



Pioneer Energy Services

Dual Induction Log

API No.

15-009-26,071-00-00

Company **Kahan and Associates, Inc.**

Well **R Oeser #1**

Field **Kraft-Prusa**

County **Barton**

State

Kansas

Location **660' FSL & 990' FEL**

Sec: **29**

Twp: **16S**

Rge: **11W**

Elevation

Permanent Datum **Ground Level** Elevation **1909**
Log Measured From **Kelly Bushing** **7** Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

K.B. 1916
D.F. 1909
G.L. 1909

Other Services
CNL/CDL
MEL

Date

1/14/2015

Run Number

One

Depth Driller

3365

Depth Logger

3353

Bottom Logged Interval

3352

Top Log Interval

400

Casing Driller

8.625 @ 407

Casing Logger

405

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

8700

Density / Viscosity

9.0

52

pH / Fluid Loss

10.5

9.6

Source of Sample

Flowline

Rm @ Meas. Temp

0.45 @ 51

Rmf @ Meas. Temp

0.34 @ 51

Rmc @ Meas. Temp

0.61 @ 51

Source of Rmf / Rmc

Charts

Rm @ BHT

0.21 @ 110

Operating Rig Time

4 Hours

Max Rec. Temp. F

110

Equipment Number

15

Location

Hays

Recorded By

D.Kerr

Witnessed By

David Wilson

<<< 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

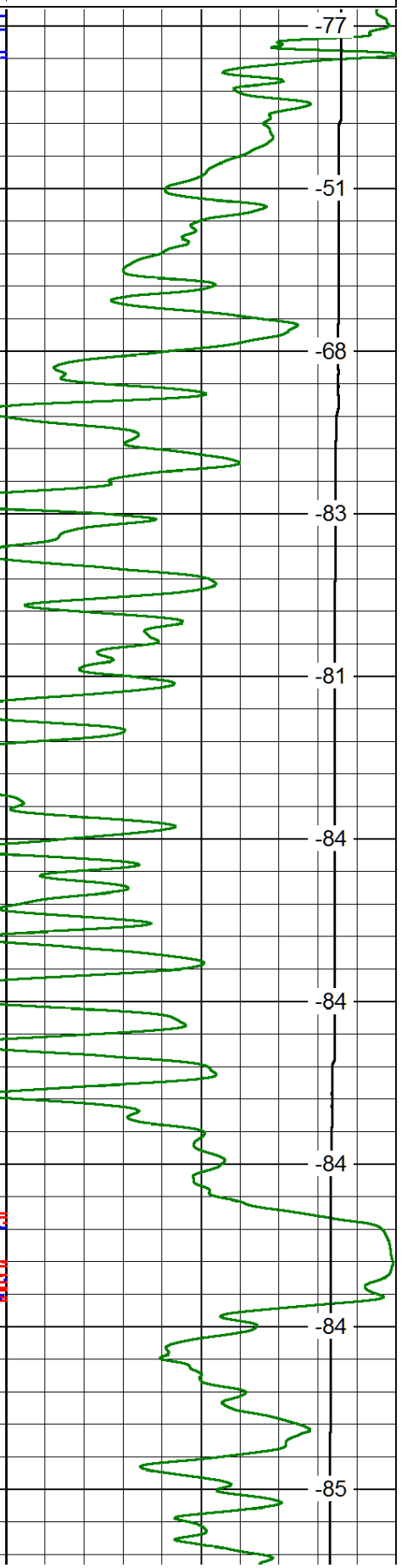
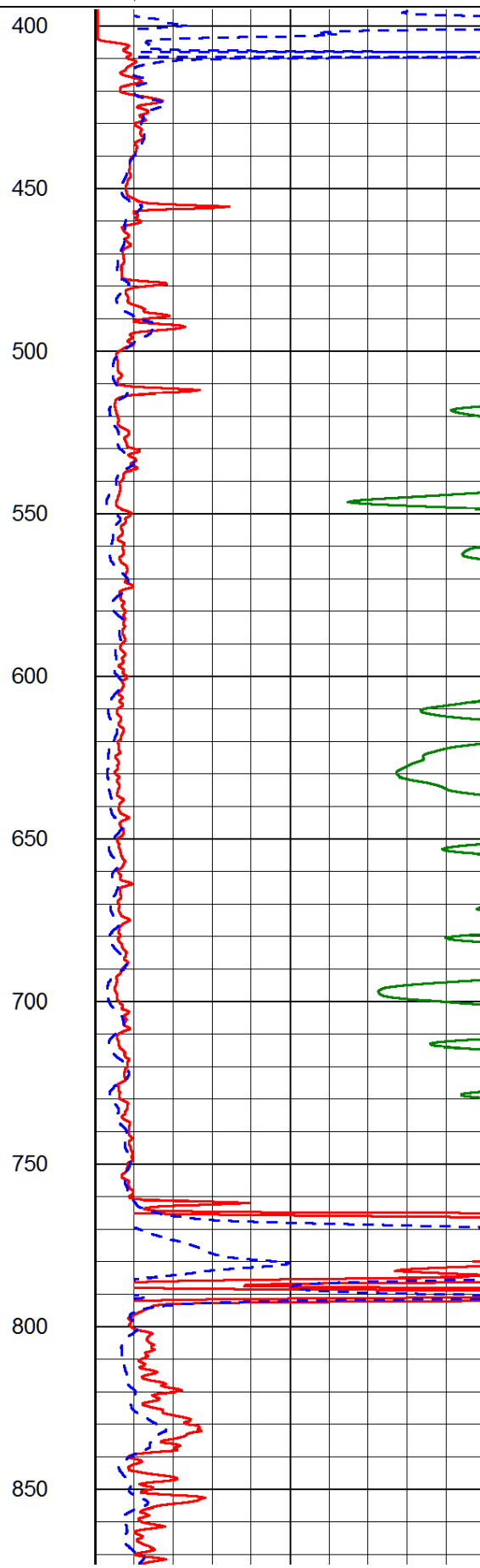
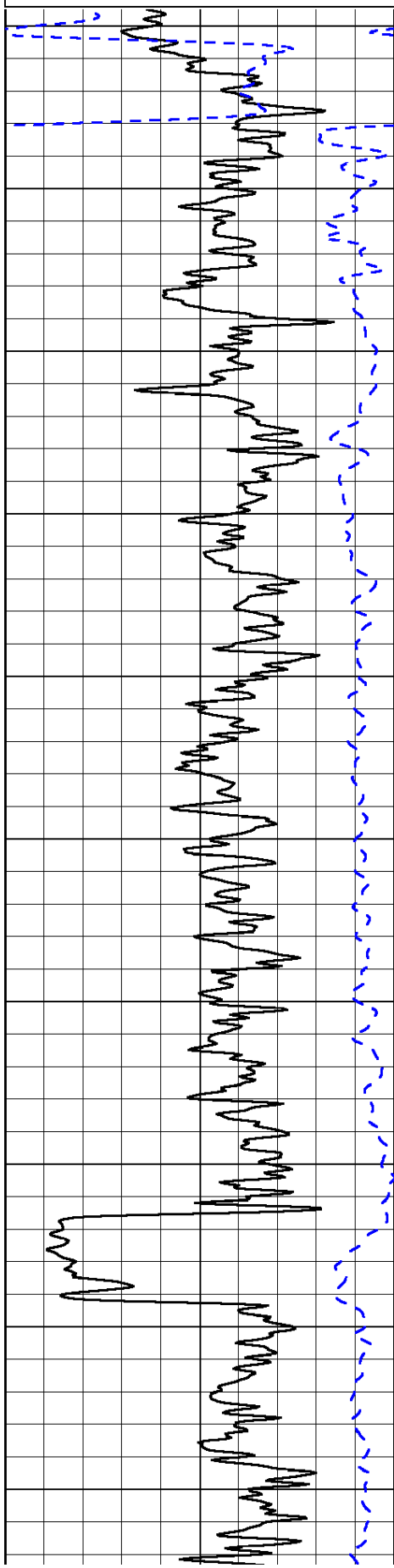
Claffin KS, 7 North, 1 1/4 West, North Into

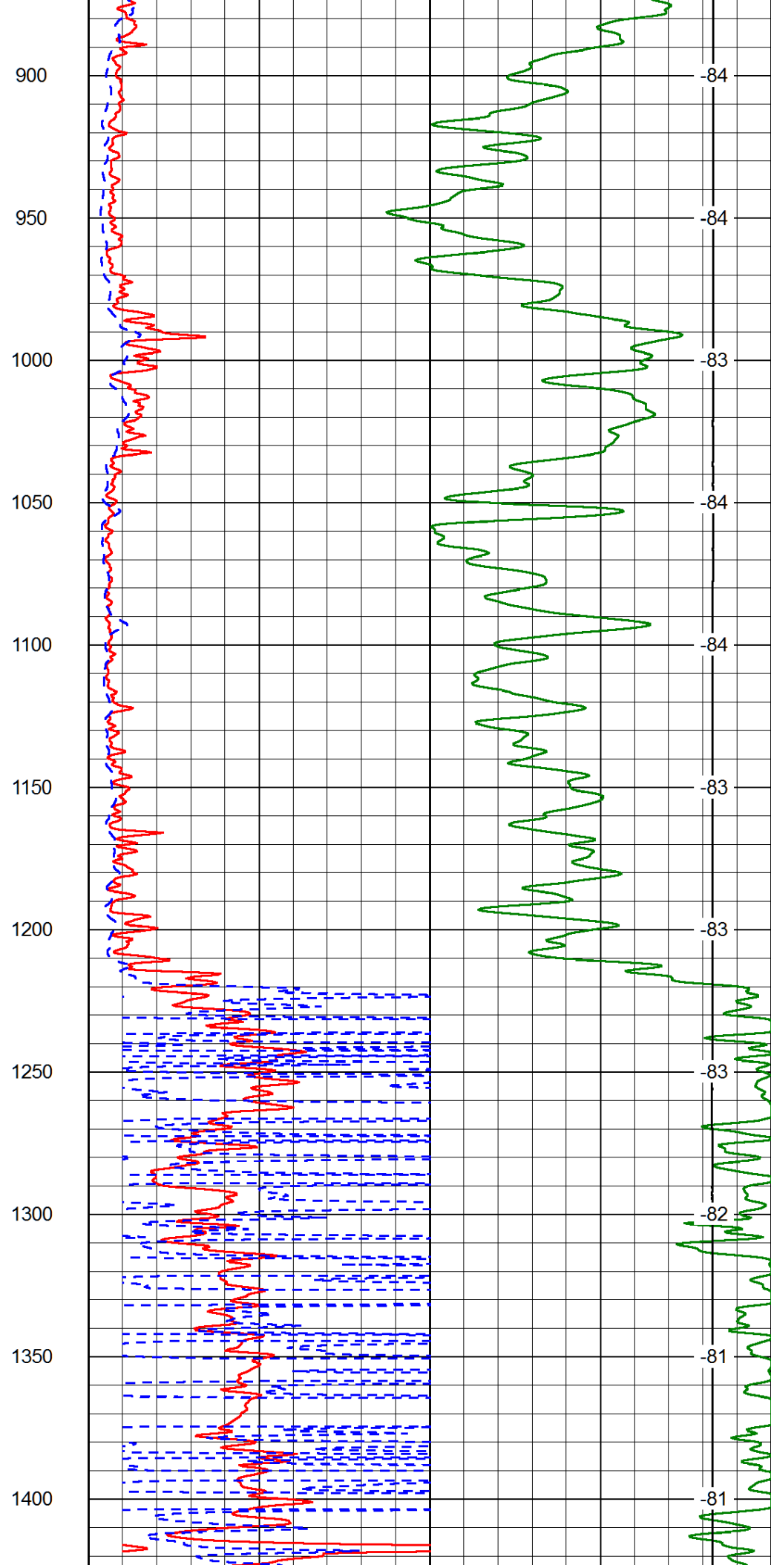
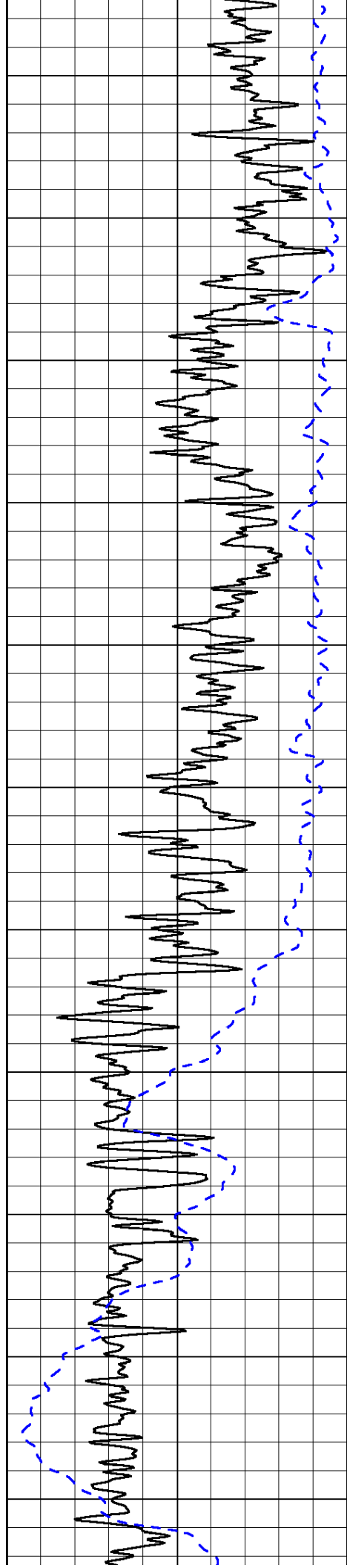
Database File: kahan_r_oeser_1hd.db
Dataset Pathname: DIL/kahstk
Presentation Format: dil2in
Dataset Creation: Wed Jan 14 03:39:10 2015
Charted by: Depth in Feet scaled 1:600

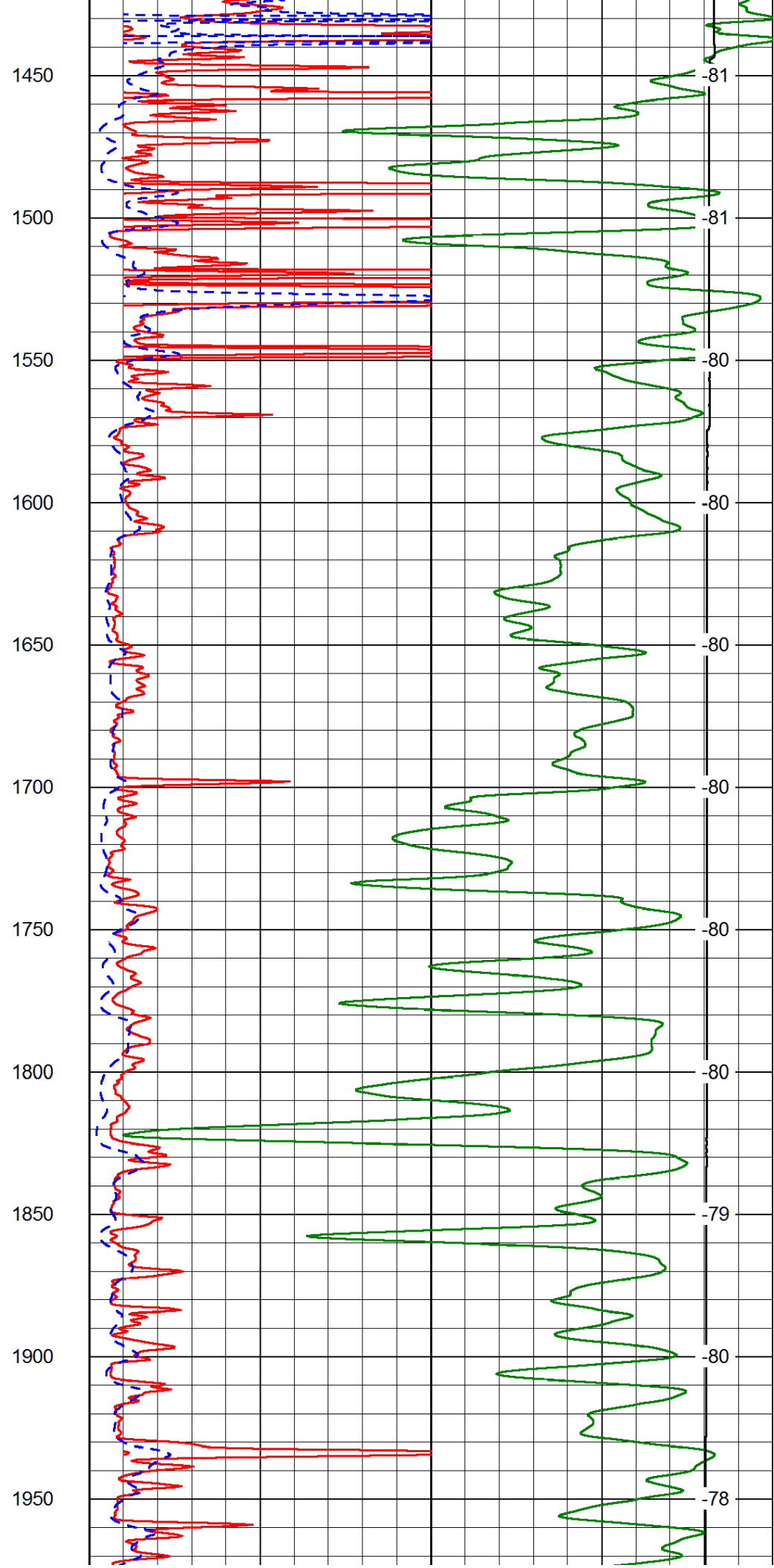
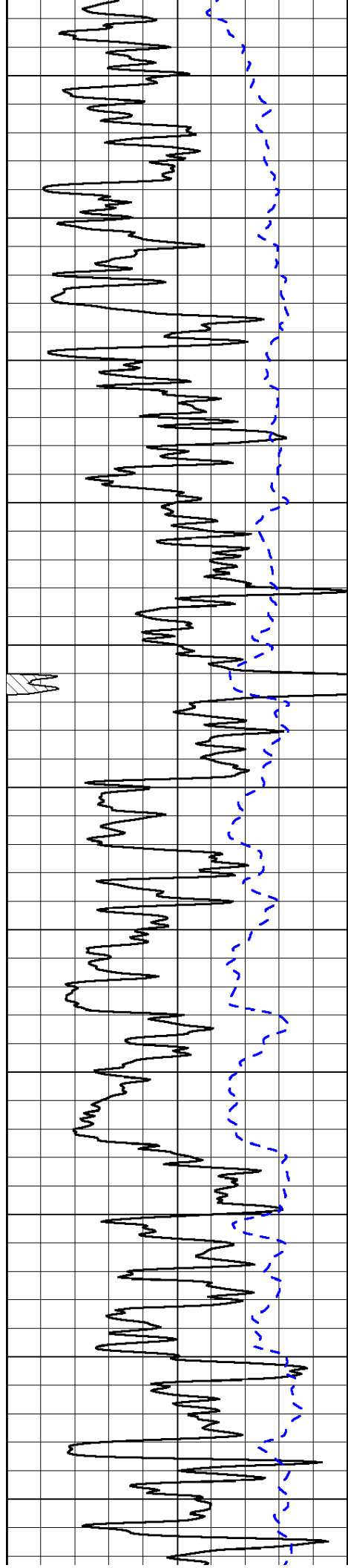
0	Gamma Ray	150
-200	SP (mV)	0

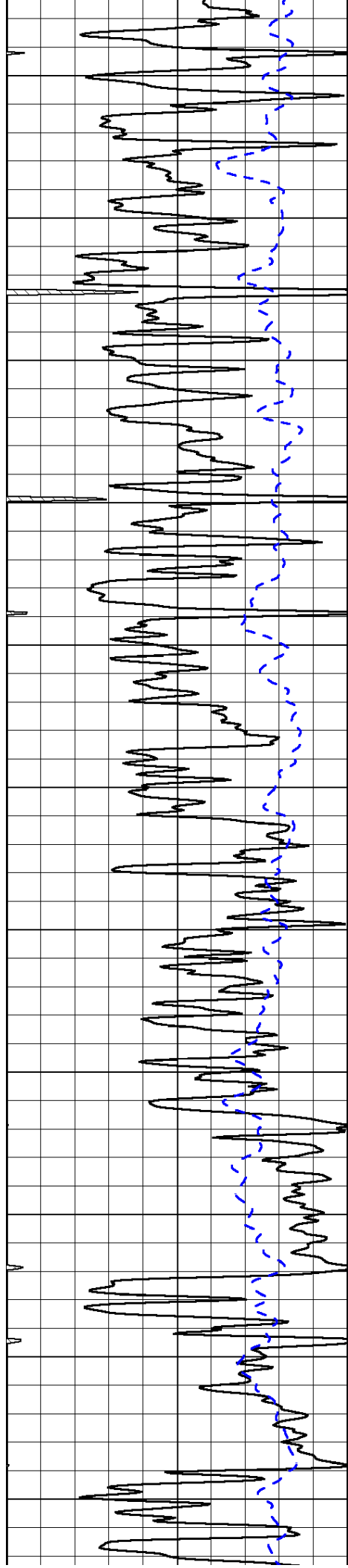
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

LSPD

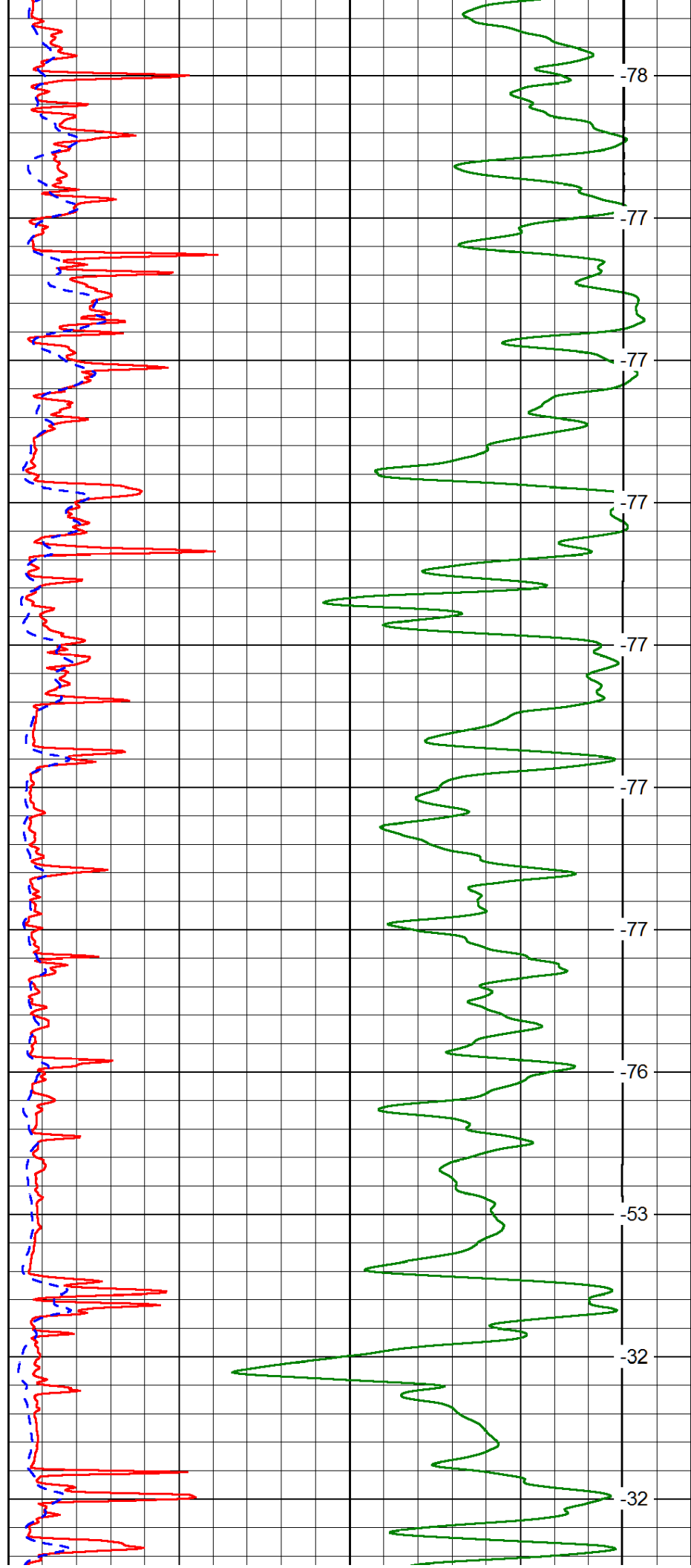


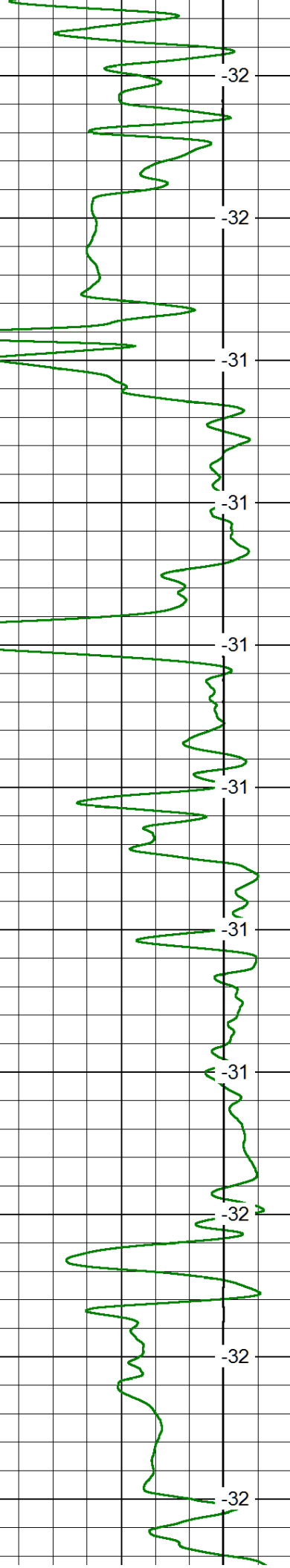
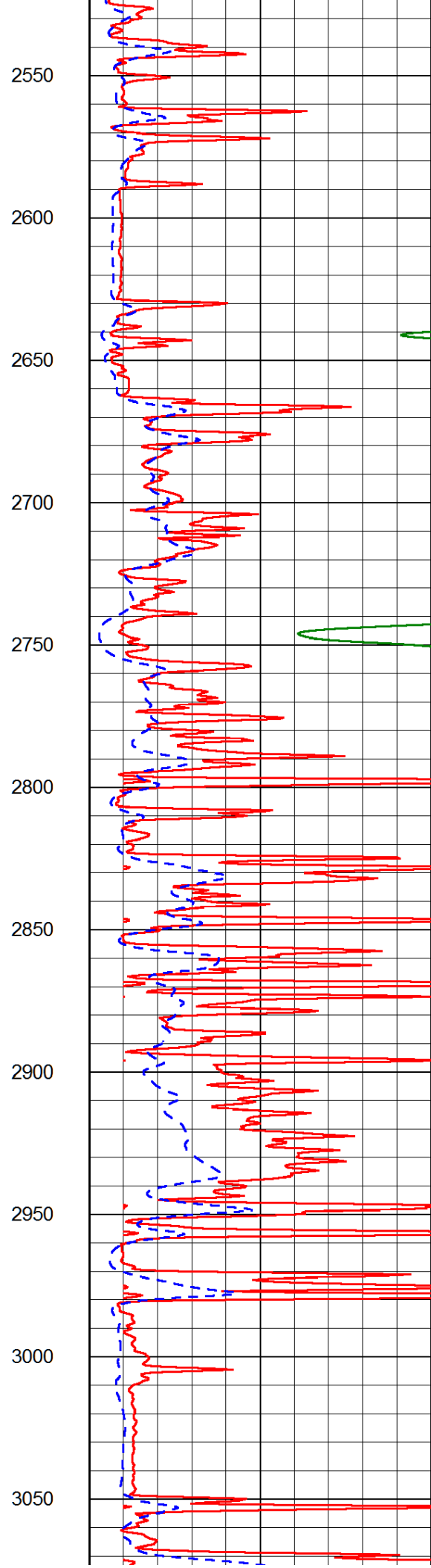
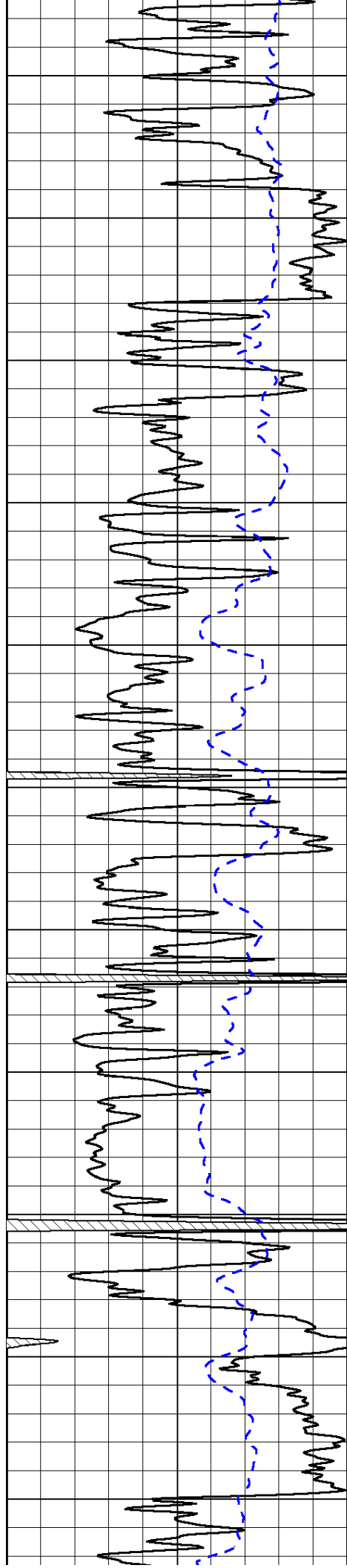


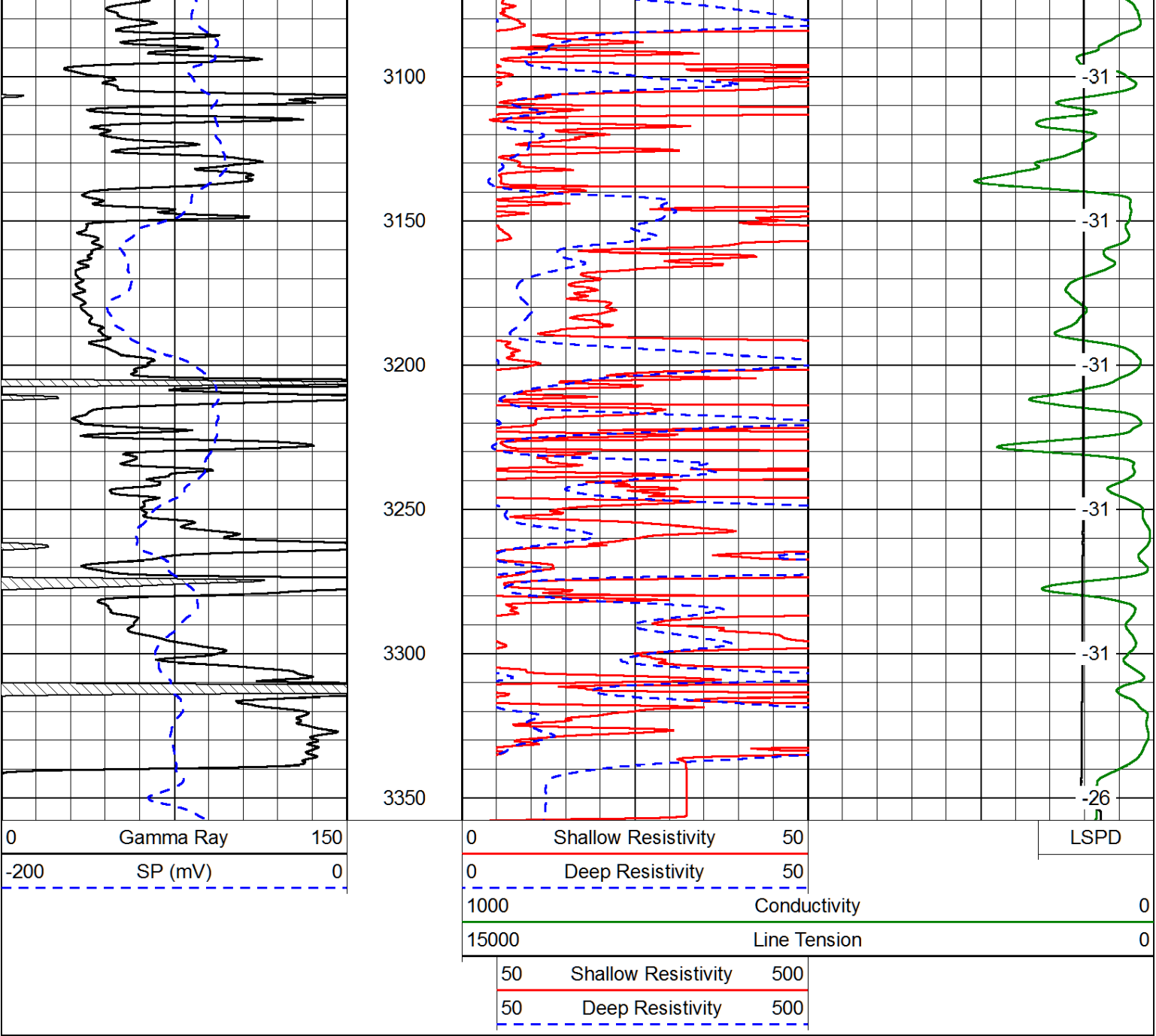




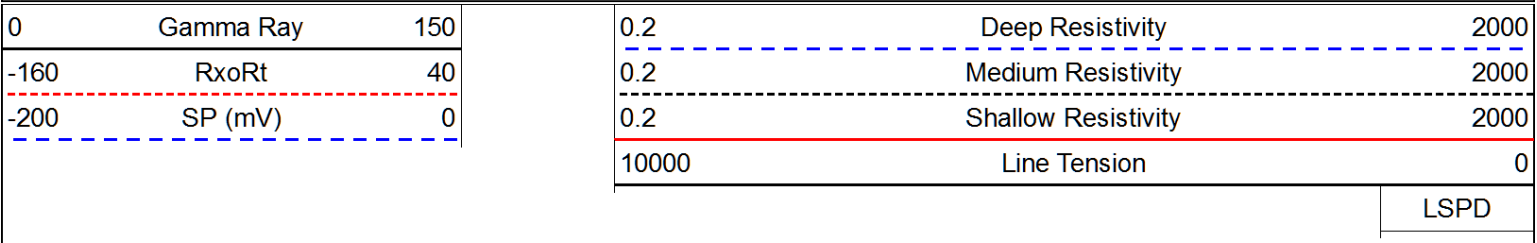
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500

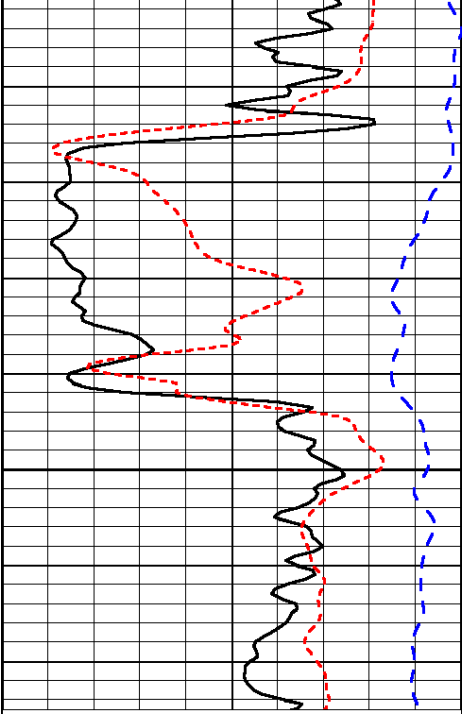




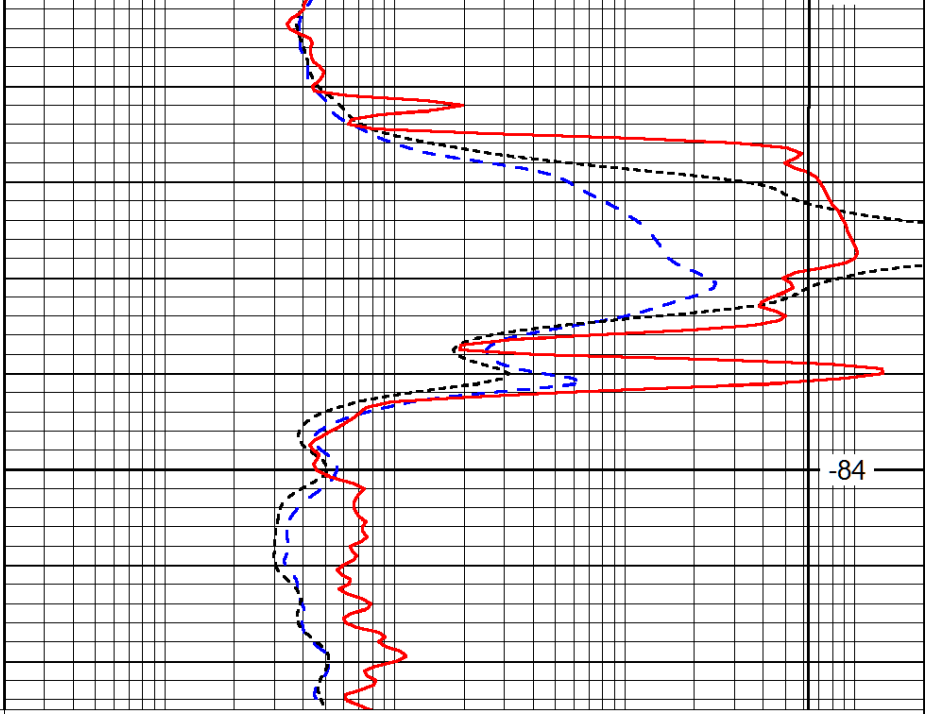


Database File: kahan_r_oesser_1hd.db
Dataset Pathname: DIL/kahstk
Presentation Format: dil
Dataset Creation: Wed Jan 14 03:39:10 2015
Charted by: Depth in Feet scaled 1:240





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



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

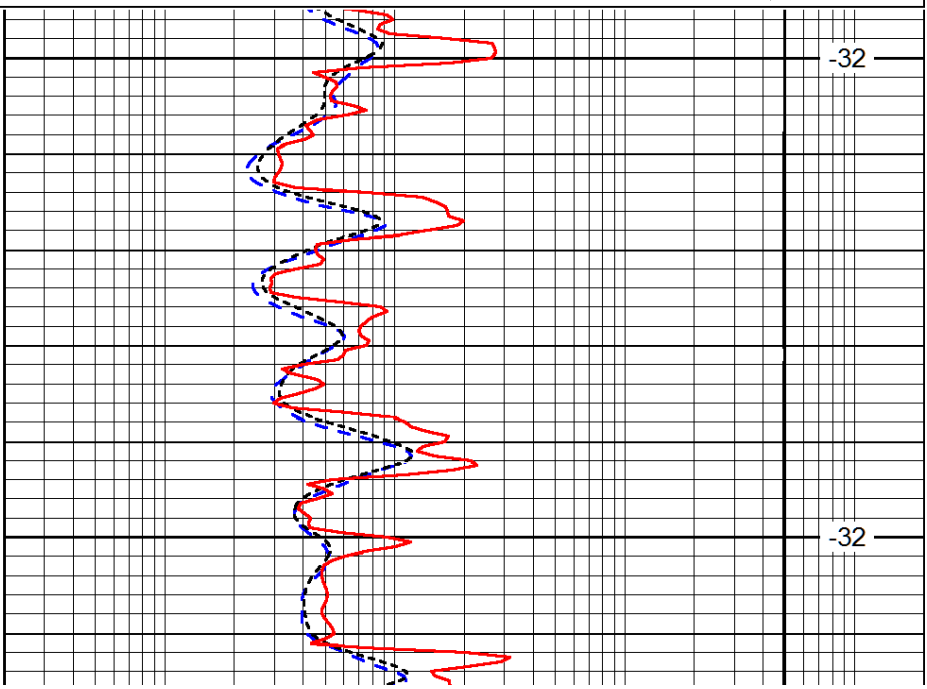
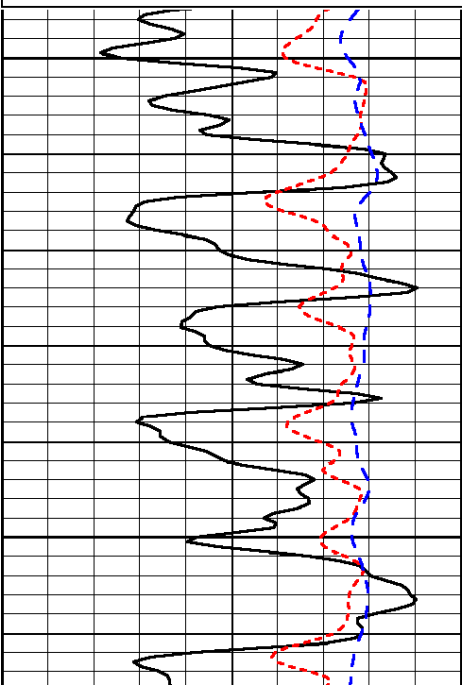
LSPD

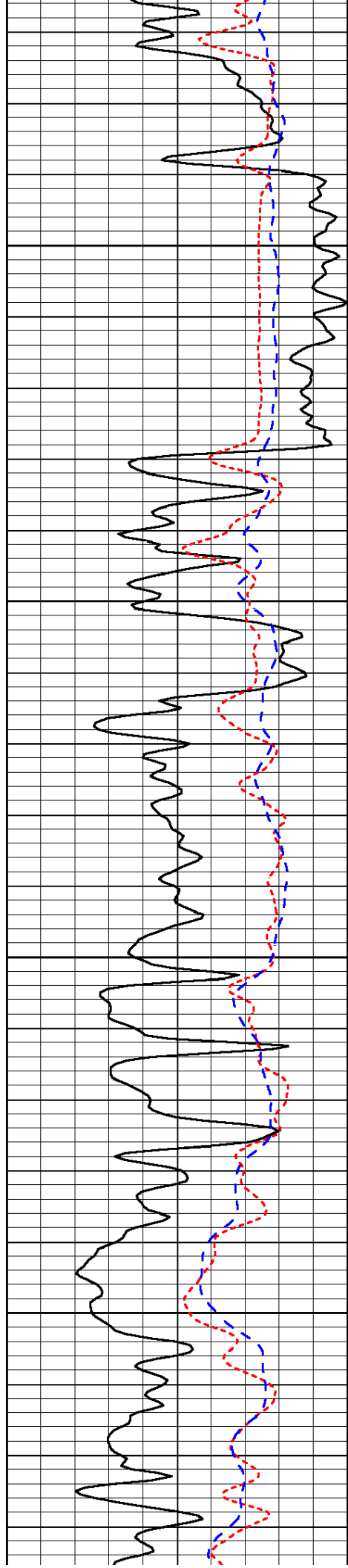
Database File: kahan_r_oesser_1hd.db
Dataset Pathname: DIL/kahstk
Presentation Format: dil
Dataset Creation: Wed Jan 14 03:39:10 2015
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-160	RxoRt	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



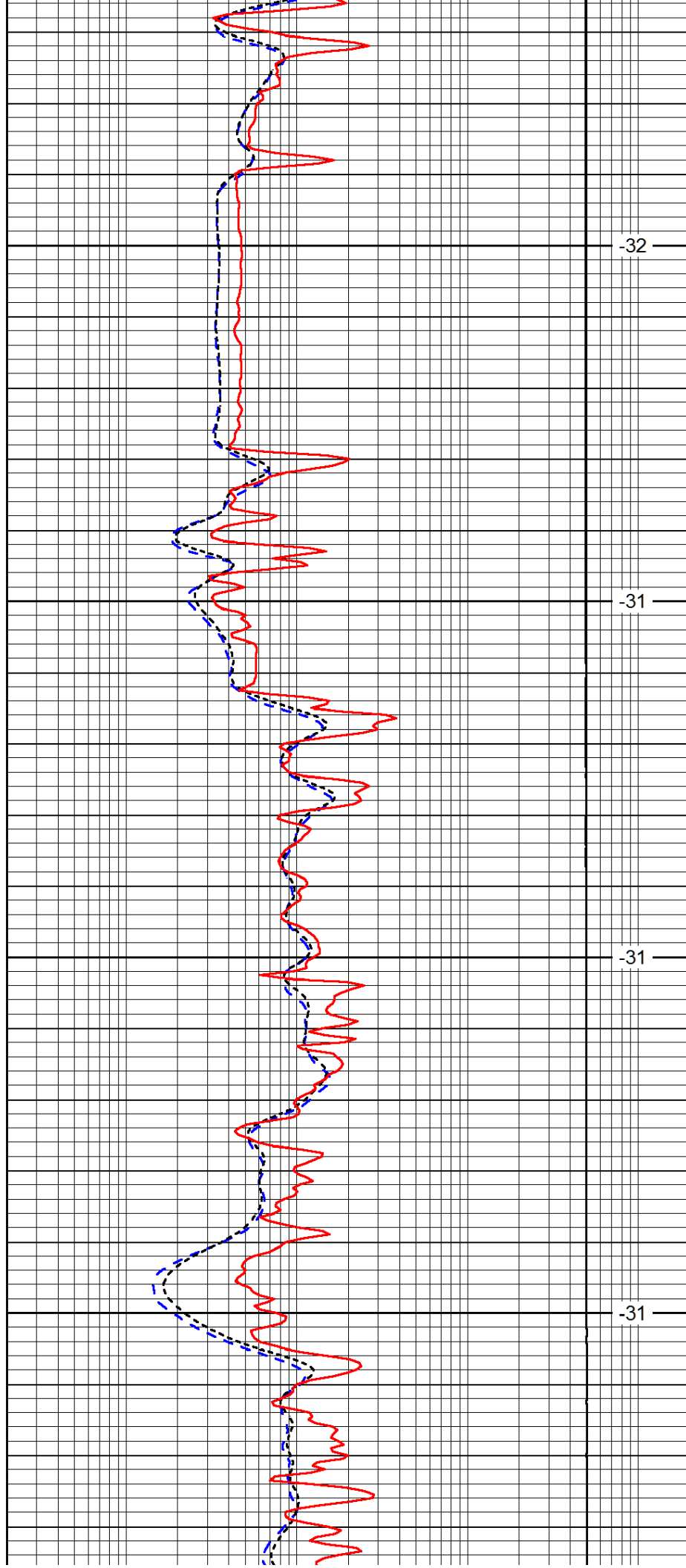


2600

2650

2700

2750

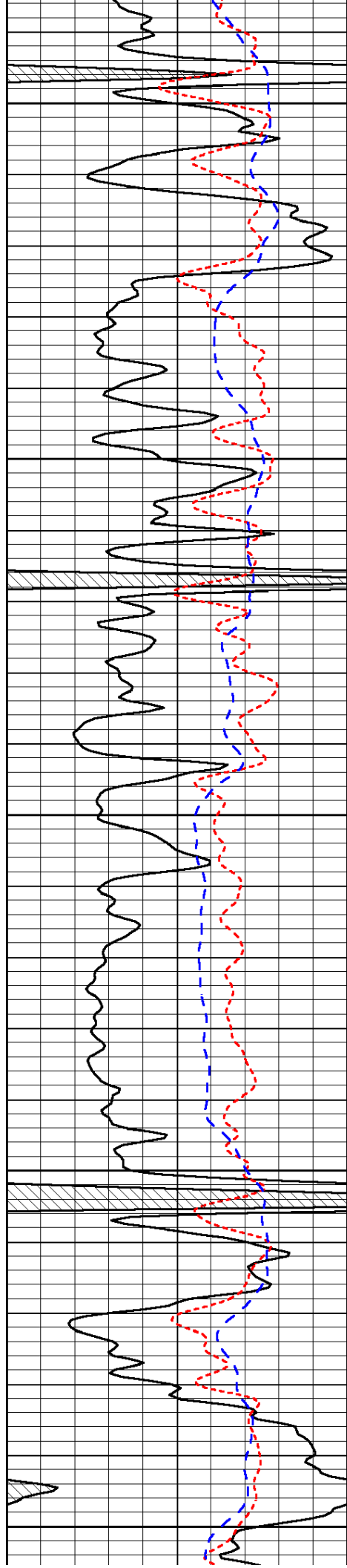


-32

-31

-31

-31



2800

2850

2900

2950

3000

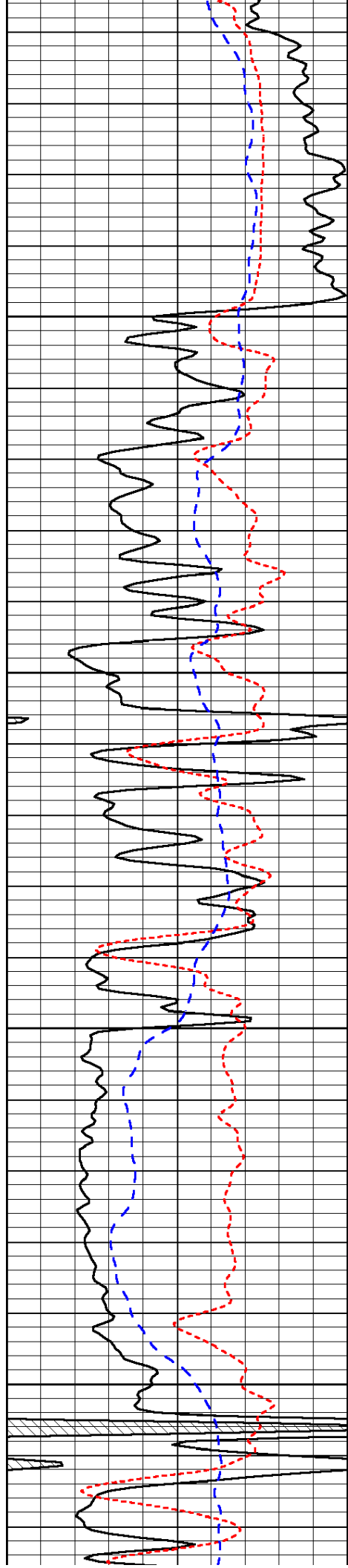
-31

-31

-31

-32

-32

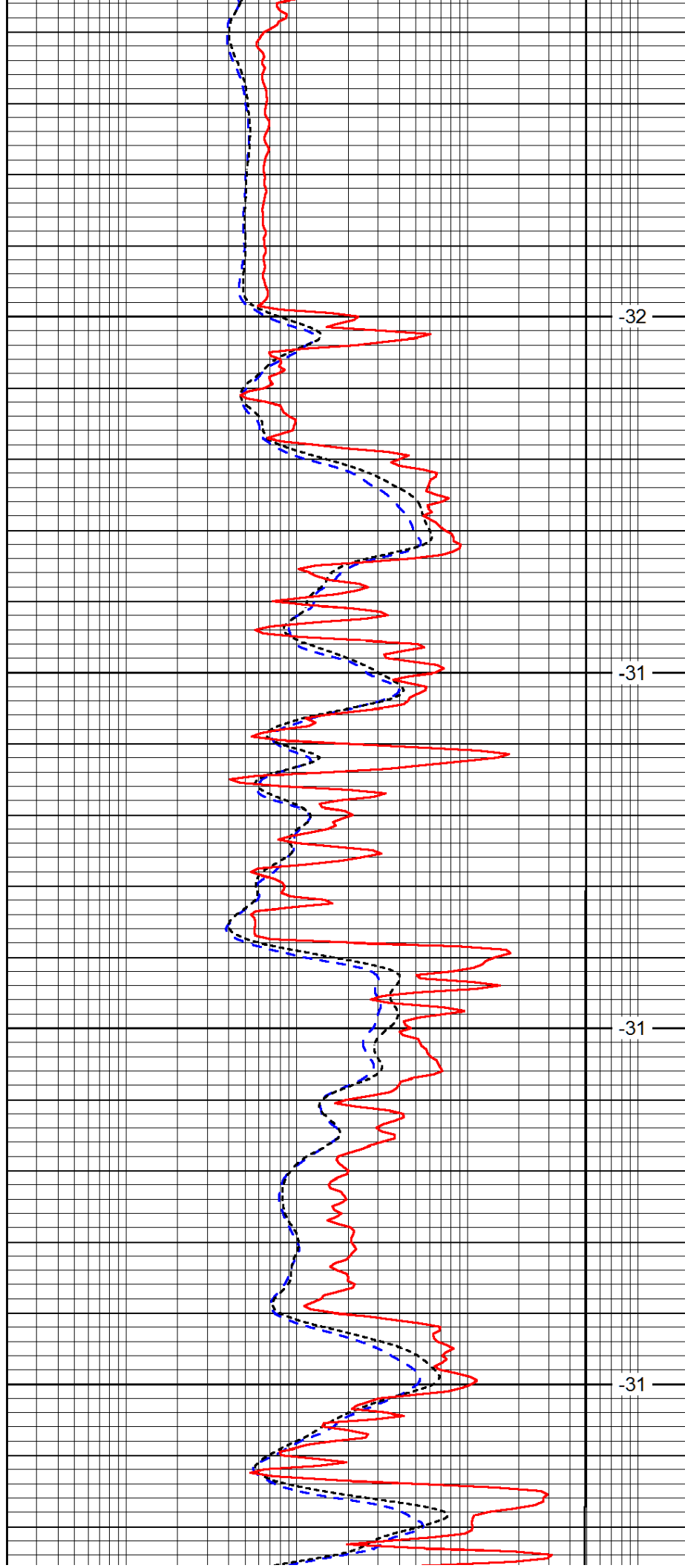


3050

3100

3150

3200

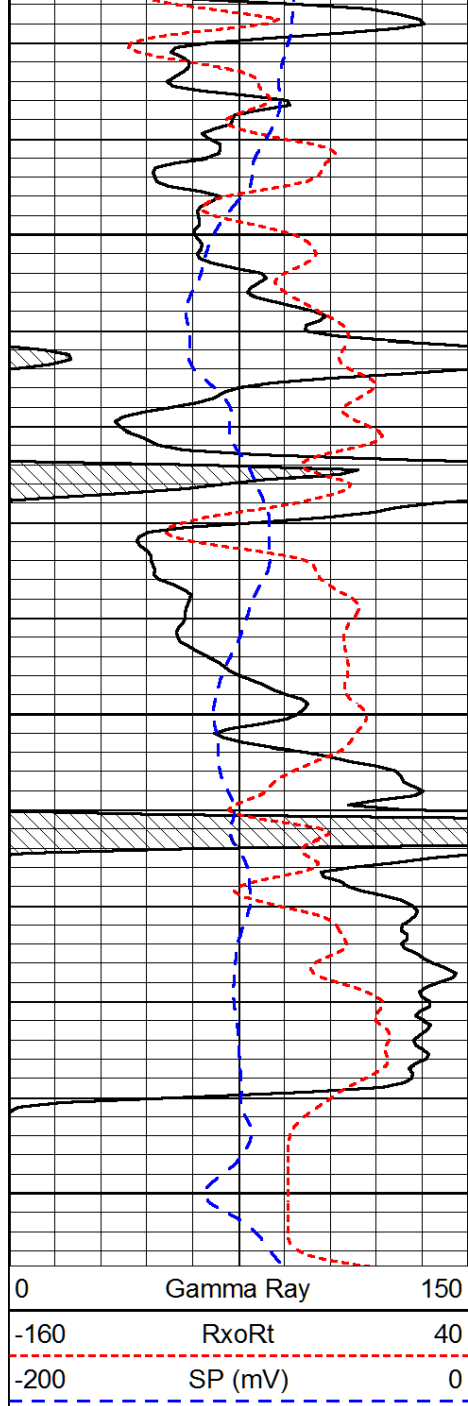


-32

-31

-31

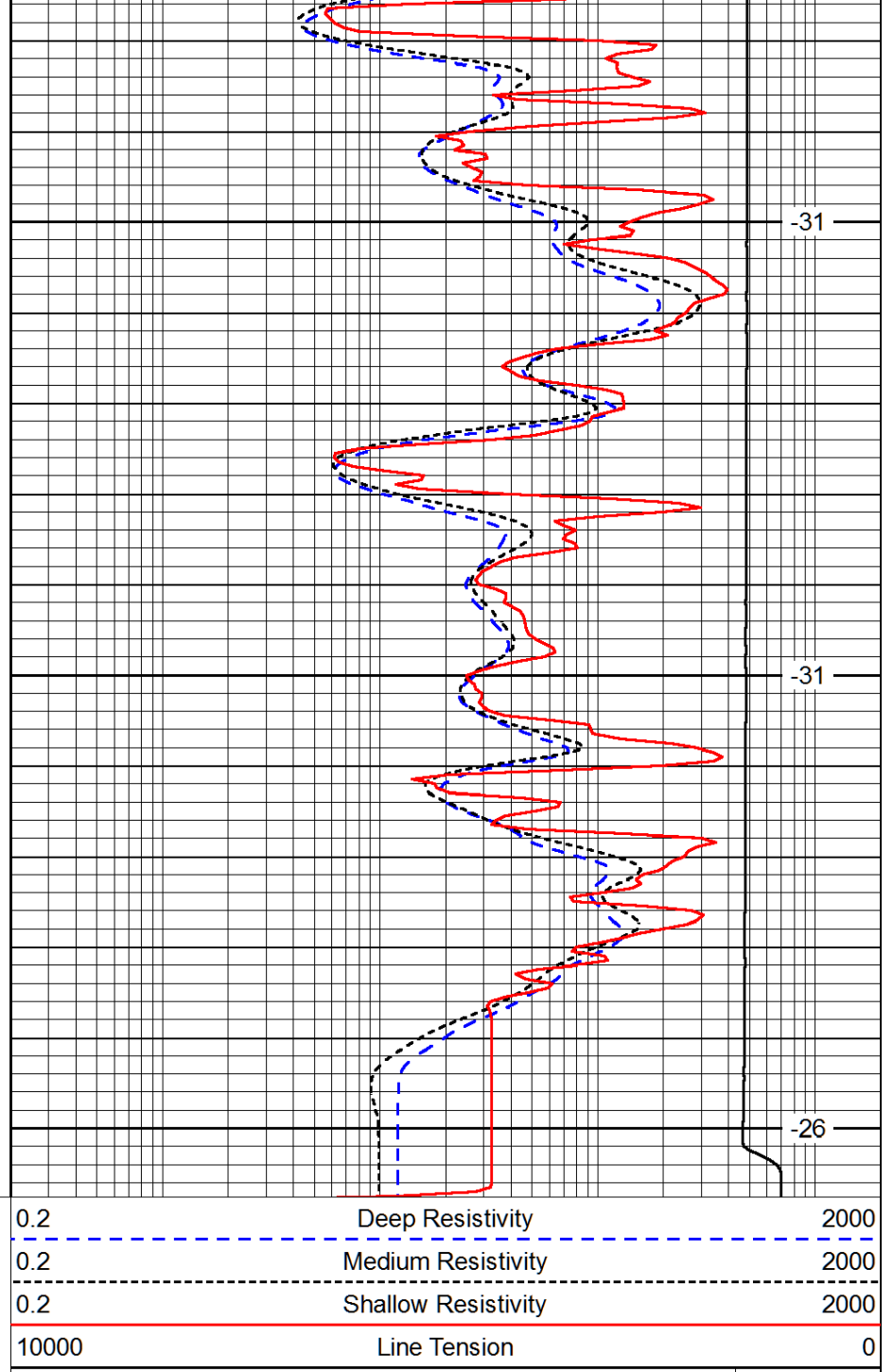
-31



3250

3300

3350



-31

-31

-26

LSPD