

MIDWEST WIRELINE

MICRORESISTIVITY
LOG

Company American Warrior, Inc.		Company American Warrior, Inc.	
Well O'Brate-Finney #11-5		Well O'Brate-Finney #11-5	
Field Seven Mile		Field Seven Mile	
County Finney		County Finney	
State Kansas		State Kansas	
Location: API #: 15-055-22571-00-00		Other Services	
1042 FNL & 1314 FWL		CNL/CDL DIL	
SEC 5 TWP 23S RGE 32W		Elevation	
Permanent Datum	Ground Level	Elevation	2857
Log Measured From	Kelly Bushing	K.B.	2870
Drilling Measured From	Kelly Bushing	D.F.	2857
		G.L.	2857
Date	3/25/2023		
Run Number	One		
Depth Driller	4900		
Depth Logger	4905		
Bottom Logged Interval	4904		
Top Log Interval	3800		
Casing Driller	8.625 @ 1775		
Casing Logger	1736		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	4200		
Density / Viscosity	9.2 54		
pH / Fluid Loss	9.0 7.2		
Source of Sample	Flowline		
Rm @ Meas. Temp	0.85 @ 72		
Rmt @ Meas. Temp	0.64 @ 72		
Rmc @ Meas. Temp	1.15 @ 72		
Source of Rmt / Rmc	Charts		
Rm @ BHT	0.49 @ 125		
Operating Rig Time	2 Hours		
Max Rec. Temp. F	125		
Equipment Number	P-24		
Location	Hays		
Recorded By	T. Martin		
Witnessed By	Kevin Timson		

<<< Fold Here >>>

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

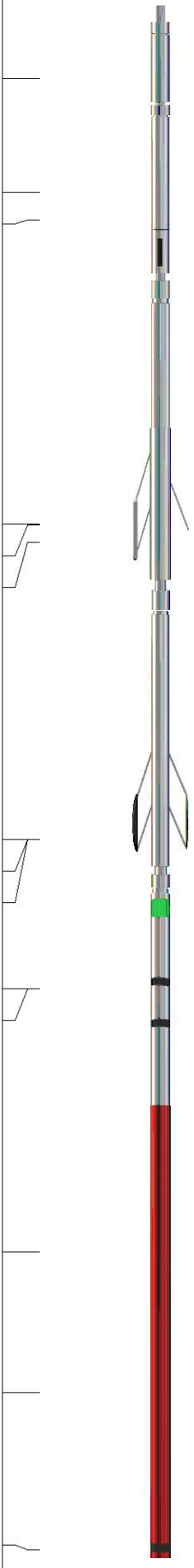
N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Garden City, KS, N on 83 to 6 Mi Rd,
1 E, 2 N, E into

Log Measured From: Kelly Bushing 13 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew		This Log Record Was Witnessed By	
Engineer: T. Martin		Primary Witness: Kevin Timson	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	
Operator:		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 (307-08)	8.50	4.00	250.00	
MCAL MI MN	19.58 19.58 19.58		ML-PSIML (401)	7.58	4.00	65.00	
RLL3F RLL3	15.50 15.50		DIL-M&W (507)	18.25	3.50	220.00	
CILD	8.33						
CILM	4.50						
SP	0.20						
Dataset: amwar_obratefinney #10-5.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\amwar_obratefinney #10-5.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	125	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	50	40		4905

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



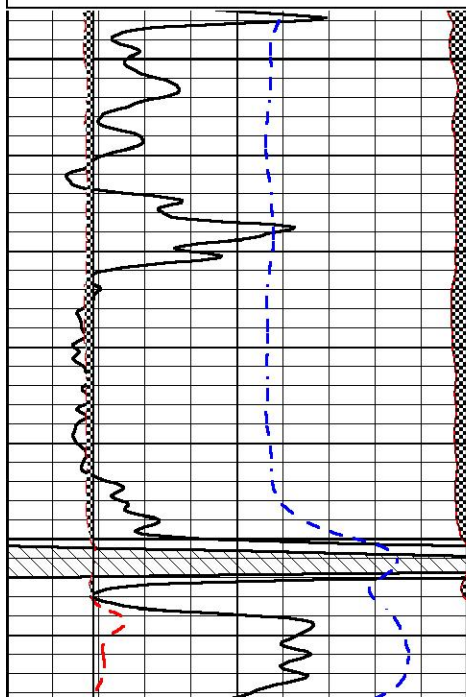
DETAIL SECTION

MAIN PASS

Database File amwar_obratefinney #10-5.db
Dataset Pathname StkMI/pass3.1
Presentation Format _micro
Dataset Creation Sat Mar 25 14:05:11 2023
Charted by Depth in Feet scaled 1:240

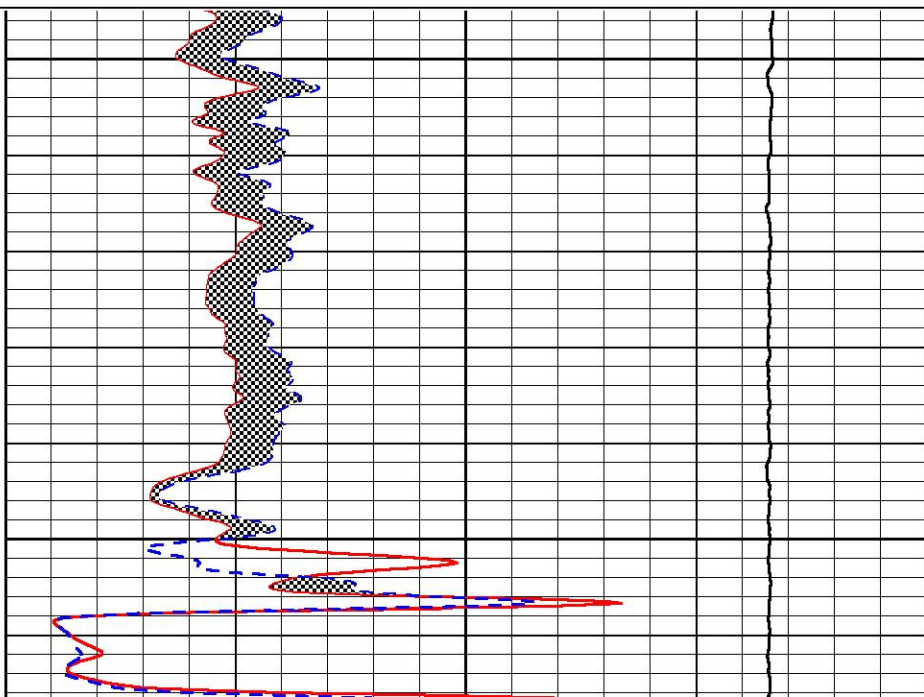
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	sp (mV)	0

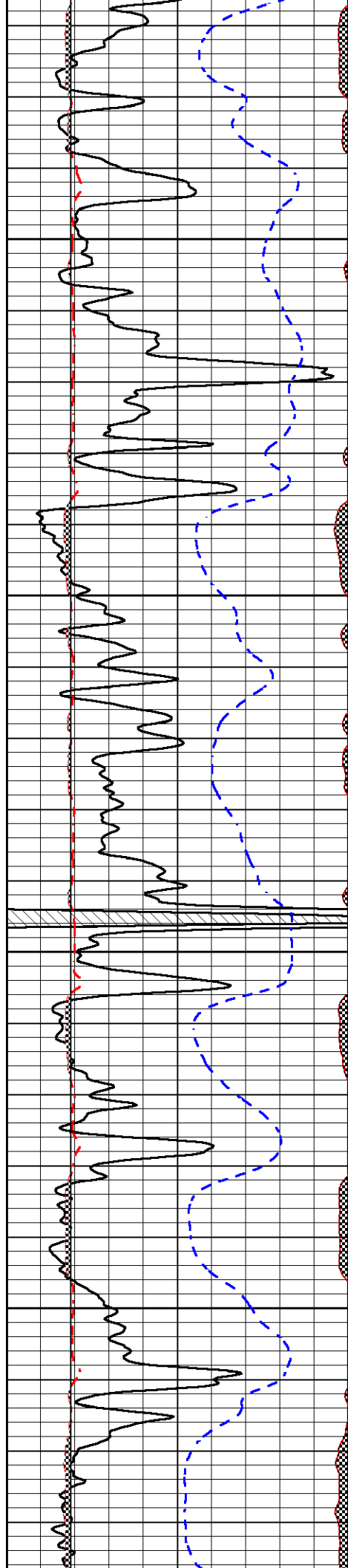
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



3800

3850



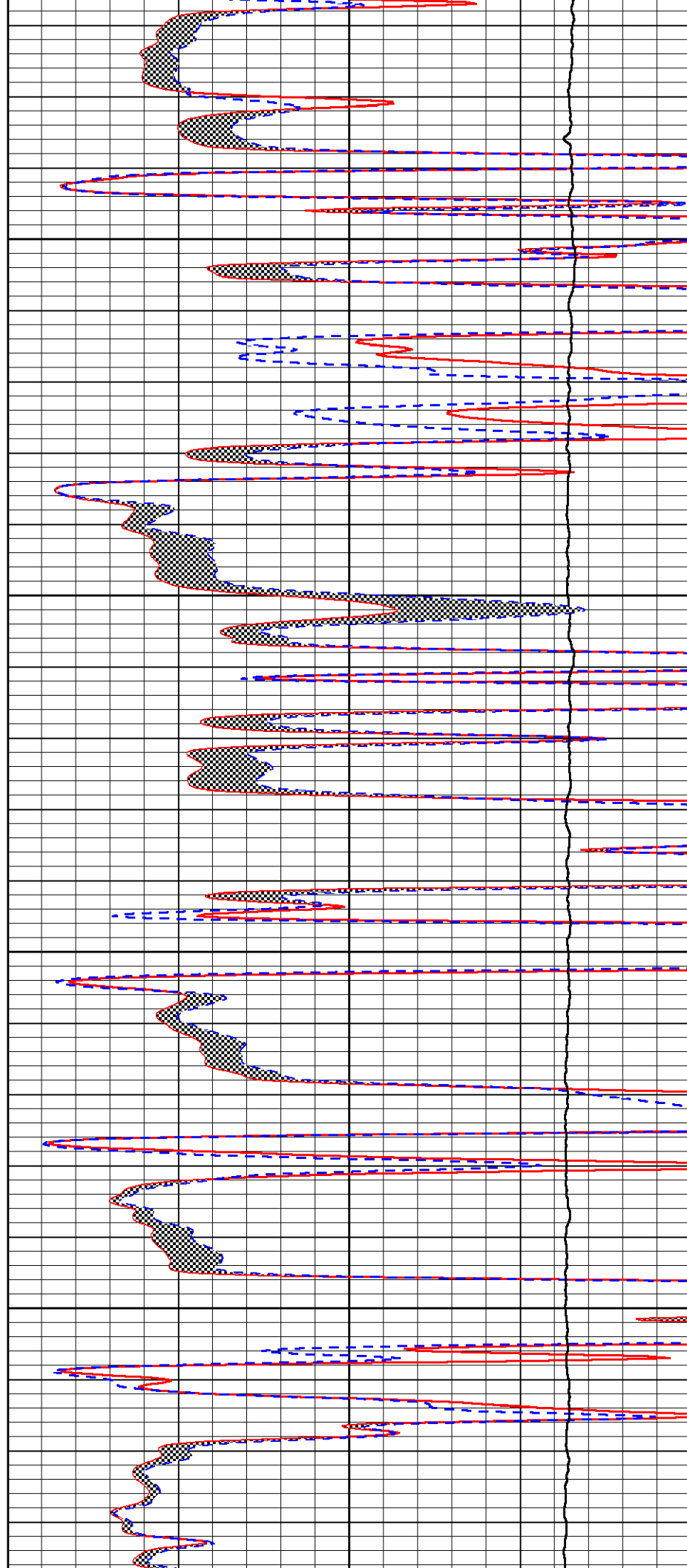


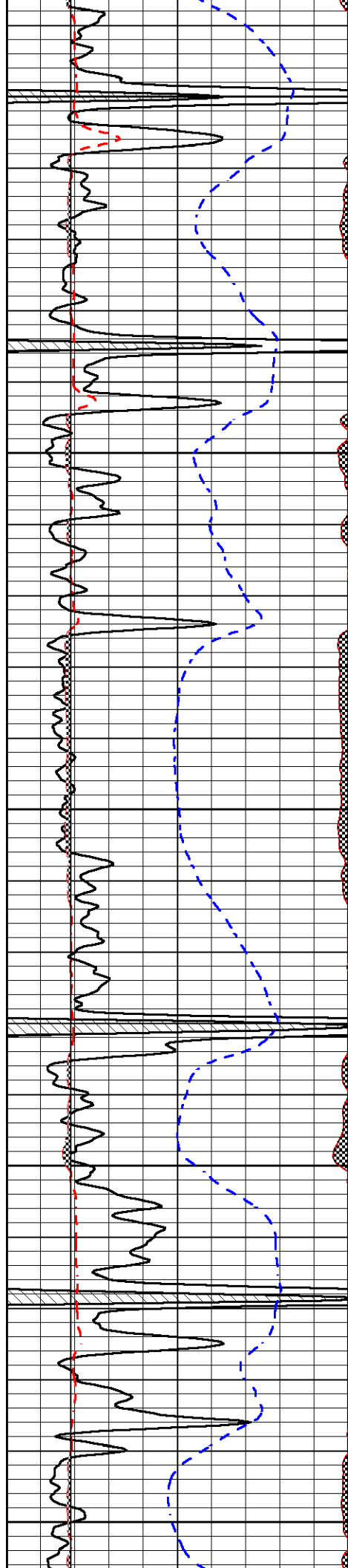
3900

3950

4000

4050





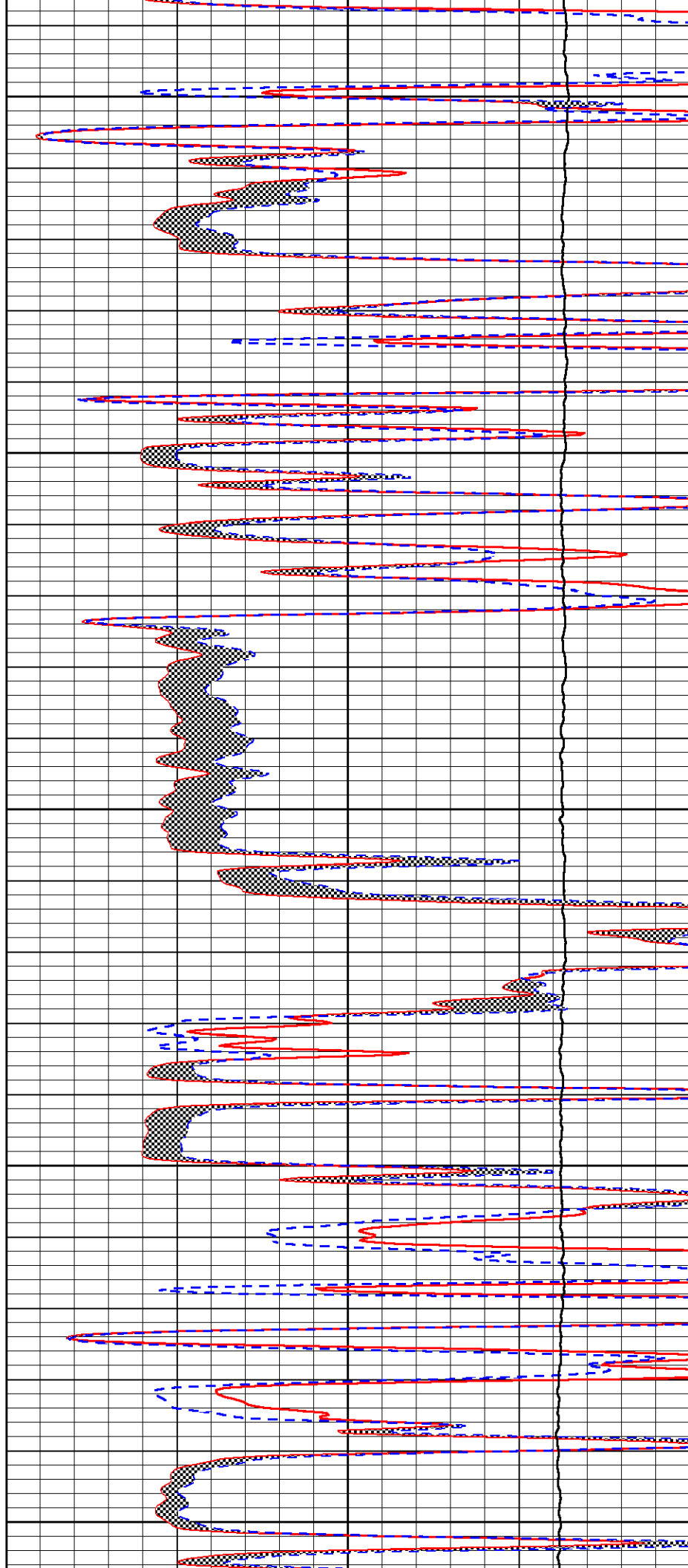
4100

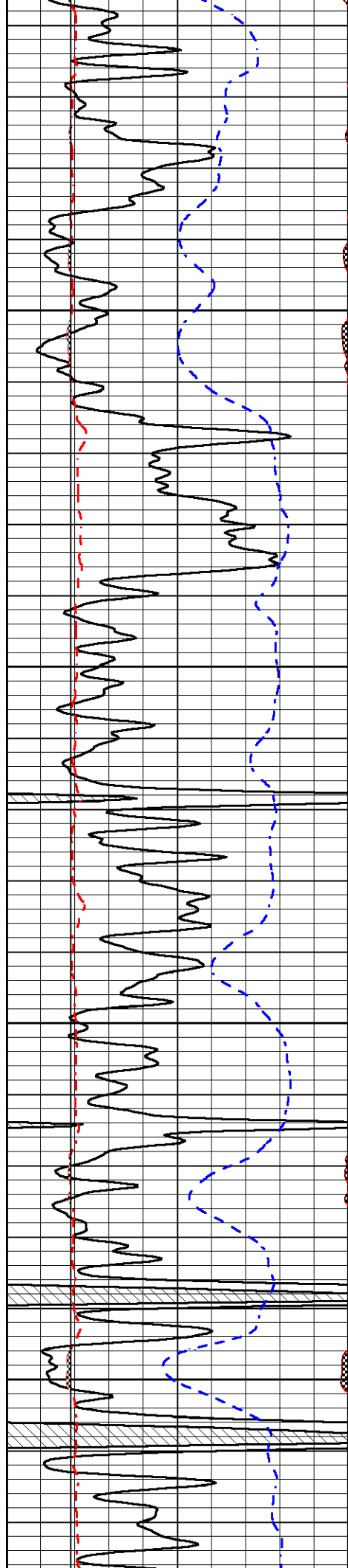
4150

4200

4250

4300



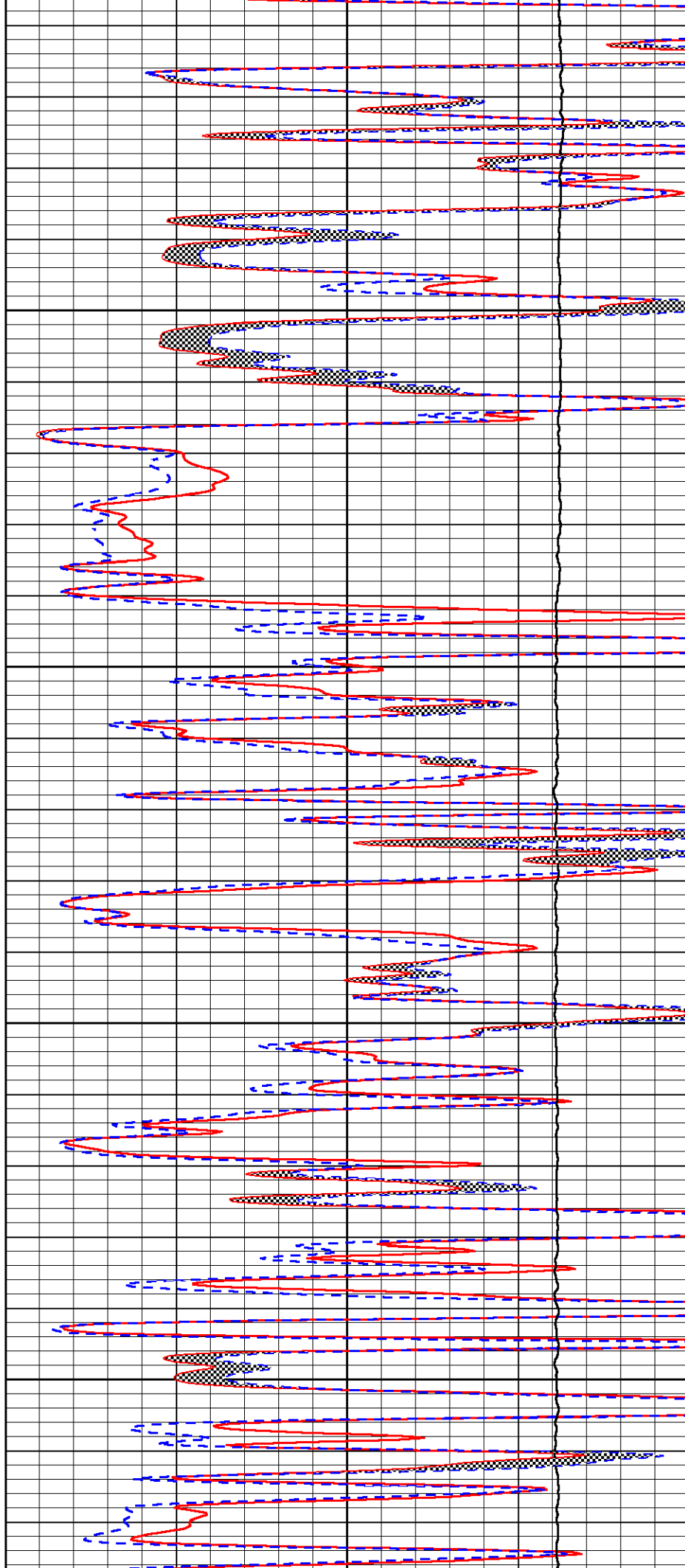


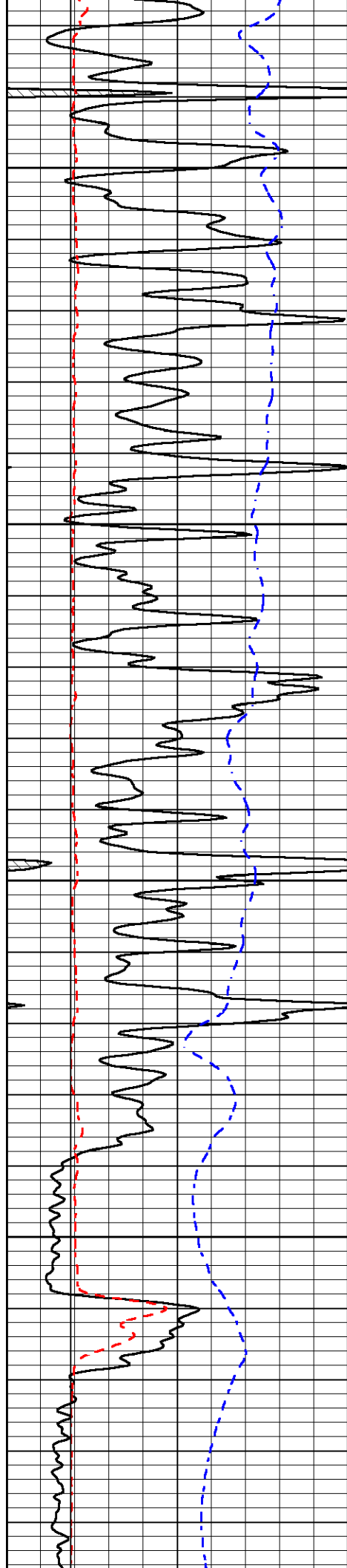
4350

4400

4450

4500



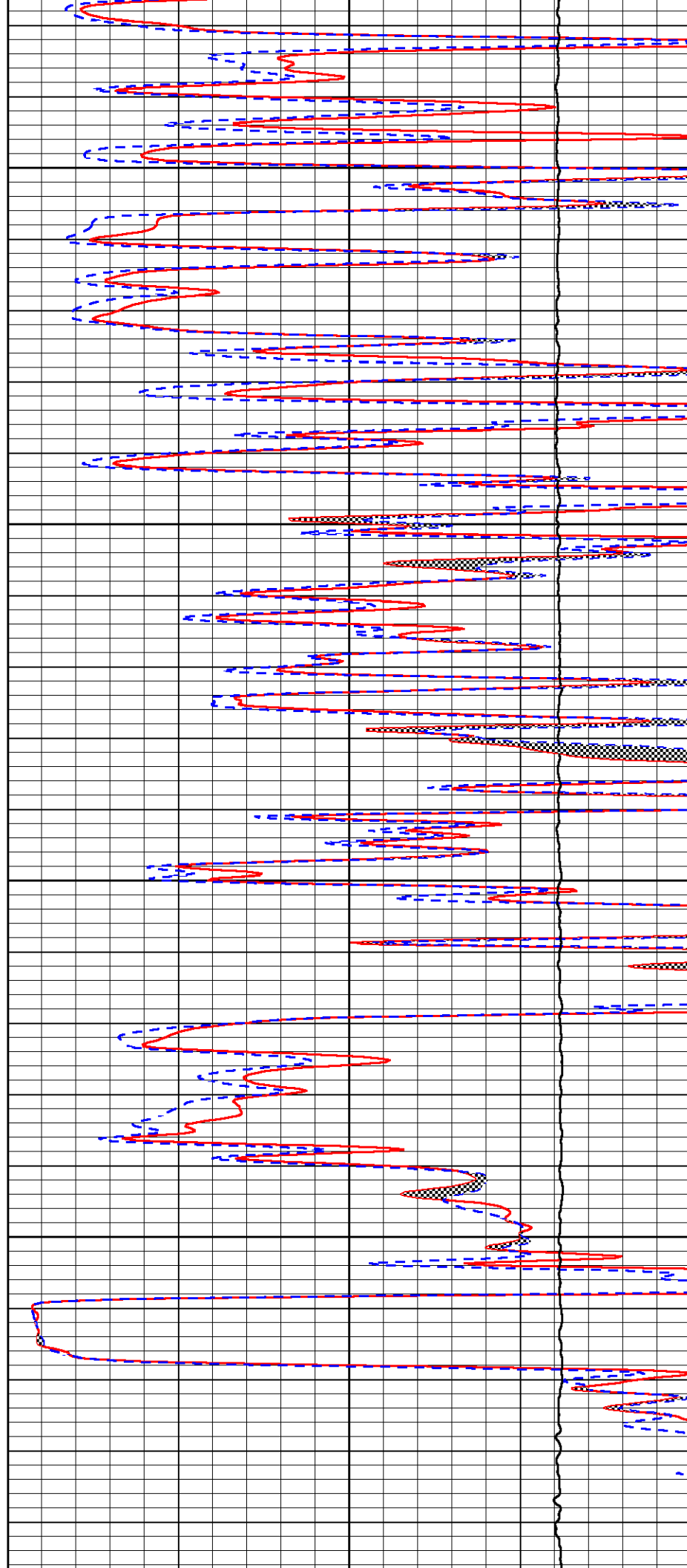


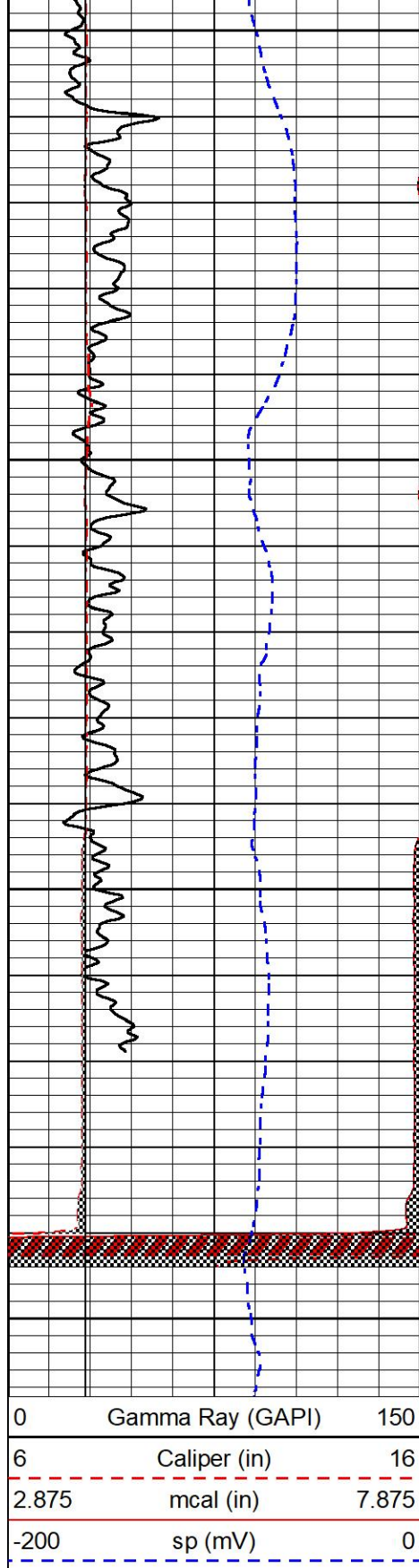
4550

4600

4650

4700



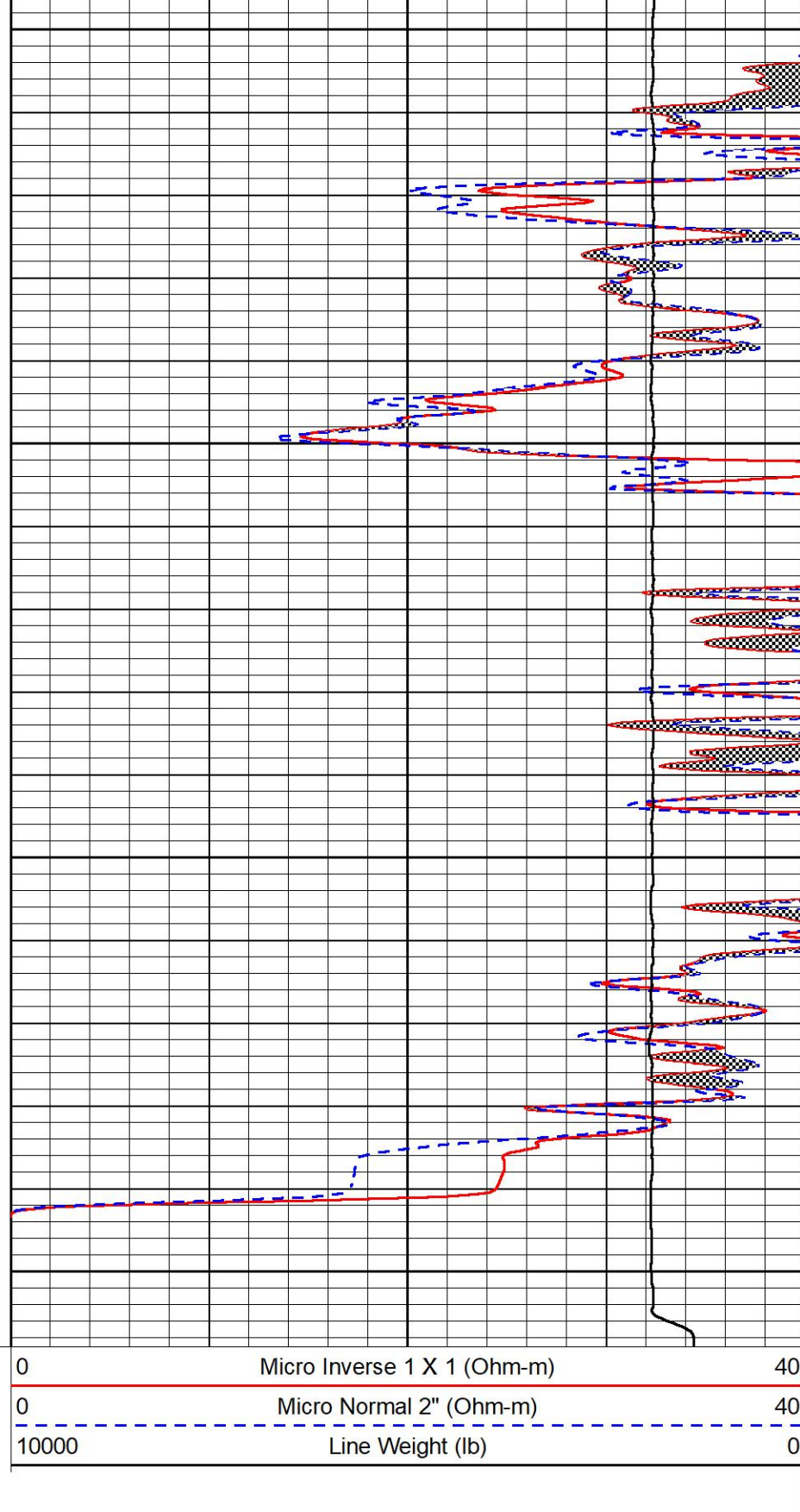


4750

4800

4850

4900



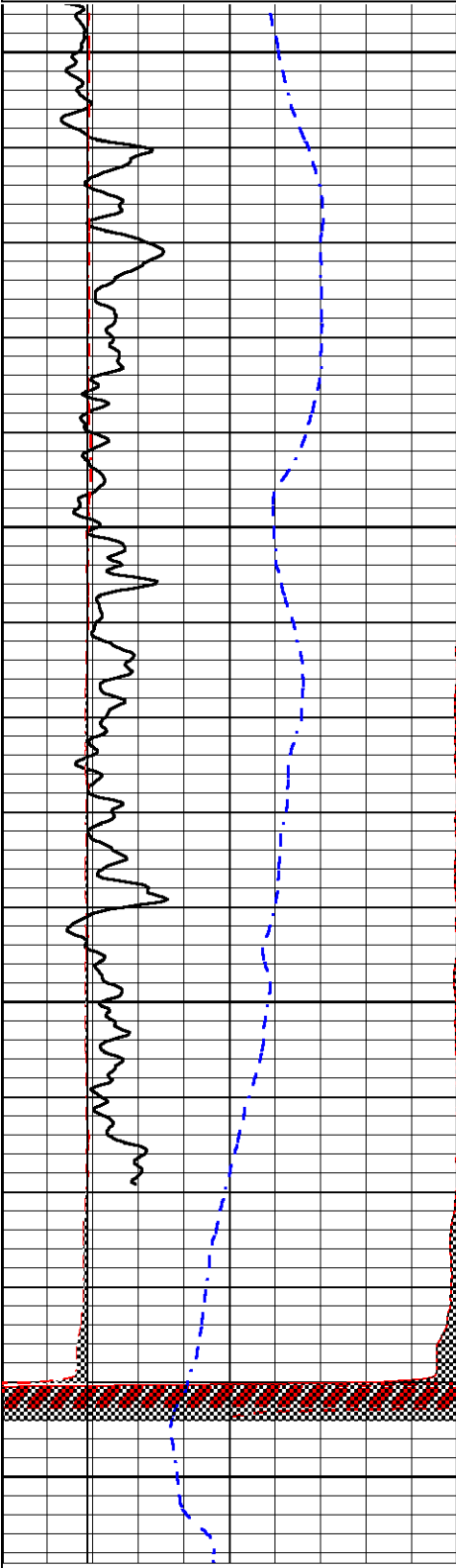
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

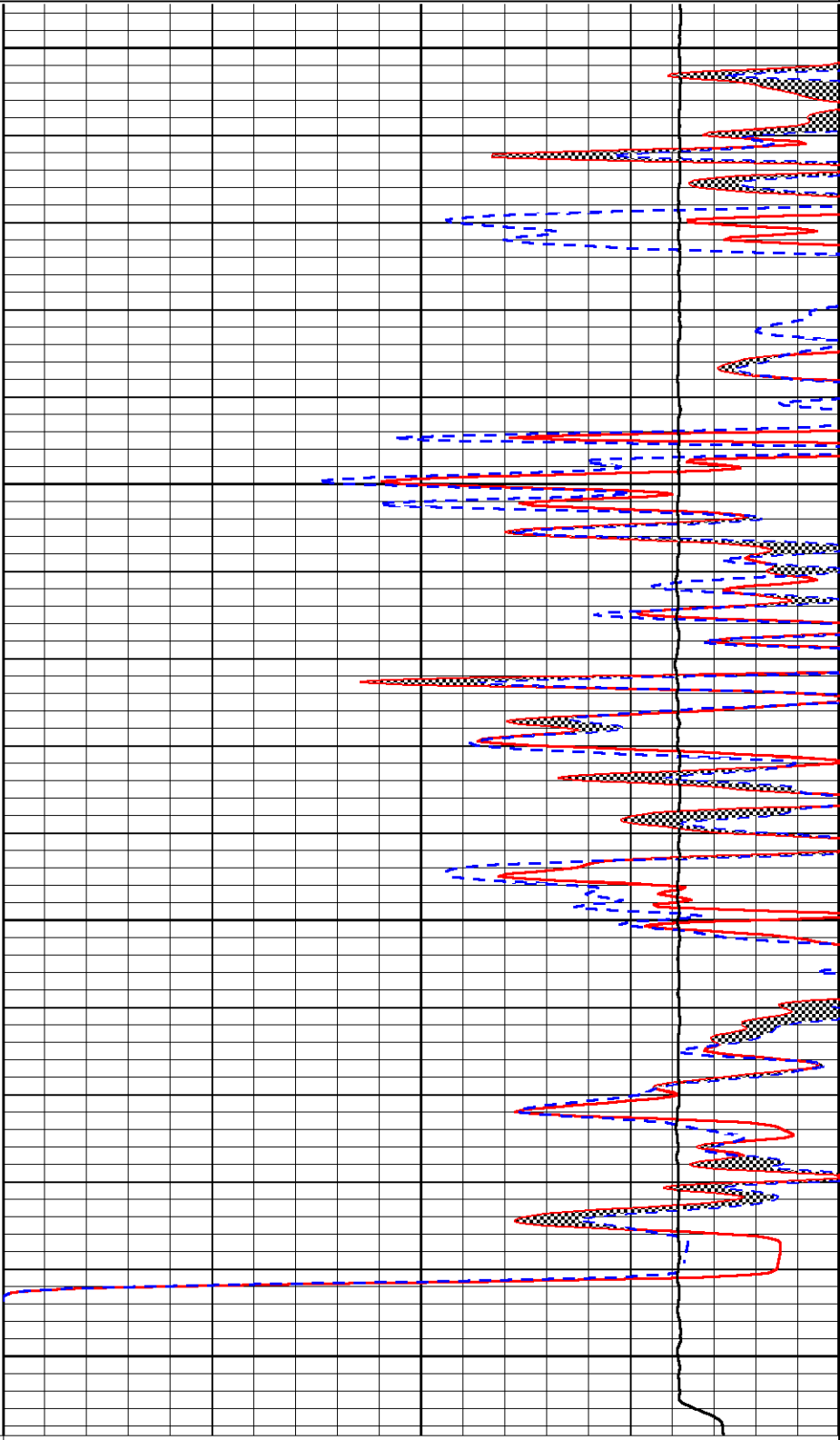
Database File amwar_obratefinney #10-5.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format _micro

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



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



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

Serial-Model: 507-M&W
Surface Cal Performed: Sun Mar 19 18:02:16 2023

Readings	References	Results
----------	------------	---------

Serial-Model: 401-PSIML
Performed: Mon Mar 20 04:31:34 2023

ReadingsReferencesResults

Serial-Model: 307-08-M&W
Source #: 20762B
Master Calibration Performed: Sat Feb 25 11:00:49 2023

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4131.04	5675.82	cps
Aluminum	2.635	g/cc	781.38	3576.78	cps
Spine Angle = 74.50			Density/Spine Ratio = 0.509		
	Size		Reading		
Small Ring	6.00	in	1.16		
Large Ring	18.00	in	1.01		

Serial Number: 207-MW
Tool Model: M&W

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



MIDWEST WIRELINE

Company American Warrior, Inc.
 Well O'Brate-Finney #11-5
 Field Seven Mile
 County Finney
 State Kansas