

MIDWEST WIRELINE

MICRORESISTIVITY LOG

CompanyGriffin Management LLC		Company Griffin Management LLC	
Well	Marla #4	Well	Marla #4
Field		Field	
County	Barber	County	Barber
State	Kansas	State	Kansas
Location: API #: 15-007-24428-00-00		Other Services	
Permanent Datum		E2 W2 E2	
Log Measured From		2640 FSL & 1650 FEL	
Drilling Measured From		SEC 5 TWP 30S RGE 15W	
Ground Level		Elevation 2005	
Kelly Bushing		K.B. 2010	
Kelly Bushing		D.F. 2005	
G.L. 2005			
Date	7/19/2022		
Run Number	One		
Depth Driller	4850		
Depth Logger	4850		
Bottom Logged Interval	4849		
Top Log Interval	2800		
Casing Driller	8.625 @ 261		
Casing Logger	261		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	7500		
Density / Viscosity	9.4 50		
pH / Fluid Loss	10.0 10.4		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.75 @ 72		
Rmt @ Meas. Temp	0.56 @ 72		
Rmc @ Meas. Temp	1.01 @ 72		
Source of Rmt / Rmc	Charts		
Rm @ BHT	0.43 @ 126		
Operating Rig Time	2.5 Hours		
Max Rec. Temp. F	126		
Equipment Number	P-24		
Location	Hays		
Recorded By	T. Martin		
Witnessed By	Chuck 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 Croft Blkt(SW 140)
S to SW 110th, 1 E, ~1.5 S

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

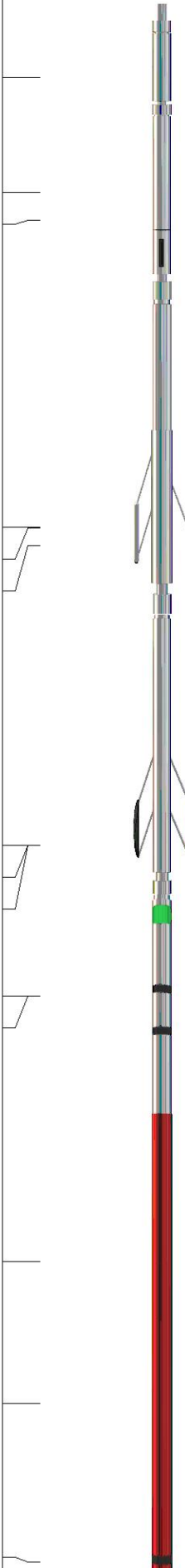
THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew

Engineer: T. Martin
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Chuck Griffin
Secondary Witness: Eli Felts
Secondary Witness:
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 28.17 27.68			CDL-M&W (302-02)	8.50	4.00	250.00	
	ML-PSIML (402)			7.58	4.00	65.00		
							MCAL MI MN	19.58 19.58 19.58
RLL3F RLL3								15.50 15.50
								CILD
CILM							4.50	
SP	0.20							
Dataset: griffin_marla #4.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_marla #4.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	126	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	105	80		4850

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



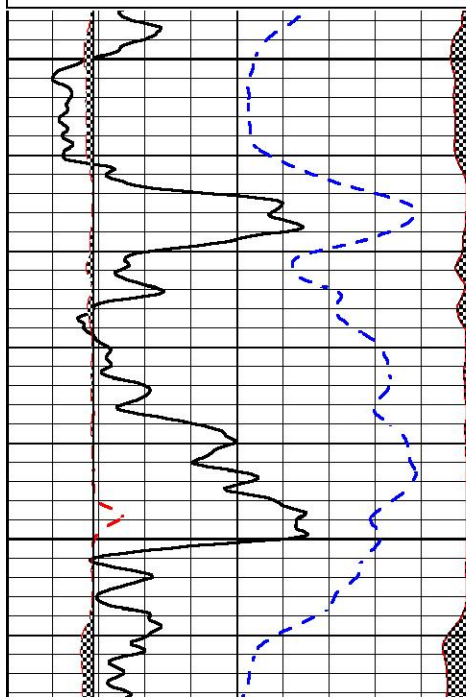
DETAIL SECTION

MAIN PASS

Database File griffin_marla #4.db
Dataset Pathname StkMI/pass3.1
Presentation Format _micro
Dataset Creation Tue Jul 19 06:45:20 2022
Charted by Depth in Feet scaled 1:240

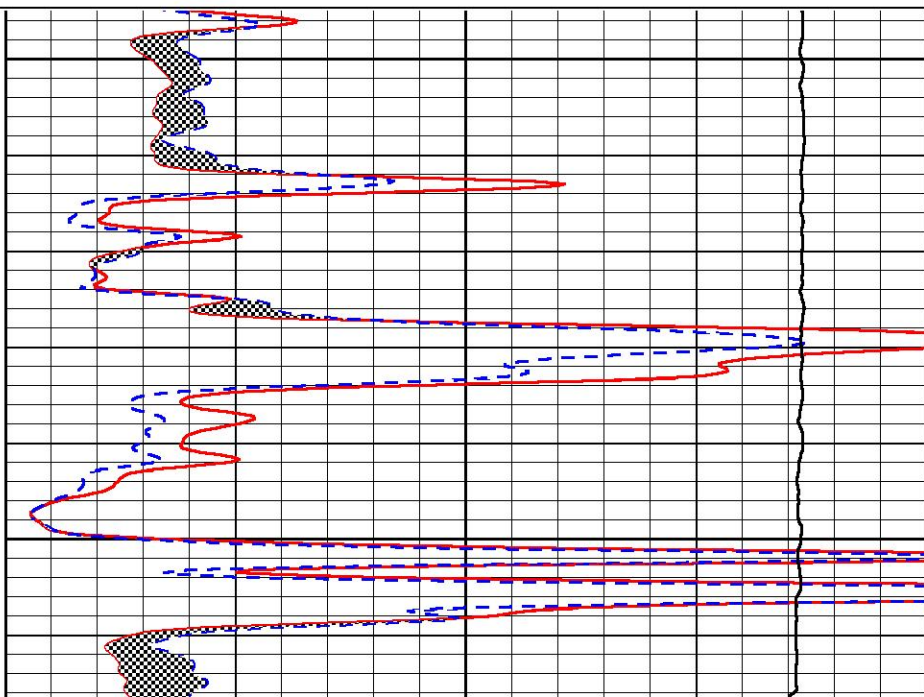
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	sp (mV)	0

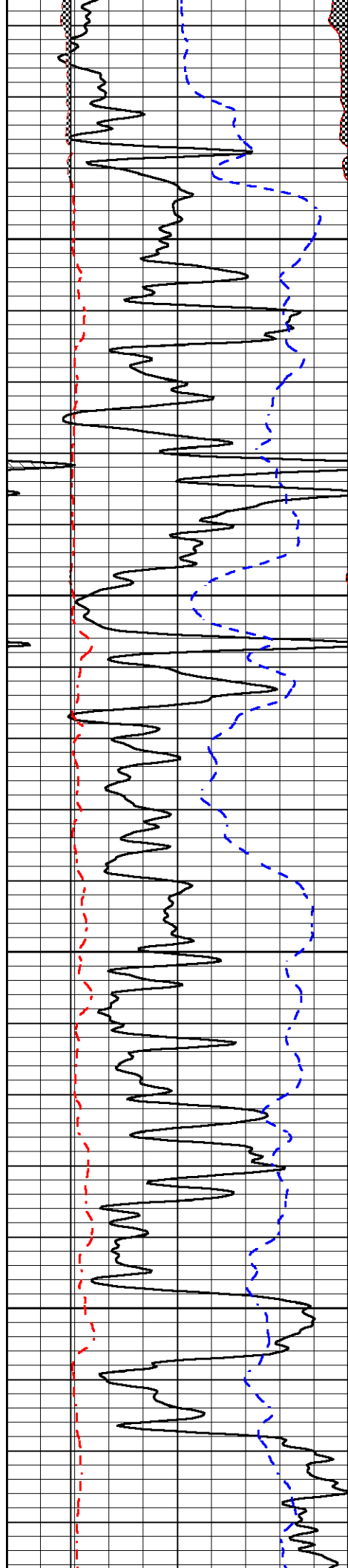
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



2800

2850



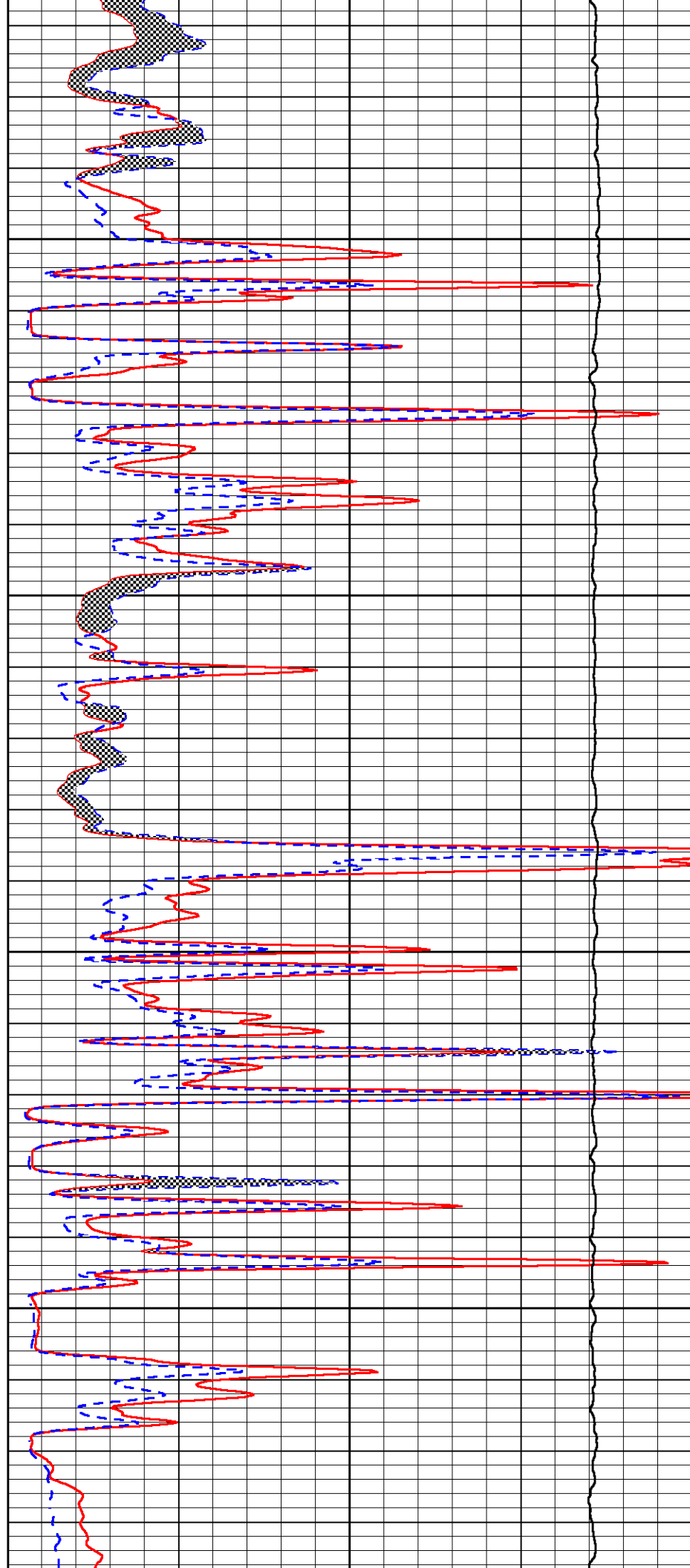


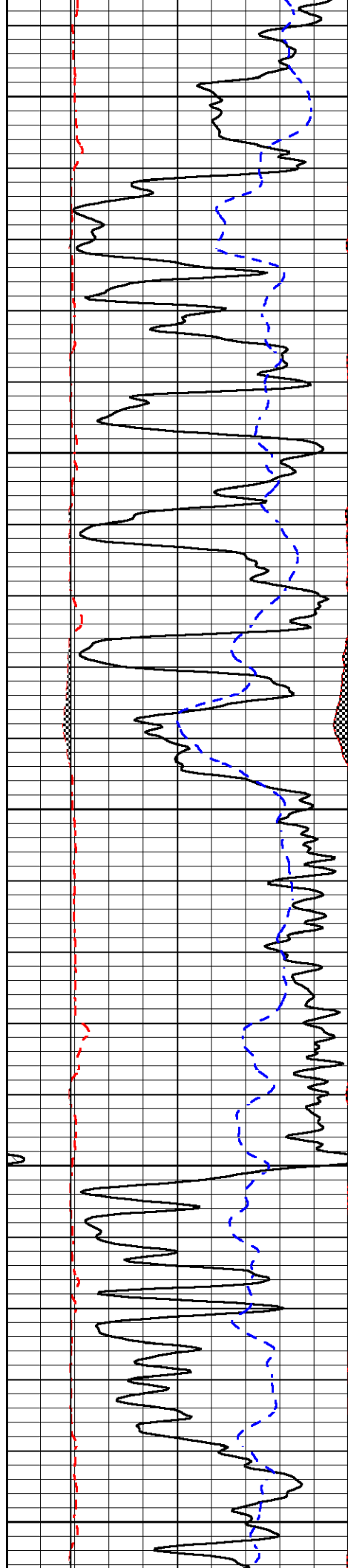
2900

2950

3000

3050





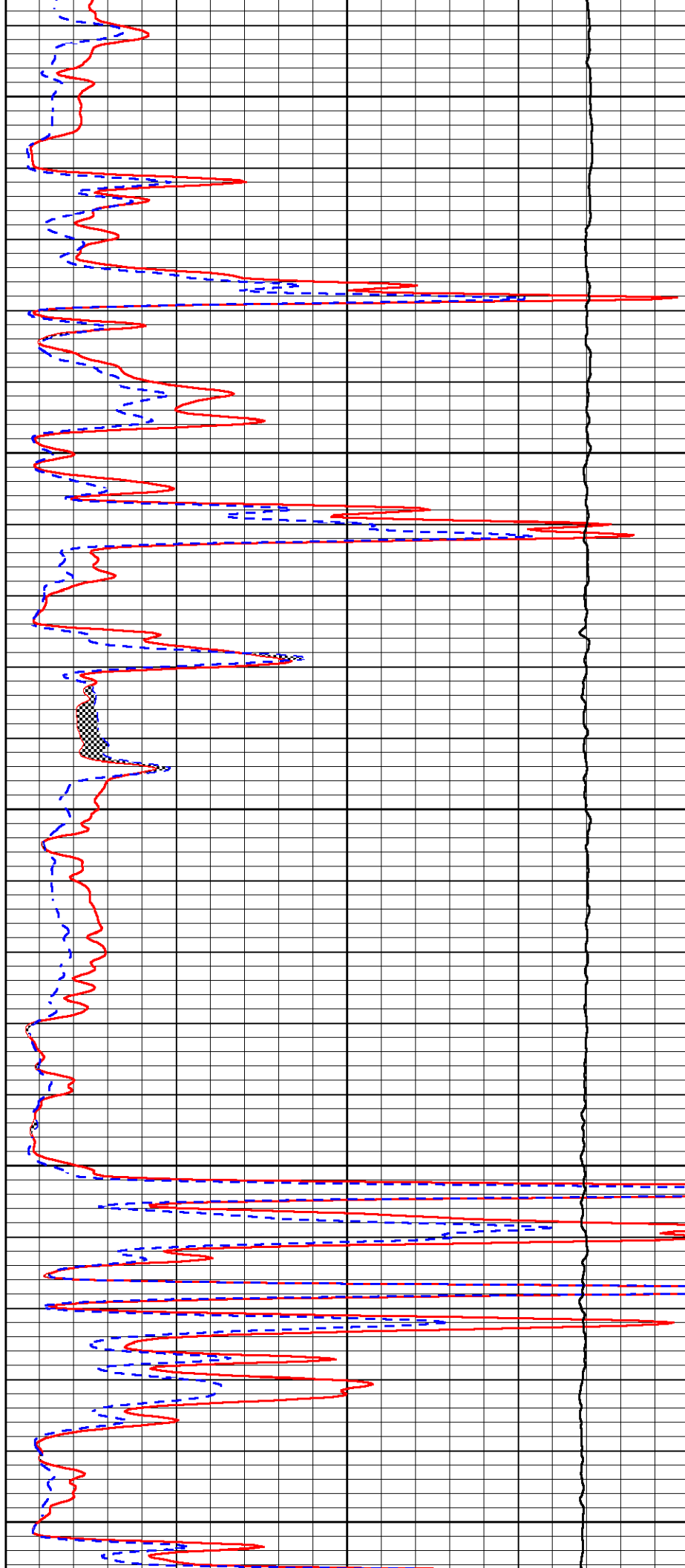
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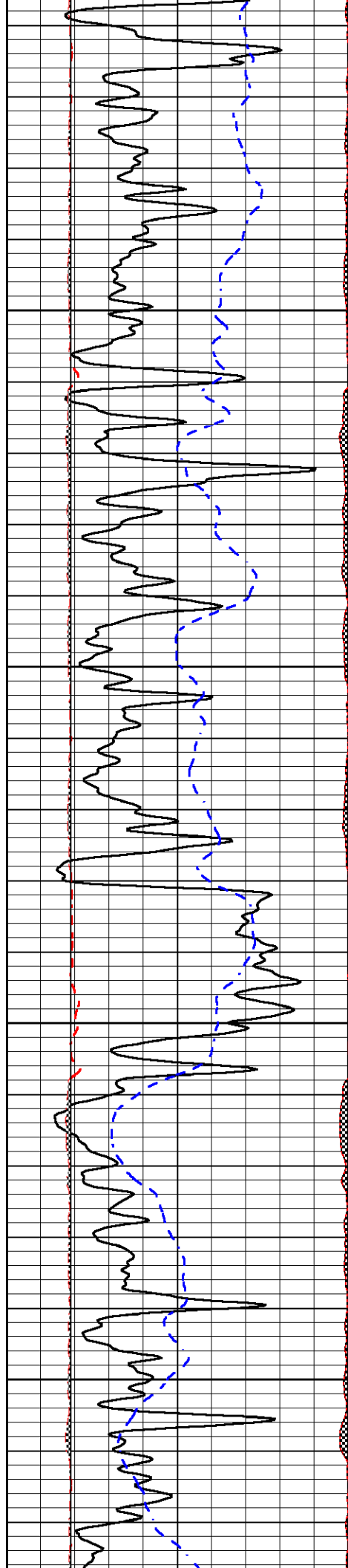
3150

3200

3250

3300



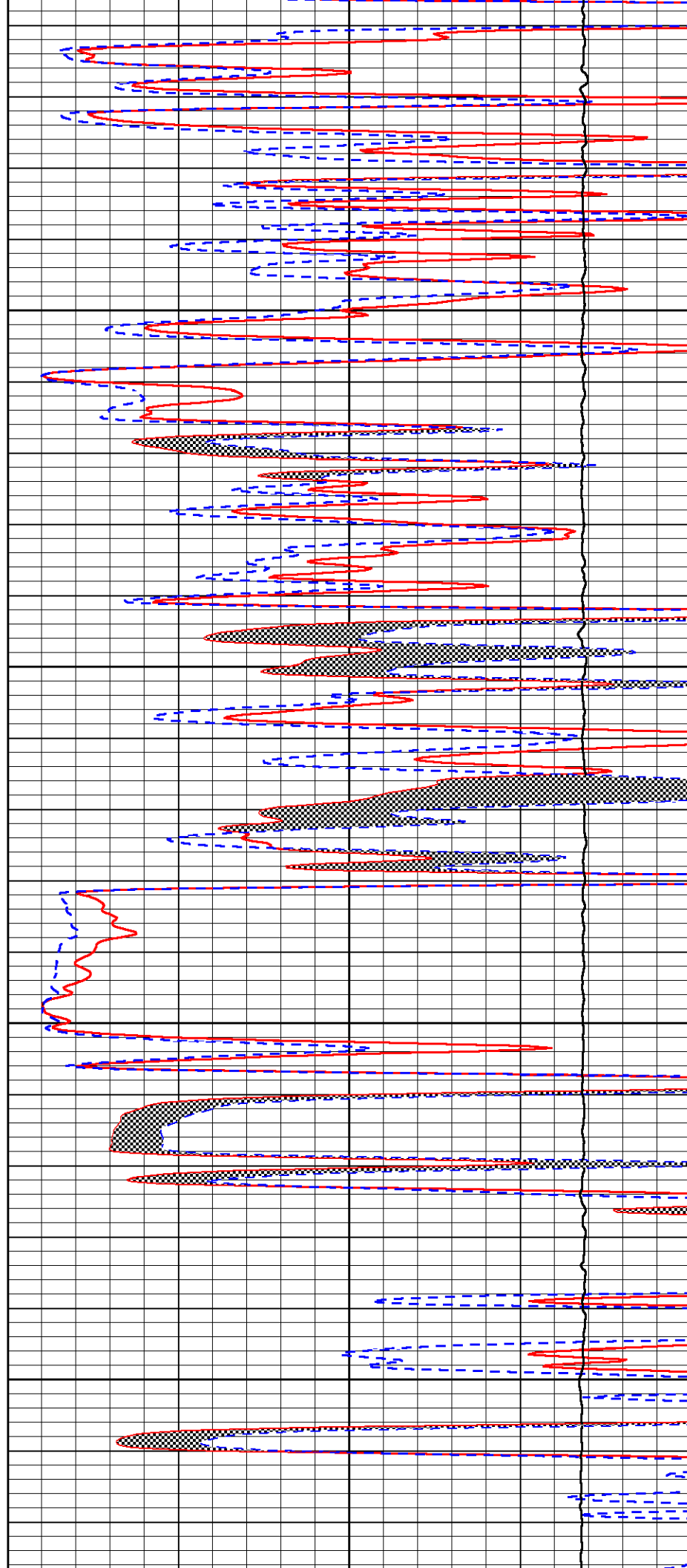


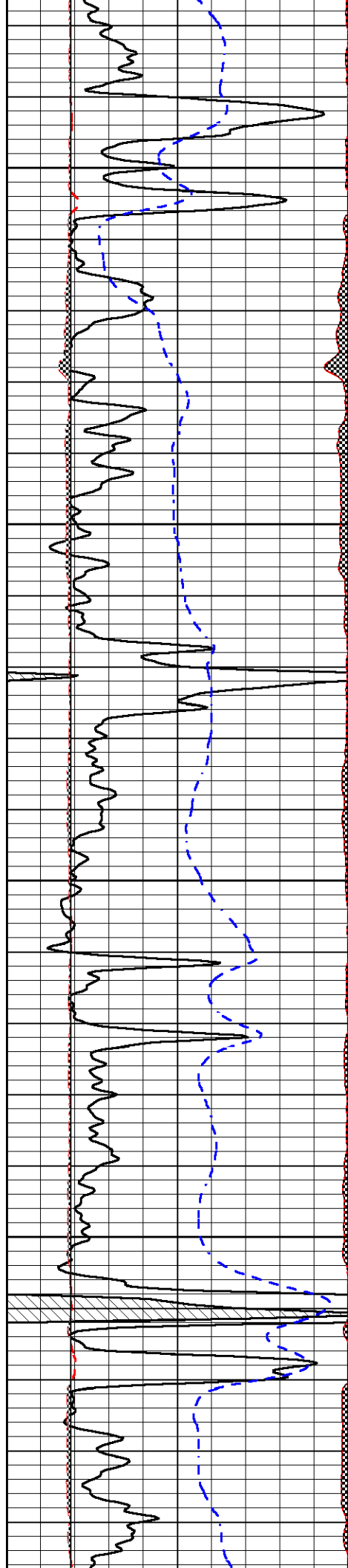
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3400

3450

3500



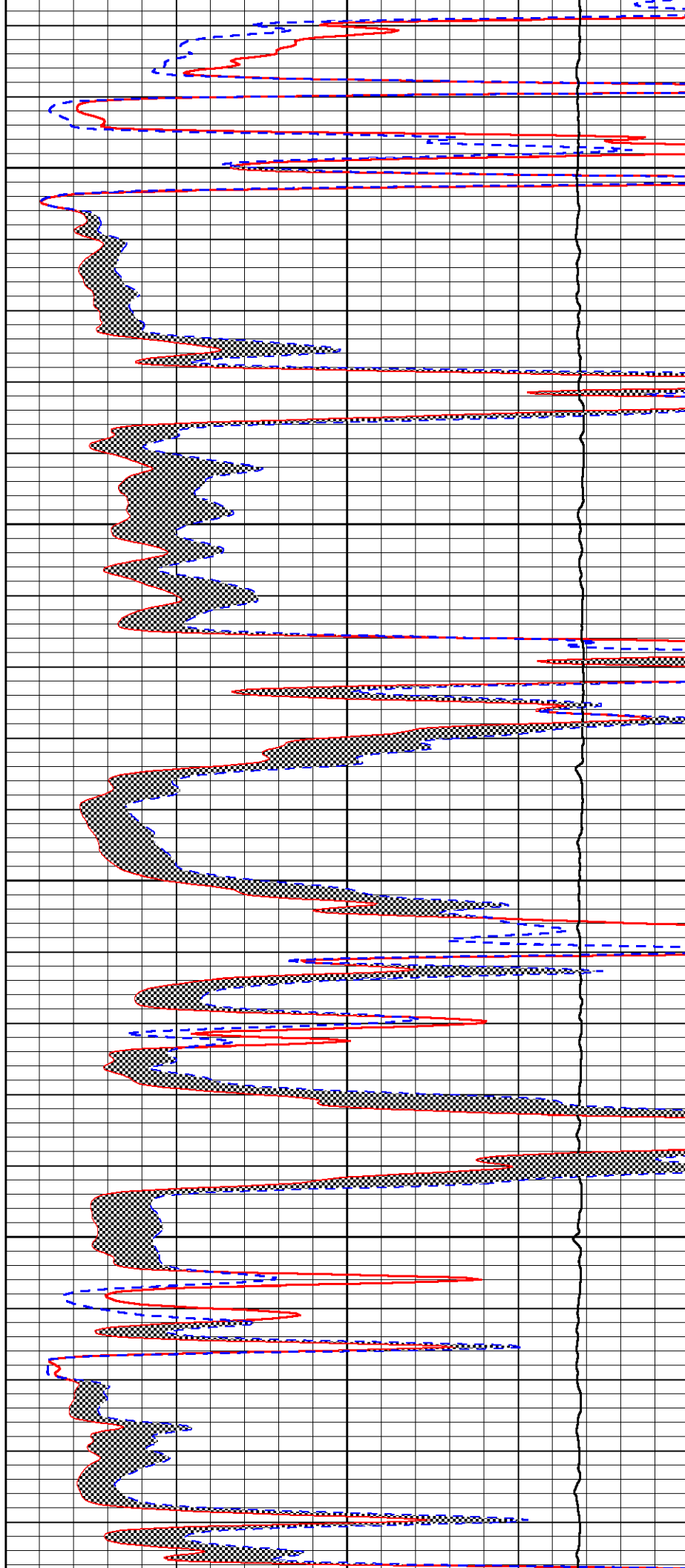


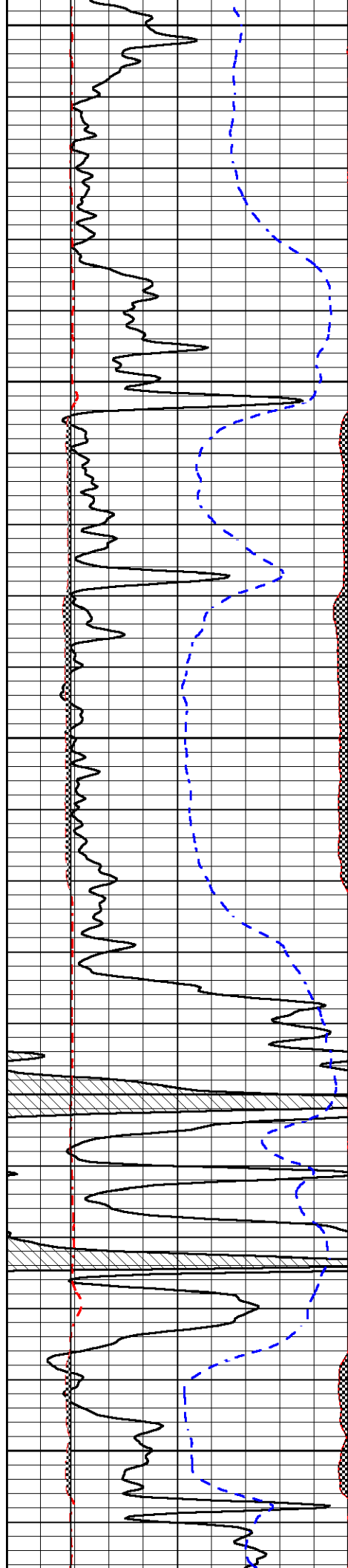
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3600

3650

3700





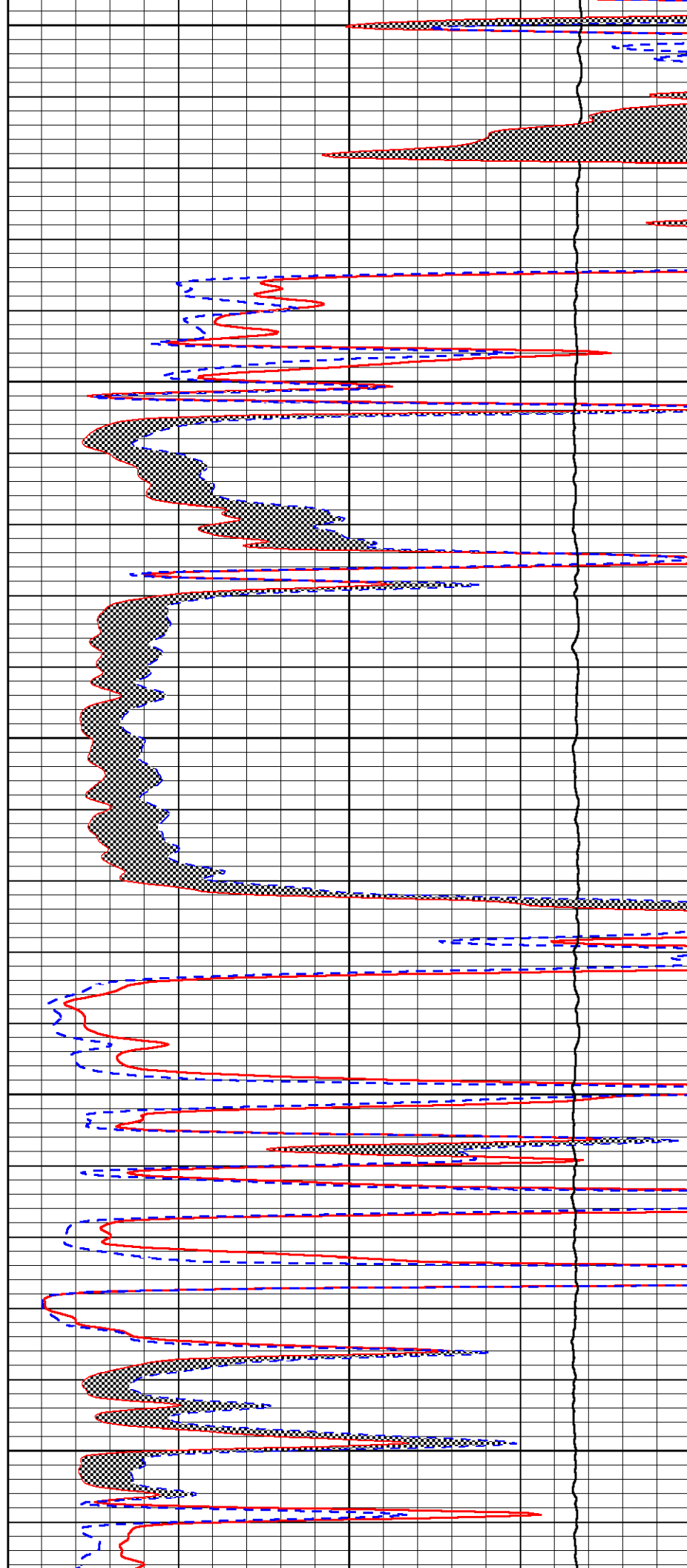
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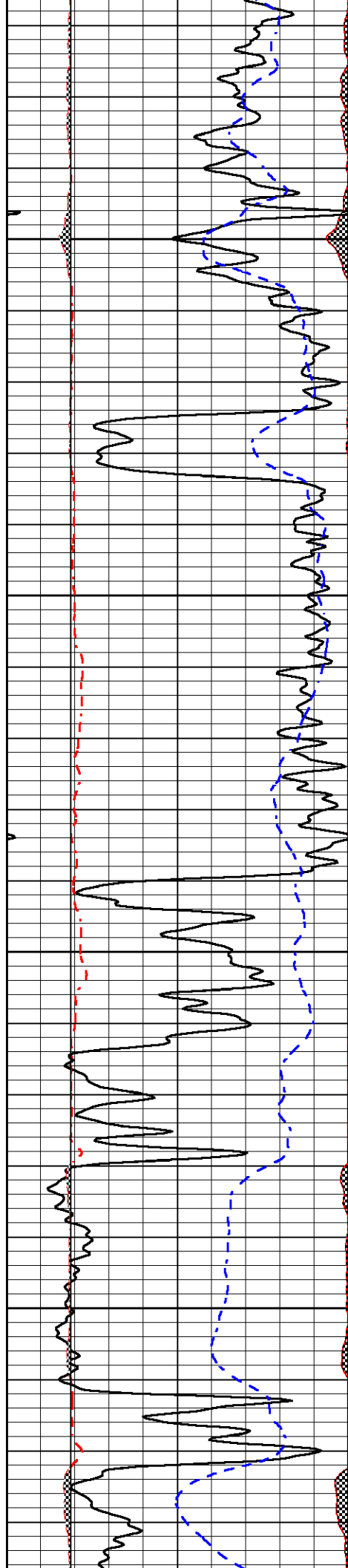
3800

3850

3900

3950



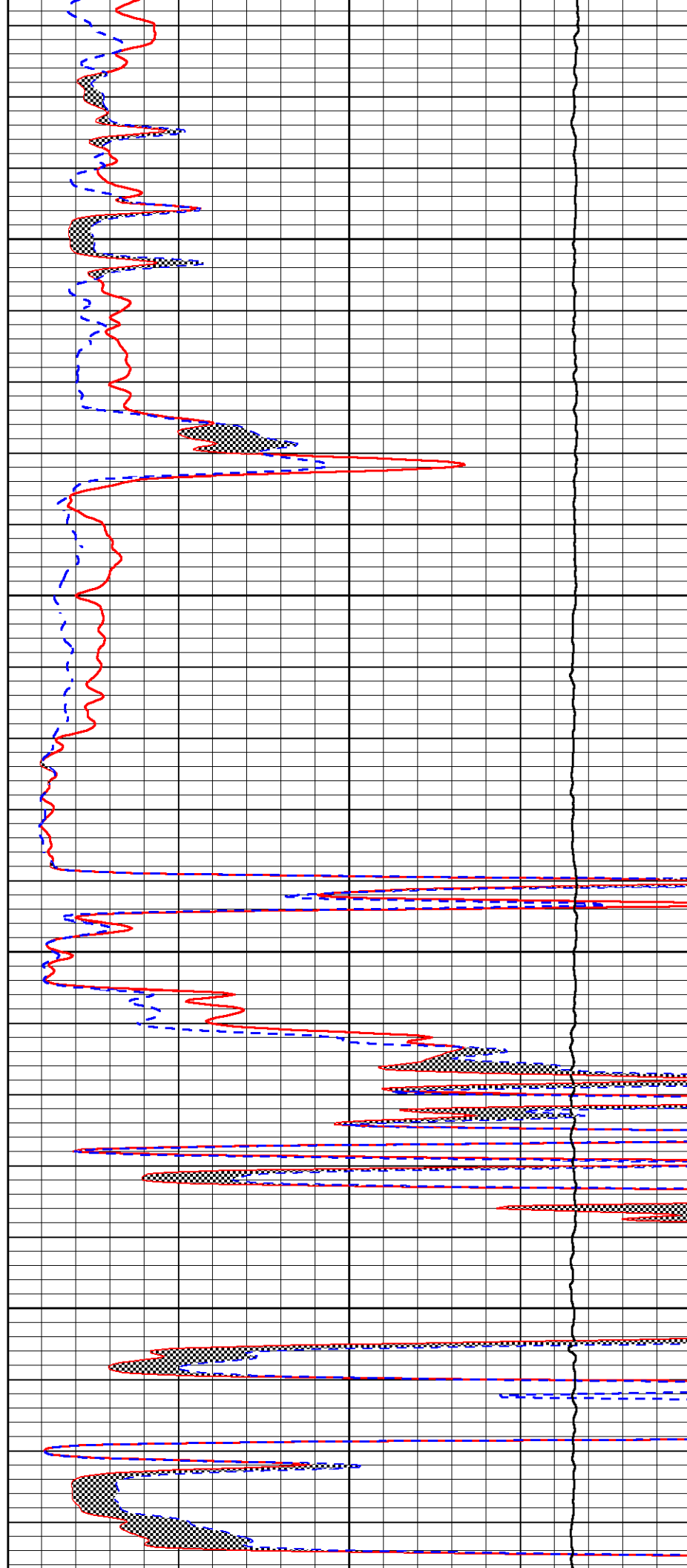


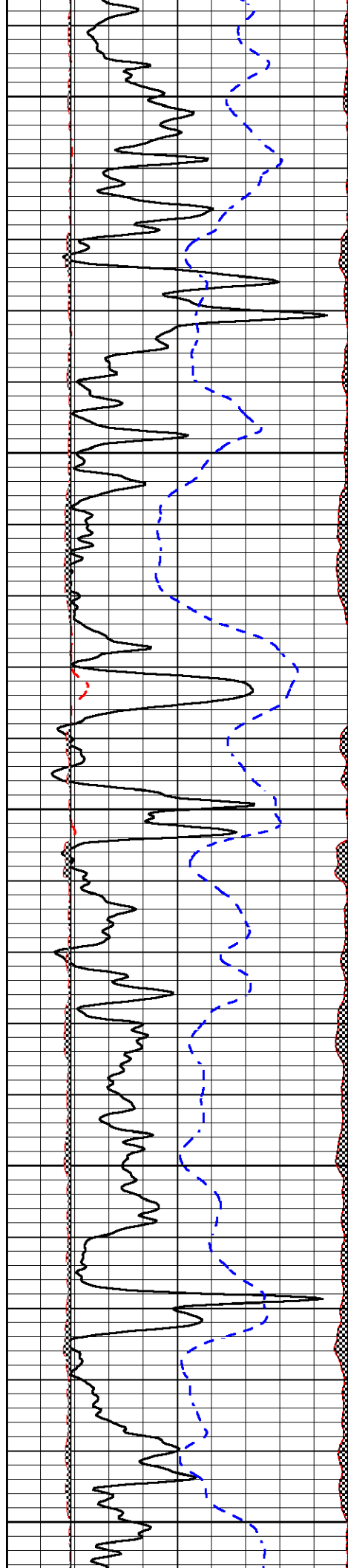
4000

4050

4100

4150





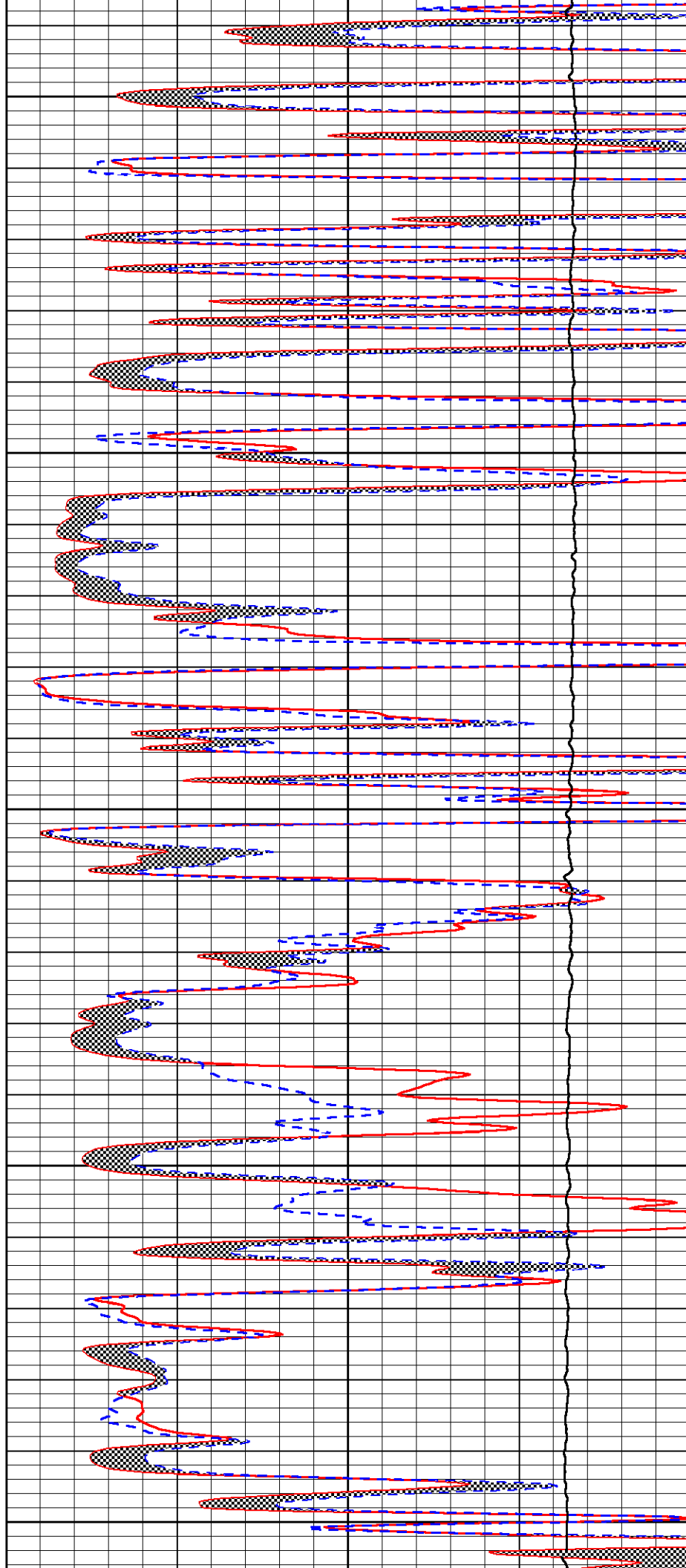
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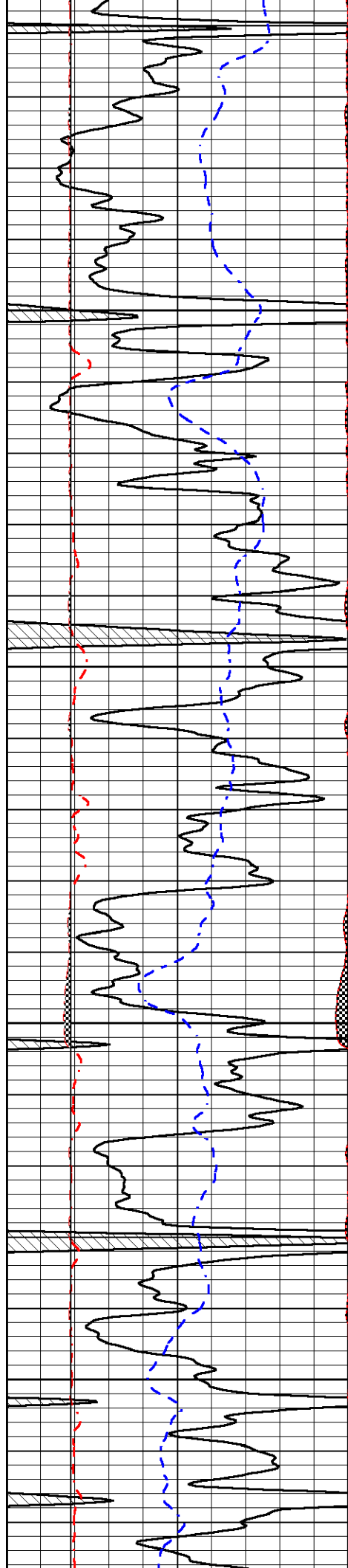
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4300

4350

4400



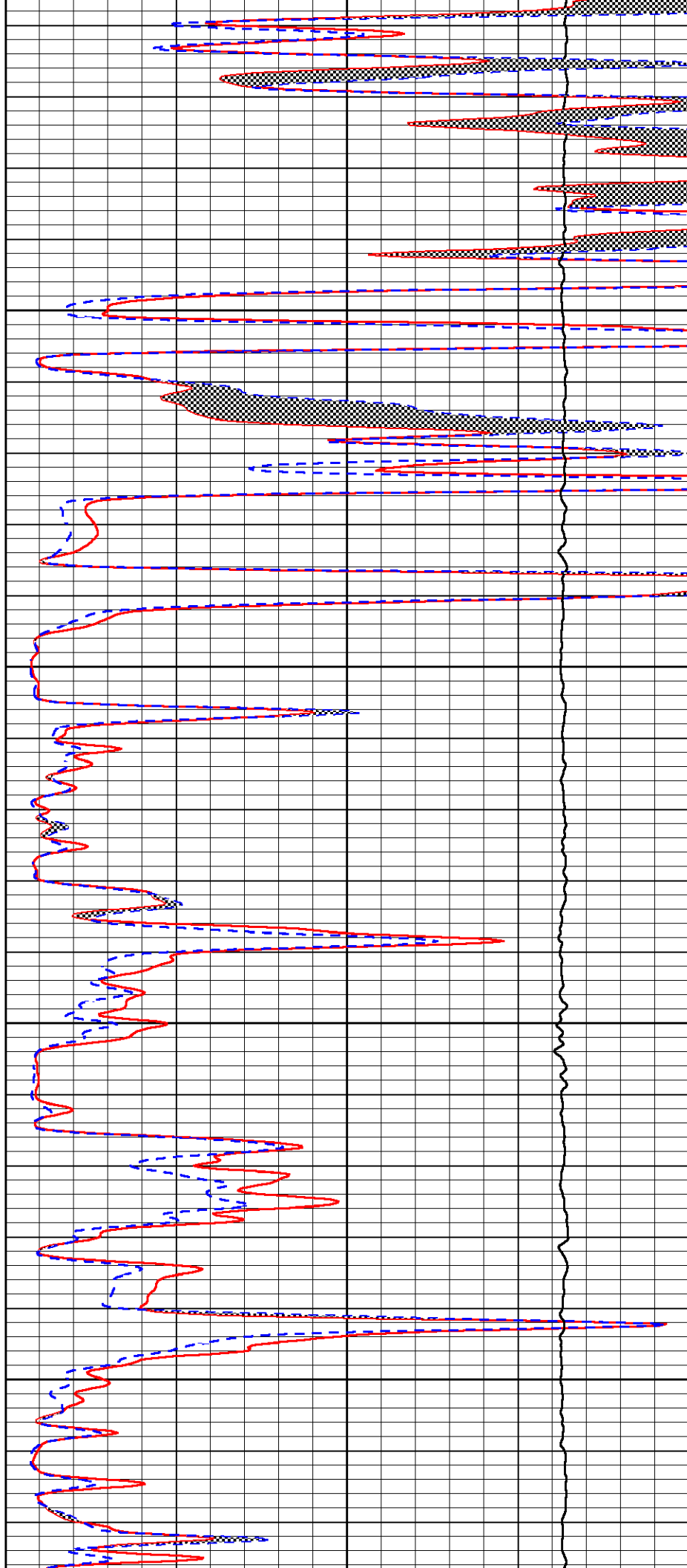


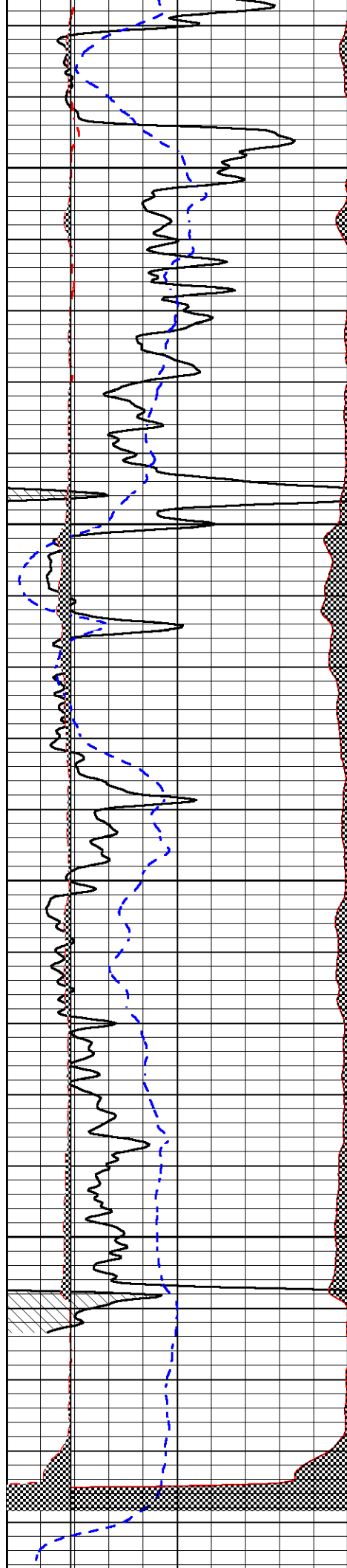
4450

4500

4550

4600



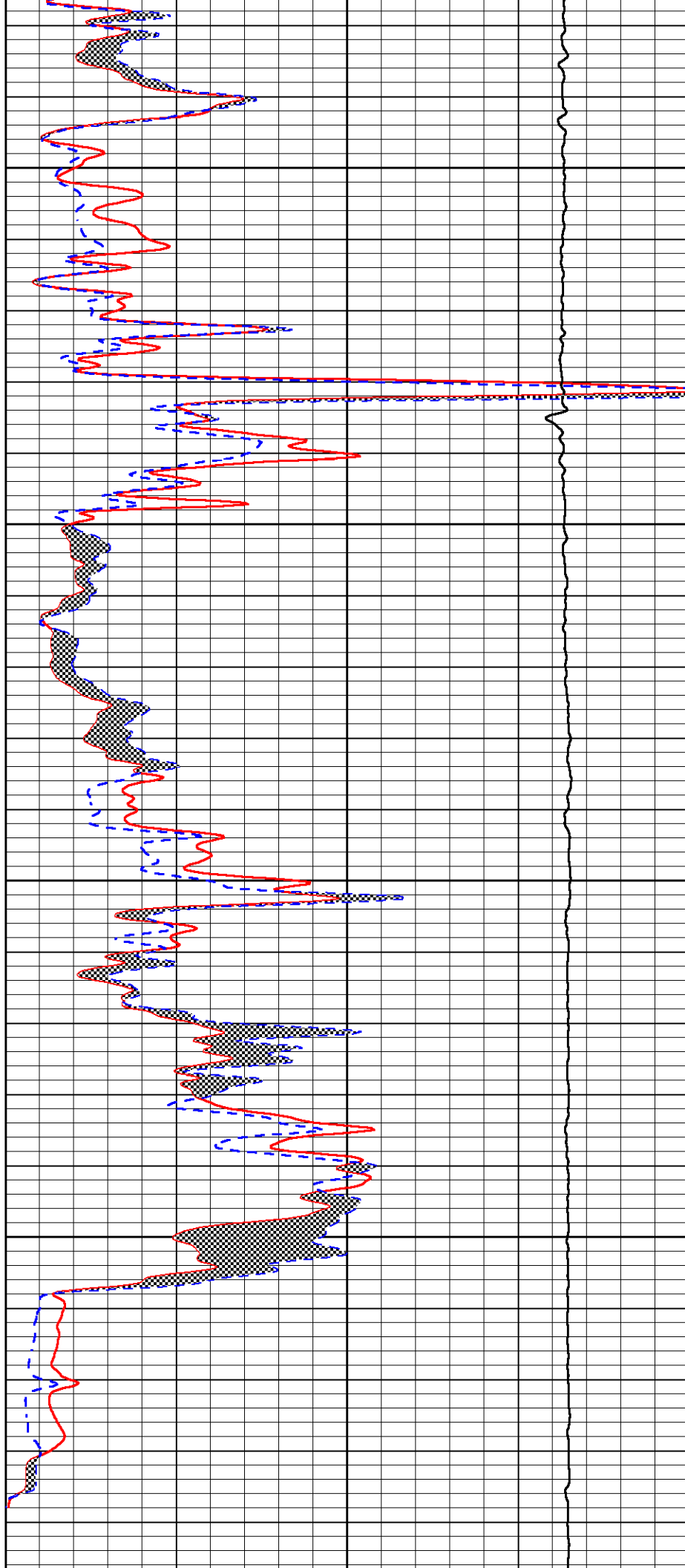


4650

4700

4750

4800



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

4850

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



MIDWEST WIRELINE

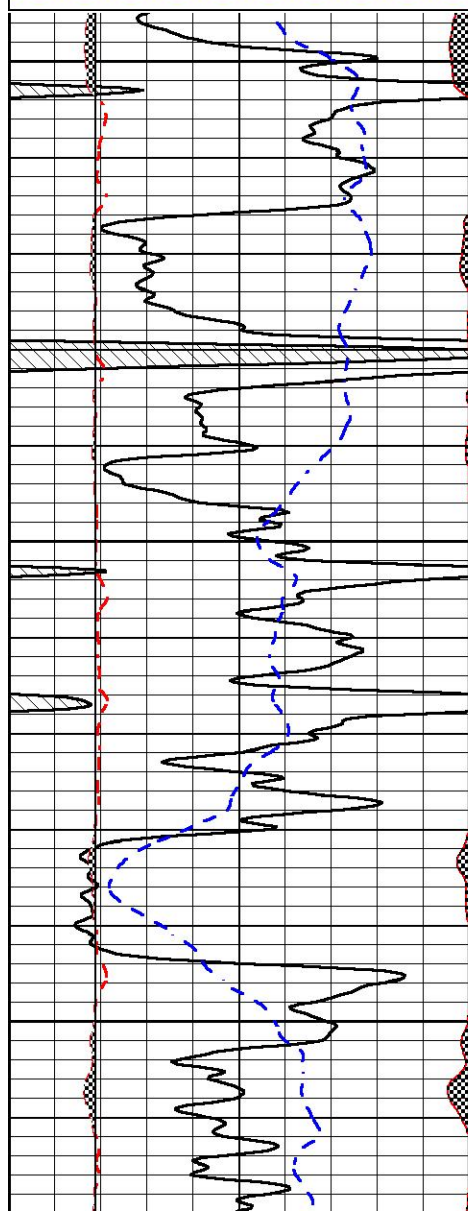
REPEAT SECTION

REPEAT PASS

Database File griffin_marla #4.db
Dataset Pathname StkMI/pass2.1
Presentation Format _micro
Dataset Creation Tue Jul 19 05:55:52 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

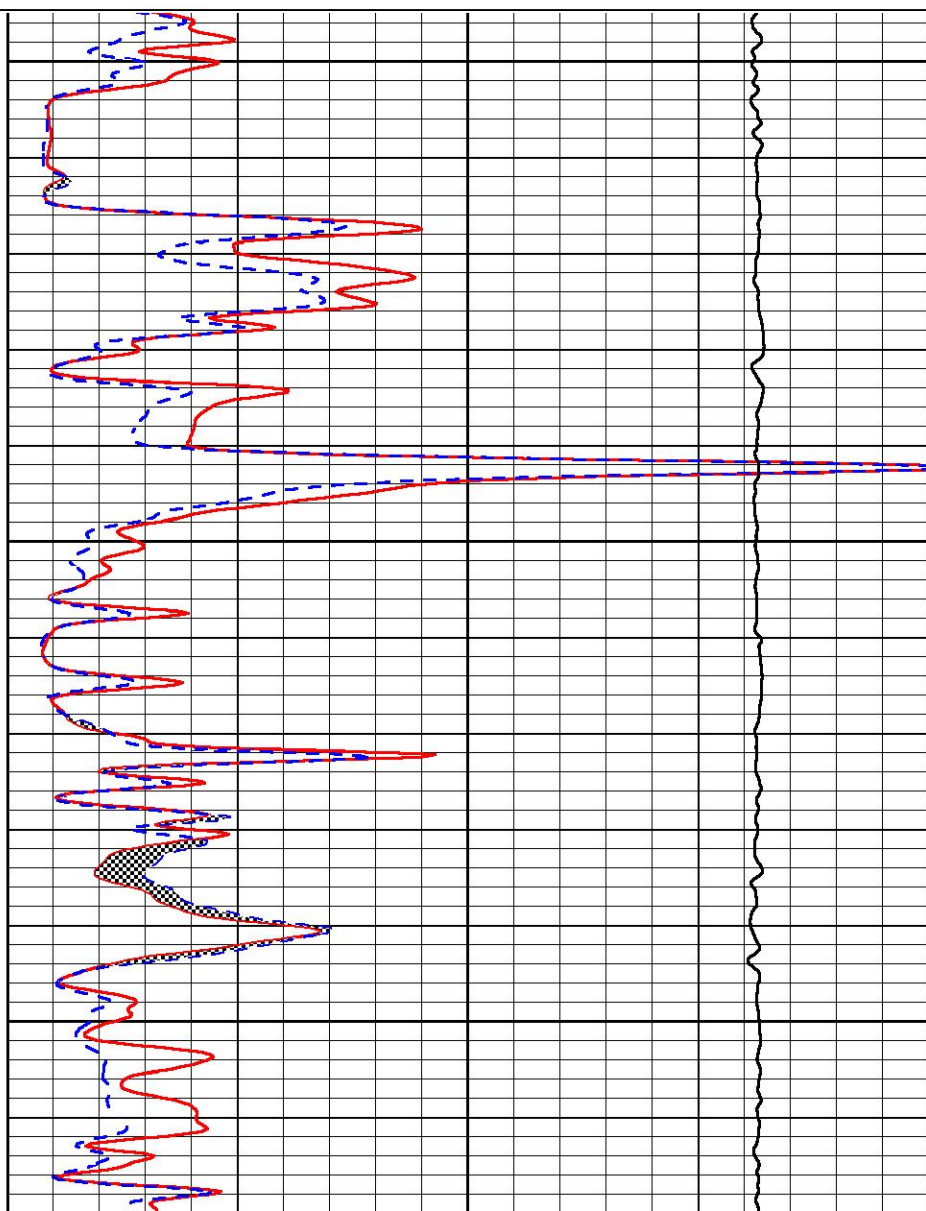
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

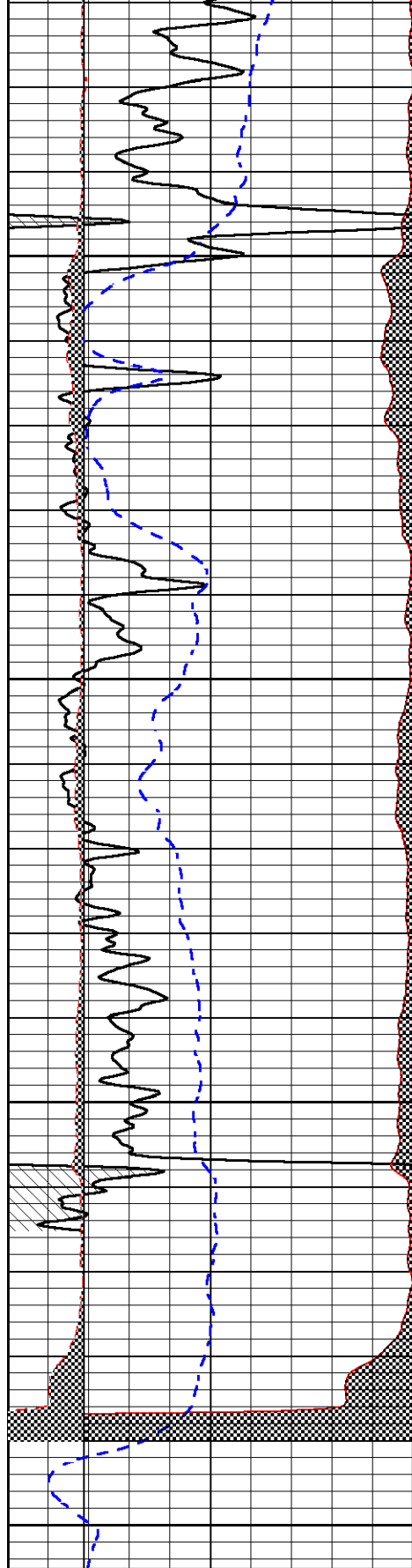


4550

4600

4650





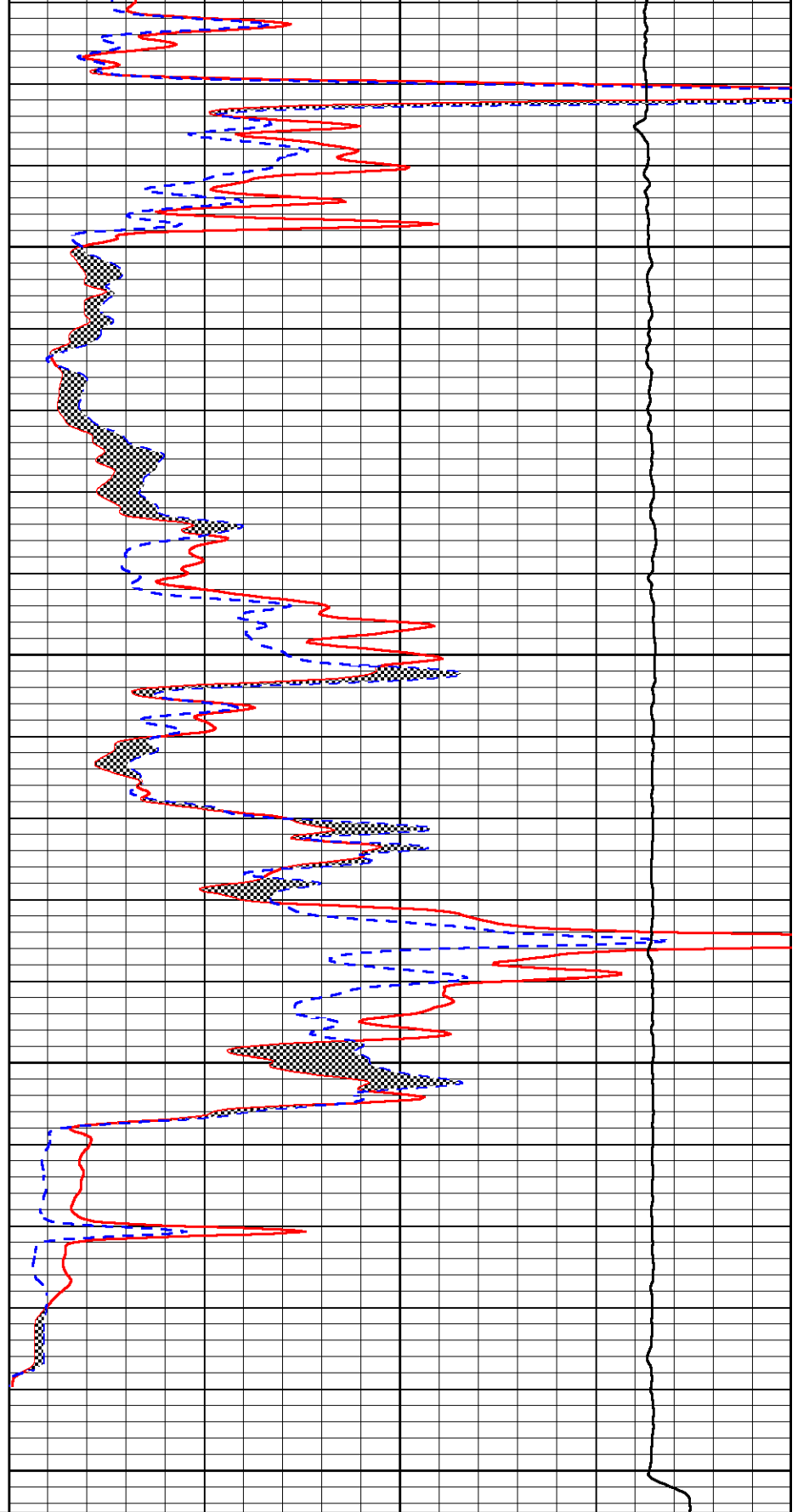
4700

4750

4800

4850

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

Calibration Report

Dual Induction Calibration Report

Serial-Model: 507-M&W
Surface Cal Performed: Sat Jul 9 16:55:02 2022

Readings			References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	82.972	482.449	0.000	255.800	mmho/m	0.640	-31.131
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	22000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	24000.0000	0.2000
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 Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	
3)	Short Space Long Space	cps cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps 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



Company	Griffin Management LLC
Well	Marla #4
Field	
County	Barber
State	Kansas