



DUAL COMP POROSITY LOG

MIDWEST WIRELINE

Company Russell Oil, Inc.		Company Russell Oil, Inc.					
Well Thomas Trust #28-1		Well Thomas Trust #28-1					
Field		Field					
County Logan		County Logan					
State Kansas		State Kansas					
Location: API #: 15-109-21659-00-00		Other Services					
1105 FNL & 1450 FWL		DIL/MEL					
SEC 28 TWP 14S RGE 33W							
Permanent Datum	Ground Level	Elevation	2858				
Log Measured From	Kelly Bushing	K.B.	2863				
Drilling Measured From	Kelly Bushing	D.F.					
		G.L.	2858				
Date	11/30/2022						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4571						
Depth Logger	4574						
Bottom Logged Interval	4545						
Top Logged Interval	3500						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	5000						
Density	9.4						
Level	Full						
Max. Rec. Temp. F	121						
Operating Rig Time	3 Hours						
Equipment -- Location	P-108 HAYS						
Recorded By	D. Schmidt						
Witnessed By	Larry Friend						
Borehole Record		Casing Record					
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	348	8.625	23	0	348
Two	7.875	348	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.

Monument,
20 South to Indian Rd, 1 1/2 East,
South 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: D. Schmidt		Primary Witness: Larry Friend	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

Log Variables

DatabaseC:\ProgramData\Warrior\Data\russell_thomas trust 28-1.db
Dataset field/well/stkml/pass3.2/_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 405	degF 30	Off	ft 4574

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



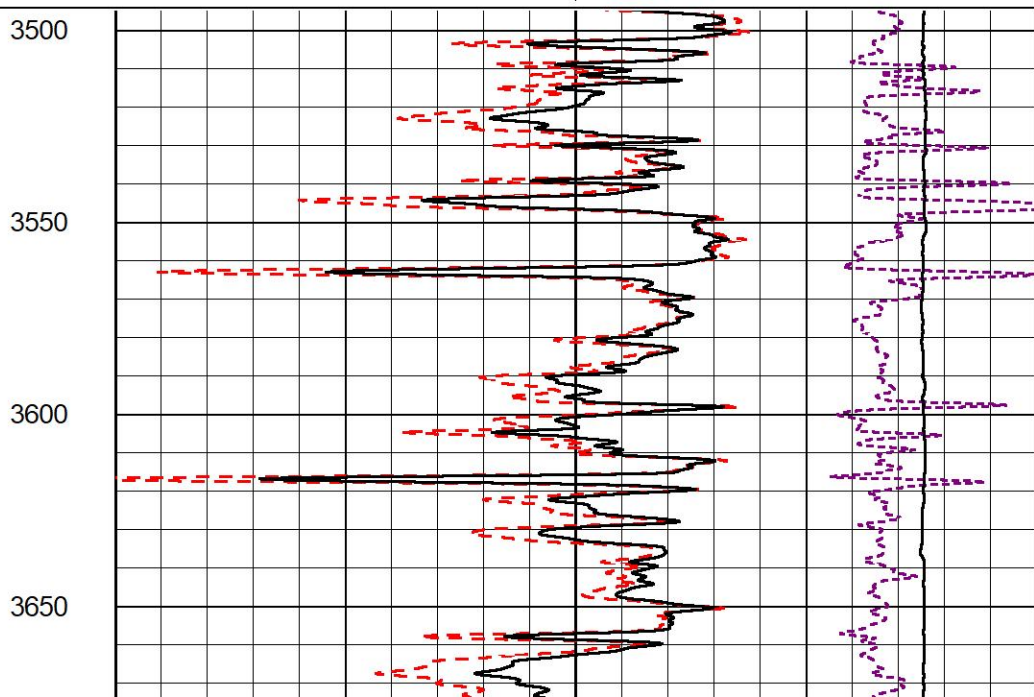
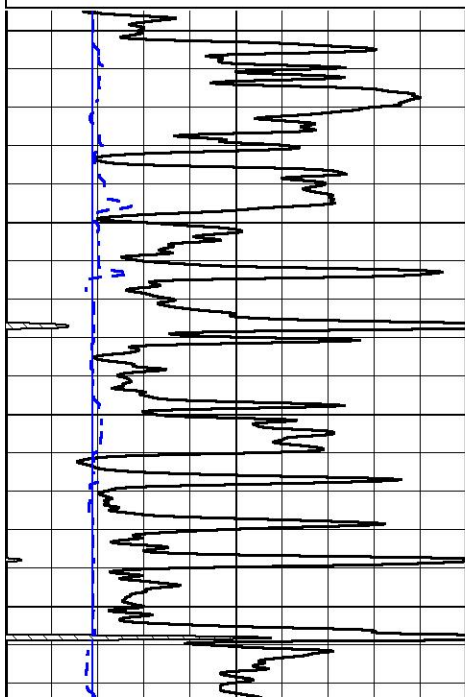
2" SCALE BULK DENSITY

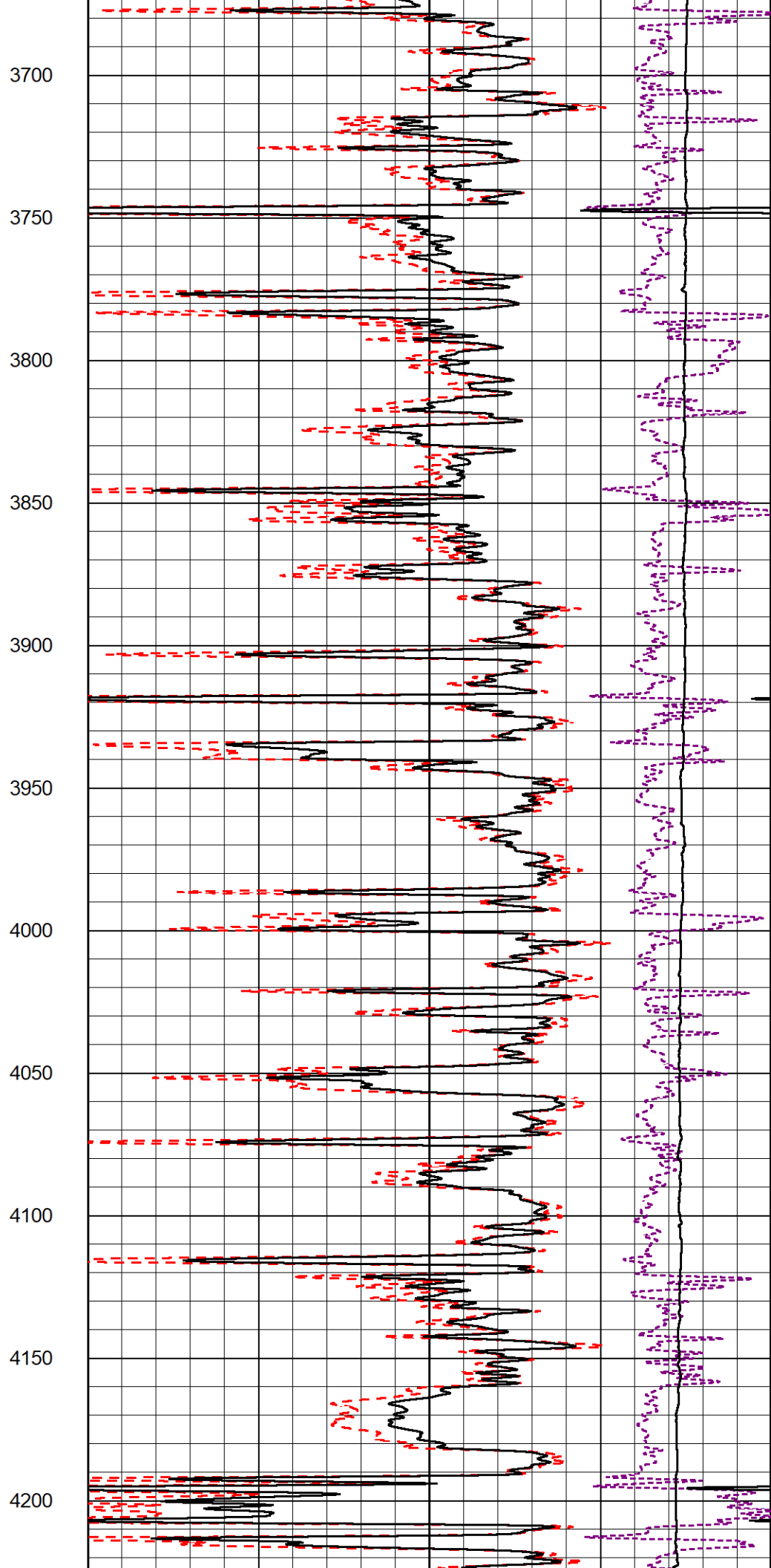
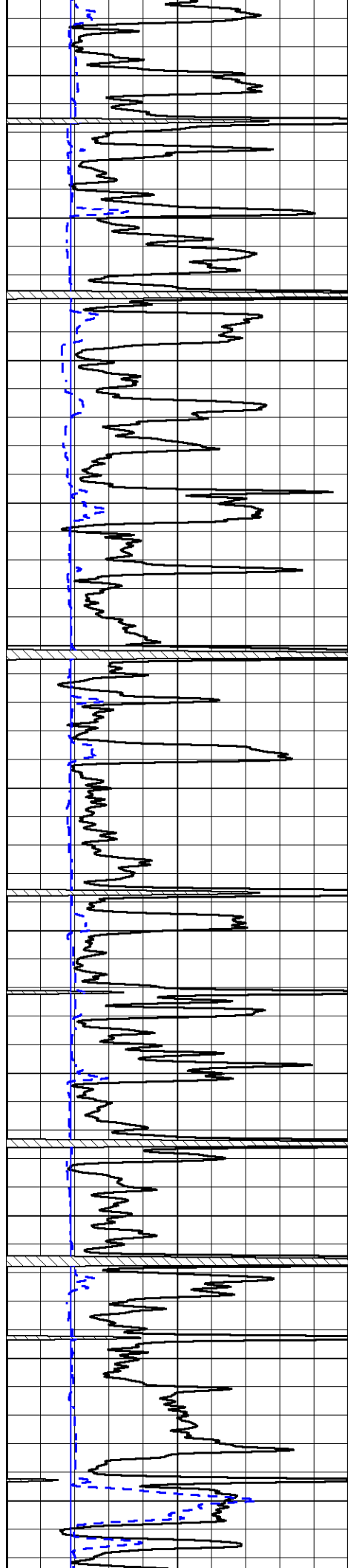
MAIN PASS

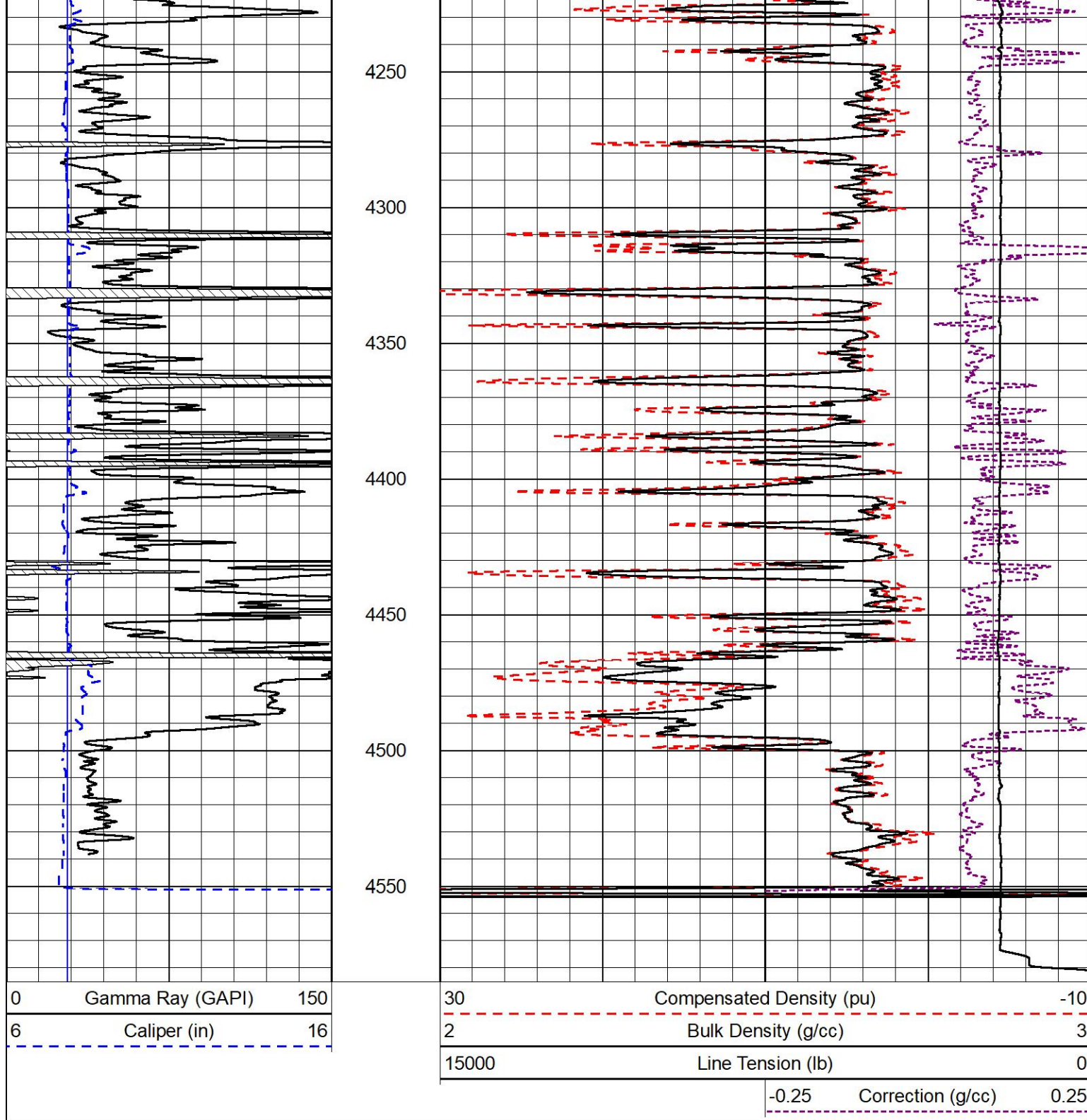
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Dataset Pathname stkml/pass3.2
Presentation Format _cdl
Dataset Creation Wed Nov 30 12:59:42 2022
Charted by Depth in Feet scaled 1:600

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







DETAIL SECTION

MAIN PASS

Database File russell_thomas trust 28-1.db
Dataset Pathname stkml/pass3.15
Presentation Format _CNDLS~1
Dataset Creation Wed Nov 30 12:51:25 2022
Charted by Depth in Feet scaled 1:240

0 GR (GAPI) 150
6 DCAL (in) 16

30 Compensated Neutron (pu) -10
30 Compensated Density (pu) -10

10000

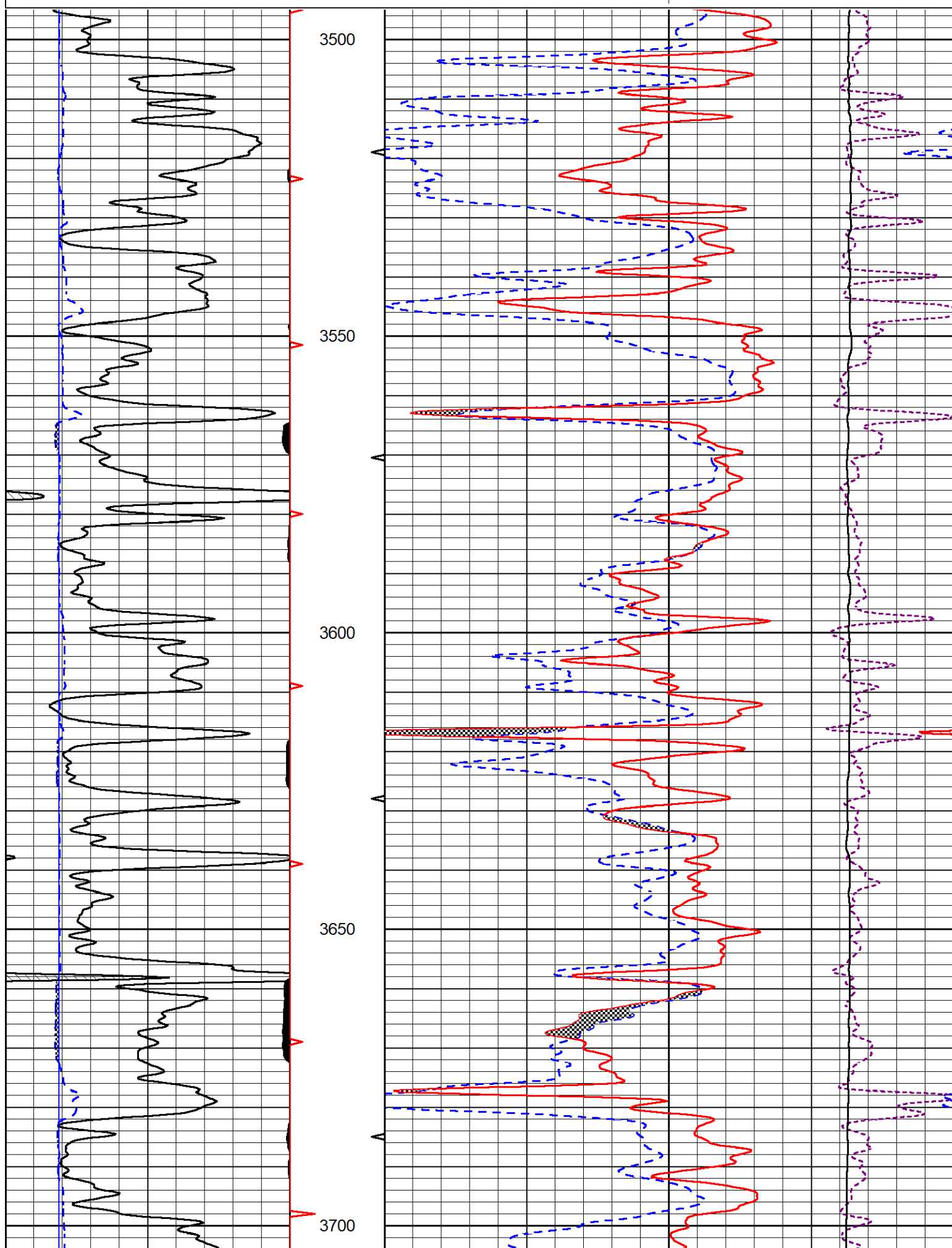
Line Tension (lb)

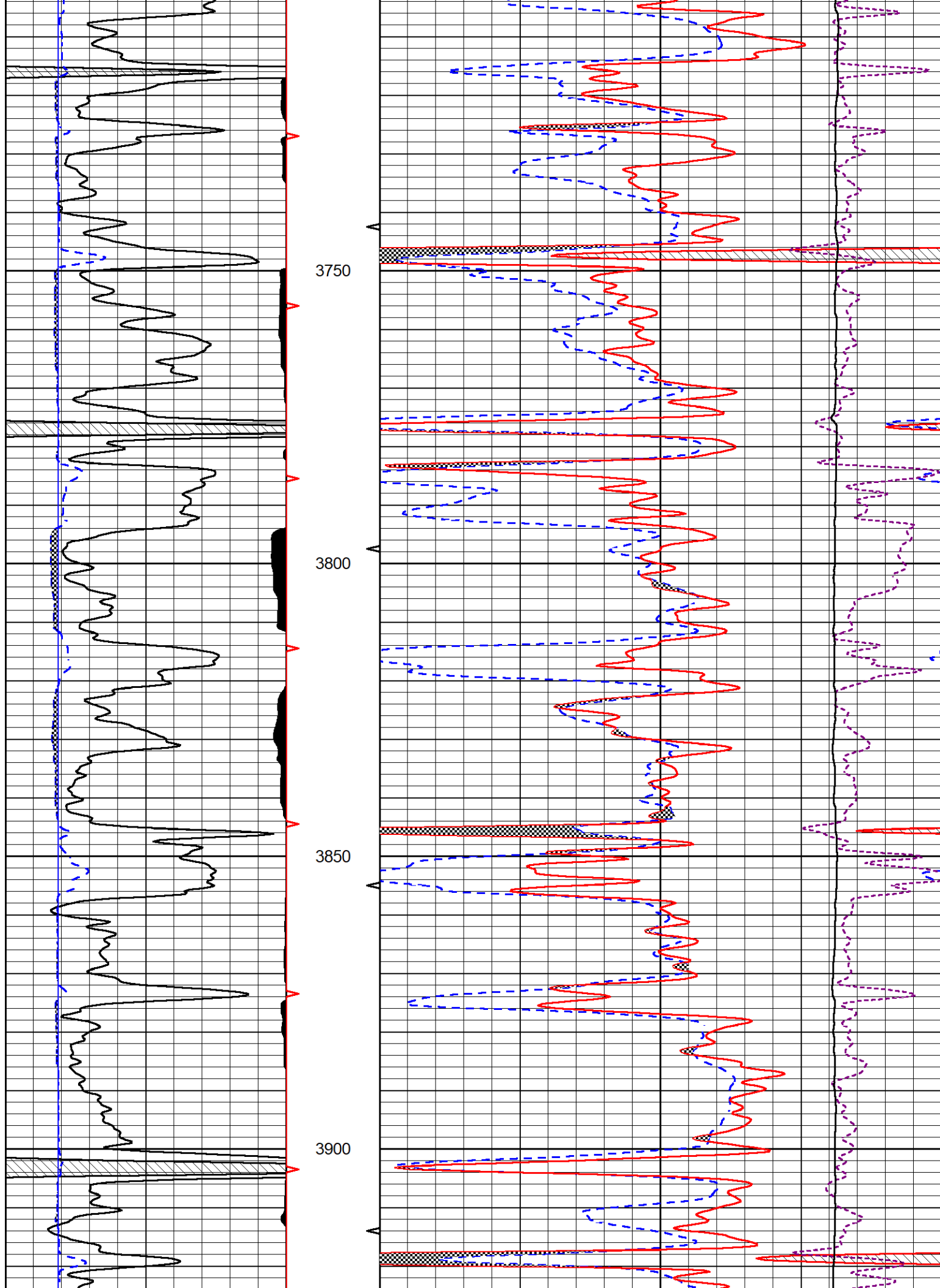
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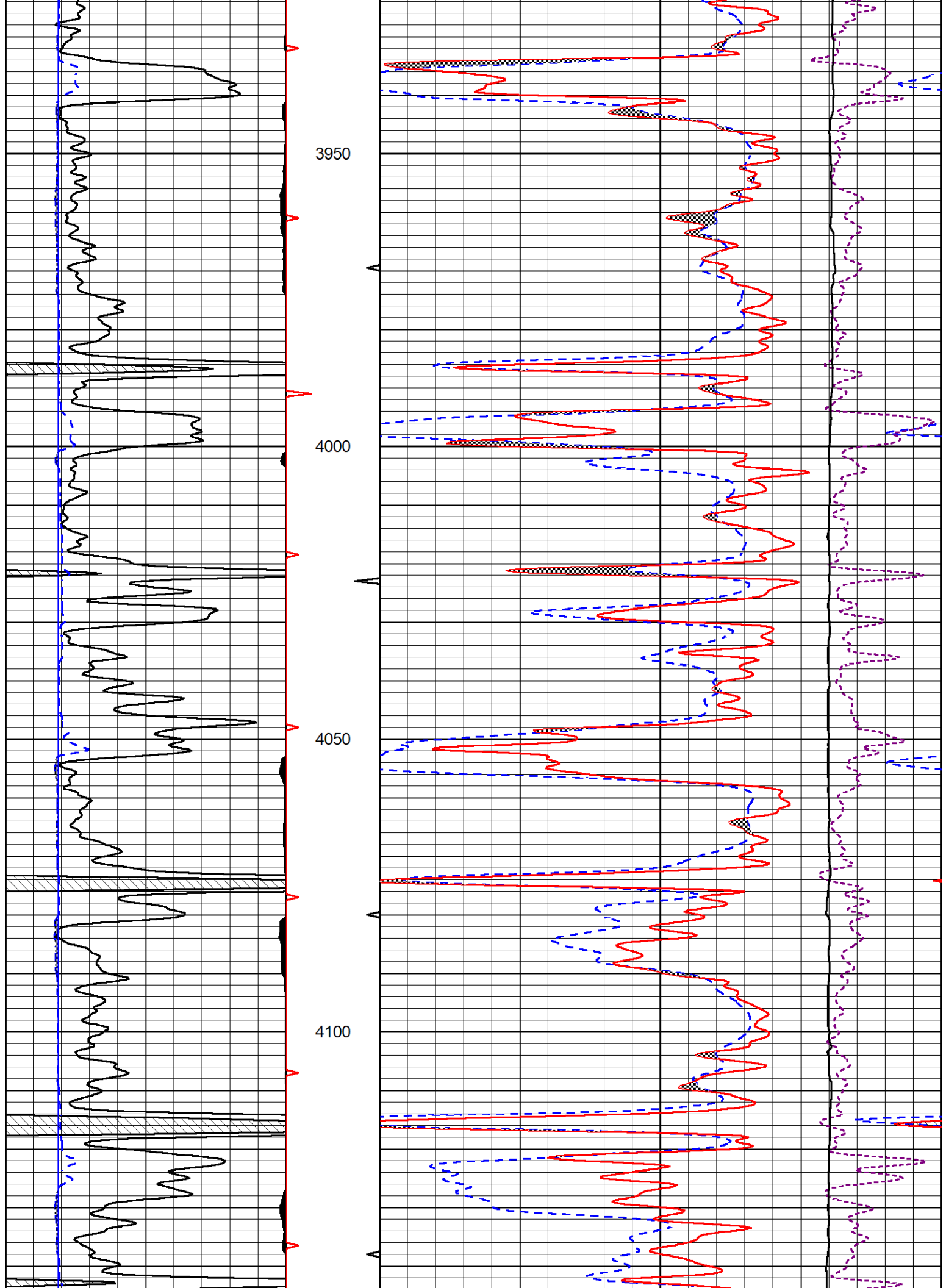
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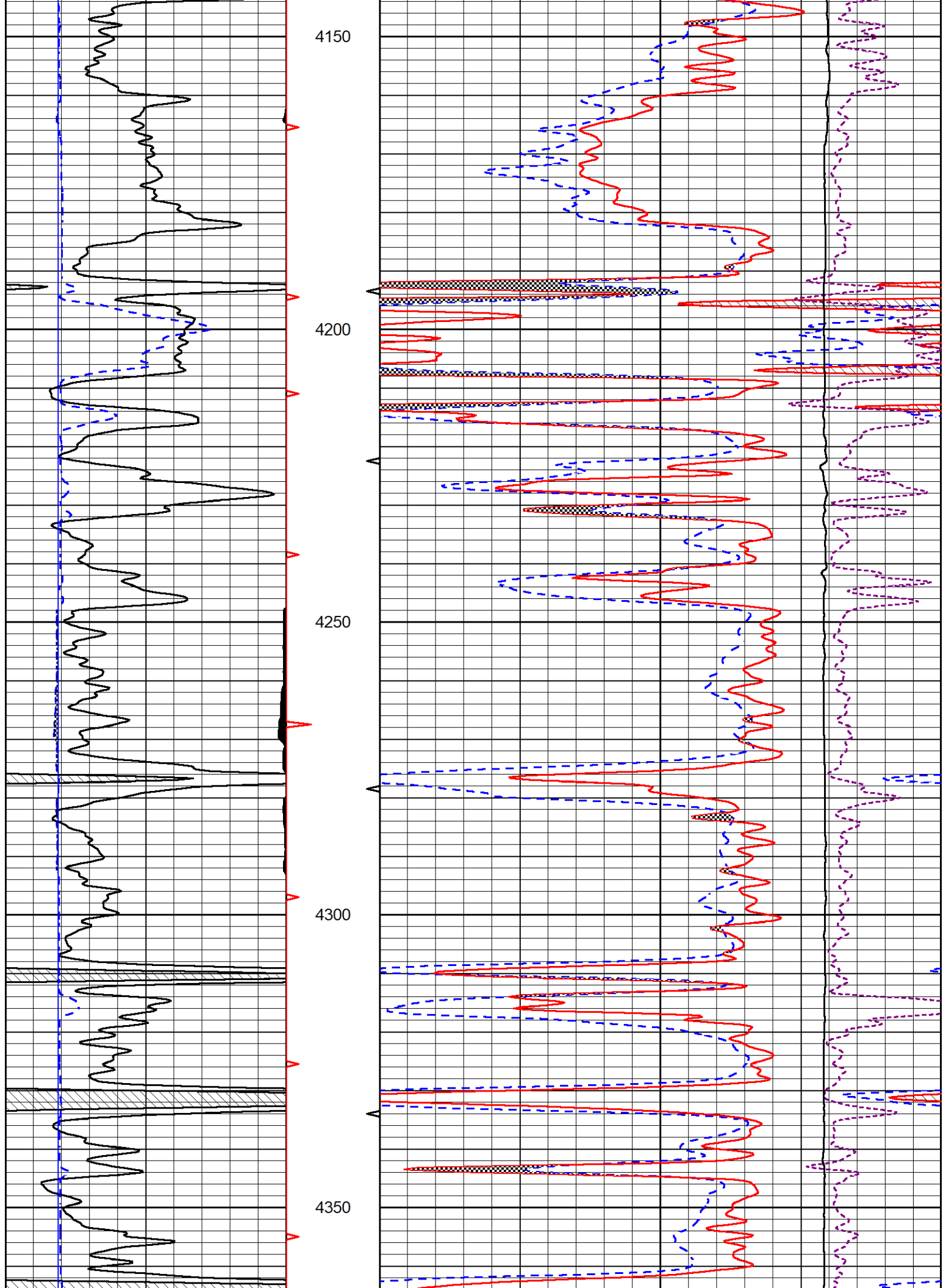
Correction (g/cc)

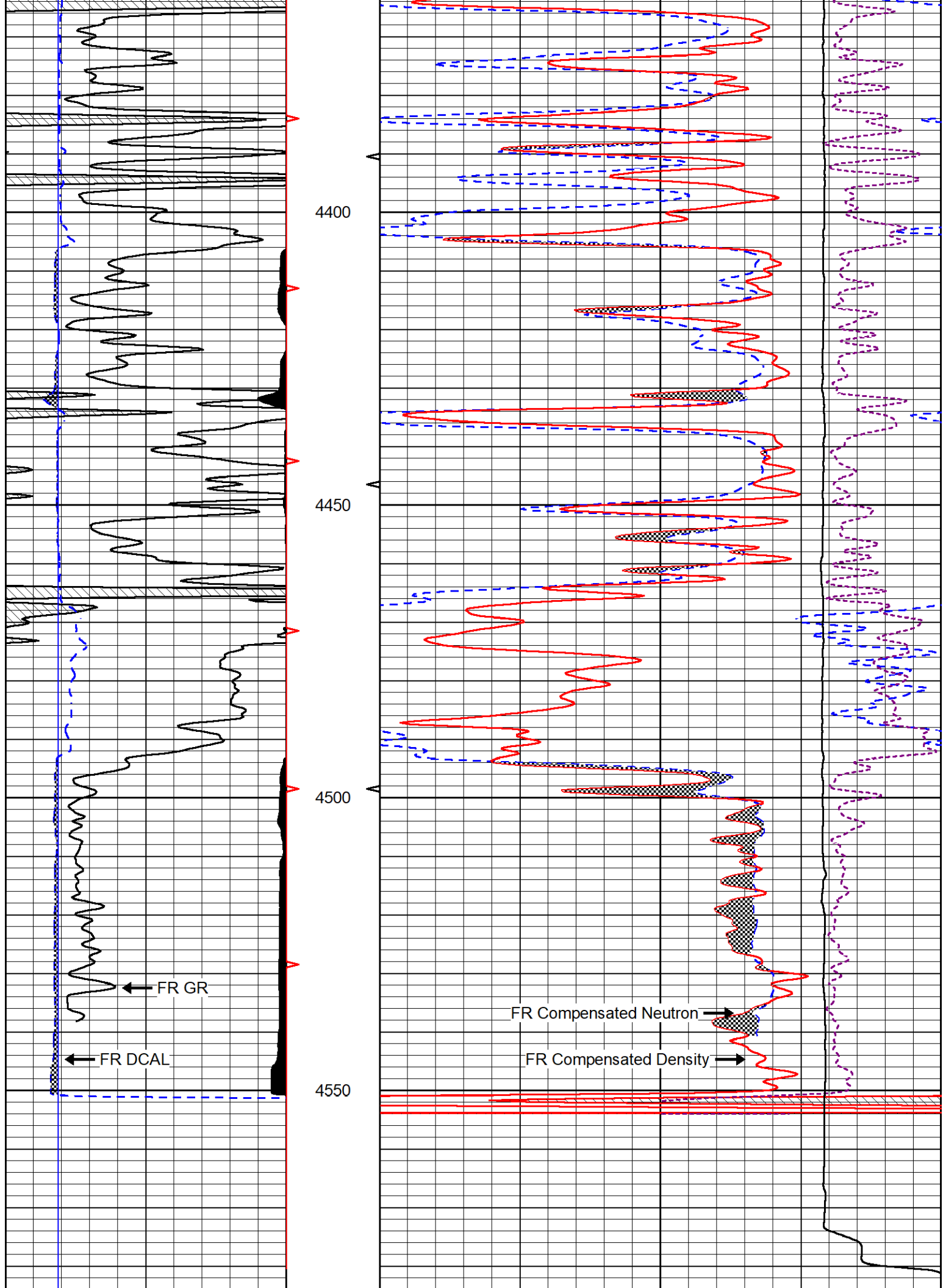
0.25











0	GR (GAPI)	150
6	DCAL (in)	16

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



MIDWEST WIRELINE

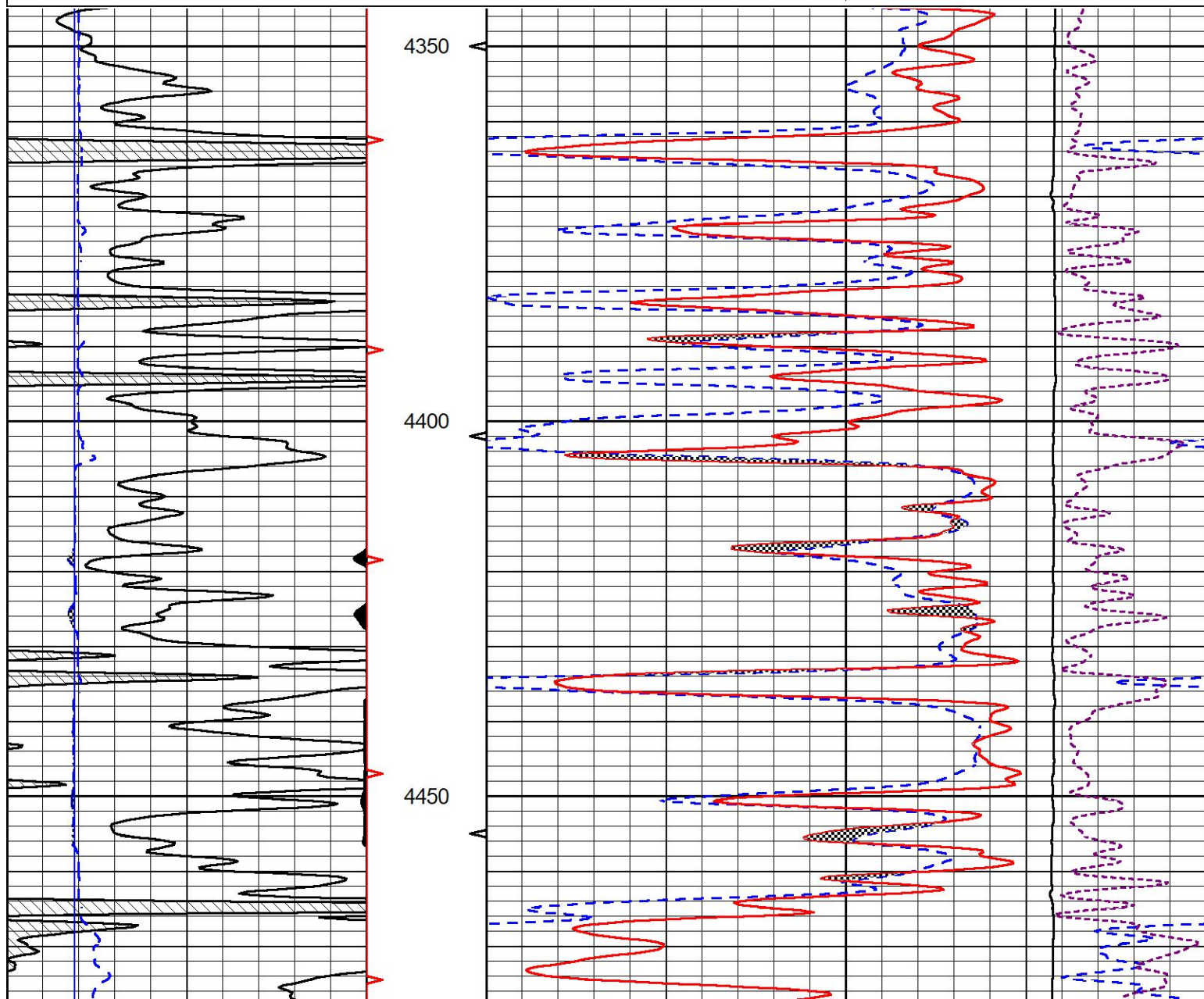
REPEAT SECTION

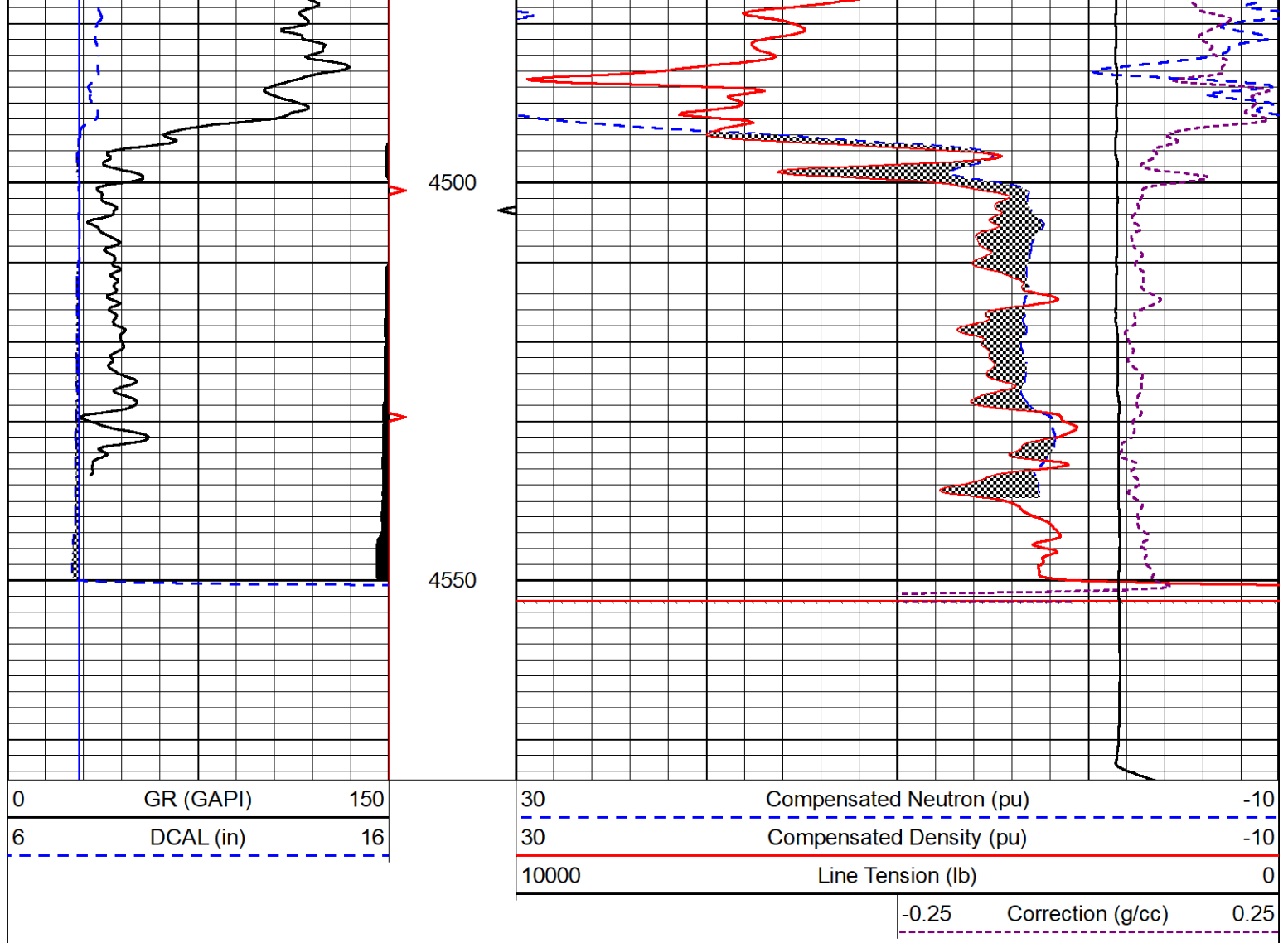
REPEAT PASS

Database File russell_thomas trust 28-1.db
Dataset Pathname stkml/pass2.1
Presentation Format _CNDLS~1
Dataset Creation Wed Nov 30 12:50:02 2022
Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150
6	DCAL (in)	16

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





Calibration Report

Database File russell_thomas trust 28-1.db
 Dataset Pathname stkml/pass3.2
 Dataset Creation Wed Nov 30 12:59:42 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	-48.000
Medium	1348.000	1348.000	0.000	255.800	mmho/m	0.390	-38.500

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	44000.0000	-2.0000

Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	45000.0000	-0.6000
Caliper	1.0046	1.1419	5.5000	20.0000	in	85.0000	-81.1700

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	Russell Oil, Inc.
Well	Thomas Trust #28-1
Field	
County	Logan
State	Kansas