

COMPENSATED DENSITY/NEUTRON PE LOG

Company SHAKESPEARE OIL COMPANY, INC.

Well TRACTOR #1-13

Field

County SCOTT

State KANSAS

Location: API # : 15-171-21277-0000

50' FNL & 1270' FEL

Other Services
DIL/MEL

SEC 13 TWP 18S RGE 32W

Elevation

Permanent Datum GROUND LEVEL Elevation 2970

Log Measured From KELLY BUSHING 8' A.G.L

Drilling Measured From KELLY BUSHING

K.B. 2978
D.F. 2976
G.L. 2970

Date 9/1/21

Run Number ONE

Depth Driller 4675

Depth Logger 4677

Bottom Logged Interval 4649

Top Log Interval 3600

Casing Driller 8 5/8" @ 265

Casing Logger 265

Bit Size 7 7/8

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.3/55

pH / Fluid Loss 10.5/8.0

Source of Sample FLOWLINE

Rm @ Meas. Temp .90 @ 90F

Rmf @ Meas. Temp .67 @ 90F

Rmc @ Meas. Temp 1.08 @ 90F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .66 @ 122F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom

Maximum Recorded Temperature 122F

Equipment Number 3802

Location HAYS, KANSAS

Recorded By JASON CAPPELLUCCI

Witnessed By KENT MATSON

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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

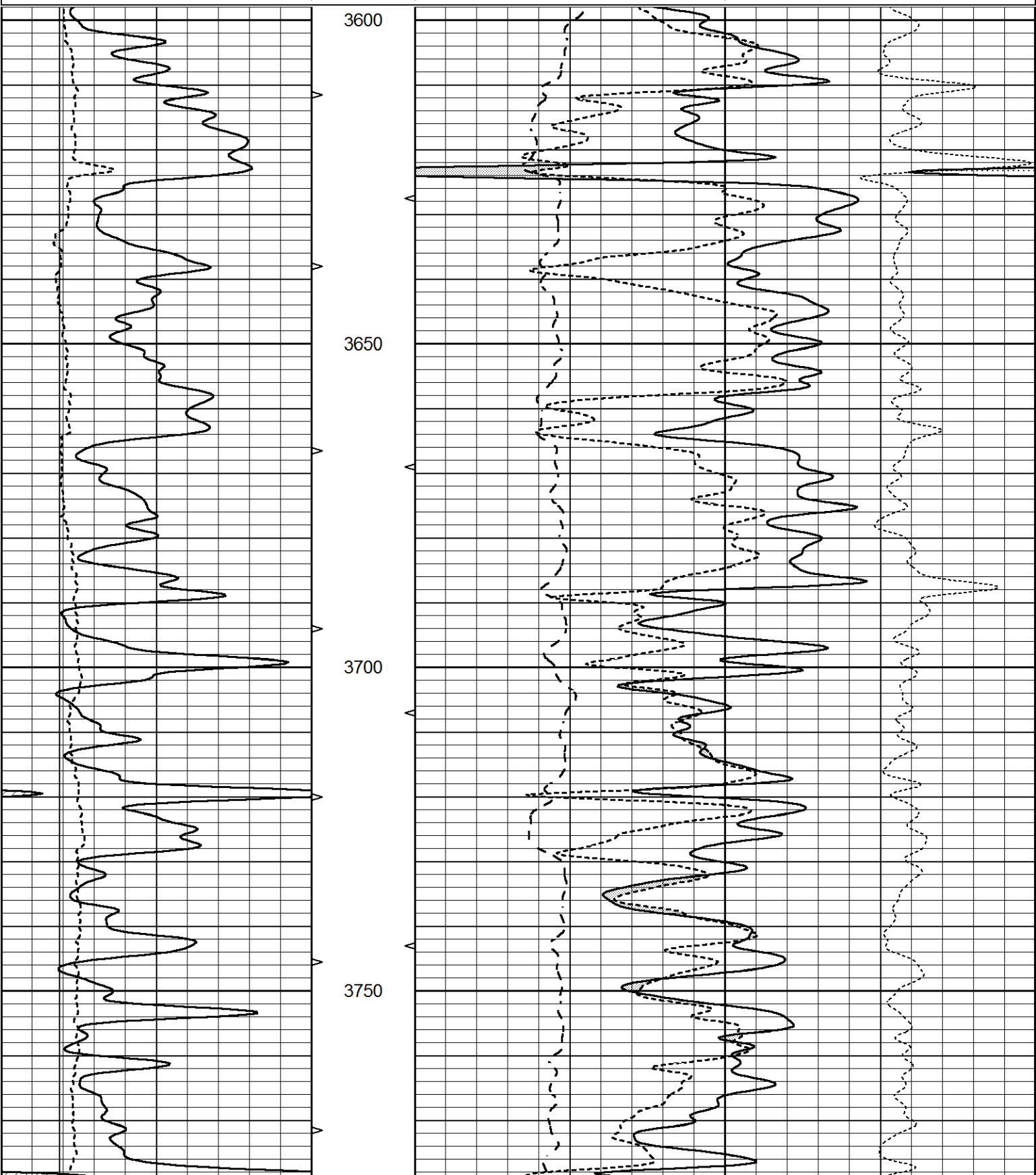
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
SCOTT CITY, KS. - 6 EAST TO RODEO RD. - 1 NORTH - 1/2 WEST - SOUTH INTO

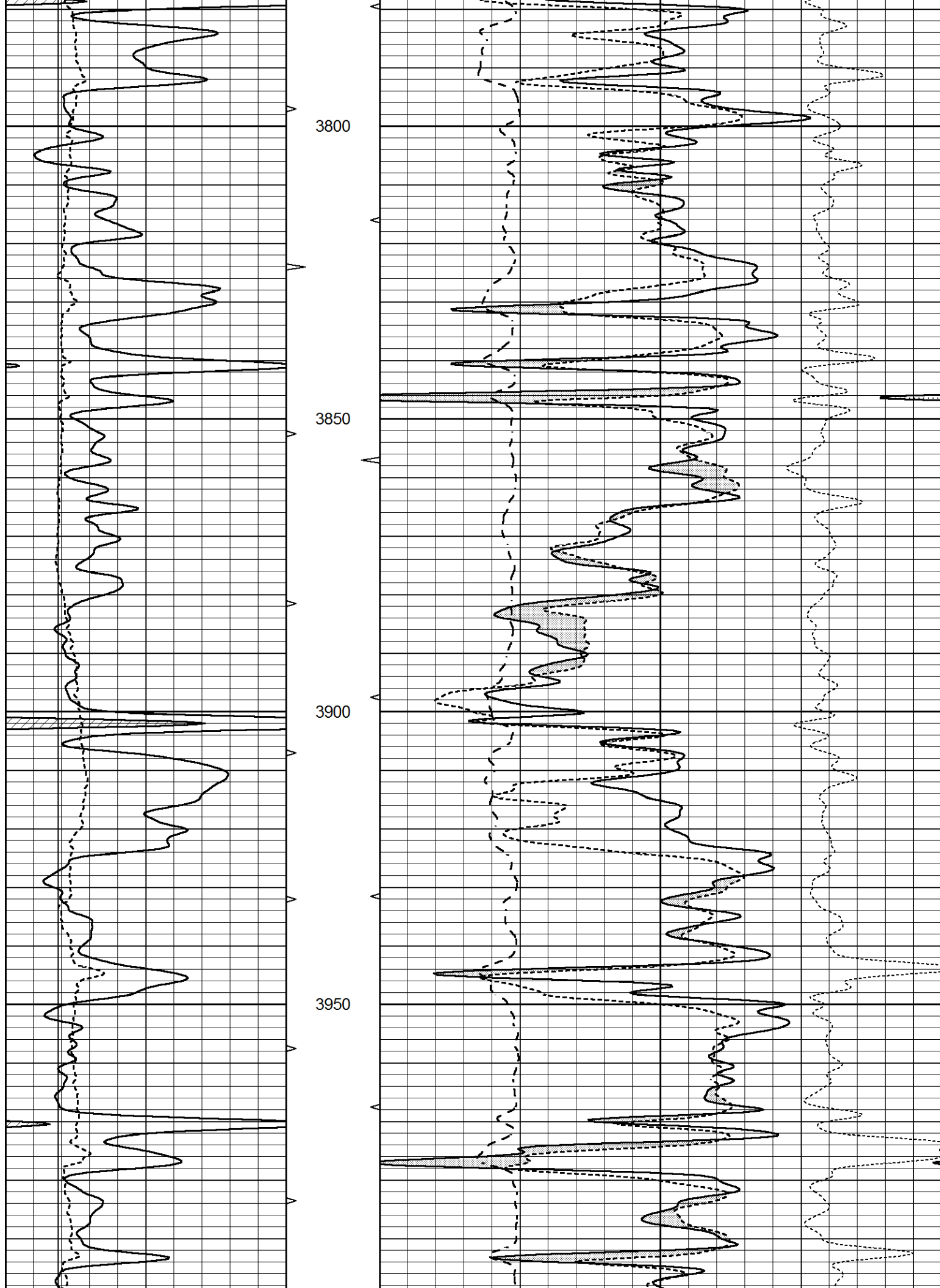


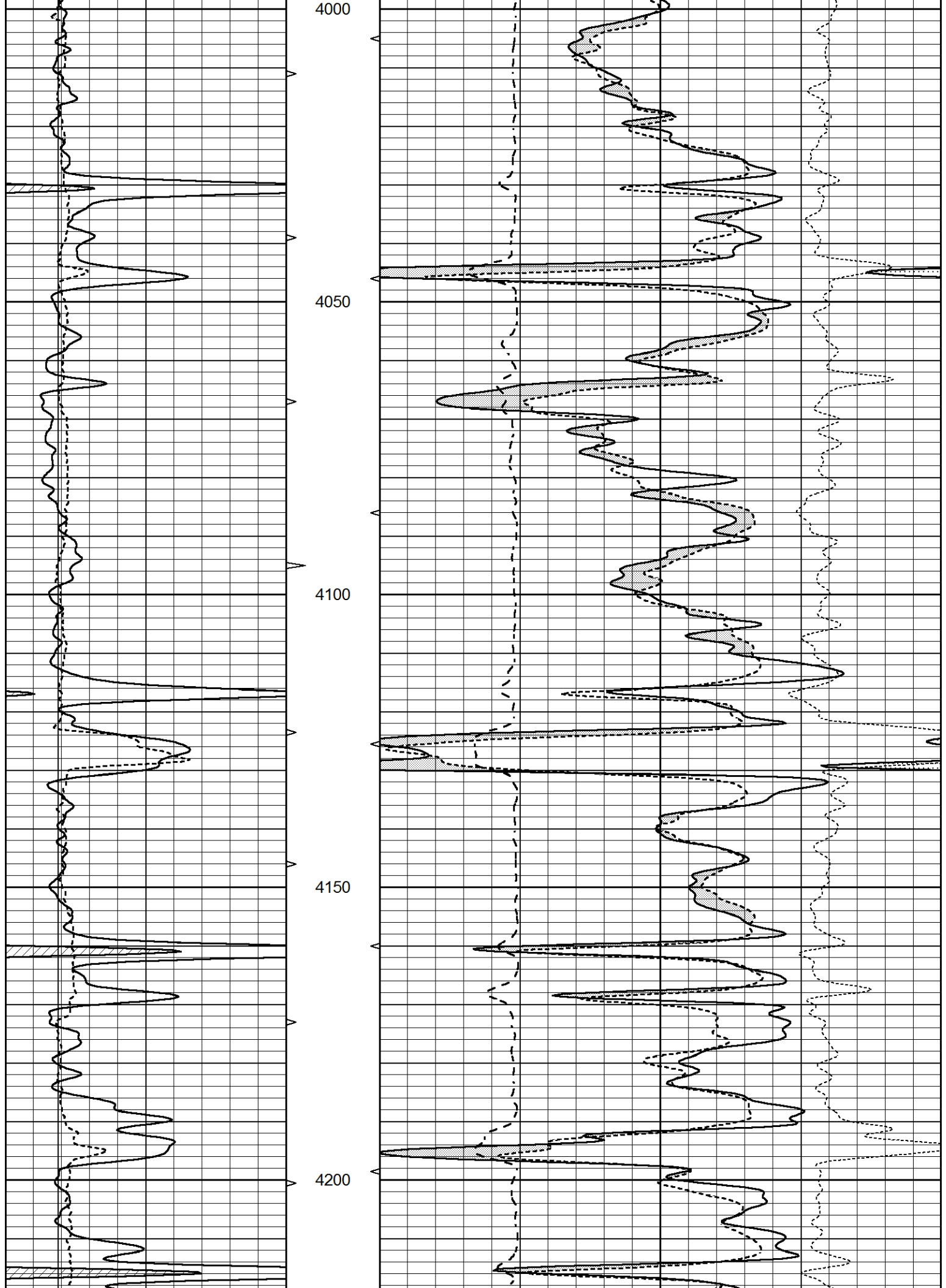
MAIN SECTION

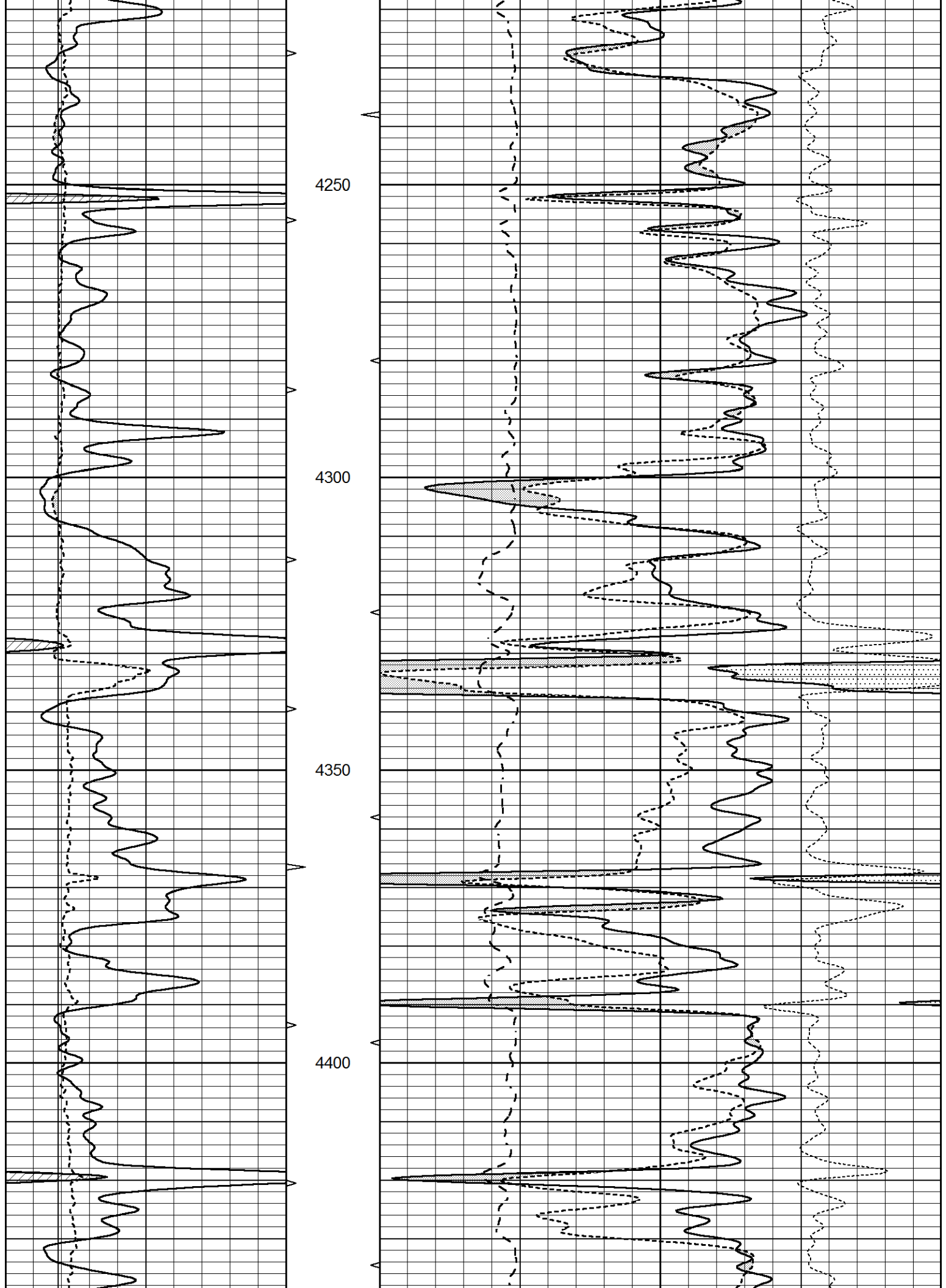
Database File	5649pe.db
Dataset Pathname	pass3.1
Presentation Format	_ldt_neu
Dataset Creation	Wed Sep 01 18:05:10 2021
Charted by	Depth in Feet scaled 1:240

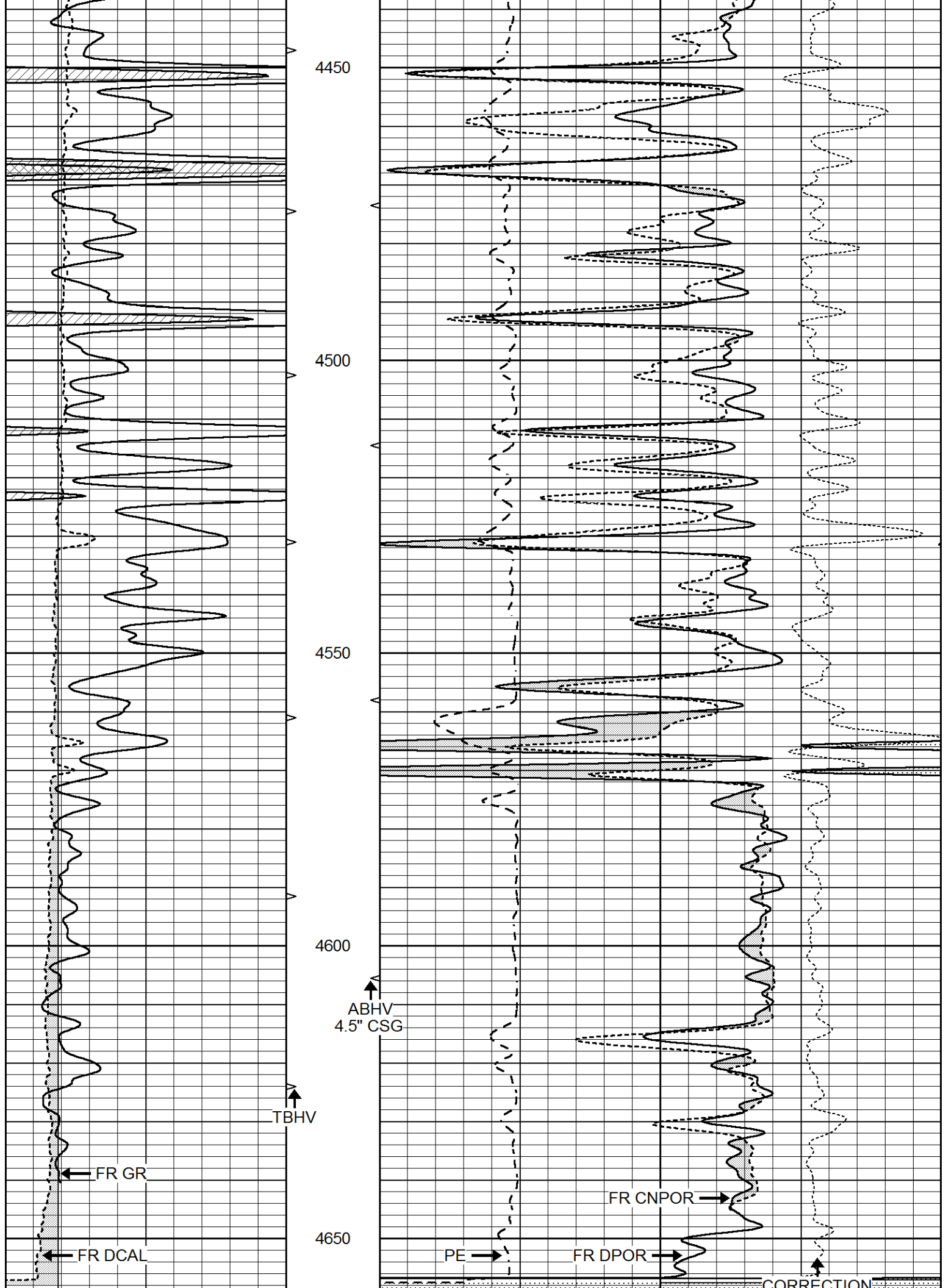
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)	-10
			TBHV	0	PE	10
			0 (ft3)	10	-0.25	CORRECTION (g/cc)
					0	LTEN (lb)
						5000











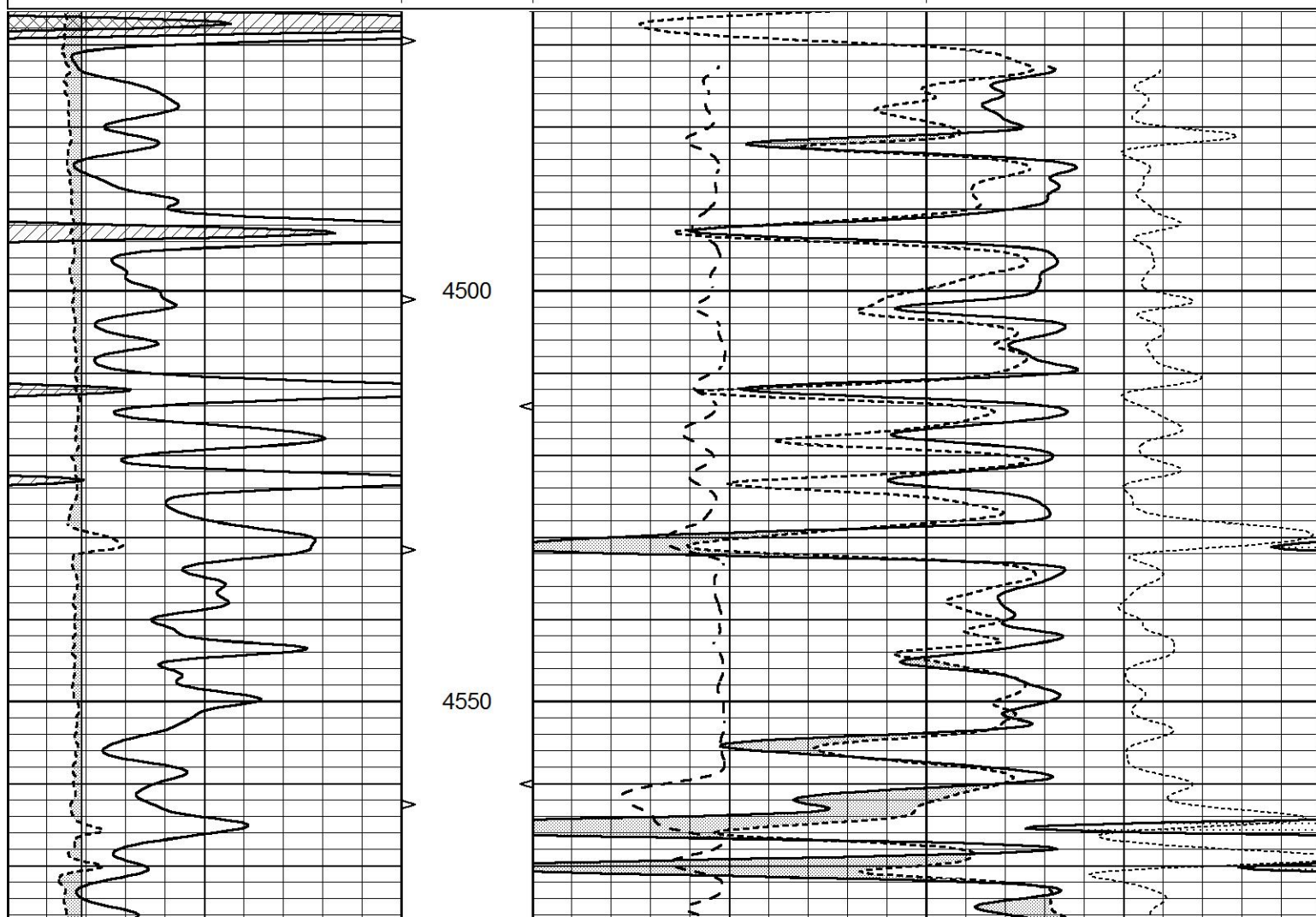
						CORRECTION		
						2.71 LIMESTONE MATRIX		
			LTD 4677					
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)			-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)			-10
			TBHV	0	PE	10	-0.25	CORRECTION (g/cc) 0.25
			0 (ft3) 10				0	LTEN (lb) 5000

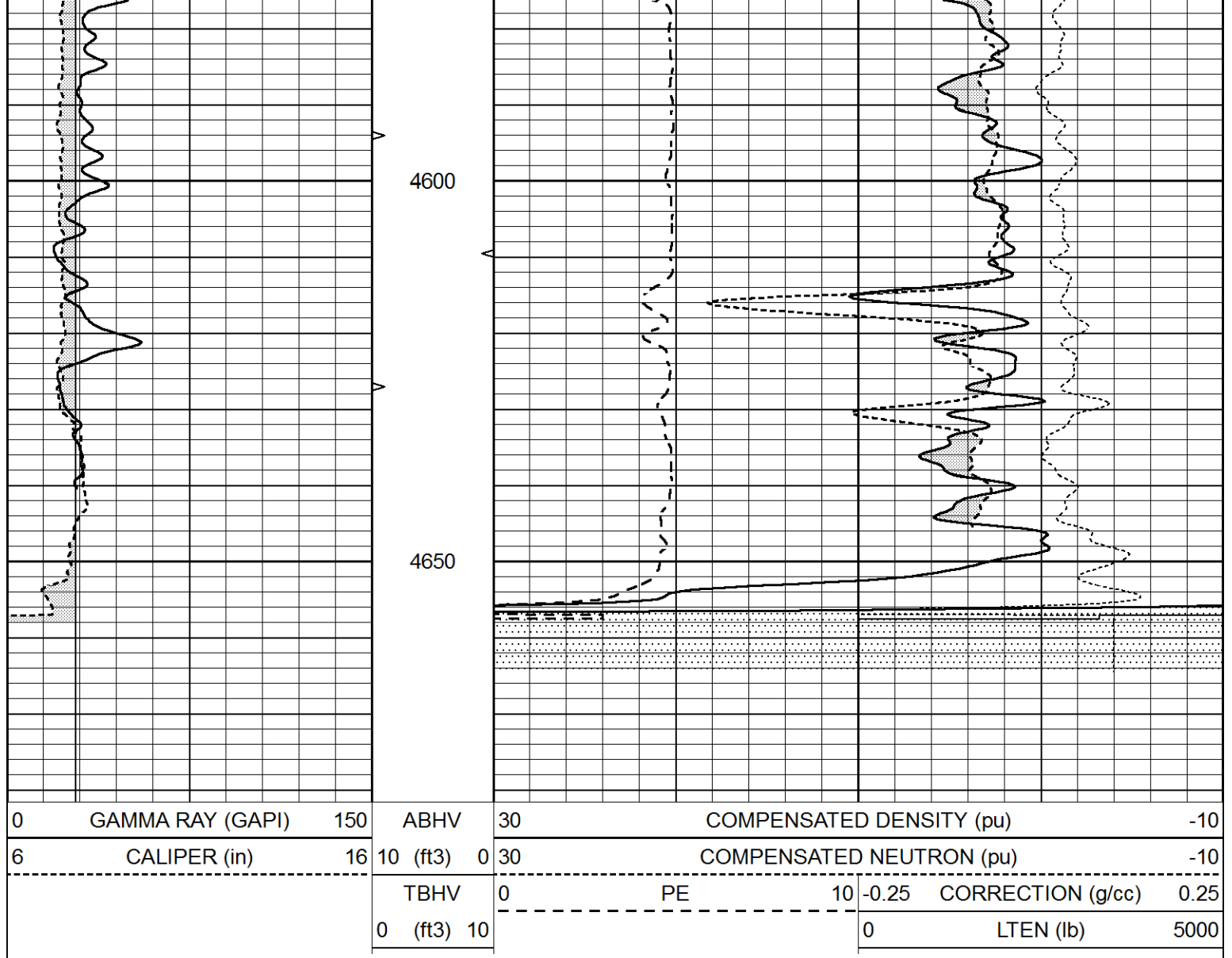


REPEAT SECTION

Database File 5649pe.db
 Dataset Pathname pass2.1
 Presentation Format _ldt_neu
 Dataset Creation Wed Sep 01 17:53:39 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
			TBHV	0	PE	10	-0.25	CORRECTION (g/cc) 0.25
			0 (ft3) 10				0	LTEN (lb) 5000





Calibration Report

Database File 5649pe.db
Dataset Pathname pass2.1
Dataset Creation Wed Sep 01 17:53:39 2021

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
Surface Cal Performed: Tue Feb 19 11:44:18 2019
Downhole Cal Performed: Tue Feb 19 11:44:24 2019
After Survey Verification Performed: Tue Feb 19 11:44:27 2019

Surface Calibration

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

Readings References Results

	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report								
Serial: 140704								
Model: V4_10P								
Source Number: 74GBq-19								

Master Calibration					Performed: Mon Dec 07 12:12:14 2020			
	Background	Aluminum	Magnesium					
Window 1	557.73	5525.14	24361.20	cps				
Window 2	47.08	1245.09	5901.17	cps				
Window 4	239.06	1250.70	5456.76	cps				
Window 5	564.08	8300.56	16134.07	cps				
Window 6	44.21	1356.78	2705.40	cps				
Window 8	267.87	2686.97	5150.30	cps				
Bulk Density	-	2.6020	1.6830	g/cc				
Pe	-	3.0000	2.5070	b/e				
LS Alpha:	: -1.8719	SS Alpha:	: -0.8000	LS CPE:	: 1.1424			
LS Beta:	: 135562.6841	SS Beta:	: 20128.7209	SS CPE:	: 1.5489			

Before Survey Background Counts Verification			Performed: Wed Dec 31 18:00:00 1969		
Window 1	0.00	cps			
Window 2	0.00	cps			
Window 4	0.00	cps			
Window 5	0.00	cps			
Window 6	0.00	cps			
Window 8	0.00	cps			

After Survey Background Counts Verification			Performed: Wed Dec 31 18:00:00 1969
Window 1	0.00	cps	
Window 2	0.00	cps	
Window 4	0.00	cps	
Window 5	0.00	cps	
Window 6	0.00	cps	
Window 8	0.00	cps	

Lithodensity Caliper Calibration			Performed: Mon Dec 07 12:12:14 2020		
Results	Readings	References (in)			

Low 10940.2	High 14100.5	Low 8.0	High 14.0	Gain 0.0	Offset -7.0
Before Survey Caliper Verification Performed:					
	Reference	Reading			
Caliper (in)					
After Survey Caliper Verification Performed:					
	Reference	Reading			
Caliper (in)					
Compensated Neutron Calibration Report					
		Serial Number: Tool Model:	080621PMC NABORS		
PRE-SURVEY VERIFICATION					
Detector	Readings	Measured	Target		
Short Space	cps				
Long Space	cps	pu	pu		
POST-SURVEY VERIFICATION					
Detector	Readings	Measured	Target		
Short Space	cps				
Long Space	cps	pu	pu		
Gamma Ray Calibration Report					
Serial Number:		7			
Tool Model:		Probe1			
Performed:		Tue Jan 19 17:50:08 2021			
Calibrator Value:		1.0	GAPI		
Background Reading:		0.0	cps		
Calibrator Reading:		1.0	cps		
Sensitivity:		0.5300	GAPI/cps		