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DUAL COMP POROSITY LOG

Company RJM COMPANY
Well REIF #2
Field WILDCAT
County BARTON State KANSAS

Location: API # : 15-009-26275-00-00
2252' FSL & 1238' FWL
SE - NE - NW - SW
SEC 1 TWP 17S RGE 12W

Other Services: DIL/MEL

Elevation: K.B. 1887' D.F. N/A G.L. 1878'

Permanent Datum GROUND LEVEL Elevation 1878'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Company	RJM COMPANY
Well	REIF #2
Field	WILDCAT
County	BARTON
State	KANSAS
Date	9/26/2019
Run Number	ONE
Type Log	CNL/CDL
Depth Driller	3353'
Depth Logger	3355'
Bottom Logged Interval	3326'
Top Logged Interval	2650'
Type Fluid In Hole	CHEMICAL
Salinity, PPM CL	6000
Density	9.2
Level	FULL
Max. Rec. Temp. F	110
Operating Rig Time	3 HOURS
Equipment -- Location	P-24 HAYS
Recorded By	IAN MABB
Witnessed By	WYATT URBAN

Borehole Record

Run No.	Bit	From	To
ONE	12.25"	0'	350'
TWO	7.875"	350'	TD

Casing Record

Size	Wgt.	From	To
8.625"	23#	0'	350'

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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.

ODIN, KS.
3 1/2 MILES NORTH,
EAST INTO

Log Measured From: KELLY BUSHING Ft. Above Permanent Datum

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

Your Pioneer Energy Services Crew	This Log Record Was Witnessed By
Engineer: IAN MABB	Primary Witness: WYATT URBAN
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\rjm_feif_2.db
Dataset field/well/stackmel/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	100	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	15	18	248	0	Off	3355

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			GR-M&W (233-M&W)	3.00	3.50	50.00
GR	40.58					
CNLSC	37.48		CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73					
			CDL-M&W (817-947)	8.50	4.00	250.00
LSD	28.43					
DCAL	28.42					
SSD	27.93					
			ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
MCAL	19.83					
MI	19.83					
MN	19.83					
RLL3F	15.80					
RLL3	15.80					
			DIL-PSI HIGH TEMP (1039)	18.50	3.50	220.00
CILD	8.00					

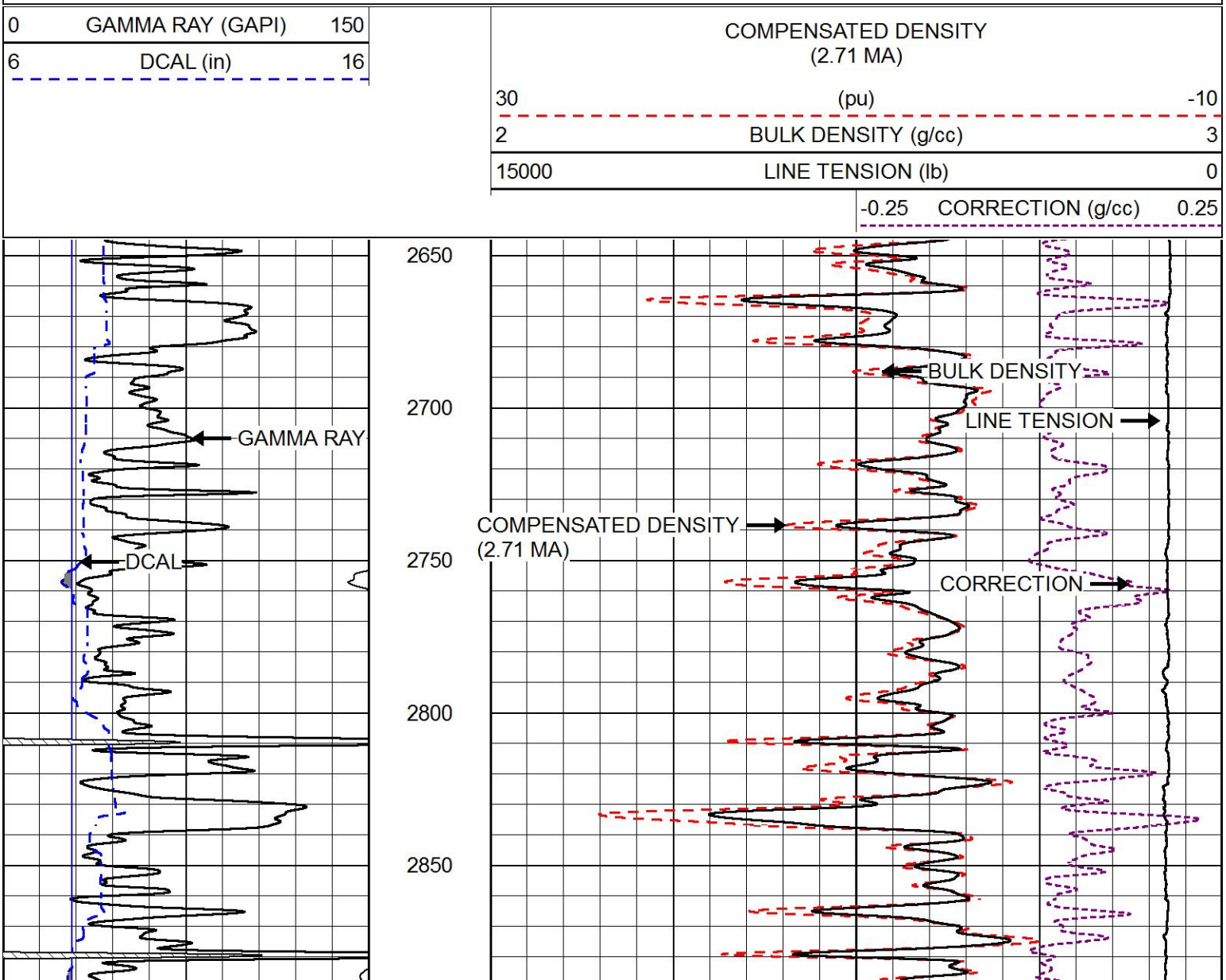
CILM	4.70	
SP	0.20	

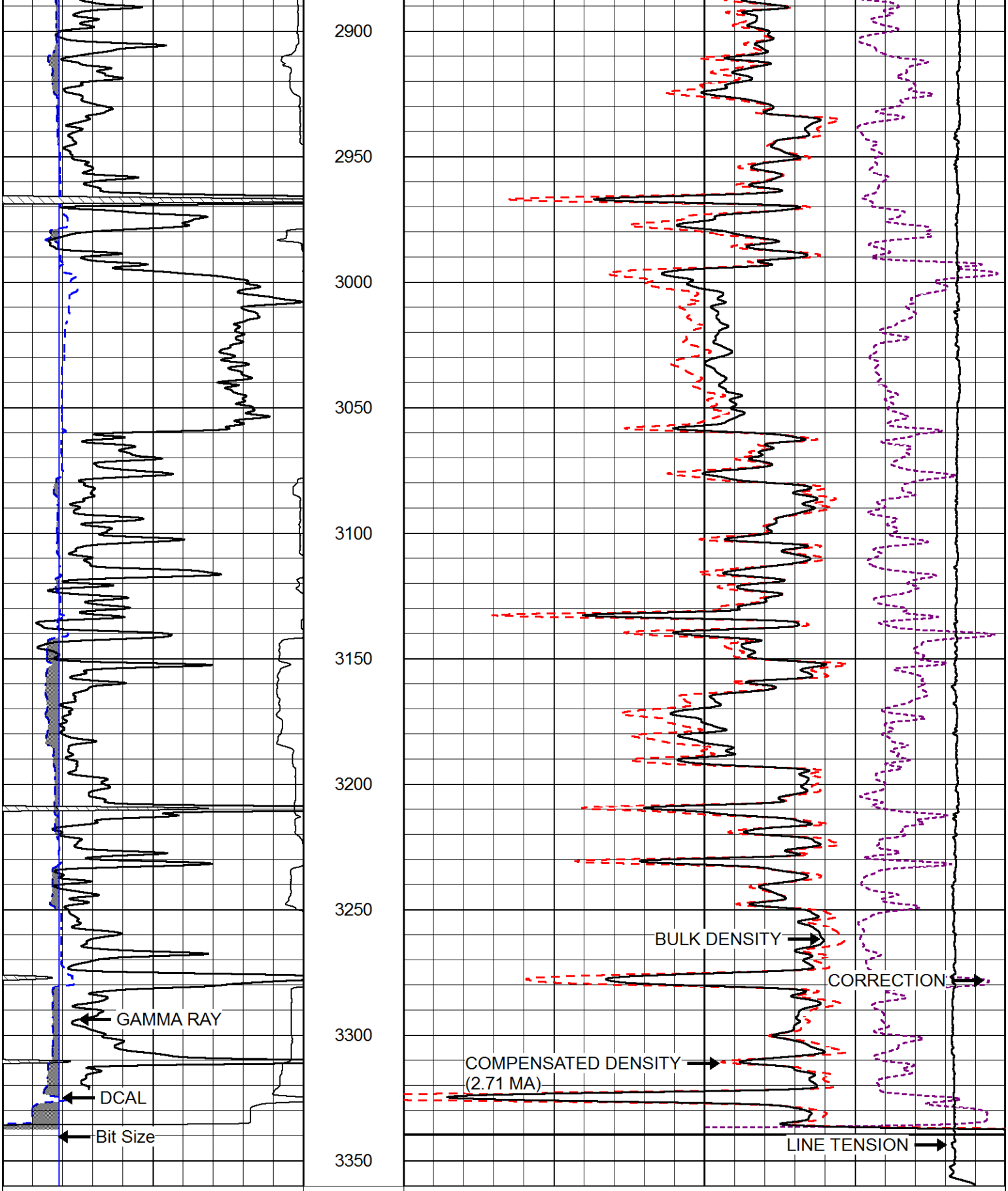
Dataset: rjm_feif_2.db: field/well/stackmel/pass3.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

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MAIN PASS

Database File	rjm_feif_2.db
Dataset Pathname	stackmel/pass3.1
Presentation Format	_cdl
Dataset Creation	Thu Sep 26 10:14:32 2019
Charted by	Depth in Feet scaled 1:600





0 GAMMA RAY (GAPI) 150

6 DCAL (in) 16

COMPENSATED DENSITY
(2.71 MA)

30 (pu) -10

2 BULK DENSITY (g/cc) 3

15000 LINE TENSION (lb) 0

-0.25 CORRECTION (g/cc) 0.25

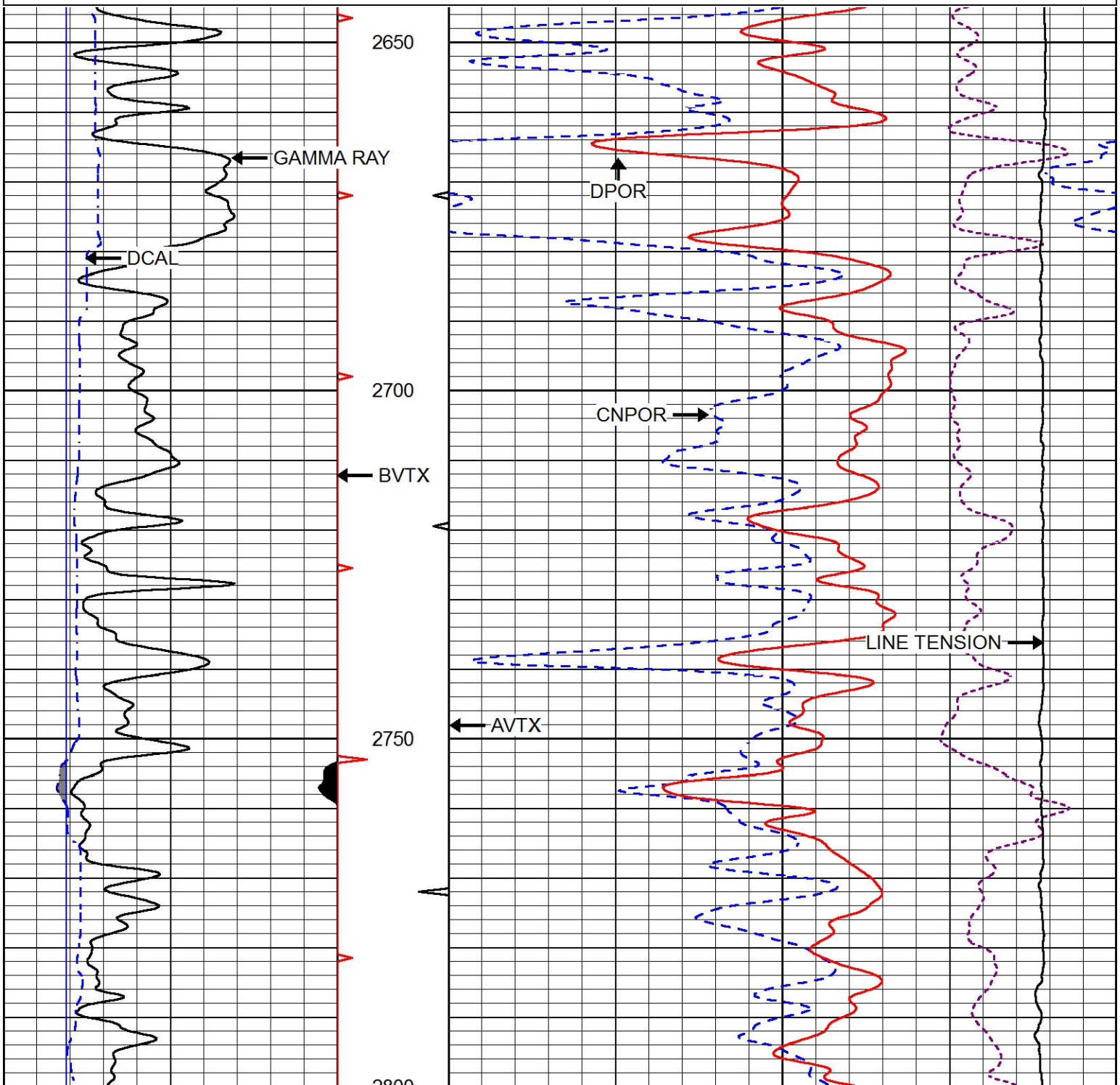
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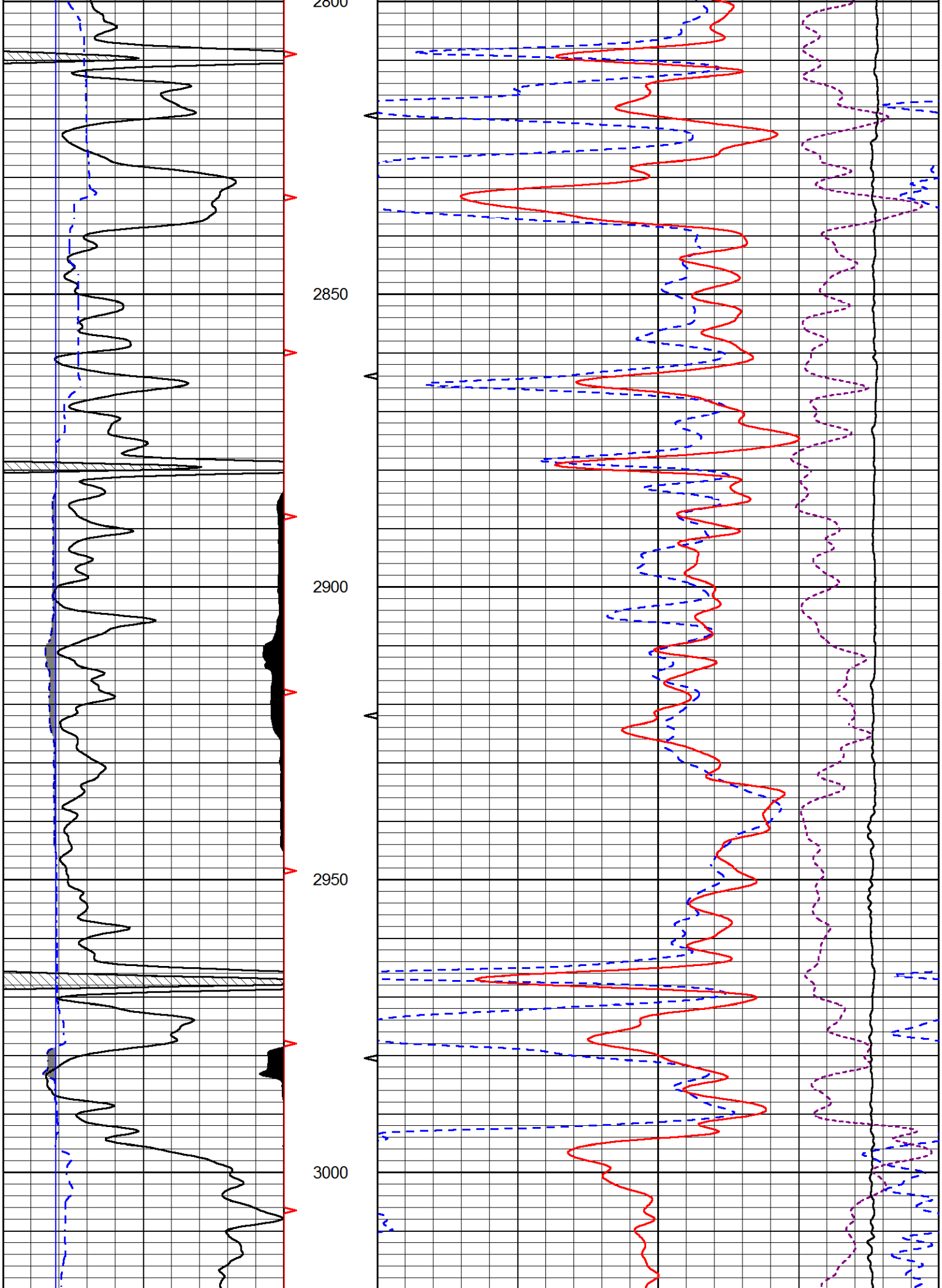
MAIN PASS

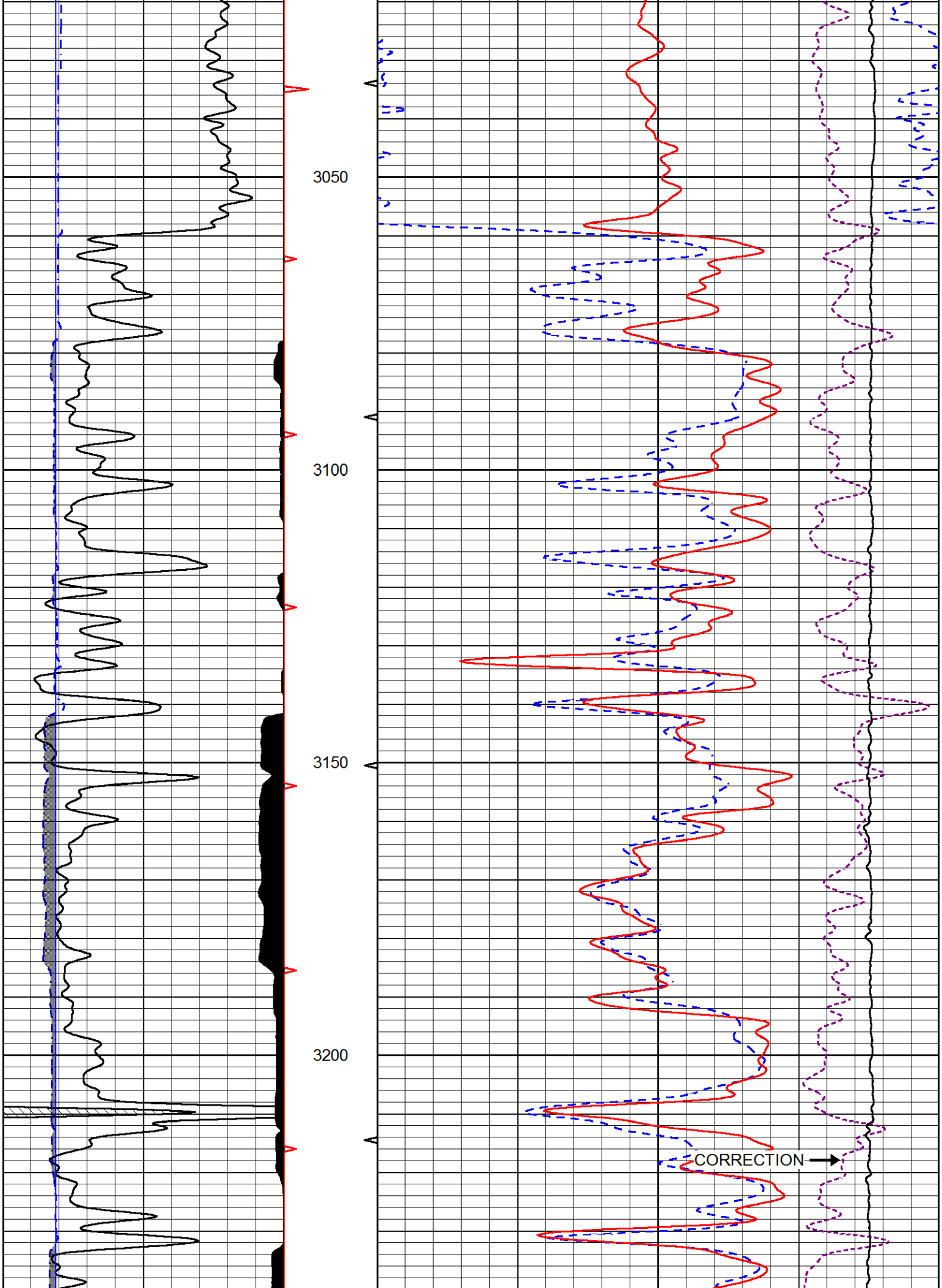
Database File	rjm_feif_2.db
Dataset Pathname	stackmel/pass3.1
Presentation Format	_CNDLS~1
Dataset Creation	Thu Sep 26 10:14:32 2019
Charted by	Depth in Feet scaled 1:240

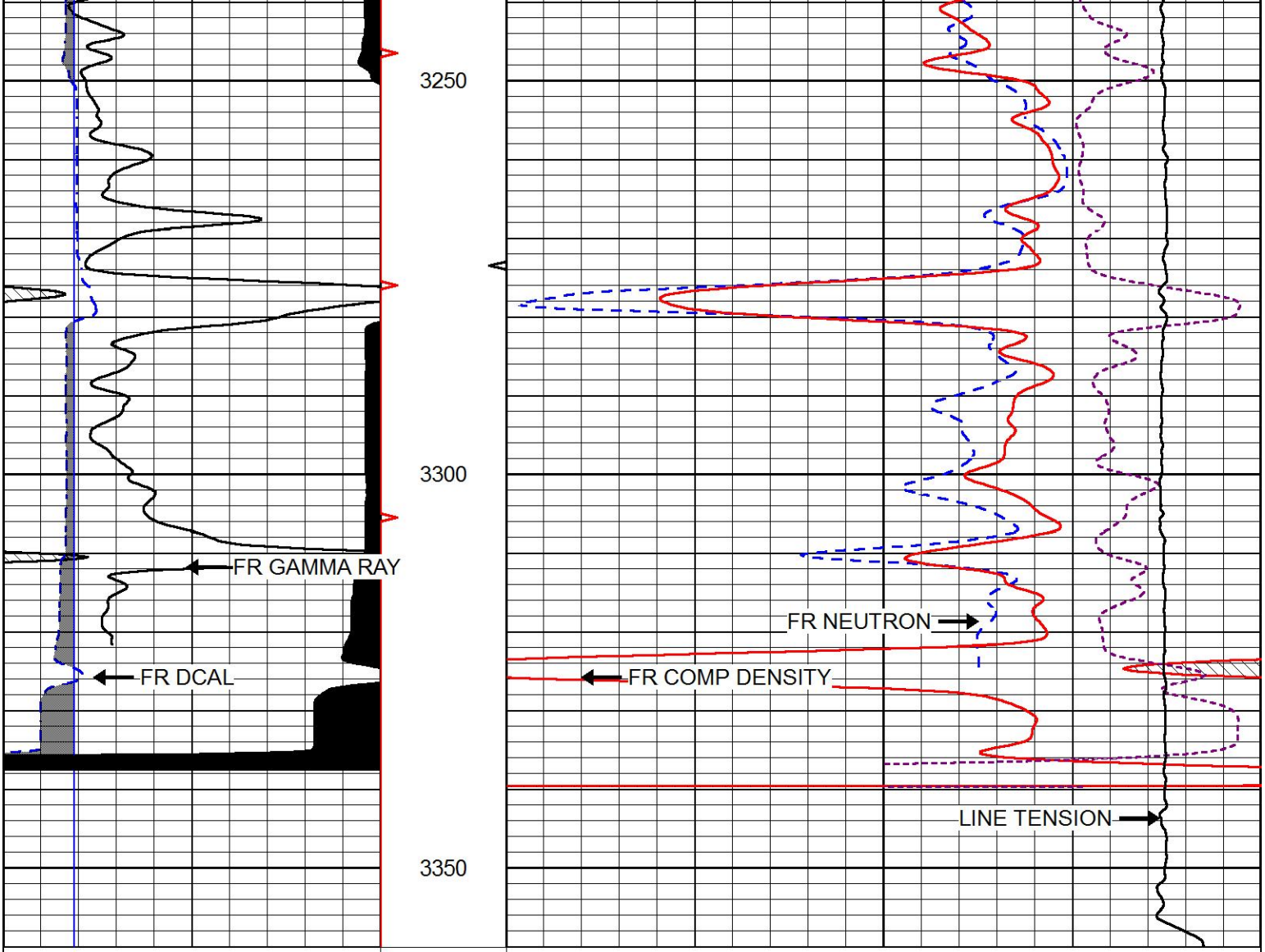
0	GAMMA RAY (GAPI)	150
6	DCAL (in)	16

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




2800
2850
2900
2950
3000


3050
3100
3150
3200
CORRECTION



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

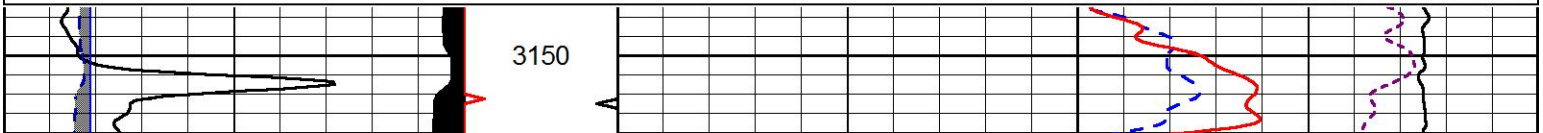
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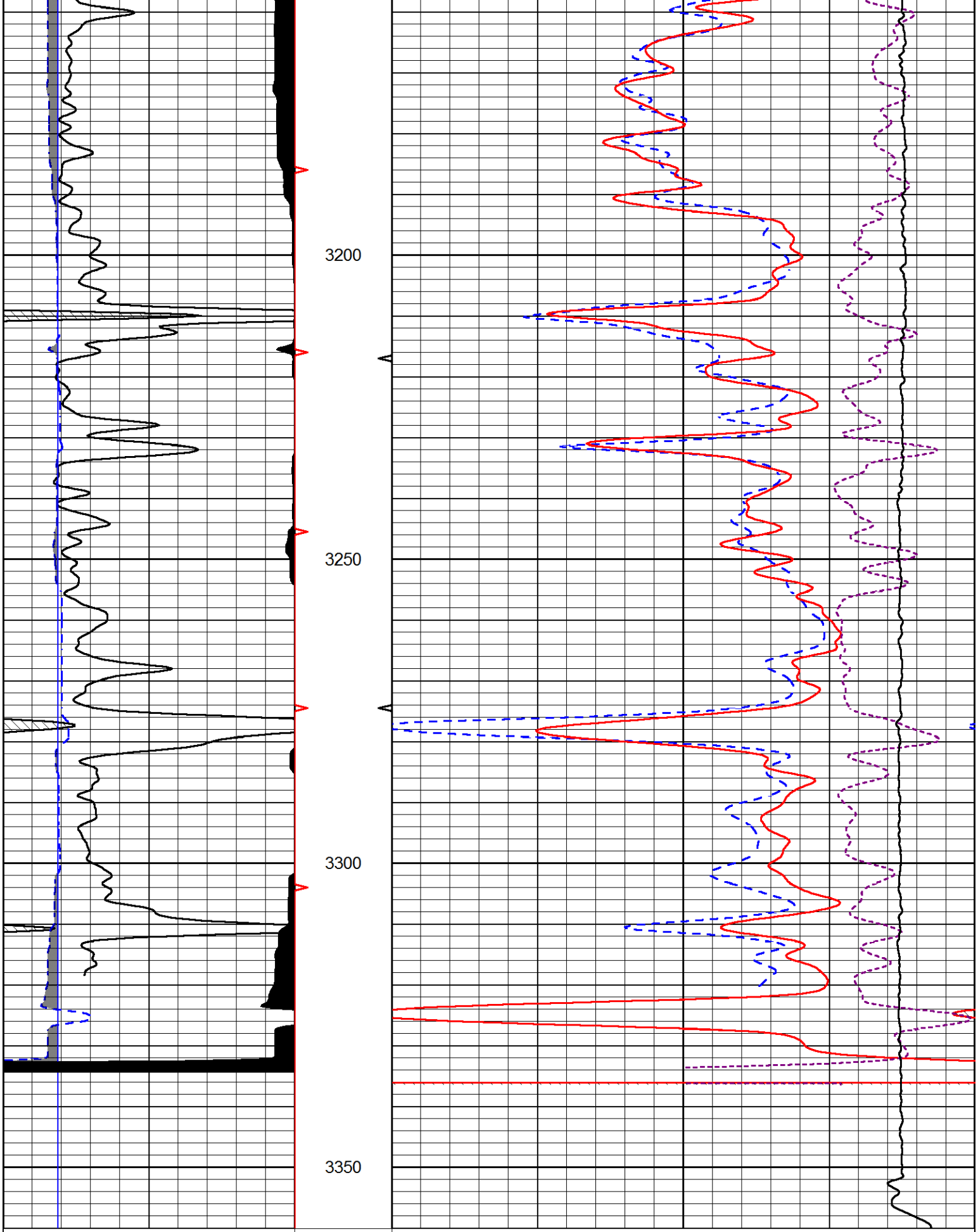
REPEAT SECTION

Database File	rjm_feif_2.db
Dataset Pathname	stackmel/pass2.1
Presentation Format	_CNDLS~1
Dataset Creation	Thu Sep 26 09:42:33 2019
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




3200
3250
3300
3350
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

Calibration Report

Database File	rjm_feif_2.db
Dataset Pathname	stackmel/pass3.1
Dataset Creation	Thu Sep 26 10:14:32 2019

Dual Induction Calibration Report

Serial-Model:	1039-PSI HIGH TEMP
Calibration Performed:	Tue Sep 10 08:34:01 2019

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.800	mmho/m	0.450	-51.000
Medium	0.000	1348.000	142.000	255.800	mmho/m	0.365	-49.000

Microlog Calibration Report

Serial-Model:	PSI-01-PSIML
Performed:	Thu Aug 01 07:57:13 2019

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	18000.0000	-0.7000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	18000.0000	-0.6000
Caliper	1.0001	1.1397	6.5000	18.5000	in	70.0000	-64.2500

Compensated Density Calibration Report

Serial-Model:	817-947-M&W
Source / Verifier:	16955B / 2ci
Master Calibration Performed:	Tue Sep 24 21:18:50 2019

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	6127.15	5922.31	cps
Aluminum	2.680	g/cc	1141.85	3762.09	cps

Spine Angle = 74.89

Density/Spine Ratio = 0.532

	Size		Reading
Small Ring	4.50	in	1.02
Large Ring	15.00	in	1.34

Compensated Neutron Calibration Report

Serial Number:	207-MW
Tool Model:	M&W
Calibration Performed:	WED FEB 13 10:30:30 2019

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:	233-M&W	
Tool Model:	M&W	
Calibration Performed:	Fri Feb 07 01:42:40 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5500	GAPI/cps

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Well	REIF #2
Field	WILDCAT
County	BARTON
State	KANSAS