



Pioneer Energy Services

Dual Induction Log

API No.

15-145-21,708-00-00

Company H&D Exploration, LLC.

Well Phyllis "A" No. 1

Field Pawnee Rock

County Pawnee State

Kansas

Location 2,310' FNL & 990' FWL

Sec: 36 Twp: 20S Rge: 16W

Permanent Datum Ground Level Elevation 2032

Log Measured From Kelly Bushing 9 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
MEL

Elevation
K.B. 2041
D.F. 2032
G.L. 2032

Date 3/3/2013

Run Number One

Depth Driller 3920

Depth Logger 3923

Bottom Logged Interval 3922

Top Log Interval 1000

Casing Driller 8.625 @ 1033

Casing Logger 1026

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity,ppm CL 7500

Density / Viscosity 9.4 47

pH / Fluid Loss 10.5 8.0

Source of Sample Flowline

Rm @ Meas. Temp .70 @ 68

Rmf @ Meas. Temp .53 @ 68

Rmc @ Meas. Temp .95 @ 68

Source of Rmf / Rmc Charts

Rm @ BHT .41 @ 115

Operating Rig Time 4 Hours

Max Rec. Temp. F 115

Equipment Number 108

Location Hays

Recorded By J. Long

Witnessed By Wyatt Urban

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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

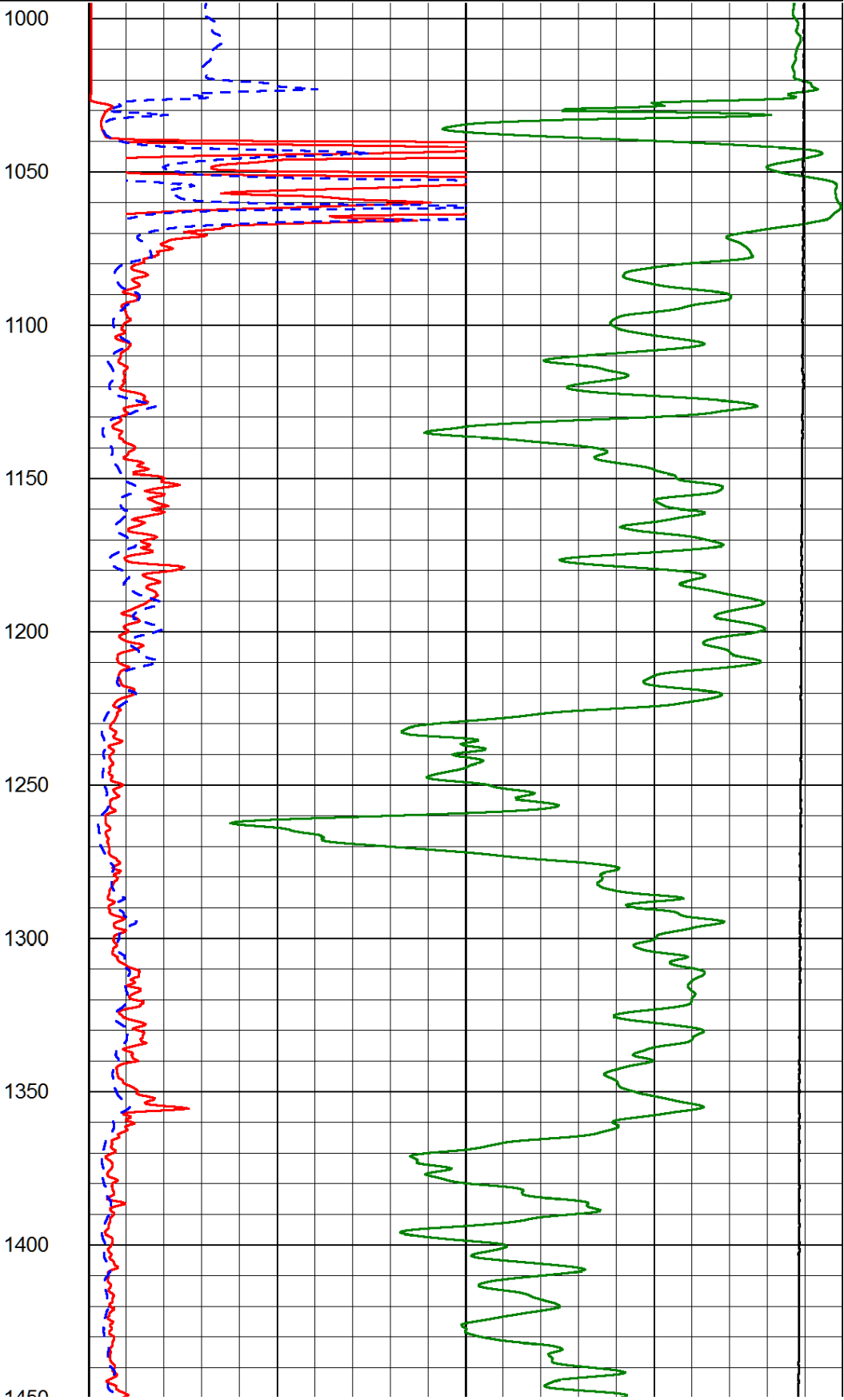
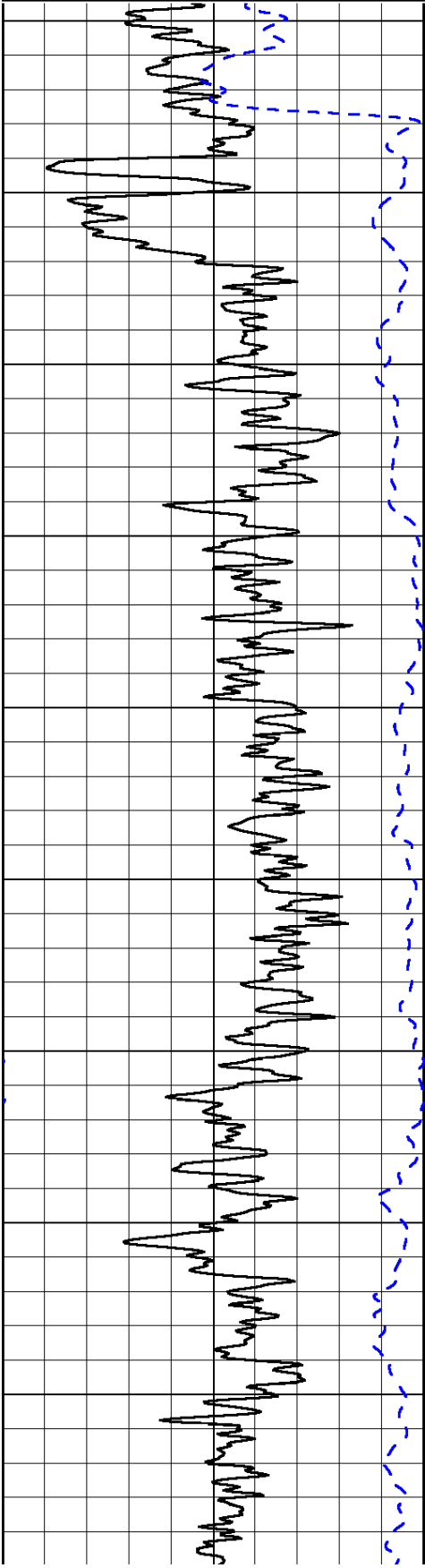
Thank you for using Log-Tech, Inc.
(785) 625-3858

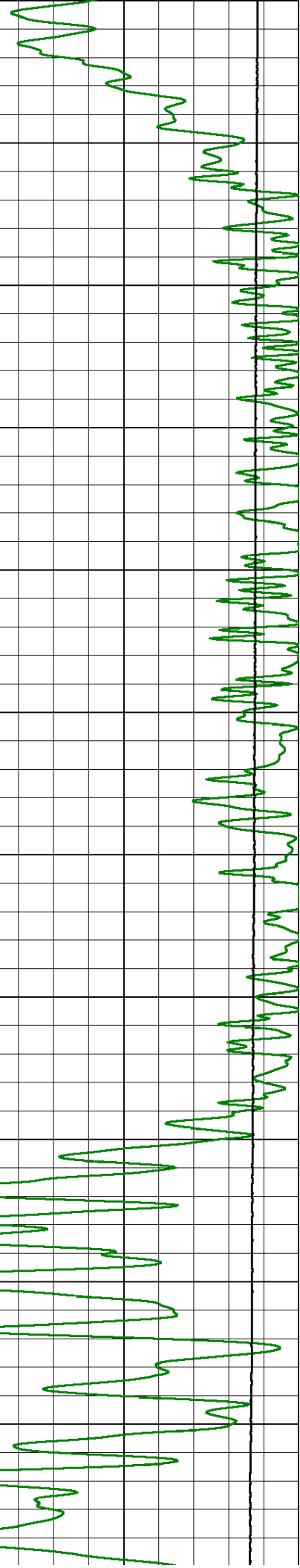
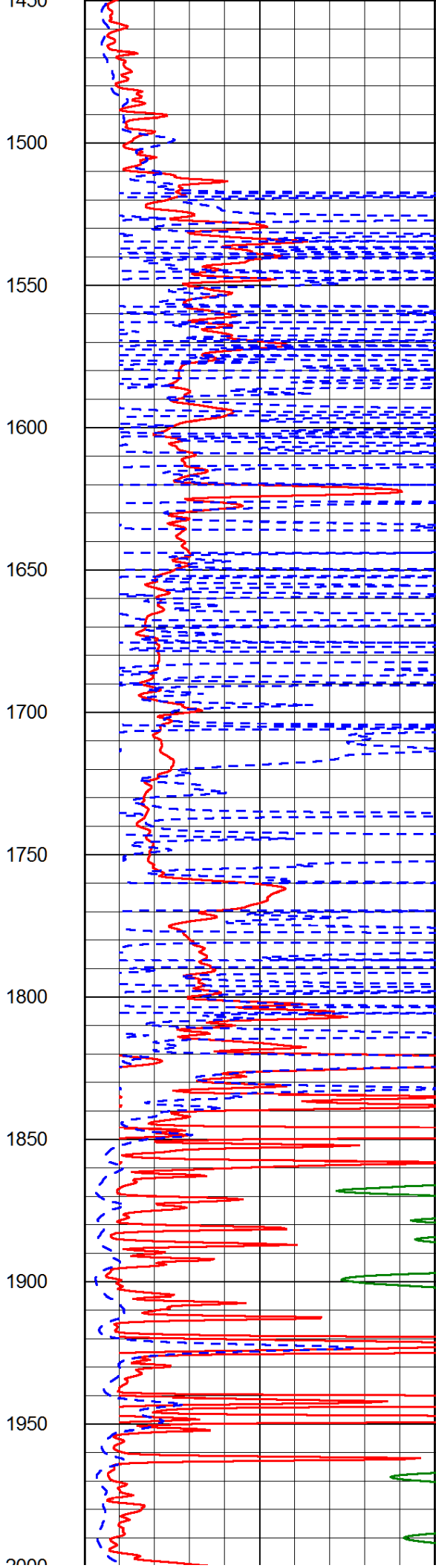
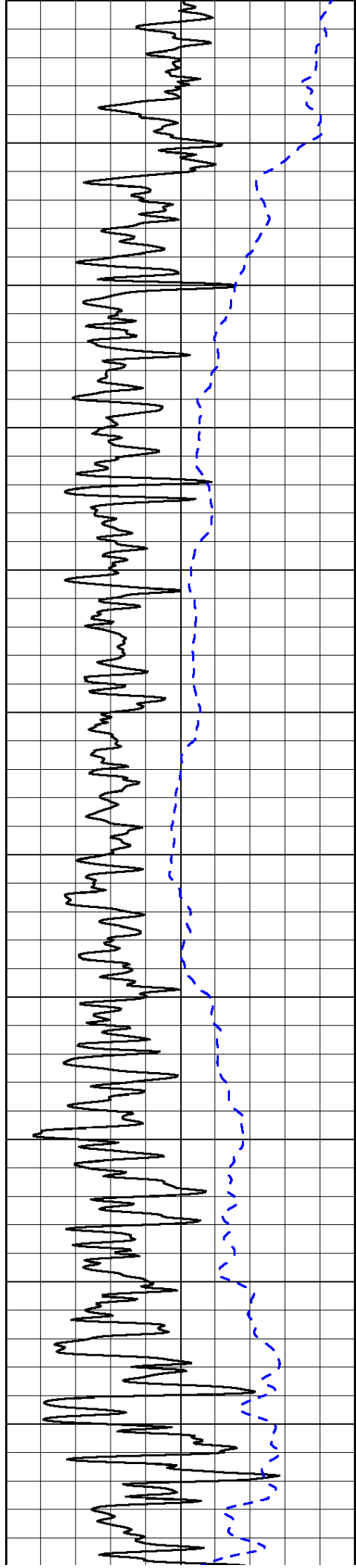
Pawnee Rock, West on T Road (County Road) to 90 Road, 1/2 North, East Into

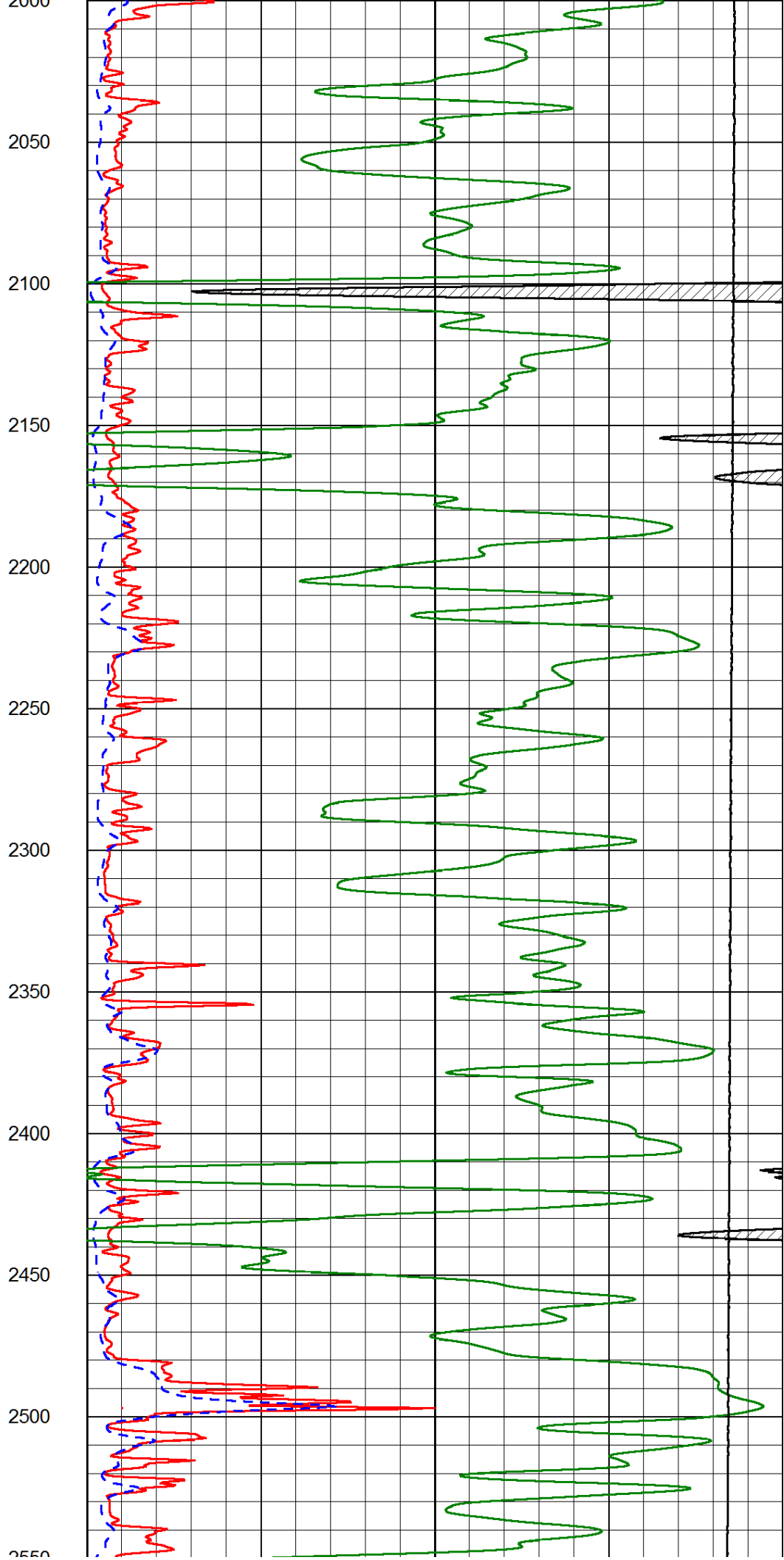
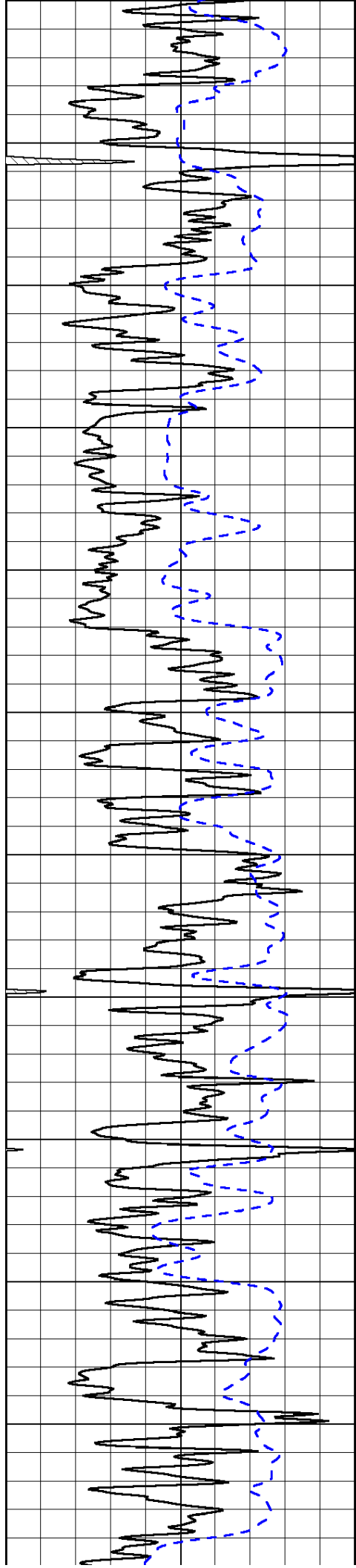
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Dataset Creation: Sun Mar 03 14:57:03 2013
Charted by: Depth in Feet scaled 1:600

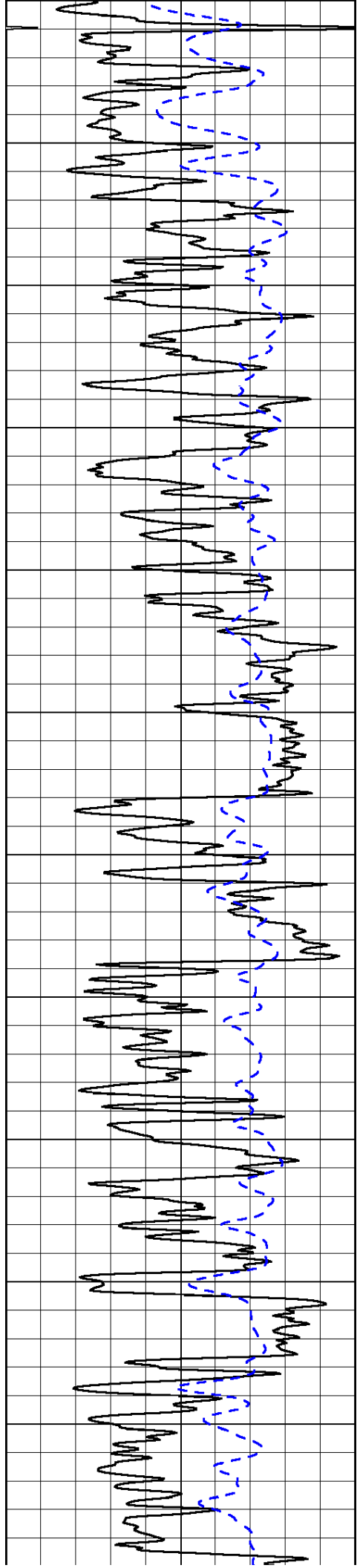
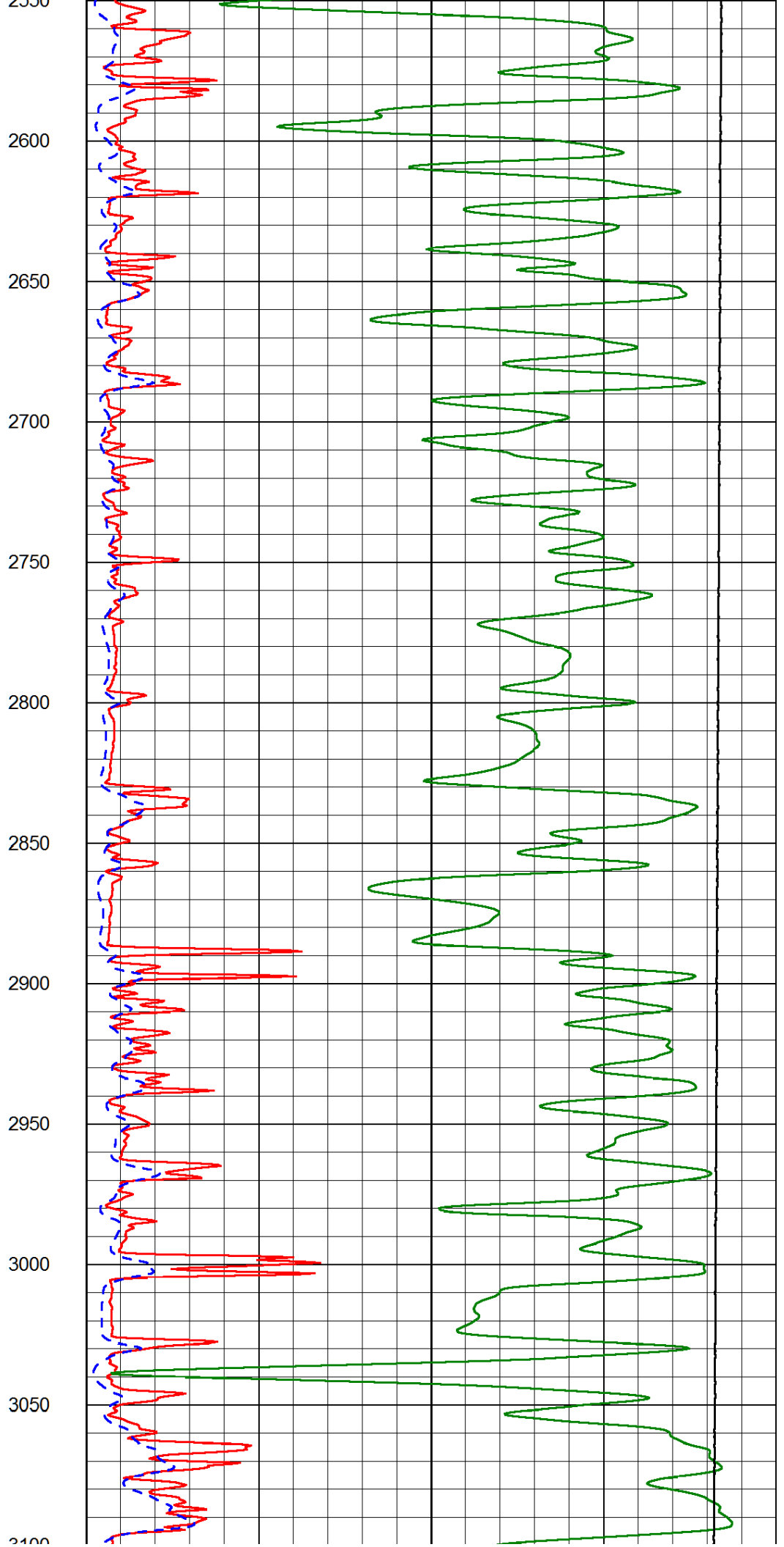
0	Gamma Ray (GAPI)	150
-200	SP (mV)	0

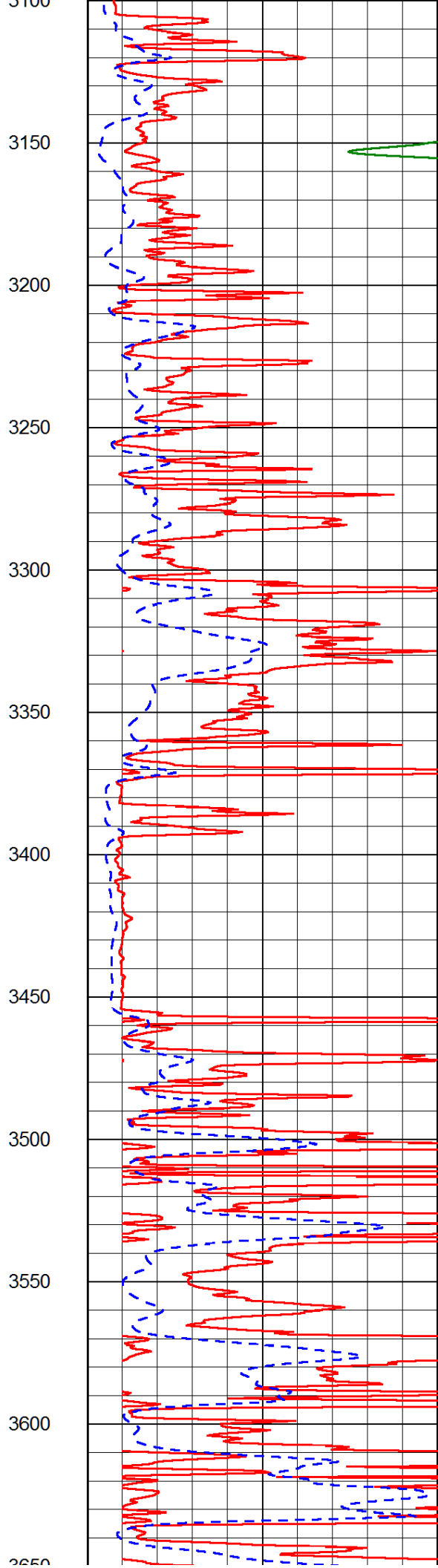
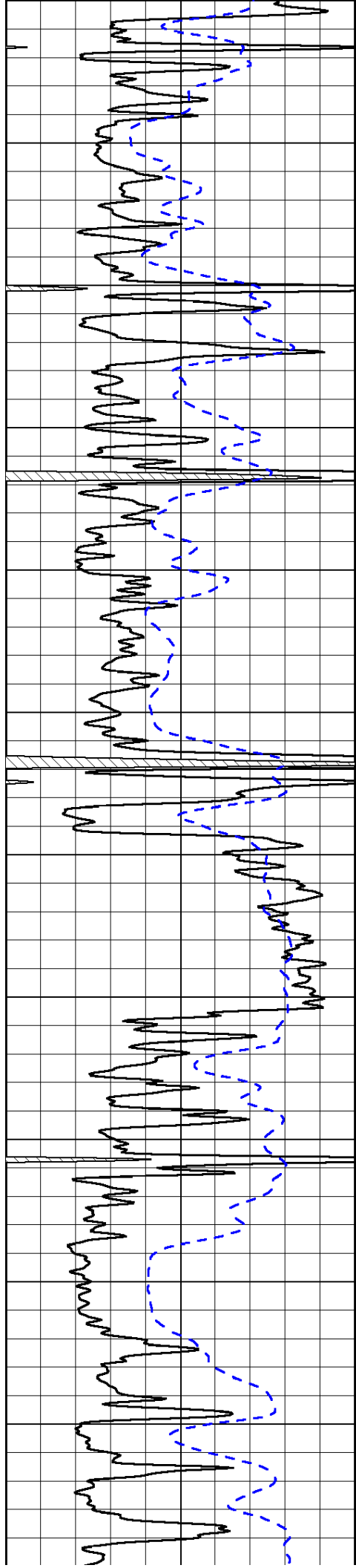
0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0
Shallow Resistivity		
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

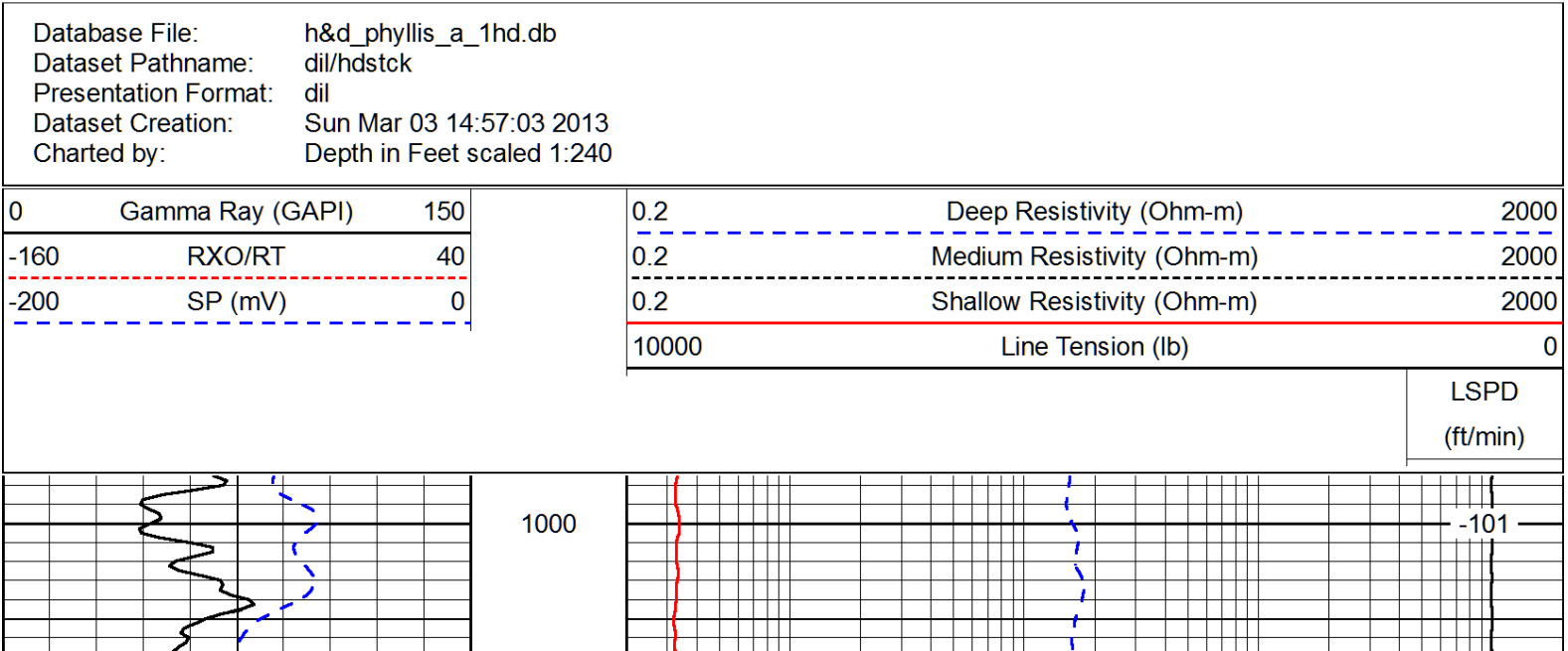
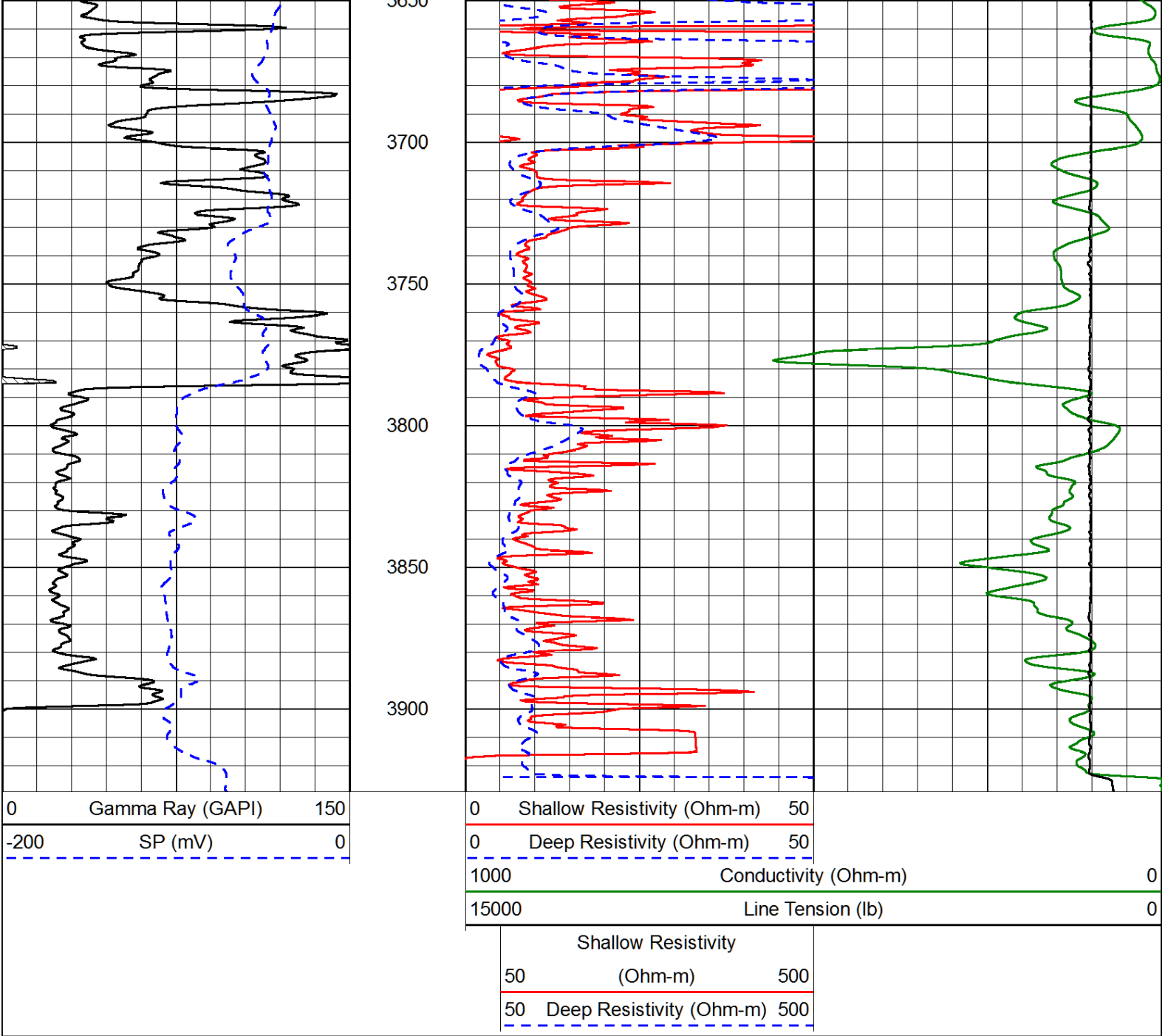


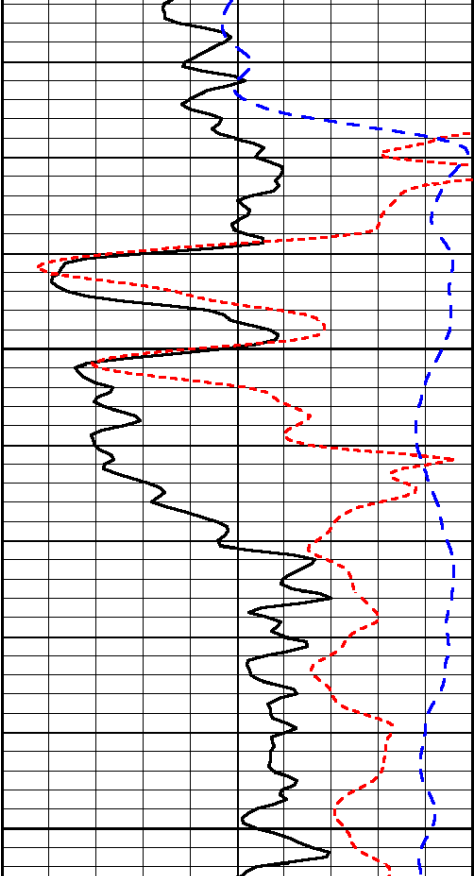








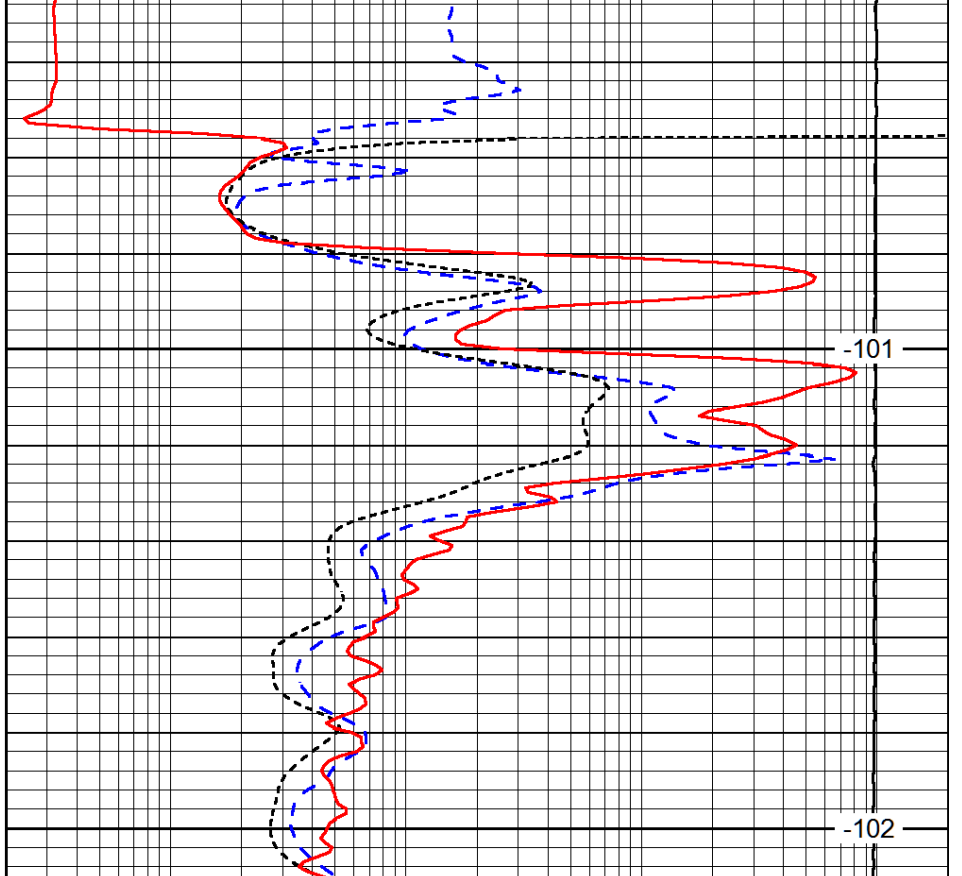




0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

1050

1100



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

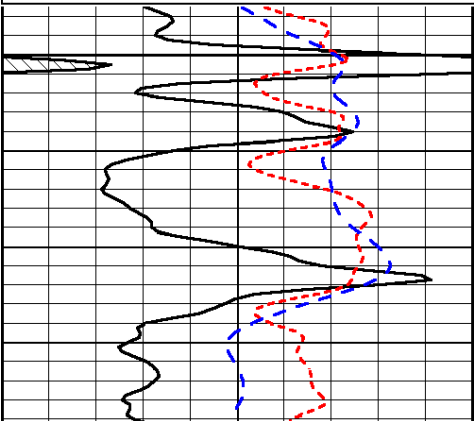
LSPD
(ft/min)

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 Charted by: Depth in Feet scaled 1:240

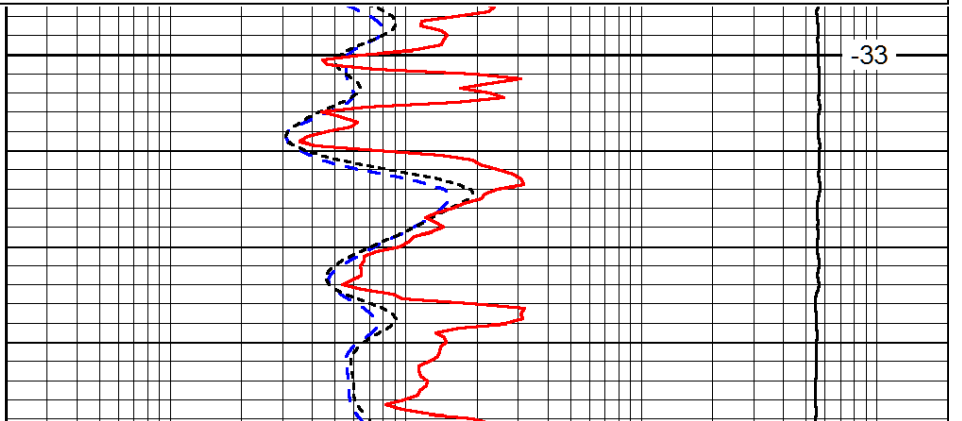
0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

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

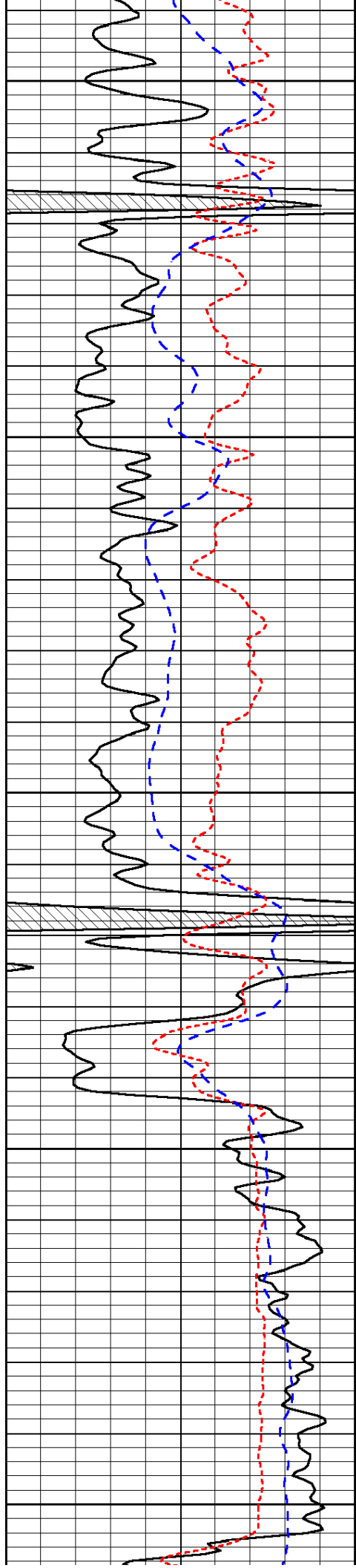
LSPD
(ft/min)



3200



-33



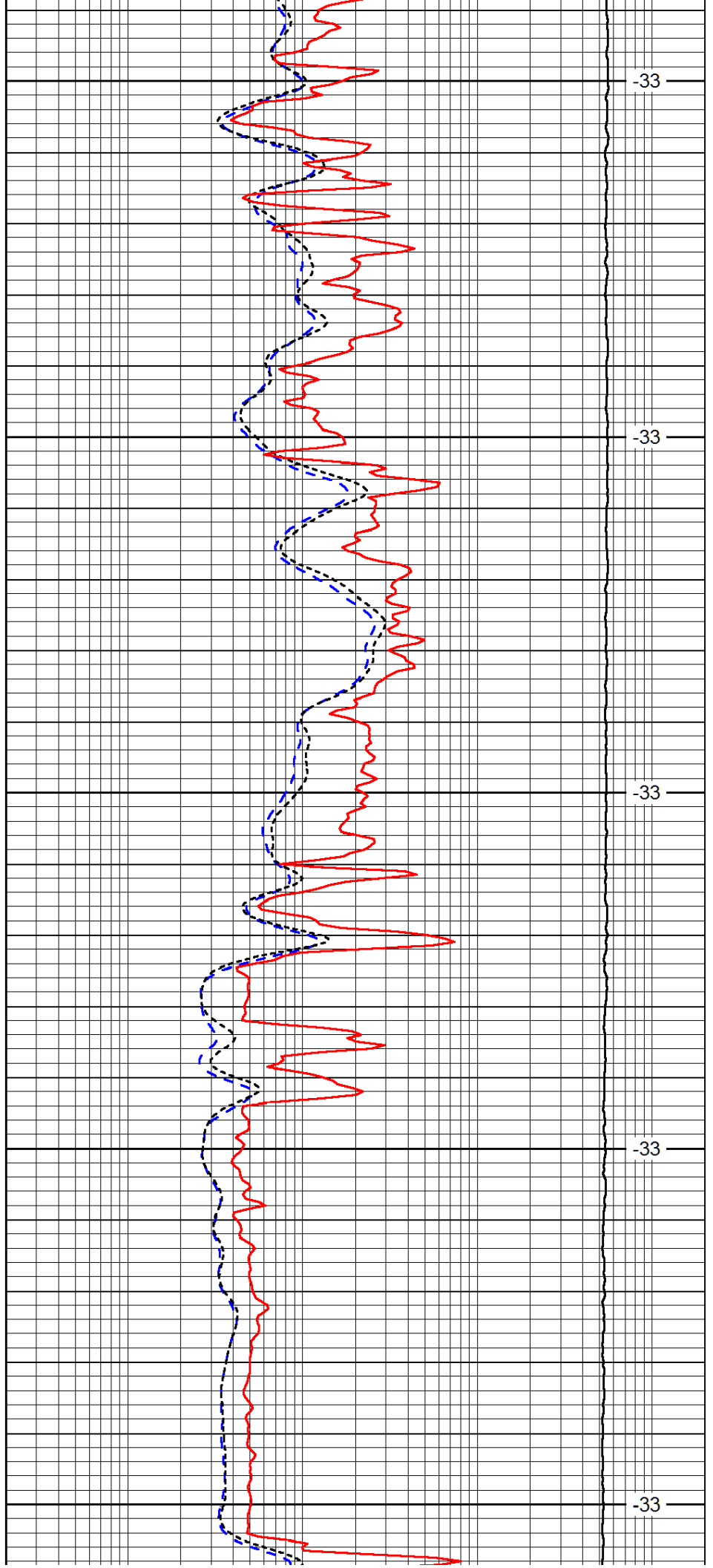
3250

3300

3350

3400

3450



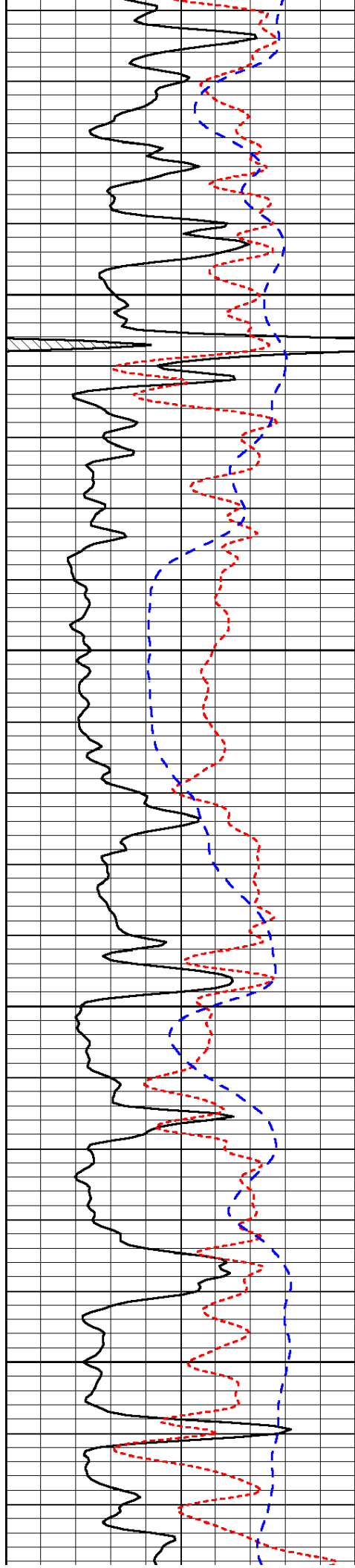
-33

-33

-33

-33

-33

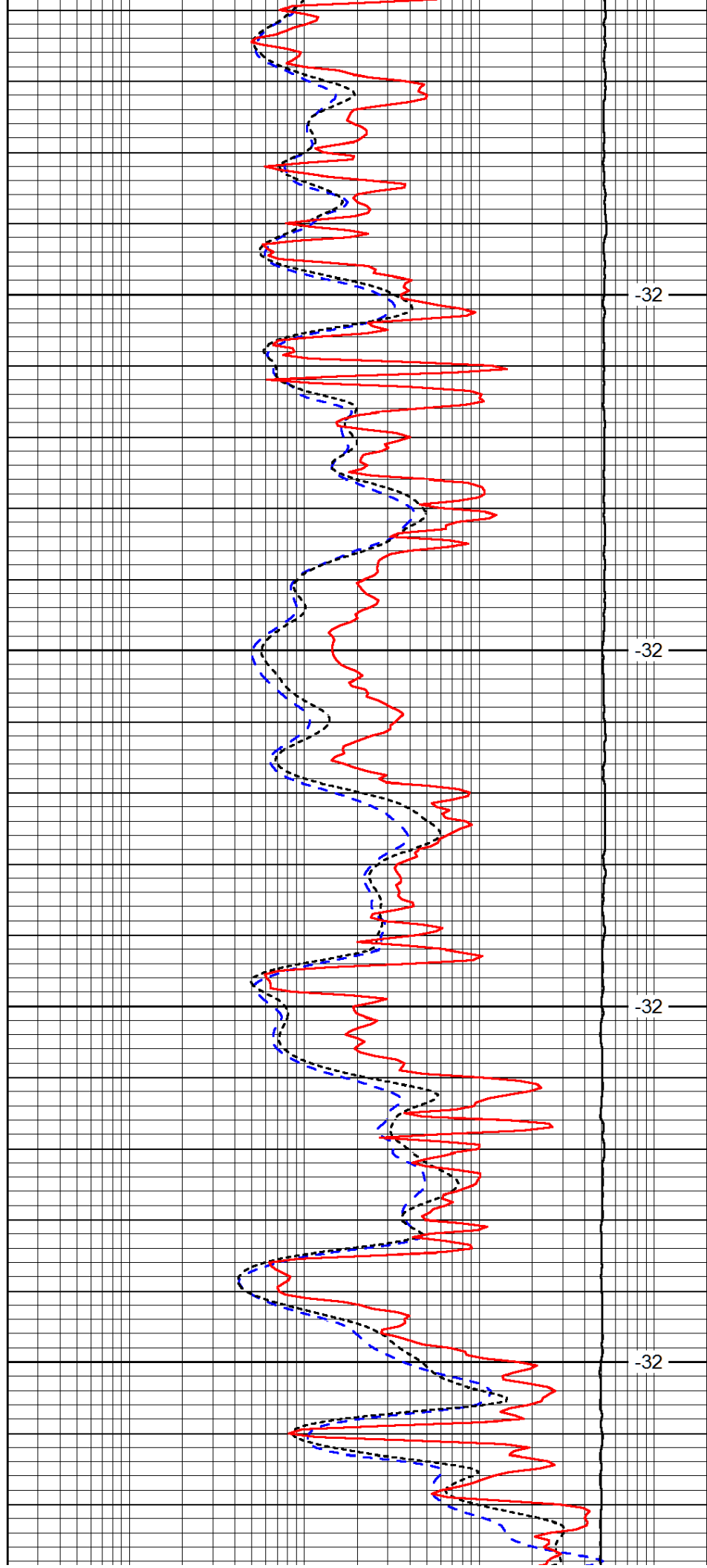


3500

3550

3600

3650

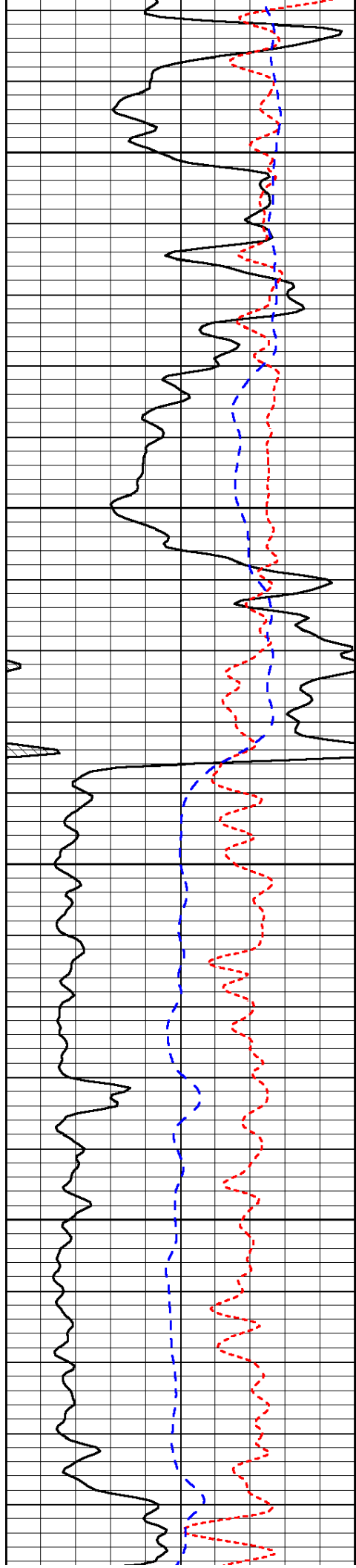


-32

-32

-32

-32

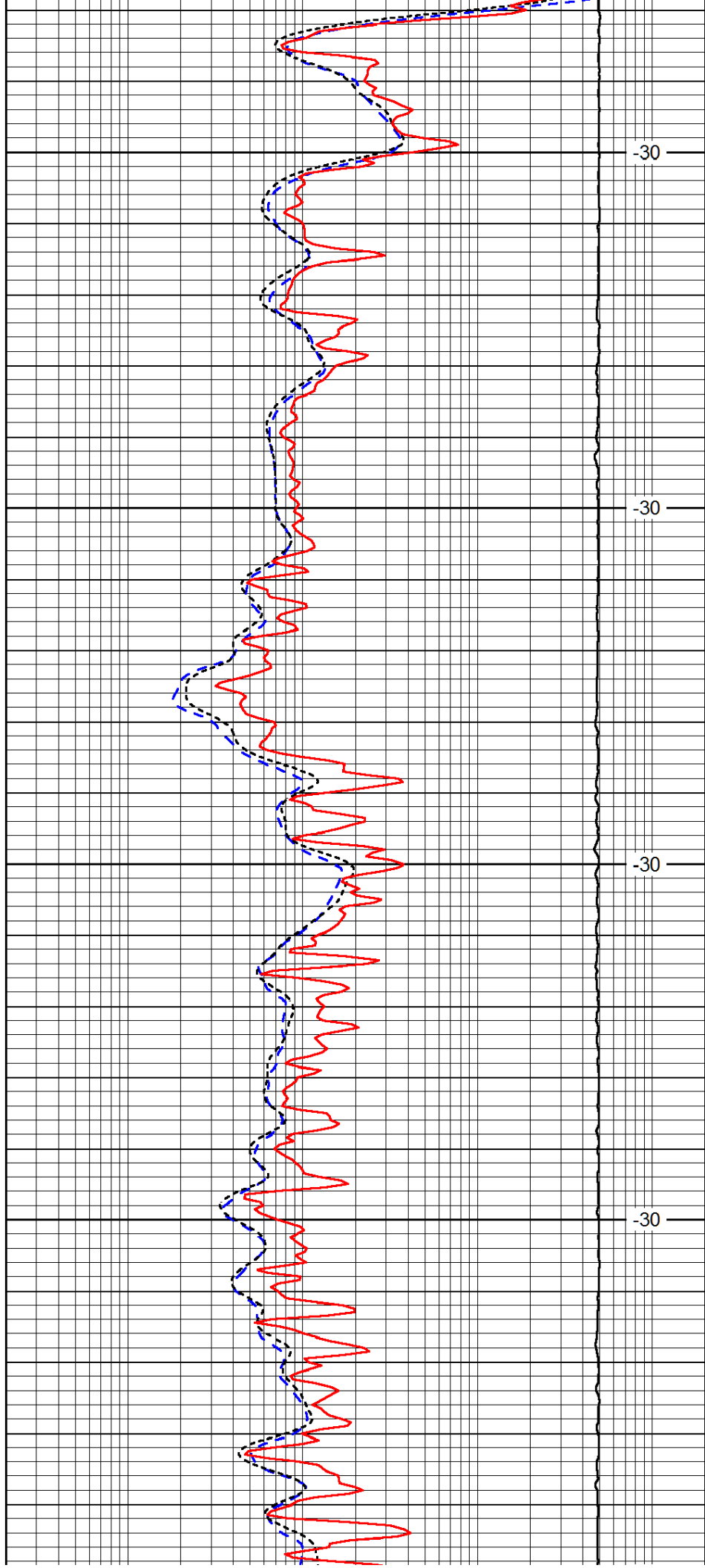


3700

3750

3800

3850

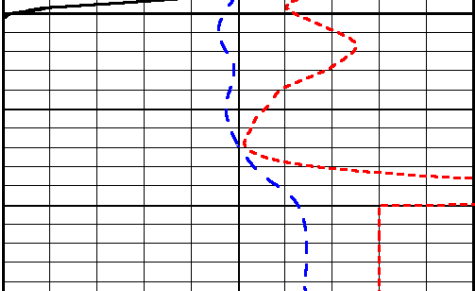


-30

-30

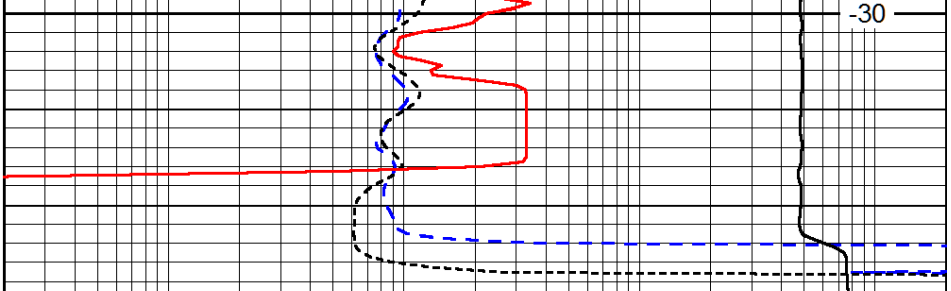
-30

-30



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

3900



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)