



Pioneer Energy Services

Dual Induction Log

15-051-26,763-00-00

API No.

Company **TDI, Inc.**

Well **Charlotte Trust No.2 Twin**

Field **Leiker Southeast**

County **Ellis** State **Kansas**

Location **1650' FNL & 1800' FEL**

Sec: **23** Twp: **15S** Rge: **18W**

Other Services
CNL/CDL
MEL

Elevation

K.B. 1963
D.F. 1953
G.L. 1953

Permanent Datum Ground Level Elevation 1953
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date	12-1-2014	
Run Number	One	
Depth Driller	3650	
Depth Logger	3644	
Bottom Logged Interval	3643	
Top Log Interval	1100	
Casing Driller	8.625 @ 1137	
Casing Logger	1137	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	2,000	
Density / Viscosity	9.4 60	
pH / Fluid Loss	10.5 7.6	
Source of Sample	Flowline	
Rm @ Meas. Temp	1.1 @ 50	
Rmf @ Meas. Temp	.83 @ 50	
Rmc @ Meas. Temp	1.49 @ 50	
Source of Rmf / Rmc	Charts	
Rm @ BHT	.49 @ 112	
Operating Rig Time	3 Hours	
Max Rec. Temp. F	112	
Equipment Number	51	
Location	Hays	
Recorded By	C. Desaire	
Witnessed By	Tom Denning	

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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

Hays KS, S on Hwy 183 to Hays Mack,
1 1/2 E, S Into

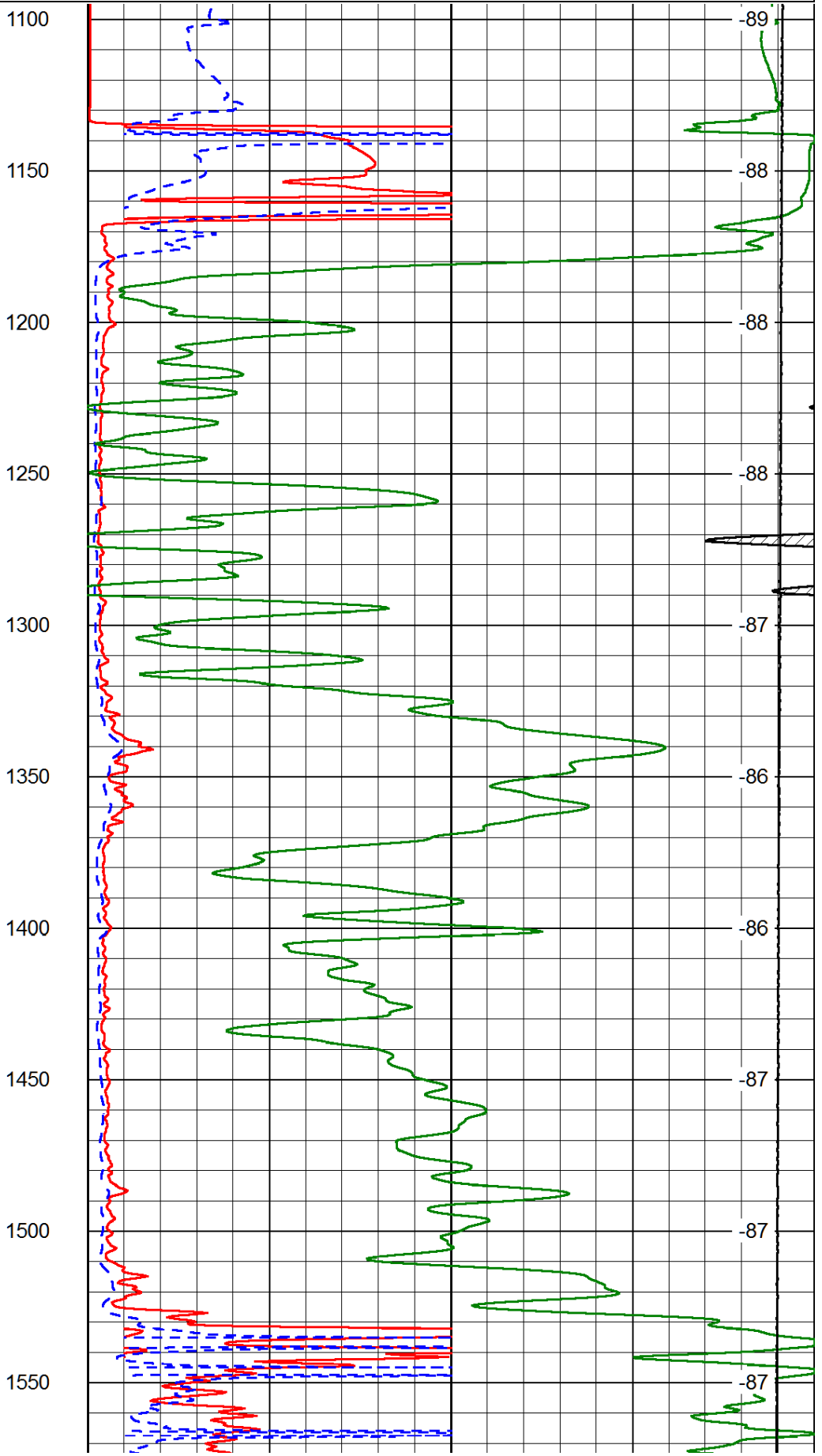
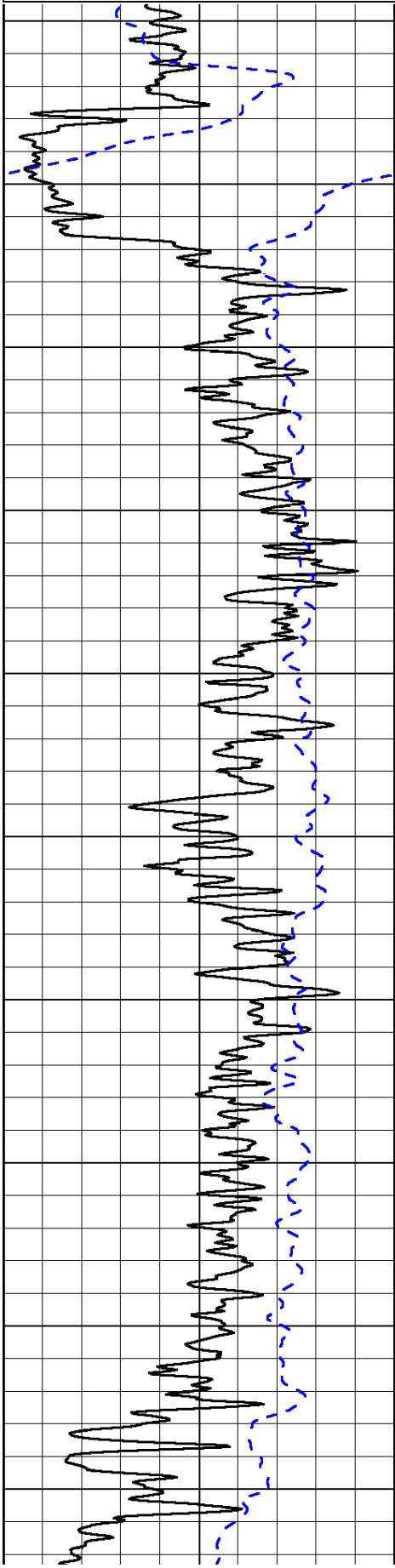
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Presentation Format: dil2in
Dataset Creation: Mon Dec 01 14:41:33 2014
Charted by: Depth in Feet scaled 1:600

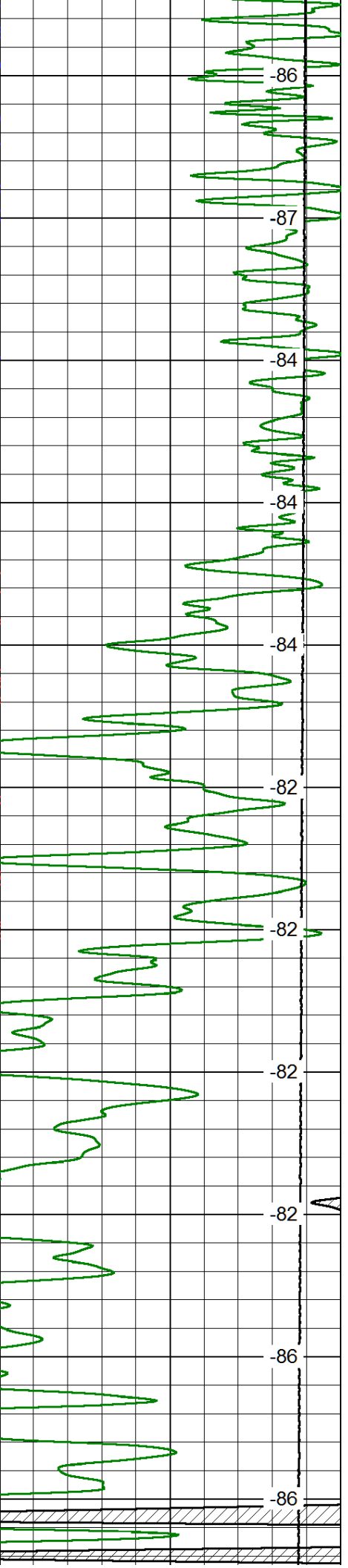
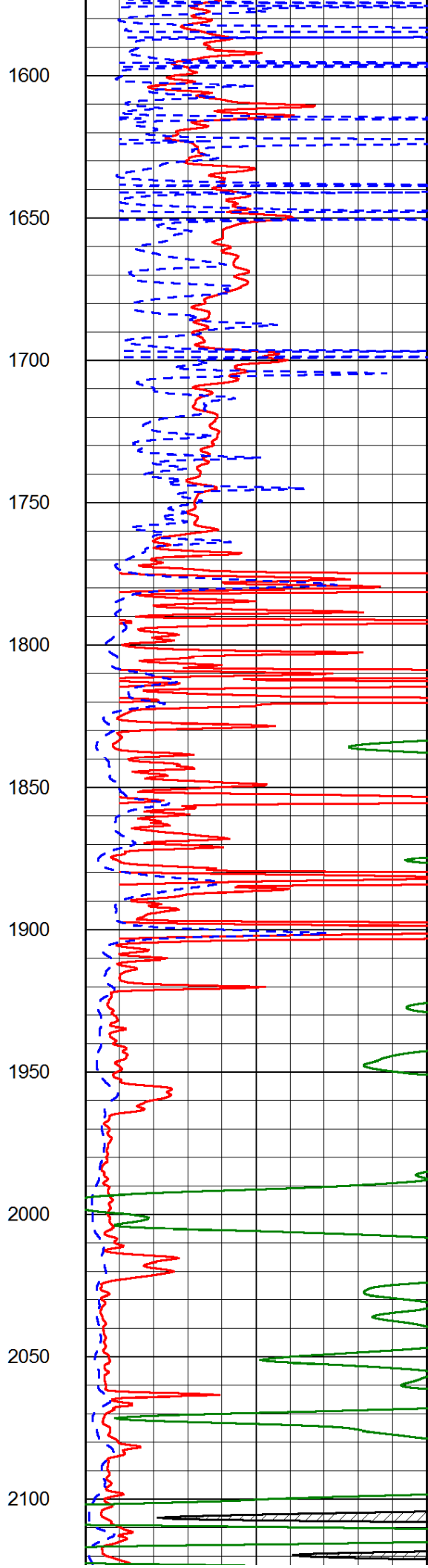
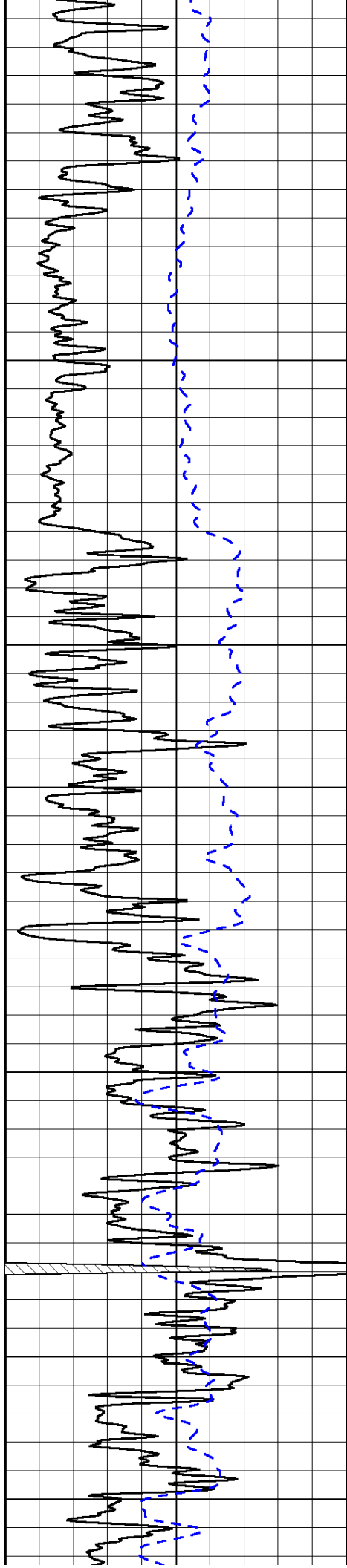
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-200	SP (mV)	0

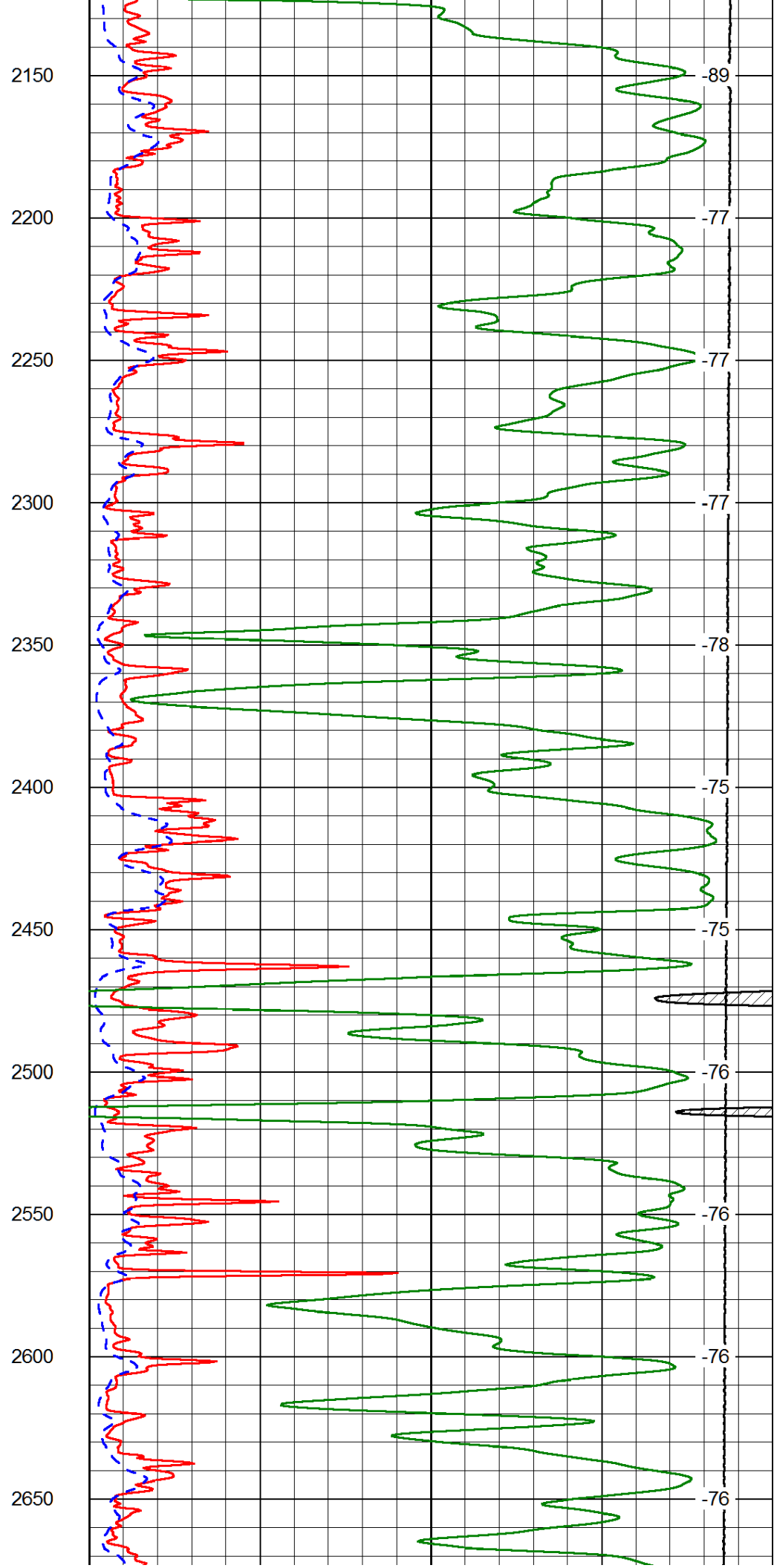
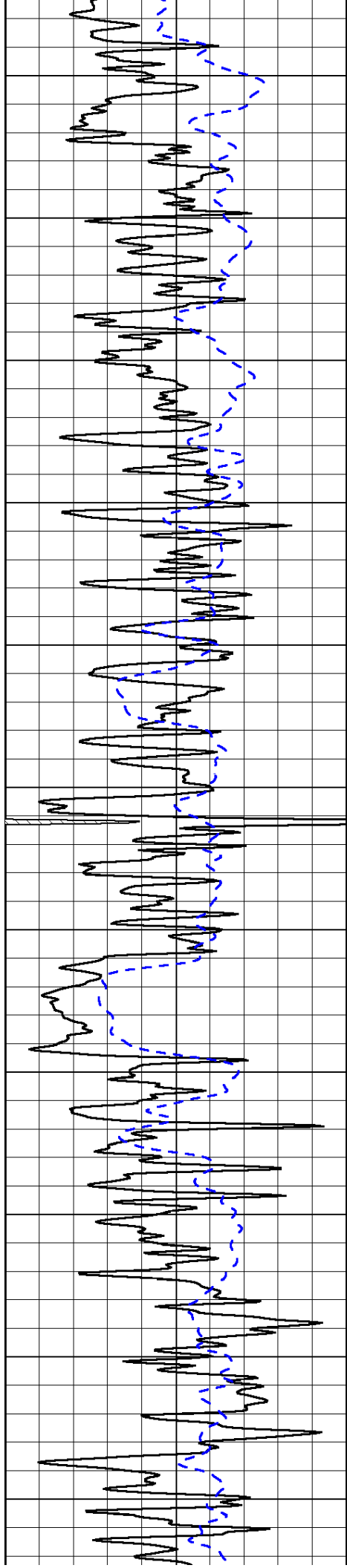
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0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0

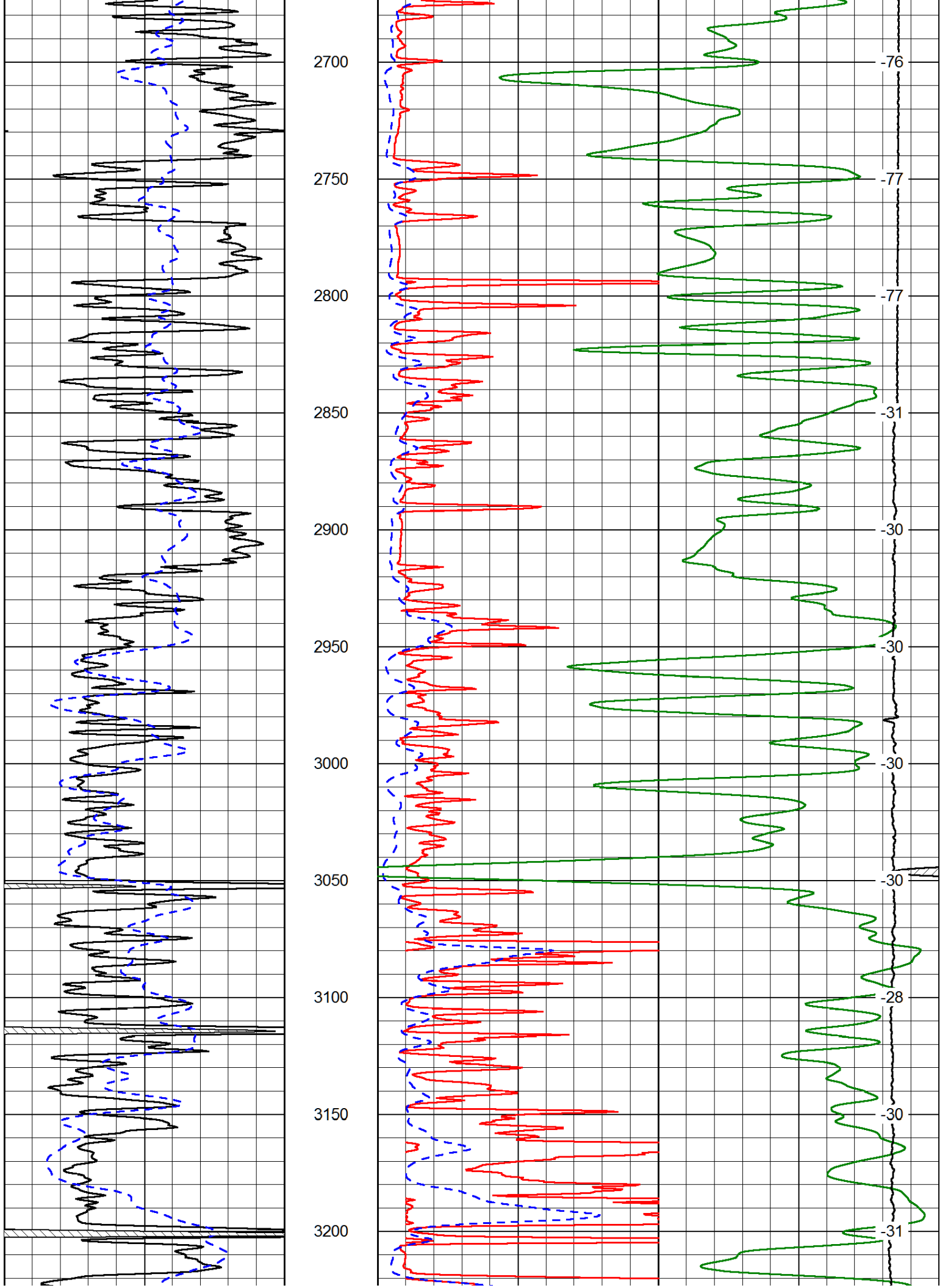
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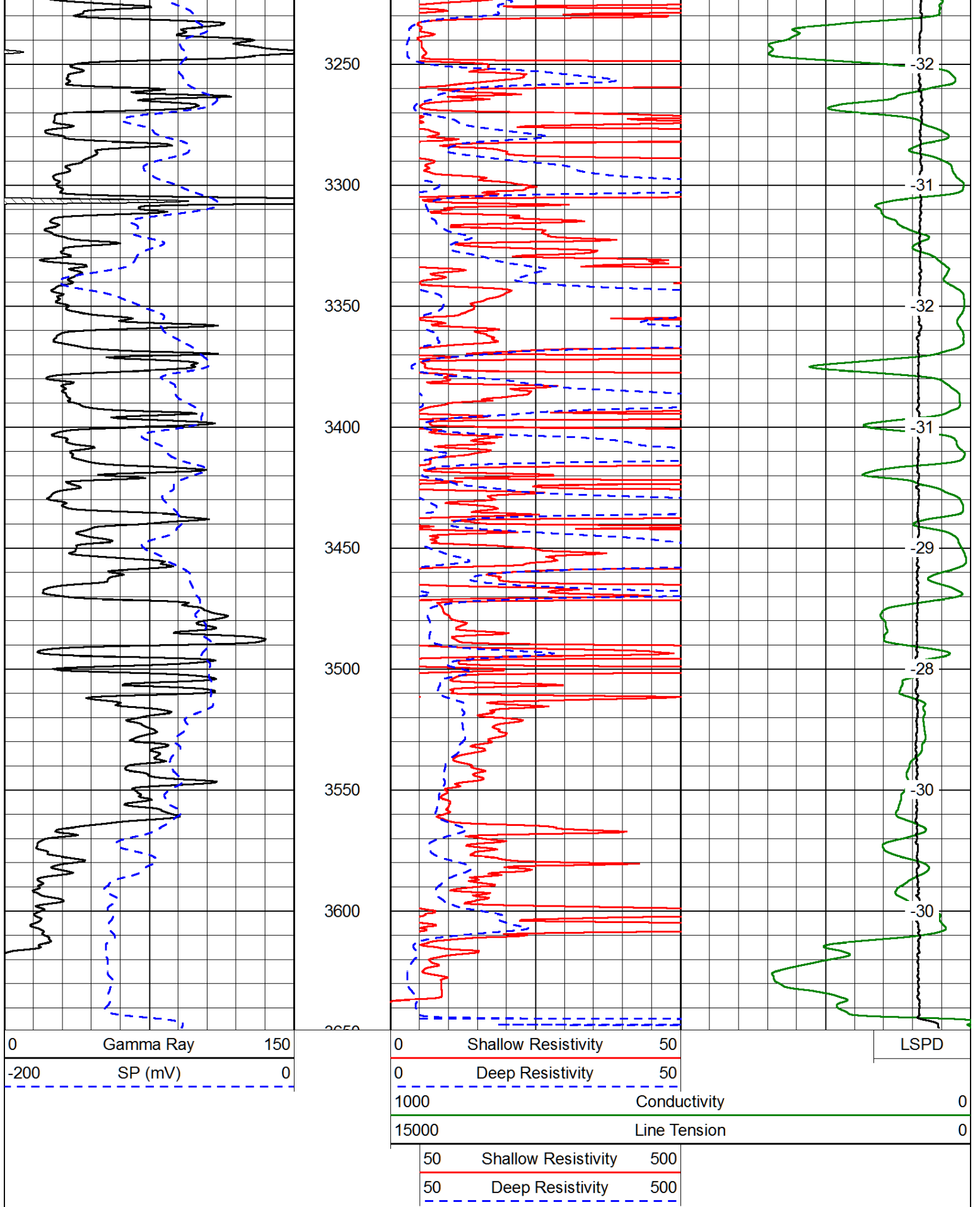
50	Shallow Resistivity	500
50	Deep Resistivity	500









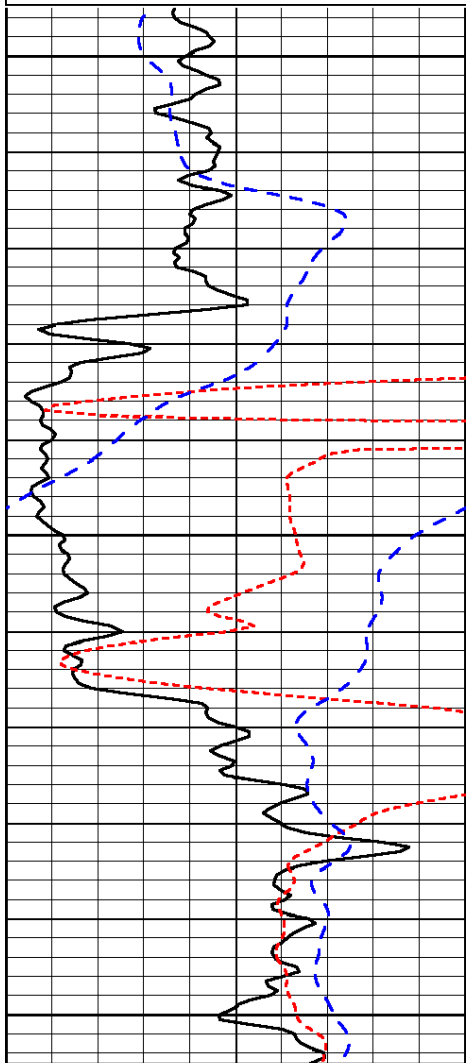


Database File: tdihd.db
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0	Gamma Ray	150
-160	RxoRt	40
-200	SP (mV)	0

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

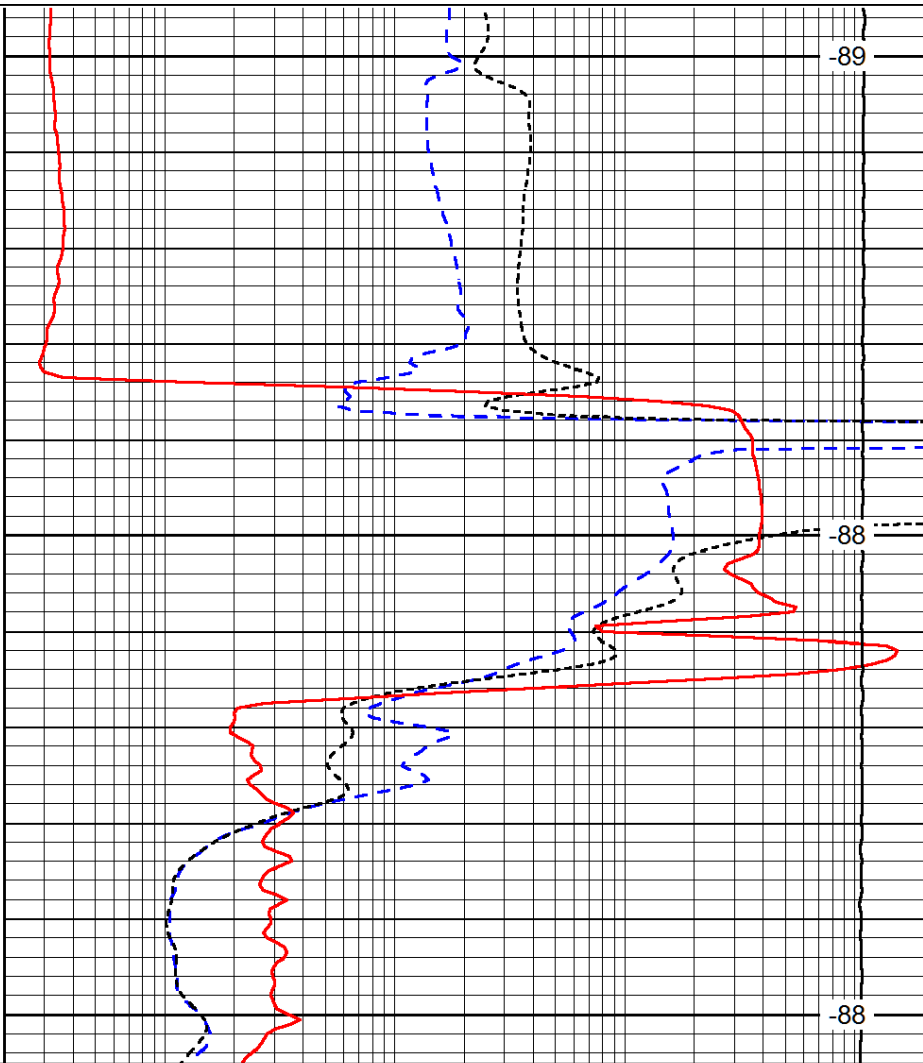
LSPD



1100

1150

1200



-89

-88

-88

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

LSPD

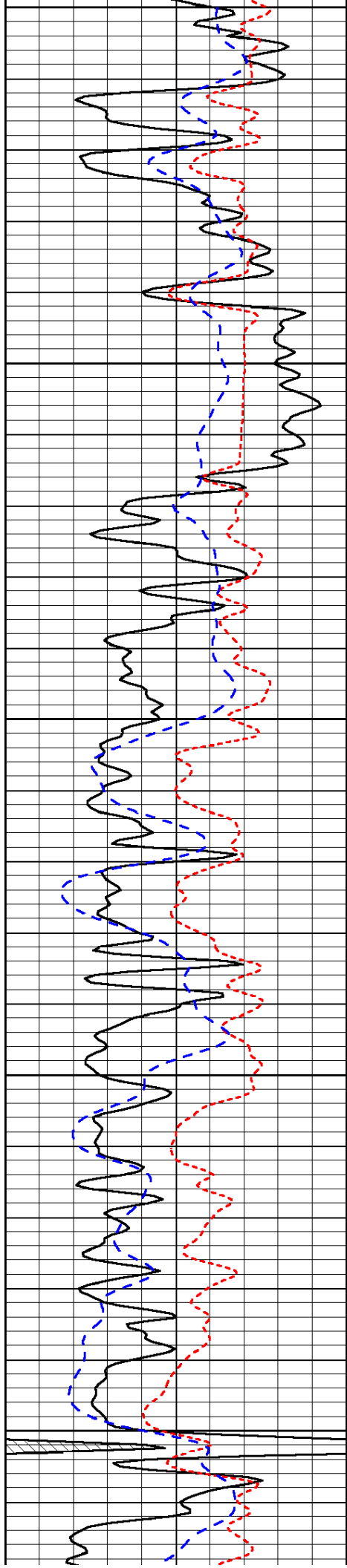
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-160	RxoRt	40
-200	SP (mV)	0

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

LSPD





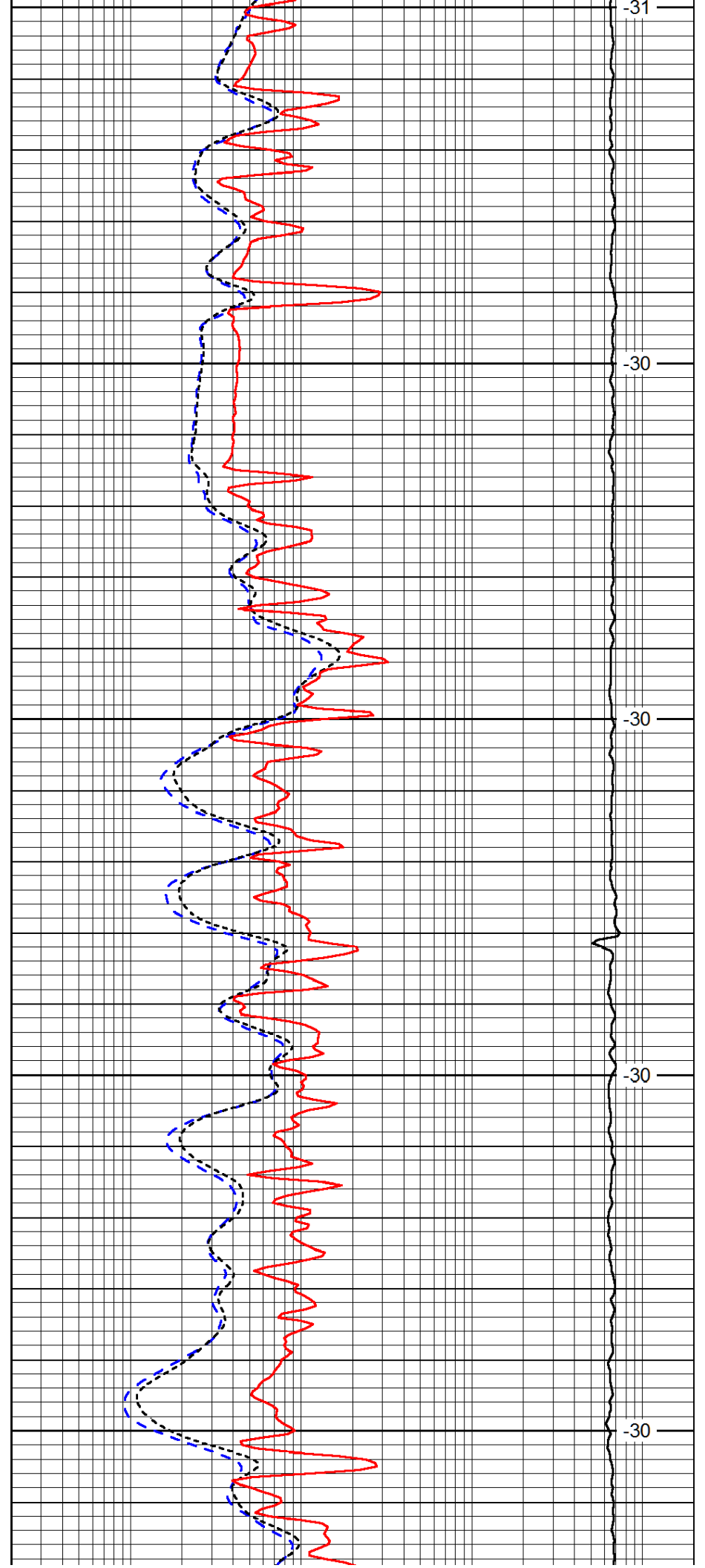
2850

2900

2950

3000

3050



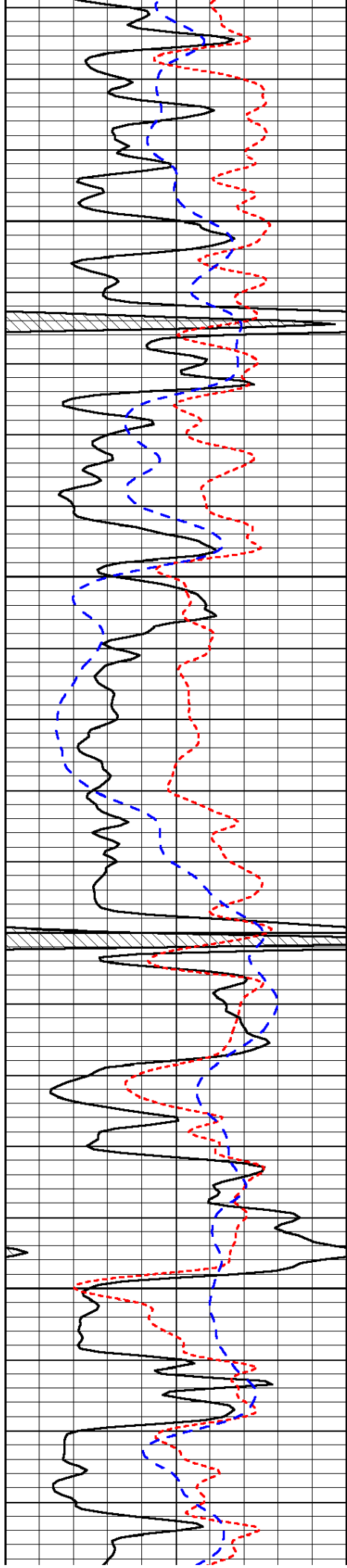
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-30

-30

-30

-30

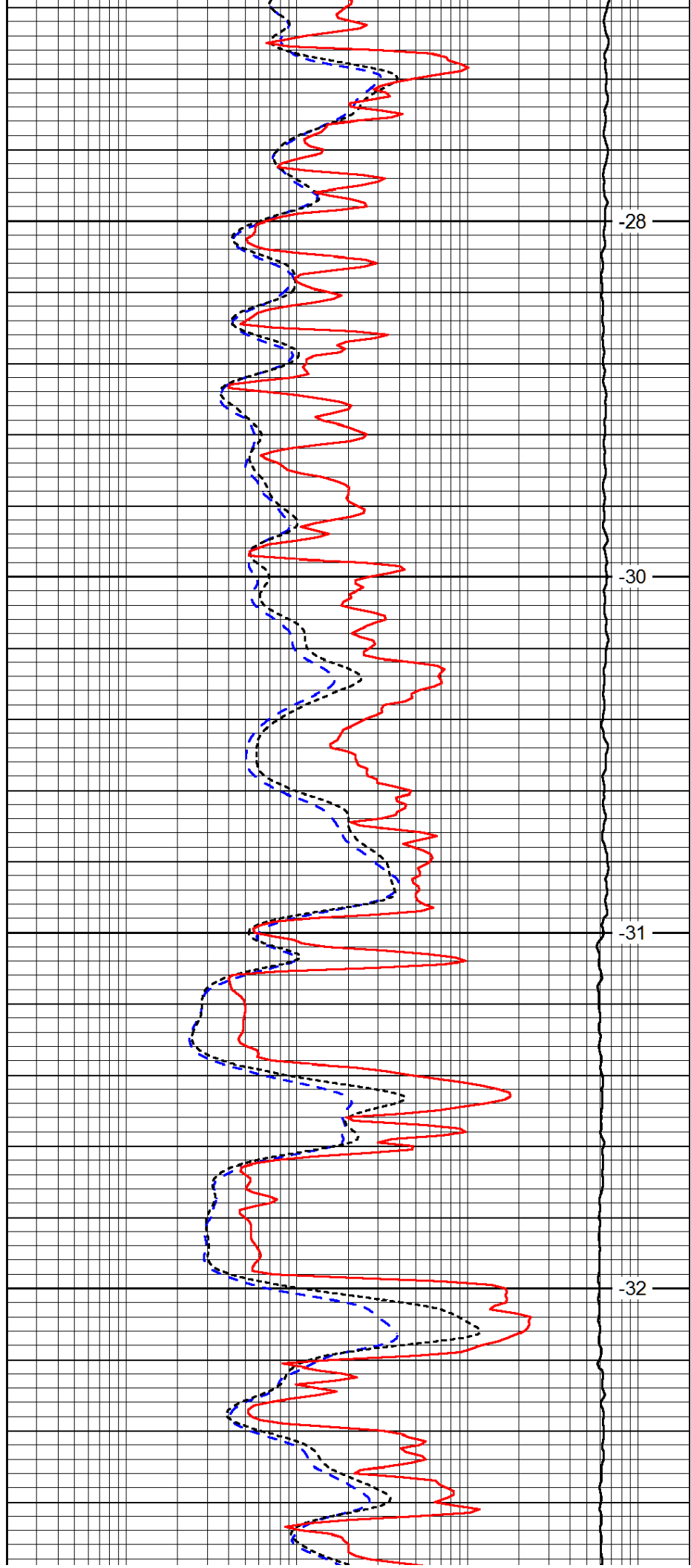


3100

3150

3200

3250

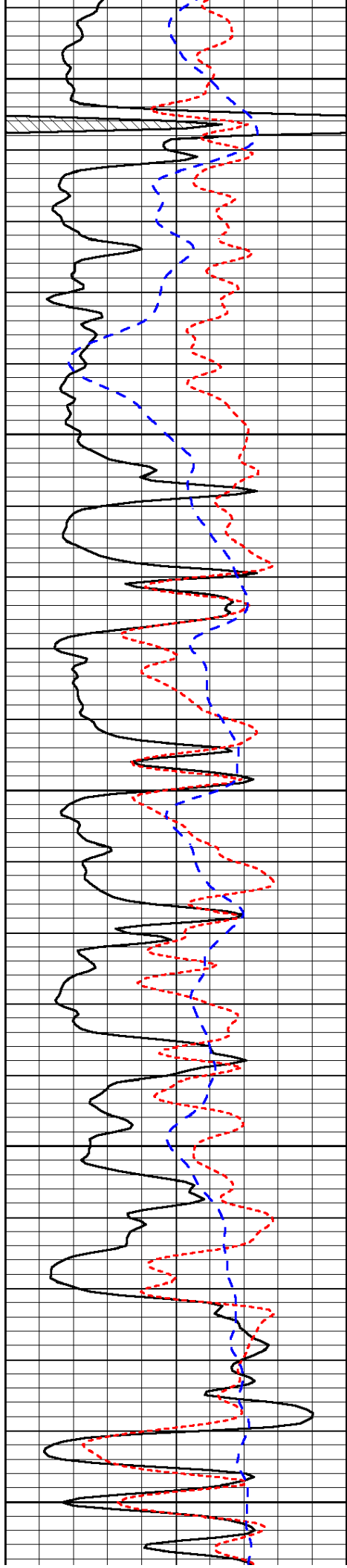


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-31

-32



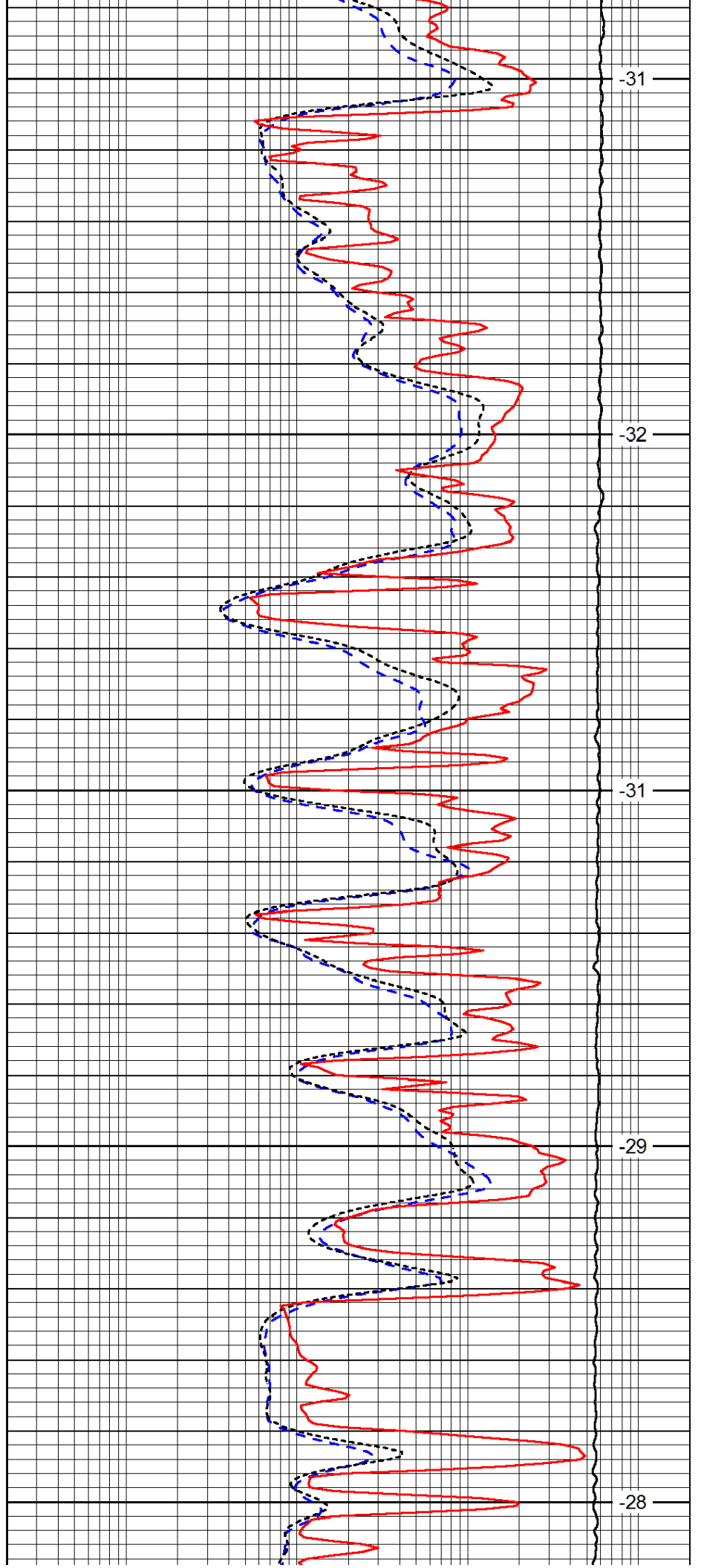
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3350

3400

3450

3500



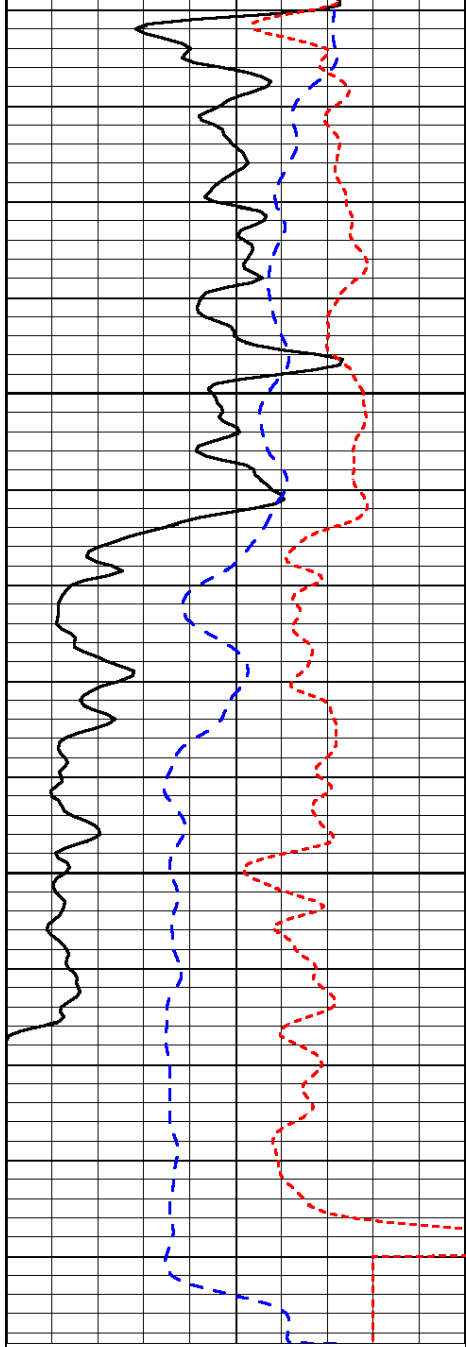
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-32

-31

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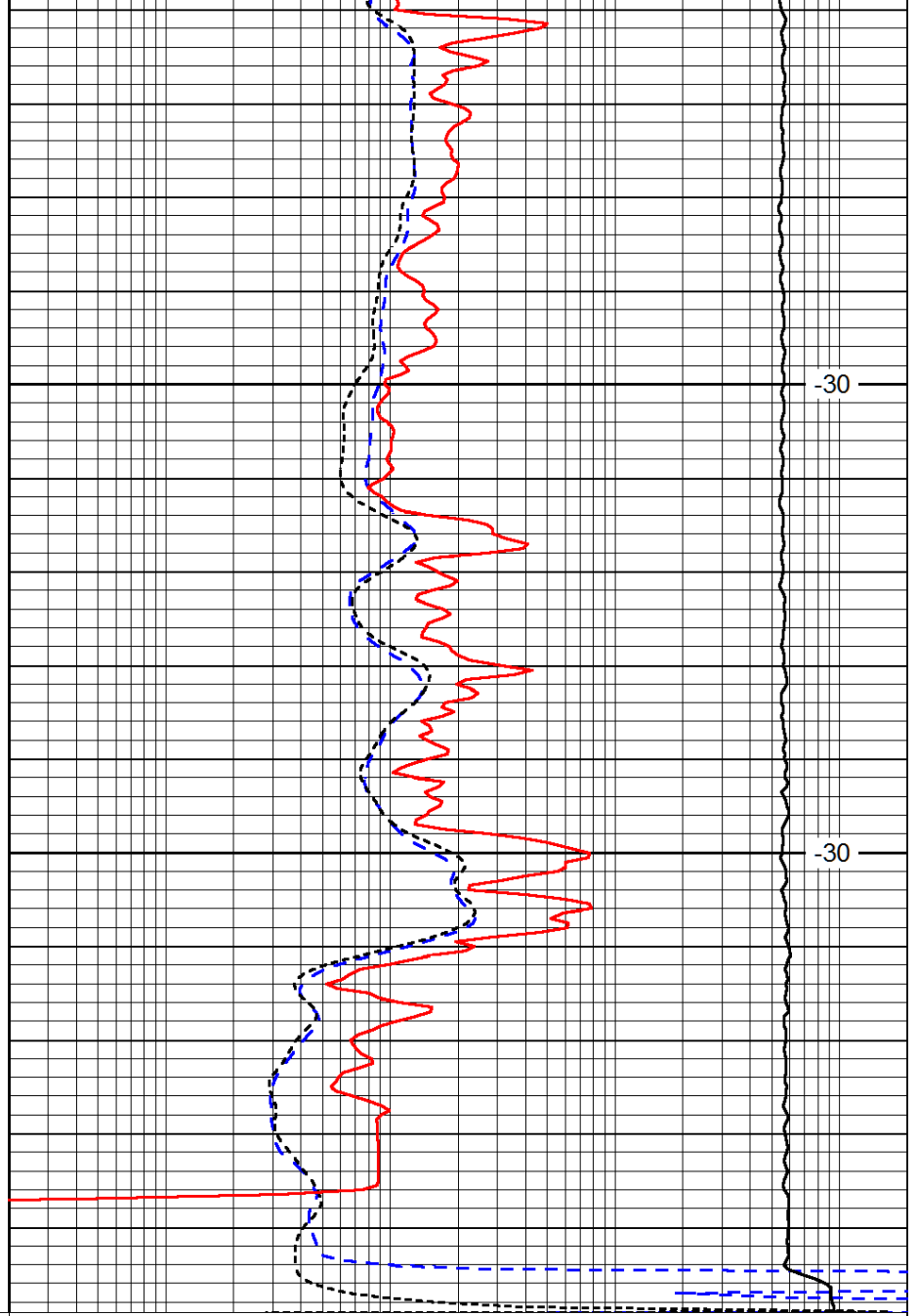
-28



3550

3600

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



-30

-30

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

LSPD