



**COMPENSATED
DENSITY/NEUTRON
LOG**

Company DOWNING NELSON OIL COMPANY, INC.
Well GEIST-TILLET UNIT B #1-22
Field CONNESS
County GRAHAM
State KANSAS

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Field CONNESS
County GRAHAM State KANSAS

Location: API #: 15-065-24187-0000
1645' FSL & 2420' FEL
SEC 22 TWP 10S RGE 23W
Permanent Datum GROUND LEVEL Elevation 2347
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services DILMEL
Elevation K.B. 2355
D.F. 2353
G.L. 2347

Date	11/25/20
Run Number	ONE
Depth Driller	3950
Depth Logger	3952
Bottom Logged Interval	3928
Top Log Interval	3300
Casing Driller	8 5/8" @ 220
Casing Logger	220
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.5/52
pH / Fluid Loss	9.5/10.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.90 @ 64F
Rmf @ Meas. Temp	.67 @ 64F
Rmc @ Meas. Temp	1.08 @ 64F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.49 @ 116F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	////
Maximum Recorded Temperature	116F
Equipment Number	3802
Location	HAYS, KANSAS
Recorded By	JASON CAPPELLUCCI
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

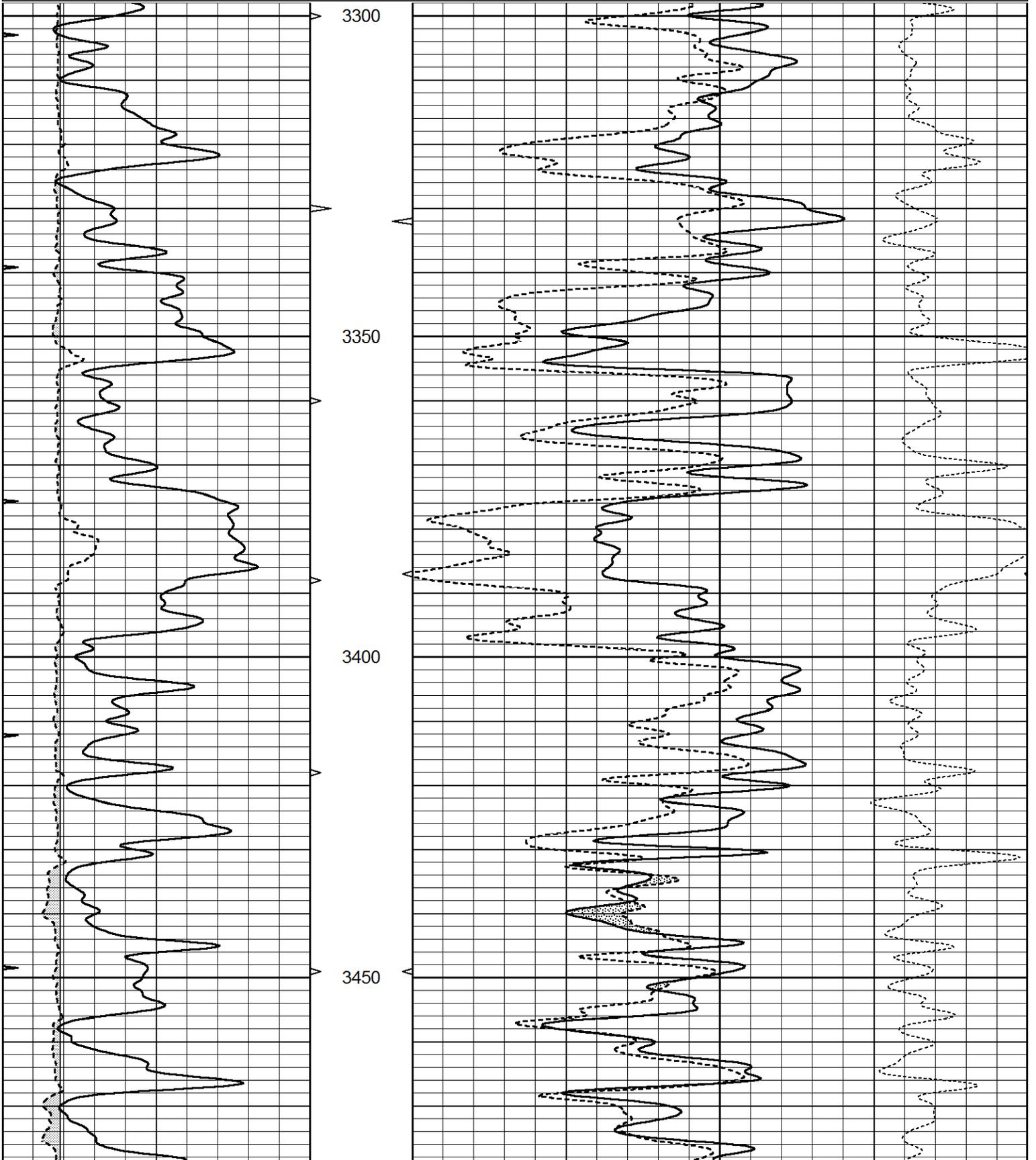
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
WAKEENEY, KS. - NORTH TO GRAHAM COUNTY LINE - 2 MORE NORTH TO C RD.
1/2 WEST - NORTH INTO

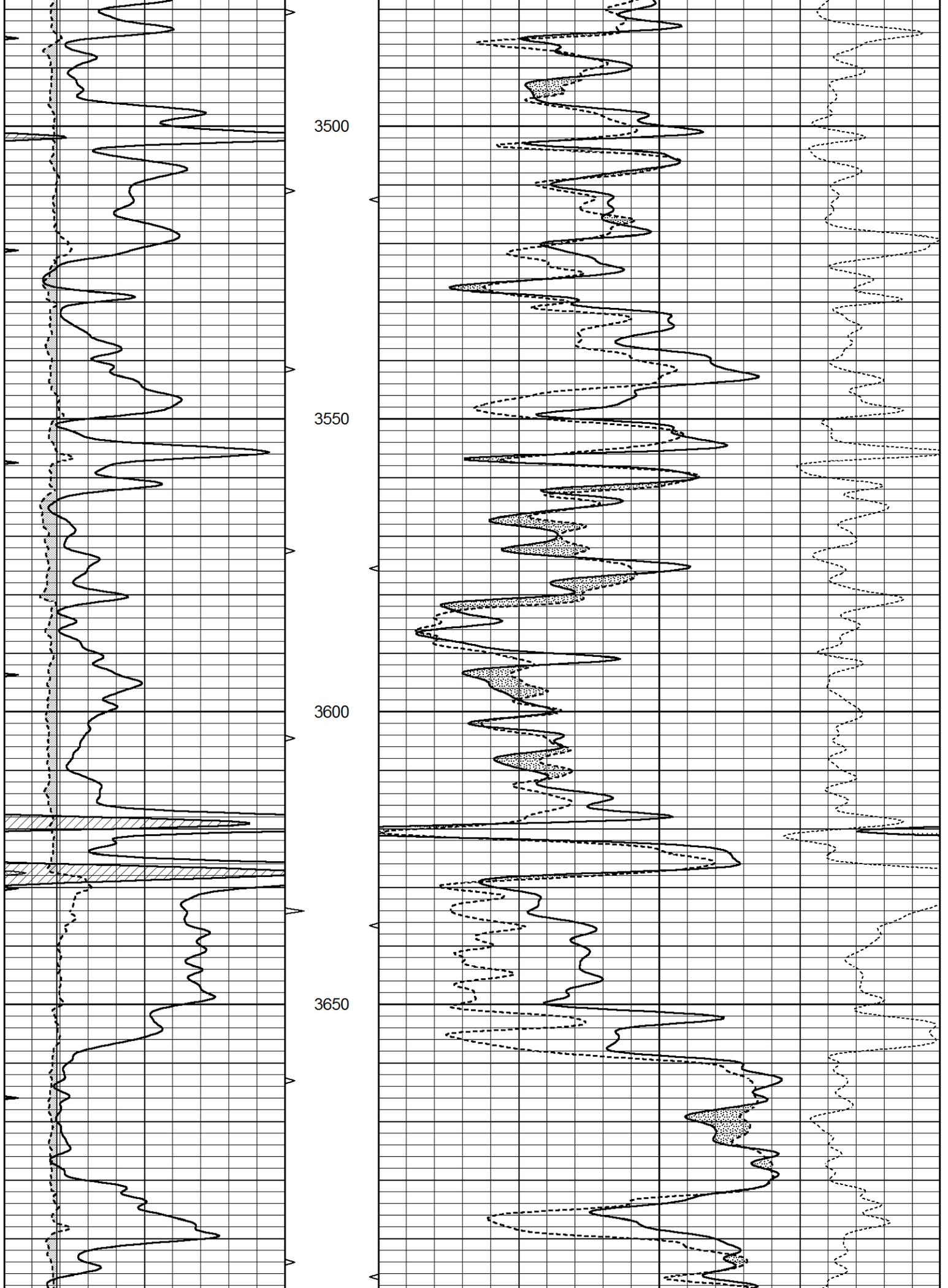


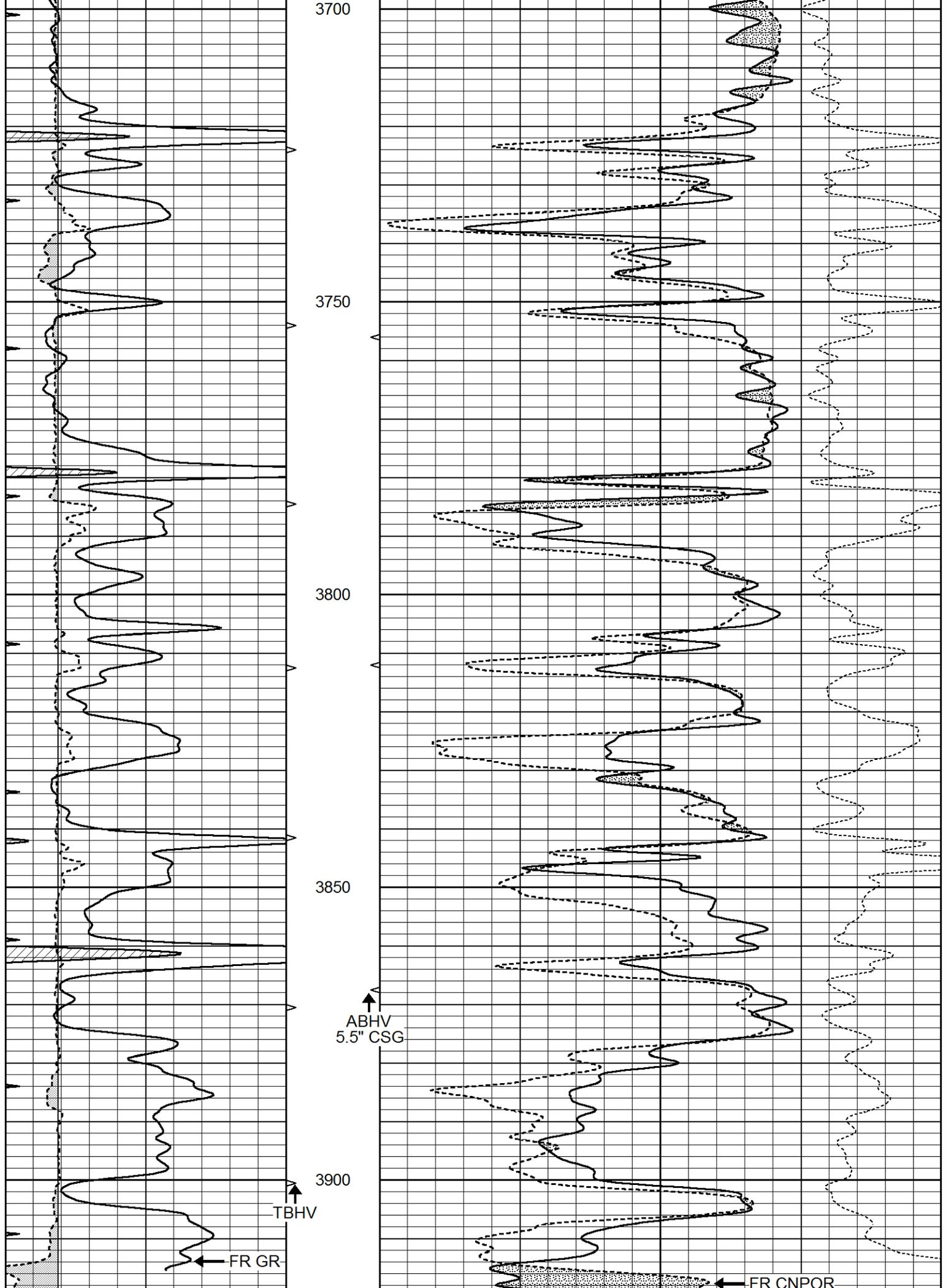
MAIN SECTION

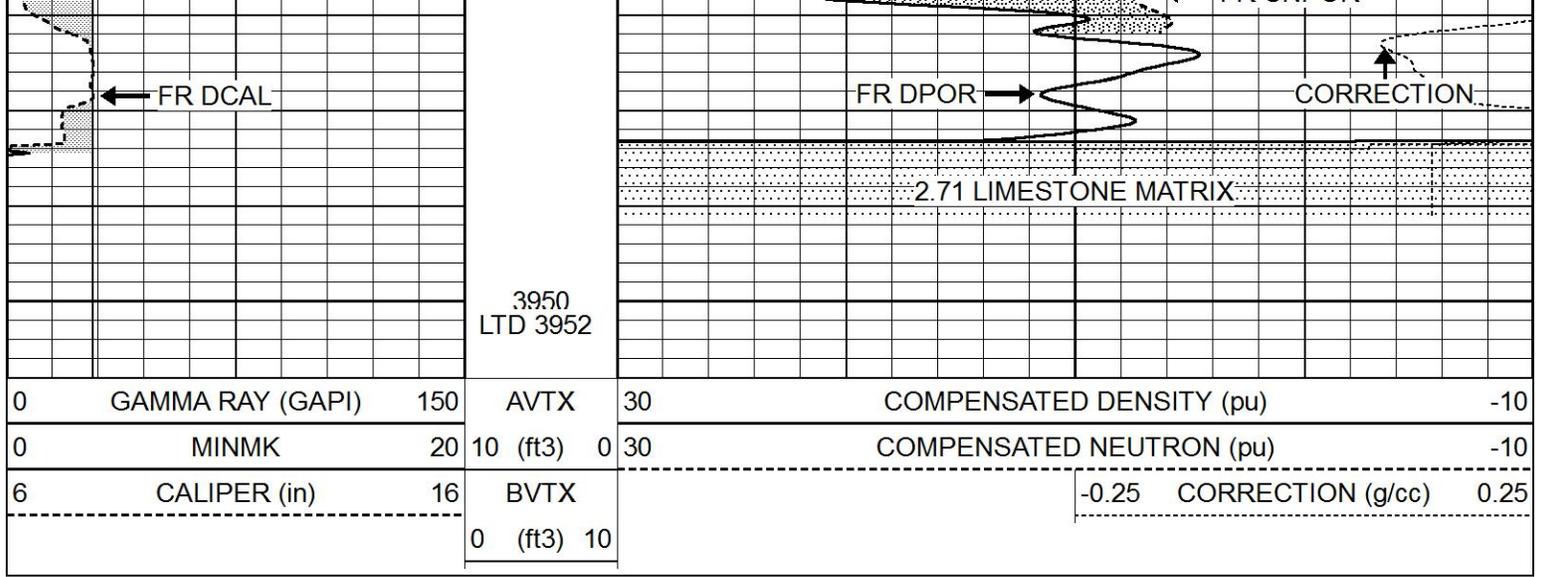
Database File 5242ddn.db
 Dataset Pathname pass4.1
 Presentation Format _den_neu
 Dataset Creation Wed Nov 25 08:01:25 2020
 Charted by Depth in Feet scaled 1:240

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





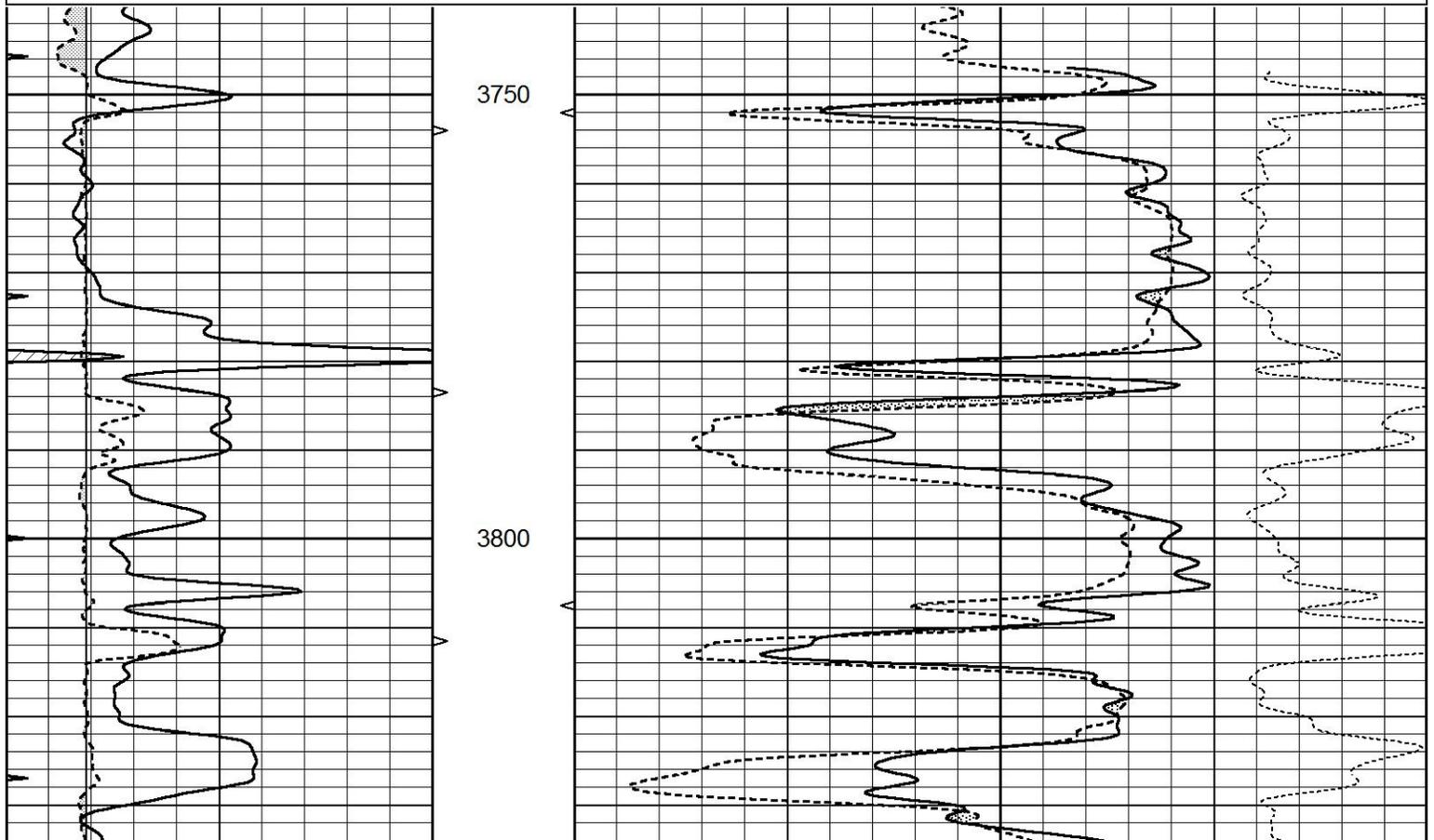


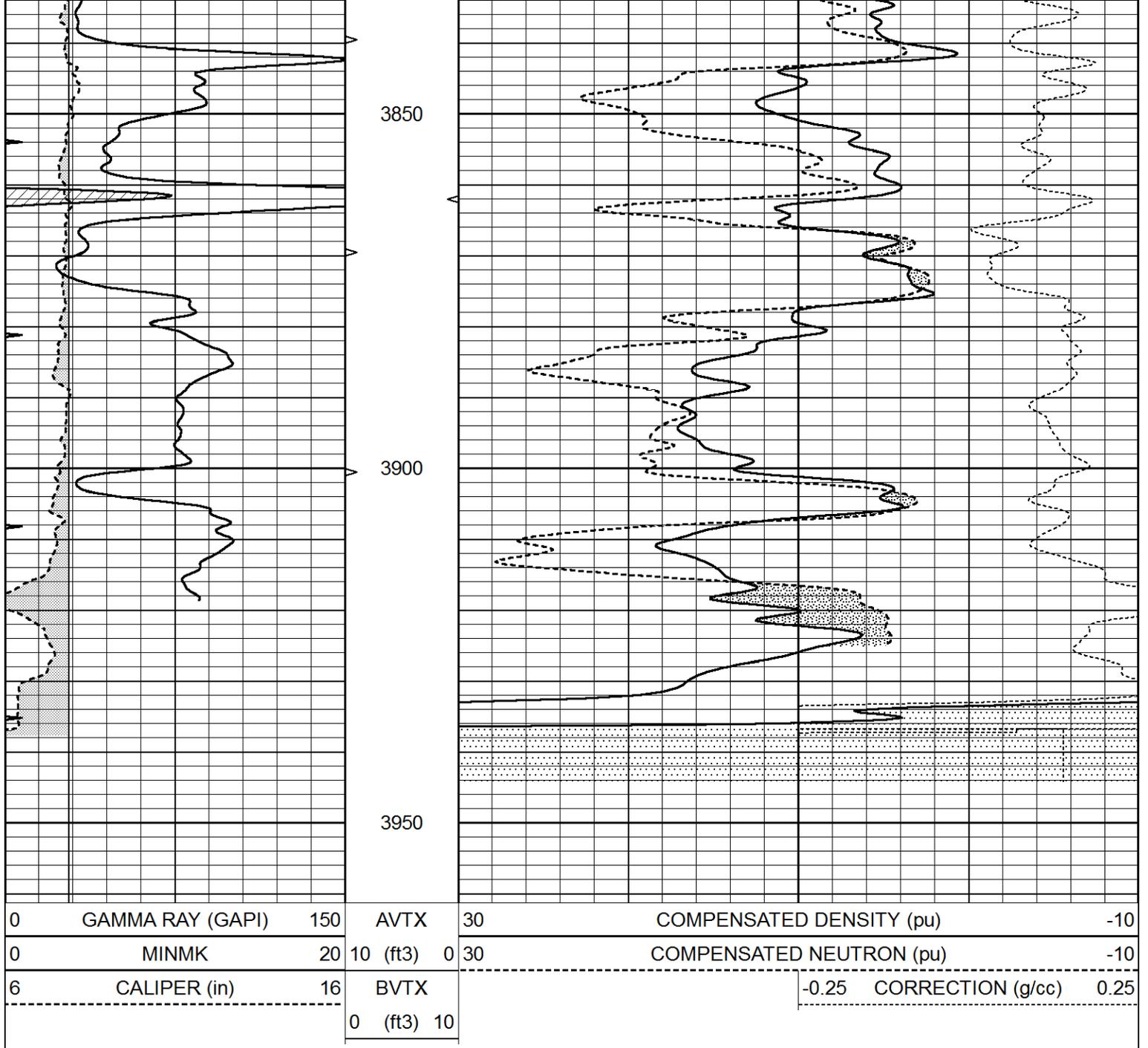


REPEAT SECTION

Database File 5242ddn.db
 Dataset Pathname pass2.2
 Presentation Format _den_neu
 Dataset Creation Wed Nov 25 08:00:23 2020
 Charted by Depth in Feet scaled 1:240

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





Calibration Report

Database File 5242ddn.db
 Dataset Pathname pass2.2
 Dataset Creation Wed Nov 25 08:00:23 2020

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

Loop:	Readings			References			Results	
	Air	Loop	V	Air	Loop	mmho/m	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: 140703
Model: V4_10P
Source Number: 74GBq-19

Master Calibration				Performed: Fri Oct 30 10:28:51 2020			
	Background	Aluminum		Magnesium			
Window 1	542.44	5567.78		24103.74	cps		
Window 2	44.66	1254.11		5862.88	cps		
Window 4	233.89	1249.47		5395.29	cps		
Window 5	561.63	8508.97		16290.56	cps		
Window 6	44.30	1445.42		2841.86	cps		
Window 8	267.45	2710.48		5092.88	cps		
Bulk Density	-	2.6020		1.6830	g/cc		
Pe	-	3.0000		2.5070	b/e		
LS Alpha:	: -1.8545	SS Alpha:	: -0.7763	LS CPE:		: 1.1359	
LS Beta:	: 130052.2542	SS Beta:	: 19130.5414	SS CPE:		: 1.4655	

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: Fri Oct 30 10:28:51 2020

Results		Readings		References (in)		Gain	Offset
Low	High	Low	High				
4306.9	7563.2	8.0	14.0			0.0	-0.5

Before Survey Caliper Verification Performed:

Caliper (in)	Reference	Reading
_____	_____	_____

After Survey Caliper Verification Performed:

Caliper (in)	Reference	Reading
_____	_____	_____

Compensated Neutron Calibration Report

Serial Number: 080621PMC
 Tool Model: 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 Dec 10 10:02:55 2019

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.4800 GAPI/cps