



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **MURFIN DRILLING CO., INC.**
Well **SOUICIE KRISS UNIT #1-14**
Field **JIMMY NORTHEAST**
County **THOMAS** State **KANSAS**

Location: API #: 15-193-21052-00-00

Other Services

2275' FSL & 2860' FEL
SEC 14 TWP 10S RGE 34W

DIL/MEL
BHCS

Permanent Datum **GROUND LEVEL** Elevation **3209'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**

Elevation
K.B. 3217'
D.F. N/A
G.L. 3209'

Date **8/28/2019**

Run Number **ONE**

Type Log **CNL/CDL**

Depth Driller **4895'**

Depth Logger **4895'**

Bottom Logged Interval **4866'**

Top Logged Interval **3750'**

Type Fluid In Hole **CHEMICAL**

Salinity, PPM CL **7000**

Density **9.3**

Level **FULL**

Max. Rec. Temp. F **125**

Operating Rig Time **5 HOURS**

Equipment -- Location **P-24 HAYS**

Recorded By **IAN MABB**

Witnessed By **ROBERT HENDRIX**

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0'	307'	8.625"	23#	0'	307'
TWO	7.875"	307'	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.

COLBY, KS.

HWY 25 SOUTH TO COUNTY RD D, WEST 2 MILE,
1/2 NORTH, WEST 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: **IAN MABB**
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: **ROBERT HENDRIX**
Secondary Witness:
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\murfir_soucie_kriss_unit_1_14.db
Dataset field/well/stackmel/pass3.1/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 125	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 8	mmho/m 6	mV 166	degF 73	Off	ft 4895

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58			GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC	37.48			CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73						
LSD	28.43			CDL-M&W (96-916)	8.50	4.00	250.00
	DCAL	28.42					
	SSD	27.93					
MCAL	19.83			ML-PSIML (PSI-01)	7.58	4.00	65.00
	MI	19.83		GO Micro log tools converted to Simplec electronics			
	MN	19.83					
RLL3F	15.80						
RLL3	15.80						
CILD	8.00			DIL-PSI HIGH TEMP (1039)	18.50	3.50	220.00

CILM

4.70

SP

0.20

Dataset: murfin_soucie_kriss_unit_1_14.db: field/well/stackmel/pass3.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in



MAIN PASS

Database File murfin_soucie_kriss_unit_1_14.db
Dataset Pathname stackmel/pass3.1
Presentation Format _cdl
Dataset Creation Wed Aug 28 14:57:32 2019
Charted by Depth in Feet scaled 1:240

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

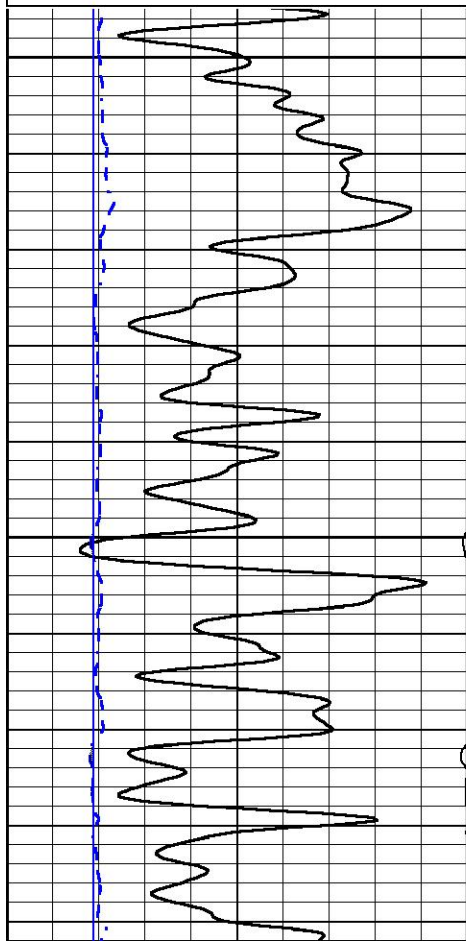
COMPENSATED DENSITY
(2.71 MA)

30 (pu) -10

2 BULK DENSITY (g/cc) 3

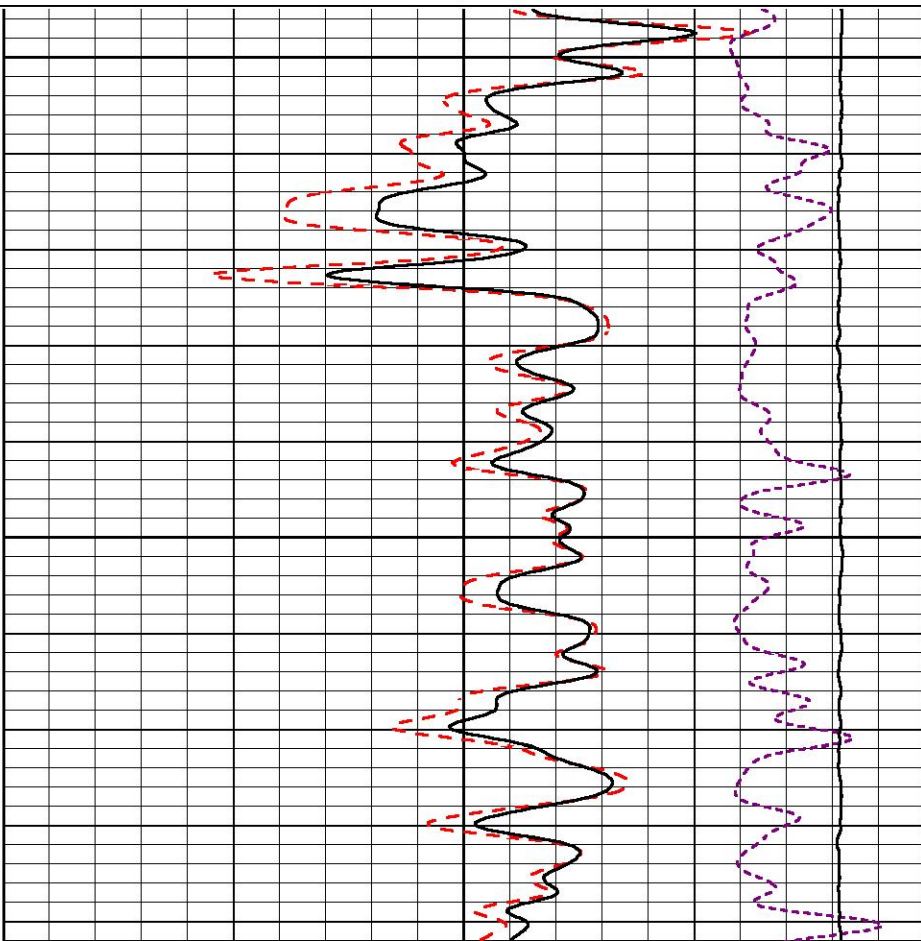
15000 LINE TENSION (lb) 0

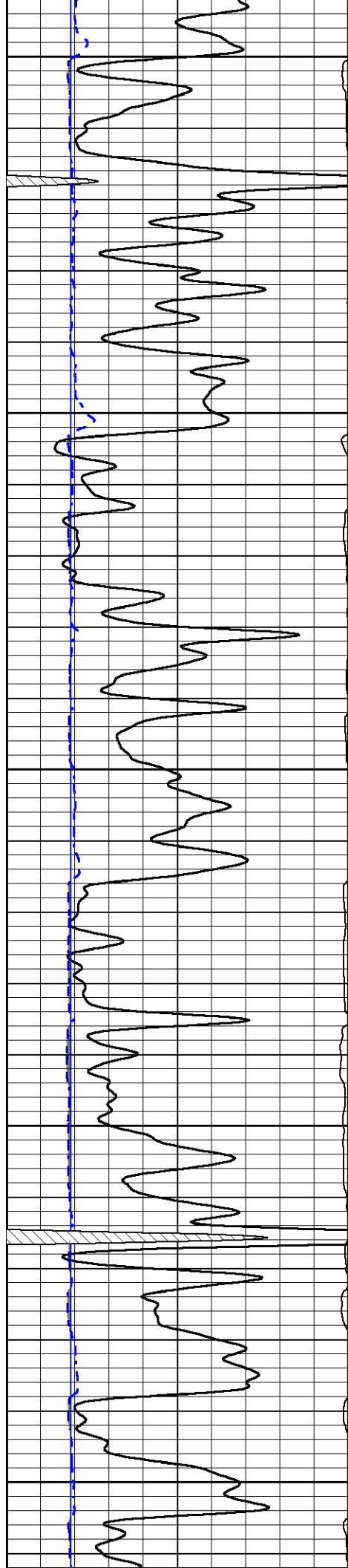
-0.25 CORRECTION (g/cc) 0.25



3750

3800





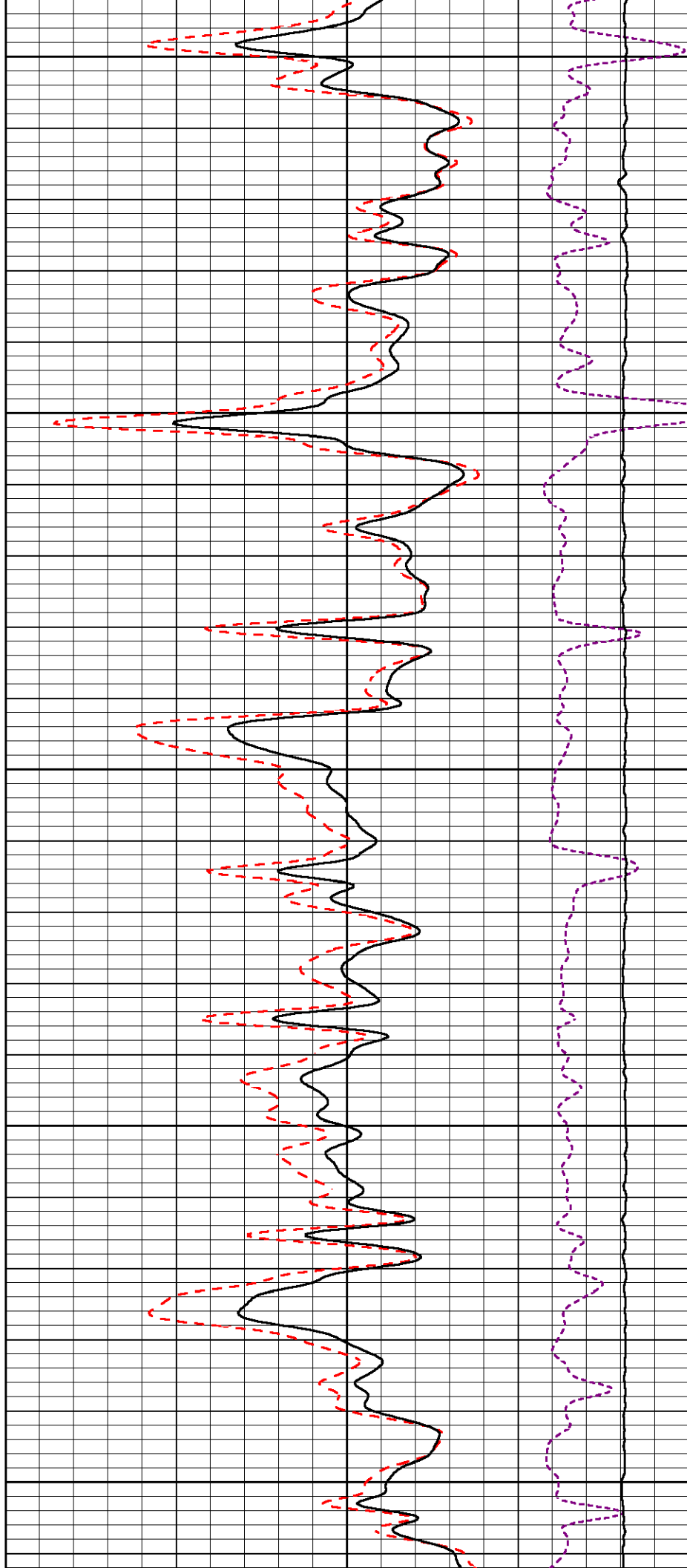
3850

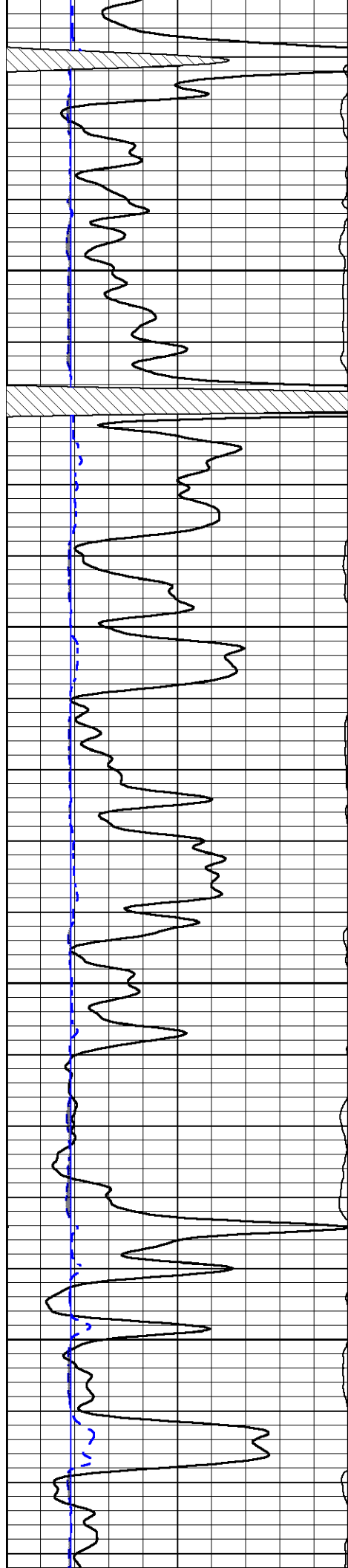
3900

3950

4000

4050



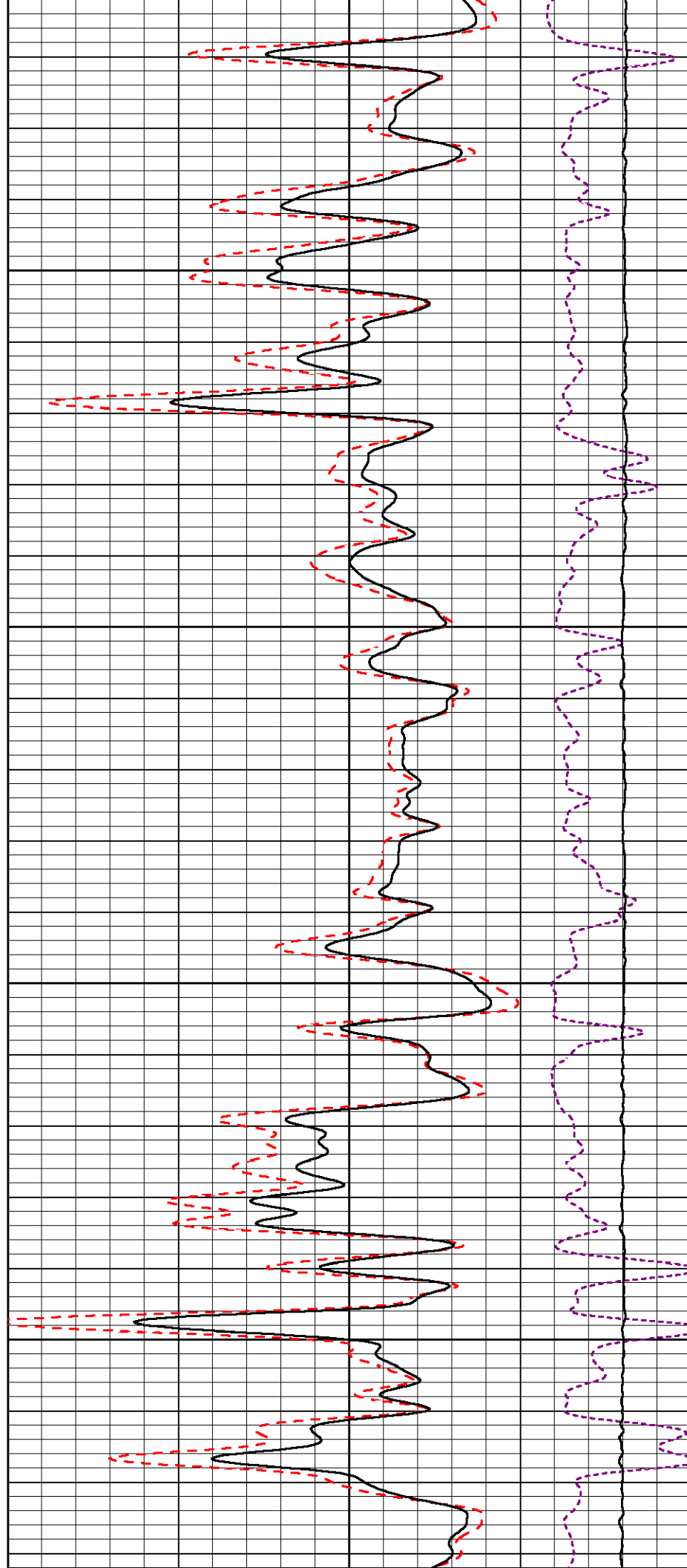


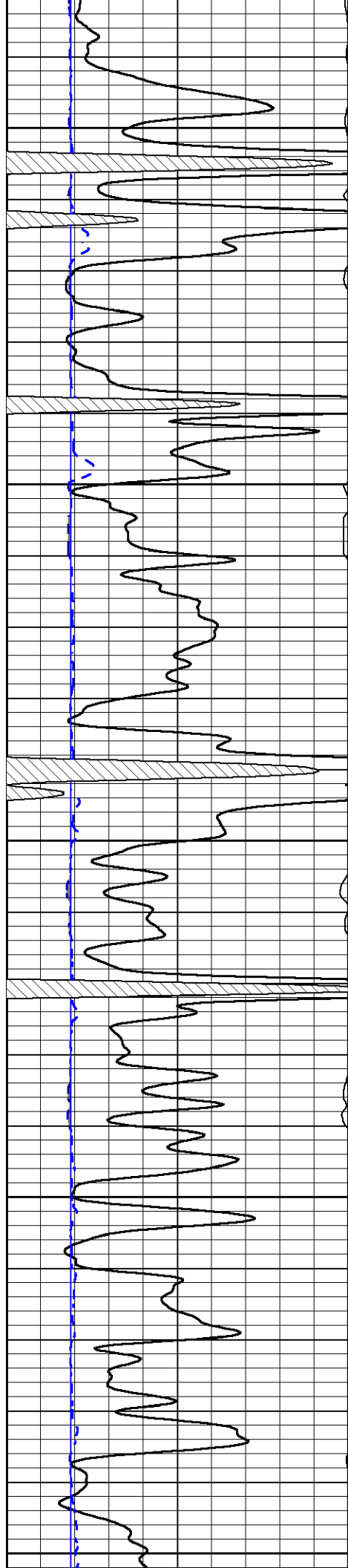
4100

4150

4200

4250





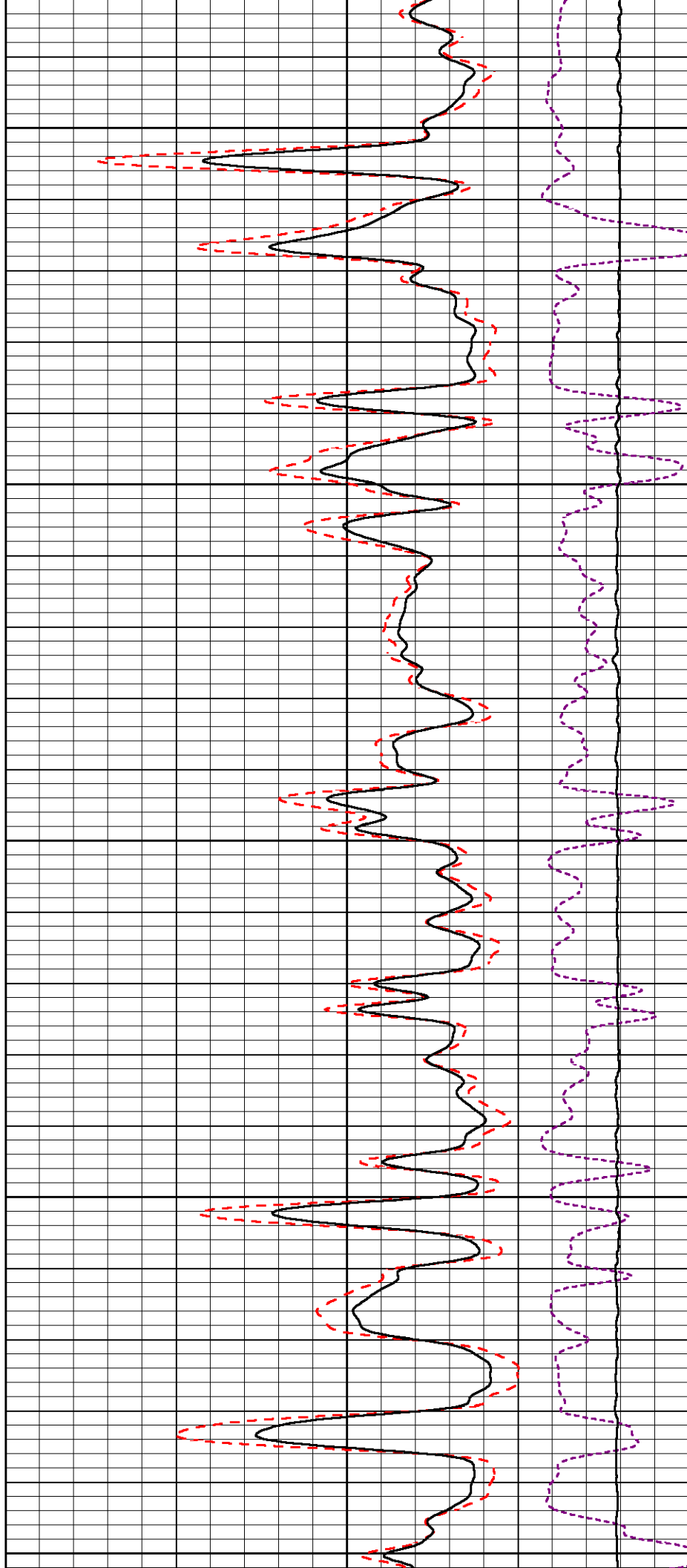
4300

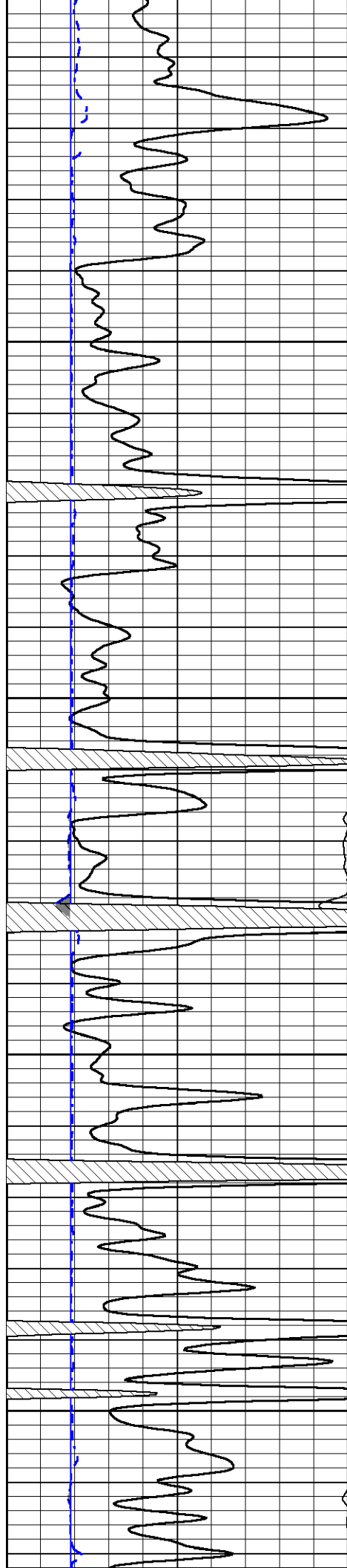
4350

4400

4450

4500



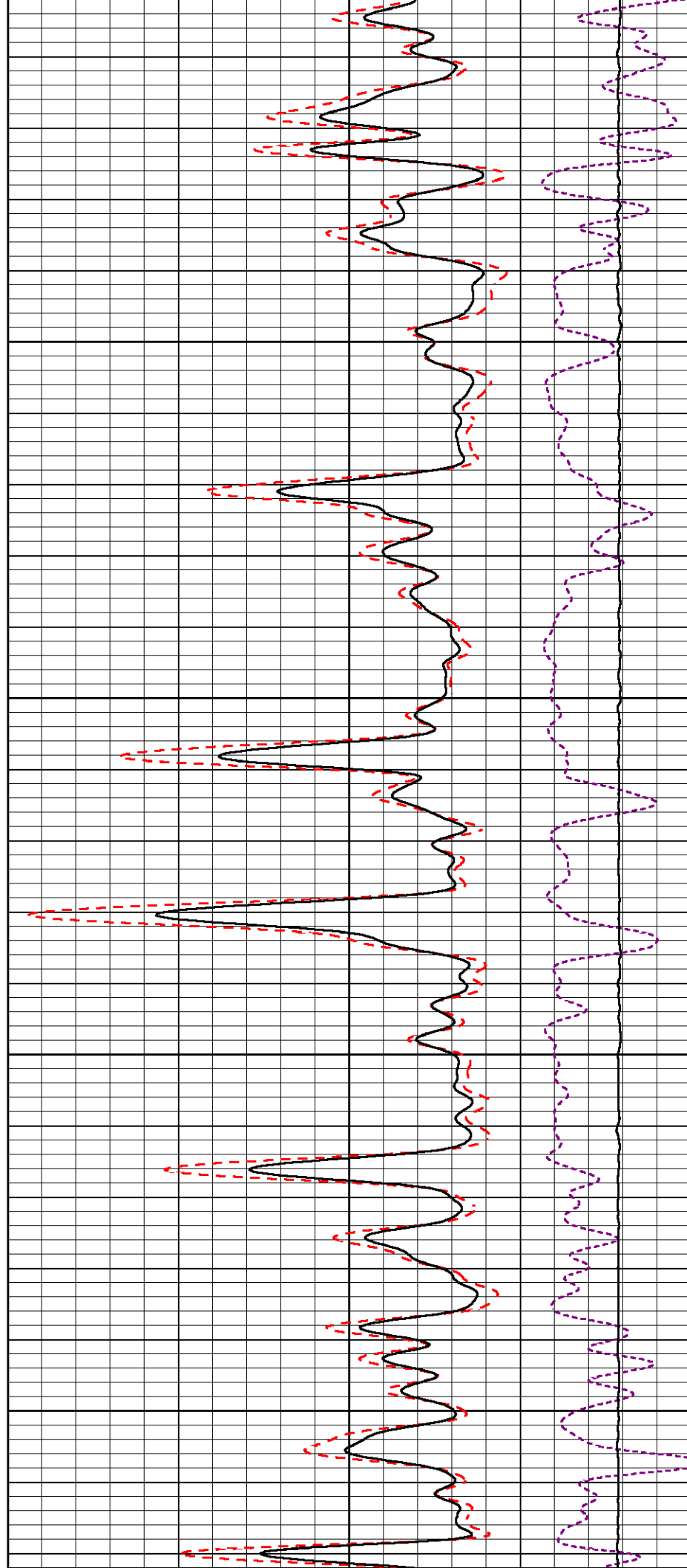


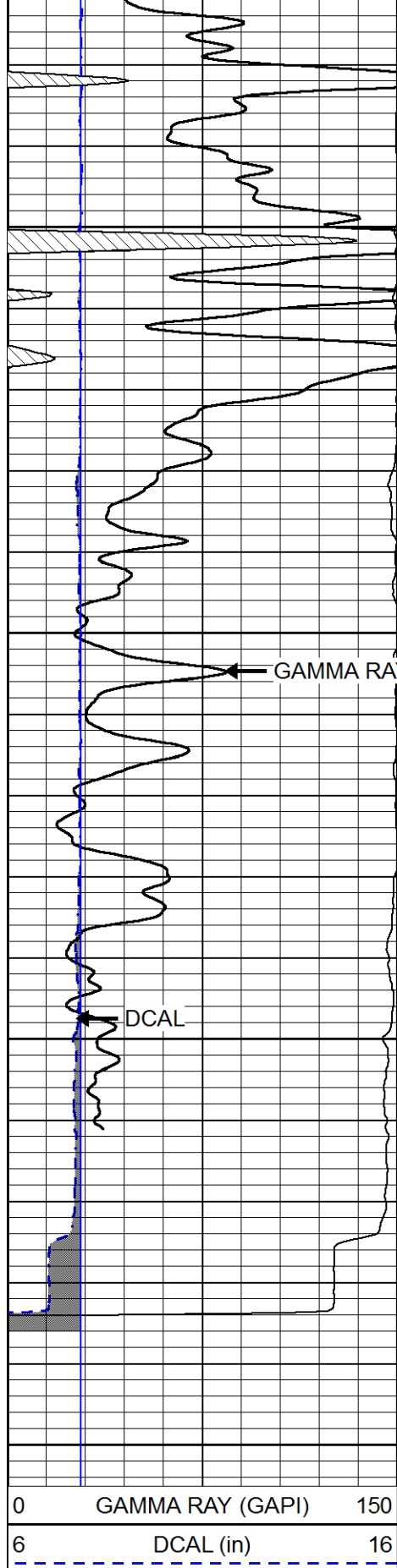
4550

4600

4650

4700





4750

4800

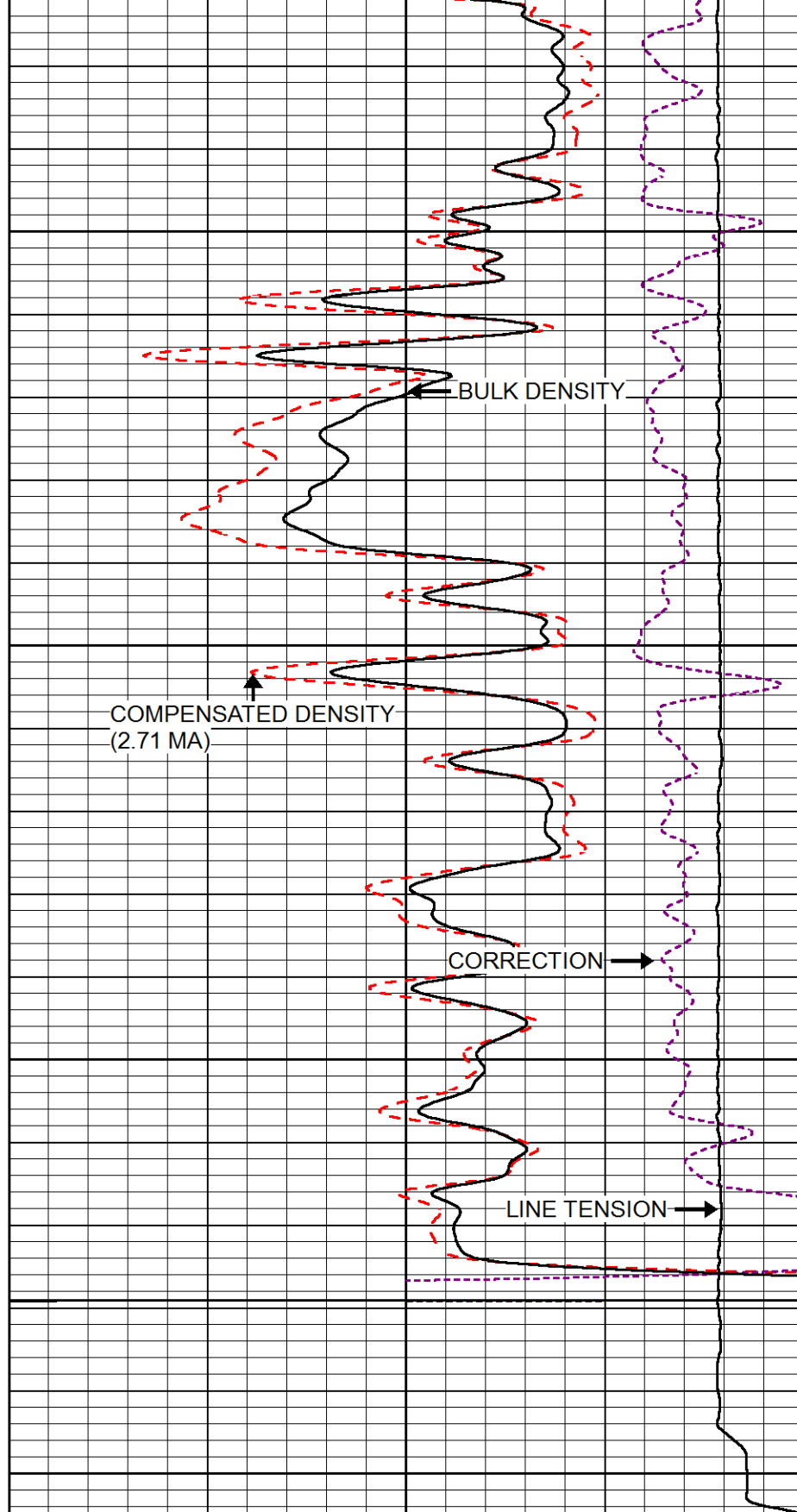
4850

4900

GAMMA RAY

DCAL

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



BULK DENSITY

COMPENSATED DENSITY
(2.71 MA)

CORRECTION

LINE TENSION

COMPENSATED DENSITY
(2.71 MA)

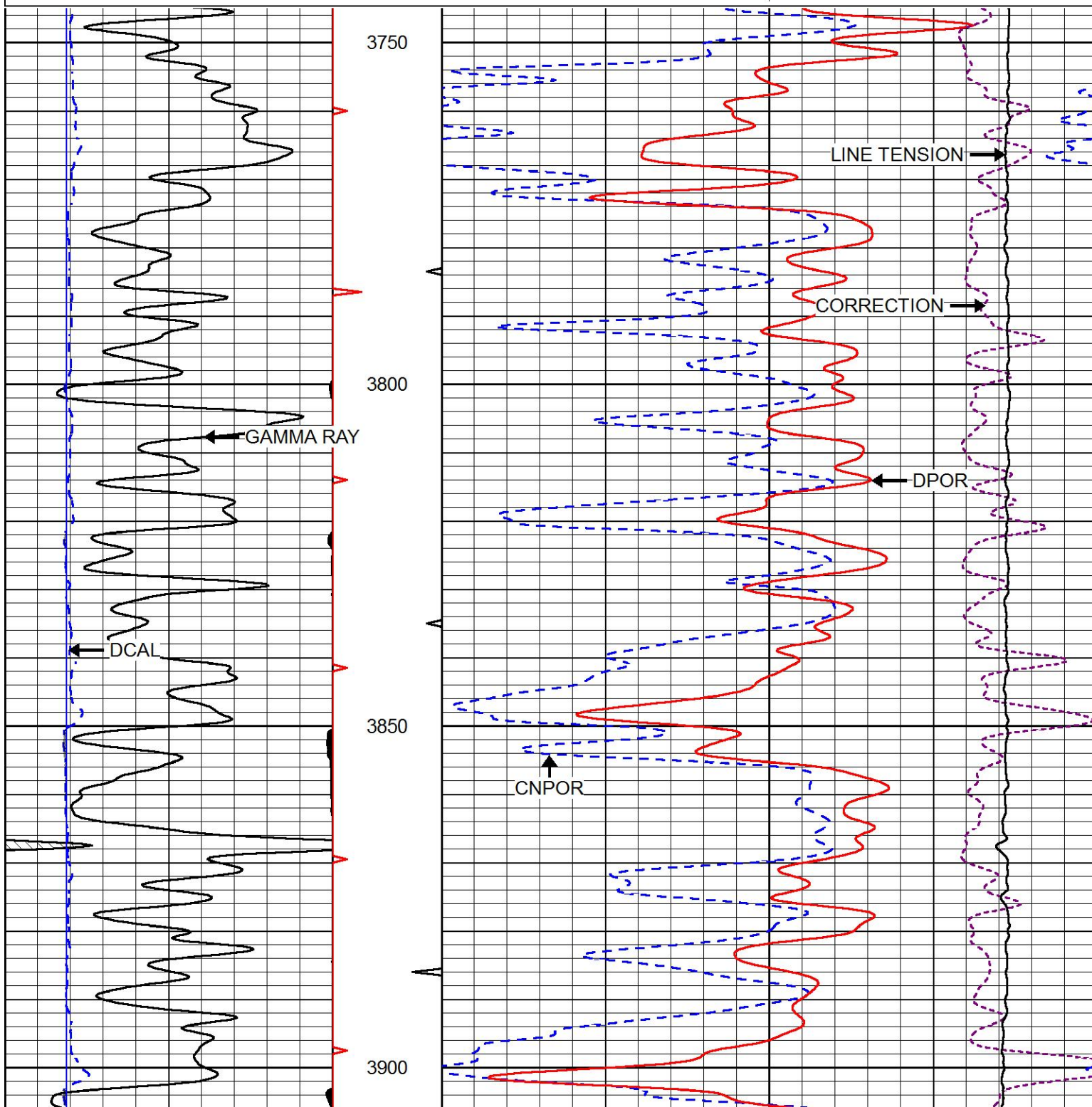
30 (pu) -10
2 BULK DENSITY (g/cc) 3
15000 LINE TENSION (lb) 0
-0.25 CORRECTION (g/cc) 0.25

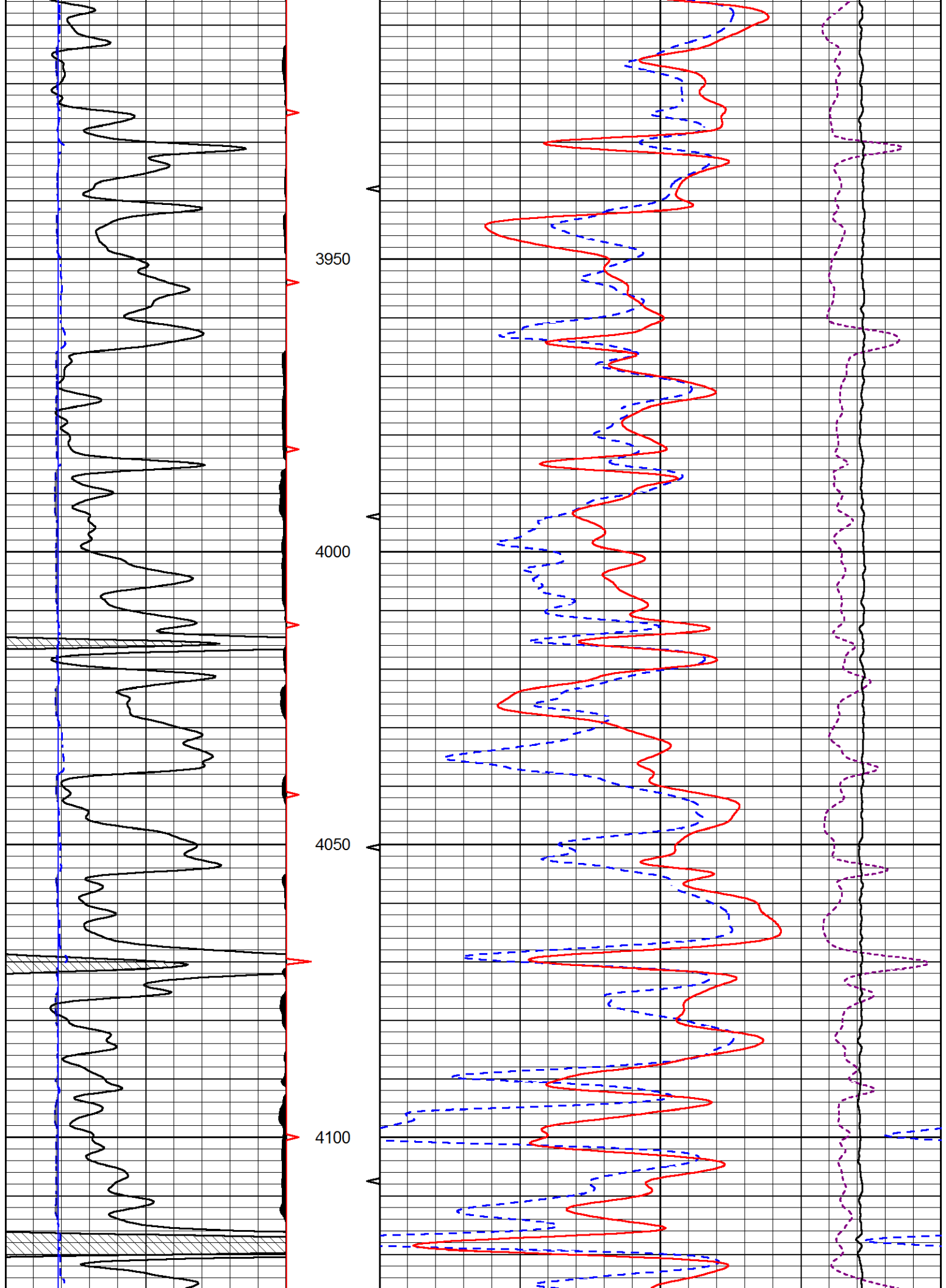
MAIN PASS

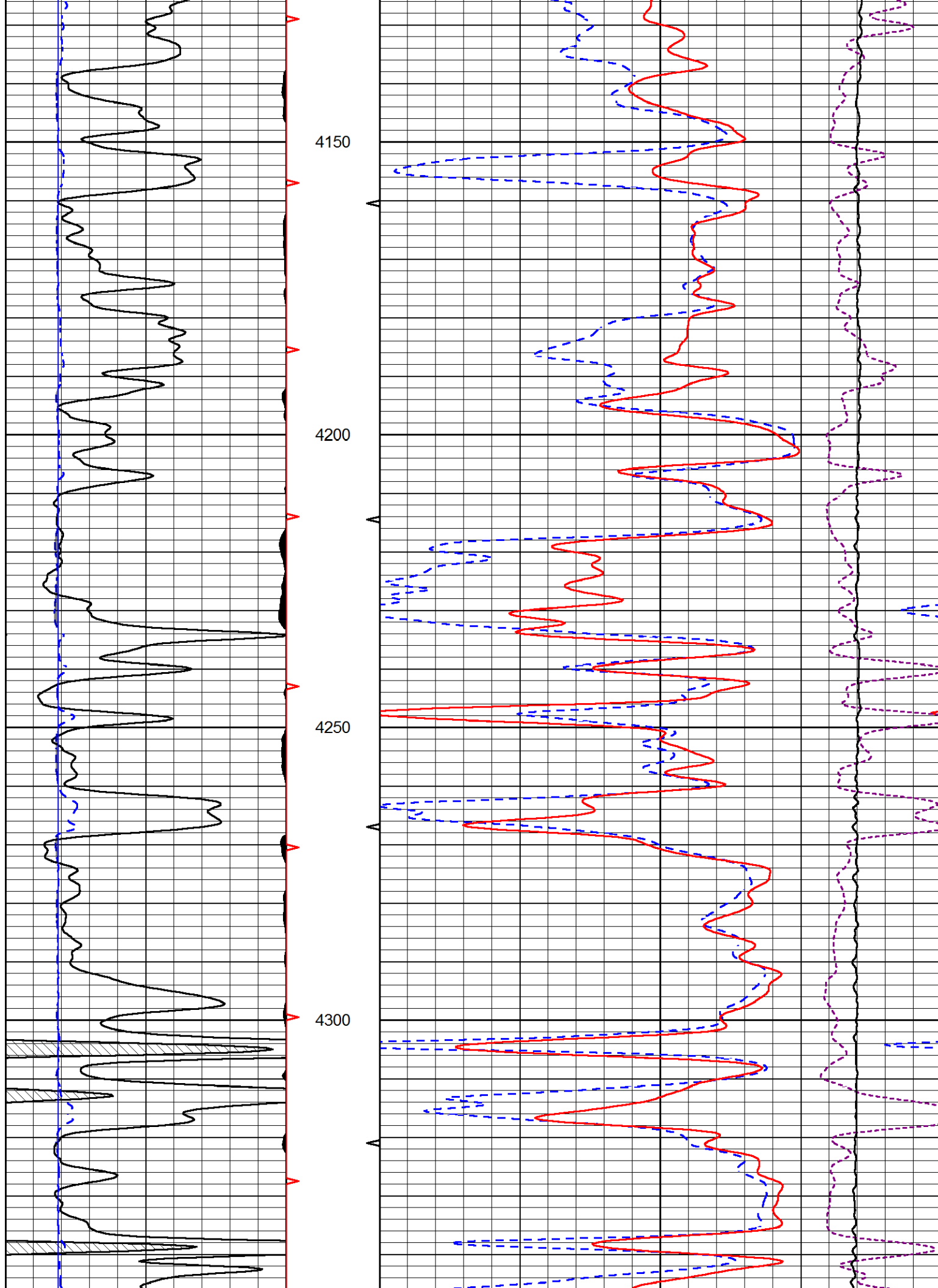
Database File murfin_soucie_kriss_unit_1_14.db
Dataset Pathname stackmel/pass3.1
Presentation Format _CNDLS~1
Dataset Creation Wed Aug 28 14:57:32 2019
Charted by Depth in Feet scaled 1:240

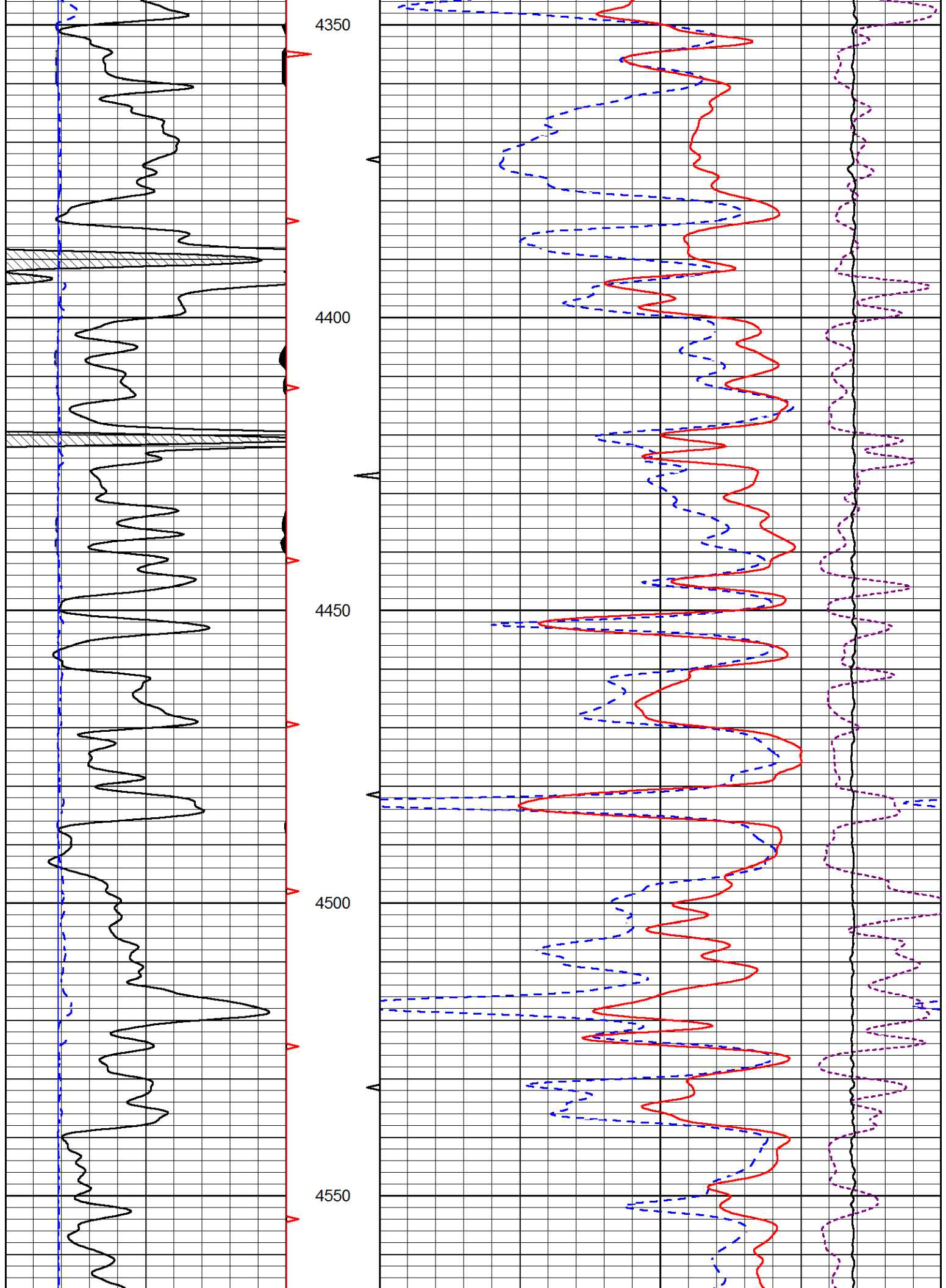
0	GAMMA RAY (GAPI)	150
6	DCAL (in)	16

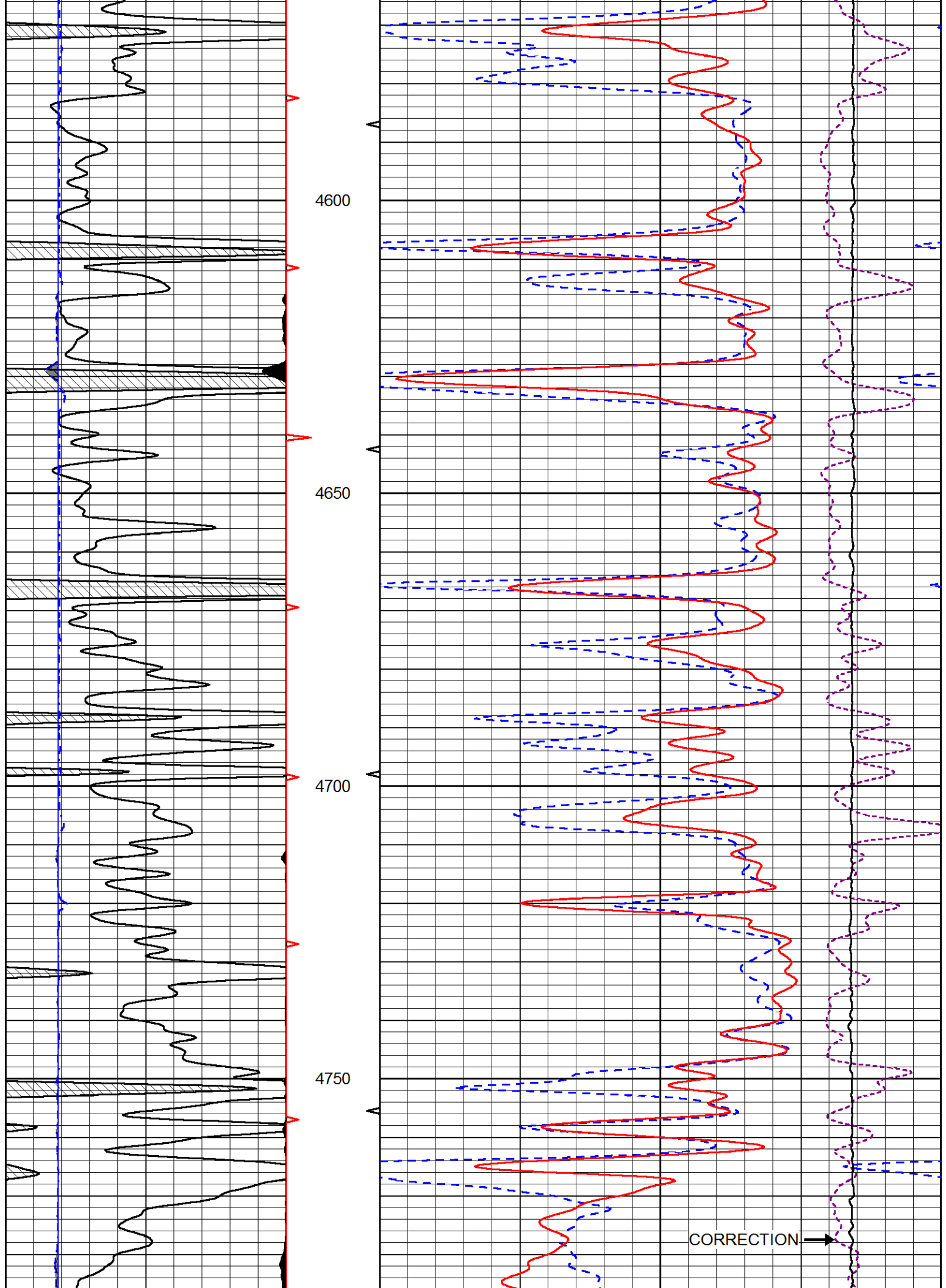
30	CNPOR (pu)	-10
30	DPOR (pu)	-10
10000	LINE TENSION (lb)	0
-0.25	CORRECTION (g/cc)	0.25

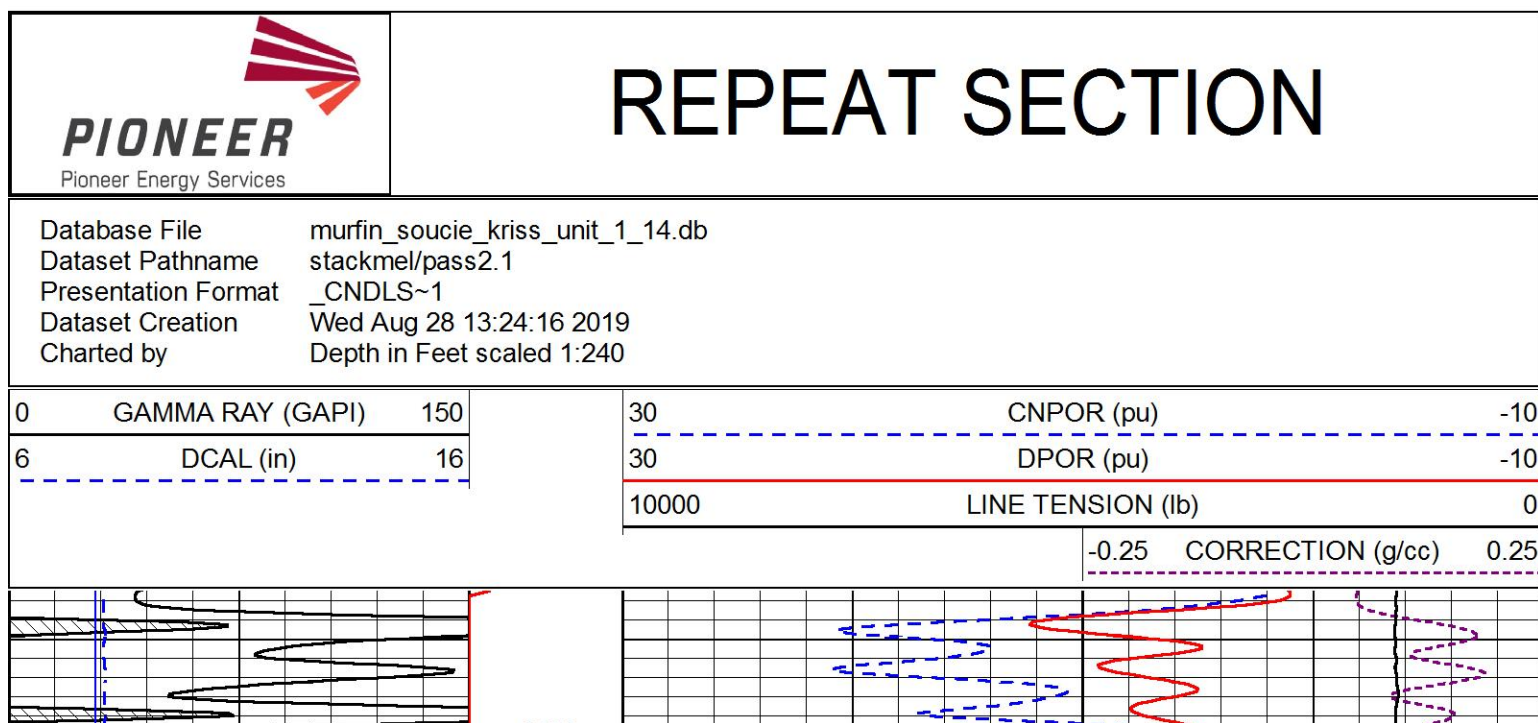
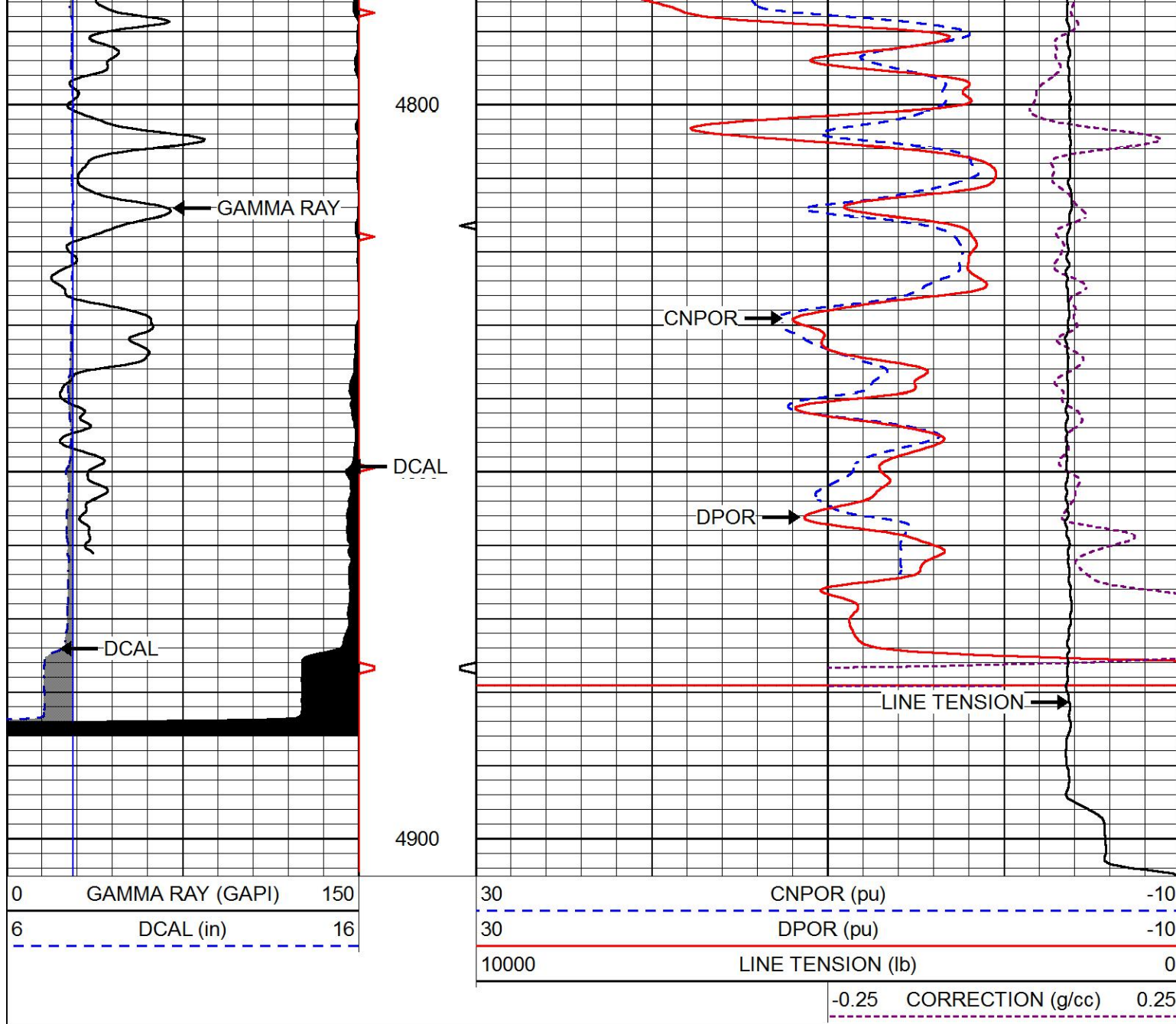


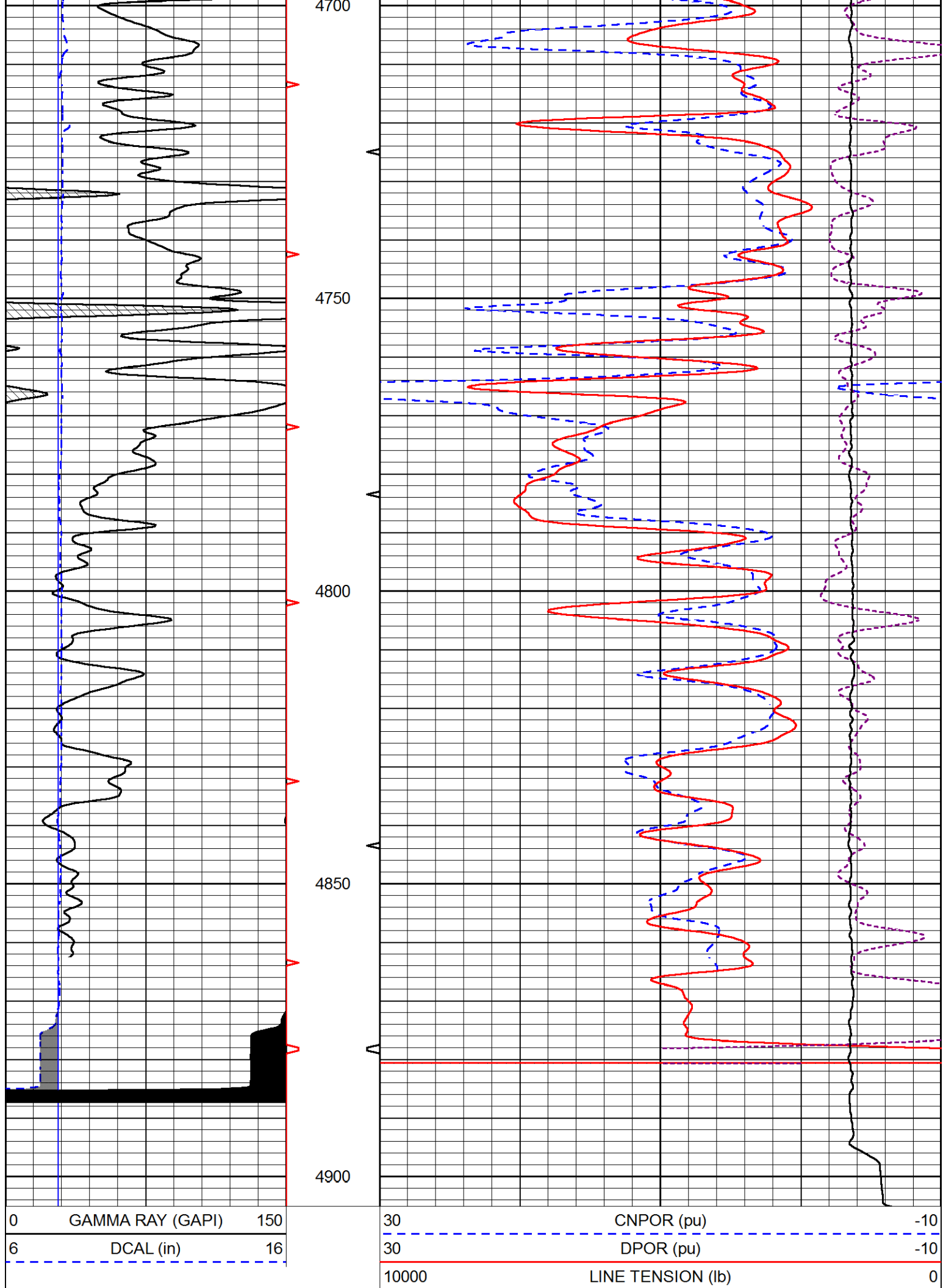












Calibration Report

Database File murfin_soucie_kriss_unit_1_14.db
 Dataset Pathname stackmel/pass3.1
 Dataset Creation Wed Aug 28 14:57:32 2019

Dual Induction Calibration Report

Serial-Model: 1039-PSI HIGH TEMP
 Calibration Performed: Tue Jul 09 07:46:05 2019

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.800	mmho/m	0.430	-51.000
Medium	0.000	1348.000	142.000	255.800	mmho/m	0.365	-49.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
 Performed: Thu Aug 01 07:57:13 2019

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	17000.0000	-0.7000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	18000.0000	-0.6000
Caliper	1.0001	1.1397	6.5000	18.5000	in	70.0000	-64.1500

Compensated Density Calibration Report

Serial-Model: 96-916-M&W
 Source / Verifier: 16955B / 2ci
 Master Calibration Performed: Wed Mar 27 11:00:53 2019

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	8943.64	10054.60	cps
Aluminum	2.655	g/cc	1595.61	6242.82	cps
Spine Angle = 74.54			Density/Spine Ratio = 0.503		
	Size		Reading		
Small Ring	8.00	in	1.75		
Large Ring	29.00	in	1.38		

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
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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

	Company	MURFIN DRILLING CO., INC.
	Well	SOUCIE KRISS UNIT #1-14
	Field	JIMMY NORTHEAST
	County	THOMAS
	State	KANSAS