



MICRORESISTIVITY LOG

MIDWEST WIRELINE

Company Griffin Management, LLC
Well Gary #3
Field Turkey Creek East
County Barber
State Kansas

Company Griffin Management, LLC
Well Gary #3
Field Turkey Creek East
County Barber State Kansas

Location: API #: 15-007-24481-00-00

660 FNL & 990 FWL

SEC 15 TWP 30S RGE 15W

Permanent Datum Ground Level Elevation 1932
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Other Services
CNL/CDL
DIL
Elevation
K.B. 1937
D.F.
G.L. 1932

Date 10/11/2023

Run Number One

Depth Driller 4804

Depth Logger 4805

Bottom Logged Interval 4804

Top Log Interval 2800

Casing Driller 8.625 @ 259

Casing Logger 258

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 10000

Density / Viscosity 9.4 60

pH / Fluid Loss 9.5 10.8

Source of Sample FLOWLINE

Rm @ Meas. Temp 0.25 @ 70

Rmt @ Meas. Temp 0.19 @ 70

Rmc @ Meas. Temp 0.34 @ 70

Source of Rmt / Rmc CHARTS

Rm @ BHT 0.14 @ 124

Operating Rig Time 3 Hours

Max Rec. Temp. F 124

Equipment Number P-108

Location HAYS

Recorded By D. Schmidt

Witnessed By 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.

Croft,
1 South, 1 East,
South & East to location

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: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Eli Felts
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.23		GR-M&W (105)	3.00	3.50	50.00
CNLSC	37.13		CNT-M&W (210)	5.00	3.50	100.00
CNSSC	36.38					
			MWLith-STEP LITHO Short (701-01)	8.40	5.00	250.00
LCAL	28.21		ML-PSI STKBL ML (402)	7.58	4.00	65.00
LLW8N	28.21					
LLW7N	28.21					
LLW6N	28.21					
LLW5N	28.21					
LLW4N	28.21					
LLW3N	28.21					
LLW2N	28.21					
LLW1N	28.21					
LSLOCK	27.96					
LLLOCK	27.96					
PELTMPR	27.96					
LSHVNG	27.96					
LLHVNG	27.96					
LSW8N	27.71					
LSW7N	27.71					
LSW6N	27.71					
LSW5N	27.71					
LSW4N	27.71					
LSW3N	27.71					
LSW2N	27.71					
LSW1N	27.71					
MCAL	19.58		DIL-M&W (505 HT)	18.25	3.50	220.00
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
CILD	8.33					
CILM	4.50					
SP	0.20					
Dataset: griffin_gary 3.db: field/well/stkml/pass3.5 Total length: 42.23 ft Total weight: 685.00 lb O.D.: 5.00 in						

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_gary 3.db
Dataset field/well/stkml/pass3.5/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	124	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		-9	-2	382	50		4805

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



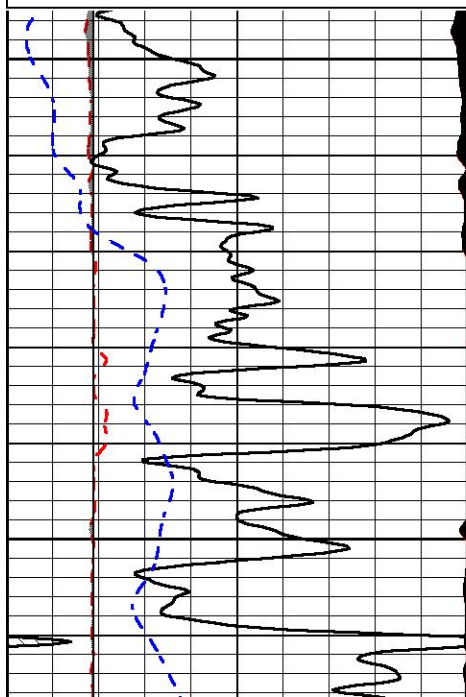
DETAIL SECTION

MAIN PASS

Database File griffin_gary 3.db
Dataset Pathname stkml/pass3.5
Presentation Format _micro
Dataset Creation Wed Oct 11 06:35:29 2023
Charted by Depth in Feet scaled 1:240

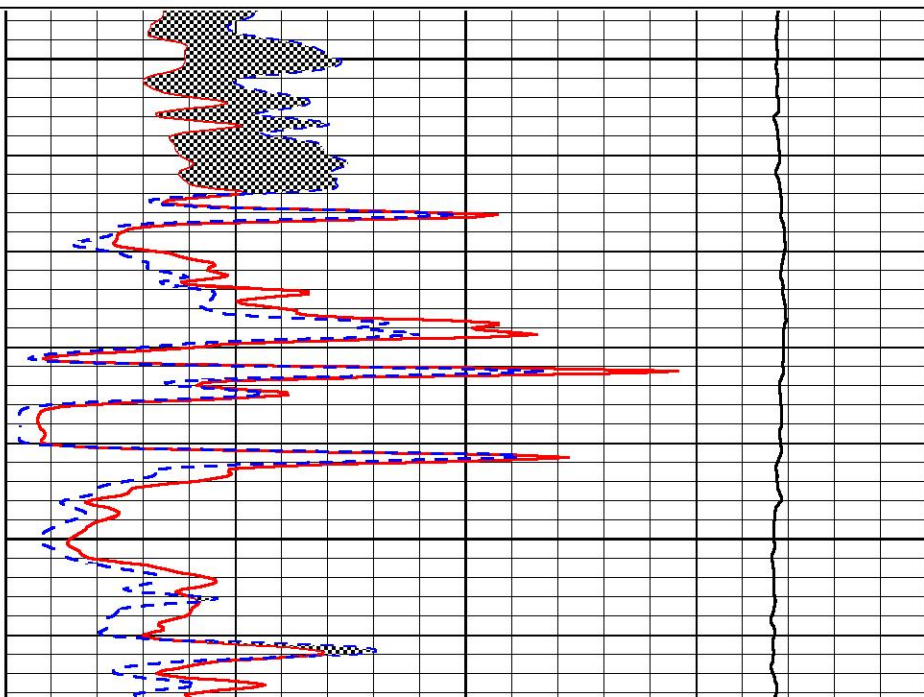
0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

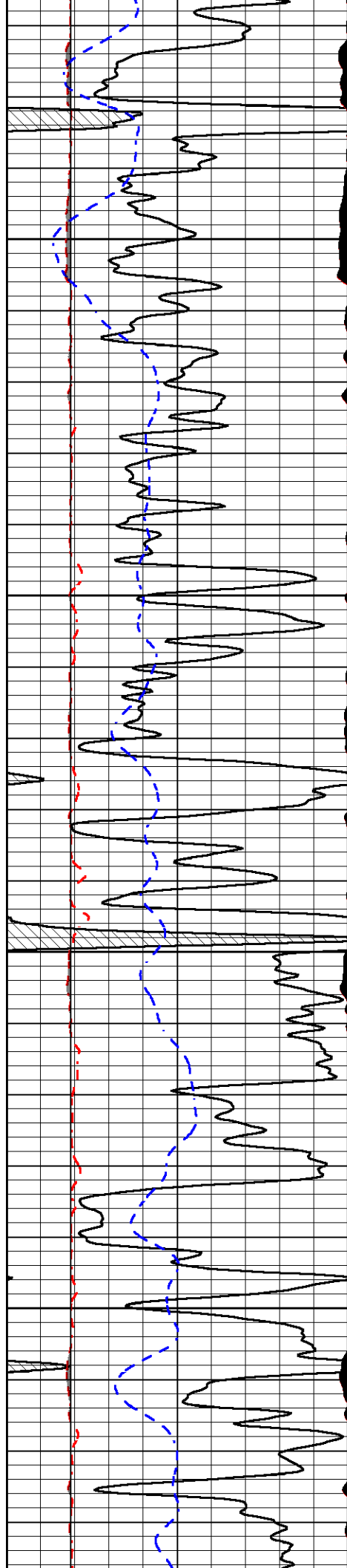
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



2800

2850



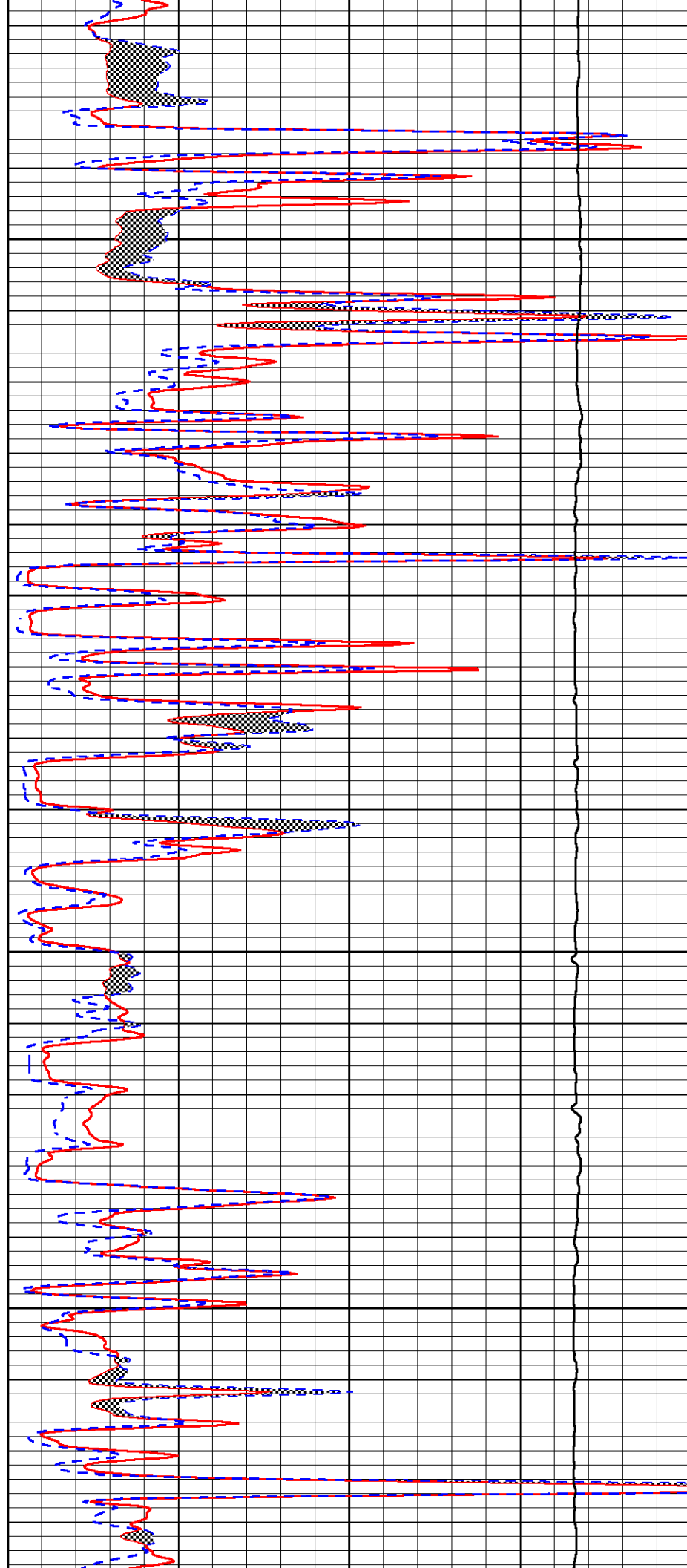


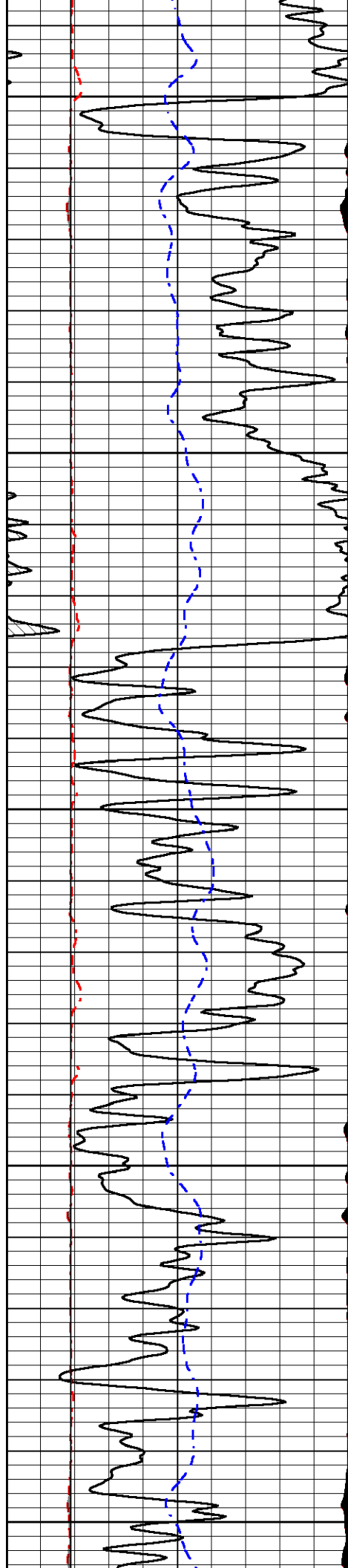
2900

2950

3000

3050





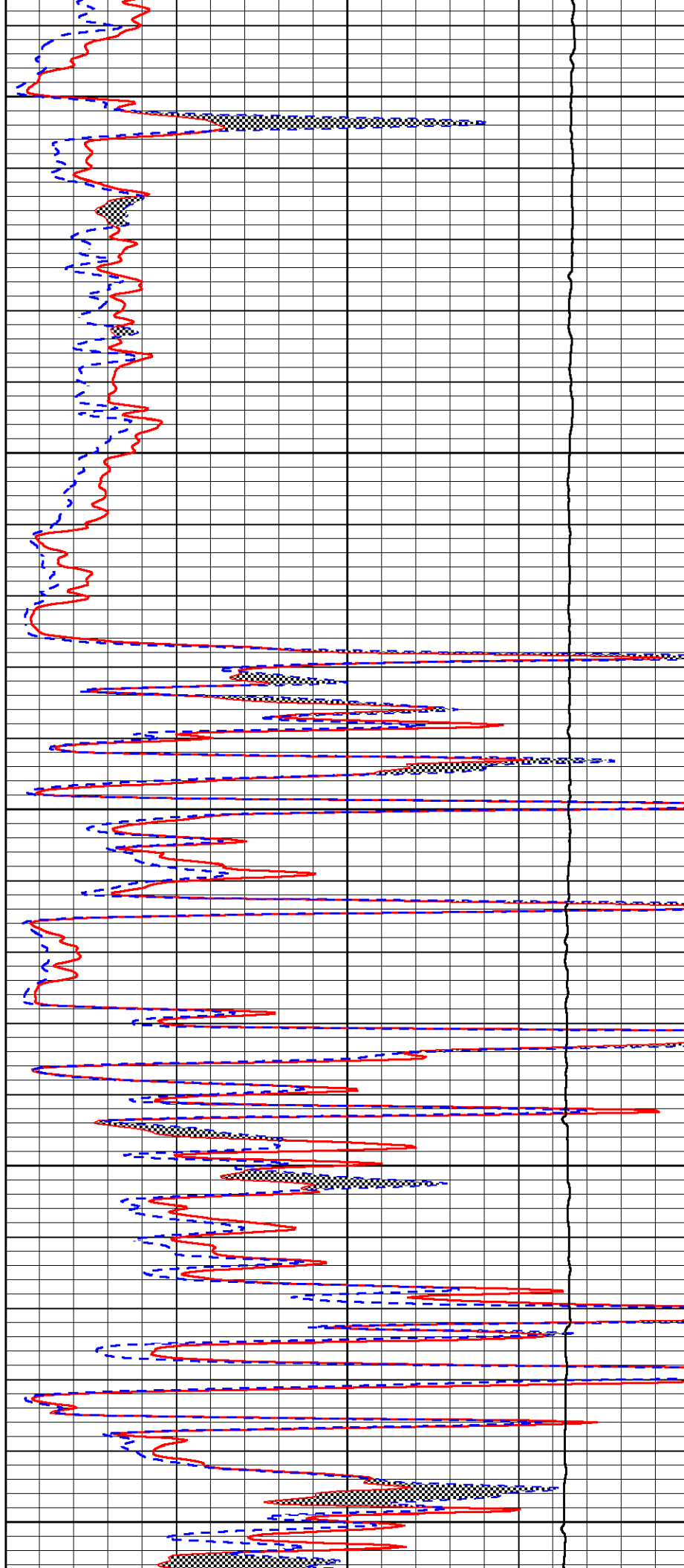
3100

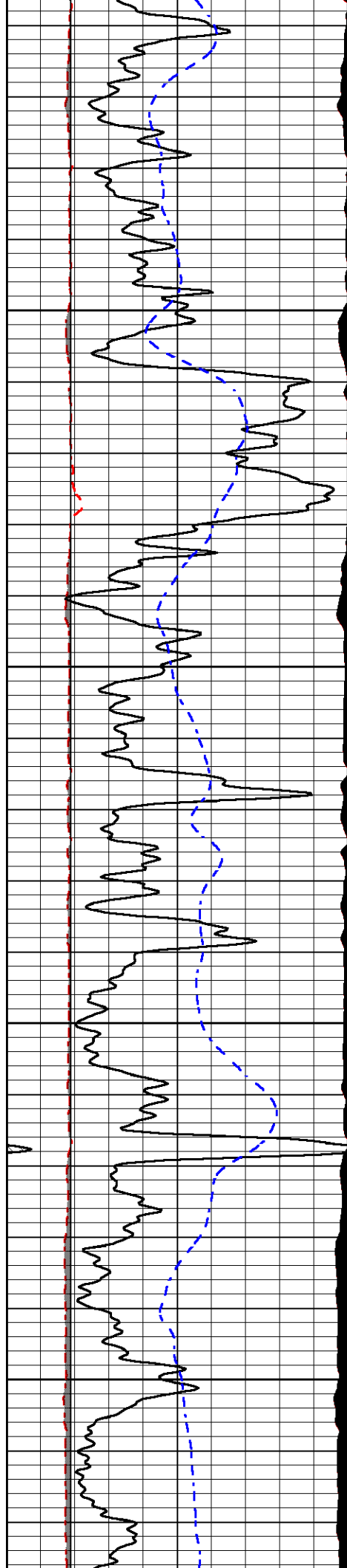
3150

3200

3250

3300



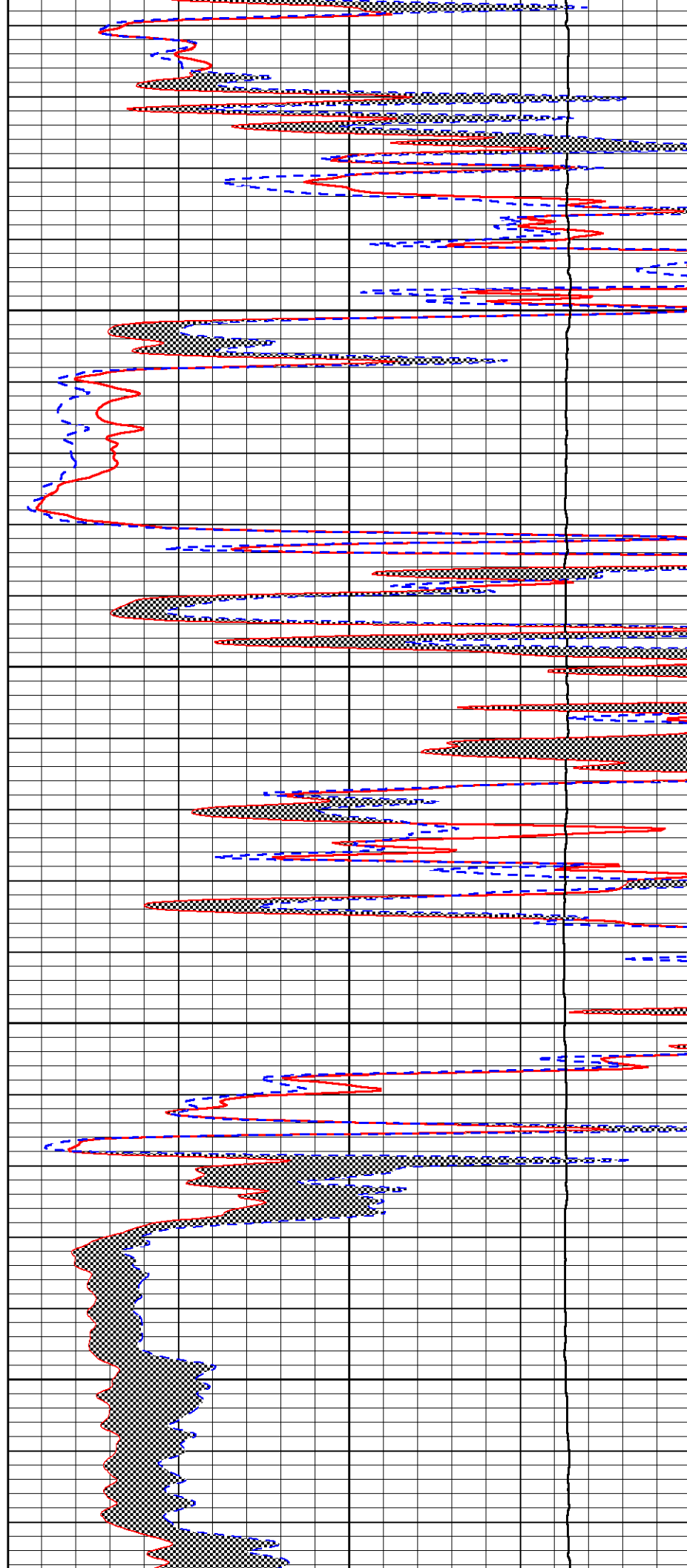


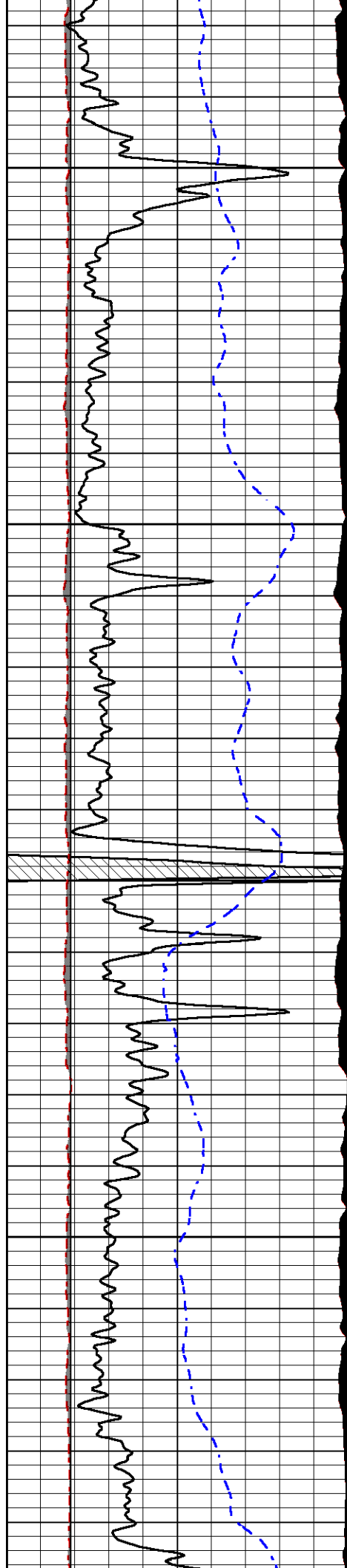
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3400

3450

3500



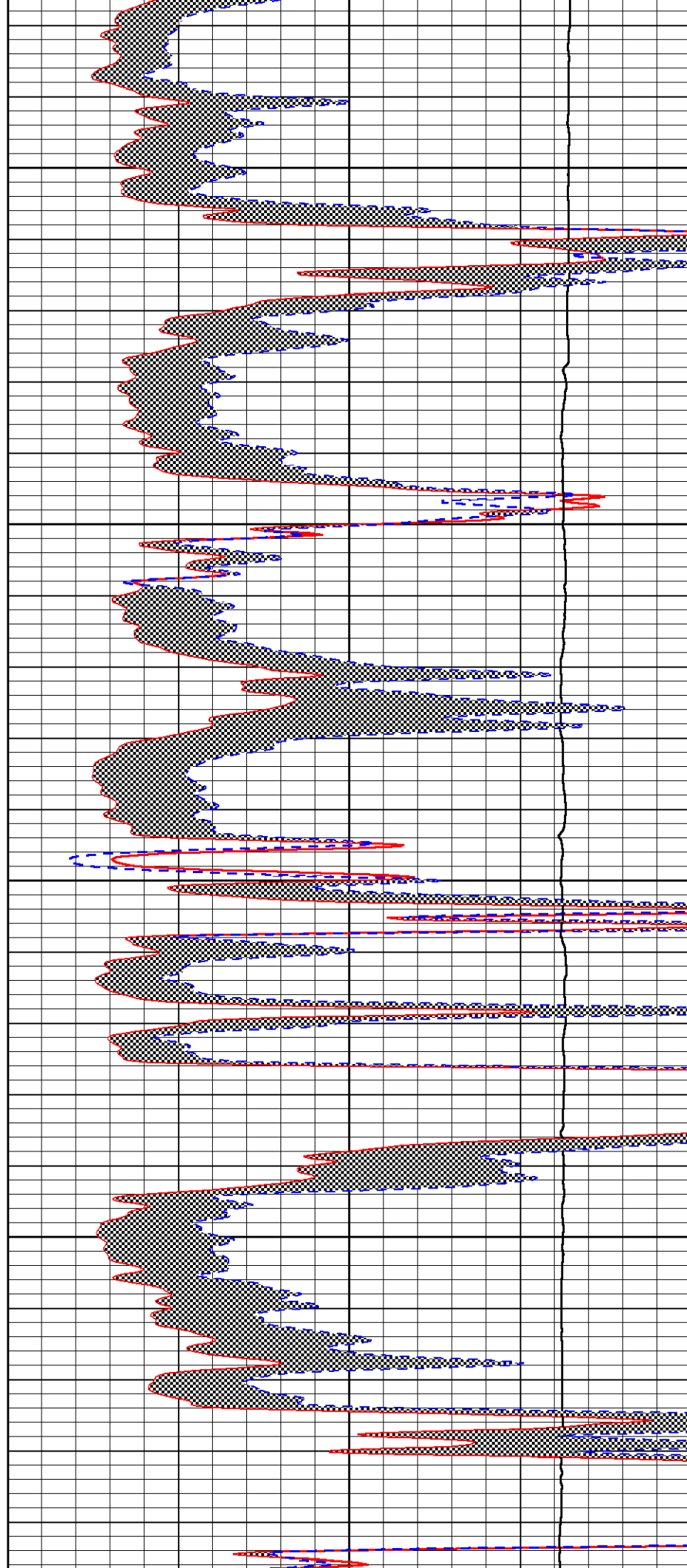


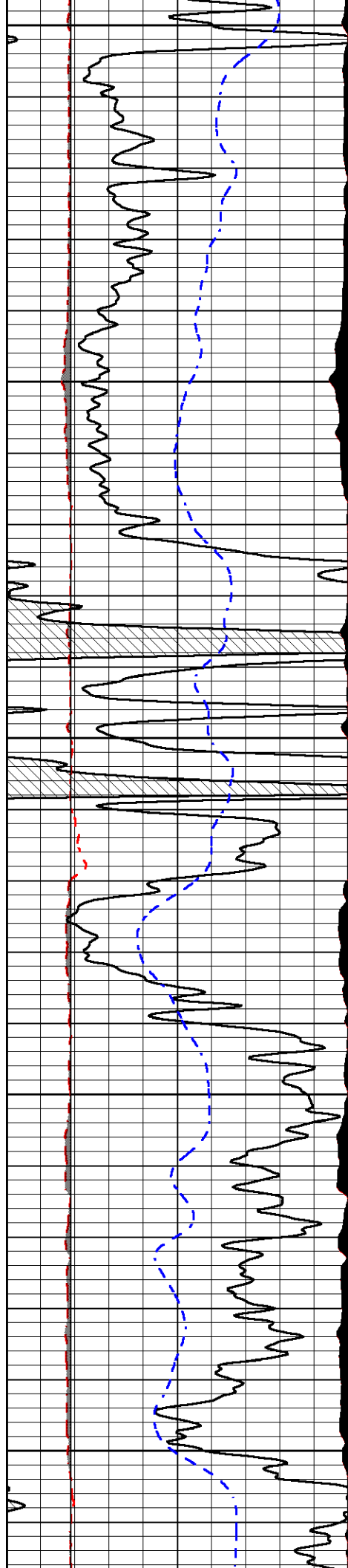
3550

3600

3650

3700





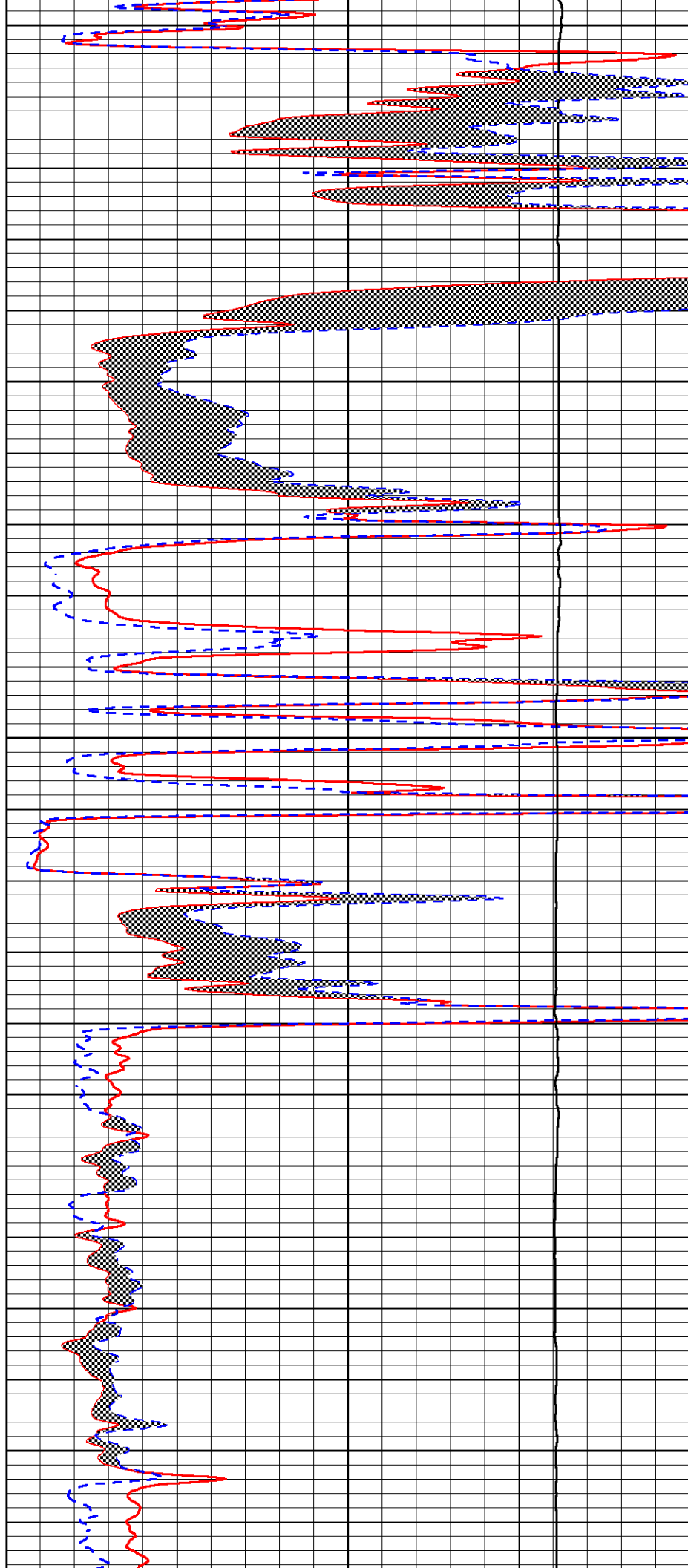
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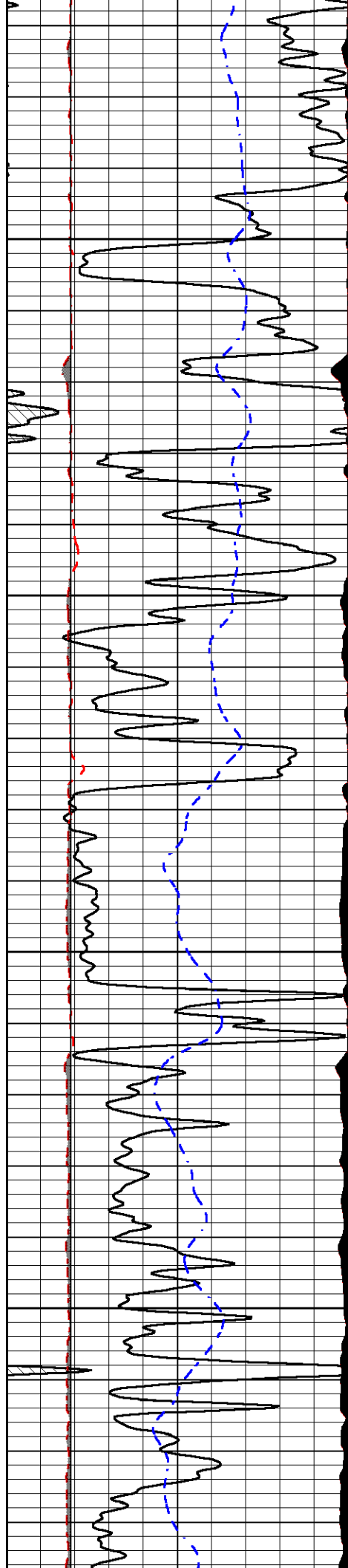
3800

3850

3900

3950



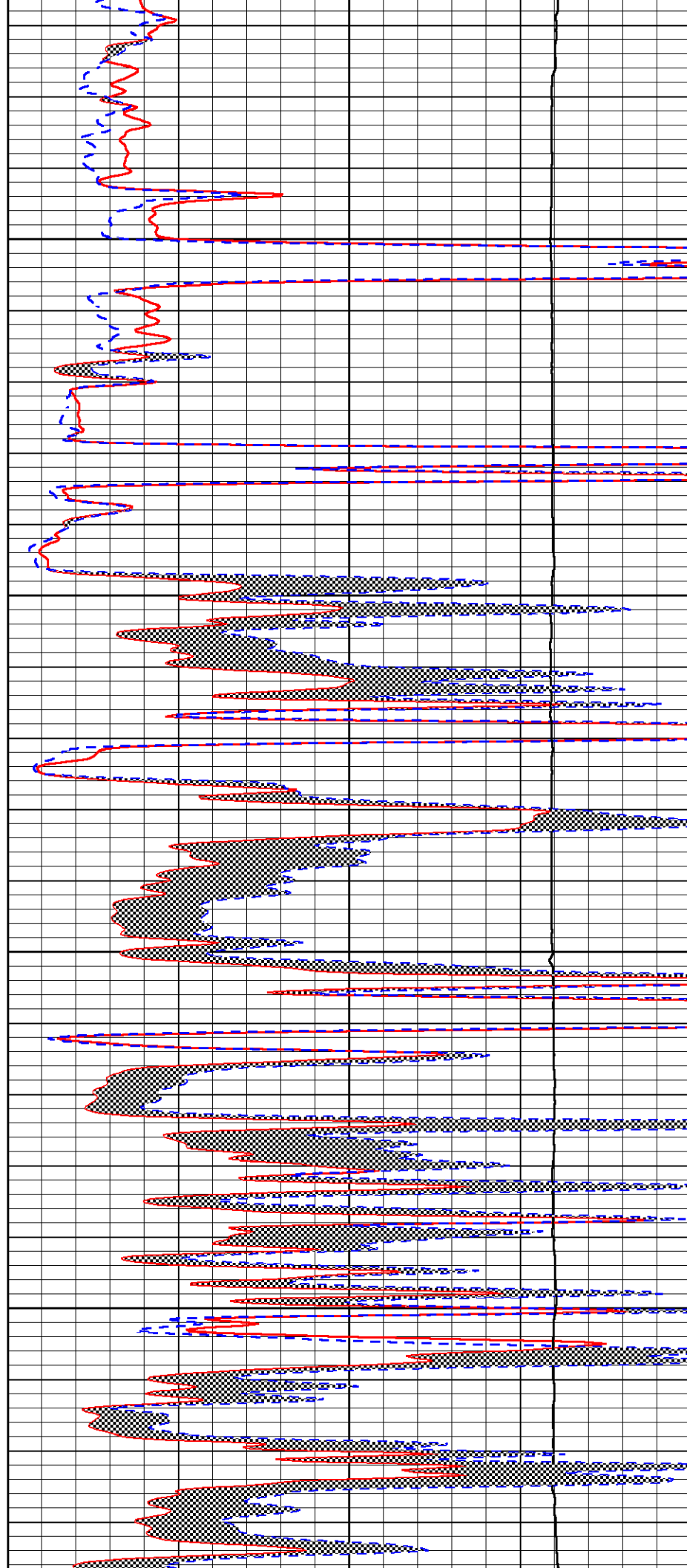


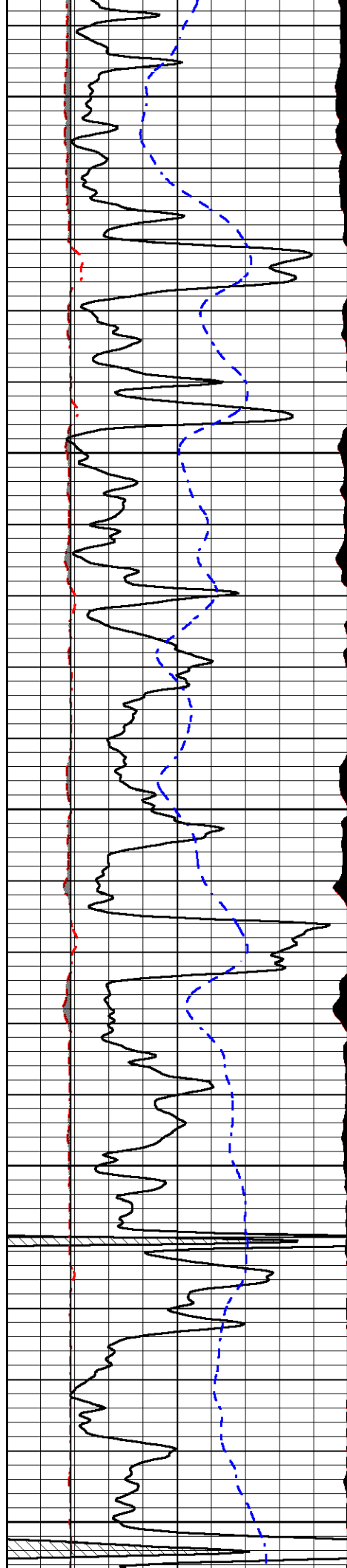
4000

4050

4100

4150





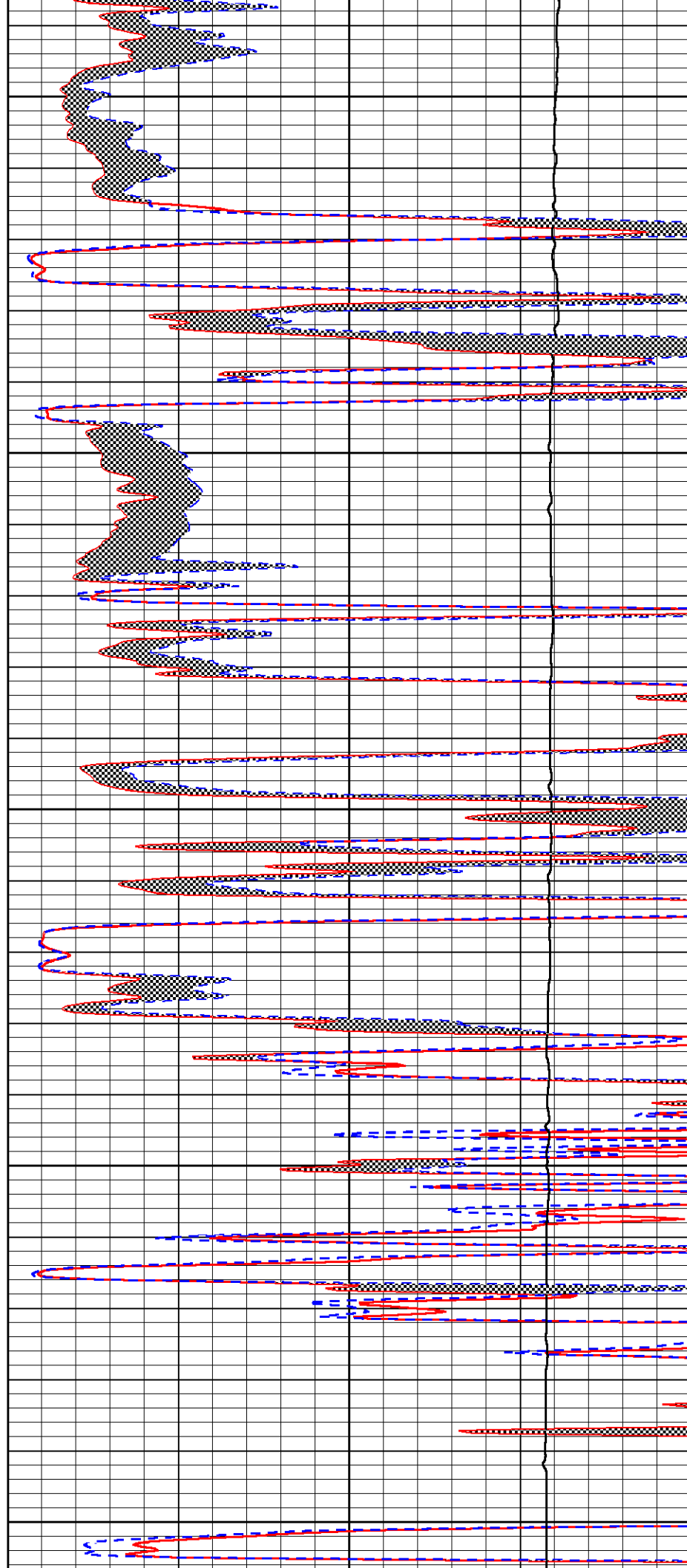
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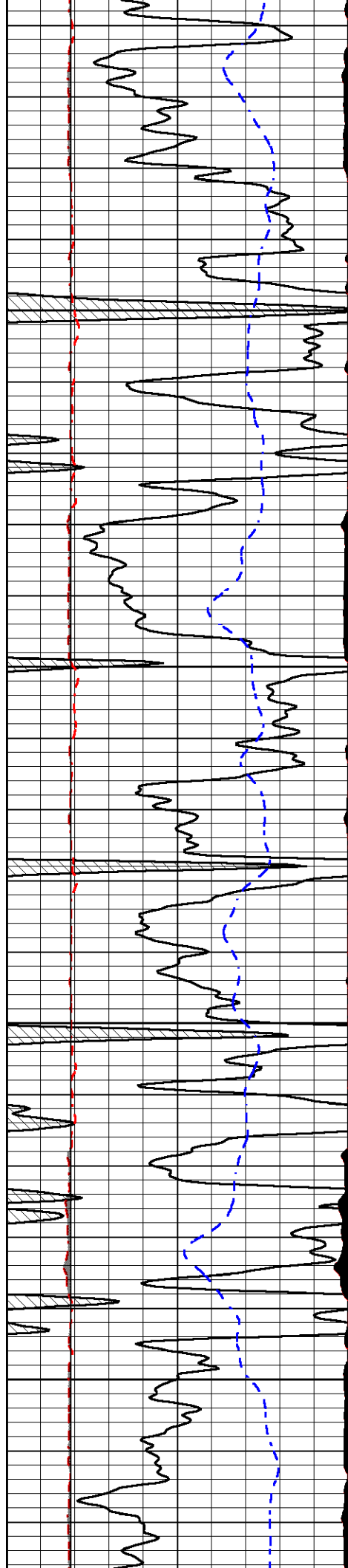
4250

4300

4350

4400



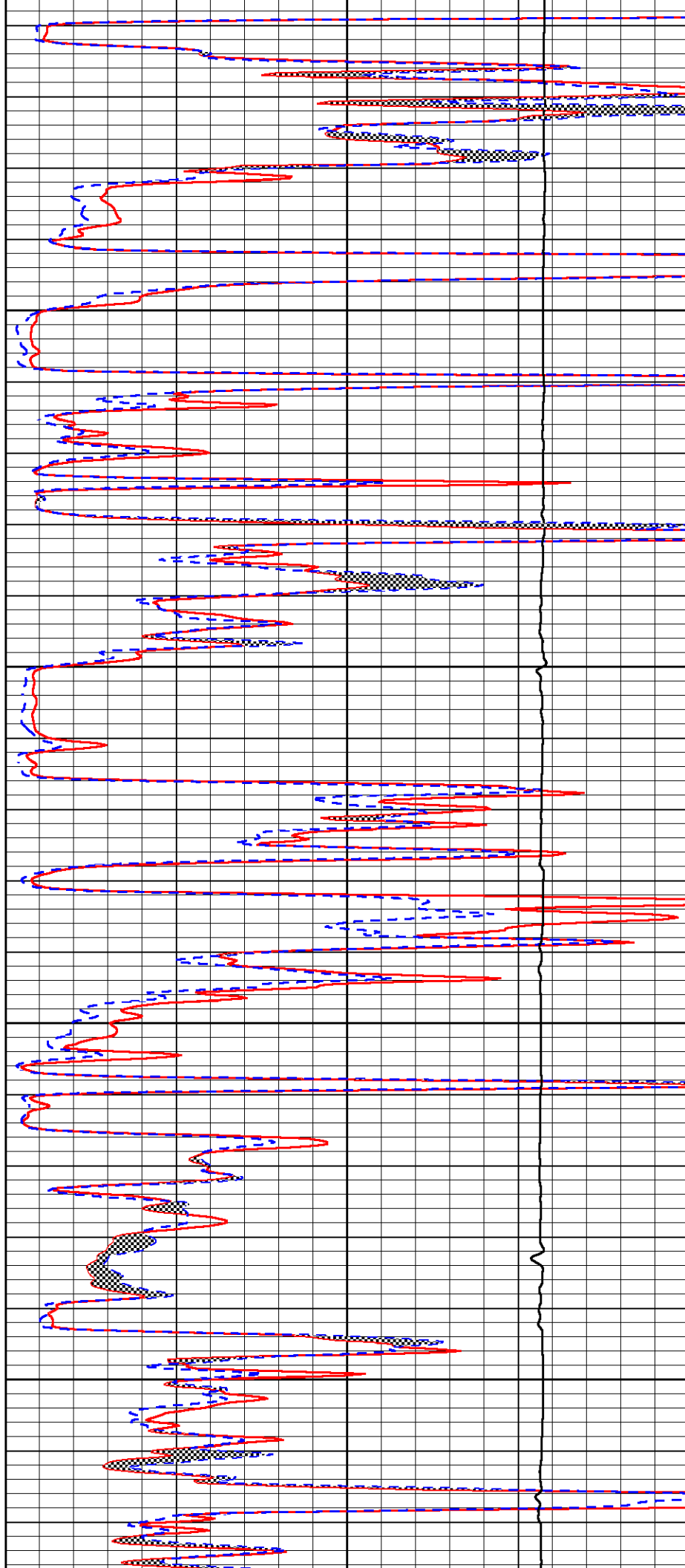


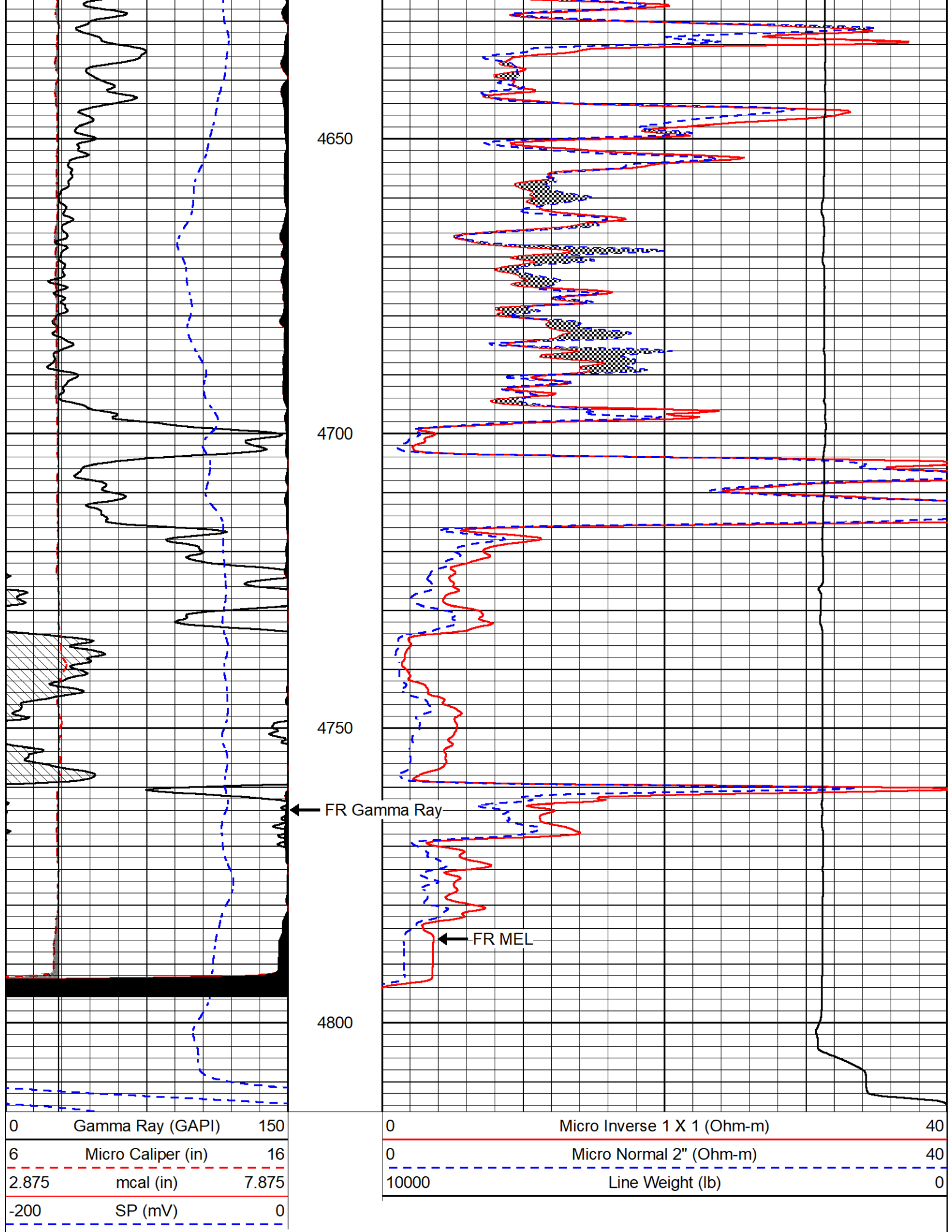
4450

4500

4550

4600





REPEAT SECTION



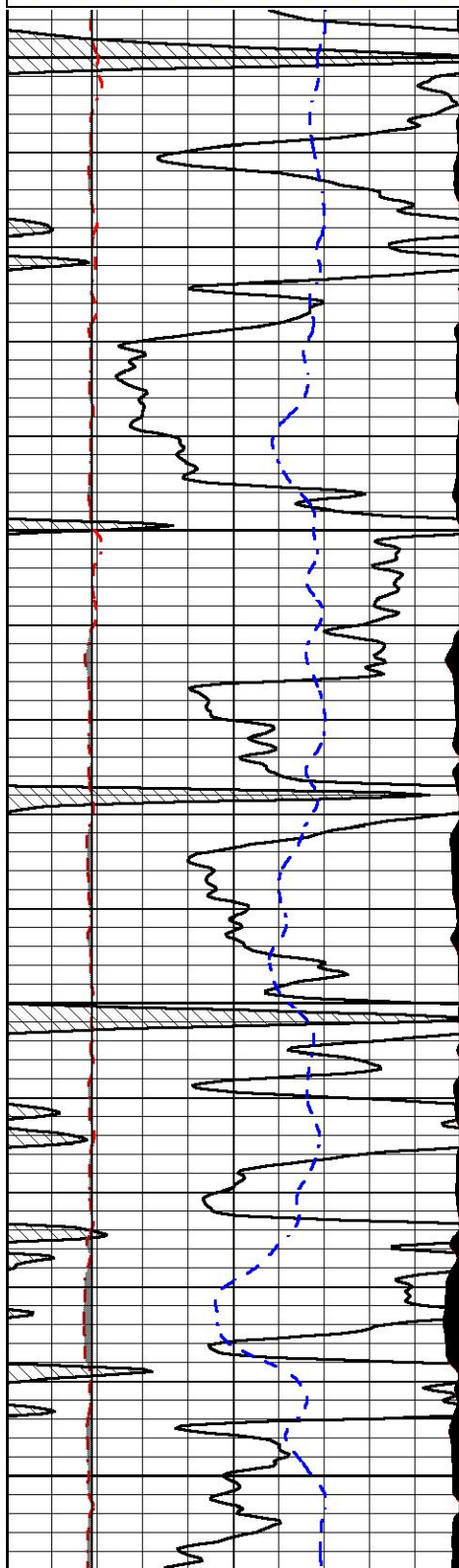
MIDWEST WIRELINE

REPEAT PASS

Database File griffin_gary 3.db
Dataset Pathname stkml/pass2.10
Presentation Format _micro
Dataset Creation Wed Oct 11 05:05:39 2023
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	Micro 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

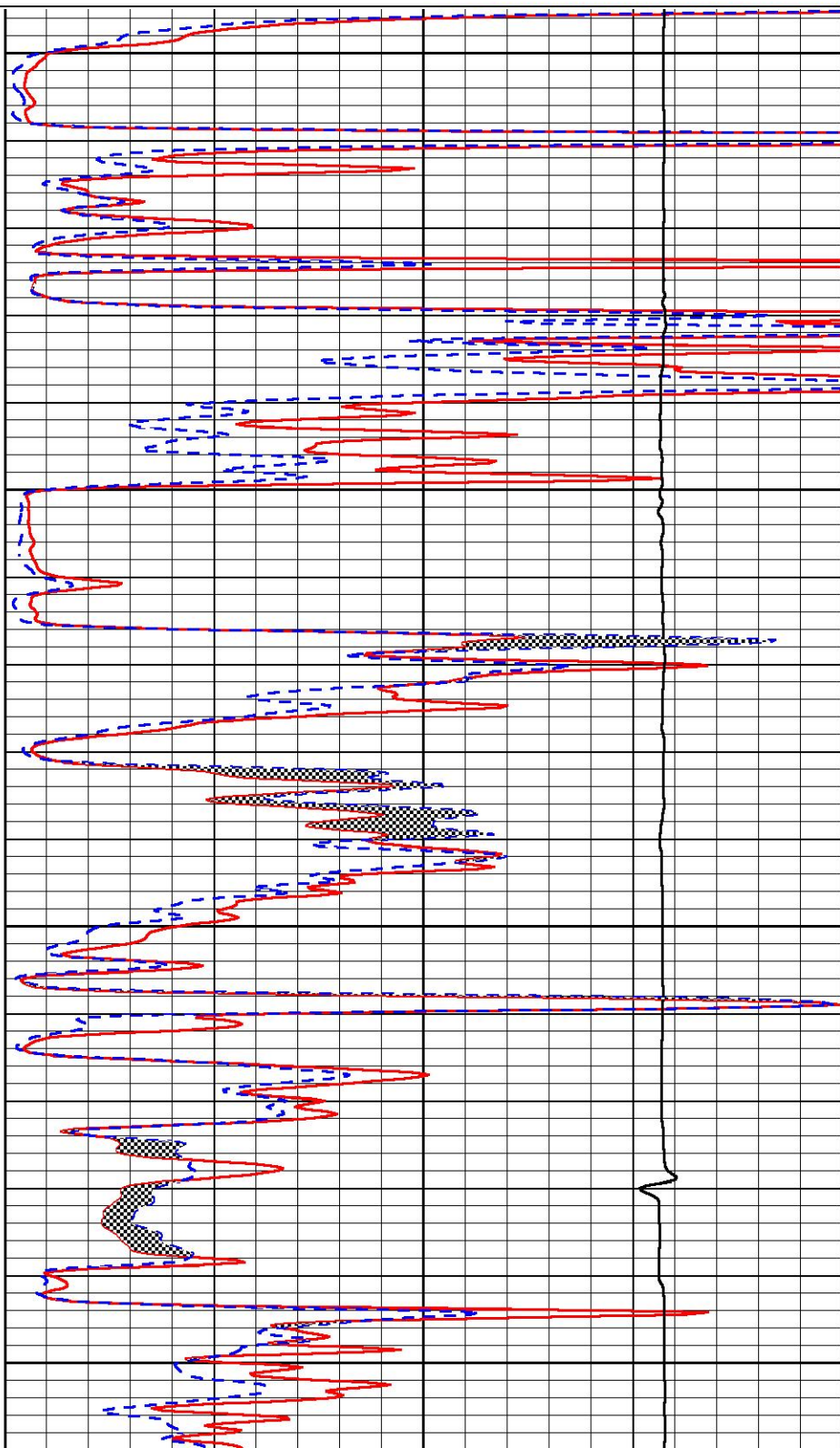


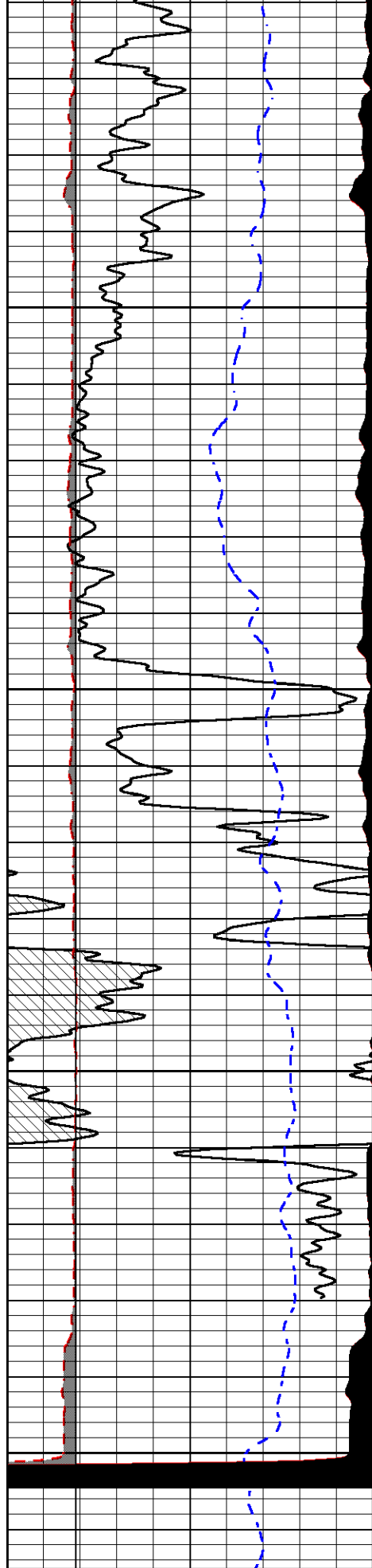
4450

4500

4550

4600





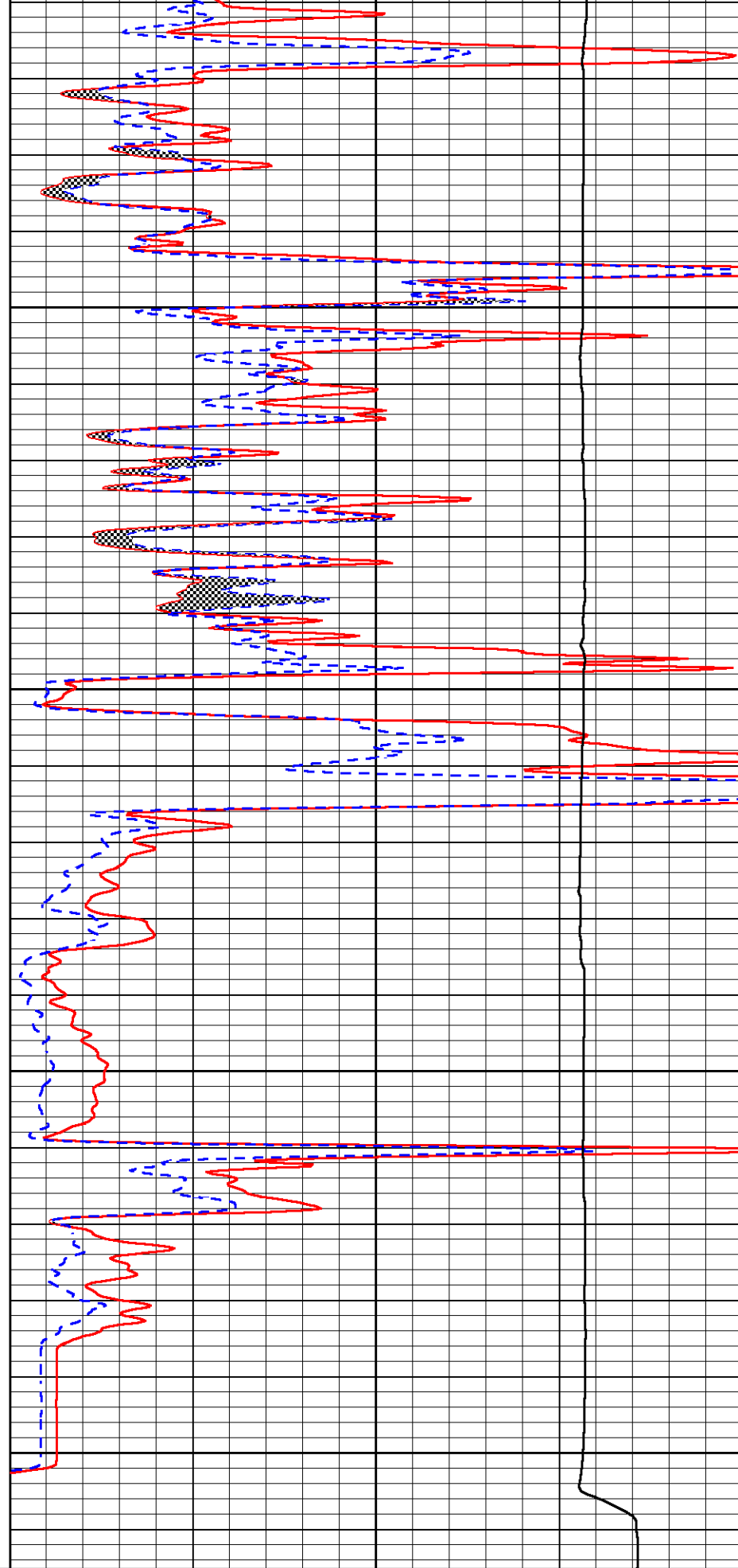
0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875

4650

4700

4750

4800



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

Calibration Report									
Database File	griffin_gary 3.db								
Dataset Pathname	stkml/pass3.5								
Dataset Creation	Wed Oct 11 06:35:29 2023								
Dual Induction Calibration Report									
Serial-Model:					505 HT-M&W				
Surface Cal Performed:					Fri Aug 11 21:22:17 2023				
Readings			References			Results			
Loop:	Air	Loop		Air	Loop		m	b	
Deep	167.000	835.000		0.000	255.800	mmho/m	0.480	-42.000	
Medium	1348.000	1348.000		0.000	255.800	mmho/m	0.410	-40.000	
Microlog Calibration Report									
Serial-Model:					402-PSI STKBL ML				
Performed:					Sat Sep 23 14:09:43 2023				
Readings			References			Results			
	Zero	Cal		Zero	Cal		m	b	
Normal	0.0037	0.0043		0.0000	10.0000	Ohm-m	30000.0000	-1.2500	
Inverse	0.1208	0.0013		0.0000	10.0000	Ohm-m	25000.0000	-0.1000	
Caliper	1.0046	1.1419		5.5000	20.0000	in	50.0000	-44.4250	
LITHODENSITY Calibration Report									
Serial Number:		701-01							
Tool Model:		STEP LITHO Short							
Performed:		Wed Aug 16 15:02:56 2023							
Source:									
	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	52	53	205	255	24	69	44	1	cps
LS:	81	85	334	425	46	135	88	2	cps
Aluminum:									
SS:	774	936	2171	1967	43	73	44	2	cps
LS:	847	1595	3011	1457	56	137	87	5	cps
Magnesium:									
SS:	1271	1508	3520	2831	46	71	45	3	cps
LS:	3600	6590	11760	4608	88	128	83	13	cps
Aluminum+Iron:									
SS:	492	651	1805	1706	40	72	44	2	cps
LS:	499	1107	2530	1299	53	134	86	4	cps
		Density			PE				
		Actual	Calibrated		Actual	Calibrated	Quality		
Background:									
SS:						0.222			
LS:						0.212			
Aluminum:									
SS:		2.6000	2.6000	g/cc		0.248			
LS:		2.6000	2.6000	g/cc		0.220			

LS:	2.6000	2.6000	g/cc			0.220
Magnesium:						
SS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.222
LS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.213
Aluminum+Iron:						
SS:					6.1800	0.239
LS:					6.1800	0.214

Caliper:	Reference:	Reading:
Small Ring:	6.0 in	100.0
Large Ring:	16.0 in	400.0
Gain:	18.000	
Offset:	0.075	

Compensated Neutron Calibration Report

Serial Number:	210
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

Gamma Ray Calibration Report

Serial Number:	105	
Tool Model:	M&W	
Performed:	Wed Aug 30 12:31:03 2023	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.6500	GAPI/cps

	Company	Griffin Management, LLC
	Well	Gary #3
	Field	Turkey Creek East
	County	Barber
	State	Kansas