MIDWEST WIRELINE

MICRORESISTIVITY LOG

Company Murfin Drilling Company, Inc.
Well Weis A #1-14
Field
County Sheridan State Kansas
Location: API # : 15-179-21508-00-00
2135 FNL & 330 FWL
SEC 14 TWP 6S RGE 28W

Other Services: CNL/CDL, DIL/BHCS

Permanent Datum: Ground Level — Elevation: 2730
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing

Elevation: K.B. 2735, D.F., G.L. 2730

Date	8/1/2024		
Run Number	Two		
Depth Driller	4200		
Depth Logger	4193		
Bottom Logged Interval	4192		
Top Log Interval	3250		
Casing Driller	8.625 @ 263		
Casing Logger	261		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	1300		
Density / Viscosity	9.3 / 59		
pH / Fluid Loss	10.5 / 6.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.10 @ 88		
Rmf @ Meas. Temp	0.83 @ 88		
Rmc @ Meas. Temp	1.49 @ 88		
Source of Rmf / Rmc	CHARTS		
Rm @ BHT	0.82 @ 118		
Operating Rig Time	5 Hours		
Max Rec. Temp. F	118		
Equipment Number	110		
Location	HAYS		
Recorded By	D. Schmidt		
Witnessed By	Jeison Rodiriquez		

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Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

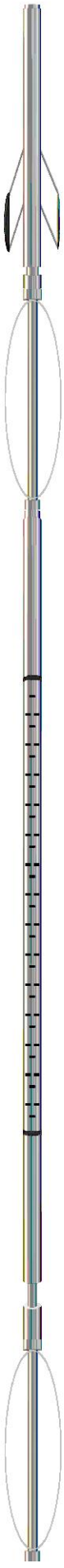
Hoxie,
North to 120th, 1 East, 1/2 North,
East into

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

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

Your Midwest Wireline Crew	This Log Record Was Witnessed By
Engineer: D. Schmidt	Primary Witness: Jeison Rodiriquez
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			ML-PENGO (P003)	5.50	3.50	100.00
MCAL	25.50					
MI	25.50					
MN	25.50					
			CENT-PENGO	4.25	3.00	70.00
WVF4	12.50		SLT-PENGO (602)	16.00	3.50	300.00
WVF1	12.50					
WVF3	10.50					
WVF2	10.50					
			CENT-PENGO	4.25	3.00	70.00

Dataset: murfin_weis a 1-14.db: field/well/sonmel/pass2
Total length: 30.00 ft
Total weight: 540.00 lb
O.D.: 3.50 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\murfin_weis a 1-14.db
Dataset field/well/stack/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	118	5.5	0	1	2	2.71
NPORSEL	**PERFS**	**SNDERR mmho/m**	**SNDERRM mmho/m**	**SPSHIFT mV**	**SRFTEMP degF**	**SZCOR**	**TDEPTH ft**
Limestone	No	0	-12	150	90	Off	4193

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

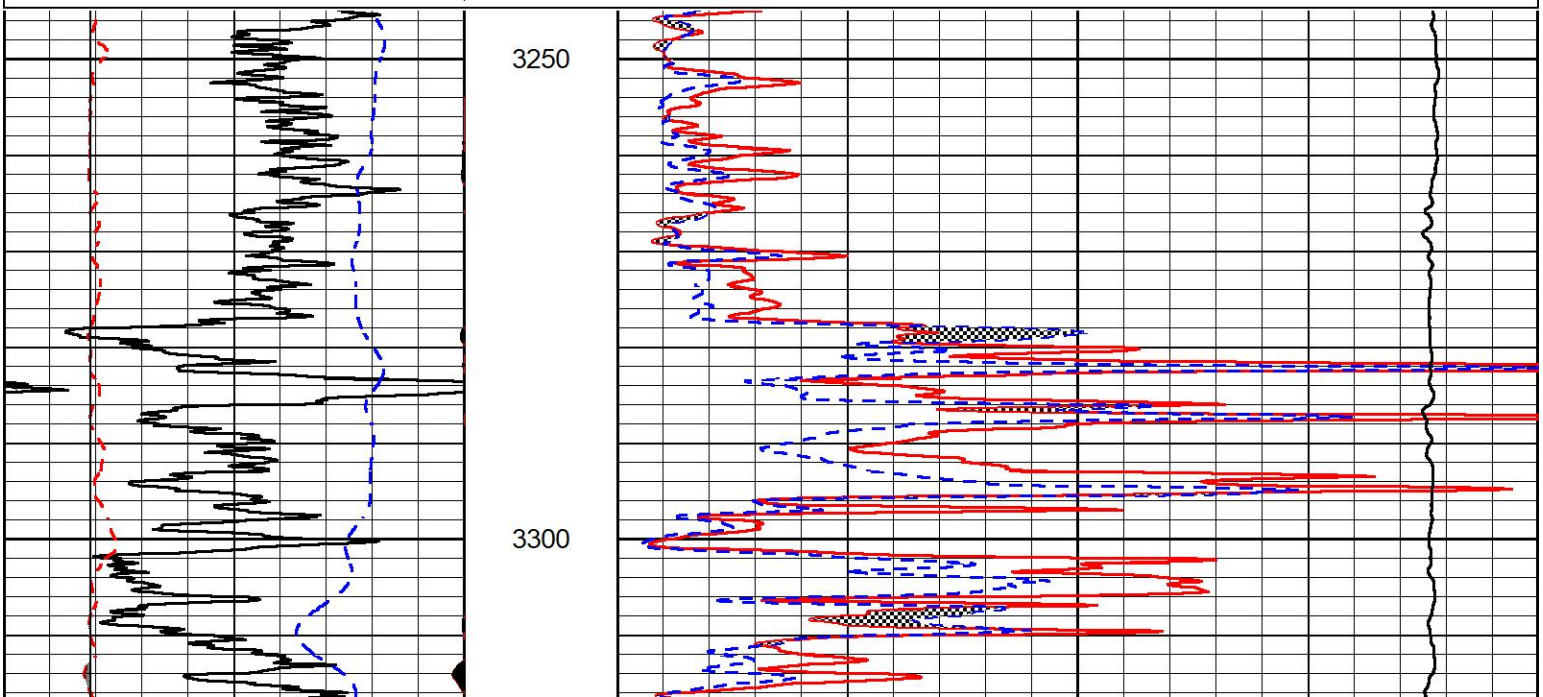
DETAIL SECTION

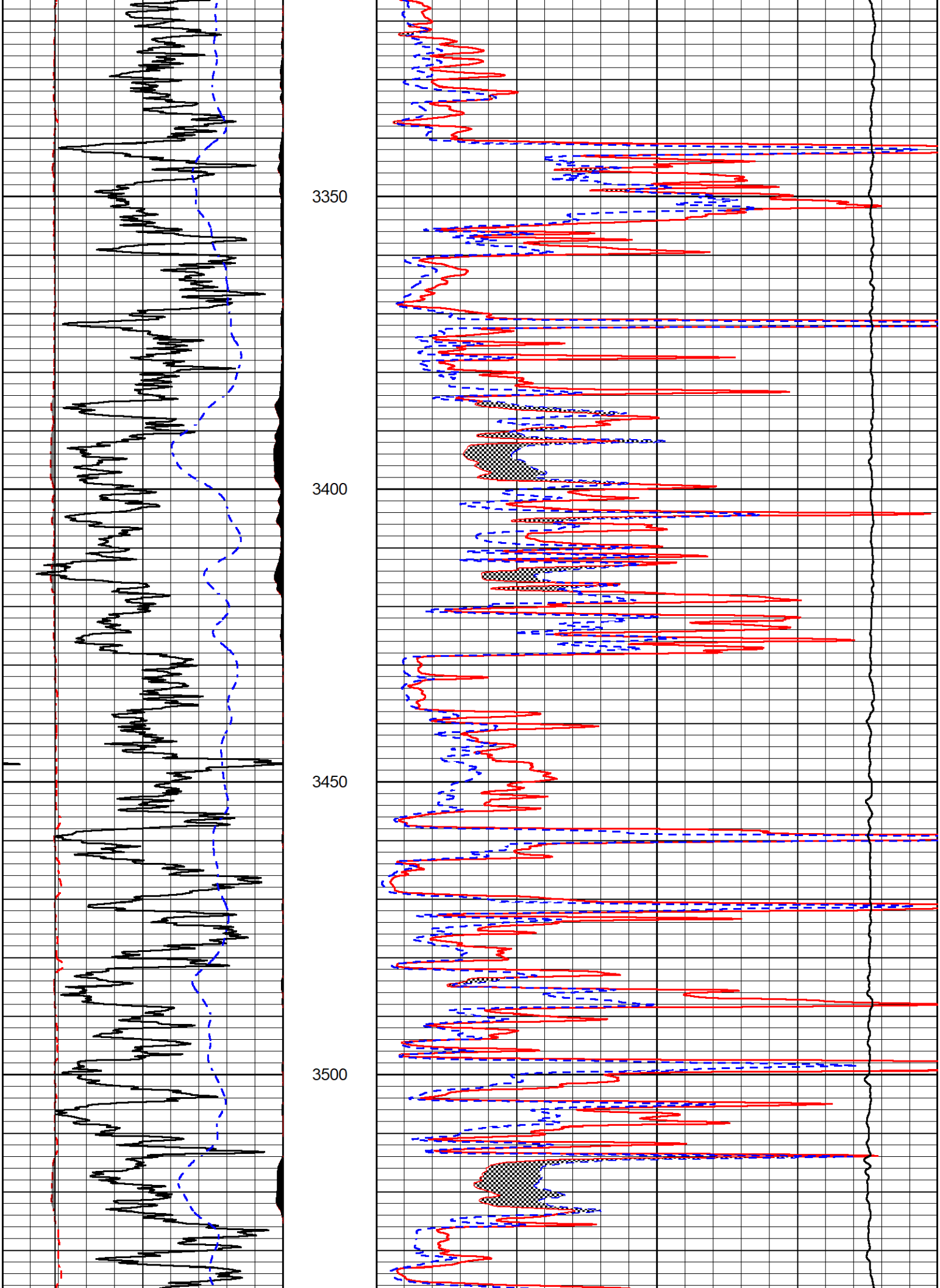
MAIN PASS

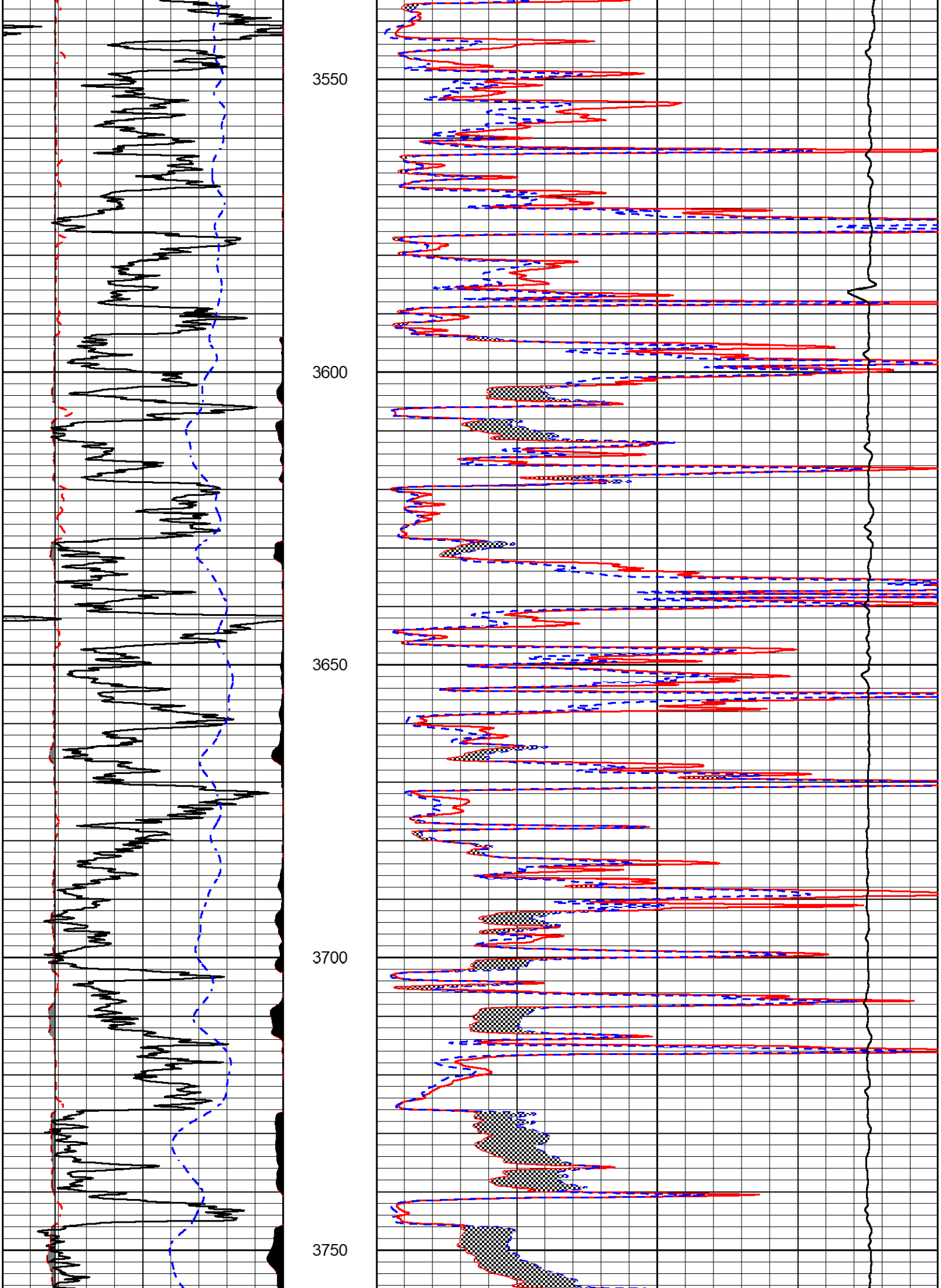
Database File	murfin_weis a 1-14.db
Dataset Pathname	stack/pass3.1
Presentation Format	_micro
Dataset Creation	Fri Aug 02 01:13:18 2024
Charted by	Depth in Feet scaled 1:240

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




3350
3400
3450
3500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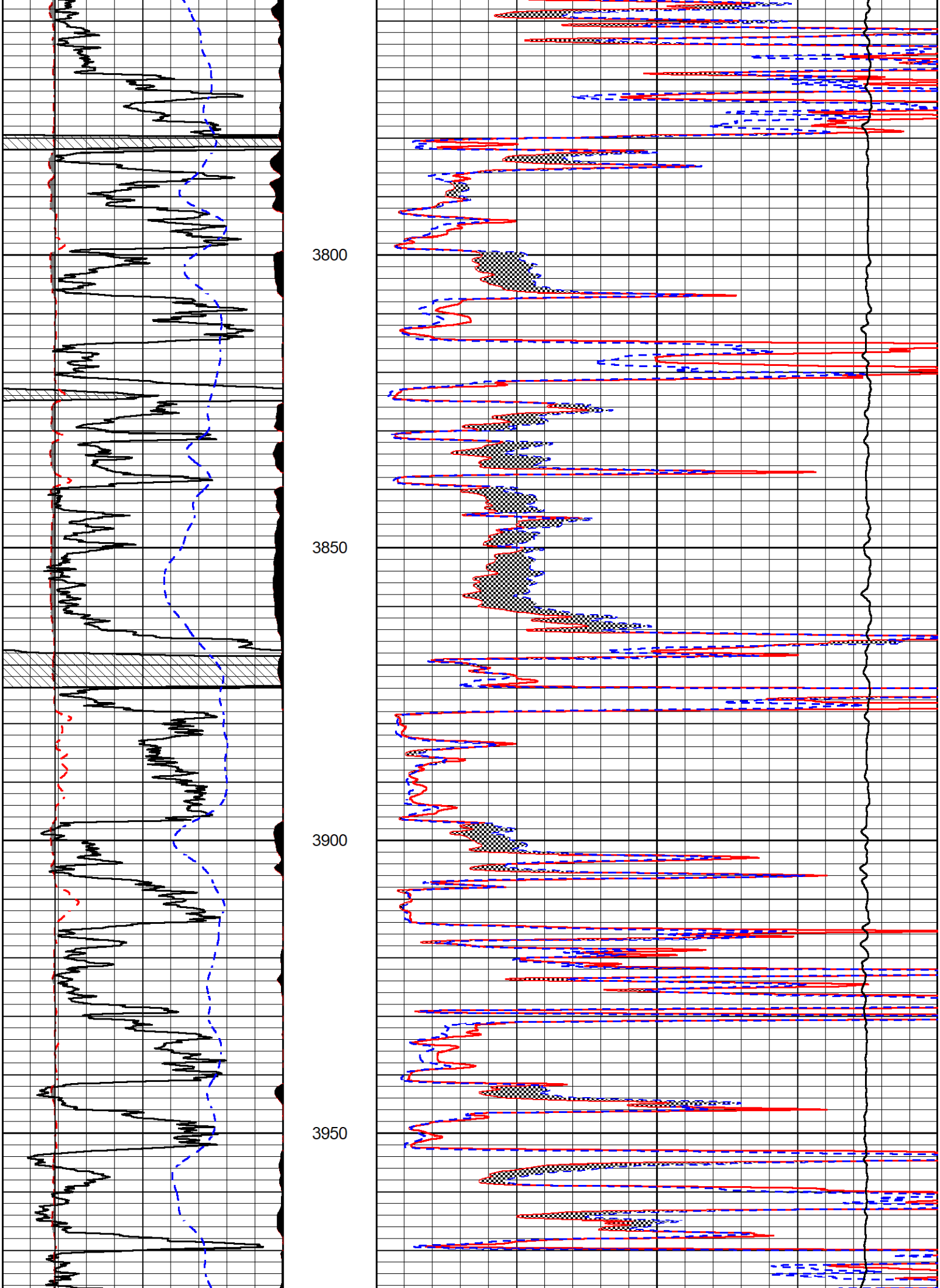
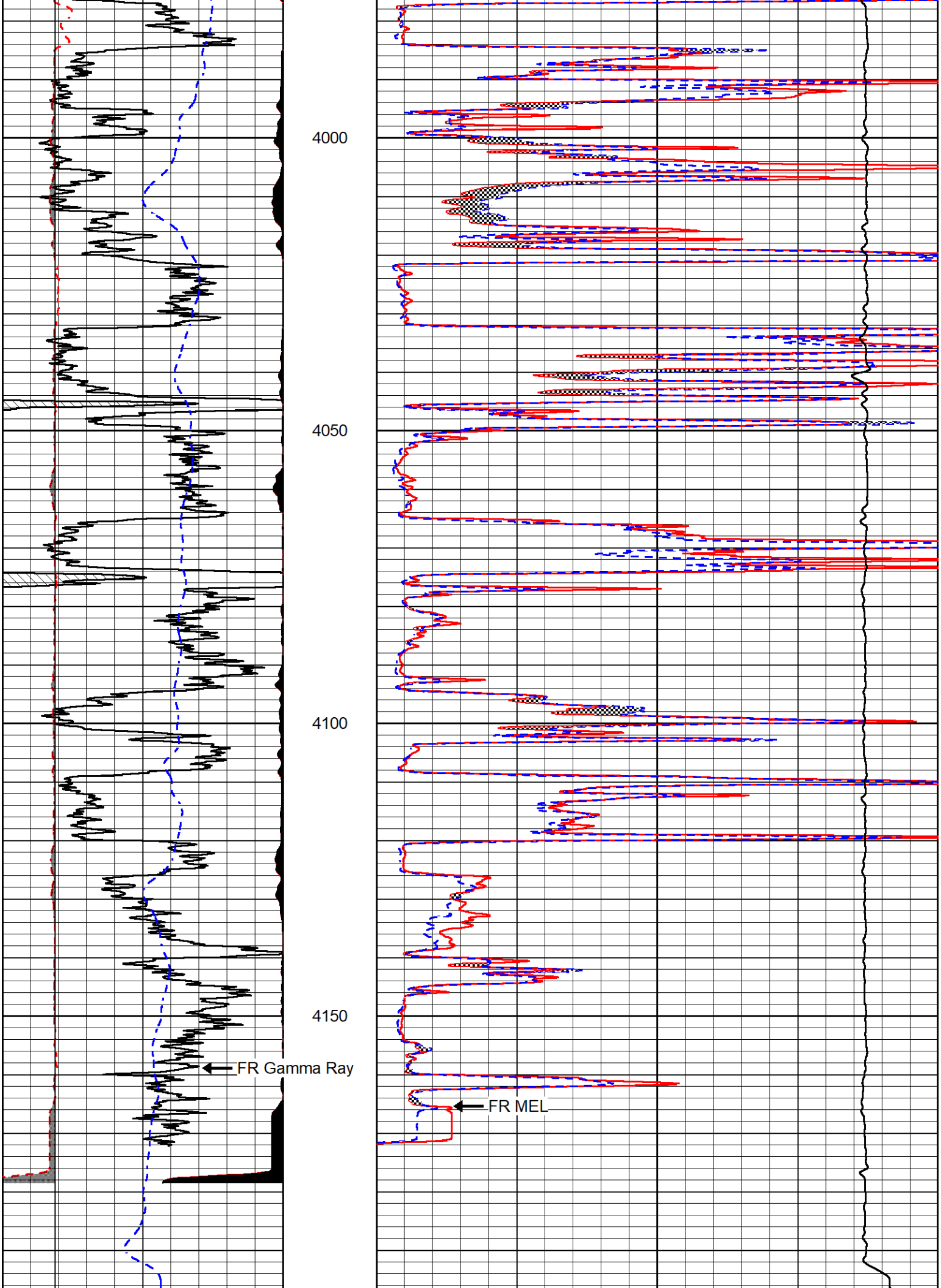
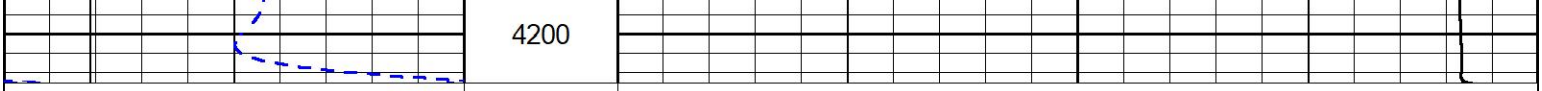
3600
3650
3700
3750


3800
3850
3900
3950


4000
4050
4100
4150
FR Gamma Ray
FR MEL



0	Gamma Ray (GAPI)	150	0	Micro Inverse 1 X 1 (Ohm-m)	20
6	Micro Caliper (in)	16	0	Micro Normal 2" (Ohm-m)	20
2.875	mcal (in)	7.875	10000	Line Weight (lb)	0
-200	SP (mV)	0			

4200

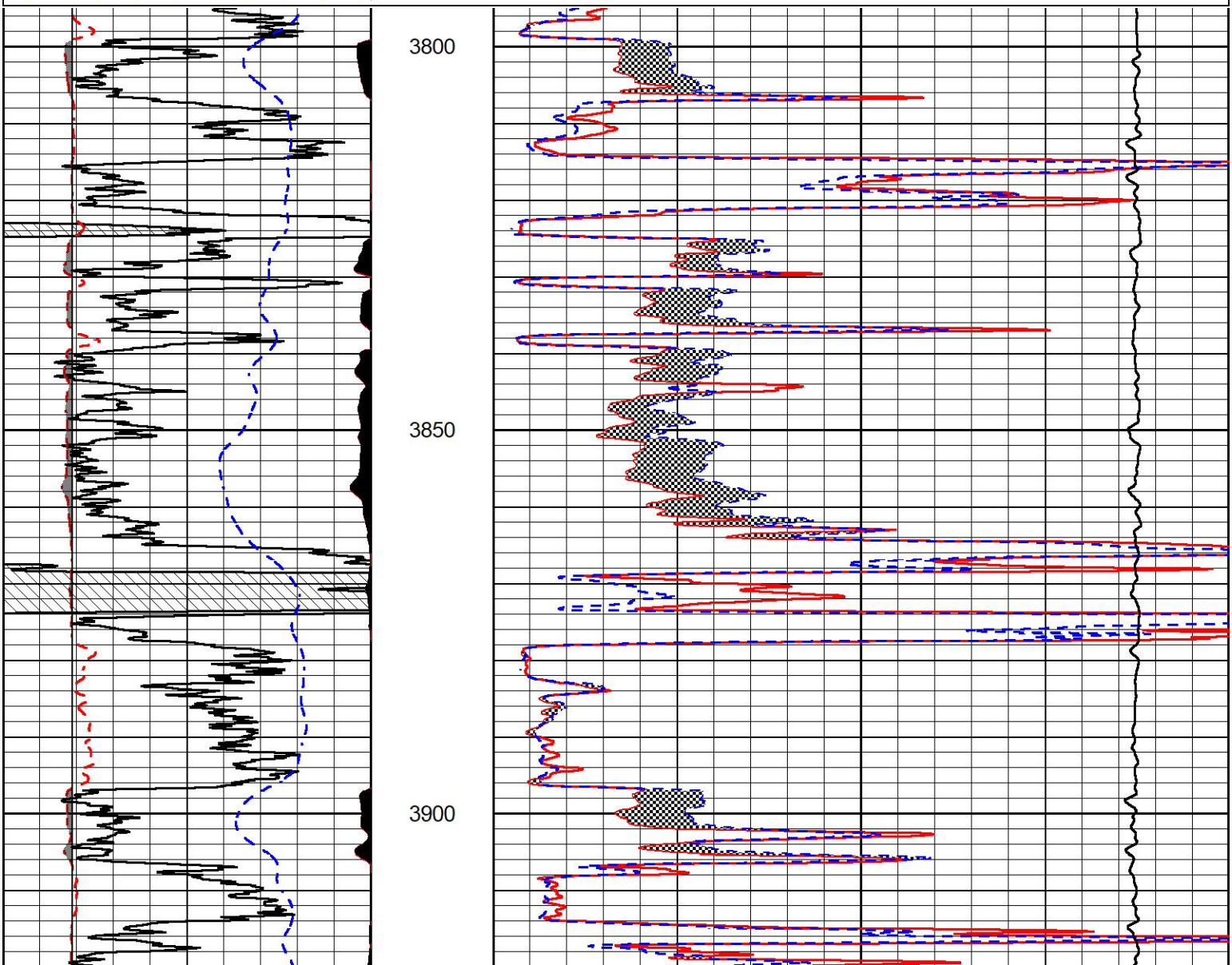
MIDWEST WIRELINE

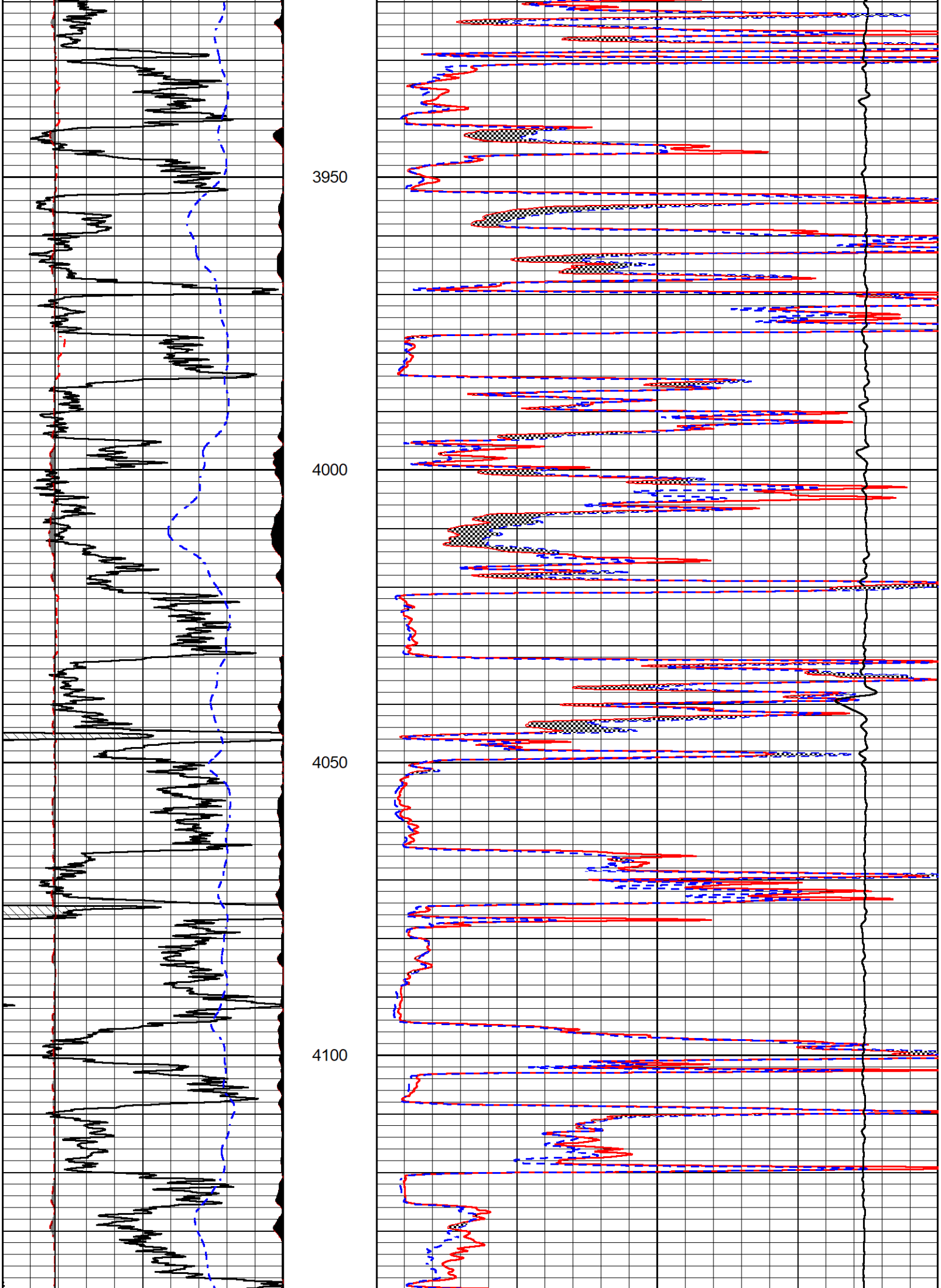
REPEAT SECTION

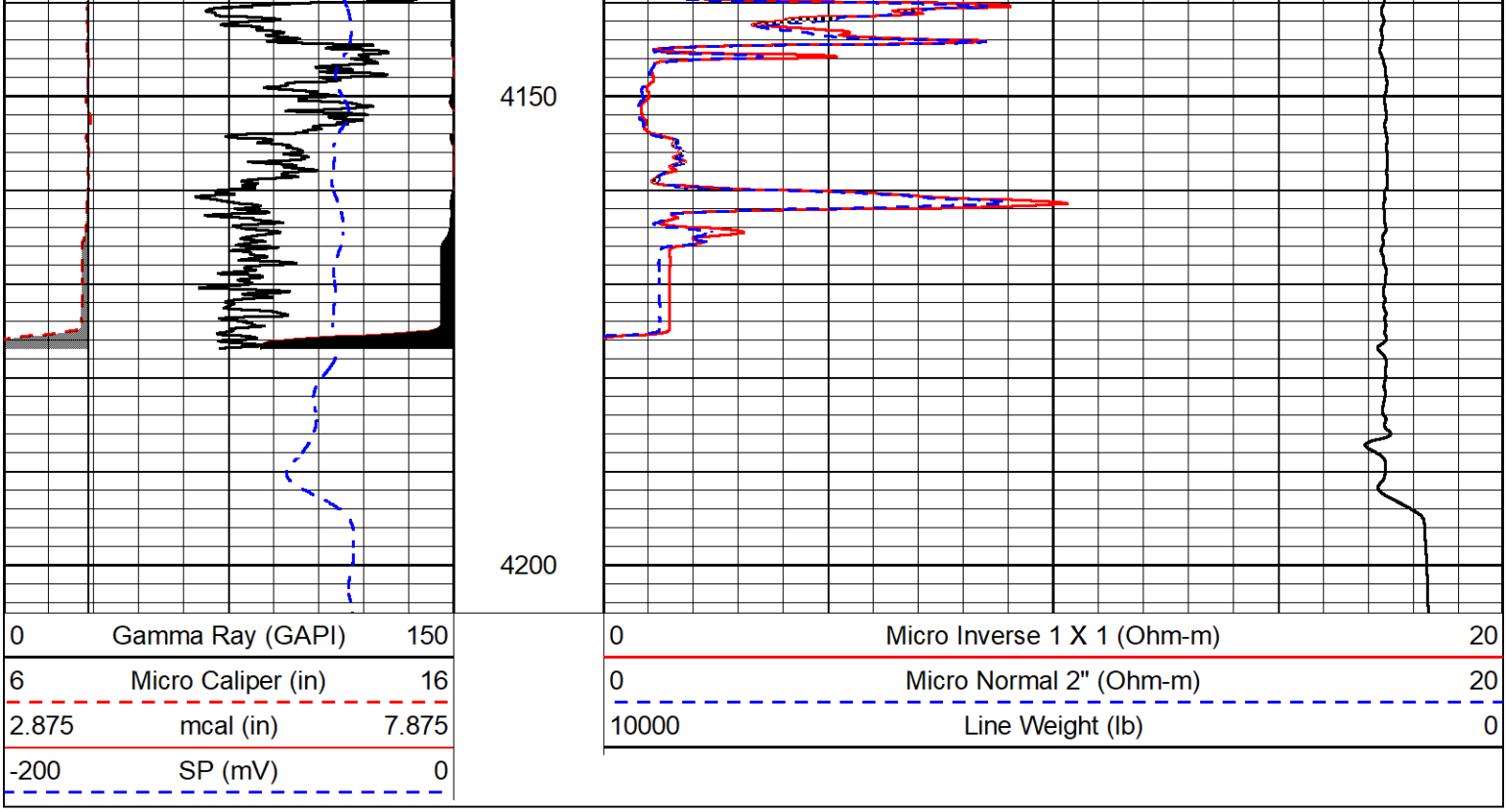
REPEAT PASS

Database File	murfin_weis a 1-14.db
Dataset Pathname	stack/pass2.1
Presentation Format	_micro
Dataset Creation	Fri Aug 02 00:38:34 2024
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	0	Micro Inverse 1 X 1 (Ohm-m)	20
6	Micro Caliper (in)	16	0	Micro Normal 2" (Ohm-m)	20
2.875	mcal (in)	7.875	10000	Line Weight (lb)	0
-200	SP (mV)	0			




3950
4000
4050
4100



Calibration Report

Database File	murfin_weis a 1-14.db
Dataset Pathname	stack/pass3.1
Dataset Creation	Fri Aug 02 01:13:18 2024

Dual Induction Calibration Report

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

	Readings		References			Results	
Loop:	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

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 Actual	Calibrated		PE 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

	Reference:		Reading:
Caliper:			
Small Ring:	6.0	in	1.0
Large Ring:	14.0	in	1.0
Gain:	12.765		
Offset:	2.170		

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

MIDWEST WIRELINE

Company	Murfin Drilling Company, Inc.
Well	Weis A #1-14
Field	
County	Sheridan
State	Kansas