



MIDWEST WIRELINE

**DUAL COMPENSATED
POROSITY**

Company Satchell Creek Petroleum LLC
 Well Worcester A #4-22
 Field Alda South
 County Graham State Kansas

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Location: API #: 15-065-24257-00-00
 NE SW/NW/SW
 1734 FSL & 567 FWL
 SEC 22 TWP 7S RGE 22W
 Permanent Datum Ground Level Elevation 2264
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 DIL
 MEL/BHCS
 K.B. 2271
 D.F.
 G.L. 2264

Date	7/15/2023						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	3913						
Depth Logger	3907						
Bottom Logged Interval	3886						
Top Logged Interval	3100						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	1000						
Density	9.4						
Level	Full						
Max. Rec. Temp. F	115						
Operating Rig Time	3.5 Hours						
Equipment -- Location	P-24 Hays						
Recorded By	T. Martin						
Witnessed By	Sean Deenihan						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	220	8.625	23	00	220
Two	7.875	220	TD				
Casing Record							

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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.

Hill City, KS, 3 E to Rd 310,
 2.5 N to TB, E & N 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: T. Martin	Operator:	Primary Witness: Sean Deenihan	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	32.75		GR-M&W (105)	3.00	3.50	50.00
CNLSC CNSSC	29.65 28.90		CNT-M&W (201-M&W)	5.00	3.50	100.00
LSD DCAL SSD	20.60 20.58 20.10		CDL-M&W (307-11)	8.50	4.00	250.00
RLL3F RLL3	15.50 15.50		DIL-M&W (507)	18.25	3.50	220.00
CILD	8.33		CILM	4.50		
SP	0.20					

Dataset: satchell_worcester a #4-22.db: field/well/Stack/pass3.1
 Total length: 34.75 ft
 Total weight: 620.00 lb
 O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrion\Data\satchell_worcester a #4-22.db
 Dataset field/well/Stack/pass3.1/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 115	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m -2	SNDERRM mmho/m 0	SPSHIFT mV 380	SRFTEMP degF 85	SZCOR Off	TDEPTH ft 3907		

Variable Description

BOREID : Borehole I.D.
 BOTTEMP : Bottom Hole Temperature
 CASEOD : Casing O.D.
 CASETHCK : Casing Thickness
 FLUIDDEN : Fluid Density
 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

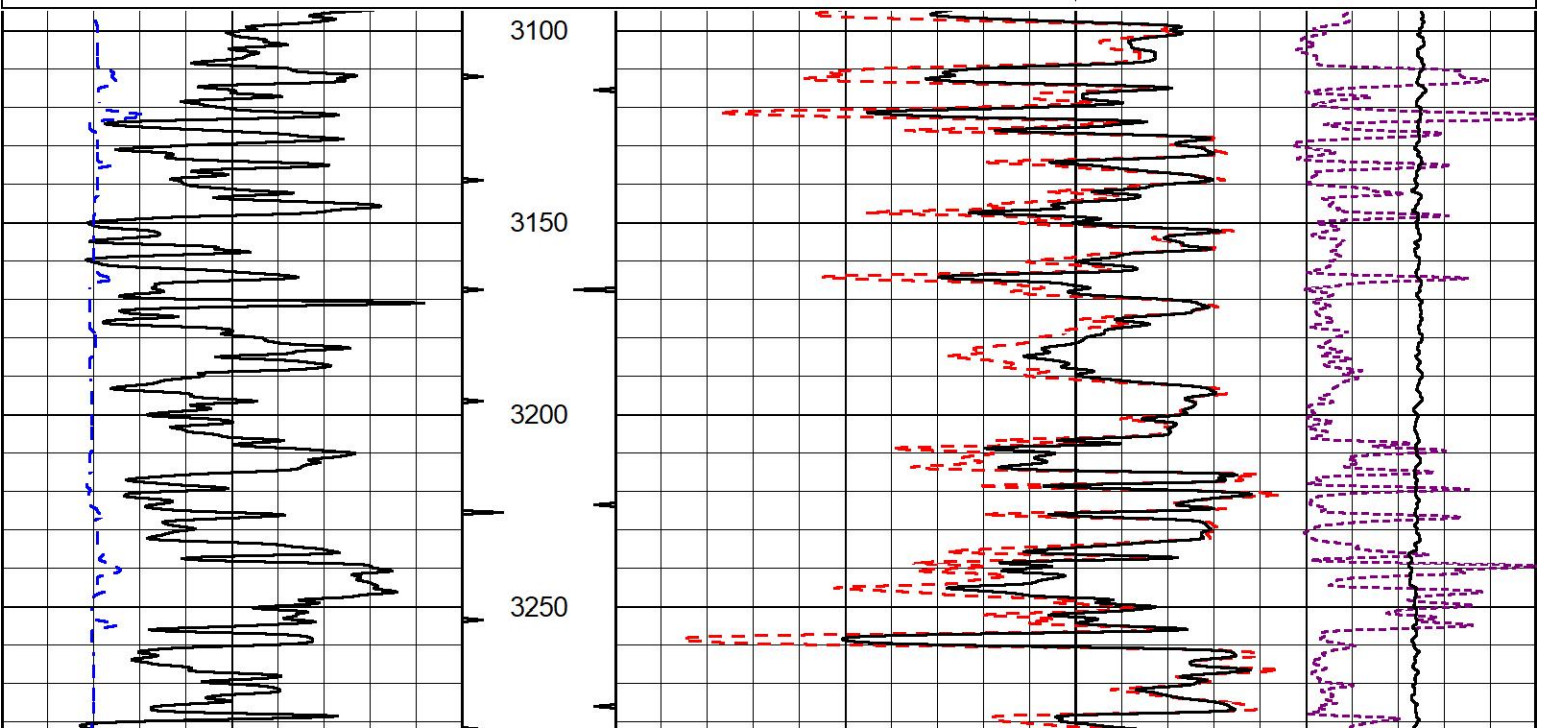


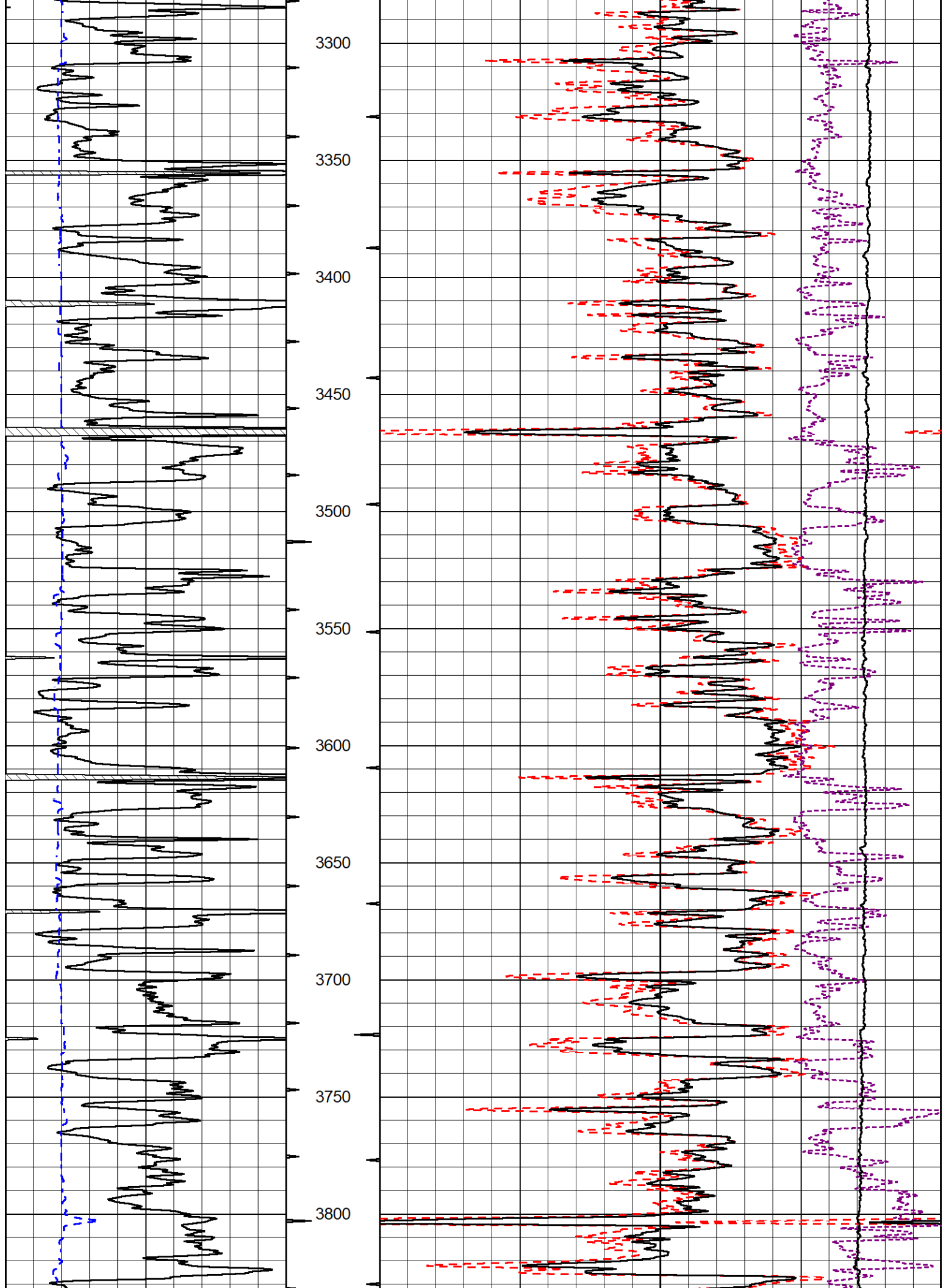
2" SCALE BULK DENSITY

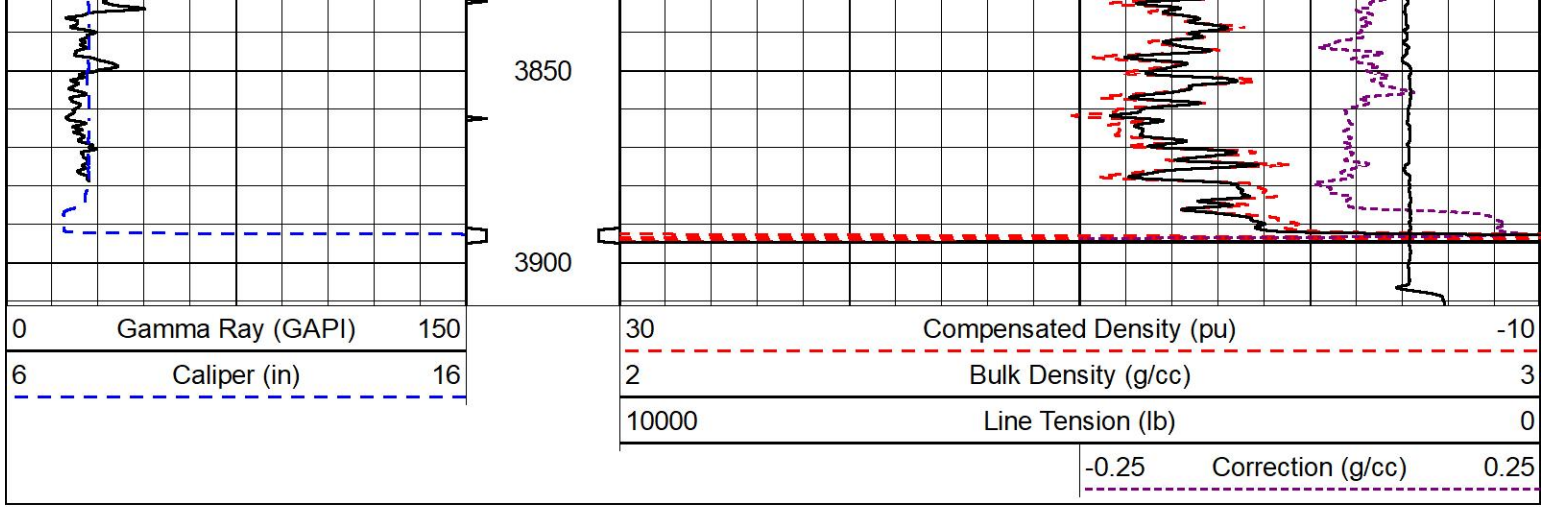
MAIN PASS

Database File satchell_worcester a #4-22.db
 Dataset Pathname Stack/pass3.3
 Presentation Format _cdl
 Dataset Creation Sat Jul 15 13:25:34 2023
 Charted by Depth in Feet scaled 1:600

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



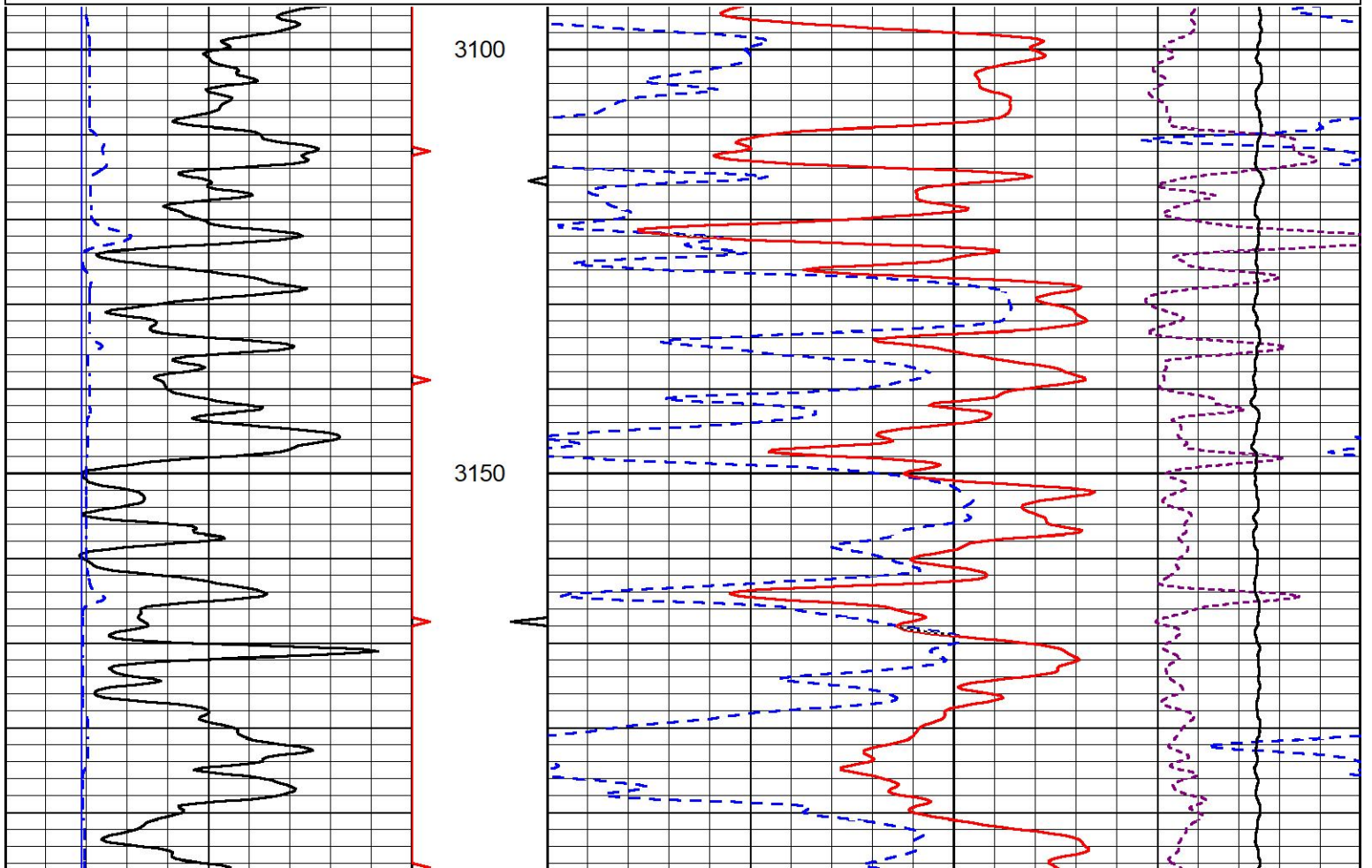
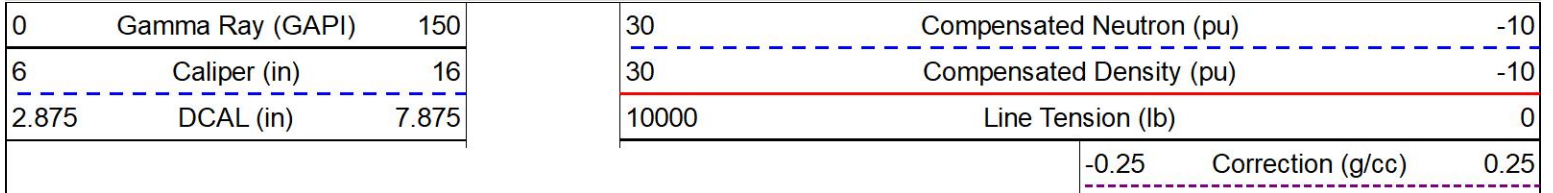


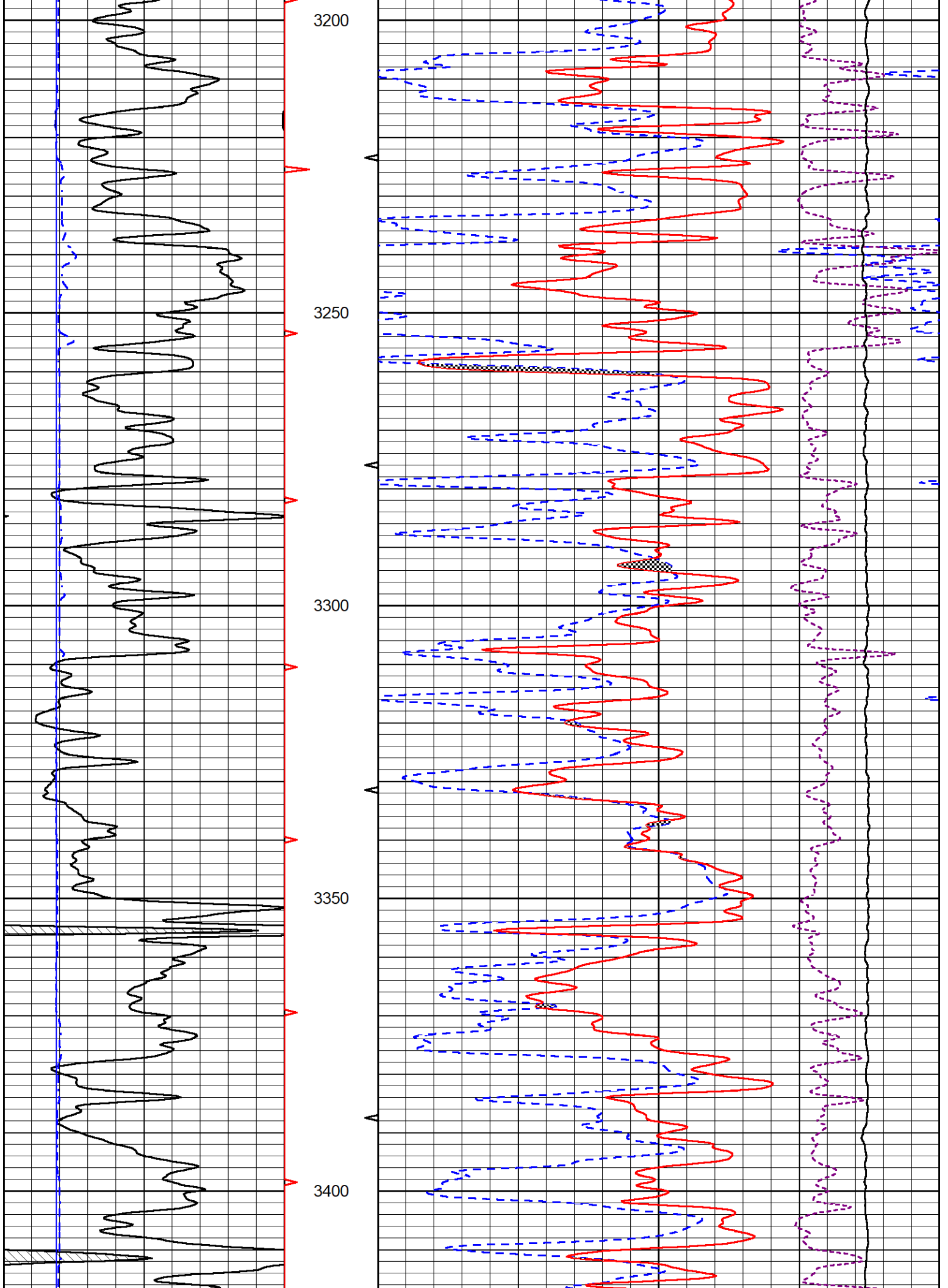


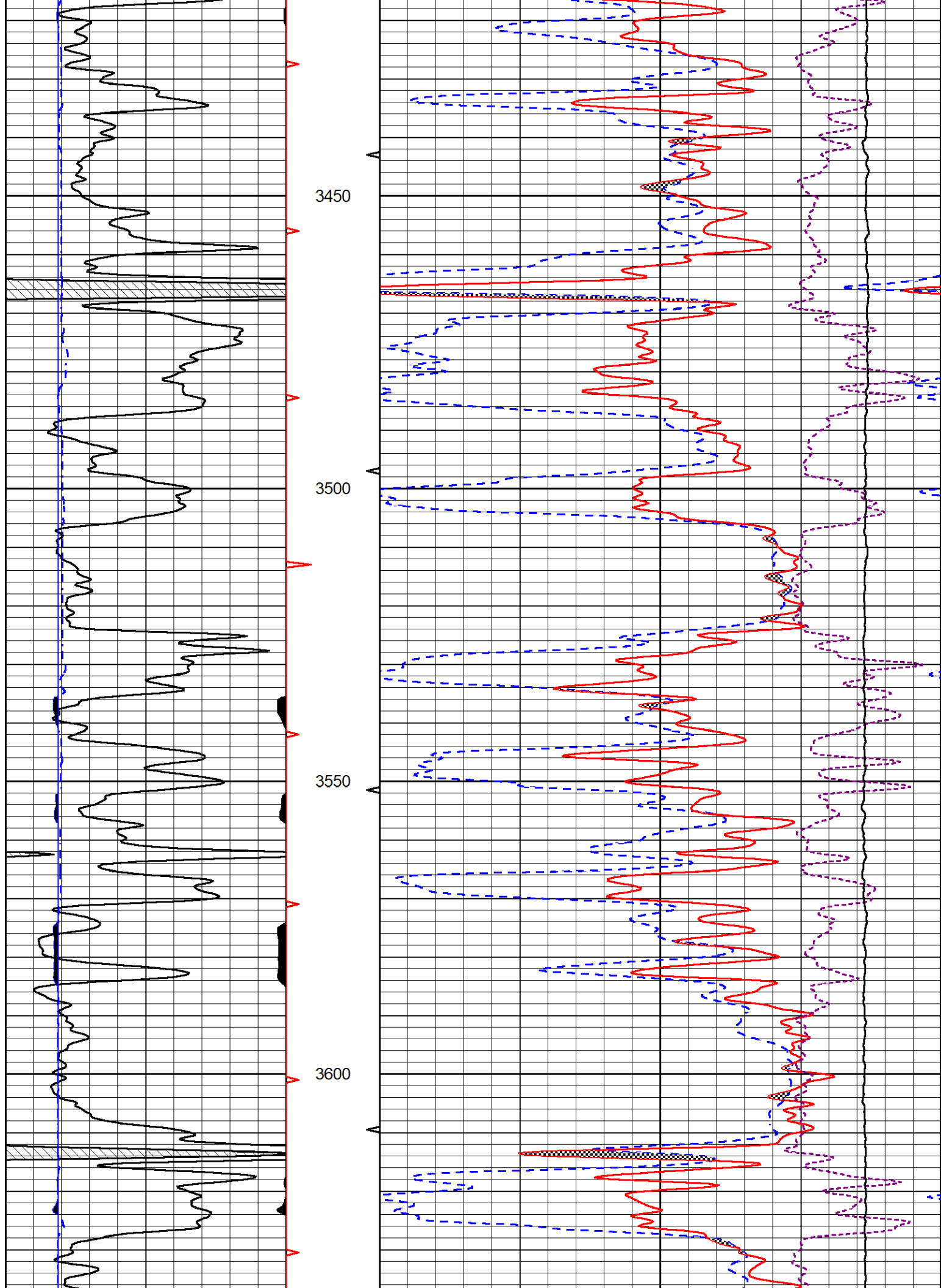
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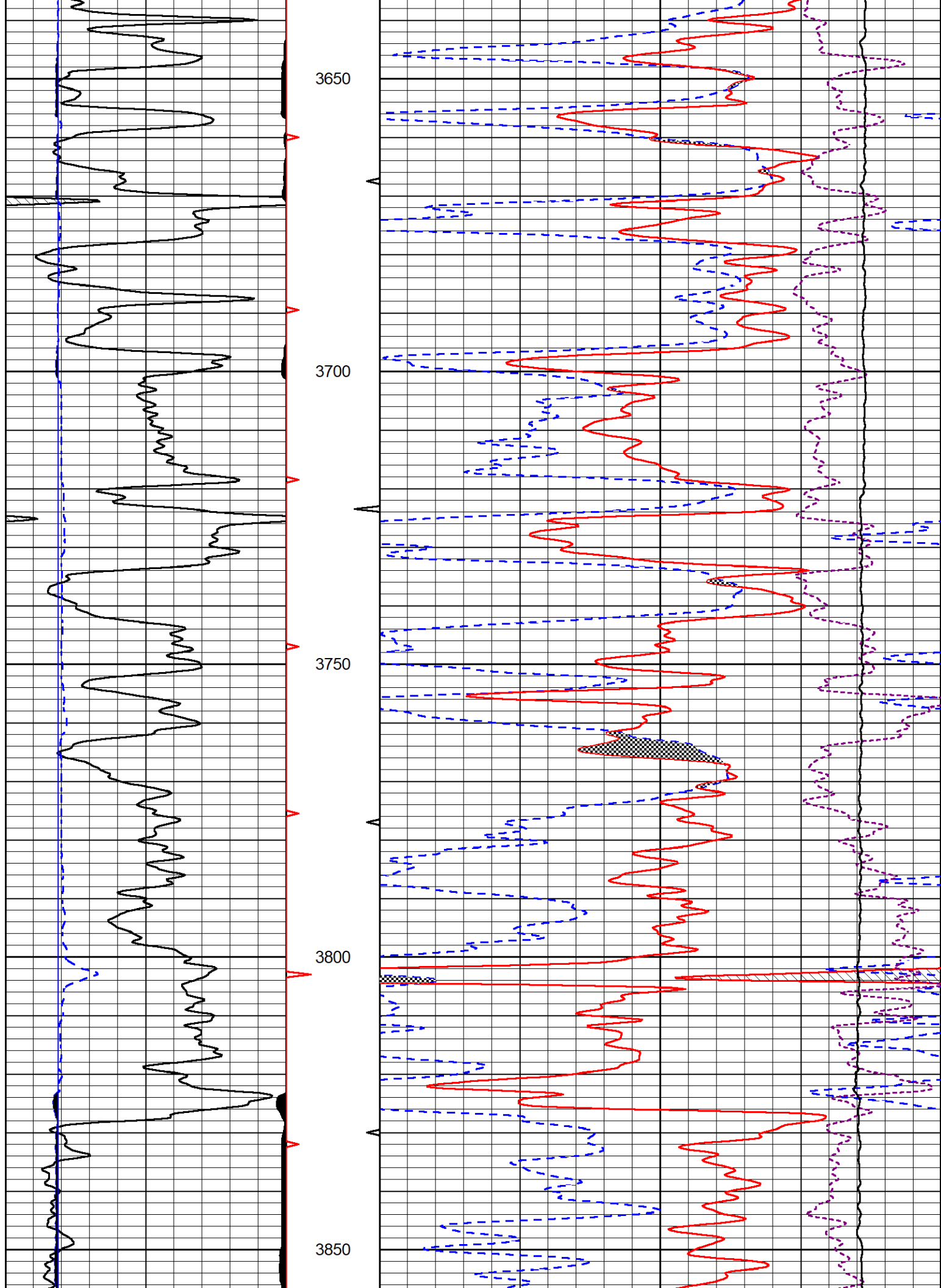
MAIN PASS

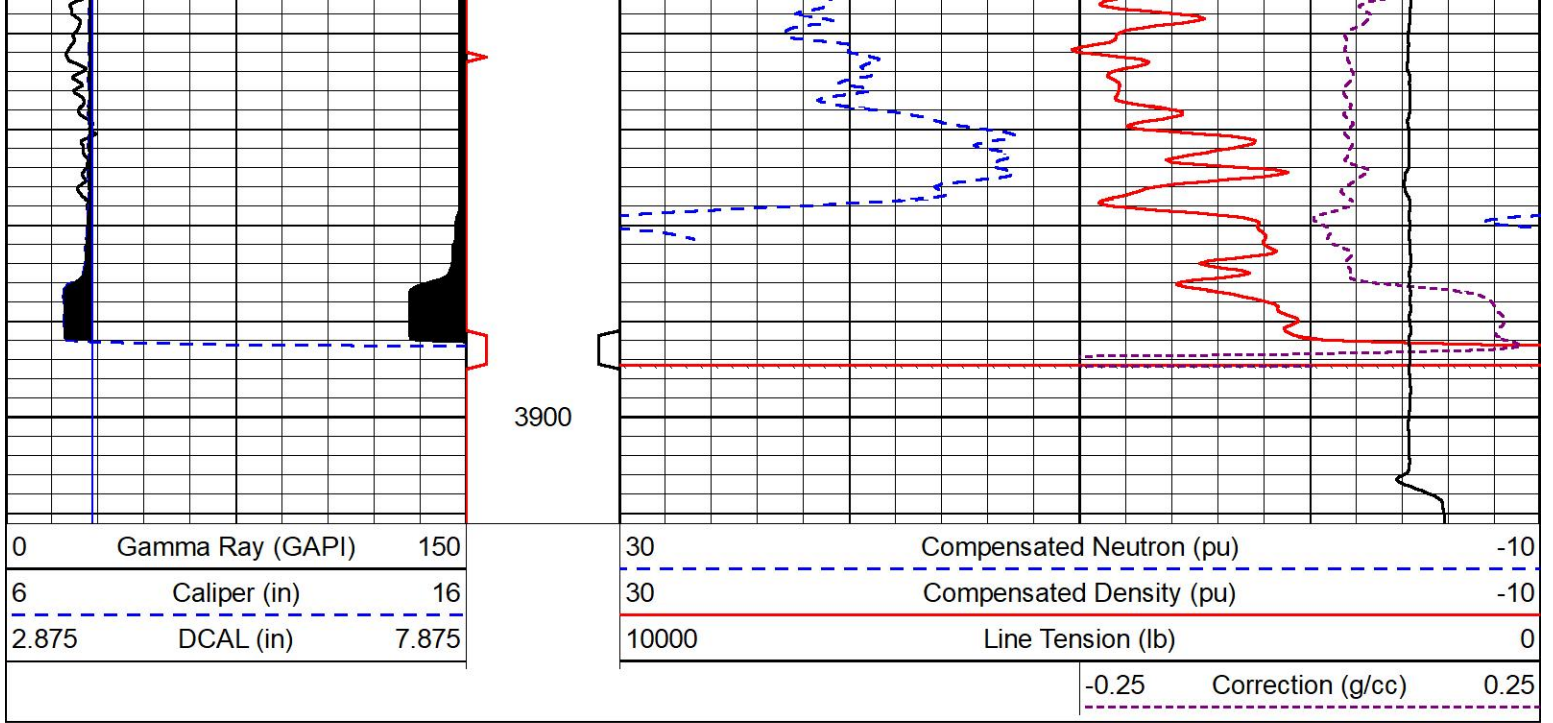
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 Dataset Pathname Stack/pass3.1
 Presentation Format _CNDLS~1
 Dataset Creation Sat Jul 15 14:00:24 2023
 Charted by Depth in Feet scaled 1:240







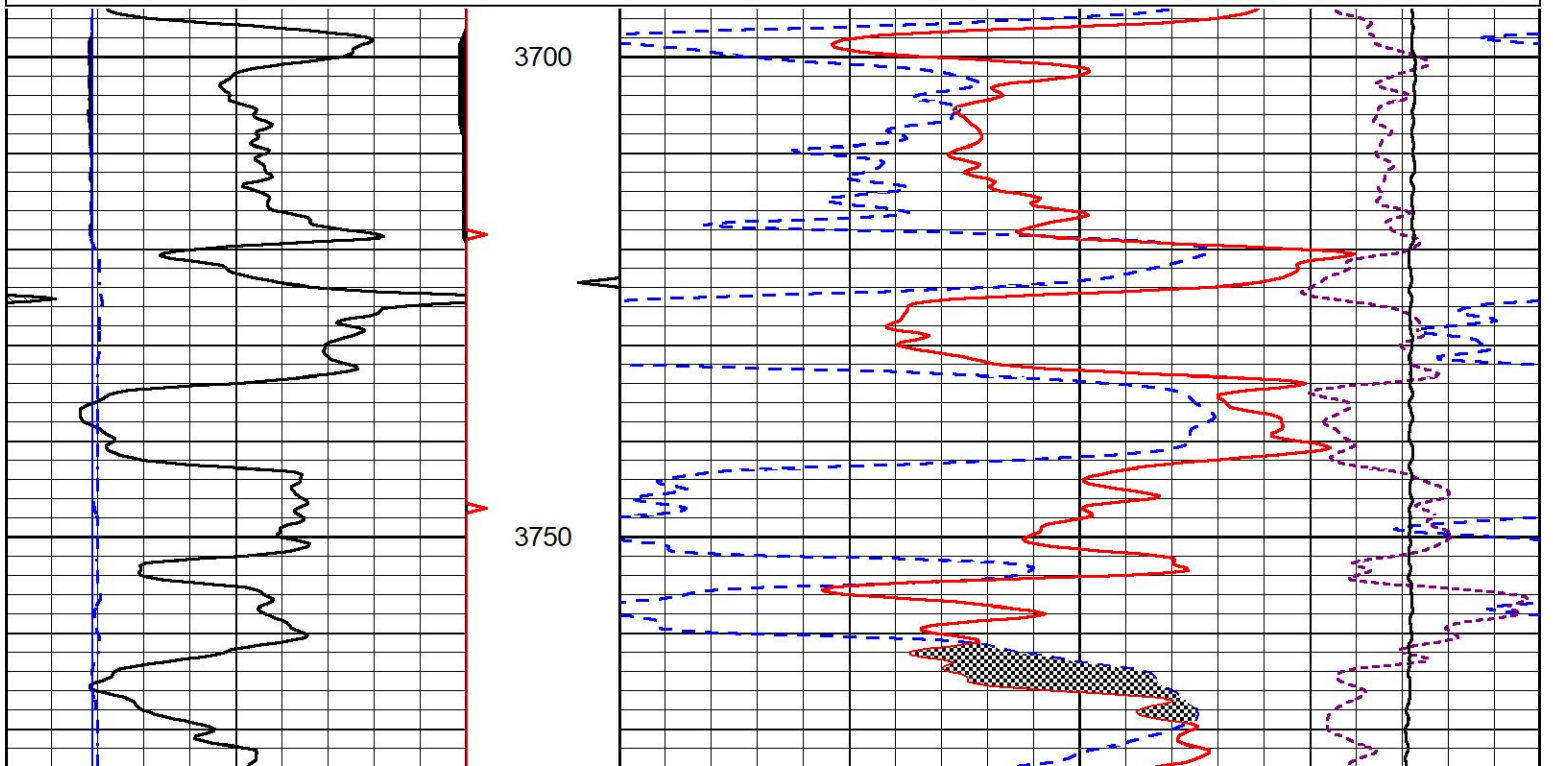
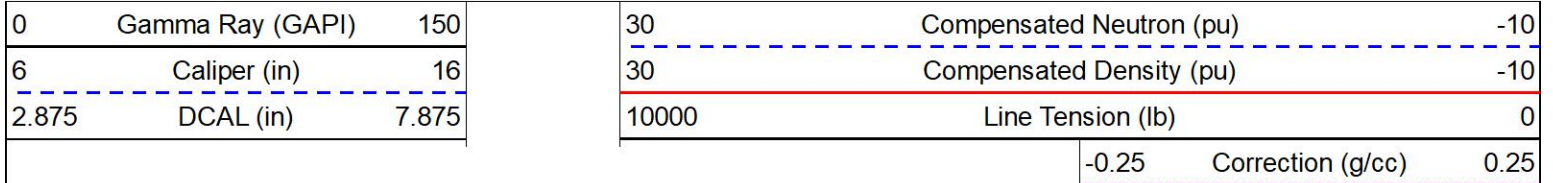


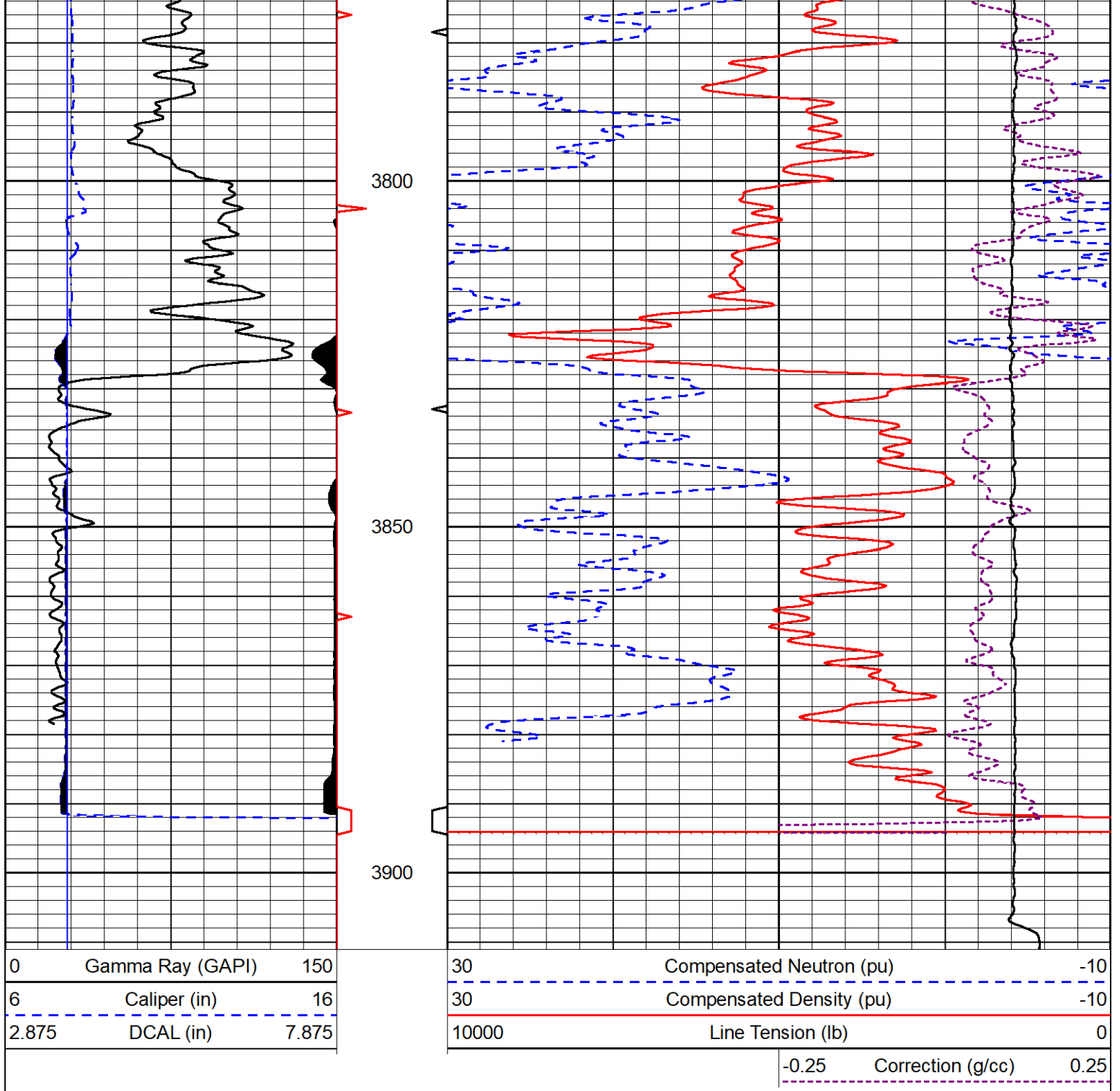


REPEAT SECTION

REPEAT PASS

Database File satchell_worcester a #4-22.db
 Dataset Pathname Stack/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Sat Jul 15 13:16:31 2023
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File satchell_worcester a #4-22.db
 Dataset Pathname Stack/pass3.1
 Dataset Creation Sat Jul 15 14:00:24 2023

Dual Induction Calibration Report

Serial-Model: 507-M&W
 Surface Cal Performed:

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	68.570	638.100	0.000	255.800	mmho/m	0.500	-37.000
Medium	184.288	716.191	0.000	255.800	mmho/m	0.470	-84.000

Compensated Density Calibration Report

Serial-Model: 307-11-M&W
 Source / Verifier: 20762B / 2ci
 Master Calibration Performed: Tue Jun 6 21:48:20 2023
 Before Survey Verification Performed:
 After Survey Verification Performed:

Master Calibration

	<u>Density</u>		<u>Far Detector</u>	<u>Near Detector</u>	
Magnesium	1.755	g/cc	3689.70	4749.82	cps
Aluminum	2.590	g/cc	822.19	3221.38	cps
	Spine Angle = 75.50		Density/Spine Ratio = 0.538		
	<u>Size</u>		<u>Reading</u>		
Small Ring	6.00	in	1.16		
Large Ring	18.00	in	1.01		

Compensated Neutron Calibration Report

Serial Number: 201-M&W
 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: Fri Dec 3 15:10:46 2021

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps
 Calibrator Reading: 637.0 cps

Sensitivity: 0.6000 GAPI/cps



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State Kansas