



Dual Induction Log

Pioneer Energy Services

API No.

15-101-22,541-00-00

Company **Larson Engineering, Inc.**

Well **James Children's Trust #1-9**

Field **Wildcat**

County **Lane** State **Kansas**

Location

**SE NE NE NW
595' FNL & 2565' FWL**

Sec: **9** Twp: **16S** Rge: **28W**

Permanent Datum **Ground Level** Elevation **2618**
Log Measured From **Kelly Bushing** **9** Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

Other Services
CNL/CDL
MEL
Elevation
K.B. 2627
D.F.
G.L. 2618

Date **11/16/2014**

Run Number **One**

Depth Driller **4500**

Depth Logger **4498**

Bottom Logged Interval **4497**

Top Log Interval **250**

Casing Driller **8.625 @ 257**

Casing Logger **252**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **2.800**

Density / Viscosity **9.0 50**

pH / Fluid Loss **10.5 6.4**

Source of Sample **Flowline**

Rm @ Meas. Temp **.9 @ 55**

Rmf @ Meas. Temp **.68 @ 55**

Rmc @ Meas. Temp **1.22 @ 55**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.41 @ 121**

Operating Rig Time **4 Hours**

Max Rec. Temp. F **121**

Equipment Number **51**

Location **Hays**

Recorded By **C. Desaire**

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 Pioneer Energy Services
www.pioneerres.com
785 625 3858

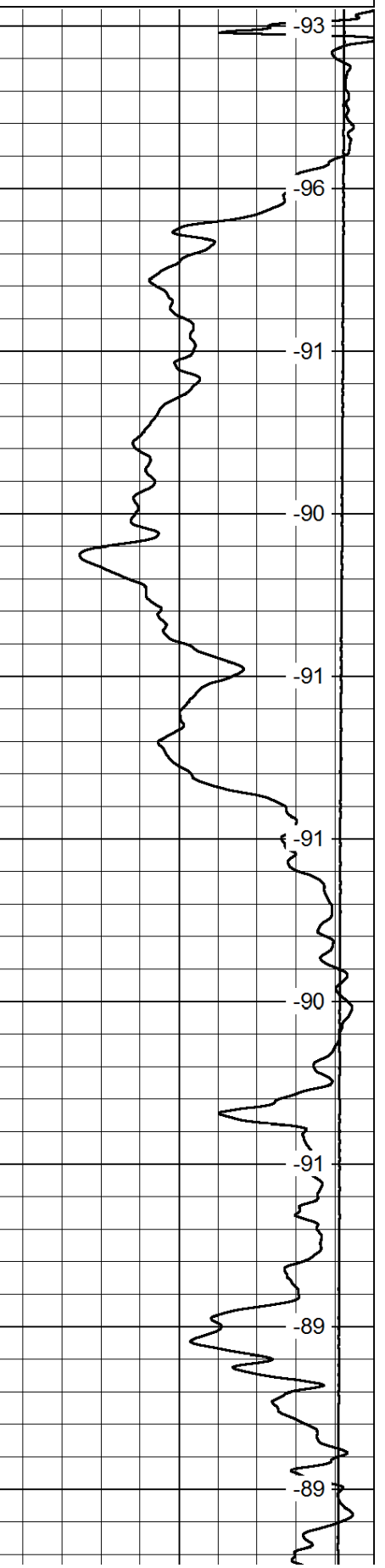
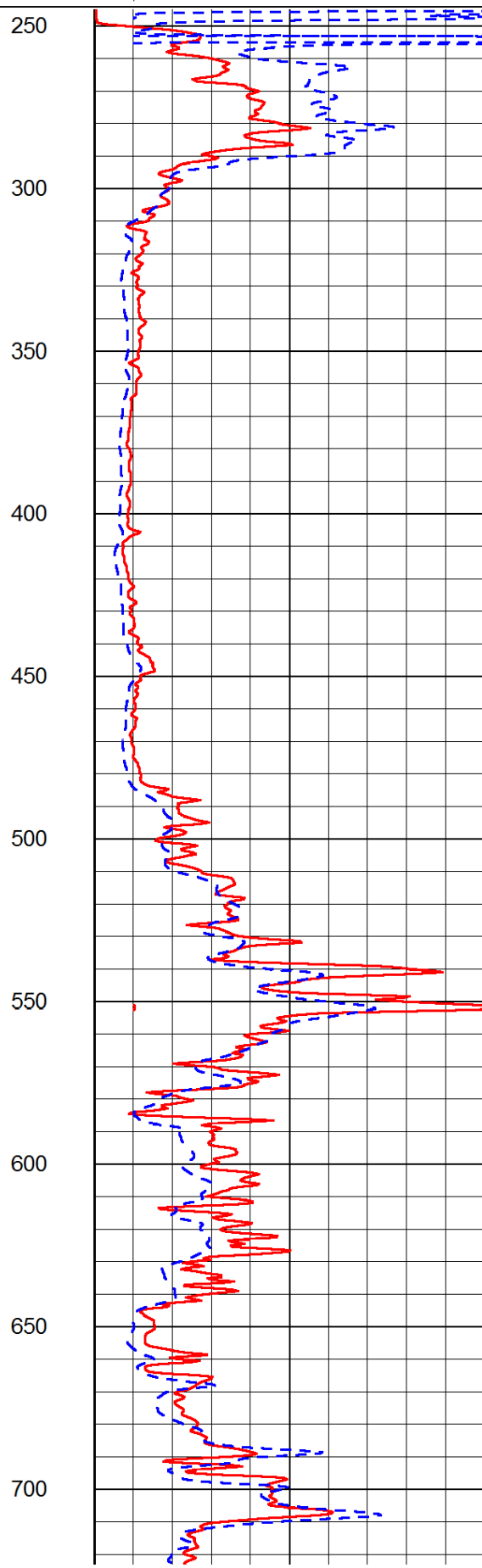
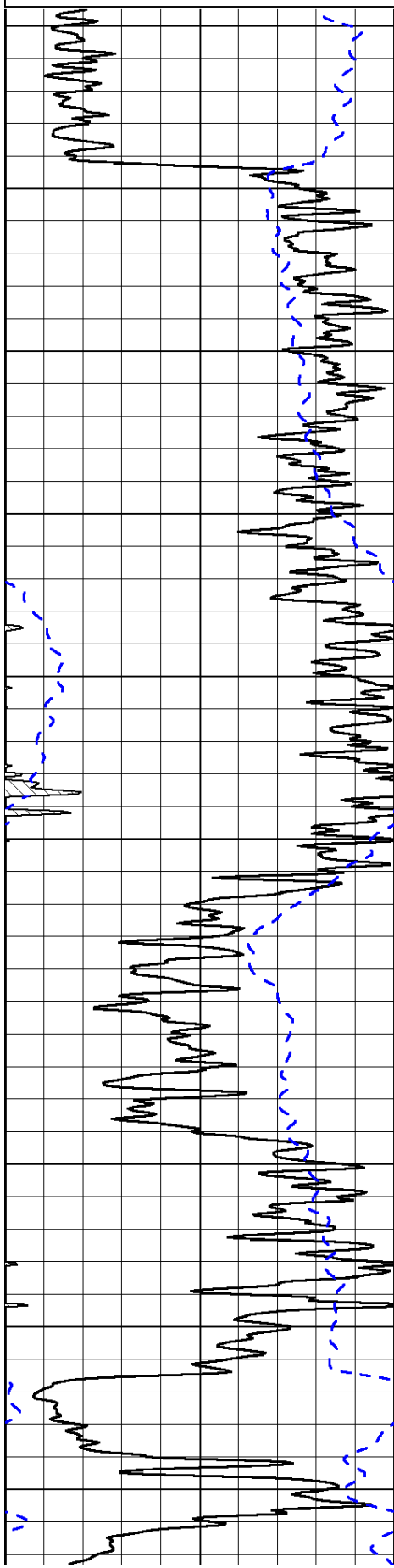
Shields KS, E edge, 4 N on Laredo Rd to 280 Rd,
1 1/2 E, 1 N, W Into 3/4

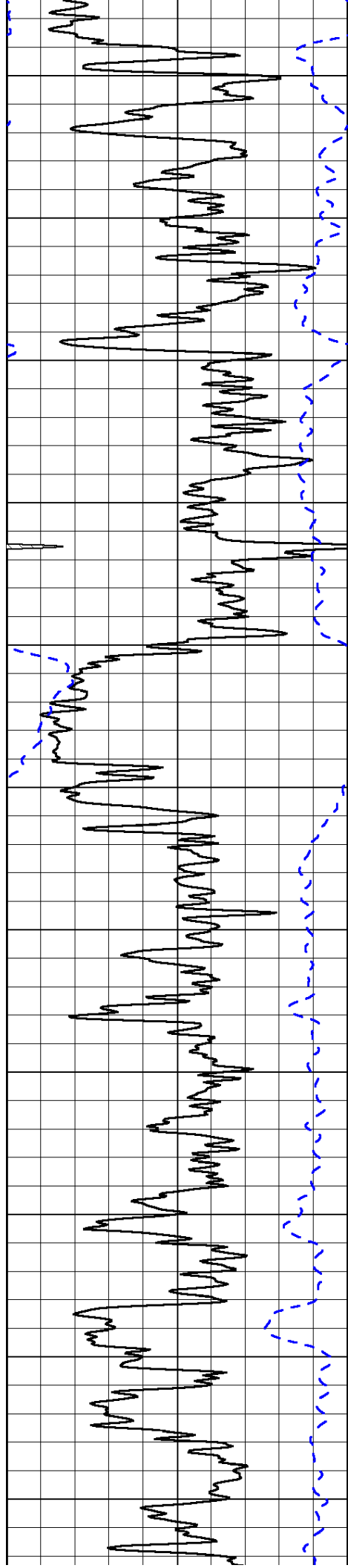
Database File: c:\warrior\data\larson_james children's trust #1-9\larhd.db
Dataset Pathname: dil\larstk
Presentation Format: dil2in
Dataset Creation: Sun Nov 16 16:39:32 2014
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray	150
-200	SP (mV)	0

0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

LSPD





750

800

850

900

950

1000

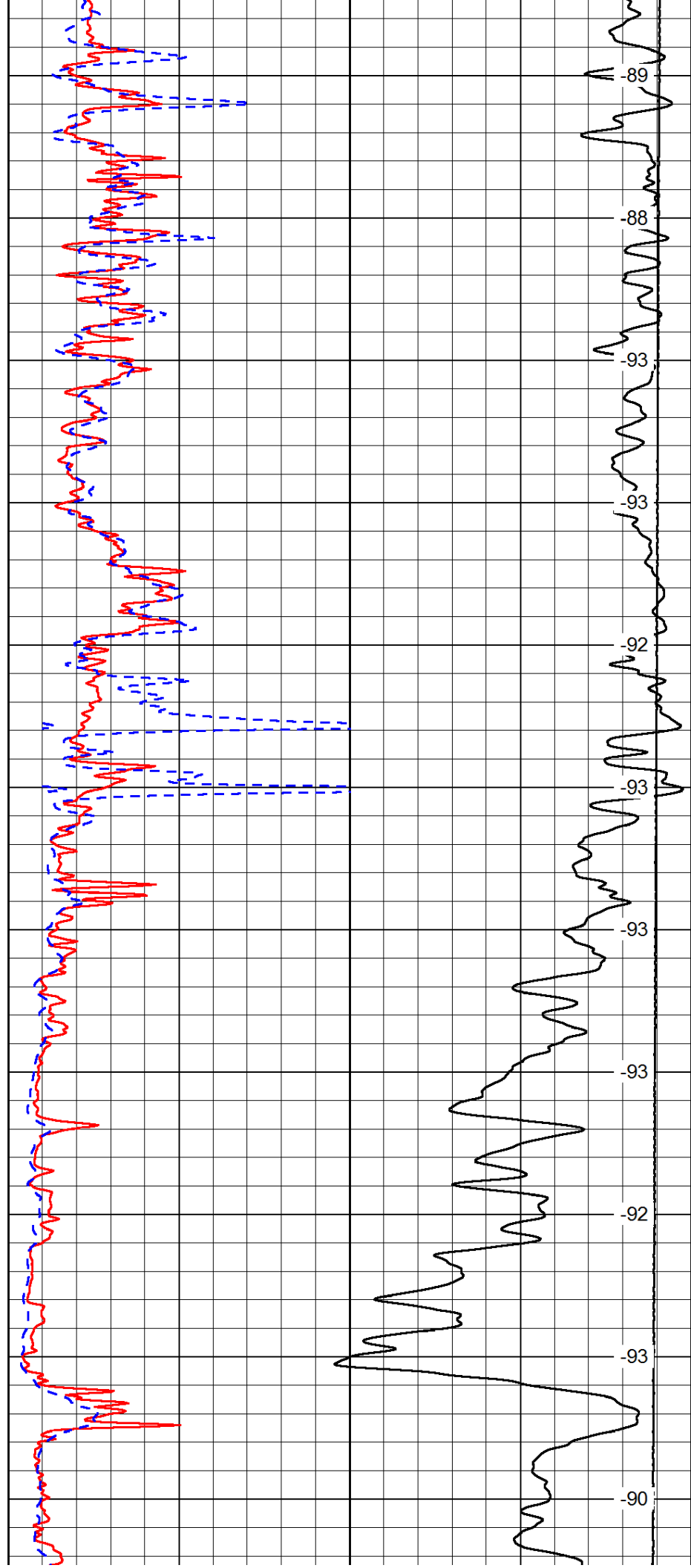
1050

1100

1150

1200

1250



-89

-88

-93

-93

-92

-93

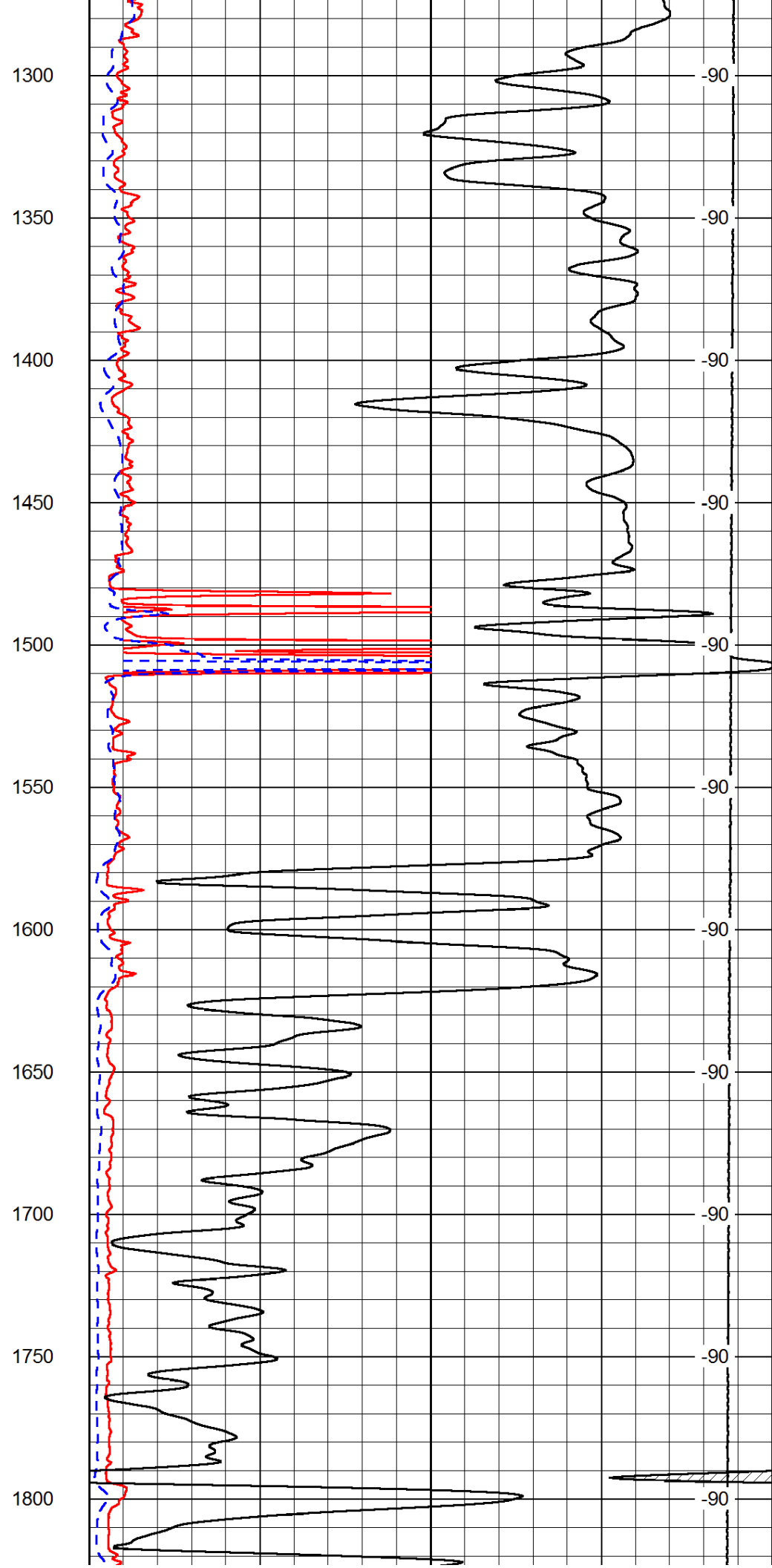
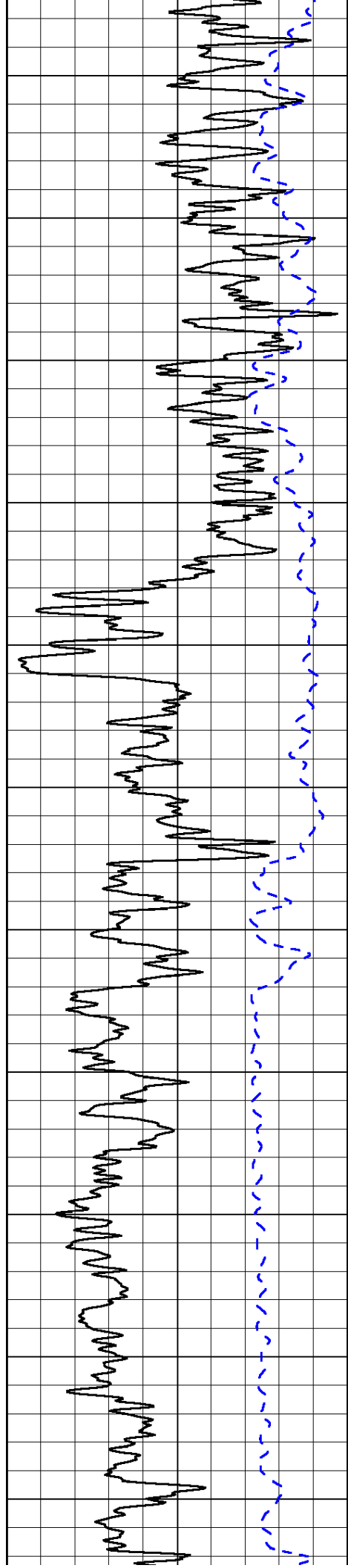
-93

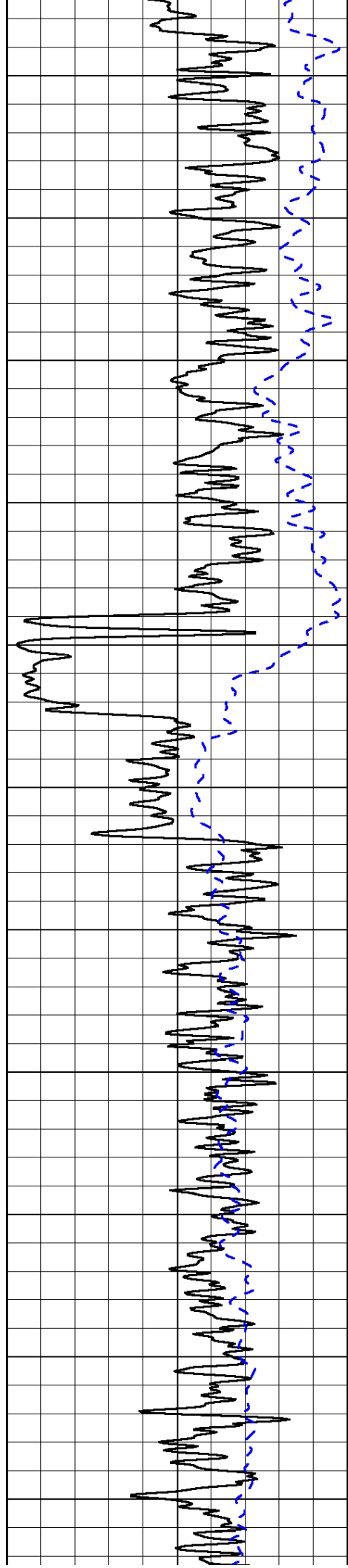
-93

-92

-93

-90





1850

1900

1950

2000

2050

2100

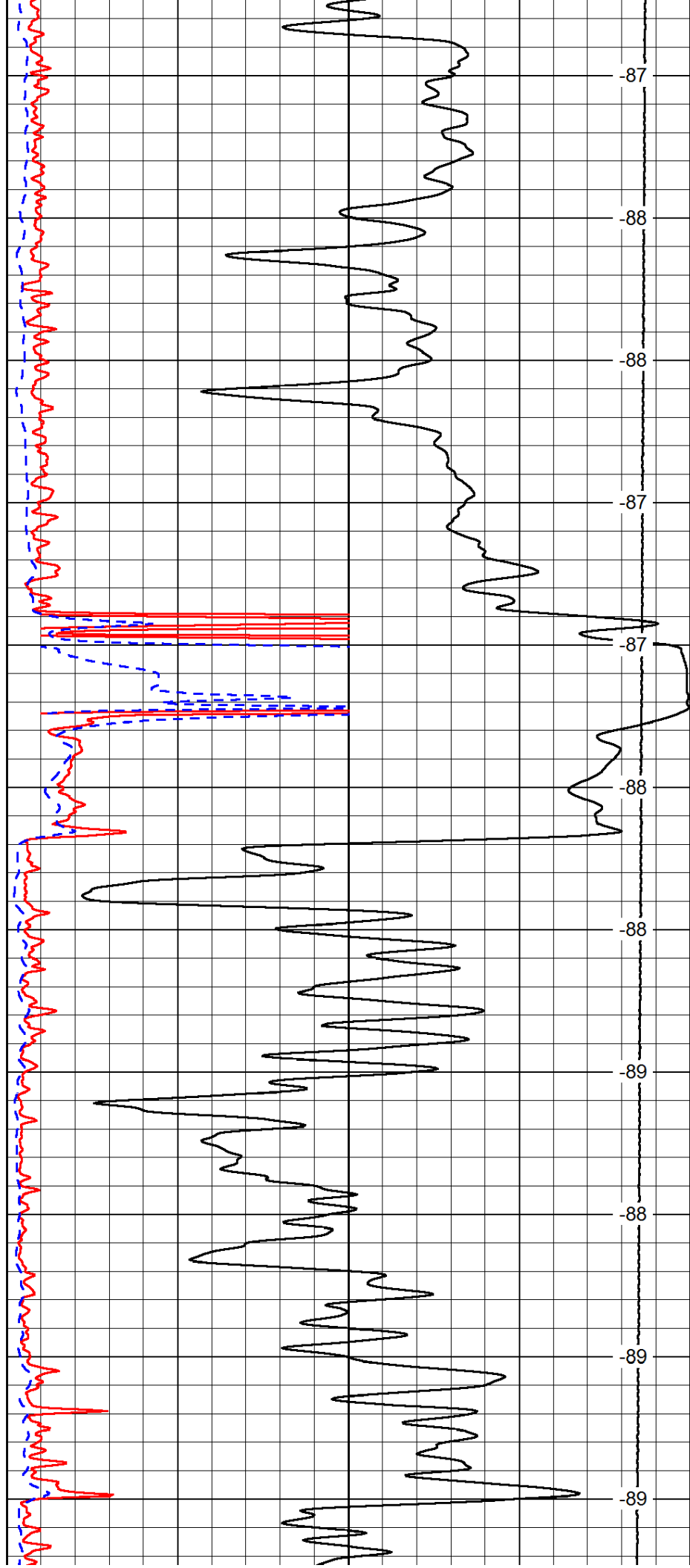
2150

2200

2250

2300

2350



-87

-88

-88

-87

-87

-88

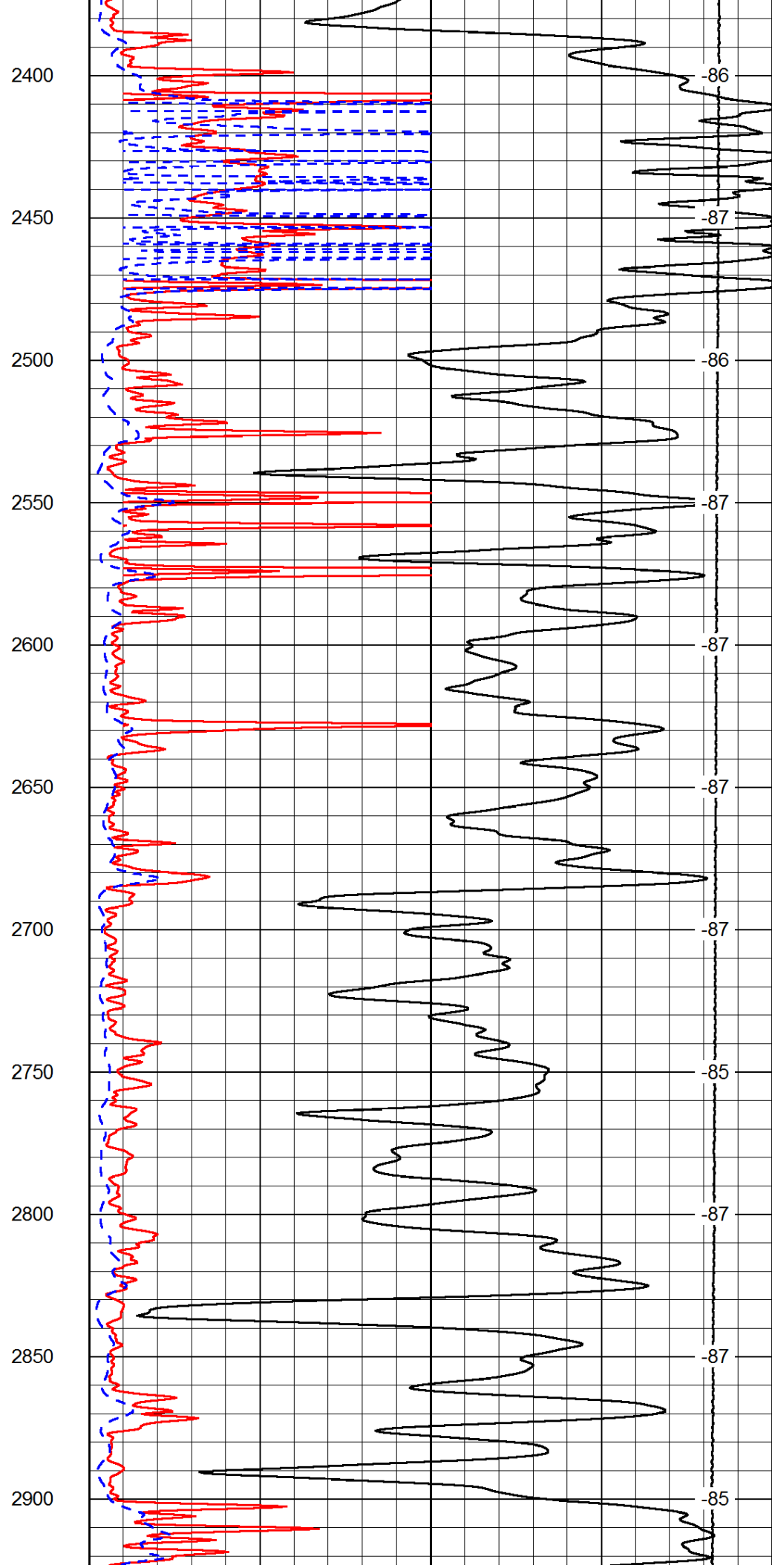
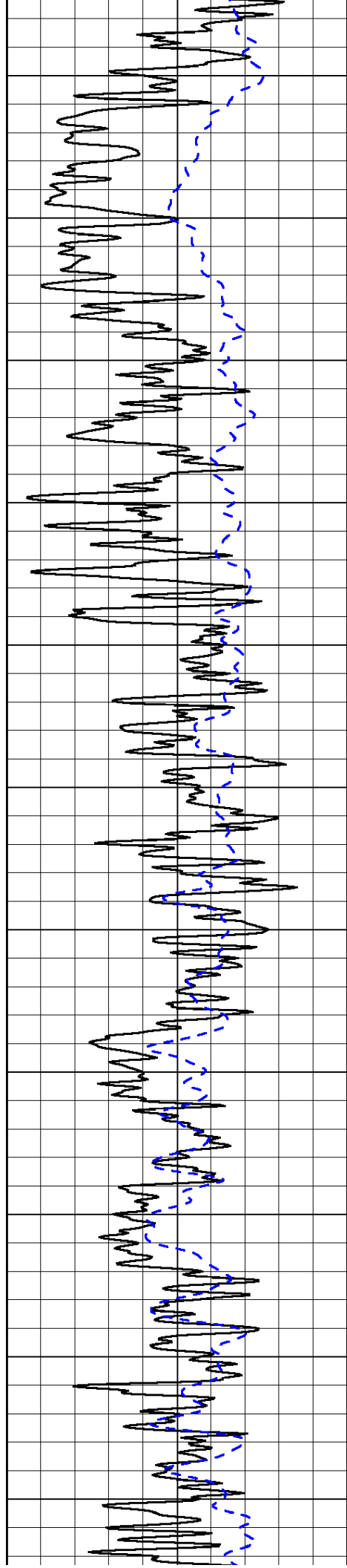
-88

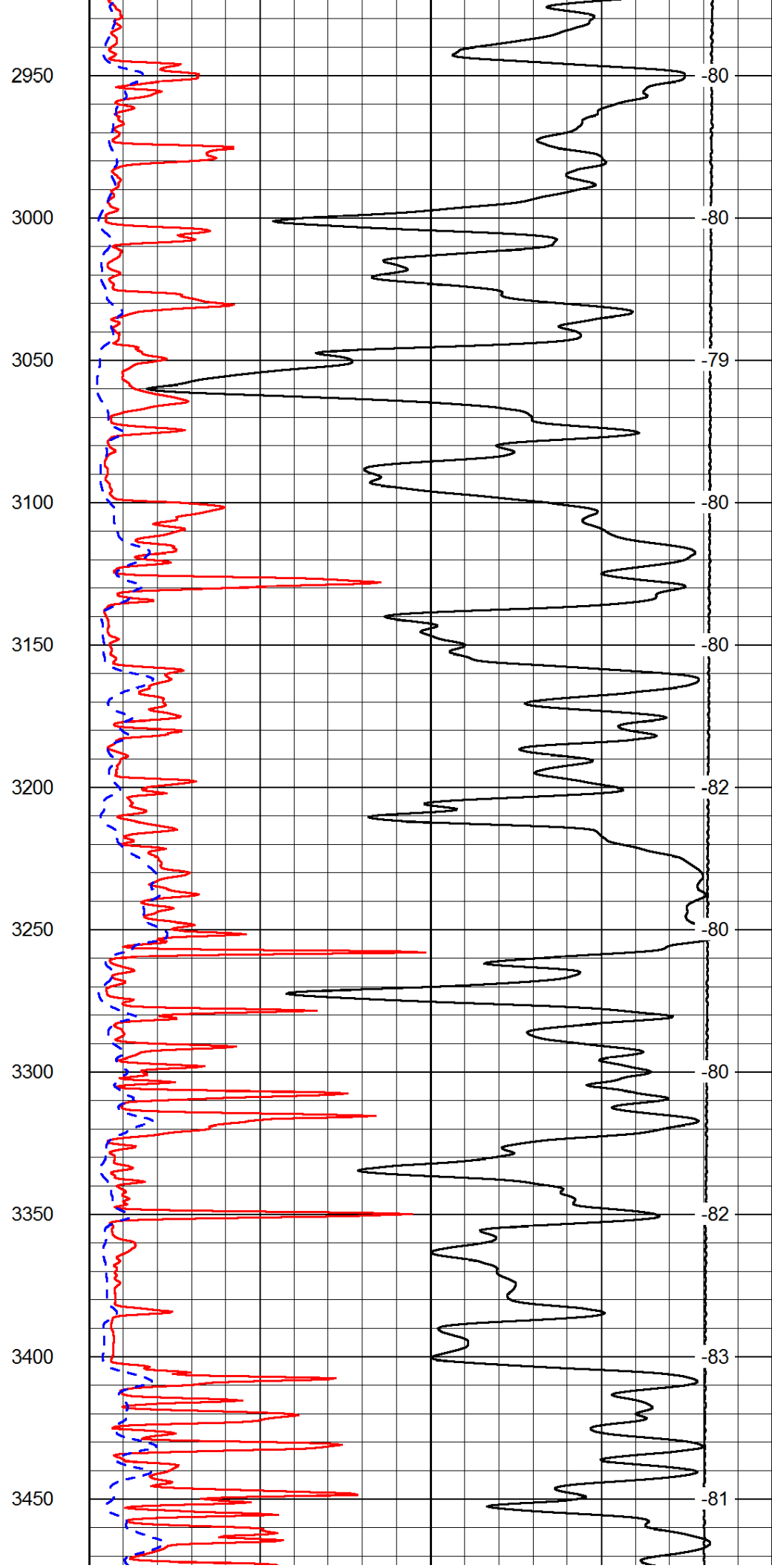
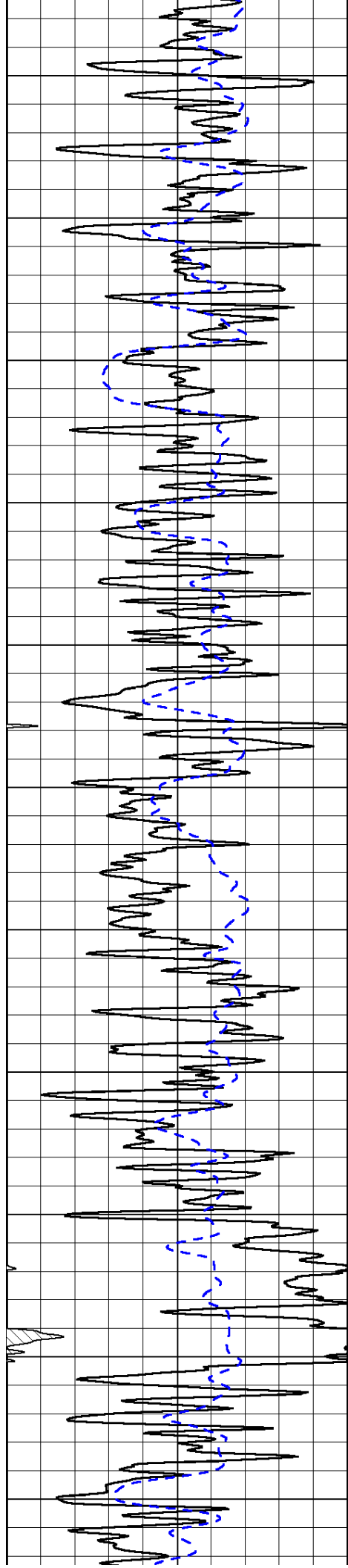
-89

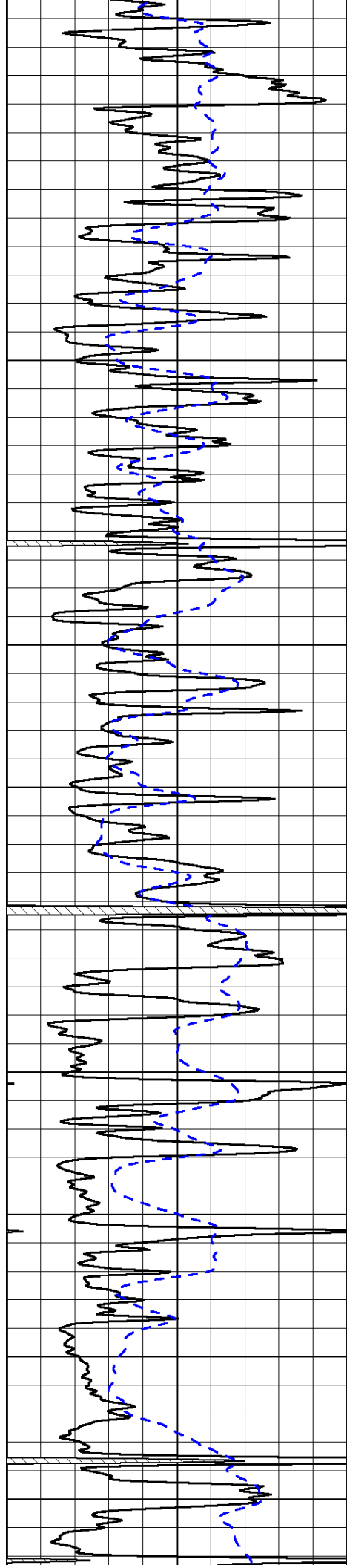
-88

-89

-89







3500

3550

3600

3650

3700

3750

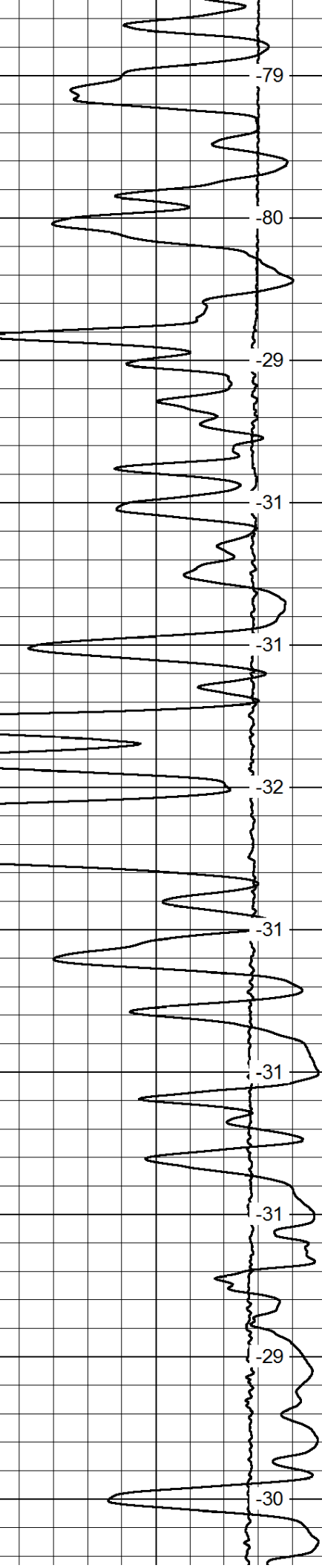
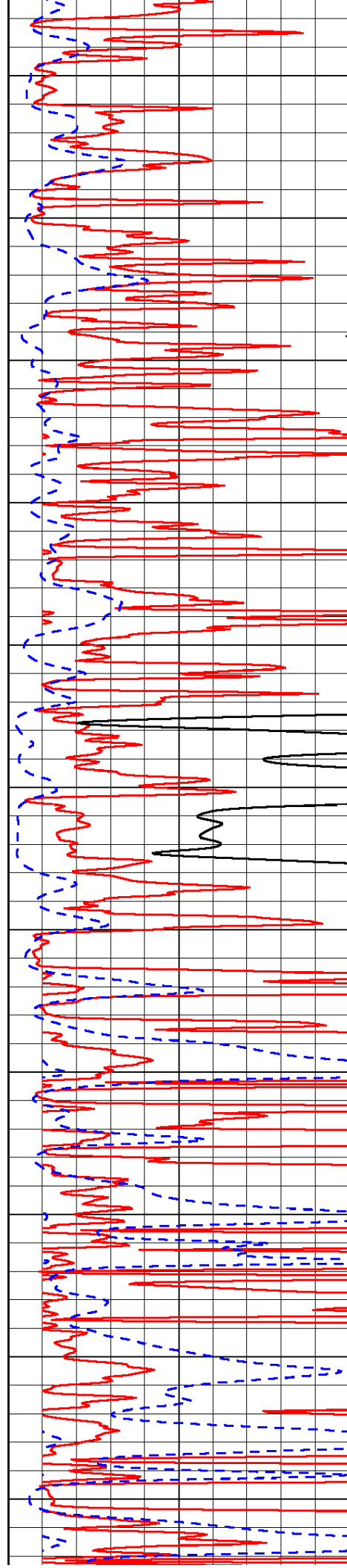
3800

3850

3900

3950

4000



-79

-80

-29

-31

-31

-32

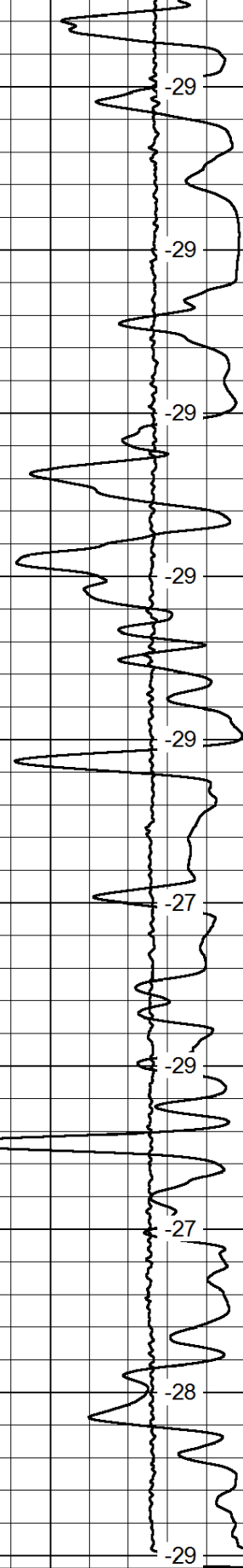
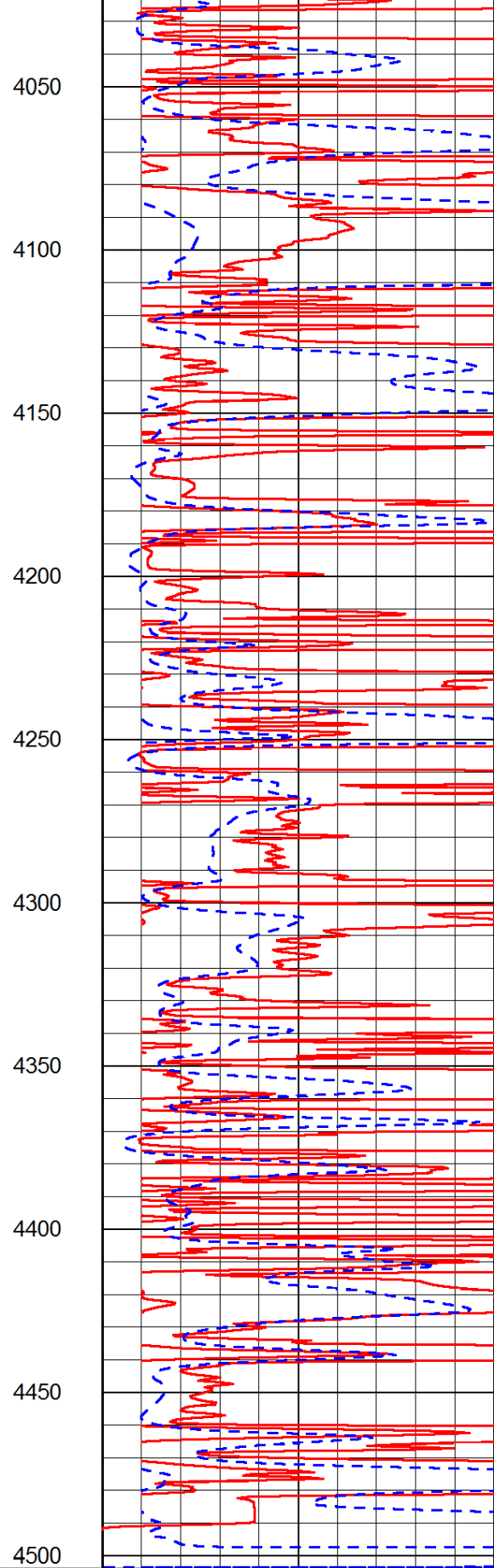
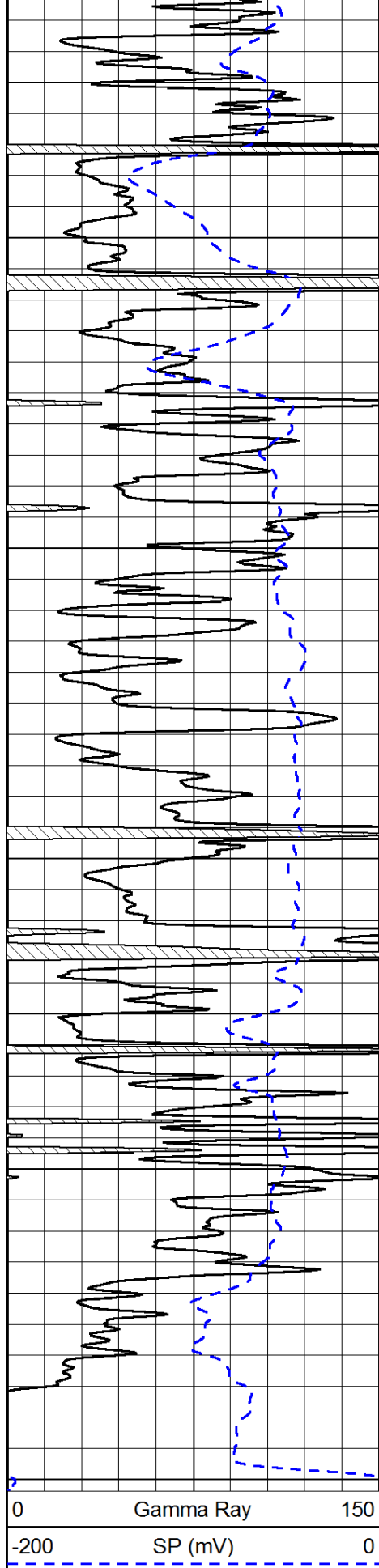
-31

-31

-31

-29

-30



0 Gamma Ray 150
-200 SP (mV) 0

0 Shallow Resistivity 50
0 Deep Resistivity 50

LSPD

1000 Conductivity 0

15000 Line Tension 0

50 Shallow Resistivity 500

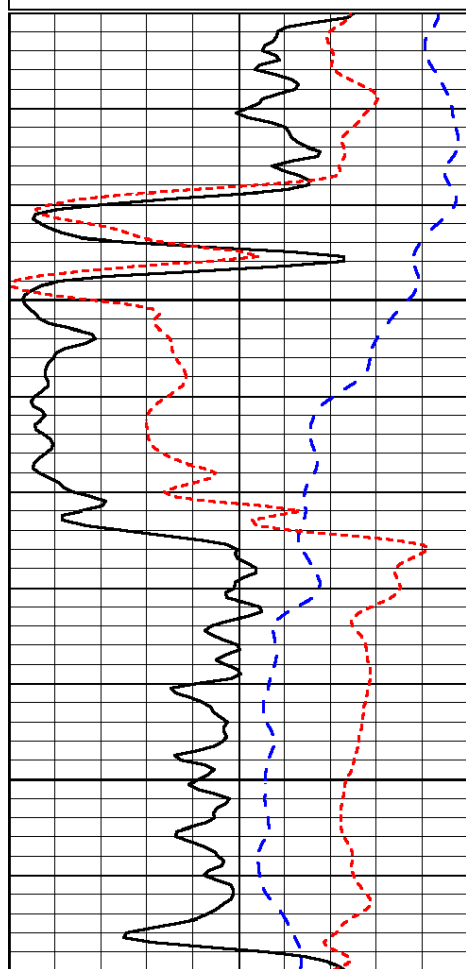
50 Deep Resistivity 500

Database File: c:\warrior\data\larson_james children's trust #1-9\larhd.db
 Dataset Pathname: dil\larstk
 Presentation Format: dil
 Dataset Creation: Sun Nov 16 16:39:32 2014
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

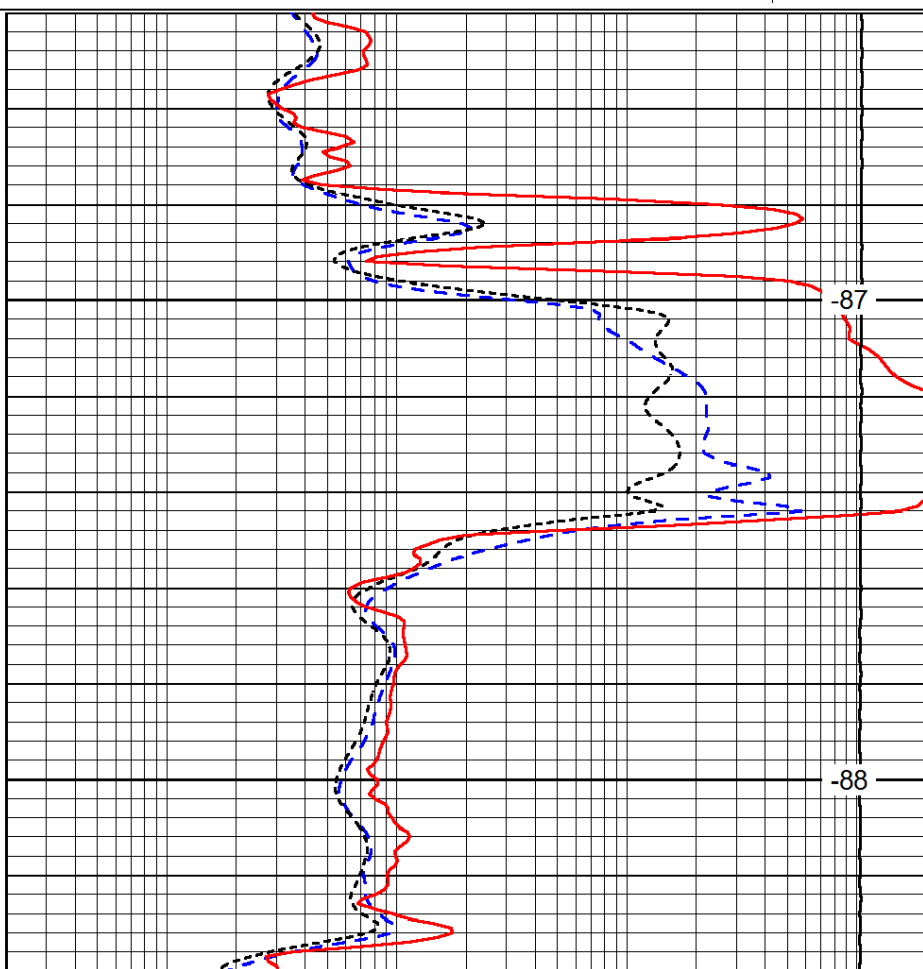
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



2050

2100



-87

-88

0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

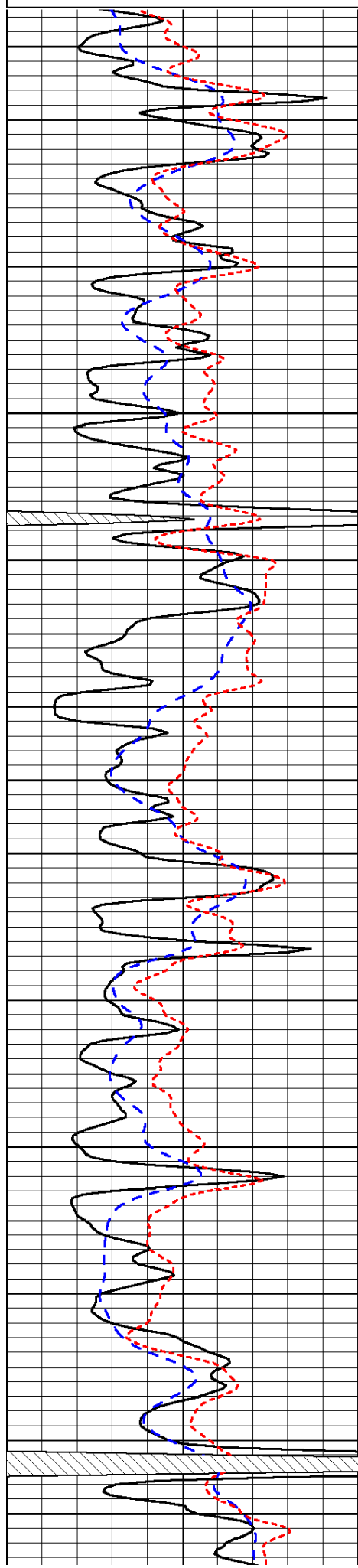
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD

Database File: c:\warrior\data\larson_james children's trust #1-9\larhd.db
 Dataset Pathname: dil\larstk
 Presentation Format: dil
 Dataset Creation: Sun Nov 16 16:39:32 2014
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0



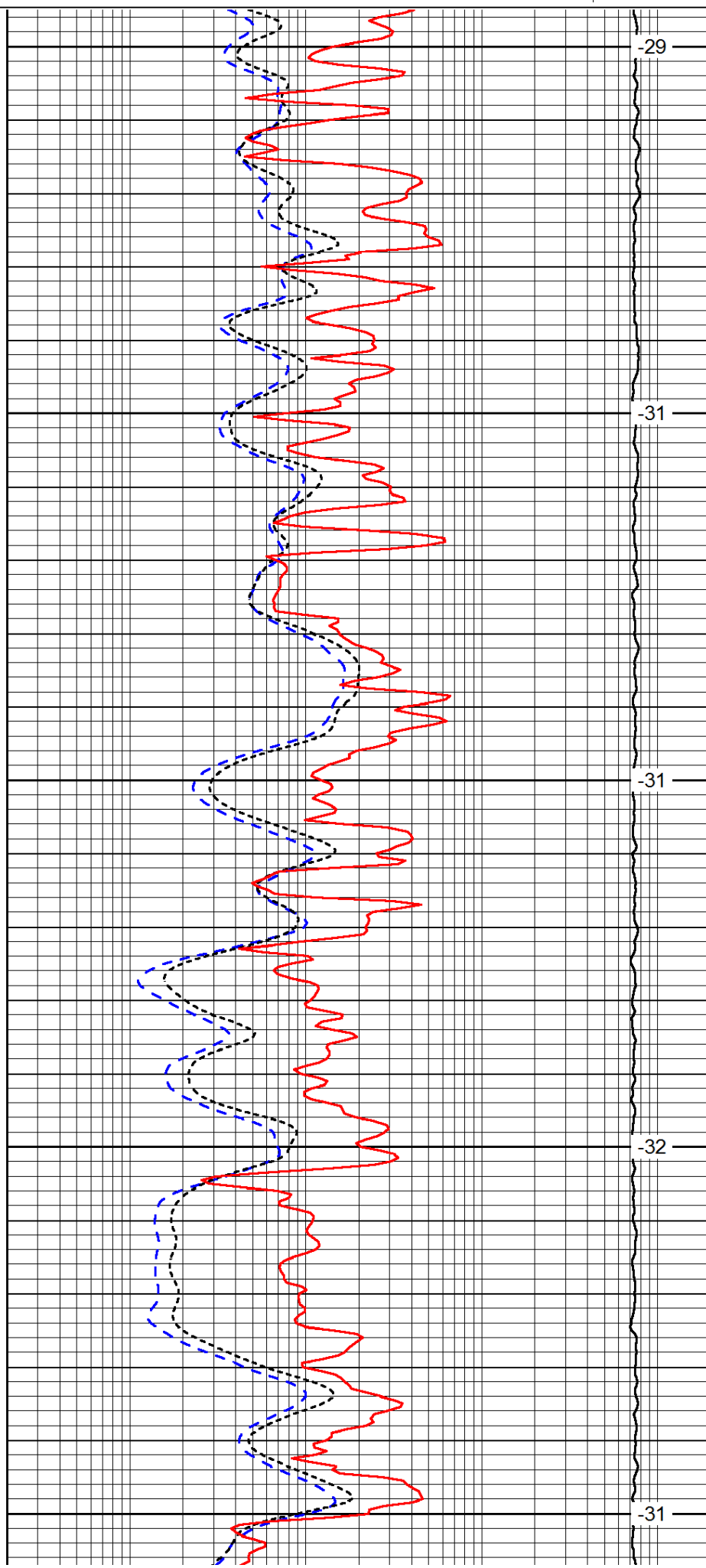
3600

3650

3700

3750

3800



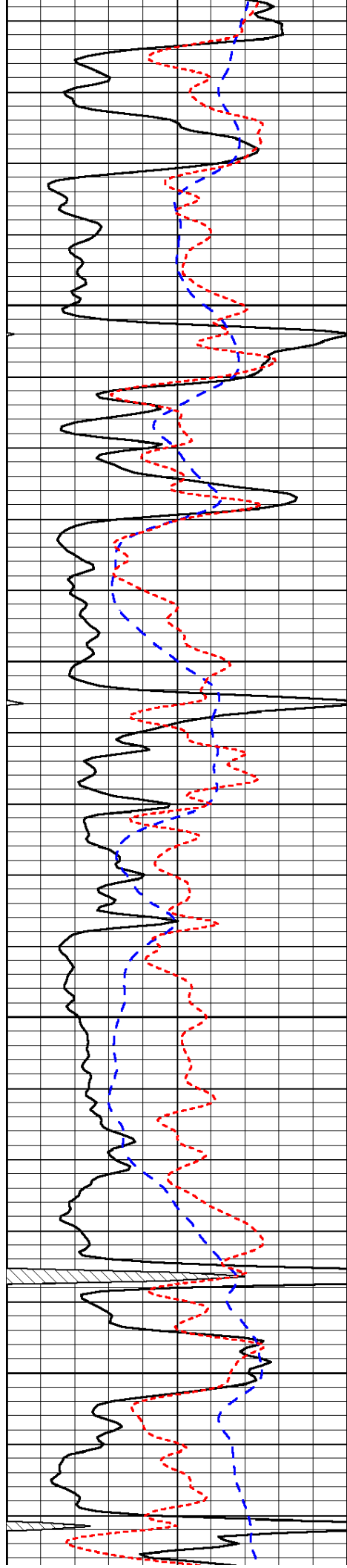
-29

-31

-31

-32

-31

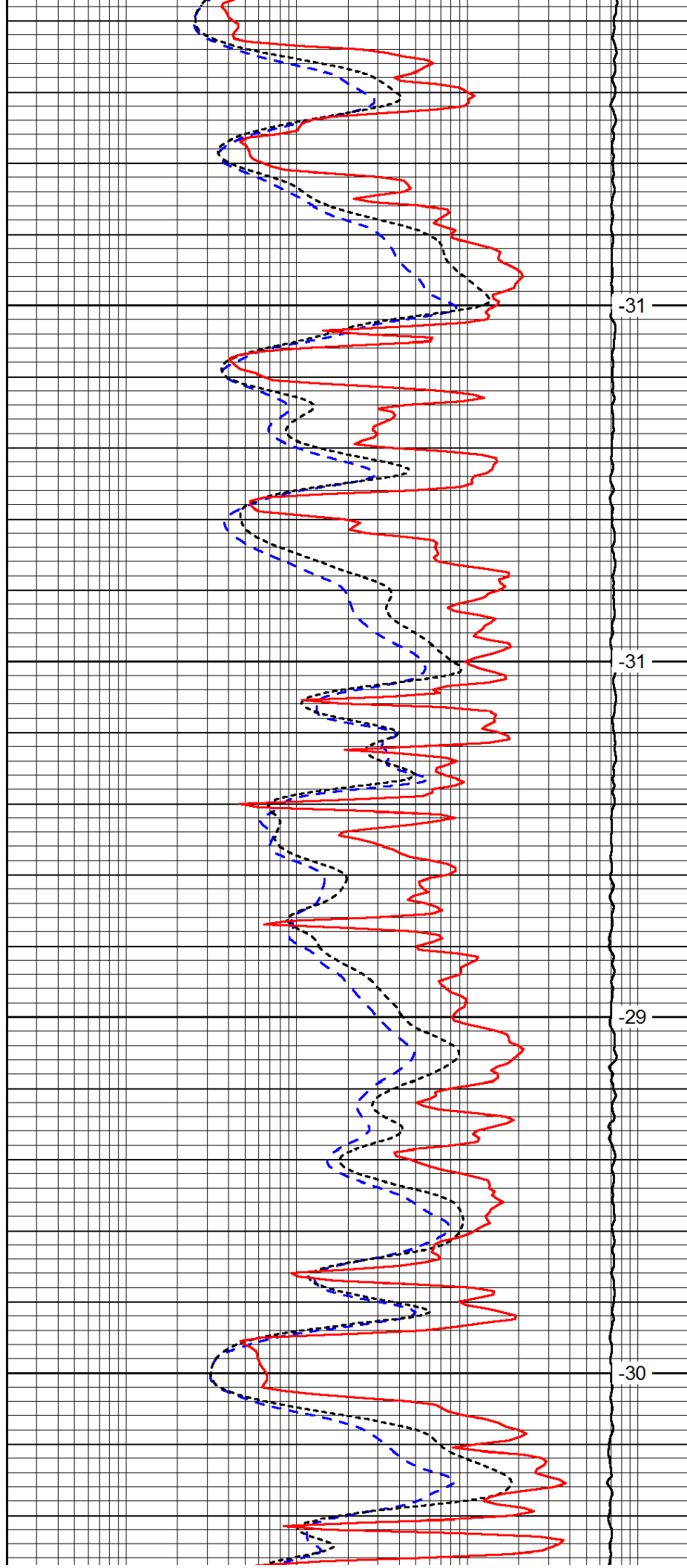


3850

3900

3950

4000

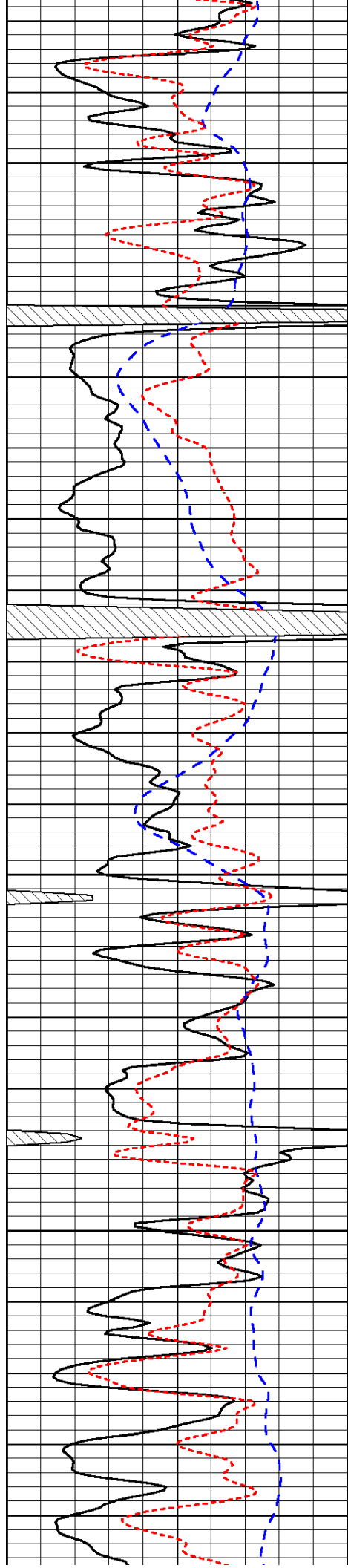


-31

-31

-29

-30

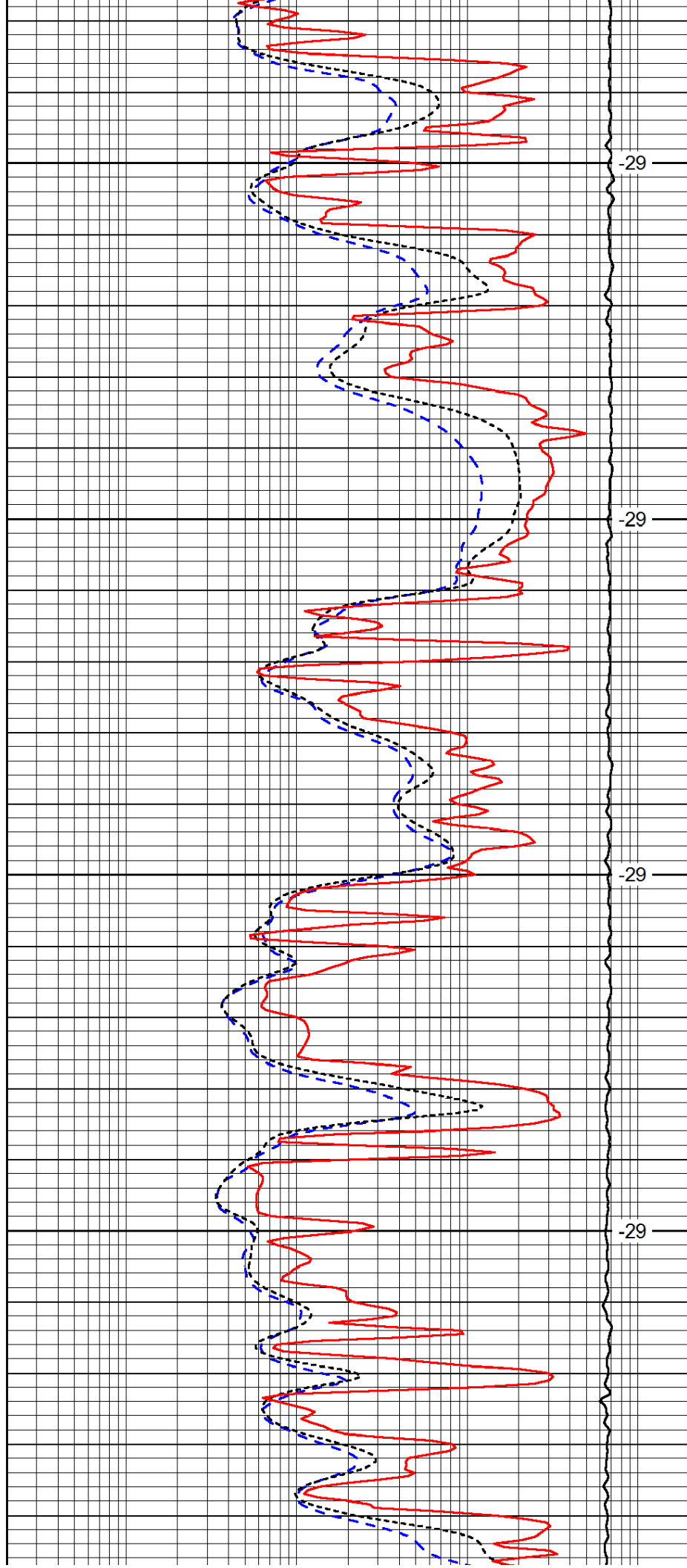


4050

4100

4150

4200

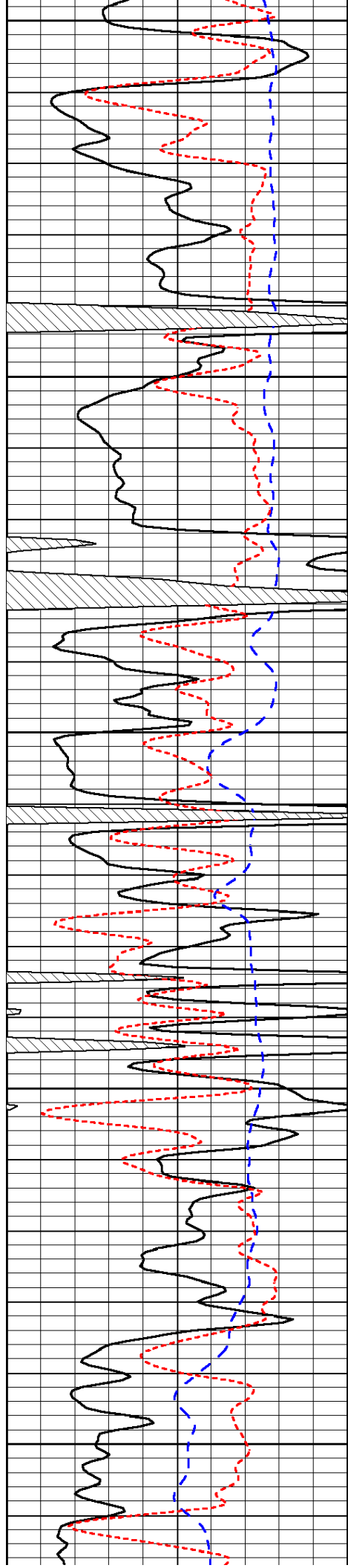


-29

-29

-29

-29



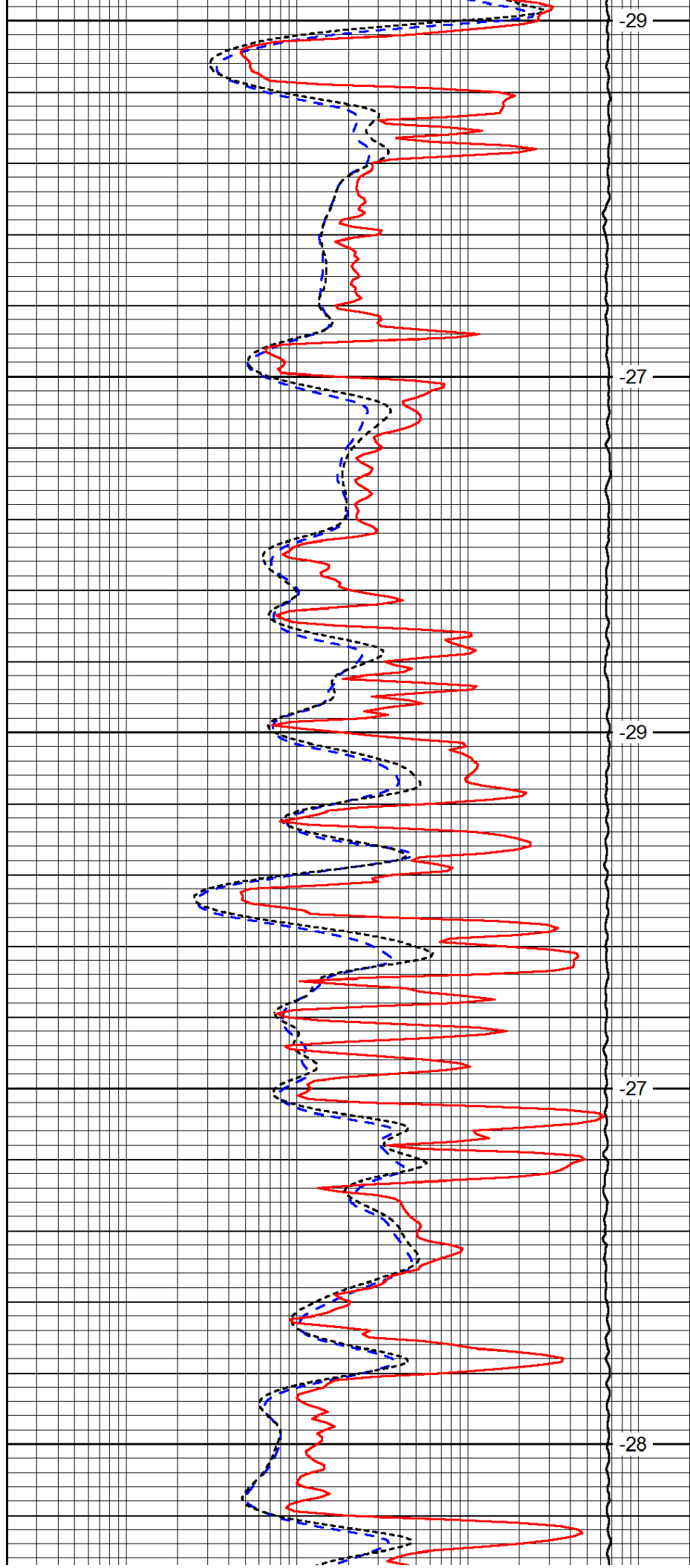
4250

4300

4350

4400

4450



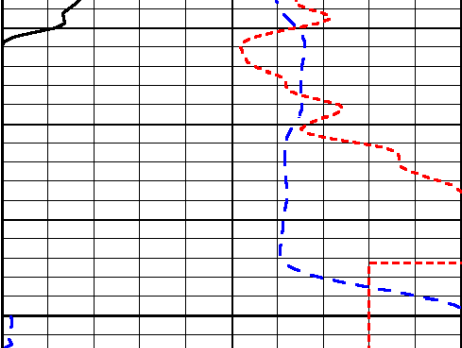
-29

-27

-29

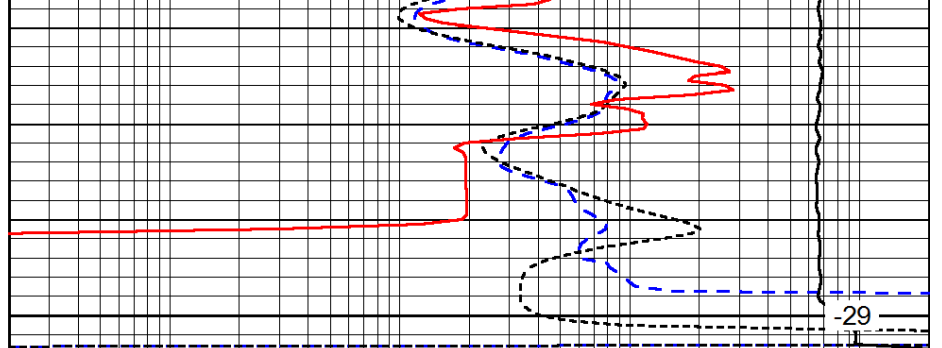
-27

-28



0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

4500



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD