Company	American Petrol Oil
Well	AO-4R
Field	Wheeler South
County	Graham
State	Kansas

The Perforators LLC

Company: American Petrol Oil
Well: AO-4R
Field: Wheeler South
County: Graham
State: Kansas
API #: 15-065-23854
Location: SE - SE - NW - NW
Sec: 4 Twp: 6 S Rng: 25 W
Elevation: GR 2317 Ft, KB 2327 Ft
Date: 12-Sep-2012
Time: 13:43:58
Depth: 3950.0 Ft
Fluid: Lime Mud
Mud Wt: 9.0 lb/gal
Vis: 55 sec
Rm: 1.0 @ 70 F
Rmf: 0.8 @ 70 F
Rmc: 1.2 @ 70 F
Max Temp: 110 F
Bit Size: 7.875 in
Rig: Red Tiger #2
Equipment: 2000 Hrs Crude
Recorded By: Jeff Brown
Witnessed By: Mr. Bill Rose

COMPENSATED DENSITY RESISTIVITY LOG

Formation: Lime

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.

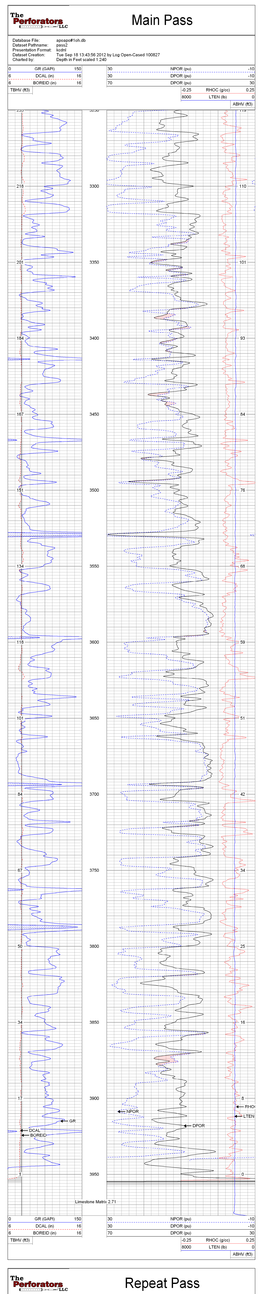
Comments

Thanks for using The Perforators LLC
785-621-4604

Main Pass

Dataloxe File: apiaopaf1oh.db
Dataset Pathname: pass2
Presentation Format: lcdbl
Dataset Creation: Tue Sep 18 13:43:58 2012
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
8	BORED (in)	16	70	DPOR (pu)	30
TBHV (KS)			-0.25	RHOC (g/cc)	0.25
			9000	LTEN (lb)	0
				ABHV (KS)	



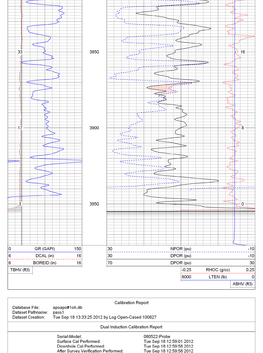
Limestone Matrix 2.71

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
8	BORED (in)	16	70	DPOR (pu)	30
TBHV (KS)			-0.25	RHOC (g/cc)	0.25
			9000	LTEN (lb)	0
				ABHV (KS)	

Repeat Pass

Dataloxe File: apiaopaf1oh.db
Dataset Pathname: pass1
Presentation Format: lcdbl
Dataset Creation: Tue Sep 18 13:35:25 2012 by Log Open-Cased 100927
Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
8	BORED (in)	16	70	DPOR (pu)	30
TBHV (KS)			-0.25	RHOC (g/cc)	0.25
			9000	LTEN (lb)	0
				ABHV (KS)	



Calibration Report

Dataloxe File: apiaopaf1oh.db
Dataset Pathname: pass1
Dataset Creation: Tue Sep 18 13:35:25 2012

Dual Induction Calibration Report

Serial/Model:	080522-Probe
Surface Cal Performed:	Tue Sep 18 12:58:01 2012
Downhole Cal Performed:	Tue Sep 18 12:58:56 2012
After Survey Verification Performed:	Tue Sep 18 12:59:35 2012

Surface Calibration

	Readings Air	Loop		References Air	Loop		Results m	b
Deep	0.000	0.639	V	0.000	400.000	mmho/m	626.871	-0.176
Medium	0.002	0.734	V	0.000	464.000	mmho/m	633.736	-1.211
Internal	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.638	V	0.000	400.000	mmho/m	626.583	-0.317
Medium	0.002	0.735	V	0.000	464.000	mmho/m	633.023	-1.059

Downhole Calibration

	Readings Zero	Cal		References Zero	Cal		Results m'	b'
Deep	0.046	400.400	mmho/m	0.142	400.210	mmho/m	0.999	0.096
Medium	0.062	464.321	mmho/m	-0.151	464.000	mmho/m	1.000	-0.213
LL3		250.000	Ohm-m		250.000	Ohm-m		
		-0.000	V		12.000	Ohm-m		
		-7.309	V		3140.000	mmho/m		

Compensated Density Calibration Report

Serial/Model:	2366DHT-DHT
Calibration Number:	
Master Calibration Performed:	Thu Sep 13 16:54:57 2012

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	717.11	305.57	cps
Aluminum	2.620	g/cc	140.63	205.93	cps

Spine Angle = 76.38

Density/Spine Ratio = 0.519

	Size		Reading	
Small Ring	8.25	in	5771.32	
Large Ring	14.00	in	10185.20	

Gamma Ray Calibration Report

Serial Number:	2001	
Tool Model:	DH	
Performed:	Wed Aug 29 08:26:23 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibration Reading:	1.0	cps
Sensitivity:	0.2300	GAPI/cps

Neutron Calibration Report

Serial Number:	5109
Tool Model:	PROBE
Performed:	Mon Sep 03 08:08:04 2012
Calibrator Value:	1	NAPI
Calibration Reading:	1	cps
Sensitivity:	1	NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			None	0.75	1.50	5.00
NEU	37.85		NEUTRONPROBE (5109) Probe	4.92	3.63	65.00
GR	32.32		GR-CNI (2001) Gamma	3.56	3.25	40.00
			CDL-DHT (2366DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
LSD	23.78					
DCAL	23.49					
SSD	23.24					
HEADVOLT	21.47		DIL-Probe (080522) Probe Dual Induction	21.47	4.00	345.00
SP	10.80					
CILM	6.89					
CILD	10.80					
RLL3	1.70					

Dataset: apiaopaf1oh.db: field/wellcut1pass1
Total Length: 42.38 ft
Total Weight: 676.00 lb
O.D.: 4.00 in