Company	NOBLE ENERGY INC.
Well	WELLS RANCH AE08-63-1HN
Field	WATTENBERG
County	WELD
State	COLORADO

NABORS
COMPLETION & PRODUCTION SERVICES CO.

CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company	NOBLE ENERGY INC.		
Well	WELLS RANCH AE08-63-1HN		
Field	WATTENBERG		
County	WELD	State	COLORADO

Location: API #: 05123356380000

SW SW
BHL: 990' FSL & 535' FEL
SEC 08 TWP 6N RGE 62W

Other Services

Permanent Datum	GL	Elevation	4929
Log Measured From	KB 30'		
Drilling Measured From	KB		

Elevation
K.B. 4959
D.F. 4958
G.L. 4929

Date	December 5, 2012	
Run Number	One	
Depth Driller	11,082	
Depth Logger	6699	
Bottom Logged Interval	6698	
Top Log Interval	Surface	
Casing Size	7.00"	
Type Fluid	Water	
Max. Recorded Temp.	202 deg F	
Estimated Cement Top	738 est.	
Time Well Ready	Crane	
Time Logger On Bottom	AM	
Unit Number	4367	4515
Tool Size / ID Number	2.75 Probe 110802	2.75 Probe 110785
Location	45	Platteville, CO
Recorded By	K. Monaghan	
Witnessed By	B Mansfield	

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9.625"	36 lb/ft J-55	Surface	742
Prot. String				
Production String	7.00"	26 lb/ft P-110	Surface	7076.5
Liner	4.50"	11.6 lb/ft P-110	6982.4	11,083

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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 out in our current Price Schedule.

Comments

Thank Yo For Choosing Nabors and Completion and Production Services CO!!
API# 05-123-35638-0000
Wireline Zero @ 30' KB
Directions: 68 & 69, E 1.25MI, N 1.25MI, E 1MI, N 1/2, E 3/4, S 1/2 INTO
(Center / South Well of 4 Well Pad)

Database File: cblwells ranch ae08-63-1hn.db
Dataset Pathname: pass3
Presentation Format: noblehozo
Dataset Creation: Wed Dec 05 08:55:47 2012 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

95	CCL	-5
30	Gamma Ray (GAPI)	130
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	30
0	Amplitude (mV)	100

200 Variable Density 1200

Database File: cblwells ranch ae08-63-1hn.db
Dataset Pathname: pass2
Presentation Format: noblehozo
Dataset Creation: Wed Dec 05 08:40:26 2012 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cblwells ranch ae08-63-1hn.db
Dataset Pathname: pass3
Dataset Creation: Wed Dec 05 08:55:47 2012 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Wed Dec 05 09:31:12 2012				
Background	0.0				cps
Calibrator	1.0				cps
		0.9500			GAPI/cps
PRIMARY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
BEFORE SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
AFTER SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Cement Bond Log Calibration Report

Serial Number: 110802
Tool Model: Probe275Digital
Performed: Wed Dec 05 07:02:01 2012

Depth: 863.892 ft
Casing Diameter: 7 in

	3' Spacing	5' Spacing	
Signal Zero:	0.9	0	mV
Calibrated Amplitude:	62.1651	62.1651	mV
Reading at Signal Zero:	0.013501	0.013501	V
Reading in Free Pipe:	2.49829	2.39395	V
Gain:	24.656	26.1149	
Offset:	0.567119	-0.352577	