



**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company CHIEFTAIN OIL COMPANY, INC.
Well ROWE SWD #1
Field SHARON NORTHEAST
County BARBER
State KANSAS

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County BARBER State KANSAS

Location: API # : 15-007-01588-0001
1980' FSL & 1905' FVL
E/2 - W/2 - NE - SW
SEC 3 TWP 32S RGE 10W
Permanent Datum GROUND LEVEL Elevation 1519
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
Elevation
K.B. 1527
D.F. 1525
G.L. 1519

Date	9/16/79		
Run Number	ONE		
Depth Driller	5300		
Depth Logger	5283		
Bottom Logged Interval	5259		
Top Log Interval	4500		
Casing Driller	10 3/4" @ 274'		
Casing Logger	280		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 18,000 PPM	
Density / Viscosity	8.9/56		
pH / Fluid Loss	9.5/24.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.280 @ 82F		
Rmf @ Meas. Temp	.210 @ 82F		
Rmc @ Meas. Temp	.336 @ 82F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.179 @ 128F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	11:15 P.M.		
Maximum Recorded Temperature	128F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	STEVE VAN BUSKIRK	RYAN MOLZ	

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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

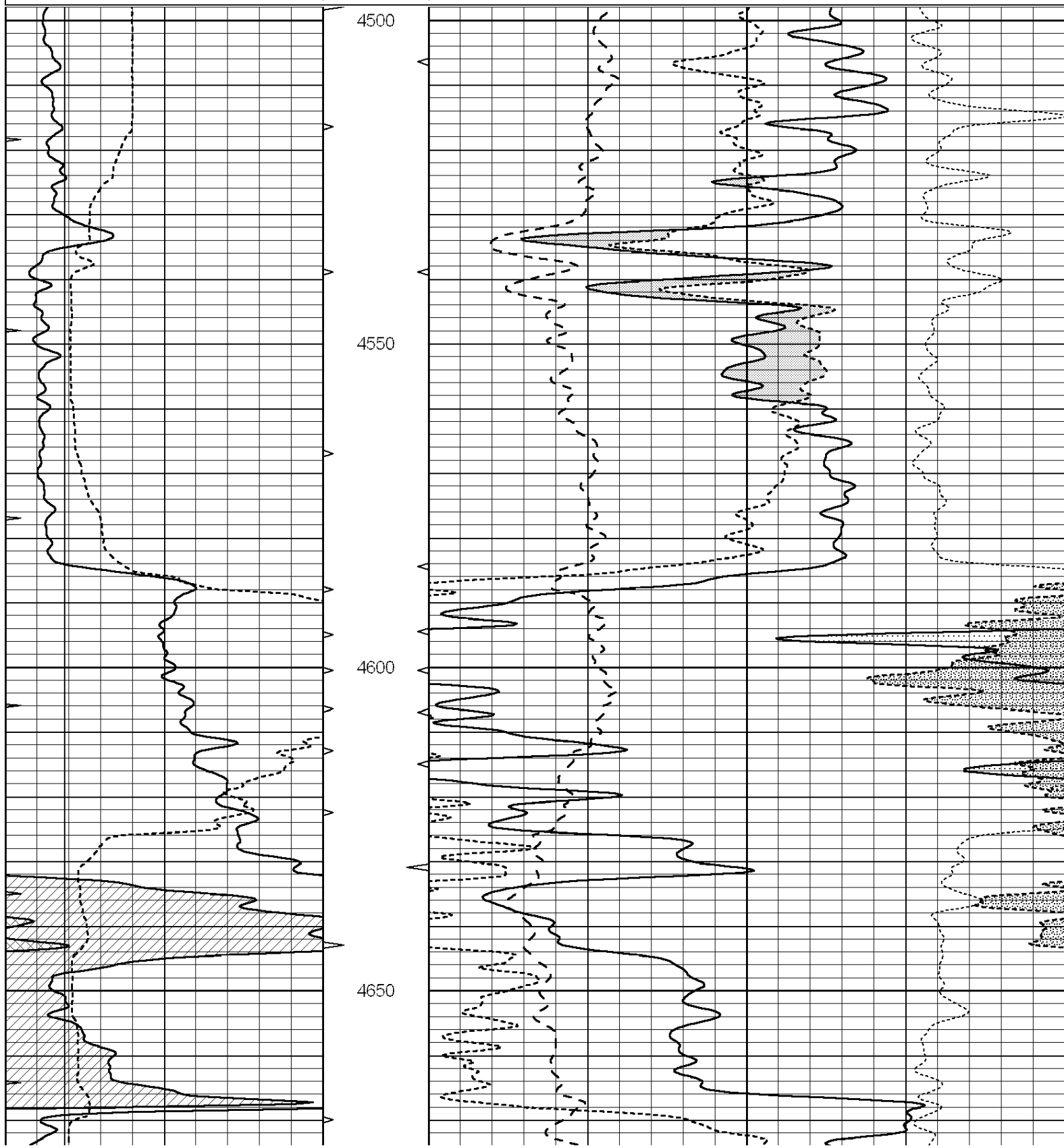
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395
DIRECTIONS
SHARON, KS. & HWY 160, 2N. ON "TRI CITY BLKTOP" TO "BLACKMORE RD.", 1 1/2E., N. INTO AT BLUE C

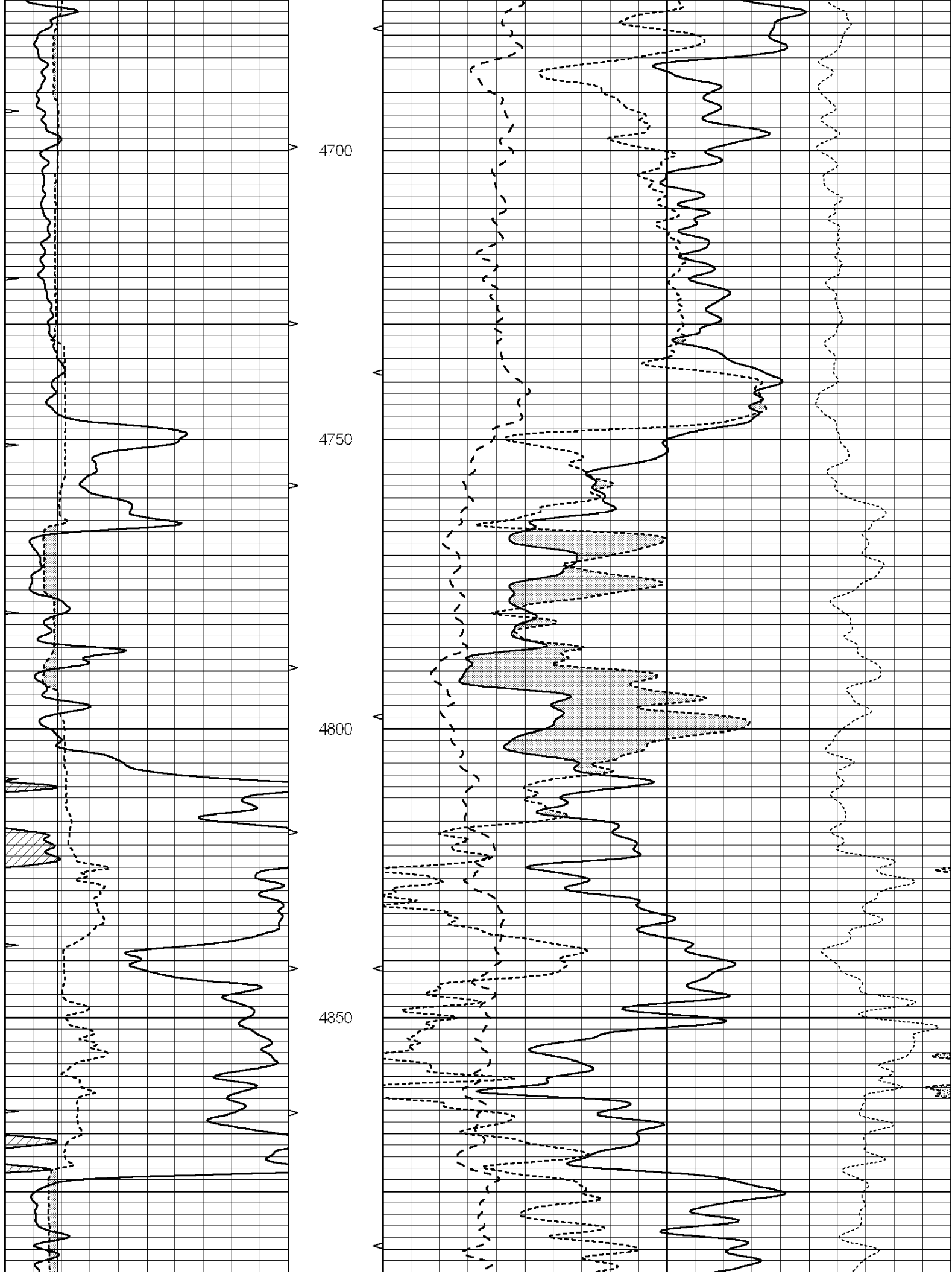


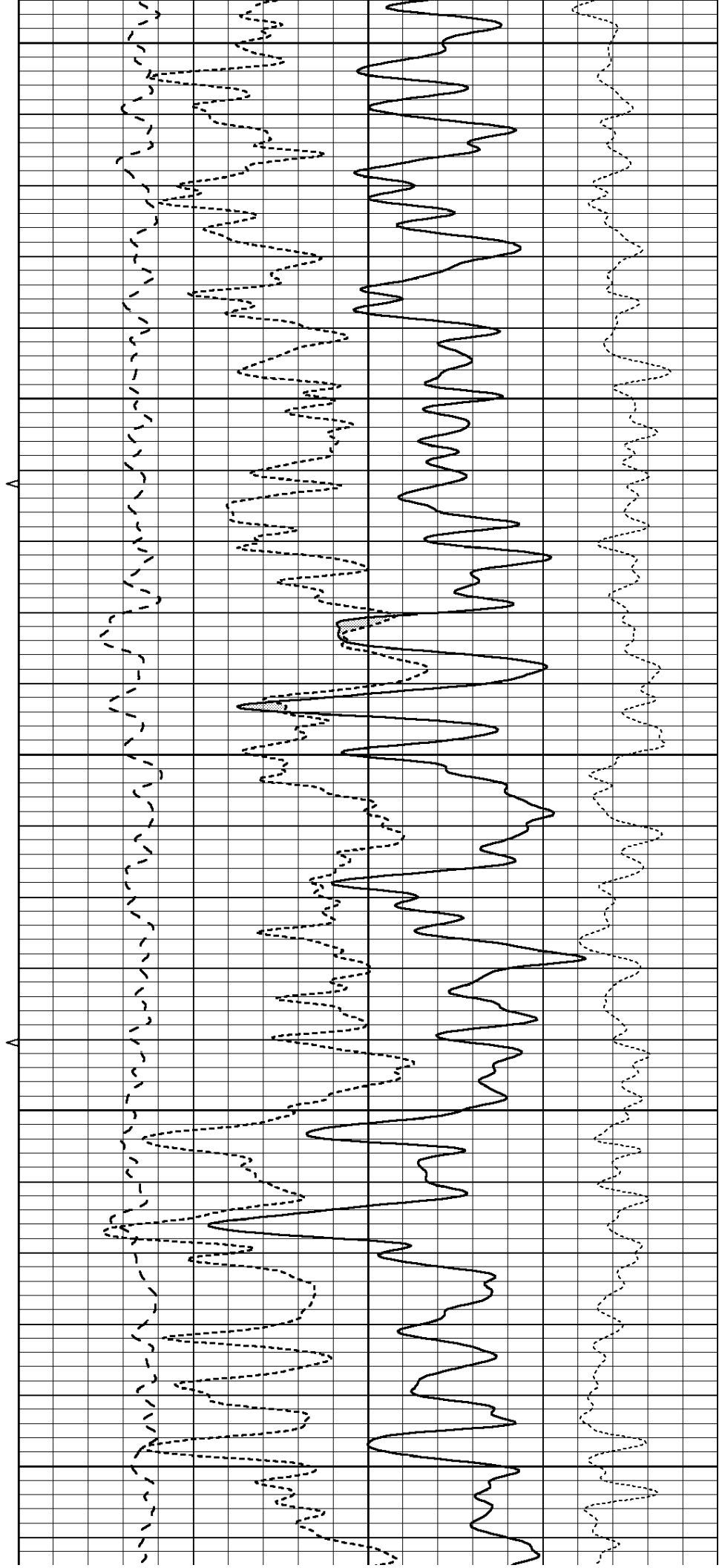
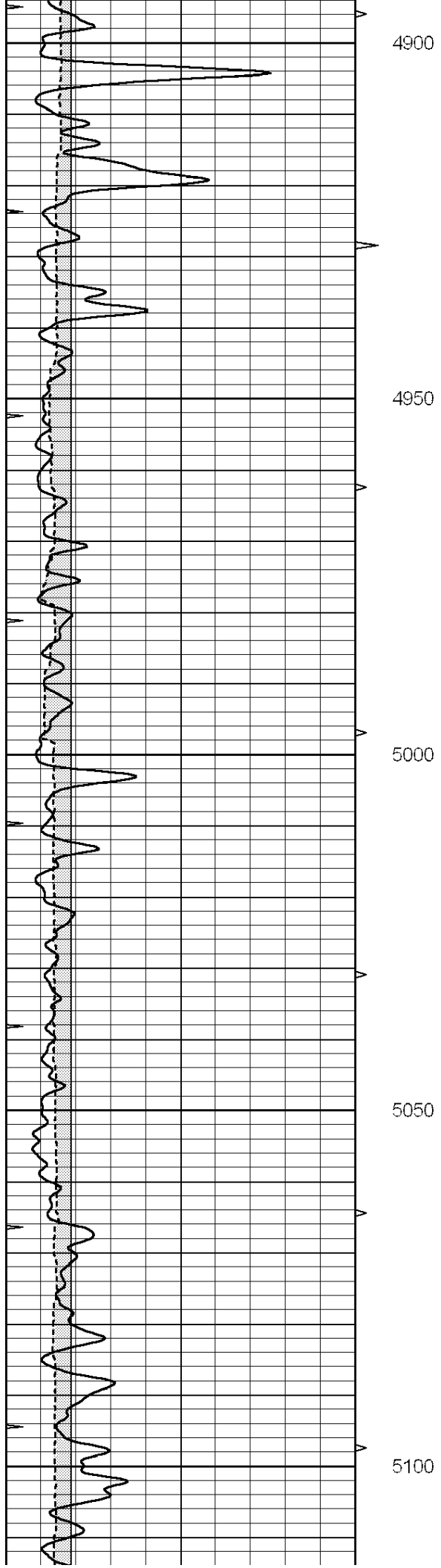
MAIN SECTION

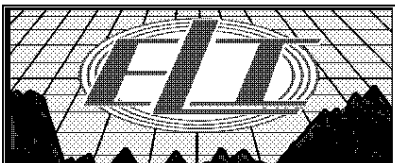
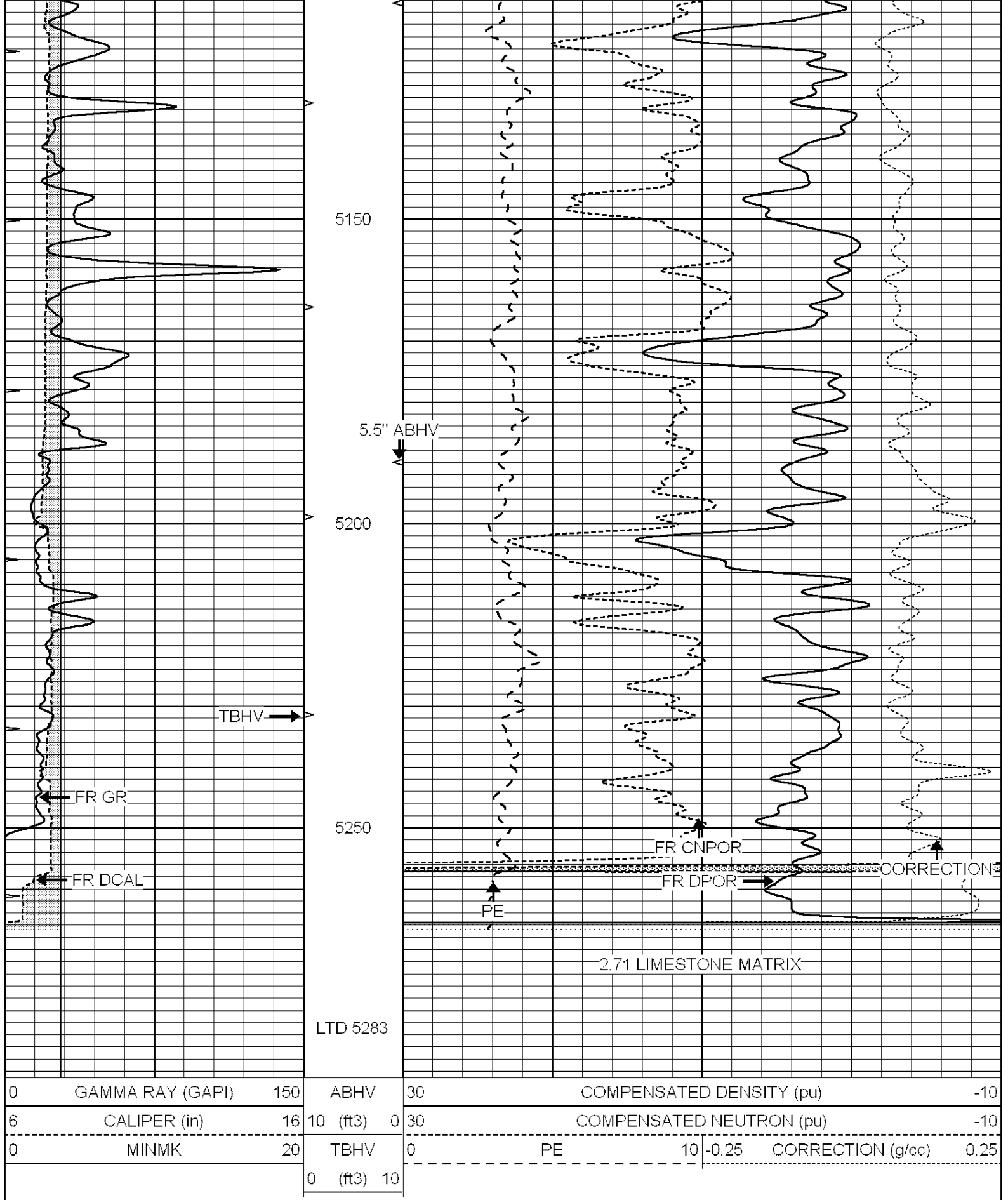
Database File: 3966pe.db
 Dataset Pathname: pass3.2
 Presentation Format: ldt_neu
 Dataset Creation: Tue Sep 17 00:01:41 2019
 Charted by: Depth in Feet scaled 1:240

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





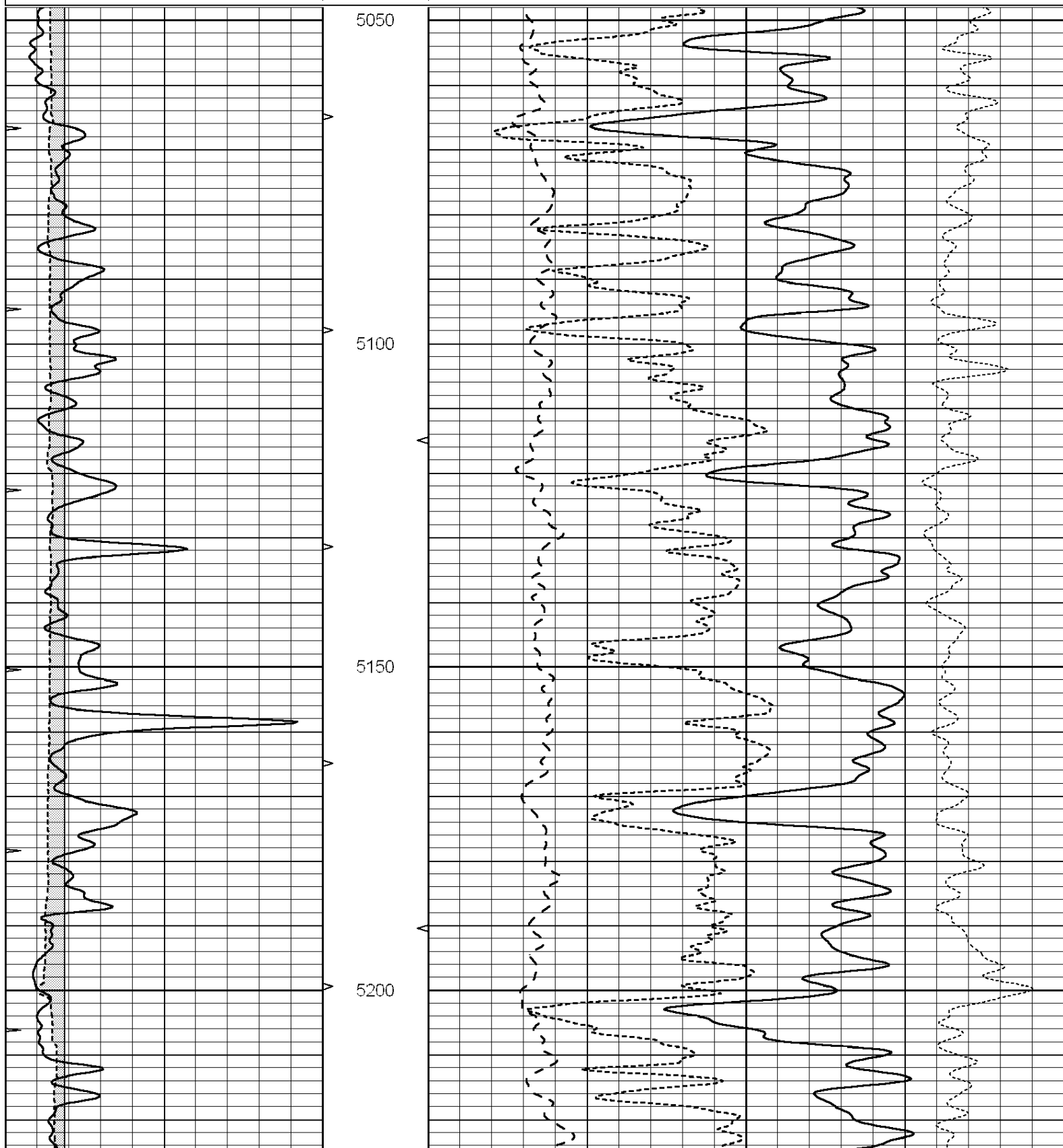




REPEAT SECTION

Database File: 3966pe.db
 Dataset Pathname: pass2.5
 Presentation Format: ldt_neu
 Dataset Creation: Tue Sep 17 00:15:29 2019 by Calc SOC 120430
 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
0	MINMK	20	TBHV	0	PE	10 -0.25	CORRECTION (g/cc) 0.25
			0 (ft3)	10			



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
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: 002 Model: PRB

Master Calibration

Performed Mon Aug 21 11:27:42 2017

	Background	Magnesium	Aluminum	Sandstone	
Window 1	837.1	10632.5	2945.1	12110.1	cps
Window 2	772.0	9117.4	2570.1	10197.3	cps
Window 3	631.7	4669.0	1481.9	5042.9	cps
Window 4	187.0	187.5	185.9	189.9	cps
Long Space	0.0	8345.4	1798.1	9425.3	cps
Short Space	1.1	1927.9	1285.9	2050.2	cps
Rho		1.7100	2.5960	1.3800	g/cc
Pe		0.0000	2.5700	1.5500	
Rib Angle	: 45.2	Rib Slope	: 1.008	Density/Spine Ratio	: 0.558
Spine Angle	: 75.2	Spine Slope	: 3.790	Spine Intercept	: -19.6

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: 070808
Tool Model: Probe

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:	OPEN_GR		
Performed:	Wed May 31 00:09:32 2017		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2800	GAPI/cps	