

The Perforators LLC		COMPENSATED DENSITY NEUTRON LOG	
Company	John O Farmer Inc.	Well	Sutley A #1
Field	Wildcat	County	Phillips
State	Kansas	Location	1920 FNL & 740 FNL
APR #	15 47 20651	SEC	19 TWP 4S R3E 18W
Location	1920 FNL & 740 FNL	Ground Level	KB 5 AGL
Remnant Datum	KB 5 AGL	Elevation	1937
Log Measured From	KB	Elevation	K.B. 1942 D.F. 1941 G.L. 1937
Drilling Measured From	KB	Chief Services	ML DIL
Date	12-11-11	Run Number	019
Depth Logger	3600'	Depth Logger	3600'
Depth Logger Interval	3000'	Tool Joint Interval	2750'
Casein Logger	231'	Casein Logger	231'
Bit Size	7 7/8"	Type Fluid in Hole	Chemical Mud
Density / Viscosity	9.2/45	pH / Fluid Loss	10.5/6.8
Source of Sample	PH	Source of Sample	PH
Run @ Mass Temp	1.76/64degF	Run @ Mass Temp	1.76/64degF
Source of Rm / Rmc	2.72/65degF	Source of Rm / Rmc	2.72/65degF
Time Circulation Stopped	1.44/106degF	Time Circulation Stopped	1.44/106degF
Maximum Recorded Temperature	6.30 a.m.	Maximum Recorded Temperature	6.30 a.m.
Equipment Number	106 degf	Equipment Number	106 degf
Revised By	ML	Revised By	ML
Revised Date	12/05/11	Revised Date	12/05/11
Prepared By	ML	Prepared By	ML
Prepared Date	12/05/11	Prepared Date	12/05/11

All interpretations are opinions based on inferences from electrical or other measurements and we 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

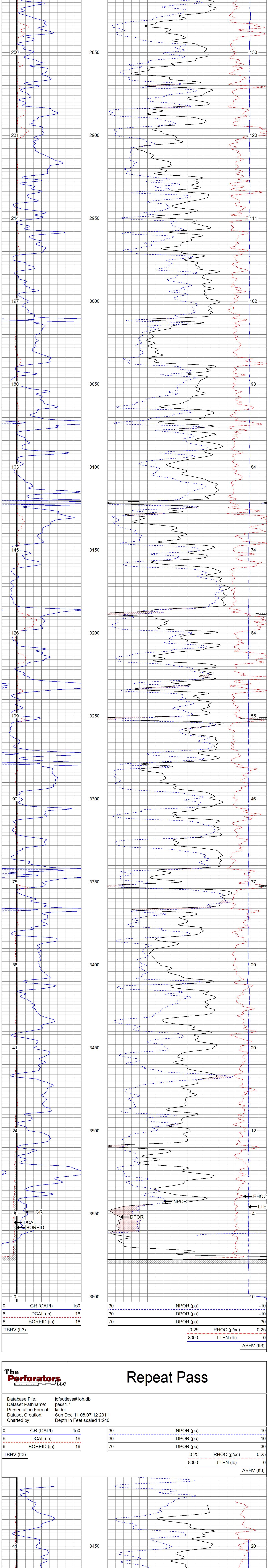
Hyw 9 west of Glade Ks., N on 400 rd.

Main Pass

Database File: jofsutleya#10h.db
 Dataset Pathname: pass2
 Presentation Format: kcdnl
 Dataset Creation: Sun Dec 11 07:39:16 2011 by Log Open-Cased 100827
 Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30

TBHV (ft3)		-0.25	RHOC (g/cc)	0.25
		8000	LTEN (lb)	0



0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30

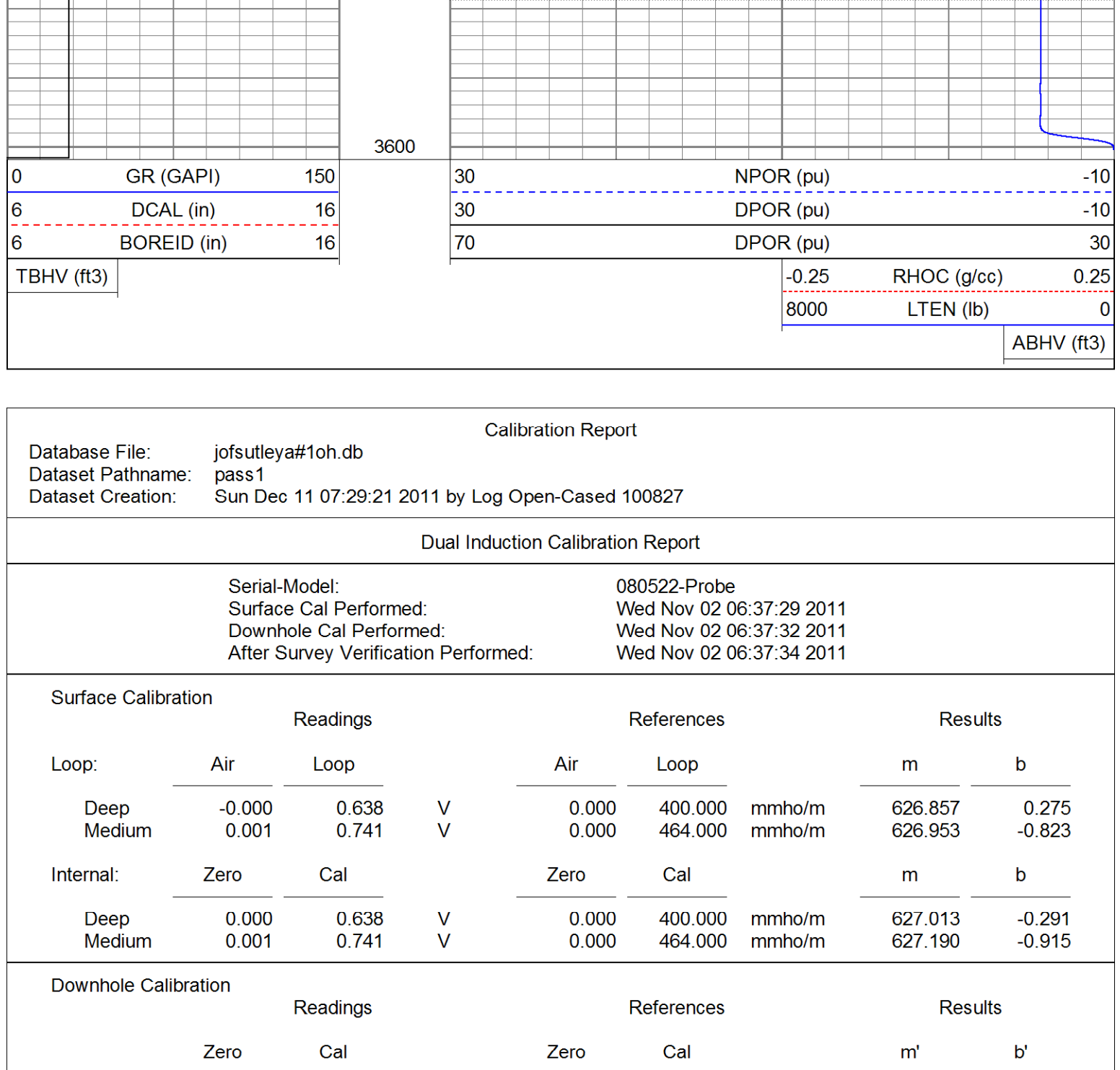
TBHV (ft3)		-0.25	RHOC (g/cc)	0.25
		8000	LTEN (lb)	0

Repeat Pass

Database File: jofsutleya#10h.db
 Dataset Pathname: pass1.1
 Presentation Format: kcdnl
 Dataset Creation: Sun Dec 11 08:07:12 2011
 Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30

TBHV (ft3)		-0.25	RHOC (g/cc)	0.25
		8000	LTEN (lb)	0



0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30

TBHV (ft3)		-0.25	RHOC (g/cc)	0.25
		8000	LTEN (lb)	0

Calibration Report

Database File: jofsutleya#10h.db
 Dataset Pathname: pass1
 Dataset Creation: Sun Dec 11 07:29:21 2011 by Log Open-Cased 100827

Dual Induction Calibration Report

Serial Model: 080522-Probe
 Surface Cal Performed: Wed Nov 02 06:37:29 2011
 Downhole Cal Performed: Wed Nov 02 06:37:32 2011
 After Survey Verification Performed: Wed Nov 02 06:37:34 2011

Loop:	Readings		References	Results	
	Air	Loop		m	b
Deep	-0.000	0.638	0.000	400.000	626.857
Medium	0.001	0.741	0.000	464.000	626.953
Internal:	Zero	Cal	Zero	Cal	m
Deep	0.000	0.638	0.000	400.000	627.013
Medium	0.001	0.741	0.000	464.000	627.190

Loop:	Readings		References	Results	
	Zero	Cal		m'	b'
Deep	0.096	400.608	0.566	400.467	0.998
Medium	-0.069	464.142	0.092	464.142	0.999
LL3	0.001	7.358	0.000	750.000	0.000
	0.000	0.001	0.000	12.000	0.000
	0.000	-7.218	0.000	3745.000	0.000

Loop:	Readings		Targets	Results	
	Zero	Cal		m'	b'
Deep	0.000	0.000	0.096	400.608	1.000
Medium	0.000	0.000	-0.069	464.142	1.000
LL3	0.000	0.000	0.000	750.000	0.000
	0.000	0.000	0.000	12.000	0.000
	0.000	0.000	0.000	3745.000	0.000

Compensated Density Calibration Report

Serial Model: 2388DHT-DHT
 Source / Verifier: Wed Nov 30 13:35:48 2011
 Master Calibration Performed:
 Before Survey Verification Performed:
 After Survey Verification Performed:

Material	Density		Far Detector	Near Detector
	g/cc	g/cc		
Magnesium	1.750	g/cc	688.93	303.28
Aluminum	2.670	g/cc	128.53	194.02

Spine Angle = 75.10
 Density/Spine Ratio = 0.530

Size	Reading	
	Small Ring	Large Ring
8.15	5771.32	
14.00	10165.20	

Before Survey Verification	Target	Measured
	g/cc	g/cc
	g/cc	g/cc
	g/cc	g/cc

After Survey Verification	Target	Measured
	g/cc	g/cc
	g/cc	g/cc
	g/cc	g/cc

Gamma Ray Calibration Report

Serial Number: 2000
 Tool Model: P2000
 Performed: Thu Dec 01 13:12:17 2011

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: Wed Nov 30 13:40:27 2011

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		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
			CDL-DHT (2388DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
LSD	23.78					
DCAL	23.49					
SSD	23.24					
HEADVOLT	21.47					
CILD	10.60					
SP	10.60		DIL-Probe (080522) Probe Dual Induction	21.47	4.00	345.00
CILM	6.89					
RLL3	1.70					

Dataset: jofsutleya#10h.db: field/well/run1/pass1
 Total Length: 40.49 ft
 Total Weight: 676.00 lb
 O.D.: 4.00 in