DUAL INDUCTION LOG

Company Bickle Energies, LLC.
Well Willie Z #1
Field N/A
County Logan State KS

Location: API # : 15 109 21460

1870' FNL & 535' FEL

SEC 36 TWP 11S RGE 33W

Other Services: CDNL

Elevation: K.B. 3090' D.F. 3089' G.L. 3080'

Permanent Datum: Ground Level Elevation 3080'
Log Measured From: KB10' AGL
Drilling Measured From: KB

Date	5-4-16		
Run Number	One		
Depth Driller	4730'		
Depth Logger	4734'		
Bottom Logged Interval	4732'		
Top Log Interval	200'		
Casing Driller	230'		
Casing Logger	230'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical Mud		
Density / Viscosity	9.5/50		
pH / Fluid Loss	9.7/8.0		
Source of Sample	Pit		
Rm @ Meas. Temp	2.3@60degf		
Rmf @ Meas. Temp	1.72@60degf		
Rmc @ Meas. Temp	2.76@60degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	1.21@114degf		
Time Circulation Stopped	12:15 a.m.		
Time Logger on Bottom	2:30 a.m.		
Maximum Recorded Temperature	114 degf		
Equipment Number	T127		
Location	Hays, KS.		
Recorded By	Gus Pfanenstiel		
Witnessed By	Mr. Garet Dinkel	Mr. Cole Robben	Mr. Eli Felts

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Well Willie Z #1
Field N/A
County Logan
State KS

<<< Fold Here >>>

Comments

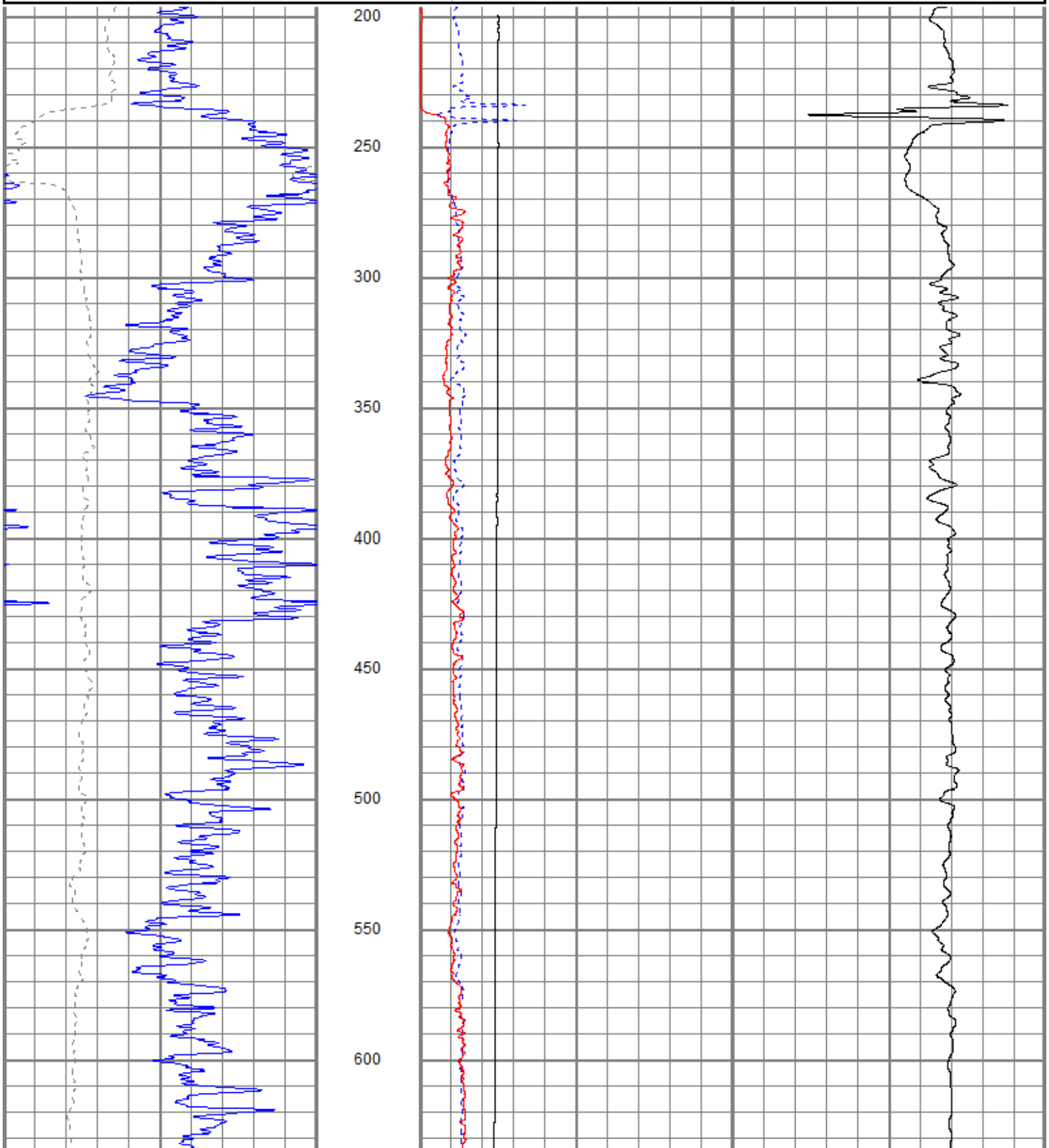
Thank you for using Gemini Wireline
785-625-1182

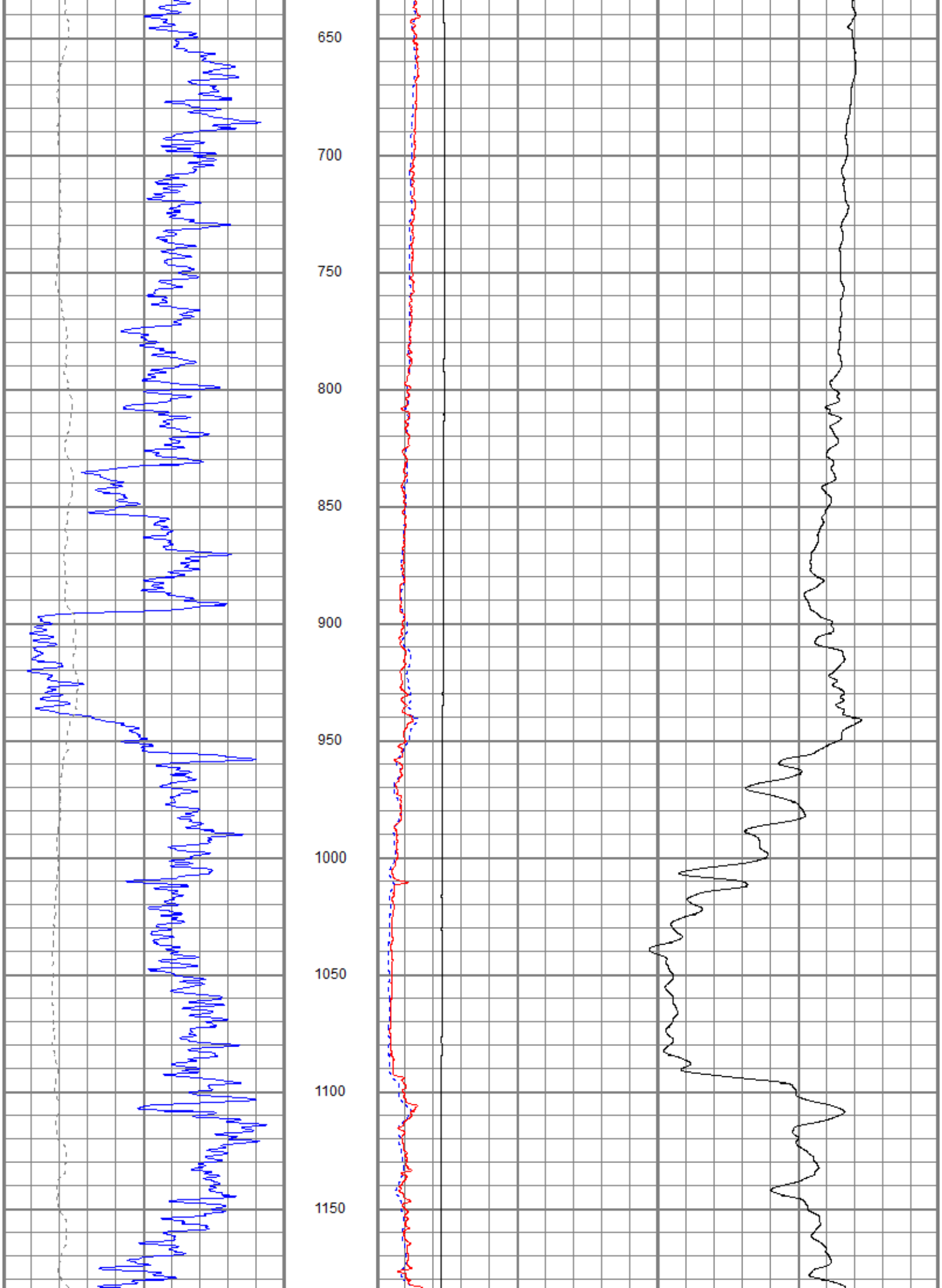
Main Pass

Database File	bewilliez#1oh.db
Dataset Pathname	pass2
Presentation Format	kdillin2
Dataset Creation	Wed May 04 02:36:54 2016
Charted by	Depth in Feet scaled 1:600

0	GR (GAPI)	150
-200	SP (mV)	0

1000	CILD (mmho/m)	0
10000	LTEN (lb)	0
0	RILD (Ohm-m)	50
0	RLL3 (Ohm-m)	50
50	RILD x 10 (Ohm-m)	500
50	RLL3 x 10 (Ohm-m)	500

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950
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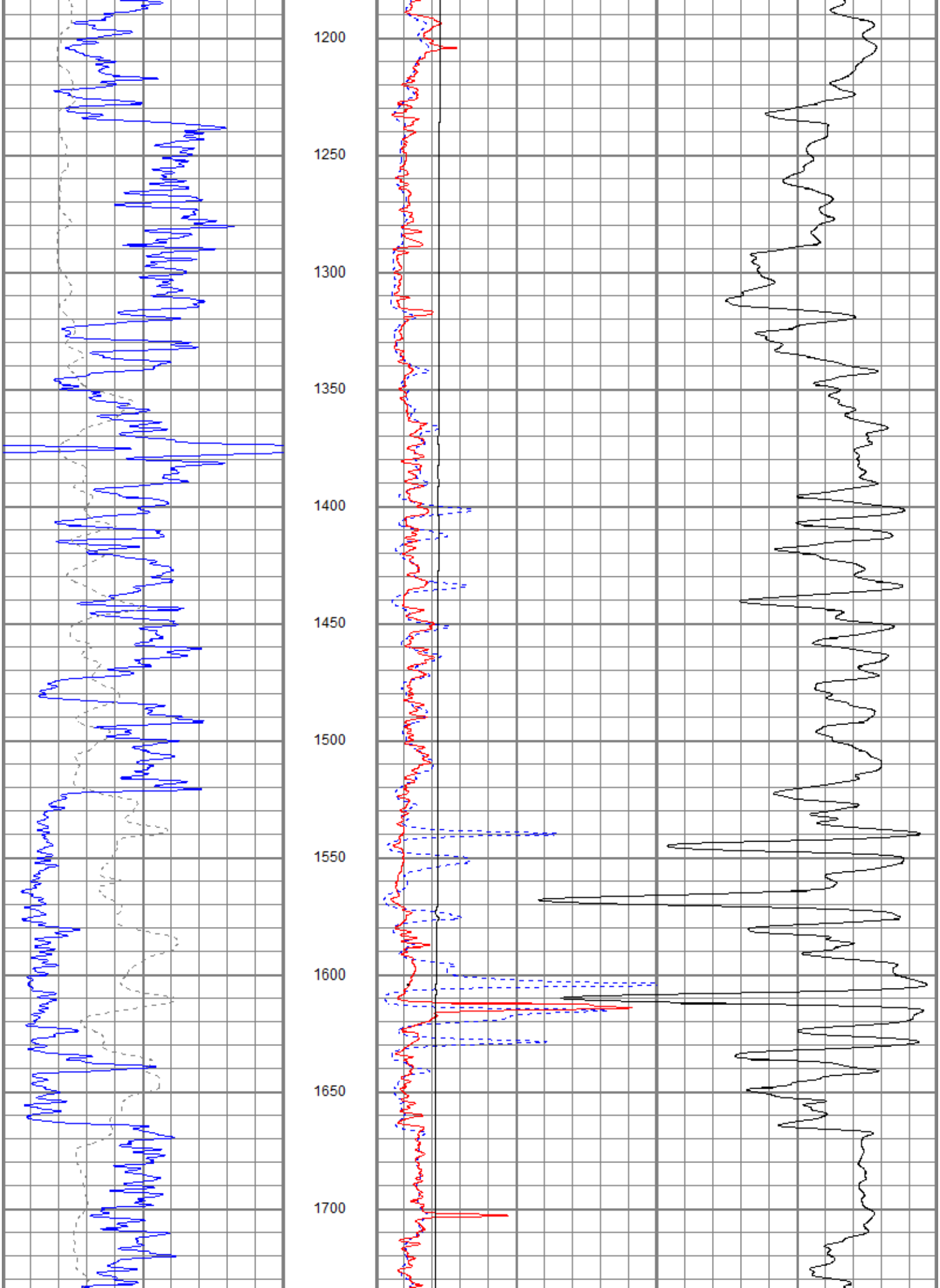
1100
1150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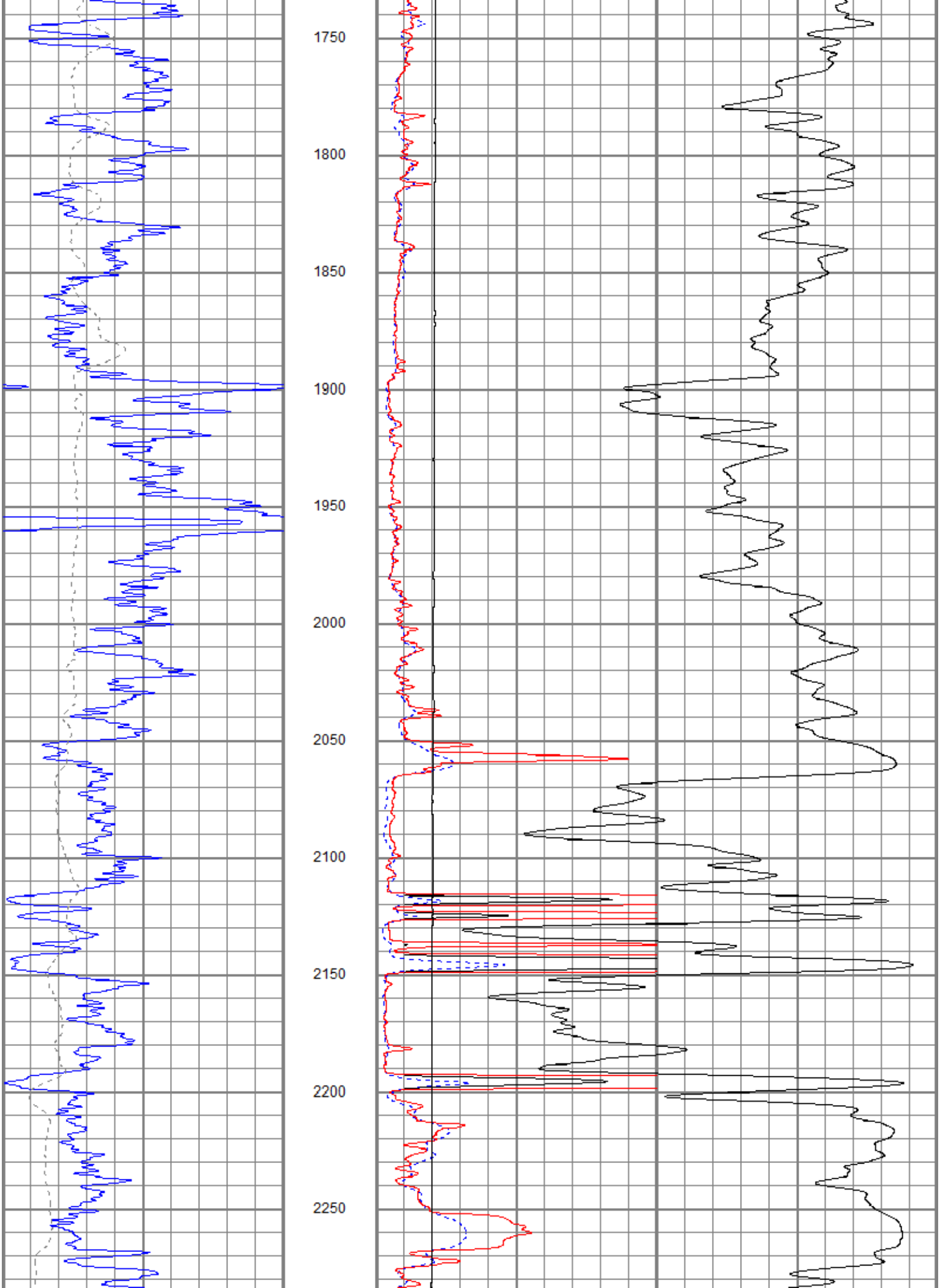
1700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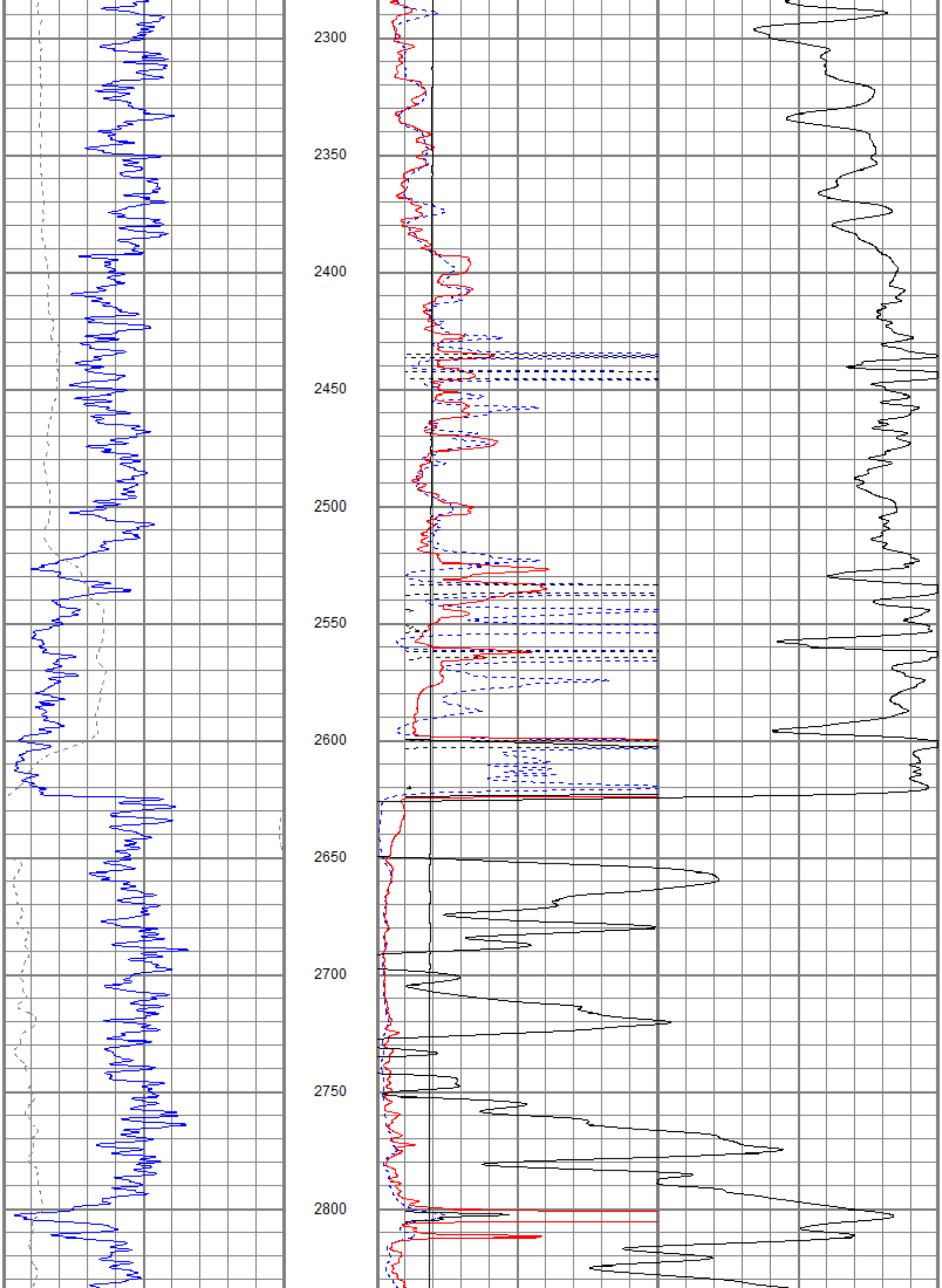
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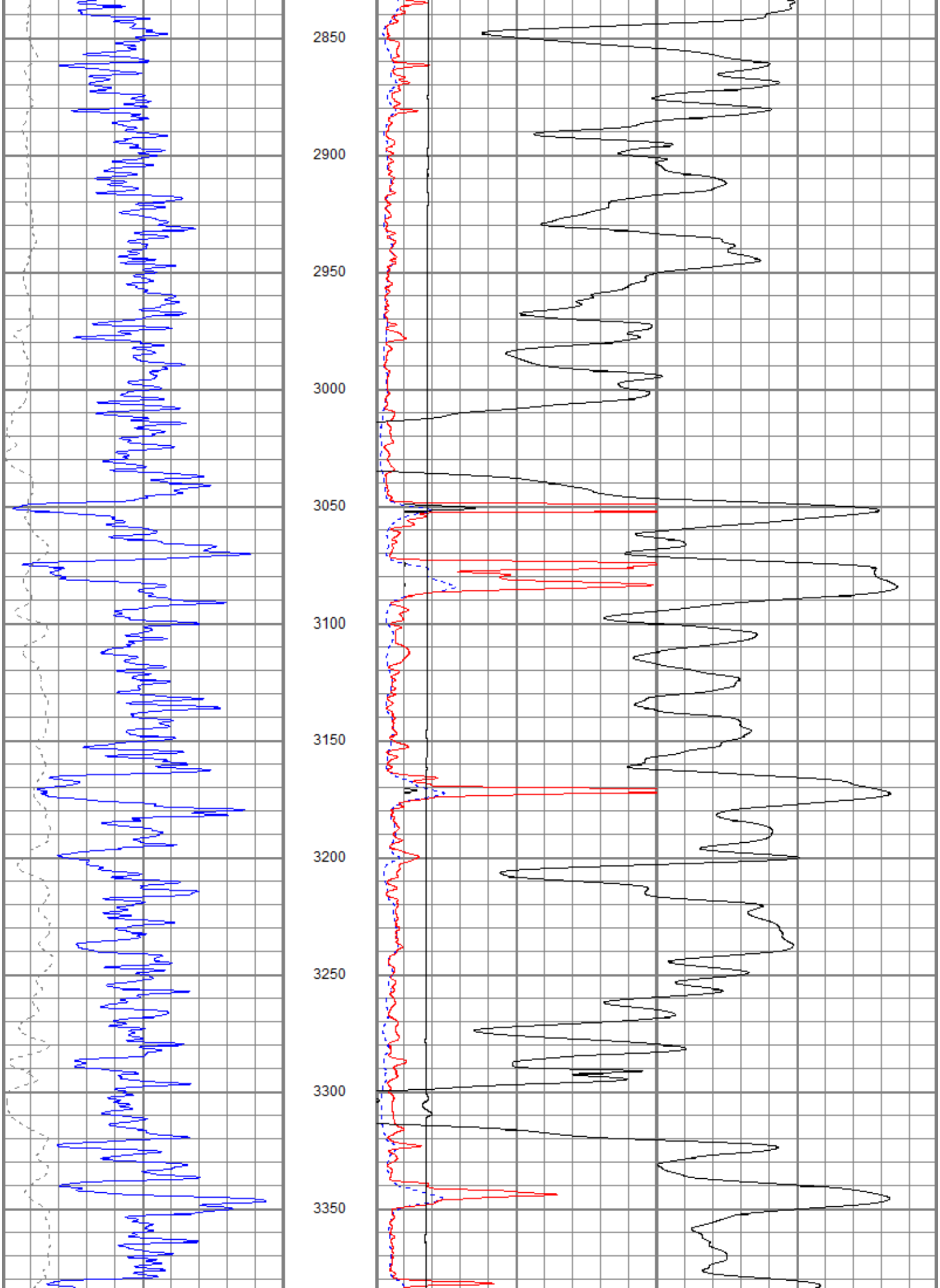
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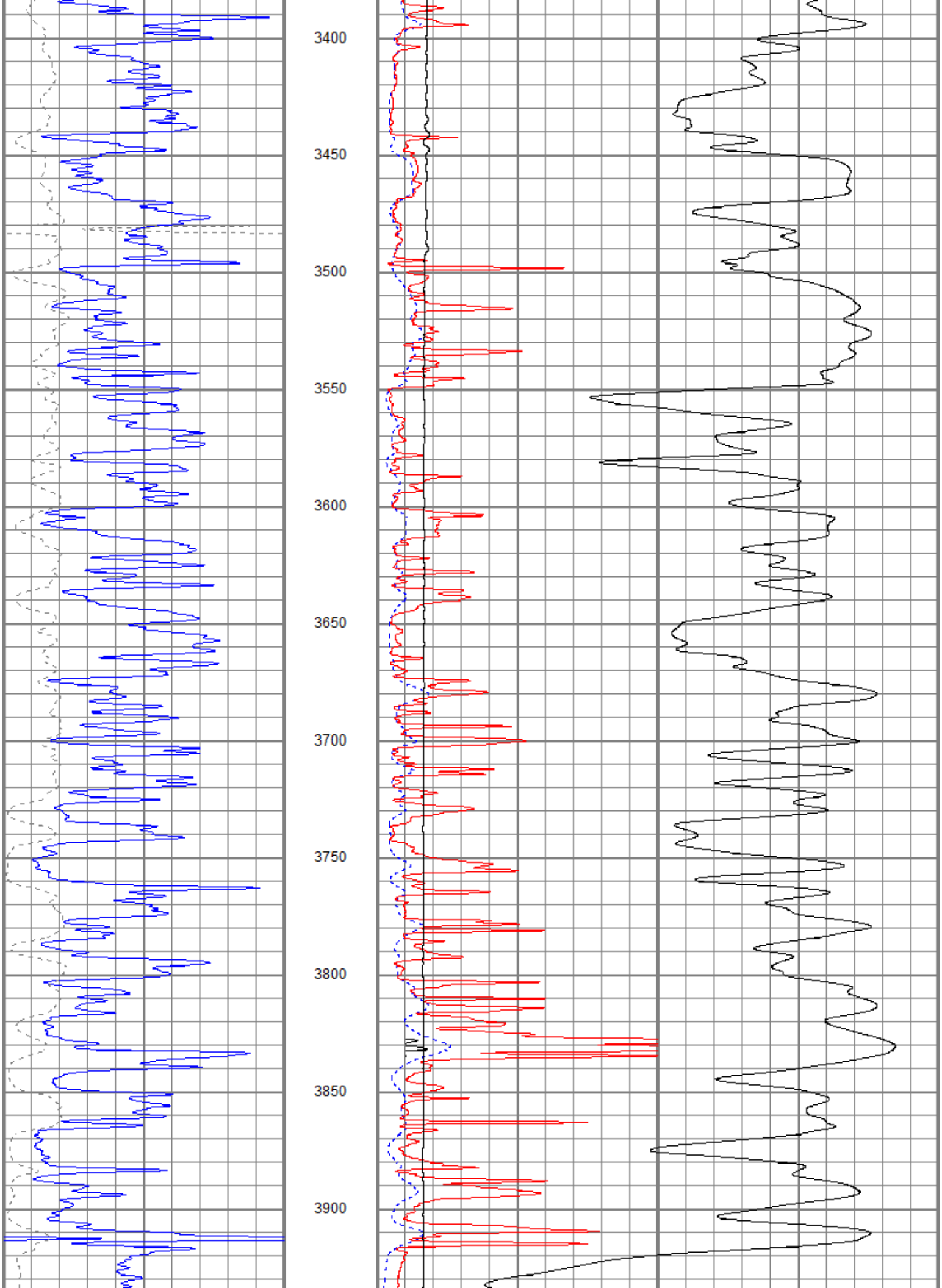
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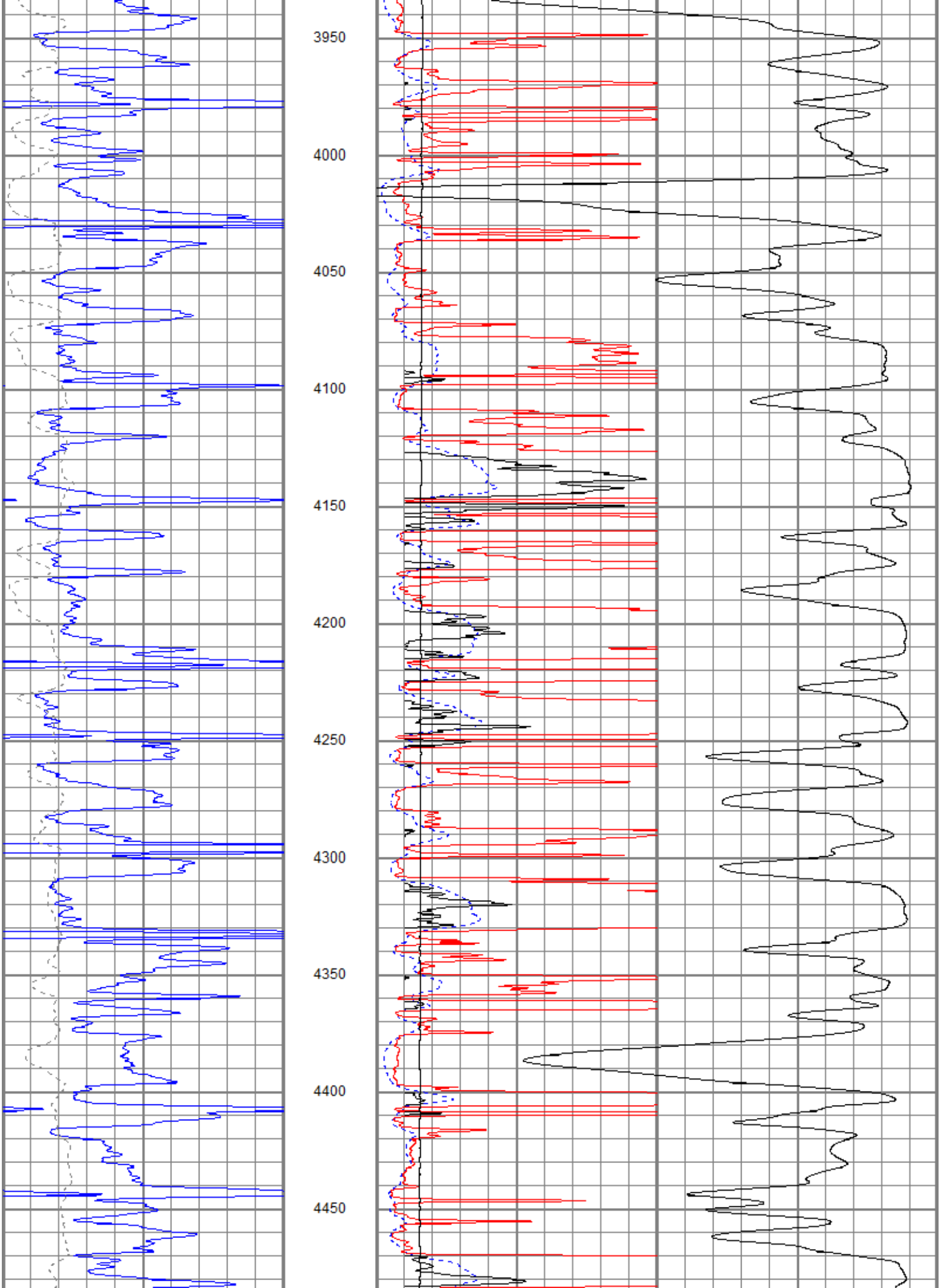
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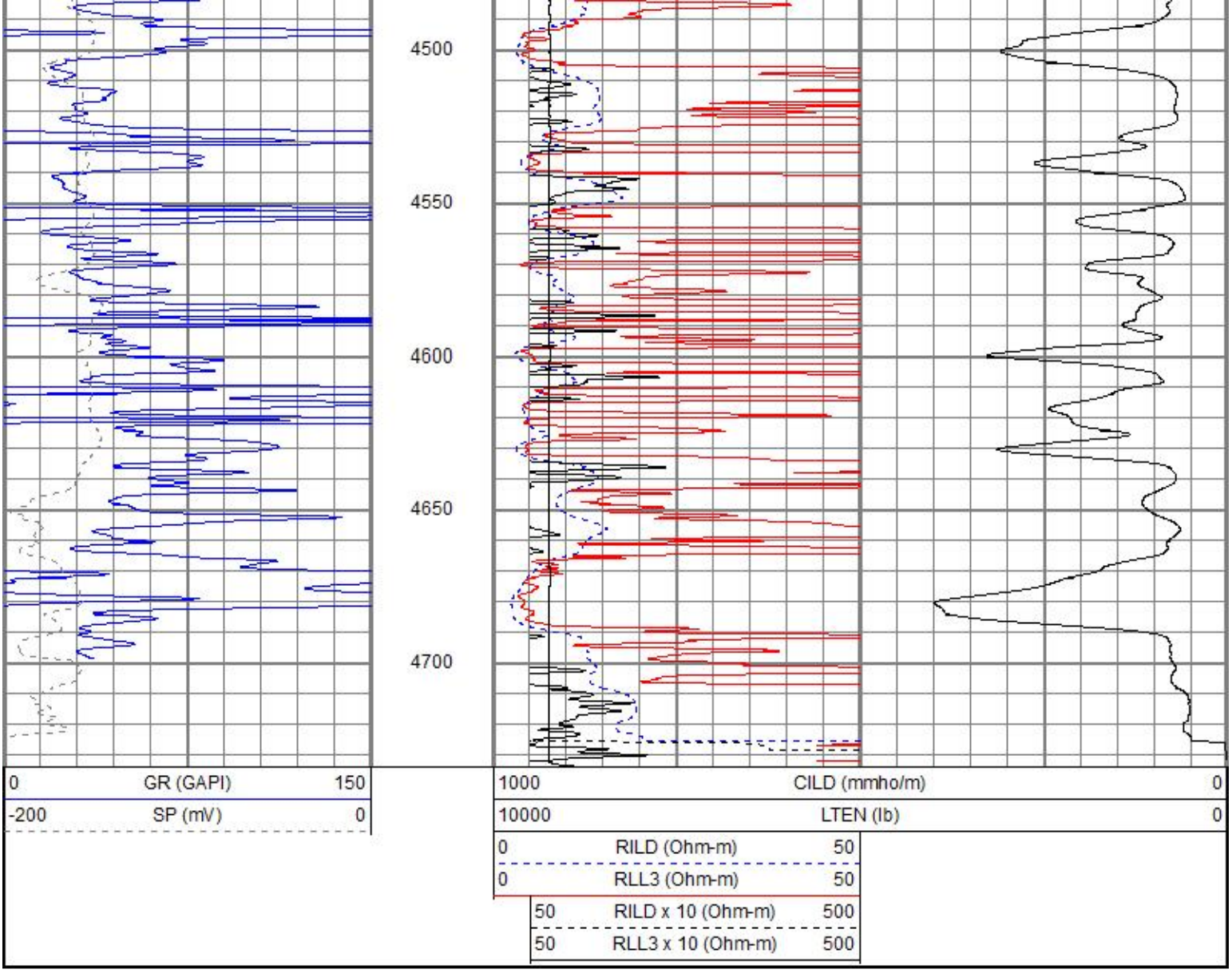
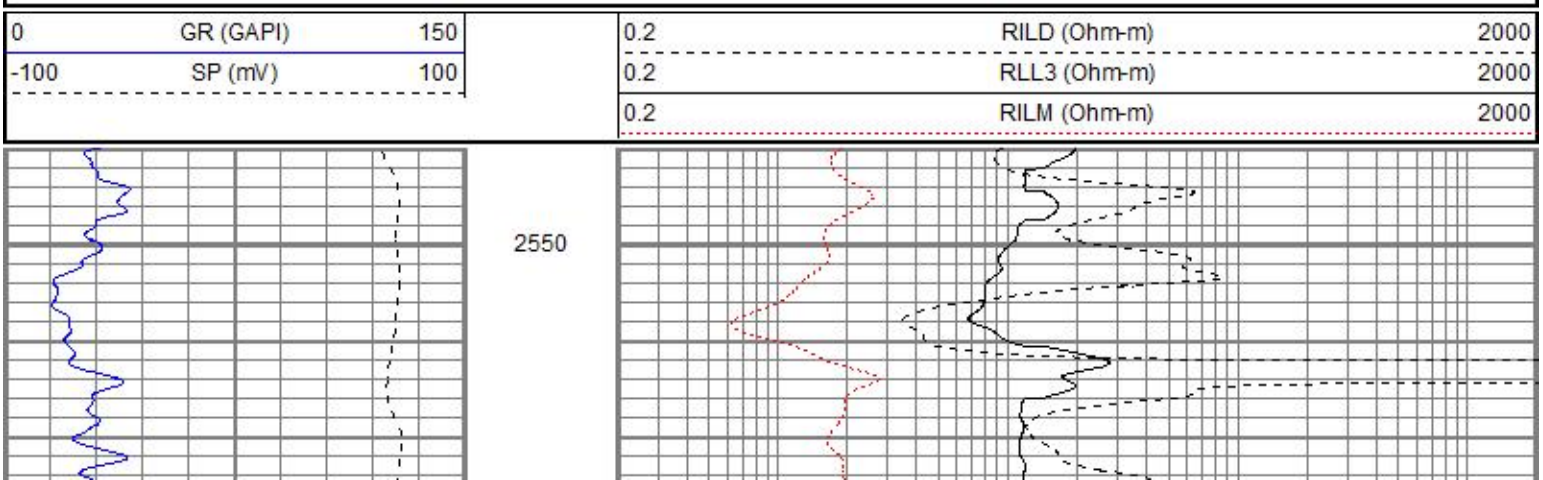
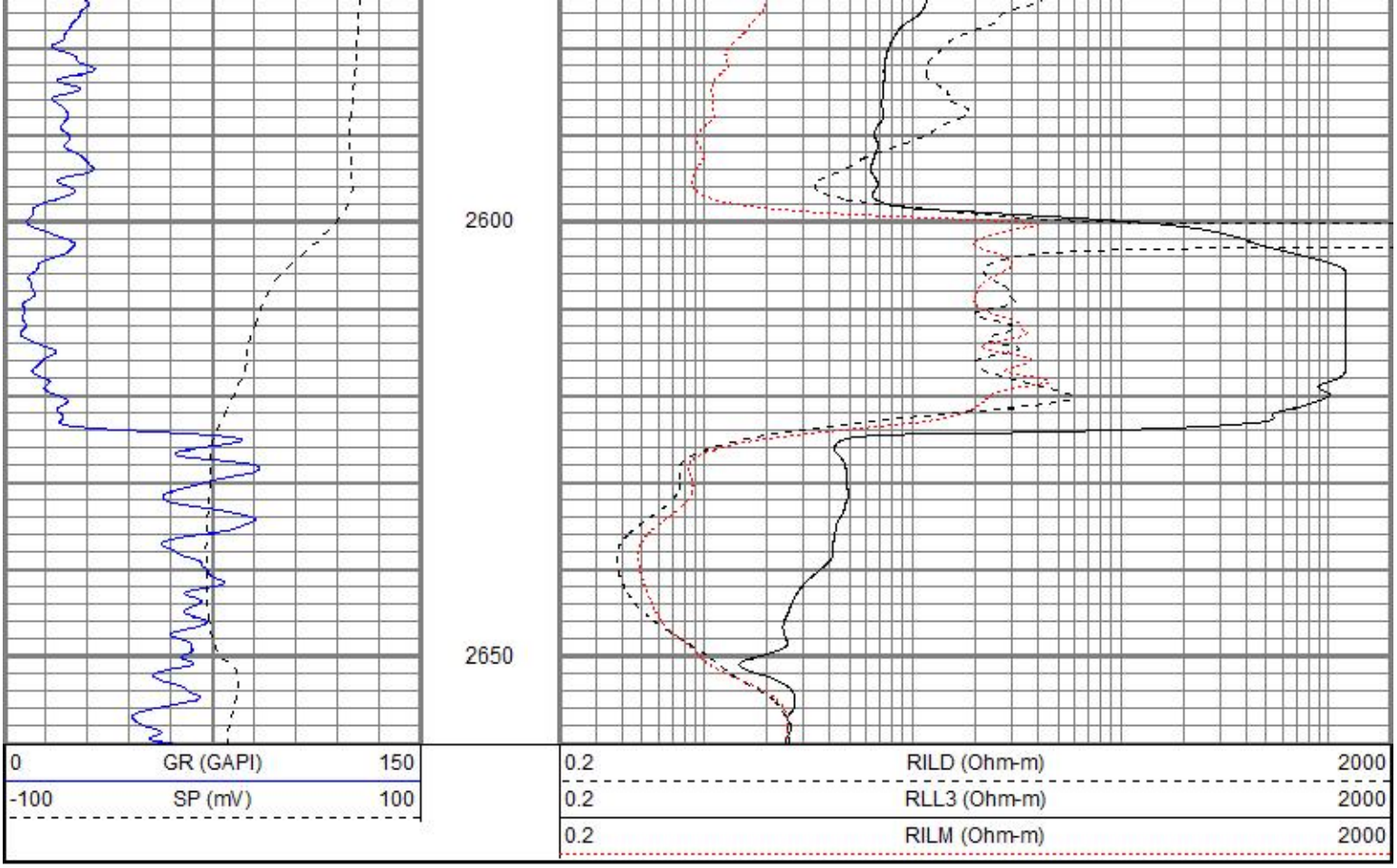


Main Pass

Database File	bewilliez#1oh.db
Dataset Pathname	pass2
Presentation Format	kdil
Dataset Creation	Wed May 04 02:36:54 2016
Charted by	Depth in Feet scaled 1:240

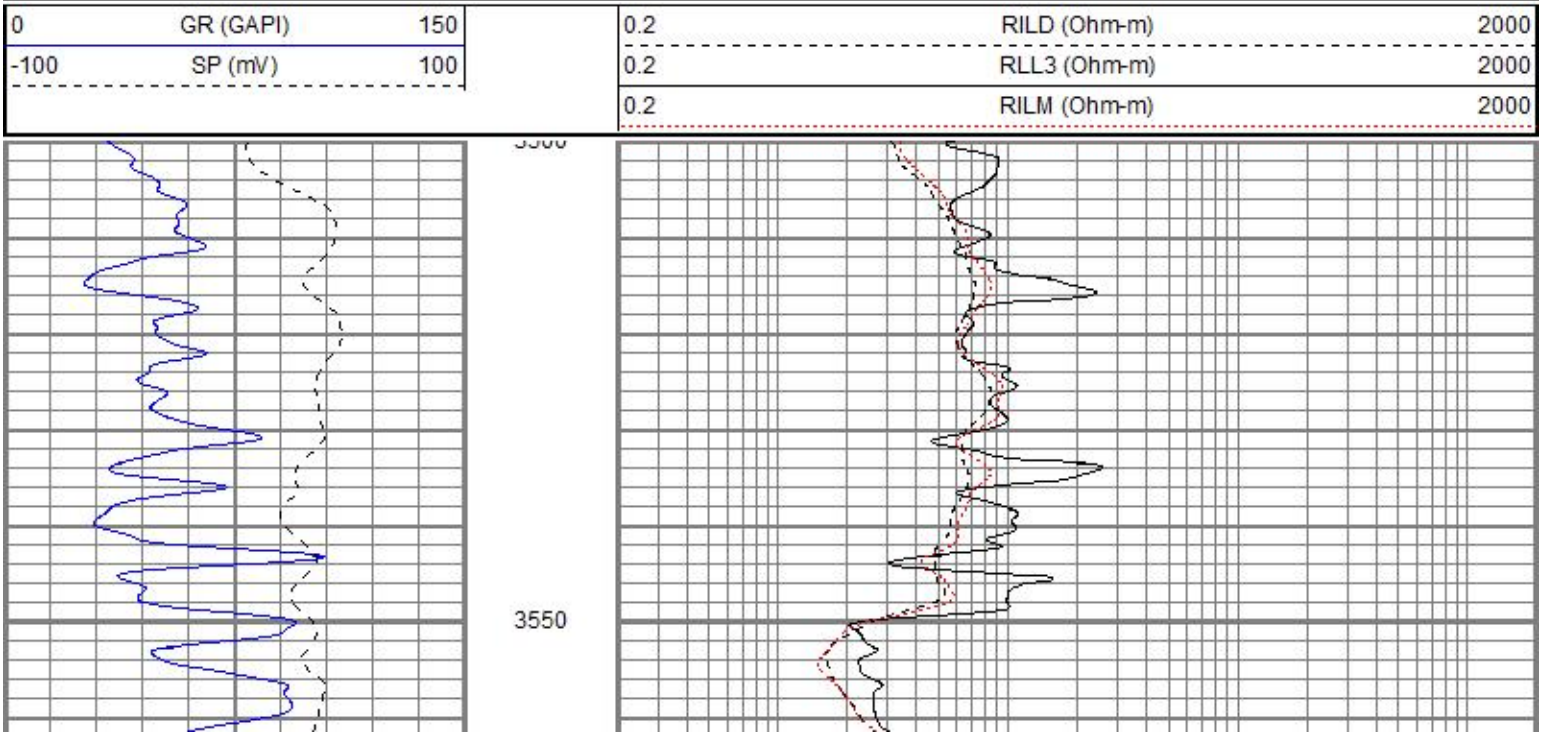


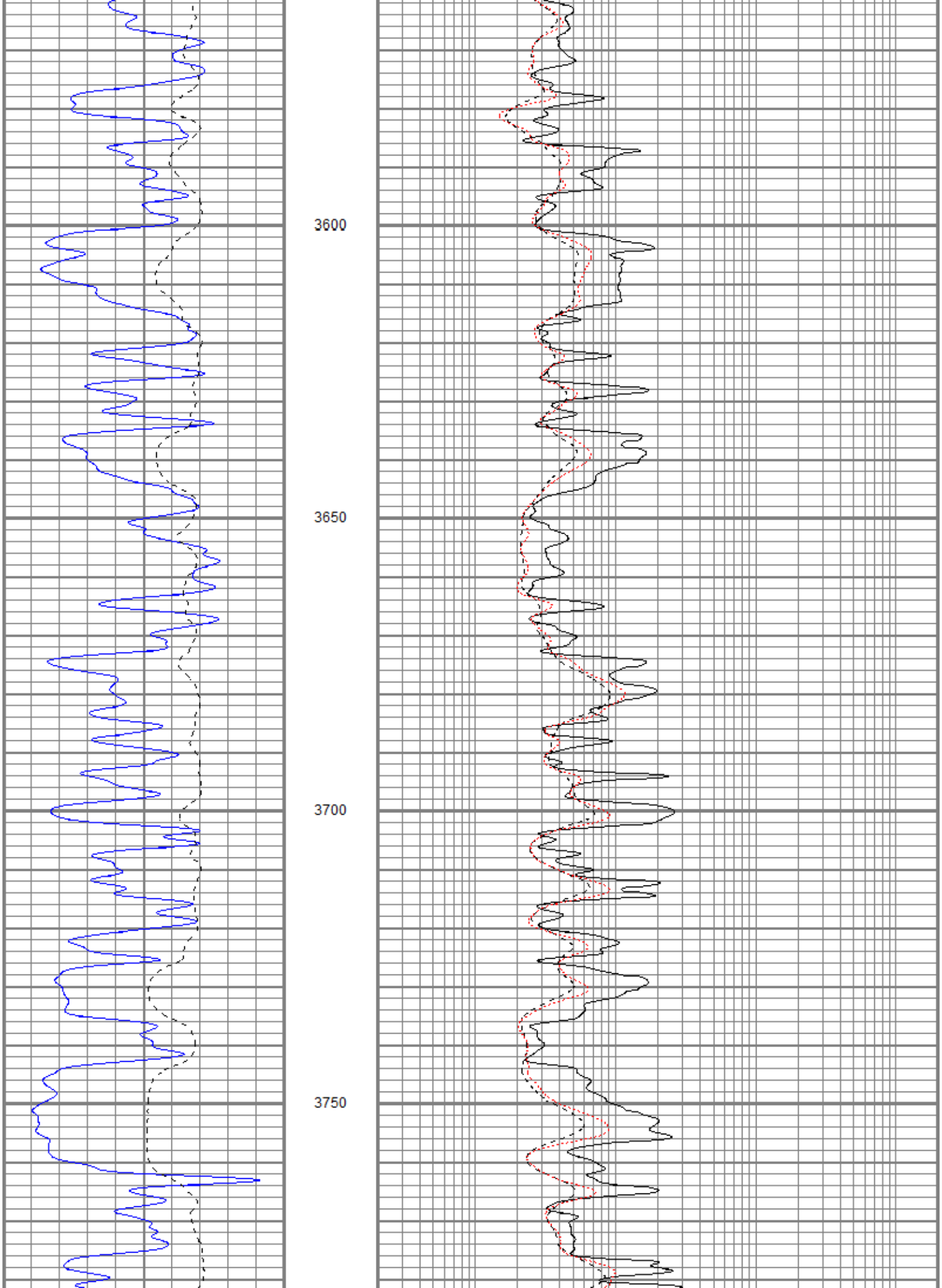


GEMINI WIRELINE

Main Pass

Database File	bewilliez#1oh.db
Dataset Pathname	pass2
Presentation Format	kdil
Dataset Creation	Wed May 04 02:36:54 2016
Charted by	Depth in Feet scaled 1:240

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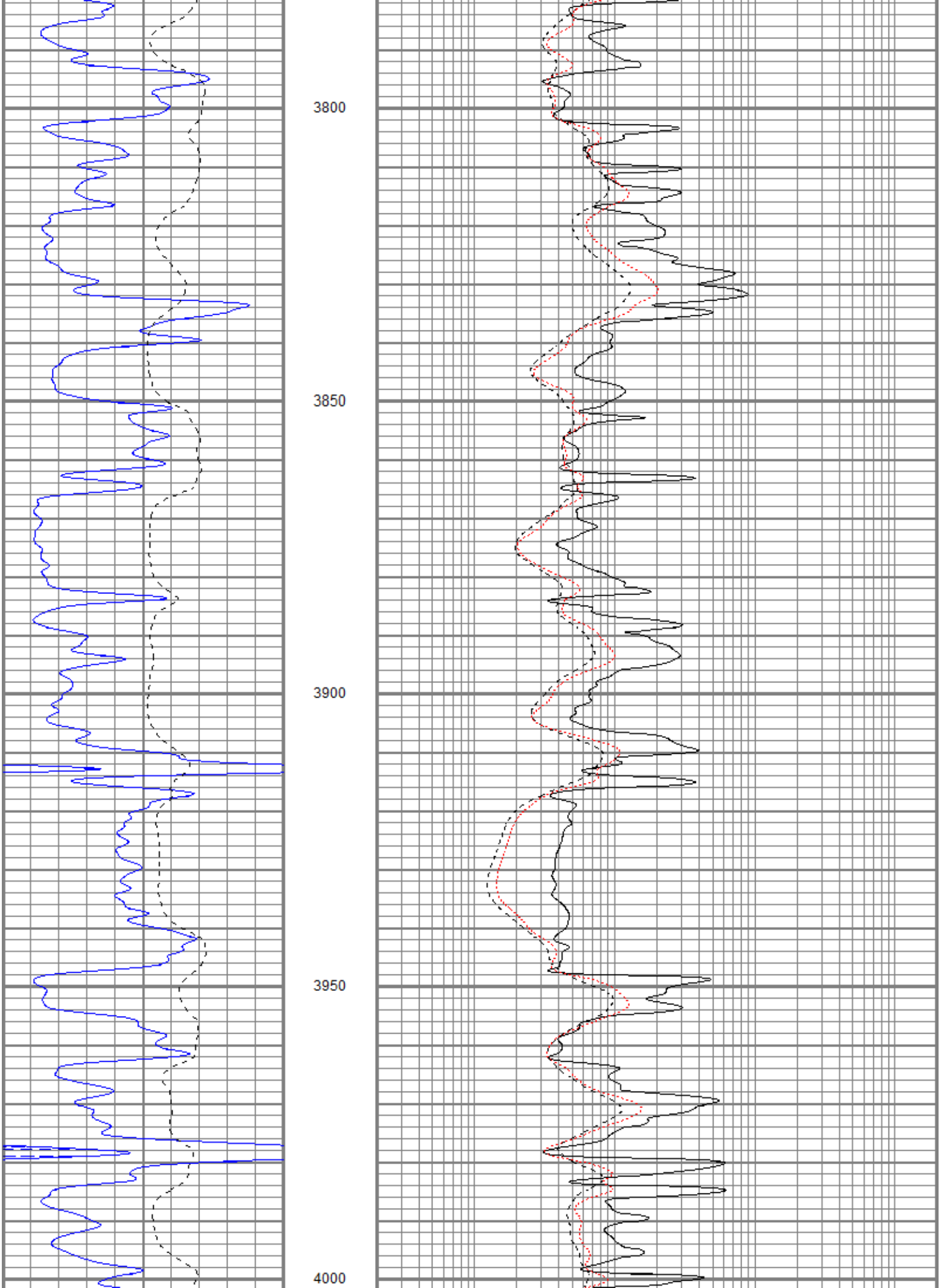
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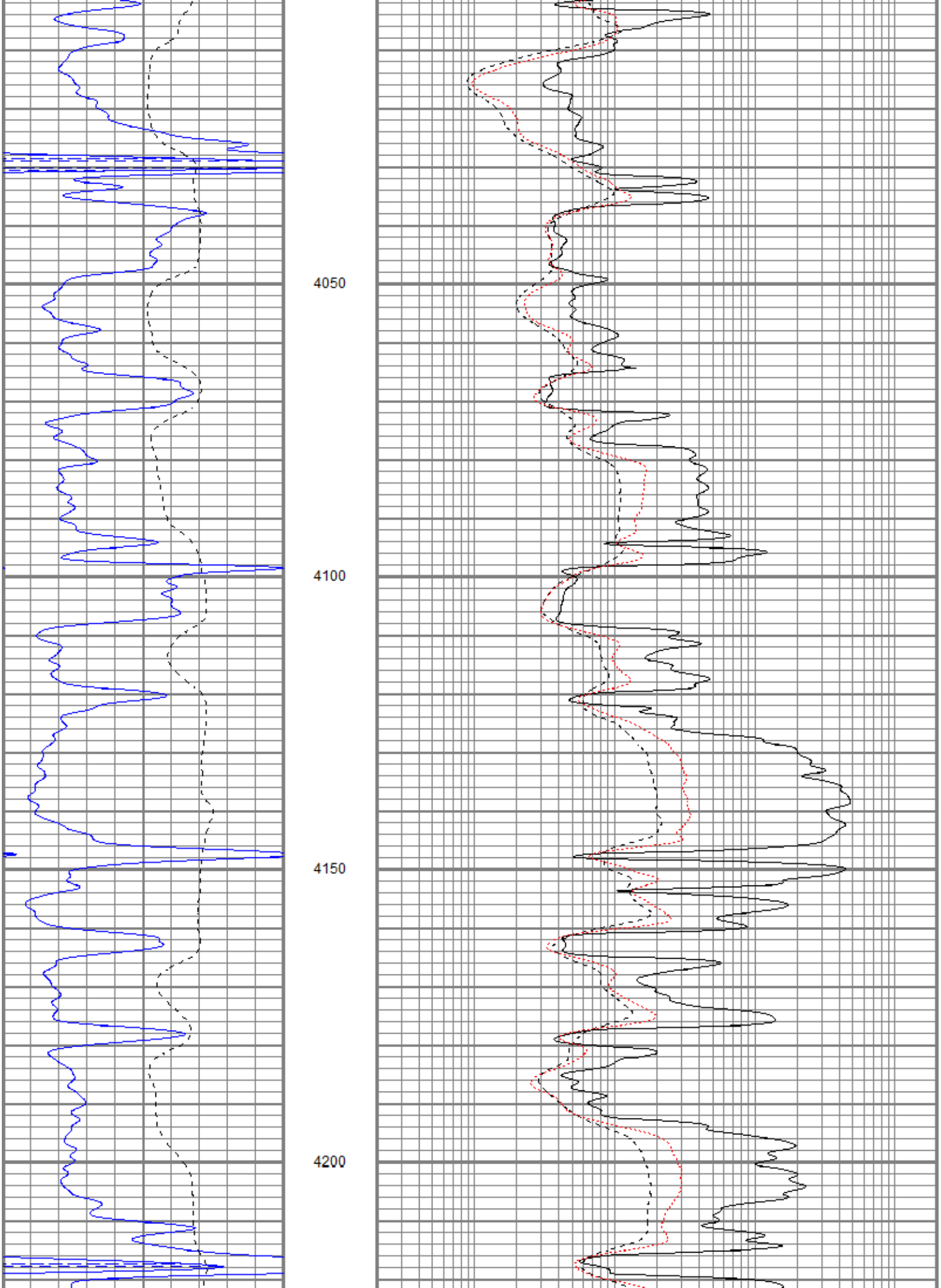
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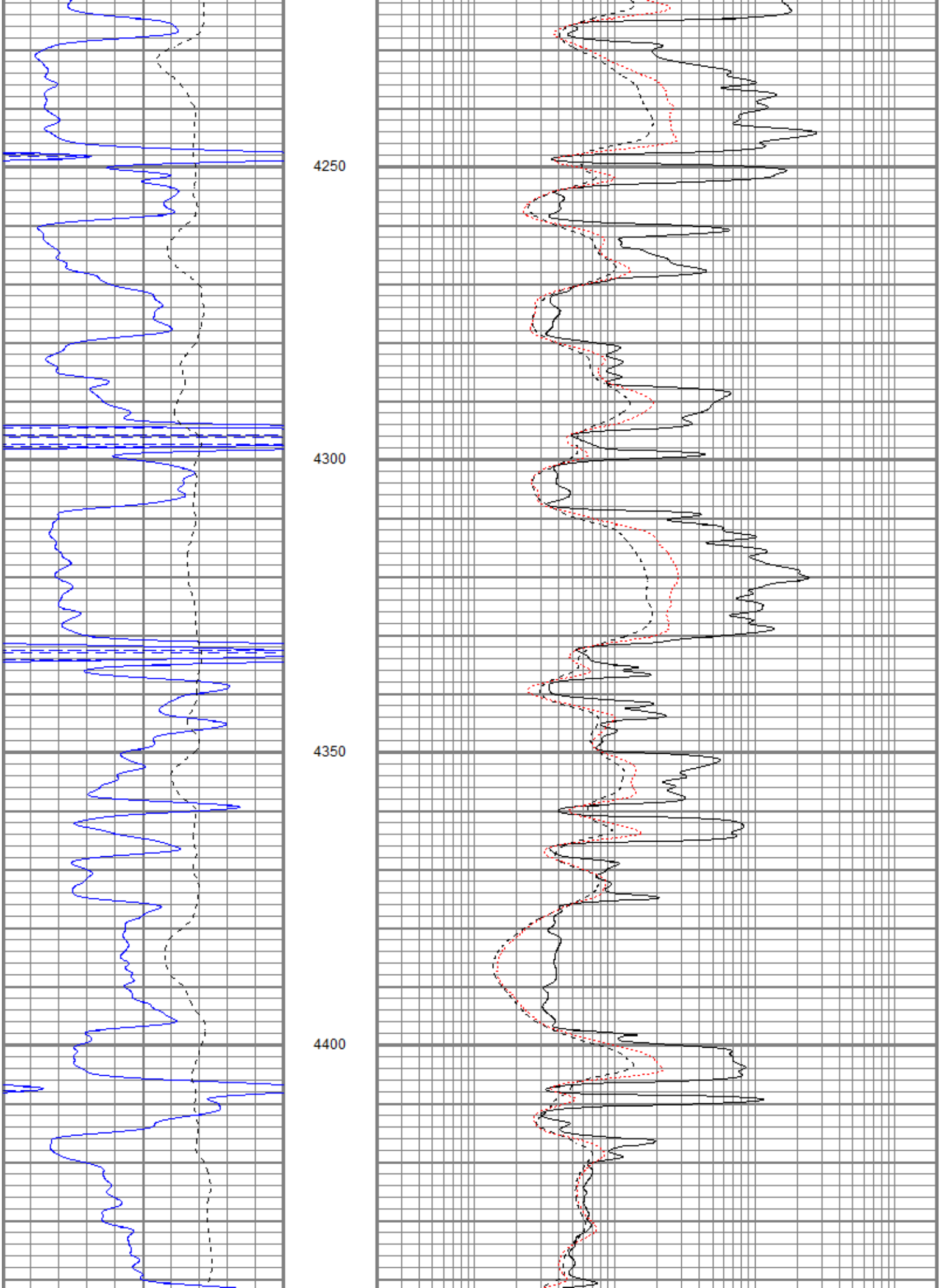
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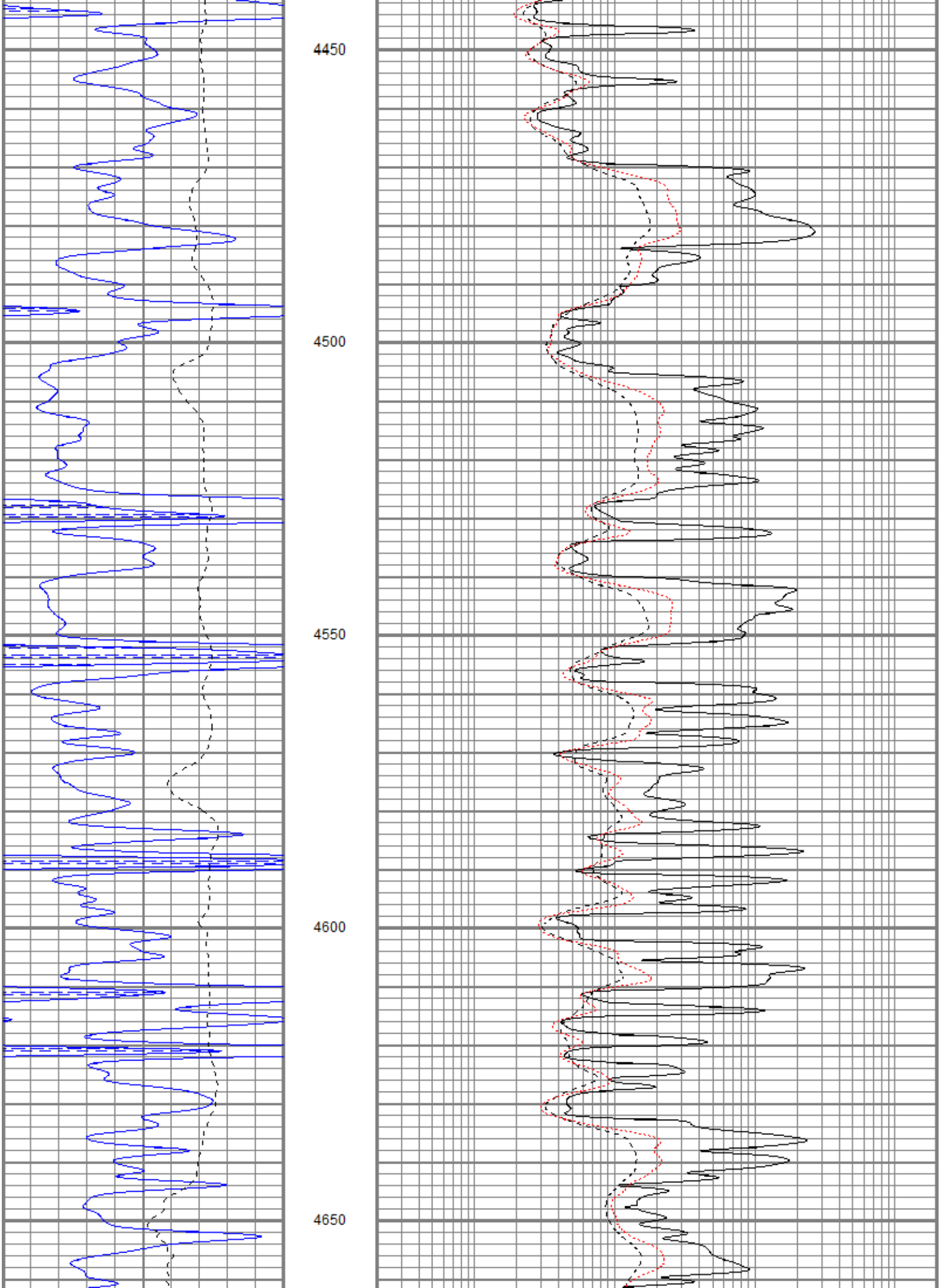
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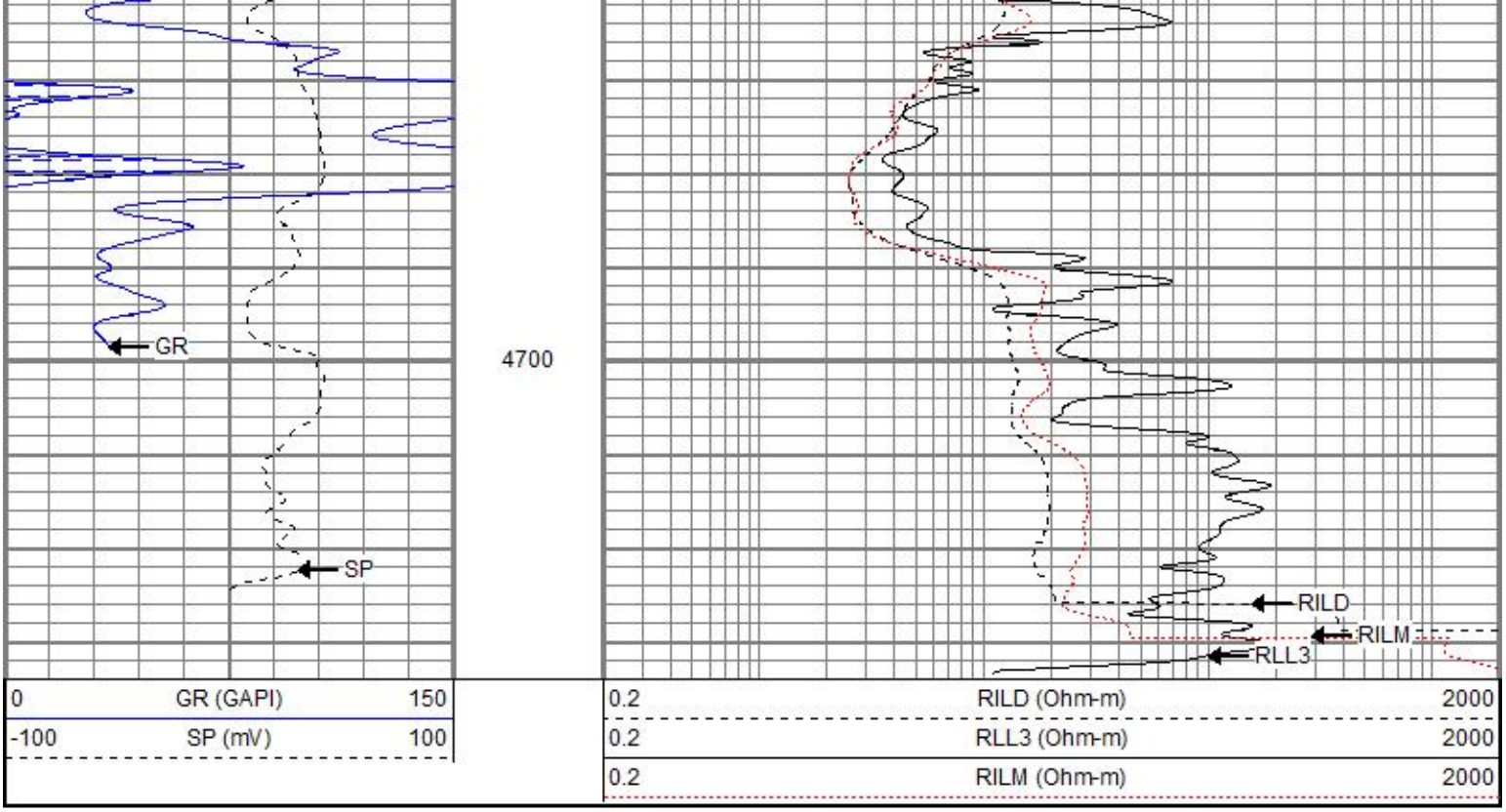


0	GR (GAPI)	150
-100	SP (mV)	100

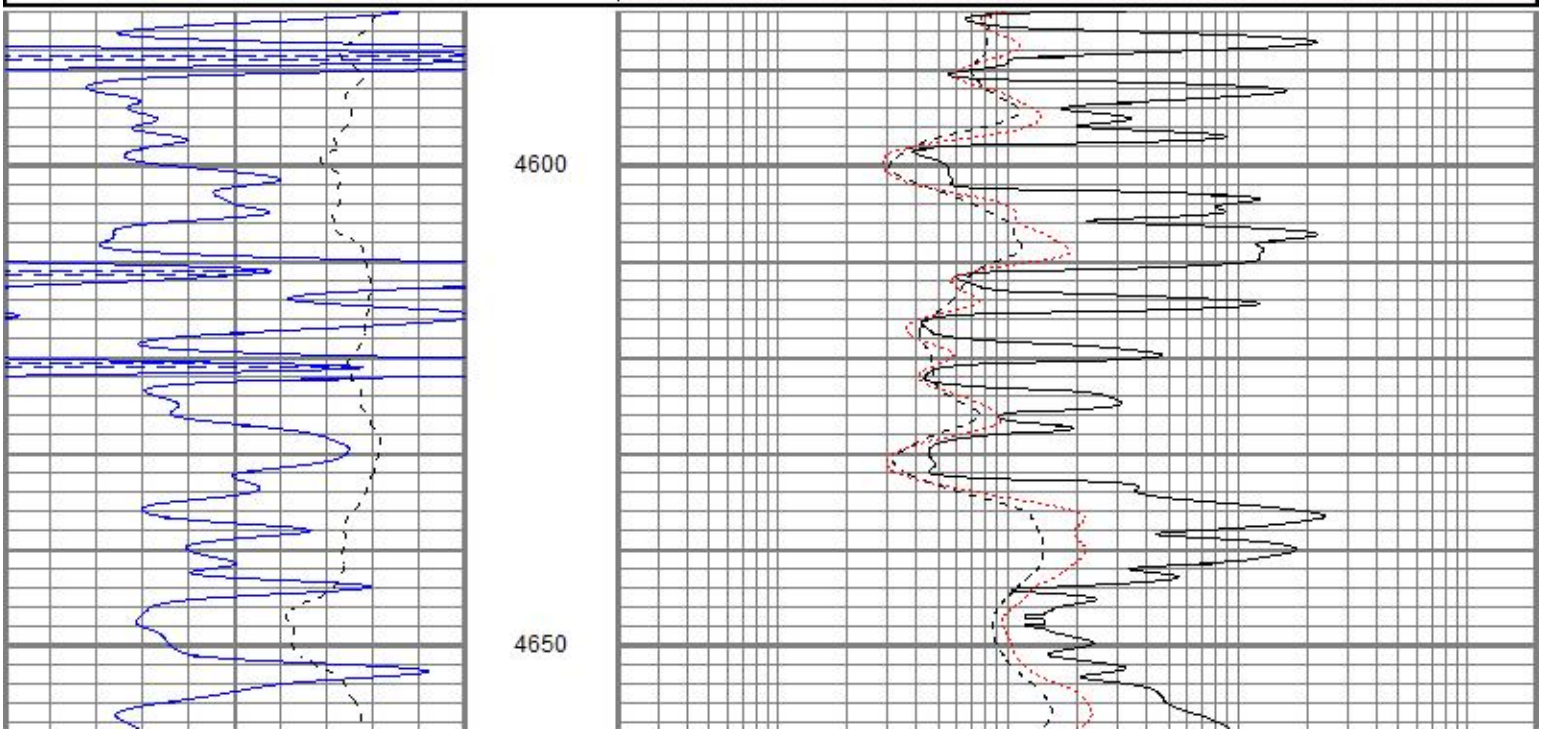
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000

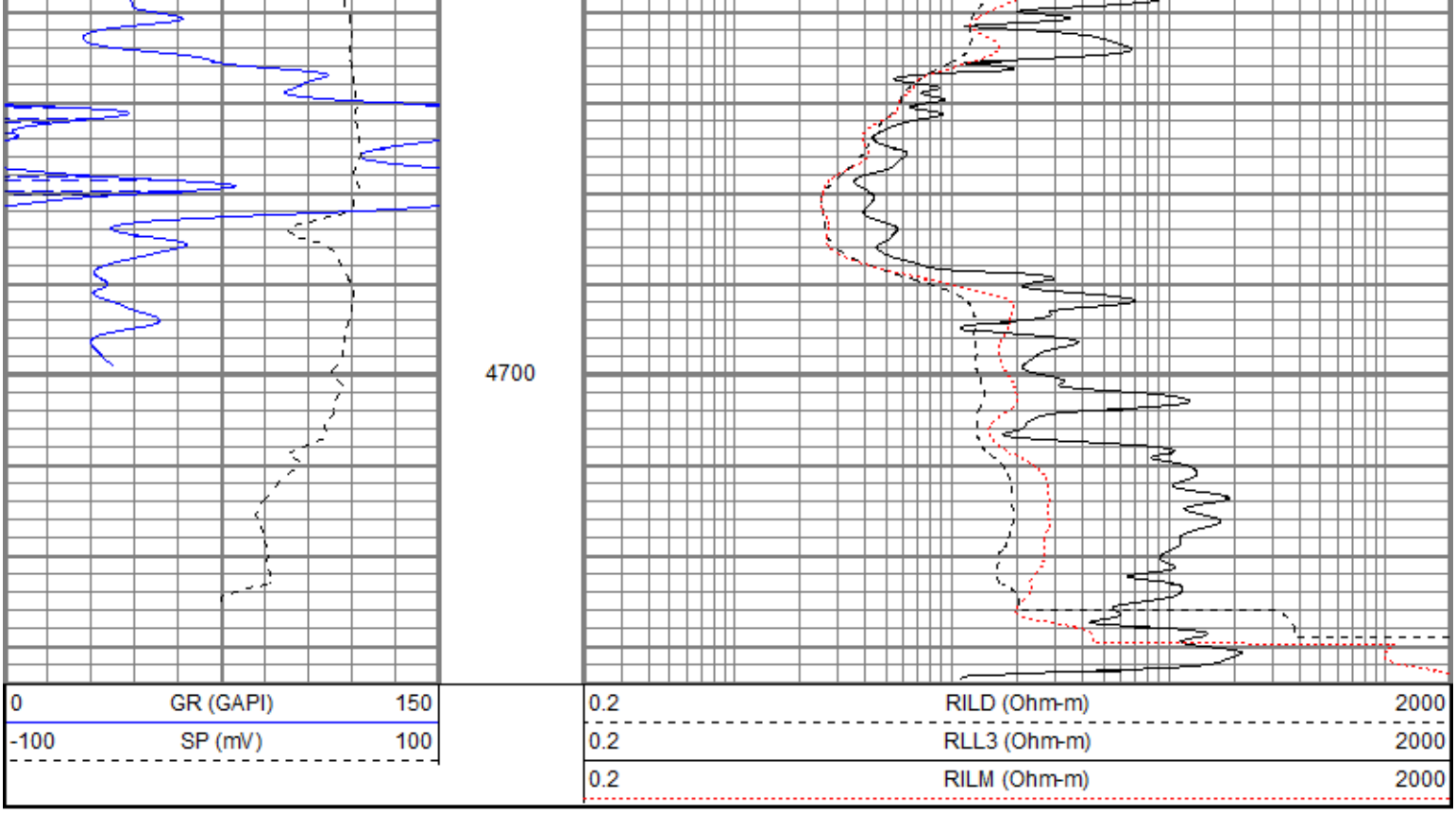
Repeat Pass

Database File	bewilliez#1oh.db
Dataset Pathname	pass1.1
Presentation Format	kdil
Dataset Creation	Wed May 04 02:43:08 2016
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150
-100	SP (mV)	100

0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000





Calibration Report

Database File bewilliez#1oh.db
Dataset Pathname pass1.1
Dataset Creation Wed May 04 02:43:08 2016

Dual Induction Calibration Report

Serial-Model:	080522-Probe
Surface Cal Performed:	Mon Mar 14 11:26:37 2016
Downhole Cal Performed:	Mon Mar 14 11:26:40 2016
After Survey Verification Performed:	Mon Mar 14 11:26:42 2016

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.040	0.651	V	0.000	400.000	mmho/m	578.981	22.871
Medium	-0.028	0.742	V	0.000	464.000	mmho/m	602.582	16.690
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.016	0.653	V	0.000	400.000	mmho/m	598.311	9.396
Medium	-0.025	0.747	V	0.000	464.000	mmho/m	601.262	14.808

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	6.834	401.088	mmho/m	13.778	400.855	mmho/m	0.982	7.068
Medium	-2.964	468.230	mmho/m	1.850	466.869	mmho/m	0.987	4.775
LL3		7.145	V		750.000	Ohm-m		
		0.016	V		12.000	Ohm-m		
		-7.248	V		3745.000	mmho-m		

After Survey Verification

	Readings		Targets		Results	
	Zero	Cal	Zero	Cal	m'	b'

Deep	0.000	0.000	mmho/m	6.834	401.088	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-2.964	468.230	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		750.000	Ohm-m		
		0.000	Ohm-m		12.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Compensated Density Calibration Report

Serial-Model:	2501DHT-DHT
Source / Verifier:	csv-j12 /
Master Calibration Performed:	Thu Jan 21 09:35:41 2016
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	711.36	284.22	cps
Aluminum	2.660	g/cc	133.07	180.42	cps

Spine Angle = 74.83

Density/Spine Ratio = 0.524

	Size		Reading
Small Ring	7.70	in	5749.57
Large Ring	14.00	in	9401.93

Before Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

After Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

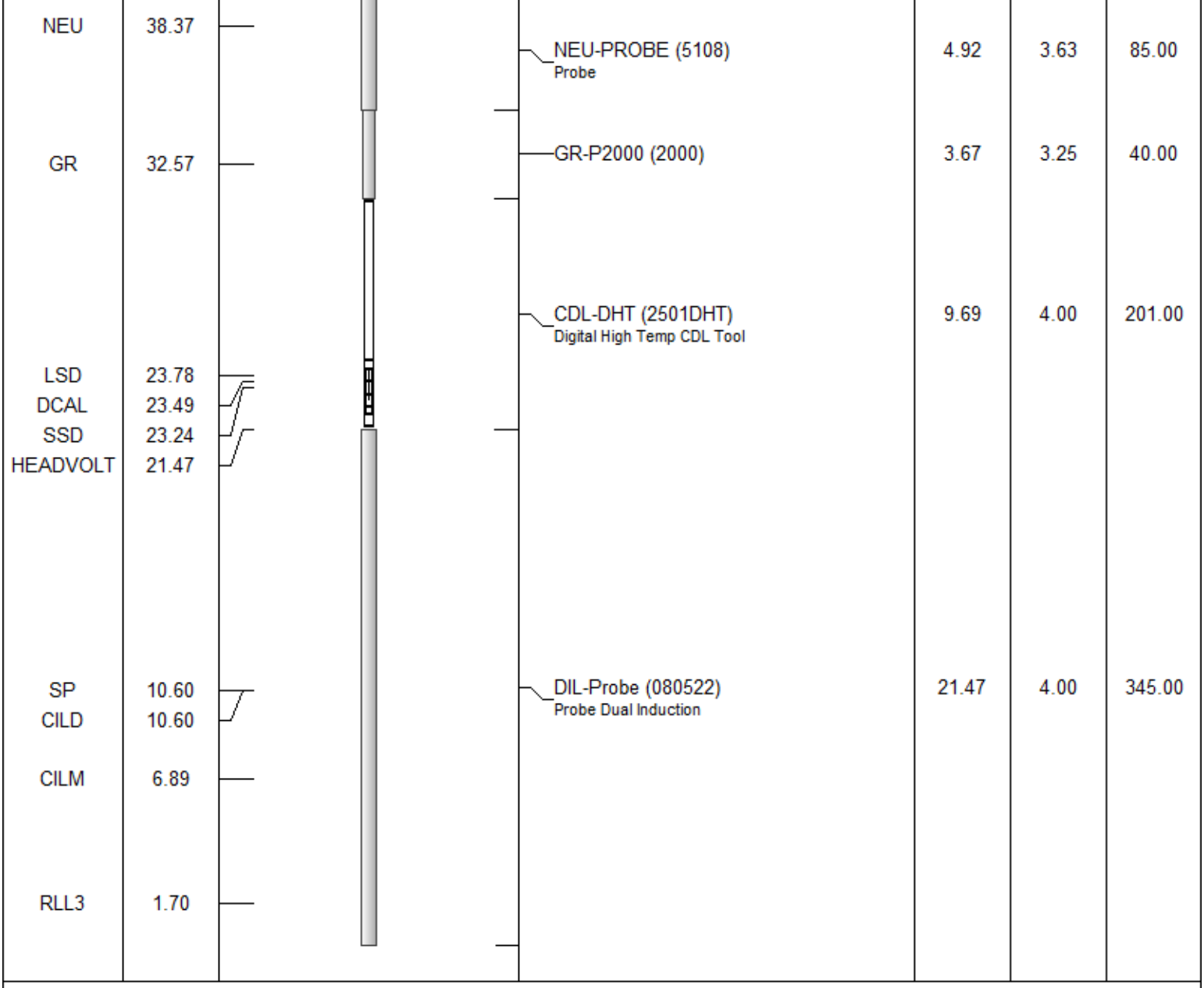
Gamma Ray Calibration Report

Serial Number:	2000	
Tool Model:	P2000	
Performed:	Sun Dec 13 16:43:47 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2200	GAPI/cps

Neutron Calibration Report

Serial Number:	5108	
Tool Model:	PROBE	
Performed:	Thu Jan 21 09:36:17 2016	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-None	0.75	1.50	5.00



Dataset:	bewilliez#1oh.db: field/well/run1/pass1.1
Total length:	40.49 ft
Total weight:	676.00 lb
O.D.:	4.00 in