PIONEER

Pioneer Energy Services

Dual Induction Log

Company	Larson Engineering, Inc.
Well	Risley #1-36
Field	Wildcat
County	Lane
State	Kansas
API No.	15-101-22538-00-00

Location: 1844' FNL & 588' FWL

Sec: 36 Twp: 18S Rge: 30W

Permanent Datum: Ground Level — Elevation 2854

Log Measured From: Kelly Bushing — 7 Ft. Above Perm. Datum

Drilling Measured From: Kelly Bushing

Other Services: CNL/CDL, MEL

Elevation: K.B. 2861, D.F. , G.L. 2854

Date	10/2/2014		
Run Number	One		
Depth Driller	4613		
Depth Logger	4614		
Bottom Logged Interval	4613		
Top Log Interval	250		
Casing Driller	8.625 @ 256		
Casing Logger	256		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	3300		
Density / Viscosity	9.4 | 104		
pH / Fluid Loss	10.0 | 8.8		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.70 @ 60		
Rmf @ Meas. Temp	0.53 @ 60		
Rmc @ Meas. Temp	0.95 @ 60		
Source of Rmf / Rmc	Charts		
Rm @ BHT	0.34 @ 124		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	124		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	Vern Schrag		

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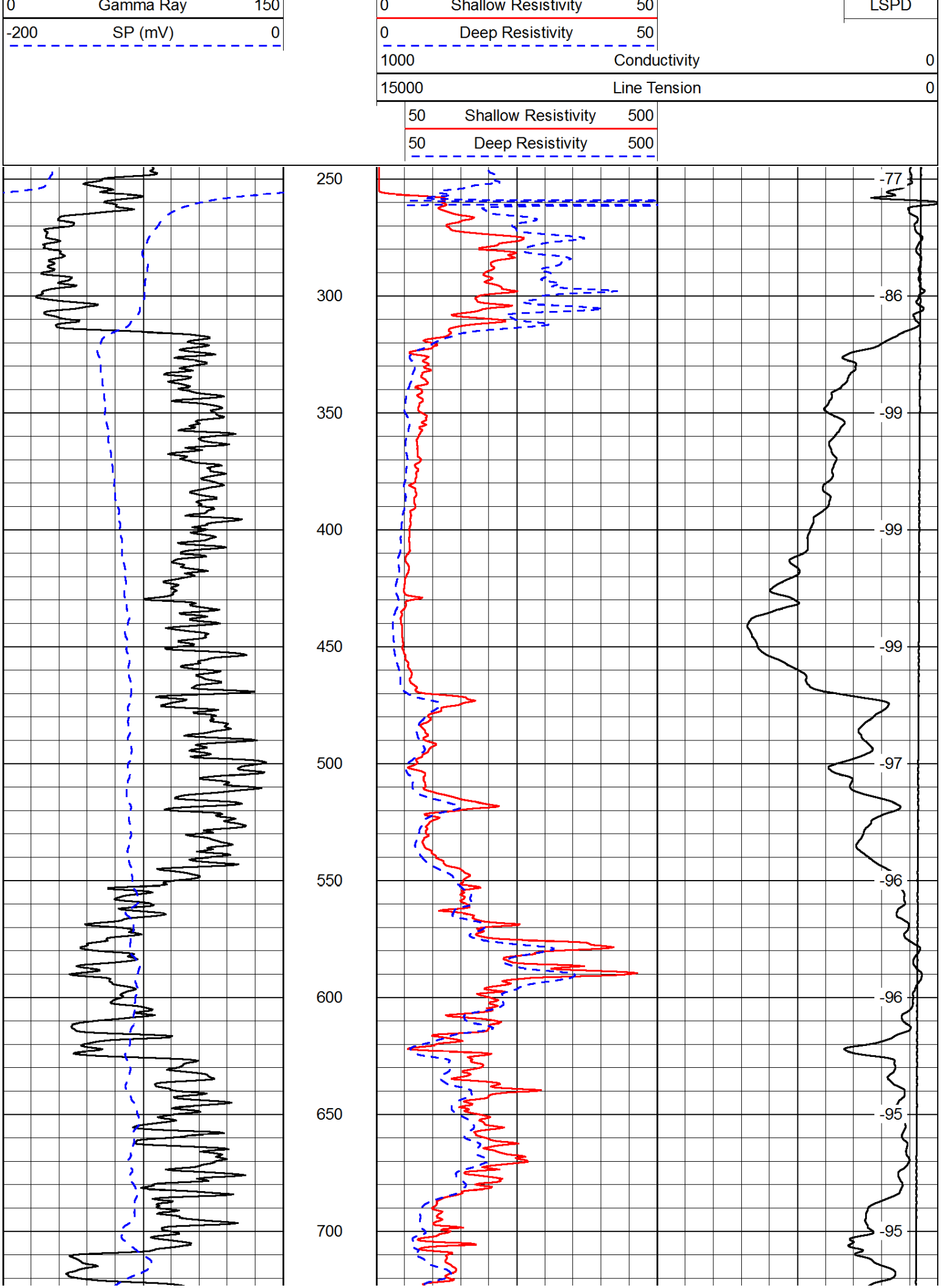
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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
www.pioneeres.com
785 625 3858

Dighton,
7 West to Eagle Rd, 2 1/3 South,
East into

Database File:	c:\warrior\data\larson_risley #1-36\larson_risley_1-36hd.db
Dataset Pathname:	dil/lastack
Presentation Format:	dil2in
Dataset Creation:	Thu Oct 02 02:57:34 2014
Charted by:	Depth in Feet scaled 1:600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-200 SP (mV) 0
0 Shallow Resistivity 50
0 Deep Resistivity 50
1000 Conductivity 0
15000 Line Tension 0
50 Shallow Resistivity 500
50 Deep Resistivity 500
LSPD
250
300
350
400
450
500
550
600
650
700
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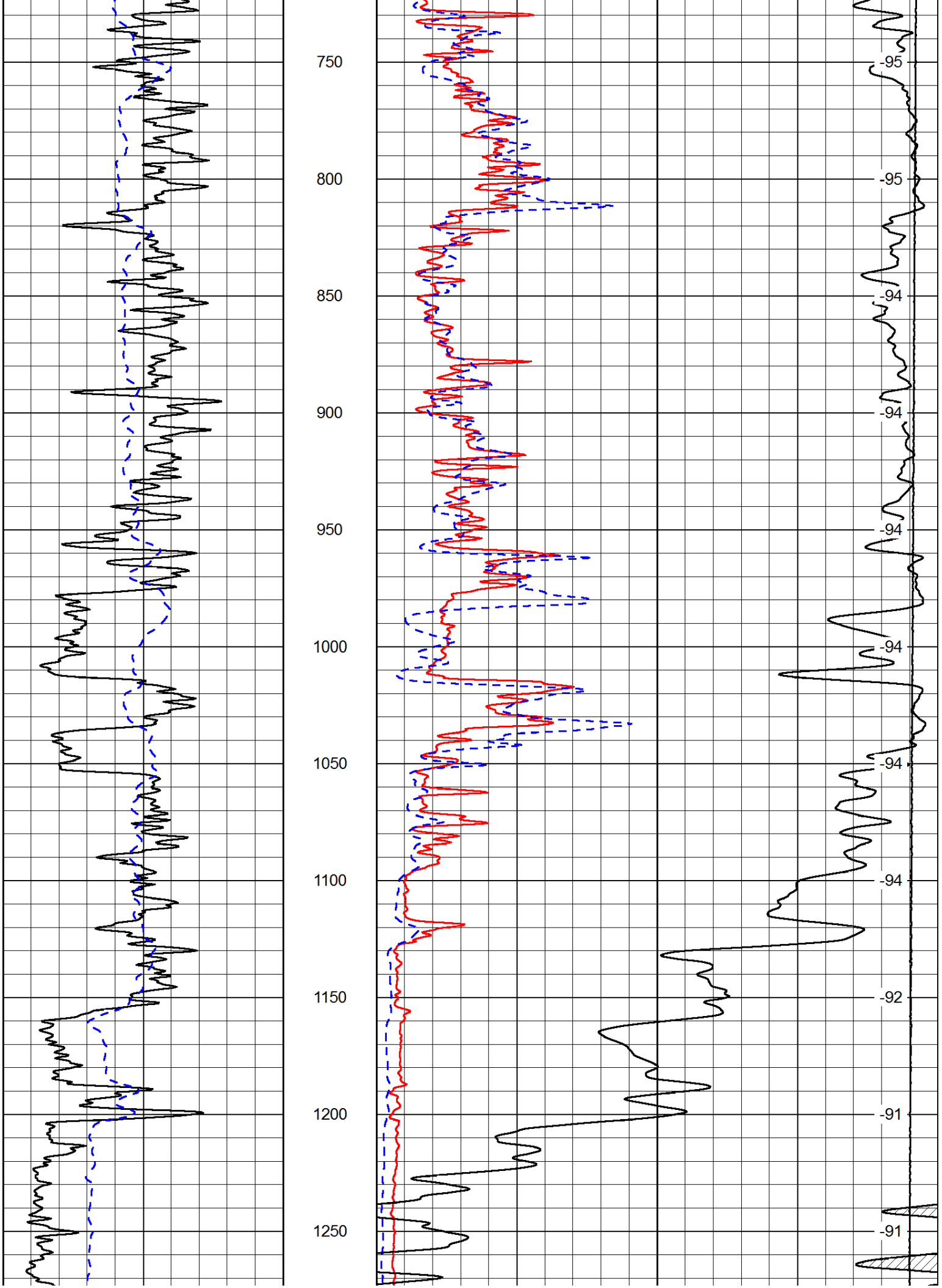
-86
-99
-99
-99
-97
-96
-96
-95
-95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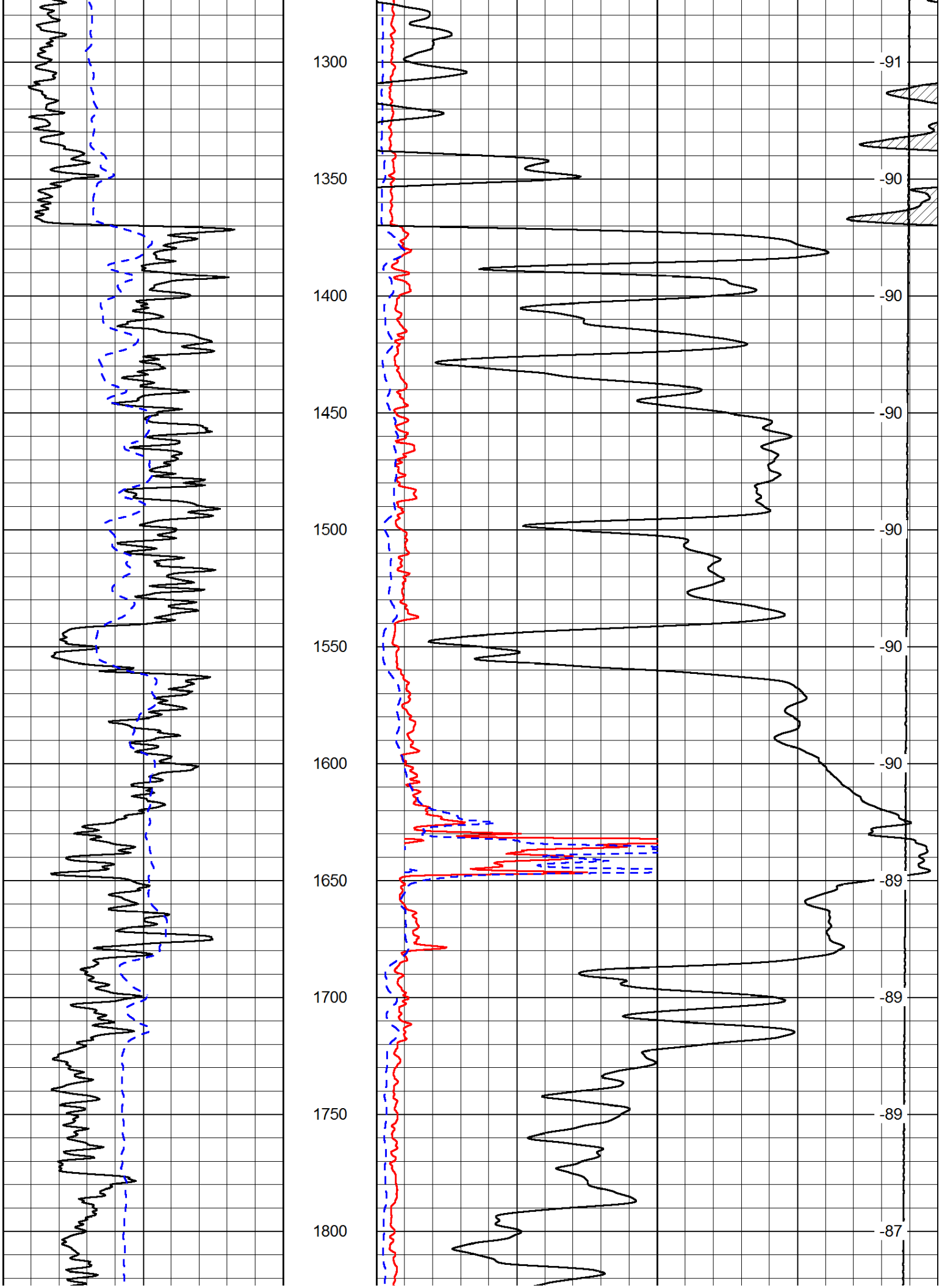
-91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1350
1400
1450
1500
1550
1600
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1750
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-91
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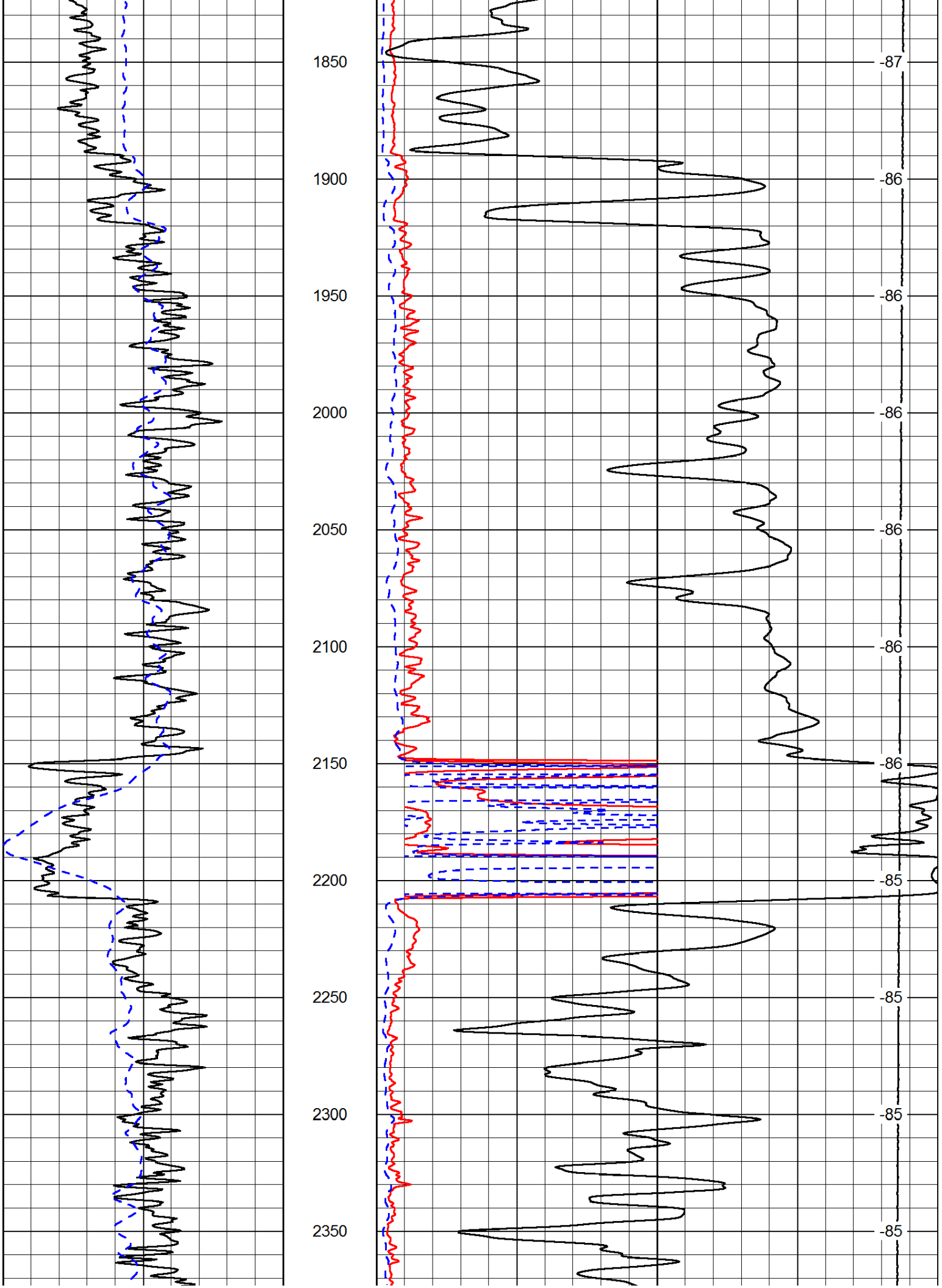
-90
-89
-89
-89
-87


1850
1900
1950
2000
2050
2100
2150
2200
2250
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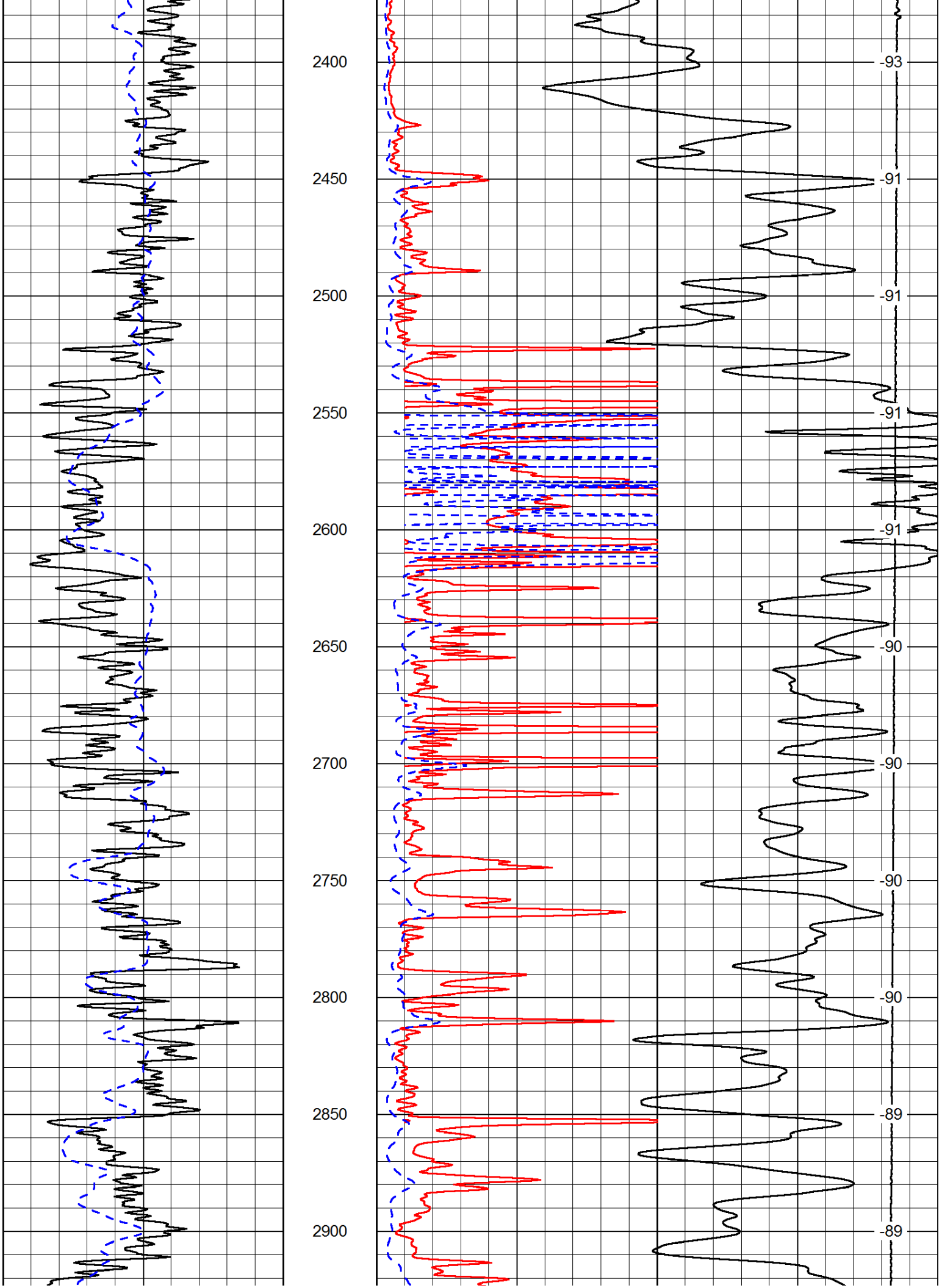
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2450
2500
2550
2600
2650
2700
2750
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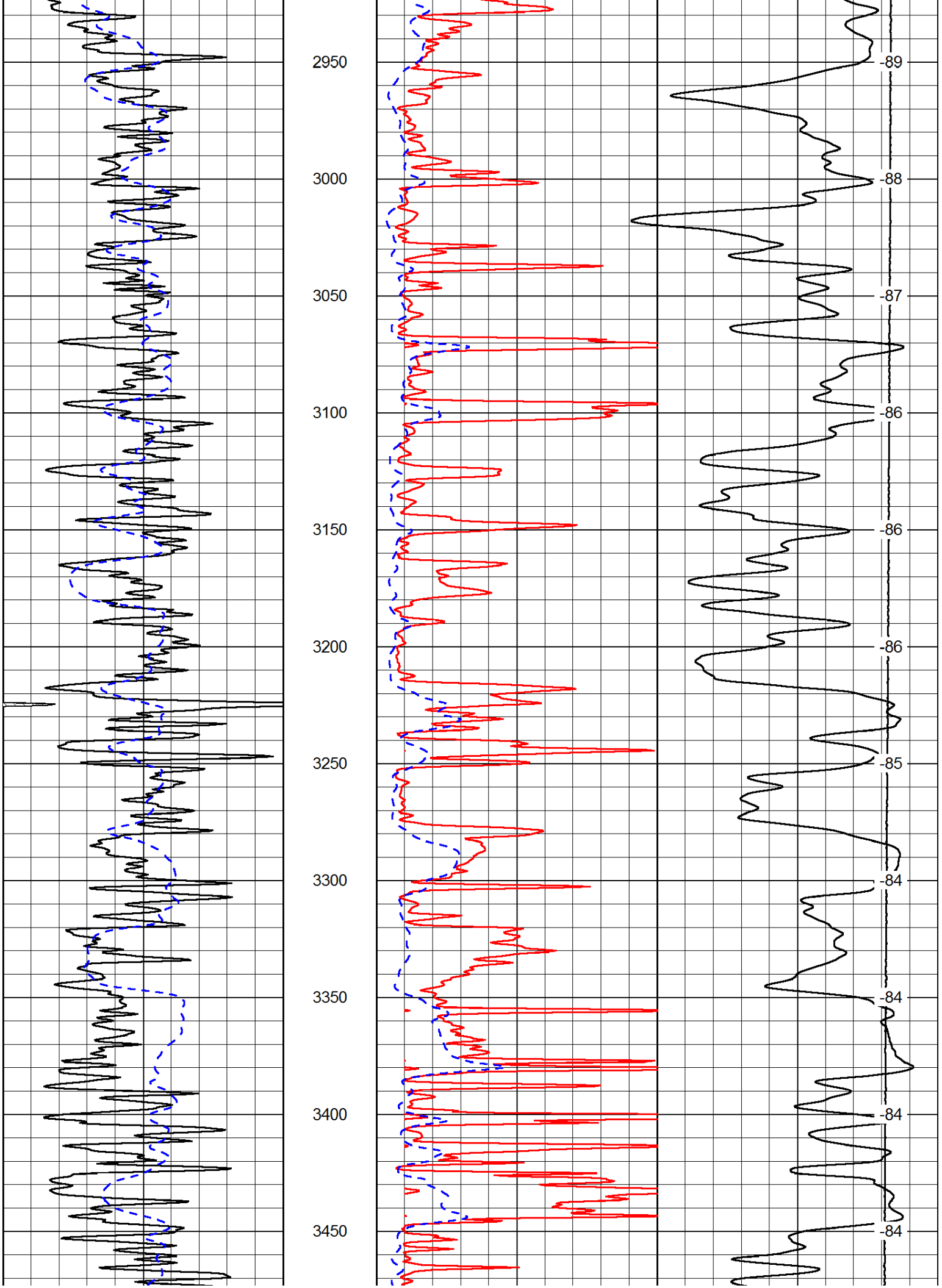
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3000
3050
3100
3150
3200
3250
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3350
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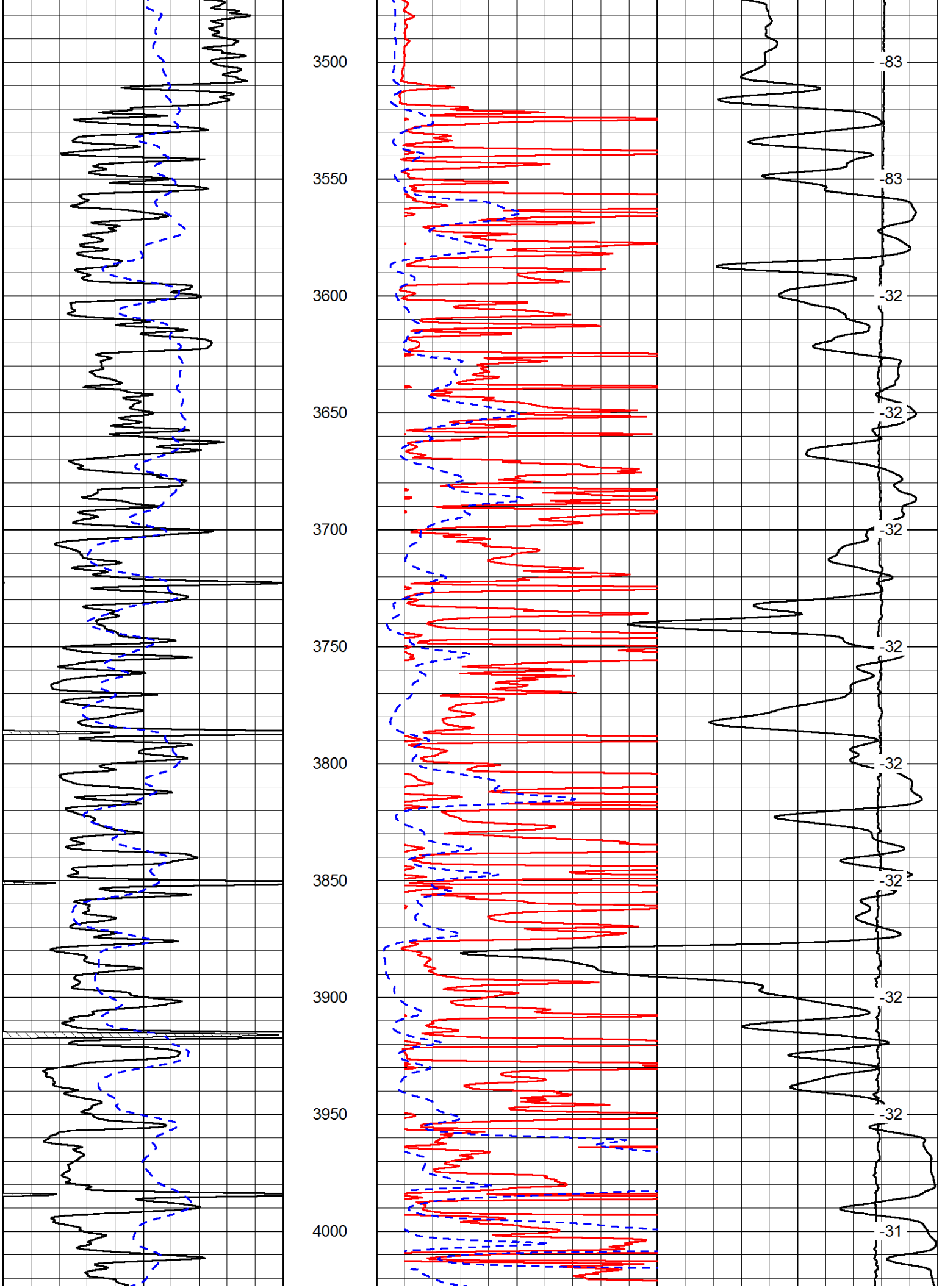
-84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3700
3750
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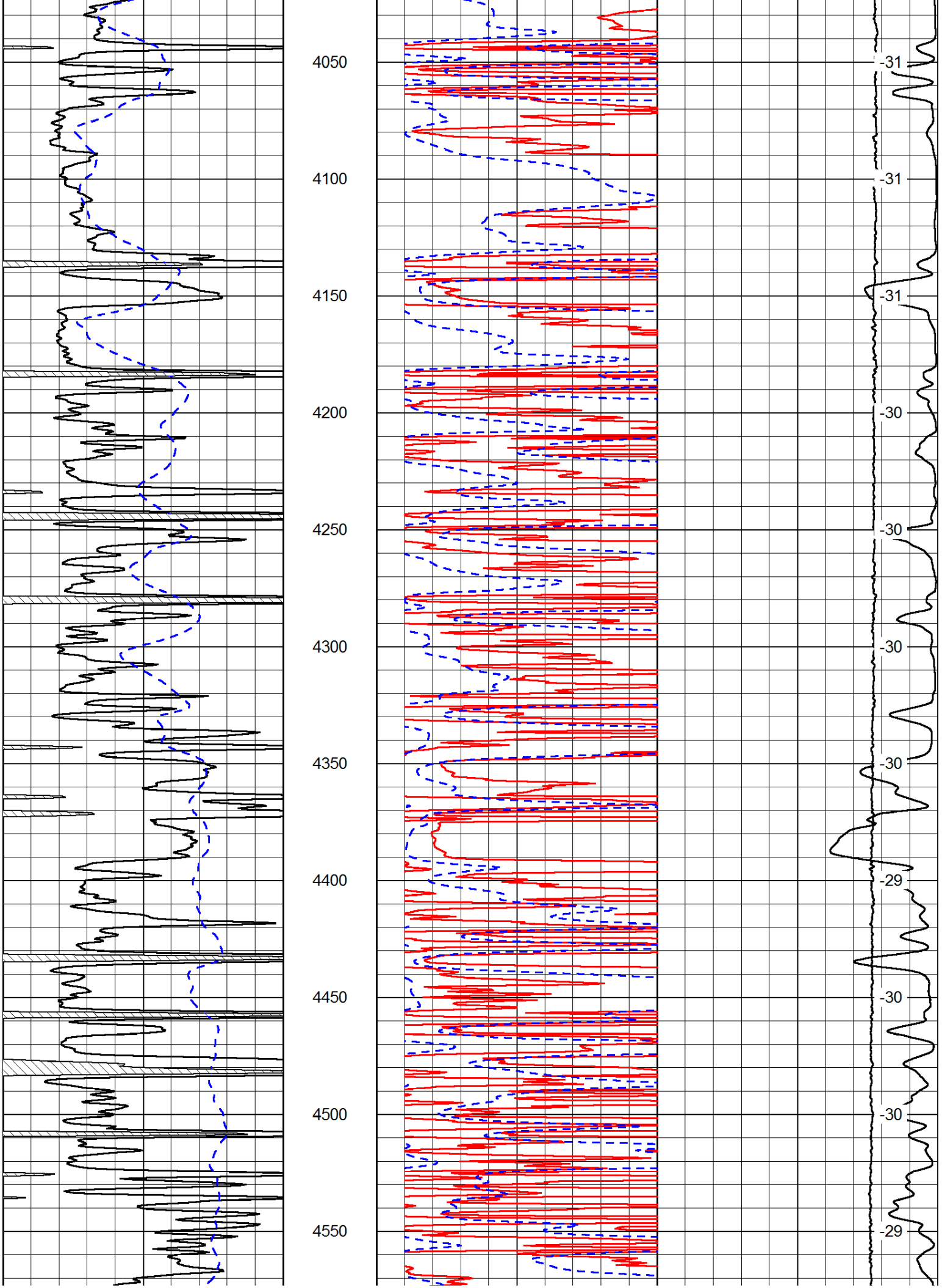
-32
-32
-32
-32
-32
-31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4100
4150
4200
4250
4300
4350
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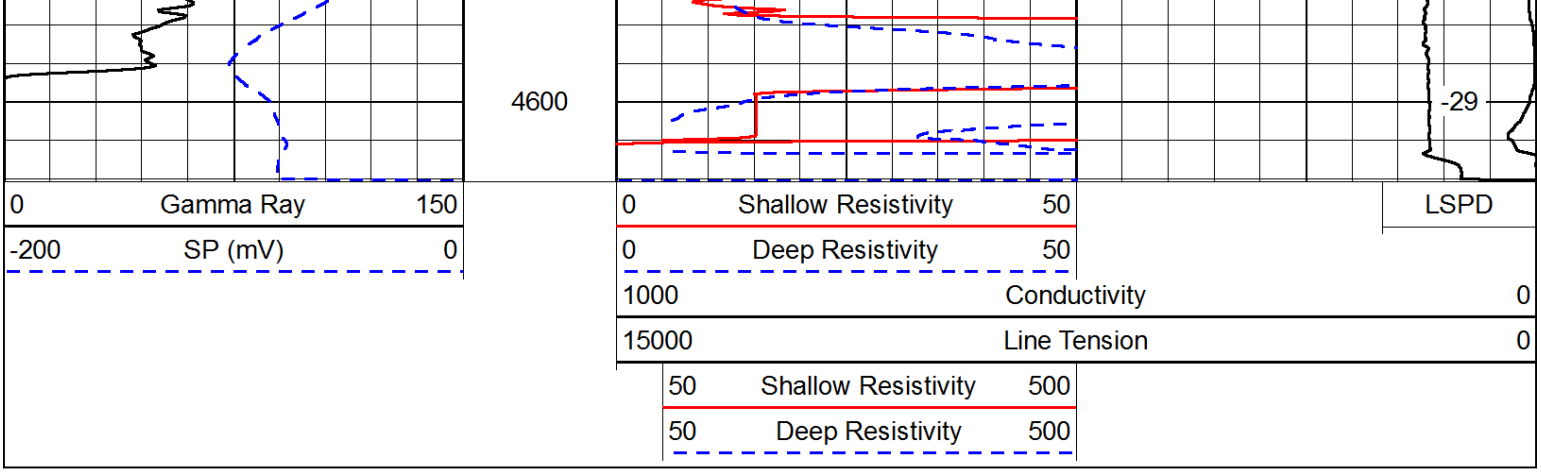

Database File: c:\warrior\data\larson_risley #1-36\larson_risley_1-36hd.db
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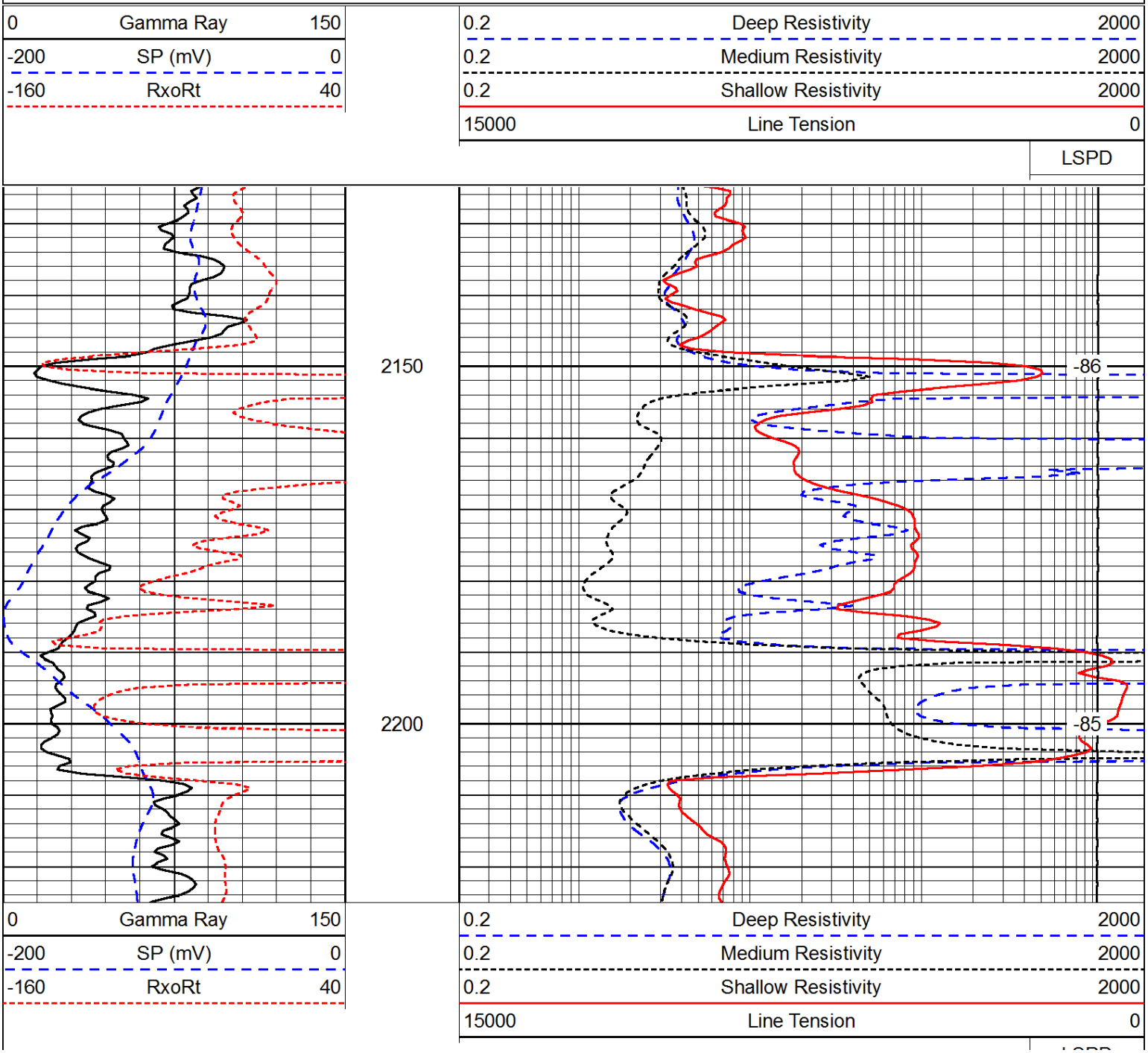
Dataset Creation: Thu Oct 02 02:57:34 2014
Charted by: Depth in Feet scaled 1:240



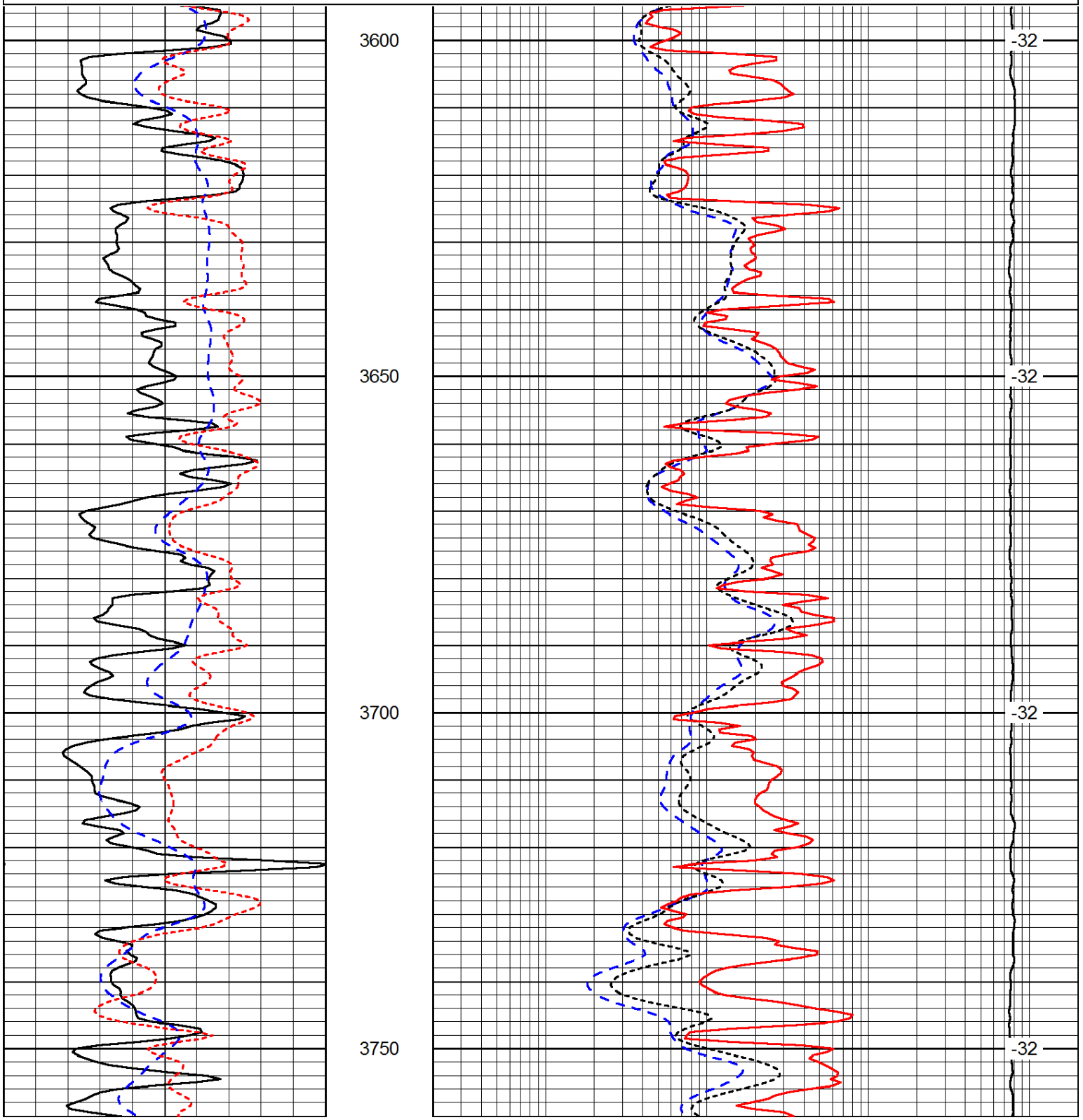
LSPD

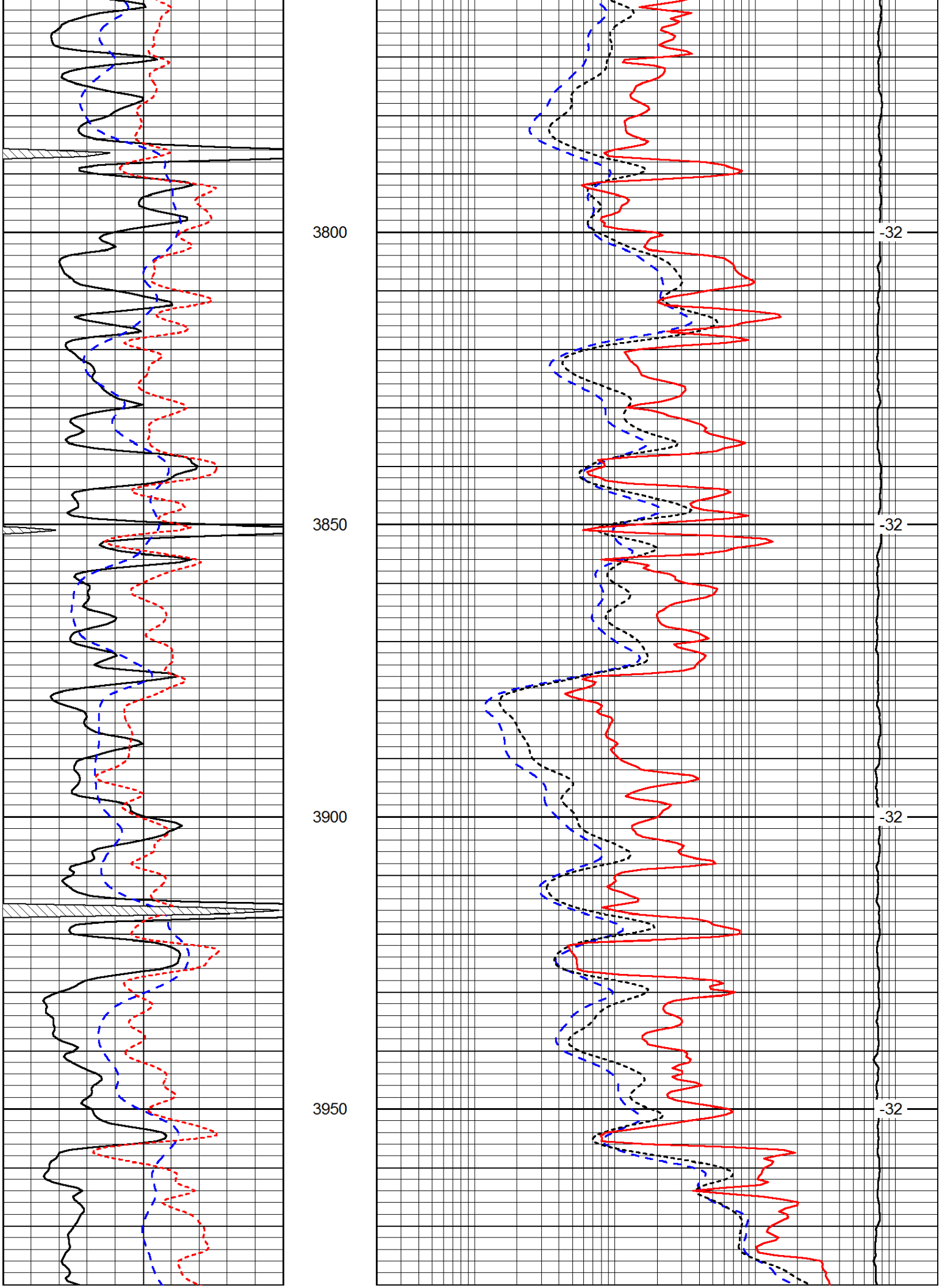
Database File: c:\warrior\data\larson_risley #1-36\larson_risley_1-36hd.db
Dataset Pathname: dil/lastack
Presentation Format: dil
Dataset Creation: Thu Oct 02 02:57:34 2014
Charted by: Depth in Feet scaled 1:240

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

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD

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-32
-32
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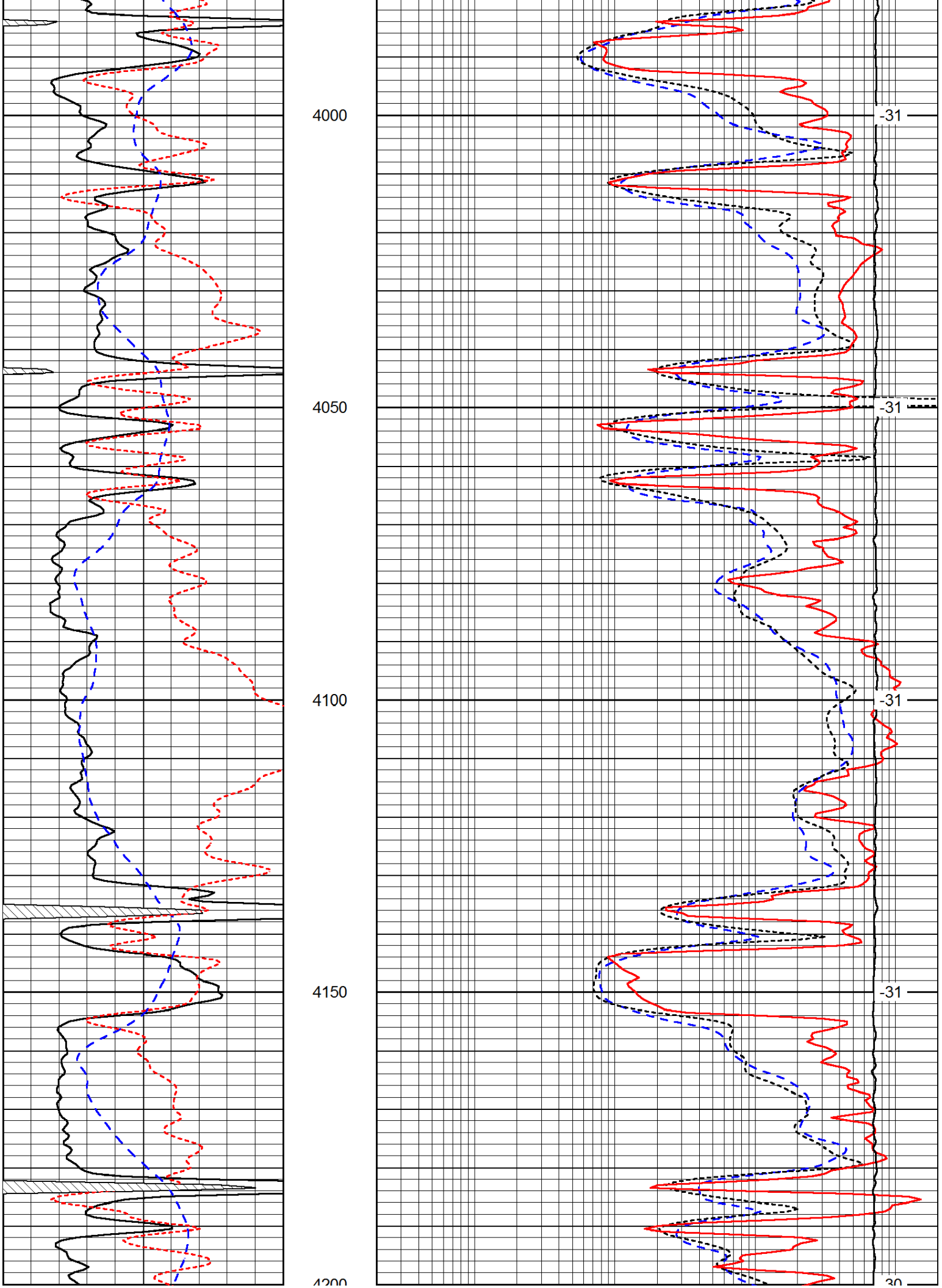
-32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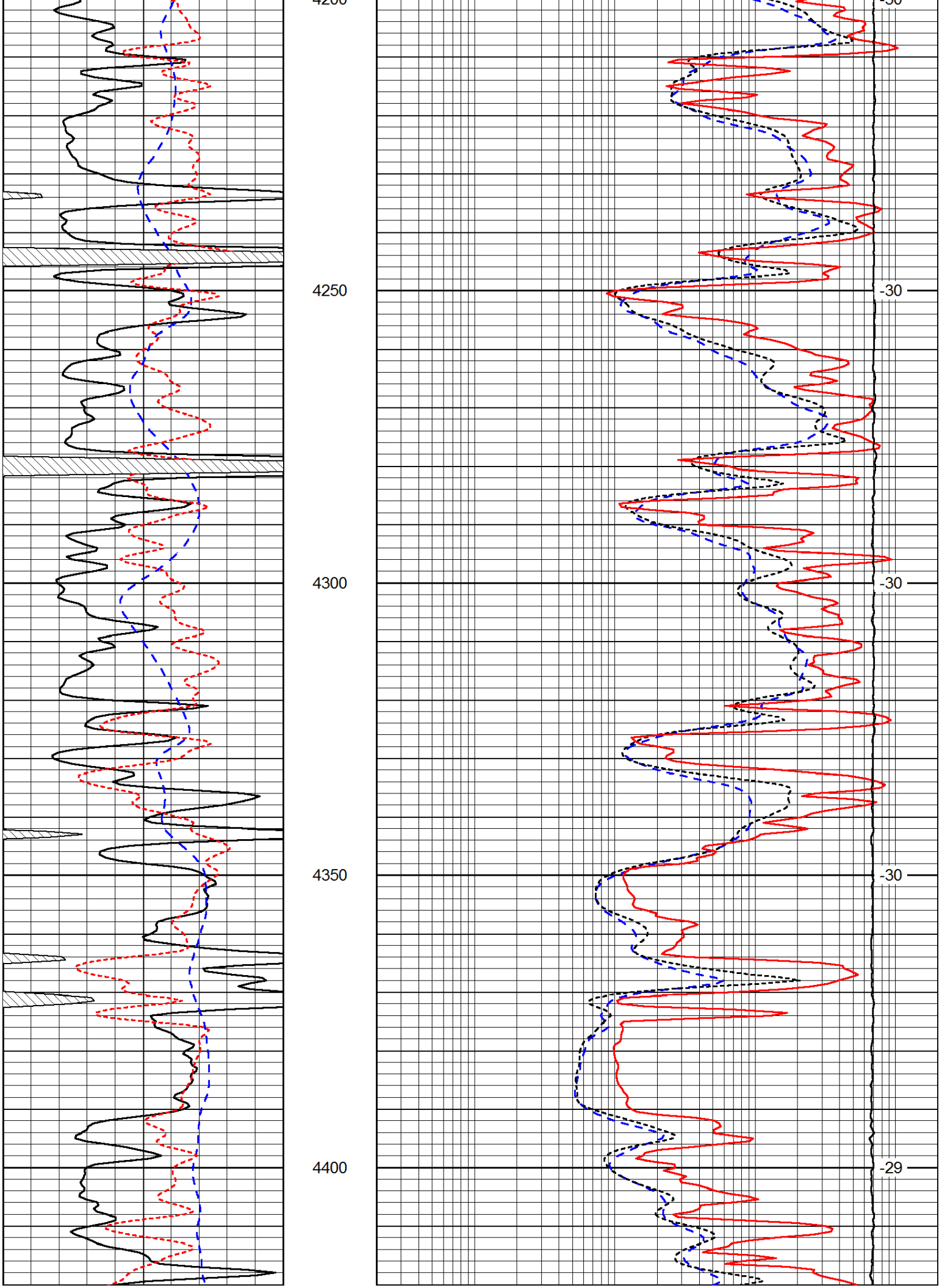
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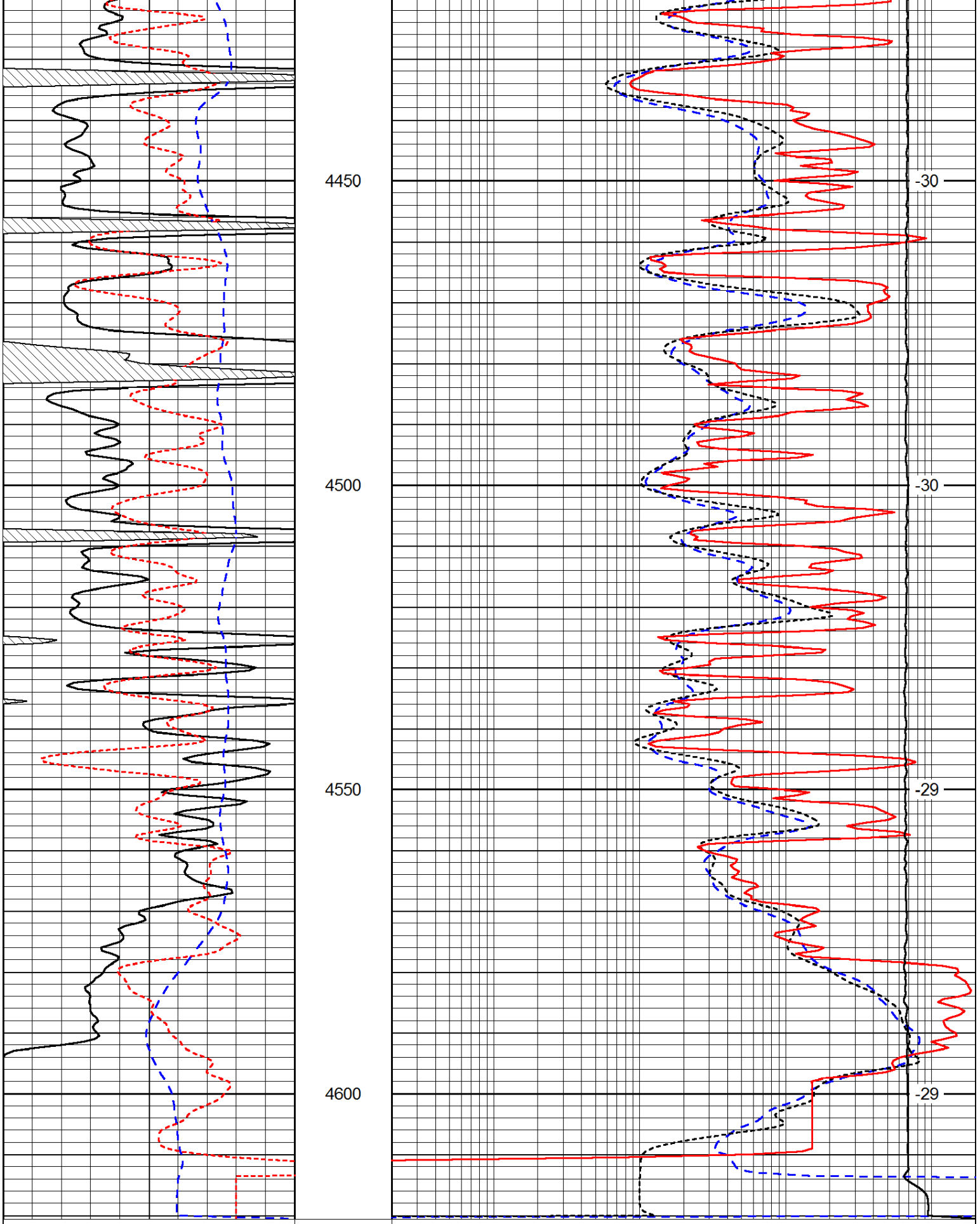

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LSPD