

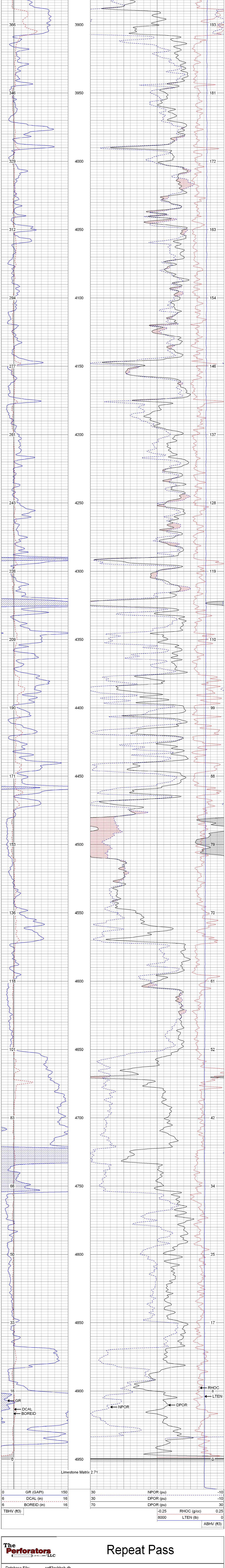
The Perforators LLC COMPENSATED DENSITY NEUTRON LOG	
Company: Charles N. Griffin Well: #3 Ash B Field: Medicine Lodge - Boggs County: Barber State: Kansas Location: 347 N.W. & 70 th EUL AP# #: 18 007 23835 Other Services: DIL	Company: Charles N. Griffin Well: #3 Ash B Field: Medicine Lodge - Boggs County: Barber State: Kansas Location: 347 N.W. & 70 th EUL AP# #: 18 007 23835 Other Services: DIL
Date: 3-4-12 Run Number: 4872 Depth: 4845' Bottom Loggers Interval: 3007' Total Log Interval: 3007' Casing: 21" O.D. Cement: 100% Pipe: 2.315" Density / Viscosity: 9.4165 pH: 7.25 Fluid Loss: 9.5110 PI: 0.0 Rate of Mass: 28900000 Temp: 1.2360000000000000 Form: 1.2360000000000000 Source of Mass: Calculated Rate @ BHT: 3811100000000000 Time Curation Stopped: 4:00:13 m Time Offset on Screen: 17:45:24 m Equipment Number: 17065 Location: Hays, KS Logged By: L. Smith Witnessed By: M. Griffin	Date: 3-4-12 Run Number: 4872 Depth: 4845' Bottom Loggers Interval: 3007' Total Log Interval: 3007' Casing: 21" O.D. Cement: 100% Pipe: 2.315" Density / Viscosity: 9.4165 pH: 7.25 Fluid Loss: 9.5110 PI: 0.0 Rate of Mass: 28900000 Temp: 1.2360000000000000 Form: 1.2360000000000000 Source of Mass: Calculated Rate @ BHT: 3811100000000000 Time Curation Stopped: 4:00:13 m Time Offset on Screen: 17:45:24 m Equipment Number: 17065 Location: Hays, KS Logged By: L. Smith Witnessed By: M. Griffin

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:
 South of Medicine Lodge on 281 2.5 mi. ,
 W on Pleasant Valley Rd. Stay on main rd. ,
 when rd. curves S go across 2 cattle guards and stay on lease rd. to top of hill a
 ABHV Calculated for 5.5" Casing.
 Thanks for using The Perforators LLC Hays, KS. (785-621-4604)

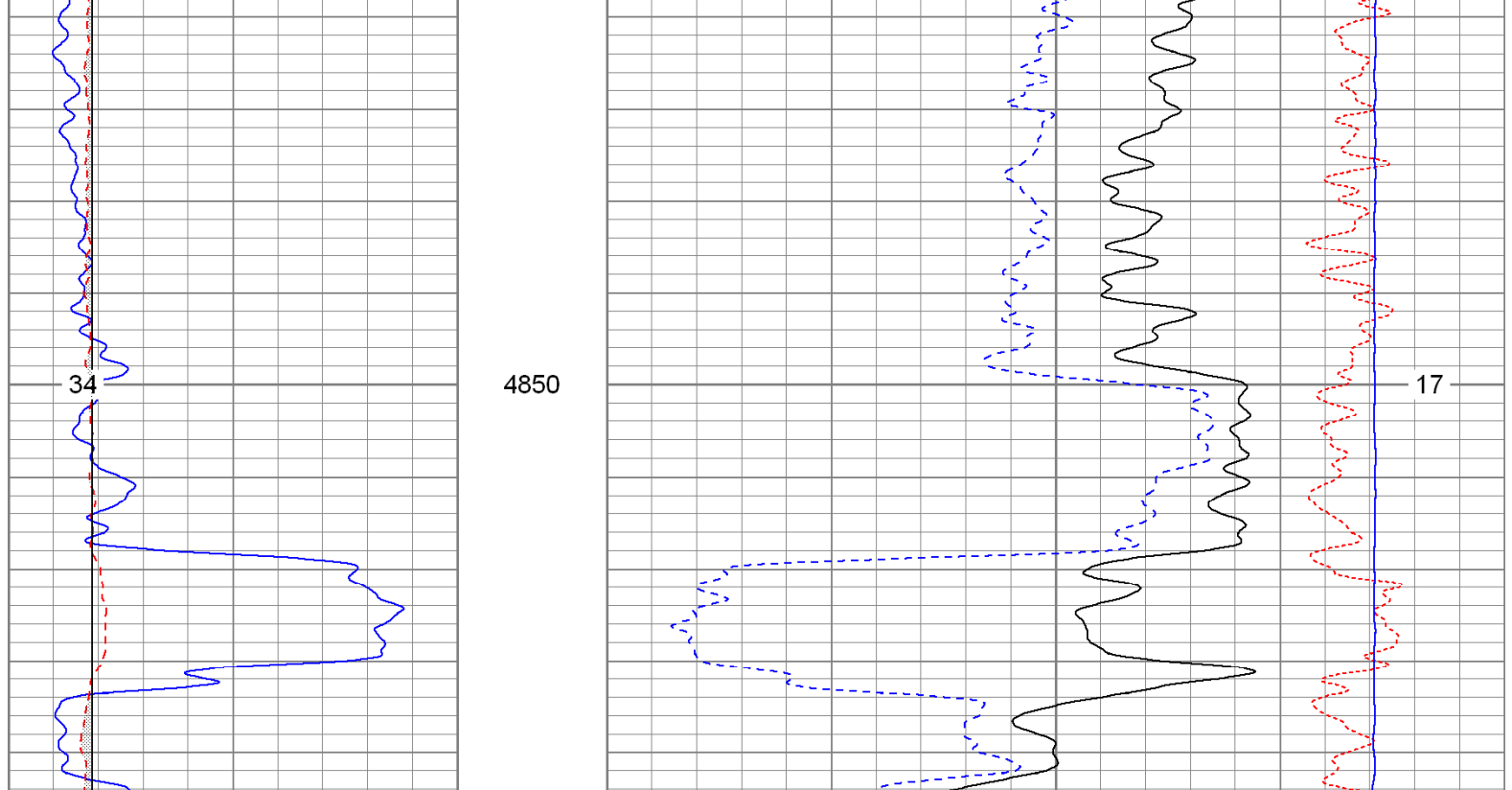
Main Pass

Database File: cg#3ashboh.db
 Dataset Pathname: pass2
 Presentation Format: kcdnl
 Dataset Creation: Sun Mar 04 07:56:01 2012 by Log Open-Cased 100827
 Charted by: Depth in Feet scaled 1:240



Repeat Pass

Database File: cg#3ashboh.db
 Dataset Pathname: pass1
 Presentation Format: kcdnl
 Dataset Creation: Sun Mar 04 07:47:09 2012 by Log Open-Cased 100827
 Charted by: Depth in Feet scaled 1:240



Calibration Report

Database File: cg#3ashboh.db
 Dataset Pathname: pass1
 Dataset Creation: Sun Mar 04 07:47:09 2012 by Log Open-Cased 100827

Dual Induction Calibration Report

Serial-Model: 080522-Probe
 Surface Cal Performed: Wed Feb 22 16:59:31 2012
 Downhole Cal Performed: Wed Feb 22 16:59:34 2012
 After Survey Verification Performed: Wed Feb 22 16:59:36 2012

Surface Calibration		Readings		References		Results	
Loop:	Air	Loop	Air	Loop	m	b	
Deep	0.001	0.639	0.000	400.000	mmho/m	627.163	-0.574
Medium	0.002	0.738	0.000	464.000	mmho/m	630.206	-1.062
Internal:	Zero	Cal	Zero	Cal	m <td>b <td></td> </td>	b <td></td>	
Deep	0.001	0.639	0.000	400.000	mmho/m	628.131	-0.717
Medium	0.002	0.738	0.000	464.000	mmho/m	630.237	-1.192

Downhole Calibration		Readings		References		Results	
	Zero	Cal	Zero	Cal	m'	b'	
Deep	0.283	399.724	0.142	399.525	mmho/m	1.000	-0.142
Medium	0.315	464.258	0.131	464.108	mmho/m	1.000	-0.185
LL3		7.287		750.000	Ohm-m		
		-0.000		12.000	Ohm-m		
		-7.425		3745.000	mmho-m		

Compensated Density Calibration Report

Serial-Model: 2501DHT-DHT
 Source / Vendor: Master Calibration Performed: Fri Feb 17 05:00:07 2012

Master Calibration		Density		Far Detector		Near Detector	
Magnesium	1.750	g/cc	744.27	293.58	cps		
Aluminum	2.680	g/cc	138.48	189.15	cps		
Spine Angle = 75.35		Density/Spine Ratio = 0.535					
Size		Reading					
Small Ring	7.55	in	6064.22				
Large Ring	14.00	in	10296.80				

Gamma Ray Calibration Report

Serial Number: 2000
 Tool Model: P2000
 Performed: Mon Feb 06 09:30:04 2012

Calibrator Value: 1.0 GAPI
 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps
 Sensitivity: 0.2200 GAPI/cps

Neutron Calibration Report

Serial Number: 5108
 Tool Model: PROBE
 Performed: Thu Feb 16 13:26:52 2012

Calibrator Value: 1 NAPI
 Calibrator Reading: 1 cps
 Sensitivity: 1 NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
NEU	37.96	[Schematic Diagram]	None	0.75	1.50	5.00	
			NEU-PROBE (5108) Probe	4.92	3.63	85.00	
GR	32.57		GR-P2000 (2000)	3.67	3.25	40.00	
LSD	23.78						
DCAL	23.49						
SSD	23.24						
HEADVOLT	21.47			CDL-DHT (2501DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
CILD	10.60						
SP	10.60						
CILM	6.89			DIL-Probe (080522) Probe Dual Induction	21.47	4.00	345.00
RLL3	1.70						

Dataset: cg#3ashboh.db: field/well/run1/pass1
 Total Length: 40.49 ft
 Total Weight: 676.00 lb
 O.D.: 4.00 in