NABORS
COMPLETION & PRODUCTION SERVICES CO.

CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company NOBLE ENERGY INC.
Well WELLS RANCH AE08-69-1HN
Field WATTENBERG
County WELD
State COLORADO

Company	NOBLE ENERGY INC.
Well	WELLS RANCH AE08-69-1HN
Field	WATTENBERG
County	WELD
State	COLORADO

API #: 05123356420000

Location: SW NW
SEC 08 TWP 6N RGE 62W

Other Services

Permanent Datum GL Elevation 4988
Log Measured From KB 30'
Drilling Measured From KB

Elevation
K.B. 5018
D.F. 5017
G.L. 4988

Date	November 26, 2012	
Run Number	One	
Depth Driller	11,296	
Depth Logger	7000	
Bottom Logged Interval	6999	
Top Log Interval	Surface	
Casing Size	7.00"	
Type Fluid	Water	
Max. Recorded Temp.	216 deg F	
Estimated Cement Top	1150 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	794
Prot. String	7.00"	26 lb/ft HCP-110	Surface	7313.8
Production String				
Liner	4.50"	11.6 lb/ft P-110	7206.6	11,281

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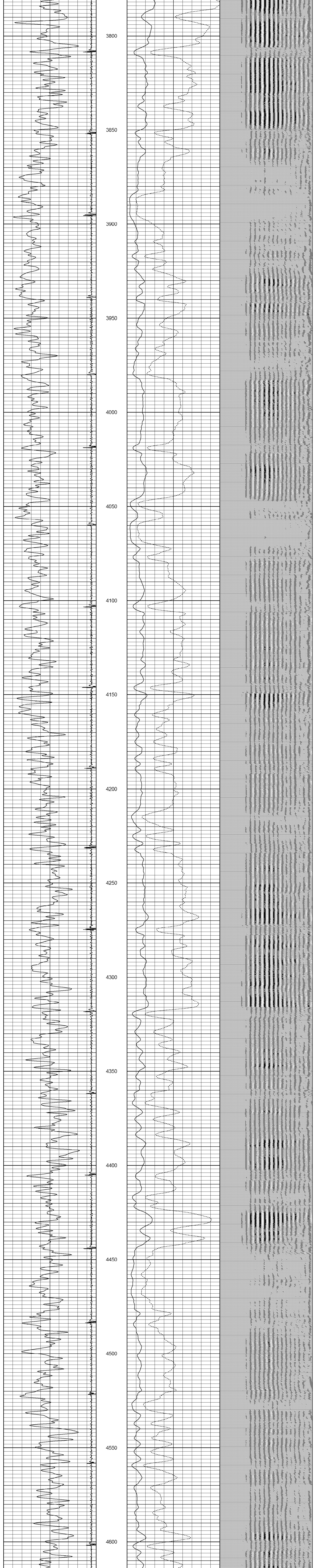
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 Copmpletion and Production Services CO!!
API# 05-123-35642-0000
Wireline Zero @ 30' KB
Directions: 68 & 69, E1.25, N1.25, E1MI, N .5, E.75 INTO
(North Well of 4 Well Pad)

Database File:	cblwells ranch ae08-69-1hn.db
Dataset Pathname:	pass3
Presentation Format:	noblehozo
Dataset Creation:	Mon Nov 26 12:43:20 2012 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240



Database File: cblwells ranch ae08-69-1hn.db
Dataset Pathname: pass2
Presentation Format: noblehozo
Dataset Creation: Mon Nov 26 12:26:17 2012 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cblwells ranch ae08-69-1hn.db
Dataset Pathname: pass3
Dataset Creation: Mon Nov 26 12:43:20 2012 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

SHOP CALIBRATION Mon Nov 26 12:11:29 2012

	Counts/Sec.	Gain	Offset	Jig	Units
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: Mon Nov 26 12:08:53 2012

Depth: 263.975 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:	0.0135742	0.0134766	V
Reading in Free Pipe:	2.49878	2.4906	V
Gain:	24.6519	25.0957	
Offset:	0.565369	-0.338203	