PSI

COMPENSATED DENSITY
NEUTRON
DUAL INDUCTION

Company: Bonanza Creek Operating Co, LLC
Field: Wattenberg
Well: Wattenberg 24-19
County: Weld
State/Province: Colorado
Location: API #: 05-123-32352-00
Sec: 19 Twp: 1N Rge: 65W
Elevation: KB: 4,911 ft
GL: 4,891 ft
Time: 2 Run Number: 1

Run No.	Date	Depth Driller	Depth Logger	Bottom Logged Interval	Top Logged Interval	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	Fluid Loss	Source of Sample	Rm @ Meas. Temp	Rmf @ Meas. Temp	Rmc @ Meas. Temp	Source of Rmf / Rmc	Rm @ BHT	Time Since Circulation	Max Rec. Temp. Deg. F	Equip. Location	Recorded By	Witnessed By
1	11-Jan-2013	7,146 ft	7,140 ft	7,140 ft	0 ft	4,911 ft	4,911 ft	8.75 in	Water Based Mud	9.2 ppg	40 s/qt	6.4 cc	Mud Pit	1.68 @ 60 °F	1.26 @ 60 °F	2.52 @ 60 °F	Calculated	1.68 @ 60 °F	12 hr	60	Greeley, CO	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 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 forth in our current price schedule.

Comments

Annular volume calculated for 4.5" casing
Reese Rg.14
Thank you for using Phoenix Surveys!
API # 05-123-32352-00

Database File: 11276.db
Dataset Name: log1
Presentation Format: DIE
Dataset Creation: Thu Dec 12 15:16:16 2013
Charted by: Depth in Feet scaled 1:240

Density Caliper (in) 16 | Deep Resistivity (Ohmm) .2(0)2k | Density Porosity (pu) 45
Gamma Ray (GAPI) 0 150 | Medium Resistivity (Ohmm) .2(0)2k | Neutron Porosity (pu) 45
SP (mV) -100 100 | Shallow Resistivity (Ohmm) .2(0)2k

ABAN (R3)

3100 3150 3200 3250 3300 3350 3400 3450 3500 3550 3600 3650 3700 3750 3800 3850 3900 3950 4000 4050 4100 4150 4200 4250 4300 4350 4400

3:48:55 Mdnt

3:49:55 Mdnt

Density Caliper (in) 16 | Deep Resistivity (Ohmm) .2(0)2k | Density Porosity (pu) 45
Gamma Ray (GAPI) 0 150 | Medium Resistivity (Ohmm) .2(0)2k | Neutron Porosity (pu) 45
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Caliper (in) 16 | Deep Resistivity (Ohmm) .2(0)2k | Density Porosity (pu) 45
Gamma Ray (GAPI) 200 | Medium Resistivity (Ohmm) .2(0)2k | Neutron Porosity (pu) 45
SP (mV) -200 | Shallow Resistivity (Ohmm) .2(0)2k

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

2:11:55 Mdnt

2:12:55 Mdnt

2:13:55 Mdnt

2:14:55 Mdnt

2:15:55 Mdnt

2:16:55 Mdnt

2:17:55 Mdnt

Ratio Change @ 6700'

2:18:55 Mdnt

2:19:55 Mdnt

2:20:55 Mdnt

2:21:55 Mdnt

TD Logger's TD: 6747'
Driller's TD: 6747'

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