

DUAL COMPENSATED POROSITY
w/PE
MICRORESISTIVITY

MIDWEST WIRELINE

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

Company Murfin Drilling Company, Inc.

Well Weis A #1-14

Field

County Sheridan

State Kansas

Location: API #: 15-179-21508-00-00

Other Services

2135 FNL & 330 FWL

SEC 14 TWP 6S RGE 28W

Permanent Datum

Ground Level

Elevation 2730

Log Measured From

Kelly Bushing

K.B. 2735

Drilling Measured From

Kelly Bushing

D.F. G.L. 2730

Date 8/1/2024

Run Number One

Type Log CNL/CDL

Depth Driller 4200

Depth Logger 4193

Bottom Logged Interval 4192

Top Logged Interval 3250

Type Fluid In Hole Chemical

Salinity, PPM CL 1300

Density 9.3

Level Full

Max. Rec. Temp. F 118

Operating Rig Time 5 Hours

Equipment -- Location 110 Hays

Recorded By D. Schmidt

Witnessed By Jeison Rodriquez

Borehole Record

Run No. Bit From To Size Wgt. From To

One 12.25 0 263 8.625 23 0 263

Two 7.875 263 TD

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Midwest Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Midwest 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.

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

Engineer: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Jeison Rodriquez
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
GR	32.65		GR-M&W (105)	3.00	3.50	50.00	
CNLSC CNSSC	29.55 28.80		CNT-M&W (210)	5.00	3.50	100.00	
			MWLith-STEP LITHO Short (703-03)	8.40	5.00	250.00	
LCAL	20.63						
LLW8N	20.63						
LLW7N	20.63						
LLW6N	20.63						
LLW5N	20.63						
LLW4N	20.63						
LLW3N	20.63						
LLW2N	20.63						
LLW1N	20.63						
LSLOCK	20.38						
LLLOCK	20.38						
PELTMPR	20.38						
LSHVNG	20.38						
LLHVNG	20.38						
LSW8N	20.13						
LSW7N	20.13						
LSW6N	20.13						
LSW5N	20.13						
LSW4N	20.13						
LSW3N	20.13						
LSW2N	20.13						
LSW1N	20.13						
RLL3F	15.50						
RLL3	15.50						
CILD	8.33						
CILM	4.50						
SP	0.20						
			DIL-M&W (506)	18.25	3.50	220.00	

Dataset:	murfin_weis a 1-14.db: field/well/stack/pass3.1
Total length:	34.65 ft
Total weight:	620.00 lb
O.D.:	5.00 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

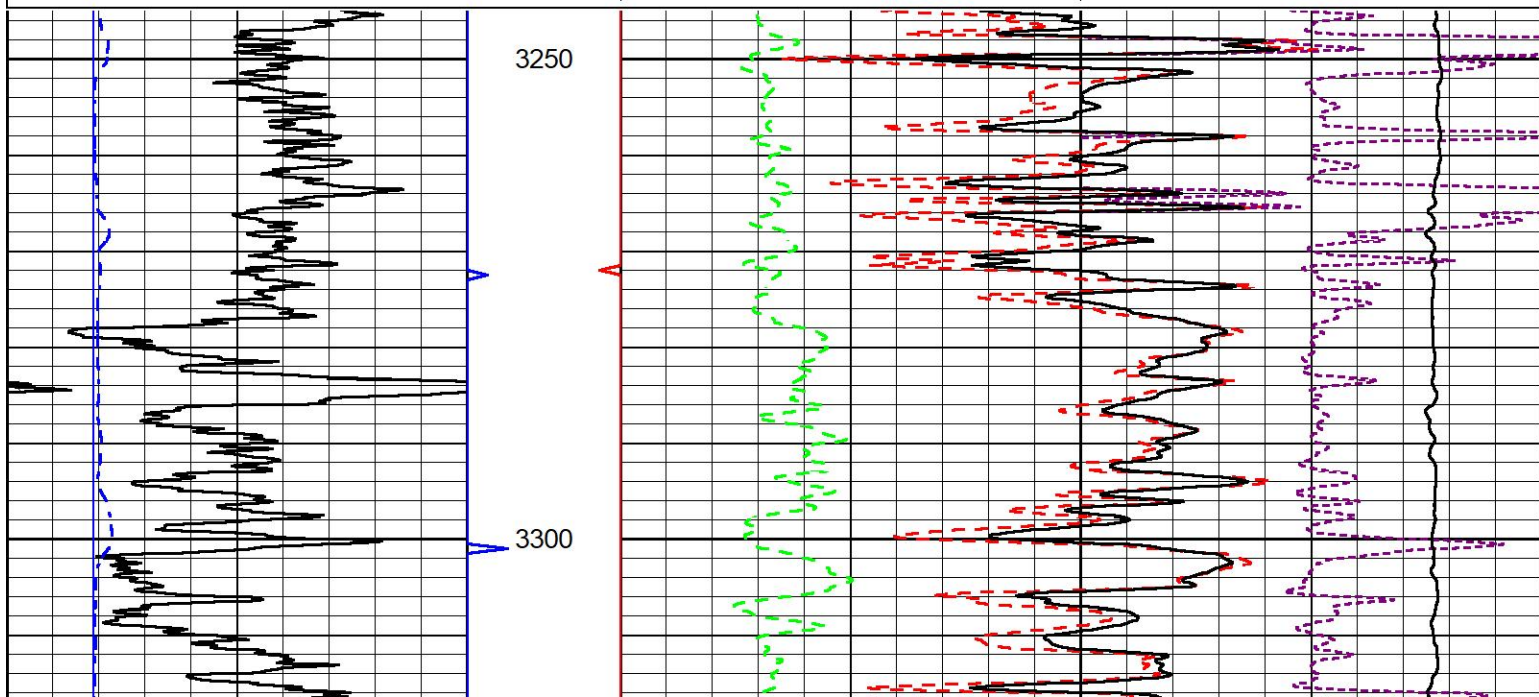


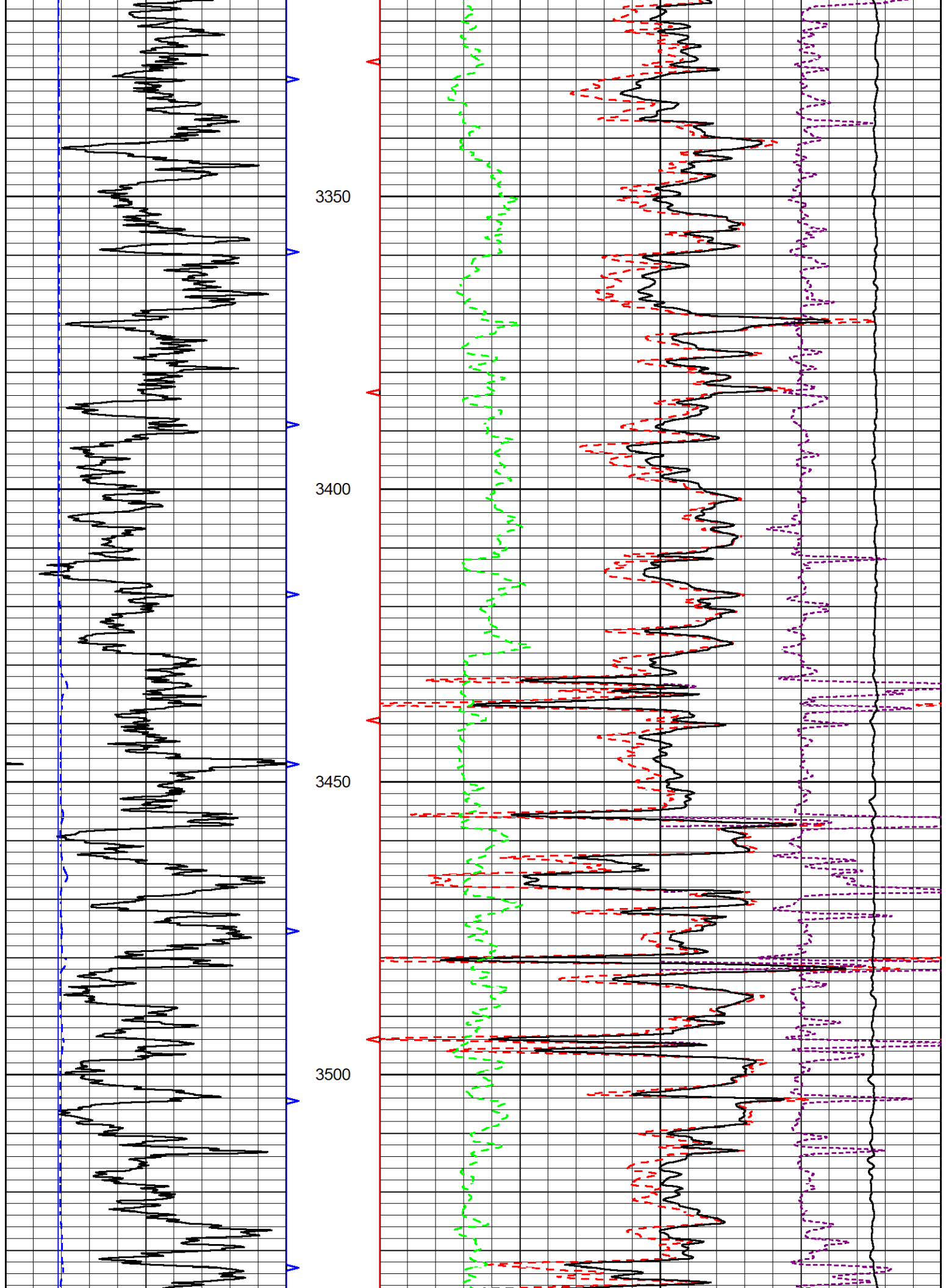
5" SCALE BULK DENSITY

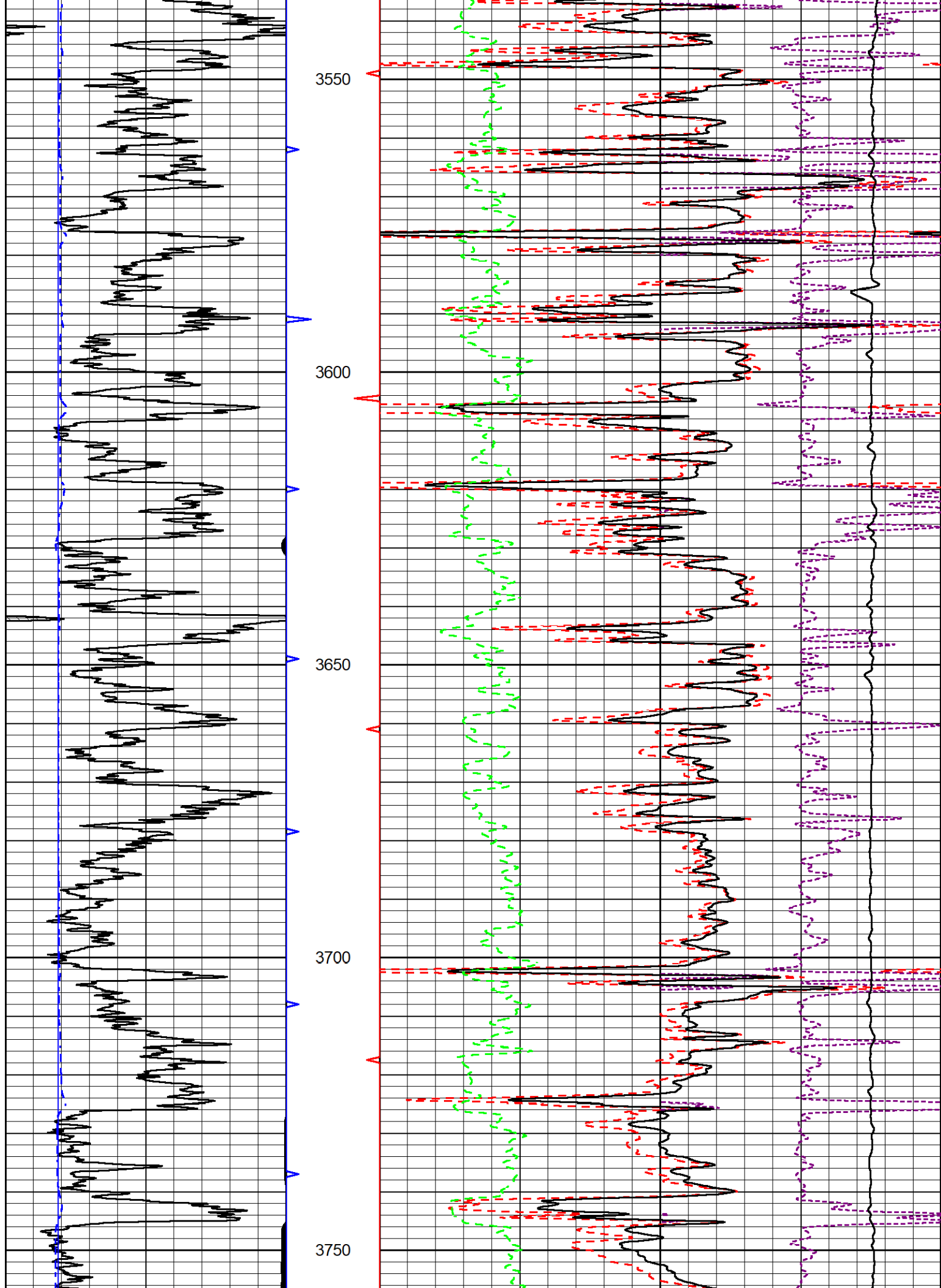
MAIN PASS

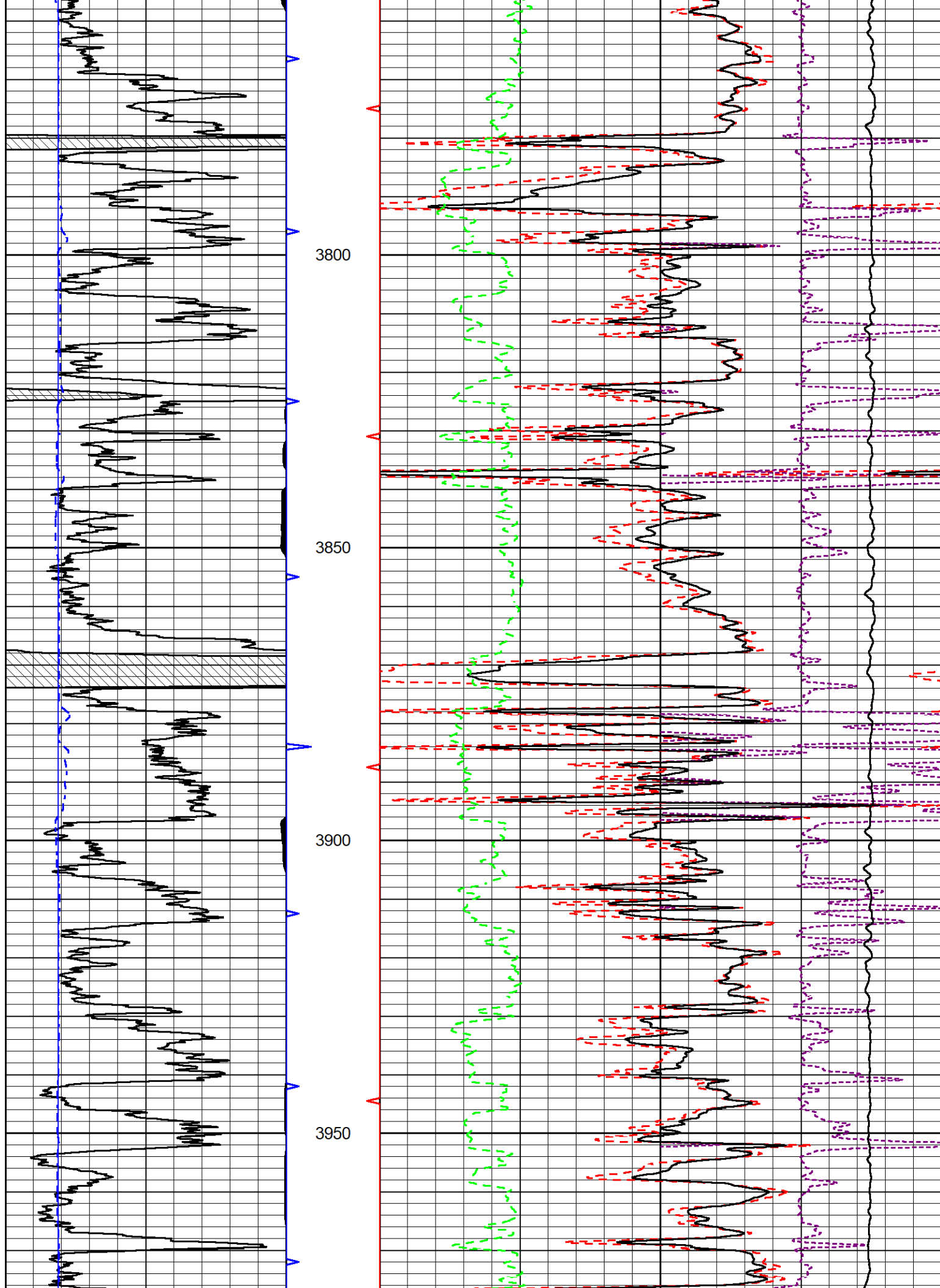
Database File murfin_weis a 1-14.db
Dataset Pathname stack/pass3.2
Presentation Format _cdlpe
Dataset Creation Fri Aug 02 01:13:57 2024
Charted by Depth in Feet scaled 1:240

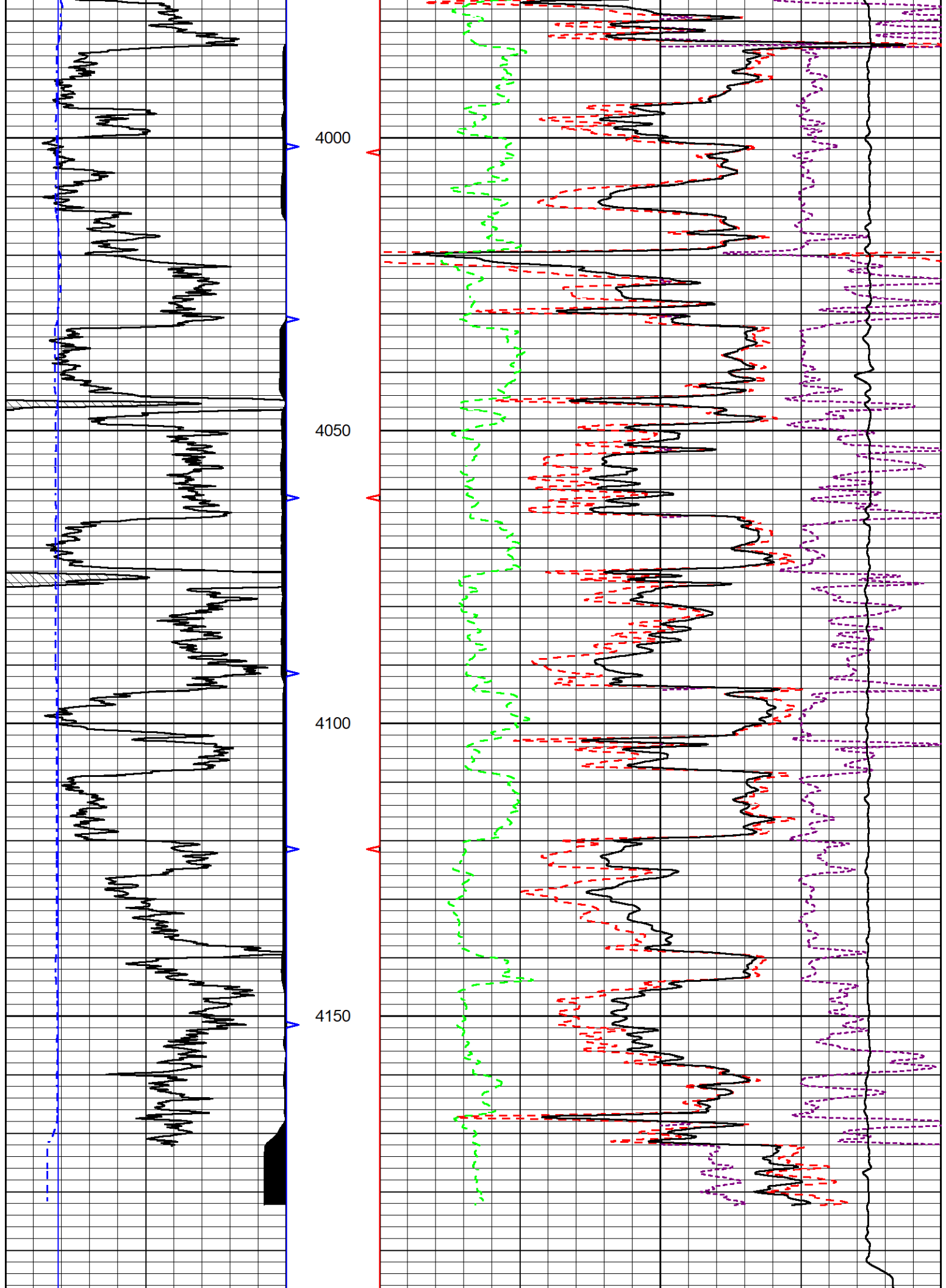
0	Gamma Ray (GAPI)	150	30	Compensated Density Porosity (pu)	-10
6	Caliper (in)	16	2	Bulk Density (g/cc)	3
			10000	Line Tension (lb)	0
			0	pecln	10 -0.25
				Correction (g/cc)	0.25











4200					
0	Gamma Ray (GAPI)	150	30	Compensated Density Porosity (pu)	-10
6	Caliper (in)	16	2	Bulk Density (g/cc)	3
			10000	Line Tension (lb)	0
0	pecln	10	-0.25	Correction (g/cc)	0.25



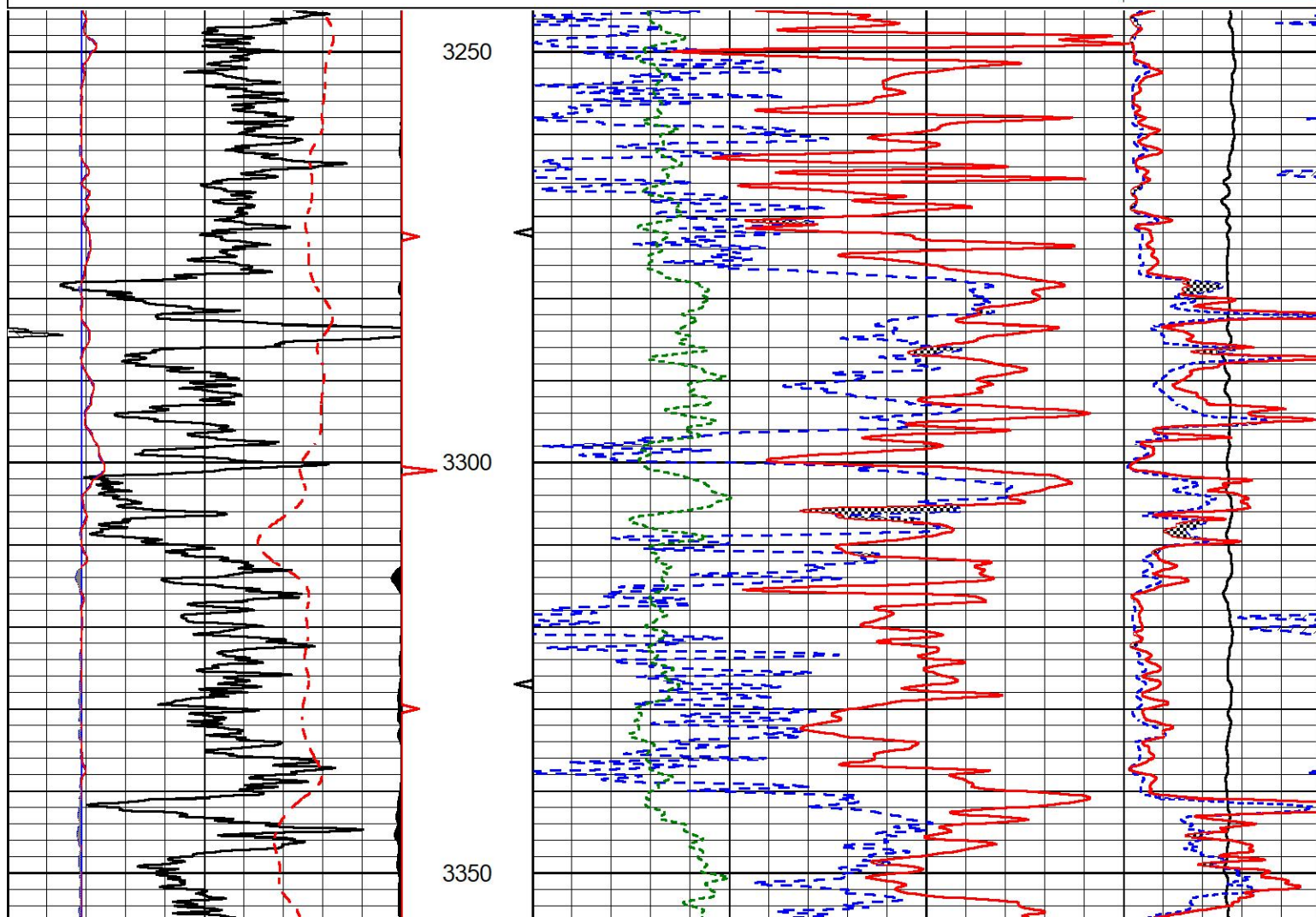
MIDWEST WIRELINE

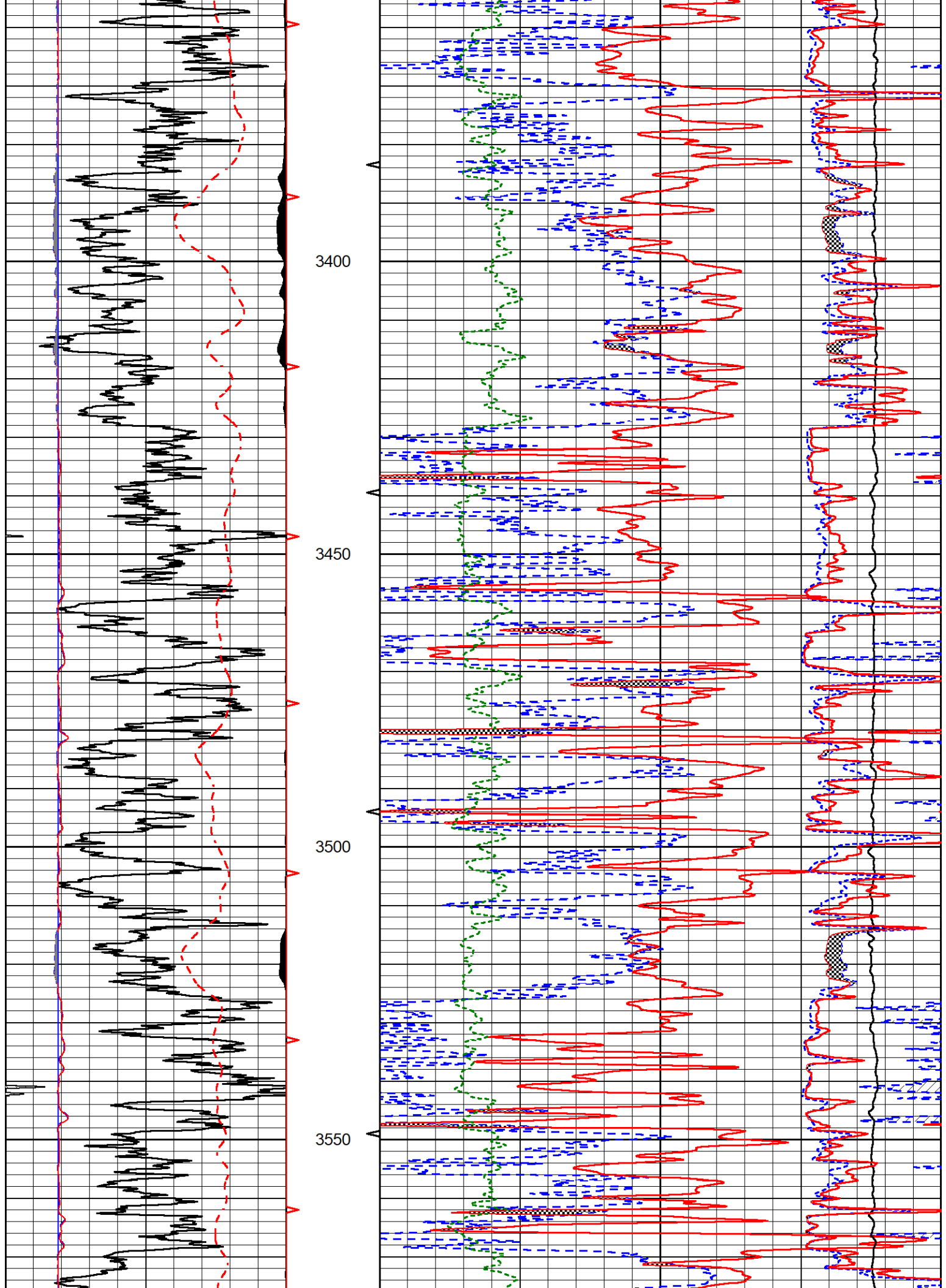
DETAIL SECTION

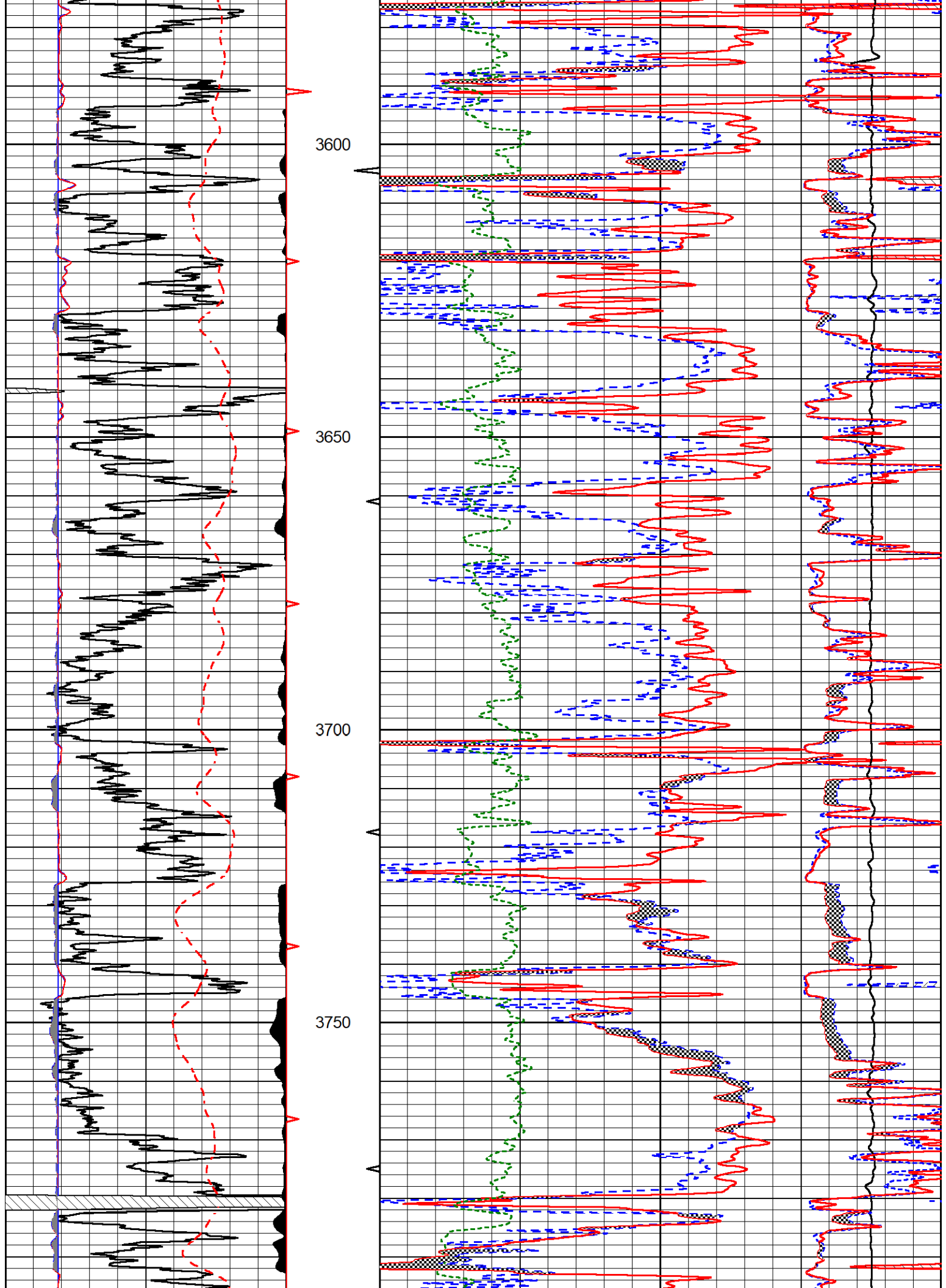
MAIN PASS

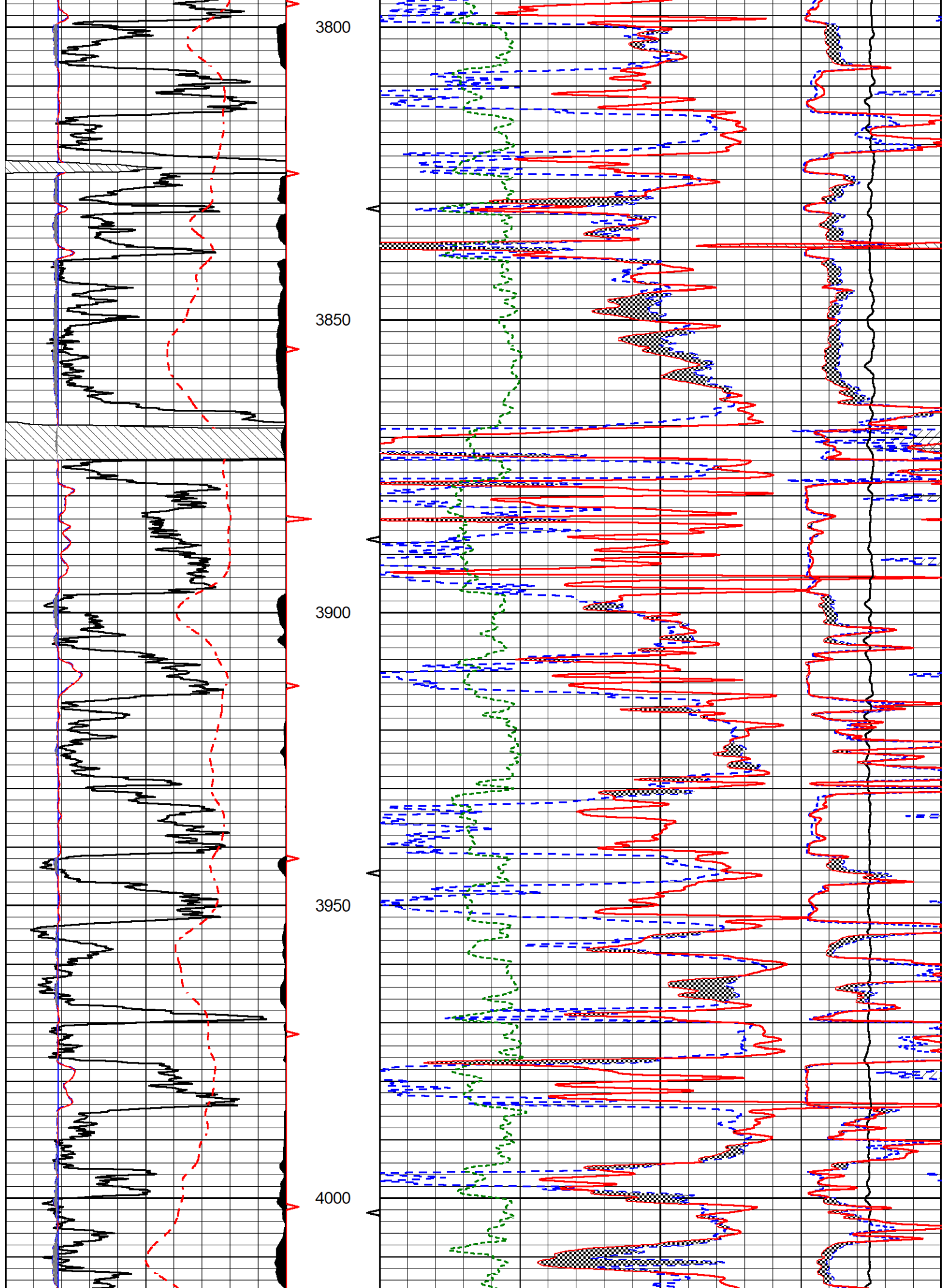
Database File murfin_weis a 1-14.db
Dataset Pathname stack/pass3.1
Presentation Format _C9B97~1
Dataset Creation Fri Aug 02 01:13:18 2024
Charted by Depth in Feet scaled 1:240

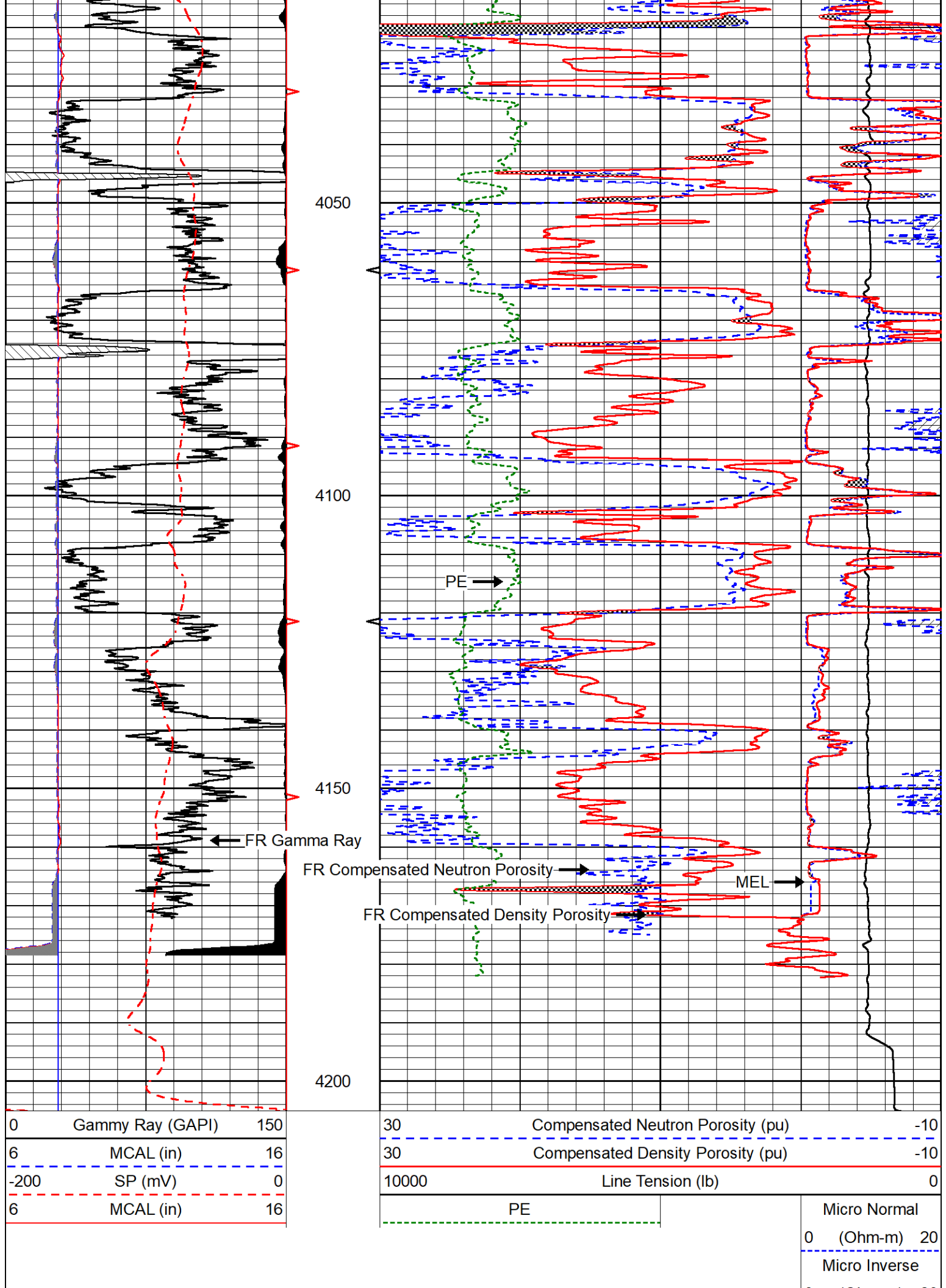
0	Gammy Ray (GAPI)	150	30	Compensated Neutron Porosity (pu)	-10
6	MCAL (in)	16	30	Compensated Density Porosity (pu)	-10
-200	SP (mV)	0	10000	Line Tension (lb)	0
6	MCAL (in)	16	PE		
			Micro Normal		
			0	(Ohm-m)	20
			Micro Inverse		
			0	(Ohm-m)	20













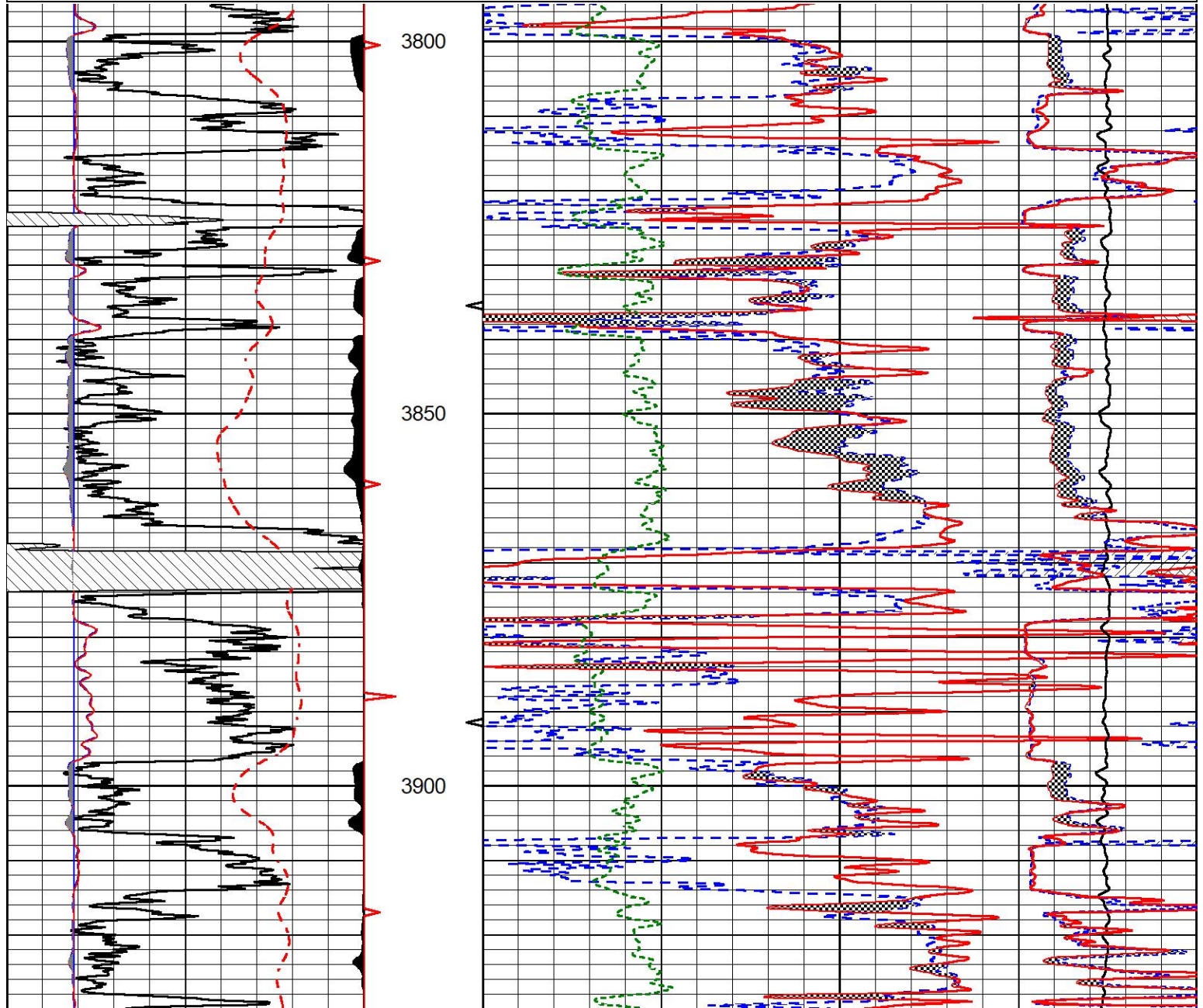
REPEAT SECTION

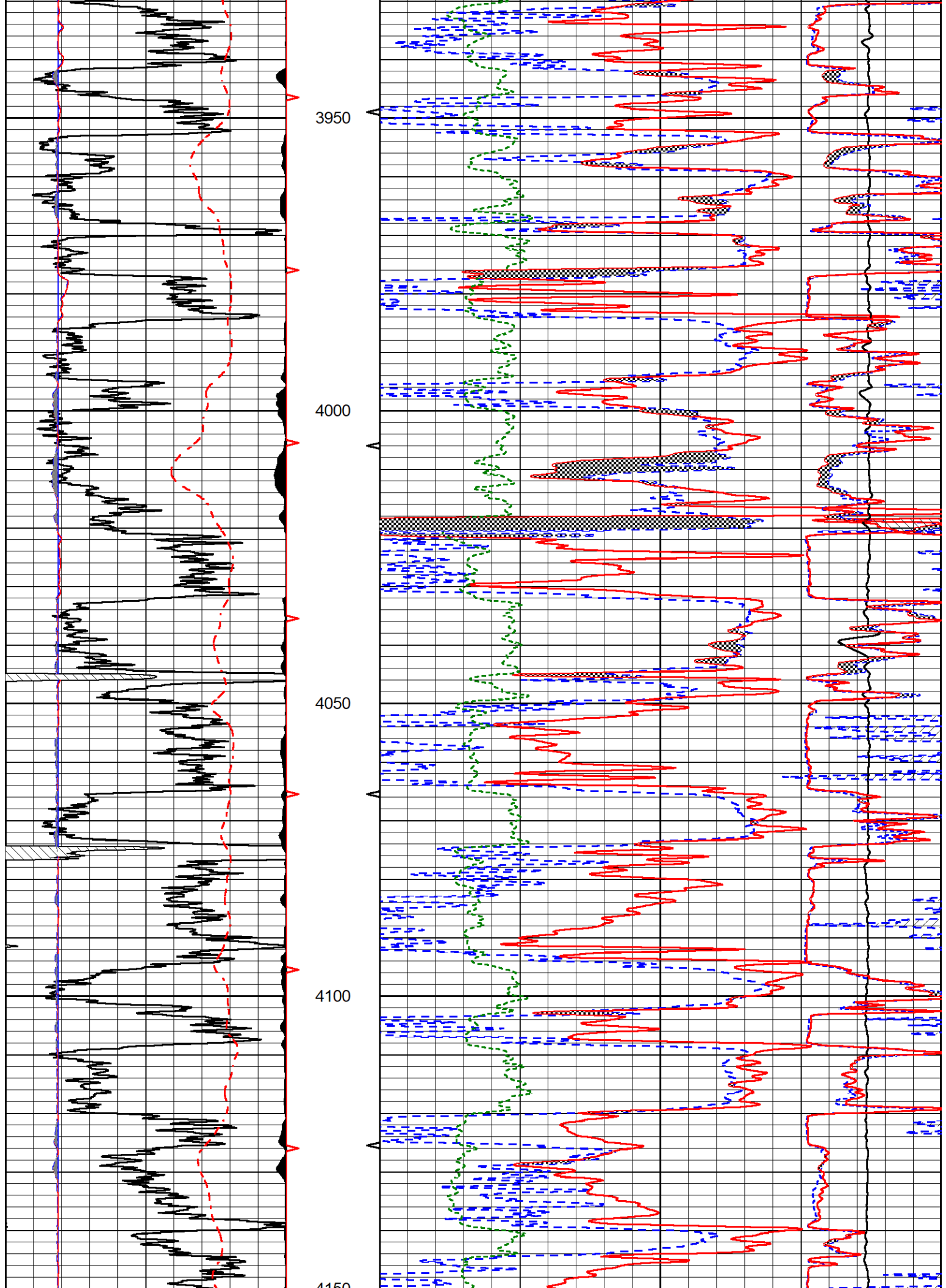
REPEAT PASS

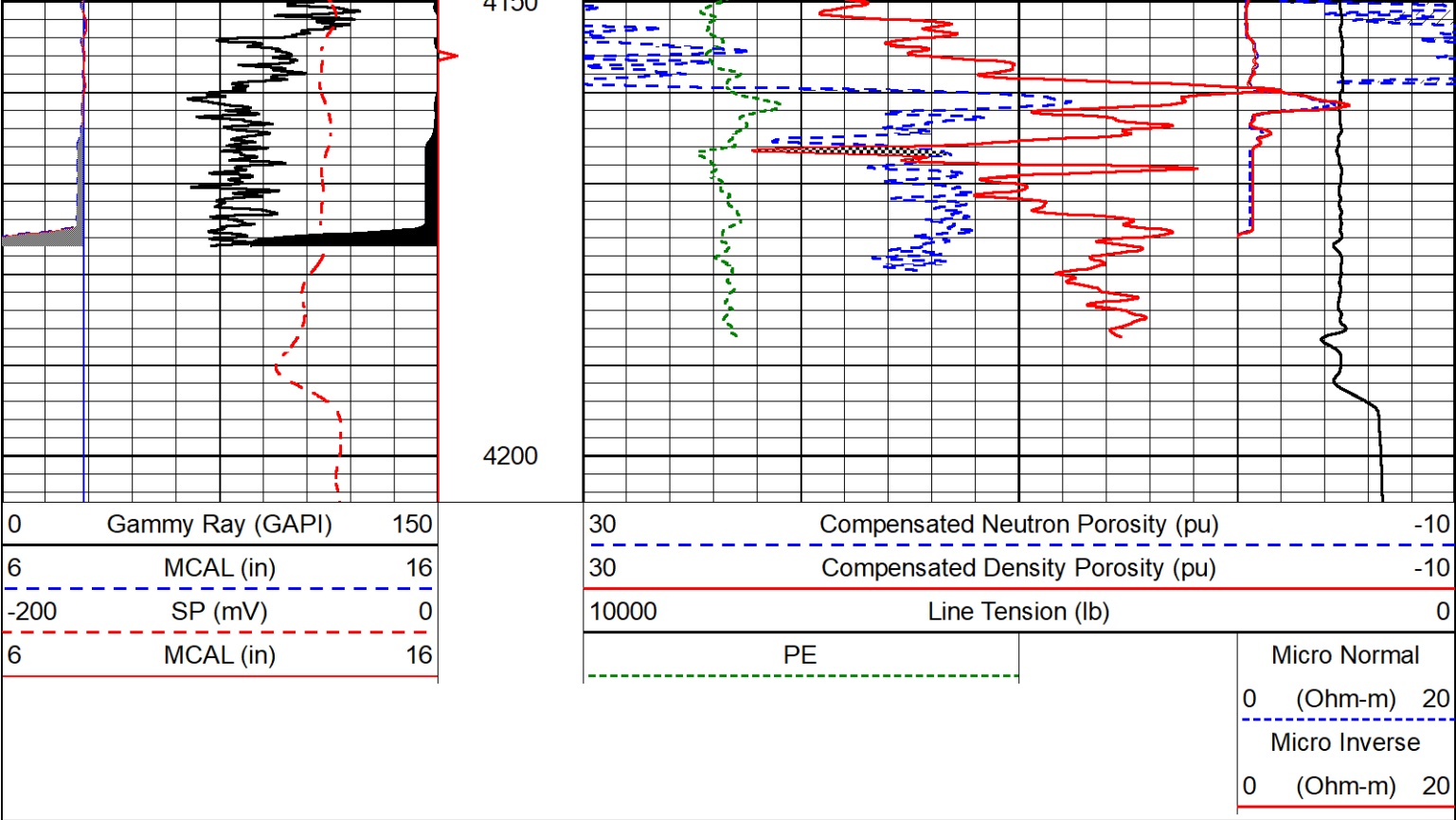
Database File murfin_weis a 1-14.db
Dataset Pathname stack/pass2.1
Presentation Format _C9B97~1
Dataset Creation Fri Aug 02 00:38:34 2024
Charted by Depth in Feet scaled 1:240

0	Gammy Ray (GAPI)	150
6	MCAL (in)	16
-200	SP (mV)	0
6	MCAL (in)	16

30	Compensated Neutron Porosity (pu)	-10
30	Compensated Density Porosity (pu)	-10
10000	Line Tension (lb)	0
PE		Micro Normal
		0 (Ohm-m) 20
		Micro Inverse
		0 (Ohm-m) 20







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			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:	2.170			

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