



MICRORESISTIVITY LOG

PIONEER
Pioneer Energy Services

Company MUSTANG ENERGY CORPORATION
Well GASKILL RANGE #1
Field WILDCAT
County LOGAN **State KANSAS**

Location: **API # : 15-109-21600-00-00**
330' FSL & 2540' FEL
SEC 23 TWP 12S RGE 36W
Permanent Datum GROUND LEVEL Elevation 3196'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING
Other Services CNL/CDL MEL

Date	11/6/2019
Run Number	ONE
Depth Driller	4800'
Depth Logger	4799'
Bottom Logged Interval	4798'
Top Log Interval	3500'
Casing Driller	8.625" @ 306'
Casing Logger	306'
Bit Size	7.875"
Type Fluid in Hole	CHEMICAL
Salinity, ppm CL	11000
Density / Viscosity	9.2 51
pH / Fluid Loss	10.0 9.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.70 @ 72
Rmt @ Meas. Temp	0.53 @ 72
Rmc @ Meas. Temp	0.95 @ 72
Source of Rmf / Rmc	CHARTS
Rm @ BHT	0.41 @ 124
Operating Rig Time	3 HOURS
Max Rec. Temp. F	124
Equipment Number	P-24
Location	HAYS
Recorded By	IAN MABB
Witnessed By	JASON T. ALM

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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.
WIONONA, KS.
WEST 1 MILE TO RD 220, SOUTH 3 MILES TO VISTA RD,
WEST 2 MILES, SOUTH INTO

Log Measured From: KELLY BUSHING 8 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: IAN MABB	Primary Witness: JASON T. ALM
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\mustang_gaskill_range_1.db
 Dataset field/well/MEL/pass1/_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	0	0	Off	0

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
						
			ML-Armadillo (ARM001) Pengo Mandrel & Armadillo ML Electronics (2014)	5.50	3.50	100.00
MCAL	1.00					
MI	1.00					
MN	1.00					

Dataset: mustang_gaskill_range_1.db: field/well/MEL/pass1
 Total length: 5.50 ft
 Total weight: 100.00 lb
 O.D.: 3.50 in

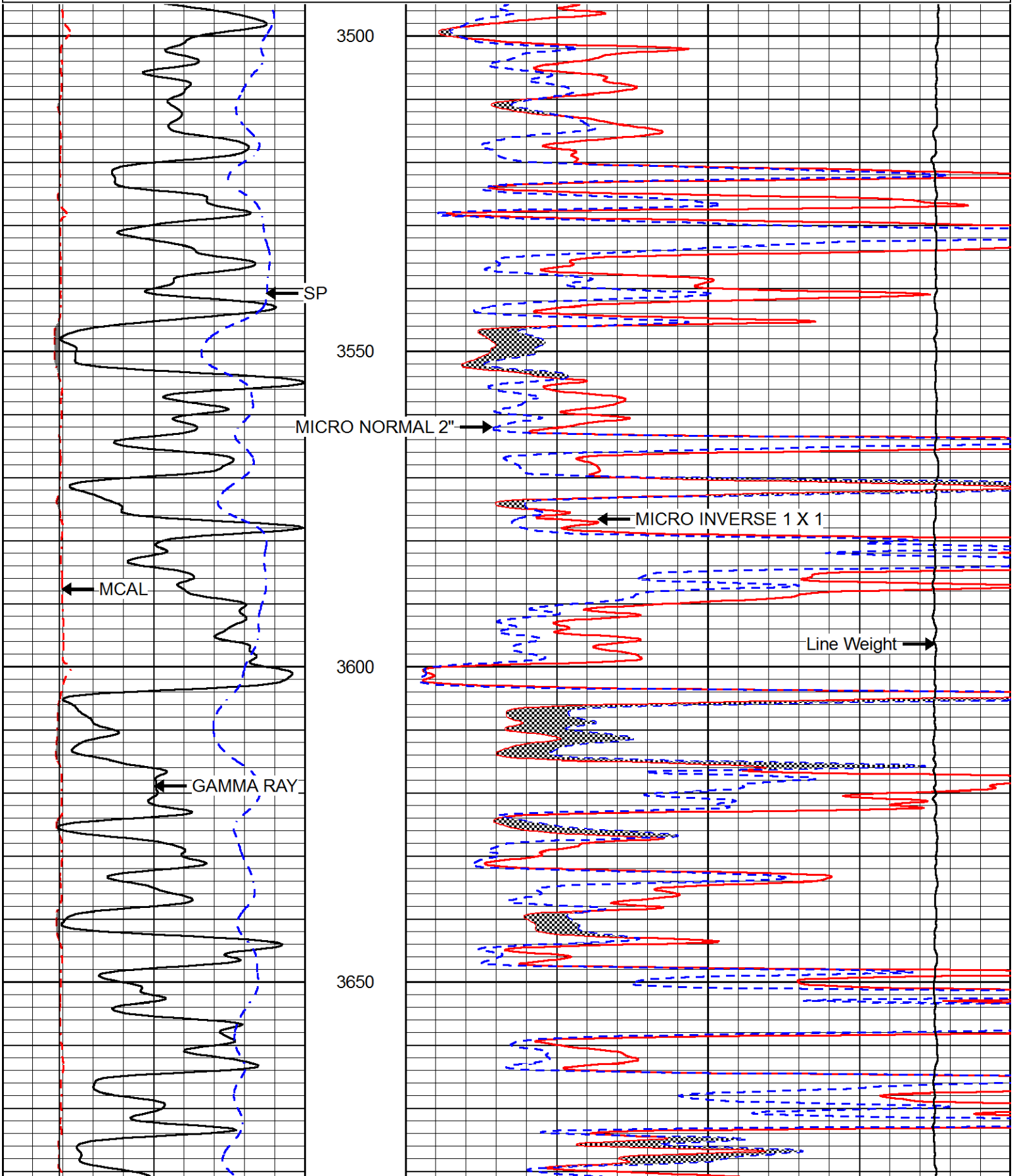


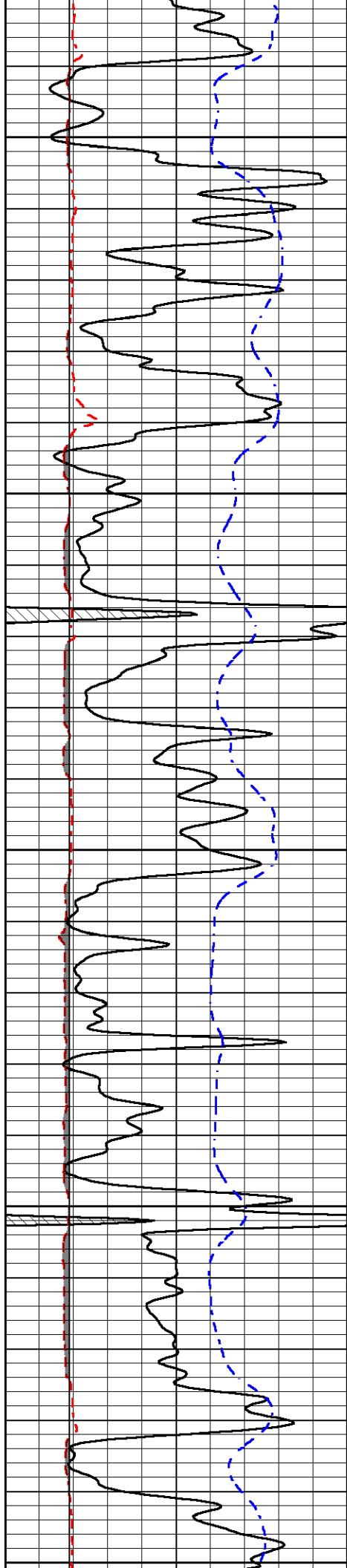
MAIN PASS

Database File mustang_gaskill_range_1.db
 Dataset Pathname stack/pass4.1

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





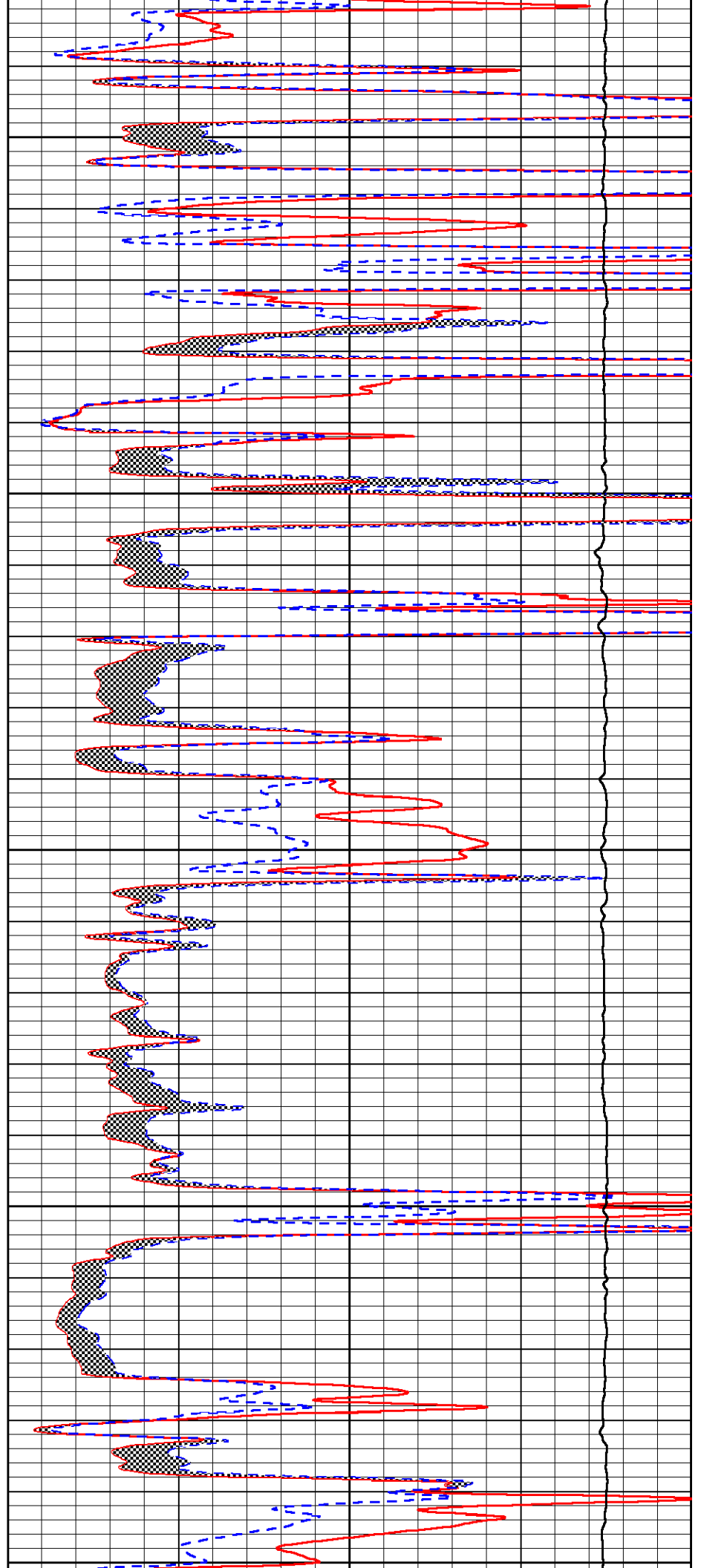
3700

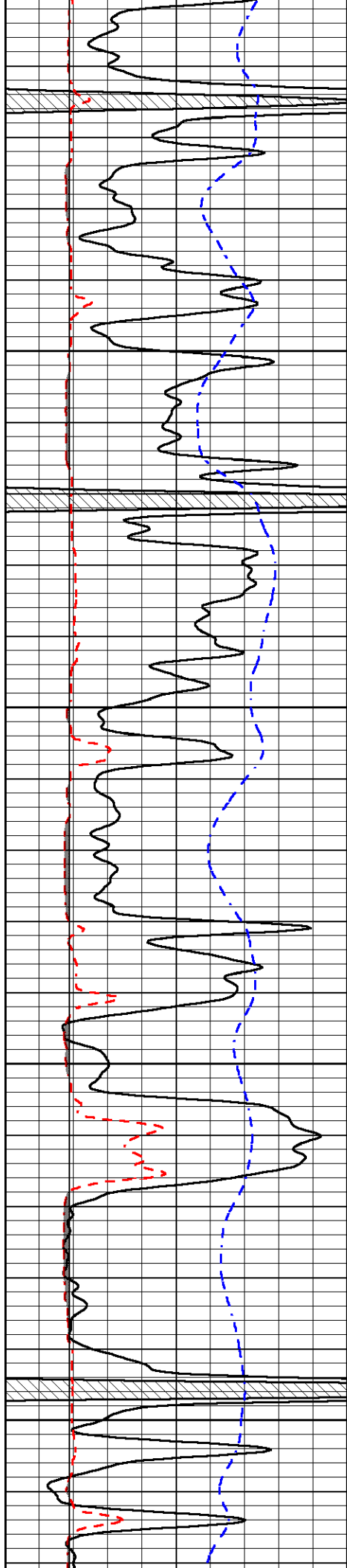
3750

3800

3850

3900



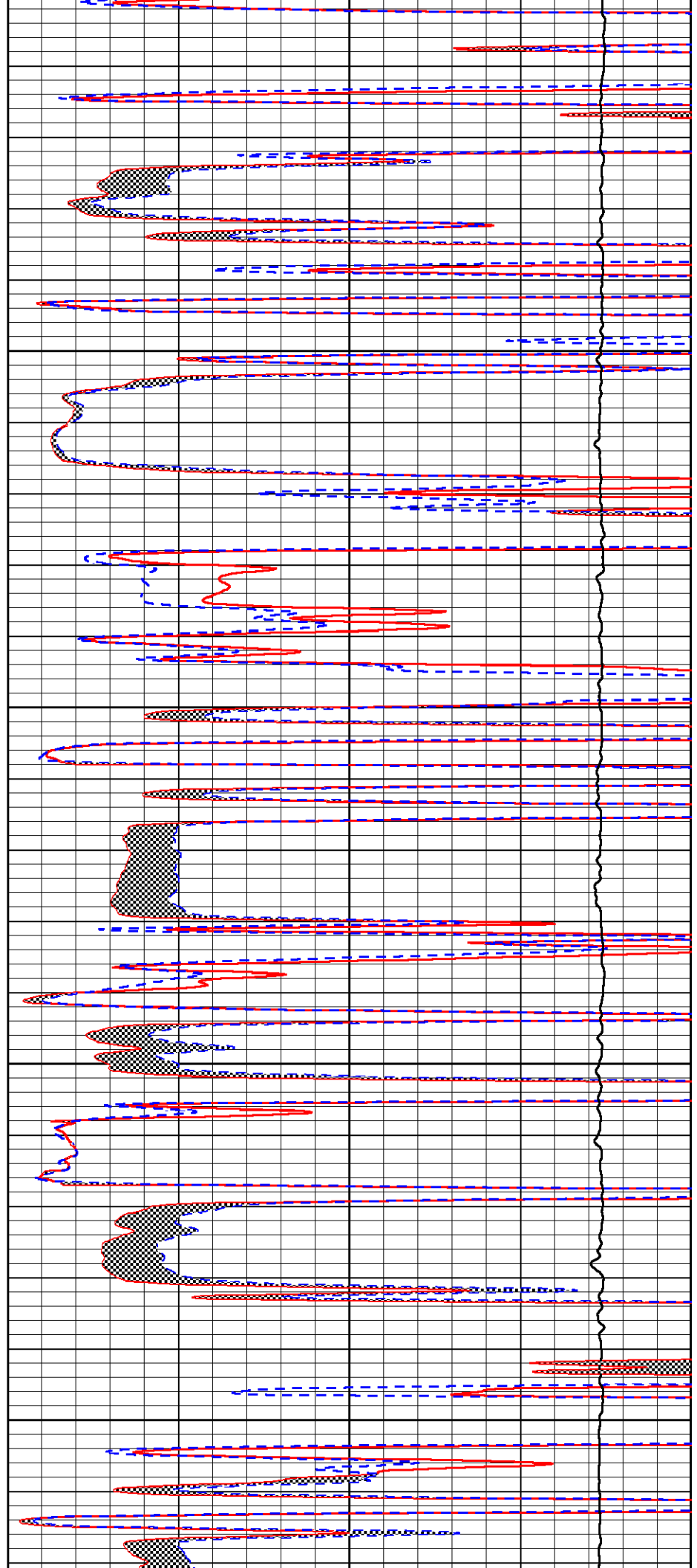


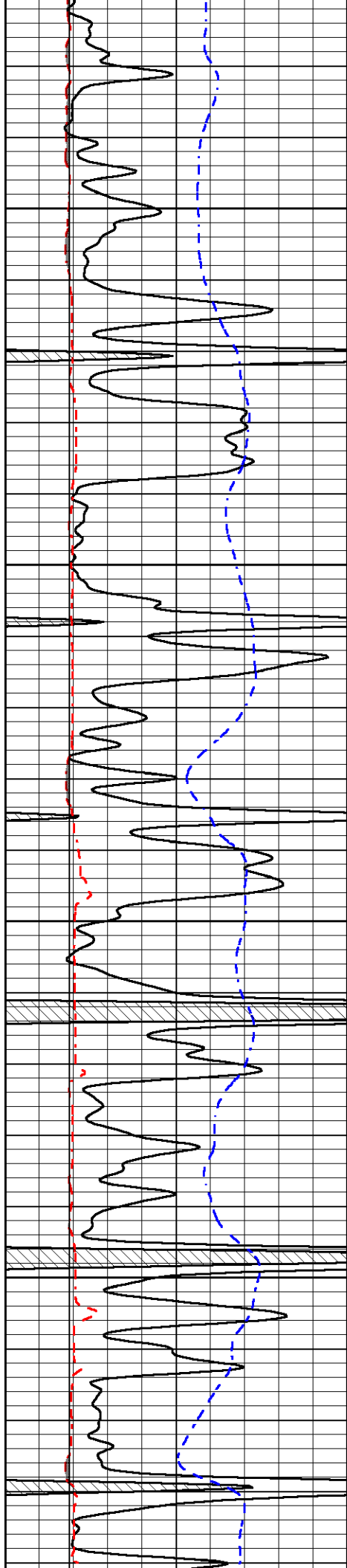
3950

4000

4050

4100



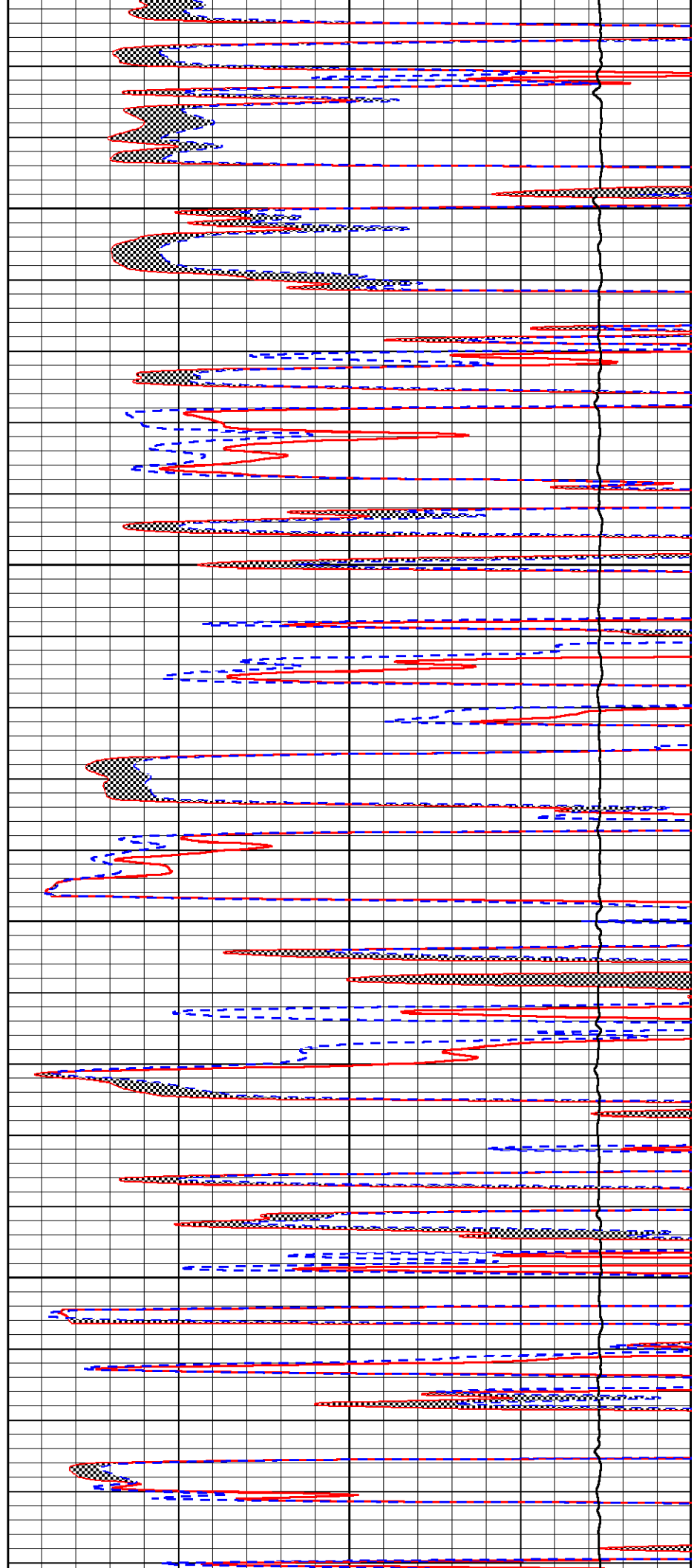


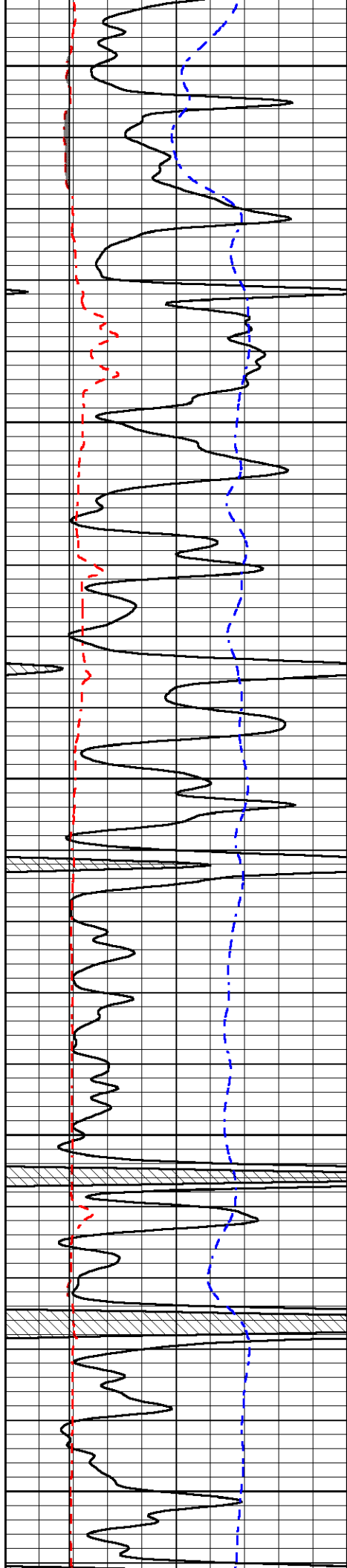
4150

4200

4250

4300





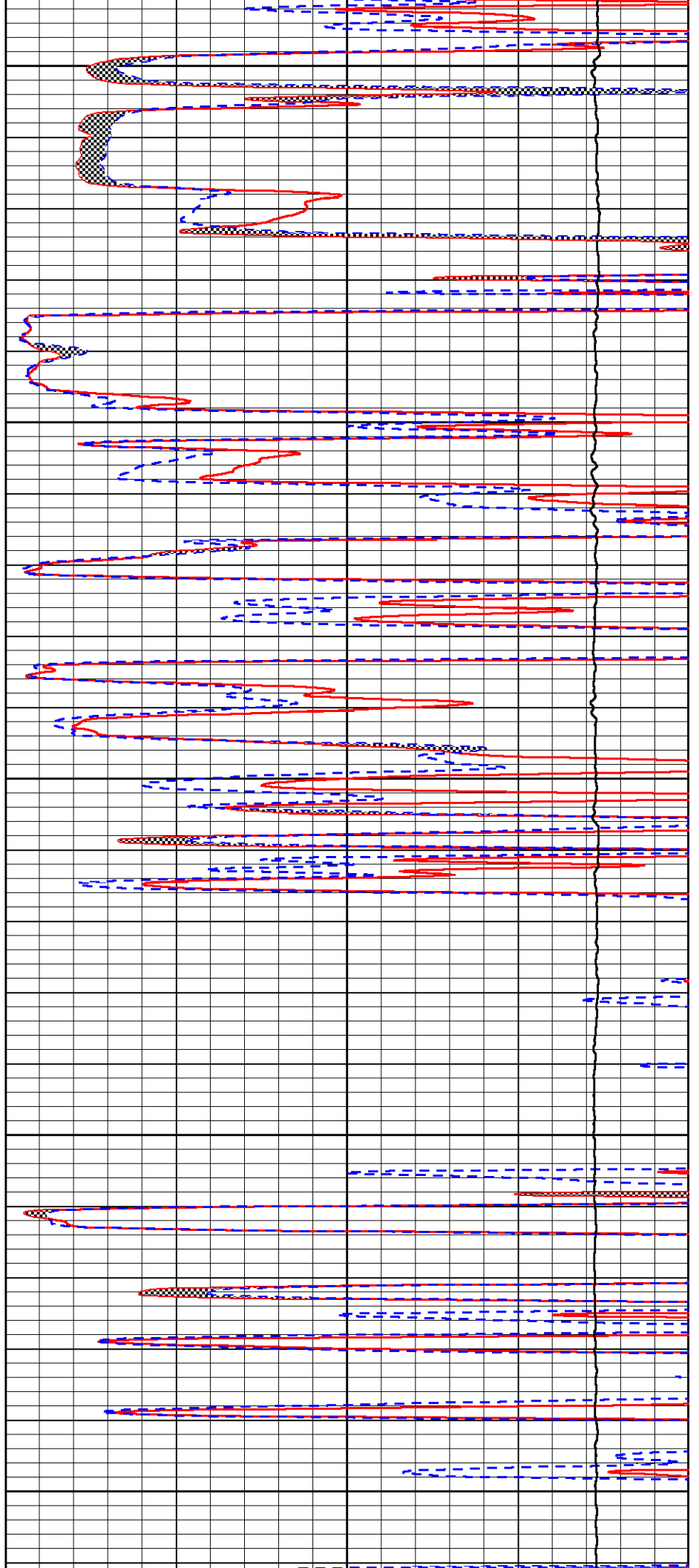
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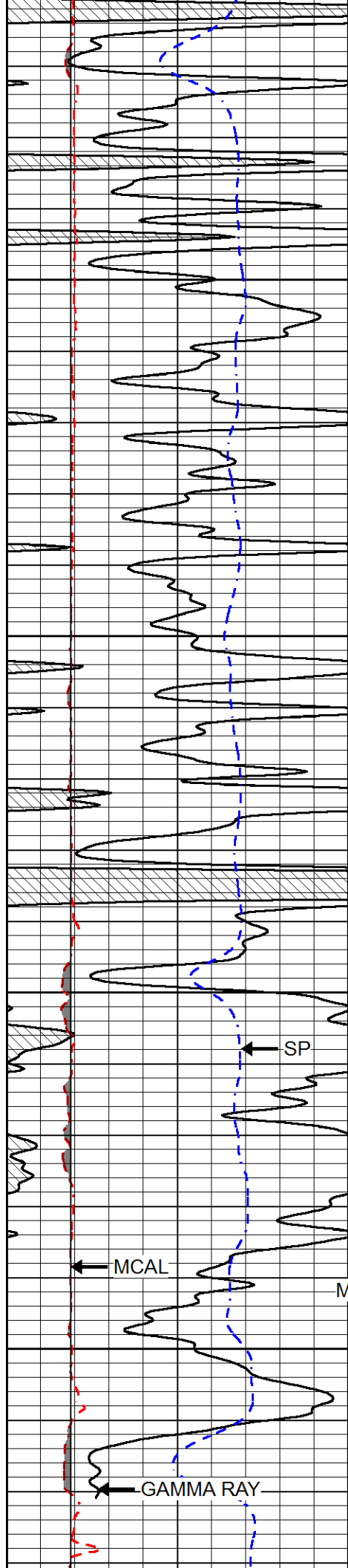
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4450

4500

4550



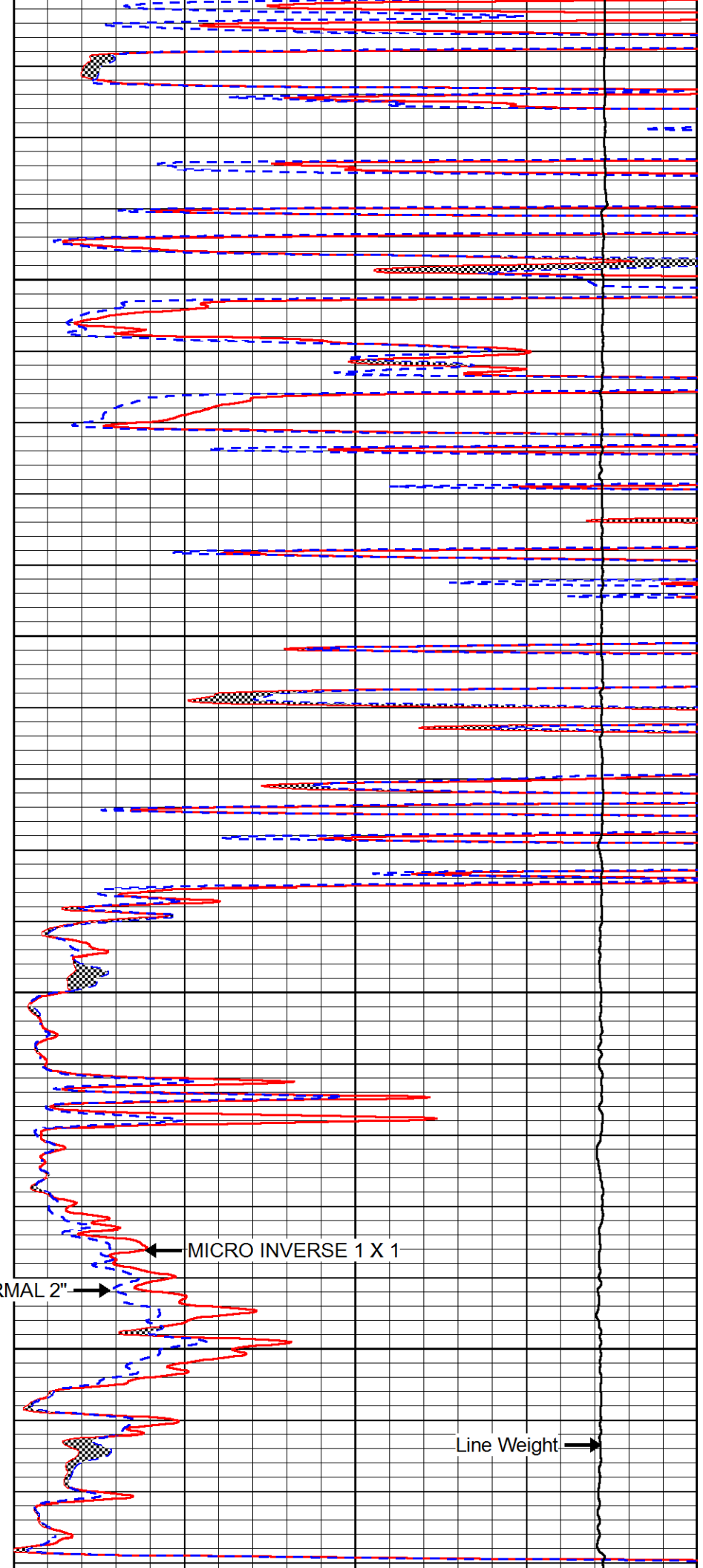


4600

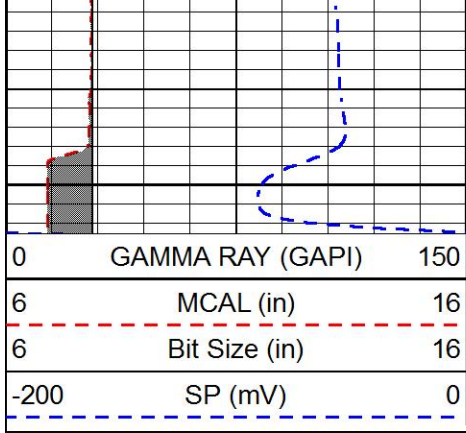
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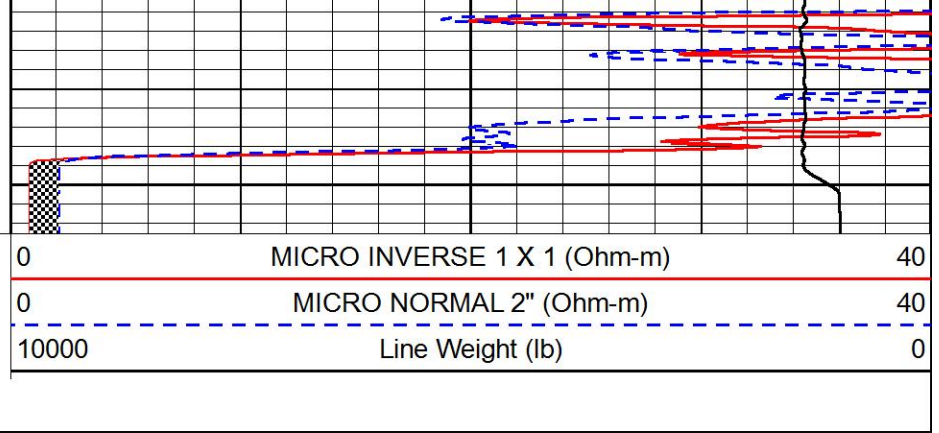
4750



Line Weight

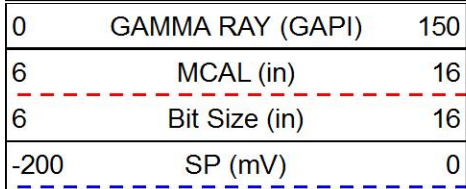


4800



REPEAT SECTION

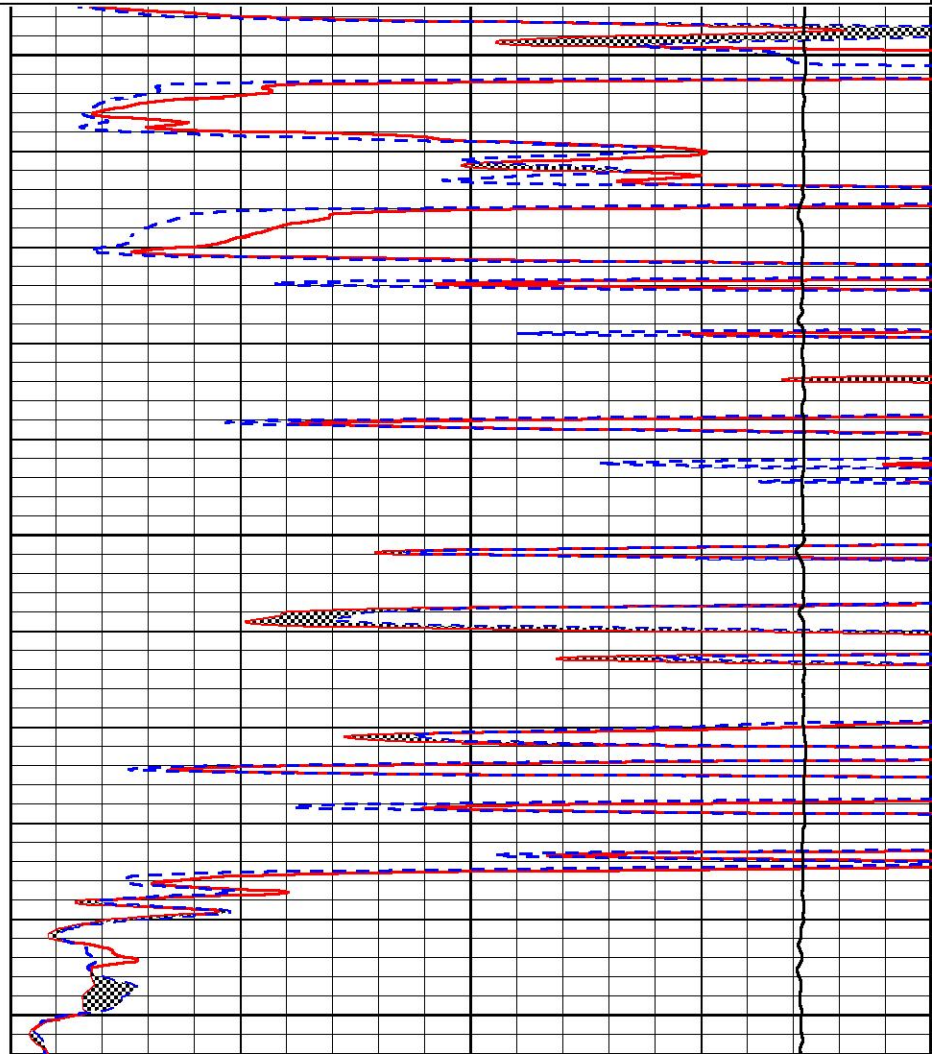
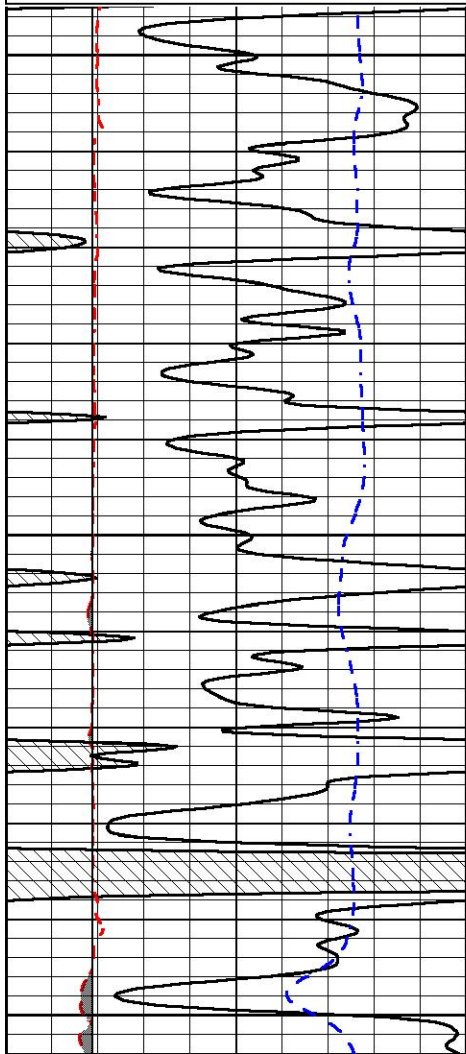
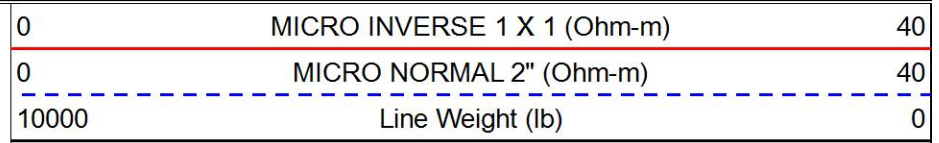
Database File mustang_gaskill_range_1.db
 Dataset Pathname stack/pass2.1
 Presentation Format _micro
 Dataset Creation Wed Nov 06 13:09:23 2019
 Charted by Depth in Feet scaled 1:240

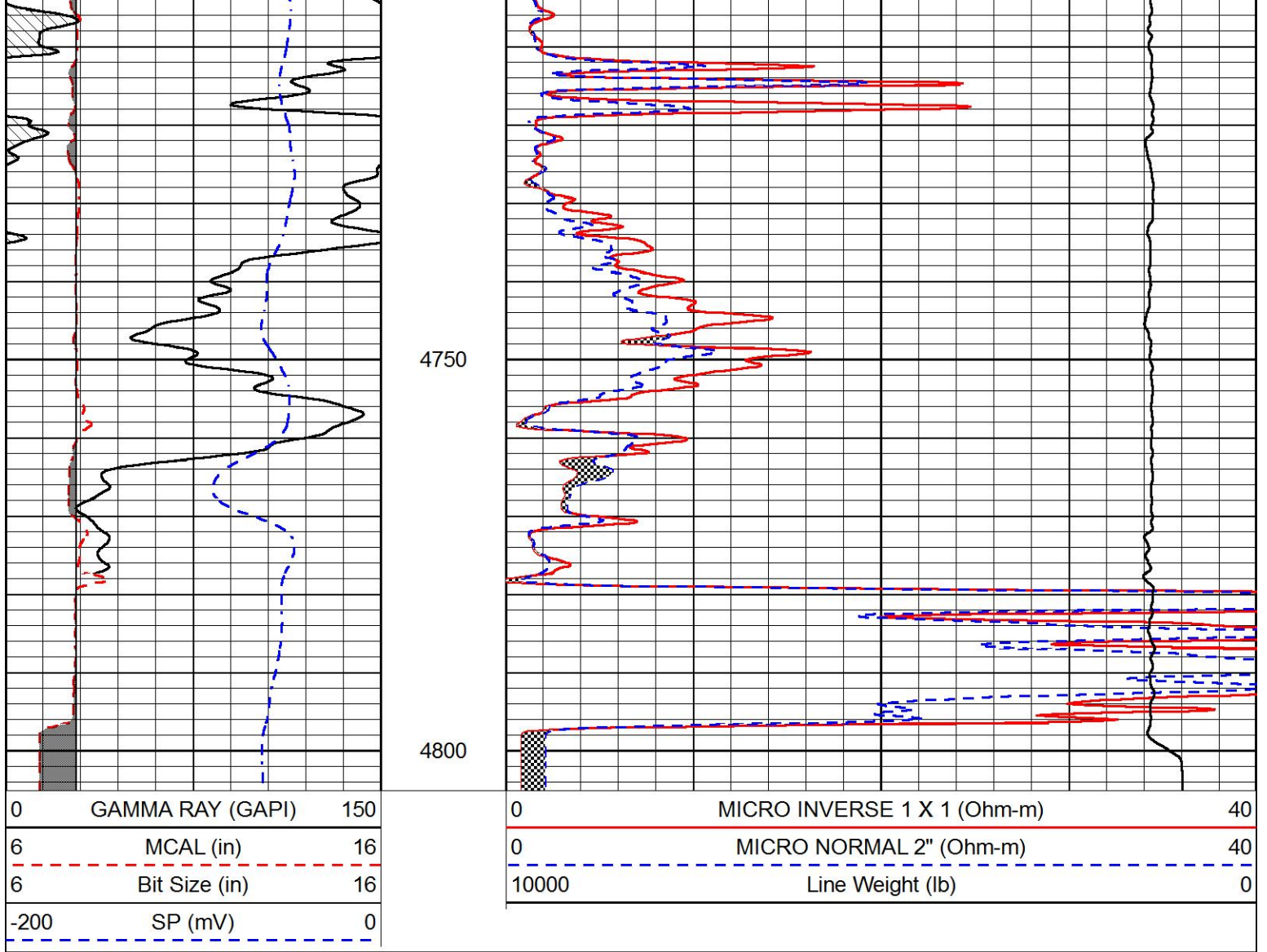


4600

4650

4700





Calibration Report

Database File mustang_gaskill_range_1.db
 Dataset Pathname MEL/pass1
 Dataset Creation Wed Nov 06 14:05:23 2019

Microlog Calibration Report

Serial-Model: ARM001-Armadillo
 Performed: Sat Sep 28 23:01:51 2019

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Normal	0.0127	0.6730	V	0.0000	10.0000	Ohm-m	23.0000	-2.4000
Inverse	0.0029	0.8729	V	0.0000	10.0000	Ohm-m	21.0000	-1.5000
Caliper	0.6744	6.5122	V	6.0000	19.0000	in	2.2269	4.4981



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Company MUSTANG ENERGY CORPORATION
 Well GASKILL RANGE #1
 Field WILDCAT
 County LOGAN
 State KANSAS

