



PIONEER
Pioneer Energy Services

MICRORESISTIVITY LOG

Company PICKRELL DRILLING COMPANY, INC.
Well LAFON TRUST B #1
Field RANSOM NW
County NESS
State KANSAS

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Location: API #: 15-135-25949-00-00

2135' FNL & 1255' FEL

SEC 17 TWP 16S RGE 24W

Permanent Datum GROUND LEVEL Elevation 2500'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2507'
D.F. N/A
G.L. 2500'

Date 5/6/2017

Run Number

ONE

Depth Driller

4600'

Depth Logger

4598'

Bottom Logged Interval

4597'

Top Log Interval

3700'

Casing Driller

8.625" @ 207'

Casing Logger

205'

Bit Size

7.875"

Type Fluid in Hole

CHEMICAL

Salinity, ppm CL

3300

Density / Viscosity

9.4 54

pH / Fluid Loss

9.0 8.8

Source of Sample

FLOWLINE

Rm @ Meas. Temp

0.70 @ 80

Rmf @ Meas. Temp

0.53 @ 80

Rmc @ Meas. Temp

0.95 @ 80

Source of Rmf / Rmc

CHARTS

Rm @ BHT

0.46 @ 122

Operating Rig Time

3 HOURS

Max Rec. Temp. F

122

Equipment Number

91

Location

HAYS

Recorded By

D. SCHMIDT

Witnessed By

AARON YOUNG

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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.

RANSOM,
3 WEST,
1 NORTH, 1/4 WEST,
NORTH INTO

Log Measured From: KELLY BUSHING 7 Ft. Above Permanent Datum

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

Your Pioneer Energy Services Crew

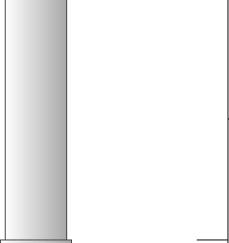
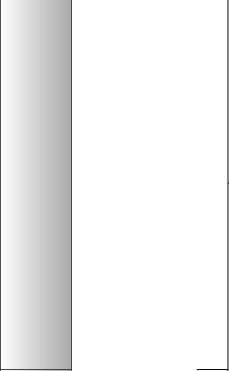
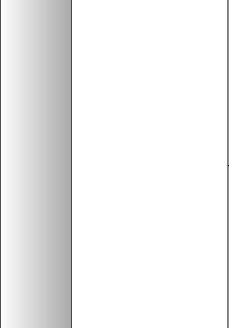
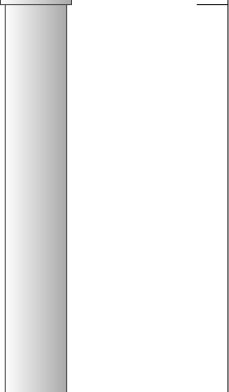
Engineer: D. SCHMIDT
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: AARON YOUNG
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

M	A	SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m
2	1	Off	Limestone	1	2.71	340	0
SNDERR mmho/m	SRFTEMP degF	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0	80	0	5.5	0	4598	122	7.875

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58		GR-M&W (89)	3.00	3.50	50.00
CNLSC CNSSC	37.48 36.73		CNT-M&W (207-MW)	5.50	3.50	100.00
LSD DCAL SSD	28.43 28.42 27.93		CDL-M&W (90-1031)	8.50	4.00	250.00
MCAL MI MN	19.83 19.83 19.83		ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
RLL3F RLL3	15.80 15.80					

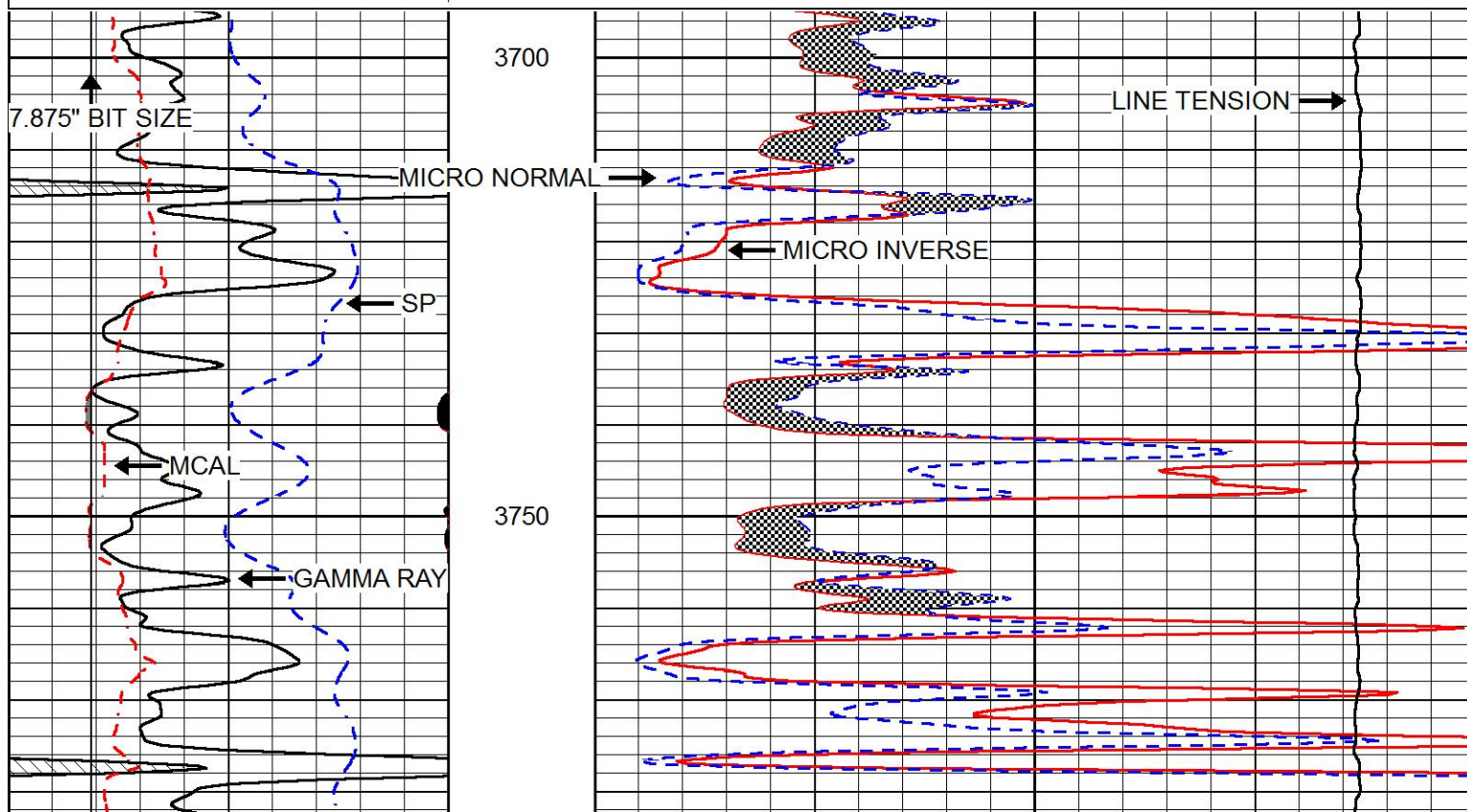
			DIL-M&W (PSI 91)	18.50	3.50	220.00
CILD	8.00					
CILM	4.70					
SP	0.20					
Dataset: pickrell drilling_lafon trust_b 1.db: field/well/STKML/pass3.1 Total length: 43.08 ft Total weight: 685.00 lb O.D.: 4.00 in						

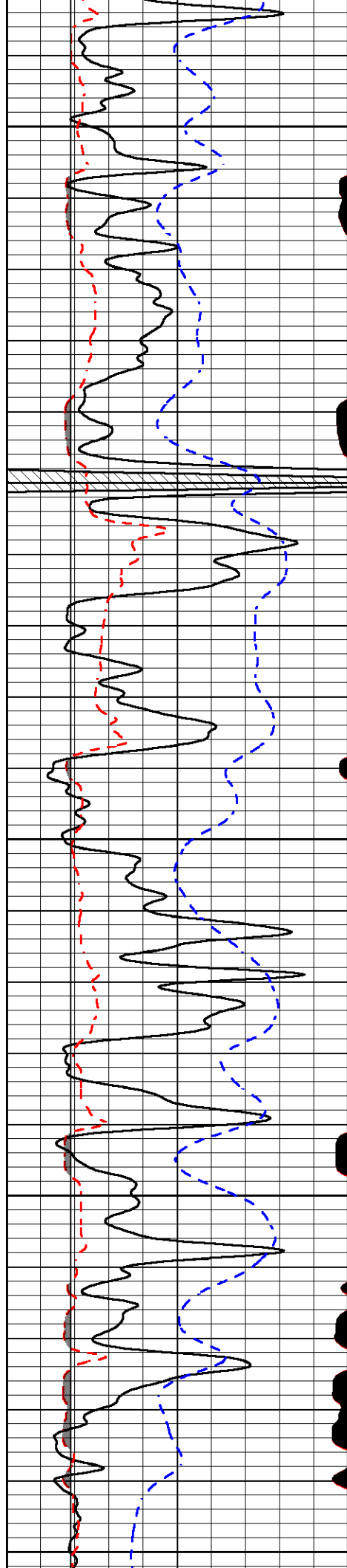


MAIN PASS

Database File	pickrell drilling_lafon trust_b 1.db
Dataset Pathname	STKML/pass3.1
Presentation Format	micro
Dataset Creation	Sat May 06 18:55:52 2017
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	0	Micro Inverse 1 X 1 (Ohm-m)	40
6	MCAL (in)	16	0	Micro Normal 2" (Ohm-m)	40
2.875	mcals (in)	7.875	10000	Line Weight (lb)	0
6	Bit Size (in)	16			
-200	SP (mV)	0			





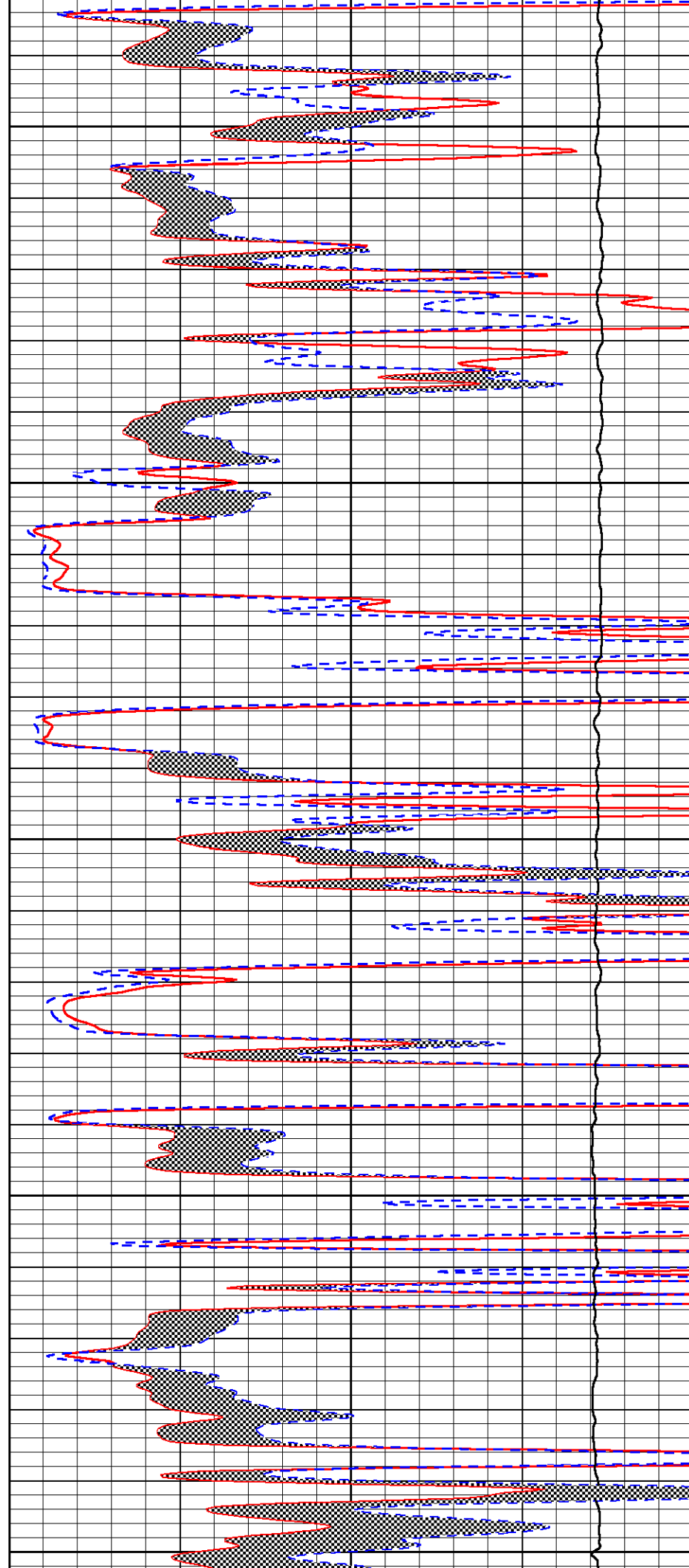
3800

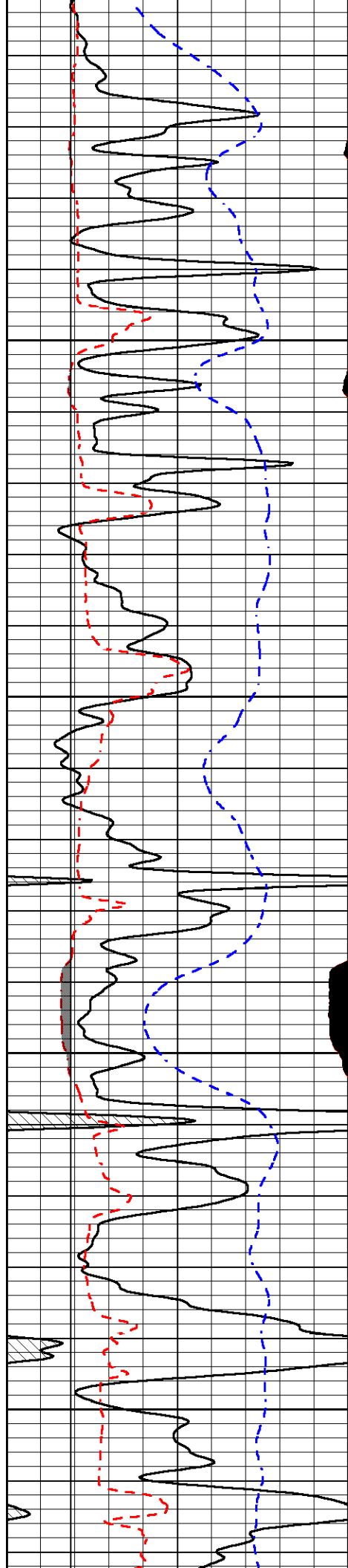
3850

3900

3950

4000



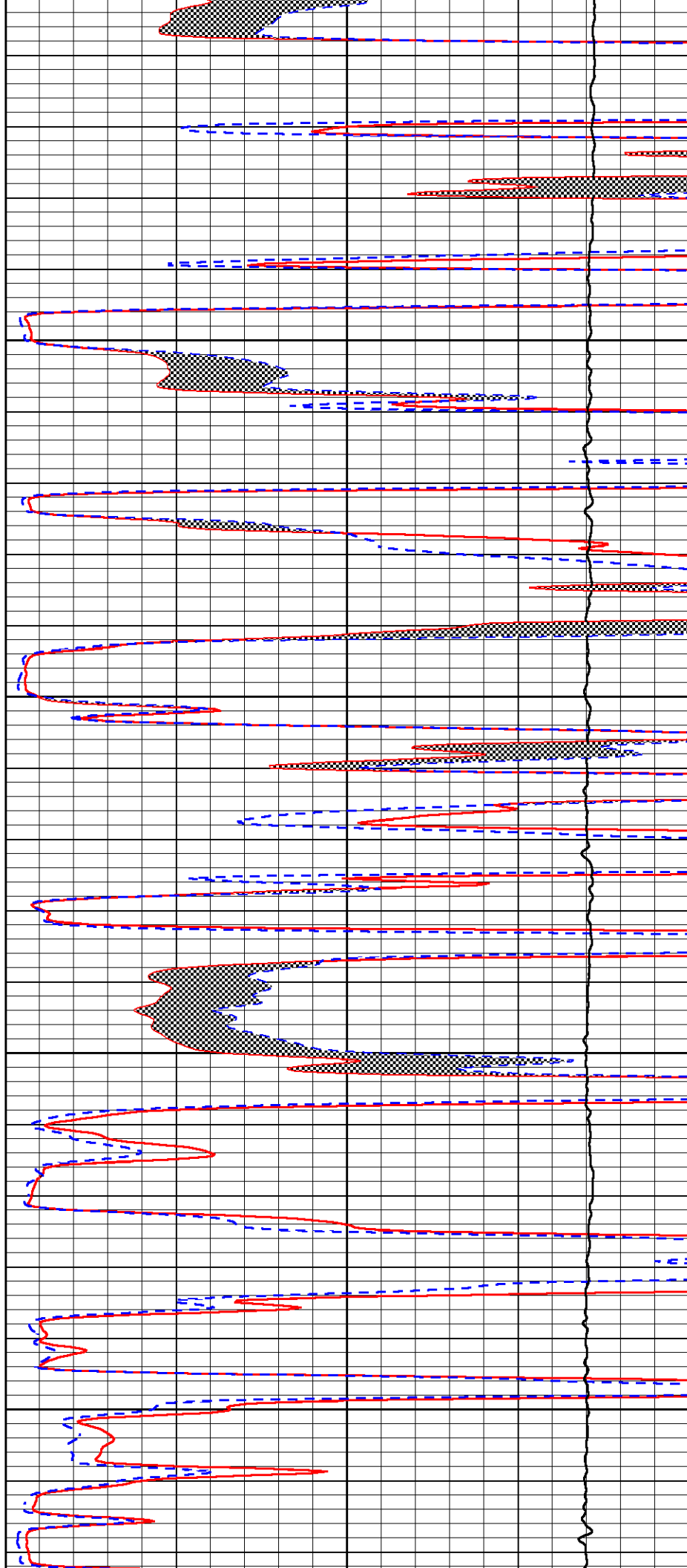


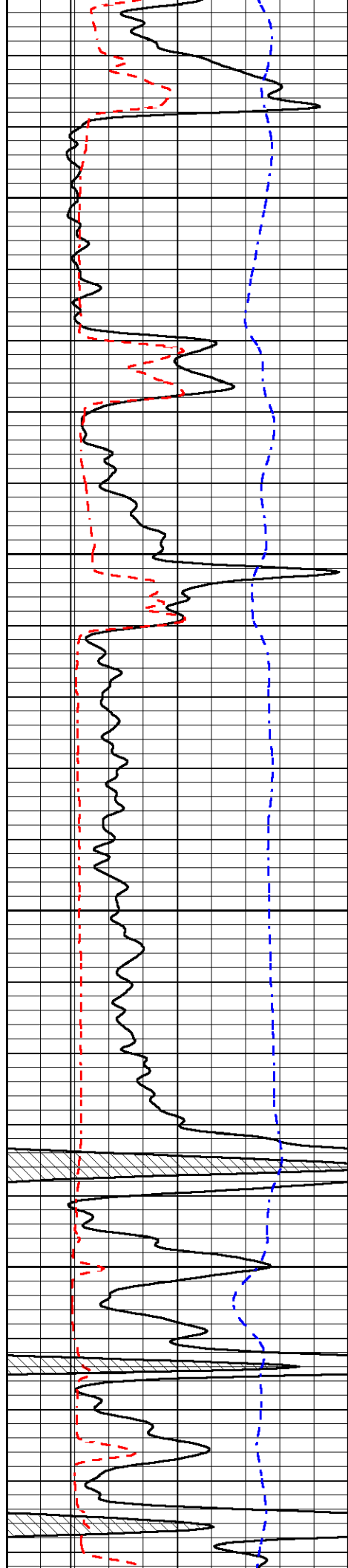
4050

4100

4150

4200



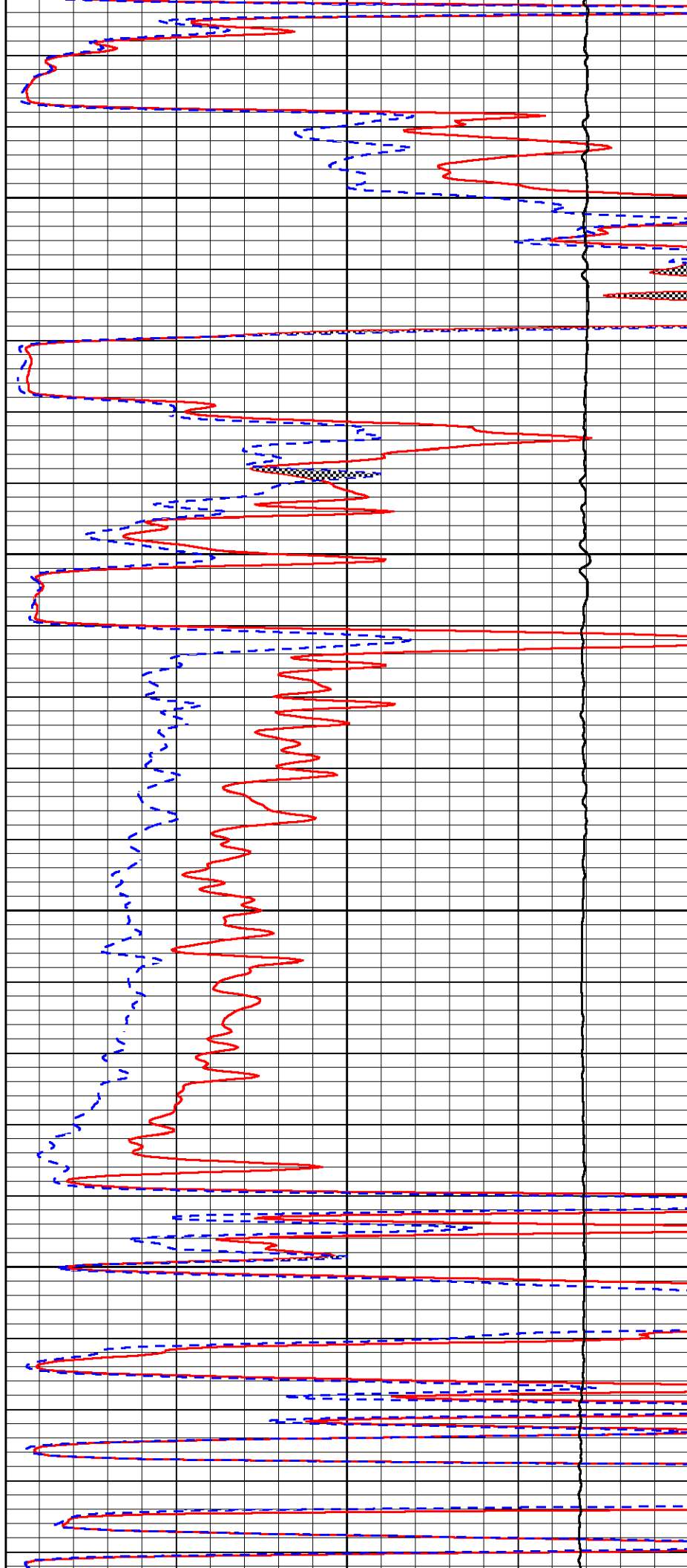


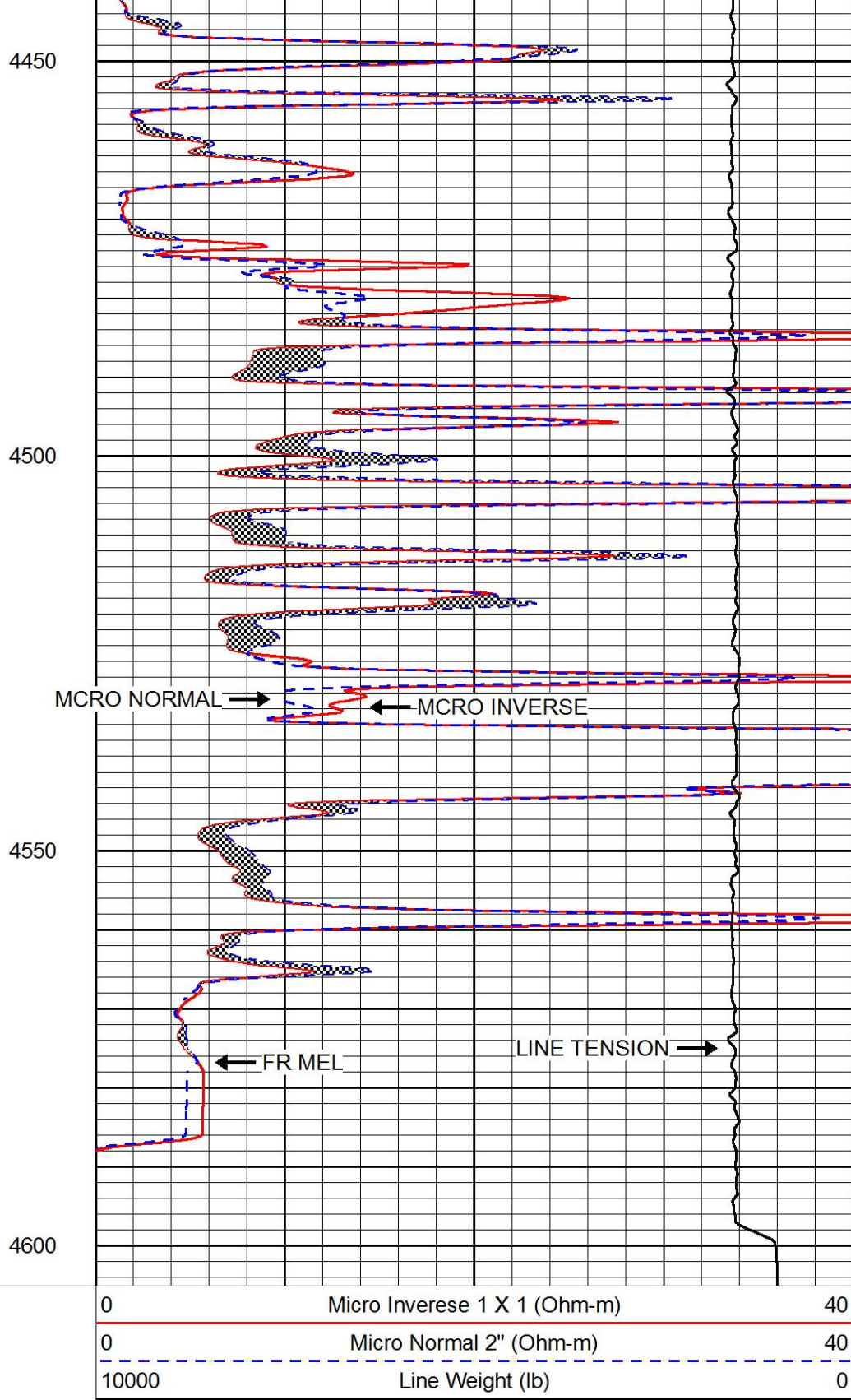
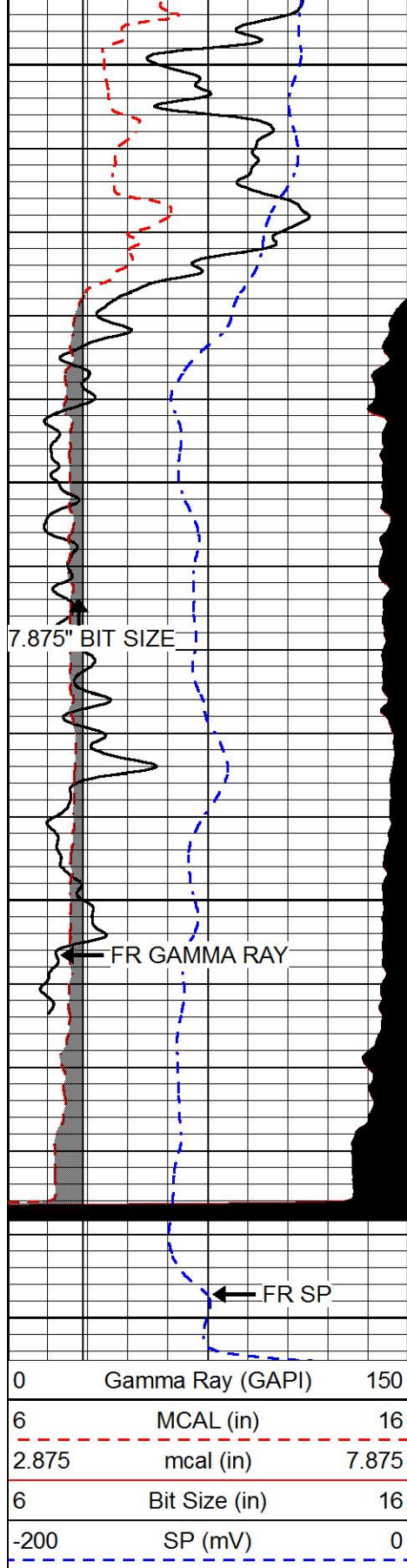
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4300

4350

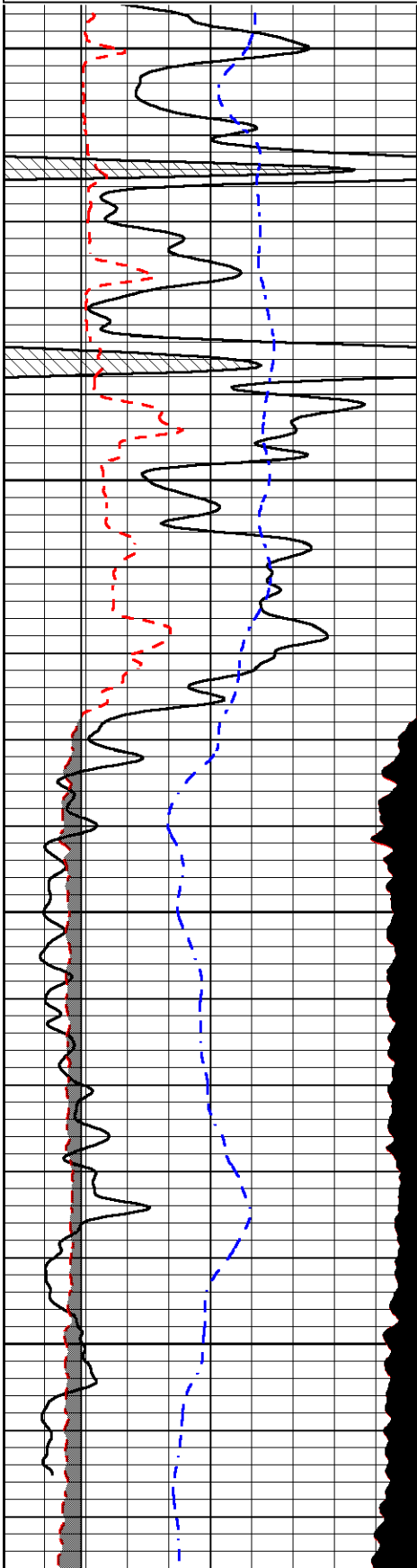
4400





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6	Bit Size (in)	16
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0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

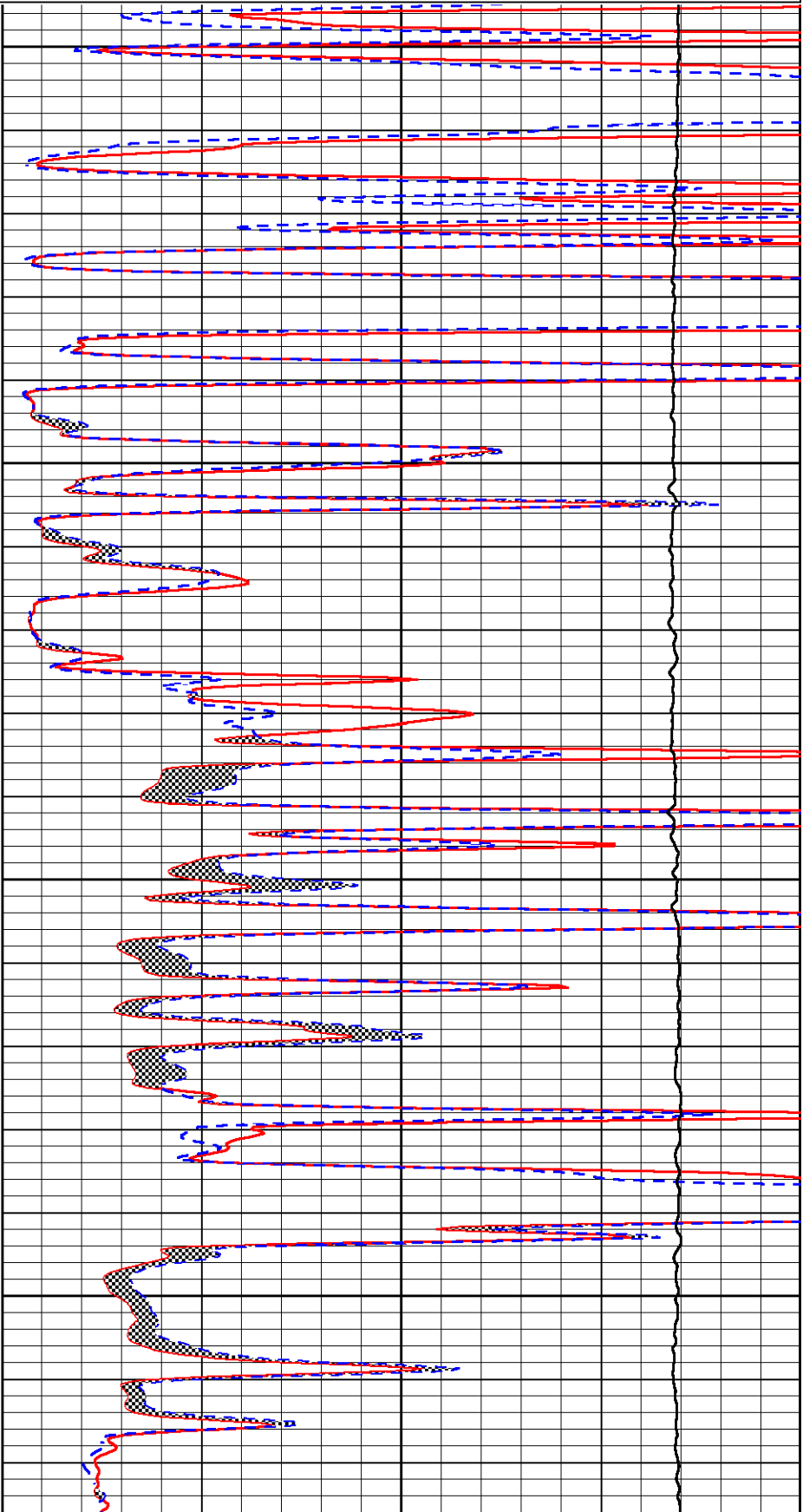


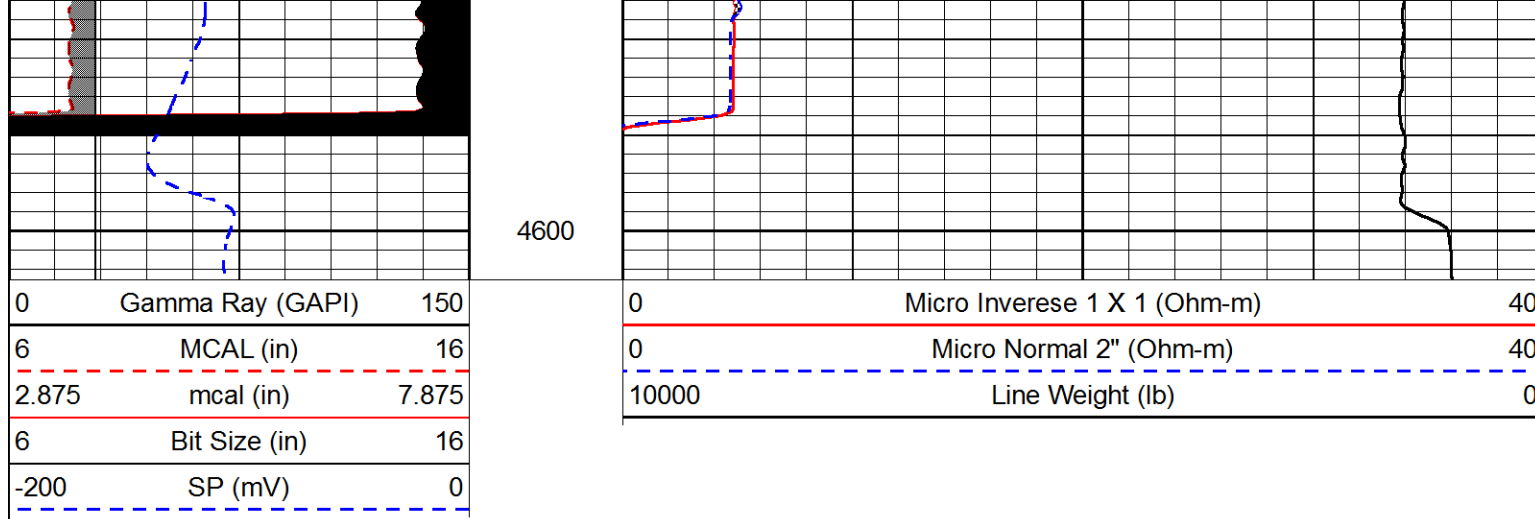
4400

4450

4500

4550





Calibration Report	
Database File	pickrell drilling_lafon trust_b 1.db
Dataset Pathname	STKML/pass3.1
Dataset Creation	Sat May 06 18:55:52 2017

Dual Induction Calibration Report

Serial-Model:	PSI 91-M&W
Calibration Performed:	Sat May 06 17:53:33 2017

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	166.796	835.089	0.000	255.800	mmho/m	0.410	-30.000
Medium	142.009	1348.560	0.000	255.800	mmho/m	0.360	-31.000

Microlog Calibration Report

Serial-Model:	PSI-01-PSIML
Performed:	Sat May 06 17:53:42 2017

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	21500.0000	-1.1000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	20000.0000	-0.3000
Caliper	1.0001	1.1397	6.5000	18.5000	in	100.0000	-97.3750

Compensated Density Calibration Report

Serial-Model:	90-1031-M&W
Source / Verifier:	16955B / 2ci
Master Calibration Performed:	Sat May 06 17:53:49 2017

Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.755	g/cc		5174.18	6425.27	cps
Aluminum	2.665	g/cc		963.17	4037.42	cps
Spine Angle = 74.55			Density/Spine Ratio = 0.522			

	Size		Reading
Small Ring	8.00	in	1.84
Large Ring	22.00	in	1.46

Compensated Neutron Calibration Report
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Serial Number:	207-MW
Tool Model:	M&W
Calibration Performed:	Sat May 6 10:30:30 2017

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:	89	
Tool Model:	M&W	
Calibration Performed:	Sat May 06 17:54:04 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6000	GAPI/cps

 PIONEER Pioneer Energy Services	Company	PICKRELL DRILLING COMPANY, INC.
	Well	LAFON TRUST B #1
	Field	RANSOM NW
	County	NESS
	State	KANSAS