PSI

COMPENSATED NEUTRON
COMPENSATED DENSITY
DUAL INDUCTION

Company: Pioneer
Well: Patterson 170 Delong Rig 14
Field: Spraberry (Trend Area)
County: Howard
State: Texas
Location: API#: 43-227-34870-00-00
Other Services: CBL/VDL/GR
Permanent Datum: Ground Level
Elev.: K.B. 2,787 ft, G.L. 2,777 ft, D.F. 2,786 ft
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing
Date: 21-Jan-14
Run Number: One
Depth Driller: 9,900 ft
Depth Logger: 9,900 ft
Bottom Logged Interval: 9,900 ft
Top Logged Interval: 7,000 ft
Casing Driller: 9.625 in @ 4,570 ft
Casing Logger: 4,570 ft
Bit Size: 8.75 in
Type Fluid in Hole: Brine
Density / Viscosity: 10.0 lb/gal / 28 s/qt
pH / Fluid Loss: 10.5 / 6.0 cc
Source of Sample: Flowline
Rm @ Meas. Temp: 0.060 @ 80 °F
Rmf @ Meas. Temp: 0.045 @ 80 °F
Rmc @ Meas. Temp: 0.080 @ 80 °F
Source of Rmf / Rmc: Measured / Measured
Rm @ BHT: 0.035 @ 200 °F
Time Since Circulation: 12 hrs
Max. Rec. Temp.: 200 °F
Equipment / Location: 1214 / Midland
Recorded By: Jeremy Cantu
Witnessed By: Mr. Jeff Hall

Pioneer Energy, LLC
Patterson 170 Delong Rig 14
Spraberry (Trend Area)
Howard County, Texas

COMMENTS

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 to the extent 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 forth in our current price schedule.

COMMENTS

Annular volume calculated for 4.5" casing
Patterson 170 Delong Rig 14
Thank you for using Phoenix Surveys!!
API # 43-227-34870-00-00
No Repeat Due To Hole Conditions

Database File: 0972.db
Dataset Pathname: pass1
Presentation Format: dualindu
Dataset Creation: Thu Mar 15 16:40:37 2007 by Log Open Caved 811023
Charted by: Depth in Feet scaled 1:240

Density_Caliber (in) 16 | Deep Resistivity_I (Ohm-m) .2(0.4) 2000 | Density_Porosity (pu) -10
Gamma Ray_CGR7i (API) 300 | Medium Resistivity_I (Ohm-m) .2(0.4) 2000 | Neutron Porosity (pu) 60
SP (mV) -160 | Shallow Resistivity_I (Ohm-m) .2(0.4) 2000

9900
9850
9800
9750
9700
9650
9600
9550
9500
9450
9400
9350
9300
9250
9200
9150
9100
9050
9000
8950
8900
8850
8800
8750
8700
8650
8600
8550
8500
8450
8400
8350
8300
8250
8200
8150
8100
8050
8000
7950
7900
7850
7800
7750
7700
7650
7600
7550
7500
7450
7400
7350
7300
7250
7200
7150
7100
7050
7000

2.95 SS Matrix

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7200
7150
7100
7050
7000
6950
6900
6850
6800
6750
6700
6650
6600
6550
6500
6450
6400
6350
6300
6250
6200
6150
6100
6050
6000

2.71 LS Matrix

Matrix Change

2.95 SS Matrix

2.95 SS Matrix

Matrix Change

2.95 SS Matrix

Caliber
Neutron Porosity
Density Porosity
Shallow Resistivity
Medium Resistivity
Deep Resistivity
Logger's TD

2.95 SS Matrix

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