



MIDWEST WIRELINE

MICRORESISTIVITY
LOG

Company Griffin Management LLC		Company Griffin Management LLC	
Well Breanna #5		Well Breanna #5	
Field		Field	
County Barber		County Barber	
State Kansas		State Kansas	
Location: API #: 15-007-24429-00-00		Other Services	
SEC 5 TWP 30S RGE 15W		CNL/CDL DIL	
Permanent Datum	Ground Level	Elevation	1963
Log Measured From	Kelly Bushing	K.B.	1968
Drilling Measured From	Kelly Bushing	D.F.	
		G.L.	1963
Date	8/4/2022		
Run Number	One		
Depth Driller	4820		
Depth Logger	4808		
Bottom Logged Interval	4807		
Top Log Interval	2800		
Casing Driller	8.625 @ 262		
Casing Logger	261		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	3000		
Density / Viscosity	9.0 50		
pH / Fluid Loss	11.0 9.6		
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 @ 124		
Operating Rig Time	2.5 Hours		
Max Rec. Temp. F	124		
Equipment Number	P-24		
Location	Hays		
Recorded By	T. Martin		
Witnessed By	Charles Griffin	Eli Felts	

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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

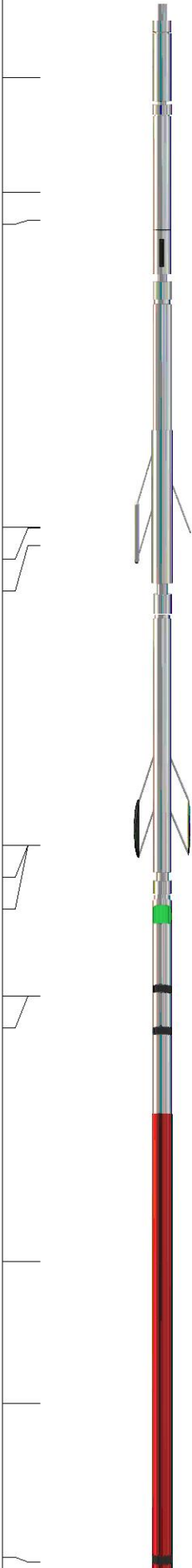
N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Pratt, KS, W to 140, S to Y,
1/4 E, N 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		This Log Record Was Witnessed By	
Engineer: T. Martin		Primary Witness: Charles Griffin	
Operator:		Secondary Witness: Eli Felts	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33			GR-M&W (106)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48			CNT-M&W (207-MW)	5.00	3.50	100.00
LSD DCAL SSD	28.18			CDL-M&W (302-02)	8.50	4.00	250.00
	28.17			ML-PSIML (402)	7.58	4.00	65.00
	27.68						
MCAL MI MN	19.58 19.58 19.58						
RLL3F RLL3	15.50 15.50			DIL-M&W (507)	18.25	3.50	220.00
CILD	8.33						
CILM	4.50						
SP	0.20						
Dataset: griffin_breanna #5.db: field/well/StkMI/pass3.1 Total length: 42.33 ft Total weight: 685.00 lb O.D.: 4.00 in							

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_breanna #5.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	124	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	210	80	Off	4808

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



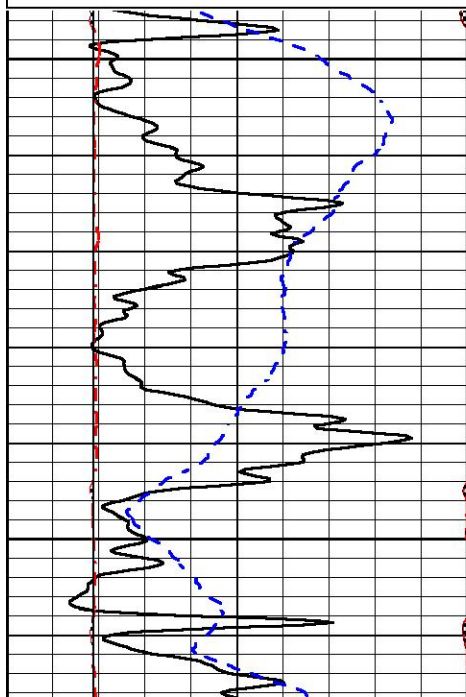
DETAIL SECTION

MAIN PASS

Database File griffin_breanna #5.db
Dataset Pathname StkMI/pass3.1
Presentation Format _micro
Dataset Creation Thu Aug 04 02:40:51 2022
Charted by Depth in Feet scaled 1:240

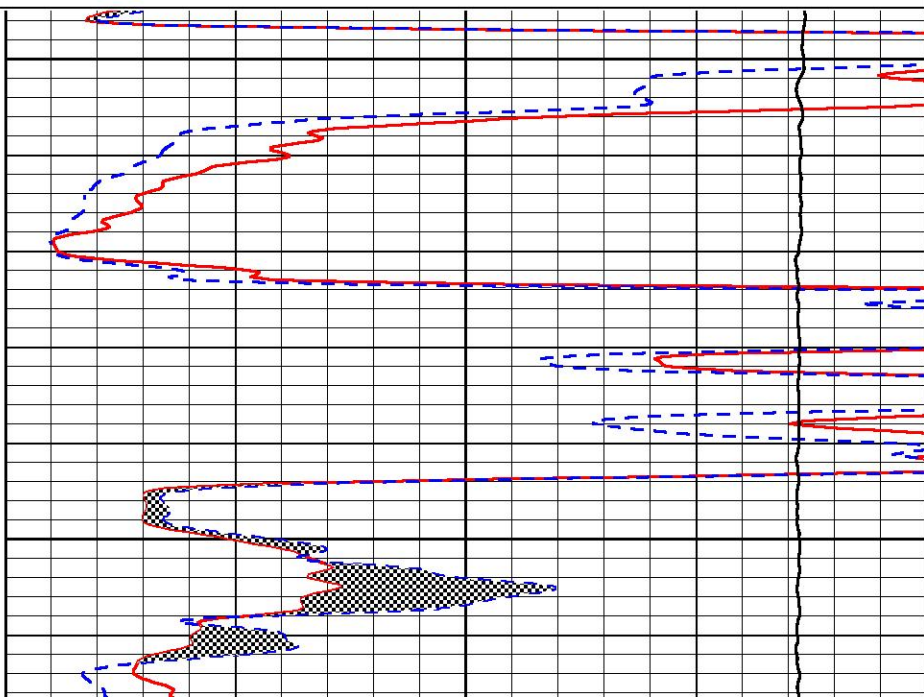
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	sp (mV)	0

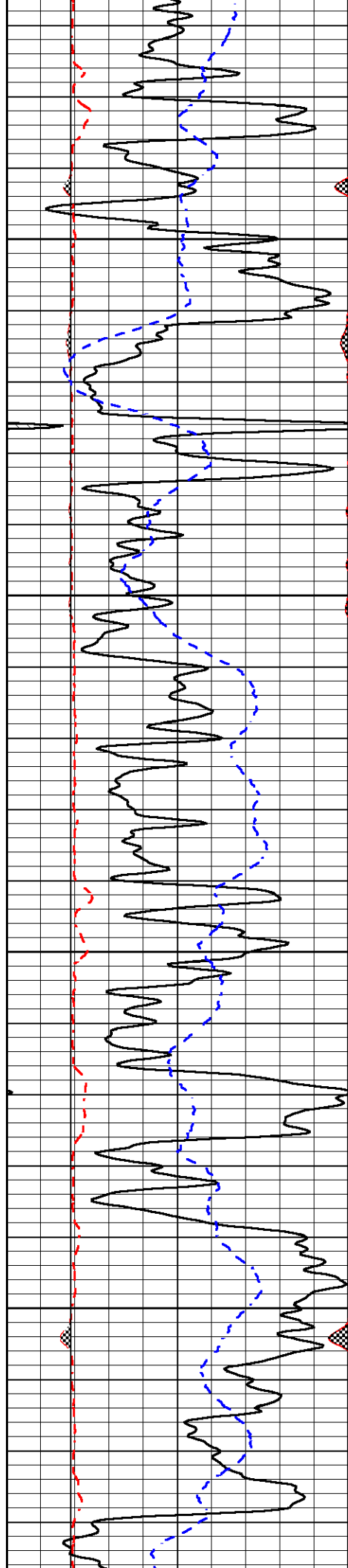
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



2800

2850



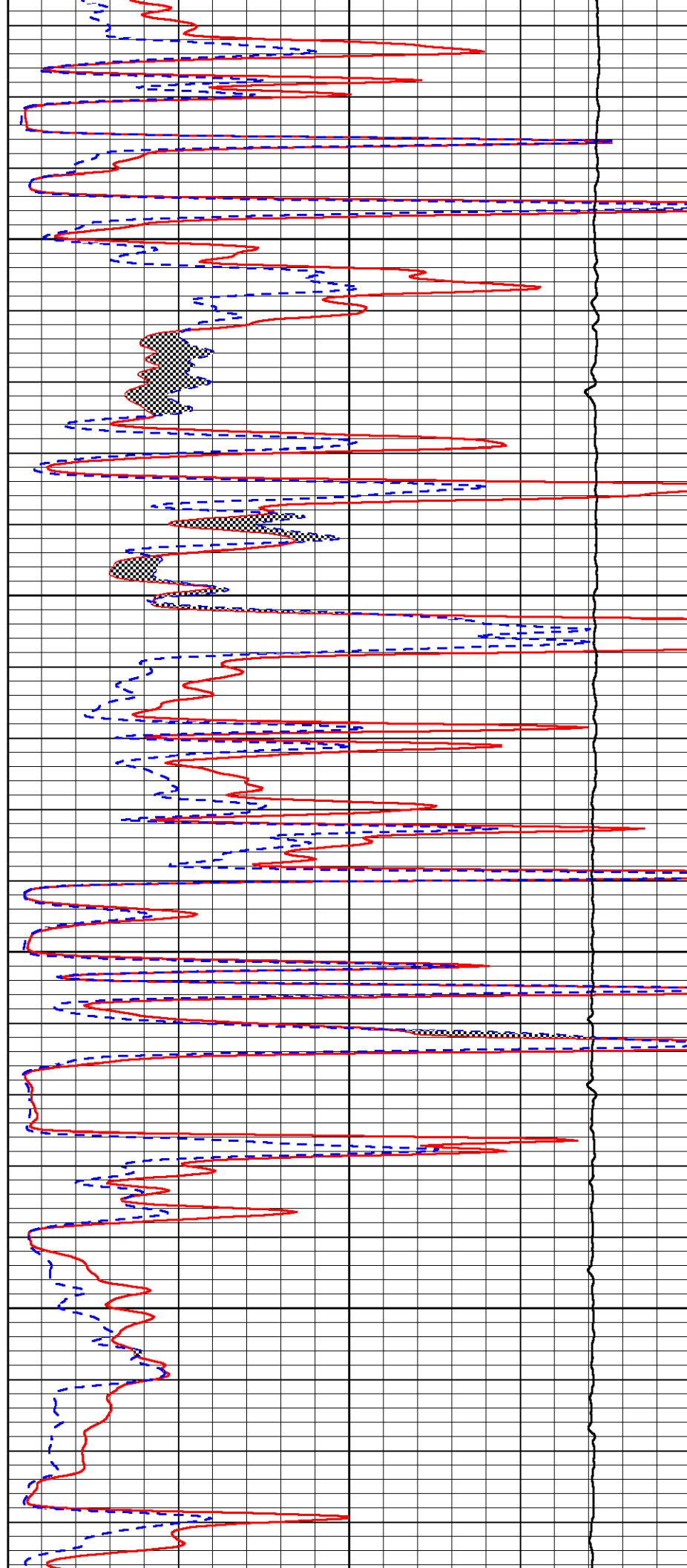


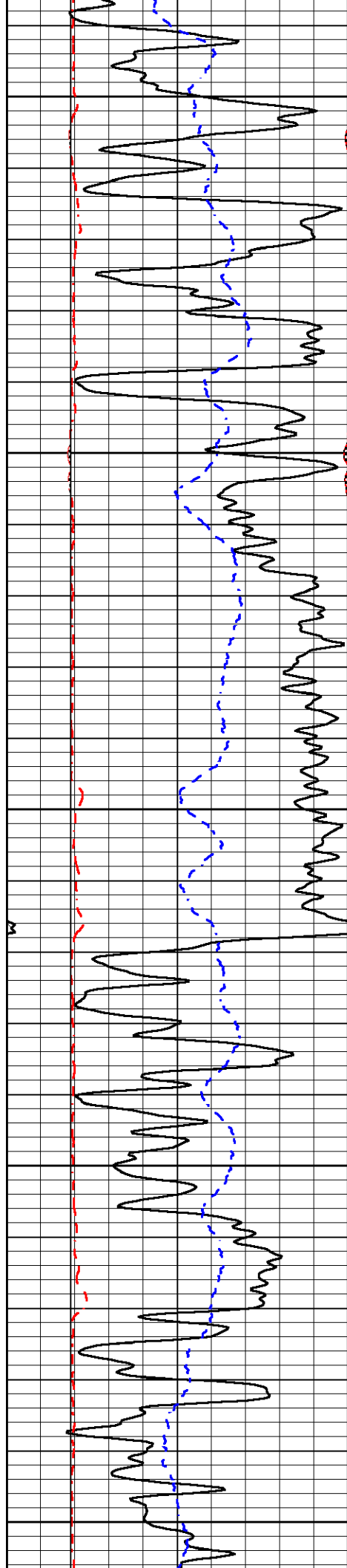
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2950

3000

3050





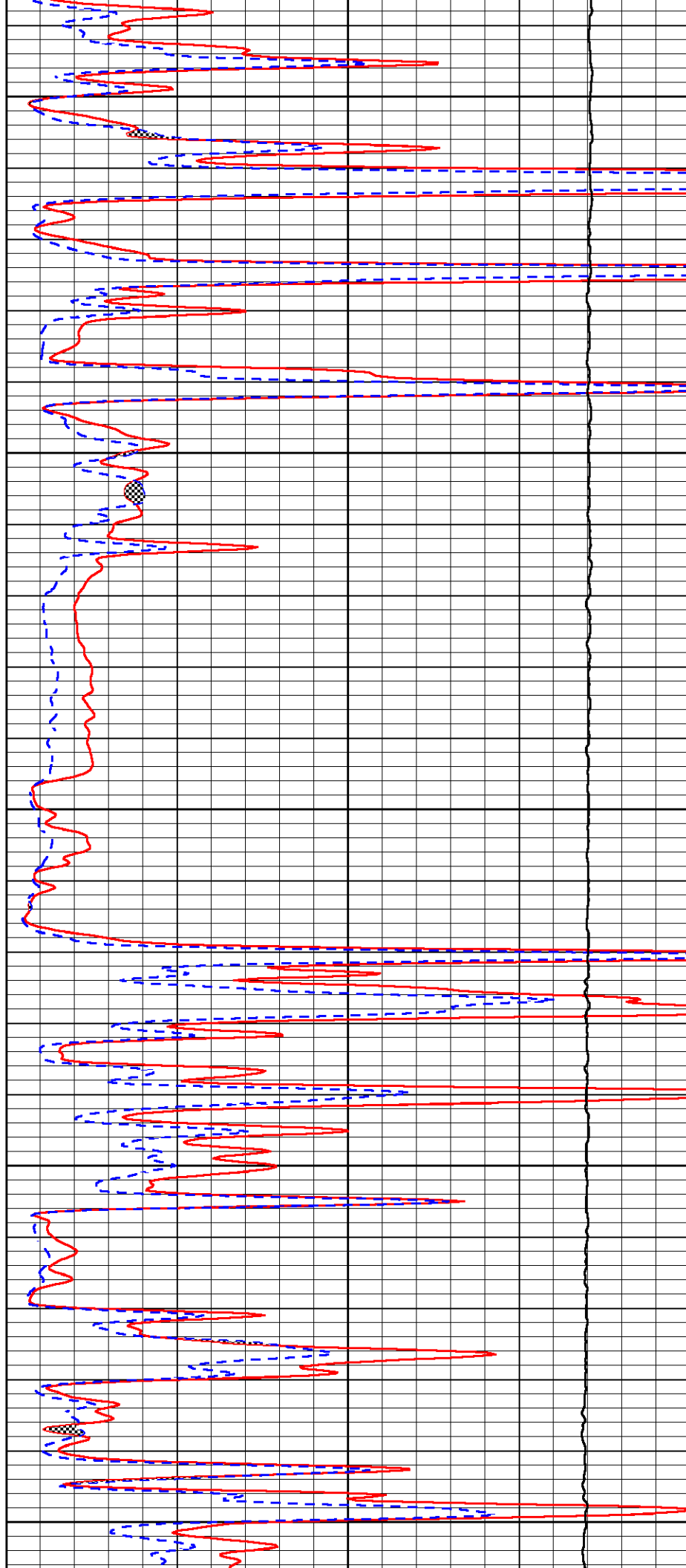
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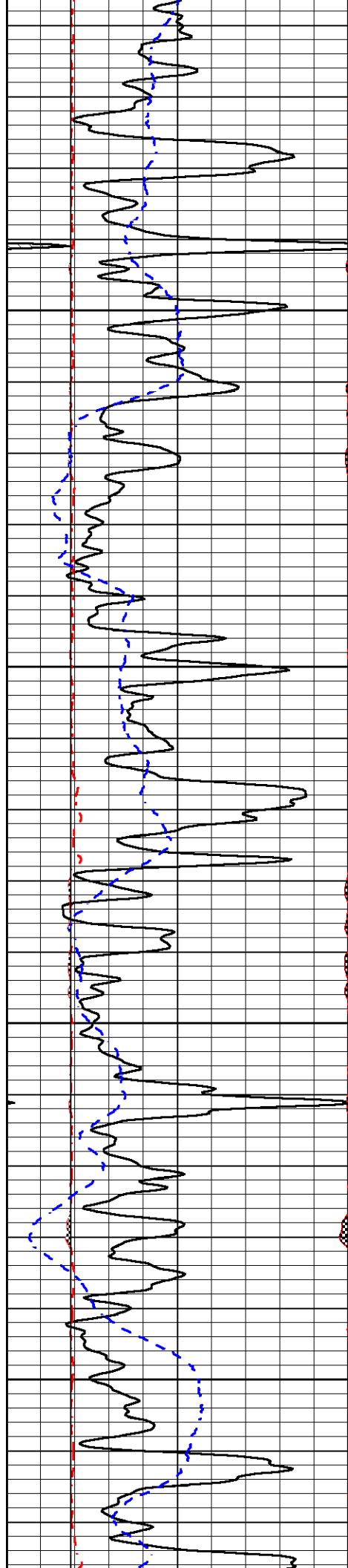
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3200

3250

3300



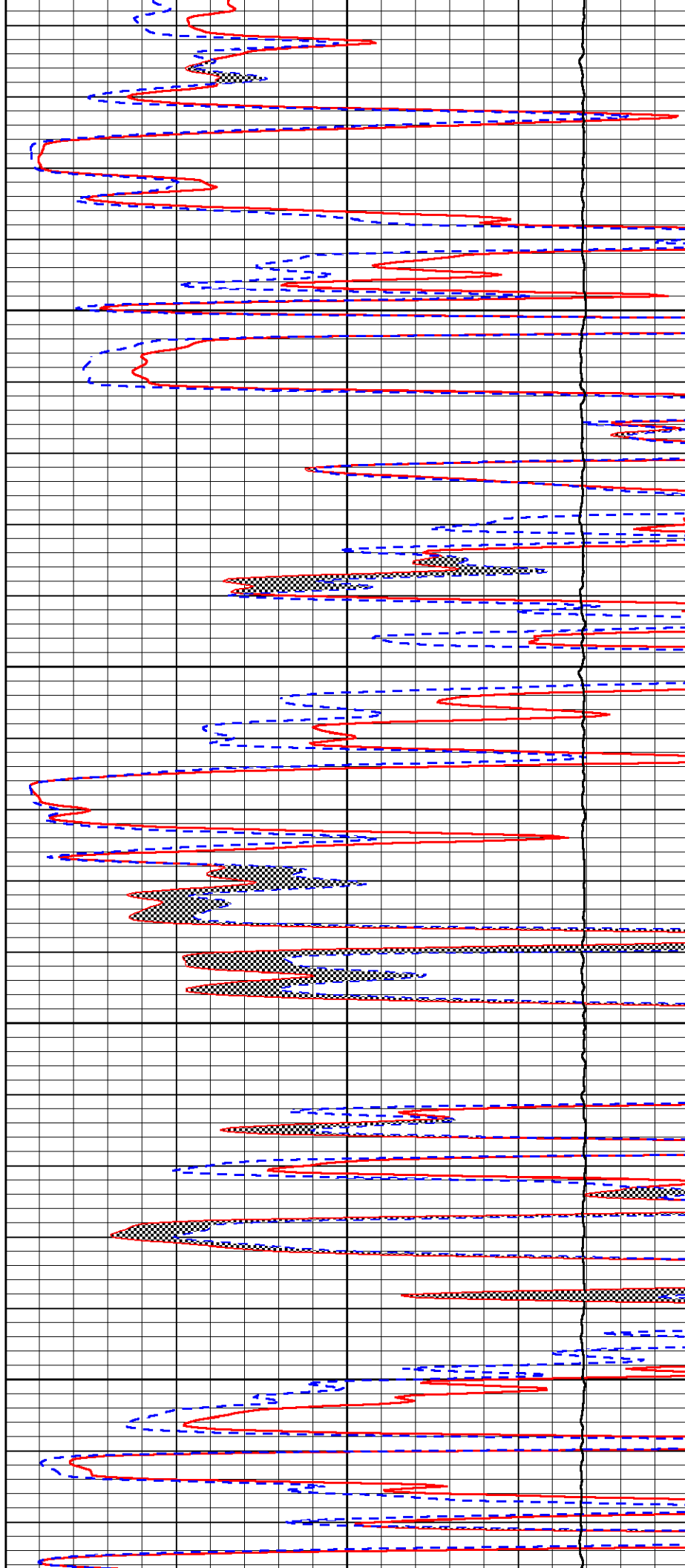


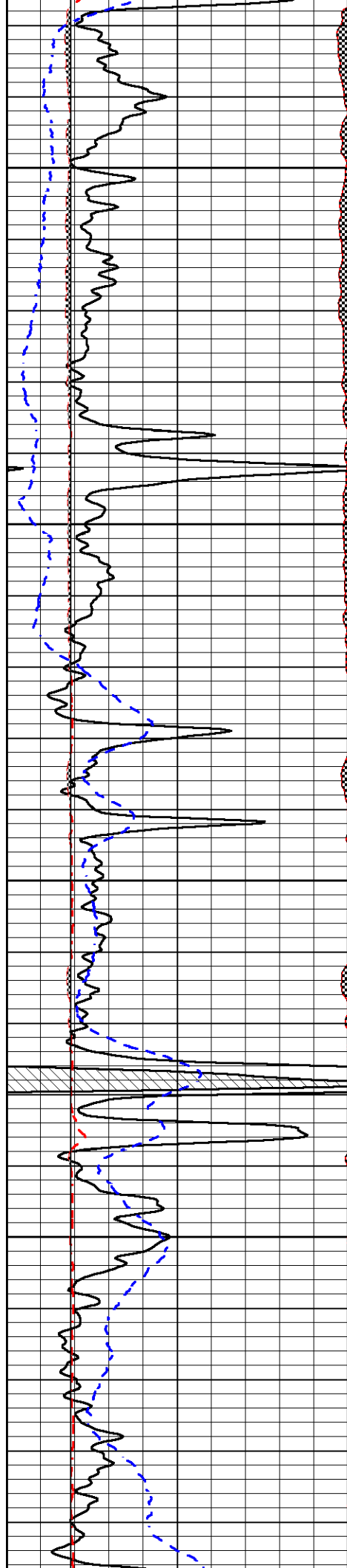
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3400

3450

3500



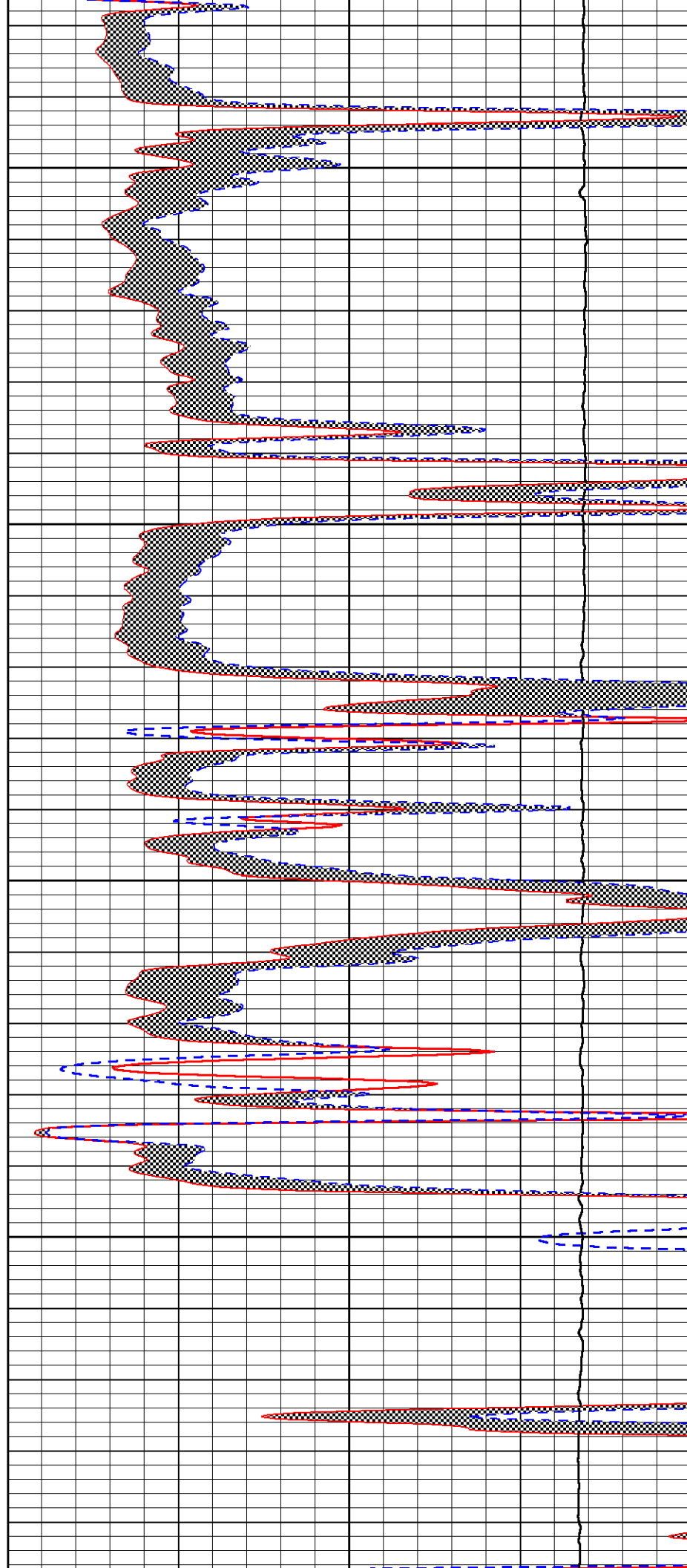


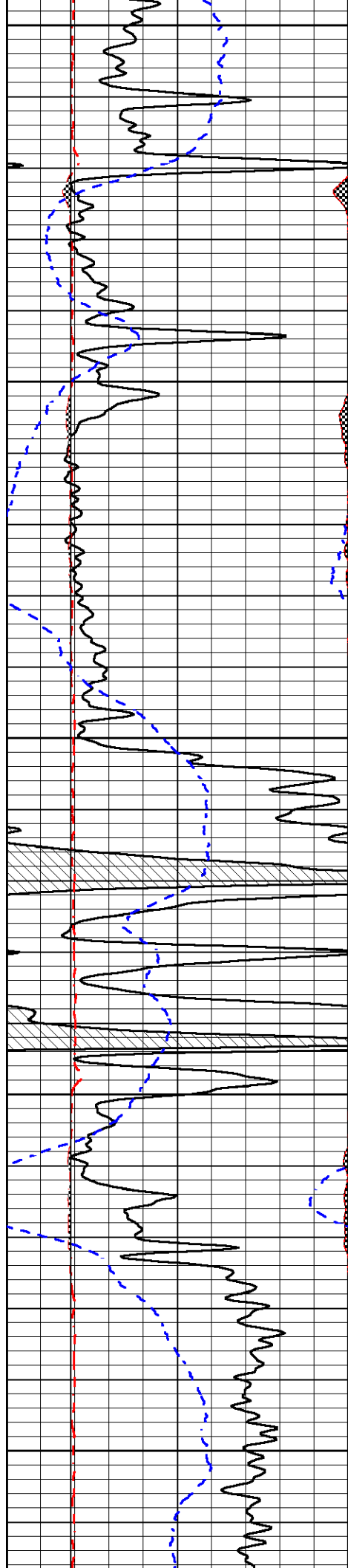
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3650

3700





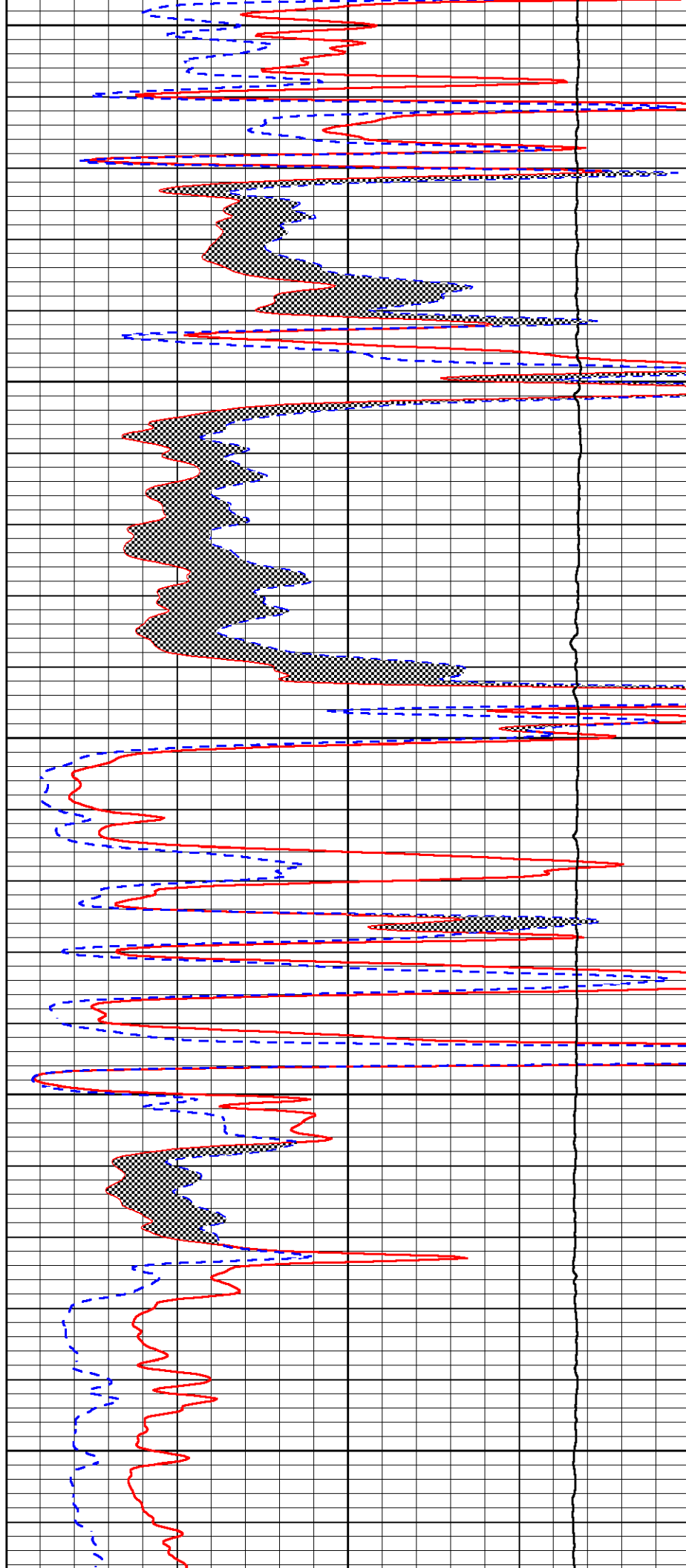
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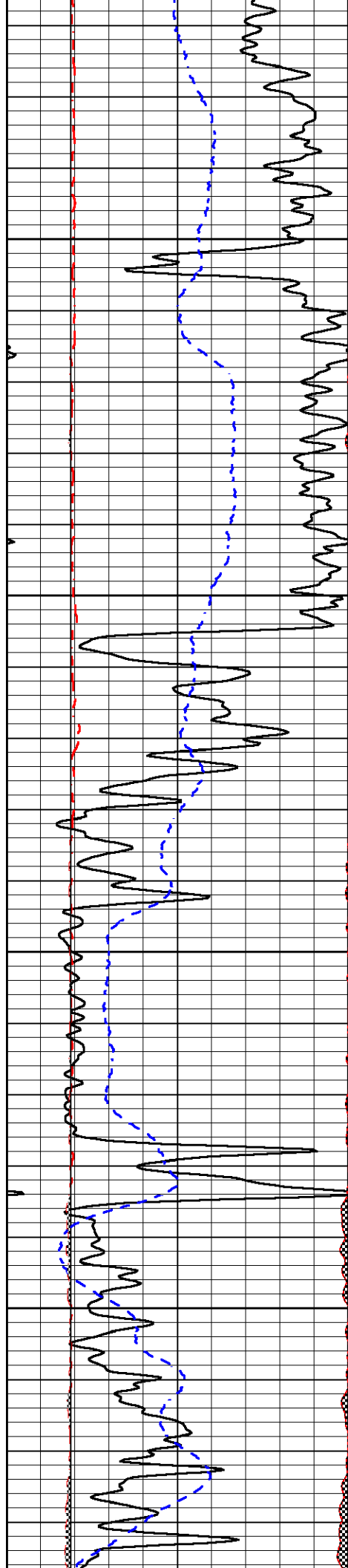
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3850

3900

3950



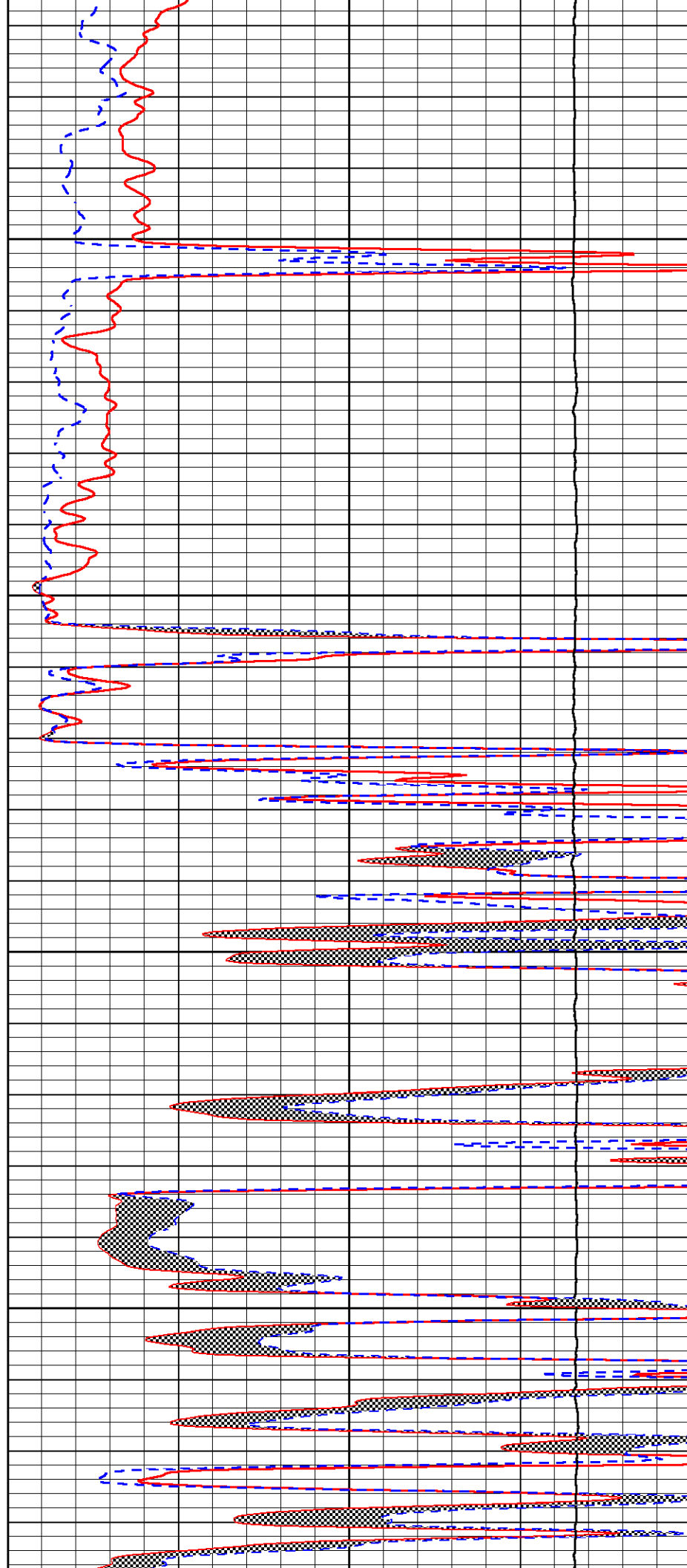


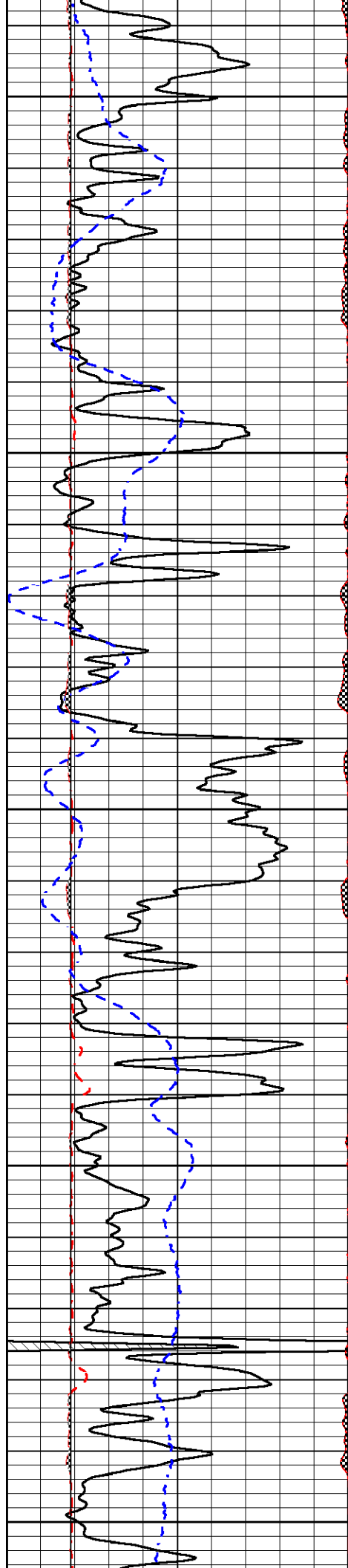
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4050

4100

4150





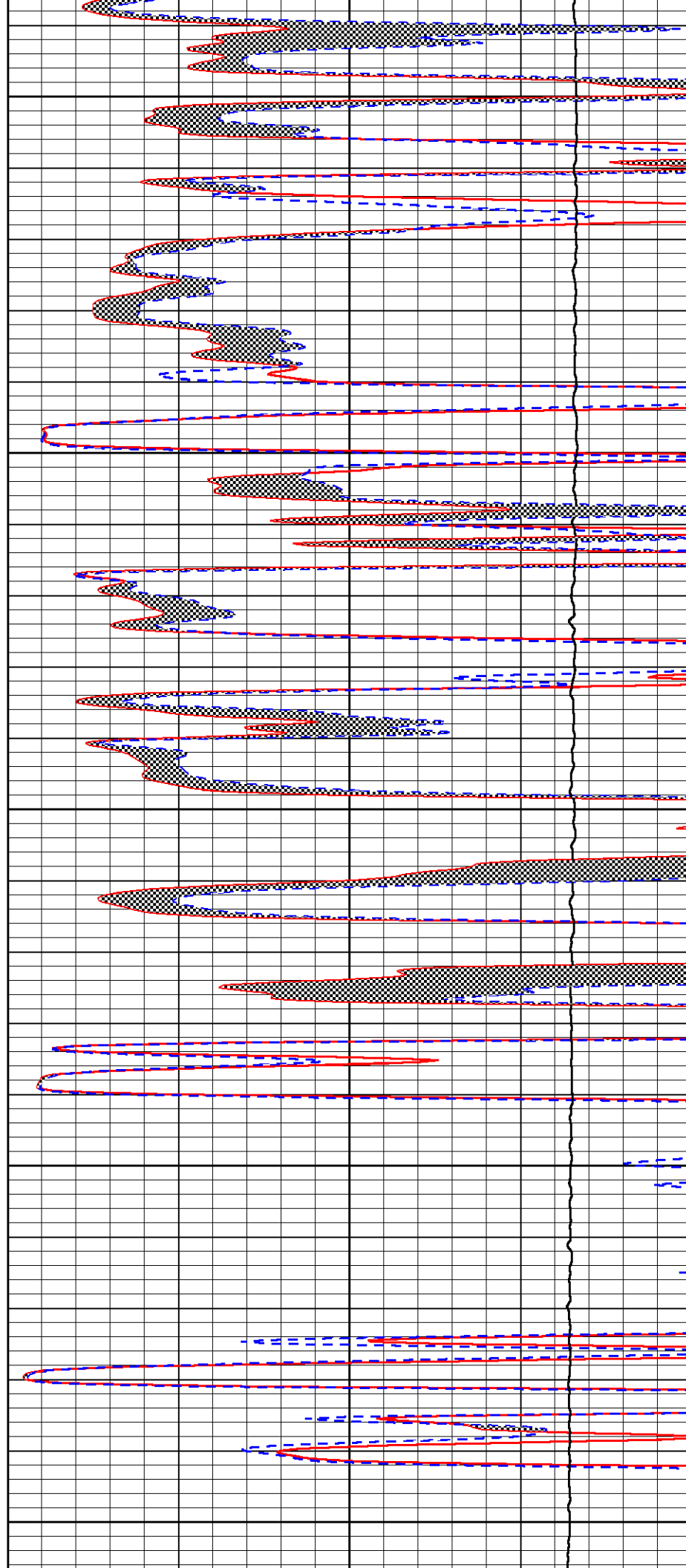
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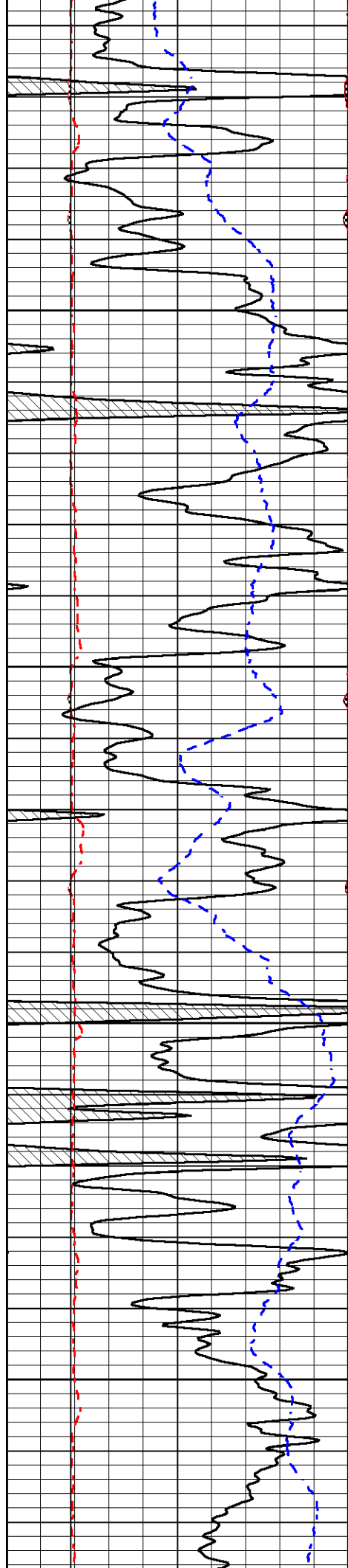
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4300

4350

4400



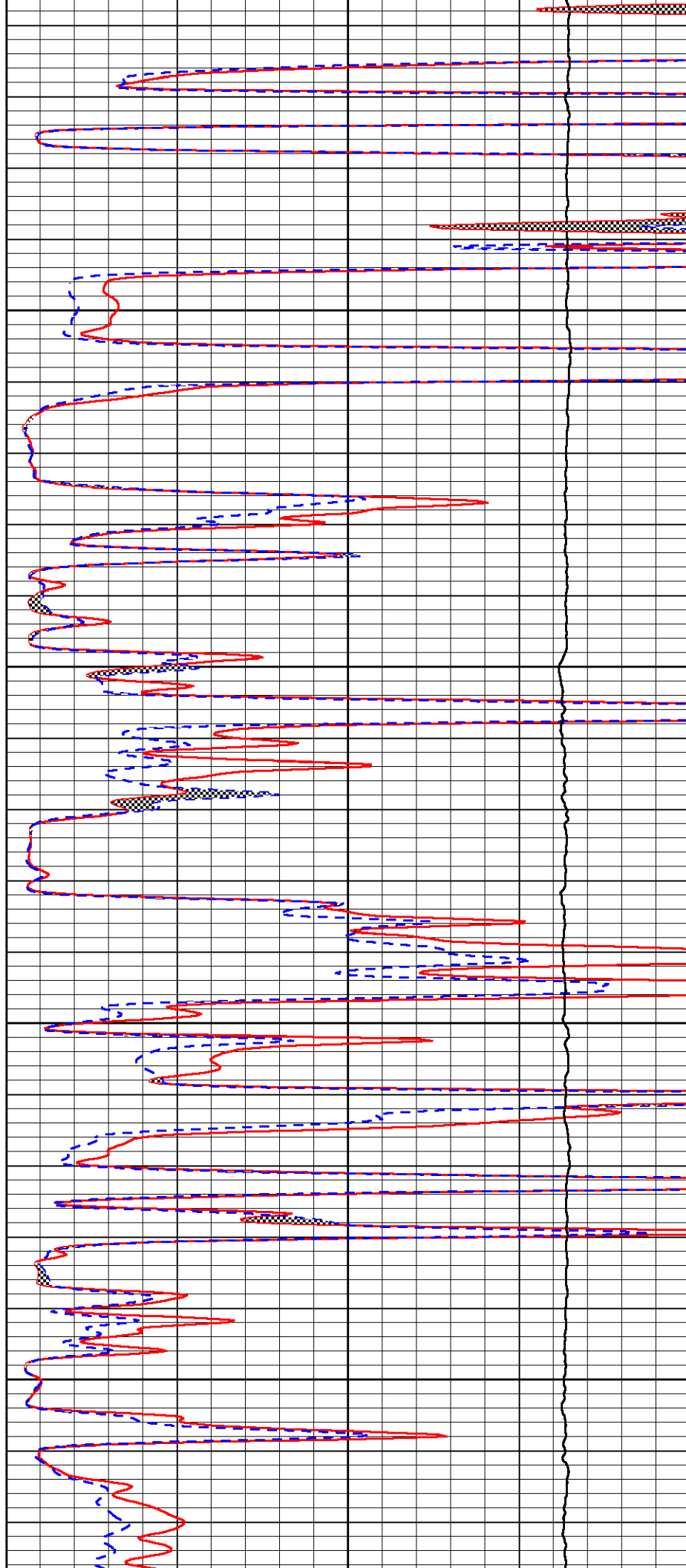


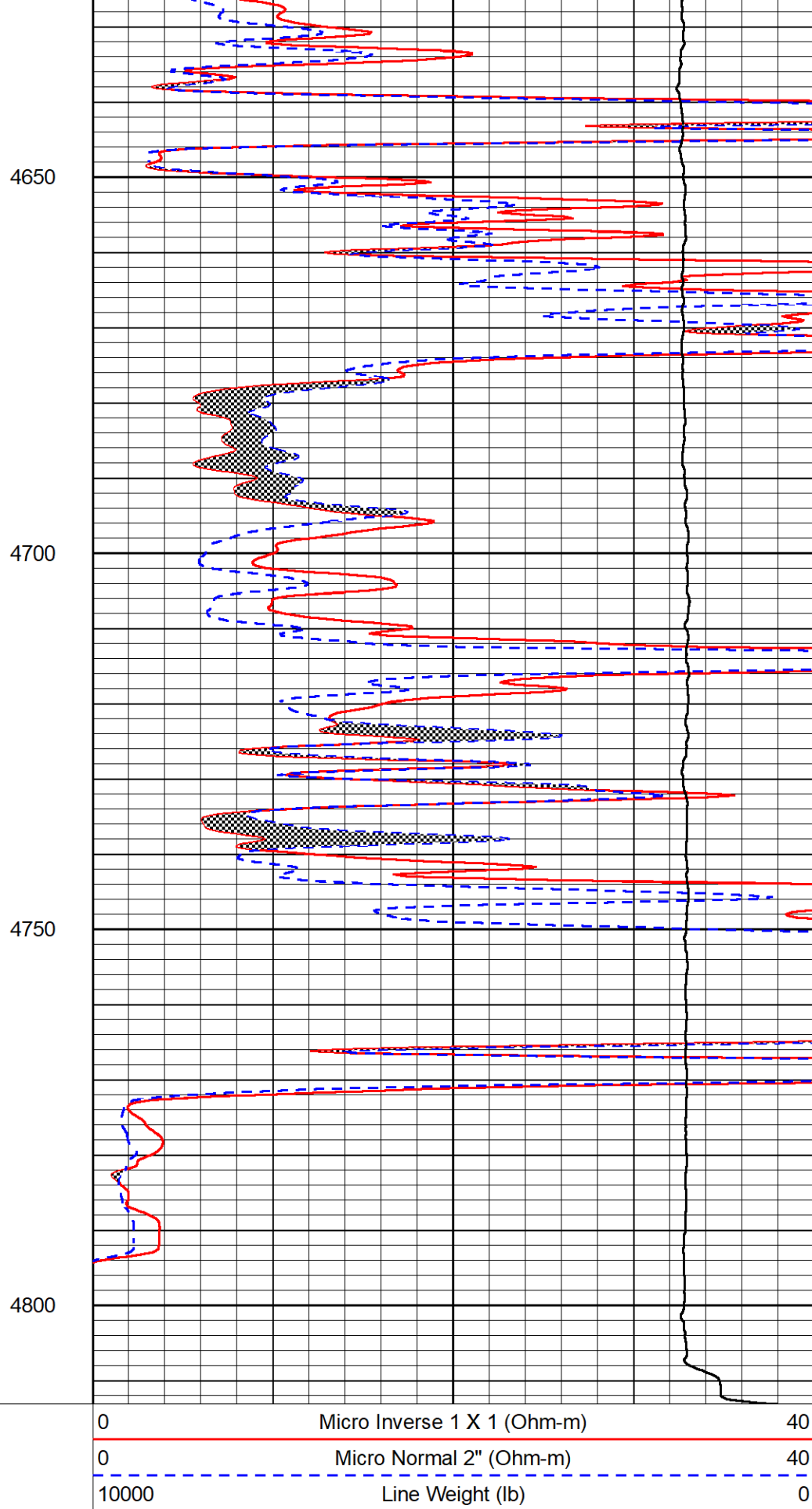
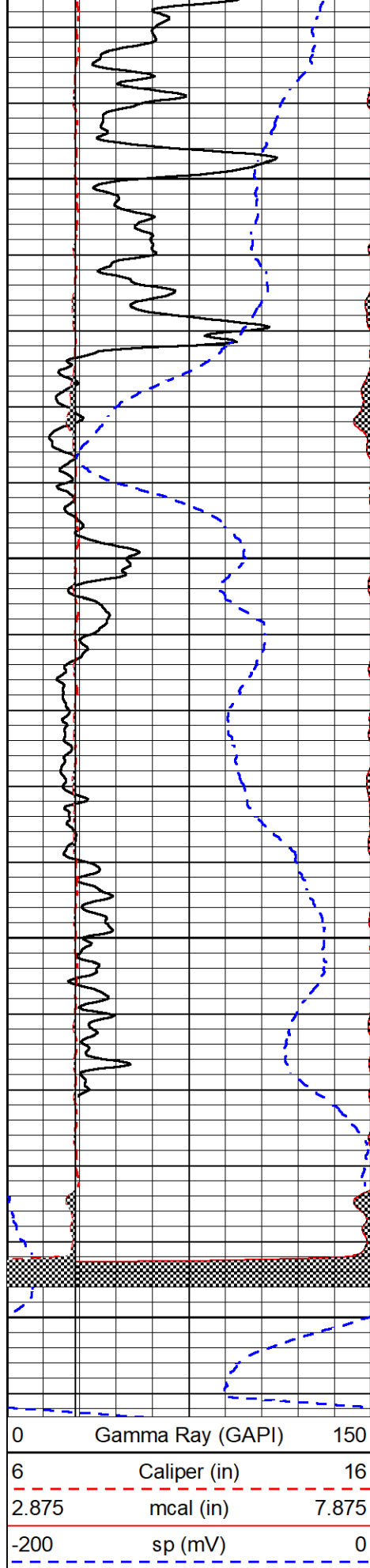
4450

4500

4550

4600





REPEAT SECTION

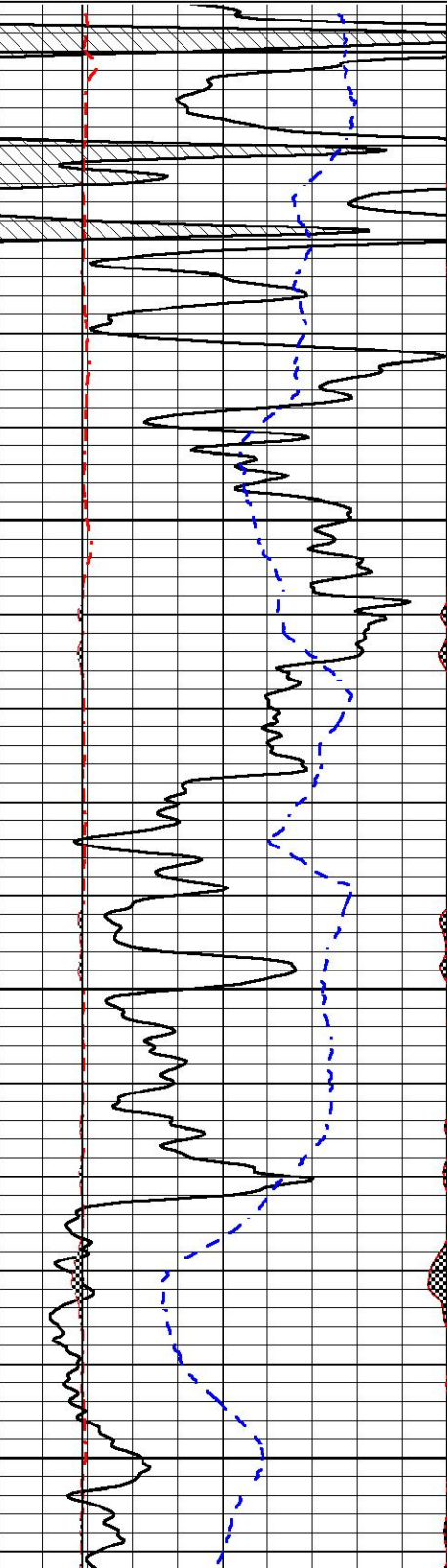


REPEAT PASS

Database File griffin_breanna #5.db
Dataset Pathname StkMI/pass2.1
Presentation Format _micro
Dataset Creation Thu Aug 04 01:58:43 2022
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	sp (mV)	0

0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

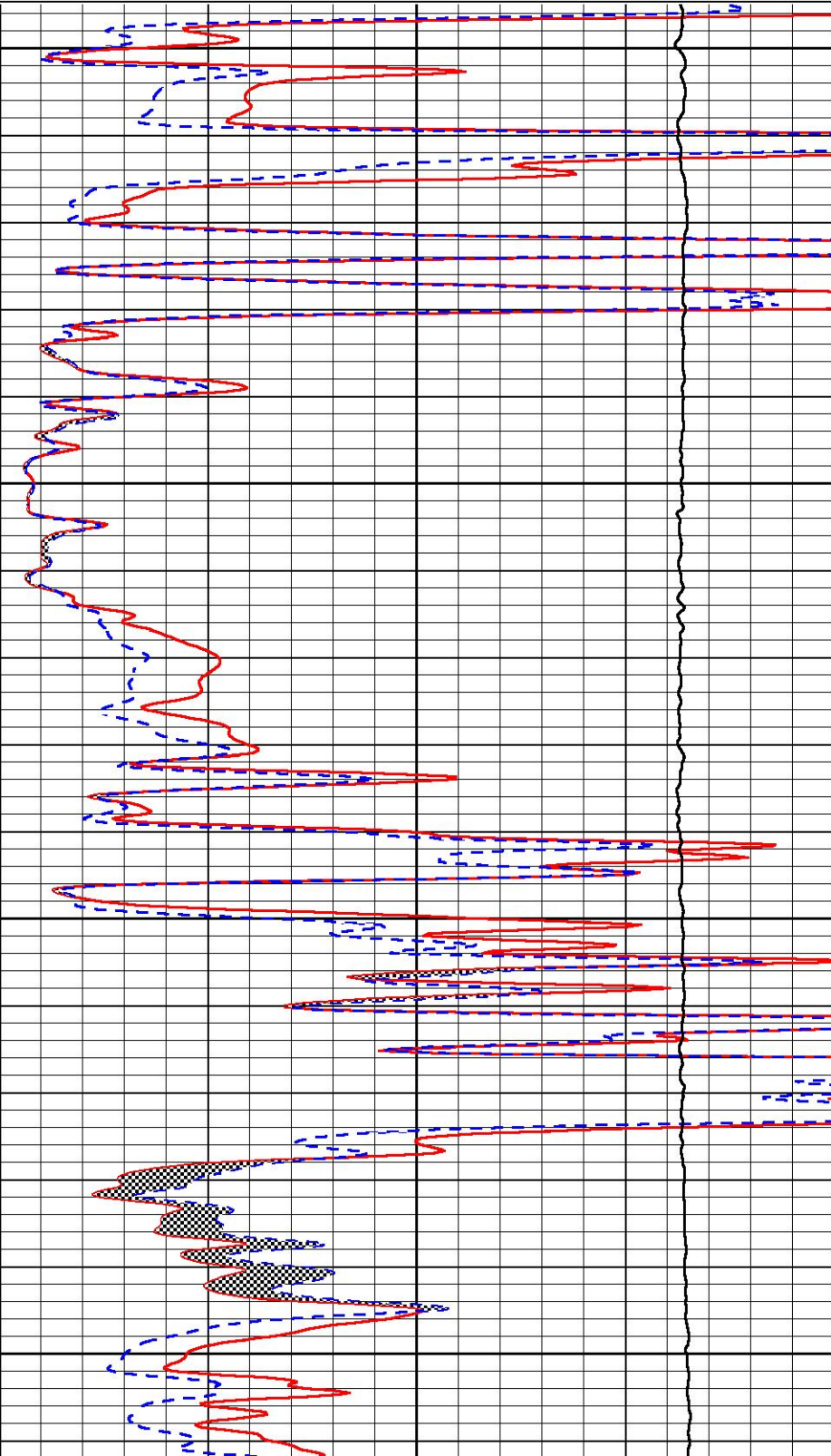


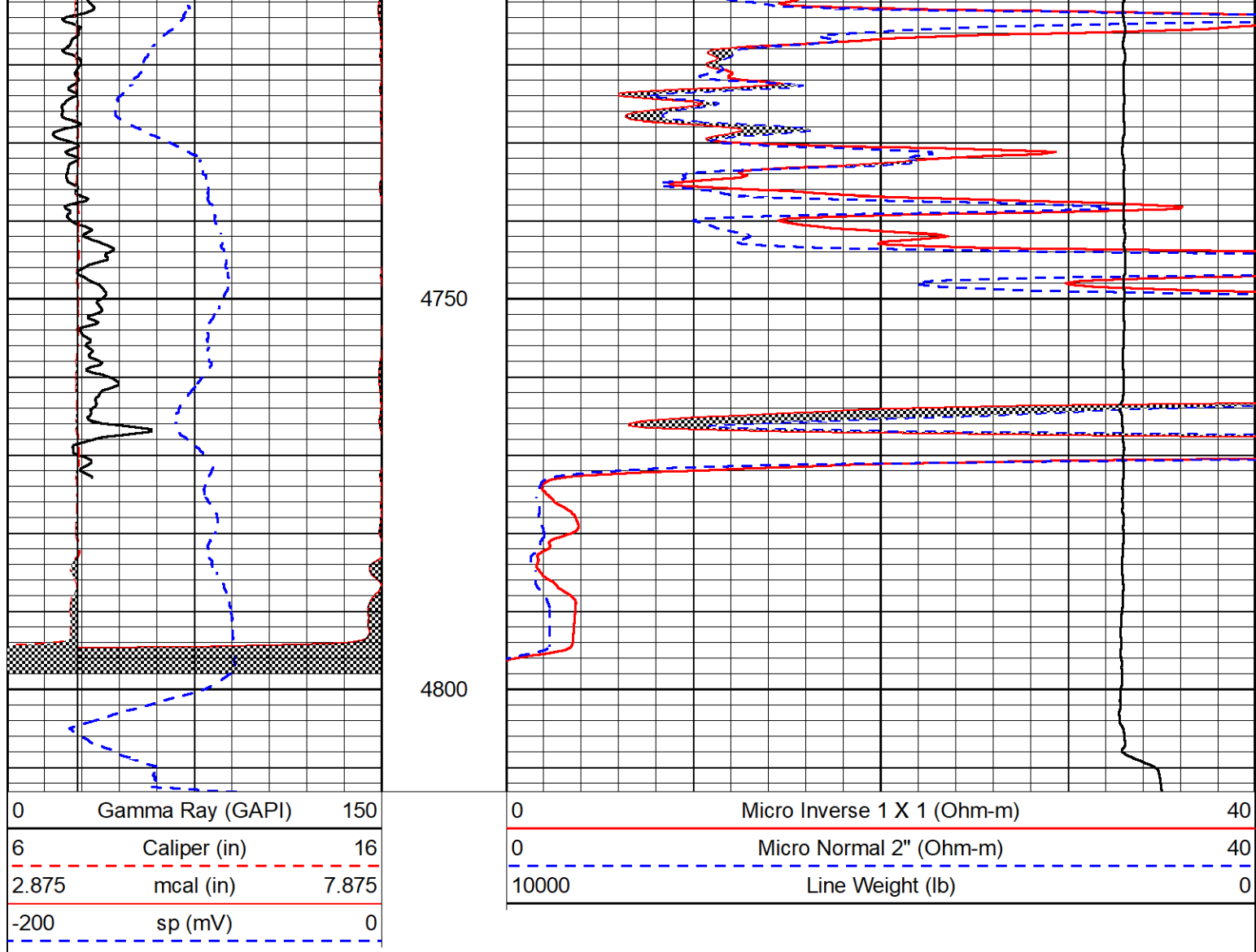
4550

4600

4650

4700





Calibration Report

Database File griffin_breanna #5.db
 Dataset Pathname StkMI/pass3.1
 Dataset Creation Thu Aug 04 02:40:51 2022

Dual Induction Calibration Report

Serial-Model: 507-M&W
 Surface Cal Performed: Wed Aug 3 13:14:16 2022

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	82.972	482.449	0.000	255.800	mmho/m	0.590	-33.130
Medium	120.285	668.174	0.000	255.800	mmho/m	0.517	-63.500

Microlog Calibration Report

Serial-Model: 402-PSIML
 Performed: Sun Jul 17 13:11:21 2022

Readings		References		Results	
Zero	Cal	Zero	Cal	m	b

Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	21000.0000	-0.5000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	24000.0000	-0.3000
Caliper	1.0052	1.0858	5.0000	16.5000	in	65.0000	-59.7500

Compensated Density Calibration Report

Serial-Model:	302-02-M&W
Source #:	20762B
Master Calibration Performed:	Wed Jun 22 01:19:51 2022

Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.755	g/cc		4422.04	6163.44	cps
Aluminum	2.665	g/cc		835.14	3912.91	cps
	Spine Angle = 74.75			Density/Spine Ratio = 0.527		
	Size			Reading		
Small Ring	8.00	in		0.53		
Large Ring	30.00	in		0.60		

Compensated Neutron Calibration Report

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	pu	pu	
	Long Space	cps			
2)	Short Space	cps	pu		
	Long Space	cps			
3)	Short Space	cps	pu		
	Long Space	cps			

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

Gamma Ray Calibration Report

Serial Number:	106
Tool Model:	M&W

Test Meas.:	RAW	
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



Company	Griffin Management LLC
Well	Breanna #5
Field	
County	Barber
State	Kansas