

**COMPENSATED
DENSITY/NEUTRON
LOG**

Company	DOWNING-NELSON OIL CO., INC.	Company	DOWNING-NELSON OIL CO., INC.
Well	KRAMER-SCOTT UNIT #1-16	Well	KRAMER-SCOTT UNIT #1-16
Field	WILDCAT	Field	WILDCAT
County	RAWLINS	County	RAWLINS
State	KANSAS	State	KANSAS
Location:	API #: 15-153-21258-0000 1640' FNL & 285' FWL	Other Services CDL/CNL ML/SO	
Permanent Datum	GROUND LEVEL Elevation 3282	Elevation	
Log Measured From	KELLY BUSHING 12' A.G.L.	K.B. 3294	
Drilling Measured From	KELLY BUSHING	D.F. 3292	
		G.L. 3282	
	SEC 16 TWP 5S RGE 36W		

Date	5/13/21
Run Number	ONE
Depth Driller	4870
Depth Logger	4870
Bottom Logged Interval	4850
Top Log Interval	3550
Casing Driller	8 5/8" @ 480
Casing Logger	480
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/63
pH / Fluid Loss	10.0/8.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	1.5 @ 70F
Rmf @ Meas. Temp	1.13 @ 70F
Rmc @ Meas. Temp	1.8 @ 70F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.85 @ 124F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	////
Maximum Recorded Temperature	124F
Equipment Number	1523
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
Witnessed By	MARC DOWNING

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING ELI WIRELINE, HAYS, KS. (785) 628-6395

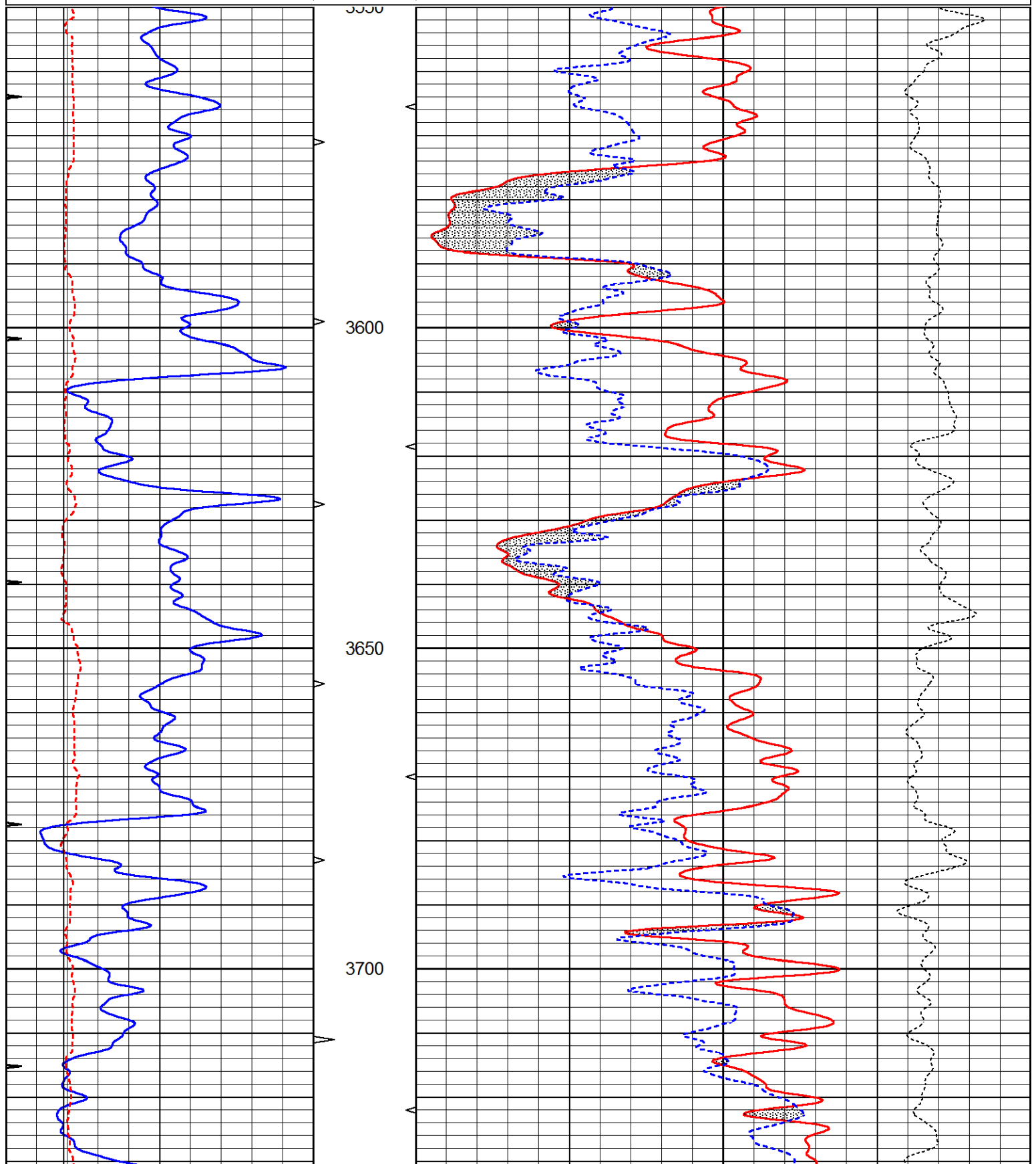
DIRECTIONS: BREWSTER NORTH HALF MILE SOUTH OF RD. G
EAST INTO.

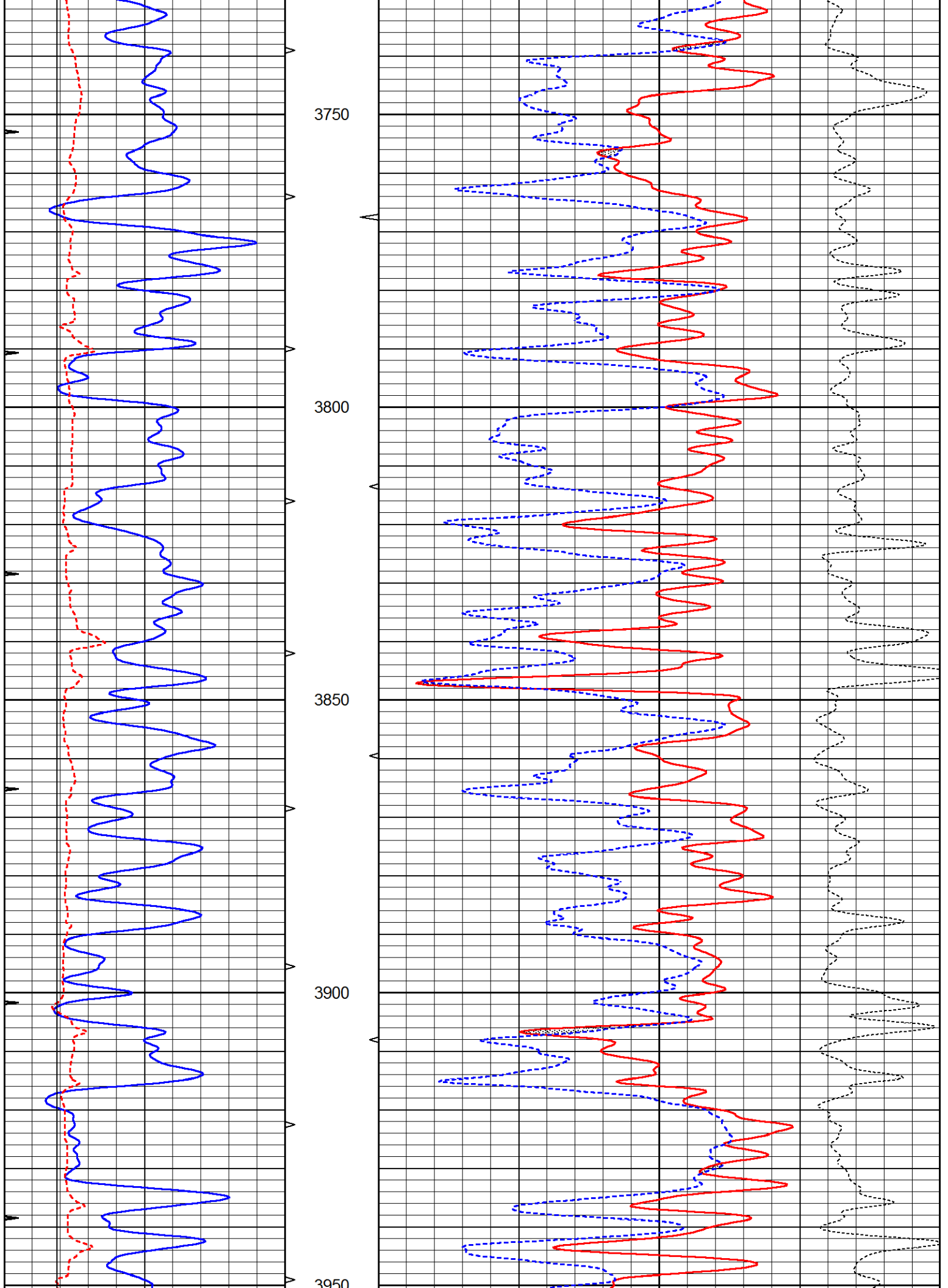


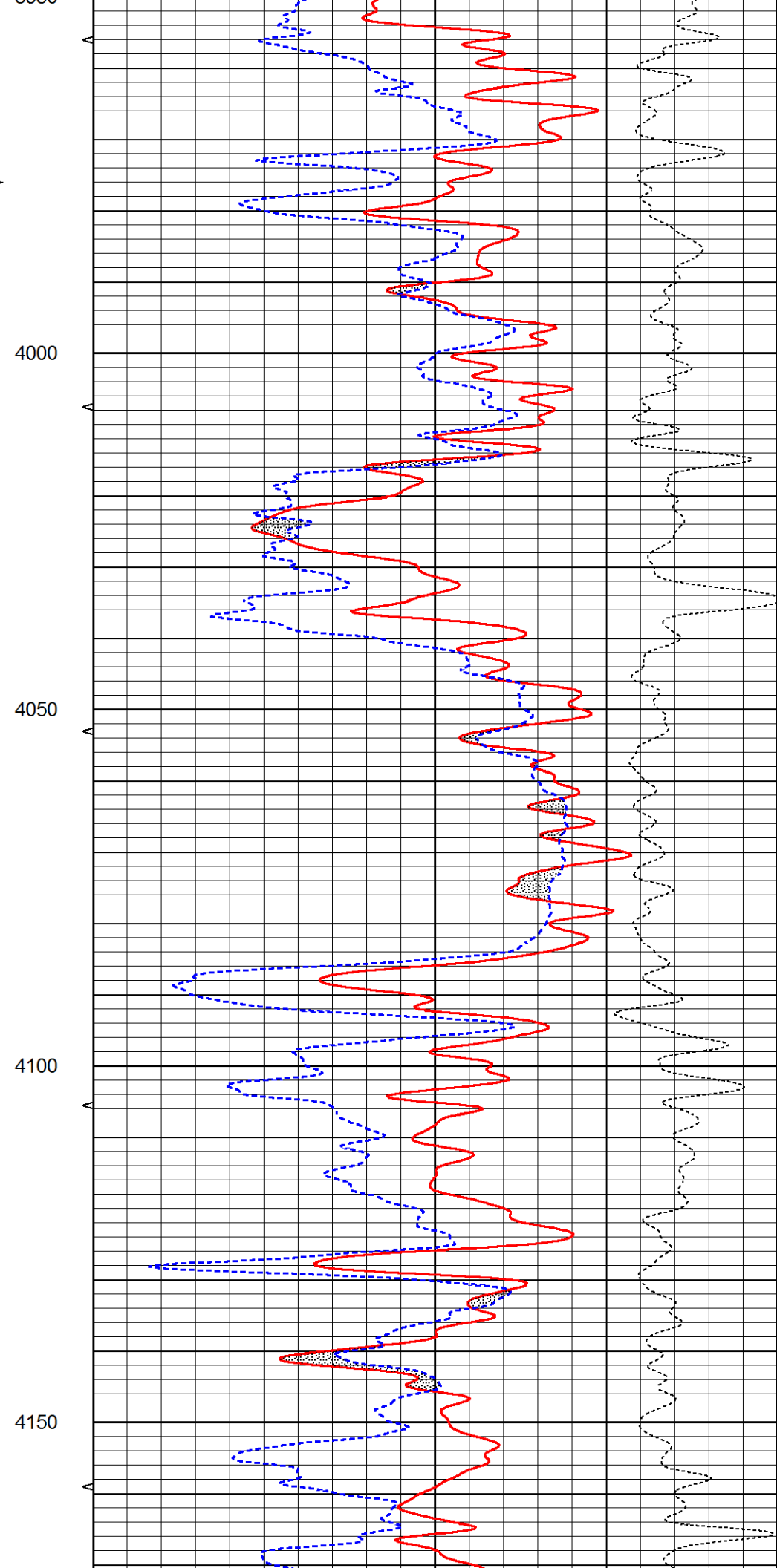
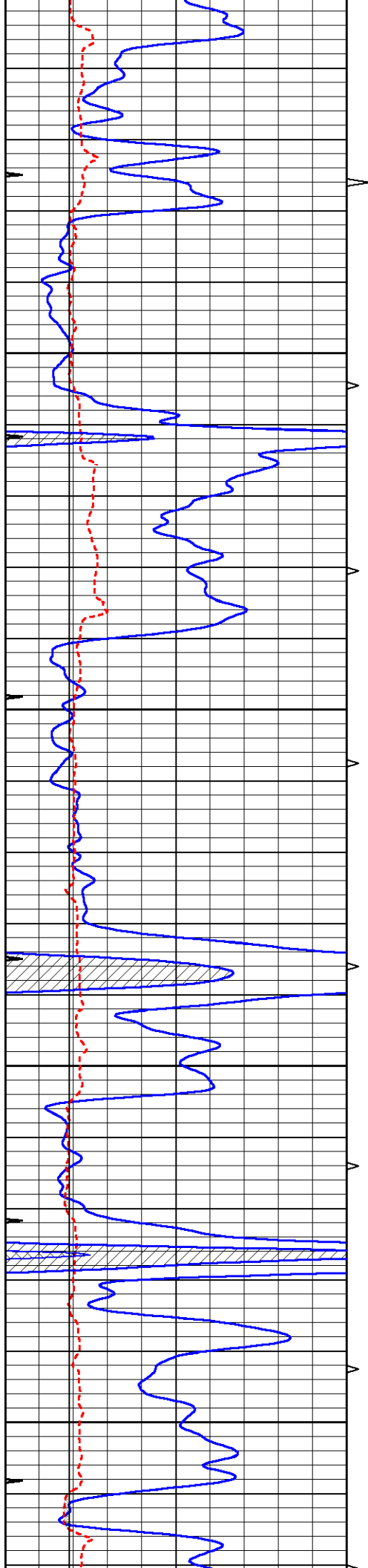
MAIN PASS

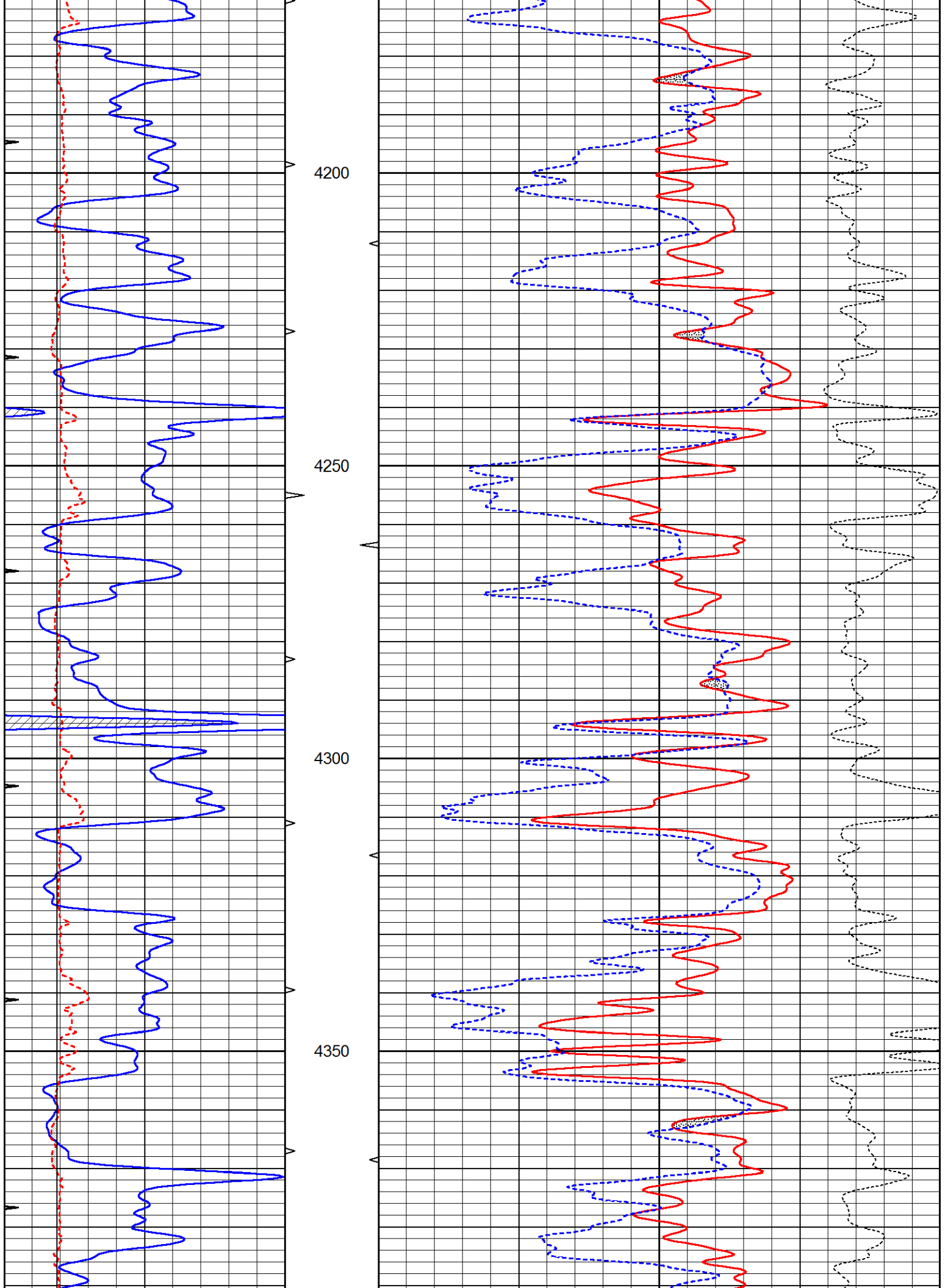
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 Dataset Pathname pass3.1
 Presentation Format den_neu
 Dataset Creation Thu May 13 06:20:53 2021
 Charted by Depth in Feet scaled 1:240

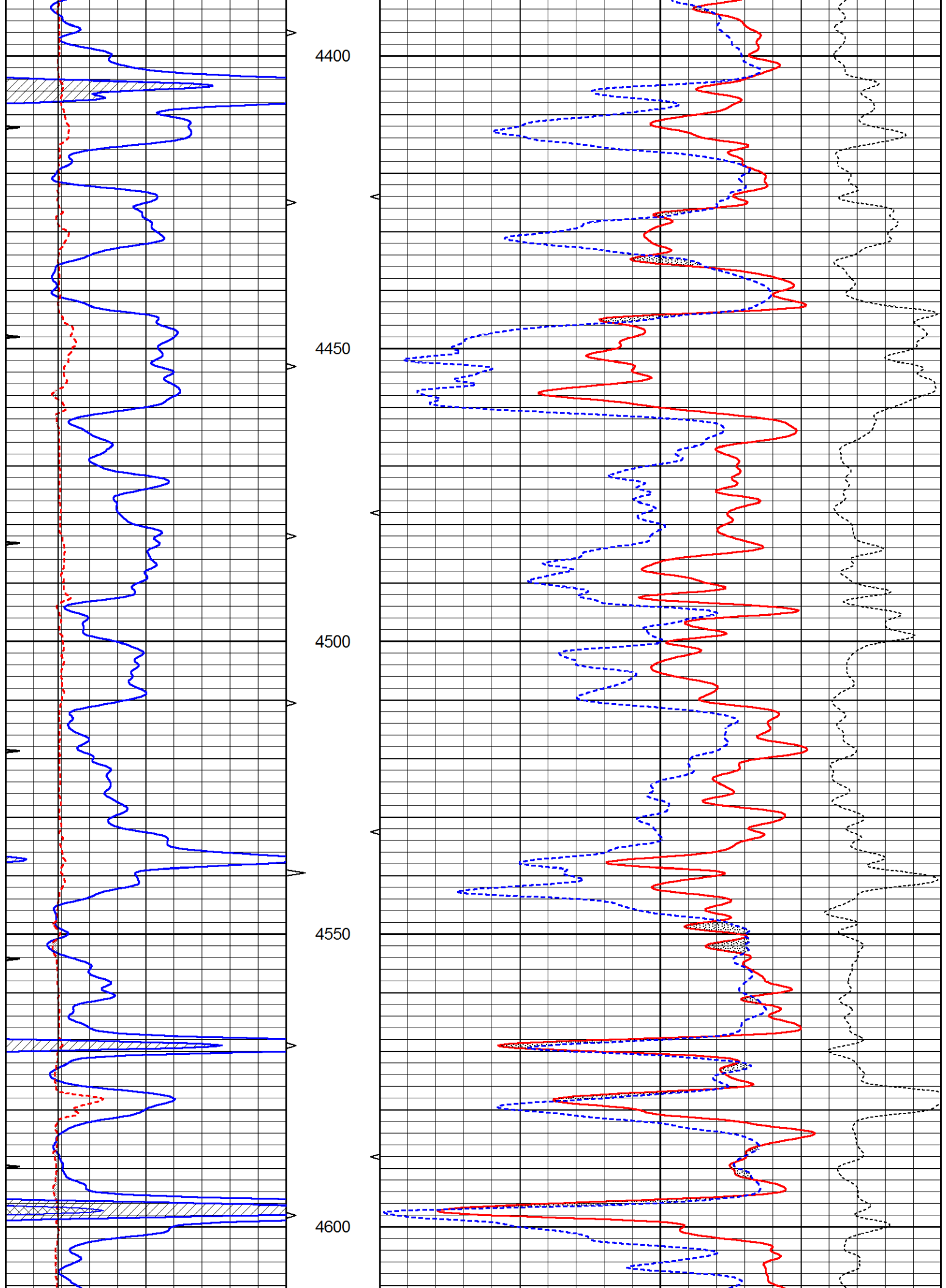
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

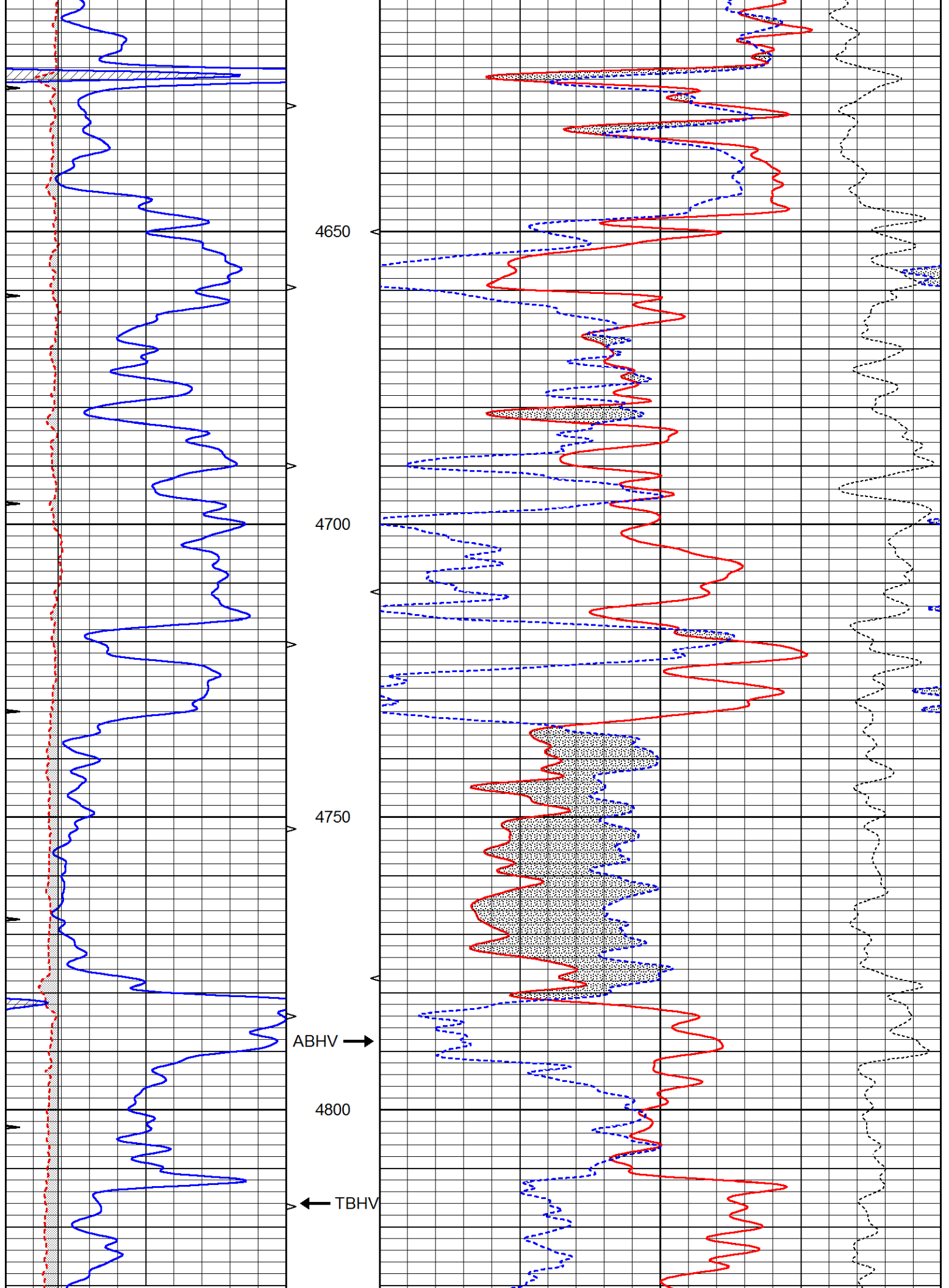


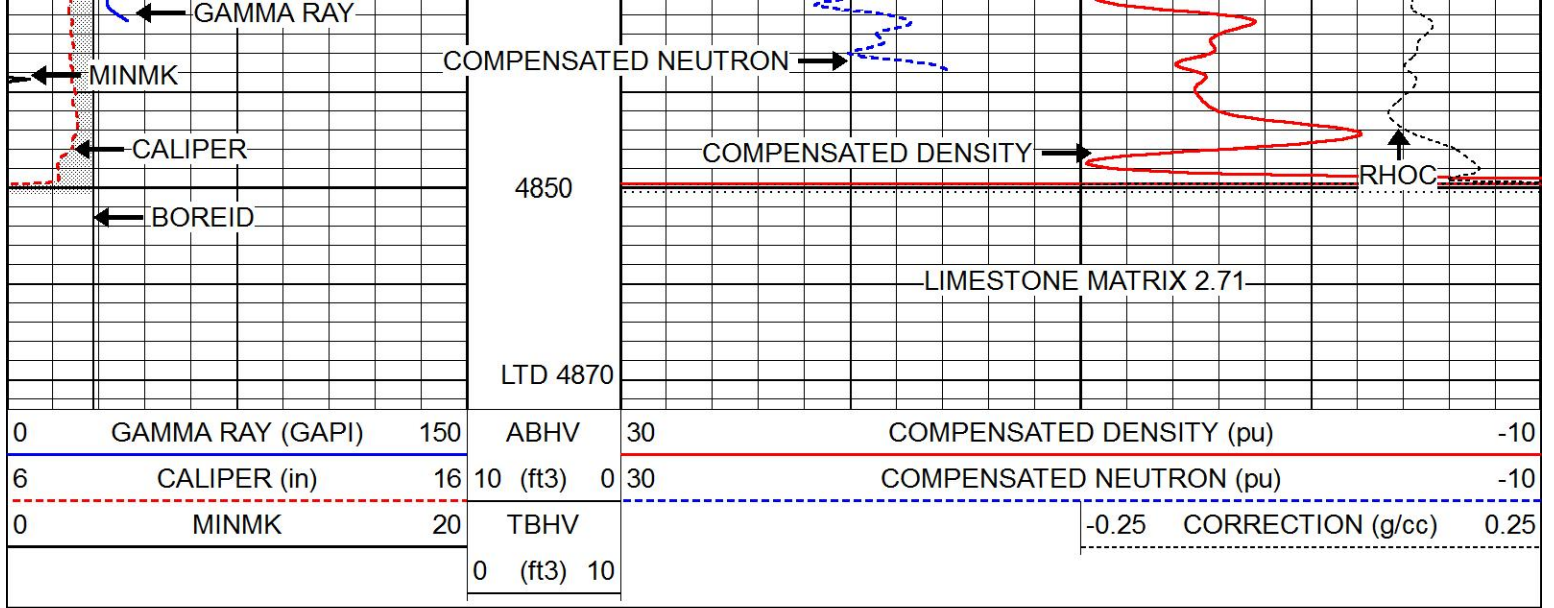








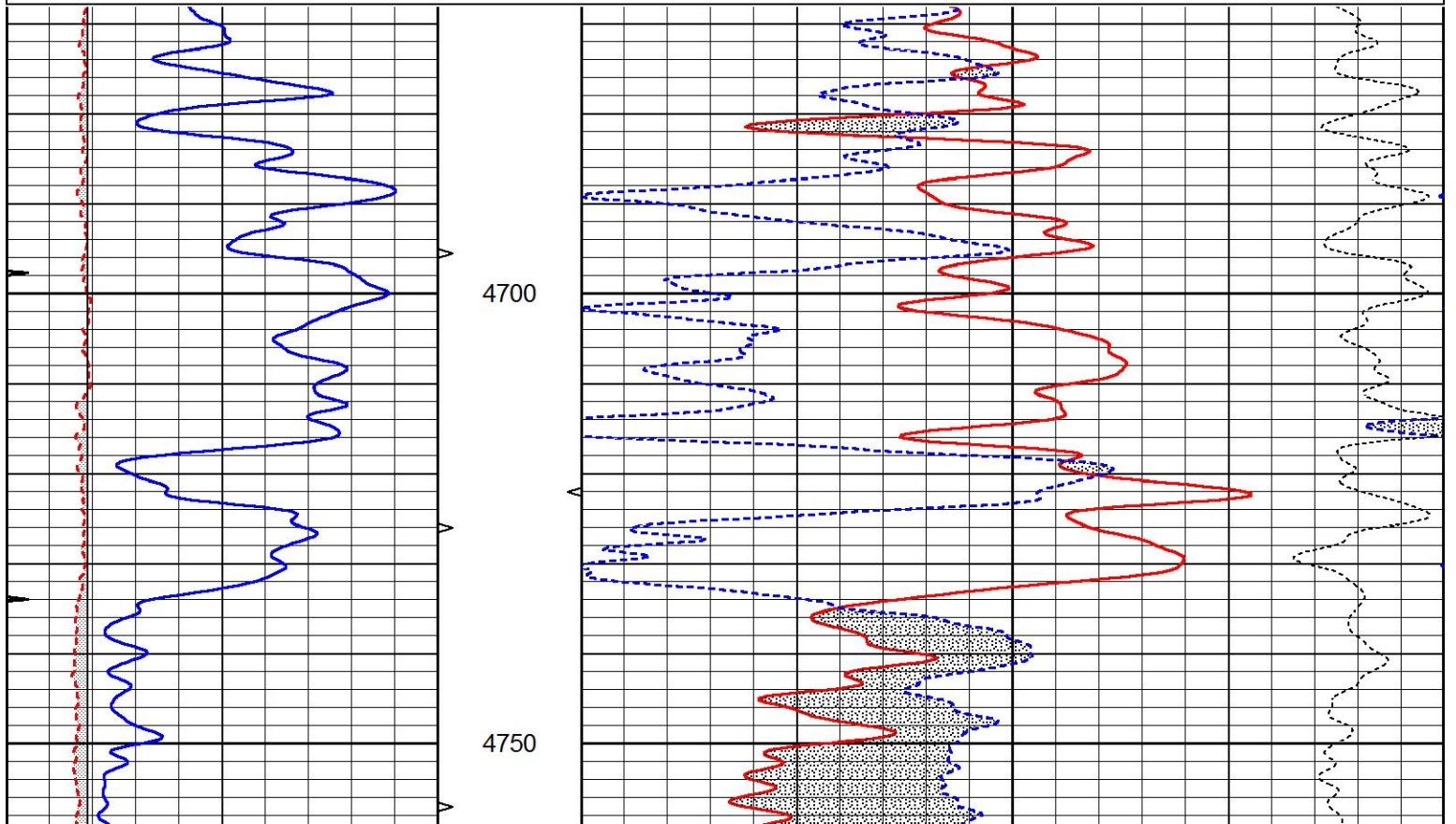


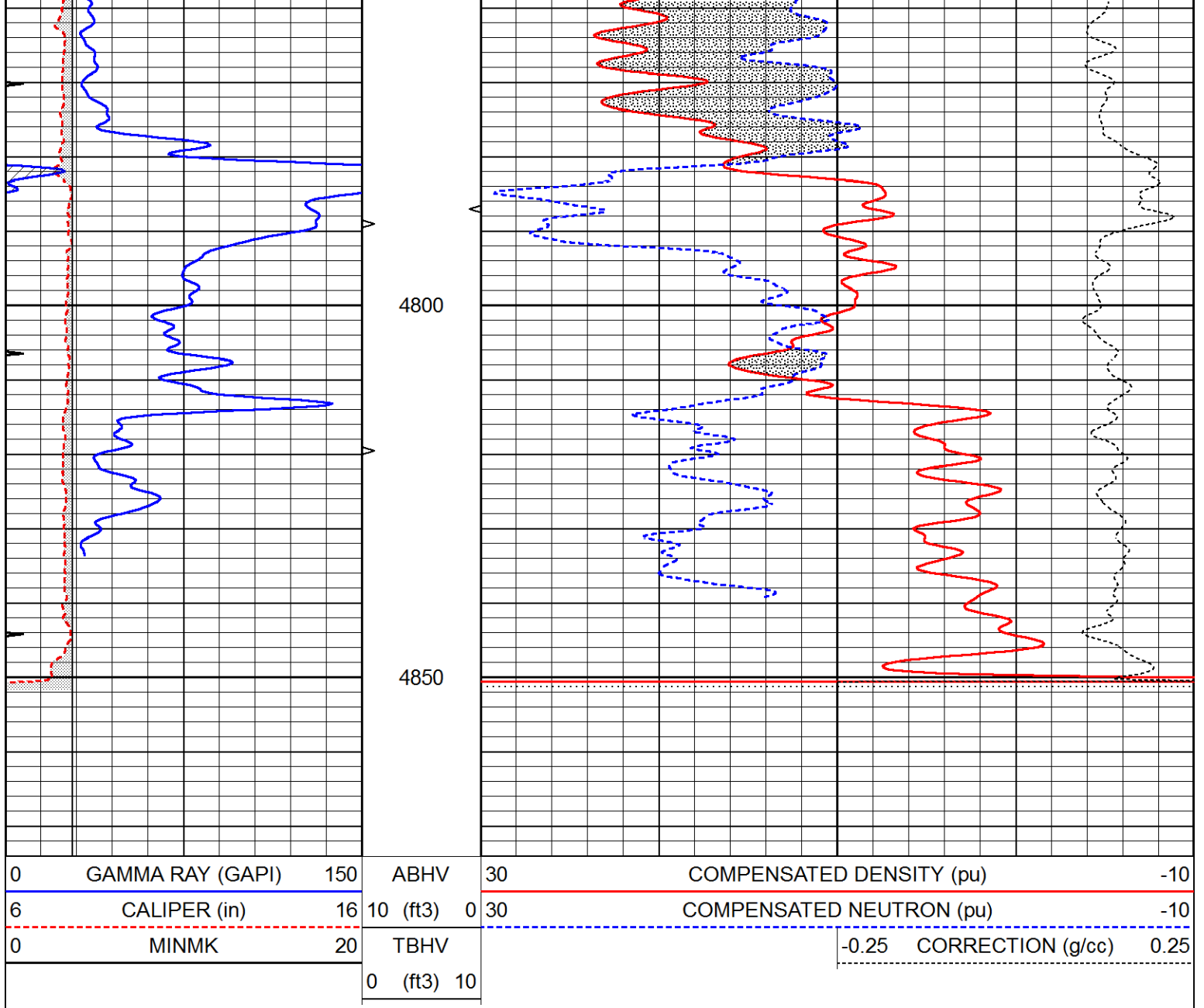


REPEAT SECTION

Database File 5435ddn.db
 Dataset Pathname pass2.1
 Presentation Format den_neu
 Dataset Creation Thu May 13 06:23:42 2021
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





Calibration Report

Database File 5435ddn.db
 Dataset Pathname pass2.1
 Dataset Creation Thu May 13 06:23:42 2021

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Mon Sep 10 14:28:35 2018
 Downhole Cal Performed: Mon Sep 10 14:28:38 2018
 After Survey Verification Performed: Mon Sep 10 14:28:40 2018

Surface Calibration

Loop:	Readings				References			Results	
	Air	Loop			Air	Loop	mmho/m	m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	0.000	
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-12.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619	
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739	

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report
Serial: 001N Model: PRB

Master Calibration		Performed Thu Mar 19 11:30:16 2020				
	Background	Magnesium	Aluminum	Aluminum+Fe		
Window 1	1572.2	7510.8	2837.3	2643.1	cps	
Window 2	1446.2	6523.9	2552.8	2409.9	cps	
Window 3	1060.9	3611.4	1731.5	1684.8	cps	
Window 4	145.5	363.4	363.2	368.1	cps	
Long Space	0.0	5077.7	1106.6	963.7	cps	
Short Space	3.1	1709.3	1103.4	916.9	cps	
Rho		1.7100	2.5900	0.0000	g/cc	
Pe		2.0000	2.7500	5.7900		
Rib Angle	: 44.0	Rib Slope	: 0.965	Density/Spine Ratio	: 0.555	
Spine Angle	: 74.0	Spine Slope	: 3.481	Spine Intercept	: -17.4	

Before Survey Verification		Performed Wed Dec 31 18:00:00 1969				
	Background	Magnesium	Aluminum	Aluminum+Fe		
Window 1	0.0	0.0	0.0	0.0	cps	
Window 2	0.0	0.0	0.0	0.0	cps	
Window 3	0.0	0.0	0.0	0.0	cps	
Window 4	0.0	0.0	0.0	0.0	cps	
Long Space	0.0	0.0	0.0	0.0	cps	
Short Space	0.0	0.0	0.0	0.0	cps	
Measured Rho		0.0000	0.0000	0.0000	g/cc	
Measured Correction		0.0000	0.0000	0.0000	g/cc	
Measured Pe			0.0000	0.0000		

After Survey Verification		Performed Wed Dec 31 18:00:00 1969				
	Background	Magnesium	Aluminum	Aluminum+Fe		
Window 1	0.0	0.0	0.0	0.0	cps	
Window 2	0.0	0.0	0.0	0.0	cps	
Window 3	0.0	0.0	0.0	0.0	cps	
Window 4	0.0	0.0	0.0	0.0	cps	
Long Space	0.0	0.0	0.0	0.0	cps	
Short Space	0.0	0.0	0.0	0.0	cps	
Measured Rho		0.0000	0.0000	0.0000	g/cc	

Measured Kms	0.0000	0.0000	0.0000	g/cc
Measured Correction	0.0000	0.0000	0.0000	
Measured Pe				

Compensated Neutron Calibration Report

Serial Number: 61
 Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	1.00 cps	1.00 cps	1.0000
Long Space	1.00 cps	1.00 cps	1.0000

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	pu
3)	Short Space	cps		
	Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: GR6
 Tool Model: OPEN
 Performed: Thu Jul 30 20:04:35 2020

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 276.0 cps

Sensitivity: 0.7500 GAPI/cps