MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Ressler Well Service, Inc.
Well Teten B #19
Field Burrton
County Reno
State Kansas

Company Ressler Well Service, Inc.
Well Teten B #19
Field Burrton
County Reno State Kansas
Location: API # : 15-155-21793-00-00
990 FNL & 495 FEL
SEC 12 TWP 23S RGE 4W

Other Services: CNL/CDL

Permanent Datum: Ground Level — Elevation 1495
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing

Elevation: K.B. 1507, D.F., G.L. 1495

Date	12/18/2022		
Run Number	One		
Depth Driller	3485		
Depth Logger	3485		
Bottom Logged Interval	3484		
Top Log Interval	300		
Casing Driller	13.375 @ 314		
Casing Logger	316		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	1400		
Density / Viscosity	9.0 / 43		
pH / Fluid Loss	11.0 / 8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.70 @ 50		
Rmf @ Meas. Temp	0.53 @ 50		
Rmc @ Meas. Temp	0.95 @ 50		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	0.32 @ 111		
Operating Rig Time	2 Hours		
Max Rec. Temp. F	111		
Equipment Number	P-108		
Location	HAYS		
Recorded By	D. Schmidt		
Witnessed By	Larry Ressler		

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Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

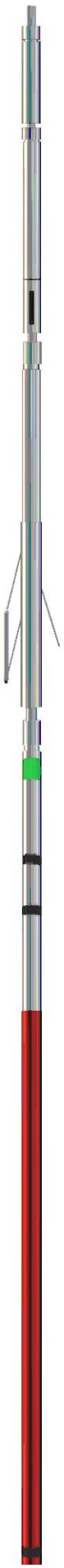
Burrton,
West to Woodberry, 2 3/4 North,
West into

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: D. Schmidt	Primary Witness: Larry Ressler
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 (103)	3.00	3.50	50.00
CNLSC	29.65					
CNSSC	28.90		CNT-M&W (210)	5.00	3.50	100.00
			CDL-M&W (303-03)	8.50	4.00	250.00
LSD	20.60					
DCAL	20.58					
SSD	20.10					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (505 HT)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: ressler_teten b 19.db: field/well/stack/pass3.11
Total length: 34.75 ft
Total weight: 620.00 lb
O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\ressler_teten b 19.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	111	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	0	0	220	50	Off	3485

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

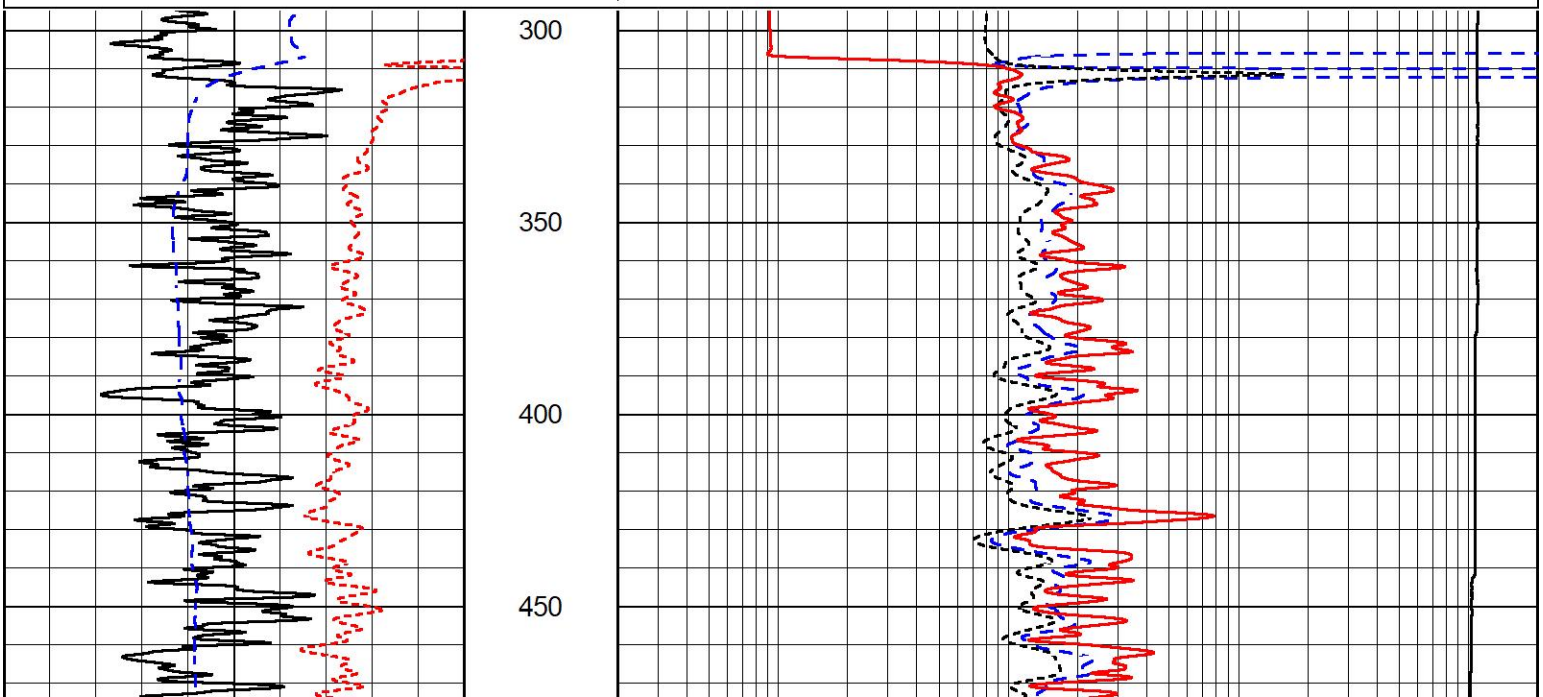
2" SCALE RESISTIVITY

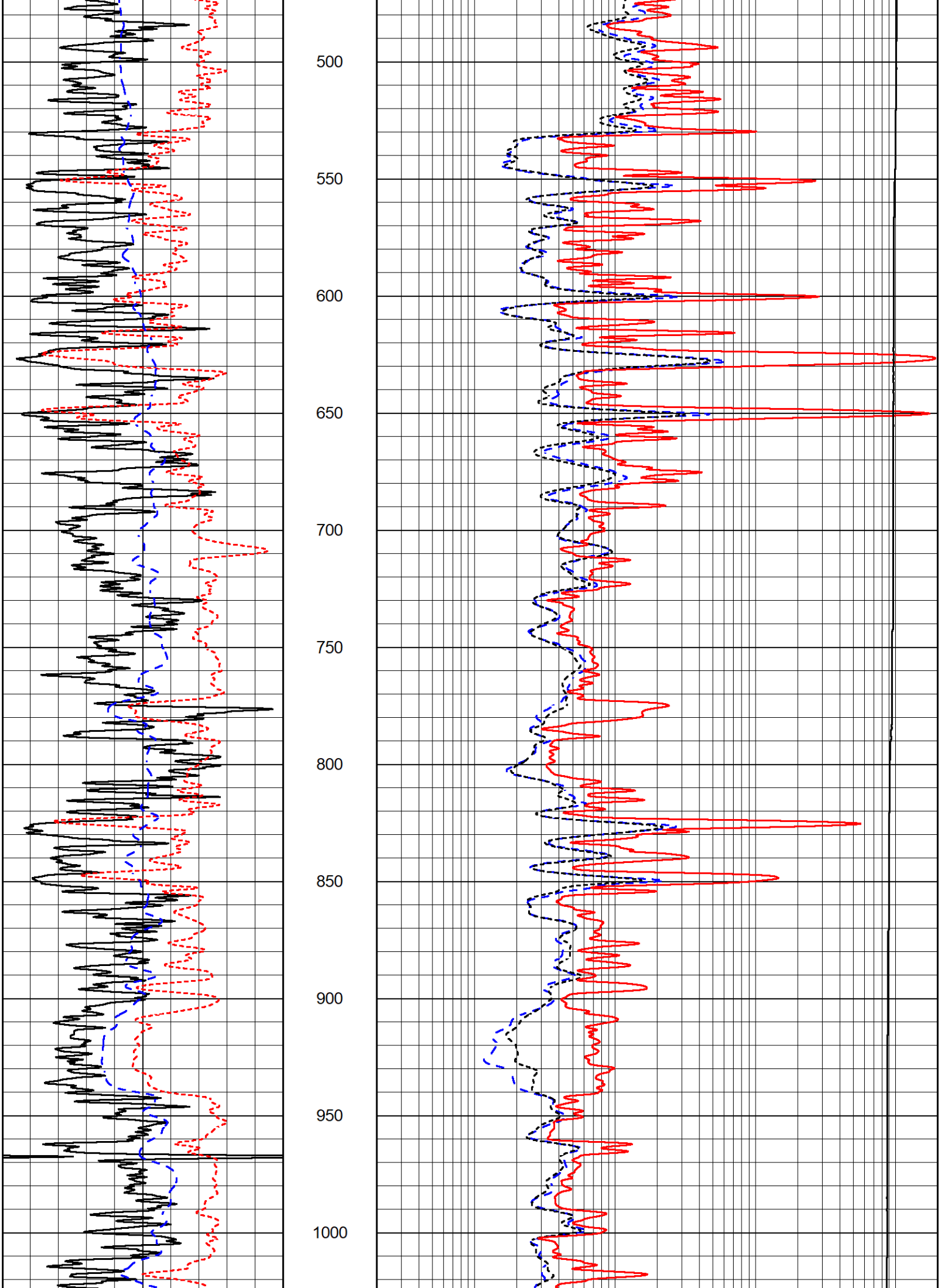
MAIN PASS

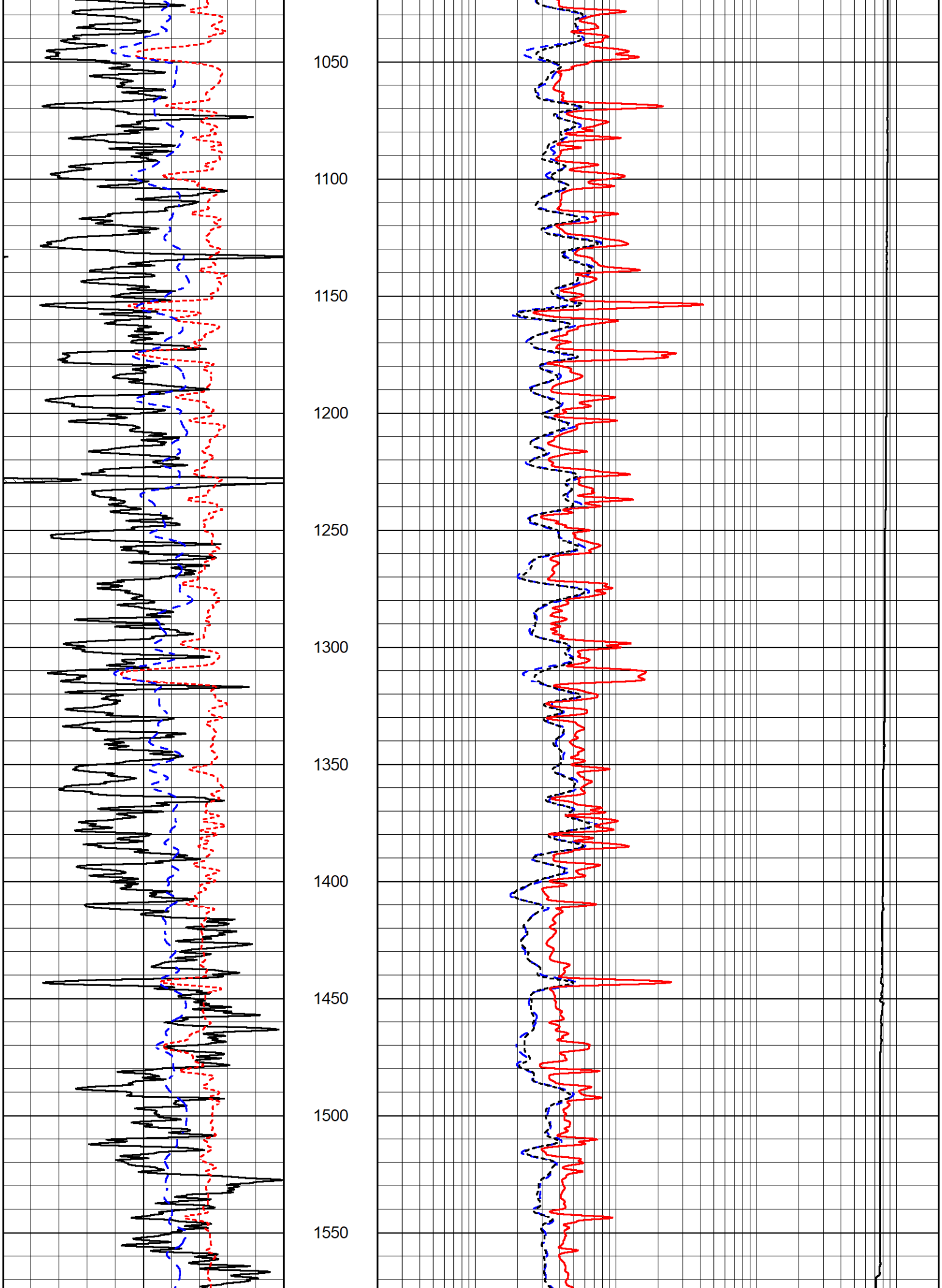
Database File	ressler_teten b 19.db
Dataset Pathname	stack/pass3.3
Presentation Format	_dil
Dataset Creation	Sun Dec 18 13:49:46 2022
Charted by	Depth in Feet scaled 1:600

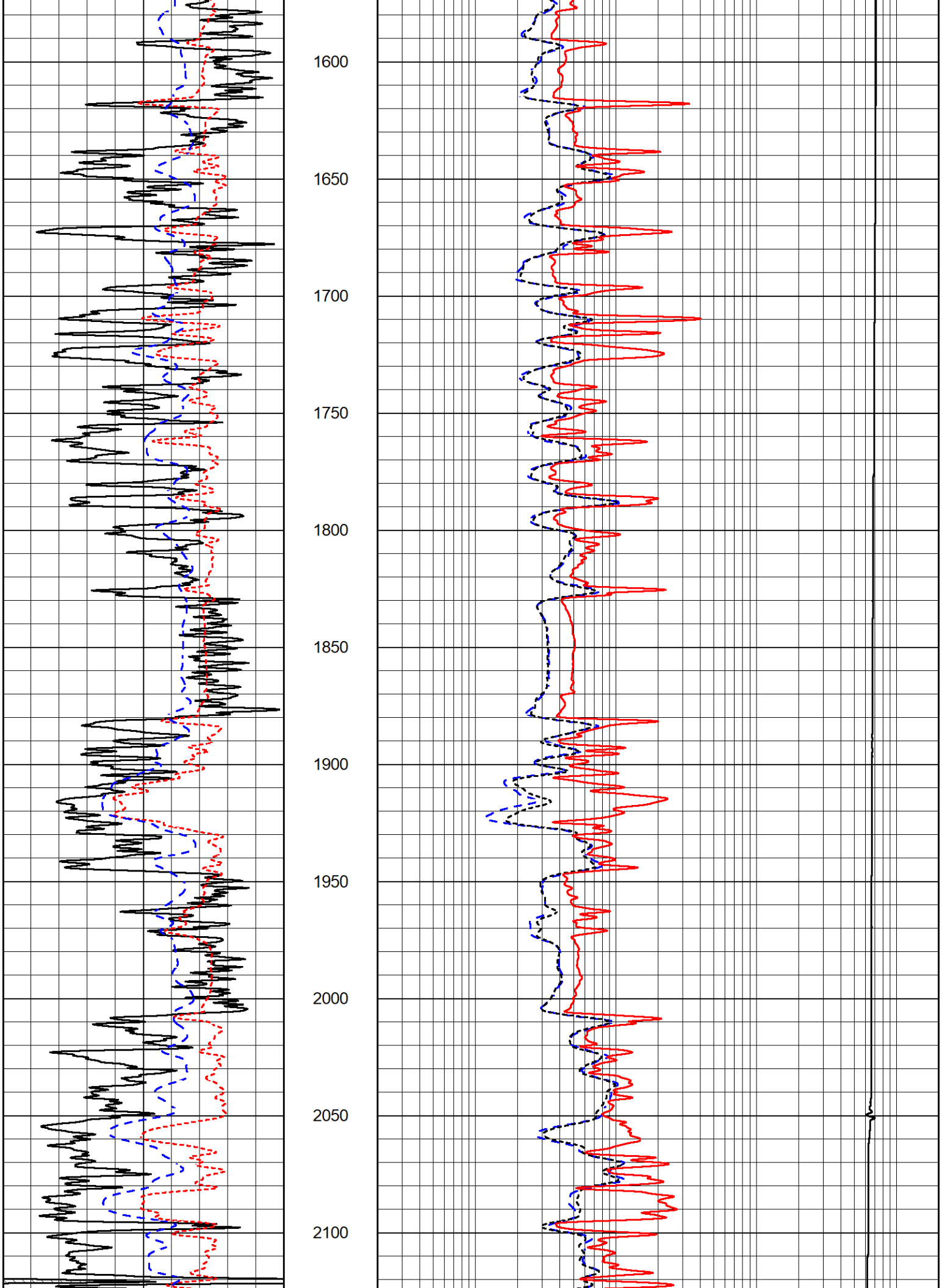
0	Gamma Ray (GAPI)	150
-160	RXORT	40
-200	SP (mV)	0

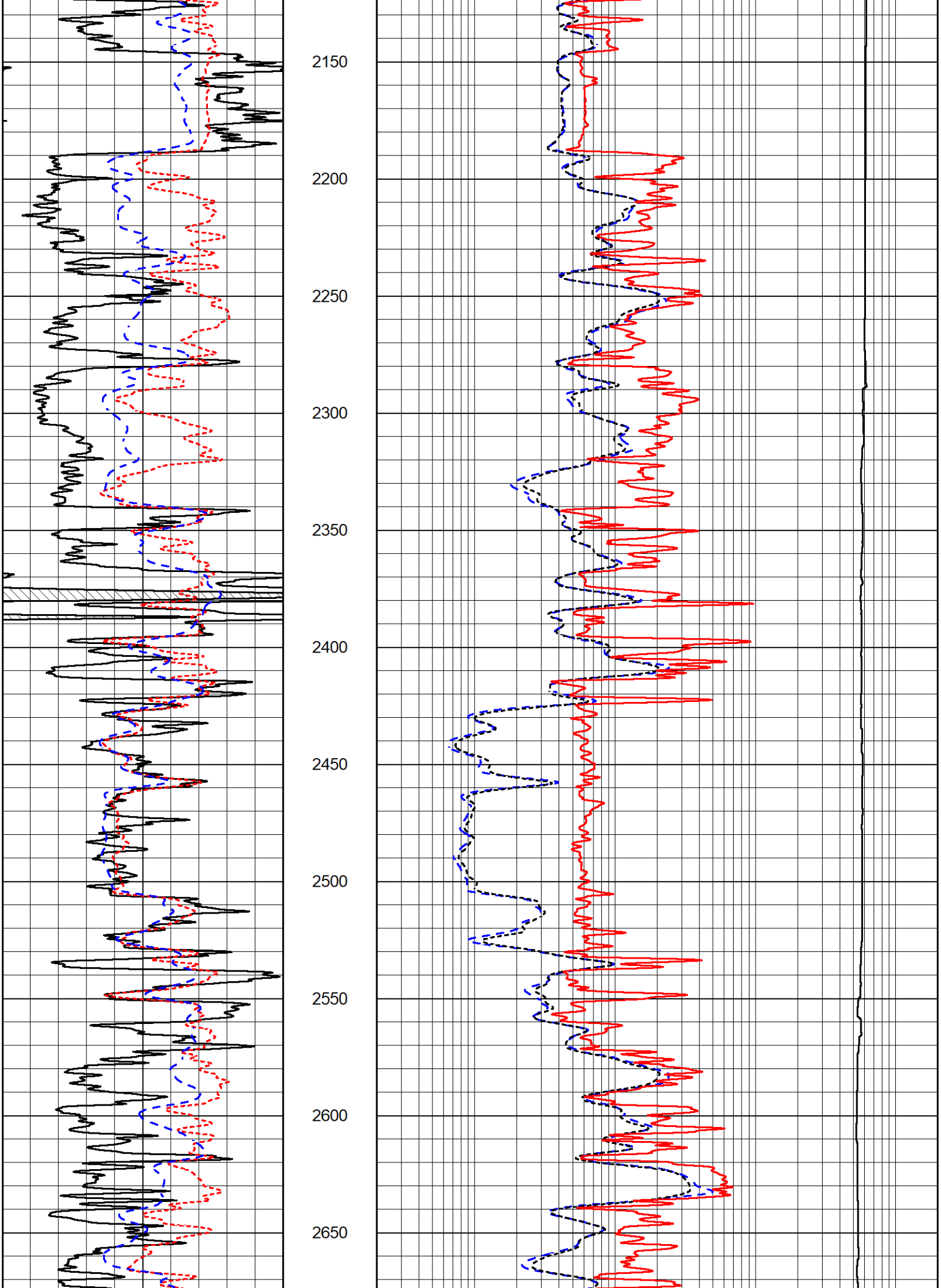
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

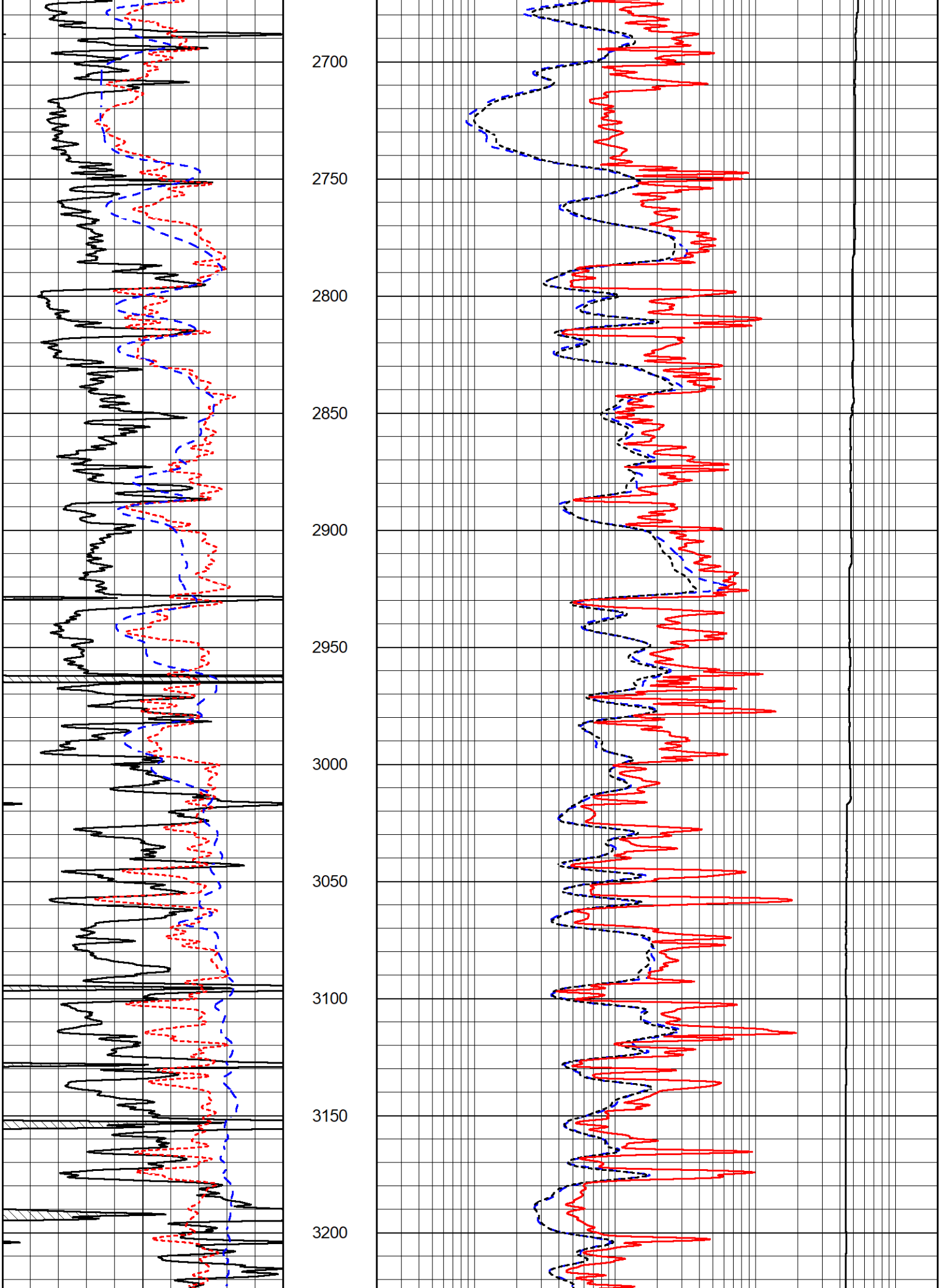



500
550
600
650
700
750
800
850
900
950
1000


1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550


1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100


2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650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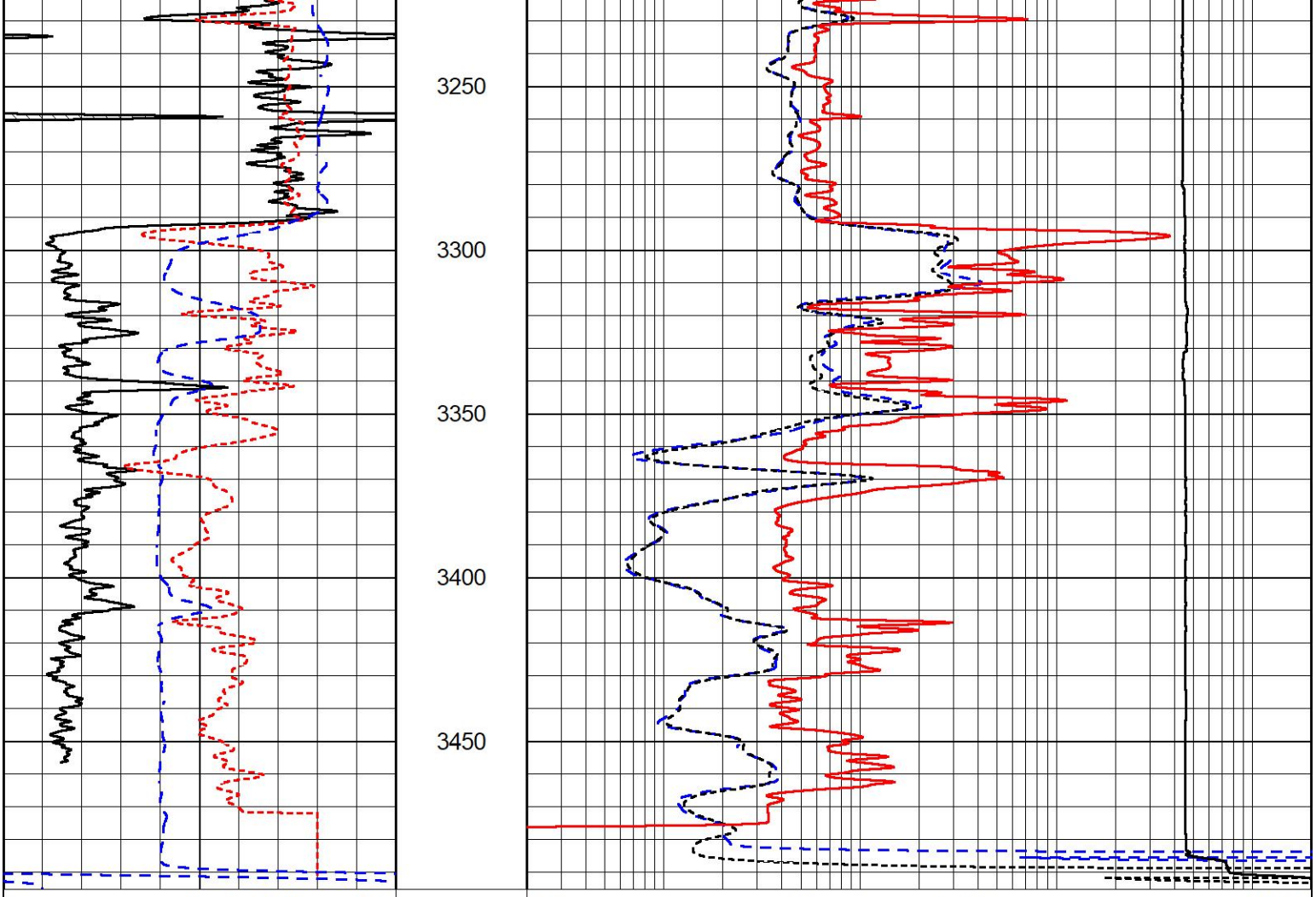
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200



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0.2	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

MIDWEST WIRELINE

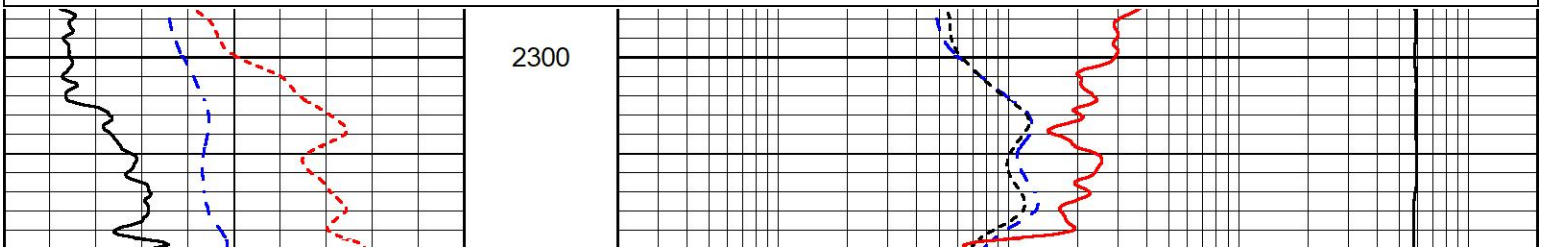
DETAIL SECTION

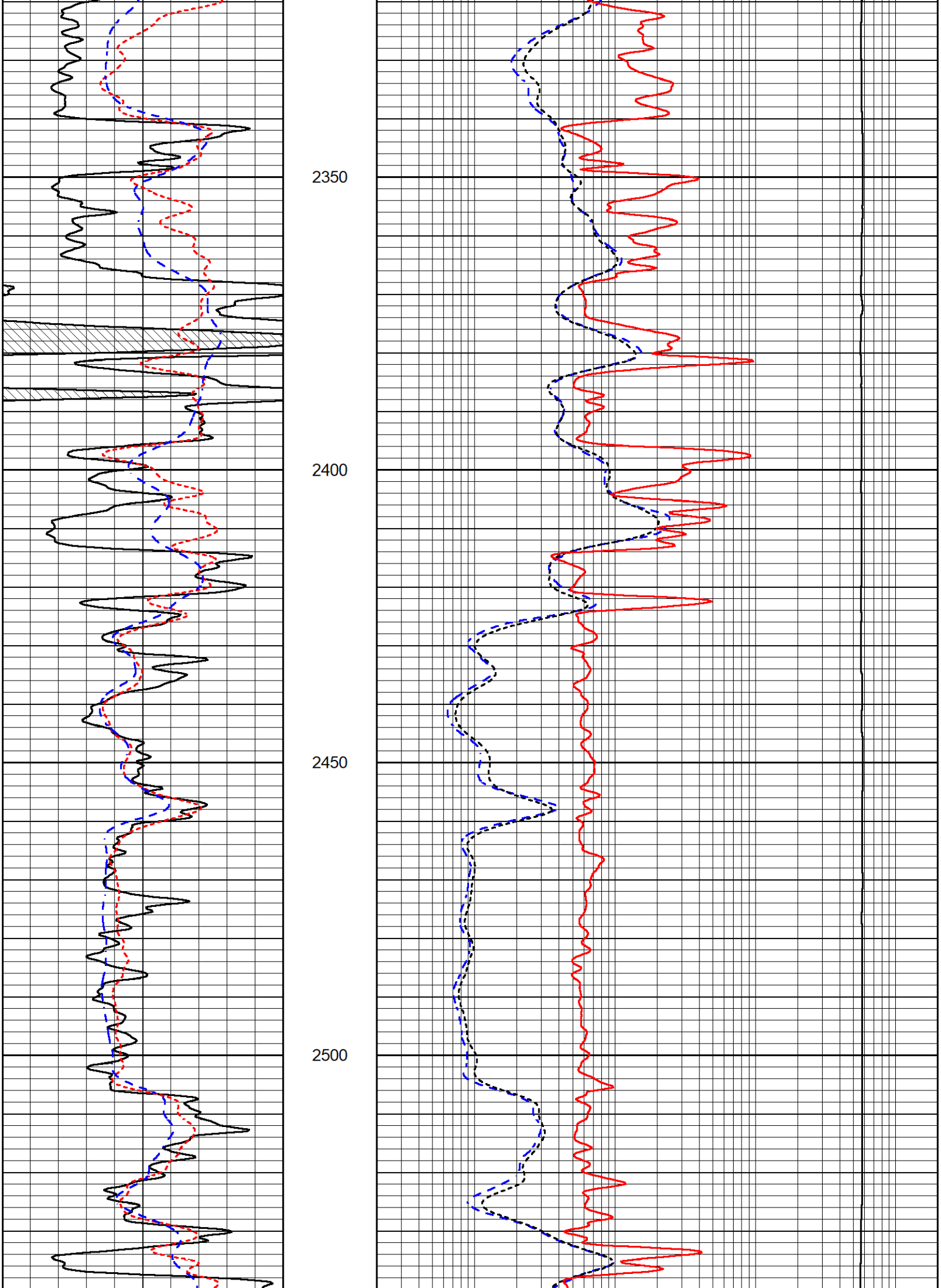
MAIN PASS

Database File	ressler_teten b 19.db
Dataset Pathname	stack/pass3.1
Presentation Format	_dil
Dataset Creation	Sun Dec 18 13:49:36 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	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0

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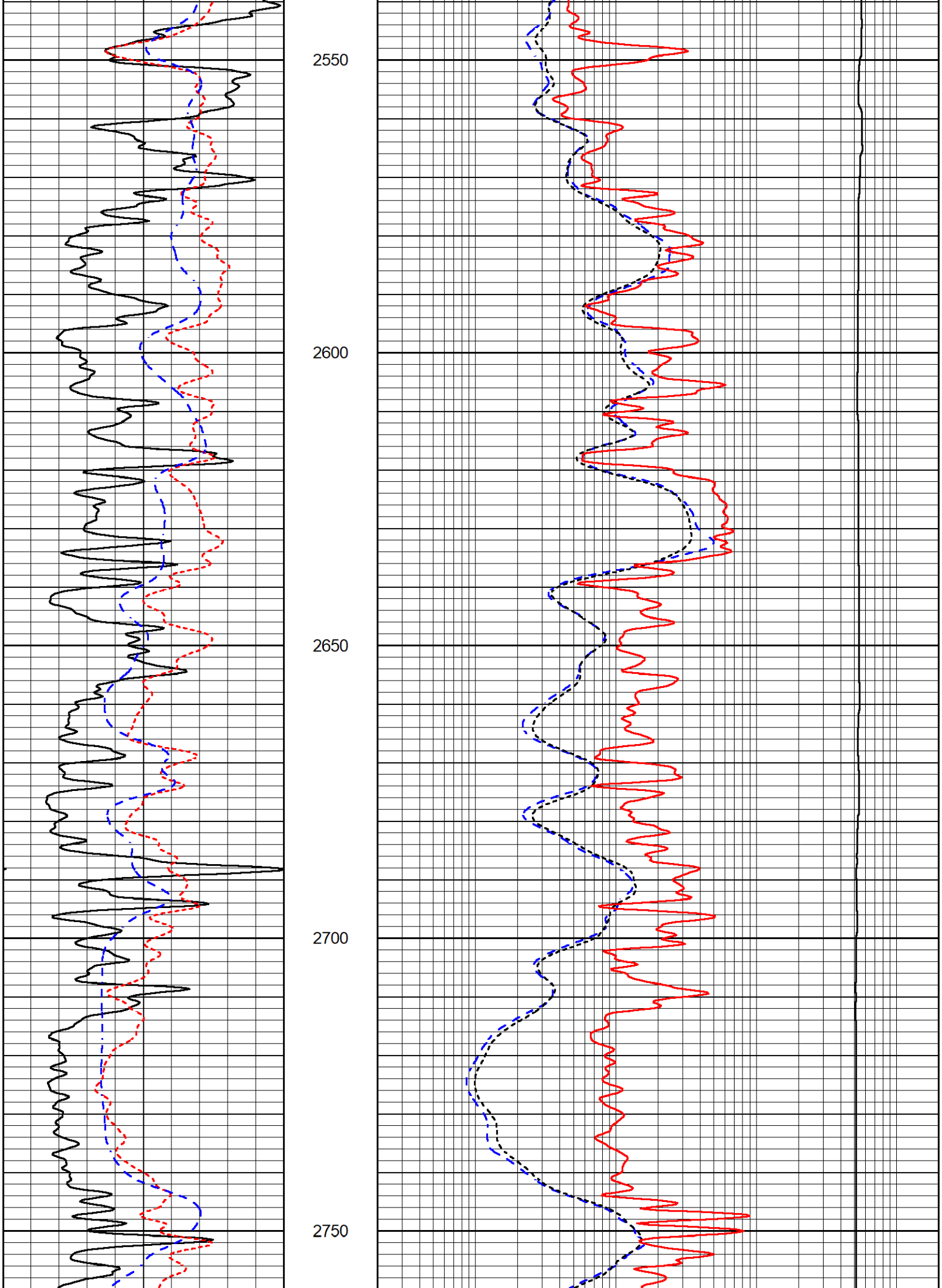
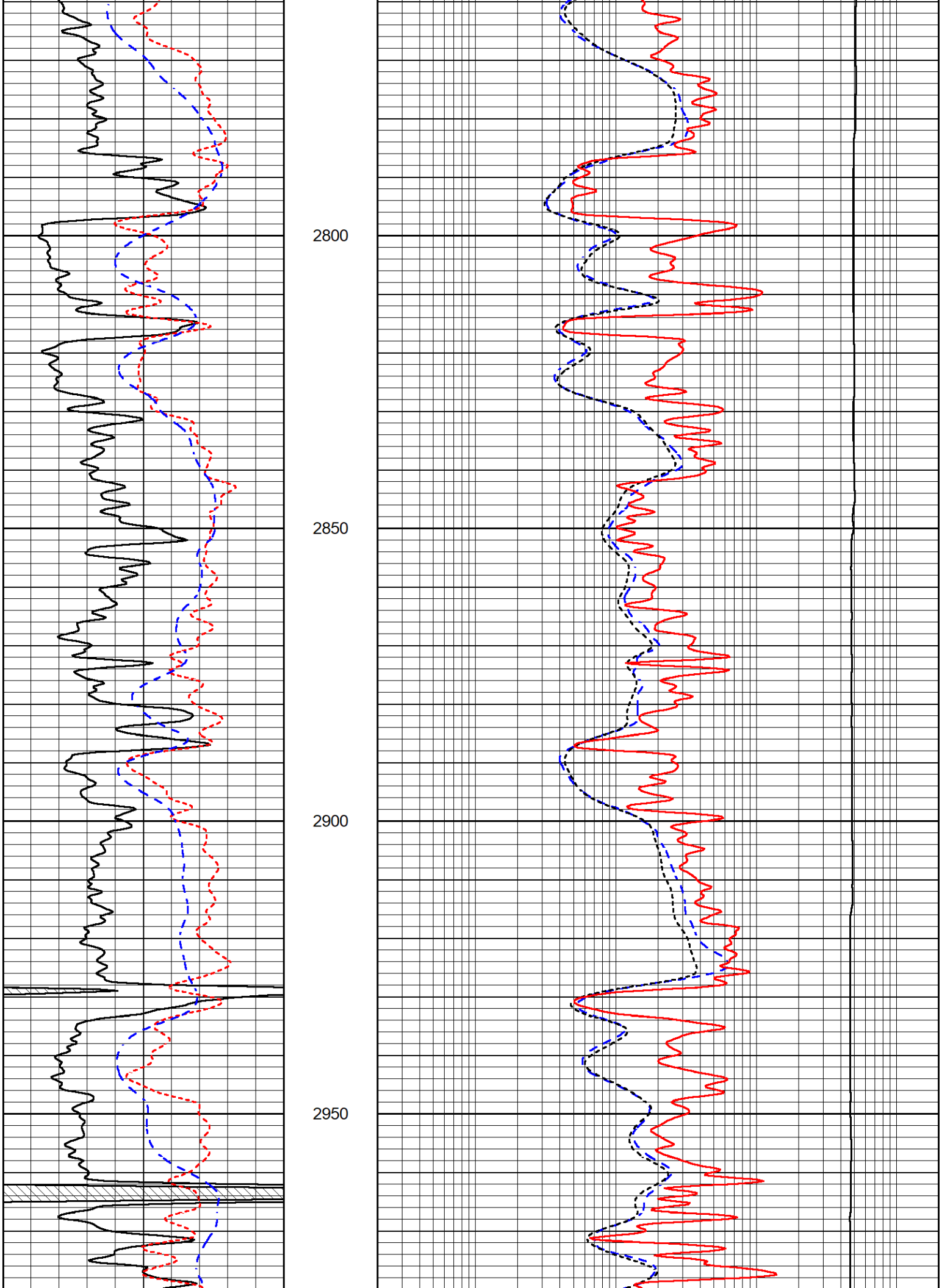
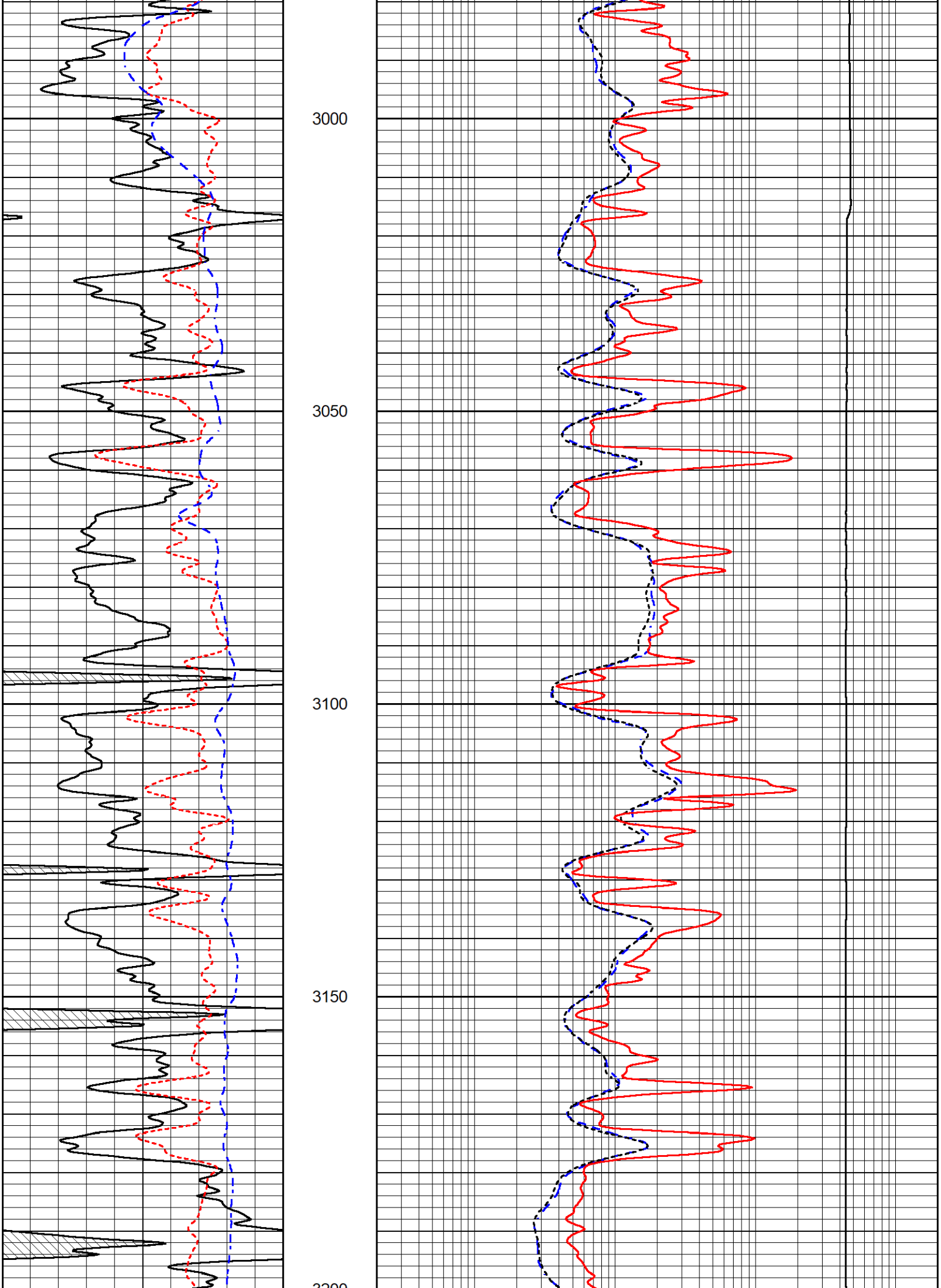
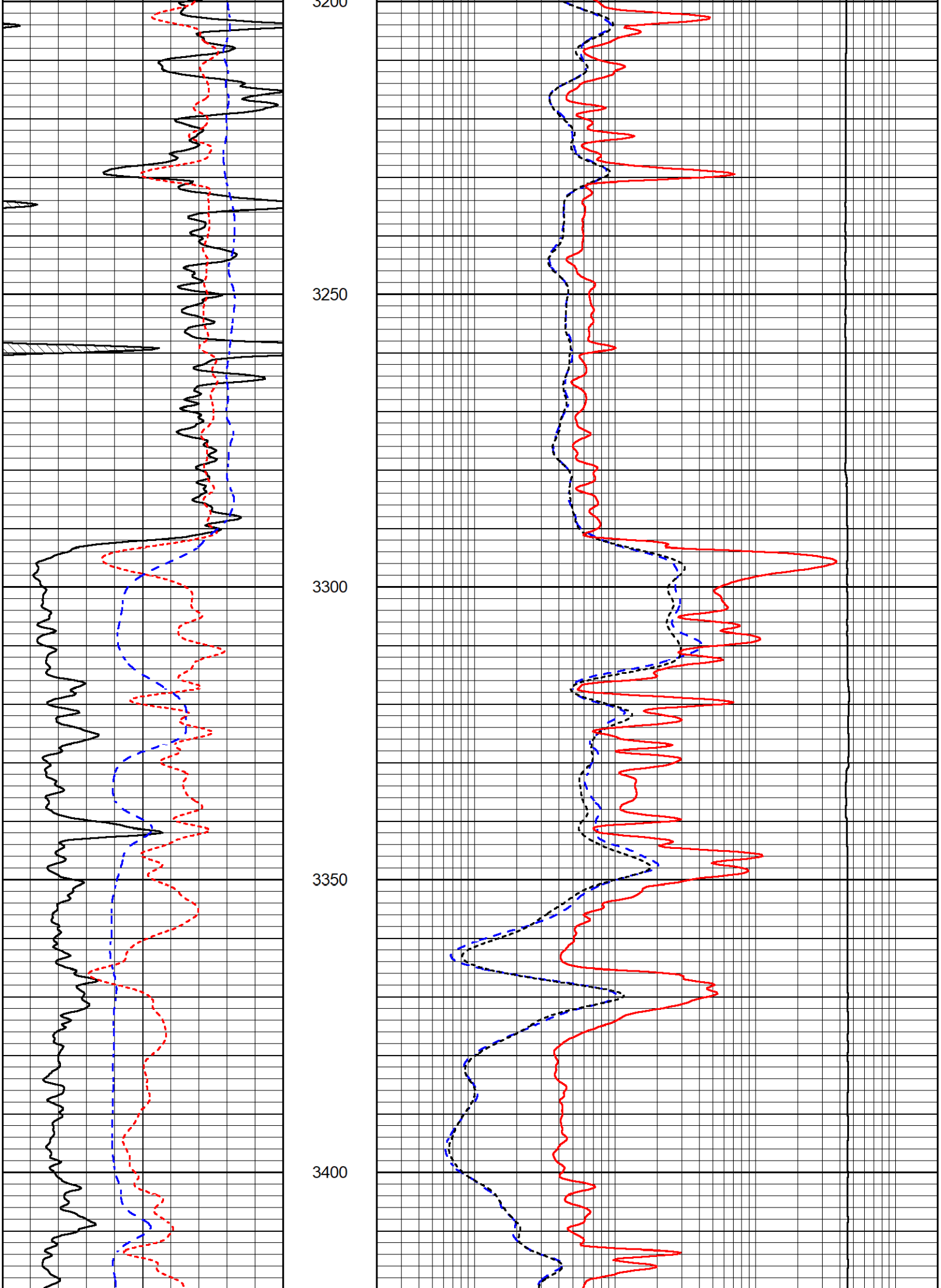
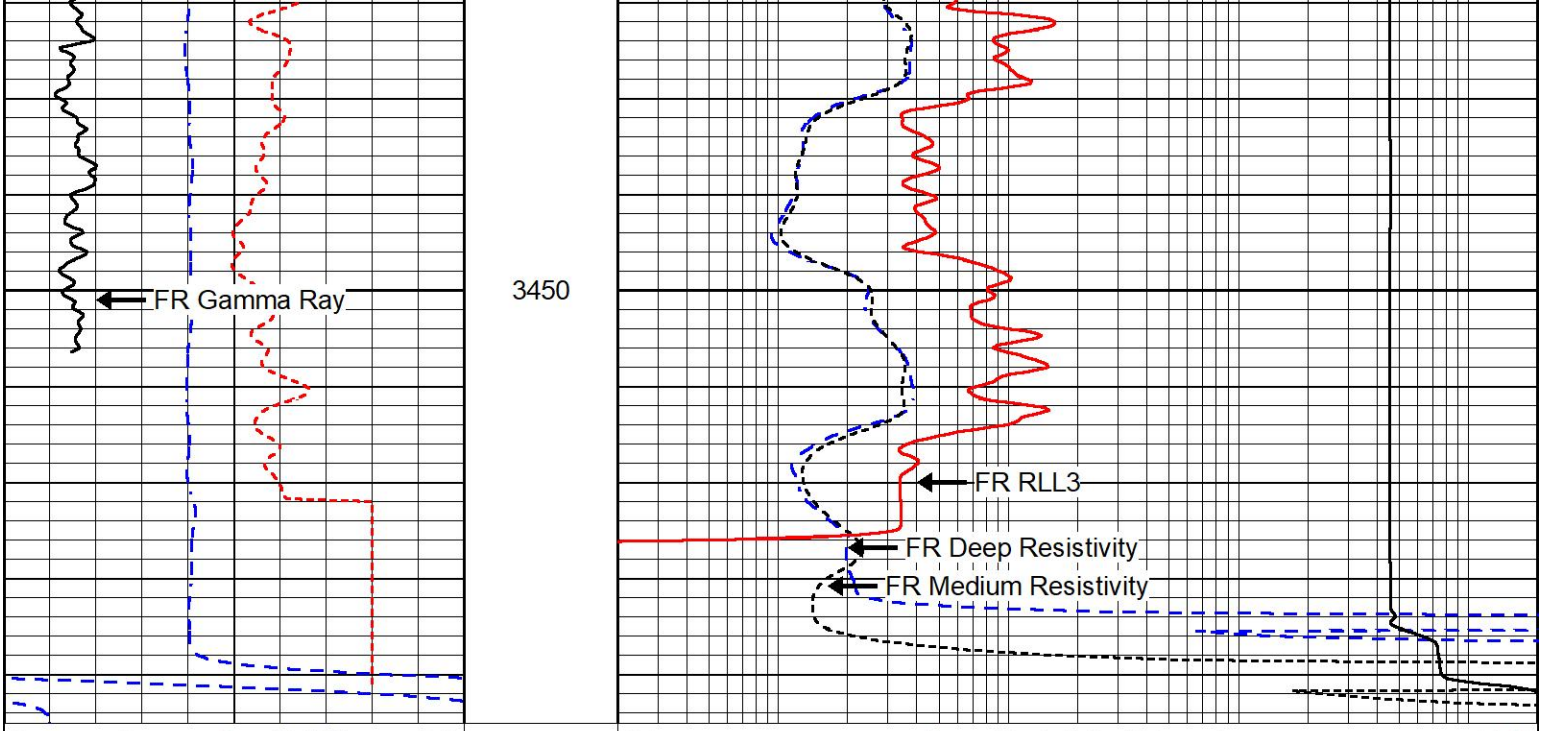
2400
2450
2500


2550
2600
2650
2700
2750


2800
2850
2900
2950


3000
3050
3100
3150


3200
3250
3300
3350
3400



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-160	RXORT	40
-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

MIDWEST WIRELINE

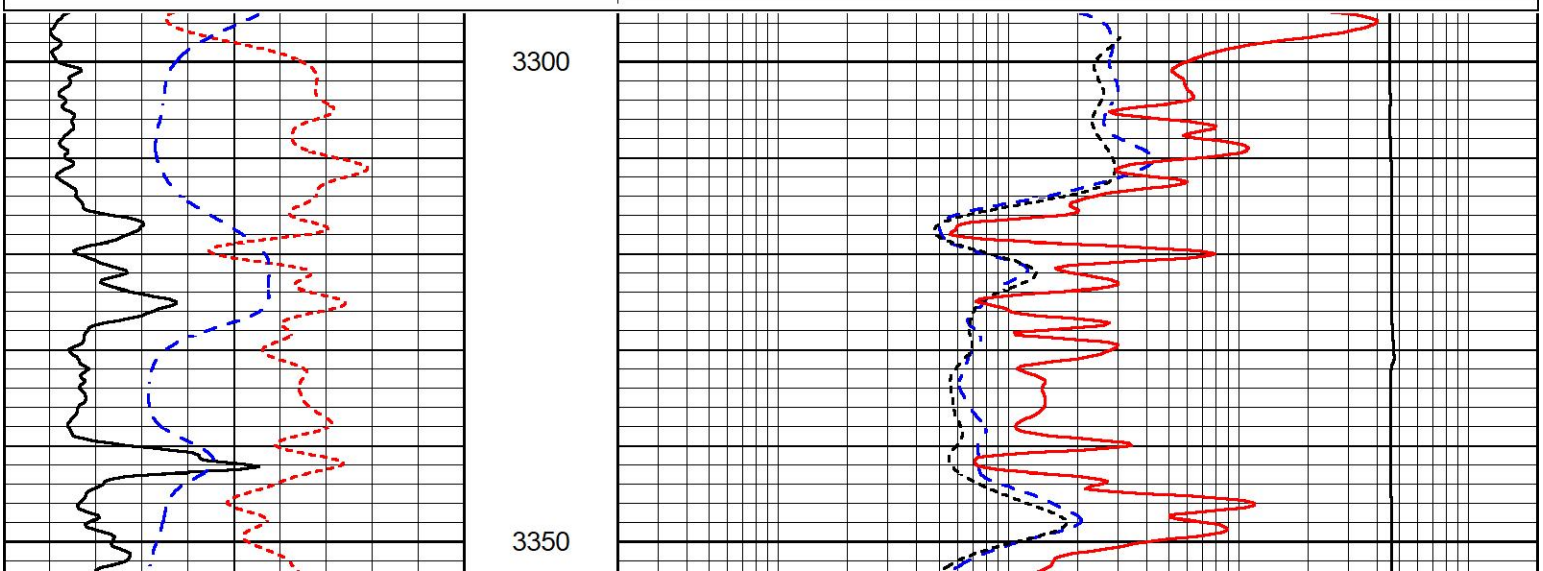
REPEAT SECTION

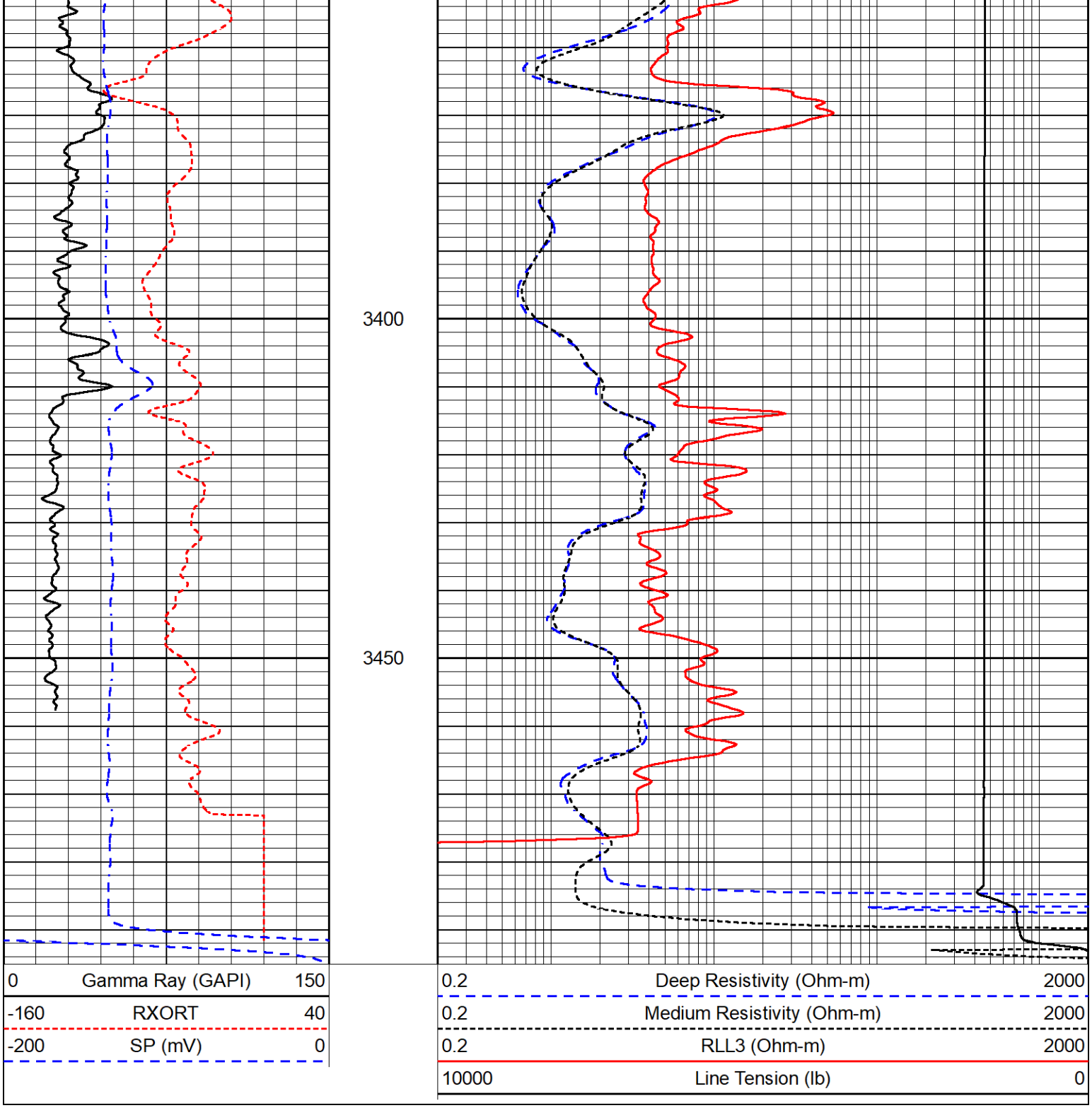
REPEAT PASS

Database File	ressler_teten b 19.db
Dataset Pathname	stack/pass2.10
Presentation Format	_dil
Dataset Creation	Sun Dec 18 13:17:08 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	RLL3 (Ohm-m)	2000
10000	Line Tension (lb)	0





Calibration Report

Database File	ressler_teten b 19.db
Dataset Pathname	stack/pass3.11
Dataset Creation	Sun Dec 18 13:16:04 2022

Dual Induction Calibration Report

Serial-Model:	505 HT-M&W
Surface Cal Performed:	Mon Nov 14 06:05:40 2022

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	167.000	835.000	0.000	255.800	mmho/m	0.480	-50.000

Medium	1348.000	1348.000	0.000	255.800	mmho/m	0.390	-42.000

Compensated Density Calibration Report

Serial-Model:	303-03-M&W
Source #:	21170B
Master Calibration Performed:	Mon Oct 17 15:14:24 2022

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3841.78	5151.73	cps
Aluminum	2.640	g/cc	700.98	3068.49	cps

Spine Angle = 73.06 Density/Spine Ratio = 0.498

	Size		Reading
Small Ring	4.00	in	1.17
Large Ring	14.00	in	1.04

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

MIDWEST WIRELINE

Company	Ressler Well Service, Inc.
Well	Teten B #19
Field	Burrton
County	Reno
State	Kansas