PIONEER

Pioneer Energy Services

Dual Induction Log

Company Mid-Con Operating, LLC

Well Hagerman #13-10

Field Oro

County Pawnee State Kansas

API No. 15-145-21694-00-00

Location 2310' FNL & 990' FWL

Sec: 10 Twp: 20S Rge: 19W

Other Services
CNL/CDL
MEL

Elevation
K.B. 2247
D.F.
G.L. 2234

Permanent Datum Ground Level
Log Measured From Kelly Bushing 13 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date	10/23/2012		
Run Number	One		
Depth Driller	4509		
Depth Logger	4508		
Bottom Logged Interval	4507		
Top Log Interval	500		
Casing Driller	8.625 @ 507		
Casing Logger	520		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	3000		
Density / Viscosity	9.2 50		
pH / Fluid Loss	9.5 8.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.60 @ 72		
Rmf @ Meas. Temp	0.45 @ 72		
Rmc @ Meas. Temp	0.81 @ 72		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.35 @ 123		
Operating Rig Time	5 Hours		
Max Rec. Temp. F	123		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Chris Bean		

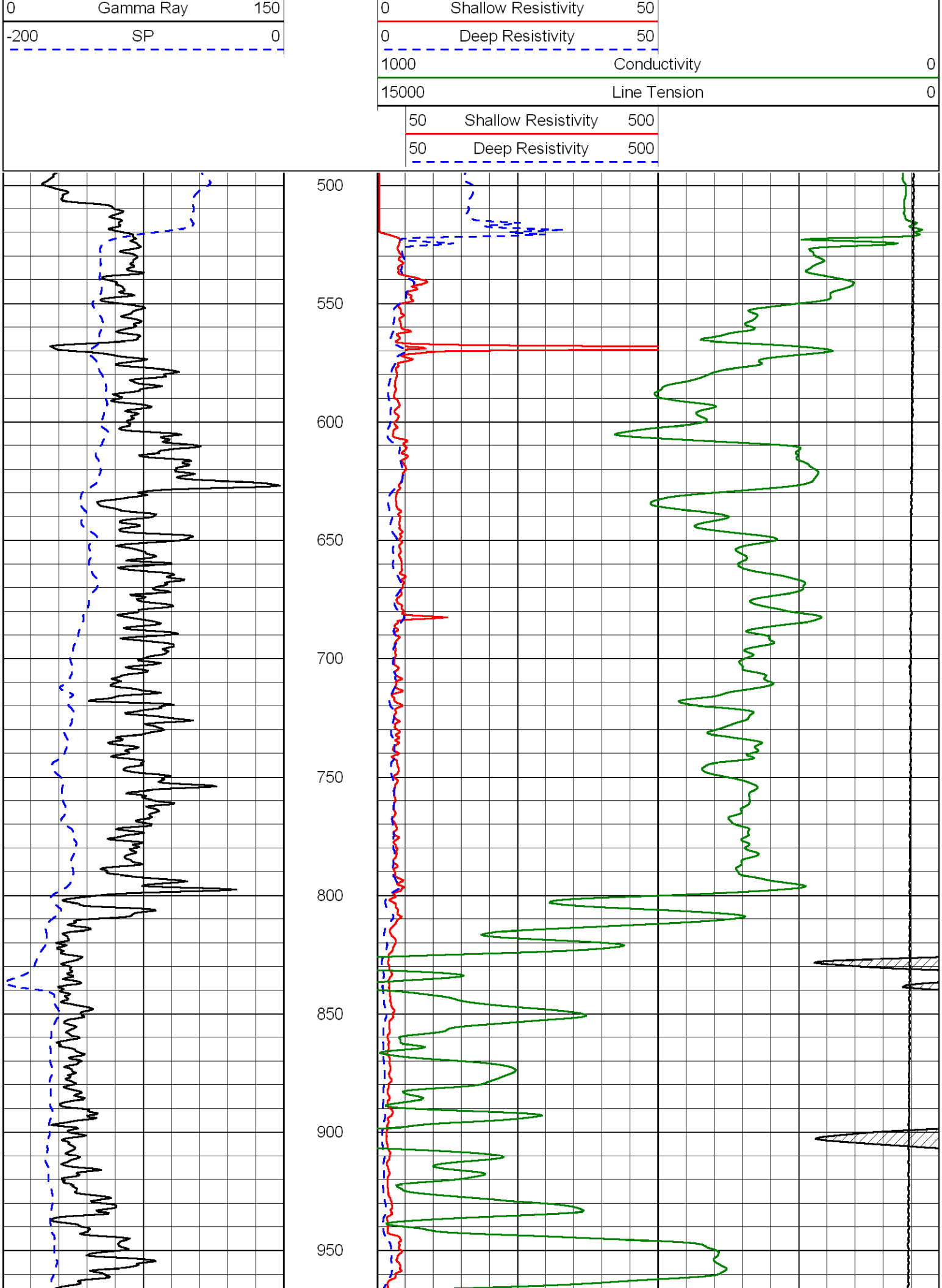
<<< Fold Here >>>

Comments

Thank you for using Log-Tech, Inc.
(785) 625-3858

Rush Center,
10 South to Pawnee County X Rd, 6 West, 1/2 North,
East into

Database File:	midcon_102312hd.db
Dataset Pathname:	dil/mcstack
Presentation Format:	dil2in
Dataset Creation:	Wed Oct 24 00:33:48 2012
Charted by:	Depth in Feet scaled 1:600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-200 SP 0
0 Shallow Resistivity 50
0 Deep Resistivity 50
1000 Conductivity 0
15000 Line Tension 0
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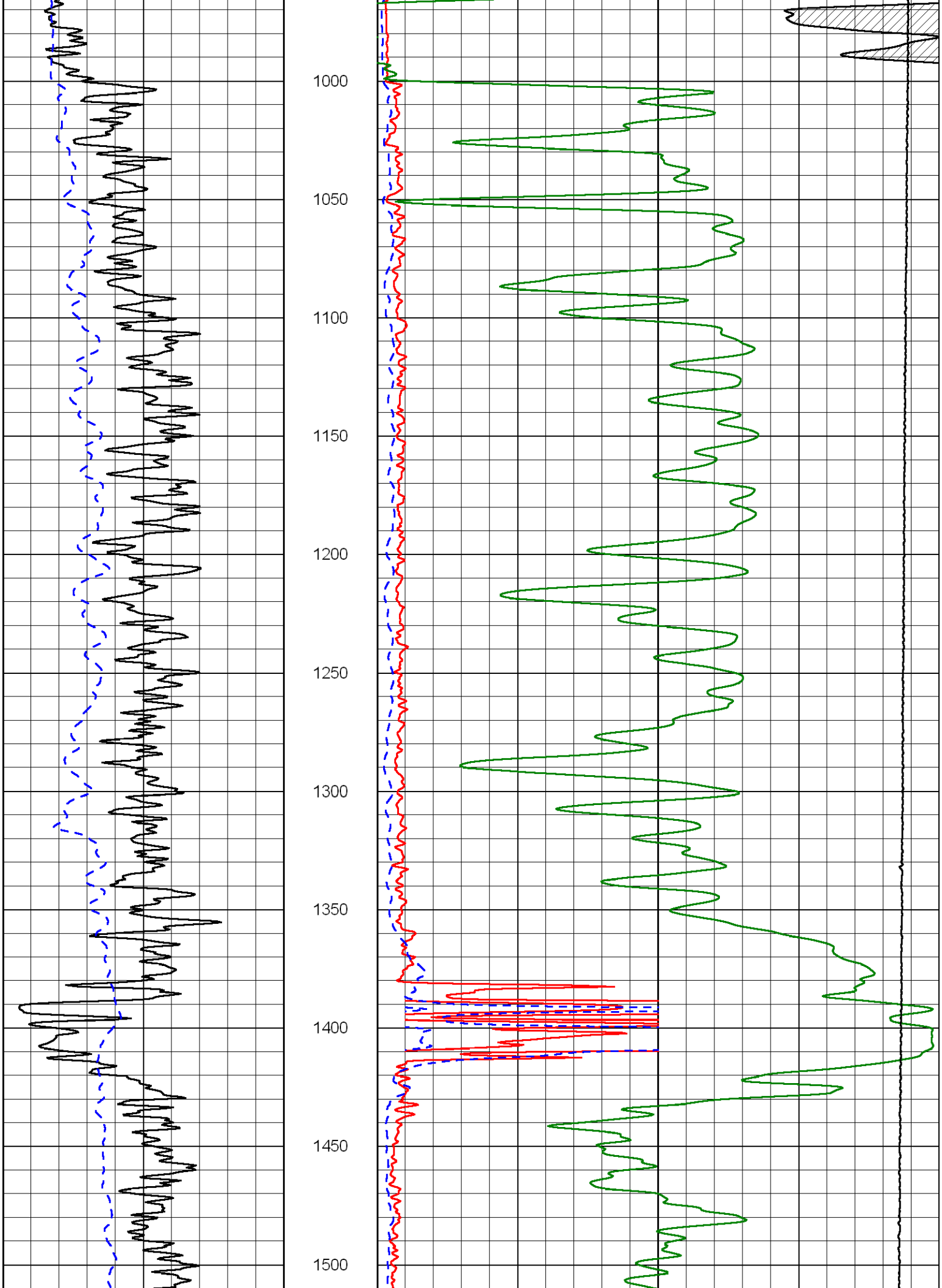
50 Deep Resistivity 500
500
550
600
650
700
750
800
850
900
950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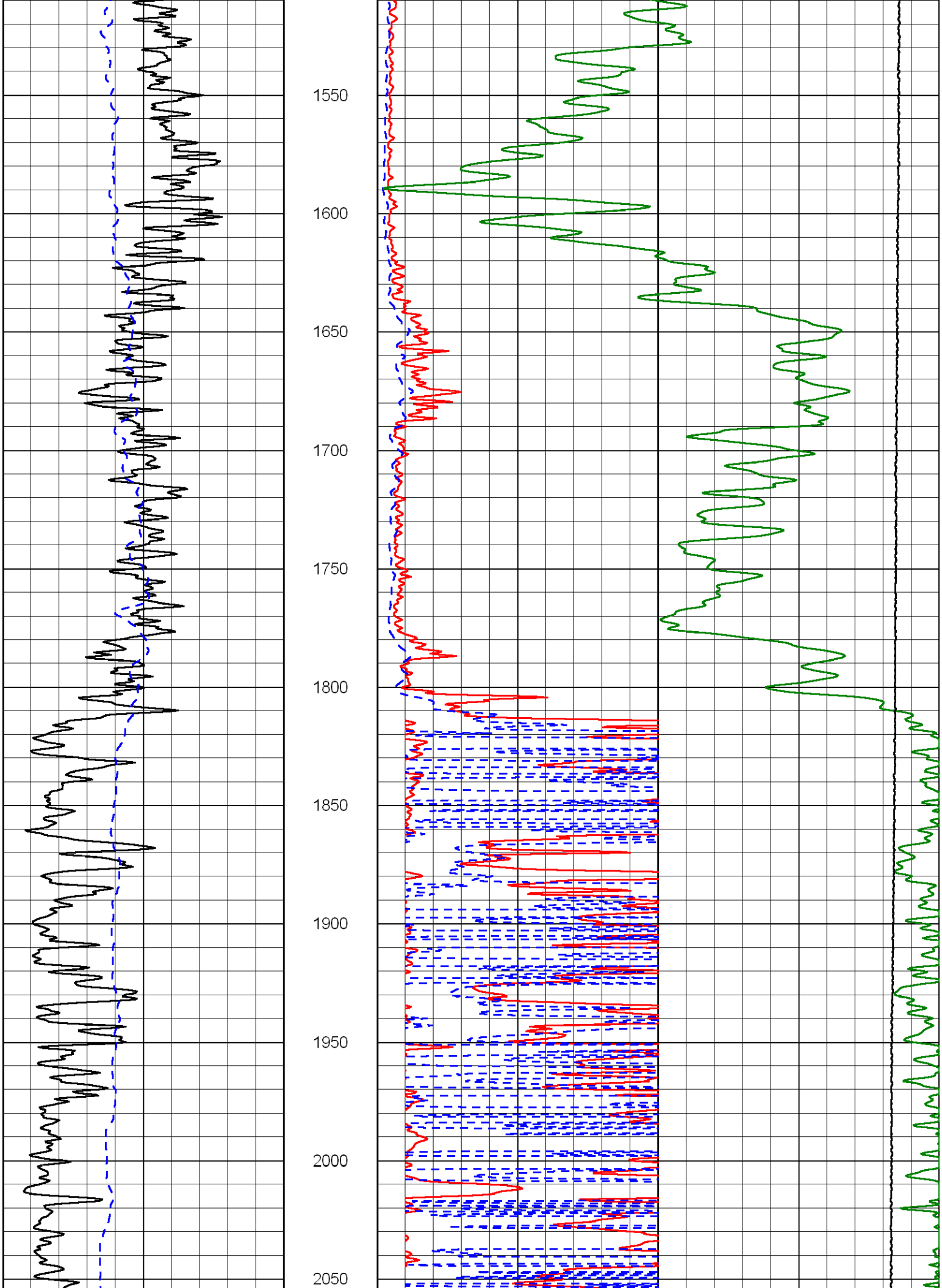
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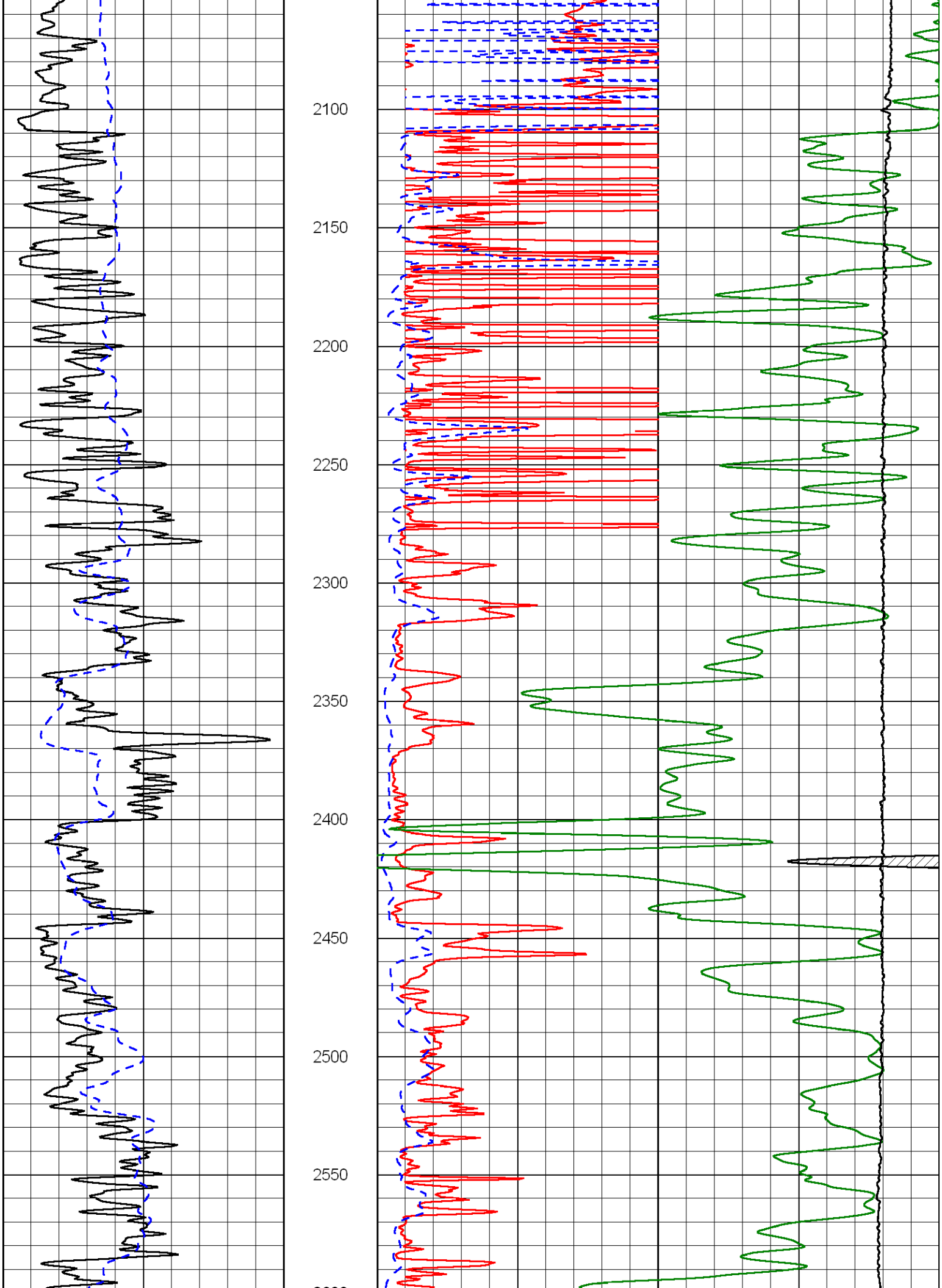
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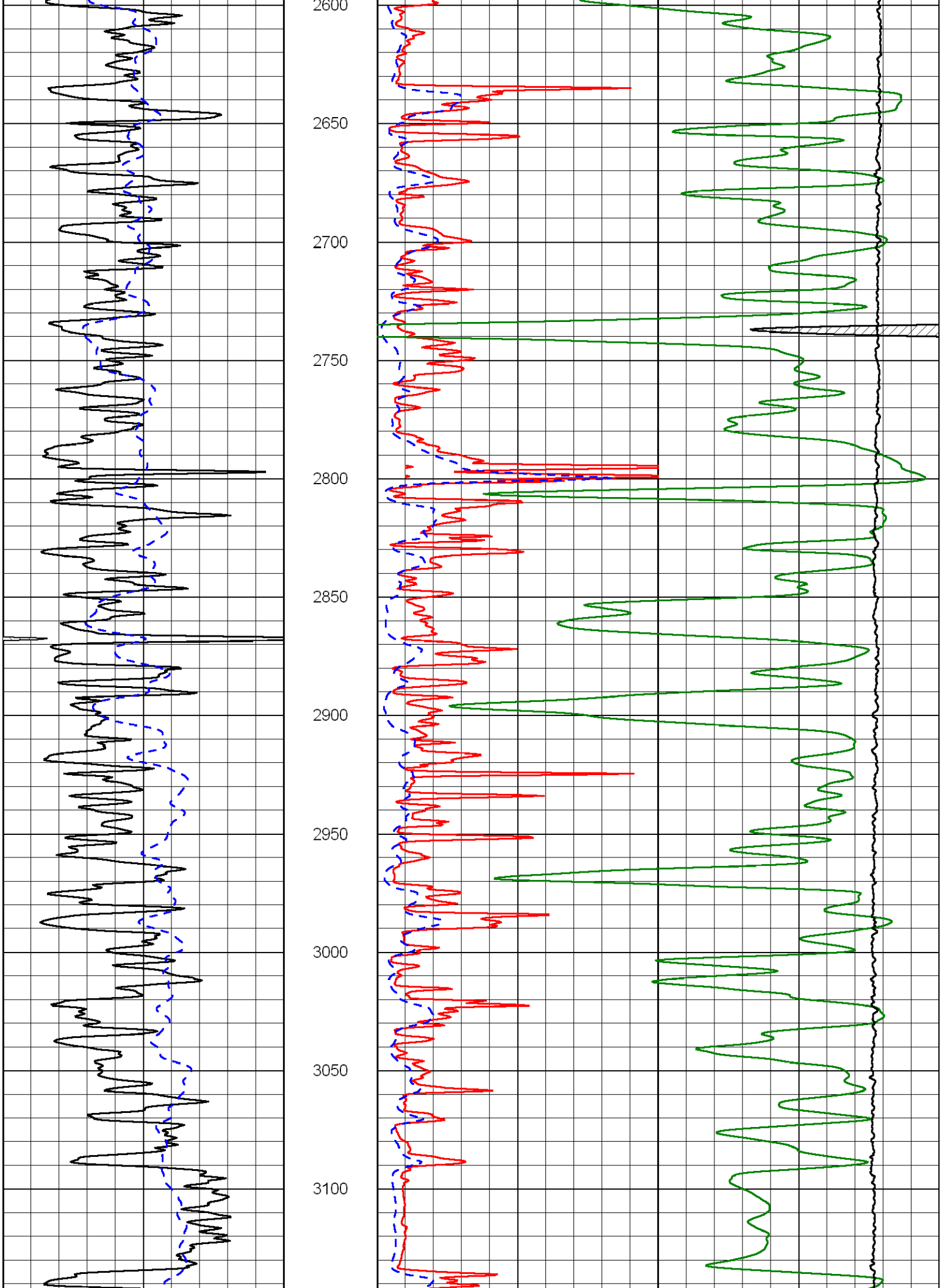
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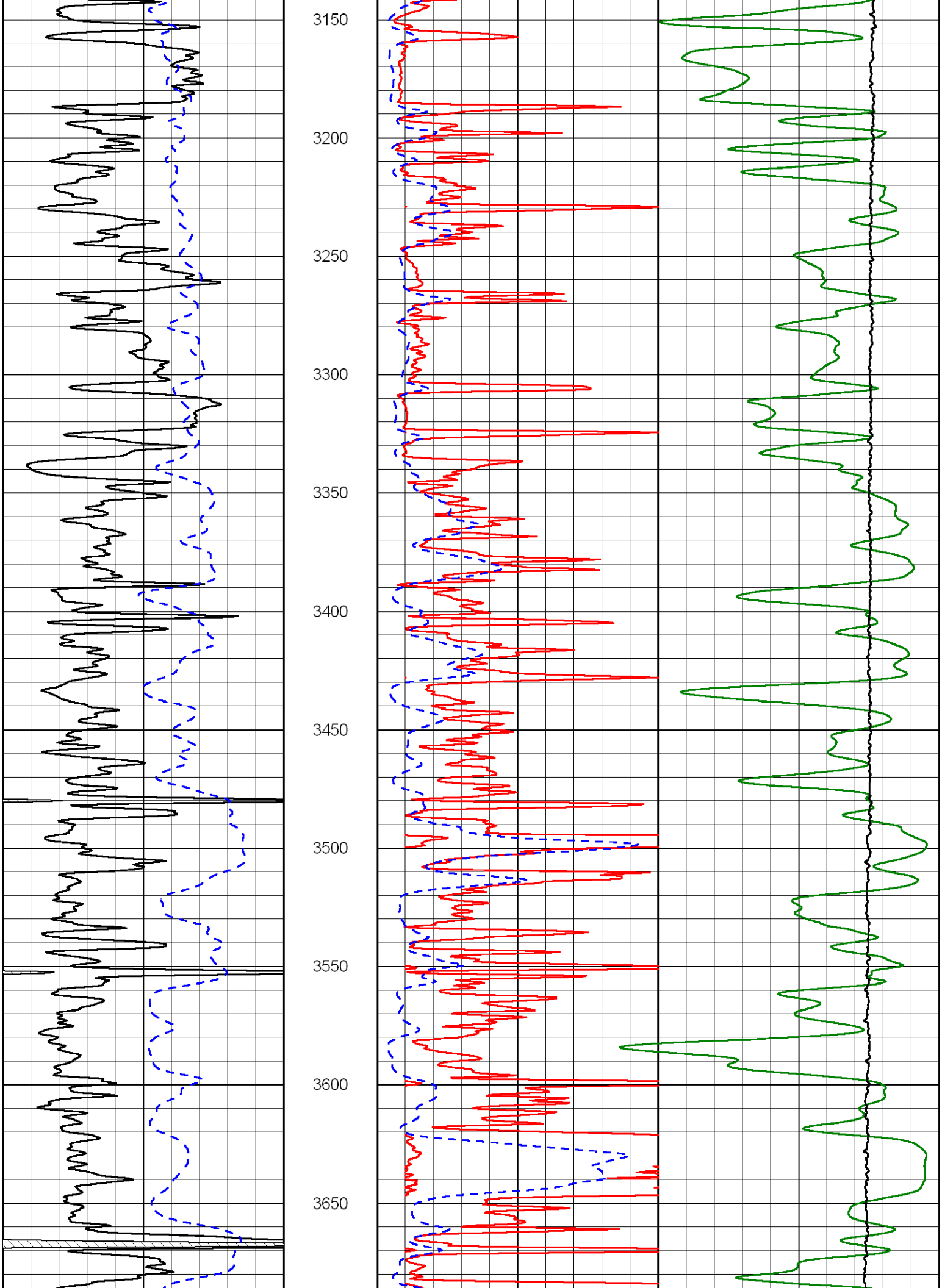
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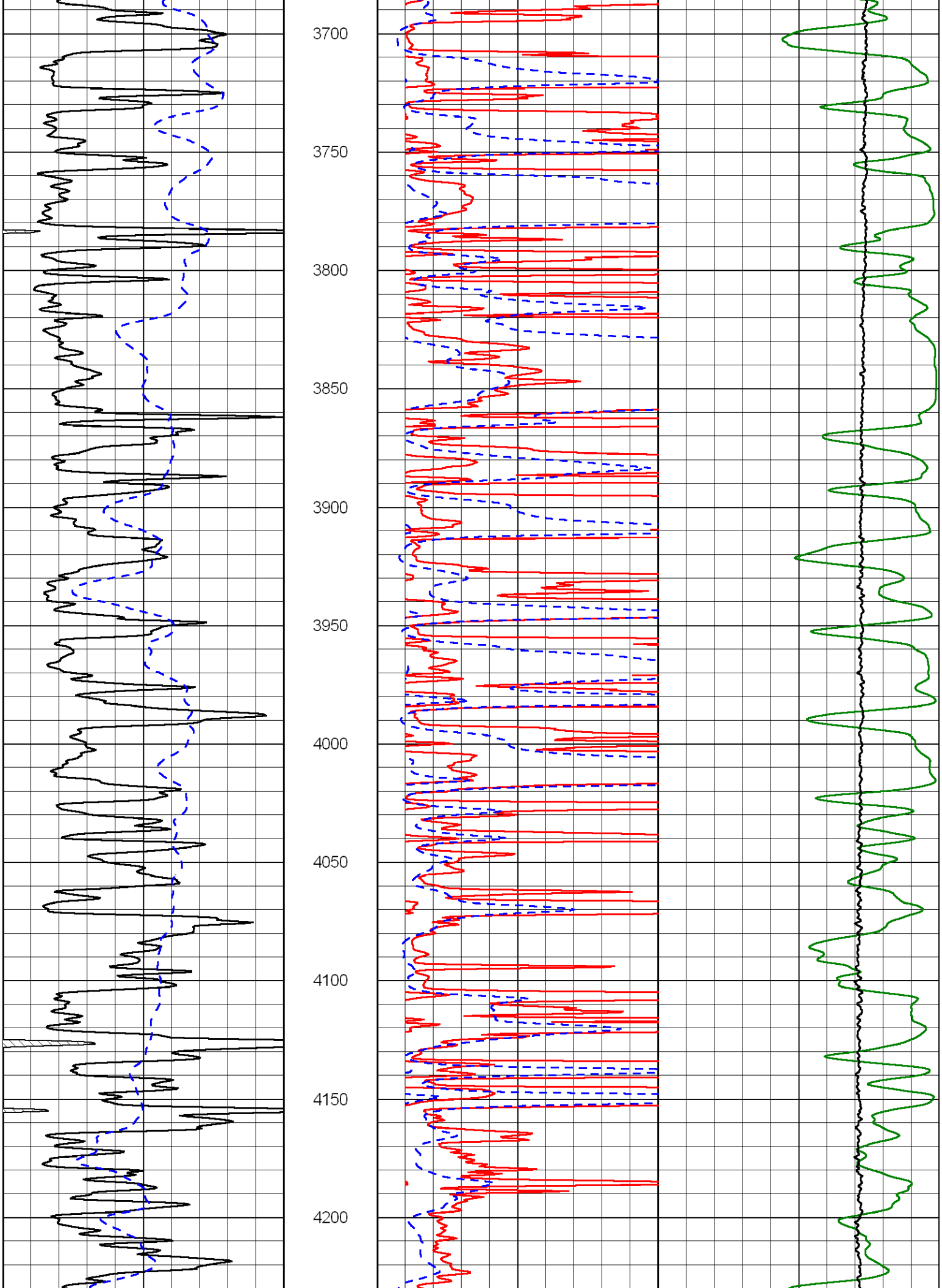
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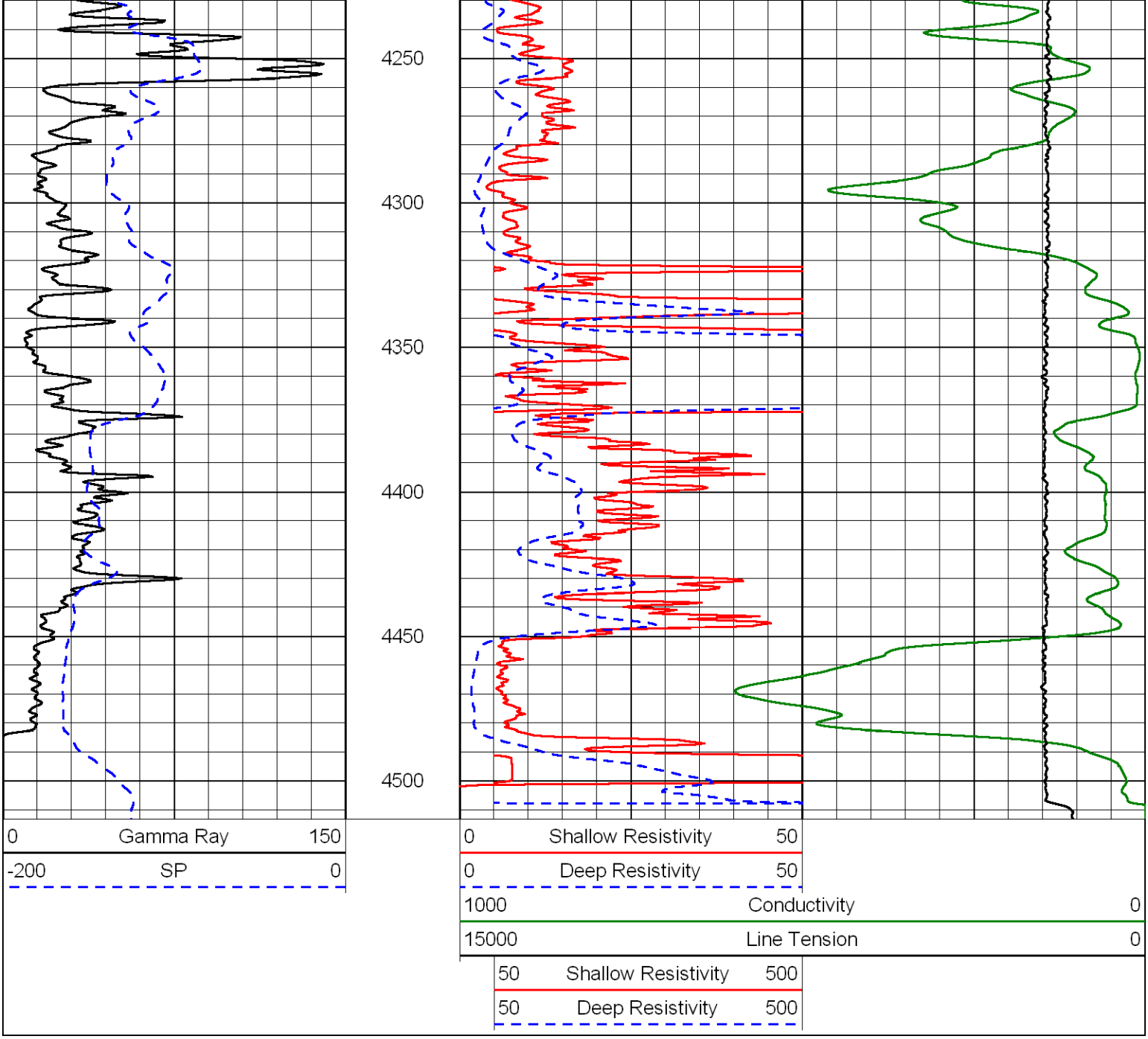

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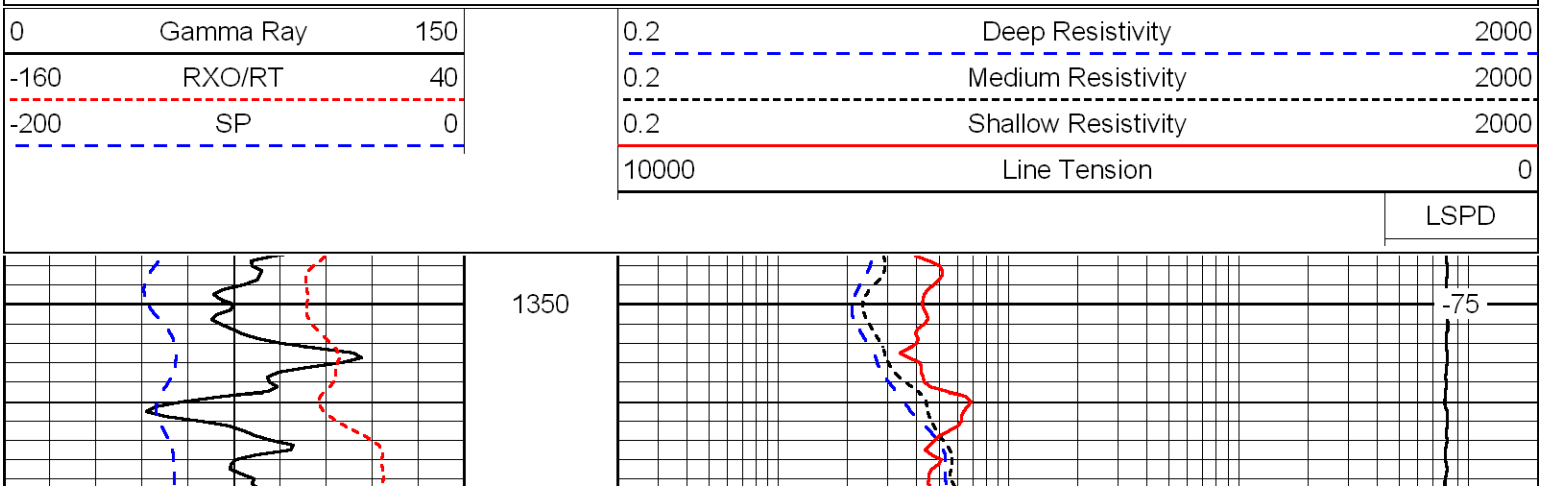
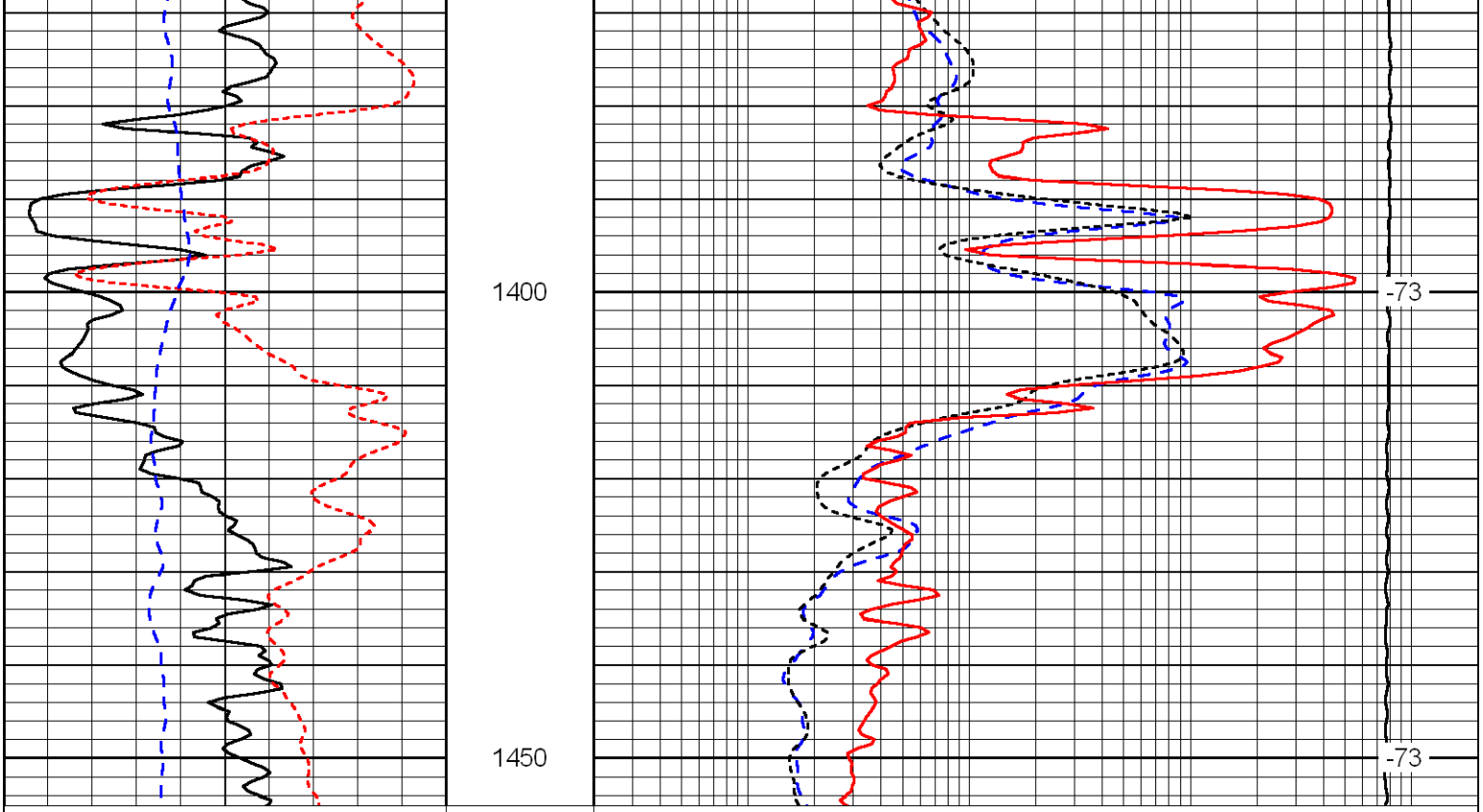
Presentation Format: dil
Dataset Creation: Wed Oct 24 00:33:48 2012
Charted by: Depth in Feet scaled 1:240





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-160	RXO/RT	40
-200	SP	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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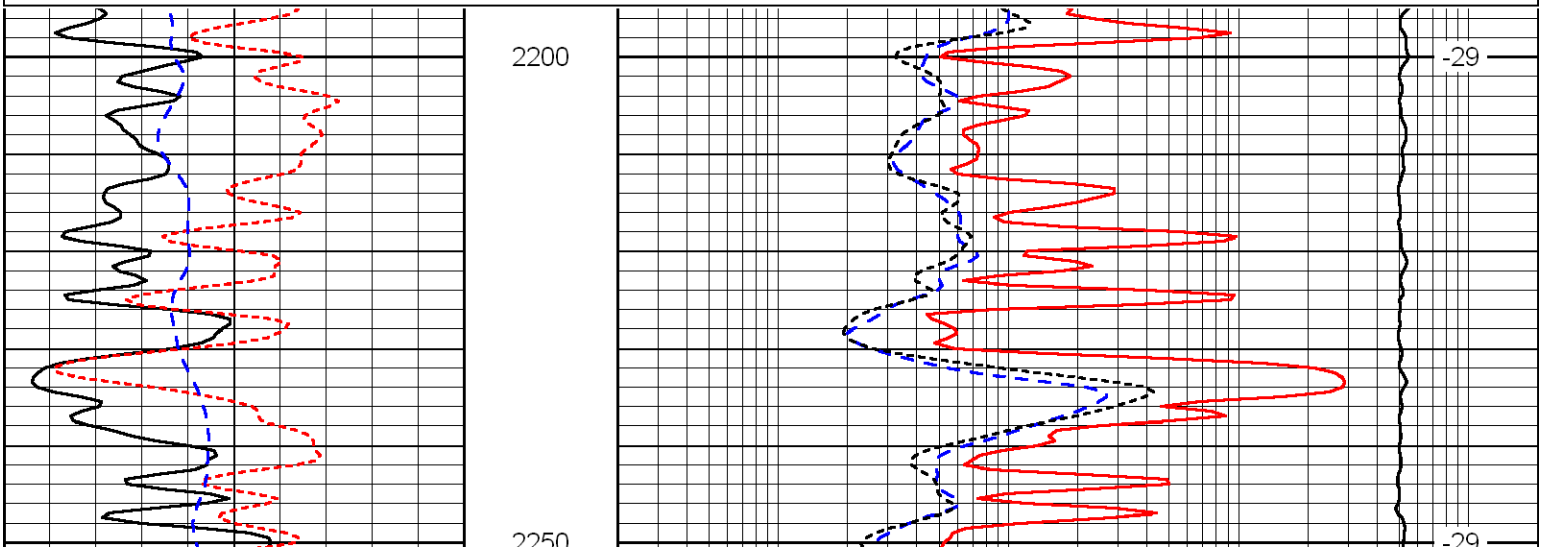
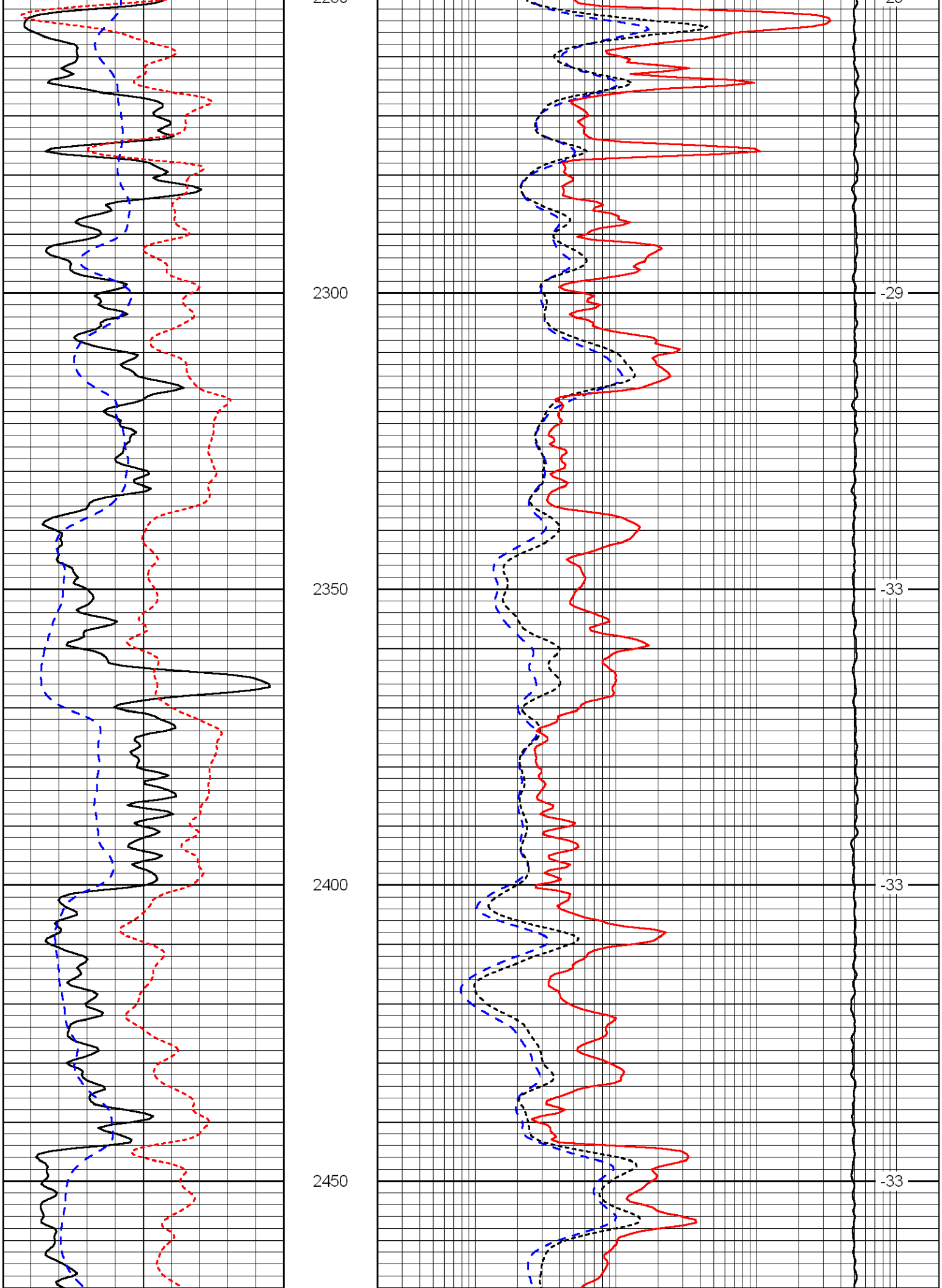
-160	RXO/RT	40
-200	SP	0

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

LSPD

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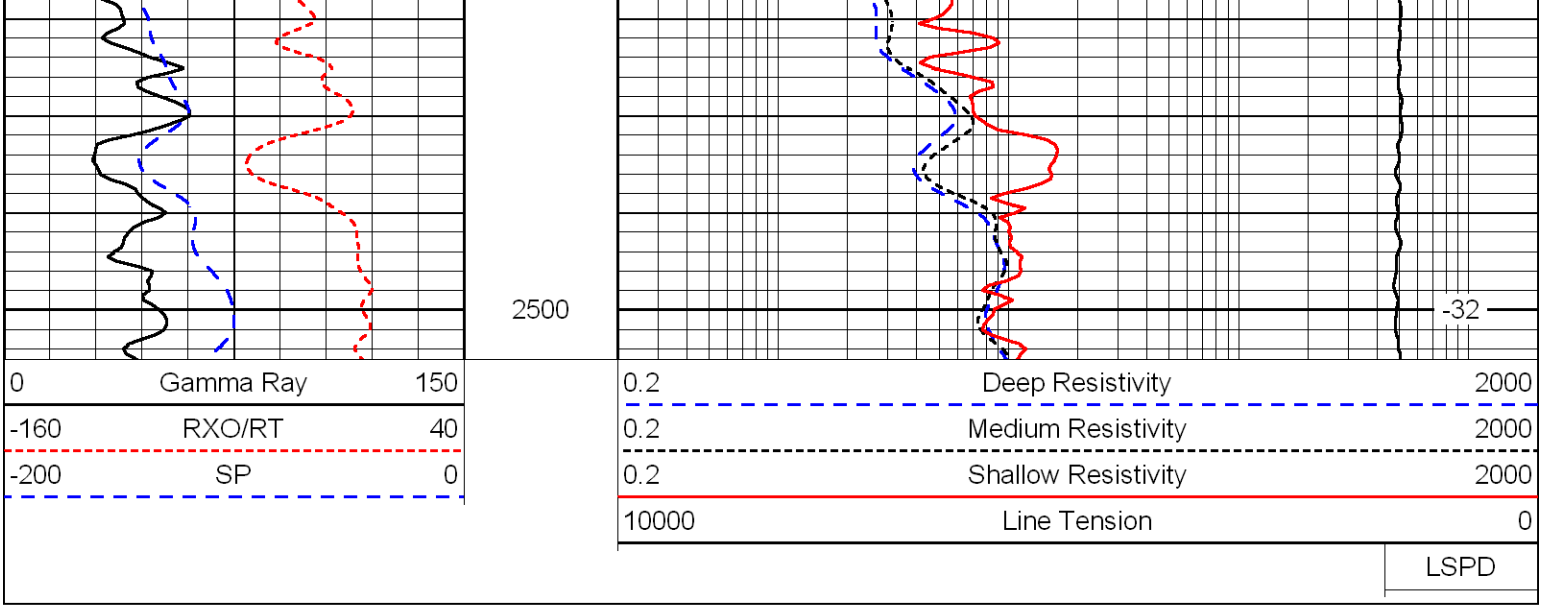

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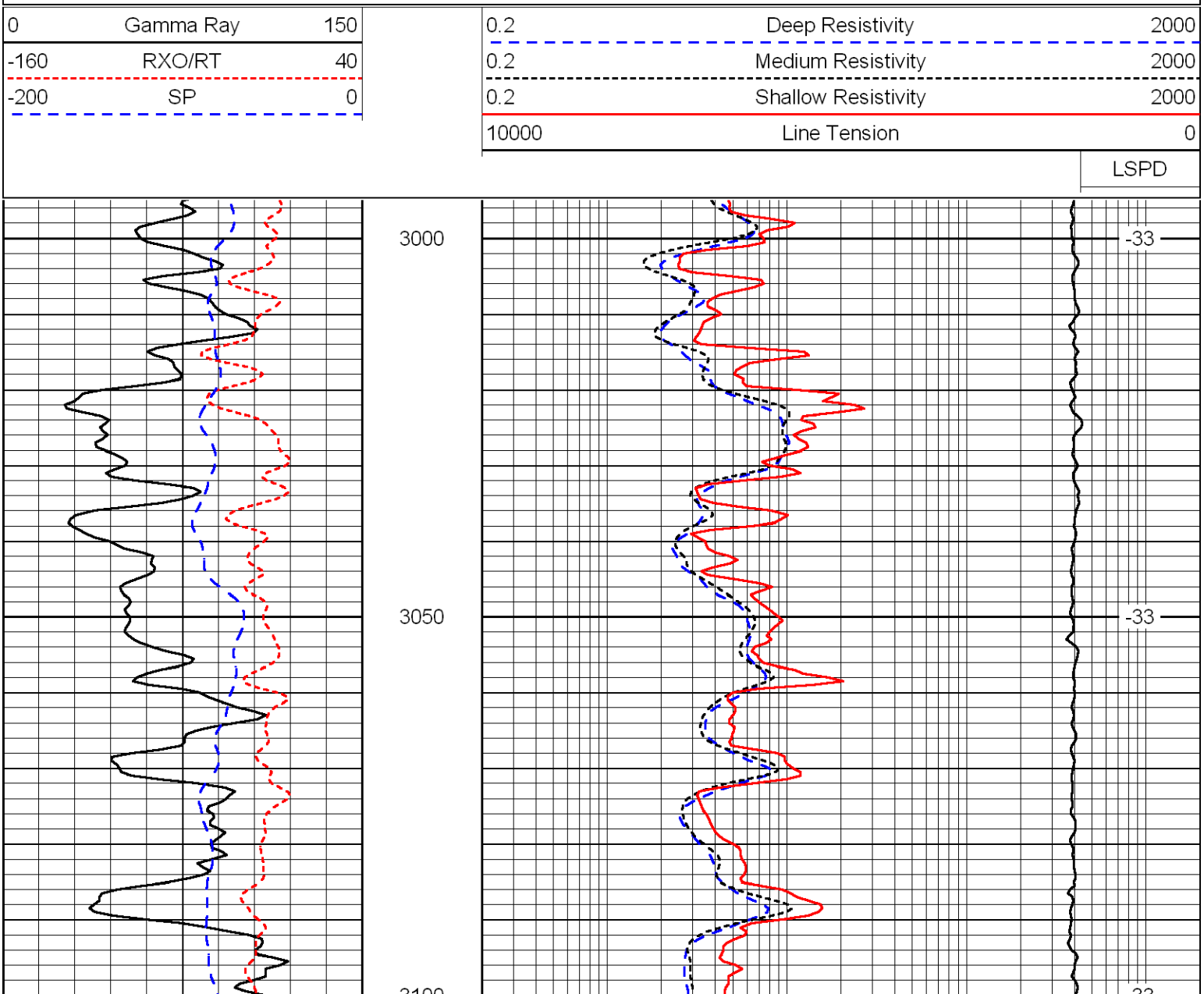

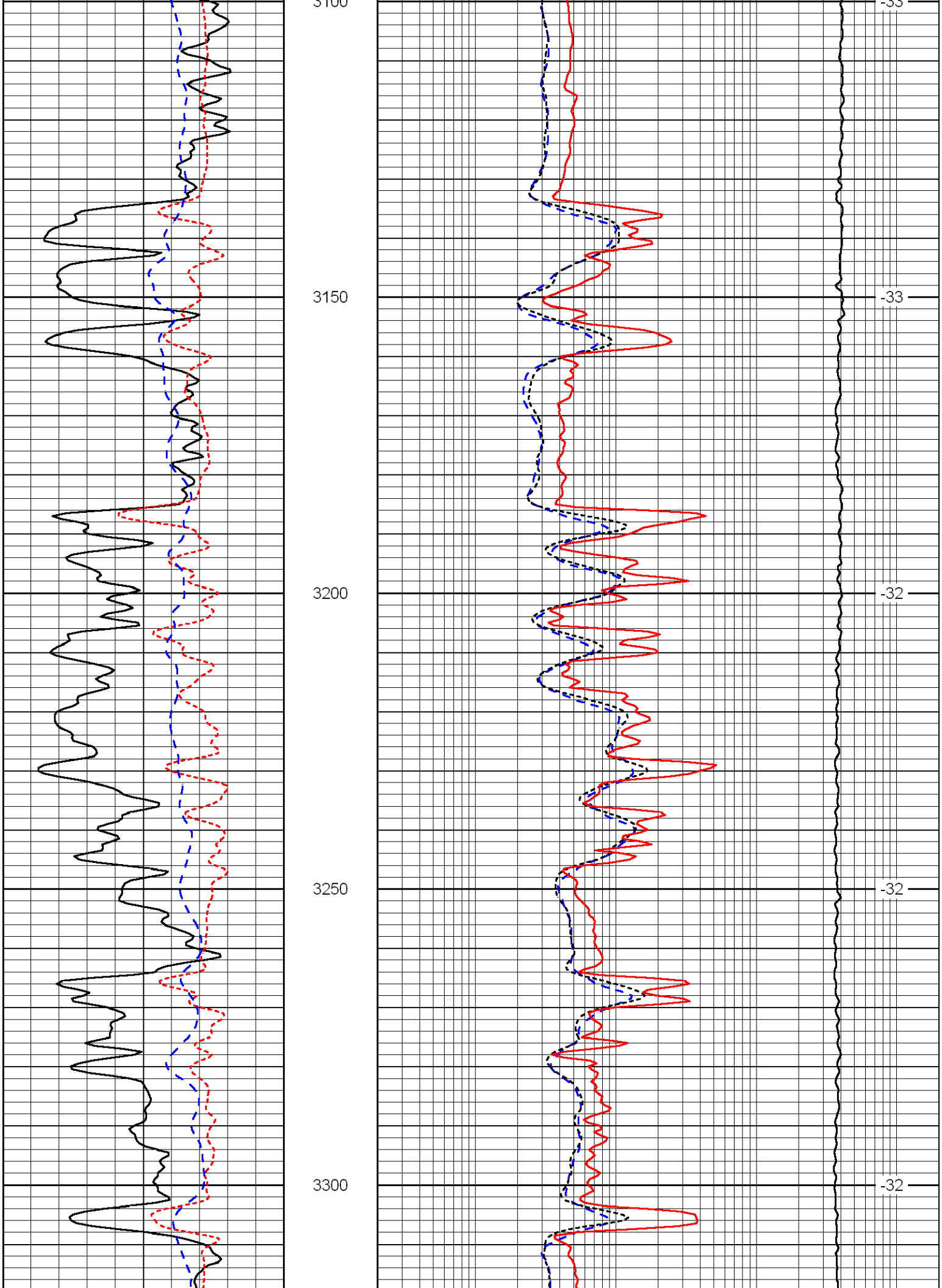
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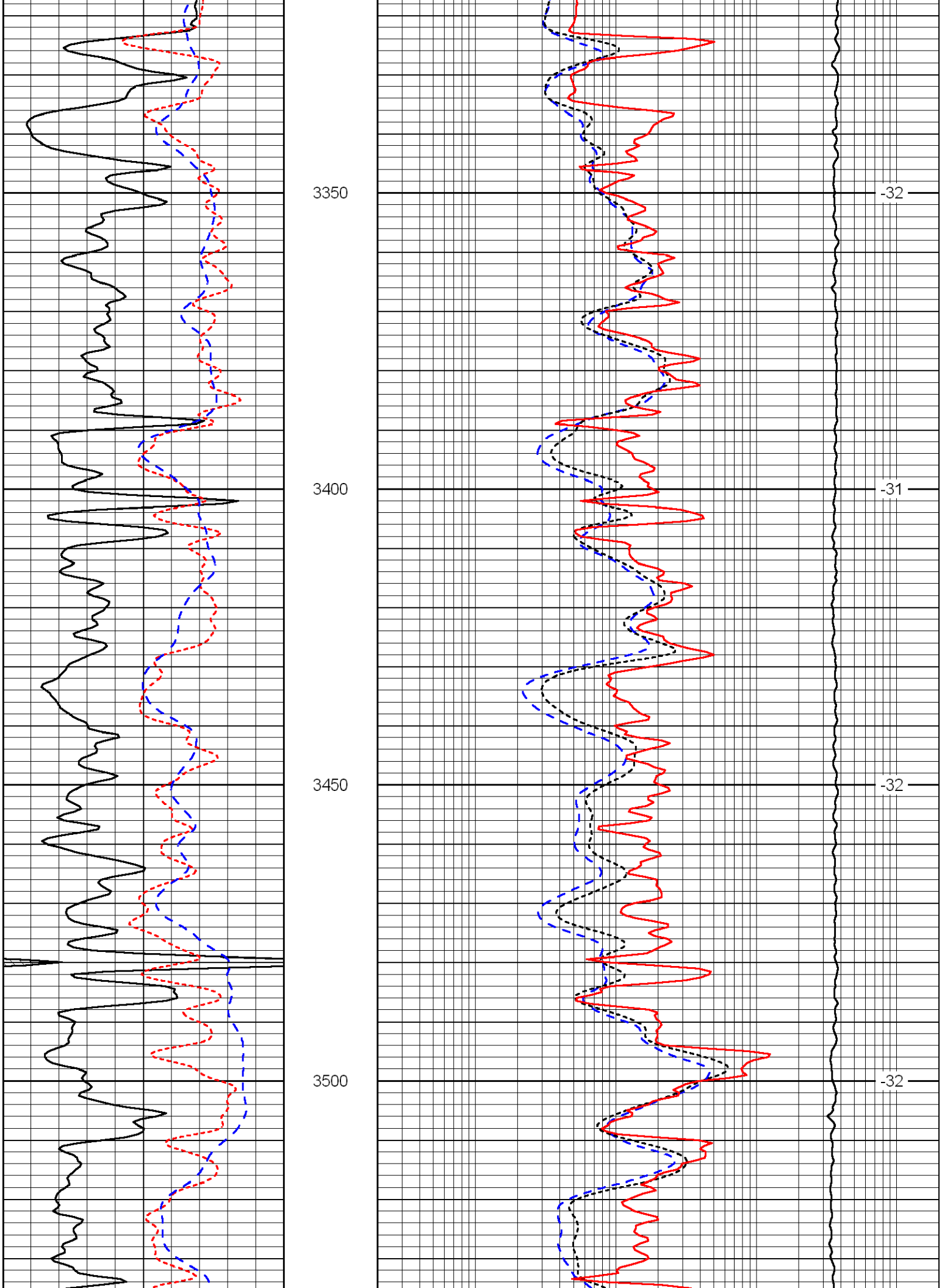
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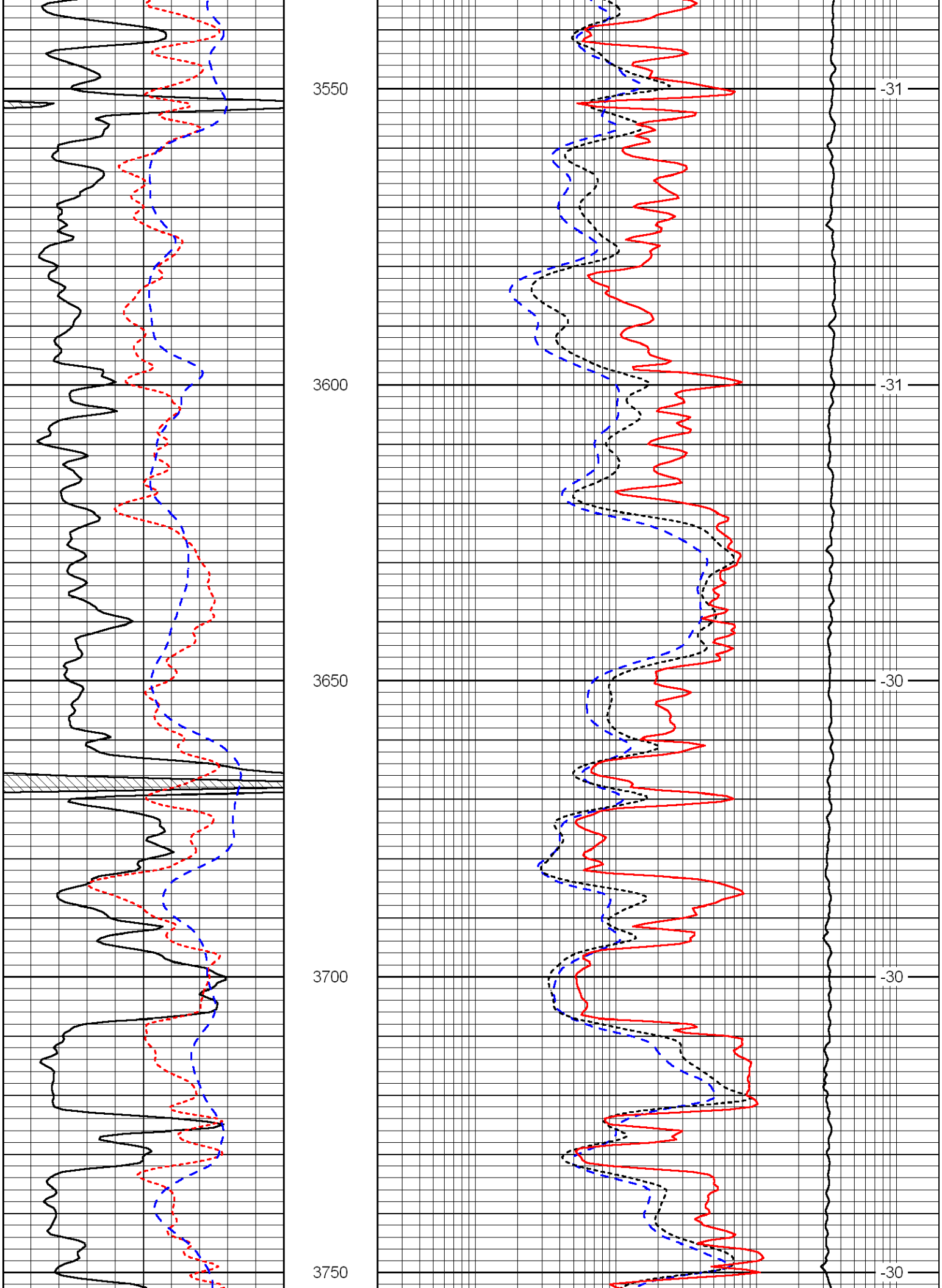
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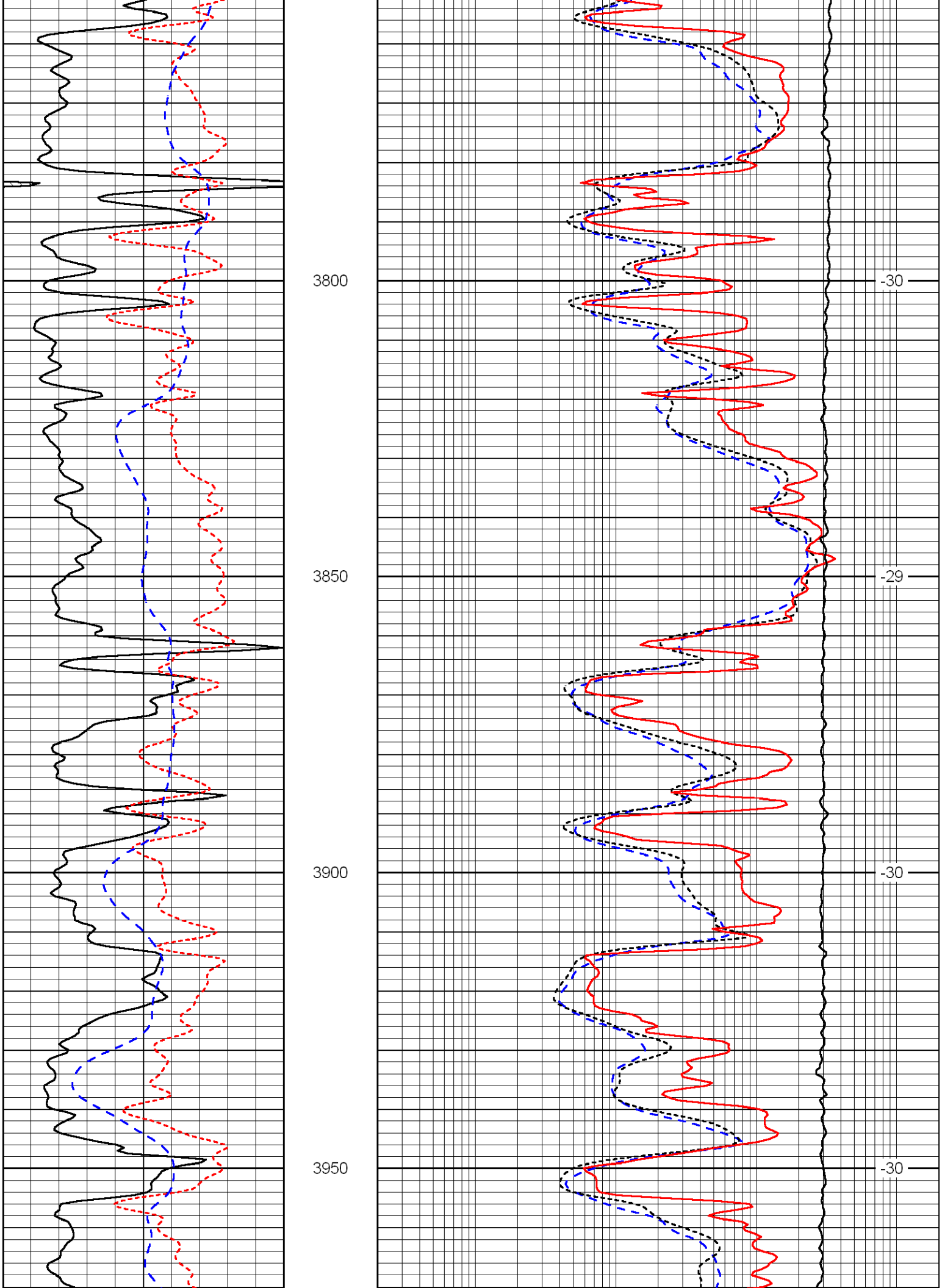
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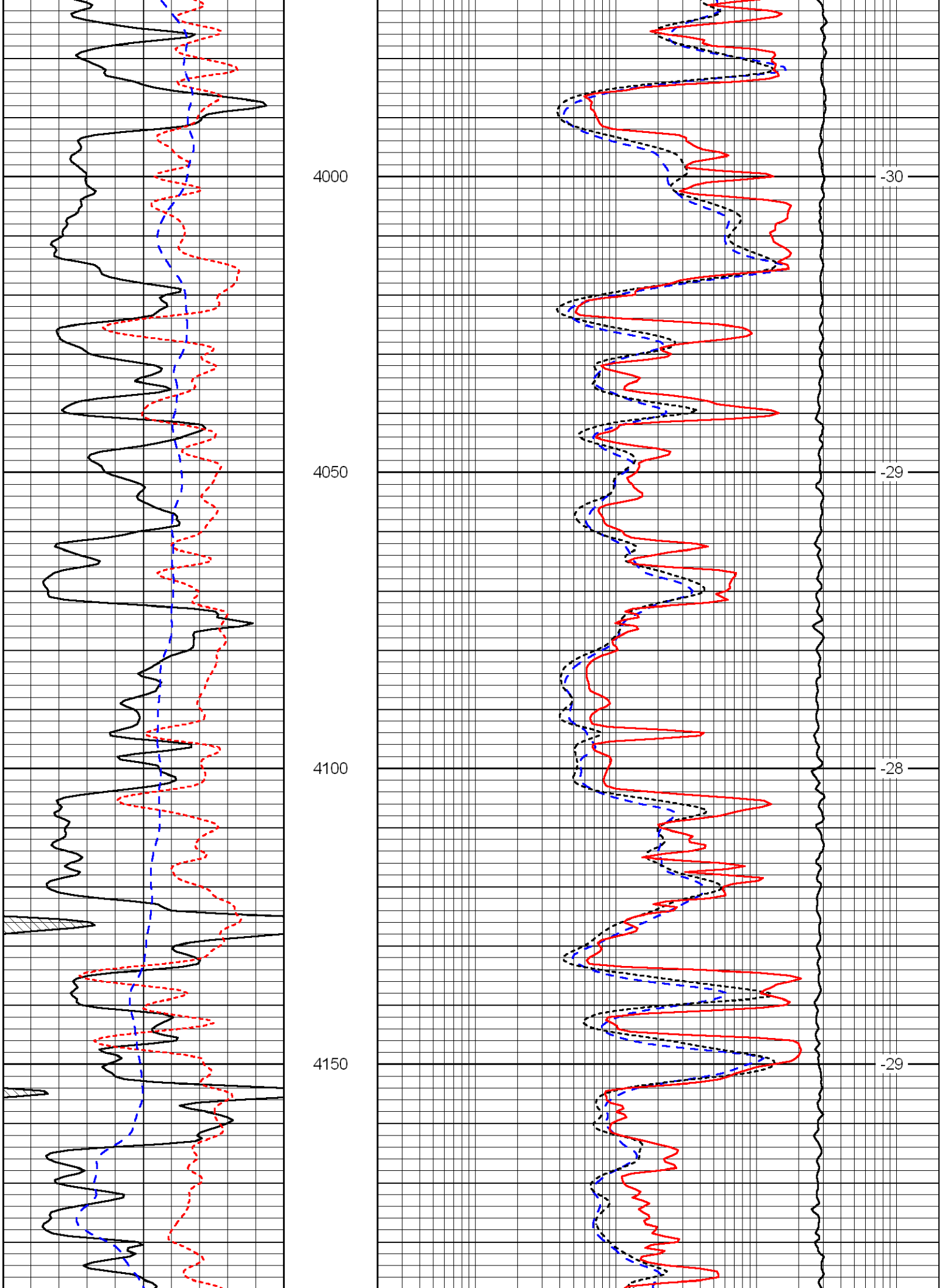
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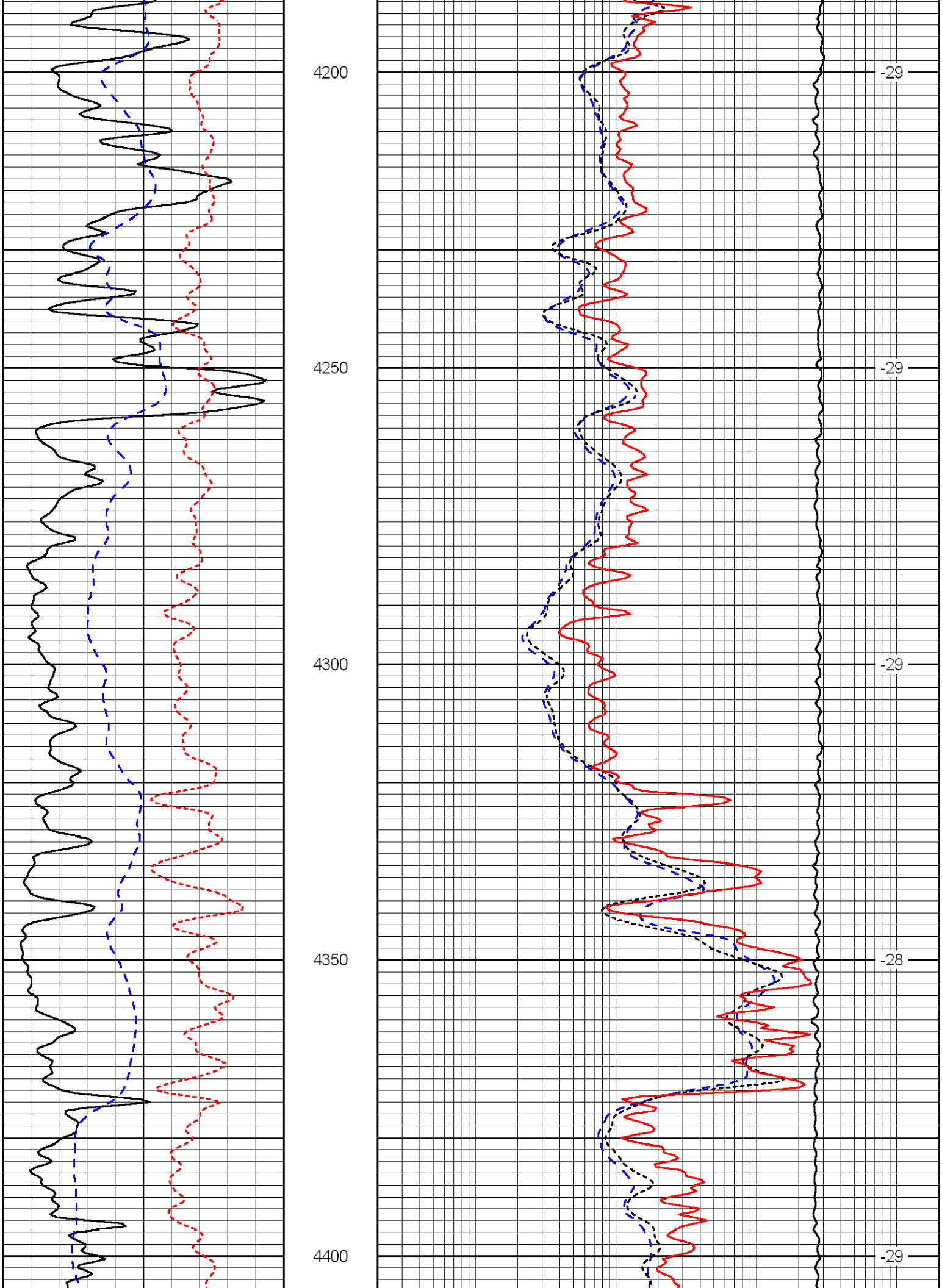
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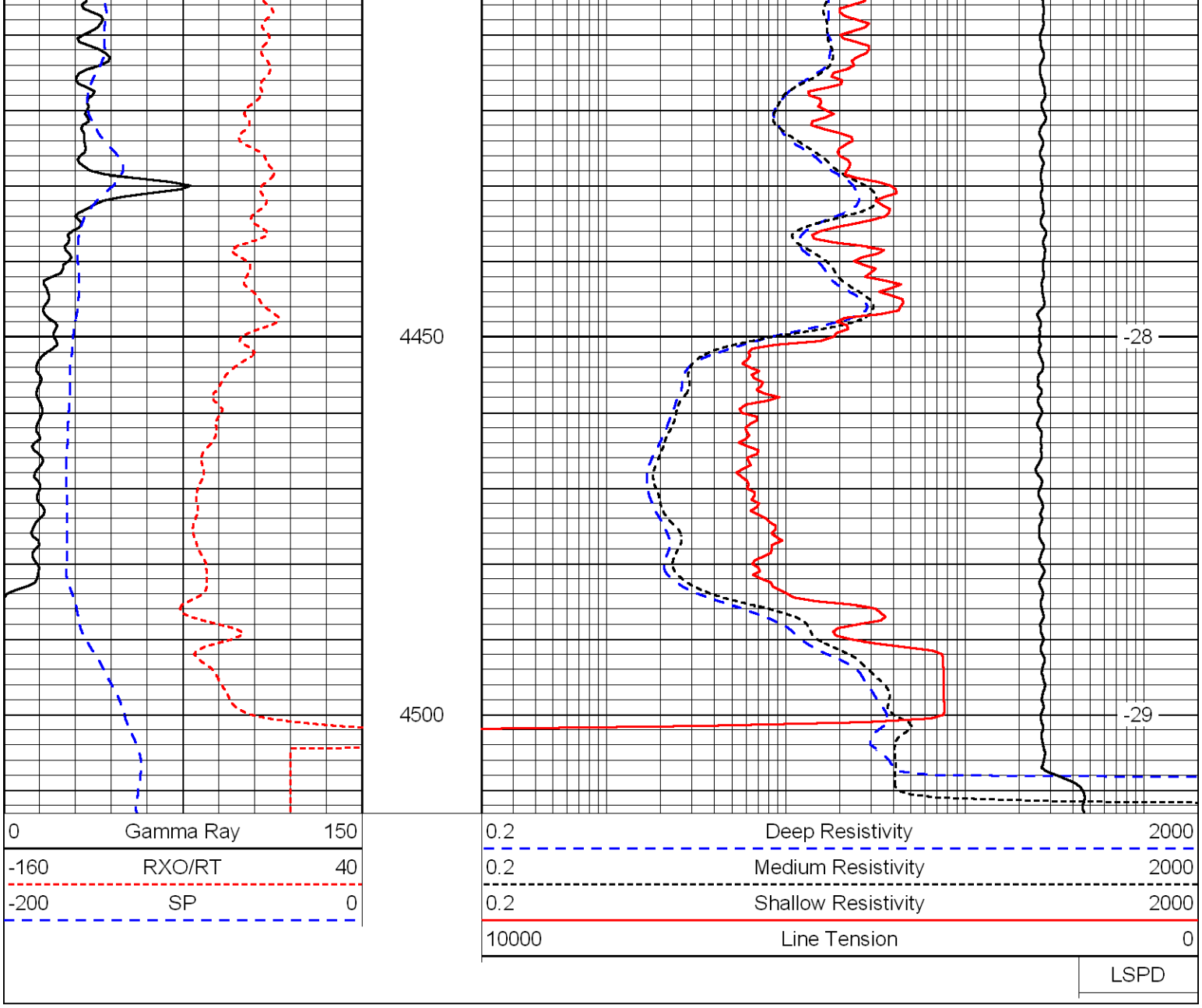
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Gamma Ray
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-160
RXO/RT
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-200
SP
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0.2
Deep Resistivity
2000
0.2
Medium Resistivity
2000
0.2
Shallow Resistivity
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