

COMPENSATED
DENSITY/NEUTRON
PE LOG

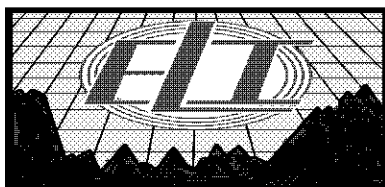
Company	EDISON OPERATING COMPANY, LLC.	
Well	O'CONNOR #1-8	
Field	KNOCHE SOUTH	
County	STAFFORD	State KANSAS
Location:	API #: 15-185-24053-0000	Other Services DIL/MEL SON
SEC 8 TWP 24S RGE 12W		
Permanent Datum	GROUND LEVEL Elevation	1885
Log Measured From	KELLY BUSHING 10' A.G.L.	
Drilling Measured From	KELLY BUSHING	Elevation K.B. 1895 D.F. 1893 G.L. 1885
Date	5/25/19	
Run Number	ONE	
Depth Driller	4140	
Depth Logger	4141	
Bottom Logged Interval	4117	
Top Log Interval	2900	
Casing Driller	8 5/8" @ 418	
Casing Logger	417	
Bit Size	7 7/8	
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 10400 PPM
Density / Viscosity	9.2/50	
pH / Fluid Loss	10.0/10.4	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp	.40 @ 92F	
Rmf @ Meas. Temp	.30 @ 92F	
Rmc @ Meas. Temp	.48 @ 92F	
Source of Rmf / Rmc	MEASUREMENT	
Rm @ BHT	.31 @ 117F	
Time Circulation Stopped	2 HOURS	
Time Logger on Bottom	////	
Maximum Recorded Temperature	117F	
Equipment Number	3802	
Location	HAYS, KANSAS	
Recorded By	JASON CAPPELLUCCI	
Witnessed By	DEREK PATTERSON	

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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

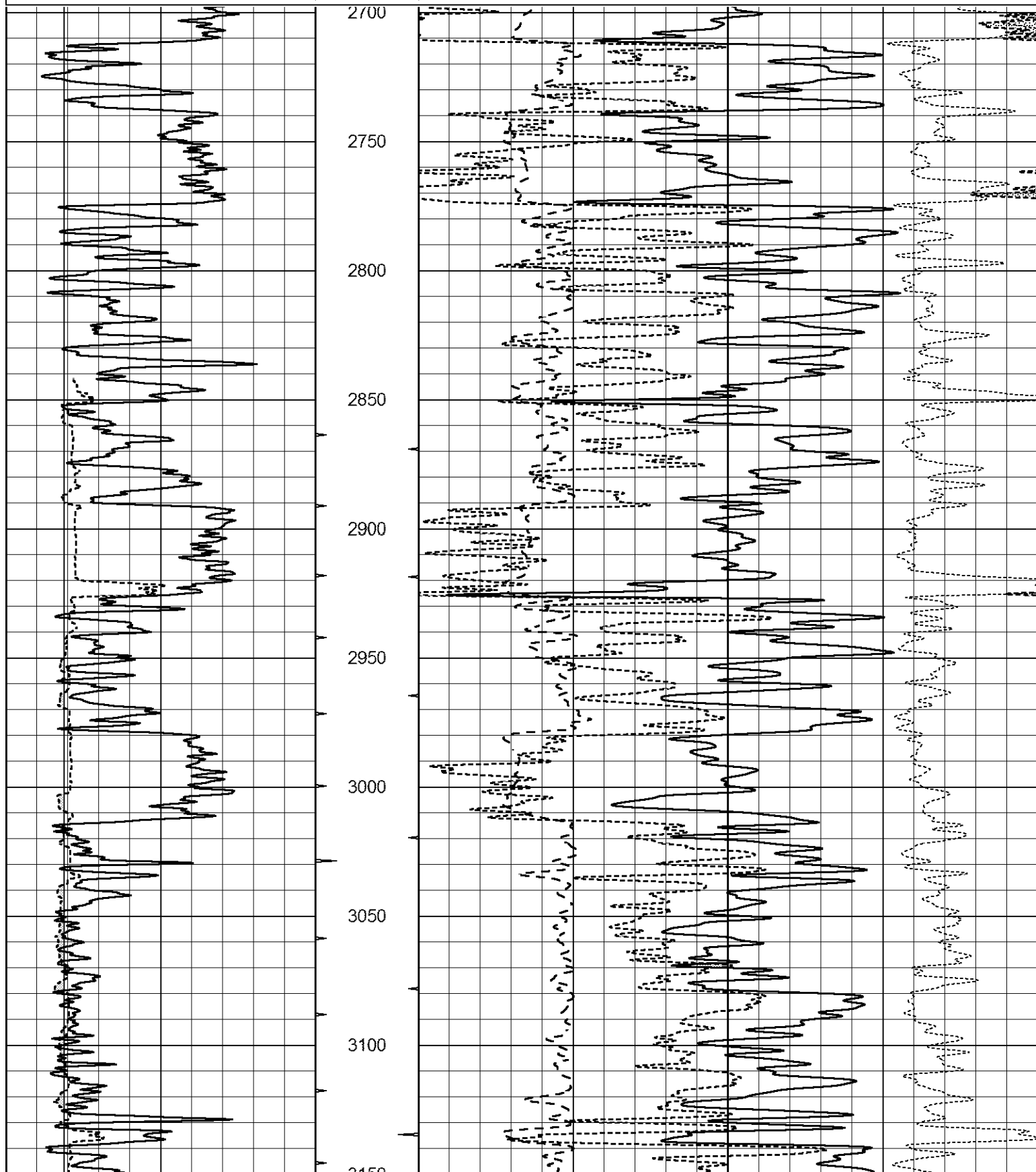
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
STAFFORD, KS. - 3 WEST TO RD 50 - 2 NORTH TO RD. 10 - 1/4 WEST - NORTH INTO

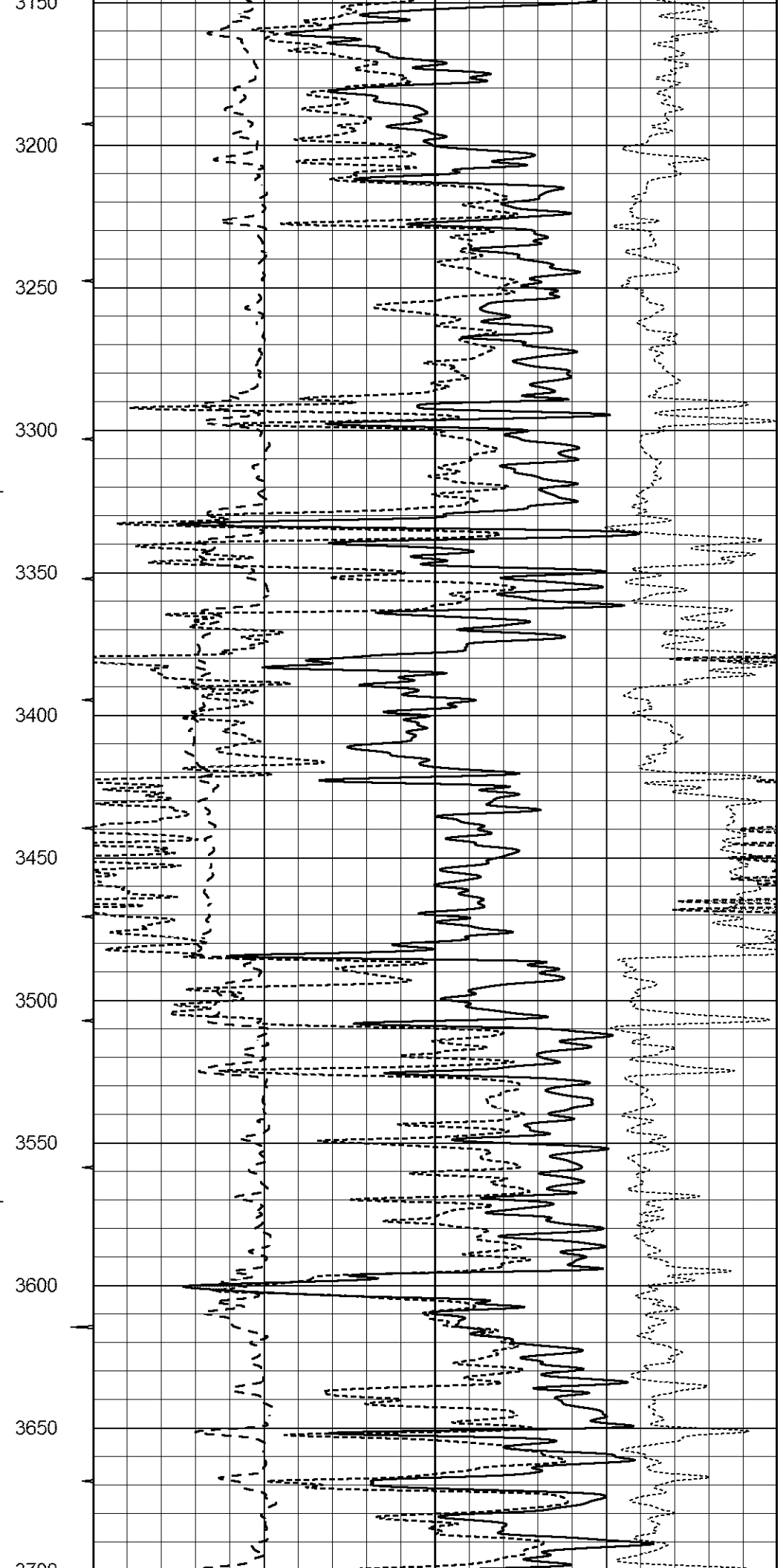
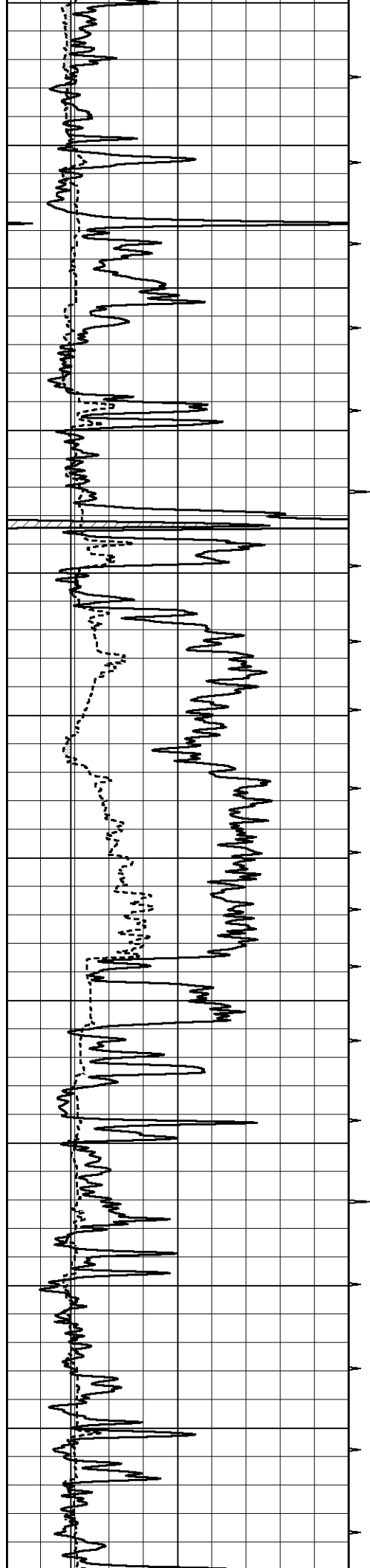


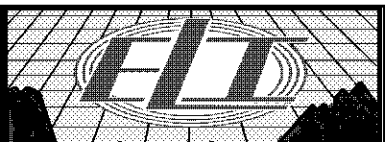
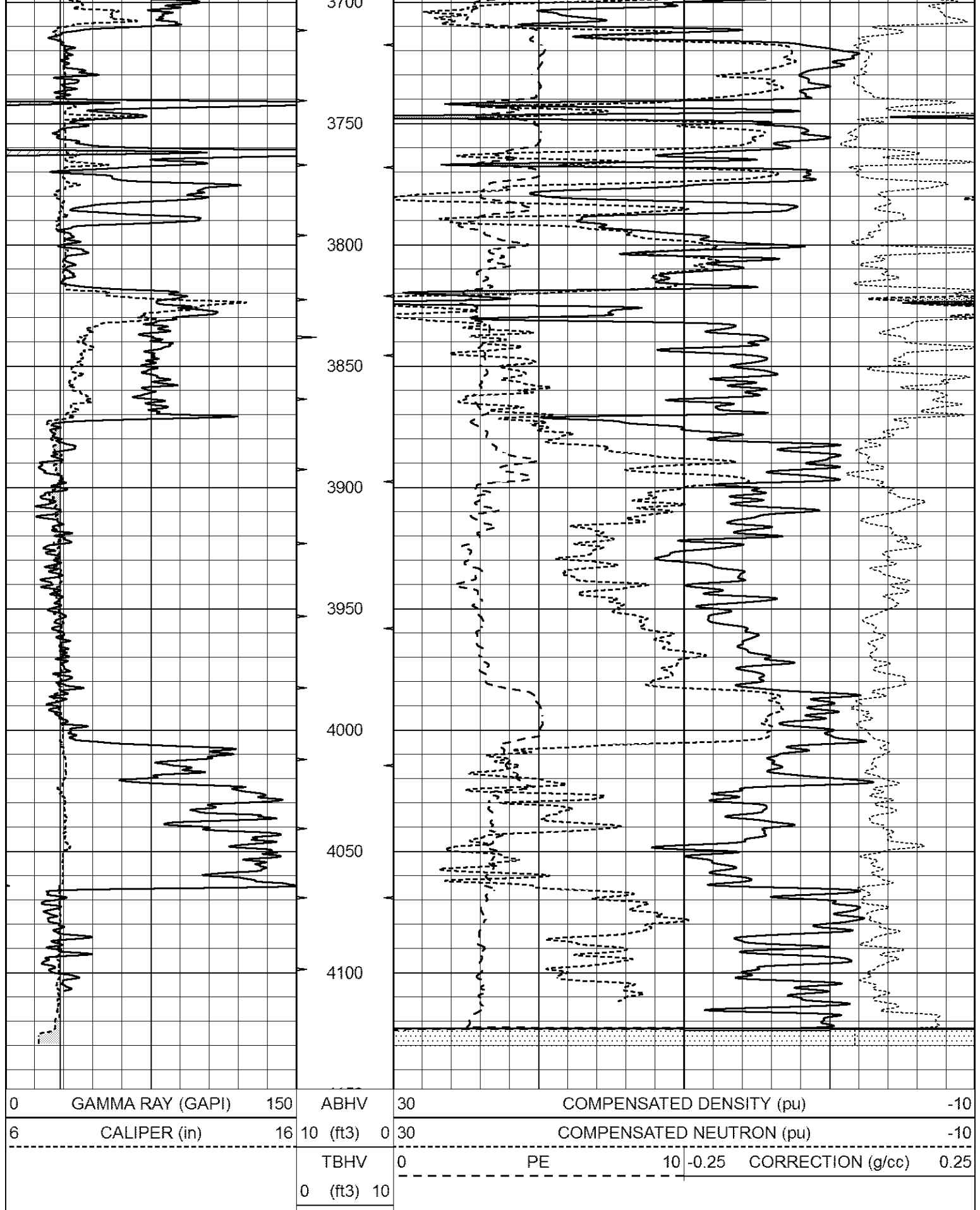
MAIN SECTION

Database File 3640pe8.db
Dataset Pathname pass3.1.1
Presentation Format _ldt_neu
Dataset Creation Sat May 25 14:28:08 2019
Charted by Depth in Feet scaled 1:600

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
			0 (ft3) 10	CORRECTION (g/cc) 0.25		







MAIN SECTION

Database File3640pe8.db

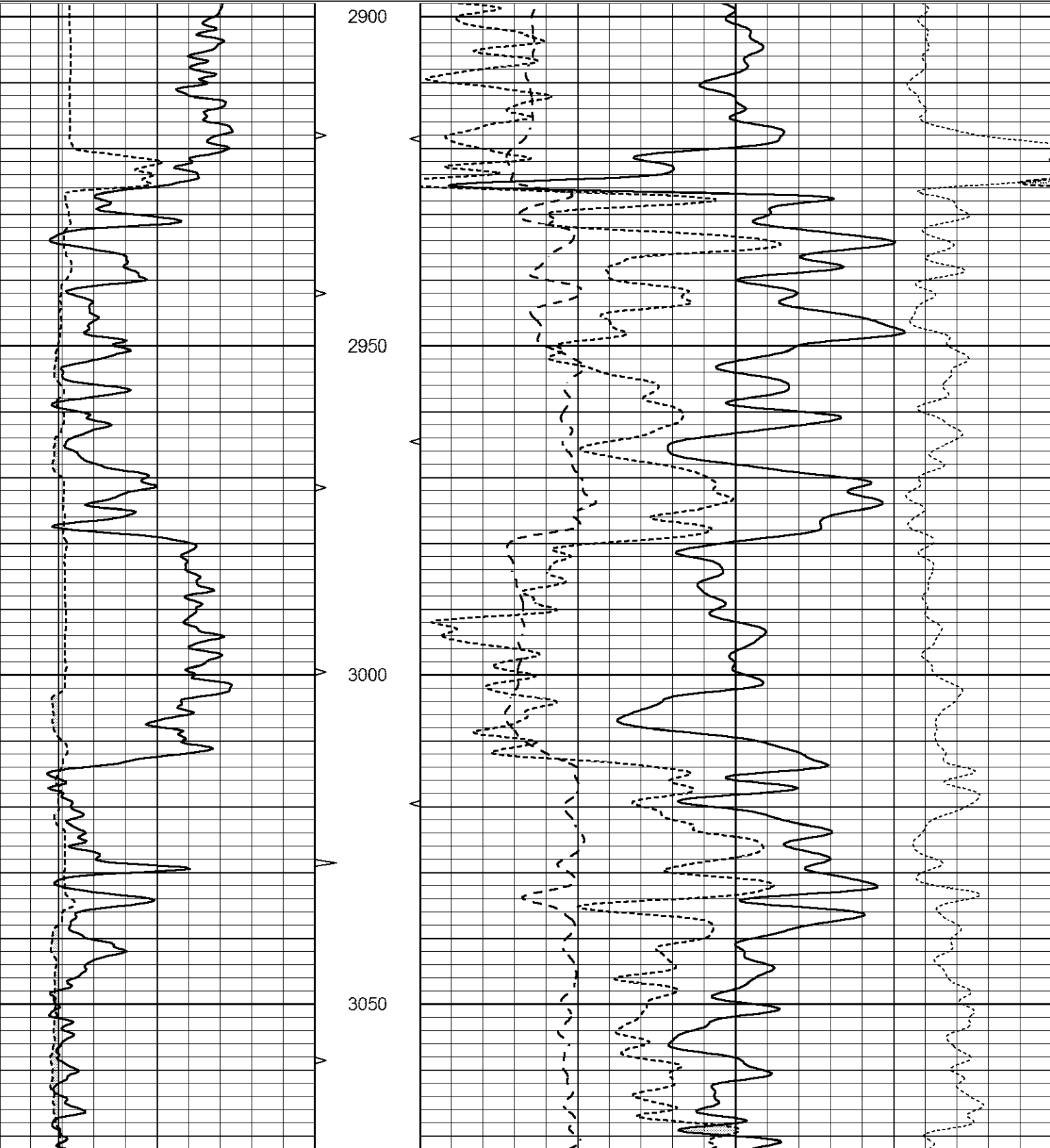
Dataset Pathnamepass3.1

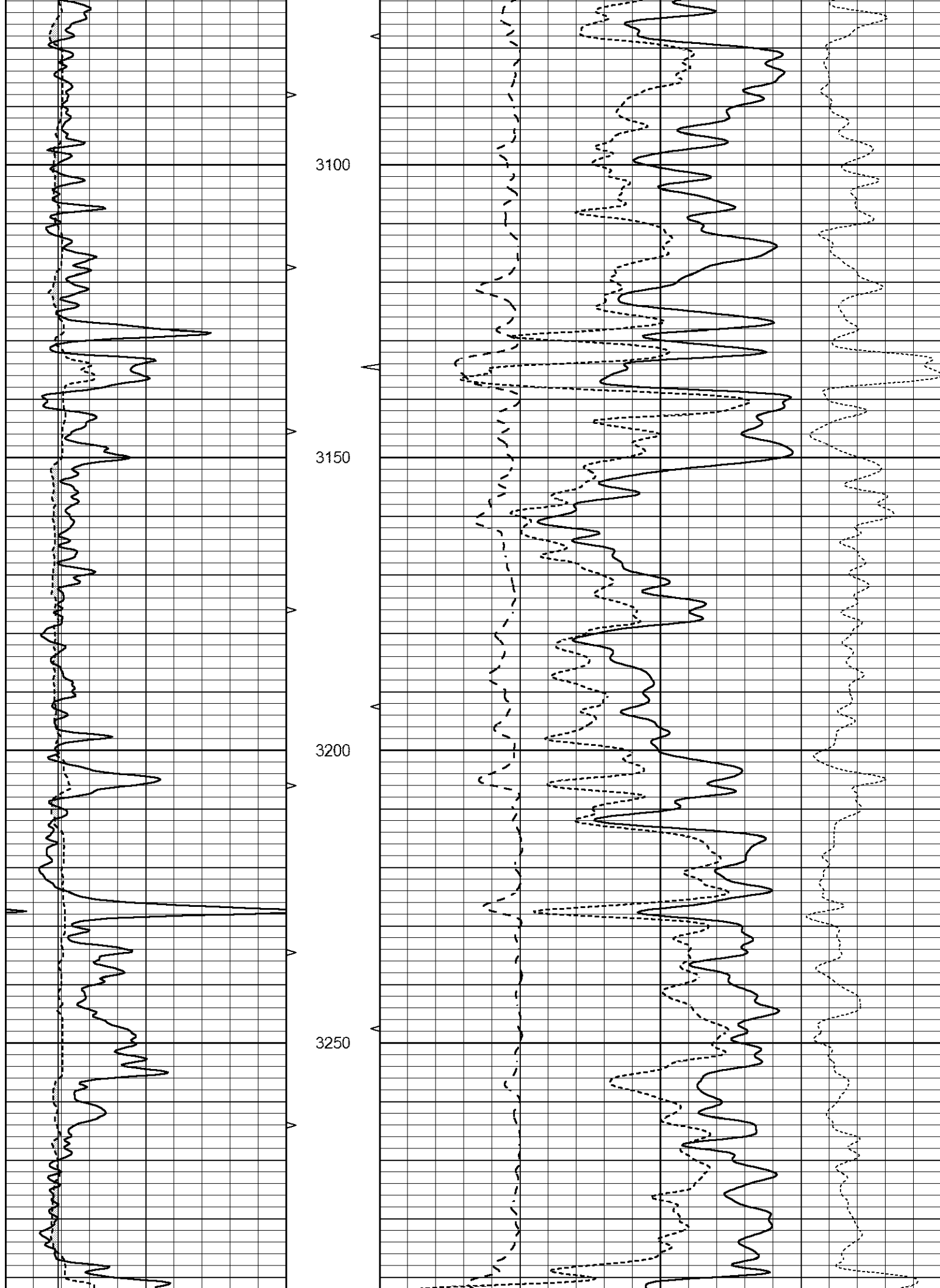
Presentation Format_idt_neu

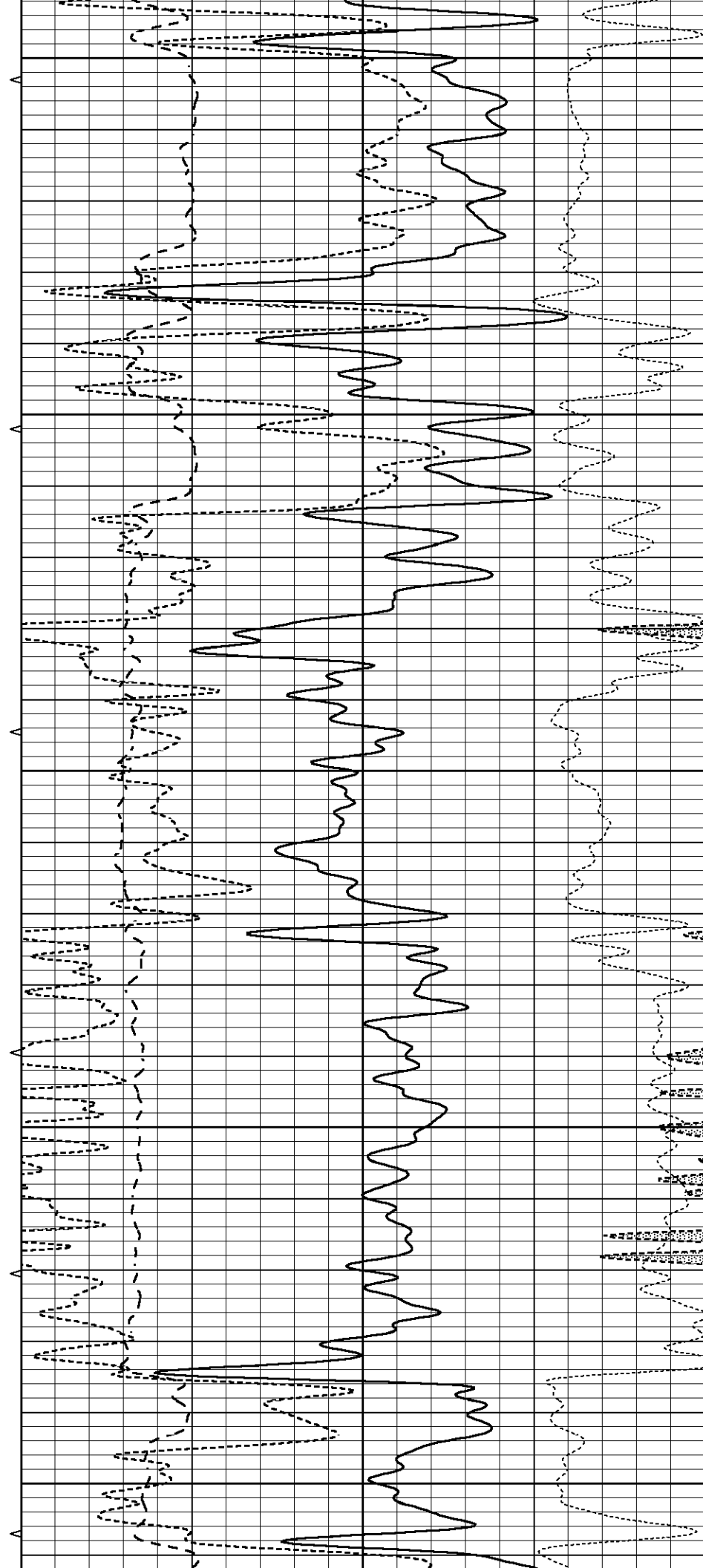
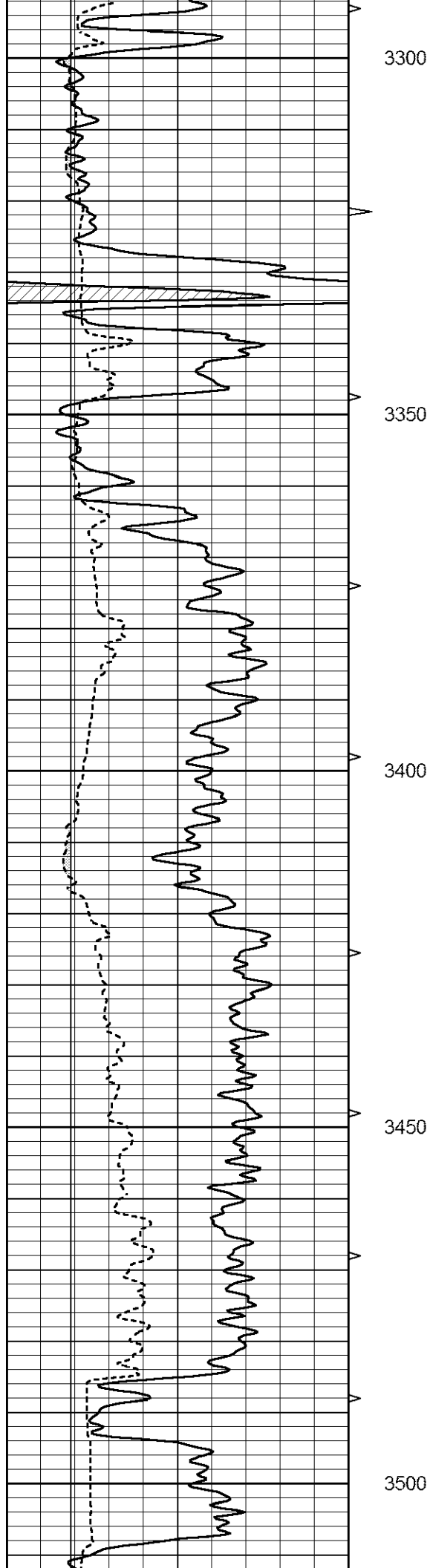
Dataset CreationSat May 25 14:21:18 2019

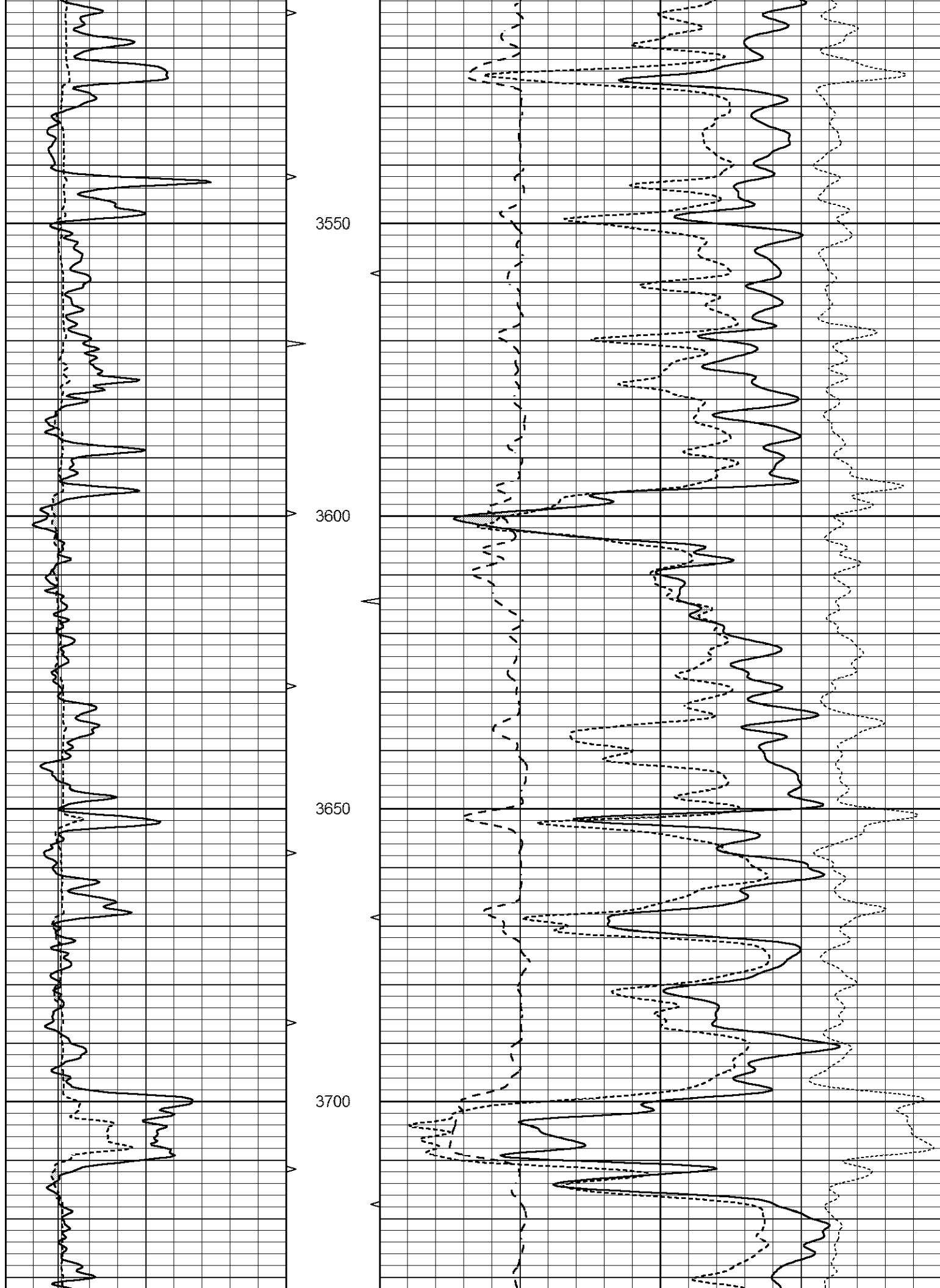
Charted byDepth in Feet scaled 1:240

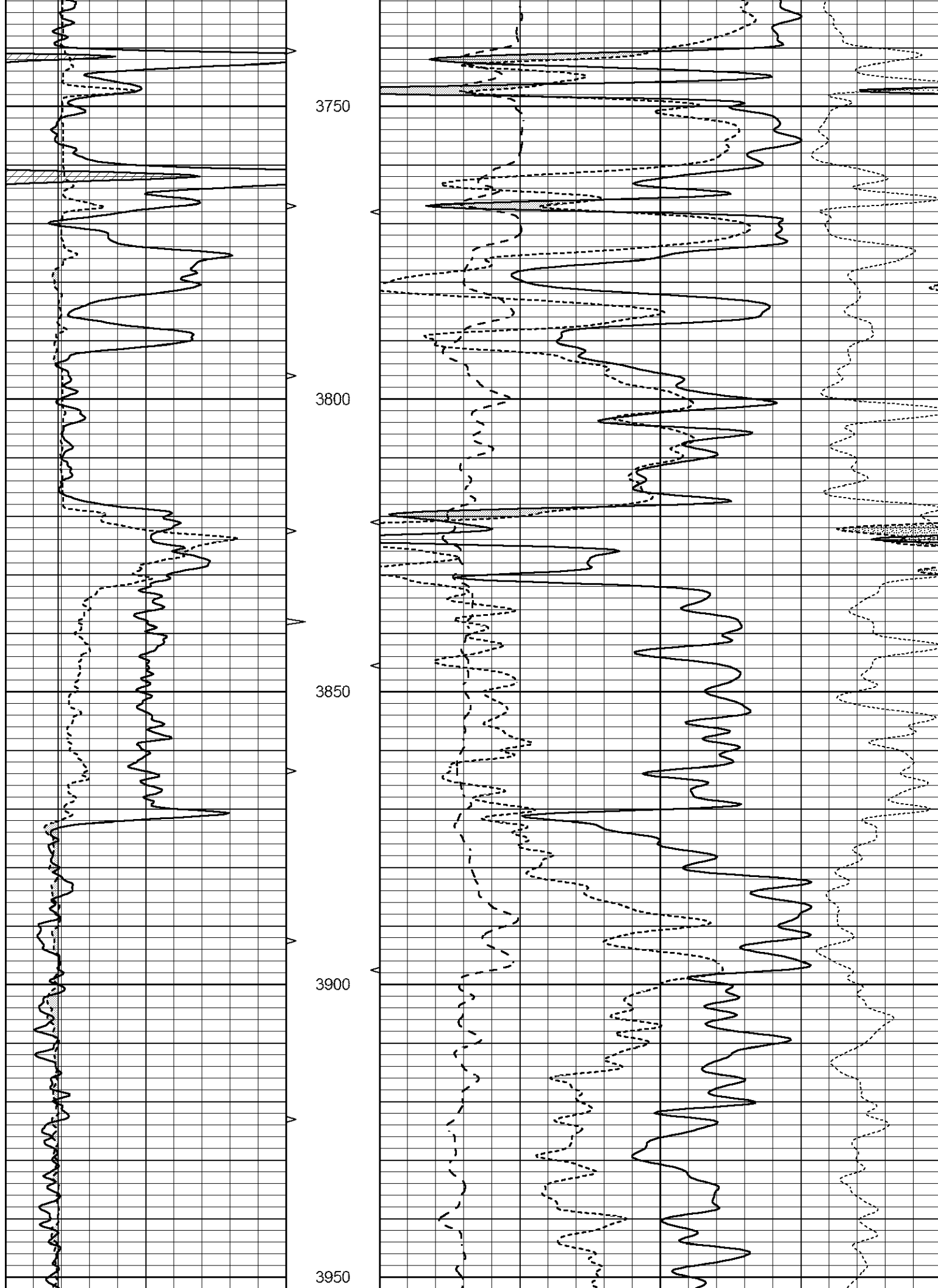
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
			TBHV	0	PE	10 -0.25
			0 (ft3) 10	CORRECTION (g/cc) 0.25		

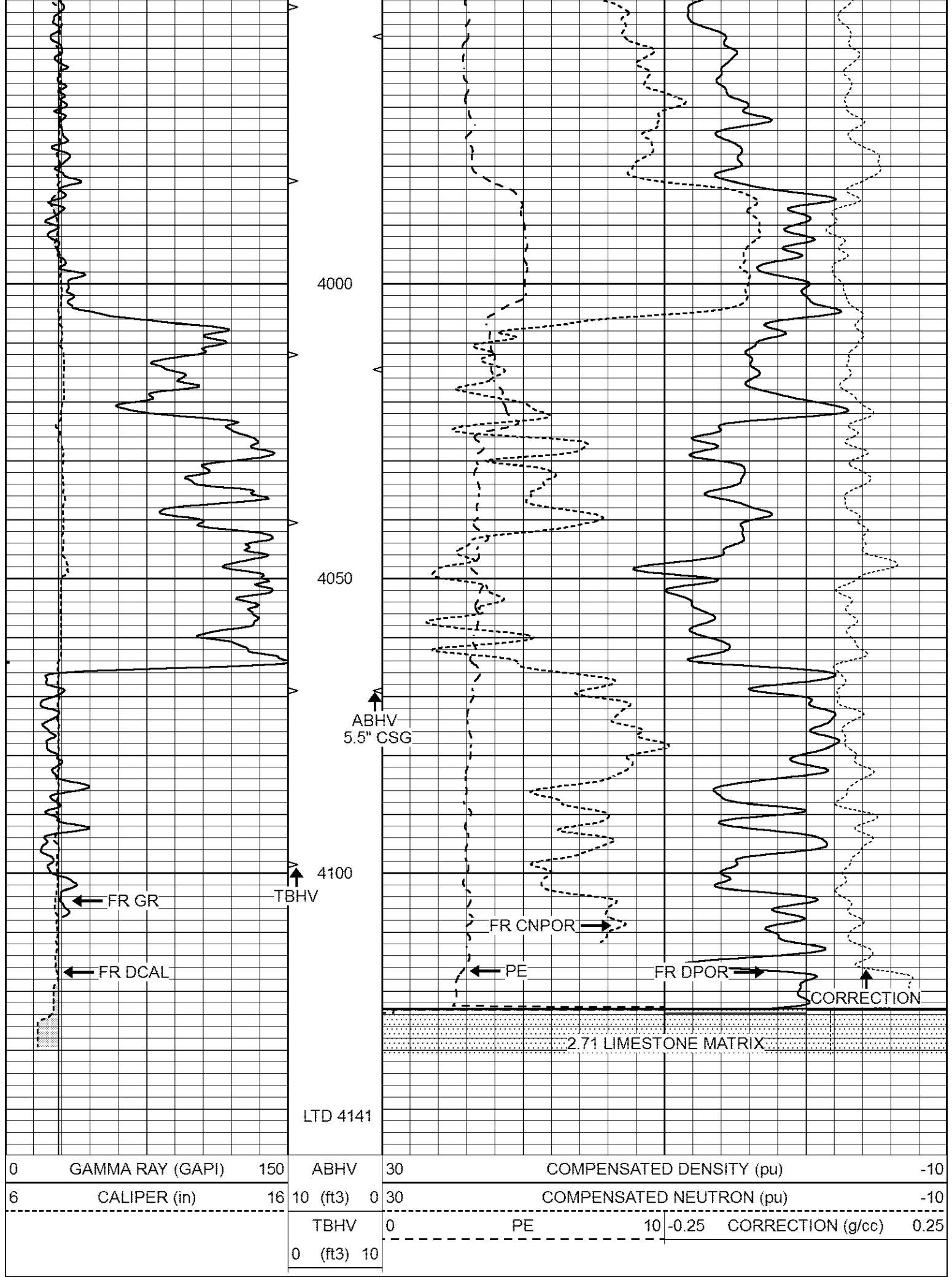




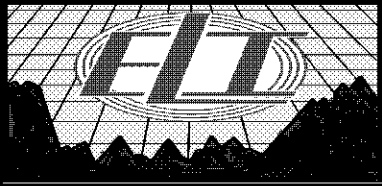








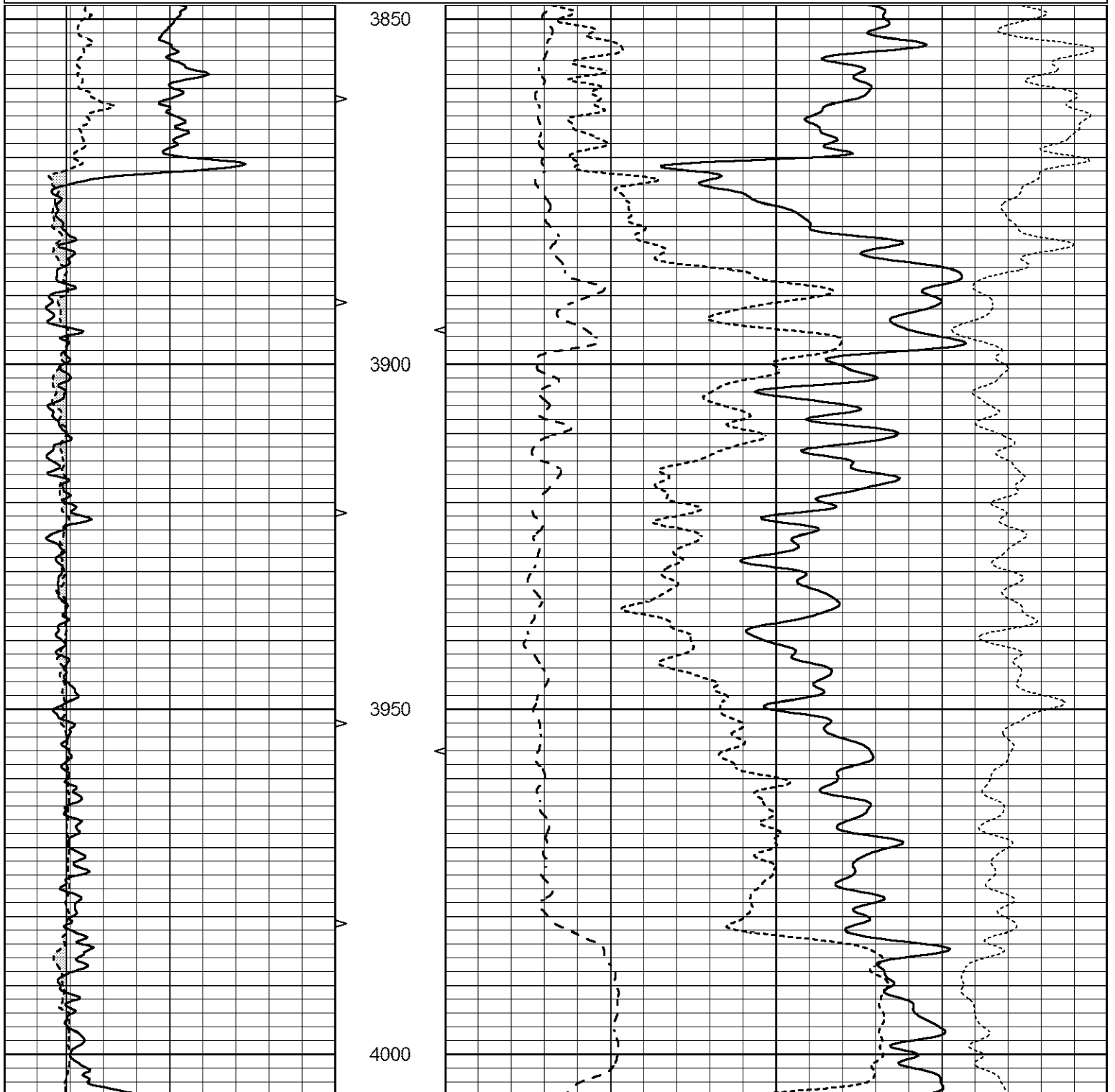
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)				-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)				-10
			TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10						

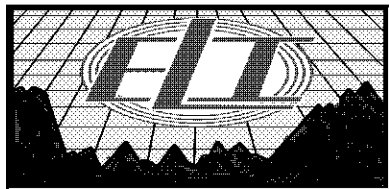
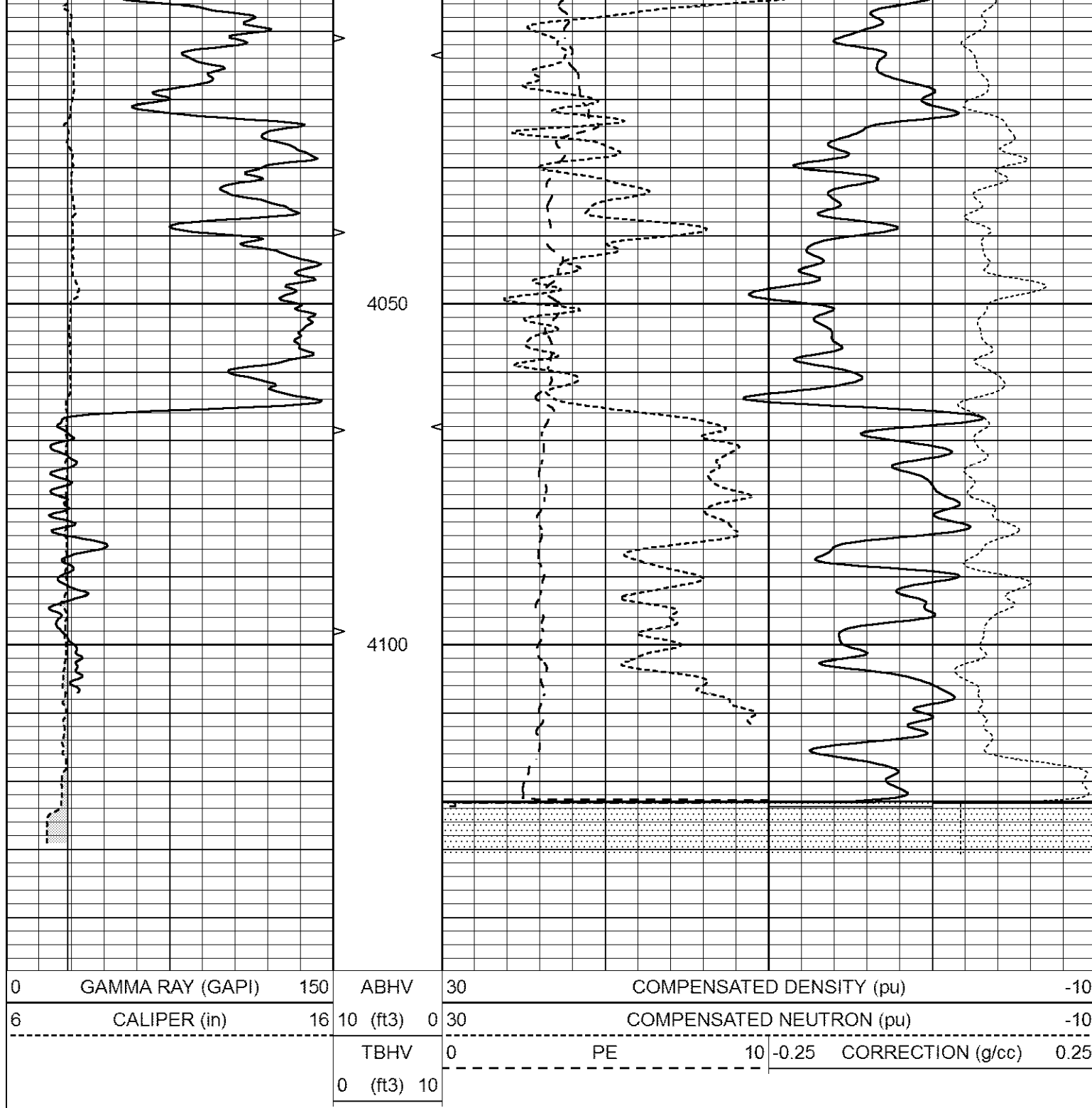


REPEAT SECTION

Database File 3640pe8.db
Dataset Pathname pass2.1
Presentation Format _ldt_neu
Dataset Creation Sat May 25 13:48:20 2019
Charted by Depth in Feet scaled 1:240

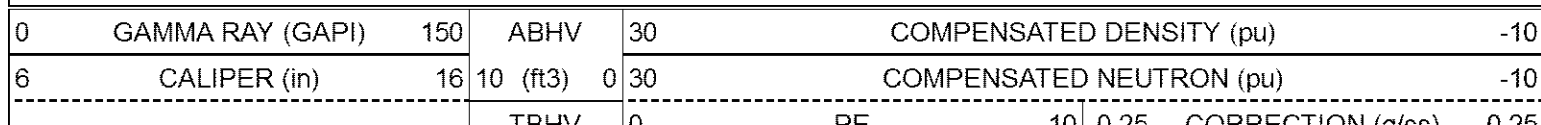
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
			TBHV	0	PE	10 -0.25 CORRECTION (g/cc) 0.25
			0 (ft3) 10			

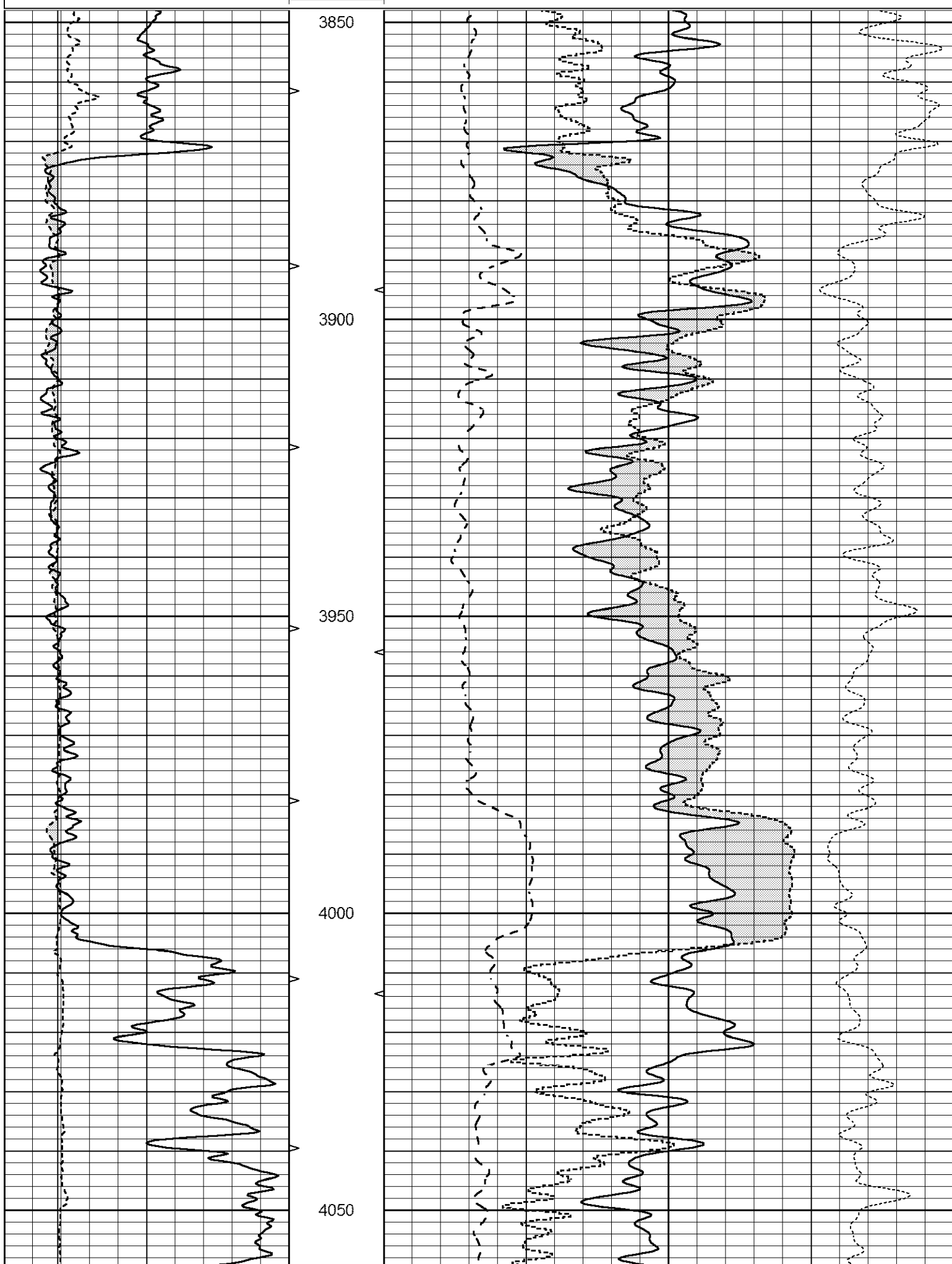


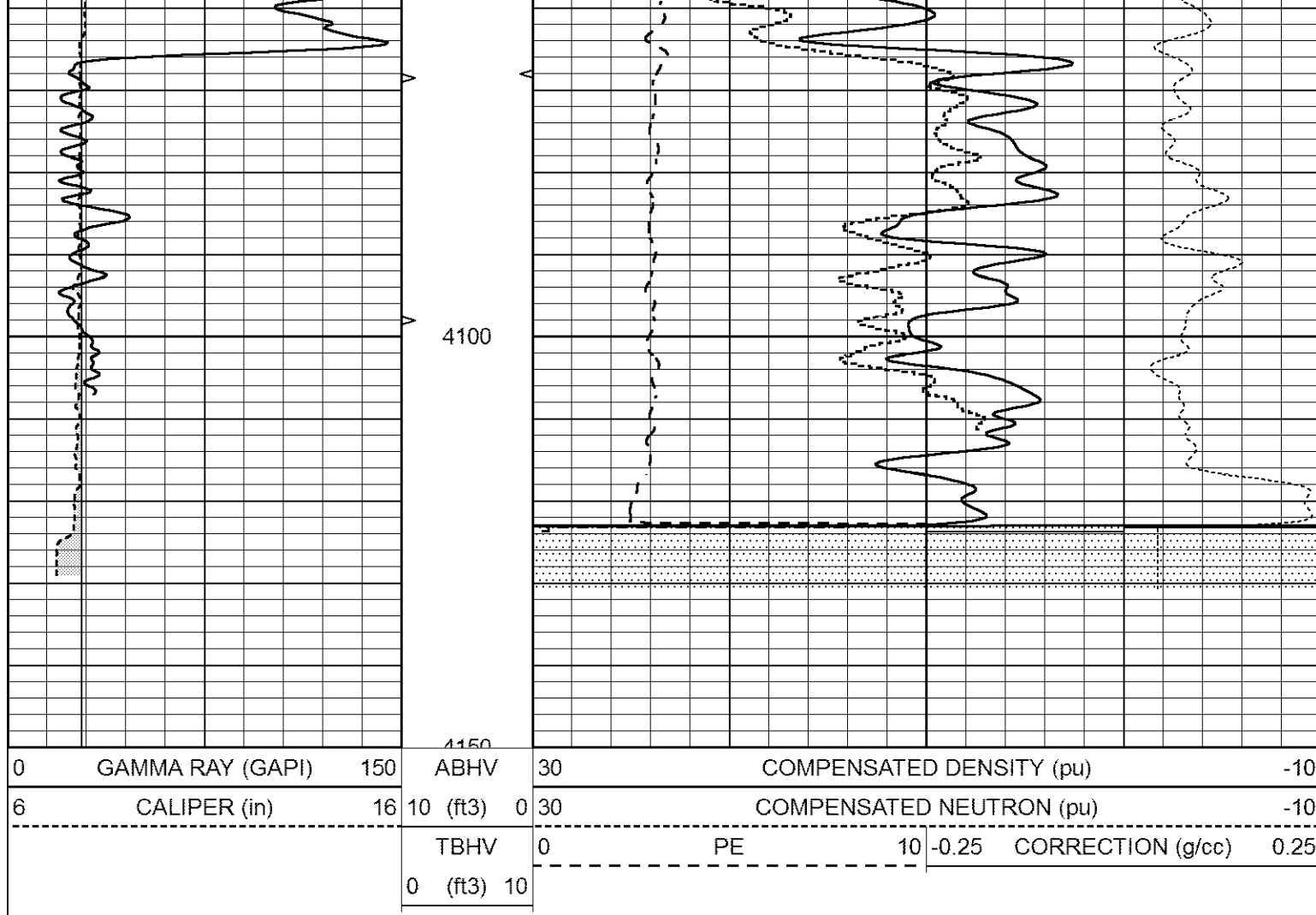


DOLOMITE MATRIX

Database File 3640pe8.db
 Dataset Pathname pass2.2
 Presentation Format _ldt_neu
 Dataset Creation Sat May 25 13:51:50 2019
 Charted by Depth in Feet scaled 1:240







Calibration Report								
Database File	3640pe8.db							
Dataset Pathname	pass2.1							
Dataset Creation	Sat May 25 13:48:20 2019							
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

Medium	0.000	471.327	mmho/m	0.400	471.327	mmho/m	1.000	-0.000
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								
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Master Calibration					Performed: Fri Jan 18 10:53:52 2019			
	Background		Aluminum		Magnesium			
Window 1	563.20		5403.39		24190.50		cps	
Window 2	44.78		1243.51		6049.93		cps	
Window 4	247.62		1222.40		5239.60		cps	
Window 5	568.17		8975.27		17094.80		cps	
Window 6	44.48		1484.88		2922.28		cps	
Window 8	270.82		2877.34		5377.89		cps	
Bulk Density	-		2.6020		1.6830		g/cc	
Pe	-		3.0000		2.5070		b/e	
LS Alpha:	: -1.8641		SS Alpha:	: -0.7692		LS CPE:	: 1.1004	
LS Beta:	: 127931.7253		SS Beta:	: 20075.8142		SS CPE:	: 1.5209	

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 Jan 18 10:53:52 2019			
Results	Readings			References (in)				
	Low	High		Low	High	Gain	Offset	
	90.2	3611.6		8.0	14.0	0.0	7.8	

Before Survey Caliper Verification		Performed:	
	Reference	Reading	
	_____	_____	
Caliper (in)			
After Survey Caliper Verification		Performed:	
	Reference	Reading	
	_____	_____	
Caliper (in)			
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 Feb 19 11:45:10 2019		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.4300	GAPI/cps	