Company: BERTRAM PLUTO STH ENERGY, LLC
Well: PLUTO 4 H
Field: GREEN FLAME
County: LINCOLN
State: COLORADO
API #:
Job Type: PERFORATING
Engineer: MARK LEWIS
Operator: MARK LEWIS
Witness: JOHN DOE
Rig: CASING
Comments:

PERFORATING RECORD - PRIMARY CORRELATION LOG

RADIAL DIRECT SERVICES, INC

Tie In Reference

All measurements are approximate unless otherwise noted and depth is often interpolated and not used as true for job quantities. No warranty is connected with the data presented. Radial Directional Services, Inc. assumes no responsibility for the use of this data for any purpose other than that for which it is intended. Radial Directional Services, Inc. is not responsible for any damages resulting from the use of this data.

Comments

RADIAL DIRECT SERVICES, INC

PORT COLLAR

Database File: mirbeb.db
Radial Perforator: Perforator2
Radial Correlator: PJ Nov 30 10:54:20 2012
Client Correlator: PJ Nov 30 10:54:20 2012
Client Comments: Log Run 1 Log Run 1 Log Run 1 Log Run 1

RADIAL DIRECT SERVICES, INC

MAIN PASS

Database File: mirbeb.db
Radial Perforator: Perforator2
Radial Correlator: PJ Nov 30 10:54:19 2012
Client Correlator: PJ Nov 30 10:54:19 2012
Client Comments: Log Run 1 Log Run 1 Log Run 1 Log Run 1

RADIAL DIRECT SERVICES, INC

Database File: mirbeb.db
Radial Perforator: Perforator2
Radial Correlator: PJ Nov 30 10:54:20 2012
Client Correlator: PJ Nov 30 10:54:20 2012
Client Comments: Log Run 1 Log Run 1 Log Run 1 Log Run 1

Calibration Report

Database File: mirbeb.db
Radial Perforator: Perforator2
Radial Correlator: PJ Nov 30 10:38:20 2012
Client Correlator: PJ Nov 30 10:38:20 2012 by Calc Std Casedhole 10071
Client Comments:

Turbine Flo-Calibration Report

Serial Number	201105B
Test Date	11-Nov-12
Test Time	Fri Nov 16 13:26:36 2012
Calibrator Value	1.0 GAPI
Background Reading	0.0 cts
Calibration Reading	97.5 cts
Sensitivity	1.0000 Cnt/Hour

Segmented Cement Bond Log Calibration Report

Serial Number	201105B
Test Model	Probe
Calibration Casing Diameter	4.500 in
Calibration Depth	4567.000 ft

Master Calibration .perf/cmd/10 Rec 00 11:21:27 2012

	Raw (-)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CCL	0.000	1.000	0.000	11.921	47.249	-0.975
0	0.000	1.000	0.000	11.921	23.740	-0.967
10	0.011	1.005	0.000	11.921	23.740	-0.967
20	0.022	1.010	0.000	11.921	23.740	-0.967
30	0.033	1.021	0.000	100.000	97.481	-1.709
40	0.044	1.032	0.000	100.000	97.481	-1.709
50	0.063	1.050	0.000	100.000	97.481	-1.709
60	0.082	1.068	0.000	100.000	97.481	-1.709
70	0.101	1.086	0.000	100.000	97.481	-1.709
80	0.112	1.097	0.000	100.000	97.481	-1.709
90	0.112	1.035	0.000	100.000	97.481	-1.709

Internal Reference Calibration .perf/cmd/Internal Rec 00 11:17:00 2012

	Raw (-)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CCL	0.000	0.000	1.467	1.862	1.000	0.000

As -Zero Calibration .perf/cmd/10 Rec 00 12:46:20 2012

	Raw (-)		Calibrated (v)		Results	
	Zero		Zero		Gain	Offset
0	0.000		0.000		0.000	0.000
10	0.000		0.000		0.000	0.000
20	0.000		0.000		0.000	0.000
30	0.000		0.000		0.000	0.000
40	0.000		0.000		0.000	0.000
50	0.000		0.000		0.000	0.000
60	0.000		0.000		0.000	0.000
70	0.000		0.000		0.000	0.000
80	0.000		0.000		0.000	0.000
90	0.000		0.000		0.000	0.000