



Dual Induction Log

Pioneer Energy Services

API No.	Company Vamco Operations			
	Well MGT A-1 #1			
	Field Dell East			
	County	Stafford	State	Kansas
	Location	1590' FNL & 770' FEL		
	Sec: 8	Twp: 21S	Rge: 13W	Other Services CNL/CDL MEL/BHCS
Permanent Datum	Ground Level	Elevation 1893	Elevation	
Log Measured From	Kelly Bushing	9 Ft. Above Perm. Datum	K.B. 1902	
Drilling Measured From	Kelly Bushing		D.F. 1893	
Date	8/28/2013			
Run Number	One			
Depth Driller	3650			
Depth Logger	3650			
Bottom Logged Interval	3649			
Top Log Interval	250			
Casing Driller	8.625 @ 263			
Casing Logger	264			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	12000			
Density / Viscosity	9.3 56			
pH / Fluid Loss	9.0 14.2			
Source of Sample	Flowline			
Rm @ Meas. Temp	0.32 @ 88			
Rmf @ Meas. Temp	0.24 @ 88			
Rmc @ Meas. Temp	0.43 @ 88			
Source of Rmf / Rmc	Charts			
Rm @ BHT	0.25 @ 115			
Operating Rig Time	5 Hours			
Max Rec. Temp. F	115			
Equipment Number	91			
Location	Hays			
Recorded By	D. Schmidt			
Witnessed By	Jeff Burk	Eli Felts		

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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

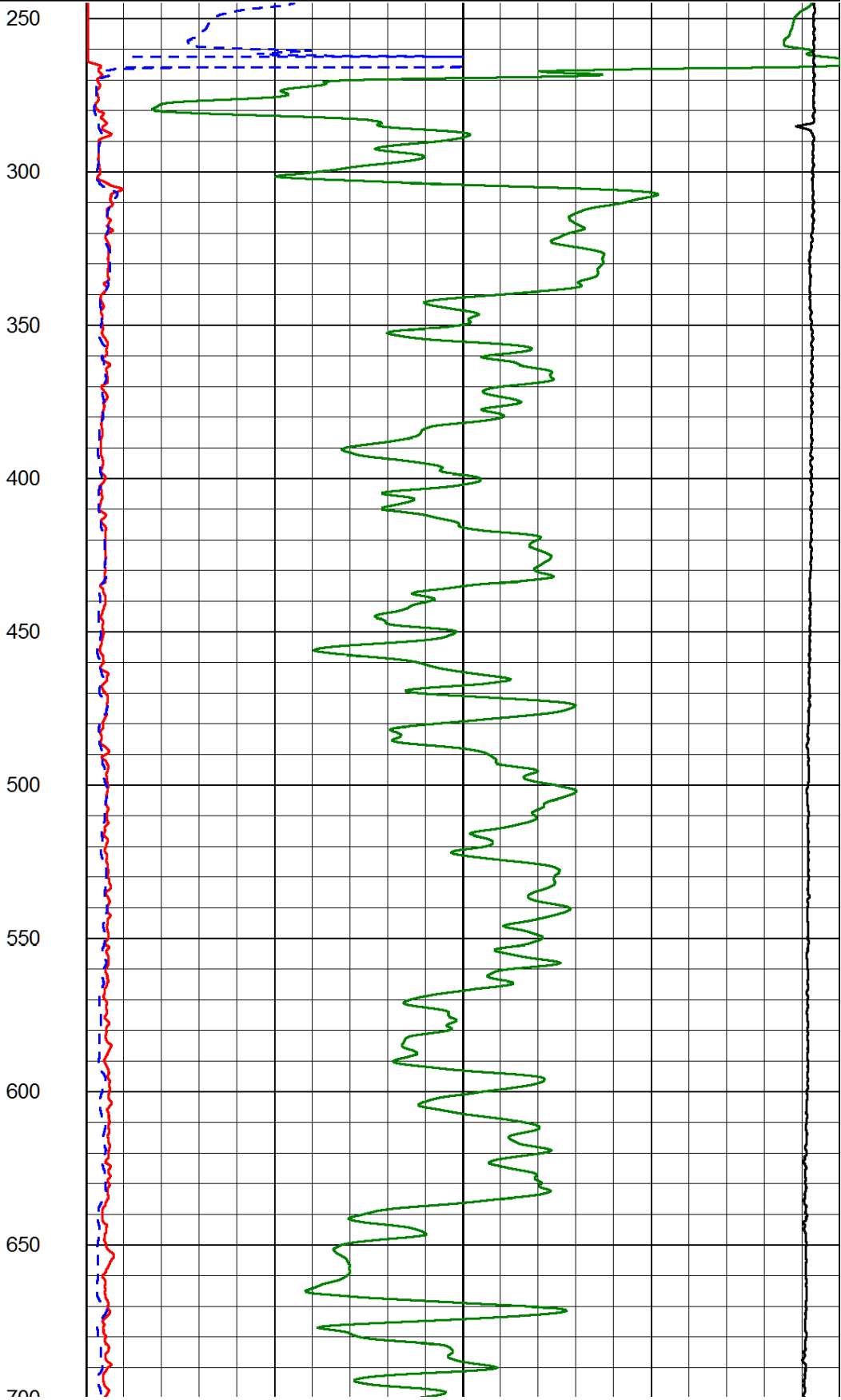
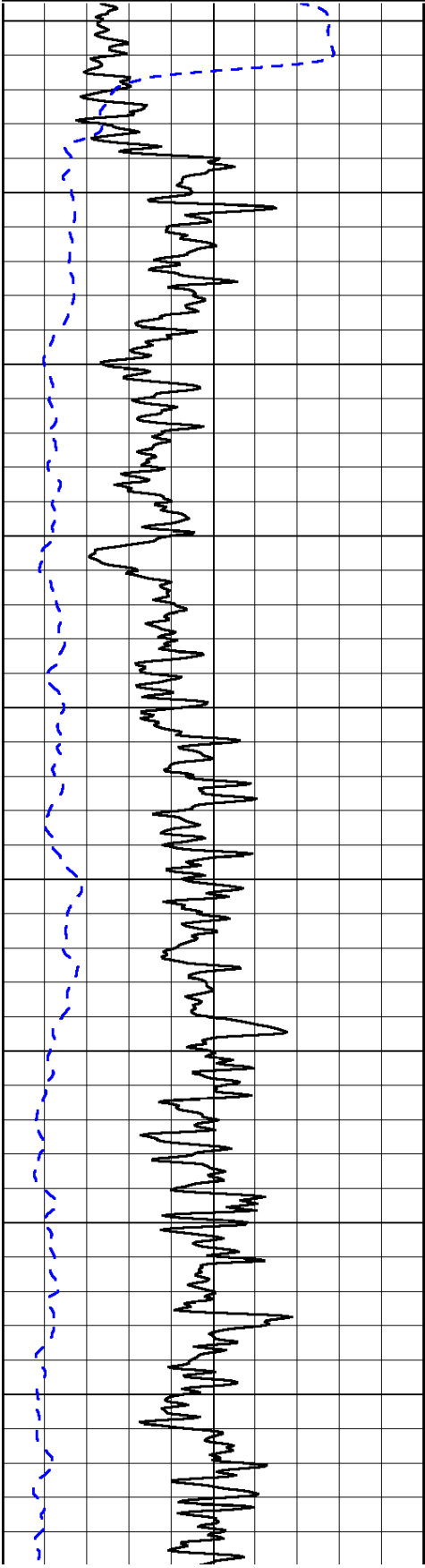
Great Bend,
South on 281 to county line, 1 South, 1 West, 1/8 South,
West into

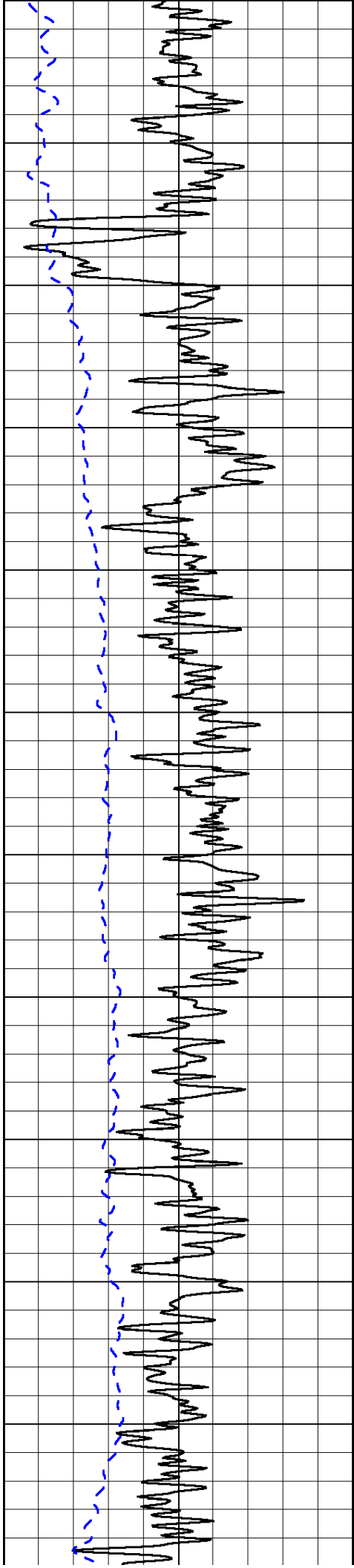
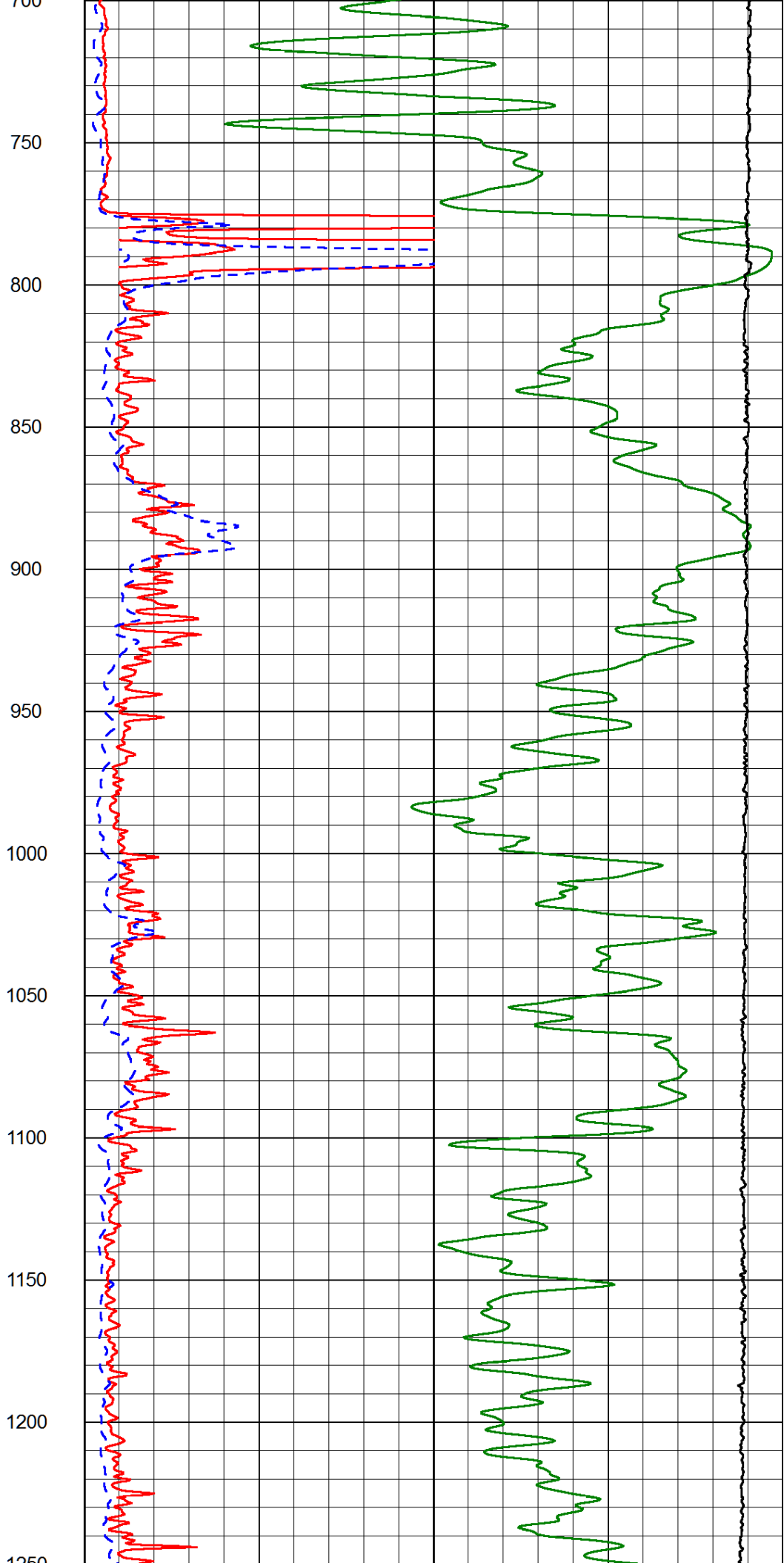
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Dataset Pathname: dil/vamstck
Presentation Format: dil2in
Dataset Creation: Wed Aug 28 17:36:49 2013
Charted by: Depth in Feet scaled 1:600

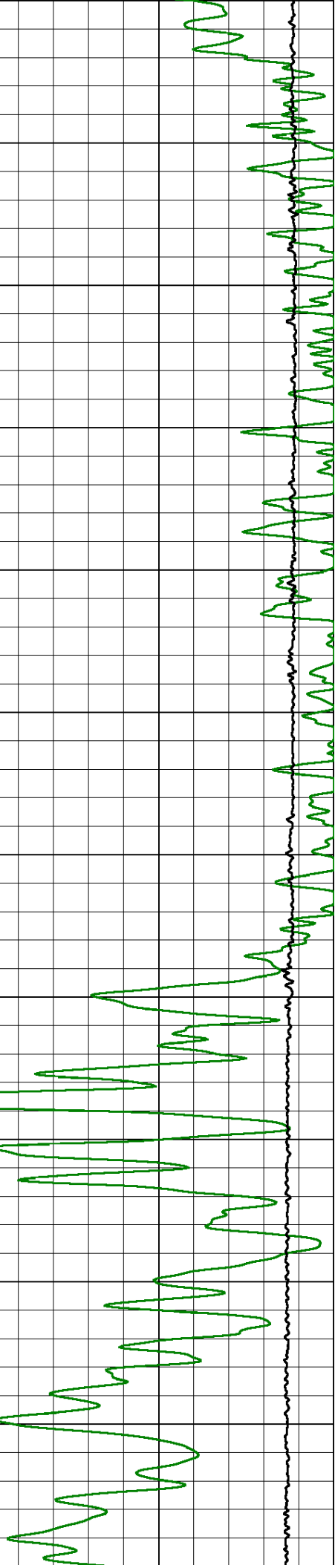
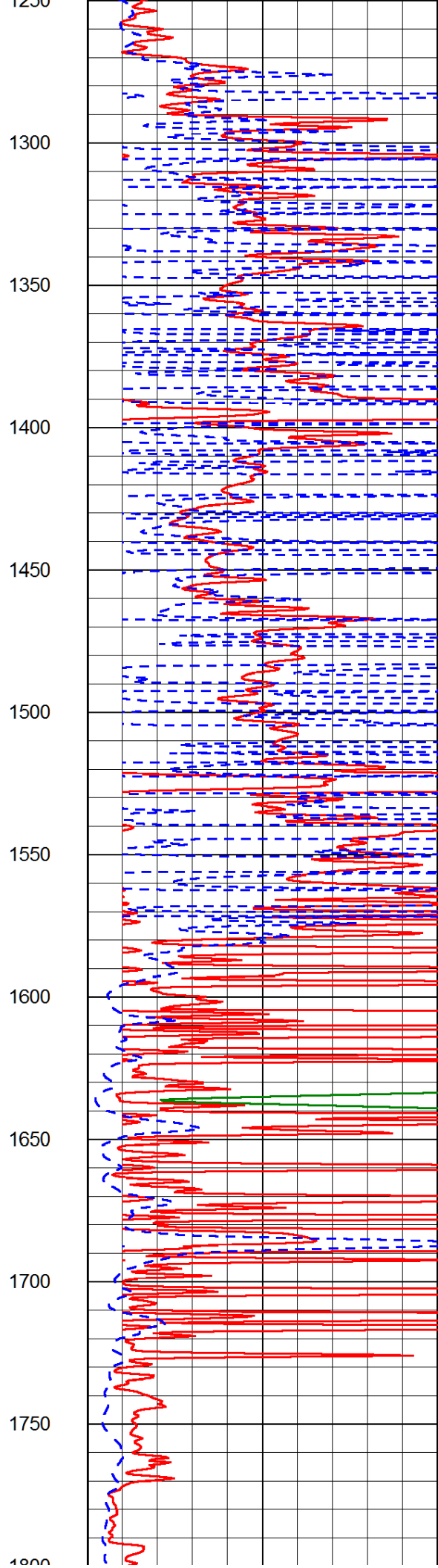
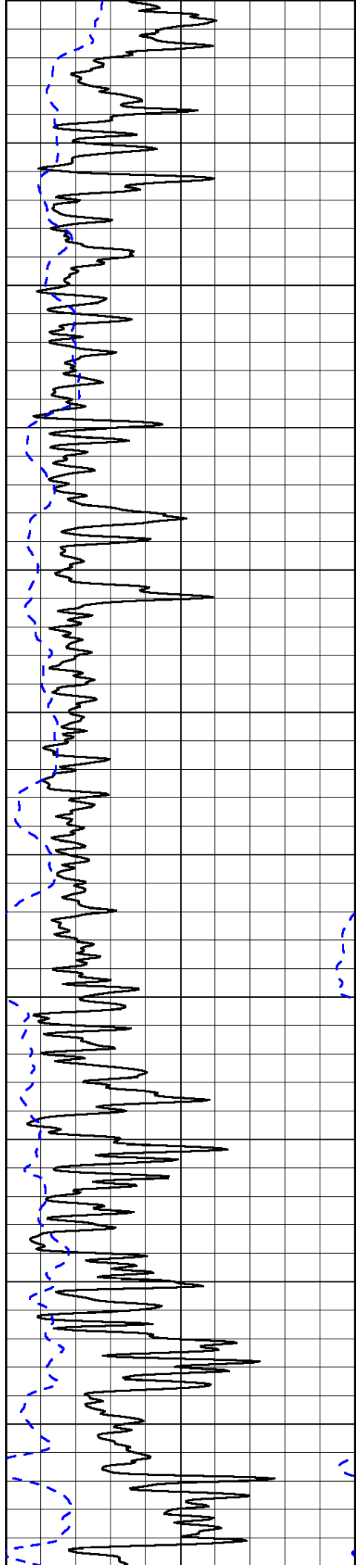
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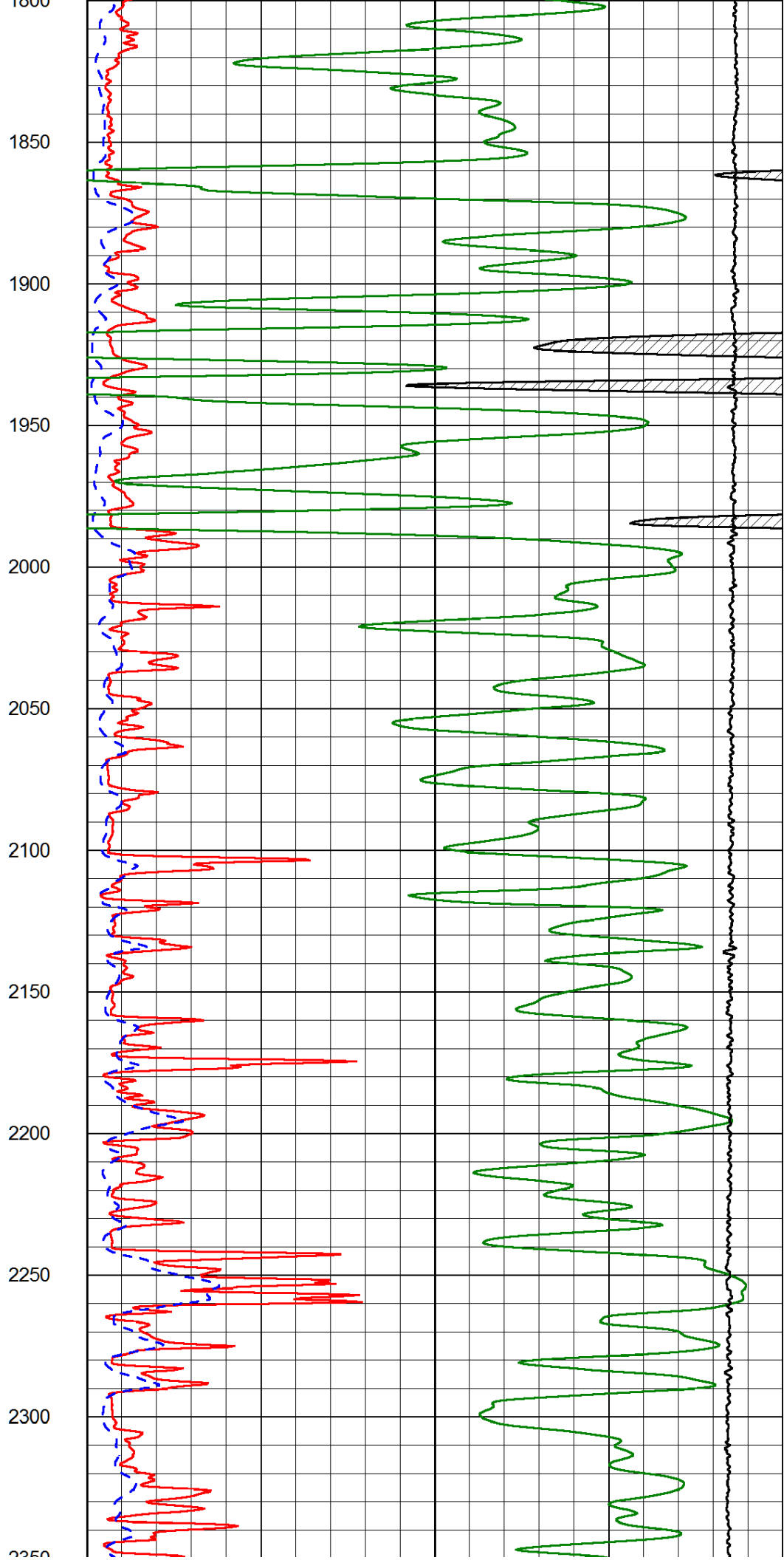
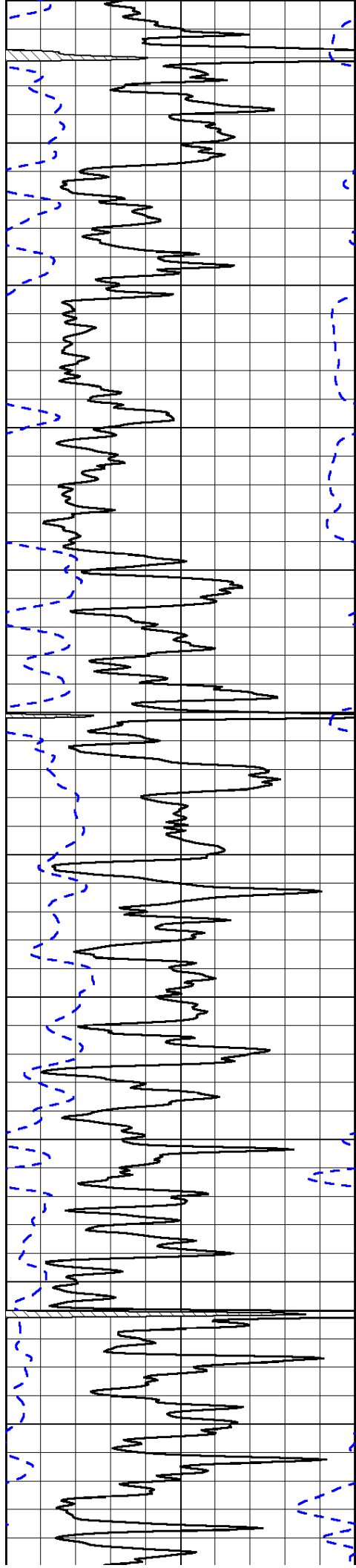
0	Gamma Ray (GAPI)	150
-200	SP (mV)	0

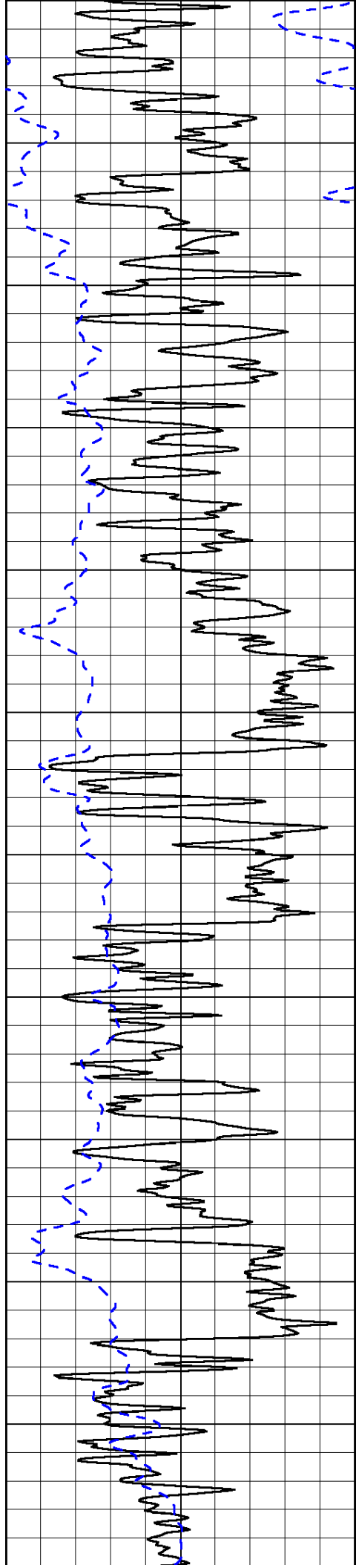
0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0
Shallow Resistivity		
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500



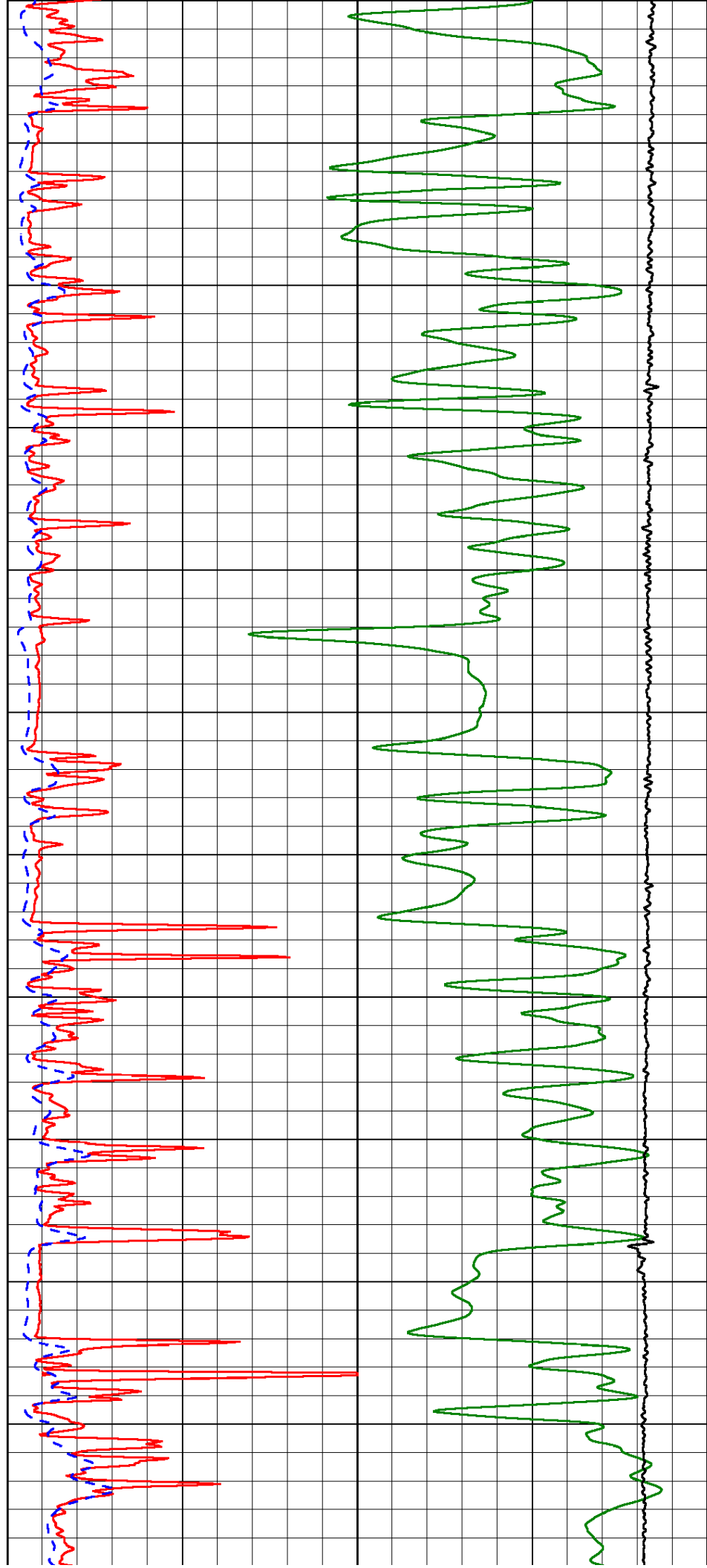


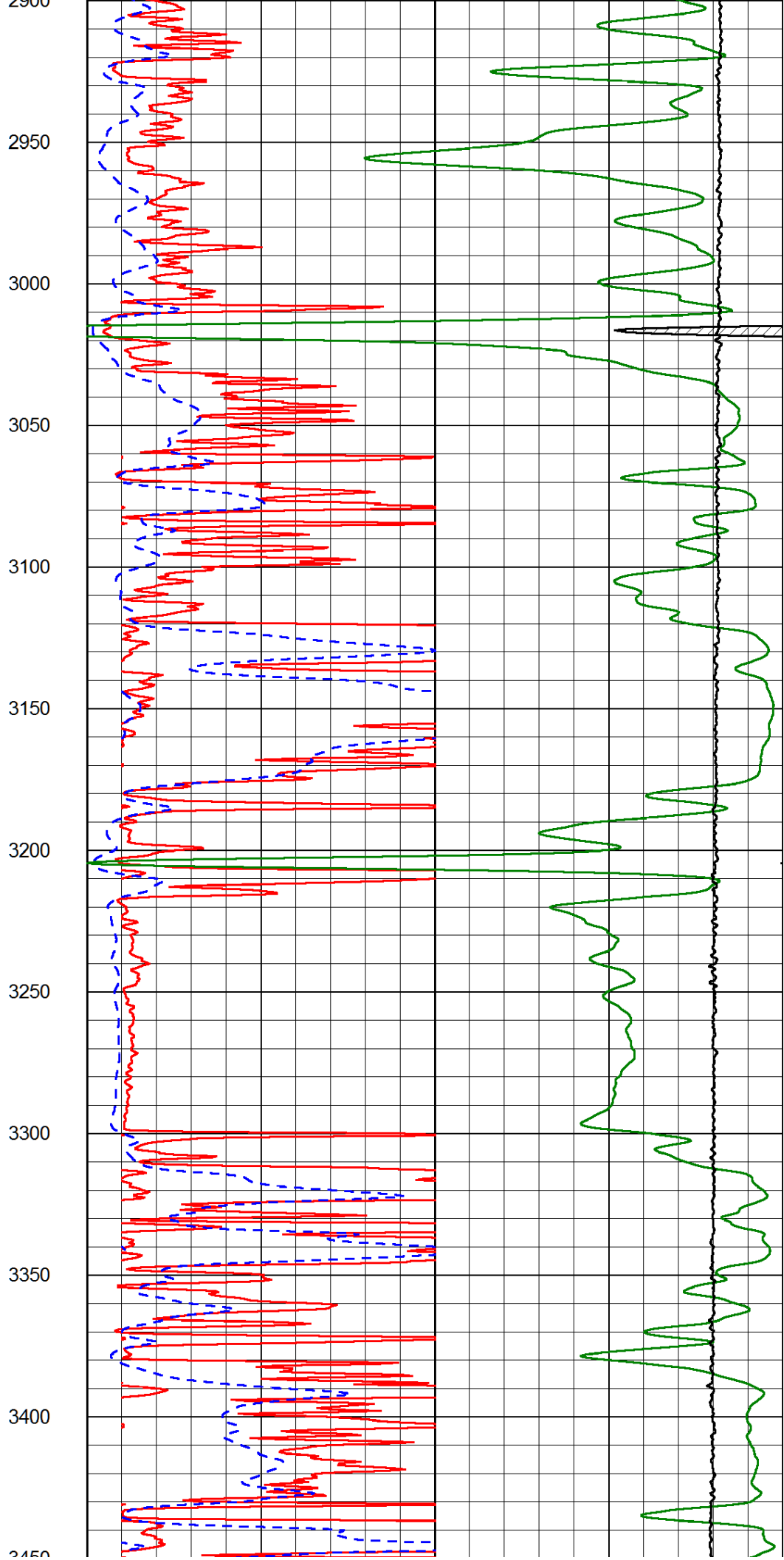
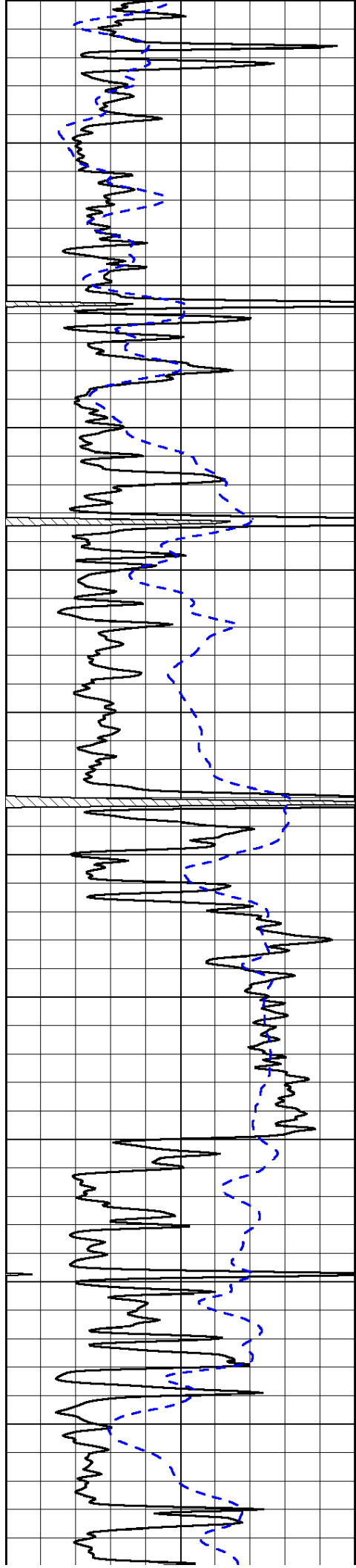


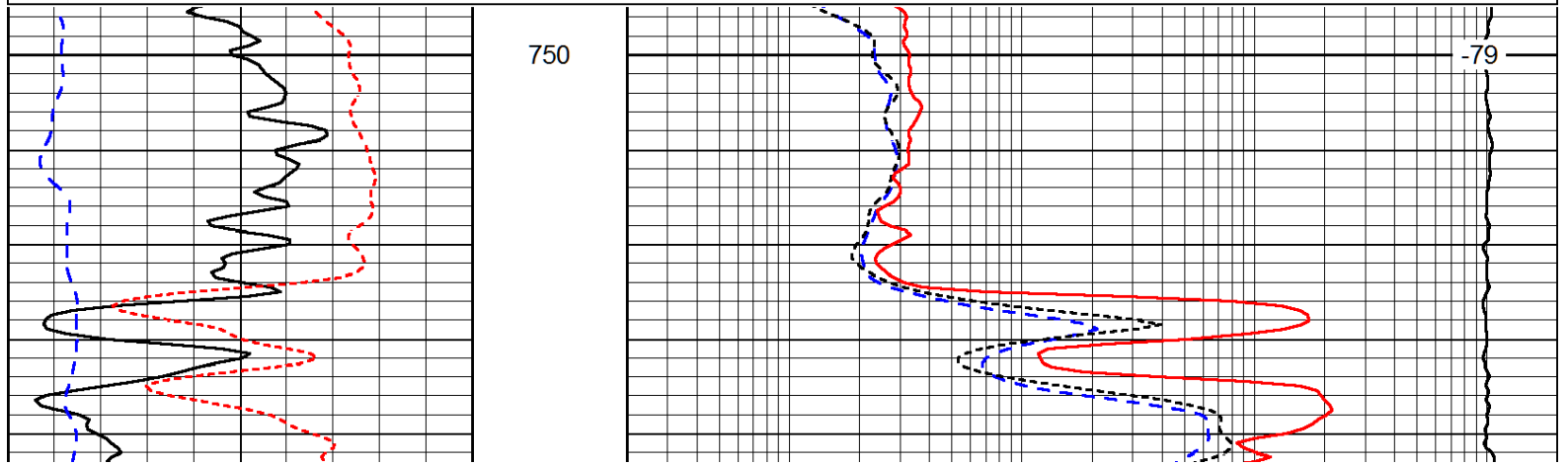
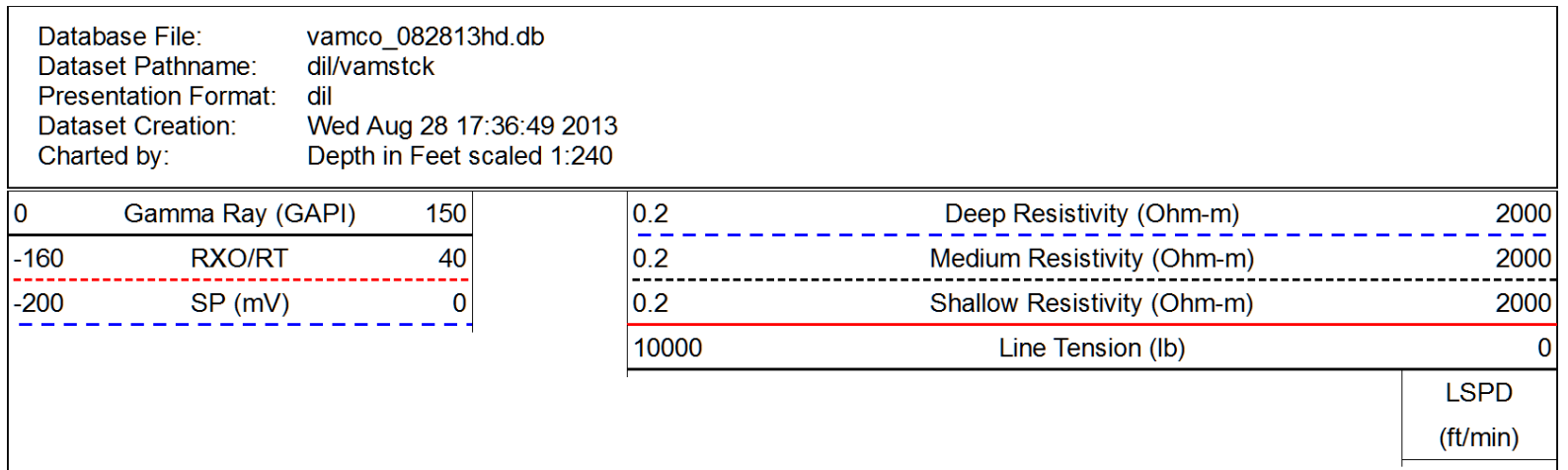
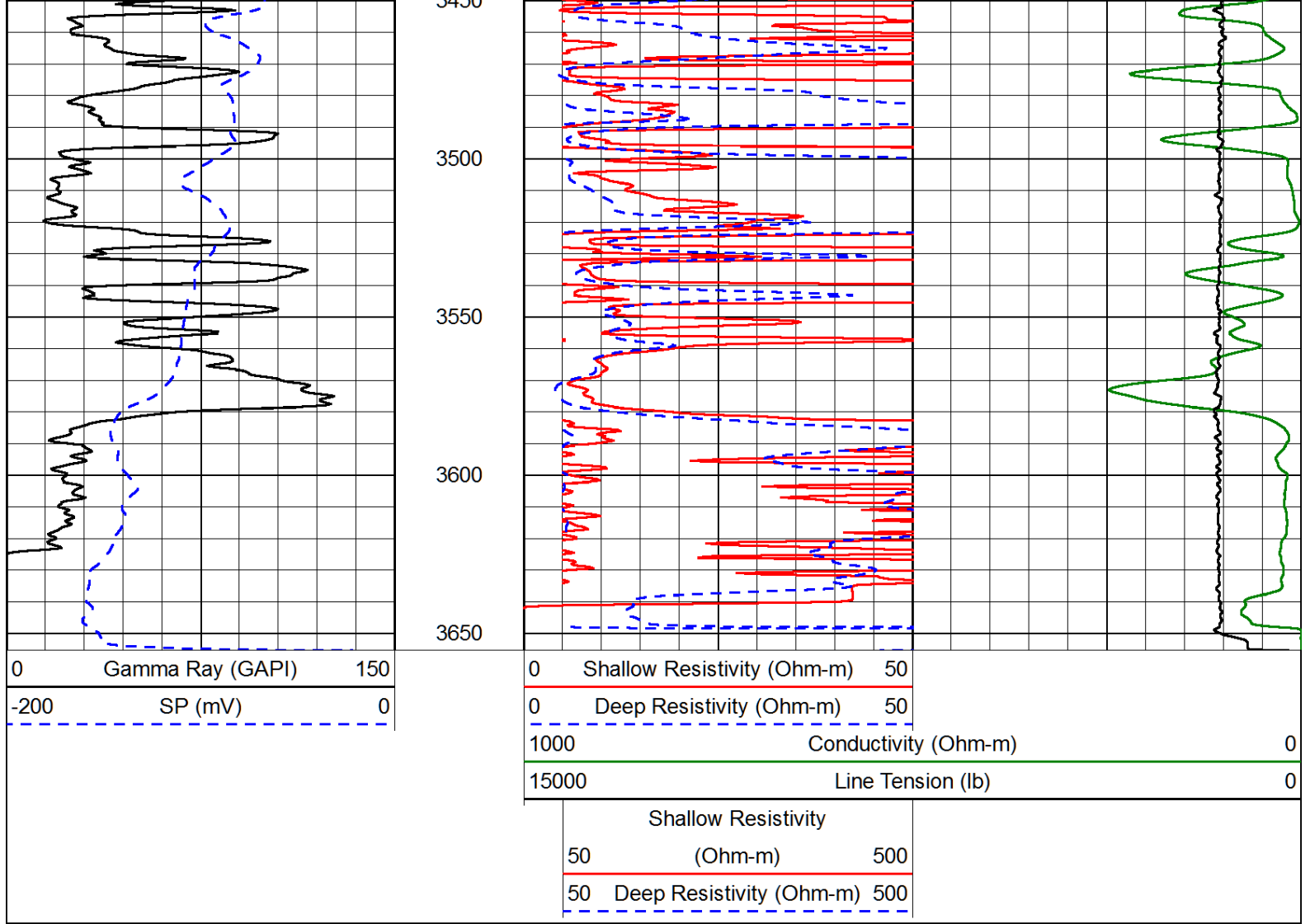


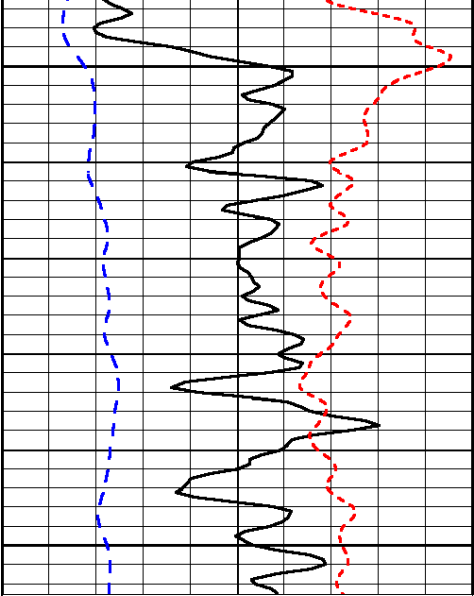


2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900





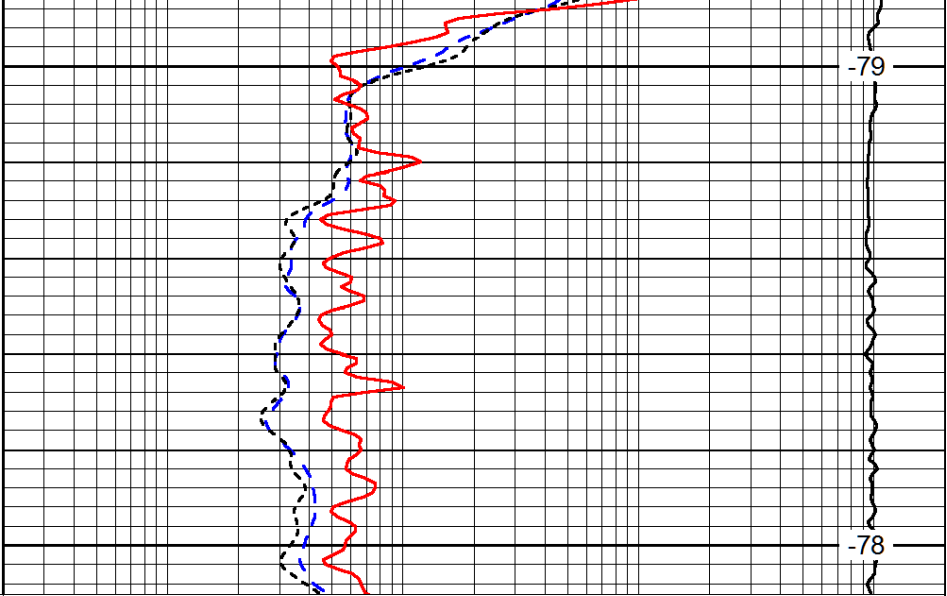




0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

800

850



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

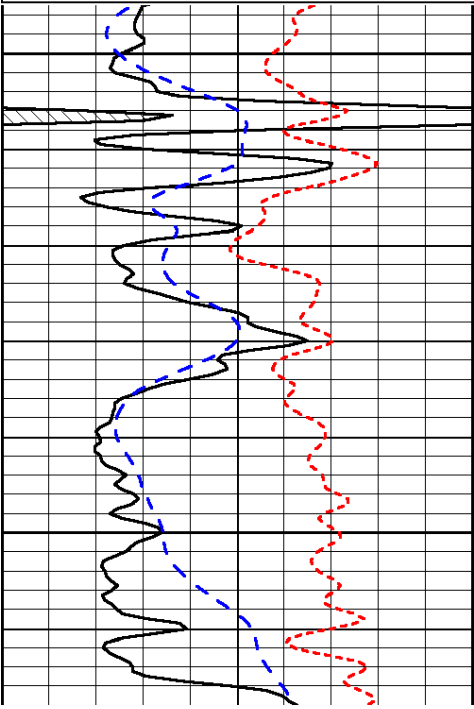
LSPD
(ft/min)

Database File: vamco_082813hd.db
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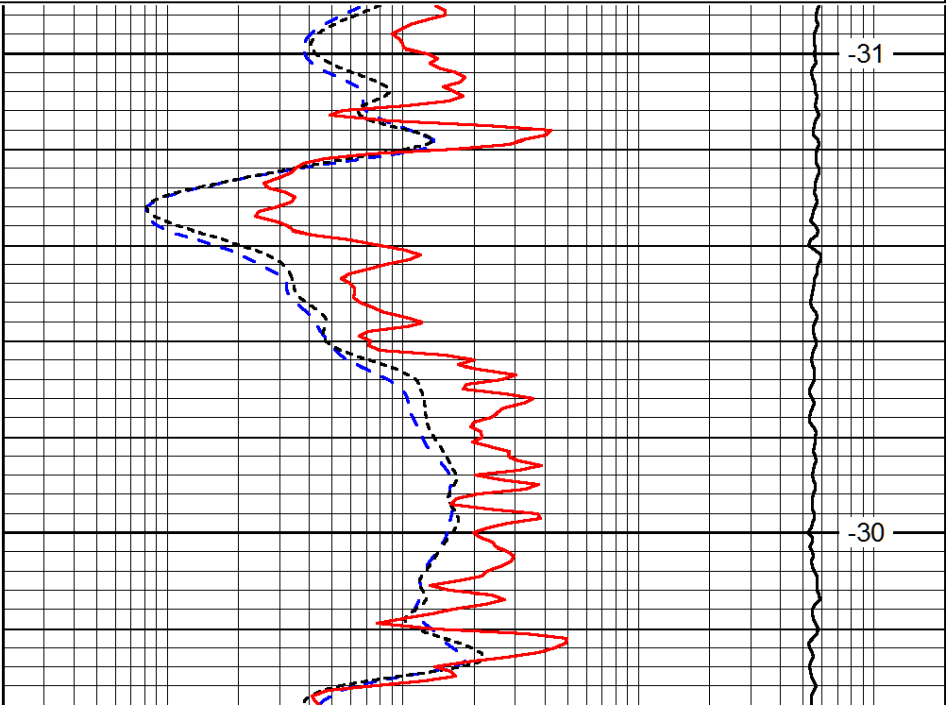
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD
(ft/min)



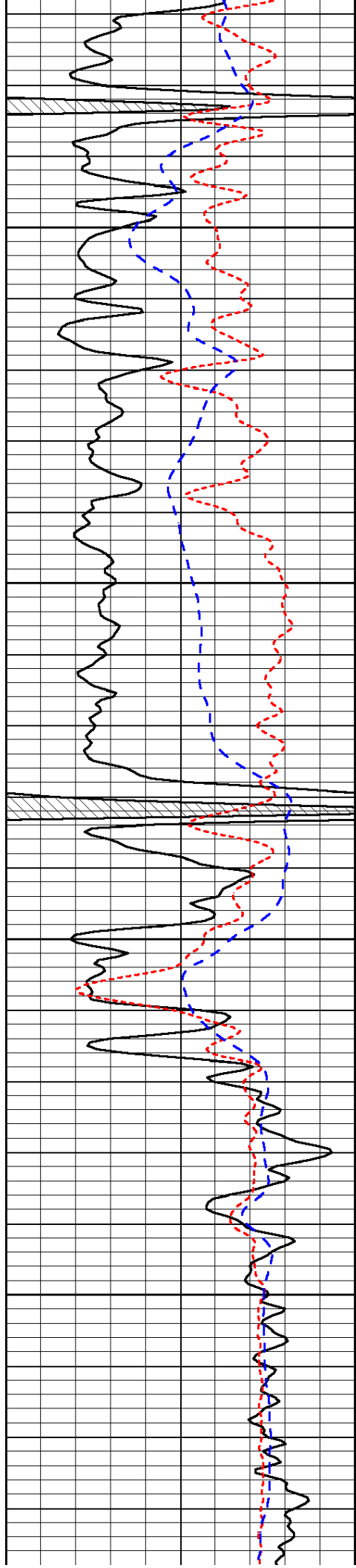
3000

3050



31

30

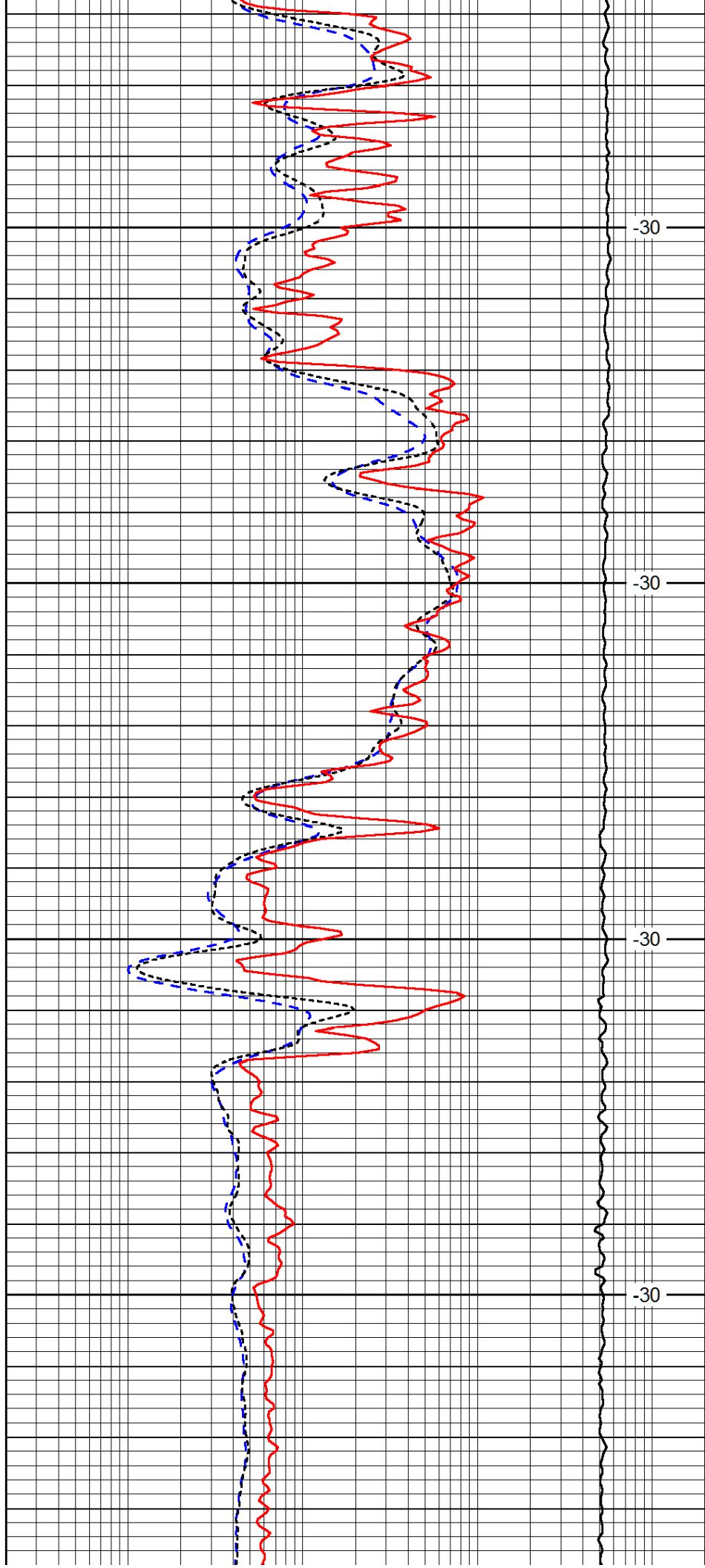


3100

3150

3200

3250

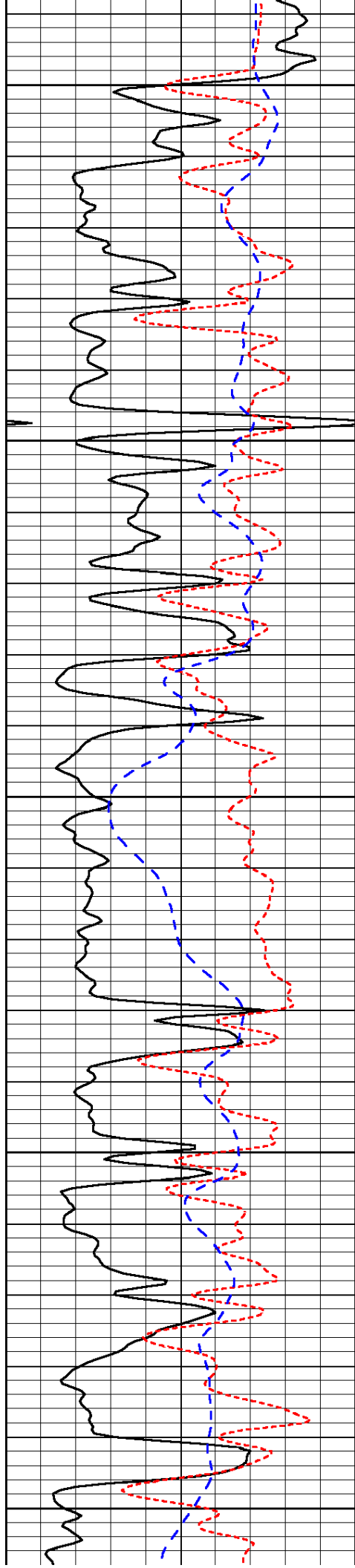


-30

-30

-30

-30



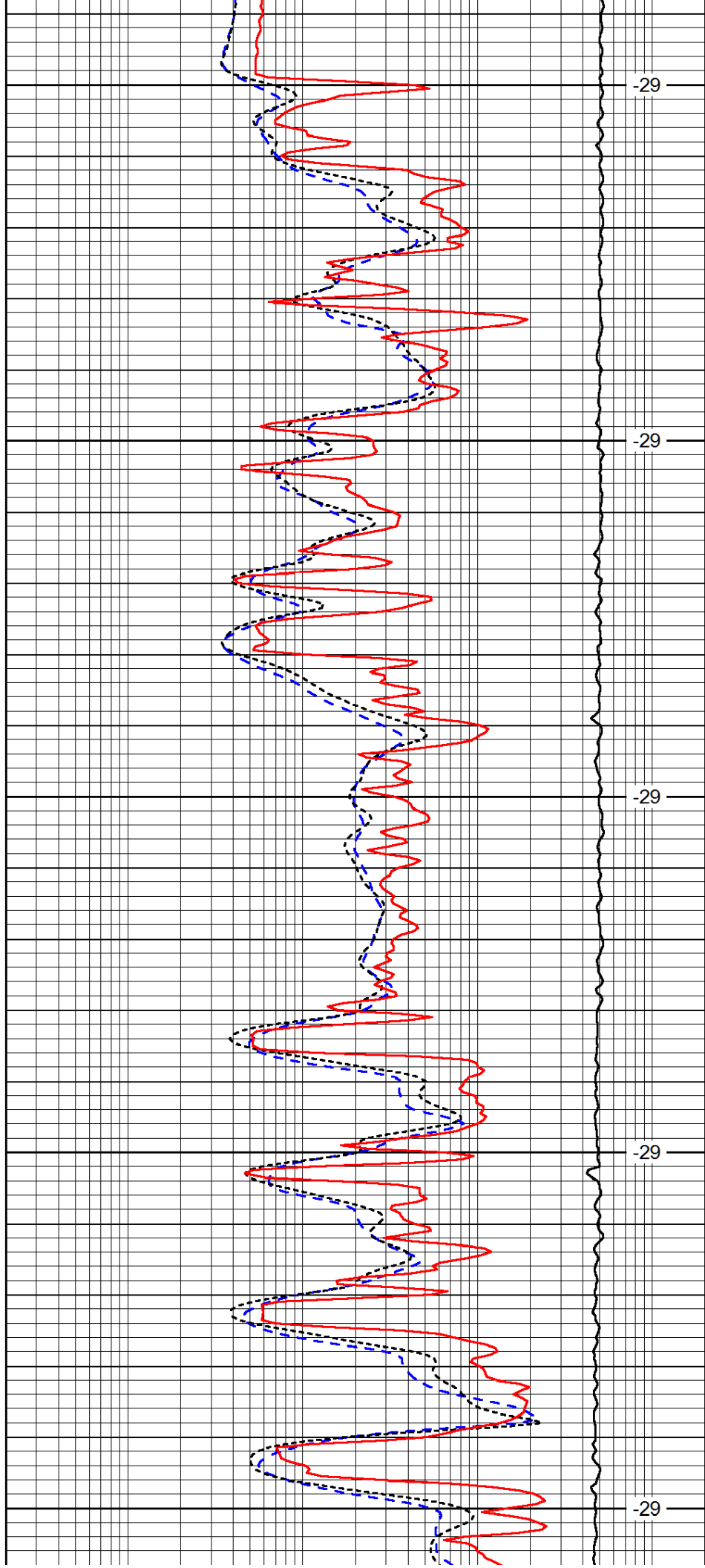
3300

3350

3400

3450

3500



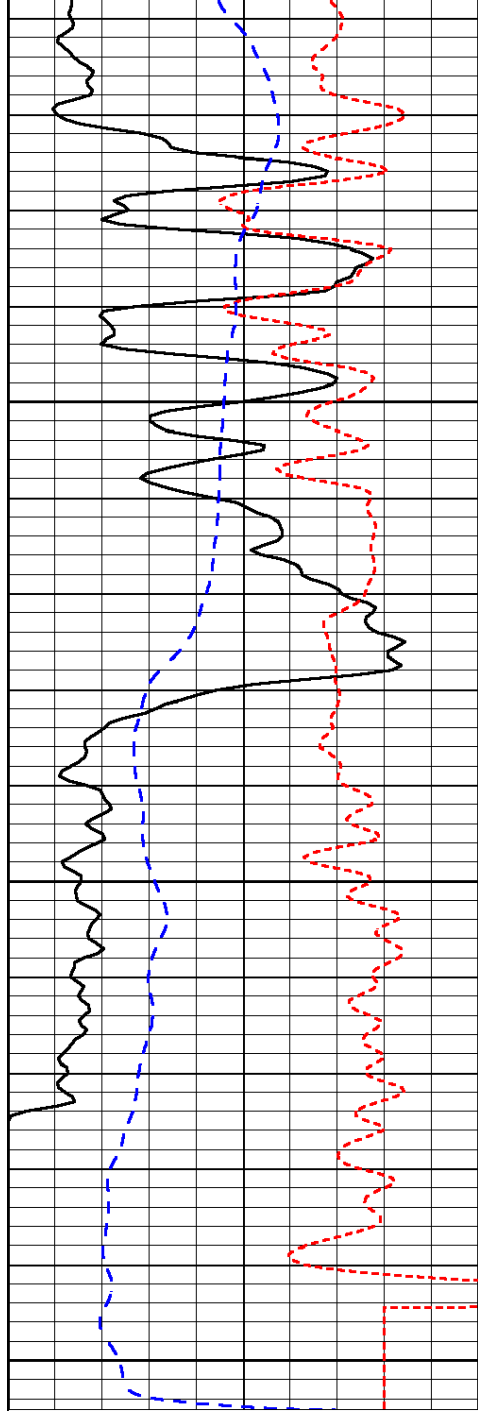
-29

-29

-29

-29

-29

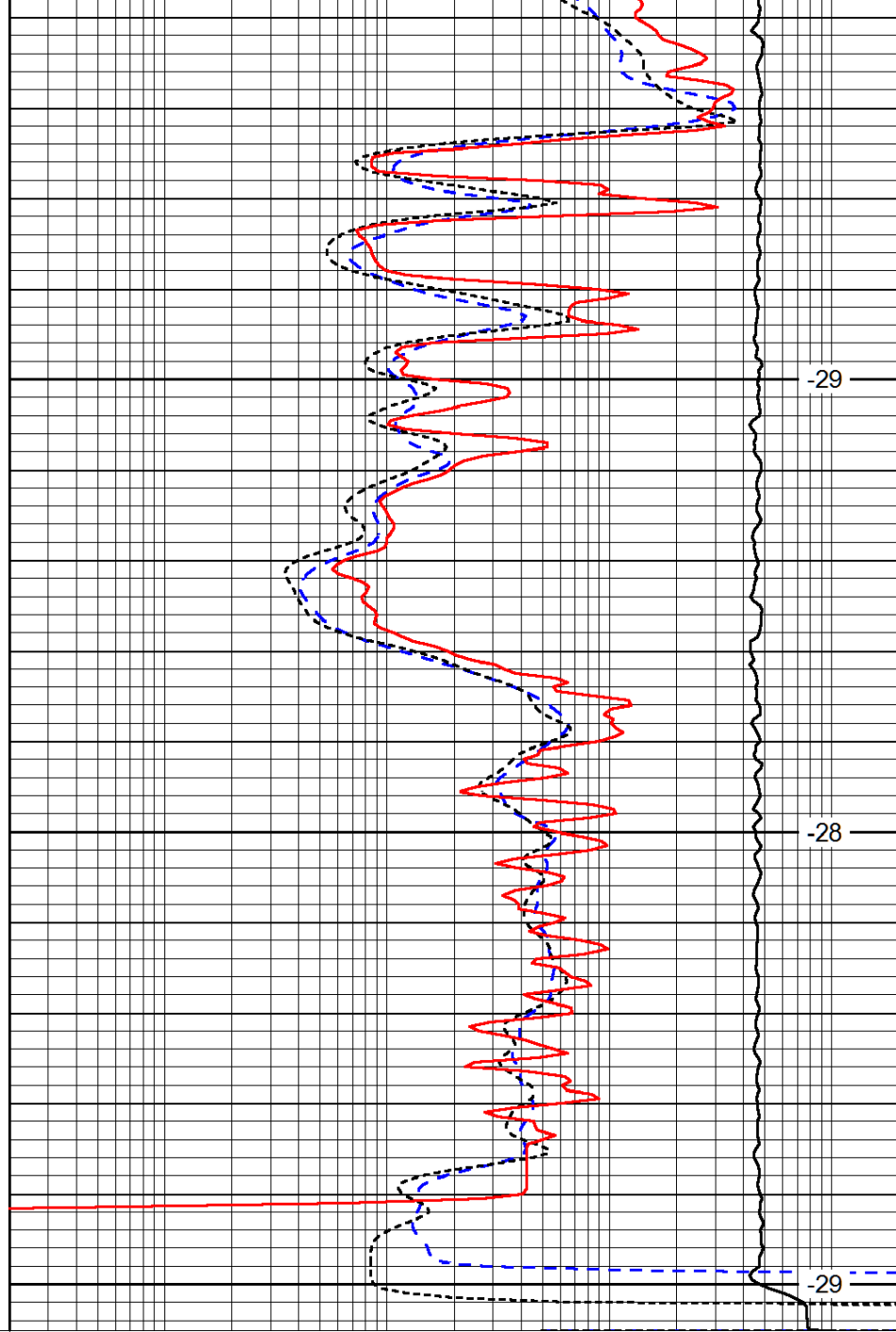


0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

3550

3600

3650



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)