

MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company Ritchie Exploration, Inc.
Well #3 Frusher 9D
Field Sandpit North
County Hodgeman State Kansas

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Location: API #: 15-083-21988-00-00
NW SE SE
948' FSL & 1062' FEL
SEC 9 TWP 21S RGE 23W
Permanent Datum Ground Level Elevation 2316'
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
DIL
MEL/BHCS
K.B. 2321'
D.F.
G.L. 2316'

Date 6/13/2021

Run Number One

Type Log CNL/CDL

Depth Driller 4600'

Depth Logger 4602'

Bottom Logged Interval 4574'

Top Logged Interval 3400'

Type Fluid In Hole Chemical

Salinity, PPM CL 9200

Density 9.05

Level Full

Max. Rec. Temp. F 122 Deg F

Operating Rig Time 4.5 Hours

Equipment -- Location P-24 HAYS

Recorded By T. Martin

Witnessed By Kent Matson

Borehole Record

Run No. Bit From To Size Wgt. From To

One 12.25" 00' 252' 8.625" 23# 00' 252'

Two 7.875" 252' TD

<<< Fold Here >>>

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.

Jetmore, KS, 9 N to V Rd, 3 E, 1 N, NW 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: Kent Matson
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\ritchie_#3 frusher 9d.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	122	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	0	0	580	70	Off	4602

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



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2" SCALE BULK DENSITY

MAIN PASS

Database File ritchie_#3 frusher 9d.db
Dataset Pathname StkMI/pass3.3
Presentation Format _cdl
Dataset Creation Sun Jun 13 09:06:53 2021
Charted by Depth in Feet scaled 1:600

0	GAMMA RAY (GAPI)	150
6	DCAL (in)	16

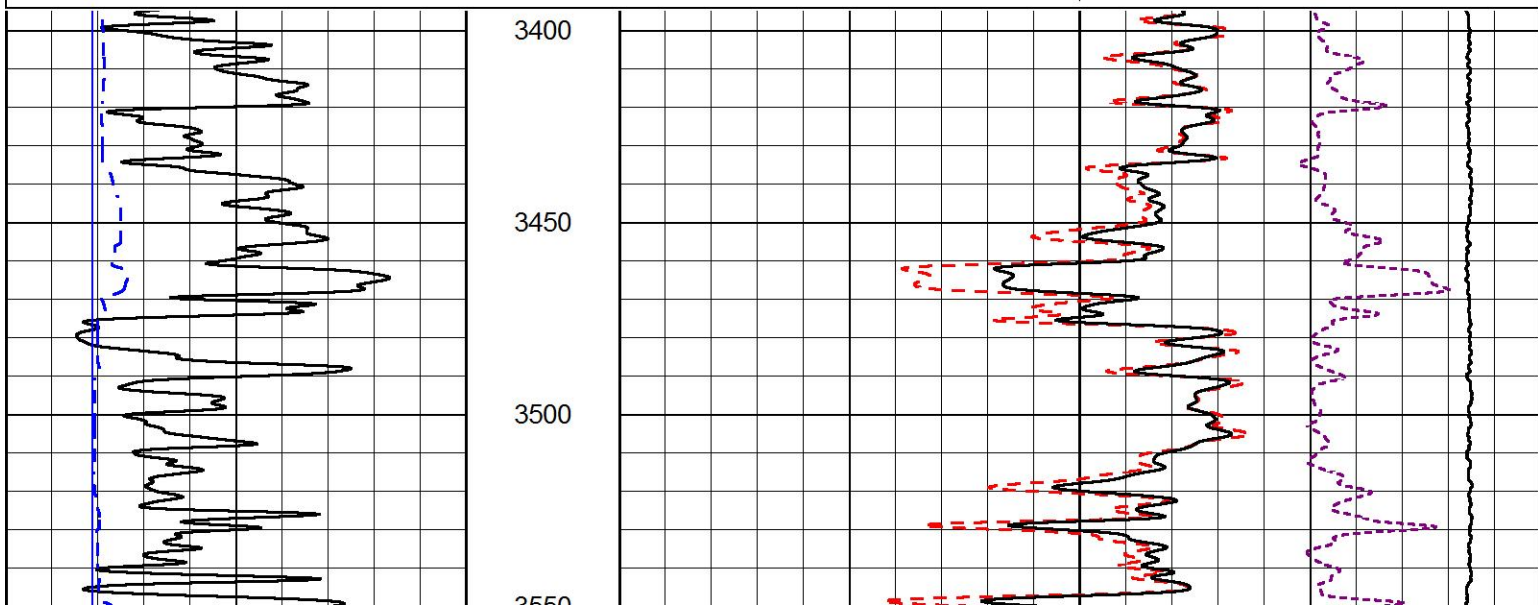
COMPENSATED DENSITY
(2.65 MA)

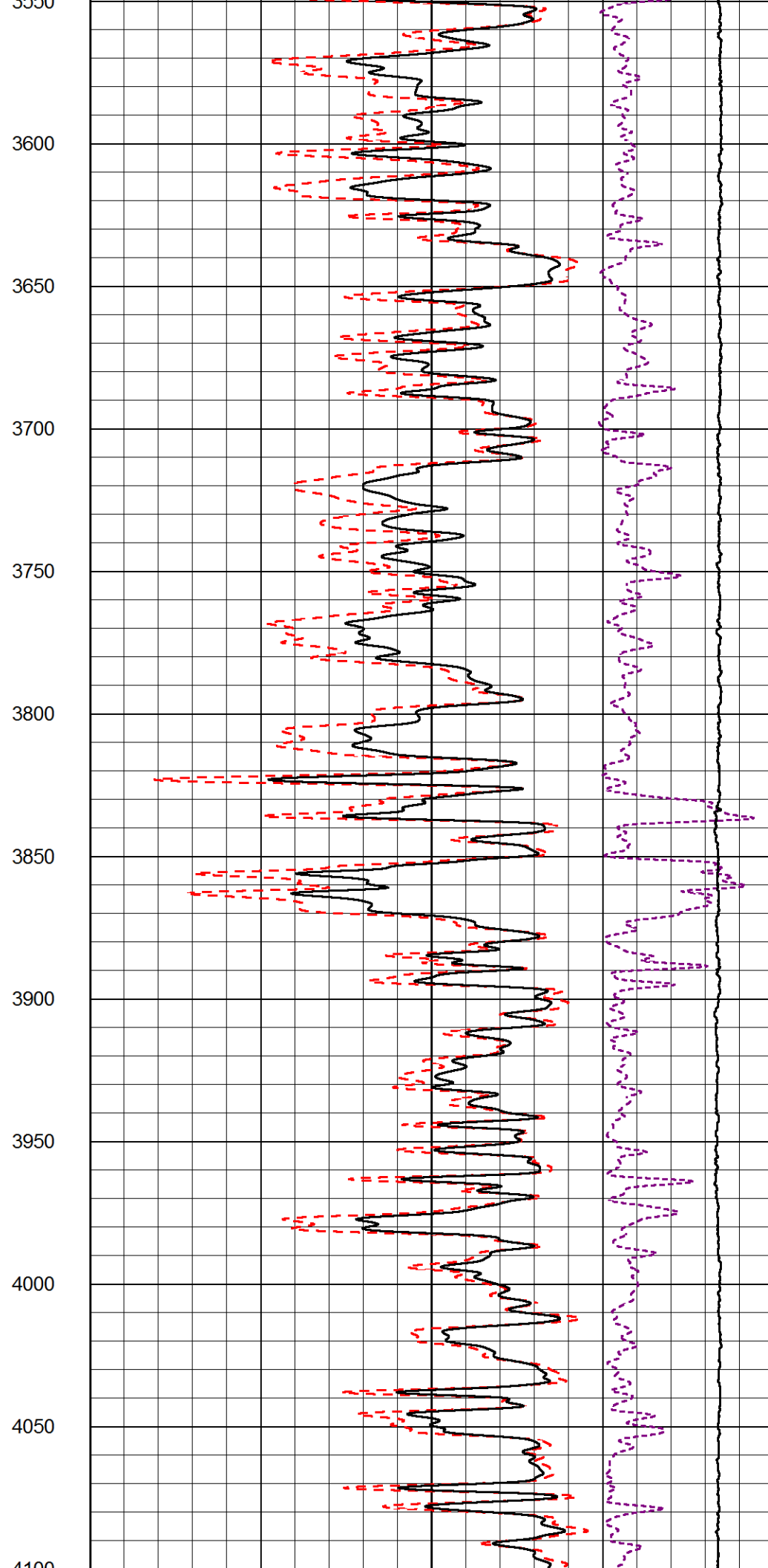
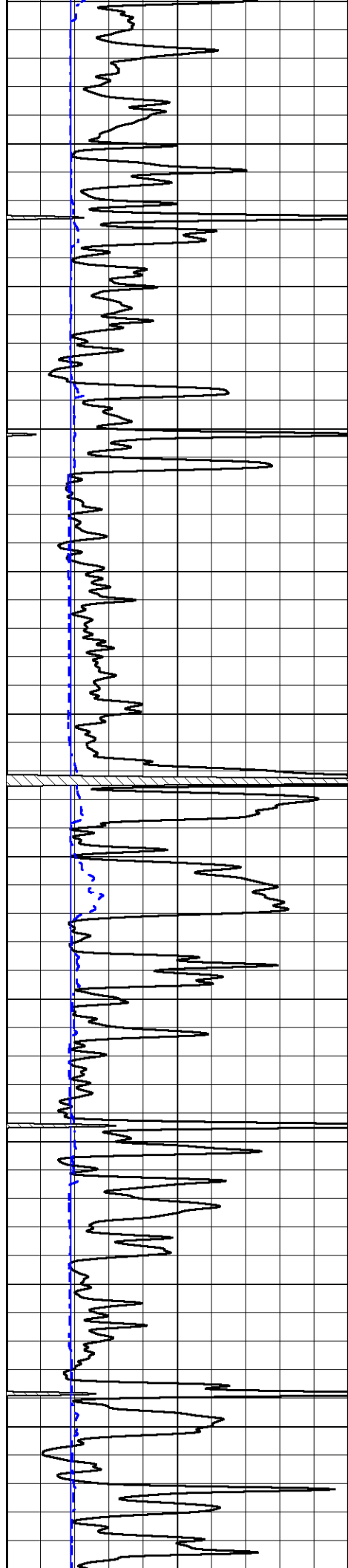
30 (pu) -10

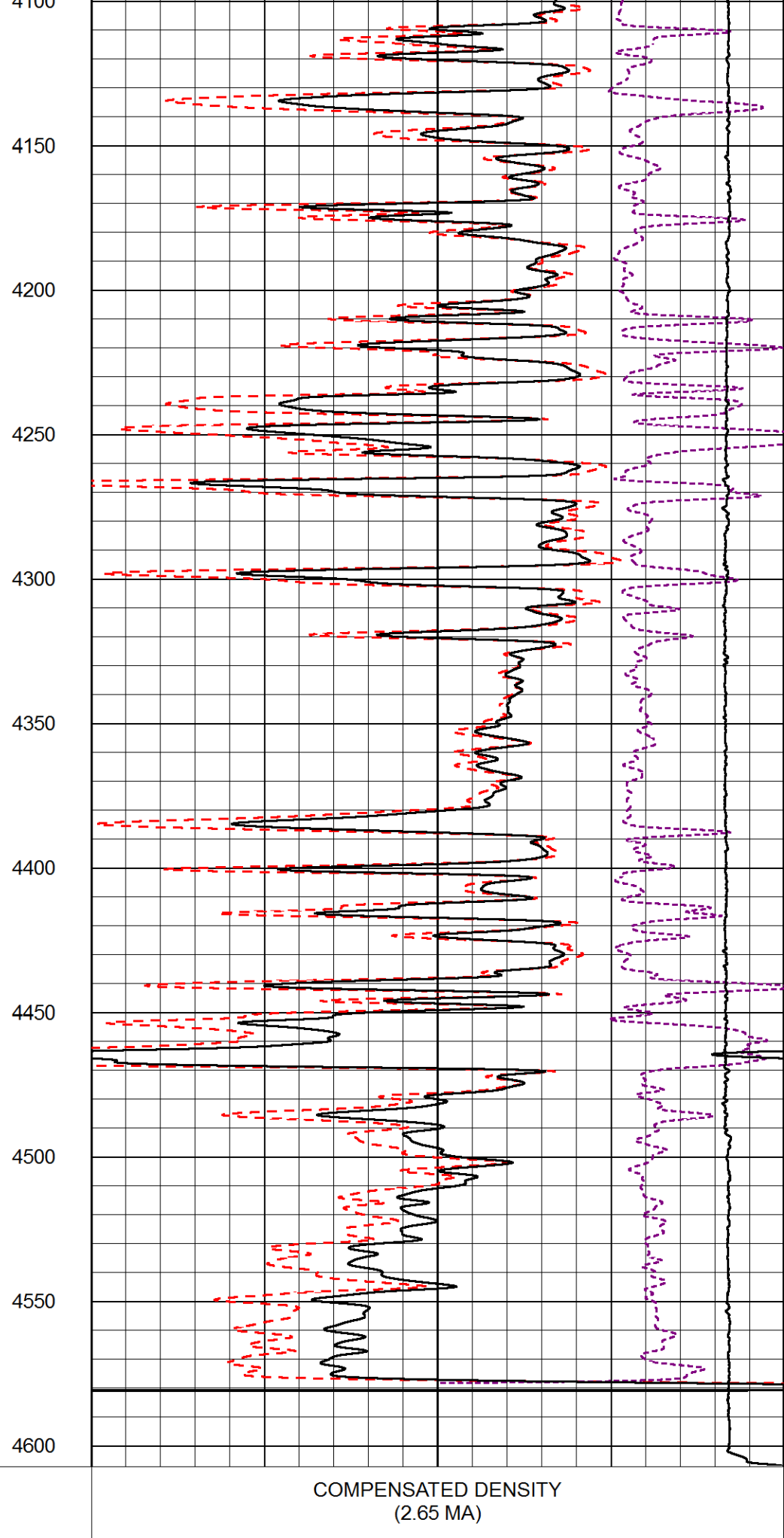
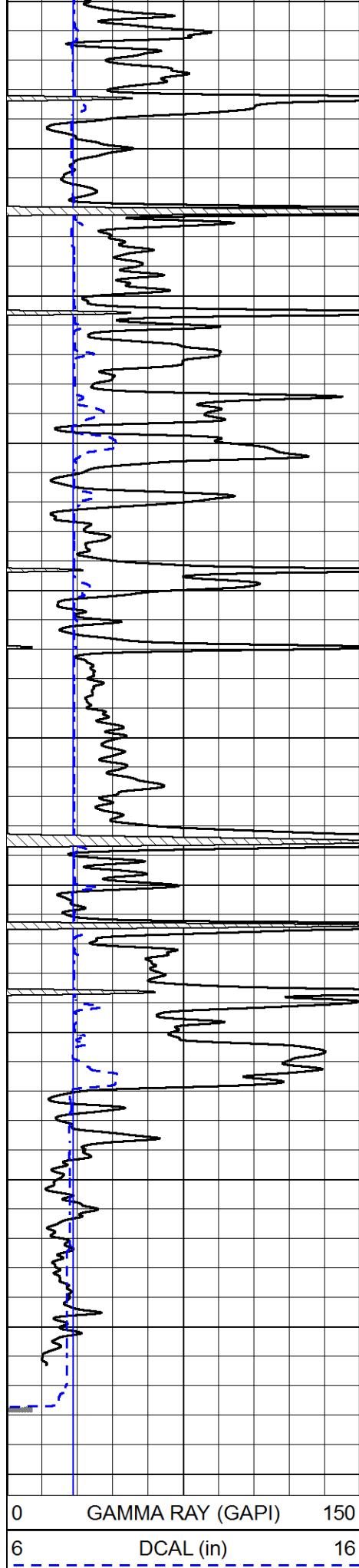
2 BULK DENSITY (g/cc) 3

15000 LINE TENSION (lb) 0

-0.25 CORRECTION (g/cc) 0.25







2	BULK DENSITY (g/cc)	5
15000	LINE TENSION (lb)	0
	-0.25 CORRECTION (g/cc)	0.25



MIDWEST WIRELINE

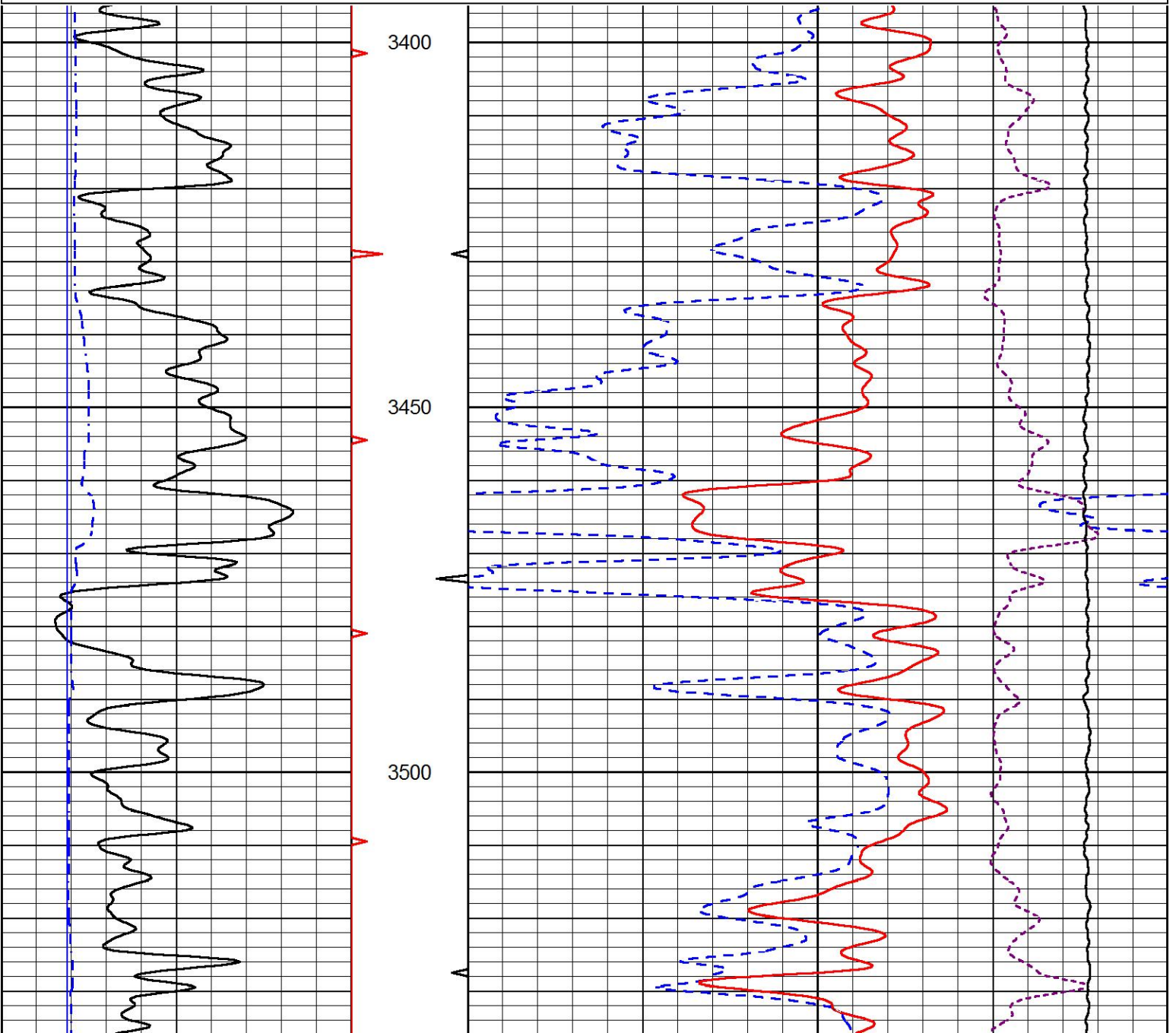
DETAIL SECTION

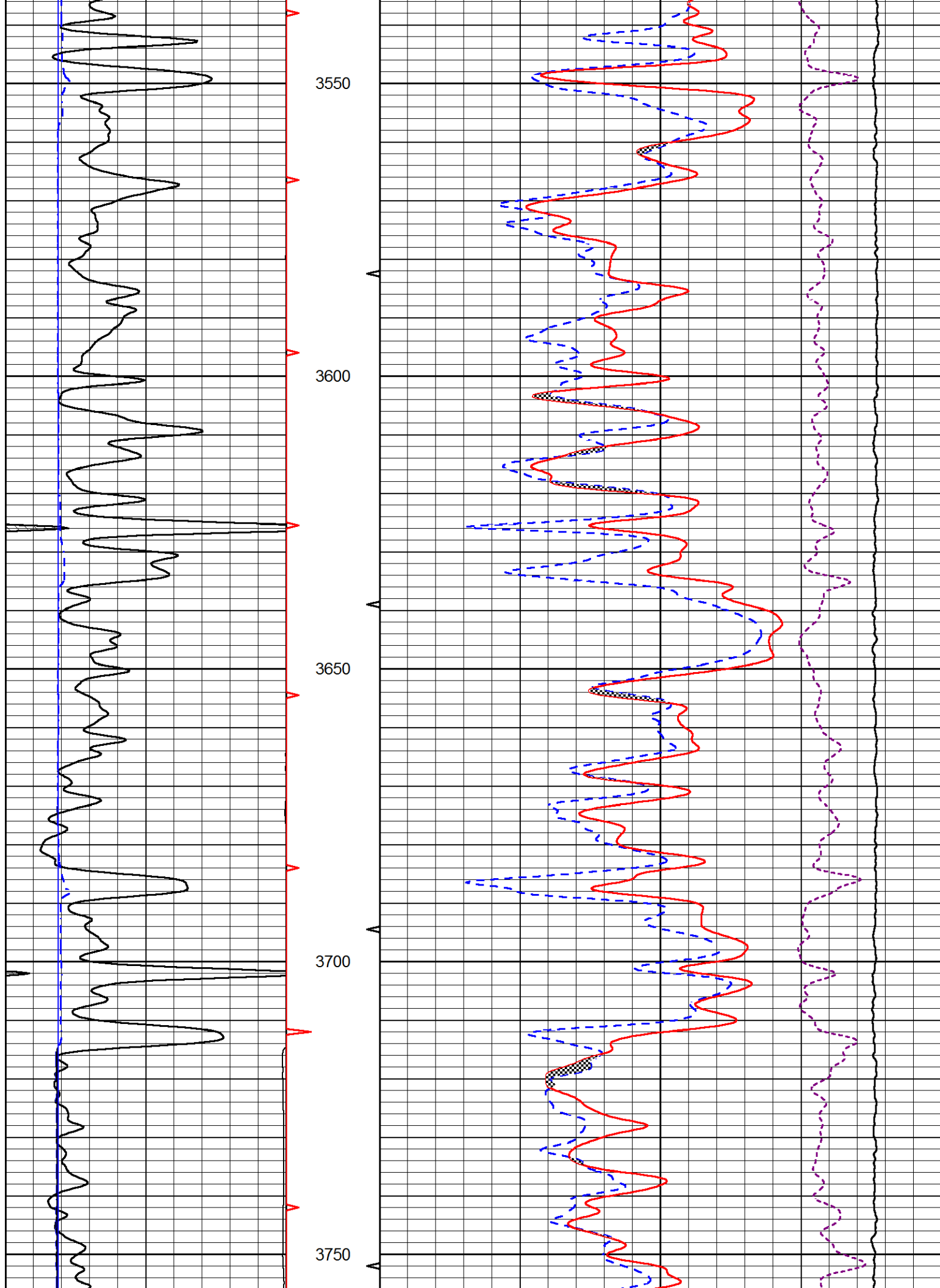
MAIN PASS

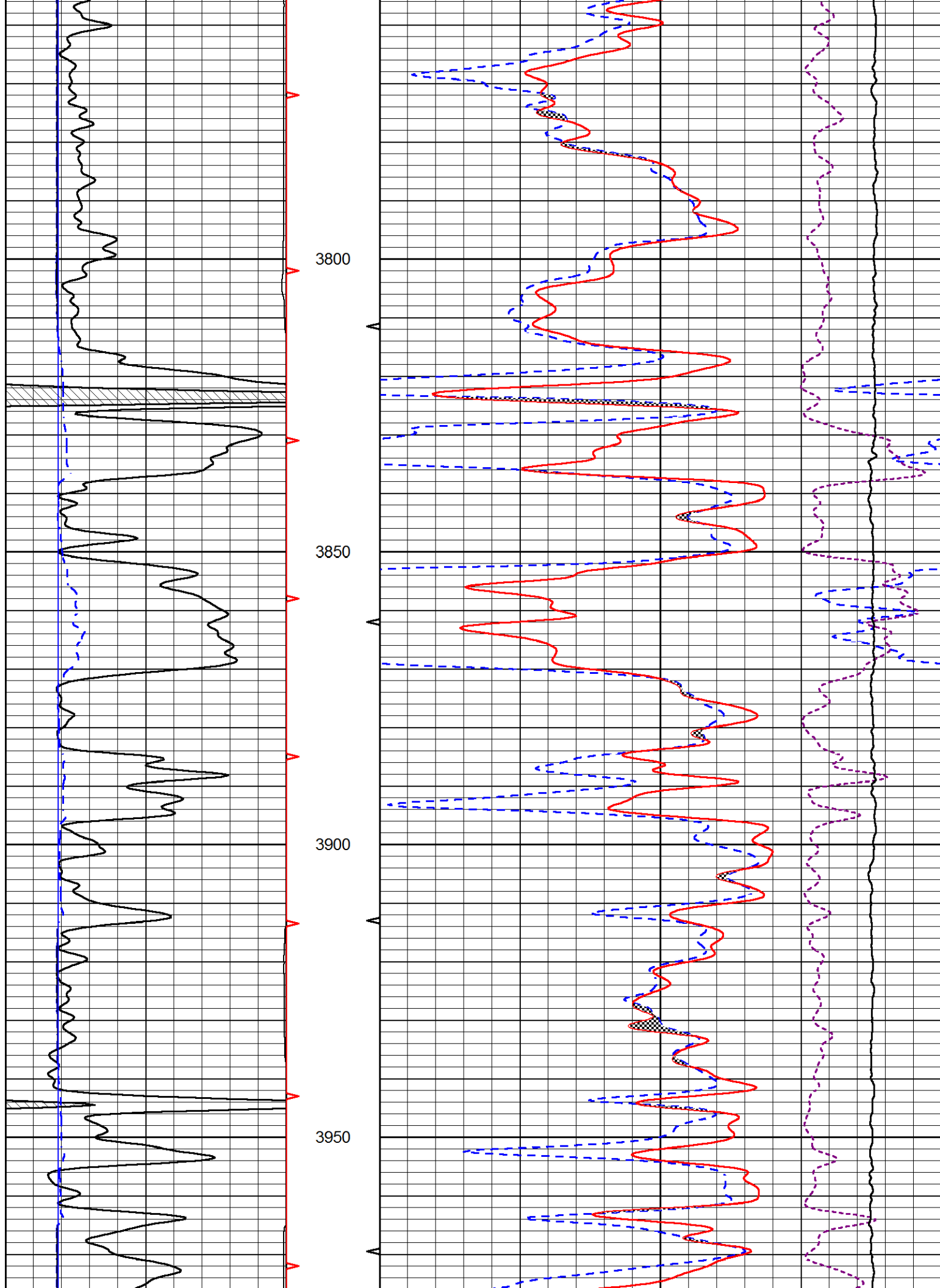
Database File ritchie_#3 frusher 9d.db
Dataset Pathname StkMI/pass3.1
Presentation Format _CNDLS~1
Dataset Creation Sun Jun 13 09:46:34 2021
Charted by Depth in Feet scaled 1:240

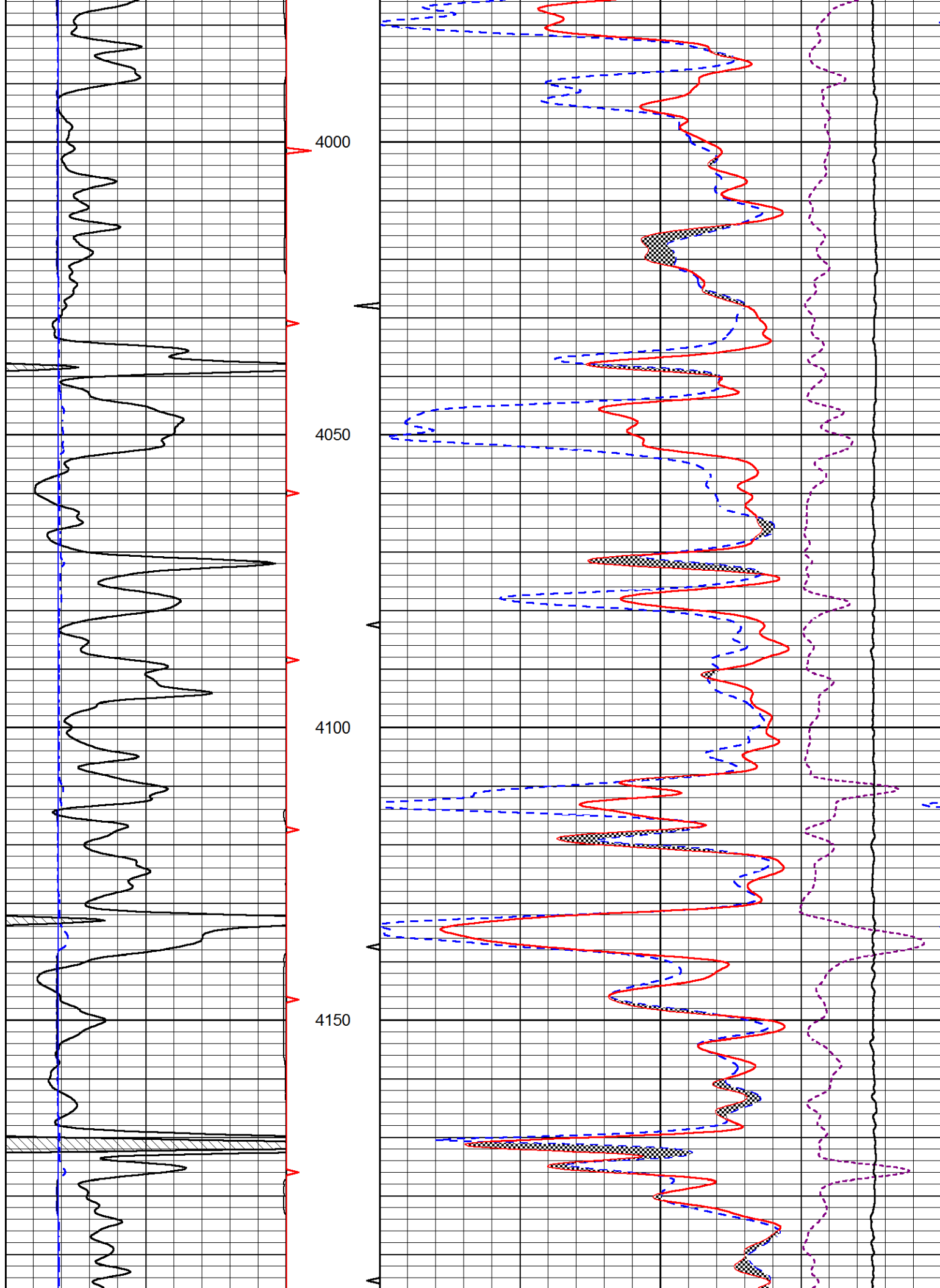
0	GAMMA RAY (GAPI)	150
6	DCAL (in)	16

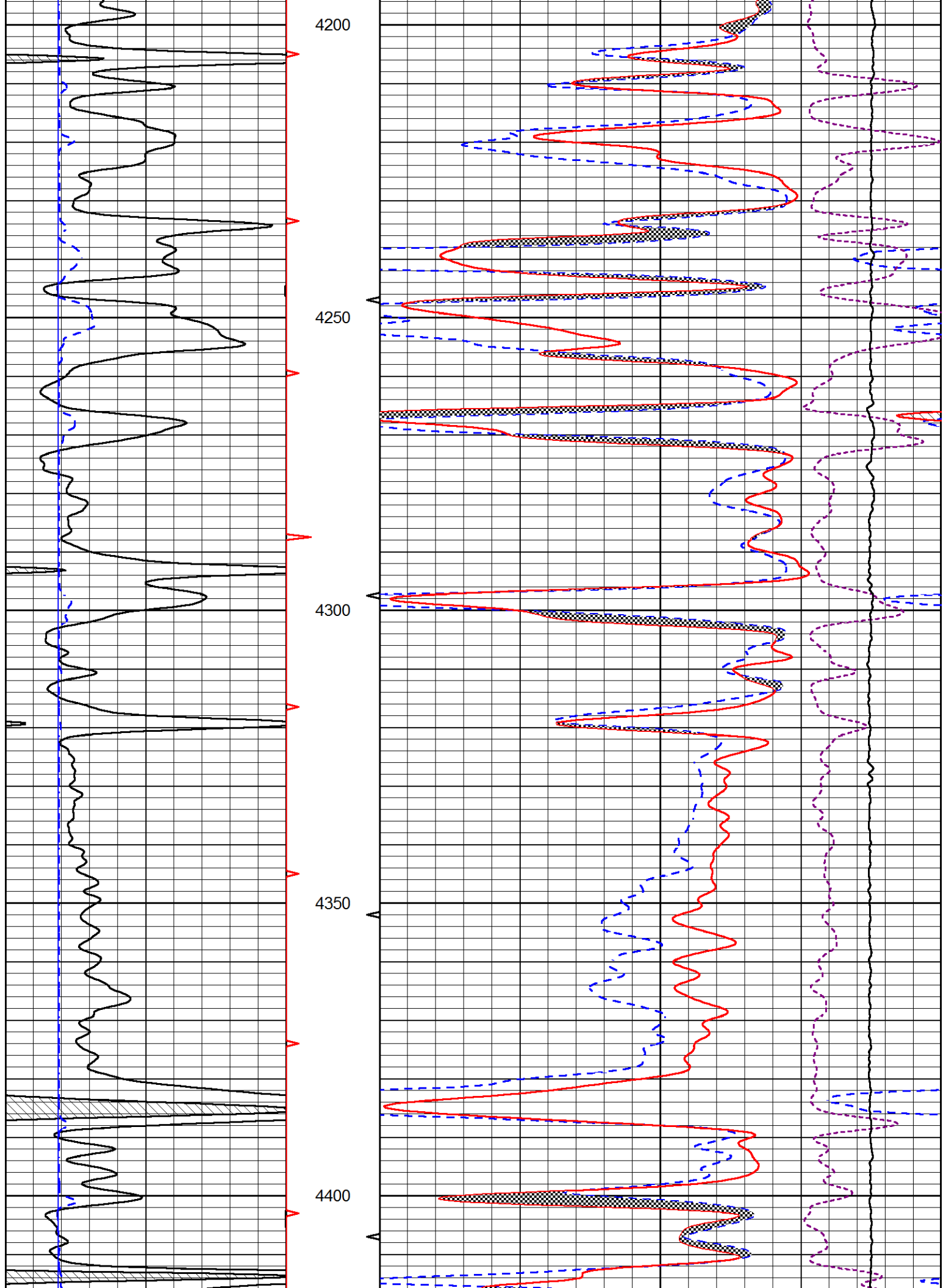
30	CNPOR (pu)	-10
30	DPOR (pu)	-10
10000	LINE TENSION (lb)	0
	-0.25 CORRECTION (g/cc)	0.25

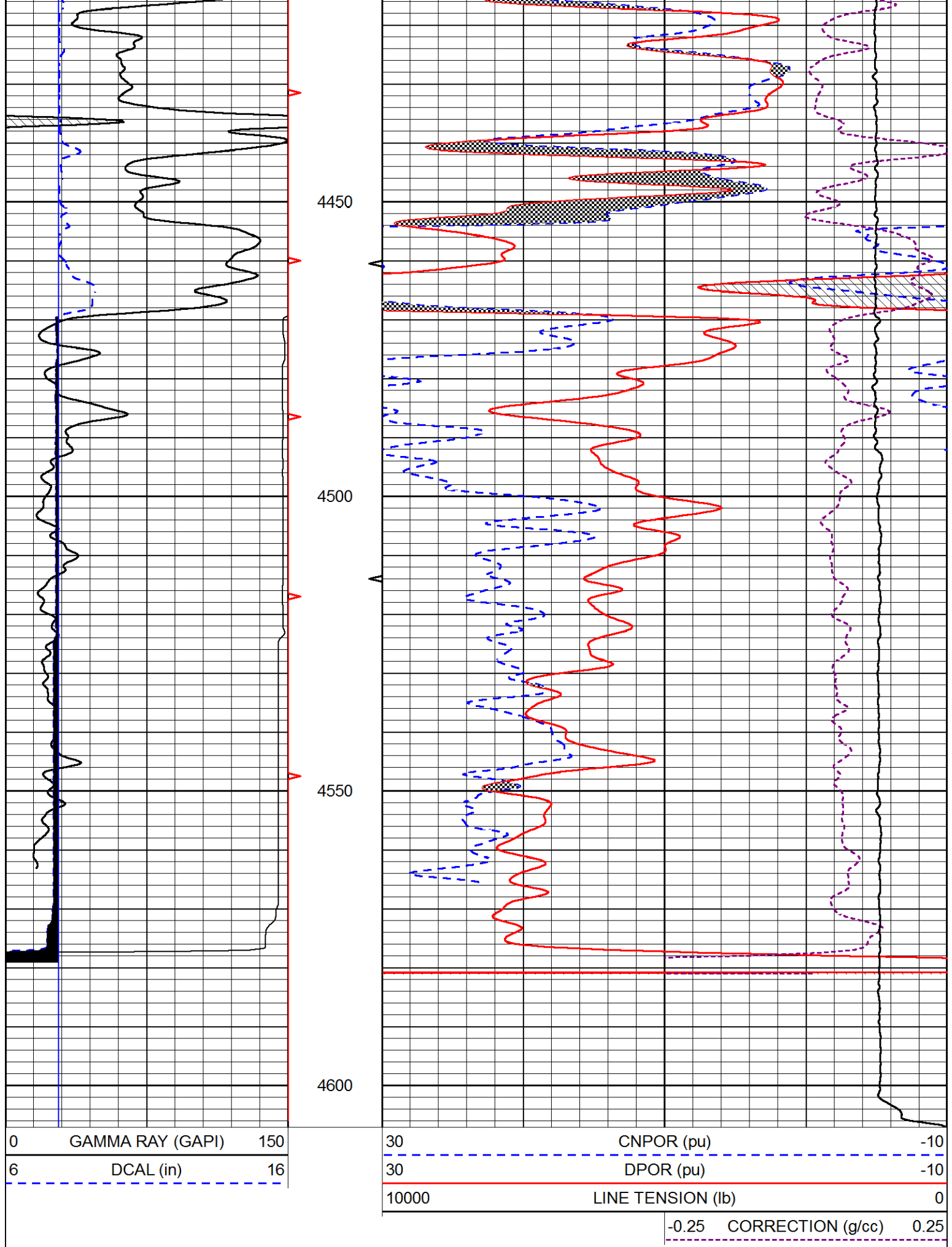














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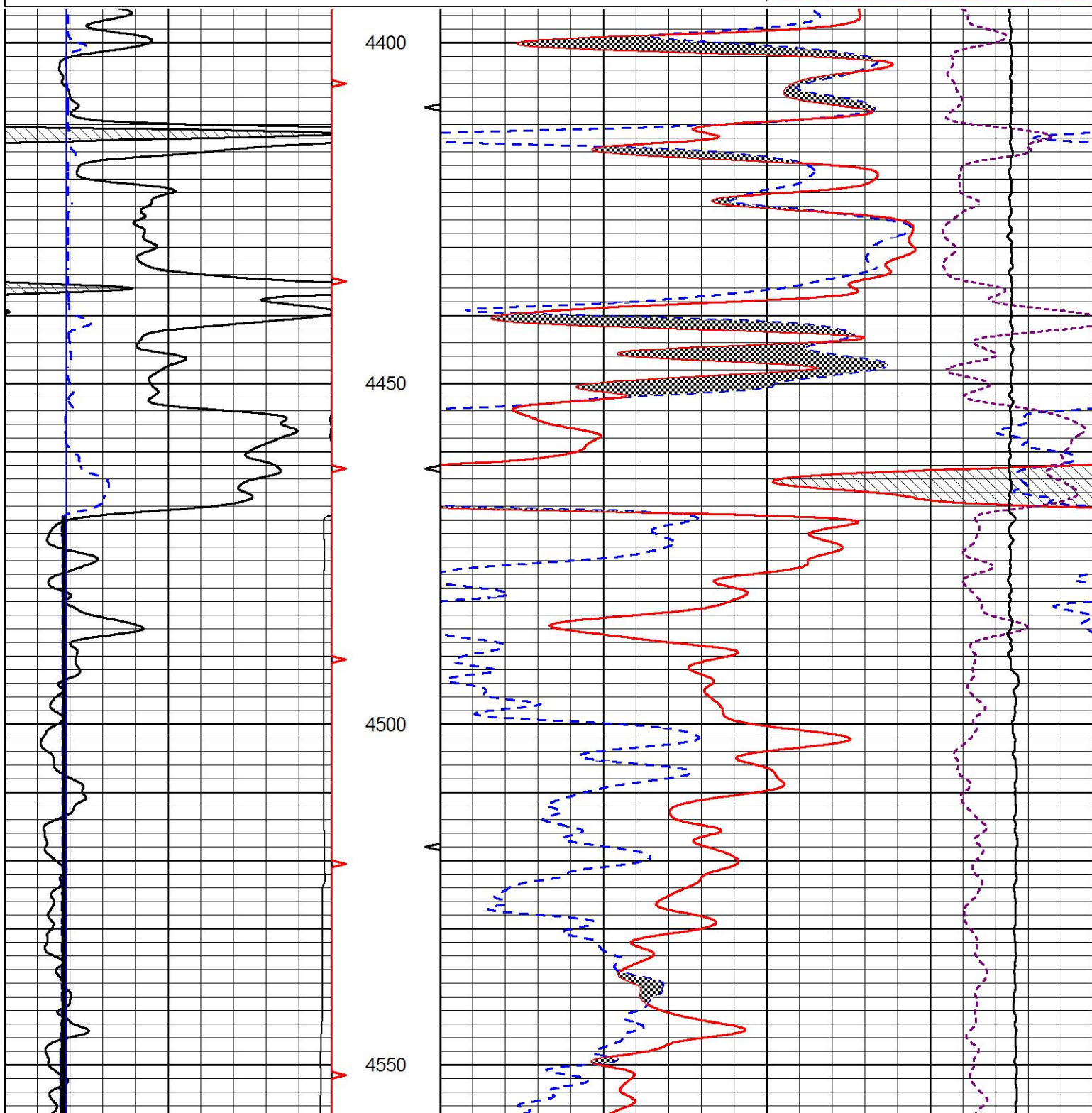
REPEAT SECTION

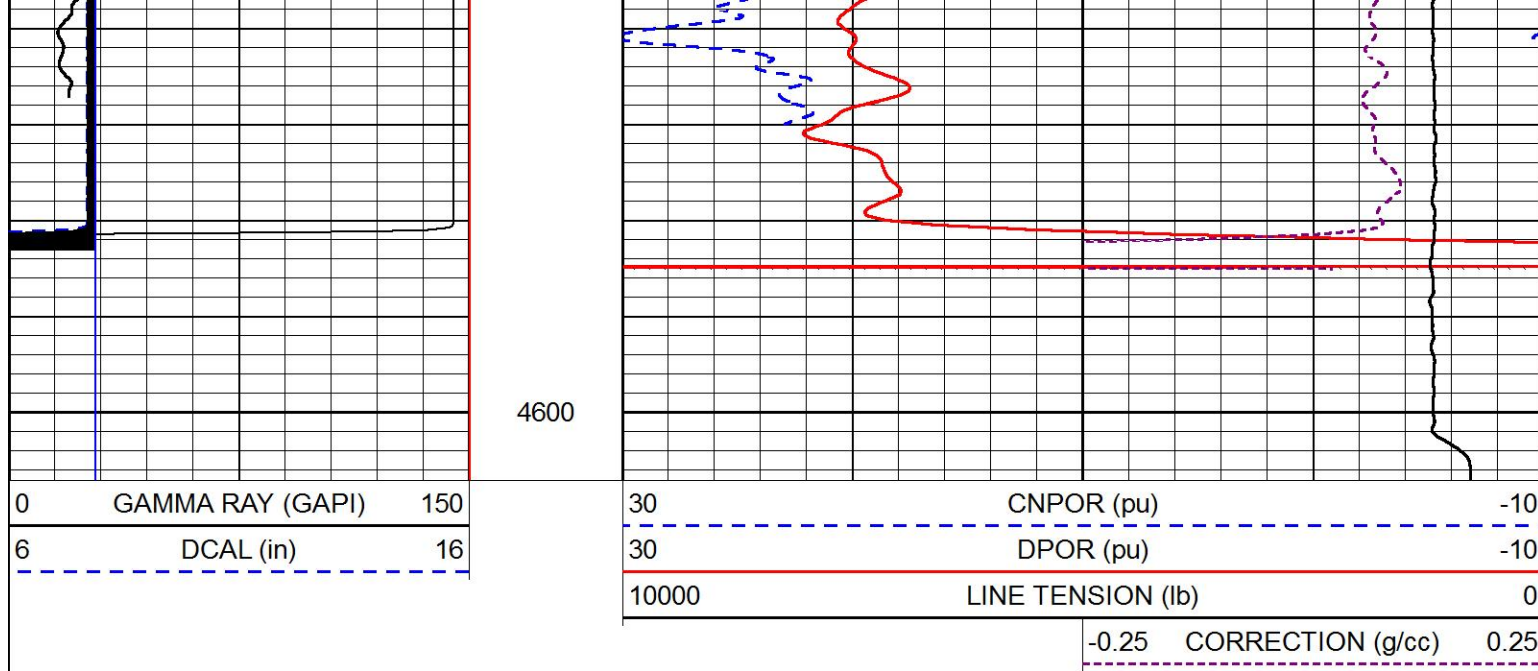
REPEAT PASS

Database File ritchie_#3 frusher 9d.db
Dataset Pathname StkMI/pass2.1
Presentation Format _CNDLS~1
Dataset Creation Sun Jun 13 09:40:58 2021
Charted by Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150
6 DCAL (in) 16

30 CNPOR (pu) -10
30 DPOR (pu) -10
10000 LINE TENSION (lb) 0
-0.25 CORRECTION (g/cc) 0.25





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State	Kansas