



Pioneer Energy Services

Dual Induction Log

API No.	15-065-24,094-00-00	
Company	H&C Oil Operating, Inc.	
Well	Berland Trust No.35-1	
Field	Wildcat	
County	Graham	State
		Kansas
Location	1900' FNL & 1200' FEL	
Sec: 35	Twp: 8S	Rge: 21W
Permanent Datum	Ground Level	Elevation 2122
Log Measured From	Kelly Bushing	7 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
		Other Services CNL/CDL MEL
		Elevation K.B. 2129 D.F. 2122 G.L. 2122

Date	1/15/2015
Run Number	One
Depth Driller	3815
Depth Logger	3813
Bottom Logged Interval	3812
Top Log Interval	200
Casing Driller	8.625 @ 219
Casing Logger	224
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	1,600
Density / Viscosity	9.3 54
pH / Fluid Loss	10.5 7.2
Source of Sample	Flowline
Rm @ Meas. Temp	1.2 @ 45
Rmf @ Meas. Temp	.9 @ 45
Rmc @ Meas. Temp	1.62 @ 45
Source of Rmf / Rmc	Charts
Rm @ BHT	.49 @ 111
Operating Rig Time	3 1/2 Hours
Max Rec. Temp. F	111
Equipment Number	51
Location	Hays
Recorded By	C. Desaire
Witnessed By	Marc Downing

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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

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(785) 625-3858

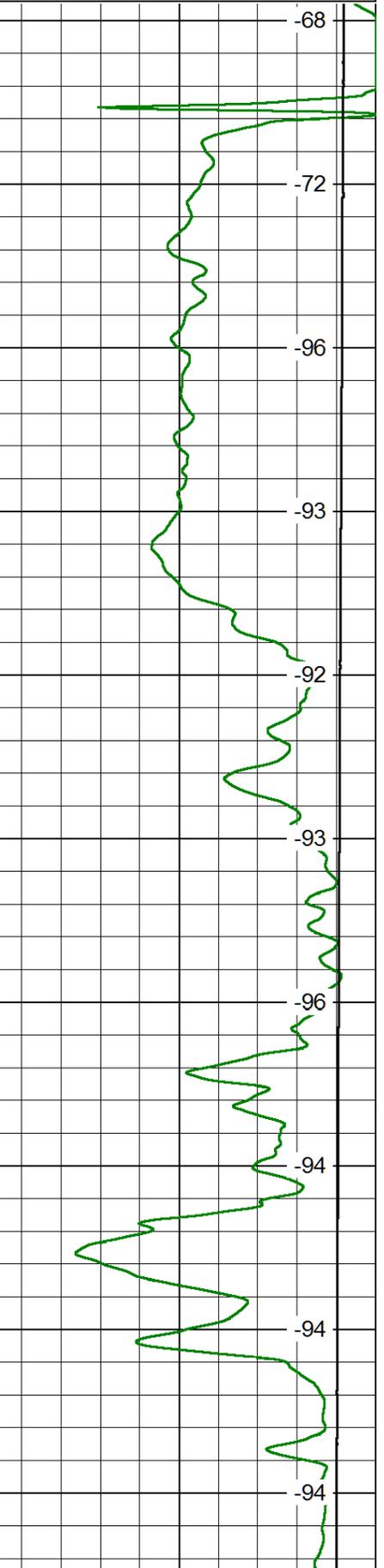
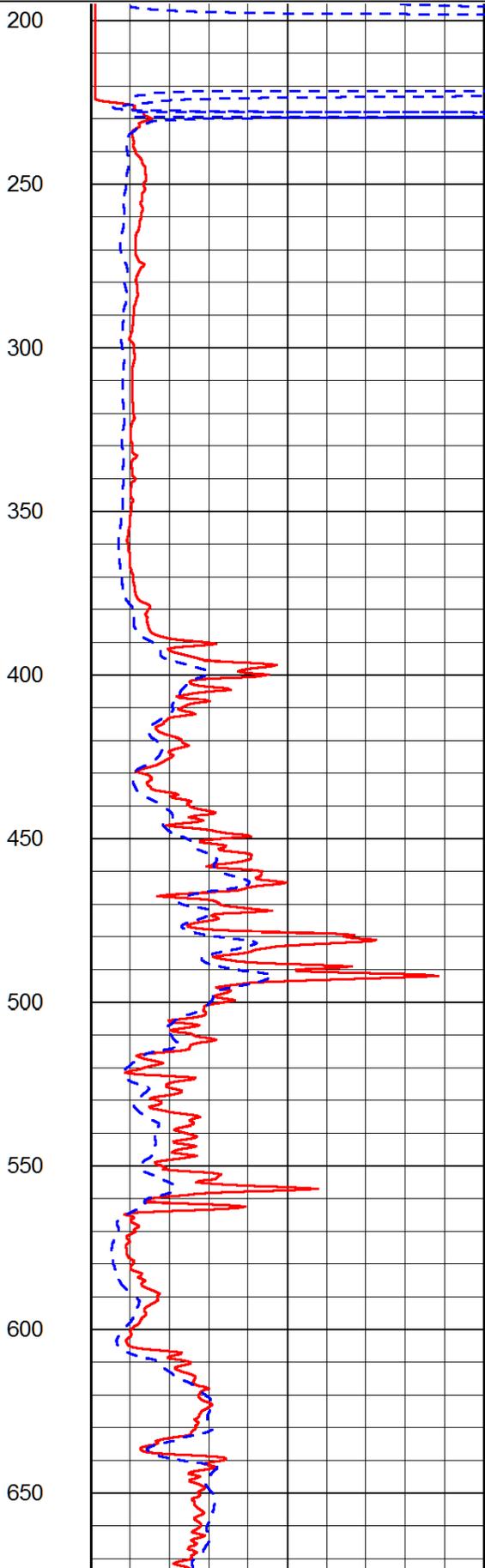
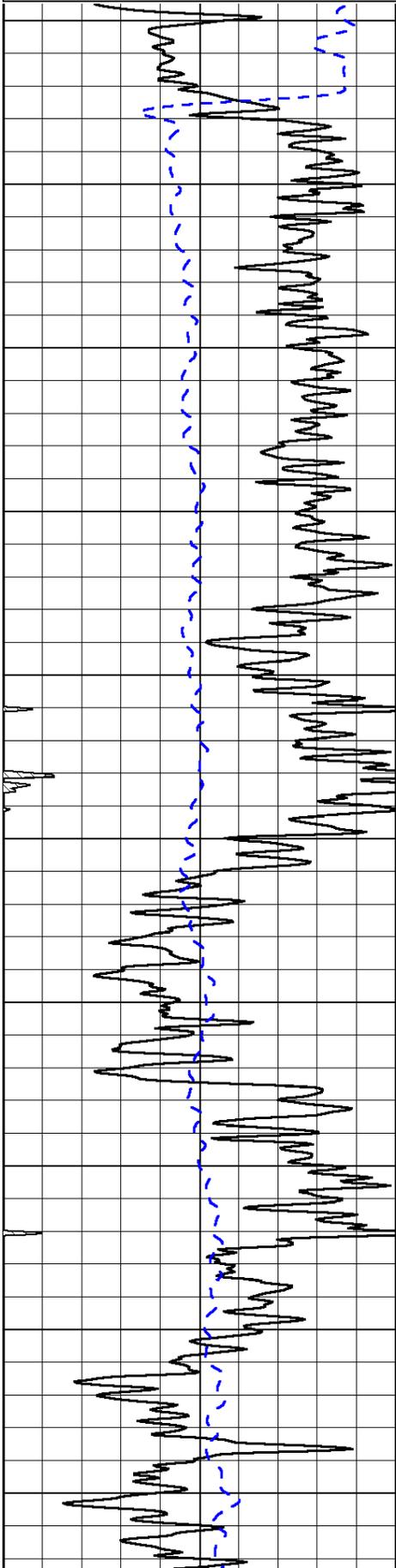
Damar KS, W on K18 to 390 Ave,
1 S, 100' W, S Into

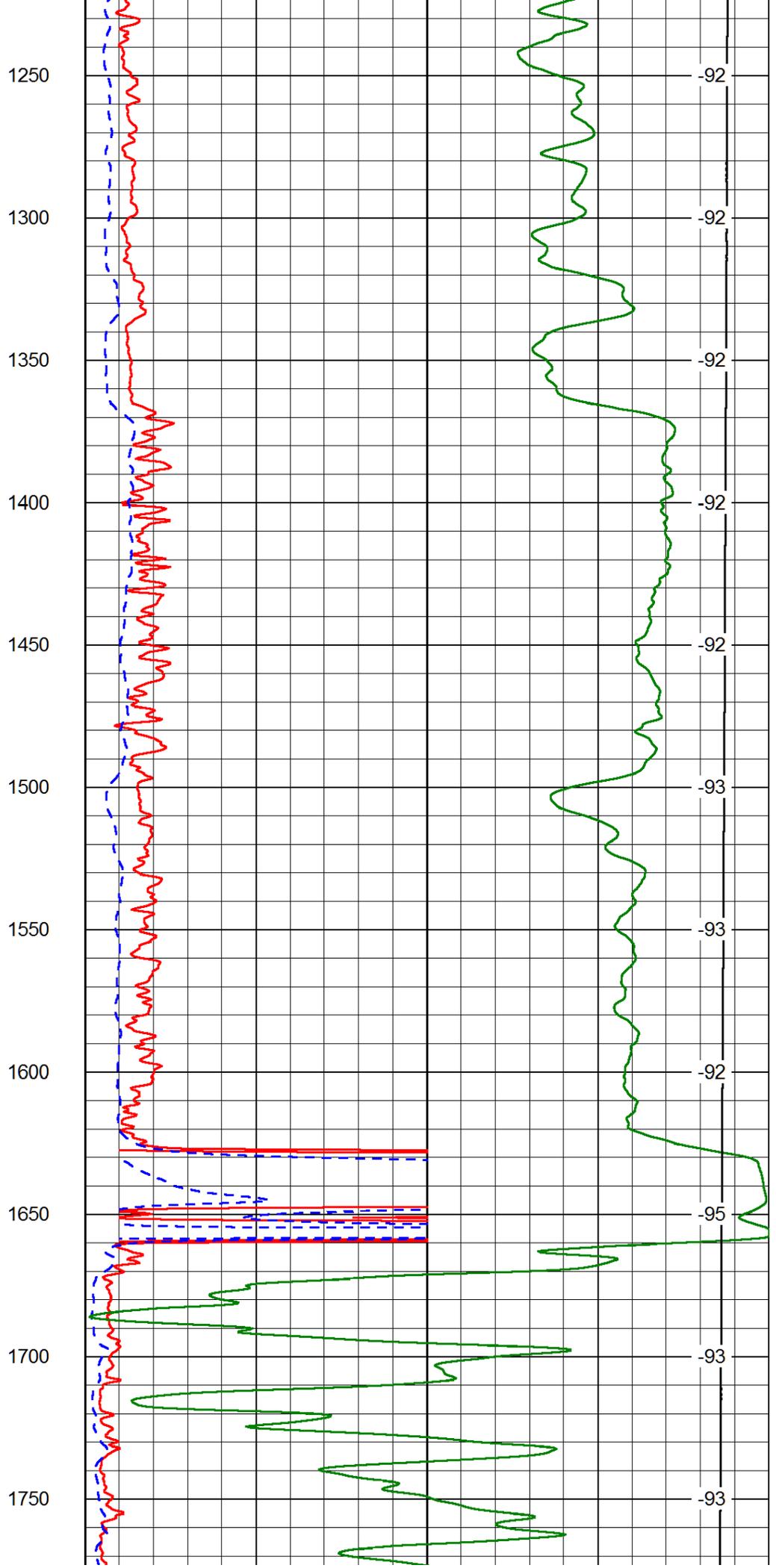
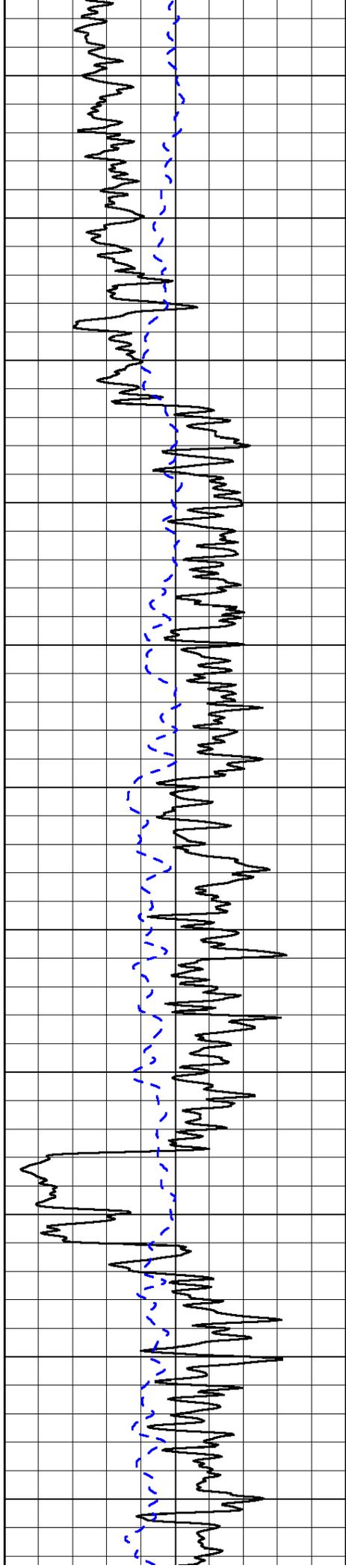
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 Charted by: Depth in Feet scaled 1:600

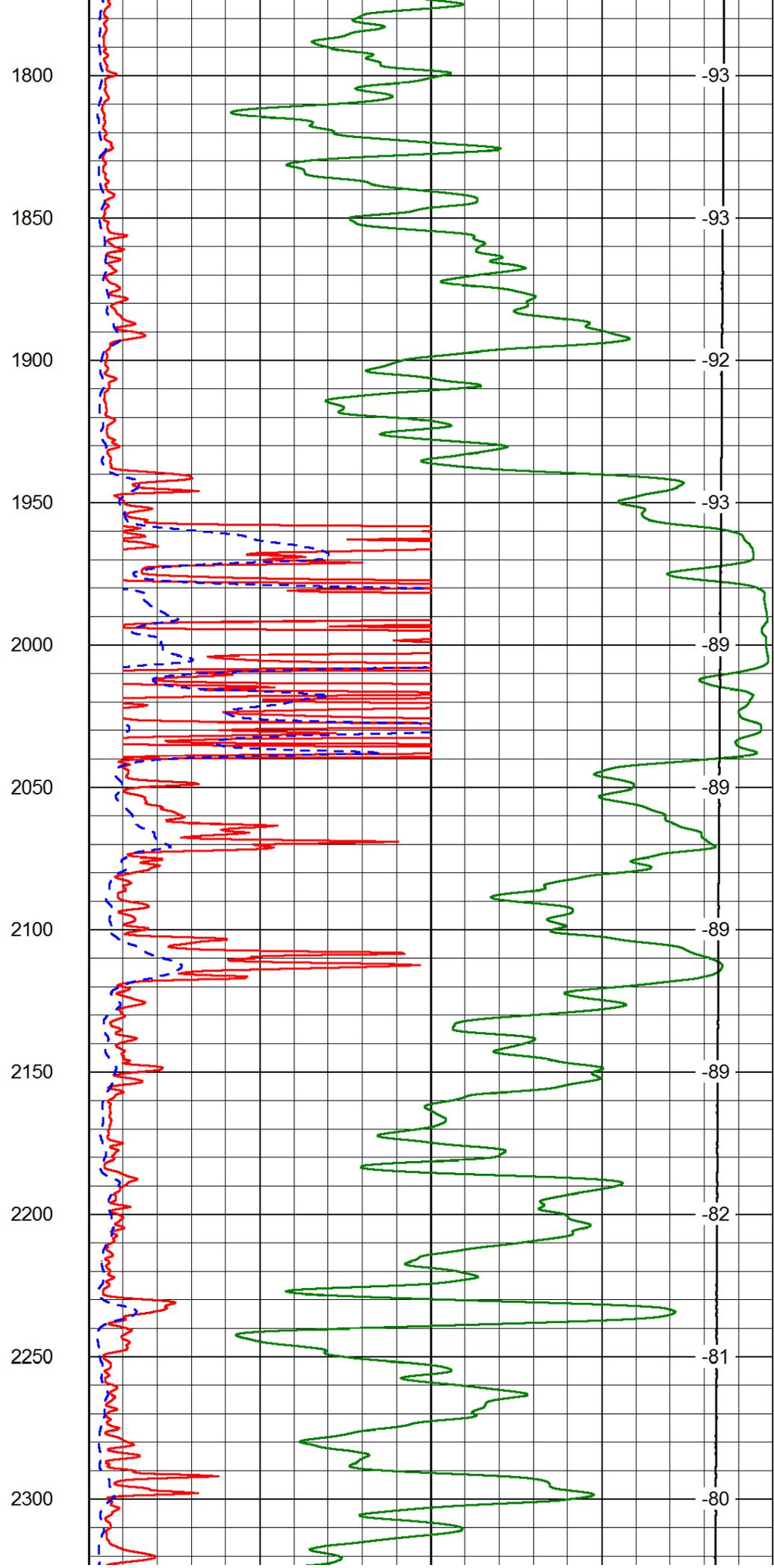
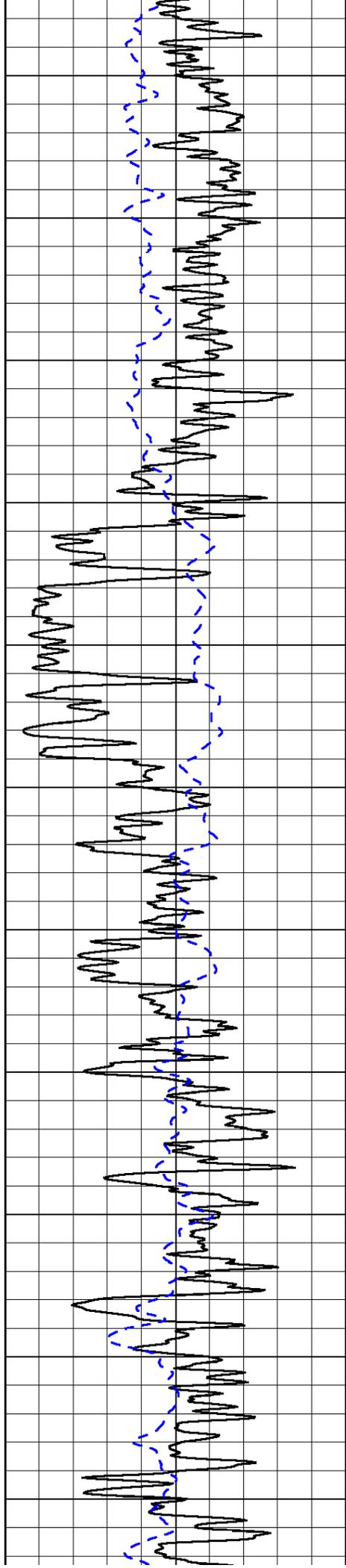
0	Gamma Ray	150
-200	SP (mV)	0

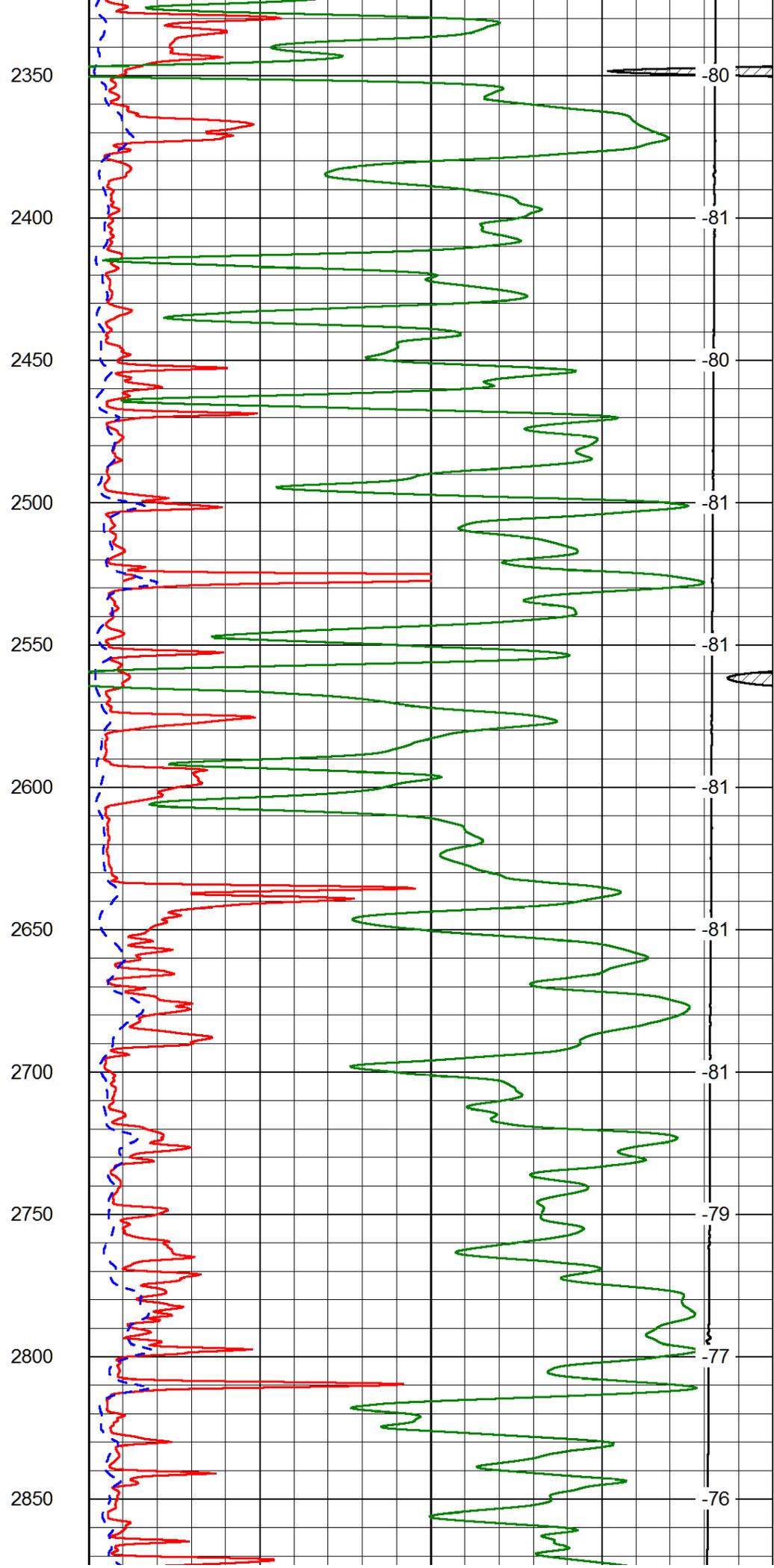
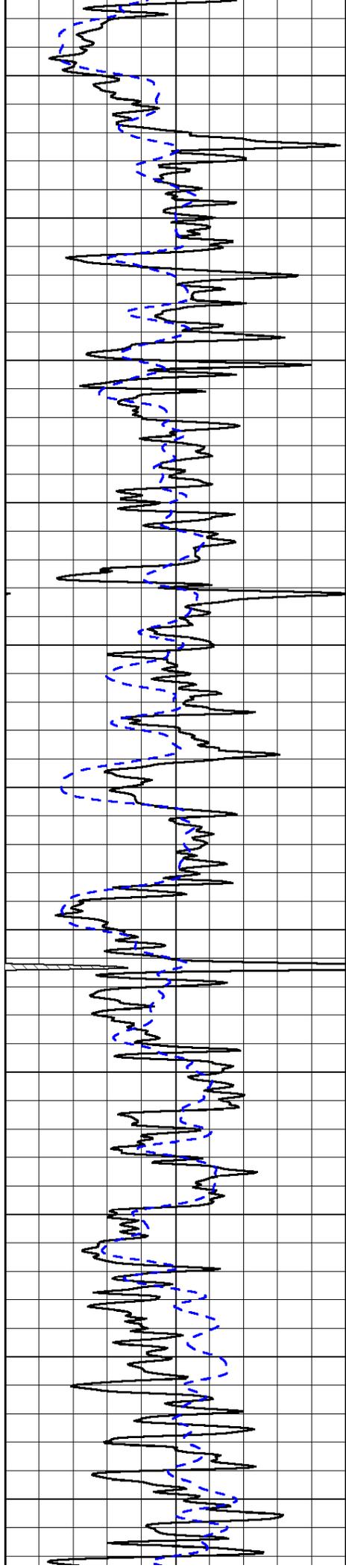
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0

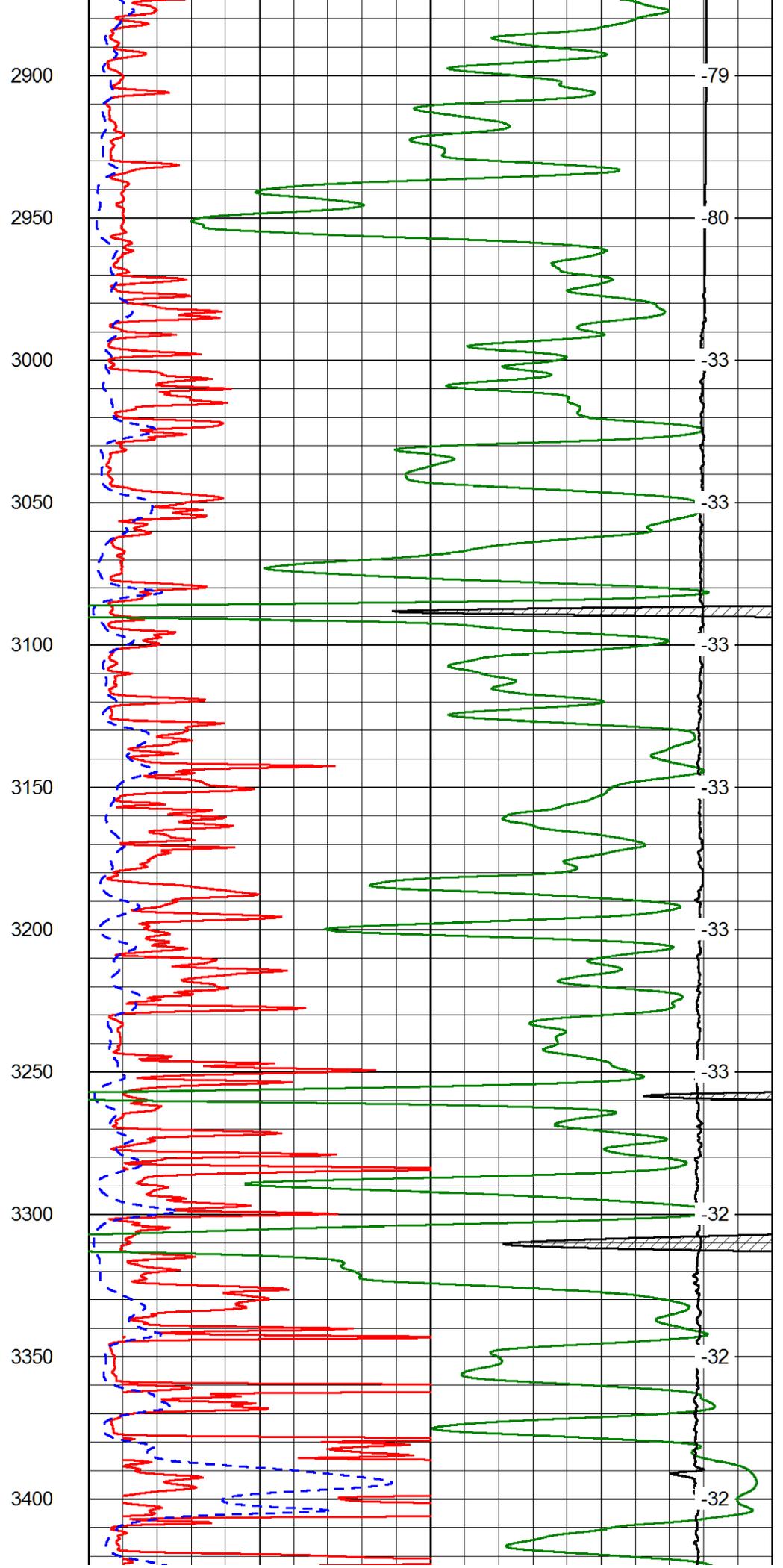
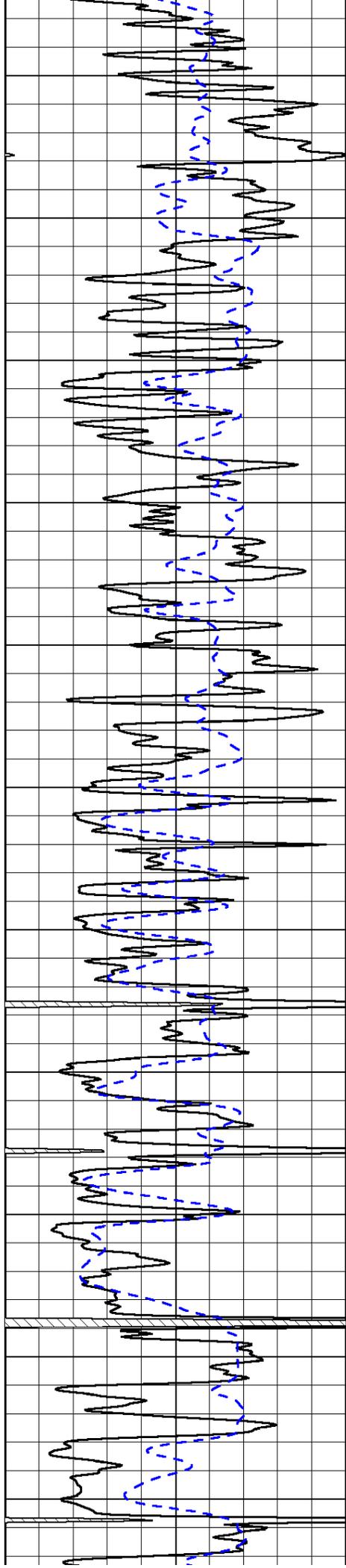
LSPD

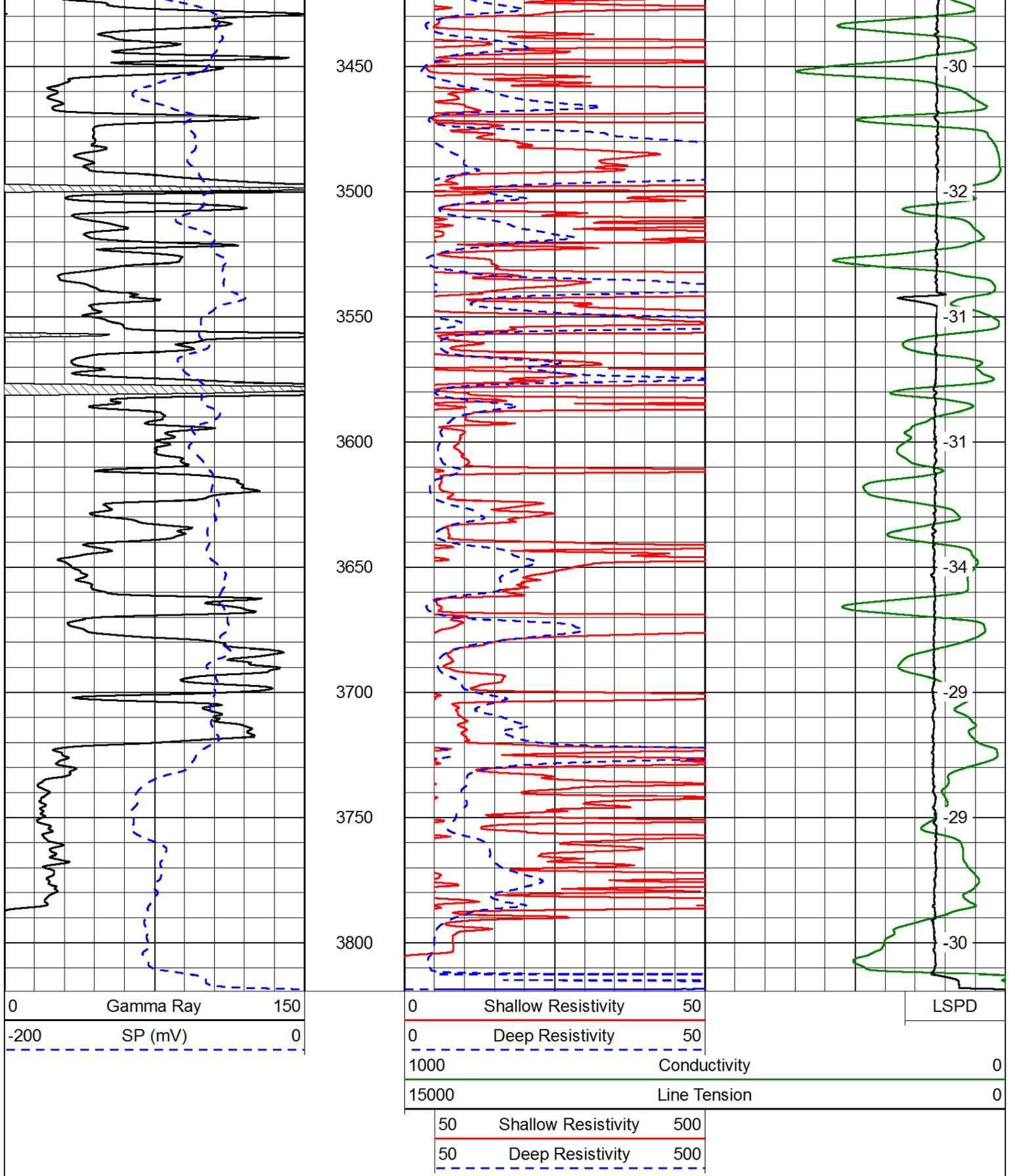












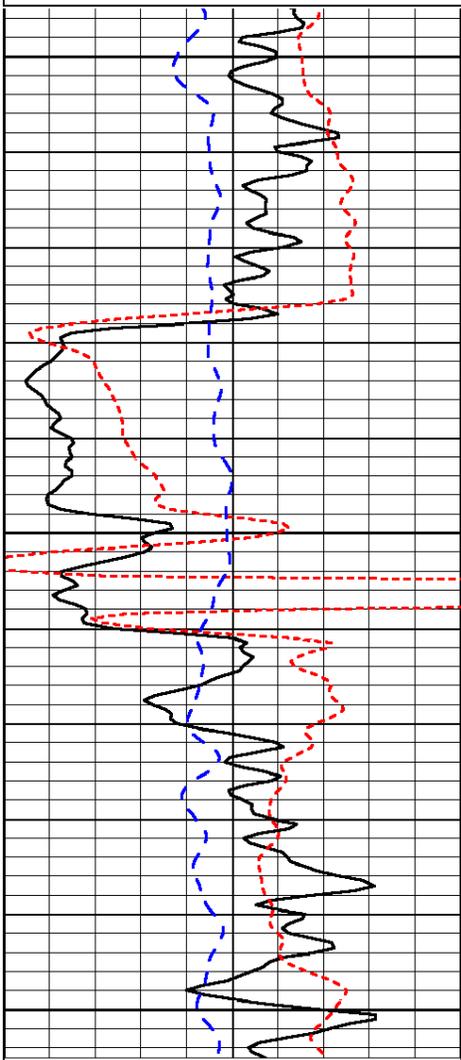
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-160	RxoRt	40
-200	SP (mV)	0

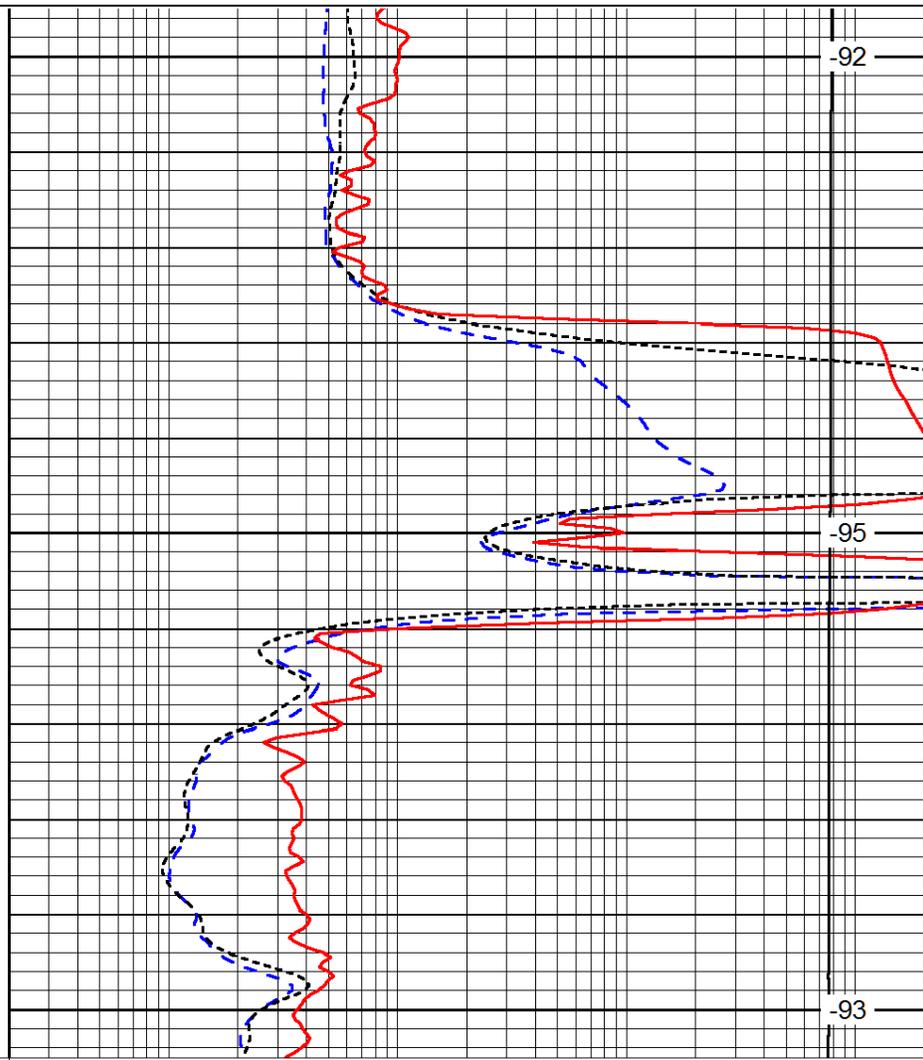
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD



1600
1650
1700

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



-92
-95
-93

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

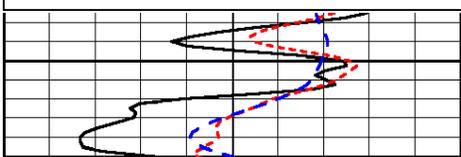
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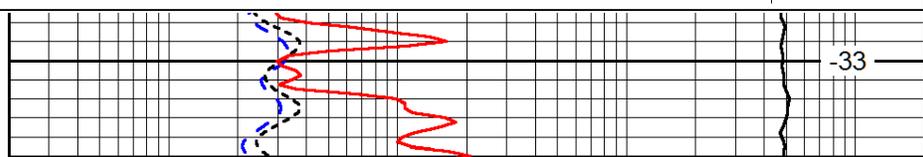
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-160	RxoRt	40
-200	SP (mV)	0

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

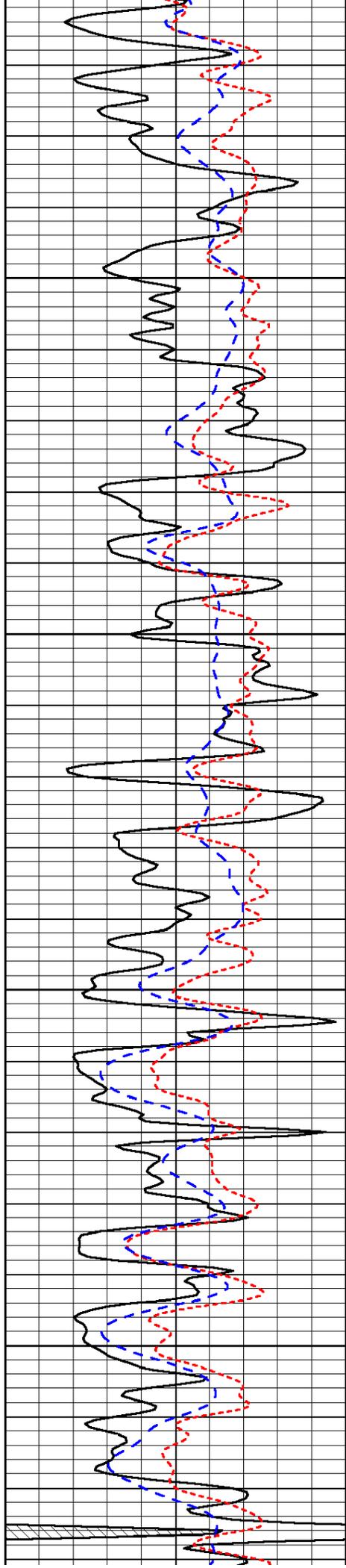
LSPD



3000



-33

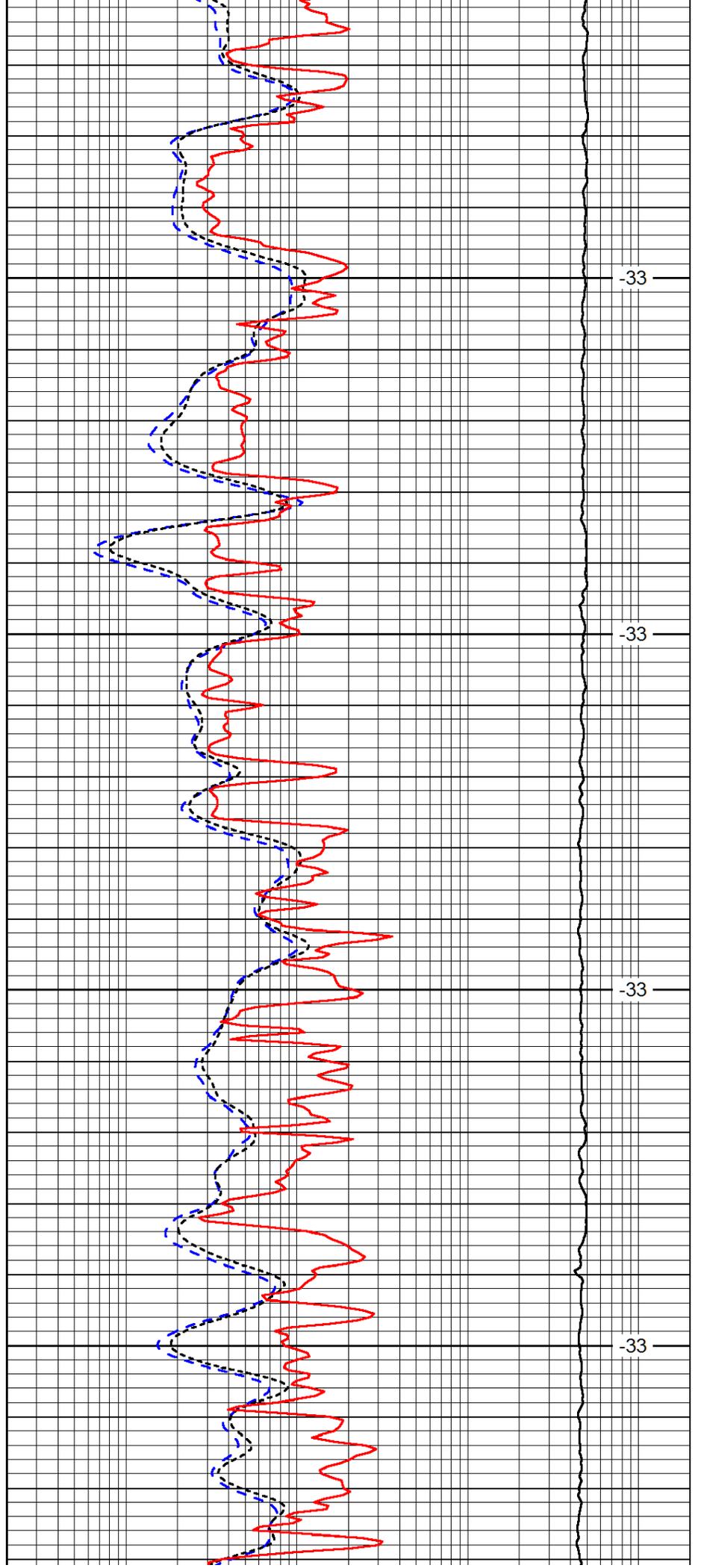


3050

3100

3150

3200

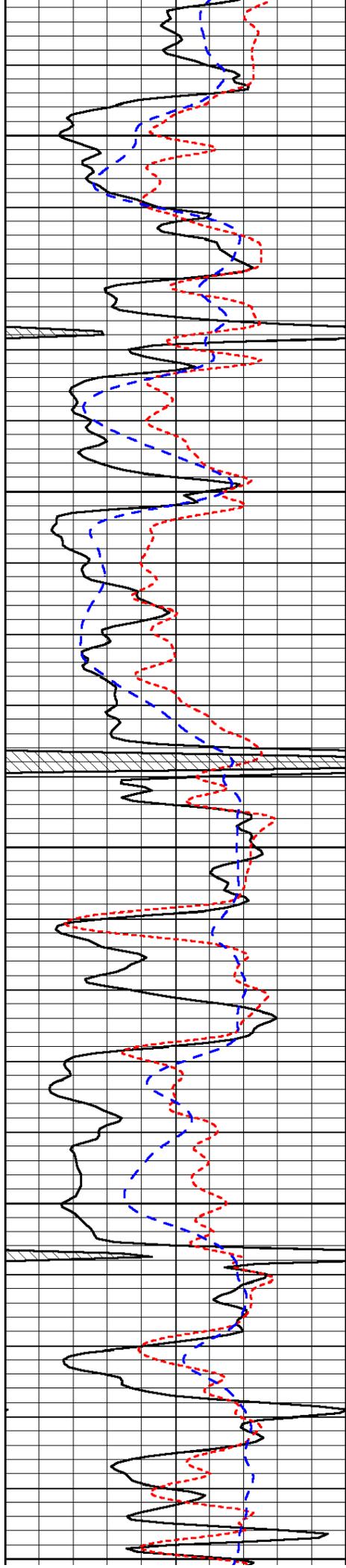


-33

-33

-33

-33



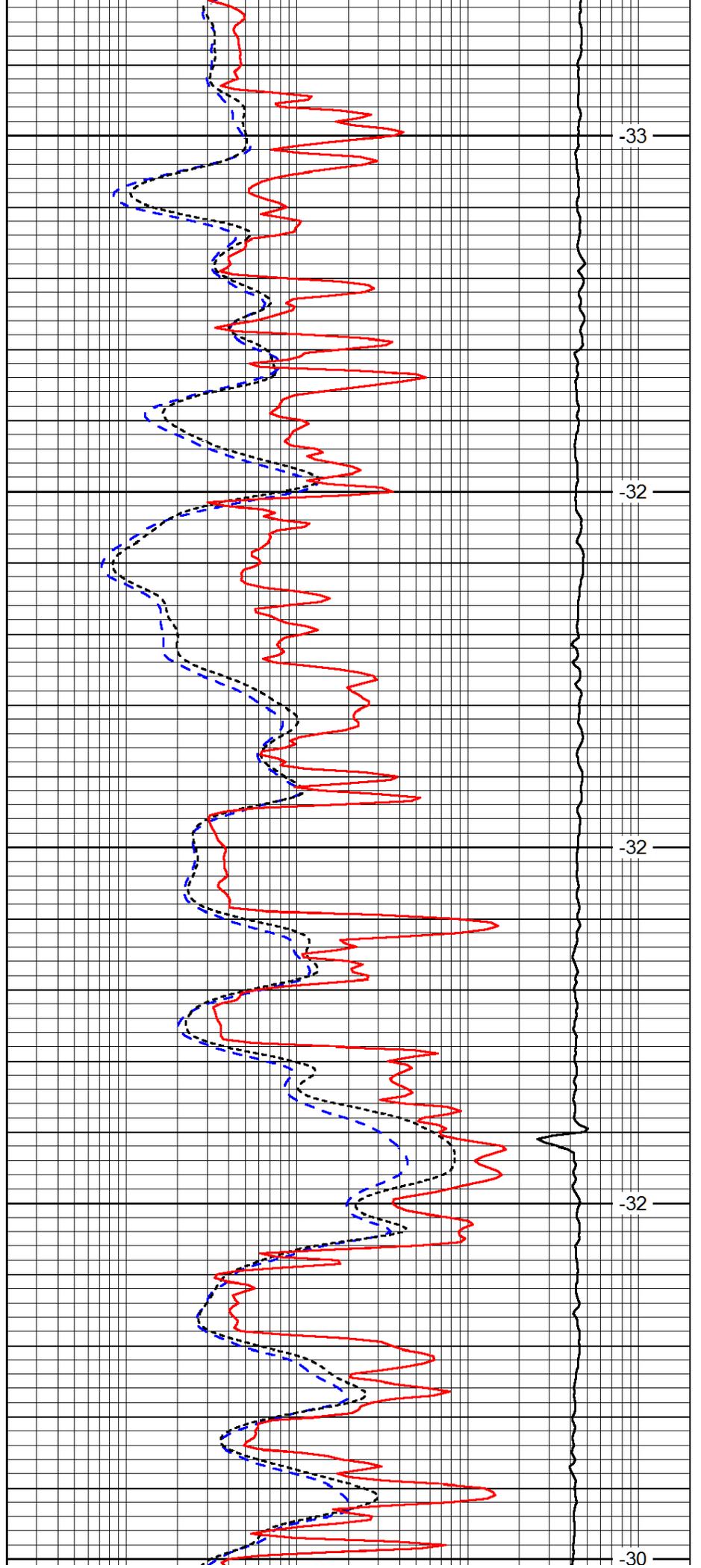
3250

3300

3350

3400

3450



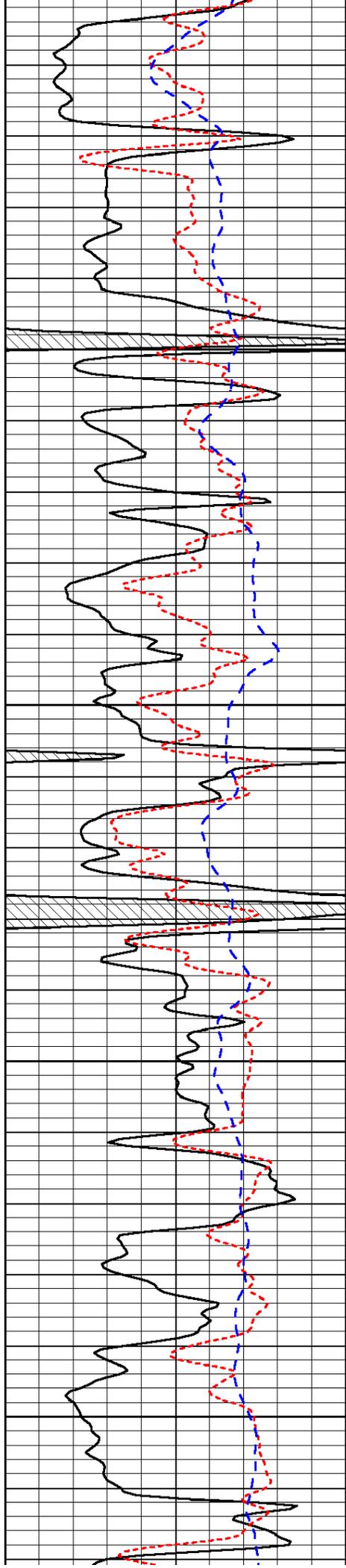
-33

-32

-32

-32

-30

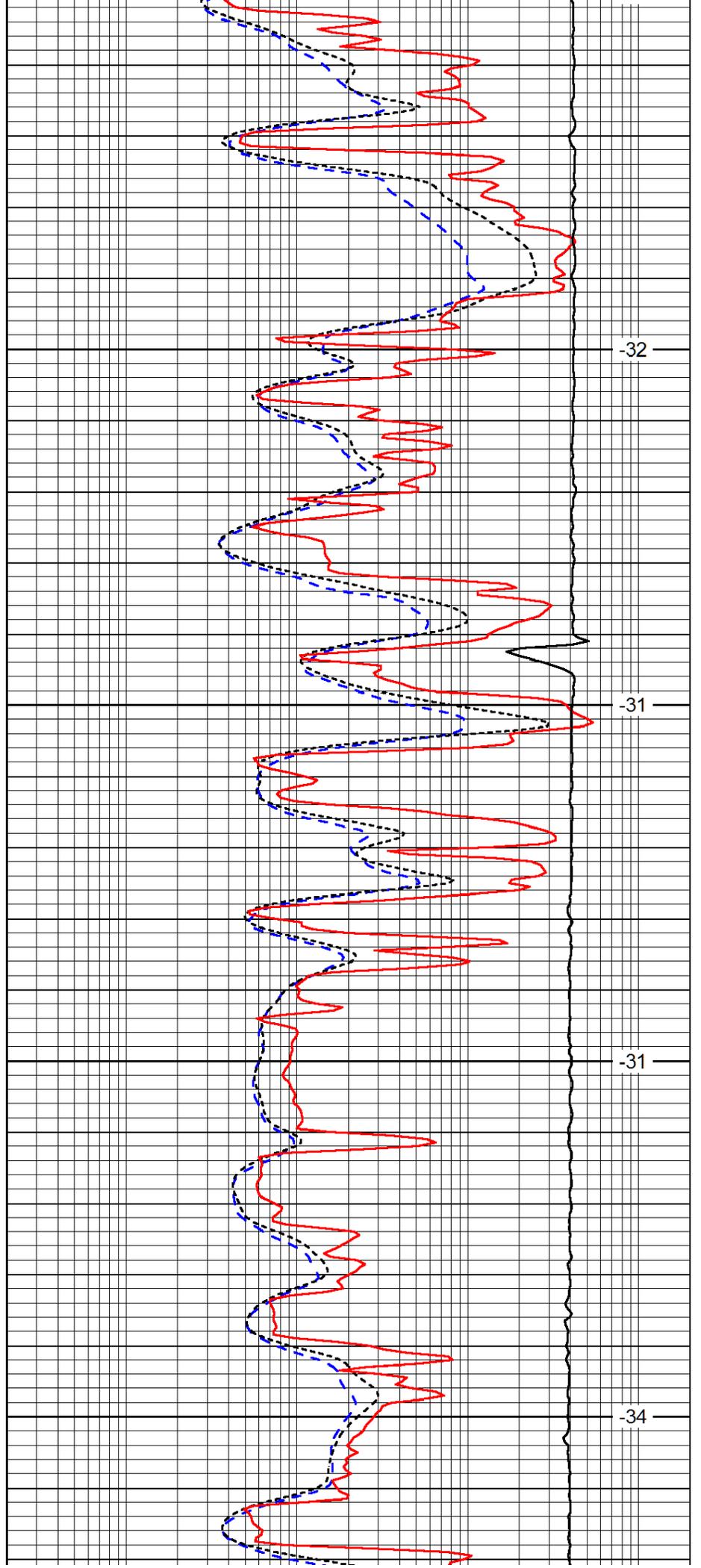


3500

3550

3600

3650

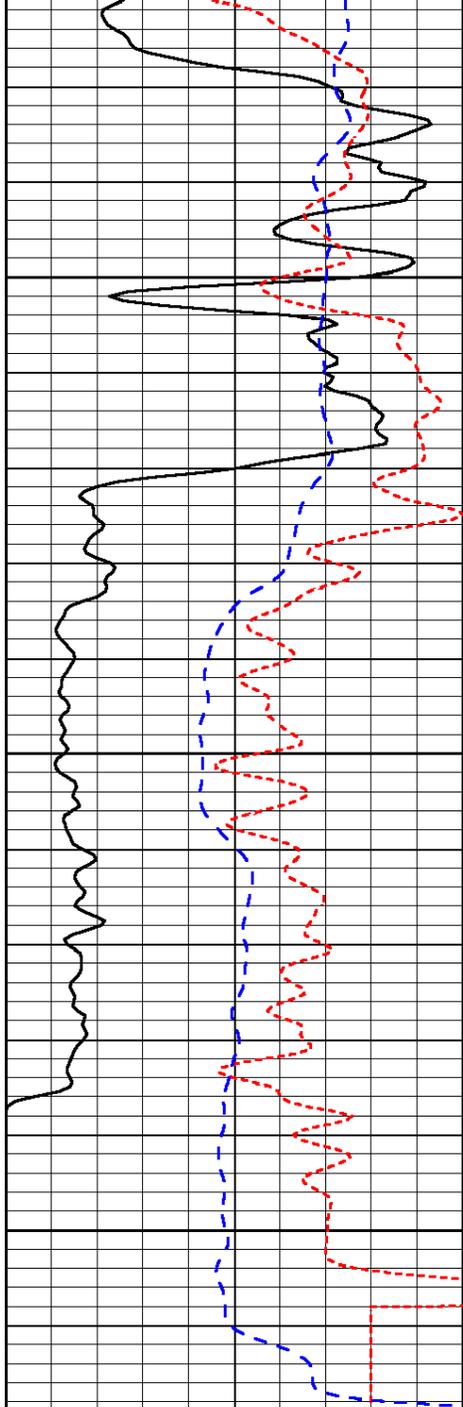


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-31

-34

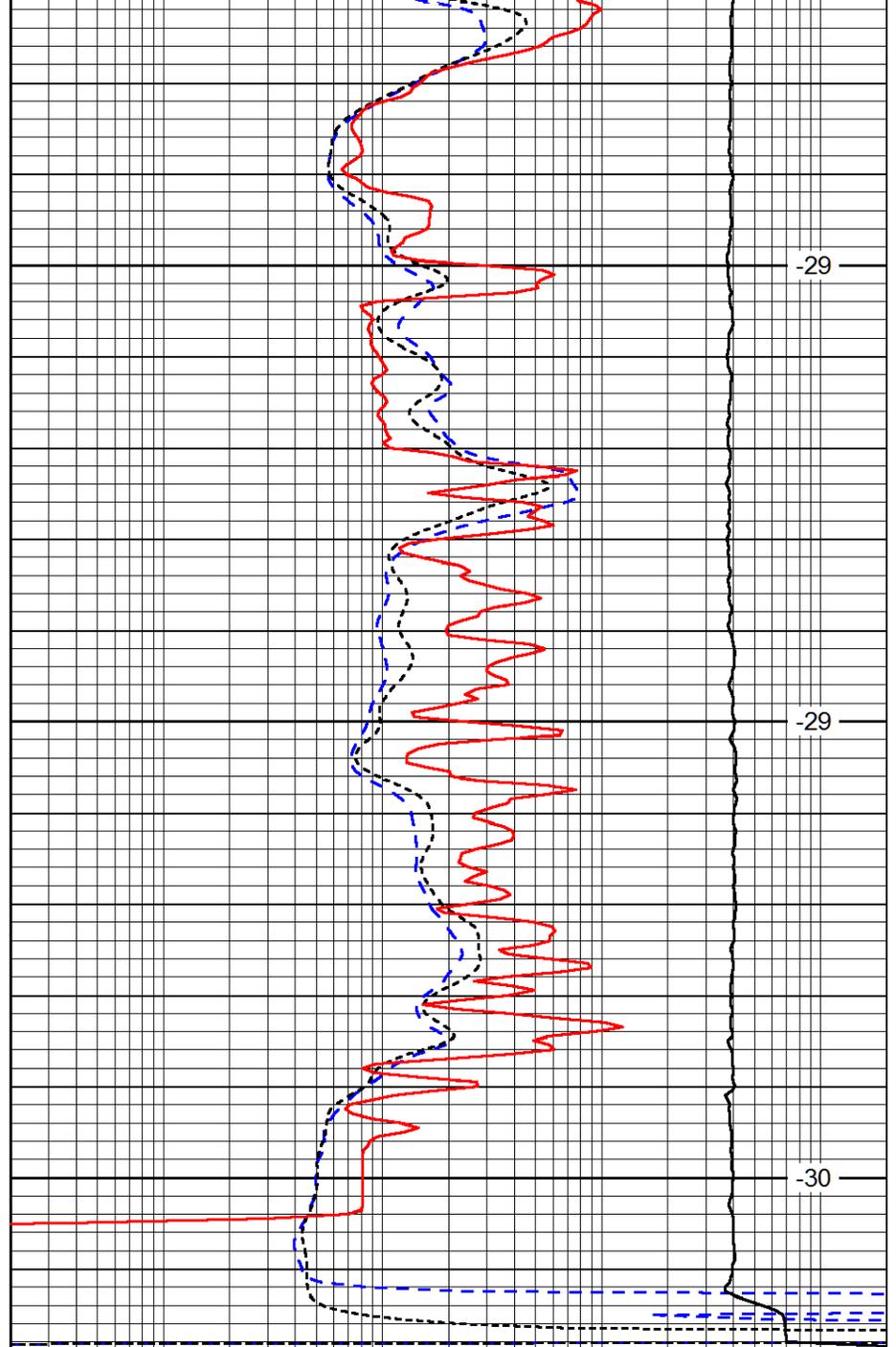


3700

3750

3800

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



-29

-29

-30

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

LSPD