



Pioneer Energy Services

# Radiation Guard Log

15-051-26,433-00-00

API No.

Company **Zinszer Oil Company, Inc.**

Well **Armbruster No. 1**

Field

County

**Eliis**

State

**Kansas**

Location

**SW NE NW NE  
590' FNL & 1,961' FEL**

Other Services  
**MEL**

Sec: **2**

Twp: **15S**

Rge: **20W**

Ground Level

**Elevation 2053**

Log Measured From

**8 Ft. Above Perm. Datum**

K.B. 2061  
D.F.  
G.L. 2053

Date **11/28/2012**

Run Number

**One**

Depth Driller

**3692**

Depth Logger

**3691**

Bottom Logged Interval

**3690**

Top Log Interval

**1300**

Casing Driller

**8.625 @ 1317**

Casing Logger

**1313**

Bit Size

**7.875**

Type Fluid in Hole

**Chemical**

Salinity,ppm CL

**4000**

Density / Viscosity

**9.0 53**

pH / Fluid Loss

**10.0 8.8**

Source of Sample

**Flowline**

Rm @ Meas. Temp

**.50 @ 69**

Rmf @ Meas. Temp

**.38 @ 69**

Rmc @ Meas. Temp

**.68 @ 69**

Source of Rmf / Rmc

**Charts**

Rm @ BHT

**.31 @ 113**

Operating Rig Time

**4 Hours**

Max Rec. Temp. F

**113**

Equipment Number

**108**

Location

**Hays**

Recorded By

**J. Long**

Witnessed By

**Bob Hopkins**

Perry Henman

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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

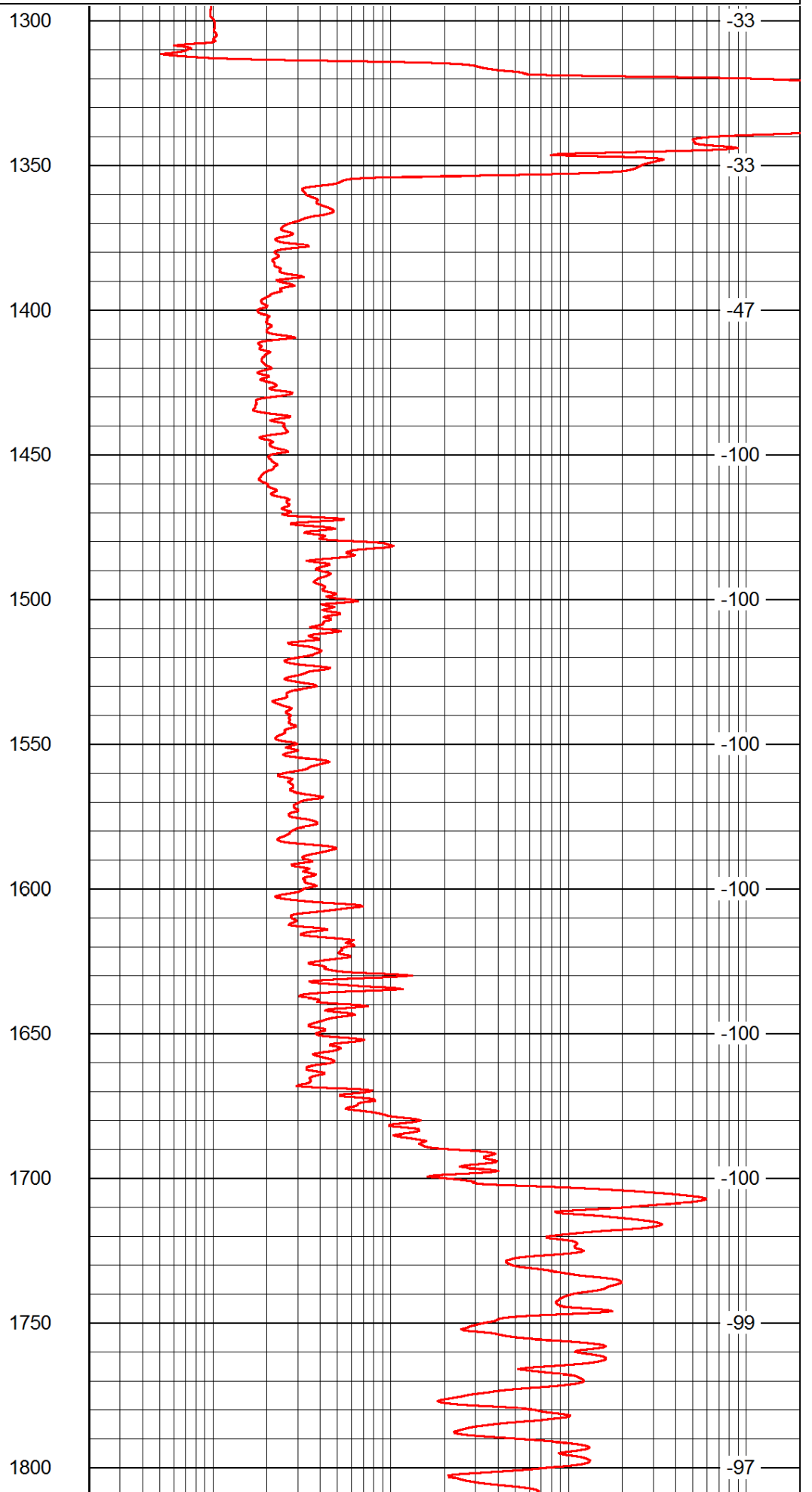
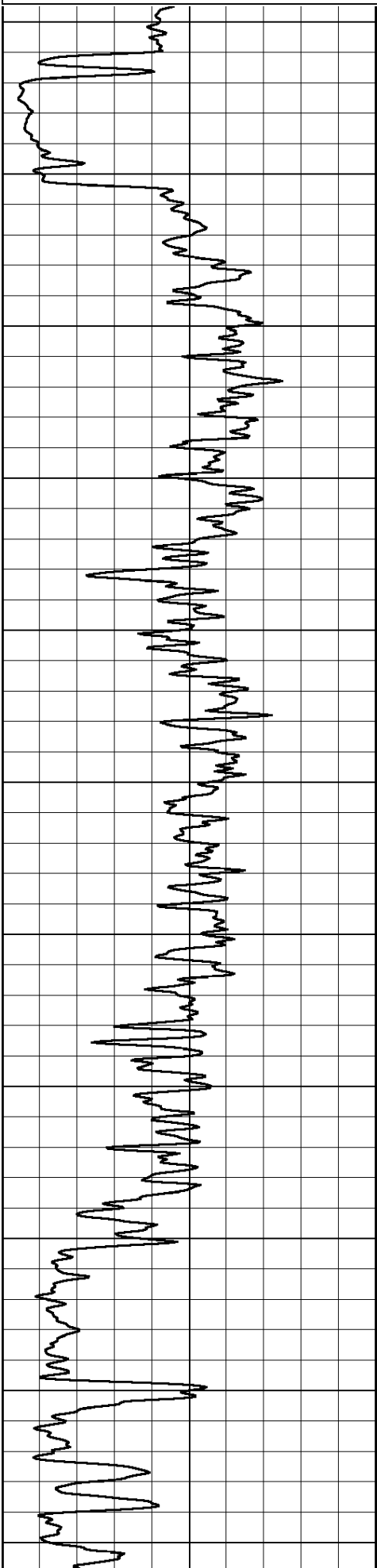
Antonino, 6 1/2 West, South Into

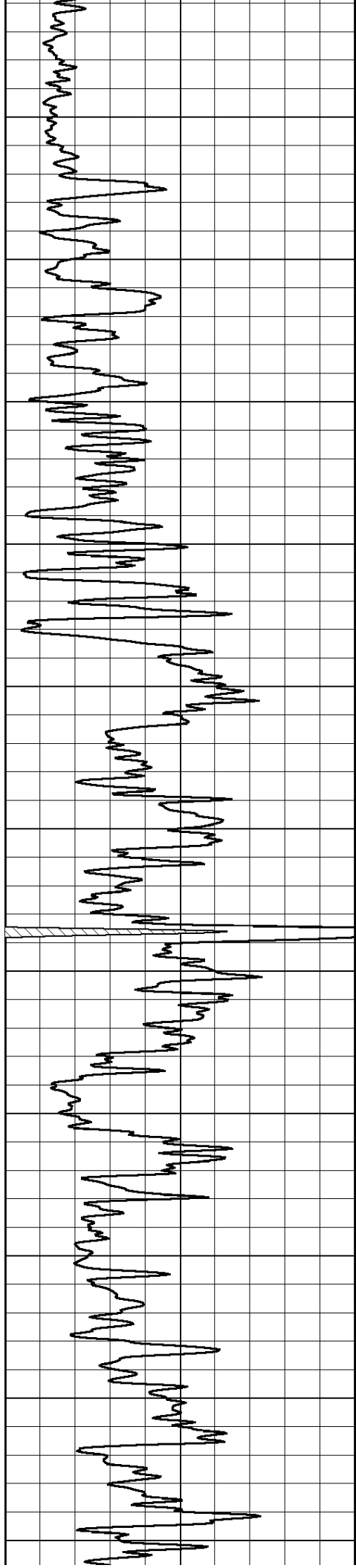
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 Presentation Format: rag2in  
 Dataset Creation: Wed Nov 28 18:27:15 2012  
 Charted by: Depth in Feet scaled 1:600

0 Gamma Ray 150

0.2 lgrd 2000

LSPD





1850

1900

1950

2000

2050

2100

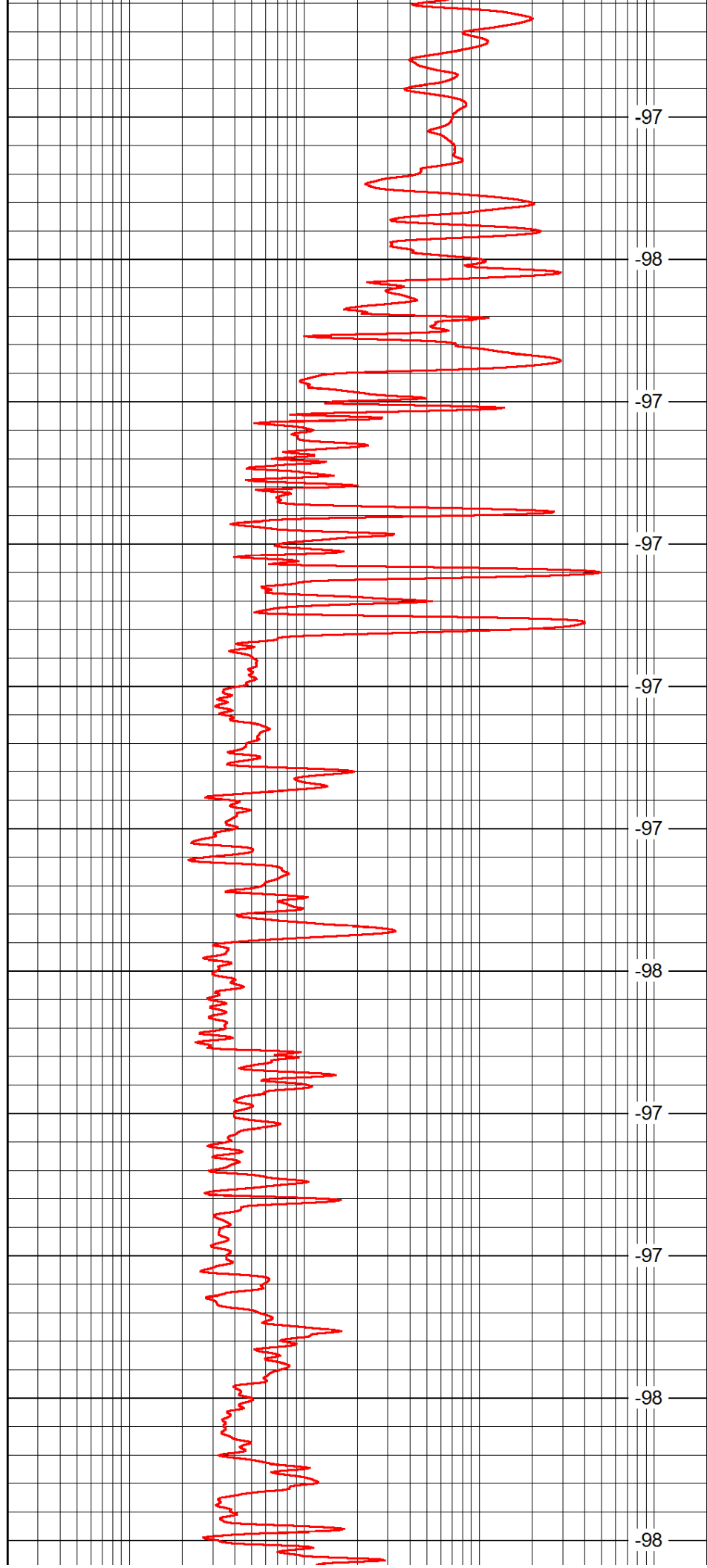
2150

2200

2250

2300

2350



-97

-98

-97

-97

-97

-97

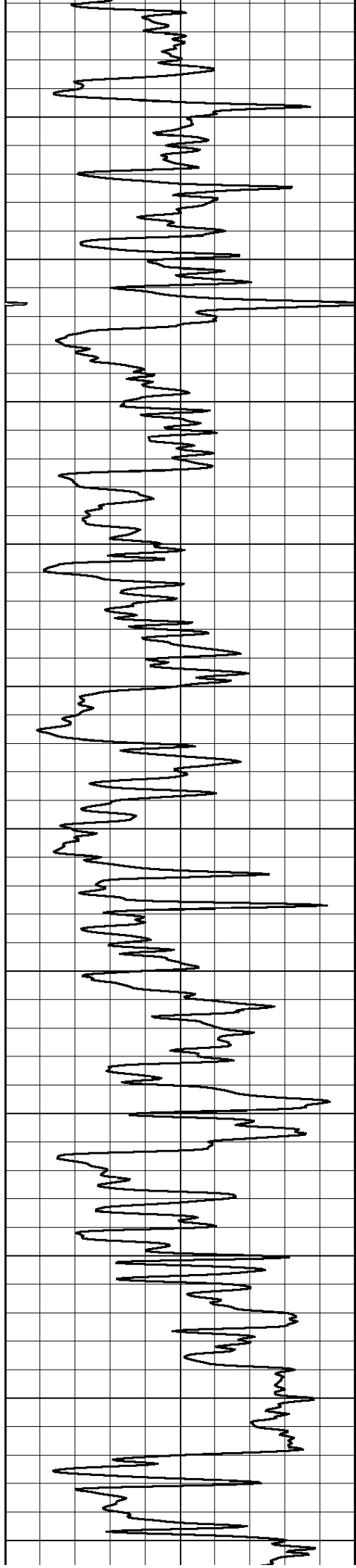
-98

-97

-97

-98

-98



2400

2450

2500

2550

2600

2650

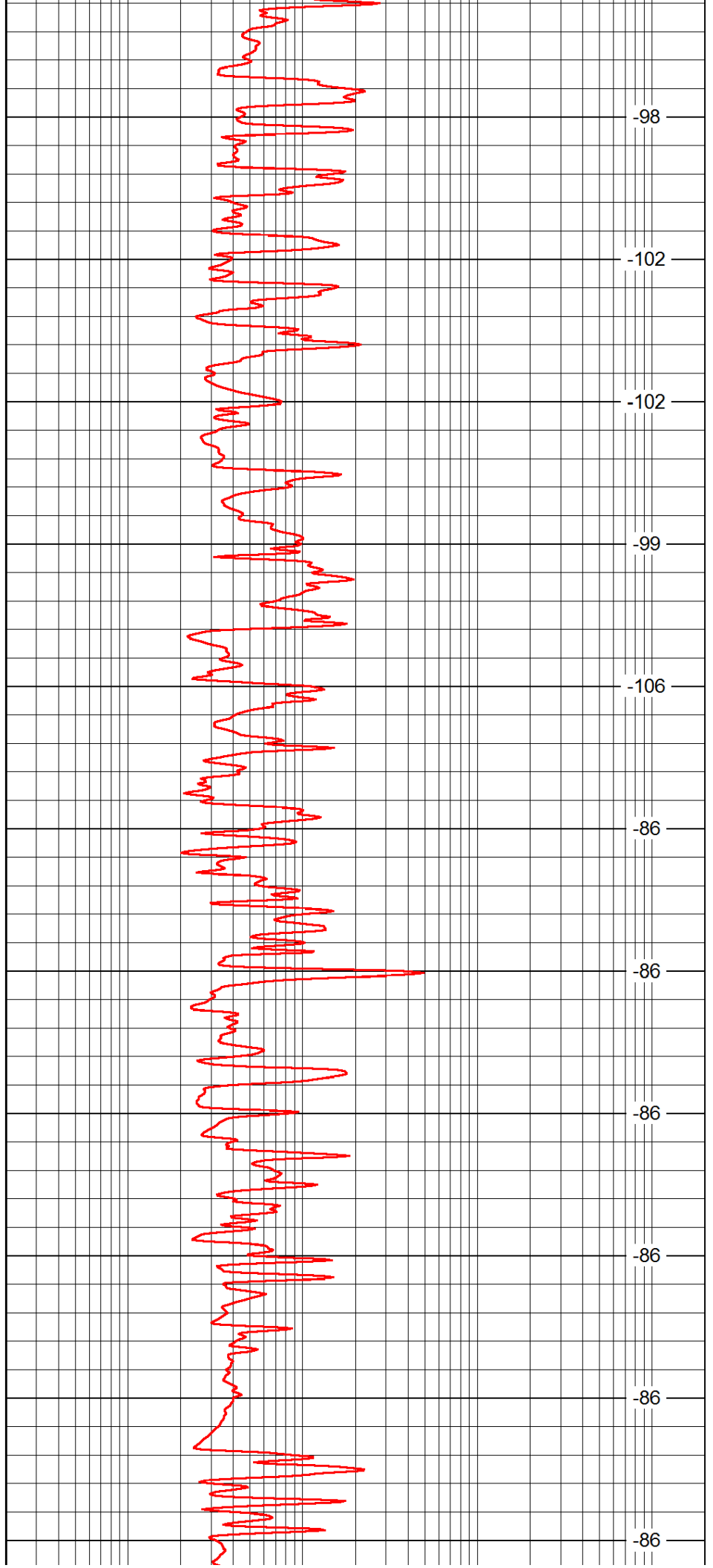
2700

2750

2800

2850

2900



-98

-102

-102

-99

-106

-86

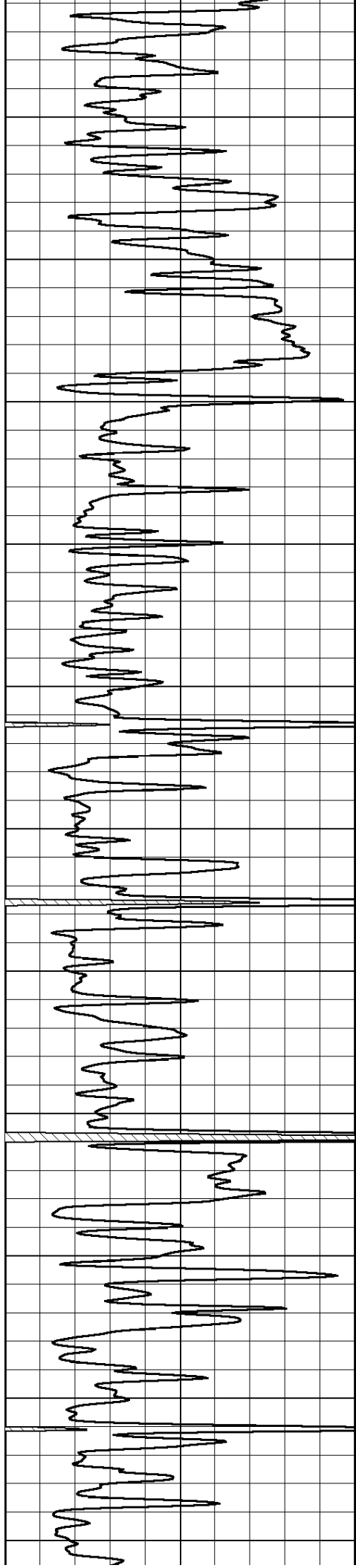
-86

-86

-86

-86

-86



2950

3000

3050

3100

3150

3200

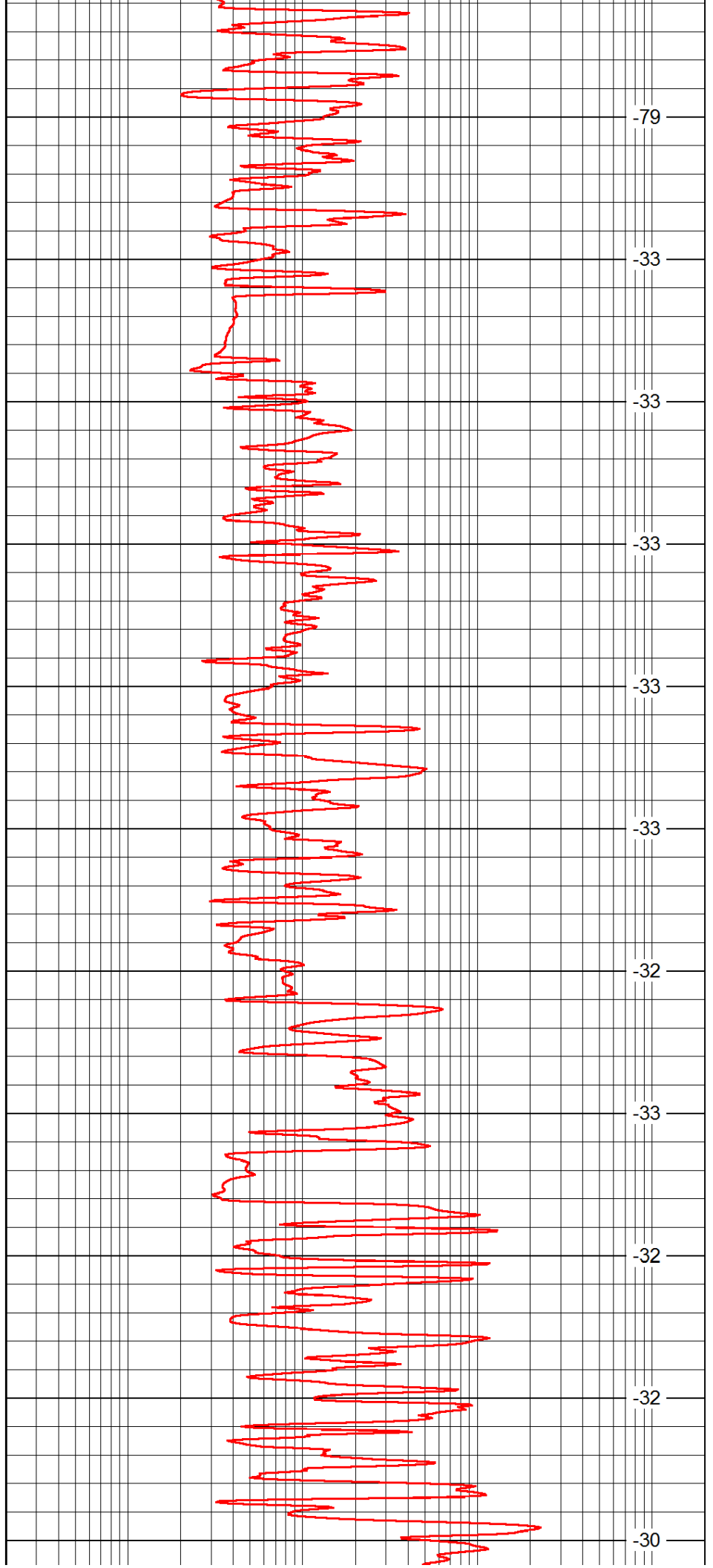
3250

3300

3350

3400

3450



-79

-33

-33

-33

-33

-33

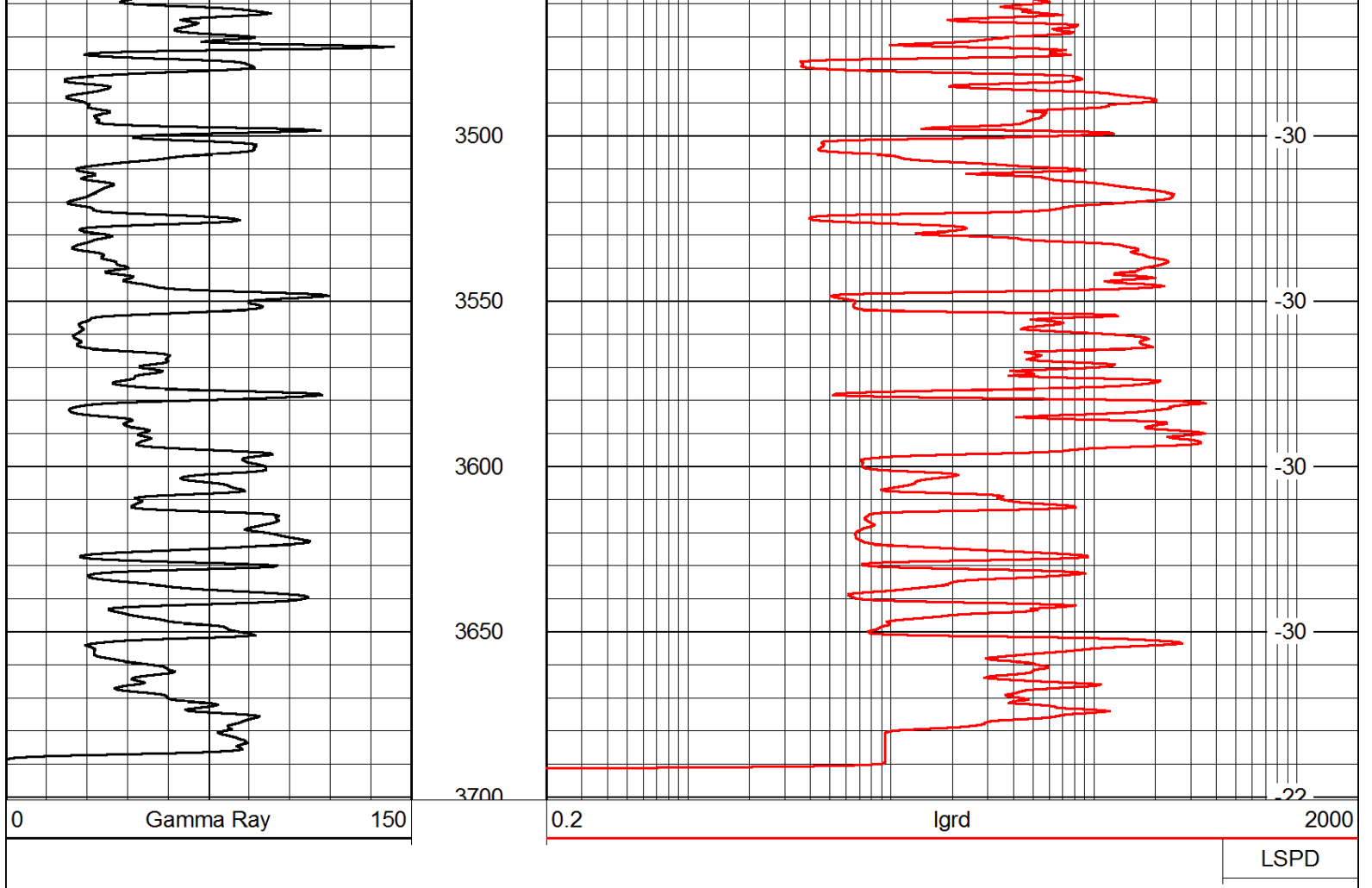
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-33

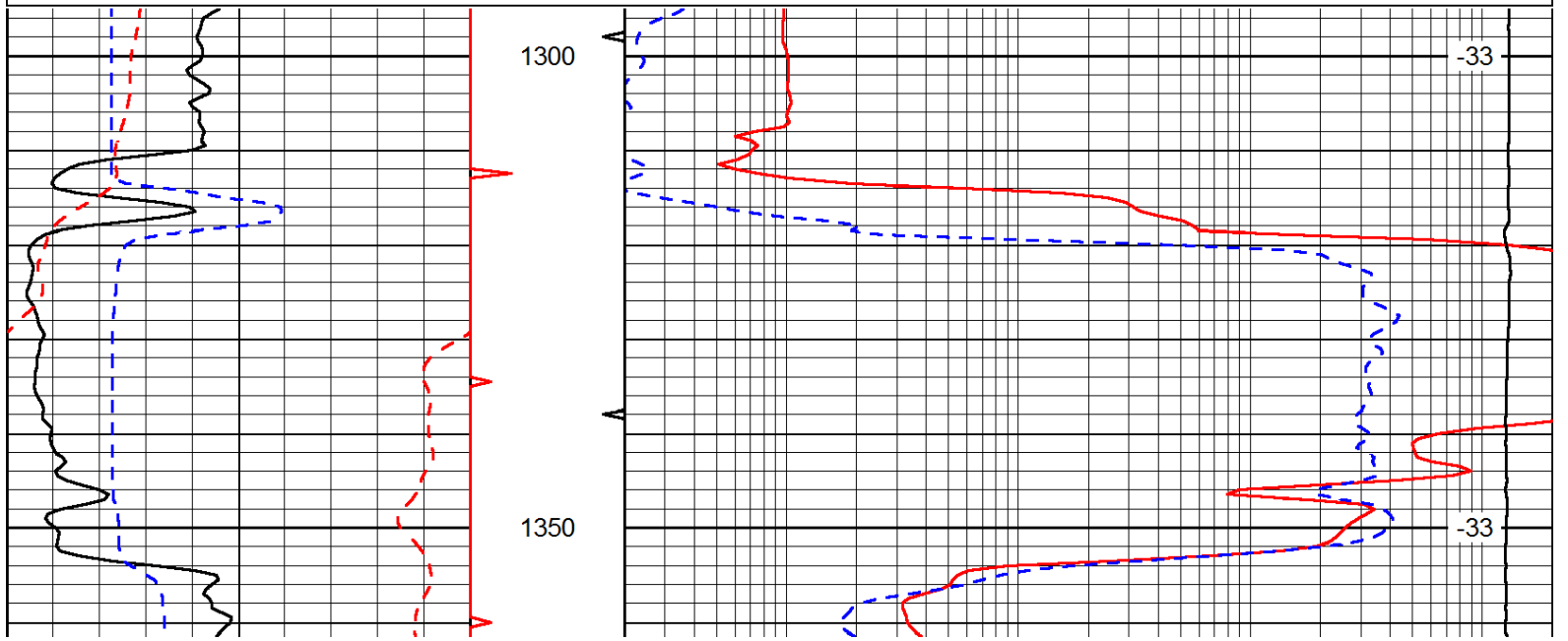
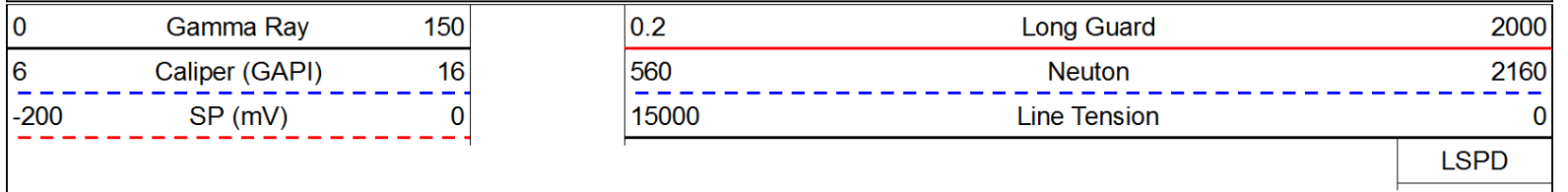
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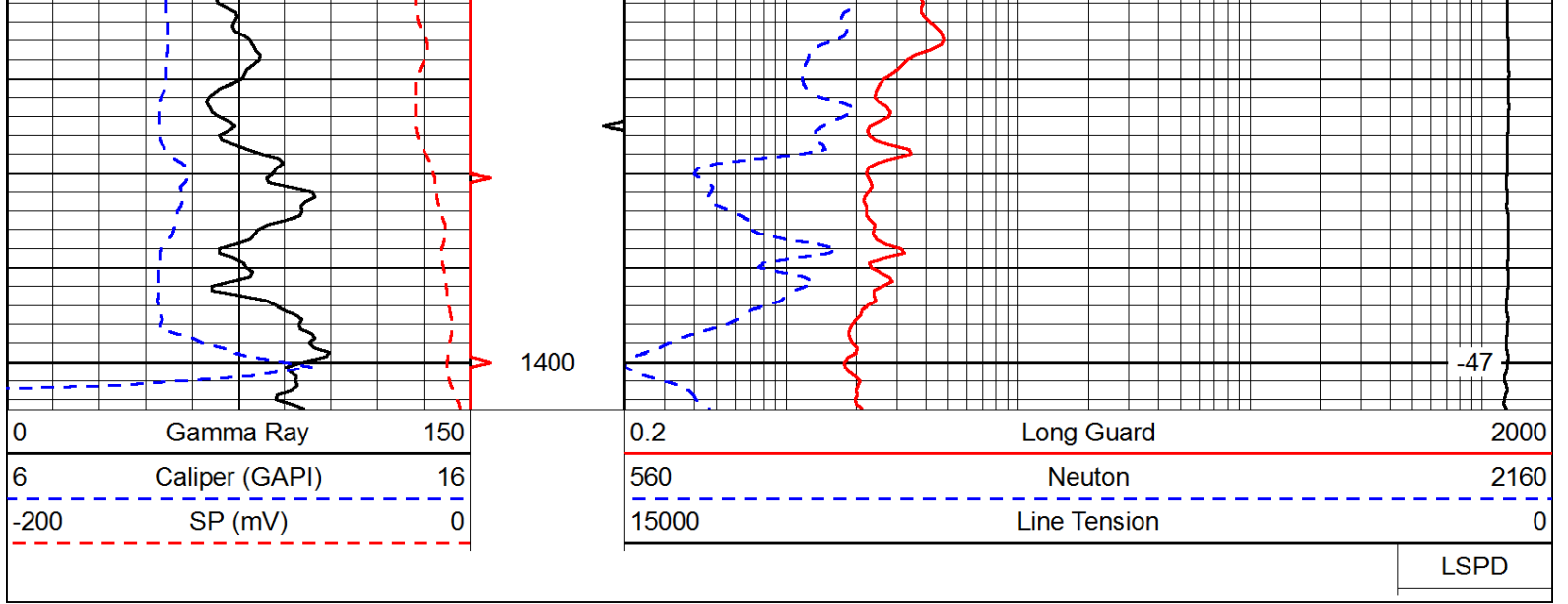
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-30

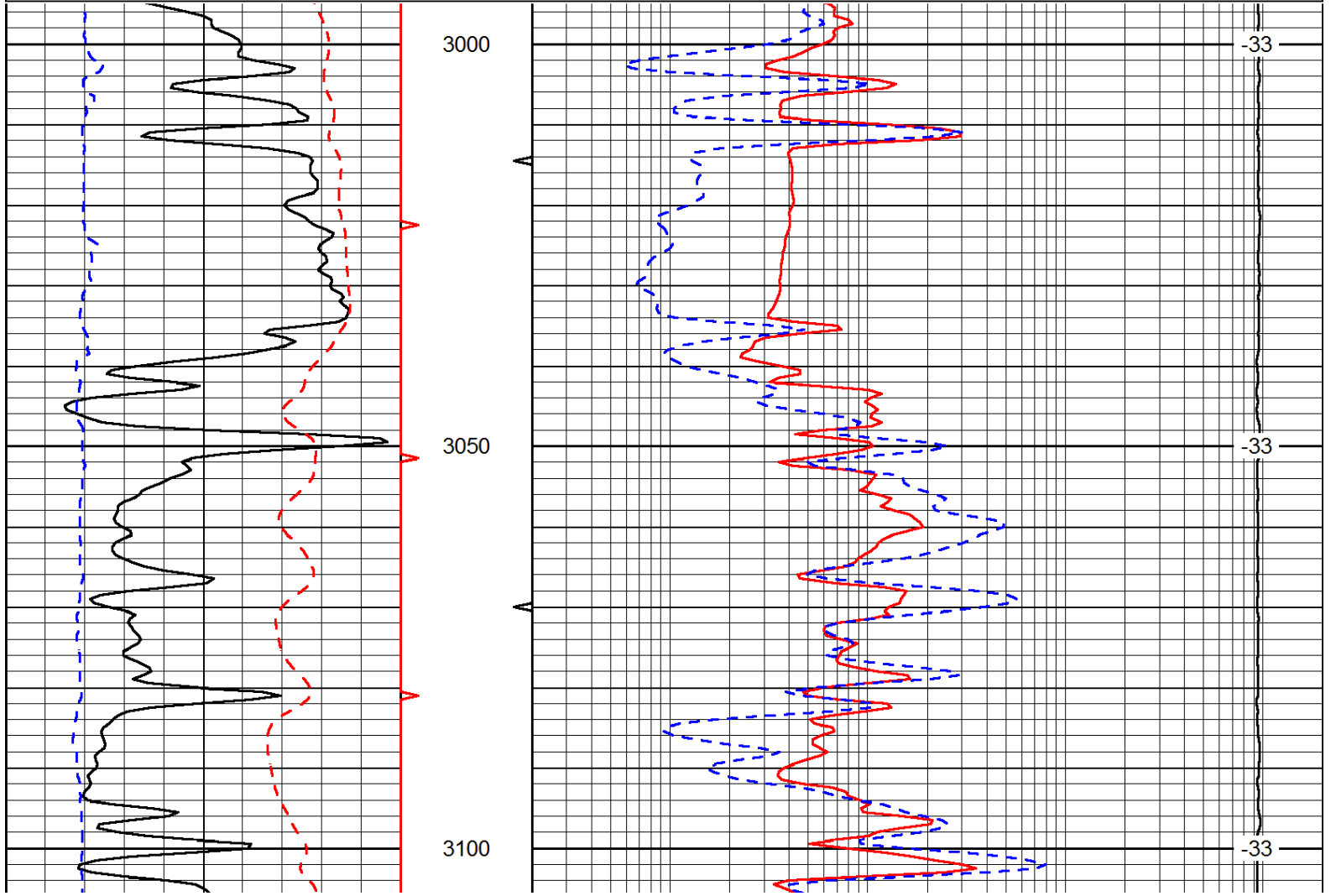
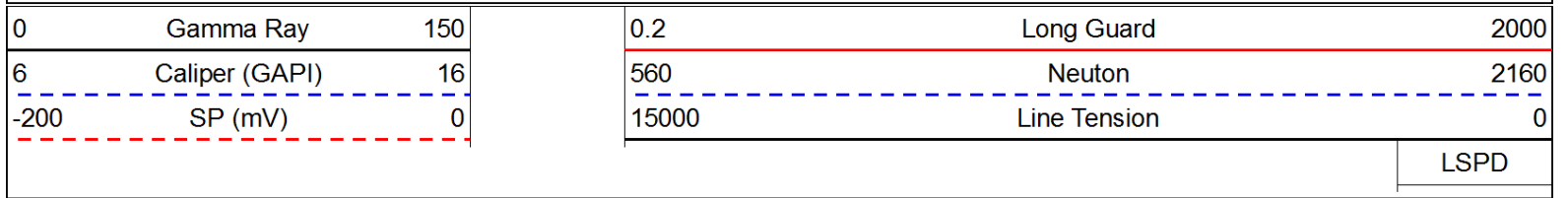


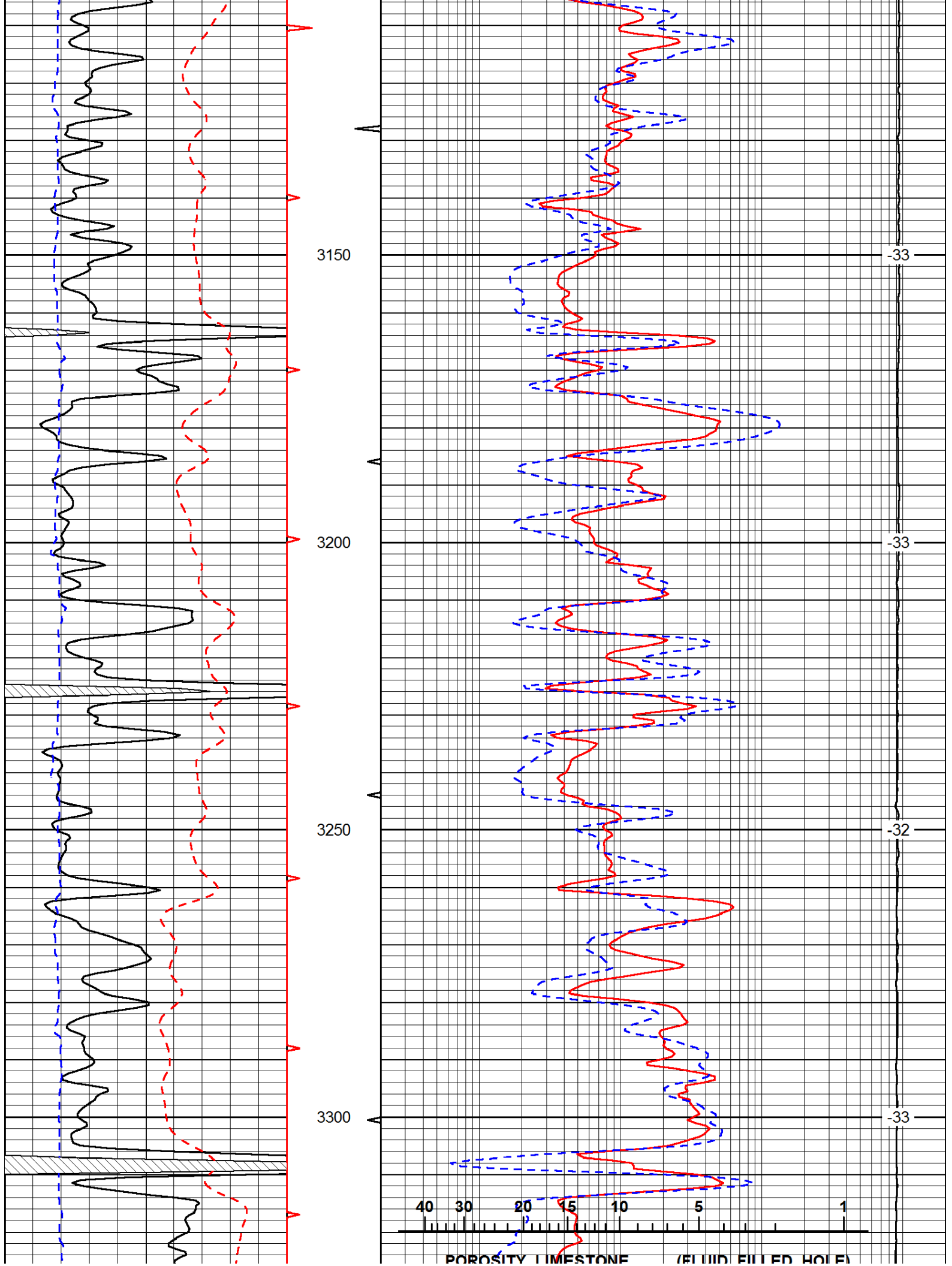
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 Dataset Creation: Wed Nov 28 18:27:15 2012  
 Charted by: Depth in Feet scaled 1:240





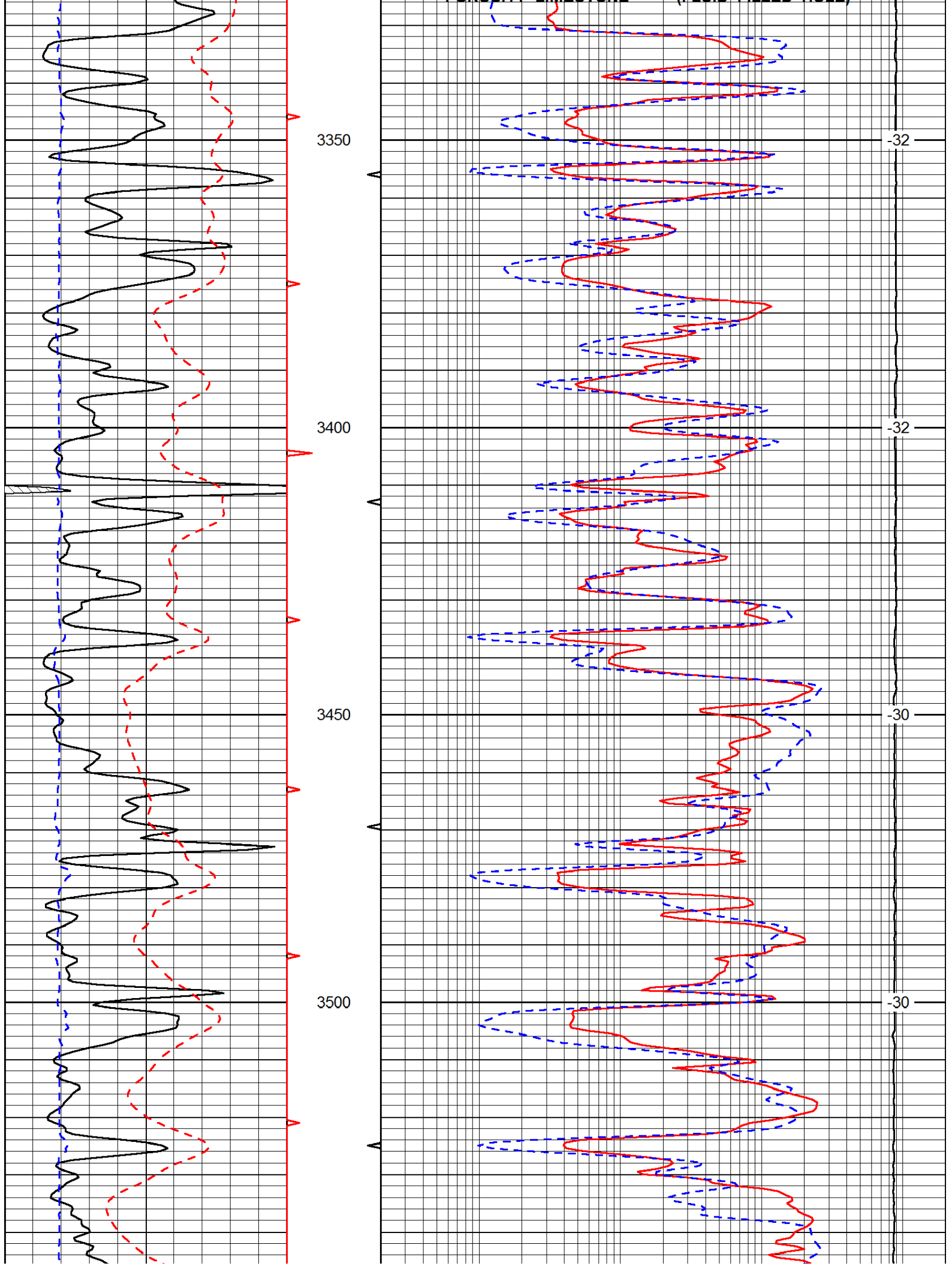
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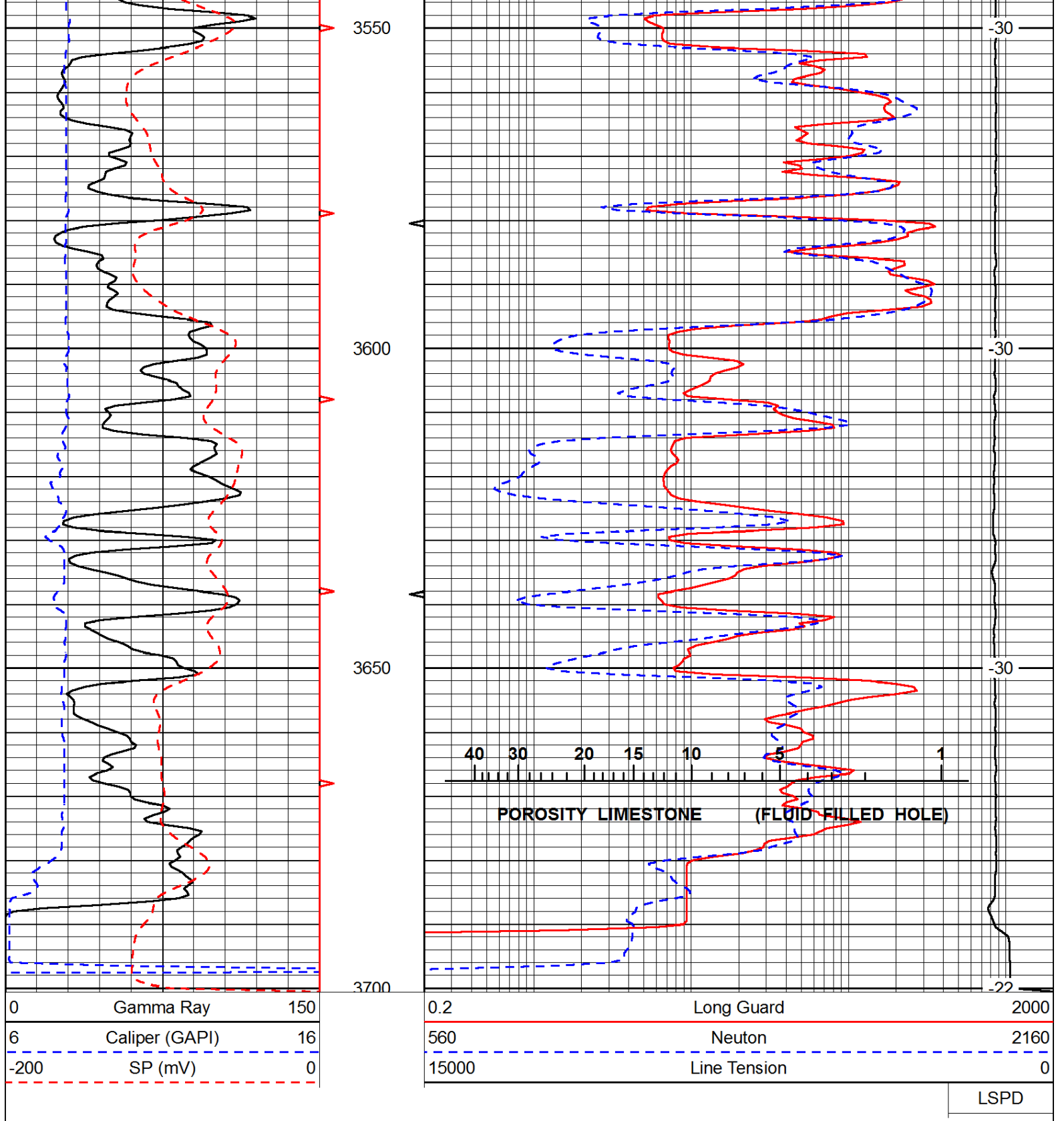




POROSITY LIMESTONE (FLUID FILLED HOLES)







LSPD