MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Ritchie Exploration, Inc.
Well Schneweis Ventures 13A #1
Field Thunder
County Ford State Kansas

Location: API #: 15-057-21063-00-00
980 FNL & 1505 FEL
SEC 13 TWP 27S RGE 24W

Other Services
CNL/CDL
MEL/BHCS

Permanent Datum Ground Level Elevation 2428
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Elevation
K.B. 2440
D.F.
G.L. 2428

Company Ritchie Exploration, Inc.
Well Schneweis Ventures 13A #1
Field Thunder
County Ford
State Kansas

Date	2/25/2022			
Run Number	One			
Depth Driller	5050			
Depth Logger	5054			
Bottom Logged Interval	5053			
Top Log Interval	350			
Casing Driller	8.625 @ 373			
Casing Logger	368			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	4300			
Density / Viscosity	9.4 / 62			
pH / Fluid Loss	11.0 / 7.2			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	.65 @ 75			
Rmf @ Meas. Temp	.49 @ 75			
Rmc @ Meas. Temp	.88 @ 75			
Source of Rmf / Rmc	CHARTS			
Rm @ BHT	.39 @ 127			
Operating Rig Time	4 Hours			
Max Rec. Temp. F	127			
Equipment Number	P-108			
Location	HAYS			
Recorded By	J. Henrickson			
Witnessed By	Kent Matson			

<<< Fold Here >>>

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Wright Kansas
South to Lariat Way, 3/4 East,
North Into

Log Measured From: Kelly Bushing 12 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew	This Log Record Was Witnessed By
Engineer: J. Henrickson	Primary Witness: Kent Matson
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

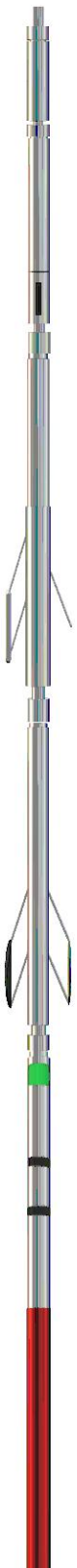
Log Variables

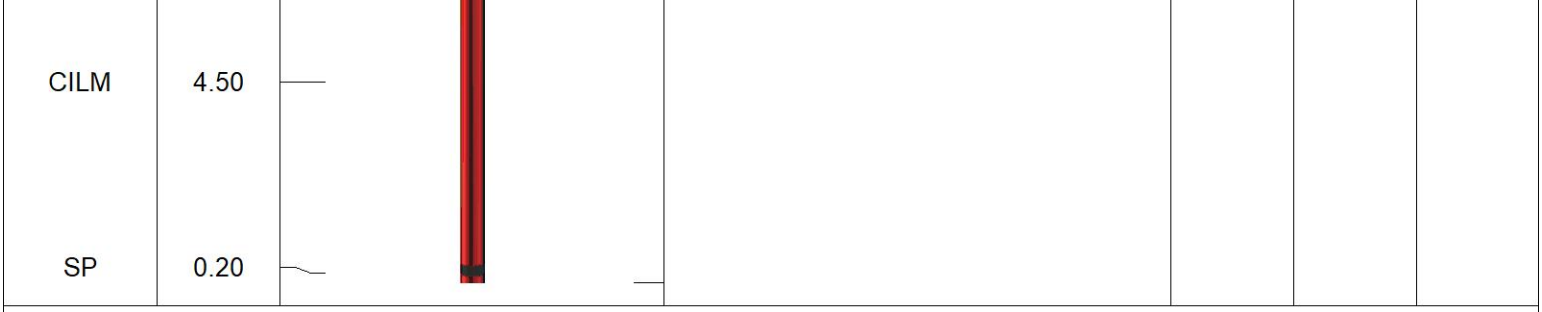
DatabaseC:\ProgramData\Warrior\Data\ritchie_schneweis_ventures_13a_1.db
Dataset field/well/stackml/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	124	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	480	0	Off	5054

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	40.33		GR-M&W (103)	3.00	3.50	50.00
CNLSC	37.23		CNT-M&W (210)	5.00	3.50	100.00
CNSSC	36.48					
			CDL-M&W (303-03)	8.50	4.00	250.00
LSD	28.18					
DCAL	28.17					
SSD	27.68					
			ML-PSI STKBL ML (402)	7.58	4.00	65.00
MCAL	19.58					
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (504 HT)	18.25	3.50	220.00
CILD	8.33					



Dataset: ritchie_schneweis_ventures_13a_1.db: field/well/stackml/pass3.1
Total length: 42.33 ft
Total weight: 685.00 lb
O.D.: 4.00 in

MIDWEST WIRELINE

2" SCALE RESISTIVITY

MAIN PASS

Database File	ritchie_schneweis_ventures_13a_1.db
Dataset Pathname	stackml/pass6.1
Presentation Format	_dil2in
Dataset Creation	Fri Feb 25 12:33:07 2022
Charted by	Depth in Feet scaled 1:600

0 Gamma Ray (GAPI) 150

1000 Conductivity (mmho/m) 0

15000 Line Tension (lb) 0

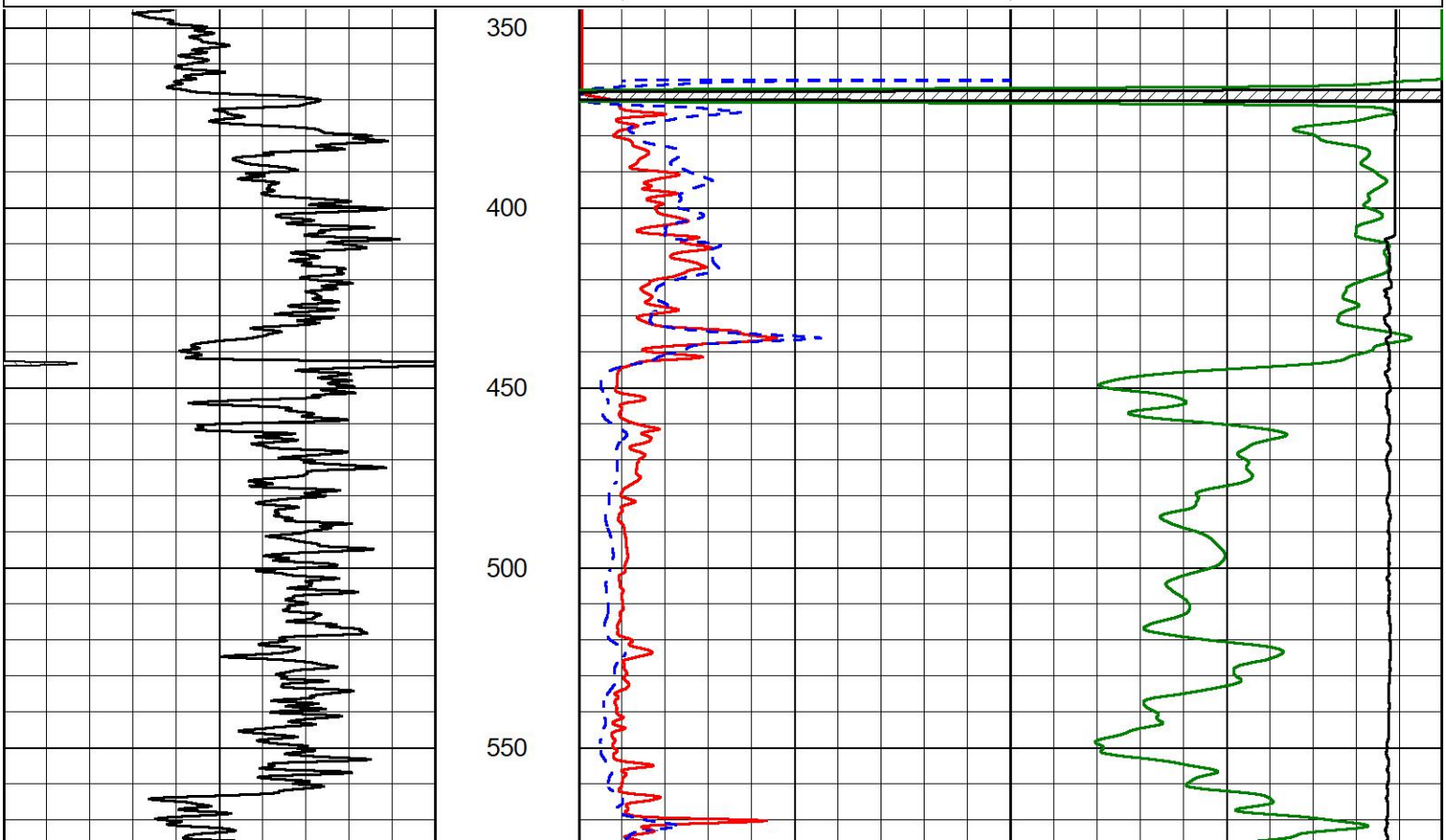
0 Shallow Resisitivity (Ohm-m) 50

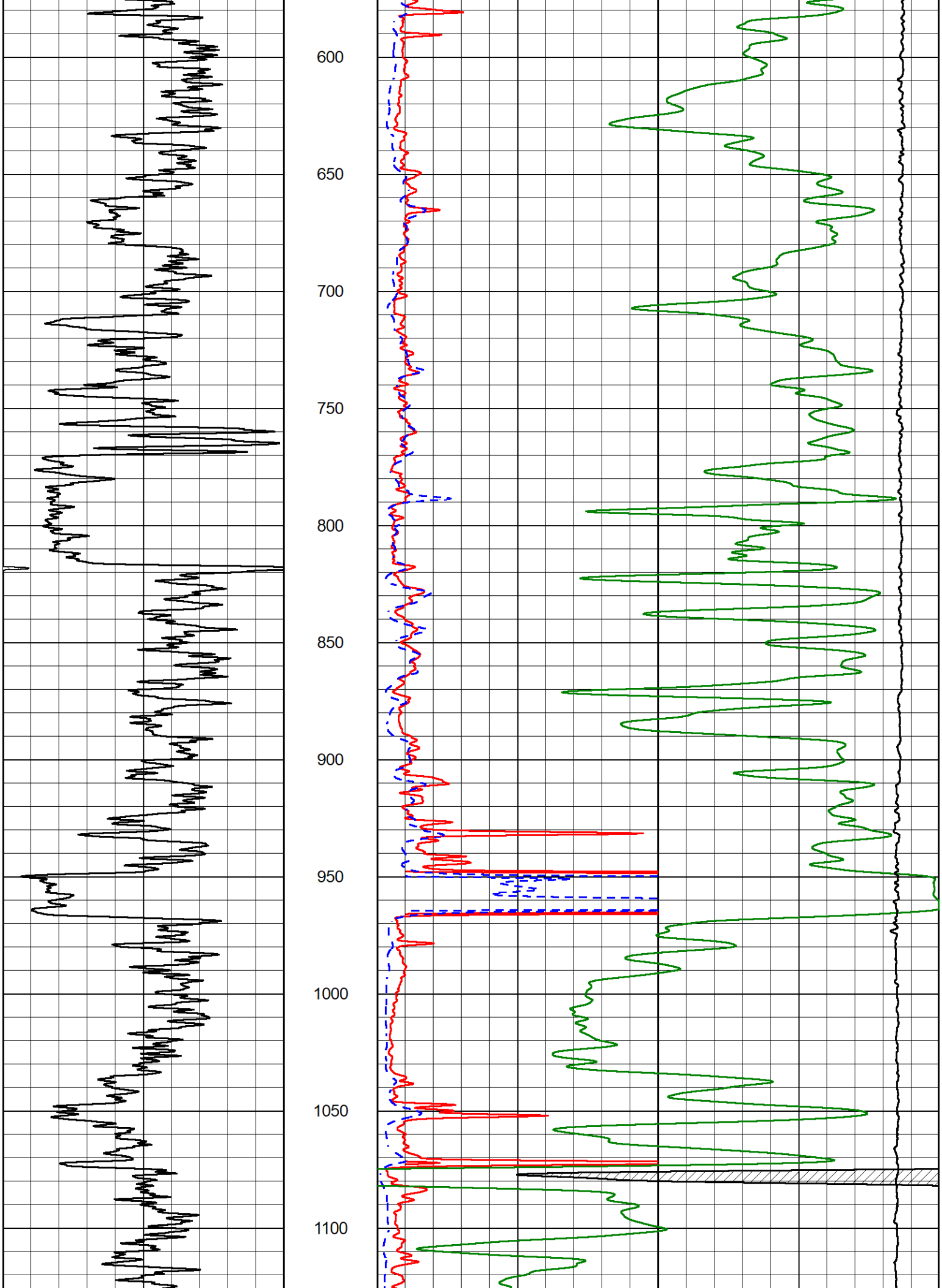
0 Deep Resistivity (Ohm-m) 50

Shallow Resistivity

50 (Ohm-m) 200

50 Deep Resistivity (Ohm-m) 200

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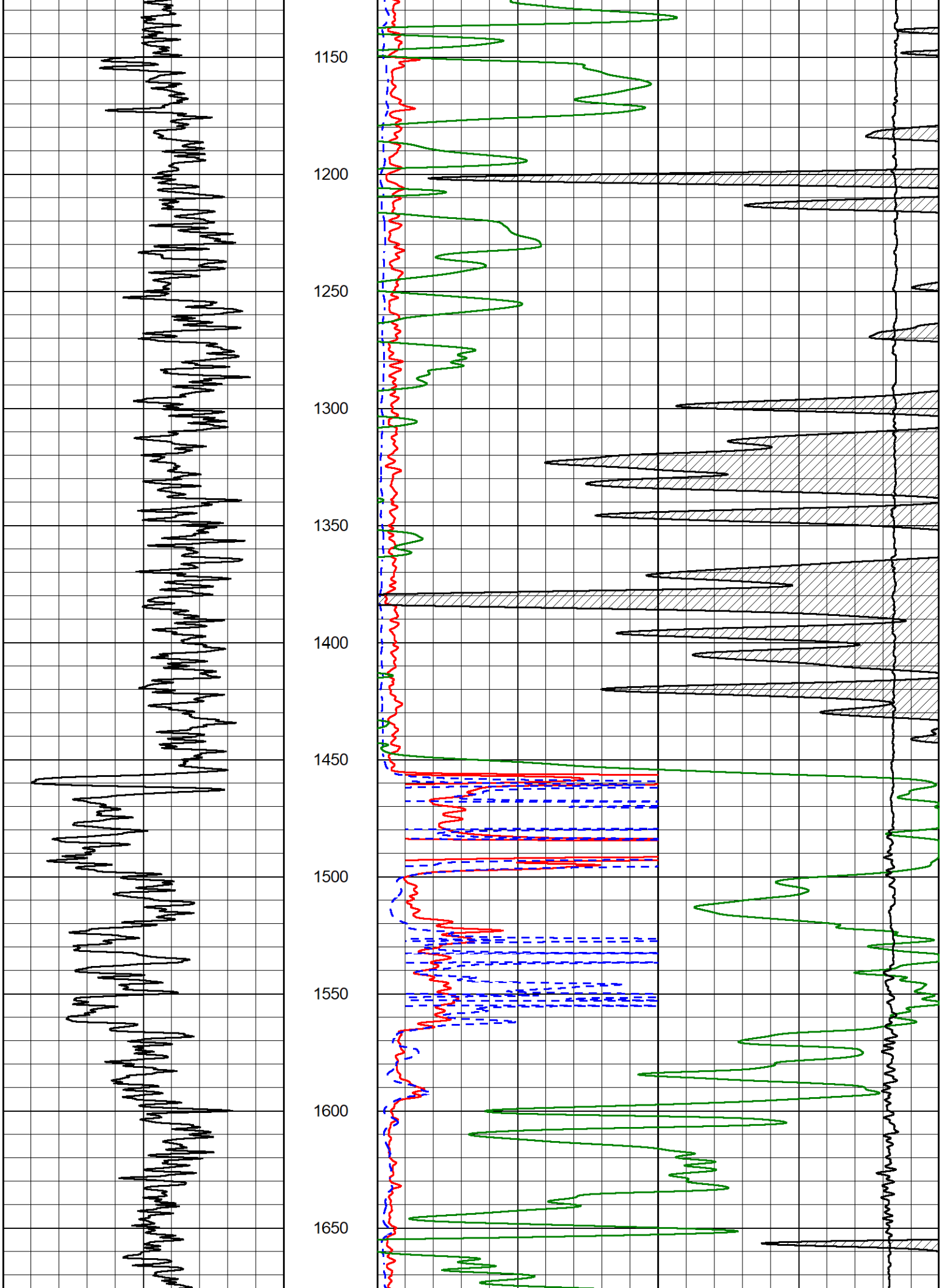
650
700
750
800
850
900
950
1000
1050
1100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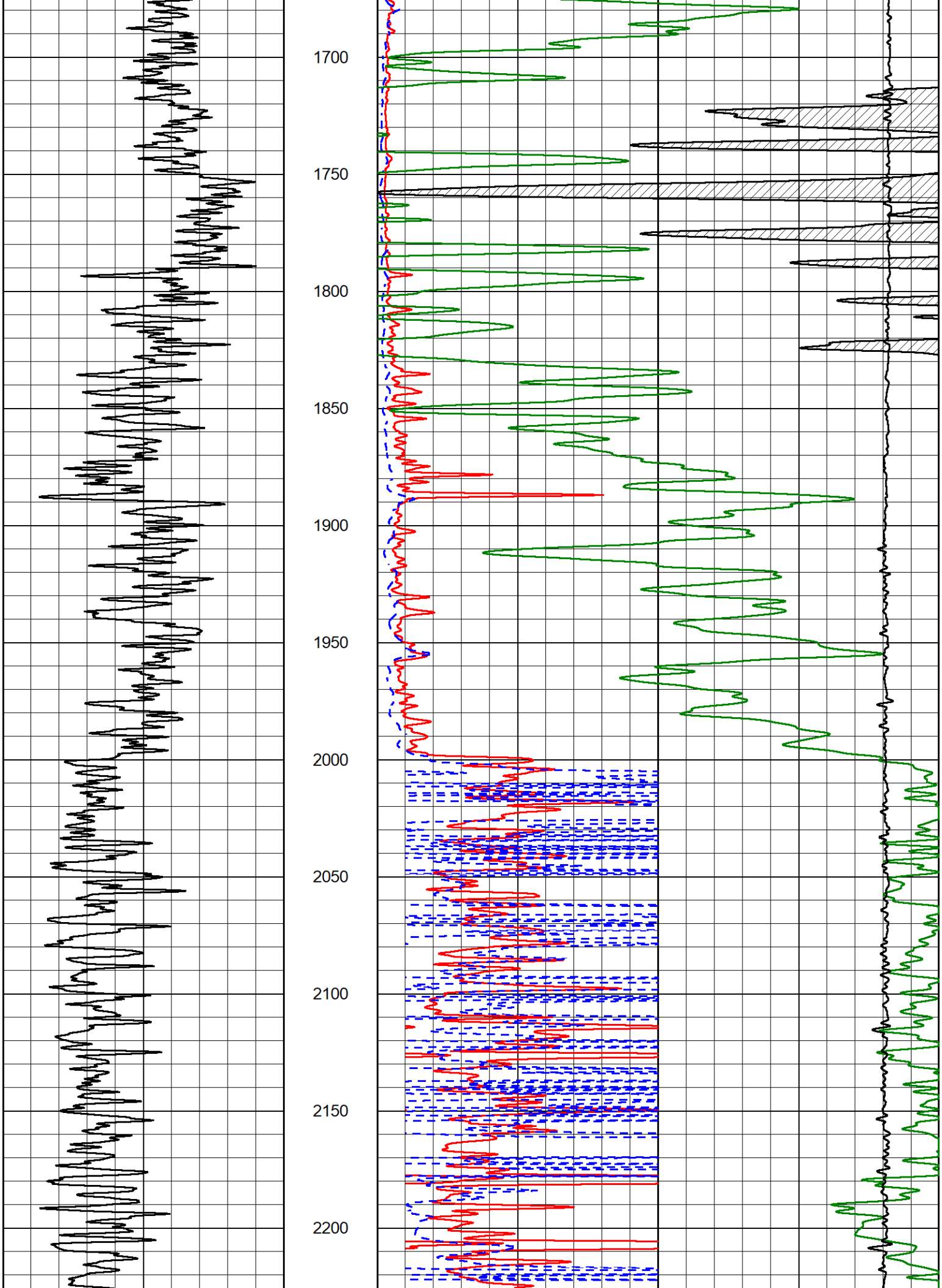
1550
1600
1650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2100
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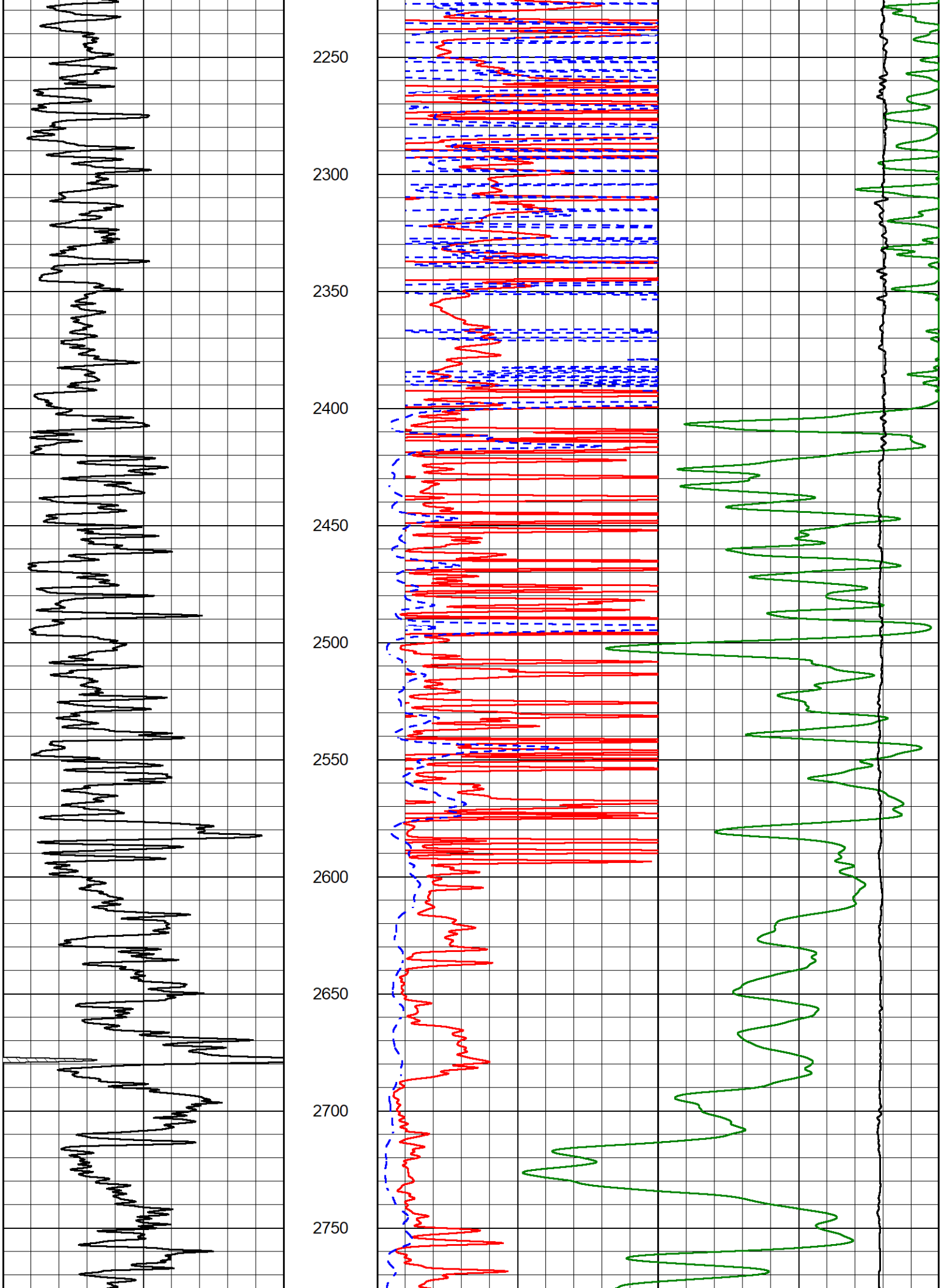
2200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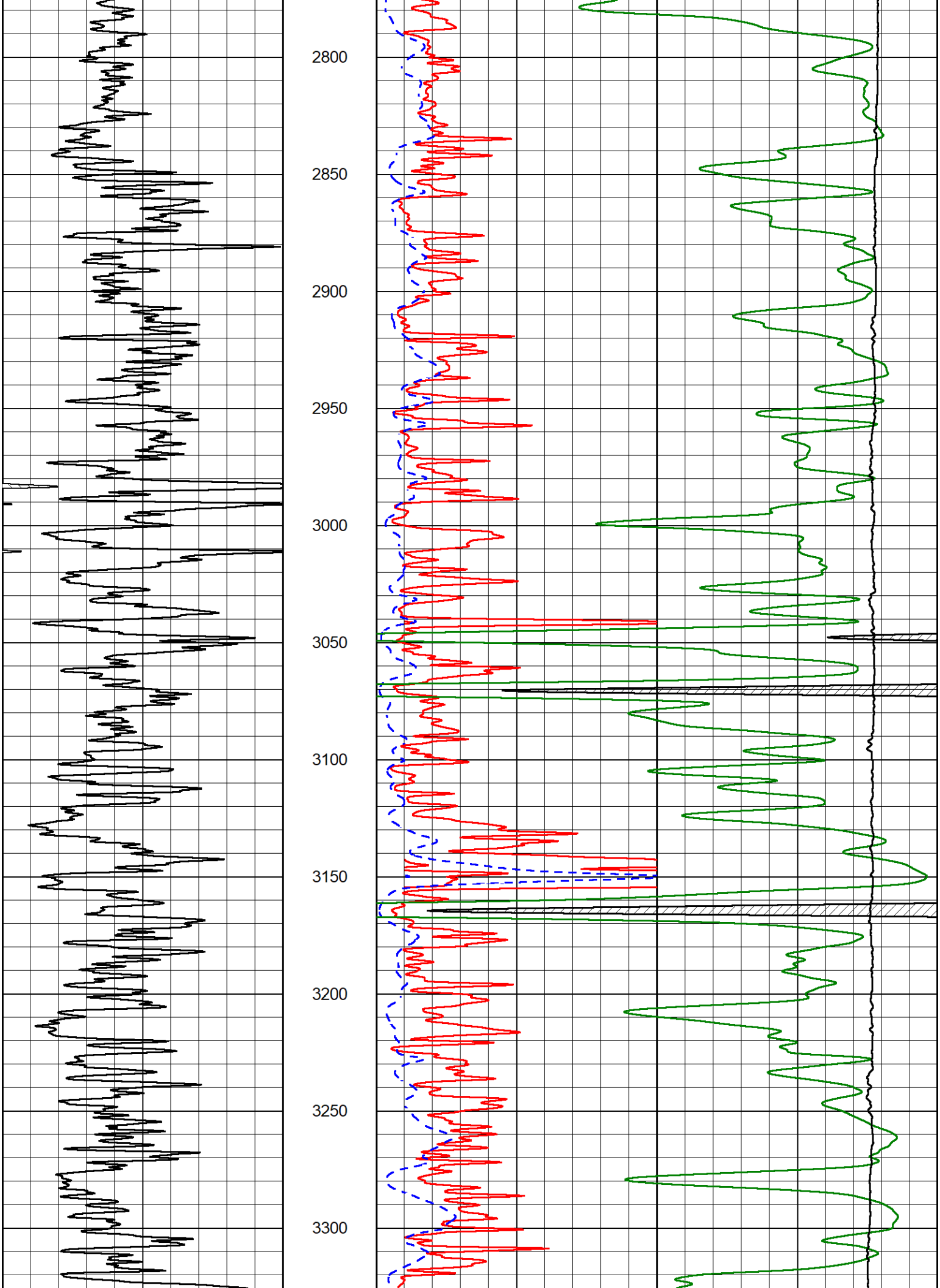
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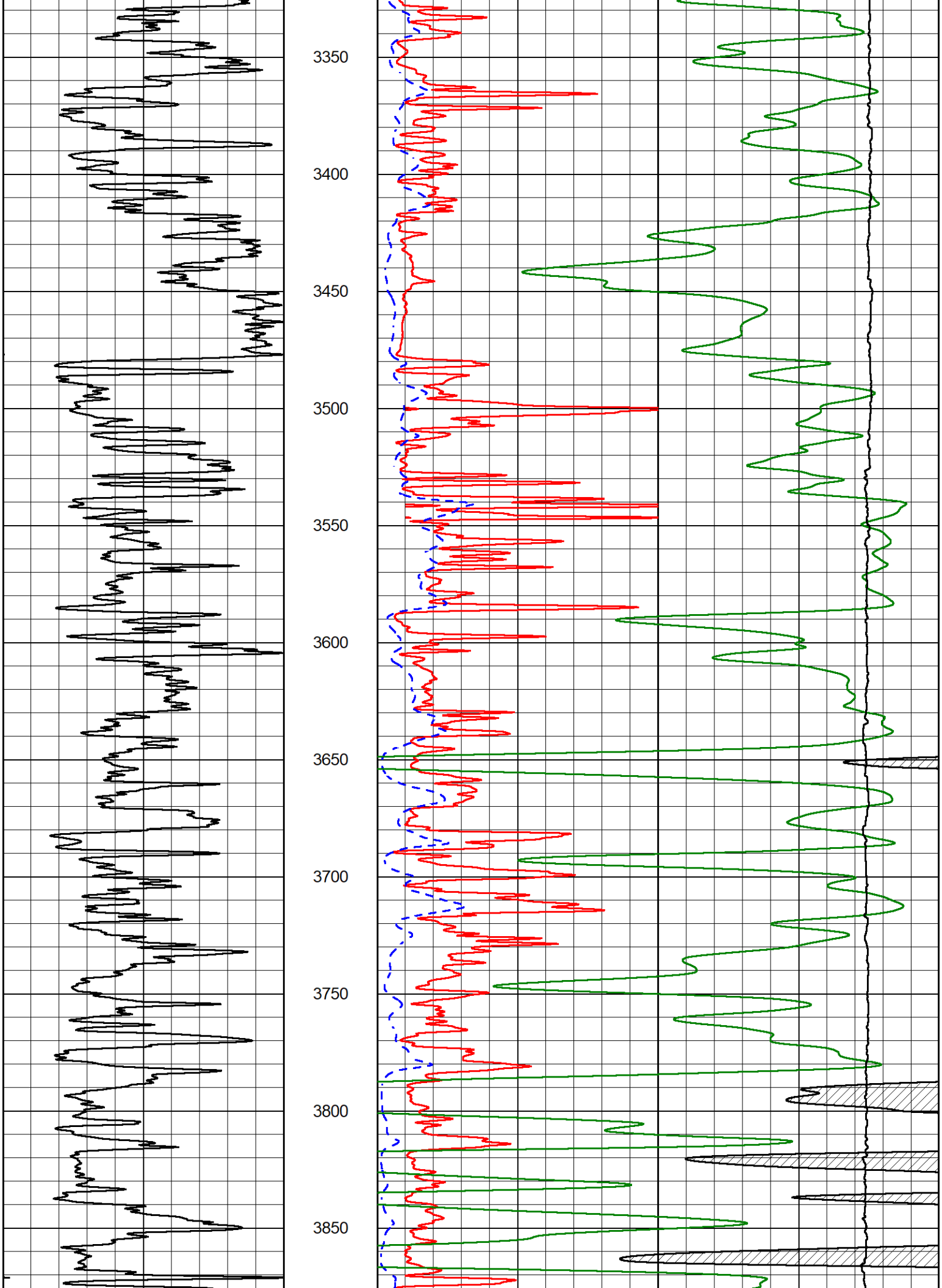
3300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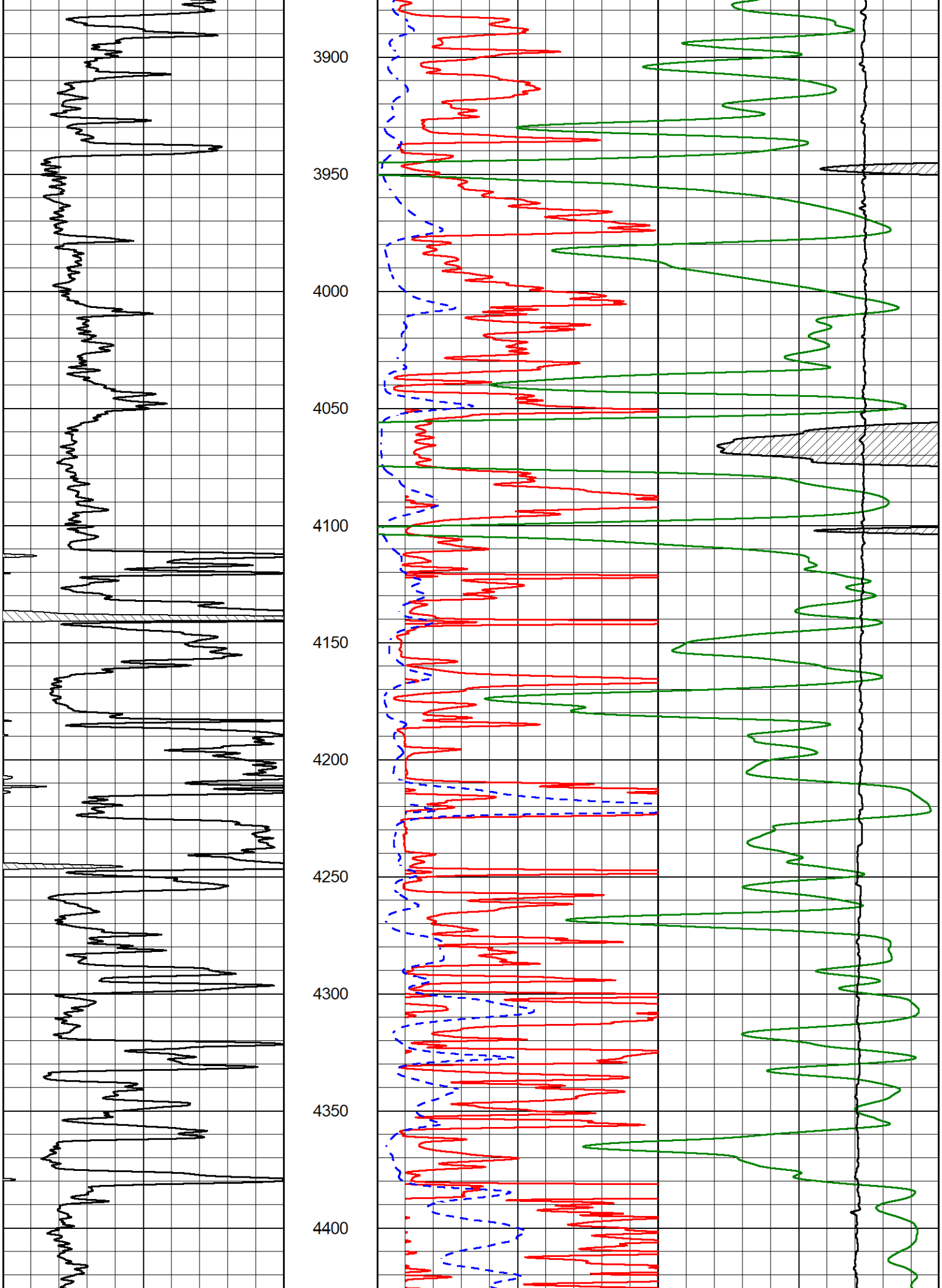
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4050
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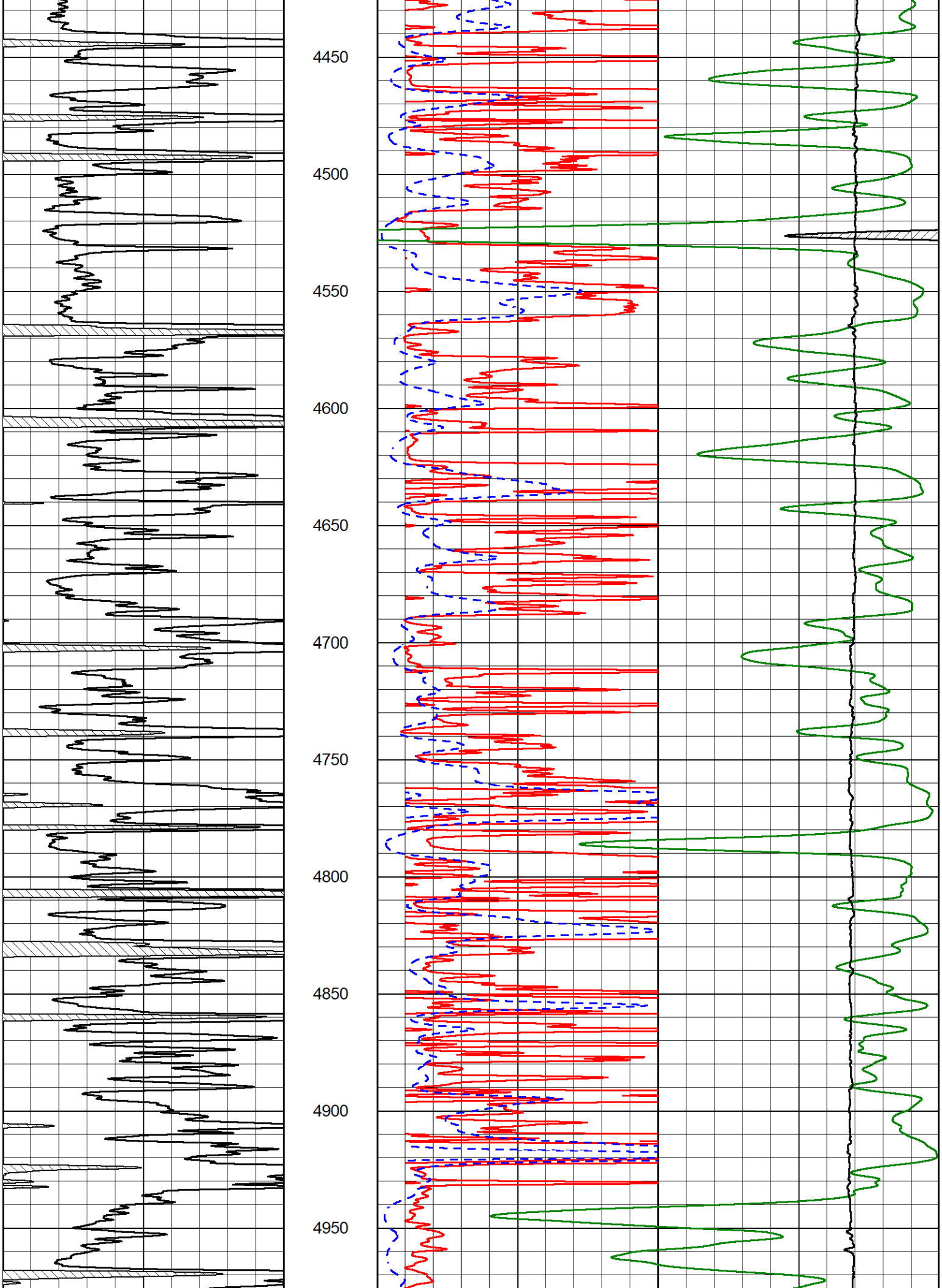
4300
4350
4400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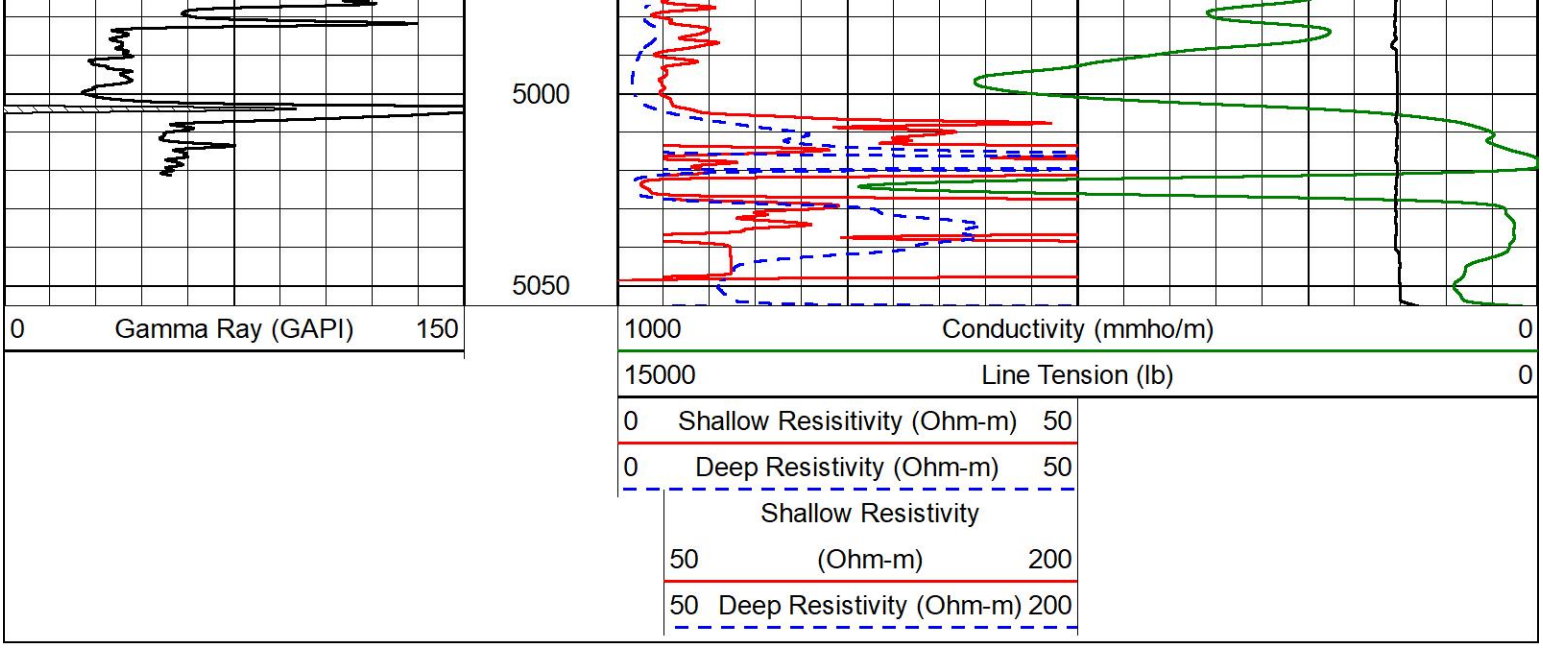
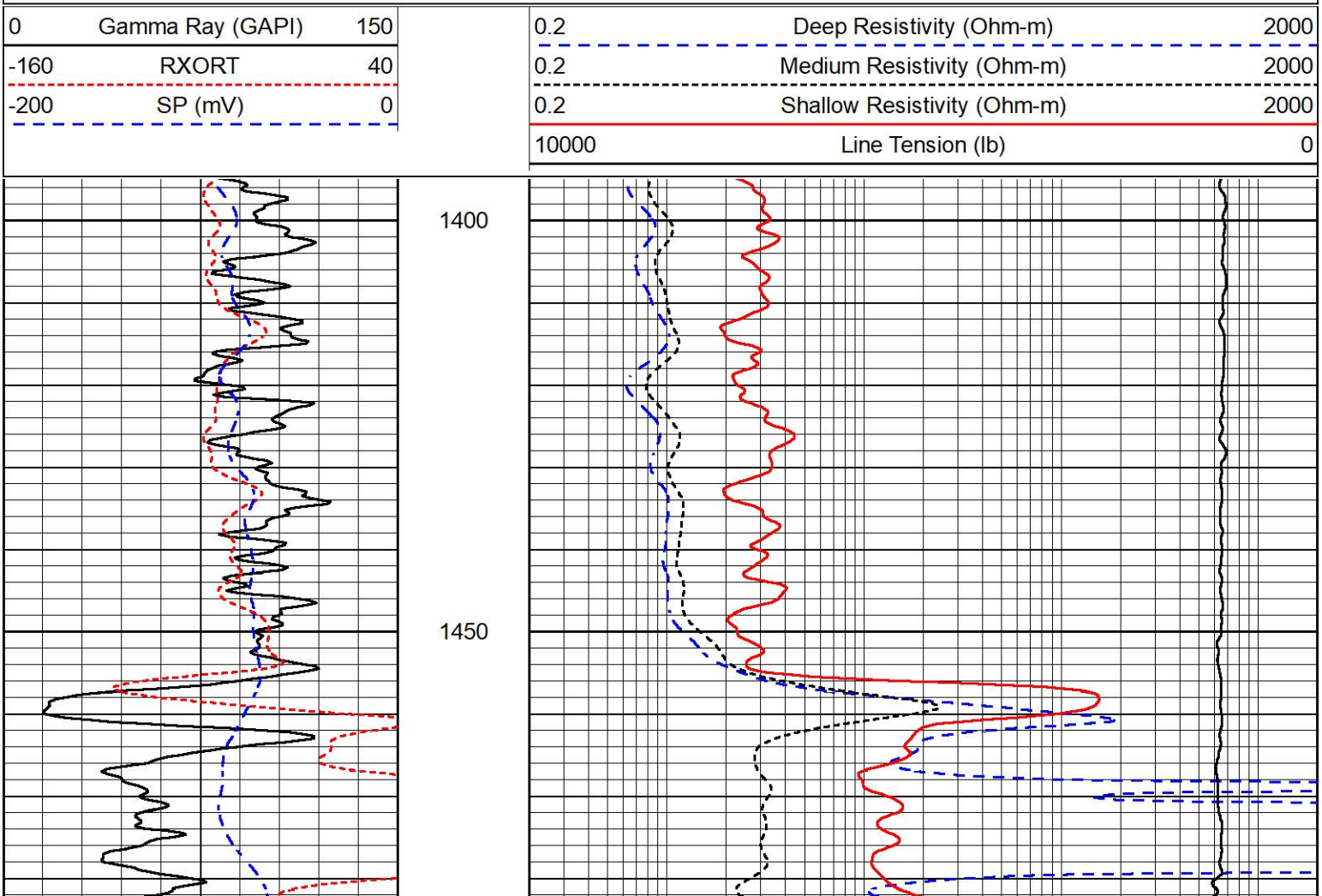


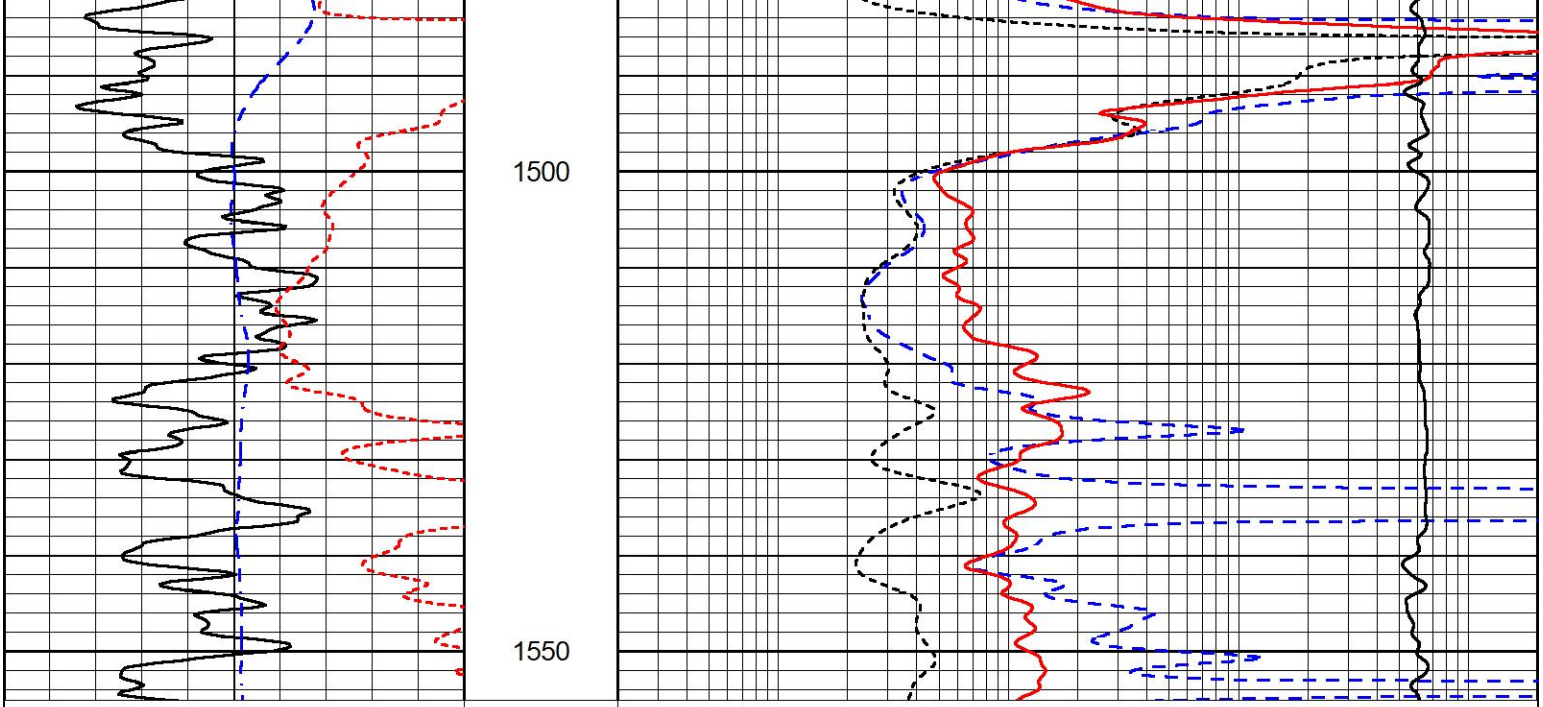
MIDWEST WIRELINE

ANHYDRITE SECTION

MAIN PASS

Database File	ritchie_schneweis_ventures_13a_1.db
Dataset Pathname	stackml/pass5.1
Presentation Format	_dil
Dataset Creation	Fri Feb 25 12:32:40 2022
Charted by	Depth in Feet scaled 1:240





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

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

MIDWEST WIRELINE

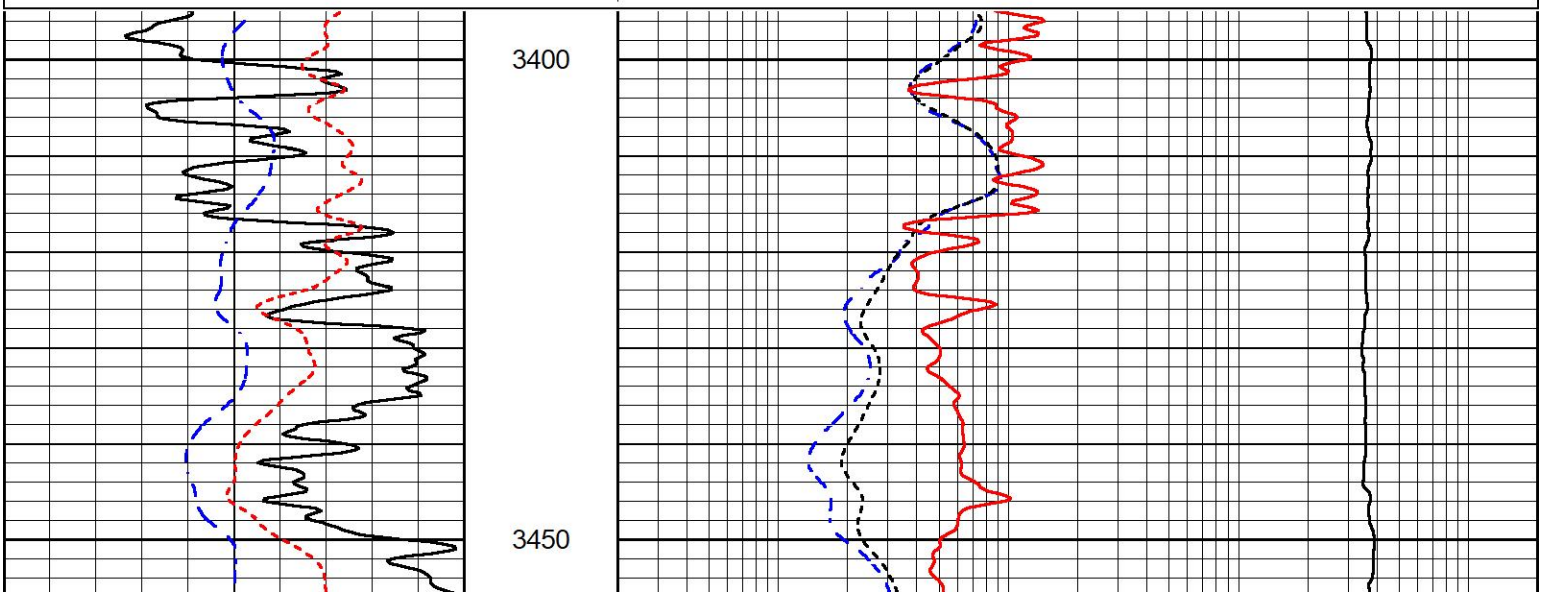
DETAIL SECTION

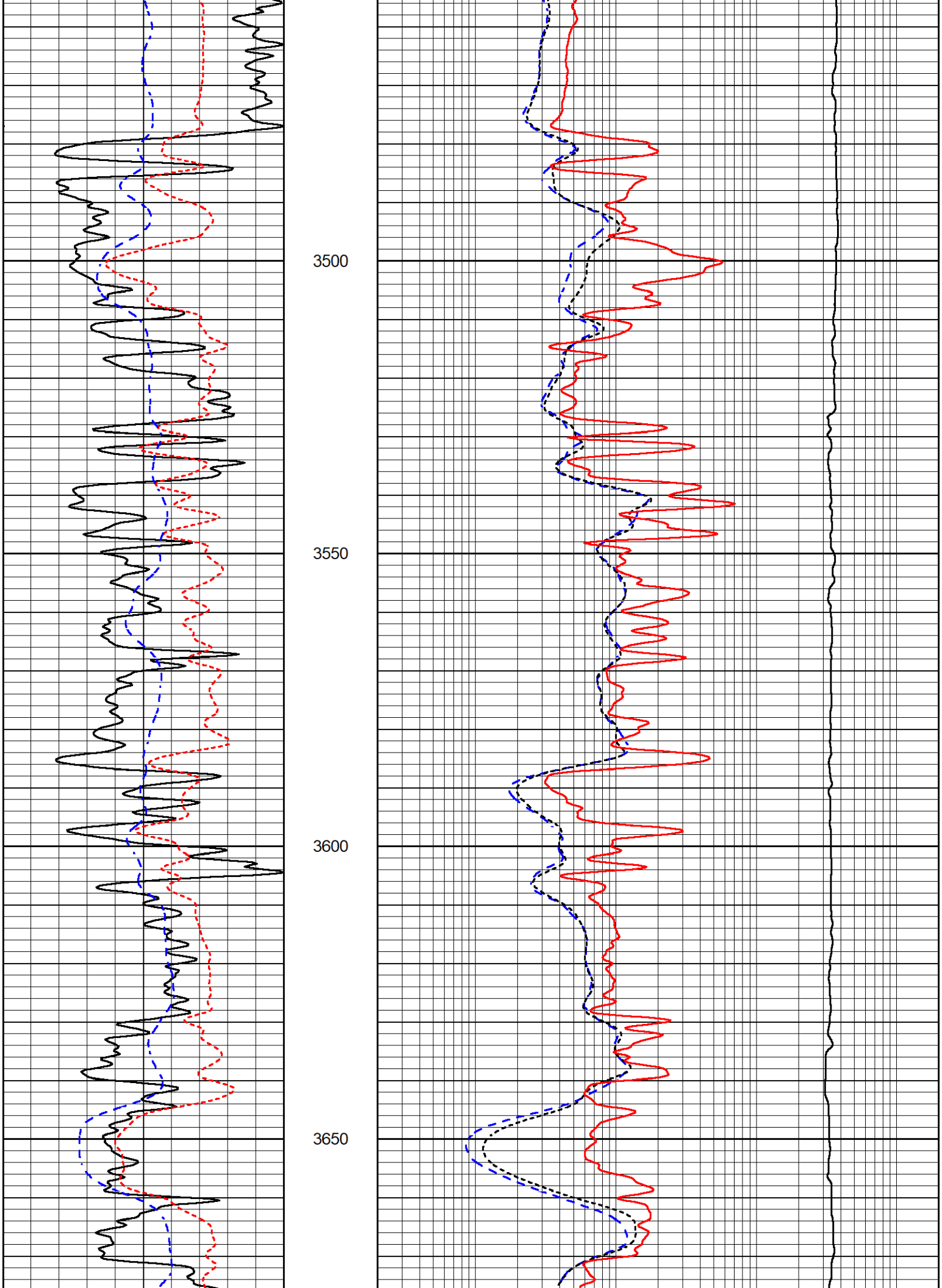
MAIN PASS

Database File	ritchie_schneweis_ventures_13a_1.db
Dataset Pathname	stackml/pass4.1
Presentation Format	_dil
Dataset Creation	Fri Feb 25 11:58:09 2022
Charted by	Depth in Feet scaled 1:240

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

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

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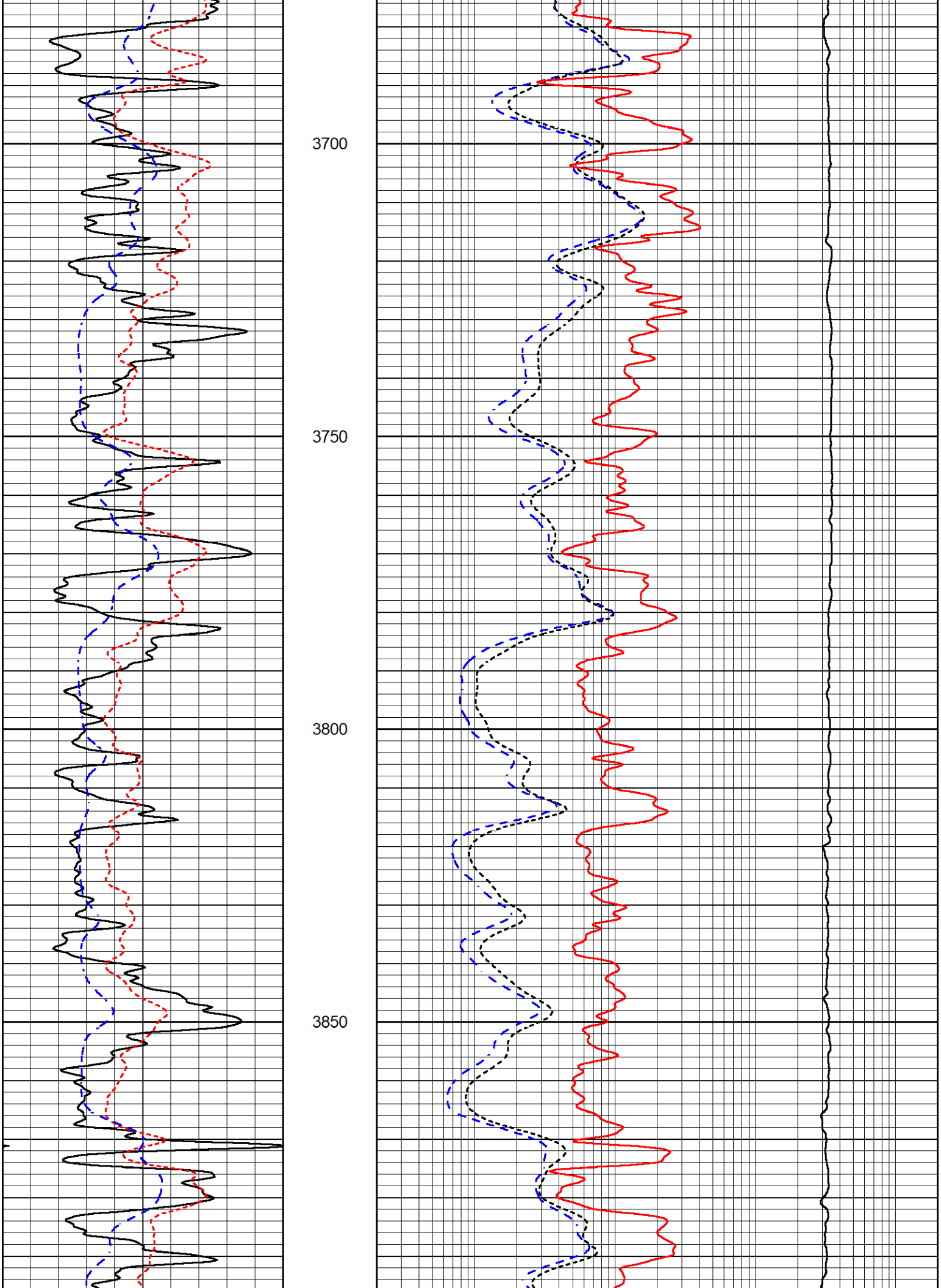
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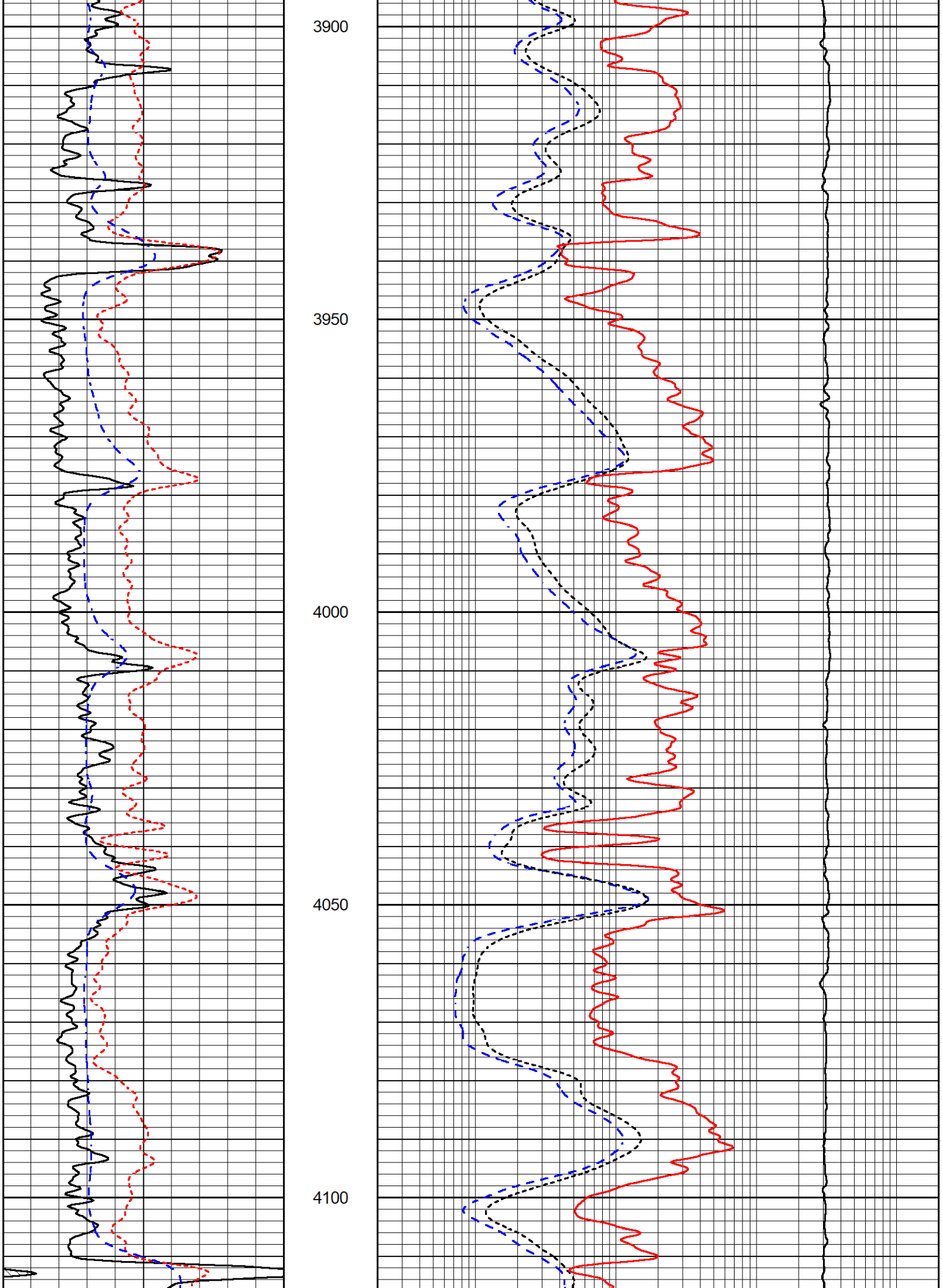
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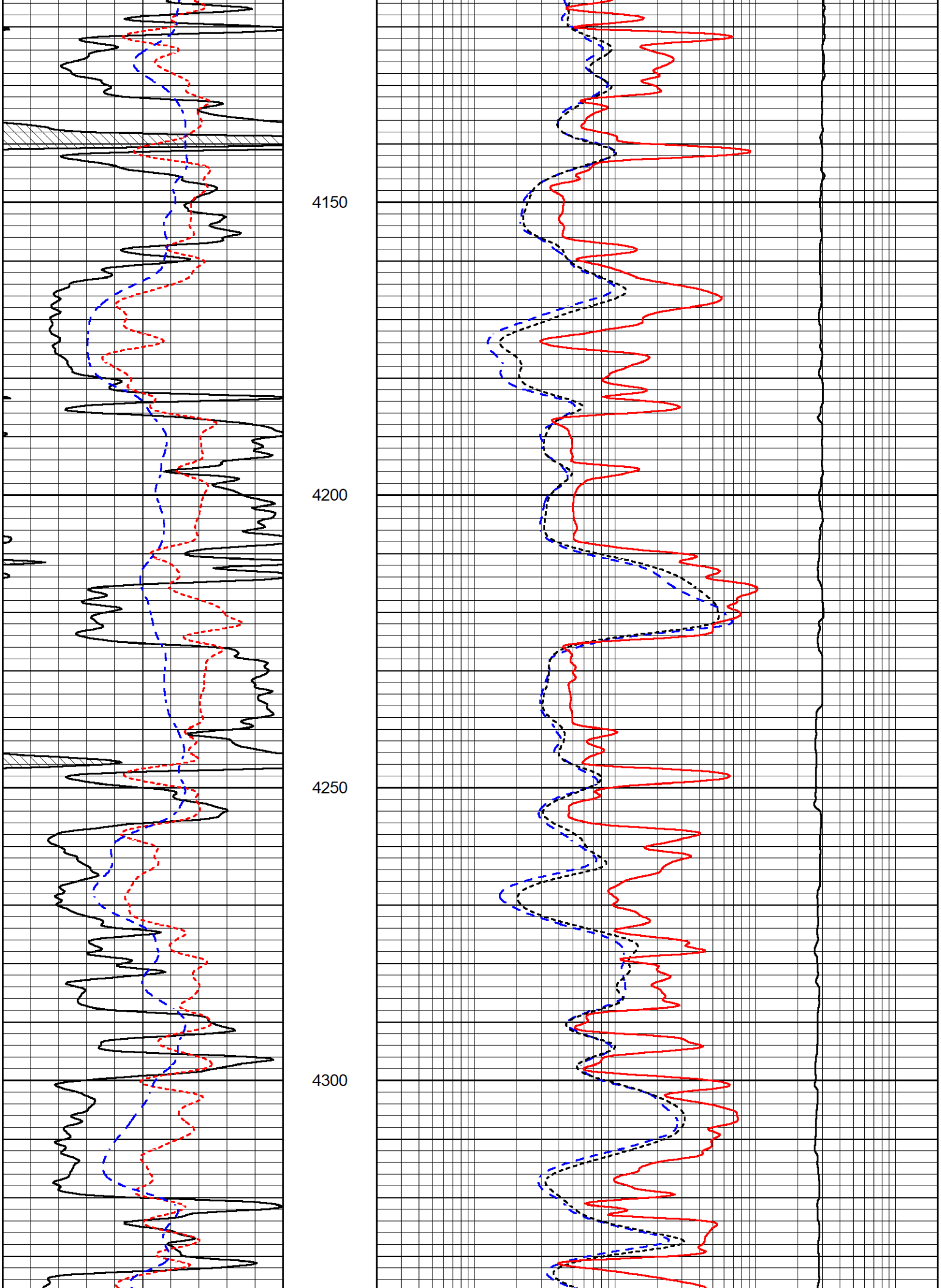
4000
4050
4100


4150
4200
4250
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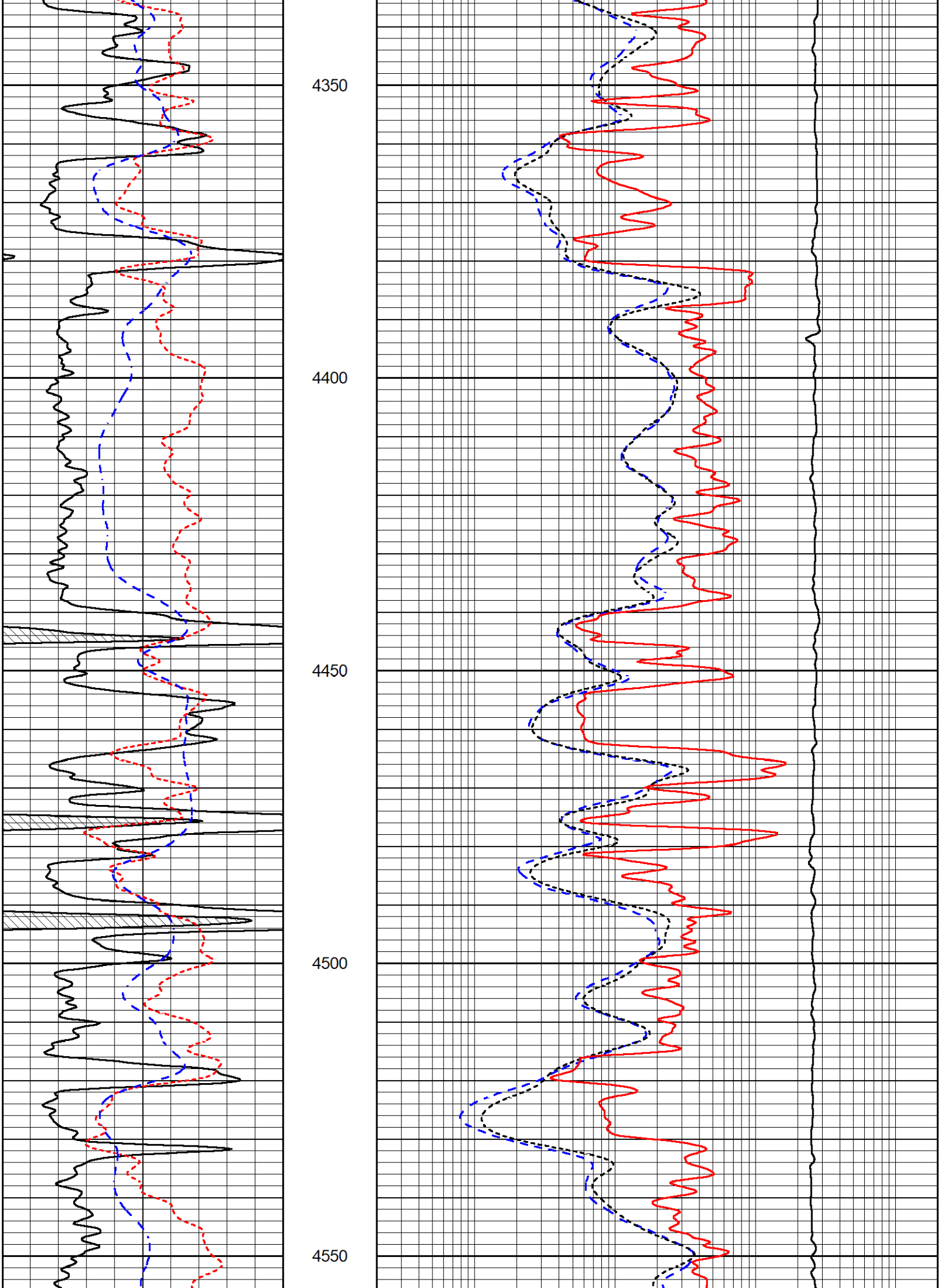
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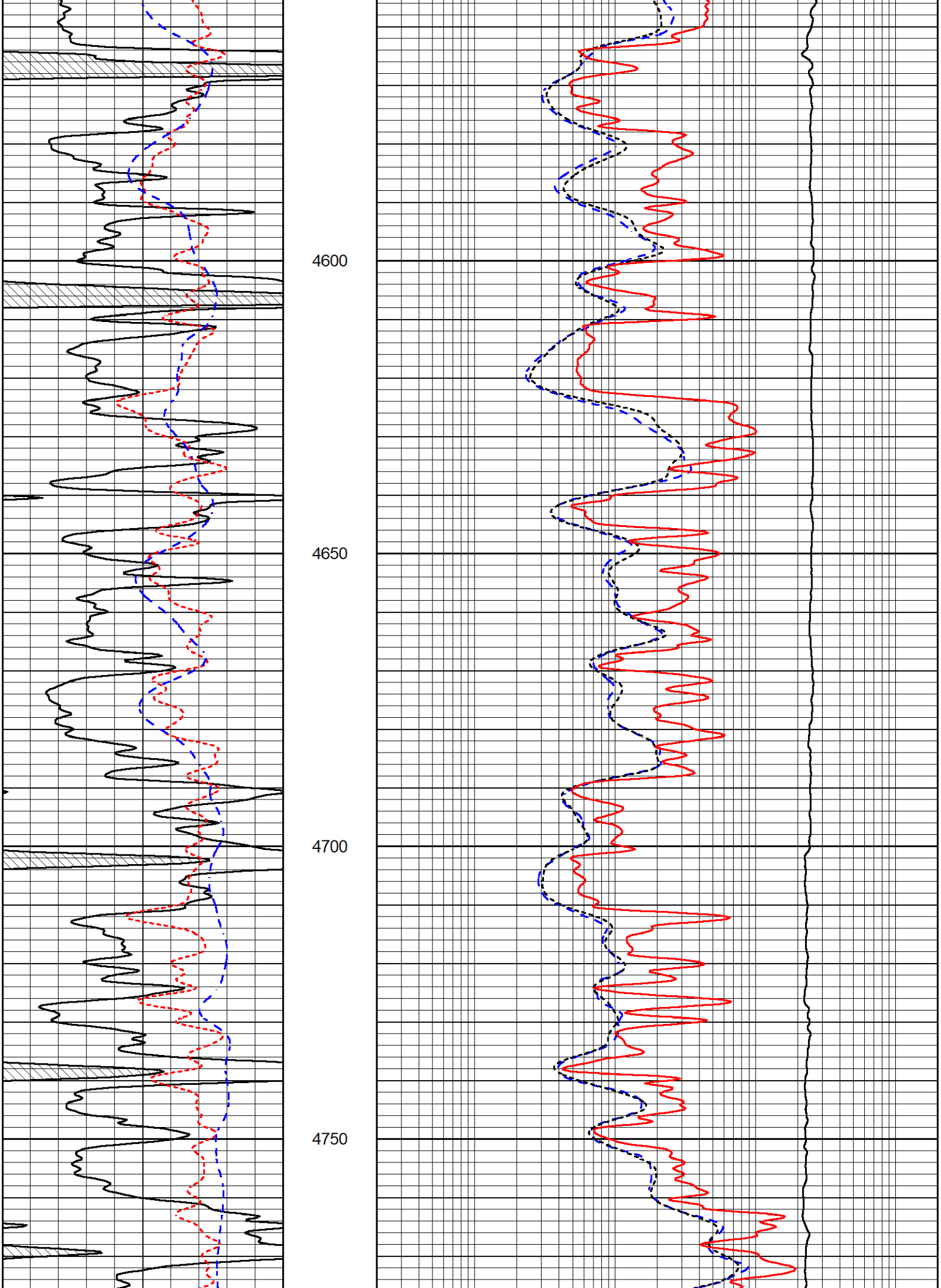
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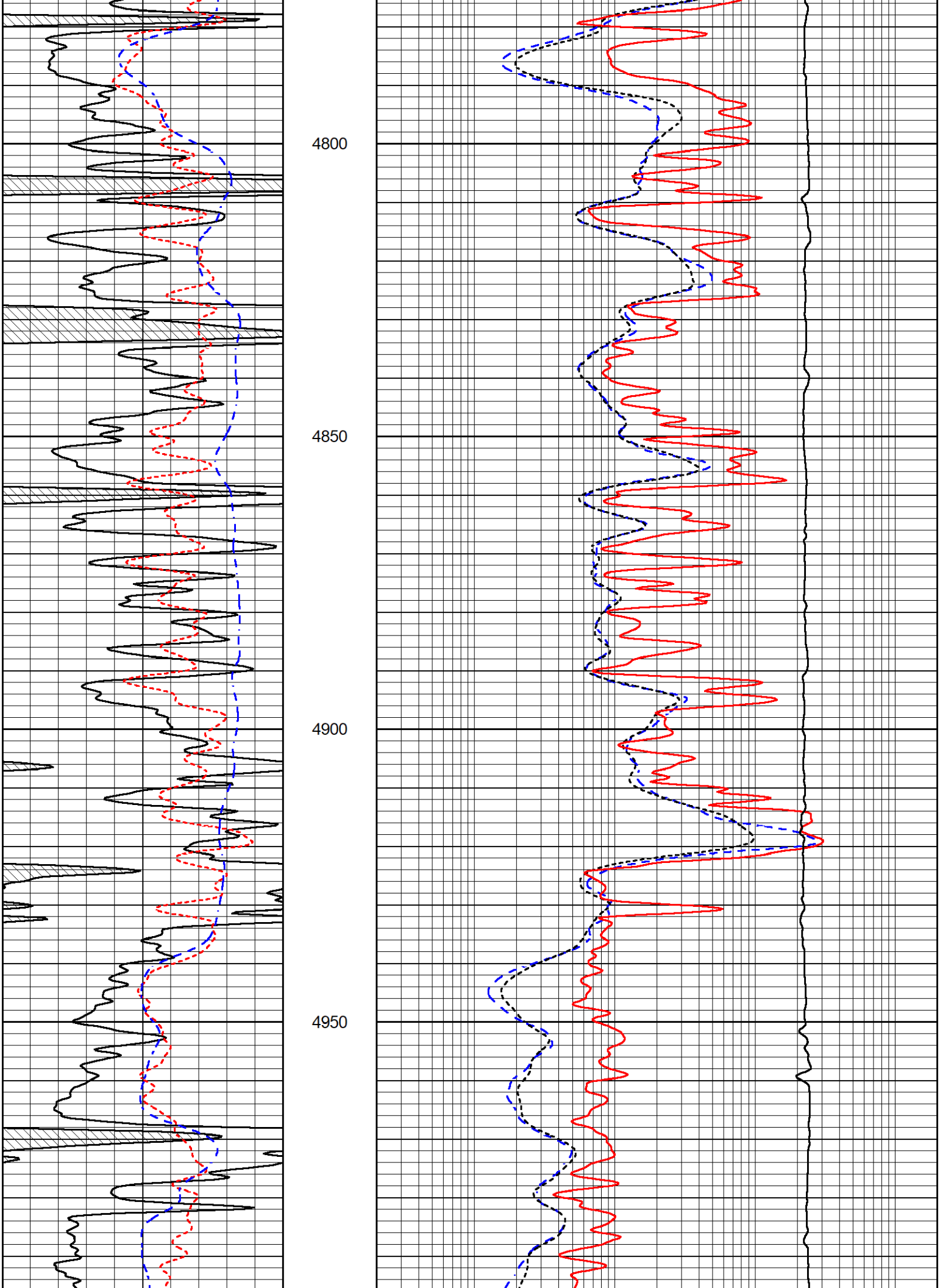
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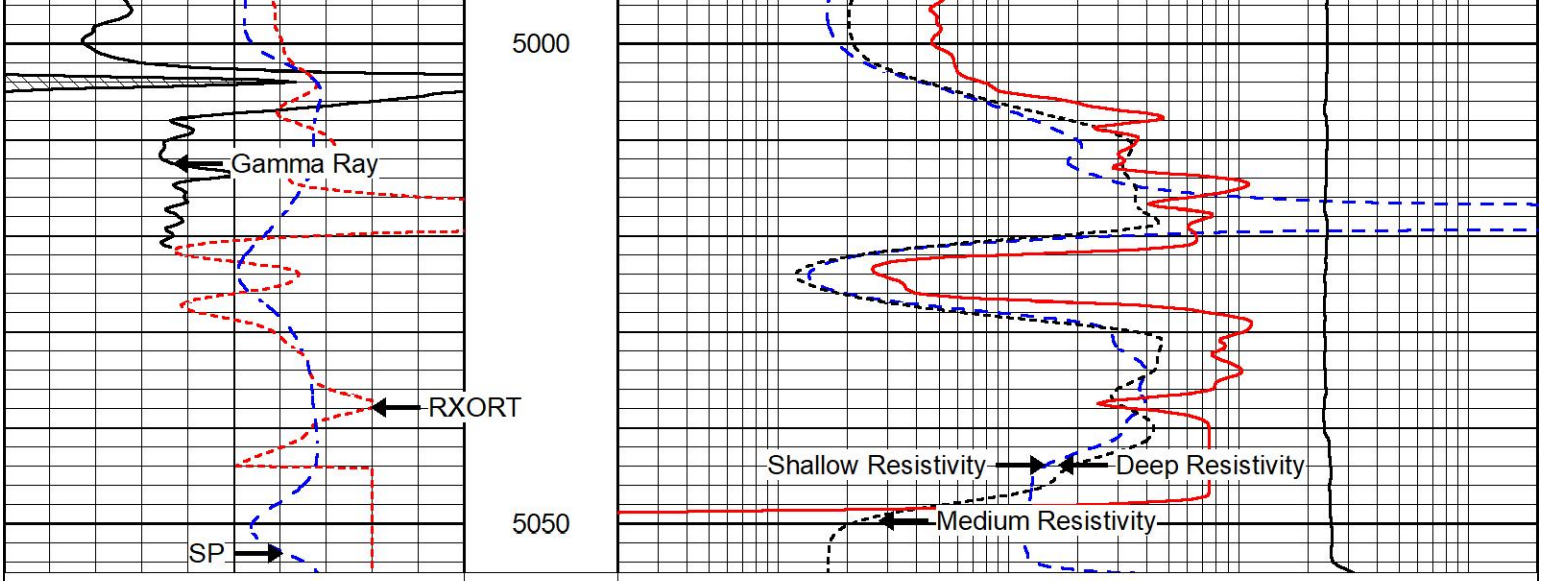


0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

MIDWEST WIRELINE

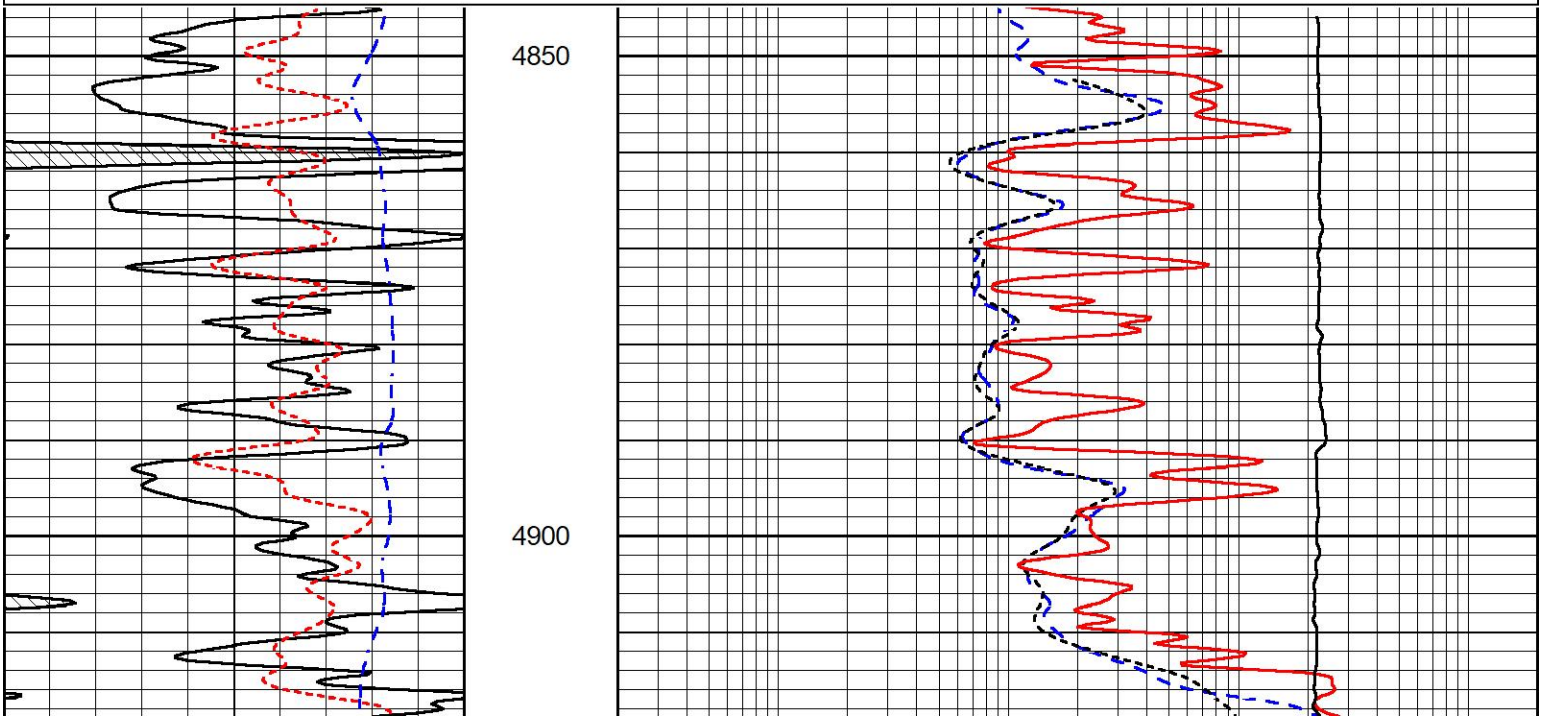
REPEAT SECTION

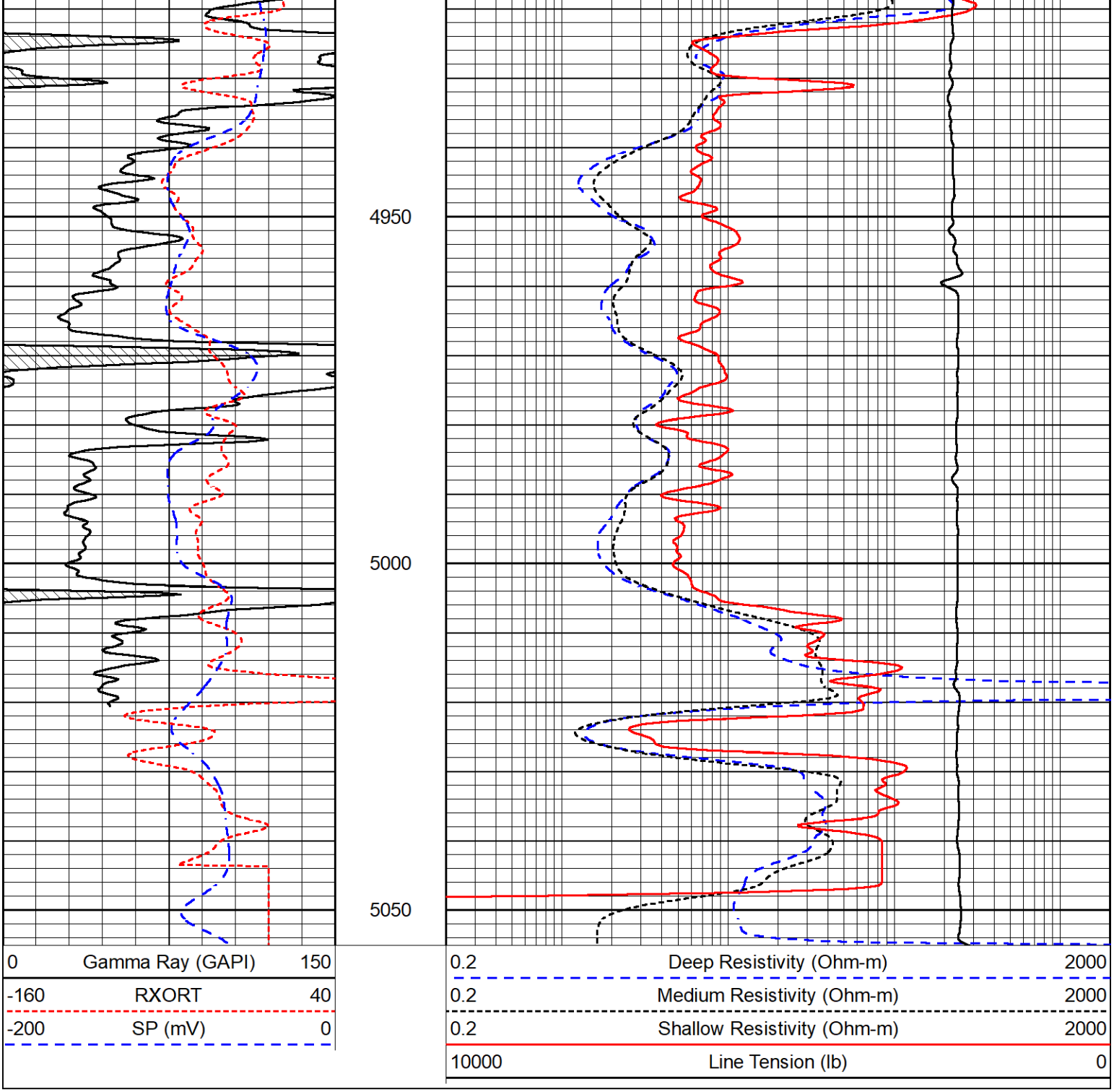
REPEAT PASS

Database File	ritchie_schneweis_ventures_13a_1.db
Dataset Pathname	stackml/pass2.1
Presentation Format	_dil
Dataset Creation	Fri Feb 25 11:57:06 2022
Charted by	Depth in Feet scaled 1:240

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

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0





Calibration Report

Database File	ritchie_schneweis_ventures_13a_1.db
Dataset Pathname	stackml/pass4.1
Dataset Creation	Fri Feb 25 11:58:09 2022

Dual Induction Calibration Report

Serial-Model:	504 HT-M&W
Surface Cal Performed:	Thu Dec 16 22:32:49 2021

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	178.615	710.235	0.000	255.800	mmho/m	0.650	-19.000
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.450	-45.500

Microlog Calibration Report

Serial-Model: 402-PSI STKBL ML
Performed: Thu Dec 16 22:29:48 2021

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	15000.0000	-1.0000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	14000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1520	-131.2000

Compensated Density Calibration Report

Serial-Model: 303-03-M&W
Source #: 21170B
Master Calibration Performed: Thu Dec 16 23:28:34 2021

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3841.78	5151.73	cps
Aluminum	2.670	g/cc	700.98	3068.49	cps

Spine Angle = 73.06 Density/Spine Ratio = 0.515

	Size		Reading
Small Ring	4.00	in	1.17
Large Ring	14.00	in	1.05

Compensated Neutron Calibration Report

Serial-Model: 210-M&W
Source #: N-1238
Master Calibration Performed: Fri Dec 3 09:16:24 2021

Master Calibration

Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

Gamma Ray Calibration Report

Serial Number: 103
Tool Model: M&W
Performed: Fri Dec 3 12:13:24 2021

Calibrator Value: 500.0 GAPI

Background Reading: 28.0 cps
Calibrator Reading: 986.0 cps

Sensitivity: 0.5700 GAPI/cps

Company Ritchie Exploration, Inc.

MIDWEST WIRELINE

Well	Schneweis Ventures 13A #1
Field	Thunder
County	Ford
State	Kansas