MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Lebsack Oil Production, Inc.
Well Garden City #9-18
Field Damme
County Finney State Kansas

Location: NW-SE-SE 335 FSL & 335 FEL SEC 18 TWP 22S RGE 33W
API # : 15-055-22553-00-00

Permanent Datum Ground Level Elevation 2897
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Other Services: CNL/CDL, MEL

Elevation: K.B. 2908, D.F., G.L. 2897

Date	4/1/2022		
Run Number	One		
Depth Driller	4865		
Depth Logger	4869		
Bottom Logged Interval	4868		
Top Log Interval	400		
Casing Driller	8.625 @ 439		
Casing Logger	440		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	2400		
Density / Viscosity	9.4 / 47		
pH / Fluid Loss	10.0 / 6.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.9 @ 68		
Rmf @ Meas. Temp	0.68 @ 68		
Rmc @ Meas. Temp	1.22 @ 68		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	0.49 @ 125		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	125		
Equipment Number	P-24		
Location	Hays		
Recorded By	T. Martin		
Witnessed By	Josh Austin		

<<< Fold Here >>>

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Holcomb, KS, N on Big Lowe Rd to Barlow Rd,
1 E, 1/4 N, W into

Log Measured From: Kelly Bushing 11 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: T. Martin	Primary Witness: Josh Austin
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	32.75		GR-M&W (101)	3.00	3.50	50.00
CNLSC	29.65					
CNSSC	28.90		CNT-M&W (207-MW)	5.00	3.50	100.00
			CDL-M&W (305-05)	8.50	4.00	250.00
LSD	20.60					
DCAL	20.58					
SSD	20.10					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (502 HT)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: lebsack_garden city #9-18.db: field/well/Stack/pass3.1
Total length: 34.75 ft
Total weight: 620.00 lb
O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\lebsack_garden city #9-18.db
Dataset field/well/Stack/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	0	0	-300	50	Off	4869

Variable Description

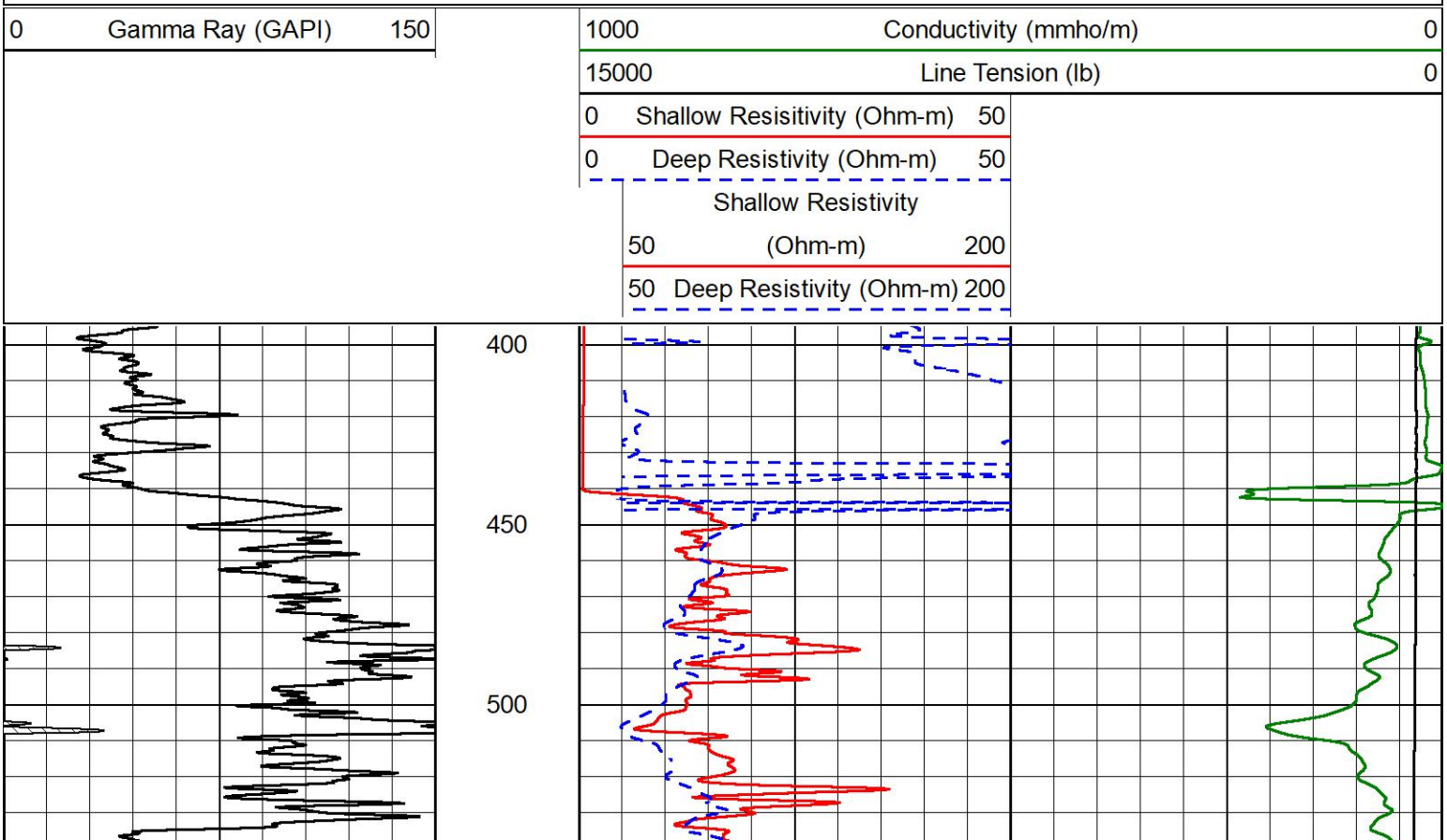
A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth

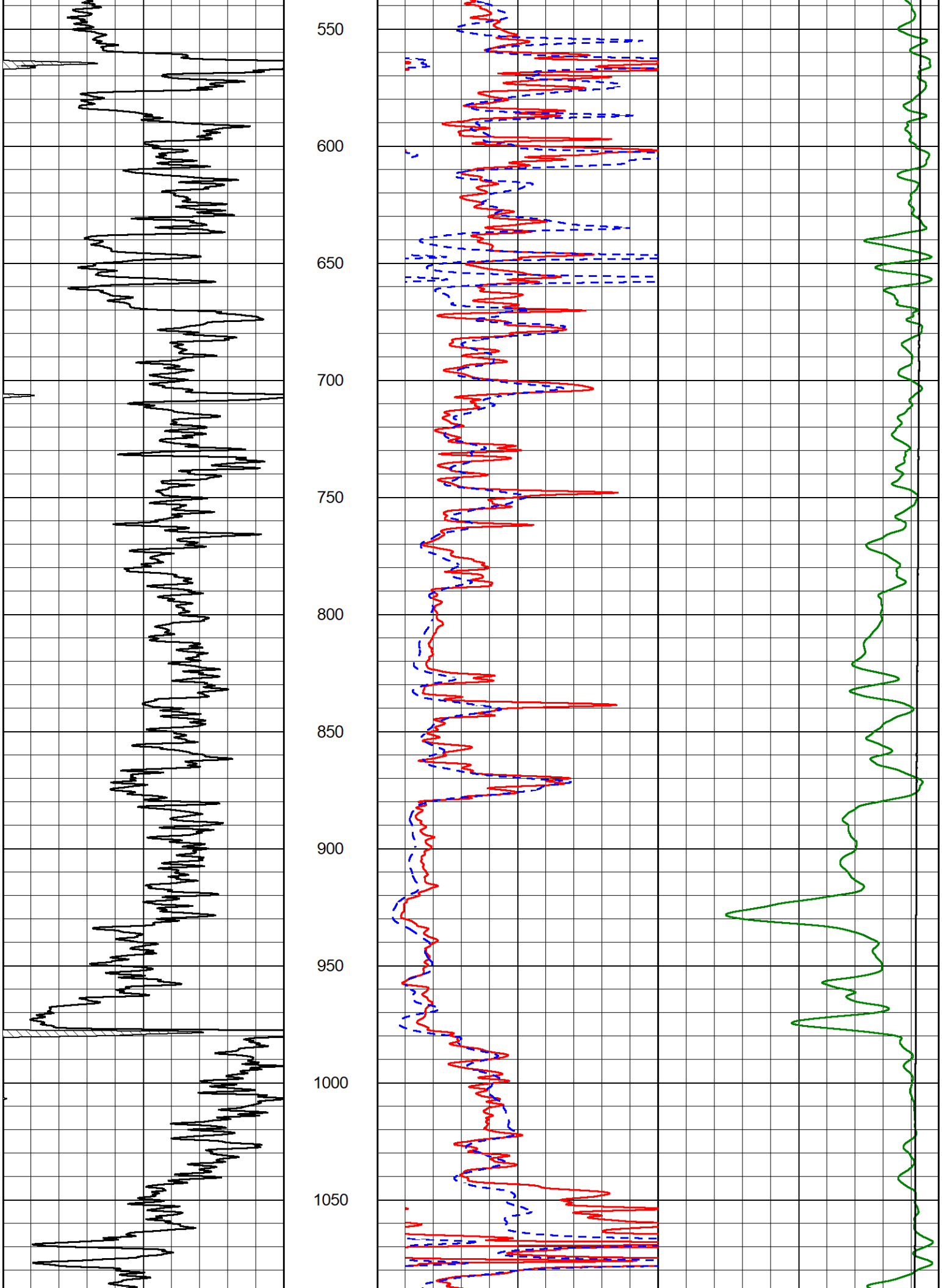
MIDWEST WIRELINE

2" SCALE RESISTIVITY

MAIN PASS

Database File	lebsack_garden city #9-18.db
Dataset Pathname	Stack/pass3.2
Presentation Format	_dil2in
Dataset Creation	Fri Apr 01 03:50:59 2022
Charted by	Depth in Feet scaled 1:600

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700
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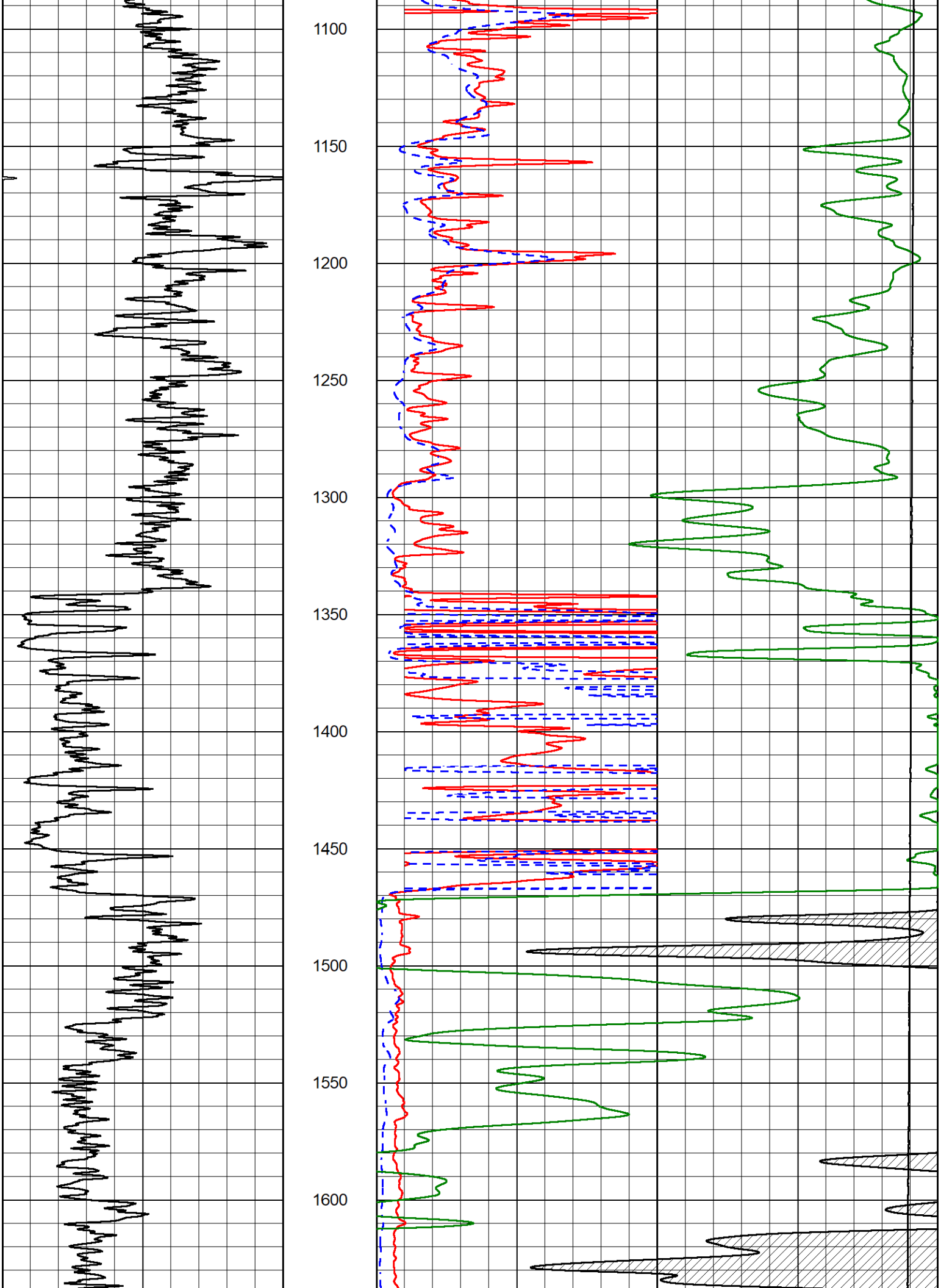
950
1000
1050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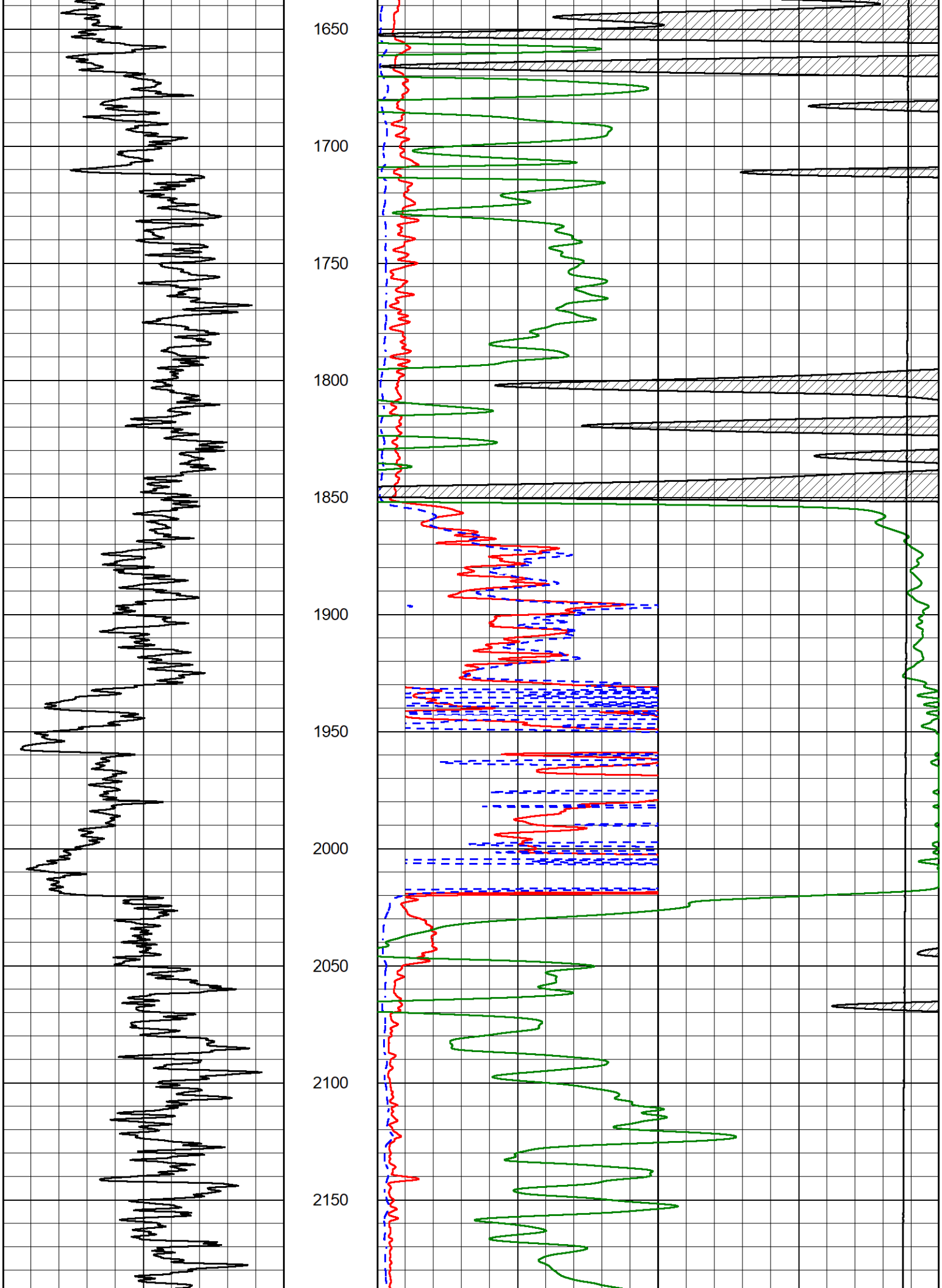
1400
1450
1500
1550
1600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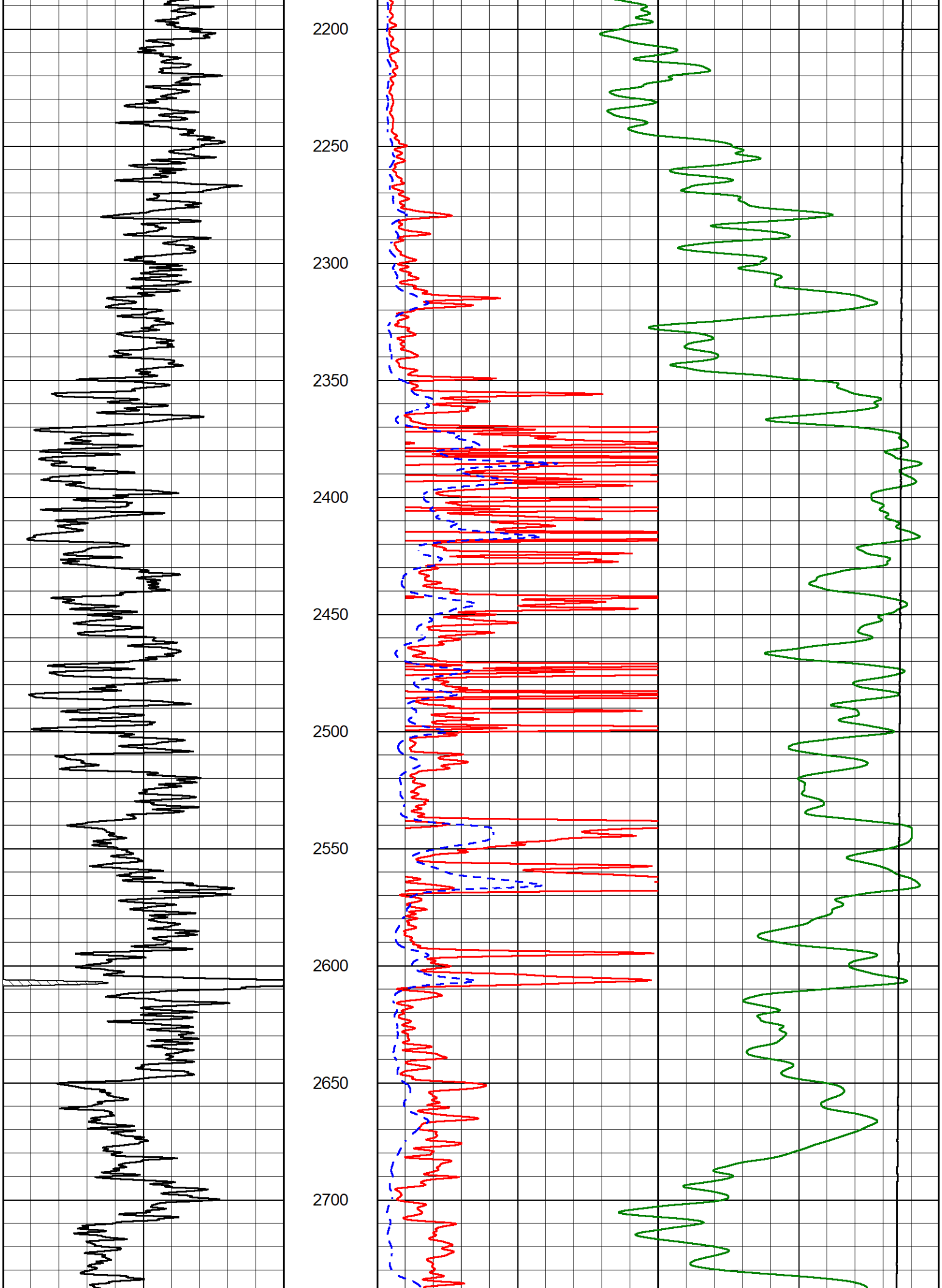
1850
1900
1950
2000
2050
2100
2150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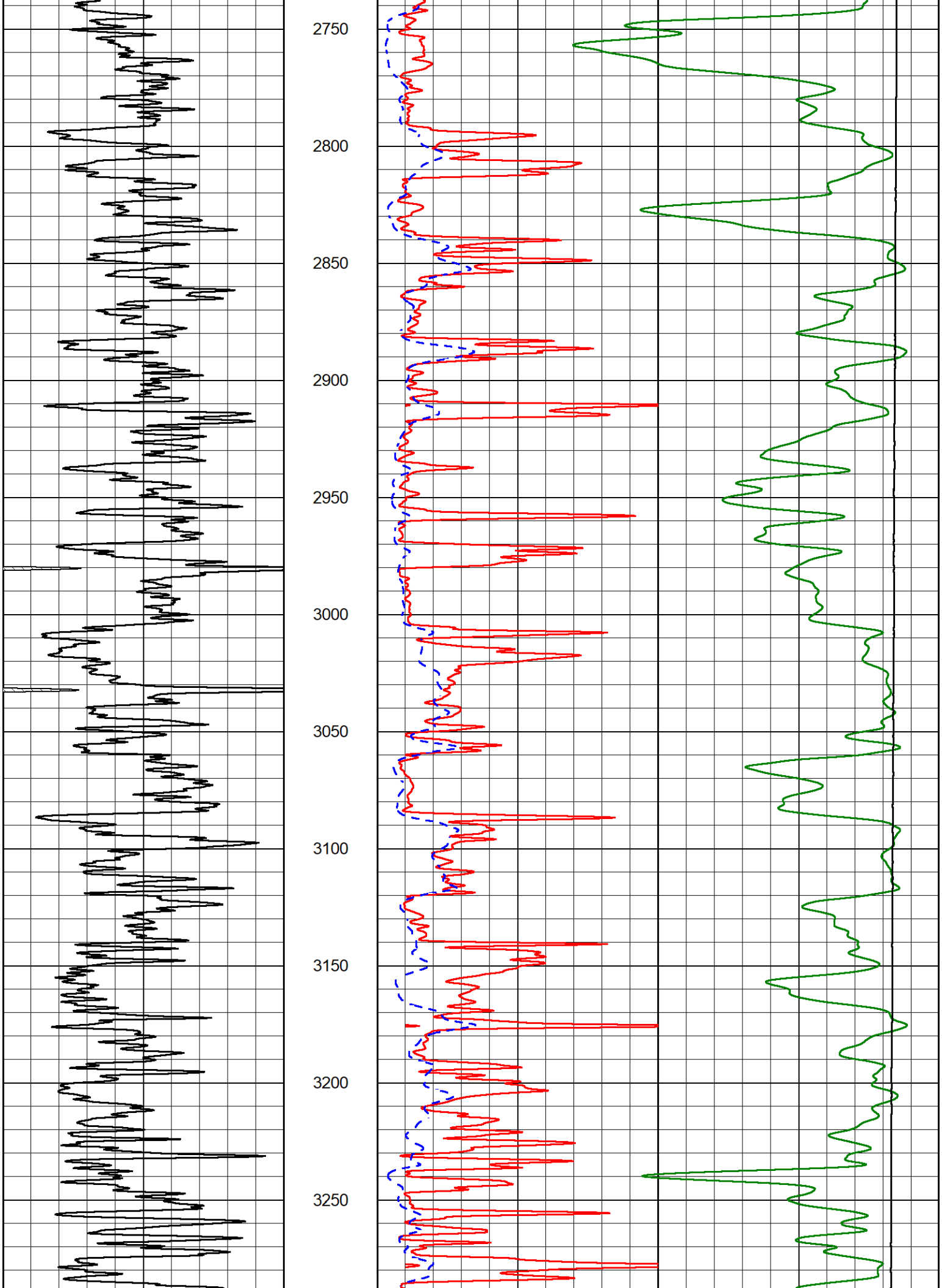
2350
2400
2450
2500
2550
2600
2650
2700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3050
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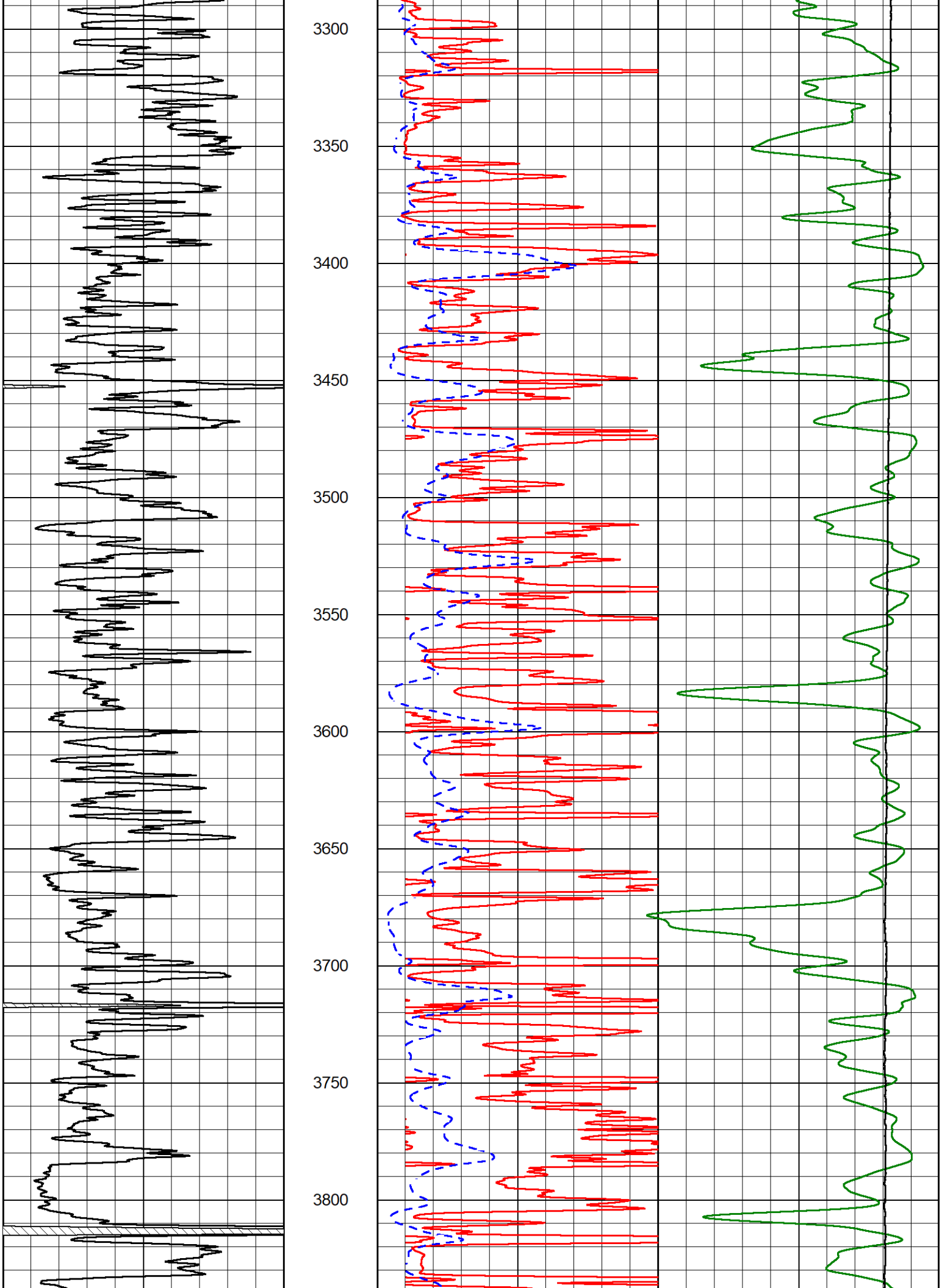
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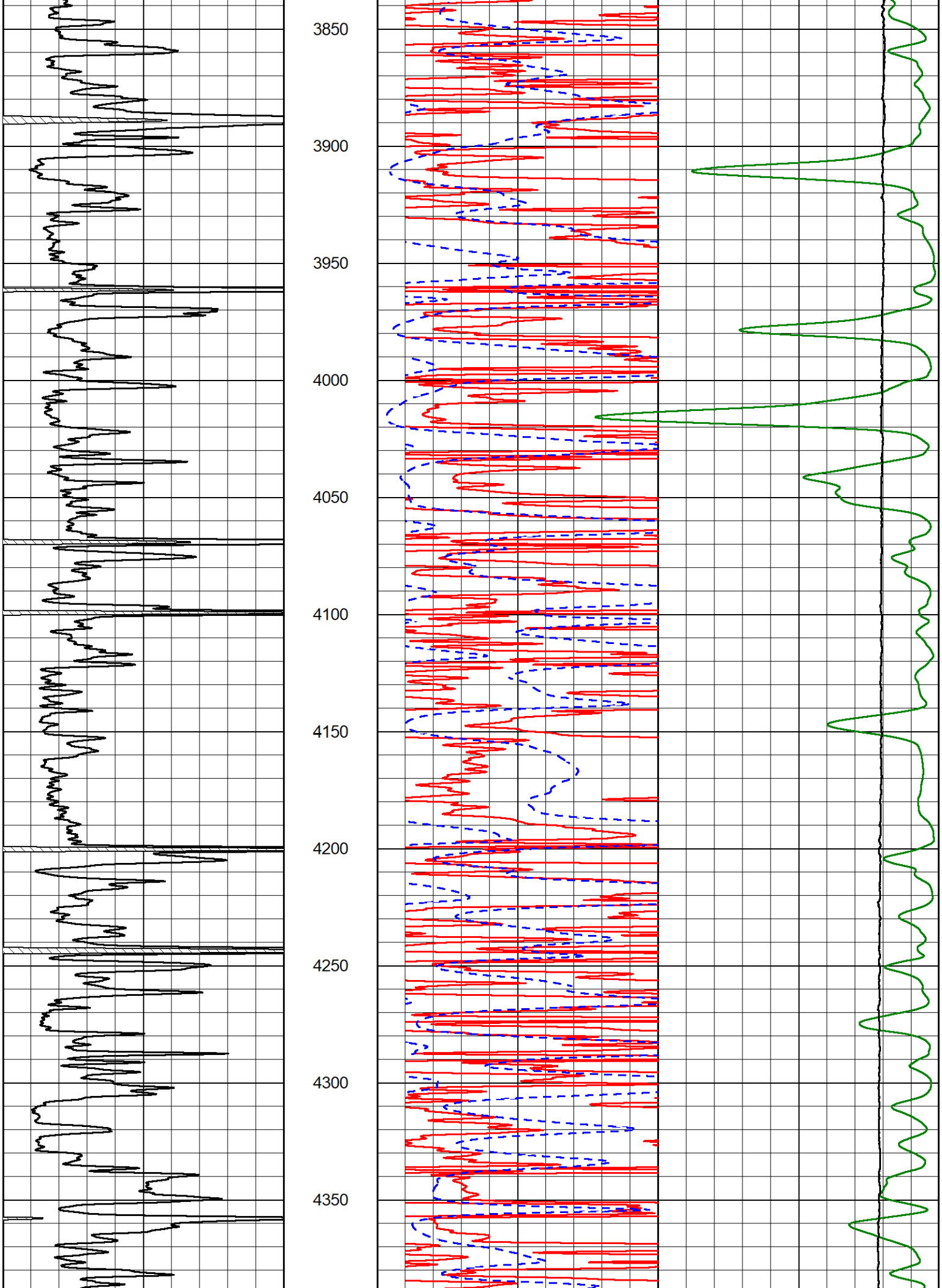
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4050
4100
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4200
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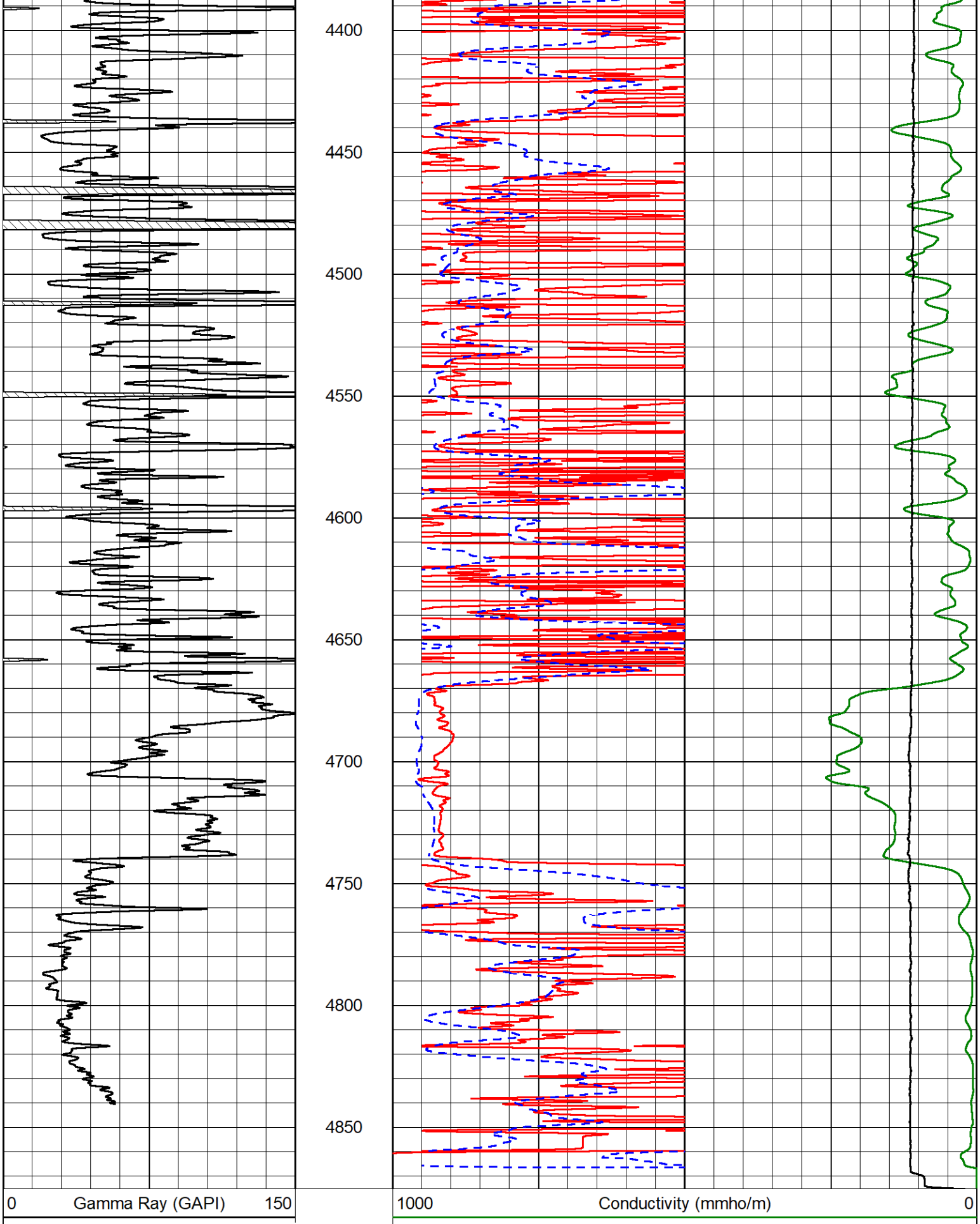
4300
4350


4400
4450
4500
4550
4600
4650
4700
4750
4800
4850
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

ANHYDRITE SECTION

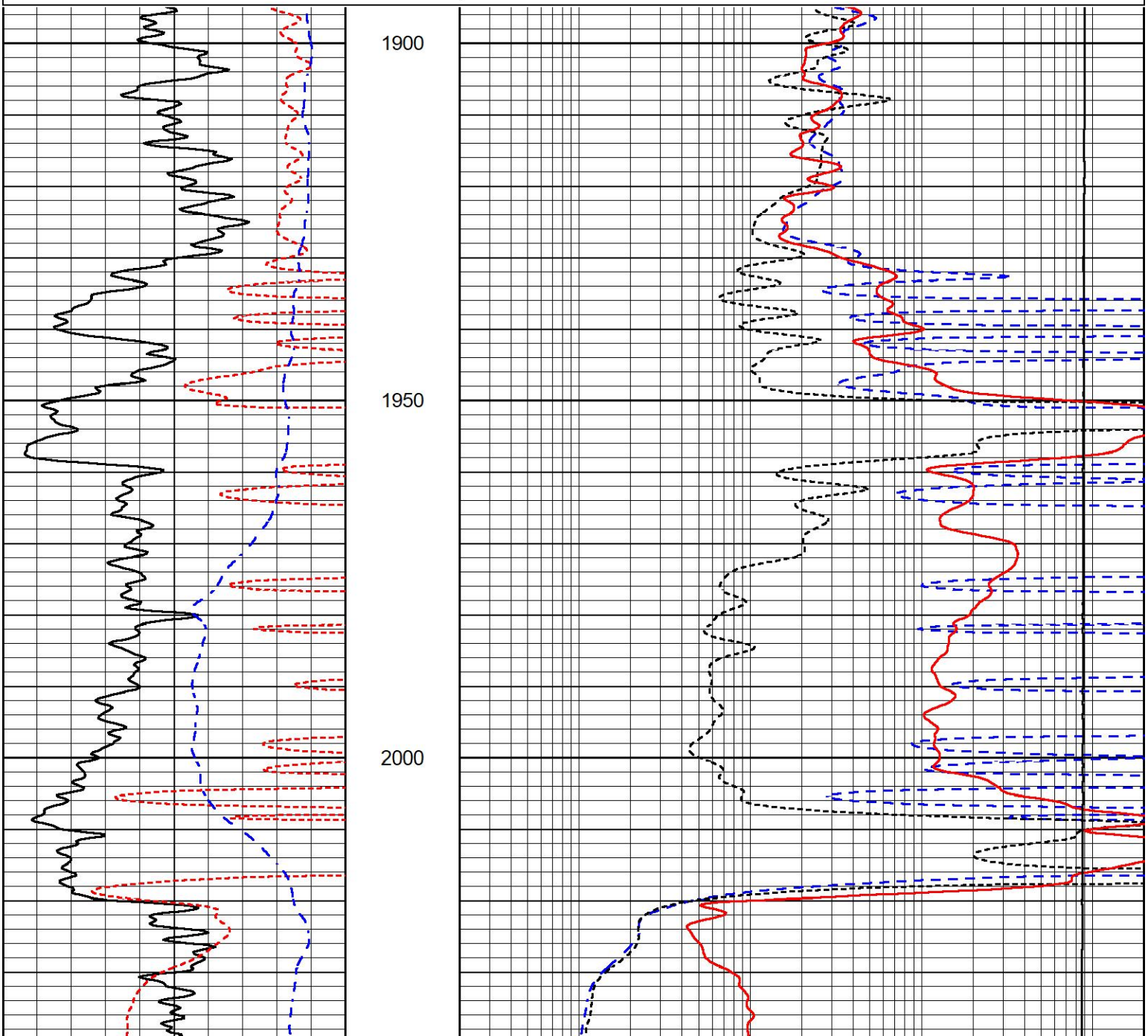
MAIN PASS

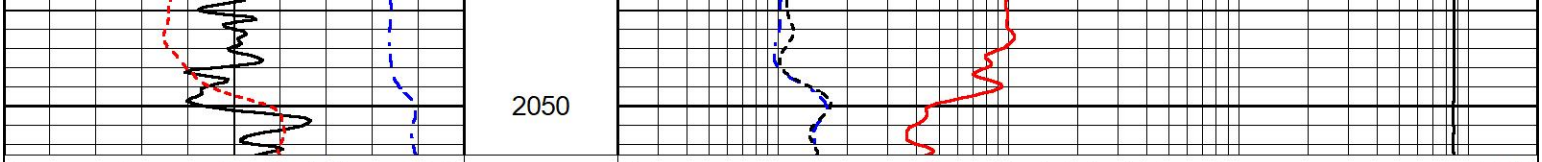
MIDWEST WIRELINE

Database File	lebsack_garden city #9-18.db
Dataset Pathname	Stack/pass3.4
Presentation Format	_dil
Dataset Creation	Fri Apr 01 03:45:26 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





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

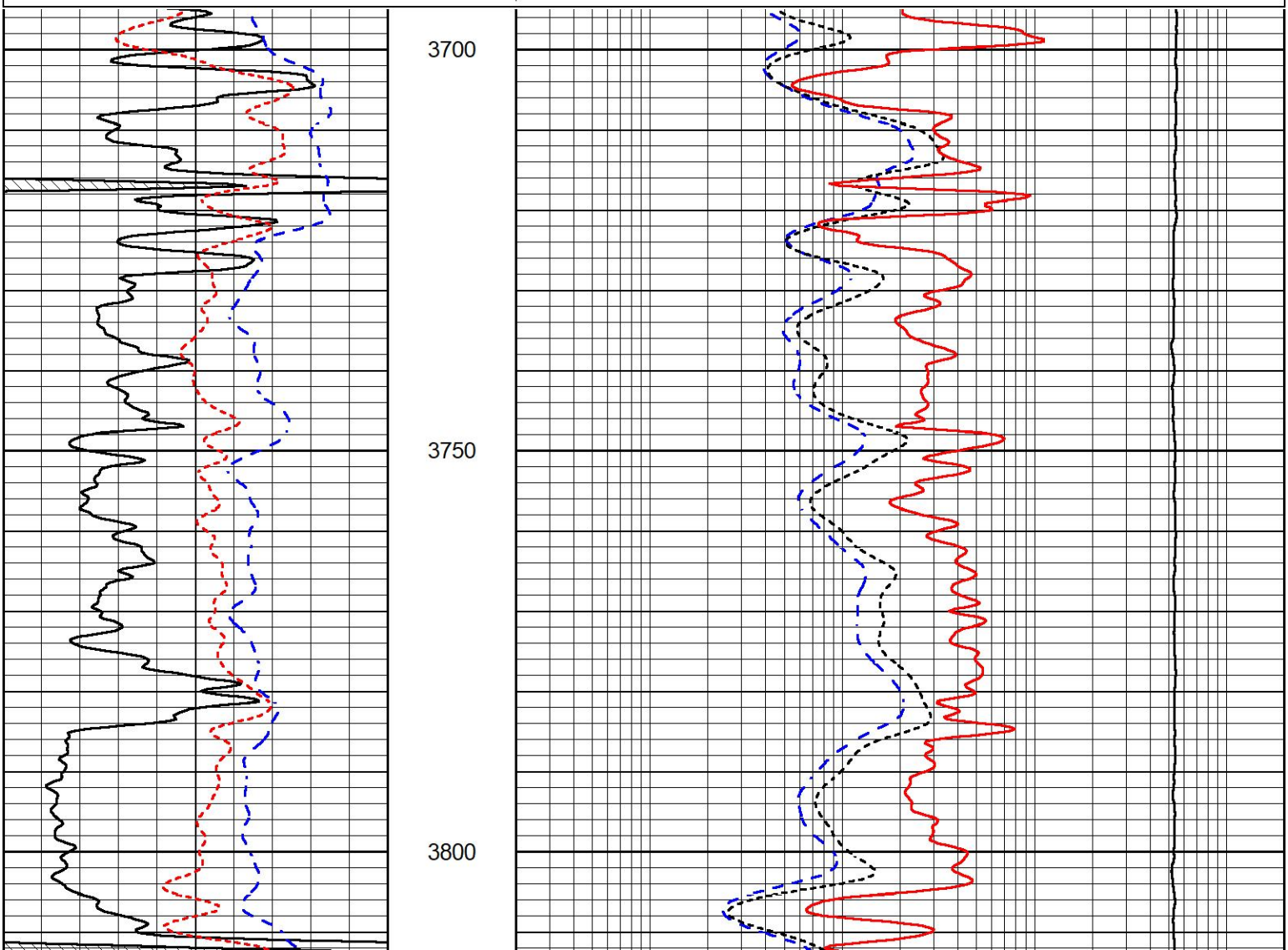
DETAIL SECTION

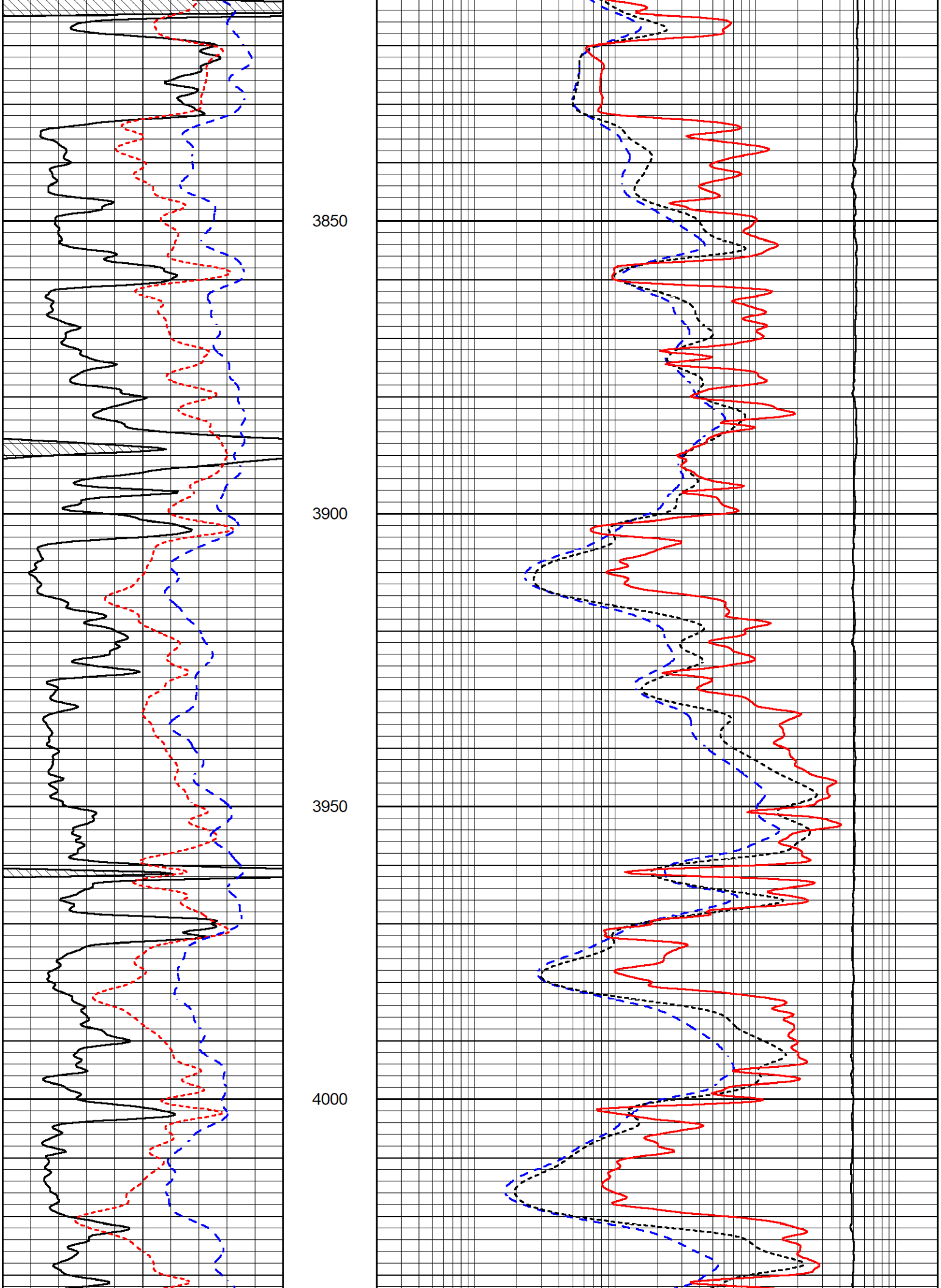
MAIN PASS

Database File	lebsack_garden city #9-18.db
Dataset Pathname	Stack/pass3.1
Presentation Format	_dil
Dataset Creation	Fri Apr 01 03:51:09 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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3900
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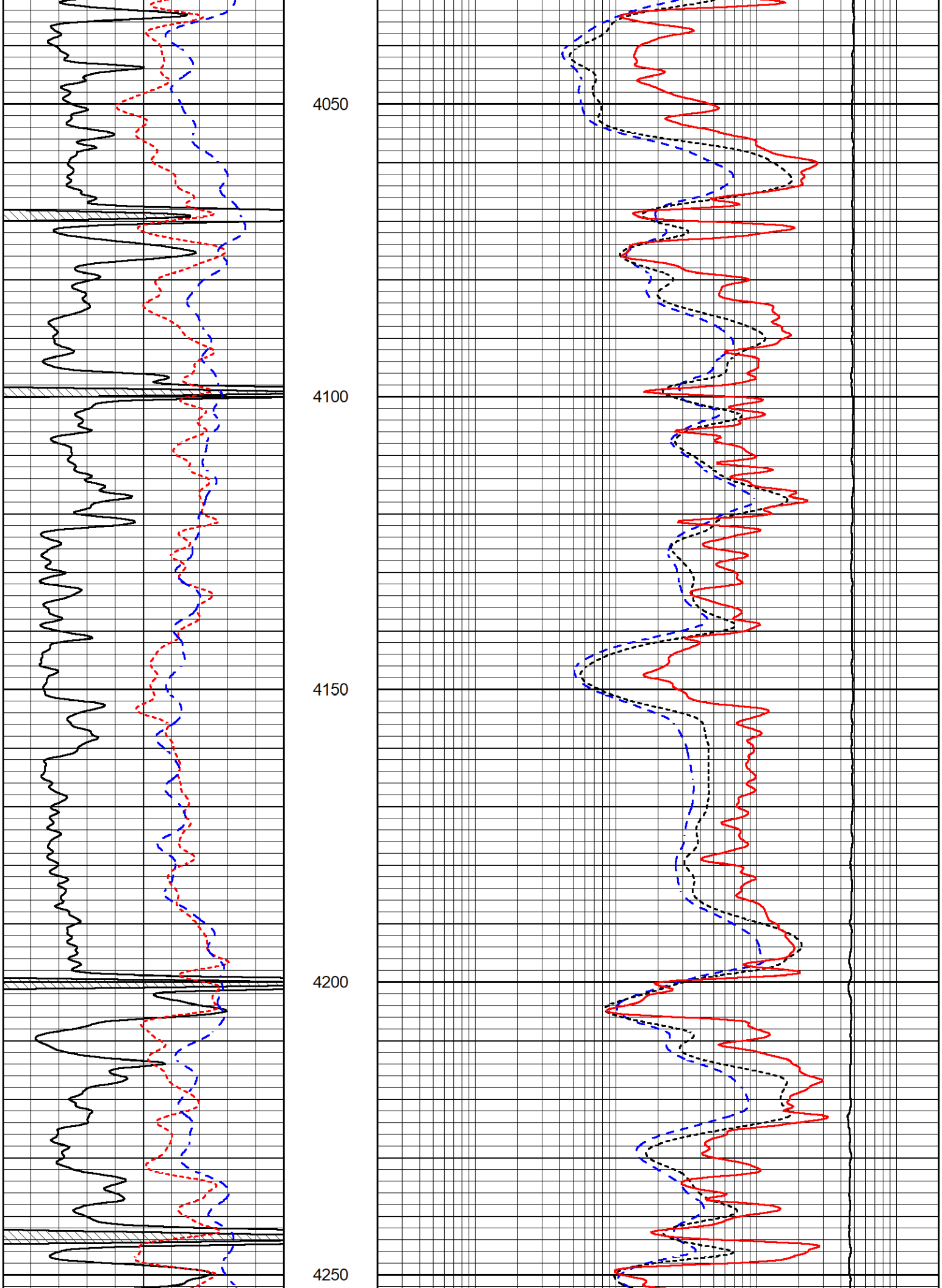
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4100
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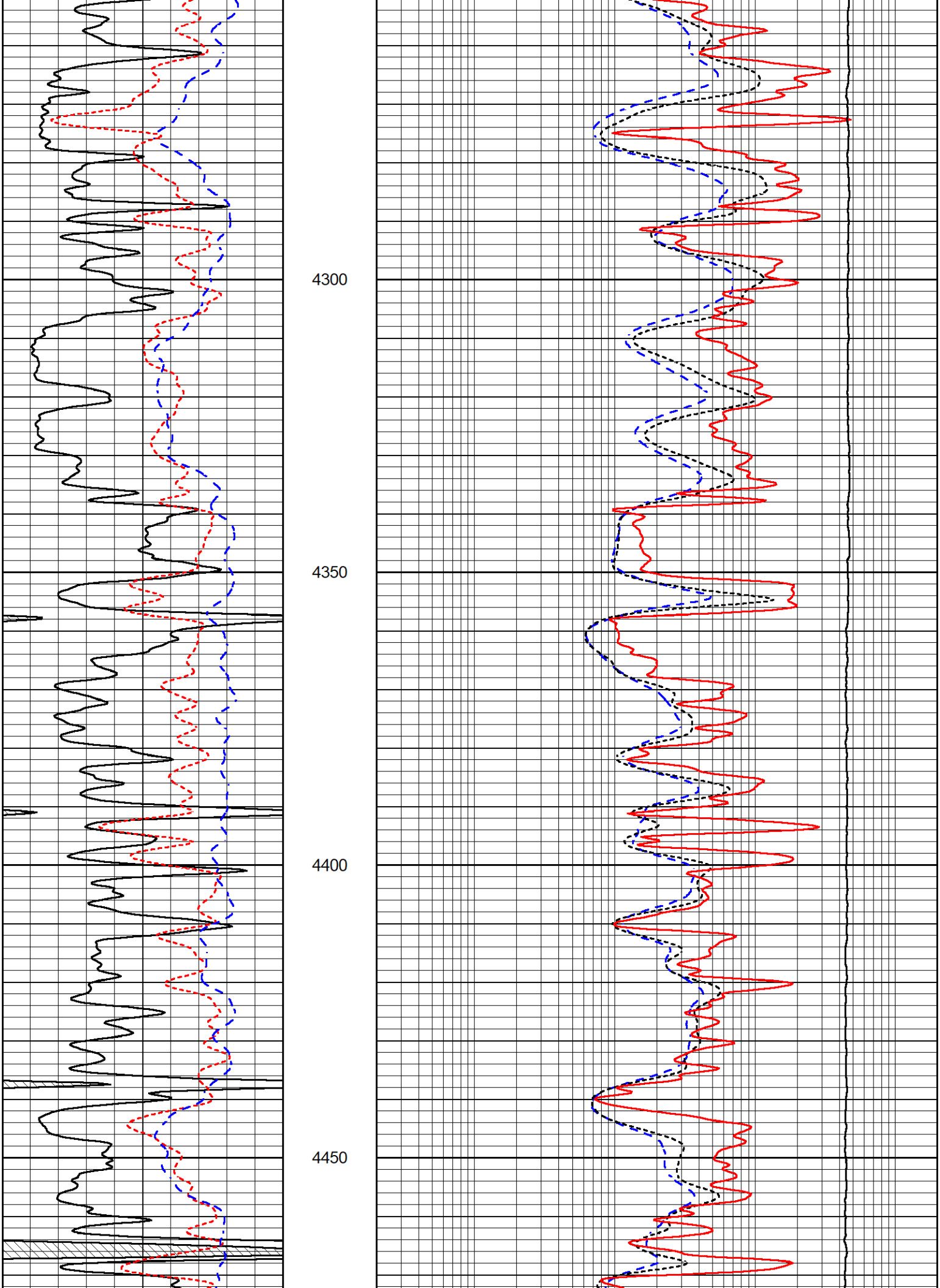
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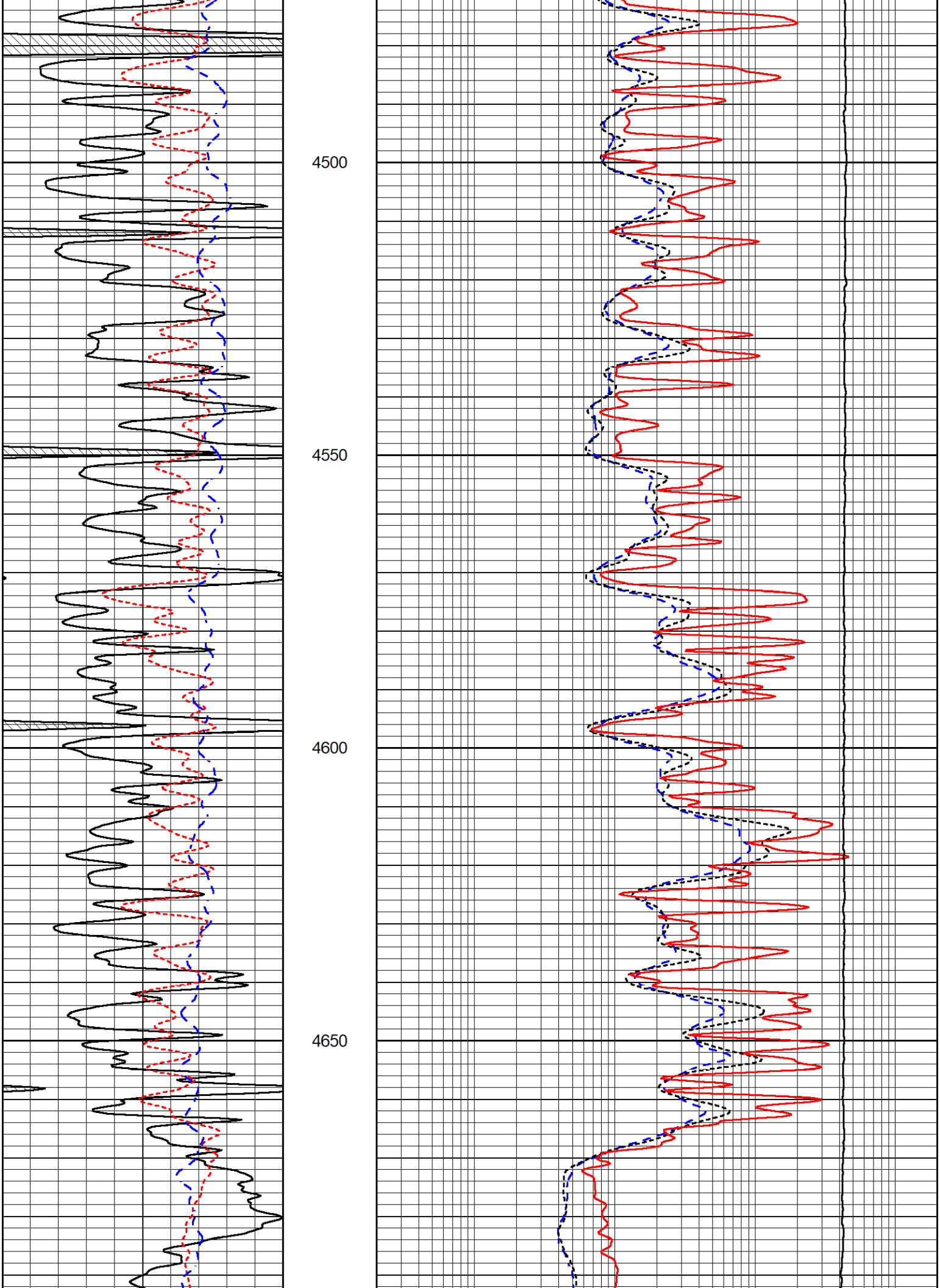
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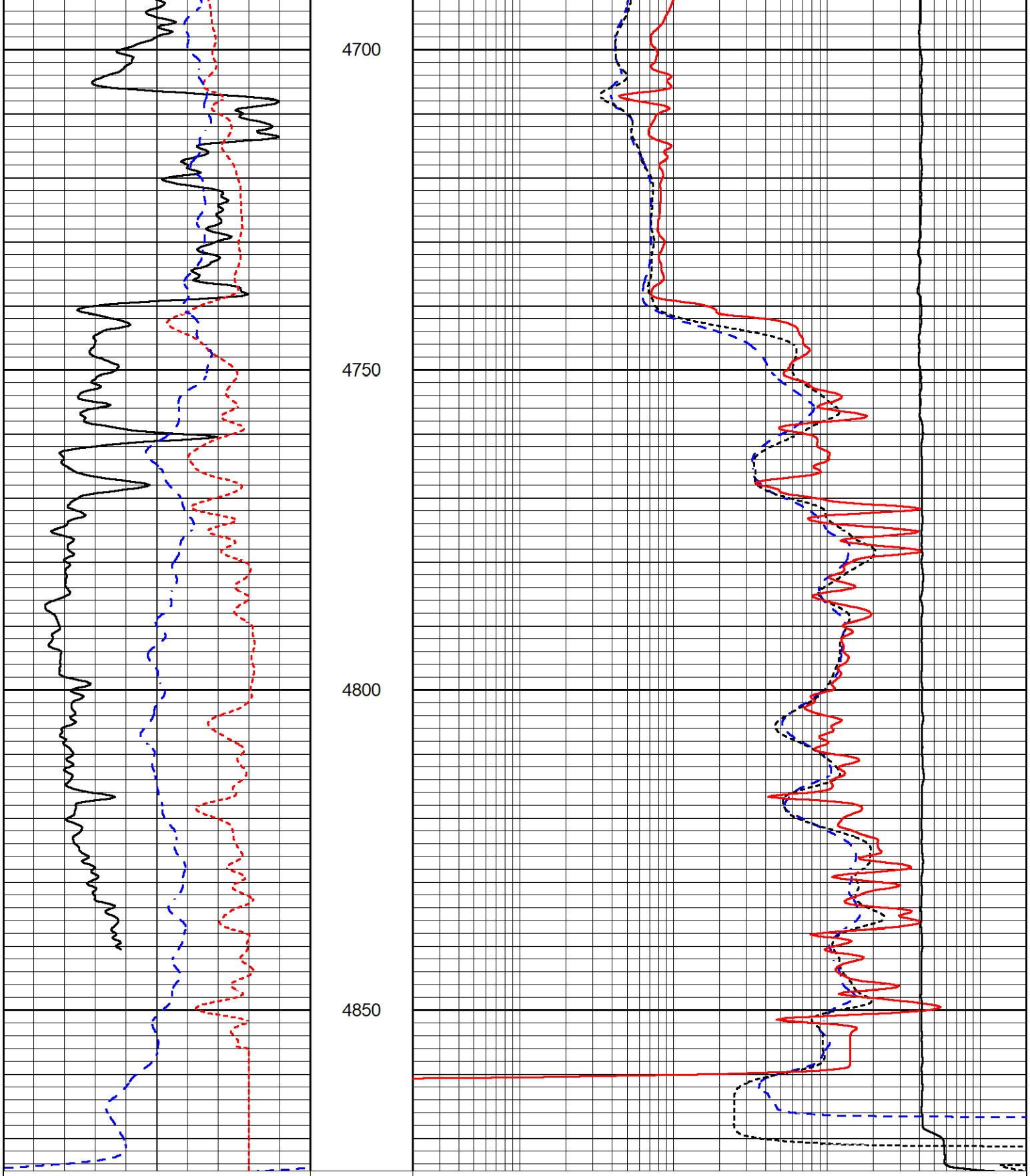


REPEAT SECTION

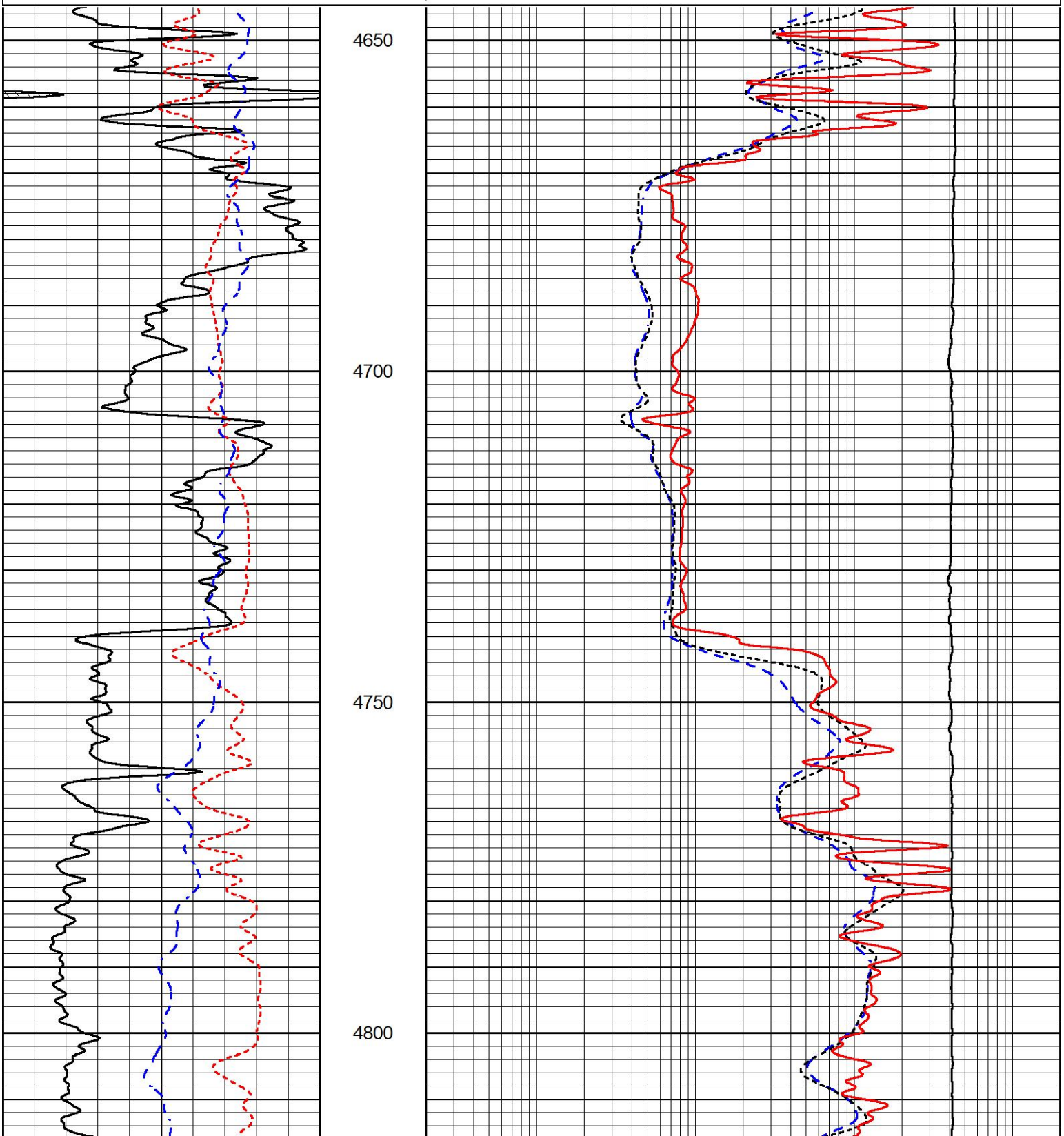
MIDWEST WIRELINE

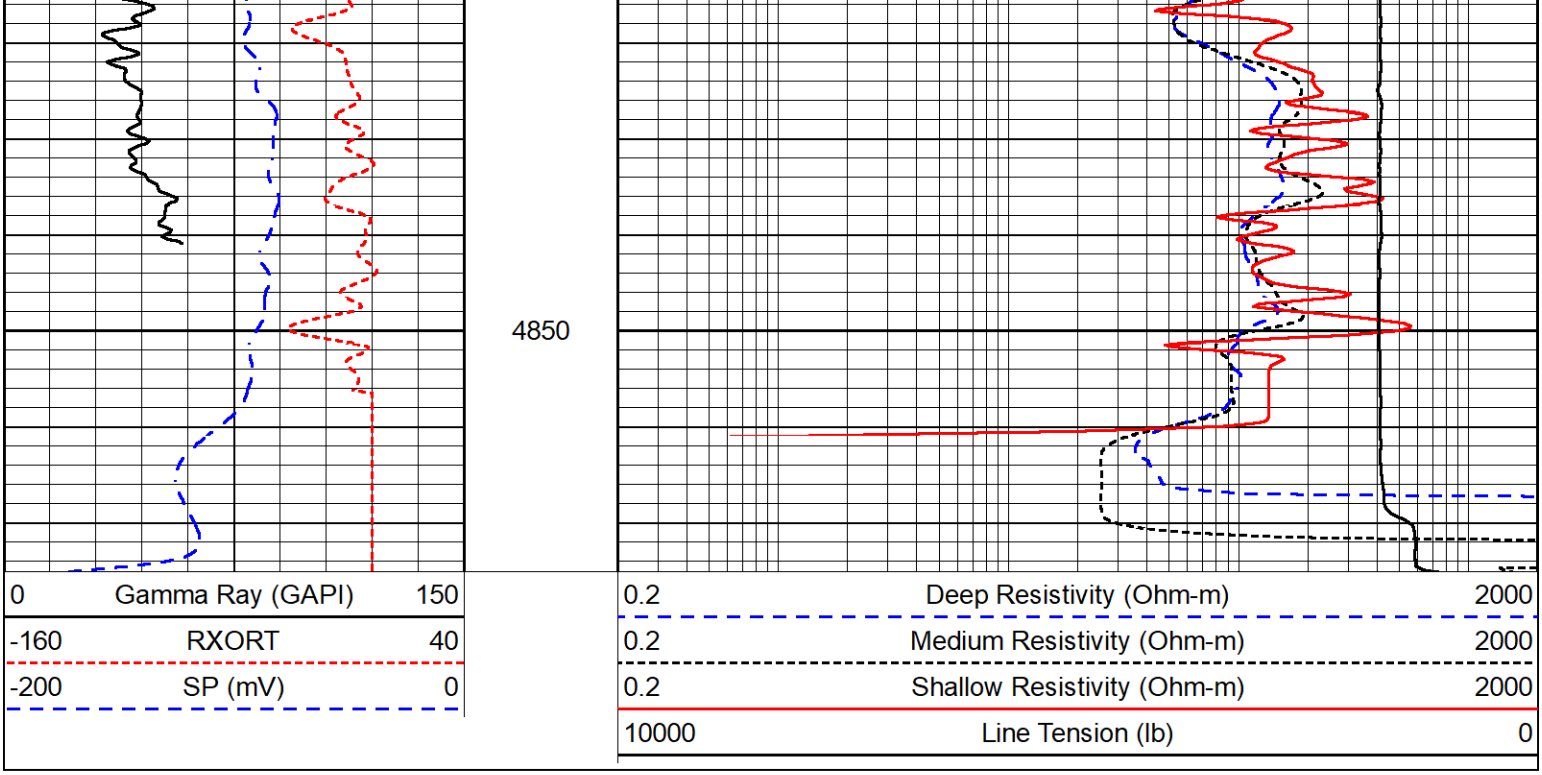
REPEAT PASS

Database File	lebsack_garden city #9-18.db
Dataset Pathname	Stack/pass2.1
Presentation Format	_dil
Dataset Creation	Fri Apr 01 02:59:40 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





Calibration Report

Database File	lebsack_garden city #9-18.db
Dataset Pathname	Stack/pass3.1
Dataset Creation	Fri Apr 01 03:51:09 2022

Dual Induction Calibration Report

Serial-Model:	502 HT-M&W
Surface Cal Performed:	Wed Feb 9 17:39:00 2022

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.454	-31.000
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.350	-10.000

Compensated Density Calibration Report

Serial-Model:	305-05-M&W
Source #:	20762B
Master Calibration Performed:	Mon Mar 28 23:57:02 2022

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	8862.47	9339.96	cps
Aluminum	2.610	g/cc	1556.73	5707.29	cps

Spine Angle = 74.19

Density/Spine Ratio = 0.473

	Size		Reading
Small Ring	4.00	in	1.75
Large Ring	14.00	in	1.38

Compensated Neutron Calibration Report

Serial-Model:	207-MW-M&W
Source #:	100046B
Master Calibration Performed:	Mon Nov 29 15:06:24 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:	101	
Tool Model:	M&W	
Performed:	Mon Jan 24 19:14:46 2022	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.5500	GAPI/cps

MIDWEST WIRELINE

Company	Lebsack Oil Production, Inc.
Well	Garden City #9-18
Field	Damme
County	Finney
State	Kansas