



Pioneer Energy Services

Dual Induction Log

API No.

15-007-24181-00-00

Company Lario Oil & Gas Company

Well Houlton #5

Field Whelan Southwest

County Barber State Kansas

Location 1650' FSL & 2310' FEL

Sec: 4 Twp: 32S Rge: 12W

Permanent Datum Ground Level Elevation 1478

Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Other Services

CNL/CDL

MEL/BHCS

Elevation

K.B. 1488

D.F. 1478

G.L. 1478

<<< 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

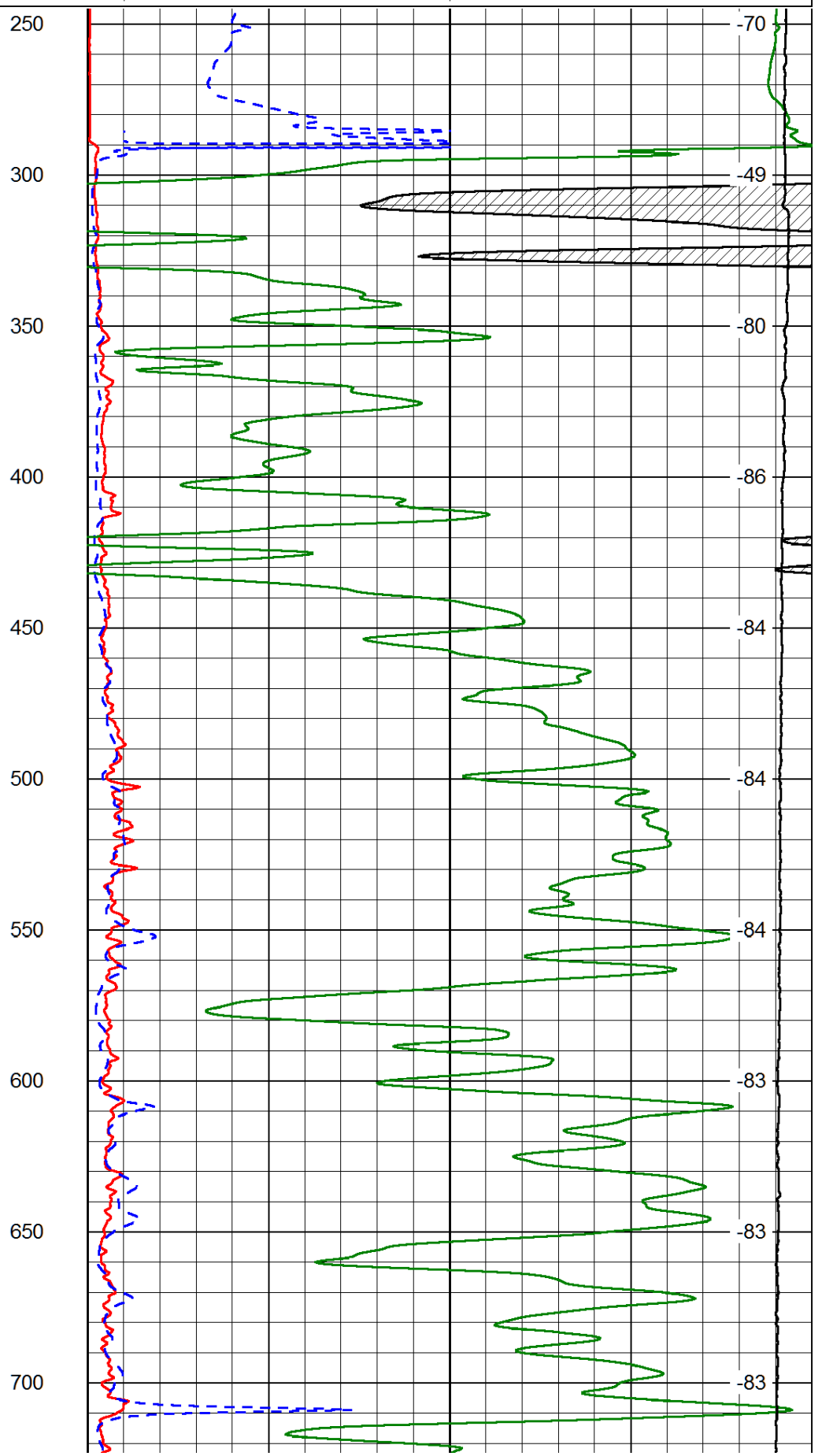
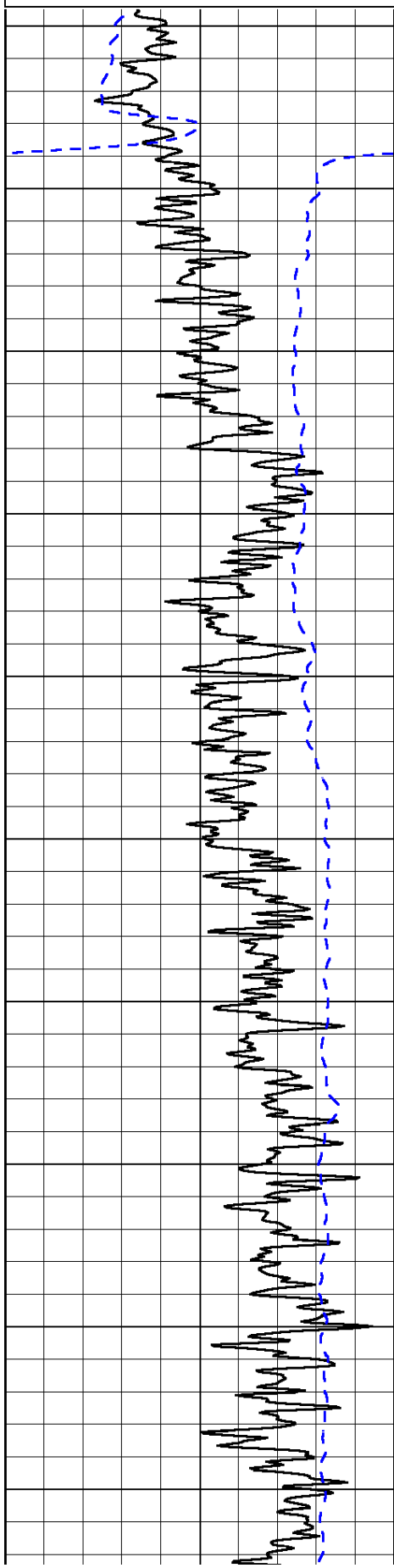
Thank you for using Log-Tech, Inc.
(785) 625-3858
Medicine Lodge,
West on River Road to Spring Creek Road,
1/4 South, East into

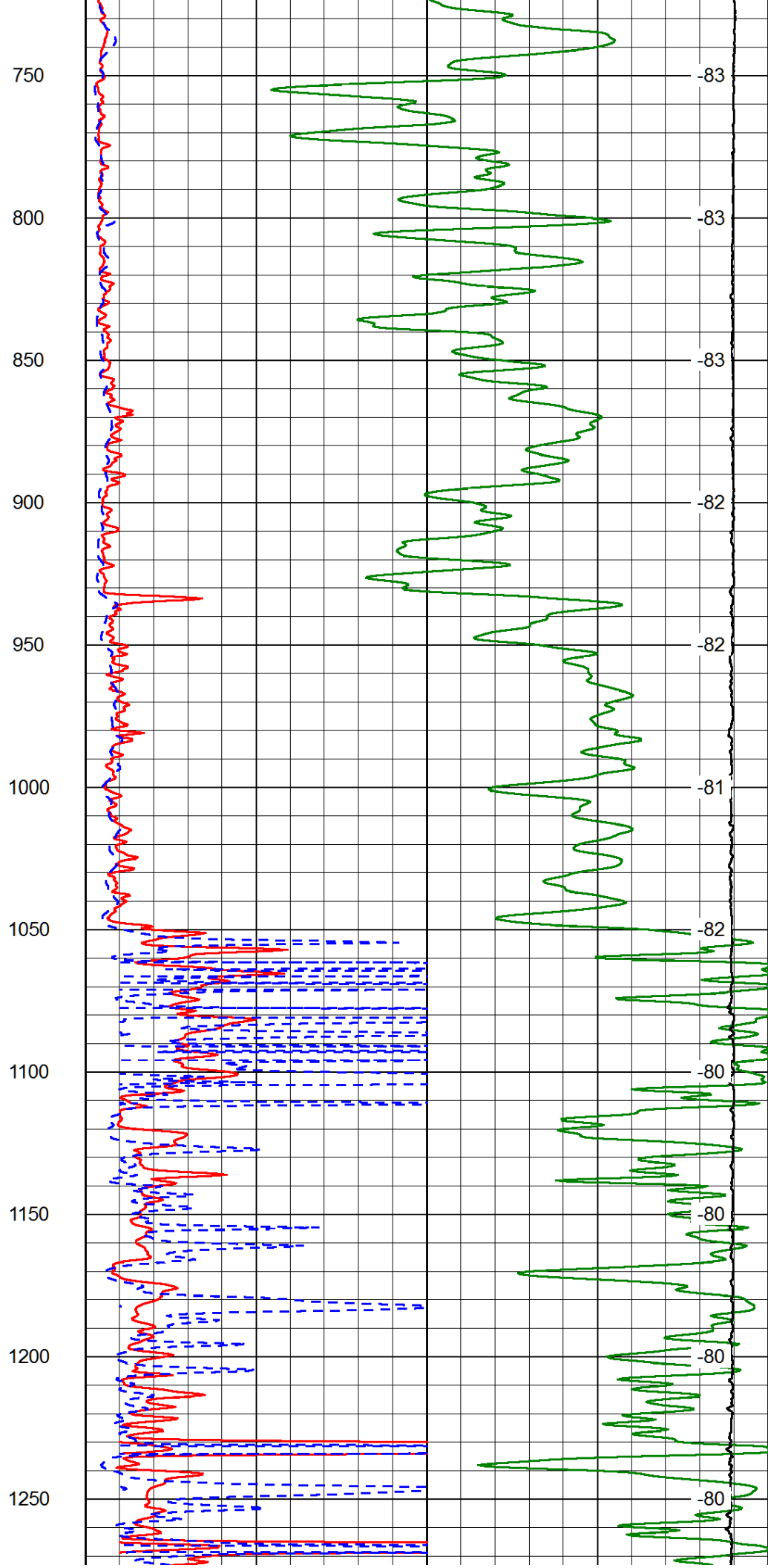
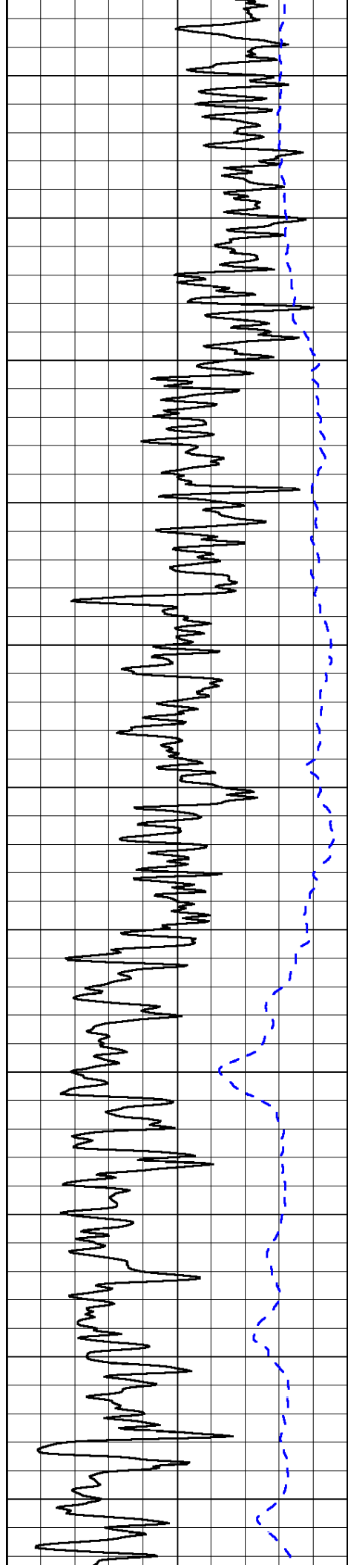
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Dataset Pathname: dil\\lastack
Presentation Format: dil2in
Dataset Creation: Fri Jun 20 19:13:33 2014
Charted by: Depth in Feet scaled 1:600

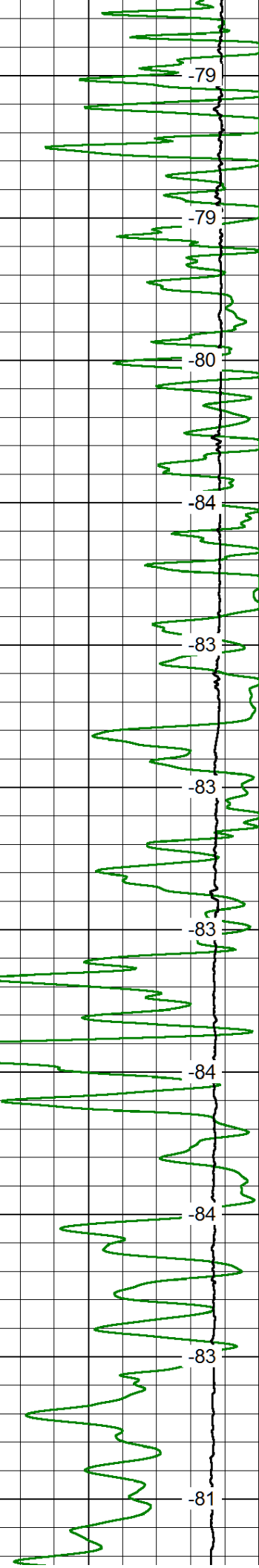
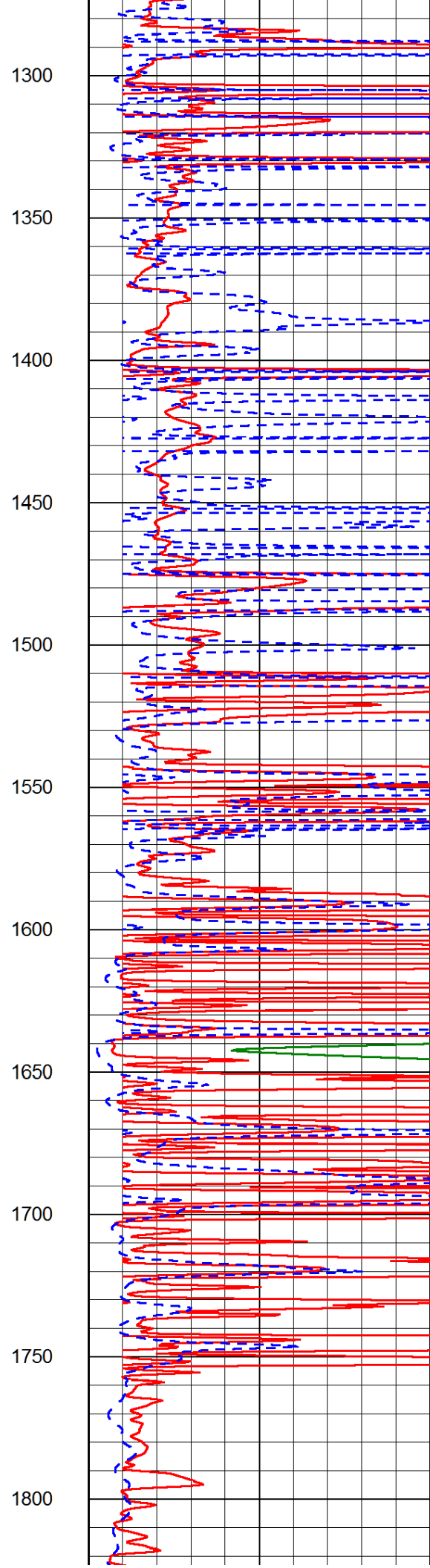
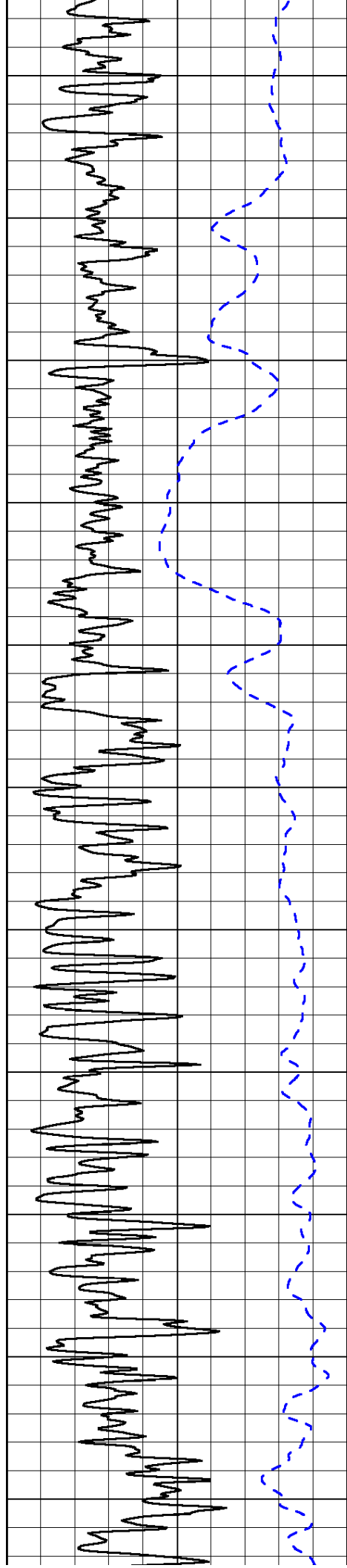
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-200	SP (mV)	0

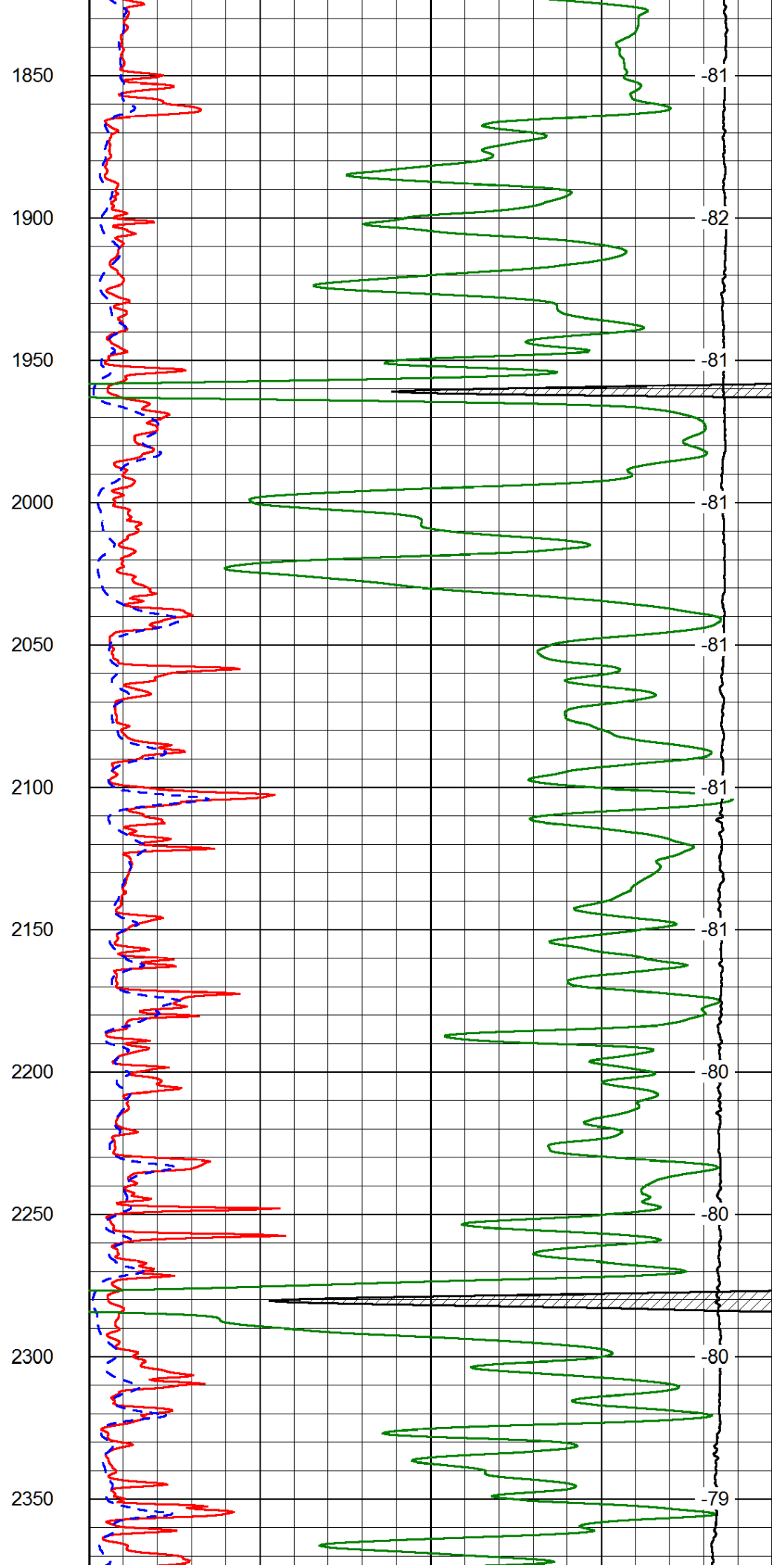
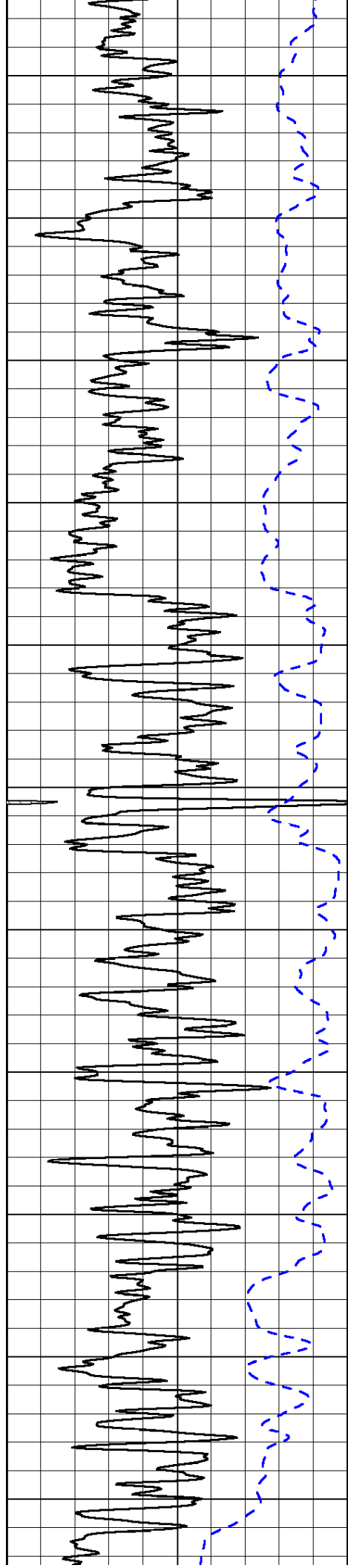
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

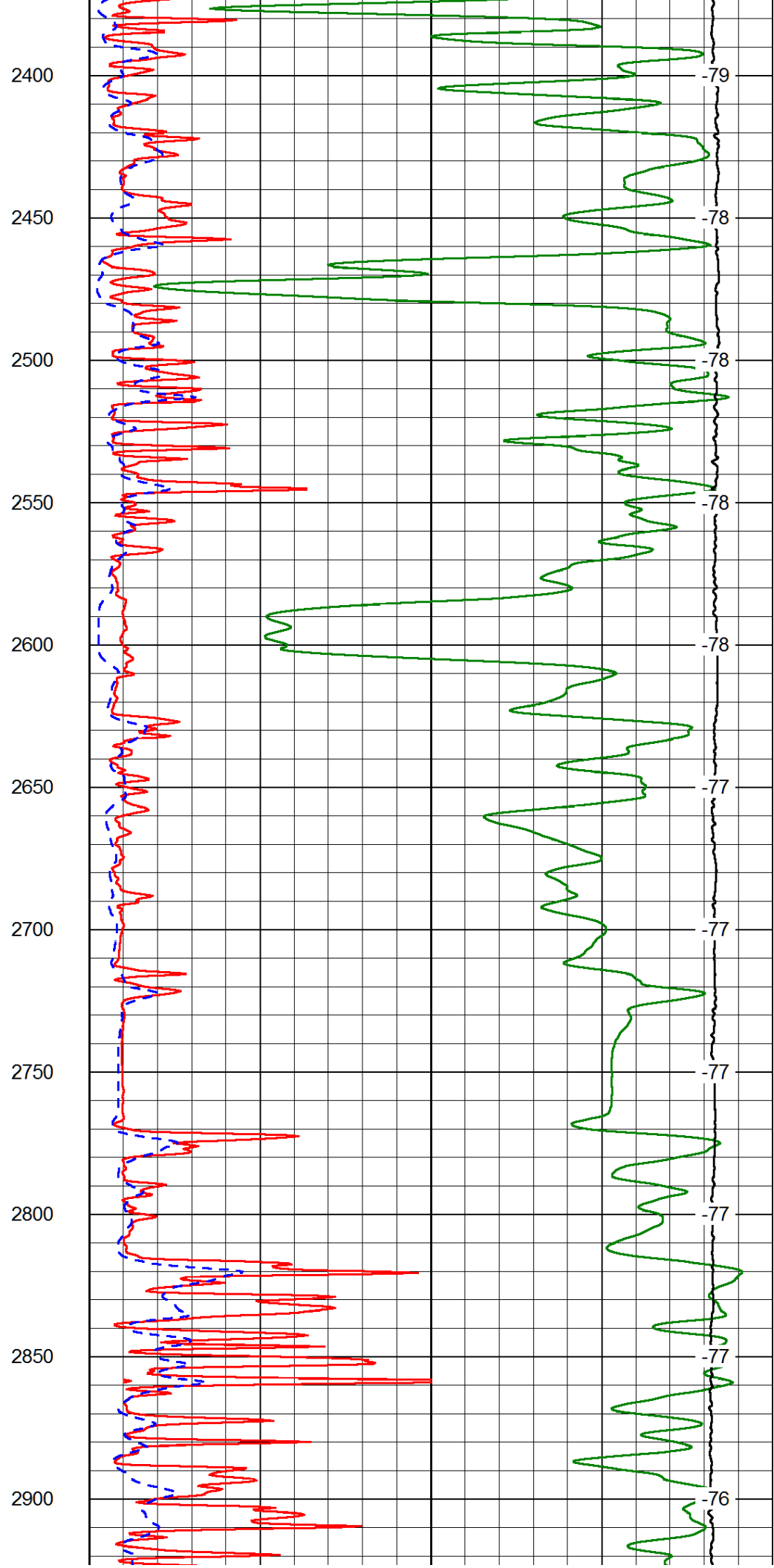
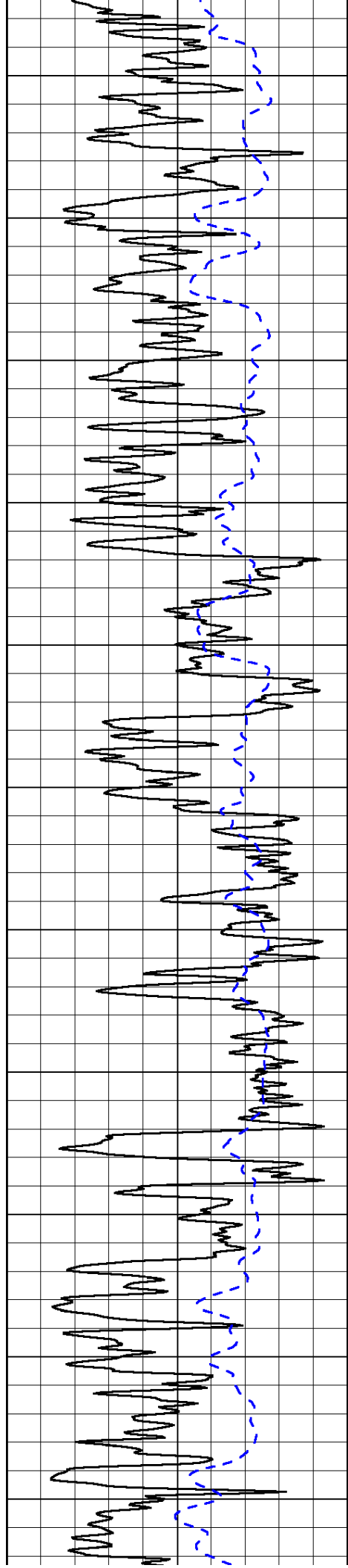
LSPD

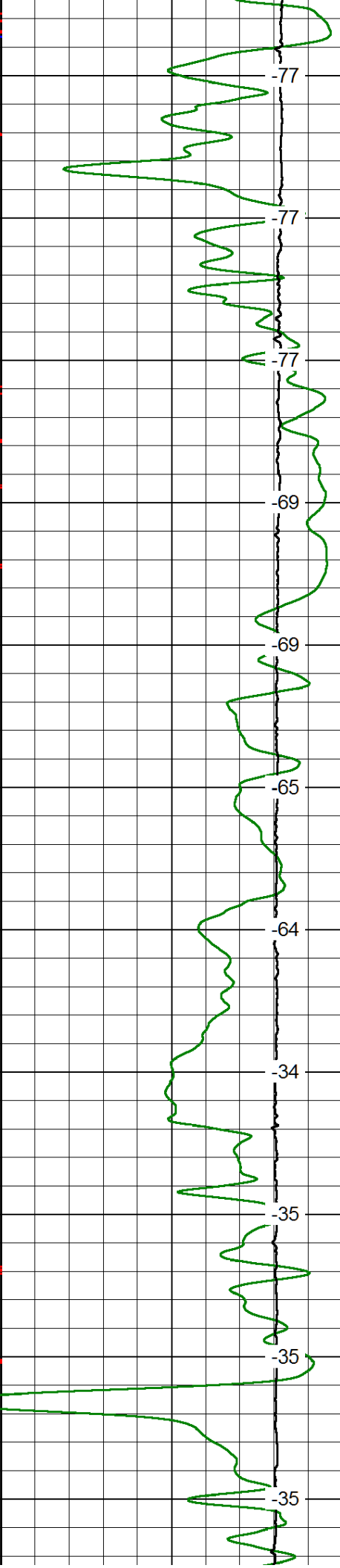
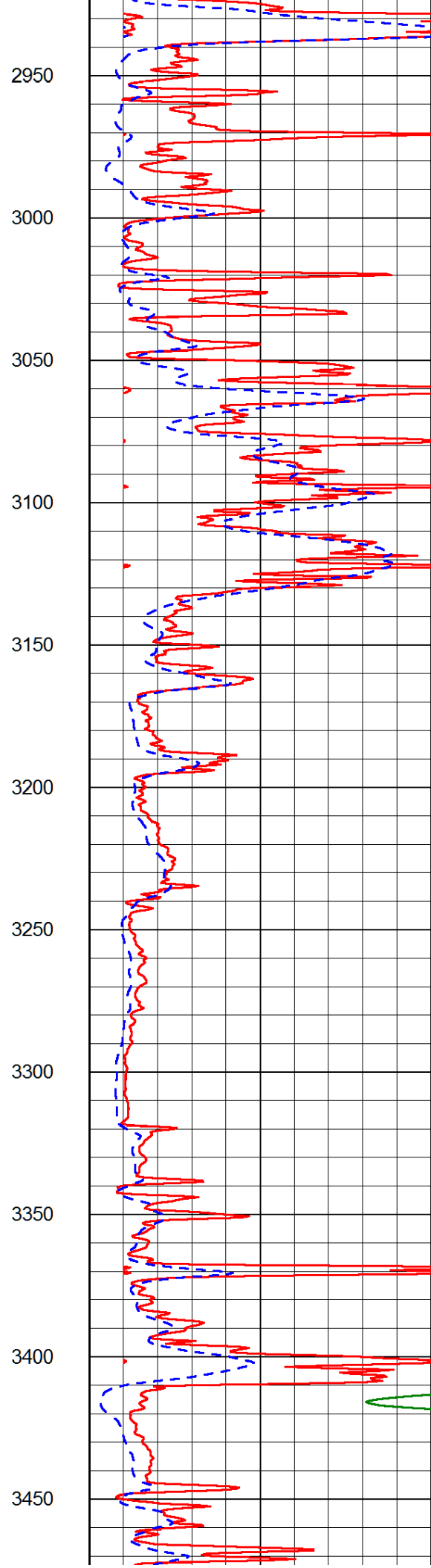
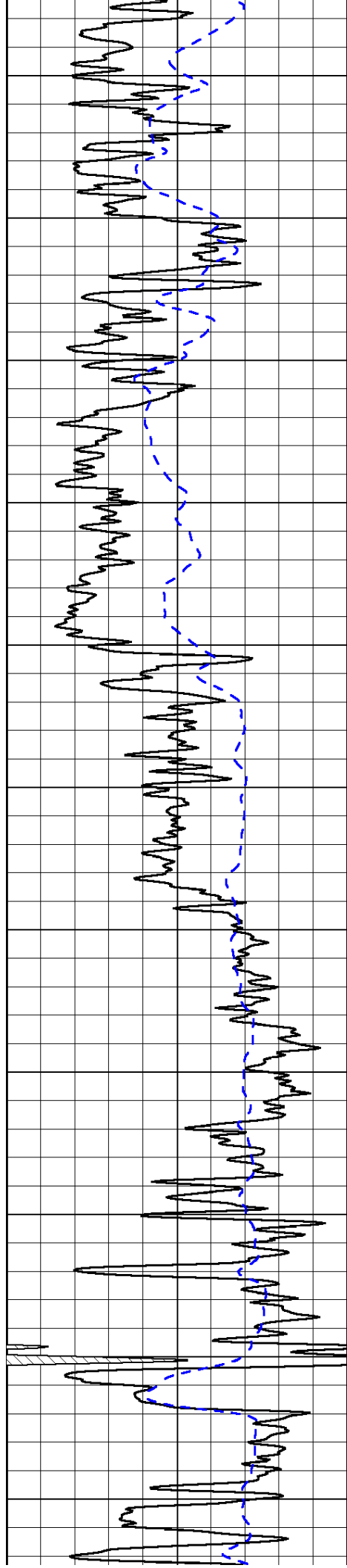


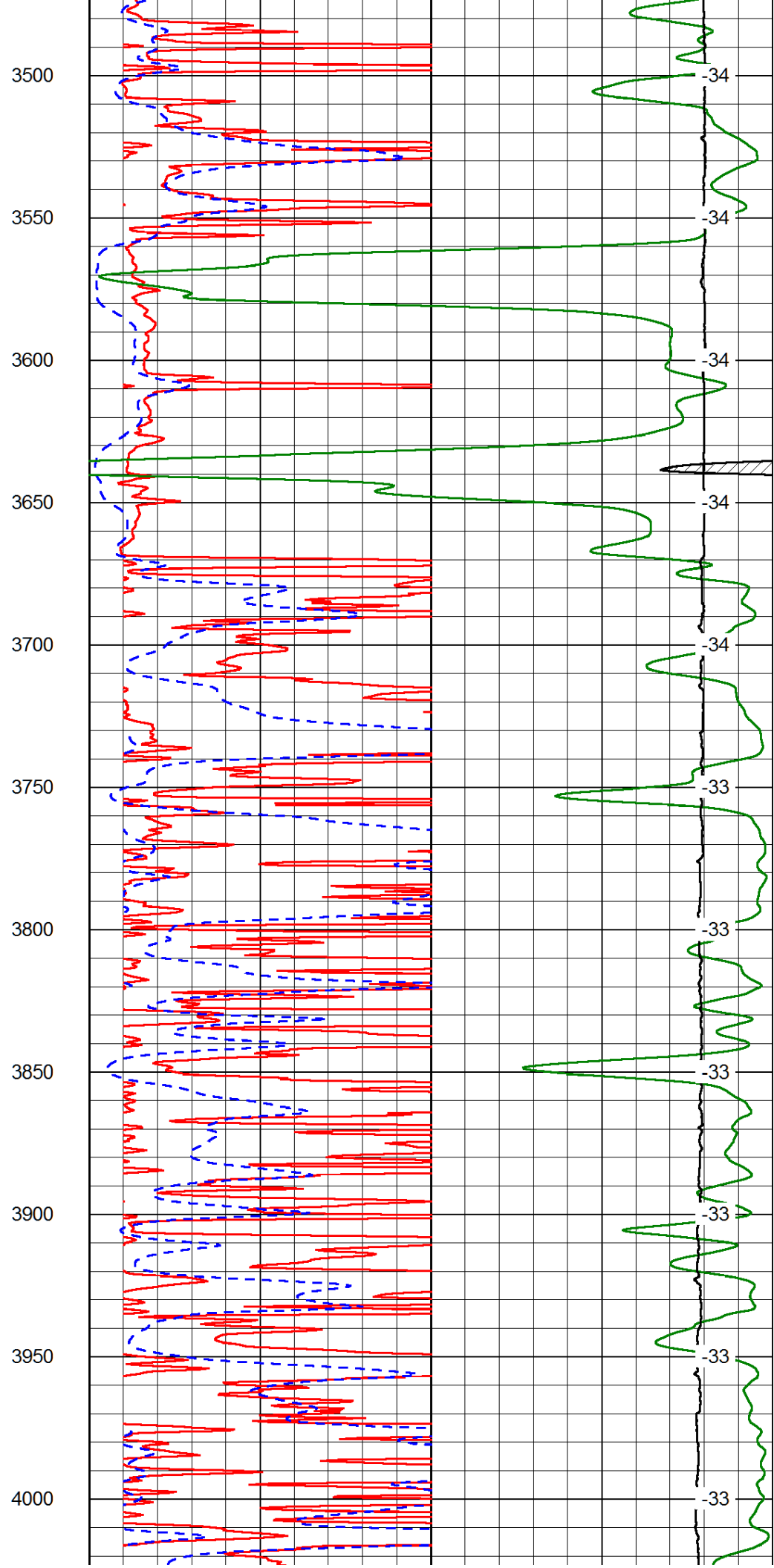
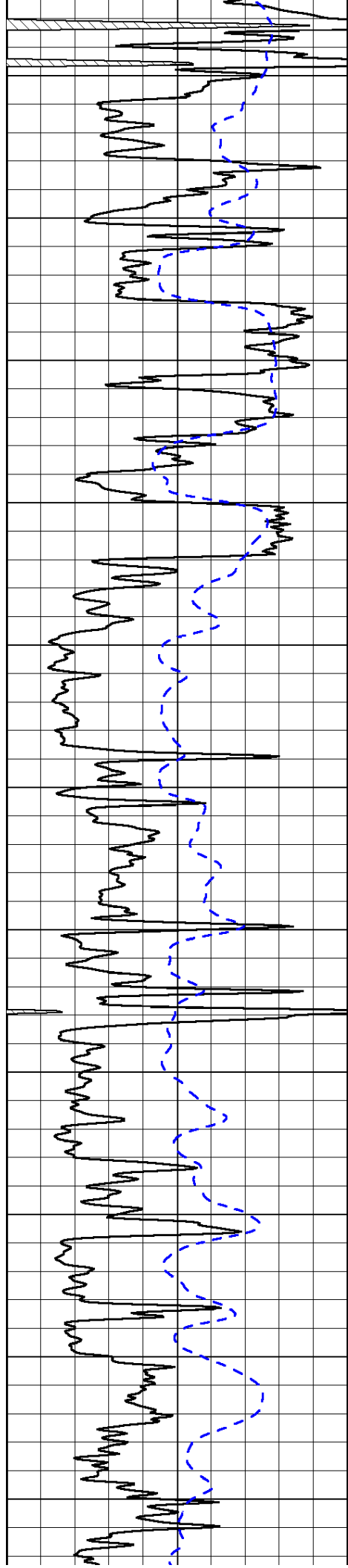


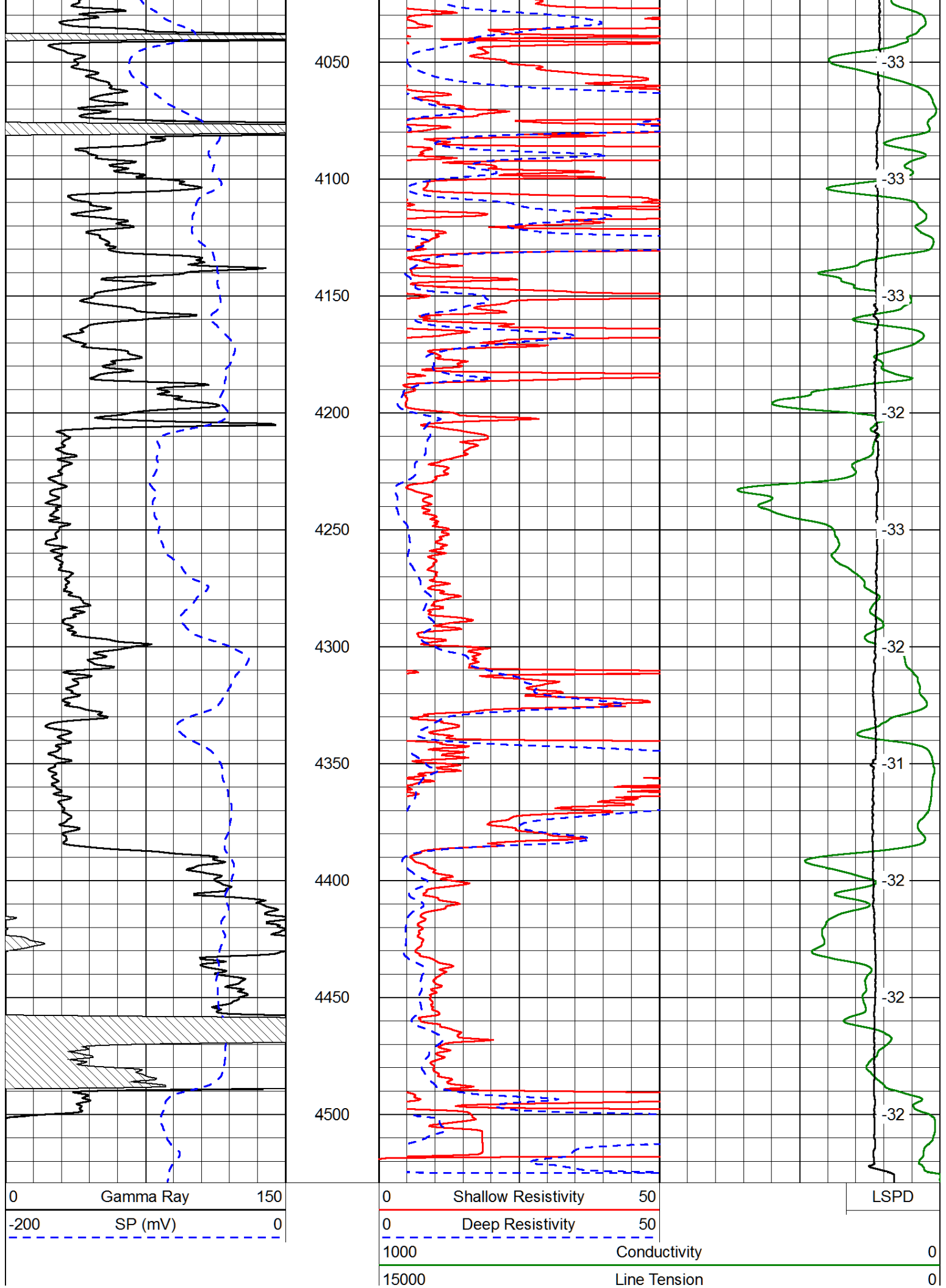












50	Shallow Resistivity	500
50	Deep Resistivity	500

Database File:

lario_houlton_5hd.db

Dataset Pathname:

dil/lastack

Presentation Format:

dil

Dataset Creation:

Fri Jun 20 19:13:33 2014

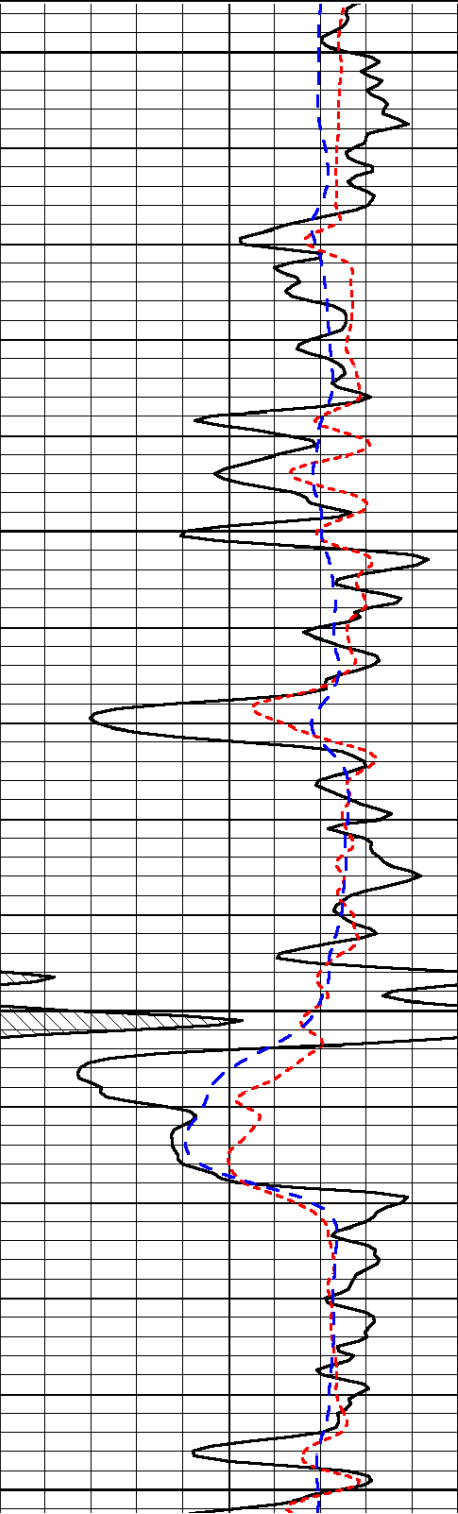
Charted by:

Depth in Feet scaled 1:240

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD

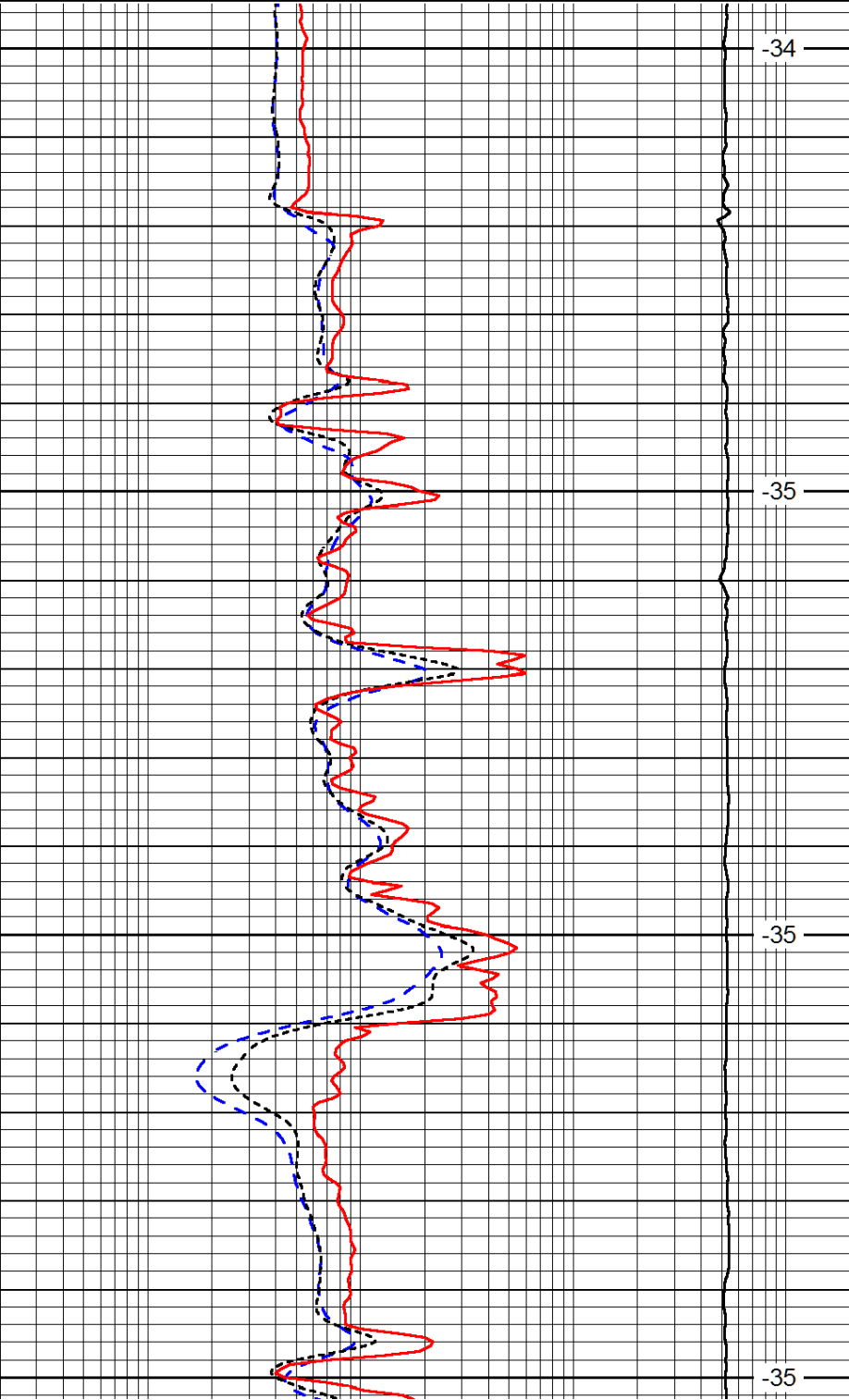


3300

3350

3400

3450

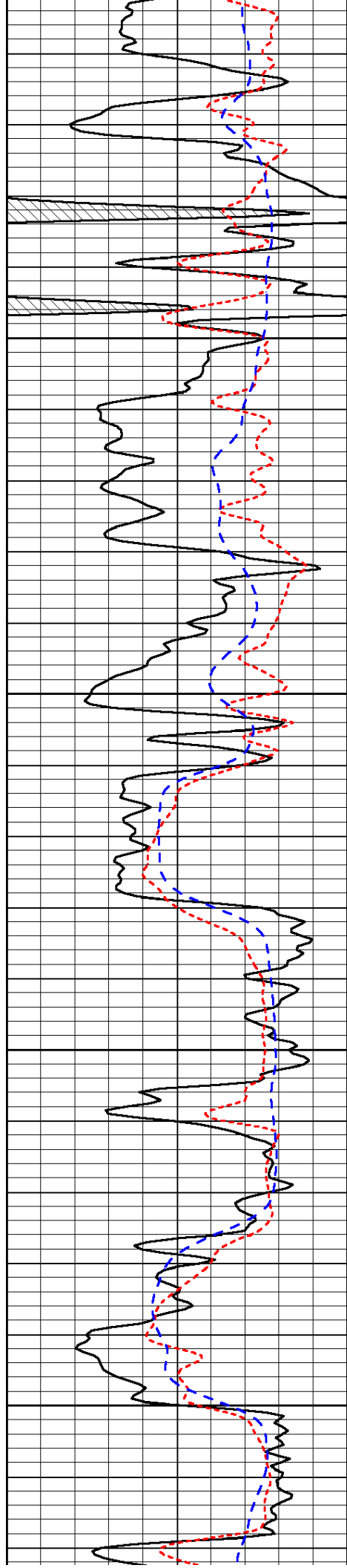


-34

-35

-35

-35

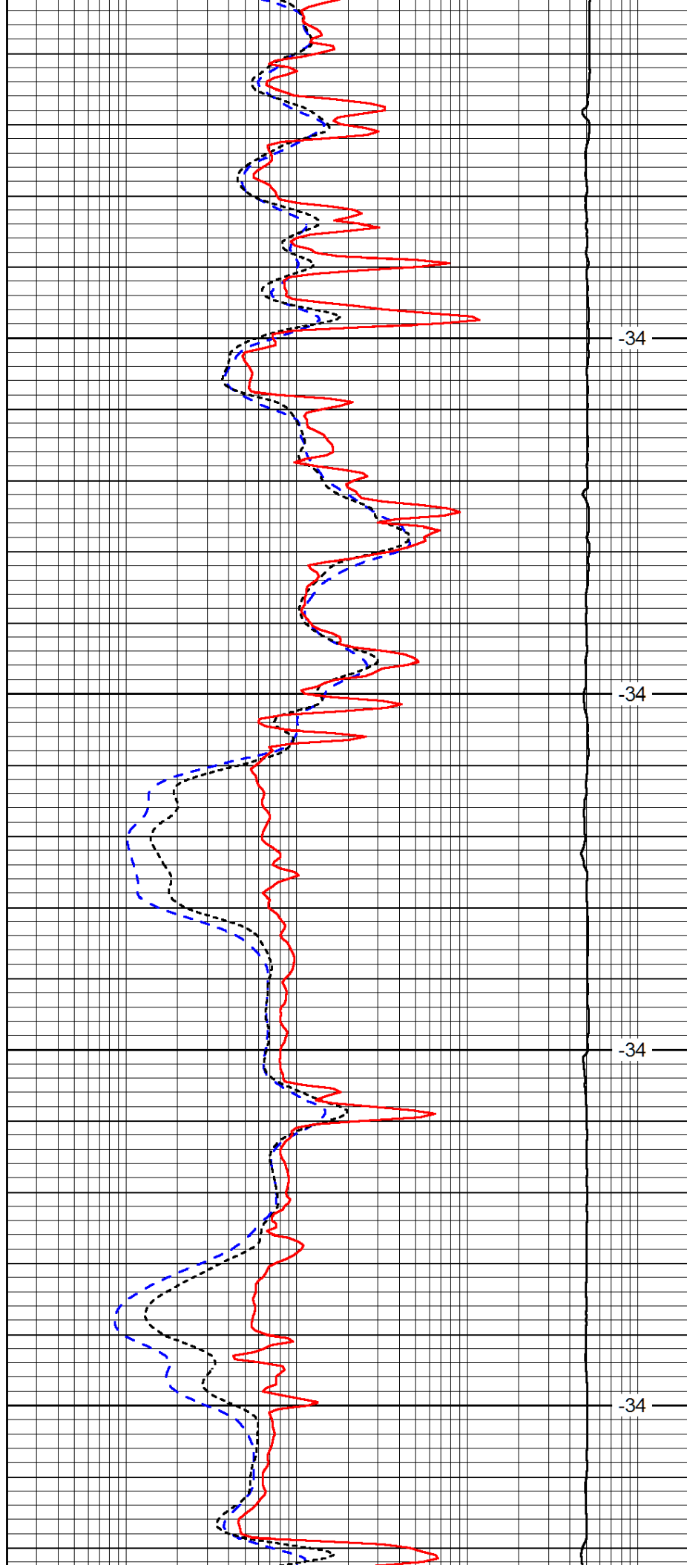


3500

3550

3600

3650

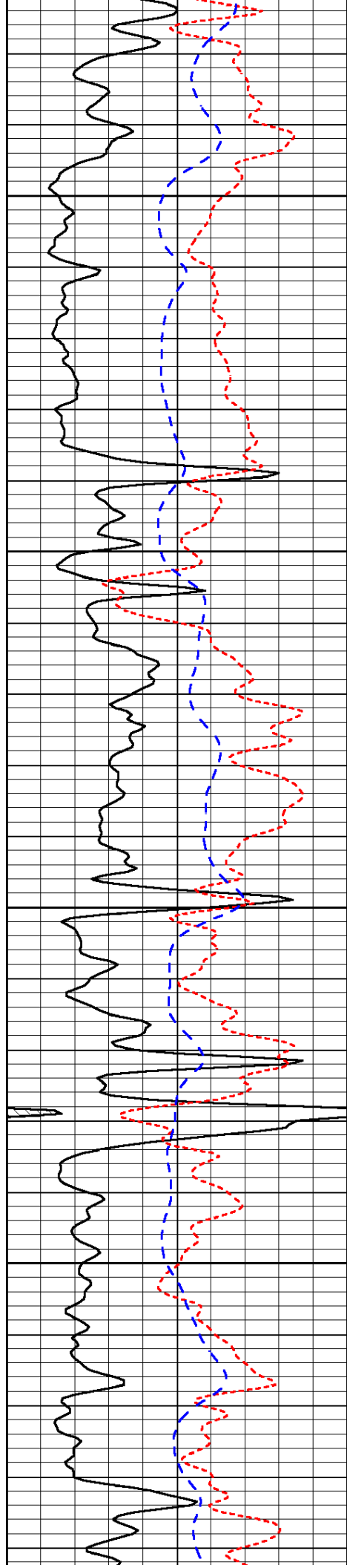


-34

-34

-34

-34

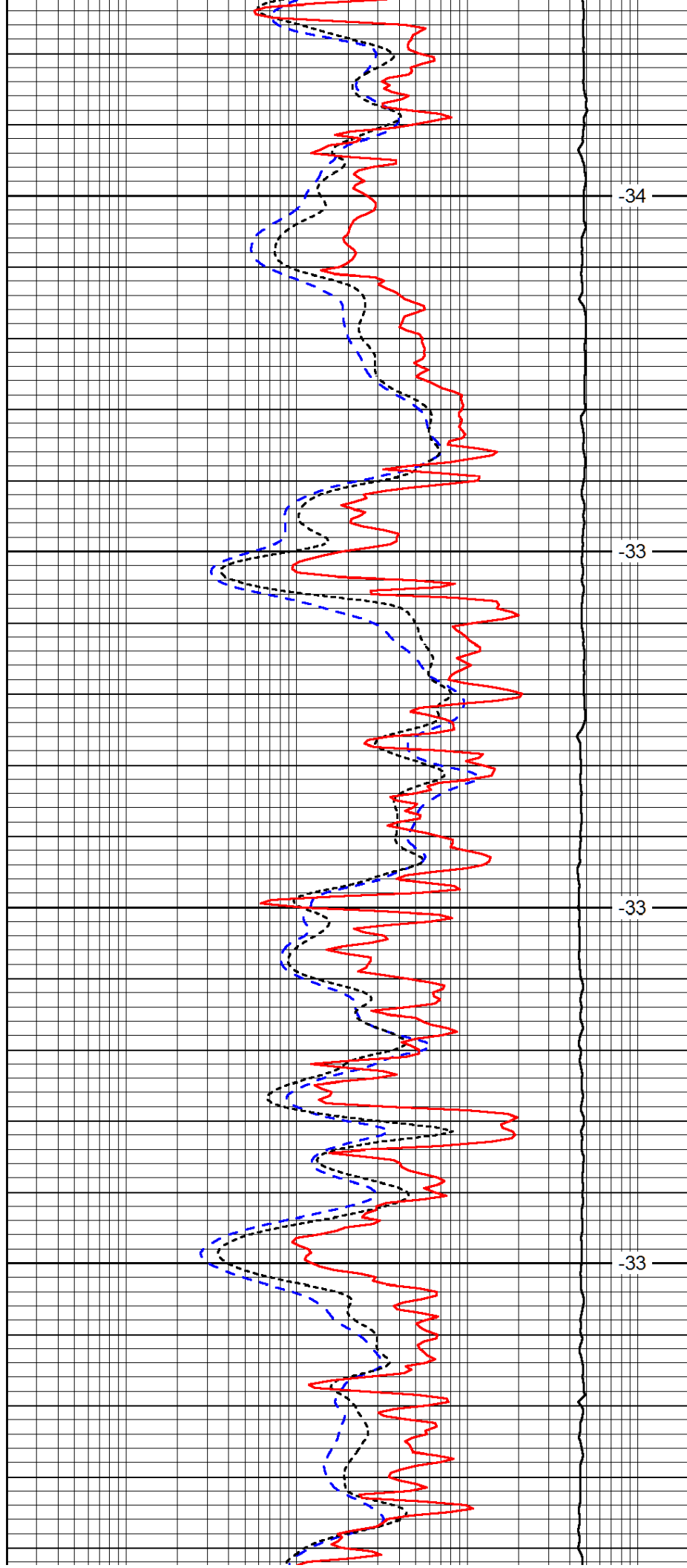


3700

3750

3800

3850

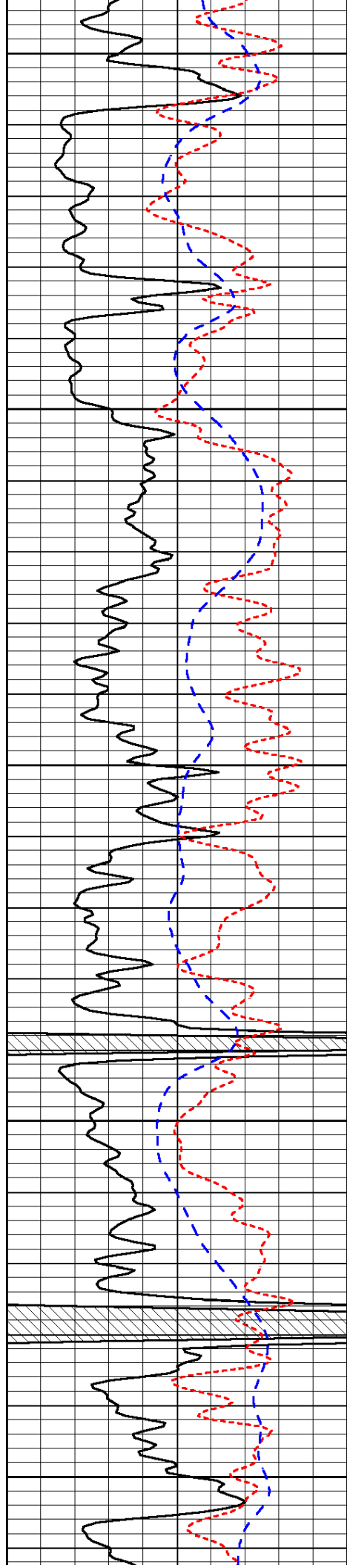


-34

-33

-33

-33



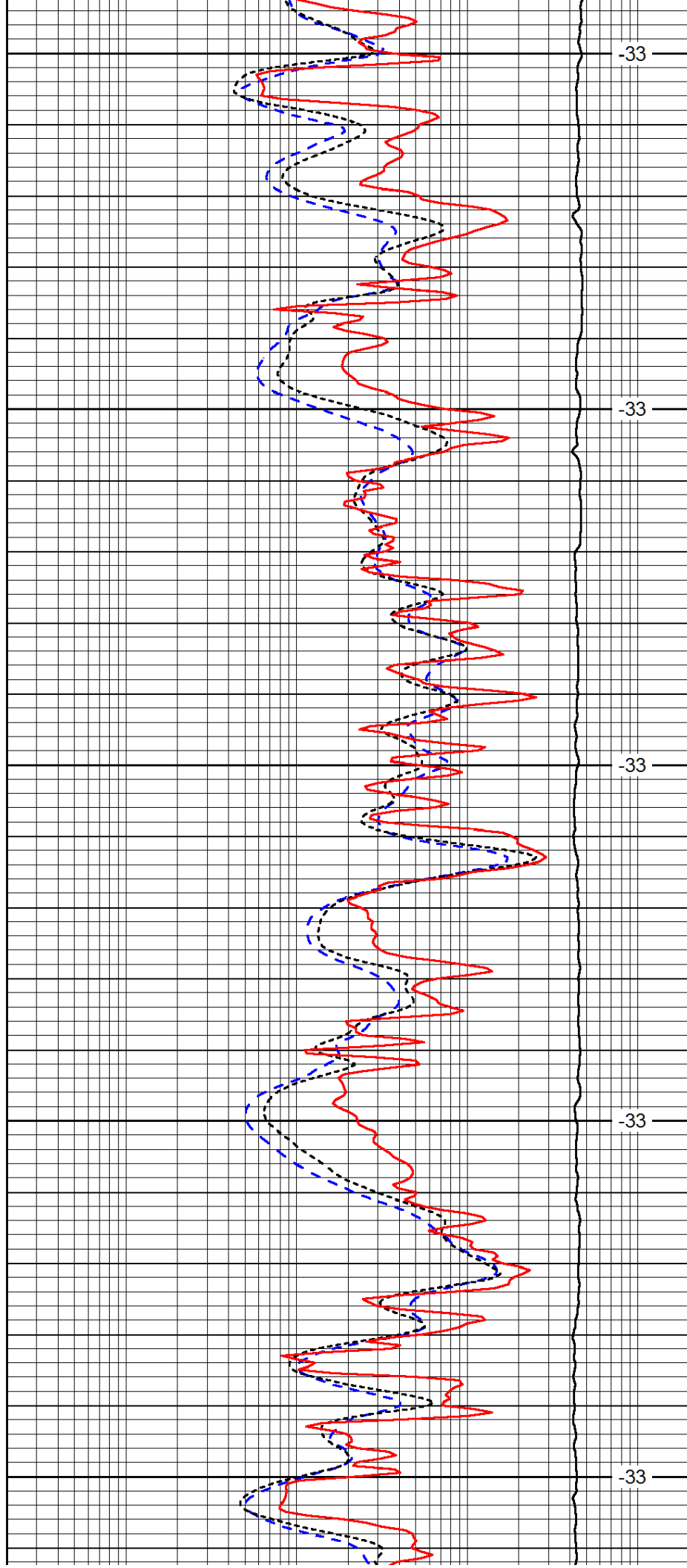
3900

3950

4000

4050

4100



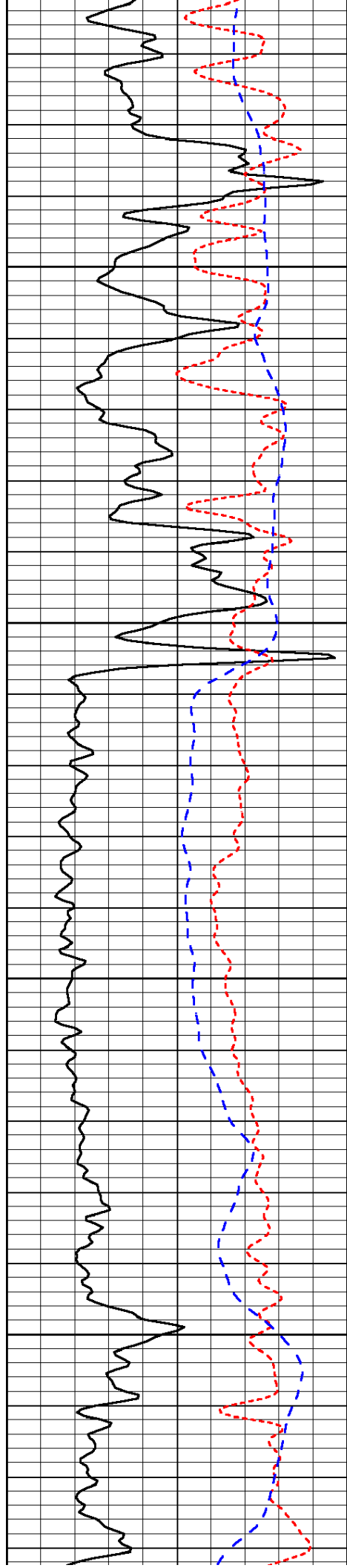
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-33

-33

-33

-33

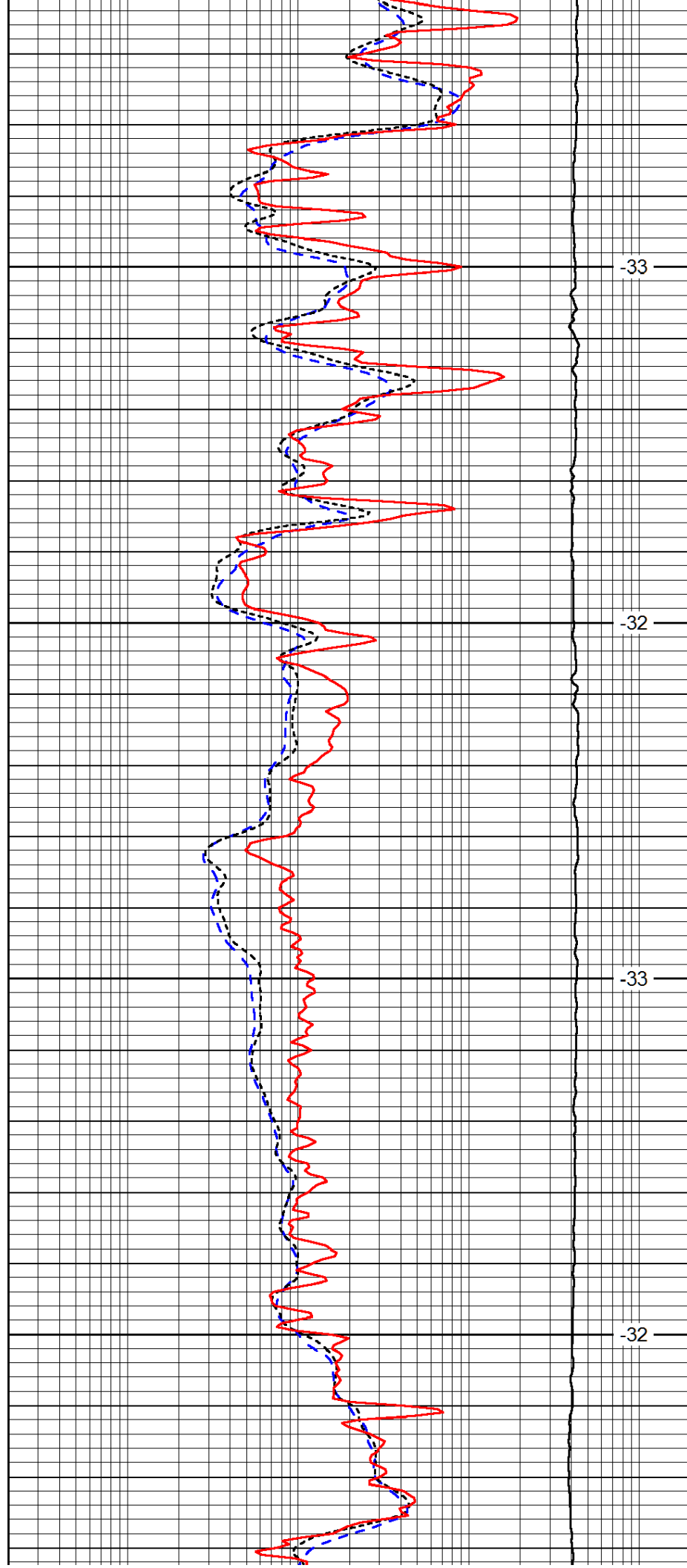


4150

4200

4250

4300

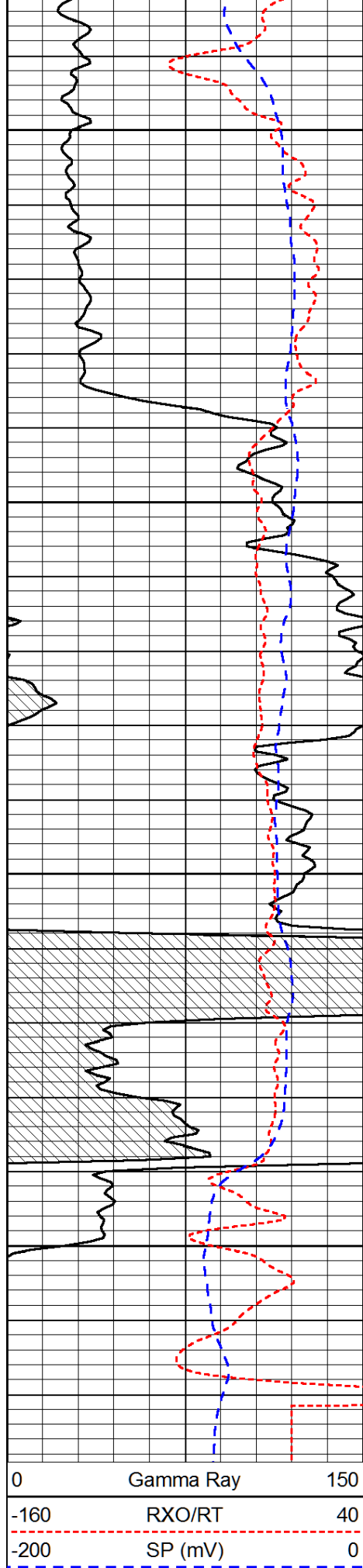


-33

-32

-33

-32



4350

4400

4450

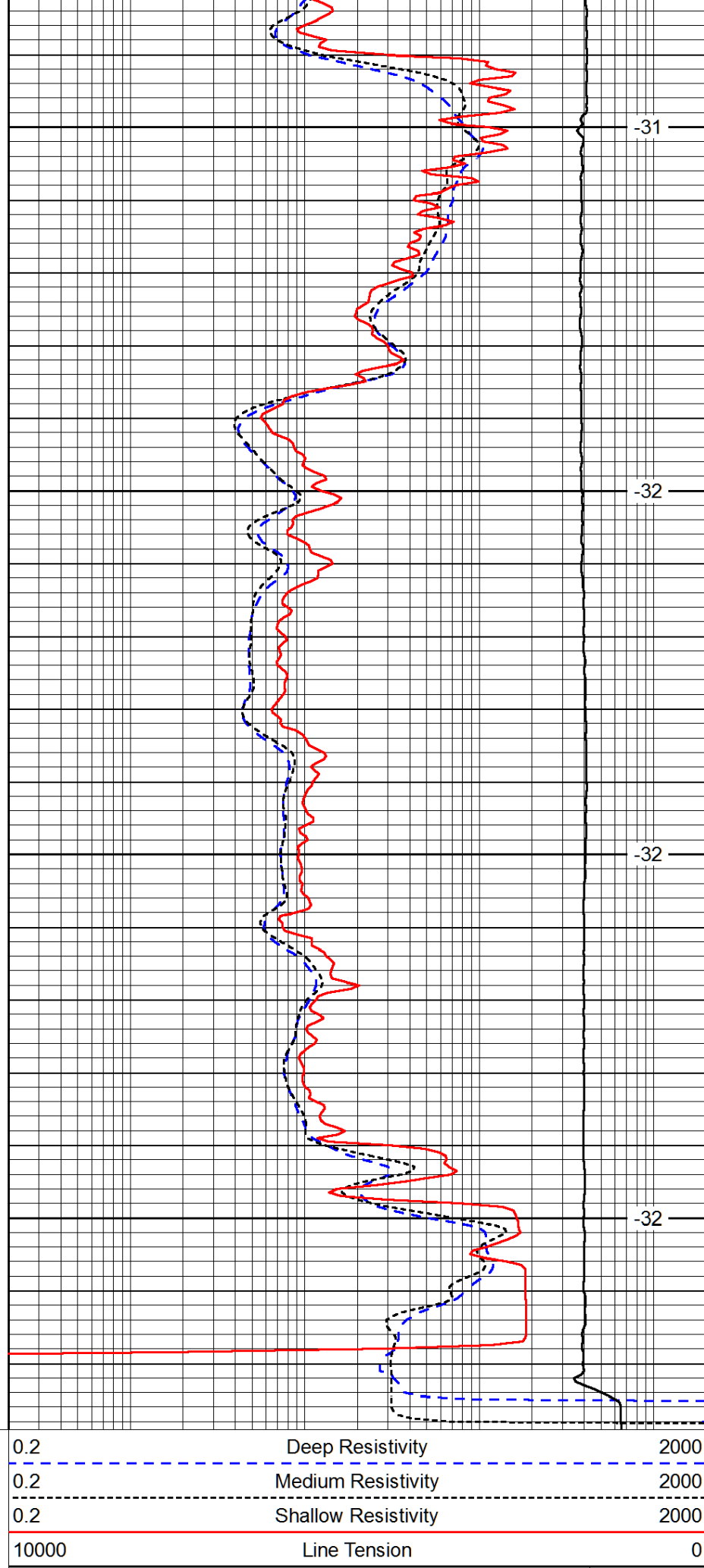
4500

-31

-32

-32

-32



LSPD

Category	Item	Value	Unit
A	1	10	kg
	2	20	kg
	3	30	kg
	4	40	kg
B	1	50	kg
	2	60	kg
	3	70	kg
	4	80	kg
C	1	90	kg
	2	100	kg
	3	110	kg
	4	120	kg
D	1	130	kg
	2	140	kg
	3	150	kg
	4	160	kg
E	1	170	kg
	2	180	kg
	3	190	kg
	4	200	kg
F	1	210	kg
	2	220	kg
	3	230	kg
	4	240	kg
G	1	250	kg
	2	260	kg
	3	270	kg
	4	280	kg
H	1	290	kg
	2	300	kg
	3	310	kg
	4	320	kg
I	1	330	kg
	2	340	kg
	3	350	kg
	4	360	kg
J	1	370	kg
	2	380	kg
	3	390	kg
	4	400	kg
K	1	410	kg
	2	420	kg
	3	430	kg
	4	440	kg
L	1	450	kg
	2	460	kg
	3	470	kg
	4	480	kg
M	1	490	kg
	2	500	kg
	3	510	kg
	4	520	kg
N	1	530	kg
	2	540	kg
	3	550	kg
	4	560	kg
O	1	570	kg
	2	580	kg
	3	590	kg
	4	600	kg
P	1	610	kg
	2	620	kg
	3	630	kg
	4	640	kg
Q	1	650	kg
	2	660	kg
	3	670	kg
	4	680	kg
R	1	690	kg
	2	700	kg
	3	710	kg
	4	720	kg
S	1	730	kg
	2	740	kg
	3	750	kg
	4	760	kg
T	1	770	kg
	2	780	kg
	3	790	kg
	4	800	kg
U	1	810	kg
	2	820	kg
	3	830	kg
	4	840	kg
V	1	850	kg
	2	860	kg
	3	870	kg
	4	880	kg
W	1	890	kg
	2	900	kg
	3	910	kg
	4	920	kg
X	1	930	kg
	2	940	kg
	3	950	kg
	4	960	kg
Y	1	970	kg
	2	980	kg
	3	990	kg
	4	1000	kg
Z	1	1010	kg
	2	1020	kg
	3	1030	kg
	4	1040	kg