PIONEER
Pioneer Energy Services

DUAL COMP POROSITY LOG

Company RITCHIE EXPLORATION, INC.
Well LEWIS TRUST 3C NO.1
Field WILDCAT
County WICHITA
State KANSAS

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Location: API # : 15-203-20340-00-00
728' FSL & 1973' FWL
SEC 3 TWP 17S RGE 37W

Other Services
DIL
MEL/BHCS

Permanent Datum	GROUND LEVEL	Elevation	3350'
Log Measured From	KELLY BUSHING		
Drilling Measured From	KELLY BUSHING		

Elevation
K.B. 3358'
D.F. N/A
G.L. 3350'

Date	8/24/2018			
Run Number	ONE			
Type Log	CNL/CDL			
Depth Driller	4980'			
Depth Logger	4978'			
Bottom Logged Interval	4957'			
Top Logged Interval	3550'			
Type Fluid In Hole	CHEMICAL			
Salinity, PPM CL	7400			
Density	9.0			
Level	FULL			
Max. Rec. Temp. F	126 DEG/F			
Operating Rig Time	5 HOURS			
Equipment -- Location	108	HAYS		
Recorded By	J. HENRICKSON			
Witnessed By	MAX LOVELY			

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	221'	8.625"	23#	0	221'
TWO	7.875"	221'	TD				

<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer 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.
LEOTI KANSAS
NORTH TO G ROAD, 2 WEST, 1 SOUTH, EAST INTO

Log Measured From: KELLY BUSHING 8 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneeres.com
785-625-3858

Your Pioneer Energy Services Crew
Engineer: J. HENRICKSON
Operator:
Operator:
Operator:

This Log Record Was Witnessed By
Primary Witness: MAX LOVELY
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\ritchie_lewis_trust_3c_1.db
Dataset field/well/stack/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	126	5.5	0	1	2	2.71
NPORSEL	**PERFS**	**SNDERR mmho/m**	**SNDERRM mmho/m**	**SPSHIFT mV**	**SRFTEMP degF**	**SZCOR**	**TDEPTH ft**
Limestone	0	0	0	0	65	Off	4978

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	33.00		GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC	29.90		CNT-M&W (tk10-MW)	5.50	3.50	100.00
CNSSC	29.15					
			CDL-M&W (168-130)	8.50	4.00	250.00
LSD	20.85					
DCAL	20.83					
SSD	20.35					
RLL3	15.80					
RLL3F	15.79					
			DIL-M&W (PSI 75)	18.50	3.50	220.00
CILD	8.00					

Dataset:	ritchie_lewis_trust_3c_1.db: field/well/stack/pass3.1
Total length:	35.50 ft
Total weight:	620.00 lb
O.D.:	4.00 in

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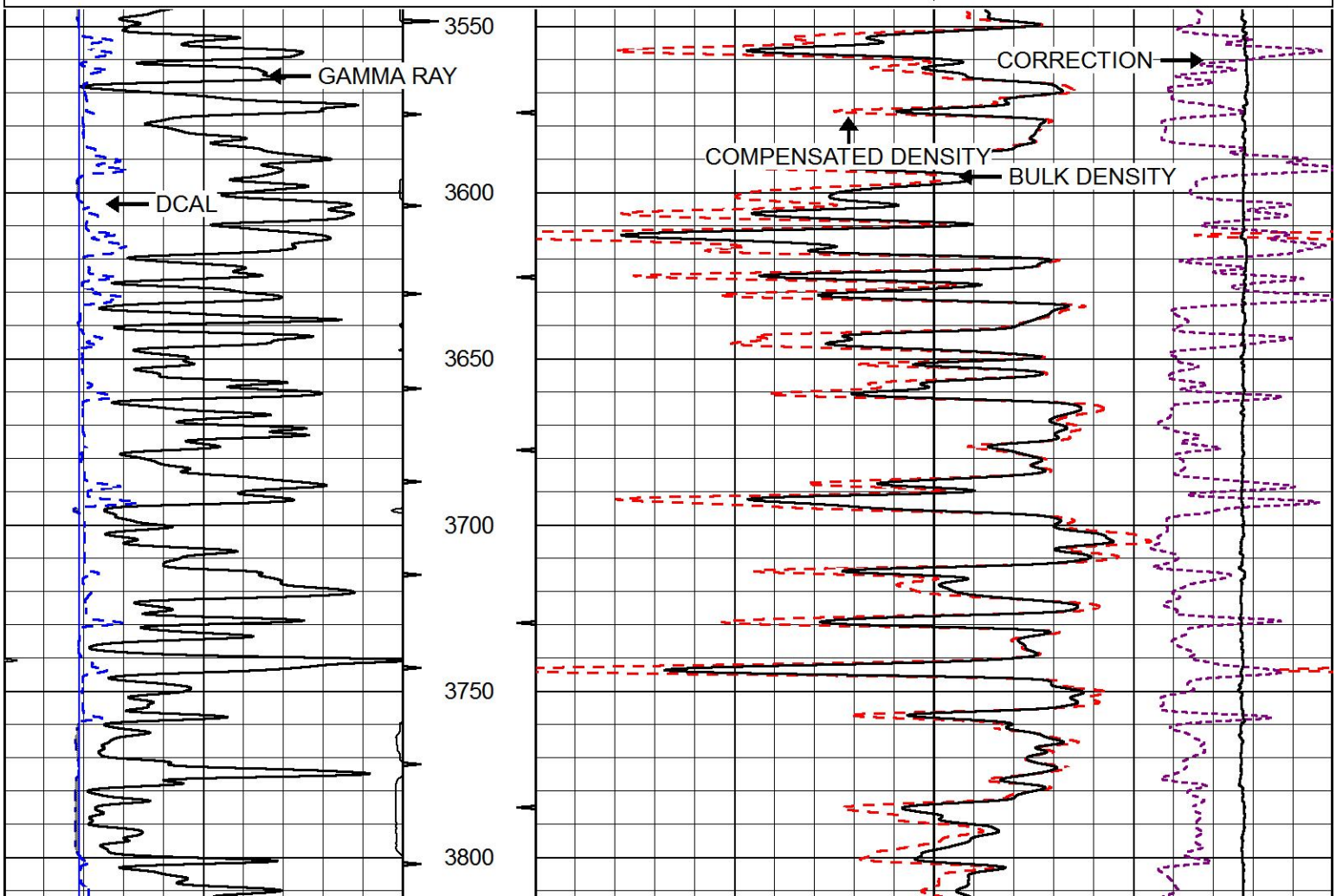
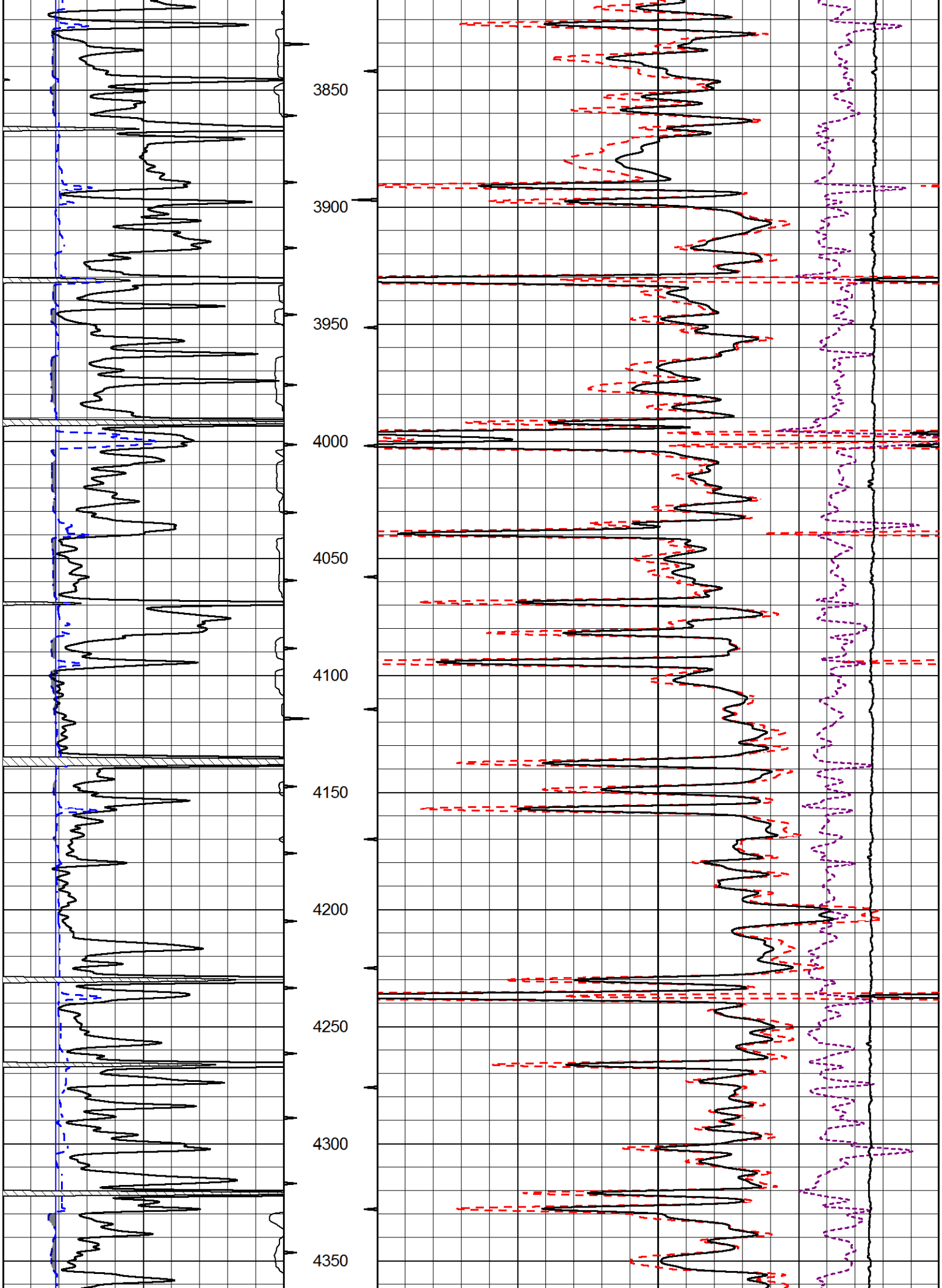
MAIN PASS

Database File	ritchie_lewis_trust_3c_1.db
Dataset Pathname	stack/pass3.1
Presentation Format	cdl
Dataset Creation	Fri Aug 24 04:35:08 2018
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

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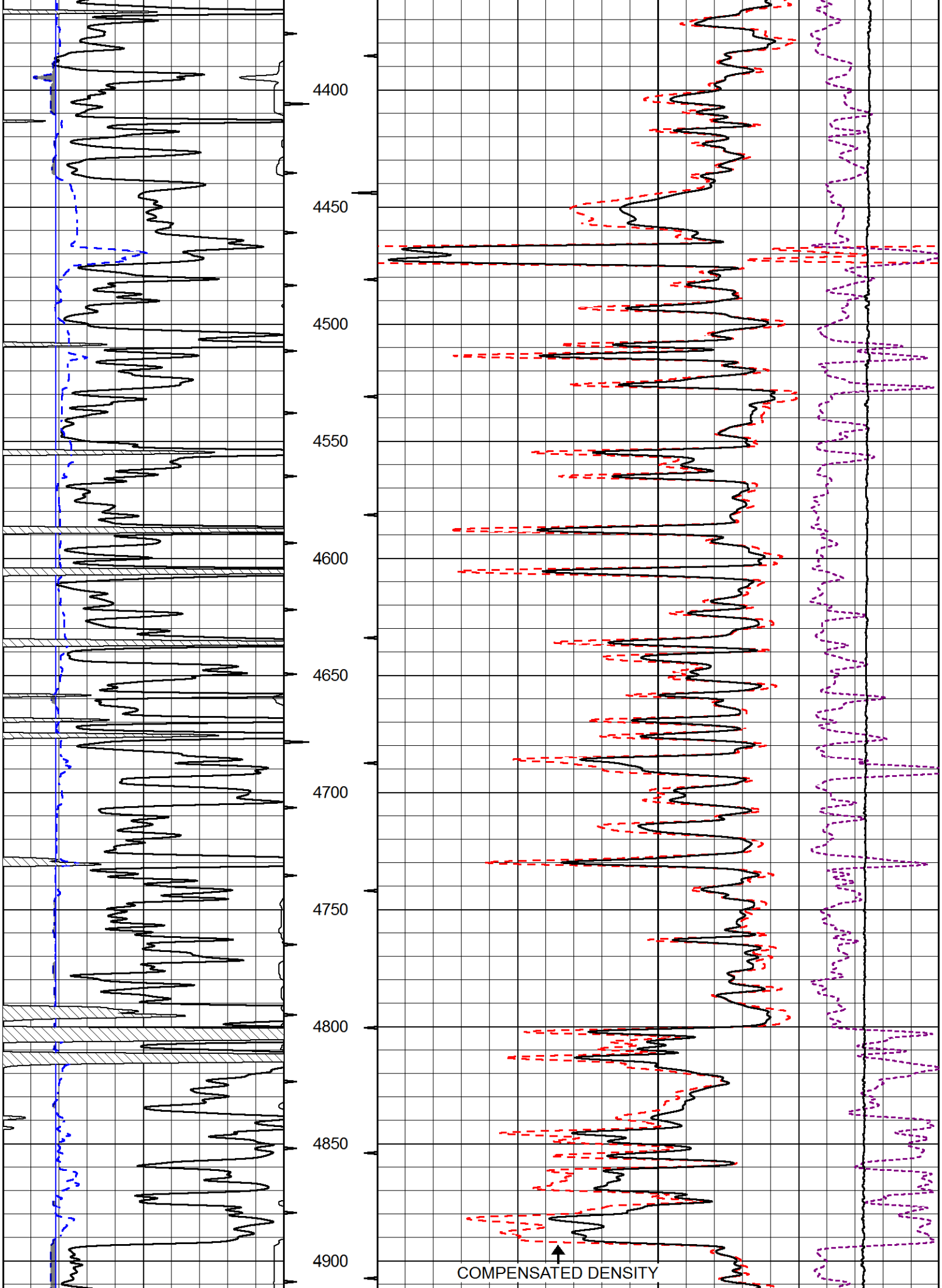
3950
4000
4050
4100
4150
4200
4250
4300
4350


4400
4450
4500
4550
4600
4650
4700
4750
4800
4850
4900
COMPENSATED DENSITY

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

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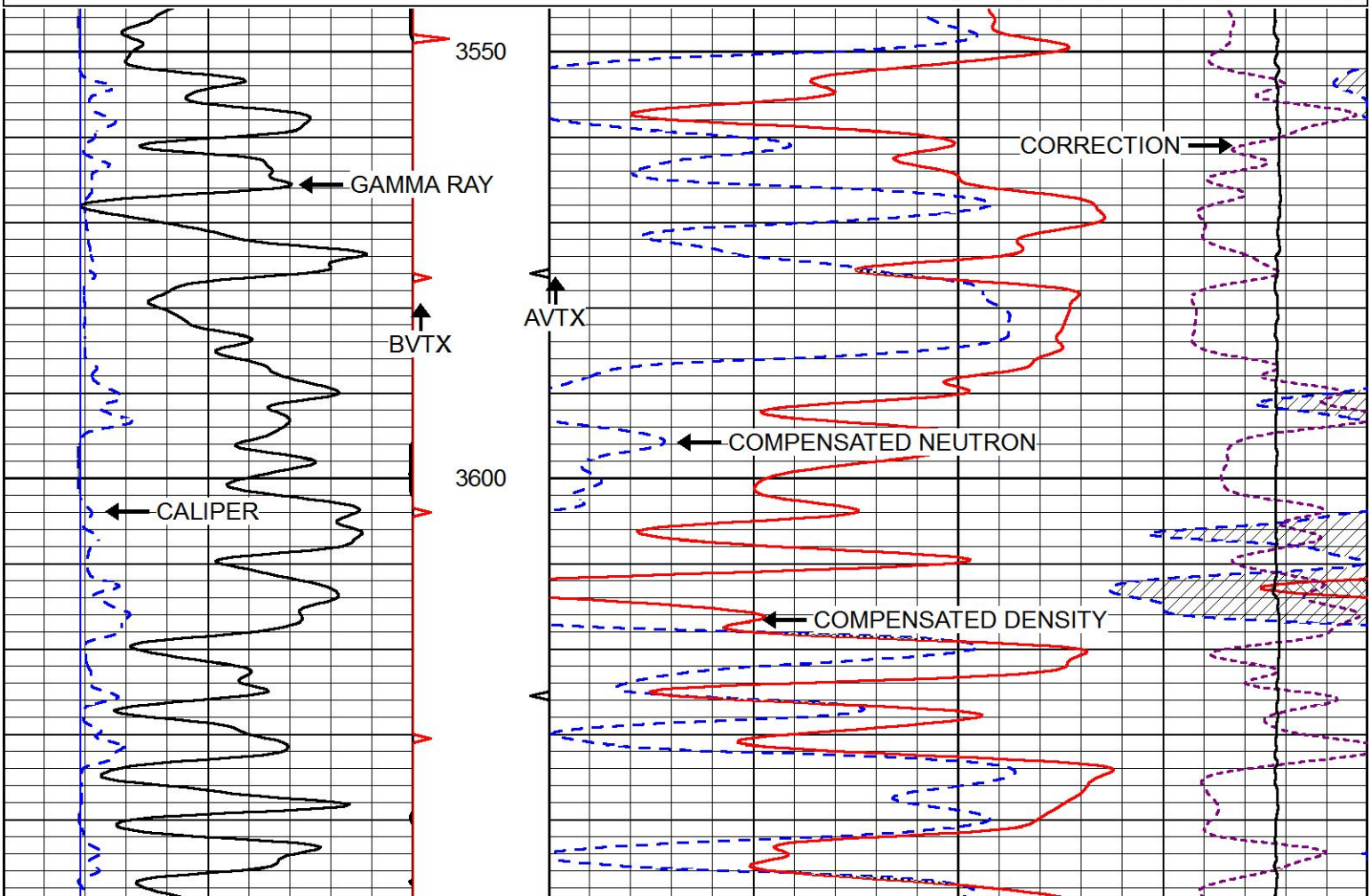
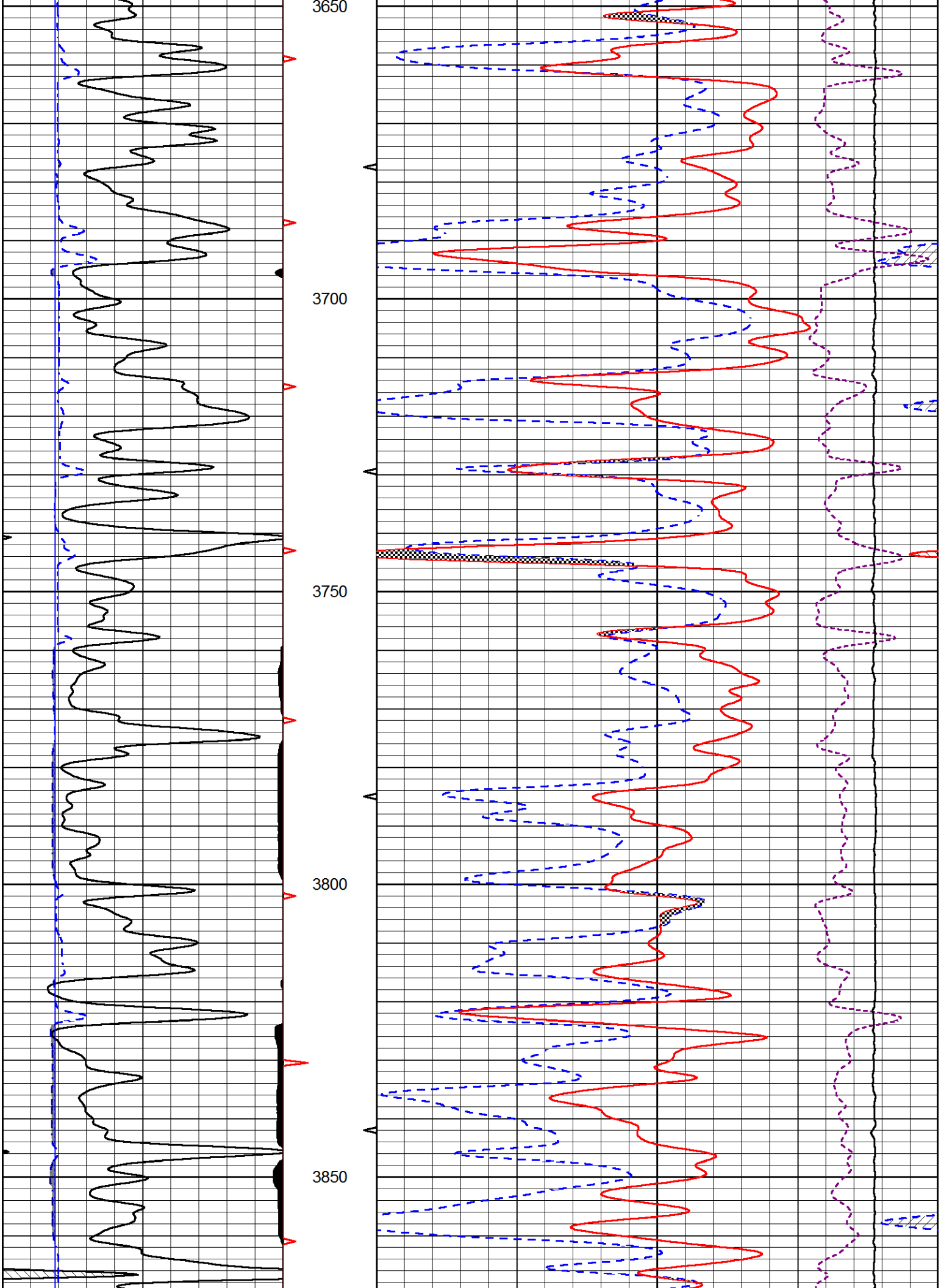
MAIN PASS

Database File	ritchie_lewis_trust_3c_1.db
Dataset Pathname	stack/pass3.1
Presentation Format	cndlspec
Dataset Creation	Fri Aug 24 04:35:08 2018
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	dcal (in)	16
6	BIT SIZE (in)	16

30	CNLS (pu)	-10
30	DPOR (pu)	-10
15000	LINE TENSION (lb)	0
-0.25	RHOC (g/cc)	0.25

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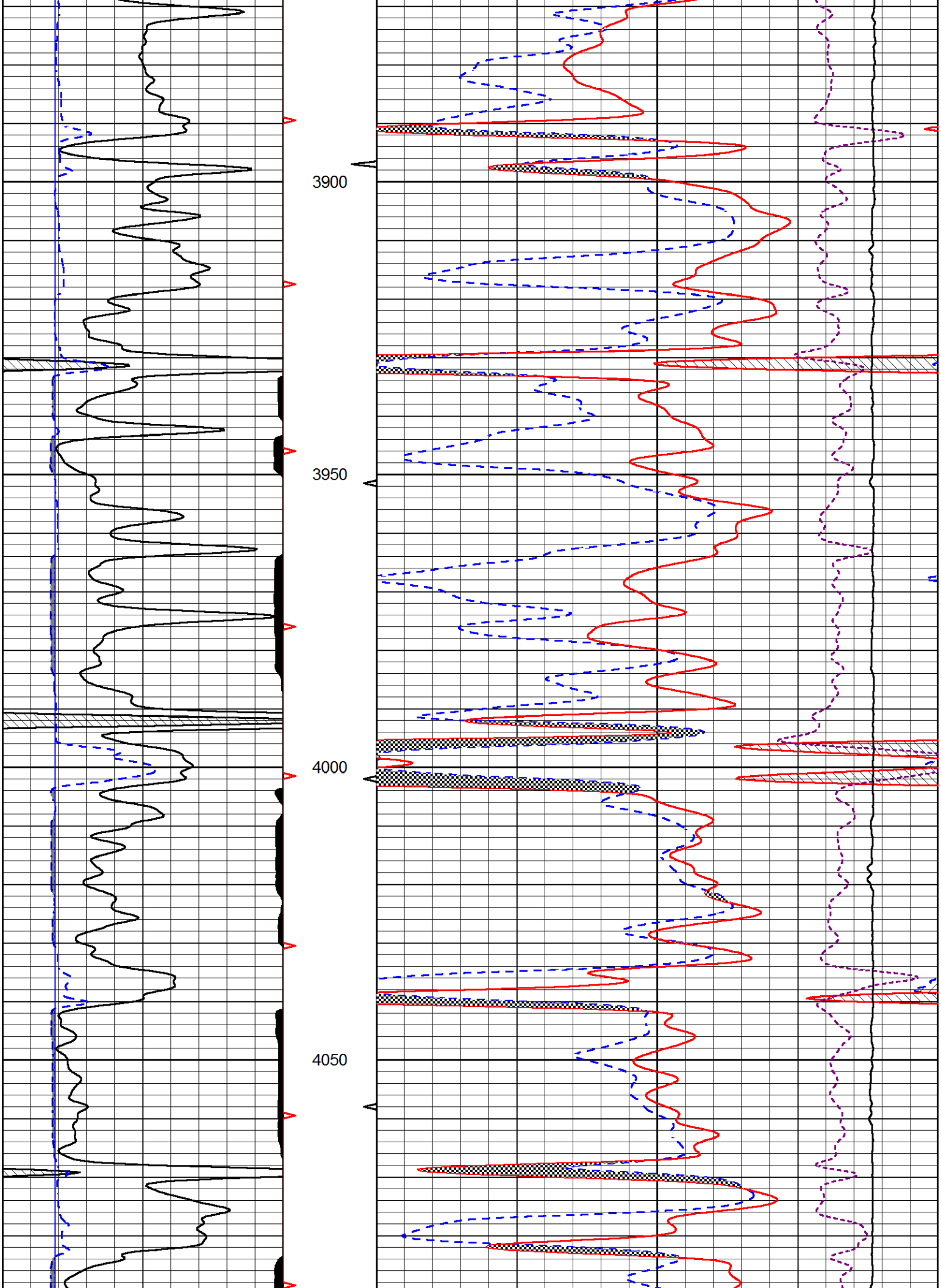
3850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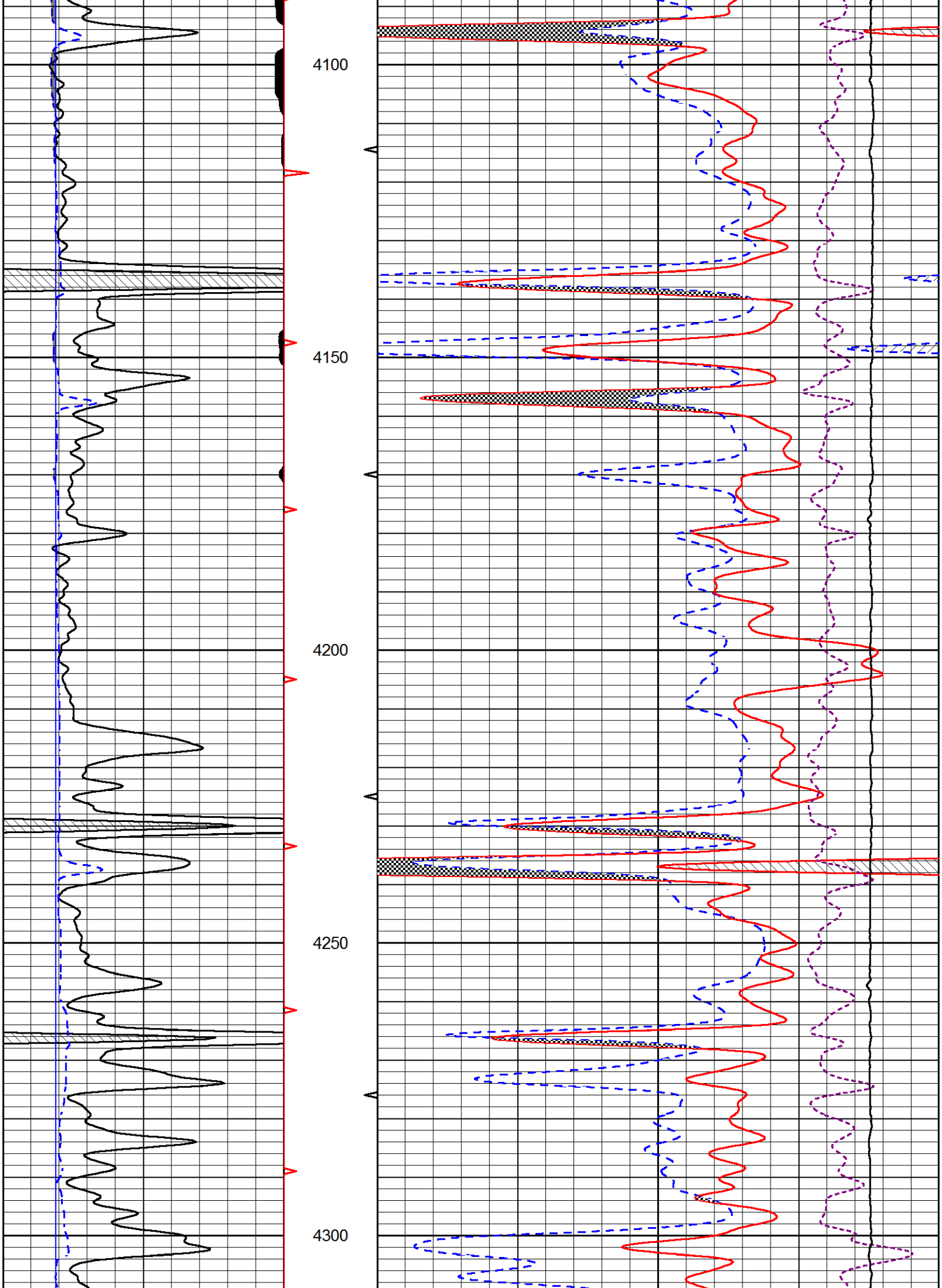
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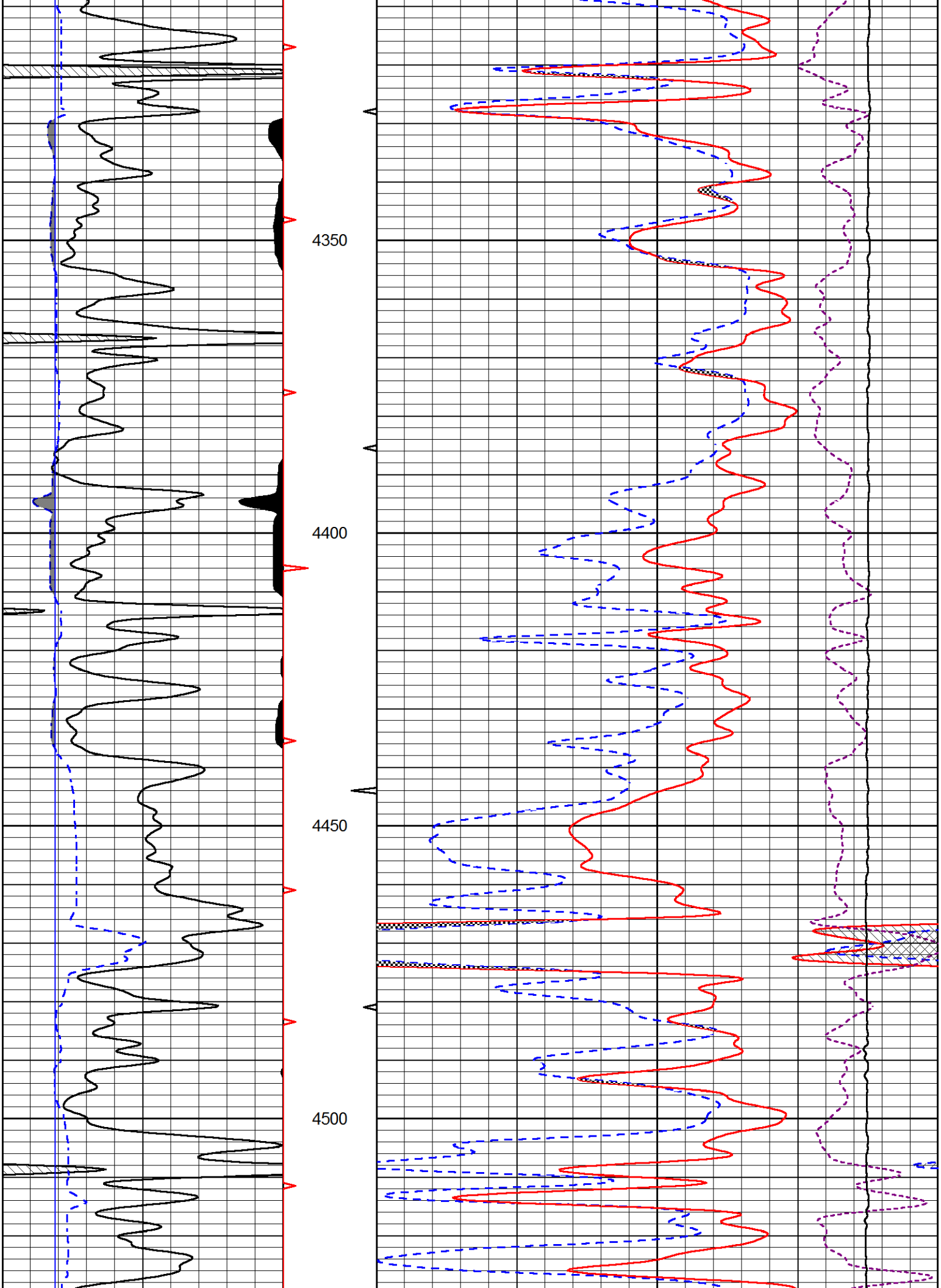
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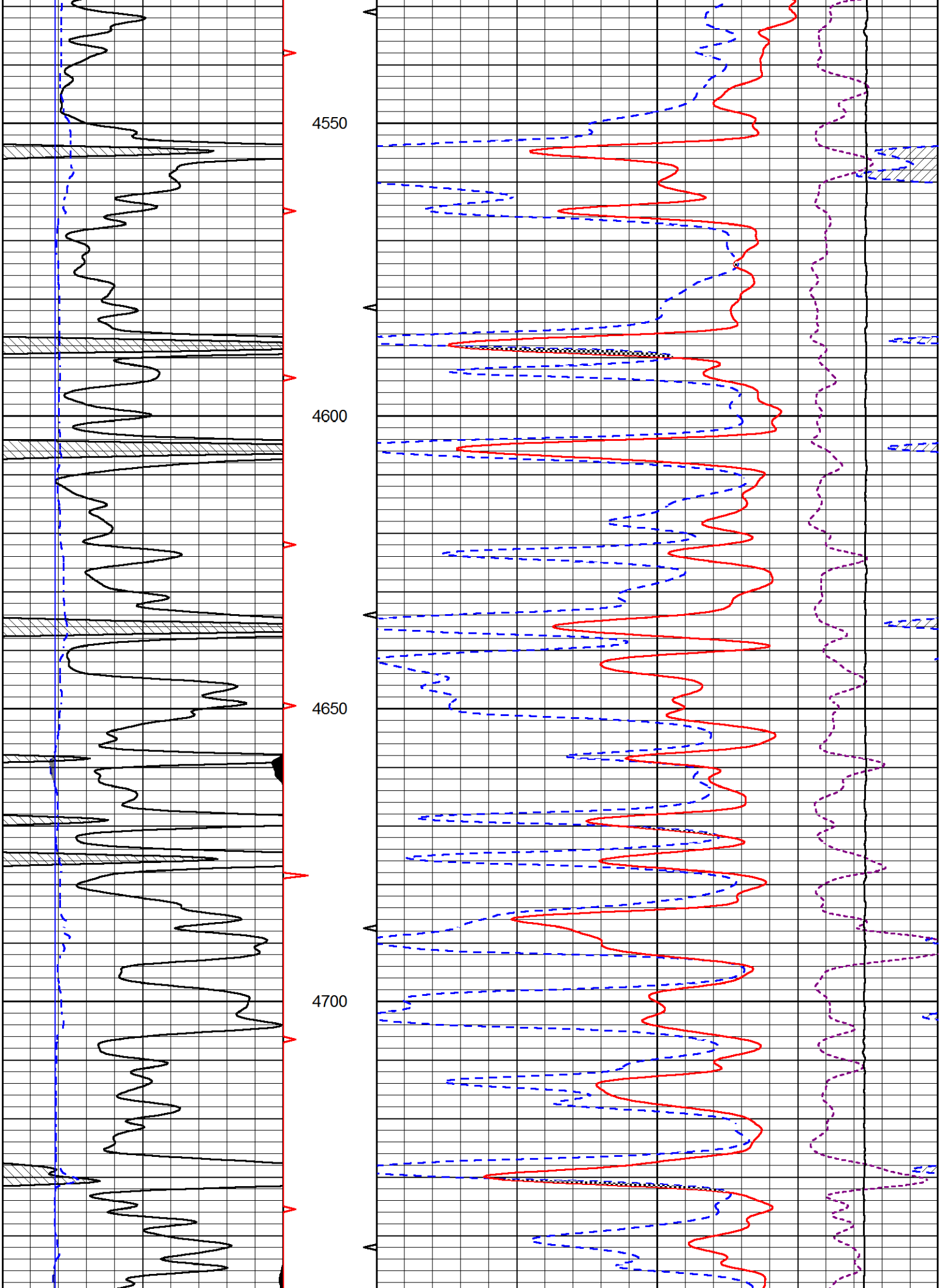
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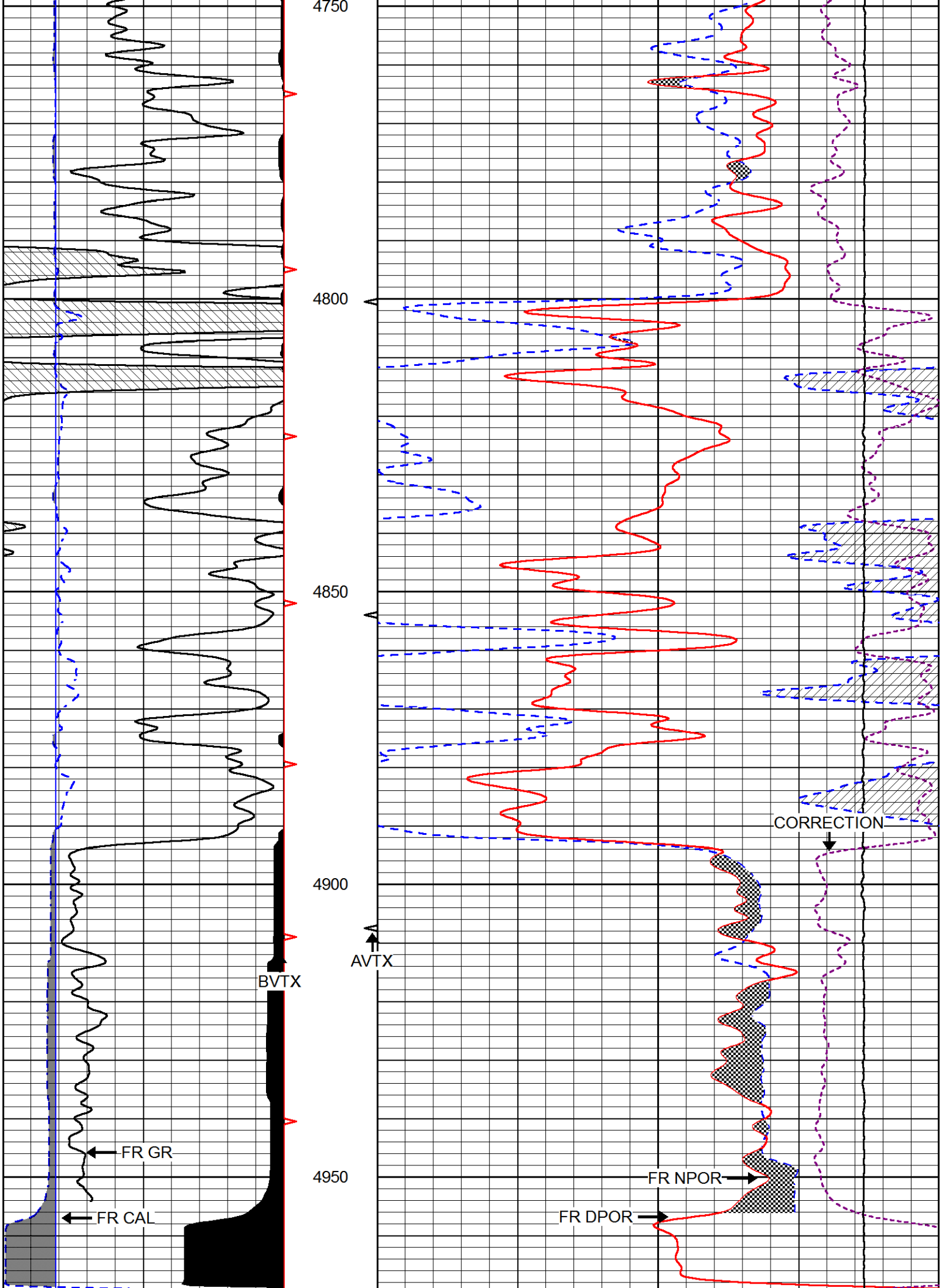
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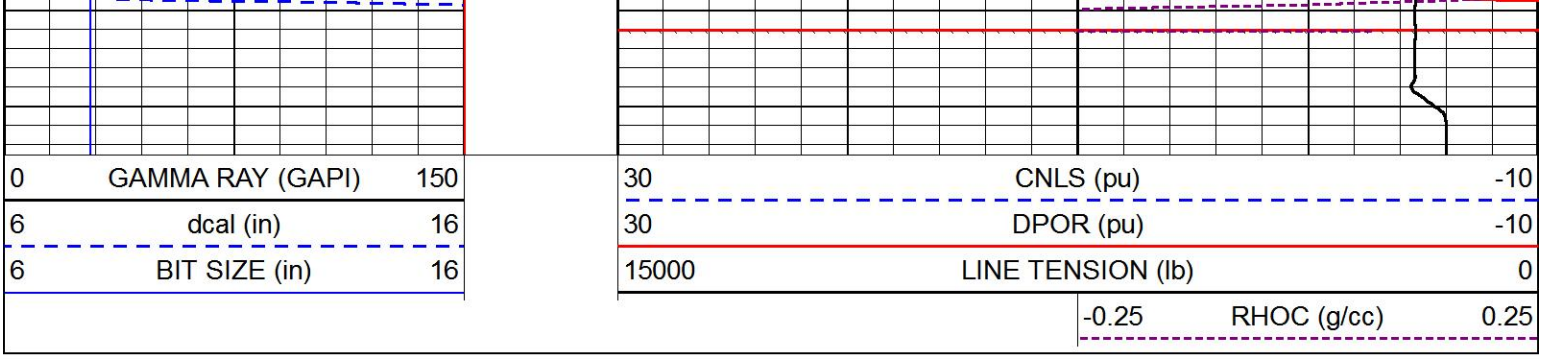
4800
4850
4900
4950
BVTX
AVTX
FR GR
FR CAL
CORRECTION
FR NPOR
FR DPOR



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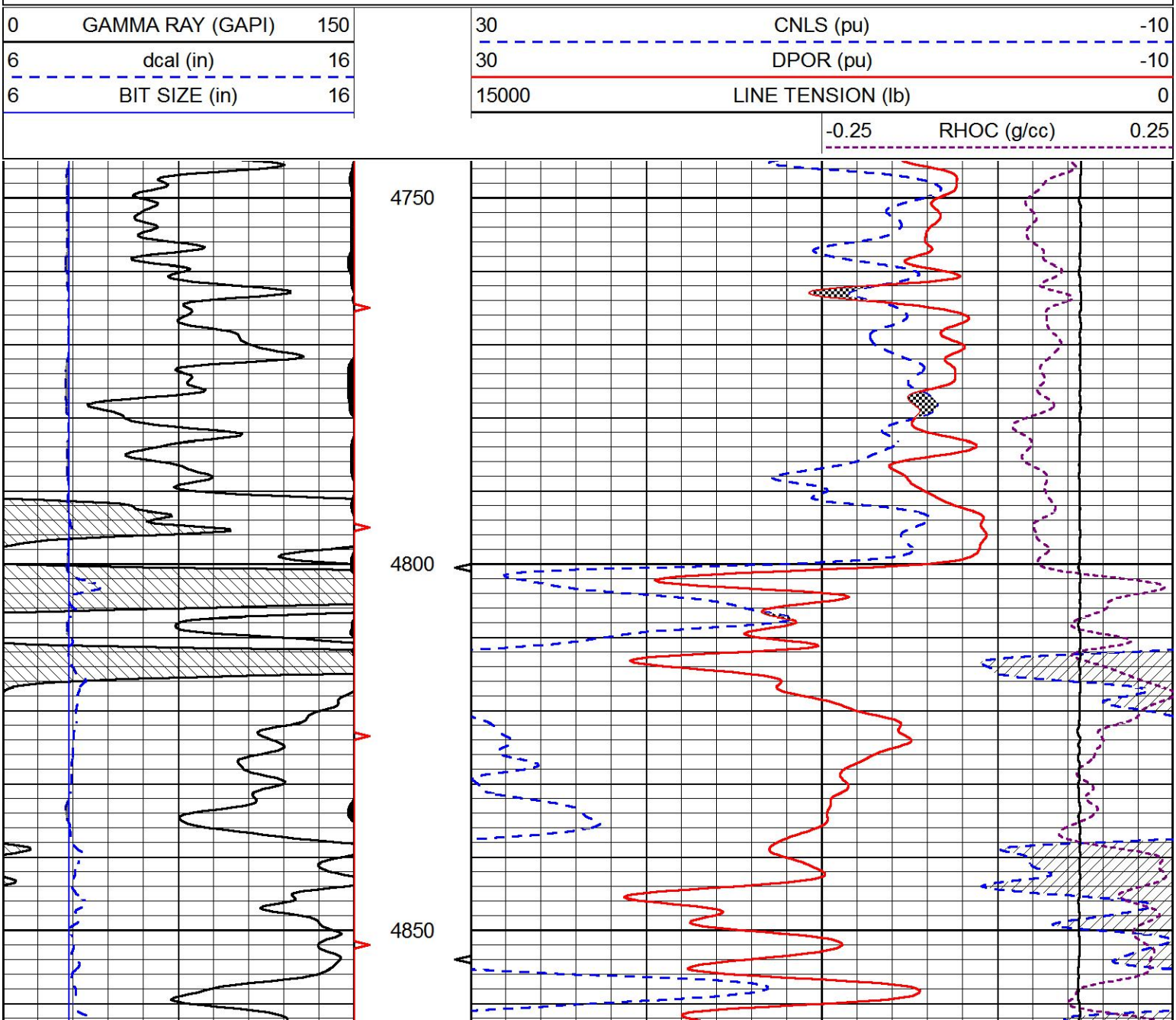
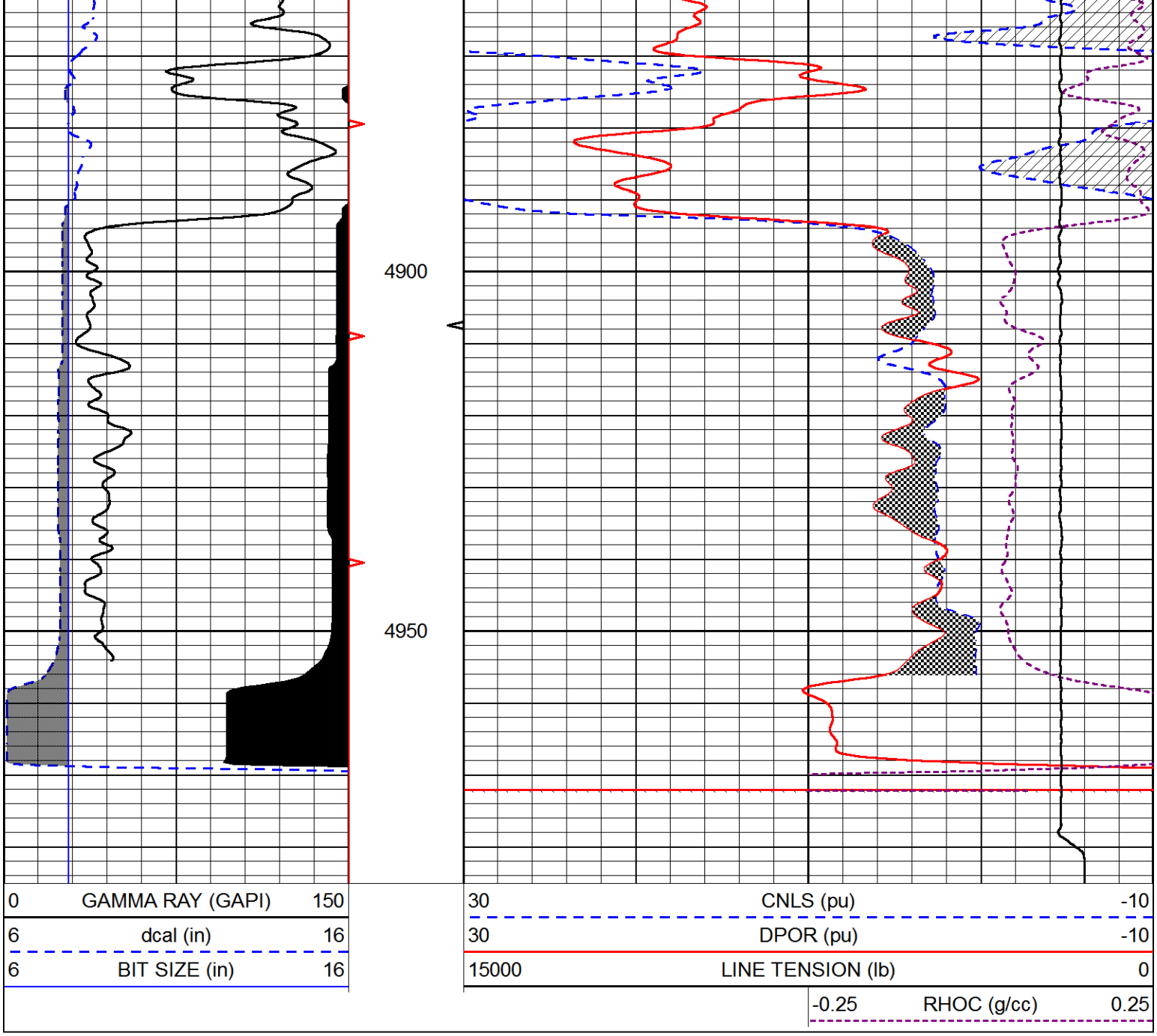
REPEAT SECTION

Database File	ritchie_lewis_trust_3c_1.db
Dataset Pathname	stack/pass2.1
Presentation Format	cndlspec
Dataset Creation	Fri Aug 24 04:35:23 2018
Charted by	Depth in Feet scaled 1:240





Calibration Report

Database File	ritchie_lewis_trust_3c_1.db
Dataset Pathname	stack/pass3.1
Dataset Creation	Fri Aug 24 04:35:08 2018

Dual Induction Calibration Report

Serial-Model:	PSI 75-M&W
Calibration Performed:	Wed Aug 22 09:23:59 2018

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	166.796	835.089	0.000	255.800	mmho/m	0.500	-37.000
Medium	142.009	1348.560	0.000	255.800	mmho/m	0.335	-32.500

Compensated Density Calibration Report

Serial-Model: 168-130 M&W

Serial-Model:	Tool-130-M&W
Source / Verifier:	/
Master Calibration Performed:	Thu Aug 09 22:42:28 2018

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4659.47	5064.14	cps
Aluminum	2.680	g/cc	853.93	3180.74	cps

Spine Angle = 74.67 Density/Spine Ratio = 0.526

	Size		Reading
Small Ring	4.00	in	0.87
Large Ring	16.00	in	0.22

Compensated Neutron Calibration Report

Serial Number:	tk10-MW
Tool Model:	M&W
Calibration Performed:	Wed Nov 16 11:21:36 2016

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:	89-M&W	
Tool Model:	M&W	
Calibration Performed:	Tue Apr 11 17:08:01 2017	
Calibrator Value:	1000.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	6.2	cps
Sensitivity:	0.5200	GAPI/cps

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Well	LEWIS TRUST 3C NO.1
Field	WILDCAT
County	WICHITA
State	KANSAS