

MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company Darrah Oil Company, LLC
Well Keller #1-31
Field Hiss South
County Barton State Kansas

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Field Hiss South
County Barton
State Kansas

Location: API #: 15-009-31702-00-00
1847 FSL & 748 FEL
SEC 31 TWP 20S RGE 13W
Permanent Datum Ground Level Elevation 1904
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
CNL/CDL
MEL/BHCS
K.B. 1914
D.F.
G.L. 1904

Date 6/19/2022

Run Number One
Type Log CNL/CDL
Depth Driller 3572
Depth Logger 3563
Bottom Logged Interval 3542
Top Logged Interval 2700
Type Fluid In Hole Chemical
Salinity, PPM CL
Density
Level Full
Max. Rec. Temp. F 112
Operating Rig Time 4 Hours
Equipment -- Location P-108 HAYS
Recorded By D. Schmidt
Witnessed By Roger Martin

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	440	8.625	23	0	440
Two	7.875	440	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.

Great Bend,
South to 50th, 2 West, 1 3/4 South,
West into

Log Measured From: Kelly Bushing 10 Ft. Above Permanent Datum

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

Your Midwest Wireline Crew

Engineer: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Roger Martin
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\darrah_keller 1-31.db
Dataset field/well/stack/pass3.12/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	112	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	335	0		3563

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



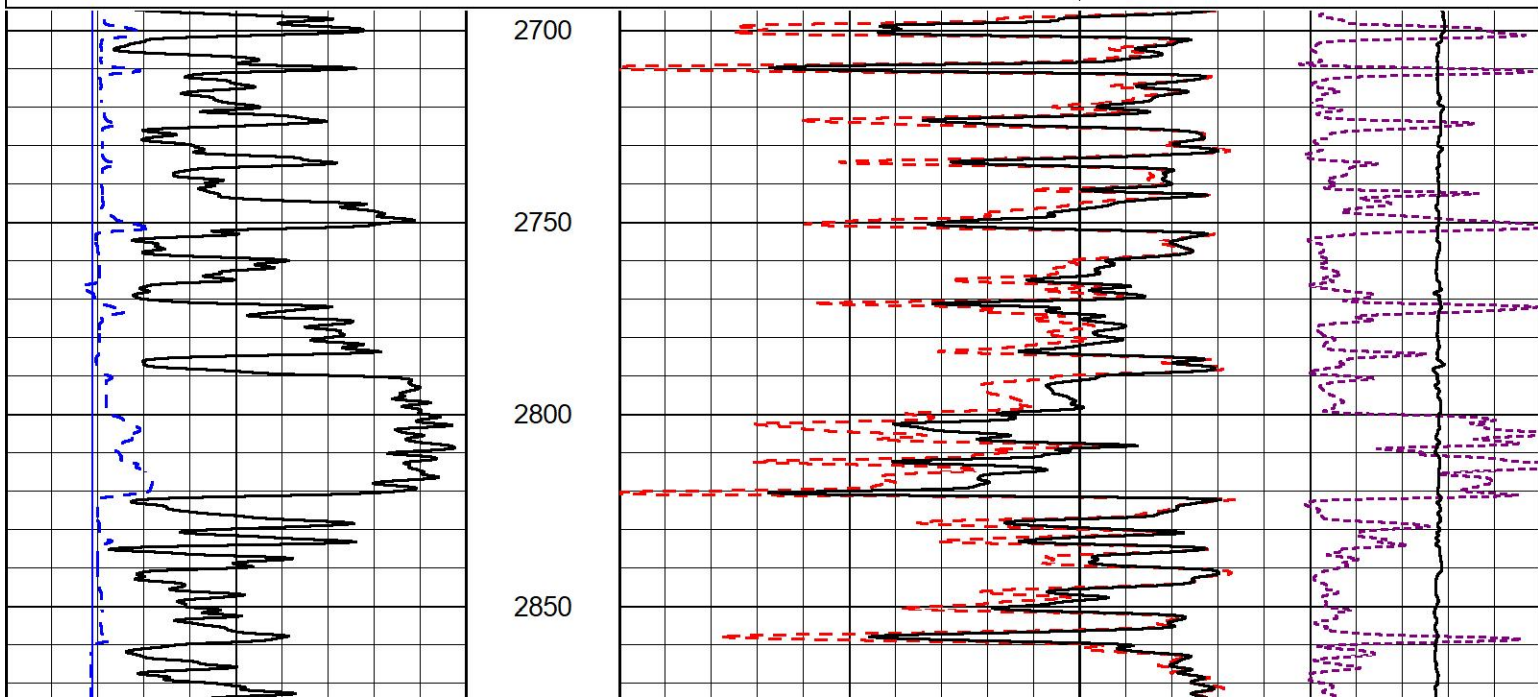
2" SCALE BULK DENSITY

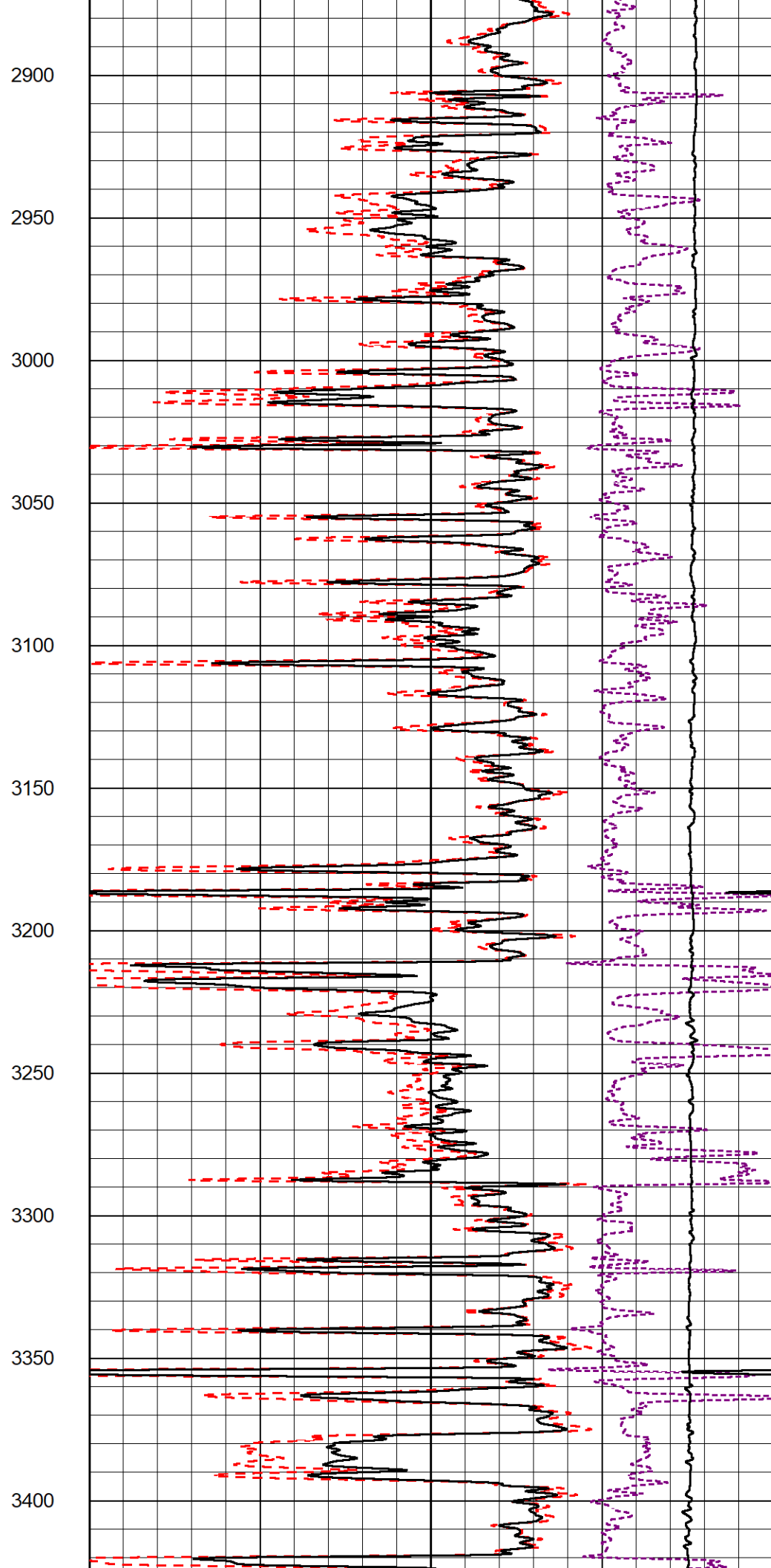
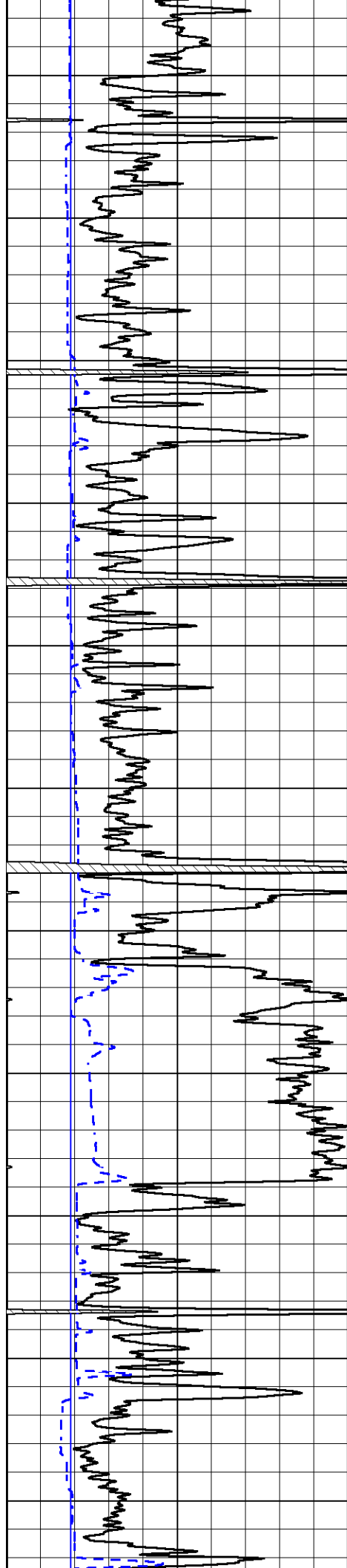
MAIN PASS

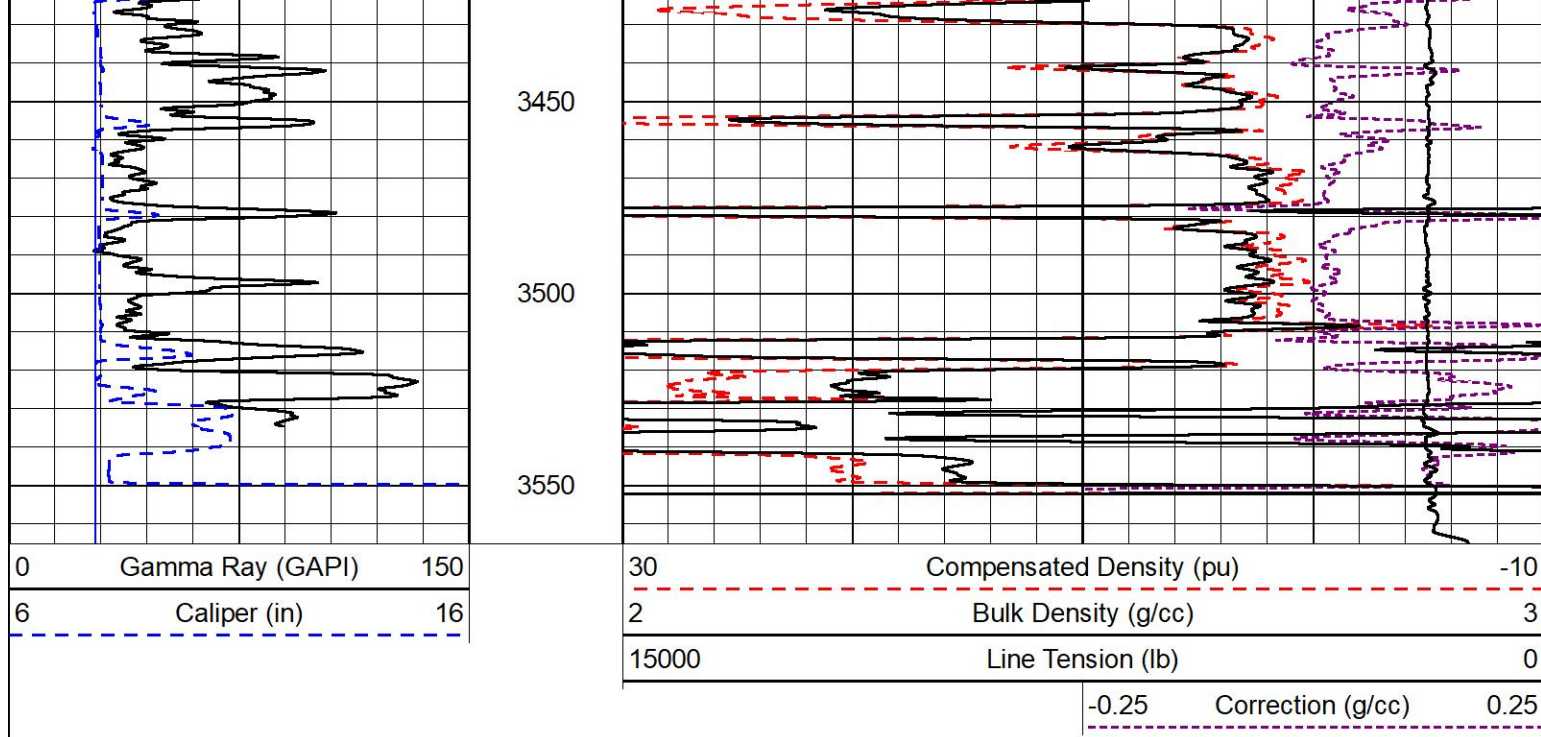
Database File darrah_keller 1-31.db
Dataset Pathname stack/pass3.2
Presentation Format _cdl
Dataset Creation Sun Jun 19 16:29:59 2022
Charted by Depth in Feet scaled 1:600

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



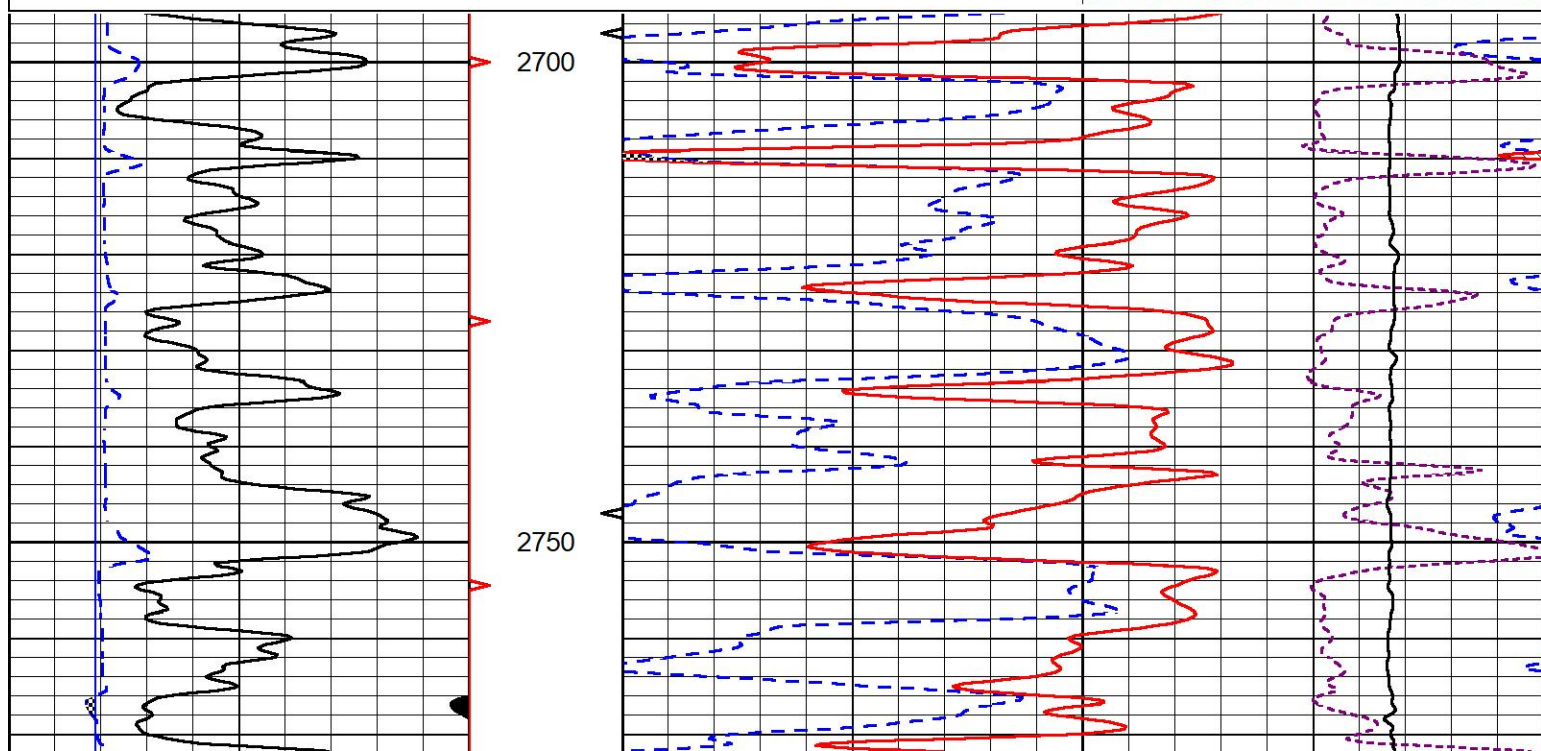
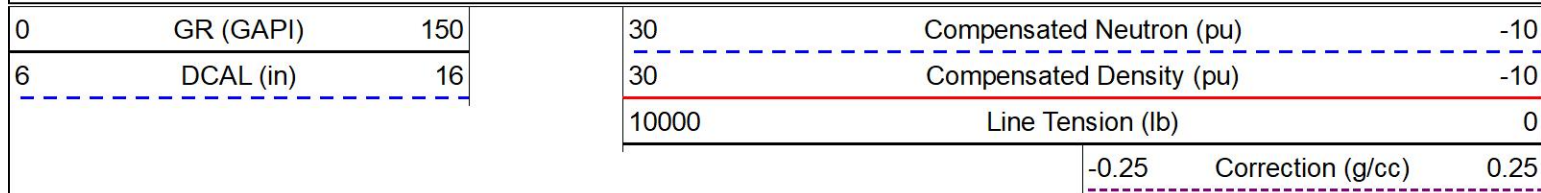


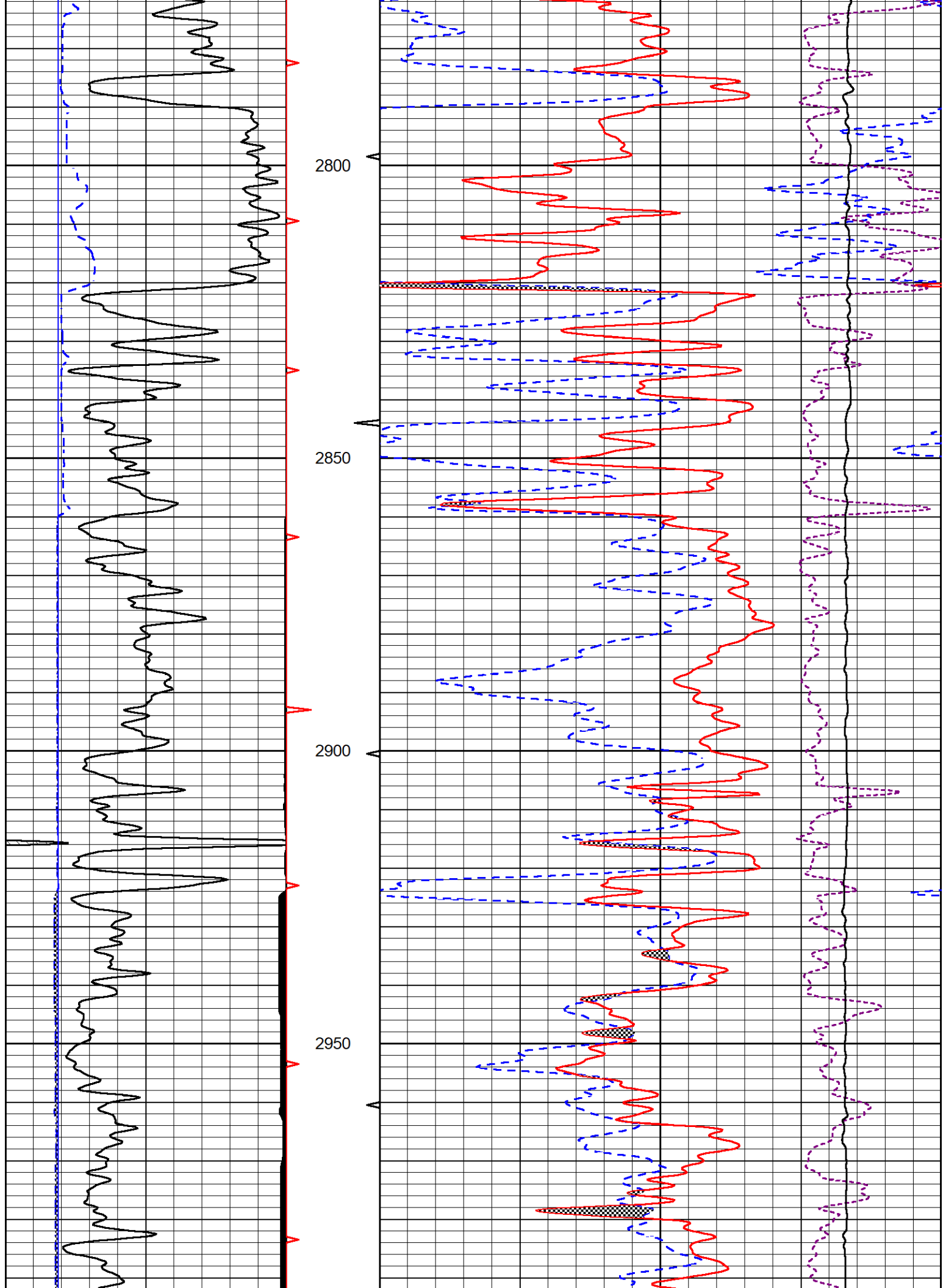


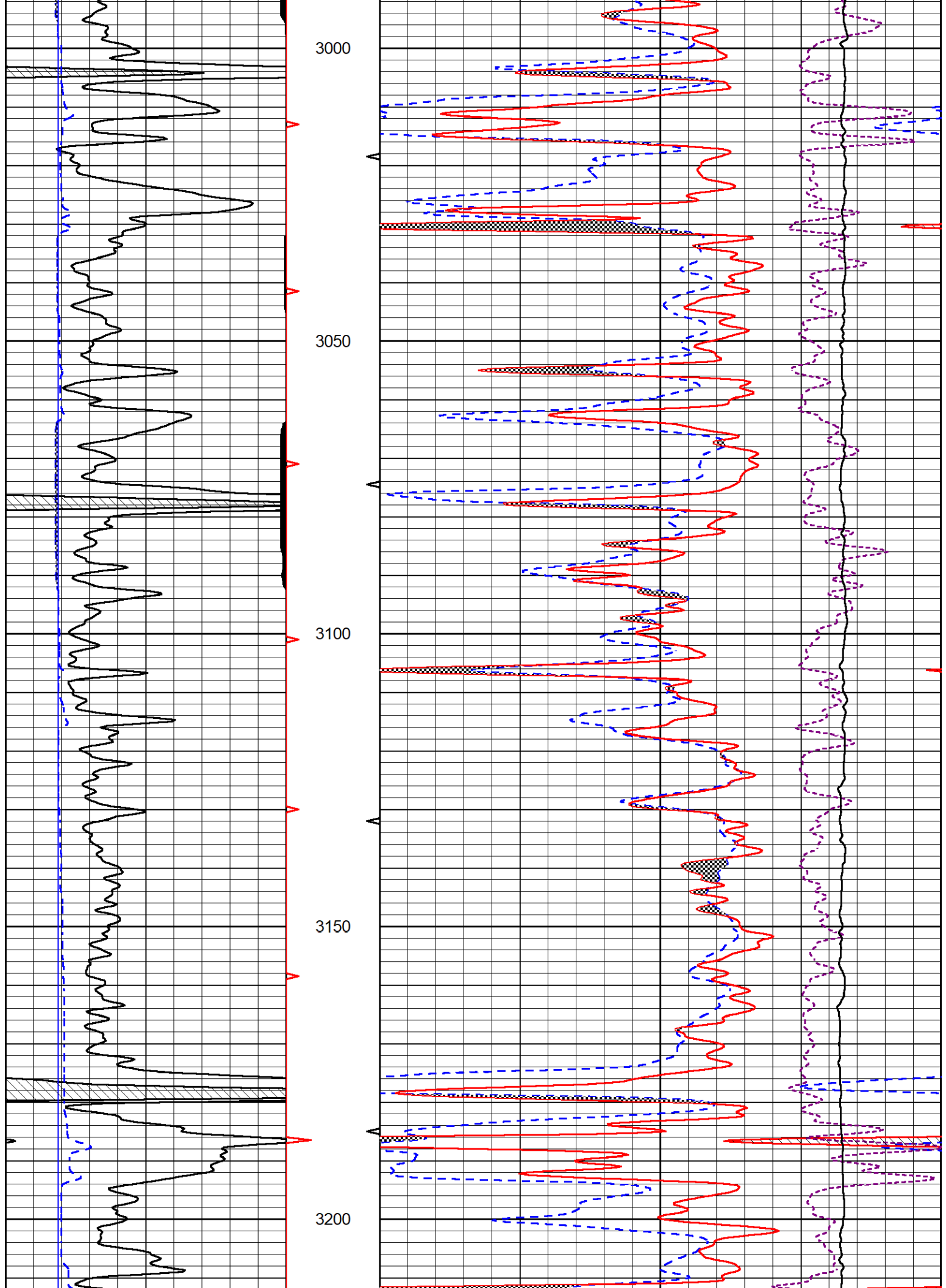
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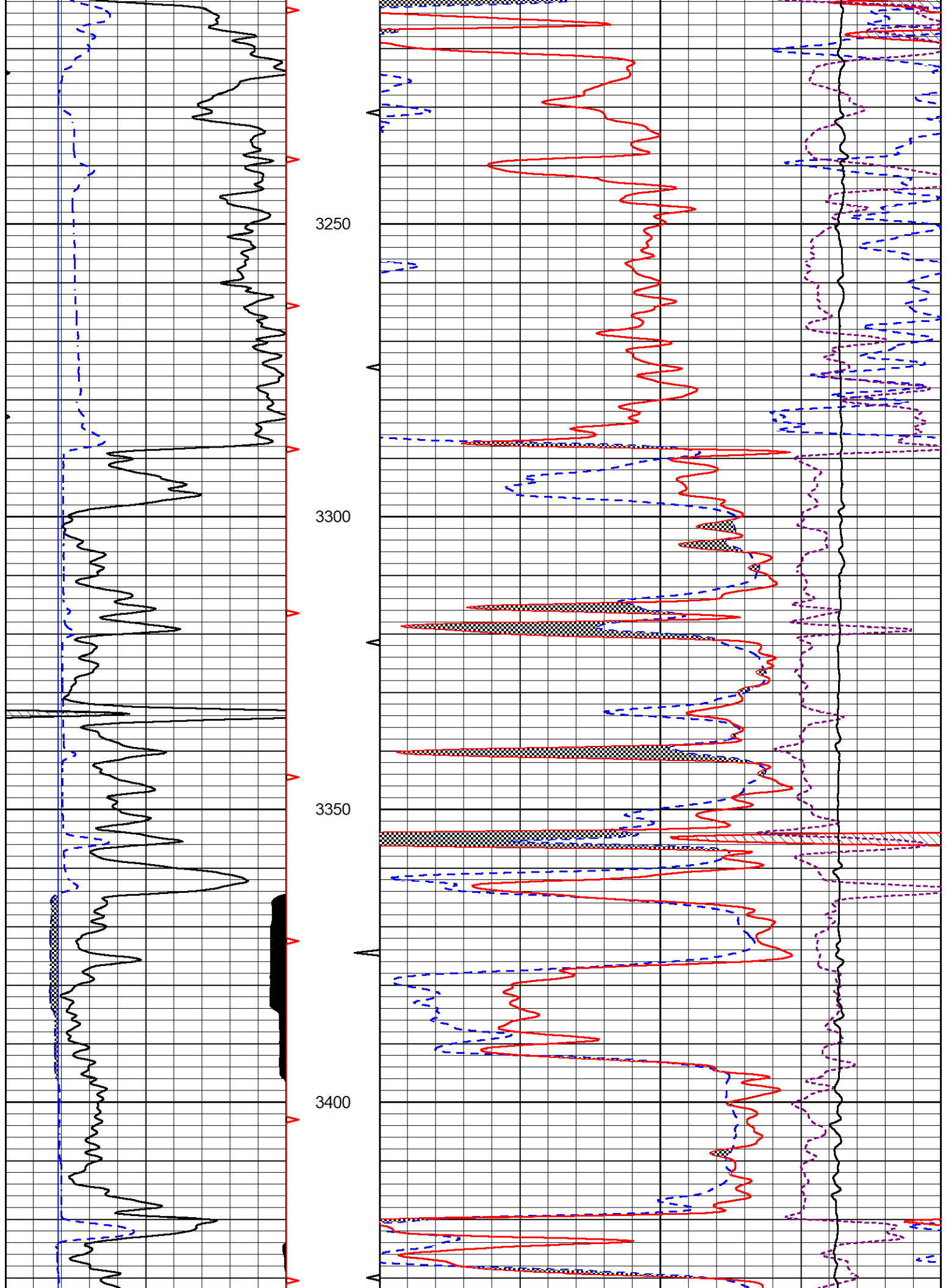
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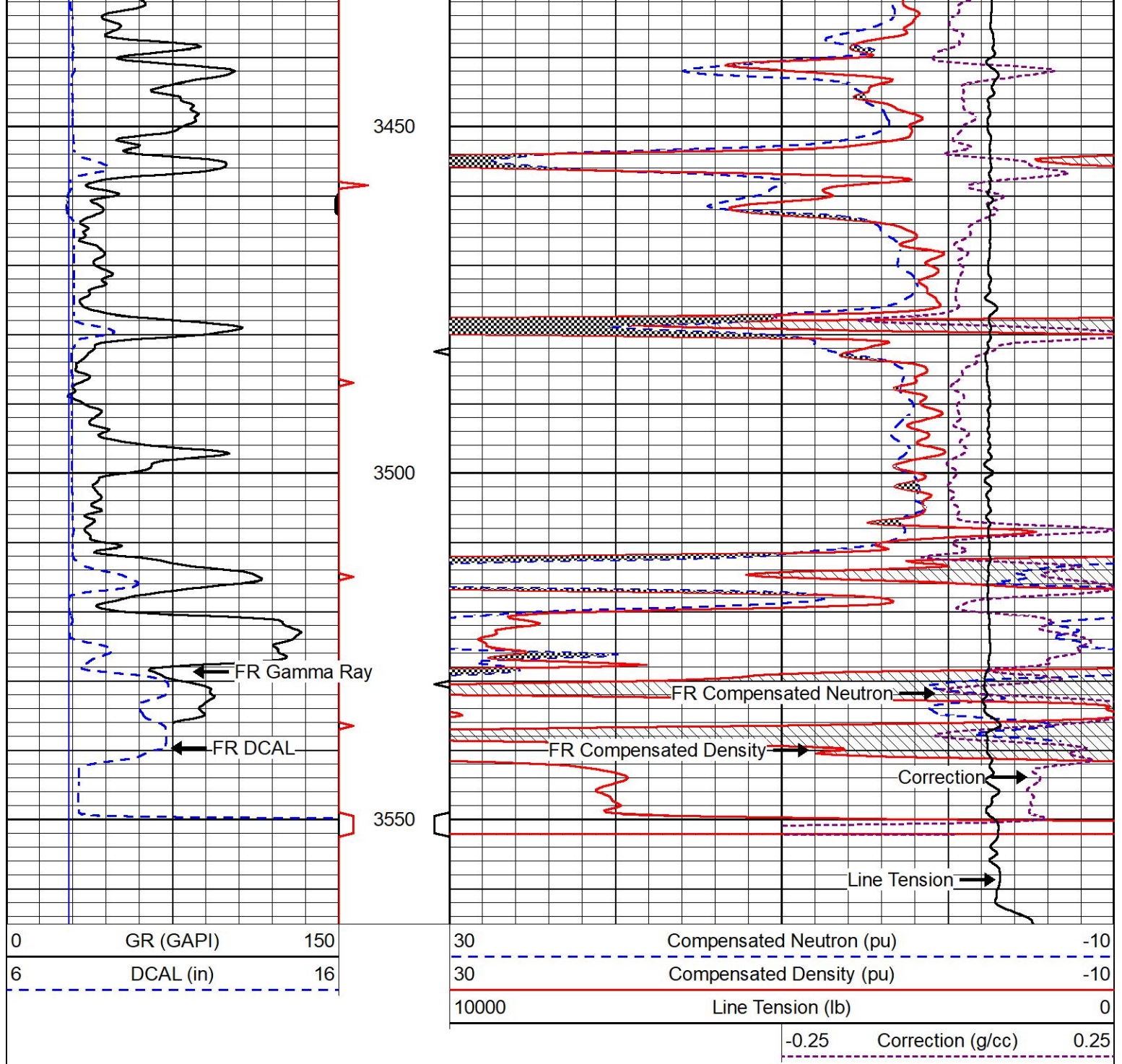
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Dataset Pathname stack/pass3.1
Presentation Format _CNDLS~1
Dataset Creation Sun Jun 19 16:29:00 2022
Charted by Depth in Feet scaled 1:240









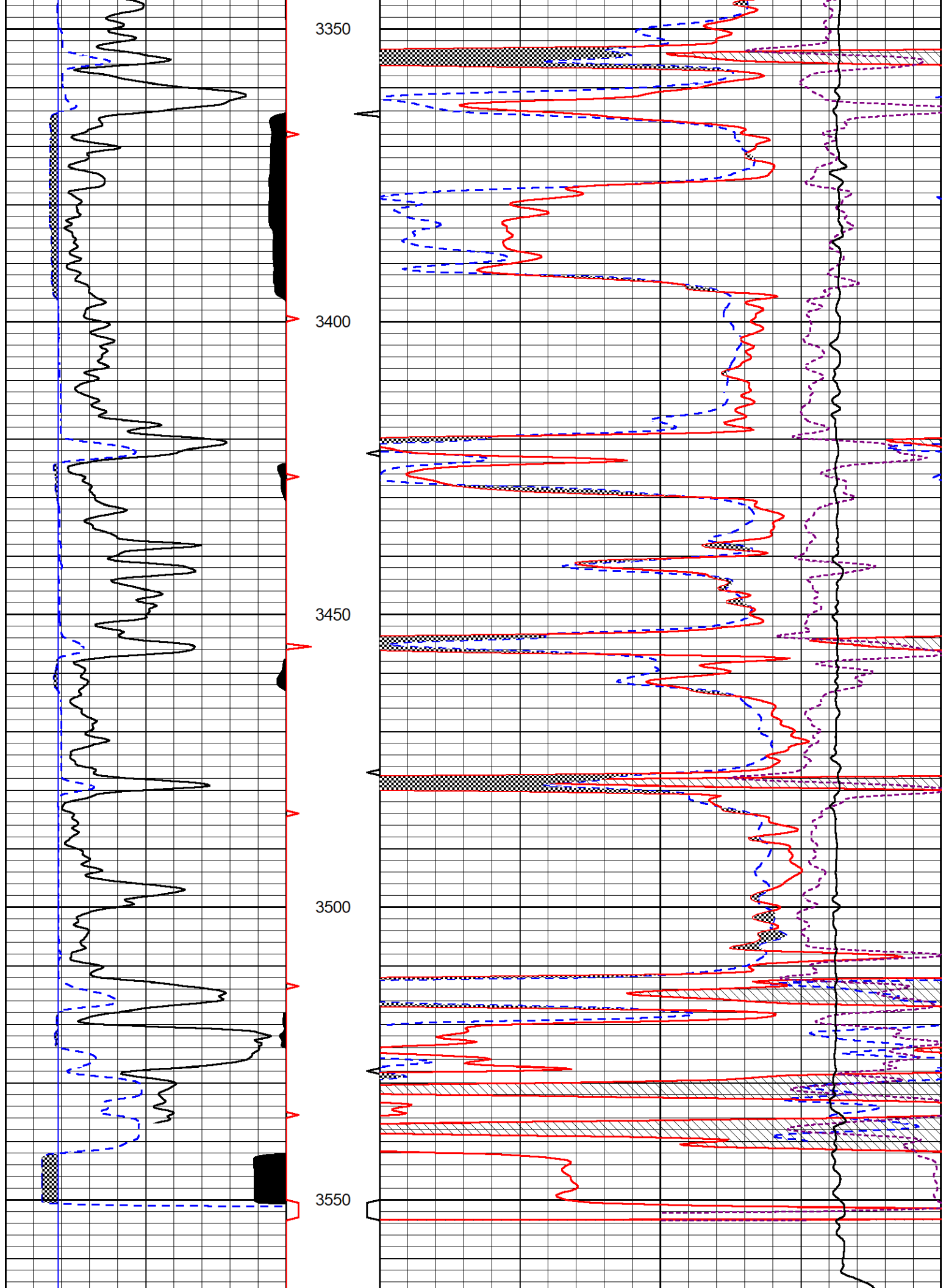


REPEAT SECTION

REPEAT PASS

Database File darrah_keller 1-31.db
 Dataset Pathname stack/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Sun Jun 19 15:56:51 2022
 Charted by Depth in Feet scaled 1:240

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



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

Calibration Report									
Database File		darrah_keller 1-31.db							
Dataset Pathname		stack/pass3.12							
Dataset Creation		Sun Jun 19 15:50:16 2022							
Dual Induction Calibration Report									
Serial-Model:				504 HT-M&W					
Surface Cal Performed:				Thu Dec 16 22:32:49 2021					
		Readings		References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	178.615	710.235		0.000	255.800	mmho/m	0.650	-10.500	
Medium	161.982	1441.110		0.000	255.800	mmho/m	0.435	-42.000	
Compensated Density Calibration Report									
Serial-Model:				304-04-M&W					
Source #:				21170B					
Master Calibration Performed:				Sun May 29 09:31:45 2022					
Master Calibration									
		Density		Far Detector		Near Detector			
Magnesium		1.755	g/cc	6392.84		8538.69		cps	
Aluminum		2.675	g/cc	1184.69		5433.63		cps	
		Spine Angle = 74.99		Density/Spine Ratio = 0.527					
		Size		Reading					
Small Ring		4.00	in	1.15					
Large Ring		14.00	in	1.02					
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									

Test Meas.:	RAW	
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	Darrah Oil Company, LLC
Well	Keller #1-31
Field	Hiss South
County	Barton
State	Kansas