



MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company Val Energy, Inc.
 Well Gail Sawyer #1-30
 Field Wilson
 County Cowley State Kansas

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 State Kansas

Location: API #: 15-035-24743-00-00
 330 FSL & 2255 FEL
 SEC 30 TWP 32S RGE 6E
 Permanent Datum Ground Level Elevation 1289
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 DIL
 MEL
 Elevation
 K.B. 1297
 D.F.
 G.L. 1289

Date	10/5/2021						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	3303						
Depth Logger	3302						
Bottom Logged Interval	3272						
Top Logged Interval	1600						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	900						
Density	8.6						
Level	Full						
Max. Rec. Temp. F	109						
Operating Rig Time	2 Hours						
Equipment -- Location	P-24 HAYS						
Recorded By	J. Henrickson						
Witnessed By	Joe Baker						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	Casing Record	
One	12.25	0	301	8.625	24	From	To
Two	7.875	301	TD			0	301

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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.

Winfield Kansas
 East to 201, 1 South, 1 West, West Into at Gate

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: J. Henrickson	Operator:	Primary Witness: Joe Baker	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Log Variables

DatabaseC:\ProgramData\Warrior\Data\val_gail_sawyer_1_30.db
Dataset field/well/stackml/pass4.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	109	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	81	Off	3302

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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58		GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC	37.48		CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73					
LSD	28.43		CDL-M&W (934-226)	8.50	4.00	250.00
DCAL	28.42					
SSD	27.93					
ML-PSIML (PSI-01)			ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
MCAL	19.83		MI	19.83	19.83	
MI	19.83					
MN	19.83					
RLL3F	15.80	RLL3	15.80			
RLL3	15.80					

CILD 8.00

CILM 4.70

SP 0.20

DIL-PSI HIGH TEMP (952-828)

18.50

3.50

220.00

Dataset: val_gail_sawyer_1_30.db: field/well/stackml/pass4.1
 Total length: 43.08 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in



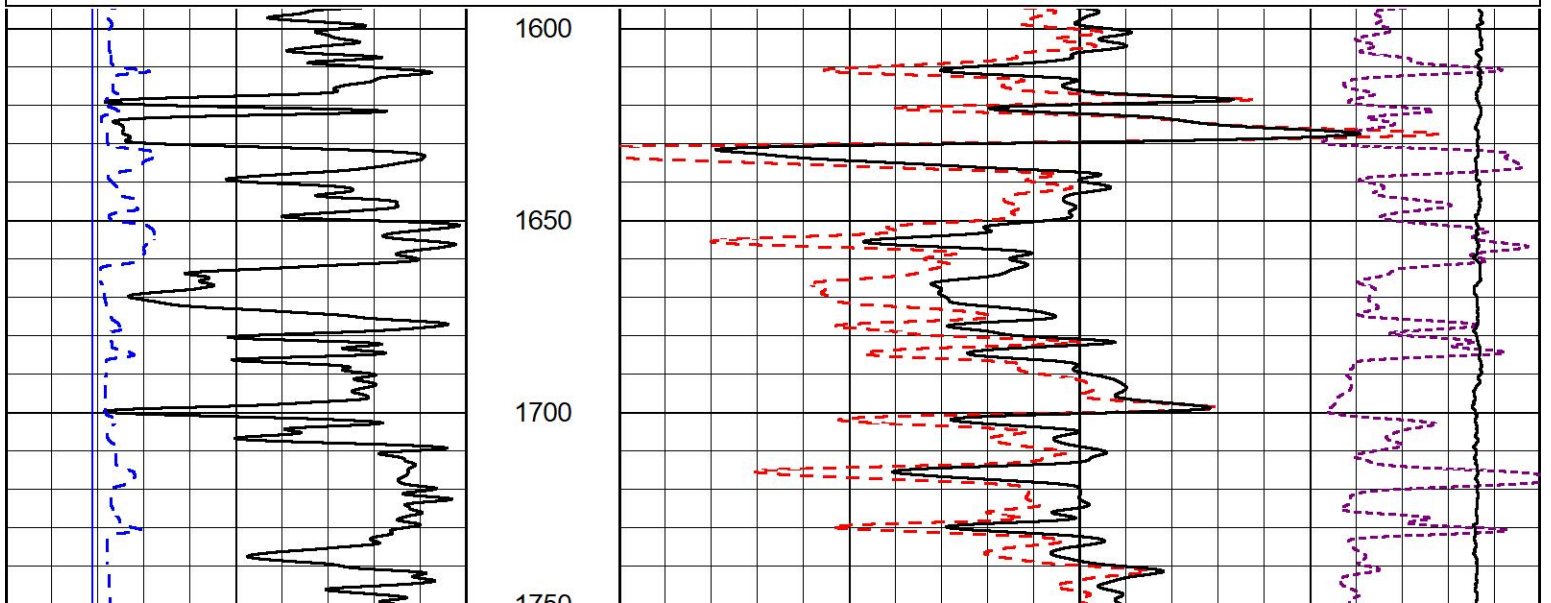
2" SCALE BULK DENSITY

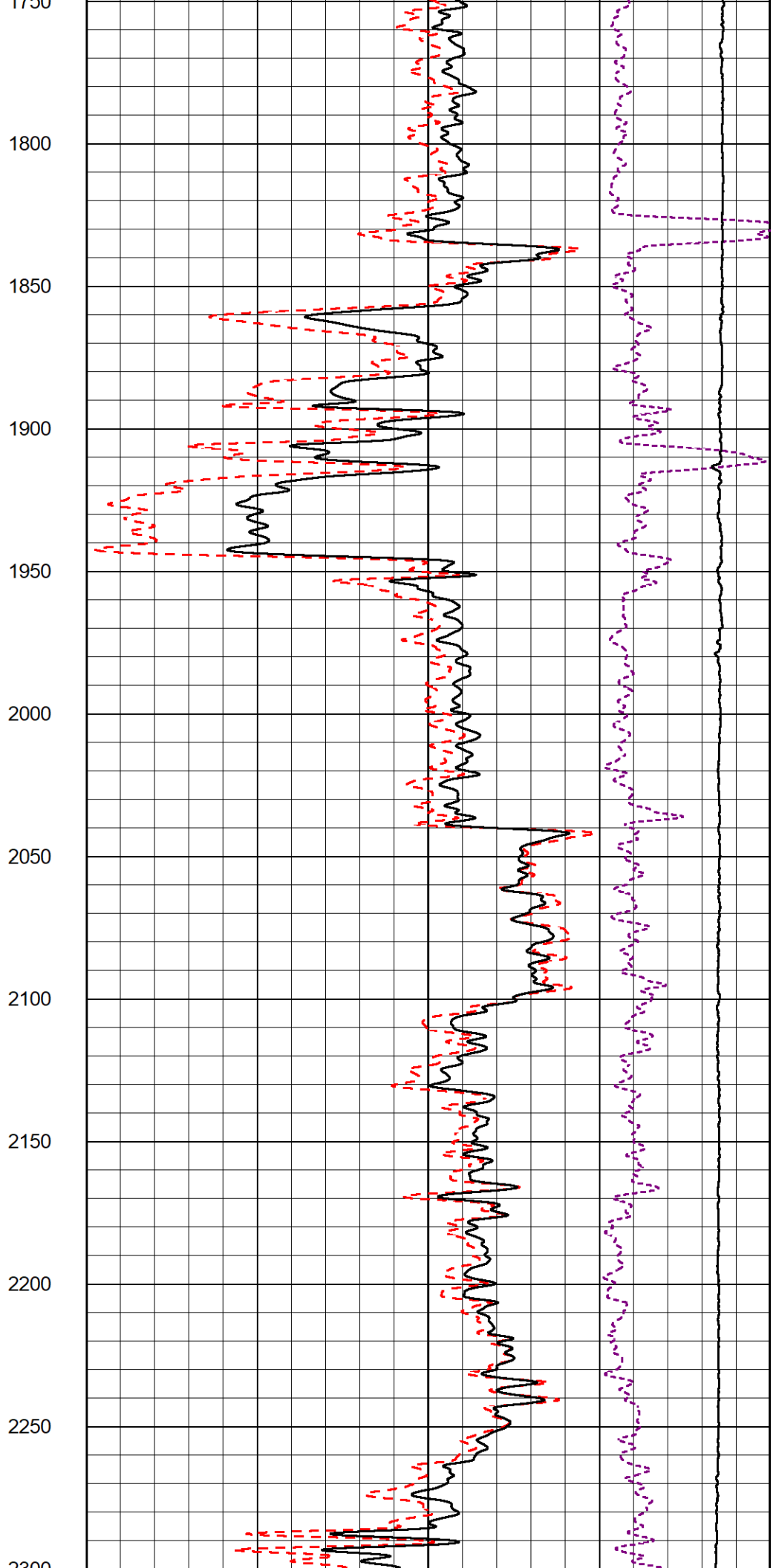
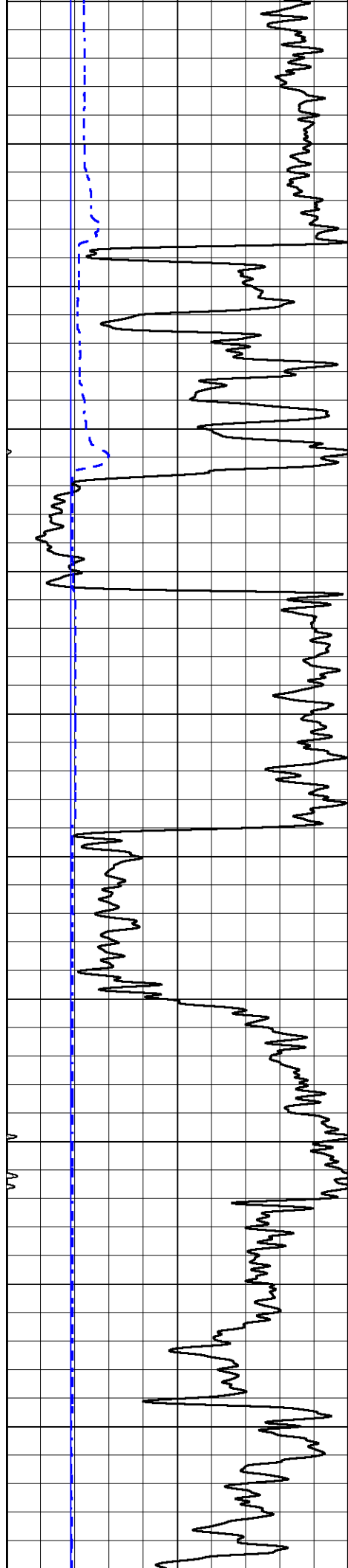
MAIN PASS

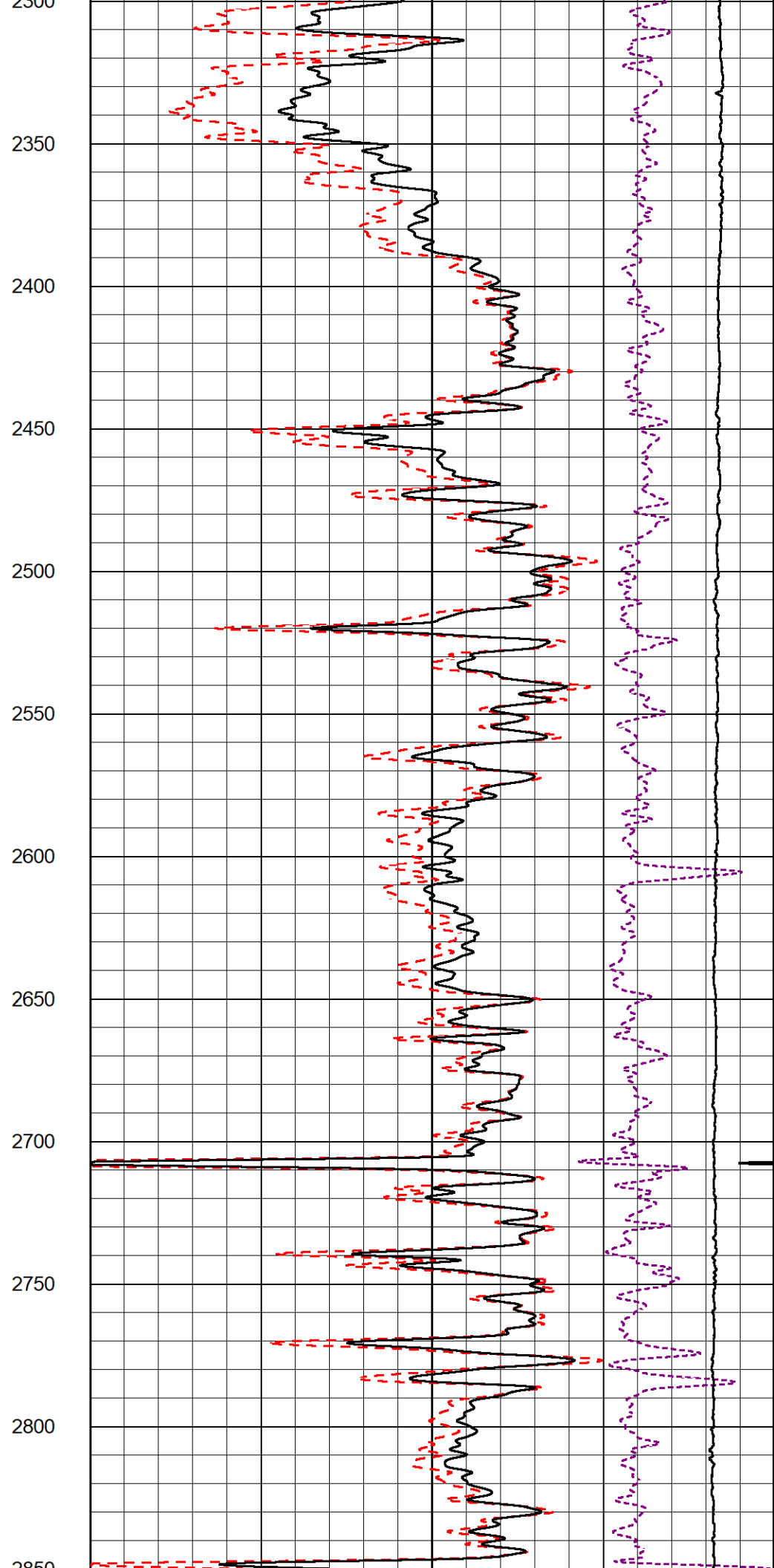
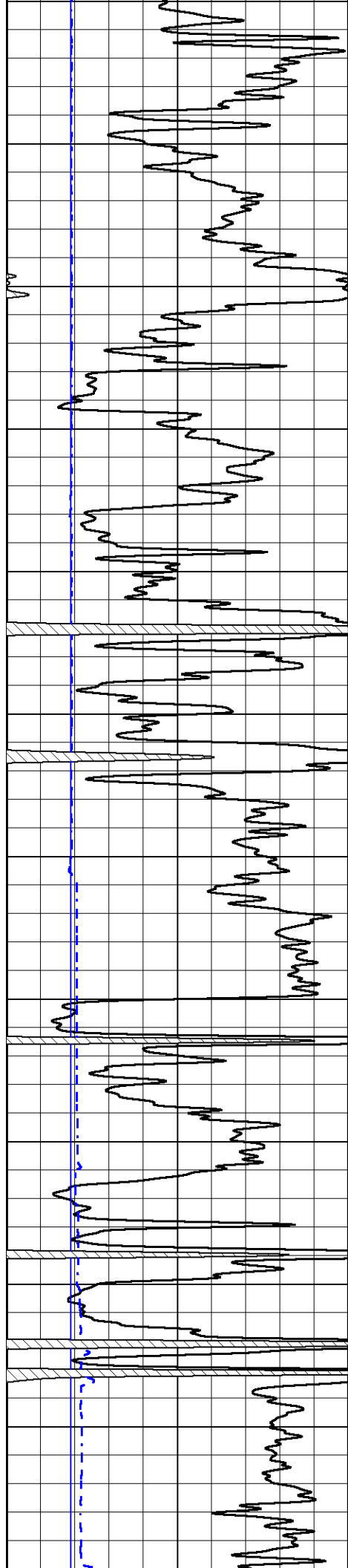
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 Presentation Format _cdl
 Dataset Creation Tue Oct 05 17:07:51 2021
 Charted by Depth in Feet scaled 1:600

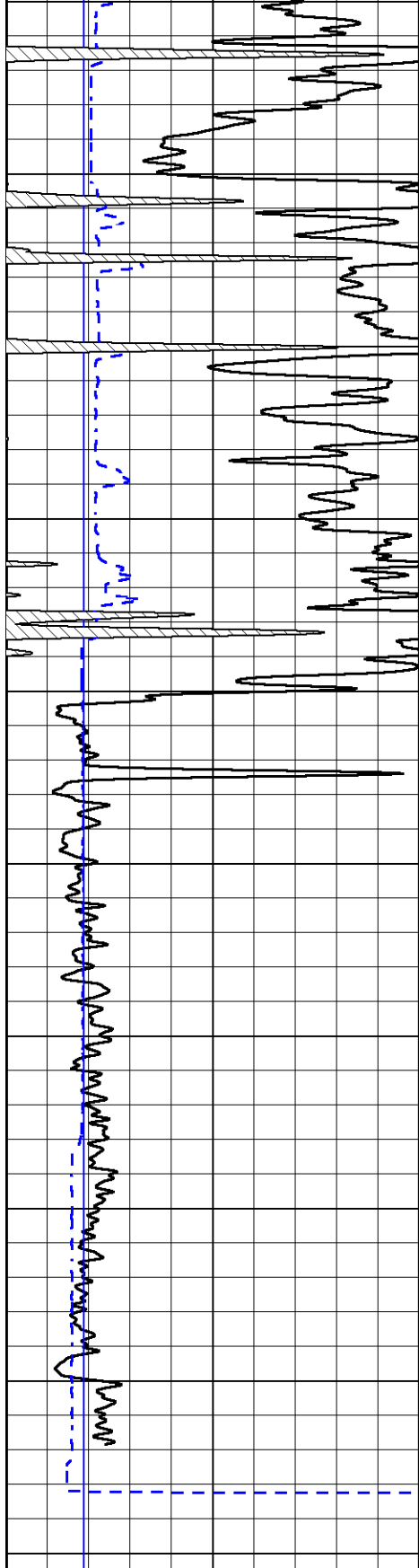
0	GAMMA RAY (GAPI)	150
6	DCAL (in)	16

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

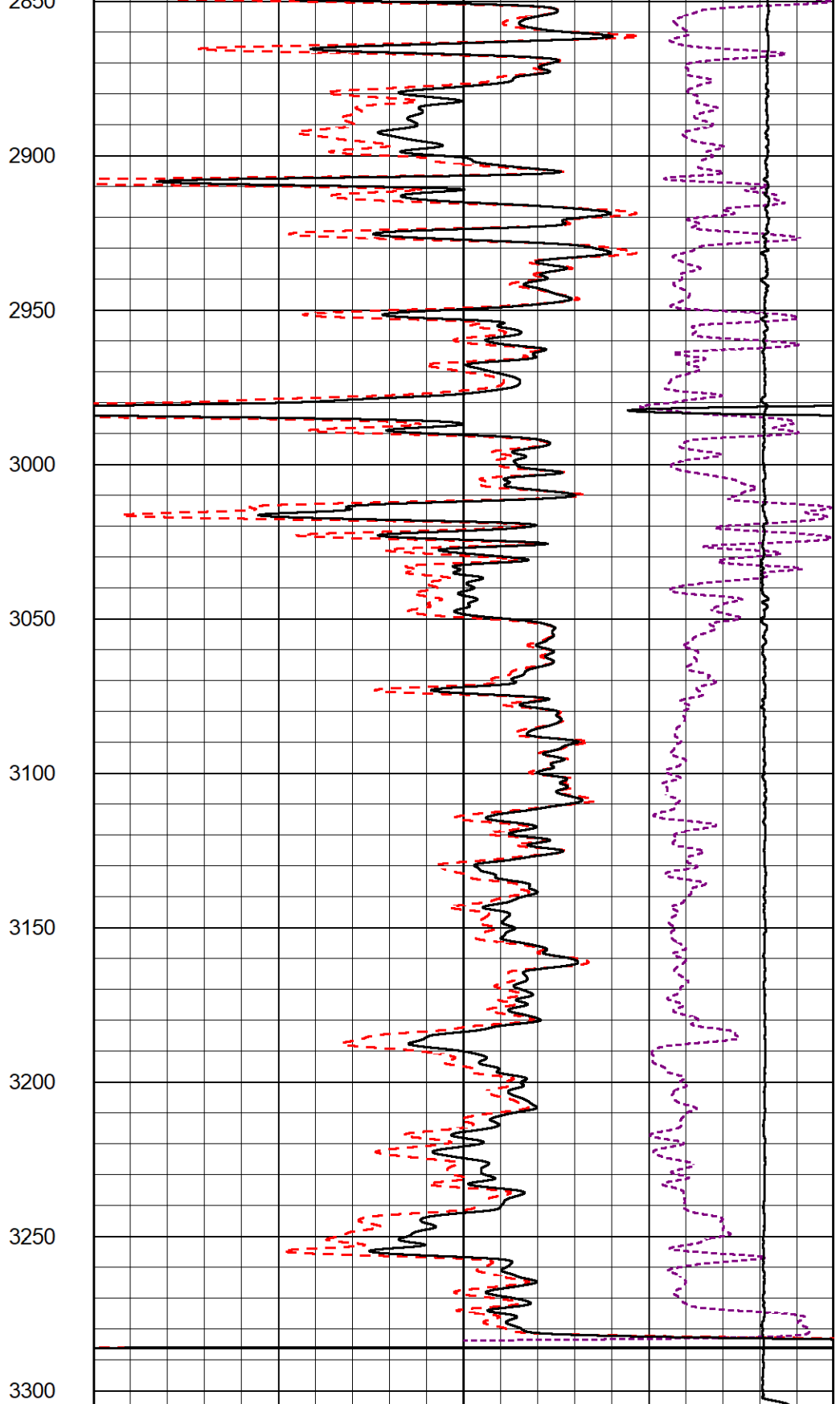








0 GAMMA RAY (GAPI) 150
 6 DCAL (in) 16



2830
 2900
 2950
 3000
 3050
 3100
 3150
 3200
 3250
 3300

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



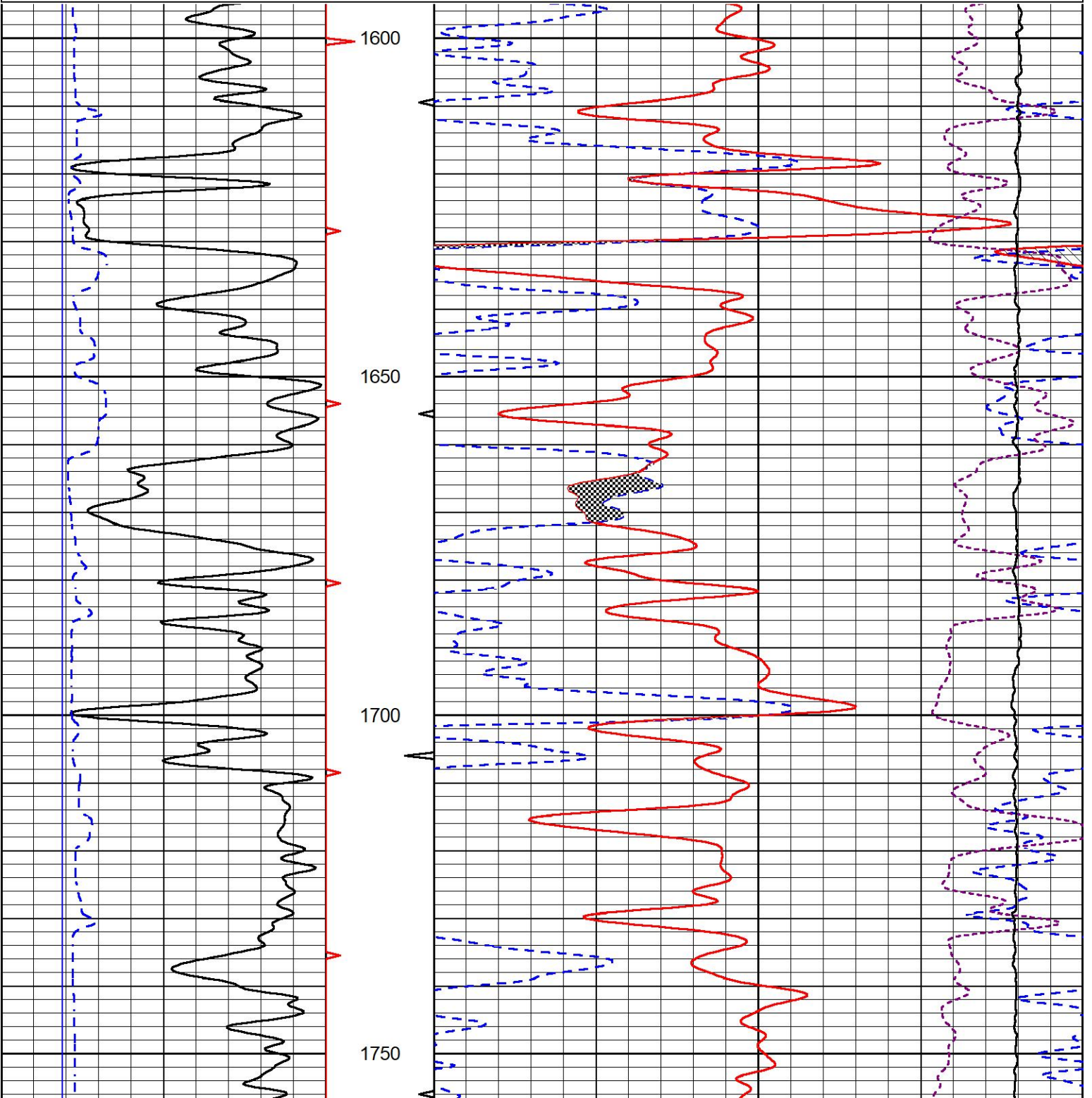
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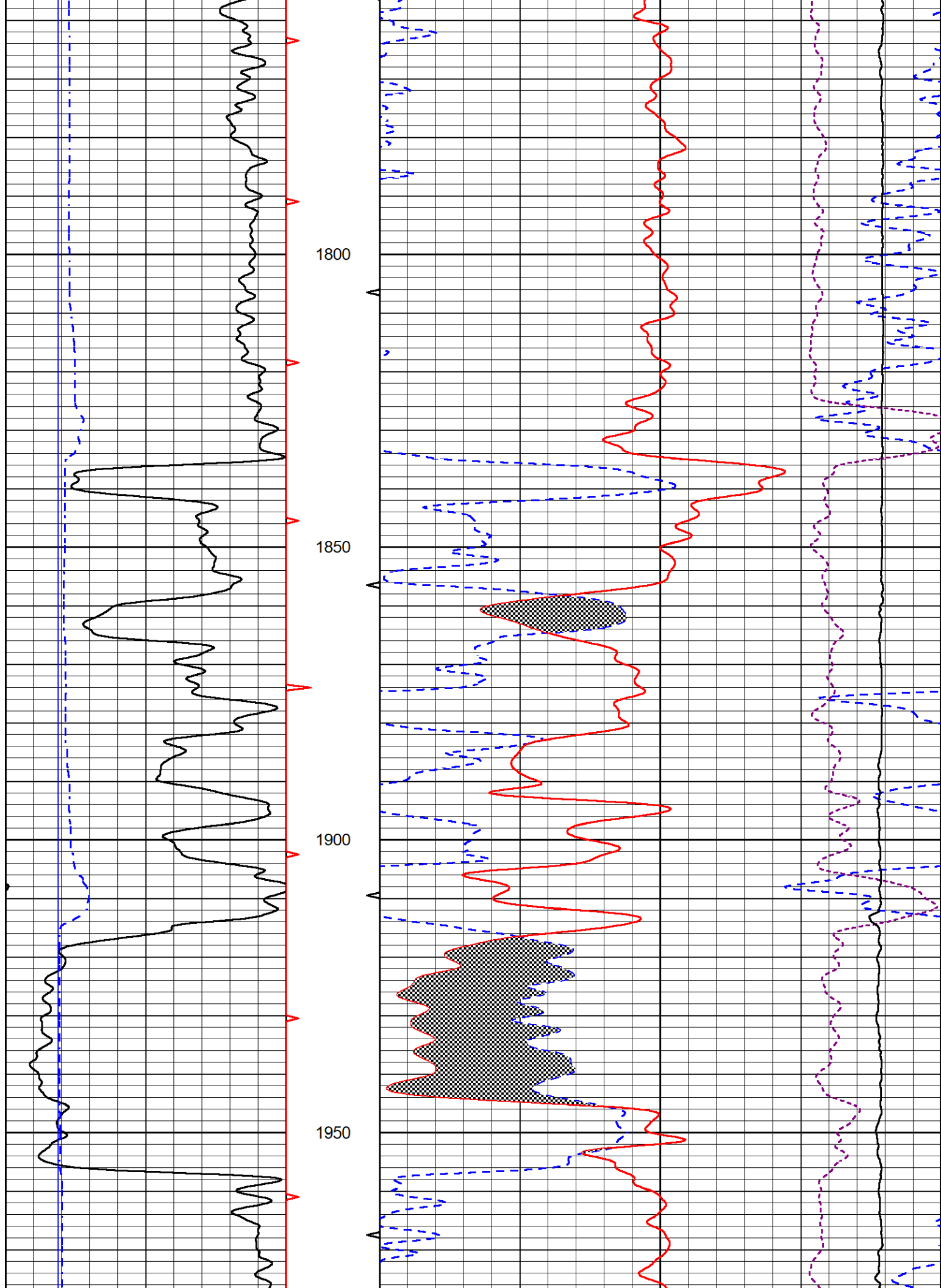
MAIN PASS

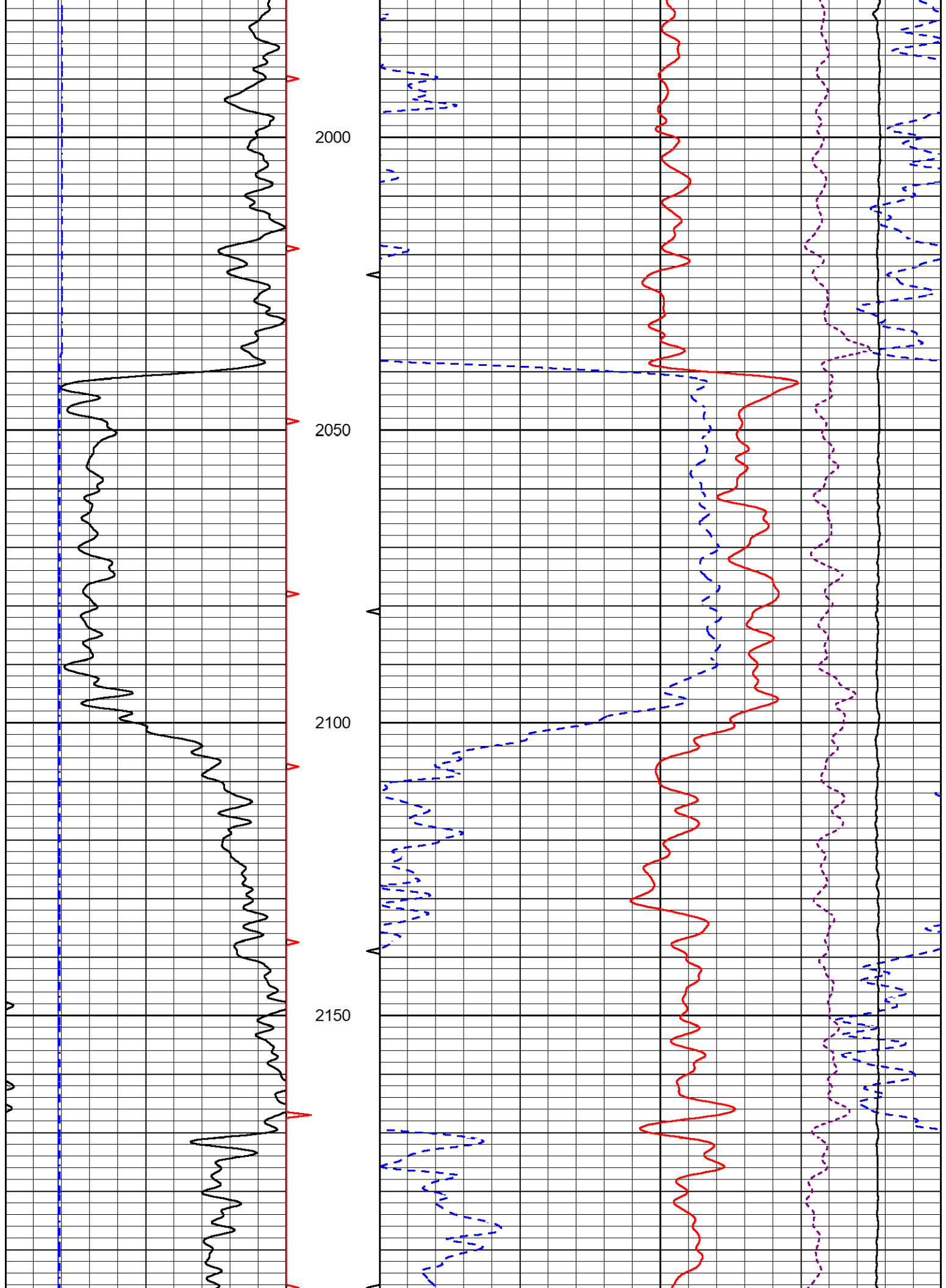
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 Presentation Format _CNDLS~1
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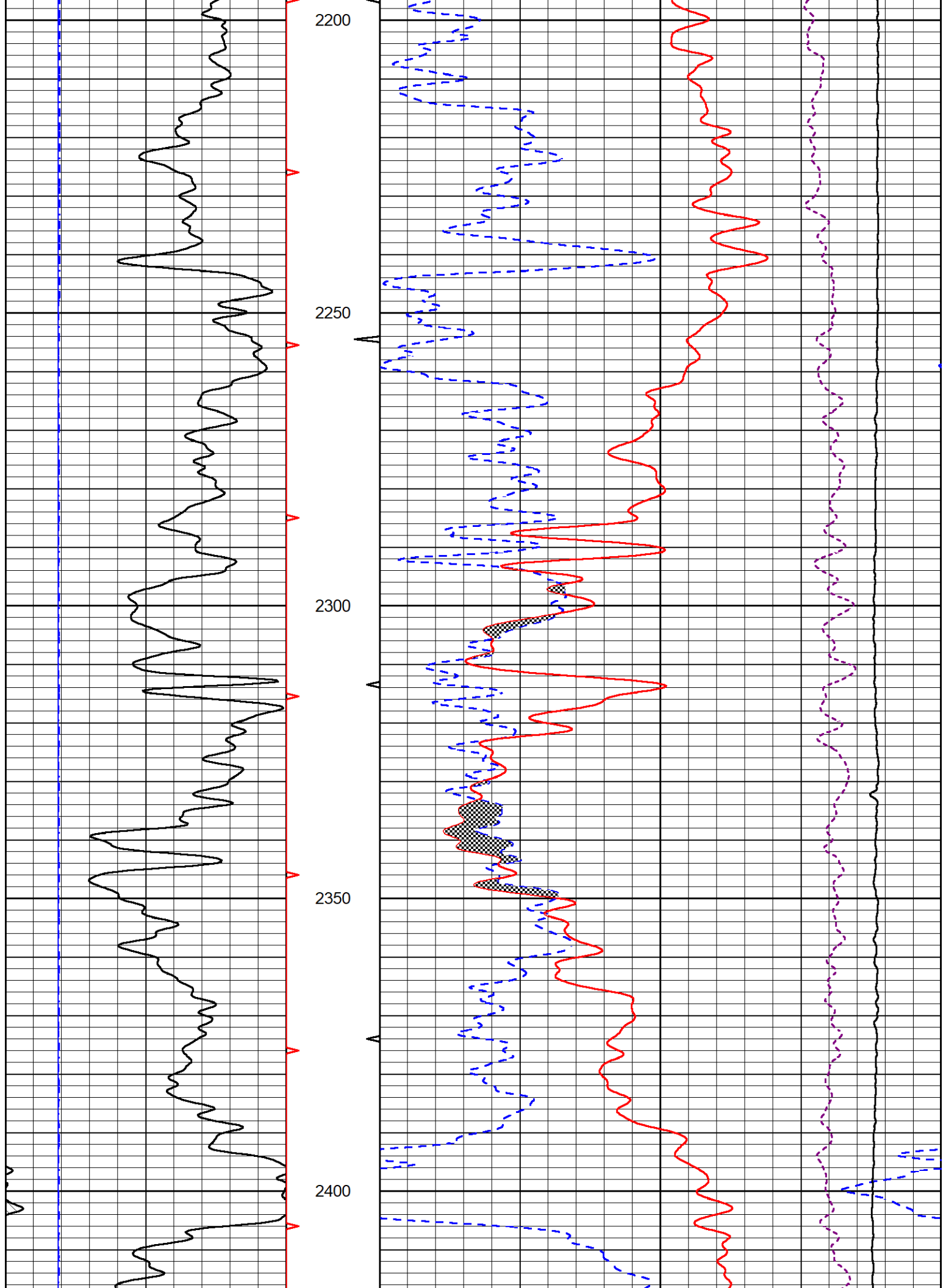
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6	DCAL (in)	16

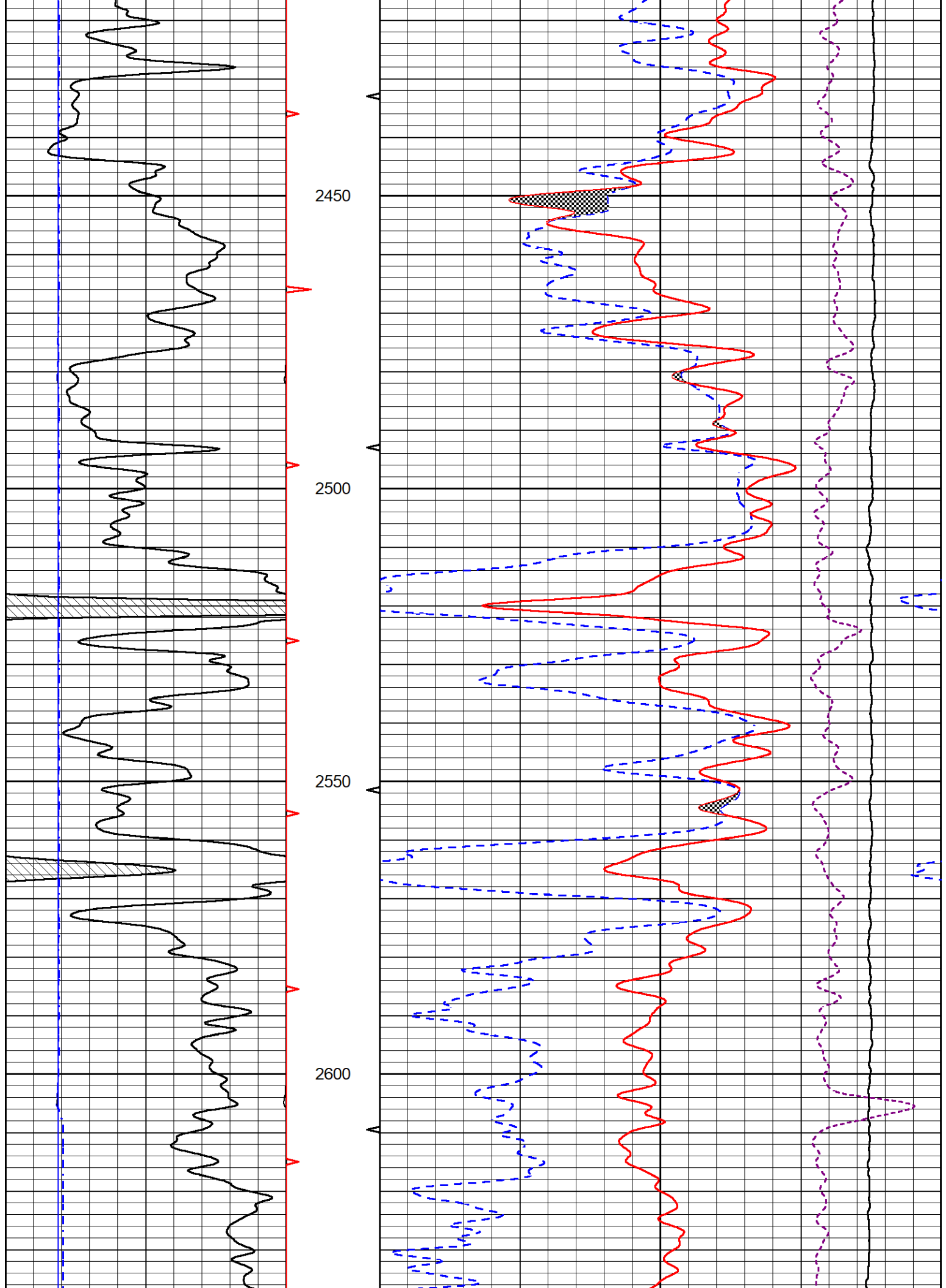
30	CNPOR (pu)	-10
30	DPOR (pu)	-10
10000	LINE TENSION (lb)	0
-0.25	CORRECTION (g/cc)	0.25

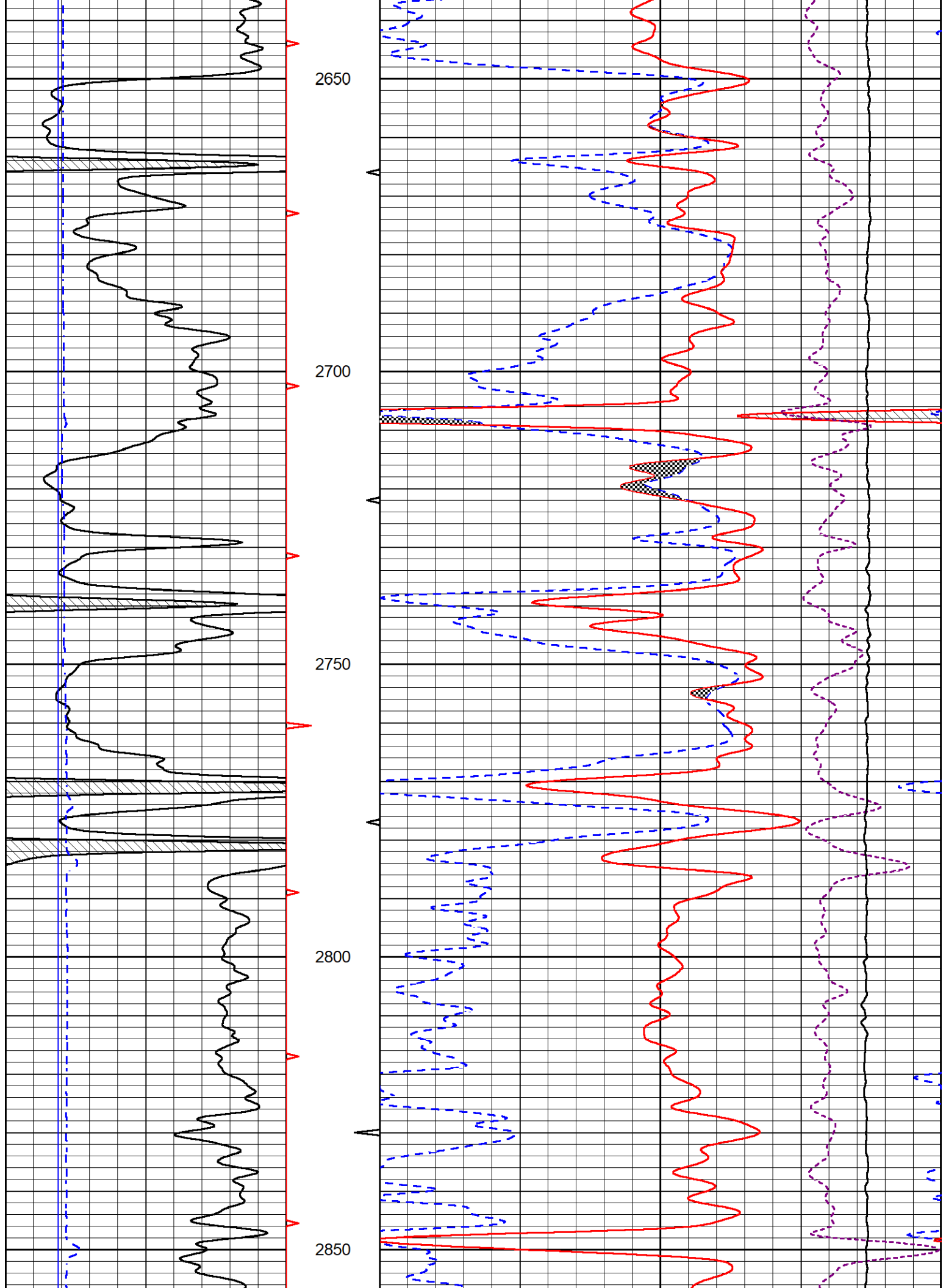


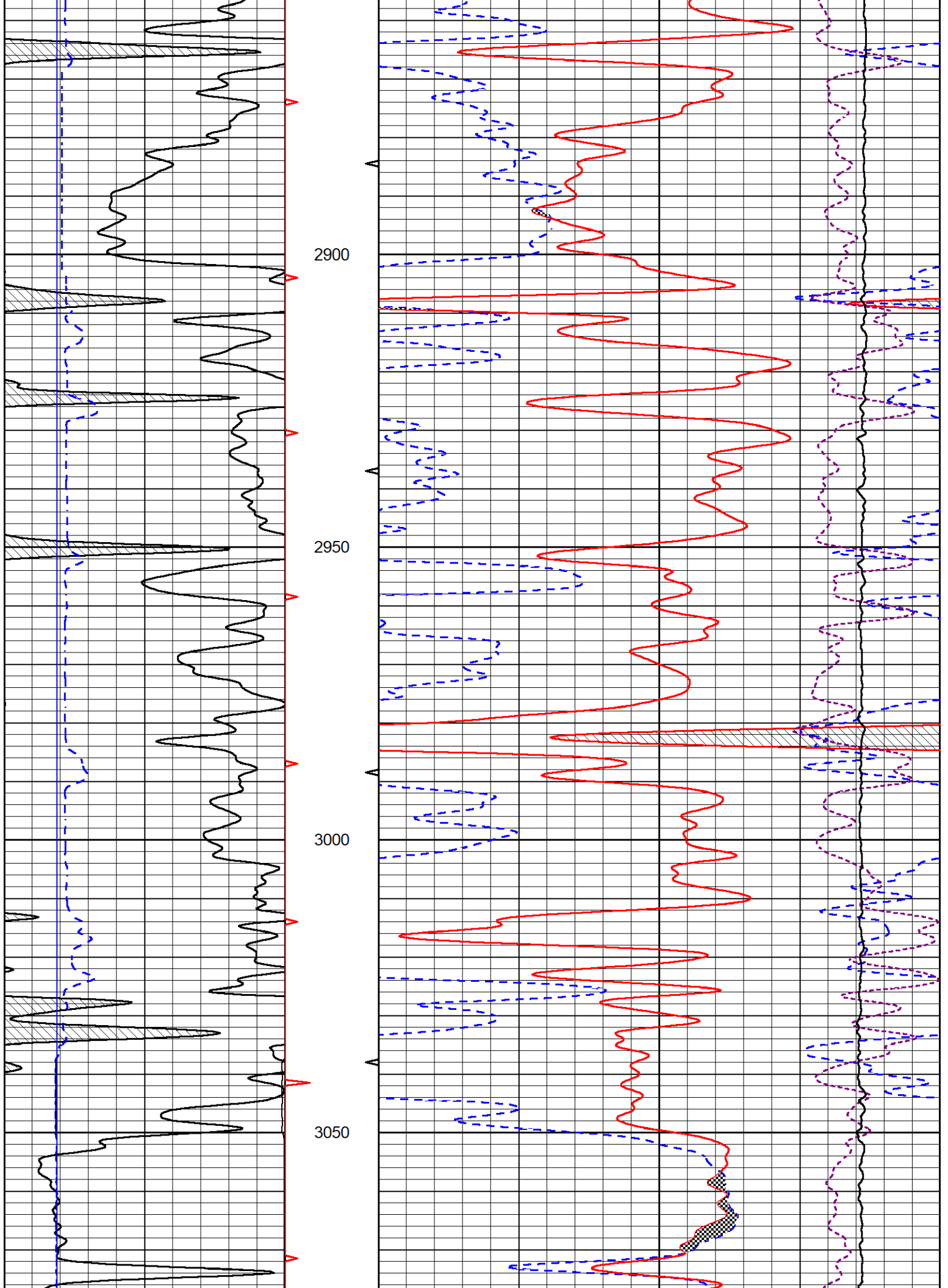


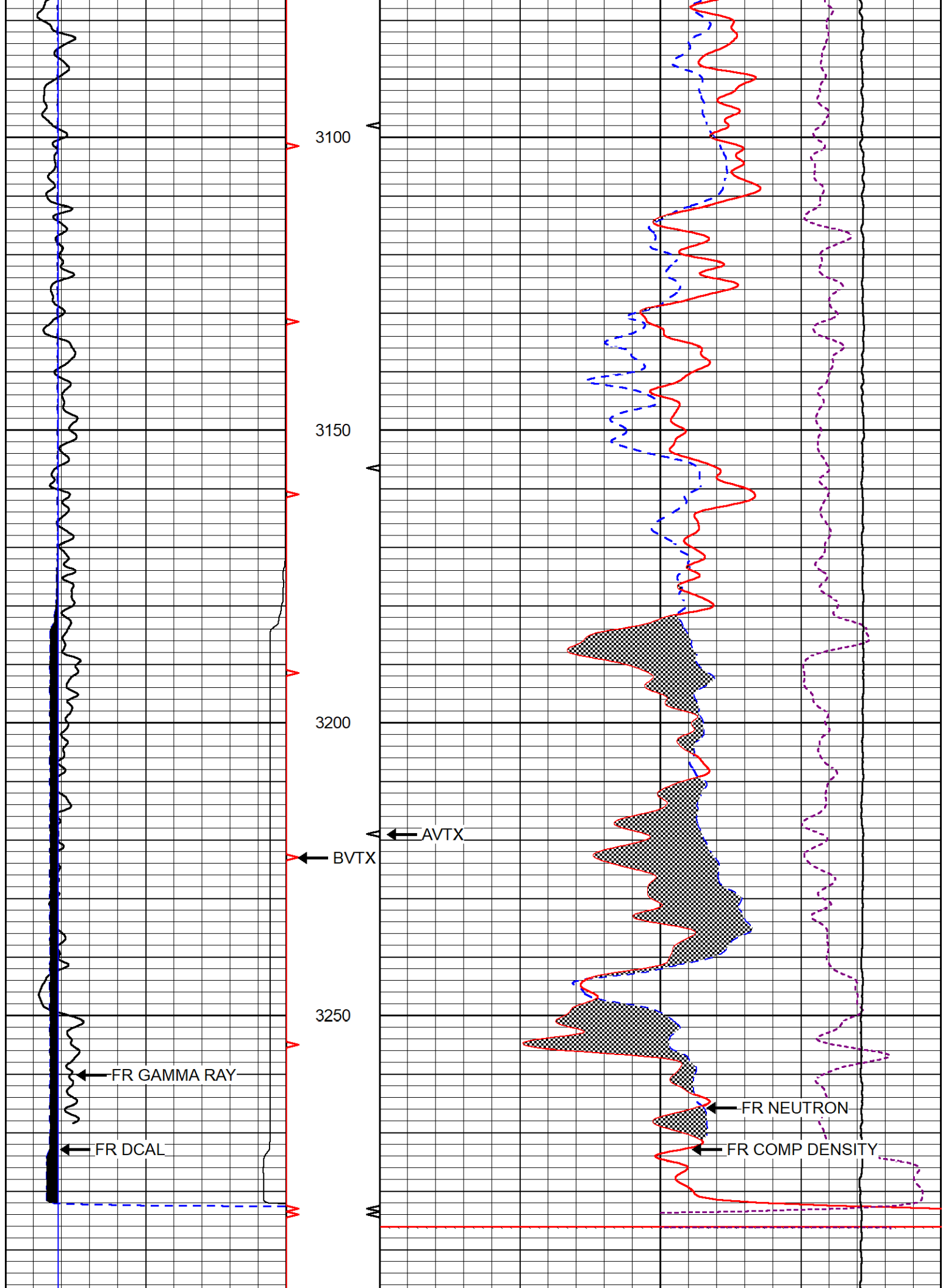












		3300		
0	GAMMA RAY (GAPI)	150	30	CNPOR (pu) -10
6	DCAL (in)	16	30	DPOR (pu) -10
			10000	LINE TENSION (lb) 0
			-0.25	CORRECTION (g/cc) 0.25

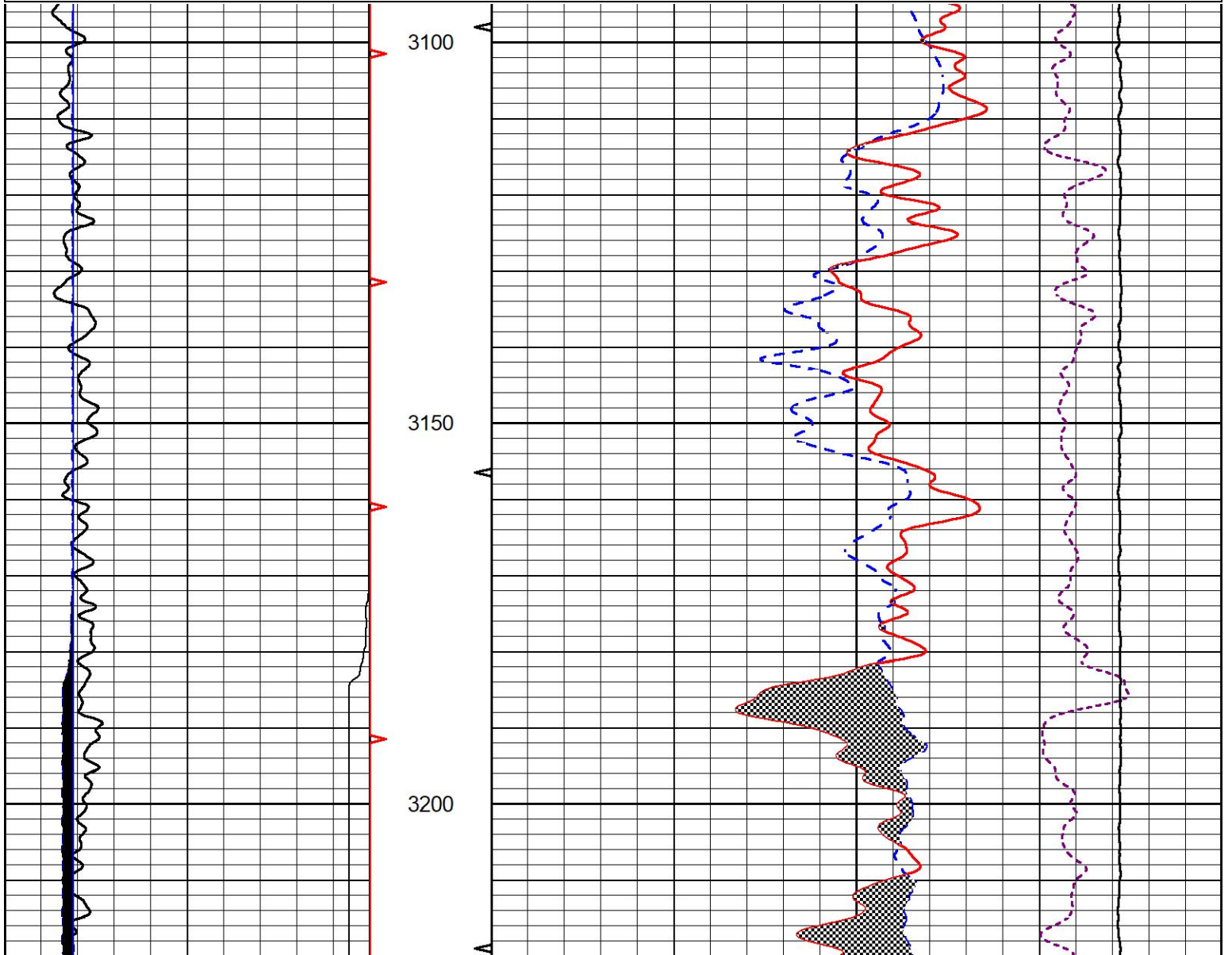


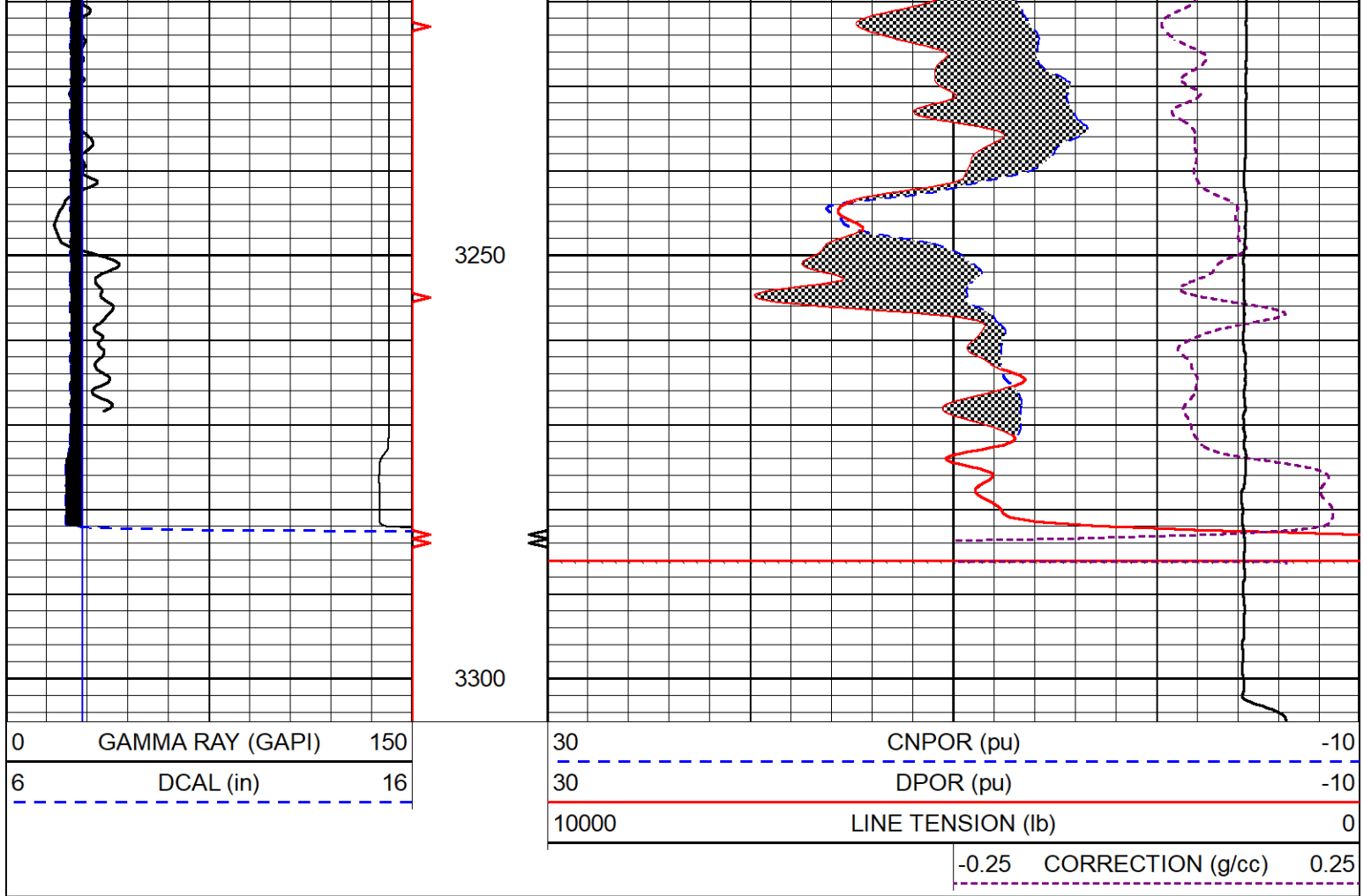
REPEAT SECTION

REPEAT PASS

Database File val_gail_sawyer_1_30.db
 Dataset Pathname stackml/pass2.1
 Presentation Format _cndlspec
 Dataset Creation Tue Oct 05 17:03:56 2021
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	30	CNPOR (pu) -10
6	DCAL (in)	16	30	DPOR (pu) -10
			10000	LINE TENSION (lb) 0
			-0.25	CORRECTION (g/cc) 0.25





Calibration Report

Database File val_gail_sawyer_1_30.db
 Dataset Pathname stackml/pass4.1
 Dataset Creation Tue Oct 05 17:08:40 2021

Dual Induction Calibration Report

Serial-Model: 952-828-PSI HIGH TEMP
 Surface Cal Performed:

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	167.000	835.000	0.000	255.000	mmho/m	0.455	-34.000
Medium	0.000	1348.000	142.000	255.000	mmho/m	0.300	-28.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
 Performed: Thu Aug 19 02:54:30 2021

	Readings		References			Results	
	Zero	Cal	Zero	Cal	Ohm-m	m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	7000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	8000.0000	-0.5000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-139.2000

Compensated Density Calibration Report

Serial-Model:
 Source / Verifier:
 Master Calibration Performed:
 Before Survey Verification Performed:
 After Survey Verification Performed:

934-226-M&W
 16955B / 2ci
 Thu Aug 19 02:54:40 2021

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3841.37	2748.76	cps
Aluminum	2.680	g/cc	717.56	1761.87	cps
Spine Angle = 75.15			Density/Spine Ratio = 0.533		
	Size		Reading		
Small Ring	8.00	in	1.16		
Large Ring	13.00	in	1.02		

Before Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

After Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

Compensated Neutron Calibration Report

Serial Number: 207-MW
 Tool Model: M&W

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

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 Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	233-M&W		
Tool Model:	M&W		
Performed:	Wed Mar 3 05:25:33 2021		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.5500	GAPI/cps	