



Pioneer Energy Services

Dual Induction Log

API No.	15-147-20,752-00-00	
Company	Bach Oil Production	
Well	Knape No. 5	
Field	Huffstutter	
County	Phillips	State
Location	2,152' FSL & 2,360' FEL	
	Sec: 18	Twp: 1S Rge: 18W
	Elevation 2060	
	5 Ft. Above Perm. Datum	
	K.B. 2065	
	D.F. 2060	
	G.L. 2060	
Other Services	CNL/CDL	

Permanent Datum	Ground Level	Elevation 2060
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
Date	12/30/2014	
Run Number	One	
Depth Driller	3462	
Depth Logger	3461	
Bottom Logged Interval	3460	
Top Log Interval	200	
Casing Driller	8.625 @ 221	
Casing Logger	215	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	500	
Density / Viscosity	8.8	49
pH / Fluid Loss	10.5	4.8
Source of Sample	Flowline	
Rm @ Meas. Temp	1.30 @	50
Rmf @ Meas. Temp	.98 @	50
Rmc @ Meas. Temp	1.76 @	50
Source of Rmf / Rmc	Charts	
Rm @ BHT	.59 @	111
Operating Rig Time	3 Hours	
Max Rec. Temp. F	111	
Equipment Number	108	
Location	Hays	
Recorded By	J. Long	
Witnessed By	Bob Peterson	

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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

Phillipsburg, 10 North to Hunter Road, 3 West to 300 Road, 4 1/2 North, West Into

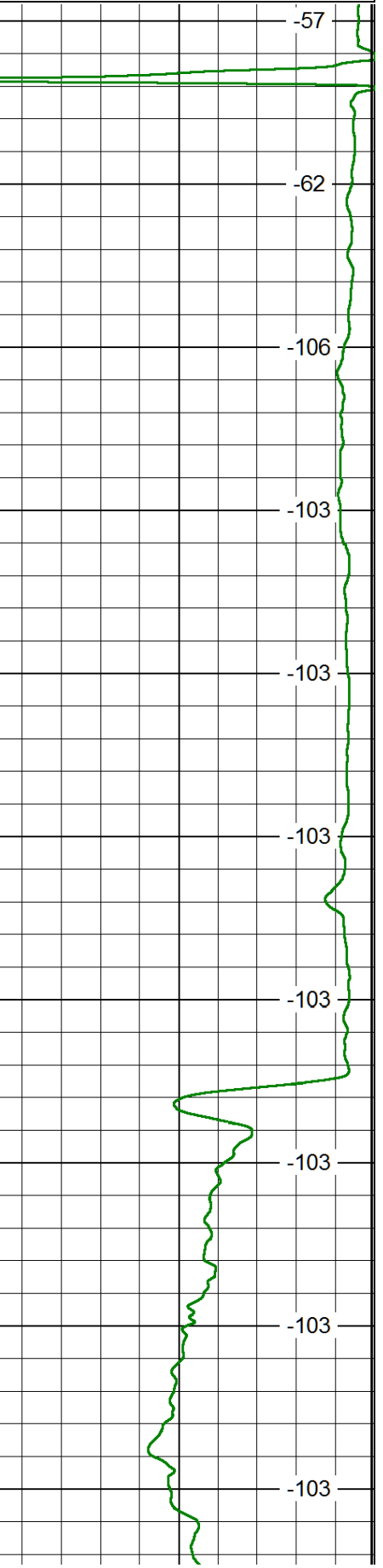
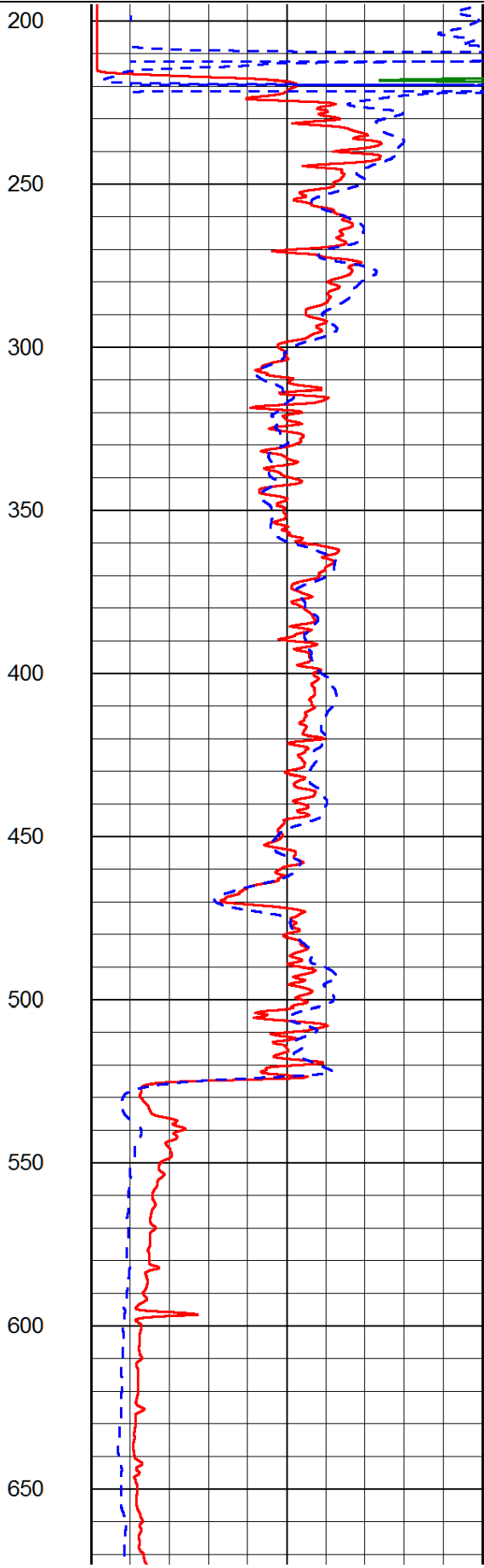
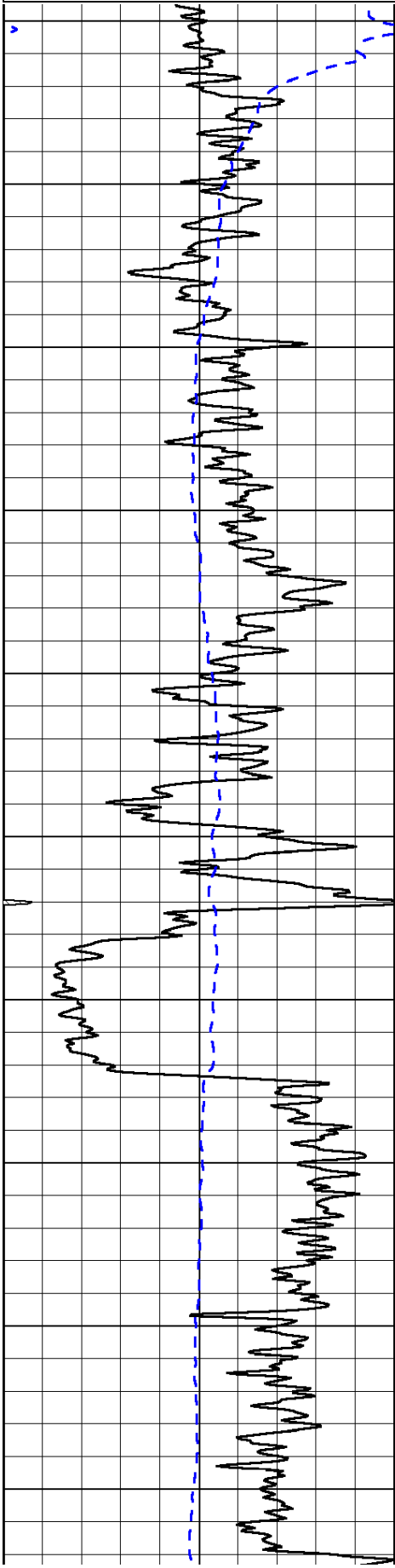
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 Dataset Pathname: dil/bachstck
 Presentation Format: dil2in
 Dataset Creation: Tue Dec 30 20:19:04 2014
 Charted by: Depth in Feet scaled 1:600

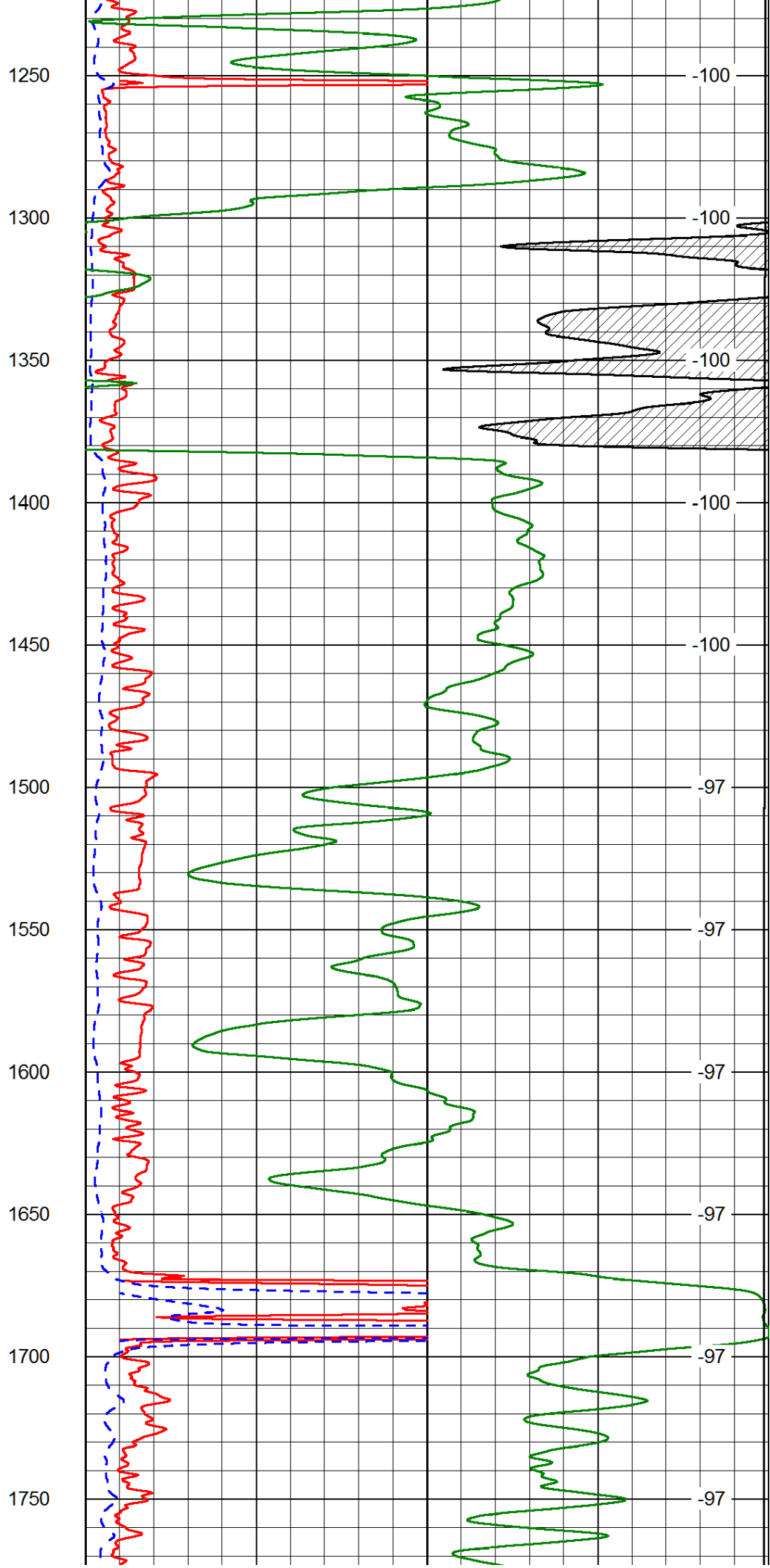
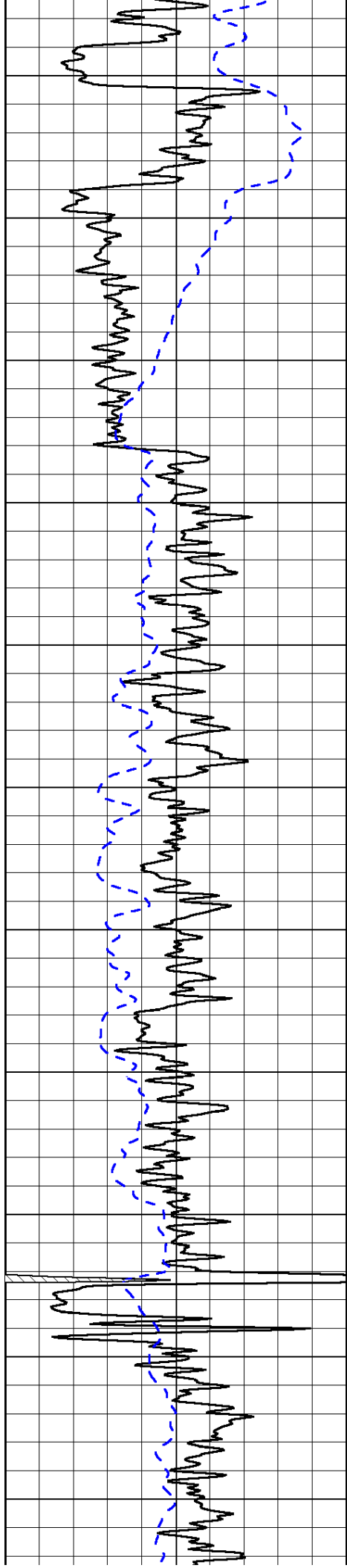
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-200	SP (mV)	0

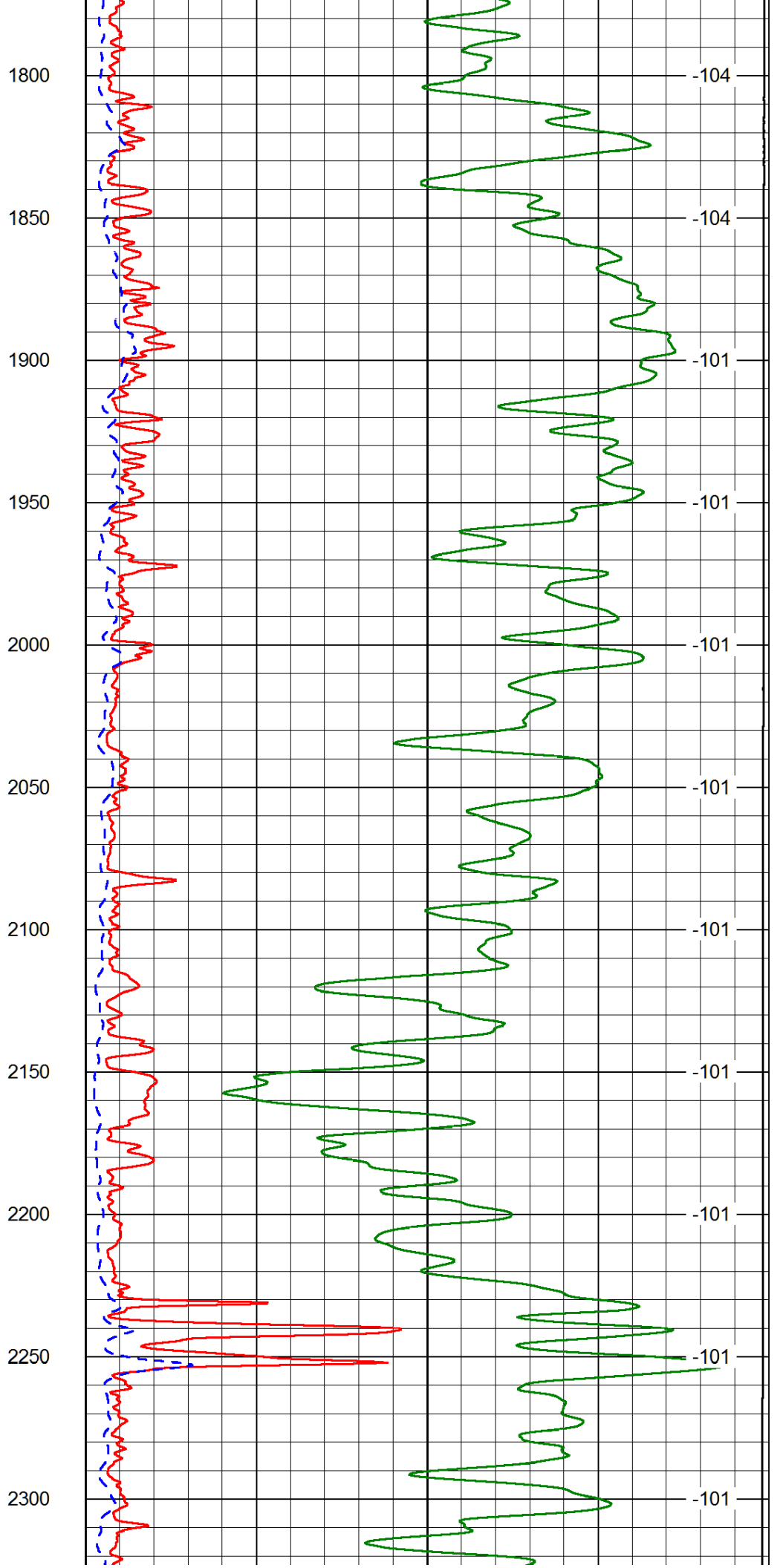
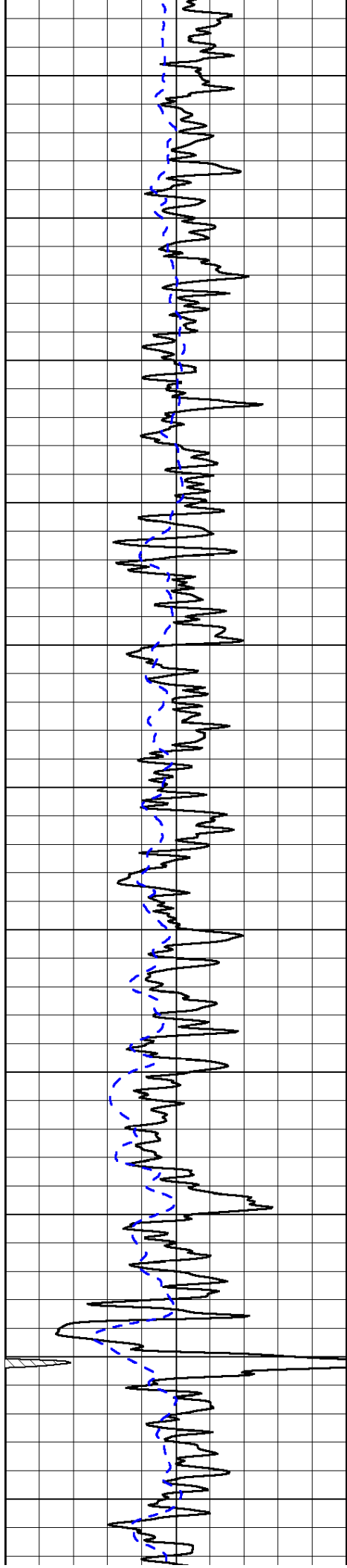
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0

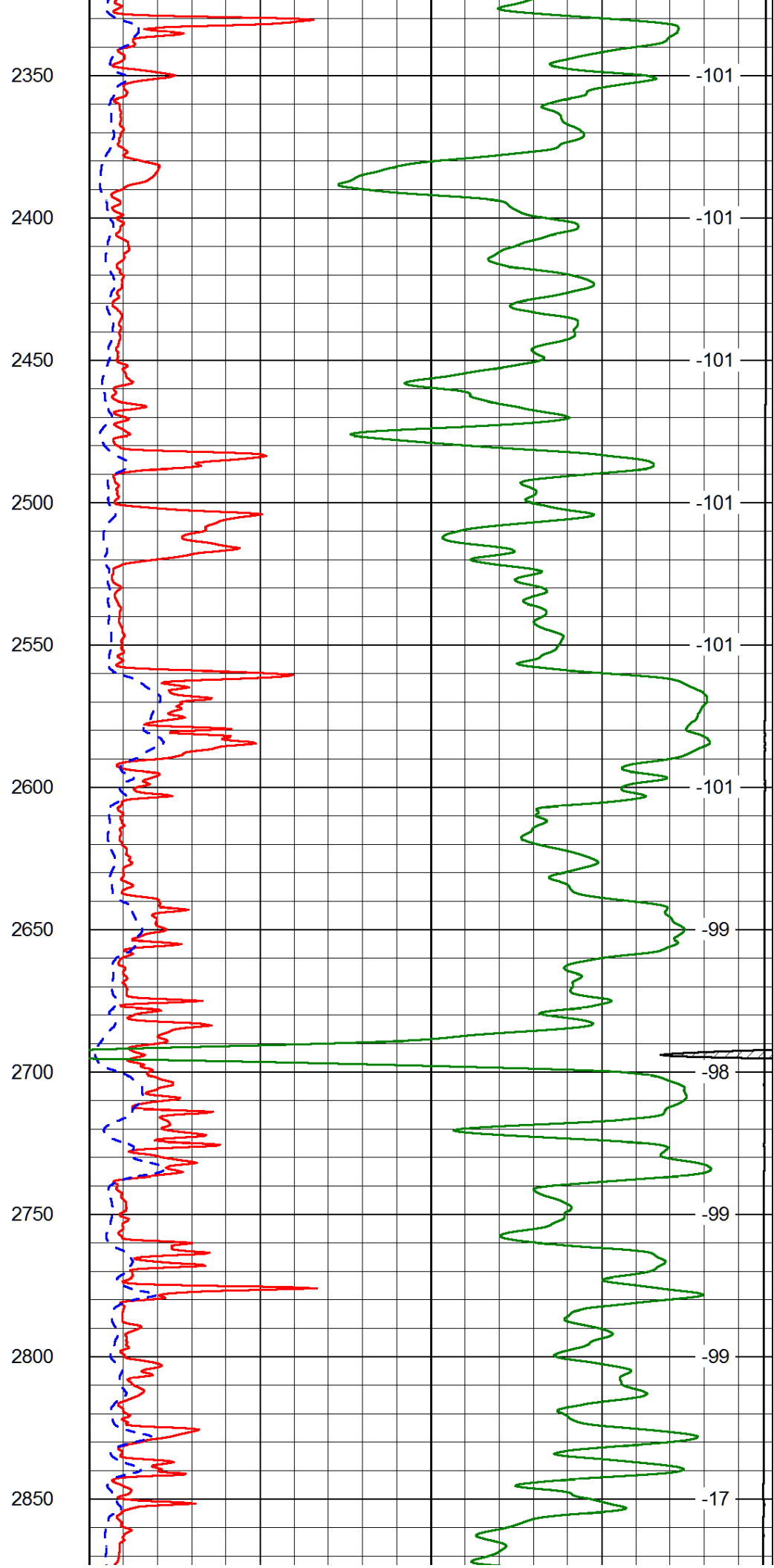
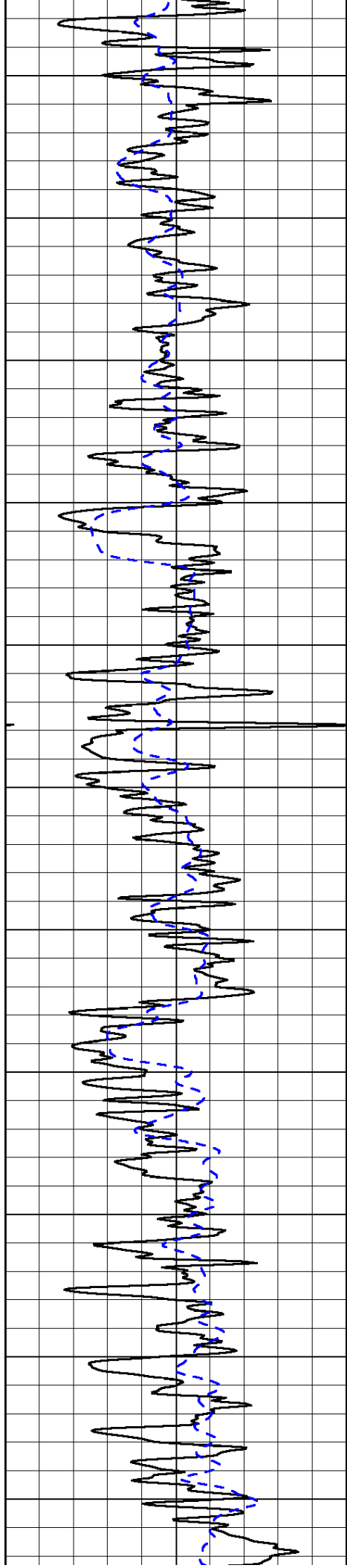
LSPD

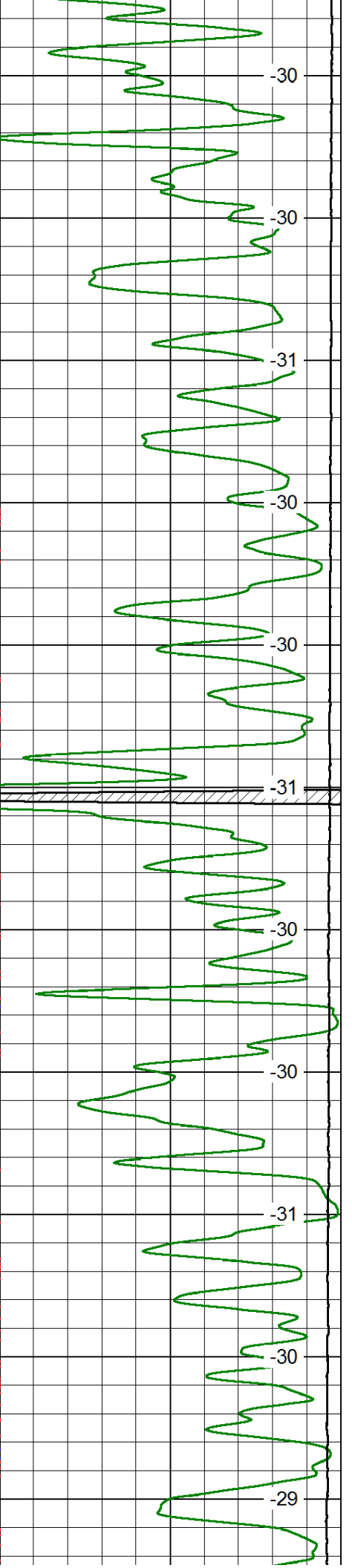
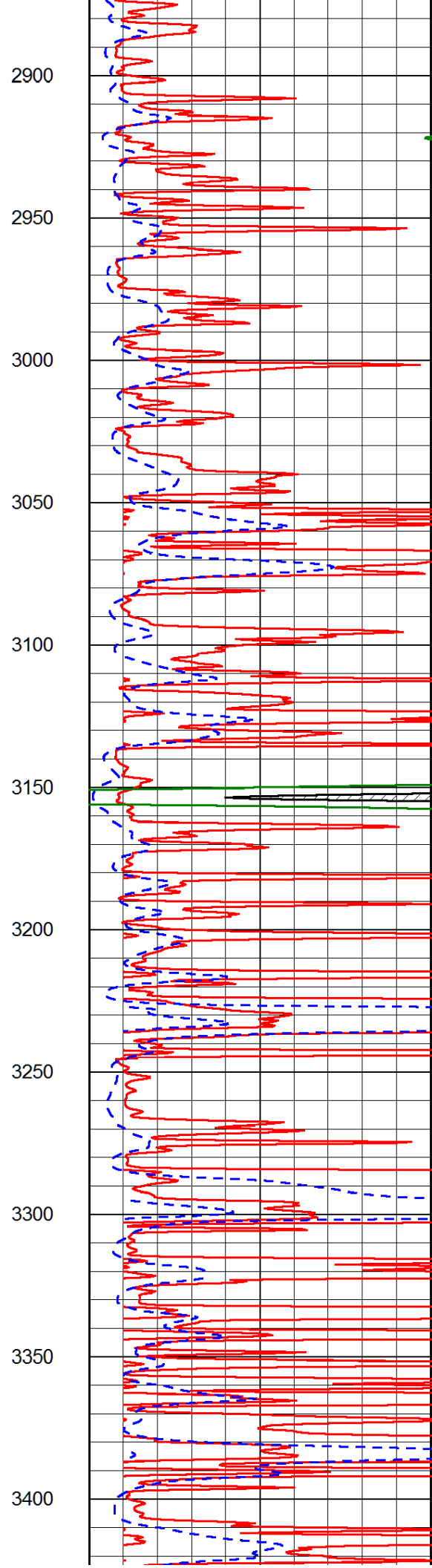
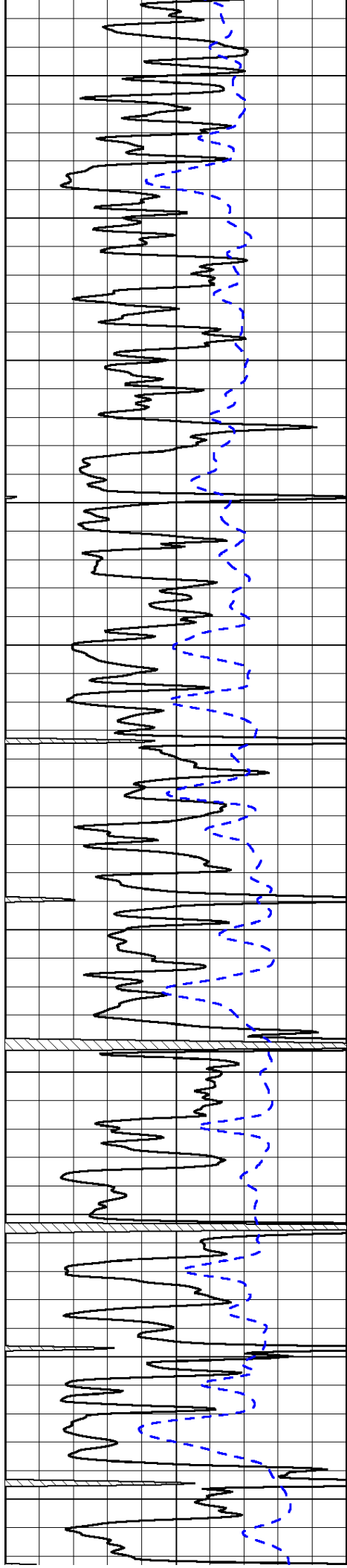
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50	Deep Resistivity	500

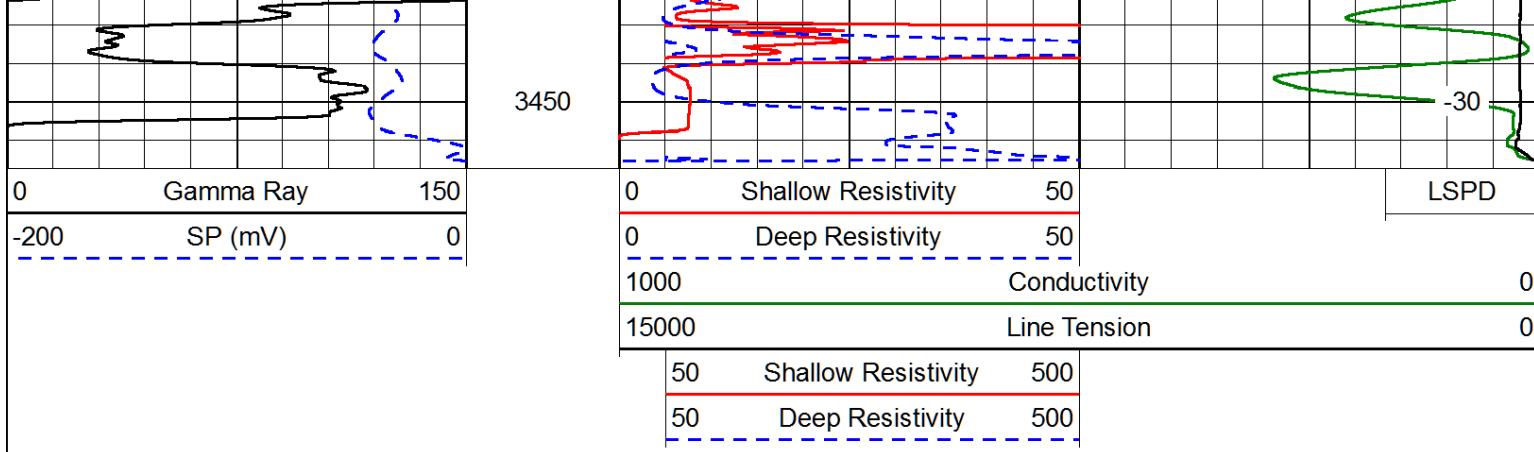




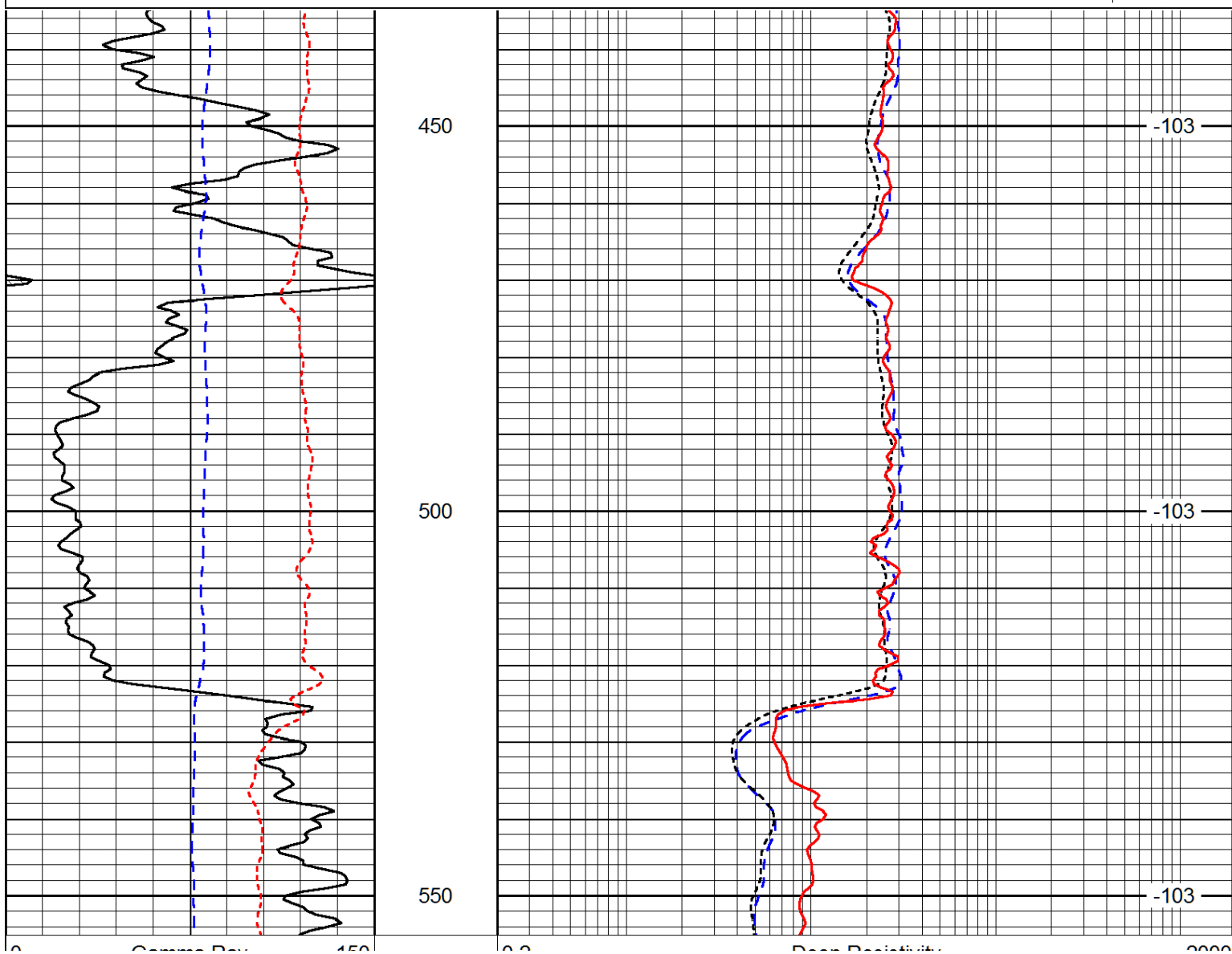
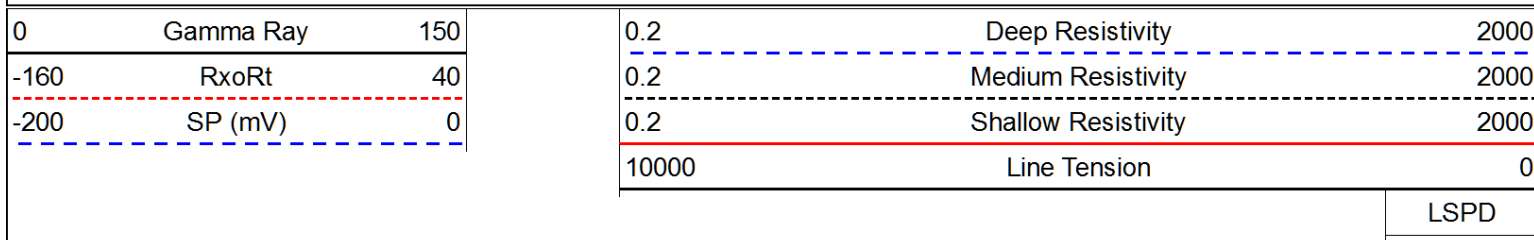








Database File: bach_knape_5hd.db
 Dataset Pathname: dil/bachstck
 Presentation Format: dil
 Dataset Creation: Tue Dec 30 20:19:04 2014
 Charted by: Depth in Feet scaled 1:240



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

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

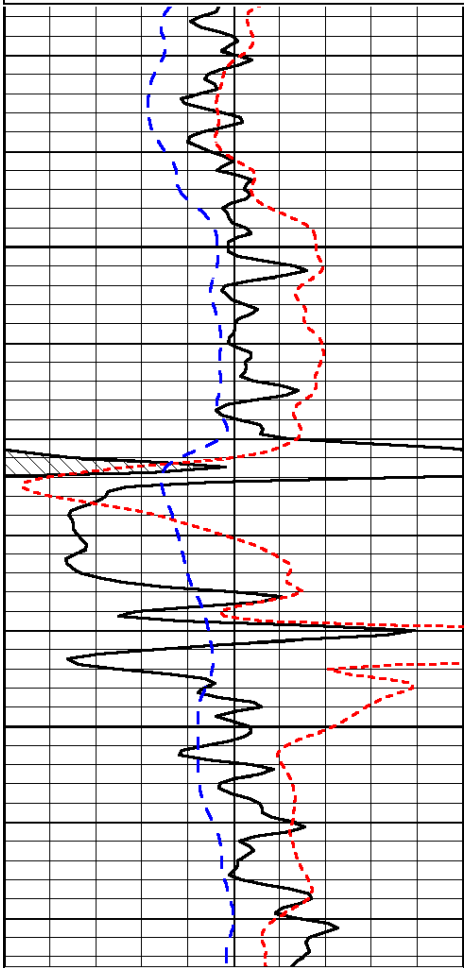
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-200	SP (mV)	0

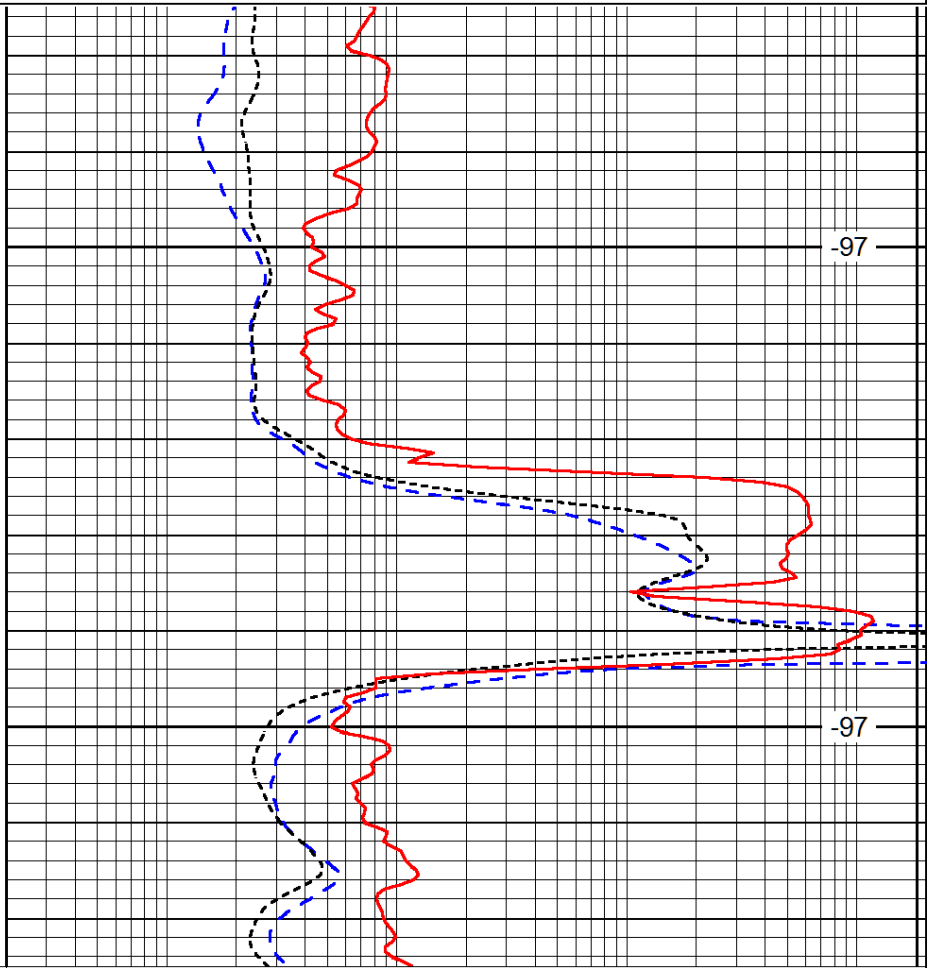
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD



1650

1700



-97

-97

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

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

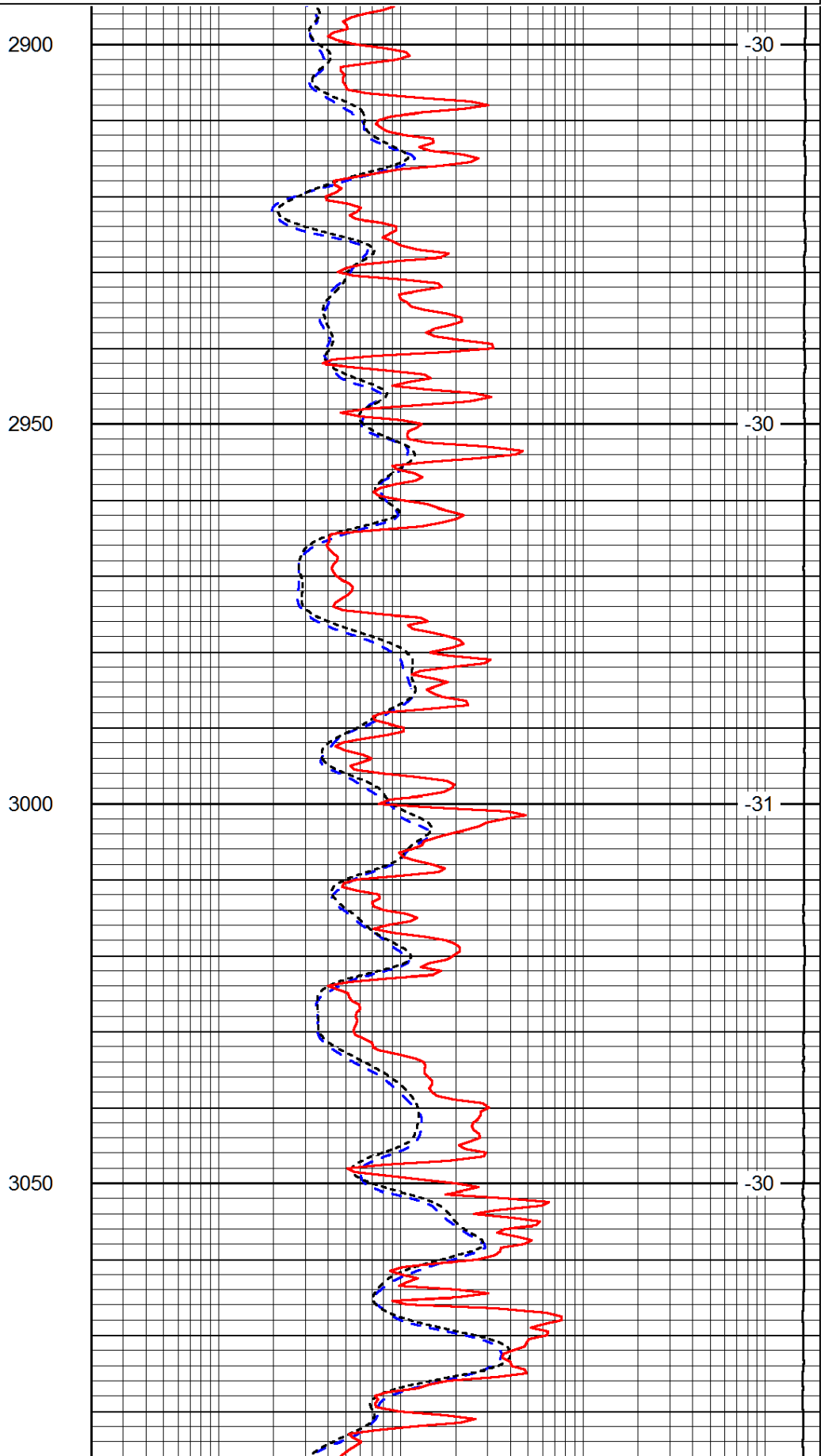
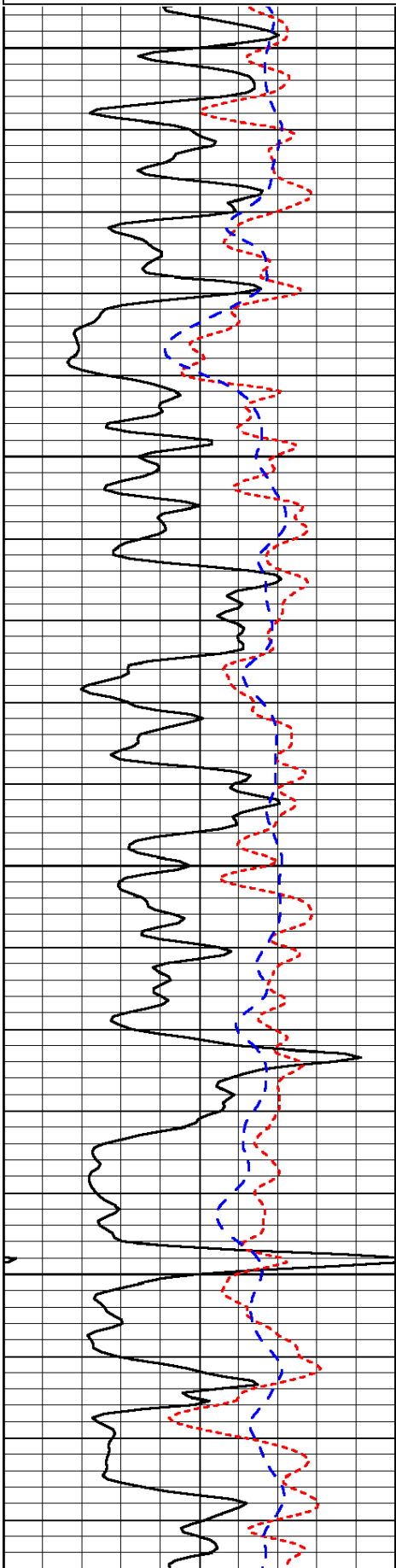
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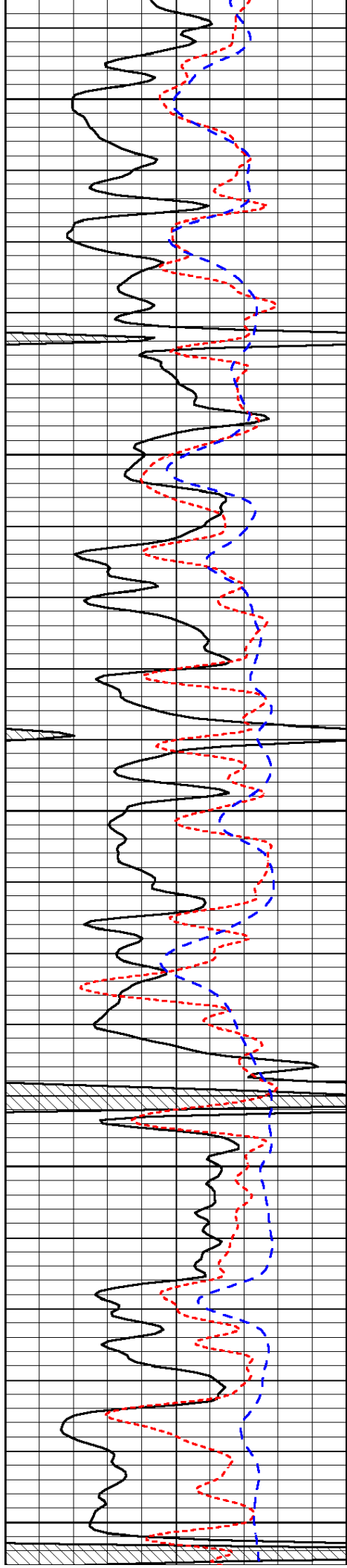
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10000	Line Tension	0

LSPD





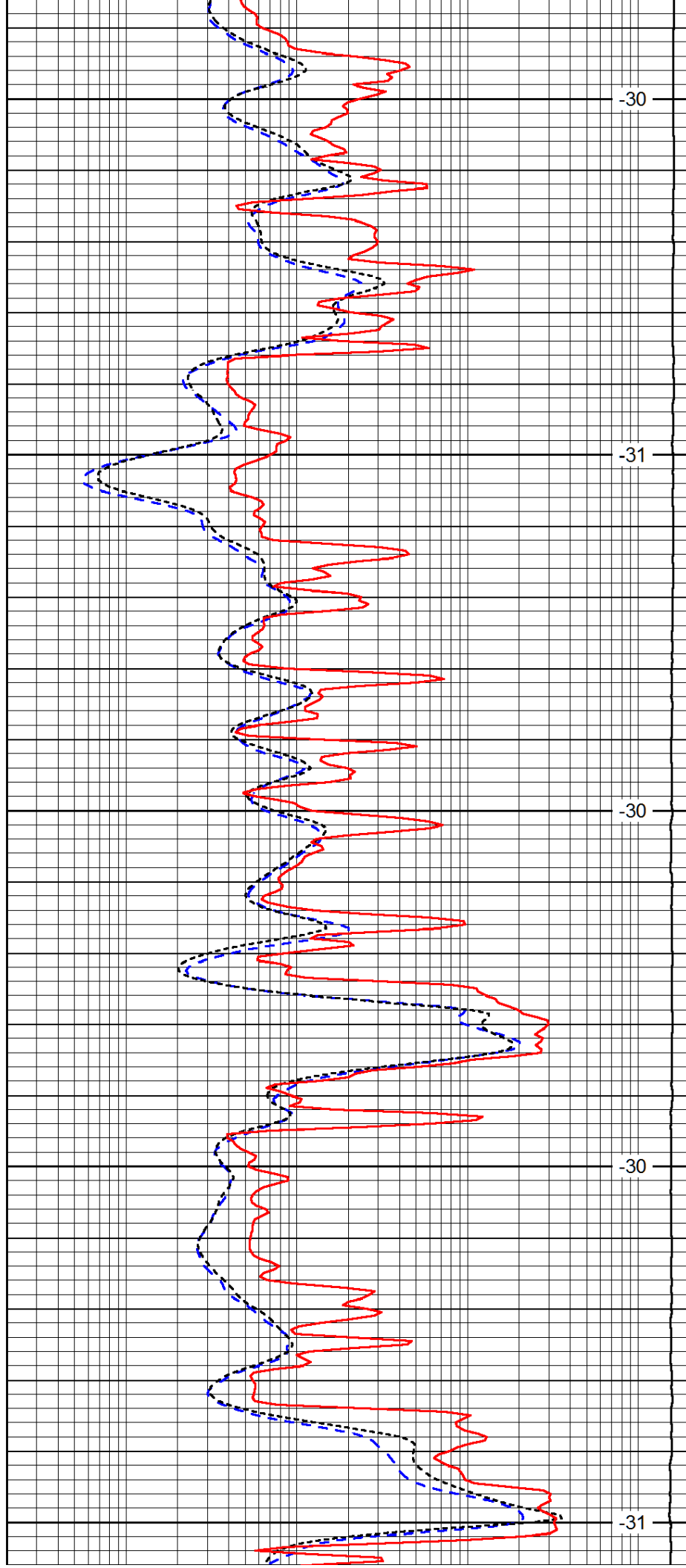
3100

3150

3200

3250

3300



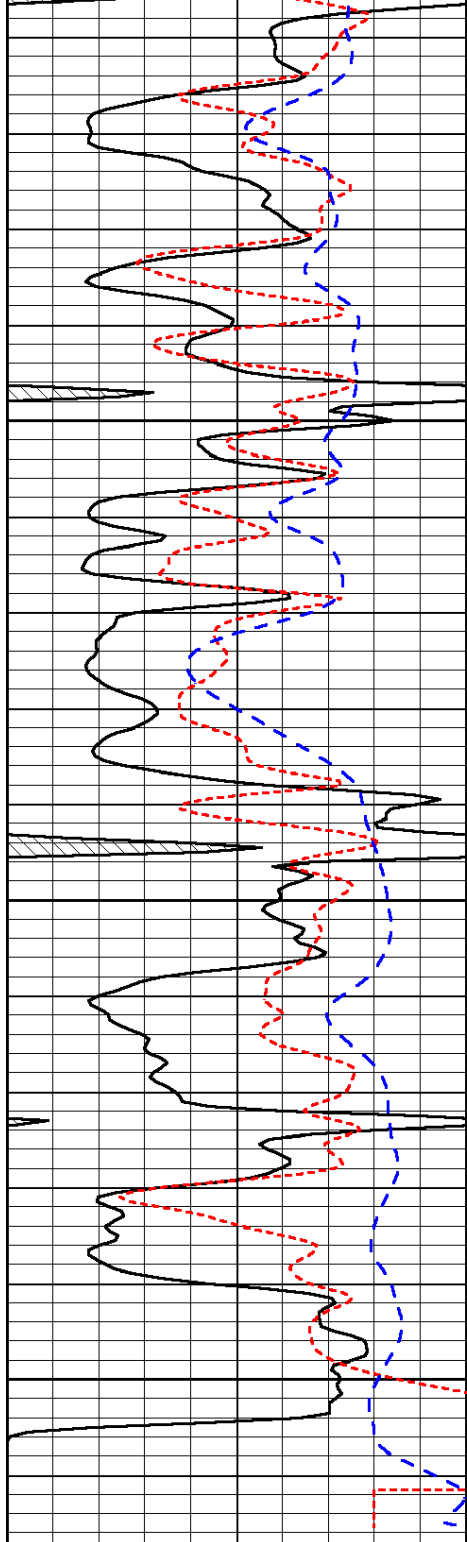
-30

-31

-30

-30

-31

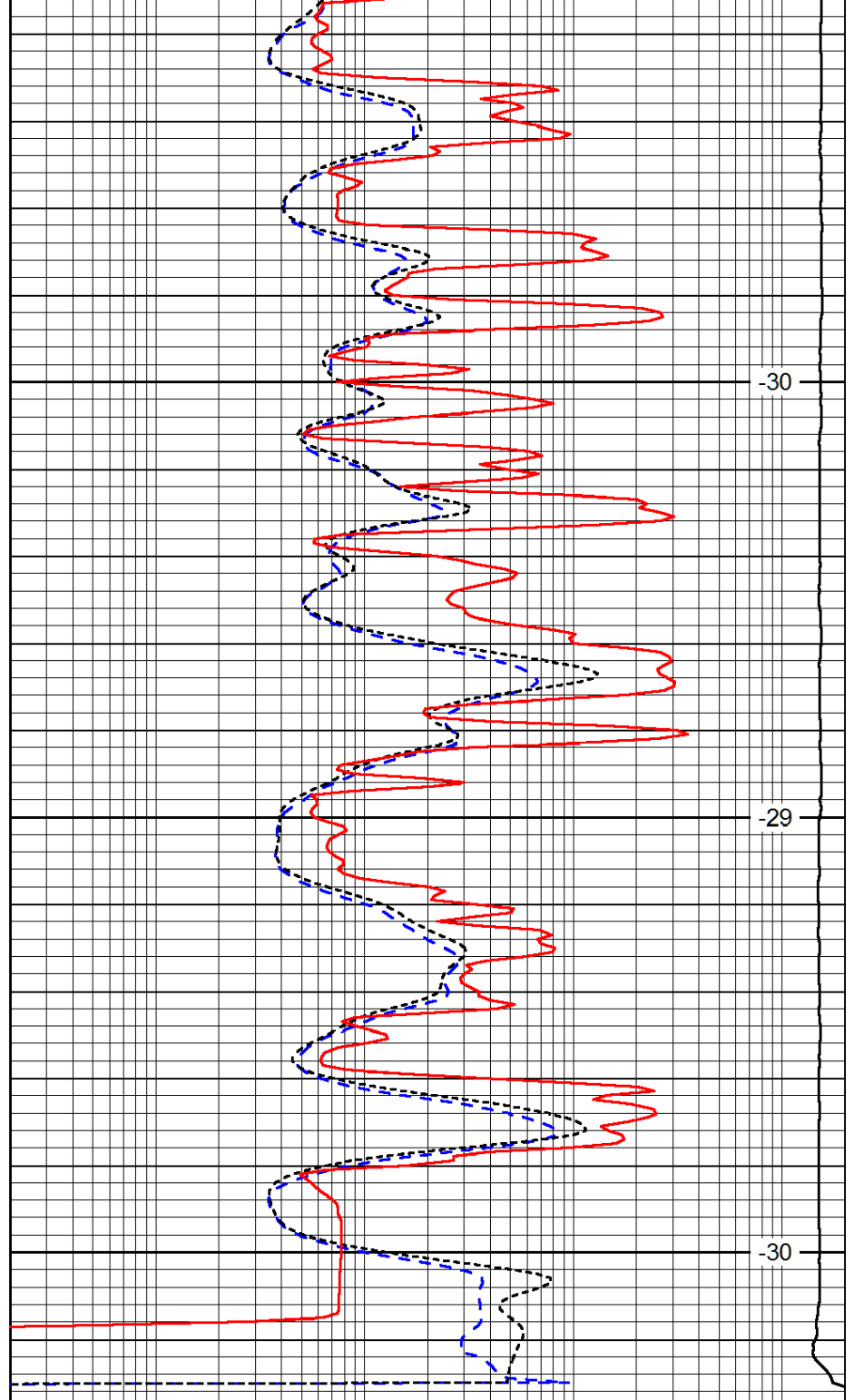


3350

3400

3450

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



-30

-29

-30

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

LSPD