



PIONEER

Pioneer Energy Services

MICRORESISTIVITY LOG

Company MURFIN DRILLING COMPANY, INC.
Well SHARP 'C' #1-6
Field UNNAMED
County CHEYENNE
State KANSAS

Company MURFIN DRILLING COMPANY, INC.
Well SHARP 'C' #1-6
Field UNNAMED
County CHEYENNE
State KANSAS

Location: API #: 15-023-21539-00-00
2230' FSL & 2310' FWL
SEC 6 TWP 3S RGE 40W
Permanent Datum GROUND LEVEL Elevation 3449'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING
Other Services
CNL/CDL
DIL/BHCS
Elevation
K.B. 3454'
D.F. N/A
G.L. 3449'

Date	3/8/2020
Run Number	ONE
Depth Driller	5193'
Depth Logger	5194'
Bottom Logged Interval	5193'
Top Log Interval	4000'
Casing Driller	8.625" @ 345'
Casing Logger	345'
Bit Size	7.875"
Type Fluid in Hole	CHEMICAL
Salinity, ppm CL	800
Density / Viscosity	9.2 60
pH / Fluid Loss	10.5 6.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.2 @ 64
Rmt @ Meas. Temp	.90 @ 64
Rmc @ Meas. Temp	1.62 @ 64
Source of Rmf / Rmc	CHARTS
Rm @ BHT	.60 @ 128
Operating Rig Time	4 HOURS
Max Rec. Temp. F	128 DEGF
Equipment Number	P-108
Location	HAYS
Recorded By	J. HENRICKSON
Witnessed By	ROBERT HENDRIX

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, 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.
ST. FRANCIS KANSAS
WEST TO HWY 27, 4 NORTH TO S ROAD, 1/2 WEST
SOUTH INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858

Your Pioneer Energy Services Crew		This Log Record Was Witnessed By	
Engineer: J. HENRICKSON		Primary Witness: ROBERT HENDRIX	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

Log Variables

DatabaseC:\ProgramData\Warrior\Data\murfin_sharp_c_1_6.db
 Dataset field/well/stackml/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	100	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	290	50	Off	5194

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
GR	44.50		GR-M&W (89-M&W)	3.00	3.50	50.00	
CNLSC CNSSC	41.40 40.65		CNT-M&W (tk10-MW)	5.50	3.50	100.00	
LSD DCAL SSD	32.35 32.33 31.85		CDL-M&W (934-229)	8.50	4.00	250.00	
ML-PSI UDM ML (UDM-01) Stackable Microlog Tools			11.50	4.00	215.00		
MCAL MI MN	20.87 20.87 20.87						
RLL3 RLL3F	15.80 15.79						
CILD	8.00			DIL-M&W (55-222)	18.50	3.50	220.00

CILM 4.70

SP 0.20

Dataset: murfin_sharp_c_1_6.db: field/well/stackml/pass3.1
 Total length: 47.00 ft
 Total weight: 835.00 lb
 O.D.: 4.00 in

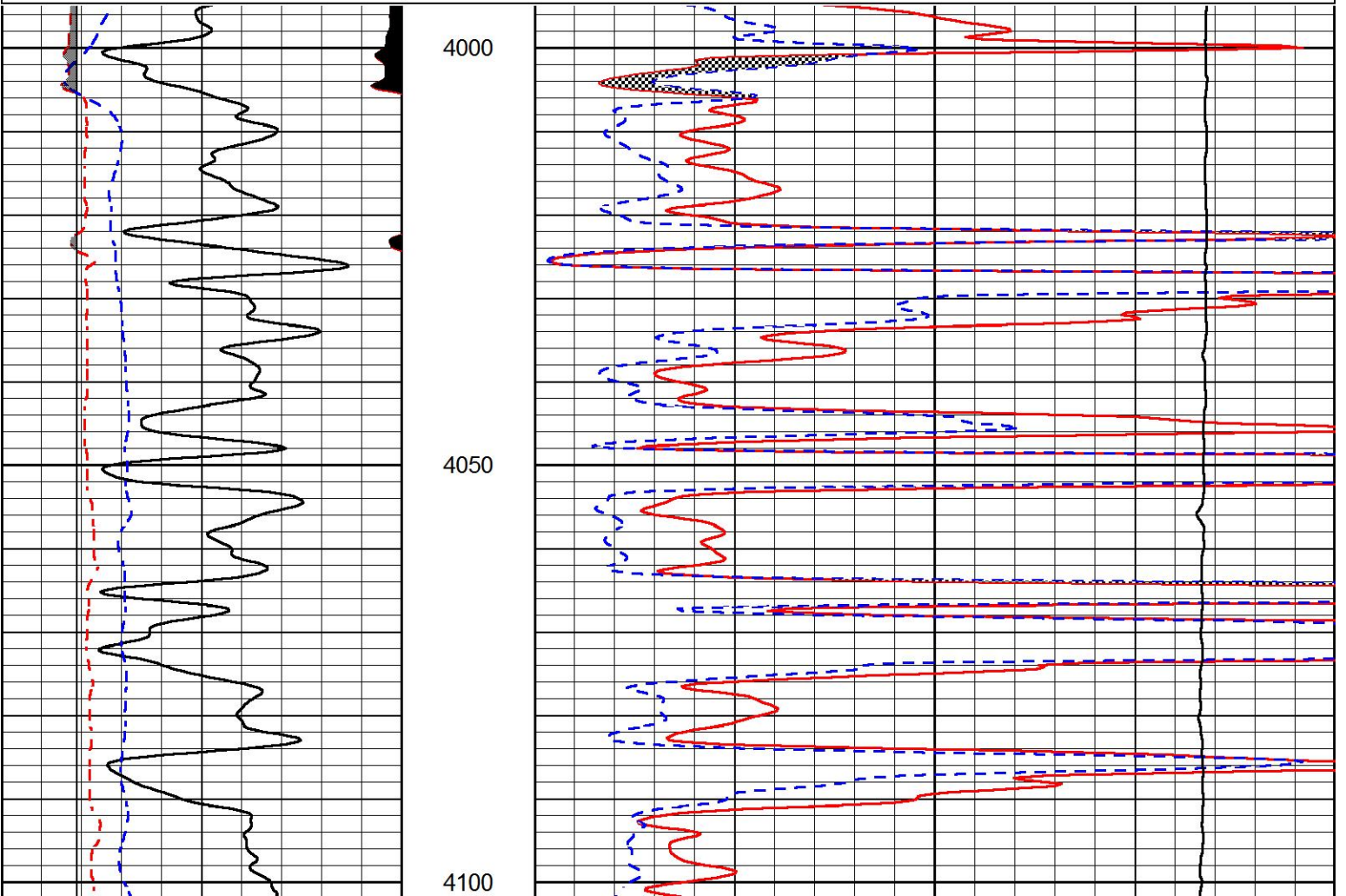


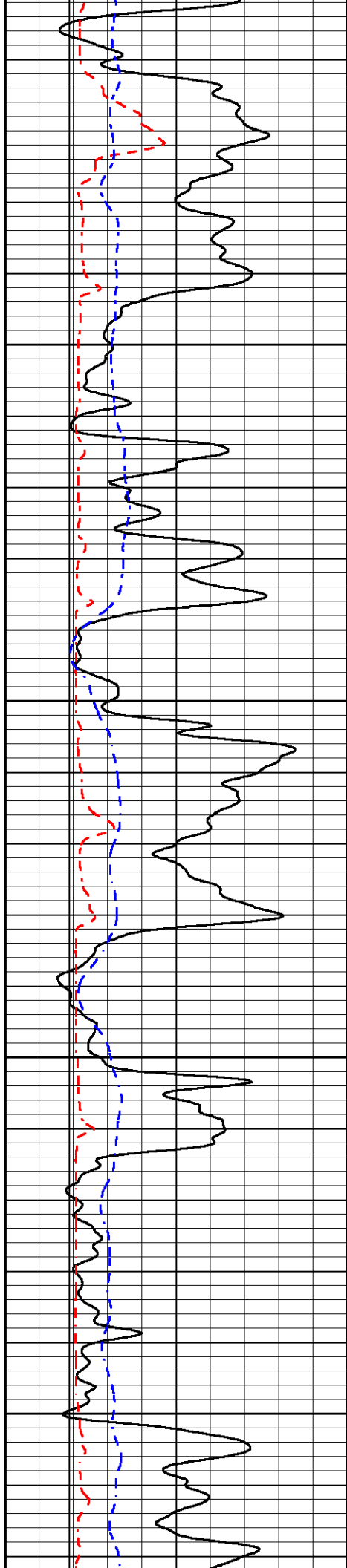
MAIN PASS

Database File murfin_sharp_c_1_6.db
 Dataset Pathname stackml/pass3.1
 Presentation Format micro
 Dataset Creation Mon Mar 09 01:24:08 2020
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	MICRO CALIPER (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
15000	LINE TENSION (lb)	0



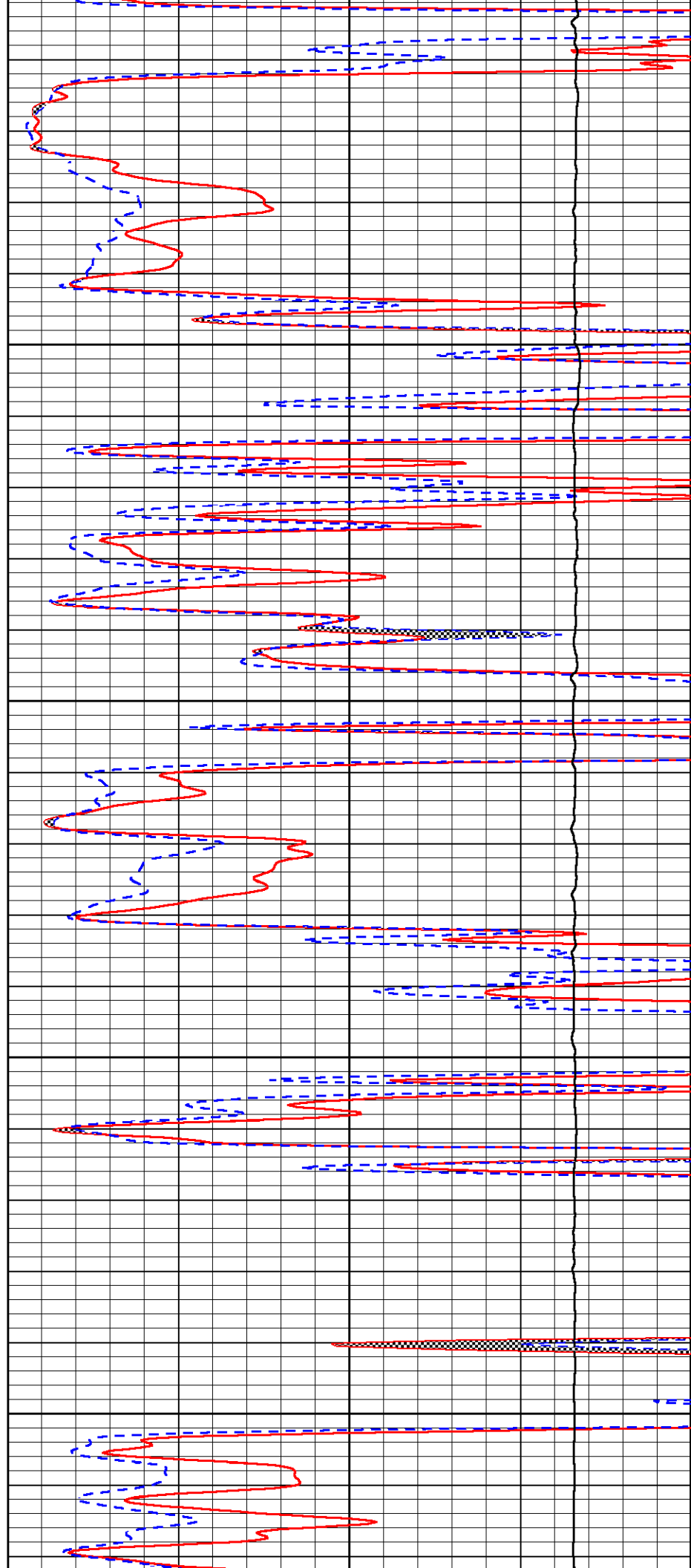


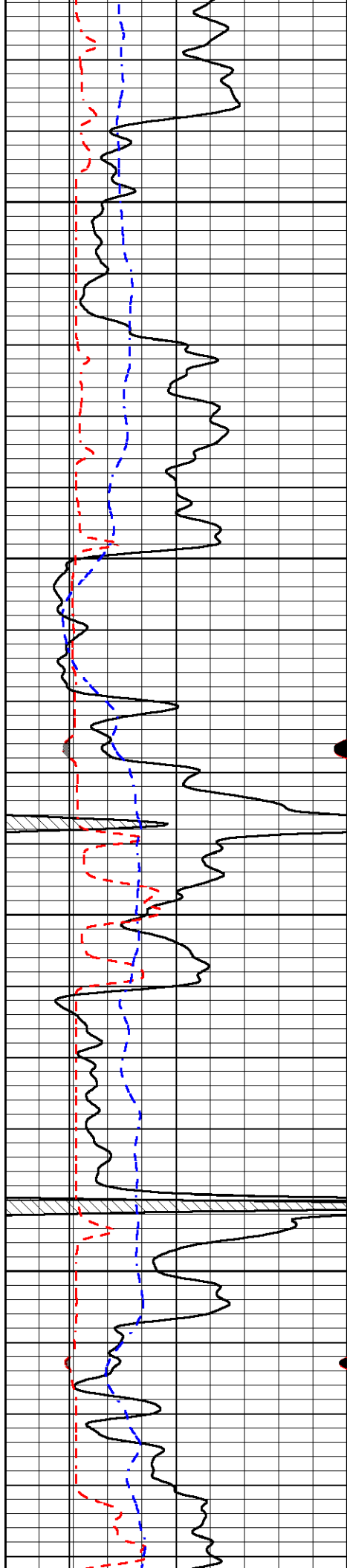
4150

4200

4250

4300



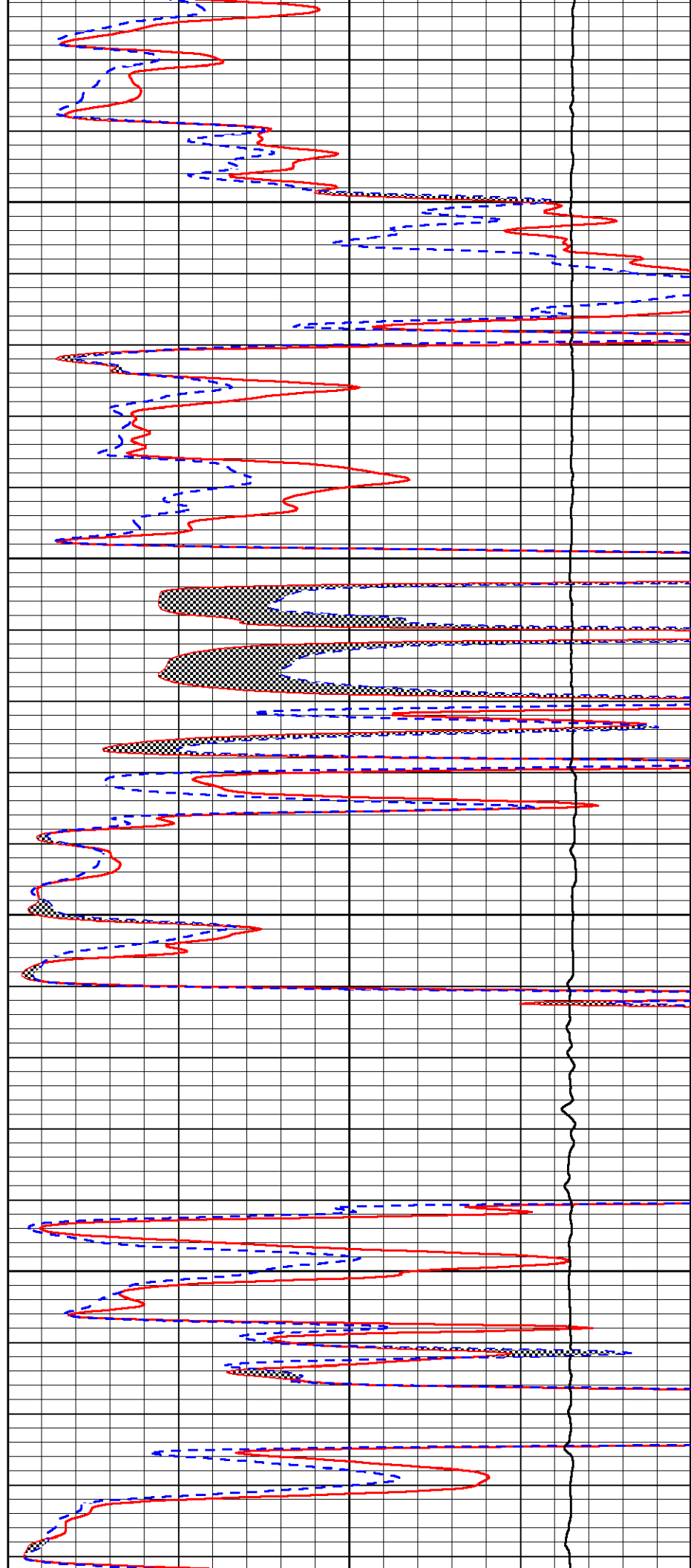


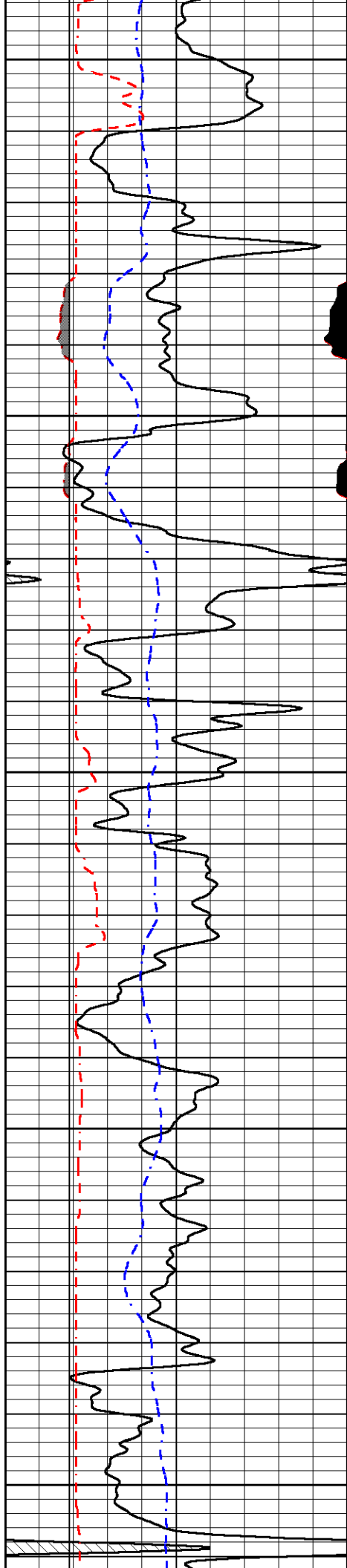
4350

4400

4450

4500





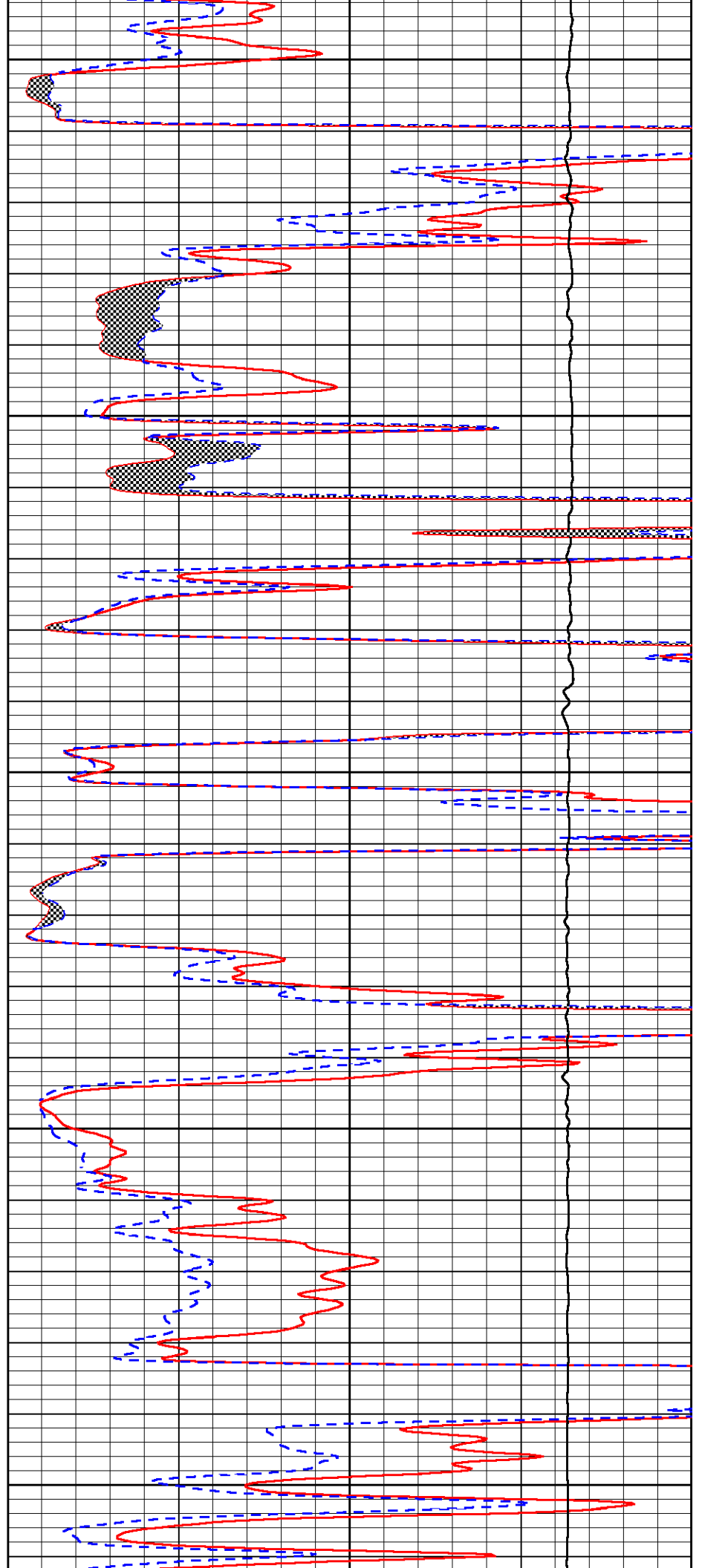
4550

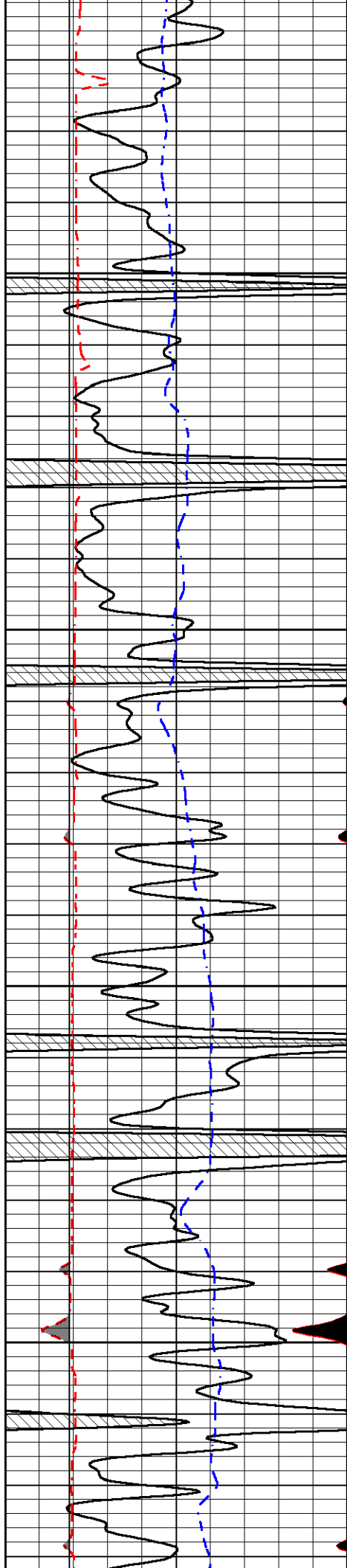
4600

4650

4700

4750



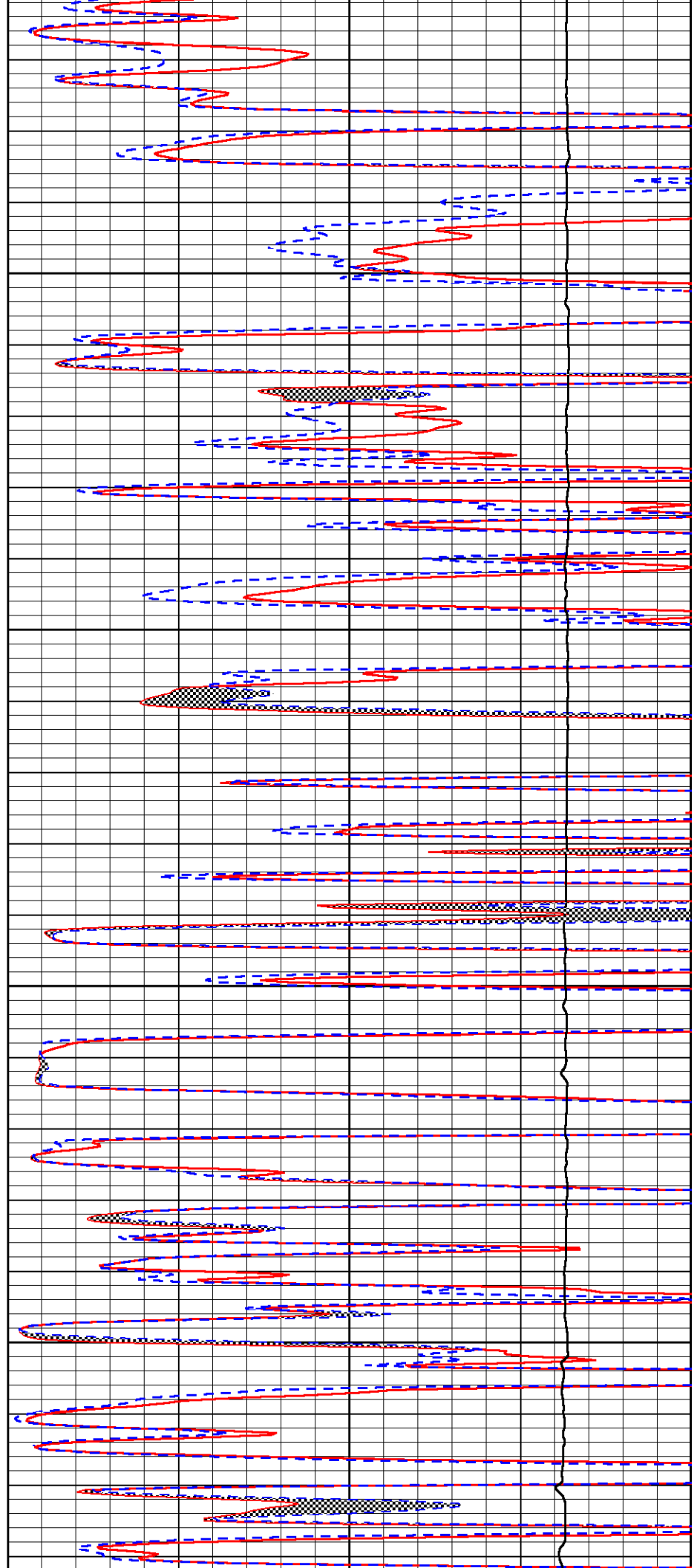


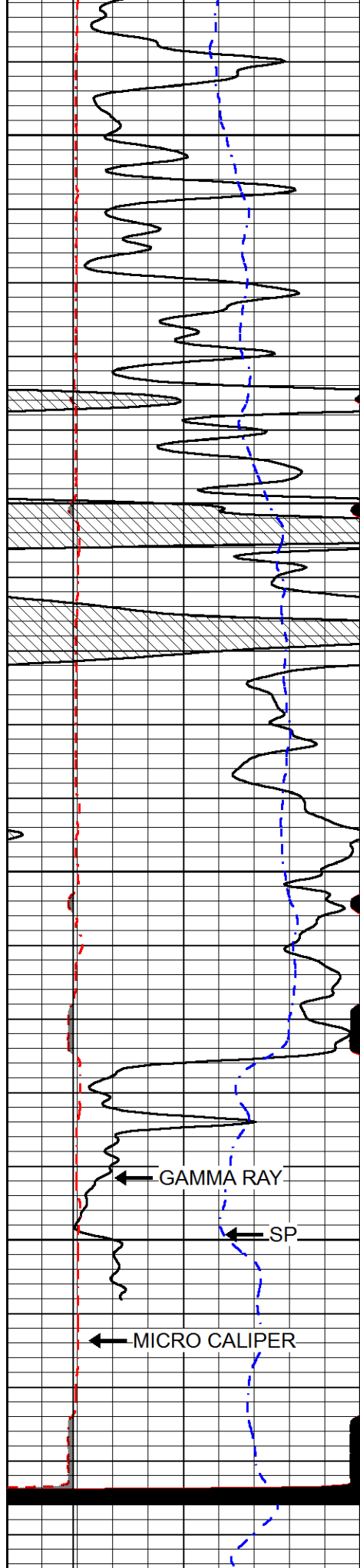
4800

4850

4900

4950





5000

5050

5100

5150

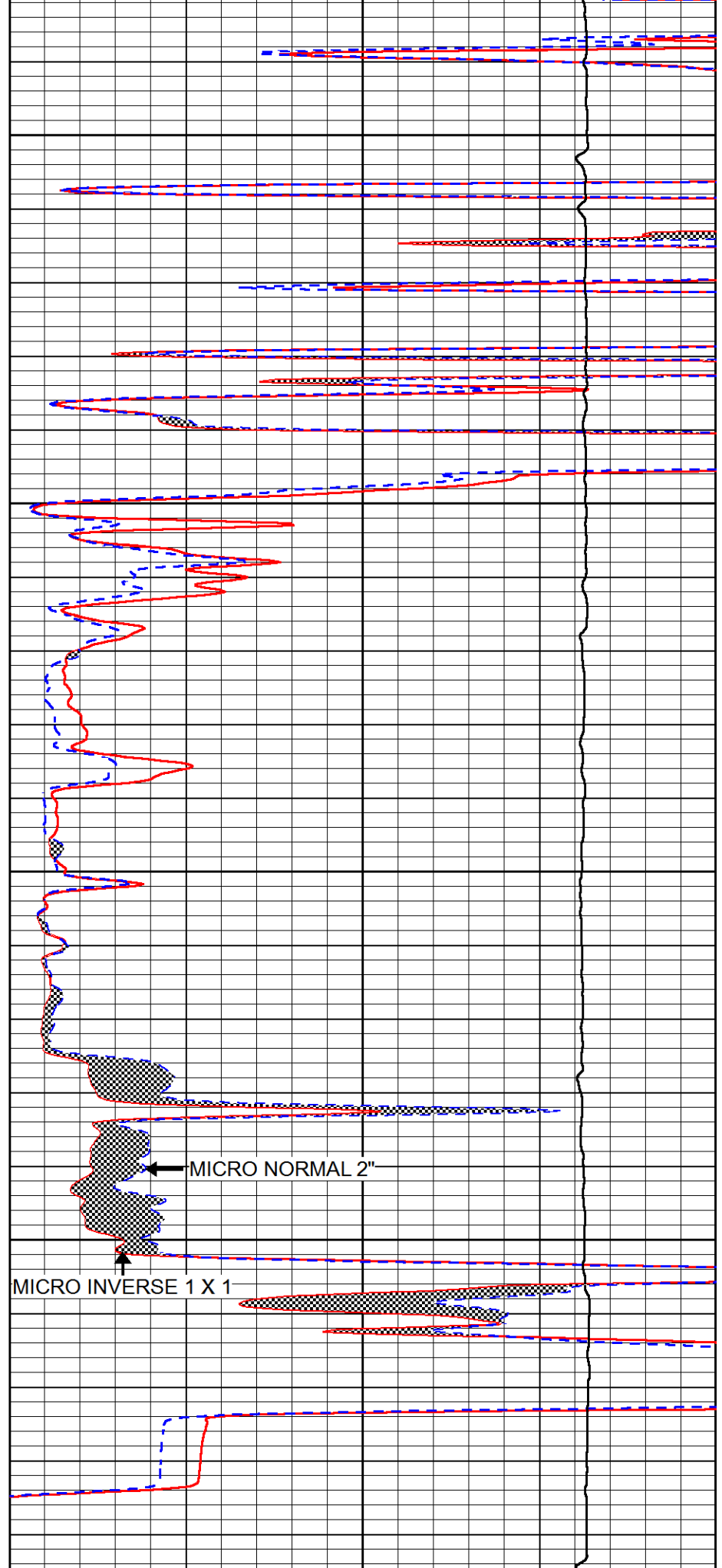
GAMMA RAY

SP

MICRO CALIPER

0 GAMMA RAY (GAPI) 150

0 MICRO CALIPER (") 10



MICRO NORMAL 2"

MICRO INVERSE 1 X 1

0 MICRO INVERSE 1 X 1 (Ohm-m) 40

0 MICRO NORMAL 2" (Ohm-m) 40

6	MICRO CALIPER (in)	16
6	BIT SIZE (in)	16
-200	SP (mV)	0

0	MICRO NORMAL 2" (Ohm-m)	40
15000	LINE TENSION (lb)	0

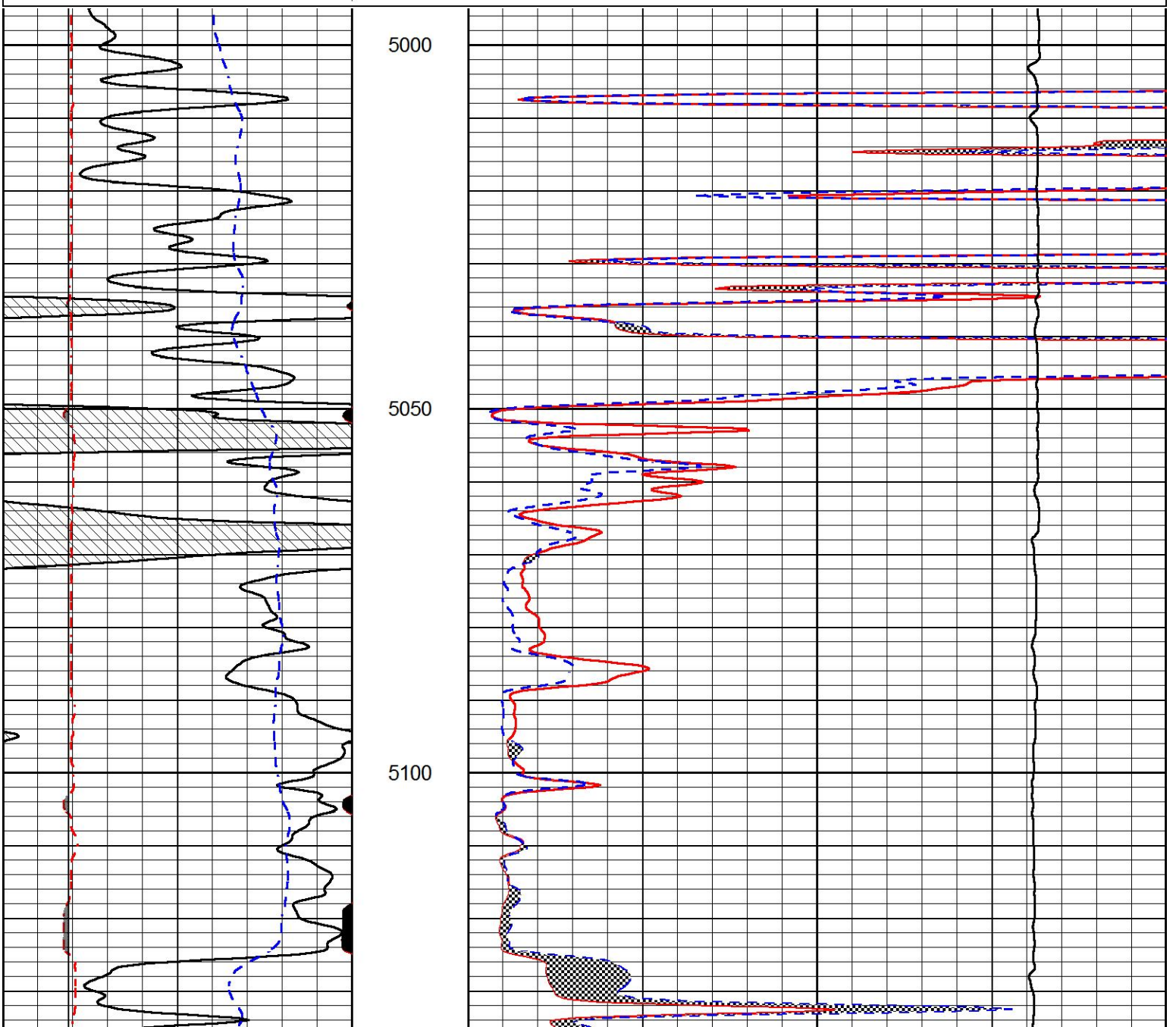


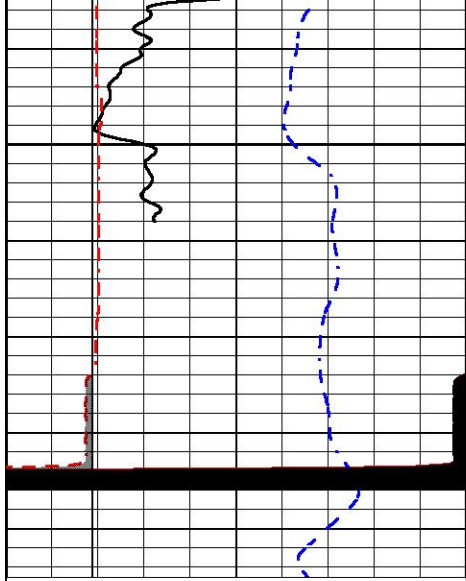
REPEAT SECTION

Database File	murfin_sharp_c_1_6.db	
Dataset Pathname	stackml/pass2.1	
Presentation Format	micro	
Dataset Creation	Mon Mar 09 00:24:14 2020	
Charted by	Depth in Feet scaled 1:240	

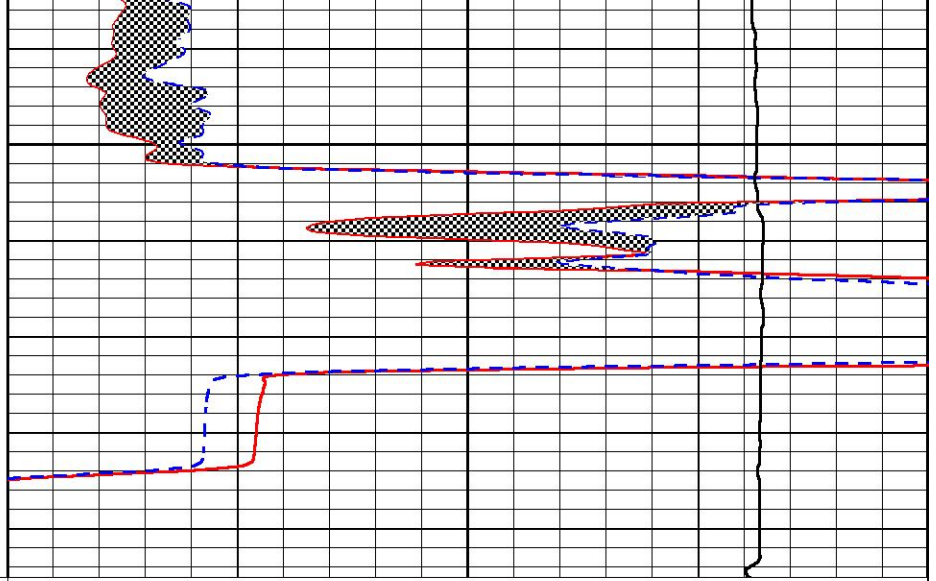
0	GAMMA RAY (GAPI)	150
6	MICRO CALIPER (in)	16
6	BIT SIZE (in)	16
-200	SP (mV)	0

0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
15000	LINE TENSION (lb)	0





5150



0	GAMMA RAY (GAPI)	150
6	MICRO CALIPER (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
15000	LINE TENSION (lb)	0



Company MURFIN DRILLING COMPANY, INC.
 Well SHARP 'C' #1-6
 Field UNNAMED
 County CHEYENNE
 State KANSAS