



Company	Petroleum Development Corporation
Well	J & L Farms 31 - 30
Field	Wattenberg
County	Weid
State/Priv	Colorado
Location	6607 FNL & 1983 FEL NW NE Sec - 30, Twp - 6N, Rge - 63W
Permeable Column	GL
Log Measured From	KB
Casing Measured From	KB
Date	November 24 2003
Run Number	1
Depth (feet)	6997
Depth (meters)	2042
Bottom Logged Interval	6990
Top Log Interval	6990
Casing Depth	694
Casing Log	694
Bit Size	7-7/8
Type Fluid in Hole	Chemical
Density / Viscosity	8.8 / 50
pH / Fluid Loss	9.0 / 8.0
Source of Sample	Rowline
Rim @ Mass Temp	3.33 @ 92° F
Rim @ Mass Temp	2.50 @ 92° F
Rim @ Mass Temp	4.16 @ 92° F
Source of Rim / Rims	Mass / Calc
Rim @ BHT	1.01 @ 204° F
Time Circulation Stopped	0530
Time Logger on Bottom	1330
Maximum Recorded Temperature	204° F
Equipment Number	4041
Location	Bryant CO
Recorded By	Joe Heynolds
Witnessed By	Steve Trappett

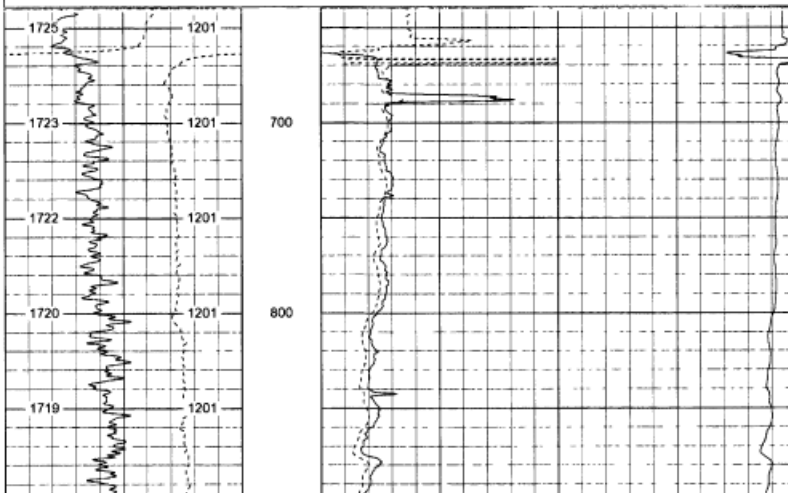
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

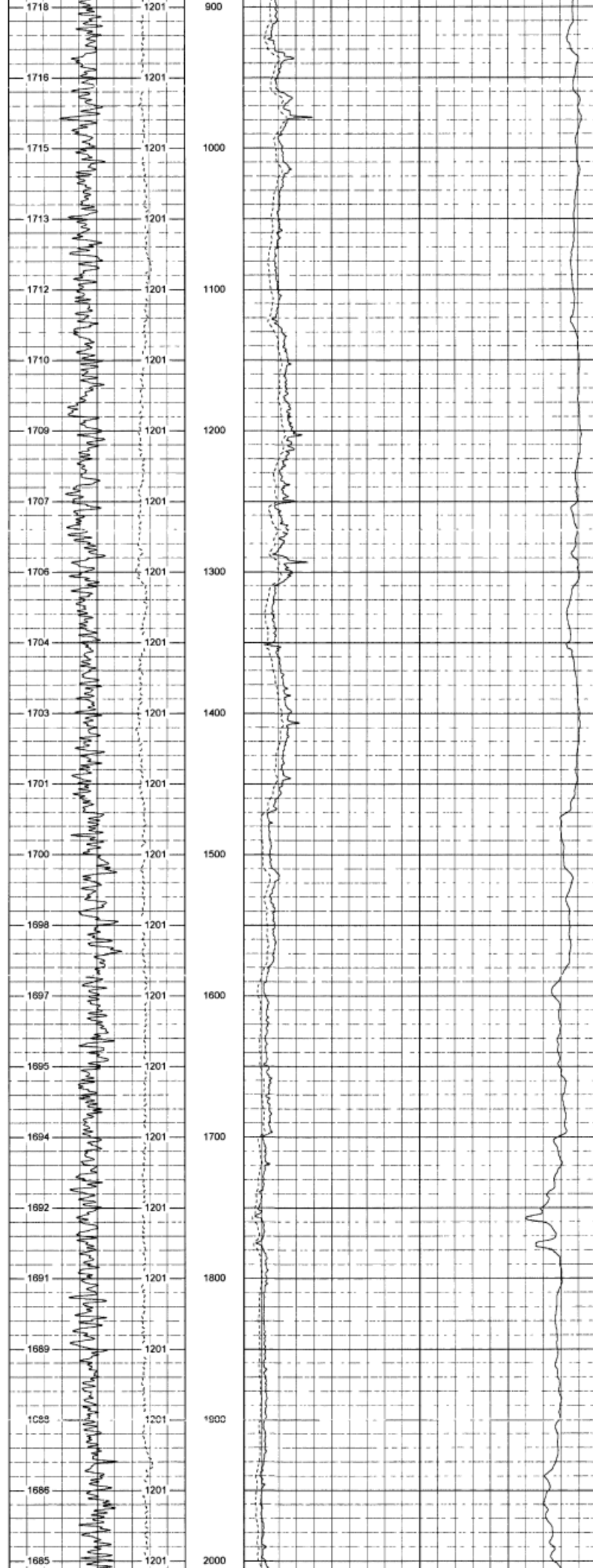
#### Comments

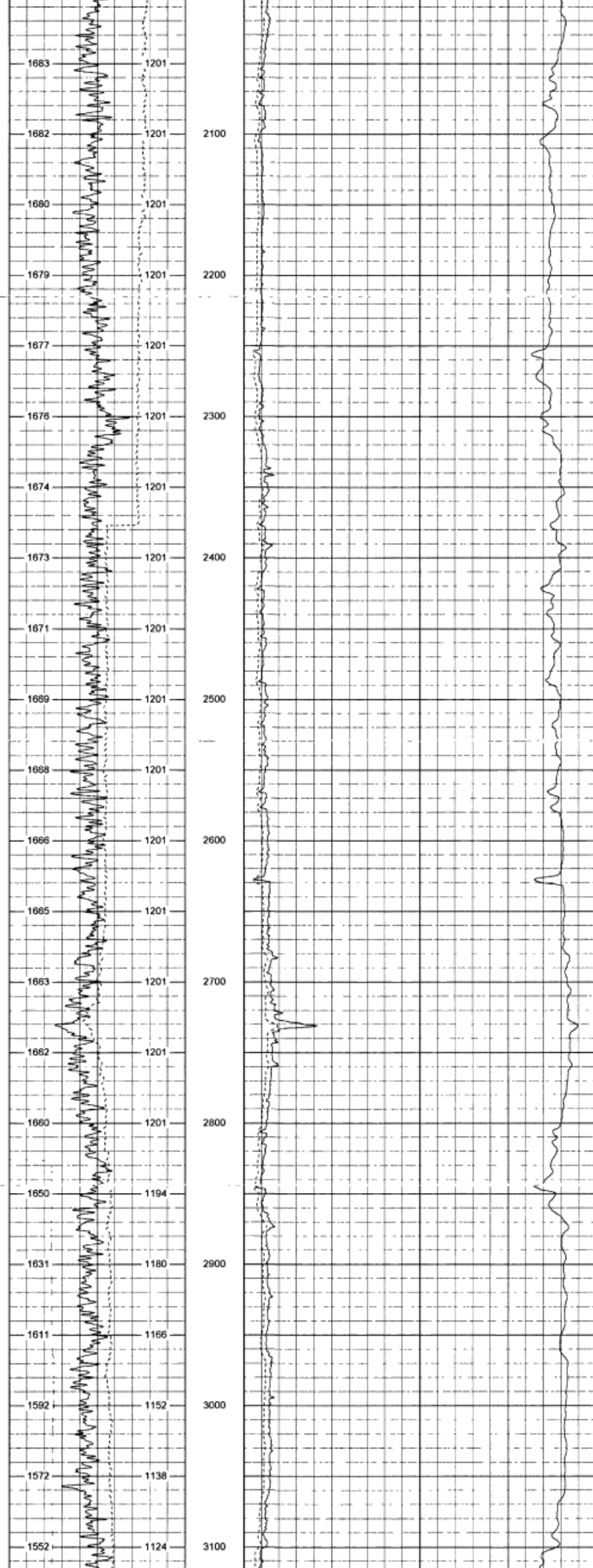
Thank you for using Phoenix Surveys  
Your crew today Joe, Seth, Caza Drilling Rig 1  
Annular volume is calculated for 4 5" casing  
API # 05-123-21807

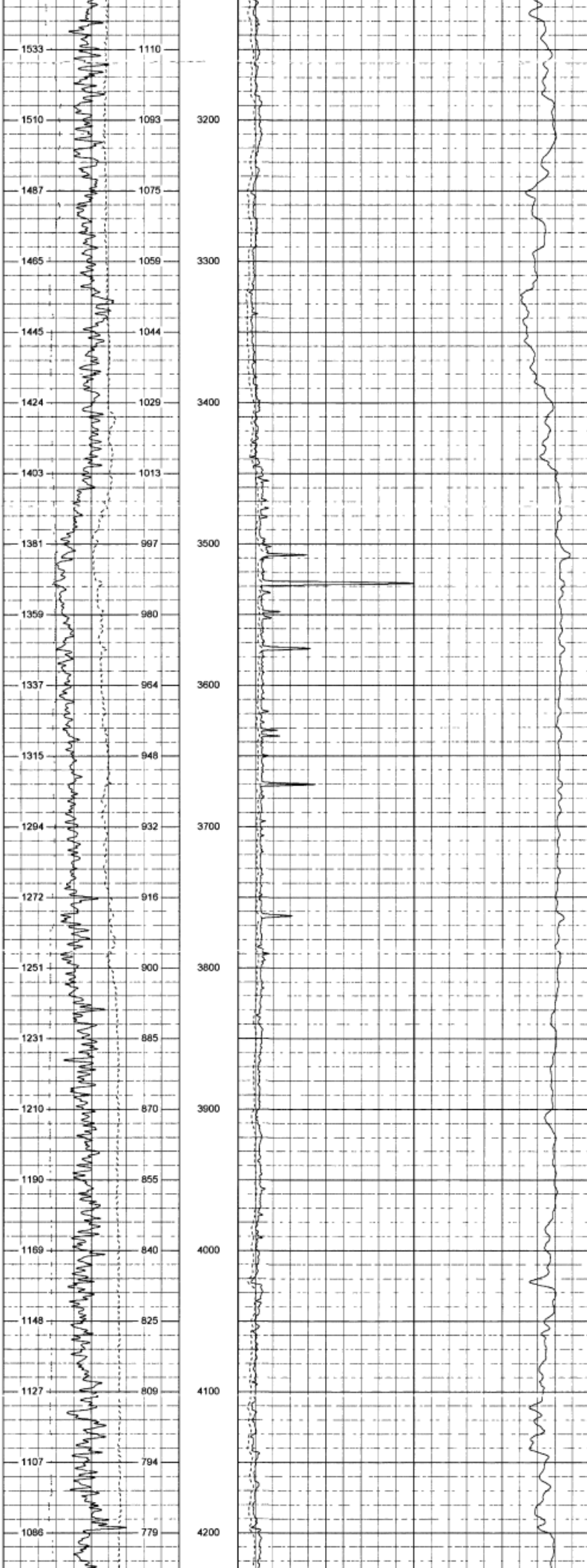
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Dataset Pathname pass3  
Presentation Format dlin5  
Dataset Creation Mon Nov 24 14 03 32 2003 by Log 6 2\_B4  
Charted by Depth in Feet scaled 1 600

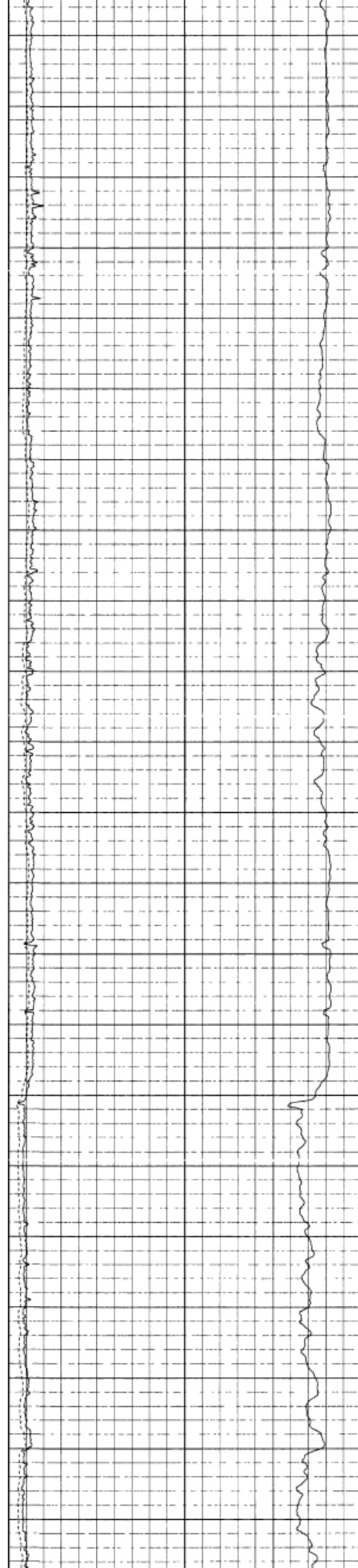
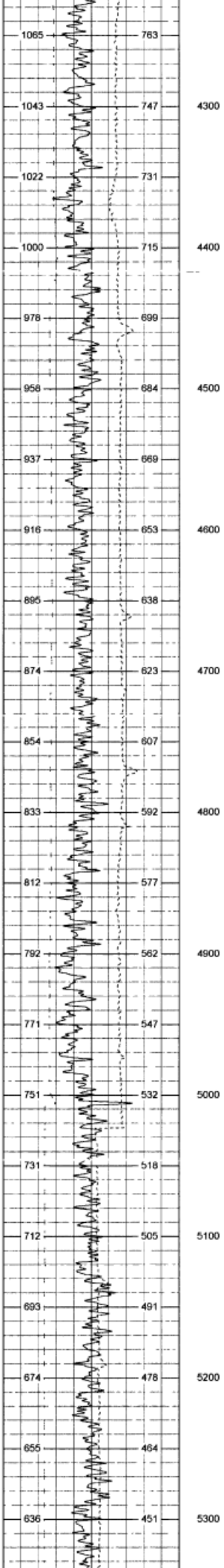
0	Gamma Ray (GAPI)	200	0	Deep Resistivity (Ohm-m)	50	1000	CILD (mmho-m)	0
6	Caliper (in)	16	0	Shallow Resistivity (Ohm-m)	50			
0	SP (mV)	200						

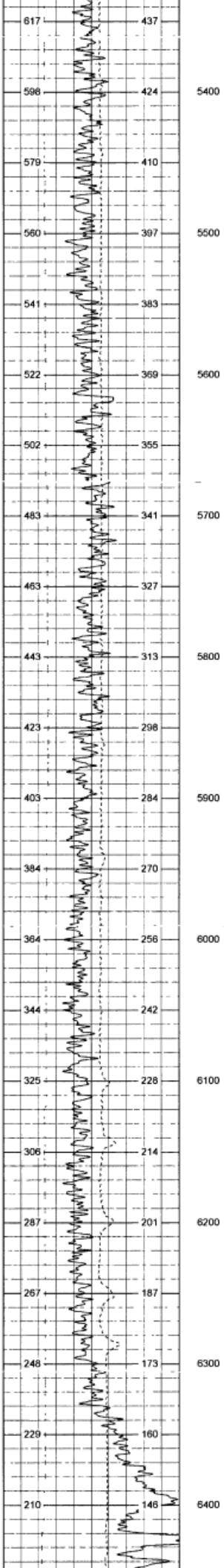


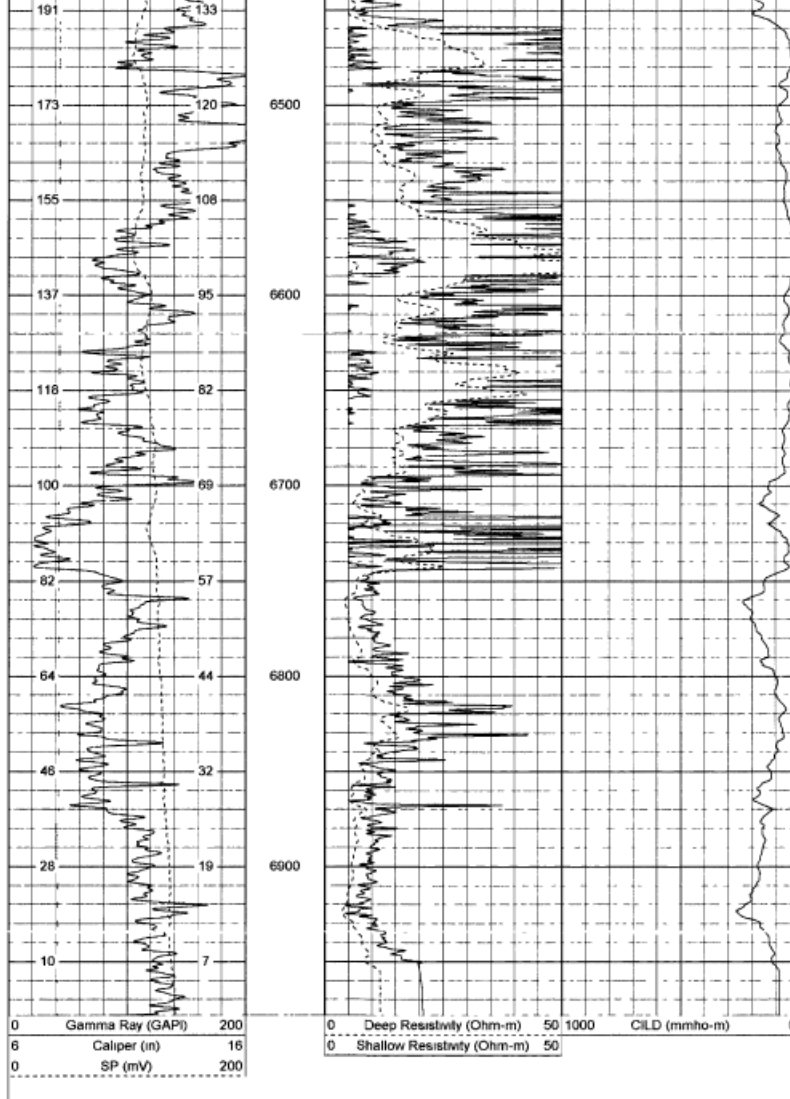






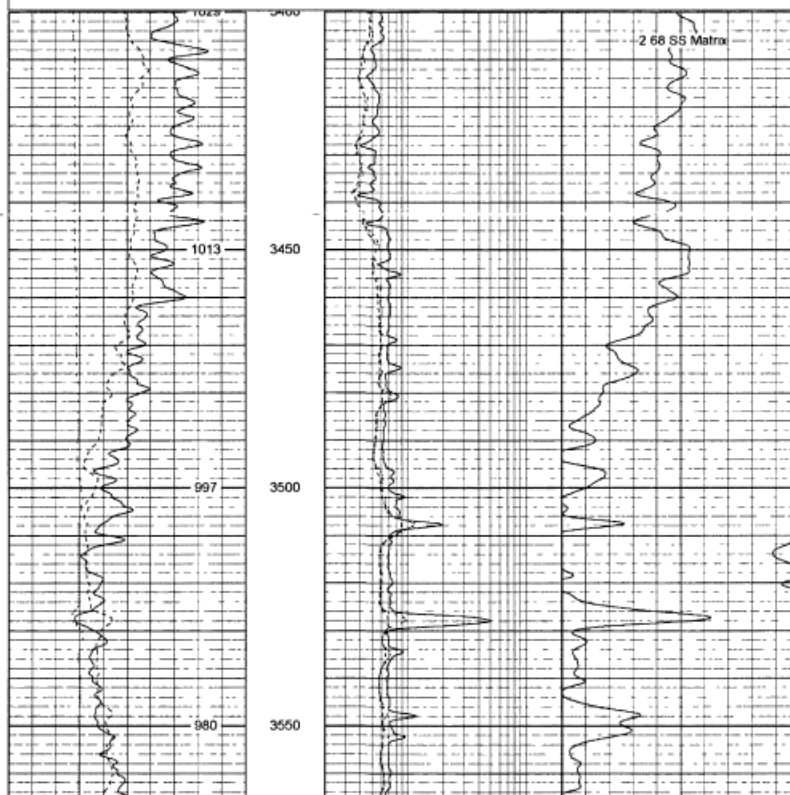


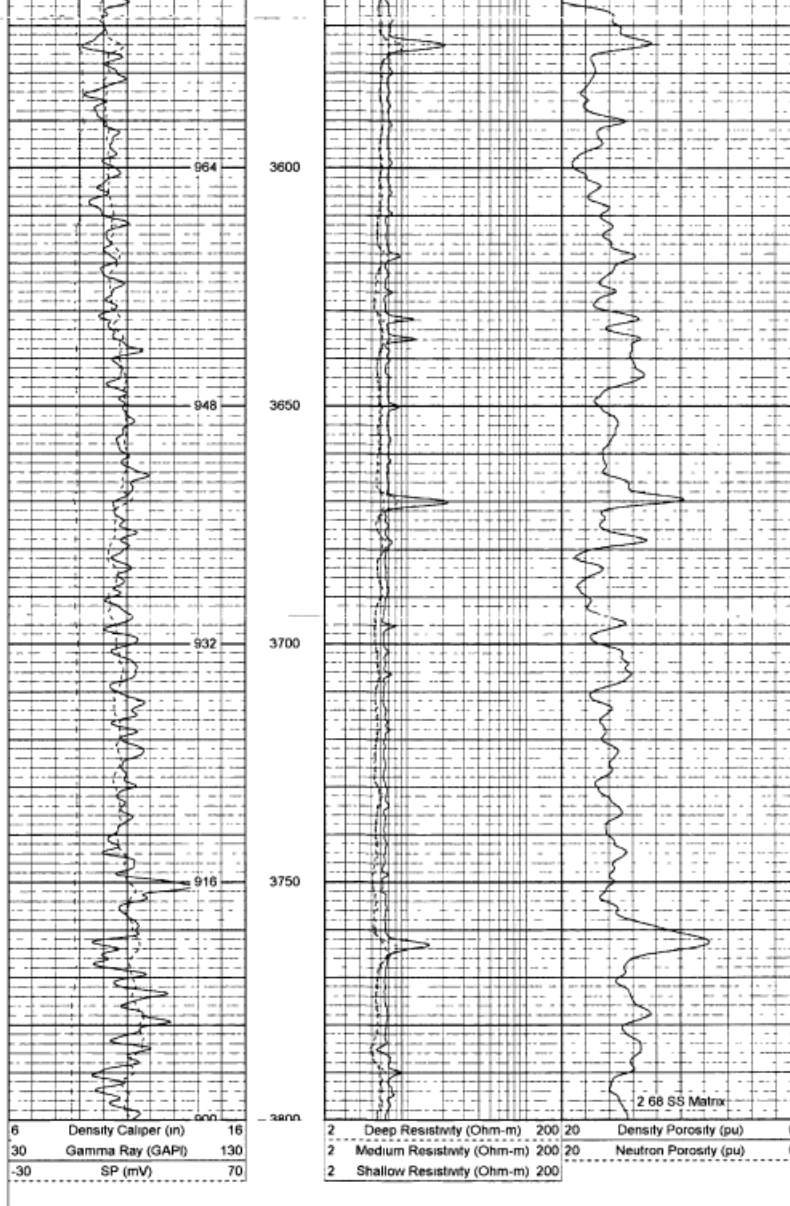




Database File 4020 db  
 Dataset Pathname pass3  
 Presentation Format spltpdc  
 Dataset Creation Mon Nov 24 14 03 32 2003 by Log 6 2\_B4  
 Charted by Depth in Feet scaled 1 240

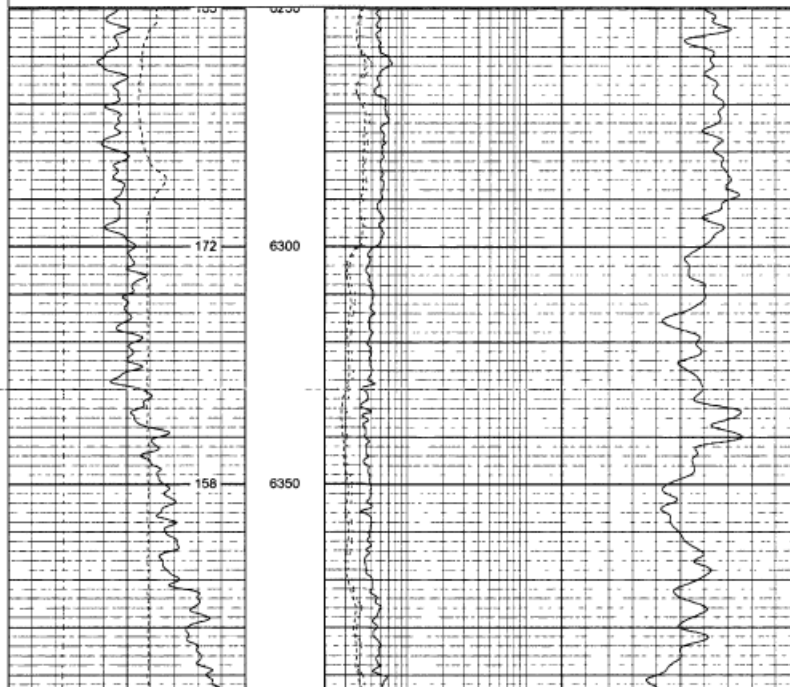
6	Density Caliper (in)	16	2	Deep Resistivity (Ohm-m)	200	20	Density Porosity (pu)	0
30	Gamma Ray (GAPI)	130	2	Medium Resistivity (Ohm-m)	200	20	Neutron Porosity (pu)	0
-30	SP (mV)	70	2	Shallow Resistivity (Ohm-m)	200			



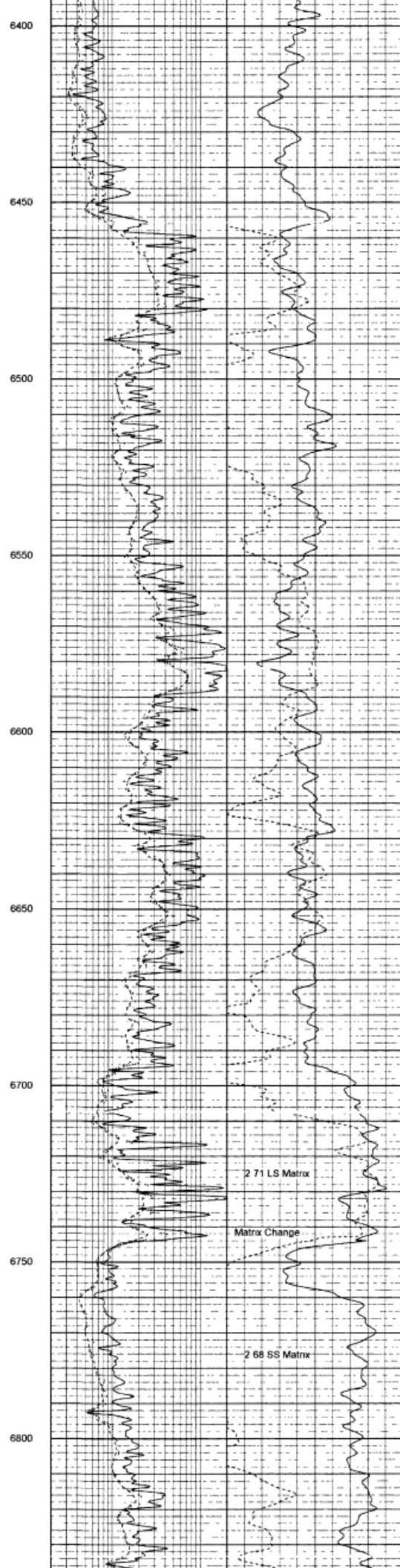
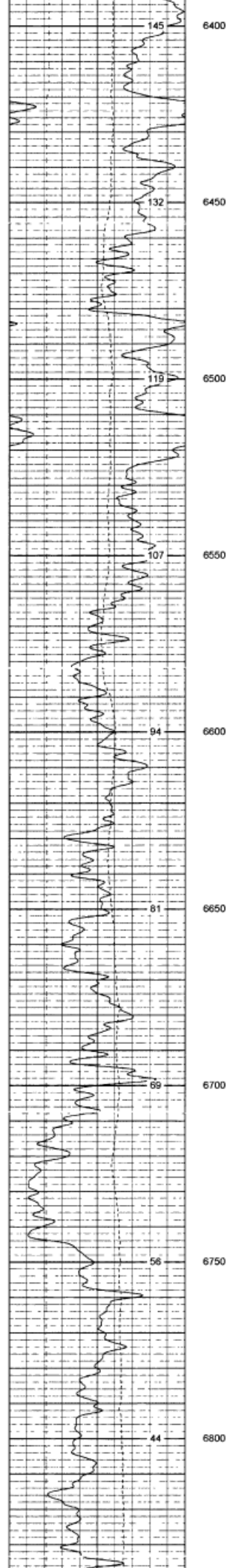


Database File 4020 db  
 Dataset Pathname pass3 1  
 Presentation Format splitpdc  
 Dataset Creation Mon Nov 24 14 28 01 2003 by Calc 6 2\_B4  
 Charted by Depth in Feet scaled 1 240

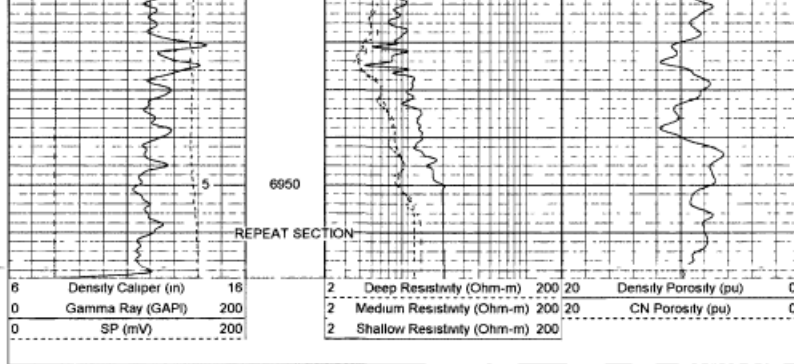
6	Density Caliper (in)	16	2	Deep Resistivity (Ohm-m)	200	20	Density Porosity (pu)	0
0	Gamma Ray (GAPI)	200	2	Medium Resistivity (Ohm-m)	200	20	CN Porosity (pu)	0
0	SP (mV)	200	2	Shallow Resistivity (Ohm-m)	200			





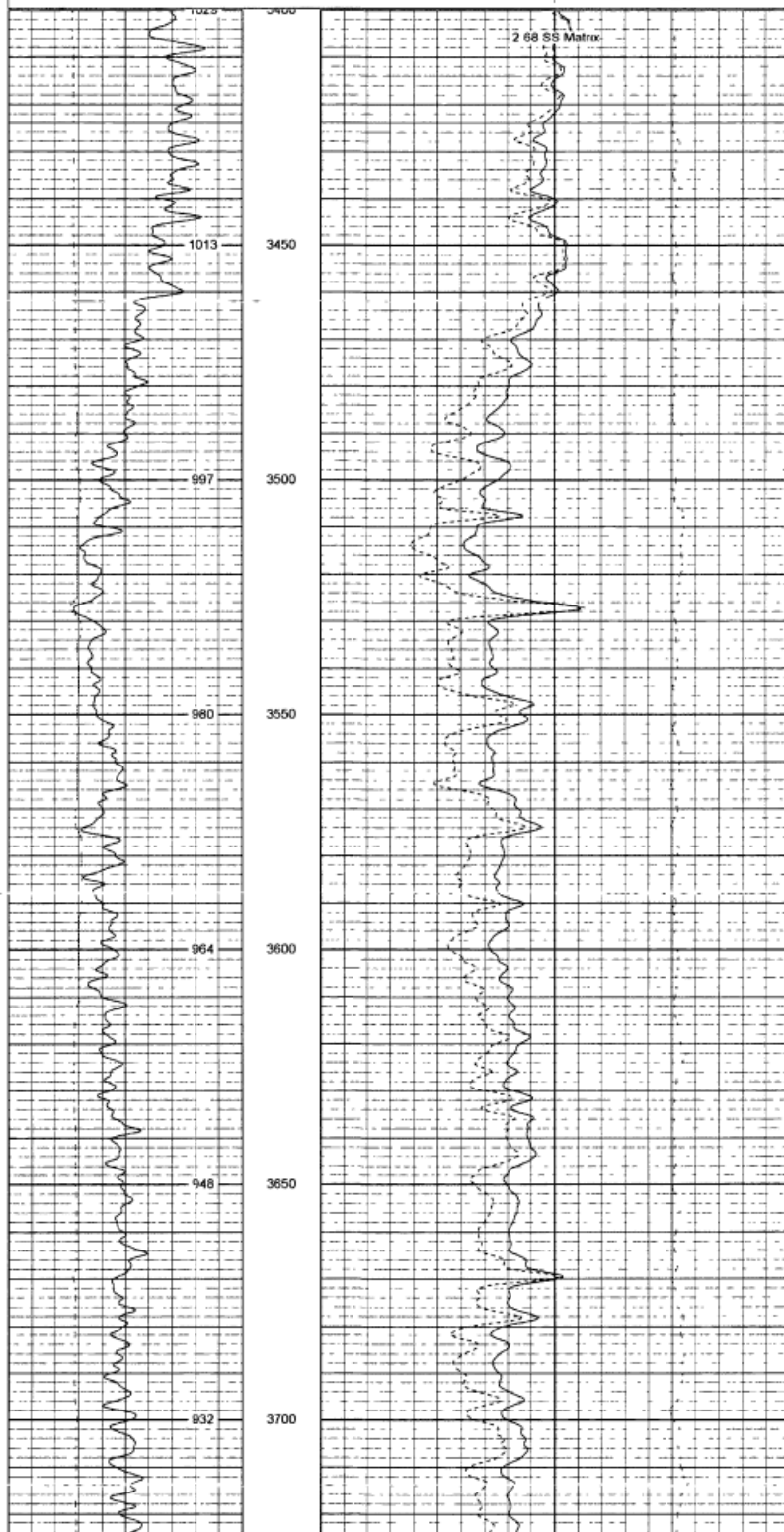


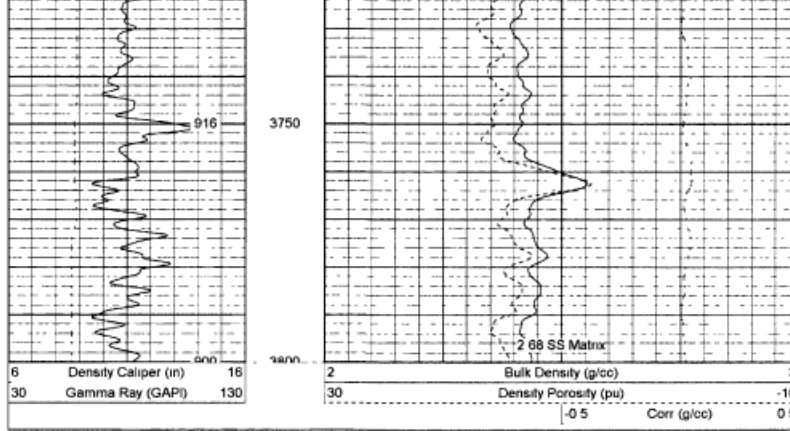




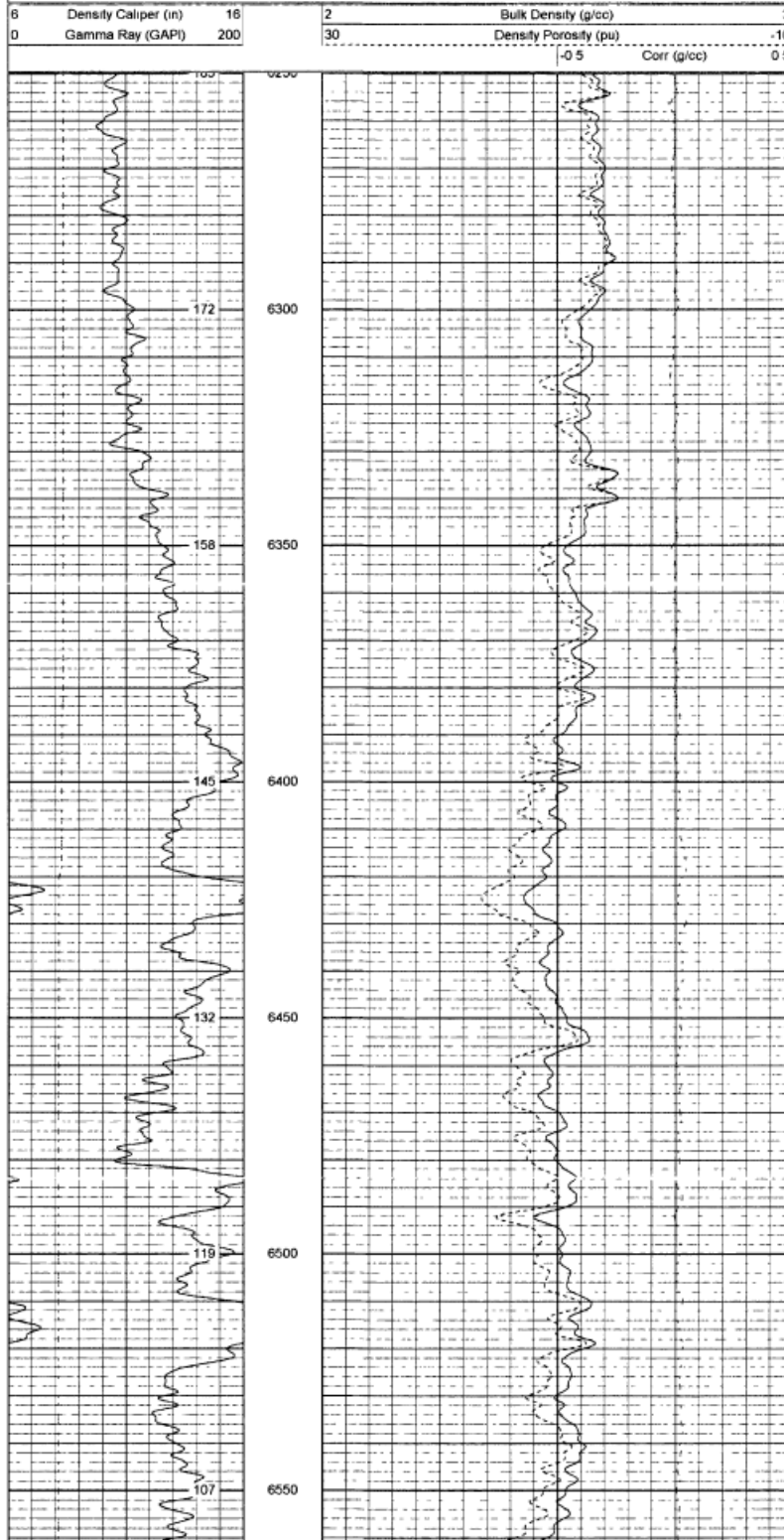
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 Dataset Pathname pass3  
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 Dataset Creation Mon Nov 24 14 03 32 2003 by Log 6 2\_B4  
 Charted by Depth in Feet scaled 1 240

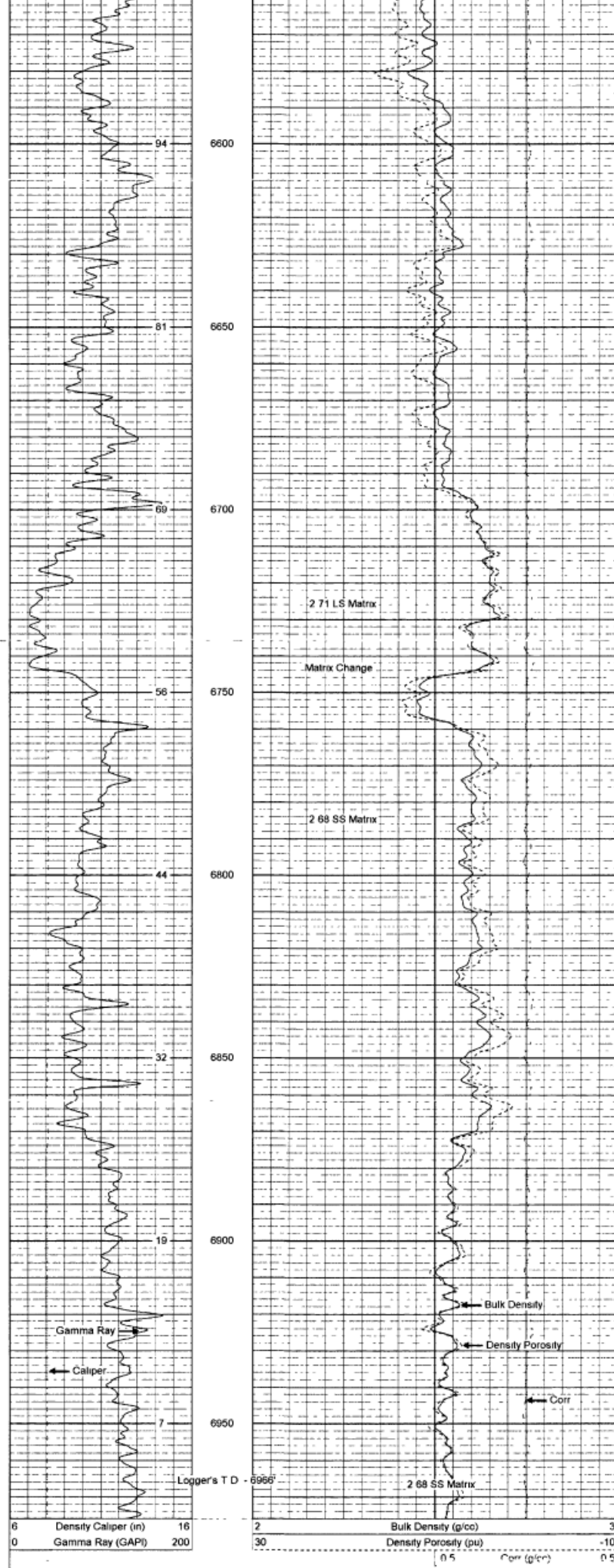
6	Density Caliper (in)	16	2	Bulk Density (g/cc)	3
30	Gamma Ray (GAPI)	130	30	Density Porosity (pu)	-10
				Corr (g/cc)	0.5





Database File 4020 db  
 Dataset Pathname pass3 1  
 Presentation Format cdl  
 Dataset Creation Mon Nov 24 14 28 01 2003 by Calc 6 2\_B4  
 Charted by Depth in Feet scaled 1 240





Serial-Model				45-PSI			
Surface Cal Performed				Fri Nov 14 15 02 12 2003			
Loop	Readings		References		Results		
	Air	Loop	Air	Loop	m	b	
Deep	0 000	1 000	0 000	1 000	mmho-m	0 542	-26 000
Medium	0 000	1 000	0 000	1 000	mmho-m	0 310	-20 000

Compensated Density Calibration Report						
Serial-Model			23-PSI			
Master Calibration Performed			Wed Sep 03 12 51 15 2003			
Before Survey Verification Performed						
After Survey Verification Performed						
Master Calibration						
Density			Far Detector		Near Detector	
Magnesium	1 750	g/cc	1559 00		1259 00 cps	
Aluminum	2 690	g/cc	300 00		806 00 cps	
Size			Reading			
Small Ring	8 00	in	0 66			
Large Ring	15 50	in	0 23			

Compensated Neutron Calibration Report					
Serial Number			25		
Tool Model			PSI		
CALIBRATION					
Detector	Readings		Target	Normalization	
Short Space	1 00	cps	1 00	cps	1 6500
Long Space	1 00	cps	1 00	cps	2 0500

Gamma Ray Calibration Report			
Serial Number	232		
Tool Model	PSI		
CALIBRATION			
	Thu Oct 16 17 59 56 2003		
Calibrator Value	253	GAPI	
Background Reading	30	cps	
Calibrator Reading	380	cps	
Sensitivity	0 65	GAPI/cps	