



DUAL INDUCTION

MIDWEST WIRELINE

Company Castle Resources Inc.
Well Mollhagen #2
Field Geneseo-Edwards
County Ellsworth
State Kansas

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Well Mollhagen #2
Field Geneseo-Edwards
County Ellsworth State Kansas

Location: API #: 15-053-21397-0-00
NE-SE-NW/NW
950 FNL & 4260 FEL
SEC 9 TWP 17S RGE 8W
Permanent Datum Ground Level Elevation
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
CNL/CDL
MEL
K.B.
D.F.
G.L.
Elevation

Table with columns: Date, Run Number, Depth Driller, Depth Logger, Bottom Logged Interval, Top Log Interval, Casing Driller, Casing Logger, Bit Size, Type Fluid in Hole, Salinity, ppm CL, Density / Viscosity, pH / Fluid Loss, Source of Sample, Rm @ Meas. Temp, Rmt @ Meas. Temp, Rmc @ Meas. Temp, Source of Rmf / Rmc, Rm @ BHT, Operating Rig Time, Max Rec. Temp. F, Equipment Number, Location, Recorded By, Witnessed By

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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.

Ellsworth, Ks
South on Hwy 14 to T Rd
1/2 West South into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew

Engineer: Justin Trout
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Jerry Green
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (105)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (201-M&W)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (305-24)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSIML (401)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50					
CILD	8.33		DIL-M&W (507)	18.25	3.50	220.00
CILM	4.50					
SP	0.20					

Dataset: castle\_mollhagen #2.db: field/well/STKML/pass3.1  
 Total length: 42.33 ft  
 Total weight: 685.00 lb  
 O.D.: 4.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\castle\_mollhagen #2.db  
 Dataset field/well/STKML/pass3.1/\_vars\_

## Top - Bottom

BOREID in 7.875	BOTTEMP degF 109	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m -1	SNDERRM mmho/m 4	SPSHIFT mV 138	SRFTEMP degF 100	SZCOR Off	TDEPTH ft 3332		

## Variable Description

BOREID : Borehole I.D.  
 BOTTEMP : Bottom Hole Temperature  
 CASEOD : Casing O.D.  
 CASETHCK : Casing Thickness  
 FLUIDDEN : Fluid Density  
 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

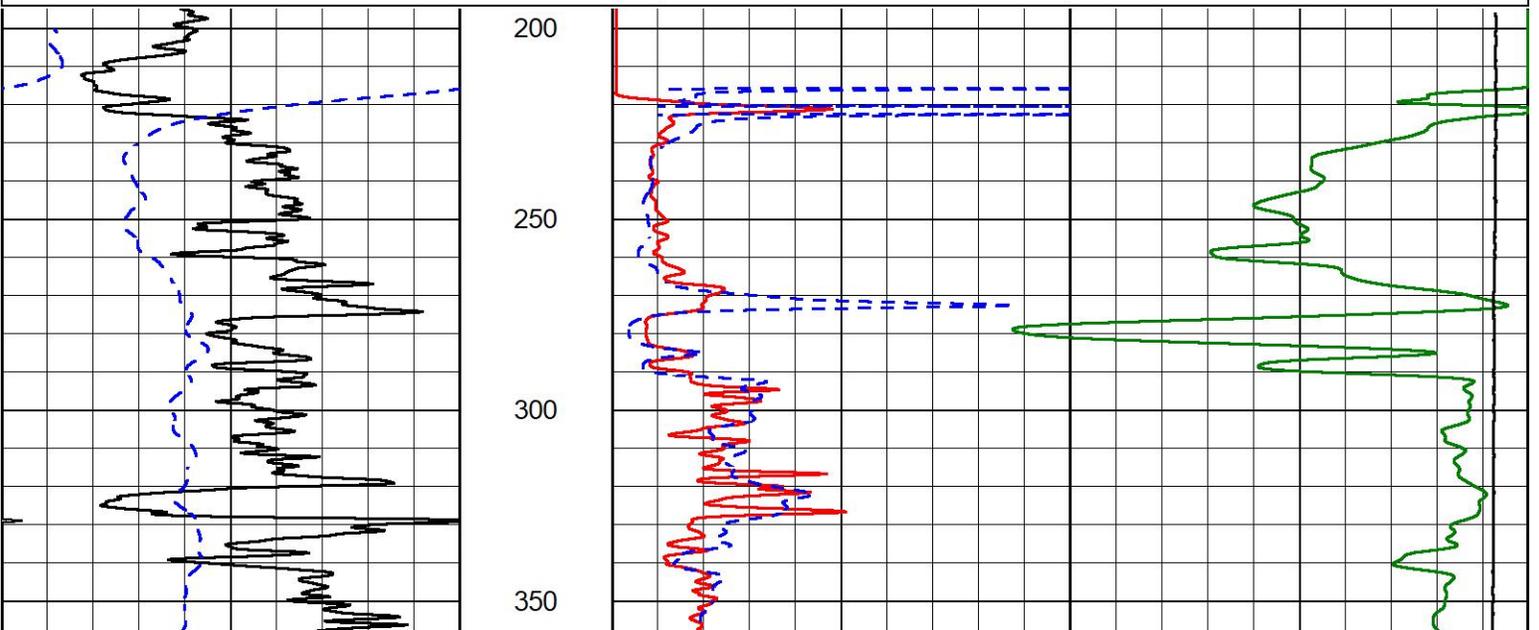


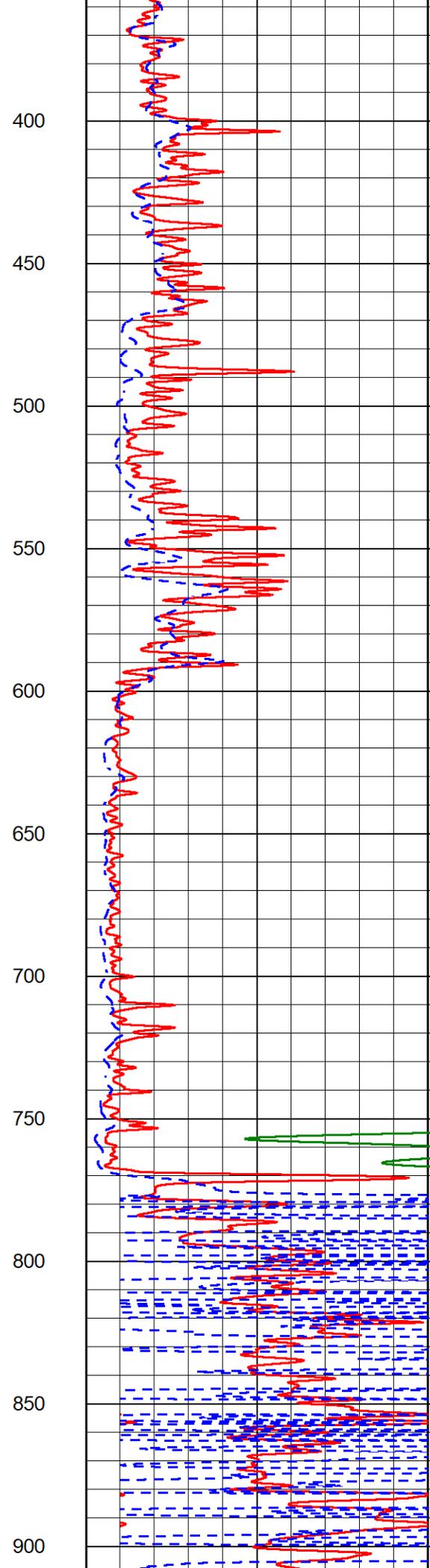
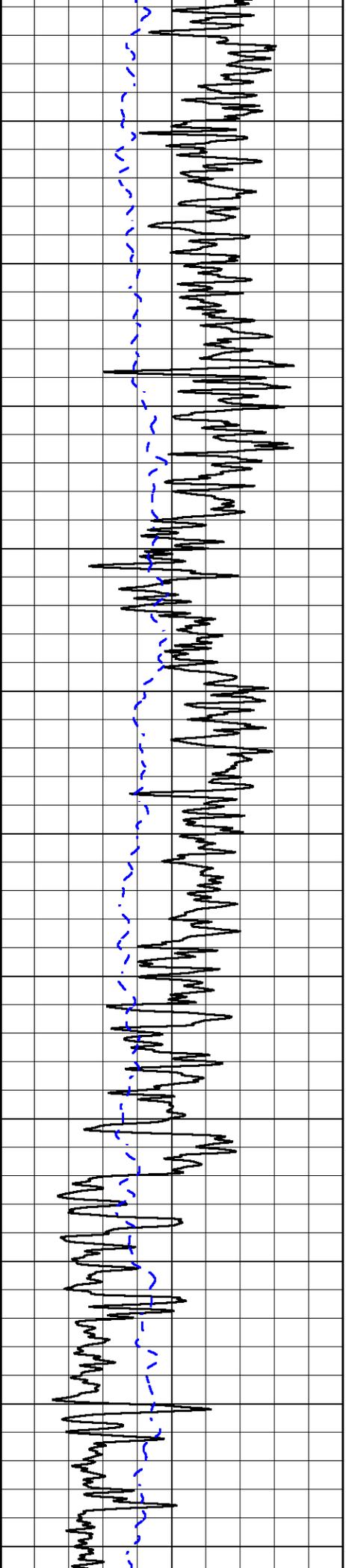
## 2" SCALE RESISTIVITY

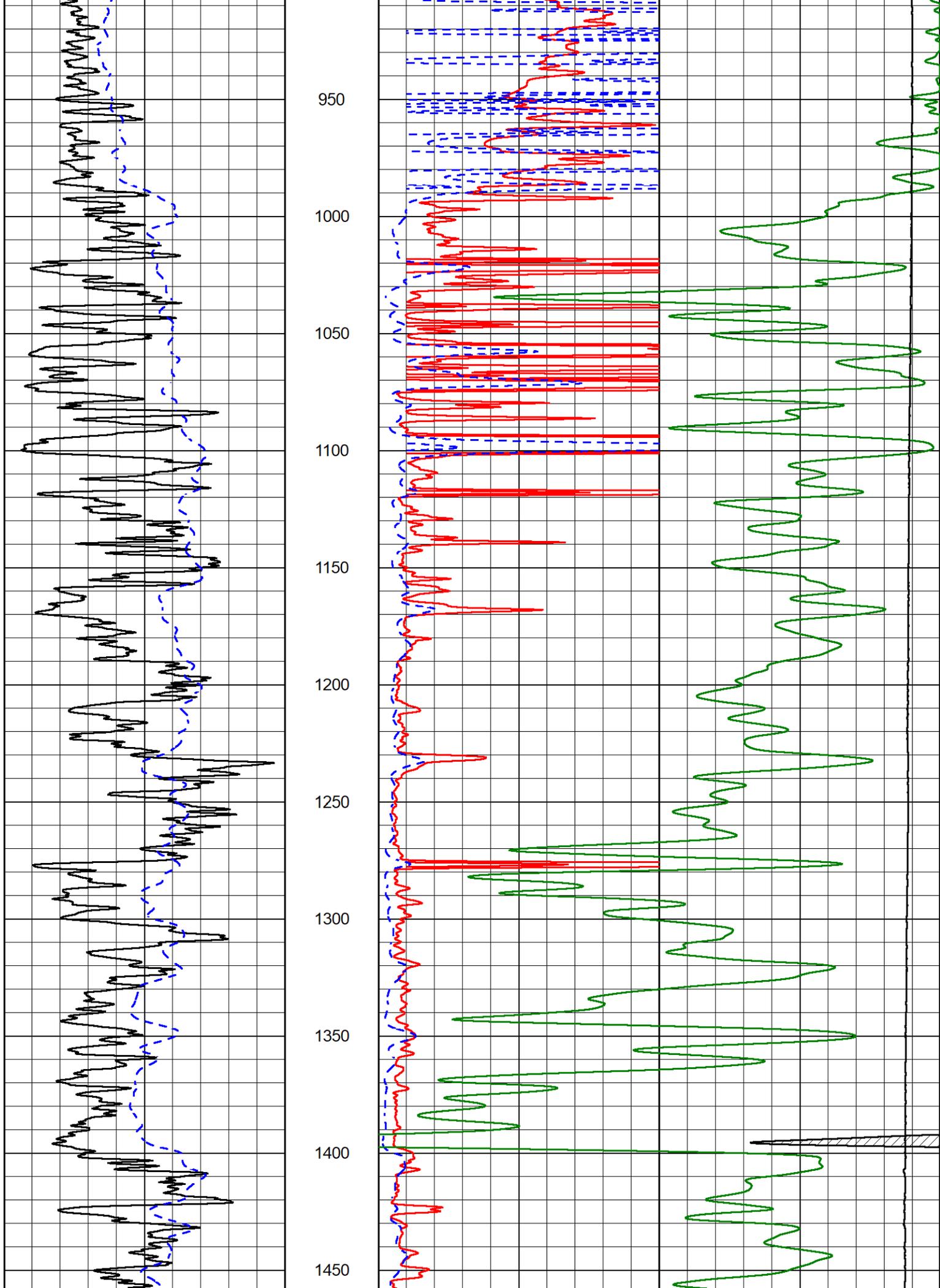
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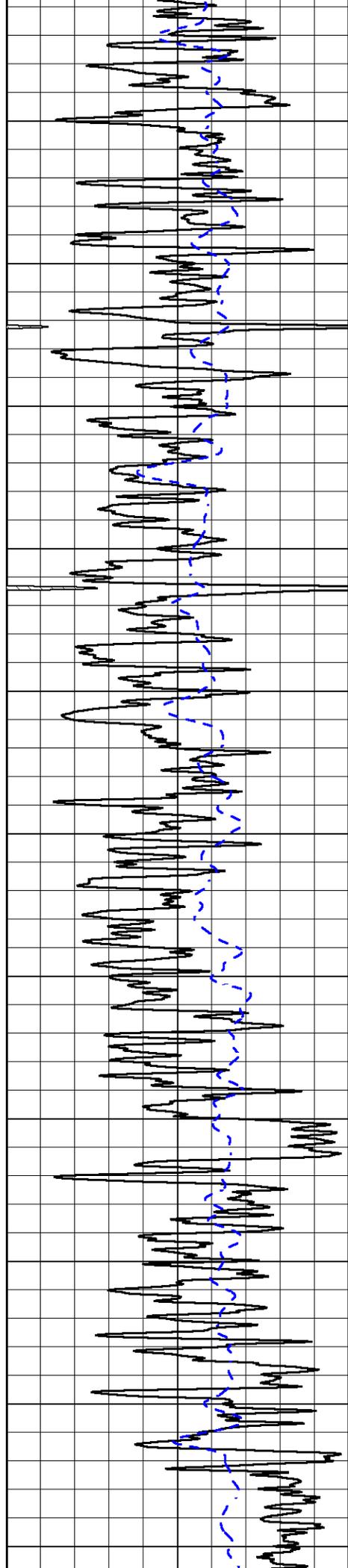
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 Dataset Pathname STKML/pass3.3  
 Presentation Format \_dil2in  
 Dataset Creation Fri Jul 12 16:55:54 2024  
 Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	1000	Conductivity (mmho/m)	0
-200	SP (mV)	0	15000	Line Tension (lb)	0
			0	RLL3 (Ohm-m)	50
			0	Deep Resistivity (Ohm-m)	50
			50	RLL3 (Ohm-m)	200
			50	Deep Resistivity (Ohm-m)	200

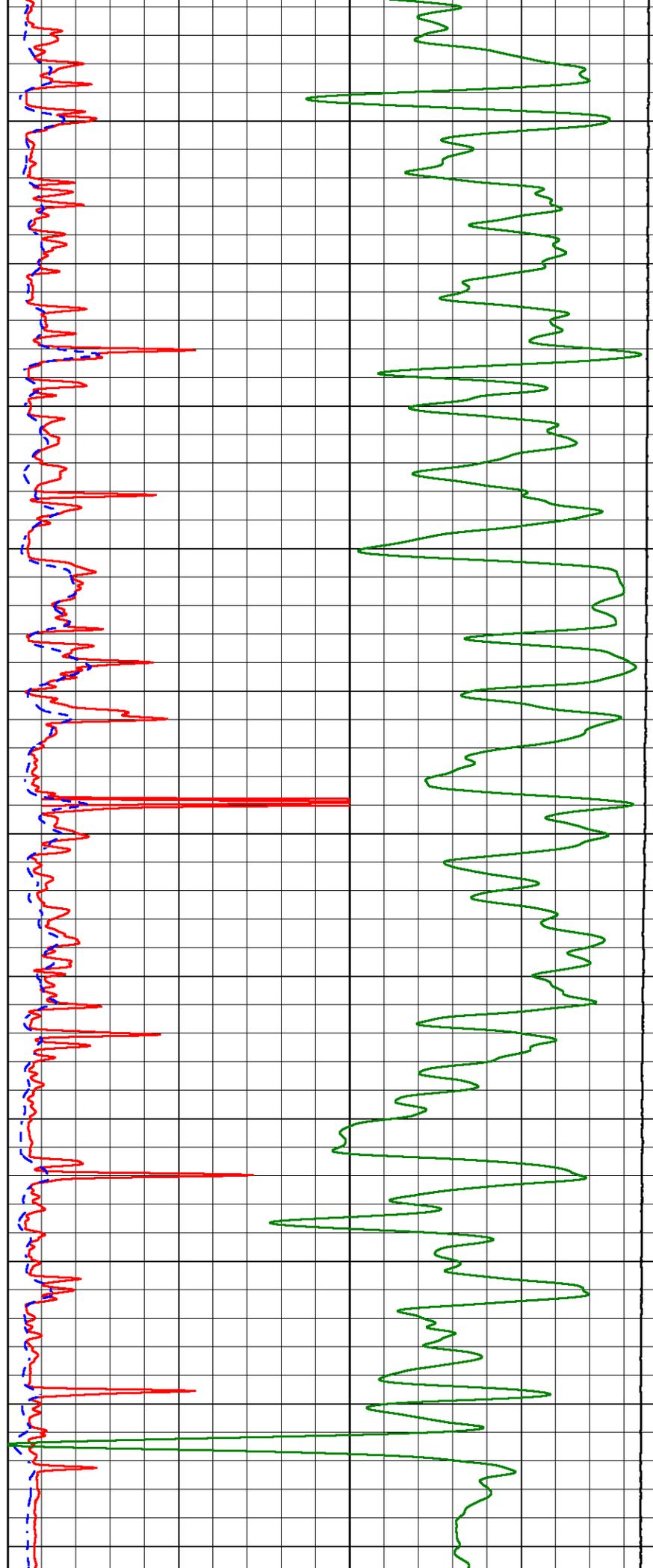


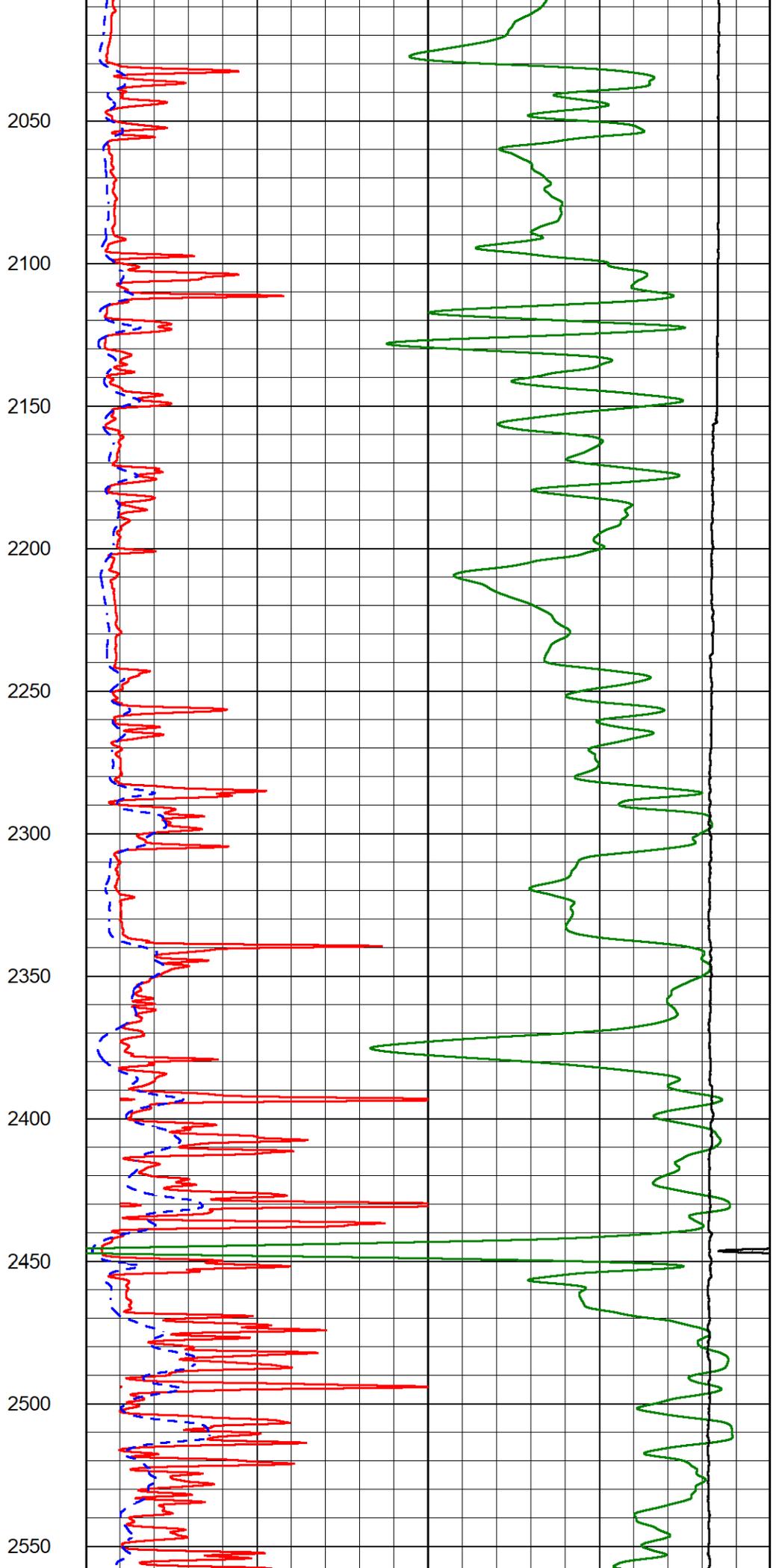
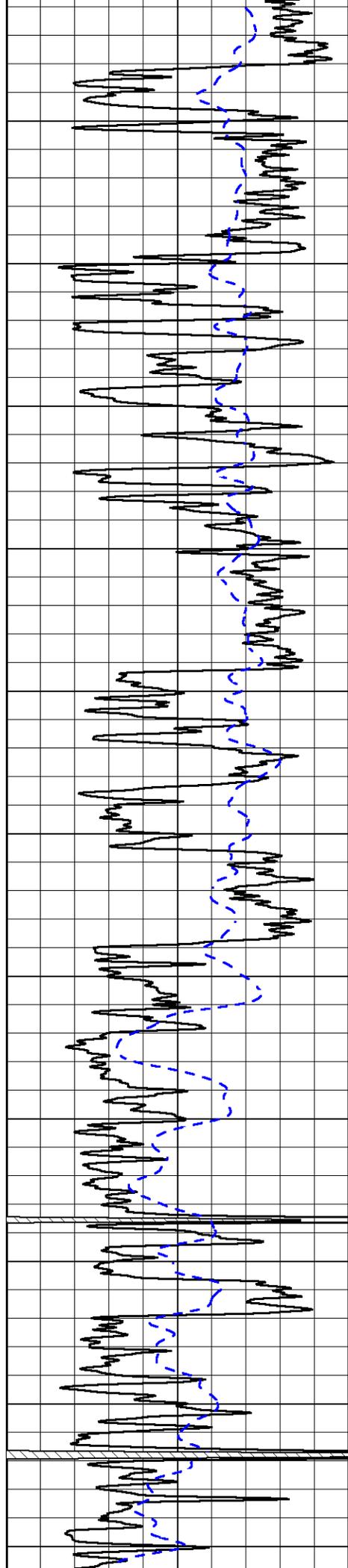


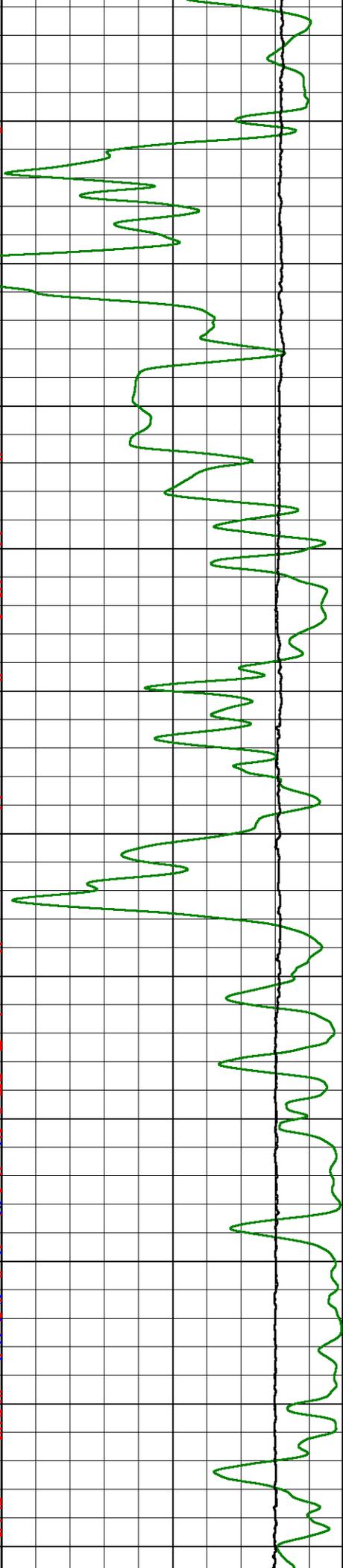
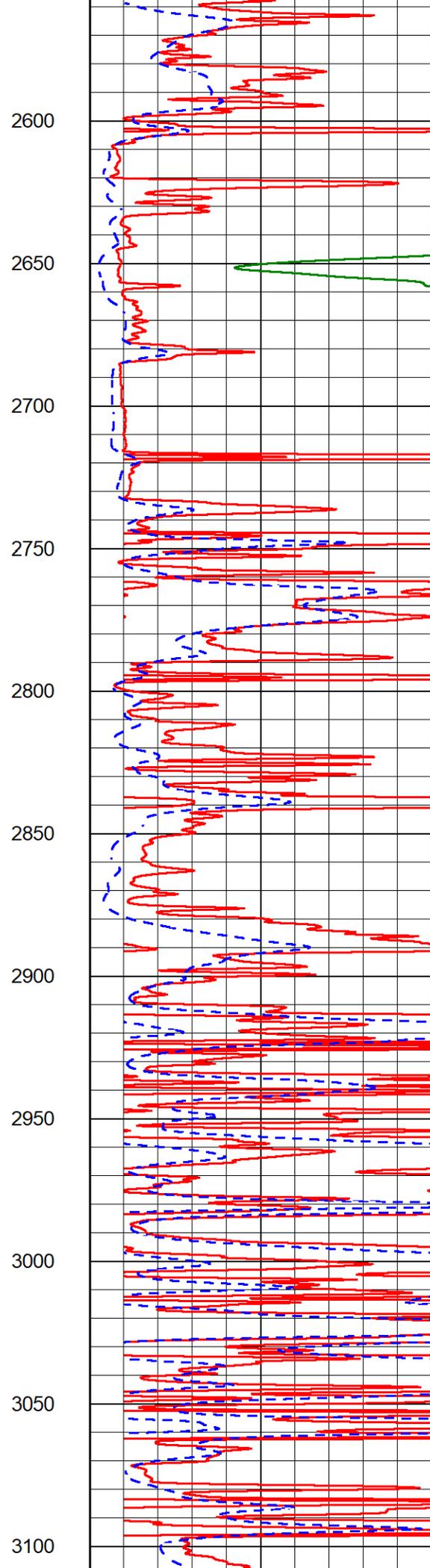
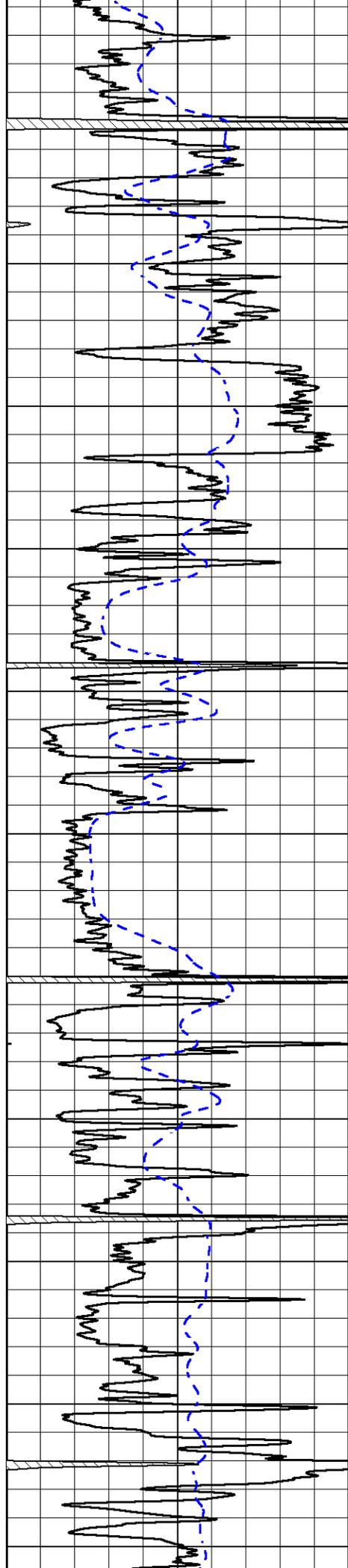


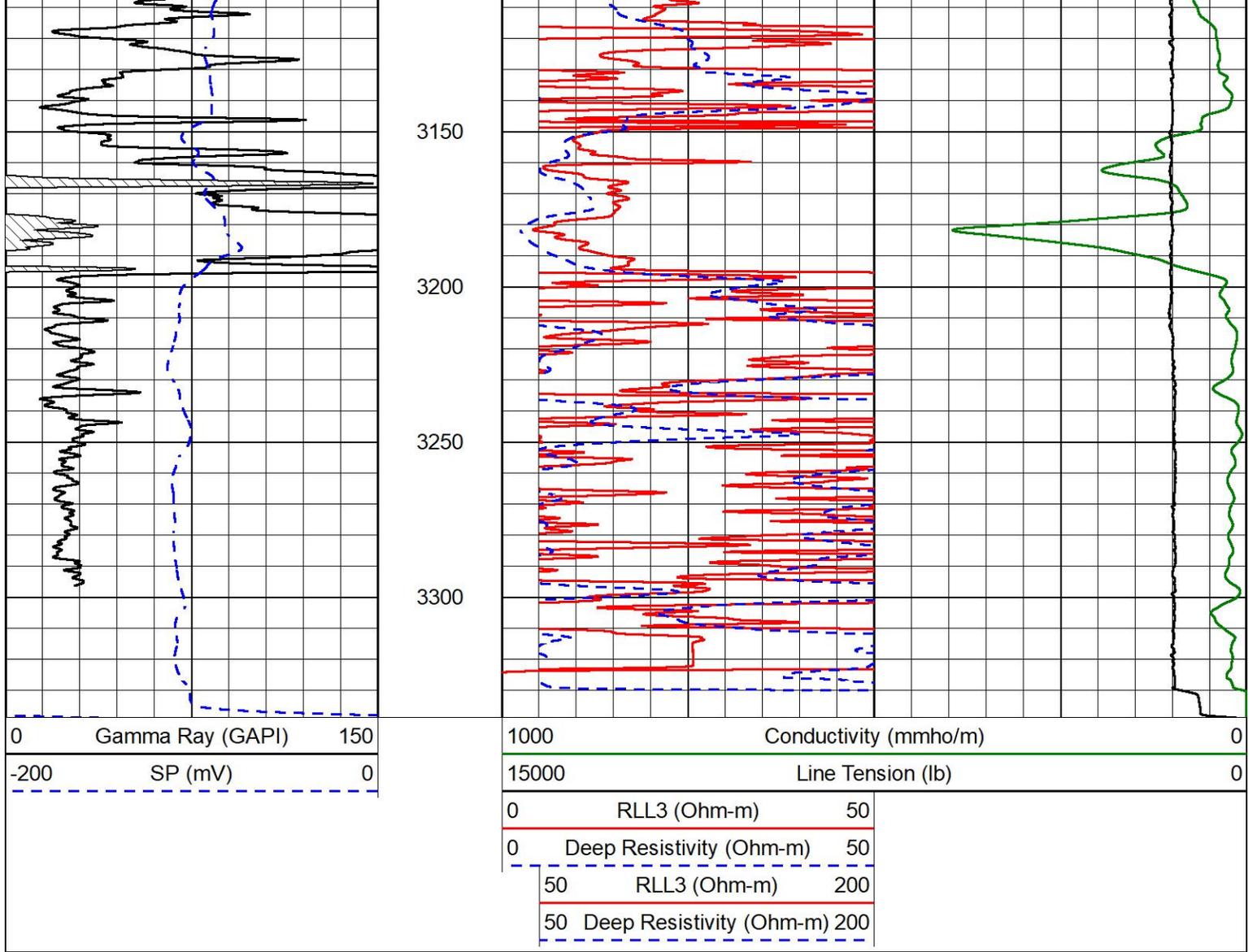


1500  
1550  
1600  
1650  
1700  
1750  
1800  
1850  
1900  
1950  
2000









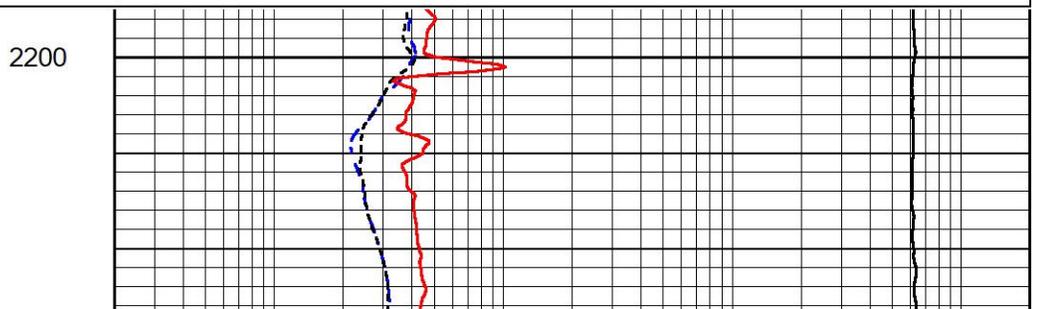
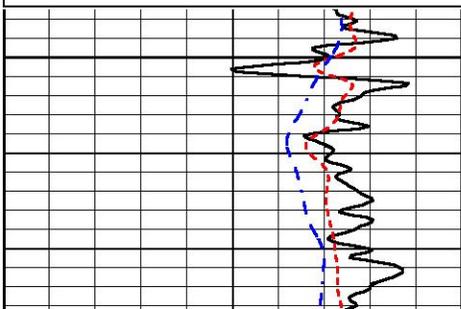
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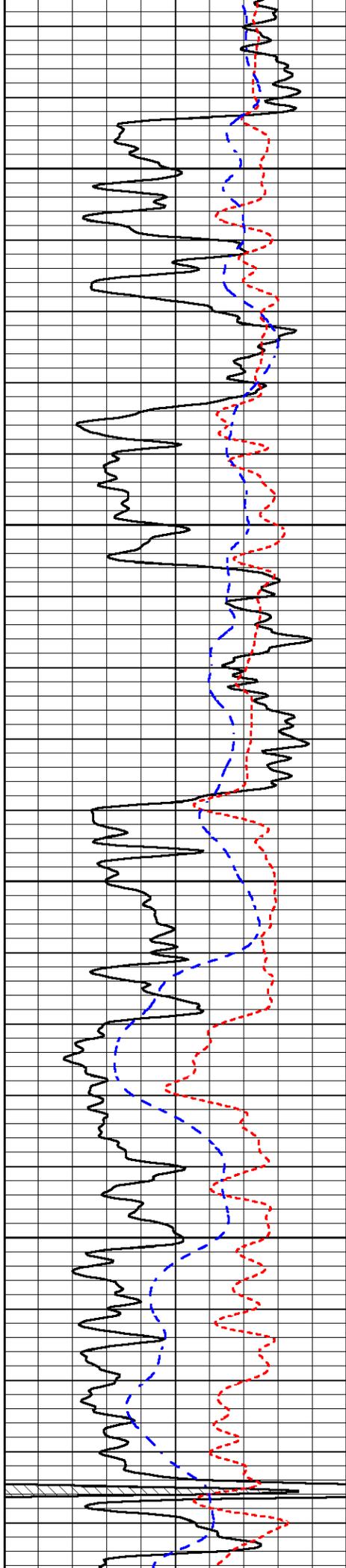
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 Dataset Pathname      STKML/pass3.1  
 Presentation Format      \_dil  
 Dataset Creation      Fri Jul 12 16:57:27 2024  
 Charted by      Depth in Feet scaled 1:240

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



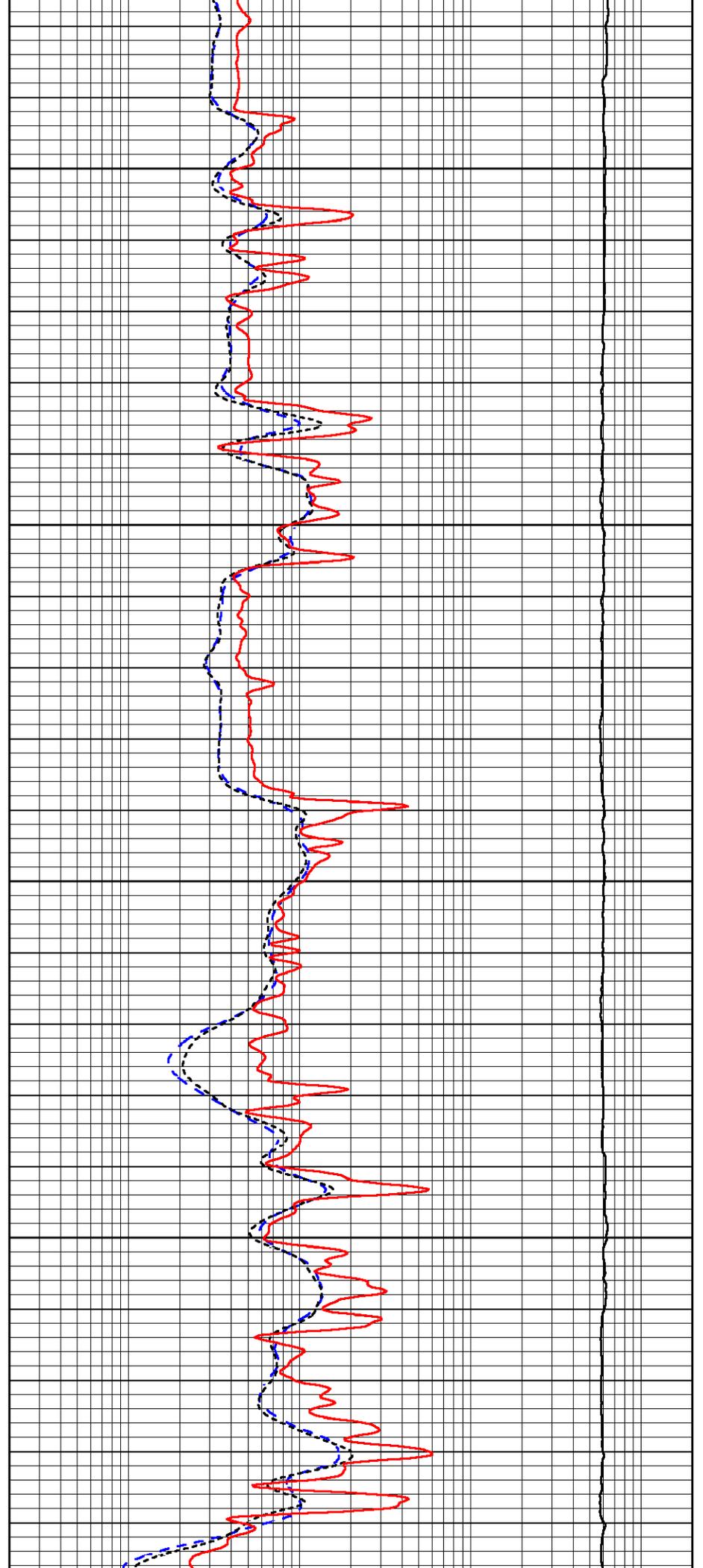


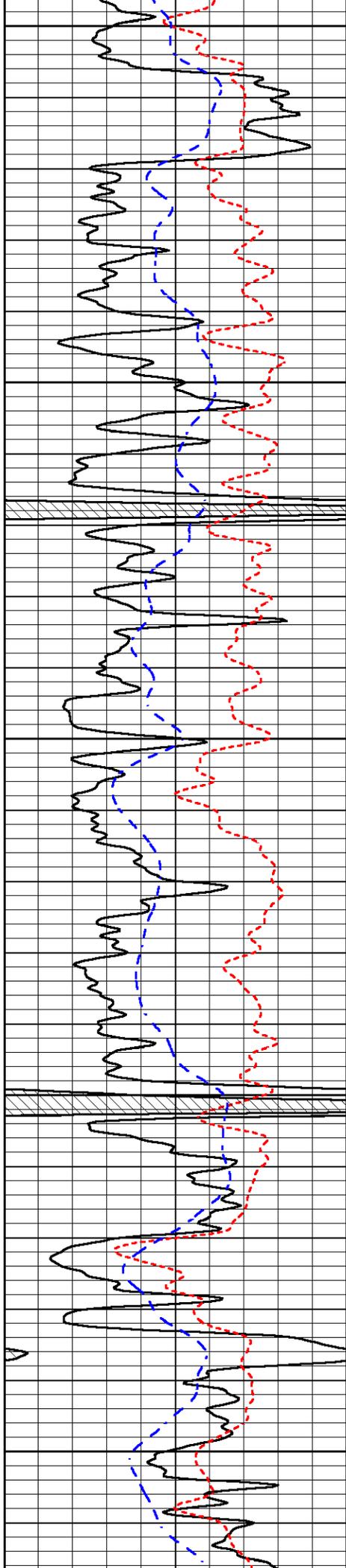
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2300

2350

2400





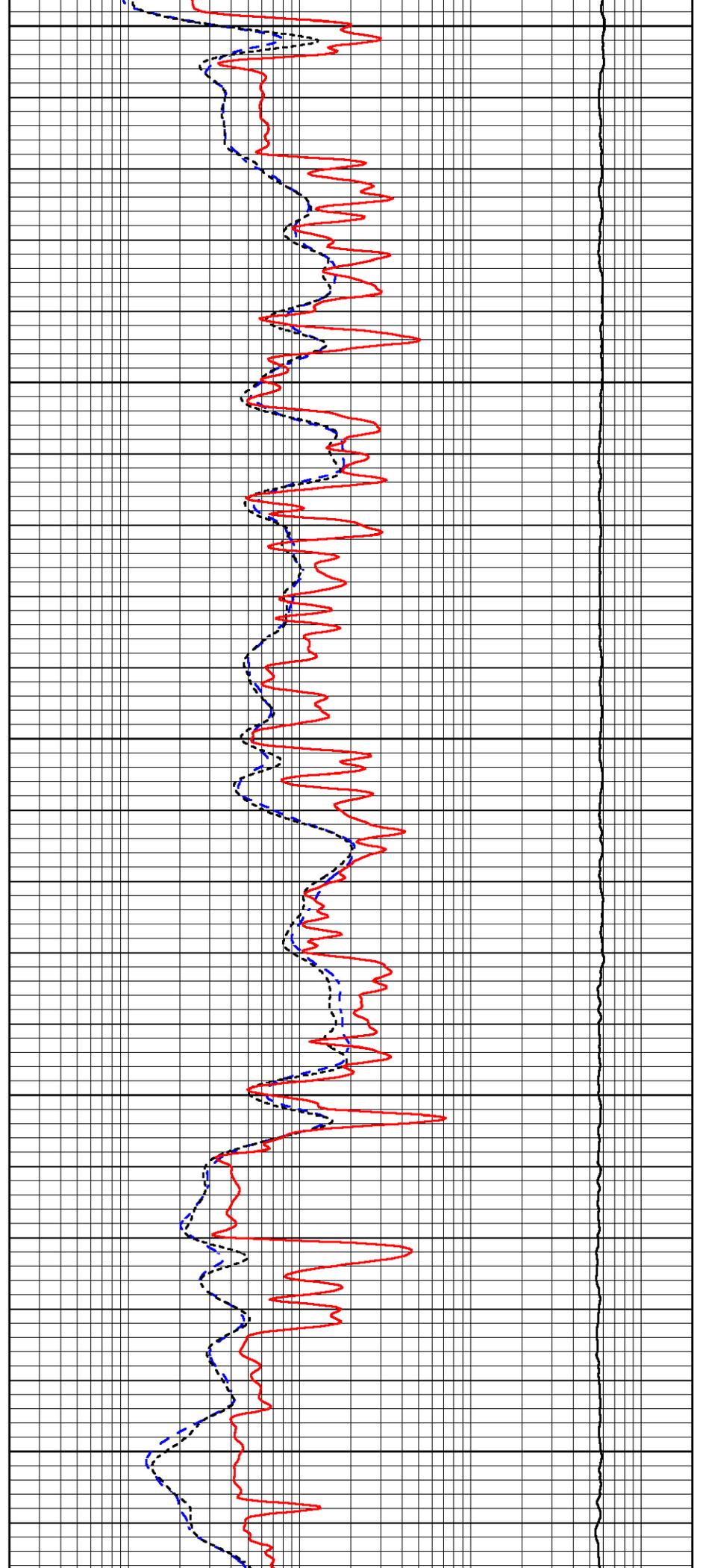
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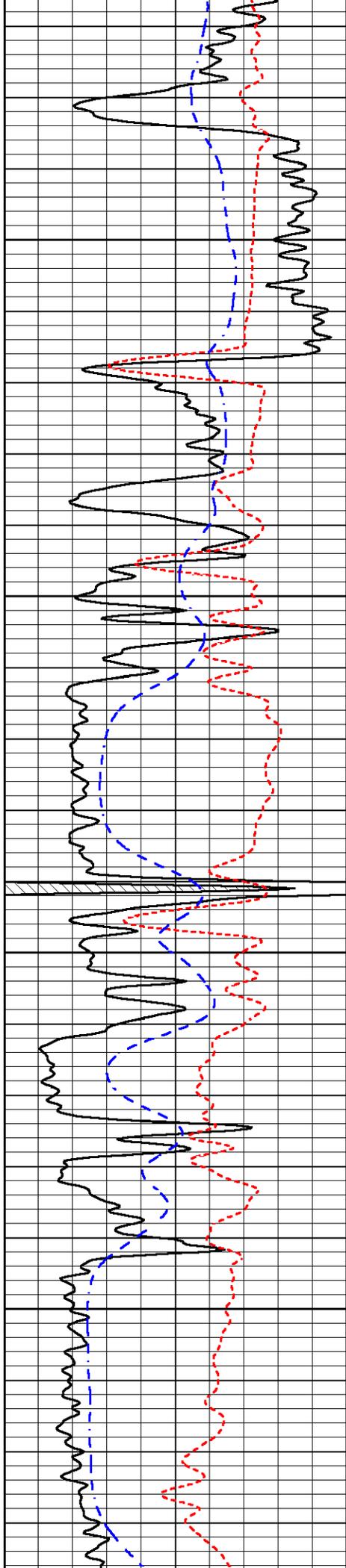
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2550

2600

2650



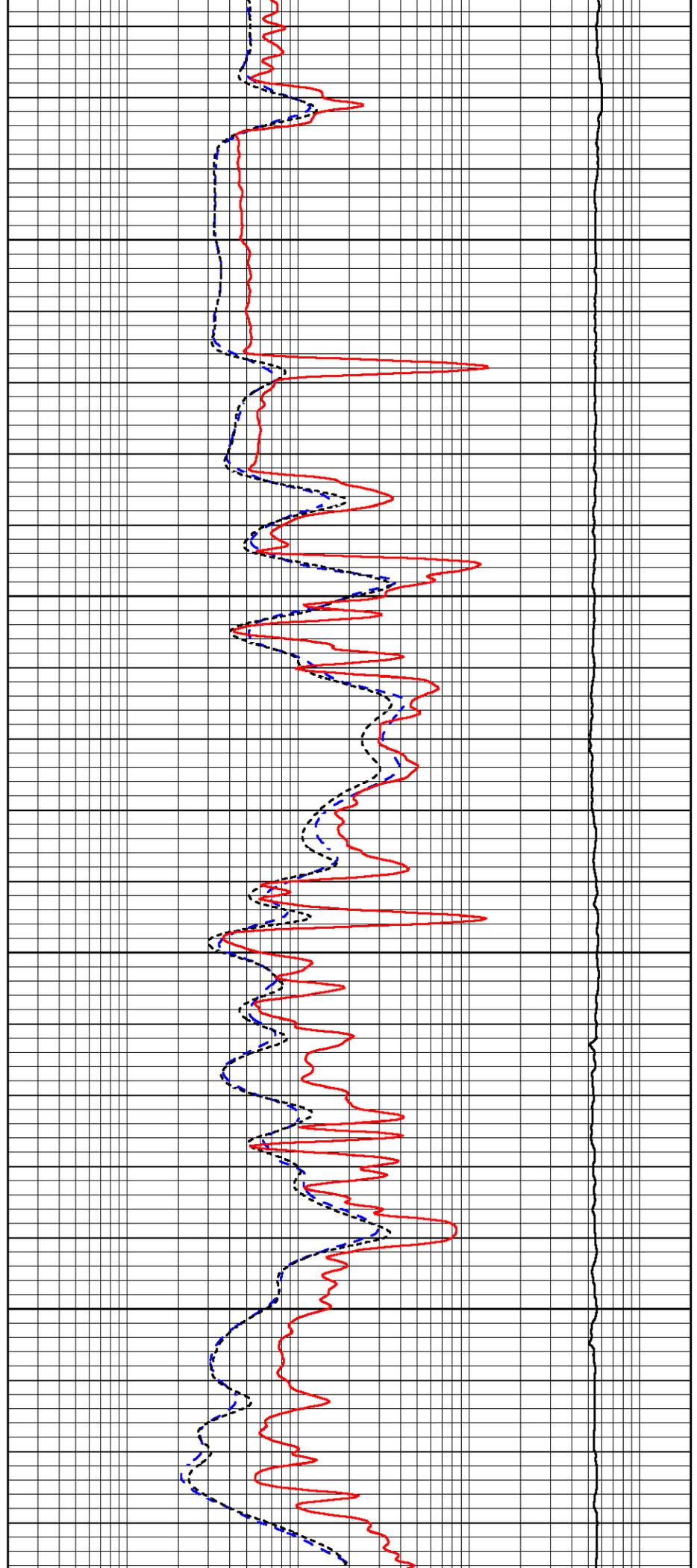


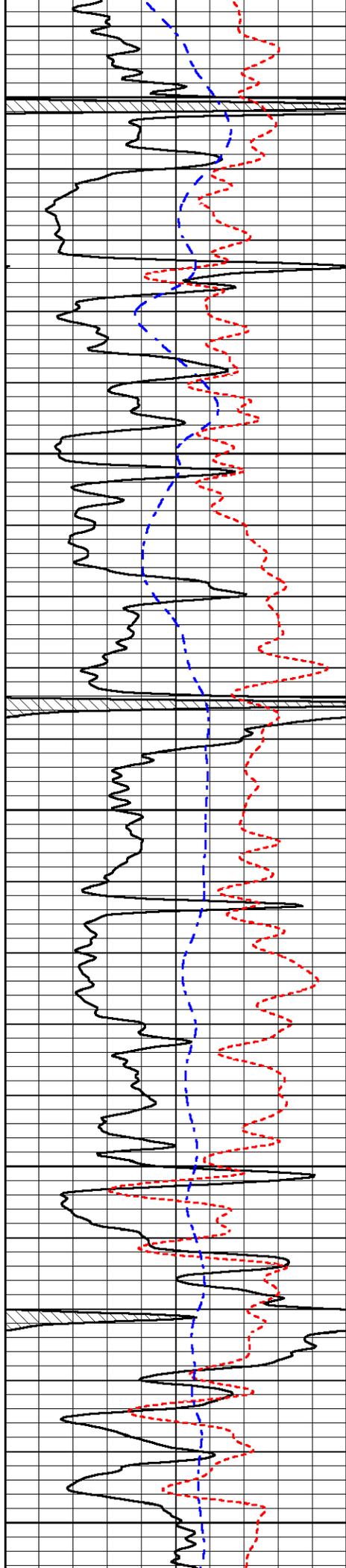
2700

2750

2800

2850





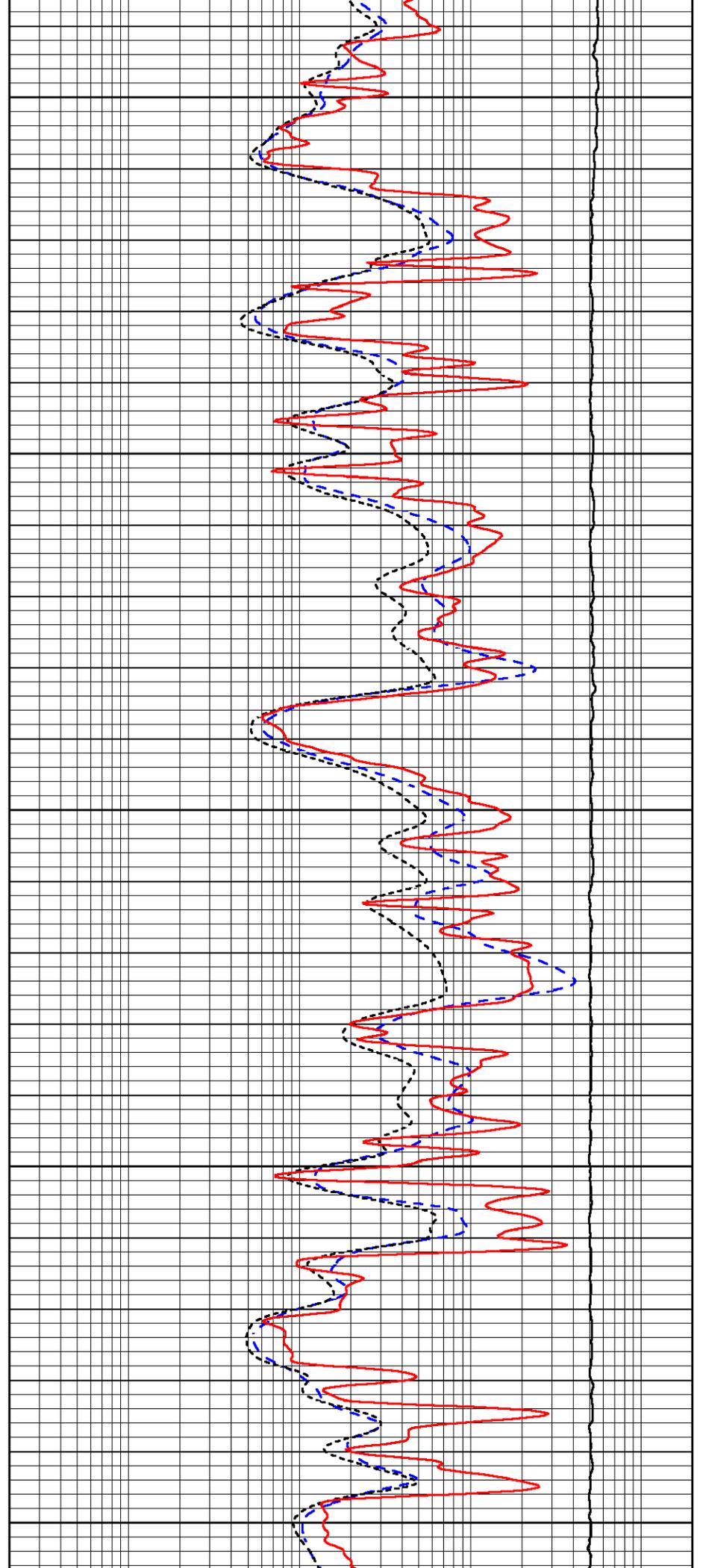
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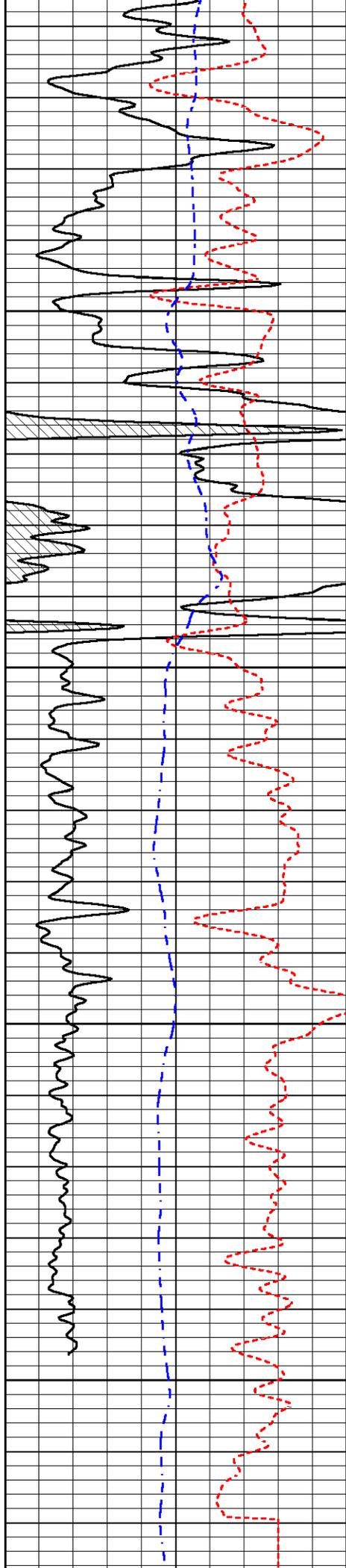
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3000

3050

3100



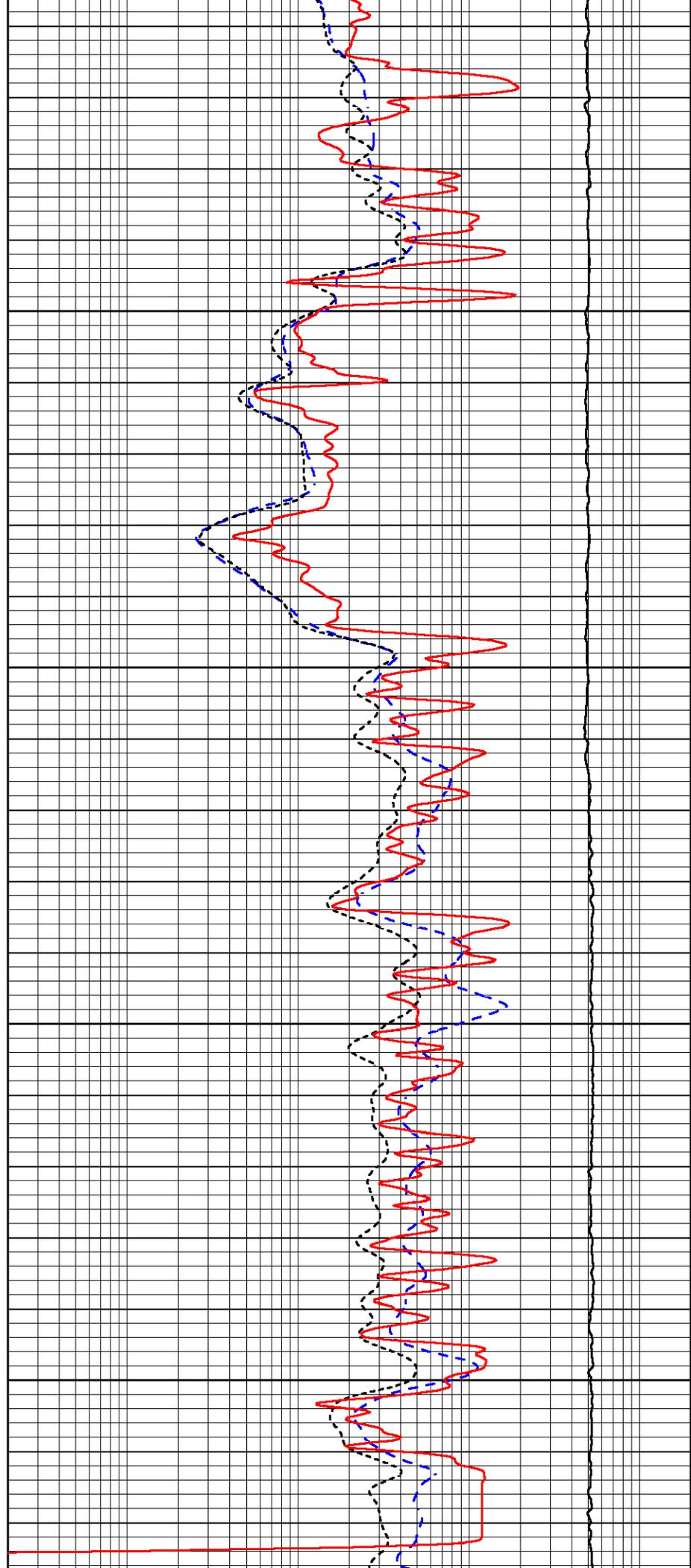


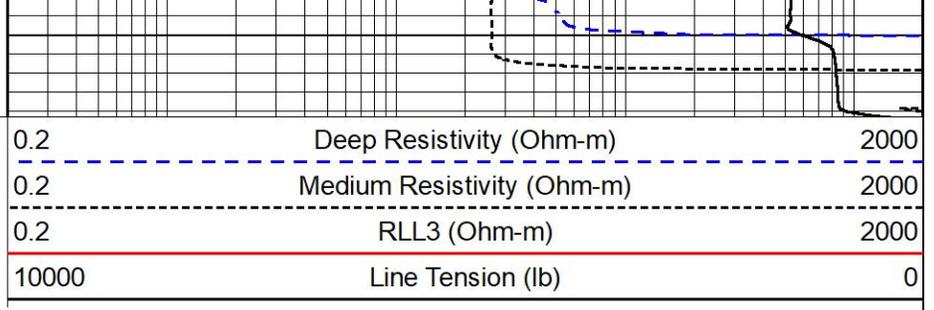
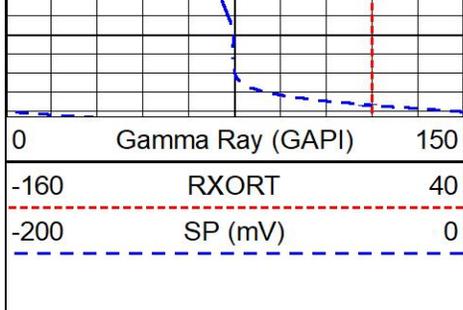
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3200

3250

3300

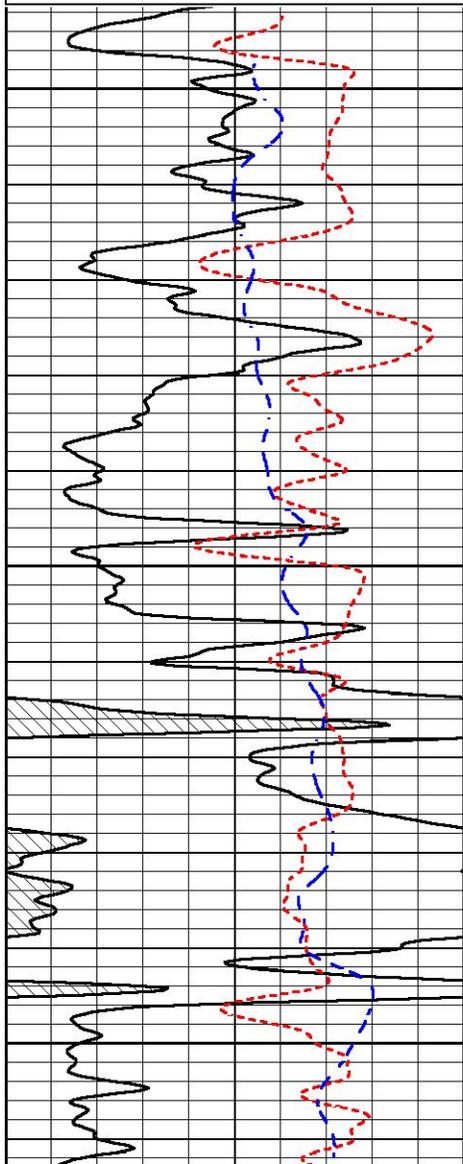
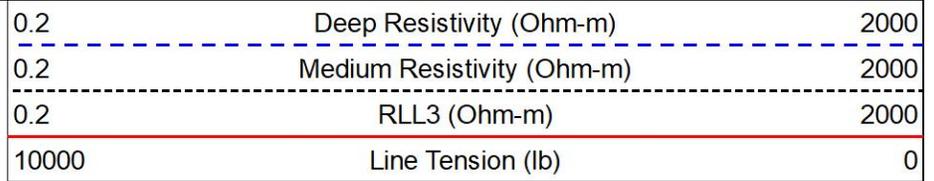
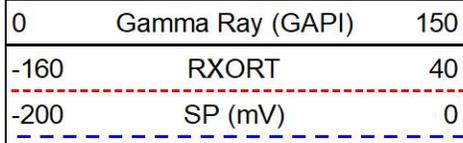




# REPEAT SECTION

## REPEAT PASS

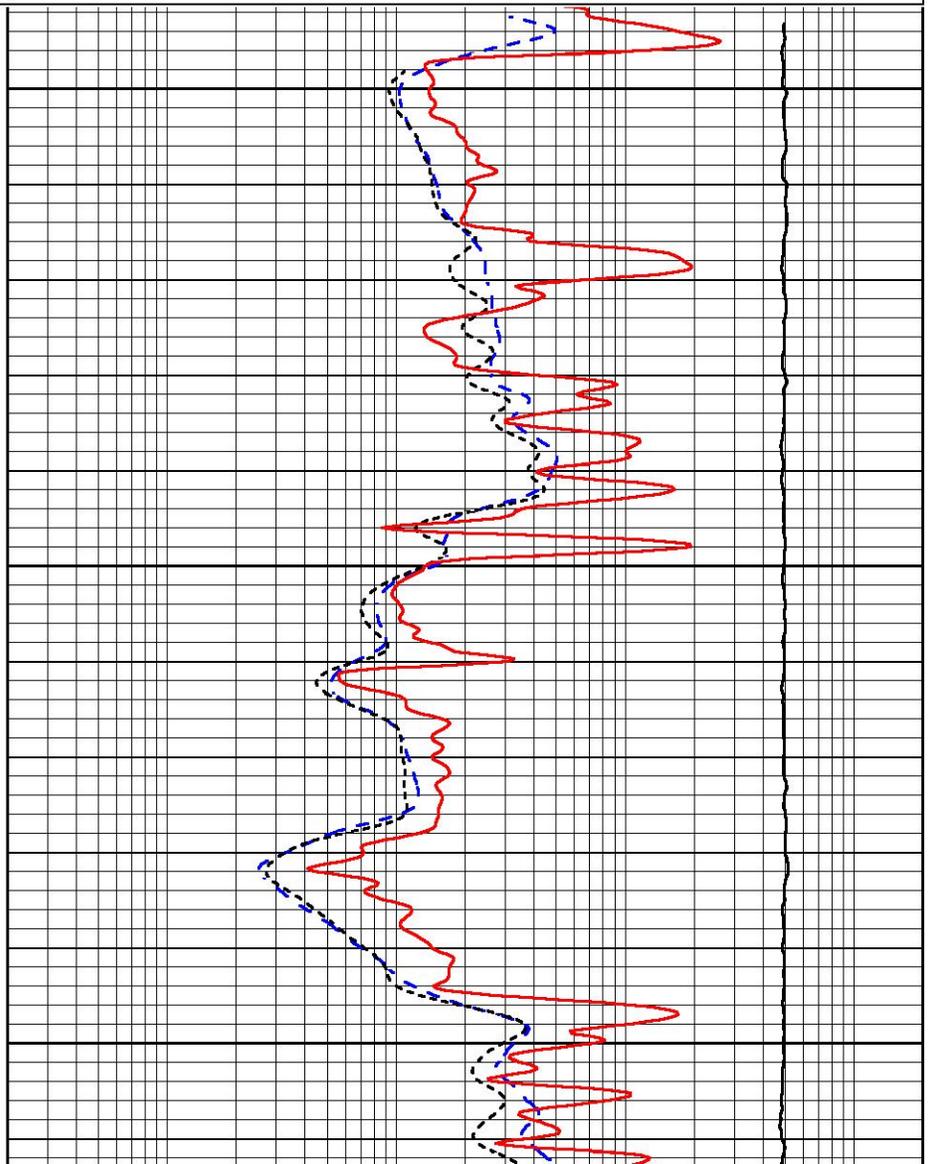
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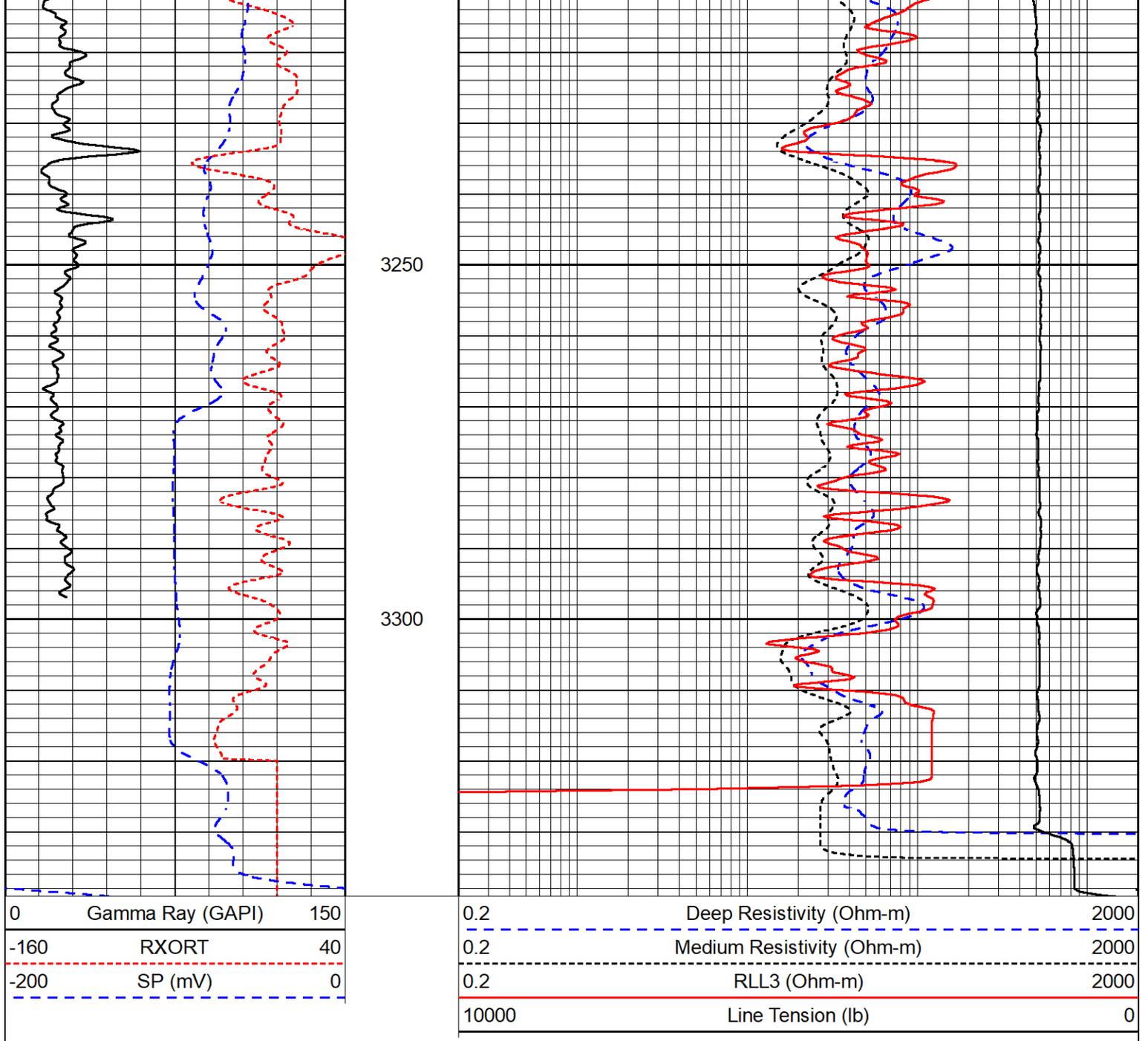


3100

3150

3200





### Calibration Report

Database File castle\_mollhagen #2.db  
 Dataset Pathname STKML/pass3.1  
 Dataset Creation Fri Jul 12 16:57:27 2024

### Dual Induction Calibration Report

Serial-Model: 507-M&W  
 Surface Cal Performed:

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	68.570	638.100	0.000	255.800	mmho/m	0.500	-37.000
Medium	184.288	716.191	0.000	255.800	mmho/m	0.450	-79.000

### Microlog Calibration Report

Serial-Model:  
Performed:

401-PSIML  
Mon Sep 25 22:02:56 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	23500.0000	-2.2000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	27000.0000	-0.5000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-139.1500

Compensated Density Calibration Report

Serial-Model: 305-24-M&W  
Source / Verifier: 20762B / 2ci  
Master Calibration Performed: Tue Feb 6 18:43:03 2024  
Before Survey Verification Performed:  
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.680	g/cc	5028.88	5761.57	cps
Aluminum	2.560	g/cc	1122.37	3952.02	cps
Spine Angle = 75.89		Density/Spine Ratio = 0.569			
	Size		Reading		
Small Ring	4.00	in	1.74		
Large Ring	14.00	in	1.38		

Compensated Neutron Calibration Report

Serial Number: 201-M&W  
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 Long Space	cps cps	pu	pu
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Gamma Ray Calibration Report

Serial Number:	105		
Tool Model:	M&W		
Performed:	Mon Aug 7 20:46:01 2023		
Calibrator Value:	500.0	GAPI	
Background Reading:	24.0	cps	
Calibrator Reading:	637.0	cps	
Sensitivity:	0.6000	GAPI/cps	

 <p>MIDWEST WIRELINE</p>	Company	Castle Resources Inc.
	Well	Mollhagen #2
	Field	Geneseo-Edwards
	County	Ellsworth
	State	Kansas