



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company CASTELLI EXPLORATION, INC.

Well DUNN #2-24

Field SHIMER

County COMANCHE

State KANSAS

Company CASTELLI EXPLORATION, INC.

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Field SHIMER

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Location: API #: 15-033-21784-00-00

Other Services

470' FSL & 660' FEL

SEC 24 TWP 33S RGE 17W

DIL

Permanent Datum GROUND LEVEL Elevation 1814'

Log Measured From KELLY BUSHING

Drilling Measured From KELLY BUSHING

Elevation
K.B. 1825'
D.F. N/A
G.L. 1814'

Date 10/23/2018

Run Number ONE

Type Log CNL/CDL

Depth Driller 5186'

Depth Logger 5185'

Bottom Logged Interval 5156'

Top Logged Interval 4175'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 8000

Density 9.3

Level FULL

Max. Rec. Temp. F 128

Operating Rig Time 3 HOURS

Equipment -- Location 91 HAYS

Recorded By D. SCHMIDT

Witnessed By RICK POPP

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

ONE N/A 0' 225' 13.375" N/A 0' 225'

TWO 7.875" 225' TD

<<< Fold Here >>>

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.

COLDWATER,
EAST ON HWY 160 TO RD 23, SOUTH TO Q RD, 1 1/2 EAST,
NORTH AND EAST TO LOCATION

Log Measured From: KELLY BUSHING 11 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: RICK POPP

Secondary Witness:

Secondary Witness:

Secondary Witness:

Top - Bottom							
M	A	SZCOR	NPORSEL	FLUIDDEN	MATRXDEN	SPSHIFT	SNDERRM
2	1	Off	Limestone	g/cc 1	g/cc 2.71	mV 0	mmho/m 0
SNDERR mmho/m 0	SRFTEMP degF 0	CASETHCK in 0	CASEOD in 5.5	PERFS 0	TDEPTH ft 0	BOTTEMP degF 100	BOREID in 7.875

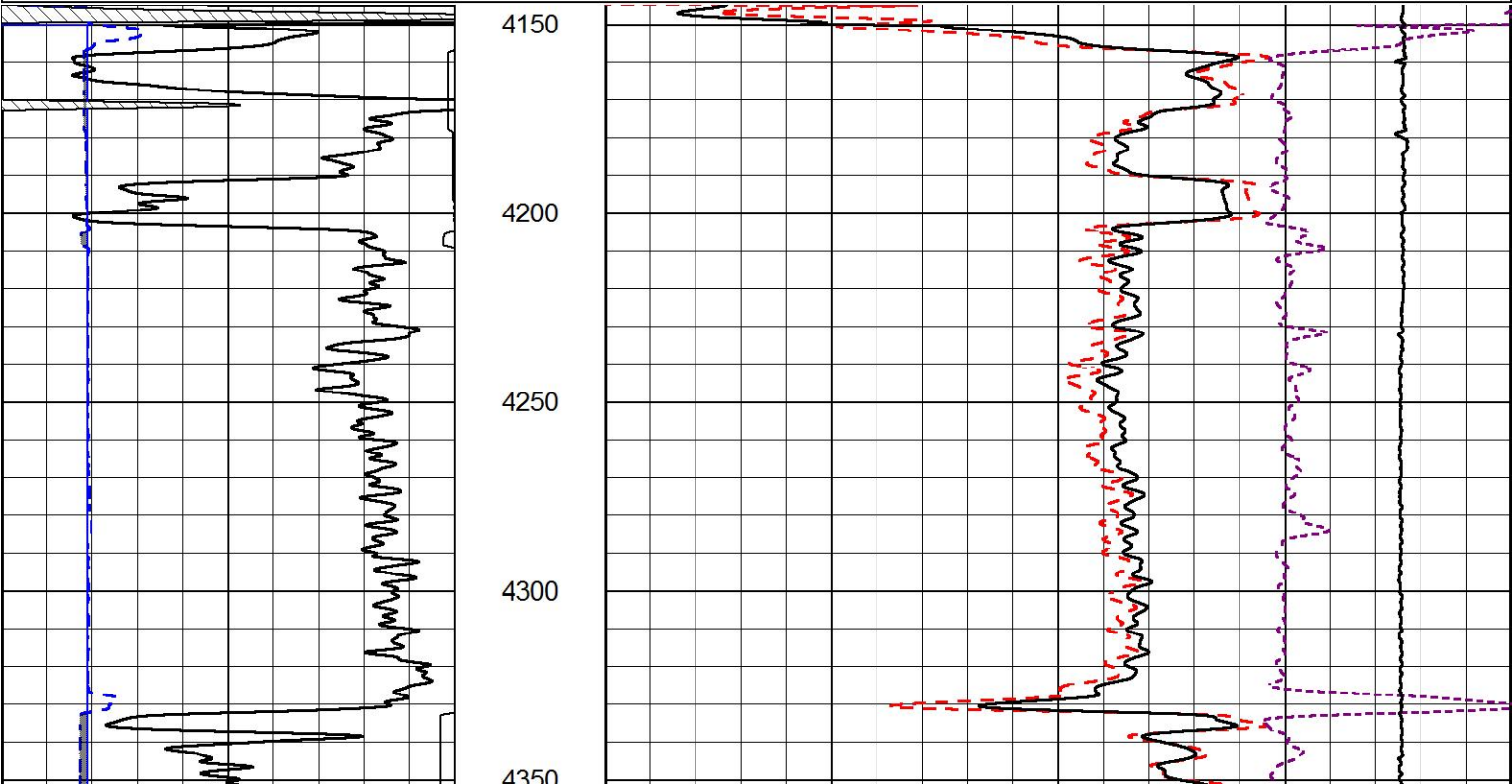


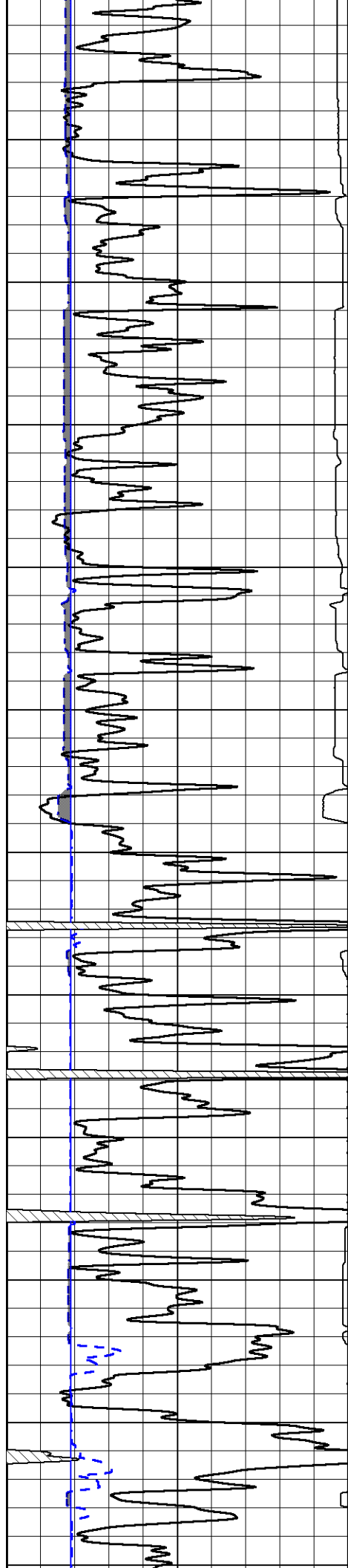
MAIN PASS

Database File
Dataset Pathname
Presentation Format
Dataset Creation
Charted by

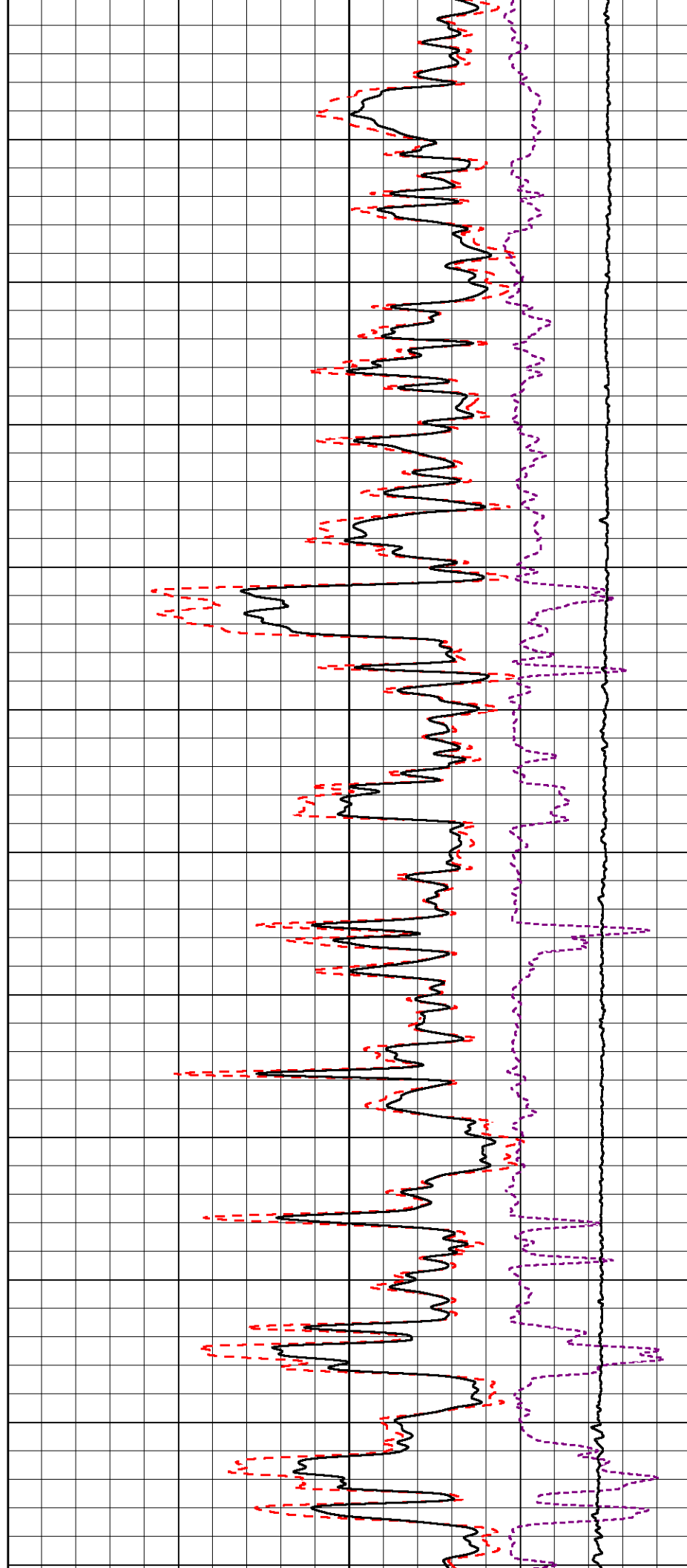
castelli_dunn 2-24.db
STKML/pass7.1
cdl
Tue Oct 23 12:46:36 2018
Depth in Feet scaled 1:600

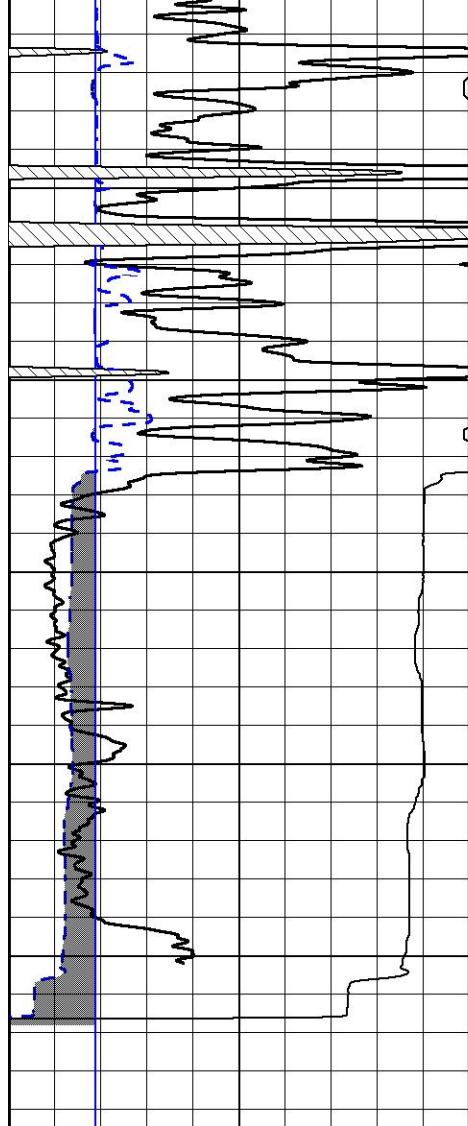
0	GAMMA RAY (GAPI)	150	COMPENSATED DENSITY (2.71 MA)	
6	DCAL (in)	16	30 (pu)	-10
			2 BULK DENSITY (g/cc)	3
			15000 LINE TENSION (lb)	0
			-0.25 CORRECTION (g/cc)	0.25



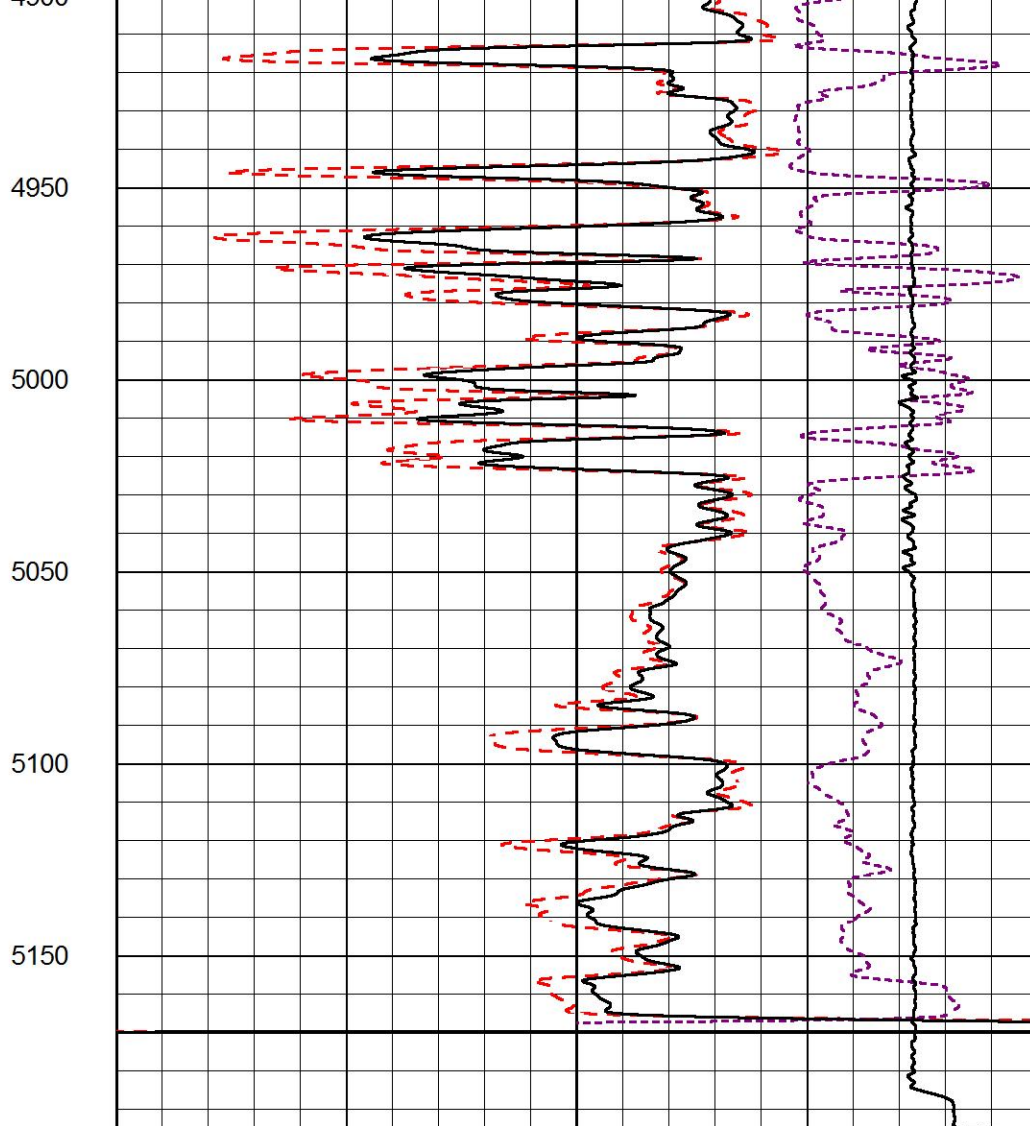


4300
4400
4450
4500
4550
4600
4650
4700
4750
4800
4850
4900





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



COMPENSATED DENSITY
(2.71 MA)
(pu)
BULK DENSITY (g/cc)
LINE TENSION (lb)
CORRECTION (g/cc)

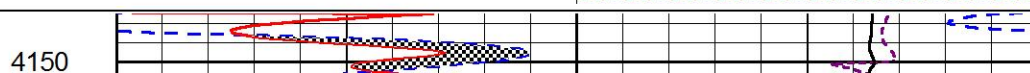


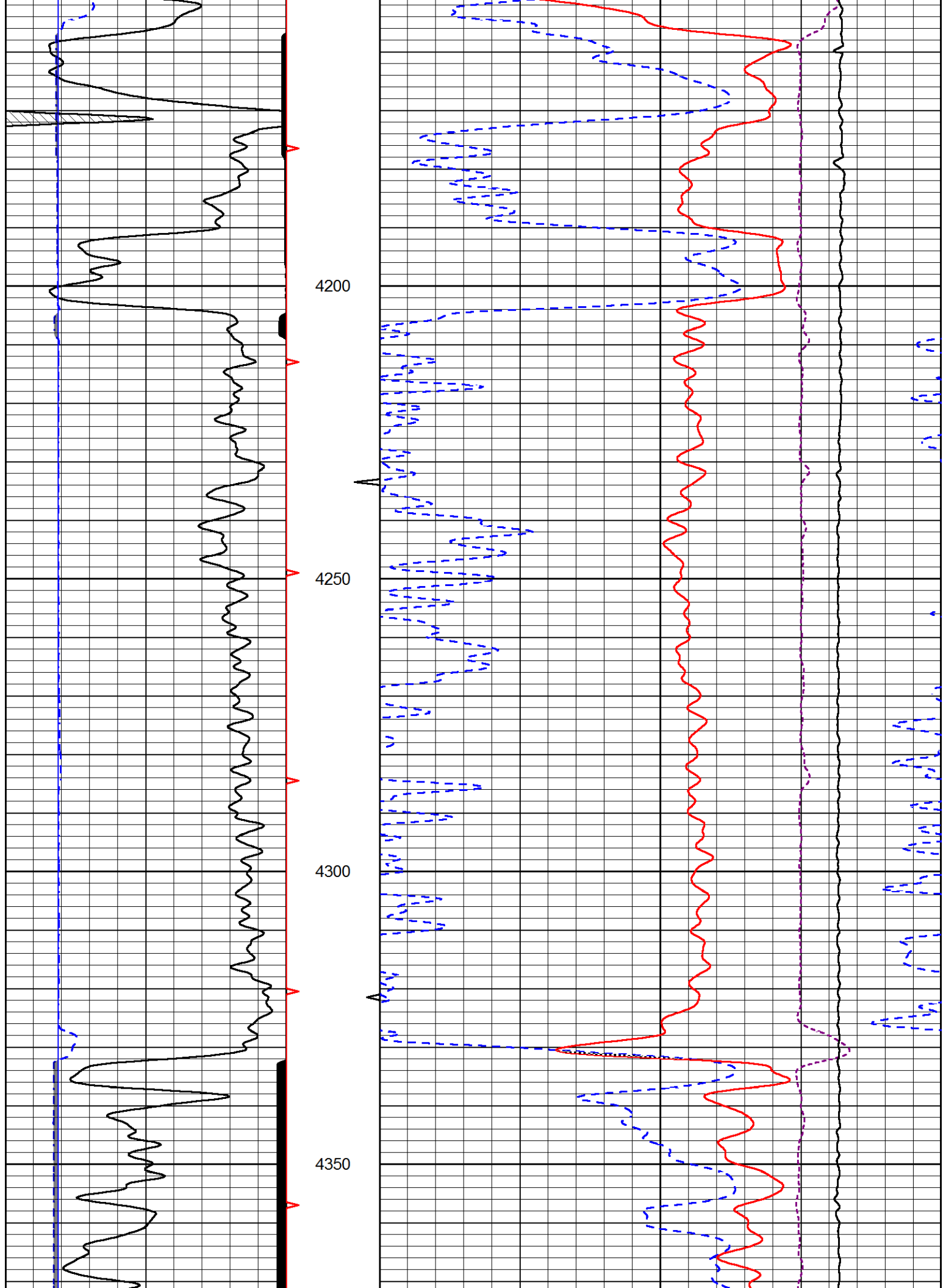
MAIN PASS

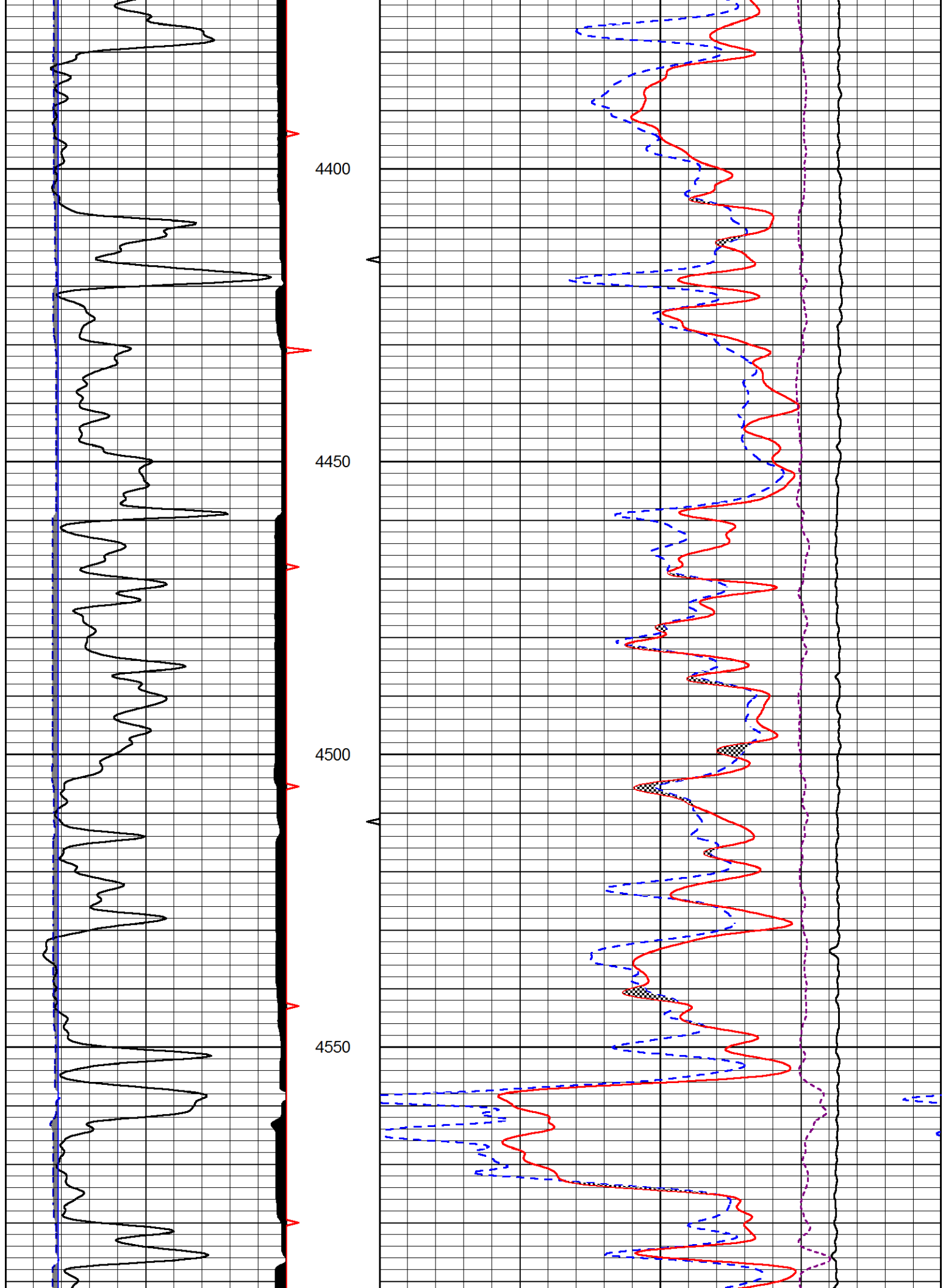
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Presentation Format cndlspec
Dataset Creation Tue Oct 23 12:46:36 2018
Charted by Depth in Feet scaled 1:240

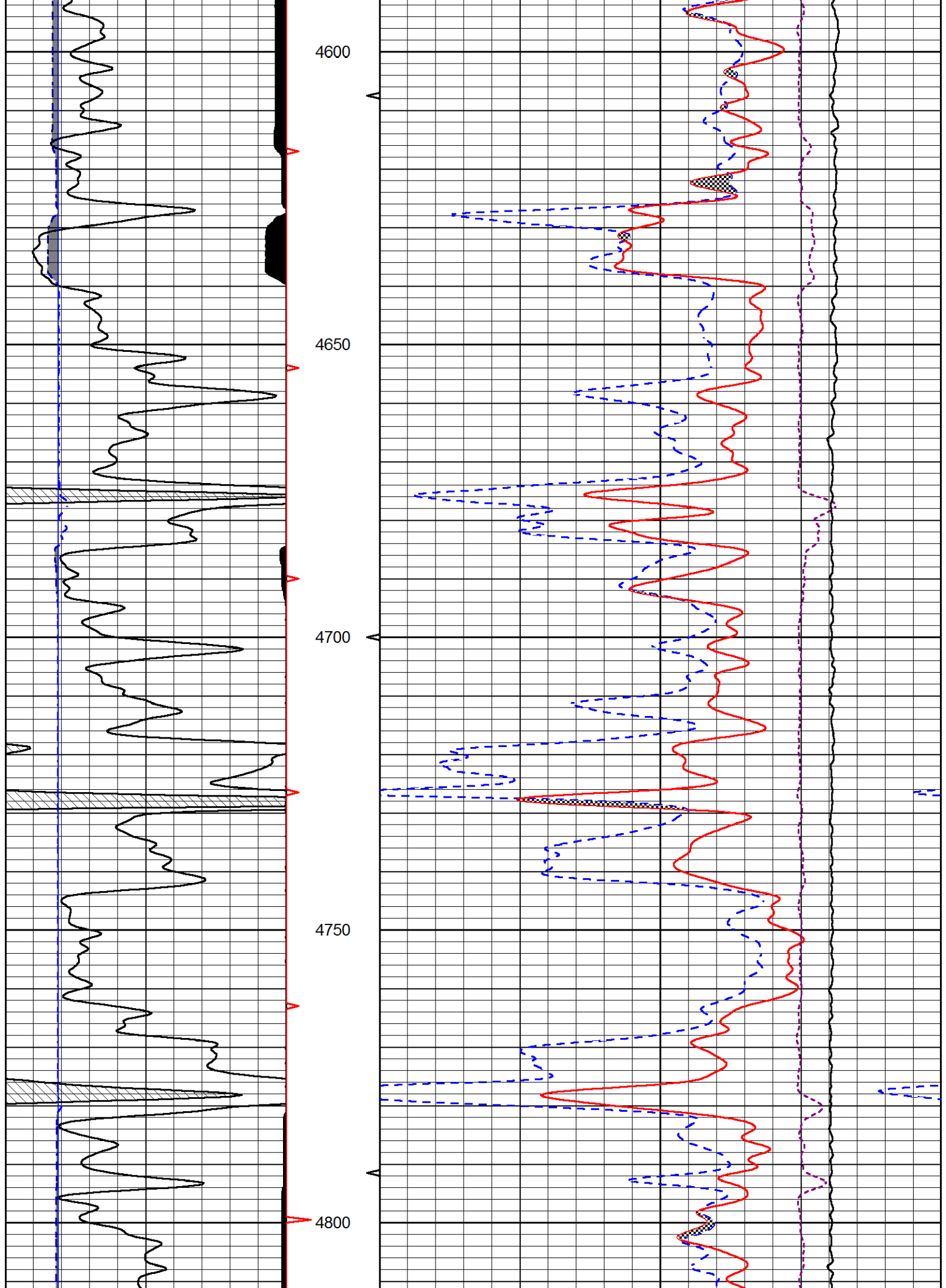
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6 DCAL (in) 16

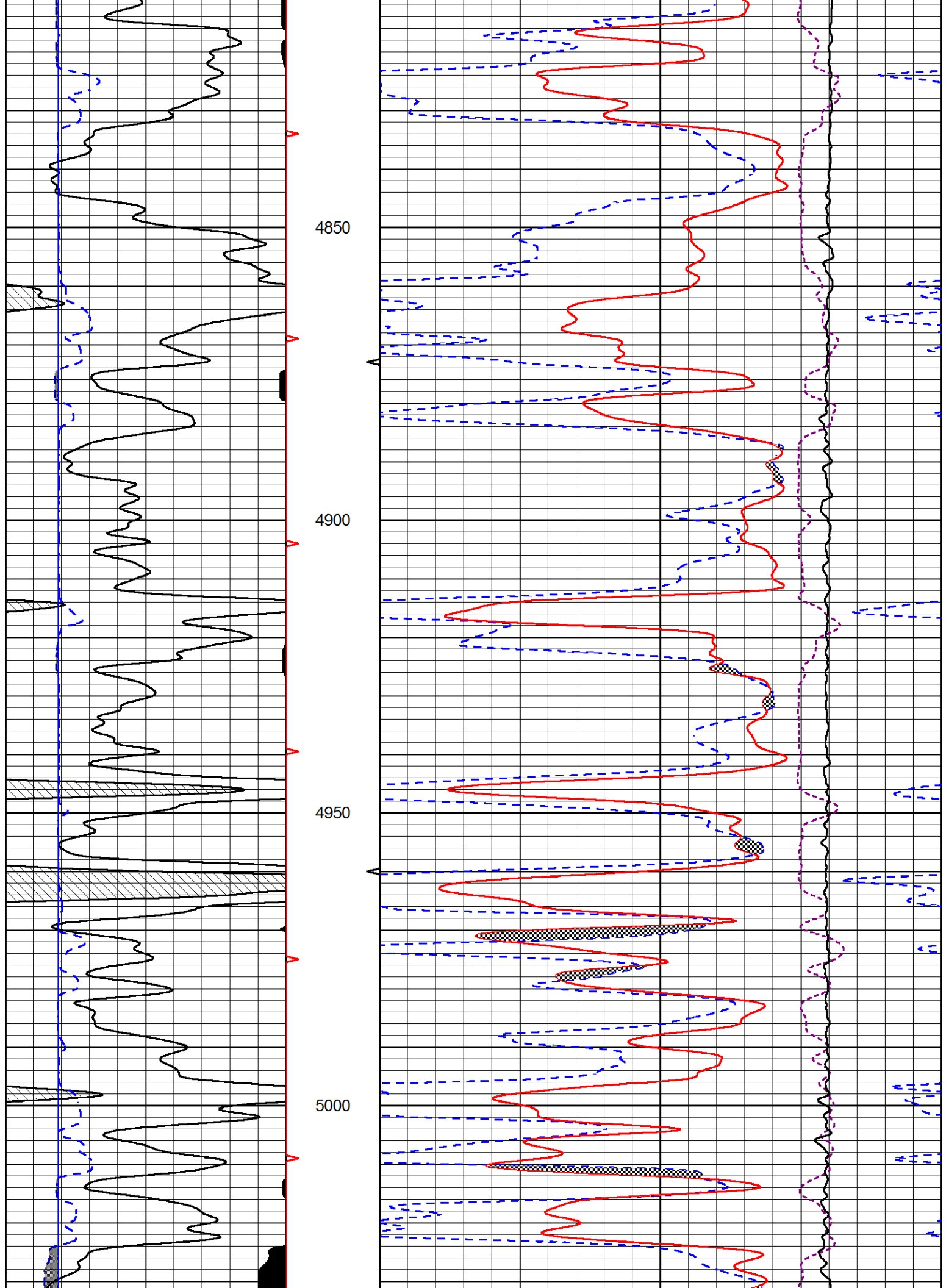
CNLS (pu)
DPOR (pu)
LINE TENSION (lb)
CORRECTION (g/cc)

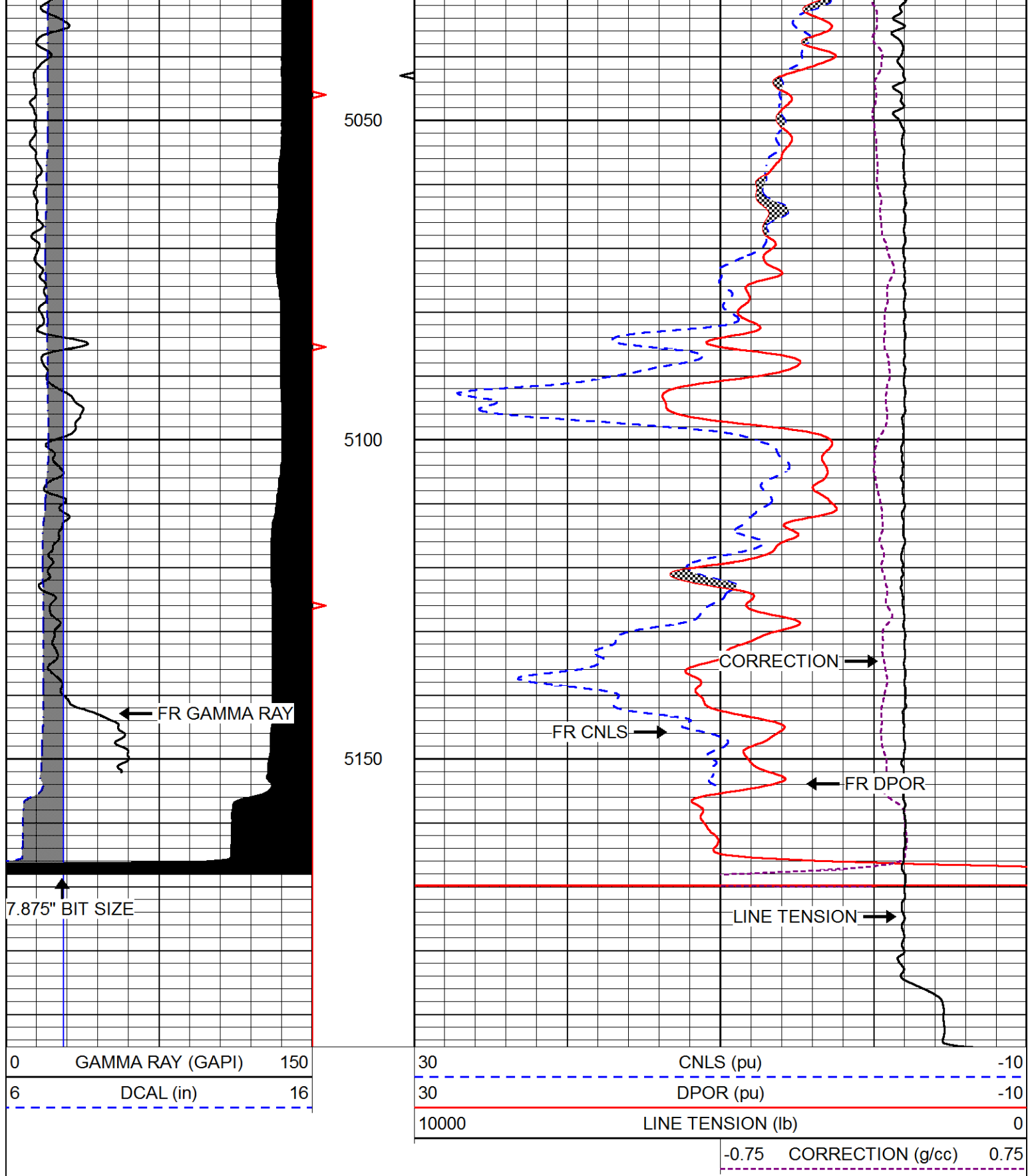












Calibration Report

Database File castelli_dunn 2-24.db
Dataset Pathname STKML/pass7.1
Dataset Creation Tue Oct 23 12:46:36 2018

Dual Induction Calibration Report

Serial-Model:
Calibration Performed:

967 (HT)-PSI HIGH TEMP
Sun Oct 07 19:24:22 2018

		Readings		References			Results	
Loop:		Air	Loop	Air	Loop		Gain	Offset
Deep		167.000	835.000	0.000	255.800	mmho/m	0.565	-15.000
Medium		0.000	1348.000	142.000	255.800	mmho/m	0.390	-41.500

Microlog Calibration Report

Serial-Model: Performed:	PSI-01-PSIML Sat Sep 08 05:17:35 2018
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		Readings		References			Results	
		Zero	Cal	Zero	Cal		m	b
Normal		0.0000	1.0000	0.0000	1.0000	Ohm-m	23000.0000	-0.8000
Inverse		0.0000	1.0000	0.0000	1.0000	Ohm-m	30000.0000	-0.6000
Caliper		1.0001	1.1397	6.5000	18.5000	in	70.0000	-65.9500

Compensated Density Calibration Report

Serial-Model: Source / Verifier: Master Calibration Performed:	817-947-M&W 16955B / 2ci Fri Aug 24 11:16:00 2018
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Master Calibration							
		Density			Far Detector	Near Detector	
Magnesium		1.755	g/cc		6127.15	5922.31	cps
Aluminum		2.670	g/cc		1141.85	3762.09	cps
Spine Angle = 74.89				Density/Spine Ratio = 0.526			
		Size			Reading		
Small Ring		4.50	in		1.02		
Large Ring		15.00	in		1.15		

Compensated Neutron Calibration Report

Serial Number: Tool Model: Calibration Performed:	207-MW M&W FRI AUG 24 10:30:30 2018
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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:	Fri Aug 24 11:16:10 2018	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps

Calibrator Reading:	1.0	cps
Sensitivity:	0.6000	GAPI/cps



Company	CASTELLI EXPLORATION, INC.
Well	DUNN #2-24
Field	SHIMER
County	COMANCHE
State	KANSAS