



MIDWEST WIRELINE

MICRORESISTIVITY LOG

Company Russell Oil, Inc.					
Well	Hockersmith 'C' #15-1				
Field	Rumback				
County	Logan				
State	Kansas				
Company Russell Oil, Inc.					
Well	Hockersmith 'C' #15-1				
Field	Rumback				
County	Logan				
State	Kansas				
Location: API #: 15-109-21612-00-00					
1675' FNL & 1150' FWL					
SEC 15 TWP 11S RGE 32W	CNL/CDL DIL				
Permanent Datum	Ground Level	Elevation	3051'	Elevation	3056'
Log Measured From	Kelly Bushing			D.F.	N/A
Drilling Measured From	Kelly Bushing			G.L.	3051'
Date	3/10/2021				
Run Number	One				
Depth Driller	4694'				
Depth Logger	4696'				
Bottom Logged Interval	4695'				
Top Log Interval	3700'				
Casing Driller	8.625" @ 305'				
Casing Logger	306'				
Bit Size	7.875"				
Type Fluid in Hole	Chemical				
Salinity, ppm CL	3000				
Density / Viscosity	9.4	57			
pH / Fluid Loss	11.0	8.0			
Source of Sample	FLOWLINE				
Rm @ Meas. Temp	0.60 @ 60				
Rmt @ Meas. Temp	0.45 @ 60				
Rmc @ Meas. Temp	0.81 @ 60				
Source of Rmt / Rmc	CHARTS				
Rm @ BHT	0.29 @ 123				
Operating Rig Time	3 Hours				
Max Rec. Temp. F	123				
Equipment Number	P-24				
Location	HAYS				
Recorded By	D. Schmidt				
Witnessed By	Kitt Noah				

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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.

Oakley,
Hwy 83 and Old 40, 1.2 South,
East 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

Engineer: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Kitt Noah
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\russell_hockersmith c 15-1.db
Dataset field/well/stkml/pass3.3/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 100	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV 403	degF 0	Off	ft 4696

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

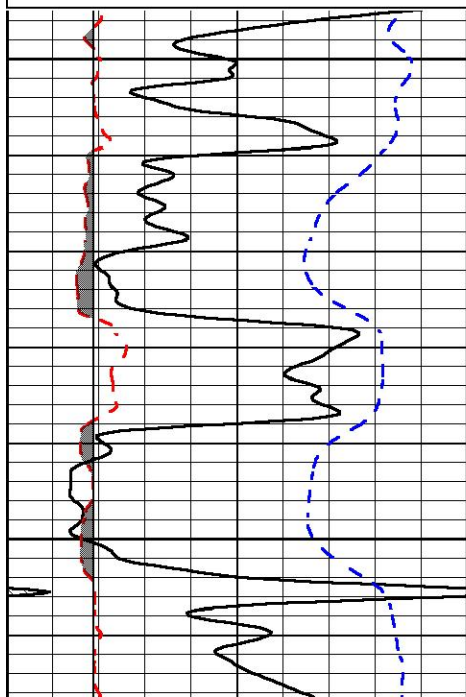


MAIN PASS

Database File russell_hockersmith c 15-1.db
Dataset Pathname stkml/pass3.1
Presentation Format _micro
Dataset Creation Wed Mar 10 21:40:21 2021
Charted by Depth in Feet scaled 1:240

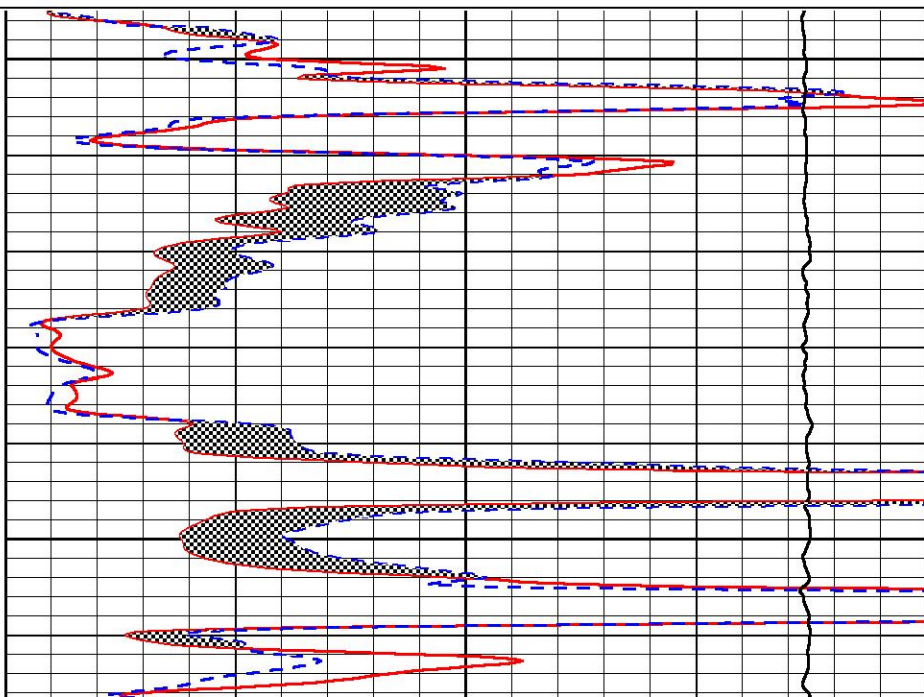
0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
6	Bit Size (in)	16
-200	sp (mV)	0

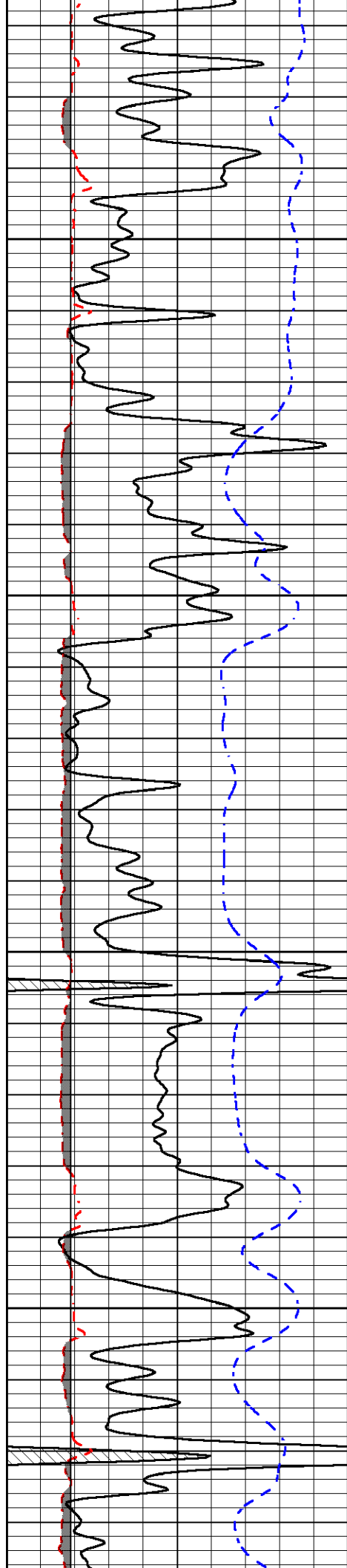
0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
10000	Line Weight (lb)	0



3700

3750



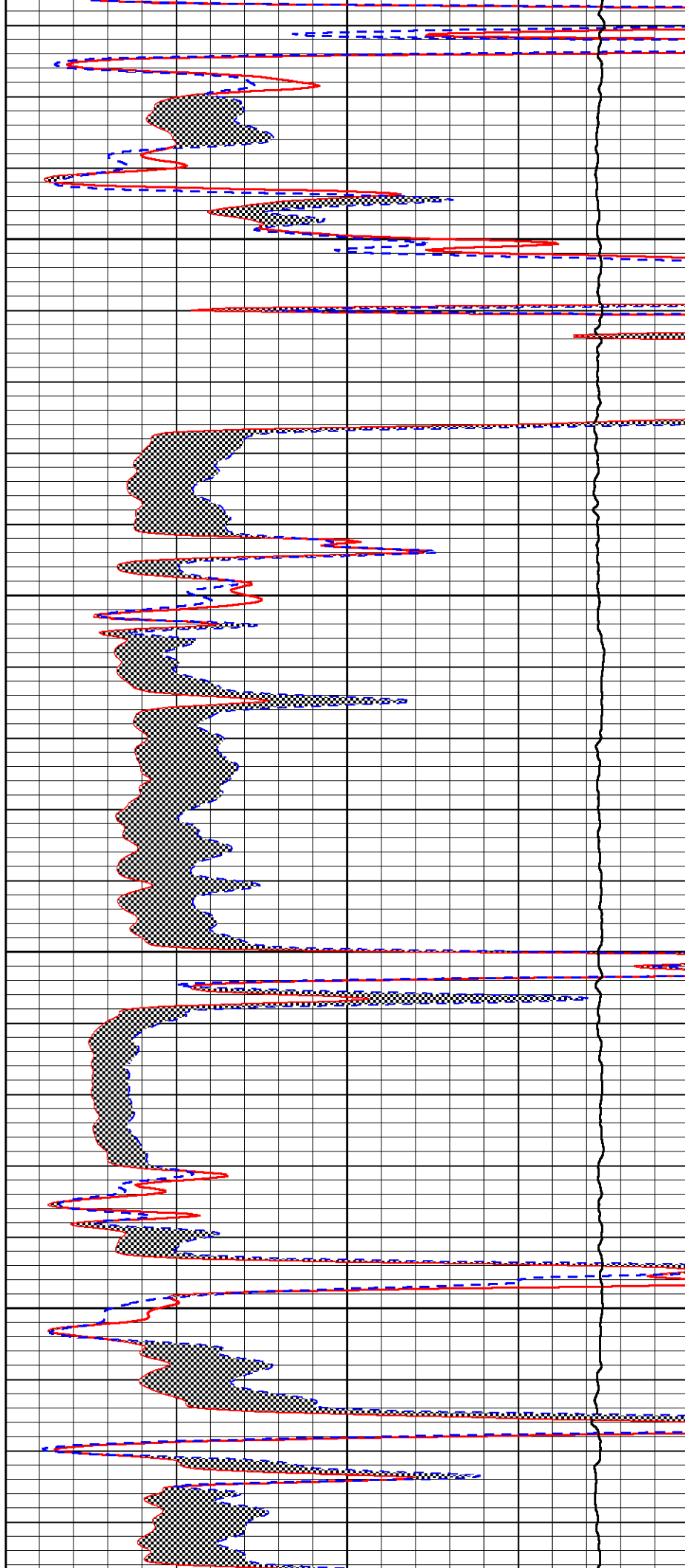


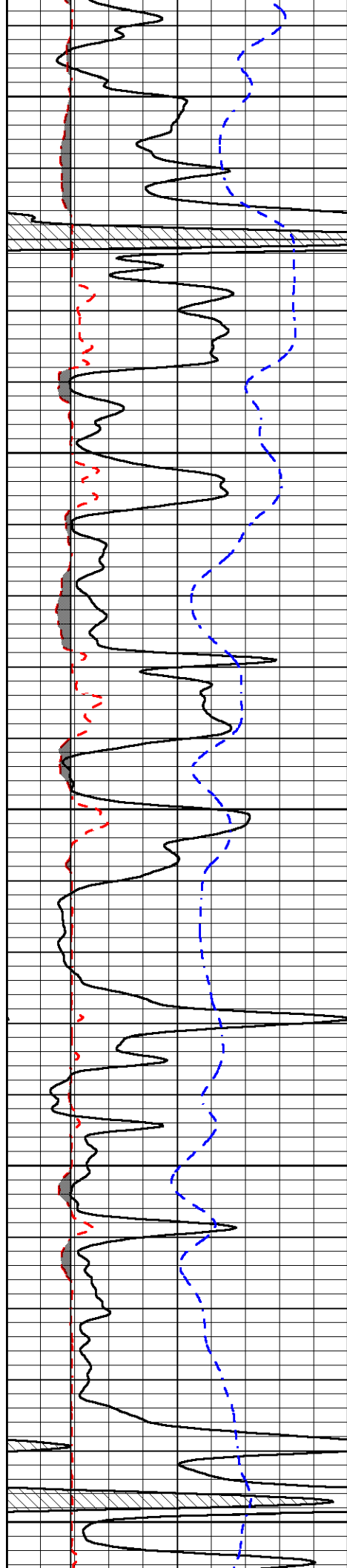
3800

3850

3900

3950





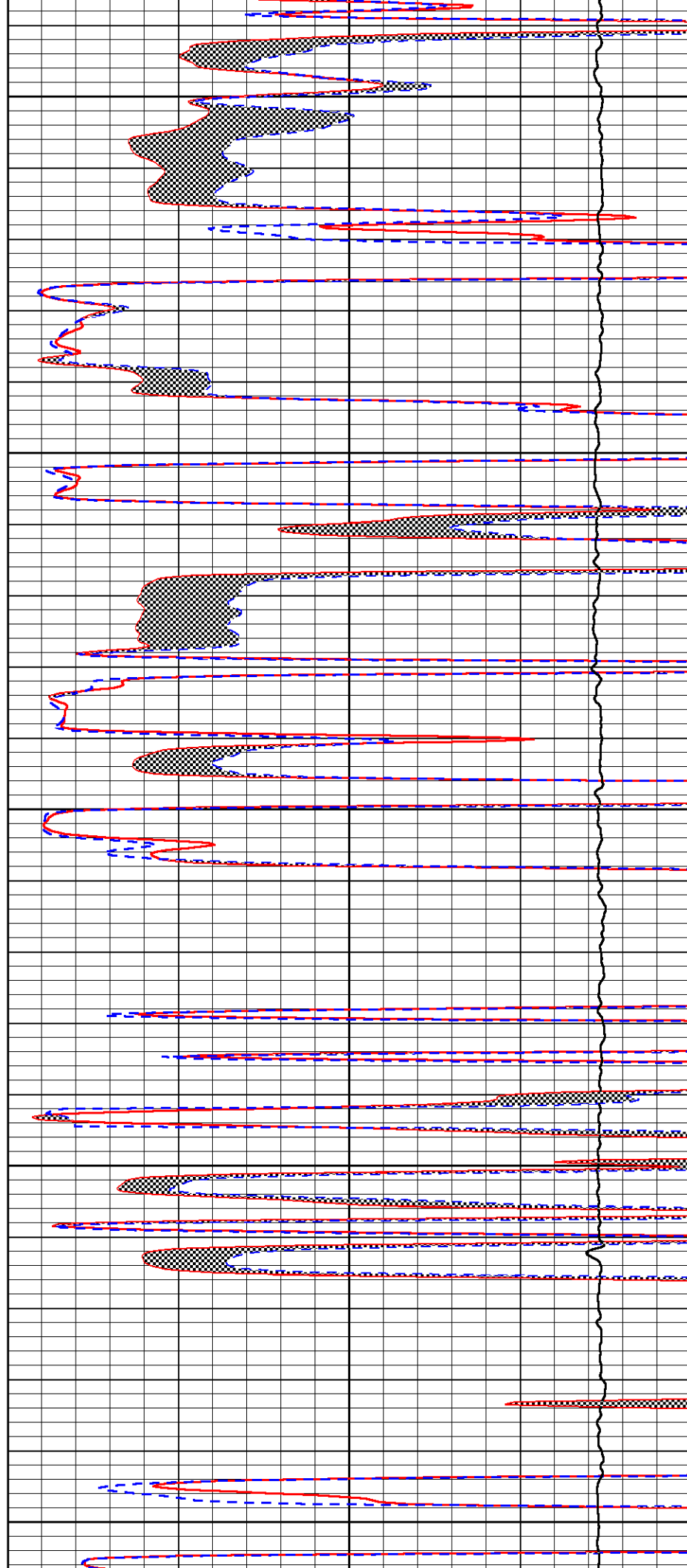
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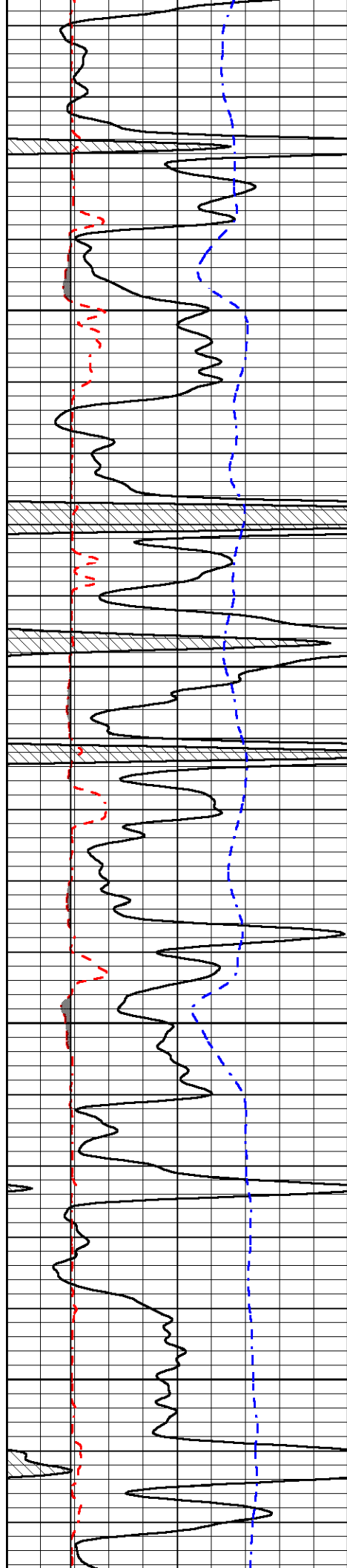
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4100

4150

4200



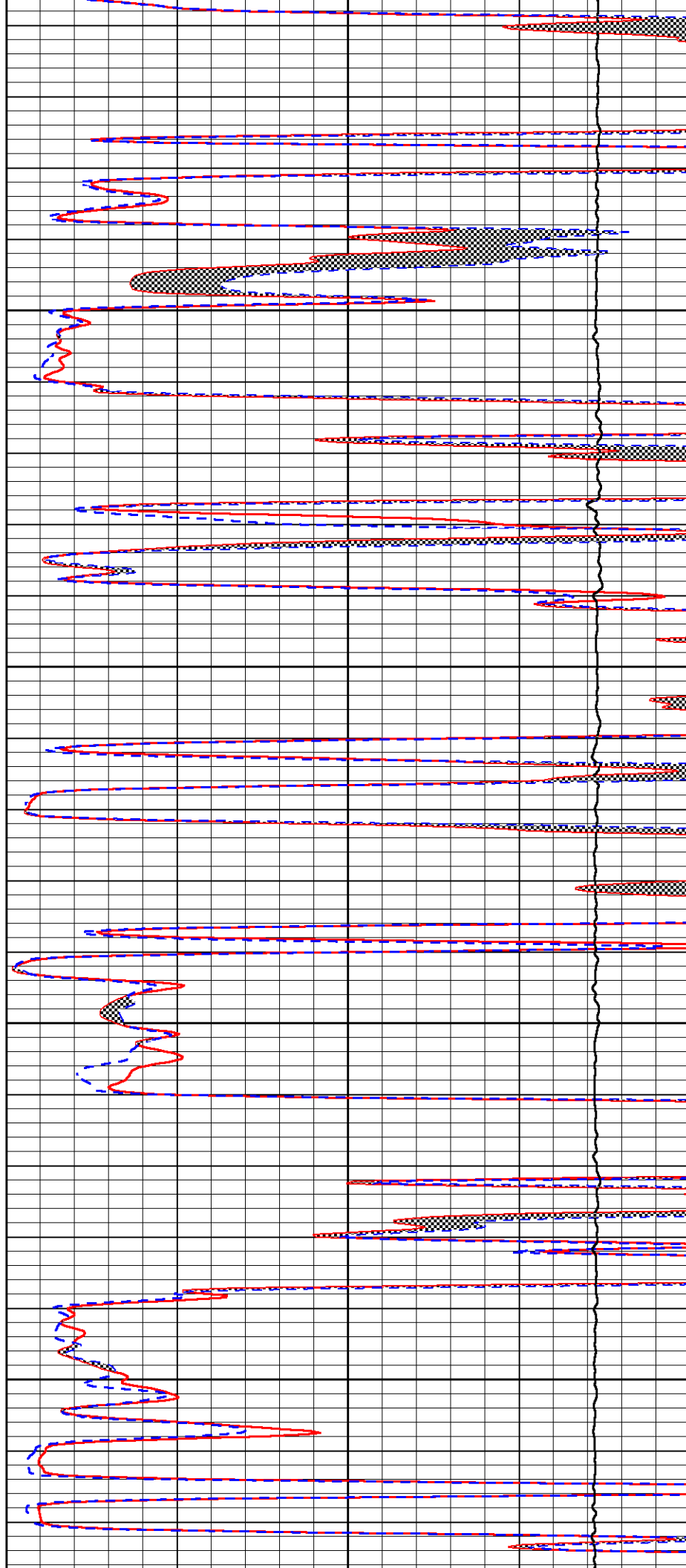


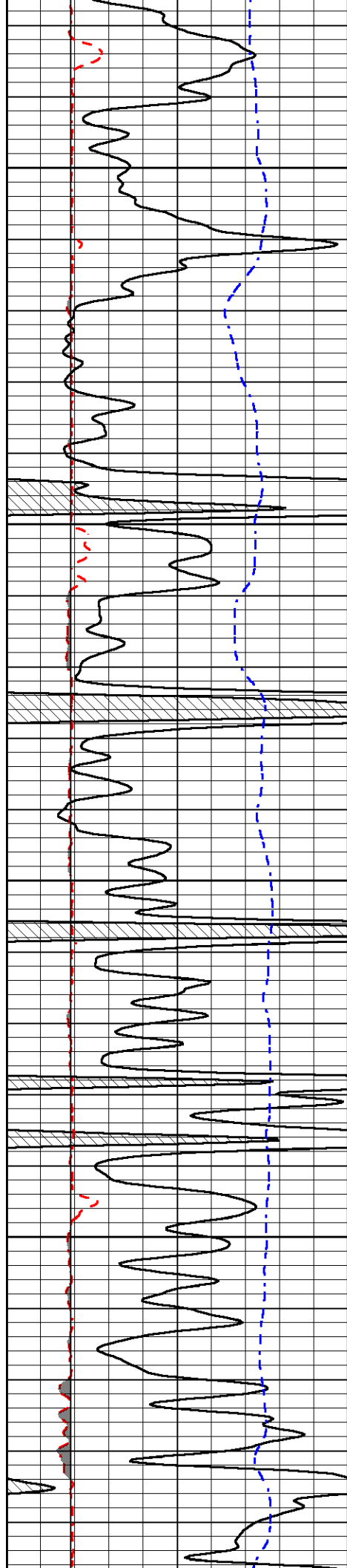
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4300

4350

4400



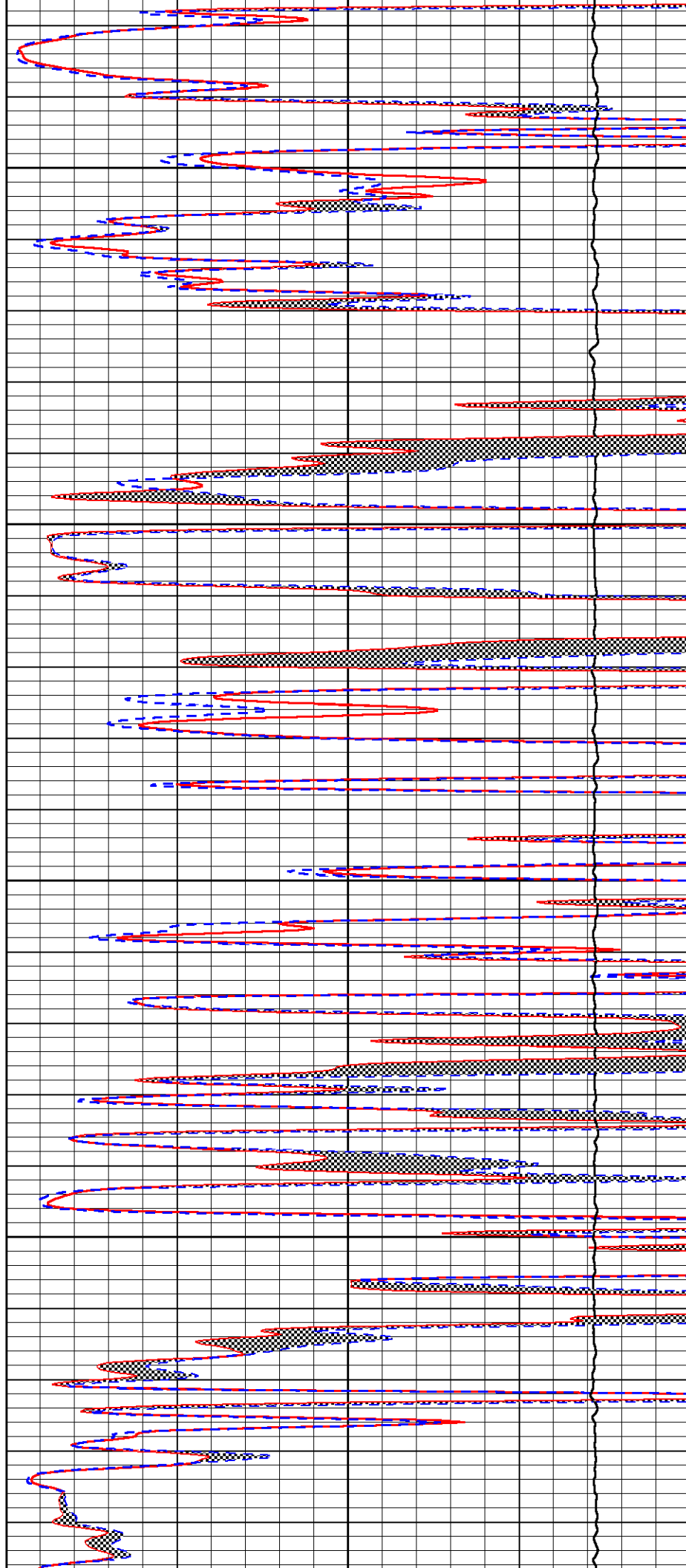


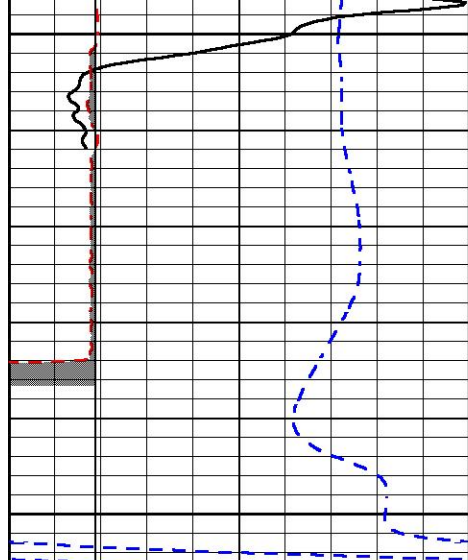
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4500

4550

4600

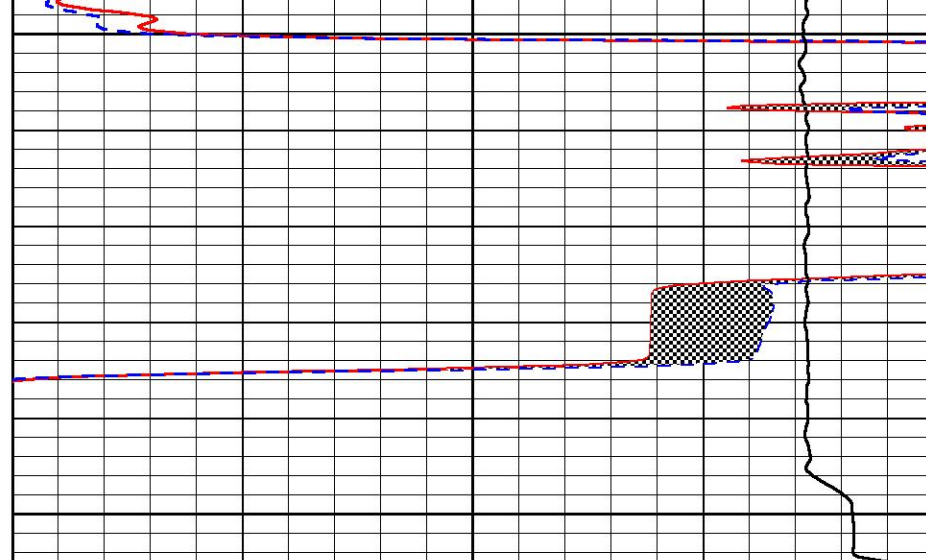




4650

4700

0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
6	Bit Size (in)	16
-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



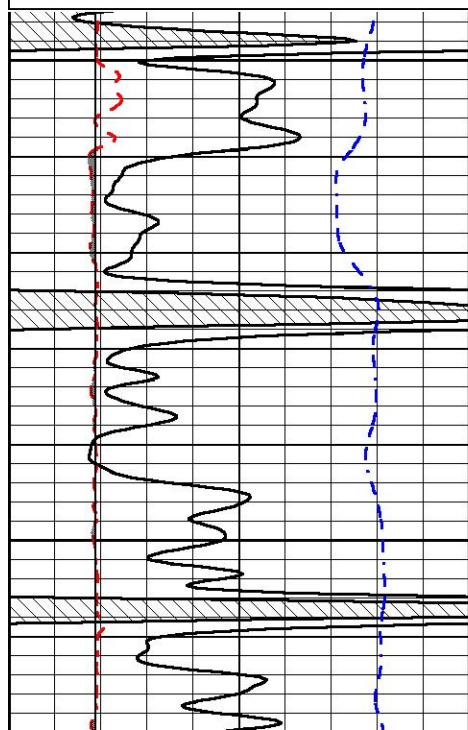
MIDWEST WIRELINE

REPEAT SECTION

Database File russell_hockersmith c 15-1.db
 Dataset Pathname stkml/pass2.1
 Presentation Format _micro
 Dataset Creation Wed Mar 10 21:29:35 2021
 Charted by Depth in Feet scaled 1:240

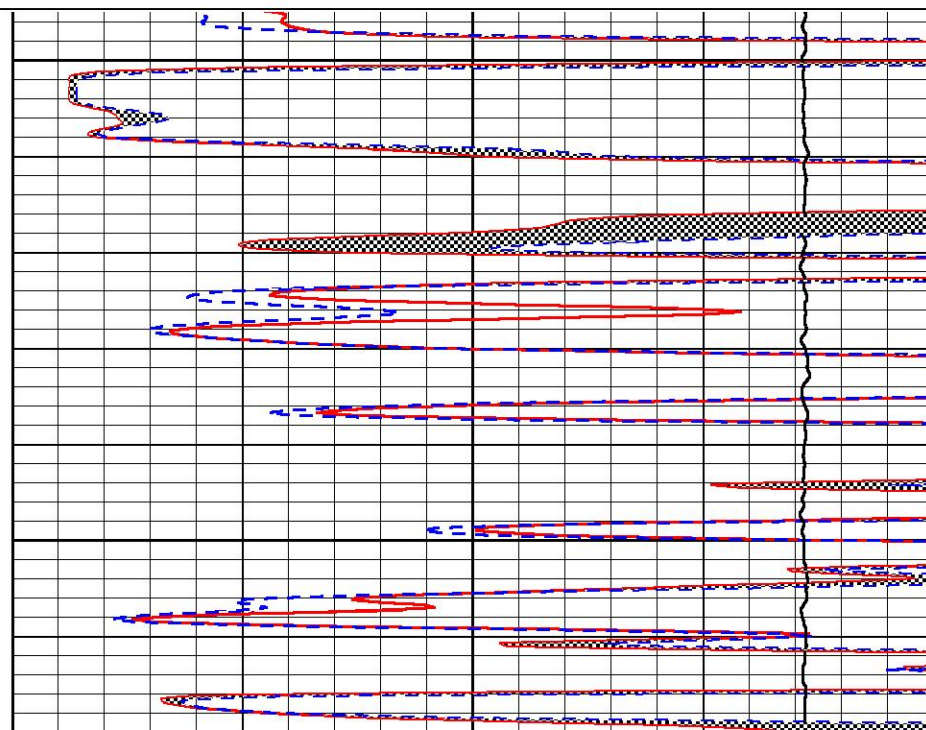
0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
6	Bit Size (in)	16
-200	sp (mV)	0

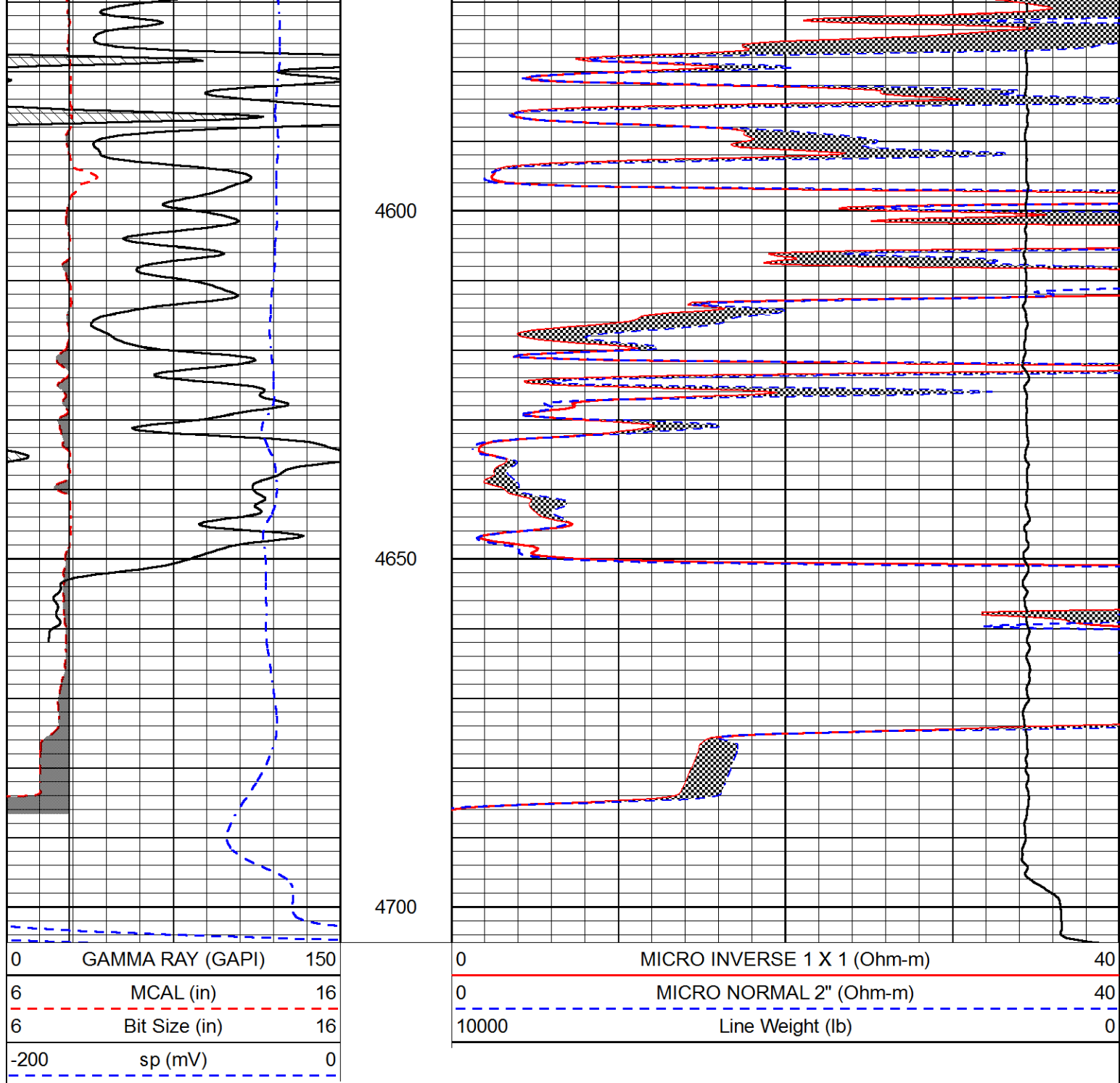
0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
10000	Line Weight (lb)	0



4500

4550





Calibration Report							
Database File	russell_hockersmith c 15-1.db						
Dataset Pathname	stkml/pass3.3						
Dataset Creation	Wed Mar 10 21:25:37 2021						
Dual Induction Calibration Report							
Serial-Model:				952-828-PSI HIGH TEMP			
Calibration Performed:				Wed Mar 10 20:07:20 2021			
Readings			References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.000	mmho/m	0.465	-34.500
Medium	0.000	1348.000	142.000	255.000	mmho/m	0.325	-31.000

Microlog Calibration Report							
Serial-Model: Performed:				PSI-01-PSIML Wed Mar 03 05:24:59 2021			
Readings			References			Results	
	Zero	Cal		Zero	Cal	m	b
Normal	0.0000	1.0000		0.0000	1.0000	Ohm-m	14000.0000
Inverse	0.0000	1.0000		0.0000	1.0000	Ohm-m	13000.0000
Caliper	1.0033	1.0841		5.0000	16.5000	in	142.3500
							-1.5000
							-0.5000
							-138.6500

Compensated Density Calibration Report							
Serial-Model: Source / Verifier: Master Calibration Performed:				817-947-M&W 16955B / 2ci Wed Mar 03 05:25:05 2021			
Master Calibration							
	Density			Far Detector		Near Detector	
Magnesium	1.755	g/cc		6127.15	5922.31	cps	
Aluminum	2.670	g/cc		1141.85	3762.09	cps	
Spine Angle = 74.89				Density/Spine Ratio = 0.526			
	Size			Reading			
Small Ring	4.50	in		1.02			
Large Ring	14.50	in		1.23			

Compensated Neutron Calibration Report							
Serial Number: Tool Model: Calibration Performed:				207-MW M&W WED MAR 3 7:30:30 2021			
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: Tool Model: Calibration Performed:		233-M&W M&W Wed Mar 03 05:25:33 2021					
Calibrator Value:		1.0		GAPI			
Background Reading:		0.0		cps			
Calibrator Reading:		1.0		cps			
Sensitivity:		0.5500		GAPI/cps			