



# Dual Induction Log

Pioneer Energy Services

API No.

15-065-24,098-00-00

Company **Ainsworth Operating Company**

Well **Davis No. 4**

Field **Red Sun**

County **Graham**

State

**Kansas**

Location  
**2,160' FNL & 440' FEL**

Sec: **34**

Twp: **6S**

Rge: **22W**

Elevation

K.B. 2255

D.F. 2245

G.L. 2245

Elevation 2245

10 Ft. Above Perm. Datum

Ground Level

Kelly Bushing

Kelly Bushing

Drilling Measured From

Log Measured From

Permanent Datum

Date **3/2/2015**

Run Number **One**

Depth Driller **3881**

Depth Logger **3882**

Bottom Logged Interval **3881**

Top Log Interval **250**

Casing Driller **8.625 @ 268**

Casing Logger **266**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity, ppm CL **500**

Density / Viscosity **9.1 44**

pH / Fluid Loss **10.0 8.4**

Source of Sample **Flowline**

Rm @ Meas. Temp **1.40 @ 66**

Rmf @ Meas. Temp **1.05 @ 66**

Rmc @ Meas. Temp **1.89 @ 66**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.80 @ 115**

Operating Rig Time **4 1/2 Hours**

Max Rec. Temp. F **115**

Equipment Number **108**

Location **Hays**

Recorded By **J. Long**

Witnessed By **Randy Kilian**

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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 Pioneer Energy Services  
785.625.3858

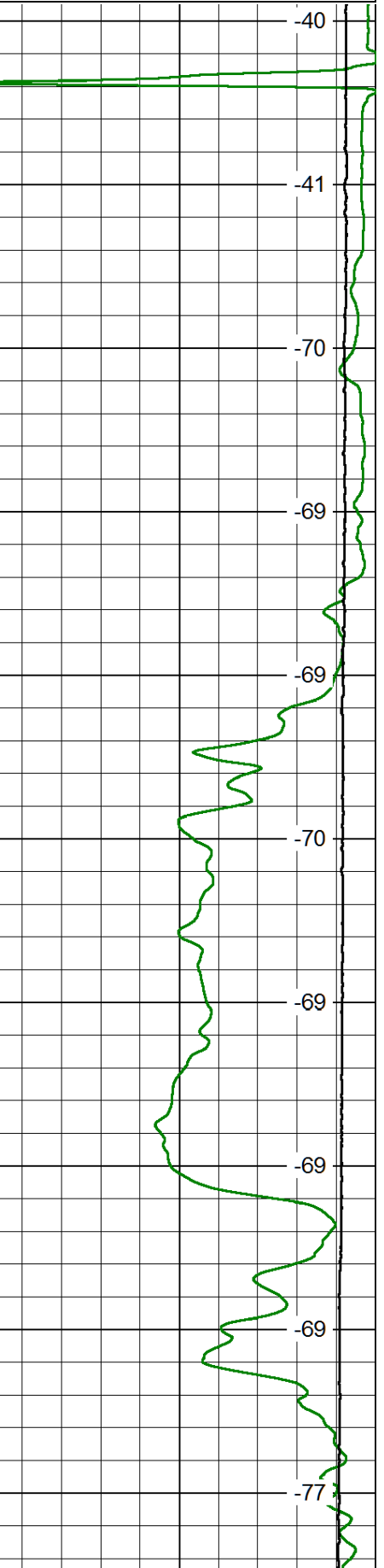
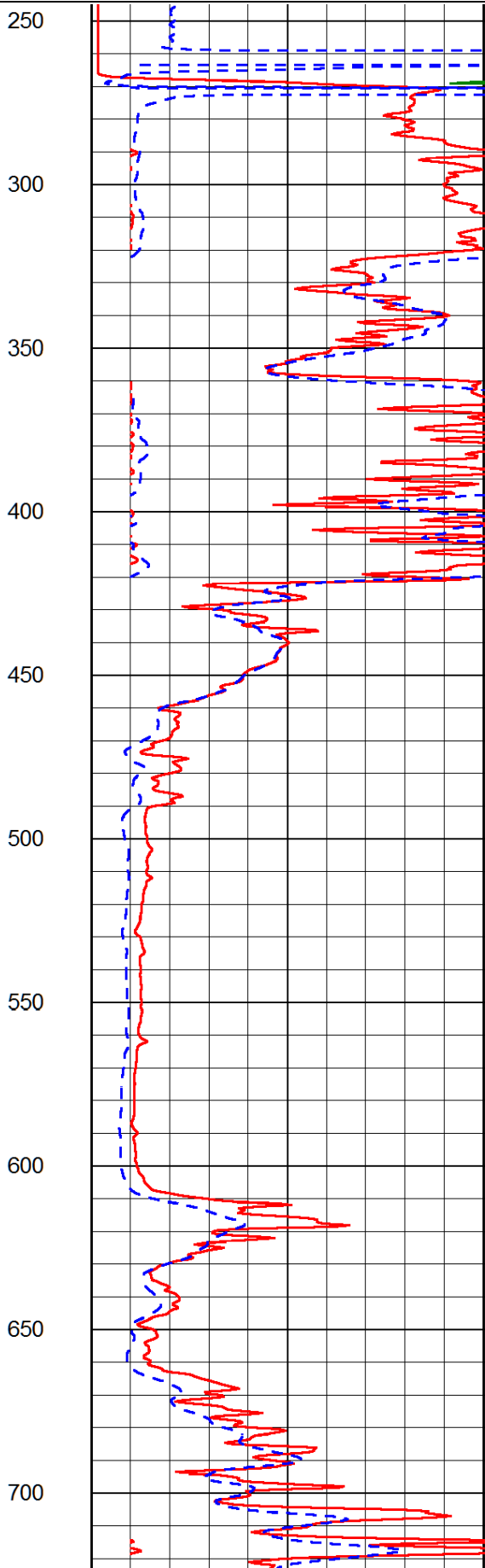
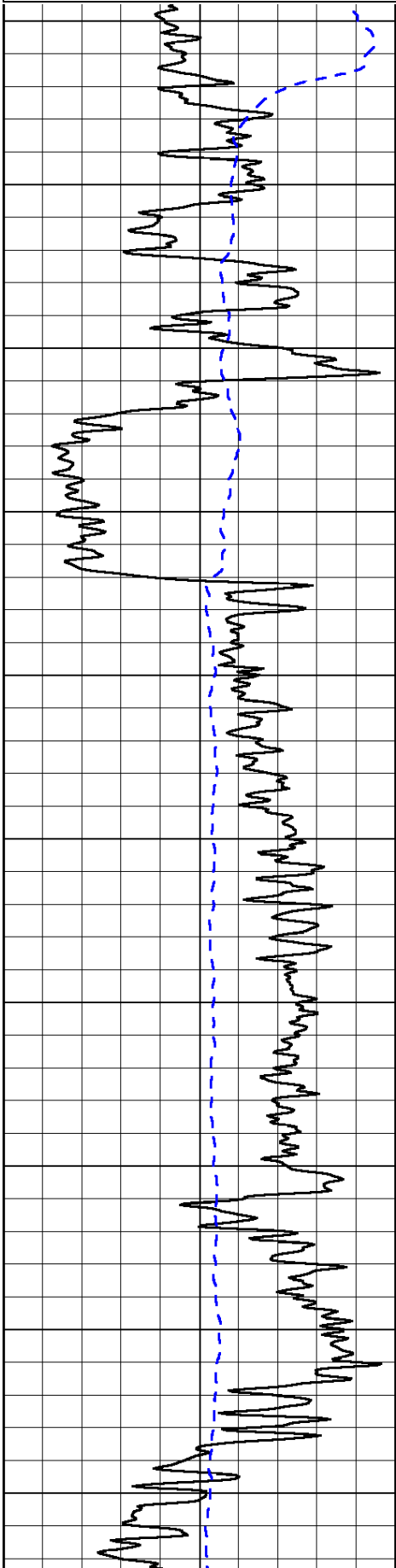
Hill City, 8 North to Y Road, 4 East to 310 Road, 1 North to Z Road, 1/2 East, South Into

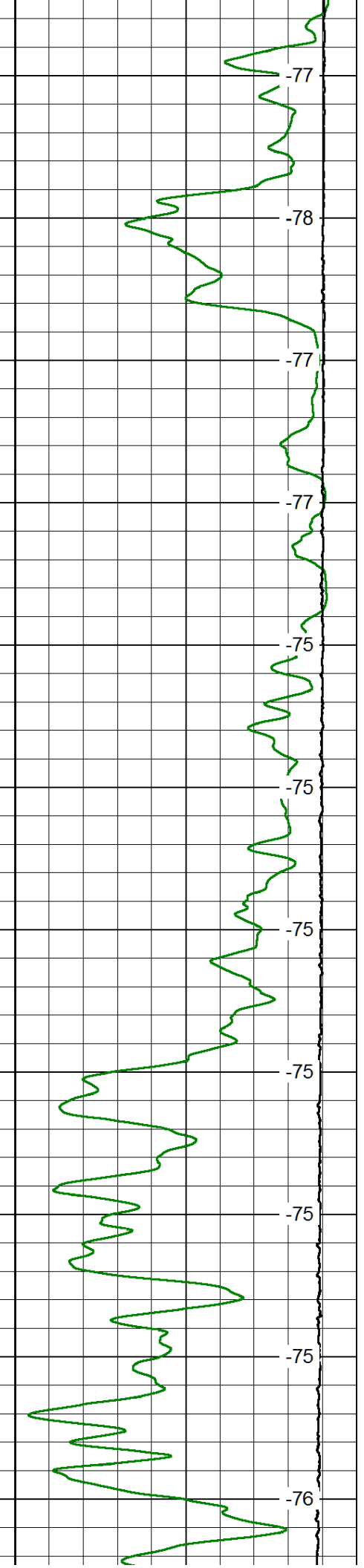
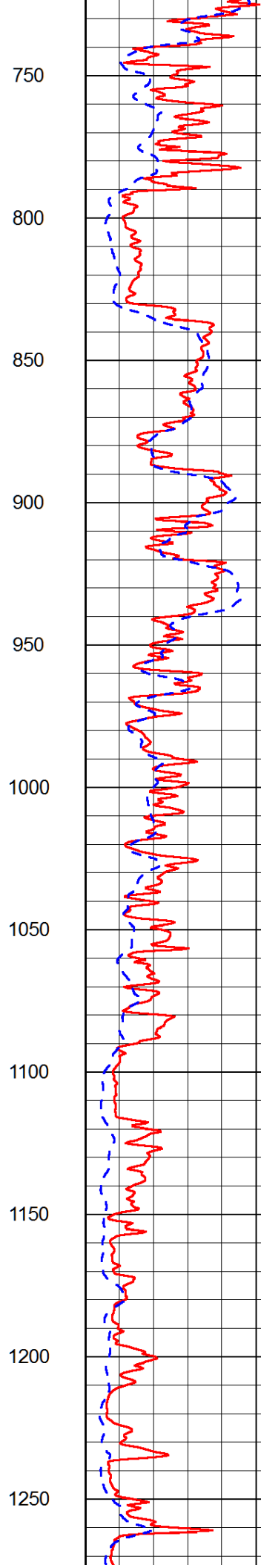
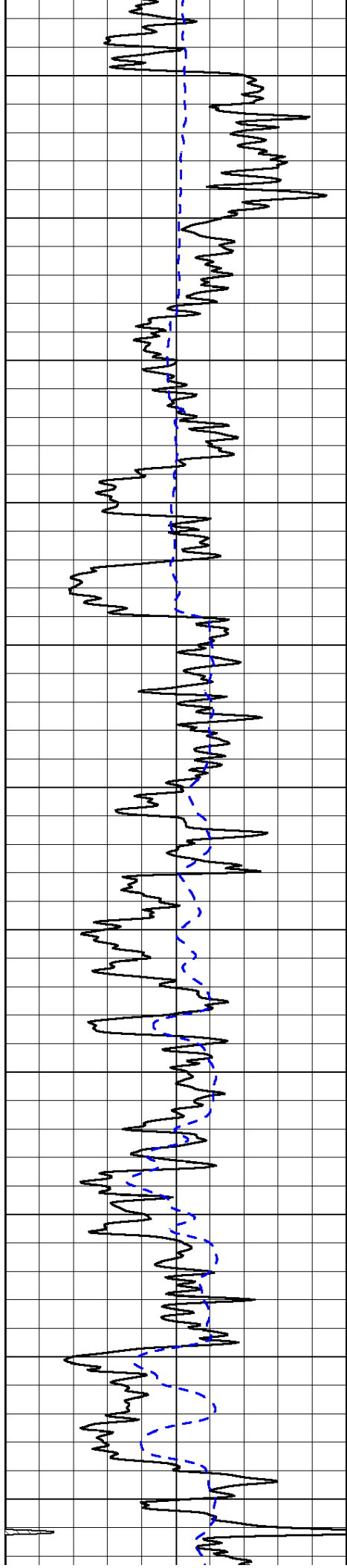
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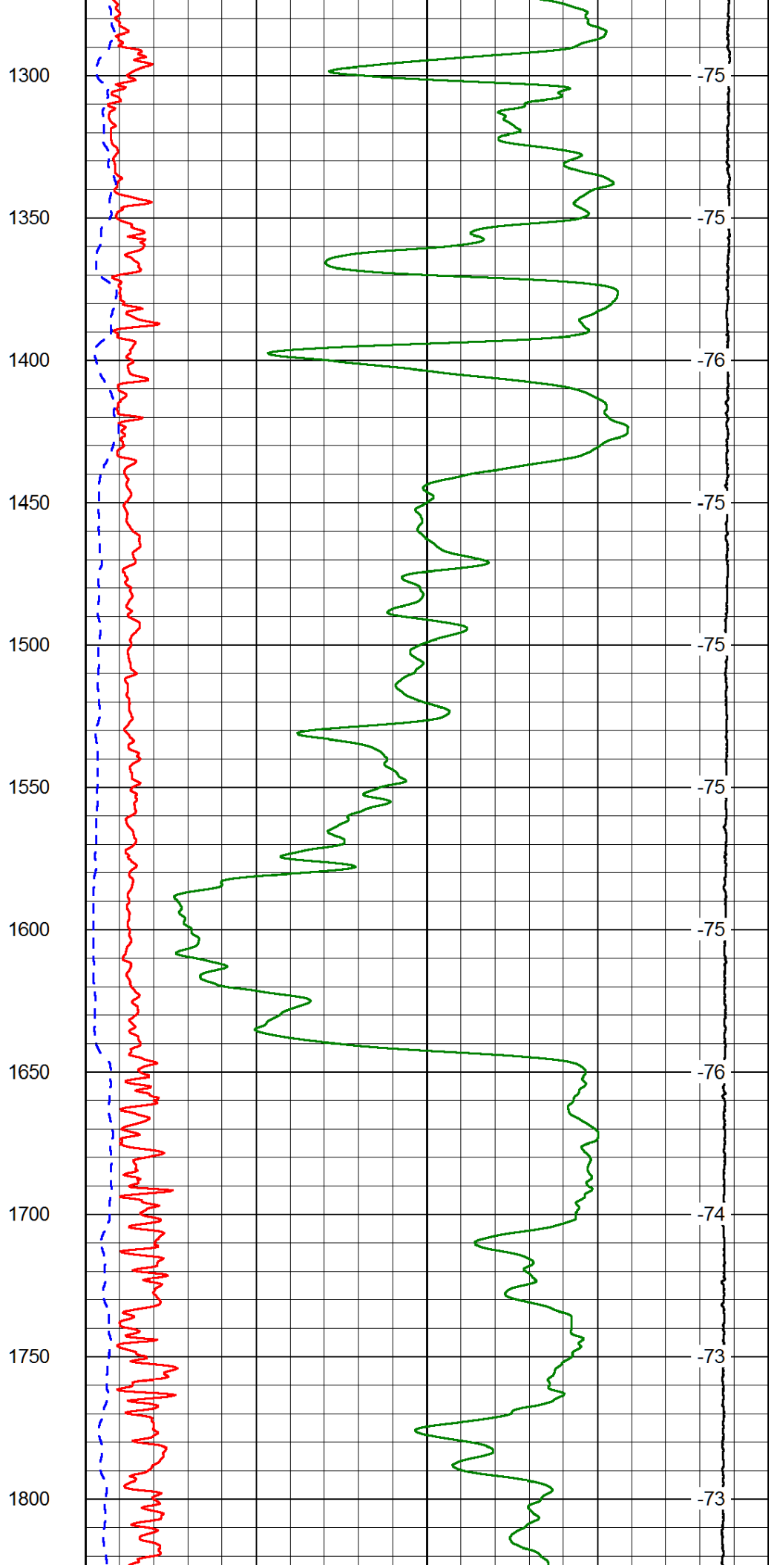
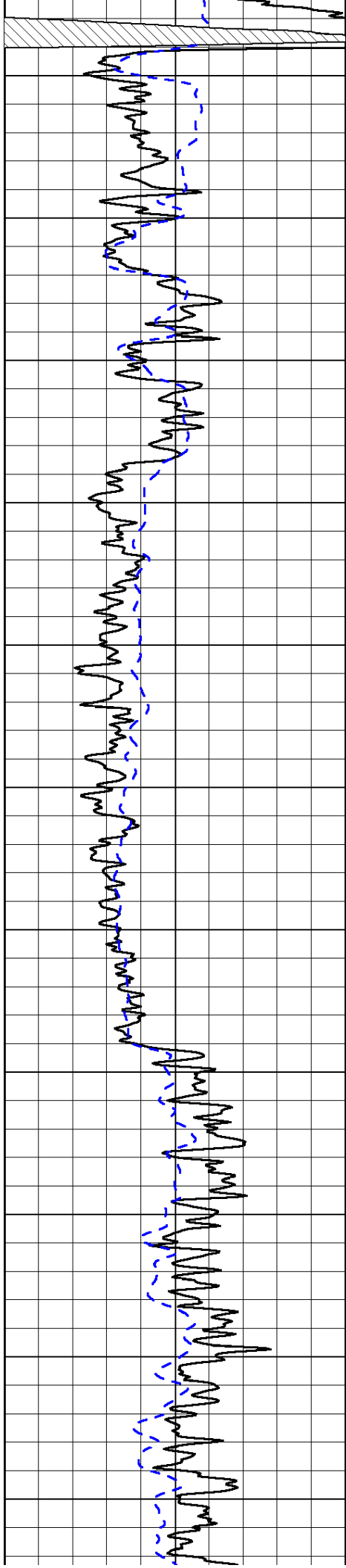
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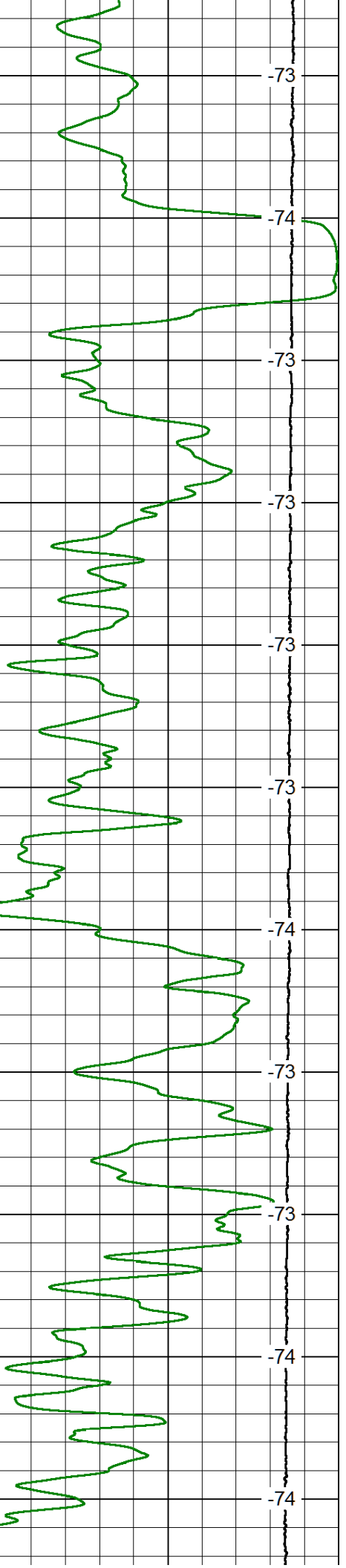
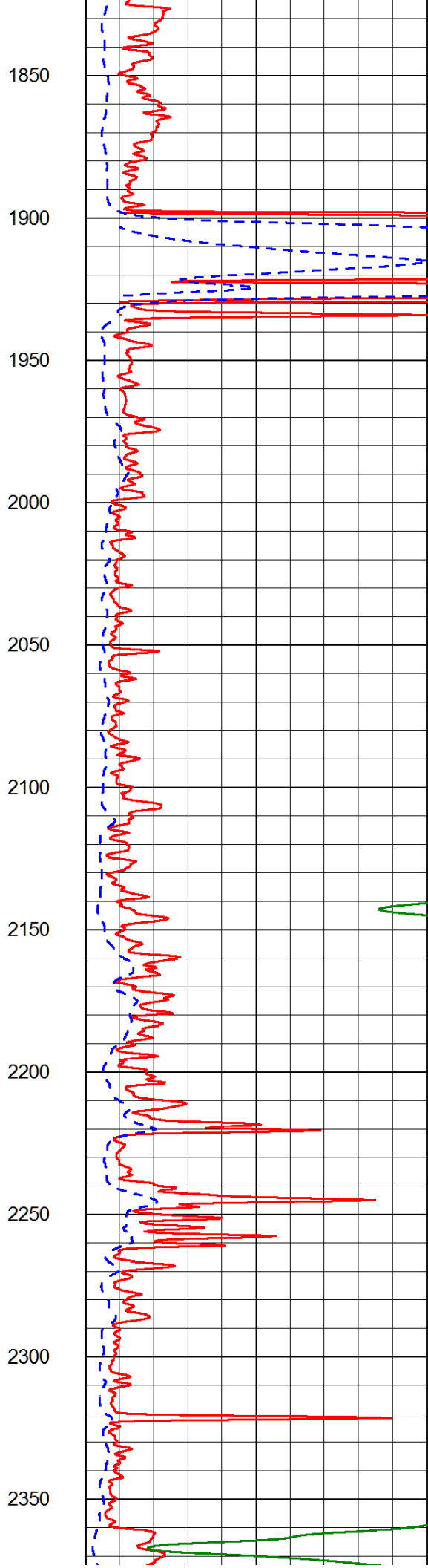
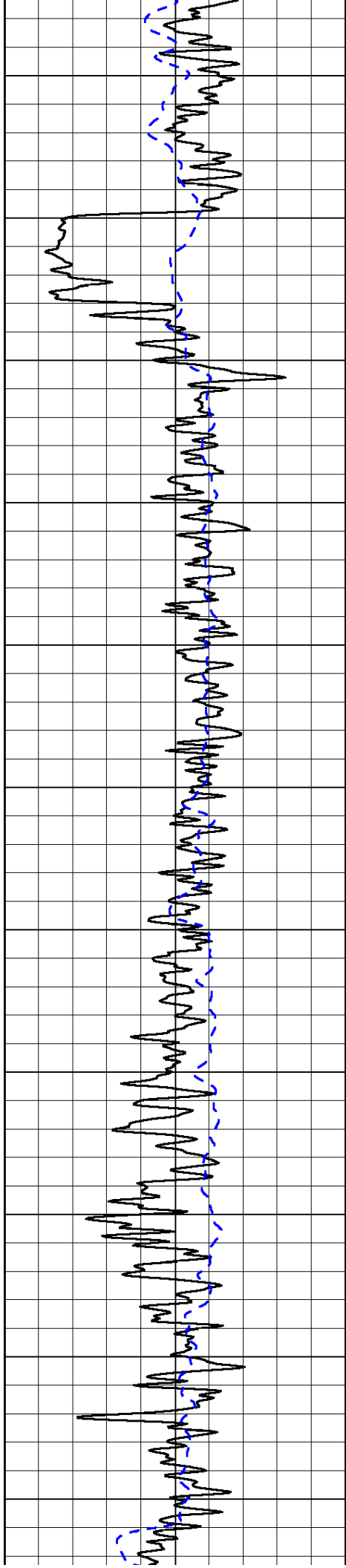
0	Shallow Resistivity	50
0	Deep Resistivity	50
1000	Conductivity	0
15000	Line Tension	0
50	Shallow Resistivity	500
50	Deep Resistivity	500

LSPD

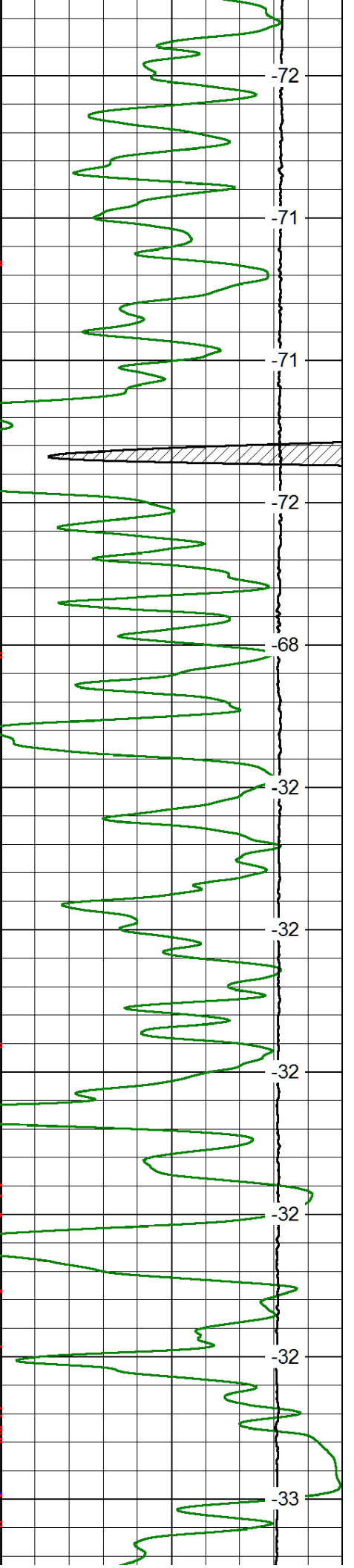
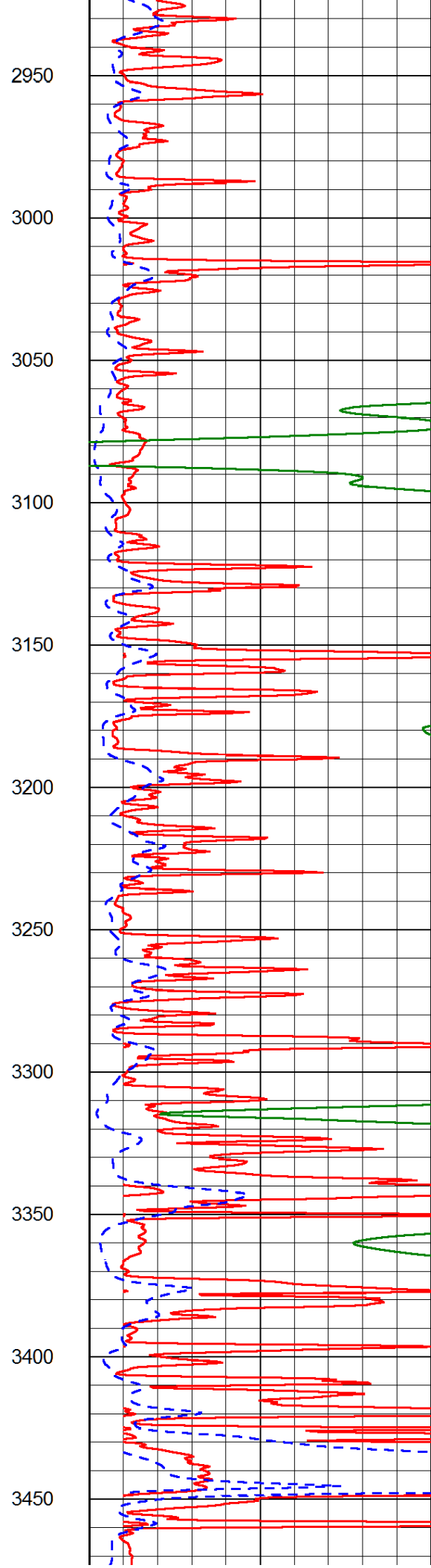
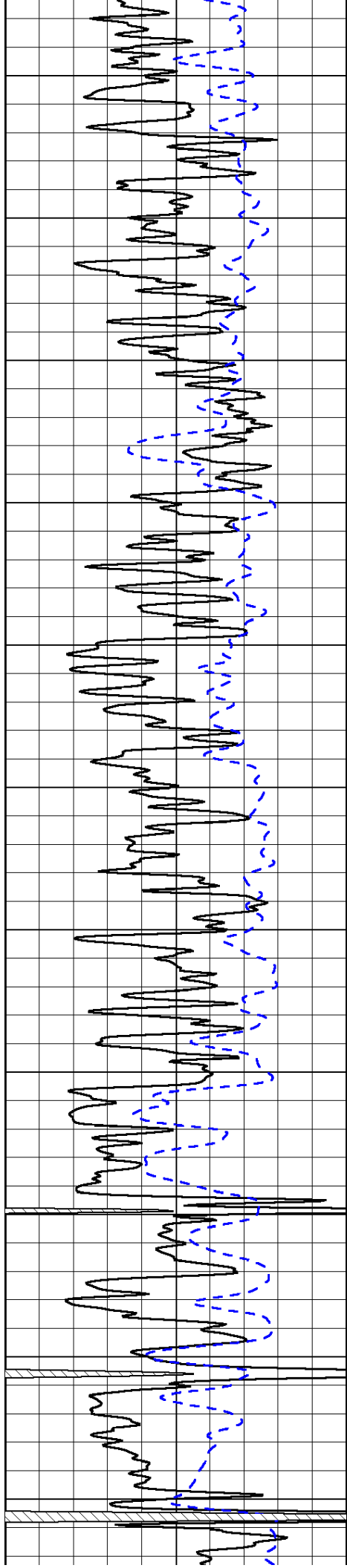


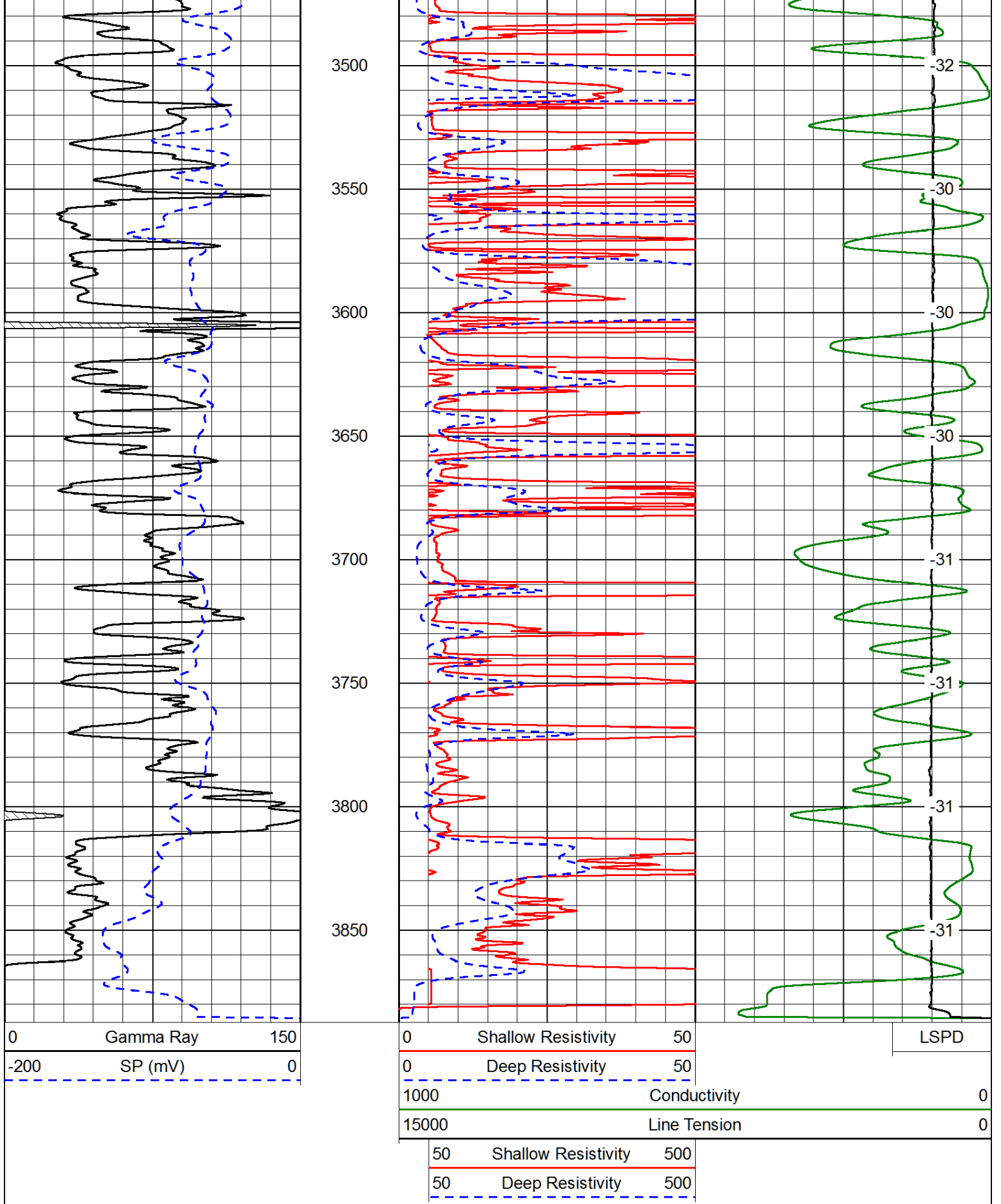










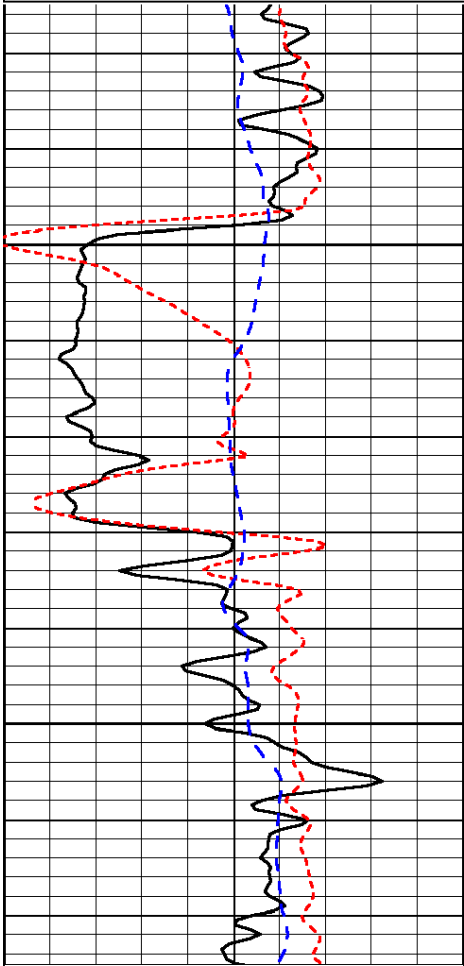


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 Presentation Format: dil  
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-160	RxoRt	40
-200	SP (mV)	0

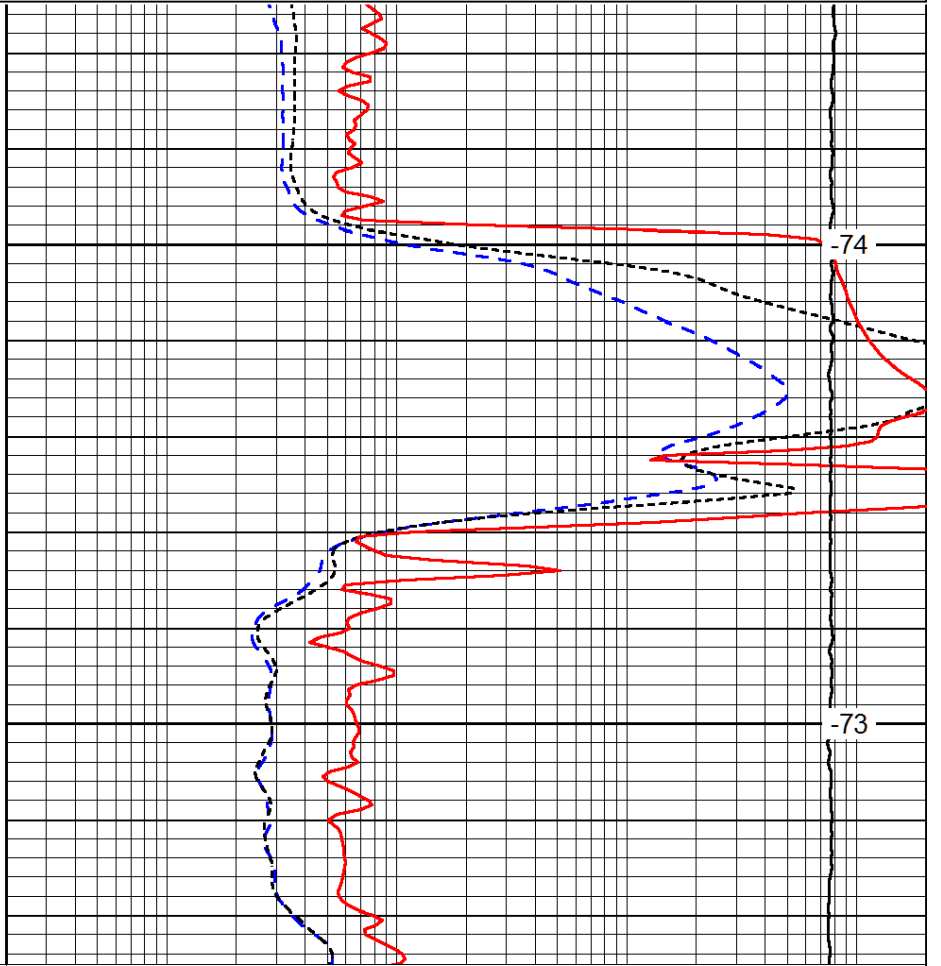
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD



1900

1950



-74

-73

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

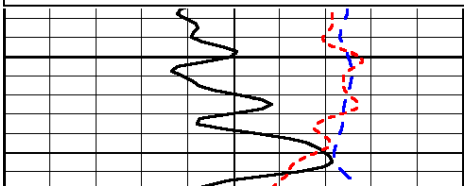
LSPD

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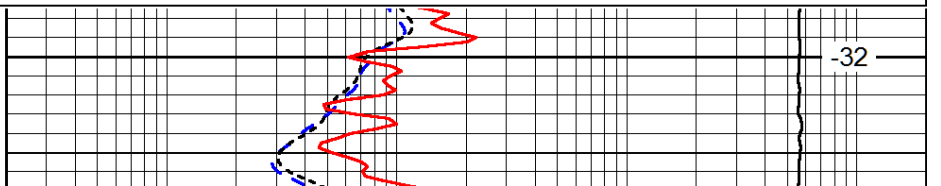
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-160	RxoRt	40
-200	SP (mV)	0

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

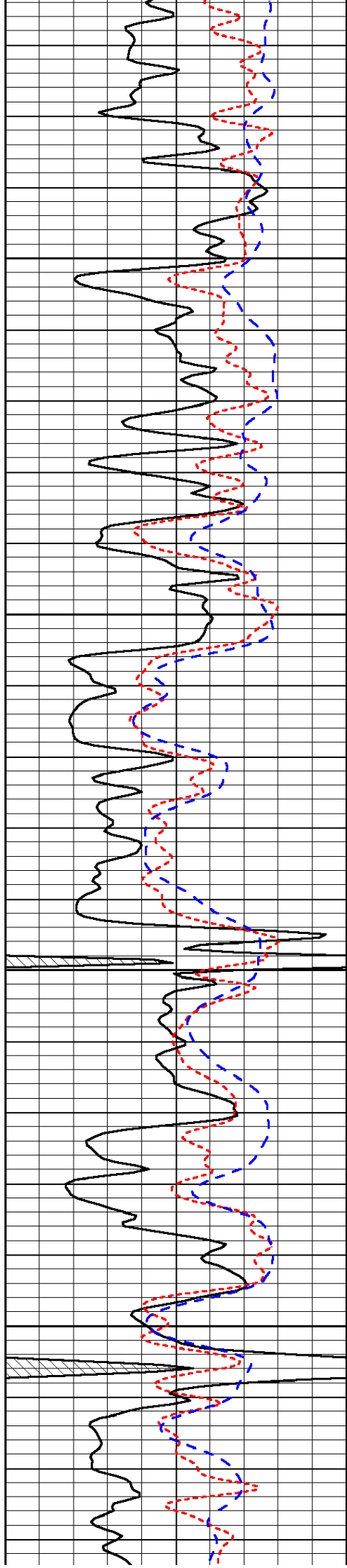
LSPD



3200



-32

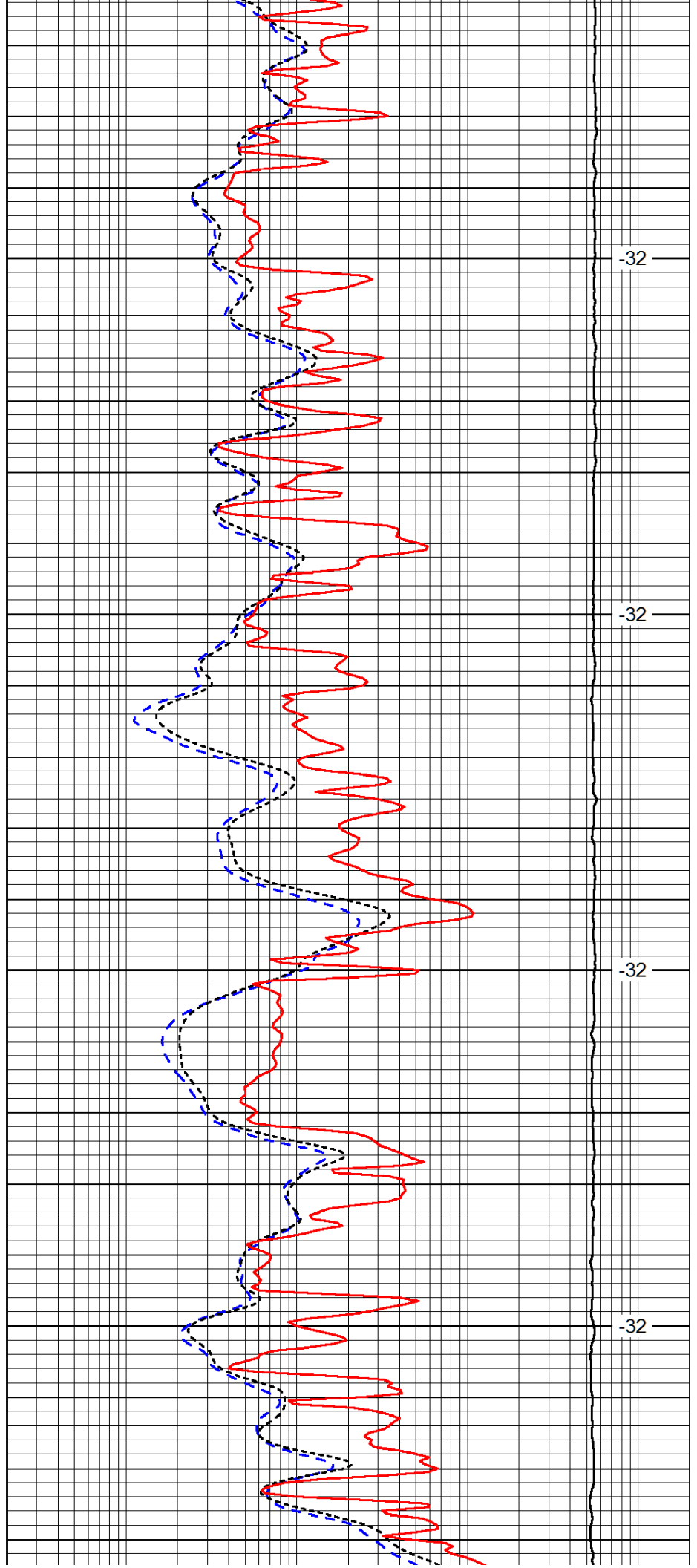


3250

3300

3350

3400

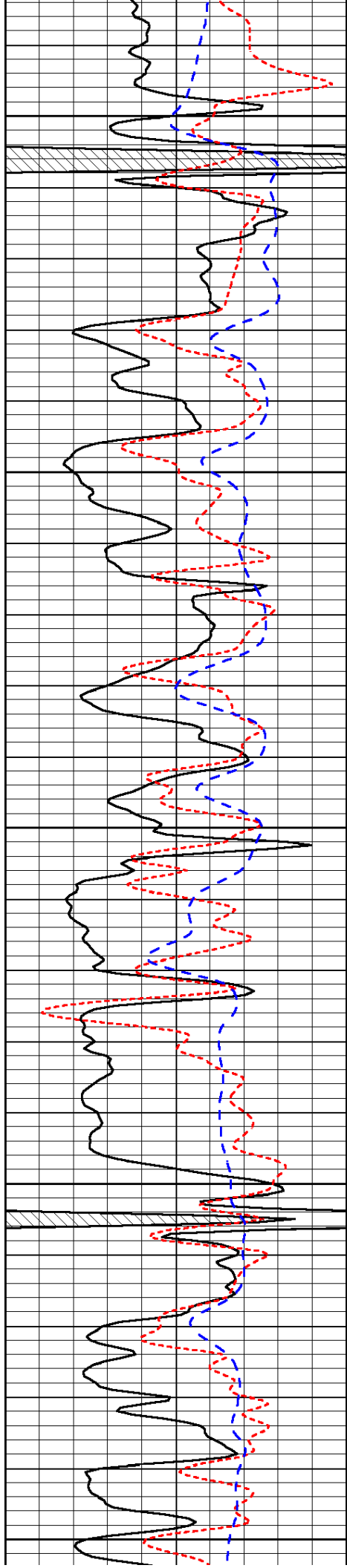


-32

-32

-32

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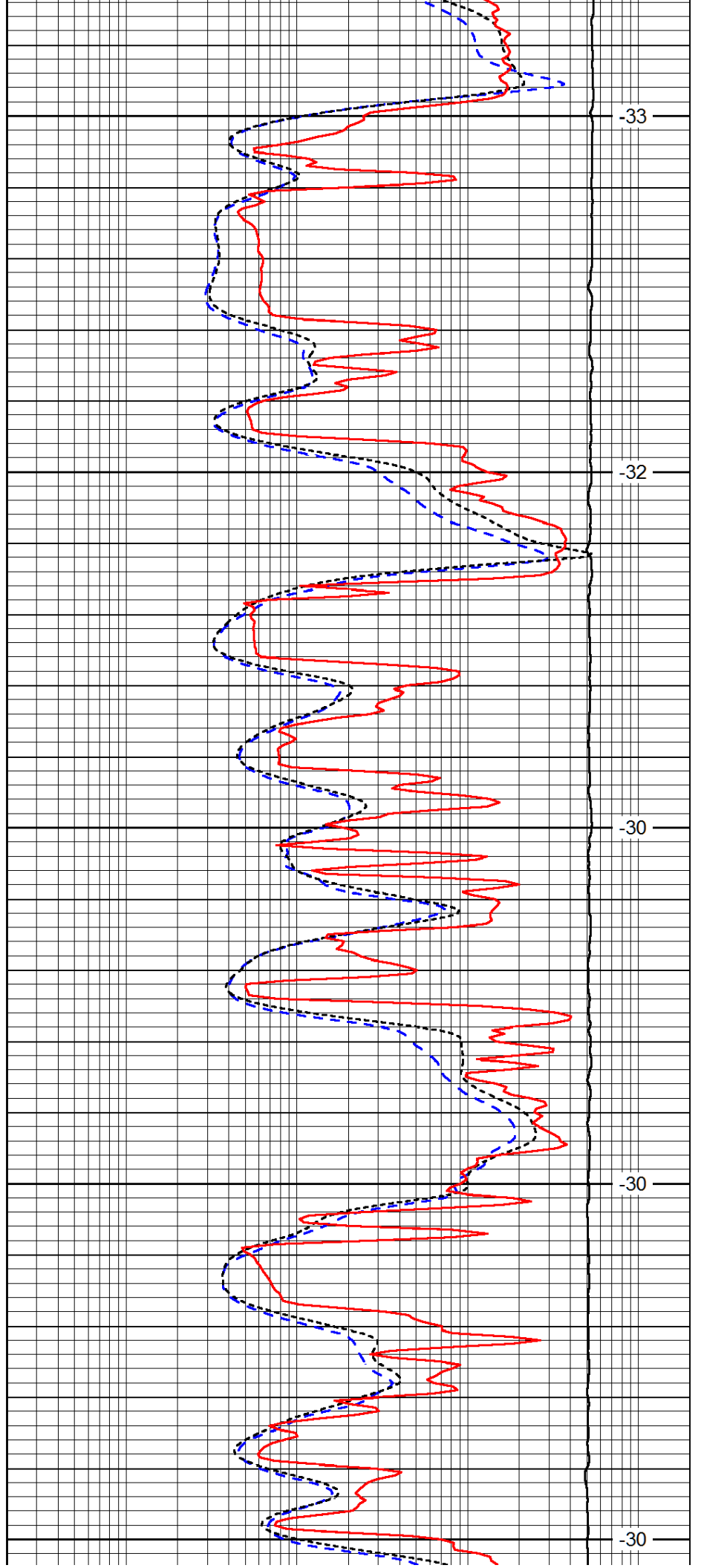
3450

3500

3550

3600

3650



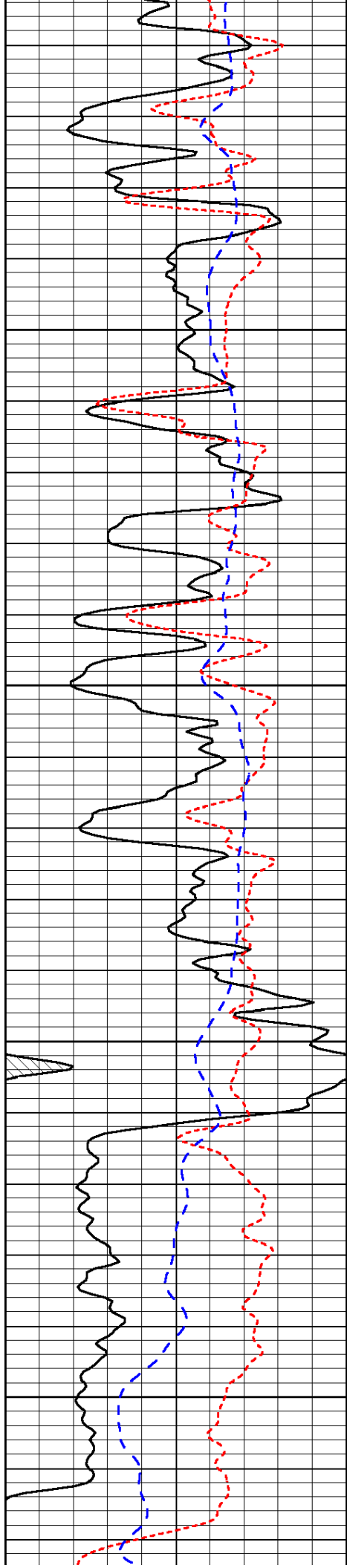
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-32

-30

-30

-30

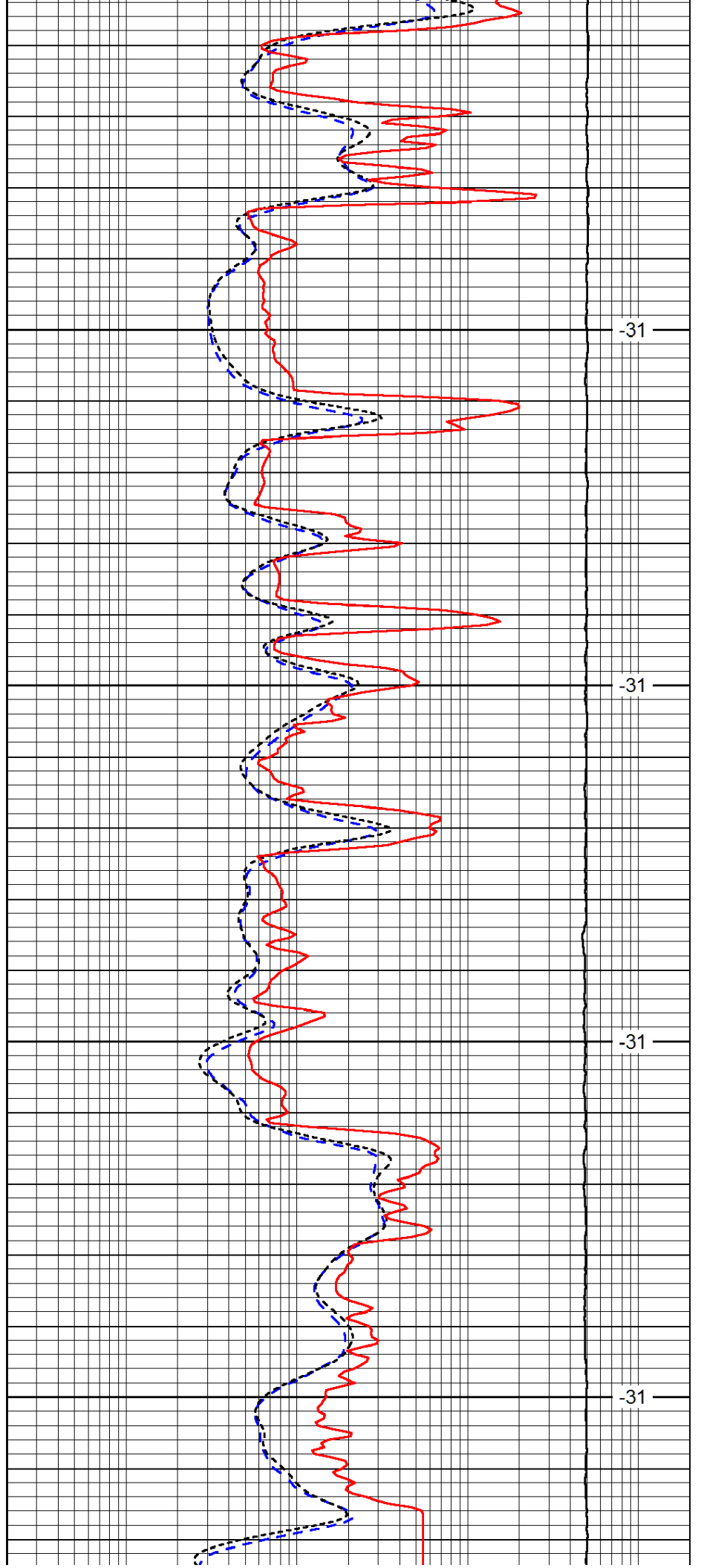


3700

3750

3800

3850

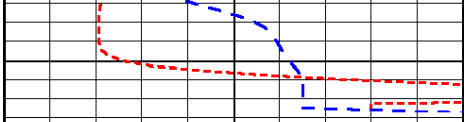


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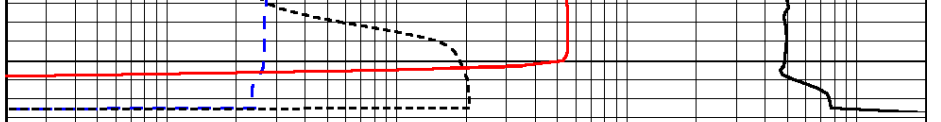
-31

-31

-31



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