

MICRORESISTIVITY LOG

MIDWEST WIRELINE

Company Ritchie Exploration, Inc.		Company Ritchie Exploration, Inc.	
Well Scheuerman-Hrbek Trust #1		Well Scheuerman-Hrbek Trust #1	
Field		Field	
County Scott		County Scott	
State Kansas		State Kansas	
Location: API #: 15-171-21280-00-00		Other Services	
2355 FSL 2028 FEL		CNL/CDL DIL/BHCS	
SEC 21 TWP 16S RGE 31W			
Permanent Datum	Ground Level	Elevation	2921
Log Measured From	Kelly Bushing	K.B.	2932
Drilling Measured From	Kelly Bushing	D.F.	
		G.L.	2921
Date	12/5/2021		
Run Number	One		
Depth Driller	4695		
Depth Logger	4695		
Bottom Logged Interval	4694		
Top Log Interval	3500		
Casing Driller	8.625 @ 219		
Casing Logger	219		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	3100		
Density / Viscosity	9.3 52		
pH / Fluid Loss	11.0 6.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.60 @ 55		
Rmt @ Meas. Temp	0.45 @ 55		
Rmc @ Meas. Temp	0.81 @ 55		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.27 @ 123		
Operating Rig Time	5 Hours		
Max Rec. Temp. F	123		
Equipment Number	P-24		
Location	Hays		
Recorded By	D. Schmidt		
Witnessed By	John Goldsmith		

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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.

Healy,
West to Taos Rd, 3 1/2 North, 1/2 East,
South into

Log Measured From: Kelly Bushing

11 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: John Goldsmith
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\ritchie_scheurmanhrbek trust 1.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	123	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	230	40		4695

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



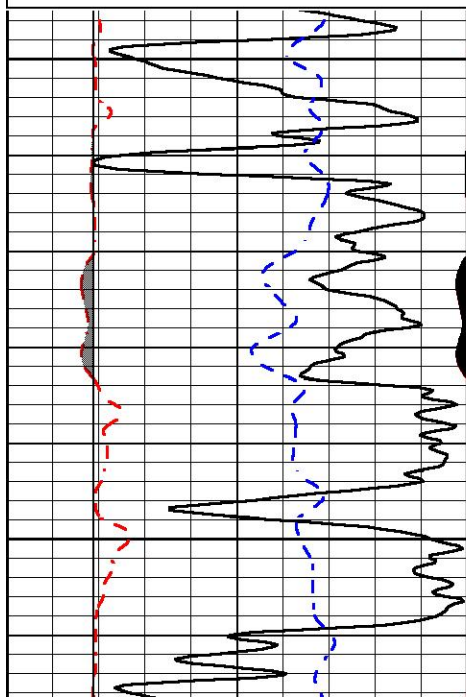
DETAIL SECTION

MAIN PASS

Database File ritchie_scheurmanhrbek trust 1.db
Dataset Pathname stkml/pass3.1
Presentation Format _micro
Dataset Creation Sun Dec 05 03:53:46 2021
Charted by Depth in Feet scaled 1:240

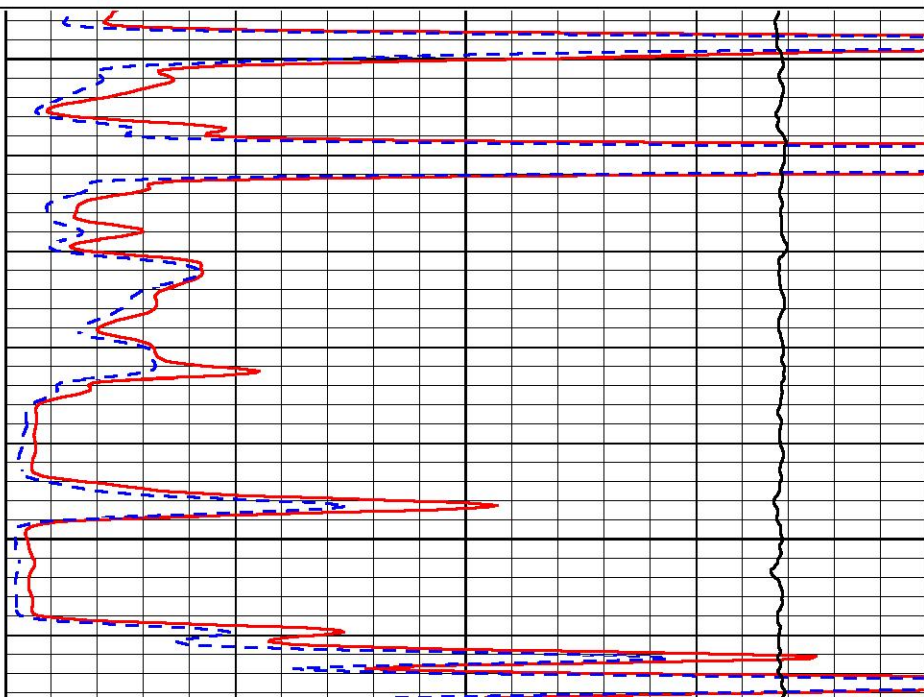
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
-2.875	mcal (in)	7.875
-200	SP (mV)	0

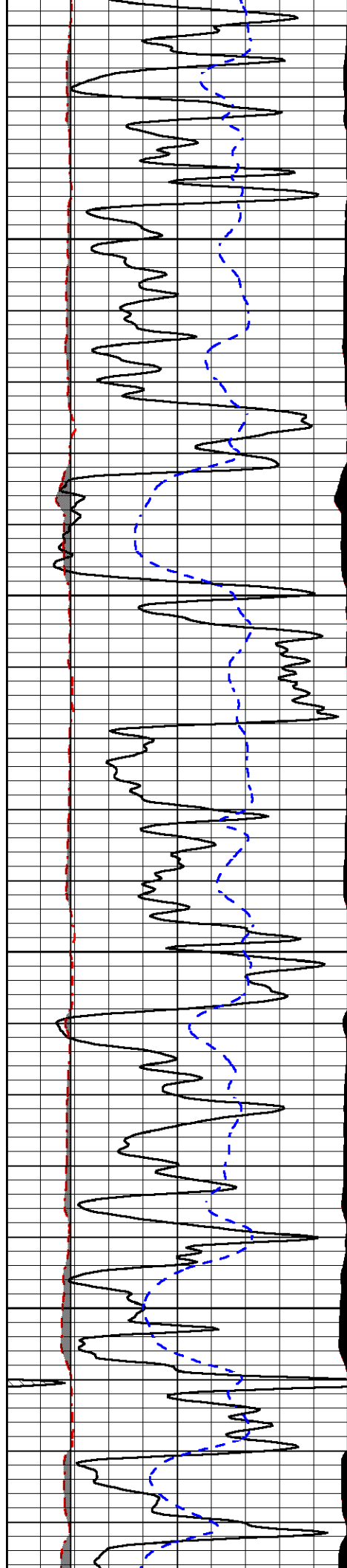
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



3500

3550



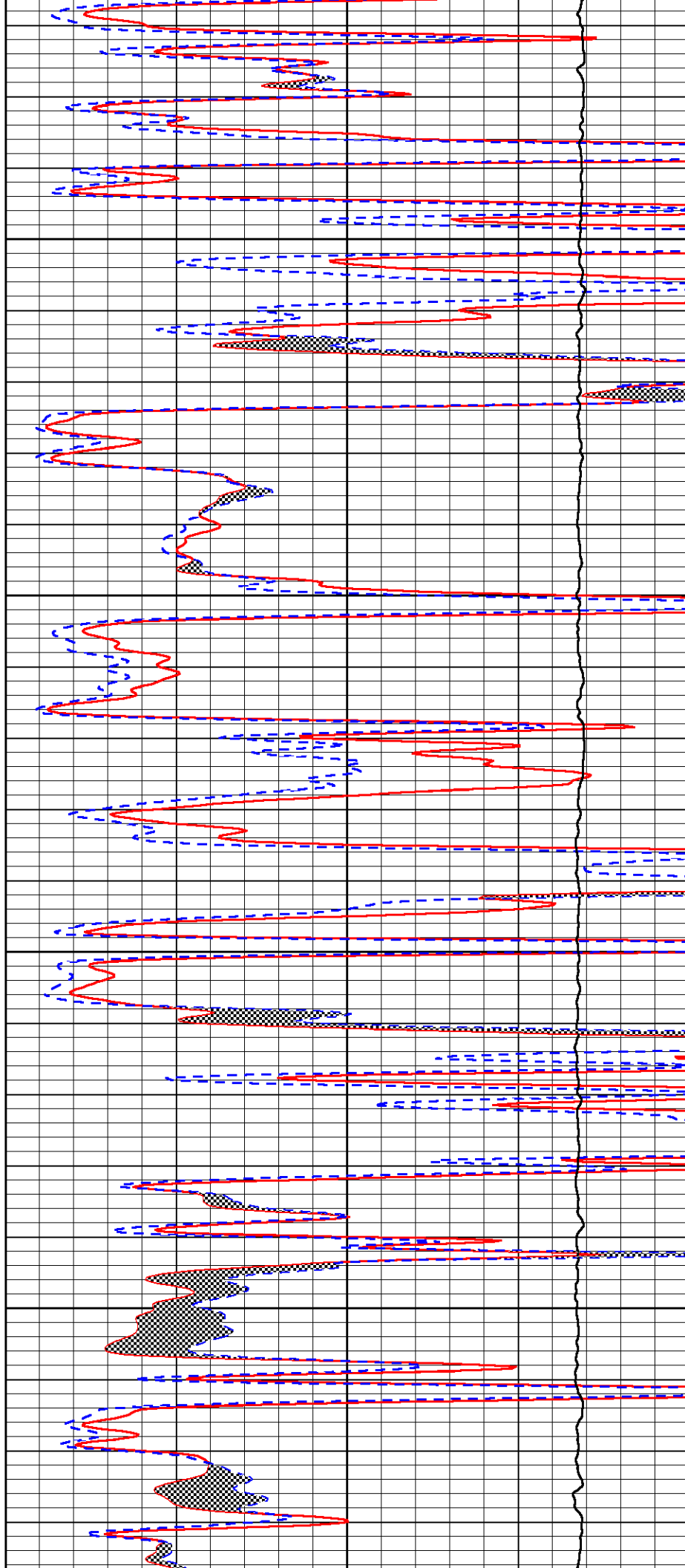


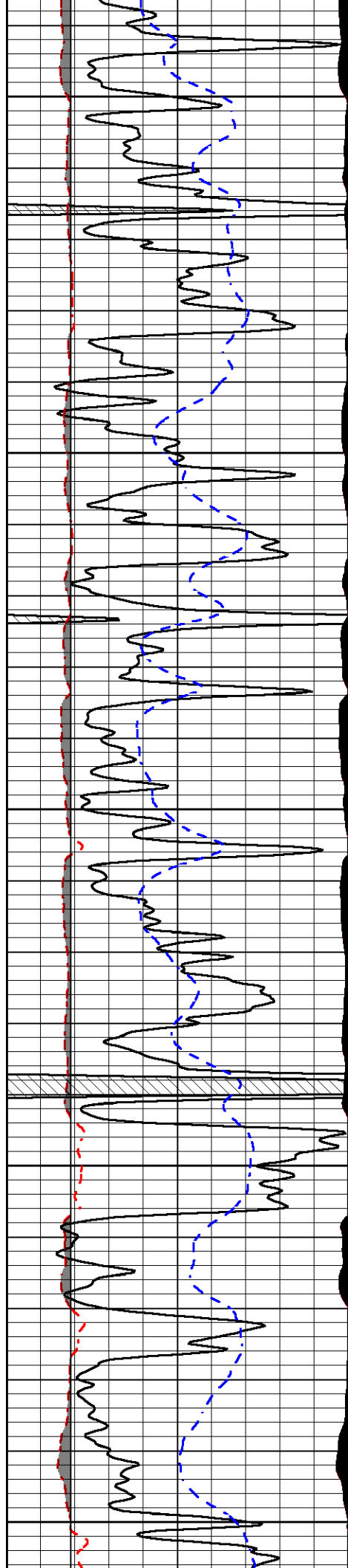
3600

3650

3700

3750





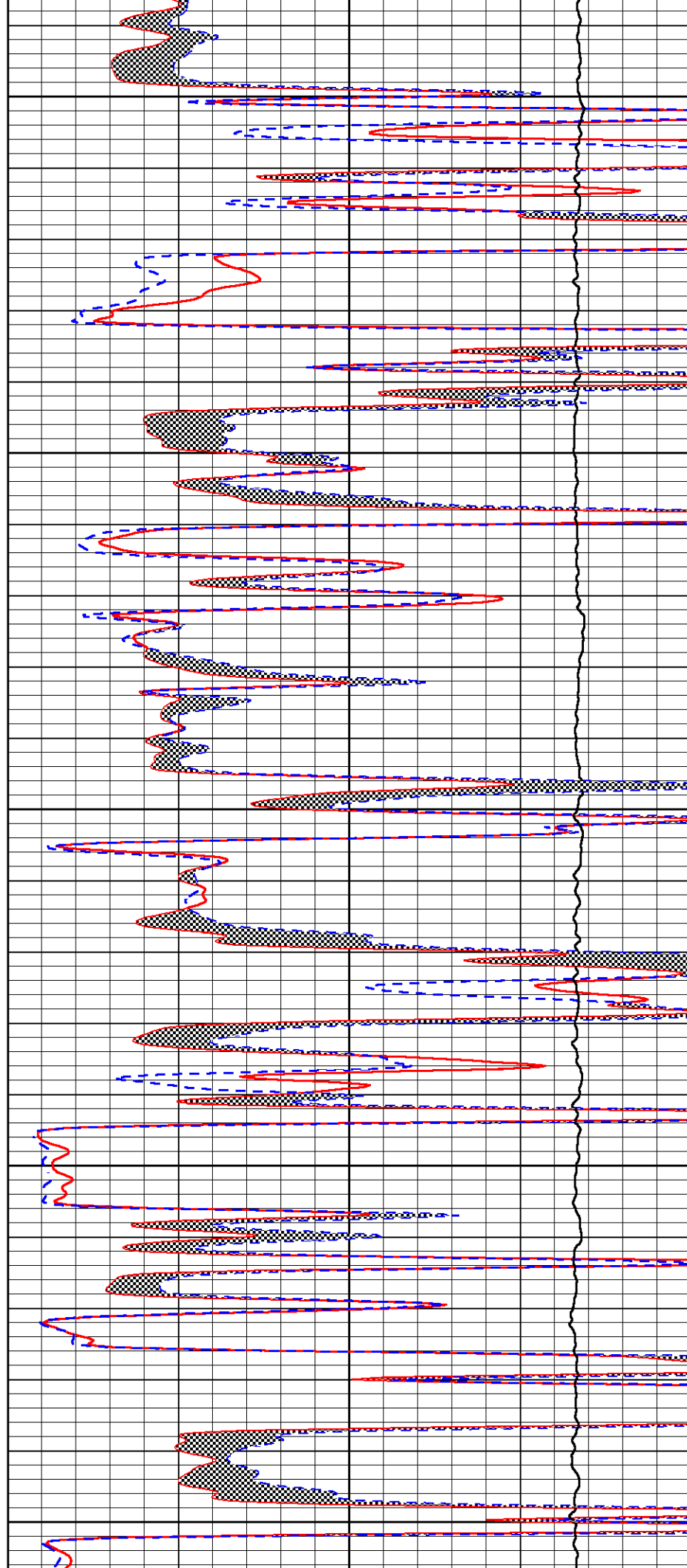
3800

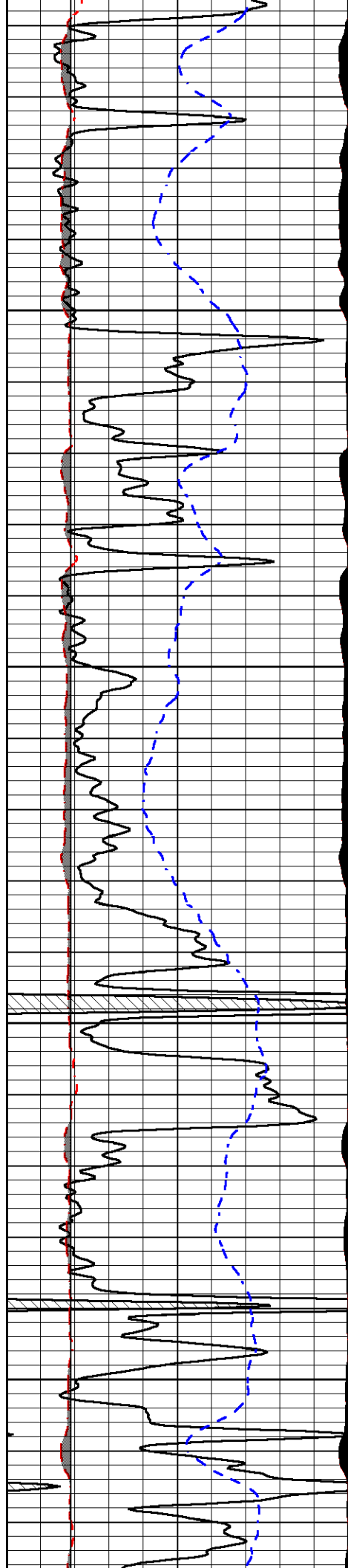
3850

3900

3950

4000



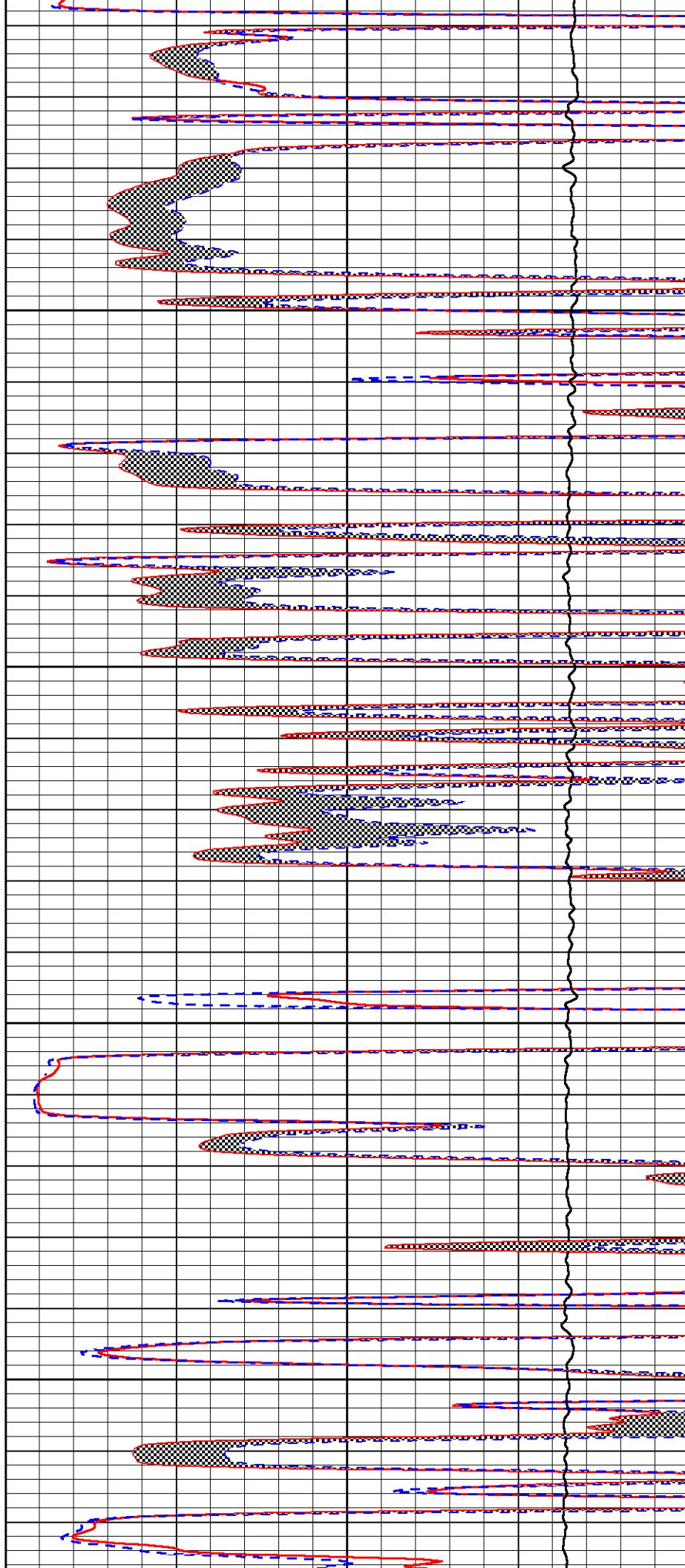


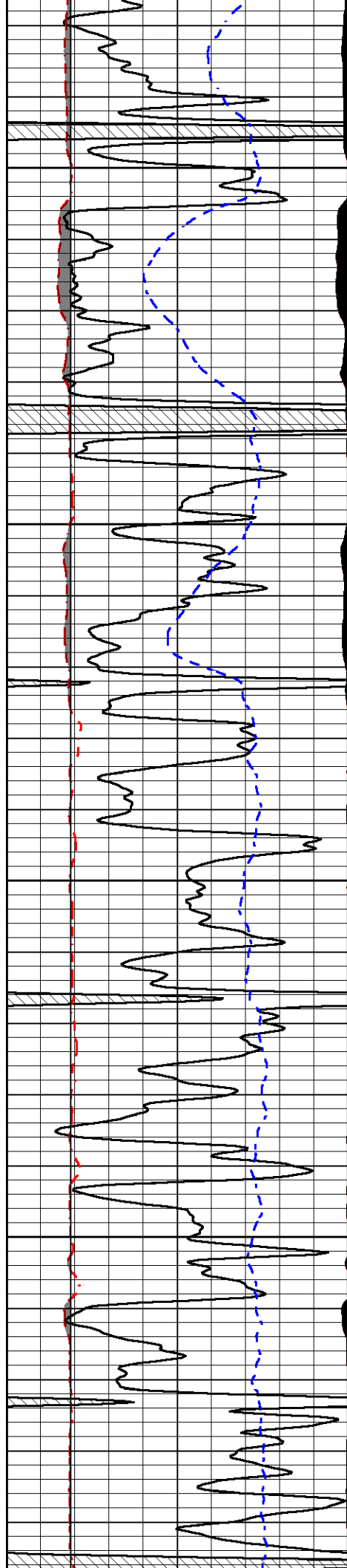
4050

4100

4150

4200



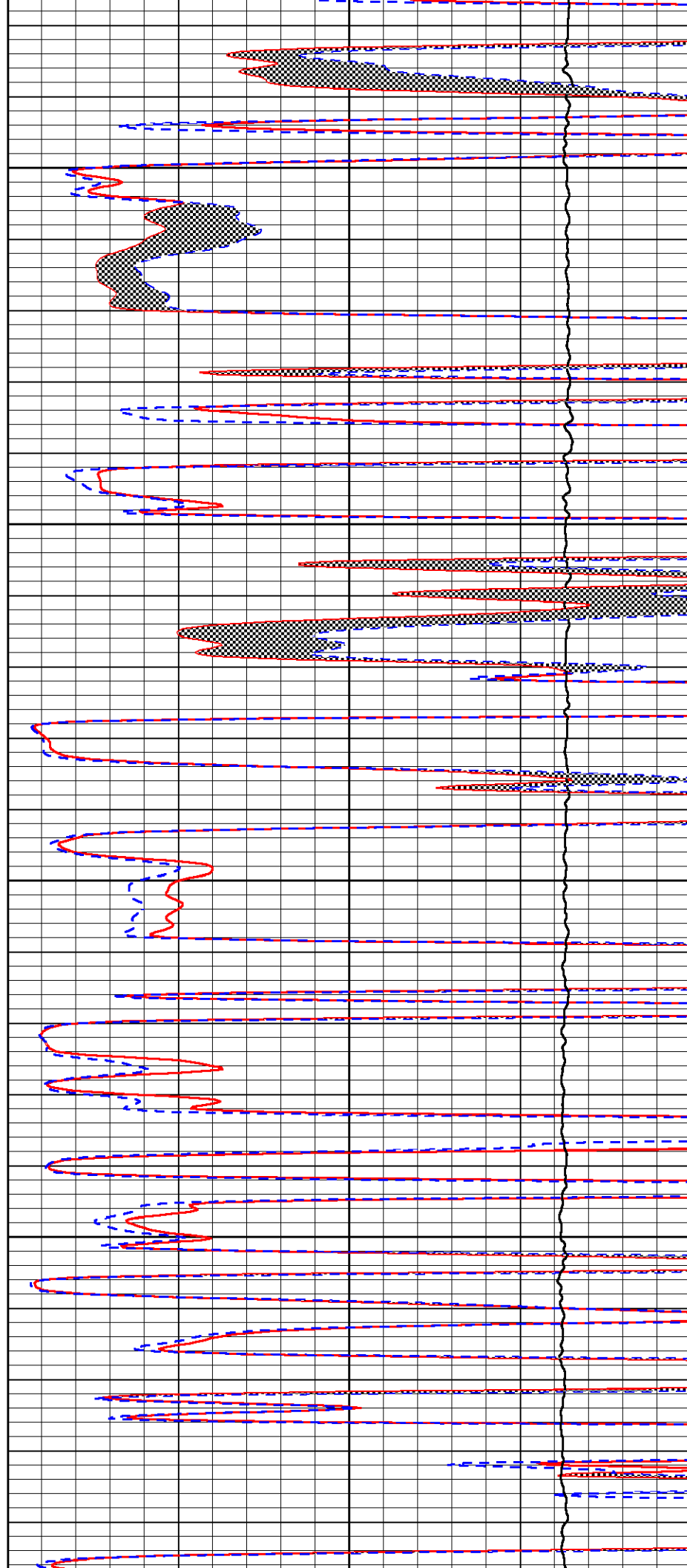


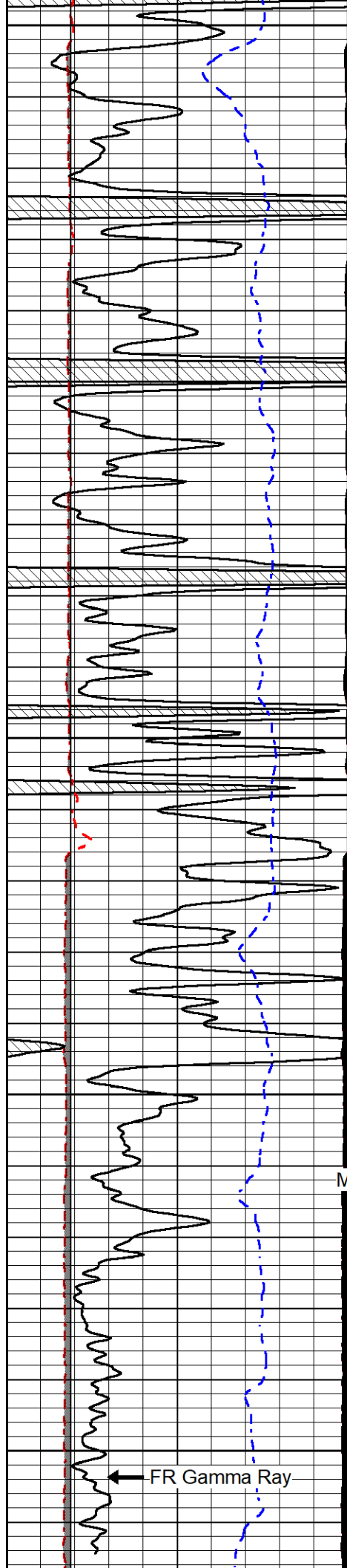
4250

4300

4350

4400





4450

4500

4550

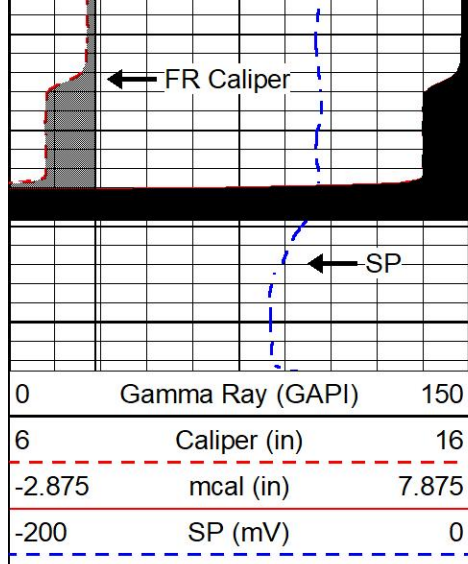
4600

4650

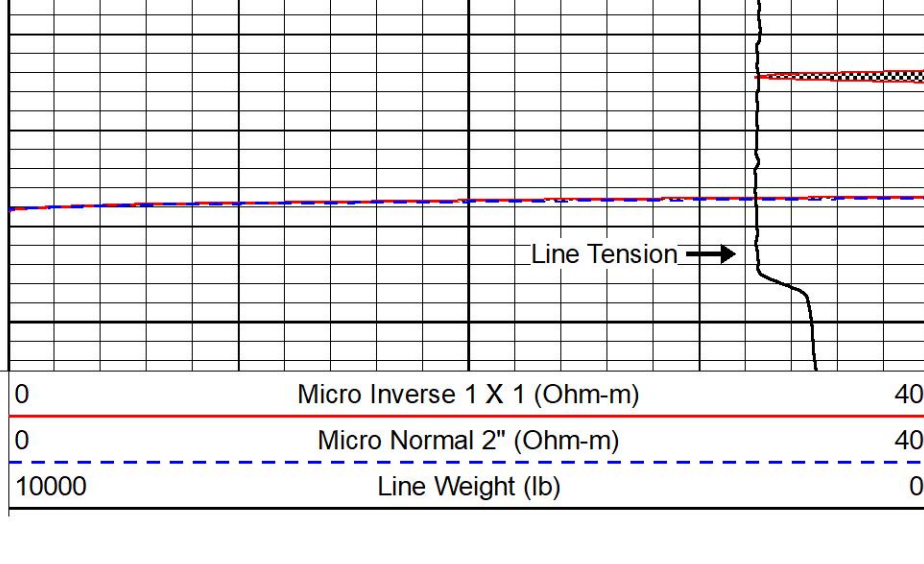
FR Gamma Ray

Micro Normal 2" →

← Micro Inverse 1 X 1



4700

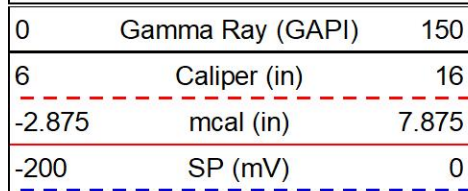


MIDWEST WIRELINE

REPEAT SECTION

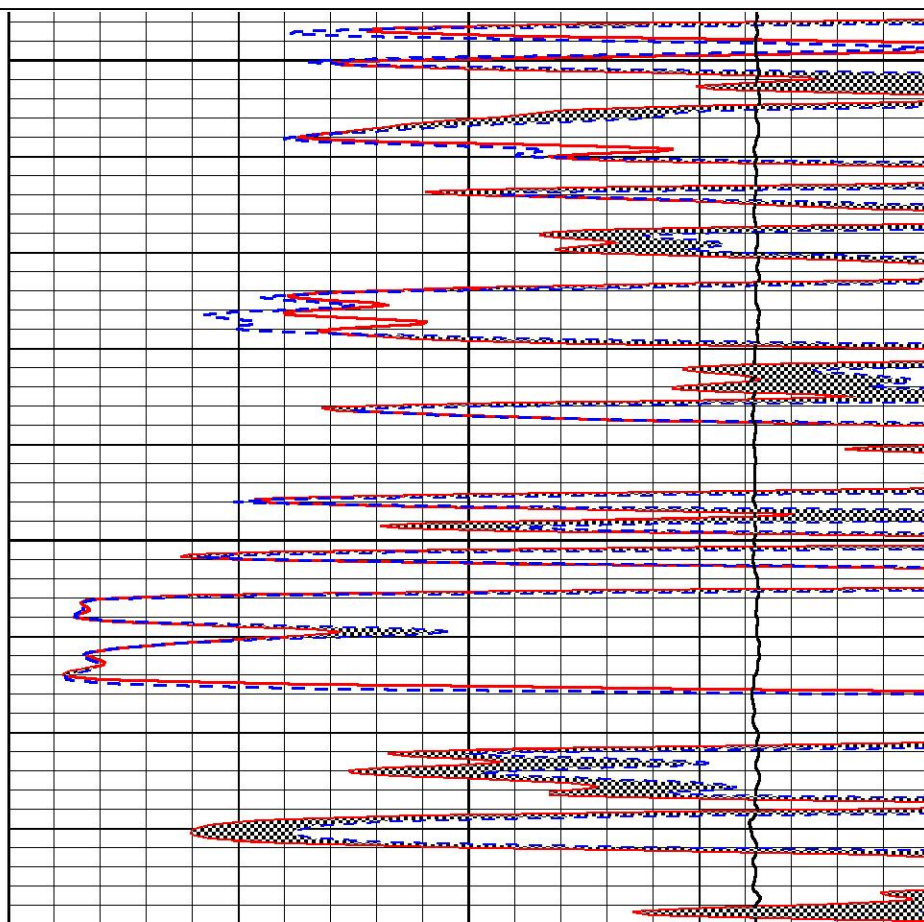
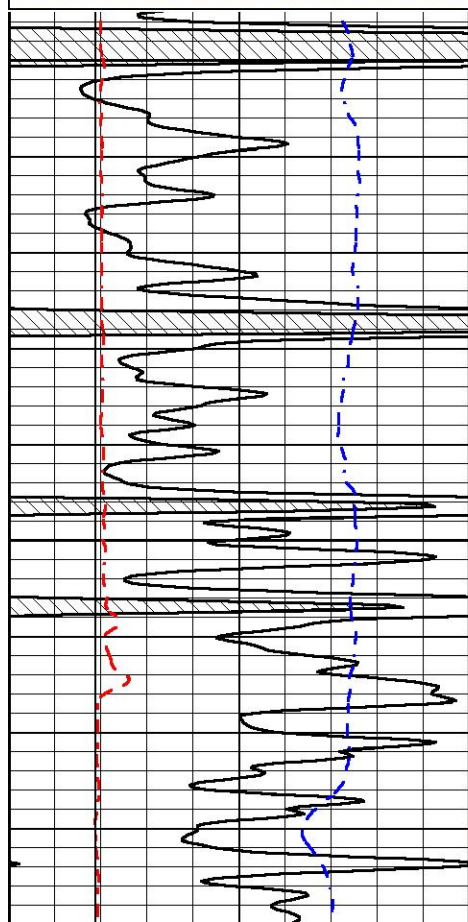
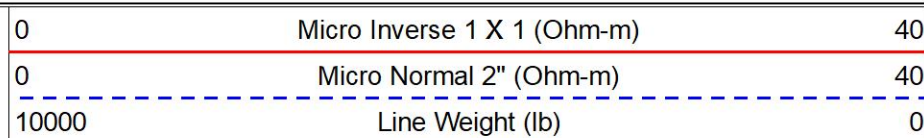
REPEAT PASS

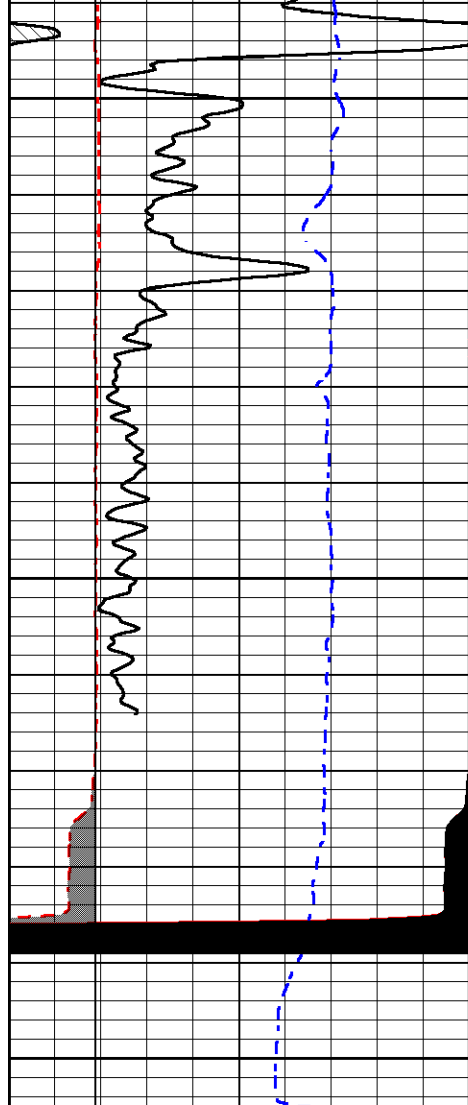
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 Presentation Format _micro
 Dataset Creation Sun Dec 05 03:13:27 2021
 Charted by Depth in Feet scaled 1:240



4500

4550



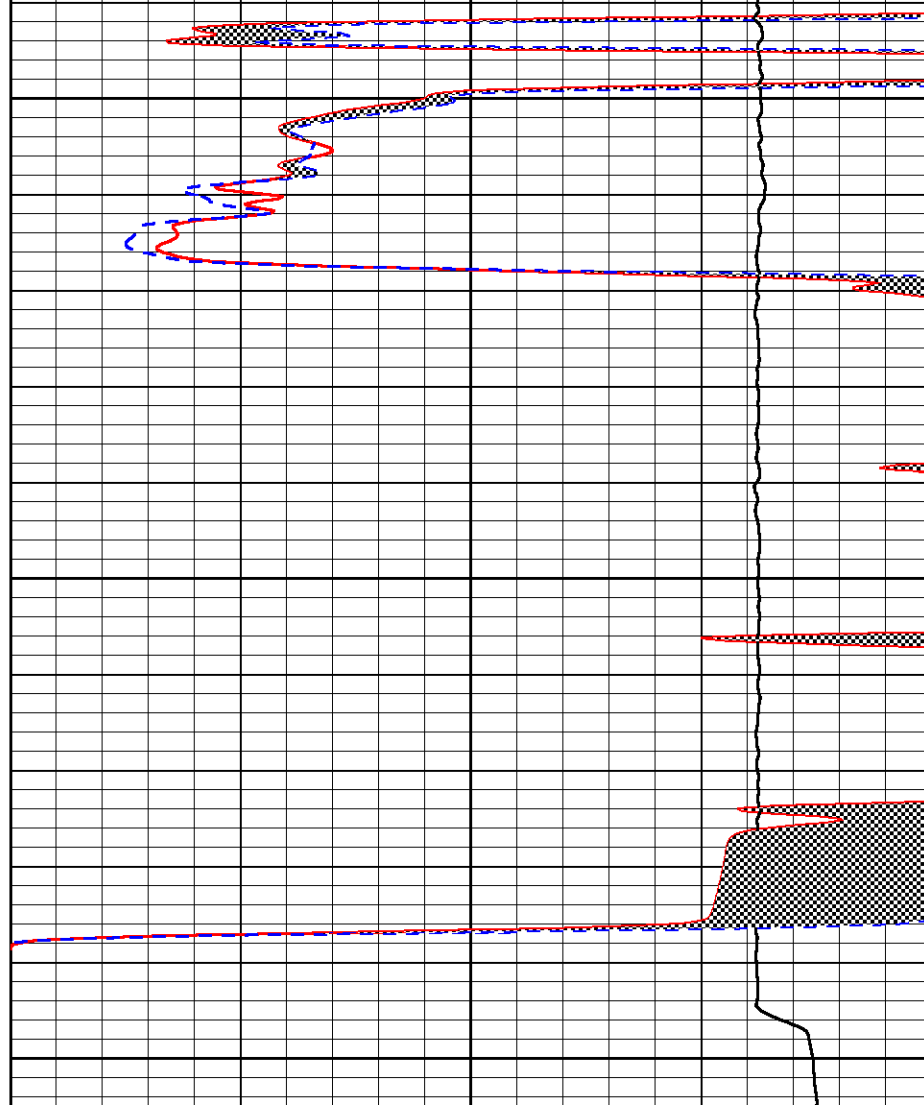


4600

4650

4700

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

Database File ritchie_scheurmanhrbek trust 1.db
 Dataset Pathname stkml/pass3.5
 Dataset Creation Sun Dec 05 03:07:33 2021

Dual Induction Calibration Report

Serial-Model: 952-828-PSI HIGH TEMP
 Surface Cal Performed: Thu Nov 18 18:13:13 2021

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.435	-32.500
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.300	-32.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
 Performed: Wed Dec 1 16:06:14 2021

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	9000.0000	-0.8000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	9000.0000	-0.4000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-139.2500

Compensated Density Calibration Report

Serial-Model: 934-226-M&W
 Source #: 20762B
 Master Calibration Performed: Tue Nov 16 13:52:04 2021

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3330.50	2332.69	cps
Aluminum	2.650	g/cc	627.41	1482.87	cps
Spine Angle = 74.82			Density/Spine Ratio = 0.517		
	Size		Reading		
Small Ring	8.00	in	1.16		
Large Ring	13.00	in	1.01		

Compensated Neutron Calibration Report

Serial-Model: 207-MW-M&W
 Source #: 100046B
 Master Calibration Performed: Mon Nov 29 15:06:24 2021

Master 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: 233-M&W
 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 Ritchie Exploration, Inc.
 Well Scheuerman-Hrbek Trust #1
 Field
 County Scott
 State Kansas