Company	ANADARKO PETROLEUM CORP.
Well	SHATTERERN, 16-18C
Field	WATTENBERG
County	WELD
State	COLORADO
Location	API: 05-123-25743 Sec: 18 Twp: 3N Rng: 67W 1,980 FSL 1,980 FWL
Drilling Rig	SHATTERERN, 16-18C
Date	10/27/2013
Run	ONE
Depth Driller	7,750
Depth Logger	7,750
Bottom Logged Interval	7,750
Top Logged Interval	6,500
Casing Driller	9.625 @ 1,500
Casing Logger	1,500
Bit Size	8.5
Type Fluid in Hole	WATER BASED
Density / Viscosity	8.4 / 28
Max Recorded Temperature	0
Resistivity	0 @ 0
Source of Sample	FLOWLINE
Rm @ Measured Temperature	0 @ 0
Rmf @ Measured Temperature	0 @ 0
Rmc @ Measured Temperature	0 @ 0
Source of Rmf / Rmc	MEASURED / MEASURED
Rm @ BHT	0 @ 0
Time Circulation Stopped	0
Time Logger on Bottom	0
Maximum Recorded H2S Concentration	0
Max Recorded Temperature	0
Equipment / Base Location	1 / GREELEY
Recorded By	J. MCCLAIN
Witnessed By	J. MCCLAIN

CEMENT BOND GAMMA RAY LOG

Schlumberger

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 that it is a 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

Service	Mnem	Schematic	Description	Len (ft)	OD (in)	WT (lb)
			CENT-A (1)	5.00	1.69	10.00
CCL	14.00		CCL-CTBaker-U 727854 CCL 1.4 Min Ø / Soft stop	1.90	2.79	20.00
GR	11.40		GR-a_1011 (GDT)	2.72	1.69	30.00
AVP3	7.74		GR_1_2 (GDT)	7.23	2.44	127.00
AVP2	6.34		CENT-B (2)	5.00	1.69	10.00

Cutaway
Total Length
Total Weight
OD

shaft fastest 10-15all db fastswitch3 pass1
41 ft
167.00 lb
2.79 in

Database File: shaft fastest 10-15all db
Dataset Pathname: pass1
Open Mode: Edit
Dataset Creation: Fri Dec 06 10:52:12 2013 by Log SCH 111116
Comments: Depth shift from pass1 CBL

Gamma Ray (GAPI)	180
0	
TT3 (usec)	200

T Amplitude (mV)	500 200
Amplitude Waveform (mV)	20
Amplitude Envelope (mV)	20

Variable Density 1200

Calibration Report
Shaft fastest 10-15all db
Pass1
Fri Dec 06 10:53:12 2013 by Log SCH 111116

Cement Bond Log Calibration Report

Serial Number	13		
Last Shop Calibration	0		
Performed	Fri Dec 06 10:53:36 2013		
Depth	1500.44	ft	
Casing Diameter	9	in	
	T Spacing	T Spacing	
Signal Gain	1	1	mV
Receiver Amplitude	61.1563	61.1563	mV
Reading at Digital Zero	40.04	40.04	
Reading at Free Pipe	1.1007	1.1007	V
Gain	10.1575	10.4143	
Offset	0	0.2241	

Gamma Ray Calibration Report

Serial Number	1001	
Tool Model	IL3001	
Calibration	Fri Oct 12 14:31:21 1900	
Calibration Units	GAPI	
Background Reading	0.0	cps
Calibration Reading	1.0	cps
Sensitivity	1.3000	GAPI/cps