



PIONEER
Pioneer Energy Services

DUAL COMP POROSITY LOG

Company GEO SOUTHERN OPERATING II, LLC
Well CRESS #1-28
Field UNKNOWN
County SHERMAN
State KANSAS

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Field UNKNOWN
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State KANSAS

Location: API #: 15-181-20628-00-00

SEC 28 TWP 7S RGE 37W

Permanent Datum GROUND LEVEL Elevation 3425'

Log Measured From KELLY BUSHING

Drilling Measured From KELLY BUSHING

Other Services
DIL/MEL
BHCS

Elevation
K.B. 3430'
D.F. N/A
G.L. 3425'

Date 9/28/2019

Run Number ONE

Type Log CNL/CDL

Depth Driller 5000'

Depth Logger 5009'

Bottom Logged Interval 4988'

Top Logged Interval 4000'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 6000

Density 9.2

Level FULL

Max. Rec. Temp. F 126

Operating Rig Time 5 HOURS

Equipment -- Location P-24 HAYS

Recorded By D. SCHMIDT

Witnessed By BEN LANDES

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0'	379'	8.625"	23#	0'	379'
TWO	7.875"	379'	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.

BREWSTER,
WEST ON Q RD TO 33 RD, 3 NORTH,
WEST 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: BEN LANDES
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\geo southern_cress 1-28.db
Dataset field/well/STACK/pass5.7/_vars_

Top - Bottom

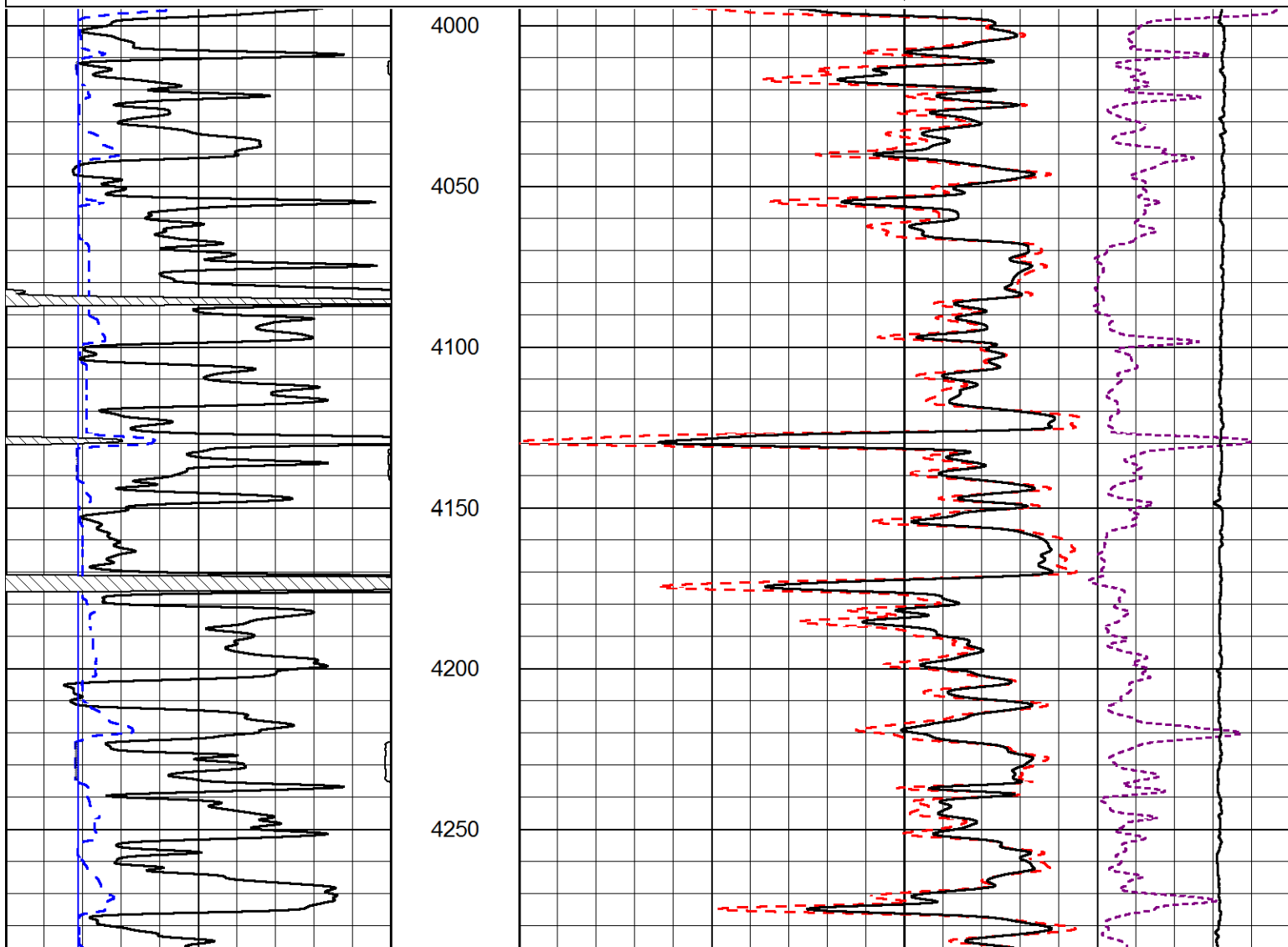
A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	100	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	255	0		0

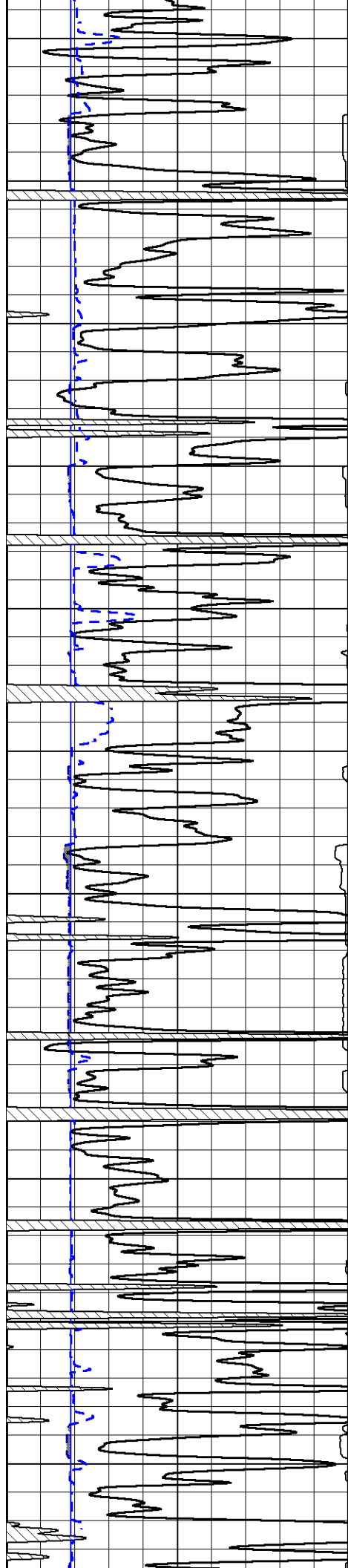
Database File geo southern_cress 1-28.db
Dataset Pathname STACK/pass5.7
Presentation Format _cdl
Dataset Creation Sat Sep 28 22:07:05 2019
Charted by Depth in Feet scaled 1:600

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





4300

4350

4400

4450

4500

4550

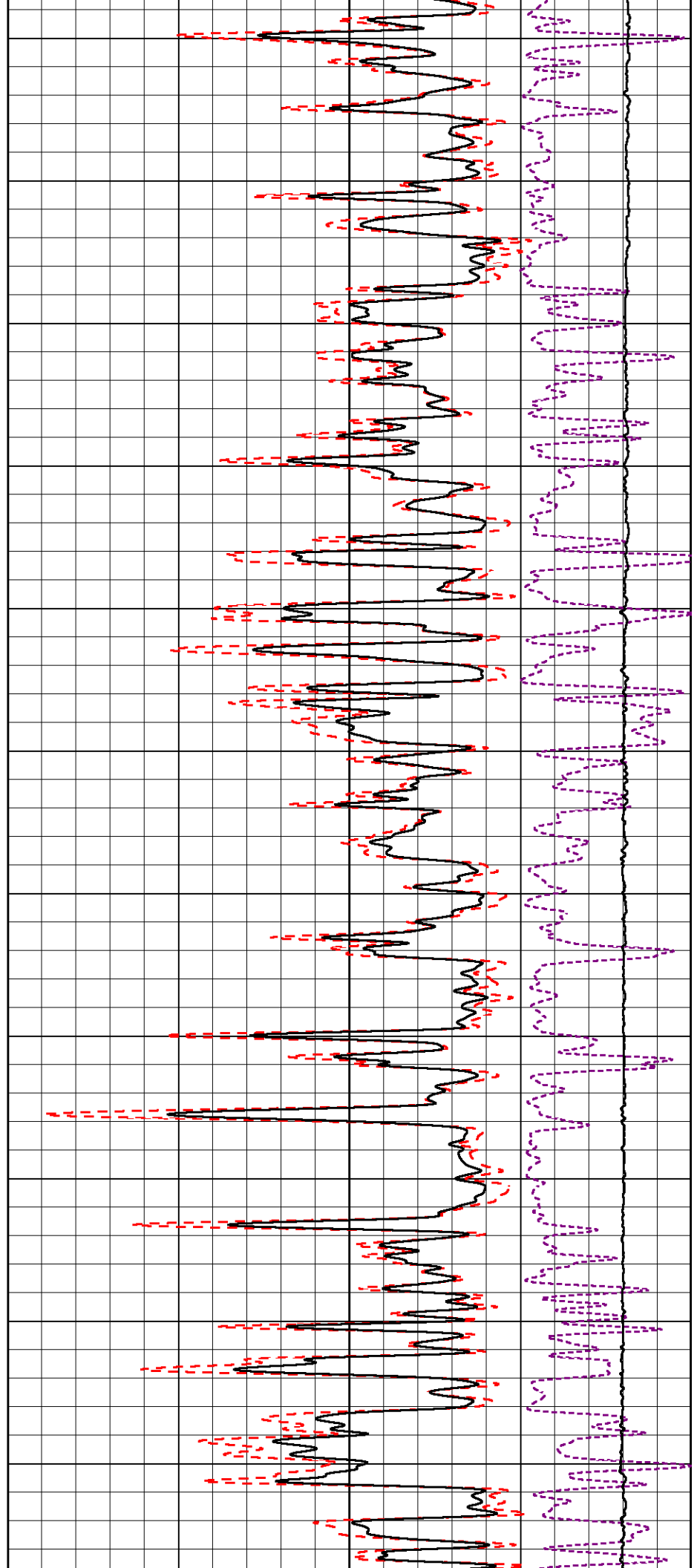
4600

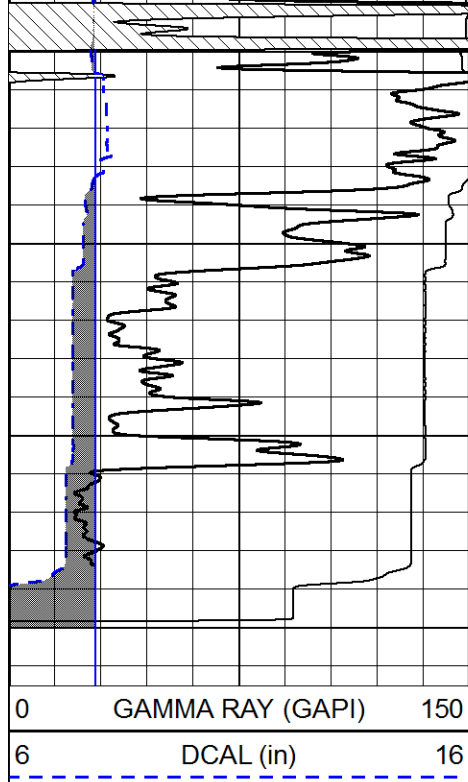
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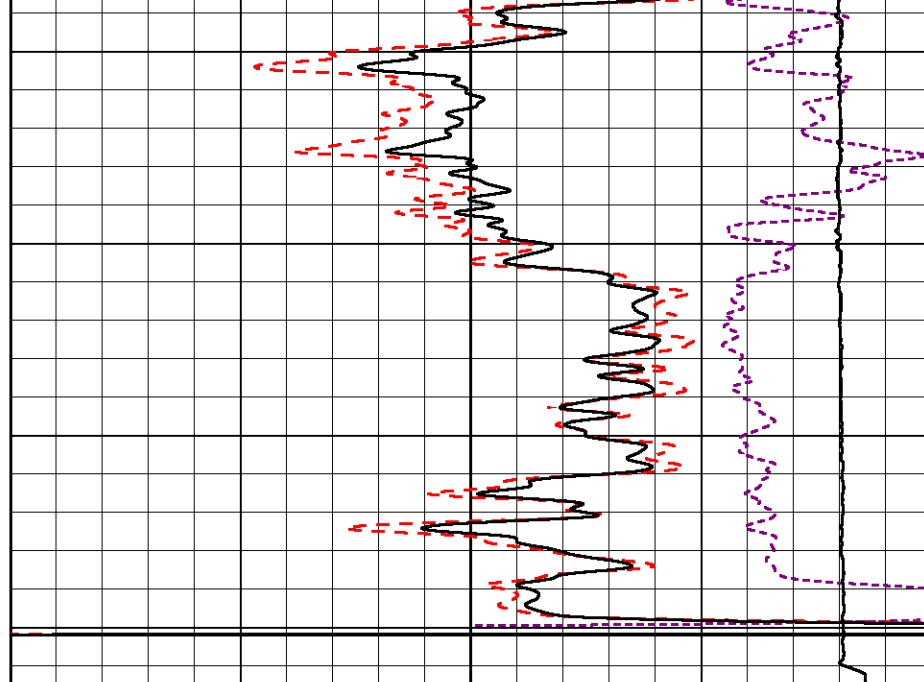
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4800

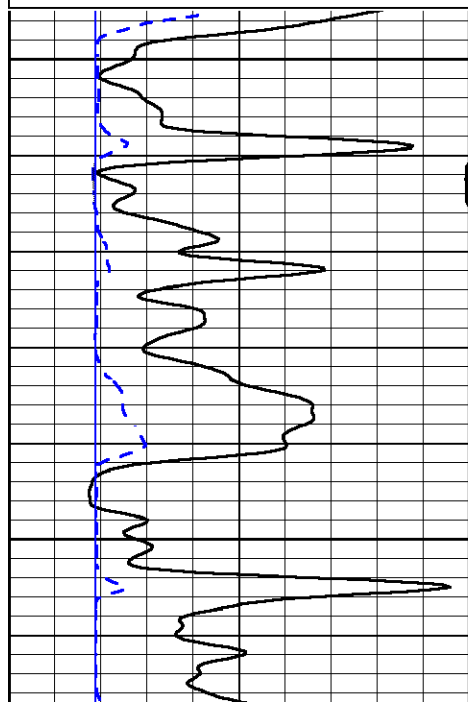
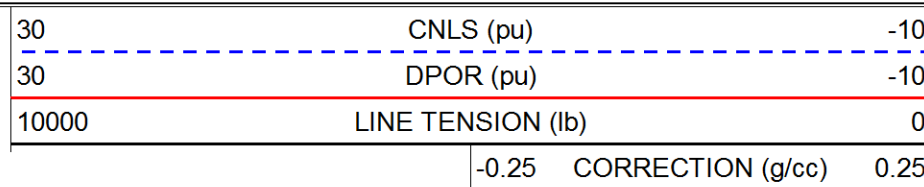
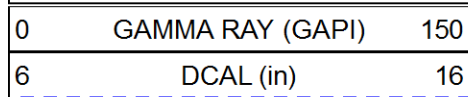




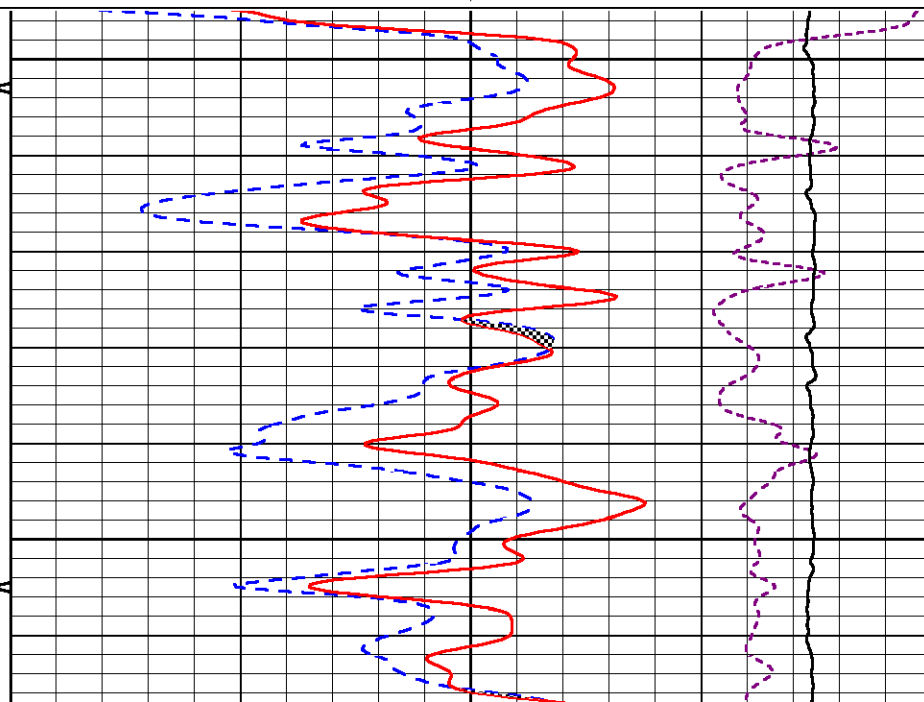
4850
4900
4950
5000

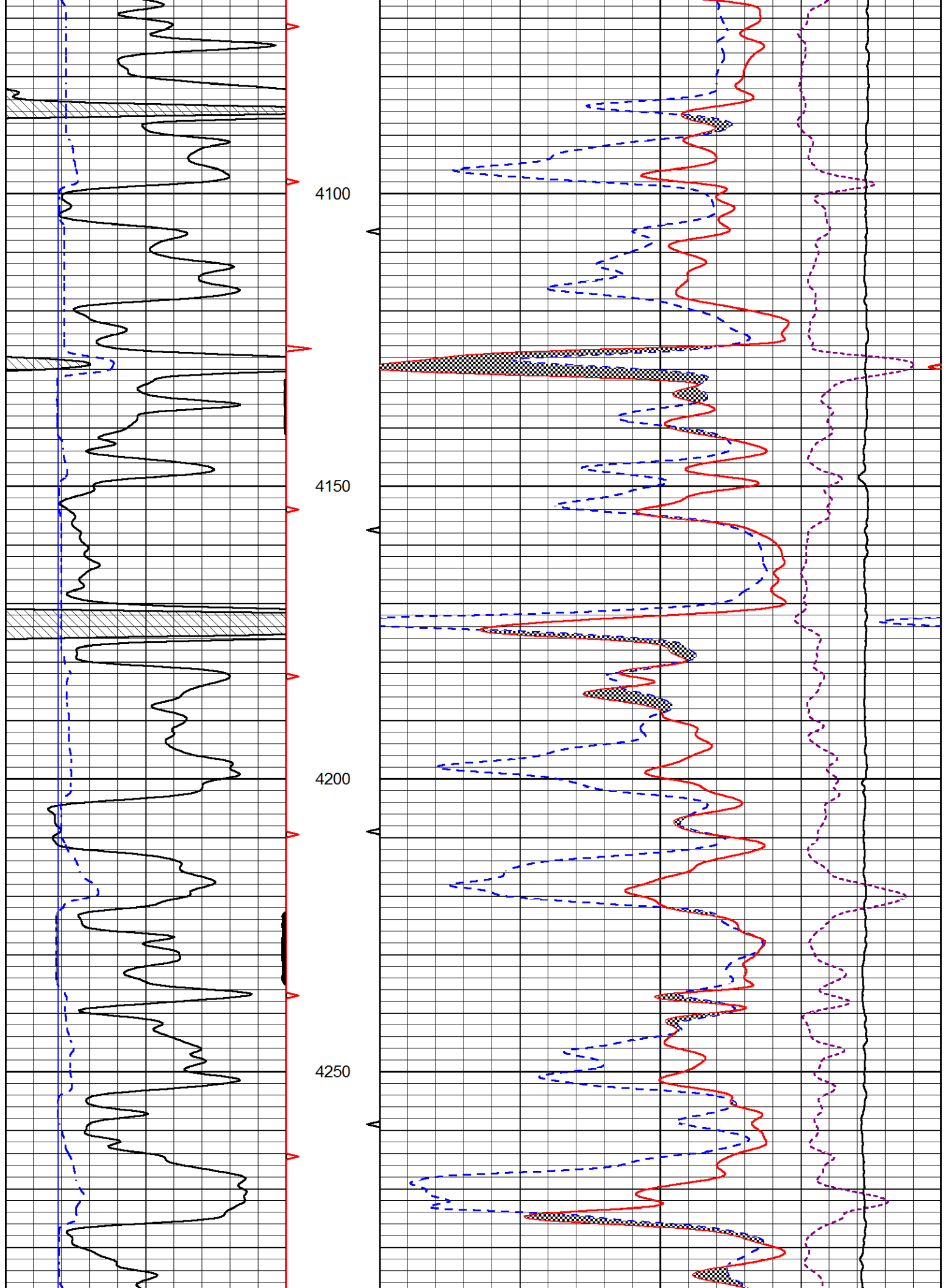


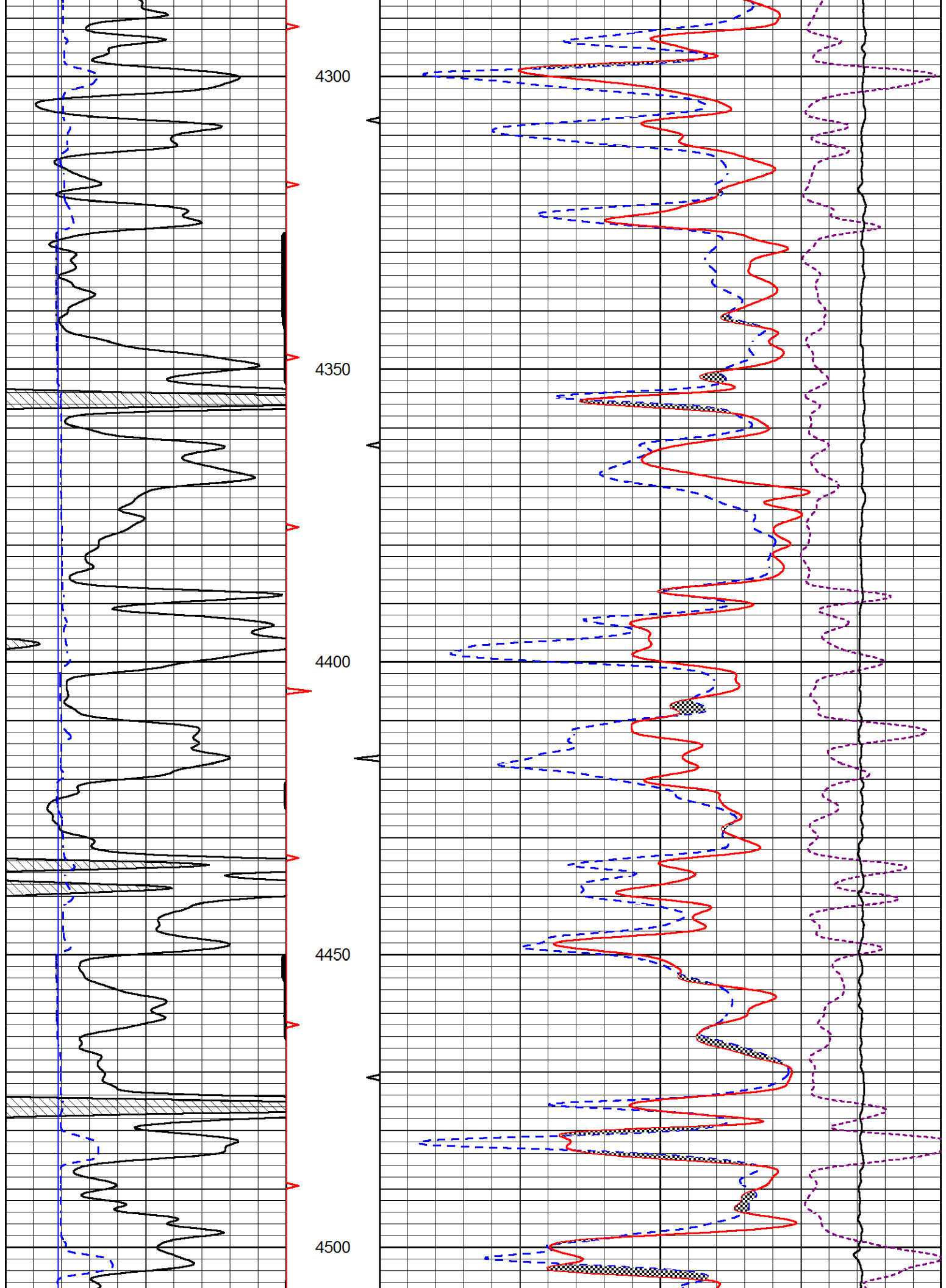
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Dataset Pathname STACK/pass5.7
Presentation Format _CNDLS~1
Dataset Creation Sat Sep 28 22:07:05 2019
Charted by Depth in Feet scaled 1:240

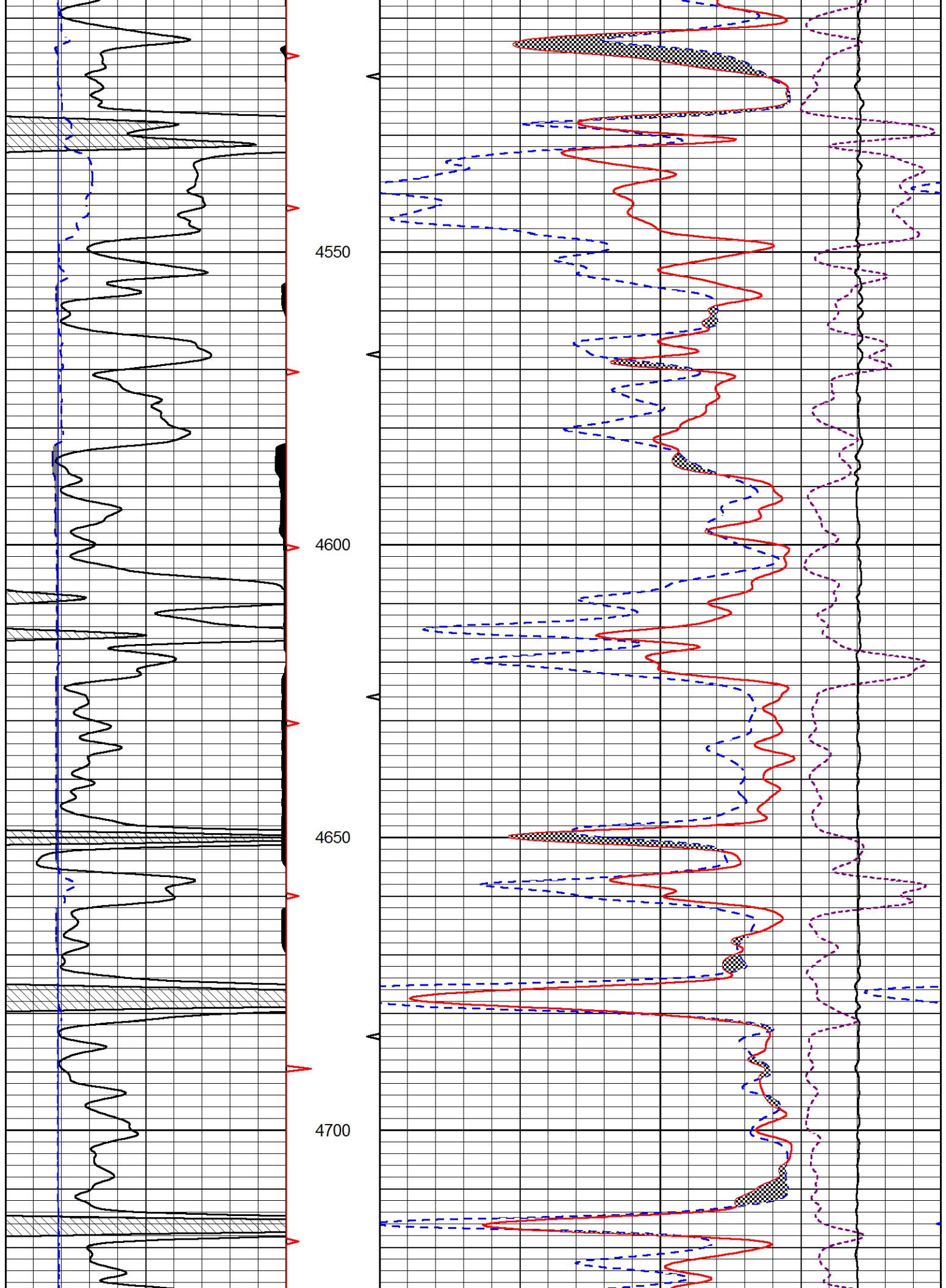


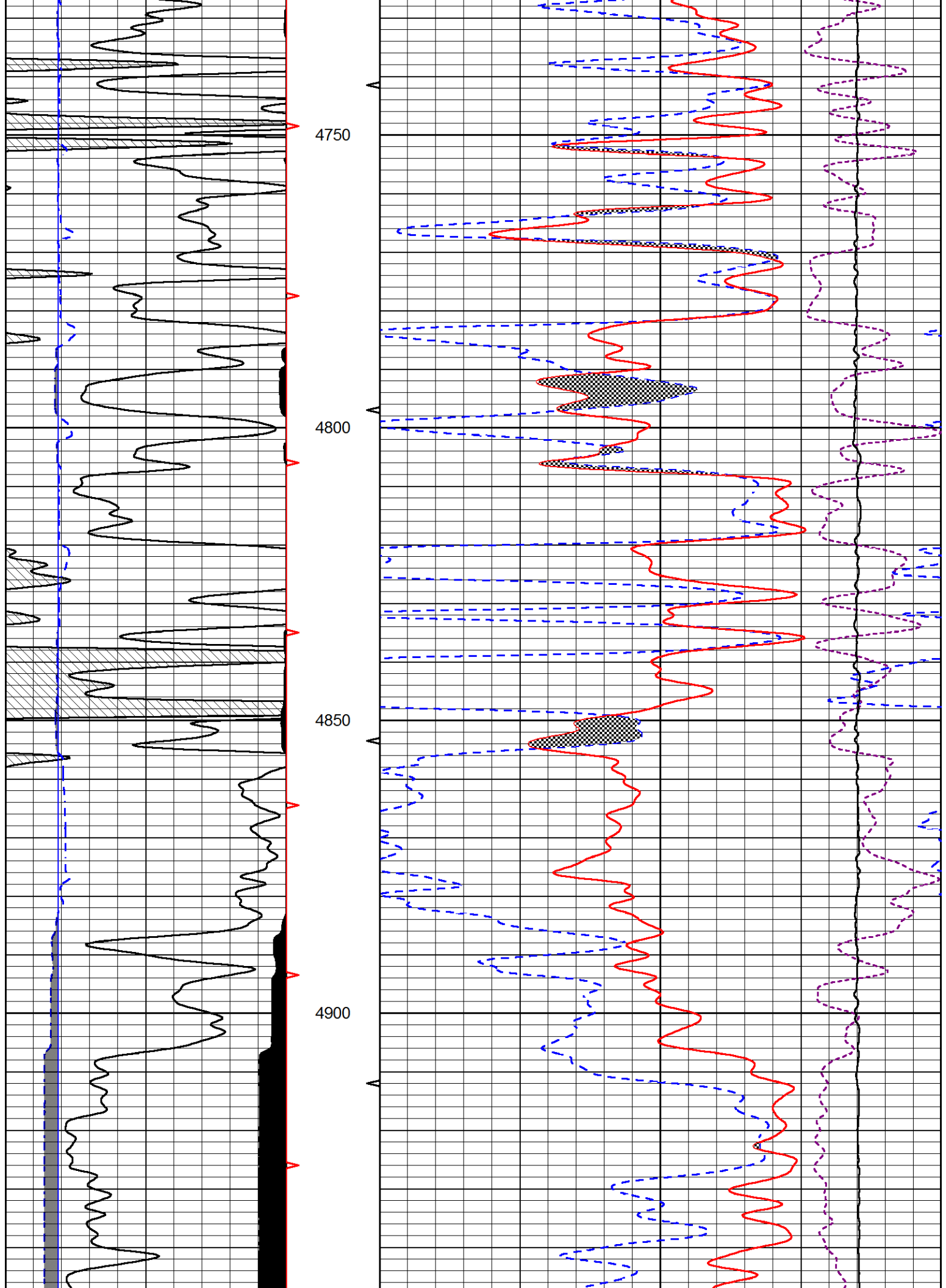
4000
4050

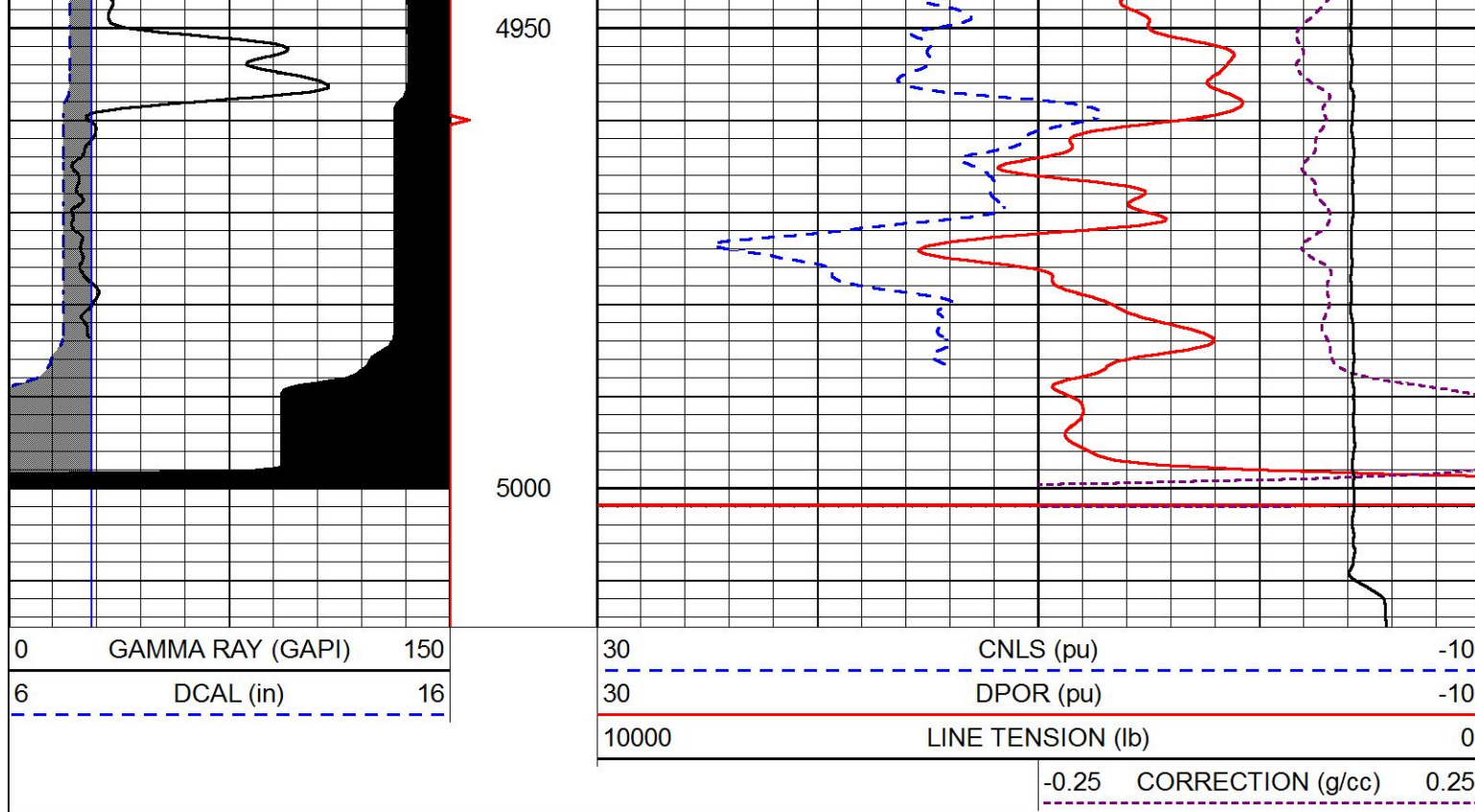






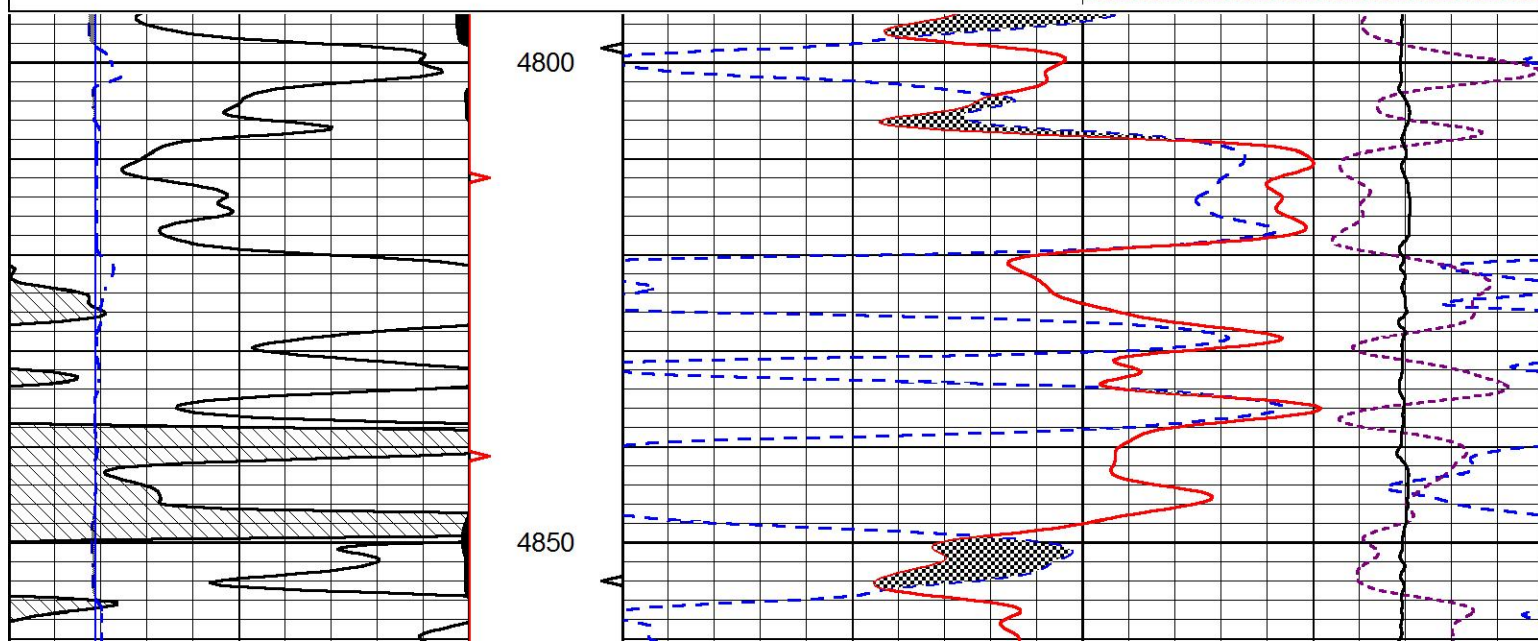
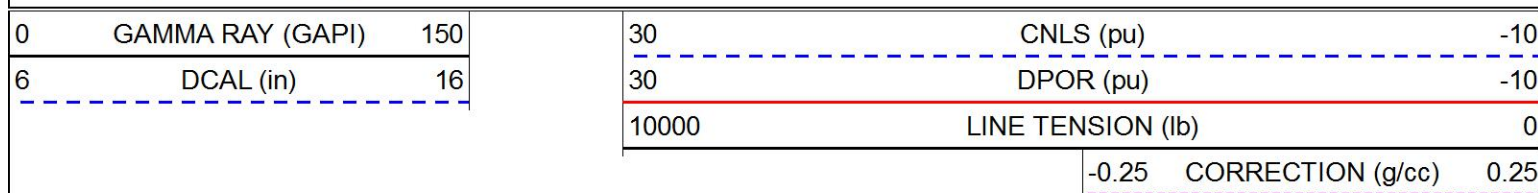


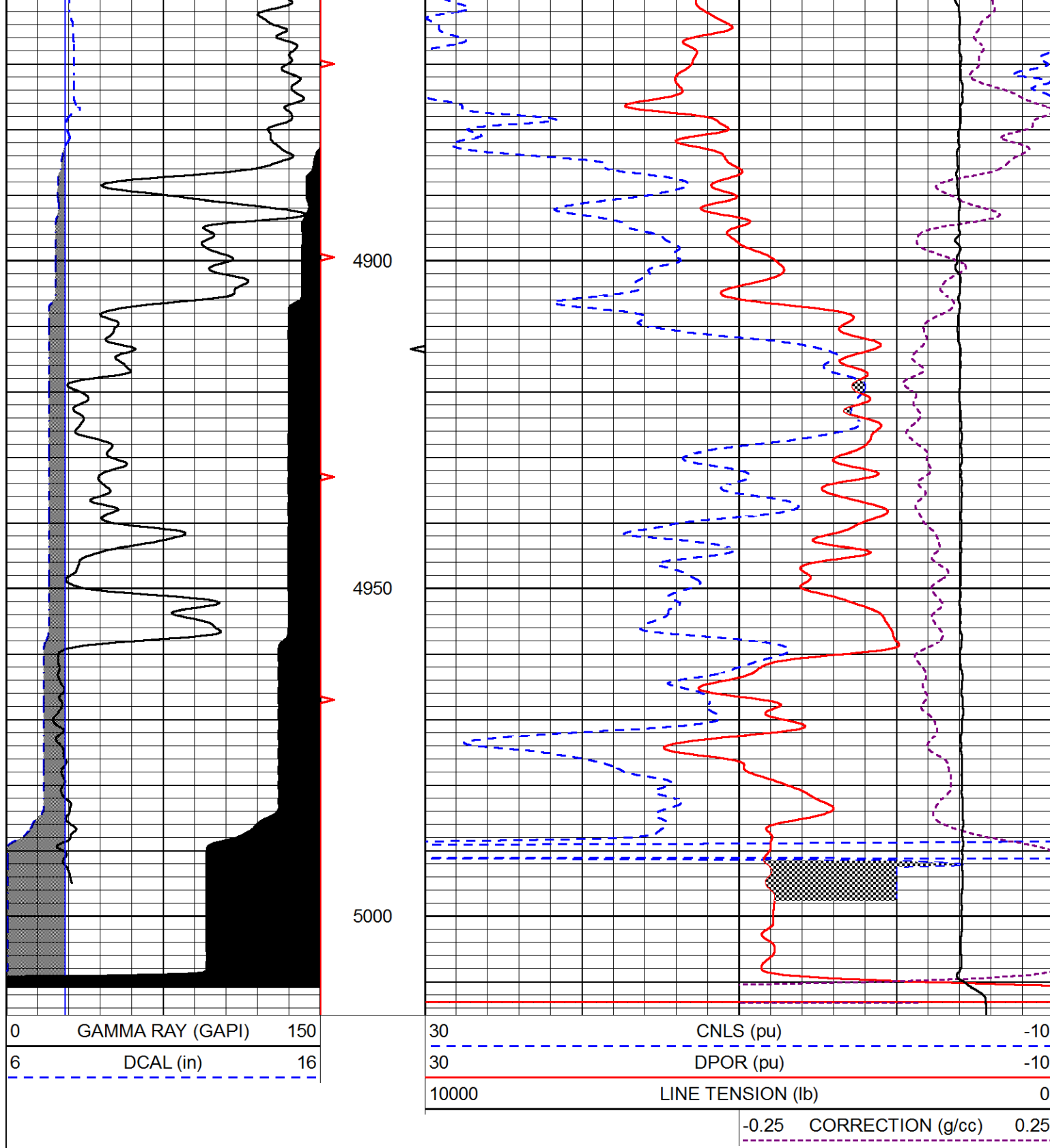




REPEAT SECTION

Database File geo southern_cress 1-28.db
 Dataset Pathname STACK/pass4.1
 Presentation Format _CNDLS~1
 Dataset Creation Sat Sep 28 22:03:15 2019
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File geo_southern_cress 1-28.db
Dataset Pathname STACK/pass5.7
Dataset Creation Sat Sep 28 22:07:05 2019

Dual Induction Calibration Report

Serial-Model: 1039-PSI HIGH TEMP
Calibration Performed: Sat Sep 28 19:20:29 2019

Readings

References

Results

Readings		References		Results	
Loop:	Air	Loop	Air	Loop	
Deep	167.000	835.000	0.000	255.800	mmho/m
Medium	0.000	1348.000	142.000	255.800	mmho/m
					Gain
					Offset
					0.440
					-52.000
					0.365
					-53.000

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	2.685	g/cc	1141.85	3762.09	cps
Spine Angle = 74.89			Density/Spine Ratio = 0.534		
	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: 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



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