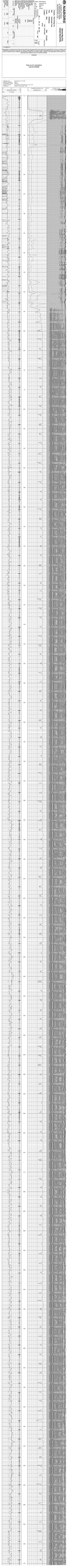

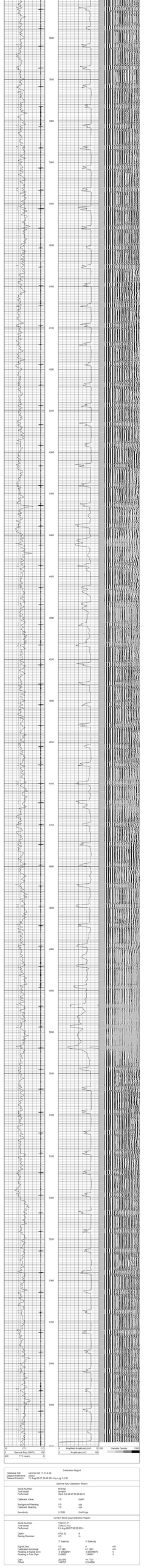

NABORS
COMPLETION
& PRODUCTION
SERVICES CO.

Gamma Ray/CCL
Cement Bond/VDL

Company	Noble Energy Inc.
Well	Kammerzell 13-04
Field	Wattenberg
County	Weld
State	Colorado

Company	Noble Energy Inc.		
Well	Kammerzell 13-04		
Field	Wattenberg		
County	Weld	State	Colorado

Location: API # : 05-123-13584

SW/SW

SEC 4 TWP 4N RGE 66W

Other Services

Elevation
K.B. 4702'
D.F. 4701'
G.L. 4691'

Permanent Datum Elevation 4691'
Log Measured From
Drilling Measured From

Date	August 8, 2014		
Run Number	one		
Depth Driller	7357'		
Depth Logger	5500'		
Bottom Logged Interval	5500'		
Top Log Interval	Surface		
Open Hole Size			
Type Fluid	Water		
Density / Viscosity			
Max. Recorded Temp.			
Estimated Cement Top			
Time Well Ready			
Time Logger on Bottom	1 11/16 Tecko		
Equipment Number	92-3376		
Location	Hwy396&CR27.5,E.2,S.1,E.4,Sinto		
Recorded By	Adam Frank		
Witnessed By	Pete Burns		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8	24#		
Prot. String				
Production String	4 1/2	15.10#		
Liner				

<<< 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 using Nabors
Log not correlated

Database File:	kammerzell 11-13-4.db
Dataset Pathname:	pass3
Presentation Format:	nuexcbl
Dataset Creation:	Fri Aug 08 07:39:45 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

Calibration Report

Database File:	kammerzell 11-13-4.db
Dataset Pathname:	pass3
Dataset Creation:	Fri Aug 08 07:39:45 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	tit/temp	
Tool Model:	temp/tit	
Performed:	Wed Oct 09 07:50:28 2013	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7000	GAPI/cps

Cement Bond Log Calibration Report

Serial Number:	TEKCO-01		
Tool Model:	TEKCO-1x2		
Performed:	Fri Aug 08 07:36:52 2014		
Depth:	4762.62	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	1.5	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	-0.00522461	-0.00546875	V
Reading in Free Pipe:	2.48262	1.80801	V
Gain:	32.0342	44.7737	
Offset:	1.66737	0.244856	