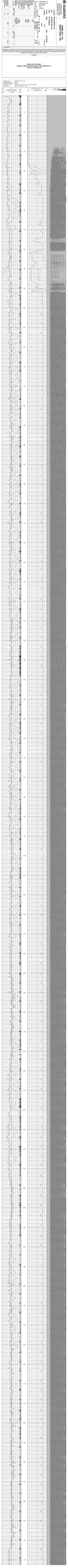

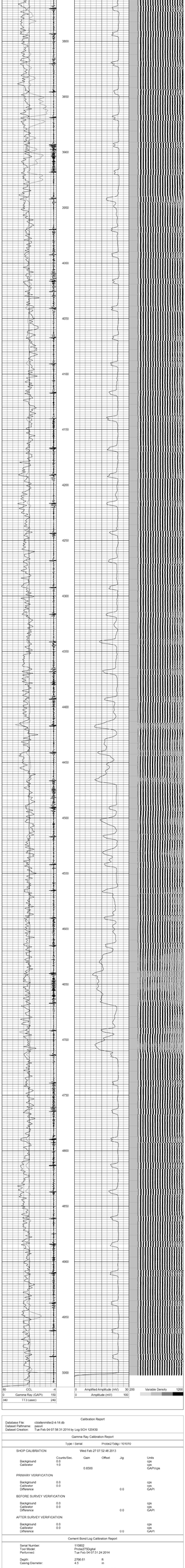

NABORS
COMPLETION
& PRODUCTION
SERVICES CO.

GAMMA RAY / CCL
CEMENT BOND / VDL

Company NOBLE ENERGY, INC
Well SCHAEFER PM K 16-9
Field WATTENBERG
County WELD
State COLORADO

Company NOBLE ENERGY, INC
Well SCHAEFER PM K 16-9
Field WATTENBERG
County WELD State COLORADO

Location: API # :
NE/SE
SEC 16 TWP 4N RGE 66W

Other Services

Permanent Datum GROUND LEVEL Elevation 4743
Log Measured From KELLY BUSHING, 13'
Drilling Measured From KELLY BUSHING

Elevation
K.B. 4756
D.F. 4755
G.L. 4743

Date	2-4-14		
Run Number	ONE		
Depth Driller			
Depth Logger			
Bottom Logged Interval	5000'		
Top Log Interval	SURFACE		
Casing Size	4 1/2"		
Type Fluid	WATER		
Max. Recorded Temp.			
Estimated Cement Top			
Time Well Ready			
Time Logger On Bottom			
Unit Number	4367		
Tool Size / ID Number	2 3/4 PROBE		
Location	FT LUPTON		
Recorded By	BRACKELSBERG		
Witnessed By	MR.MILLER		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	4 1/2"			
Liner				

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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 USING
NABORS COMPLETION AND PRODUCTION SERVICES CO.
LOG NOT CORROLATED

Database File: cblallenmiller2-4-14.db
Dataset Pathname: pass4
Presentation Format: noble en
Dataset Creation: Tue Feb 04 07:58:31 2014 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cblallenmiller2-4-14.db
Dataset Pathname: pass4
Dataset Creation: Tue Feb 04 07:58:31 2014 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

SHOP CALIBRATION Wed Feb 27 07:52:48 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.6500			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: Tue Feb 04 07:51:24 2014

Depth: 2766.61 ft
Casing Diameter: 4.5 in

	3' Spacing	5' Spacing	
Signal Zero:	0.9	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0.0135986	0.013501	V
Reading in Free Pipe:	2.47249	2.22166	V
Gain:	32.6555	36.771	
Offset:	0.45593	-0.496445	