

COMPENSATED
DENSITY/NEUTRON
PE LOG

Company	DIXON OPERATING COMPANY, LLC.	
Well	CURTIS #1-4	
Field	RATTLESNAKE CREEK	
County	STAFFORD	State KANSAS
Location:	API # : 15-185-23987-0000	Other Services DIL/MEL SONIC
Permanent Datum	330' FSL & 3960' FEL	Elevation
Log Measured From	GROUND LEVEL	K.B. 1852
Drilling Measured From	KELLY BUSHING 9' A.G.L	D.F. 1850
		G.L. 1843
Date	6/10/17	
Run Number	ONE	
Depth Driller	3825	
Depth Logger	3823	
Bottom Logged Interval	3799	
Top Log Interval	2700	
Casing Driller	8 5/8" @ 347'	
Casing Logger	347'	
Bit Size	7 7/8	
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5500 PPM
Density / Viscosity	9.4/49	
pH / Fluid Loss	10.0/9.6	
Source of Sample	FLOWLINE	
Rm @ Meas. Temp	.51 @ 79F	
Rmf @ Meas. Temp	.38 @ 79F	
Rmc @ Meas. Temp	.61 @ 79F	
Source of Rmf / Rmc	MEASUREMENT	
Rm @ BHT	.35 @ 114F	
Time Circulation Stopped	2 HOURS	
Time Logger on Bottom		
Maximum Recorded Temperature	114F	
Equipment Number	3802	
Location	HAYS, KANSAS	
Recorded By	JASON CAPELLUCCI	
Witnessed By	CHUCK SCHMALTZ	

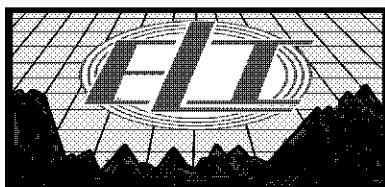
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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

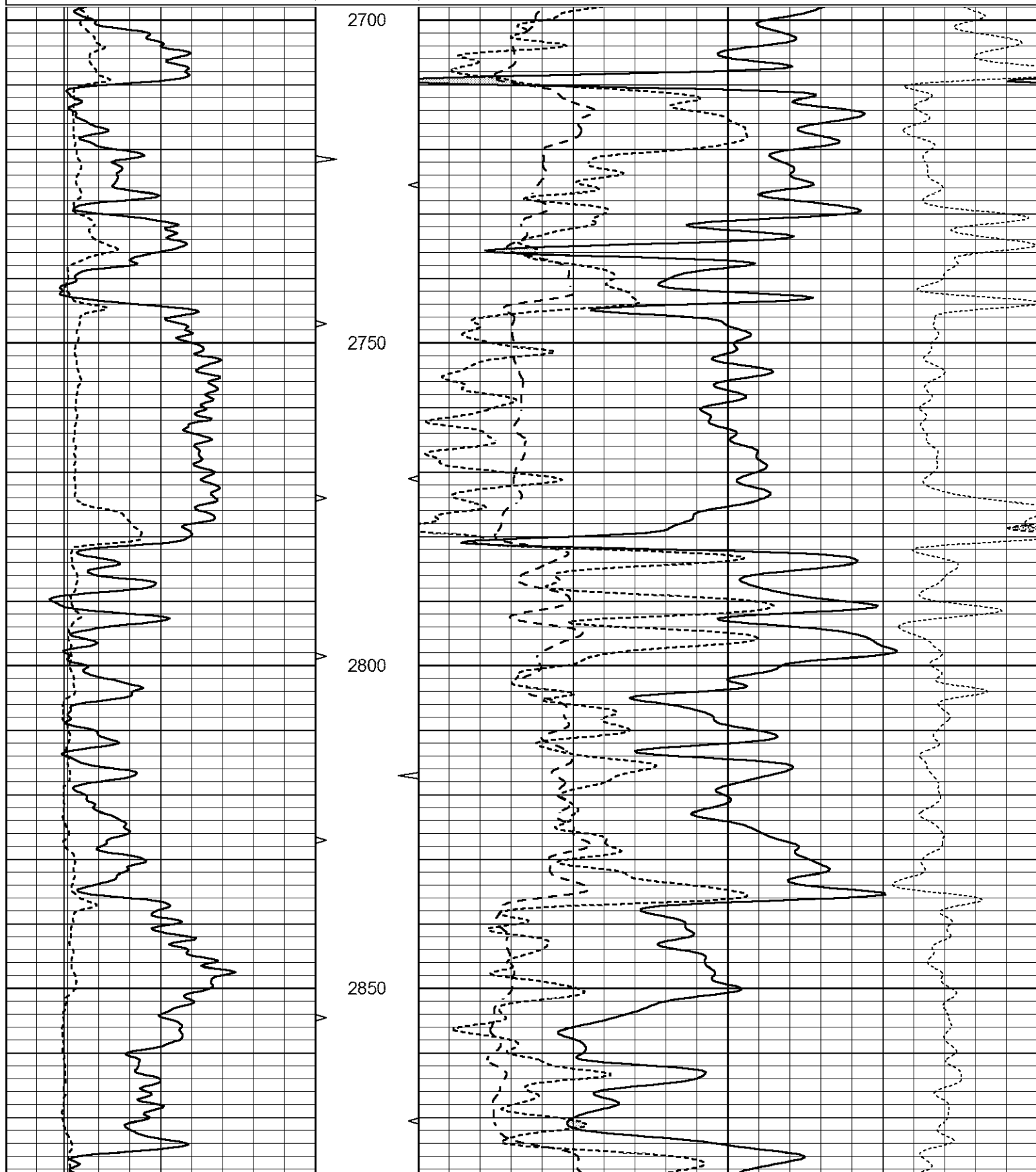
ST. JOHN, KS. - 3 NORTH TO 70TH RD. - 5 EAST TO 50 RD. - 1 NORTH - 1/4 EAST - NORTH INTO

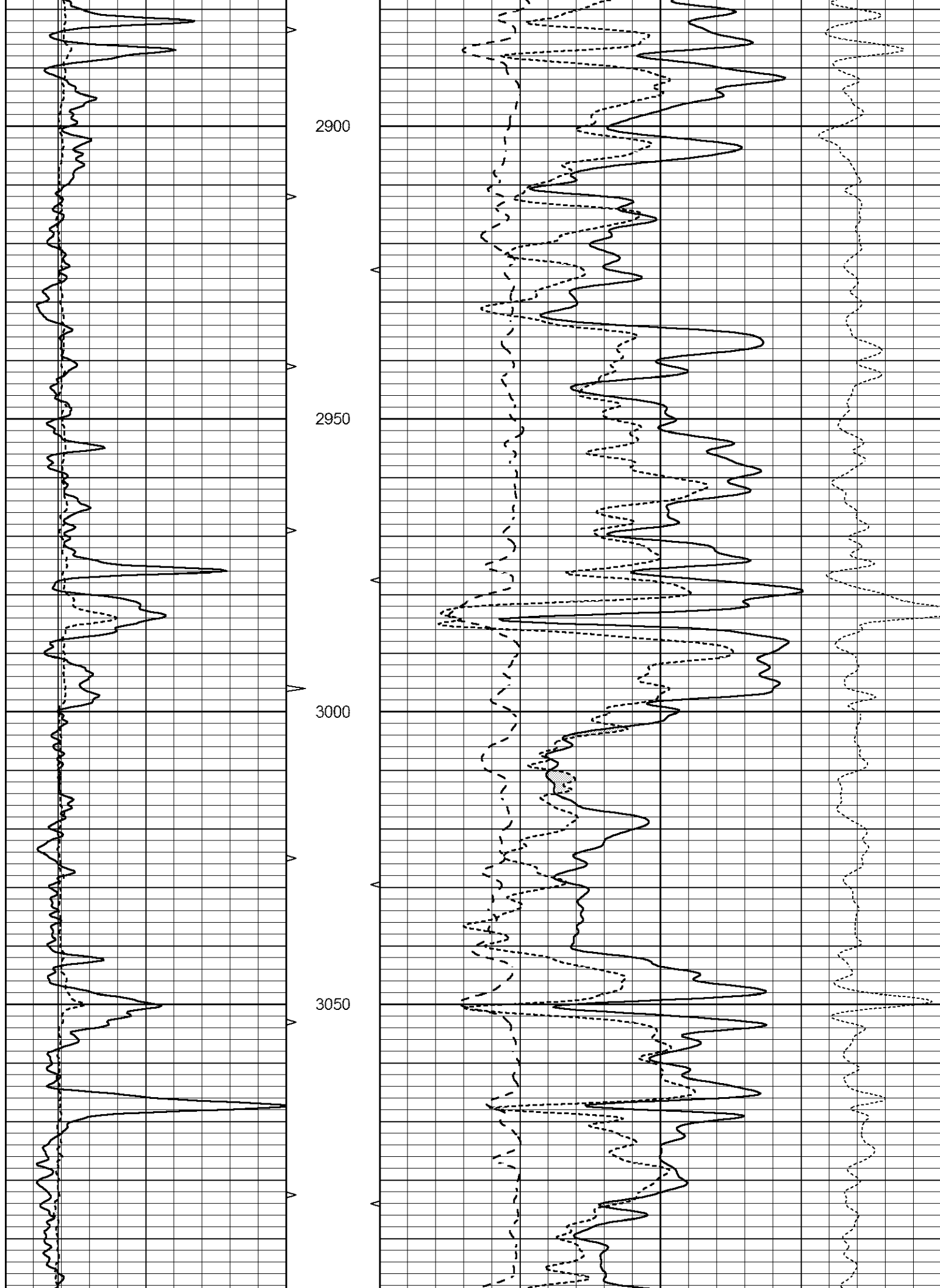


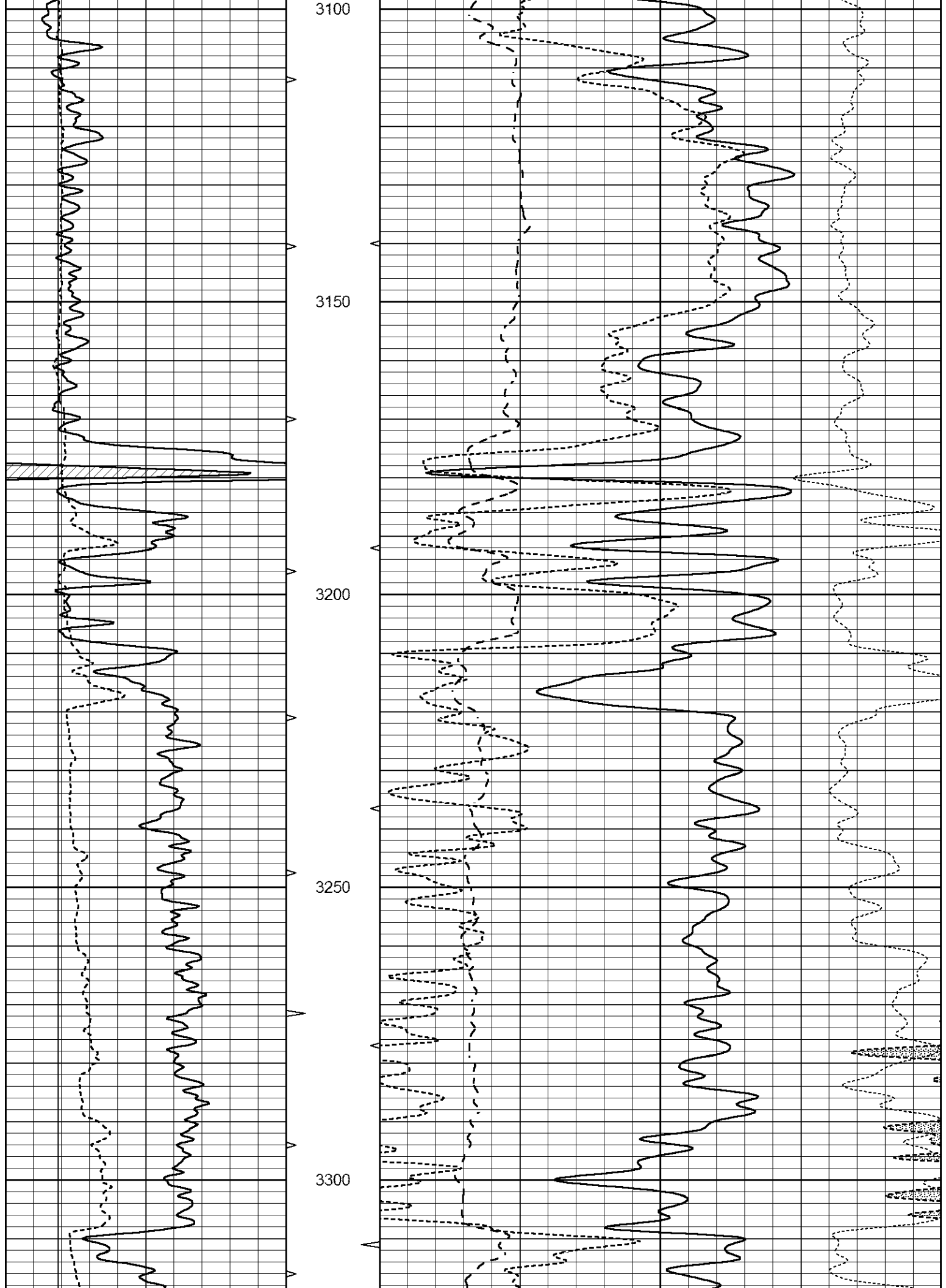
MAIN SECTION

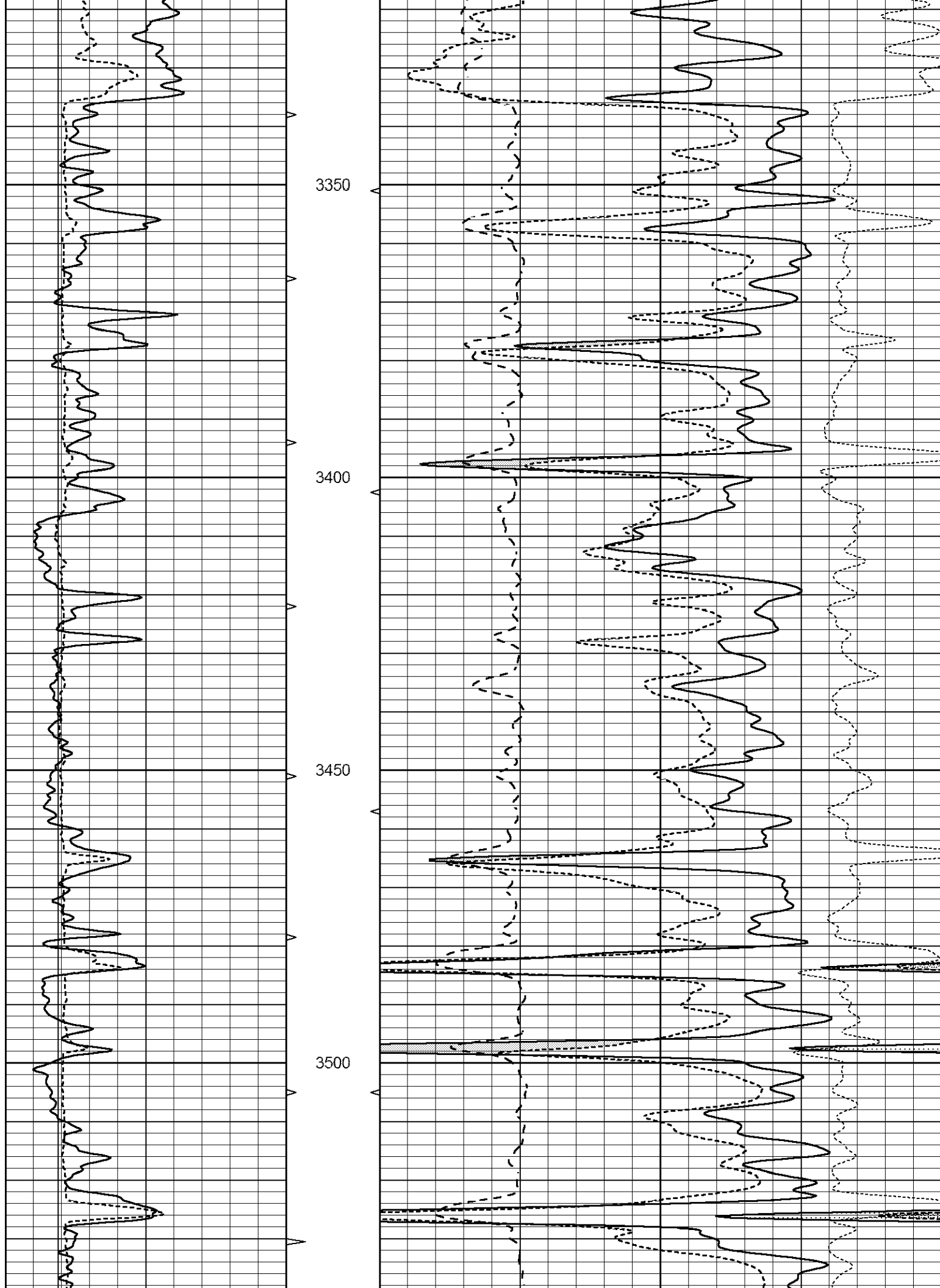
Database File	1148pe8.db
Dataset Pathname	pass3.1.1
Presentation Format	_ldt_neu
Dataset Creation	Sat Jun 10 09:38:39 2017
Charted by	Depth in Feet scaled 1:240

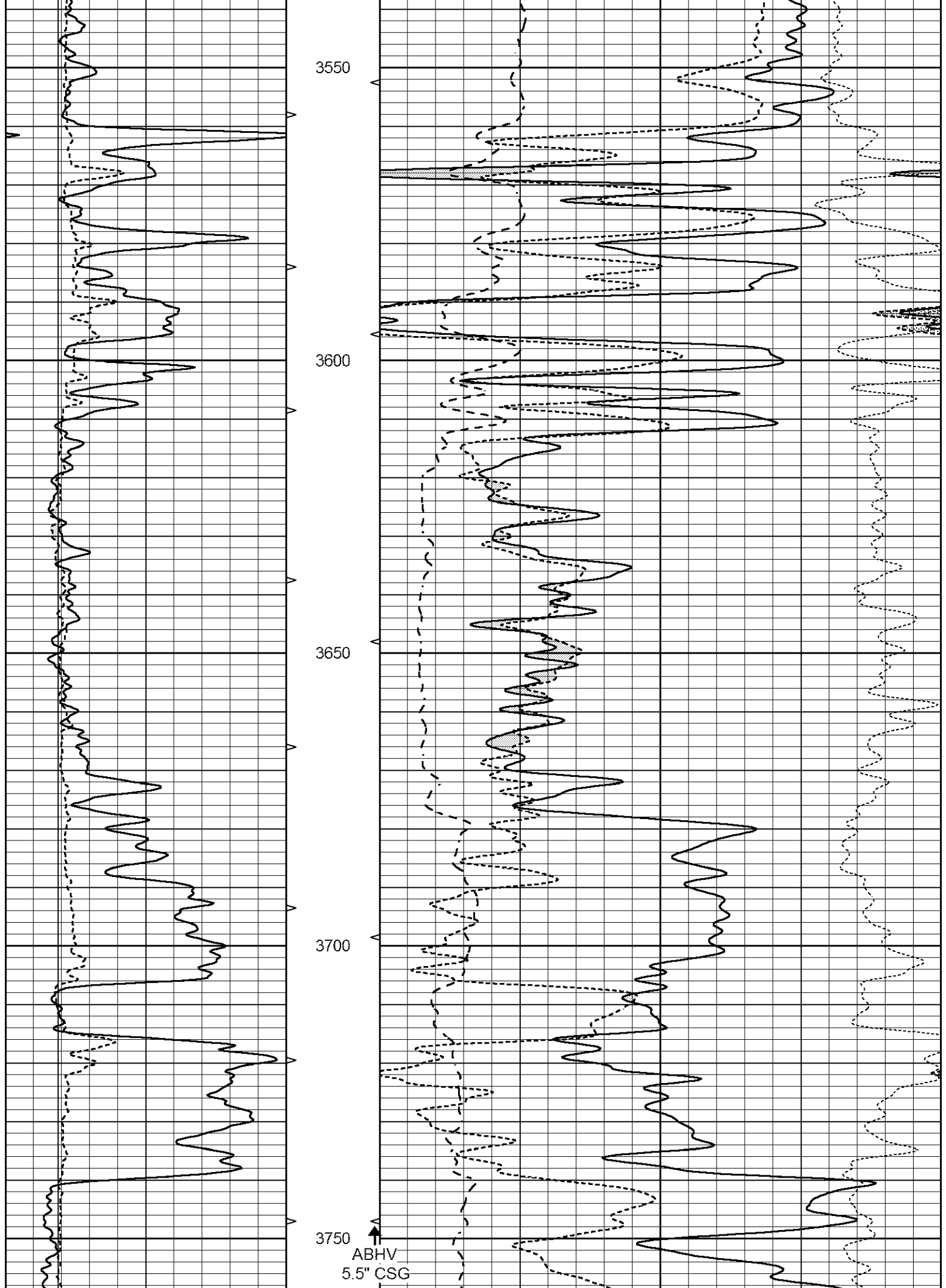
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
			TBHV	0	PE	10 -0.25
			0 (ft3) 10	CORRECTION (g/cc) 0.25		

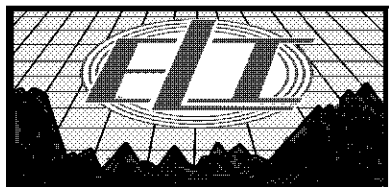
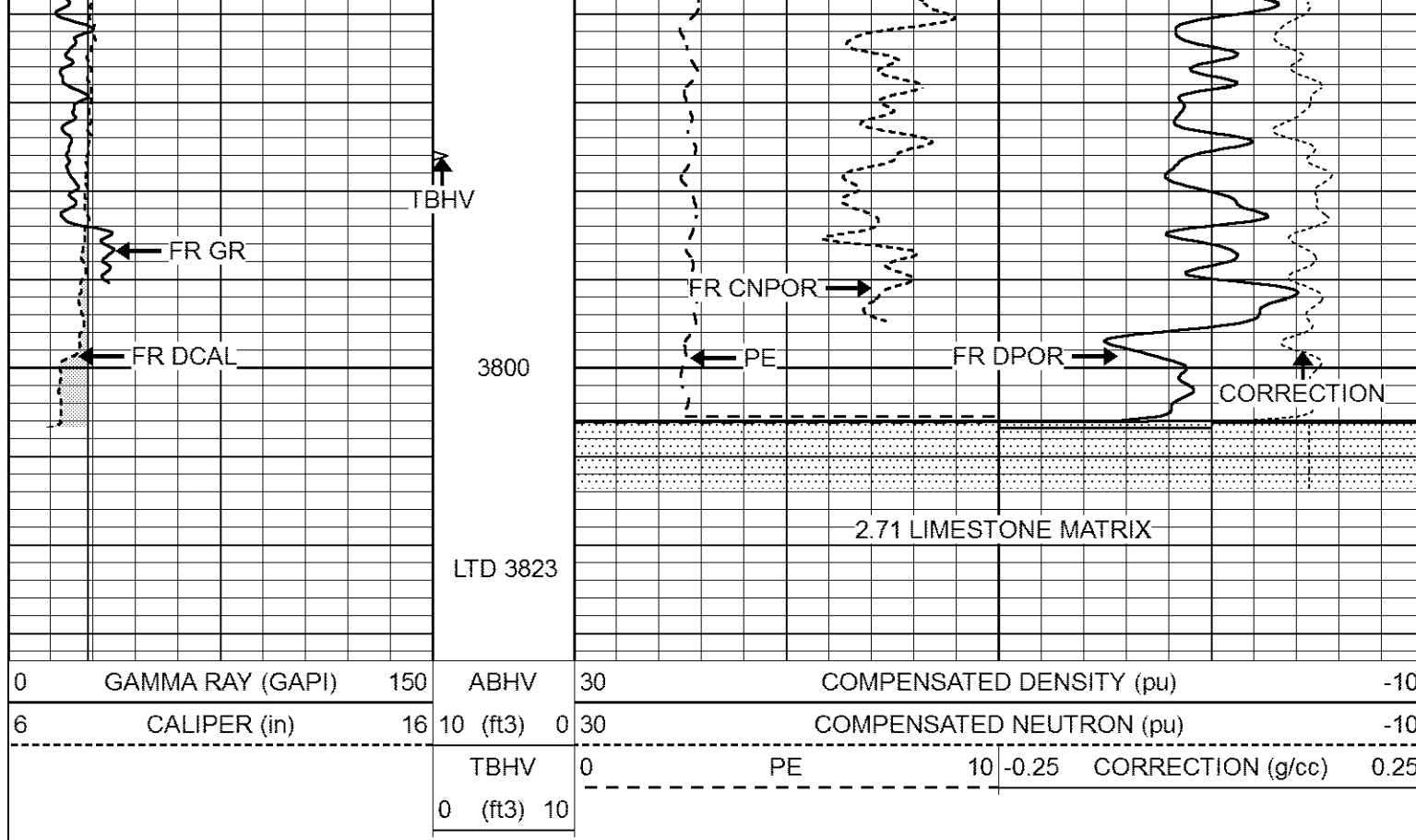








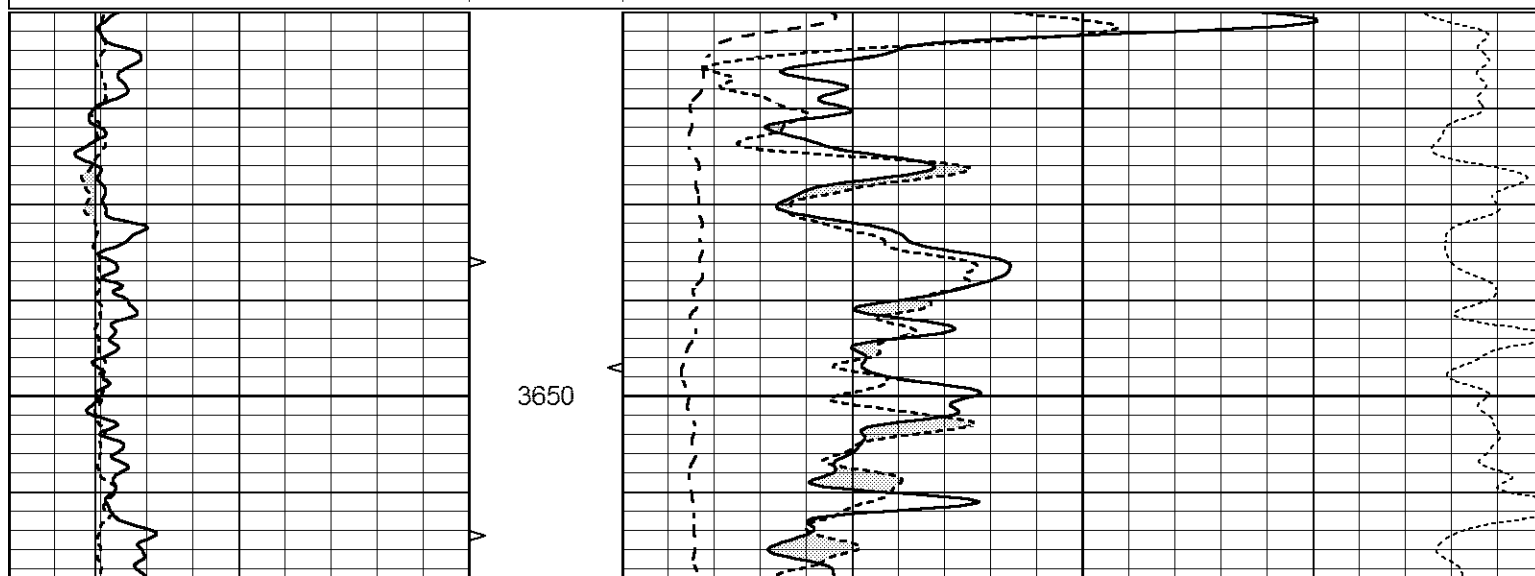


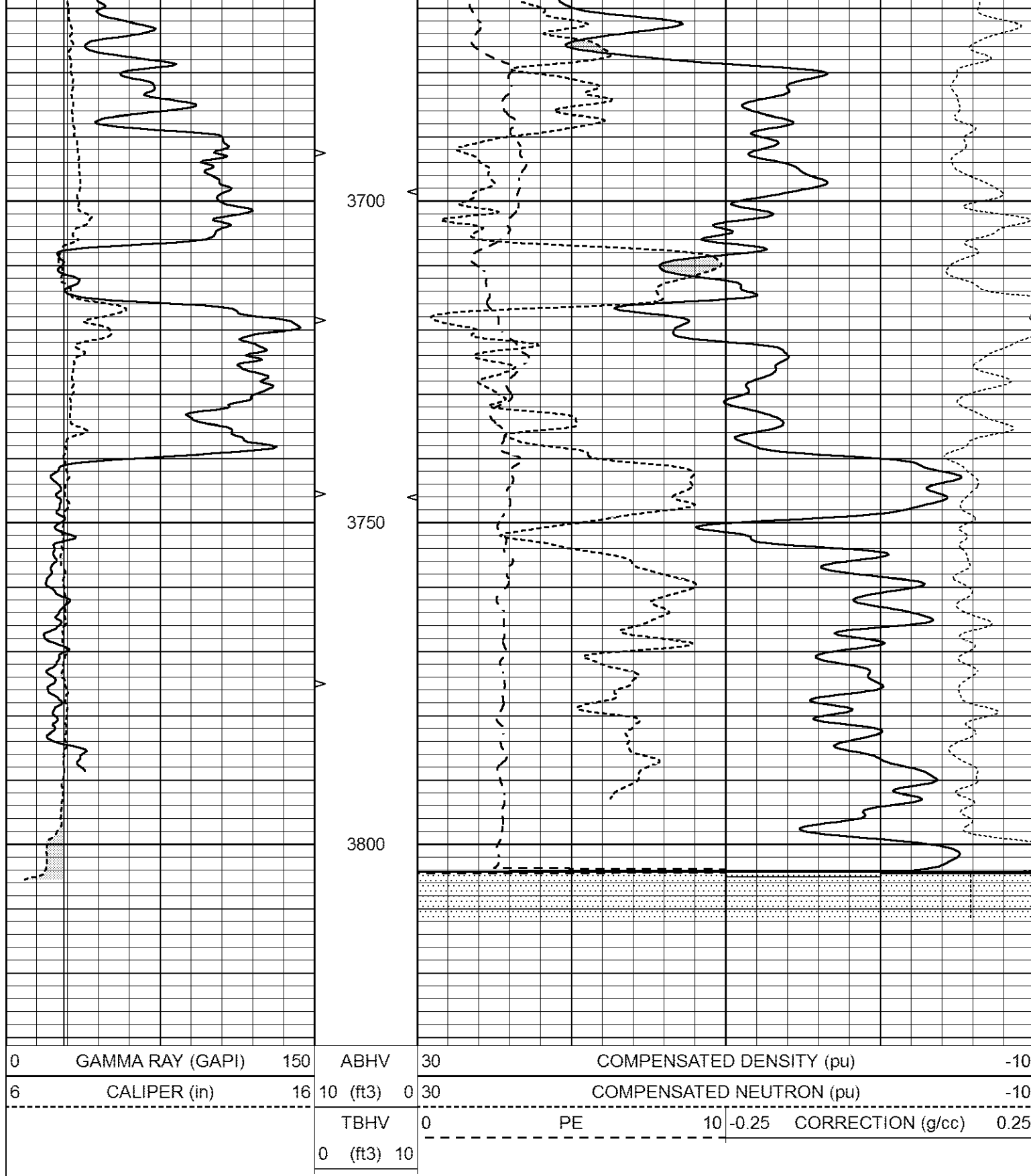


REPEAT SECTION

Database File 1148pe8.db
 Dataset Pathname pass2.1
 Presentation Format _ldt_neu
 Dataset Creation Sat Jun 10 09:11:09 2017
 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			





Calibration Report

Database File 1148pe8.db
 Dataset Pathname pass2.1
 Dataset Creation Sat Jun 10 09:11:09 2017

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
 Surface Cal Performed: Mon May 22 14:23:32 2017

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: Wed Feb 11 18:53:41 2015

	Background	Aluminum	Magnesium		
Window 1	613.01	6027.40	27508.60	cps	
Window 2	48.21	1424.77	7132.66	cps	
Window 4	266.48	1373.19	5767.15	cps	
Window 5	622.07	10090.30	18937.90	cps	
Window 6	49.07	1682.84	3271.18	cps	
Window 8	298.04	3248.38	5980.58	cps	
Bulk Density	-	2.6020	1.6830	g/cc	
Pe	-	3.0000	2.5070	b/e	
LS Alpha:	: -1.8451	SS Alpha:	: -0.7542	LS CPE:	: 1.0882
LS Beta:	: 138648.8473	SS Beta:	: 21960.9250	SS CPE:	: 1.5181

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: Wed Feb 11 18:53:41 2015

Results	Readings	References (in)			
Low	High	Low	High	Gain	Offset
1107.5	7124.1	8.0	15.0	0.0	6.5

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:070558

Tool Model:Probe1

Performed:Mon May 22 14:24:46 2017

Calibrator Value:1.0

GAPI

Background Reading:0.0

cps

Calibrator Reading:1.0

cps

Sensitivity:0.3000

GAPI/cps

