



PIONEER
Pioneer Energy Services

DUAL INDUCTION LOG

Company **THREE FORKS RESOURCES, LLC**
Well **MAY TRUST #1-30**
Field **WILDCAT**
County **DECATUR**
State **KANSAS**

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Location: API #: 15-039-21243-00-00

848' FNL & 2126' FWL

SEC 30 TWP 2S RGE 30W

Permanent Datum **GROUND LEVEL Elevation 2847'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**

Other Services
CNL/CDL
MEL/BHCS
Elevation
K.B. 2852'
D.F. N/A
G.L. 2847'

Date	9/29/2017		
Run Number	ONE		
Depth Driller	4630'		
Depth Logger	4632'		
Bottom Logged Interval	4631'		
Top Log Interval	250'		
Casing Driller	8.625" @ 260'		
Casing Logger	263'		
Bit Size	7.875"		
Type Fluid in Hole	CHEMICAL		
Salinity, ppm CL	2400		
Density / Viscosity	9.2 60		
pH / Fluid Loss	10.5 7.6		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.80 @ 80		
Rmf @ Meas. Temp	0.60 @ 80		
Rmc @ Meas. Temp	1.08 @ 80		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	0.52 @ 122		
Operating Rig Time	5 HOURS		
Max Rec. Temp. F	122		
Equipment Number	91		
Location	HAYS		
Recorded By	D. SCHMIDT		
Witnessed By	LAWRENCE WEIS	JASON ALM	

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, 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.

OBERLIN,
10 WEST TO 100RD, 2 NORTH, 3/4 WEST,
SOUTH INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858

Your Pioneer Energy Services Crew

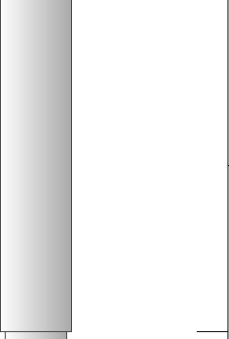
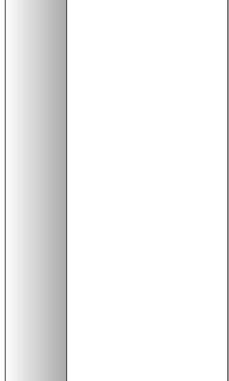
Engineer: D. SCHMIDT
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: LAWRENCE WEIS
Secondary Witness: JASON ALM
Secondary Witness:
Secondary Witness:

Top - Bottom

M	A	SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m
2	1	Off	Limestone	1	2.71	53	0
SNDERR mmho/m	SRFTEMP degF	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0	80	0	5.5	0	0	122	7.875

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58		GR-M&W (89)	3.00	3.50	50.00
CNLSC CNSSC	37.48 36.73		CNT-M&W (207-MW)	5.50	3.50	100.00
LSD DCAL SSD	28.43 28.42 27.93		CDL-M&W (90-1031)	8.50	4.00	250.00
MCAL MI MN	19.83 19.83 19.83		ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
RLL3F RLL3	15.80 15.80					

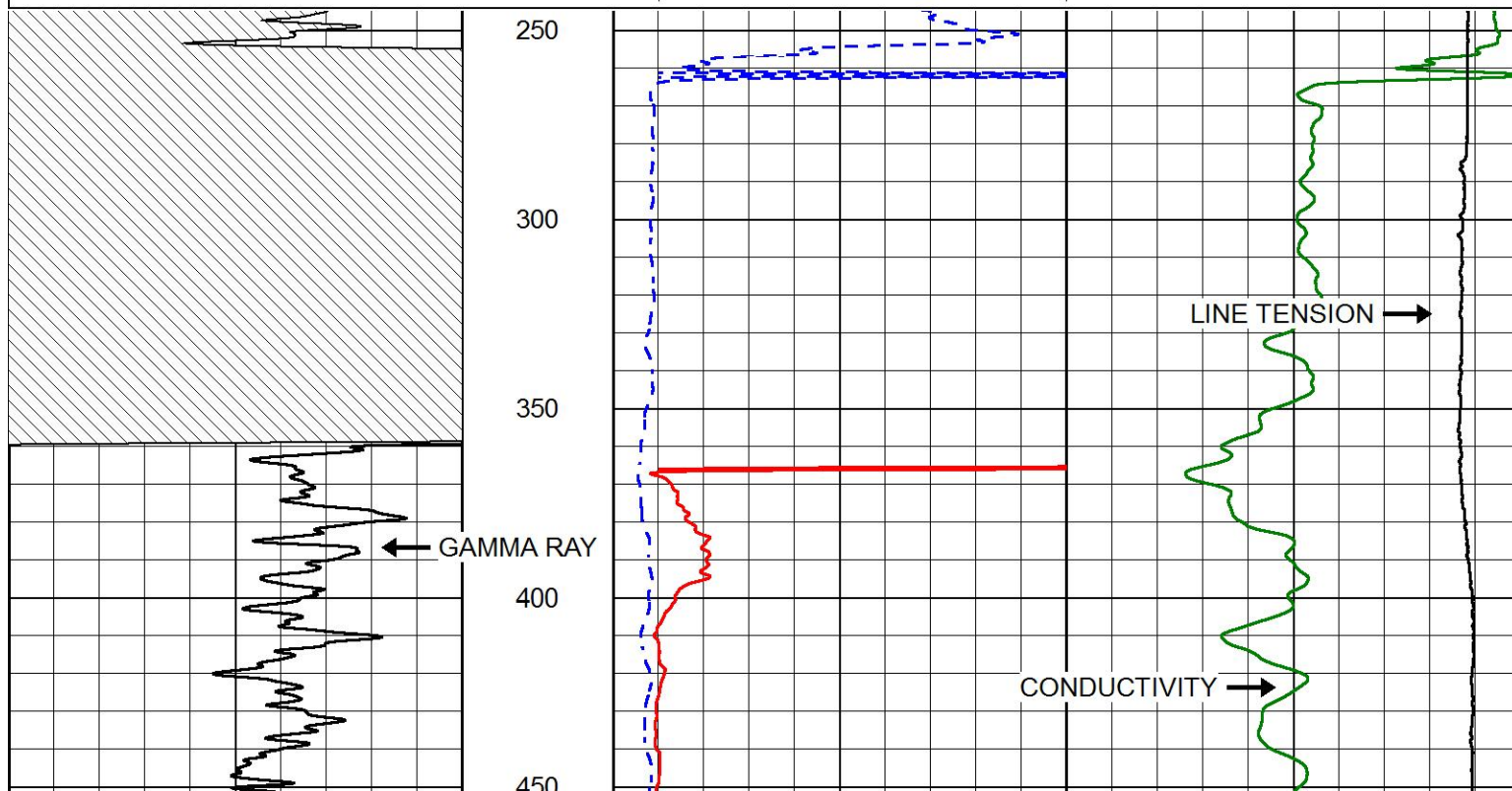
			DIL-M&W (PSI 91)	18.50	3.50	220.00
CILD	8.00					
CILM	4.70					
SP	0.20					
Dataset: three forks_may trust 1-30.db: field/well/STKML/pass3.1 Total length: 43.08 ft Total weight: 685.00 lb O.D.: 4.00 in						

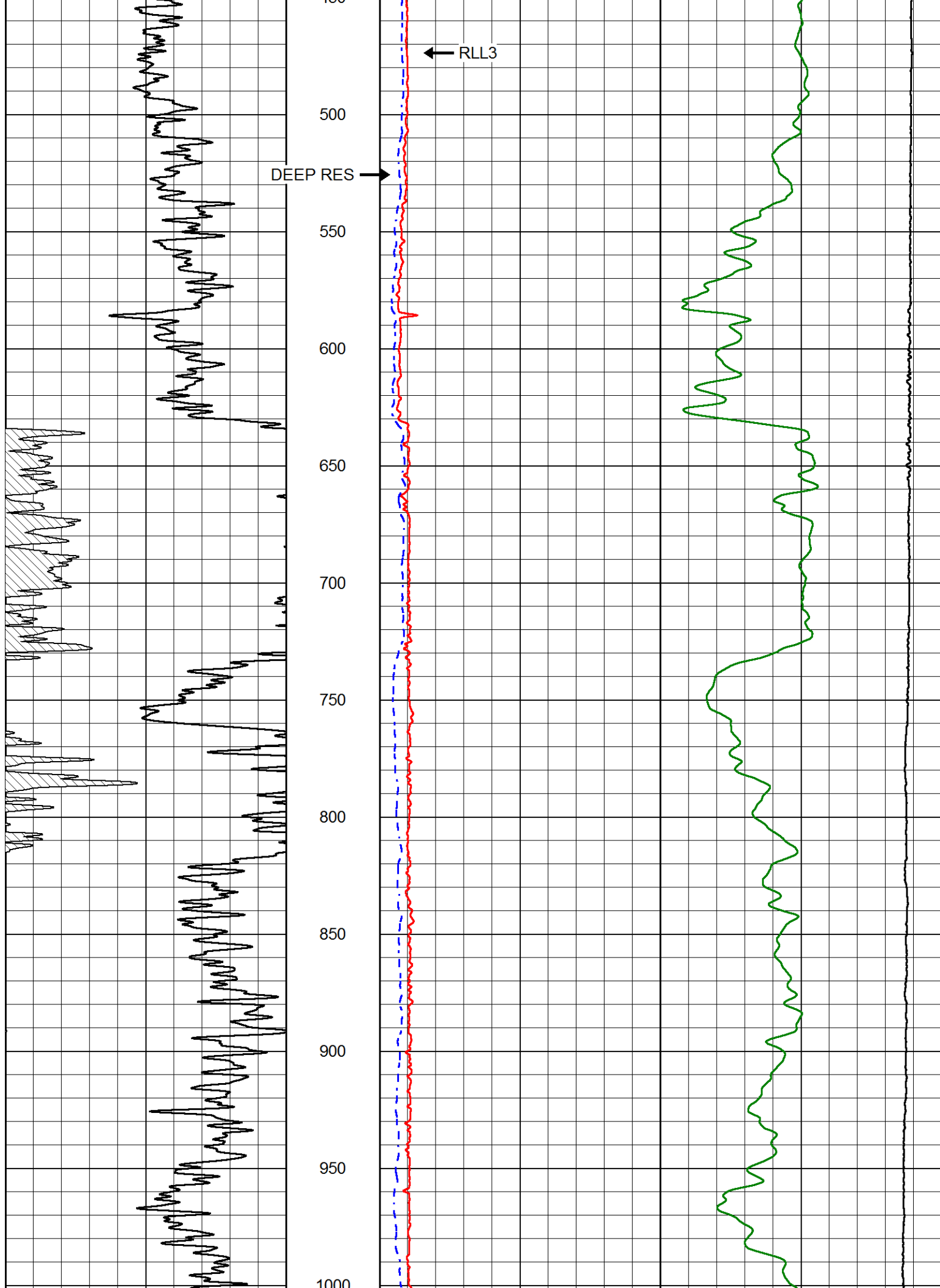


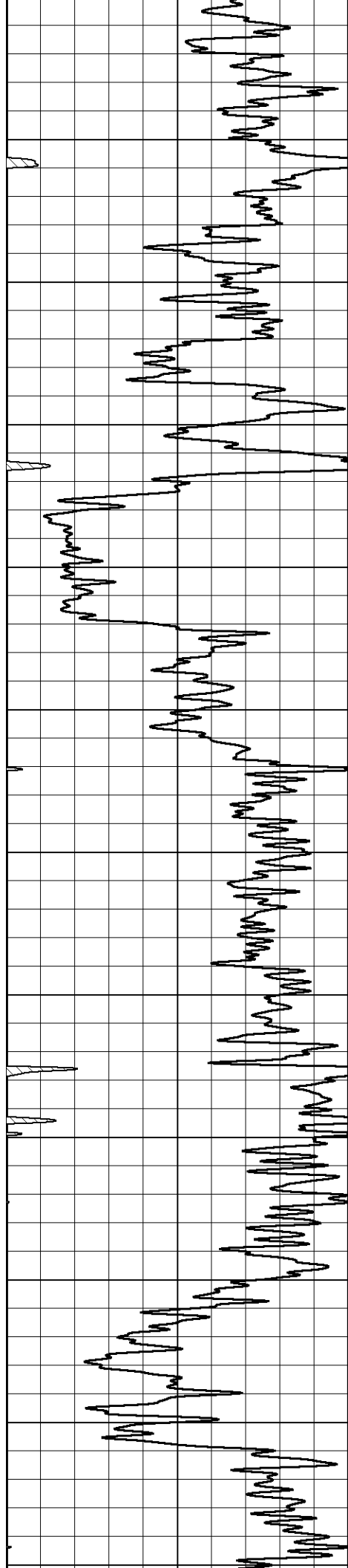
MAIN PASS

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Presentation Format	dil2in
Dataset Creation	Fri Sep 29 17:26:41 2017
Charted by	Depth in Feet scaled 1:600

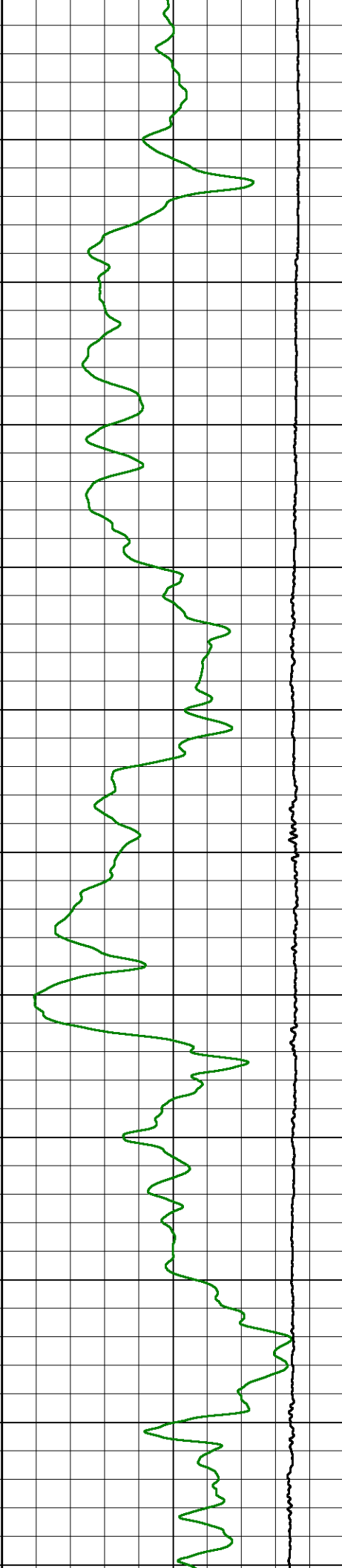
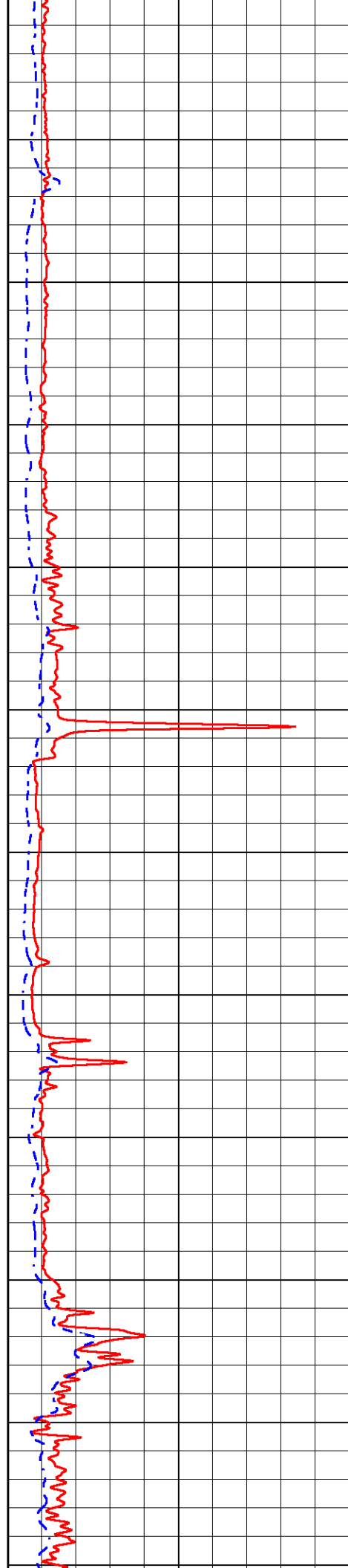
0	Gamma Ray (GAPI)	150	1000	Conductivity (mmho/m)	0
			15000	Line Tension (lb)	0
			0	RLL3 (Ohm-m)	50
			0	Deep Resistivity (Ohm-m)	50
			50	RLL3 (Ohm-m)	500
			50	Deep Resistivity (Ohm-m)	500

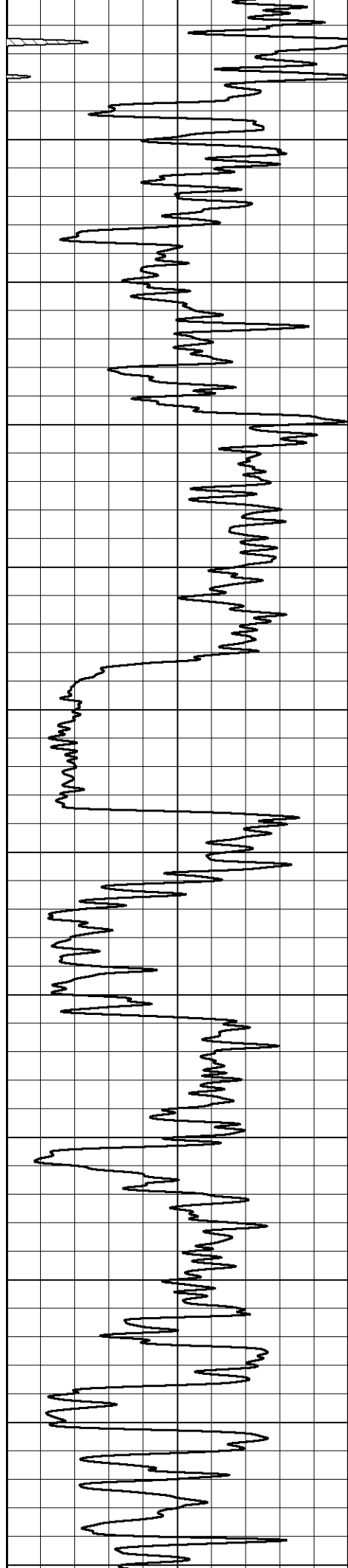




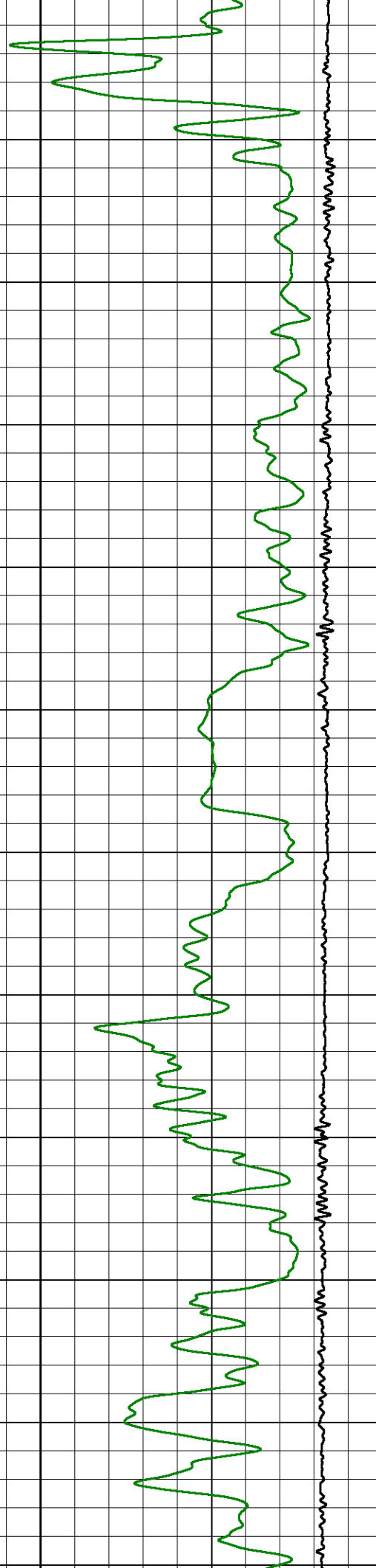
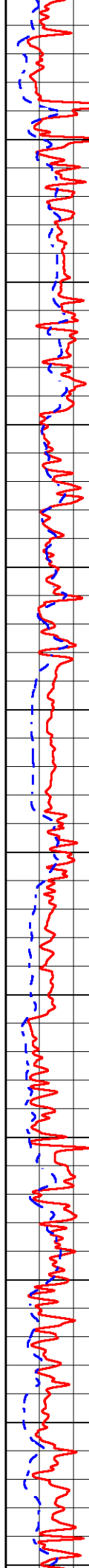


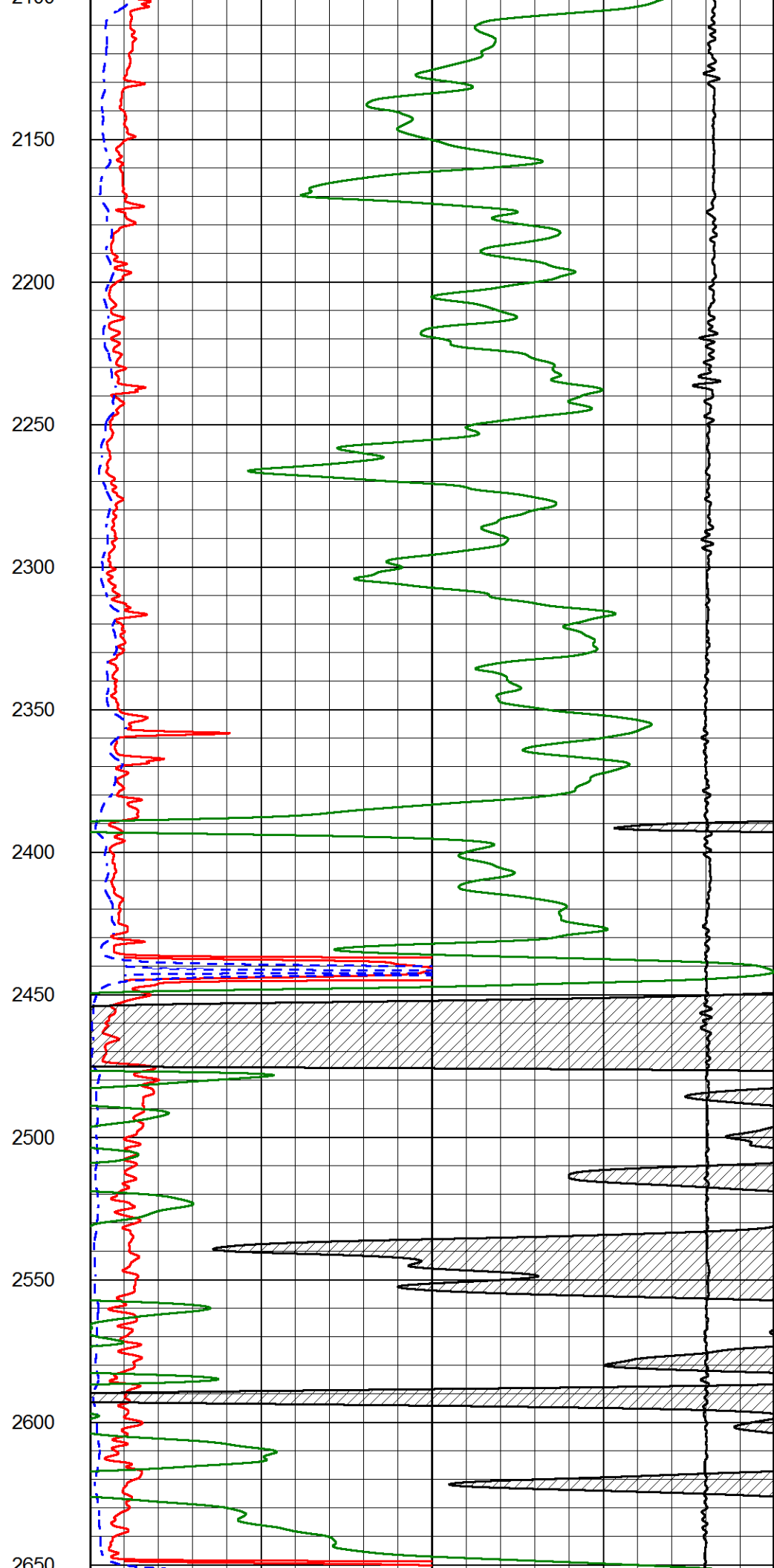
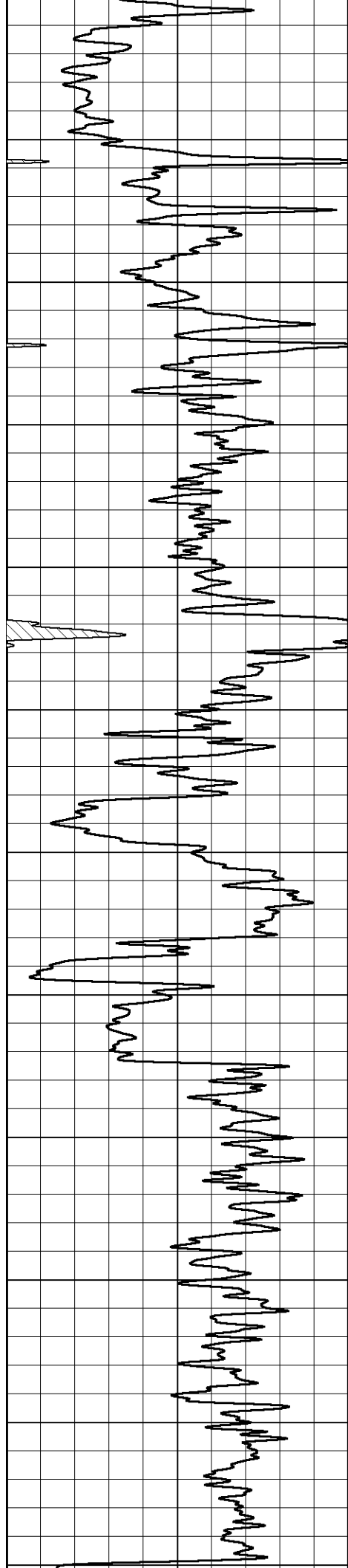
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550

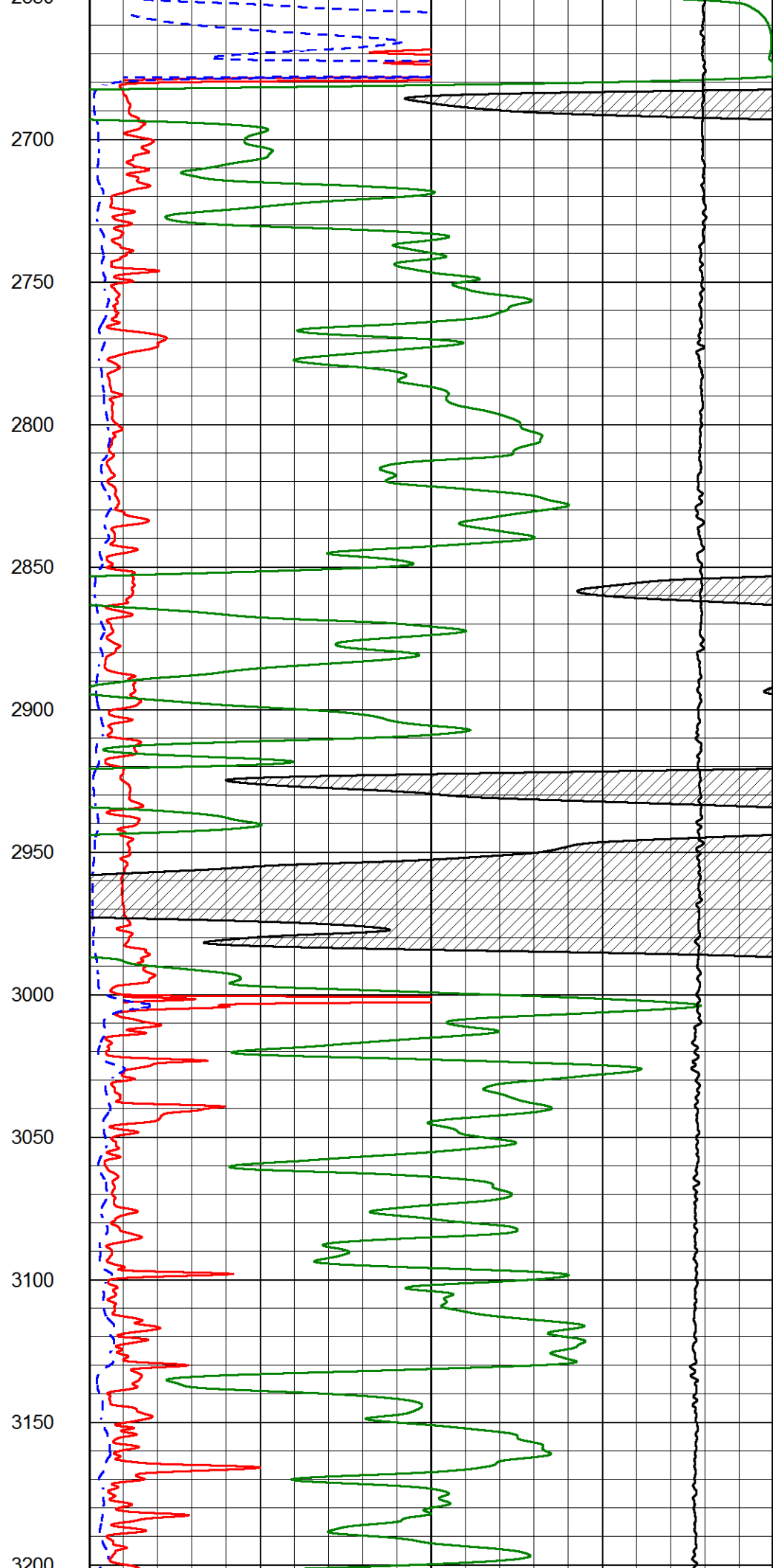
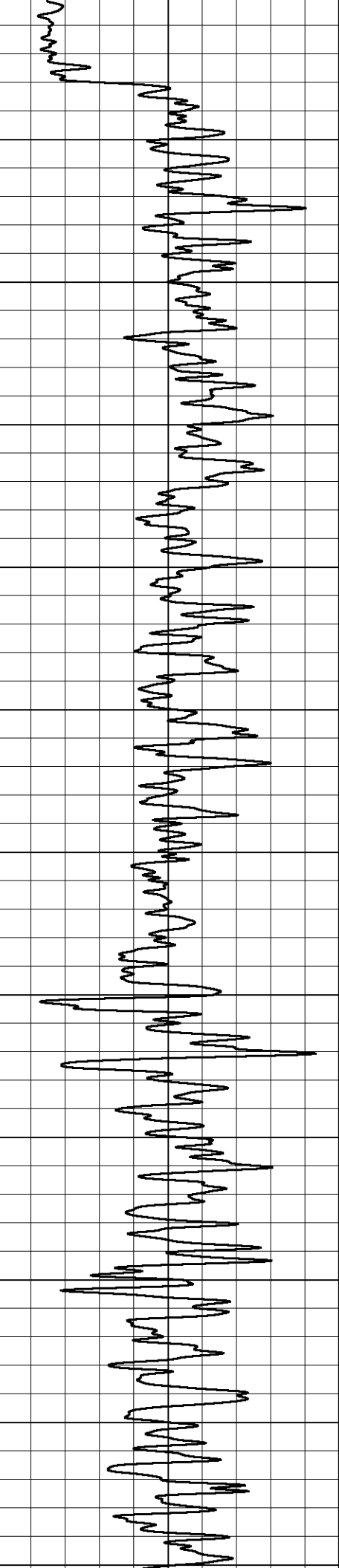


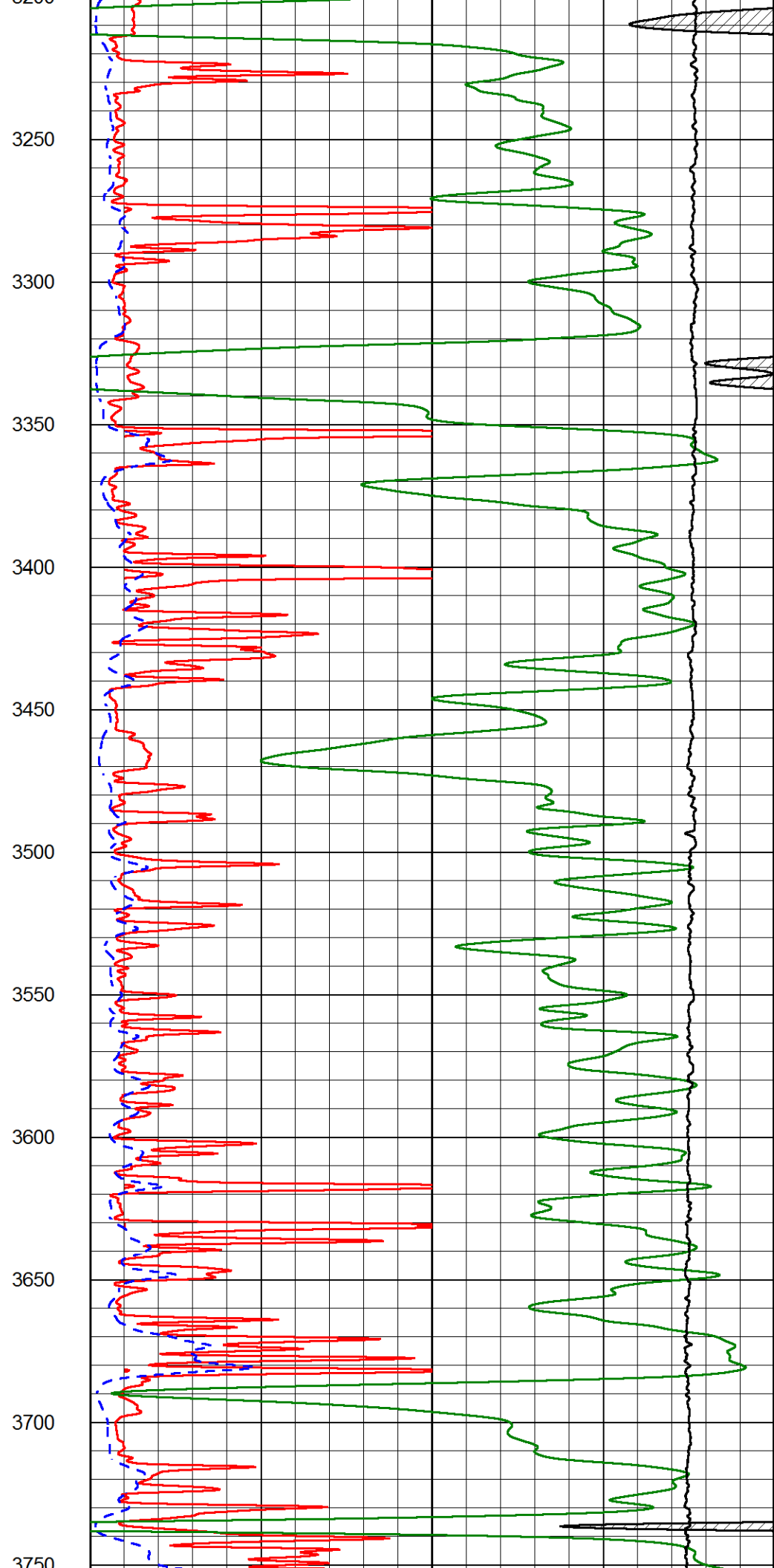
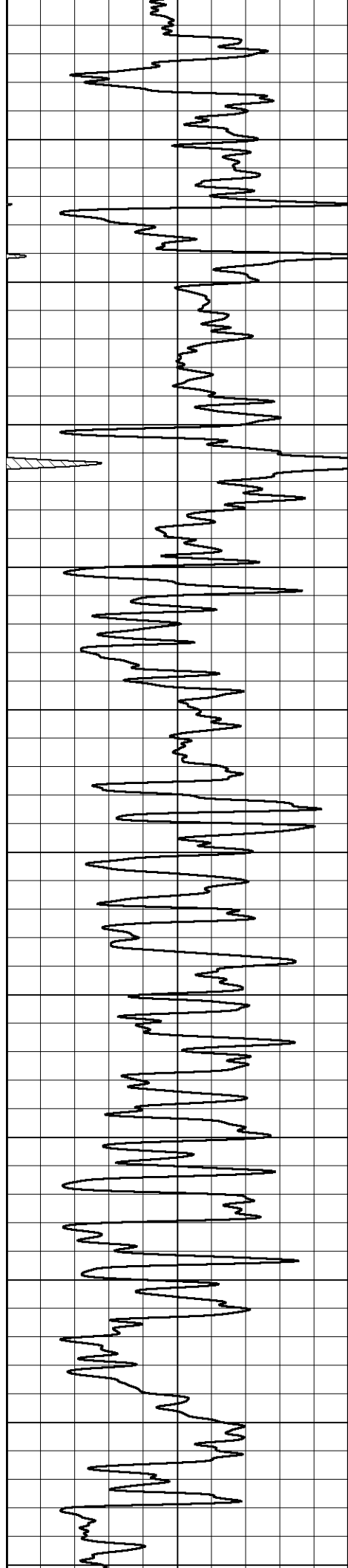


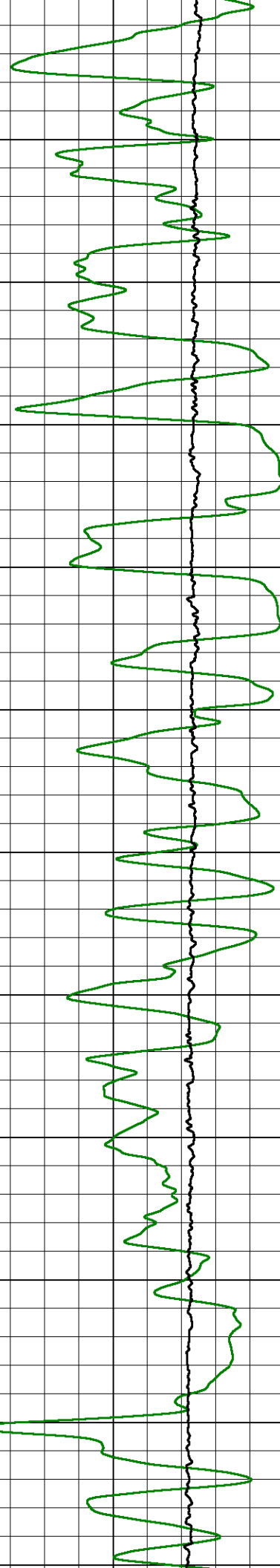
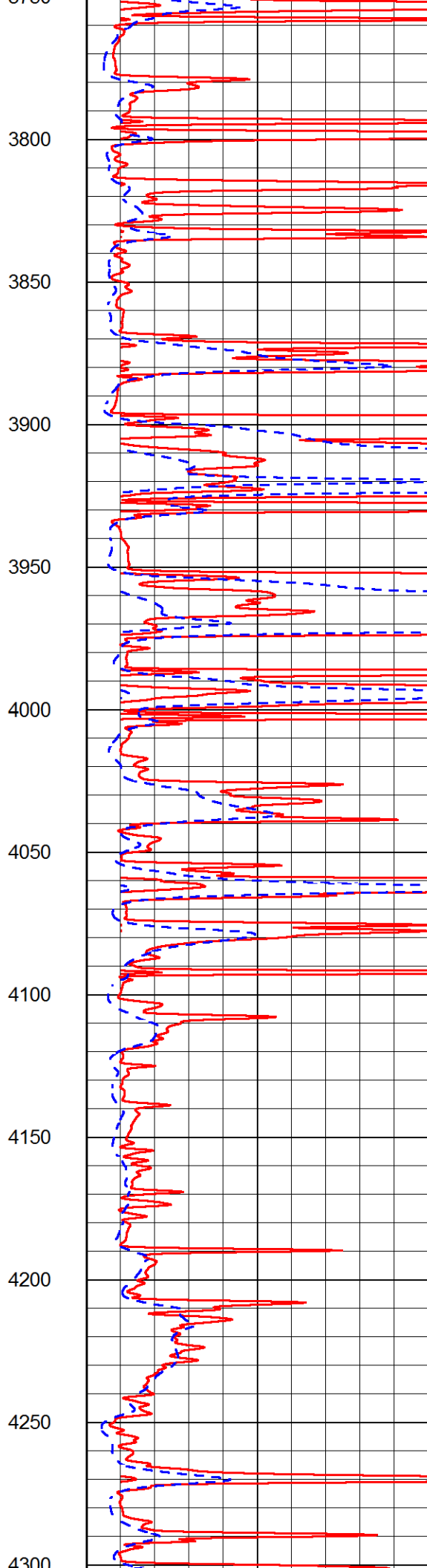
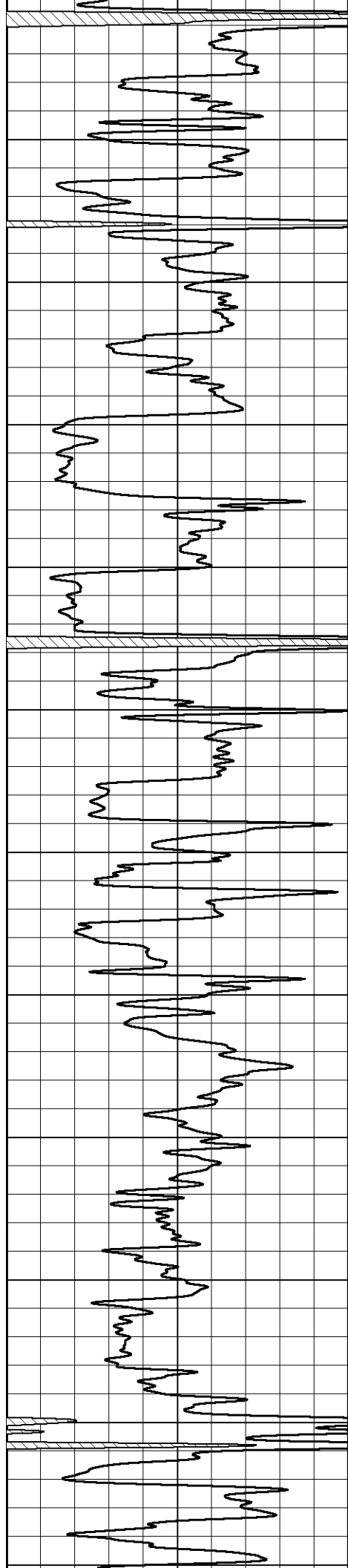
1600 1650 1700 1750 1800 1850 1900 1950 2000 2050 2100

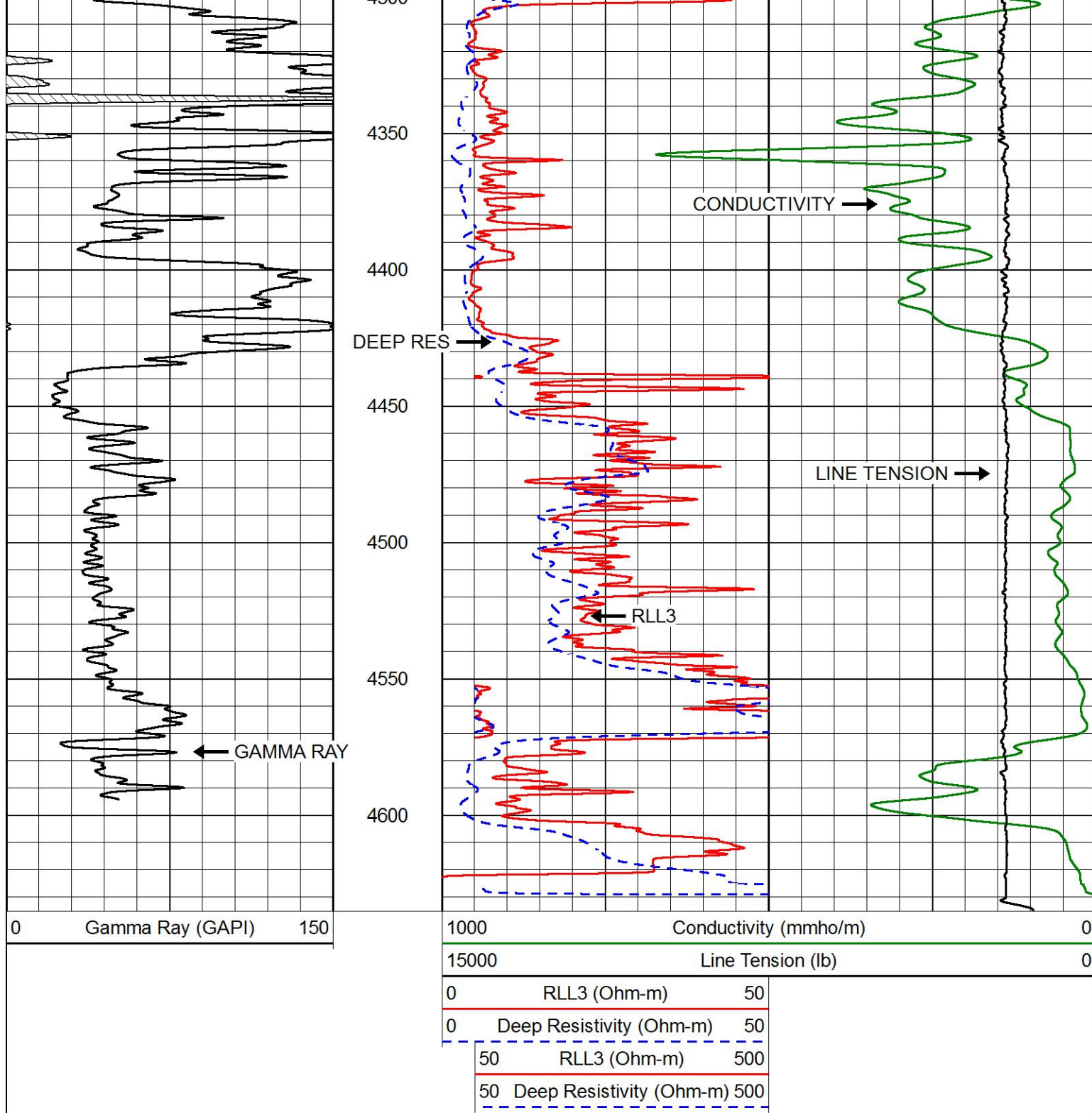














PIONEER
Pioneer Energy Services

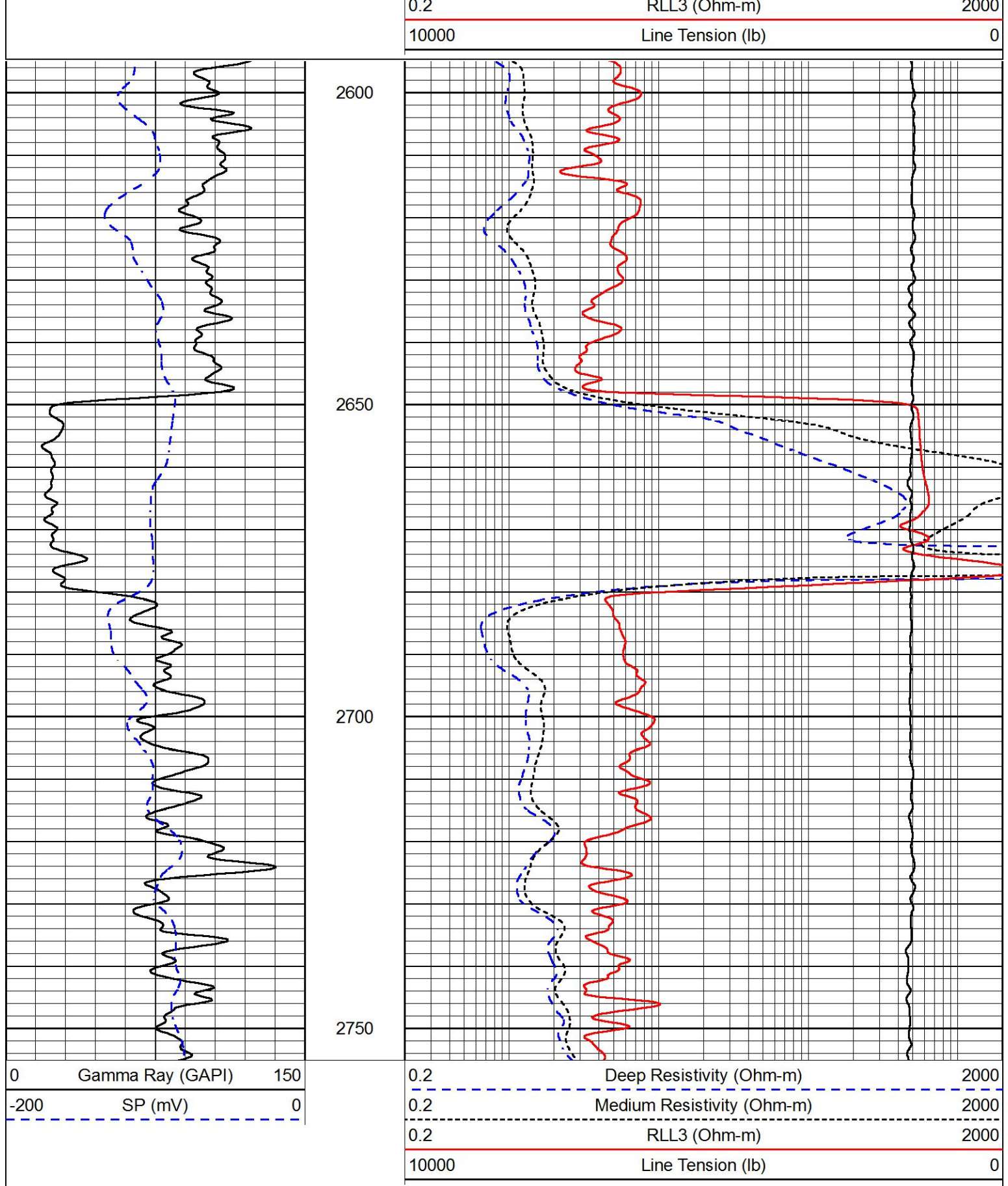
MAIN PASS

Database File	three forks_may trust 1-30.db	
Dataset Pathname	STKML/pass4.1	
Presentation Format	dil	
Dataset Creation	Fri Sep 29 17:26:41 2017	
Charted by	Depth in Feet scaled 1:240	

0	Gamma Ray (GAPI)	150
-200	SP (mV)	0

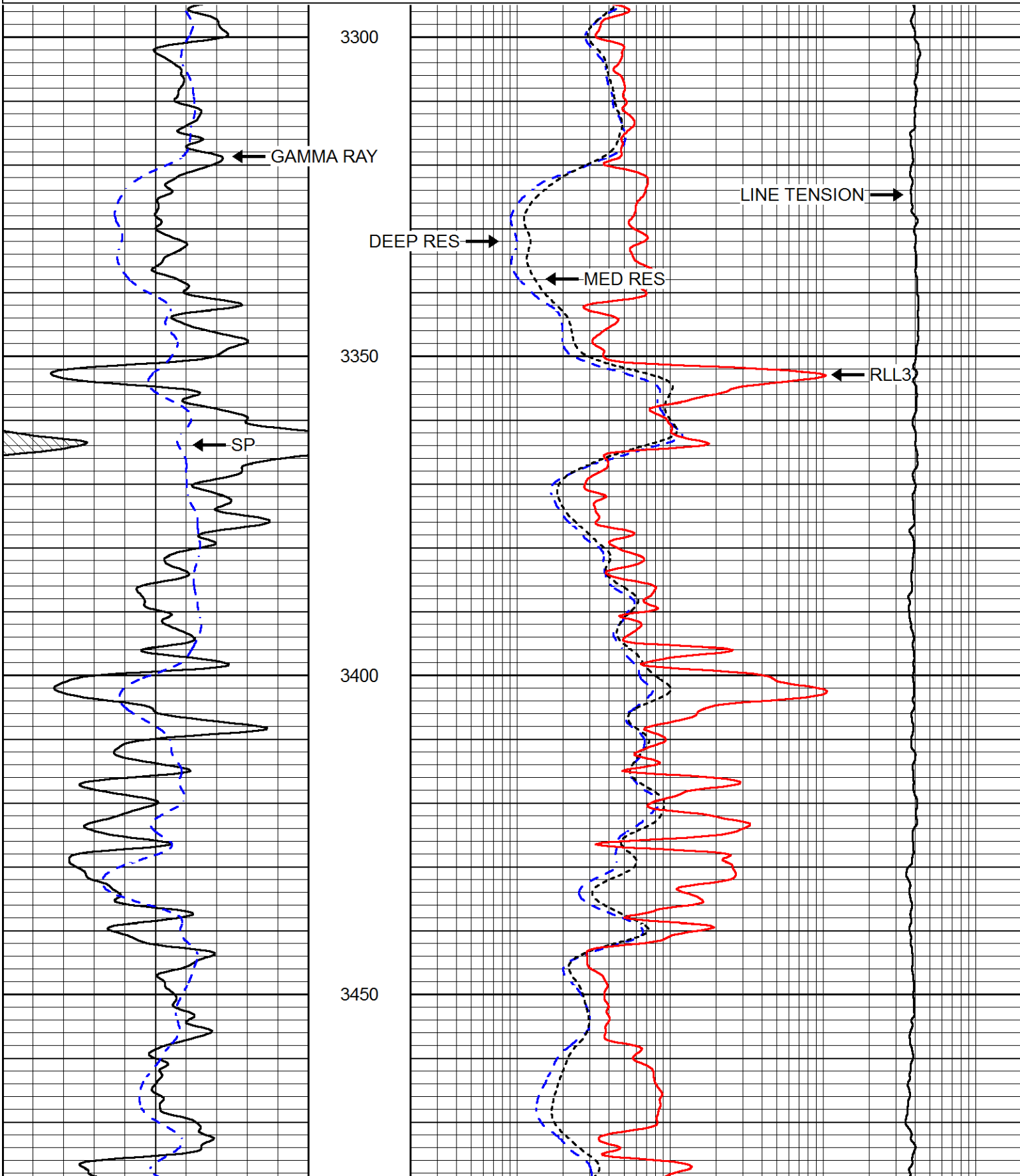
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000

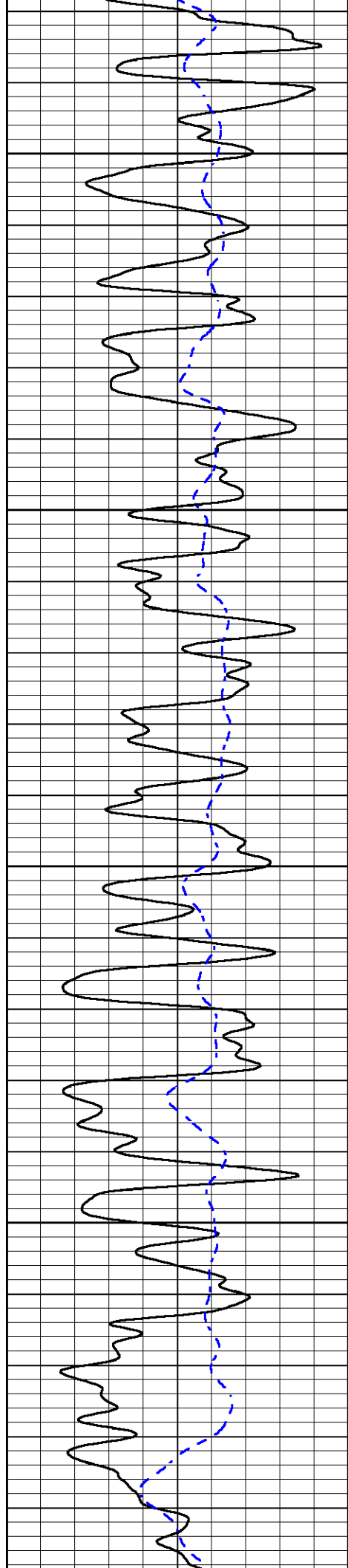
0.2	RLL3 (Ohm-m)	2000
0.2	Deep Resistivity (Ohm-m)	2000



MAIN PASS

0	Gamma Ray (GAPI)	150	0.2	Deep Resistivity (Ohm-m)	2000
-200	SP (mV)	0	0.2	Medium Resistivity (Ohm-m)	2000
			0.2	RLL3 (Ohm-m)	2000
			10000	Line Tension (lb)	0



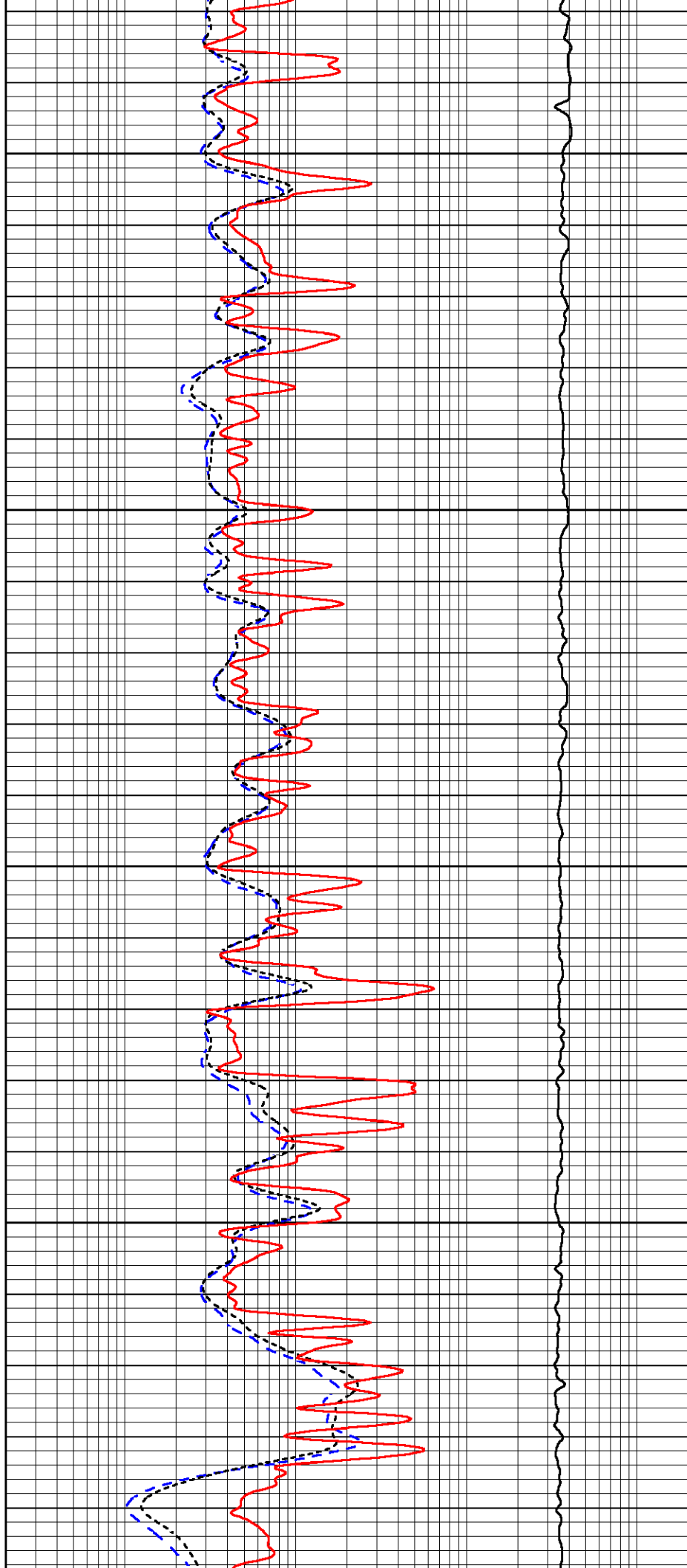


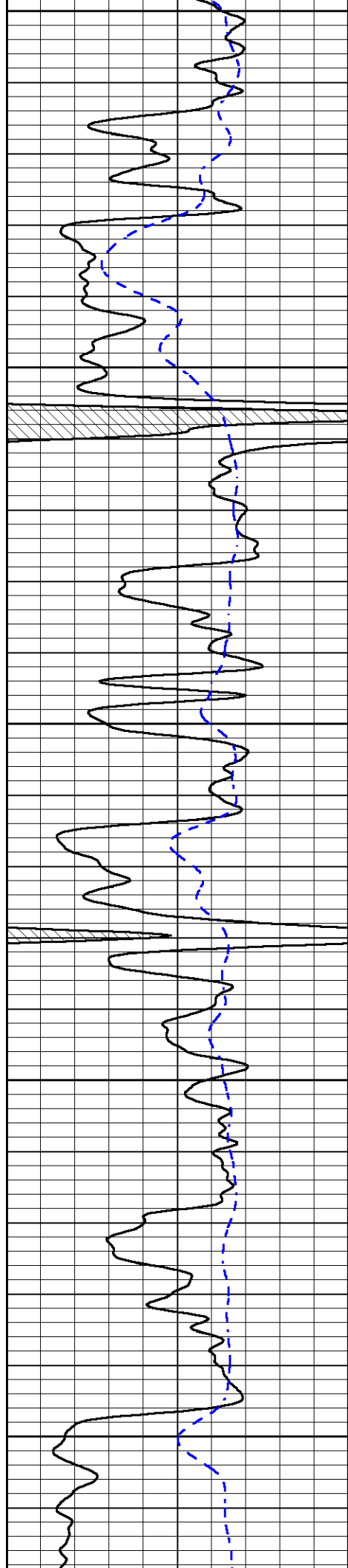
3500

3550

3600

3650





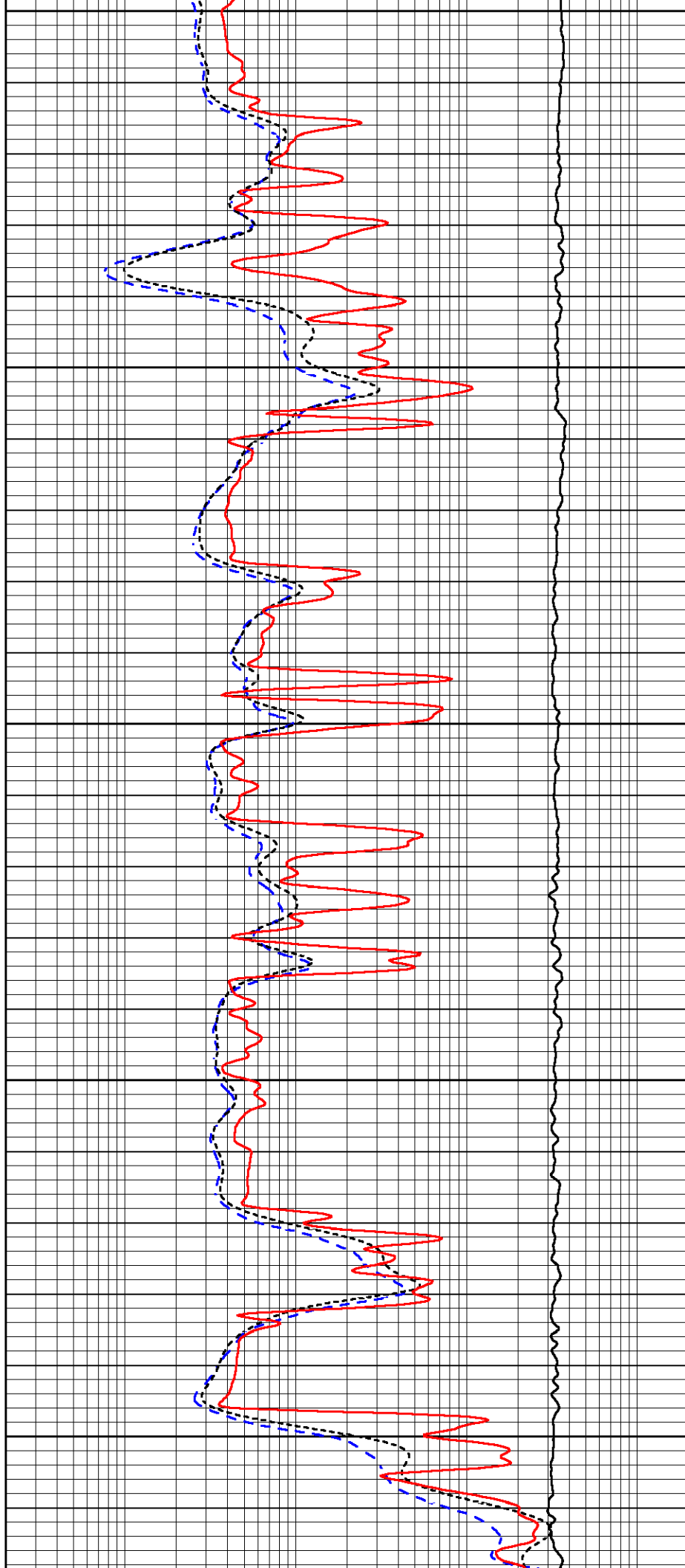
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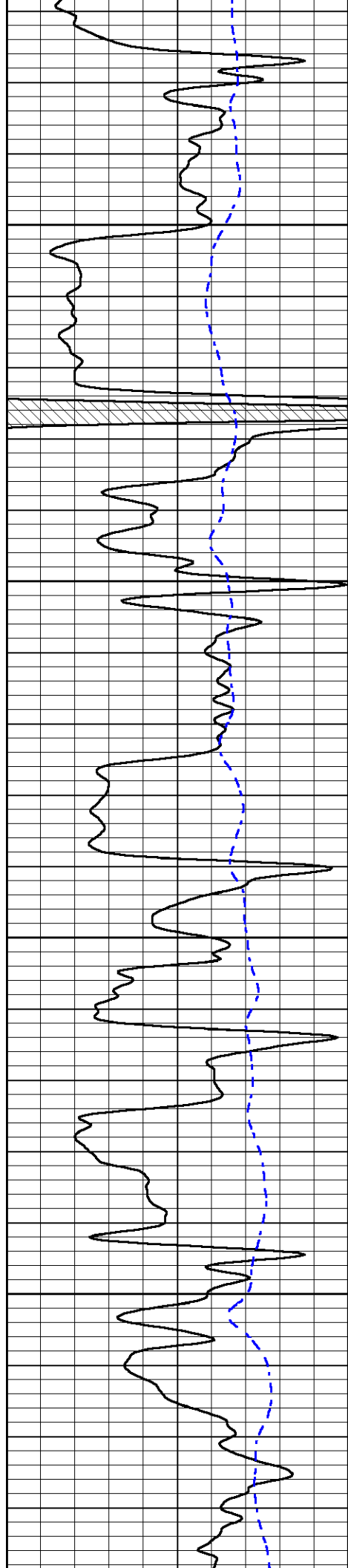
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3800

3850

3900



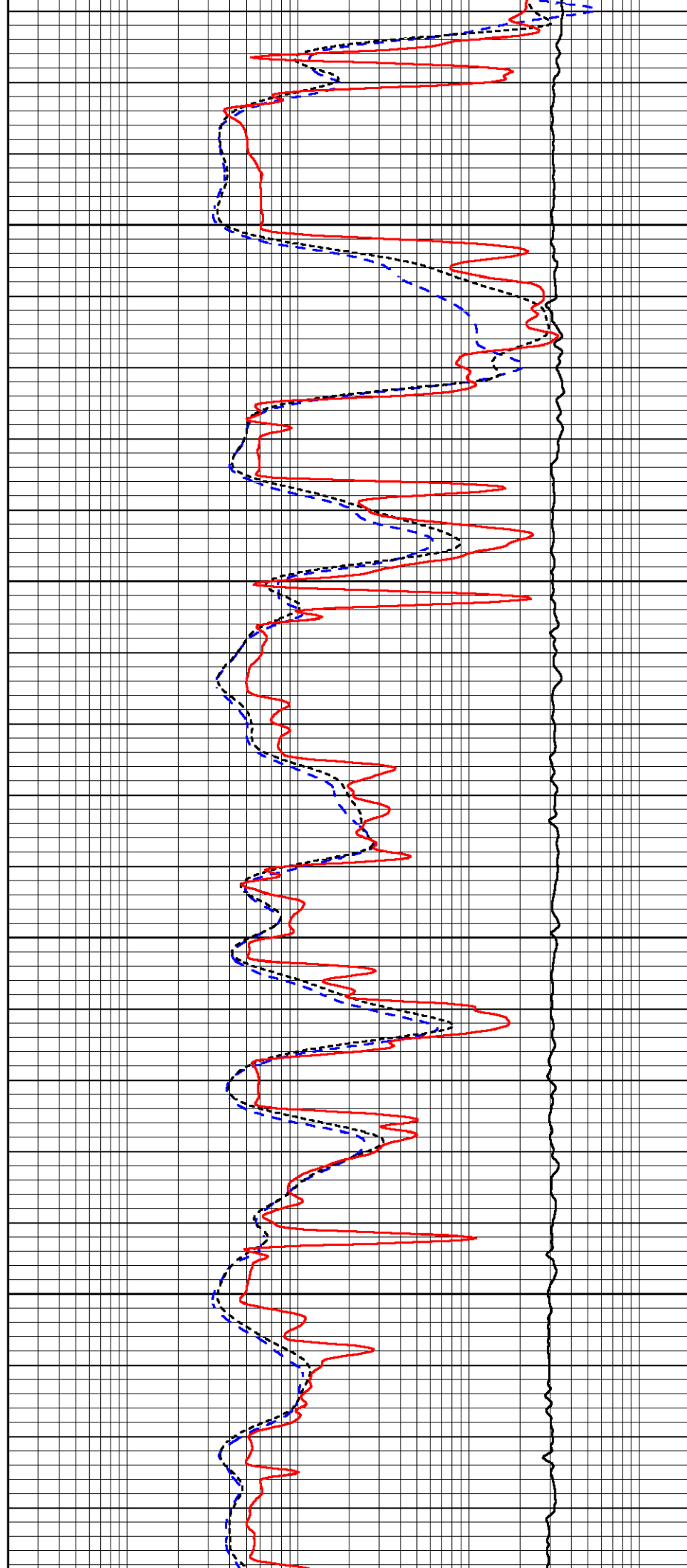


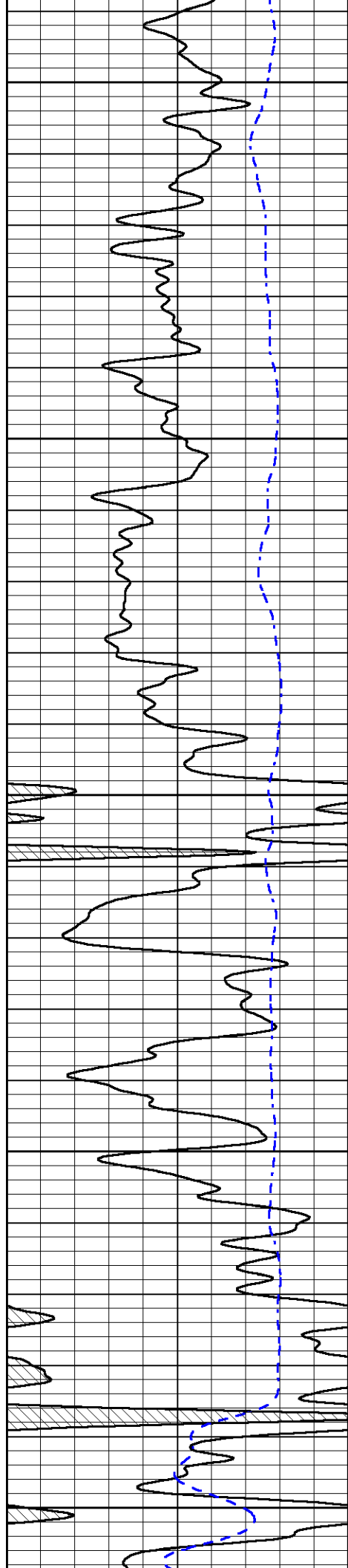
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4000

4050

4100





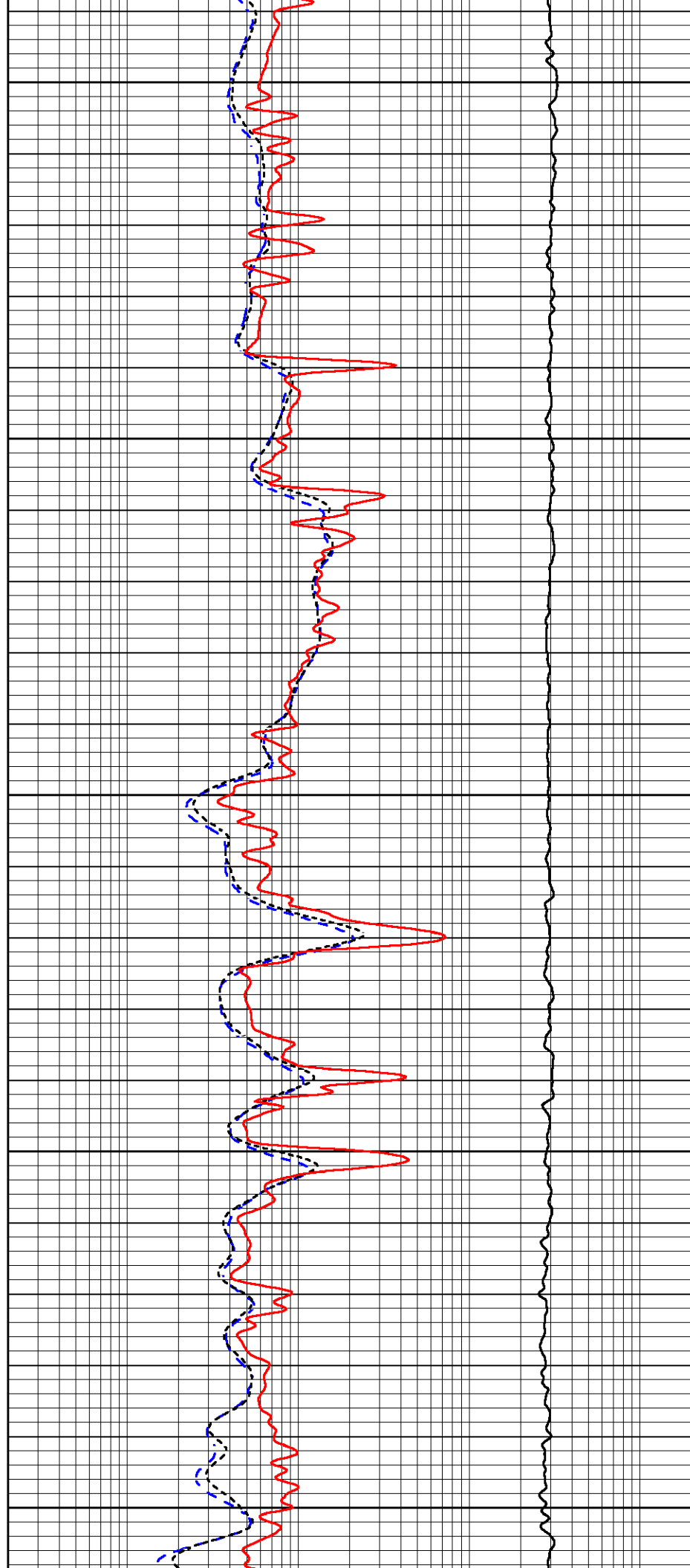
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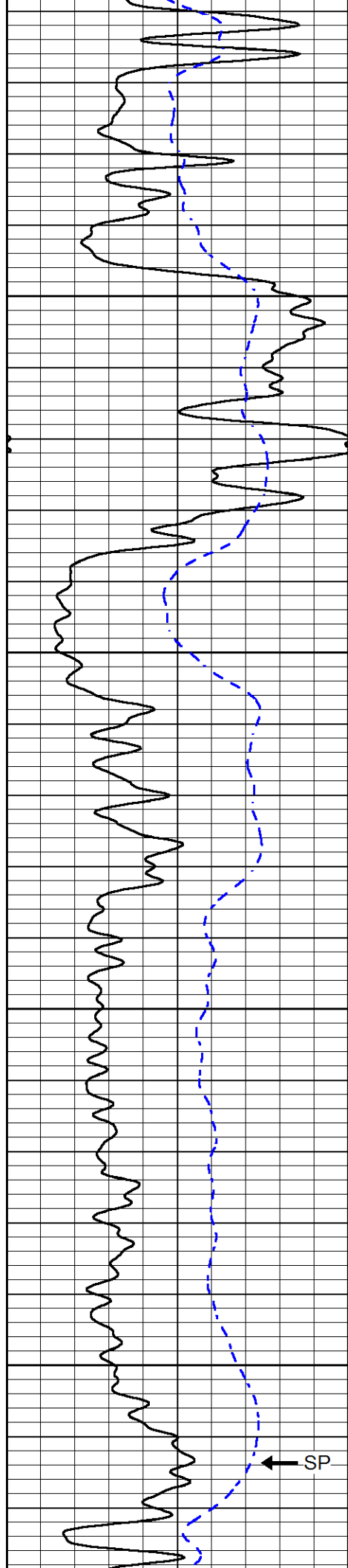
4200

4250

4300

4350





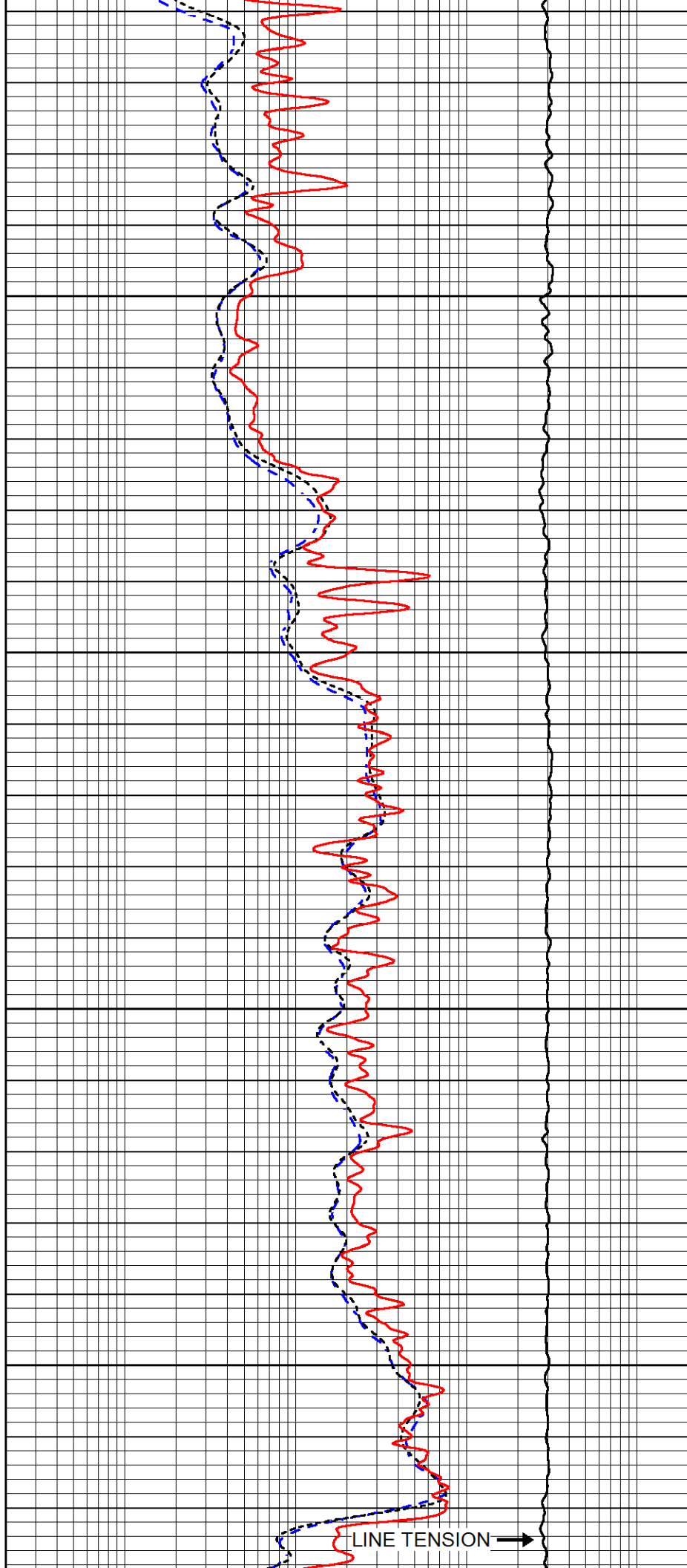
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4450

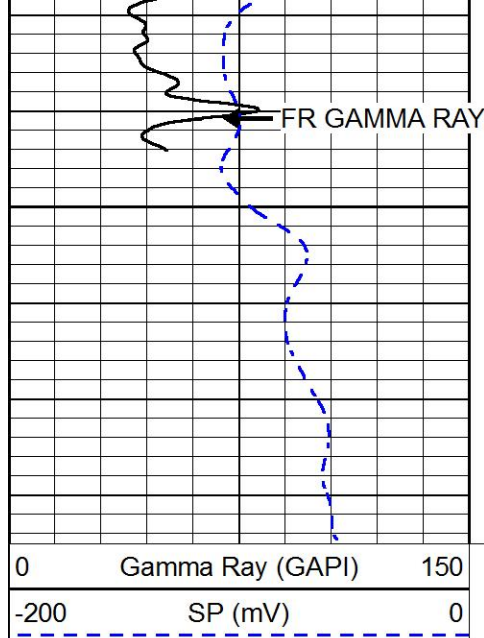
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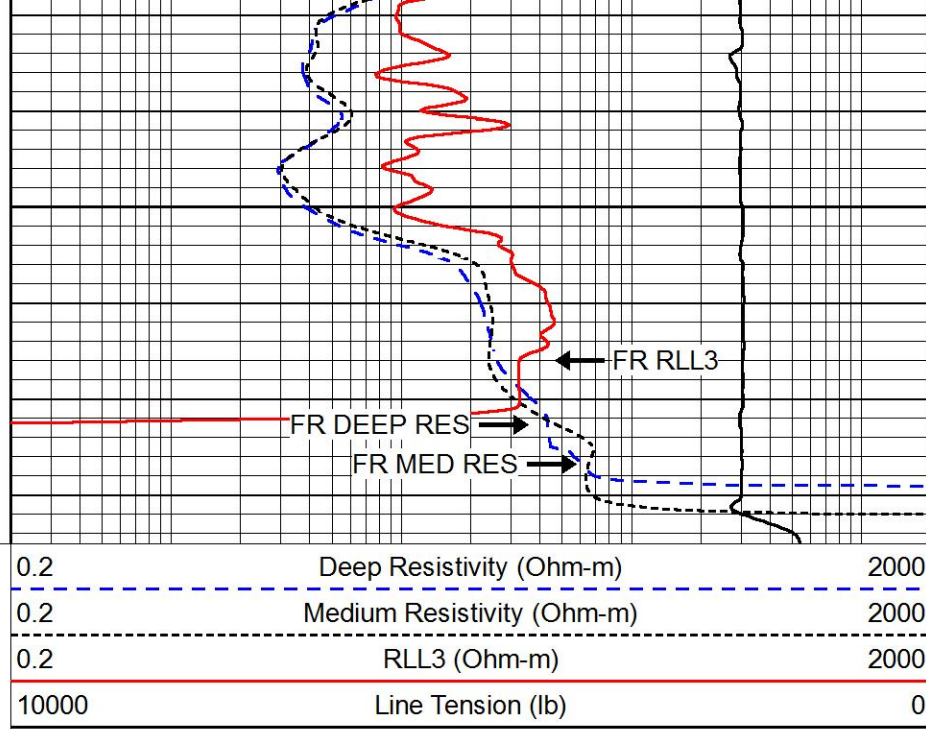
SP



LINE TENSION

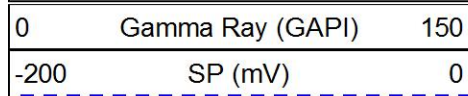


4600



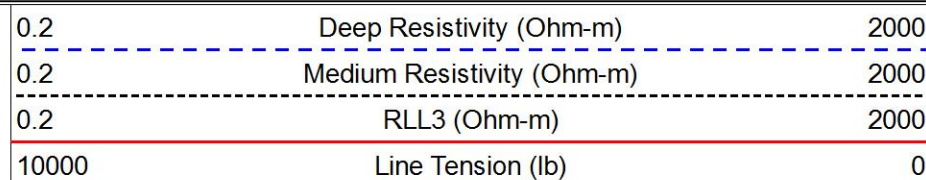
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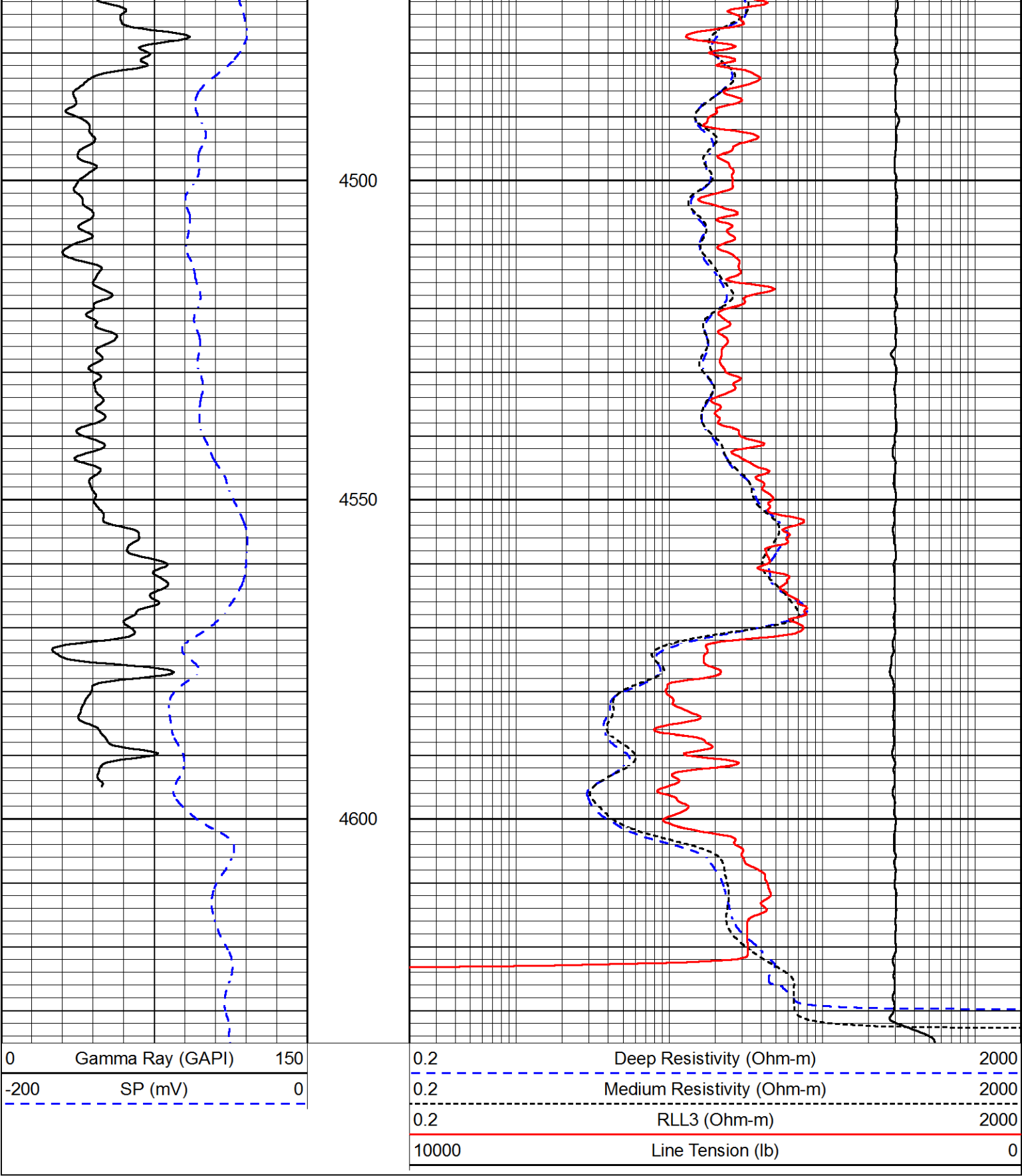
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 Dataset Pathname STKML/pass2.1
 Presentation Format dil
 Dataset Creation Fri Sep 29 16:51:43 2017
 Charted by Depth in Feet scaled 1:240



4400

4450





Calibration Report

Database File three forks_may trust 1-30.db
Dataset Pathname STKML/pass3.1
Dataset Creation Fri Sep 29 16:49:59 2017

Dual Induction Calibration Report

Serial-Model: PSI 91-M&W
Calibration Performed: Wed Sep 13 22:23:16 2017

		Readings		References			Results	
Loop:	Air	Loop		Air	Loop		Gain	Offset
Deep	166.796	835.089		0.000	255.800	mmho/m	0.430	-34.300
Medium	142.009	1348.560		0.000	255.800	mmho/m	0.360	-31.000

Microlog Calibration Report

Serial-Model: Performed:	PSI-01-PSIML Wed Sep 06 19:50:56 2017
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		Readings		References			Results	
		Zero	Cal	Zero	Cal		m	b
Normal		0.0000	1.0000	0.0000	1.0000	Ohm-m	19000.0000	-0.7000
Inverse		0.0000	1.0000	0.0000	1.0000	Ohm-m	23000.0000	-0.5000
Caliper		1.0001	1.1397	6.5000	18.5000	in	100.0000	-97.2250

Compensated Density Calibration Report

Serial-Model: Source / Verifier: Master Calibration Performed:	90-1031-M&W 16955B / 2ci Wed Sep 06 19:51:03 2017
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Master Calibration							
		Density			Far Detector	Near Detector	
Magnesium		1.755	g/cc		4903.44	6153.79	cps
Aluminum		2.640	g/cc		934.50	4021.31	cps
		Spine Angle = 75.61			Density/Spine Ratio = 0.517		
		Size			Reading		
Small Ring		8.00	in		1.84		
Large Ring		22.00	in		1.46		

Compensated Neutron Calibration Report

Serial Number: Tool Model: Calibration Performed:	207-MW M&W WED SEP 6 10:30:30 2017
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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	
Tool Model:	M&W	
Calibration Performed:	Wed Sep 06 19:51:14 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	

Calibrator Reading:	1.0	cps
Sensitivity:	0.6000	GAPI/cps



Company	THREE FORKS RESOURCES, LLC
Well	MAY TRUST #1-30
Field	WILDCAT
County	DECATUR
State	KANSAS