

MIDWEST WIRELINE

DUAL INDUCTION
LOG

Company American Warrior, Inc. Well O'Brate-Finney #11-5 Field Seven Mile County Finney State Kansas		Company American Warrior, Inc. Well O'Brate-Finney #11-5 Field Seven Mile County Finney State Kansas		Location: API #: 15-055-22571-00-00 1042 FNL & 1314 FWL SEC 5 TWP 23S RGE 32W Permanent Datum Ground Level Elevation 2857 Log Measured From Kelly Bushing Drilling Measured From Kelly Bushing Other Services CNL/CDL MEL Elevation K.B. 2870 D.F. G.L. 2857	
Date	3/25/2023				
Run Number	One				
Depth Driller	4900				
Depth Logger	4905				
Bottom Logged Interval	4904				
Top Log Interval	1750				
Casing Driller	8.625 @ 1775				
Casing Logger	1736				
Bit Size	7.875				
Type Fluid in Hole	Chemical				
Salinity, ppm CL	4200				
Density / Viscosity	9.2 54				
pH / Fluid Loss	9.0 7.2				
Source of Sample	Flowline				
Rm @ Meas. Temp	0.85 @ 72				
Rmt @ Meas. Temp	0.64 @ 72				
Rmc @ Meas. Temp	1.15 @ 72				
Source of Rmt / Rmc	Charts				
Rm @ BHT	0.49 @ 125				
Operating Rig Time	2 Hours				
Max Rec. Temp. F	125				
Equipment Number	P-24				
Location	Hays				
Recorded By	T. Martin				
Witnessed By	Kevin Timson				

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All interpretations are opinions based on inferences from electrical or other measurements and Midwest Wireline LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Midwest Wireline LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Garden City, KS, N on 83 to 6 Mi Rd,
1 E, 2 N, E into

Log Measured From: Kelly Bushing 13 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: Kevin Timson	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

Log Variables

DatabaseC:\ProgramData\Warrior\Data\amwar_obratefinney #10-5.db
Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	125	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	50	40		4905

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

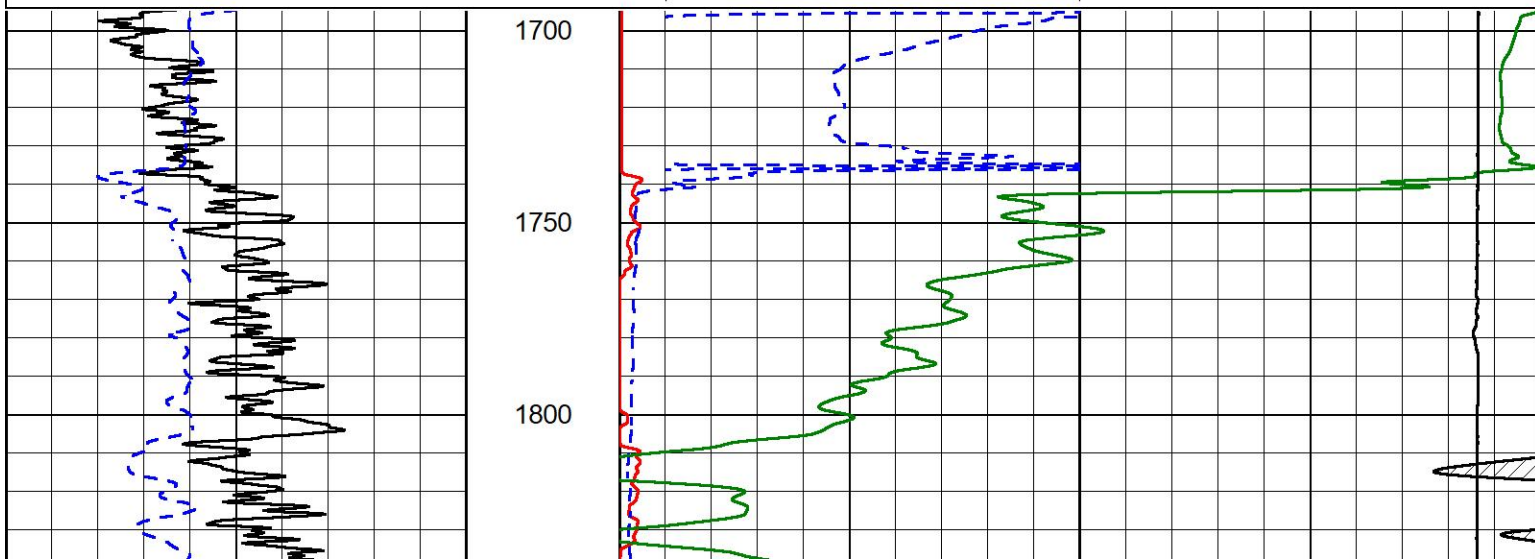


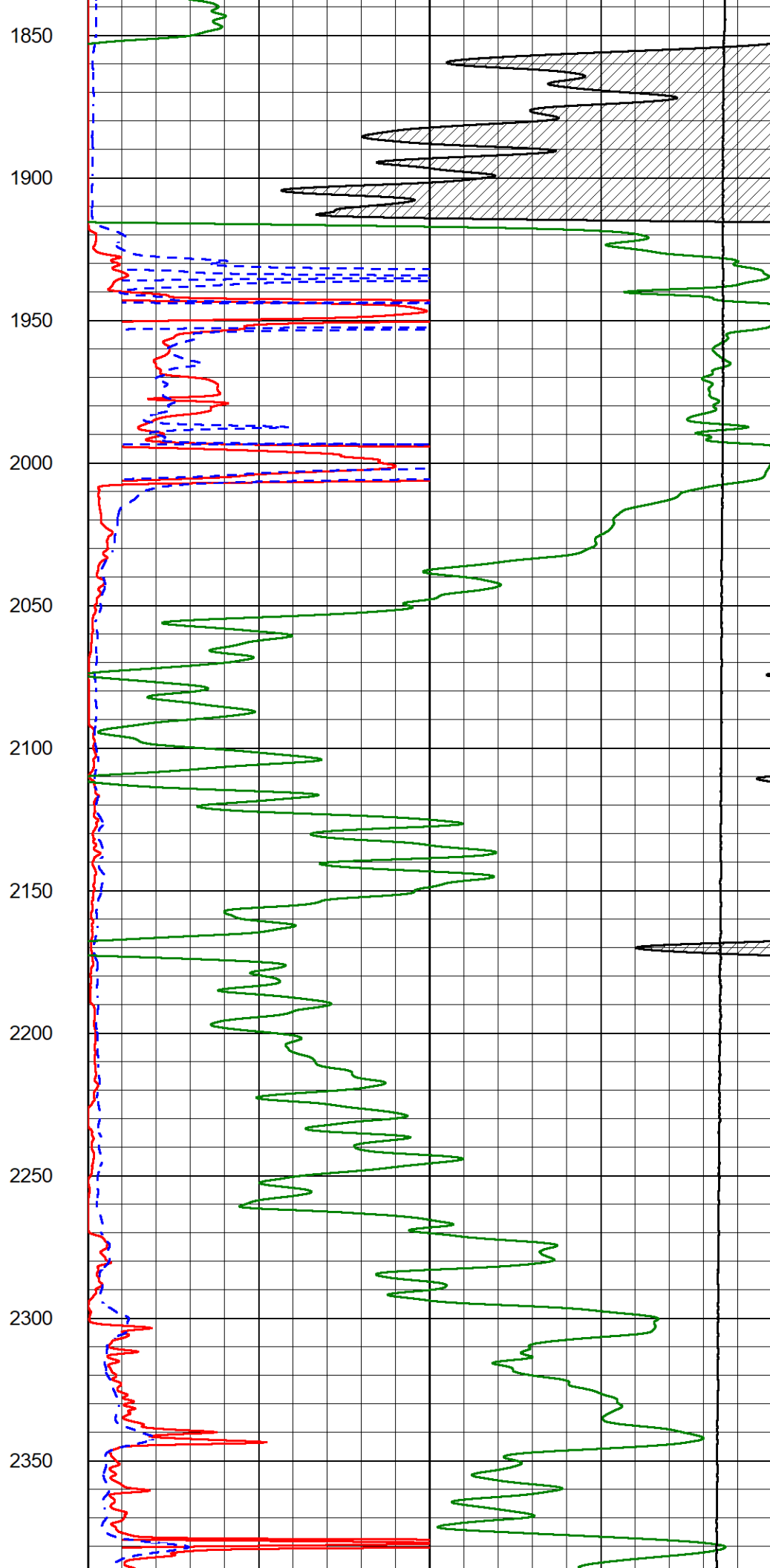
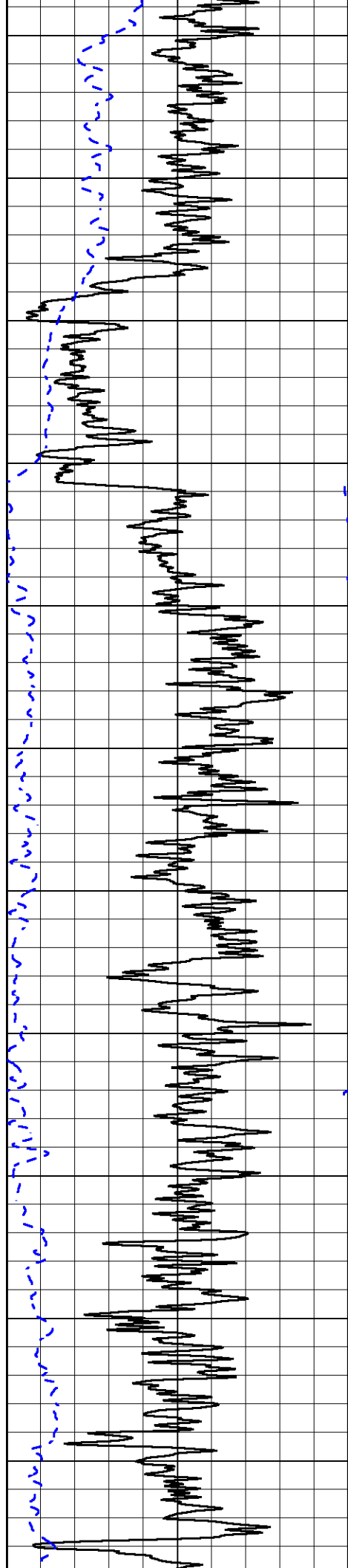
2" SCALE RESISTIVITY

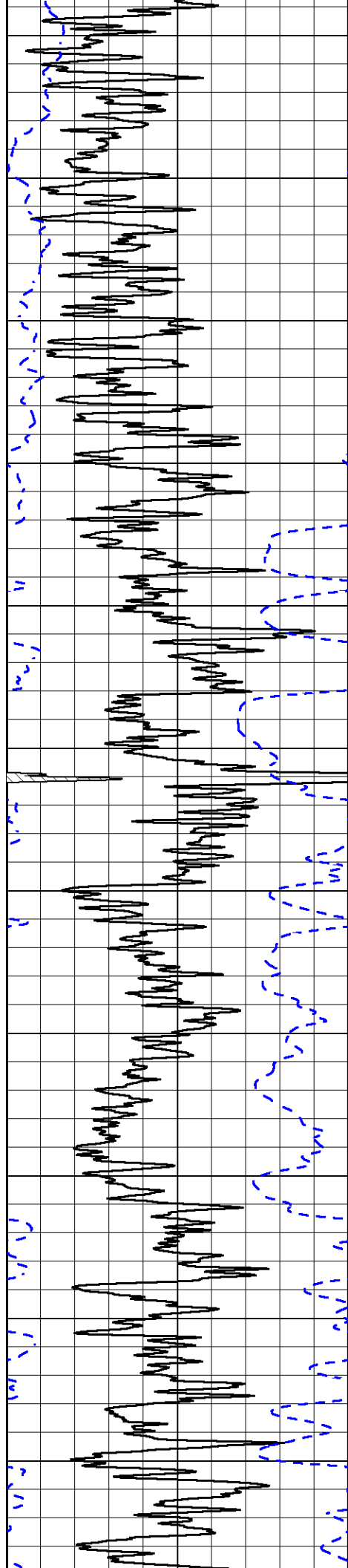
MAIN PASS

Database File amwar_obratefinney #10-5.db
Dataset Pathname StkMI/pass3.2
Presentation Format _dil2in
Dataset Creation Sat Mar 25 14:05:02 2023
Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	1000	Conductivity (mmho/m)	0
-200	SP (mV)	0	15000	Line Tension (lb)	0
			0	Shallow Resistivity (Ohm-m)	50
			0	Deep Resistivity (Ohm-m)	50
			Shallow Resistivity		
			50	(Ohm-m)	200
			50	Deep Resistivity (Ohm-m)	200







2400

2450

2500

2550

2600

2650

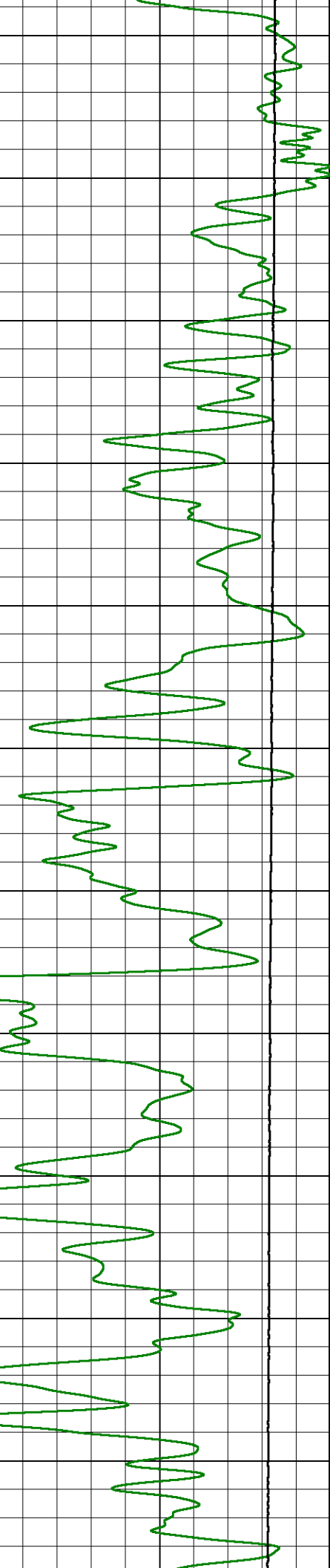
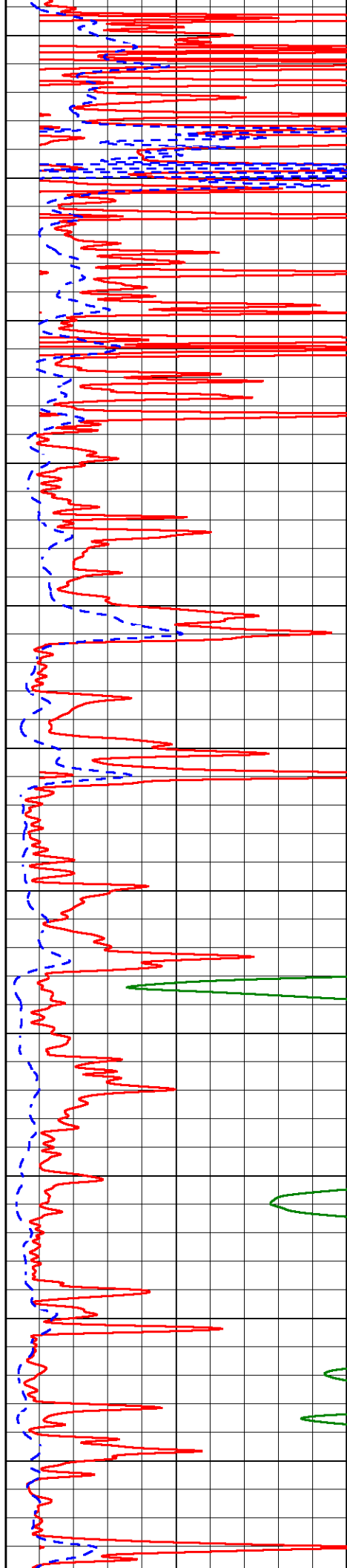
2700

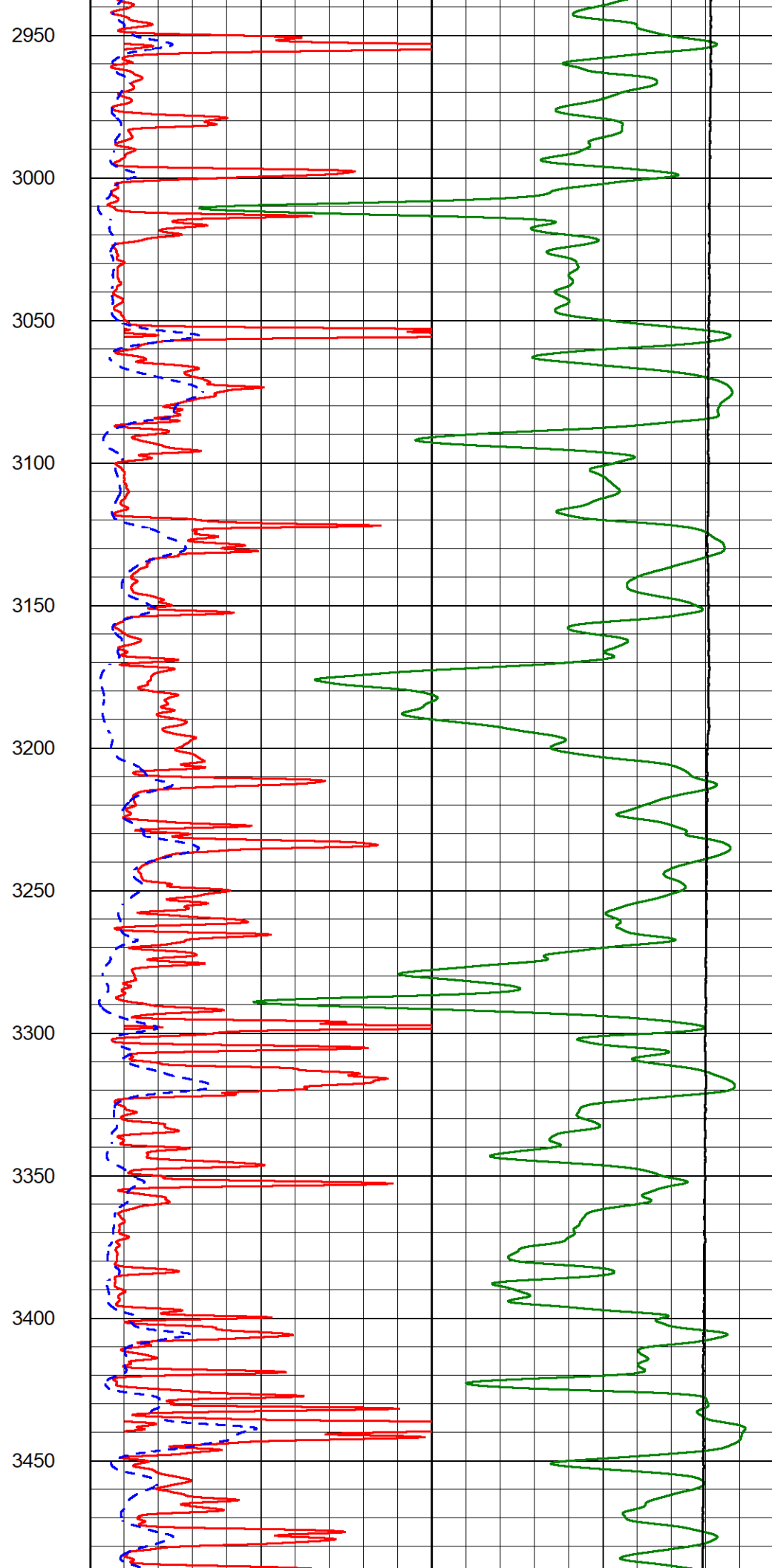
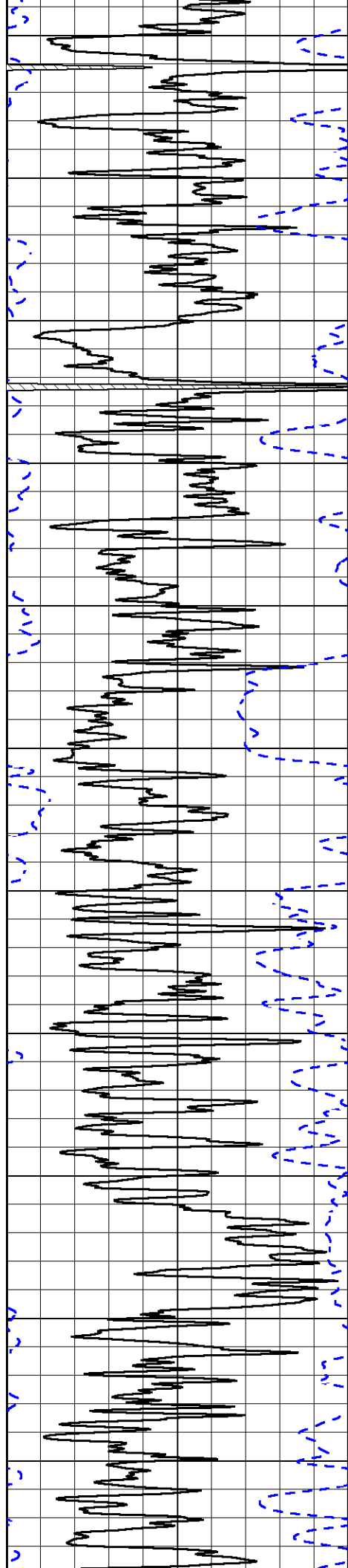
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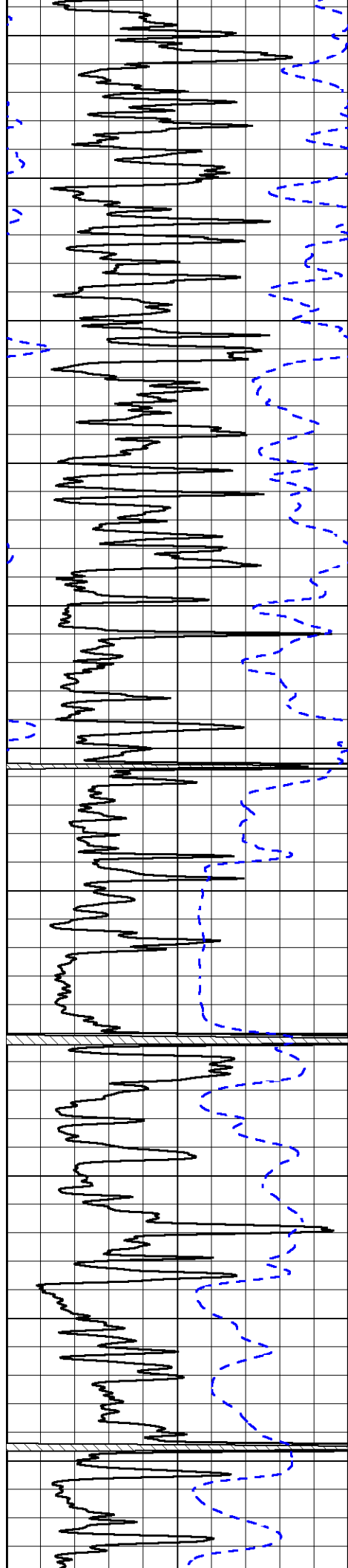
2800

2850

2900







3500

3550

3600

3650

3700

3750

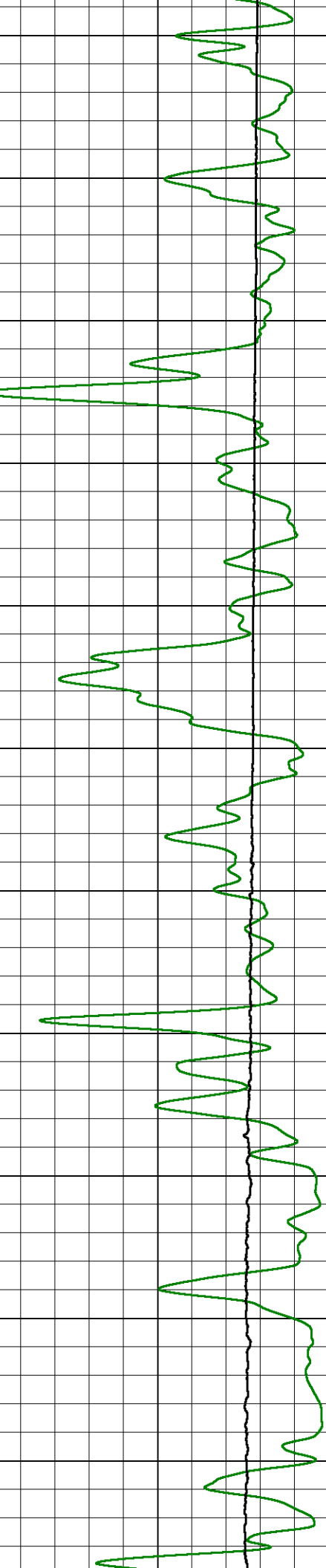
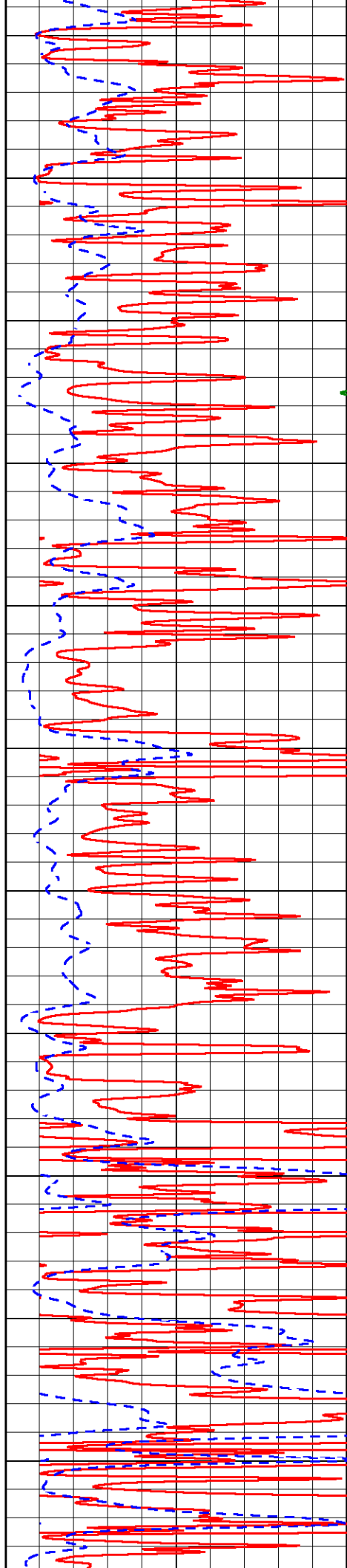
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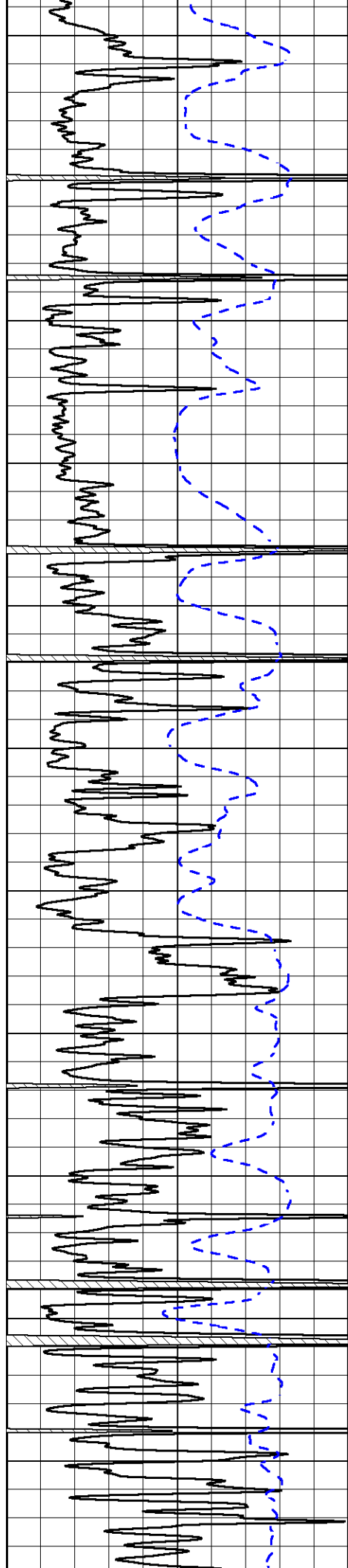
3850

3900

3950

4000





4050

4100

4150

4200

4250

4300

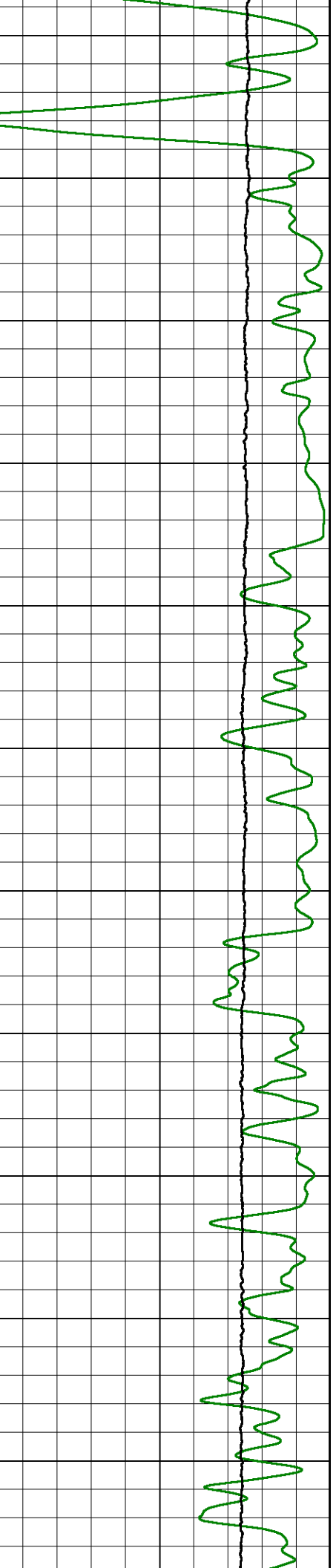
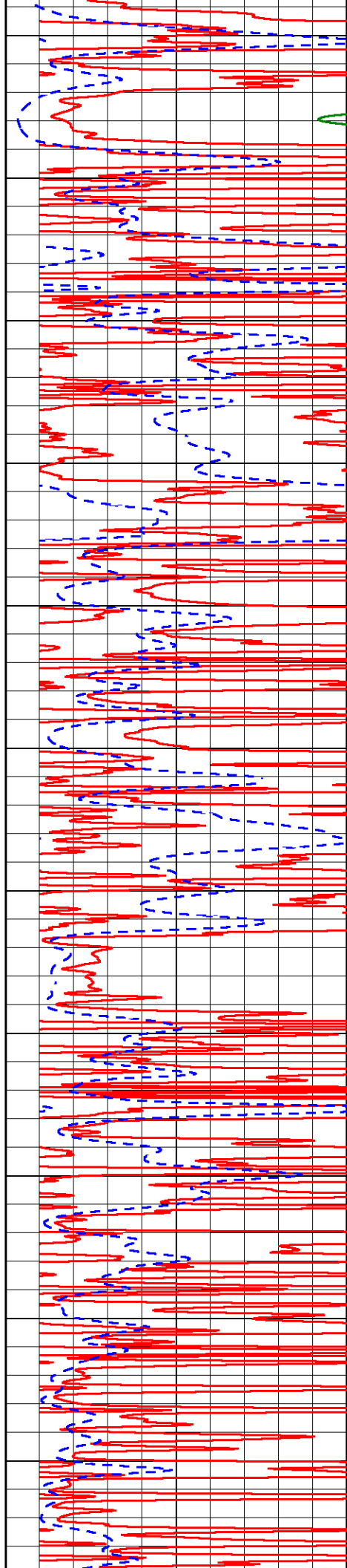
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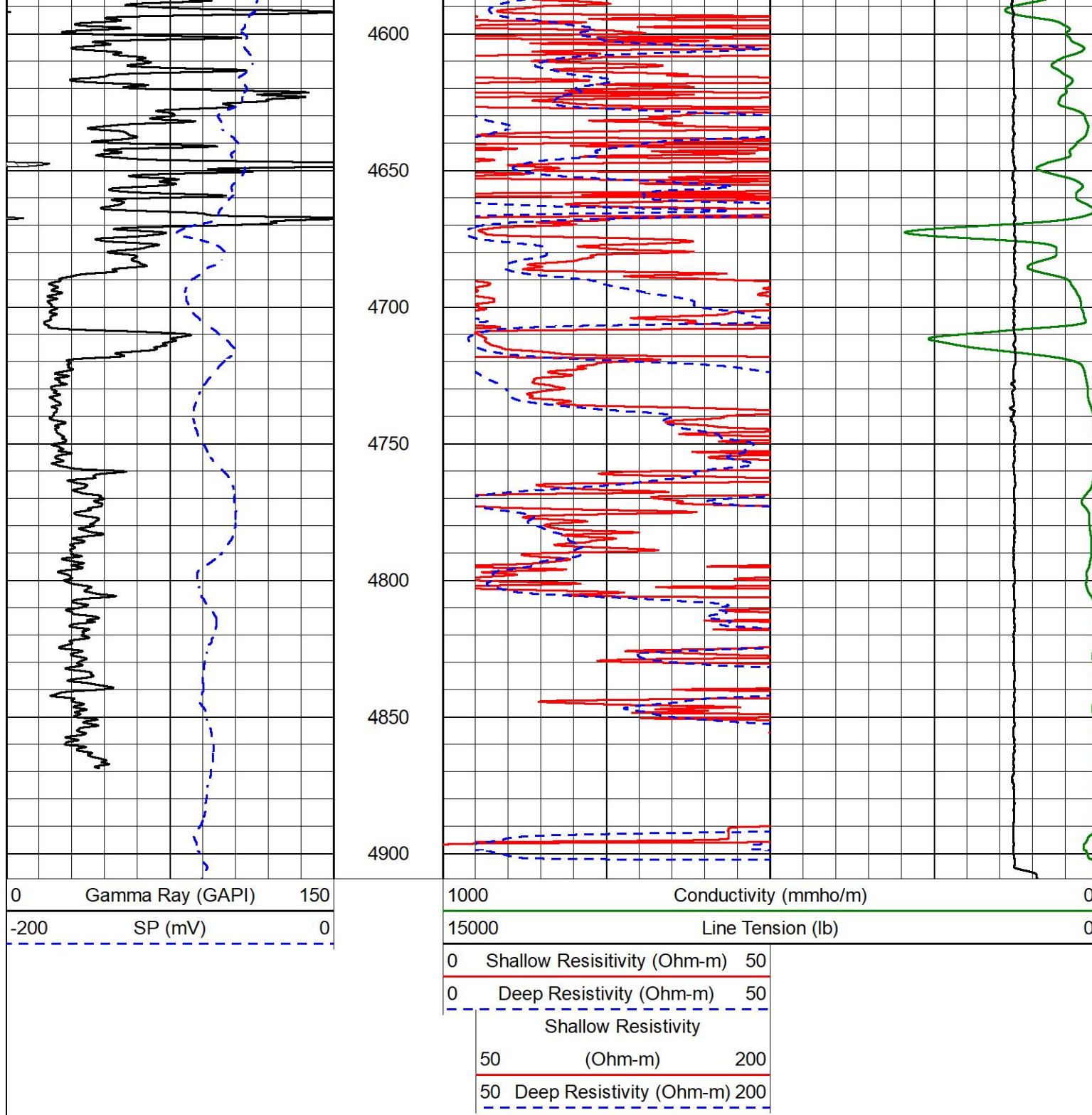
4400

4450

4500

4550





MIDWEST WIRELINE

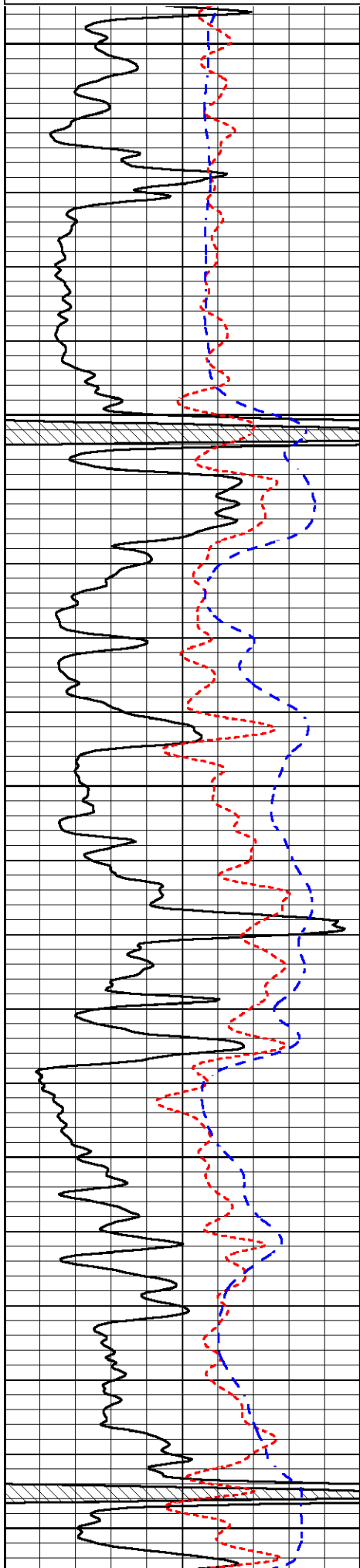
DETAIL SECTION

MAIN PASS

Database File amwar_obratefinney #10-5.db
Dataset Pathname StkMI/pass3.1
Presentation Format _dil
Dataset Creation Sat Mar 25 14:05:11 2023
Charted by Depth in Feet scaled 1:240

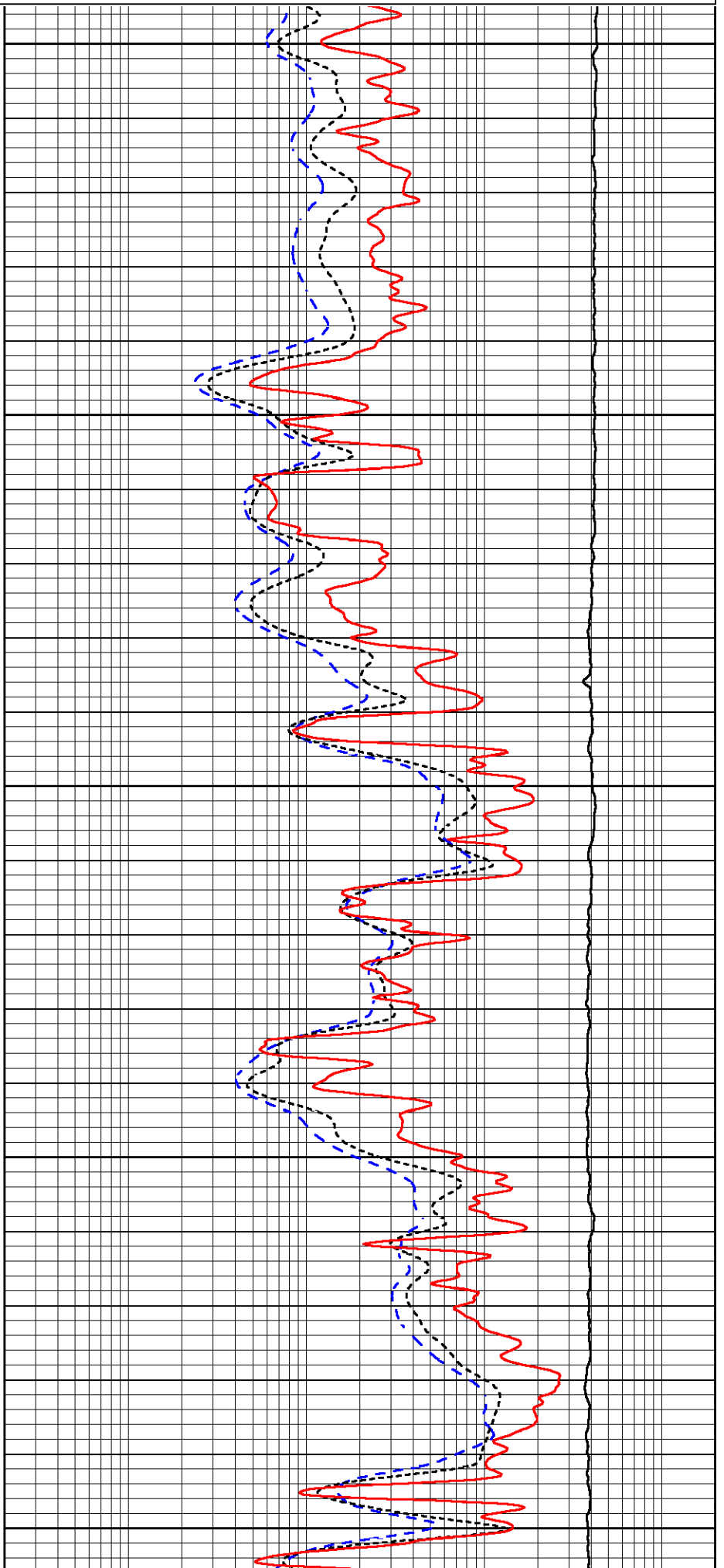


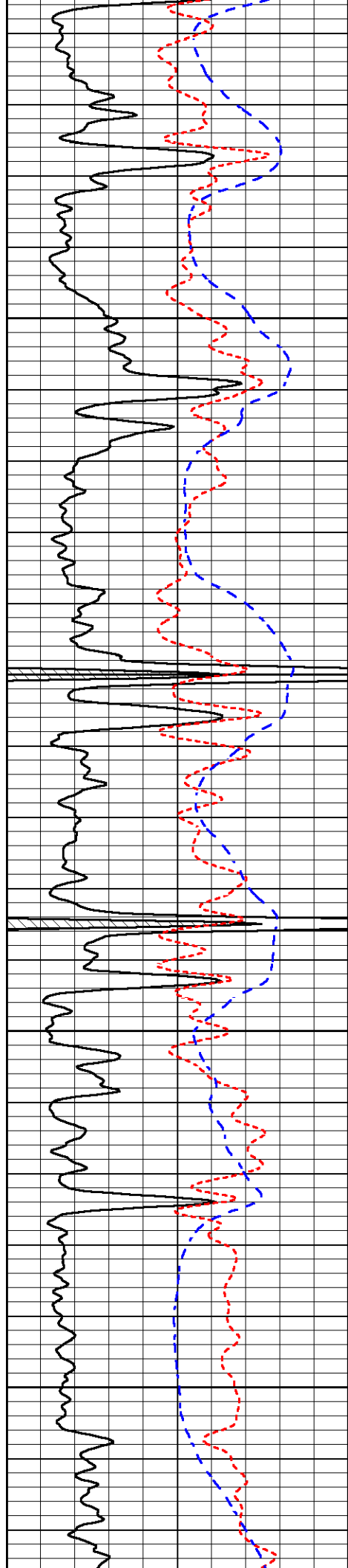
-200 SP (mV) 0



0.2 RLL3 (Ohm-m) 2000

10000 Line Tension (lb) 0



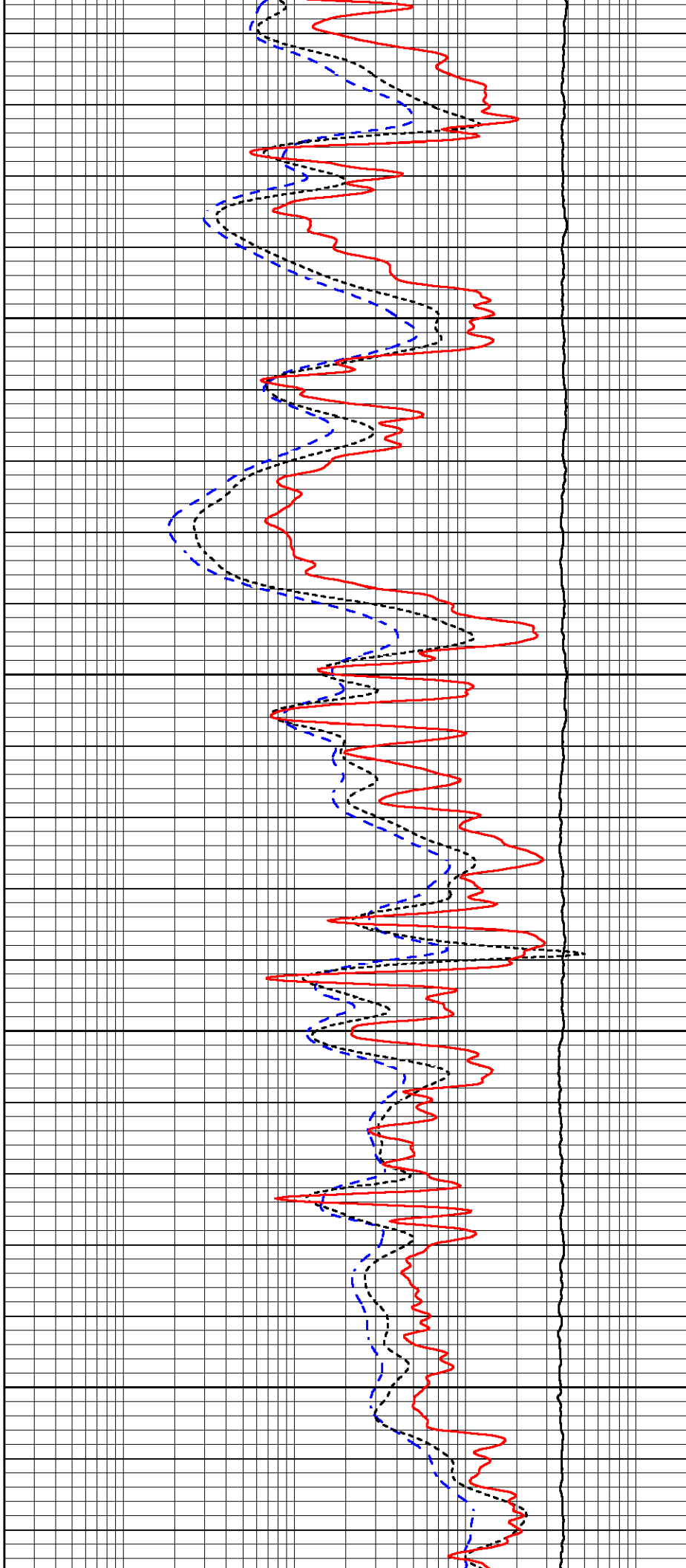


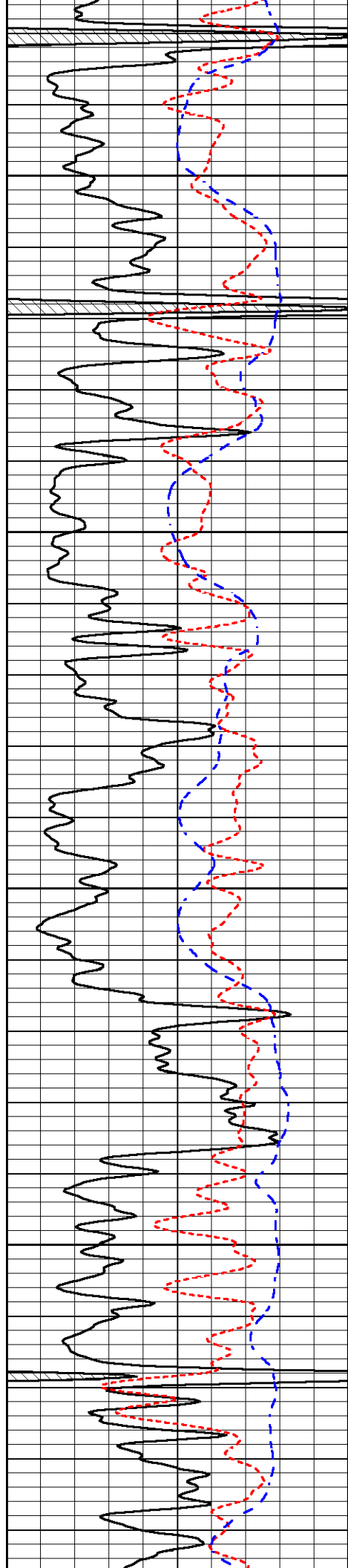
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4100

4150

4200



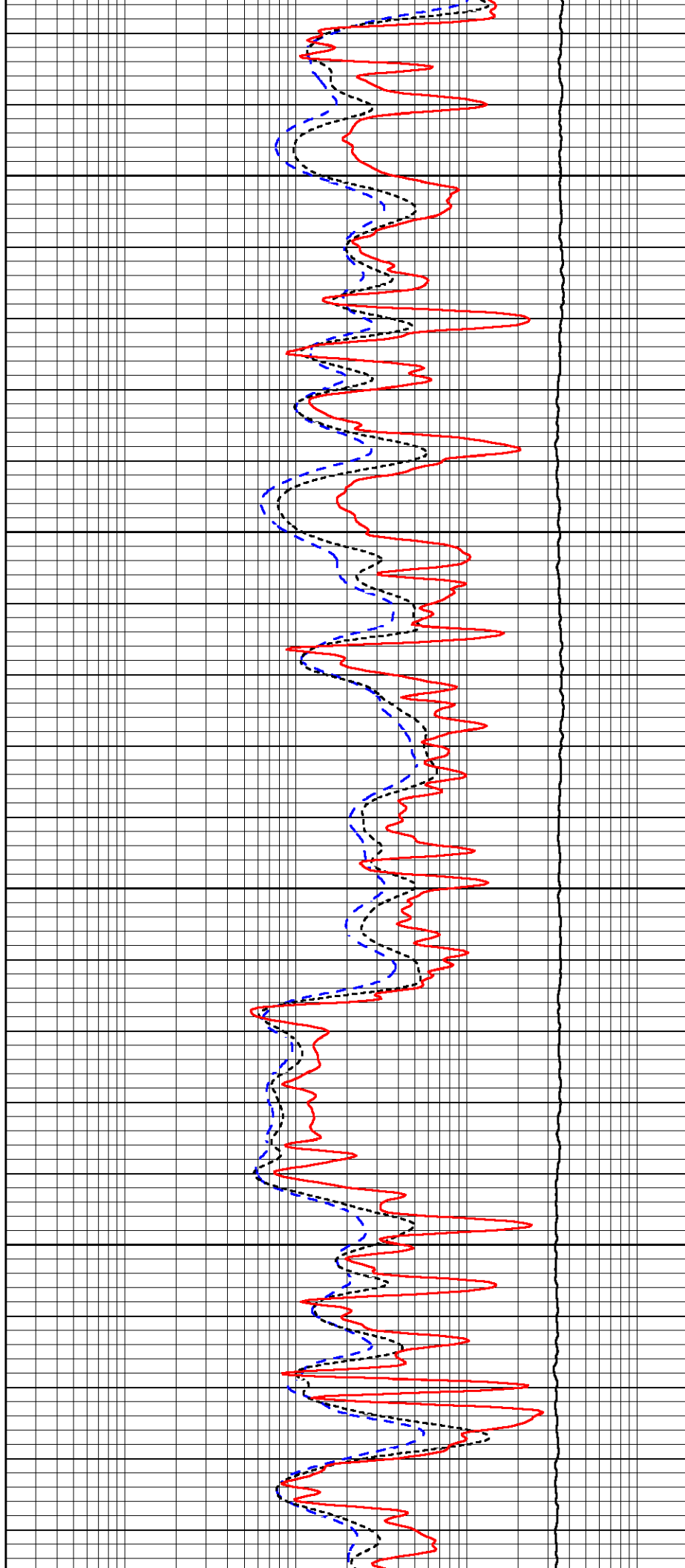


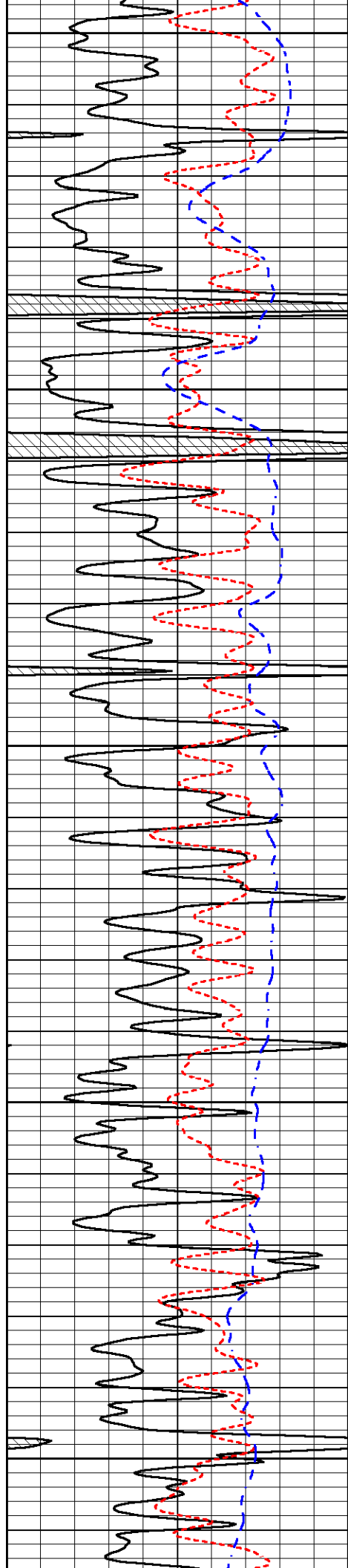
4250

4300

4350

4400





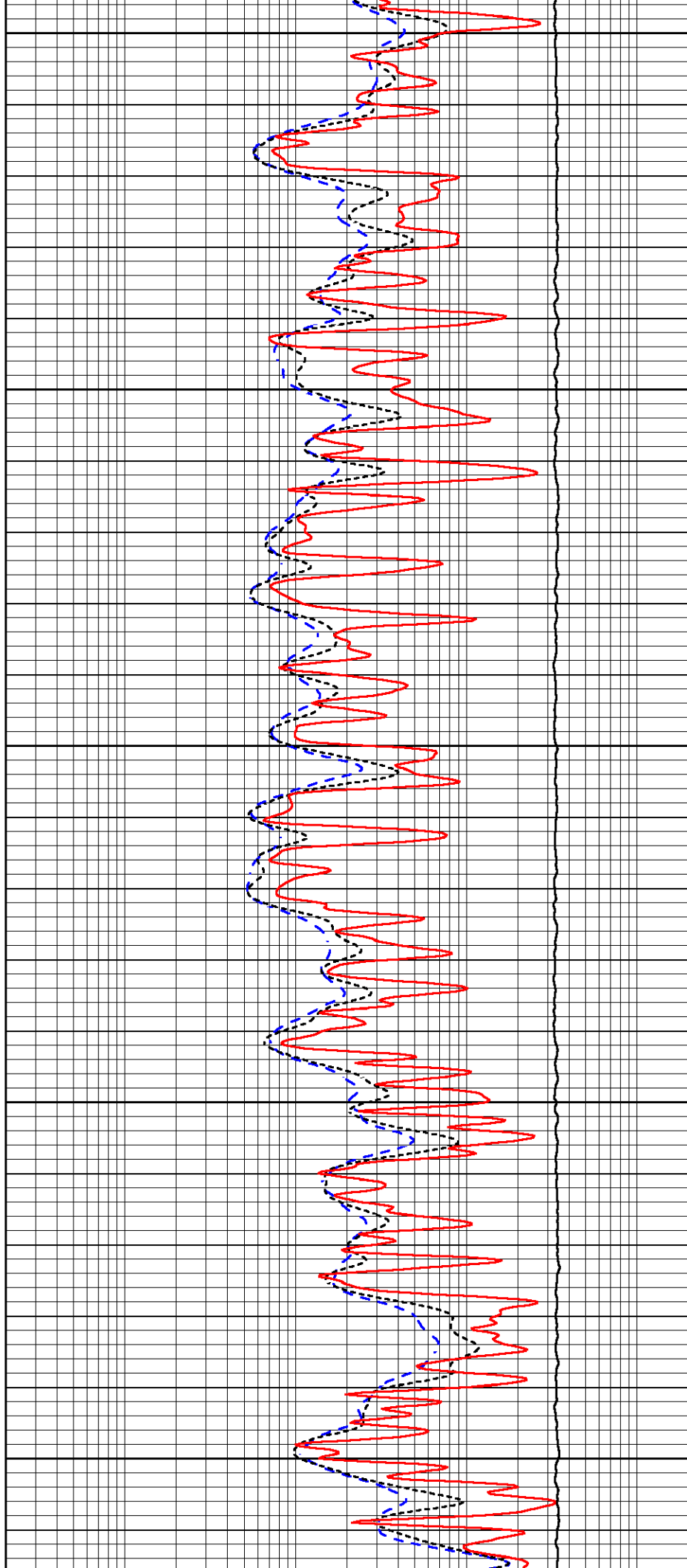
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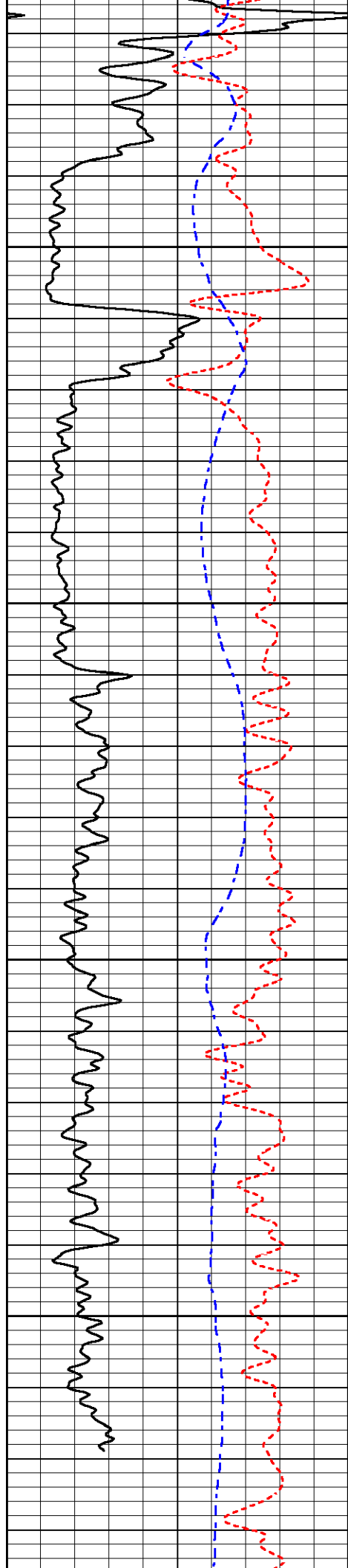
4500

4550

4600

4650



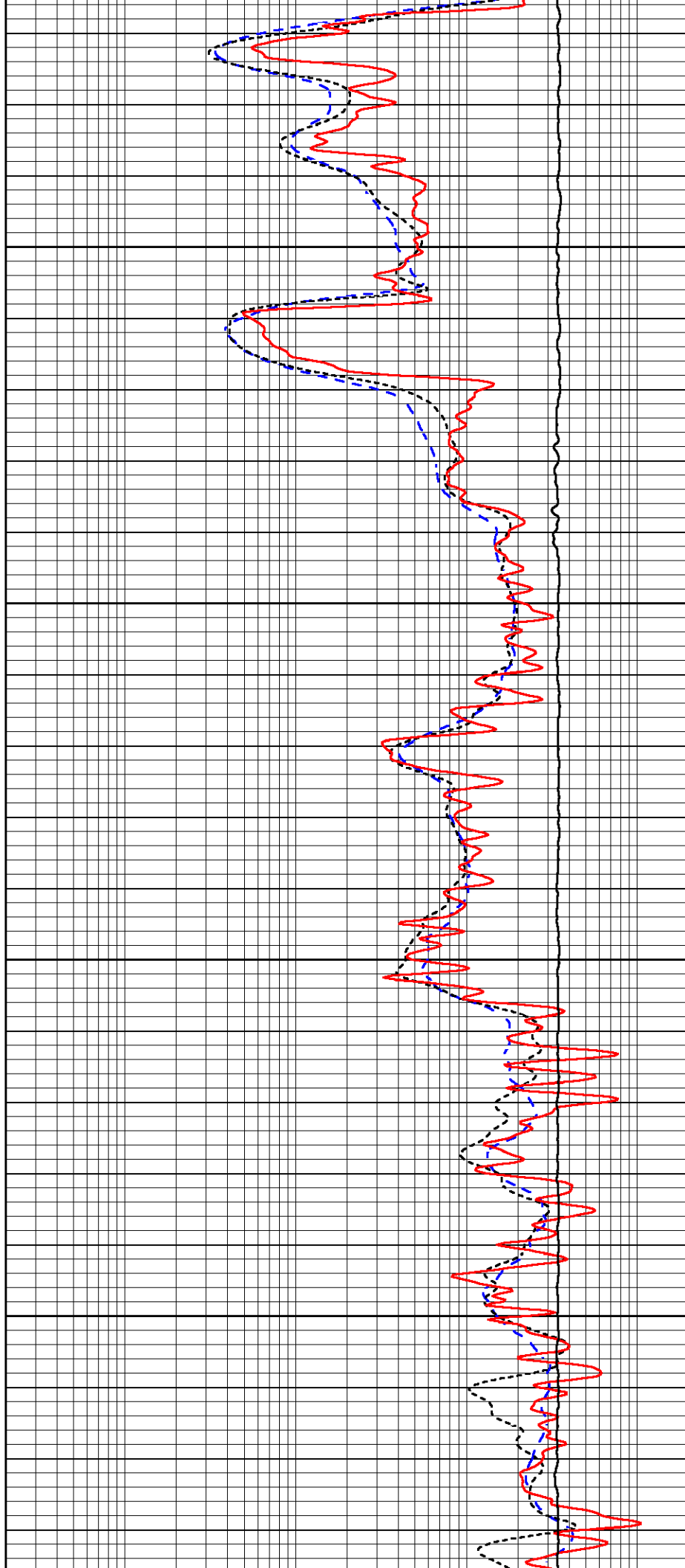


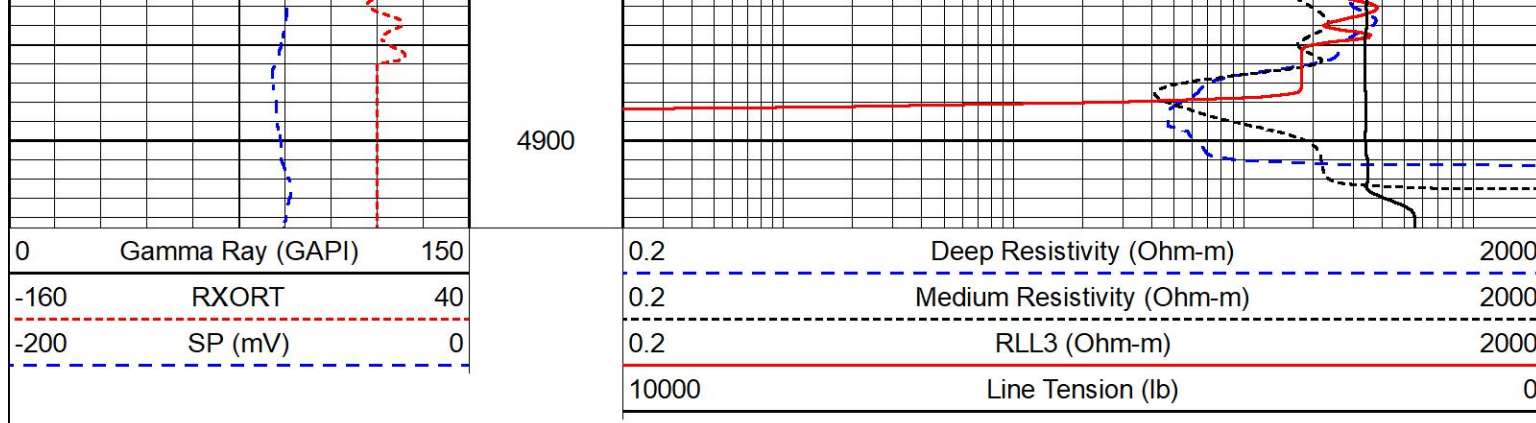
4700

4750

4800

4850

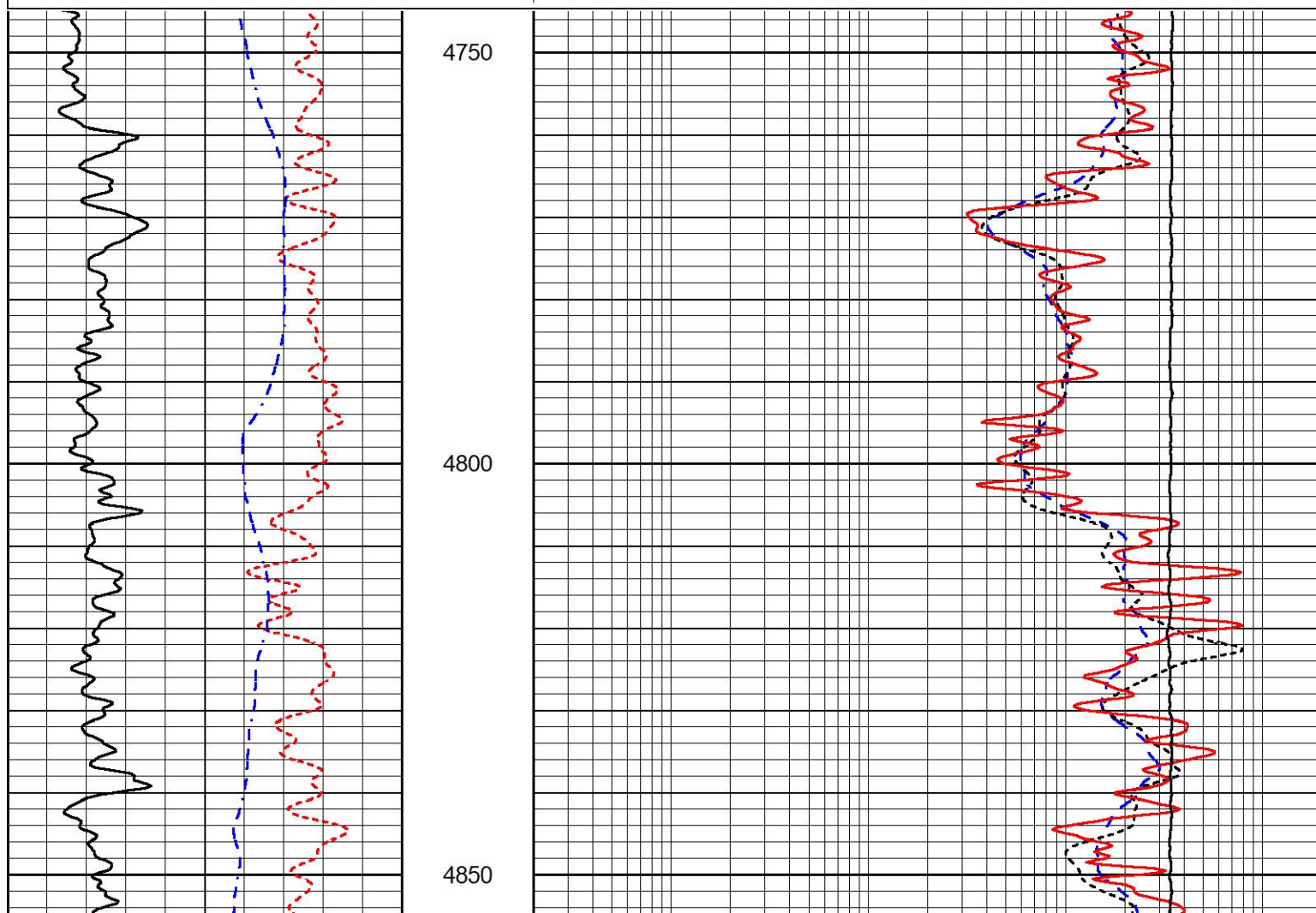
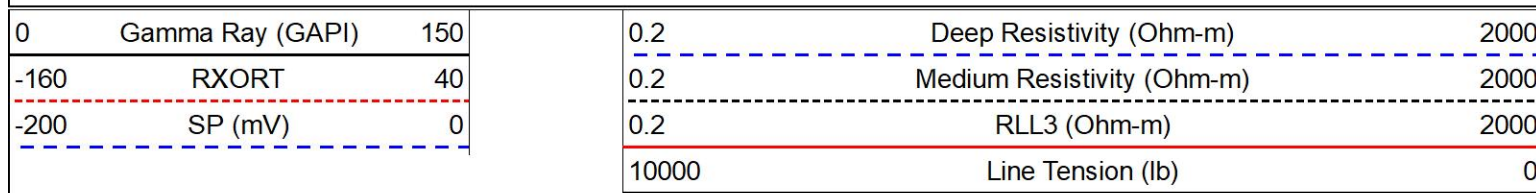


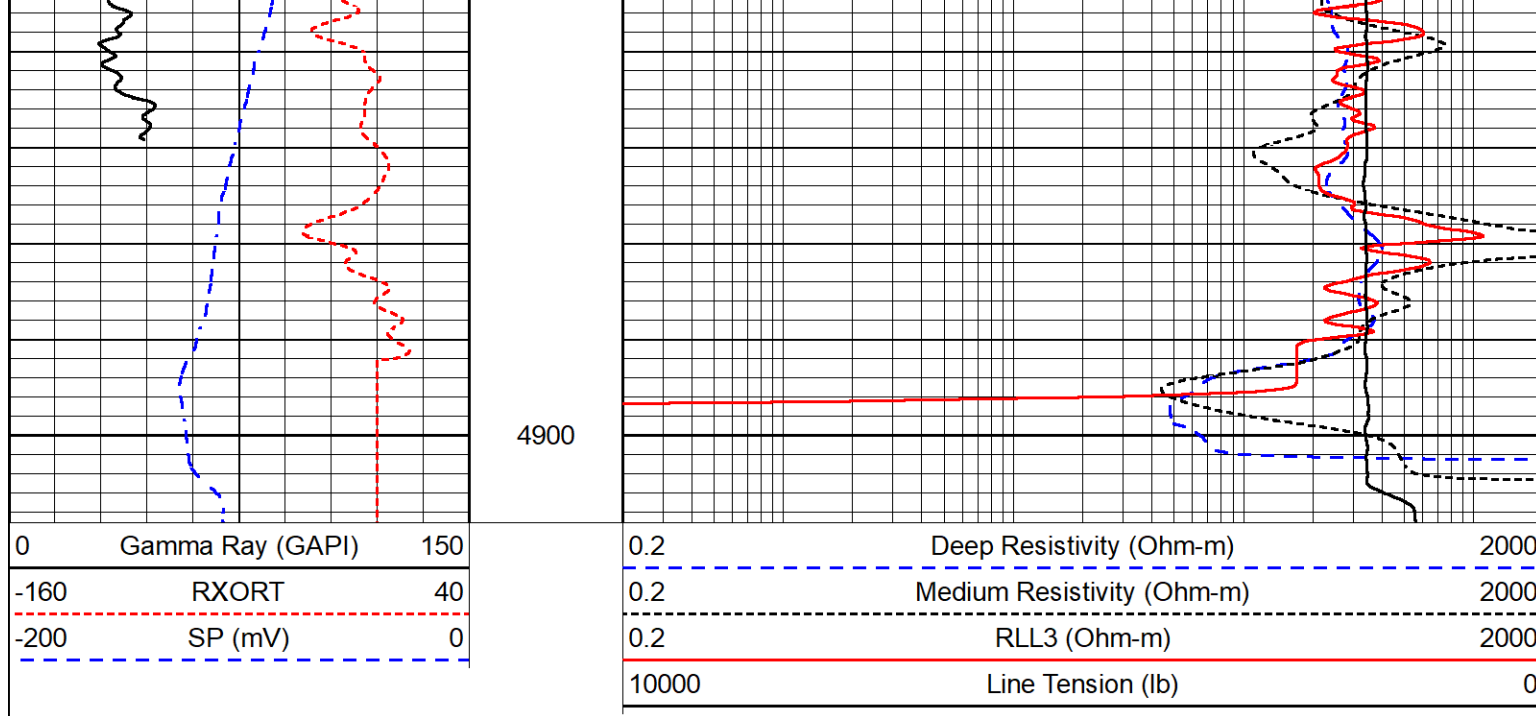


REPEAT SECTION

REPEAT PASS

Database File amwar_obratefinney #10-5.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format _dil
 Dataset Creation Sat Mar 25 13:34:56 2023
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File amwar_obratefinney #10-5.db
 Dataset Pathname StkMI/pass3.1
 Dataset Creation Sat Mar 25 14:05:11 2023

Dual Induction Calibration Report

Serial-Model: 507-M&W
 Surface Cal Performed: Sun Mar 19 18:02:16 2023

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	67.445	566.296	0.000	255.800	mmho/m	0.480	-32.000
Medium	192.026	839.715	0.000	255.800	mmho/m	0.420	-86.500

Microlog Calibration Report

Serial-Model: 401-PSIML
 Performed: Mon Mar 20 04:31:34 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	10000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	11250.0000	0.0000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-138.9500

Compensated Density Calibration Report

Serial-Model: 307-08-M&W
 Source #: 20762B
 Master Calibration Performed: Sat Feb 25 11:00:49 2023

Master Calibration

Density

Far Detector

Near Detector

Magnesium	1.755	g/cc	4131.04	5675.82	cps
Aluminum	2.635	g/cc	781.38	3576.78	cps
Spine Angle = 74.50			Density/Spine Ratio = 0.509		
	Size		Reading		
Small Ring	6.00	in	1.16		
Large Ring	18.00	in	1.01		

Compensated Neutron Calibration Report
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Serial Number:	207-MW
Tool Model:	M&W

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

PRE-SURVEY VERIFICATION						
Detector		Readings		Measured	Target	
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		
3)	Short Space		cps			
	Long Space		cps	pu		

POST-SURVEY VERIFICATION						
Detector		Readings		Measured	Target	
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		pu
3)	Short Space		cps			
	Long Space		cps	pu		pu

Gamma Ray Calibration Report

Serial Number:	106	
Tool Model:	M&W	
Performed:	Fri Dec 3 15:10:46 2021	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.5500	GAPI/cps



MIDWEST WIRELINE

Field	Seven Mile
County	Finney
State	Kansas