



MIDWEST WIRELINE

# DUAL COMP POROSITY LOG

Company Satchell Creek Petroleum, LLC  
 Well Worcester A #7-21  
 Field Alda South  
 County Graham  
 State Kansas

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 Well Worcester A #7-21  
 Field Alda South  
 County Graham State Kansas

Location: API #: 15-065-24256-00-00  
 SEC 21 TWP 7S RGE 22W  
 SW NE SW NW  
 1833 FNL & 766 FWL  
 Permanent Datum Ground Level Elevation 2340  
 Log Measured From Kelly Bushing  
 Drilling Measured From Kelly Bushing  
 Other Services  
 DIL  
 MEL/BHCS  
 K.B. 2348  
 D.F.  
 G.L. 2340

Date	6/6/2023						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4010						
Depth Logger	4010						
Bottom Logged Interval	3981						
Top Logged Interval	3100						
Type Fluid In Hole	Chemical Mud						
Salinity, PPM CL	2200						
Density	9.4						
Level	Full						
Max. Rec. Temp. F	116						
Operating Rig Time	5 Hours						
Equipment -- Location	P-108 HAYS						
Recorded By	Justin Trout						
Witnessed By	Pat Deenihan						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	268	8.625	23	0	268
Two	7.875	268	TD				
Casing Record							

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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.


Hill City, Ks,  
 East to 310, North to V Rd  
 1/2 West, South and West into

Log Measured From: Kelly Bushing 8 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: Justin Trout	Operator:	Primary Witness: Pat Deenihan	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Case No.	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (103)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (210)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (303-03)	8.50	4.00	250.00
ML-PSI STKBL ML (402)			7.58	4.00	65.00	
MCAL MI MN	19.58 19.58 19.58					
RLL3F RLL3	15.50 15.50					
DIL-M&W (505 HT)			18.25	3.50	220.00	
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: satchell creek\_worcester a #7-21 .db: field/well/STKML/pass3  
 Total length: 42.33 ft  
 Total weight: 685.00 lb  
 O.D.: 4.00 in



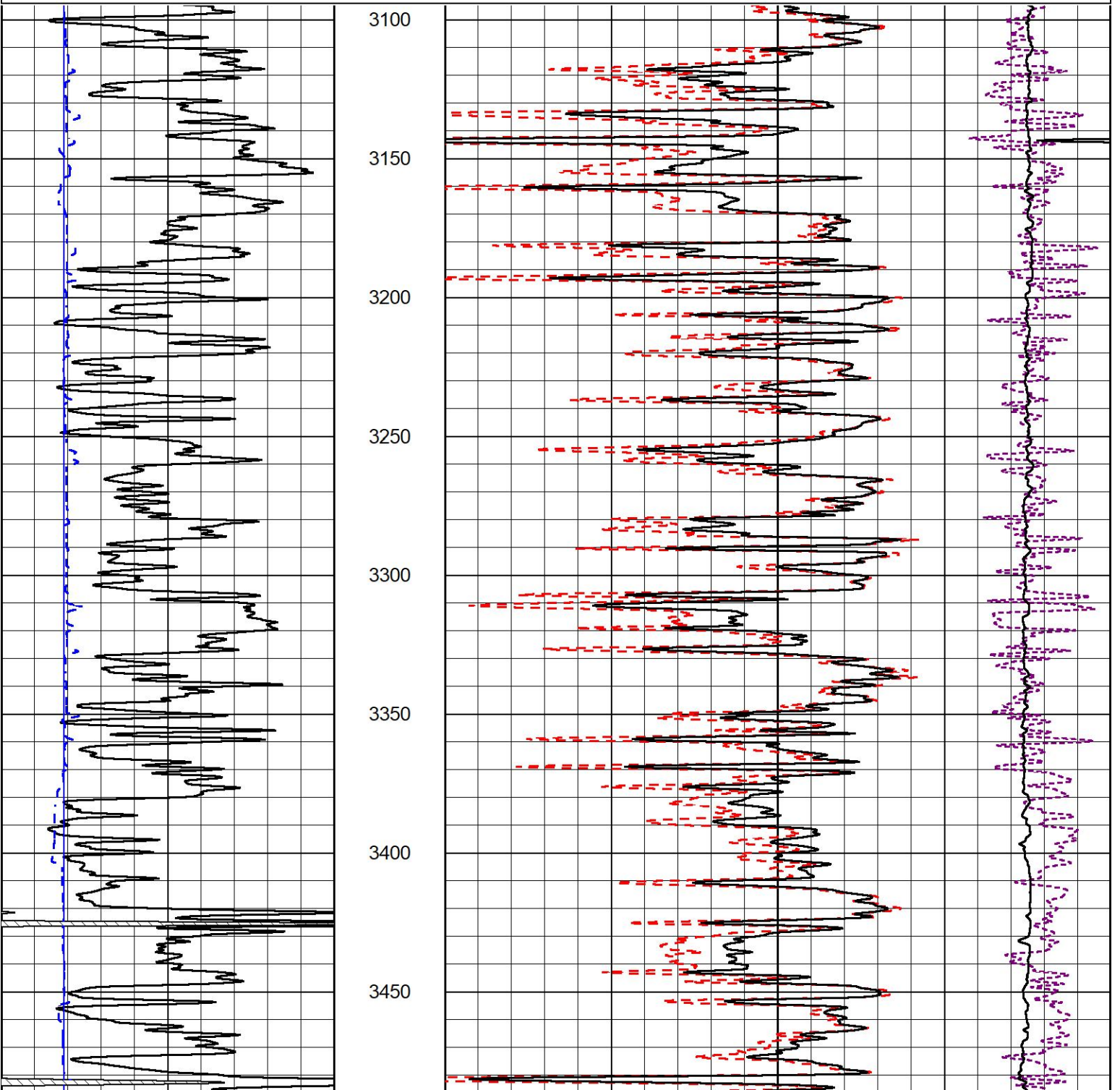
# 2" SCALE BULK DENSITY

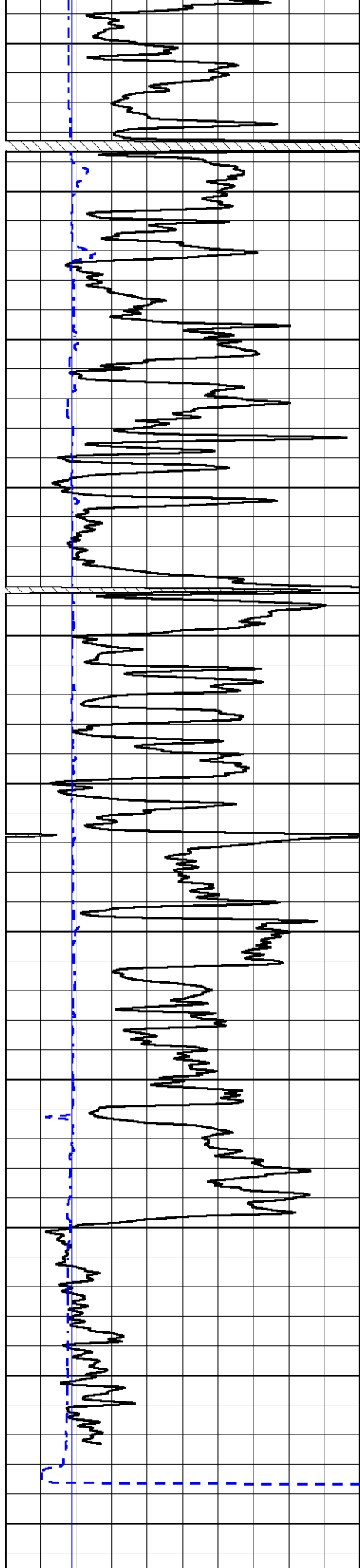
## MAIN PASS

Database File      satchell creek\_worcester a #7-21 .db  
 Dataset Pathname    STKML/pass3.2  
 Presentation Format    \_cdl  
 Dataset Creation      Tue Jun 06 09:18:11 2023  
 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





3500

3550

3600

3650

3700

3750

3800

3850

3900

3950

4000

0

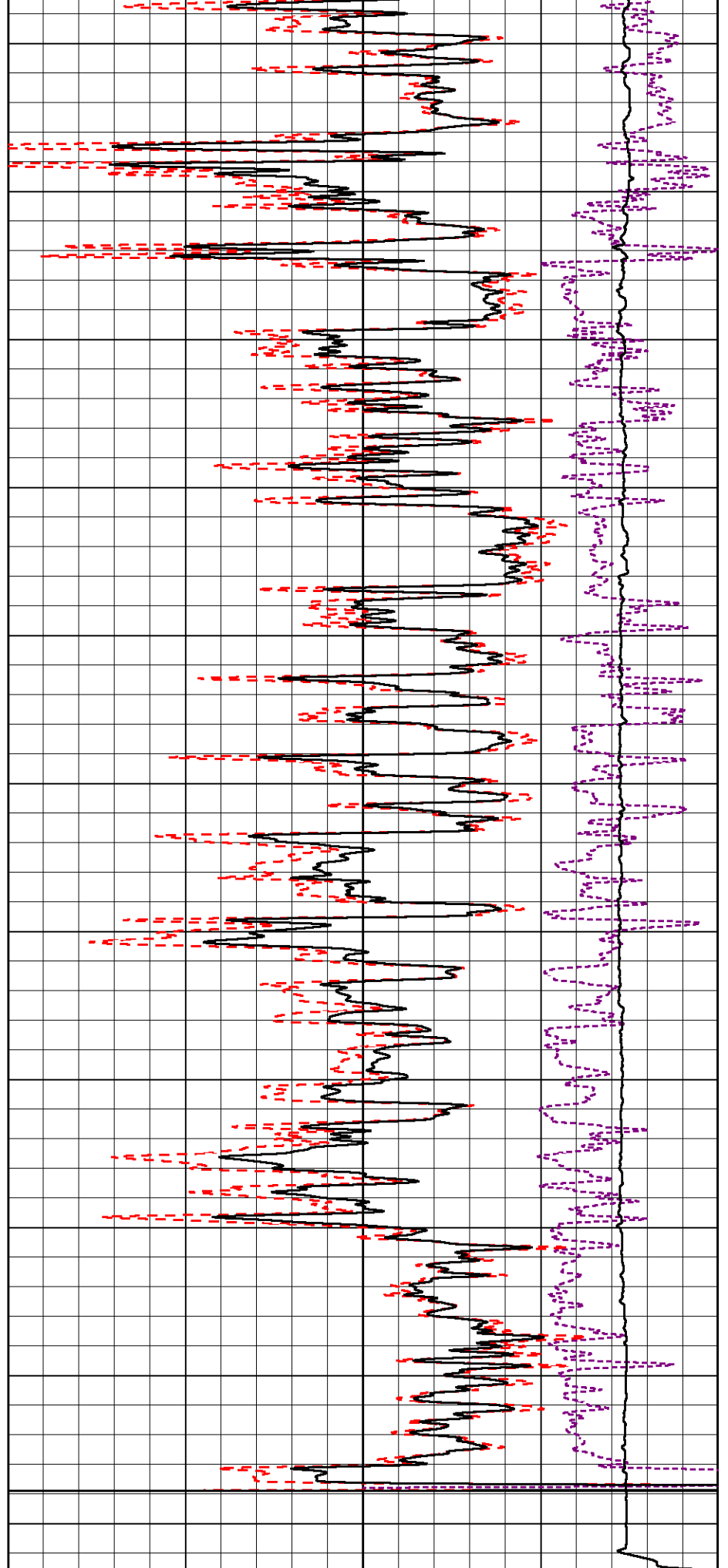
Gamma Ray (GAPI)

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



MIDWEST WIRELINE

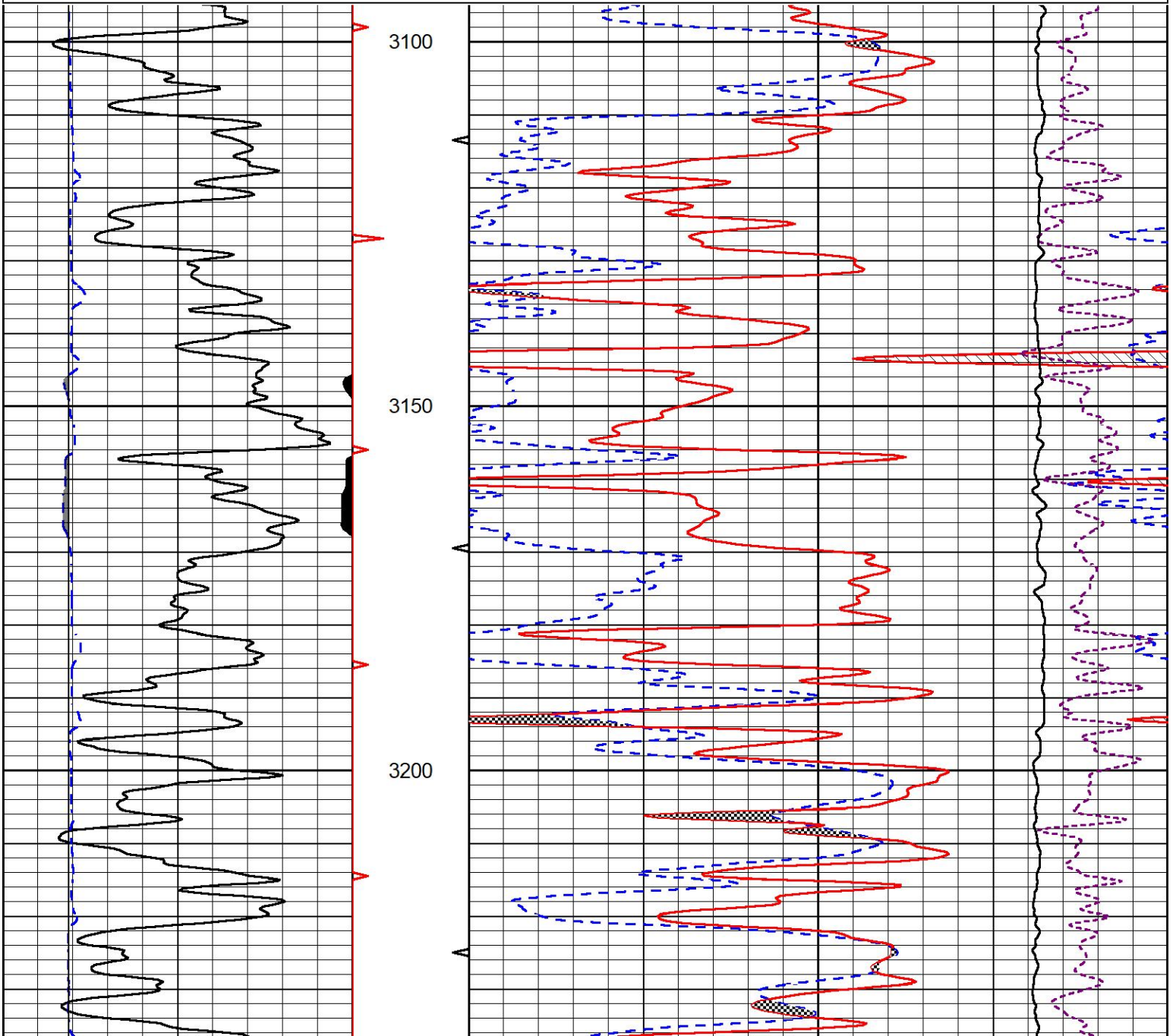
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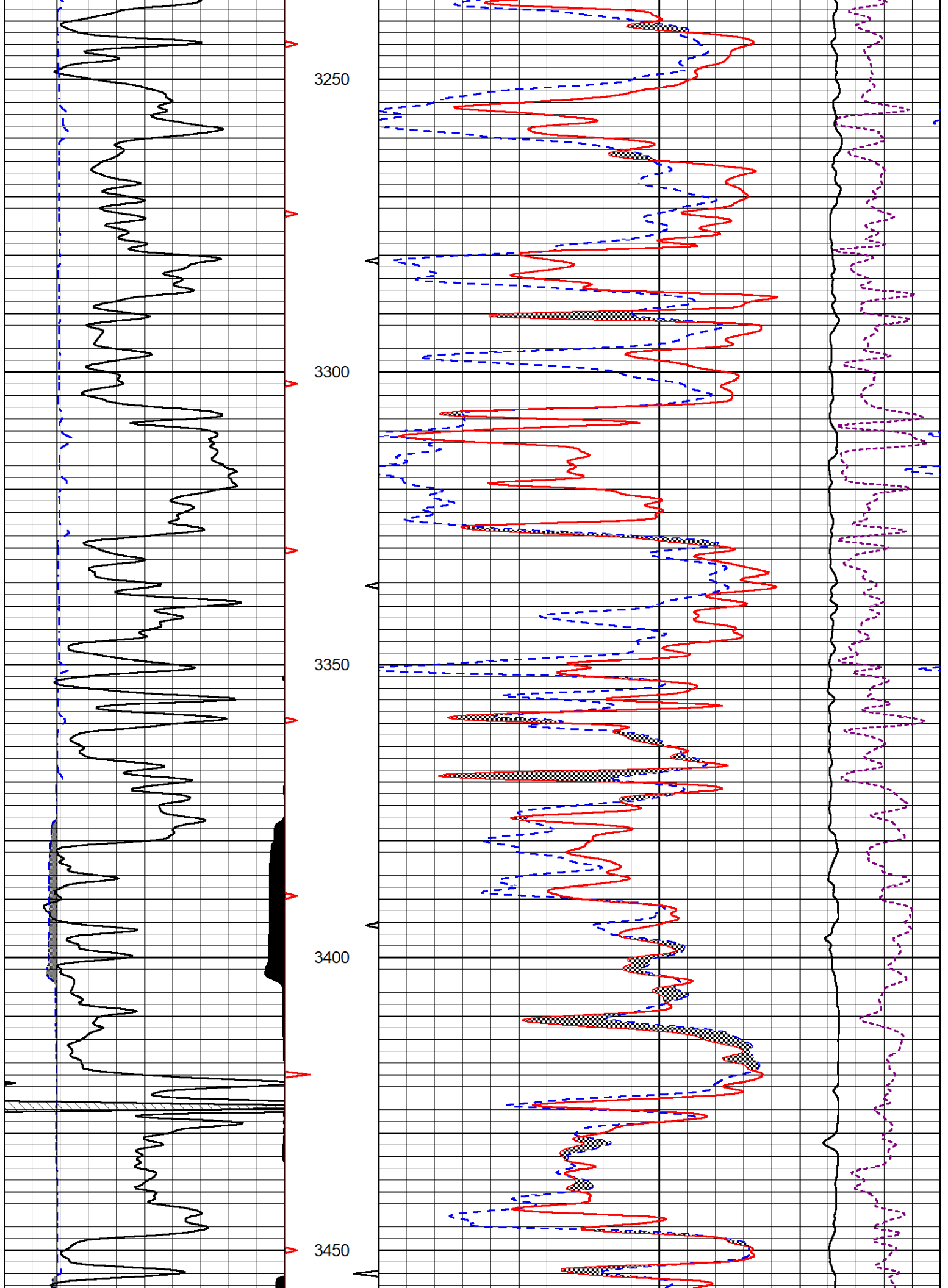
## MAIN PASS

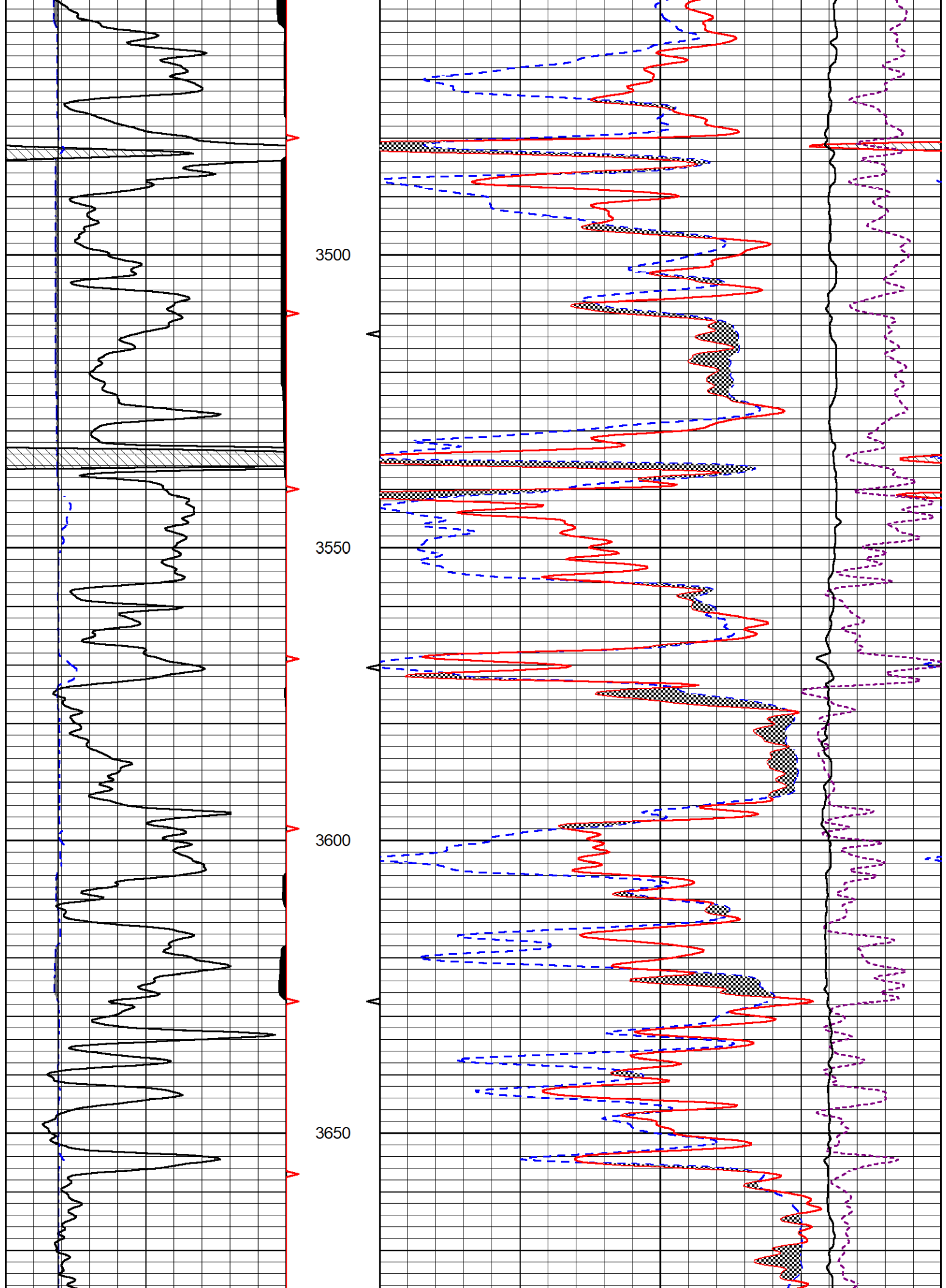
Database File satchell creek\_worcester a #7-21 .db  
 Dataset Pathname STKML/pass3.1  
 Presentation Format \_CNDLS~1  
 Dataset Creation Tue Jun 06 09:04:42 2023  
 Charted by Depth in Feet scaled 1:240

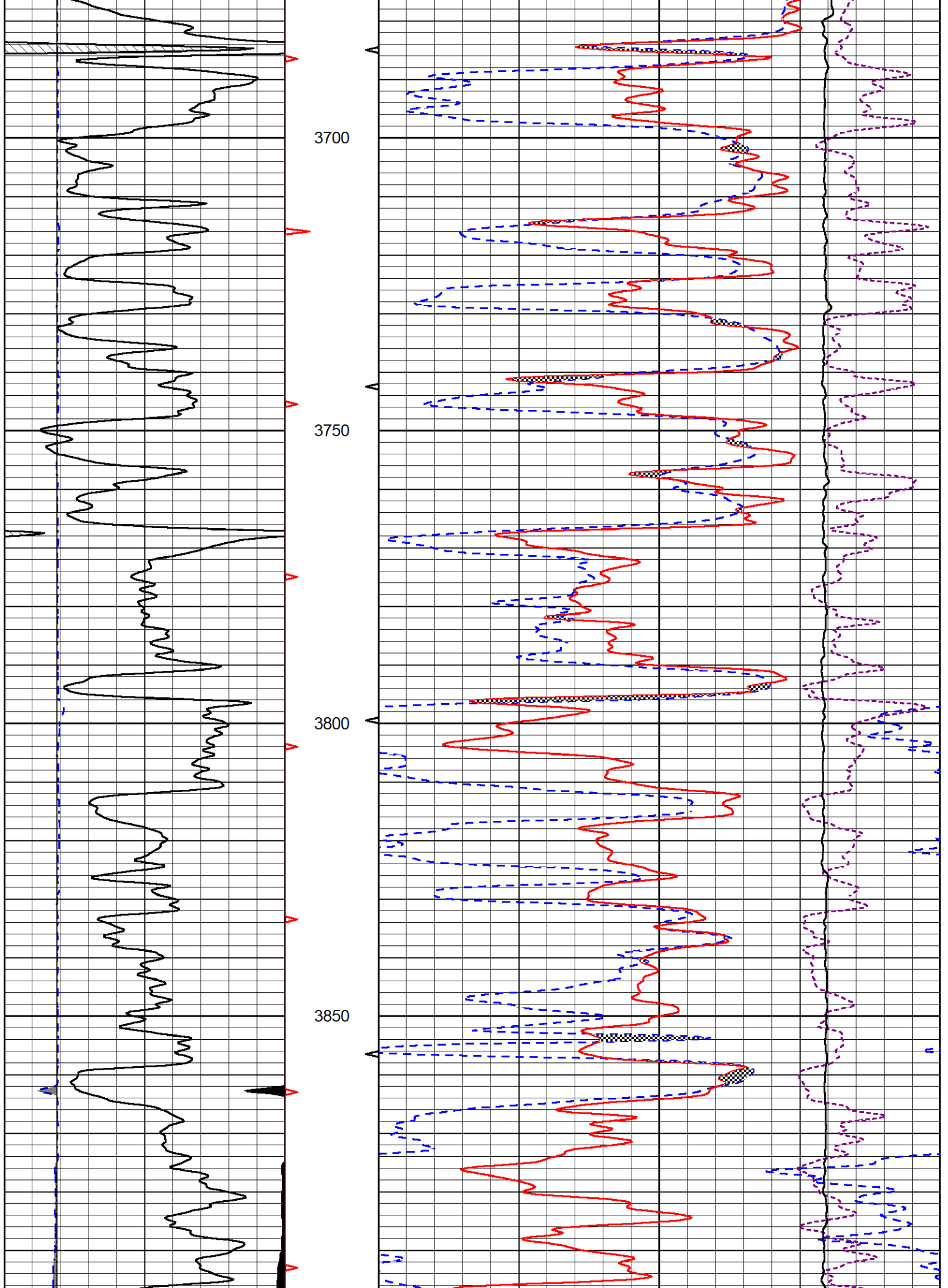
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

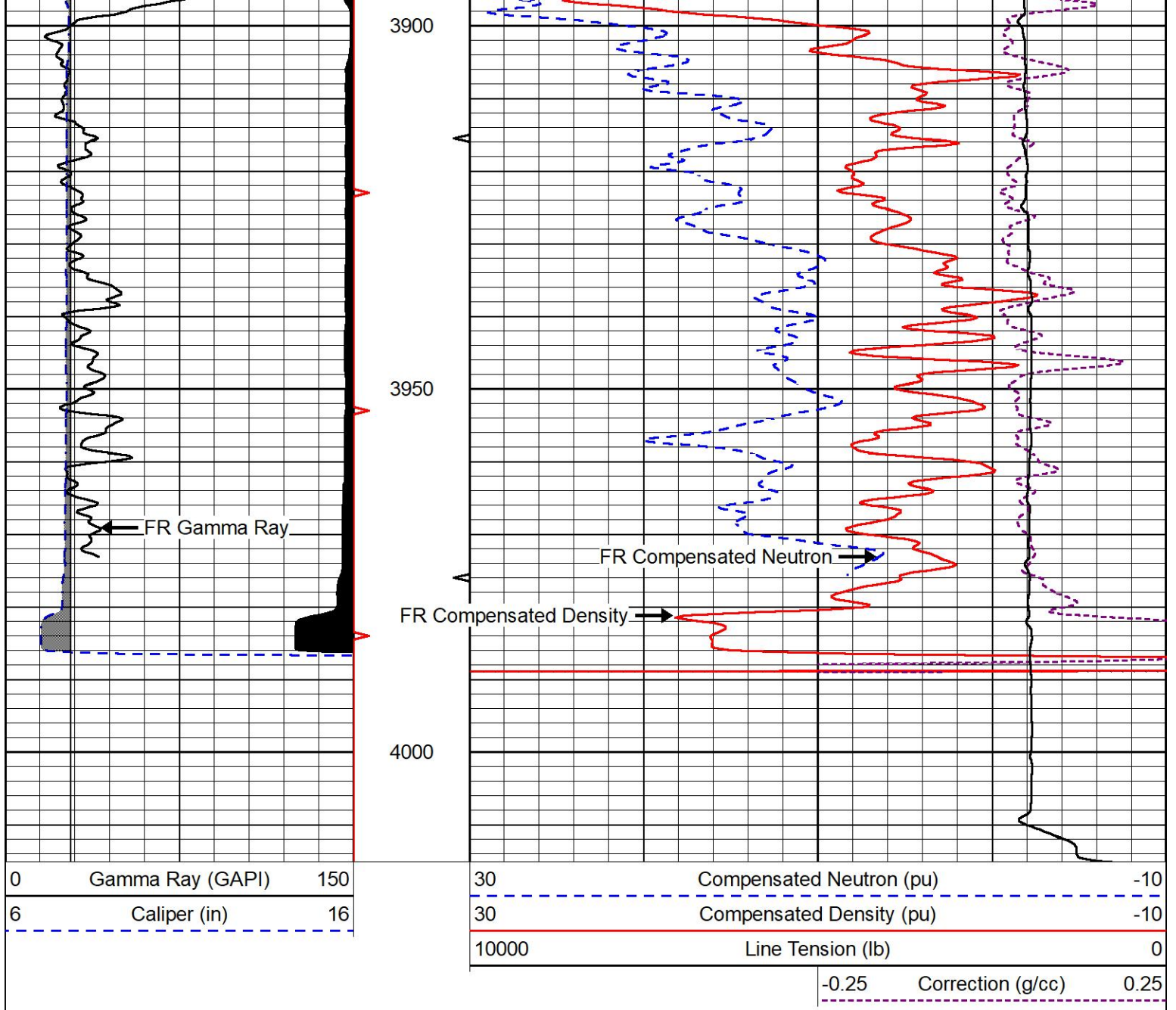
30	Compensated Neutron (pu)	-10
30	Compensated Density (pu)	-10
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25







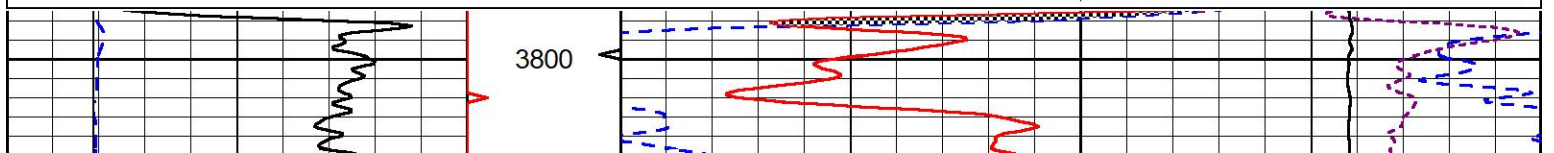
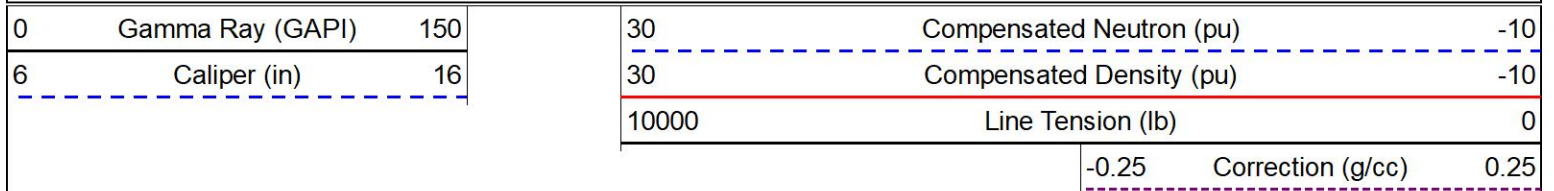


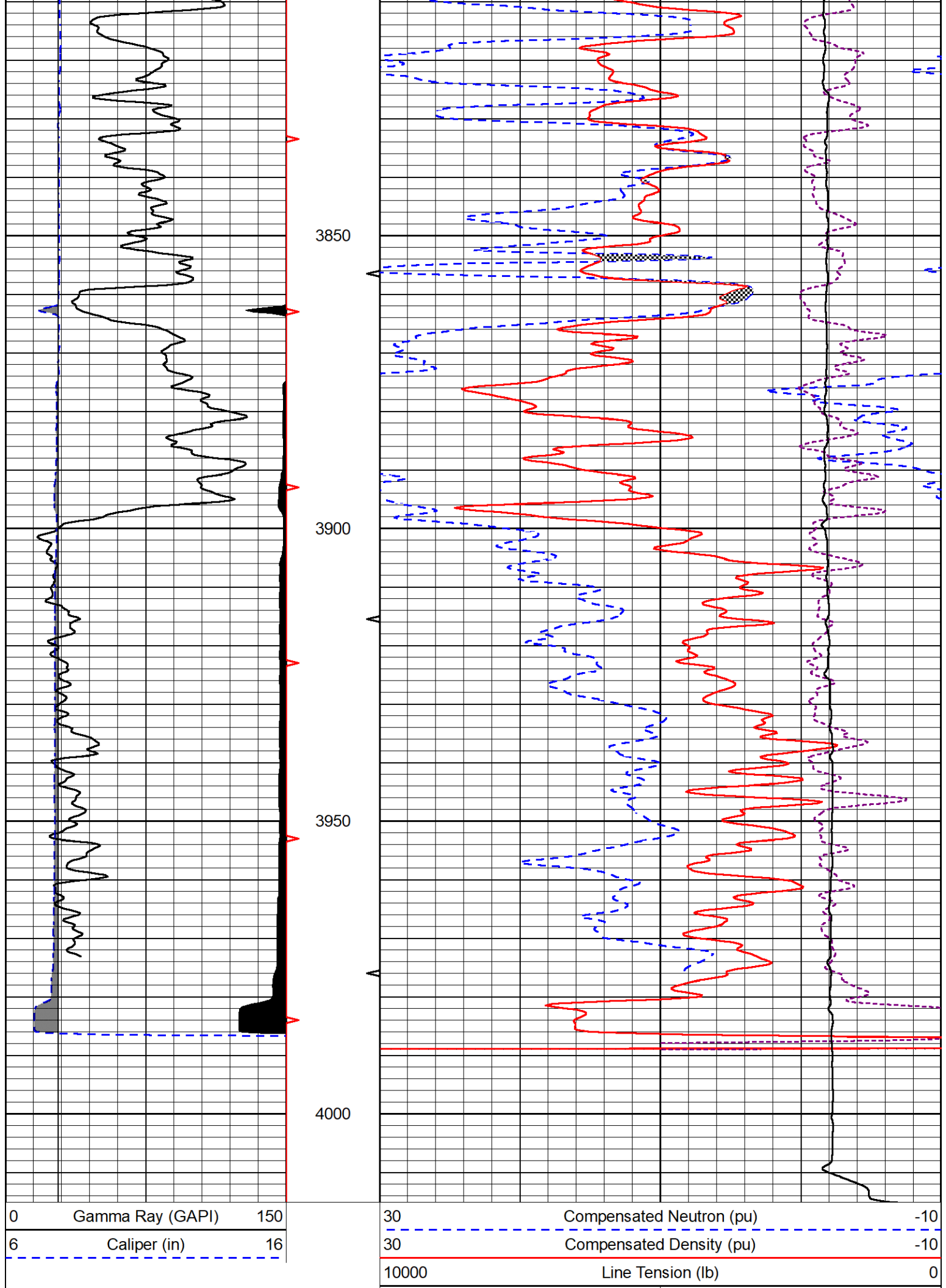


# REPEAT SECTION

## REPEAT PASS

Database File satchell creek\_worcester a #7-21 .db  
 Dataset Pathname STKML/pass2.1  
 Presentation Format \_CNDLS~1  
 Dataset Creation Tue Jun 06 09:19:16 2023  
 Charted by Depth in Feet scaled 1:240





3850

3900

3950

4000

0 Gamma Ray (GAPI) 150

6 Caliper (in) 16

30 Compensated Neutron (pu) -10

30 Compensated Density (pu) -10

10000 Line Tension (lb) 0

Calibration Report

Database File satchell creek\_worcester a #7-21 .db  
 Dataset Pathname STKML/pass3.16  
 Dataset Creation Tue Jun 06 07:40:51 2023

Dual Induction Calibration Report

Serial-Model: 505 HT-M&W  
 Surface Cal Performed: Thu May 18 09:03:46 2023

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	167.000	835.000	0.000	255.800	mmho/m	0.475	-49.000
Medium	1348.000	1348.000	0.000	255.800	mmho/m	0.410	-35.500

Microlog Calibration Report

Serial-Model: 402-PSI STKBL ML  
 Performed: Thu Apr 13 09:19:45 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	14500.0000	-0.7000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	16000.0000	-0.1000
Caliper	1.0046	1.1419	5.5000	20.0000	in	50.0000	-44.5750

Compensated Density Calibration Report

Serial-Model: 303-03-M&W  
 Source #: 21170B  
 Master Calibration Performed: Tue May 16 07:41:35 2023

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3841.78	5151.73	cps
Aluminum	2.635	g/cc	700.98	3068.49	cps
Spine Angle = 73.06			Density/Spine Ratio = 0.495		
	Size		Reading		
Small Ring	4.00	in	1.17		
Large Ring	14.00	in	1.03		

Compensated Neutron Calibration Report

Serial Number: 210  
 Tool Model: M&W

CALIBRATION

Detector	Readings	Target	Normalization
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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:	103	
Tool Model:	M&W	
Performed:	Fri May 26 12:04:43 2023	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5700	GAPI/cps



Company	Satchell Creek Petroleum, LLC
Well	Worcester A #7-21
Field	Alda South
County	Graham
State	Kansas