



MIDWEST WIRELINE

**DUAL COMPENSATED  
POROSITY**

Company Castle Resources, Inc.  
Well Mollhagen #3  
Field Geneseo-Edward  
County Ellsworth  
State Kansas

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Location: API #: 15-053-21400-00-00  
SE NW SE NW  
1750 FNL & 3390 FEL  
SEC 9 TWP 17S RGE 8W  
Permanent Datum Ground Level Elevation 1720  
Log Measured From Kelly Bushing  
Drilling Measured From Kelly Bushing  
Other Services  
DIL/MEL  
K.B. 1725  
D.F.  
G.L. 1720

Date	7/23/2024						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	3350						
Depth Logger	3346						
Bottom Logged Interval	3317						
Top Logged Interval	2200						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	6000						
Density	9.0						
Level	Full						
Max. Rec. Temp. F	110						
Operating Rig Time	2 Hours						
Equipment -- Location	P-24 Hays						
Recorded By	T. Martin						
Witnessed By	Jerry Green						
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.**

Ellsworth, KS, S on 14 to Rd T,  
1/2 E, S 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: T. Martin  
Operator:  
Operator:  
Operator:

**This Log Record Was Witnessed By**

Primary Witness: Jerry Green  
Secondary Witness:  
Secondary Witness:  
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (105)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (201-M&W)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (305-24)	8.50	4.00	250.00
			ML-PSIML (401)	7.58	4.00	65.00
MCAL MI MN	19.58 19.58 19.58					
RLL3F RLL3	15.50 15.50					
CILD	8.33		DIL-M&W (507)	18.25	3.50	220.00
CILM	4.50					
SP	0.20					

Dataset: castle\_mollhagen #3.db: field/well/StkMI2/pass3.1  
 Total length: 42.33 ft  
 Total weight: 685.00 lb  
 O.D.: 4.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\castle\_mollhagen #3.db  
 Dataset field/well/StkM12/pass3.1/\_vars\_

## Top - Bottom

BOREID in 7.875	BOTTEMP degF 110	CASEOD in 5.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m 3	SNDERRM mmho/m -6	SPSHIFT mV 180	SRFTEMP degF 70	SZCOR Off	TDEPTH ft 3346		

## 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

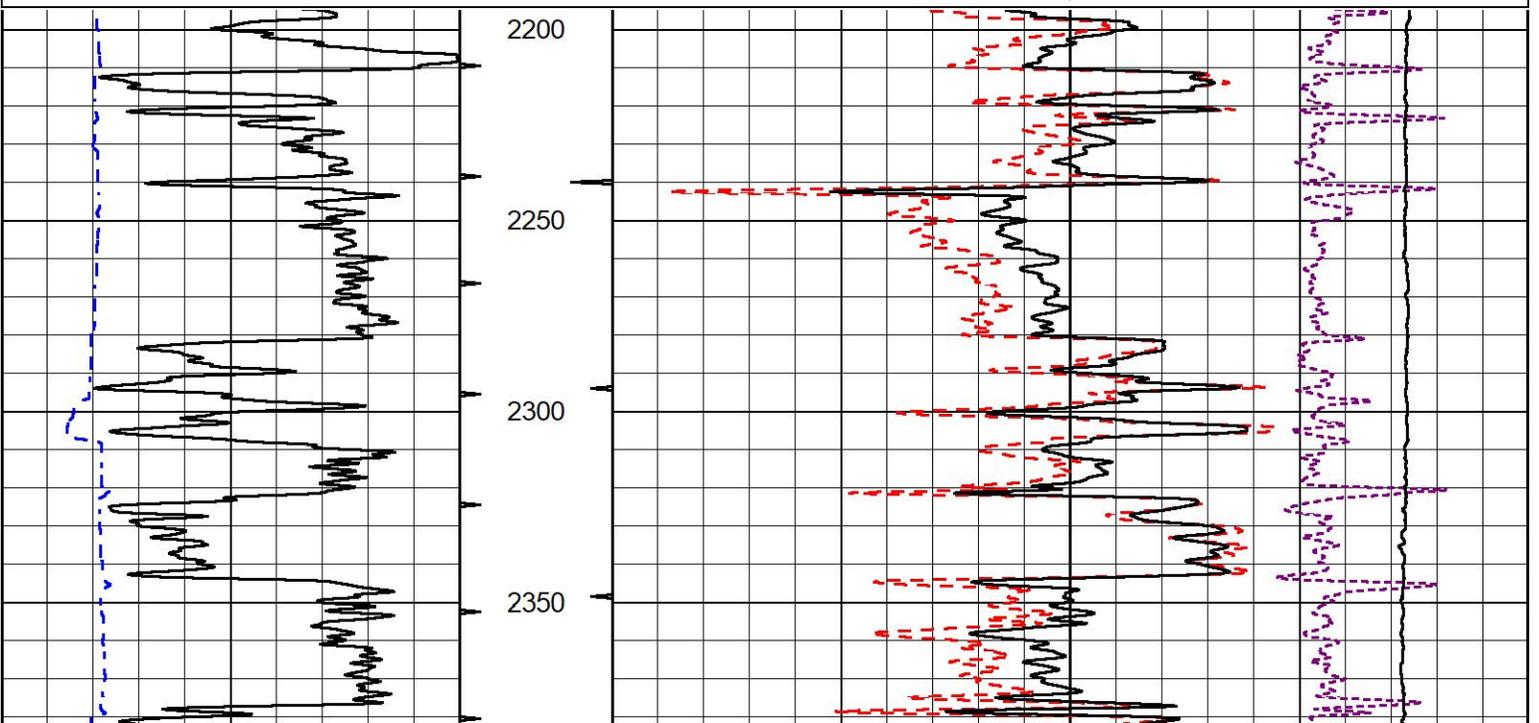


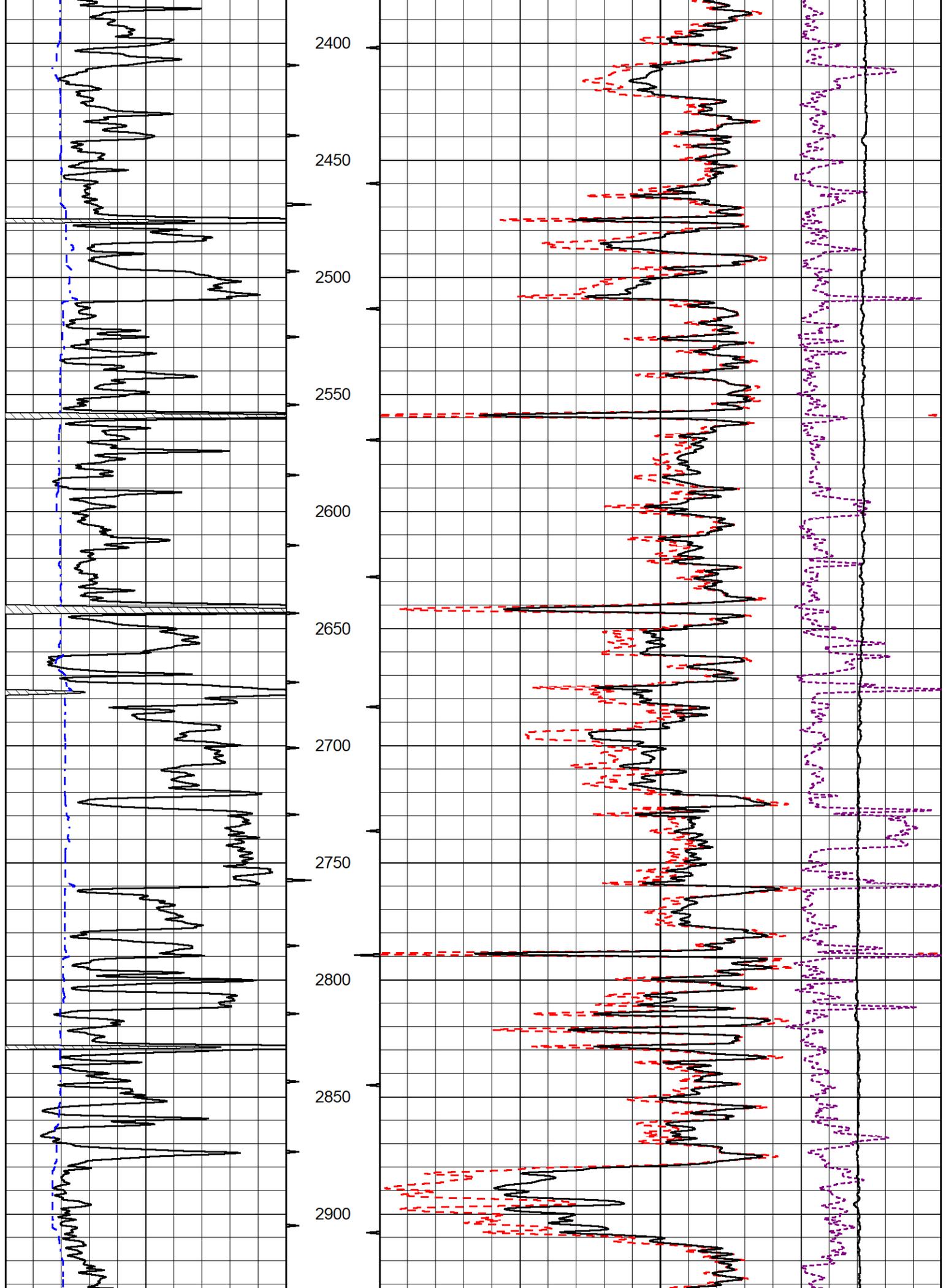
## 2" SCALE BULK DENSITY

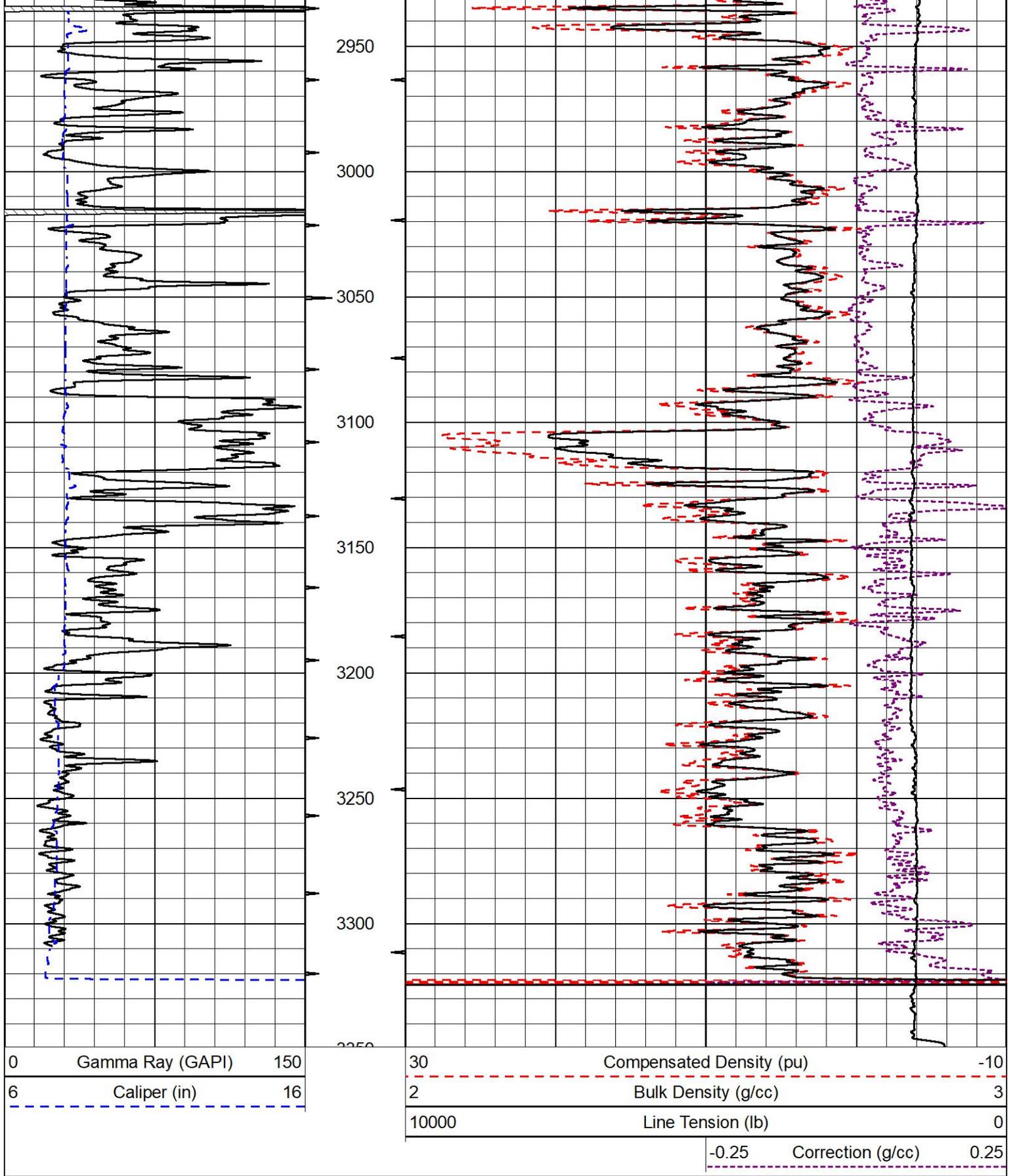
### MAIN PASS

Database File castle\_mollhagen #3.db  
 Dataset Pathname StkM12/pass3.3  
 Presentation Format \_cdl  
 Dataset Creation Tue Jul 23 07:15:23 2024  
 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





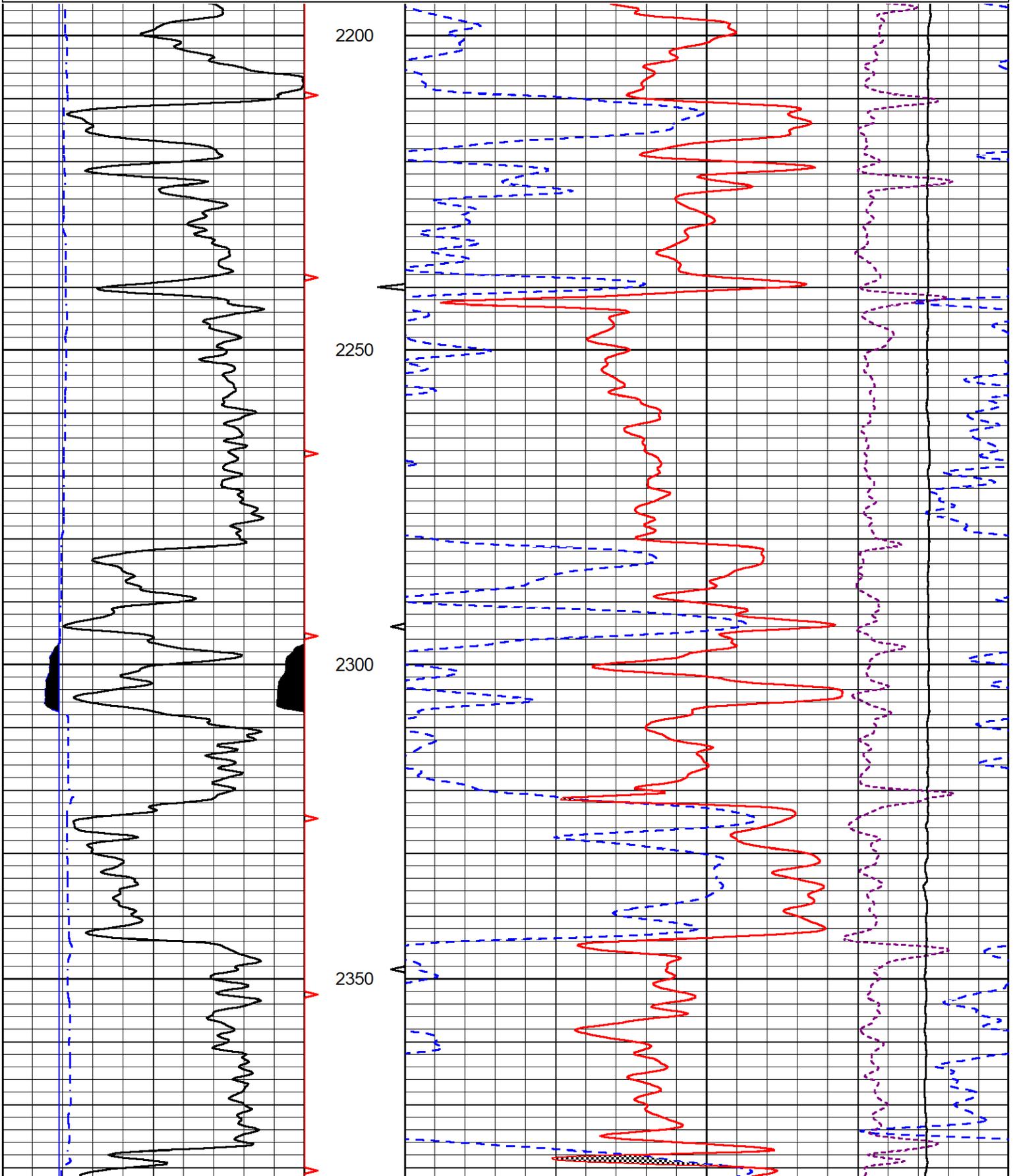


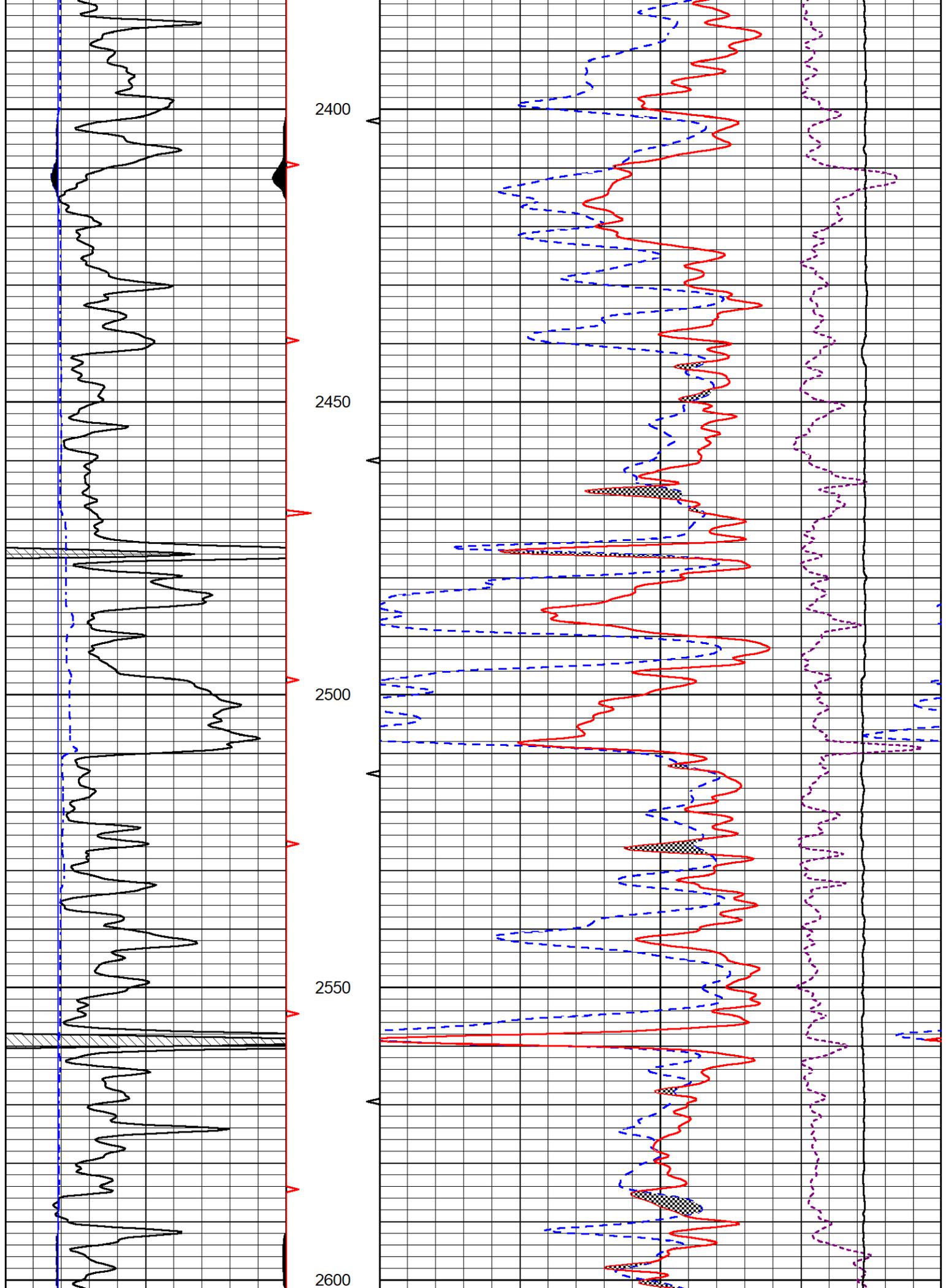
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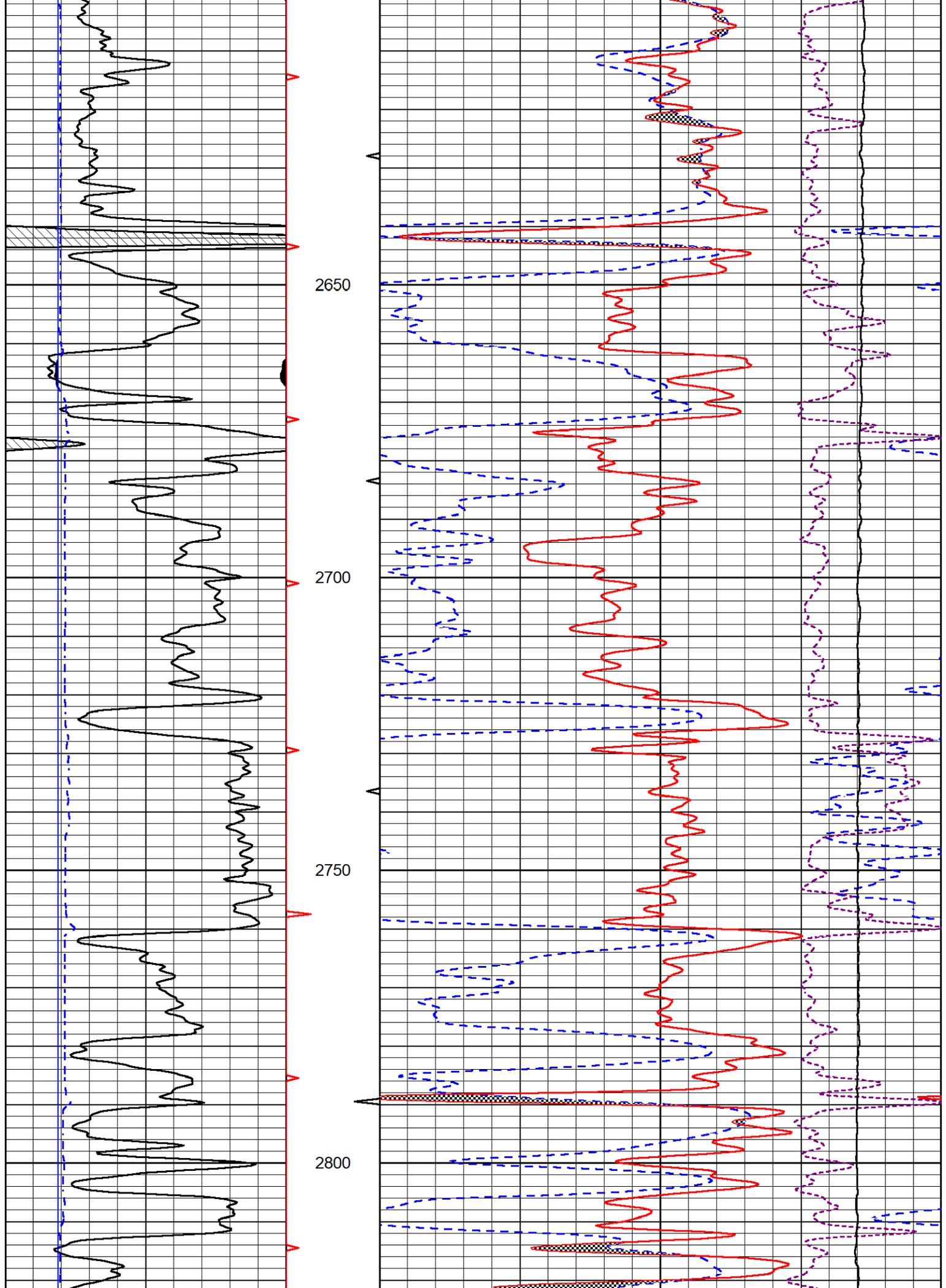
MAIN PASS

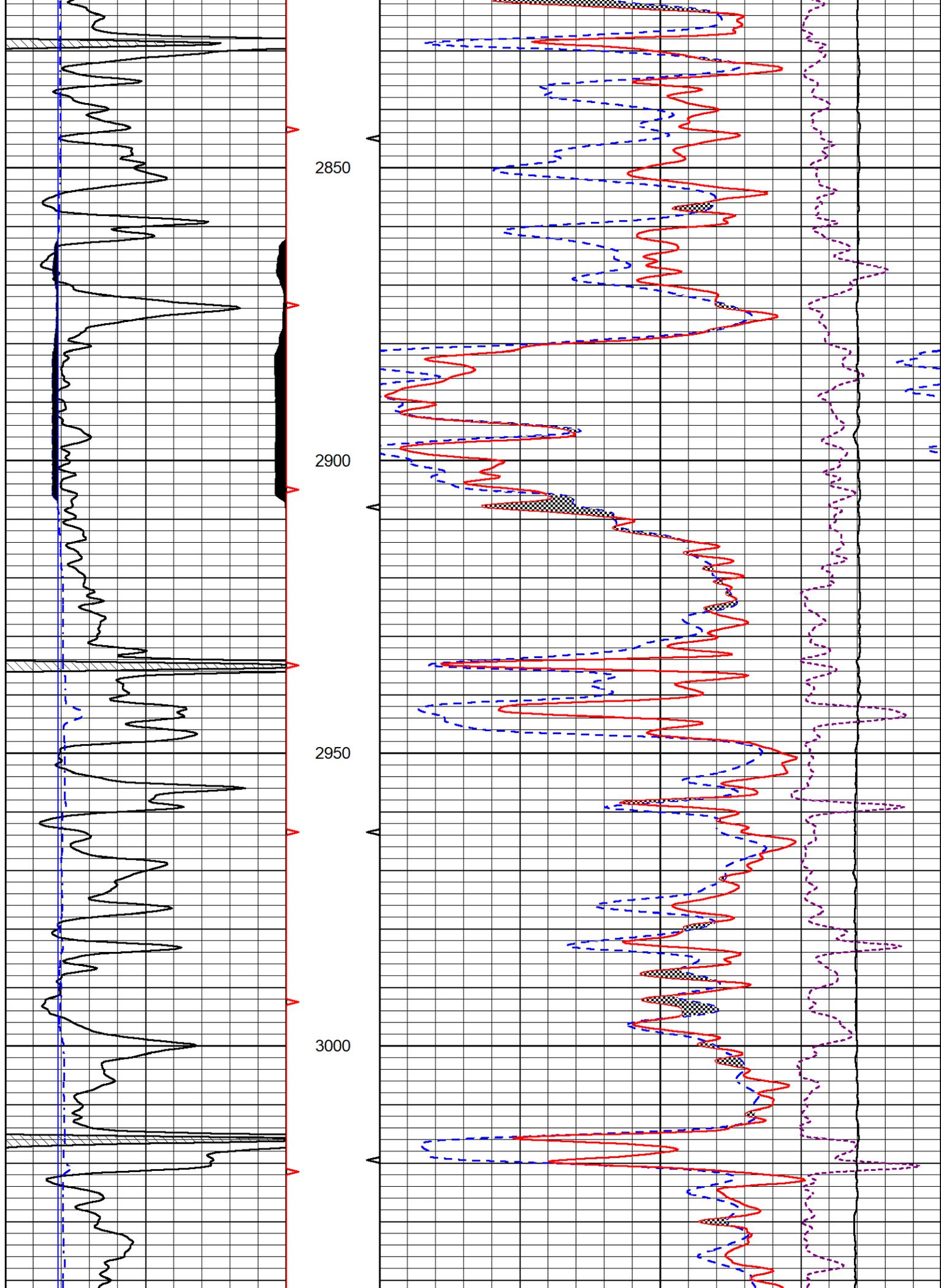
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	DCAL (in)	7.875

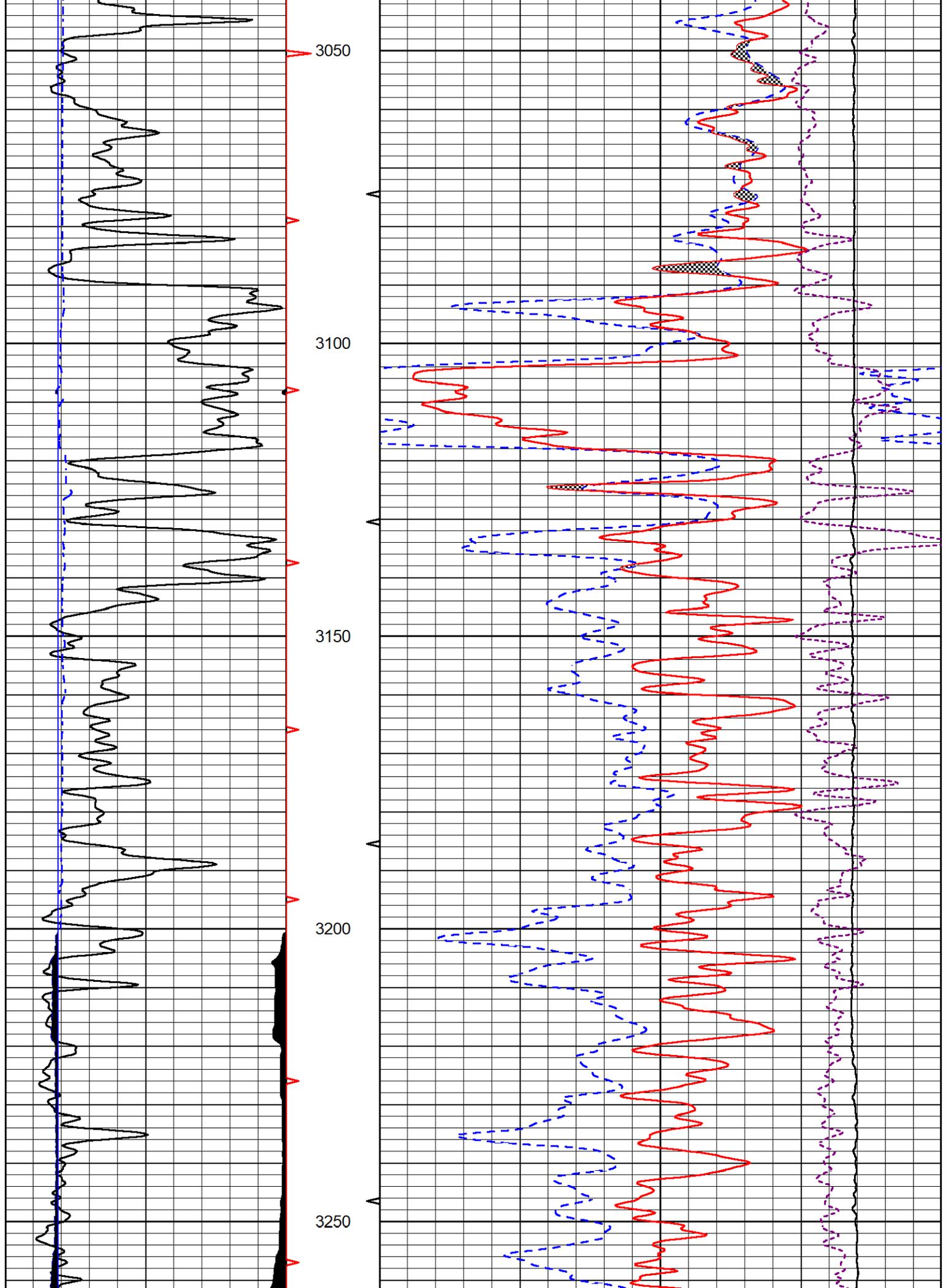
30	Compensated Neutron (pu)	-10
30	Compensated Density (pu)	-10
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25

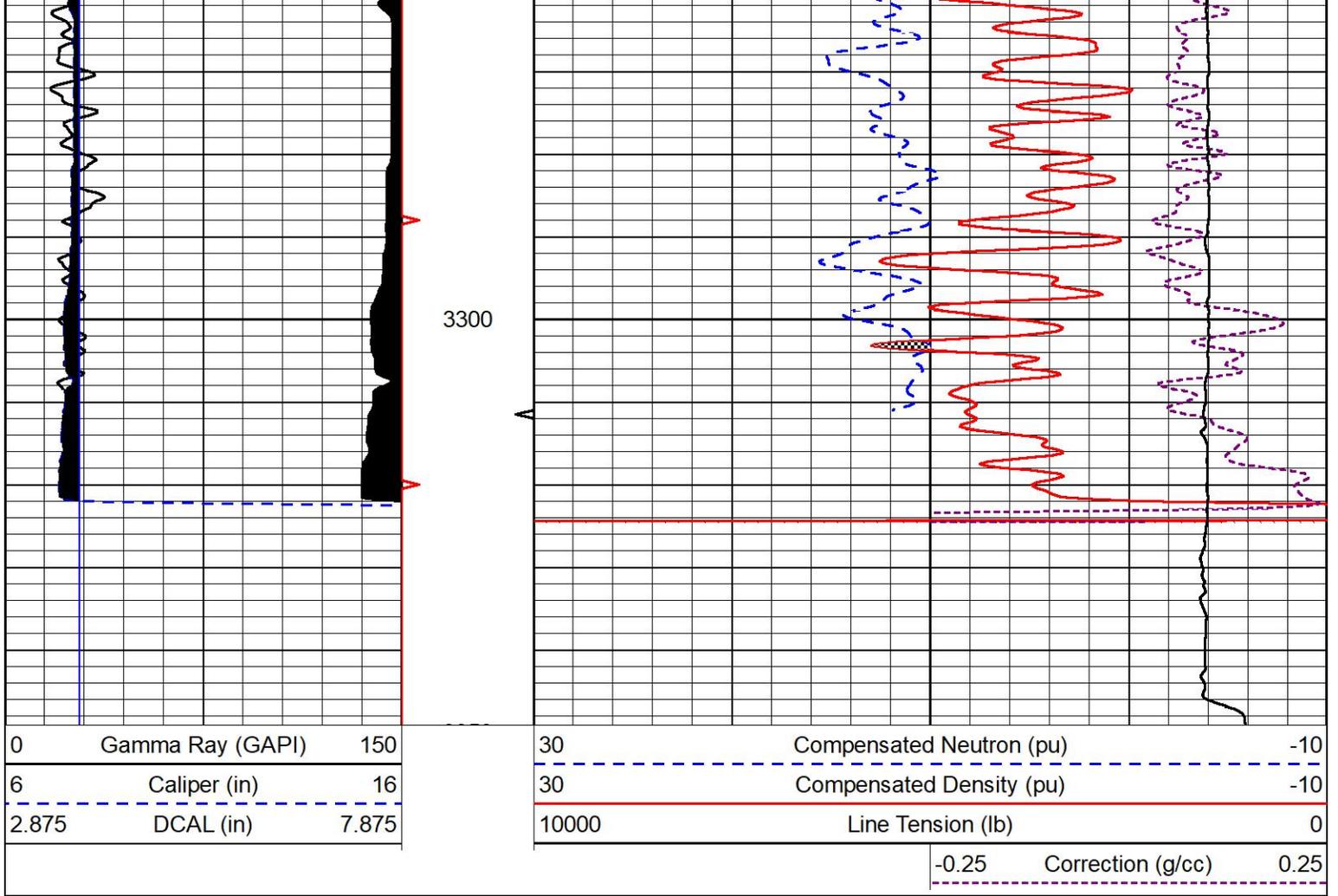










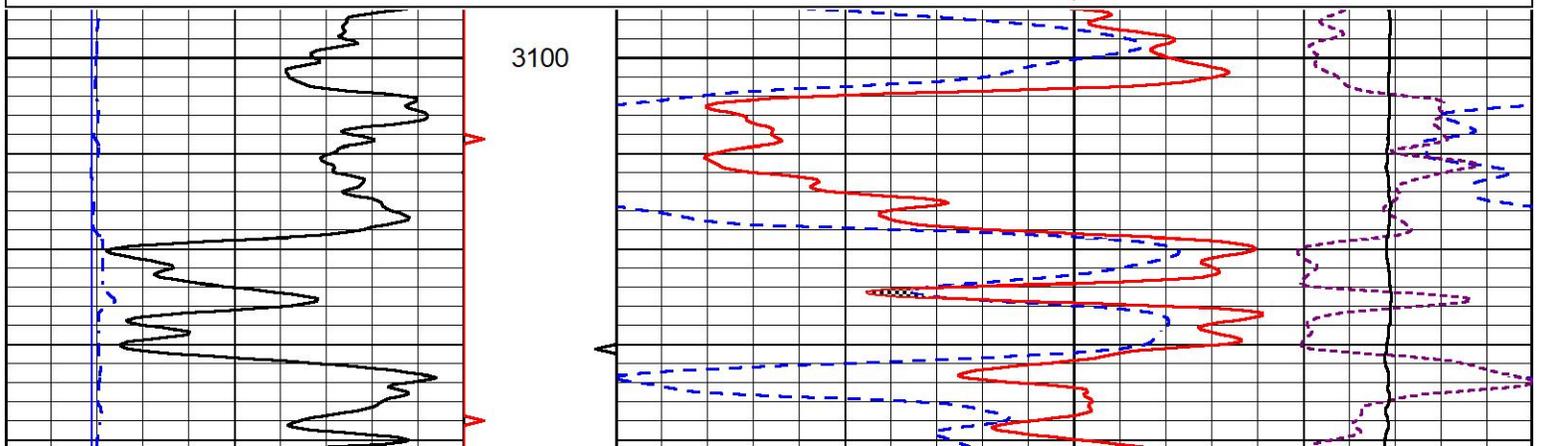
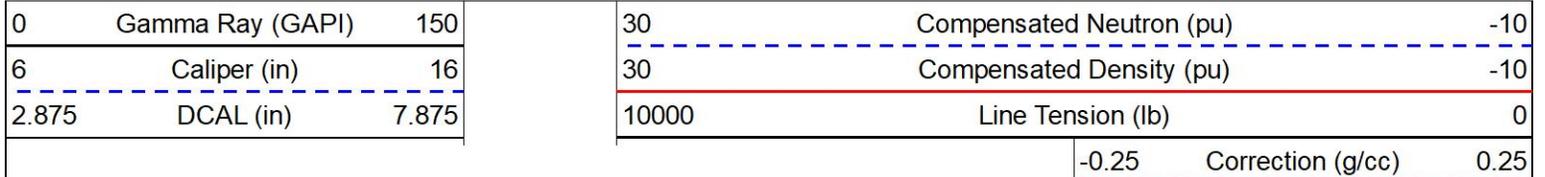


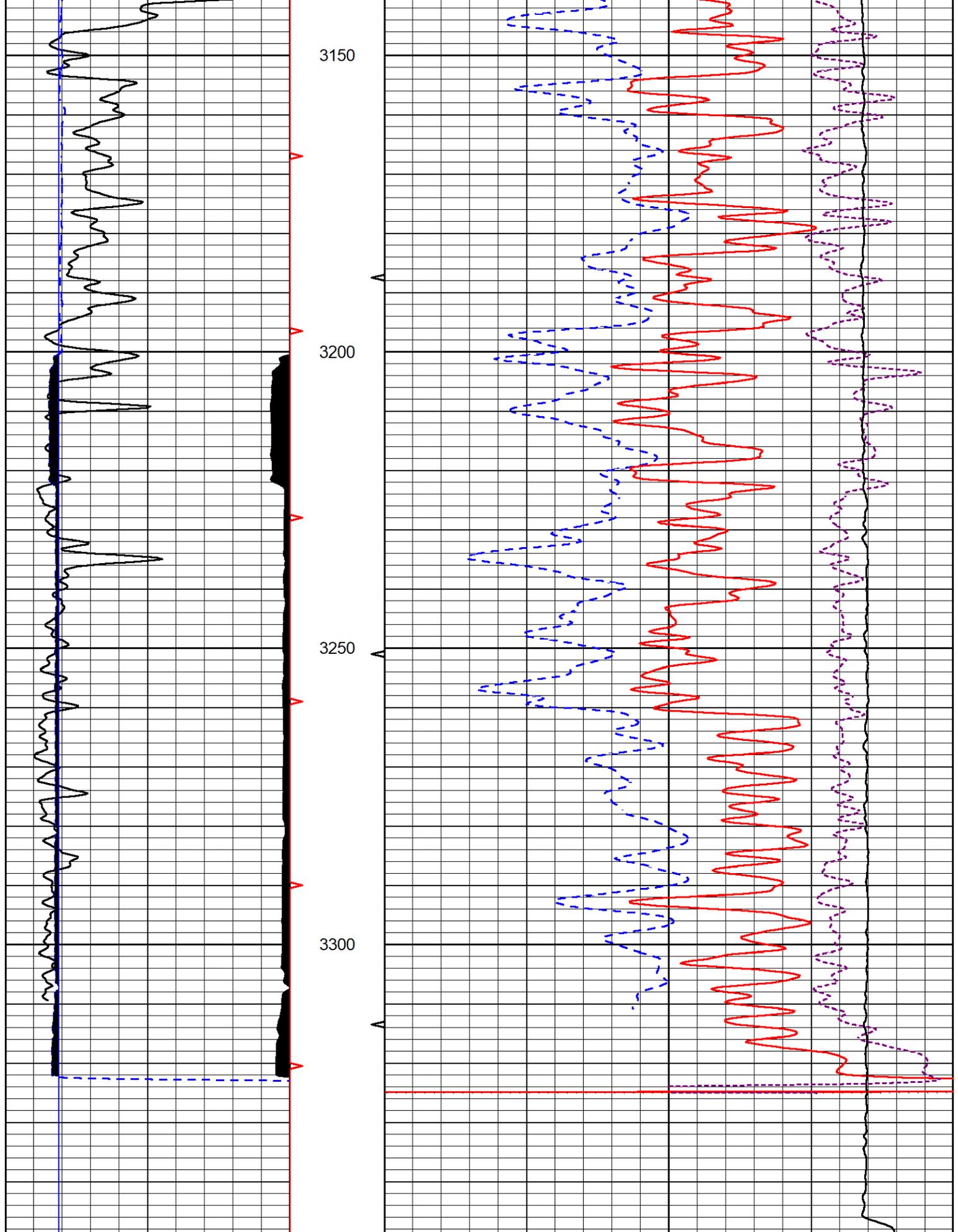
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# REPEAT SECTION

## REPEAT PASS

Database File castle\_mollhagen #3.db  
 Dataset Pathname StkMI/pass3.1  
 Presentation Format \_CNDLS~1  
 Dataset Creation Tue Jul 23 06:52:50 2024  
 Charted by Depth in Feet scaled 1:240





0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.075	DCAL (in)	7.075

30	Compensated Neutron (pu)	-10
30	Compensated Density (pu)	-10
10000	Line Tension (lb)	0



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	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	

POST-SURVEY VERIFICATION

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

Gamma Ray Calibration Report

Serial Number:	105	
Tool Model:	M&W	
Performed:	Mon Aug 7 20:46:01 2023	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.6000	GAPI/cps



Company	Castle Resources, Inc.
Well	Mollhagen #3
Field	Geneseo-Edward
County	Ellsworth
State	Kansas