PSI

COMPENSATED DENSITY
NEUTRON LITHO
DUAL INDUCTION

Company: Bonanza Creek Operating Co. LLC
Well: Antelope 13-19
Field: Wildcat
County: Weld
State/Province: Colorado

Location: Sec : 19, Twp : 5N, Rge : 62W
Elevation: KDF 4,997 ft, KBF 4,974 ft, GL 4,947 ft
Permanent Datum: Ground Level
Log Measured From: KB, 23 ft above Perm. Datum
Drilling Measured From: KB

Run Number	Date	Depth Driller	Depth Logger	Bottom Logged Interval	Top Logged Interval	Casing Driller	Casing Logger	Bit Size
ONE	07-Jul-10	6,700 ft	6,700 ft	6,700 ft	3,000 ft	8.625 in @ 3,000 ft	3,000 ft	7.875 in

Run Number	Type Fluid in Hole	Density	Viscosity	Fluid Loss	Source of Sample	Rm @ Meas. Temp	Rmf @ Meas. Temp	Rmc @ Meas. Temp	Source Rmf / Rmc	Rm @ BHT	Time Since Circulation	Max Rec. Temp. Deg. F	Equipment Number	Location	Recorded By	Witnessed By
ONE	Water Based Mud	9.2 lbm/gal	40 s/qt	6.4 cm3/30min	Flowline	0.1 @ 70 degF	0.08 @ 70 degF	0.12 @ 70 degF	Measured / Measured	0.06 @ 200 degF	12 hr	200	3	Greeley	Jeff Hall	Jeff Hall

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 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

Annular volume calculated for 4.5" casing
Mid Continent Rig 1
Thank you for using Phoenix Surveys!!
API #: 05-123-30511-00

Database File: 10796.db
Dataset Pathname: 2nd
Presentation Format: depth
Dataset Creation: Mon Jul 19 07:18:36 2010
Charted by: Depth in Feet scaled 1:240

6 Density Caliper (in) 16
30 Gamma Ray (GAPI) 130
100 SP (mV) 200

ABHV (ft3)

2 Deep Resistivity (Ohm-m) 200 20 Density Porosity (pu) 0
2 Medium Resistivity (Ohm-m) 200 20 Neutron Porosity (pu) 0
2 Shallow Resistivity (Ohm-m) 200

2.98 SS Matrix

2.98 SS Matrix

Caliper
SP
Density Porosity
Neutron Porosity
Deep Resistivity
Medium Resistivity
Shallow Resistivity
Logger's TD 6702
6700

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6 Caliper (in) 16
0 Gamma Ray (GAPI) 200
0 SP (mV) 200

2 Deep Resistivity (Ohm-m) 200 0.2 Density Porosity (pu) 0
2 Medium Resistivity (Ohm-m) 200 0.2 Neutron Porosity (pu) 0
2 Shallow Resistivity (Ohm-m) 200

2.71 LS Matrix

Matrix Change @ 6510'

2.68 SS Matrix