



MICRORESISTIVITY LOG

MIDWEST WIRELINE

Company Canyon Operating, LLC		Company Canyon Operating, LLC	
Well	Rush Trust #17-1	Well	Rush Trust #17-1
Field	High Hill	Field	High Hill
County	Graham	County	Graham
State	Kansas	State	Kansas
Location: API #: 15-065-24205-00-00		Other Services	
SEC 17 TWP 10S RGE 24W		CNL/CDL DIL/BHCS	
Permanent Datum	Ground Level	Elevation	2467
Log Measured From	Kelly Bushing	K.B.	2474
Drilling Measured From	Kelly Bushing	D.F.	
		G.L.	2467
Date	5/25/2022		
Run Number	One		
Depth Driller	4120		
Depth Logger	4122		
Bottom Logged Interval	4121		
Top Log Interval	3400		
Casing Driller	8.625 @ 221		
Casing Logger	217		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	5000		
Density / Viscosity	9.2 54		
pH / Fluid Loss	10.5 8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.40 @ 70		
Rmt @ Meas. Temp	0.30 @ 70		
Rmc @ Meas. Temp	0.54 @ 70		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.24 @ 117		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	117		
Equipment Number	P-108		
Location	HAYS		
Recorded By	D. Schmidt		
Witnessed By	Macklin Armstrong		

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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.

St. Peter,
3 East on Cemetery Rd, 1 South, 1/2 East,
North into

Log Measured From: Kelly Bushing 7 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Macklin Armstrong
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\canyon_rush trust 17-1.db
Dataset field/well/stkml/pass3.1/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	117	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	570	50		4122

Variable Description

A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density

NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth



MIDWEST WIRELINE

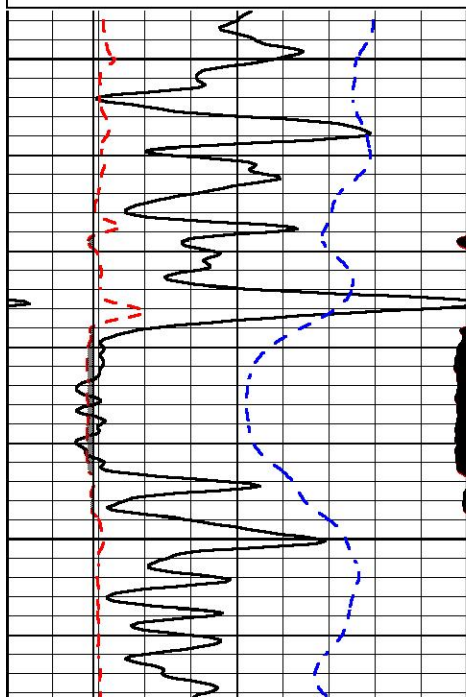
DETAIL SECTION

MAIN PASS

Database File canyon_rush trust 17-1.db
Dataset Pathname stkml/pass3.1
Presentation Format _micro
Dataset Creation Wed May 25 12:30:53 2022
Charted by Depth in Feet scaled 1:240

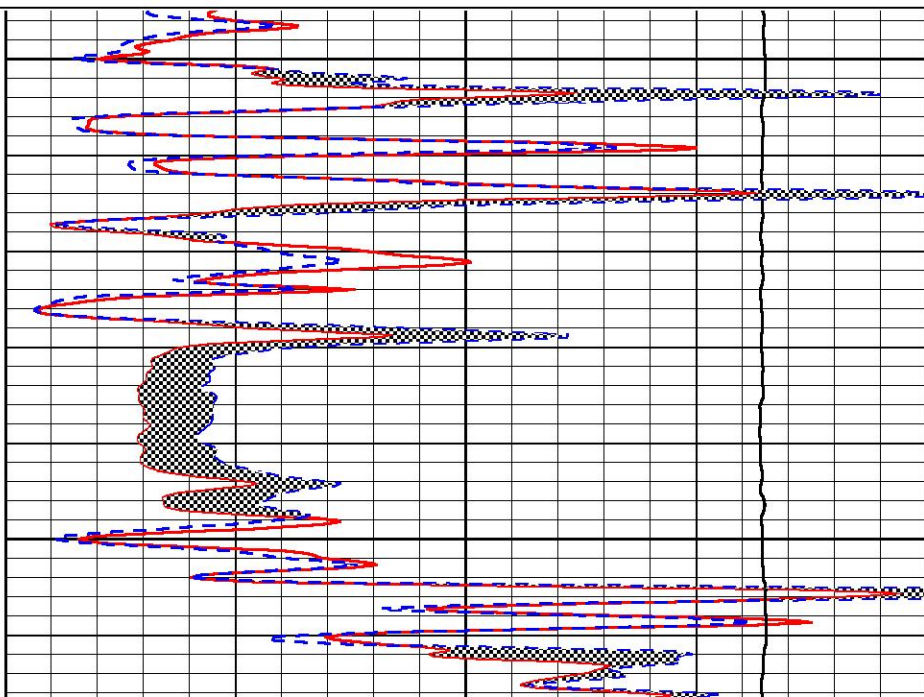
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

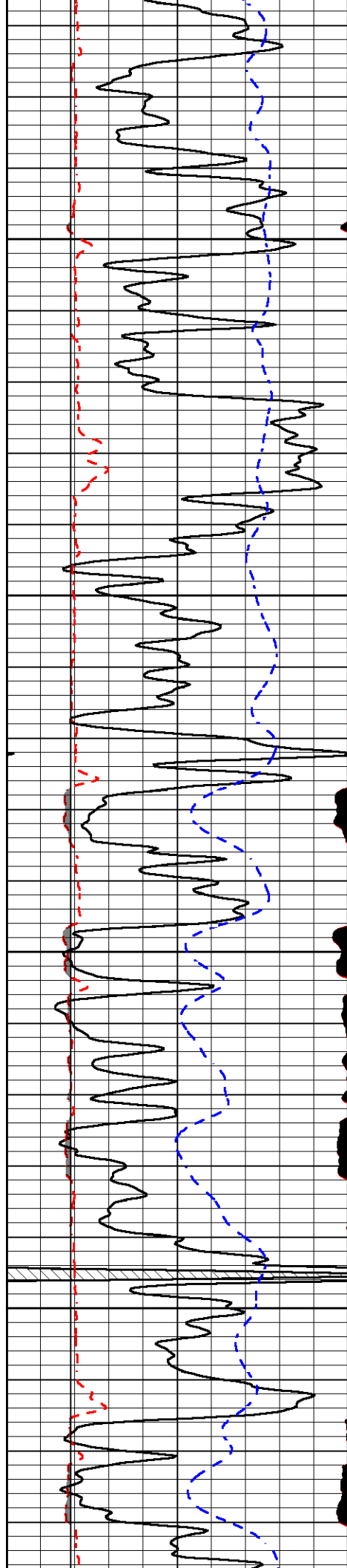
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



3400

3450



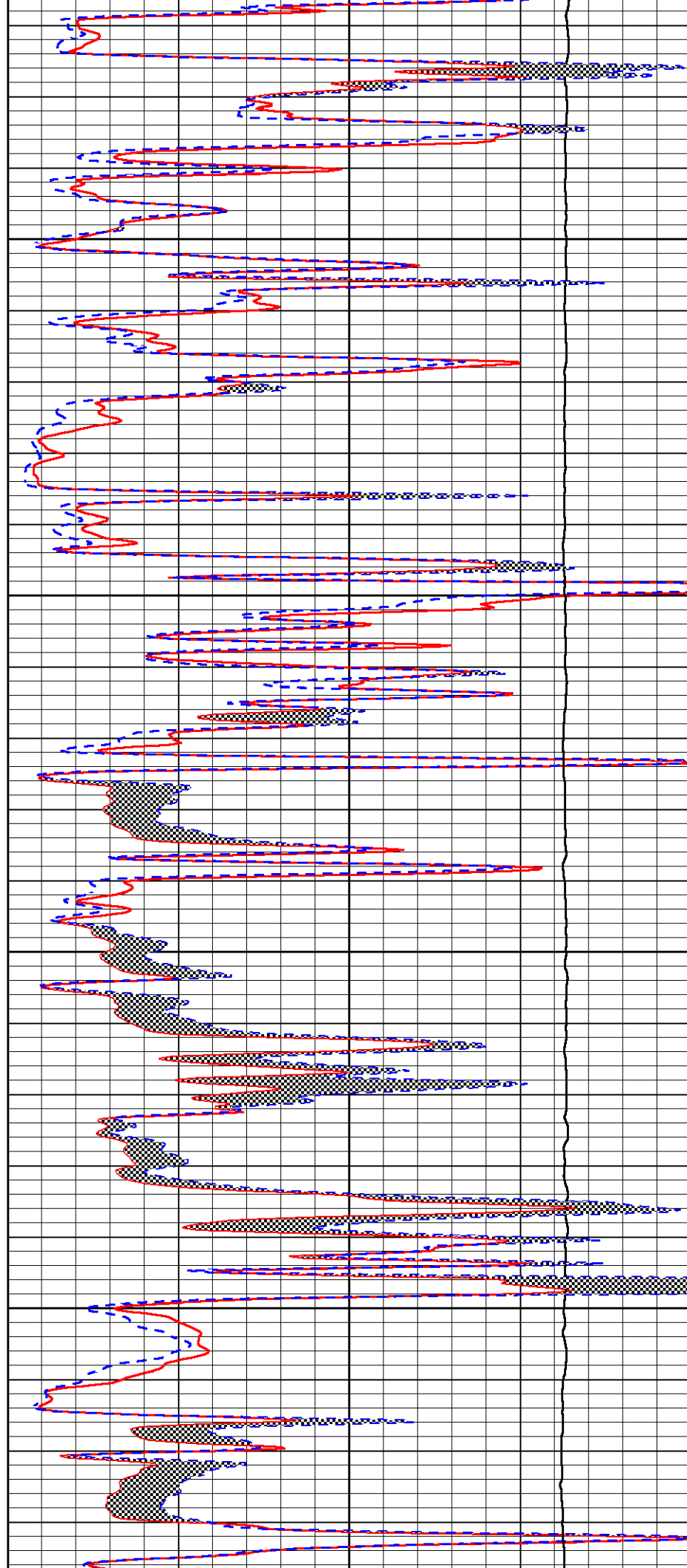


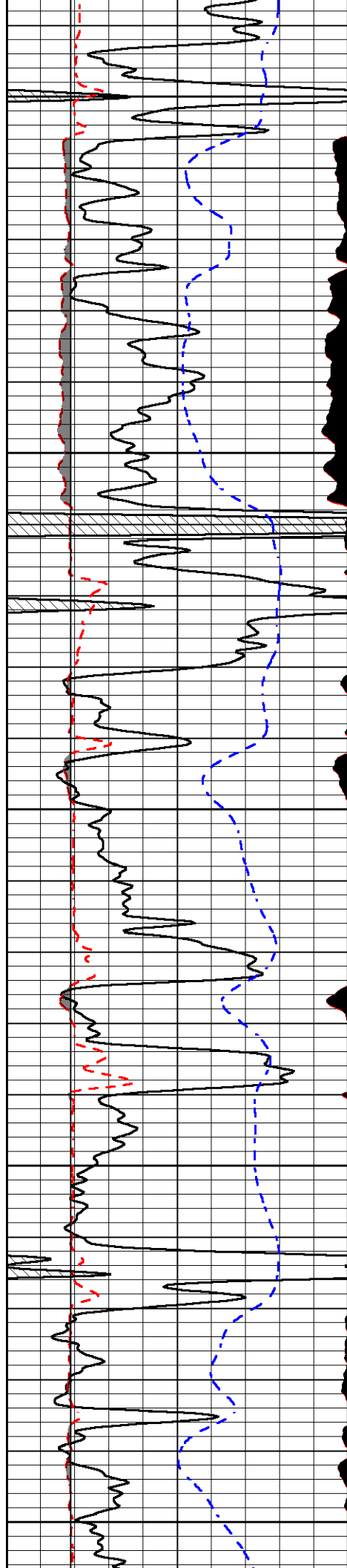
3500

3550

3600

3650





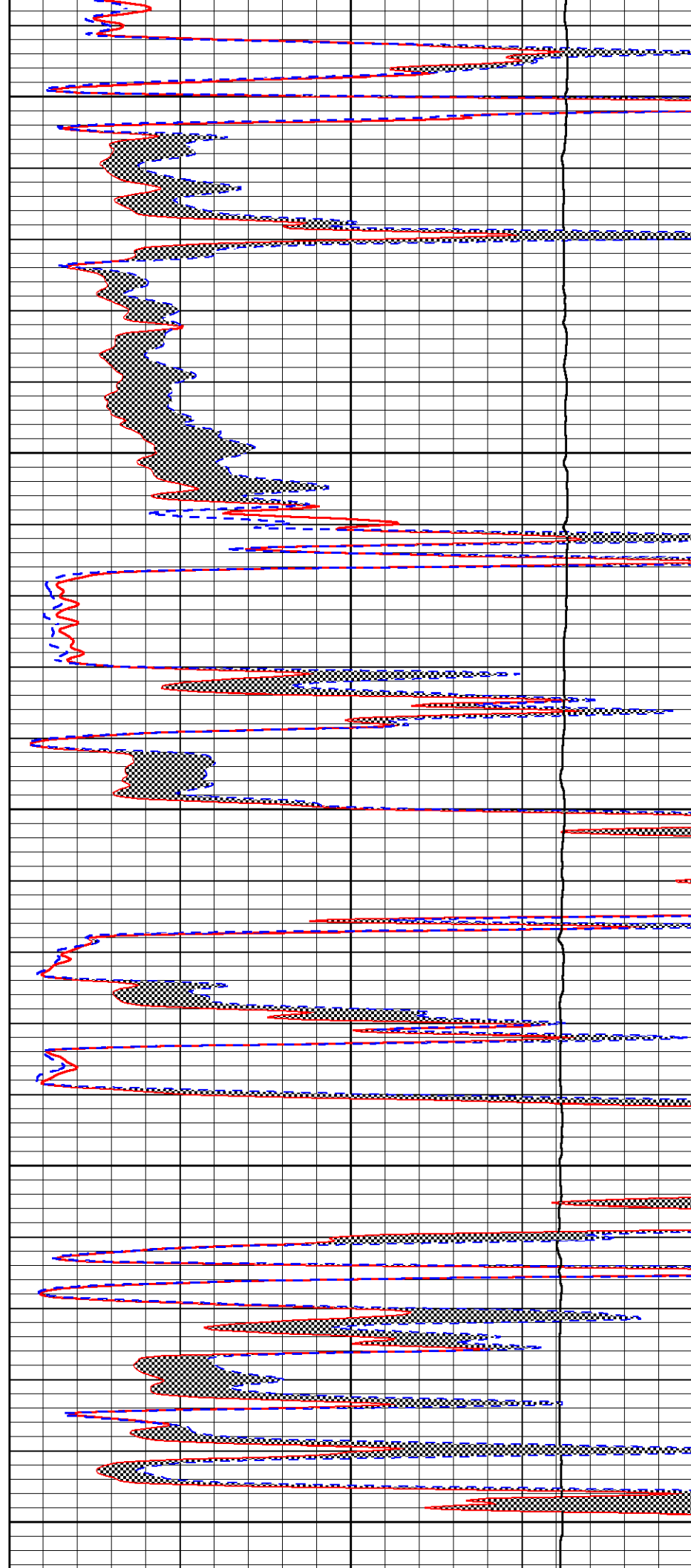
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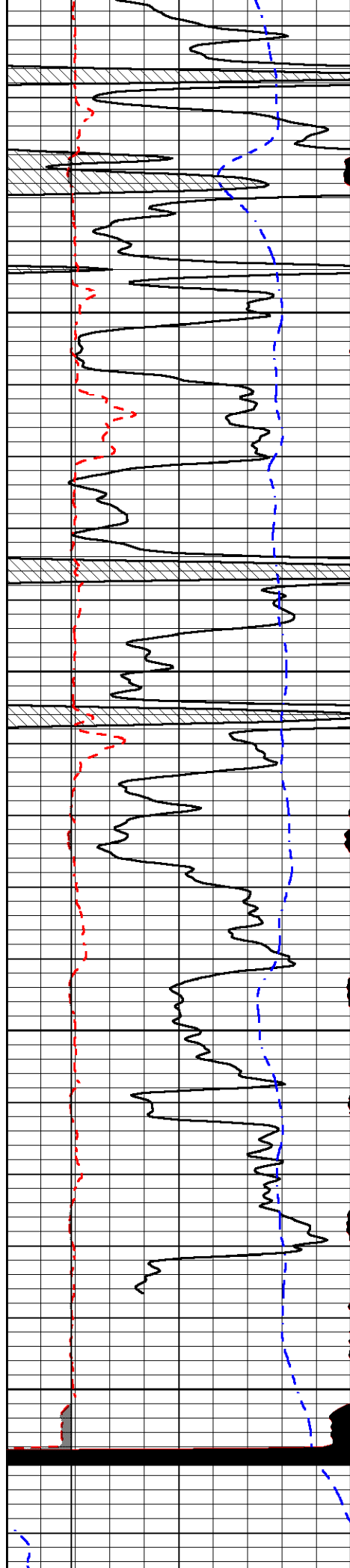
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3800

3850

3900



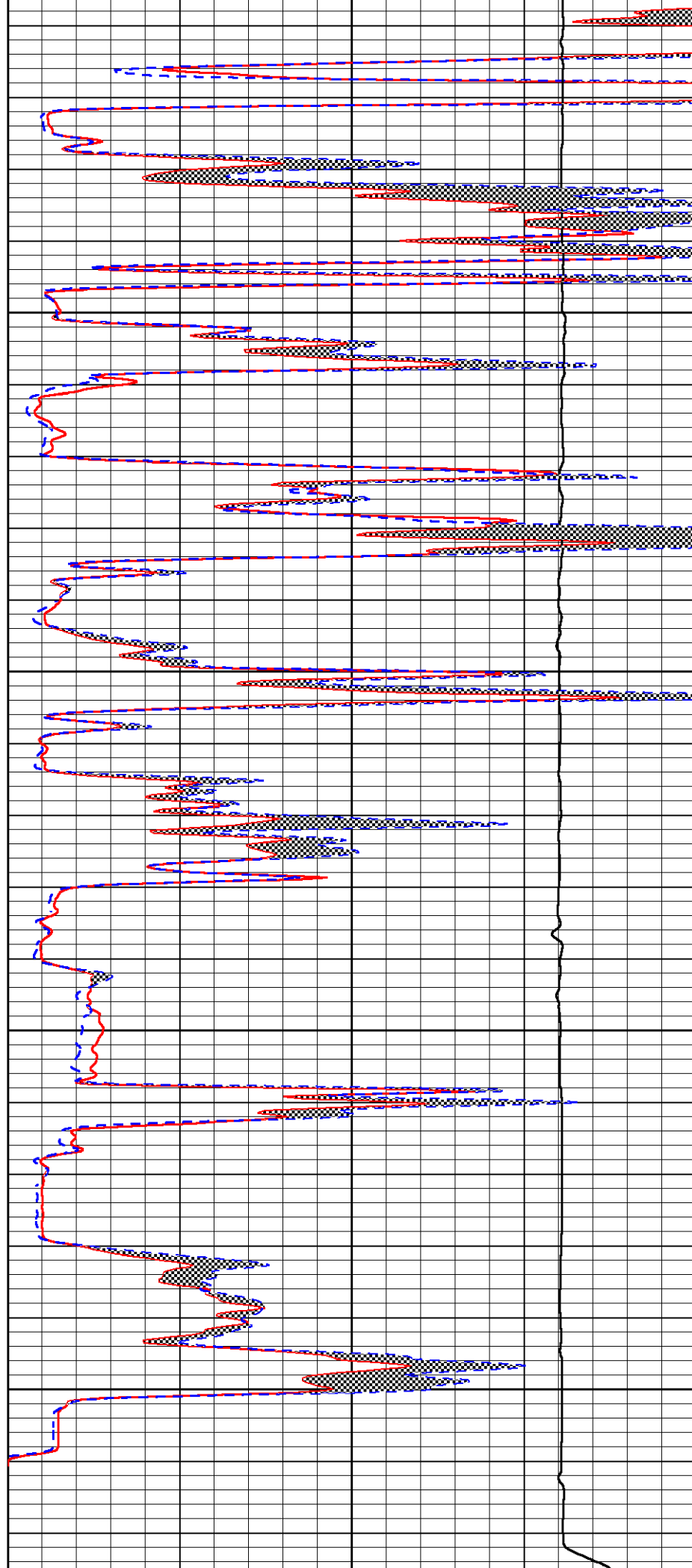


3950

4000

4050

4100



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



MIDWEST WIRELINE

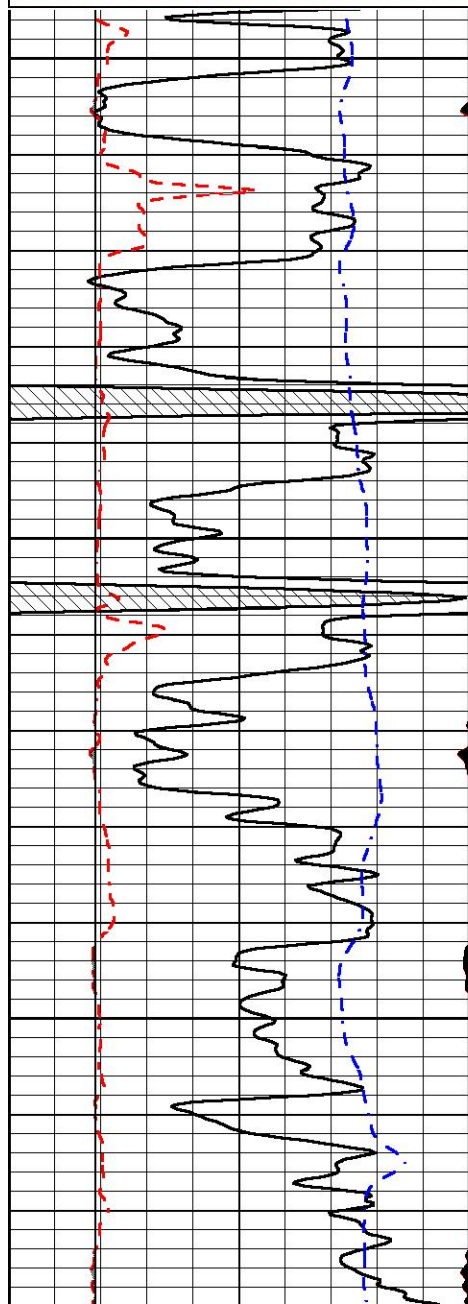
REPEAT SECTION

REPEAT PASS

Database File canyon_rush trust 17-1.db
Dataset Pathname stkml/pass2.1
Presentation Format _micro
Dataset Creation Wed May 25 11:38:42 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

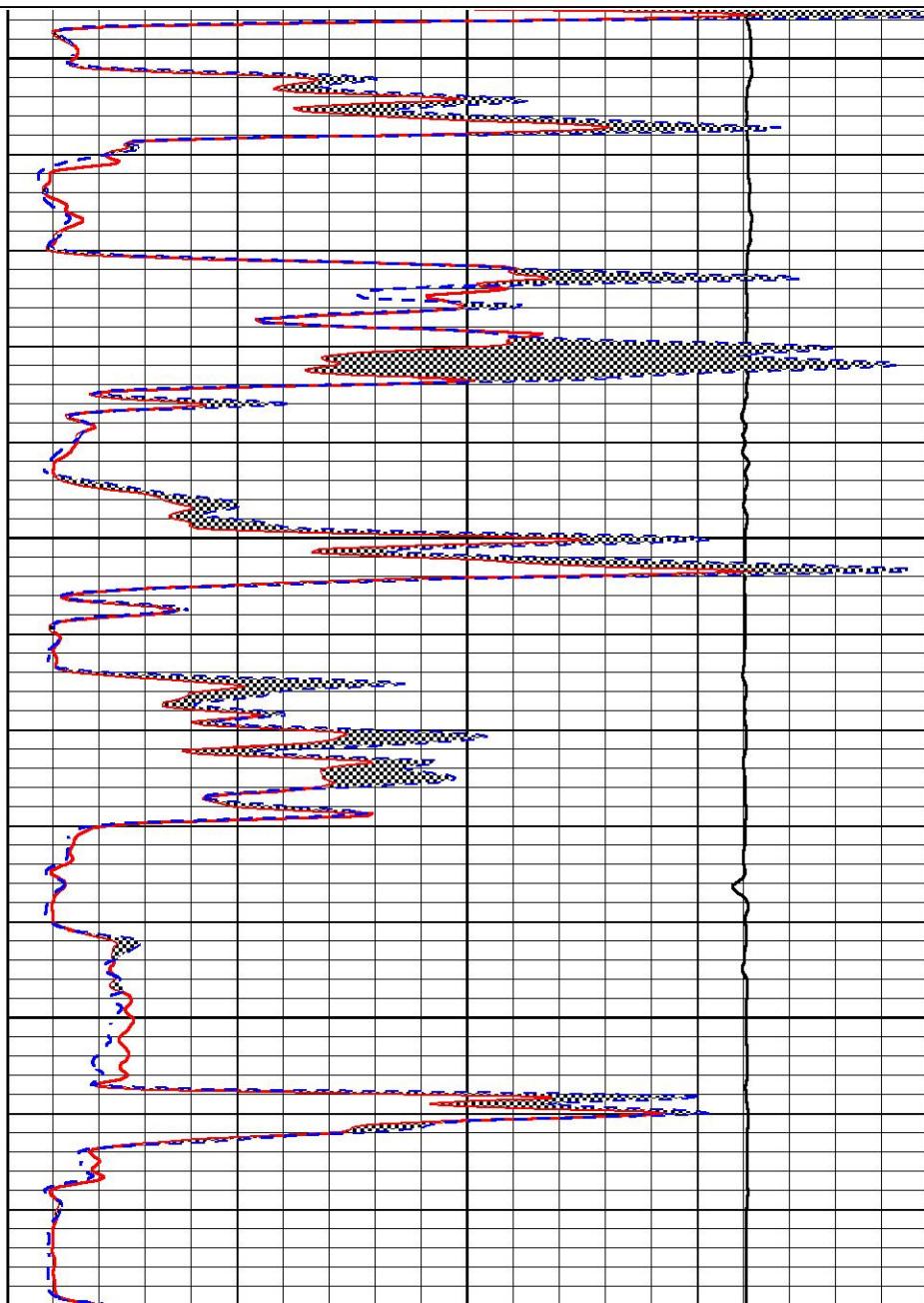
0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

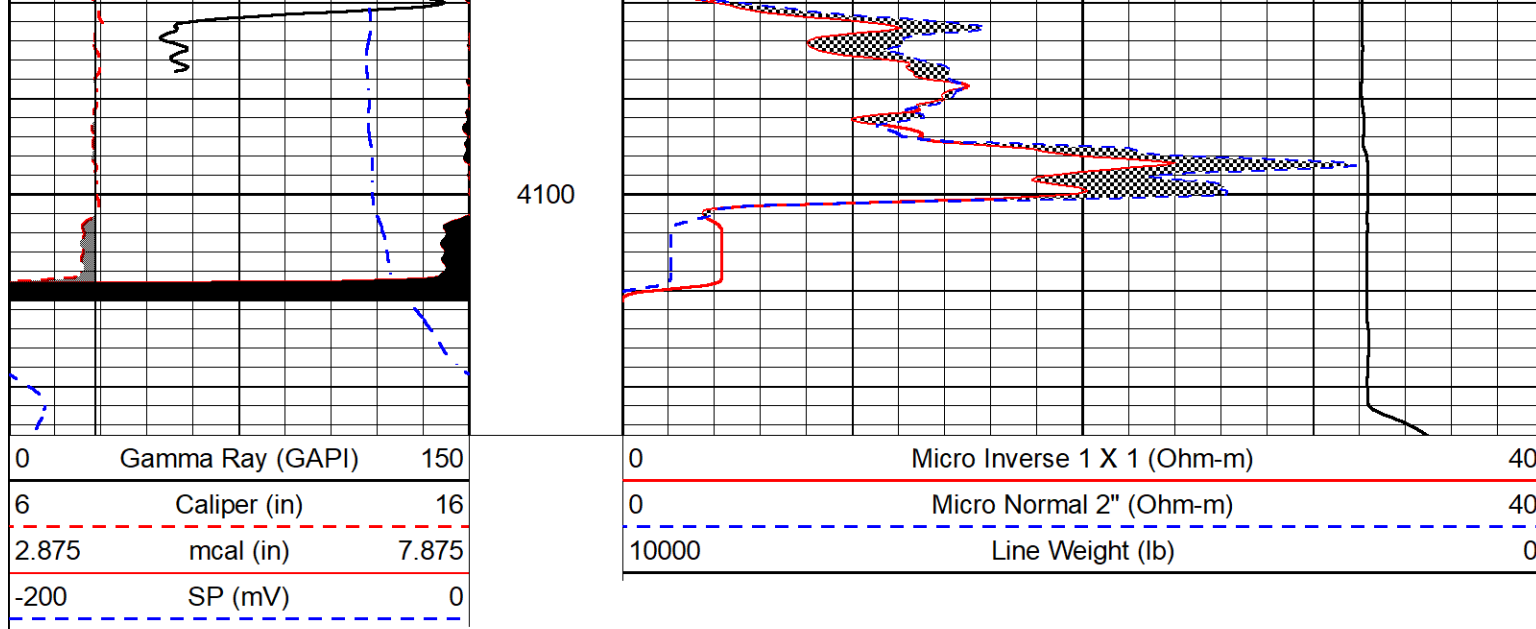


3950

4000

4050





Calibration Report		
Database File	canyon_rush trust 17-1.db	
Dataset Pathname	stkml/pass3.1	
Dataset Creation	Wed May 25 12:30:53 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	-18.000
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:	Mon May 23 16:31:54 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	14000.0000	-0.9000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	12500.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1520	-131.3550

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

Aluminum	2.070	g/cc	700.00	0000.10	cps
Spine Angle = 73.06			Density/Spine Ratio = 0.515		
	Size		Reading		
Small Ring	4.00	in	1.17		
Large Ring	14.00	in	1.03		

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

	Company	Canyon Operating, LLC
	Well	Rush Trust #17-1
	Field	High Hill
	County	Graham
	State	Kansas