



COMPENSATED DENSITY/NEUTRON LOG

Company	PHILLIPS EXPLORATION COMPANY L.C.	Company	PHILLIPS EXPLORATION COMPANY L.C.
Well	GEYER #3-3	Well	GEYER #3-3
Field	WC	Field	WC
County	TREGO	County	TREGO
State	KANSAS	State	KANSAS
Location:	API # : 15-195-23105-0000 850' FNL & 330' FWL	Other Services DIL/MEL	
Permanent Datum	SEC 3 TWP 11S RGE 24W	Elevation	
Log Measured From	GROUND LEVEL Elevation 2358 KELLY BUSHING 5' A.G.L.	K.B. 2363 D.F. 2361 G.L. 2358	
Drilling Measured From	KELLY BUSHING		
Date	07/12/20		
Run Number	ONE		
Depth Driller	4000		
Depth Logger	3997		
Bottom Logged Interval	3977		
Top Log Interval	3400		
Casing Driller	8 5/8" @ 207		
Casing Logger	207		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3/48		
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.9@ 82F		
Rmf @ Meas. Temp	.68@ 82F		
Rmc @ Meas. Temp	1.08 @ 82F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.70@ 116F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	116F		
Equipment Number	1523		
Location	HAYS, KANSAS		
Recorded By	GUS PFANENSTIEL		
Witnessed By	PAT DEENIHAN		

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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

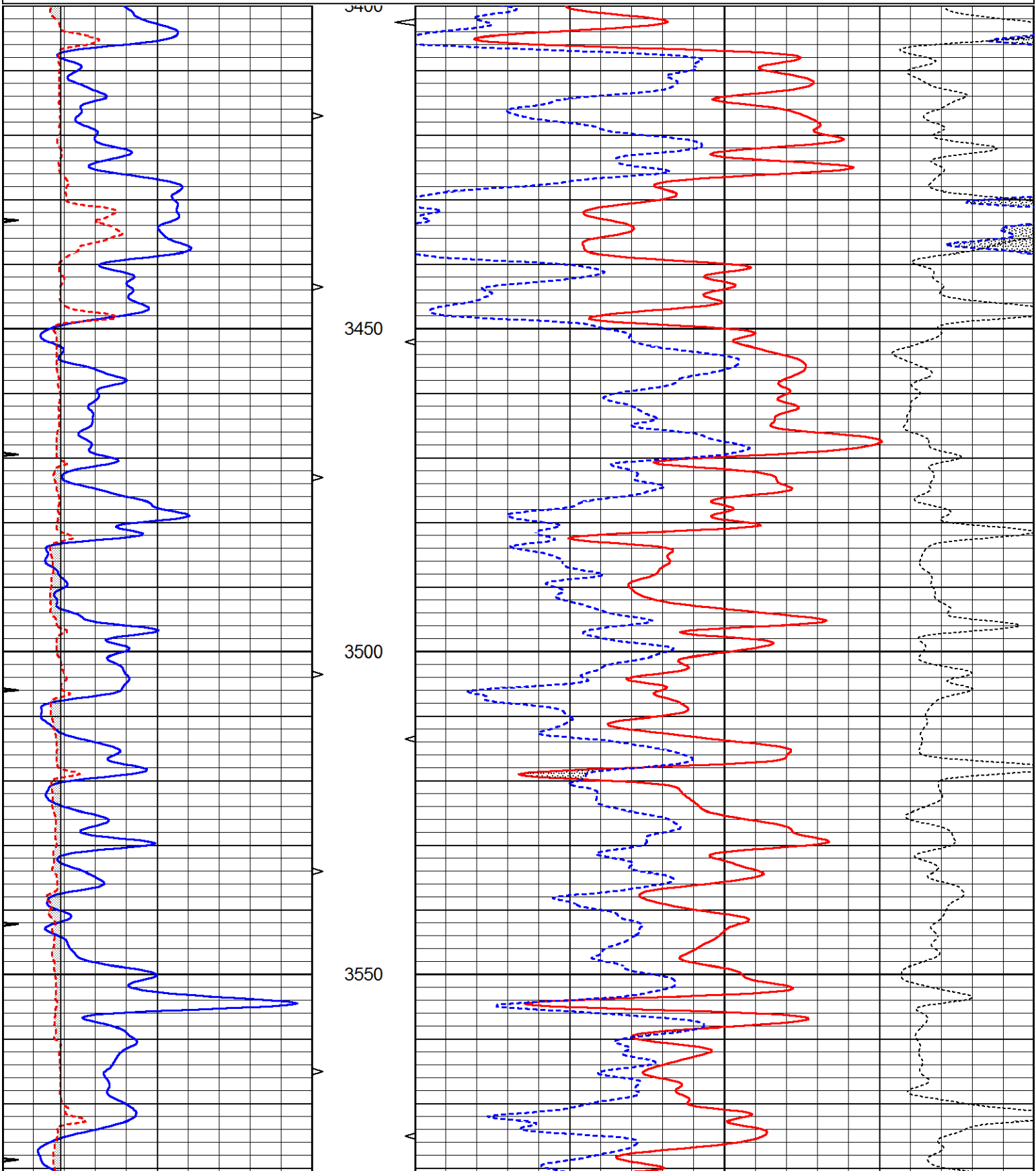
DIRECTIONS: WAKEENEY NORTH TO B RD.
6 WEST TO 200 RD., N 3/4 MILE, EAST INTO.

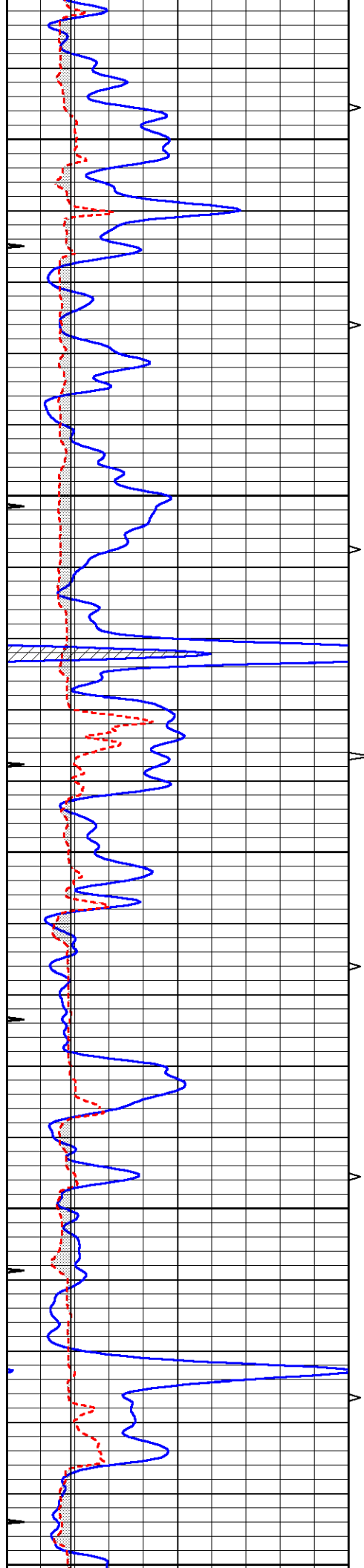


MAIN PASS

Database File	4693ddn.db
Dataset Pathname	pass4.1
Presentation Format	den_neu
Dataset Creation	Sun Jul 12 19:45:21 2020
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					





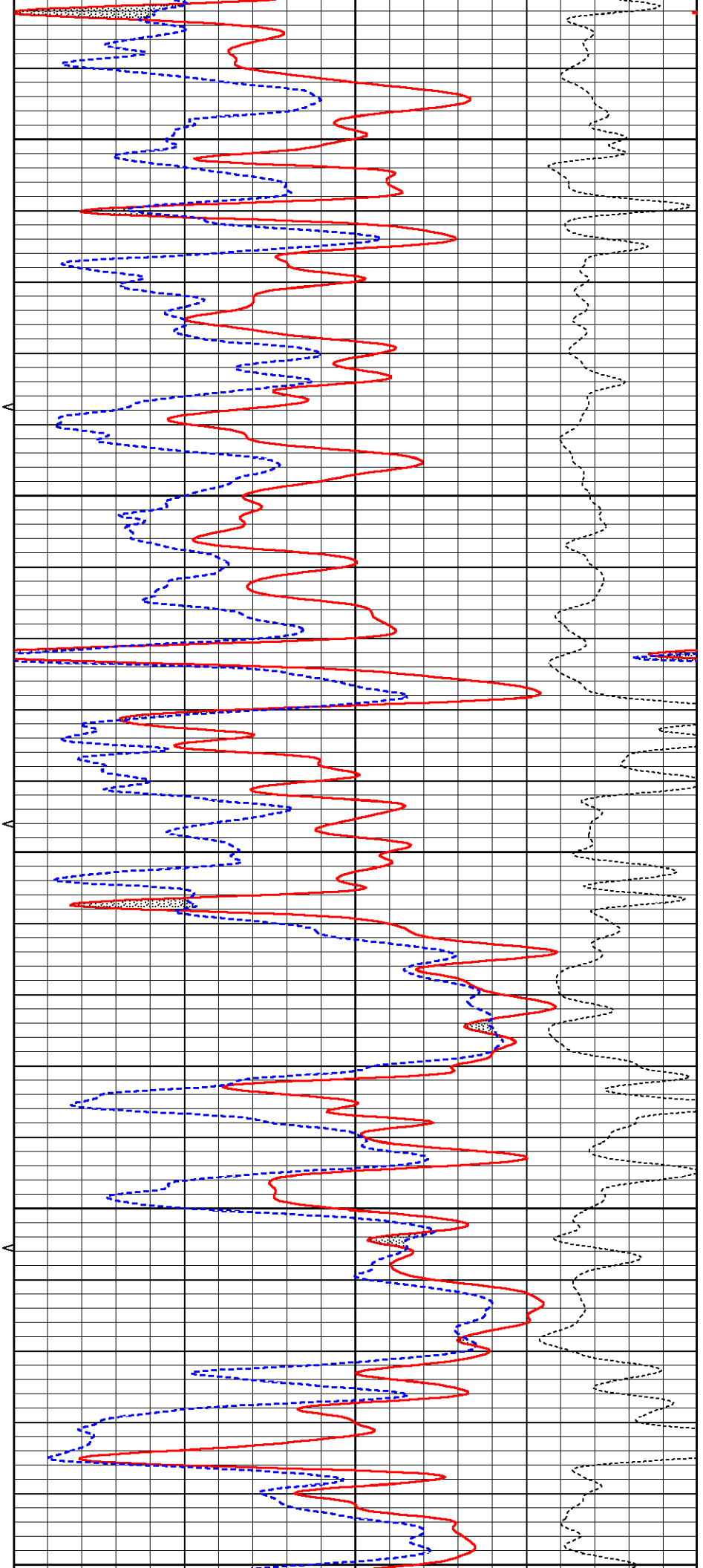
3600

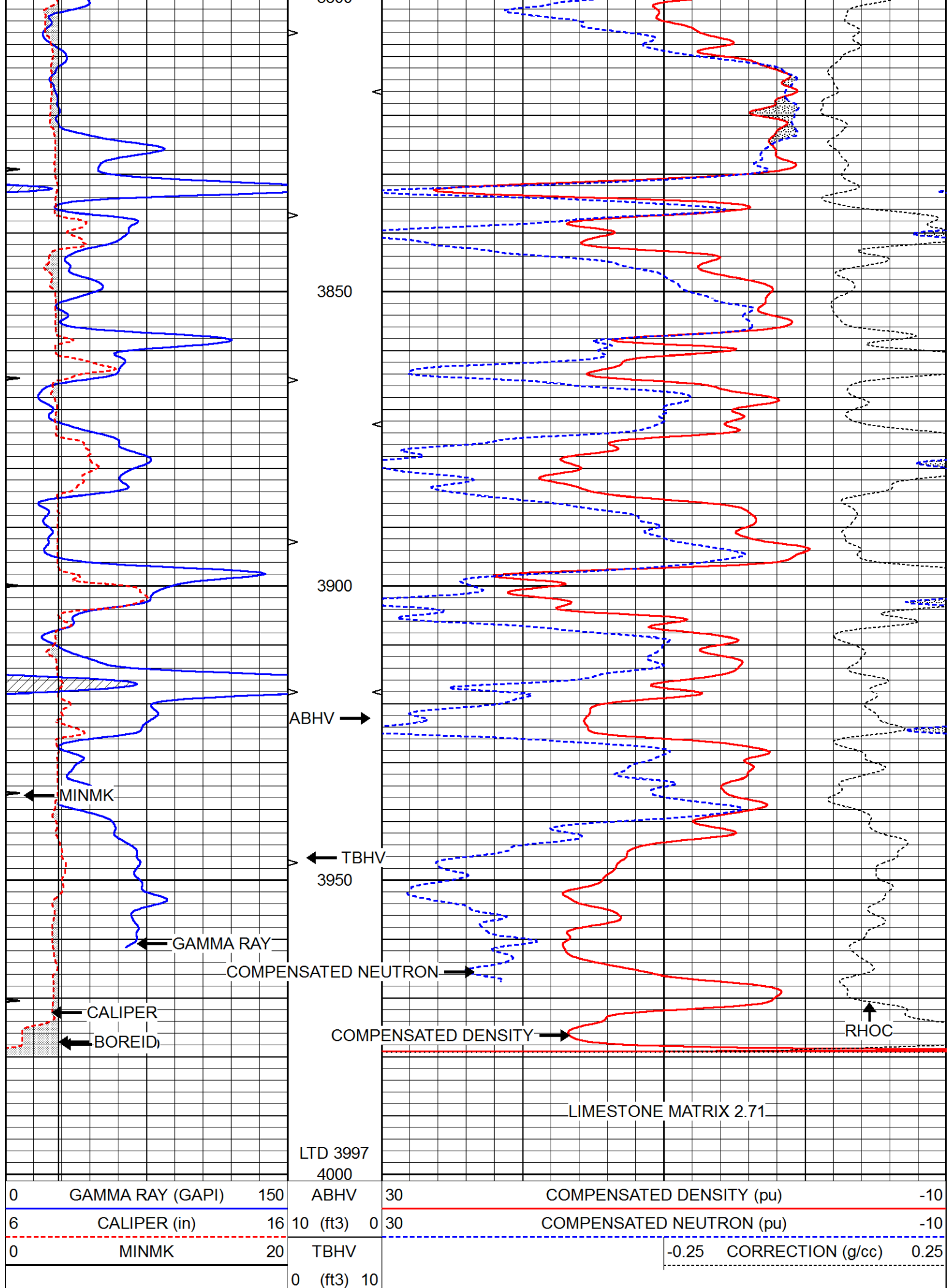
3650

3700

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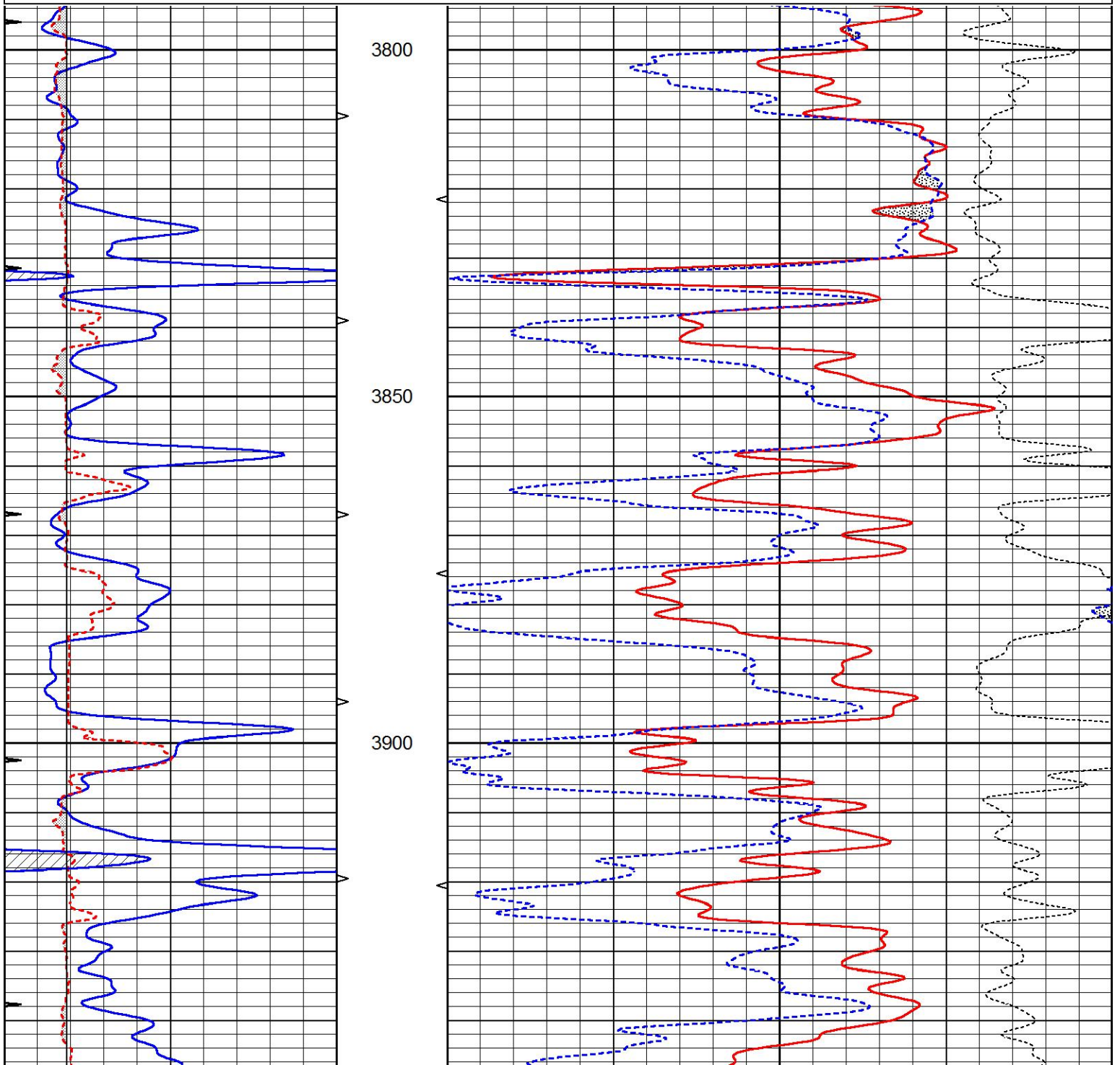


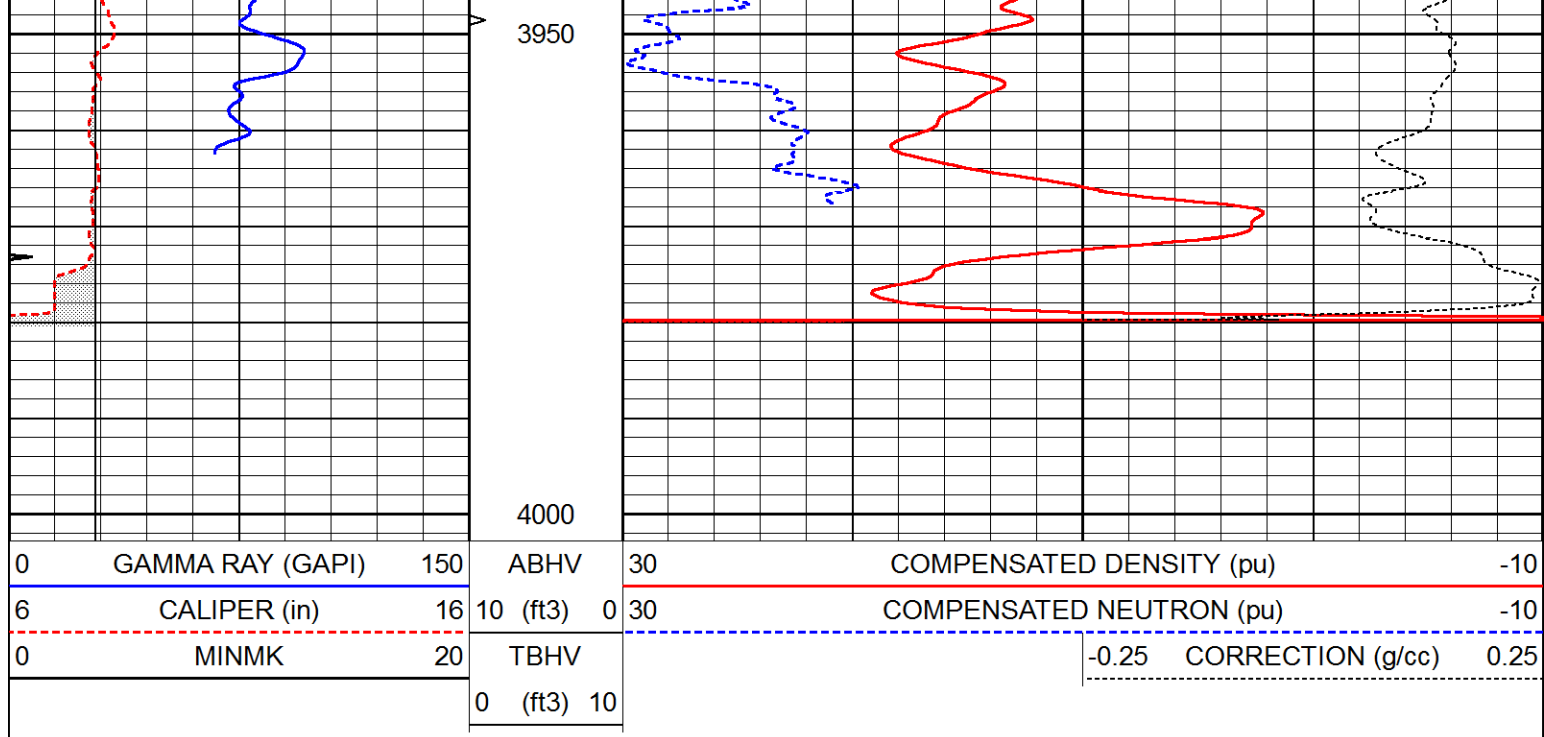


REPEAT SECTION

Database File 4693ddn.db
Dataset Pathname pass3.1
Presentation Format den_neu
Dataset Creation Sun Jul 12 19:17:52 2020
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	4693ddn.db								
Dataset Pathname	pass3.1								
Dataset Creation	Sun Jul 12 19:17:52 2020								
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									
Readings			References				Results		
Loop:	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	

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						
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						
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 Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	
3)	Short Space Long Space	cps cps	pu	
POST-SURVEY VERIFICATION				
	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu
Gamma Ray Calibration Report				
Serial Number:		GR6		
Tool Model:		OPEN		
Performed:		Wed Jul 03 12:57:34 2019		
Calibrator Value:		150.0	GAPI	
Background Reading:		0.0	cps	
Calibrator Reading:		276.0	cps	
Sensitivity:		0.5700	GAPI/cps	