

MICRORESISTIVITY LOG

MIDWEST WIRELINE

Company Berexco, LLC		Company Berexco, LLC	
Well Robb #4		Well Robb #4	
Field		Field	
County Gove	State Kansas	County Gove	State Kansas
Location: API #: 15-063-22445-00-00		Other Services	
SEC 6 TWP 15S RGE 29W		CNL/CDL DIL	
Permanent Datum	Ground Level	Elevation	2576
Log Measured From	Kelly Bushing	K.B.	2586
Drilling Measured From	Kelly Bushing	D.F.	2576
		G.L.	2576
Date	6/30/2024		
Run Number	One		
Depth Driller	4330		
Depth Logger	4332		
Bottom Logged Interval	4331		
Top Log Interval	3400		
Casing Driller	8.625 @ 403		
Casing Logger	399		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity, ppm CL	3600		
Density / Viscosity	9.1 58		
pH / Fluid Loss	10.0 7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.70 @ 78		
Rmt @ Meas. Temp	0.53 @ 78		
Rmc @ Meas. Temp	0.95 @ 78		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	0.46 @ 119		
Operating Rig Time	3 Hours		
Max Rec. Temp. F	119		
Equipment Number	110		
Location	HAYS		
Recorded By	D. Schmidt		
Witnessed By	Larry Friend		

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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.

Gove,
South to C Rd, 5 West to Rd 32,
North to E Rd, East to Rd 36, 1 North,
West into

Log Measured From: Kelly Bushing 10 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: Larry Friend
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\berexco_rob主 4.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	119	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		1.5	-6	140	75		4332

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



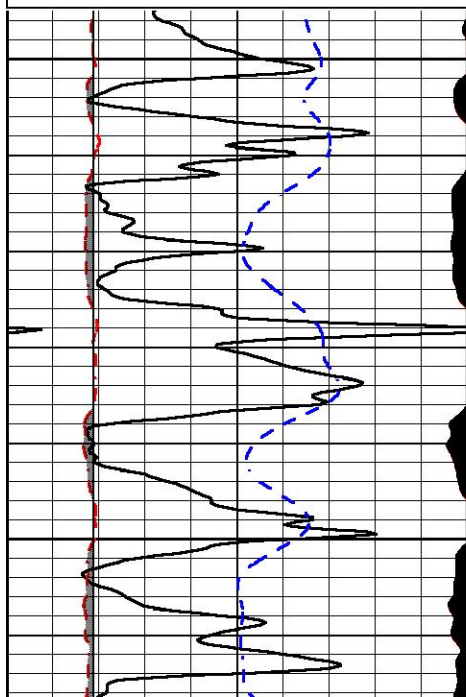
DETAIL SECTION

MAIN PASS

Database File berexco_rob主 4.db
Dataset Pathname stkml/pass3.1
Presentation Format _micro
Dataset Creation Sun Jun 30 22:11:50 2024
Charted by Depth in Feet scaled 1:240

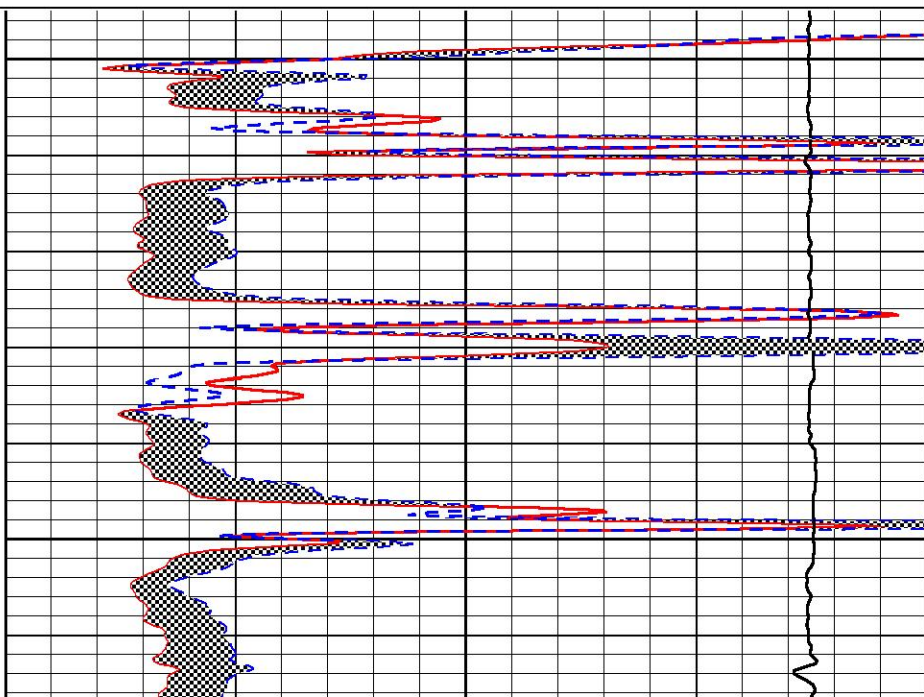
0	Gamma Ray (GAPI)	150
6	Micro Caliper (in)	16
2.875	mcal (in)	7.875
-200	SP (mV)	0

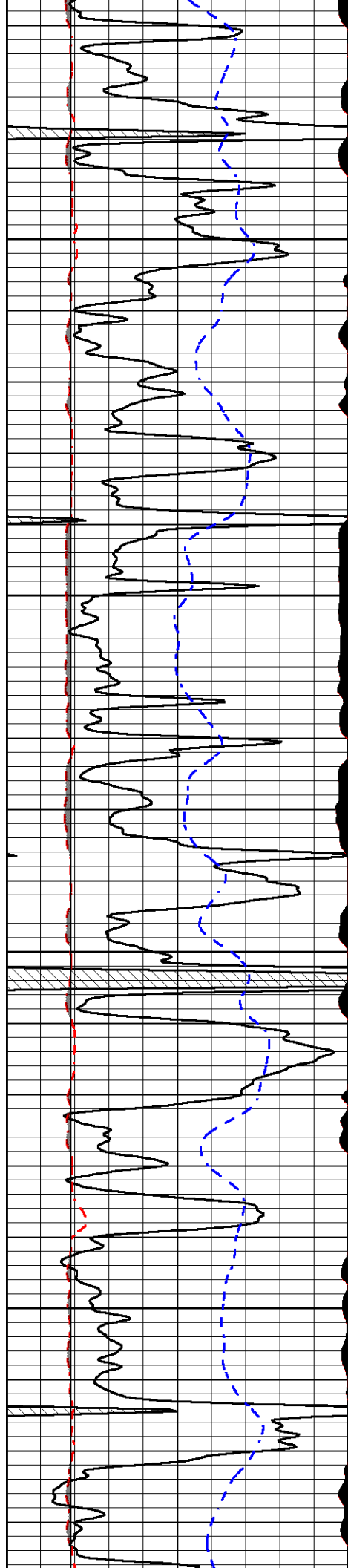
0	Micro Inverse 1 X 1 (Ohm-m)	20
0	Micro Normal 2" (Ohm-m)	20
10000	Line Weight (lb)	0



3400

3450



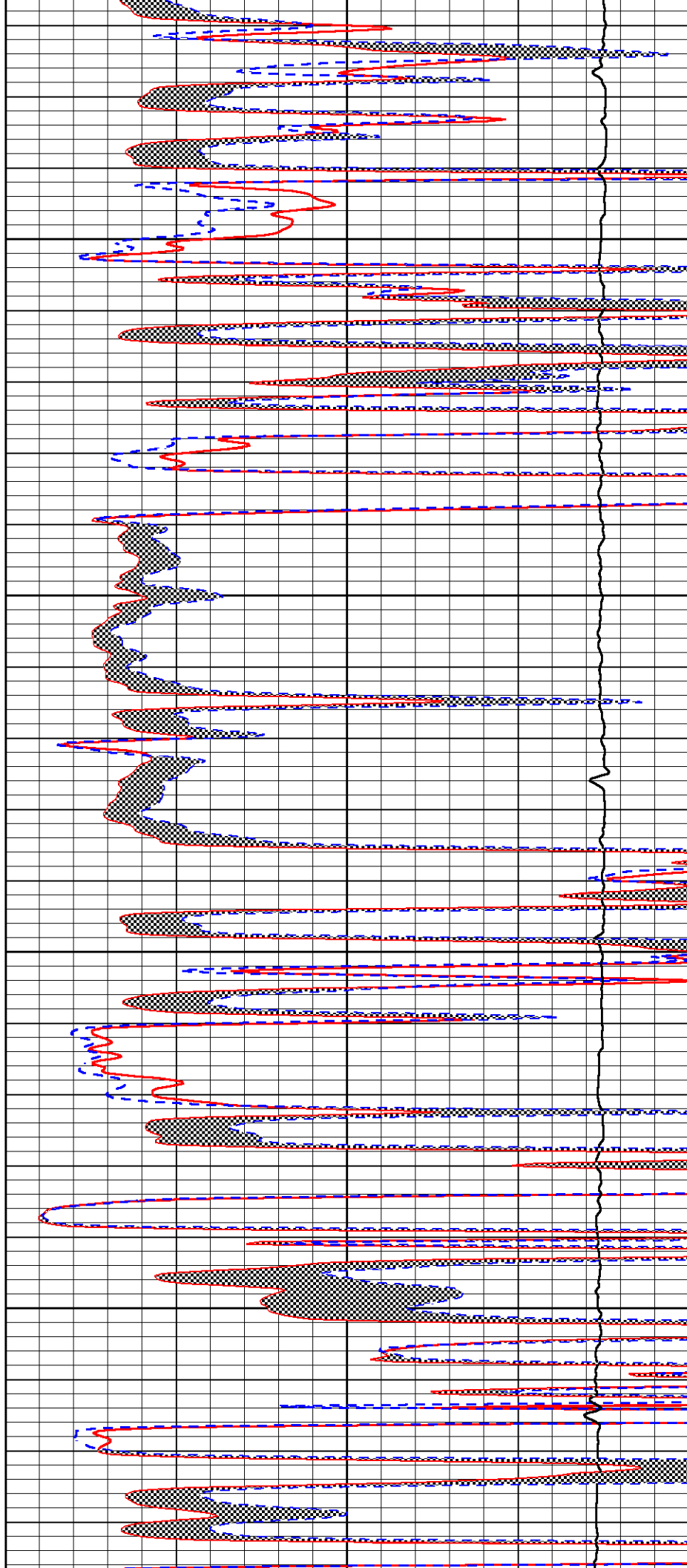


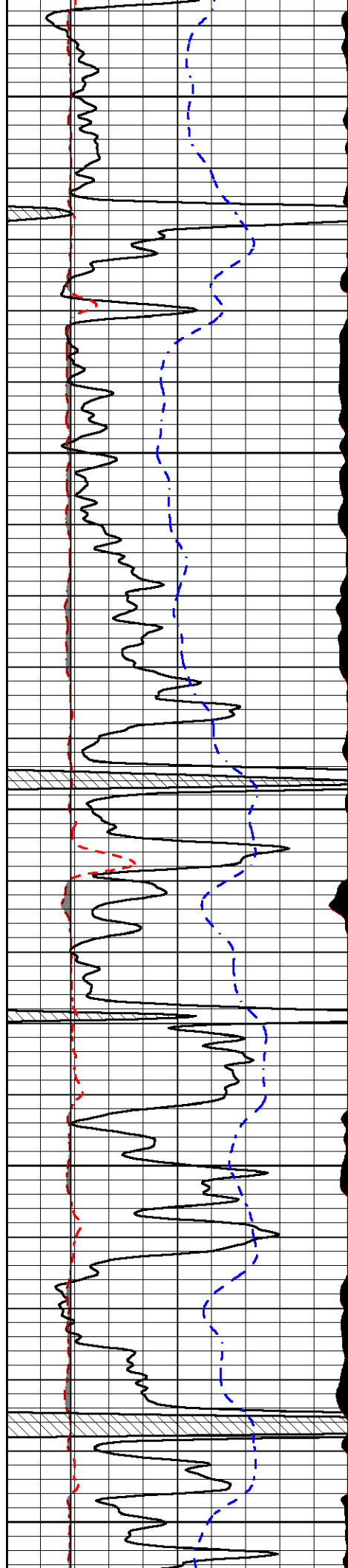
3500

3550

3600

3650





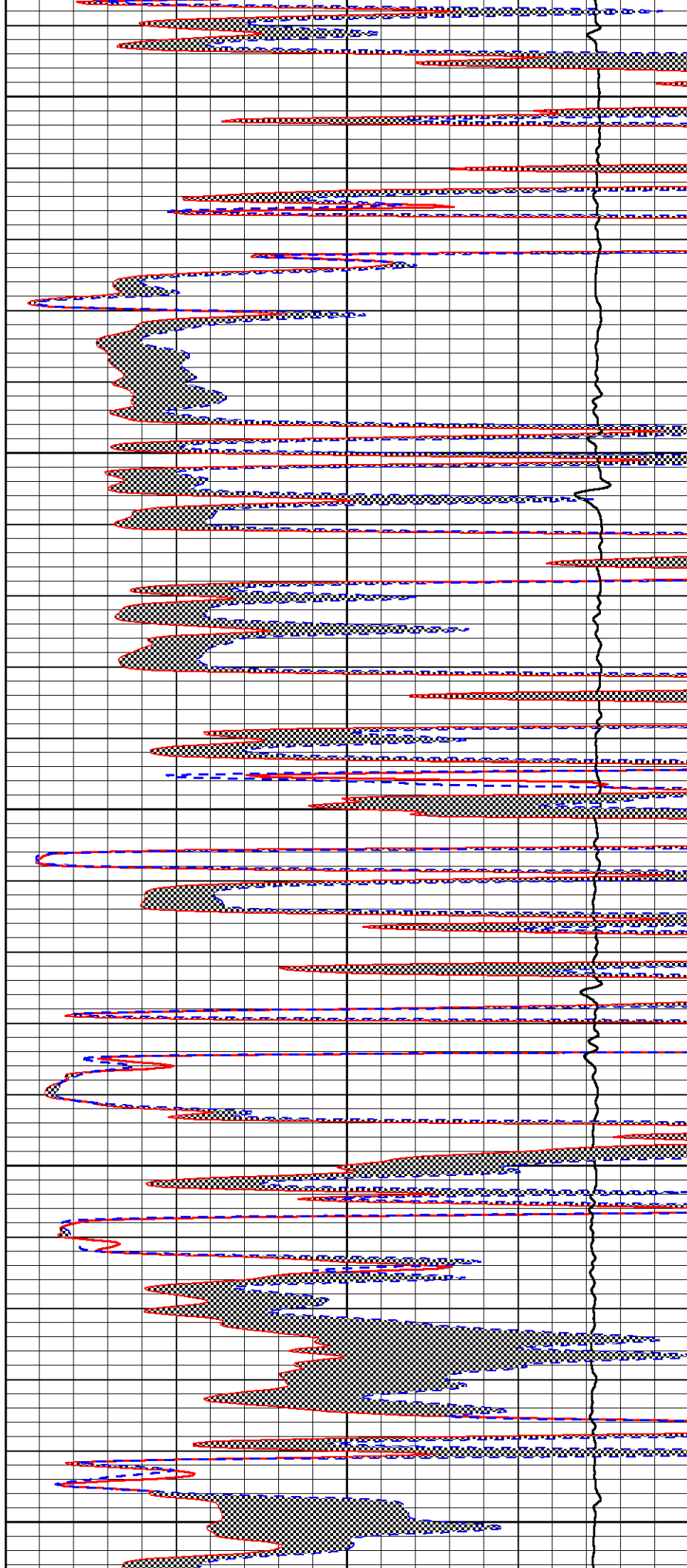
3700

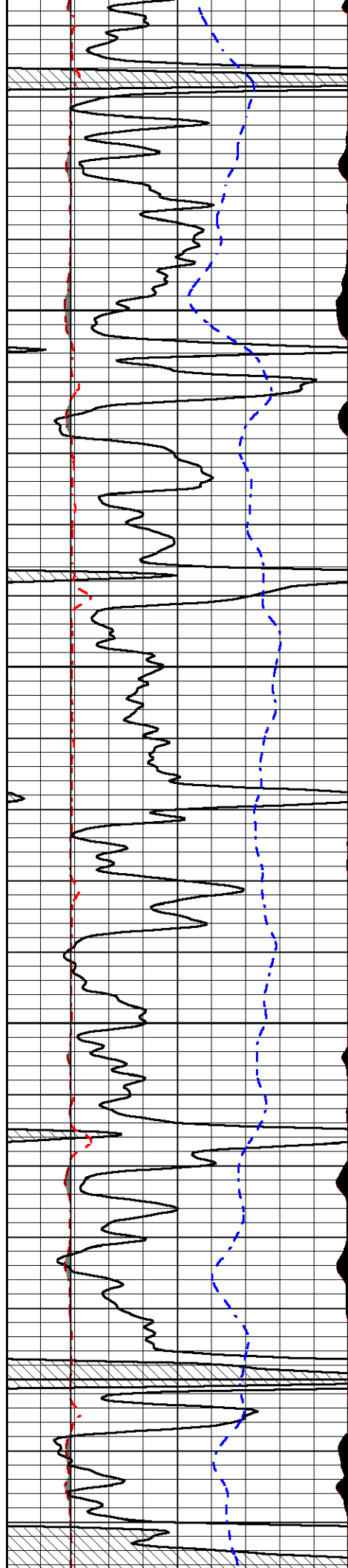
3750

3800

3850

3900



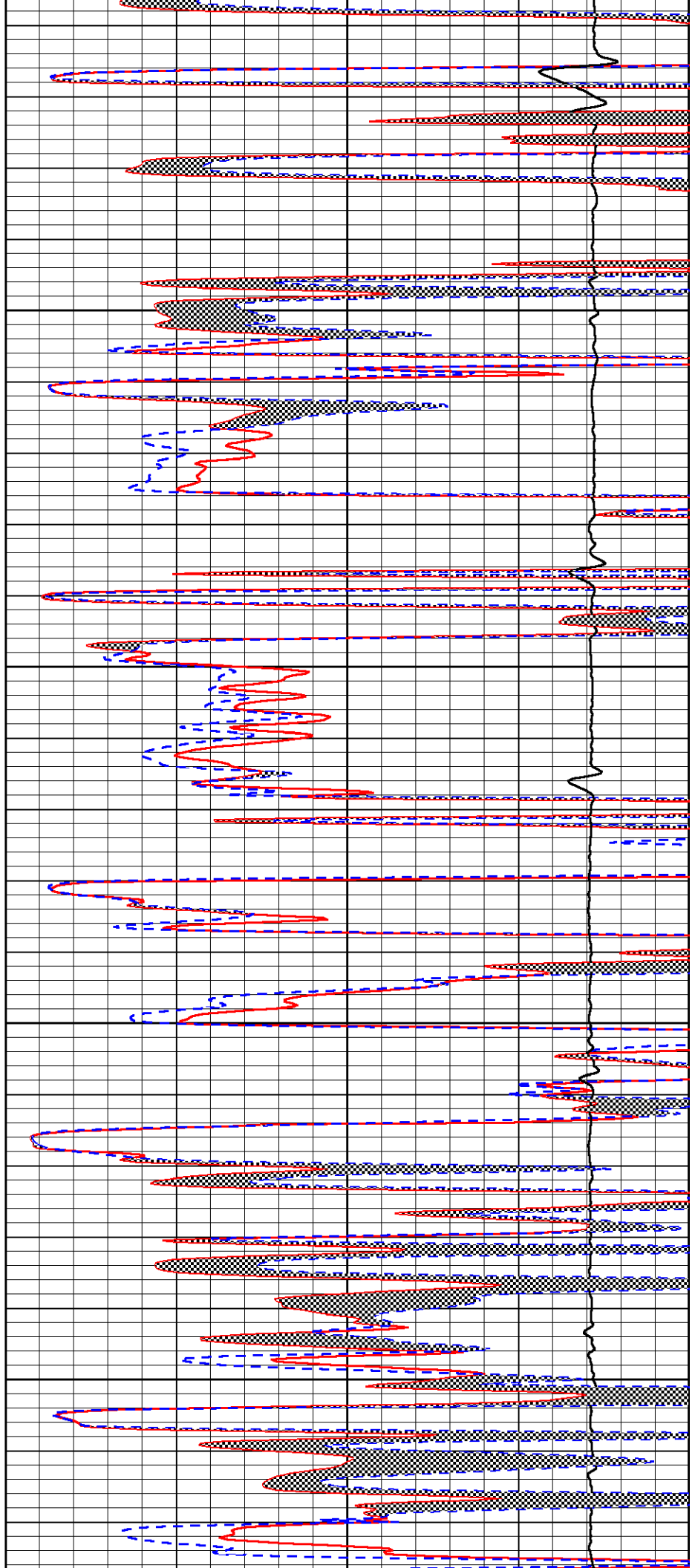


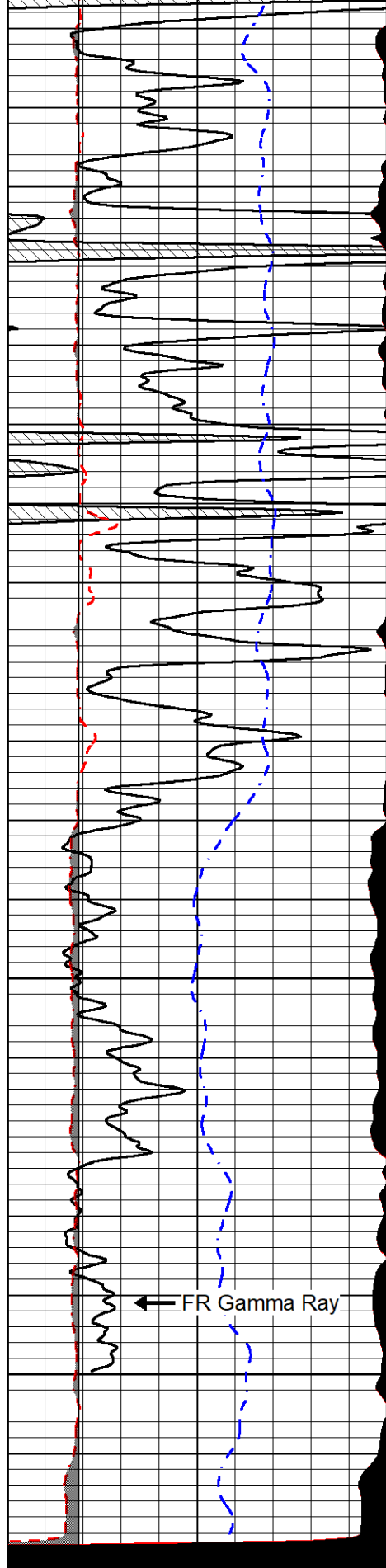
3950

4000

4050

4100





0 Gamma Ray (GAPI) 150

6 Micro Caliper (in) 16

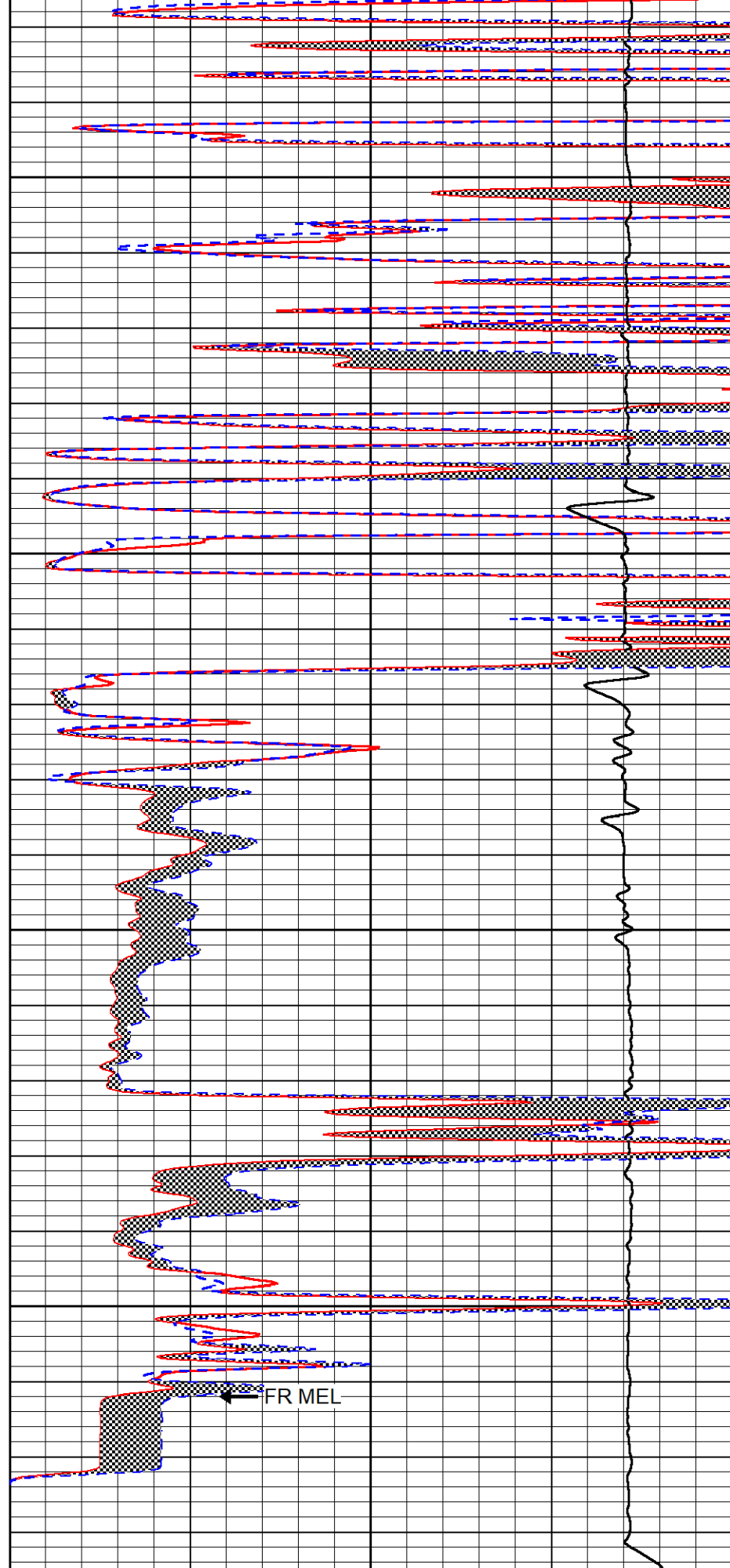
0.075 7.075

4150

4200

4250

4300



0 Micro Inverse 1 X 1 (Ohm-m) 20

0 Micro Normal 2" (Ohm-m) 20

10000 10000

2.875	mcal (in)	7.875
-200	SP (mV)	0

10000	Line Weight (lb)	0
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MIDWEST WIRELINE

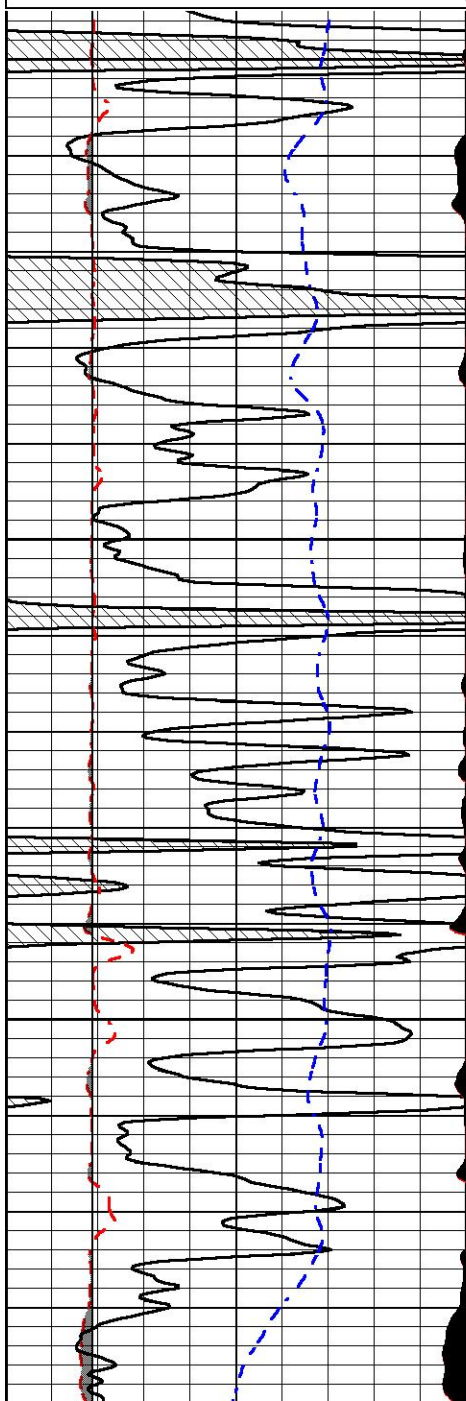
REPEAT SECTION

REPEAT PASS

Database File berexco_robb 4.db
Dataset Pathname stkml/pass2.11
Presentation Format _micro
Dataset Creation Sun Jun 30 21:19:11 2024
Charted by Depth in Feet scaled 1:240

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

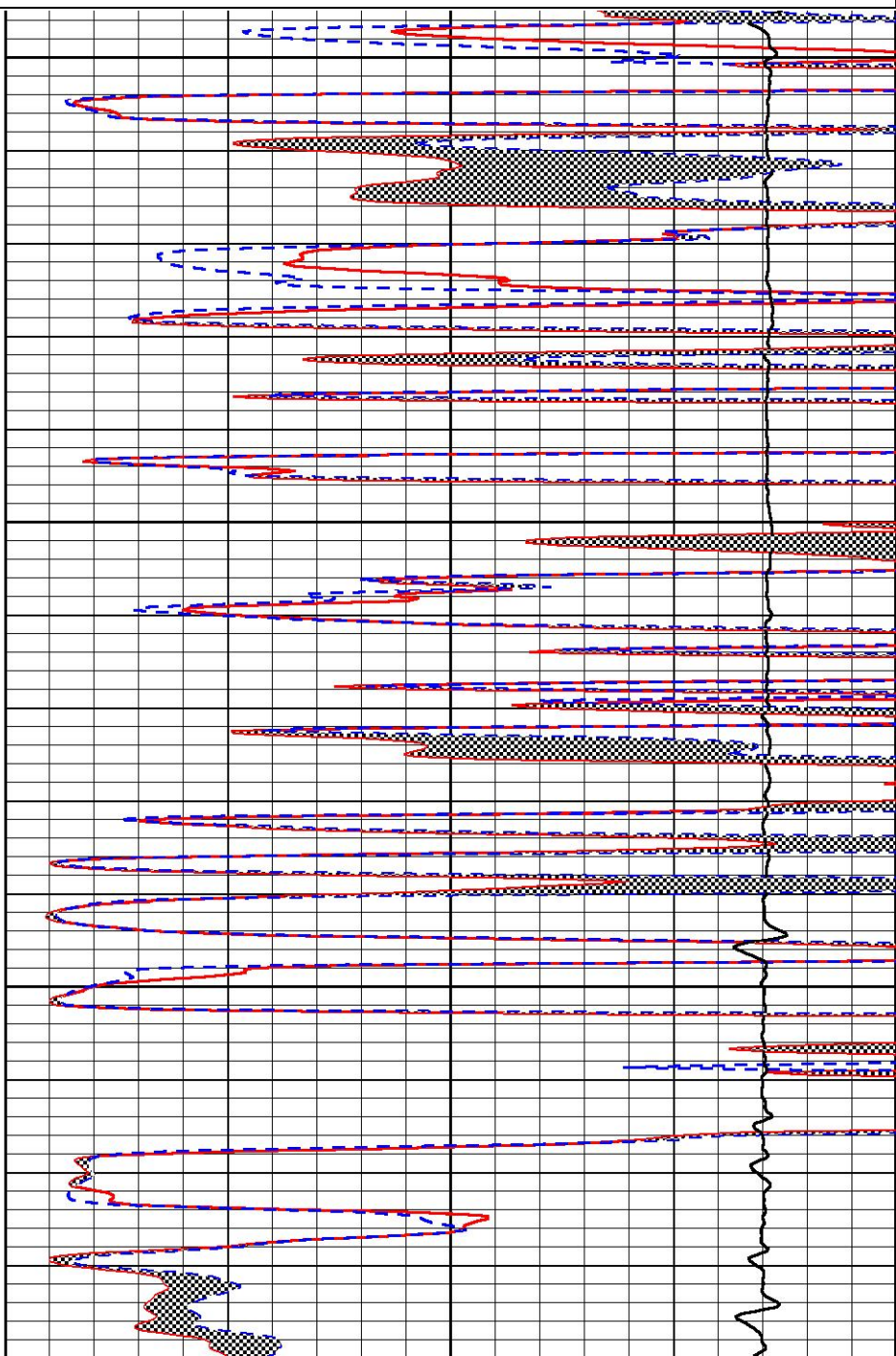
0	Micro Inverse 1 X 1 (Ohm-m)	20
0	Micro Normal 2" (Ohm-m)	20
10000	Line Weight (lb)	0

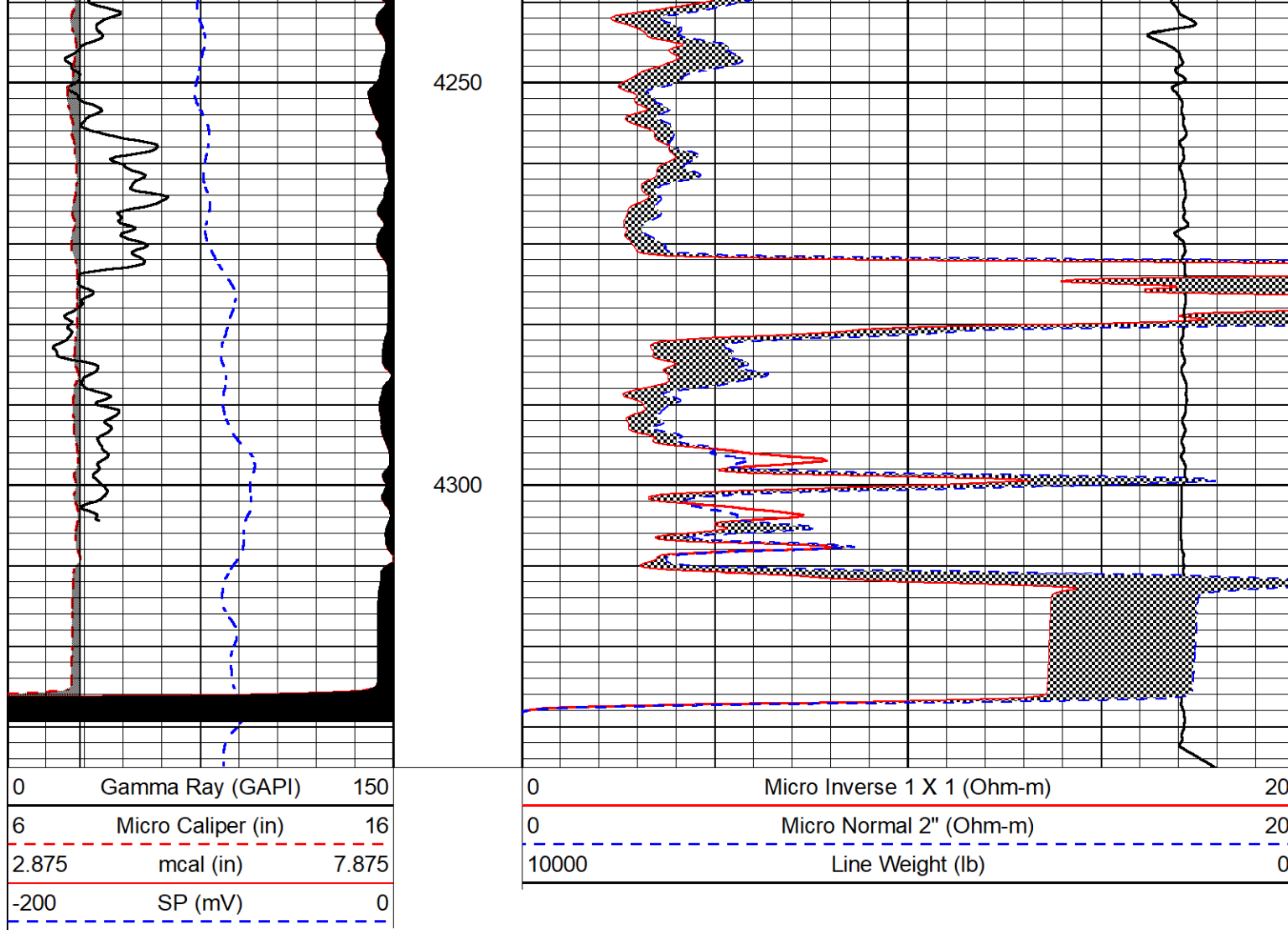


4100

4150

4200





Calibration Report	
Database File	berexco_robb 4.db
Dataset Pathname	stkml/pass3.1
Dataset Creation	Sun Jun 30 22:11:50 2024

Dual Induction Calibration Report	
Serial-Model:	506-M&W
Surface Cal Performed:	Sun Jun 30 20:32:27 2024

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	84.211	428.152	0.000	255.800	mmho/m	0.465	-32.000
Medium	141.000	670.654	0.000	255.800	mmho/m	0.390	-10.000

Microlog Calibration Report	
Serial-Model:	402-PSI STKBL ML
Performed:	Thu May 30 05:58:00 2024

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	11000.0000	0.0000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	14000.0000	0.0000

Caliper	1.0046	1.1419			5.5000	20.0000	in	50.0000	-44.6250
LITHODENSITY Calibration Report									
Serial Number:	703-03								
Tool Model:	STEP LITHO Short								
Performed:	Fri May 31 13:59:15 2024								
Source:									
	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	56	59	223	276	25	75	46	1	cps
LS:	83	90	344	441	51	132	90	3	cps
Aluminum:									
SS:	1063	1260	2893	2631	48	80	48	3	cps
LS:	1179	2084	3854	1823	62	133	86	5	cps
Magnesium:									
SS:	1756	2035	4740	3894	55	79	49	4	cps
LS:	4981	8390	15059	6054	115	127	85	14	cps
Aluminum+Iron:									
SS:	676	887	2426	2310	45	79	52	2	cps
LS:	700	1495	3280	1630	60	131	90	5	cps
		Density			PE				
		Actual	Calibrated		Actual	Calibrated	Quality		
Background:									
SS:							0.236		
LS:							0.189		
Aluminum:									
SS:		2.6000	2.6000	g/cc			0.249		
LS:		2.6000	2.6000	g/cc			0.216		
Magnesium:									
SS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.232		
LS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.198		
Aluminum+Iron:									
SS:						6.1800	0.208		
LS:						6.1800	0.188		
Caliper:		Reference:		Reading:					
Small Ring:		6.0	in	1.0					
Large Ring:		14.0	in	1.0					
Gain:		12.765							
Offset:		2.050							
Compensated Neutron Calibration Report									
		Serial Number:		210					
		Tool Model:		M&W					
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:			105						
Tool Model:			M&W						
Performed:			Sat Oct 21 23:48:19 2023						
Calibrator Value:			500.0		GAPI				

Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.6000	GAPI/cps



Company	Berexco, LLC
Well	Robb #4
Field	
County	Gove
State	Kansas