



DUAL COMP POROSITY LOG

Company THOMAS GARNER, INC.
 Well SHRACK UNIT #1
 Field VAN LIEU
 County STAFFORD
 State KANSAS

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Location: API #: 15-185-24065-00-00
 1145' FNL & 100' FEL
 SE - SE - NE - NE
 SEC 20 TWP 24S RGE 13W
 Permanent Datum GROUND LEVEL Elevation 1922'
 Log Measured From KELLY BUSHING
 Drilling Measured From KELLY BUSHING
 Other Services DIL/MEL
 Elevation K.B. 1933'
 D.F. N/A
 G.L. 1922'

Date	1/3/2020						
Run Number	ONE						
Type Log	CNL/CDL						
Depth Driller	4120'						
Depth Logger	4120'						
Bottom Logged Interval	4119'						
Top Logged Interval	2800'						
Type Fluid In Hole	CHEMICAL						
Salinity, PPM CL	6000						
Density	9.4						
Level	FULL						
Max. Rec. Temp. F	117						
Operating Rig Time	3 HOURS						
Equipment -- Location	P-24 HAYS						
Recorded By	IAN MABB						
Witnessed By	JOSH AUSTIN						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0'	307'	8.625"	23#	0'	07'
TWO	7.875"	307'					
Casing Record							

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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.
 ST. JOHN, KS.
 HWY 281 & HWY 50, WEST 1 MILE TO SW 10TH AVE,
 SOUTH 3/8 OF A MILE & WEST INTO

Log Measured From: KELLY BUSHING 10 Ft. Above Permanent Datum

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

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

Log Variables

DatabaseC:\ProgramData\Warrior\Data\thomas_garner_shrack_unit_1.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	3	4	0	0	Off	4120

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
GR	44.50		GR-M&W (233-M&W)	3.00	3.50	50.00	
CNLSC	41.40		CNT-M&W (207-MW)	5.50	3.50	100.00	
CNSSC	40.65						
LSD	32.35		CDL-M&W (817-947)	8.50	4.00	250.00	
DCAL	32.33						
SSD	31.85						
MCAL	20.87		ML-PSI UDM ML (UDM-01) Stackable Microlog Tools	11.50	4.00	215.00	
MI	20.87						
MN	20.87						
RLL3F	15.80						
RLL3	15.80						
CILD	8.00		DIL-PSI HIGH TEMP (952-828)	18.50	3.50	220.00	

CILM 4.70

SP 0.20

Dataset: thomas_garner_shrack_unit_1.db: field/well/stackmel/pass3.1
 Total length: 47.00 ft
 Total weight: 835.00 lb
 O.D.: 4.00 in

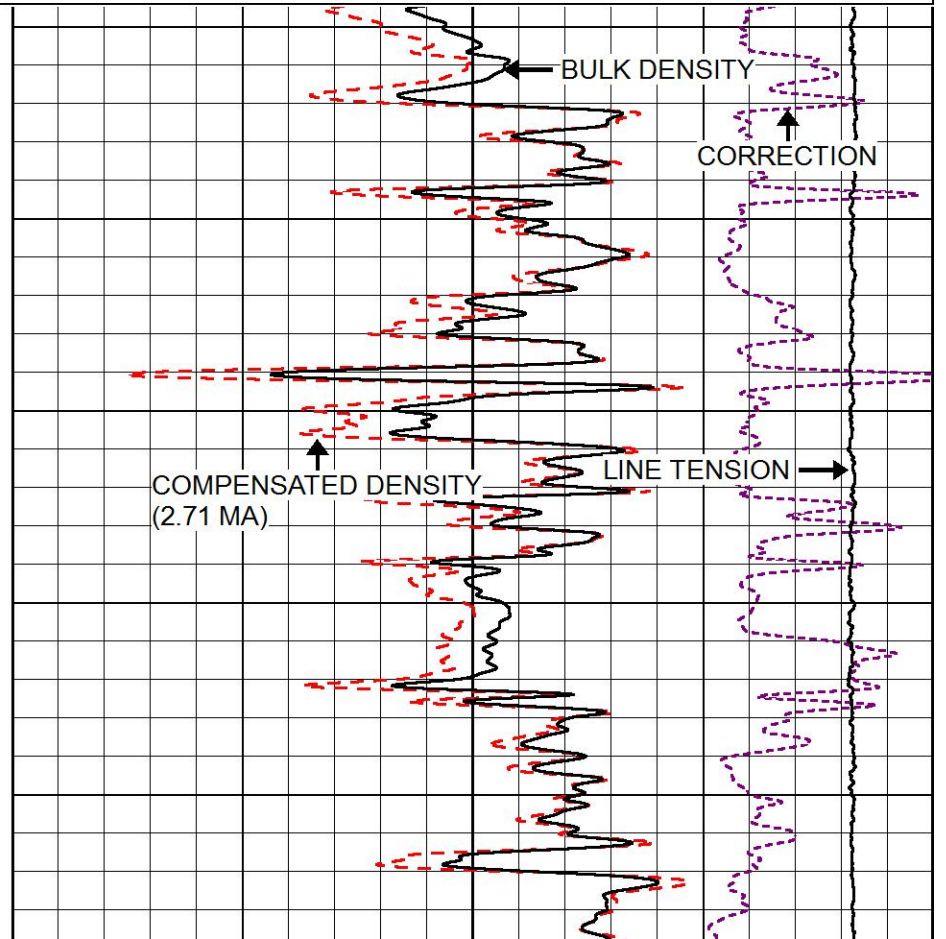
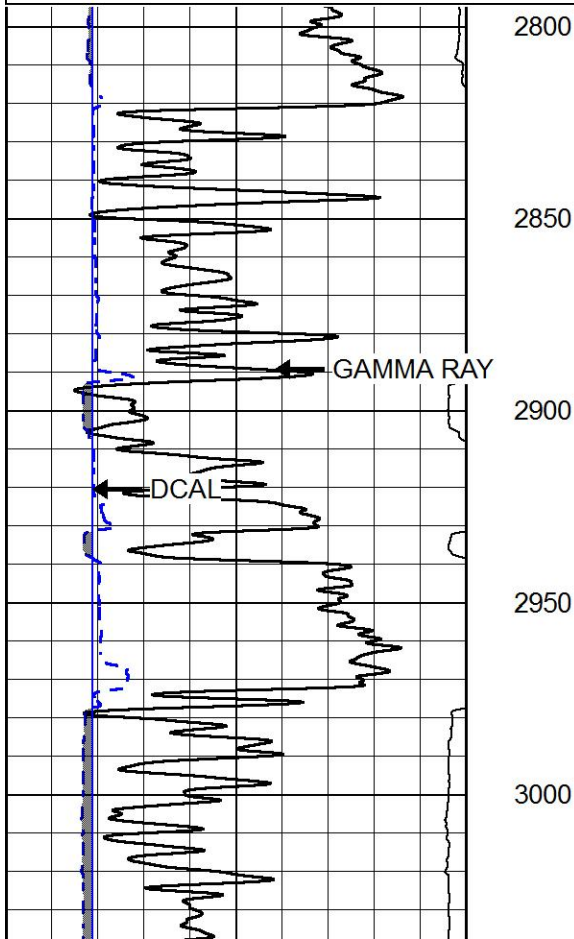


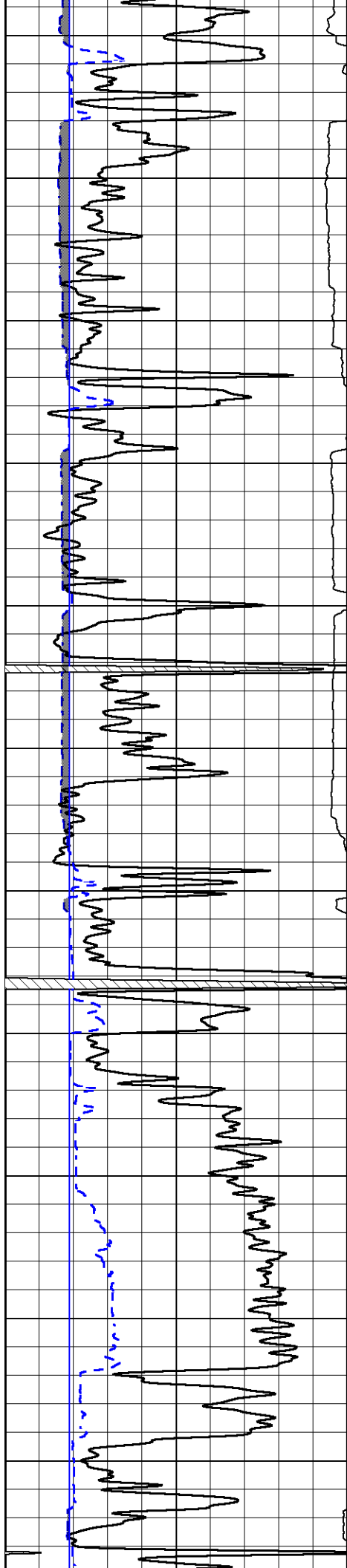
MAIN PASS

Database File thomas_garner_shrack_unit_1.db
 Dataset Pathname stackmel/pass3.1
 Presentation Format _cdl
 Dataset Creation Fri Jan 03 04:25:18 2020
 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





3050

3100

3150

3200

3250

3300

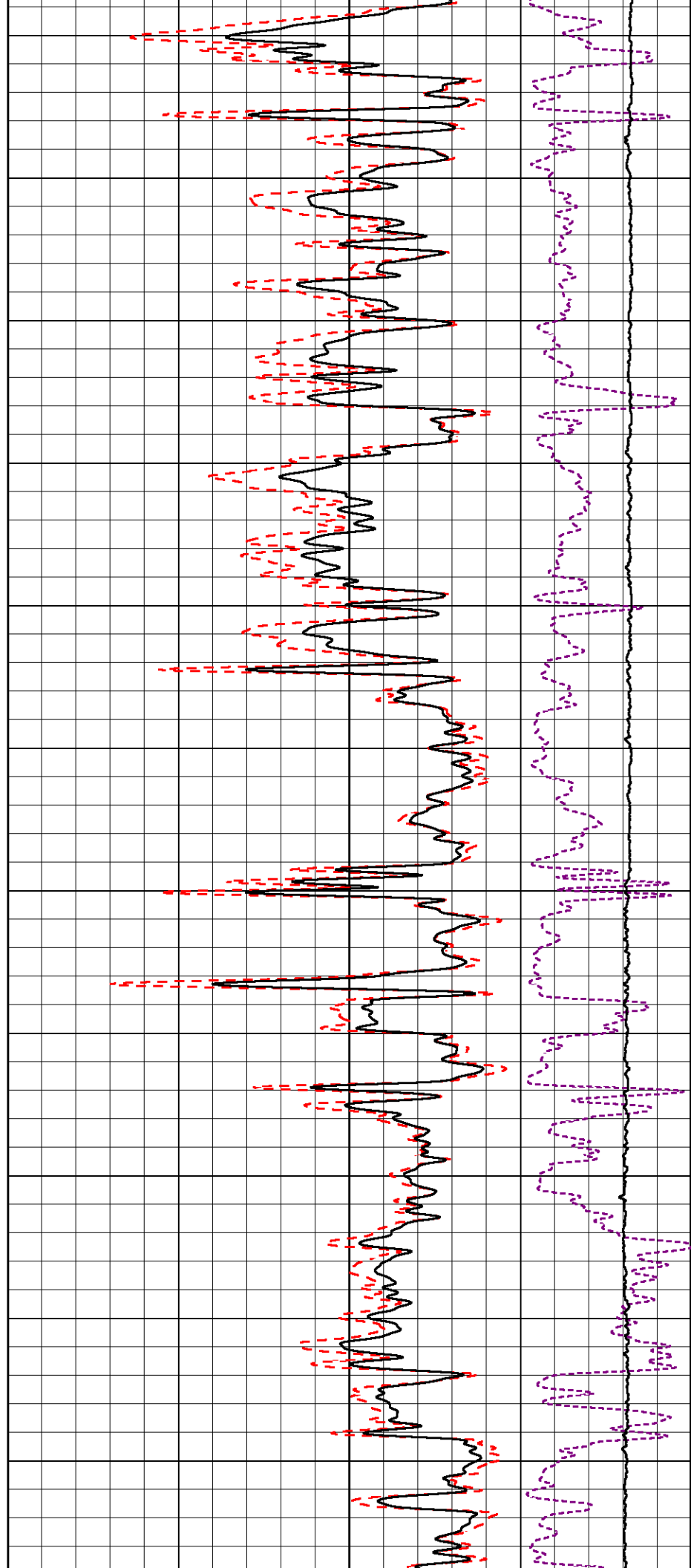
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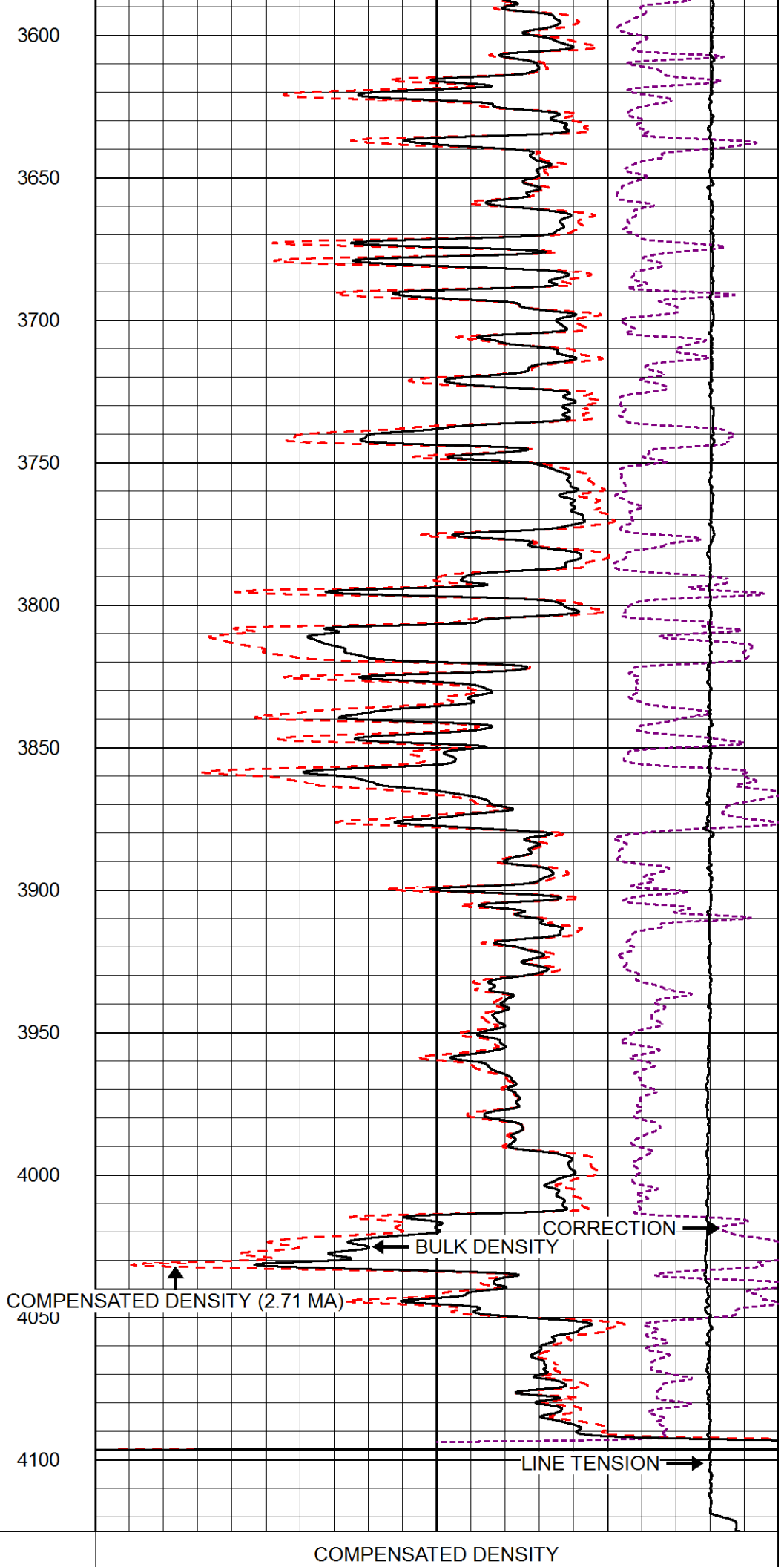
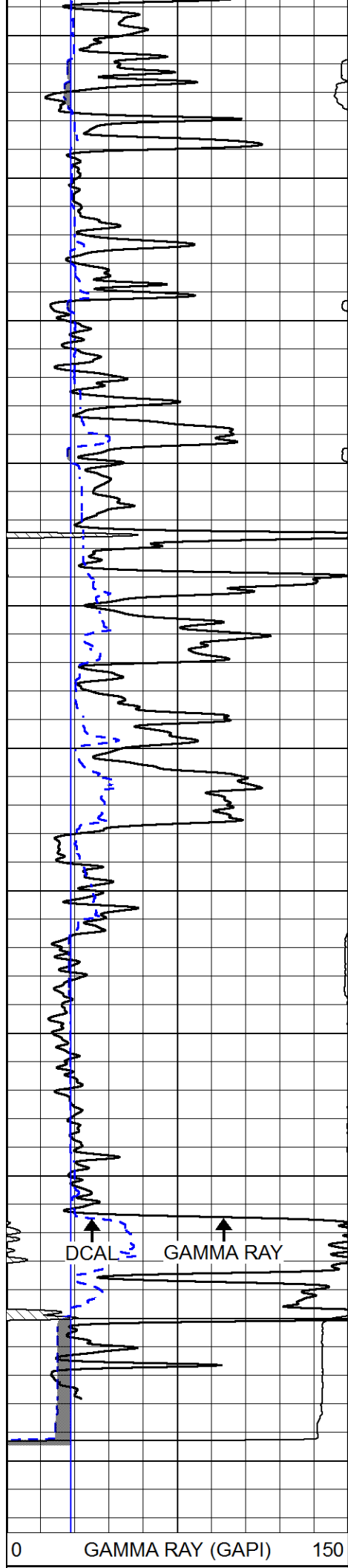
3400

3450

3500

3550





6	DCAL (in)	16
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	(2.71 MA)	
30	(pu)	-10
2	BULK DENSITY (g/cc)	3
15000	LINE TENSION (lb)	0
	-0.25 CORRECTION (g/cc)	0.25

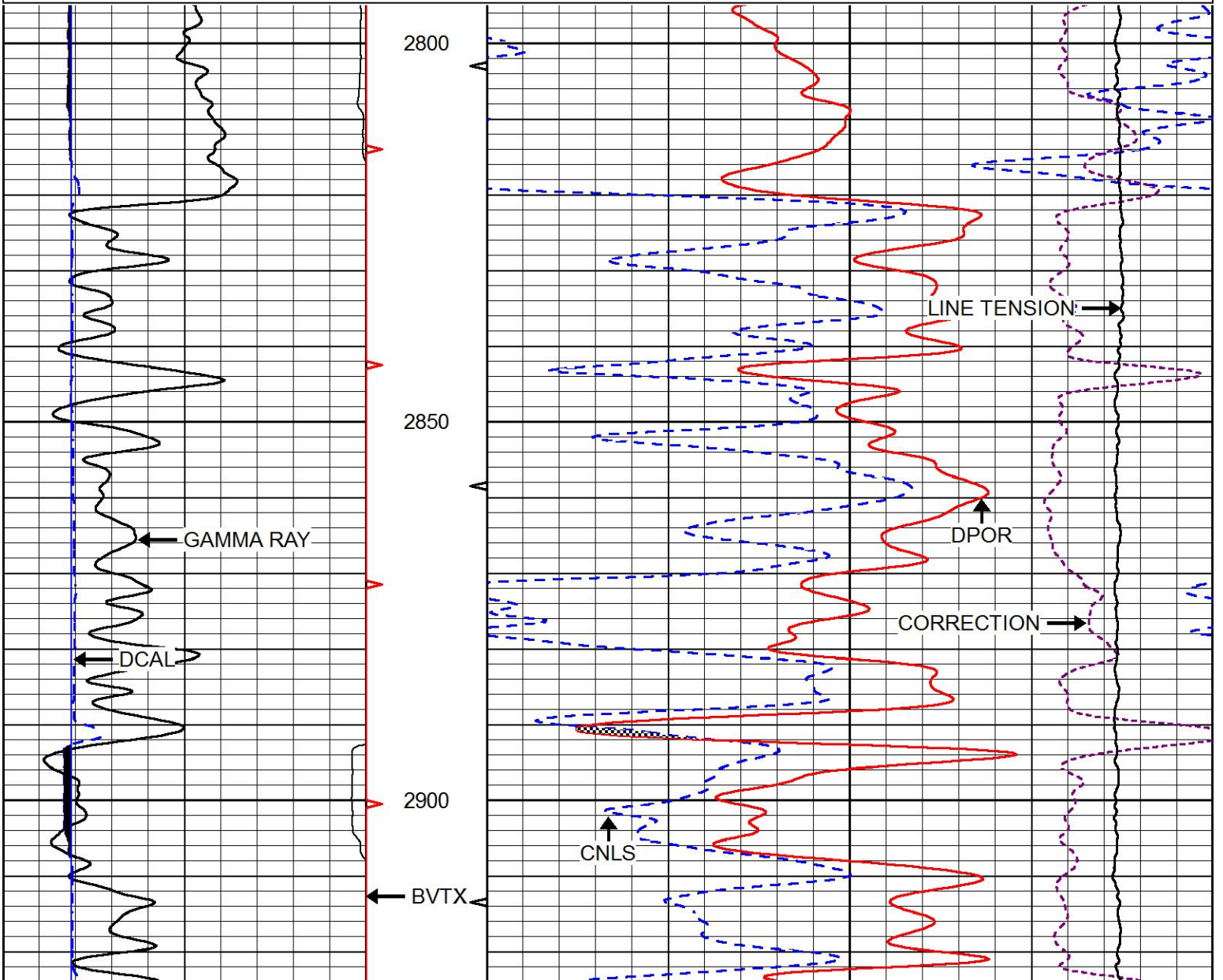


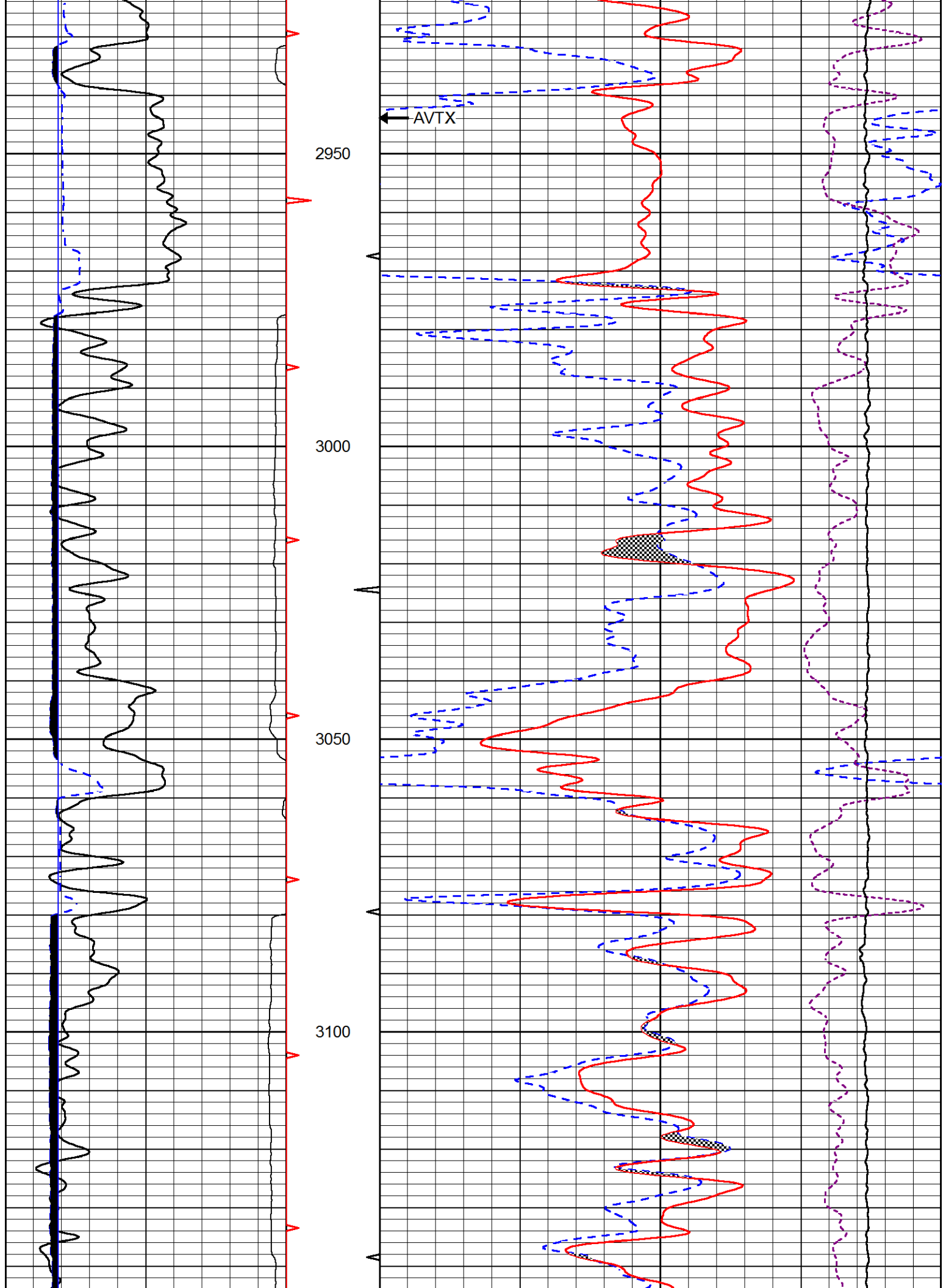
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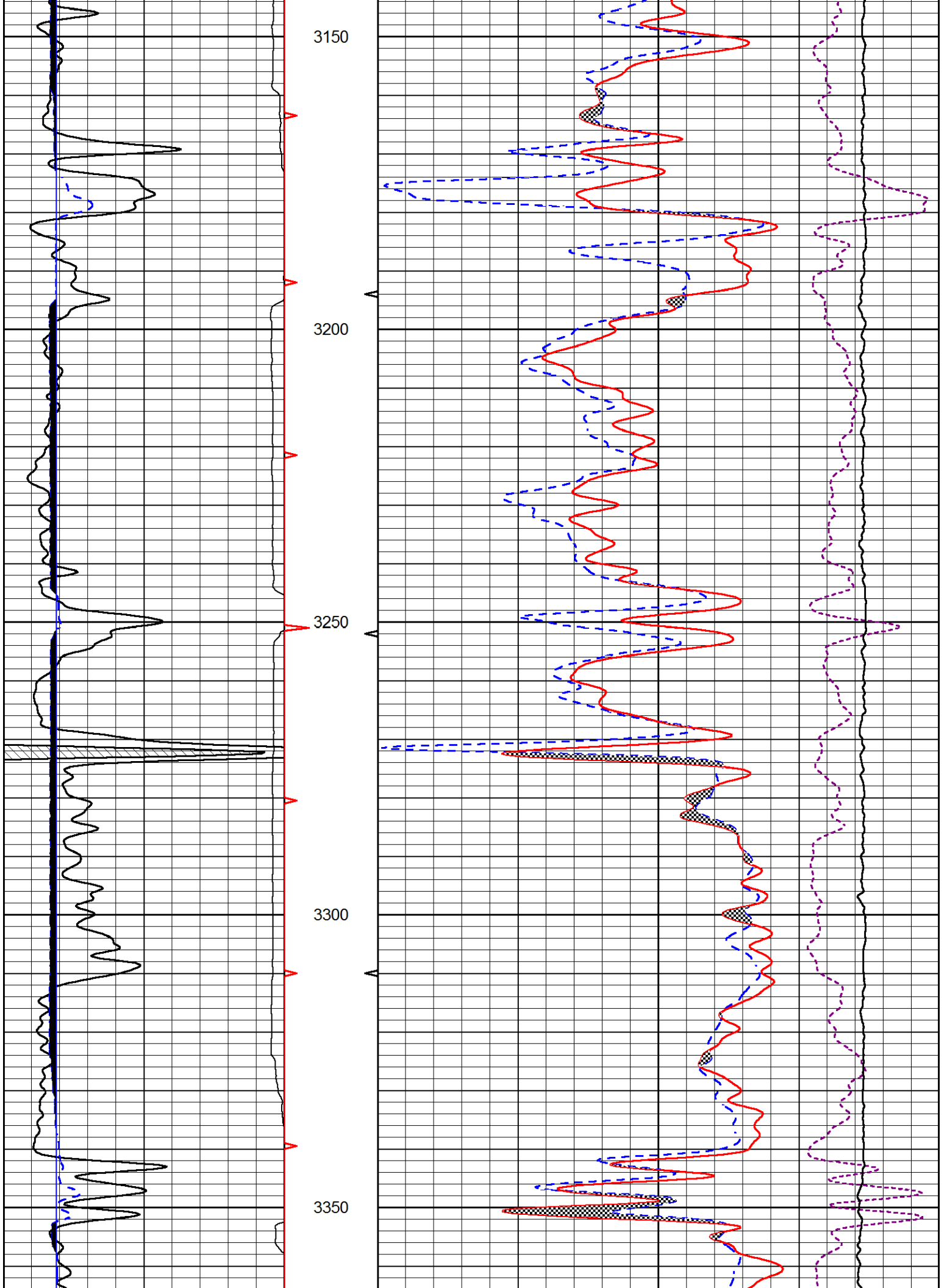
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Dataset Pathname	stackmel/pass3.1
Presentation Format	_CNDLS~1
Dataset Creation	Fri Jan 03 04:25:18 2020
Charted by	Depth in Feet scaled 1:240

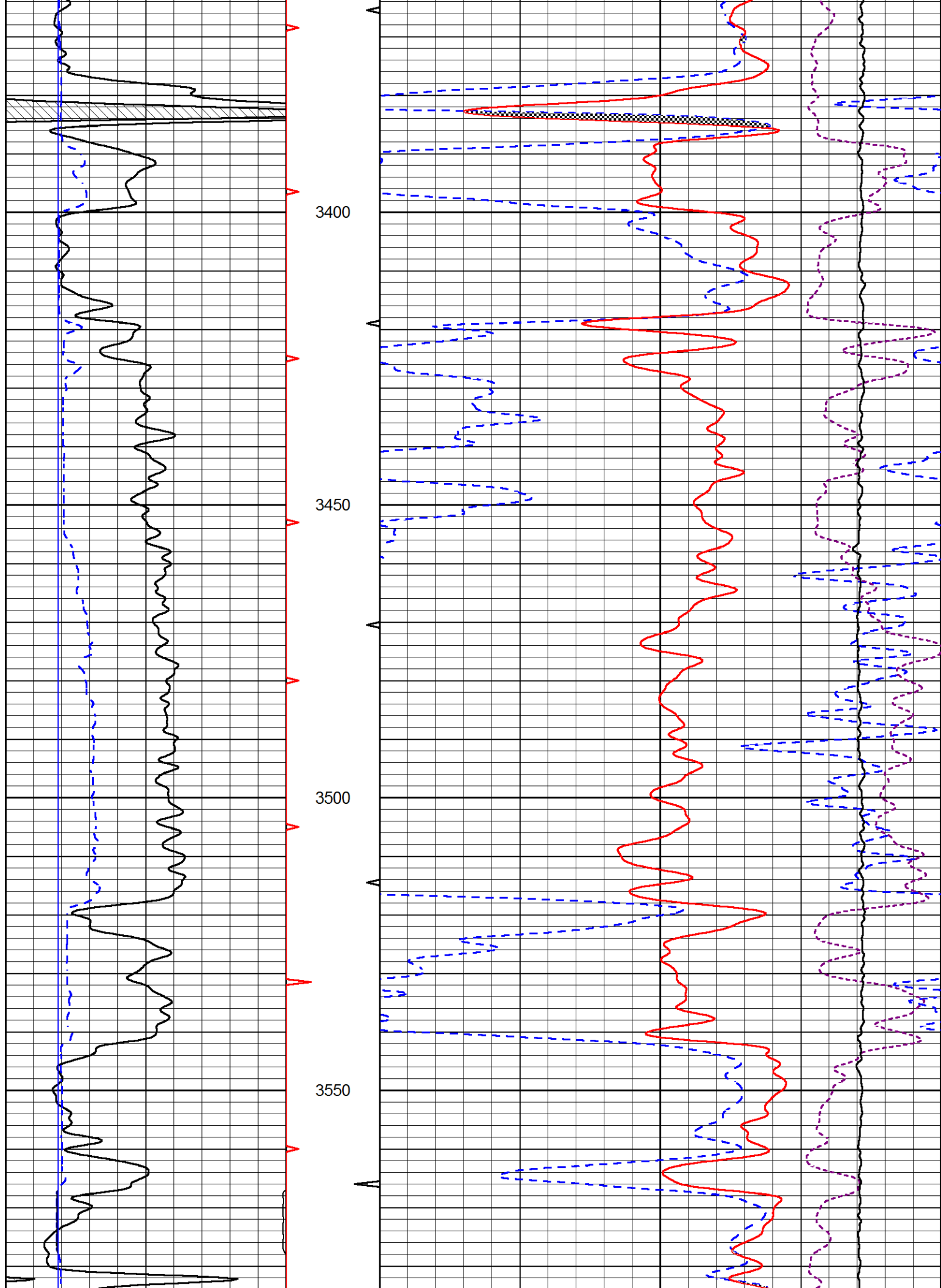
0	GAMMA RAY (GAPI)	200
6	DCAL (in)	16

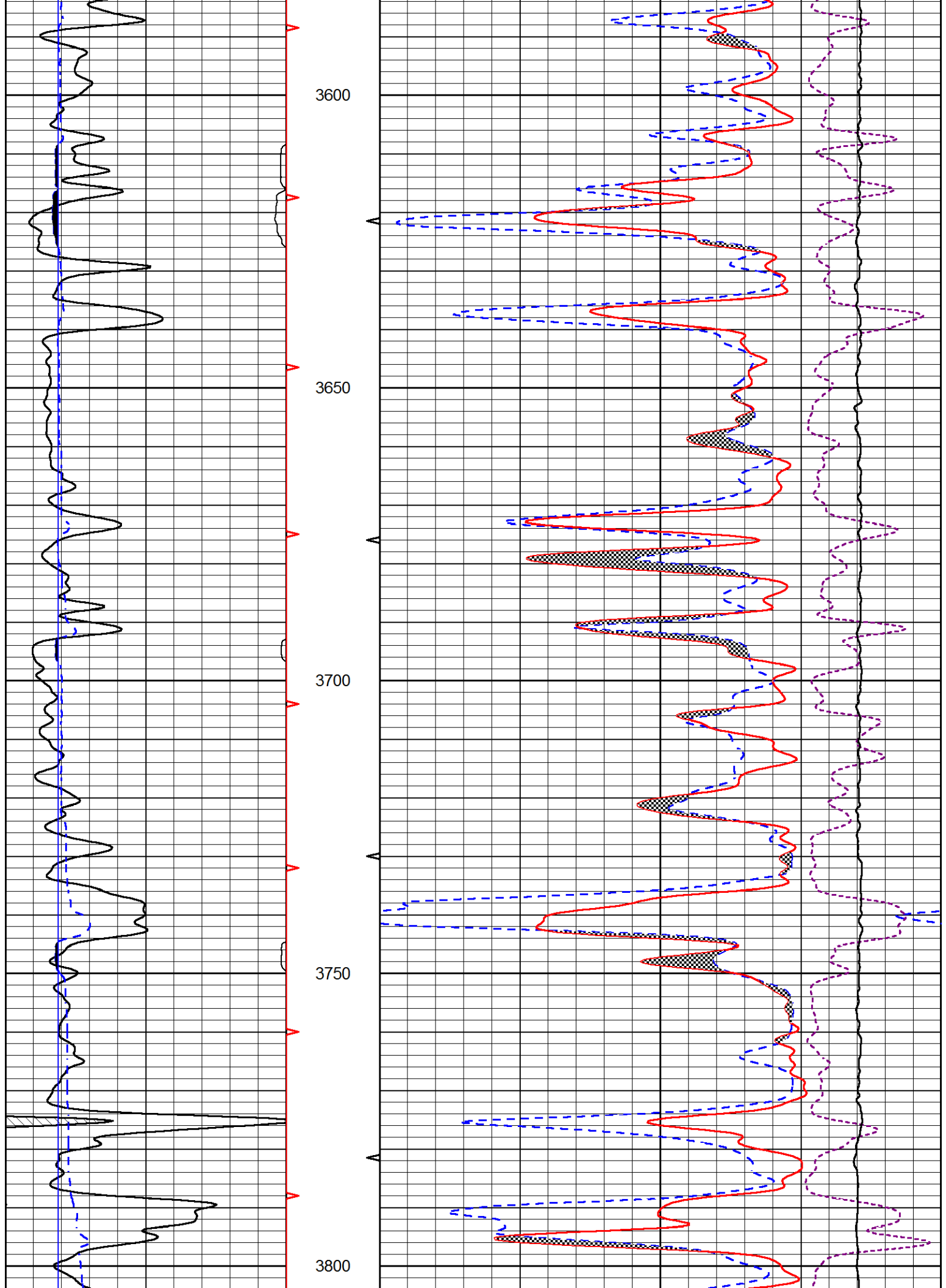
30	CNLS (pu)	-10
30	DPOR (pu)	-10
10000	LINE TENSION (lb)	0
	-0.25 CORRECTION (g/cc)	0.25

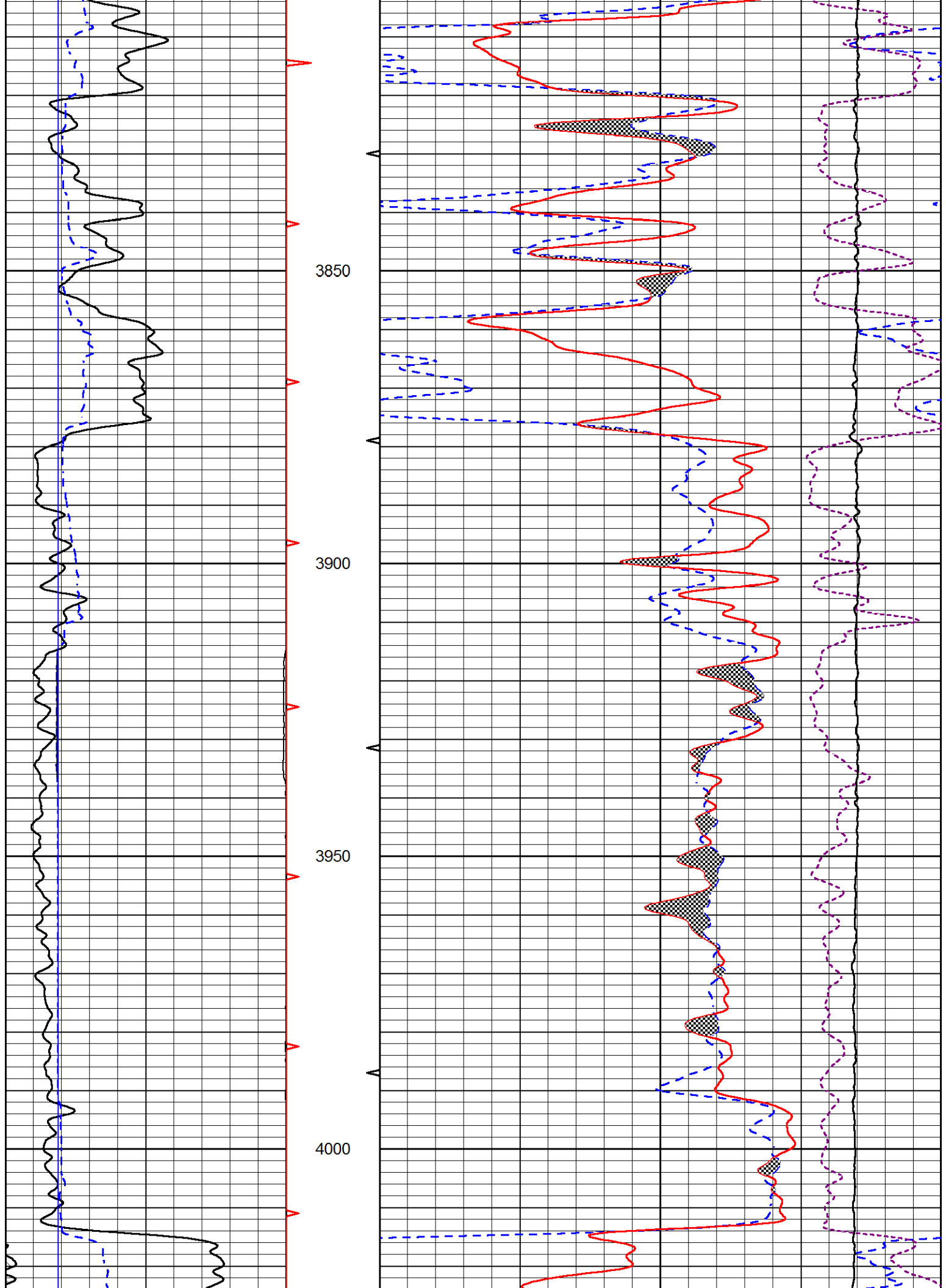


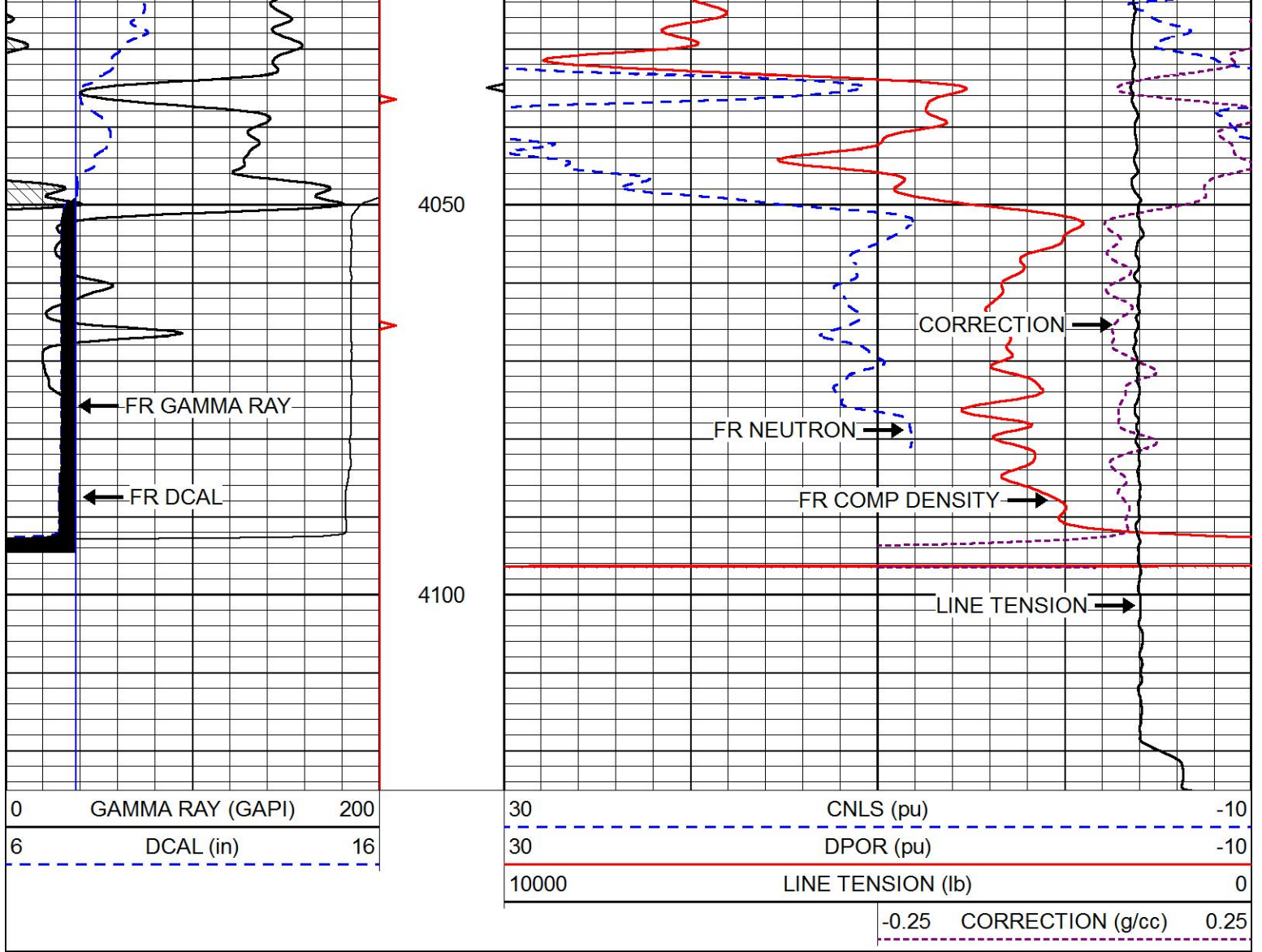






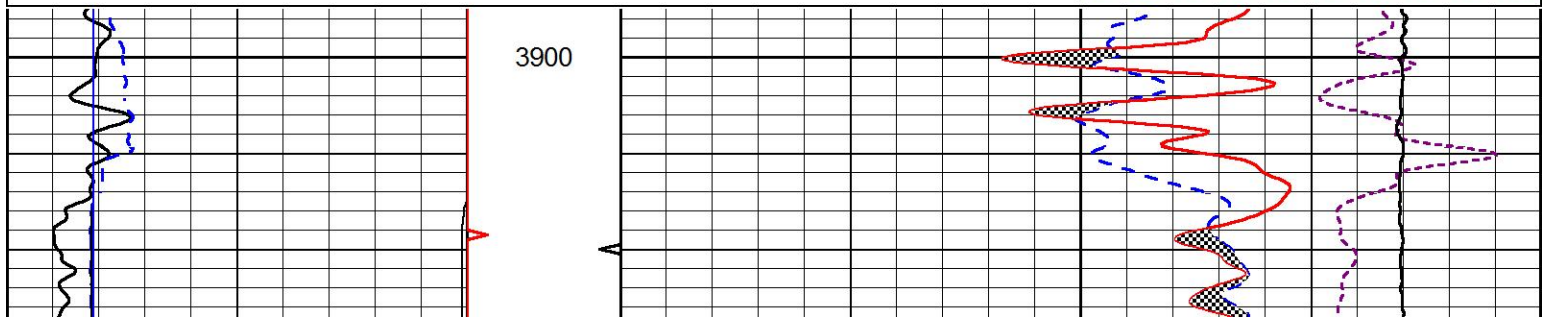
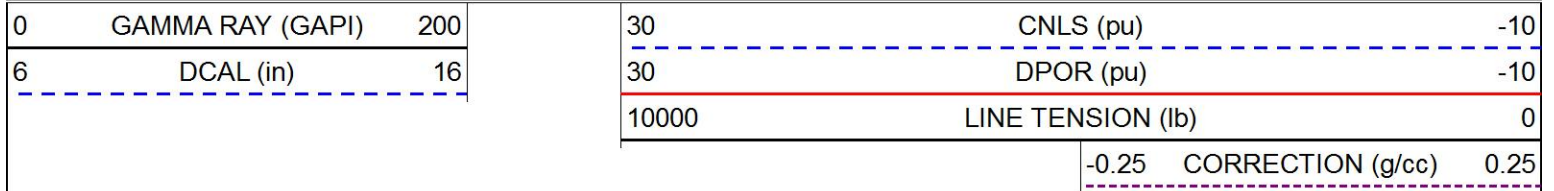


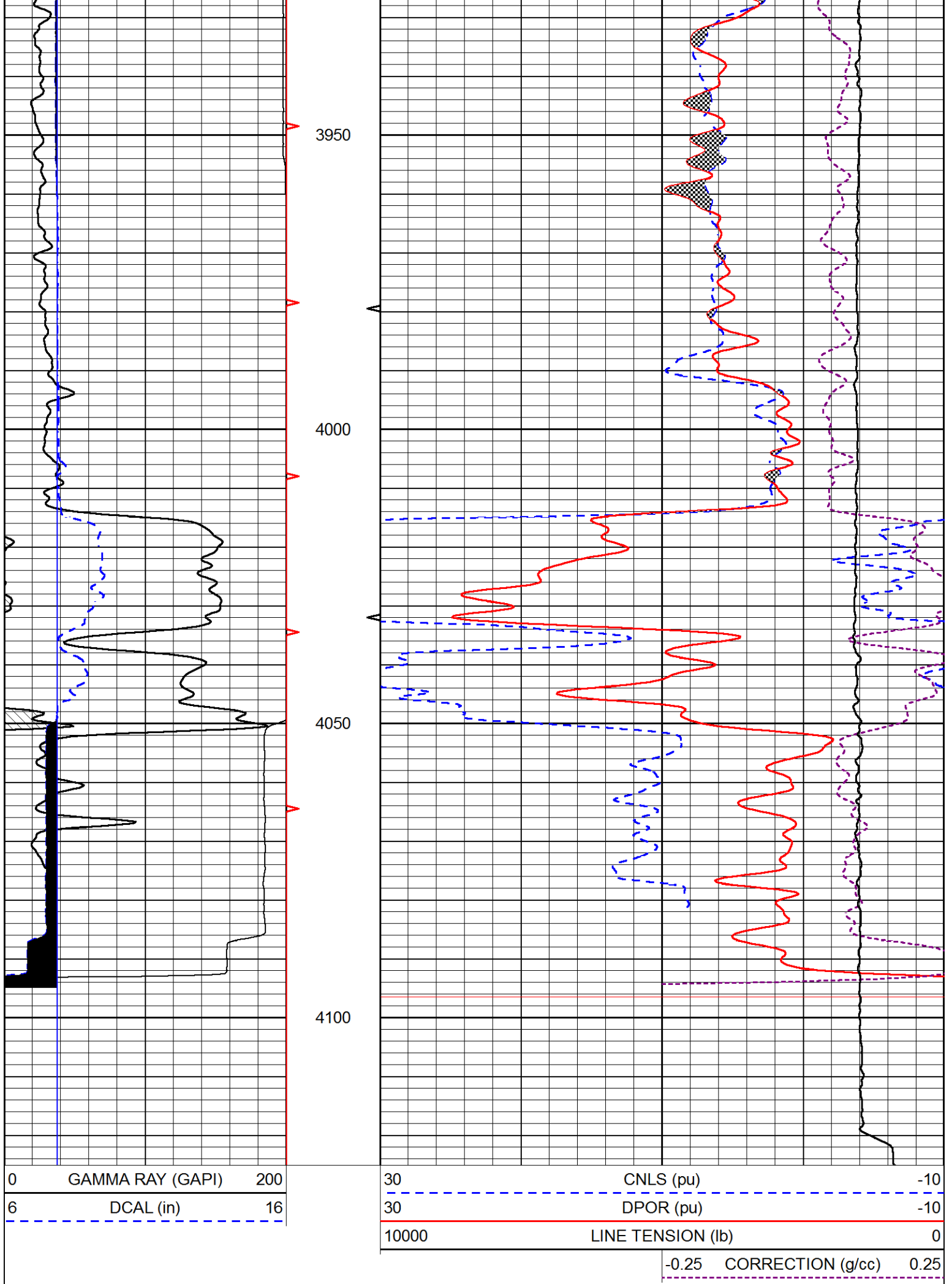




REPEAT SECTION

Database File thomas_garner_shrack_unit_1.db
 Dataset Pathname stackmel/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Fri Jan 03 04:33:17 2020
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File thomas_garner_shrack_unit_1.db
 Dataset Pathname stackmel/pass3.1
 Dataset Creation Fri Jan 03 04:25:18 2020

Dual Induction Calibration Report

Serial-Model: 952-828-PSI HIGH TEMP
 Calibration Performed: Wed Oct 09 13:38:53 2019

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.000	mmho/m	0.400	-27.500
Medium	0.000	1348.000	142.000	255.000	mmho/m	0.275	-27.000

Microlog Calibration Report

Serial-Model: UDM-01-PSI UDM ML
 Performed: (Not Performed)

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	32000.0000	0.5000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	32000.0000	0.5000
Caliper	0.0000	1.0000	0.0000	1.0000	in	6.2000	0.0000

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

**PIONEER**

Pioneer Energy Services

Company	THOMAS GARNER, INC.
Well	SHRACK UNIT #1
Field	VAN LIEU
County	STAFFORD
State	KANSAS