



Pioneer Energy Services

Dual Induction Log

API No.

15-101-22,421-00-00

Company Larson Engineering, Inc.

Well WR Unit No. 1 - 27

Field Wildcat

County Lane

State

Kansas

Location

NE NE SE NE
1485' FNL & 1' FEL

Other Services
CNL/CDL
MEL

Sec: 27

Twp: 18 S

Rge: 29 W

Elevation

Permanent Datum Ground Level Elevation 2801
Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date

2/15/2013

Run Number

One

Depth Driller

4645

Depth Logger

4649

Bottom Logged Interval

4648

Top Log Interval

250

Casing Driller

8.625 @ 281

Casing Logger

278

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

3000

Density / Viscosity

9.3 67

pH / Fluid Loss

9.5 6.8

Source of Sample

Flowline

Rm @ Meas. Temp

.90 @ 54

Rmf @ Meas. Temp

.68 @ 54

Rmc @ Meas. Temp

1.22 @ 54

Source of Rmf / Rmc

Charts

Rm @ BHT

.40 @ 122

Operating Rig Time

4 1/2 Hours

Max Rec. Temp. F

122

Equipment Number

108

Location

Hays

Recorded By

D. Martin

Witnessed By

Vern Schrag

<<< Fold Here >>>

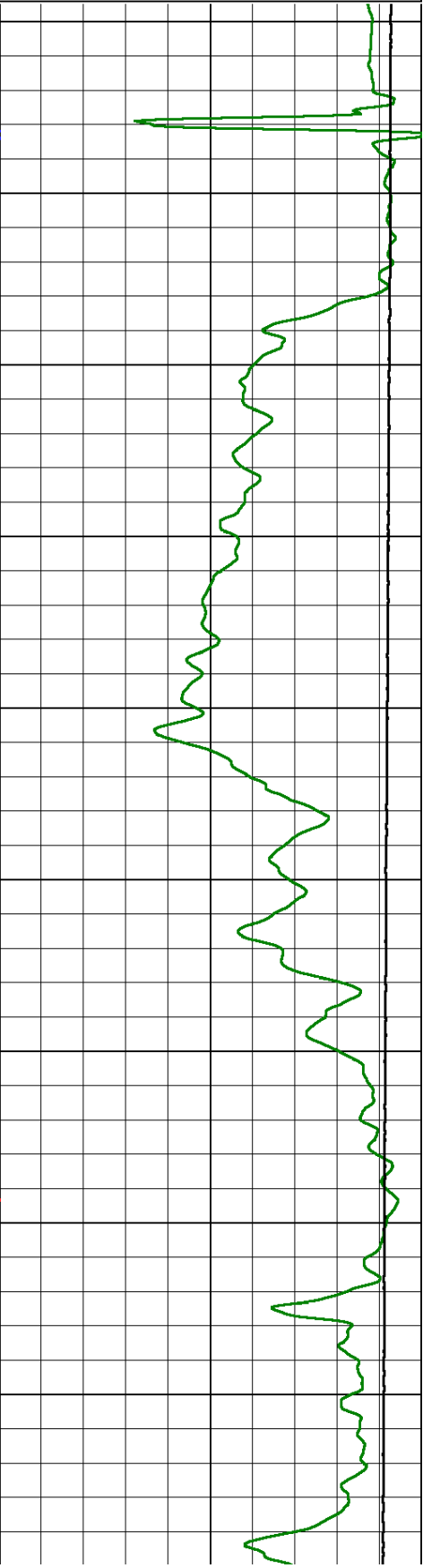
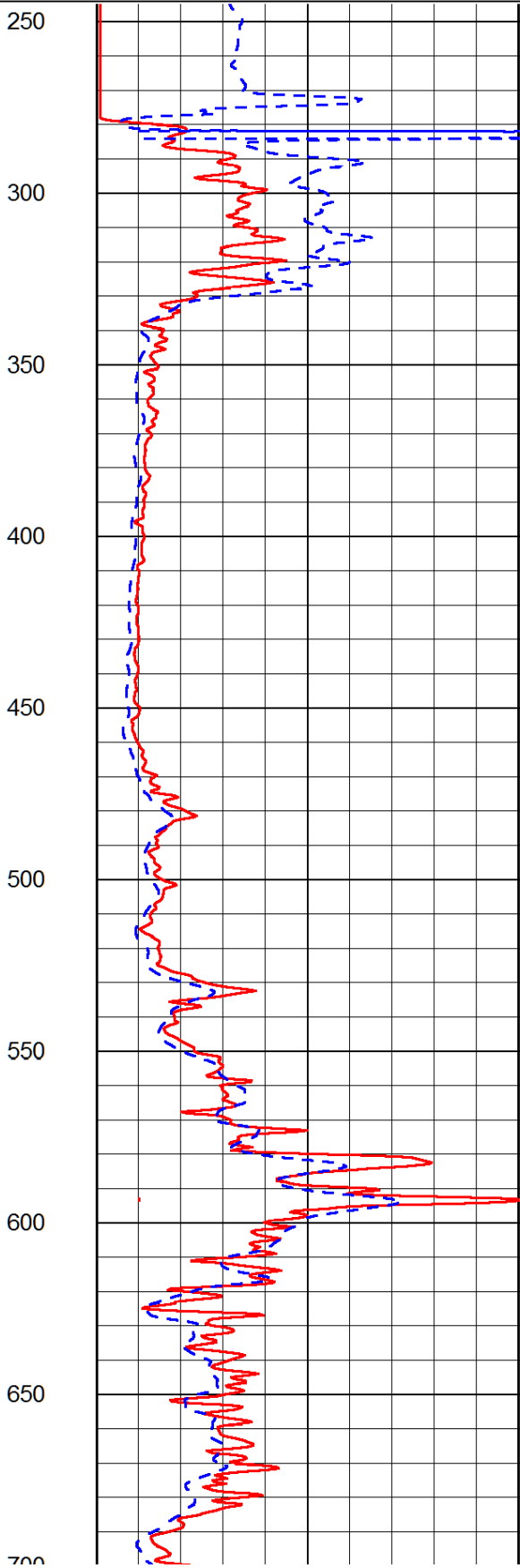
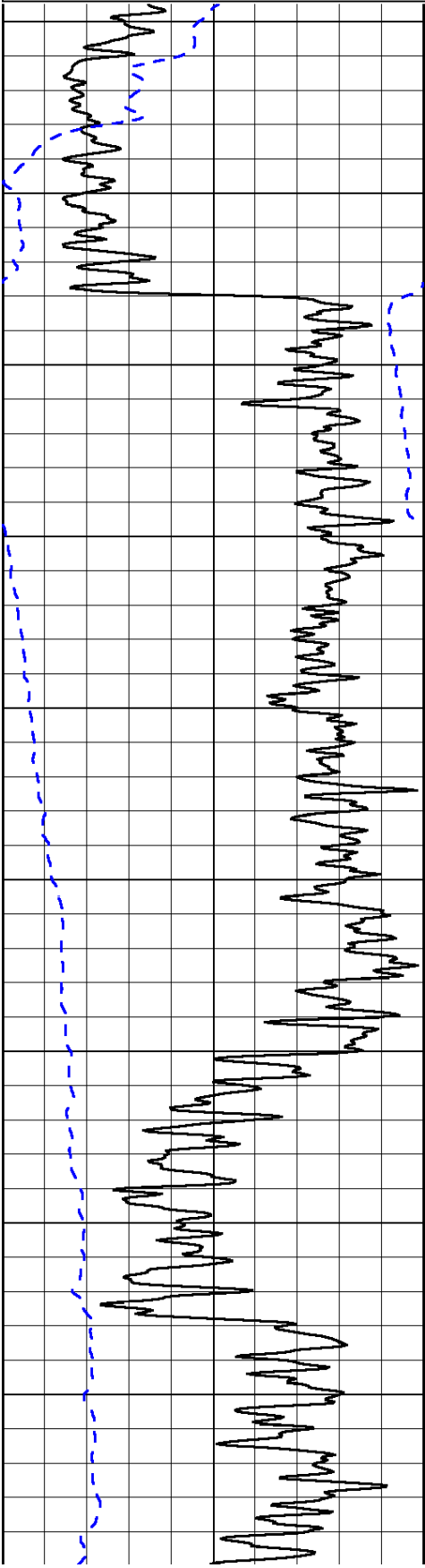
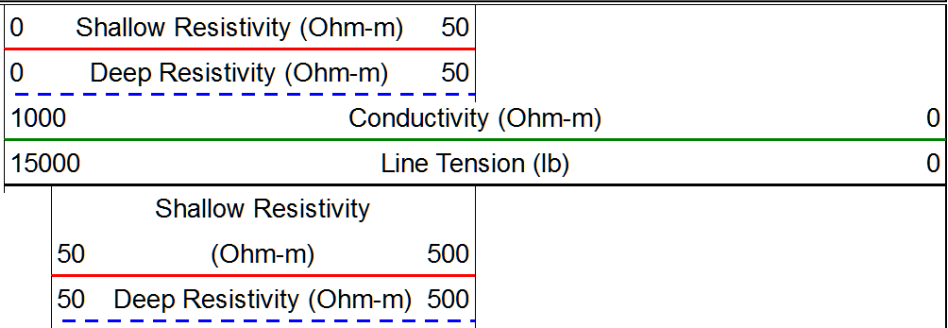
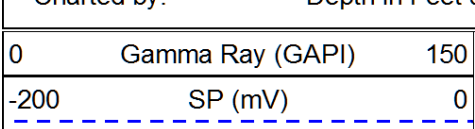
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

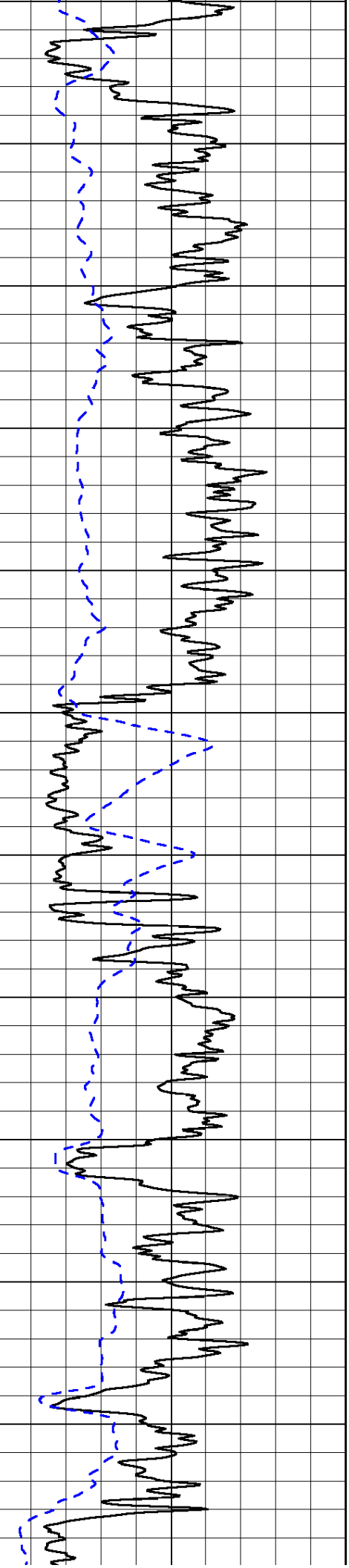
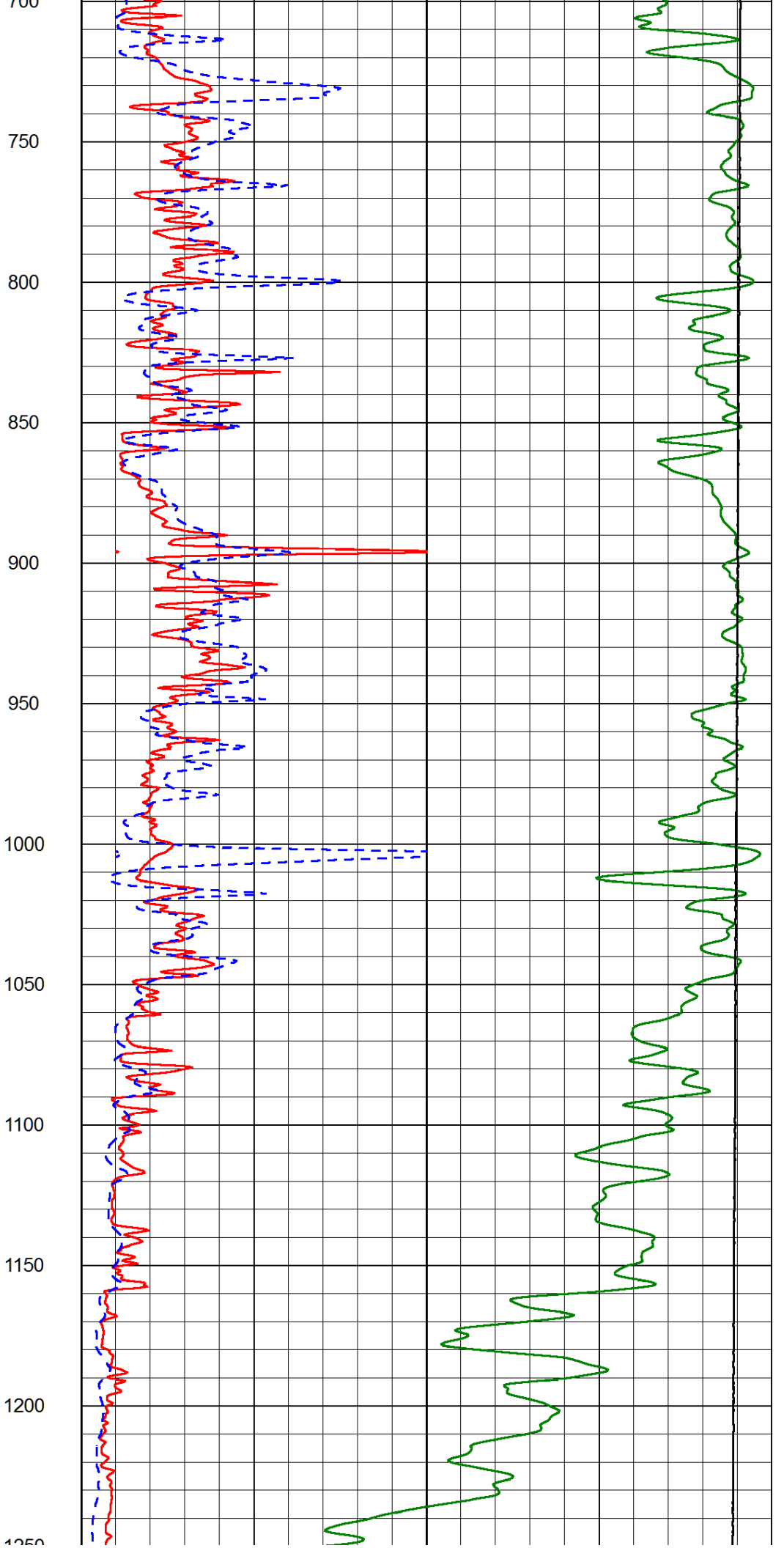
Comments

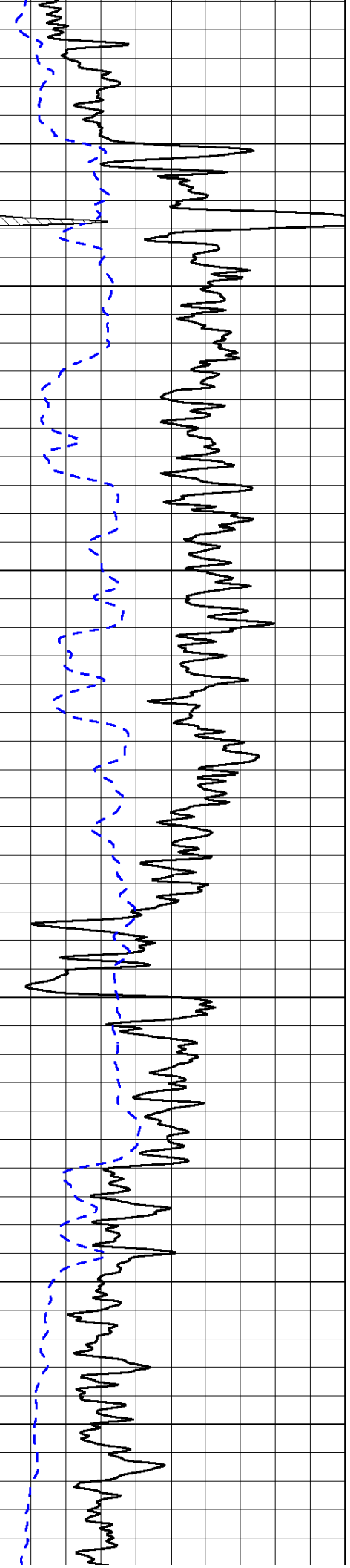
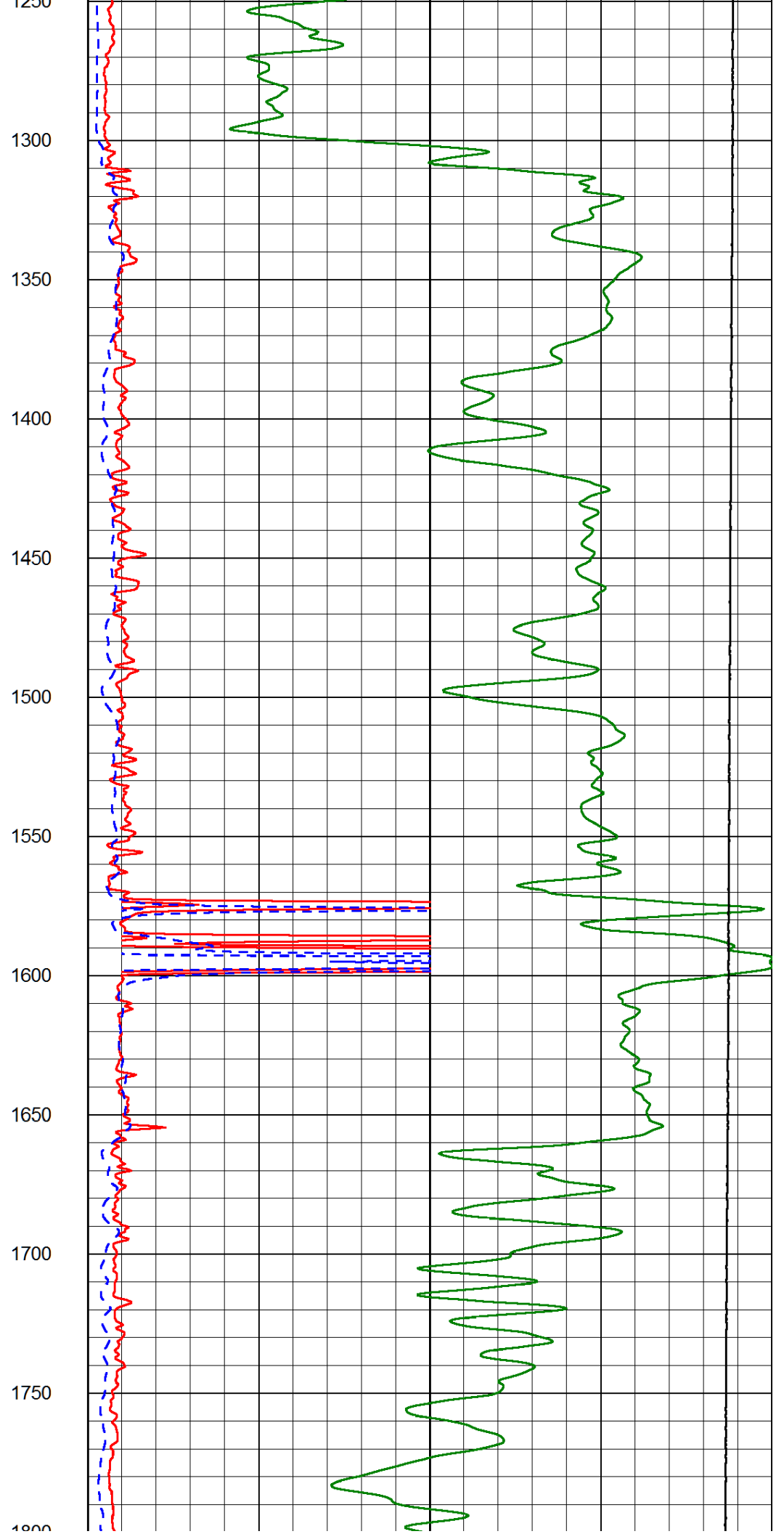
Thank you for using Log-Tech, Inc.
(785) 625-3858

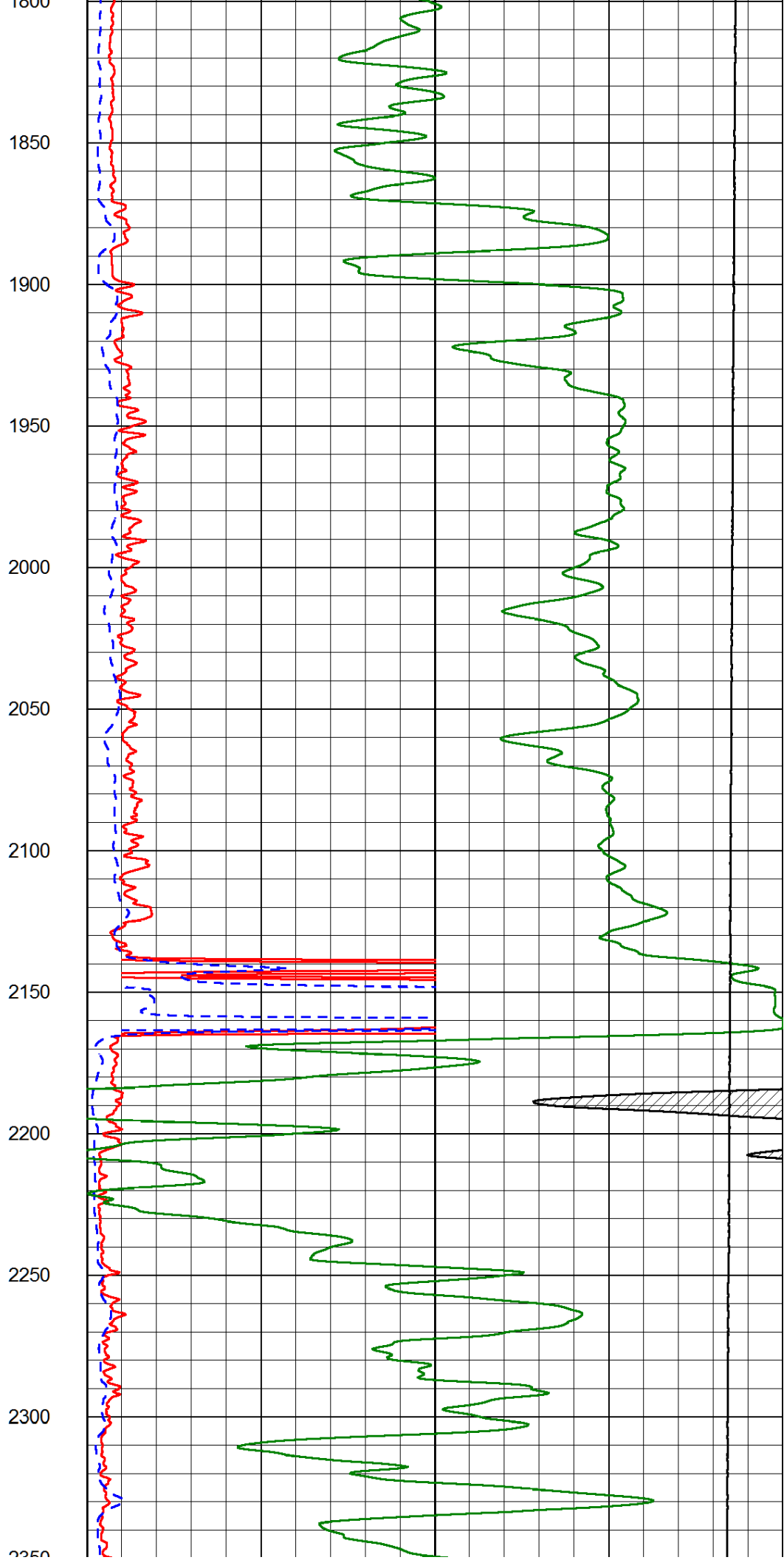
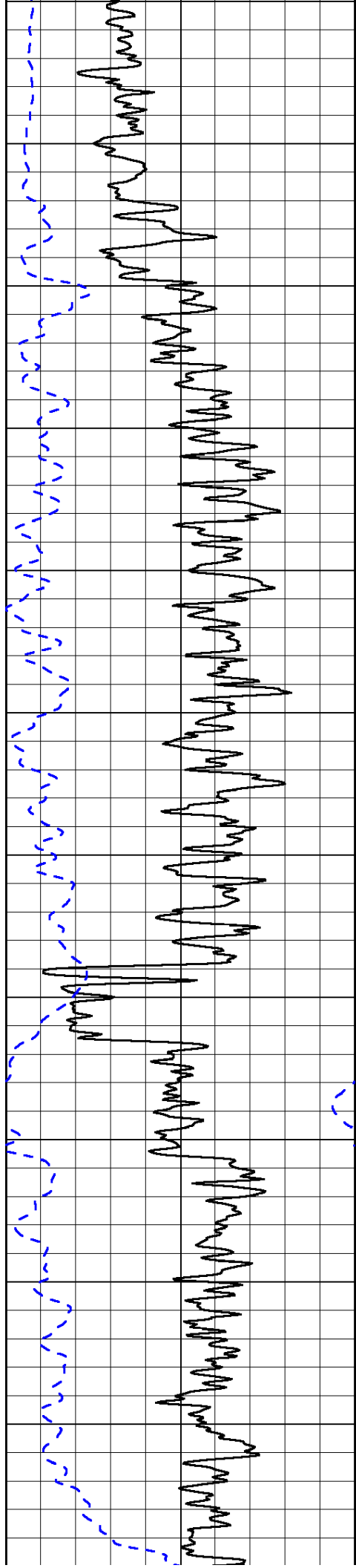
Dighton, KS
2 S to 130 Rd., 2 W, N Into

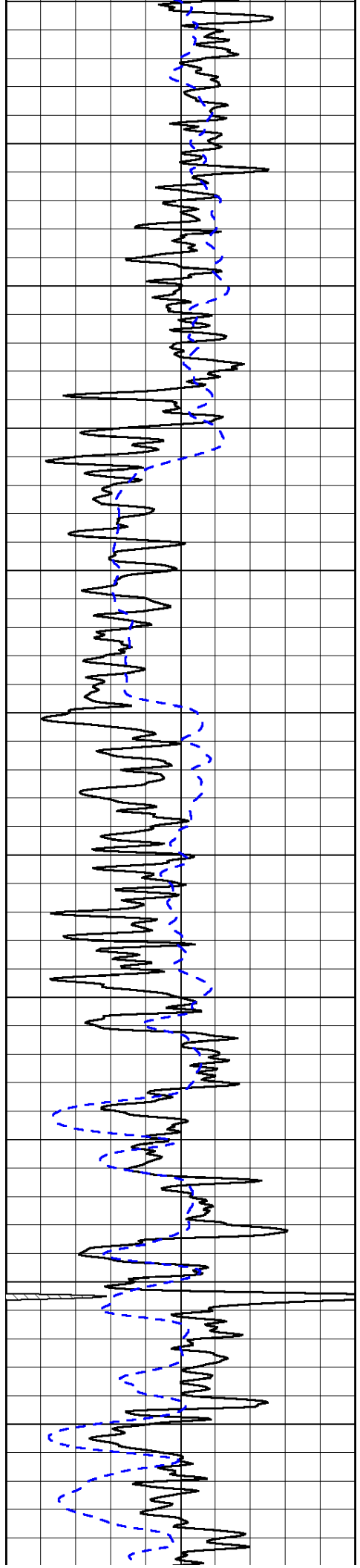
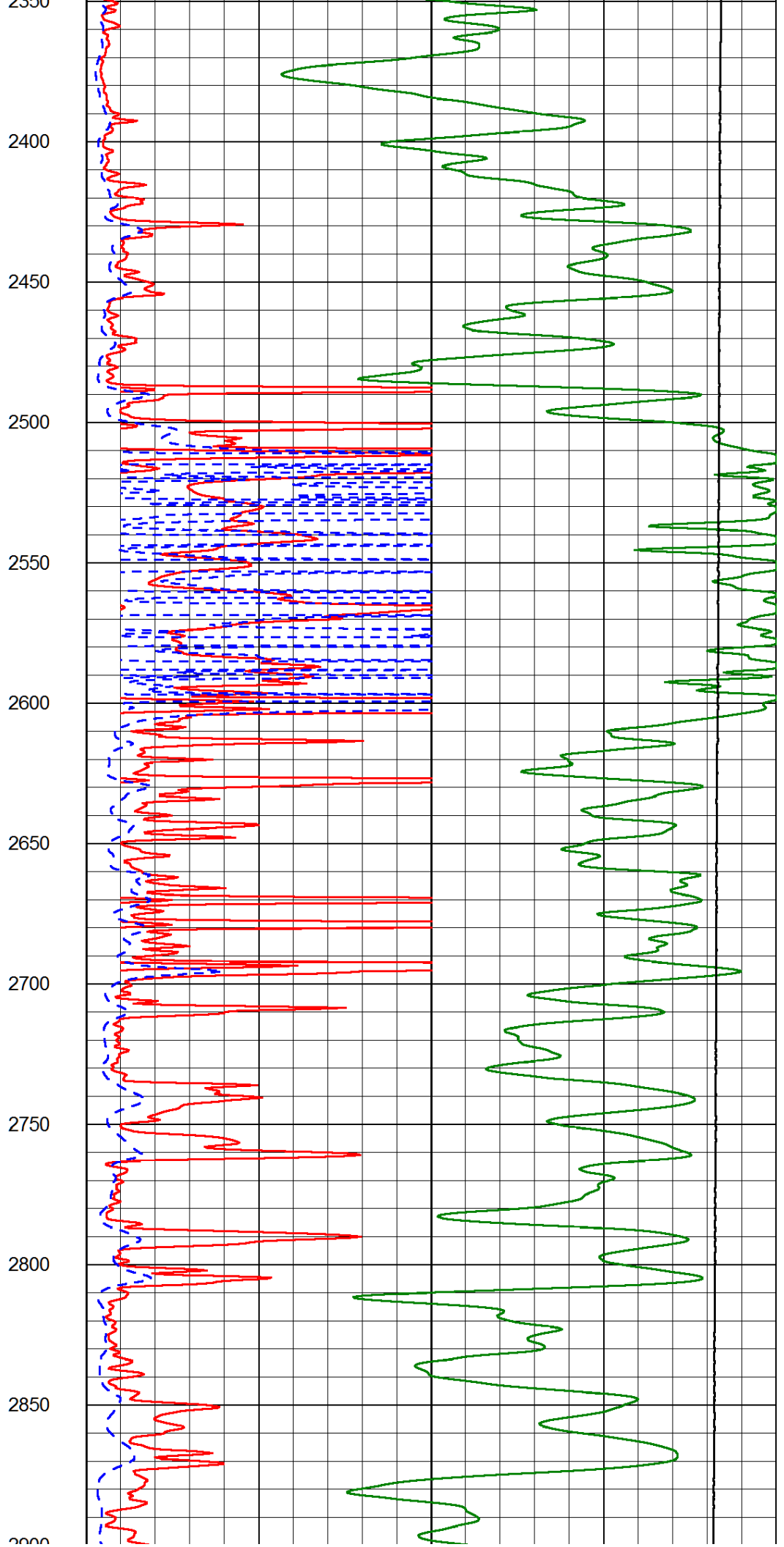
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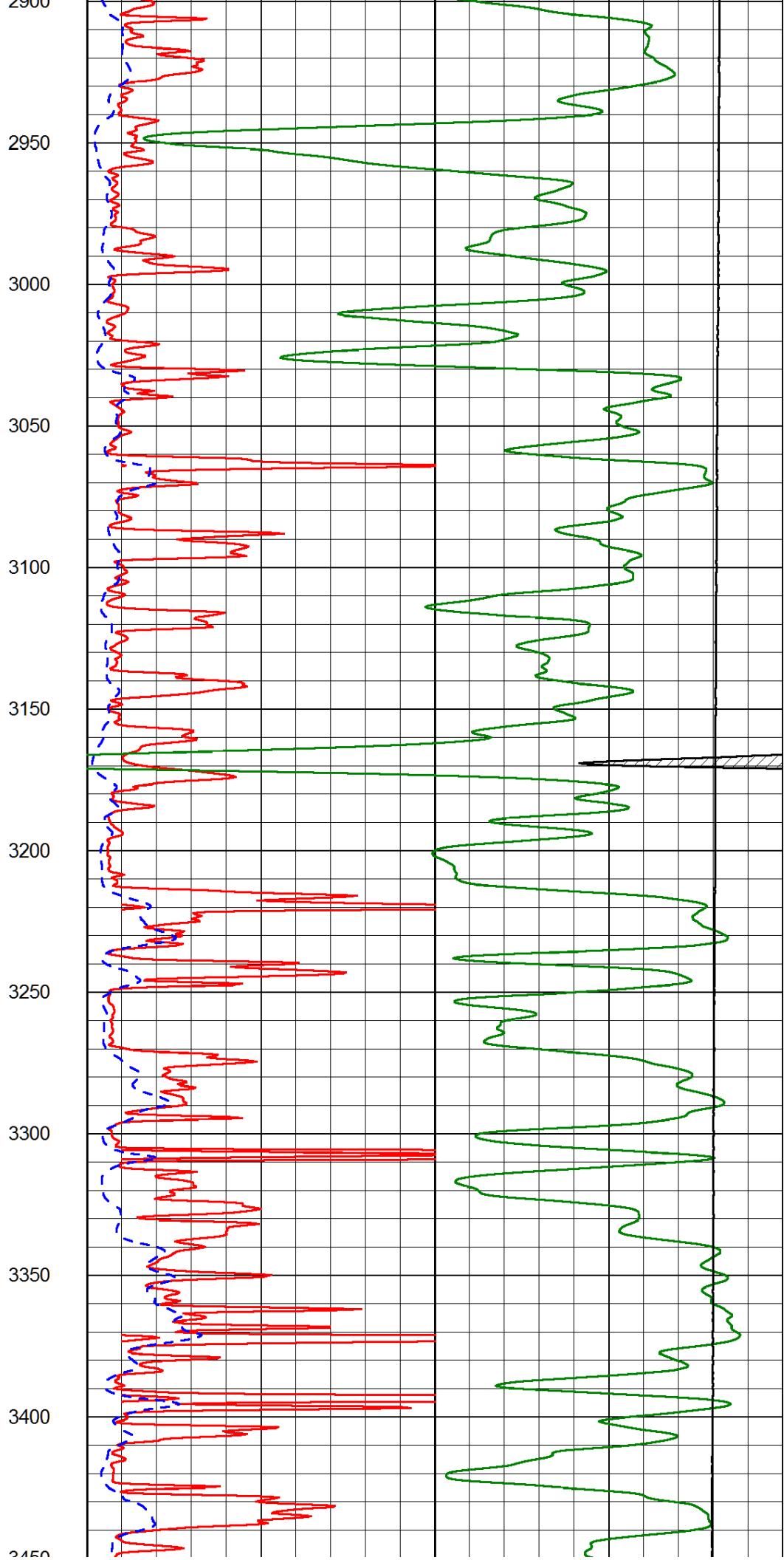
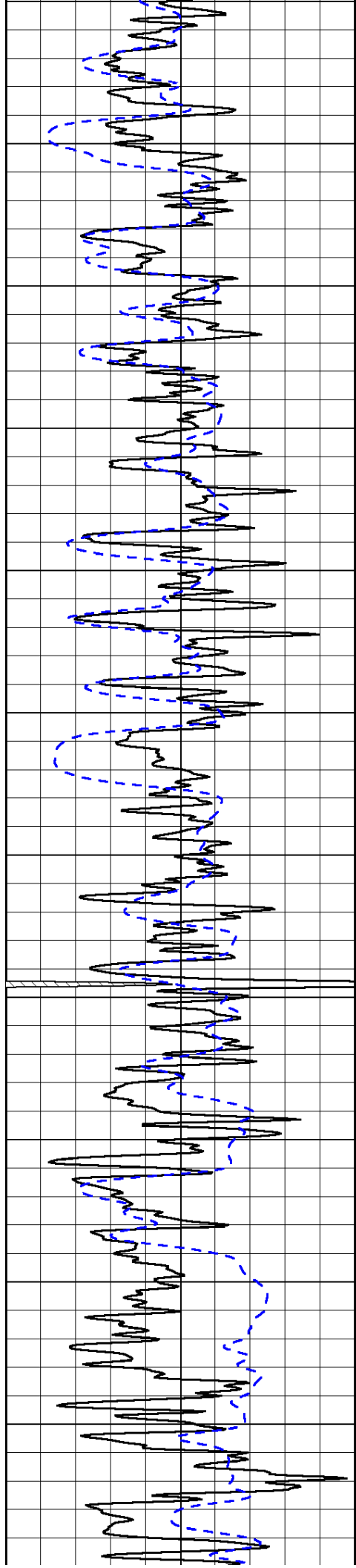


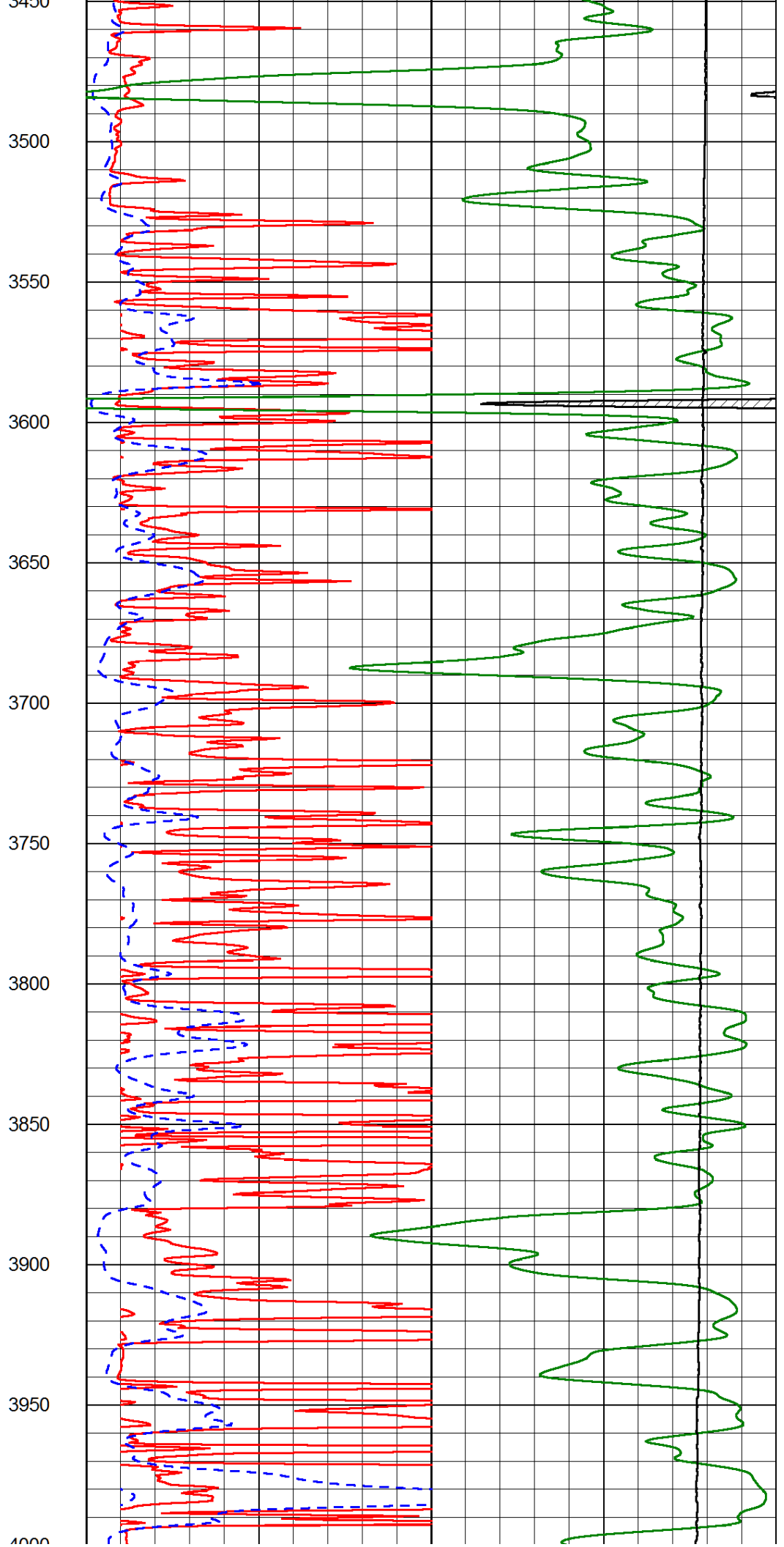
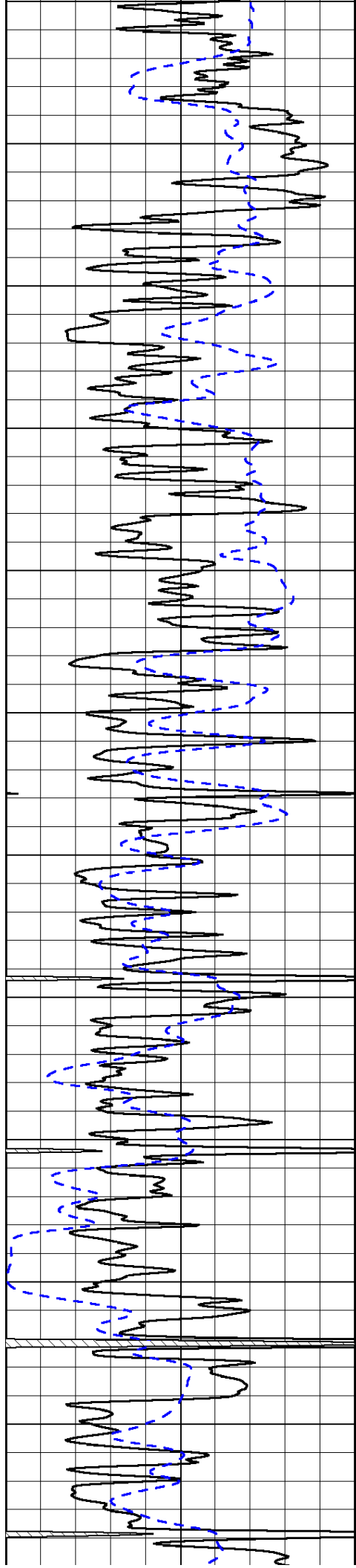


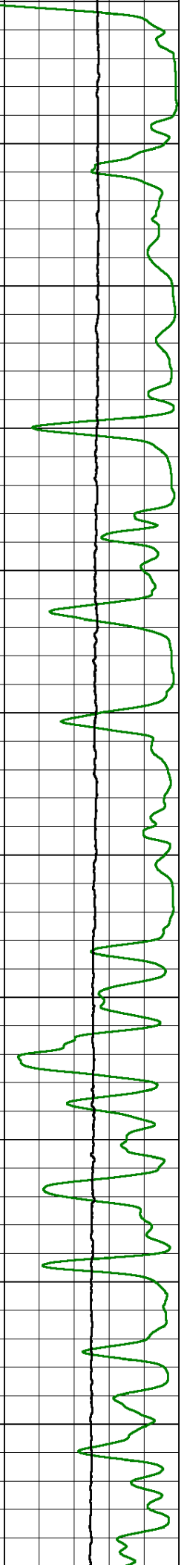
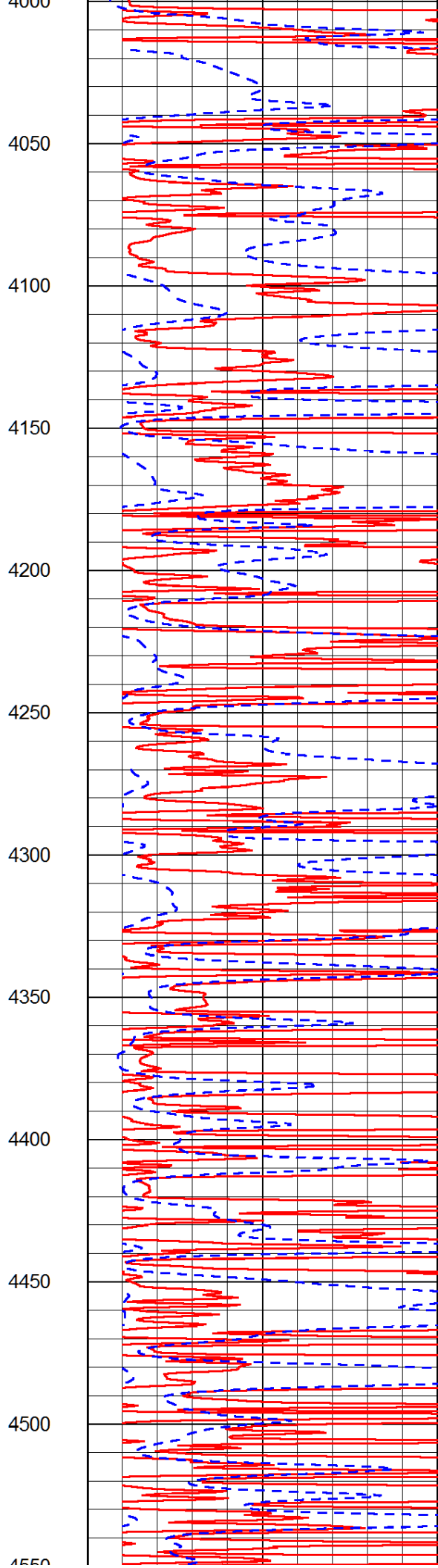
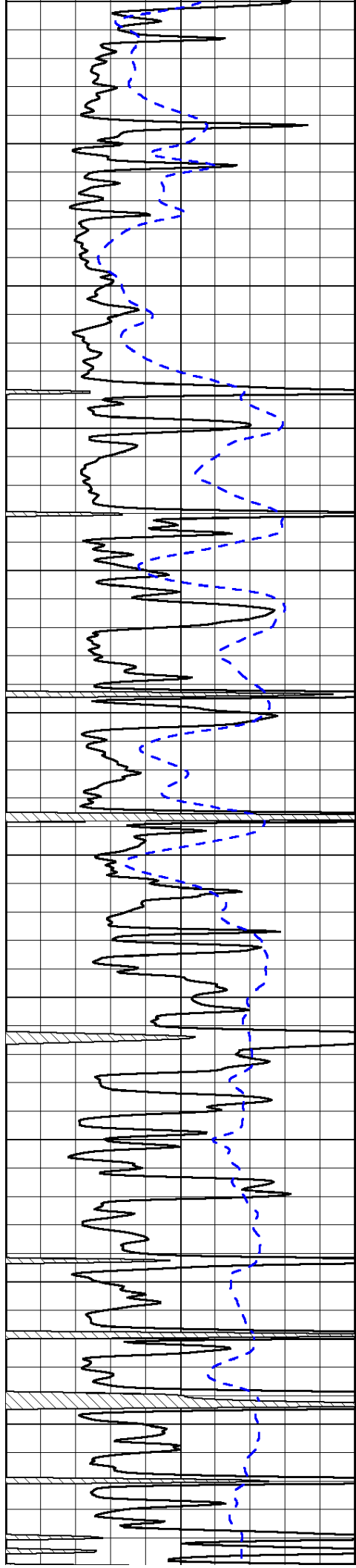


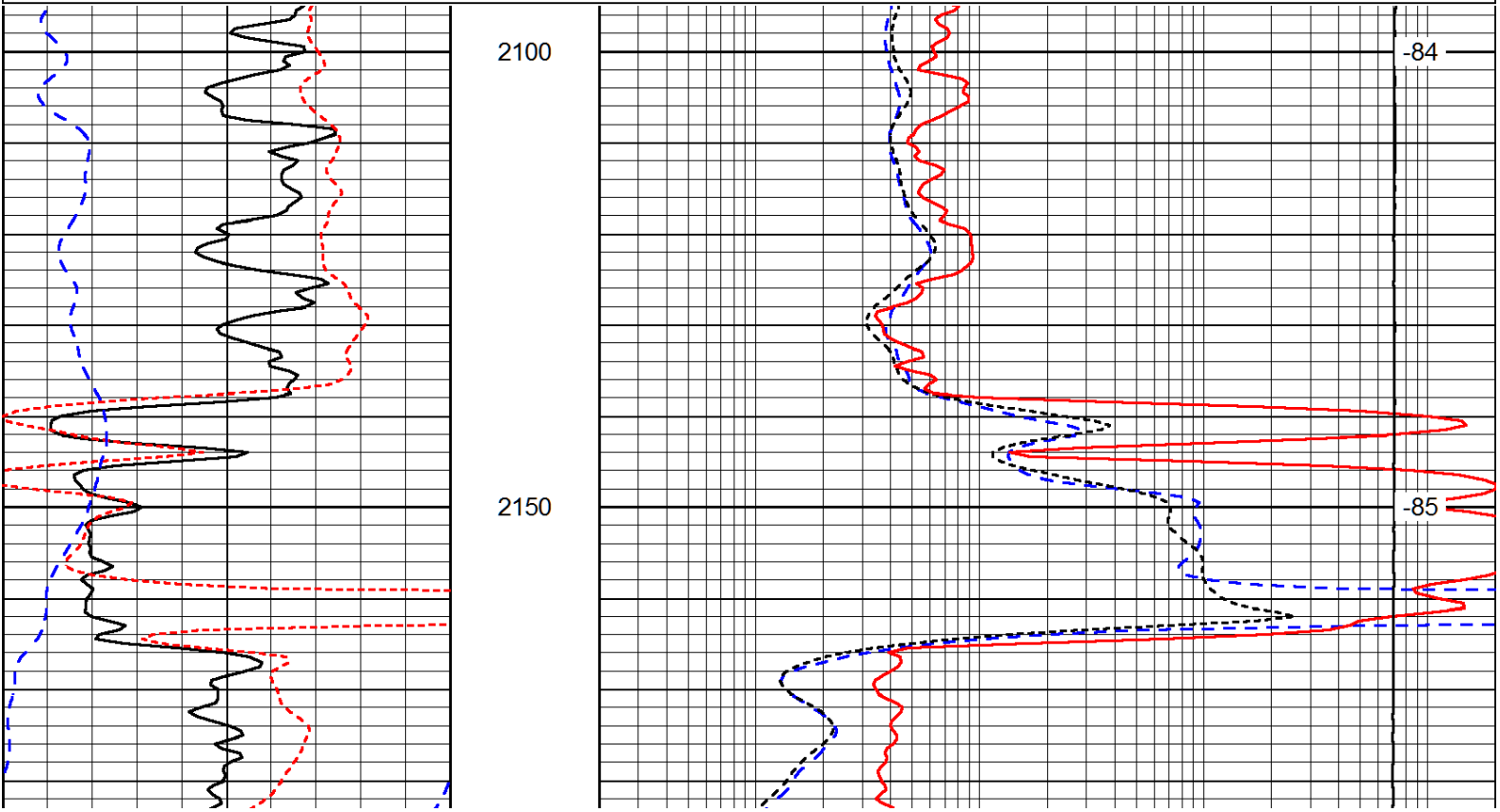
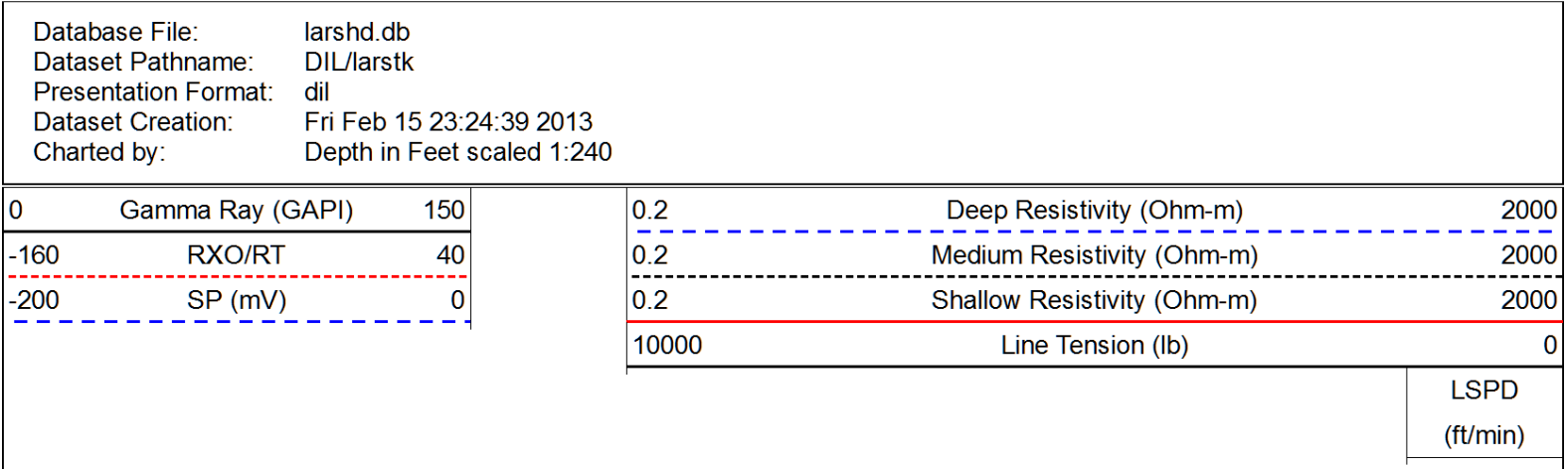
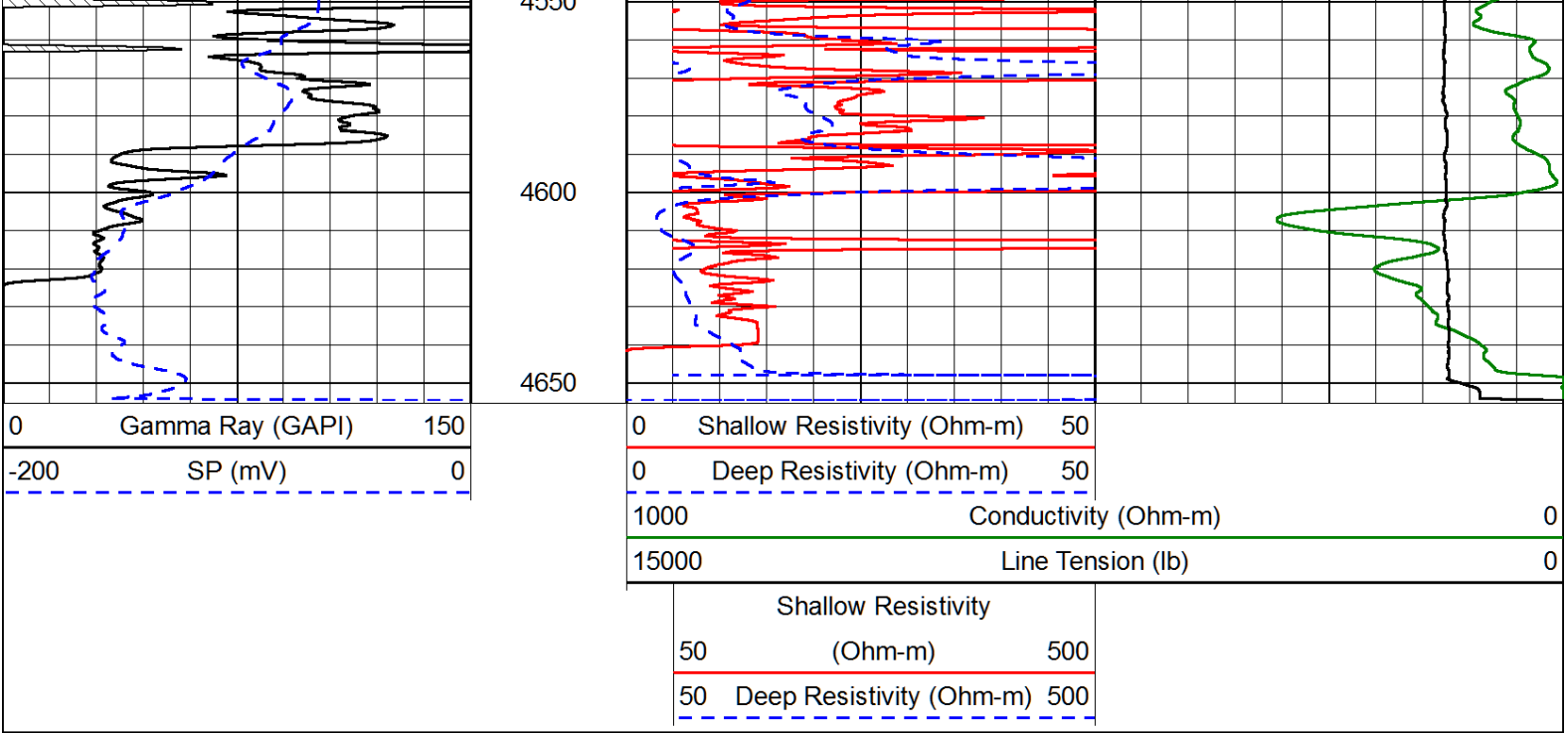


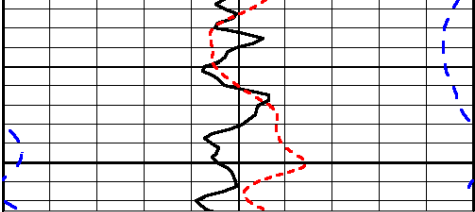






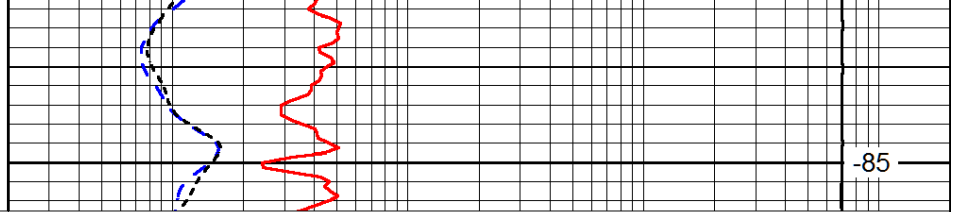






0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

2200



0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

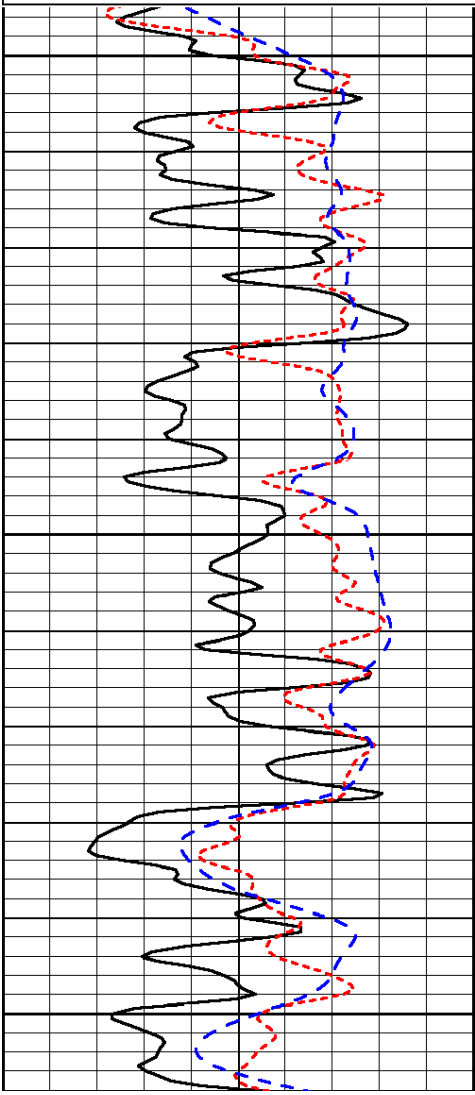
LSPD
(ft/min)

Database File: larshd.db
Dataset Pathname: DIL/larstk
Presentation Format: dil
Dataset Creation: Fri Feb 15 23:24:39 2013
Charted by: Depth in Feet scaled 1:240

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-160	RXO/RT	40
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

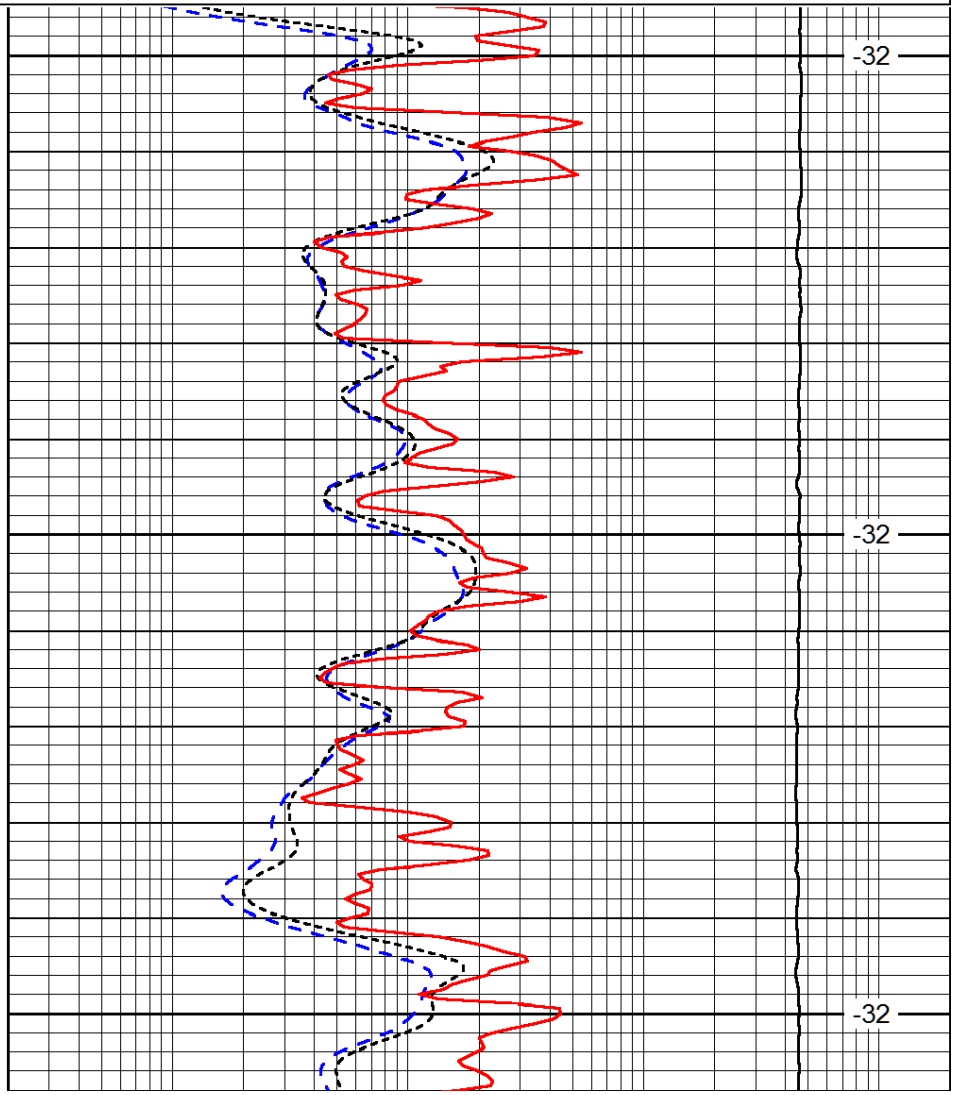
LSPD
(ft/min)



3600

3650

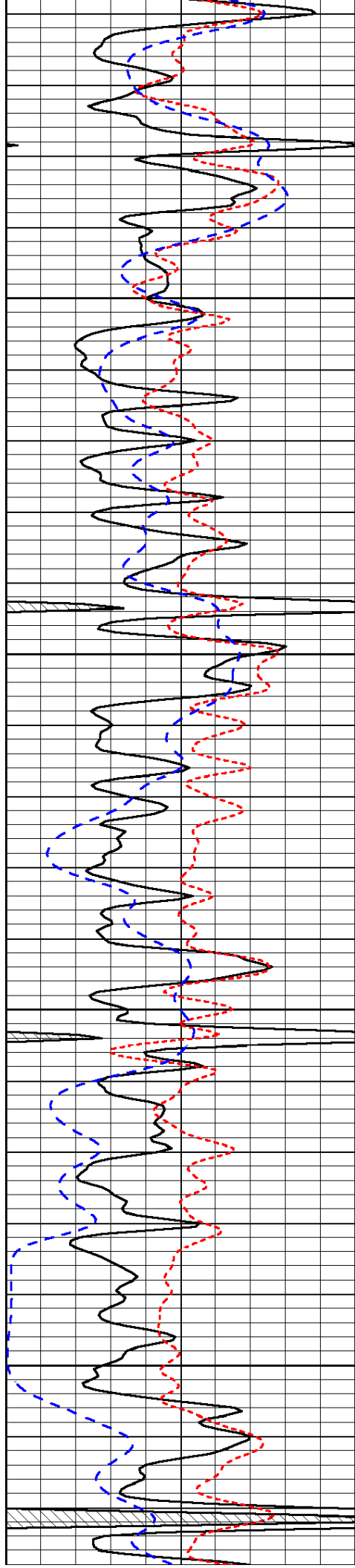
3700



-32

-32

-32

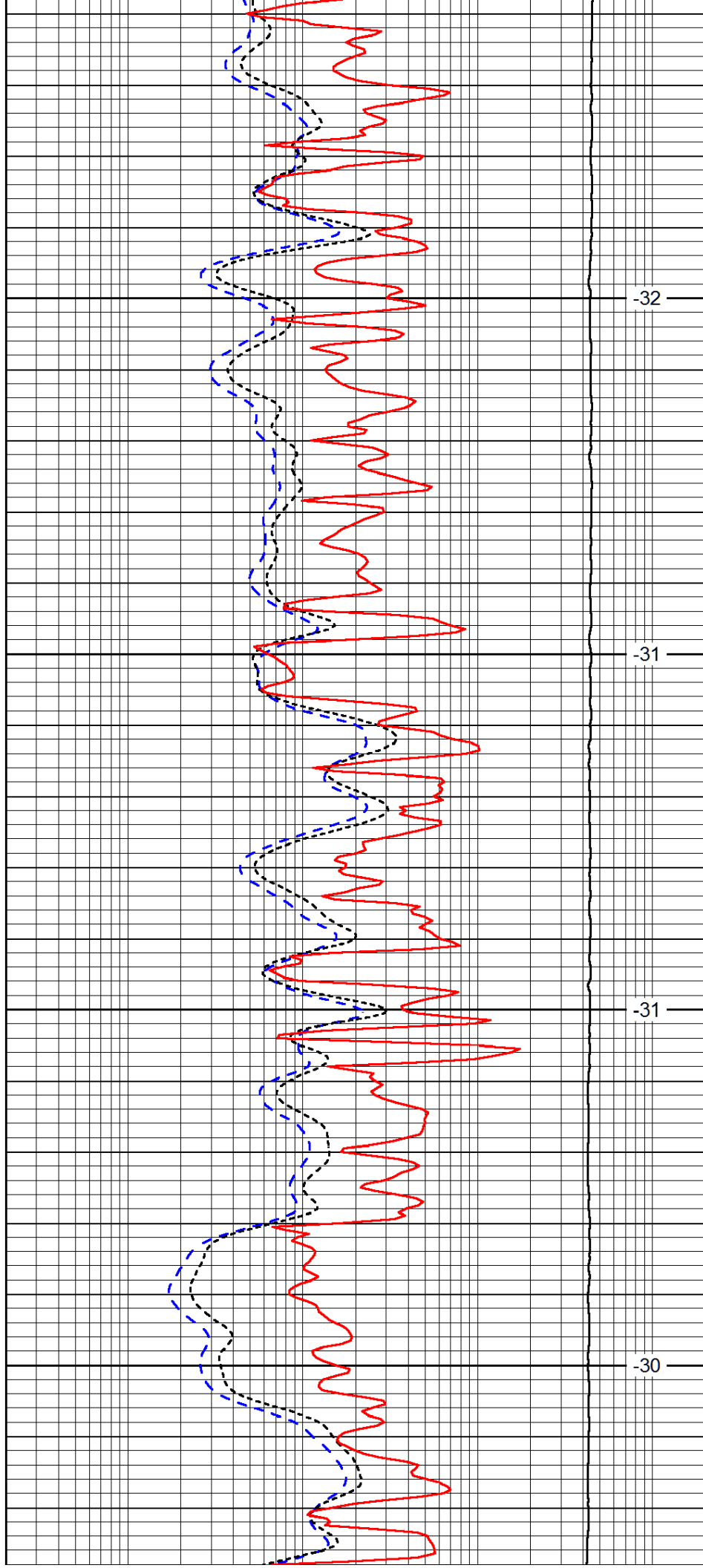


3750

3800

3850

3900

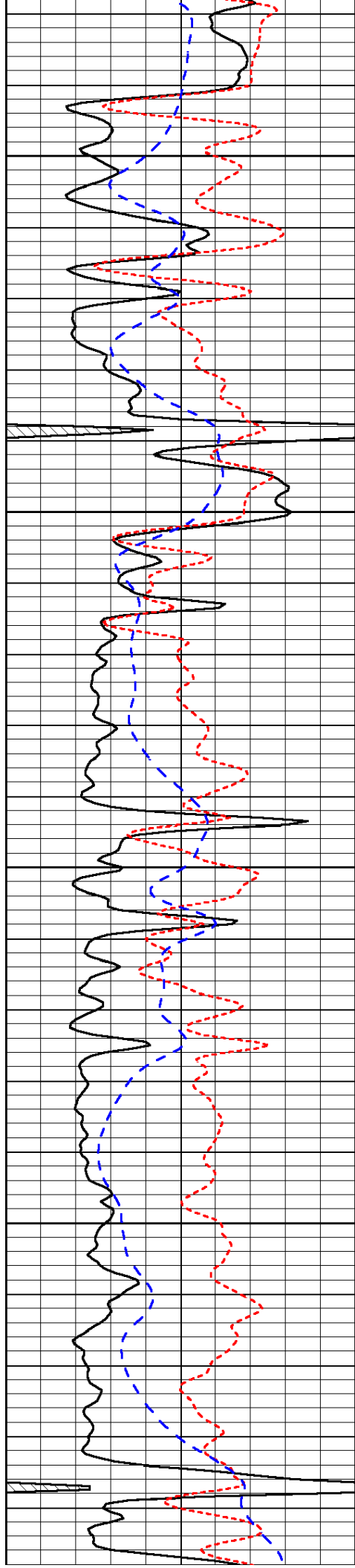


-32

-31

-31

-30

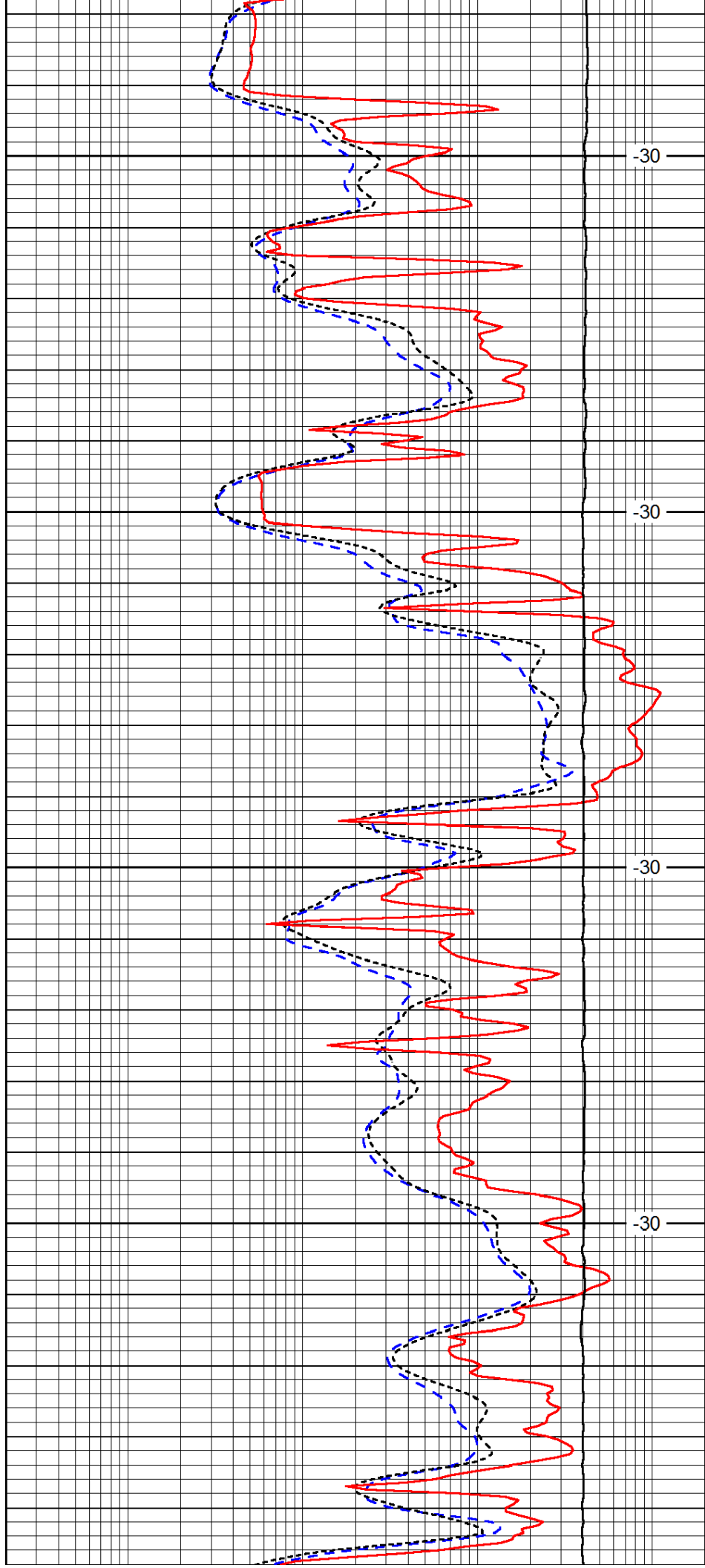


3950

4000

4050

4100

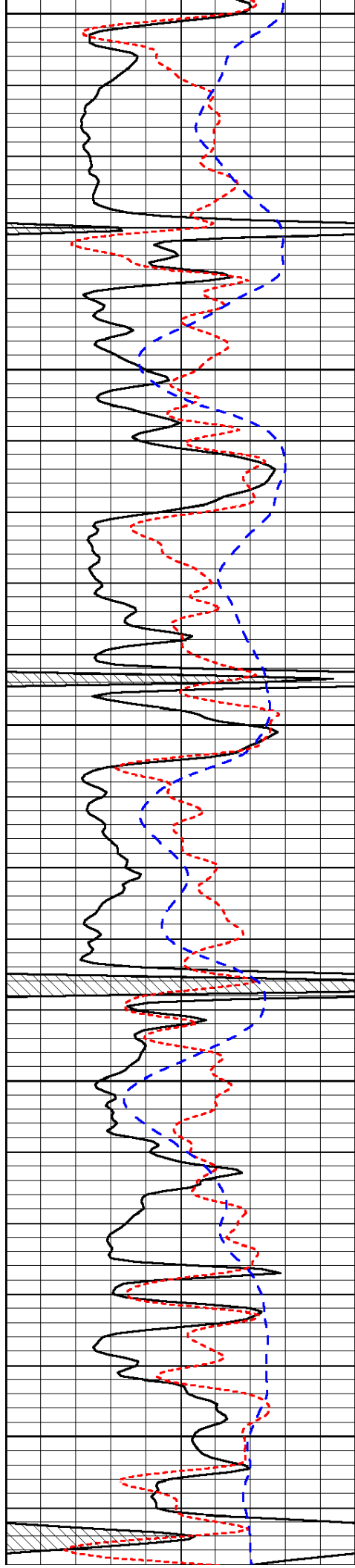


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-30

-30

-30



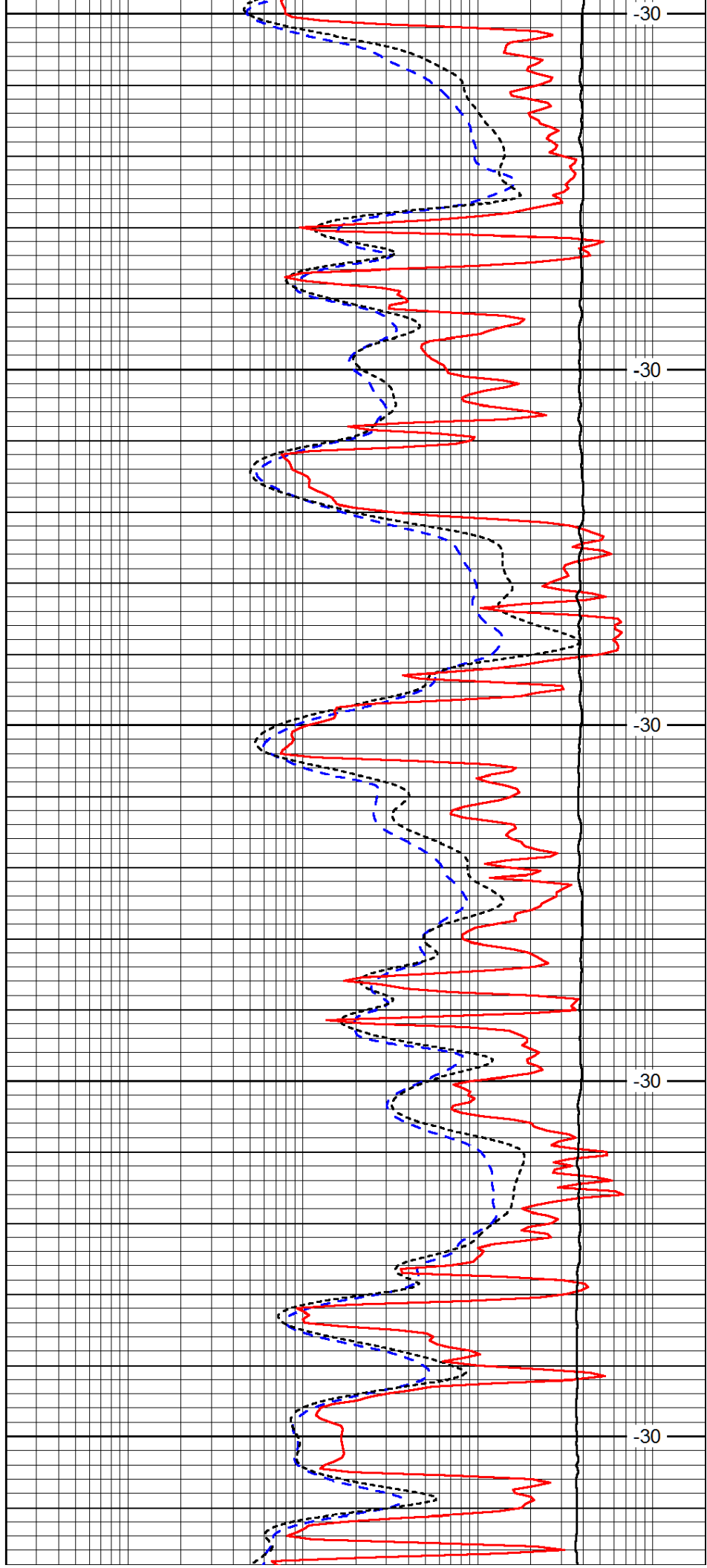
4150

4200

4250

4300

4350



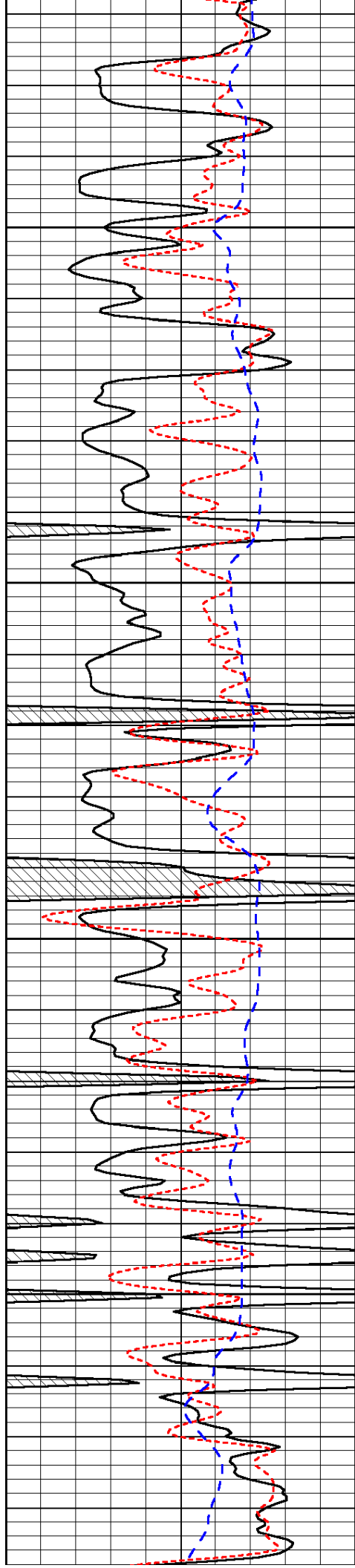
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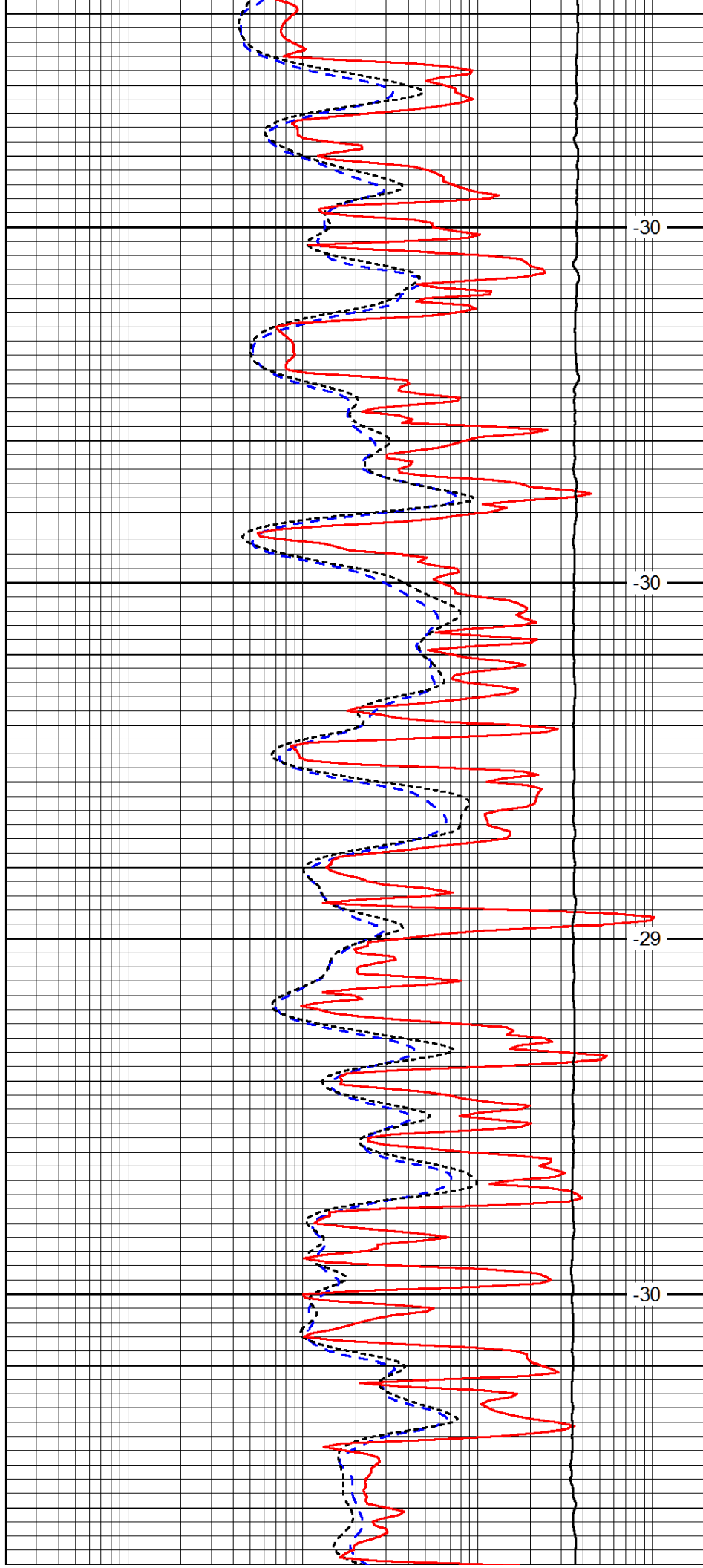


4400

4450

4500

4550

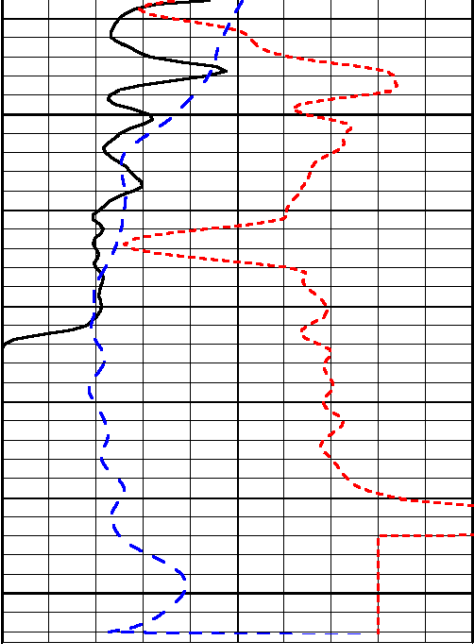


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-30

-29

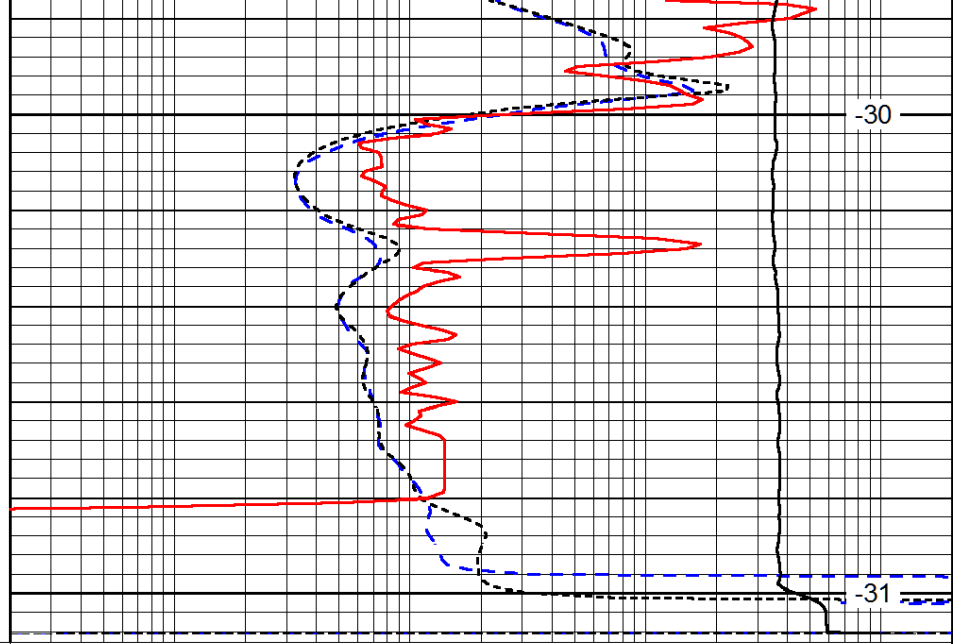
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0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

4600

4650



0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)