



Pioneer Energy Services

Dual Induction Log

API No.

15-167-23871-00-00

Company **RJM Company**

Well **Feist #1**

Field **Ney**

County **Russell**

State

Kansas

Location

**SW SW SE
330' FSL / 2310' FEL**

Other Services
CNL/CDL
MEI/BHCS

Sec: 31

Twp: 15S

Rge: 12W

Elevation

Permanent Datum Ground Level Elevation 1880
Log Measured From Kelly Bushing 7 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 1887
D.F. 1880
G.L. 1880

Date

4/14/2013

Run Number

One

Depth Driller

3425

Depth Logger

3425

Bottom Logged Interval

3424

Top Log Interval

400

Casing Driller

8.625 @ 432

Casing Logger

430

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

8000

Density / Viscosity

9.3 50

pH / Fluid Loss

9.5 8.8

Source of Sample

Flowline

Rm @ Meas. Temp

0.32 @ 62

Rmf @ Meas. Temp

0.24 @ 62

Rmc @ Meas. Temp

0.43 @ 62

Source of Rmf / Rmc

Charts

Rm @ BHT

0.18 @ 110

Operating Rig Time

4 Hours

Max Rec. Temp. F

110

Equipment Number

15

Location

Hays

Recorded By

R. Barnhart

Witnessed By

Kurt Talbott

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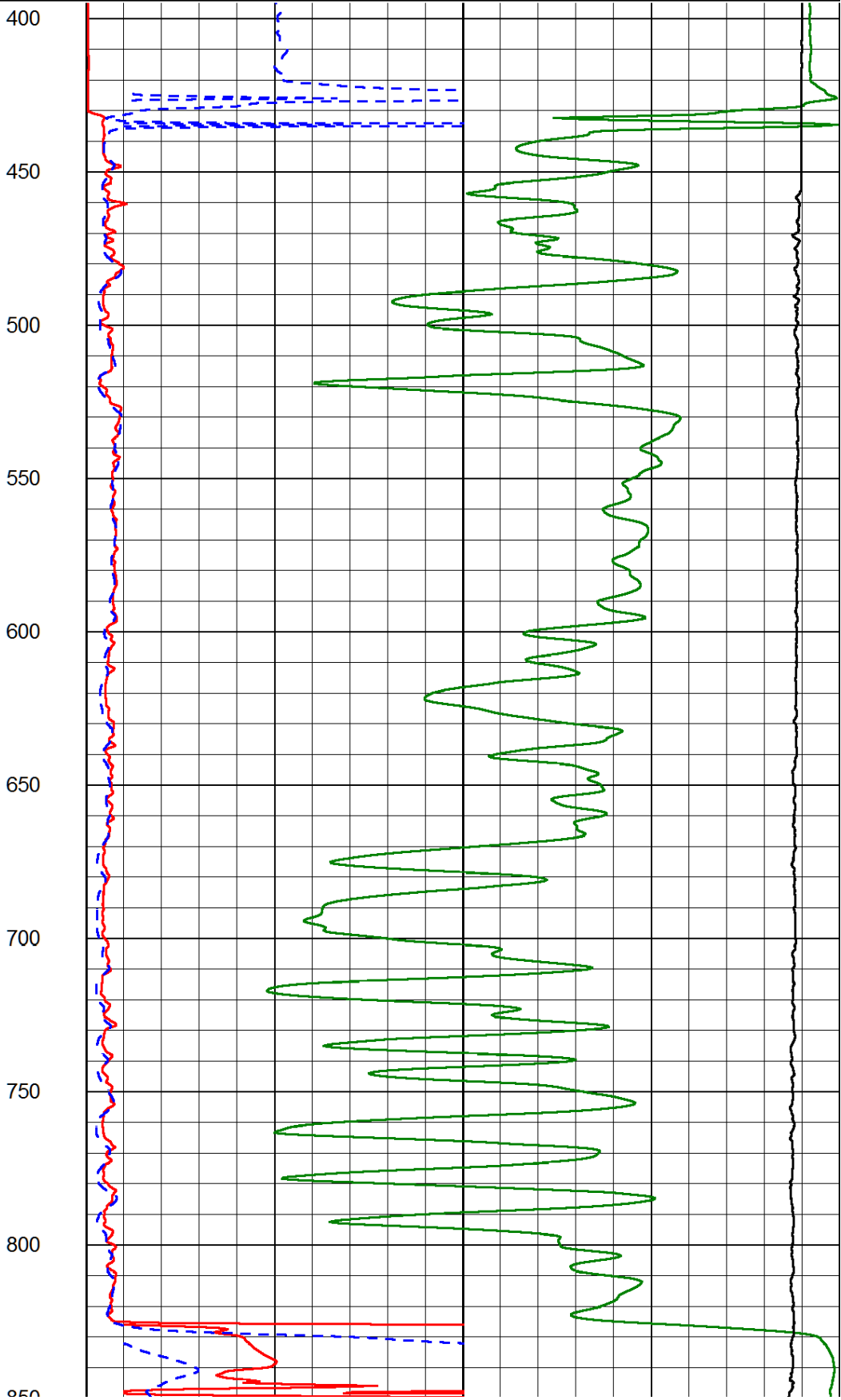
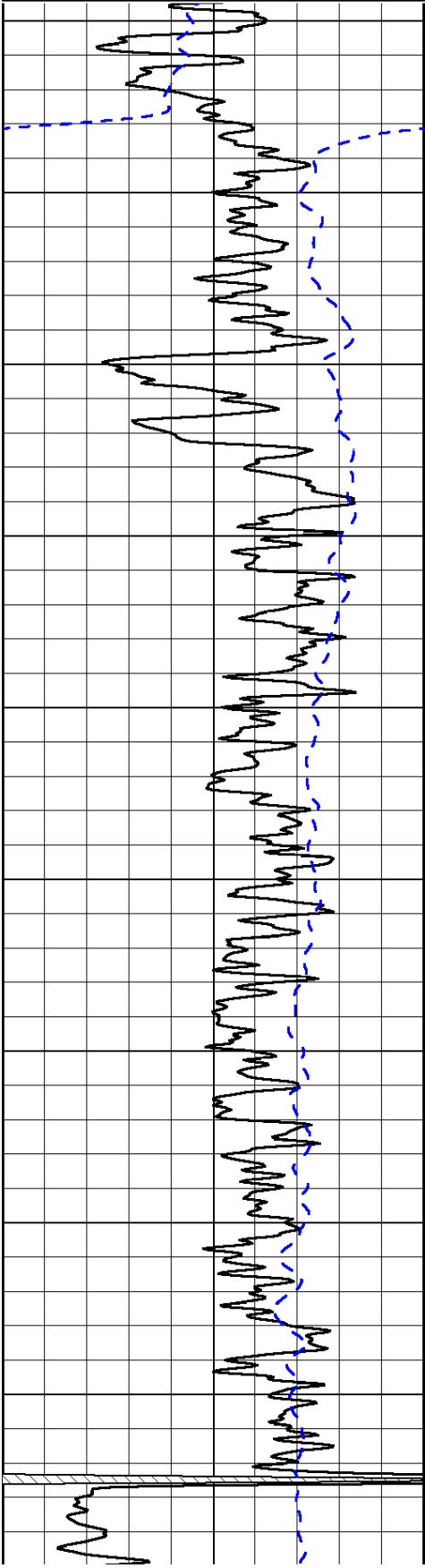
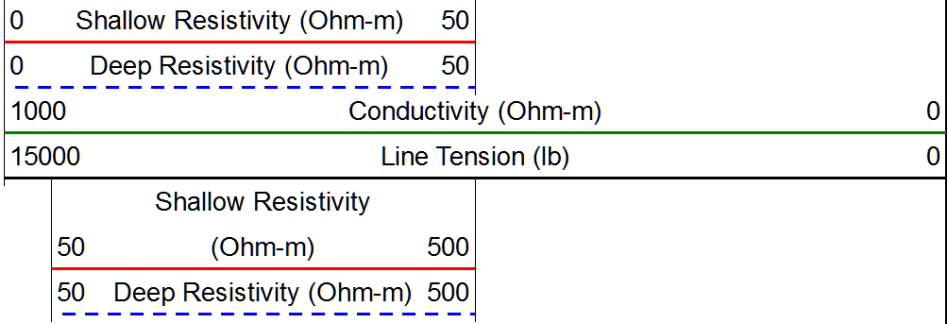
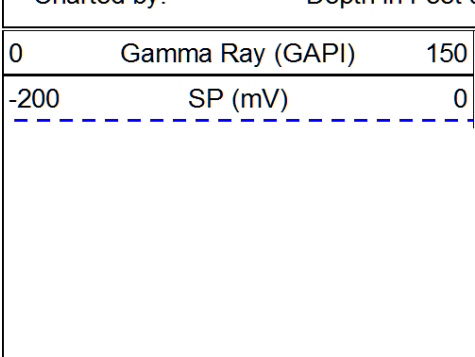
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

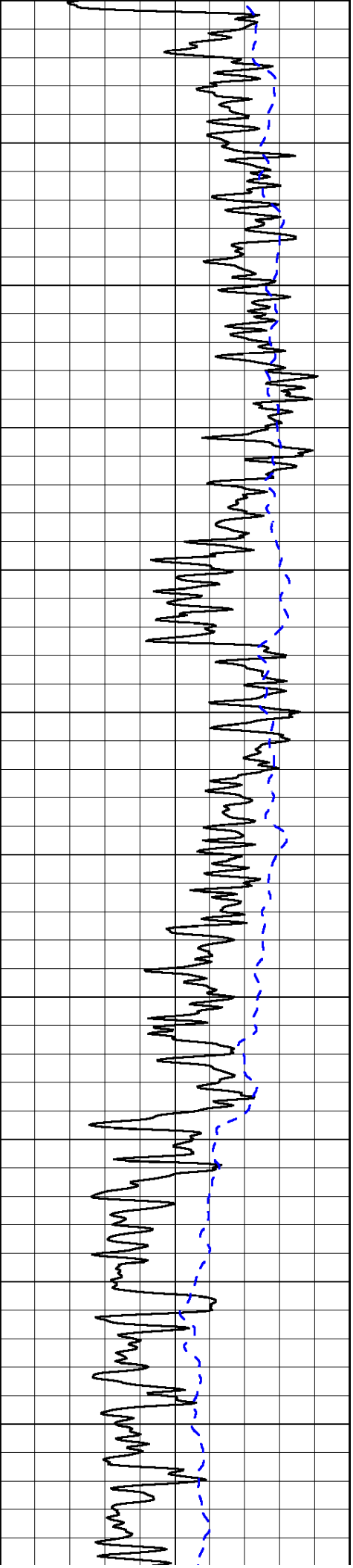
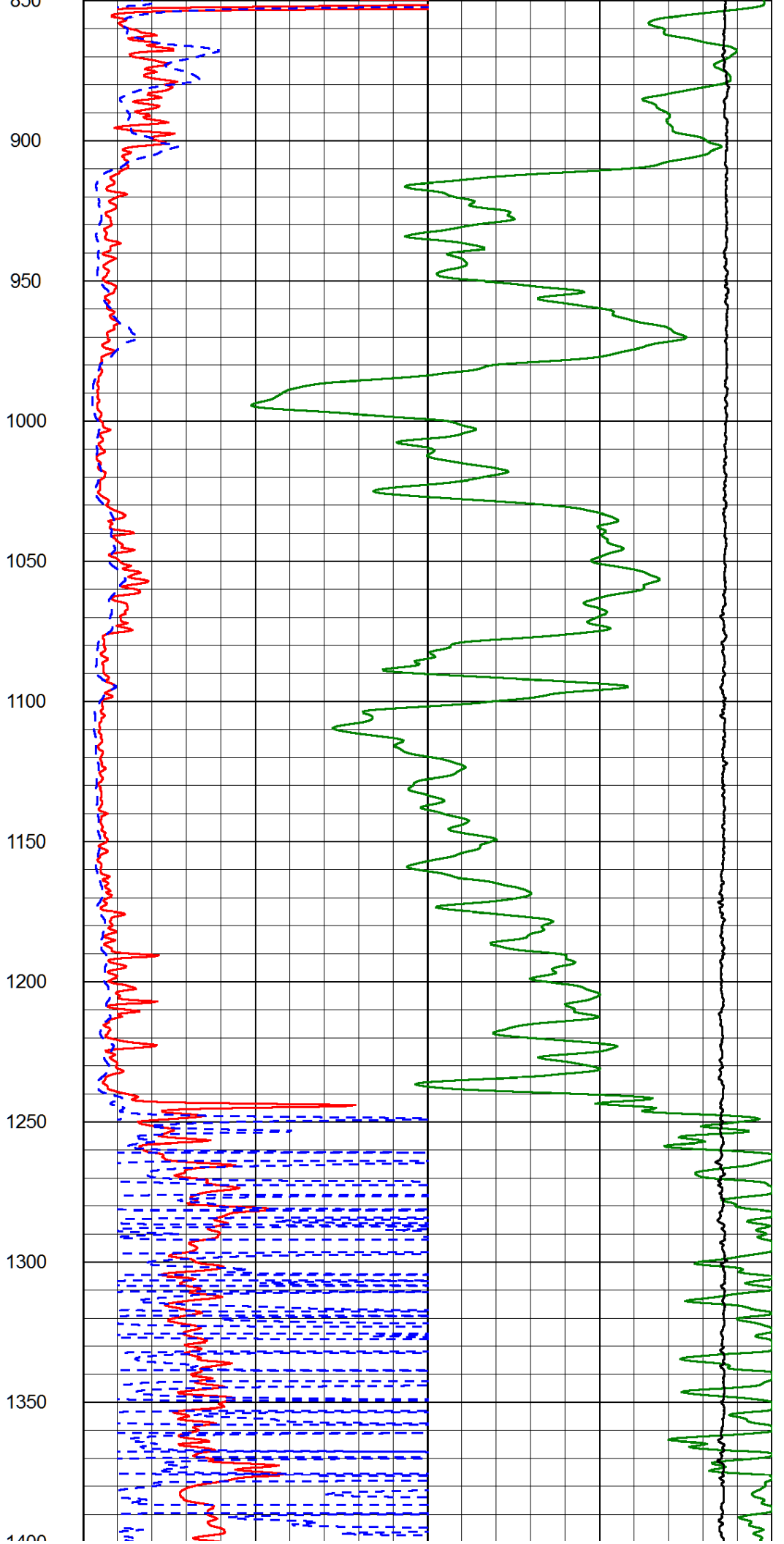
Comments

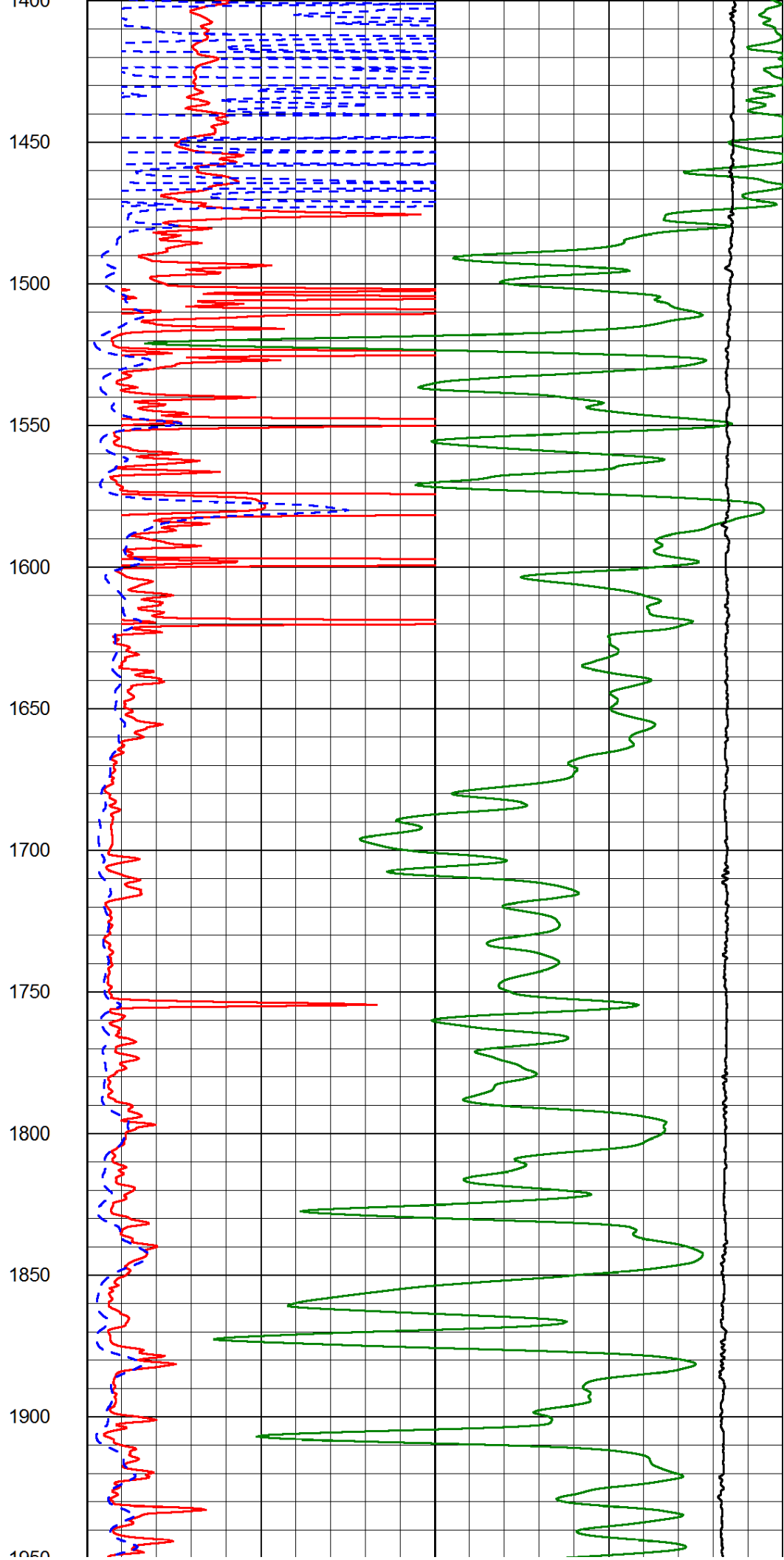
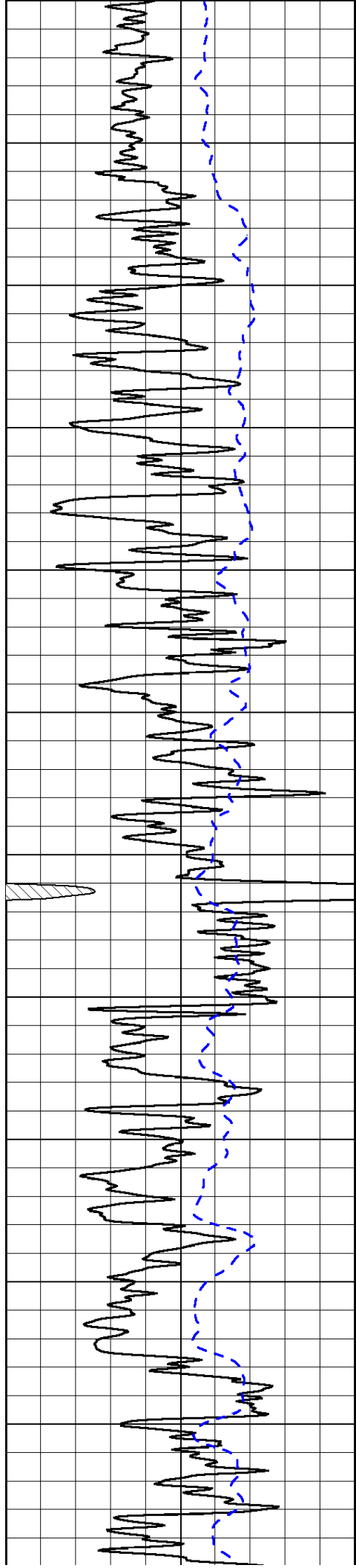
Thank you for using Log-Tech, Inc.
(785) 625-3858

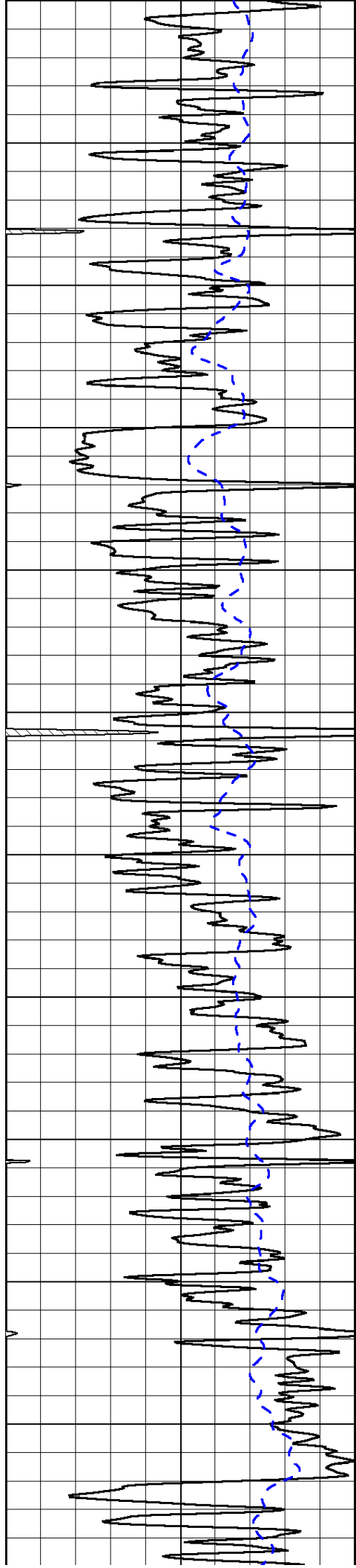
Russell, KS:
S to Co. Line, 8E, N into

Database File: rjm_hd.db
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Presentation Format: dil2in
Dataset Creation: Sun Apr 14 02:08:14 2013
Charted by: Depth in Feet scaled 1:600

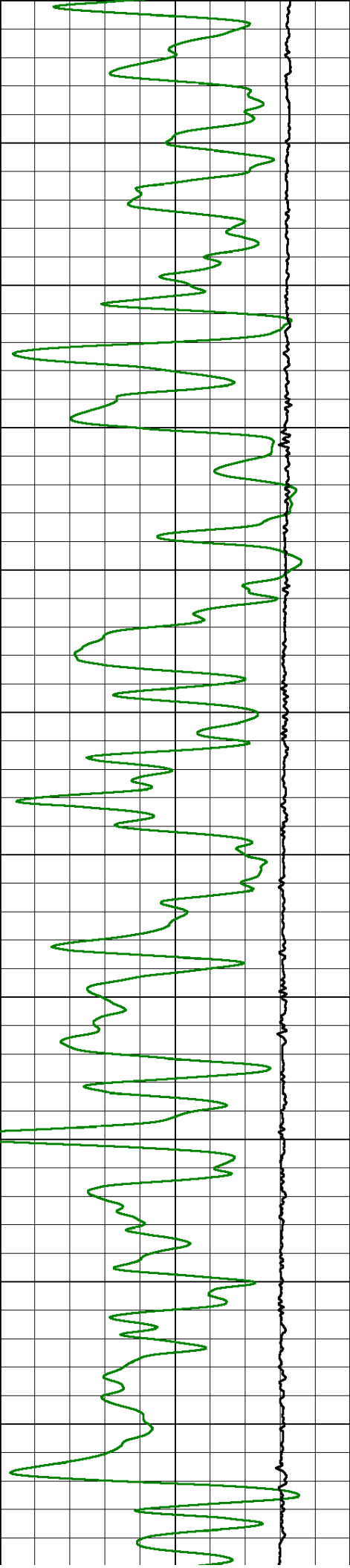
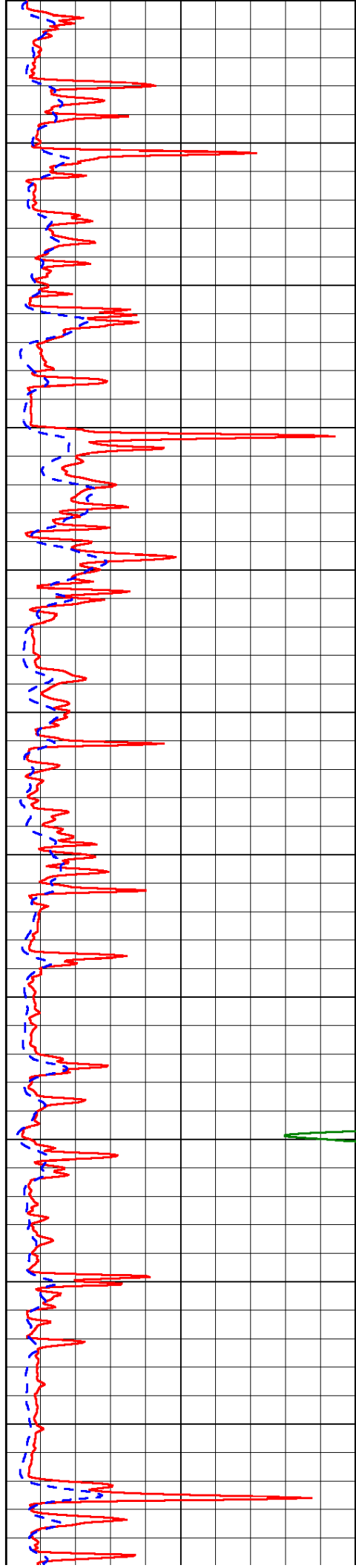


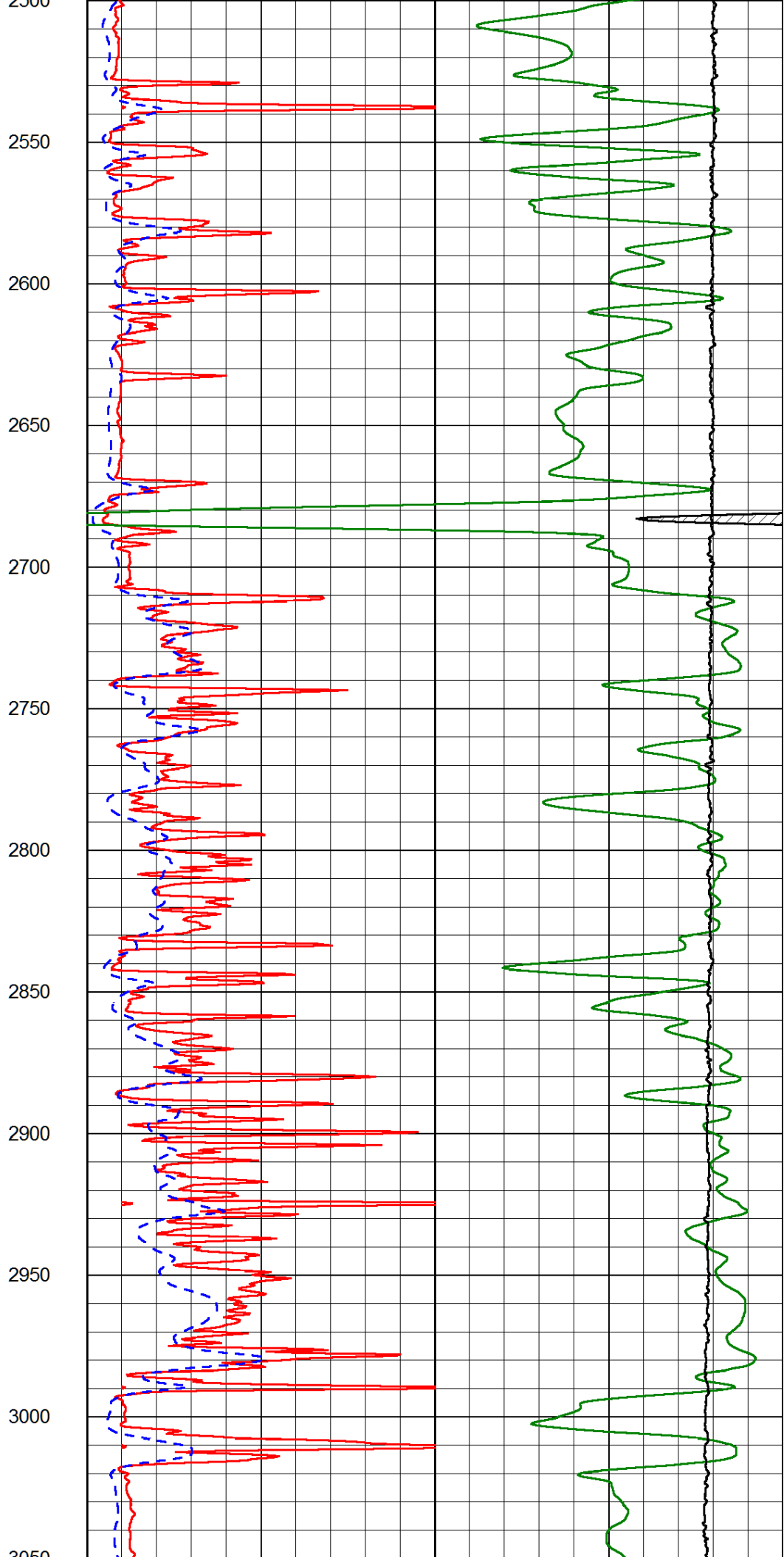
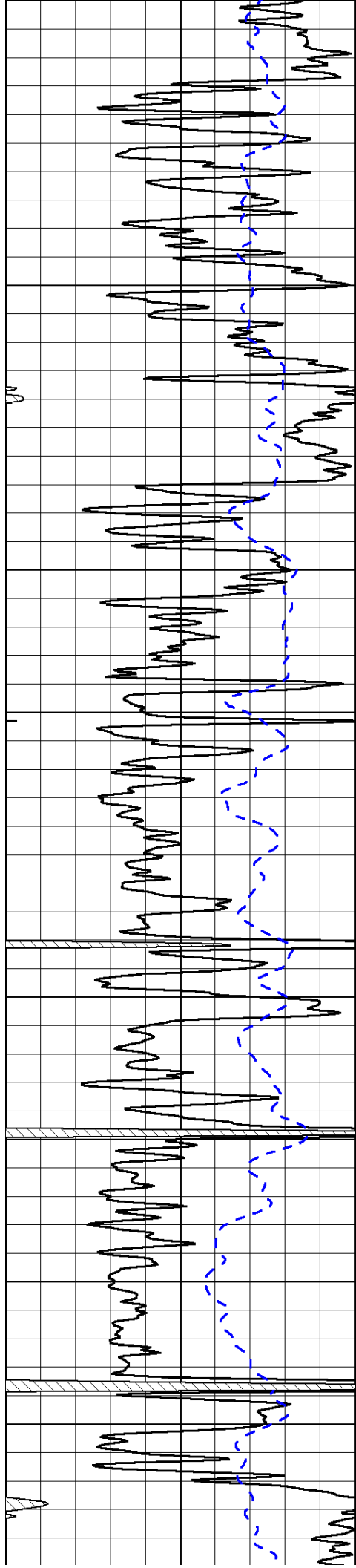


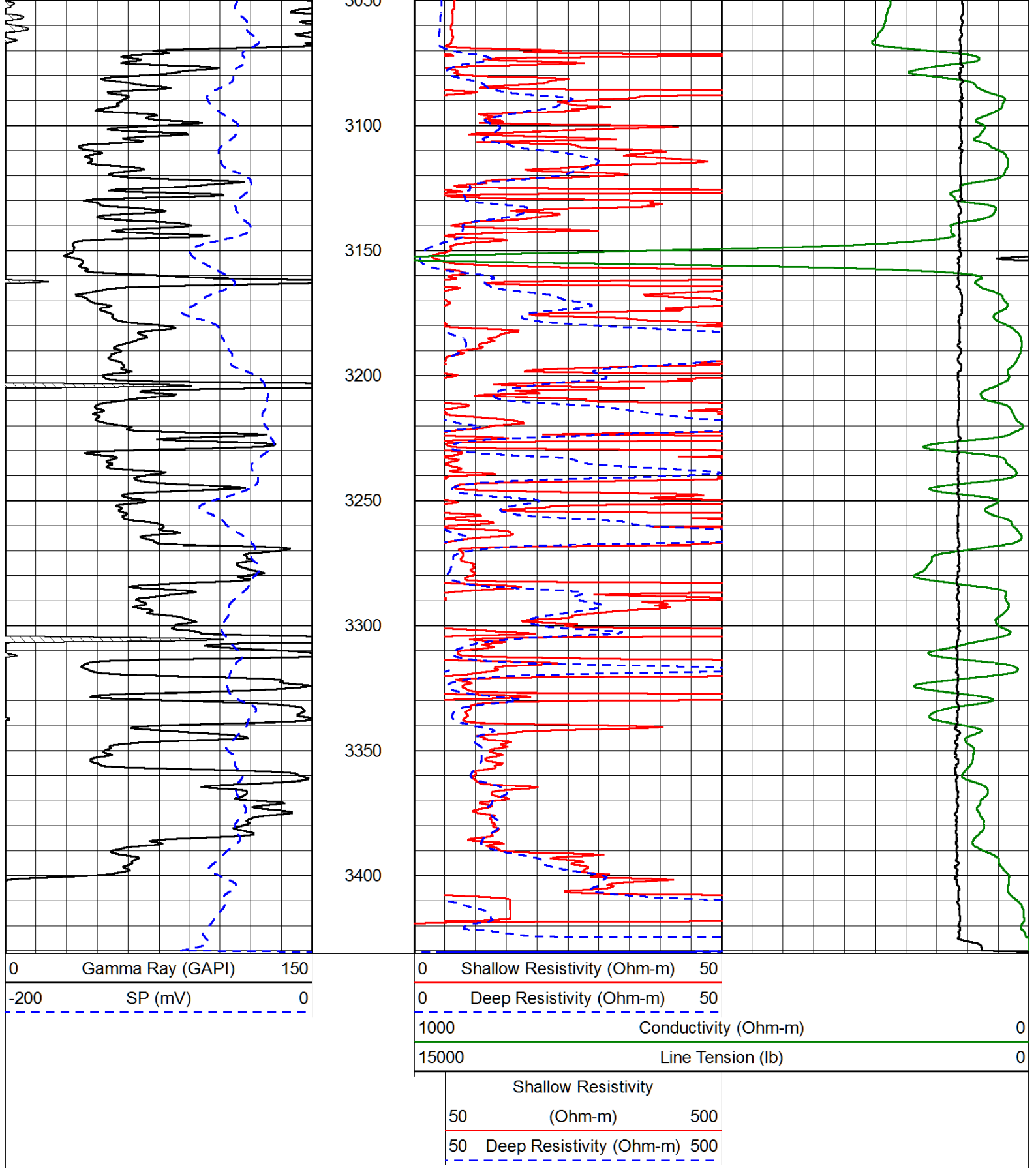




1950
2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500







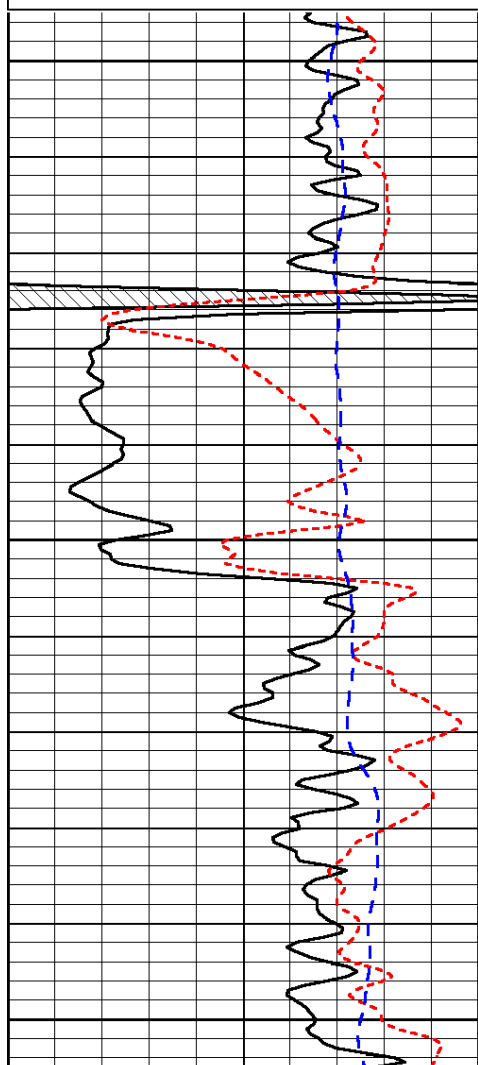
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Presentation Format: dil
Dataset Creation: Sun Apr 14 02:08:14 2013
Charted by: Depth in Feet scaled 1:240



-200	SP (mV)	0
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0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)

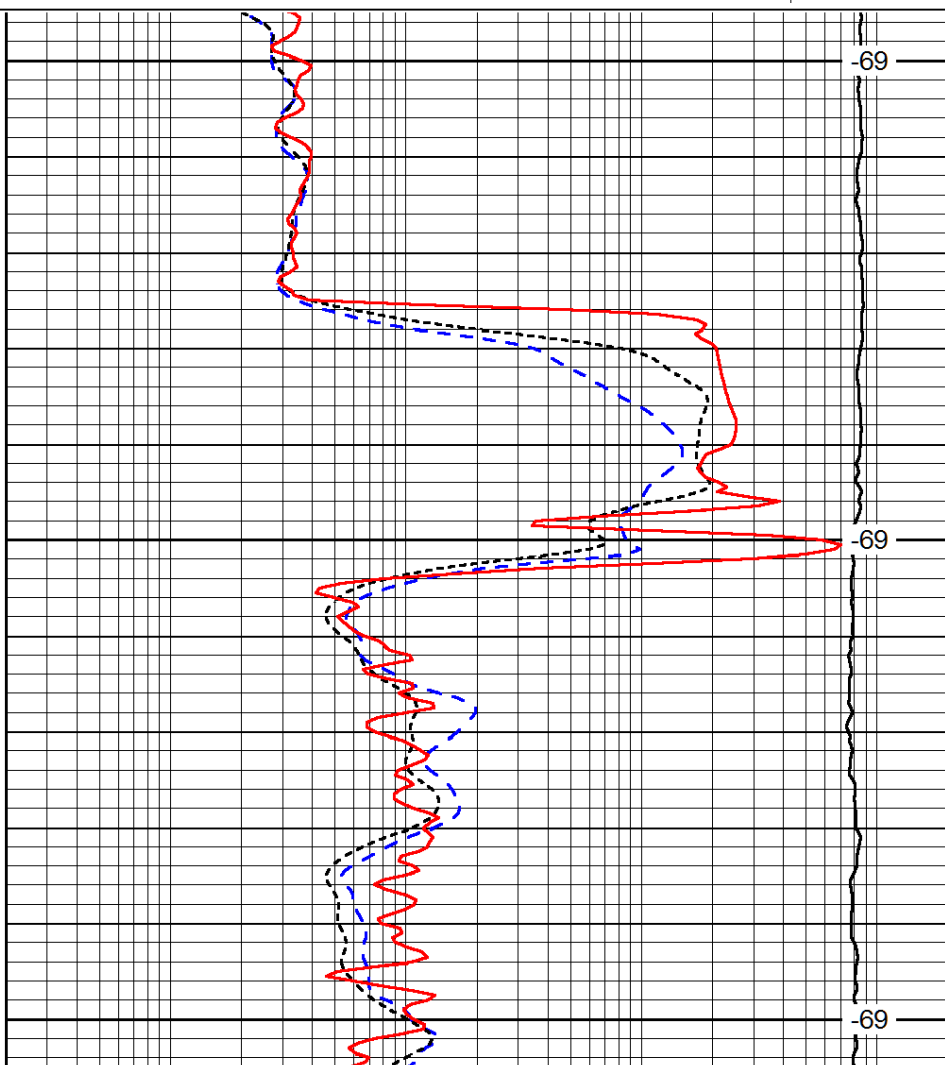


800

850

900

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



69

69

69

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

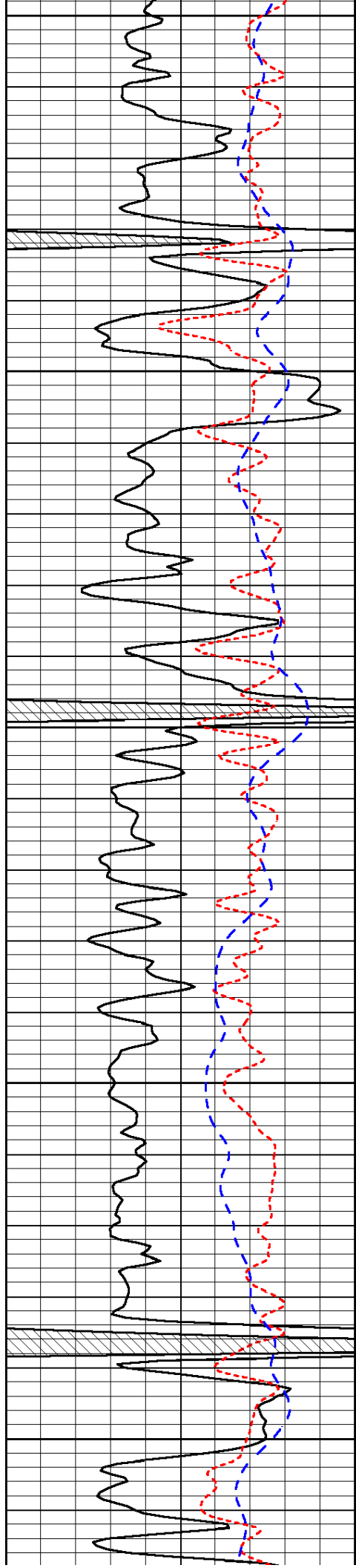
LSPD
(ft/min)

Database File: rjm_hd.db
 Dataset Pathname: dil/rjmmain
 Presentation Format: dil
 Dataset Creation: Sun Apr 14 02:08:14 2013
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-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)



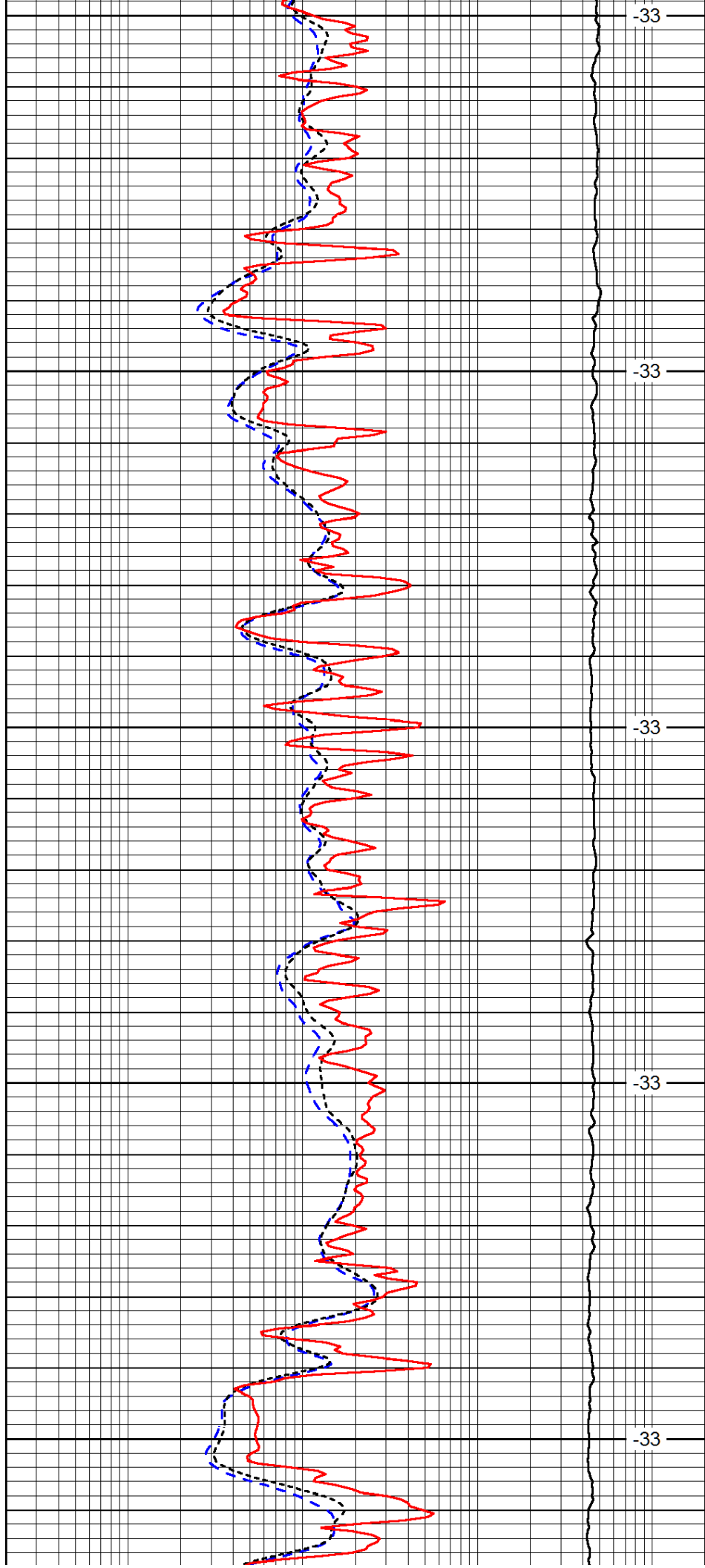
2800

2850

2900

2950

3000



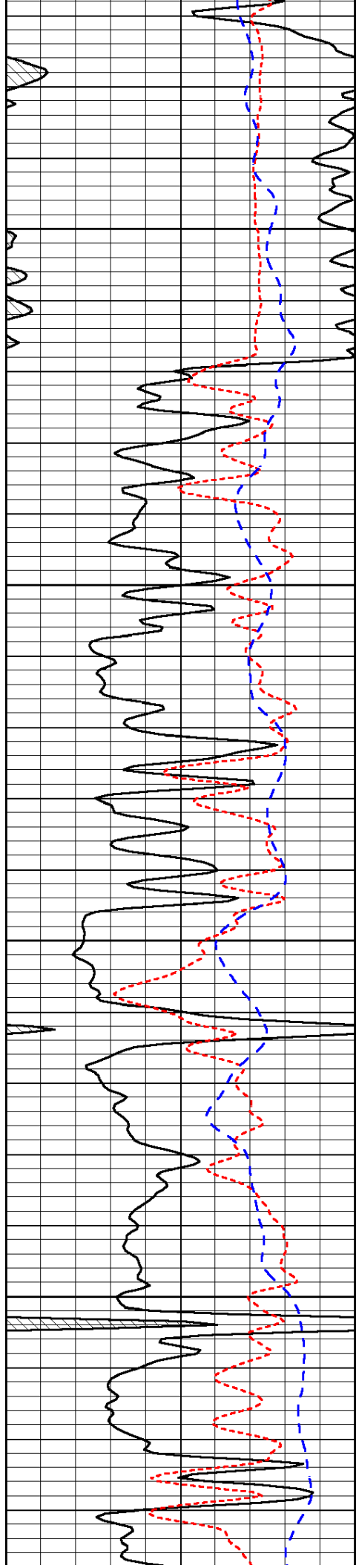
-33

-33

-33

-33

-33

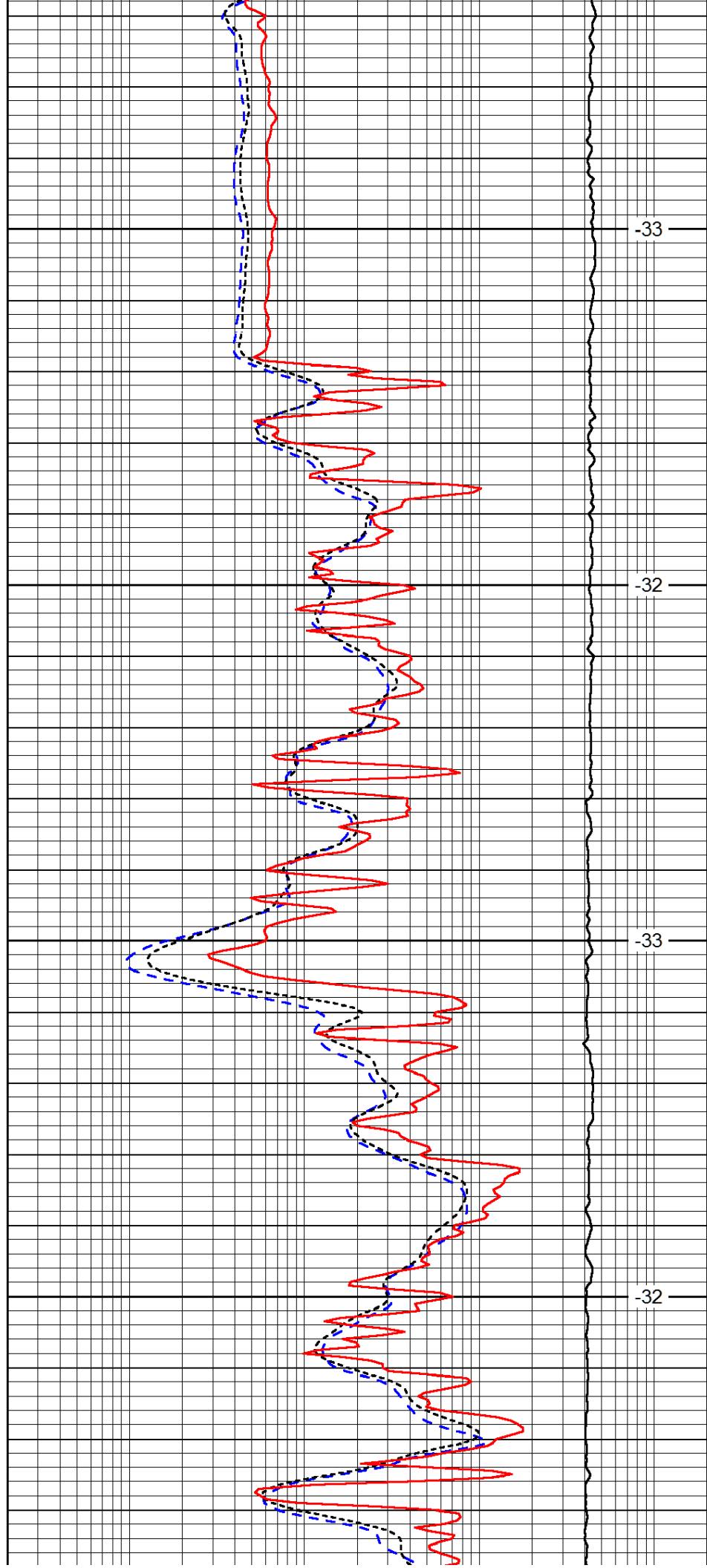


3050

3100

3150

3200

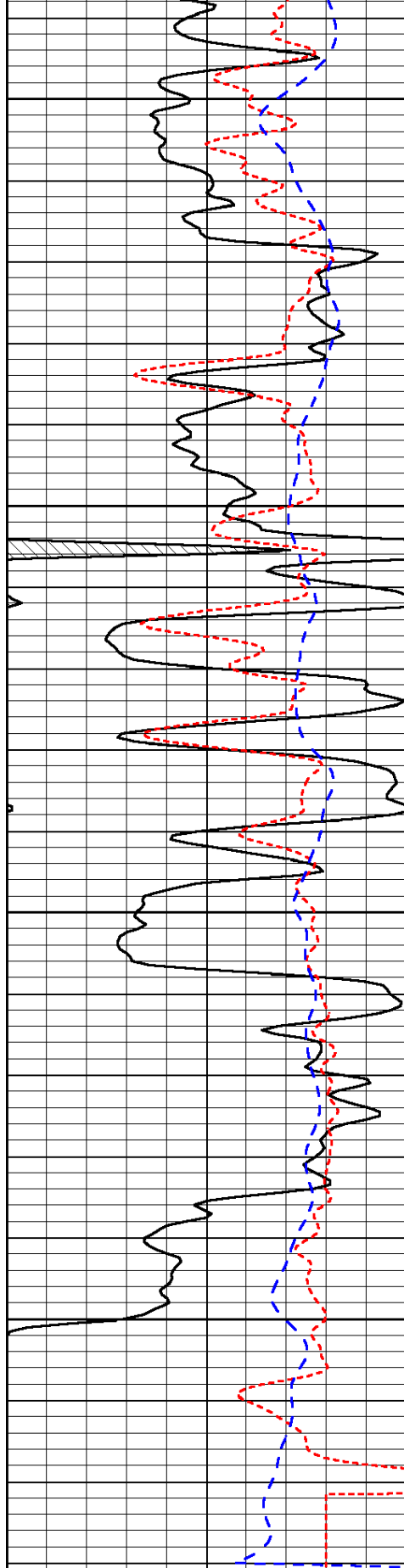


-33

-32

-33

-32



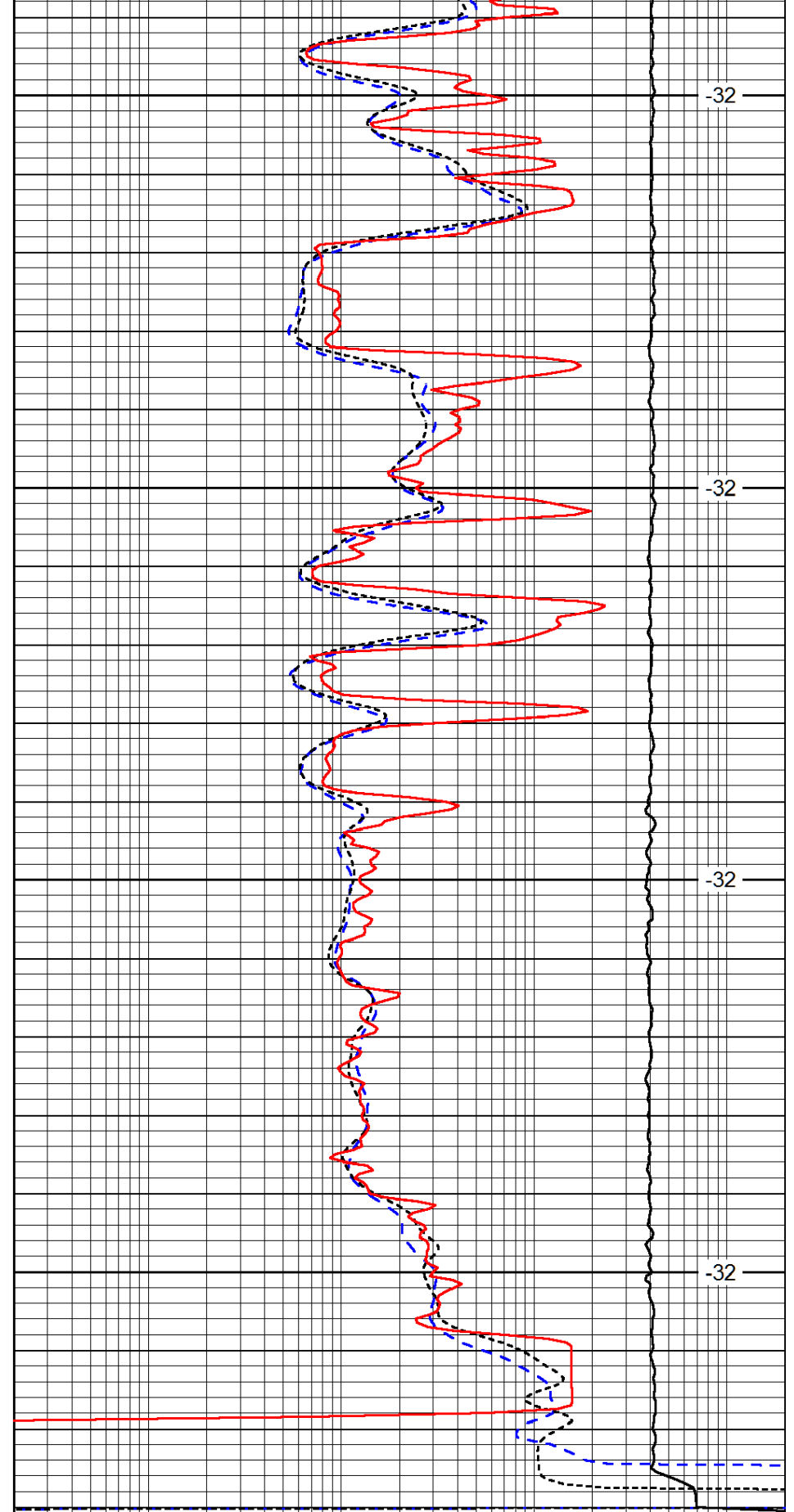
0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

3250

3300

3350

3400



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)

[illegible]