



PIONEER
Pioneer Energy Services

MICRORESISTIVITY LOG

Company PIONEER RESOURCES	
Well	MAIER NO. 1
Field	WILDCAT
County	ELLIS
State	KANSAS
Company PIONEER RESOURCES	
Well	MAIER NO. 1
Field	WILDCAT
County	ELLIS
State	KANSAS
Location:	API #: 15-051-26840-00-00
620' FNL & 1,520' FWL	
SEC 33 TWP 12S RGE 19W	CNL/CDL DIL
Permanent Datum	GROUND LEVEL Elevation 2135'
Log Measured From	KELLY BUSHING
Drilling Measured From	KELLY BUSHING
Elevation	K.B. 2142' D.F. N/A G.L. 2135'
Date	10/15/2016
Run Number	ONE
Depth Driller	3885'
Depth Logger	3884'
Bottom Logged Interval	3883'
Top Log Interval	3100'
Casing Driller	8.625" @ 232'
Casing Logger	232'
Bit Size	7.875"
Type Fluid in Hole	CHEMICAL
Salinity, ppm CL	6000
Density / Viscosity	9.1 52
pH / Fluid Loss	10.0 9.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.62 @ 80
Rmt @ Meas. Temp	.47 @ 80
Rmc @ Meas. Temp	.84 @ 80
Source of Rmt / Rmc	CHARTS
Rm @ BHT	.43 @ 115
Operating Rig Time	2 1/2 HOURS
Max Rec. Temp. F	115
Equipment Number	108
Location	COLBY
Recorded By	J. LONG
Witnessed By	JANEL STAAB

<<< 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.

YOCEMENTO (I-70 EXIT), 3 1/2 NORTH TO HOPEWELL ROAD, 2/3 WEST, SOUTH INTO

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

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

Your Pioneer Energy Services Crew

Engineer: J. LONG
Operator: C. PFEIFER
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: JANEL STAAB
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 115	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV -365	degF 81	Off	ft 3884

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58			GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC	37.48			CNT-M&W (tk10-MW)	5.50	3.50	100.00
CNSSC	36.73						
LSD DCAL SSD	28.43 28.42 27.93			CDL-M&W (71-914)	8.50	4.00	250.00
ML-PSI STKBL ML (PSI-02) Stackable Microlog Tools	7.58				7.58	4.00	65.00
MCAL	19.83						
MI	19.83						
MN	19.83						
RLL3	15.80						
RLL3F	15.79						
CILD	8.00			DIL-M&W (1987)	18.50	3.50	220.00

CILM

4.70

SP

0.20

Dataset: pioneerresources_maier_1.db: field/well/stackmel/pass1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

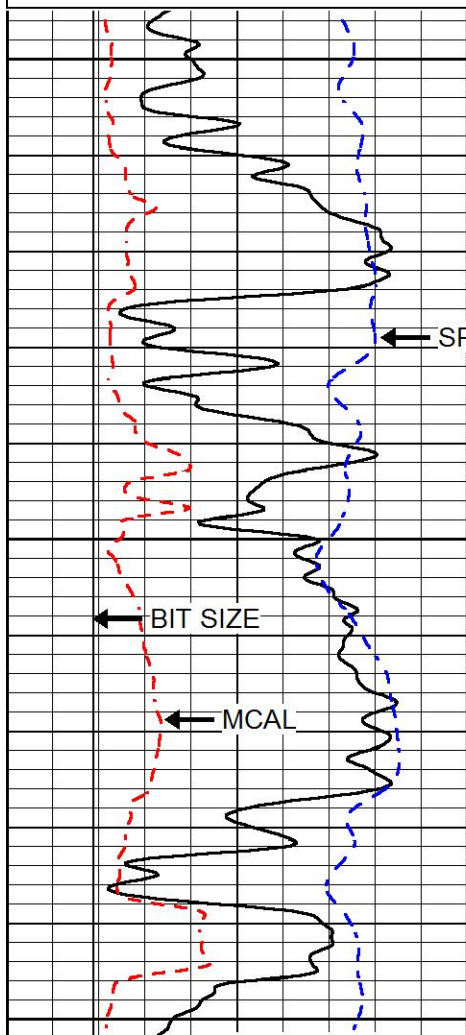


MAIN PASS

Database File: pioneerresources_maier_1.db
Dataset Pathname: stackmel/pass4.1
Presentation Format: micro
Dataset Creation: Sat Oct 15 18:39:35 2016
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

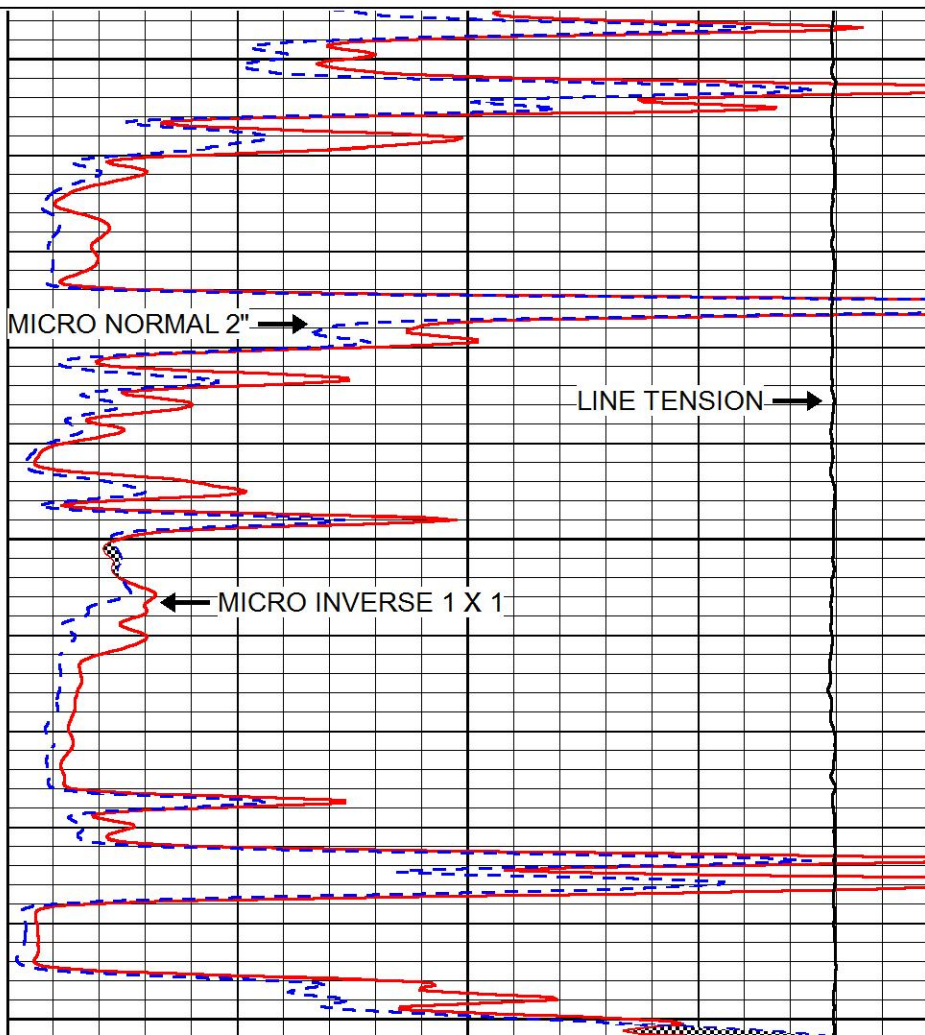
0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
15000	LINE TENSION (lb)	0



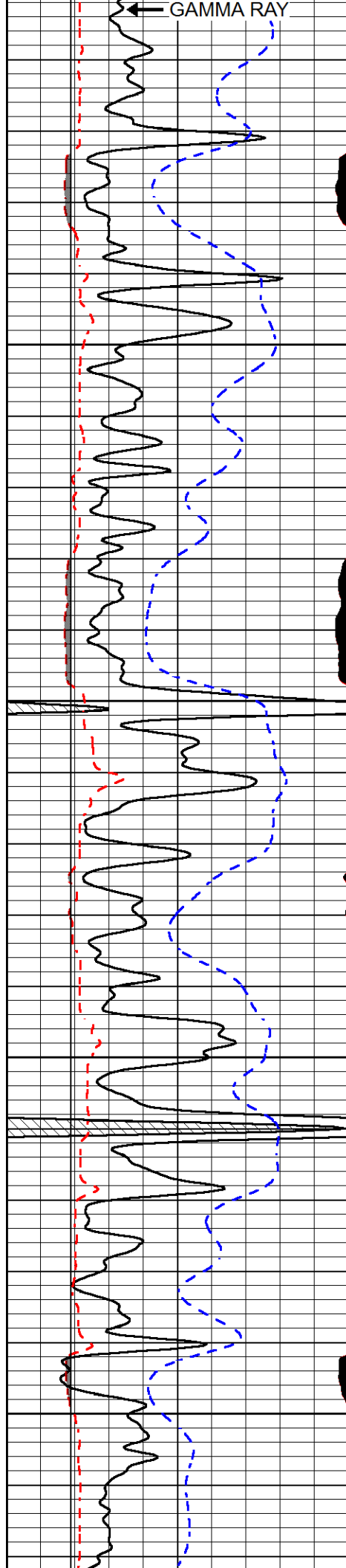
3100

3150

3200



GAMMA RAY

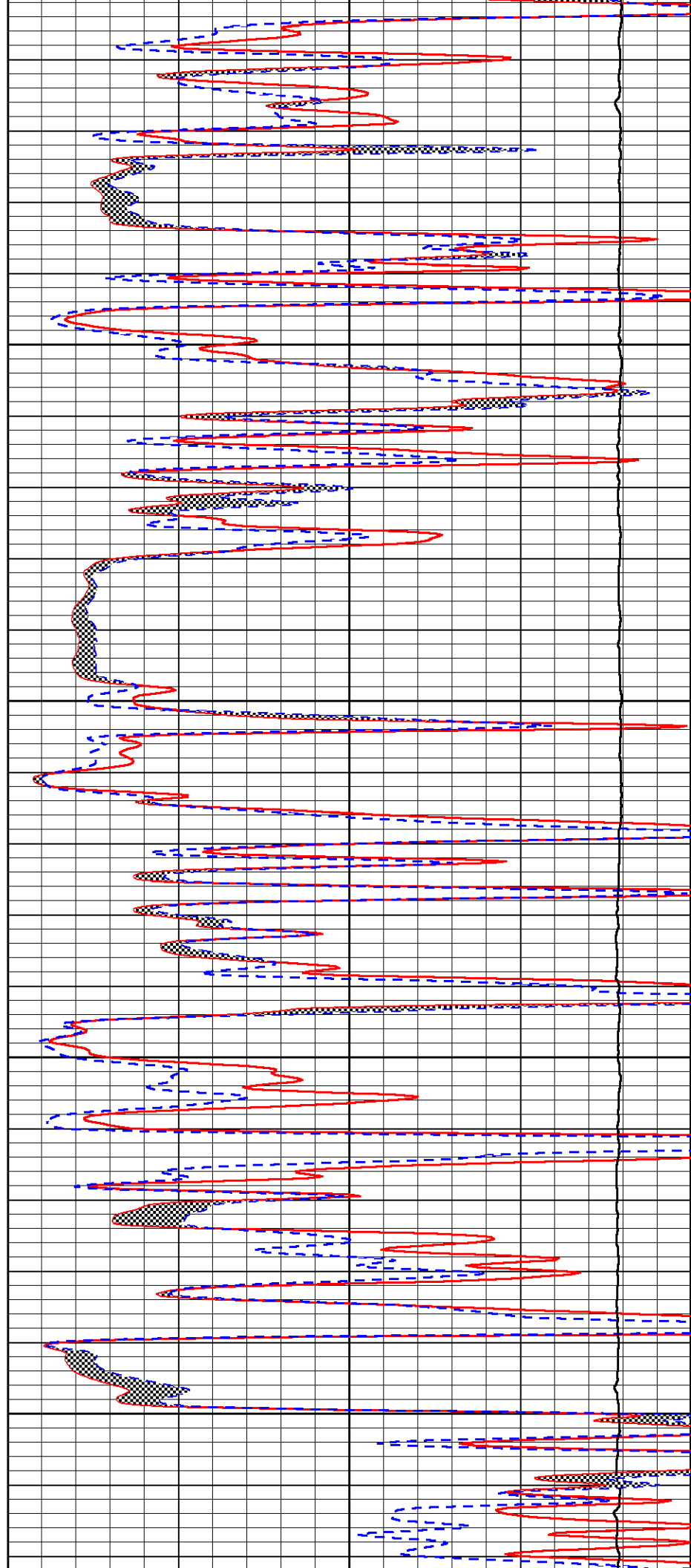


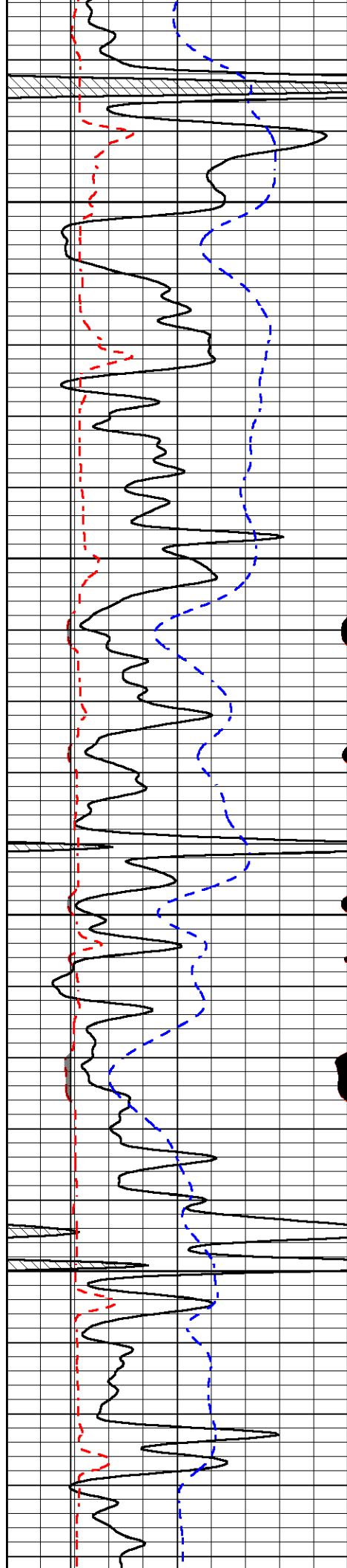
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3300

3350

3400



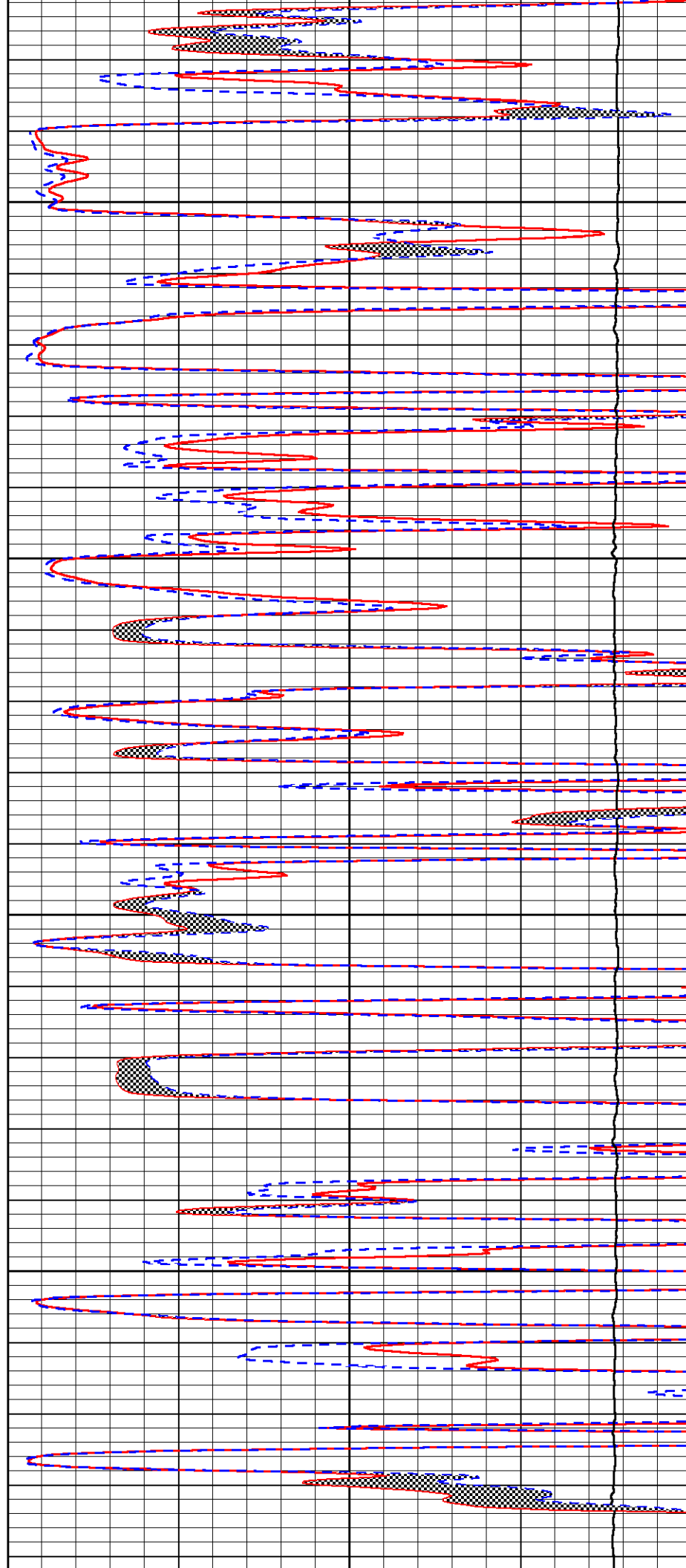


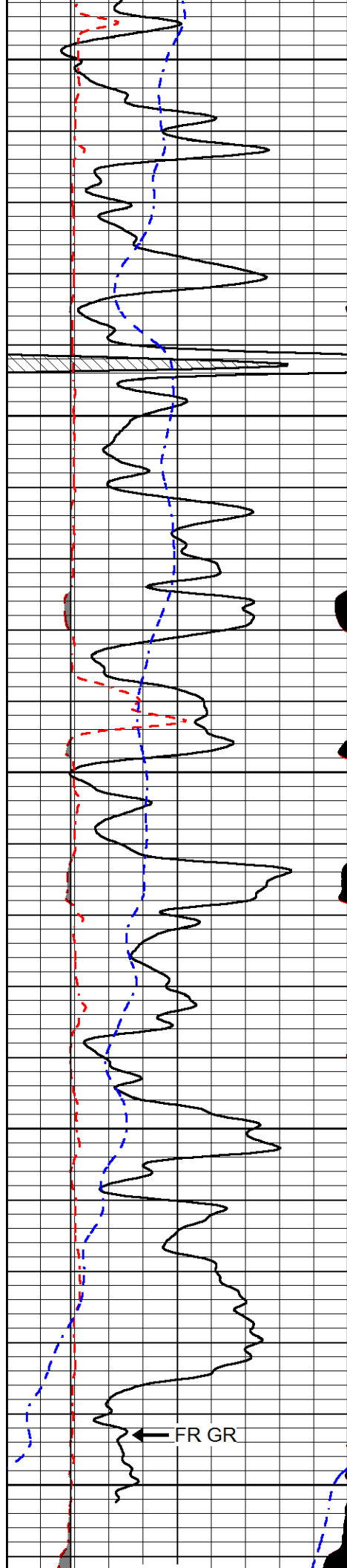
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3500

3550

3600





3650

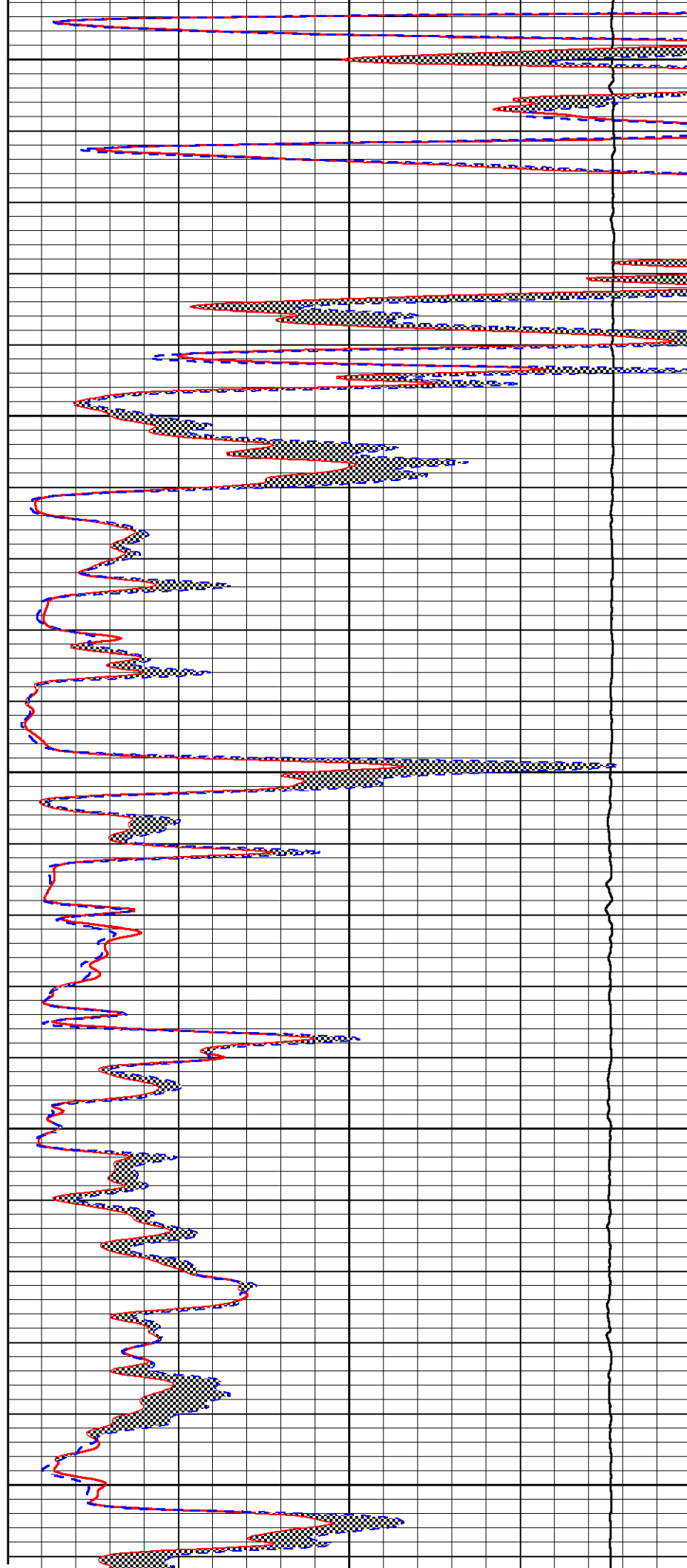
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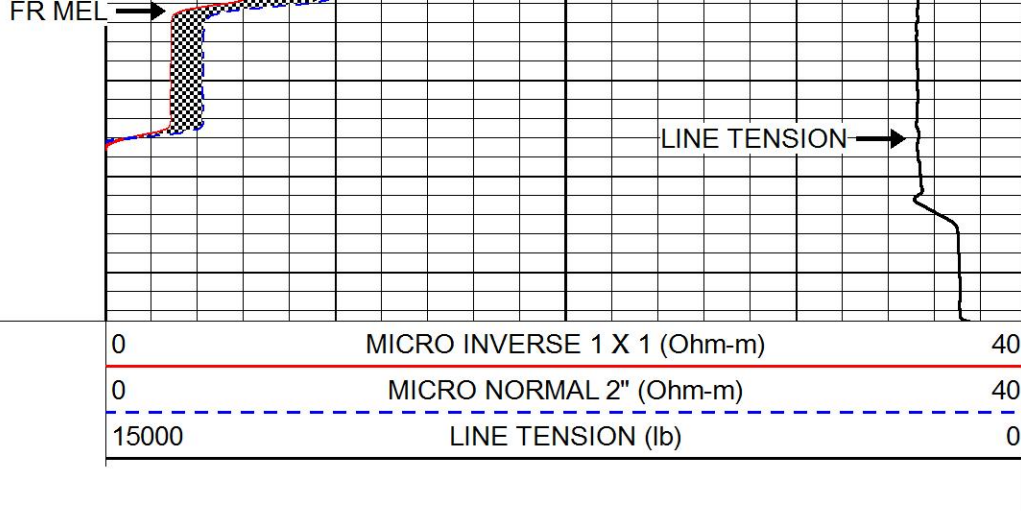
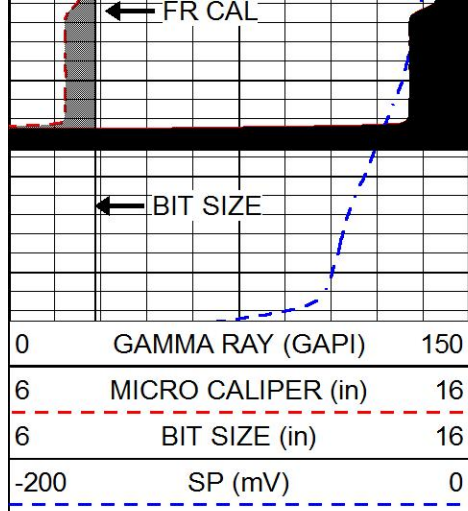
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3800

3850

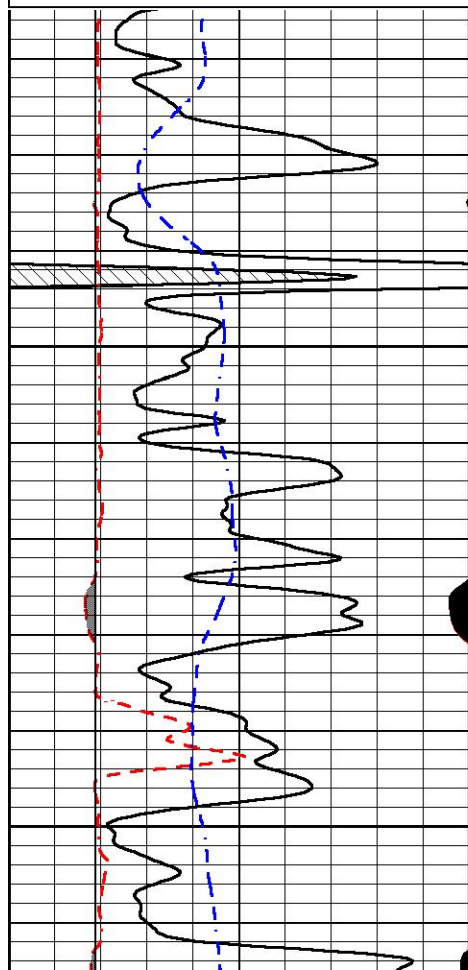
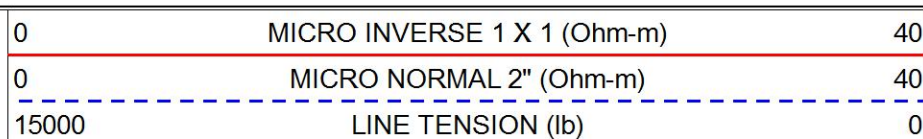
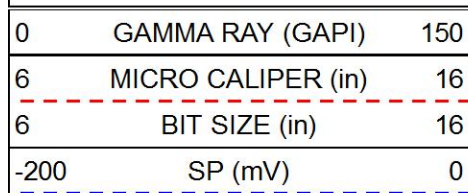
FR GR





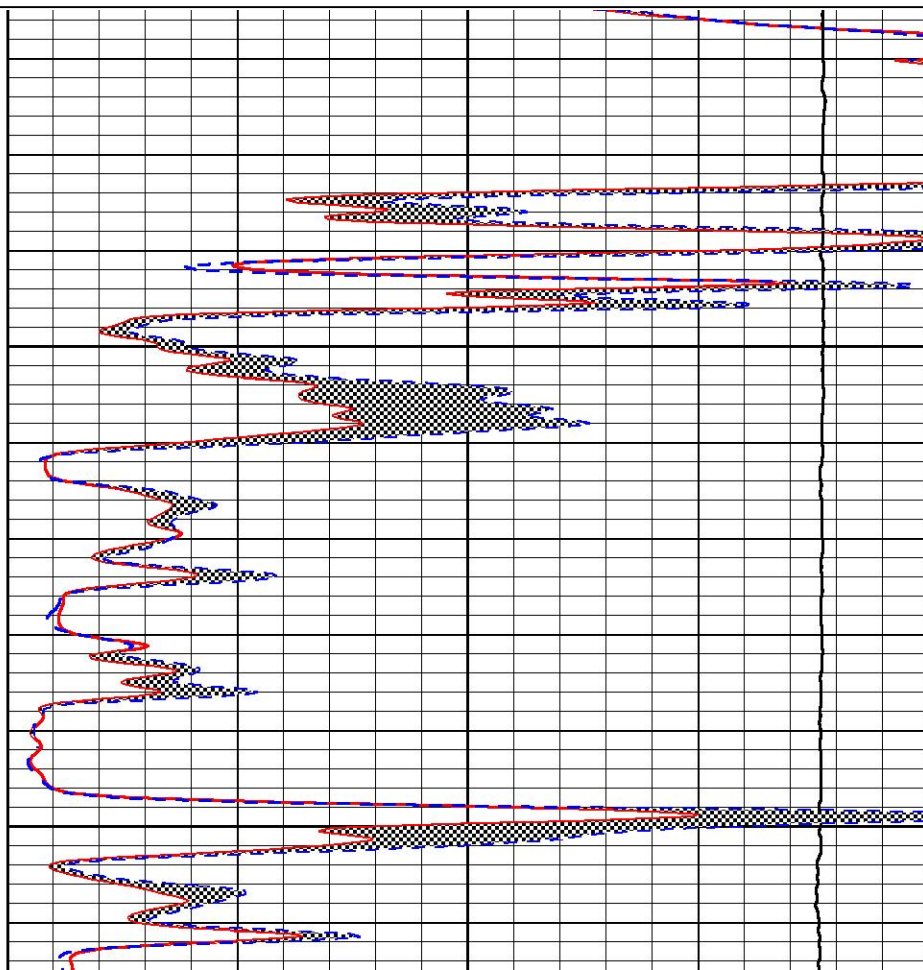
REPEAT SECTION

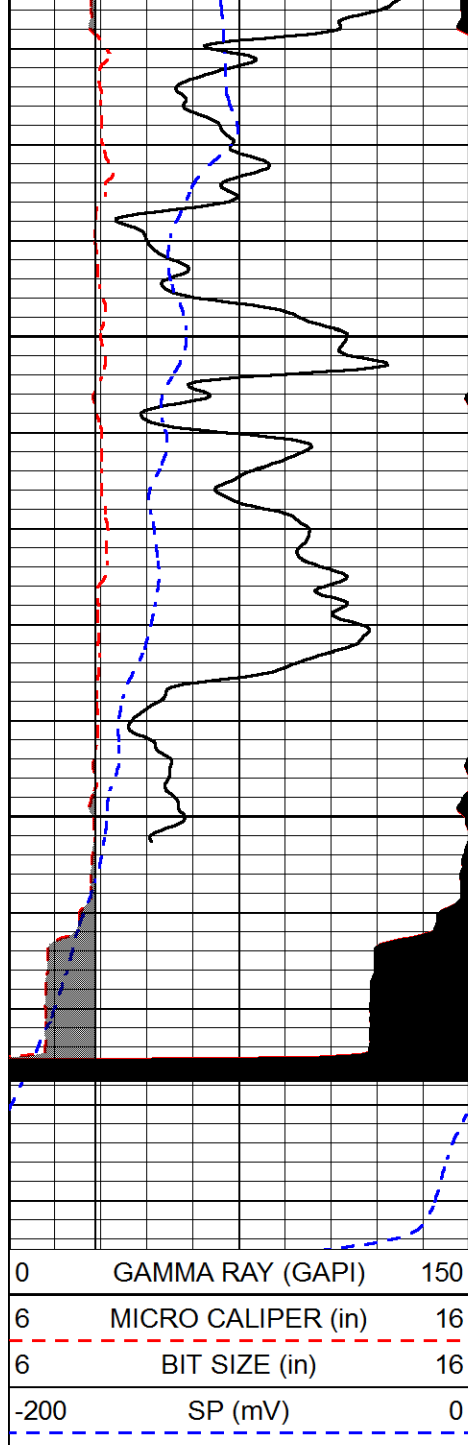
Database File: pioneerresources_maier_1.db
 Dataset Pathname: stackmel/pass3.1
 Presentation Format: micro
 Dataset Creation: Sat Oct 15 18:39:05 2016
 Charted by: Depth in Feet scaled 1:240



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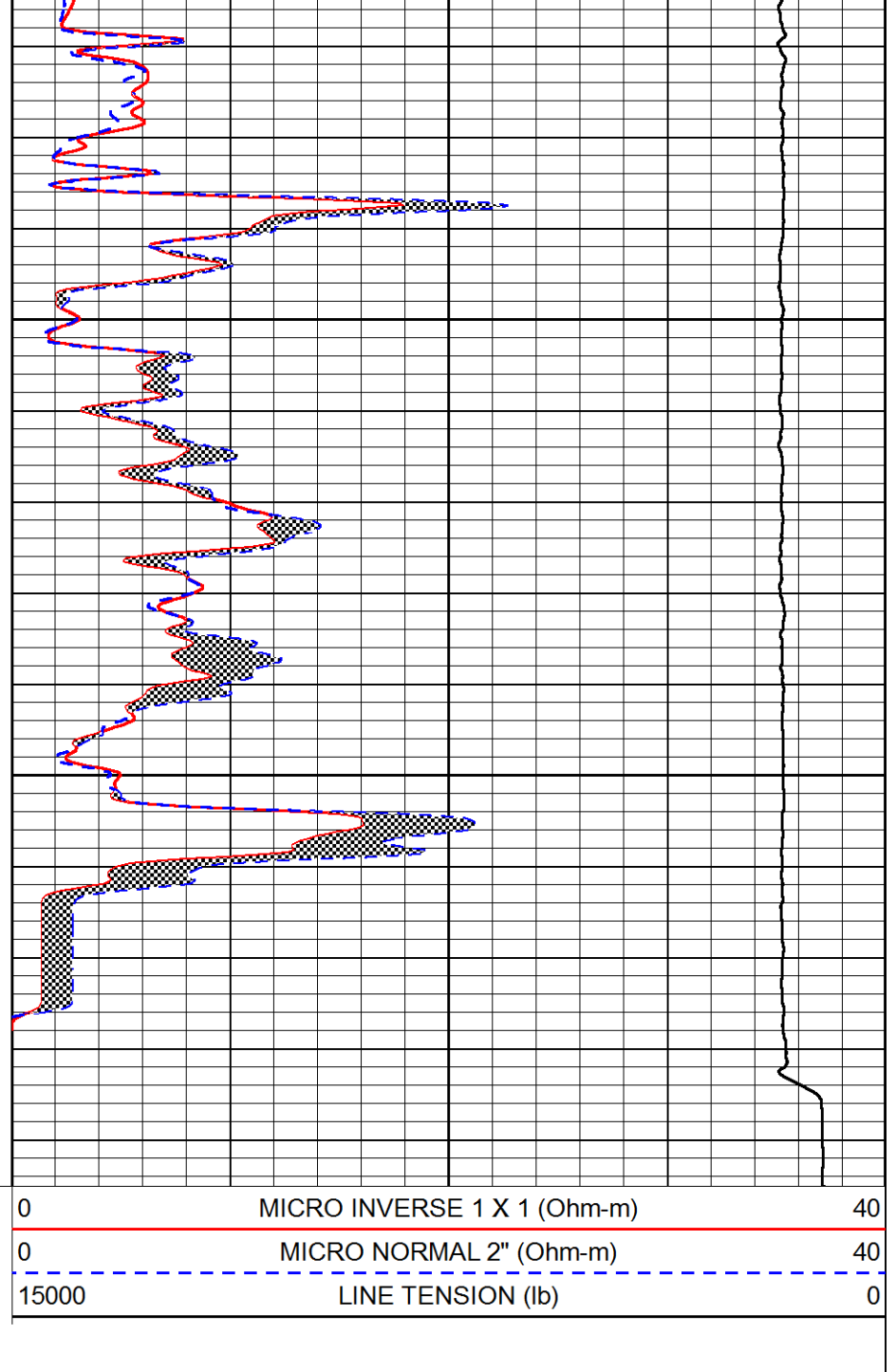
3750





3800

3850



Calibration Report

Database File: pioneerresources_maier_1.db
 Dataset Pathname: stackmel/pass1
 Dataset Creation: Sat Oct 15 15:46:47 2016

Dual Induction Calibration Report

Serial-Model: 1987-M&W
 Calibration Performed: Tue Aug 30 16:23:58 2016

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.530	-36.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.440	-110.500

Compensated Density Calibration Report

Serial-Model: 71-914-M&W
 Source / Verifier: /
 Master Calibration Performed: Fri Oct 07 08:39:26 2016

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4314.49	5307.52	cps
Aluminum	2.675	g/cc	822.19	3456.36	cps
Spine Angle = 75.49			Density/Spine Ratio = 0.537		
	Size		Reading		
Small Ring	4.00	in	1.16		
Large Ring	14.00	in	1.57		

Compensated Neutron Calibration Report

Serial Number: tk10-MW
 Tool Model: M&W
 Calibration Performed: Sat Oct 1 10:01:53 2016

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-M&W
 Tool Model: M&W
 Calibration Performed: Fri Sep 30 22:06:47 2016

Calibrator Value: 1000.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 6.2 cps

Sensitivity: 0.5200 GAPI/cps



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