



DUAL COMP POROSITY LOG

MIDWEST WIRELINE

Company Lachenmayr Oil, LLC
Well Tanner #2
Field Kipp North
County Stafford State Kansas

Location: API #: 15-185-24124-00-00
1815 FNL & 1980 FWL
SEC 23 TWP 25S RGE 14W
Permanent Datum Ground Level Elevation 1971
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
DIL/MEL
K.B. 1984
D.F. G.L. 1971

Date	12/2/2022						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4350						
Depth Logger	4350						
Bottom Logged Interval	4321						
Top Logged Interval	3400						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	8000						
Density	9.3						
Level	Full						
Max. Rec. Temp. F	120						
Operating Rig Time	3 Hours						
Equipment -- Location	P-108 HAYS						
Recorded By	D. Schmidt						
Witnessed By	Keaton Jones						
Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	414	8.625	23	0	414
Two	7.875	414	TD				

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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. John,
South to 70 Rd, 5 West, 1/2 North,
East 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				This Log Record Was Witnessed By			
Engineer: D. Schmidt				Primary Witness: Keaton Jones			
Operator:				Secondary Witness:			
Operator:				Secondary Witness:			
Operator:				Secondary Witness:			

Operator	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
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Log Variables

DatabaseC:\ProgramData\Warrior\Data\lachenmayr_tanner 2.db
Dataset field/well/stkml/pass3.5/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 121	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV 370	degF 50	Off	ft 4350

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



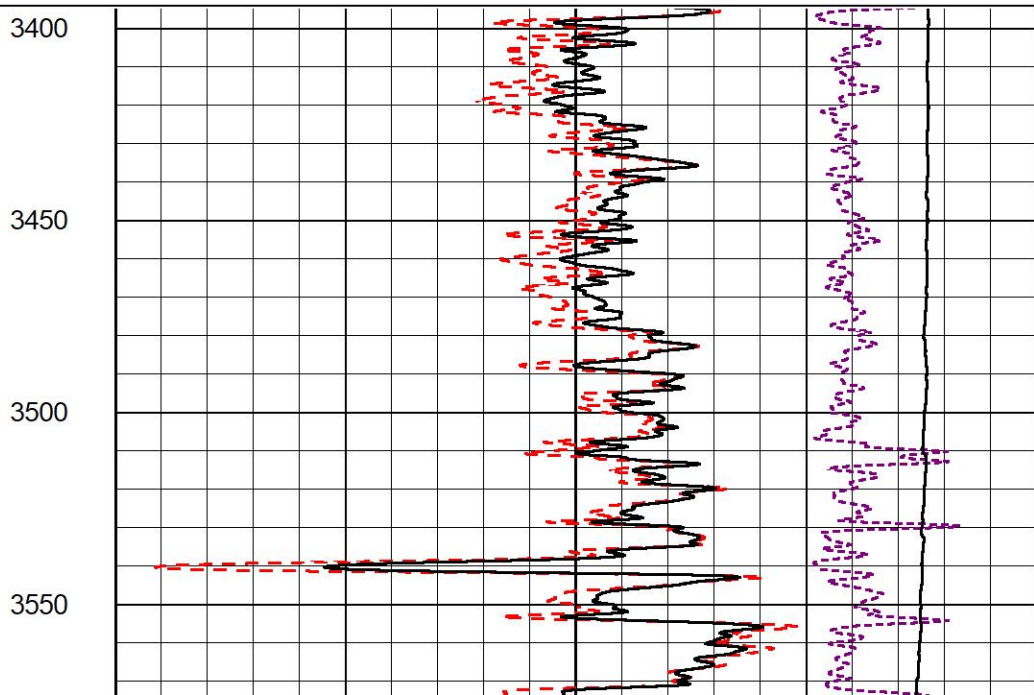
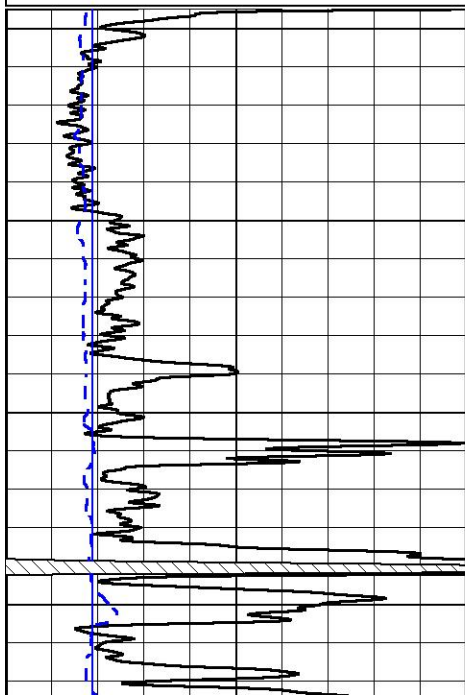
2" SCALE BULK DENSITY

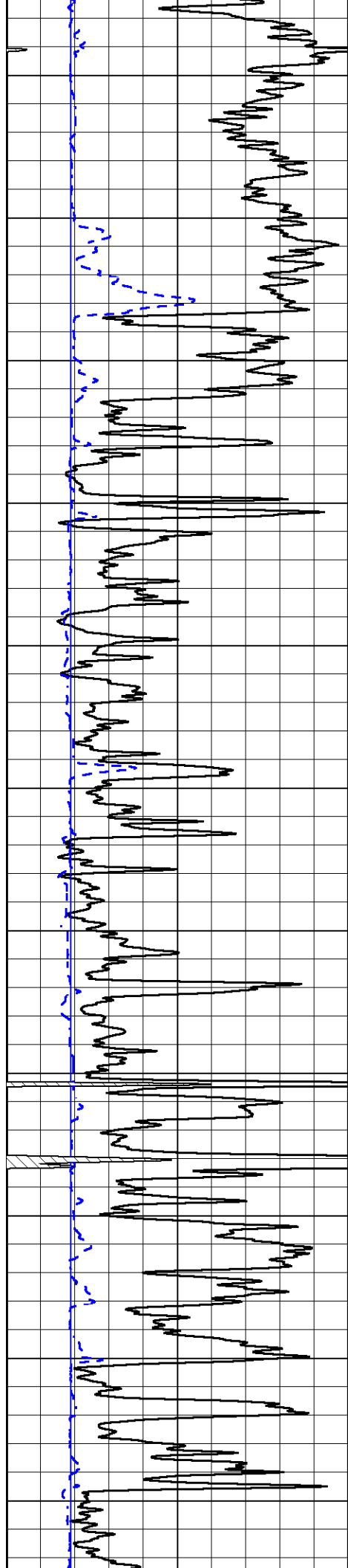
MAIN PASS

Database File lachenmayr_tanner 2.db
Dataset Pathname stkml/pass3.2
Presentation Format _cdl
Dataset Creation Fri Dec 02 17:52:03 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
15000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25





3600

3650

3700

3750

3800

3850

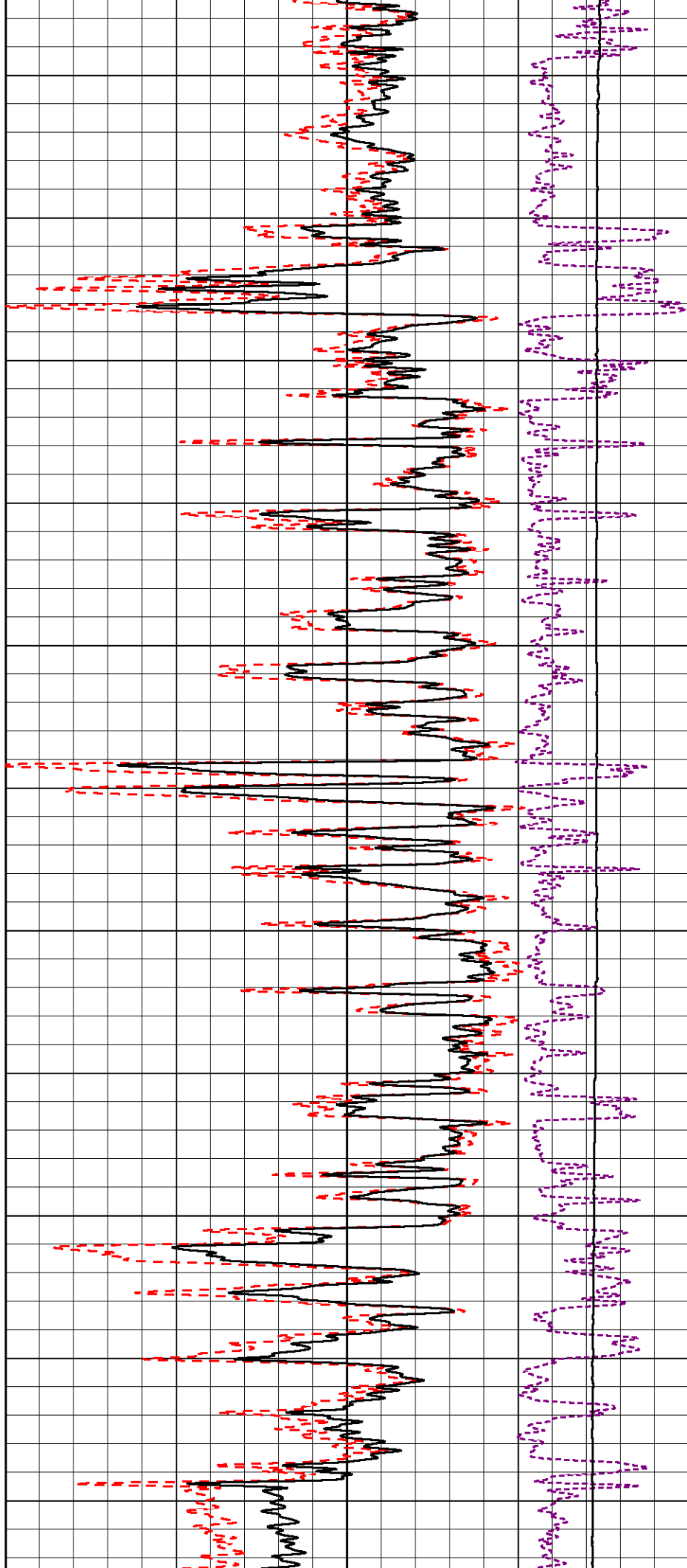
3900

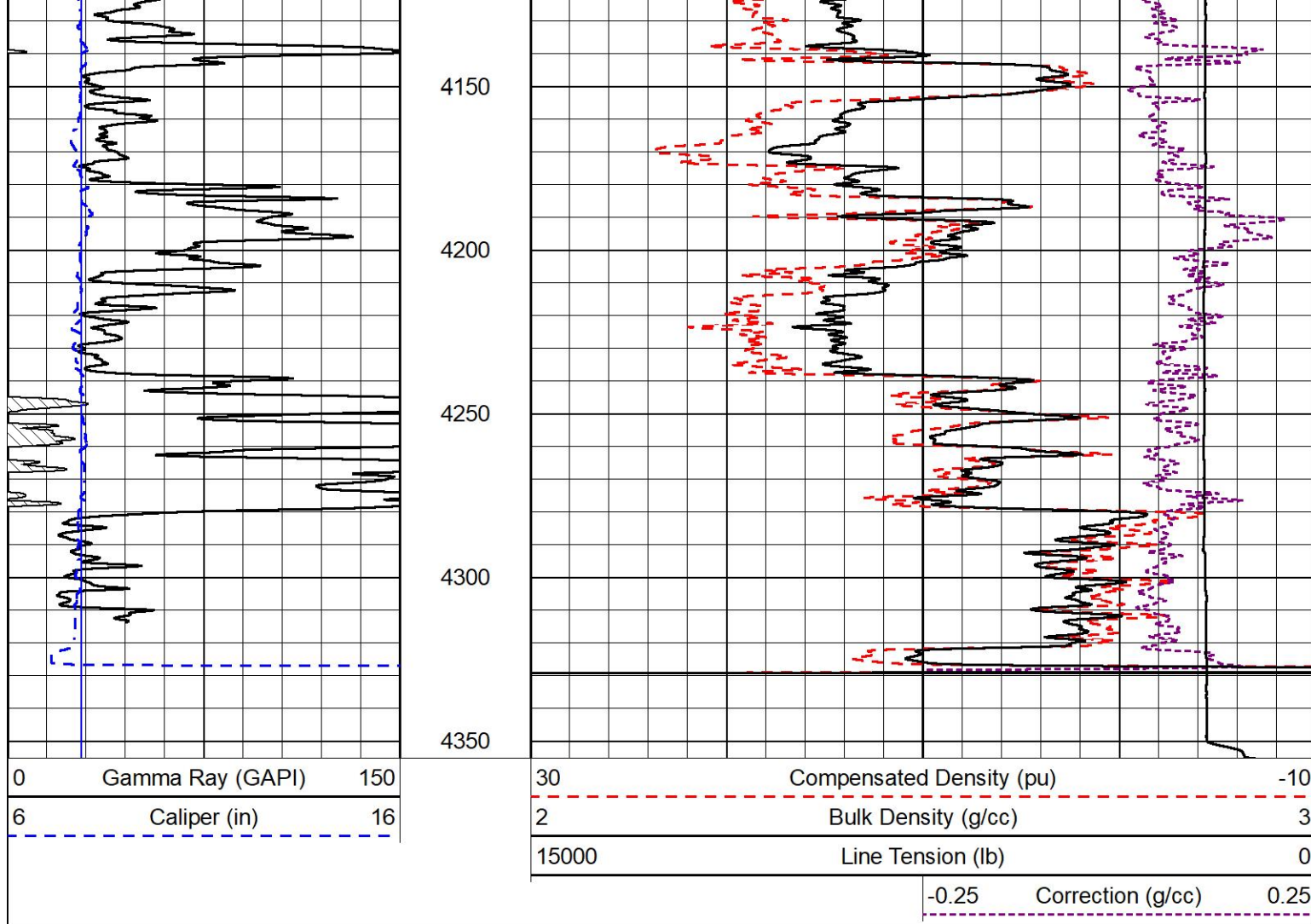
3950

4000

4050

4100

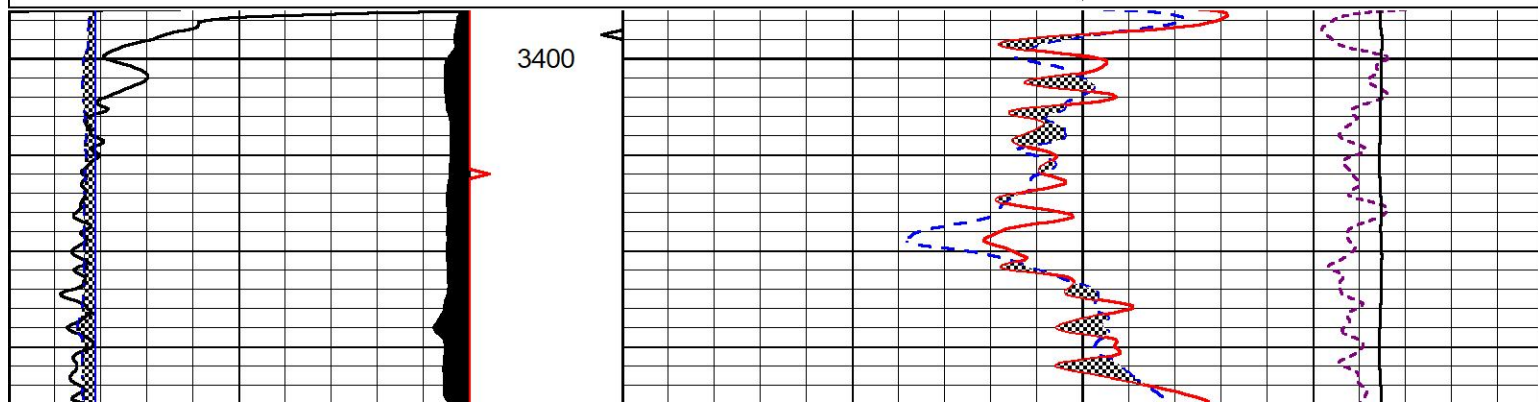
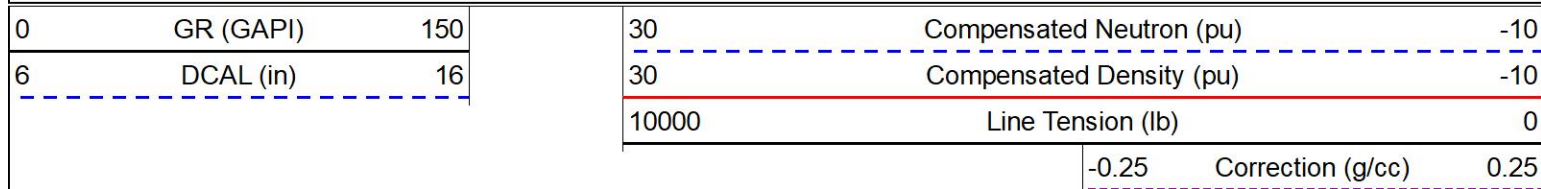


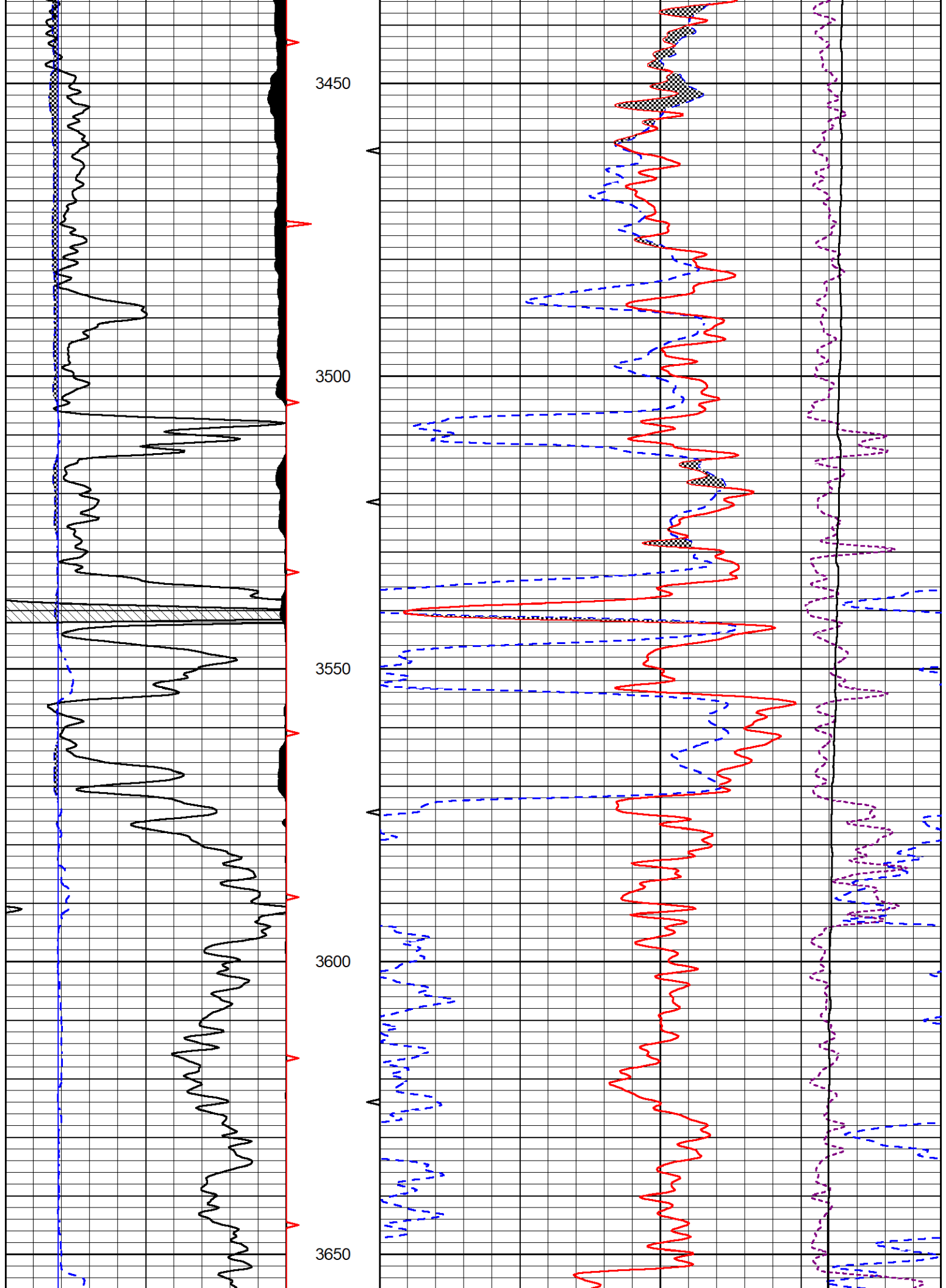


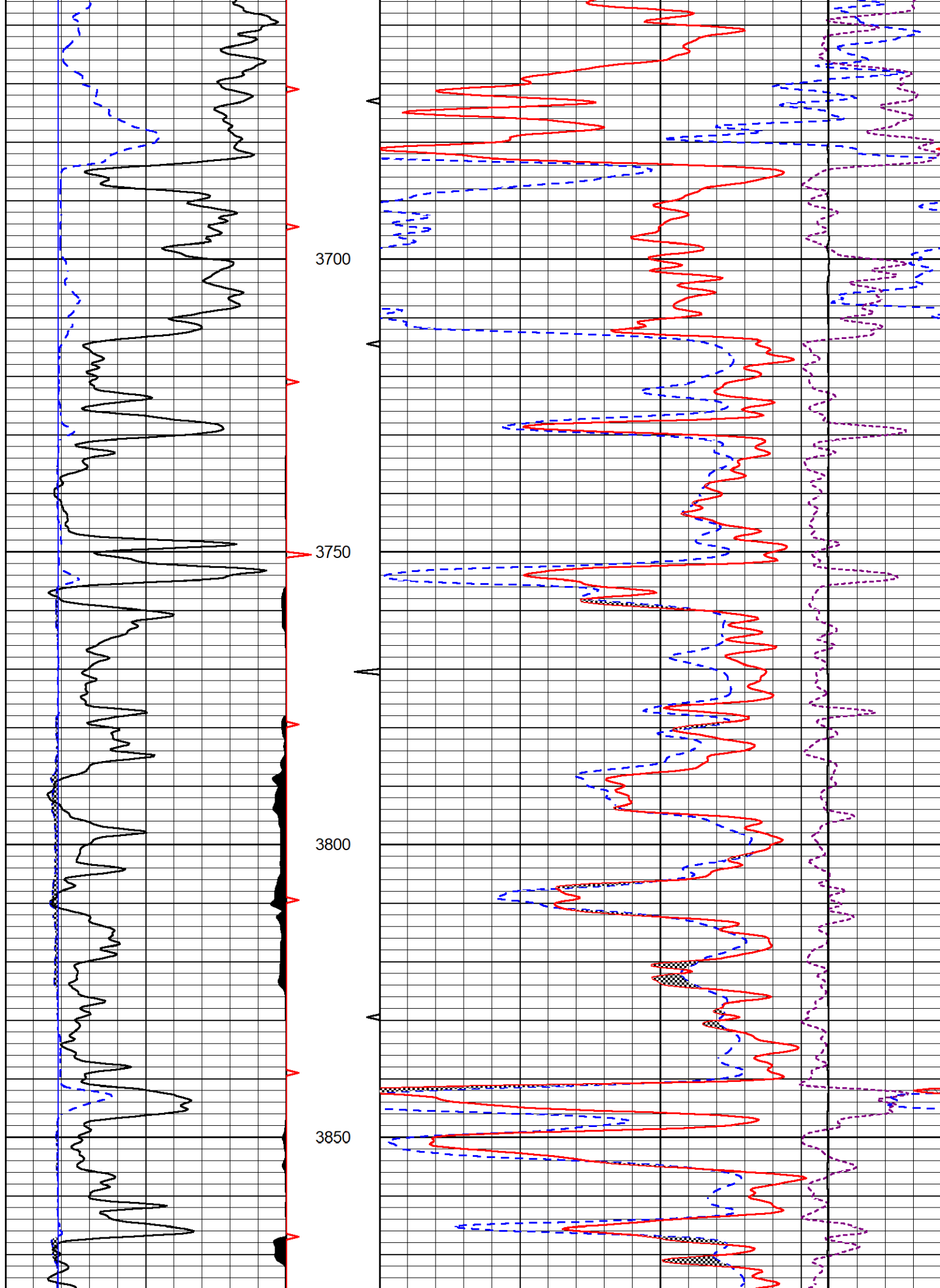
DETAIL SECTION

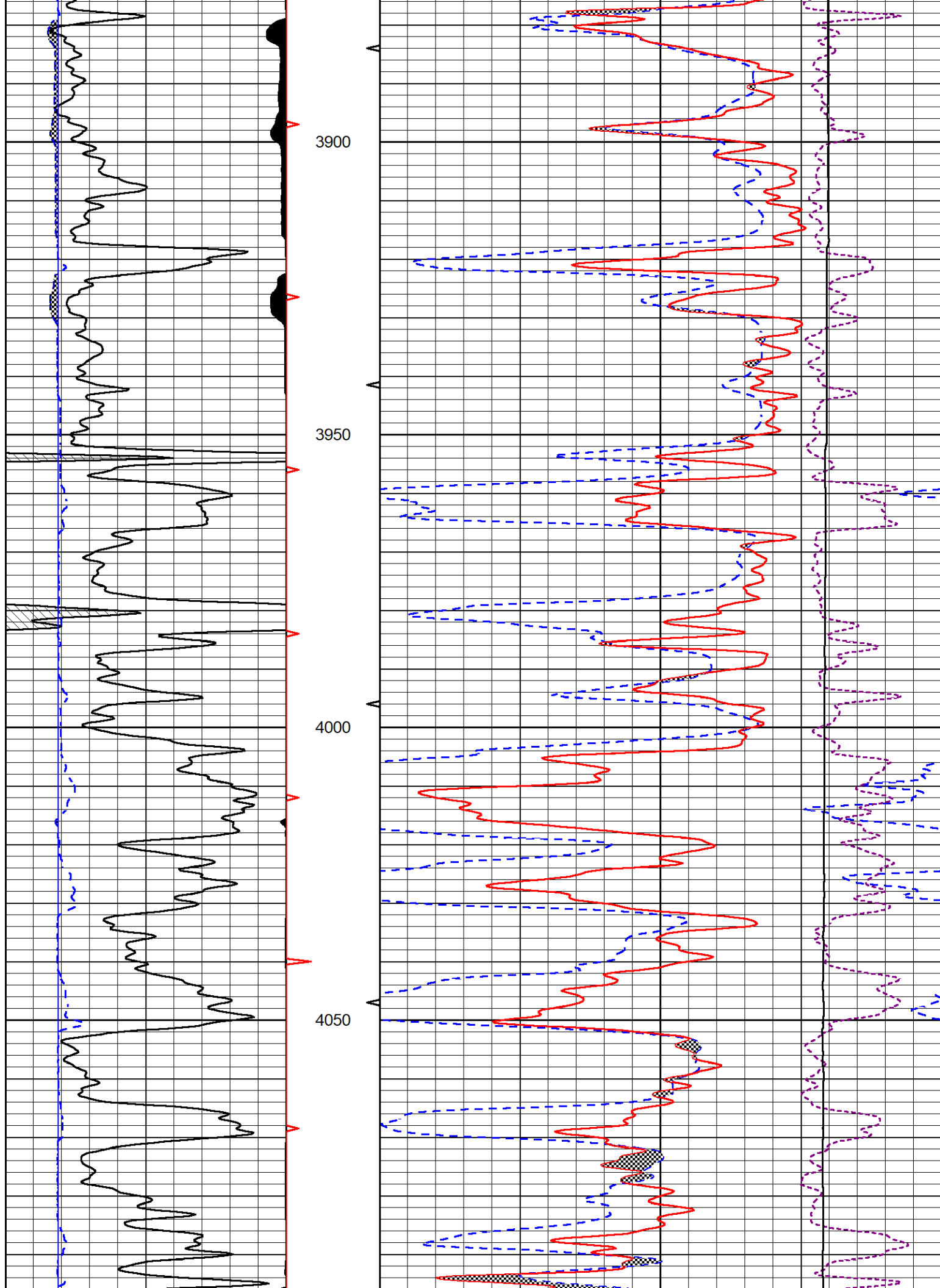
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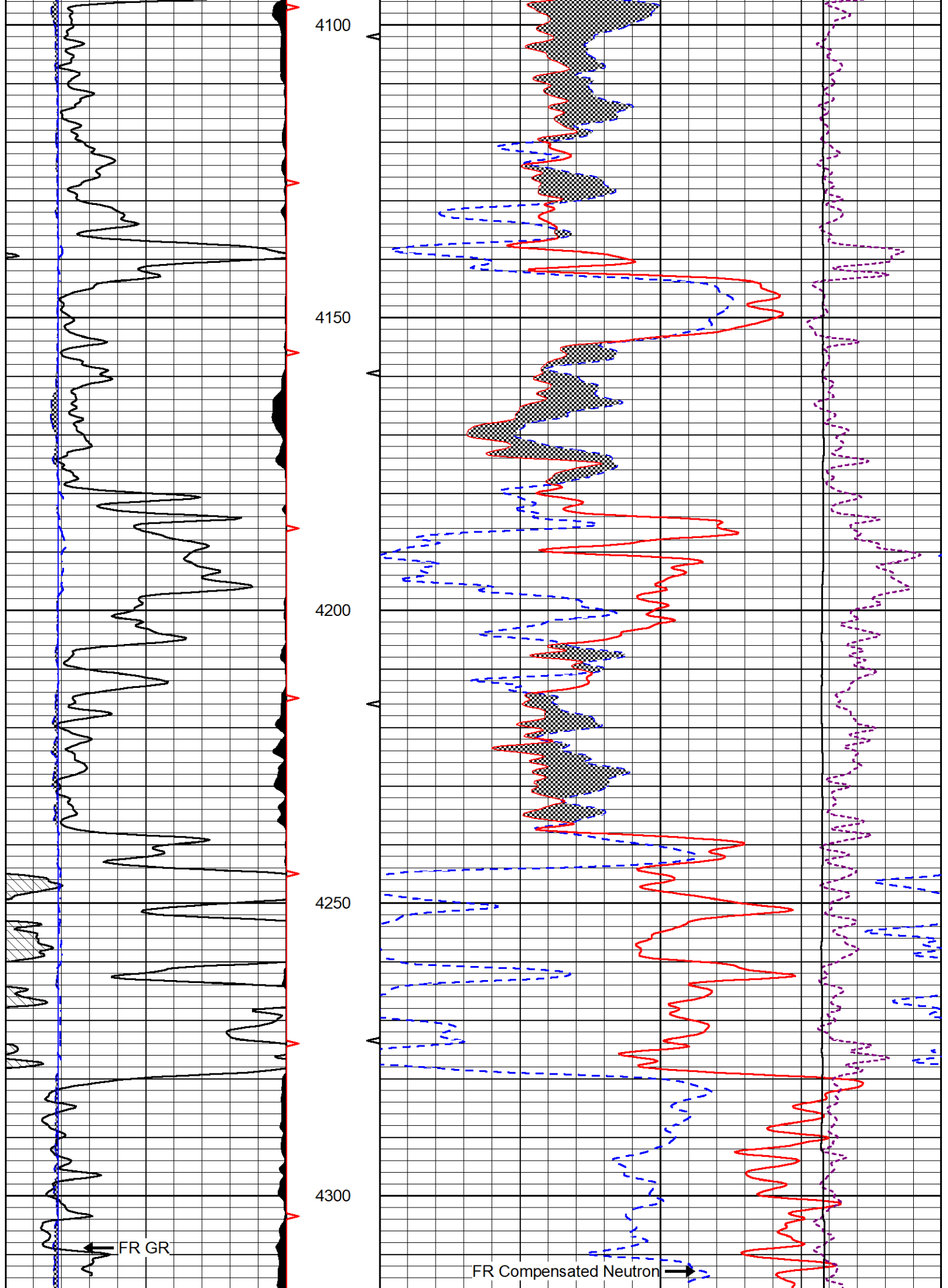
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 Dataset Pathname stkml/pass3.5
 Presentation Format _CNDLS~1
 Dataset Creation Fri Dec 02 17:53:25 2022
 Charted by Depth in Feet scaled 1:240

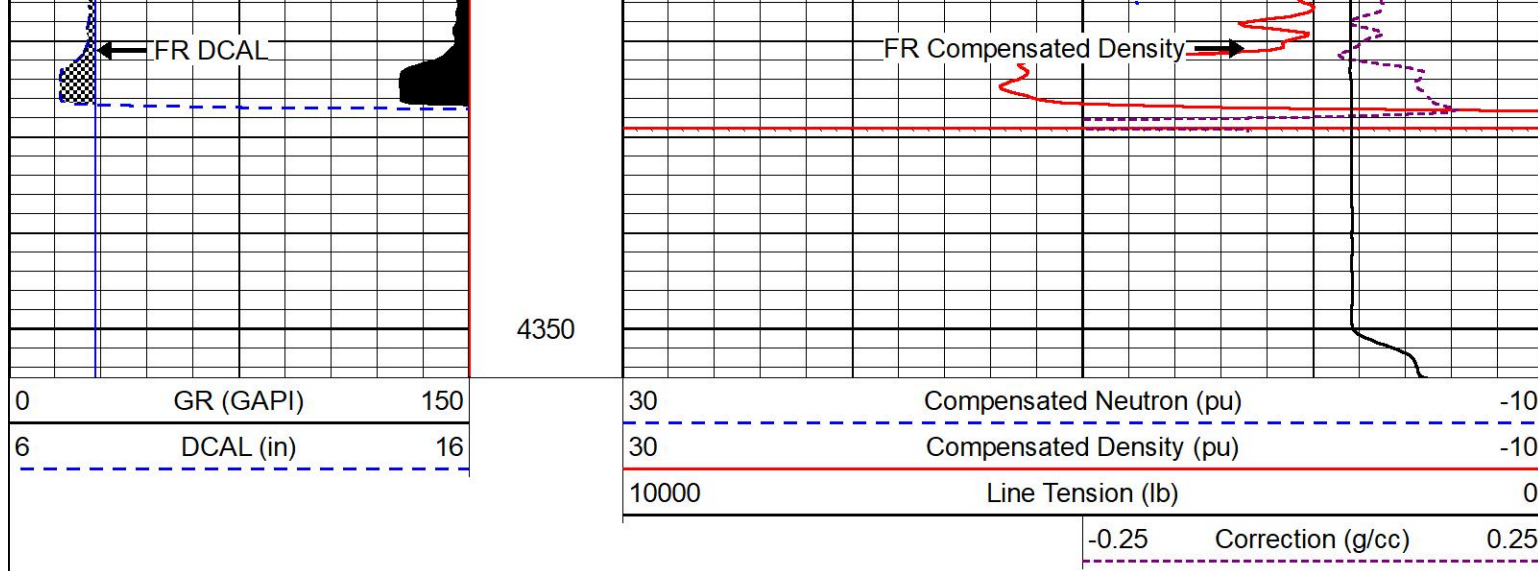










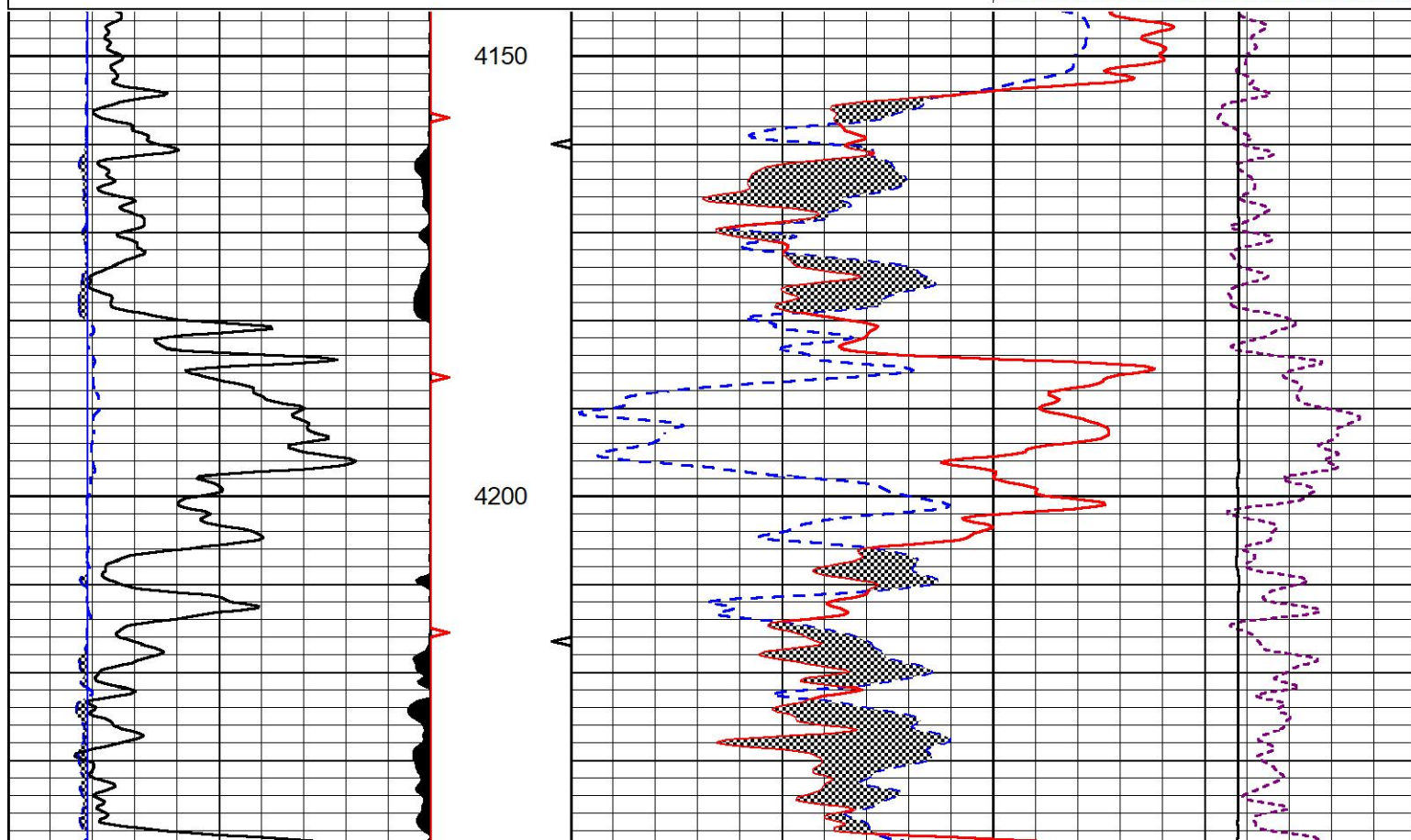
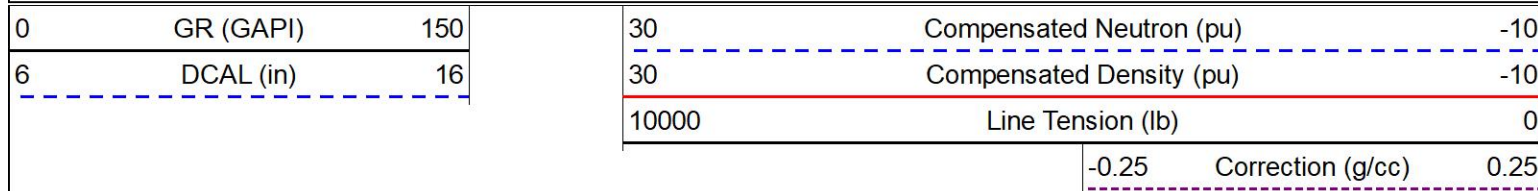


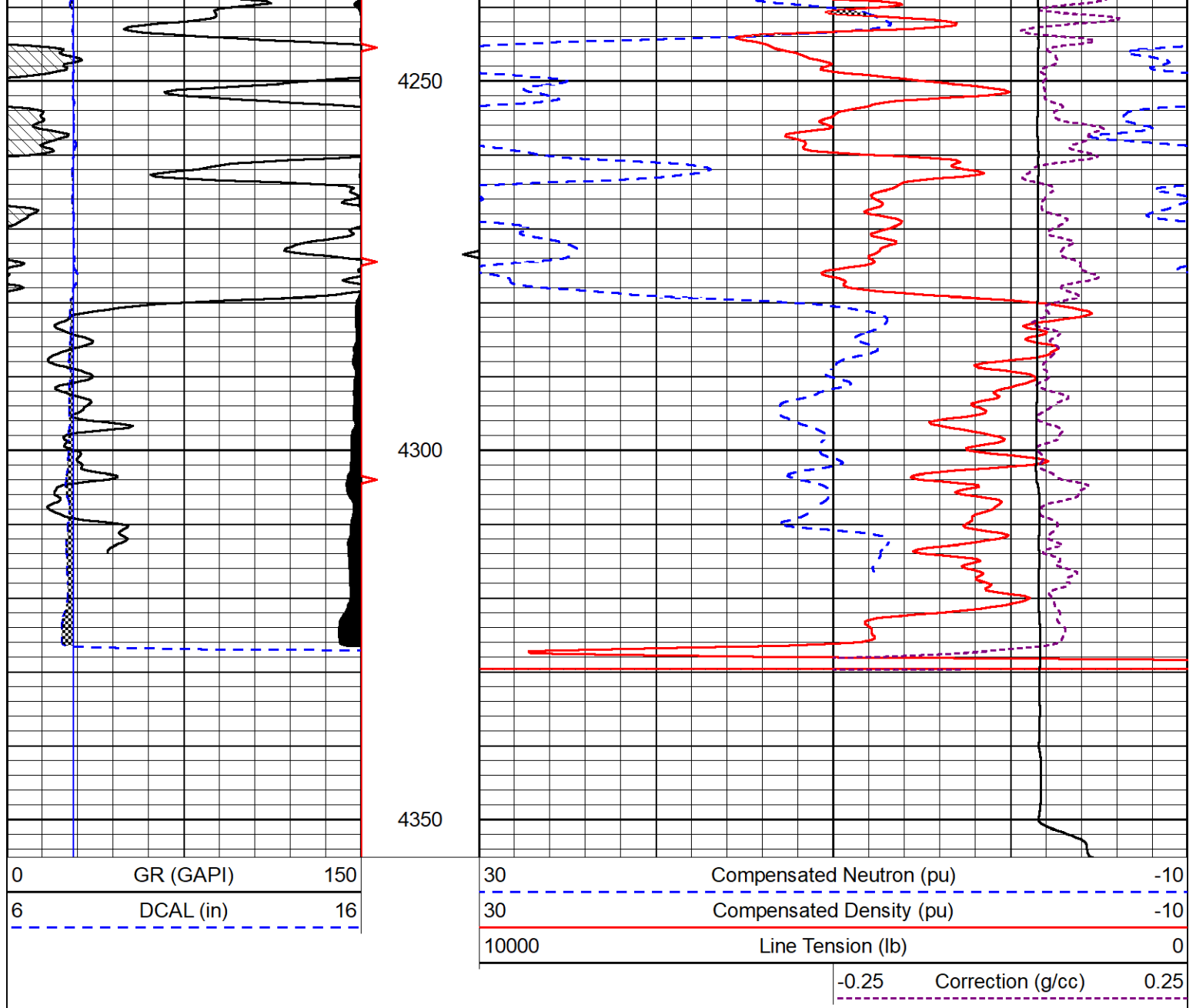
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

Database File lachenmayr_tanner 2.db
 Dataset Pathname stkml/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Fri Dec 02 17:51:10 2022
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File lachenmayr_tanner 2.db
 Dataset Pathname stkml/pass3.5
 Dataset Creation Fri Dec 02 17:53:25 2022

Dual Induction Calibration Report

Serial-Model: 505 HT-M&W
 Surface Cal Performed: Mon Nov 14 06:05:40 2022

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	167.000	835.000	0.000	255.800	mmho/m	0.480	-53.000
Medium	1348.000	1348.000	0.000	255.800	mmho/m	0.390	-49.500

Microlog Calibration Report

Serial-Model: 402-PSI STKBL ML
 Performed: Fri Nov 25 03:22:18 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	38000.0000	-1.8000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	42000.0000	-1.0000
Caliper	1.0046	1.1419	5.5000	20.0000	in	105.5890	-102.7500

Compensated Density Calibration Report

Serial-Model: 303-03-M&W
 Source #: 21170B
 Master Calibration Performed: Mon Oct 17 15:14:24 2022

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3841.78	5151.73	cps
Aluminum	2.650	g/cc	700.98	3068.49	cps
Spine Angle = 73.06			Density/Spine Ratio = 0.503		
	Size		Reading		
Small Ring	4.00	in	1.17		
Large Ring	14.00	in	1.04		

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 Lachenmayr Oil, LLC
 Well Tanner #2
 Field Kipp North
 County Stafford
 State Kansas

