PIONEER
Pioneer Energy Services

DUAL INDUCTION LOG

Company VAL ENERGY, INC.
Well FLYING S NO.1-10
Field LEVANT
County THOMAS State KANSAS

Location: API #: 15-193-21041-00-00
475' FNL & 1597' FWL
SEC 10 TWP 8S RGE 35W

Other Services: CNL/CDL, MEL

Elevation: K.B. 3317', D.F. N/A, G.L. 3312'

Permanent Datum: GROUND LEVEL Elevation 3312'
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING

Company VAL ENERGY, INC.
Well FLYING S NO.1-10
Field LEVANT
County THOMAS
State KANSAS

Date	5/9/2019			
Run Number	ONE			
Depth Driller	4870'			
Depth Logger	4872'			
Bottom Logged Interval	4871'			
Top Log Interval	250'			
Casing Driller	8.875" @ 262'			
Casing Logger	262'			
Bit Size	7.875"			
Type Fluid in Hole	CHEMICAL			
Salinity,ppm CL	6,000			
Density / Viscosity	9.3 / 74			
pH / Fluid Loss	10.5 / 8.0			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	0.40 @ 62			
Rmf @ Meas. Temp	0.30 @ 62			
Rmc @ Meas. Temp	0.54 @ 62			
Source of Rmf / Rmc	CHARTS			
Rm @ BHT	0.20 @ 125			
Operating Rig Time	4 HOURS			
Max Rec. Temp. F	125 DEG. F.			
Equipment Number	P-24			
Location	HAYS			
Recorded By	M. HISS	I. MABB		
Witnessed By	TIM PRIEST			

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Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

LEVANT EXIT I-70
NORTH TO R ROAD, 3/4 WEST,
SOUTH INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneeres.com 785-625-3858

Your Pioneer Energy Services Crew	This Log Record Was Witnessed By
Engineer: M. HISS	Primary Witness: TIM PRIEST
Operator: I. MABB	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

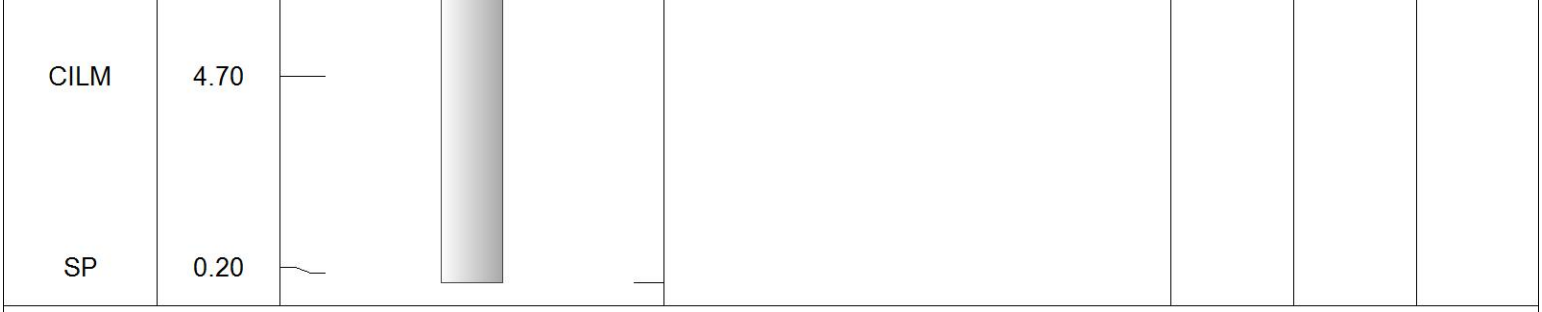
DatabaseC:\ProgramData\Warrior\Data\val_flyings_#1_10.db
Dataset field/well/STACKMEL/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	125	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	5	5	360	50	Off	4872

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			GR-M&W (233-M&W)	3.00	3.50	50.00
GR	40.58					
CNLSC	37.48		CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73					
			CDL-M&W (96-916)	8.50	4.00	250.00
LSD	28.43					
DCAL	28.42					
SSD	27.93					
			ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
MCAL	19.83					
MI	19.83					
MN	19.83					
RLL3F	15.80					
RLL3	15.80					
			DIL-PSI HIGH TEMP (967 (HT))	18.50	3.50	220.00
CILD	8.00					



Dataset: val_flyings_#1_10.db: field/well/STACKMEL/pass3.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

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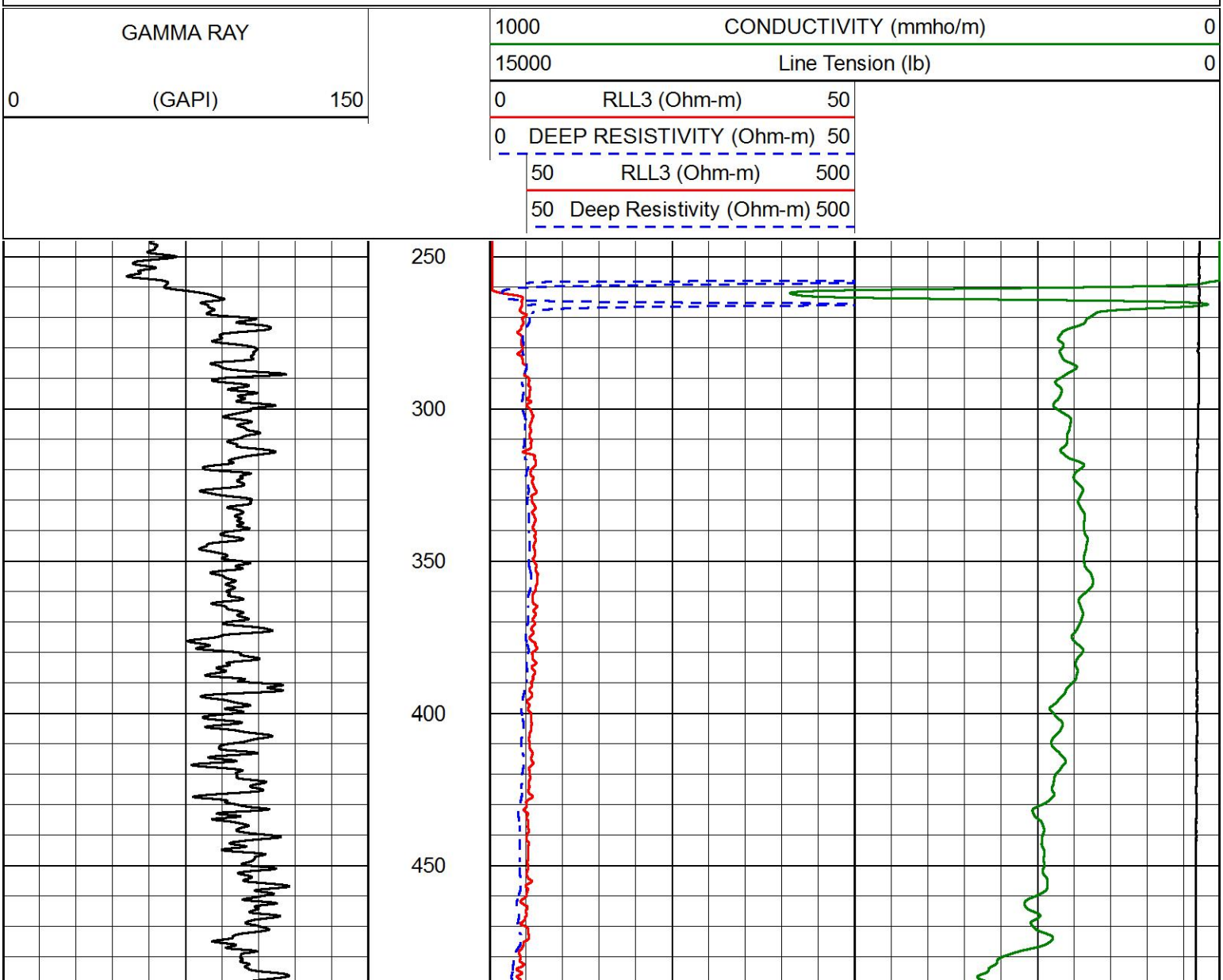
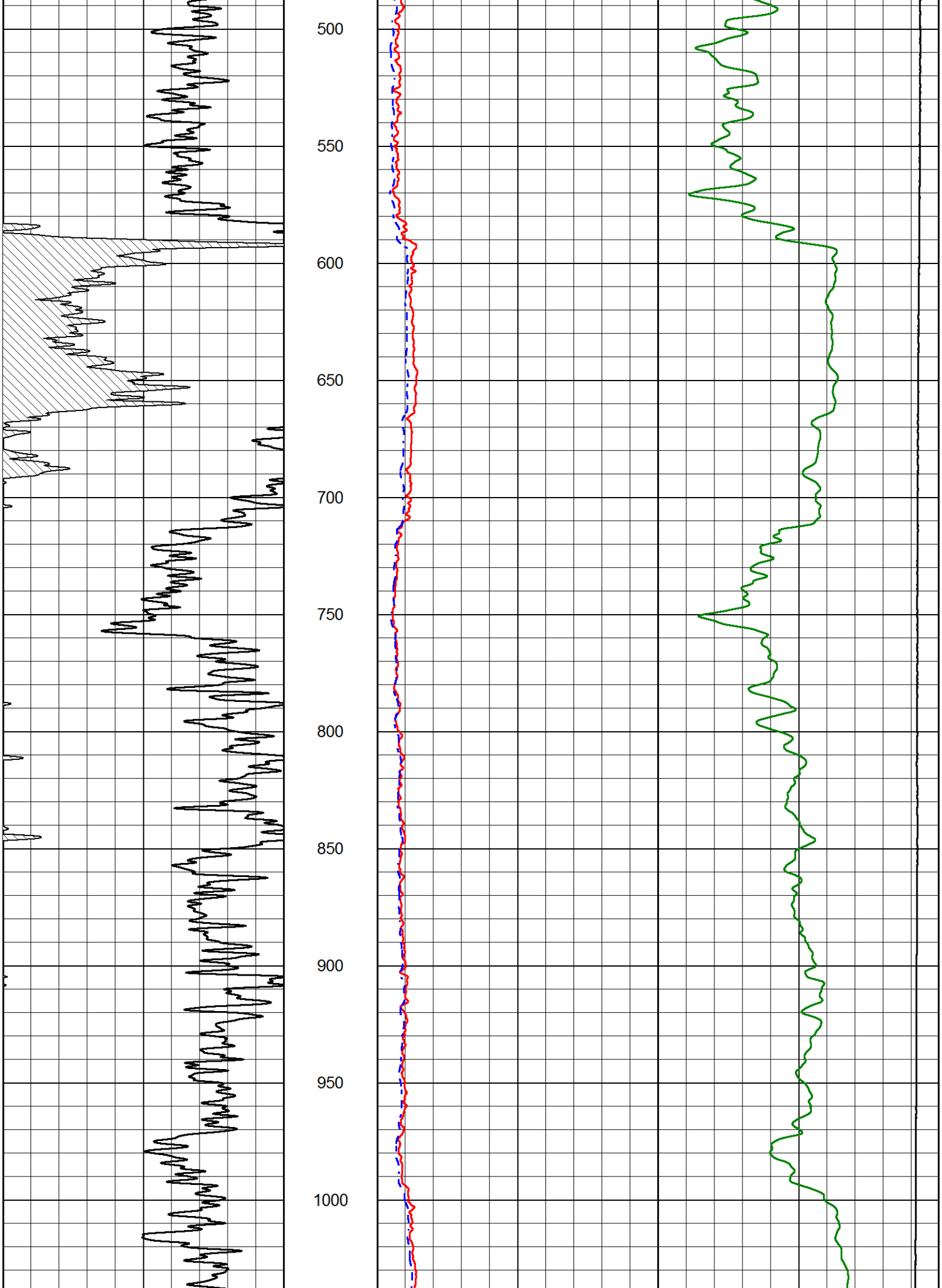
Database File val_flyings_#1_10.db
Dataset Pathname STACKMEL/pass3.1
Presentation Format _dil2in
Dataset Creation Thu May 09 23:06:49 2019
Charted by Depth in Feet scaled 1:600

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650
700
750
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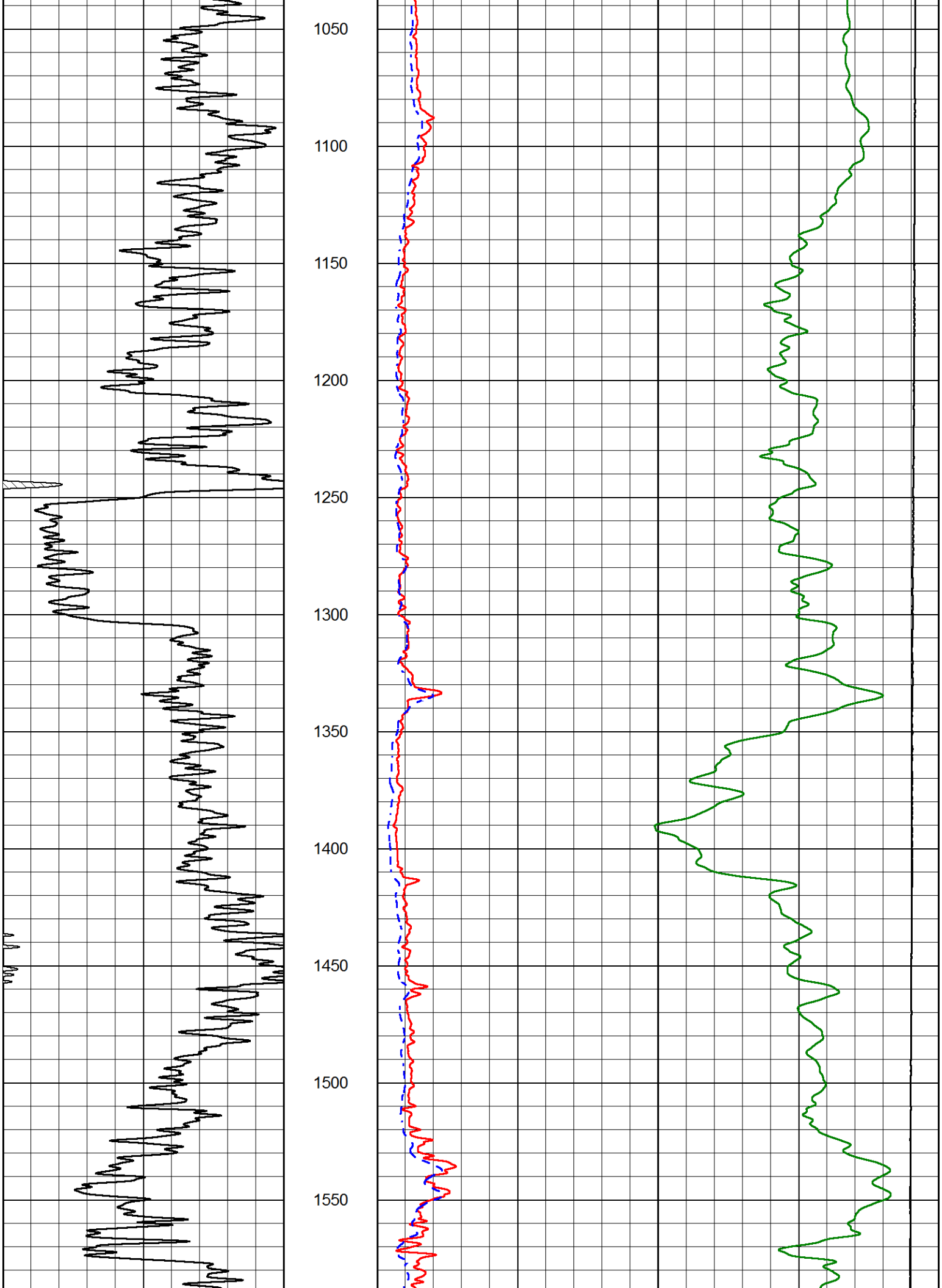
850
900
950
1000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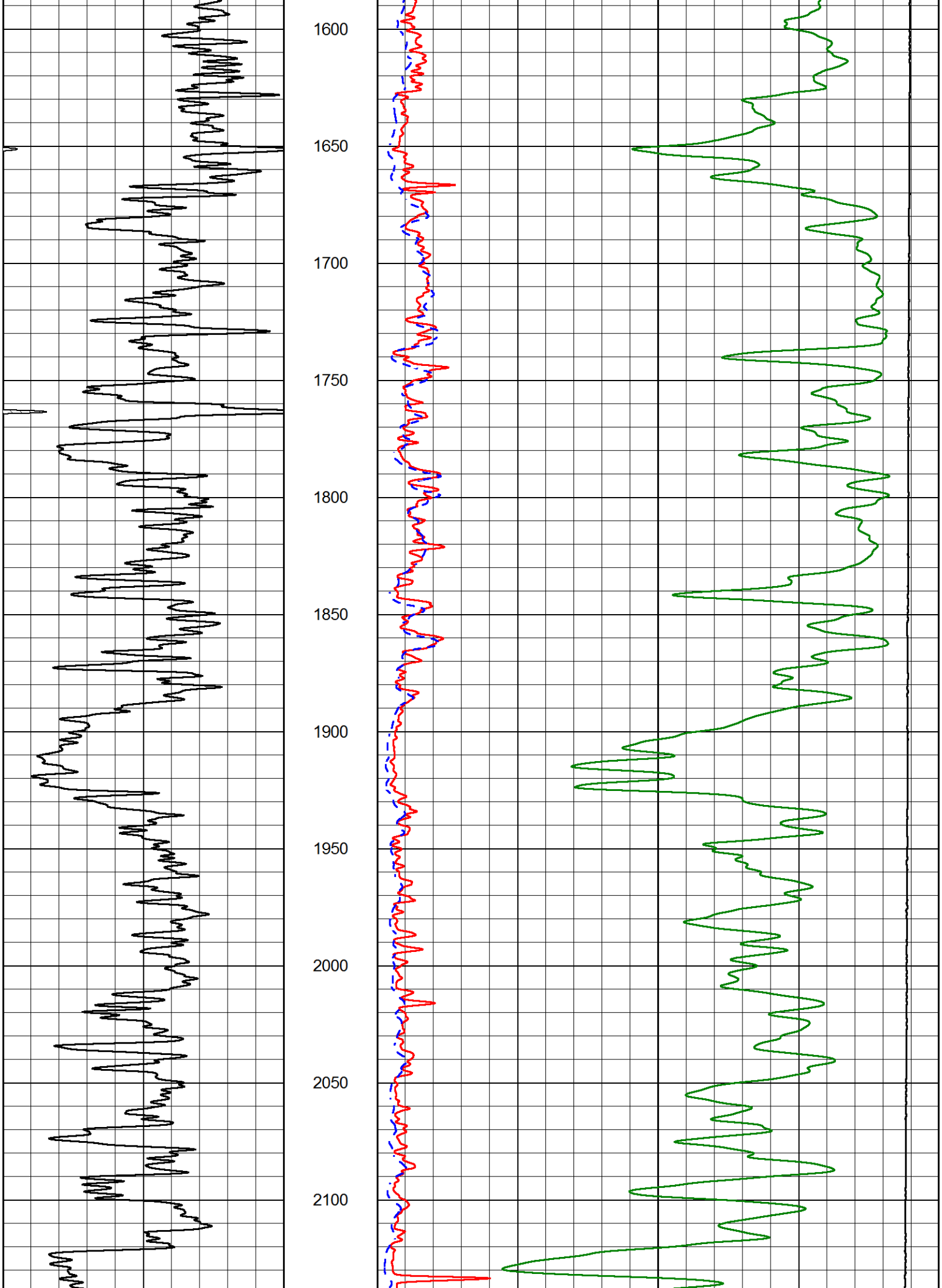
1150
1200
1250
1300
1350
1400
1450
1500
1550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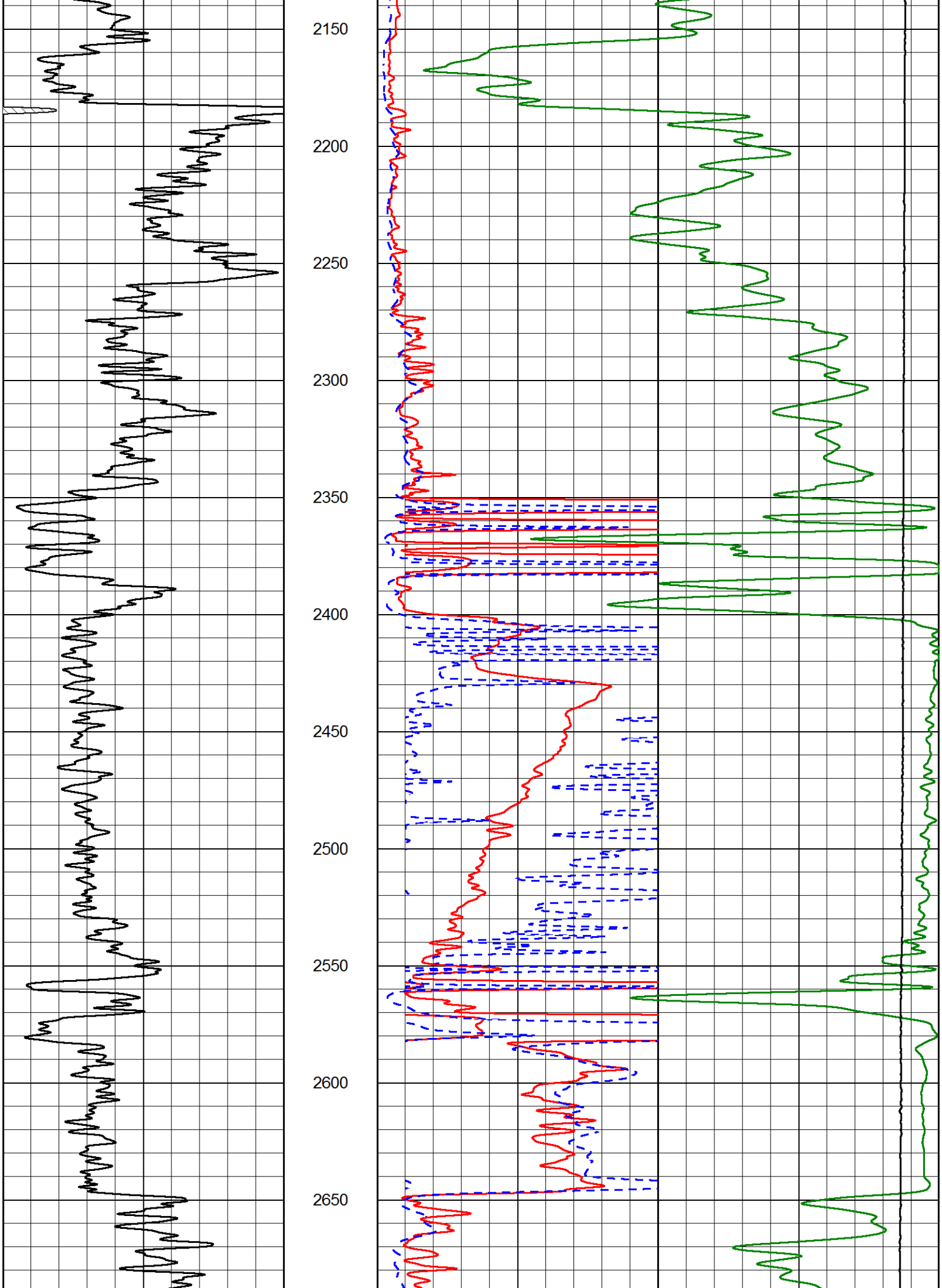
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100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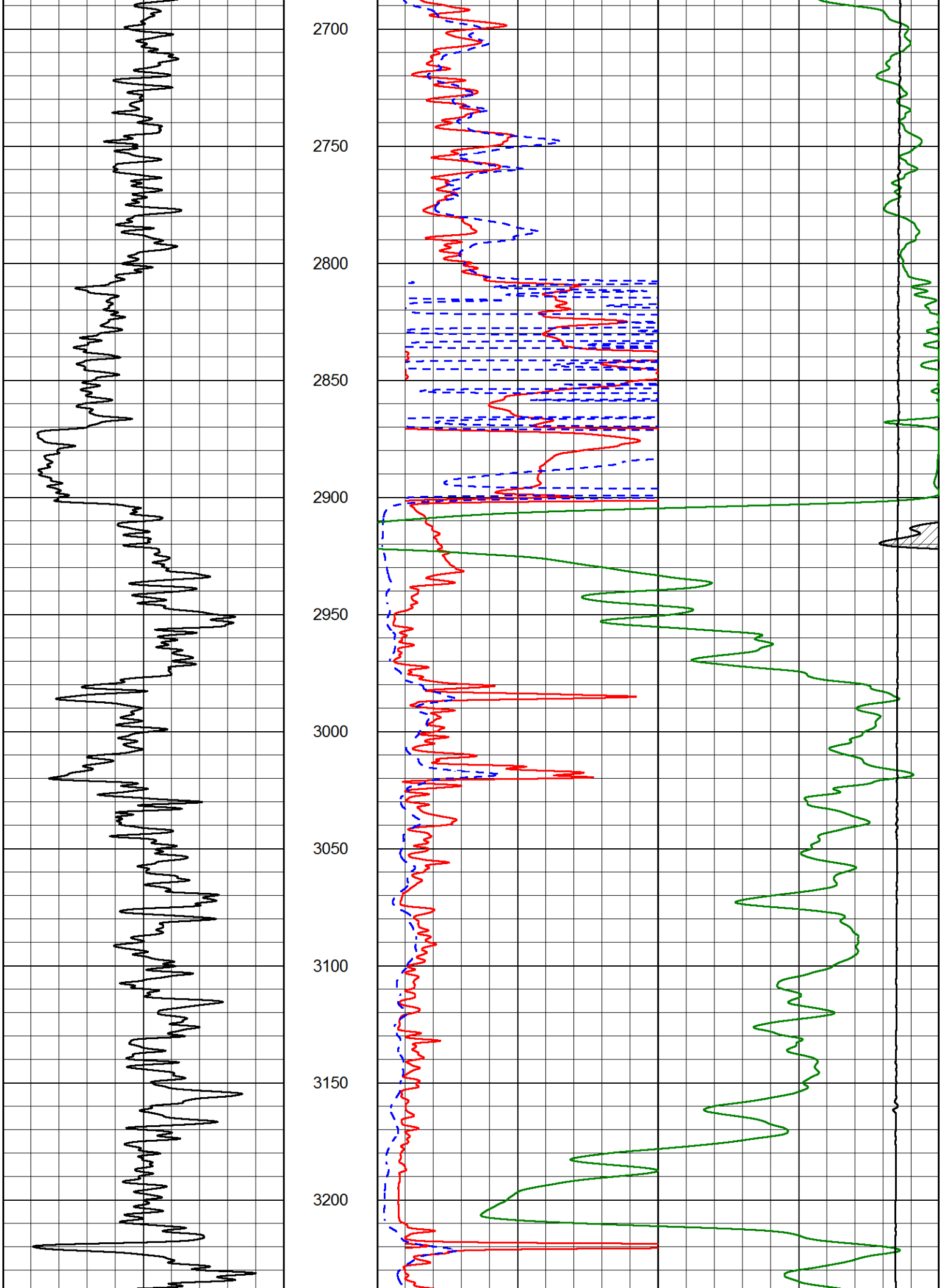
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650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2800
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2950
3000
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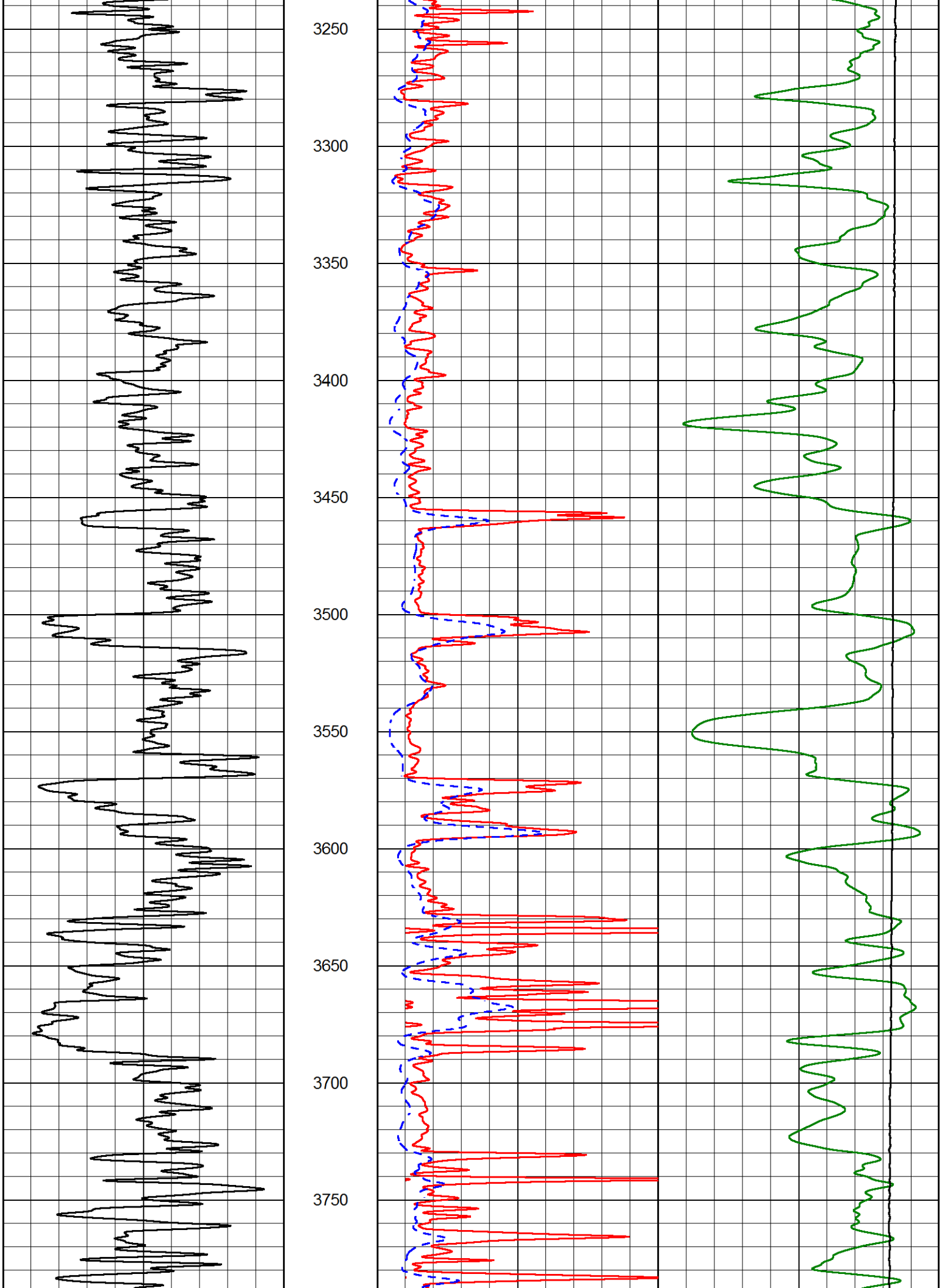
3200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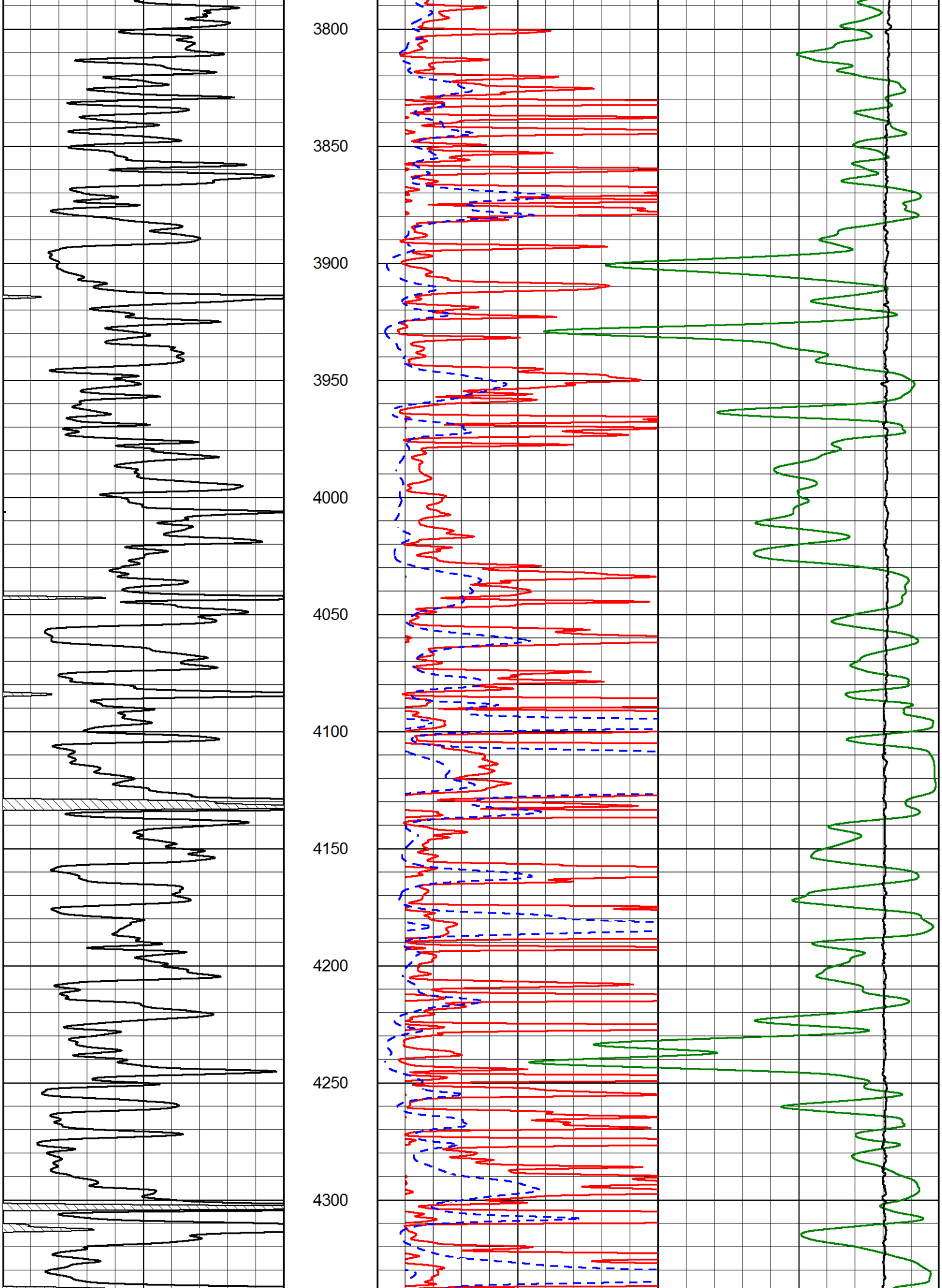
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3950
4000
4050
4100
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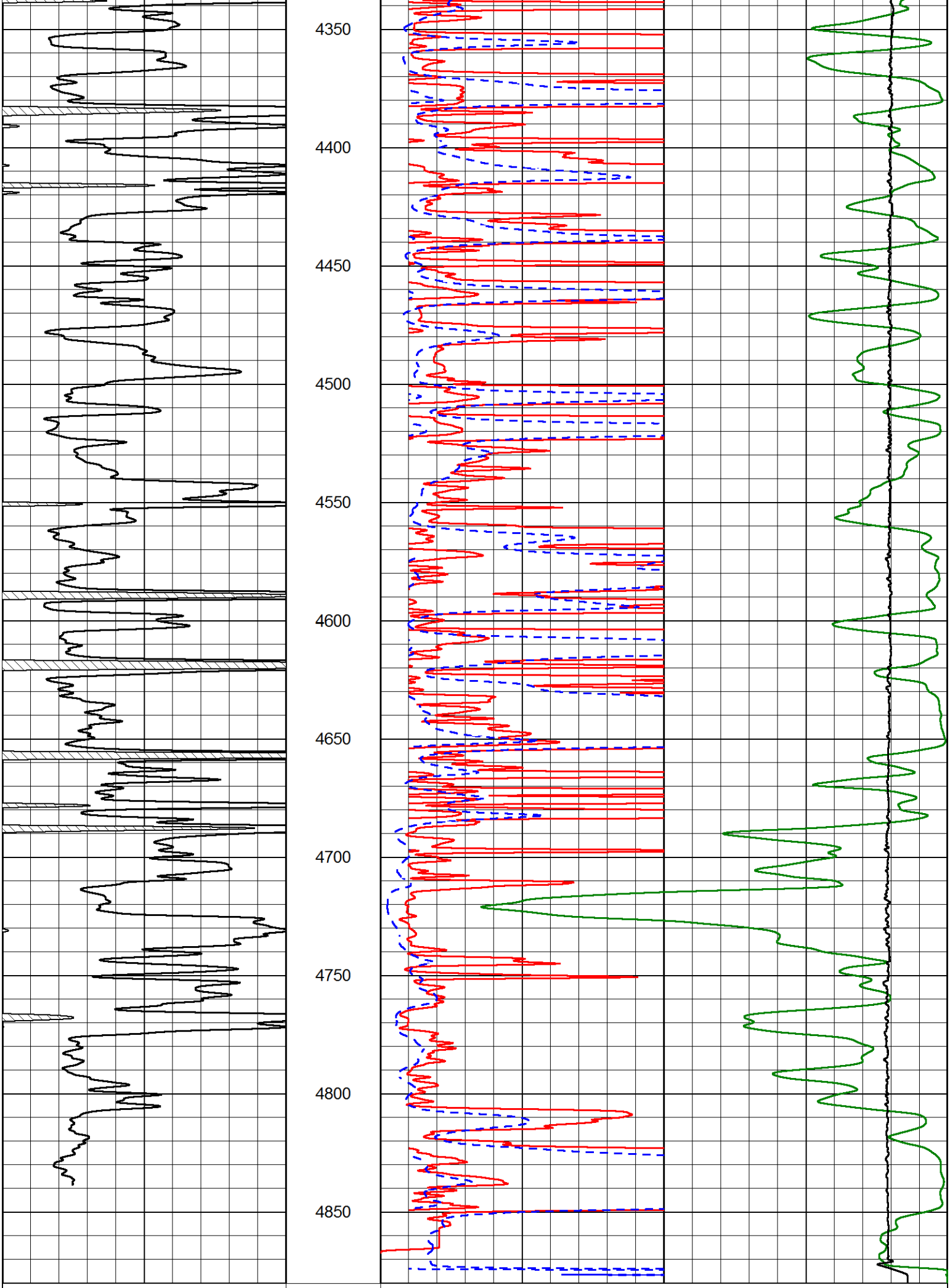
4200
4250
4300


4350
4400
4450
4500
4550
4600
4650
4700
4750
4800
4850
1000
CONDUCTIVITY (mmho/m)
0

GAMMA RAY

0 (GAPI) 150

15000 Line Tension (lb) 0

0 RLL3 (Ohm-m) 50

0 DEEP RESISTIVITY (Ohm-m) 50

50 RLL3 (Ohm-m) 500

50 Deep Resistivity (Ohm-m) 500

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MAIN PASS

Database File	val_flyings_#1_10.db
Dataset Pathname	STACKMEL/pass3.1
Presentation Format	_dil
Dataset Creation	Thu May 09 23:06:49 2019
Charted by	Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150

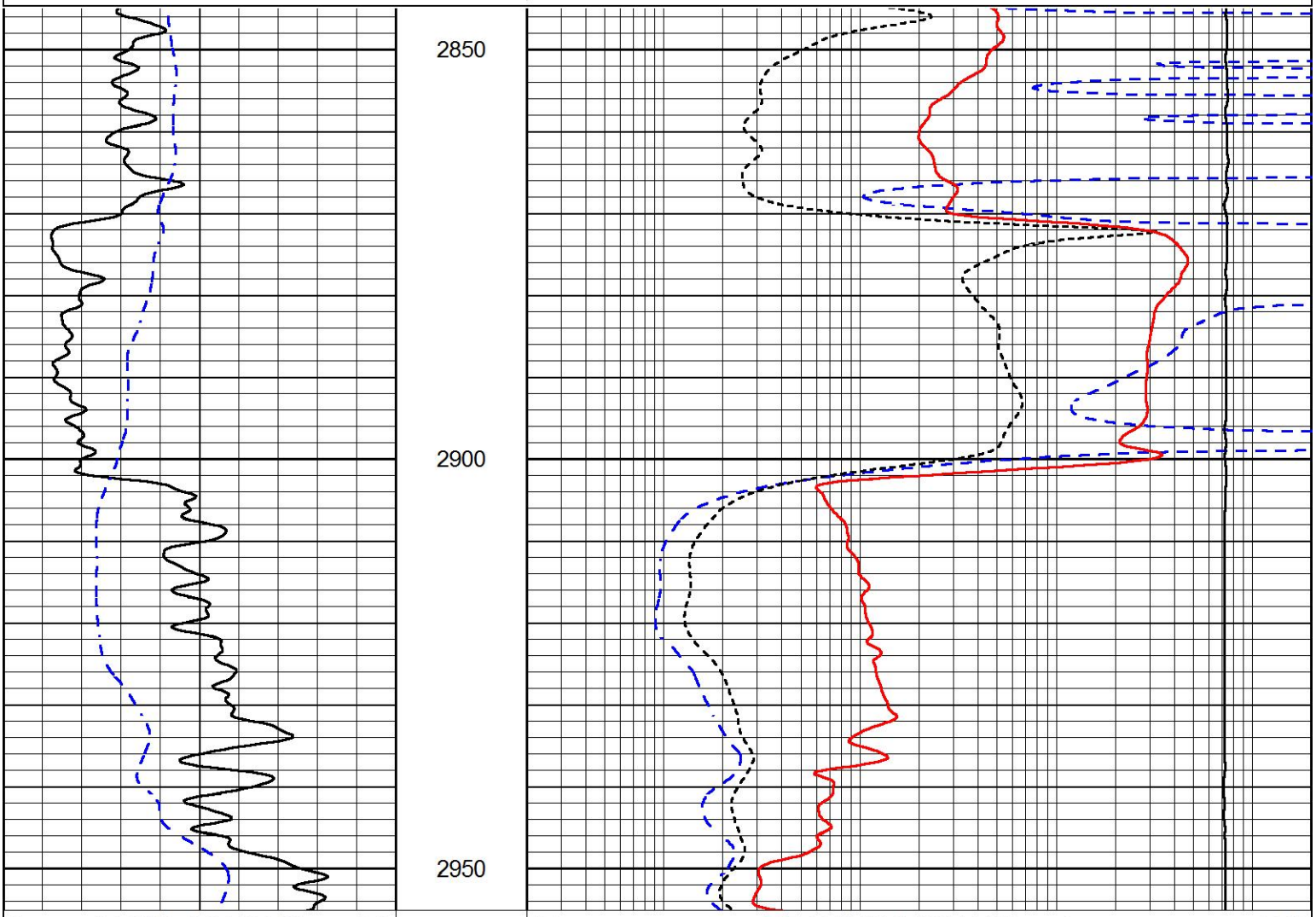
-200 SP (mV) 0

0.2 DEEP RESISTIVITY (Ohm-m) 2000

0.2 MEDIUM RESISTIVITY (Ohm-m) 2000

0.2 RLL3 (Ohm-m) 2000

10000 LINE TENSION (lb) 0



0 GAMMA RAY (GAPI) 150

-200 SP (mV) 0

0.2 DEEP RESISTIVITY (Ohm-m) 2000

0.2 MEDIUM RESISTIVITY (Ohm-m) 2000

0.2 RLL3 (Ohm-m) 2000

10000 LINE TENSION (lb) 0

10000	LINE TENSION (lb)	0

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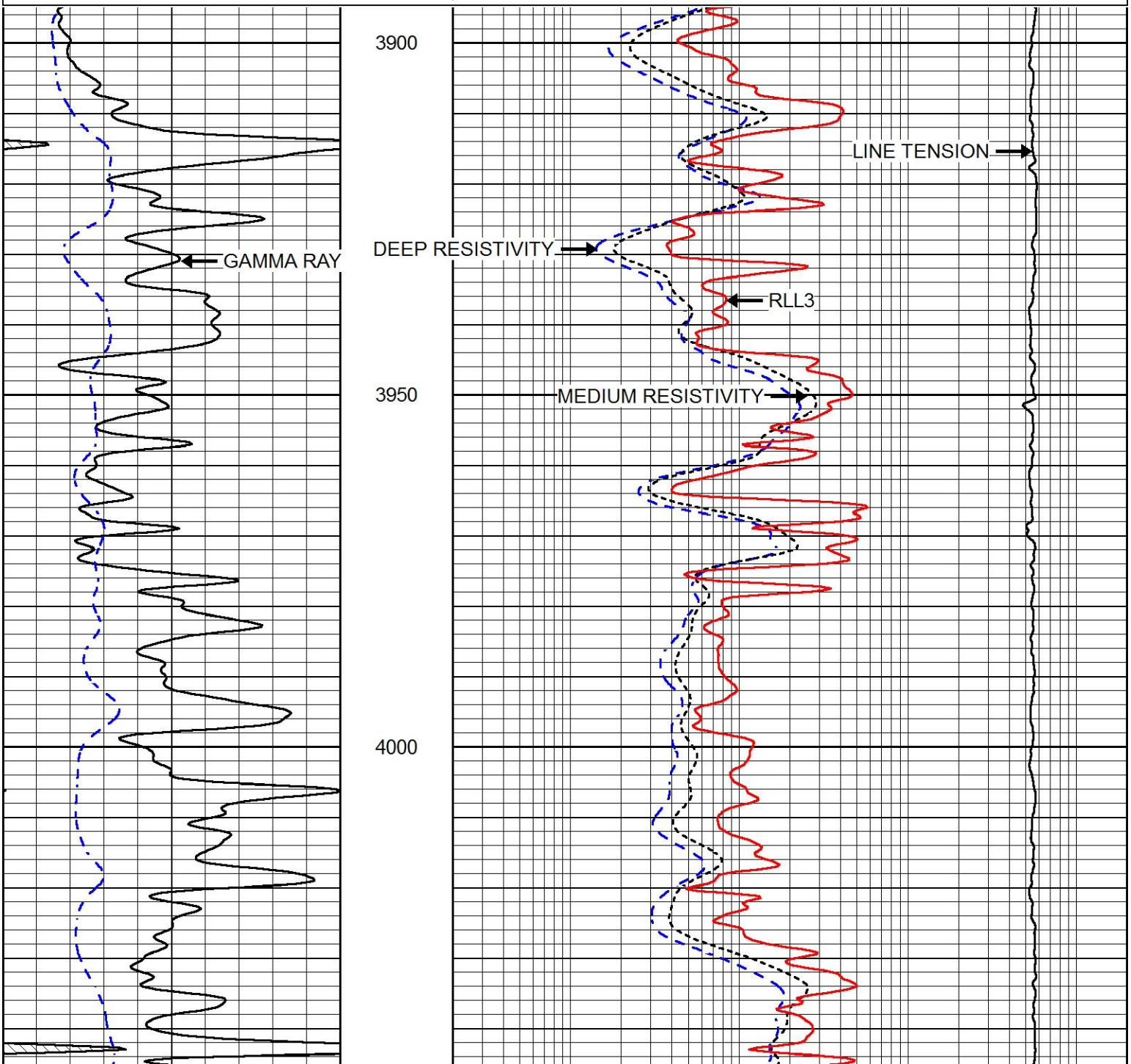
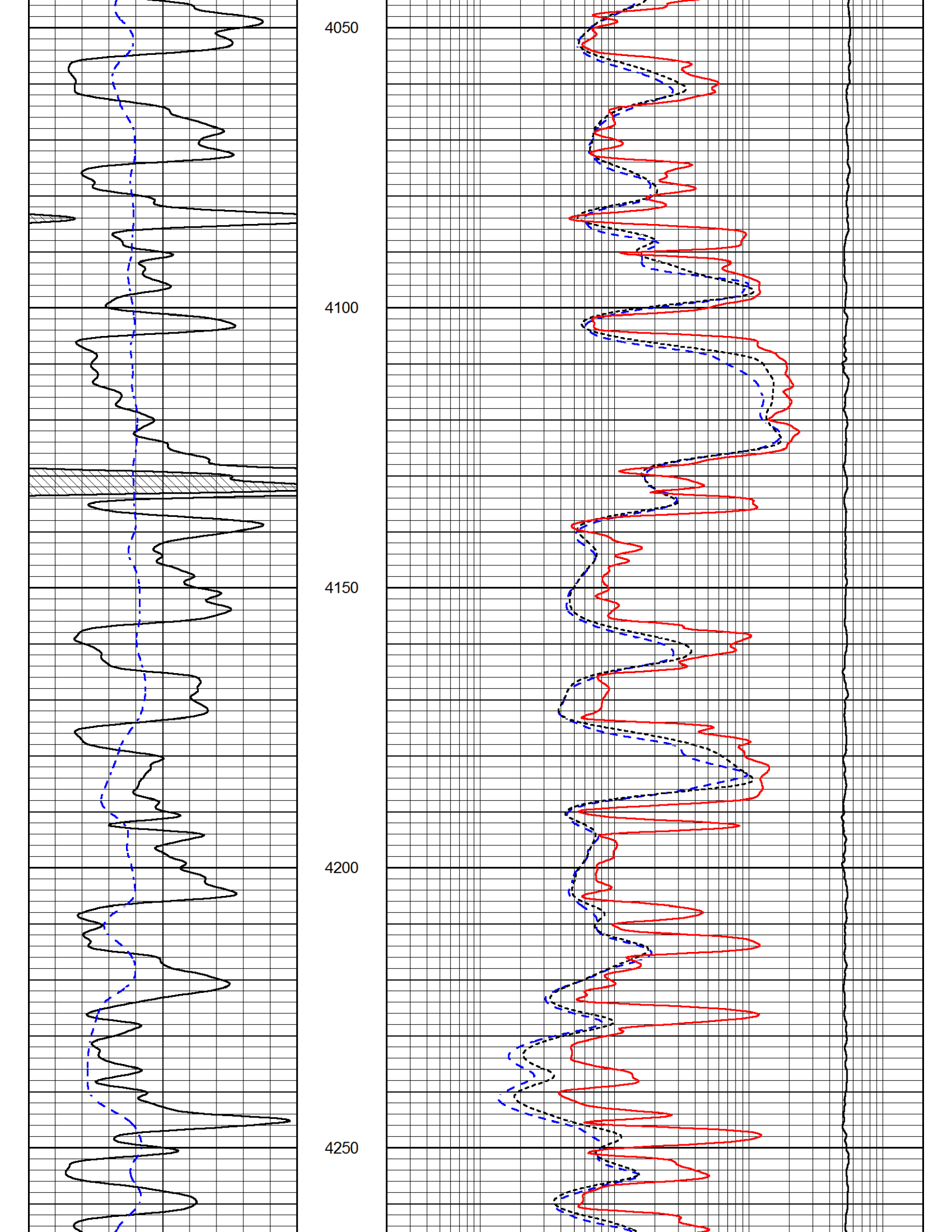
MAIN PASS

Database File	val_flyings_#1_10.db
Dataset Pathname	STACKMEL/pass3.1
Presentation Format	_dil
Dataset Creation	Thu May 09 23:06:49 2019
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-200	SP (mV)	0

0.2	DEEP RESISTIVITY (Ohm-m)	2000
0.2	MEDIUM RESISTIVITY (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	LINE TENSION (lb)	0

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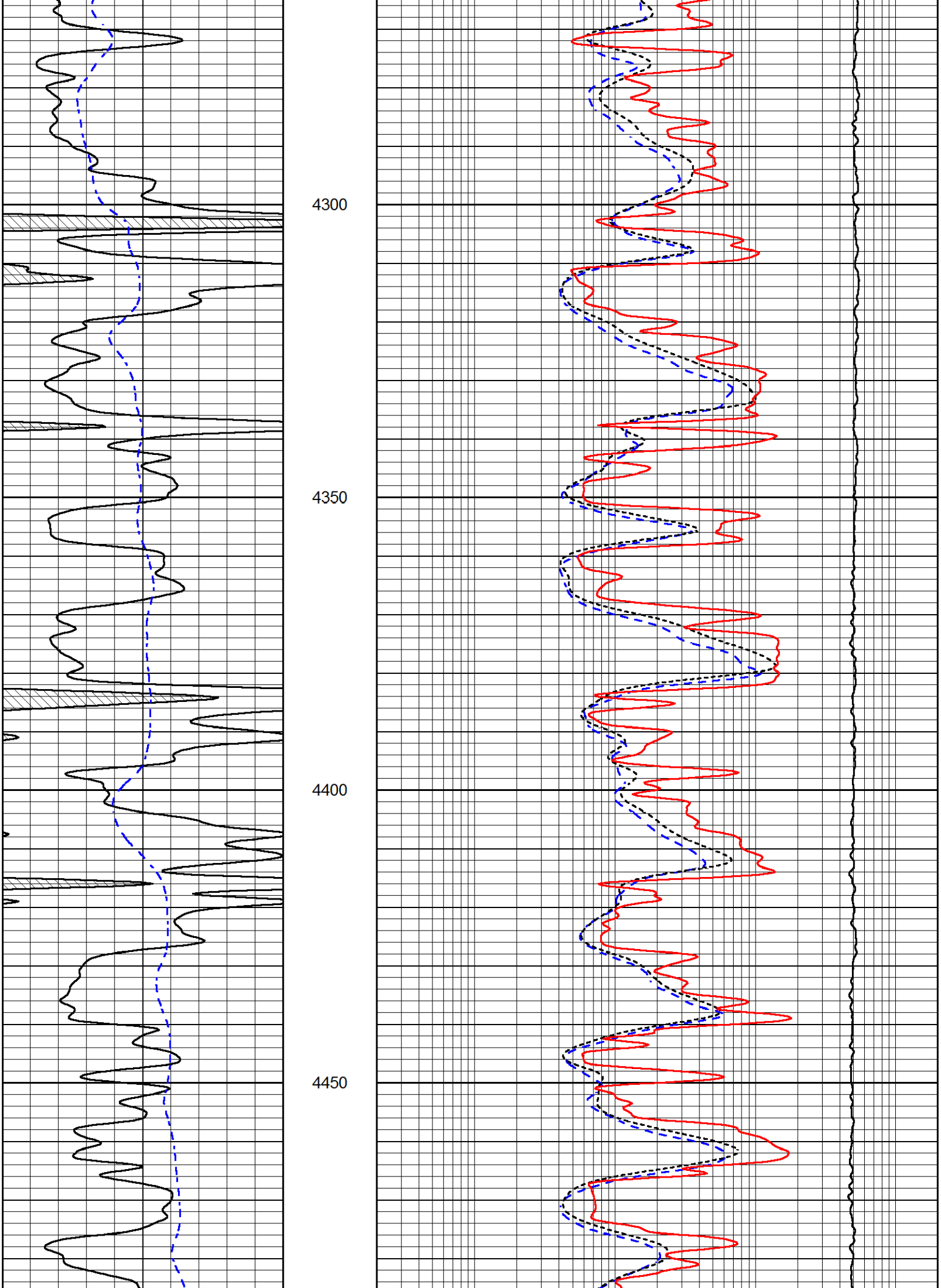
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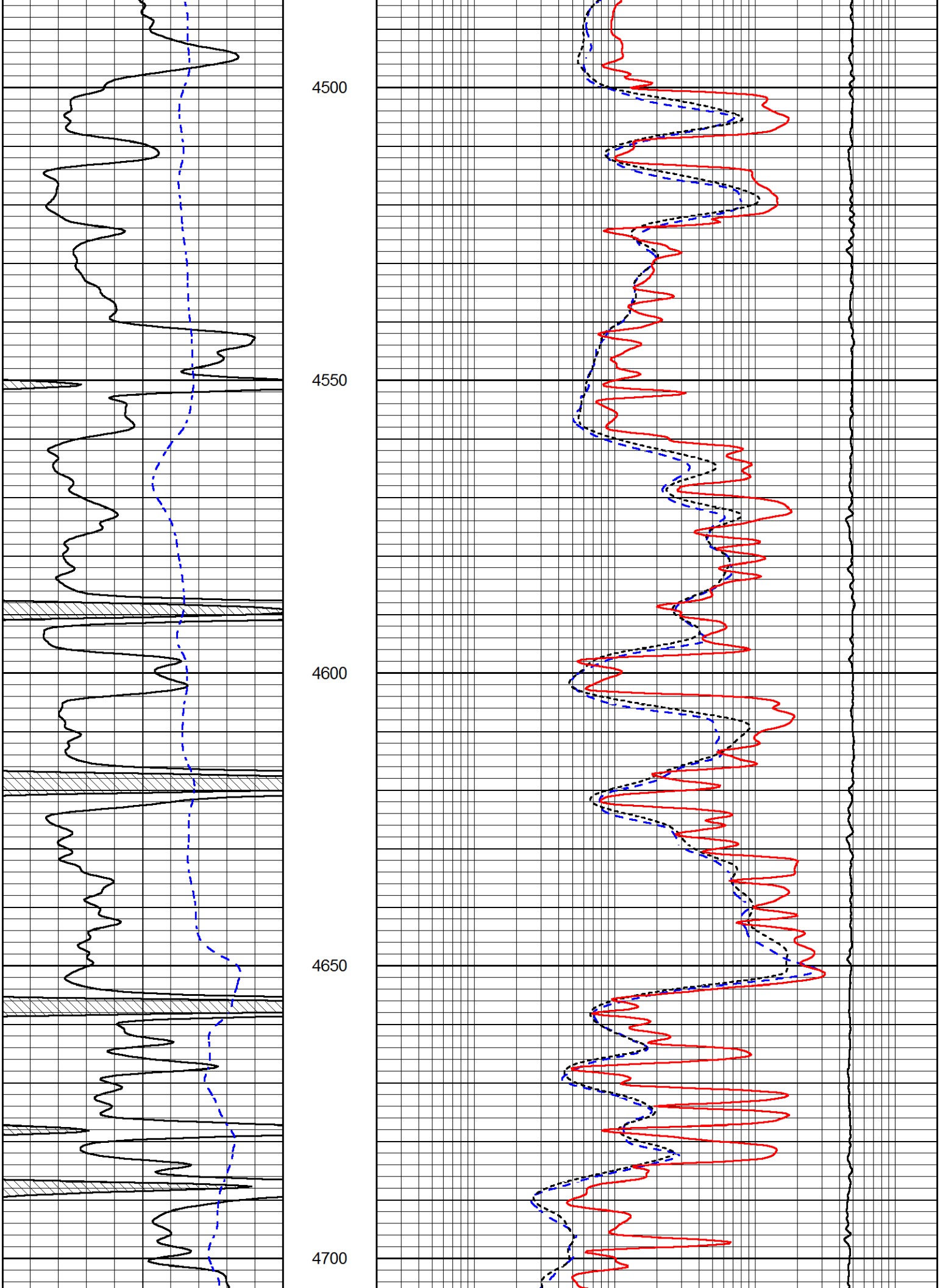
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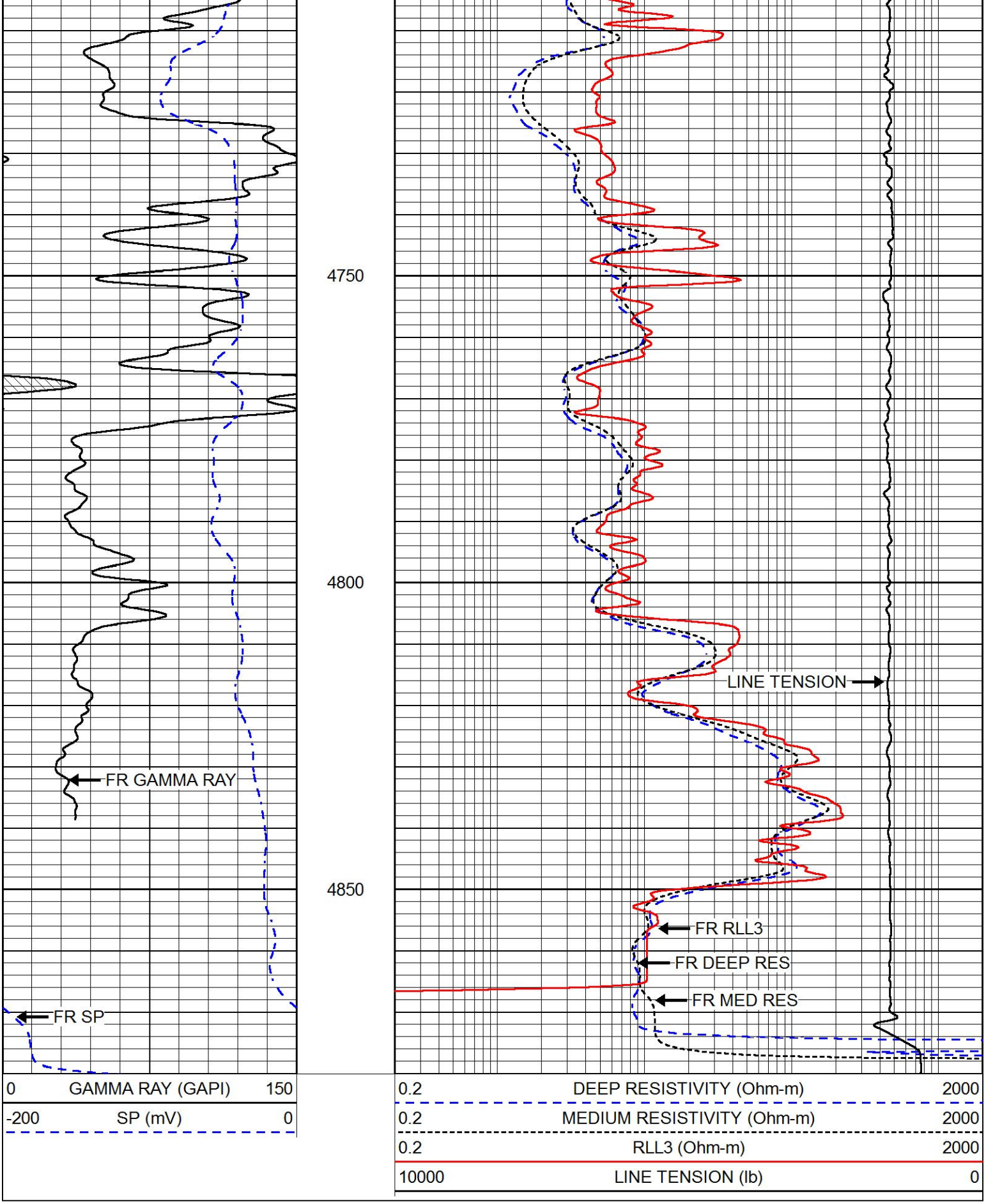

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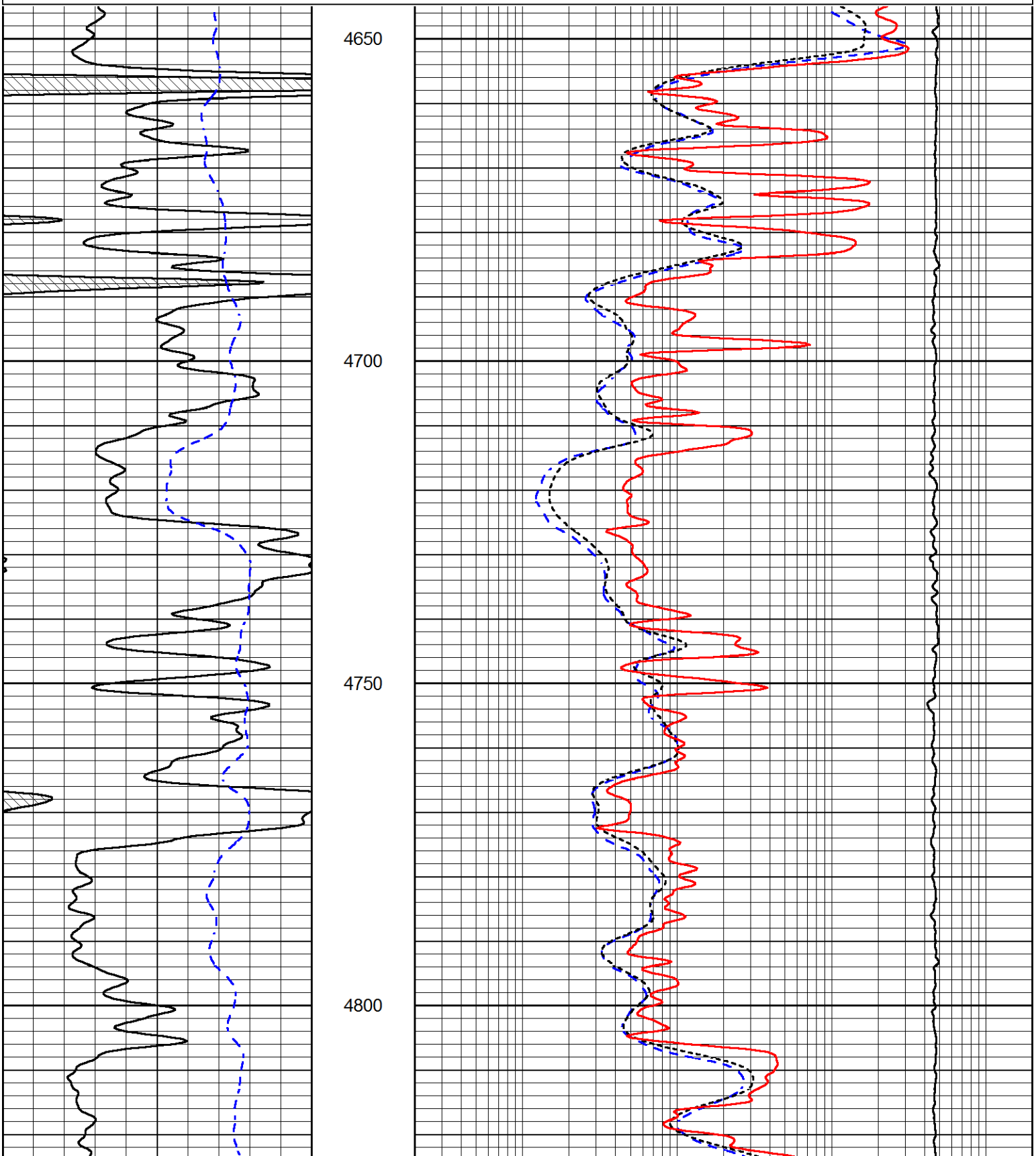
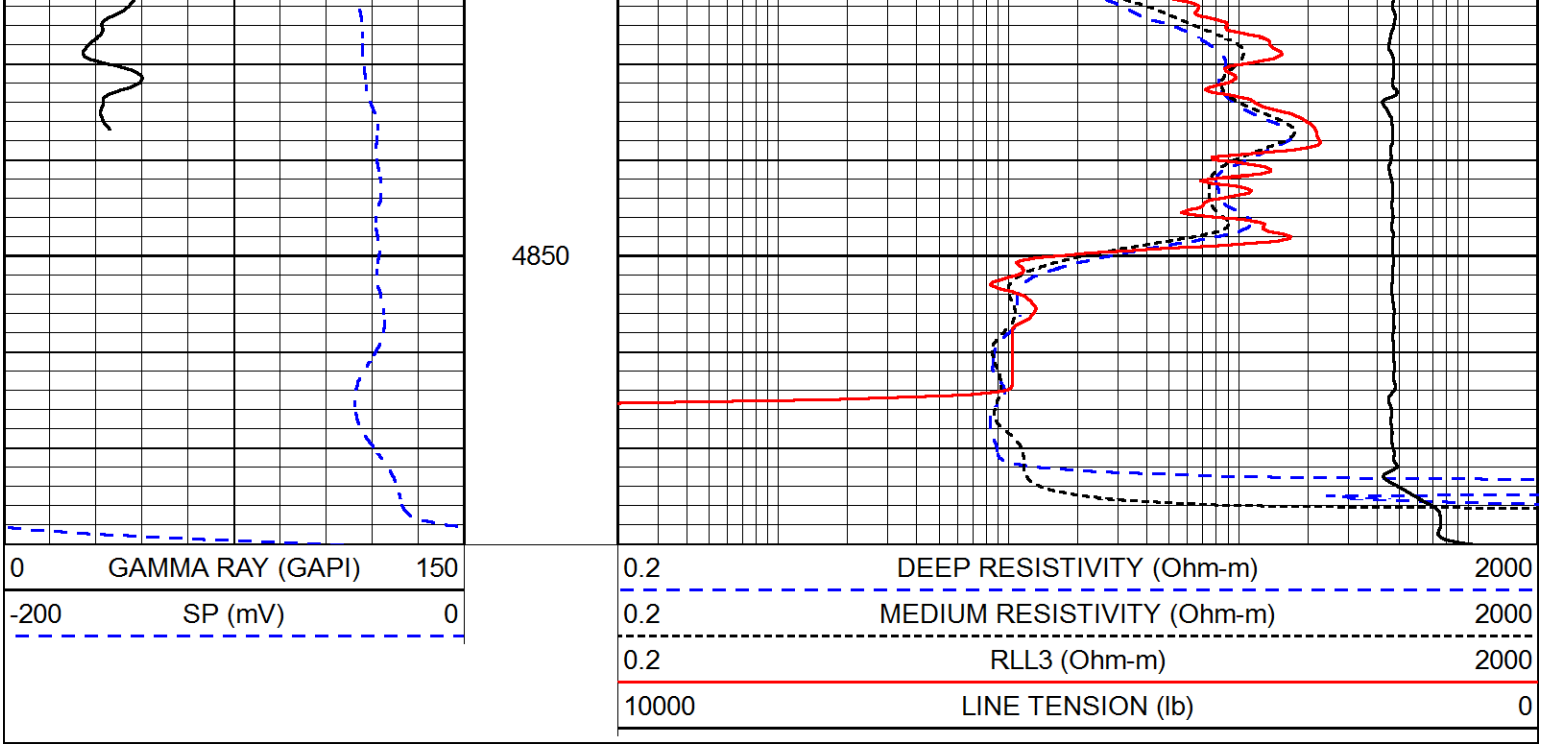
REPEAT SECTION

Database File	val_flyings_#1_10.db
Dataset Pathname	STACKMEL/pass2.1
Presentation Format	_dil
Dataset Creation	Thu May 09 23:19:28 2019
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-200	SP (mV)	0

0.2	DEEP RESISTIVITY (Ohm-m)	2000
0.2	MEDIUM RESISTIVITY (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	LINE TENSION (lb)	0





Calibration Report

Database File val_flyings_#1_10.db
Dataset Pathname STACKMEL/pass3.20
Dataset Creation Thu May 09 22:36:22 2019

Dual Induction Calibration Report

Serial-Model: 967 (HT)-PSI HIGH TEMP
Calibration Performed: Fri Apr 12 09:37:07 2019

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.800	mmho/m	0.565	-17.500
Medium	0.000	1348.000	142.000	255.800	mmho/m	0.390	-40.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
Performed: Sun Feb 24 09:53:40 2019

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	66000.0000	-0.7000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	123000.0000	5.0000
Caliper	1.0001	1.1397	6.5000	18.5000	in	70.0000	-65.7000

Compensated Density Calibration Report

Serial-Model: 96-916-M&W
Source / Verifier: 16955B / 2ci
Master Calibration Performed: Wed Mar 27 11:00:53 2019

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	8943.64	10054.60	cps
Aluminum	2.655	g/cc	1595.61	6242.82	cps

Spine Angle = 74.54

Density/Spine Ratio = 0.503

	Size		Reading
Small Ring	6.00	in	1.75
Large Ring	16.00	in	1.46

Compensated Neutron Calibration Report

Serial Number: 207-MW
Tool Model: M&W
Calibration Performed: WED FEB 13 10:30:30 2019

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: 233-M&W
Tool Model: M&W
Calibration Performed: Fri Feb 07 01:42:40 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5500 GAPI/cps

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