



MIDWEST WIRELINE

**MICRORESISTIVITY**

Company Campbell Energy LLC  
 Well JPC #1  
 Field Turkey Creek East  
 County Barber  
 State Kansas

Company Campbell Energy LLC  
 Well JPC #1  
 Field Turkey Creek East  
 County Barber State Kansas

Location: API #: 15-007-24484-00-00  
 NE NE SW  
 2310 FL & 2310 FWL  
 SEC 15 TWP 30S RGE 15W  
 Permanent Datum Ground Level Elevation 1899  
 Log Measured From Kelly Bushing  
 Drilling Measured From Kelly Bushing  
 Other Services  
 CNL/CDL  
 DIL  
 Elevation  
 K.B. 1904  
 D.F.  
 G.L. 1899

Date	1/11/2023
Run Number	One
Depth Driller	4803
Depth Logger	4806
Bottom Logged Interval	4805
Top Log Interval	2800
Casing Driller	8,625 @ 975
Casing Logger	975
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	7500
Density / Viscosity	9.4 62
pH / Fluid Loss	10.5 8.8
Source of Sample	Flowline
Rm @ Meas. Temp	0.9 @ 62
Rmt @ Meas. Temp	0.68 @ 62
Rmc @ Meas. Temp	1.22 @ 62
Source of Rmf / Rmc	Charts
Rm @ BHT	0.45 @ 124
Operating Rig Time	2.5 Hours
Max Rec. Temp. F	124
Equipment Number	P-24
Location	Hays
Recorded By	T. Martin
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, KS, S to 110, 1 E, S into  
 (NE of lrg pond)

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

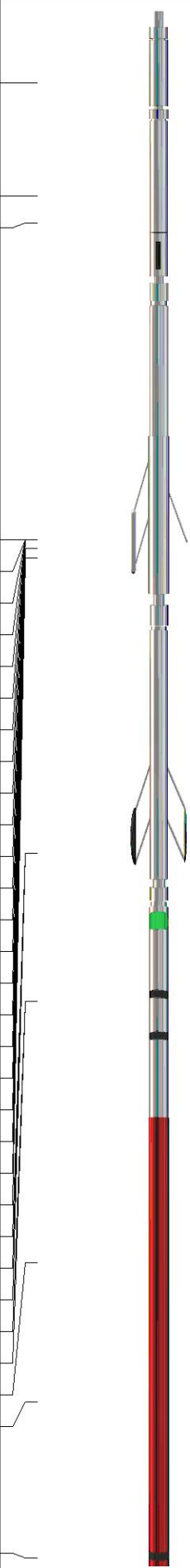
THANK YOU FOR USING MIDWEST WIRELINE LLC  
 785-625-3858

**Your Midwest Wireline Crew**

Engineer: T. Martin  
 Operator:  
 Operator:  
 Operator:

**This Log Record Was Witnessed By**

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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
GR	40.75		GR-M&W (102)	3.00	3.50	50.00	
CNLSC CNSSC	37.65 36.90		CNT-M&W (207)	5.00	3.50	100.00	
				MWLith-STEP LITHO (704-10) Long Litho Mandrel	8.92	5.00	250.00
LCAL	28.21						
LLW8N	28.21						
LLW7N	28.21						
LLW6N	28.21						
LLW5N	28.21						
LLW4N	28.21						
LLW3N	28.21						
LLW2N	28.21			ML-PSIML (401)	7.58	4.00	65.00
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 (507)	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: campbell\_jpc #1.db: field/well/StkMI/pass3.1  
 Total length: 42.75 ft  
 Total weight: 685.00 lb  
 O.D.: 5.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\campbell\_jpc #1.db  
 Dataset field/well/StkMI/pass3.1/\_vars\_

## Top - Bottom

BOREID in 7.875	BOTTEMP degF 124	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m 1	SNDERRM mmho/m -3	SPSHIFT mV 230	SRFTEMP degF 40	SZCOR Off	TDEPTH ft 4806		

## Variable Description

BOREID : Borehole I.D.  
 BOTTEMP : Bottom Hole Temperature  
 CASEOD : Casing O.D.  
 CASETHCK : Casing Thickness  
 FLUIDDEN : Fluid Density  
 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



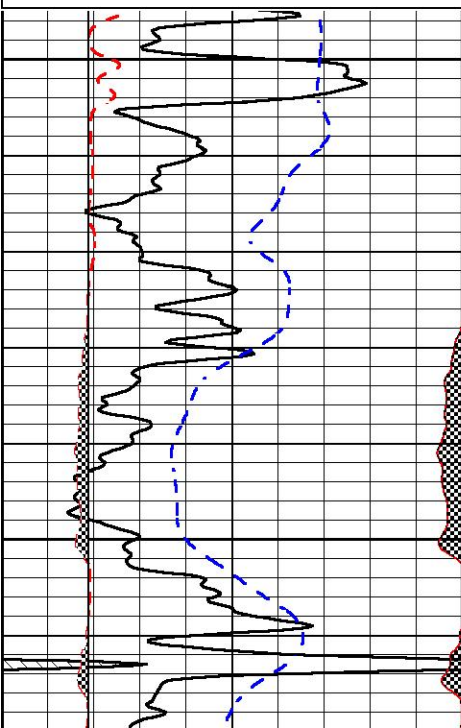
## DETAIL SECTION

### MAIN PASS

Database File      campbell\_jpc #1.db  
 Dataset Pathname   StkMI/pass3.1  
 Presentation Format   \_micro  
 Dataset Creation    Thu Jan 11 12:02:55 2024  
 Charted by          Depth in Feet scaled 1:240

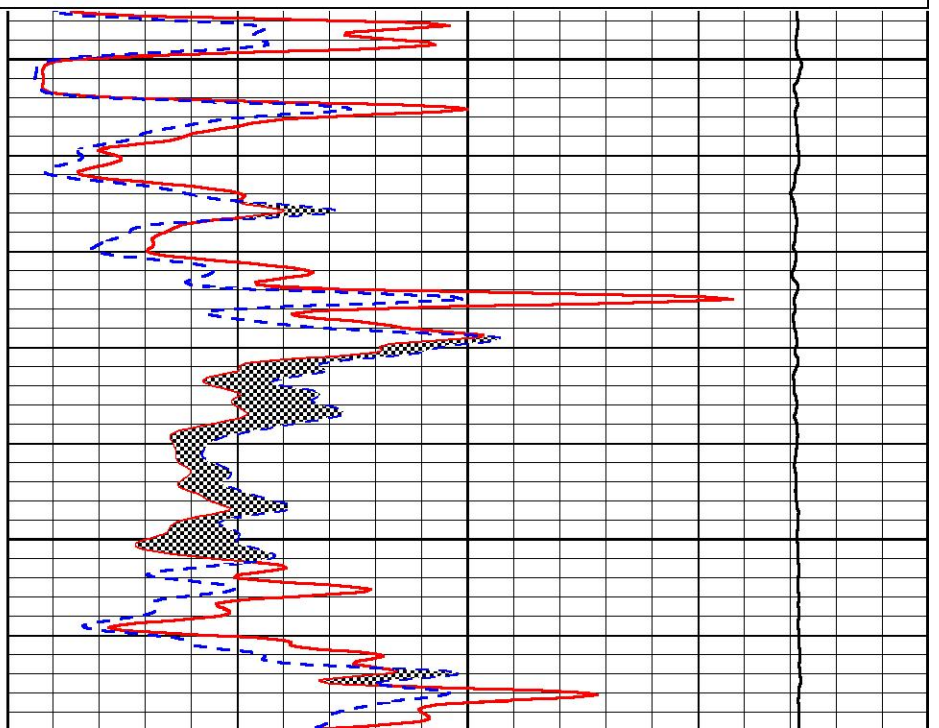
0	GR (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	sp (mV)	0

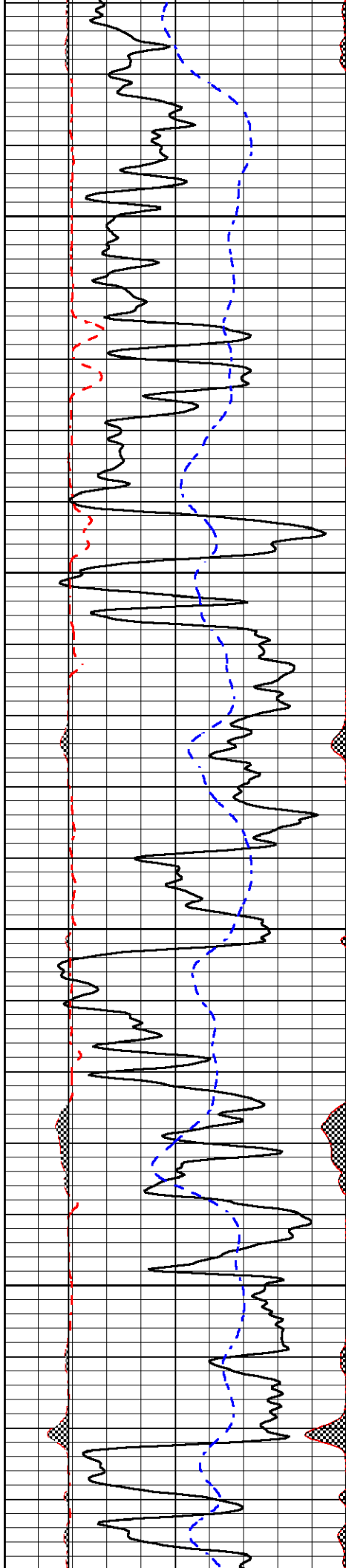
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



2800

2850



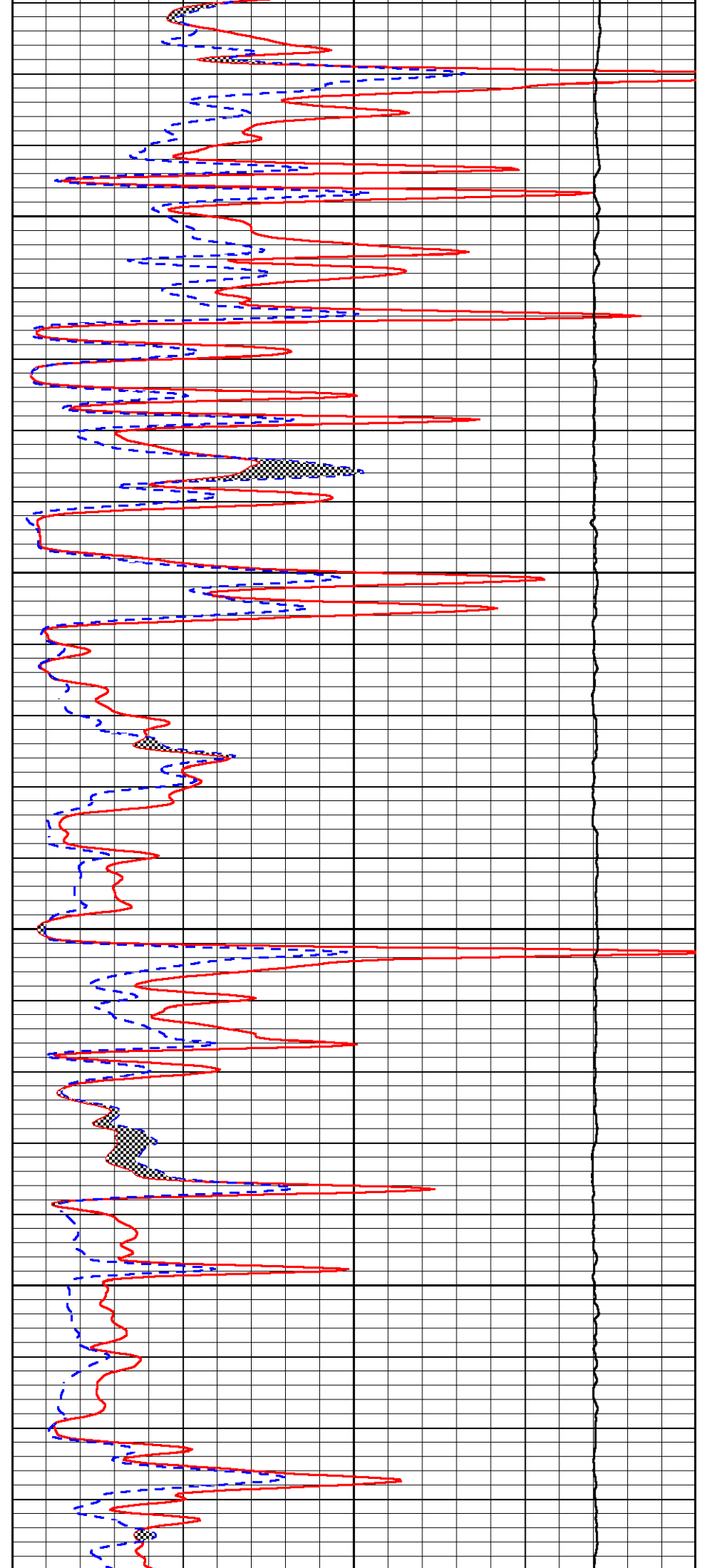


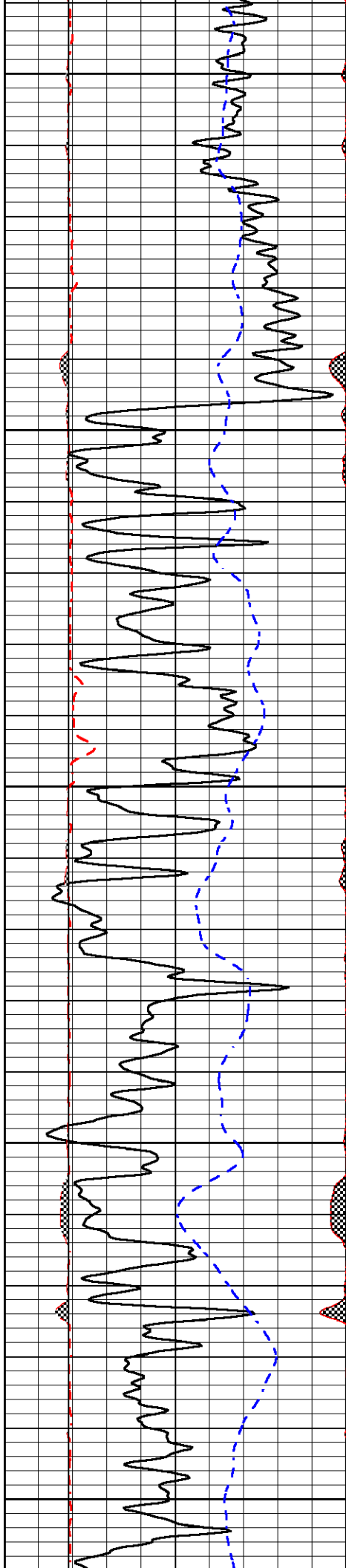
2900

2950

3000

3050





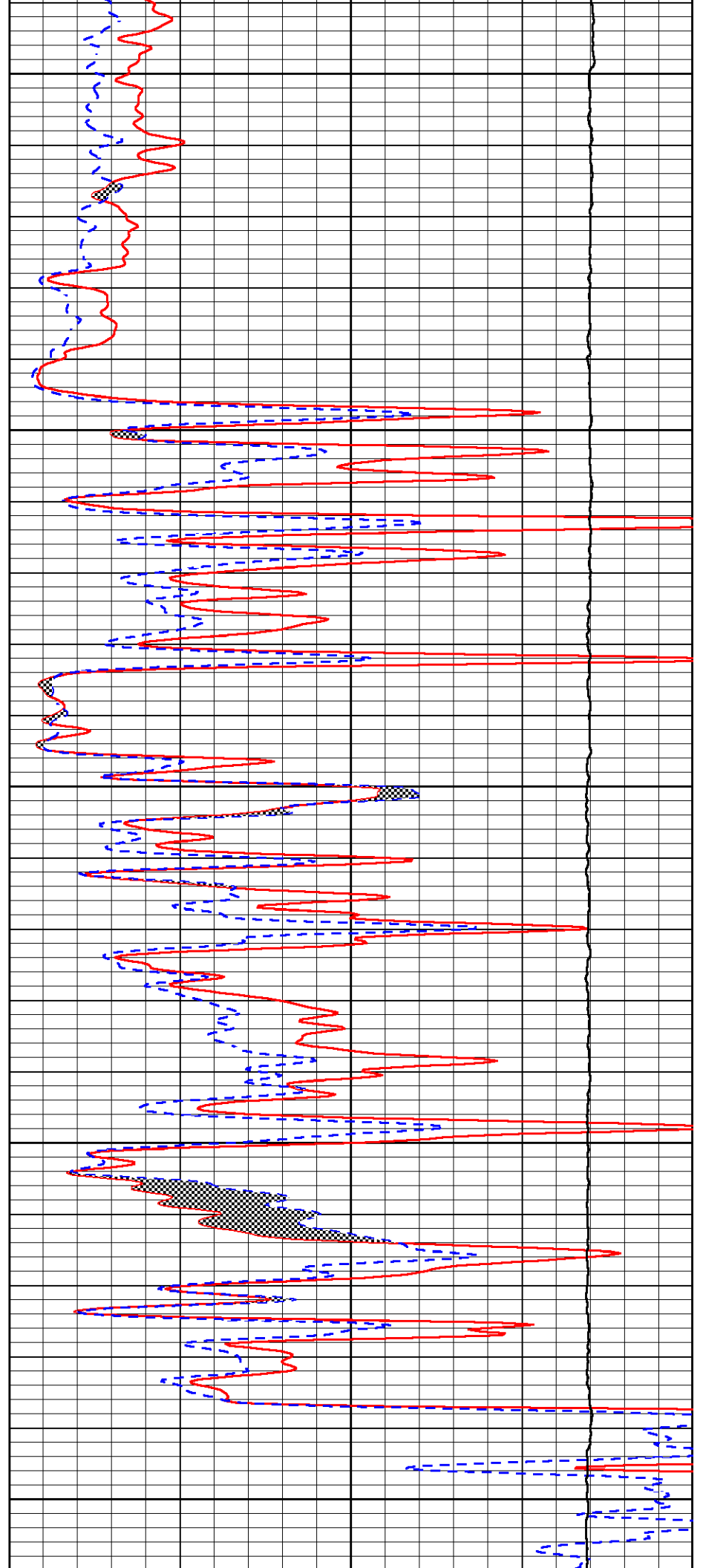
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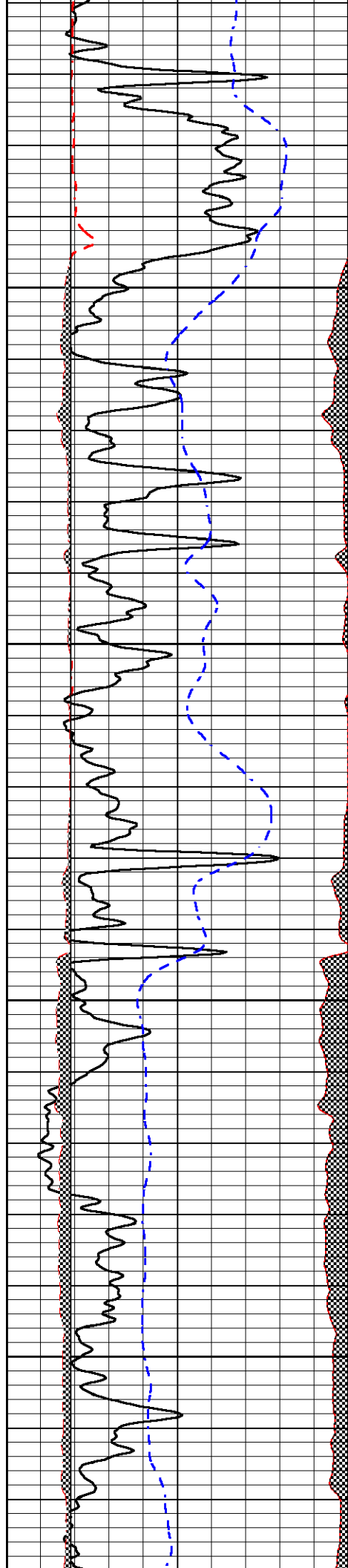
3150

3200

3250

3300



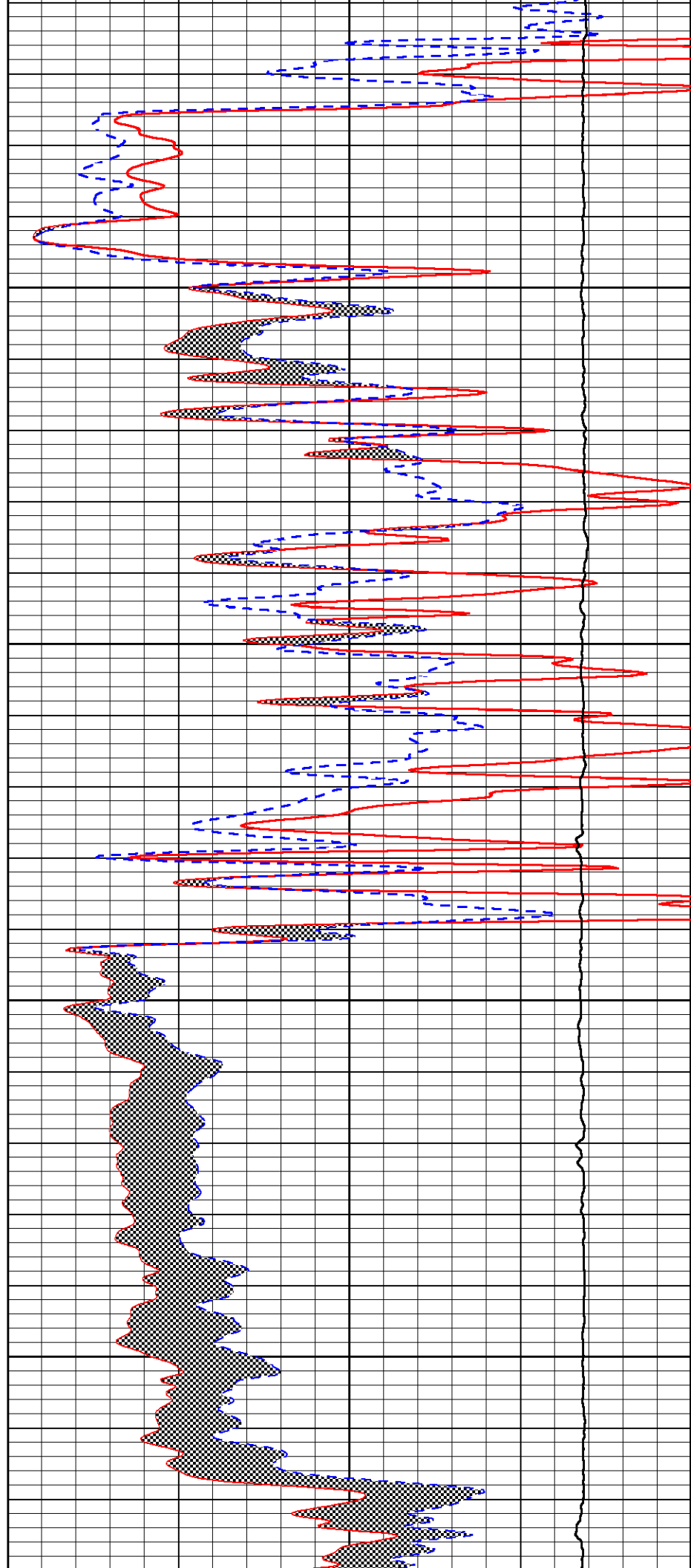


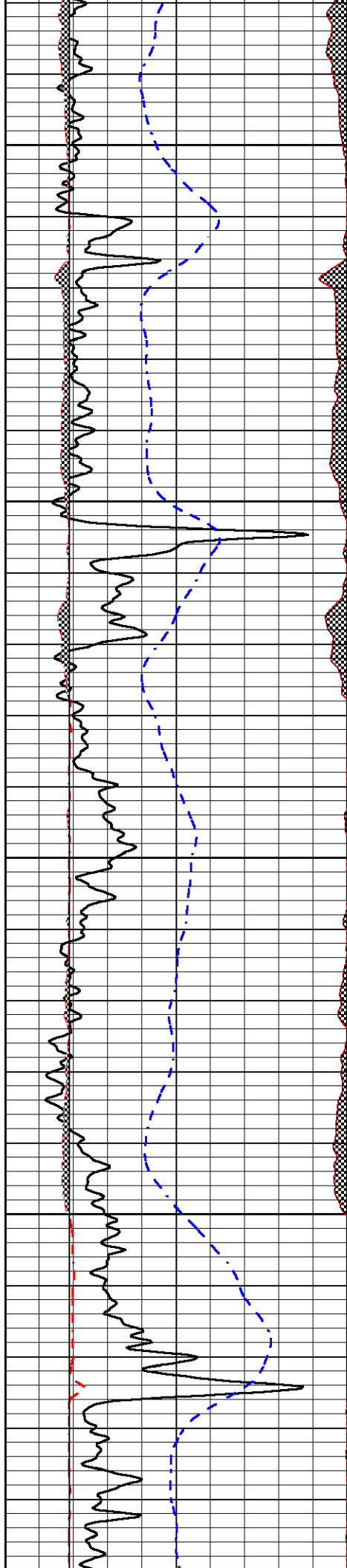
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3400

3450

3500





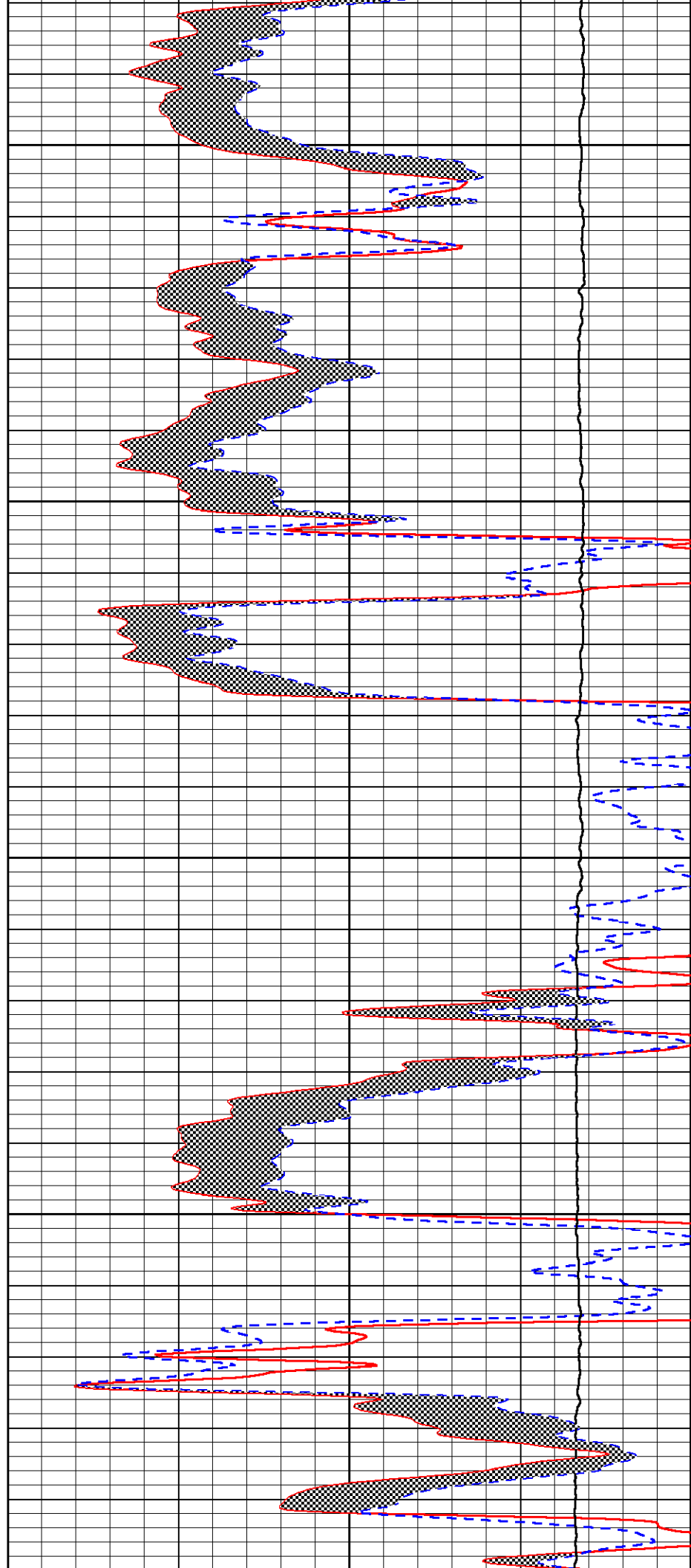
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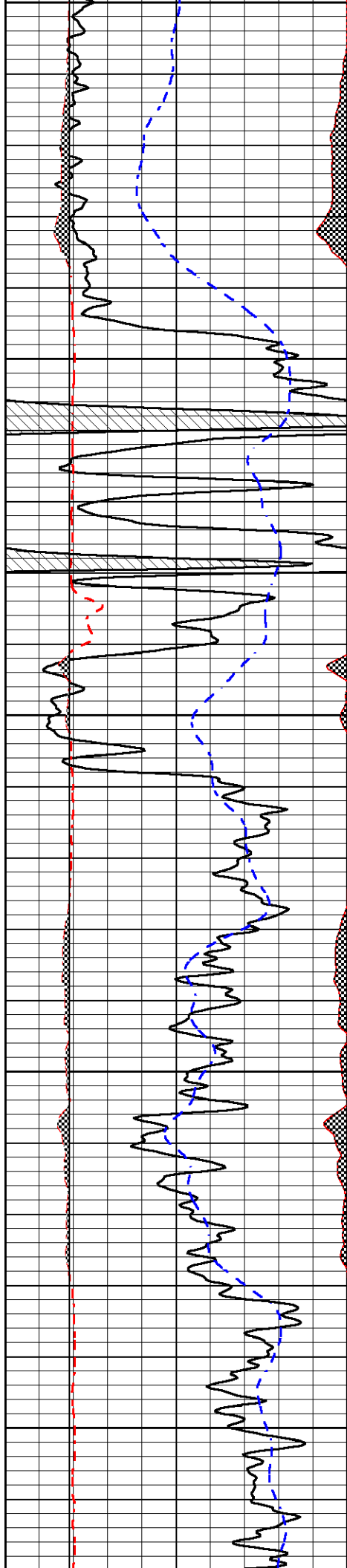
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3650

3700

3750





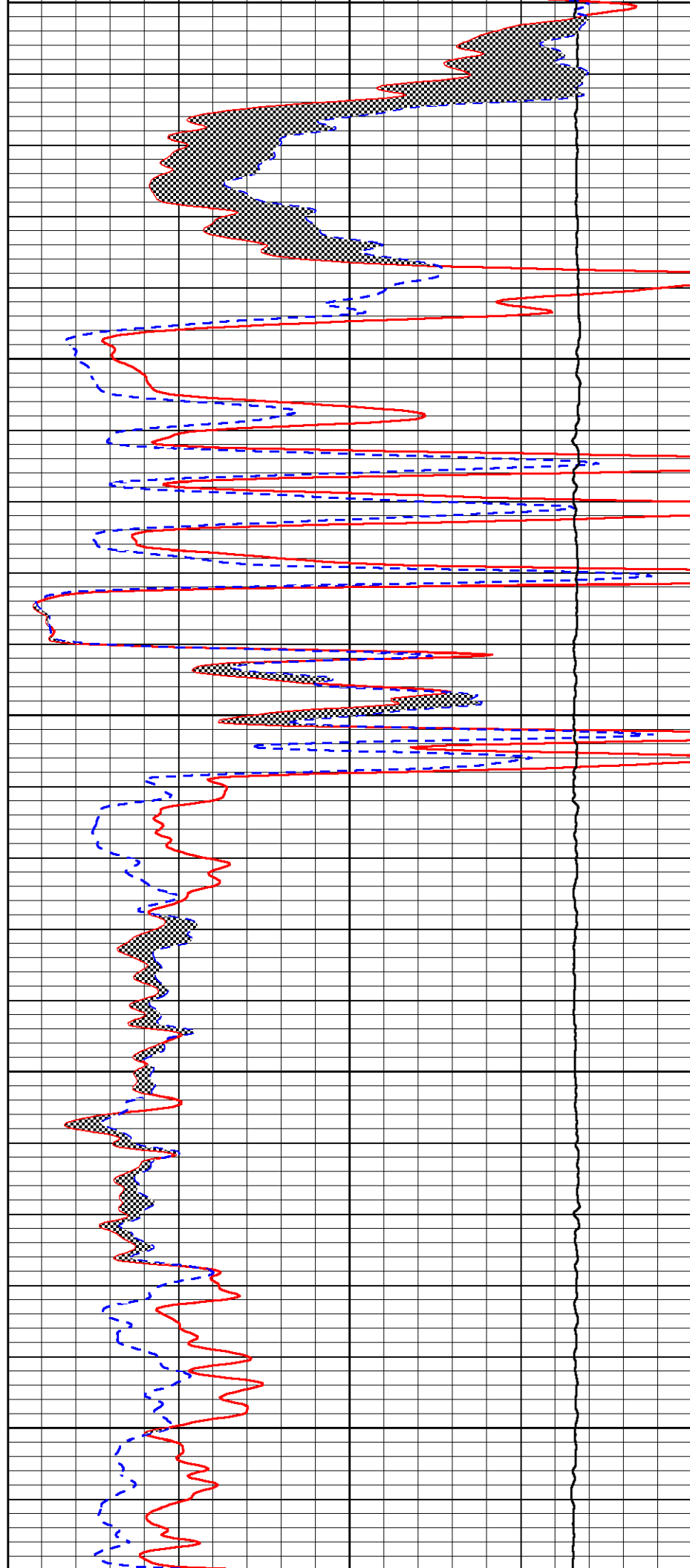
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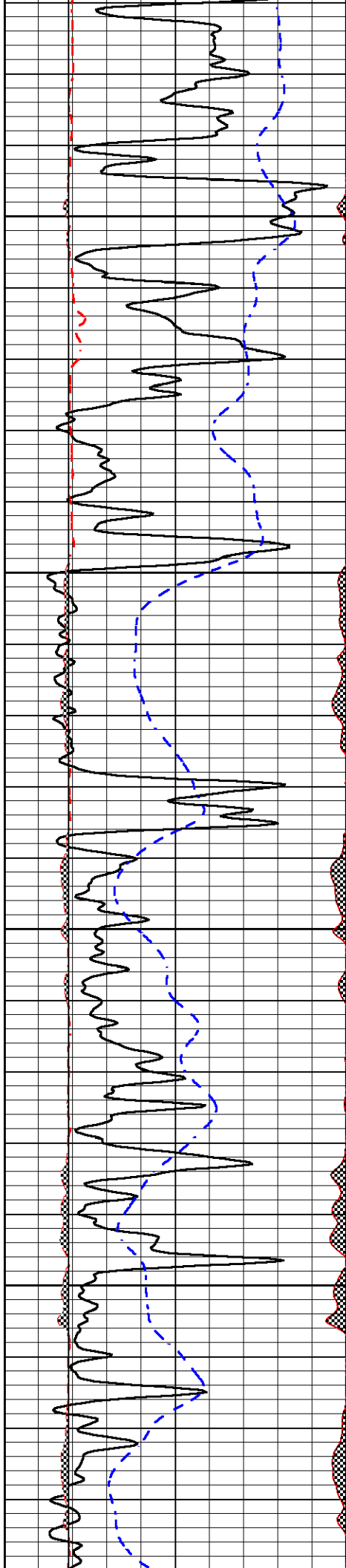
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3850

3900

3950



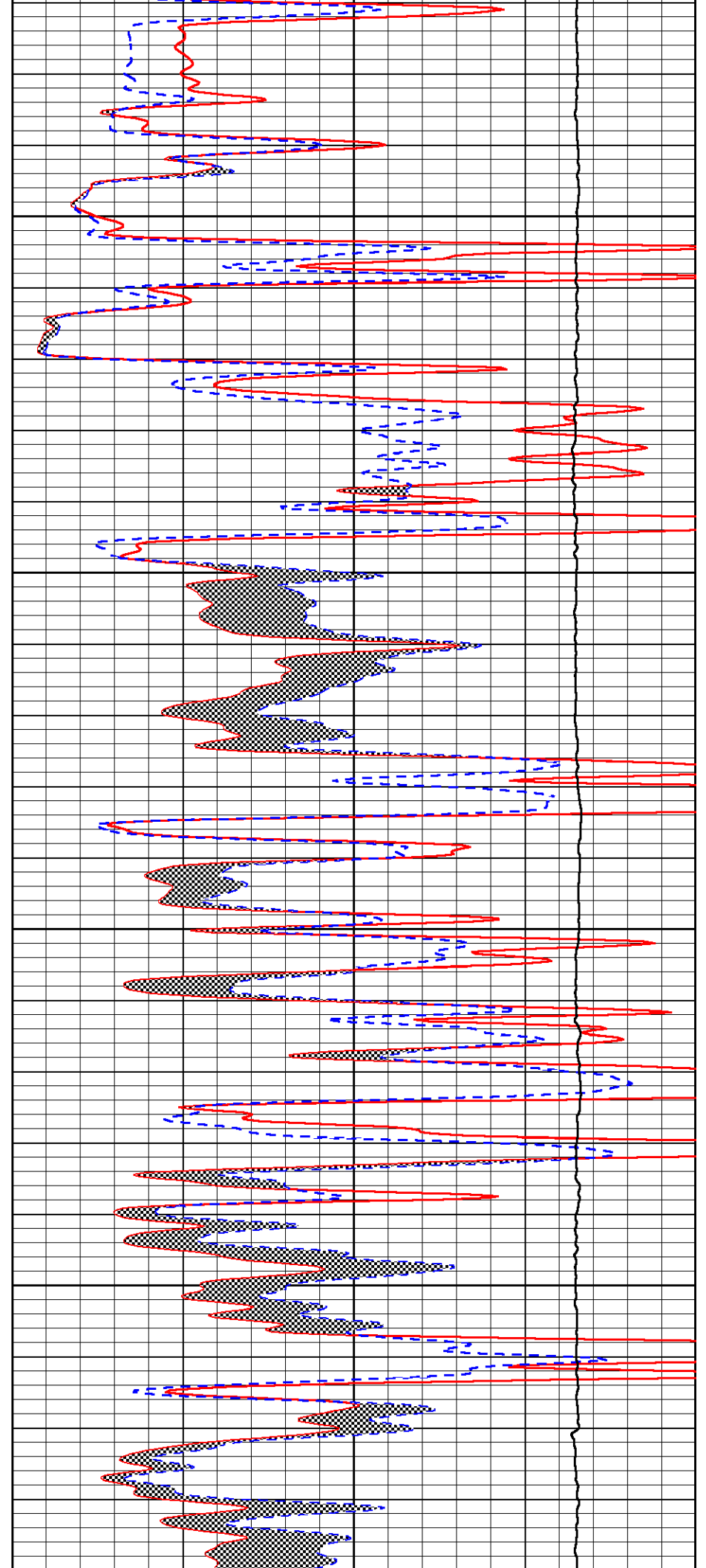


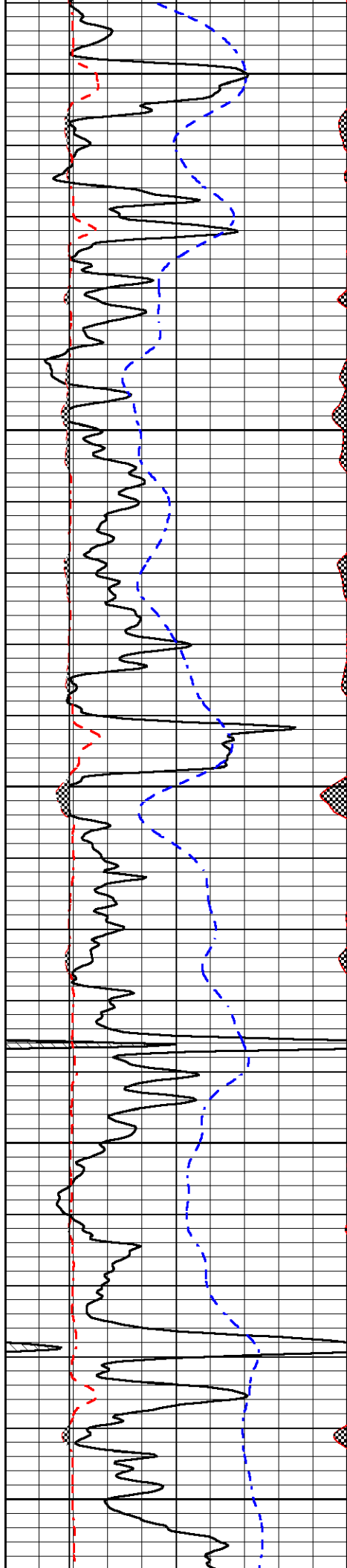
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4050

4100

4150





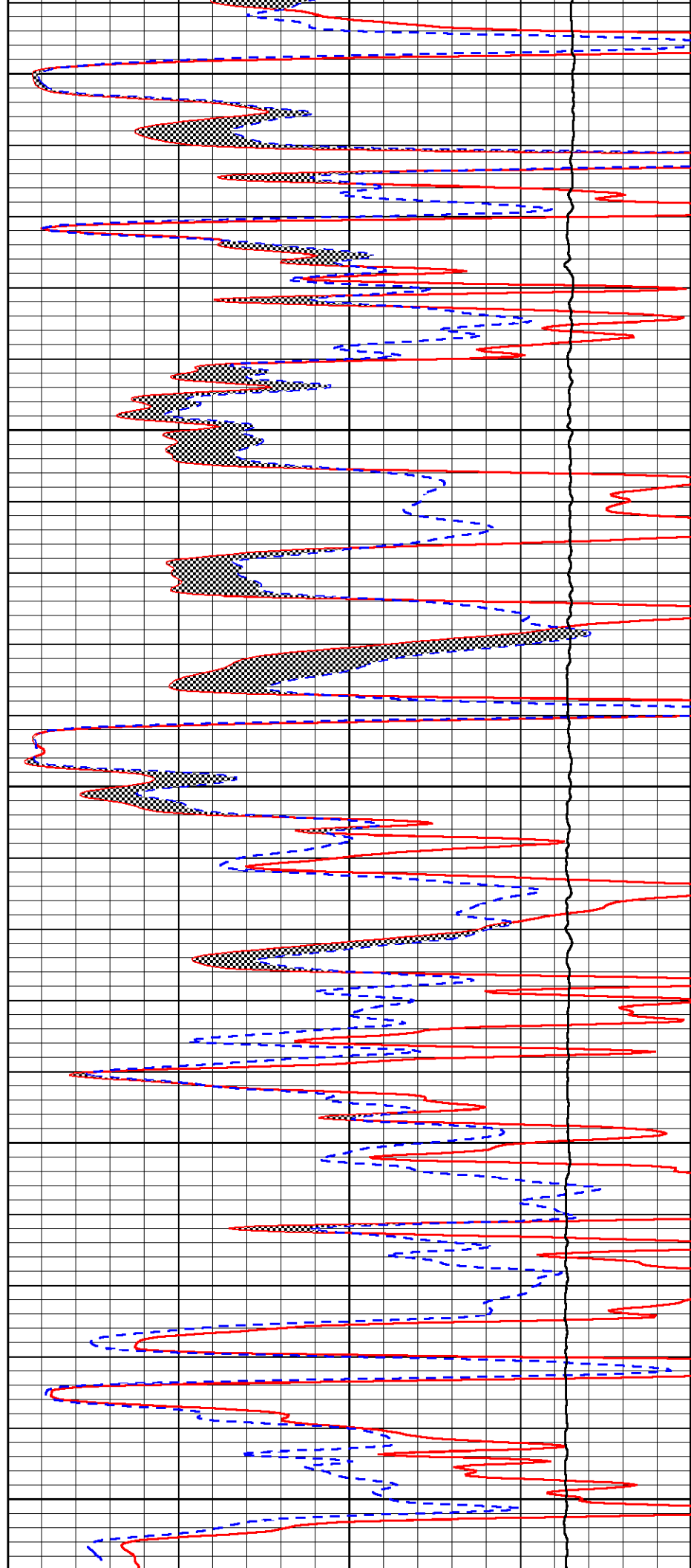
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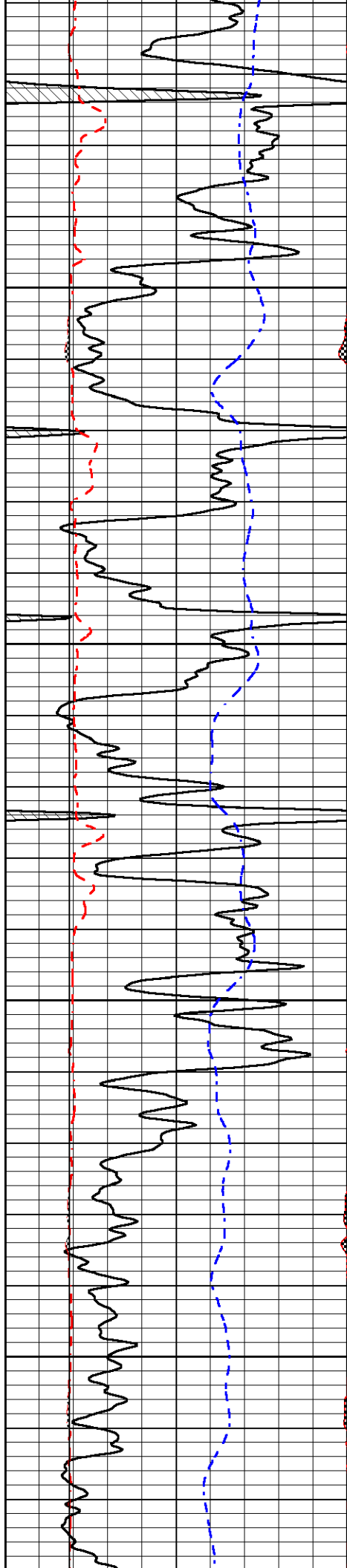
4250

4300

4350

4400



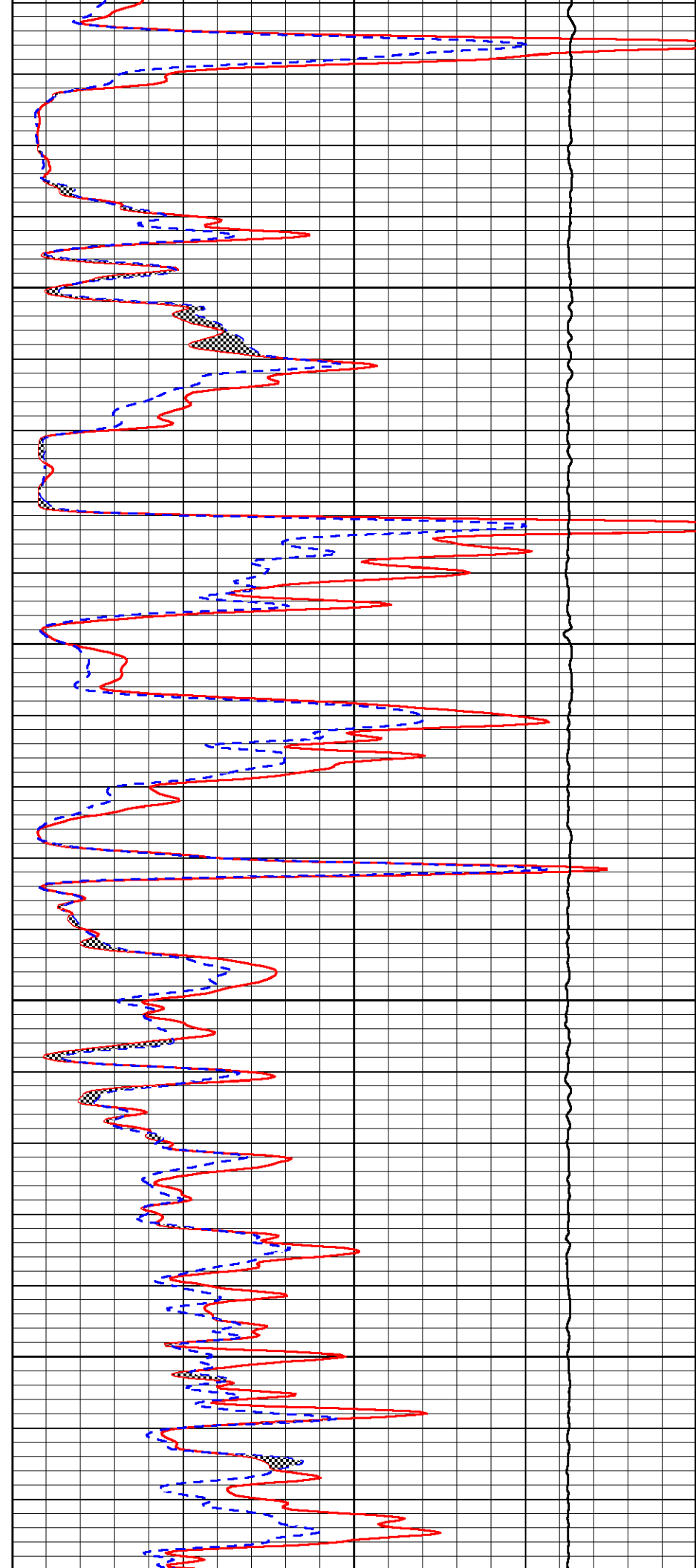


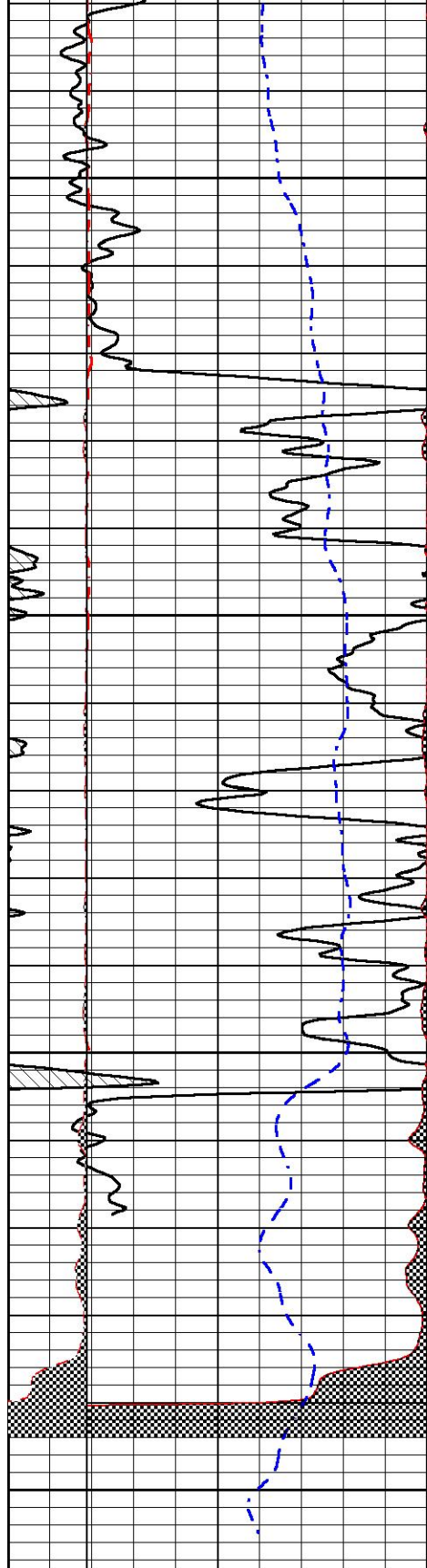
4450

4500

4550

4600





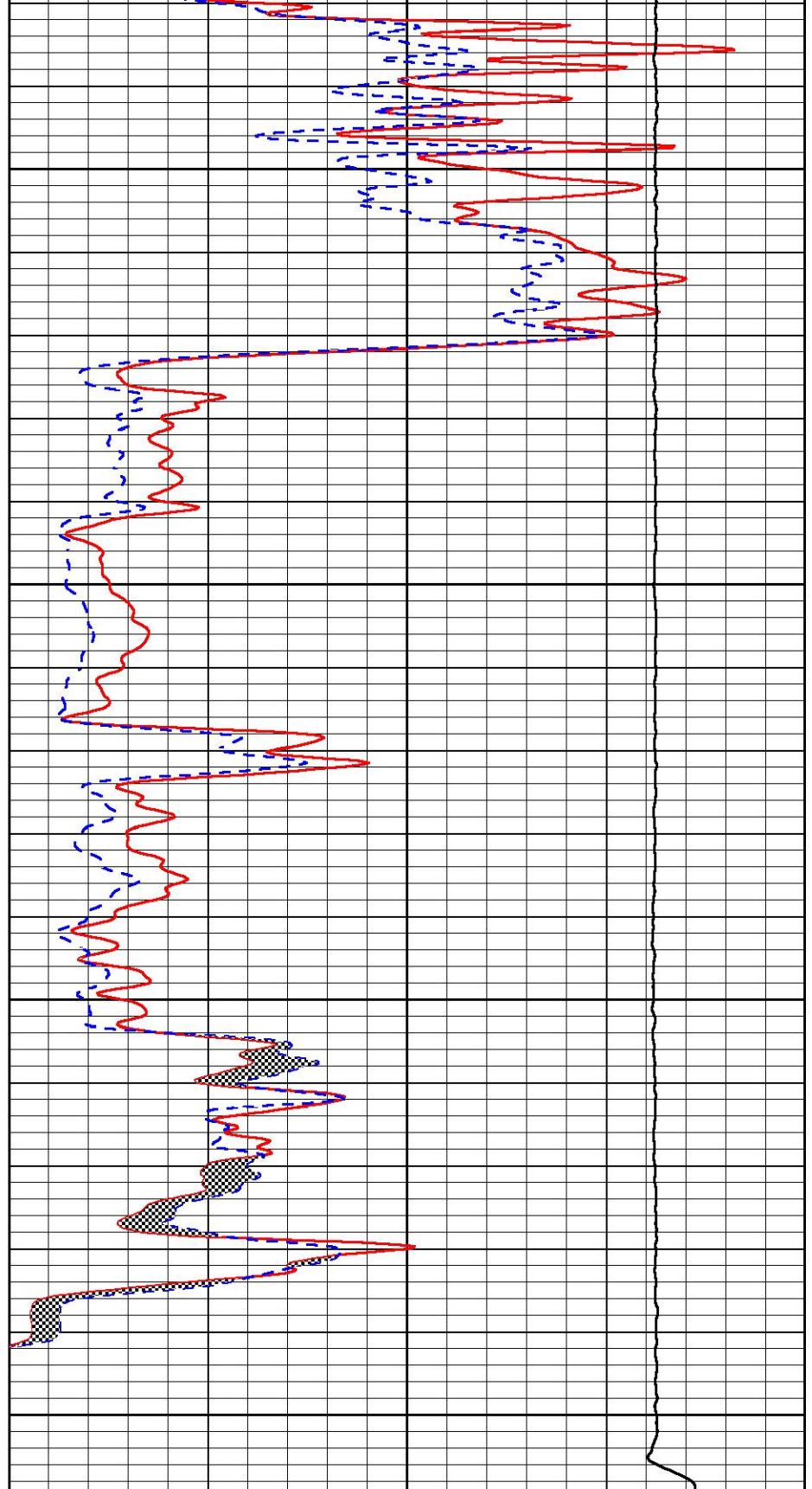
0	GR (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	sp (mV)	0

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



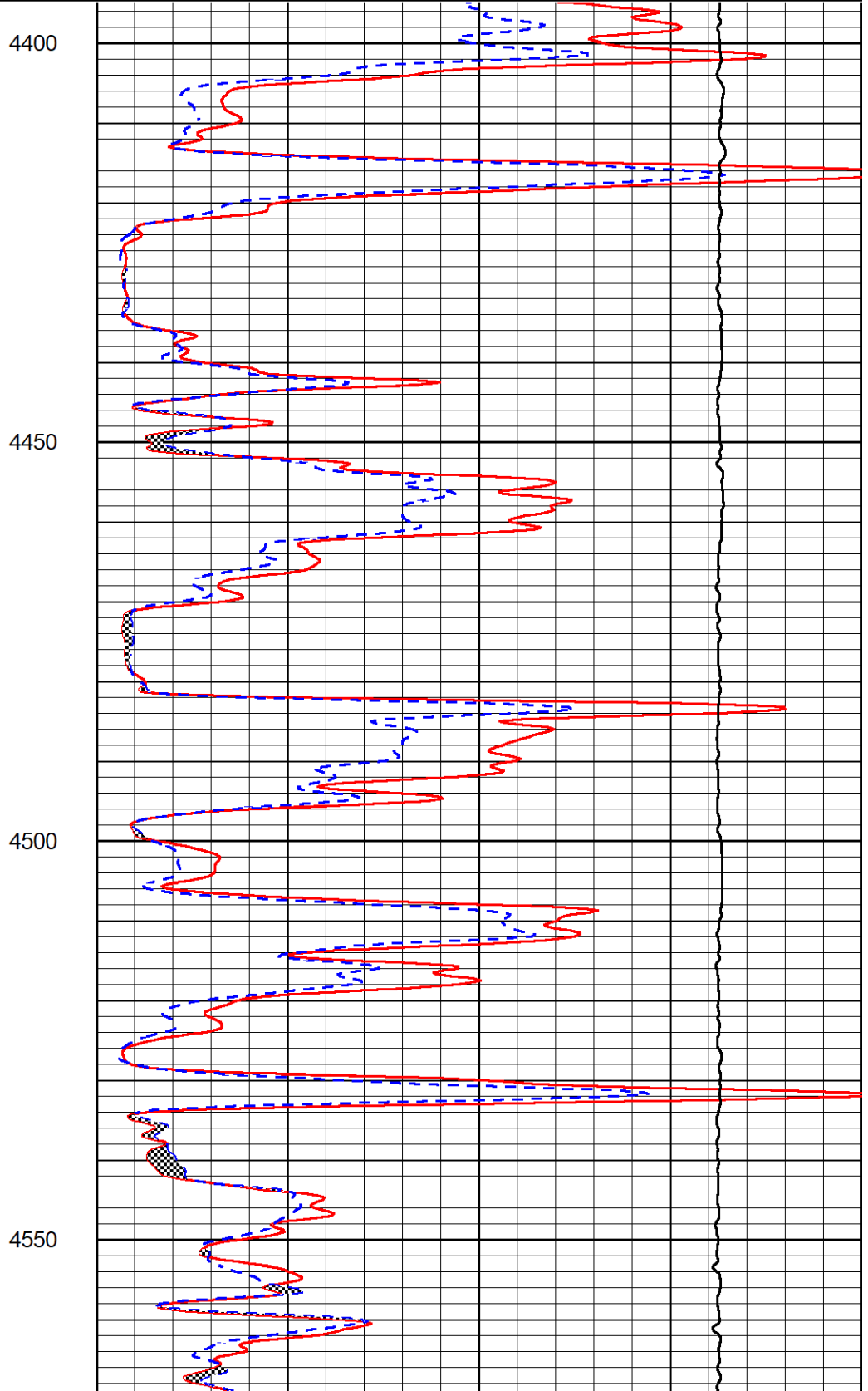
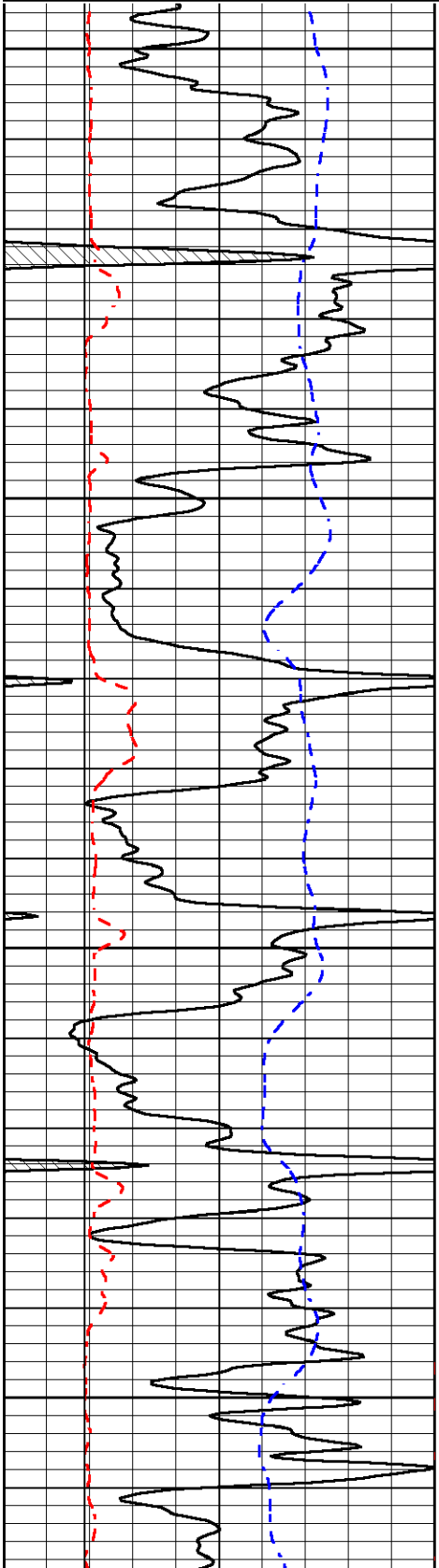
REPEAT SECTION

REPEAT PASS

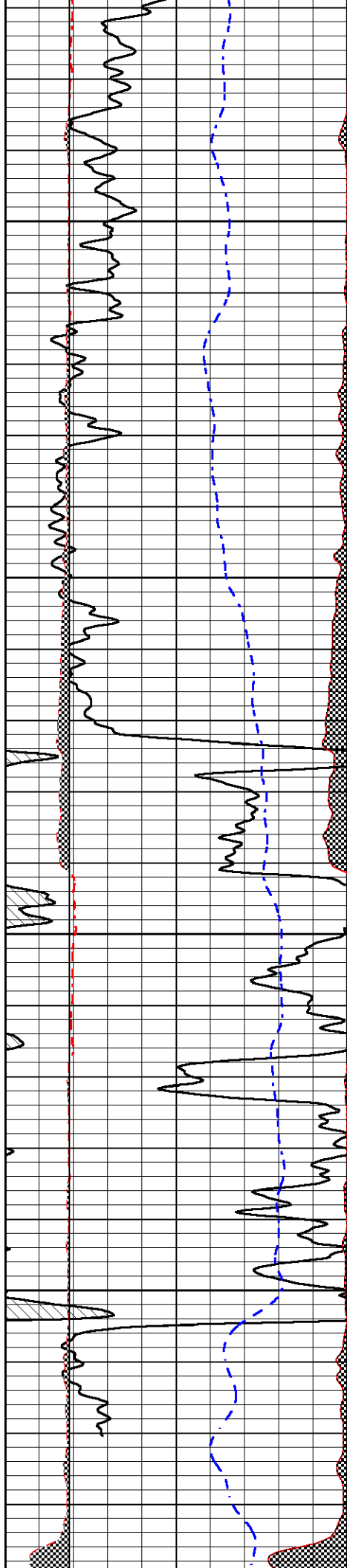
Database File      campbell\_jpc #1.db  
Dataset Pathname   StkMI/pass2.1  
Presentation Format  \_micro  
Dataset Creation    Thu Jan 11 11:43:10 2024  
Charted by          Depth in Feet scaled 1:240

0	GR (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



4400  
4450  
4500  
4550

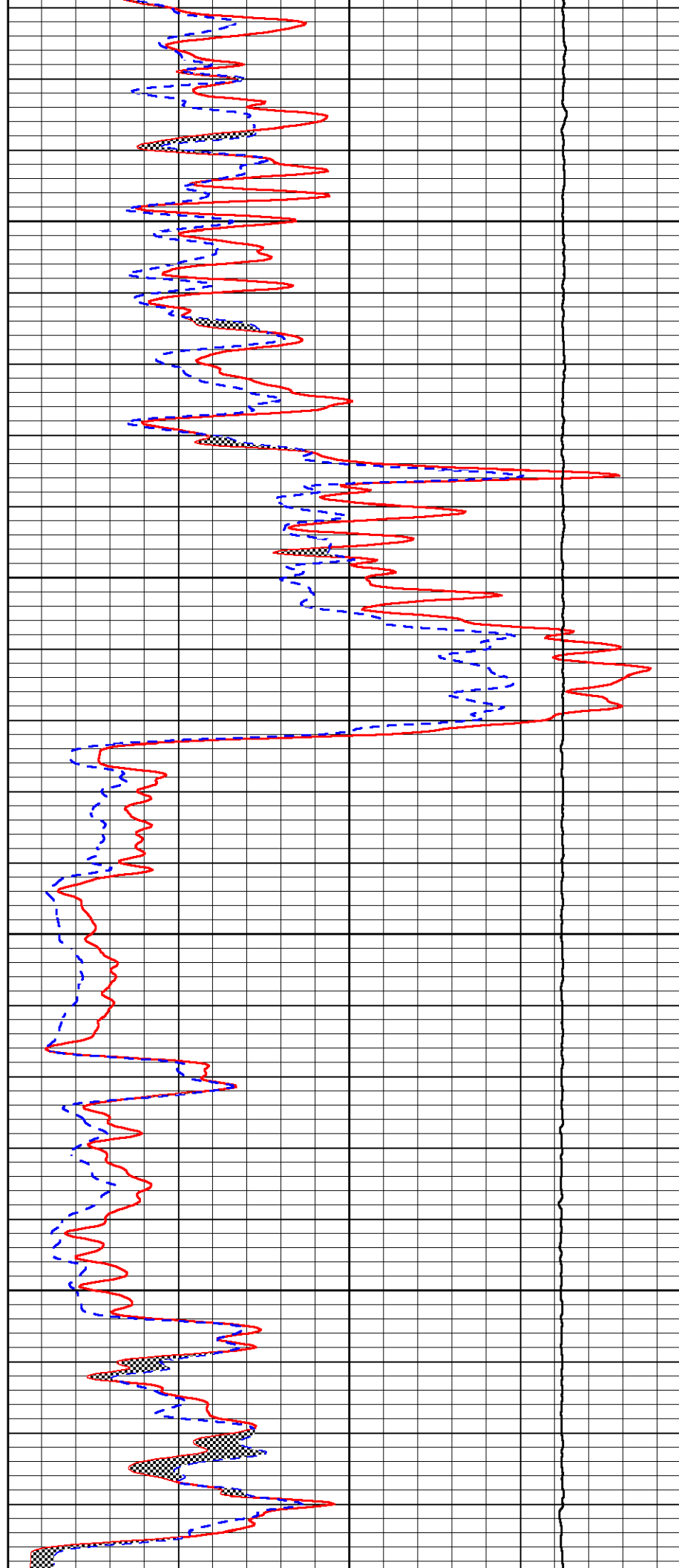


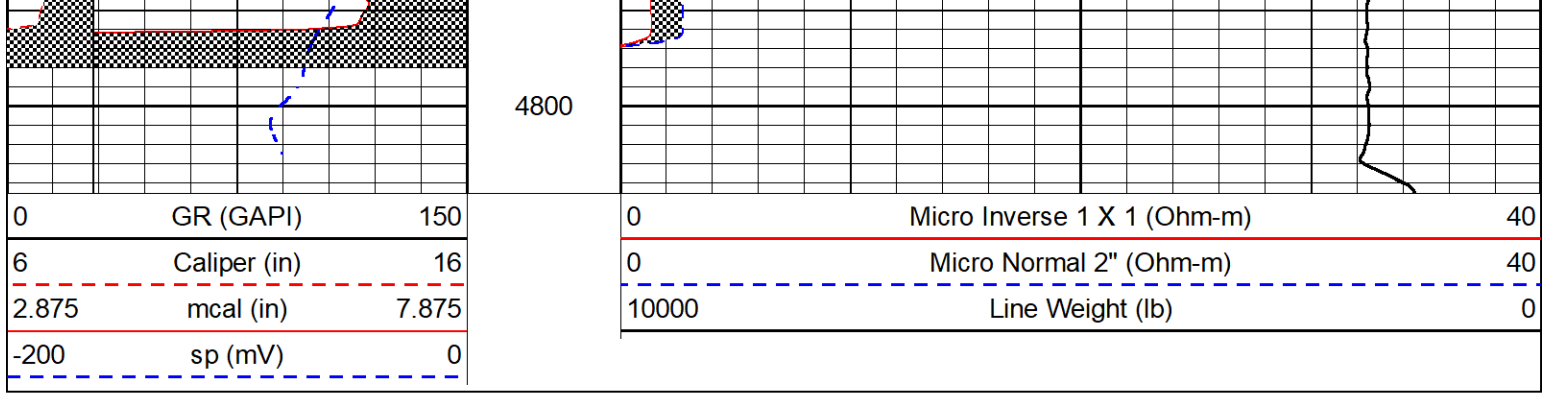
4600

4650

4700

4750





### Calibration Report

Database File: campbell\_jpc #1.db  
 Dataset Pathname: StkMI/pass3.1  
 Dataset Creation: Thu Jan 11 12:02:55 2024

### Dual Induction Calibration Report

Serial-Model: 507-M&W  
 Surface Cal Performed:

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	68.570	638.100	0.000	255.800	mmho/m	0.500	-37.000
Medium	184.288	716.191	0.000	255.800	mmho/m	0.450	-79.000

### Microlog Calibration Report

Serial-Model: 401-PSIML  
 Performed: Mon Sep 25 22:02:56 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	20500.0000	-1.3000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	17000.0000	-0.7500
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-137.8600

### LITHODENSITY Calibration Report

Serial Number: 704-10  
 Tool Model: STEP LITHO  
 Performed: Wed Oct 11 14:52:04 2023

#### Source:

	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	52	56	202	260	22	71	45	1	cps
LS:	82	93	356	462	52	144	94	3	cps

#### Aluminum:

SS:	868	1009	2312	2012	39	73	47	2	cps
LS:	1063	1847	3324	1556	63	146	95	6	cps

#### Magnesium:

SS:	1458	1686	3853	2923	42	73	48	3	cps
LS:	4604	7631	13124	4967	100	134	94	14	cps

#### Aluminum+Iron:

Aluminum+Iron:	SS: 538	708	1910	1720	37	73	47	1	cps
	LS: 619	1309	2817	1400	60	147	97	5	cps
		Density			PE				
		Actual	Calibrated		Actual	Calibrated	Quality		
Background:									
	SS:						0.225		
	LS:						0.208		
Aluminum:									
	SS:	2.6000	2.6000	g/cc				0.210	
	LS:	2.6000	2.6000	g/cc				0.210	
Magnesium:									
	SS:	1.6800	1.6800	g/cc	2.5700	2.5700		0.207	
	LS:	1.6800	1.6800	g/cc	2.5700	2.5700		0.173	
Aluminum+Iron:									
	SS:					6.1800		0.215	
	LS:					6.1800		0.205	

Before Survey									
Performed:	Wed Feb 9 13:15:42 2022								
SS:	0	0	0	0	0	0	0	0	cps
LS:	1370	1580	3705	3037	48	80	50	4	cps
After Survey									
Performed:	Wed Feb 9 13:16:02 2022								
SS:	0	0	0	0	0	0	0	0	cps
LS:	1400	1600	3800	3100	60	100	70	6	cps

Caliper:	Reference:	Reading:
Small Ring:	6.0 in	0.2
Large Ring:	15.0 in	0.8
Gain:	16.161	
Offset:	1.050	

Compensated Neutron Calibration Report

Serial Number: 207  
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	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	


POST-SURVEY VERIFICATION

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

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

Gamma Ray Calibration Report

Serial Number:	102		
Tool Model:	M&W		
Performed:	Mon Sep 25 22:02:33 2023		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.5250	GAPI/cps	

 <b>MIDWEST WIRELINE</b>	<b>Company</b>	Campbell Energy LLC
	<b>Well</b>	JPC #1
	<b>Field</b>	Turkey Creek East
	<b>County</b>	Barber
	<b>State</b>	Kansas