



DUAL COMP POROSITY LOG

Company CHIZUM OIL, LLC
 Well LAZY HEART #1-26
 Field WILDCAT
 County SHERMAN
 State KANSAS

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Location: API #: 15-181-20613-00-00
 440' FNL & 560' FEL
 SEC 26 TWP 7S RGE 37W
 Permanent Datum GROUND LEVEL Elevation 3440'
 Log Measured From KELLY BUSHING
 Drilling Measured From KELLY BUSHING
 Other Services DIL/MEL
 K.B. 3448'
 D.F. N/A
 G.L. 3440'

Date	05/03/2018	
Run Number	ONE	
Type Log	CNL/CDL	
Depth Driller	5000'	
Depth Logger	4996'	
Bottom Logged Interval	4967'	
Top Logged Interval	3900'	
Type Fluid In Hole	CHEMICAL	
Salinity, PPM CL	7800	
Density	9.4	
Level	FULL	
Max. Rec. Temp. F	116	
Operating Rig Time	3 HOURS	
Equipment -- Location	91 HAYS	
Recorded By	D. SCHMIDT	
Witnessed By	TIM PRIEST	

Run No.	Bit	Borehole Record		Casing Record	
		From	To	From	To
ONE	12.25"	0'	347'	8.625"	23#
TWO	7.875"	347'	TD	0'	347'

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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.

BREWSTER, KS
 5 SOUTH TO T ROAD,
 3 WEST, 1 NORTH,
 EAST INTO

Log Measured From: KELLY BUSHING 8 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: TIM PRIEST
 Secondary Witness:
 Secondary Witness:
 Secondary Witness:

Log Variables

Database C:\ProgramData\Warrior\Data\chizum_lazyheart#1-26.db
 Dataset field/well/STKML/pass5.1/_vars_

Top - Bottom

M	A	SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m
2	1	Off	Limestone	1	2.71	280	0
SNDERR mmho/m	SRFTEMP degF	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0	50	0	5.5	0	4997	116	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 (227-771)	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					

CILD 8.00

CILM 4.70

SP 0.20

DIL-PSI HIGH TEMP (967 (HT))

18.50

3.50

220.00

Dataset: chizum_lazyheart#1-26.db: field/well/STKML/pass5.1
 Total length: 43.08 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

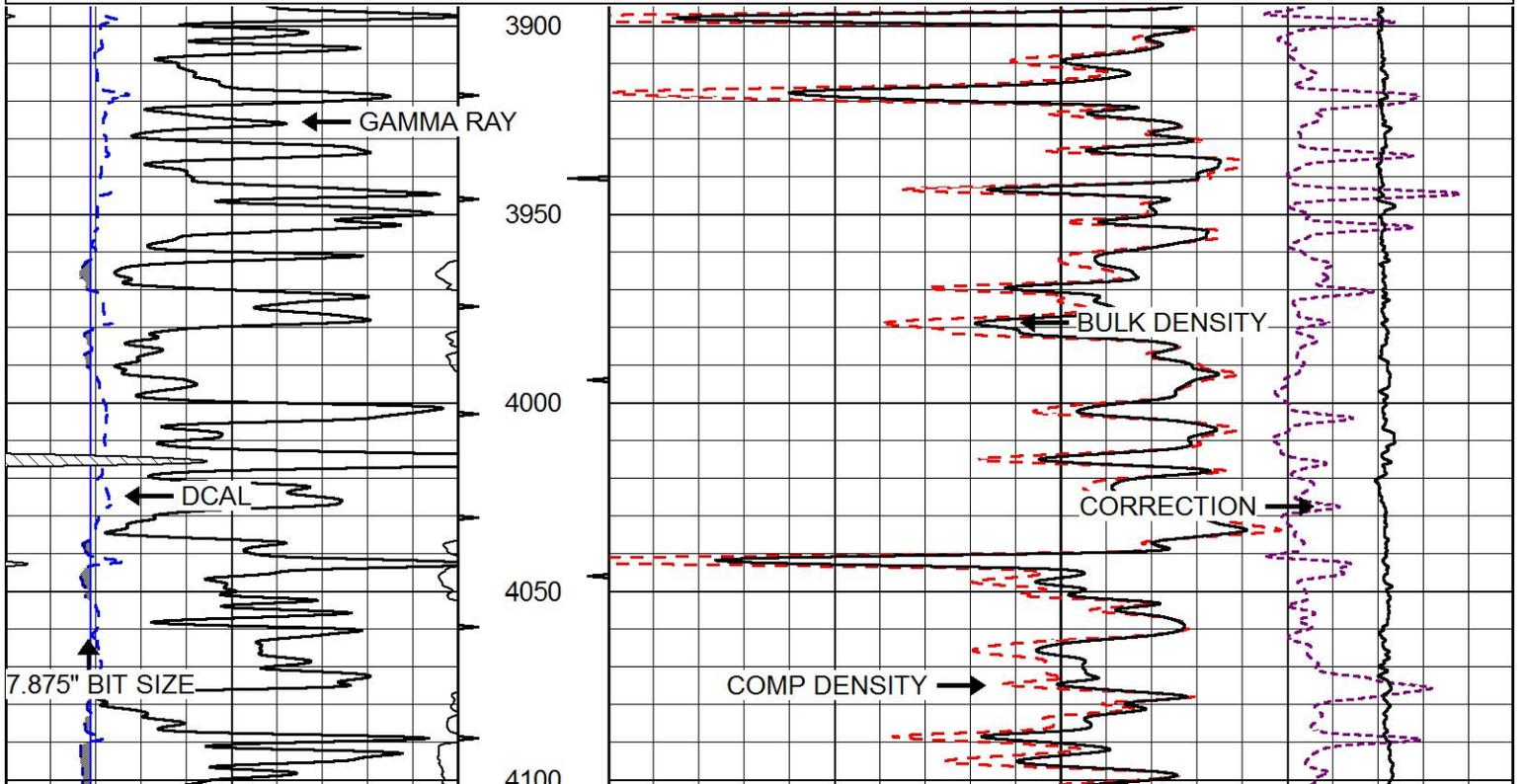


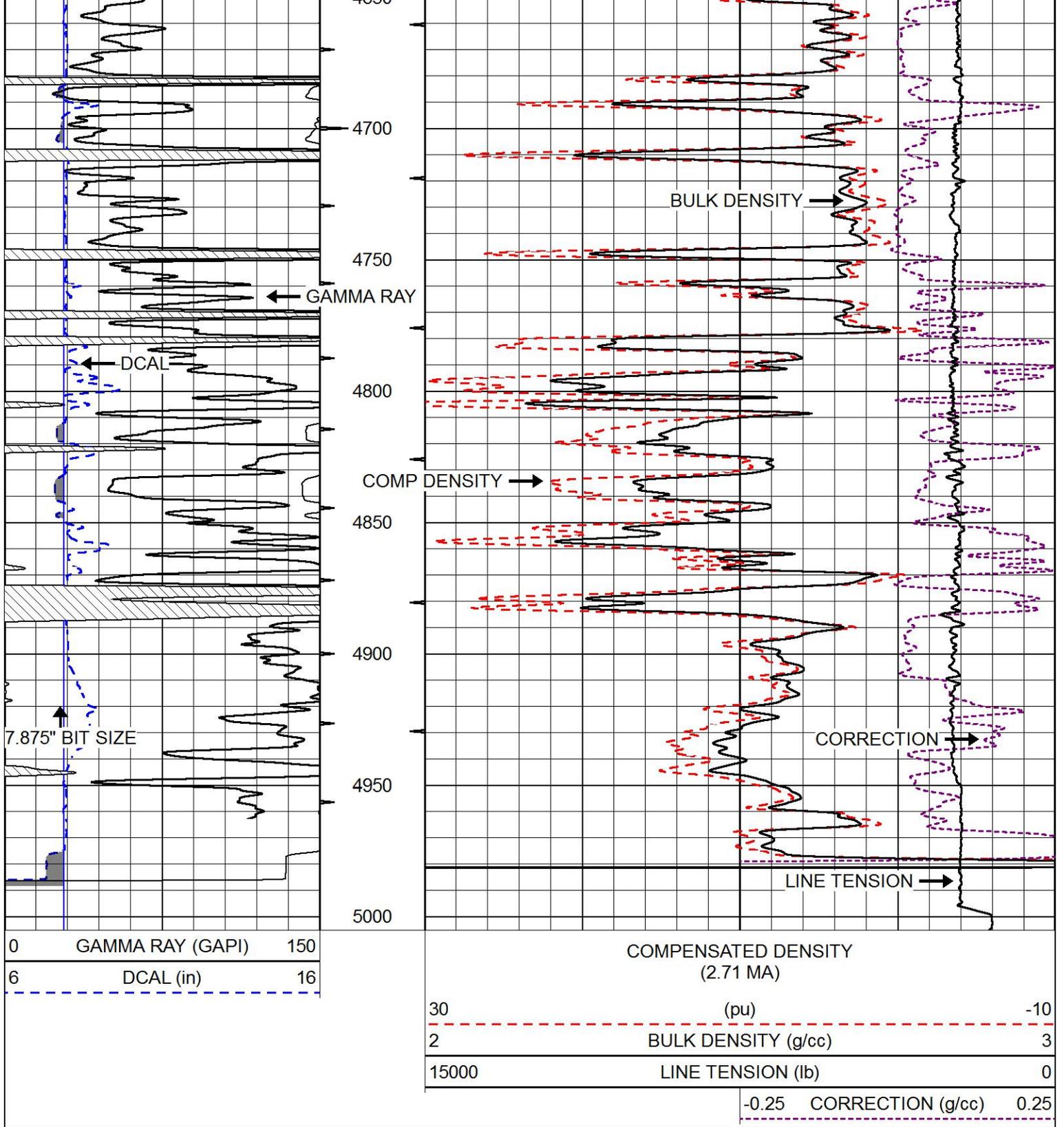
MAIN PASS

Database File chizum_lazyheart#1-26.db
 Dataset Pathname STKML/pass5.1
 Presentation Format cdl
 Dataset Creation Fri May 04 02:48:44 2018
 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





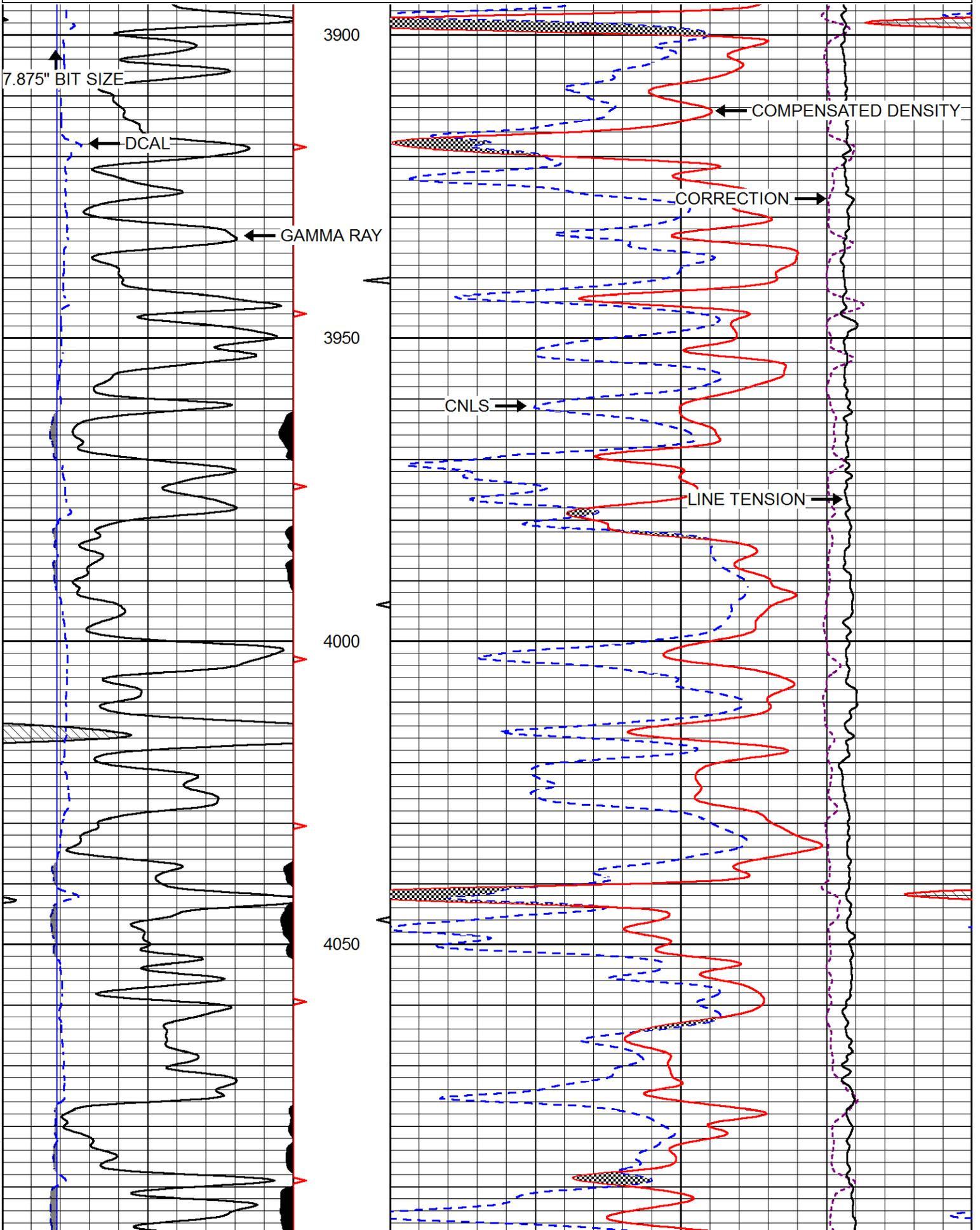
MAIN PASS

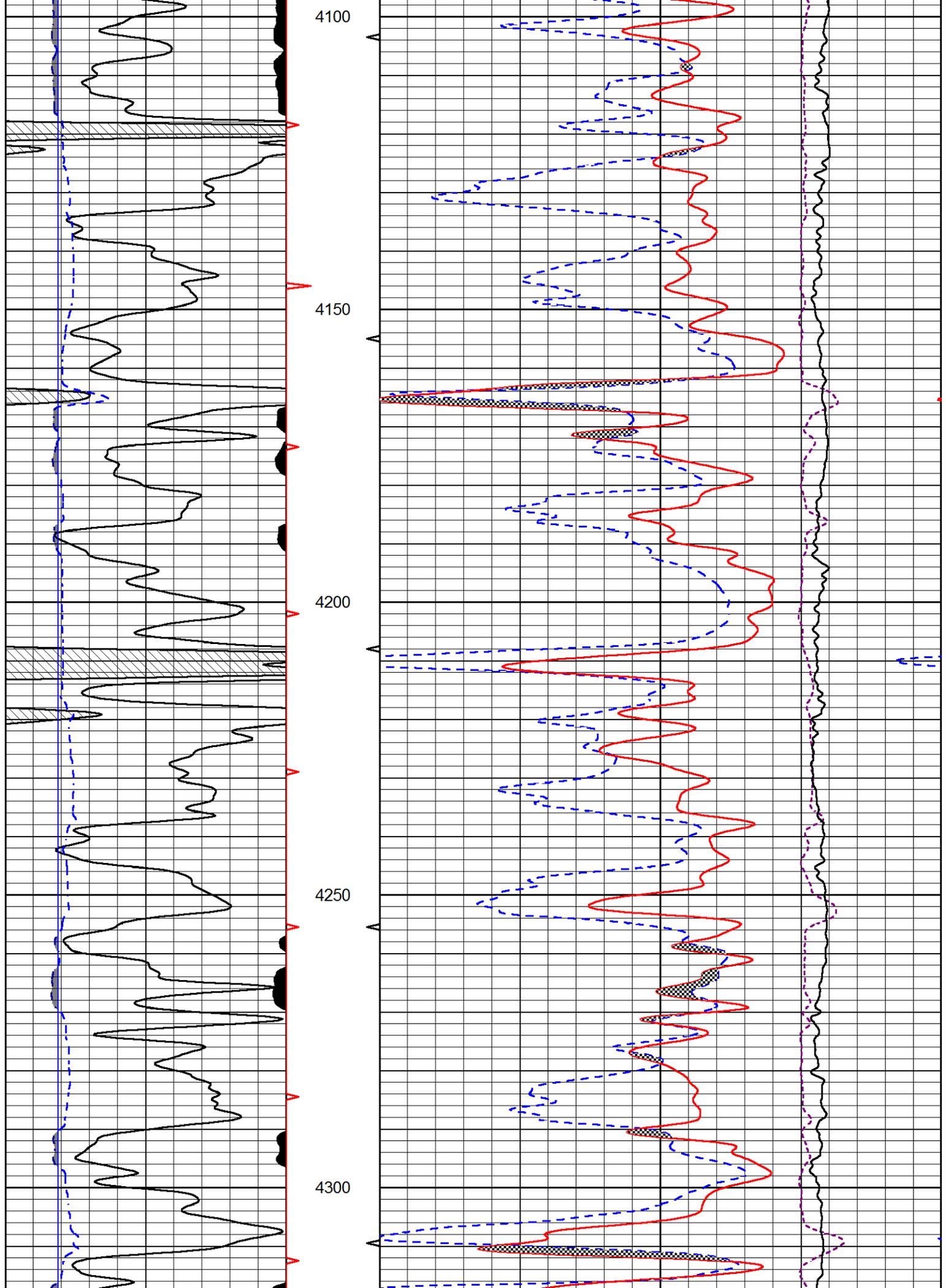
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 Dataset Pathname STKML/pass5.1
 Presentation Format cndlspec
 Dataset Creation Fri May 04 02:48:44 2018
 Charted by Depth in Feet scaled 1:240

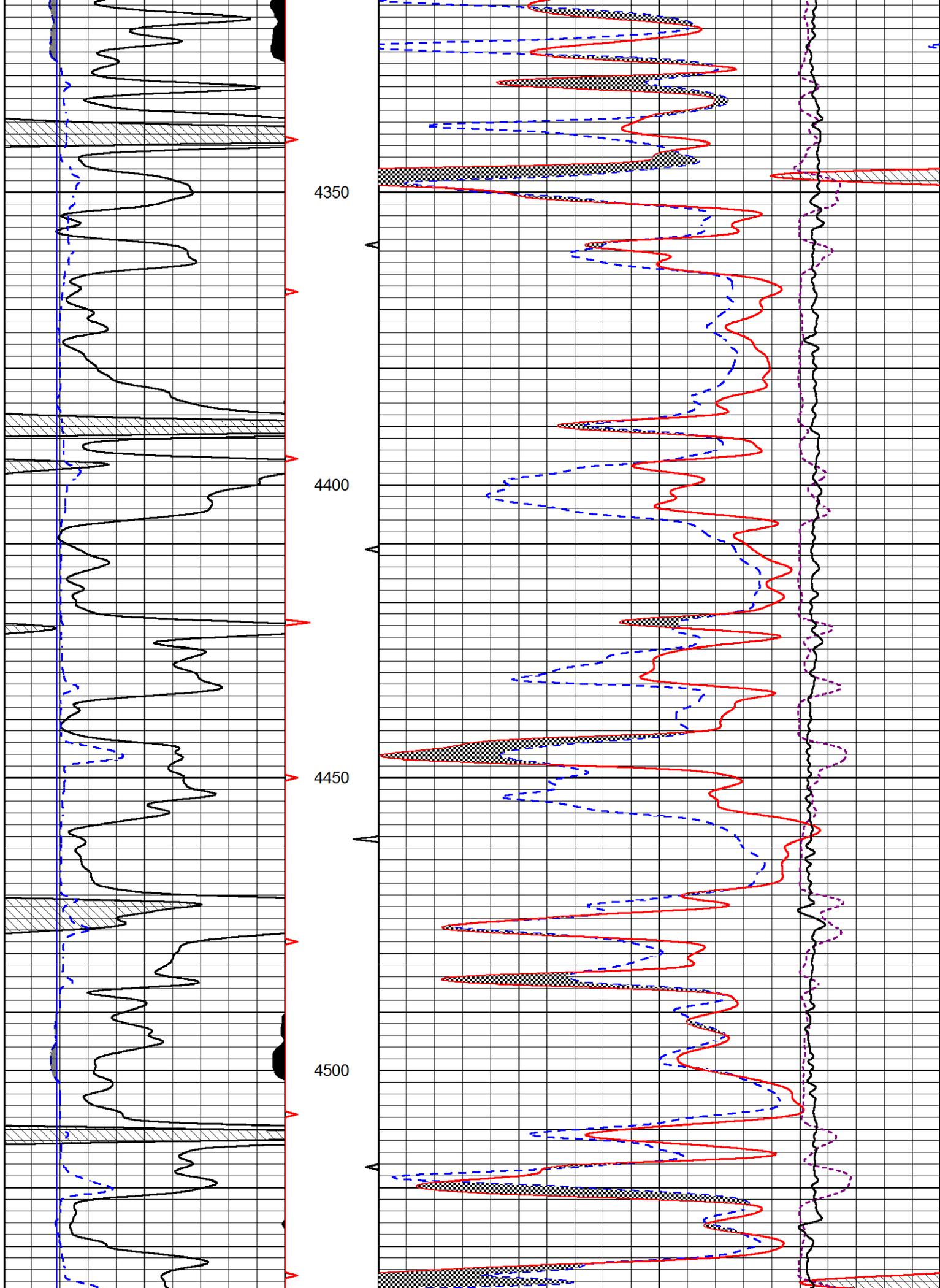


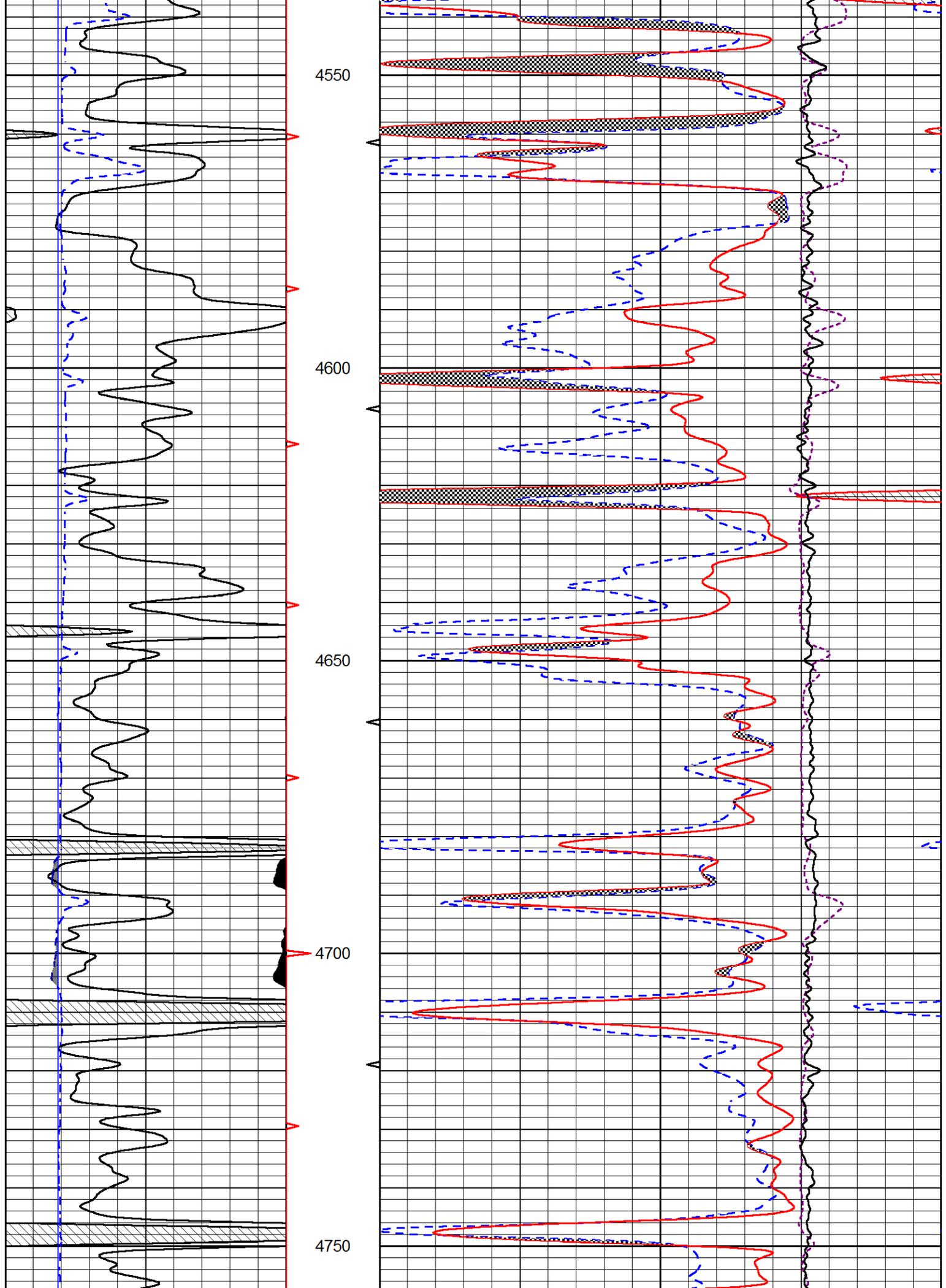
6 DCAL (in) 16

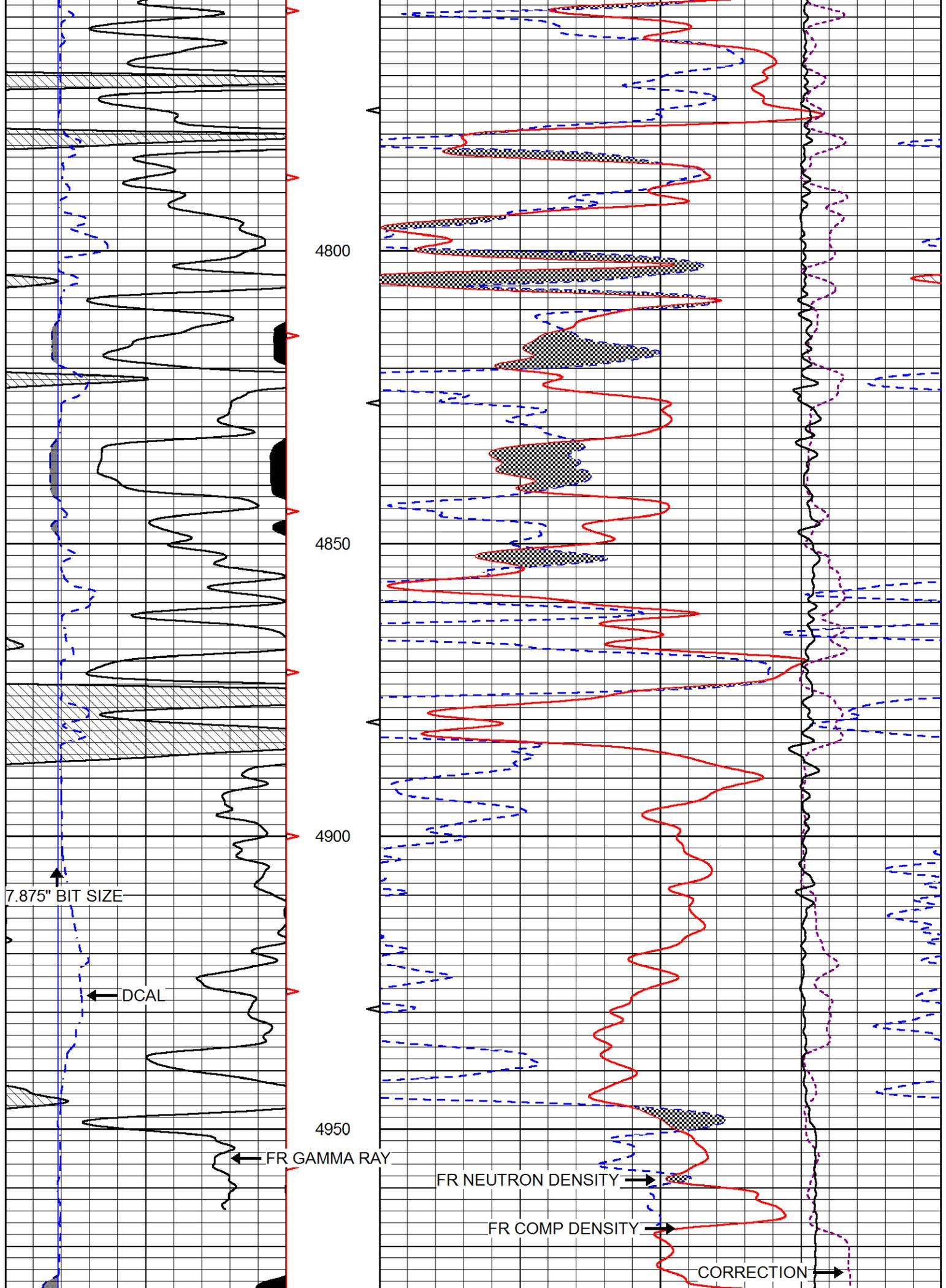
30 COMPENSATED DENSITY 2.71g/cc (pu) -10
10000 LINE TENSION (lb) 0
-0.75 CORRECTION (g/cc) 0.75

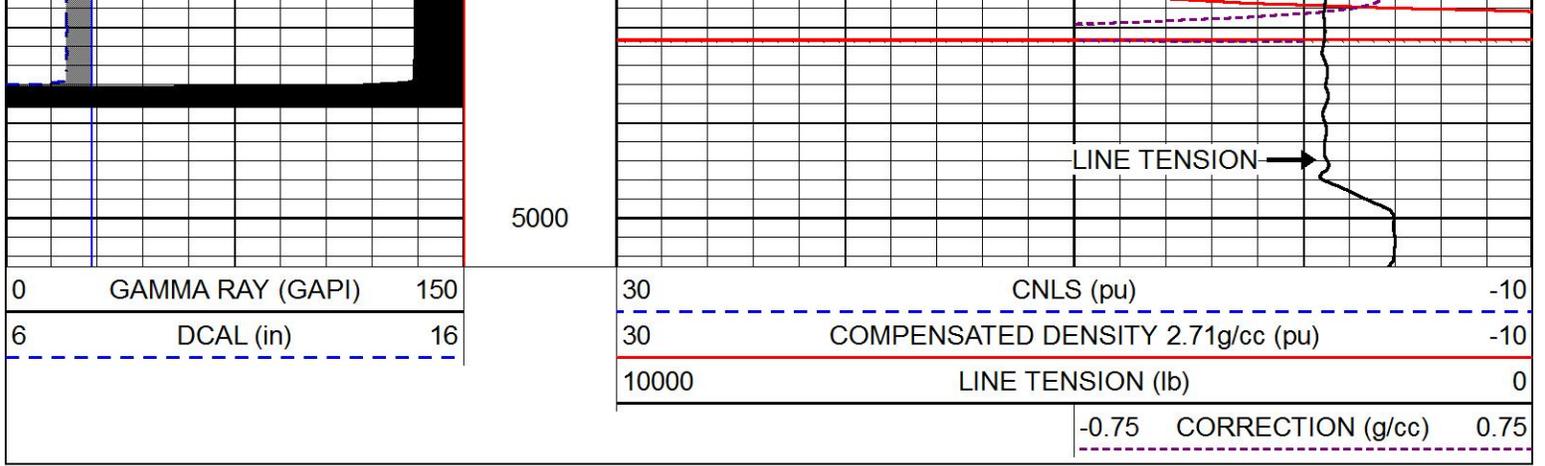






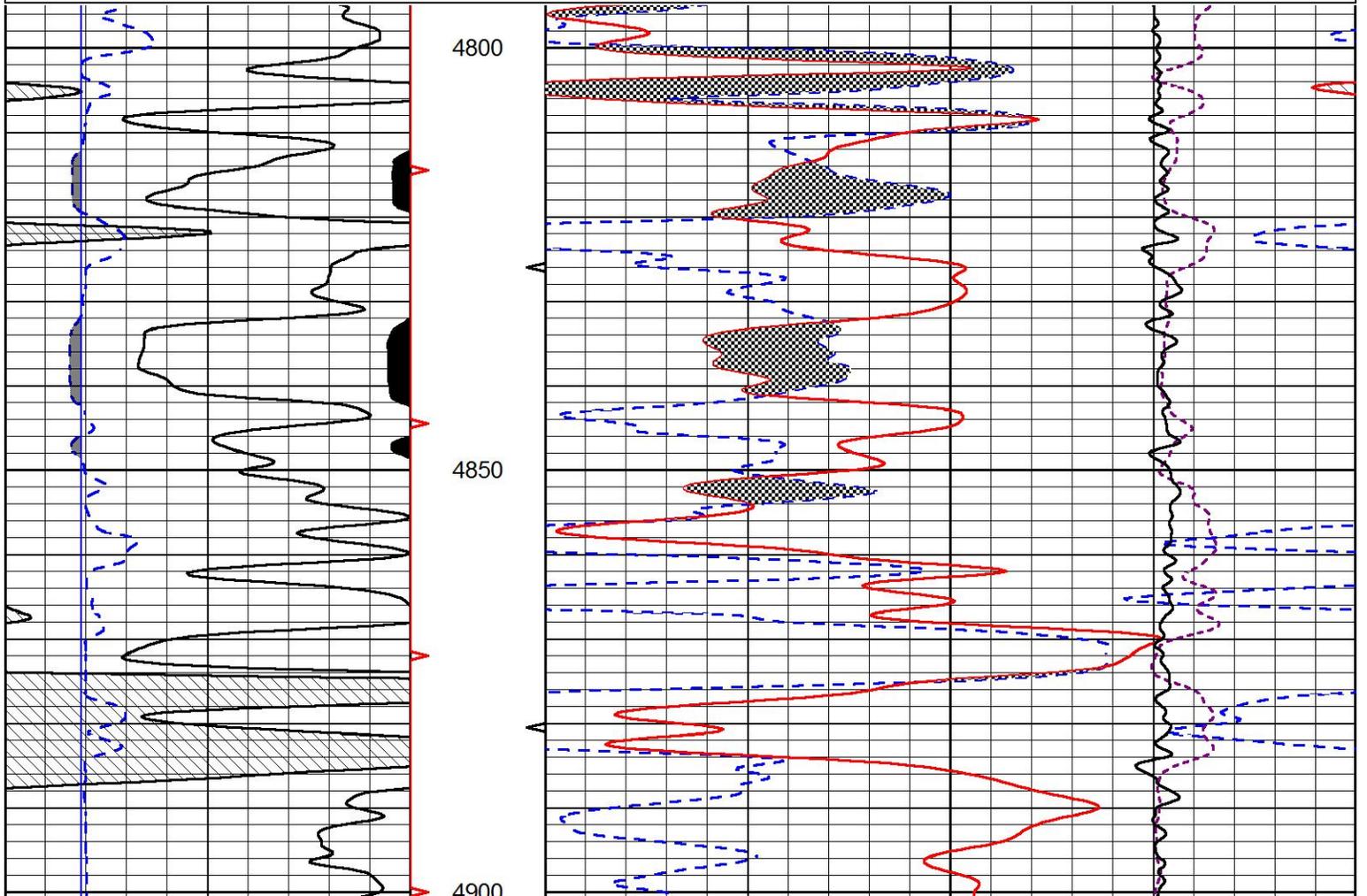
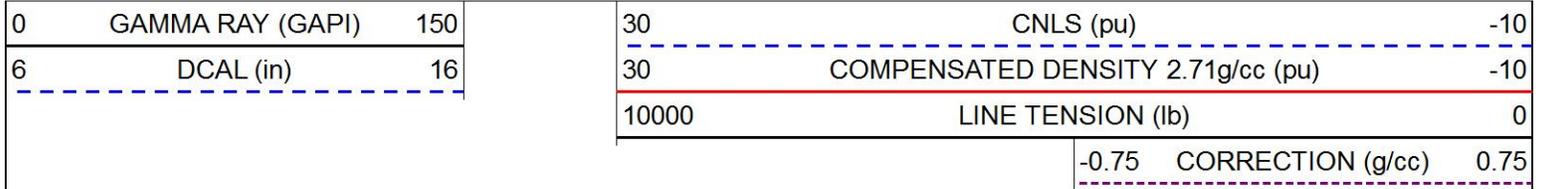


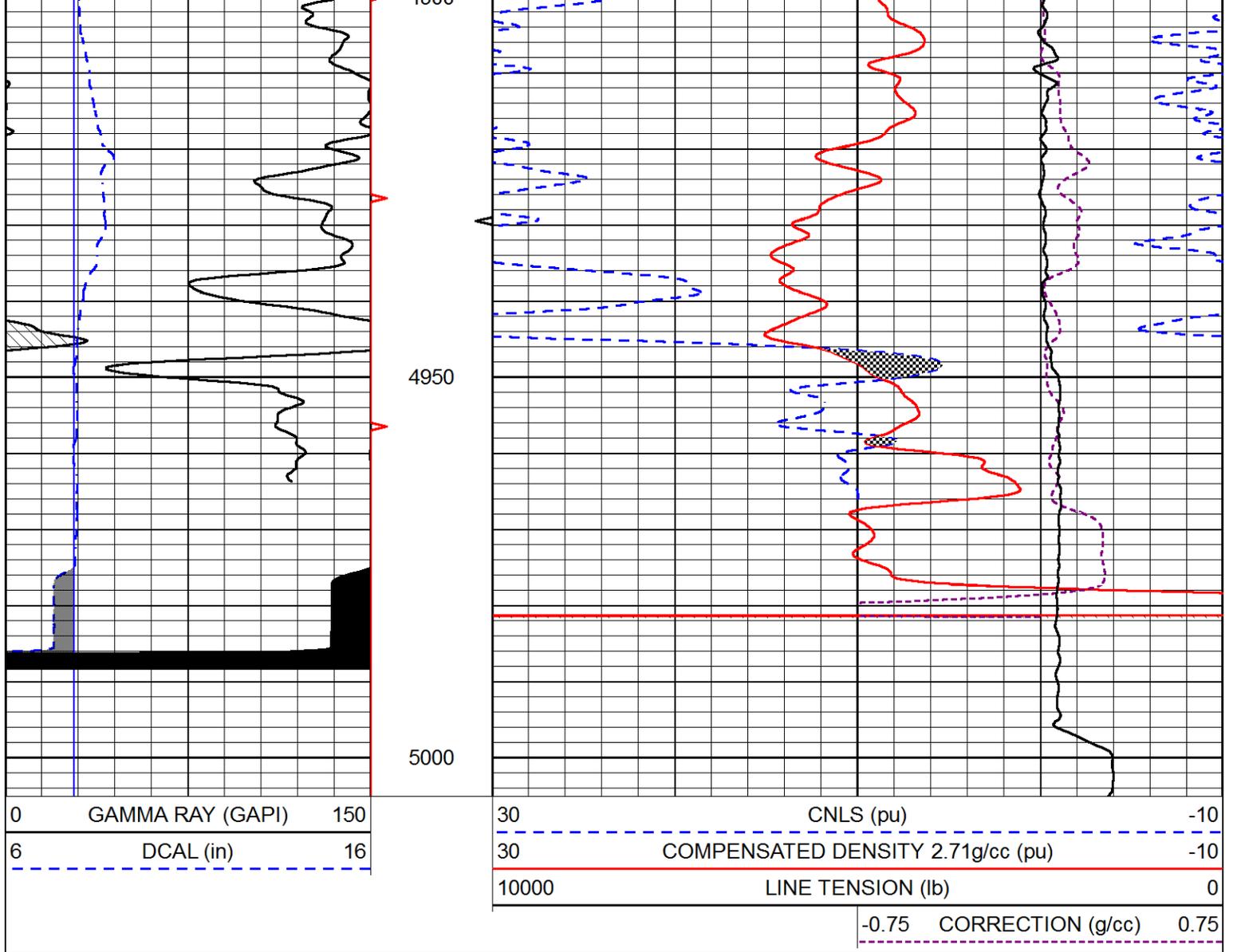




REPEAT SECTION

Database File chizum_lazyheart#1-26.db
 Dataset Pathname STKML/pass3.1
 Presentation Format cndlspec
 Dataset Creation Fri May 04 02:51:03 2018
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File chizum_lazyheart#1-26.db
 Dataset Pathname STKML/pass5.1
 Dataset Creation Fri May 04 02:48:44 2018

Dual Induction Calibration Report

Serial-Model: 967 (HT)-PSI HIGH TEMP
 Calibration Performed: Fri Mar 09 21:20:21 2018

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	Gain	Offset
Deep	167.000	835.000	0.000	255.800	mmho/m	0.565	-16.000
Medium	0.000	1348.000	142.000	255.800	mmho/m	0.390	-40.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
 Performed: Mon Apr 16 11:11:21 2018

Readings		References		Results	
Zero	Cal	Zero	Cal	m	b

Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	60000.0000	-2.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	73500.0000	-1.4000
Caliper	1.0001	1.1397	6.5000	18.5000	in	70.0000	-65.8500

Compensated Density Calibration Report

Serial-Model: 227-771-M&W
Source / Verifier: 16955B / 2ci
Master Calibration Performed: Fri Mar 09 21:14:39 2018

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4919.18	6345.34	cps
Aluminum	2.670	g/cc	911.94	4081.94	cps
Spine Angle = 75.33			Density/Spine Ratio = 0.525		
	Size		Reading		
Small Ring	8.00	in	1.84		
Large Ring	22.00	in	1.46		

Compensated Neutron Calibration Report

Serial Number: 207-MW
Tool Model: M&W
Calibration Performed: MON APR 16 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



PIONEER
Pioneer Energy Services

Company CHIZUM OIL, LLC
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Field WILDCAT
County SHERMAN
State KANSAS