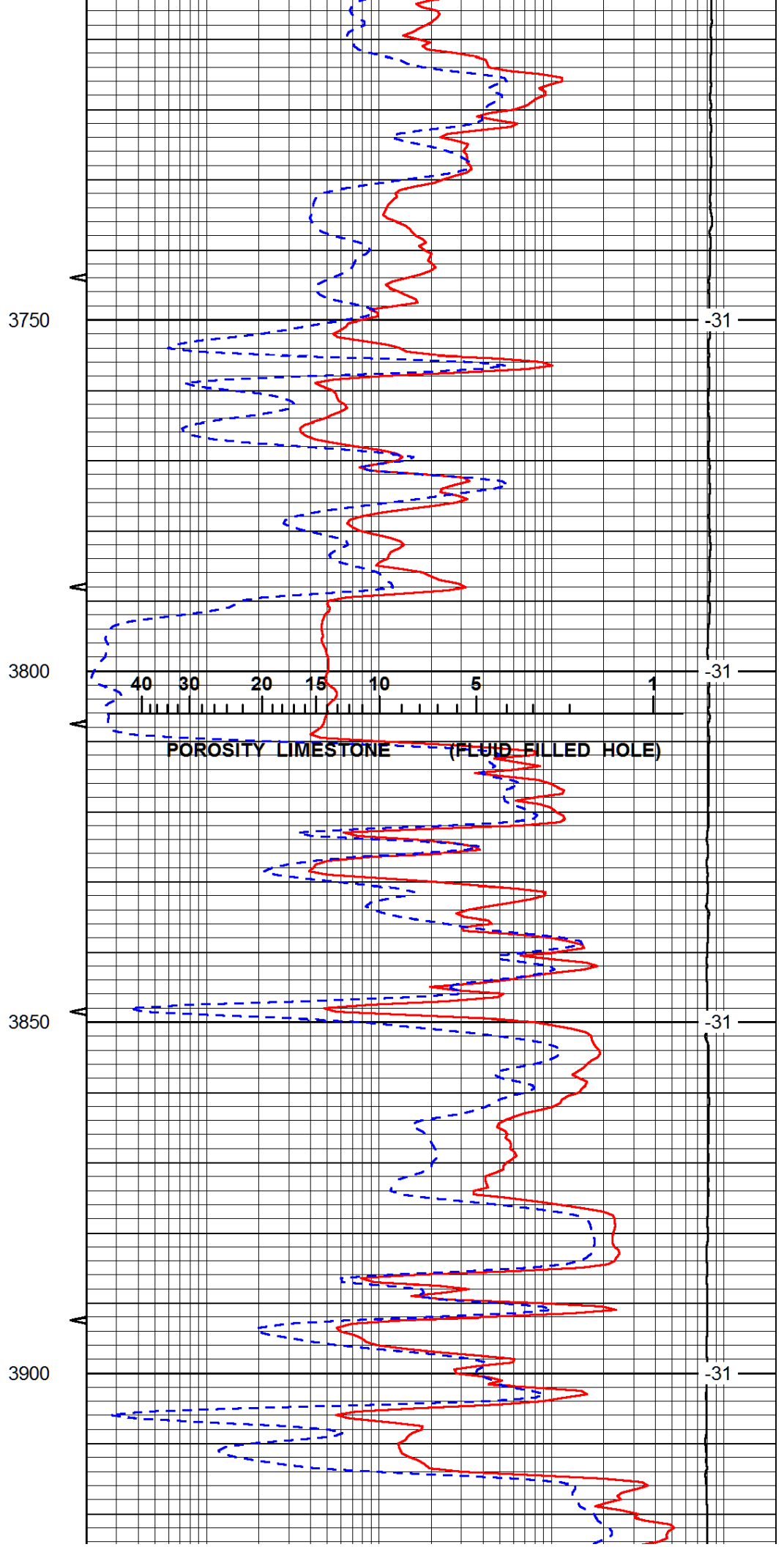
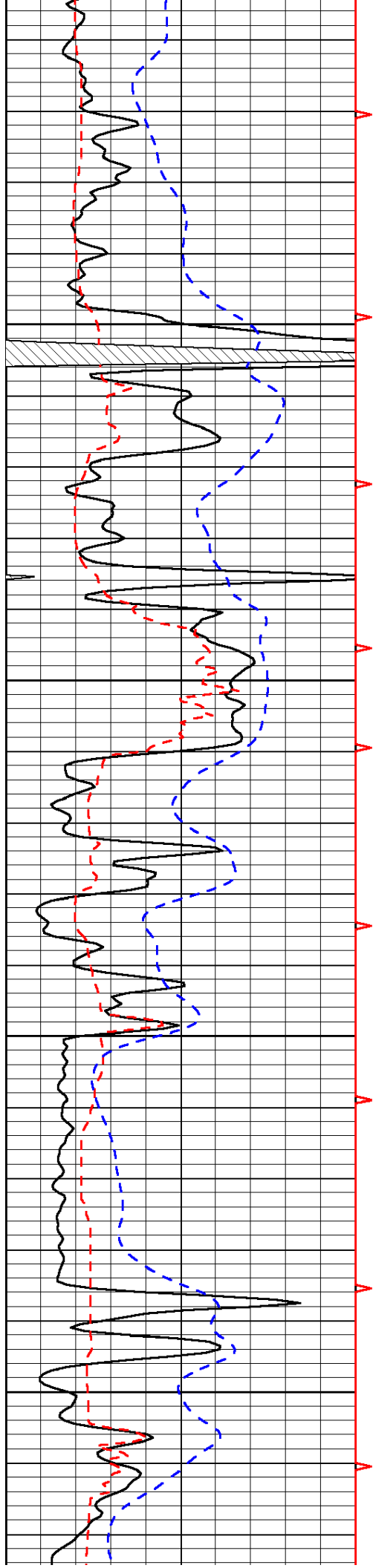


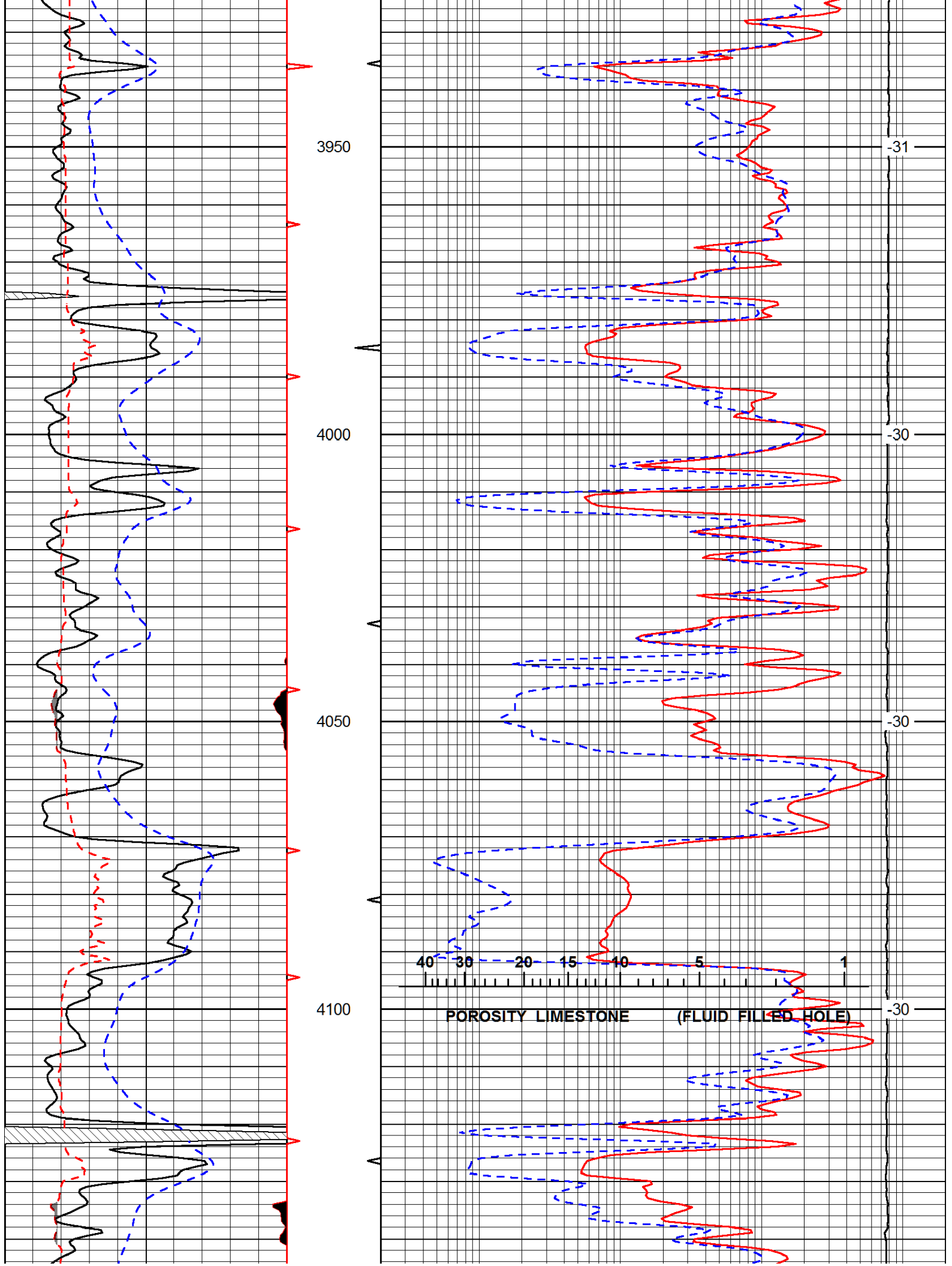
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 Presentation Format: rag
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 Charted by: Depth in Feet scaled 1:240

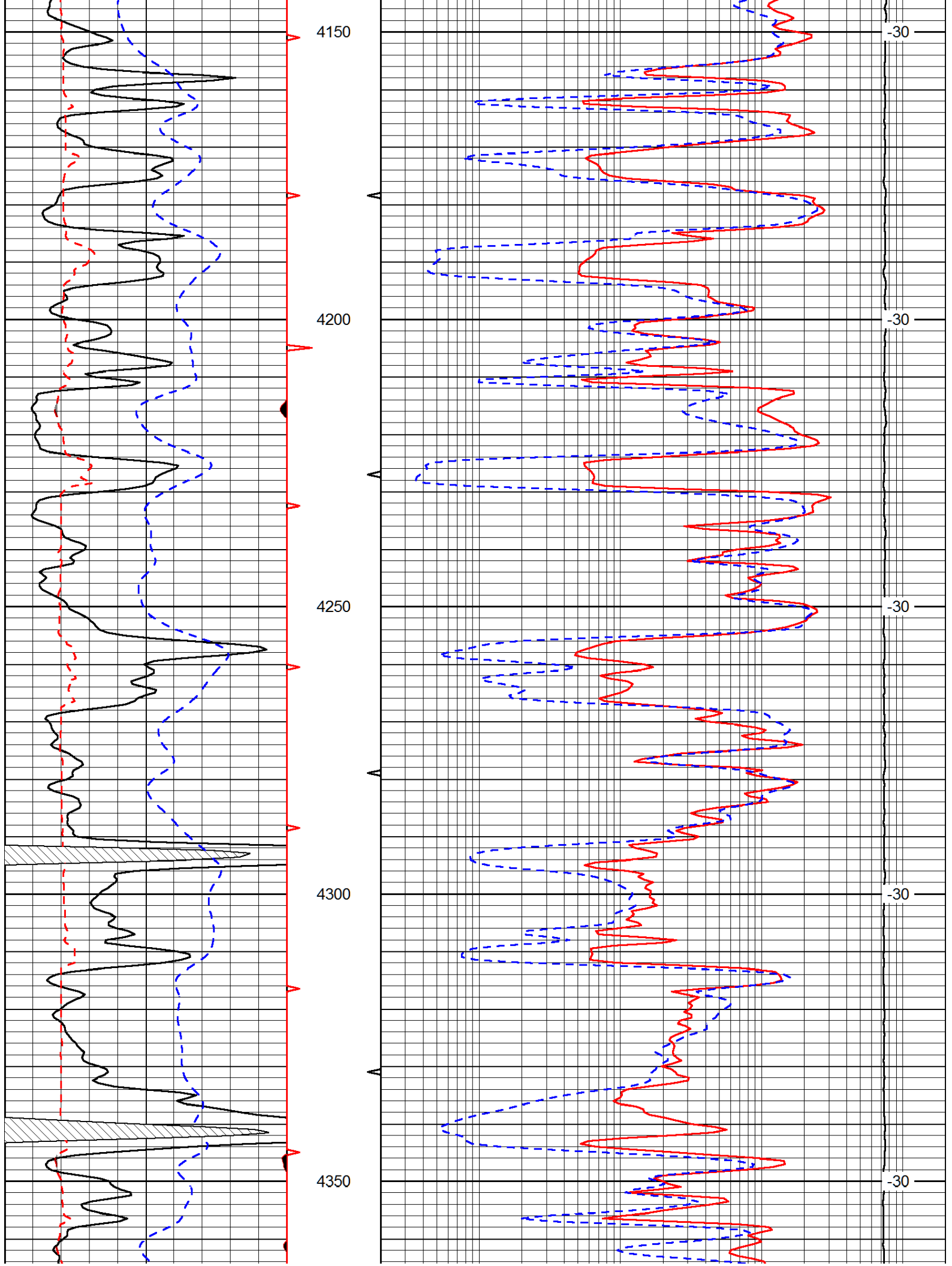
0	Gamma Ray (GAPI)	150	0.2	LGRD (Ohm-m)	2000
6	SCAL (in)	16	560	SWNC (NAPI)	2160
-200	sp (mV)	0	15000	Line Tension (lb)	0

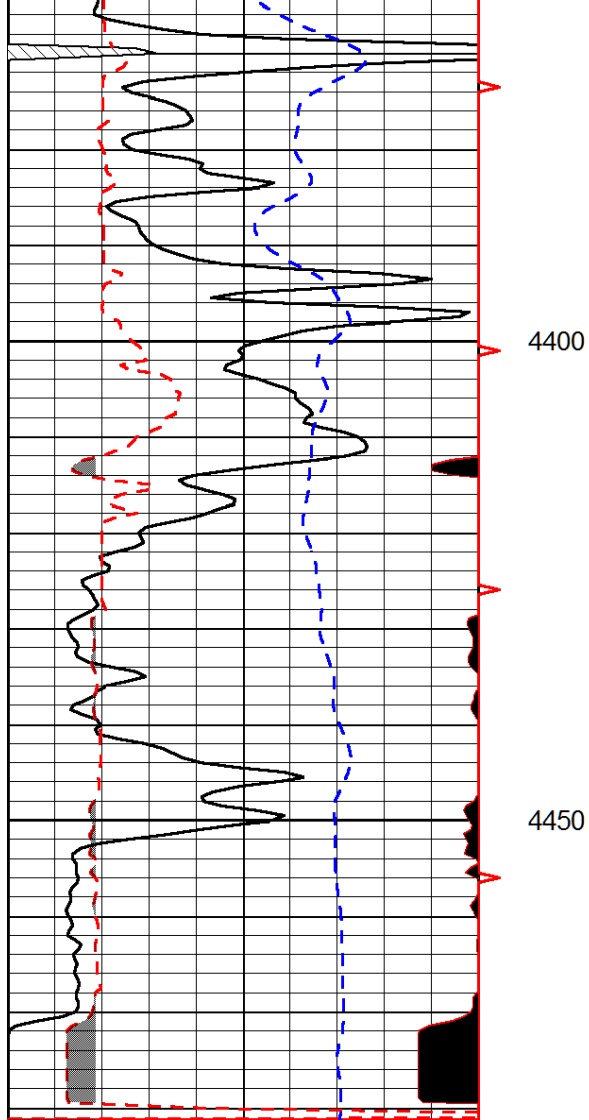
LSPD
(ft/min)



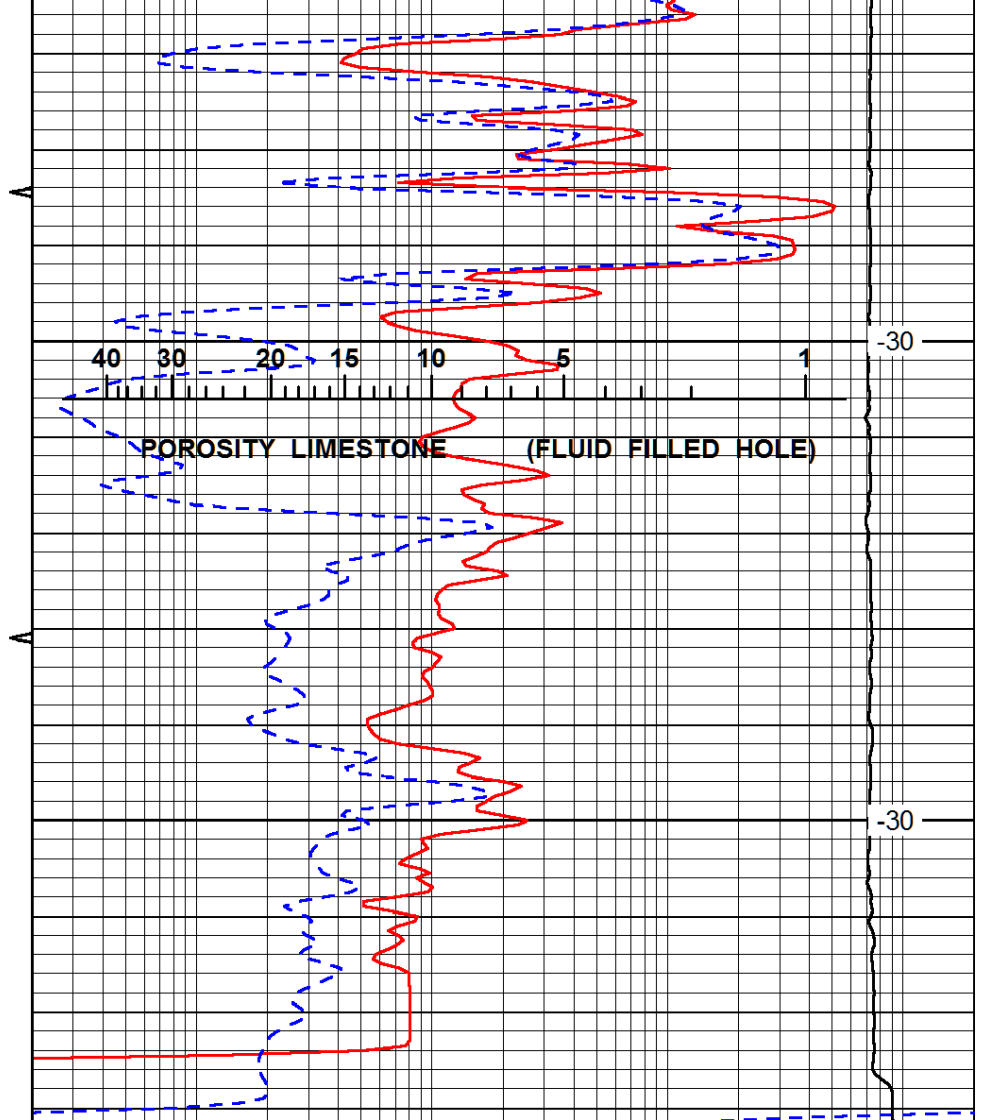








0	Gamma Ray (GAPI)	150
6	SCAL (in)	16
-200	sp (mV)	0



0.2	LGRD (Ohm-m)	2000
560	SWNC (NAPI)	2160
15000	Line Tension (lb)	0

LSPD
(ft/min)