



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **PALOMINO PETROLEUM, INC.**
Well **UEHLING-SCHWIEN #1**
Field **WILDCAT**
County **NESS** State **KANSAS**

Location: API #: 15-135-25992-00-00

Other Services

587' FNL & 2477' FEL
SEC 11 TWP 20S RGE 22W

DIL/MEL
BHCS

Permanent Datum **GROUND LEVEL** Elevation **2235'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**

Elevation
K.B. **2240'**
D.F. **N/A**
G.L. **2235'**

Date **2/21/2018**

Run Number **ONE**

Type Log **CNL/CDL**

Depth Driller **4545'**

Depth Logger **4546'**

Bottom Logged Interval **4517'**

Top Logged Interval **3600'**

Type Fluid In Hole **CHEMICAL**

Salinity, PPM CL **11,700**

Density **9.35**

Level **FULL**

Max. Rec. Temp. F **121**

Operating Rig Time **5 HOURS**

Equipment -- Location **91 HAYS**

Recorded By **D. SCHMIDT**

Witnessed By **ANDREW STENZEL**

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0'	218'	8.625"	23#	0'	218'
TWO	7.875"	218'	TD				

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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.

BAZINE,
8 SOUTH TO ROAD 50, 1 1/2 WEST
SOUTH INTO

Log Measured From: **KELLY BUSHING** 5 Ft. Above Permanent Datum

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

Your Pioneer Energy Services Crew

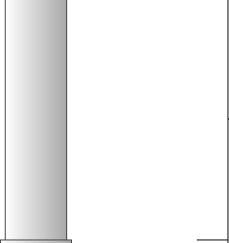
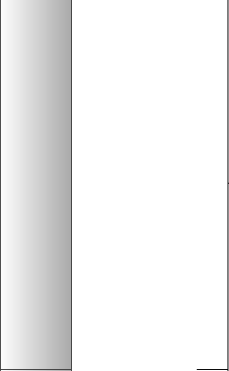
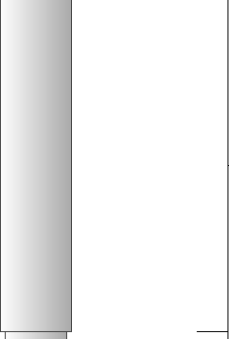
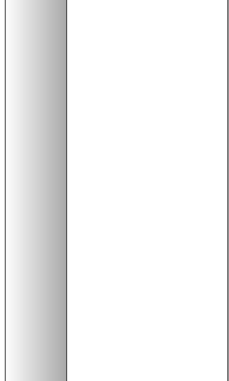
Engineer: **D. SCHMIDT**
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: **ANDREW STENZEL**
Secondary Witness:
Secondary Witness:
Secondary Witness:

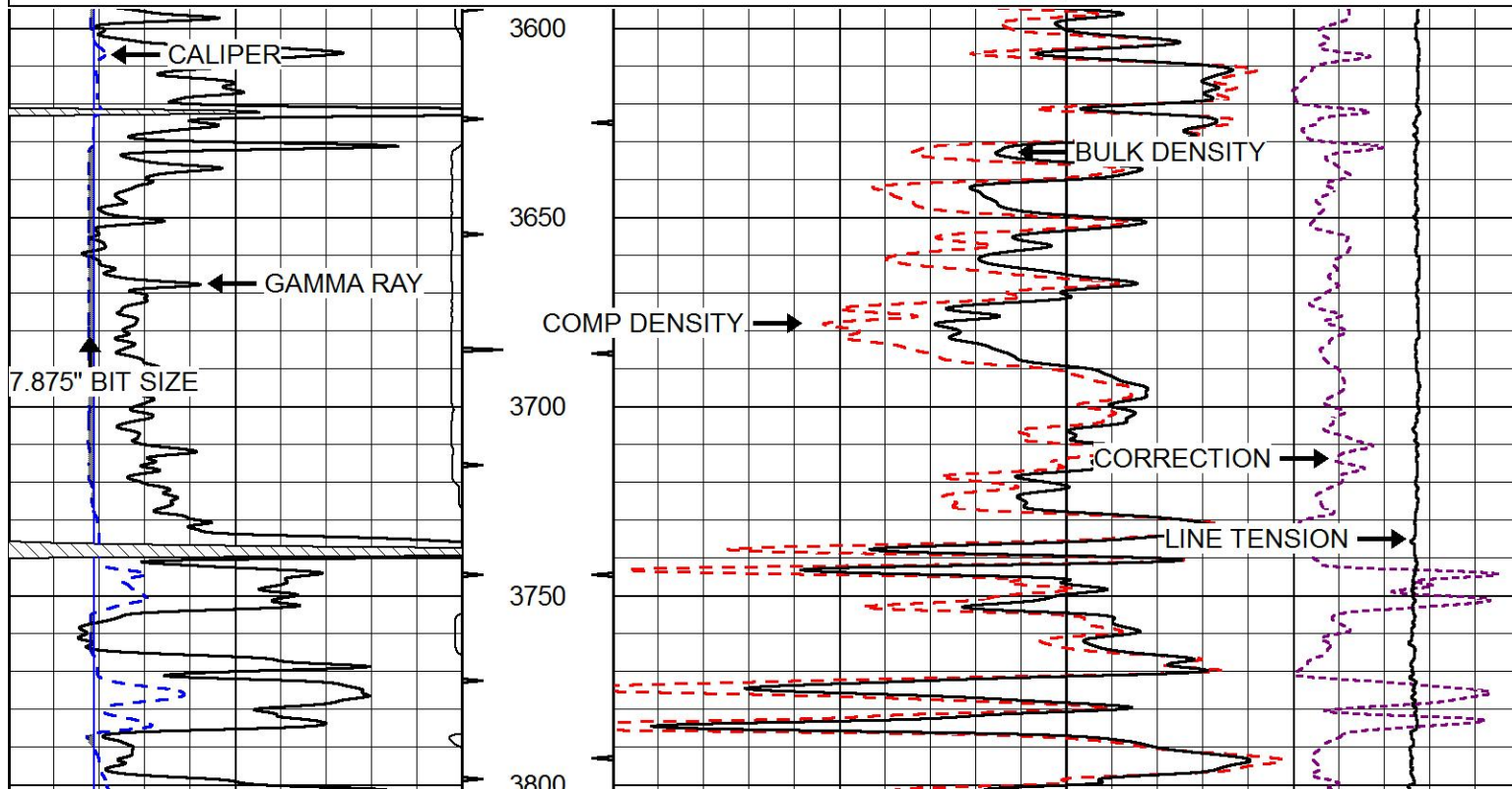
Top - Bottom

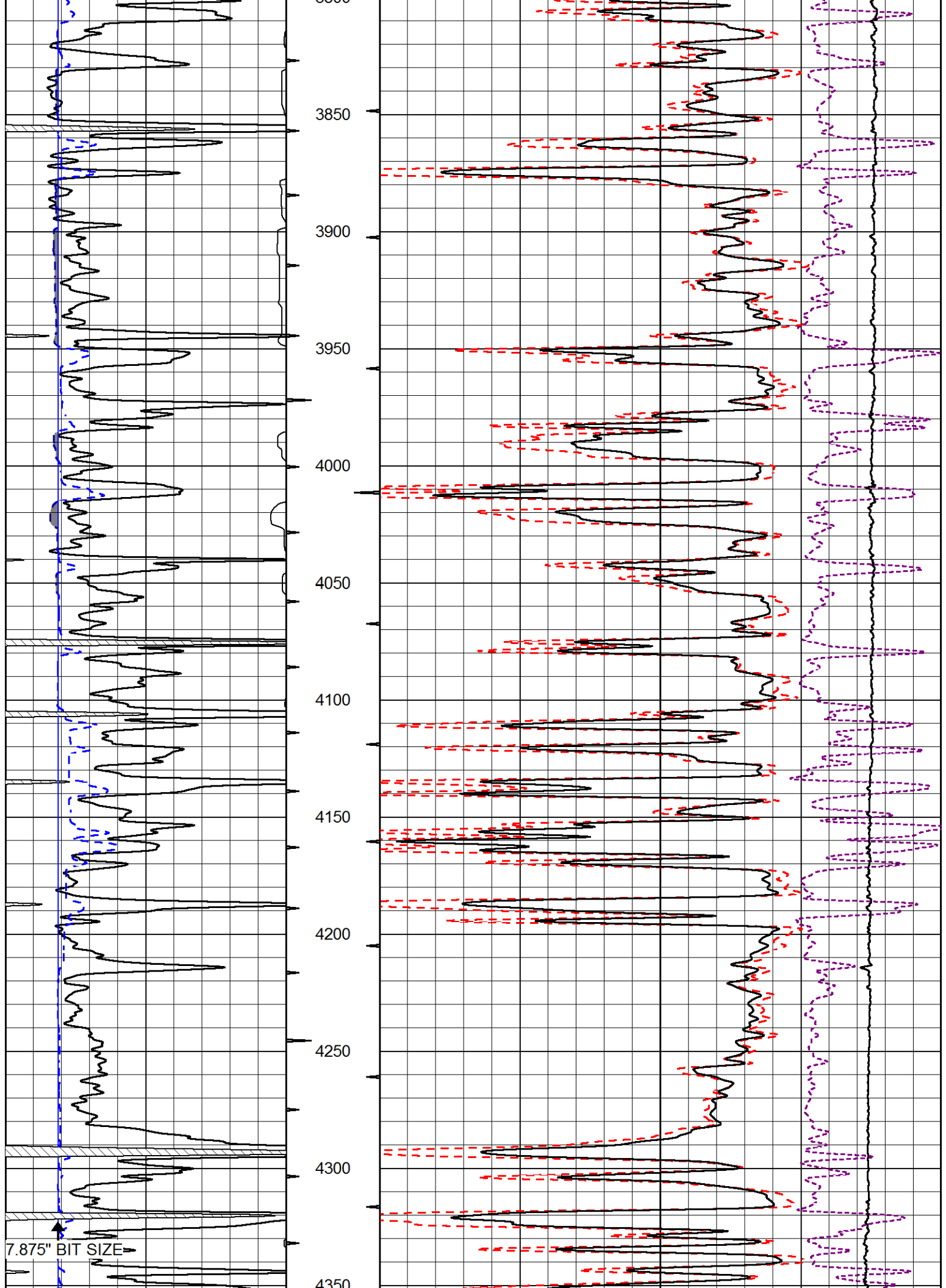
M	A	SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m
2	1	Off	Limestone	1	2.71	-143	0
SNDERR mmho/m 0	SRFTEMP degF 20	CASETHCK in 0	CASEOD in 5.5	PERFS 0	TDEPTH ft 4546	BOTTEMP degF 121	BOREID in 7.875

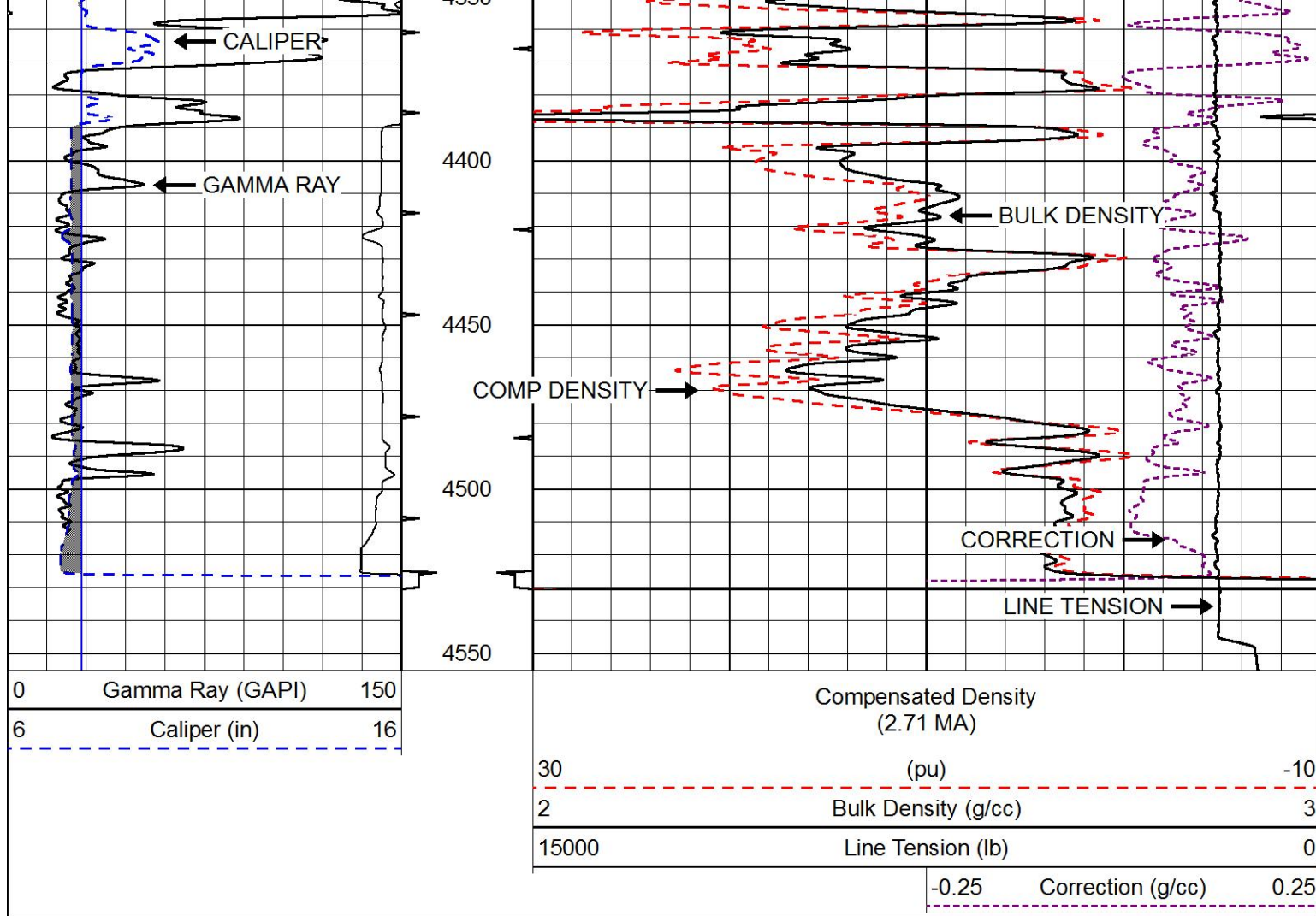
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58		GR-M&W (89)	3.00	3.50	50.00
CNLSC CNSSC	37.48 36.73		CNT-M&W (207-MW)	5.50	3.50	100.00
LSD DCAL SSD	28.43 28.42 27.93		CDL-M&W (182-152)	8.50	4.00	250.00
MCAL MI MN	19.83 19.83 19.83		ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
RLL3F RLL3	15.80 15.80					

		DIL-PSI HIGH TEMP (933 (HT))		18.50	3.50	220.00
CILD	8.00					
CILM	4.70					
SP	0.20					
Dataset: palomino_uehling-schwien#1.db: field/well/STACKML/pass3.6 Total length: 43.08 ft Total weight: 685.00 lb O.D.: 4.00 in						

		MAIN PASS			
Database File	palomino_uehling-schwien#1.db				
Dataset Pathname	STACKML/pass3.6				
Presentation Format	cdl				
Dataset Creation	Wed Feb 21 03:44:13 2018				
Charted by	Depth in Feet scaled 1:600				
0	Gamma Ray (GAPI)	150			
6	Caliper (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





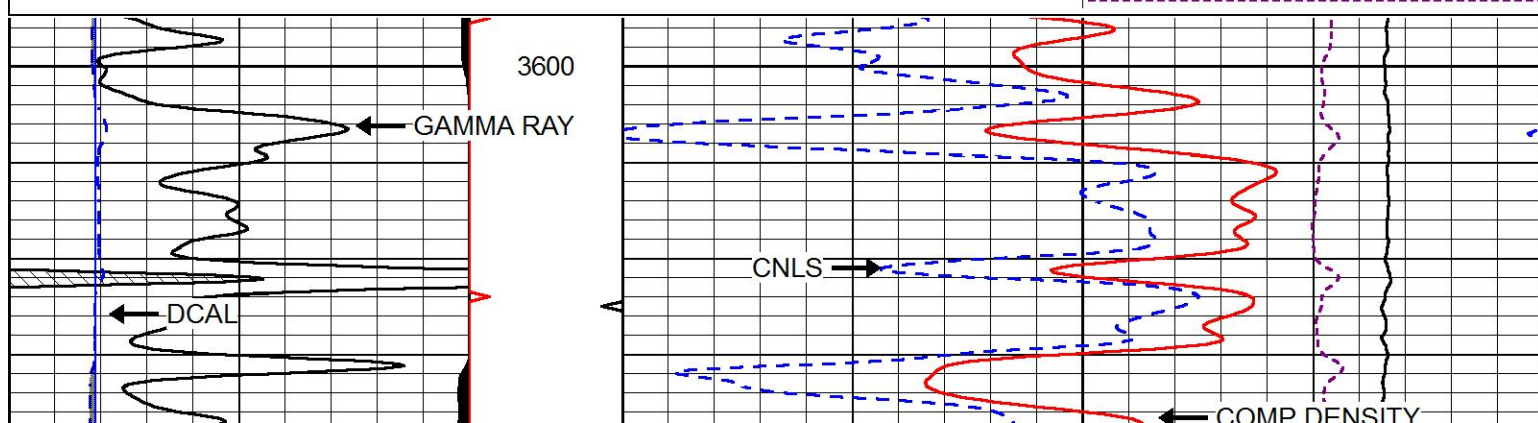


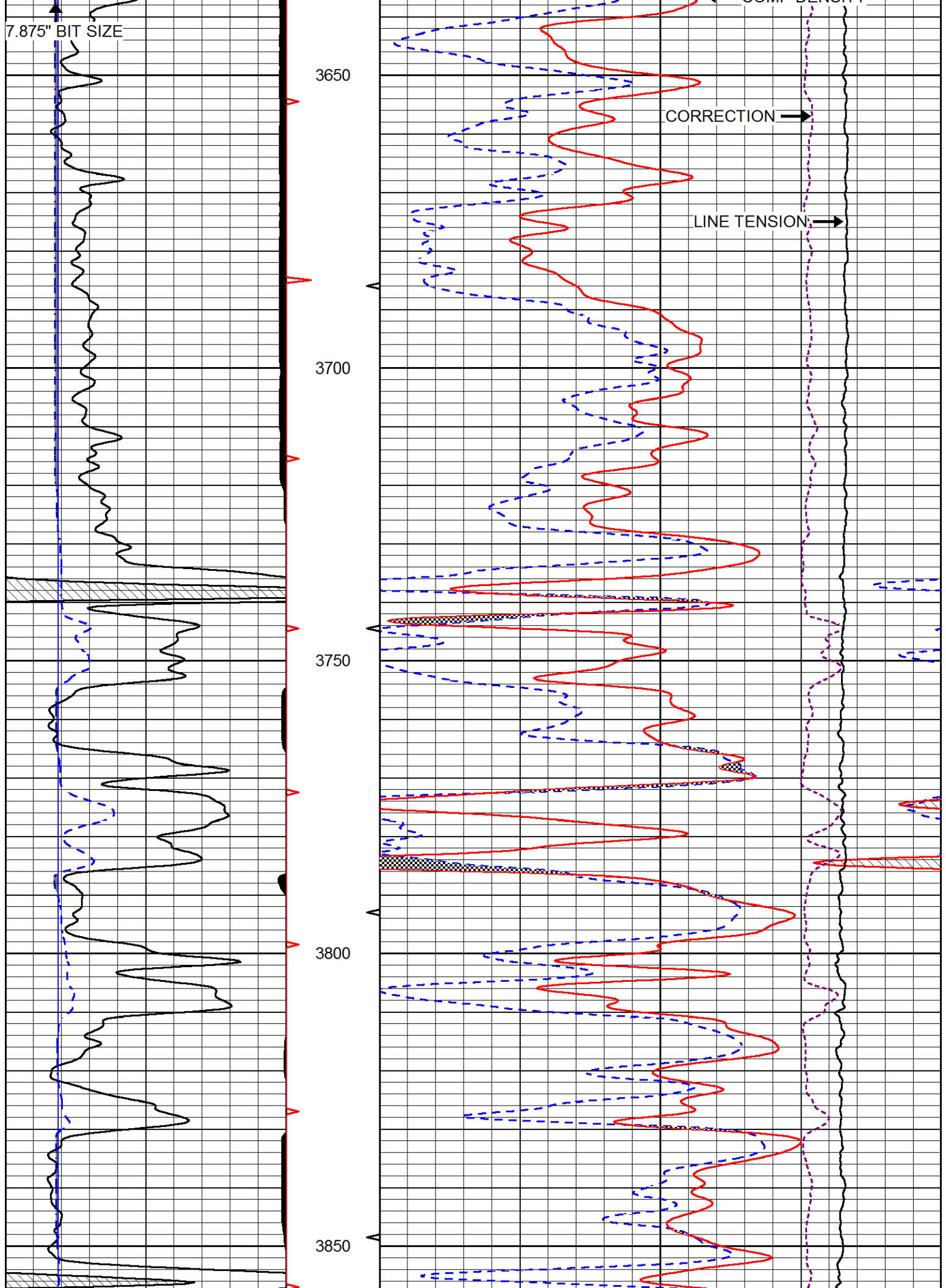
MAIN PASS

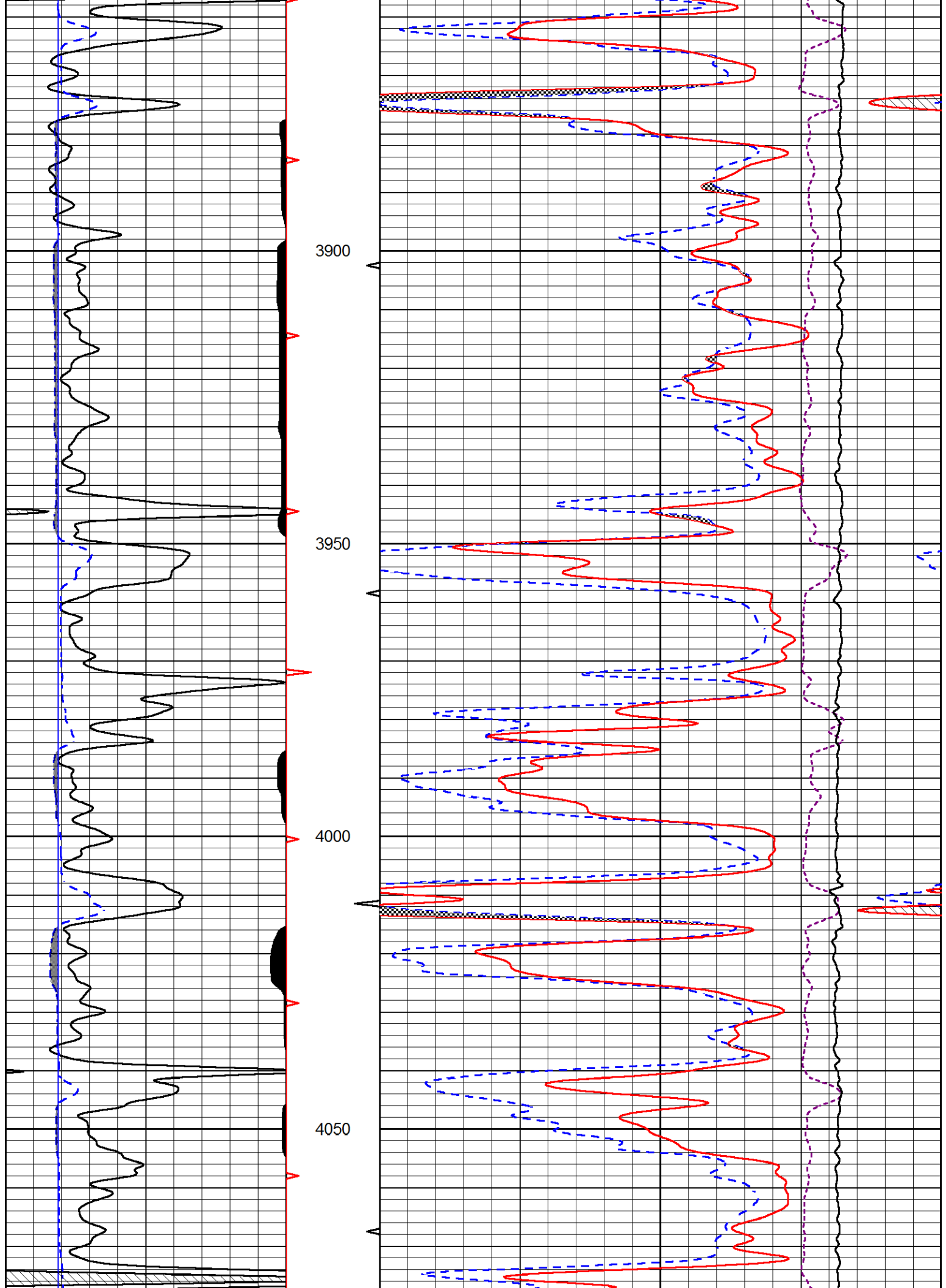
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Dataset Pathname	STACKML/pass3.6
Presentation Format	cnlspec
Dataset Creation	Wed Feb 21 03:44:13 2018
Charted by	Depth in Feet scaled 1:240

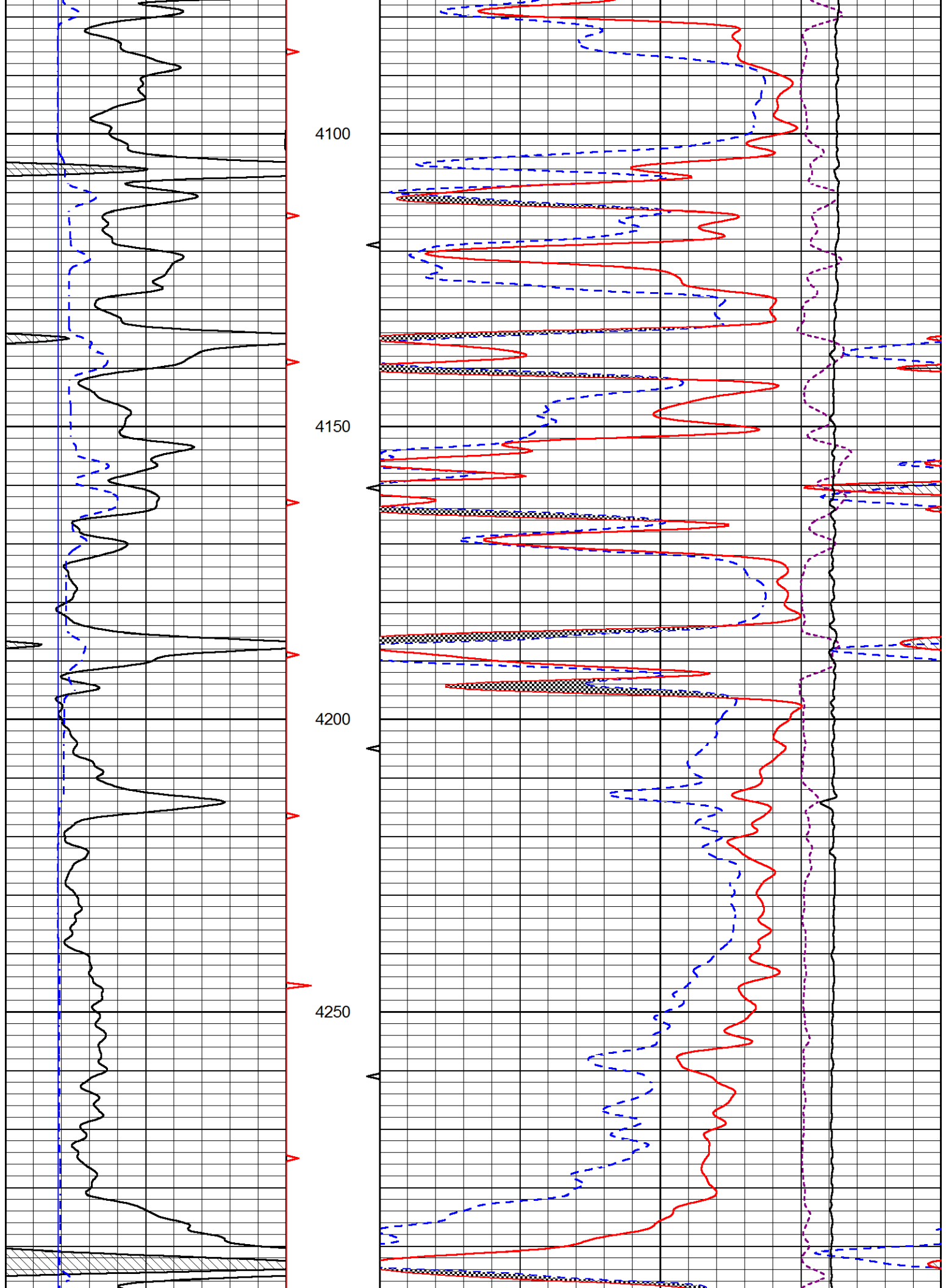
0	Gamma Ray (GAPI)	150
6	DCAL (in)	16

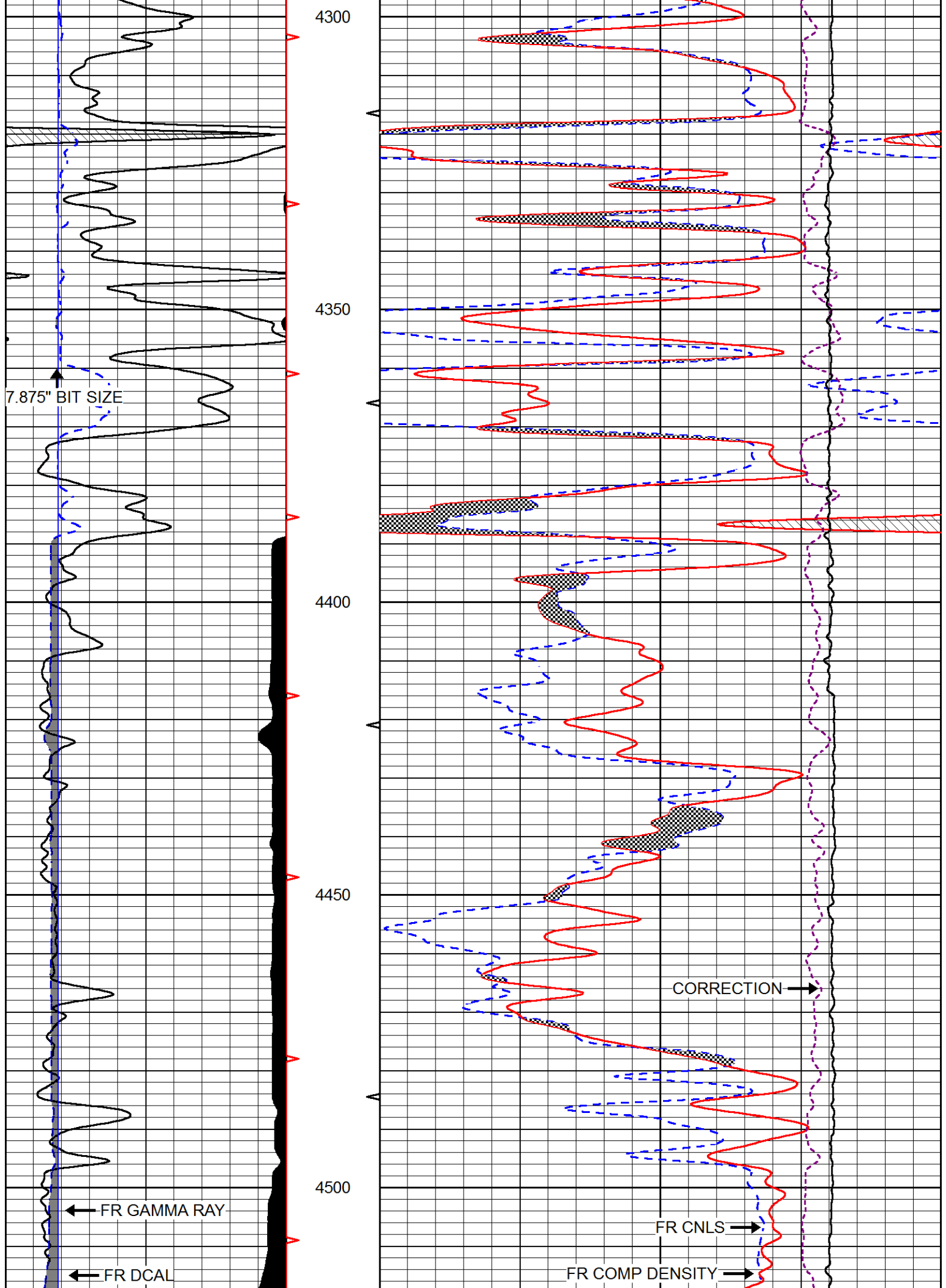
30	CNLS (pu)	-10
30	Compensated Density 2.71 g/cc (pu)	-10
10000	Line Tension (lb)	0
-0.75	Correction (g/cc)	0.75

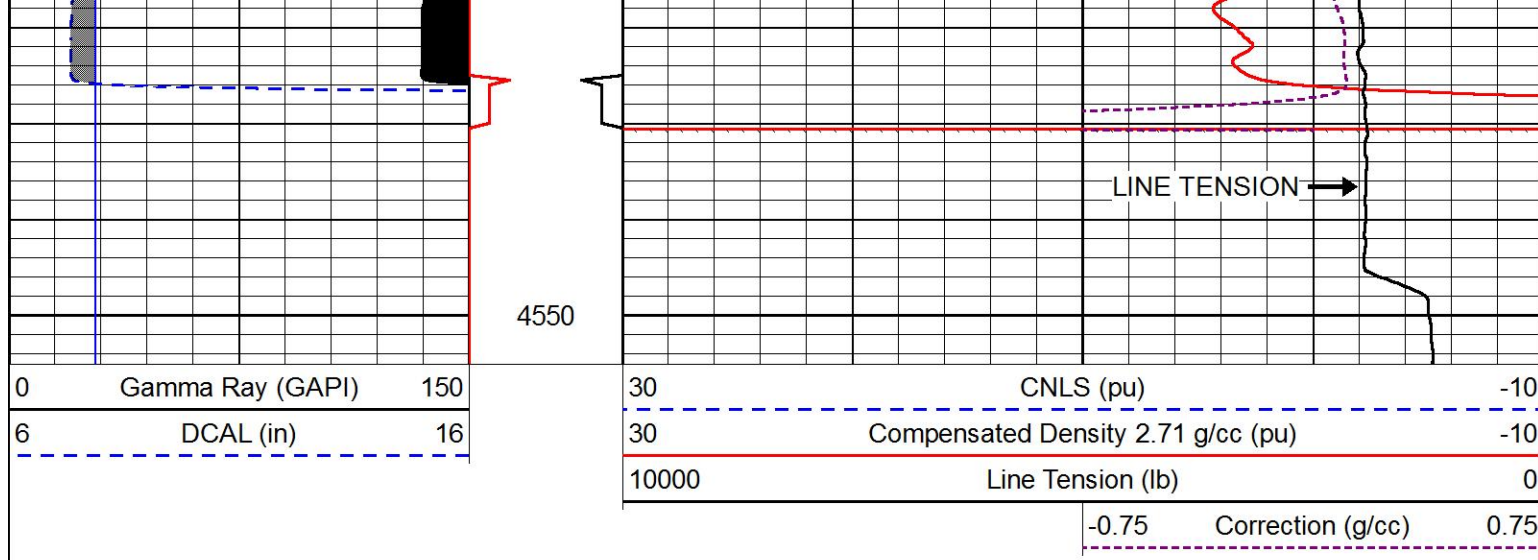






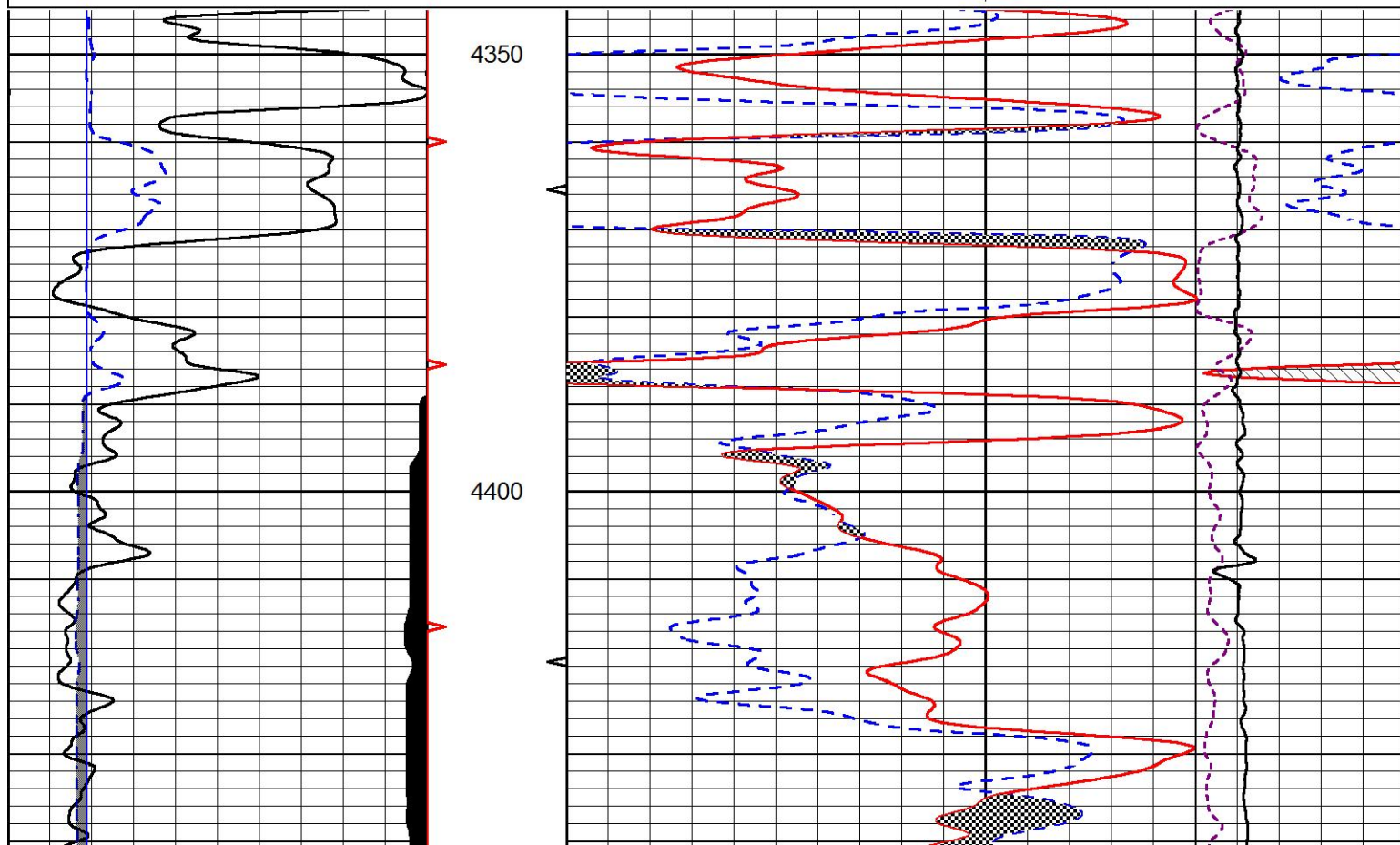
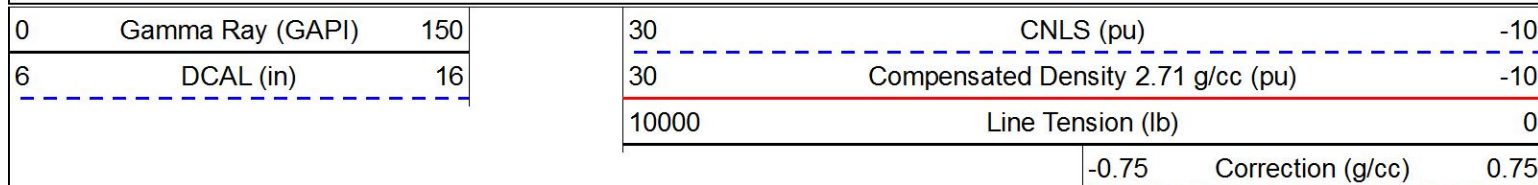


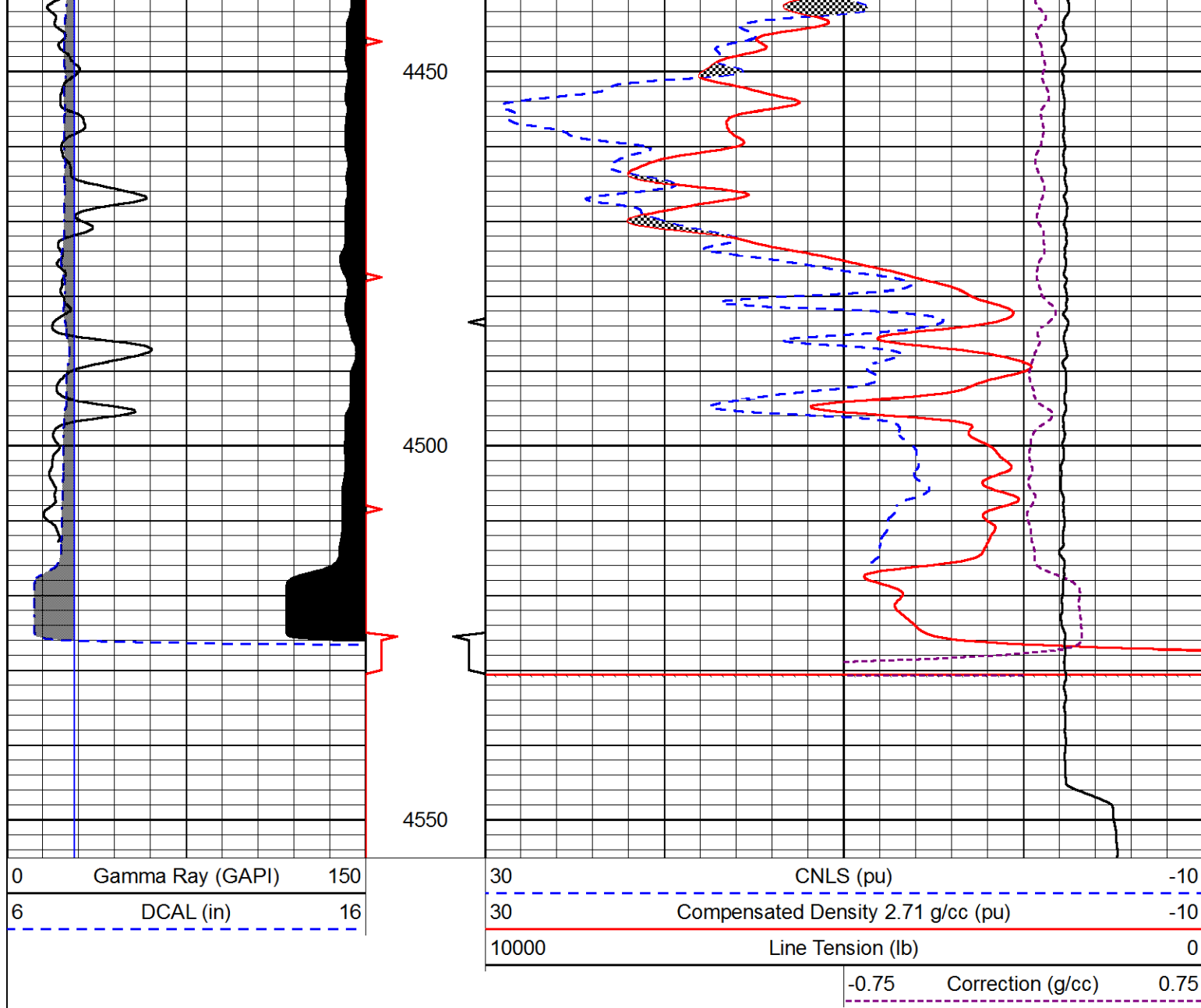




REPEAT SECTION

Database File palomino_uehling-schwien#1.db
 Dataset Pathname STACKML/pass2.2
 Presentation Format cndlspec
 Dataset Creation Wed Feb 21 04:00:29 2018
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File palomino_uehling-schwien#1.db
 Dataset Pathname STACKML/pass3.6
 Dataset Creation Wed Feb 21 03:44:13 2018

Dual Induction Calibration Report

Serial-Model: 933 (HT)-PSI HIGH TEMP
 Calibration Performed: Sun Feb 18 17:32:17 2018

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.000	mmho/m	0.700	-17.500
Medium	142.000	1349.000	0.000	255.000	mmho/m	0.550	-61.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
 Performed: Mon Jan 15 11:19:55 2018

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	24000.0000	-0.5000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	25500.0000	0.1000
Caliper	1.0001	1.1397	6.5000	18.5000	in	70.0000	-65.9000

Compensated Density Calibration Report

Serial-Model: 182-152-M&W
 Source / Verifier: 16955B / 2ci
 Master Calibration Performed: Mon Feb 12 16:20:26 2018

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4992.81	6098.44	cps
Aluminum	2.675	g/cc	945.67	3945.60	cps

Spine Angle = 75.33 Density/Spine Ratio = 0.535

	Size		Reading
Small Ring	4.50	in	1.09
Large Ring	15.00	in	1.03

Compensated Neutron Calibration Report

Serial Number: 207-MW
 Tool Model: M&W
 Calibration Performed: MON JAN 15 10:30:30 2018

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
 Tool Model: M&W
 Calibration Performed: Mon Jan 15 11:20:44 2018

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps



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 Field WILDCAT
 County NESS
 State KANSAS