



MIDWEST WIRELINE

**DUAL COMPENSATED
POROSITY**

Company Satchell Creek Petroleum LLC
 Well Winchester A #5-22
 Field Alda South
 County Graham State Kansas

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Location: API #: 15-065-24258-00-00
 E2 NW/NW/SW
 2310 FSL & 484 FWL
 SEC 22 TWP 7S RGE 22W
 Permanent Datum Ground Level Elevation 2270
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 DIL
 MEL/BHCS
 K.B. 2277
 D.F.
 G.L. 2270

Date	6/19/2023						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	3841						
Depth Logger	3835						
Bottom Logged Interval	3806						
Top Logged Interval	3100						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	900						
Density	9.1						
Level	Full						
Max. Rec. Temp. F	114						
Operating Rig Time	4 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	265	8.625	23	00	265
Two	7.875	265	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, 3.5 N, E & S into

Log Measured From: Kelly Bushing 7 Ft. Above Permanent Datum

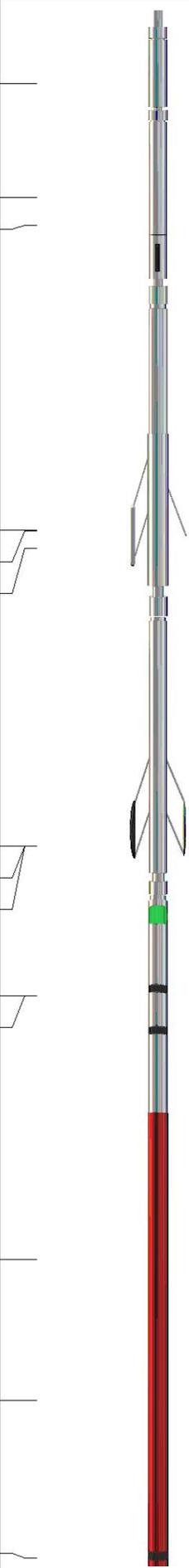
THANK YOU FOR USING MIDWEST WIRELINE LLC
 785-625-3858

Your Midwest Wireline Crew

Engineer: T. Martin
 Operator:
 Operator:
 Operator:

This Log Record Was Witnessed By

Primary Witness: Sean Deenihan
 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 (207-MW)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (307-11)	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					
DIL-M&W (507)			18.25	3.50	220.00	
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: satchell_winchester a #5-22.db: field/well/StkMI/pass3.1
 Total length: 42.33 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\satchell_winchester a #5-22.db
 Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	114	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	-5	-2.5	20	70	Off	3835

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

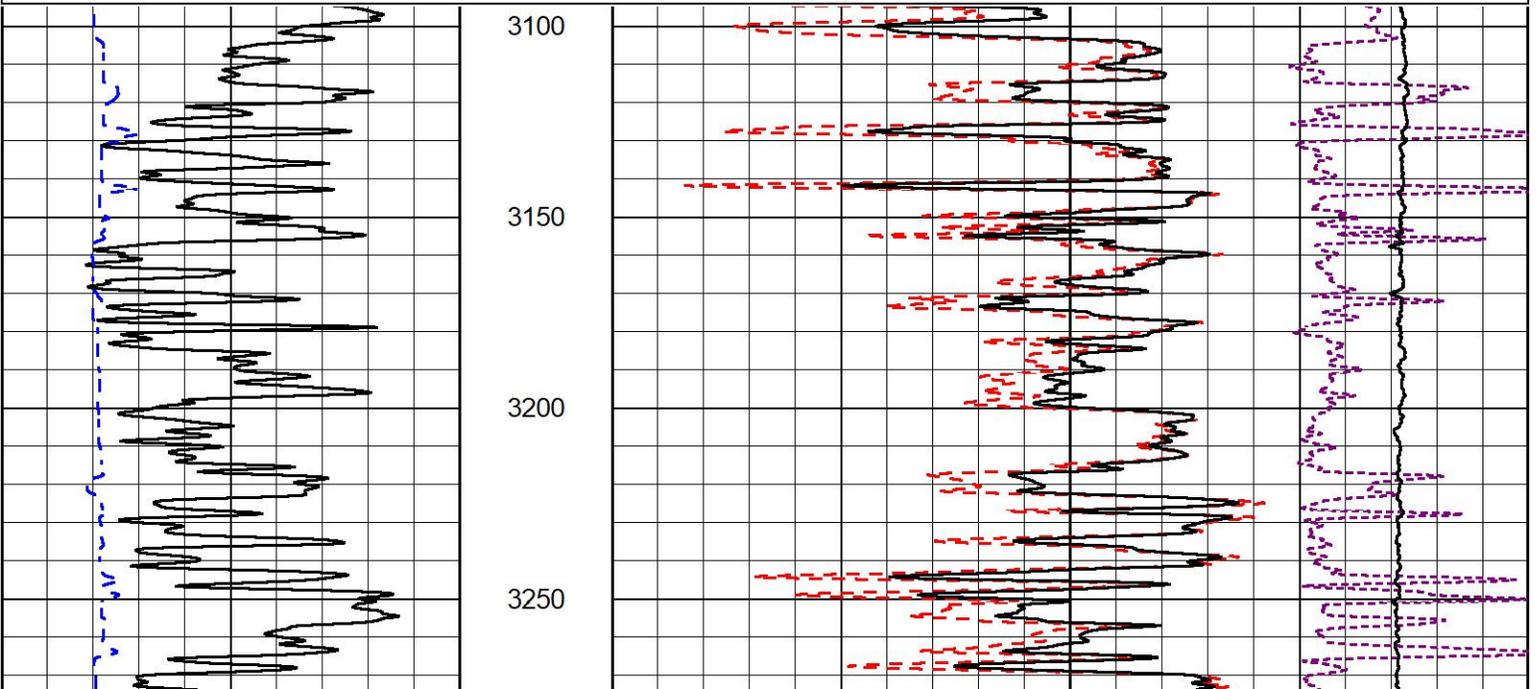


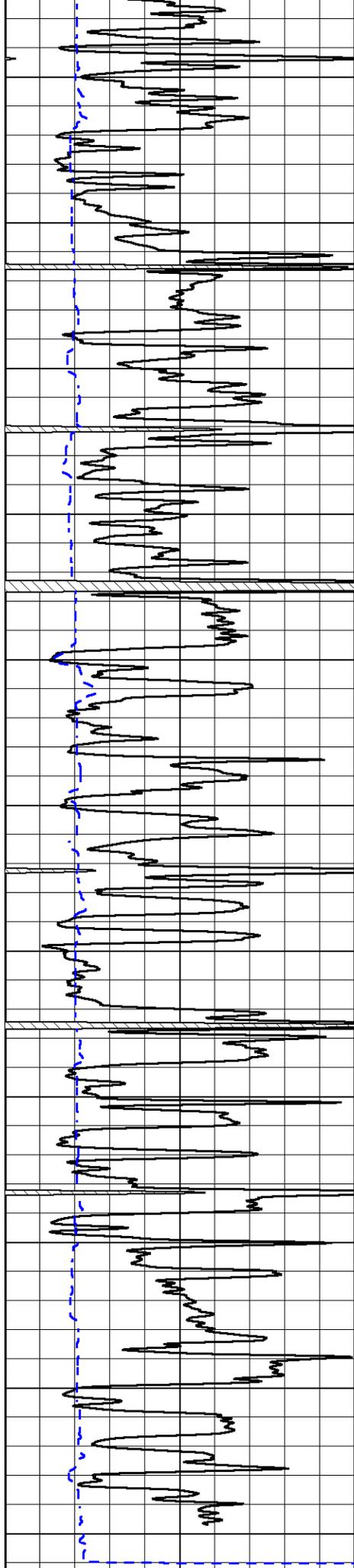
2" SCALE BULK DENSITY

MAIN PASS

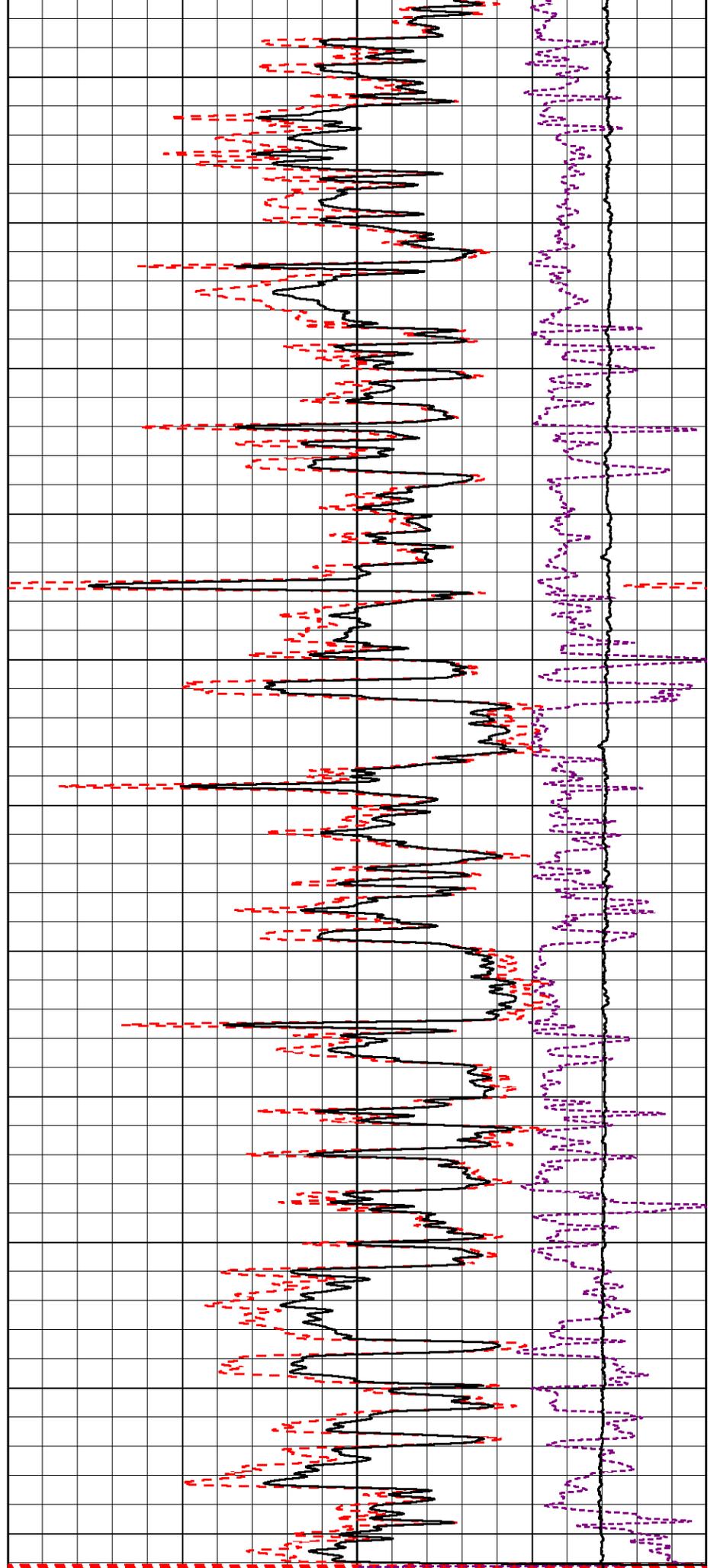
Database File satchell_winchester a #5-22.db
 Dataset Pathname StkMI/pass3.3
 Presentation Format _cdl
 Dataset Creation Mon Jun 19 04:04:17 2023
 Charted by Depth in Feet scaled 1:600

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





3300
3350
3400
3450
3500
3550
3600
3650
3700
3750
3800



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



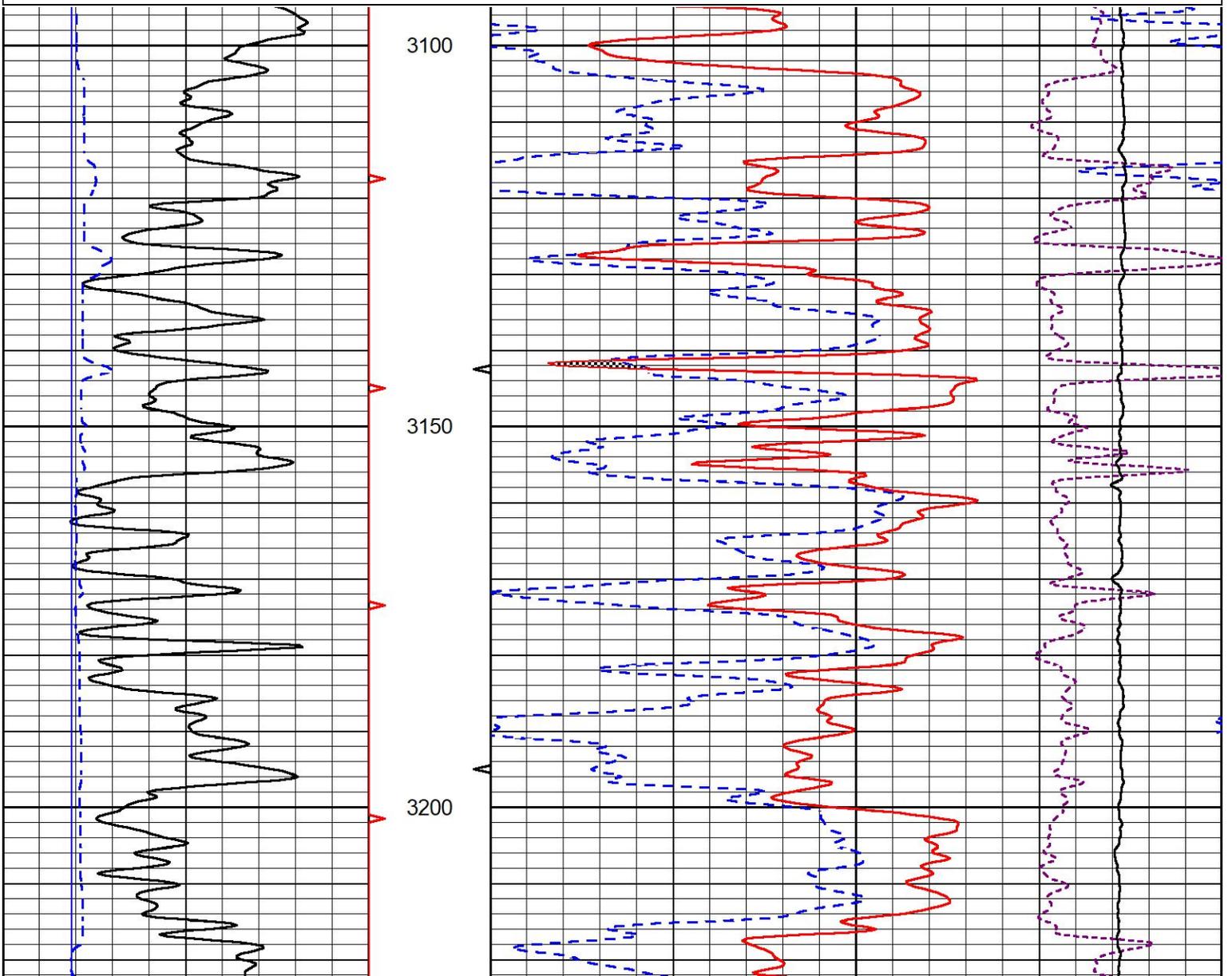
MIDWEST WIRELINE

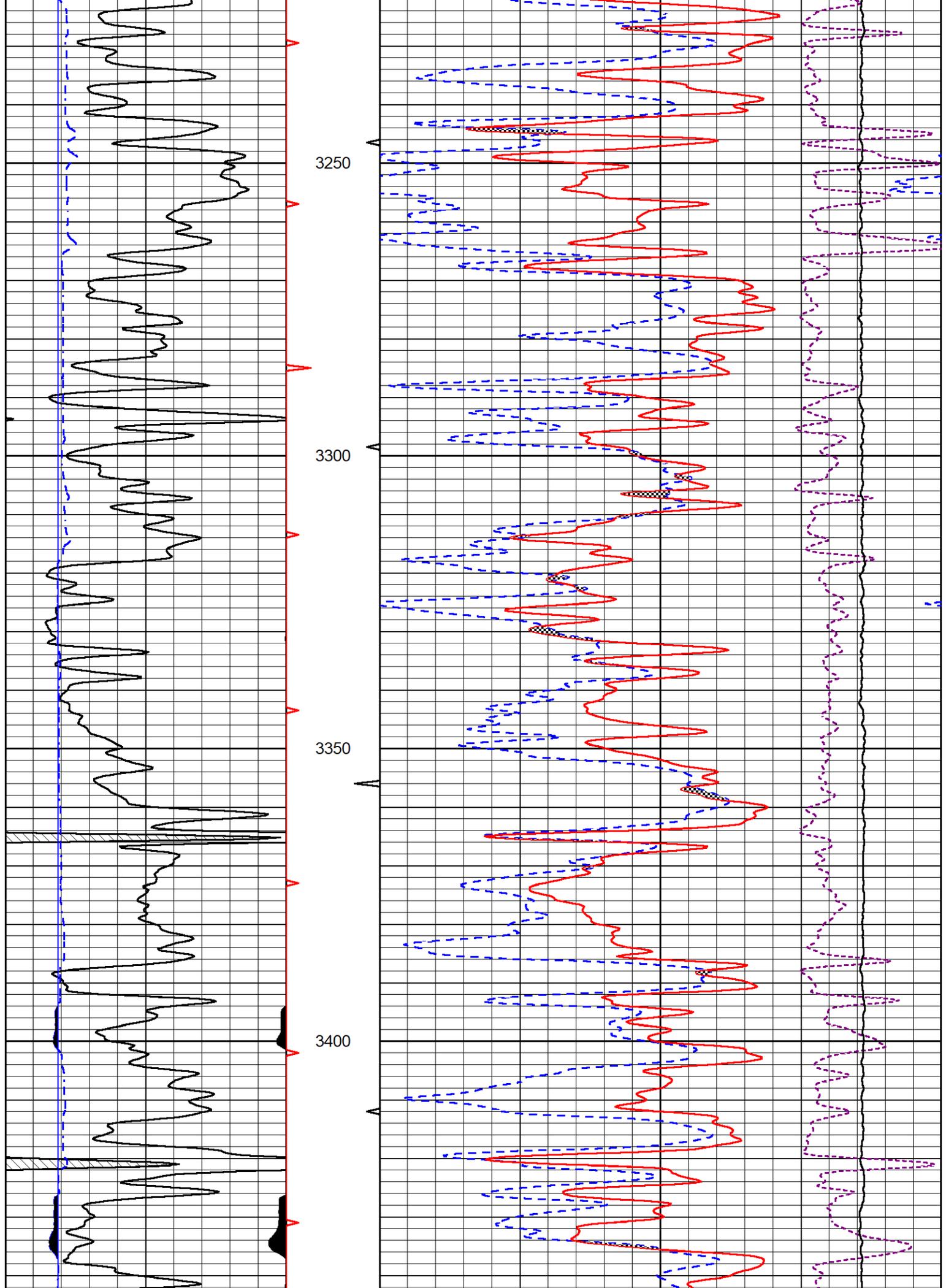
DETAIL SECTION

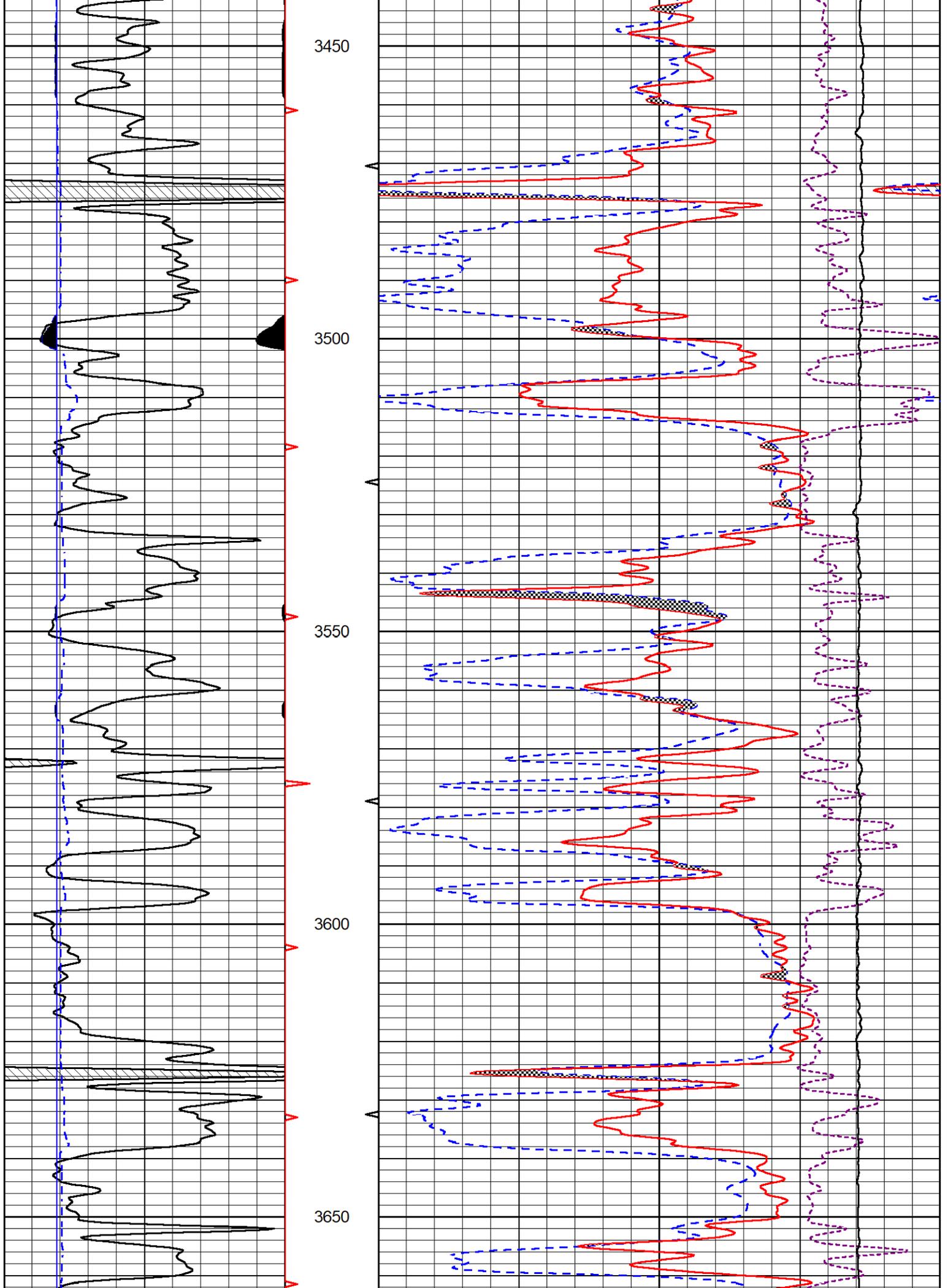
MAIN PASS

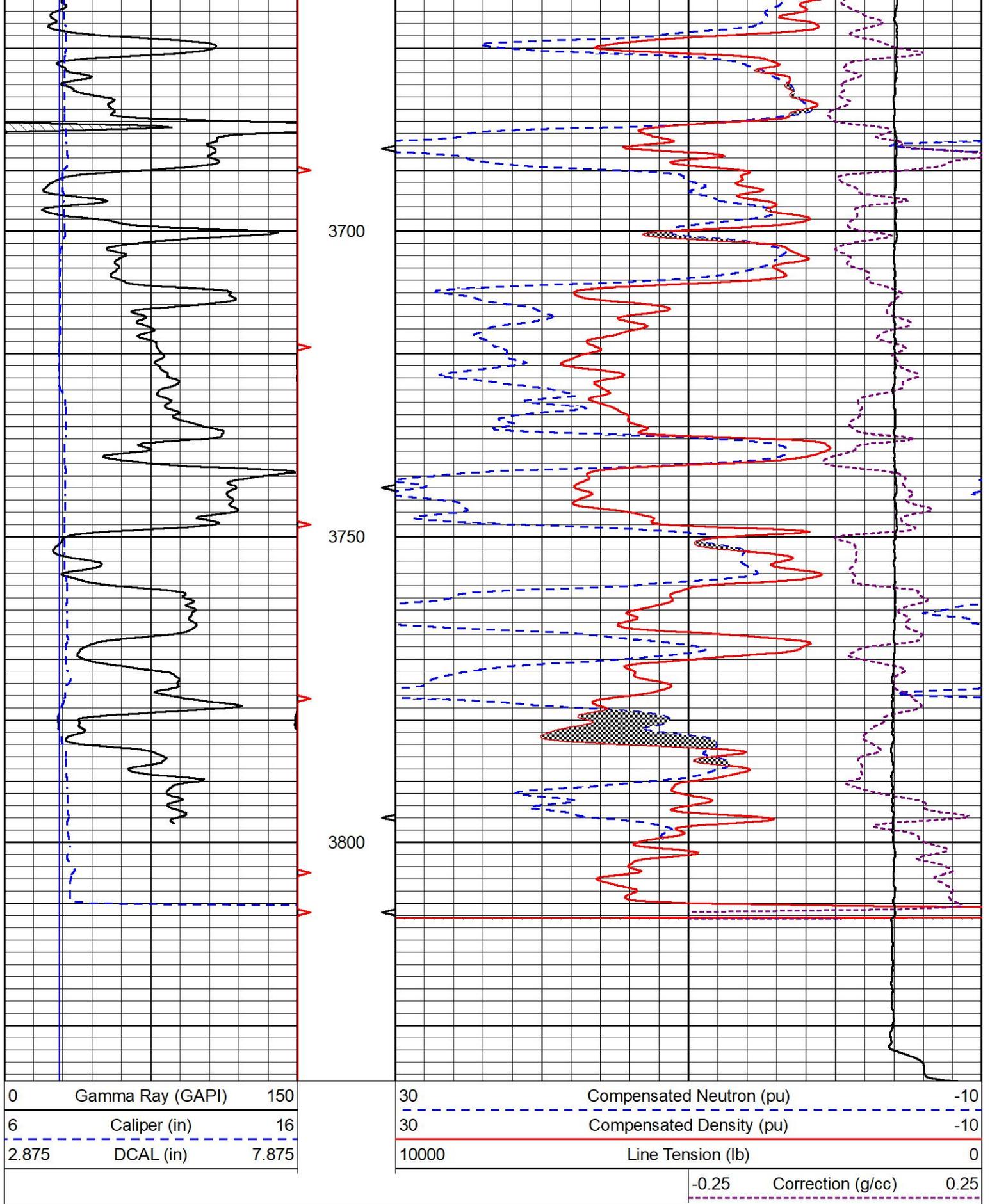
Database File satchell_winchester a #5-22.db
 Dataset Pathname StkMI/pass3.1
 Presentation Format _CNDLS~1
 Dataset Creation Mon Jun 19 04:36:21 2023
 Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	30	Compensated Neutron (pu)	-10
6	Caliper (in)	16	30	Compensated Density (pu)	-10
2.875	DCAL (in)	7.875	10000	Line Tension (lb)	0
				-0.25 Correction (g/cc)	0.25









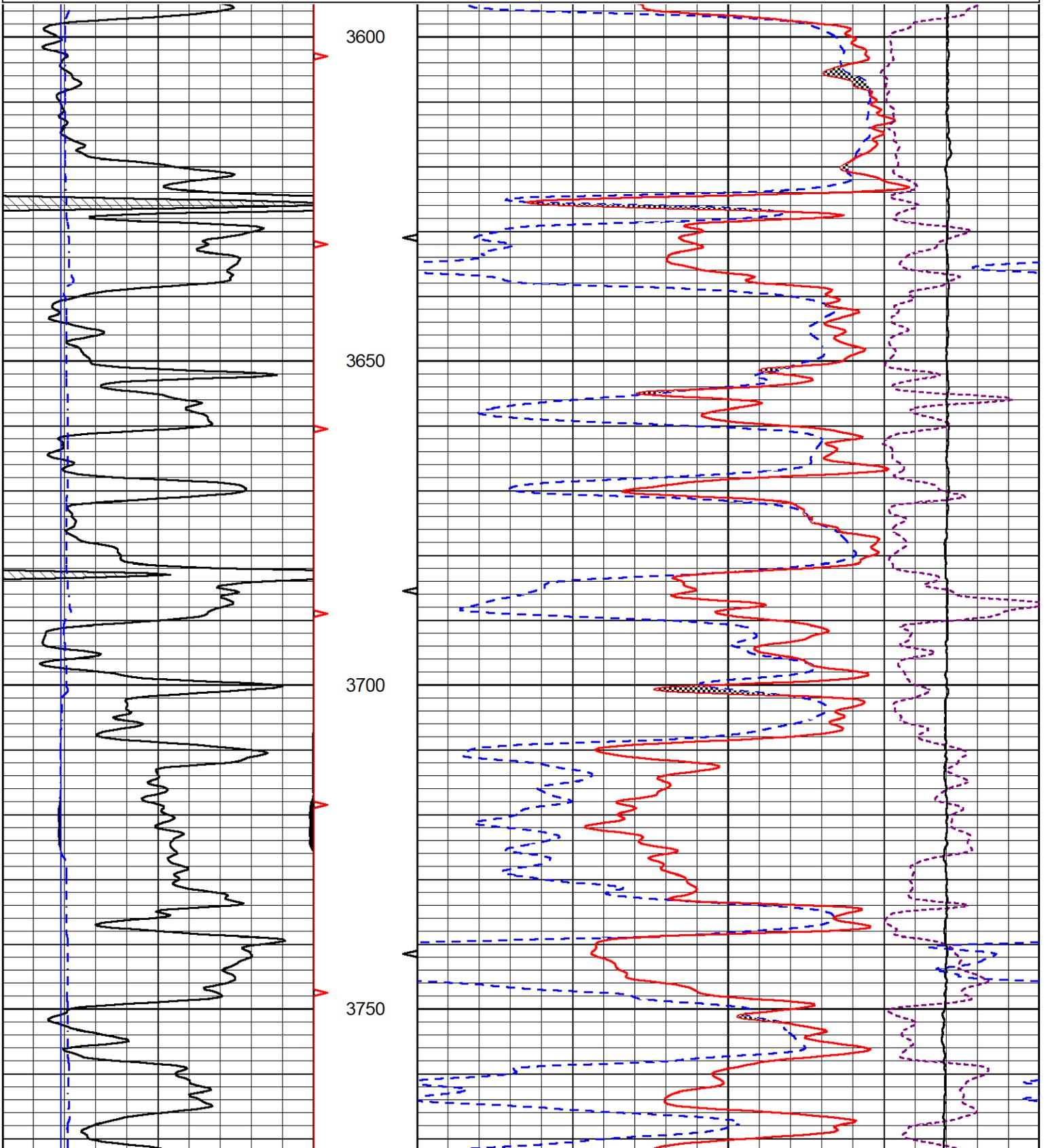
REPEAT SECTION

REPEAT PASS

Database File satchell_winchester a #5-22.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Mon Jun 19 03:59:45 2023
 Charted by Depth in Feet scaled 1:240

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



Master Calibration					
	Density		Far Detector	Near Detector	
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		
	Size		Reading		
Small Ring	6.00	in	1.16		
Large Ring	18.00	in	1.01		

Before Survey Verification					
	Target		Measured		
		g/cc		g/cc	
		g/cc		g/cc	
		g/cc		g/cc	

After Survey Verification					
	Target		Measured		
		g/cc		g/cc	
		g/cc		g/cc	
		g/cc		g/cc	

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	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:	Fri Dec 3 15:10:46 2021	
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	Winchester A #5-22
Field	Alda South
County	Graham
State	Kansas