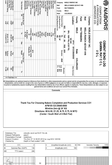

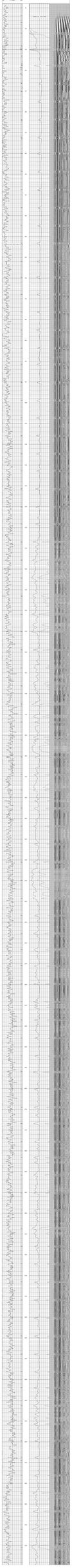

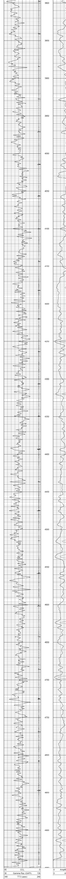

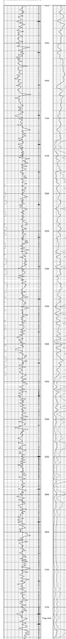

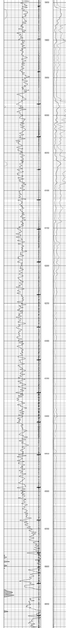

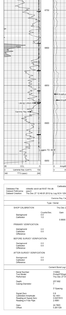

NABORS

COMPLETION & PRODUCTION SERVICES CO.

CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company	NOBLE ENERGY INC.	Company	NOBLE ENERGY INC.
Well	WELLS RANCH AE18-67-1HN	Well	WELLS RANCH AE18-67-1HN
Field	WATTENBERG	Field	WATTENBERG
County	WELD	County	WELD
State	COLORADO	State	COLORADO

Location: API # : 05123356450000
NW NW
BHL: 1650' FNL & 535' FEL
SEC 18 TWP 6N RGE 62W

Other Services

Permanent Datum	GL	Elevation	4848
Log Measured From	KB 24'		
Drilling Measured From	KB		

Elevation
K.B. 4872
D.F. 4871
G.L. 4848

Date	December 27, 2012		
Run Number	One		
Depth Driller	11,159		
Depth Logger	6936		
Bottom Logged Interval	6935		
Top Log Interval	Surface		
Casing Size	7.00"		
Type Fluid	Water		
Max. Recorded Temp.	221 deg F		
Estimated Cement Top	1323 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	M. Pratt		

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	622
Prot. String				
Production String	7.00"	26 lb/ft P-110	Surface	7035
Liner	4.50"	11.6 lb/ft P-110	6929.6	11,139

<<< Fold Here >>>

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 You For Choosing Nabors Completion and Production Services CO!!
API# 05-123-35645-0000
Wireline Zero @ 24' KB
Directions: 68 & 69, E1.25, N.75, E.75, N INTO
(Center / South Well of 4 Well Pad)

Database File:	cblwells ranch ae18-67-1hn.db
Dataset Pathname:	pass3
Presentation Format:	noblehozo
Dataset Creation:	Thu Dec 27 12:46:05 2012 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

Database File: cblwells ranch ae18-67-1hn.db
Dataset Pathname: pass2
Presentation Format: noblehozo
Dataset Creation: Thu Dec 27 12:29:12 2012 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cblwells ranch ae18-67-1hn.db
Dataset Pathname: pass3
Dataset Creation: Thu Dec 27 12:46:05 2012 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

SHOP CALIBRATION	Thu Dec 27 12:13:02 2012				
	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.9000			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: Thu Dec 27 07:22:21 2012

Depth:	257.692		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:	0.0257813	0.0296631	V
Reading in Free Pipe:	2.4981	2.41951	V
Gain:	24.7805	26.0122	
Offset:	0.261129	-0.771602	