PIONEER

Pioneer Energy Services

Dual Induction Log

API No. 15-167-23,905-00-00

Company Russell Oil, Inc.

Well Steinle No. 3-32

Field

County Russell State Kansas

Location 330' FNL & 1,160' FEL

Sec: 32 Twp: 15S Rge: 14W

Other Services
CNL/CDL
MEL

Elevation
K.B. 1927
D.F.
G.L. 1915

Permanent Datum Ground Level Elevation 1915
Log Measured From Kelly Bushing 12 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date	10/22/2013			
Run Number	One			
Depth Driller	3460			
Depth Logger	3460			
Bottom Logged Interval	3459			
Top Log Interval	900			
Casing Driller	8.625 @ 931			
Casing Logger	930			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	2500			
Density / Viscosity	9.0 52			
pH / Fluid Loss	10.0 6.8			
Source of Sample	Flowline			
Rm @ Meas. Temp	1.0 @ 76			
Rmf @ Meas. Temp	.75 @ 76			
Rmc @ Meas. Temp	1.35 @ 76			
Source of Rmf / Rmc	Charts			
Rm @ BHT	.69 @ 111			
Operating Rig Time	4 Hours			
Max. Rec. Temp. F	111			
Equipment Number	108			
Location	Hays			
Recorded By	J. Long			
Witnessed By	Kitt Noah			

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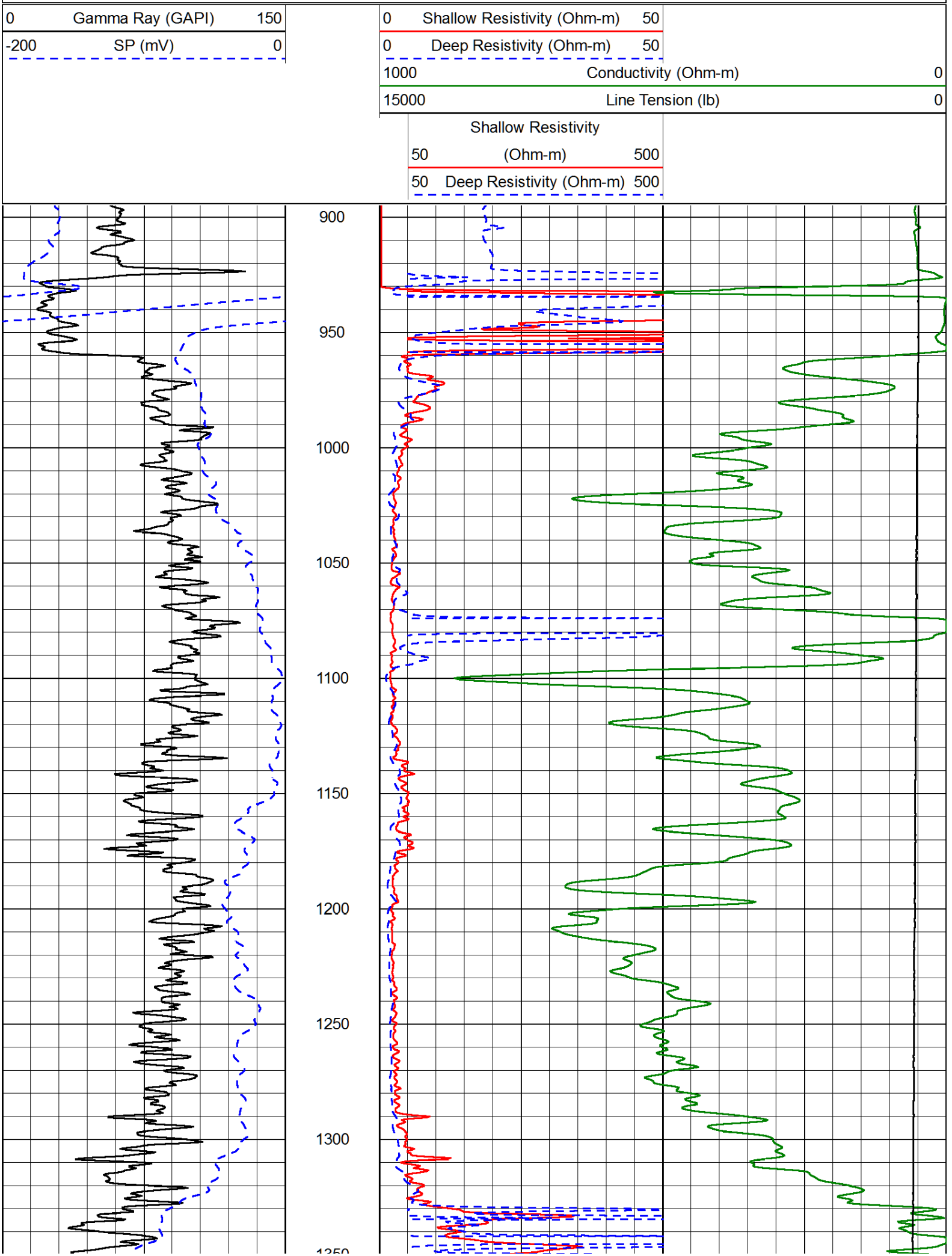
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

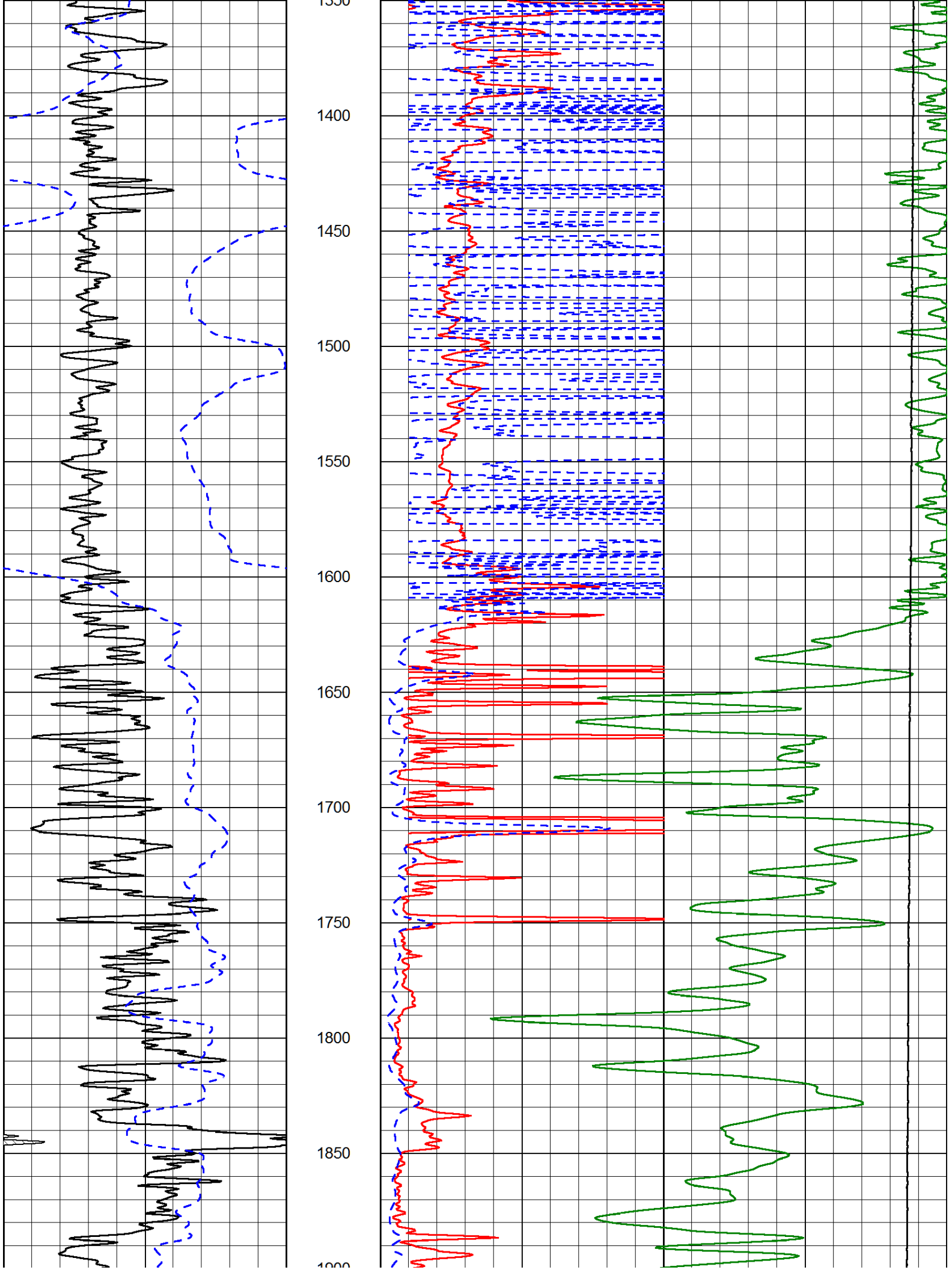
Comments

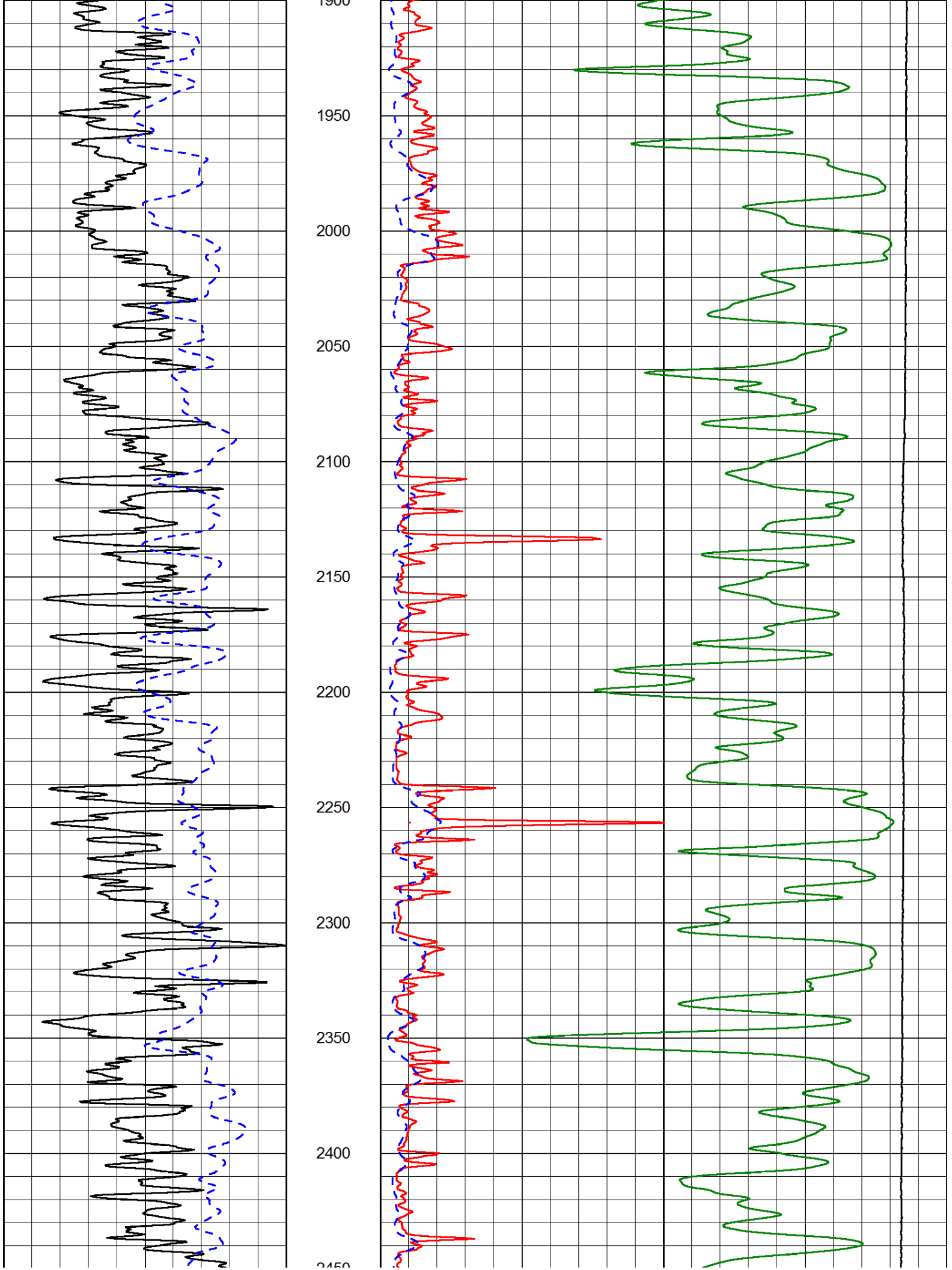
Thank you for using Log-Tech, Inc.
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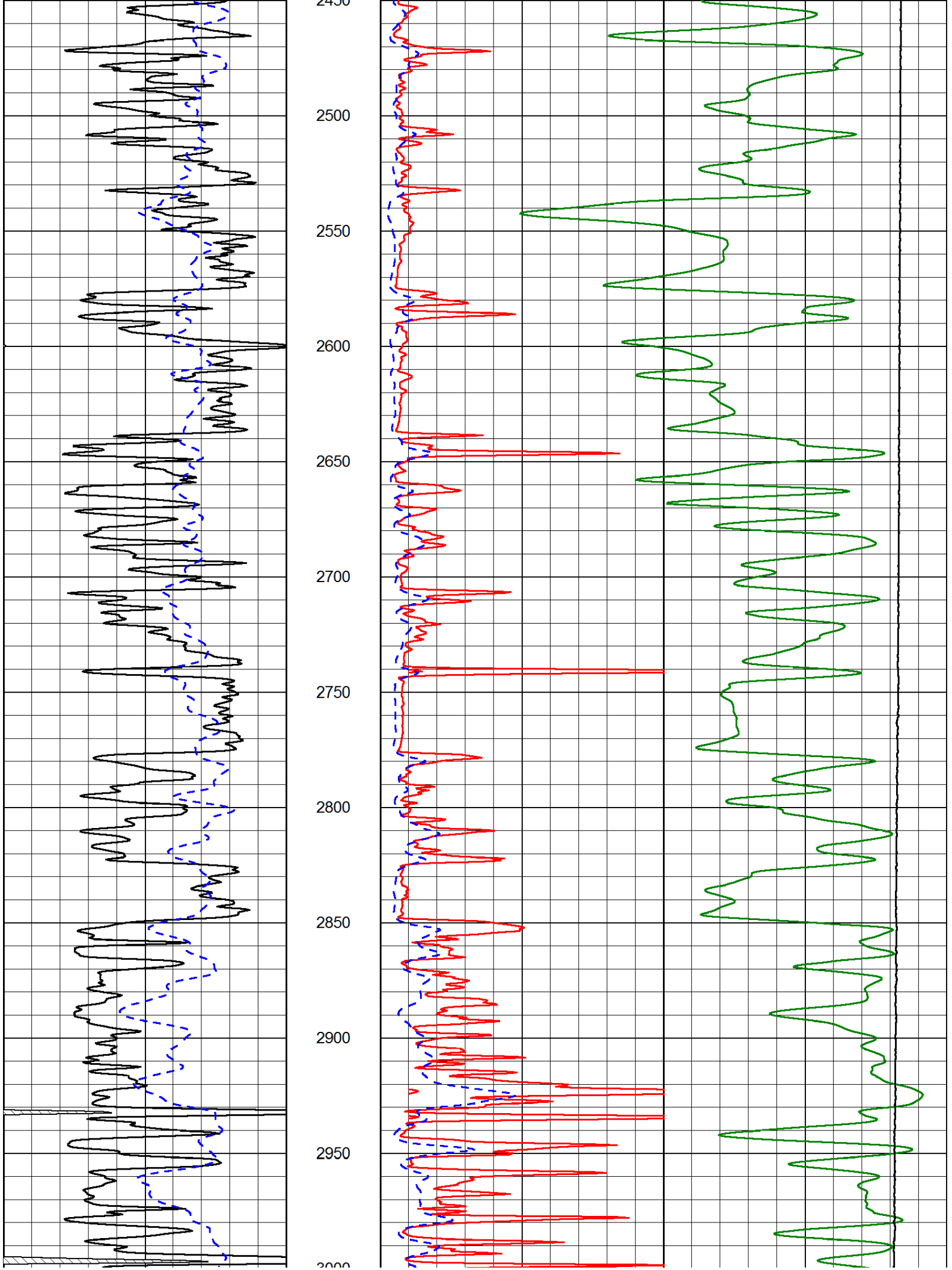
Milberger, 3/4 East, South Into

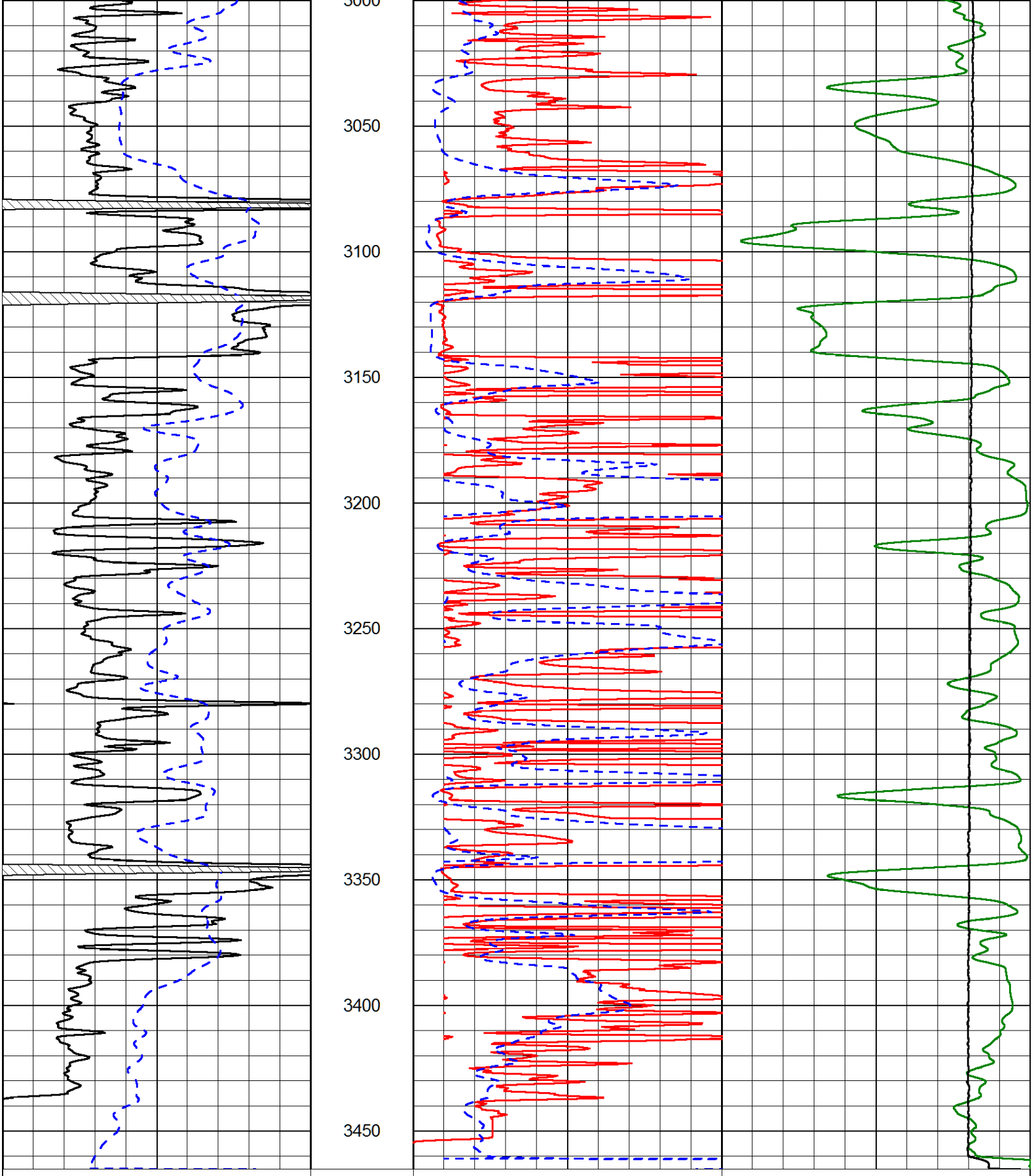
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Presentation Format:	dil2in
Dataset Creation:	Tue Oct 22 22:41:40 2013
Charted by:	Depth in Feet scaled 1:600


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
900
950
1000
1050
1100
1150
1200
1250
1300

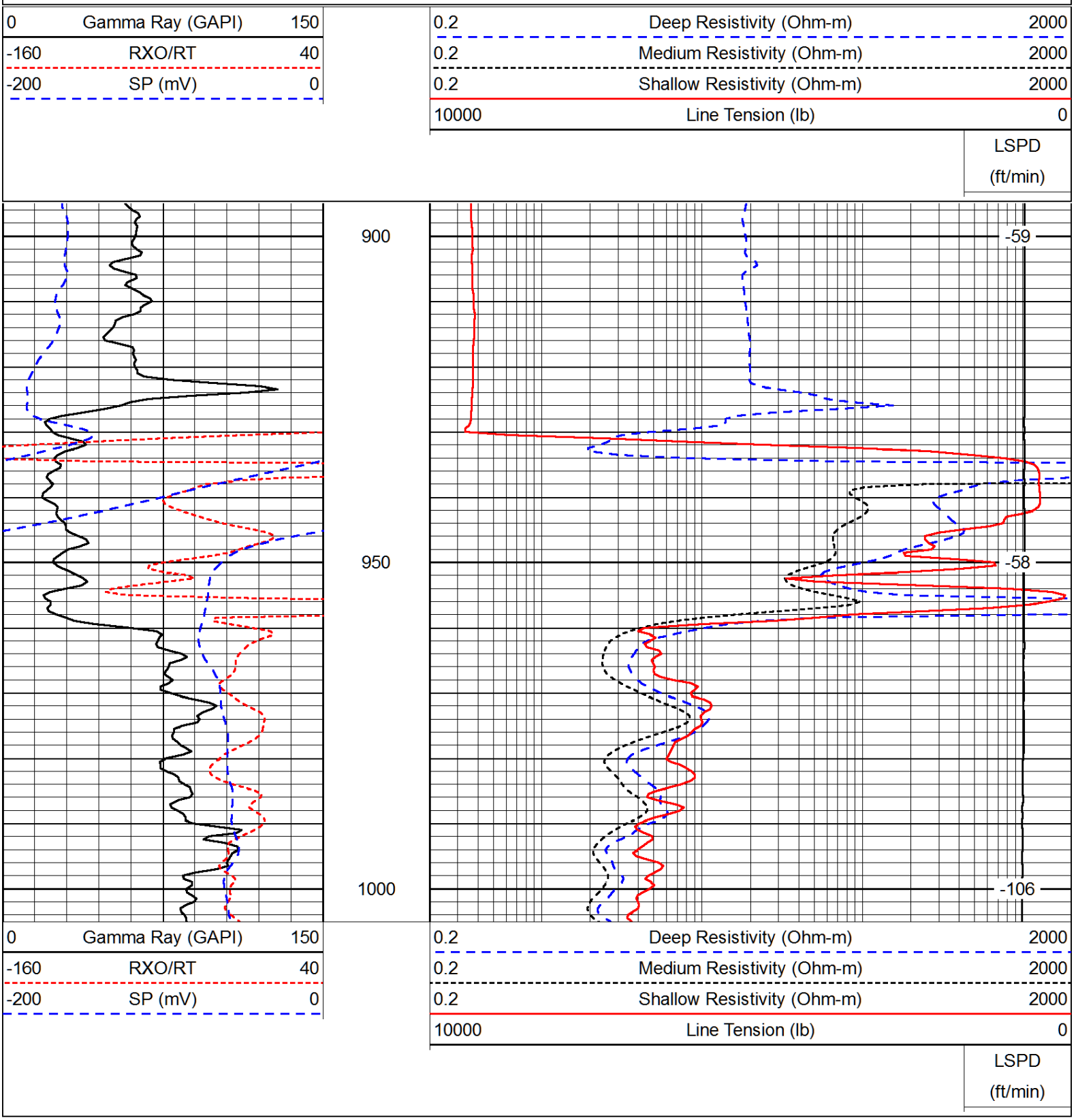

1350
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900


1900
1950
2000
2050
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2150
2200
2250
2300
2350
2400
2450

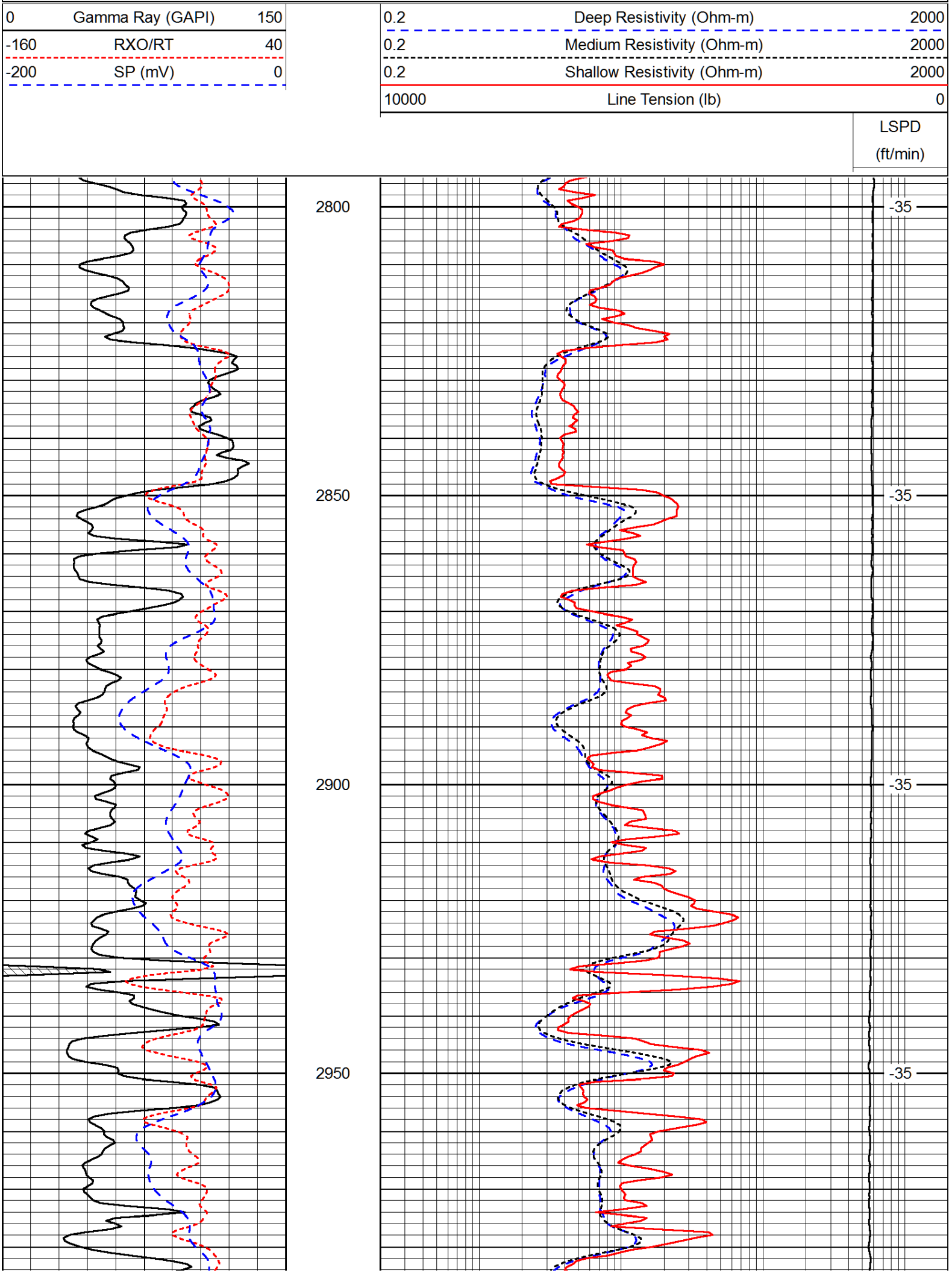

2450
2500
2550
2600
2650
2700
2750
2800
2850
2900
2950
3000

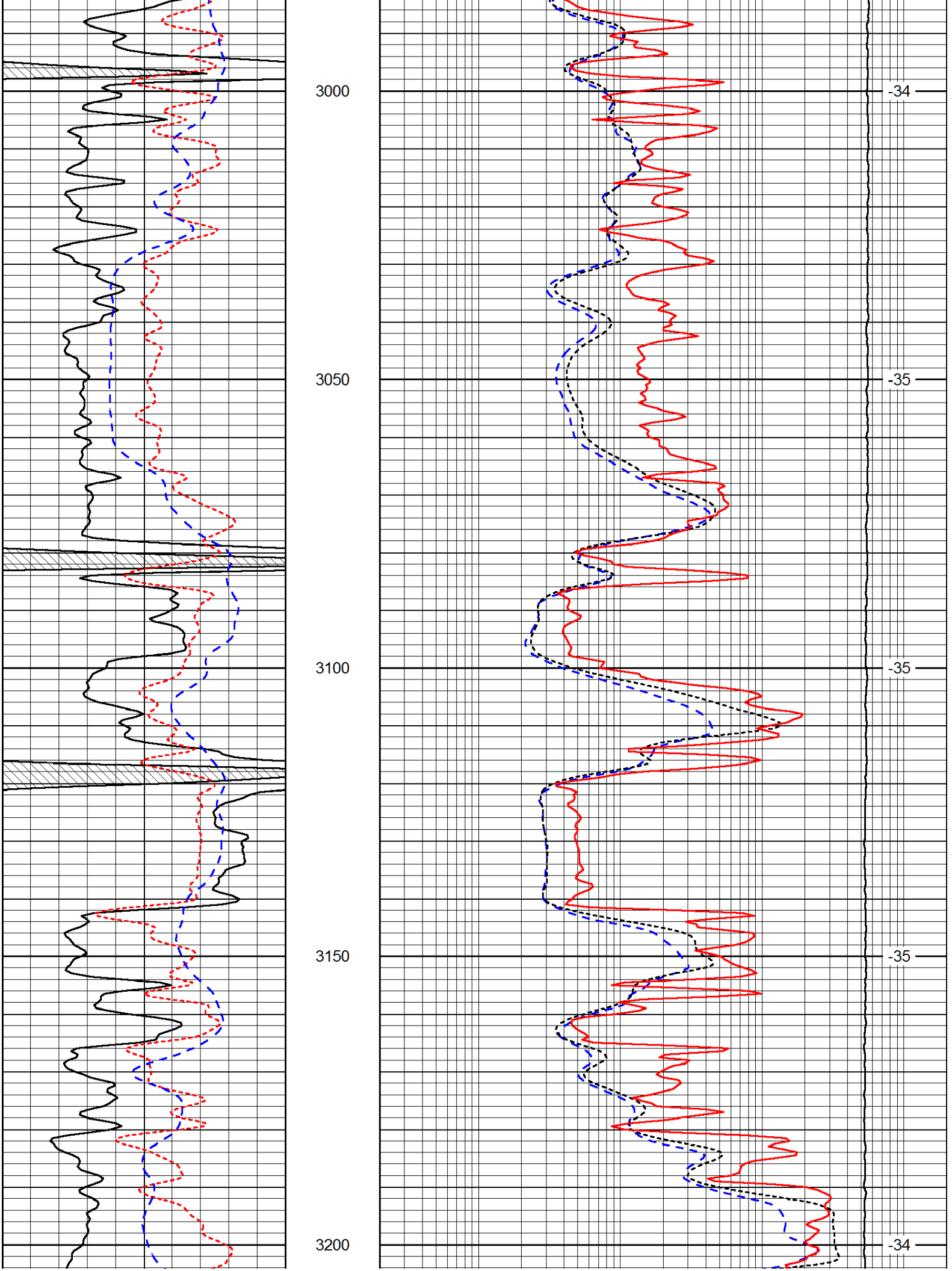

3000
3050
3100
3150
3200
3250
3300
3350
3400
3450
0 Gamma Ray (GAPI) 150
-200 SP (mV) 0
0 Shallow Resistivity (Ohm-m) 50
0 Deep Resistivity (Ohm-m) 50
1000 Conductivity (Ohm-m) 0
15000 Line Tension (lb) 0
Shallow Resistivity
50 (Ohm-m) 500
50 Deep Resistivity (Ohm-m) 500

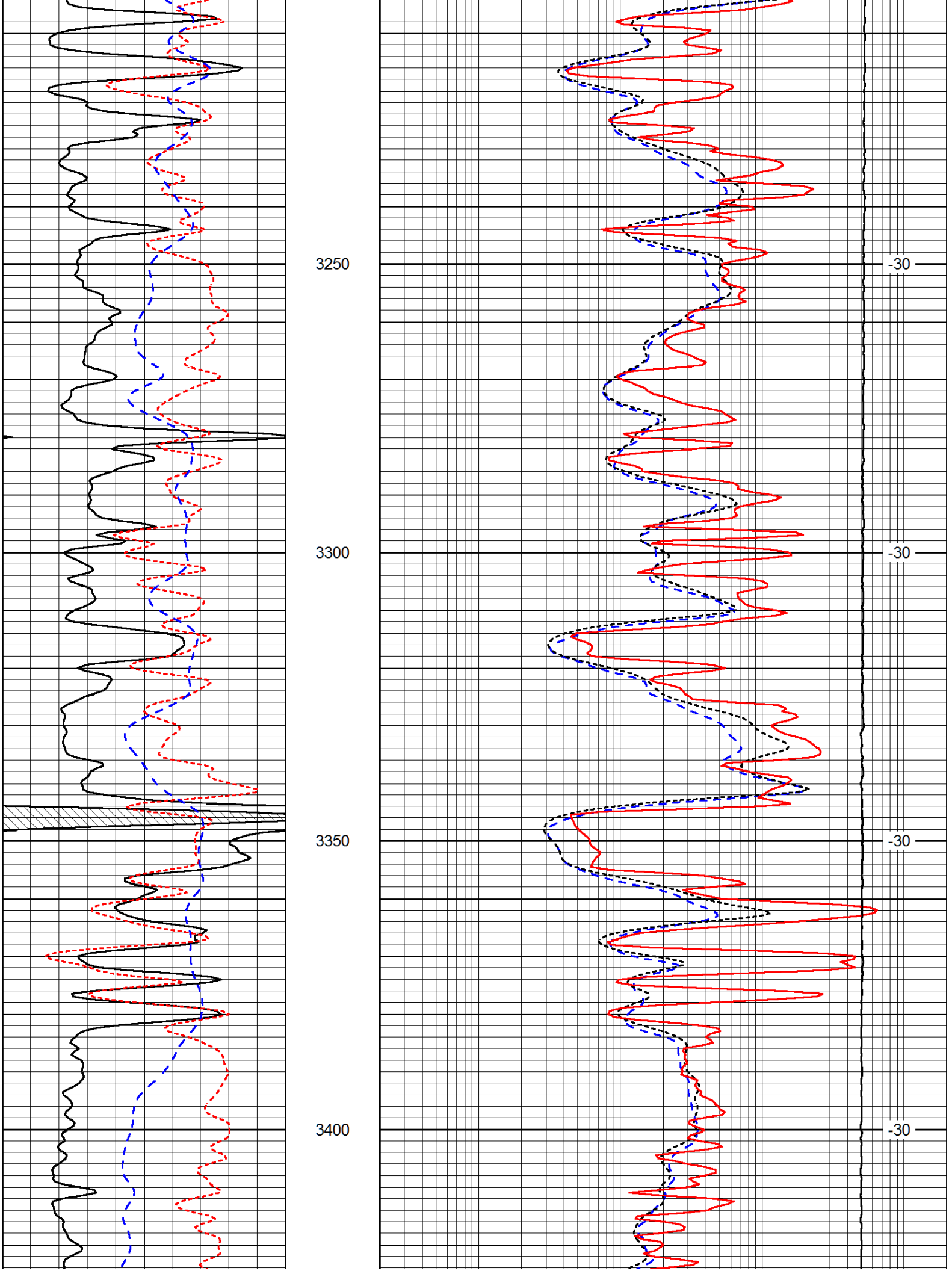
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Dataset Pathname:	dil/russstck
Presentation Format:	dil
Dataset Creation:	Tue Oct 22 22:41:40 2013
Charted by:	Depth in Feet scaled 1:240



Database File:	russelloil_steinle_3-32hd.db
Dataset Pathname:	dil/russstck
Presentation Format:	dil
Dataset Creation:	Tue Oct 22 22:41:40 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
-35
-35
-35


3000
3050
3100
3150
3200
-34
-35
-35
-35
-34


3250
3300
3350
3400
-30
-30
-30
-30



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)