



**COMPENSATED
DENSITY/NEUTRON
PE/LOG**

Company **TRIPLE CROWN OPERATING, LLC.**
Well **HARTING #1-9**
Field **UNNAMED**
County **HODGEMAN** State **KANSAS**

Location: **API # : 15-083-21991-0000**
335' FNL & 2054' FWL
Permanent Datum **GROUND LEVEL Elevation 2179**
Log Measured From **KELLY BUSHING 5' A.G.L.**
Drilling Measured From **KELLY BUSHING**
Other Services
DIL
ML
Elevation

Date	08/05/21
Run Number	ONE
Depth Driller	4420
Depth Logger	4418
Bottom Logged Interval	4398
Top Log Interval	3500
Casing Driller	8 5/8" @ 1349
Casing Logger	1349
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4/48
pH / Fluid Loss	9.5/8.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.4@ 70F
Rmf @ Meas. Temp	.30@ 70F
Rmc @ Meas. Temp	.48 @ 70F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.23@ 120F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	////
Maximum Recorded Temperature	120F
Equipment Number	1523
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
Witnessed By	SEAN DEENIHAN
	CHRIS JOHNSON

<<< Fold Here >>>

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

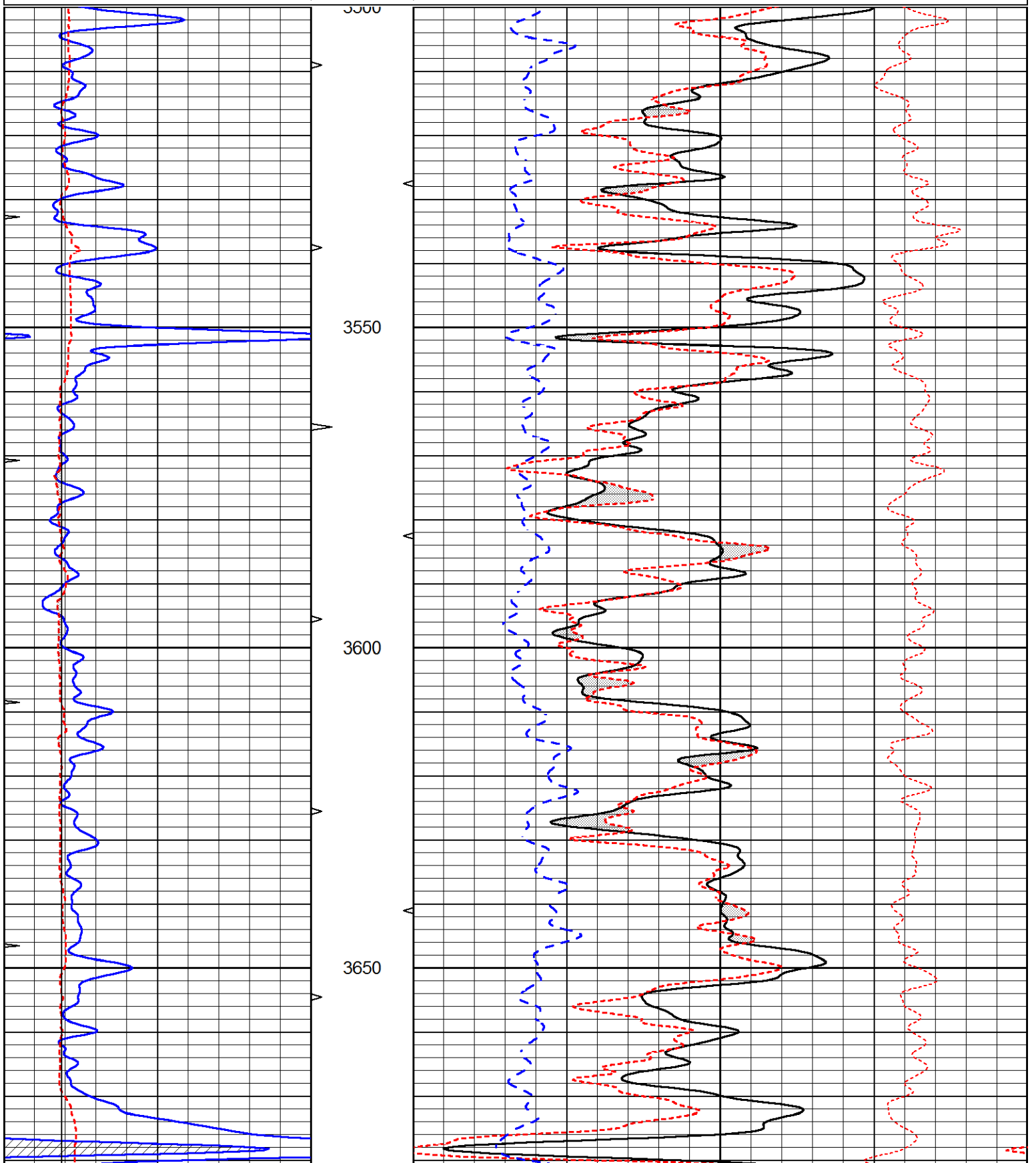
DIRECTIONS: EAST OF BAZINE TO GG RD. SOUTH 14 MILES,
TO RD X, EAST 1/2 MILE, SOUTH INTO.

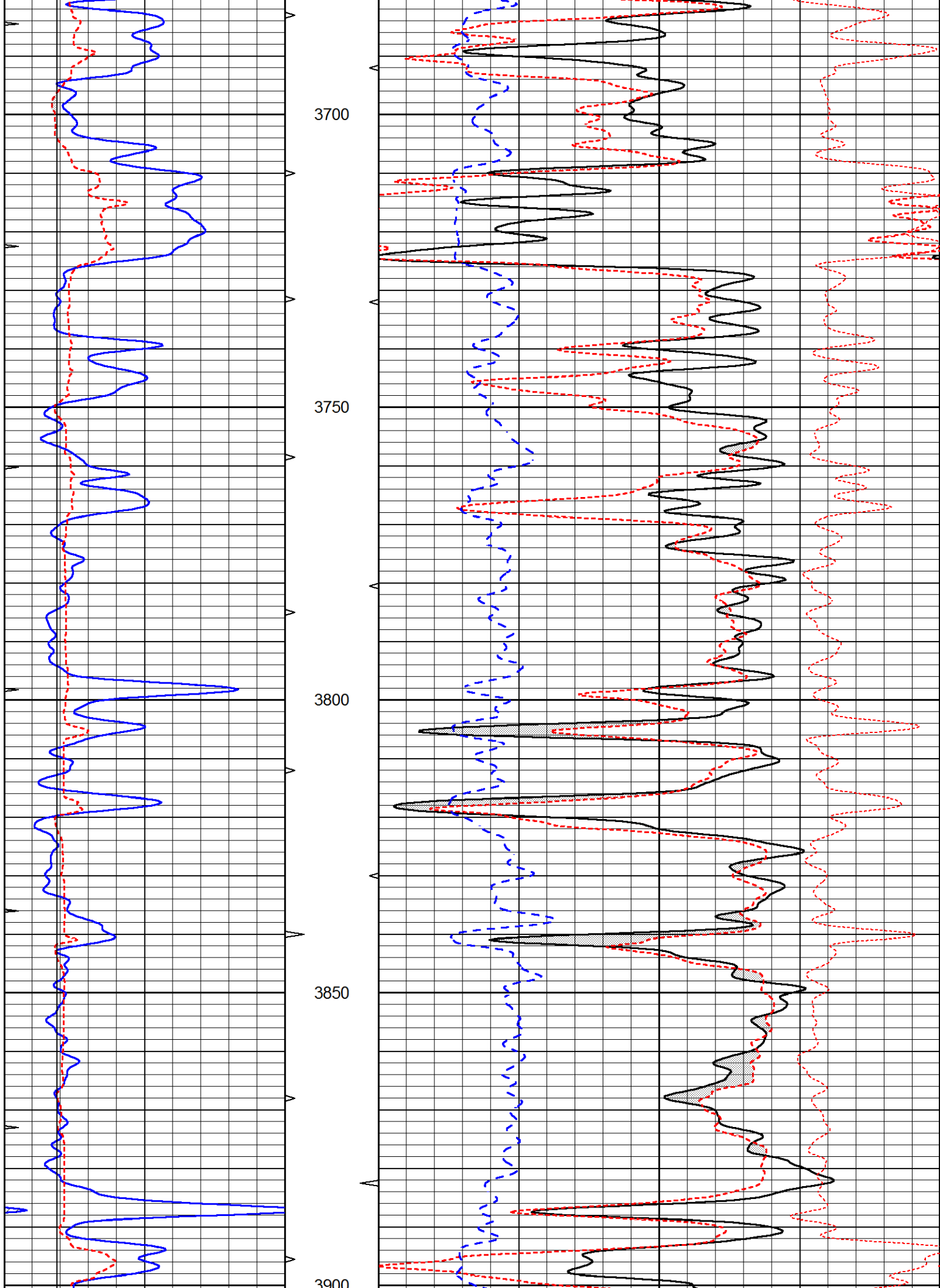


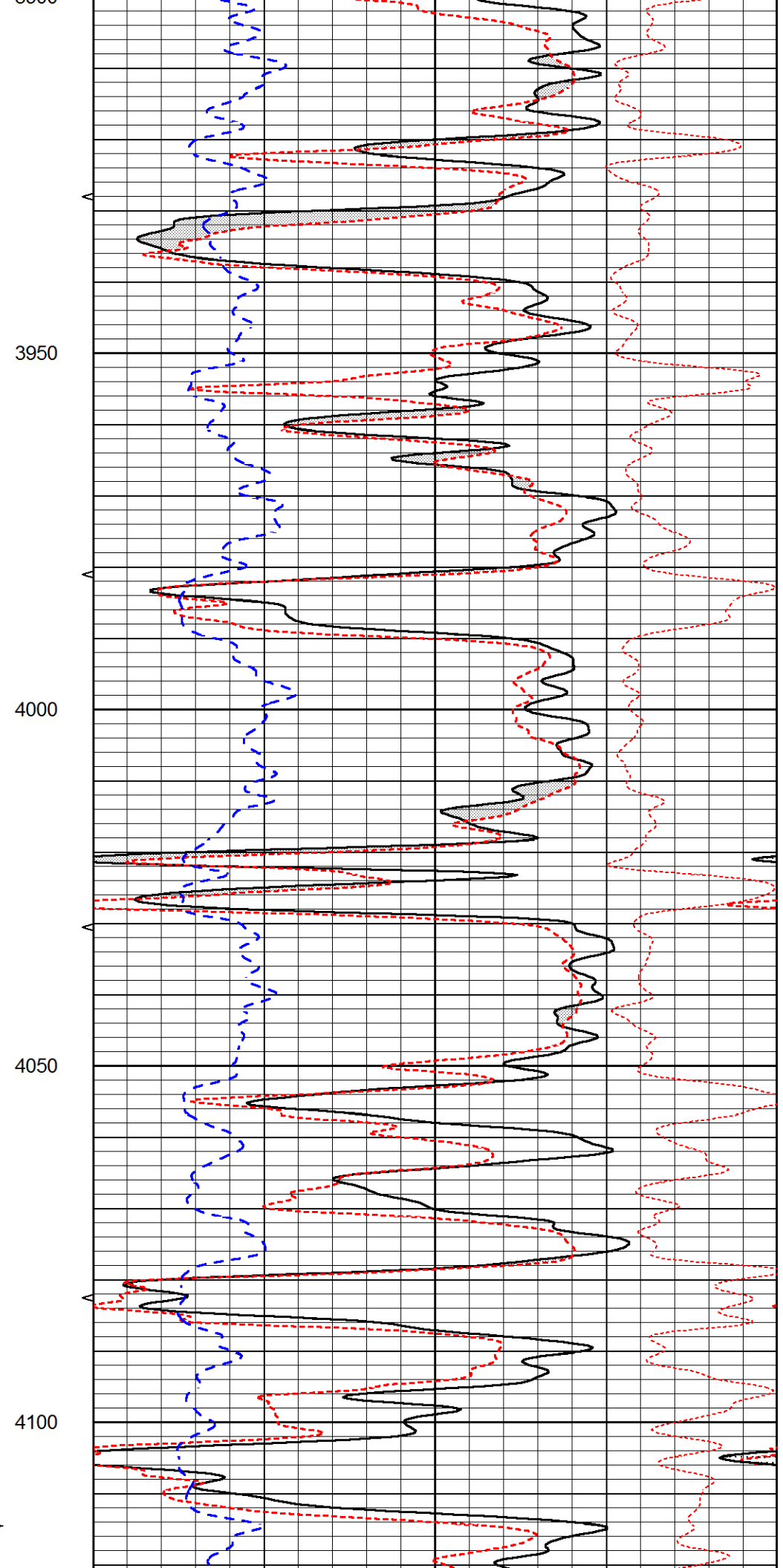
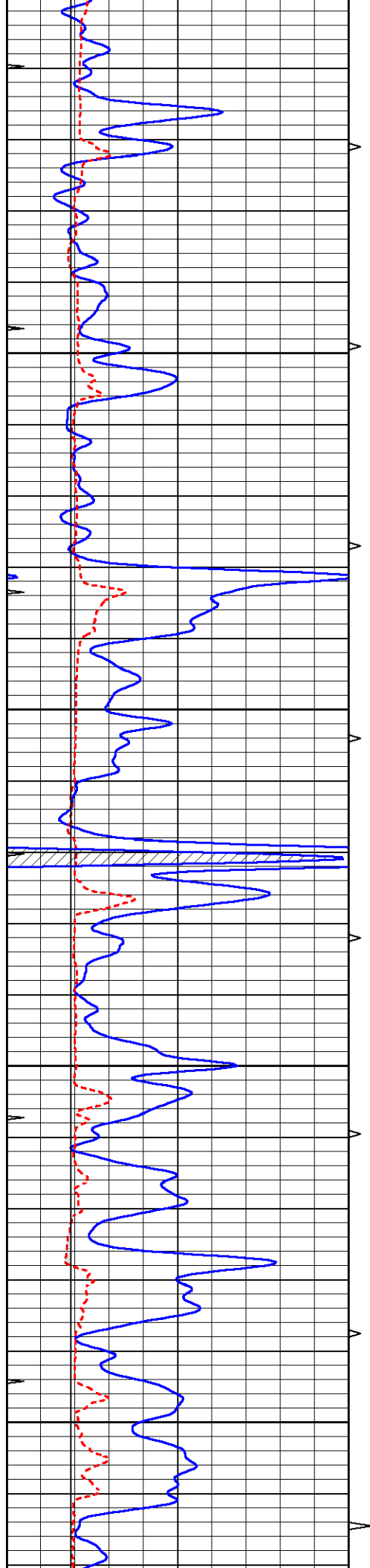
MAIN PASS

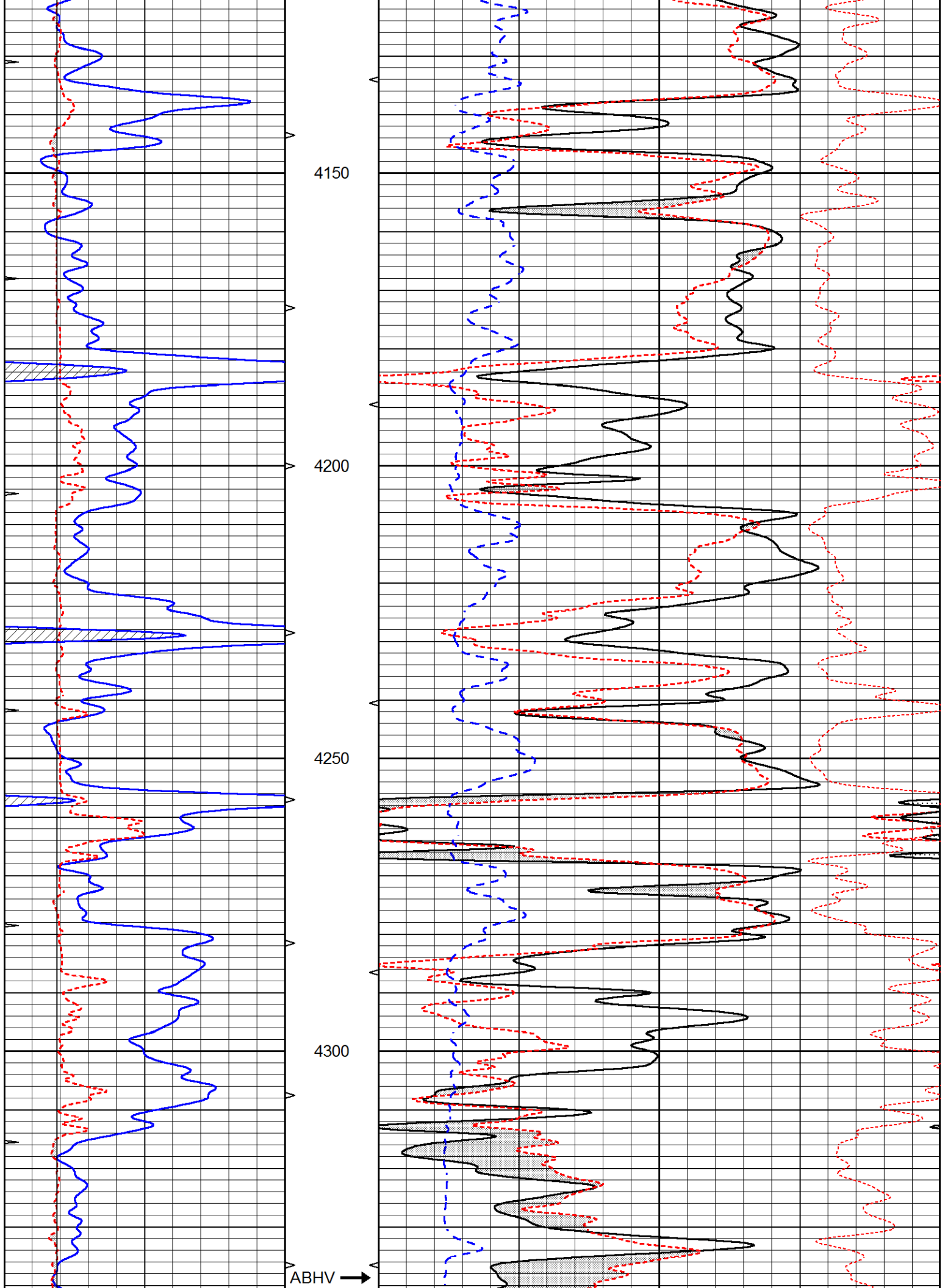
Database File 5611pe.db
 Dataset Pathname pass4.1
 Presentation Format _ldt_neu
 Dataset Creation Thu Aug 05 12:49:31 2021
 Charted by Depth in Feet scaled 1:240

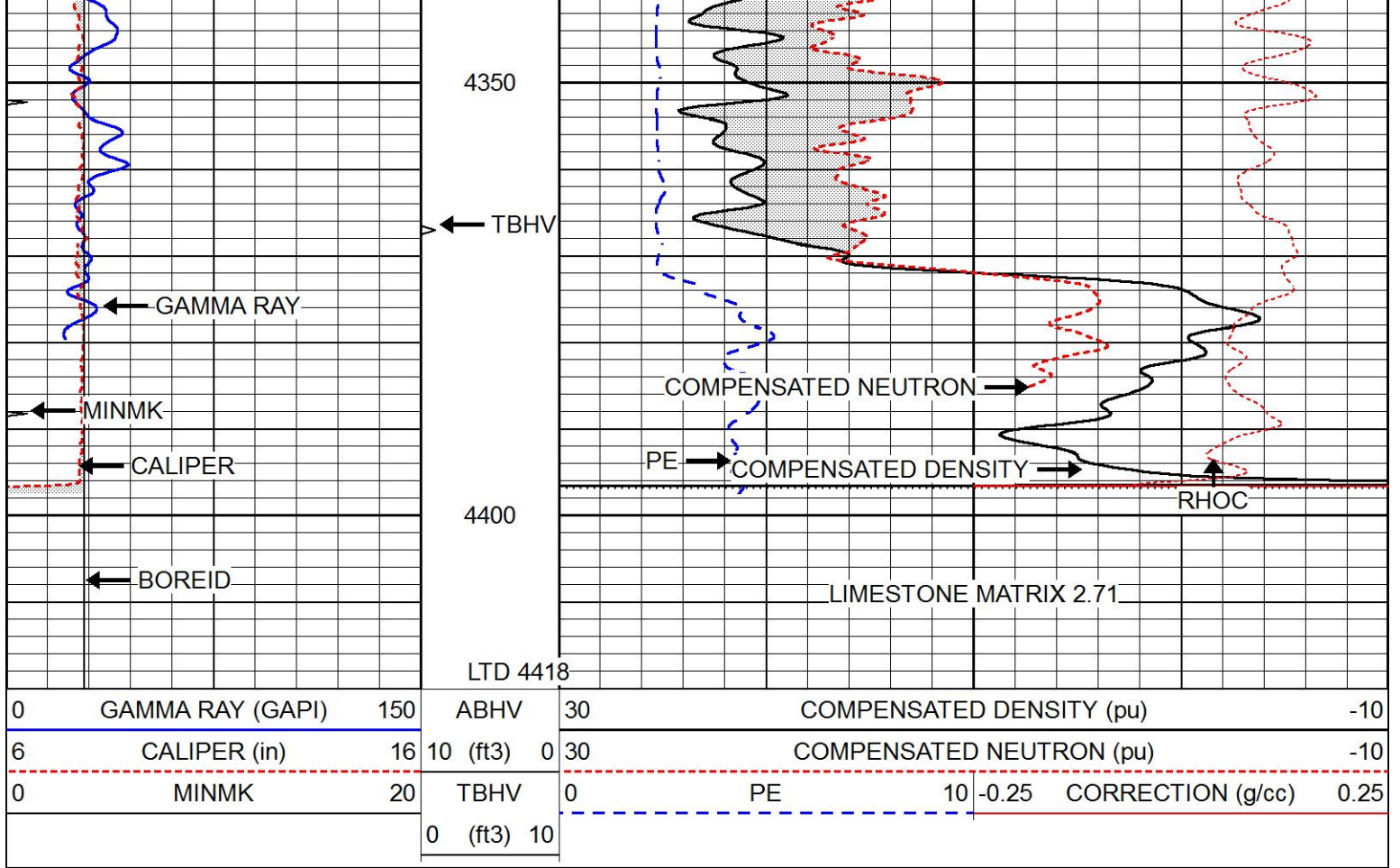
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)			-10	
6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)			-10	
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					







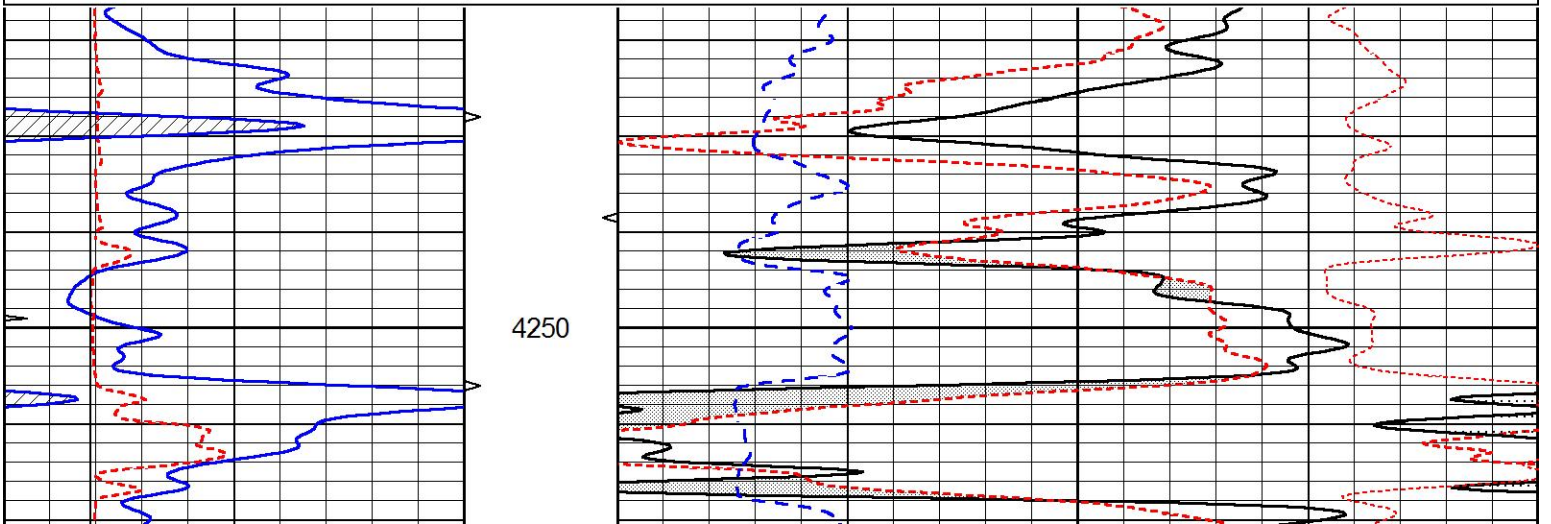


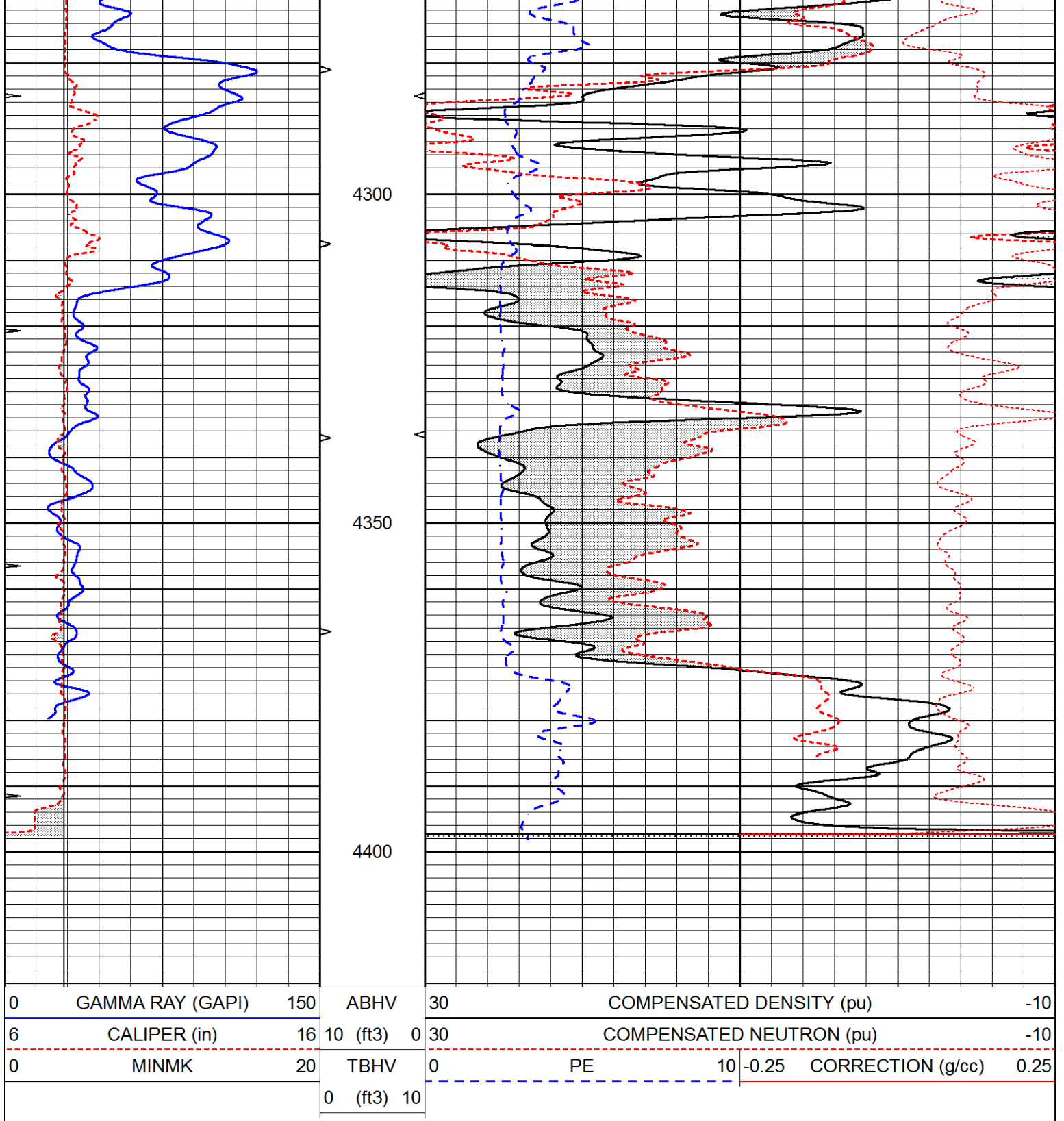


REPEAT SECTION

Database File 5611pe.db
 Dataset Pathname pass3.1
 Presentation Format _ldt_neu
 Dataset Creation Thu Aug 05 12:17:40 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	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					





Calibration Report

Database File 5611pe.db
 Dataset Pathname pass3.1
 Dataset Creation Thu Aug 05 12:17:40 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		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: 002N Model: PRB

Master Calibration						Performed Tue Mar 10 15:08:00 2020		
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	780.1	6981.9	2088.6	1871.2				cps
Window 2	718.6	5898.2	1813.8	1664.1				cps
Window 3	580.0	2989.5	1088.0	1039.1				cps
Window 4	172.8	175.7	175.3	173.5				cps
Long Space	0.0	5179.6	1095.2	945.5				cps
Short Space	1.1	1228.6	821.2	690.4				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 45.5	Rib Slope	: 1.016	Density/Spine Ratio				: 0.548
Spine Angle	: 75.5	Spine Slope	: 3.857	Spine Intercept				: -18.9

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				

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	

Compensated Neutron Calibration Report

Serial Number: 6I
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