



MIDWEST WIRELINE

# MICRORESISTIVITY LOG

Company Brehm Asset Management LLC  
 Well SEIB #2-27  
 Field SEIB  
 County Ness  
 State Kansas

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Location: 2301 FNL & 1980 FEL  
 SEC 27 TWP 20S RGE 21W  
 API #: 15-135-26131-00-00  
 Permanent Datum Ground Level Elevation 2195  
 Log Measured From Kelly Bushing  
 Drilling Measured From Kelly Bushing  
 Other Services  
 CNL/CDL  
 DIL  
 Elevation  
 K.B. 2200  
 D.F. G.L. 2195

Date	1/7/2022
Run Number	One
Depth Driller	4430
Depth Logger	4432
Bottom Logged Interval	4431
Top Log Interval	3700
Casing Driller	8:625 @ 266
Casing Logger	262
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	11,800
Density / Viscosity	9.6 45
pH / Fluid Loss	8.5 11.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.30 @ 71
Rmt @ Meas. Temp	.23 @ 71
Rmc @ Meas. Temp	.41 @ 71
Source of Rmf / Rmc	CHARTS
Rm @ BHT	.18 @ 120
Operating Rig Time	2 Hours
Max Rec. Temp. F	120
Equipment Number	P-108
Location	HAYS
Recorded By	J. Henrickson
Witnessed By	Ed Glassman

<<< 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.

Bazine Kansas  
 10 South, 3 East, 1 1/2 South,  
 East Into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: J. Henrickson  
 Operator:  
 Operator:  
 Operator:

This Log Record Was Witnessed By

Primary Witness: Ed Glassman  
 Secondary Witness:  
 Secondary Witness:  
 Secondary Witness:

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\brehm\_seib\_2\_27.db  
 Dataset field/well/stackml/pass4.1/\_vars\_

## Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	115	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	600	50	Off	4432

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (103)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (210)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (303-03)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSI STKBL ML (402)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50		DIL-M&W (504 HT)	18.25	3.50	220.00
CILD	8.33					

CILM 4.50

SP 0.20

Dataset: brehm\_seib\_2\_27.db: field/well/stackml/pass4.1  
 Total length: 42.33 ft  
 Total weight: 685.00 lb  
 O.D.: 4.00 in



MIDWEST WIRELINE

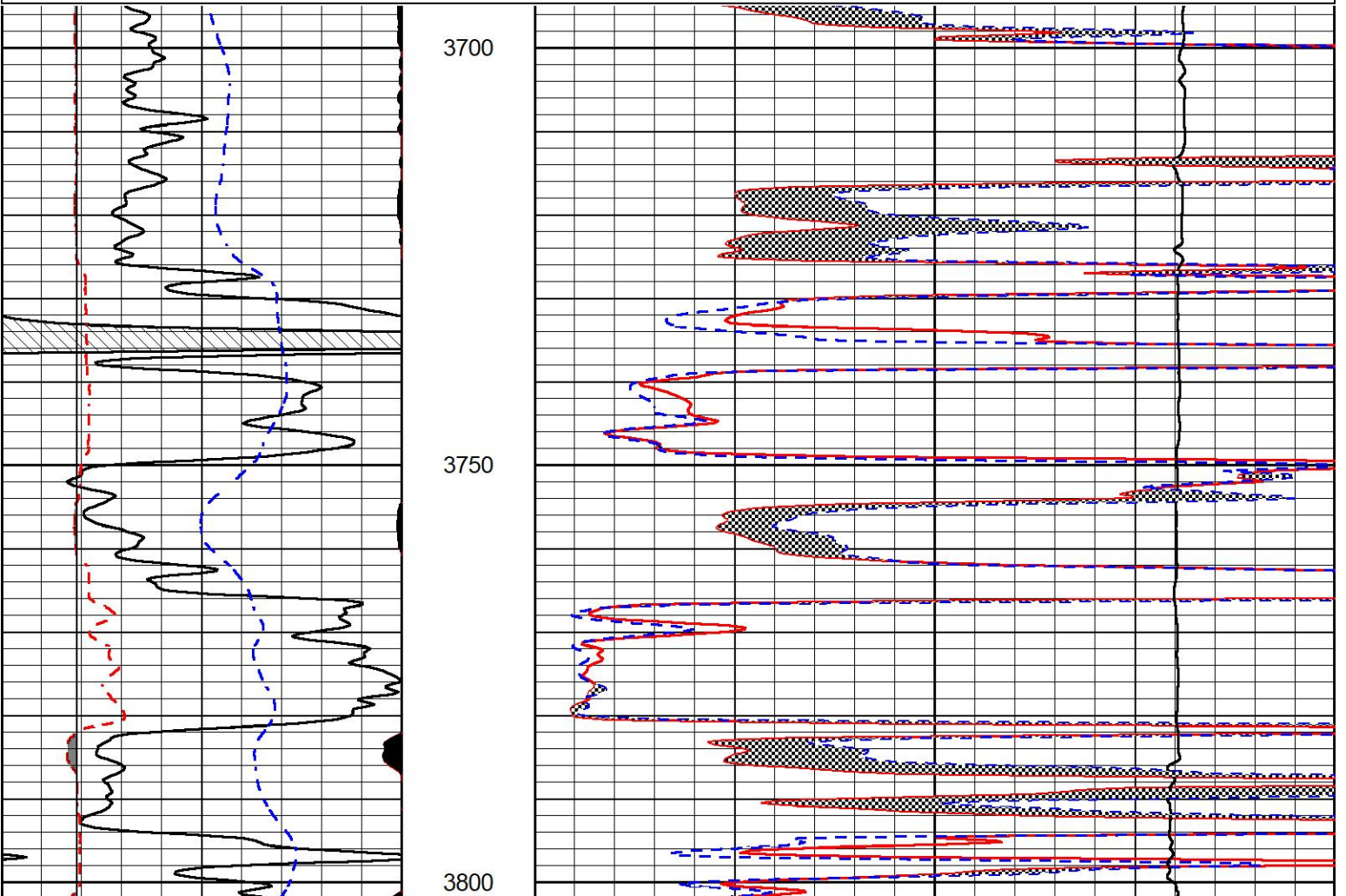
# DETAIL SECTION

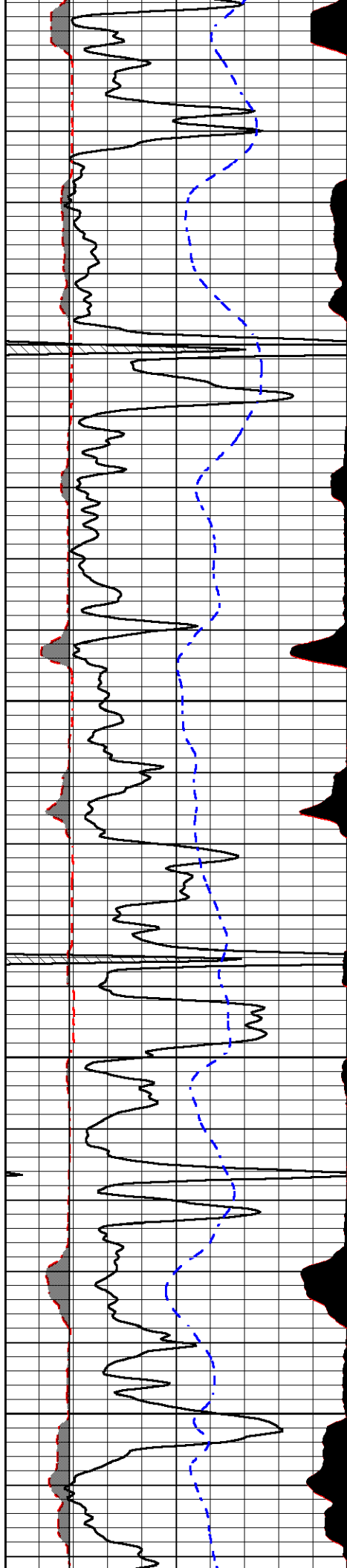
## MAIN PASS

Database File brehm\_seib\_2\_27.db  
 Dataset Pathname stackml/pass4.1  
 Presentation Format \_micro  
 Dataset Creation Fri Jan 07 18:28:22 2022  
 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



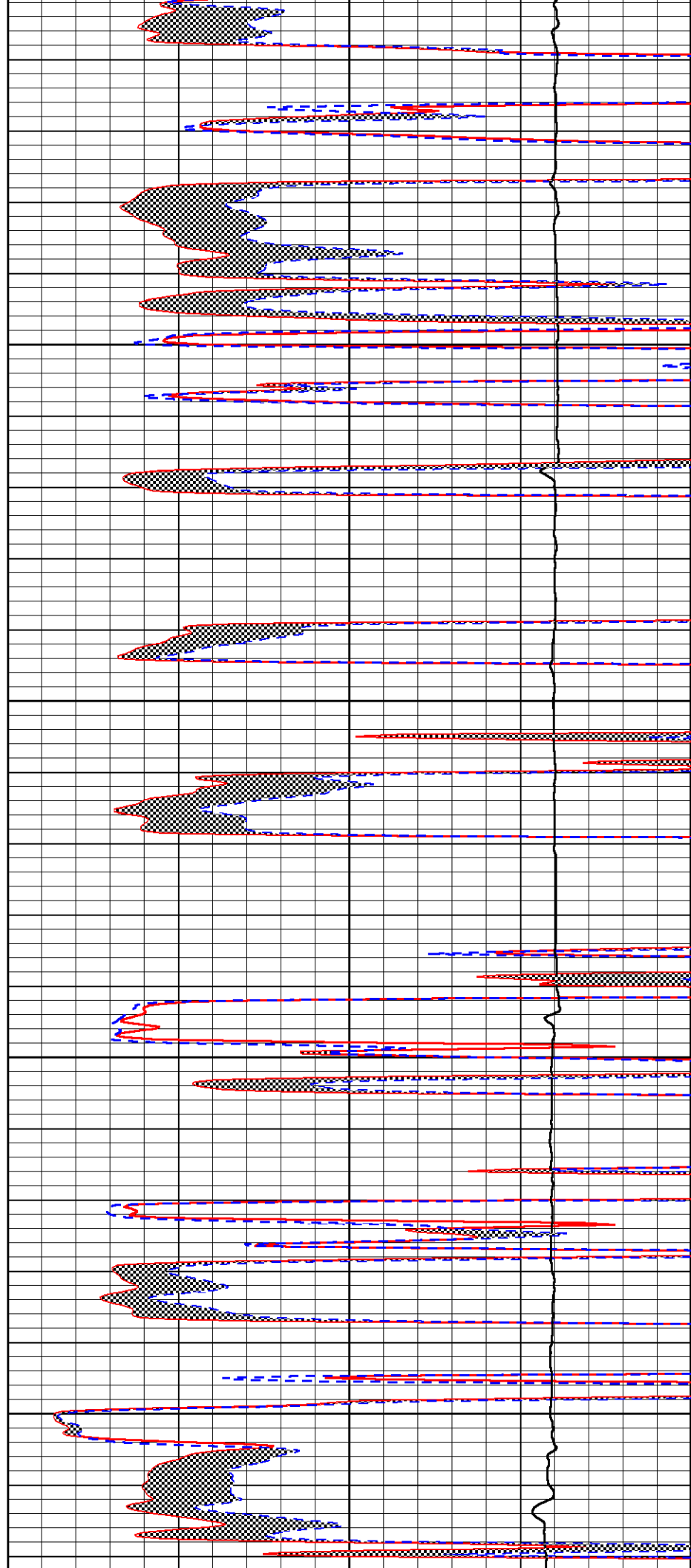


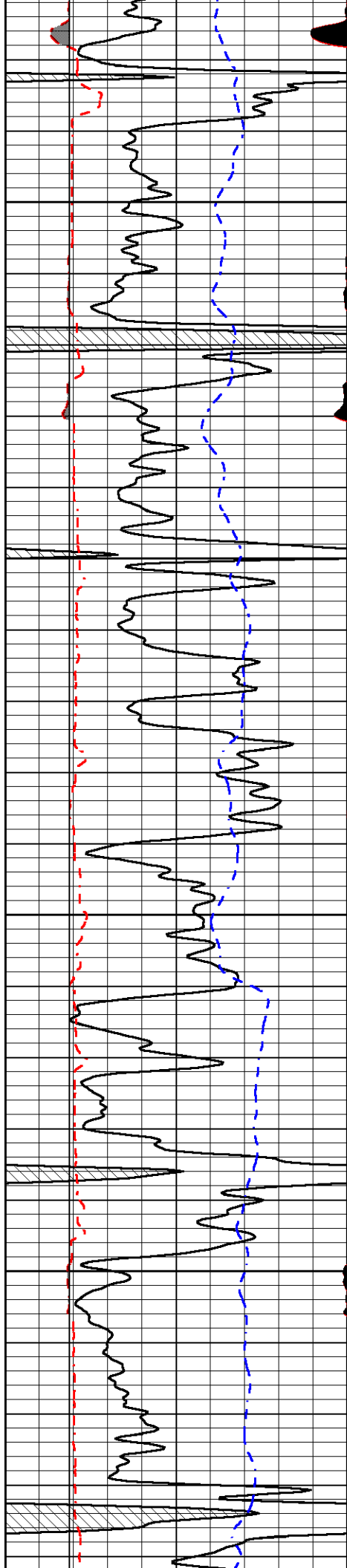
3850

3900

3950

4000



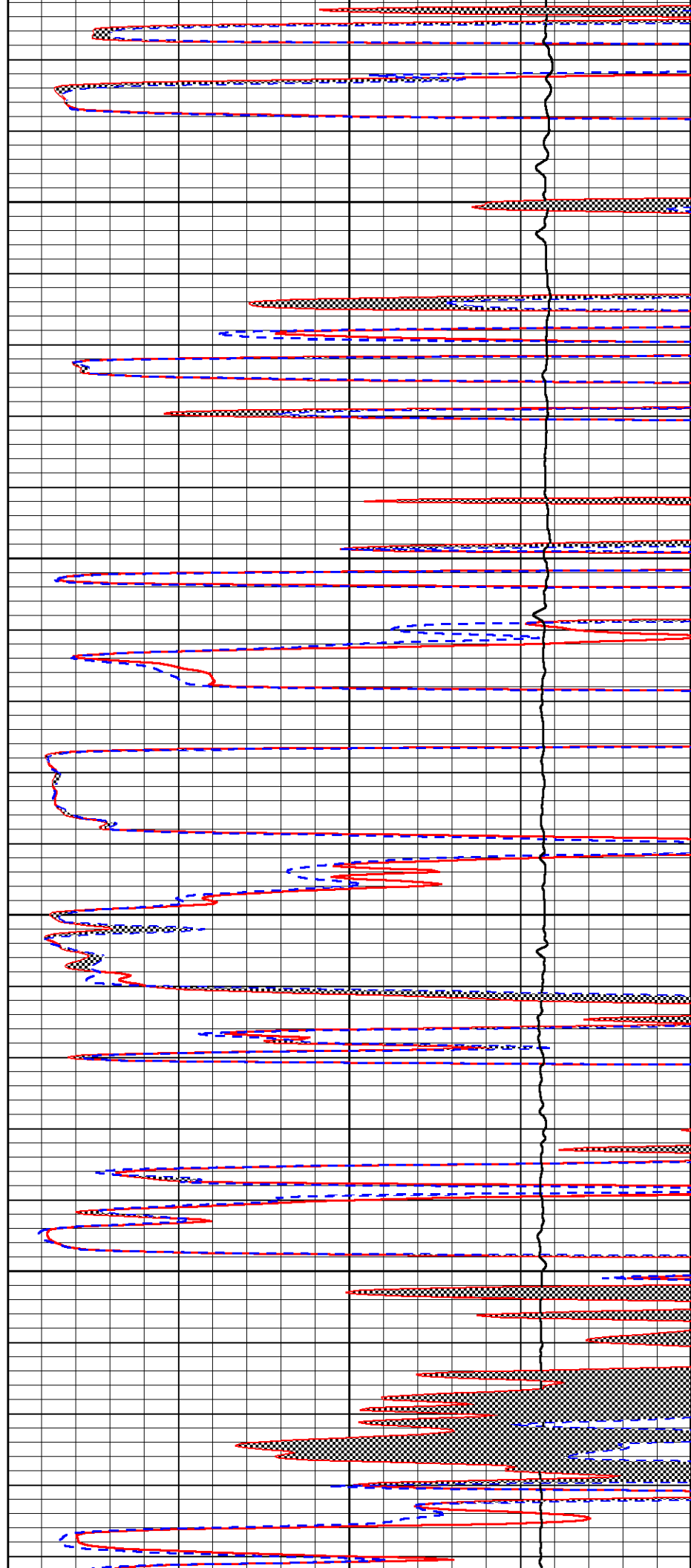


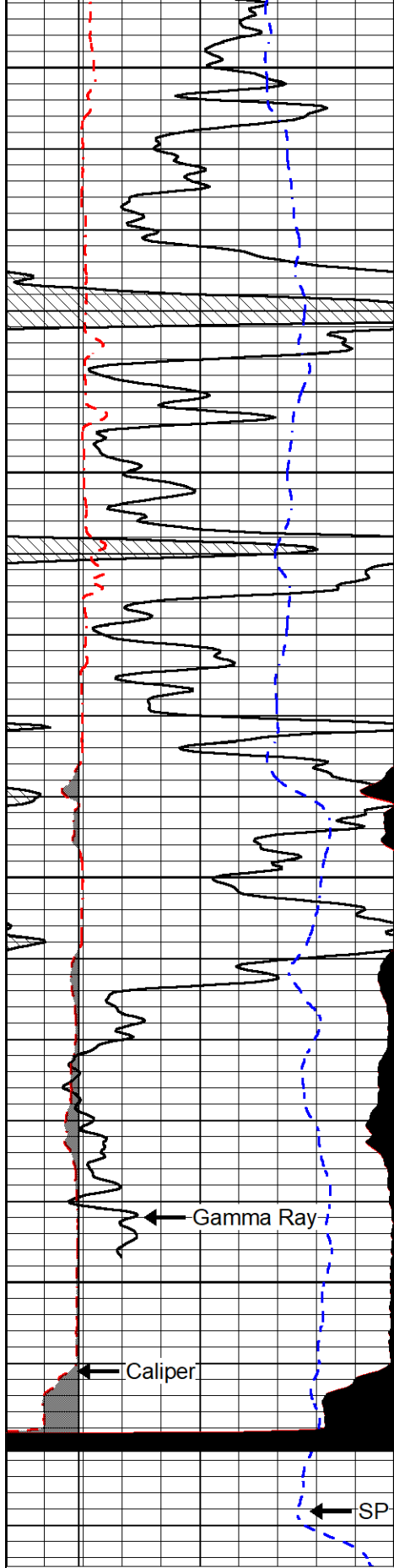
4050

4100

4150

4200





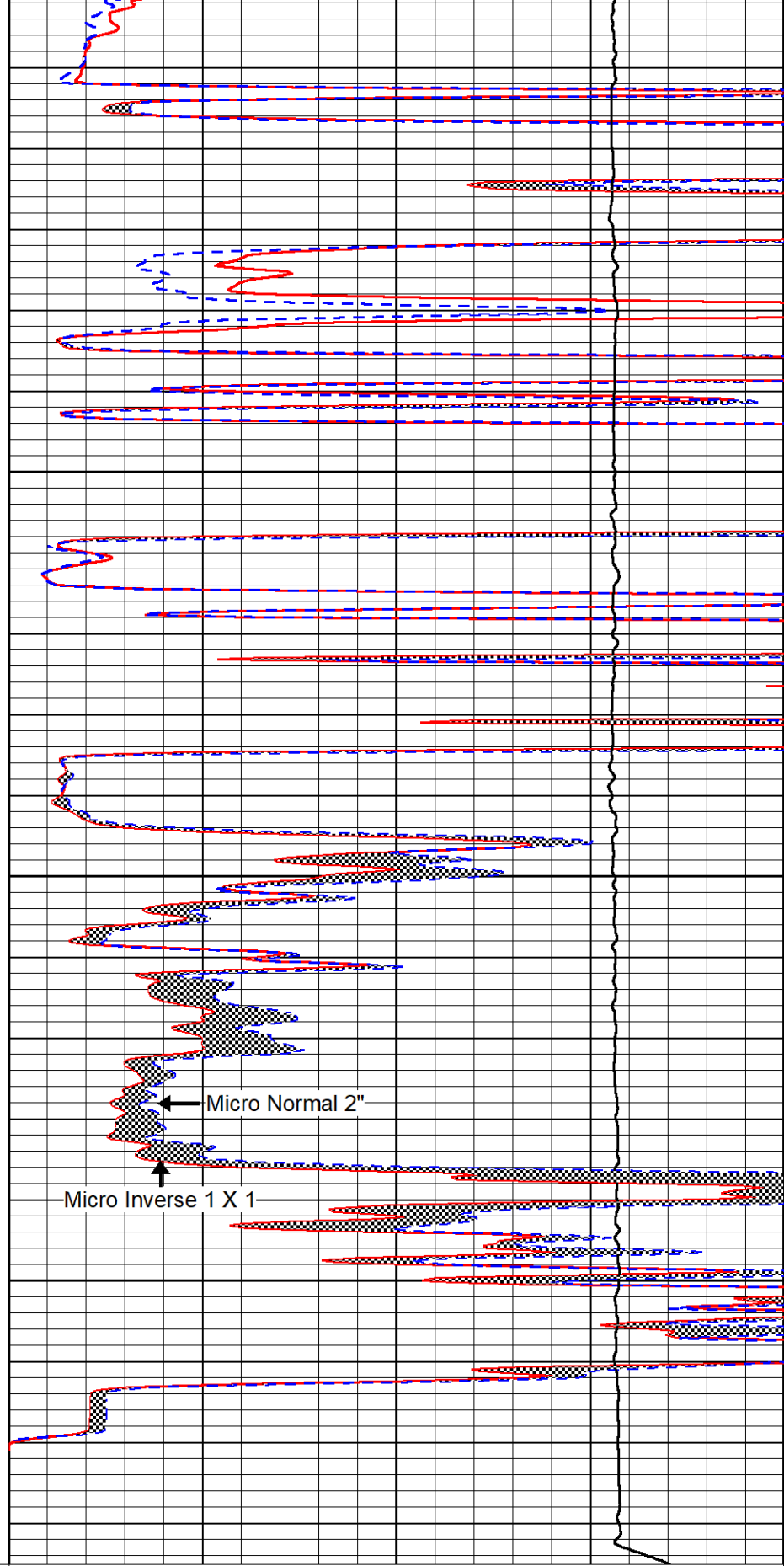
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

4250

4300

4350

4400



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

Micro Normal 2"

Micro Inverse 1 X 1



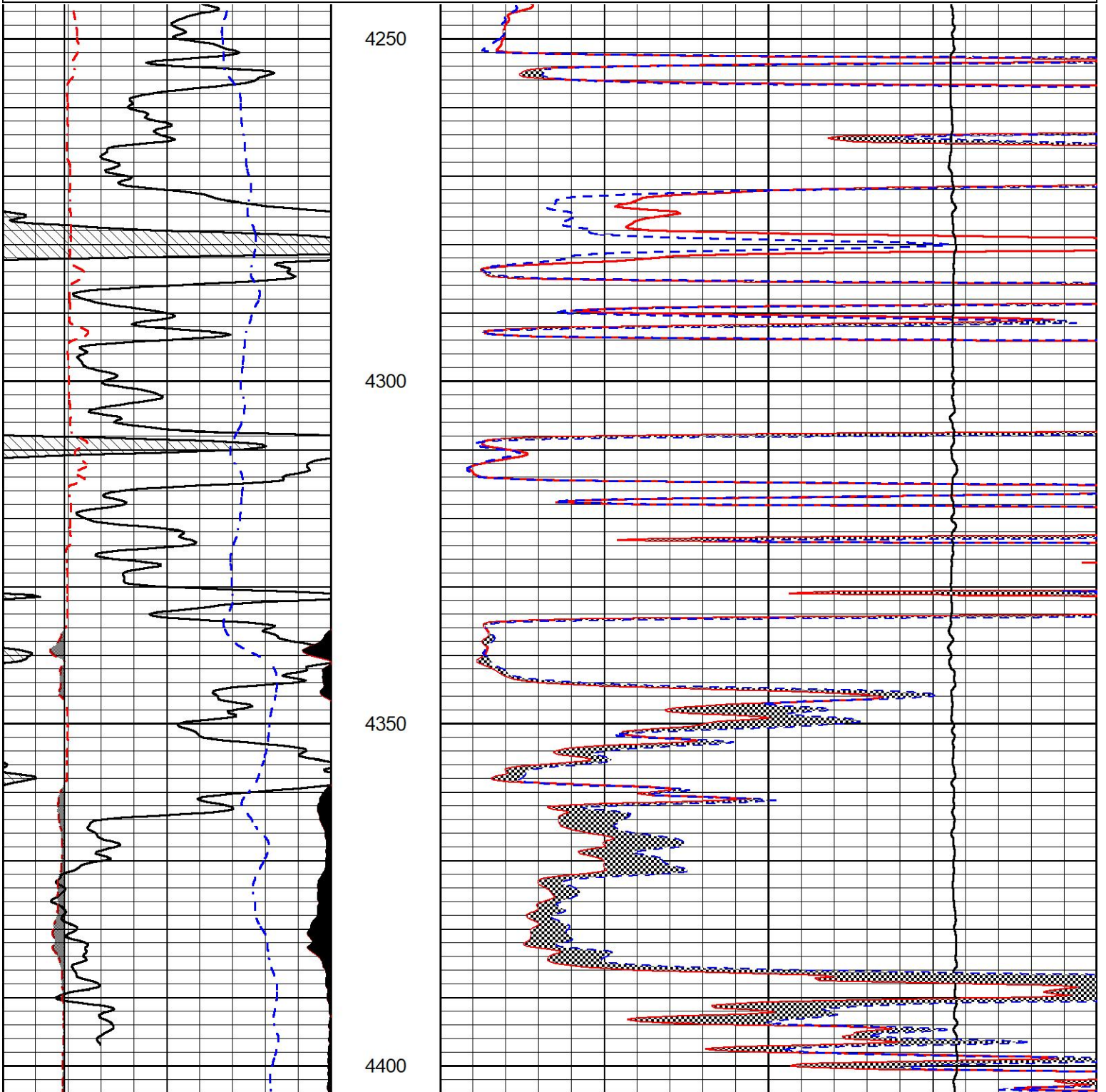
# REPEAT SECTION

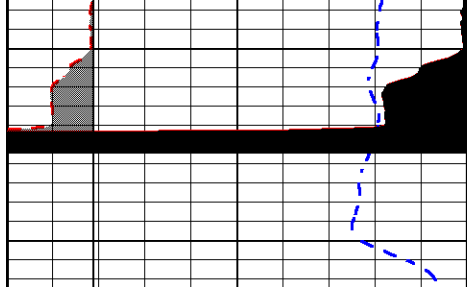
## REPEAT PASS

Database File      brehm\_seib\_2\_27.db  
 Dataset Pathname    stackml/pass2.1  
 Presentation Format    \_micro  
 Dataset Creation      Fri Jan 07 18:27:04 2022  
 Charted by            Depth in Feet scaled 1:240

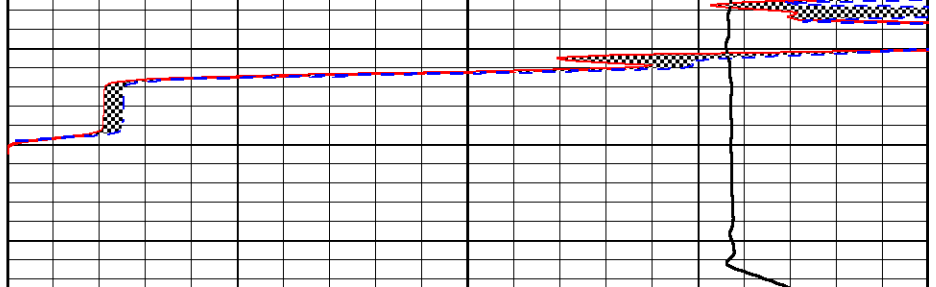
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

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





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

### Calibration Report

Database File      brehm\_seib\_2\_27.db  
 Dataset Pathname    stackml/pass4.1  
 Dataset Creation    Fri Jan 07 18:28:22 2022

### Dual Induction Calibration Report

Serial-Model:                      504 HT-M&W  
 Surface Cal Performed:            Thu Dec 16 22:32:49 2021

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	178.615	710.235	0.000	255.800	mmho/m	0.650	-19.000
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.450	-45.500

### Microlog Calibration Report

Serial-Model:                      402-PSI STKBL ML  
 Performed:                        Thu Dec 16 22:29:48 2021

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	23000.0000	-1.0000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	20000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1520	-131.2000

### Compensated Density Calibration Report

Serial-Model:                      303-03-M&W  
 Source #:                         21170B  
 Master Calibration Performed:    Thu Dec 16 23:28:34 2021

### Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3841.78	5151.73	cps
Aluminum	2.670	g/cc	700.98	3068.49	cps

Spine Angle = 73.06

Density/Spine Ratio = 0.515

Size

Reading

Small Ring  
Large Ring

4.00 in  
14.00 in

1.17  
1.05

Compensated Neutron Calibration Report

Serial-Model: 210-M&W  
Source #: N-1238  
Master Calibration Performed: Fri Dec 3 09:16:24 2021

Master Calibration

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: 103  
Tool Model: M&W  
Performed: Fri Dec 3 12:13:24 2021

Calibrator Value: 500.0 GAPI

Background Reading: 28.0 cps  
Calibrator Reading: 986.0 cps

Sensitivity: 0.5700 GAPI/cps



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Field SEIB  
County Ness  
State Kansas