PSI
PHOENIX SURVEYS, INC.

COMPENSATED DENSITY
COMPENSATED NEUTRON
PHOENIX SURVEYS, INC.

Company: Petroleum Development Corp.
Well: Bison 6-6 Pan 16-6SG-1 Nbc
Field: Wattenberg
County: Adams
State/Prov: Colorado

Location: Sec. 6 T1S R64W 2,527' FSL 898' FEL Sec. 6 Twp. 1S Rge. 64W
Permanent Datum: Ground Level
Elevation: 5,277 ft
Log Measured From: KB 16 ft above Permanent Datum
Drilling Measured From: KB

Date: 8-8-15
Run Number: ONE
Depth Driller: 7944 ft
Depth Logger: 7944 ft
Bottom Logged Interval: 7944 ft
Top Logged Interval: 200 ft
Casing Driller: 8.625 @ 1,240 ft
Casing Logger: 1,240 ft
Bit Size: 7.875 in
Type Fluid in Hole: Fresh Water
Density / Viscosity: 8.4 lb/gal 28 s/qt
pH / Fluid Loss: 10.5 6.4 ml/30min
Source of Sample: Flowline
Rm @ Meas. Temp: 0.1 @ 70 °F
Rmf @ Meas. Temp: 0.08 @ 70 °F
Rmc @ Meas. Temp: 0.13 @ 70 °F
Source of Rmf / Rmc: Measured / Measured
Rm @ BHT: 0.05 @ 180 °F
Time Since Circulation: 4 hrs
Max. Rec. Temp.: 180 °F
Equipment / Base: 4010
Recorded By: Jeff Hall
Witnessed By: Jeff Hall

Run No. 1

We interpret Log measurements and 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 accept in the case of gross or willful negligence on our part to 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

Annular volume calculated for 4.5" casing
Pathfinders Rg1 Drilling Rig 34
Thank you for using Phoenix Surveys!
API # 05-123-40124-00

Database File: 7944.db
Dataset Pathname: pass1
Presentation Format: dpnd
Dataset Creation: Fri Nov 06 17:34:35 2015
Charted by: Depth in Feet scaled 1:240

Density Caliper (in) 16 / 6
Gamma Ray (GAPI) 600 / 0
SP (mV) 100 / -100
Deep Resistivity (Ohm-m) 200:.45 / Density Porosity (frac) 0:.45
Medium Resistivity (Ohm-m) 200:.45 / Neutron Porosity (frac) 0:.45
Shallow Resistivity (Ohm-m) 200

2.68 SS Matrix

2.71 LS Matrix

Matrix Change

2.65 SS Matrix

Logger's TD: 7944

Gamma Ray
Caliper
SP
Deep Resistivity
Medium Resistivity
Shallow Resistivity
Neutron Porosity
Density Porosity