MIDWEST WIRELINE

DUAL INDUCTION LOG

Company Darrah Oil Company LLC
Well Keller 25C #1
Field Pritchard
County Barton State Kansas

Location: API # : 15-009-26324-00-00
1646 FSL & 925 FWL
SEC 25 TWP 20S RGE 14W

Other Services
CNL/CDL
MEL/BHCS

Permanent Datum Ground Level Elevation 1896
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Elevation
K.B. 1906
D.F.
G.L. 1896

Date	1/18/2022		
Run Number	One		
Depth Driller	3556		
Depth Logger	3550		
Bottom Logged Interval	3549		
Top Log Interval	250		
Casing Driller	8.625 @ 293		
Casing Logger	290		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL			
Density / Viscosity			
pH / Fluid Loss			
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.55 @ 76		
Rmf @ Meas. Temp	.41 @ 76		
Rmc @ Meas. Temp	.74 @ 76		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	.37 @ 112		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	112		
Equipment Number	P-108		
Location	HAYS		
Recorded By	J. Henrickson		
Witnessed By	Saman Sharifaie		

<<< Fold Here >>>

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Great Bend Kansas
5 South, East to 30 Rd, 1/2 South,
East 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: J. Henrickson	Primary Witness: Saman Sharifaie
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

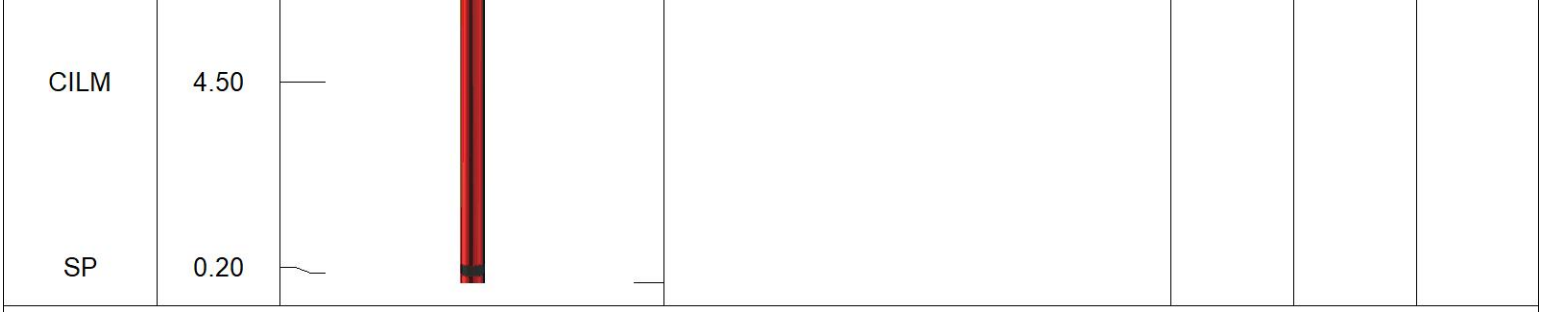
DatabaseC:\ProgramData\Warrior\Data\darrah_keller_25c_1.db
Dataset field/well/stackml/pass4.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	114	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	380	55	Off	3350

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: darrah_keller_25c_1.db: field/well/stackml/pass5.1
Total length: 42.33 ft
Total weight: 685.00 lb
O.D.: 4.00 in

MIDWEST WIRELINE

2" SCALE RESISTIVITY

MAIN PASS

Database File	darrah_keller_25c_1.db
Dataset Pathname	stackml/pass6.1
Presentation Format	_dil2in
Dataset Creation	Tue Jan 18 09:24:17 2022
Charted by	Depth in Feet scaled 1:600

0 Gamma Ray (GAPI) 150

1000 Conductivity (mmho/m) 0

15000 Line Tension (lb) 0

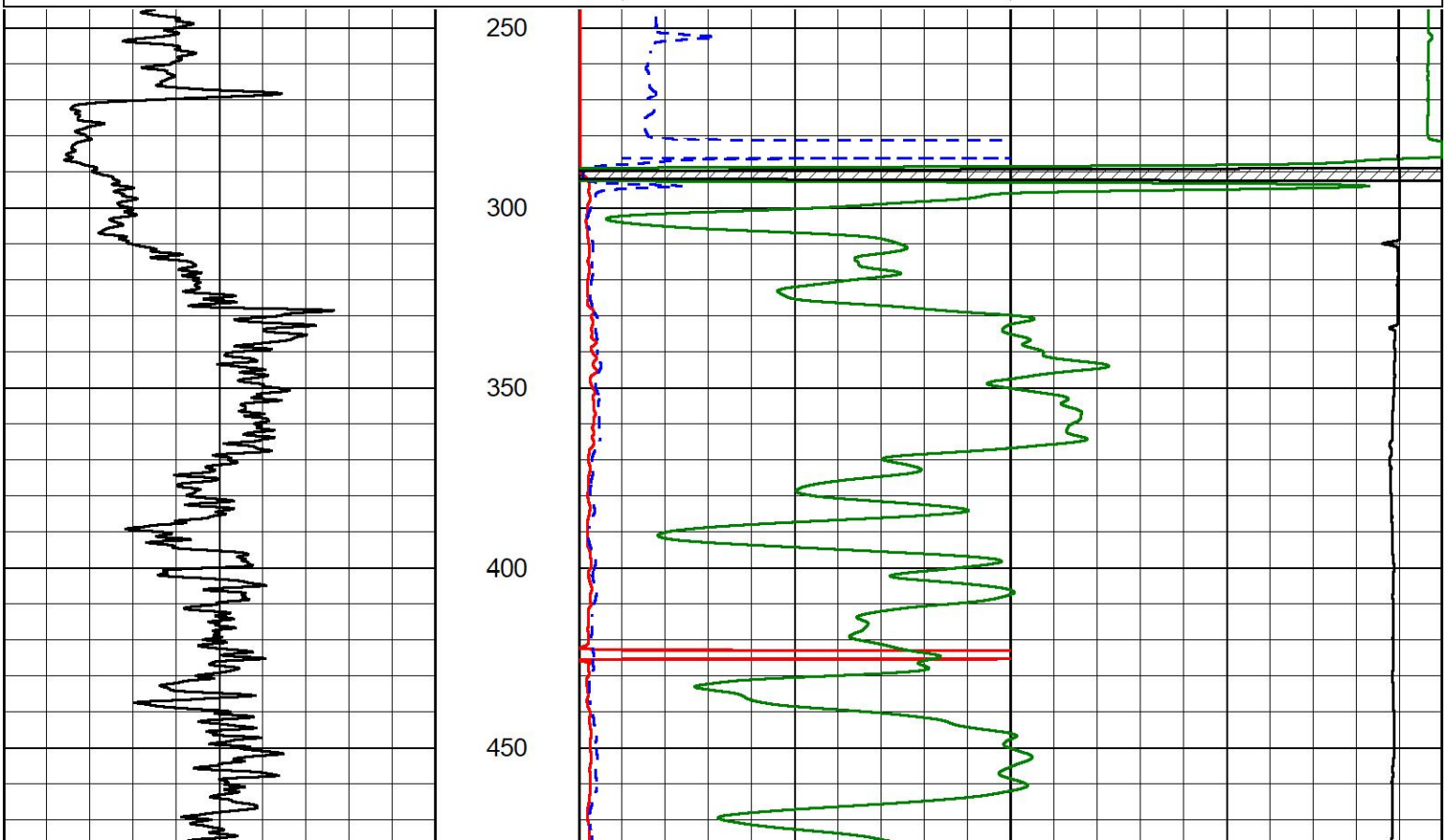
0 Shallow Resisitivity (Ohm-m) 50

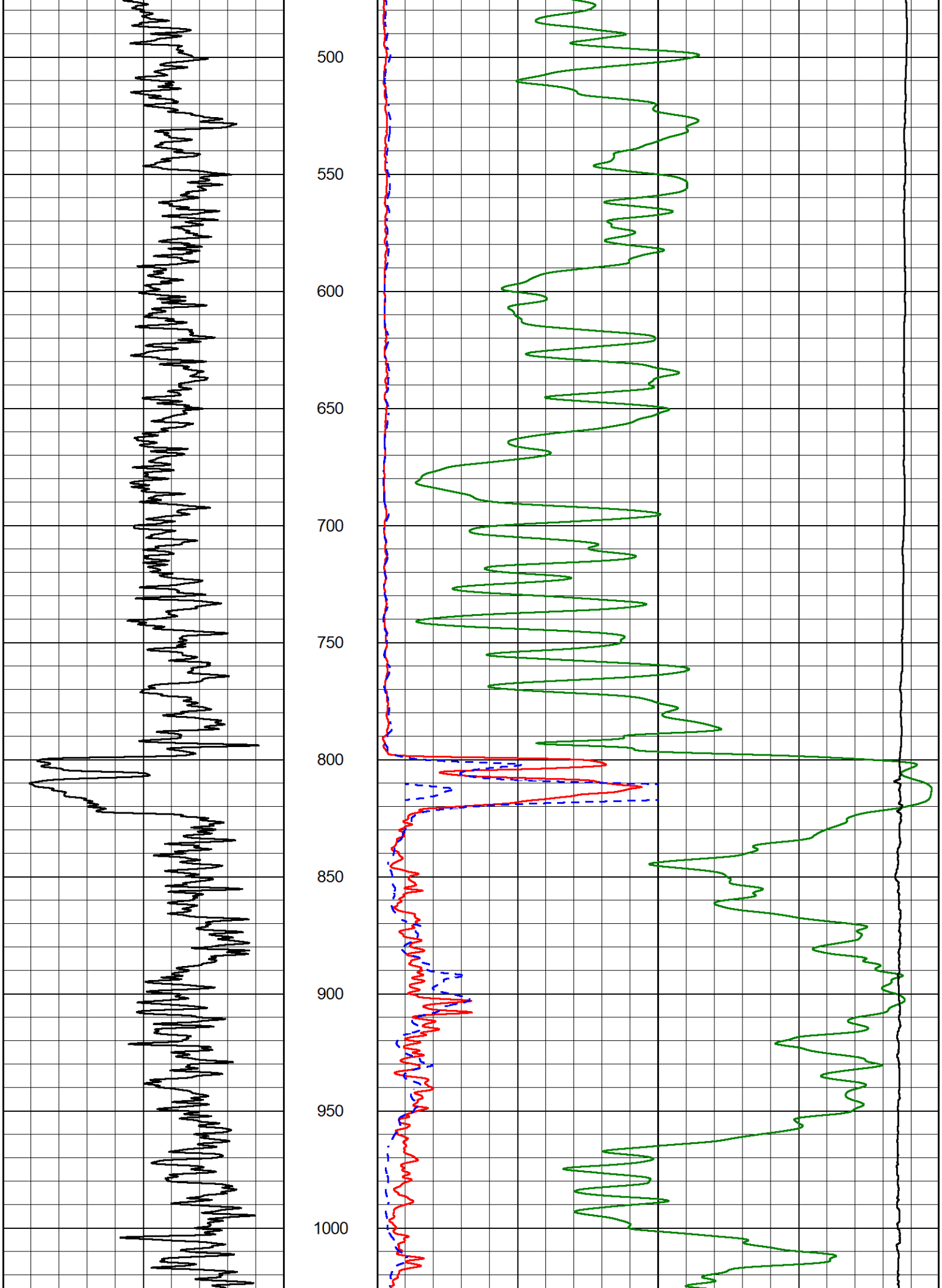
0 Deep Resistivity (Ohm-m) 50

Shallow Resistivity

50 (Ohm-m) 200

50 Deep Resistivity (Ohm-m) 200

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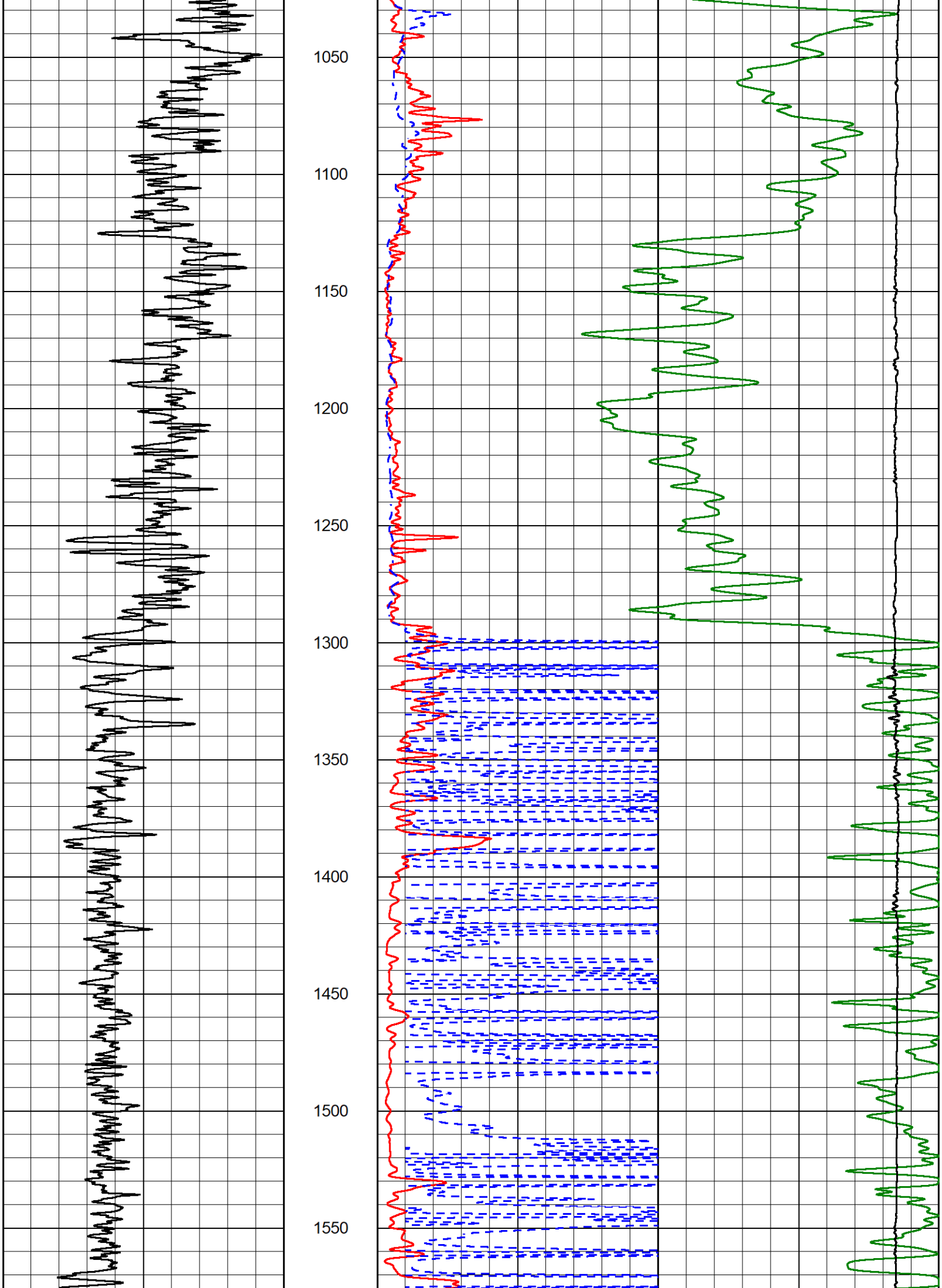
550
600
650
700
750
800
850
900
950
1000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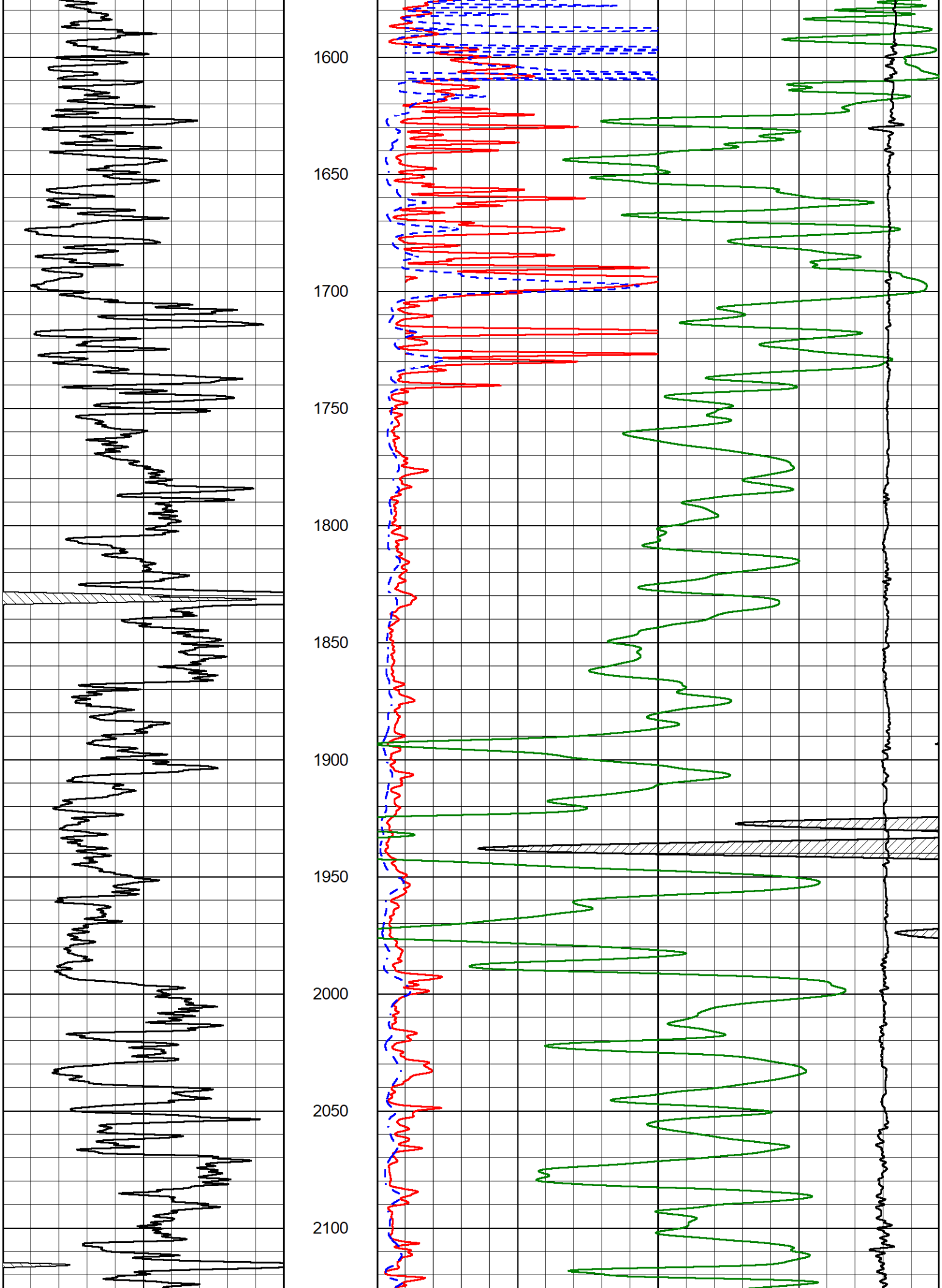
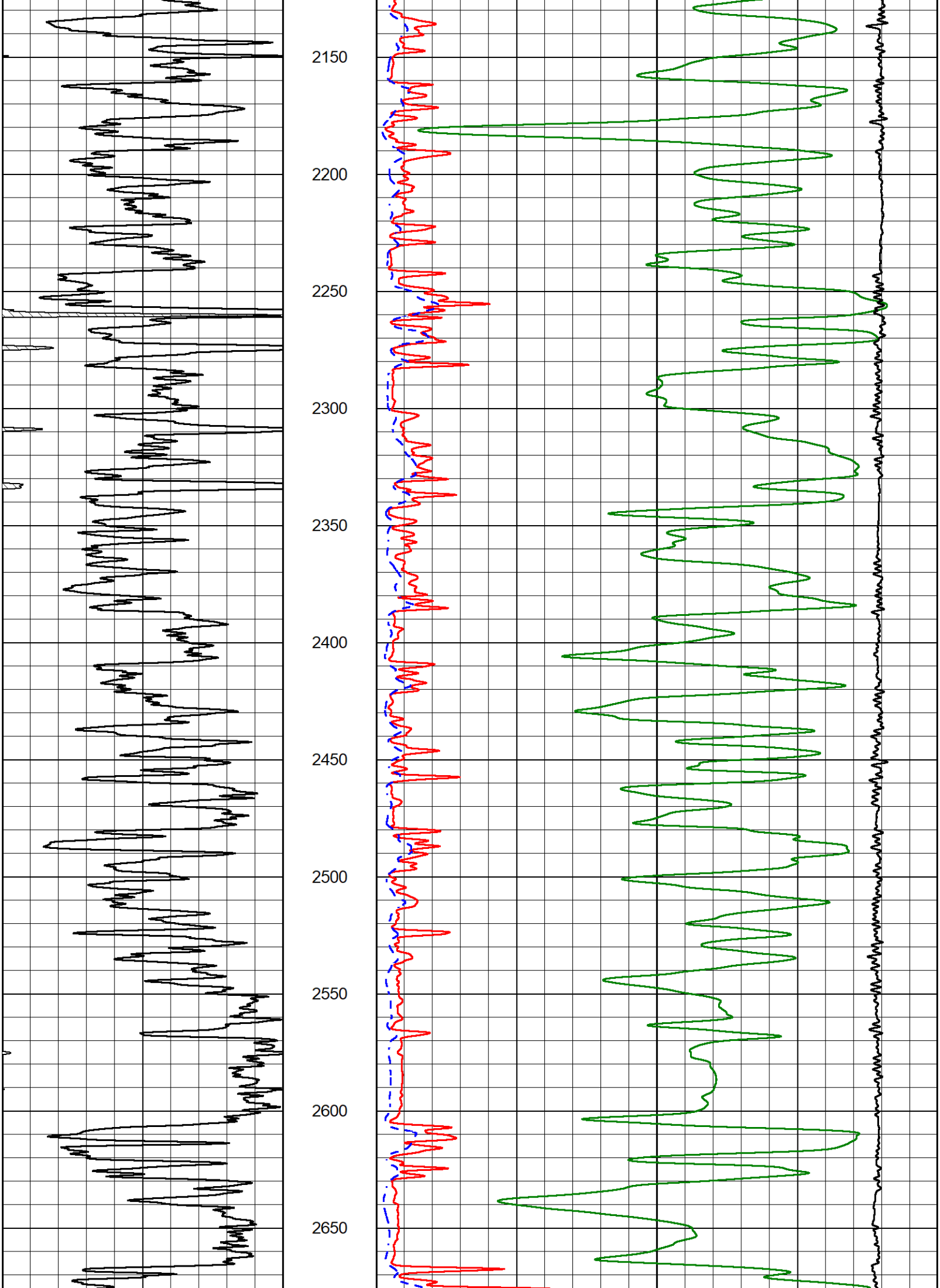
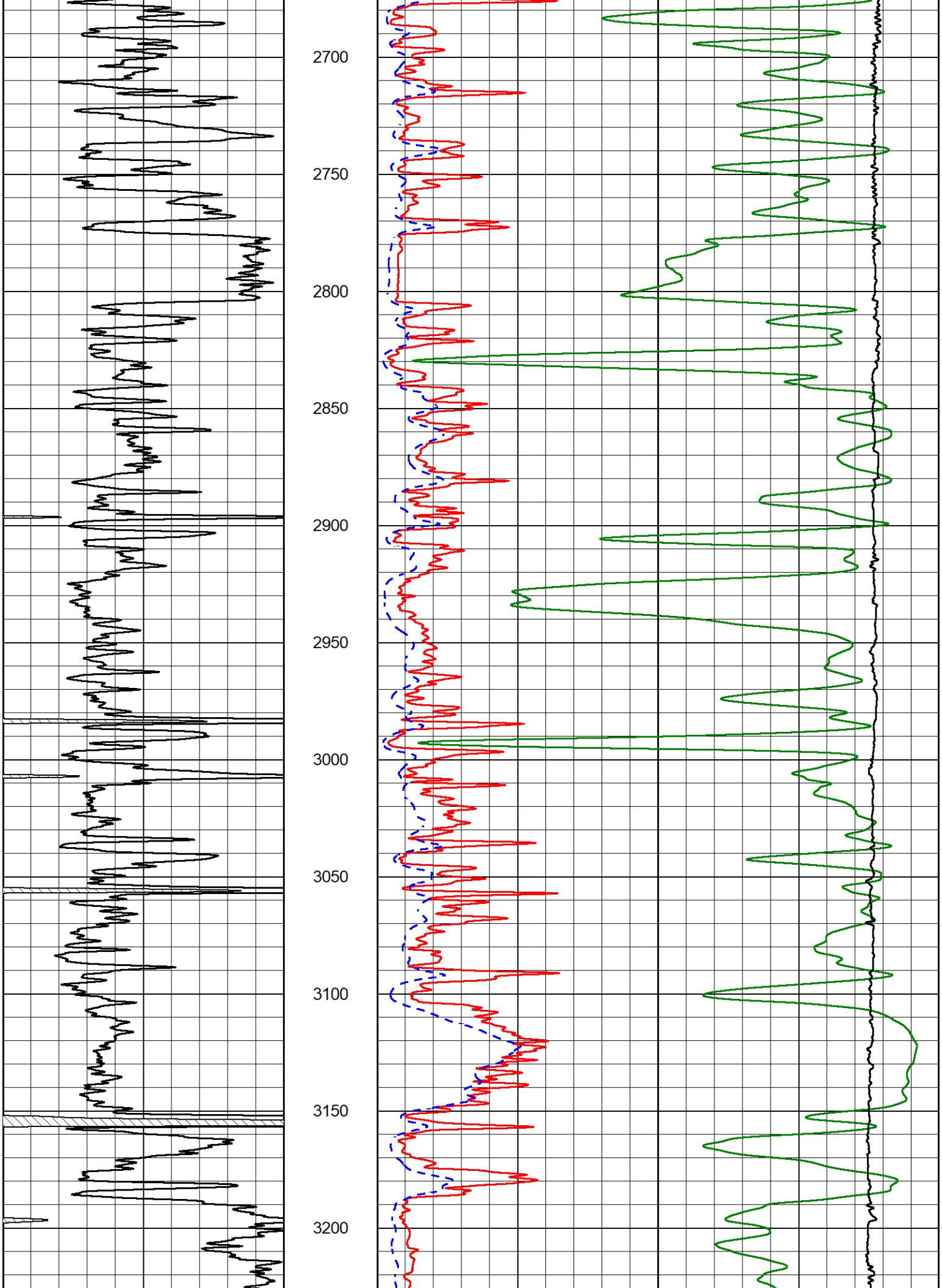
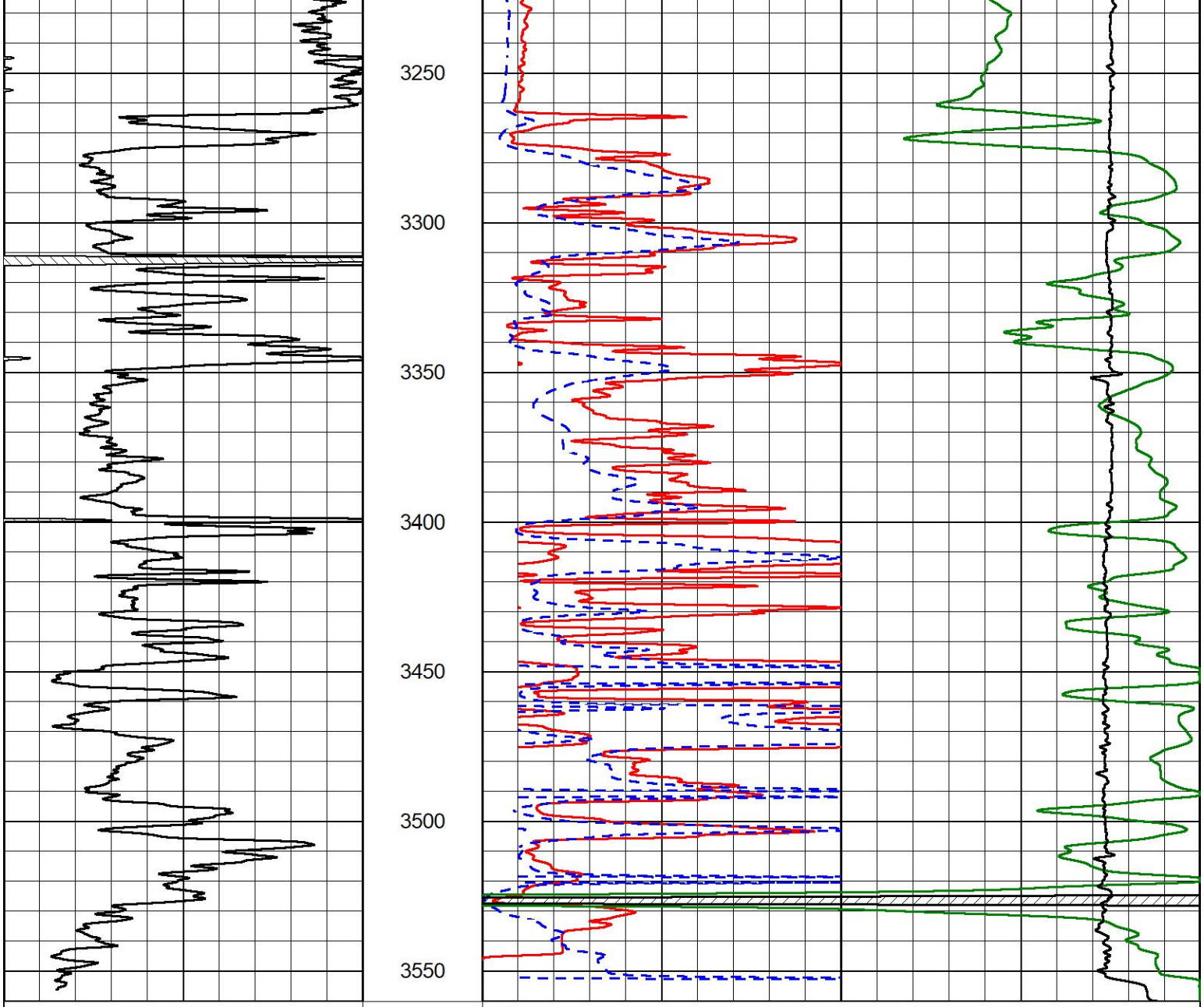
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550


1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100


2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650


2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200

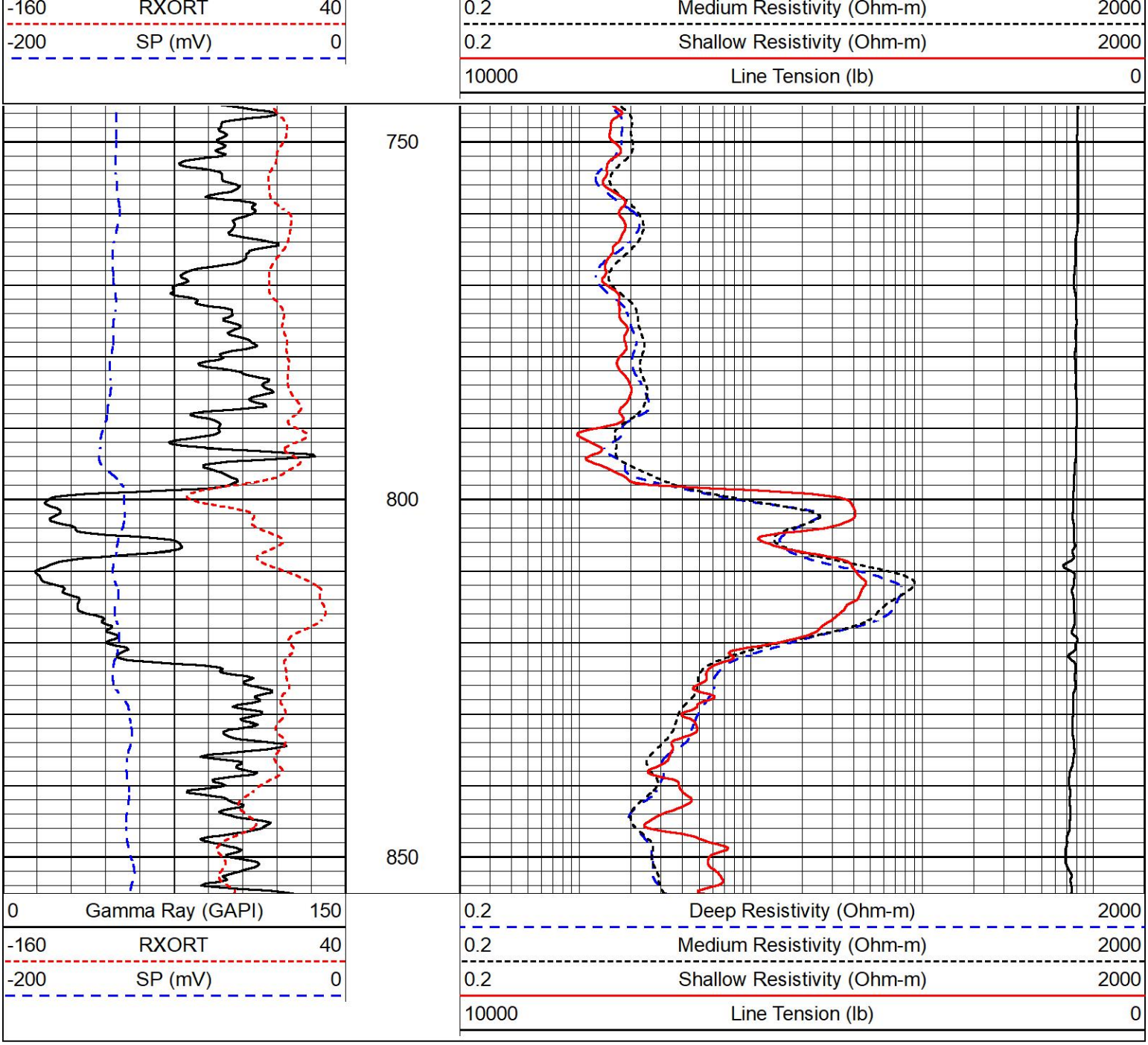


MIDWEST WIRELINE

ANHYDRITE SECTION

MAIN PASS

Database File	darrah_keller_25c_1.db
Dataset Pathname	stackml/pass5.1
Presentation Format	_dil
Dataset Creation	Tue Jan 18 09:15:20 2022
Charted by	Depth in Feet scaled 1:240

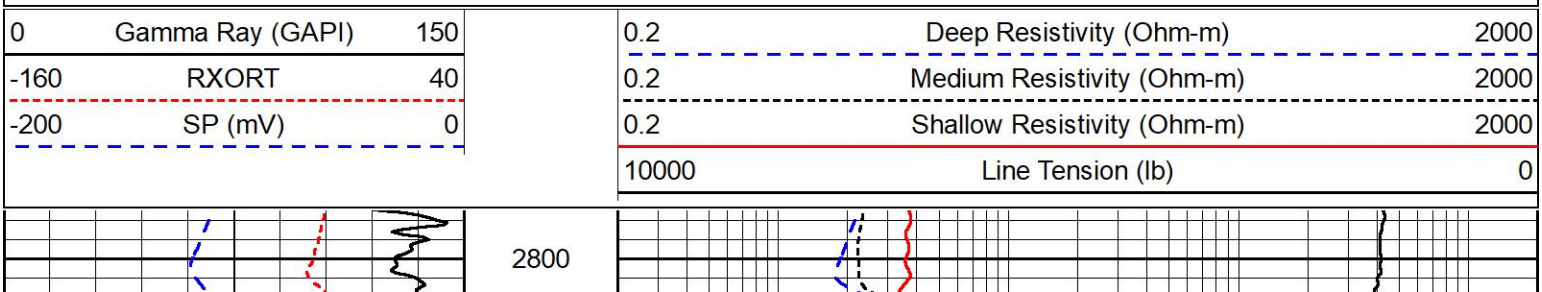


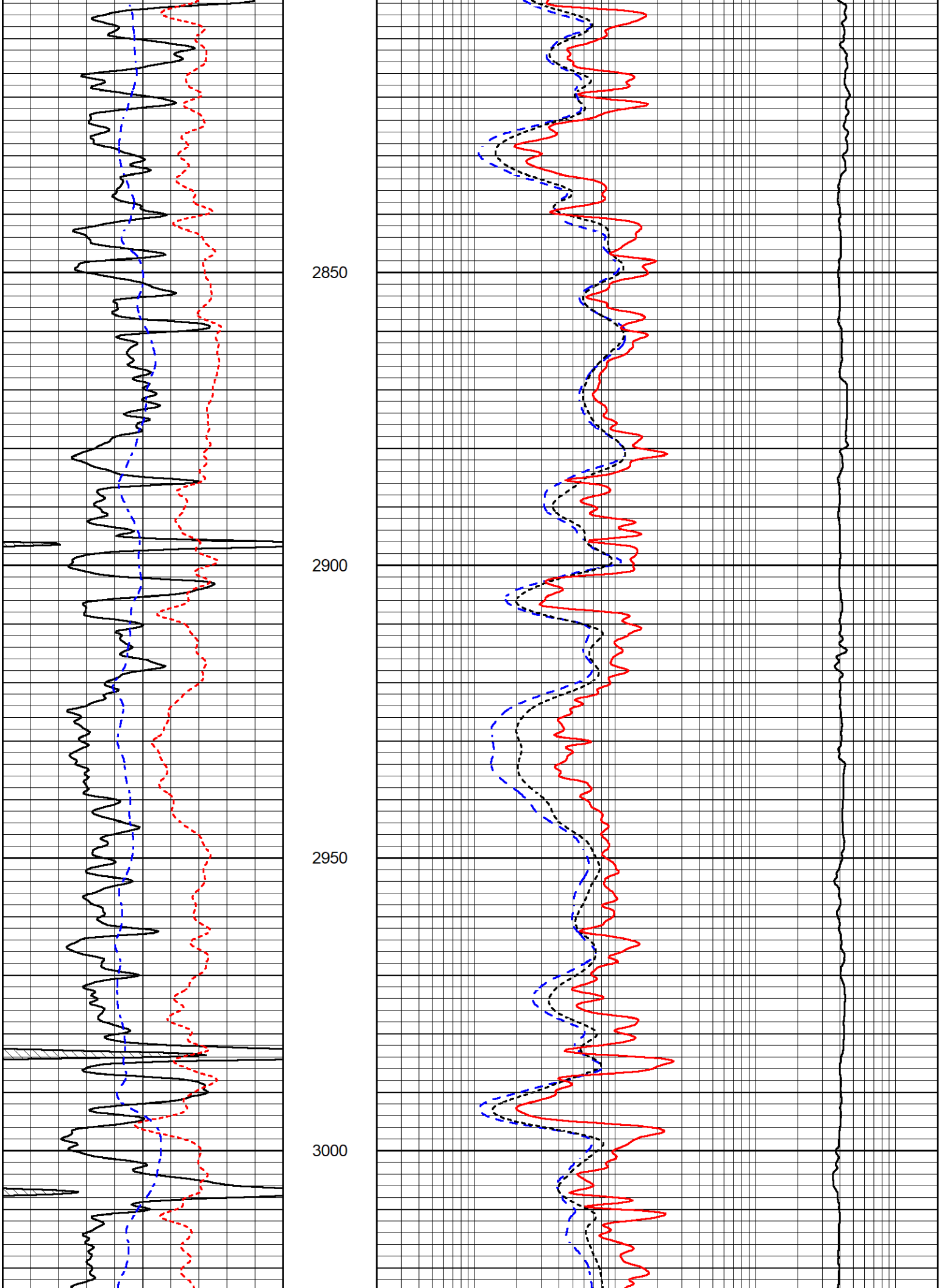
MIDWEST WIRELINE

DETAIL SECTION

MAIN PASS

Database File	darrah_keller_25c_1.db
Dataset Pathname	stackml/pass4.1
Presentation Format	_dil
Dataset Creation	Tue Jan 18 09:11:10 2022
Charted by	Depth in Feet scaled 1:240

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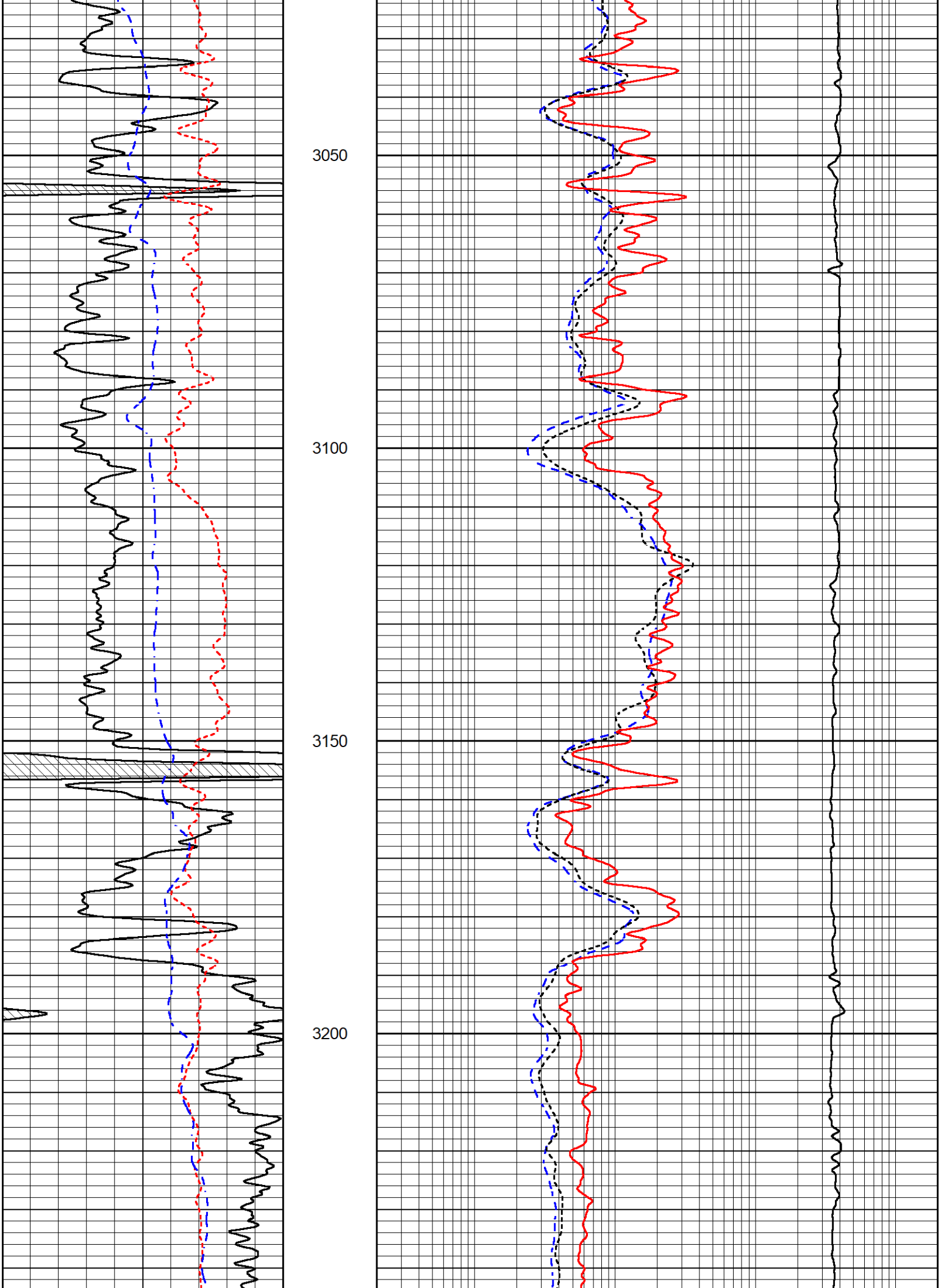
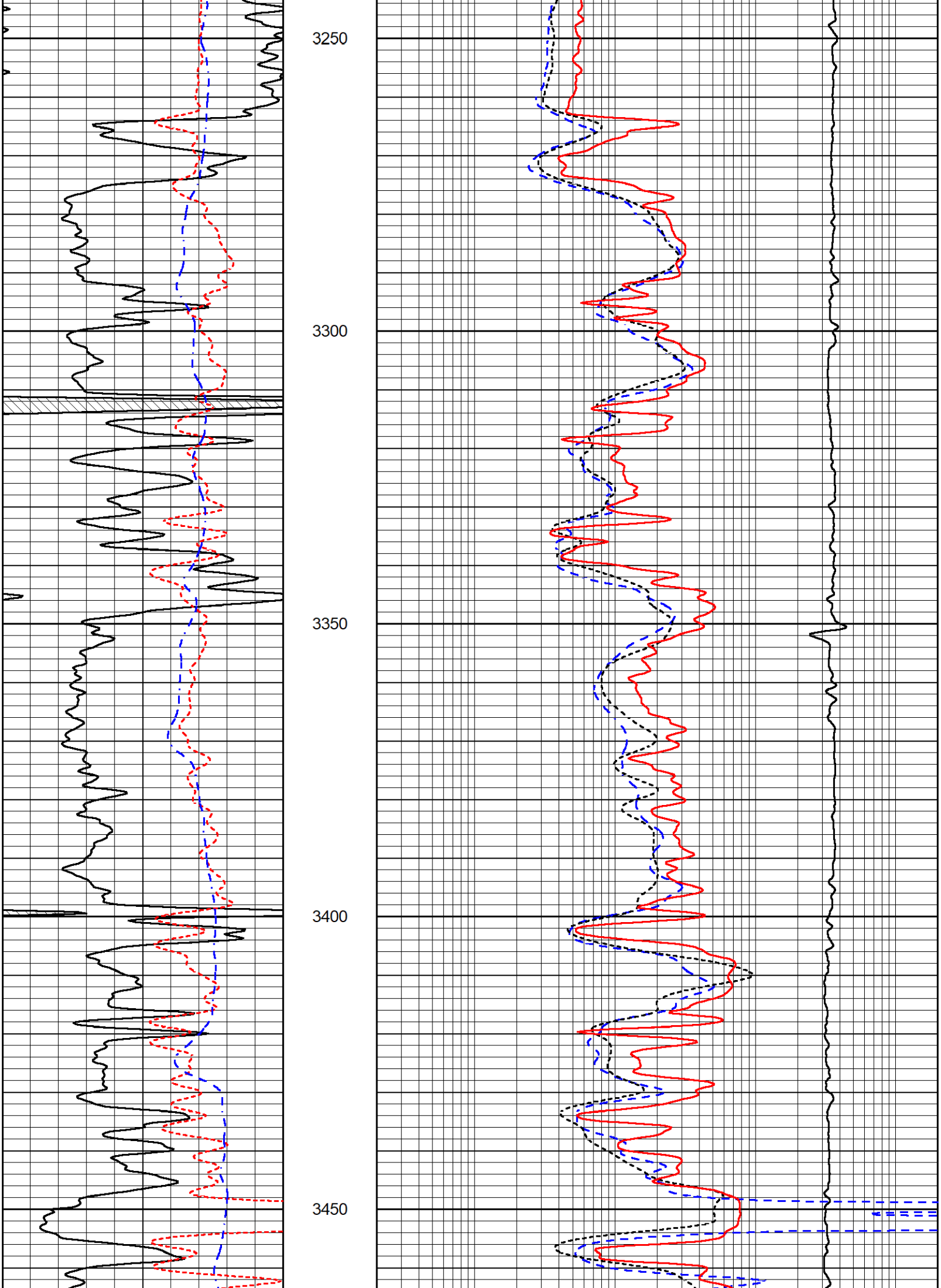
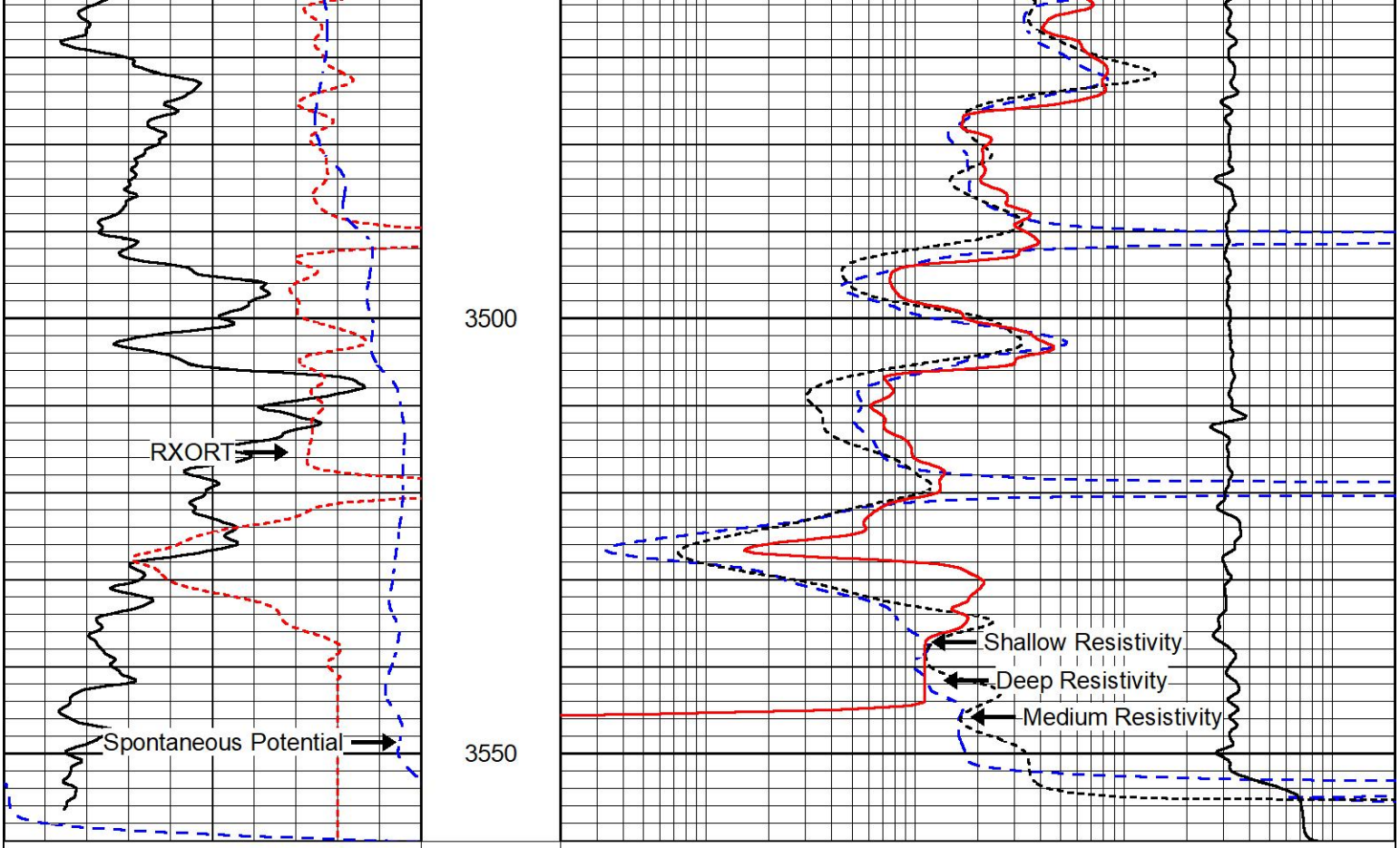
2900
2950
3000


3050
3100
3150
3200


3250
3300
3350
3400
3450



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

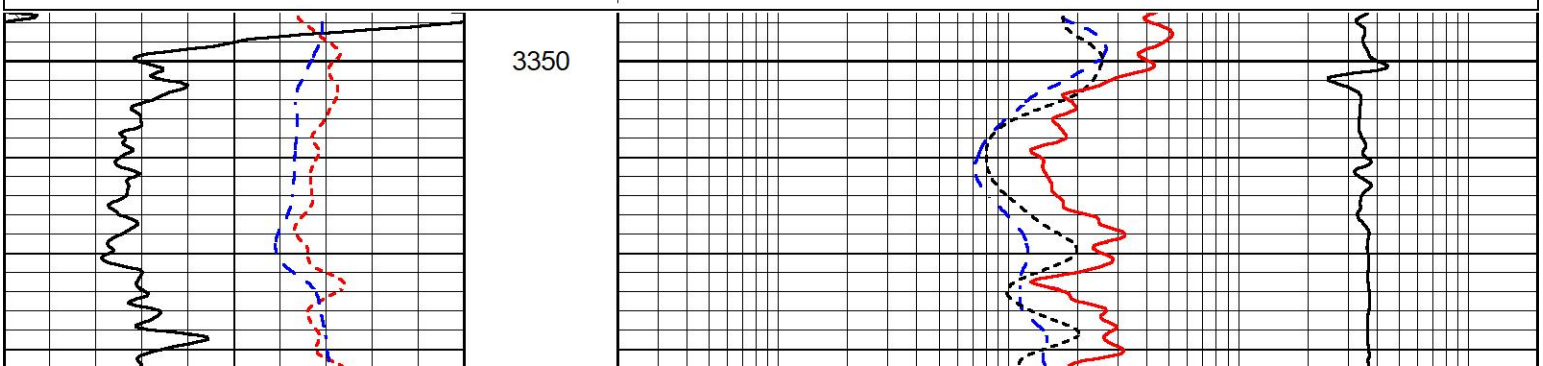
REPEAT SECTION

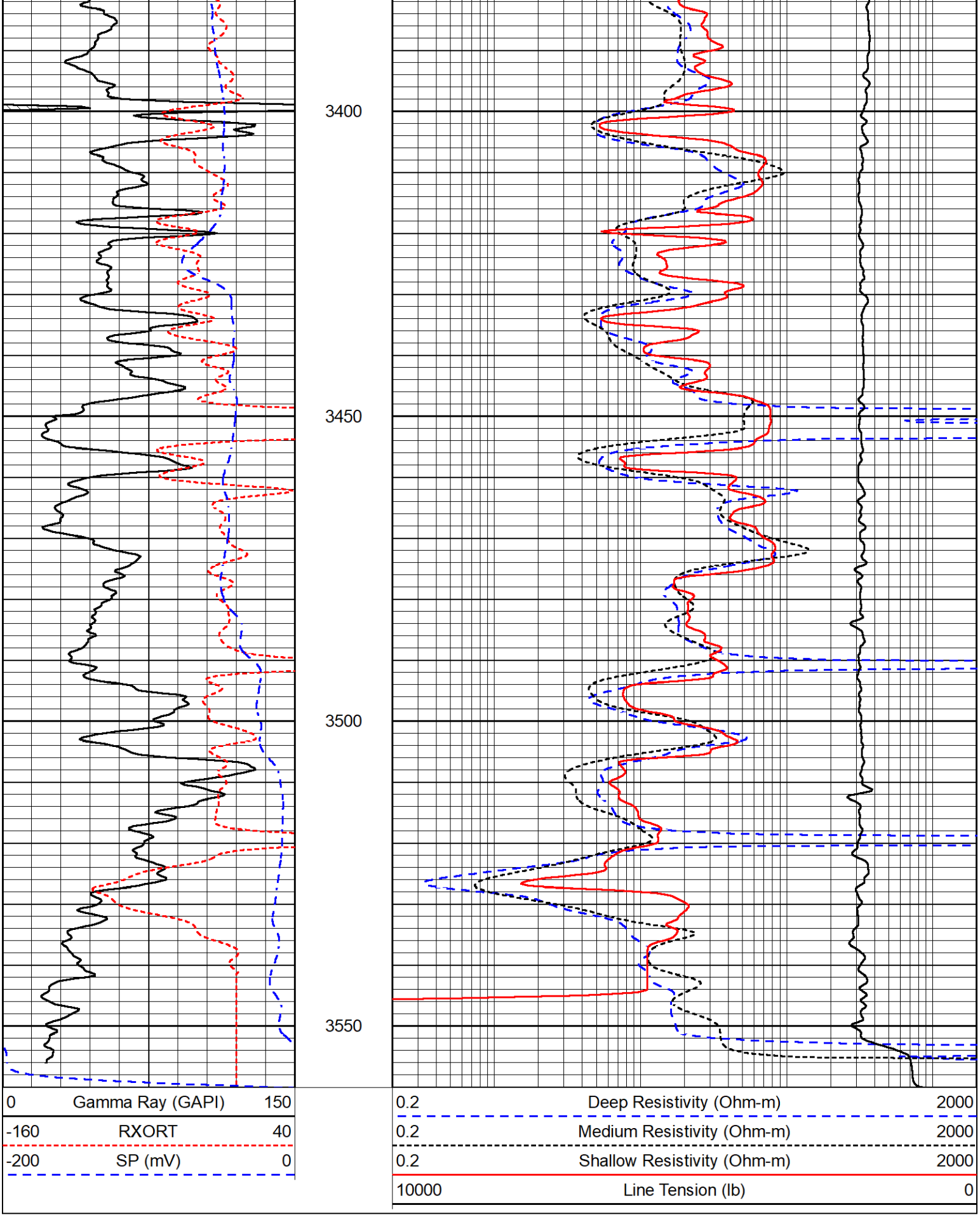
REPEAT PASS

Database File	darrah_keller_25c_1.db
Dataset Pathname	stackml/pass2.1
Presentation Format	_dil
Dataset Creation	Tue Jan 18 08:56:41 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	darrah_keller_25c_1.db
Dataset Pathname	stackml/pass4.1
Dataset Creation	Tue Jan 18 09:11:10 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	0.680	-5.000
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	45000.0000	-1.0000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	40000.0000	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

MIDWEST WIRELINE

Company	Darrah Oil Company LLC
Well	Keller 25C #1
Field	Pritchard
County	Barton
State	Kansas