



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

COMPENSATED DENSITY/NEUTRON LOG

Company	DEUTSCH OIL COMPANY	Company	DEUTSCH OIL COMPANY
Well	STALLINGS NO 2-31	Well	STALLINGS NO 2-31
Field	STALLINGS	Field	STALLINGS
County	HODGEMAN	County	HODGEMAN
State	KANSAS	State	KANSAS
Location:	API # : 15-083-21865-00-00 NE - NW- NE - SW 2320' FSL & 1820' FWL	Other Services DIL/MEL	
Permanent Datum Log Measured From Drilling Measured From	GROUND LEVEL KELLY BUSHING 10' A.G.L. KELLY BUSHING	Elevation K.B. 2465 D.F. 2463 G.L. 2455	
Date	11/28/2012		
Run Number	ONE		
Depth Driller	4820		
Depth Logger	4826		
Bottom Logged Interval	4802		
Top Log Interval	3800		
Casing Driller	8 5/8" @ 268'		
Casing Logger	278		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3/56	CHLORIDES 5,800 PPM	
pH / Fluid Loss	8.5/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.4@76F		
Rmf @ Meas. Temp	1.12@76F		
Rmc @ Meas. Temp	1.68@76F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	.865@123F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	6:00 A.M.		
Maximum Recorded Temperature	123		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	MIKE GARRISON		
Witnessed By	KENT DEUTSCH		

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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 NABORS COMPLETION & PRODUCTION SVCS. (785) 628-6395

DIRECTIONS:
JETMORE, KS 5 SOUTH, 1/2 EAST, NORTH



NABORS
COMPLETION
& PRODUCTION

MAIN SECTION

Database File:

40010140dildn.db

Dataset Pathname:

pass3.1

Presentation Format:

_den_neu

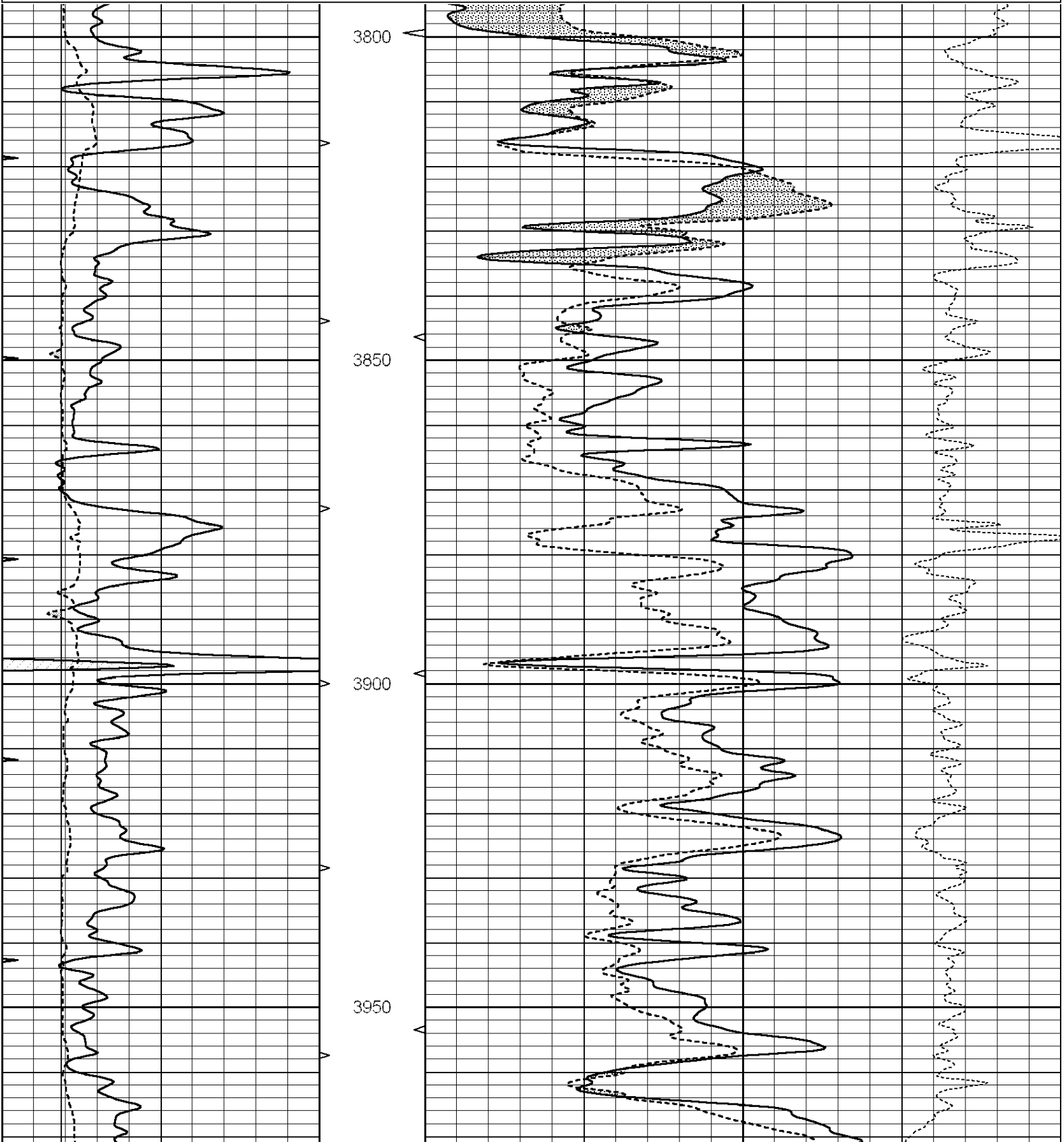
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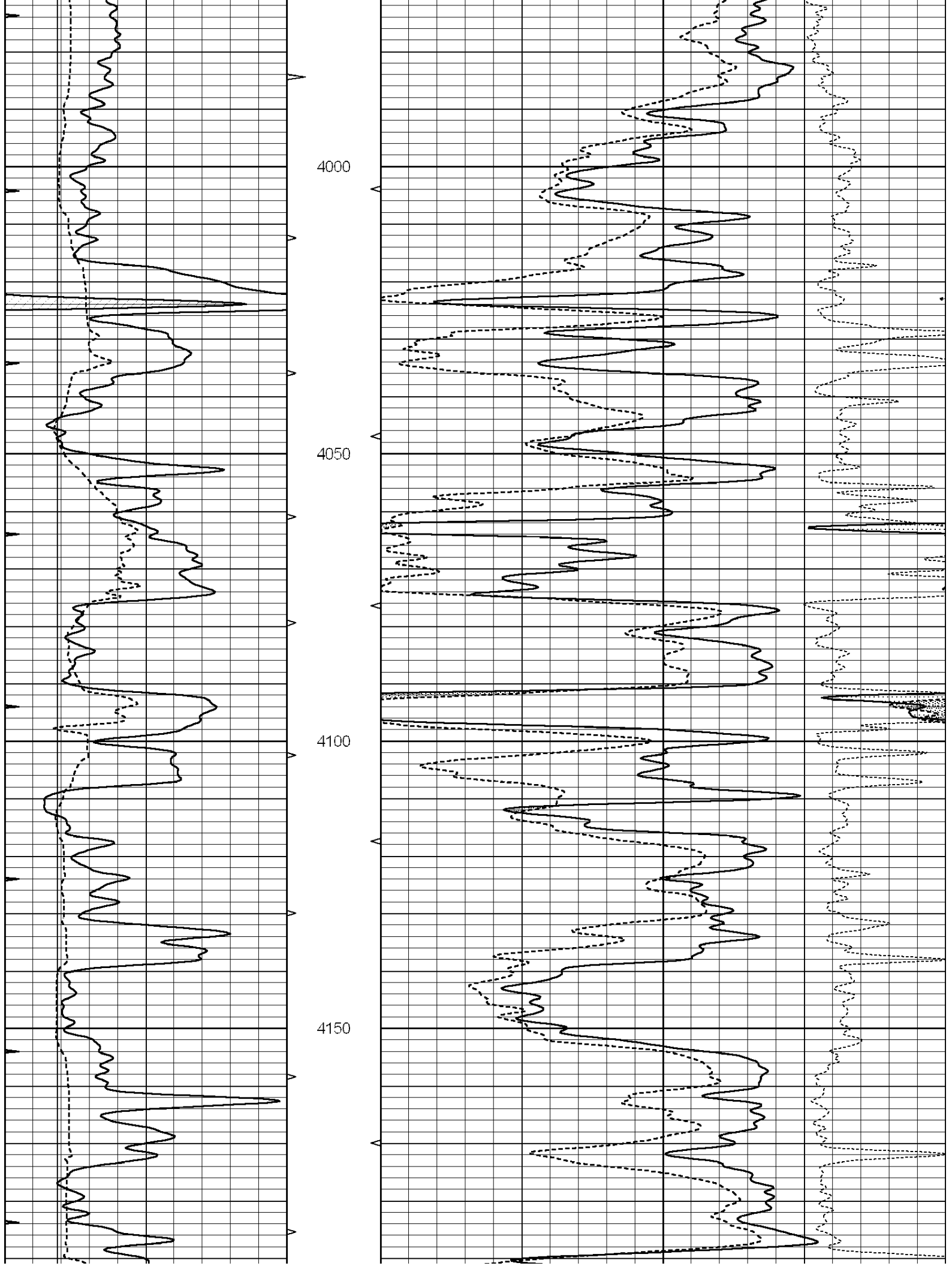
Wed Nov 28 19:30:08 2012 by Calc Open-Cased 090629

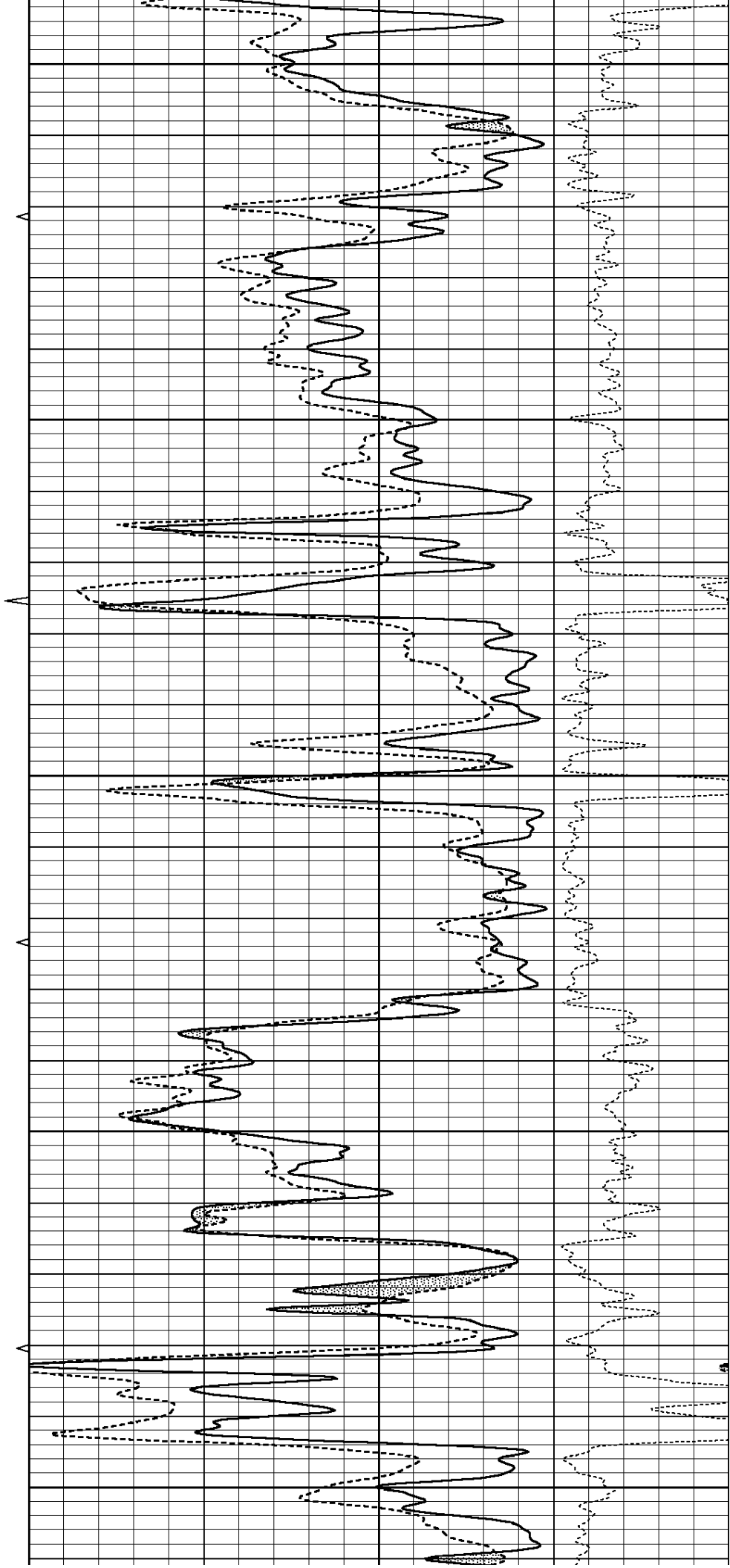
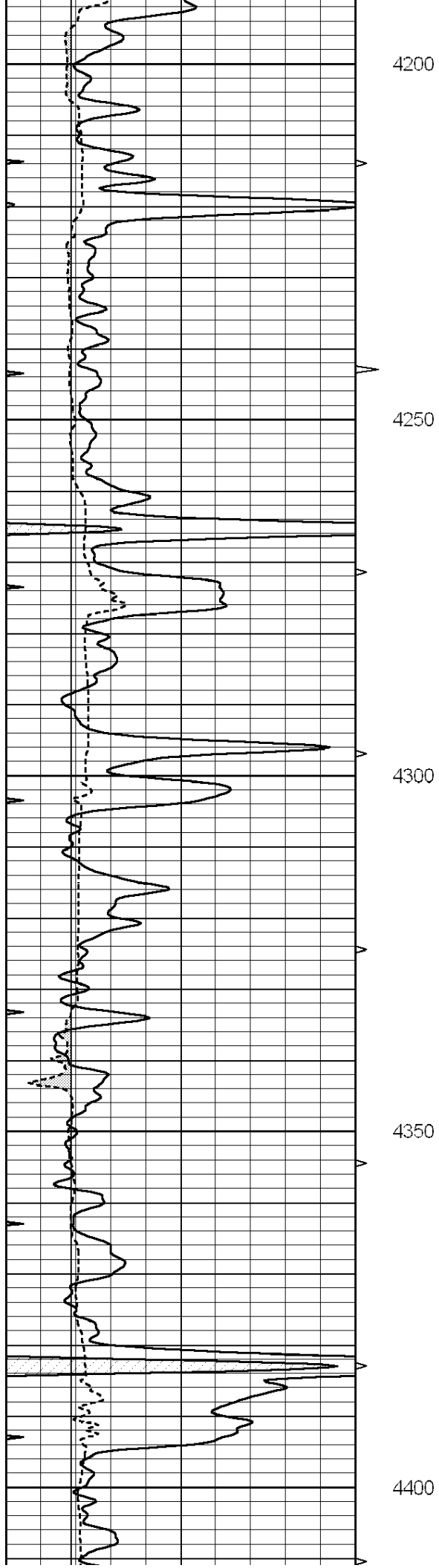
Charted by:

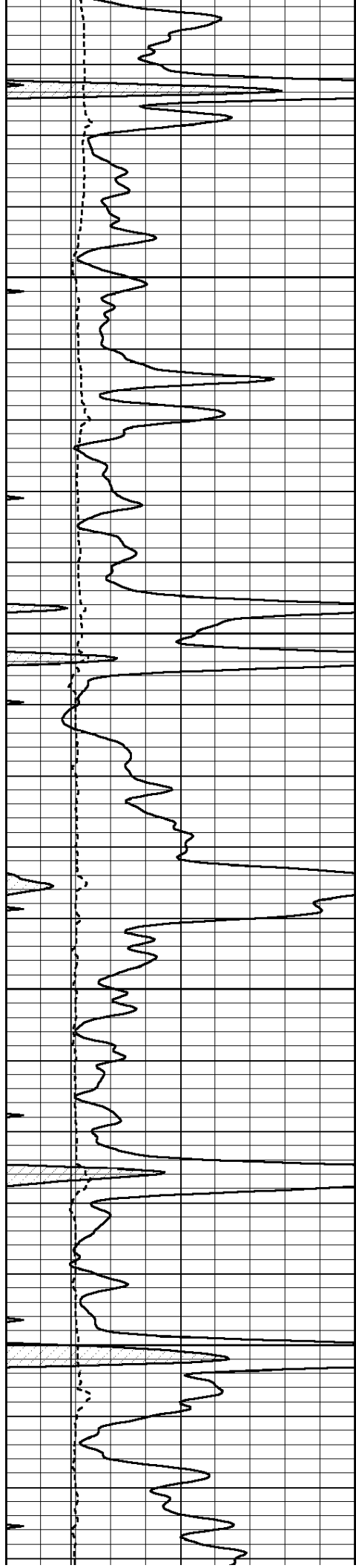
Depth in Feet scaled 1:240

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







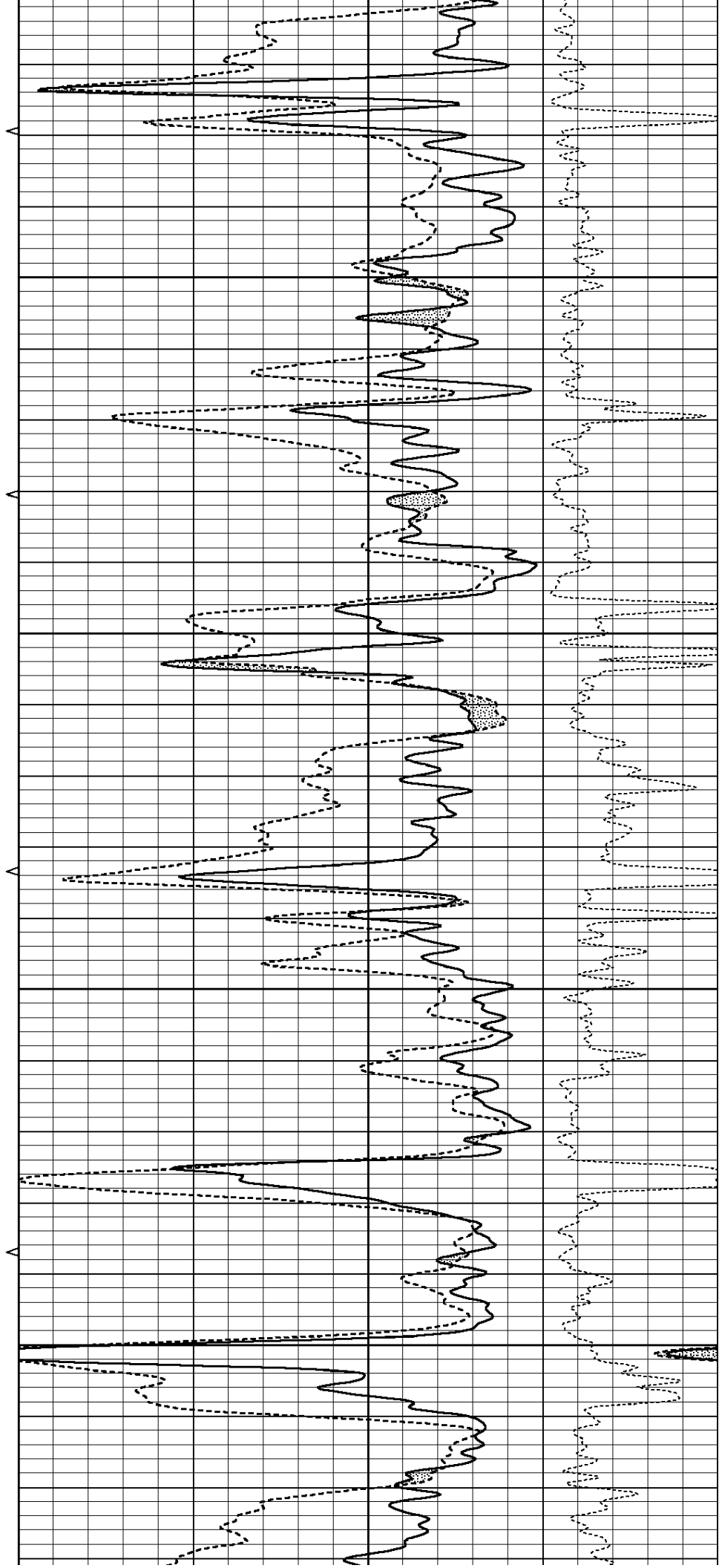


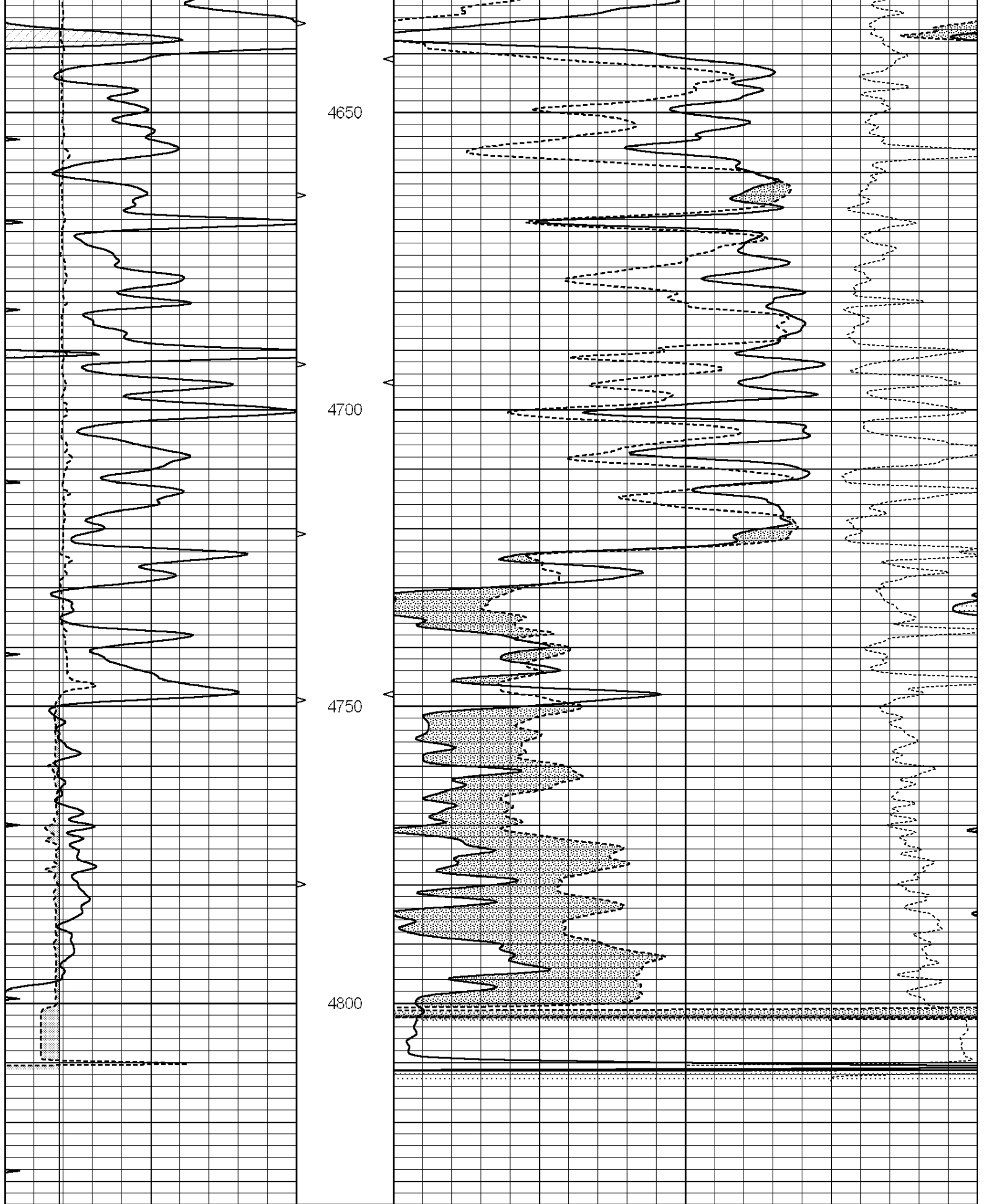
4450

4500

4550

4600





0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)			-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)			-10

0	MINMK	20	BVTX				-0.25	CORRECTION (g/cc)	0.25

			0 (ft3)	10					

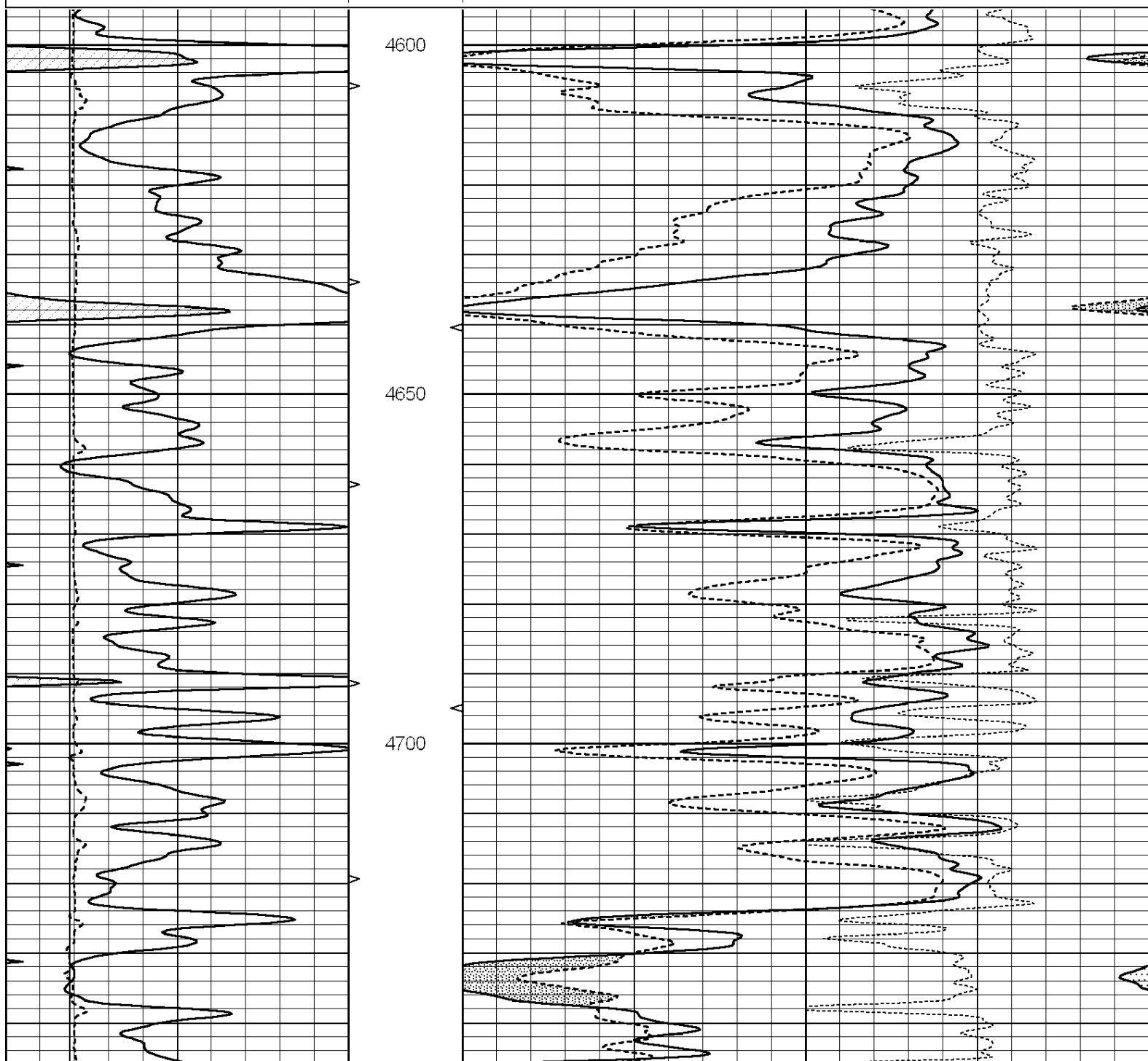


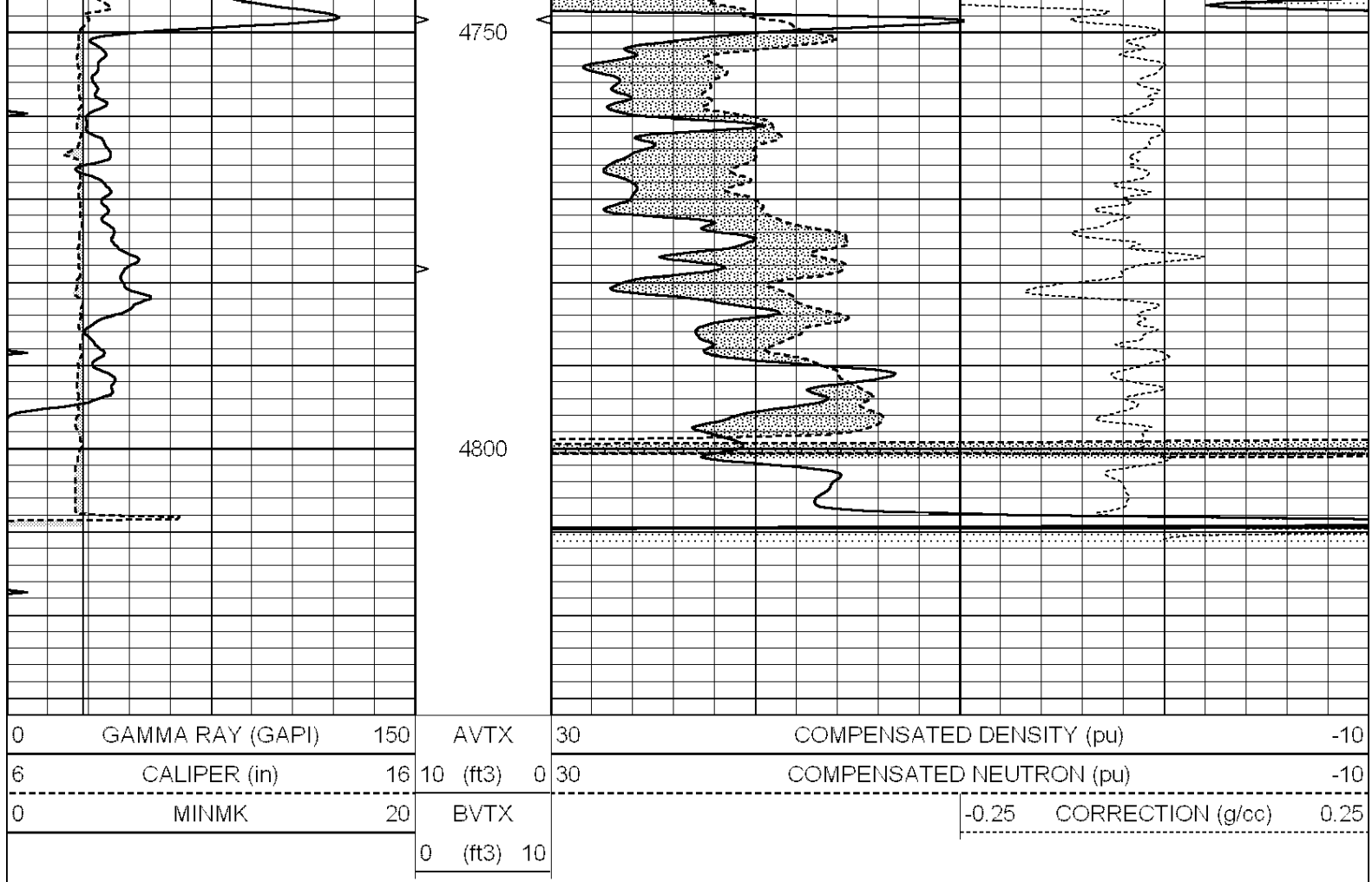
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REPEAT SECTION

Database File: 40010140dildn.db
Dataset Pathname: pass2.1
Presentation Format: _den_neu
Dataset Creation: Wed Nov 28 18:40:12 2012 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

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





Calibration Report

Database File: 40010140dildn.db
 Dataset Pathname: pass3.1
 Dataset Creation: Wed Nov 28 19:30:08 2012 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
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	
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			
Compensated Density Calibration Report									
Serial-Model:					GEAR4-GEARHART				
Source / Verifier:					143 / 143				
Master Calibration Performed:					Mon Mar 19 19:07:19 2012				
Master Calibration									
	Density			Far Detector		Near Detector			
Magnesium		1.710	g/cc	1015.91			497.51	cps	
Aluminum		2.600	g/cc	227.67			350.20	cps	
Spine Angle = 76.79				Density/Spine Ratio = 0.579					
	Size			Reading					
Small Ring		8.00	in	3.21		V			
Large Ring		14.00	in	5.46		V			
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			
Gamma Ray Calibration Report									
Serial Number:			#8						
Tool Model:			OPEN						
Performed:			Mon Jun 13 16:56:43 2011						
Calibrator Value:			150.0	GAPI					
Background Reading:			0.0	cps					
Calibrator Reading:			175.0	cps					
Sensitivity:			0.8371	GAPI/cps					