NABORS
COMPLETION & PRODUCTION SERVICES CO.

CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company NOBLE ENERGY INC.
Well WELLS RANCH AA24-62HN
Field WATTENBERG
County WELD
State COLORADO

Company	NOBLE ENERGY INC.	
Well	WELLS RANCH AA24-62HN	
Field	WATTENBERG	
County	WELD	State COLORADO
Location:	API #: 05123353360000	Other Services
	SW SW BHL: 660' FSL & 535' FEL	
	SEC 24 TWP 6N RGE 63W	Elevation
Permanent Datum	GL Elevation 4828	K.B. 4852
Log Measured From	KB 24'	D.F. 4851
Drilling Measured From	KB	G.L. 4828

Date	November 23, 2012	
Run Number	One	
Depth Driller	11,096	
Depth Logger	7013	
Bottom Logged Interval	7012	
Top Log Interval	Surface	
Casing Size	7.00"	
Type Fluid	Water	
Max. Recorded Temp.	210 deg F	
Estimated Cement Top	580 est.	
Time Well Ready	Crane	
Time Logger On Bottom	PM	
Unit Number	4367	4515
Tool Size / ID Number	2.75 Probe 110802	2.75 Probe 101010
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	621
Prot. String	7.00"	26 lb/ft P-110	Surface	7128
Production String				
Liner	4.50"	11.6 lb/ft P-110	7029.1	11,081

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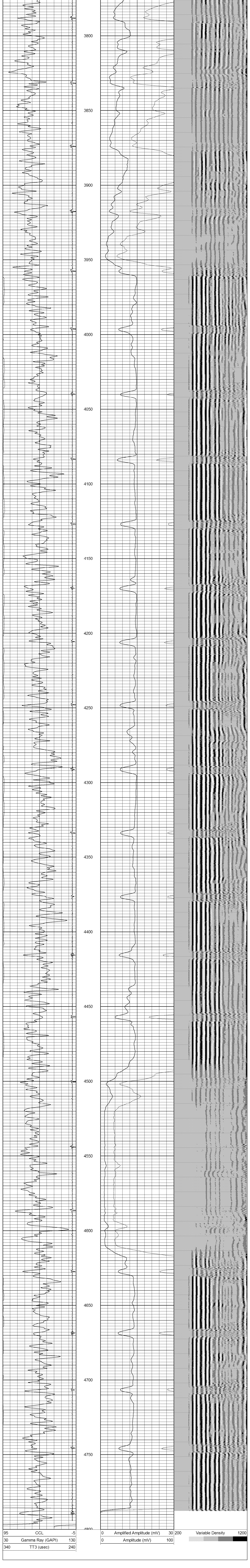
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 You For Choosing Nabors Completion and Production Services CO!!!!
API# 05-123-35336-0000
Wireline Zero @ 24' KB
Directions: 68 & 67, E.2, S,25, E 1.75, S.5, E.25, S INTO
(Second Well From South on 6 Well Pad)

Database File: cblwells ranch aa24-62hn.db
Dataset Pathname: pass3
Presentation Format: noblehozo
Dataset Creation: Fri Nov 23 13:50:30 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
Gamma Ray Shift, Surface Casing



Database File: cblwells ranch aa24-62hn.db
Dataset Pathname: pass2
Presentation Format: noblehozo
Dataset Creation: Fri Nov 23 13:31:08 2012 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cblwells ranch aa24-62hn.db
Dataset Pathname: pass3
Dataset Creation: Fri Nov 23 13:50:30 2012 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Fri Nov 23 14:26:03 2012				
Background	0.0				cps
Calibrator	1.0				cps
		0.8500			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: Fri Nov 23 07:01:33 2012

Depth: 415.083 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:	0.0138916	0.0137451	V
Reading in Free Pipe:	2.49868	2.39456	V
Gain:	24.656	26.1109	
Offset:	0.557488	-0.358897	