



DUAL INDUCTION LOG

MIDWEST WIRELINE

Company TDI, Inc.		Company TDI, Inc.	
Well	Linda #1	Well	Linda #1
Field	Dechant	Field	Dechant
County	Ellis	County	Ellis
State	Kansas	State	Kansas
Location: API #: 15-051-26999-00-00		Other Services	
SE NE NW NW 595' FNL & 1155' FWL SEC 11 TWP 15S RGE 19W		CNL/CDL MEL	
Permanent Datum	Ground Level	Elevation	2046'
Log Measured From	Kelly Bushing	K.B.	2056'
Drilling Measured From	Kelly Bushing	D.F.	
		G.L.	2046'
Date	7/1/2021		
Run Number	One		
Depth Driller	3750'		
Depth Logger	3754'		
Bottom Logged Interval	3753'		
Top Log Interval	200'		
Casing Driller	8.625" @ 213.56'		
Casing Logger	212'		
Bit Size	7.875"		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	11600		
Density / Viscosity	9.2 58		
pH / Fluid Loss	10.5 8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.55 @ 74		
Rmt @ Meas. Temp	0.41 @ 74		
Rmc @ Meas. Temp	0.74 @ 74		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.36 @ 114		
Operating Rig Time	2.5 Hours		
Max Rec. Temp. F	114 Deg F		
Equipment Number	P-108		
Location	HAYS		
Recorded By	T. Martin		
Witnessed By	Herb Deines	Tom Denning	

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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.

Antonino, KS, 1 S, 1.5 W, S into

Log Measured From: Kelly Bushing

10 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: T. Martin
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Herb Deines
Secondary Witness: Tom Denning
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58			GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC CNSSC	37.48 36.73			CNT-M&W (tk10-MW)	5.50	3.50	100.00
LSD DCAL SSD	28.43 28.42 27.93			CDL-M&W (915-956)	8.50	4.00	250.00
ML-PSI STKBL ML (PSI-02) Stackable Microlog Tools					7.58	4.00	65.00
MCAL MI MN	19.83 19.83 19.83						
RLL3F RLL3	15.80 15.80						
CILD	8.00			DIL-PSI HIGH TEMP (959-1032)	18.50	3.50	220.00
CILM	4.70						
SP	0.20						
Dataset: tdi_linda_#1.db: field/well/StkMI/pass3.1 Total length: 43.08 ft Total weight: 685.00 lb O.D.: 4.00 in							

Log Variables

DatabaseC:\ProgramData\Warrior\Data\tdi_linda_#1.db
Dataset field/well/StkMI/pass3.1/_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	205	80	Off	3754

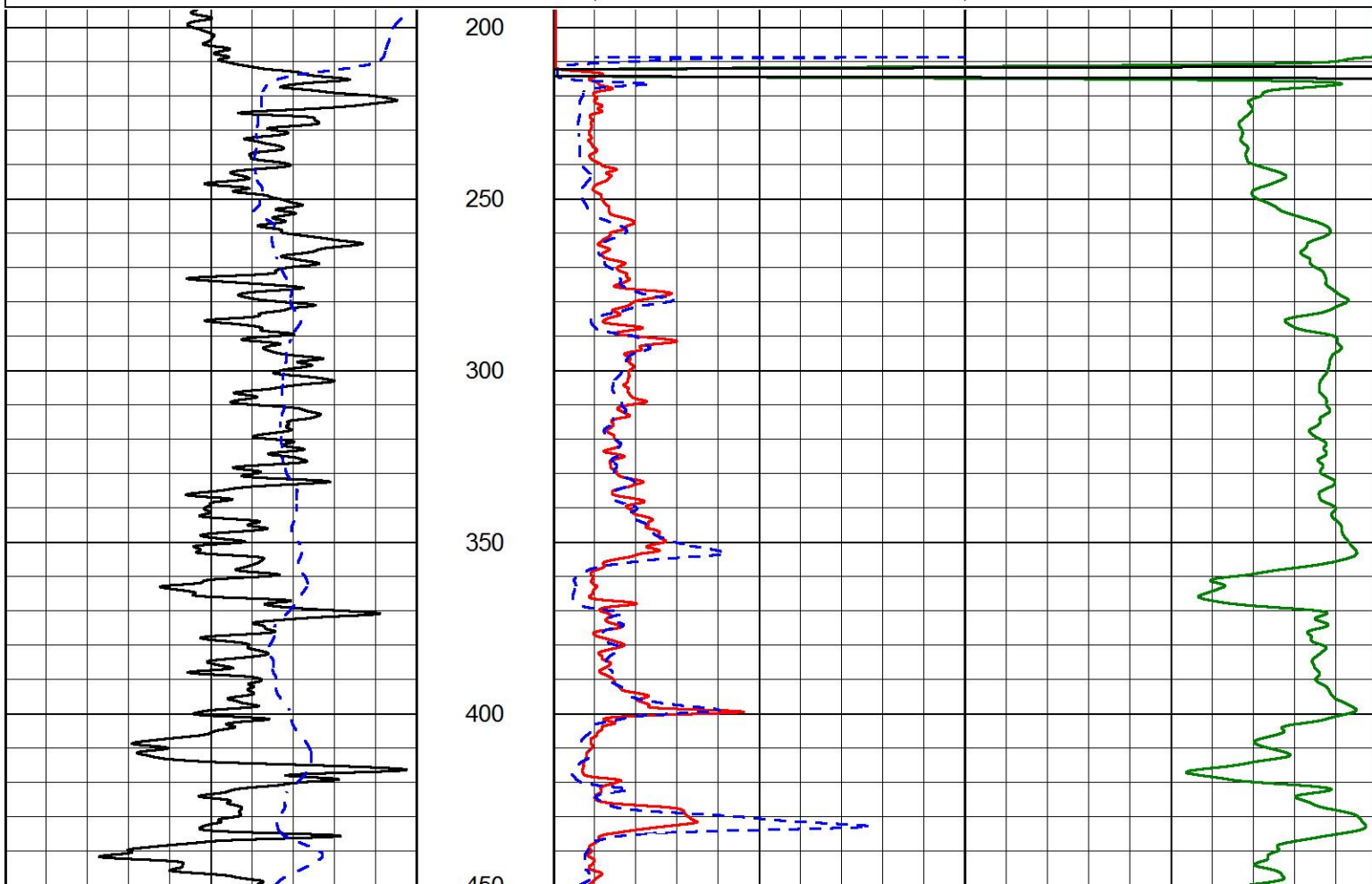


2" SCALE RESISTIVITY

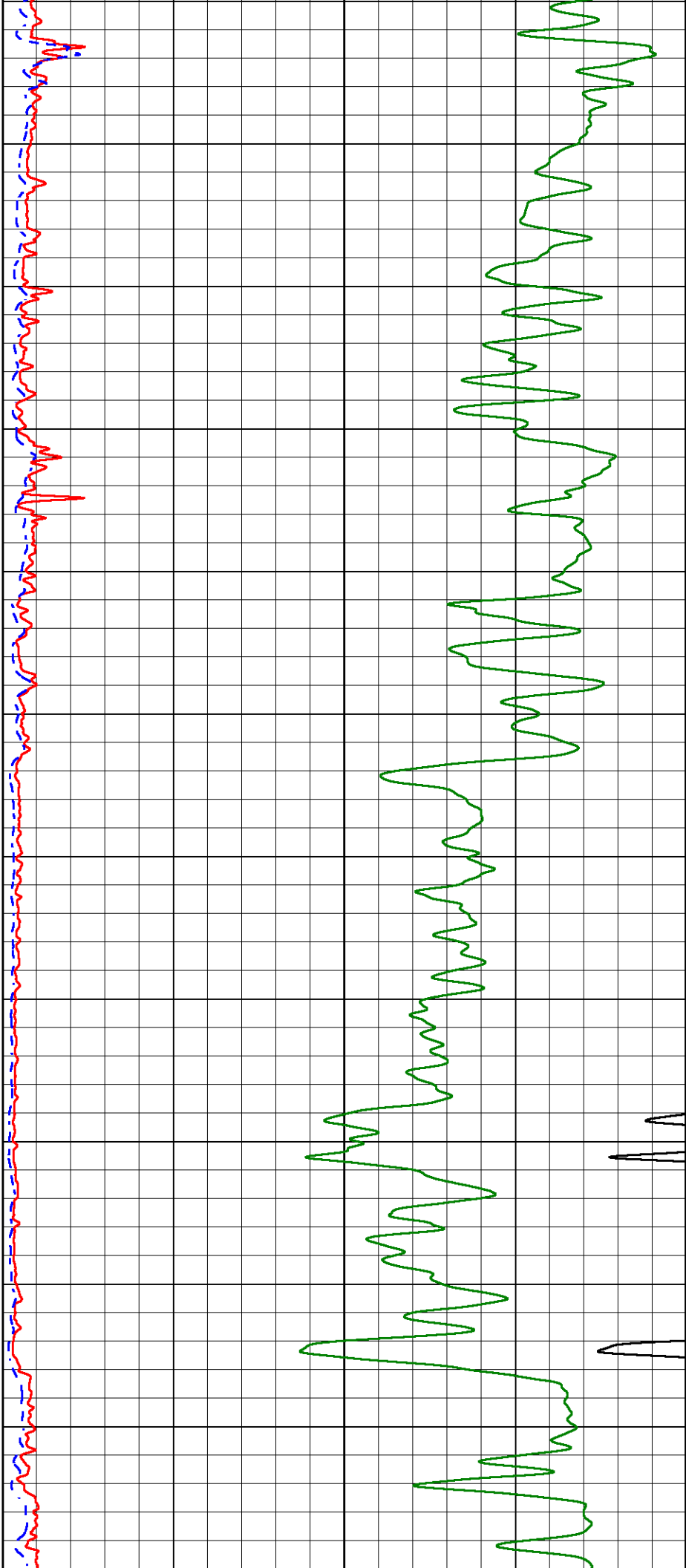
MAIN PASS

Database File tdi_linda_#1.db
Dataset Pathname StkMI/pass3.2
Presentation Format dil2in
Dataset Creation Thu Jul 01 11:49:29 2021
Charted by Depth in Feet scaled 1:600

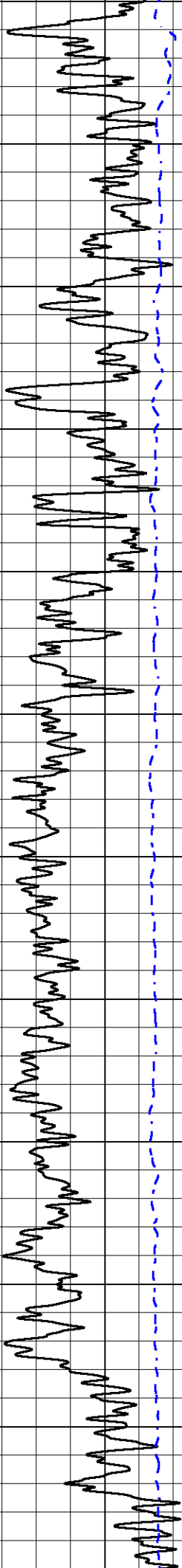
0	GAMMA RAY (GAPI)	150	2000	CILD (mmho/m)	0
-200	SP (mV)	0	0	RLL3 (Ohm-m)	50
			0	DEEP RESISTIVITY (Ohm-m)	50
			50	RLL3 (Ohm-m)	200
			50	RILD (Ohm-m)	200

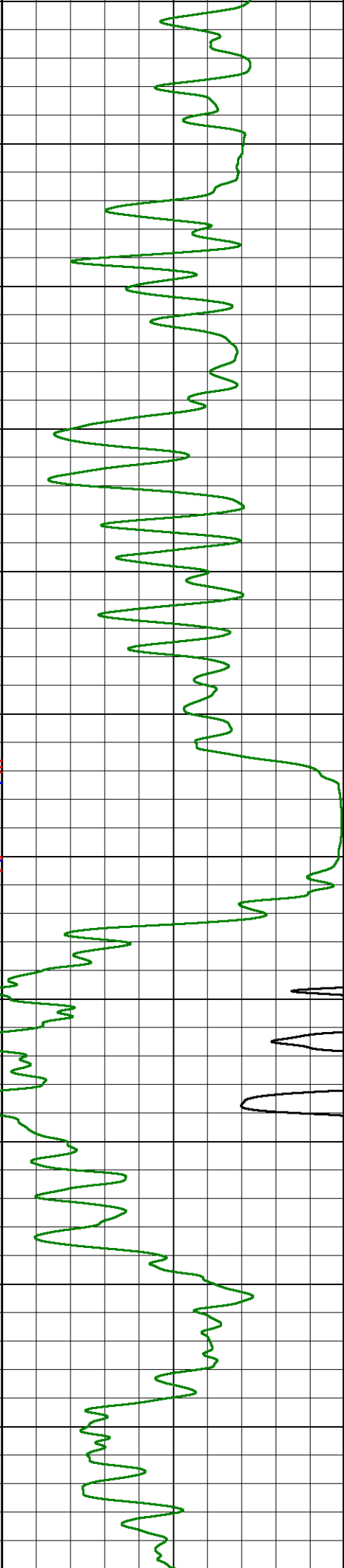
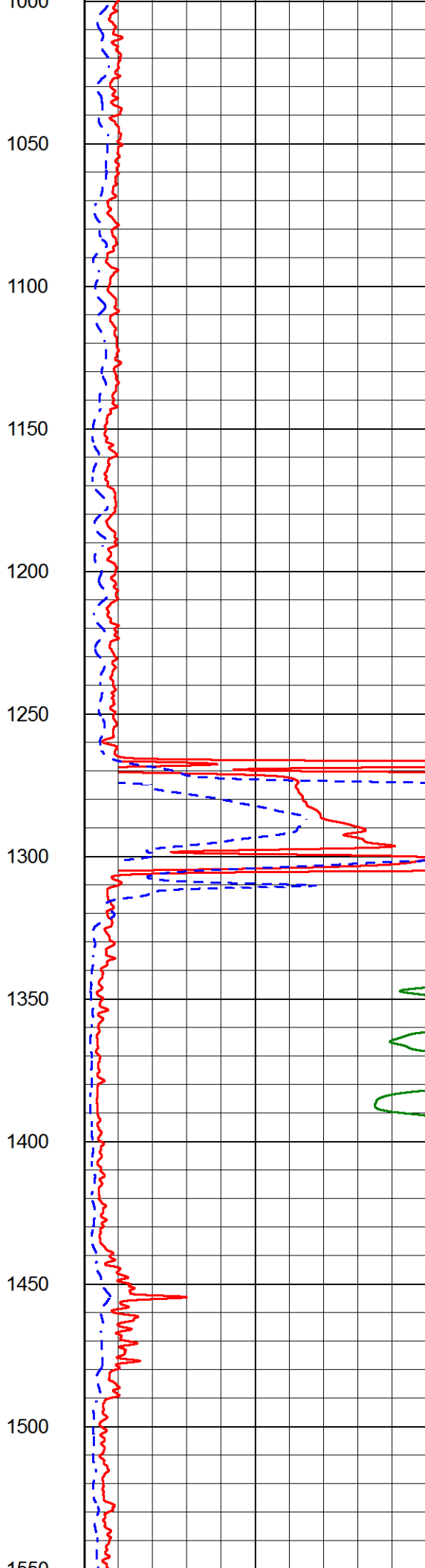
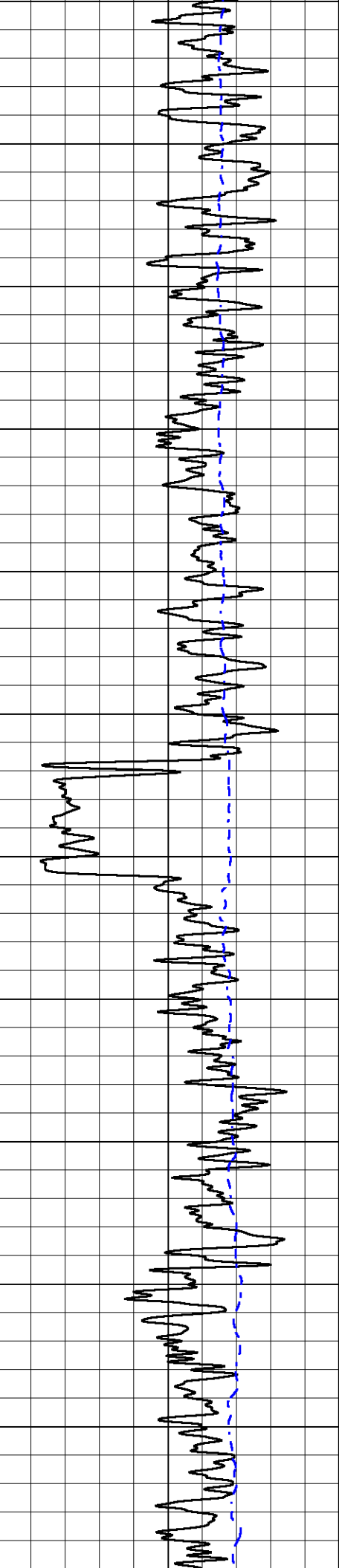


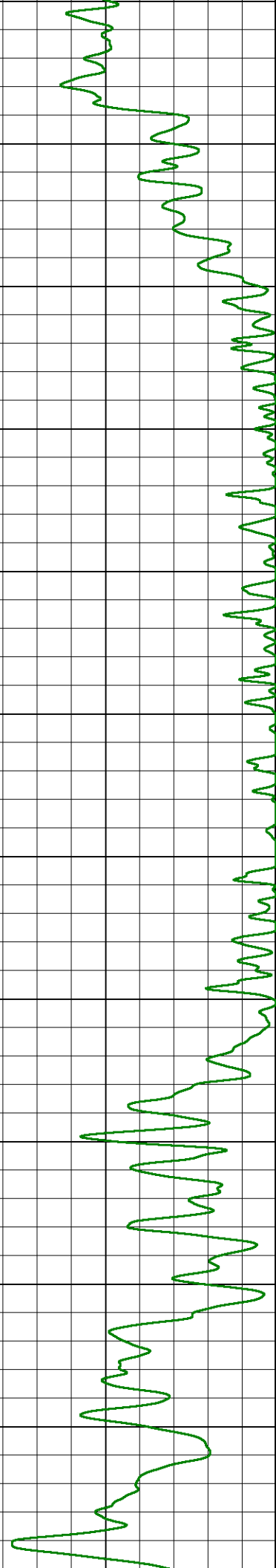
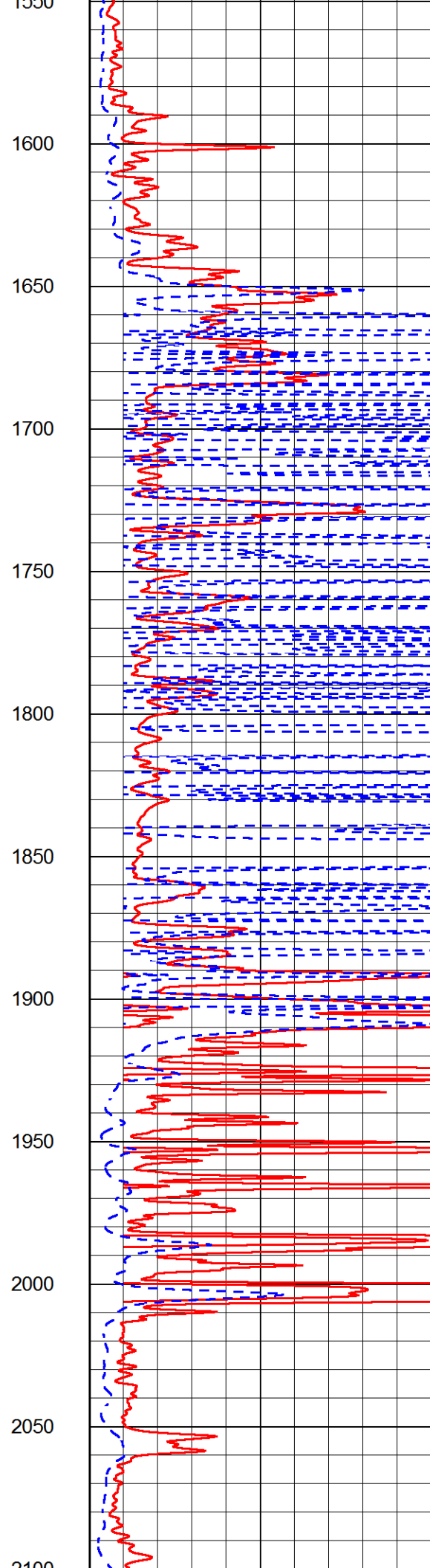
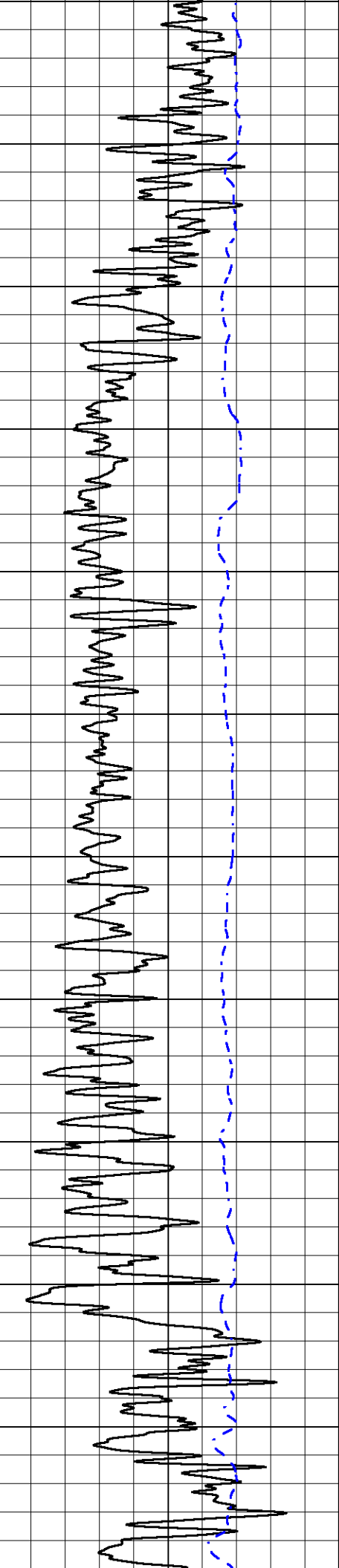
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950
1000

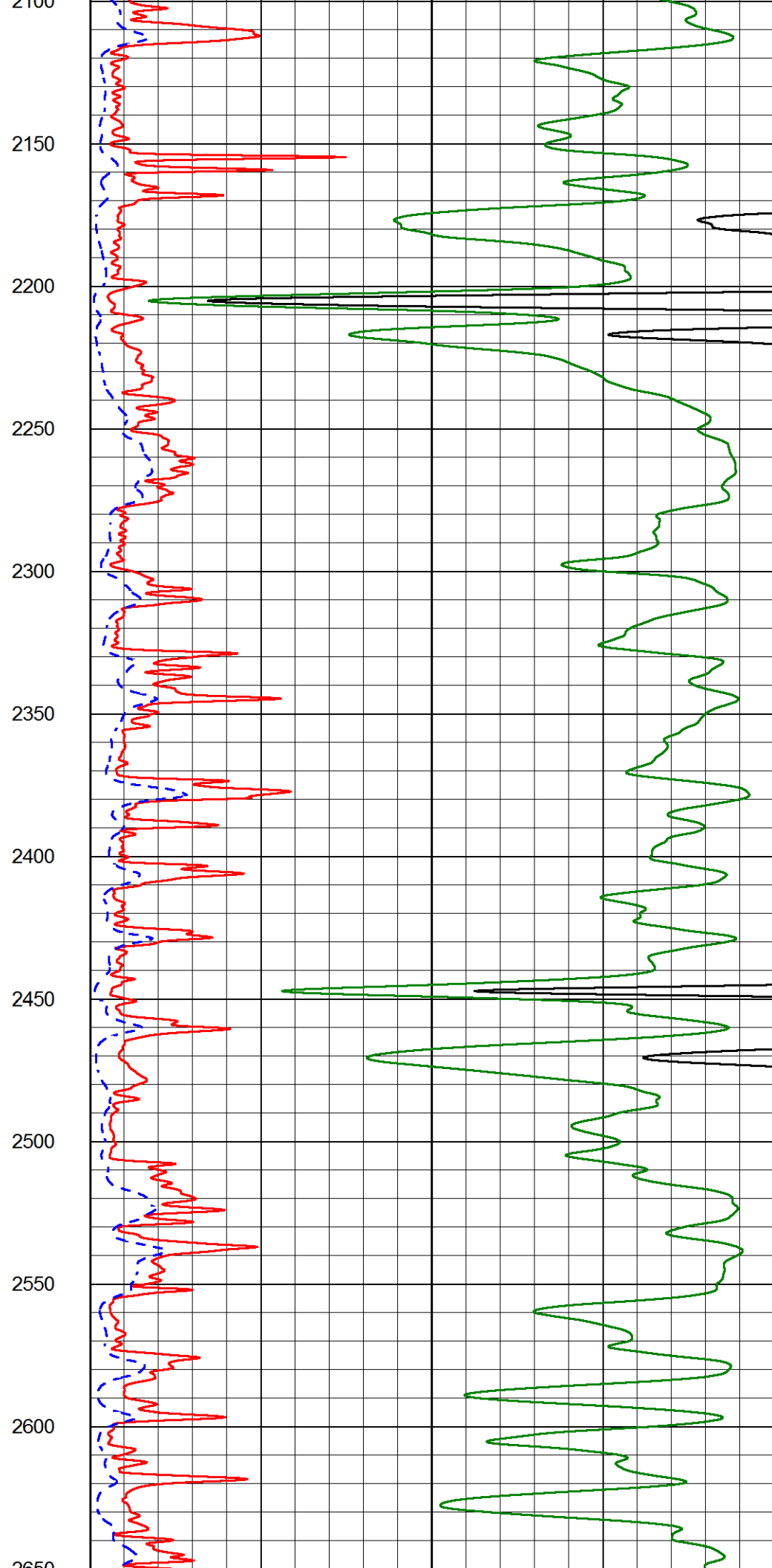
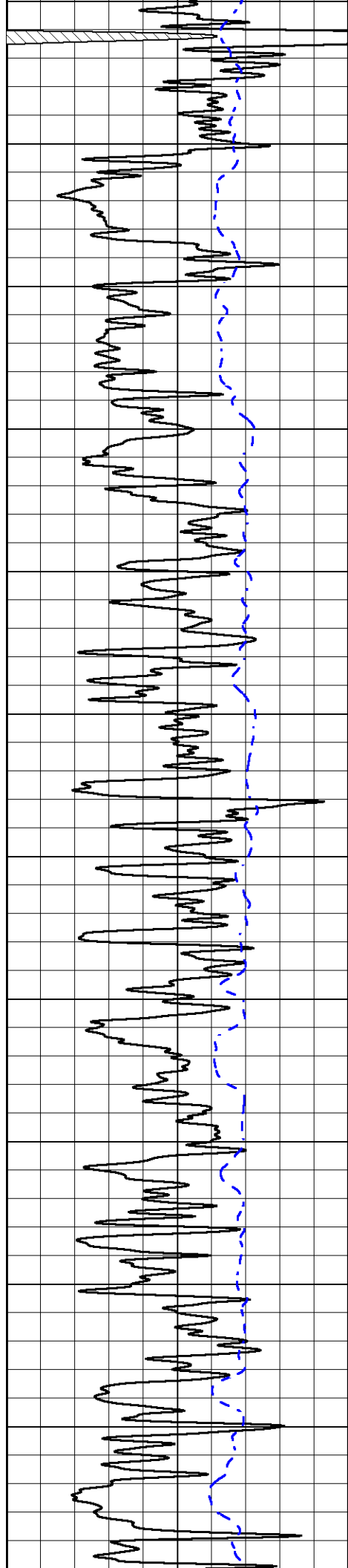


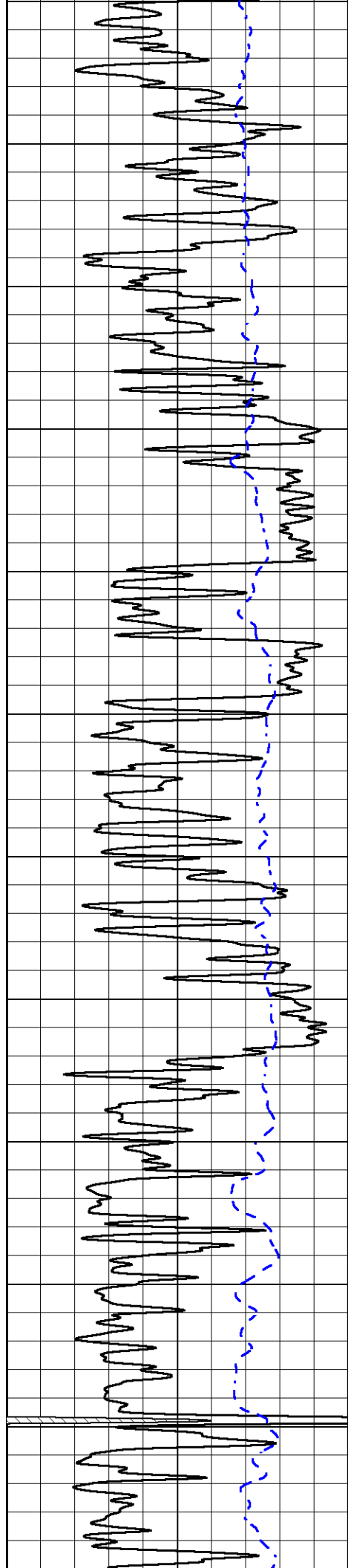
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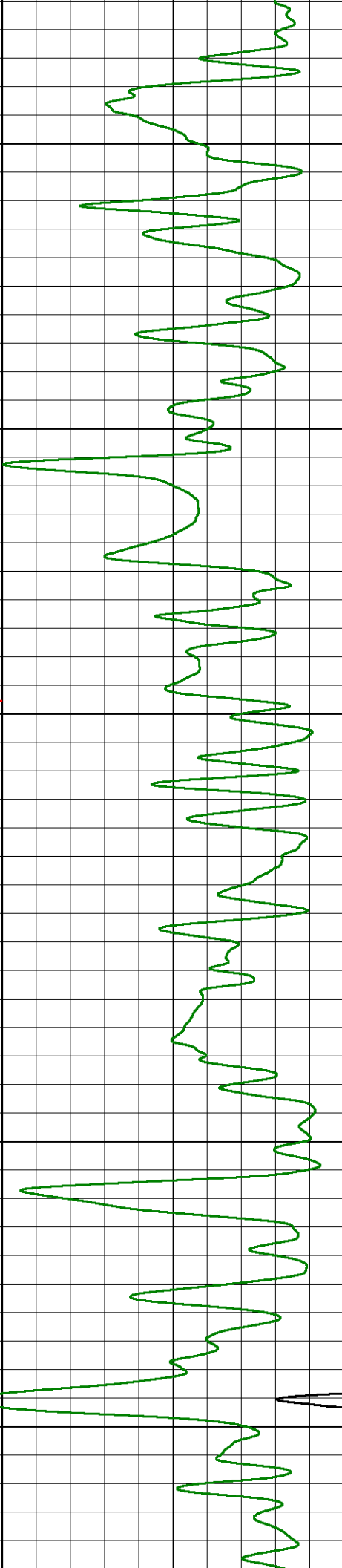
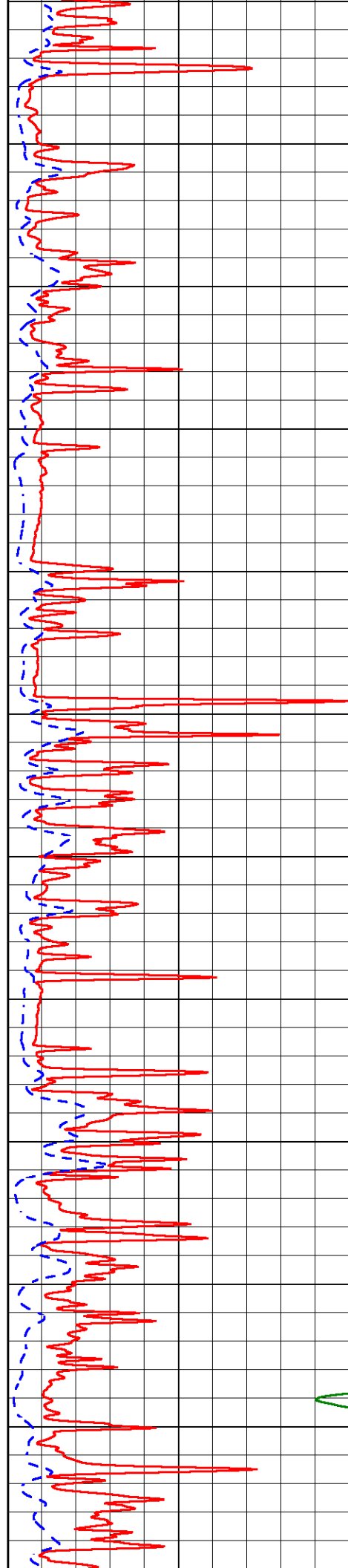


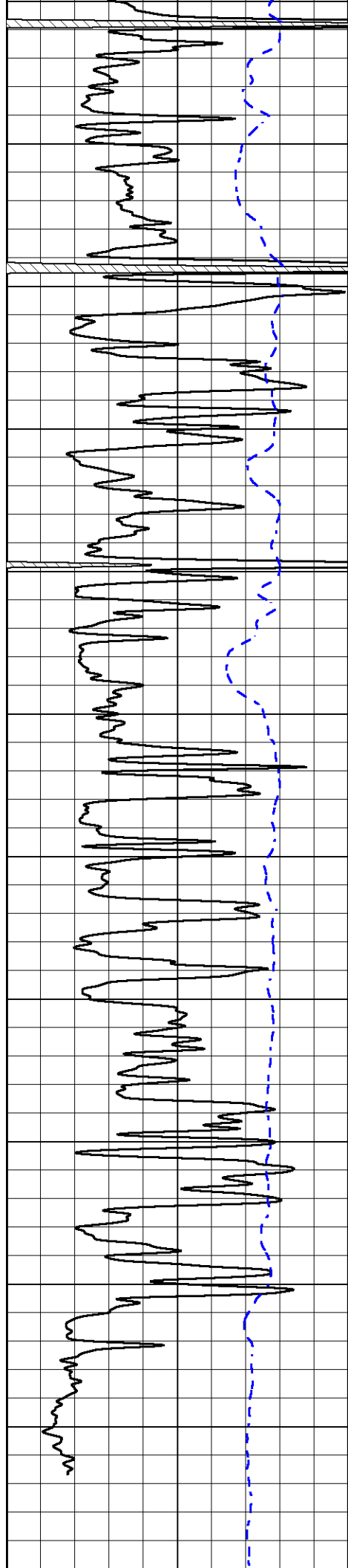




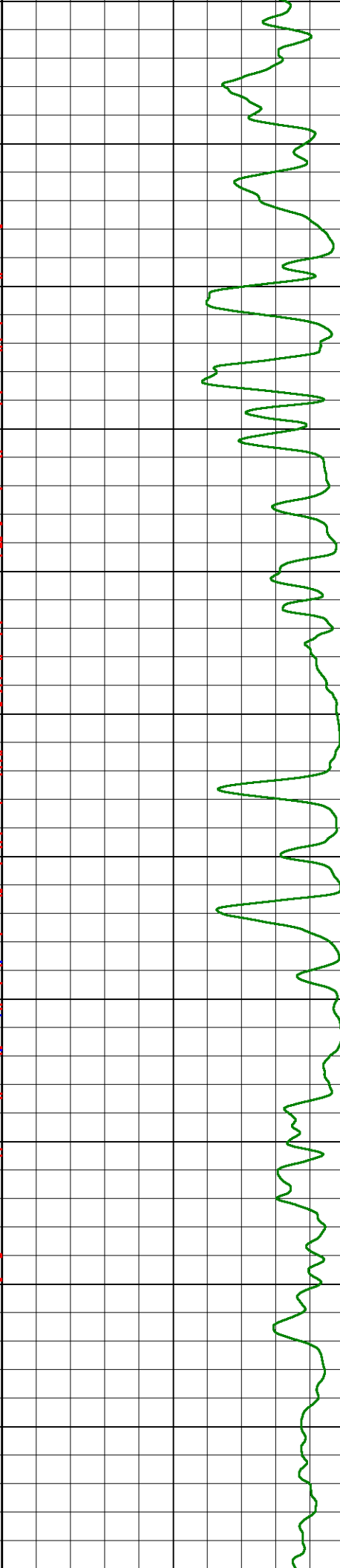
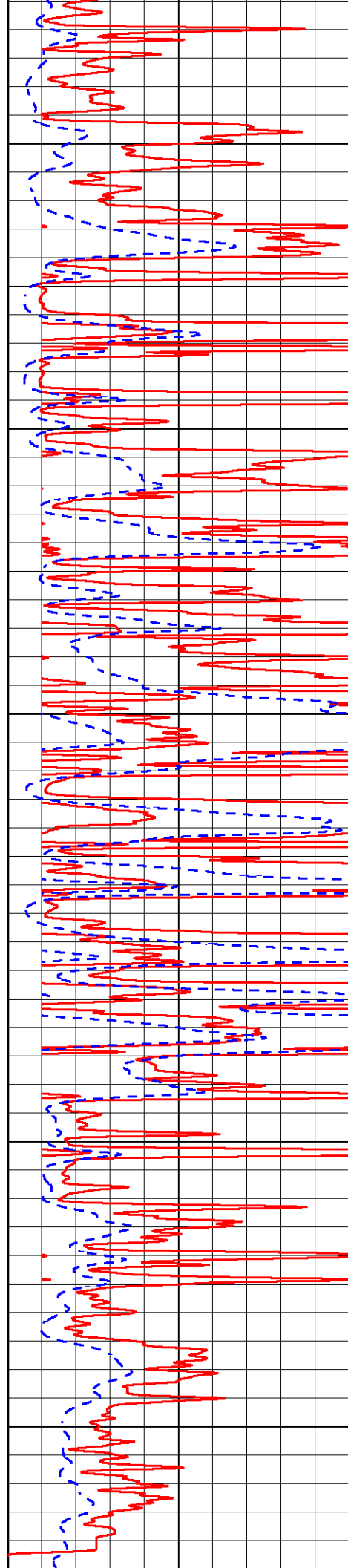


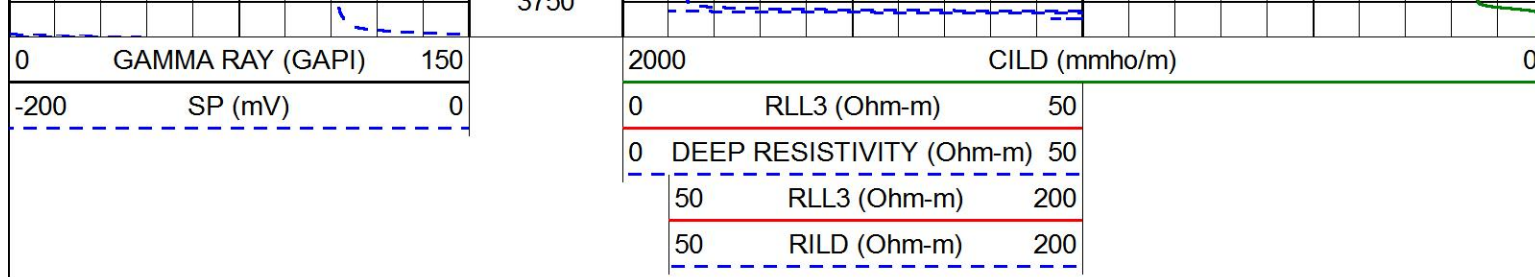
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2800
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2900
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3000
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3100
3150
3200





3200
3250
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3700
3750

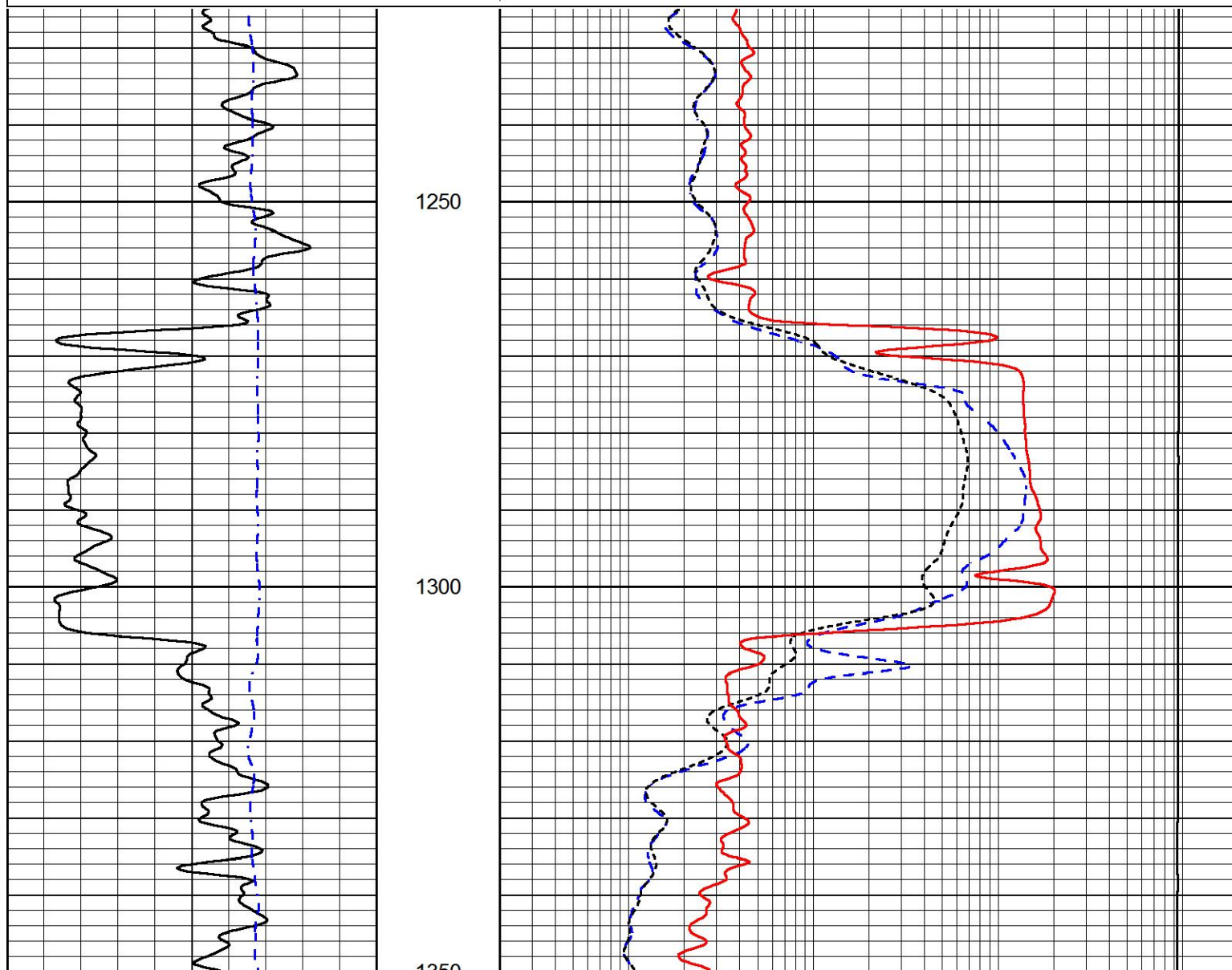
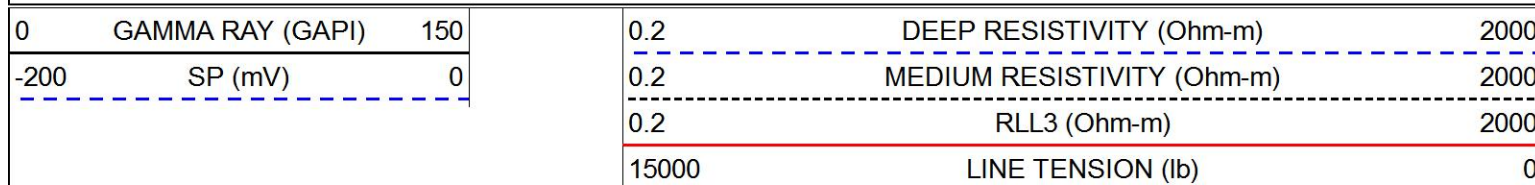


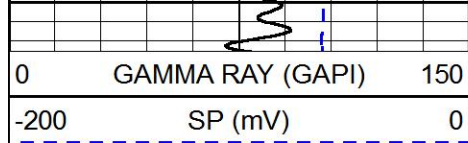


ANHYDRITE SECTION

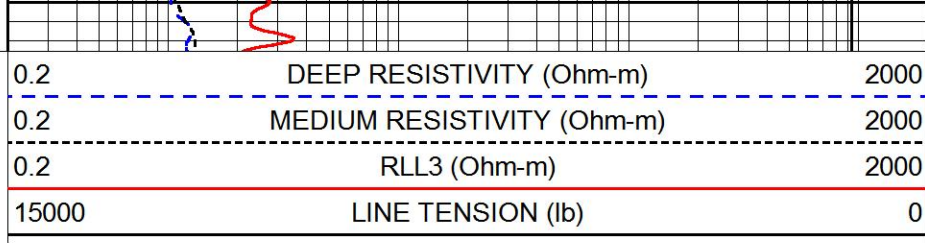
MAIN PASS

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 Presentation Format dil
 Dataset Creation Thu Jul 01 11:39:30 2021
 Charted by Depth in Feet scaled 1:240





1550

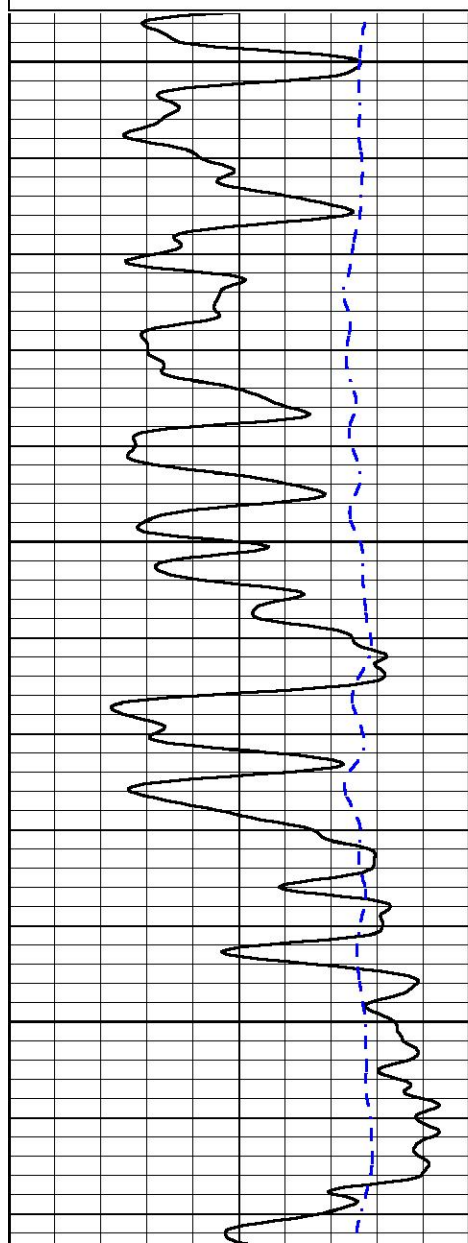
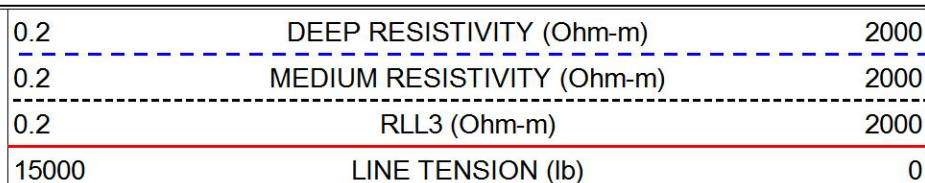
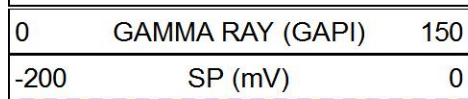


MIDWEST WIRELINE

DETAIL SECTION

MAIN PASS

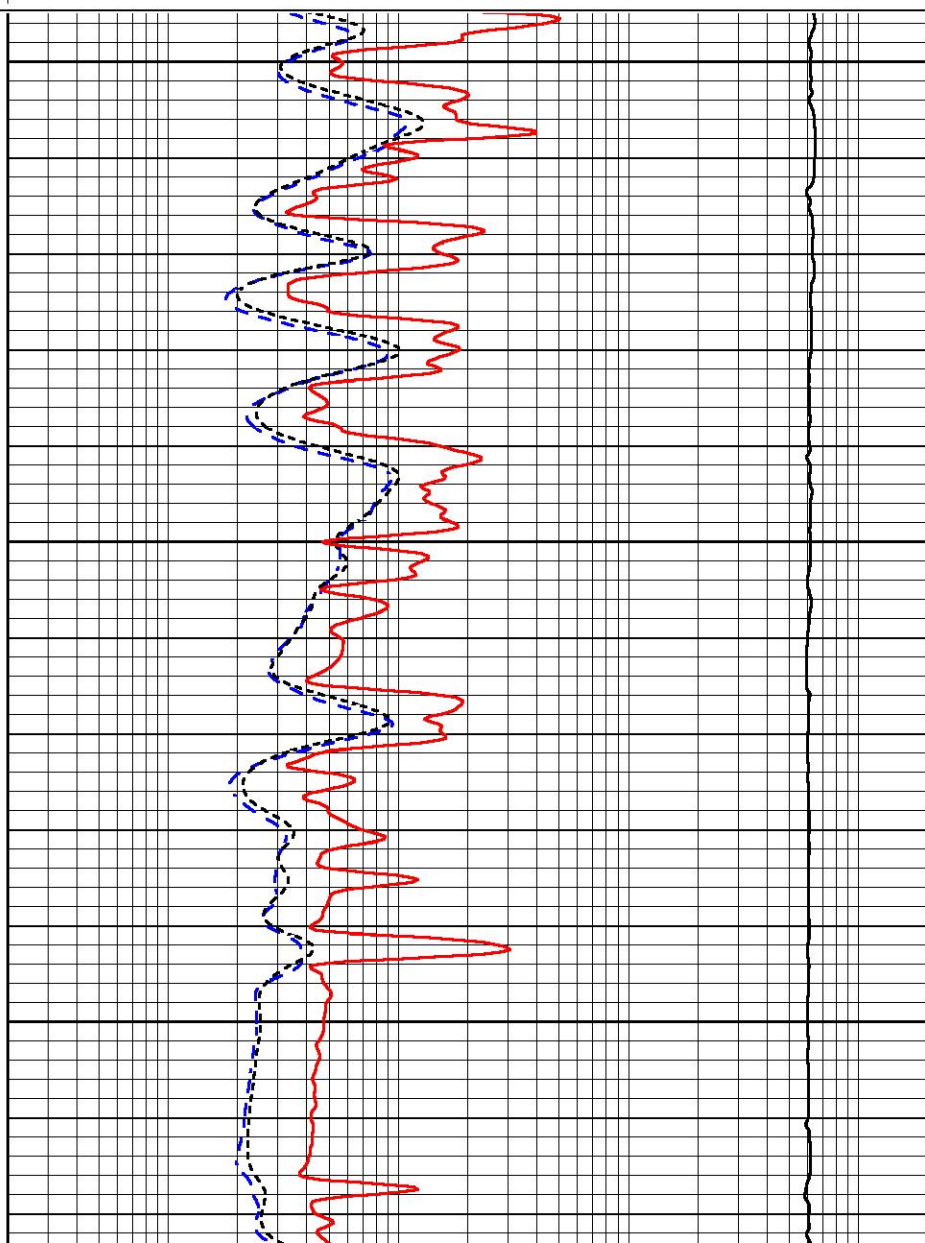
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Presentation Format dil
Dataset Creation Thu Jul 01 11:49:38 2021
Charted by Depth in Feet scaled 1:240

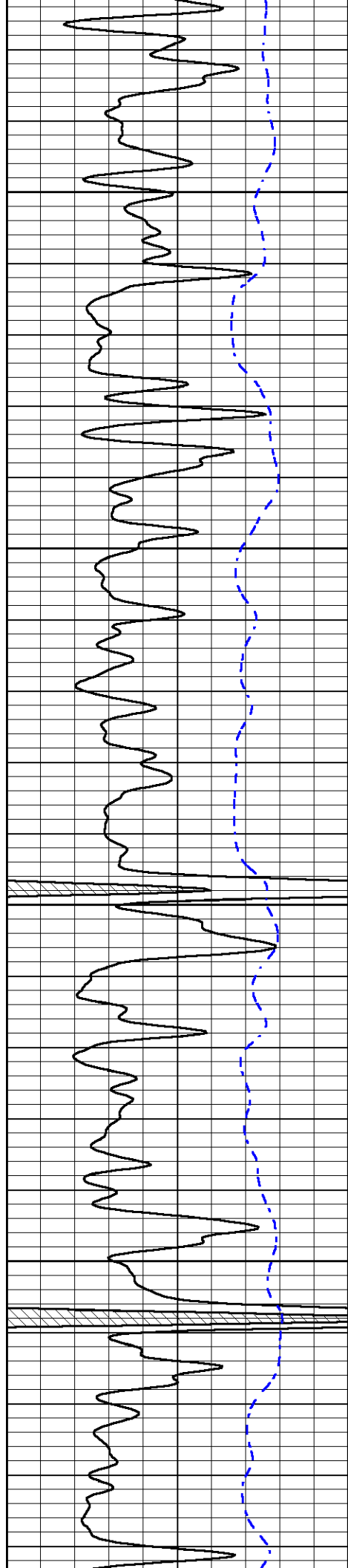


2900

2950

3000



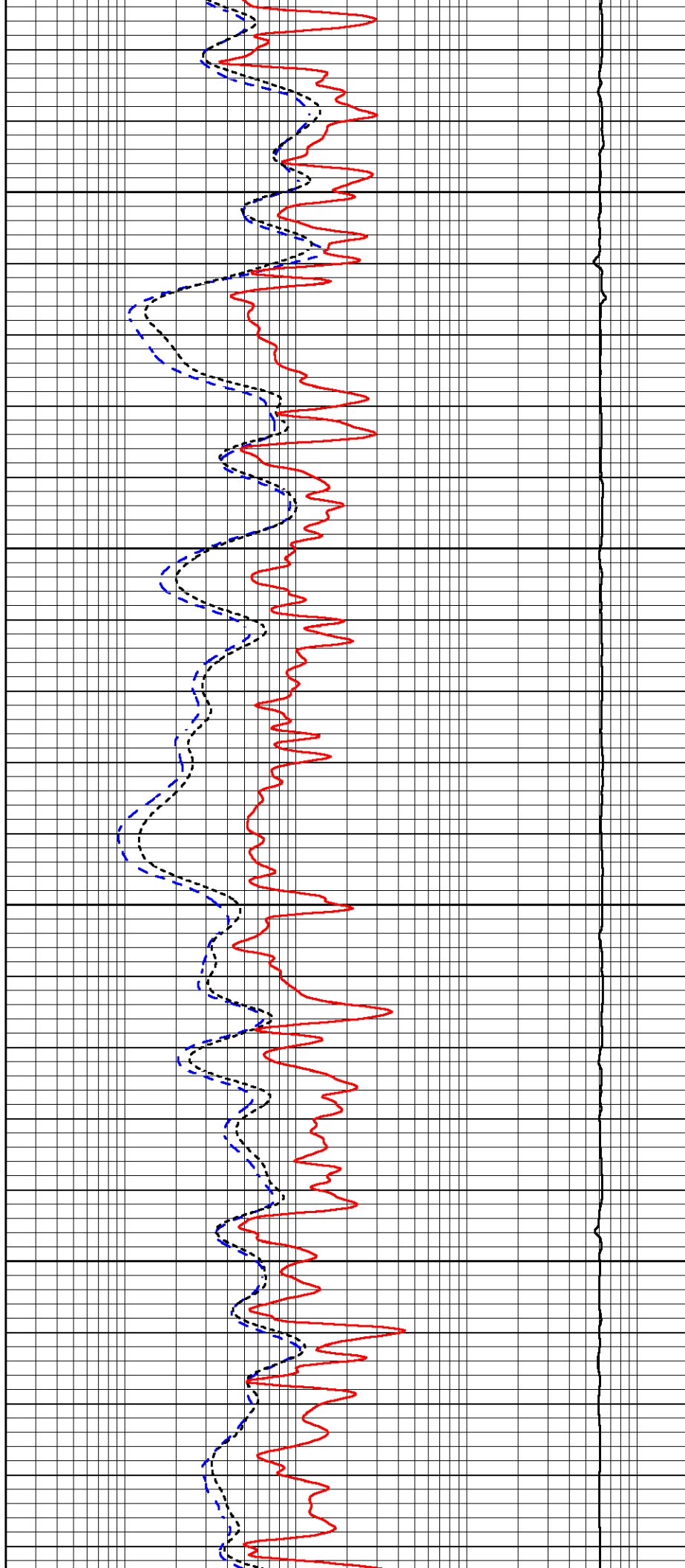


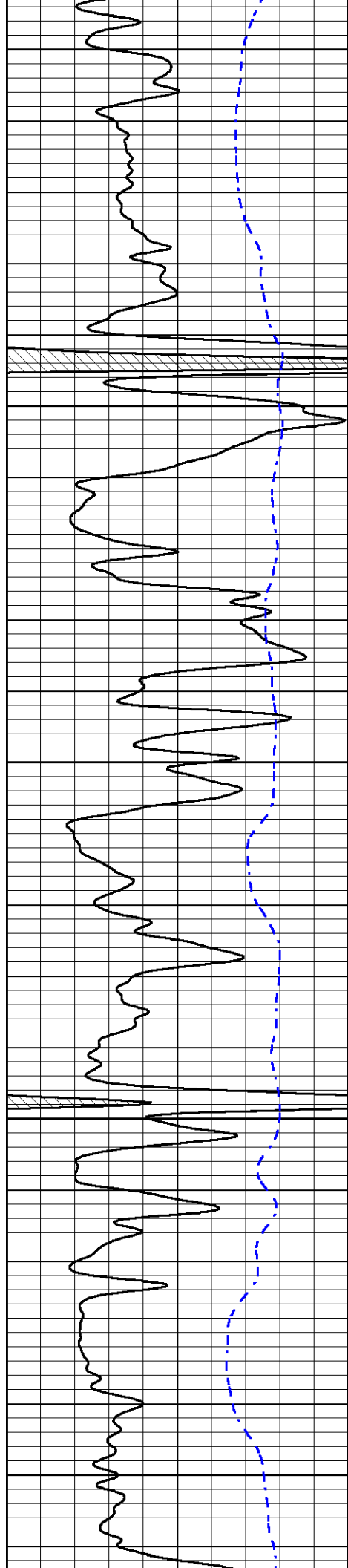
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3150

3200





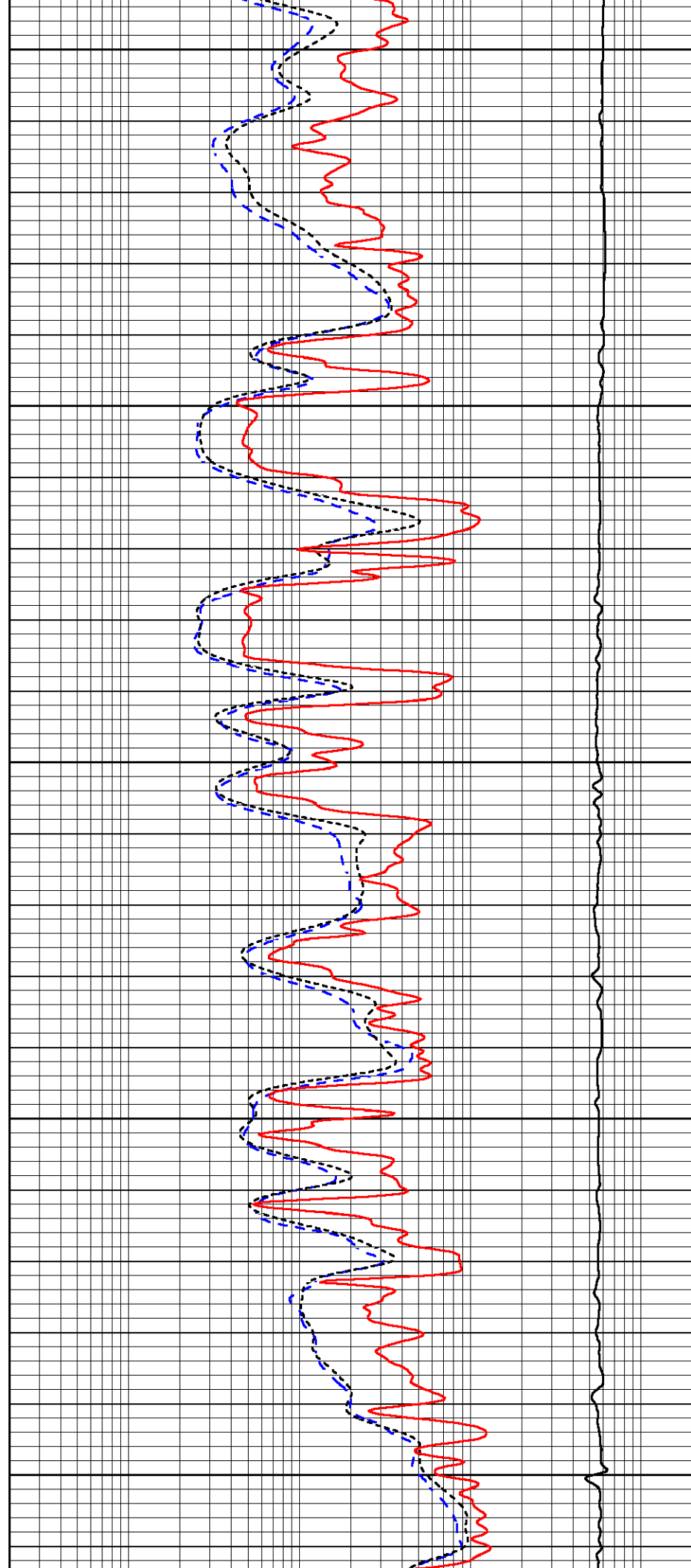
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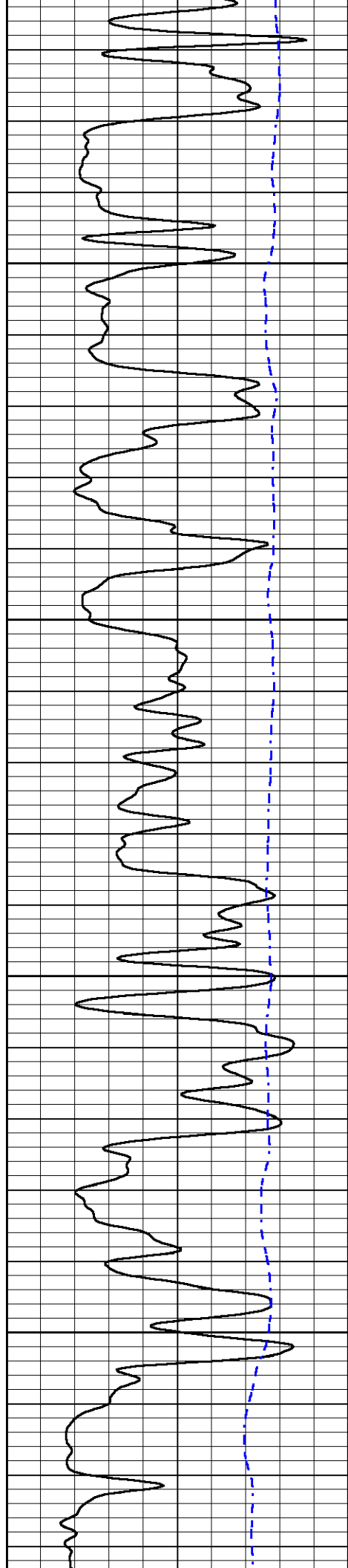
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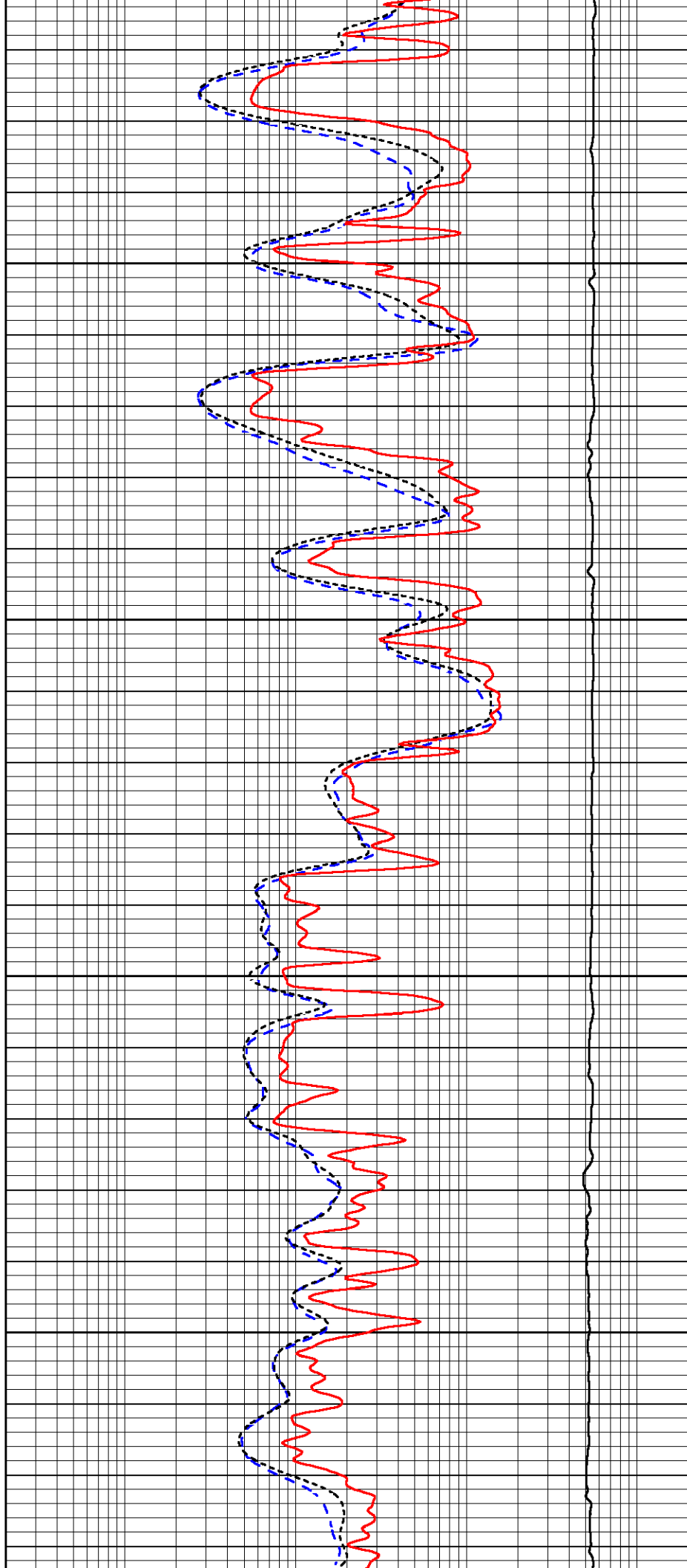


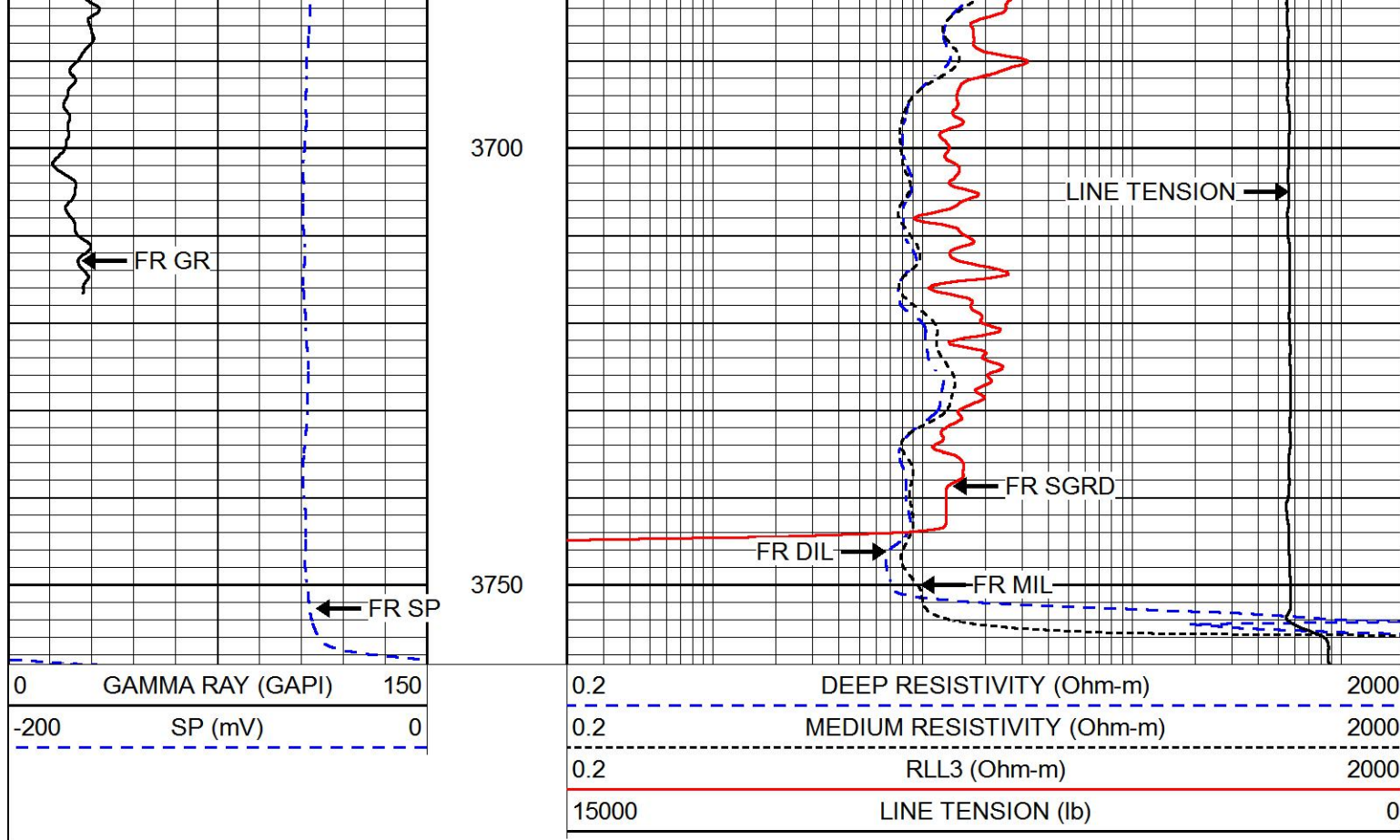
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3600

3650



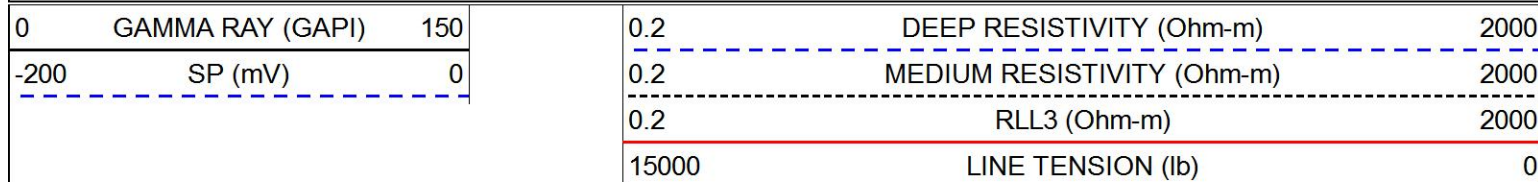


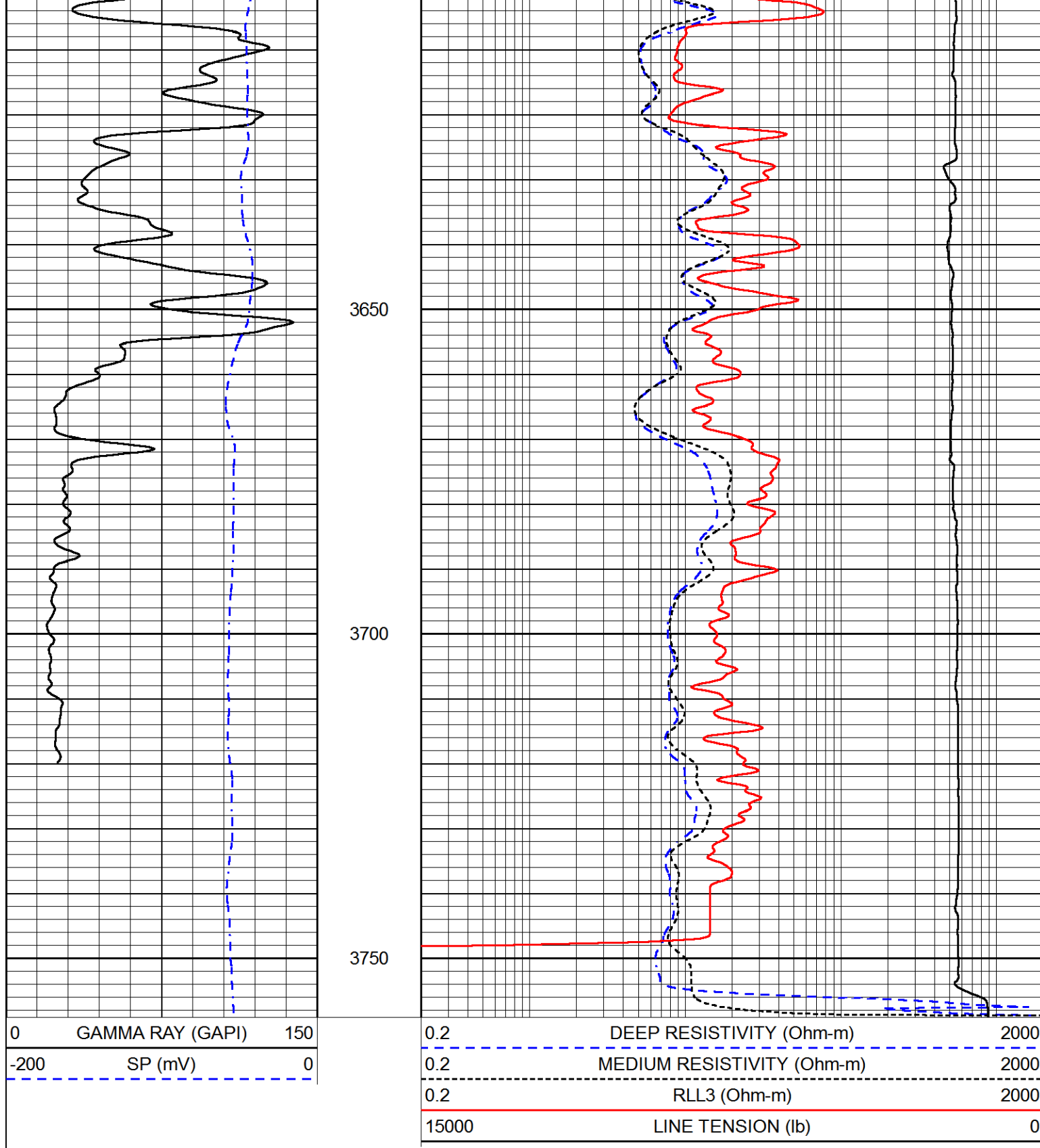
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

Database File tdi_linda_#1.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format dil
 Dataset Creation Thu Jul 01 11:34:27 2021
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File tdi_linda_#1.db
Dataset Pathname StkMI/pass3.1
Dataset Creation Thu Jul 01 11:49:38 2021

Dual Induction Calibration Report

Serial-Model: 959-1032-PSI HIGH TEMP
Calibration Performed: Thu Feb 25 23:27:57 2021

Readings			References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.650	-5.750
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.450	-42.500

Microlog Calibration Report

Serial-Model: Performed:	PSI-02-PSI STKBL ML Sat Apr 07 12:01:20 2018
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Readings			References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0031	0.0043	0.0000	10.0000	Ohm-m	25000.0000	-1.0000
Inverse	0.0000	0.0013	0.0000	10.0000	Ohm-m	25000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1560	-131.3000

Compensated Density Calibration Report

Serial-Model: Source / Verifier: Master Calibration Performed:	915-956-M&W / Mon May 10 06:44:16 2021
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Master Calibration							
	Density			Far Detector		Near Detector	
Magnesium	1.755	g/cc		3668.53		4669.61	cps
Aluminum	2.675	g/cc		710.88		3056.05	cps
Spine Angle = 75.51				Density/Spine Ratio = 0.543			
	Size			Reading			
Small Ring	4.00	in		1.17			
Large Ring	14.00	in		1.05			

Compensated Neutron Calibration Report

Serial Number: Tool Model: Calibration Performed:	tk10-MW M&W Wed Nov 16 11:21:36 2016
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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:	89-M&W	
Tool Model:	M&W	
Calibration Performed:	Mon May 10 06:44:25 2021	
Calibrator Value:	1000.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	6.2	cps
Sensitivity:	0.5200	GAPI/cps

**MIDWEST WIRELINE**

Company	TDI, Inc.
Well	Linda #1
Field	Dechant
County	Ellis
State	Kansas