

MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company American Warrior, Inc.
Well Hubin #3-10
Field Lippoldt West
County Hodgeman
State Kansas

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Field Lippoldt West
County Hodgeman State Kansas

Location: API #: 15-083-22010-00-00

Other Services

1333 FSL & 1692 FWL
SEC 10 TWP 23S RGE 23W

DIL/MEL

Permanent Datum Ground Level Elevation 2337
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

K.B. 2350
D.F. 2337
G.L. 2337

Date 7/2/2022

Run Number One

Type Log CNL/CDL

Depth Driller 4725

Depth Logger 4652

Bottom Logged Interval 4632

Top Logged Interval 3800

Type Fluid In Hole Chemical

Salinity, PPM CL 3000

Density 9.3

Level Full

Max. Rec. Temp. F 123

Operating Rig Time 3 Hours

Equipment -- Location 24 Hays

Recorded By D. Schmidt

Witnessed By Kevin Timson

Run No. Bit From To Size Wgt. From To

One 12.25 0 311 8.625 23 0 311

Two 7.875 311 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.

Jetmore,
East to 219 Rd, South to K Rd, 2 East,
North into

Log Measured From: Kelly Bushing 13 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: Kevin Timson
Secondary Witness:
Secondary Witness:
Secondary Witness:

[illegible]

Log Variables

DatabaseC:\ProgramData\Warrior\Data\american_warrior_hubin 3-10.db
Dataset field/well/stkml/pass2.17/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	125	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	85	70	Off	4652

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

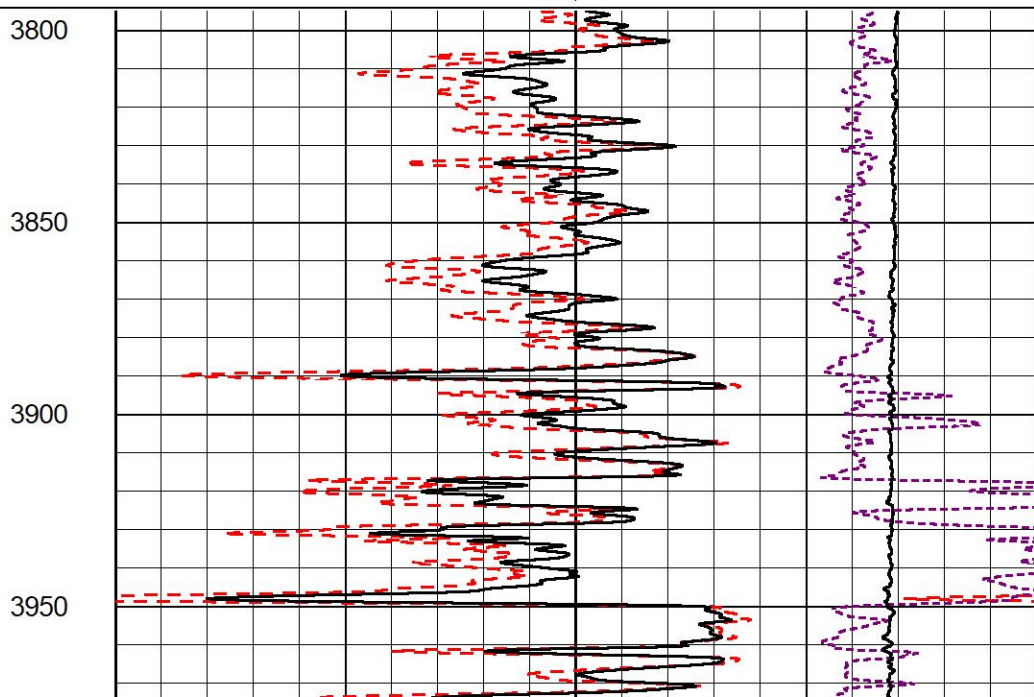
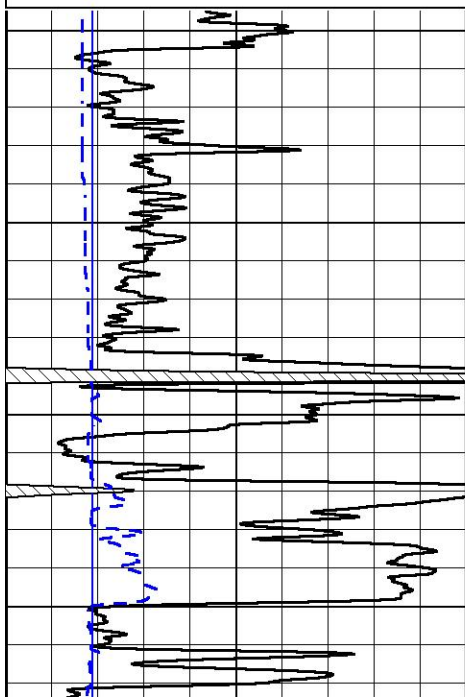
2" SCALE BULK DENSITY

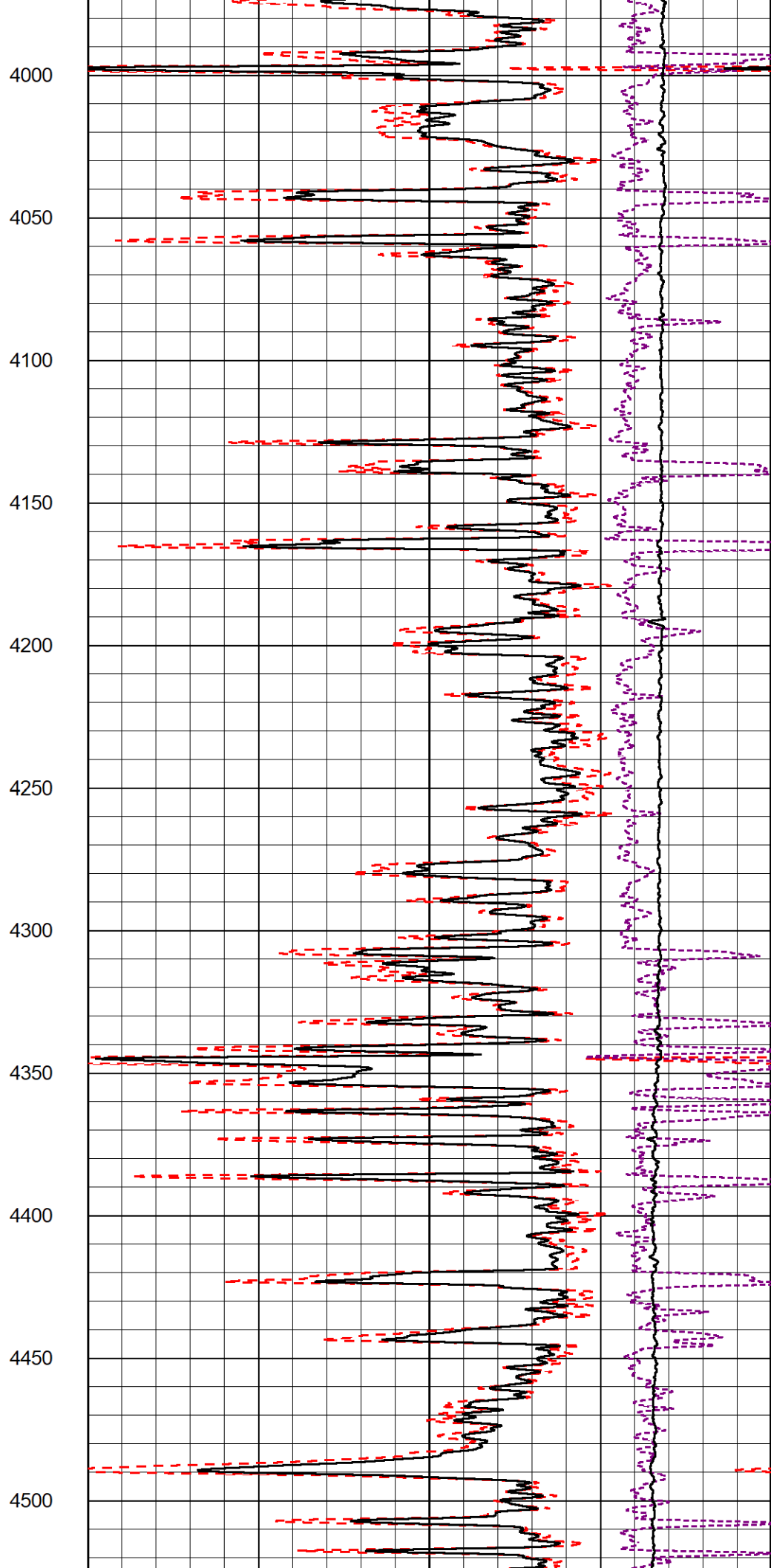
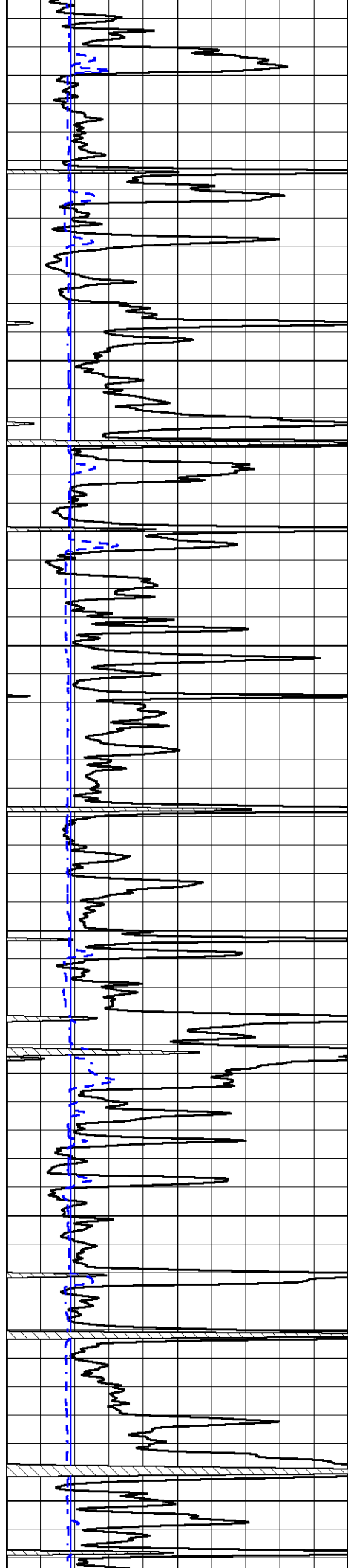
MAIN PASS

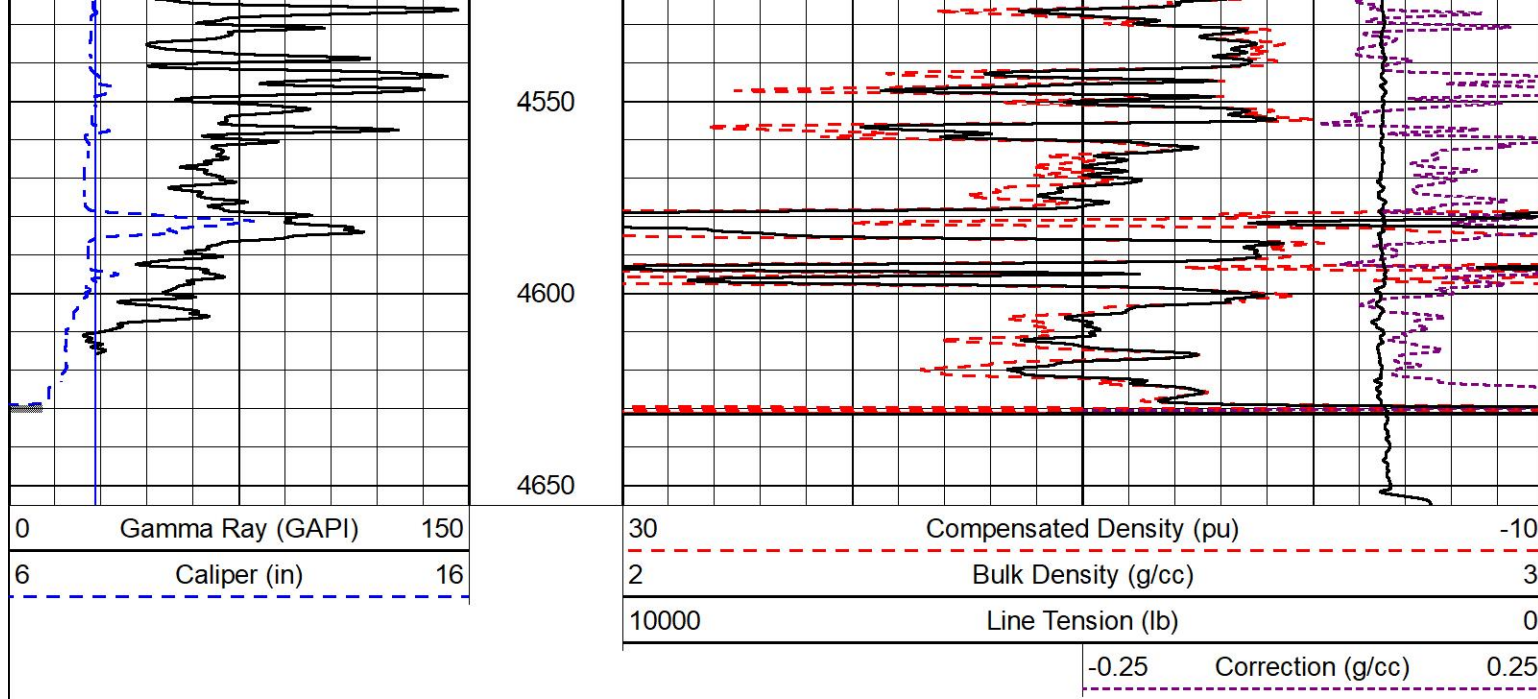
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Dataset Pathname stkml/pass3.2
Presentation Format _cdl
Dataset Creation Sat Jul 02 09:46:12 2022
Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

30	Compensated Density (pu)	-10
2	Bulk Density (g/cc)	3
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25





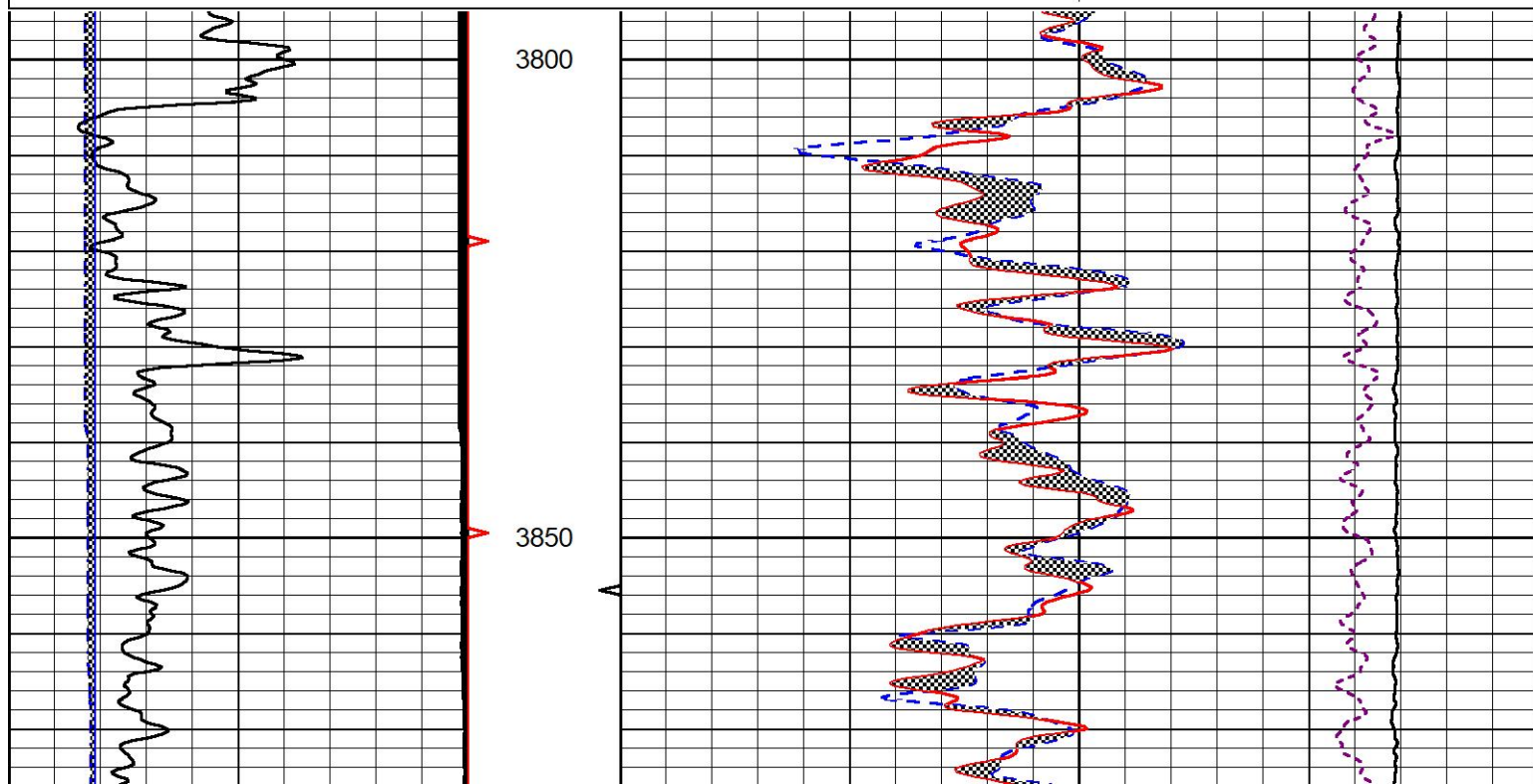
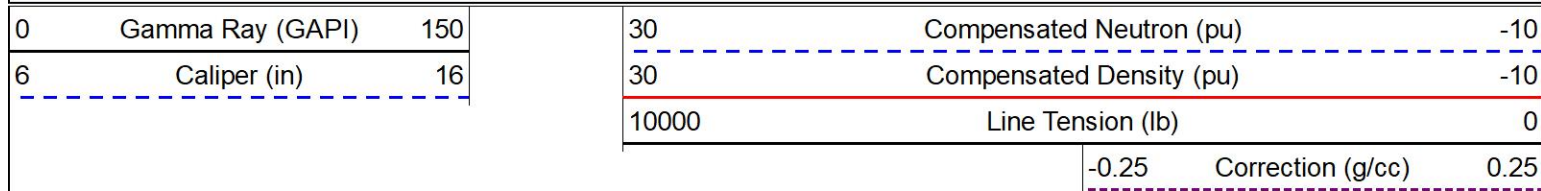


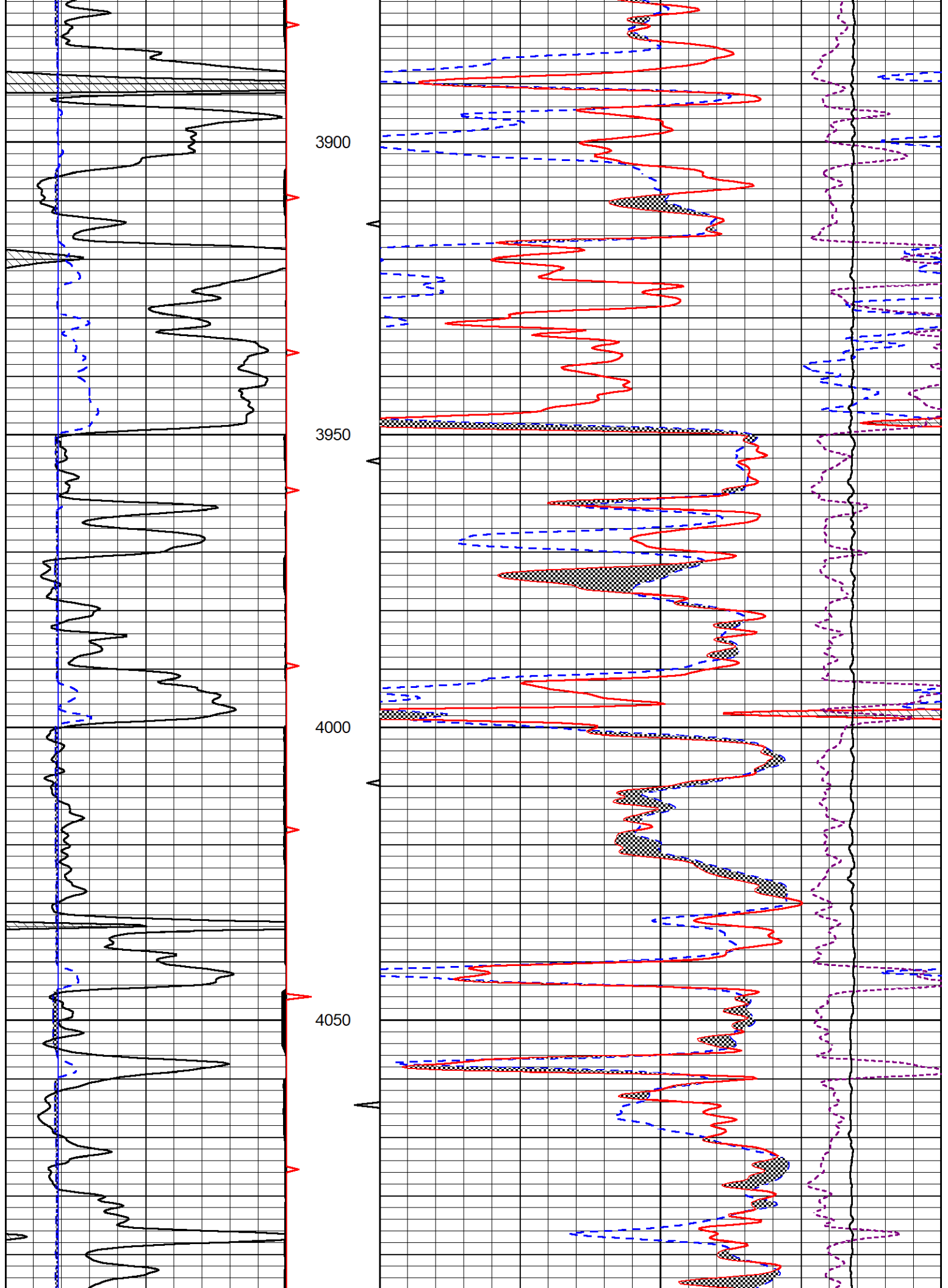
MIDWEST WIRELINE

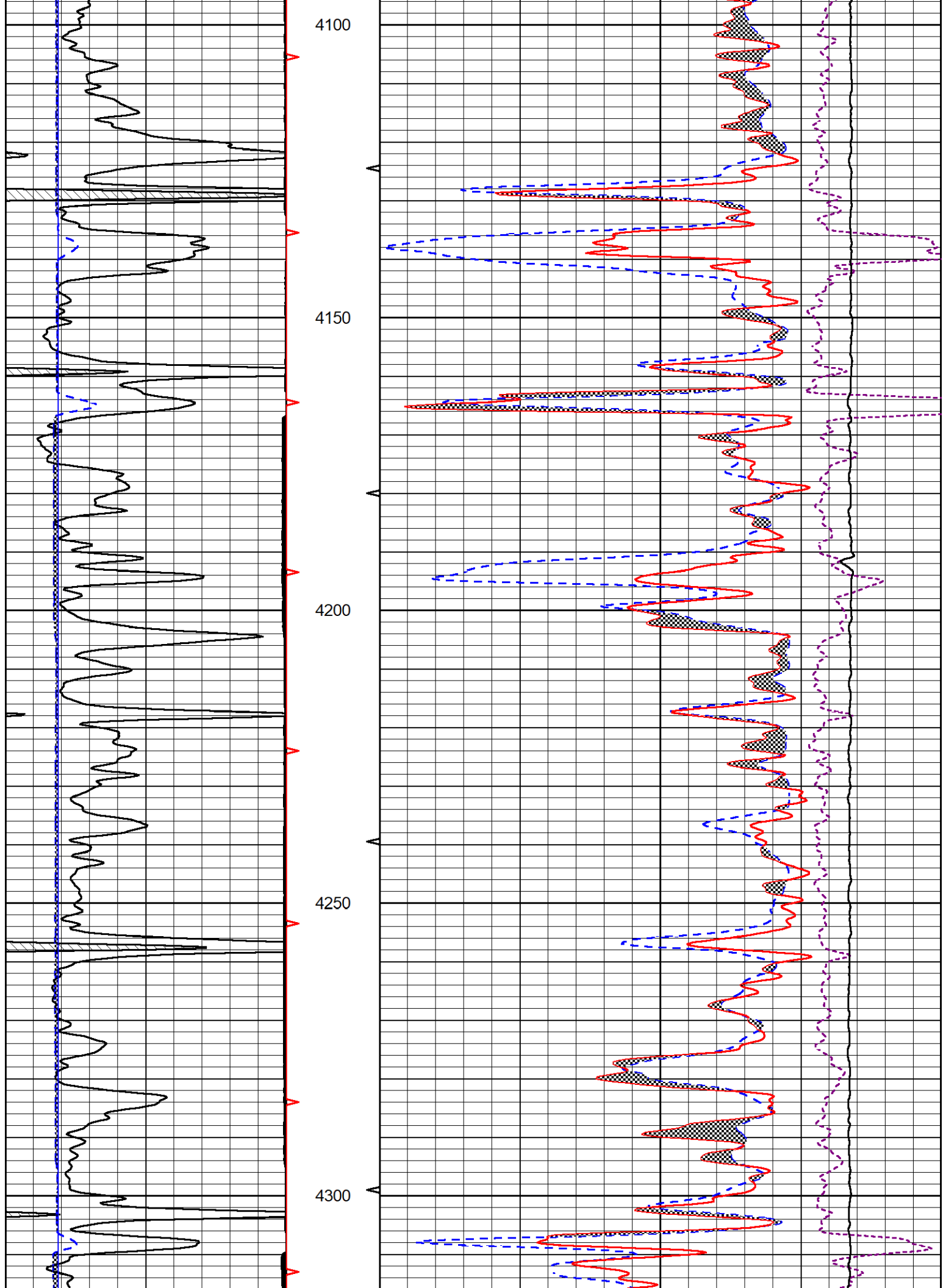
DETAIL SECTION

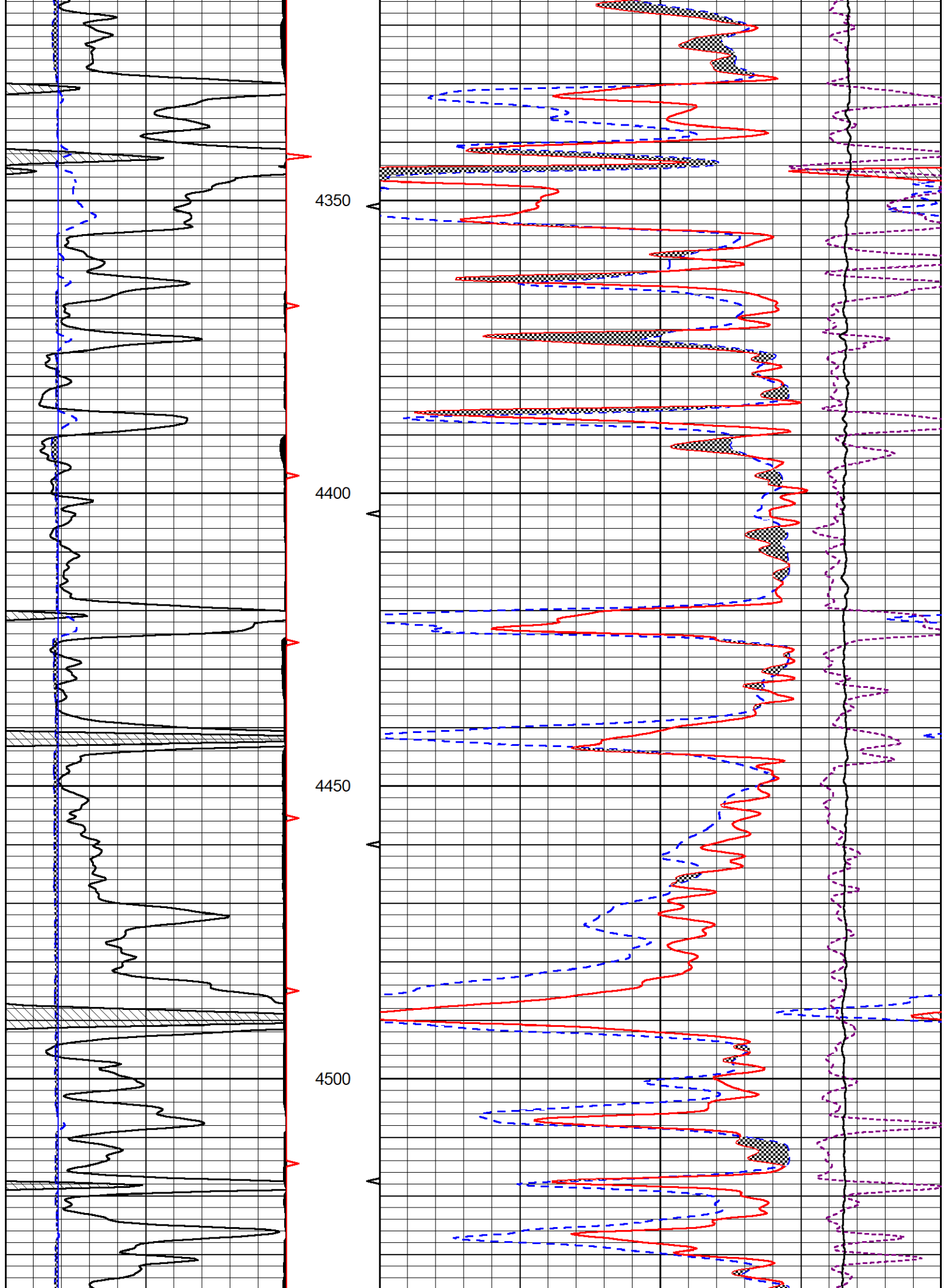
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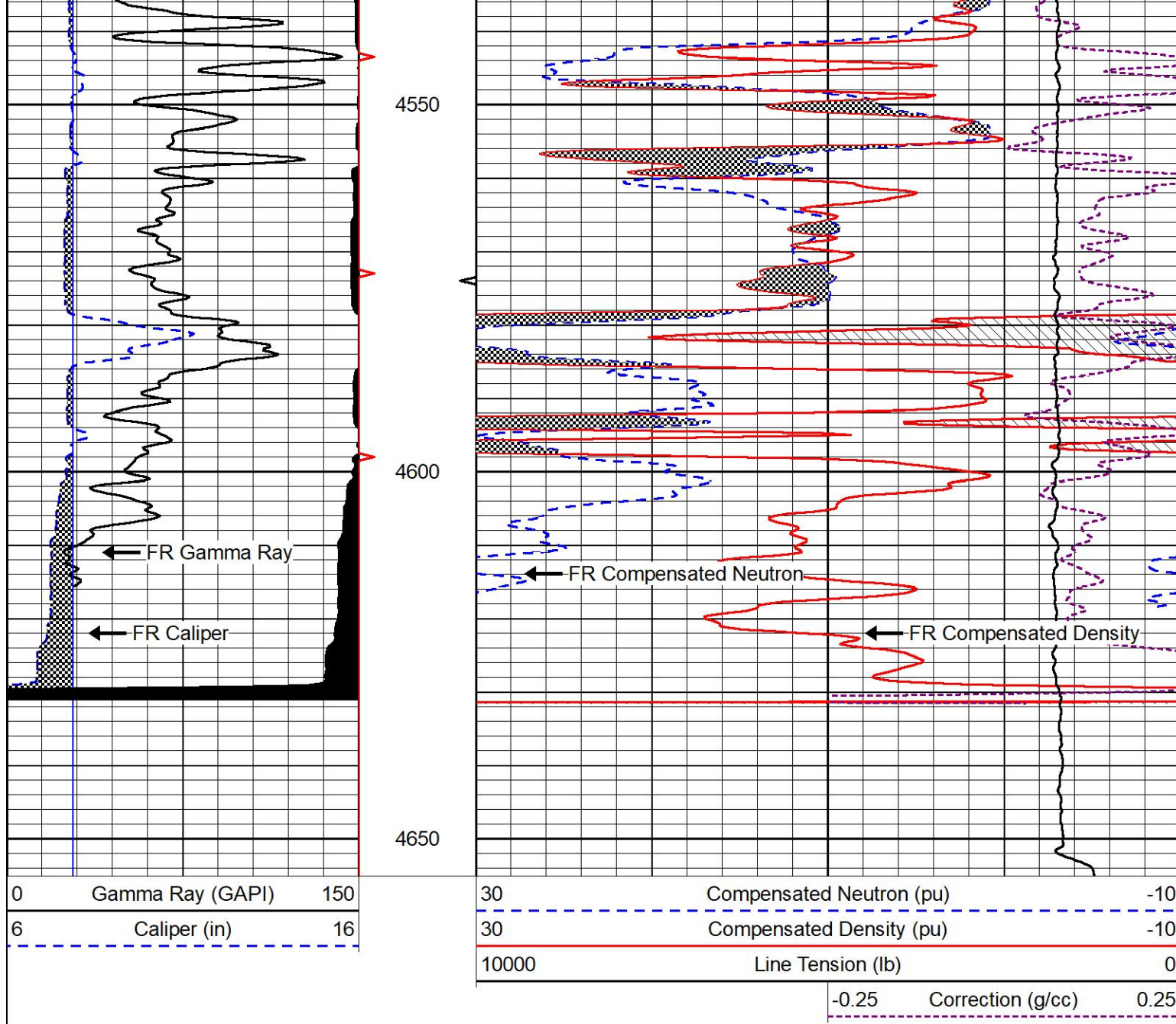
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 Dataset Pathname stkml/pass2.17
 Presentation Format _CNDLS~1
 Dataset Creation Sat Jul 02 09:39:30 2022
 Charted by Depth in Feet scaled 1:240







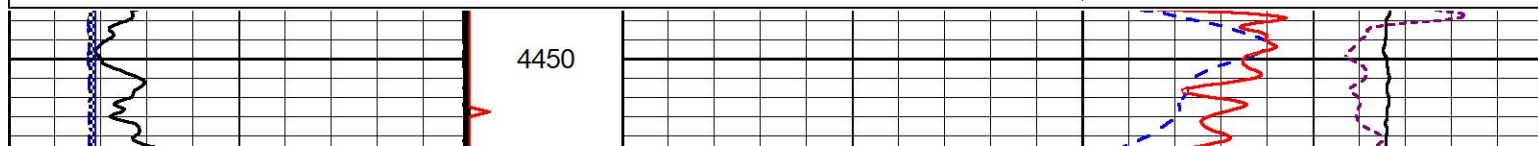
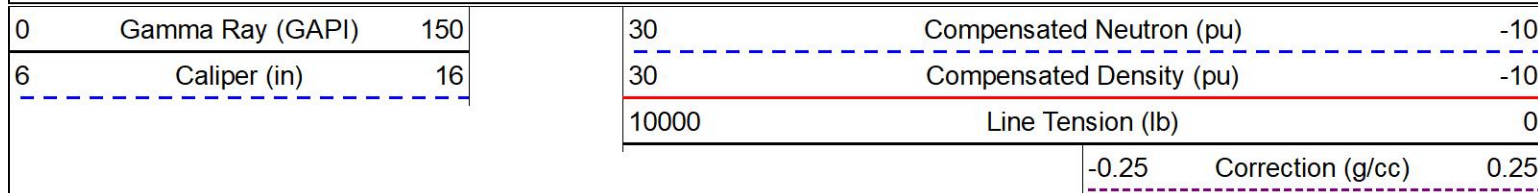


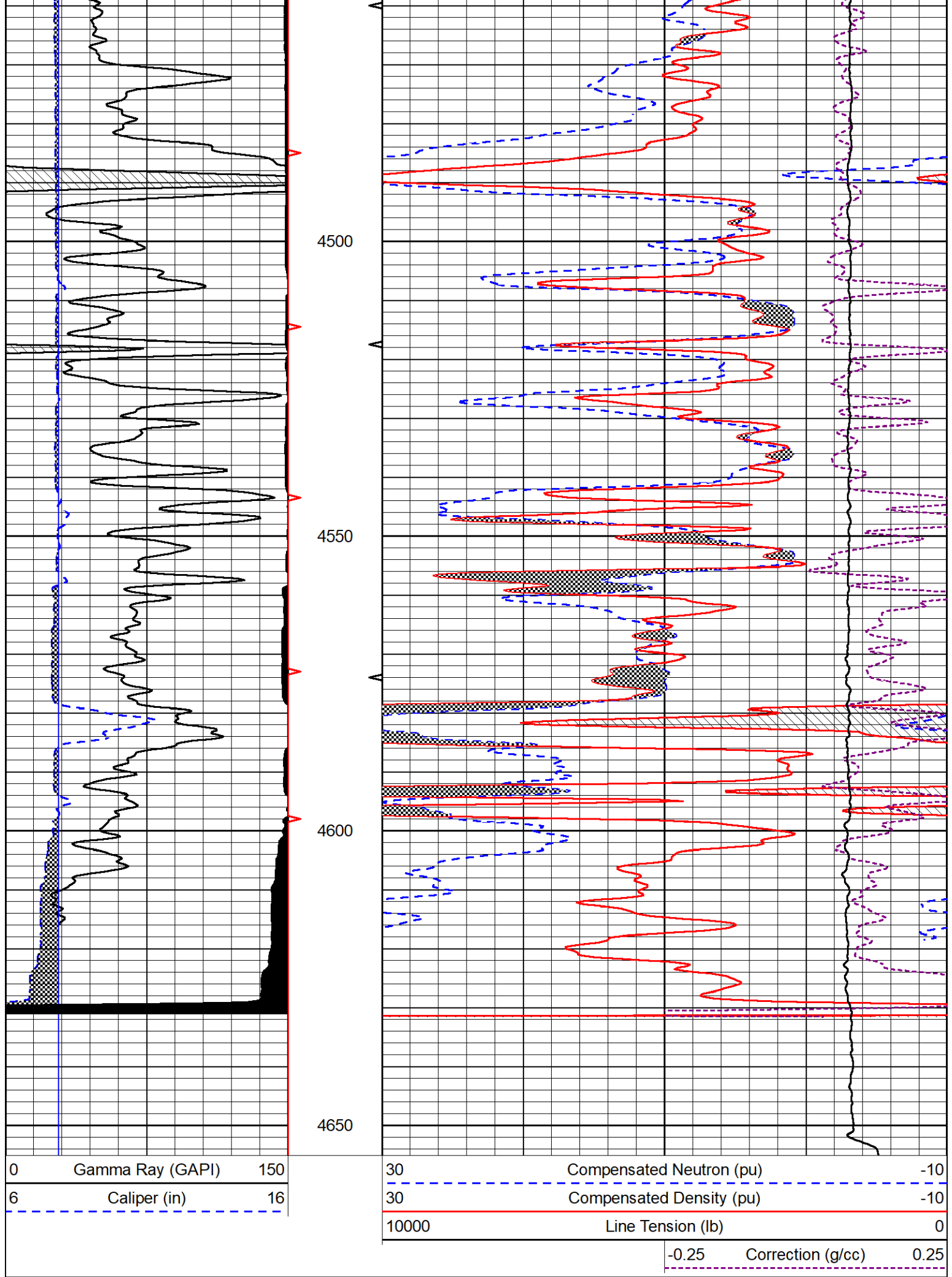


REPEAT SECTION

REPEAT PASS

Database File american_warrior_hubin 3-10.db
 Dataset Pathname stkml/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Sat Jul 02 09:40:31 2022
 Charted by Depth in Feet scaled 1:240





Calibration Report							
Database File	american warrior_hubin 3-10.db						
Dataset Pathname	stkml/pass3.2						
Dataset Creation	Sat Jul 02 09:46:12 2022						
Dual Induction Calibration Report							
Serial-Model:				501 HT-M&W			
Surface Cal Performed:				Sat Apr 30 02:12:10 2022			
		Readings		References		Results	
Loop:	Air	Loop		Air	Loop	m	b
Deep	83.639	487.104		0.000	183.000	mmho/m	0.455
Medium	113.335	1585.690		0.000	442.000	mmho/m	-34.000
							-11.000
Microlog Calibration Report							
Serial-Model:				401-PSIML			
Performed:				Mon Jun 27 17:53:09 2022			
		Readings		References		Results	
	Zero	Cal		Zero	Cal	m	b
Normal	0.0000	1.0000		0.0000	1.0000	Ohm-m	31500.0000
Inverse	0.0000	1.0000		0.0000	1.0000	Ohm-m	-1.0000
Caliper	1.0052	1.0858		5.0000	16.5000	in	26000.0000
							-0.4000
							142.7190
							-140.1000
Compensated Density Calibration Report							
Serial-Model:				302-02-M&W			
Source #:				20762B			
Master Calibration Performed:				Wed Jun 22 01:19:51 2022			
Master Calibration							
		Density		Far Detector		Near Detector	
Magnesium	1.755	g/cc		4422.04	6163.44	cps	
Aluminum	2.655	g/cc		835.14	3912.91	cps	
Spine Angle = 74.75				Density/Spine Ratio = 0.521			
		Size		Reading			
Small Ring	8.00	in		0.53			
Large Ring	16.00	in		0.60			
Compensated Neutron Calibration Report							
Serial Number:				207-MW			
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	

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	
3)	Short Space Long Space	cps cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	101	
Tool Model:	M&W	
Performed:	Mon Jan 24 19:14:46 2022	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.5500	GAPI/cps



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Well	Hubin #3-10
Field	Lippoldt West
County	Hodgeman
State	Kansas