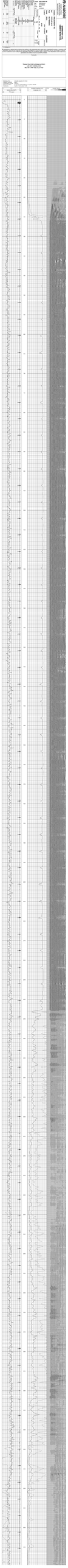

NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company	NOBLE ENERGY INC.
Well	PEPPLER 24-32
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY INC.
Well PEPPLER 24-32
Field WATTENBERG
County WELD State COLORADO
Location: API #: 0512326192
NW/SW
SEC 24 TWP 6N RGE 64W
Other Services

Permanent Datum	GL	Elevation	4641	Elevation
Log Measured From	KB			K.B. 4653
Drilling Measured From	KB			D.F.
				G.L. 4641

Date	SEPTEMBER 13, 2013
Run Number	ONE
Depth Driller	7000
Depth Logger	5000
Bottom Logged Interval	5000
Top Log Interval	SURFACE
Casing Size	7-7/8
Type Fluid	WATER
Max. Recorded Temp.	N/A
Estimated Cement Top	2328
Time Well Ready	PORTABLE MAST
Time Logger On Bottom	12:30
Unit Number	4838
Tool Size / ID Number	2-3/4 PROBE 1010802
Location	45
Recorded By	GREG NOLAN
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# J-55	12	471
Prot. String				
Production String				
Liner	4-1/2	11.6#	12	6958

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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 NCPS!!!!
LOG NOT CORRELATED
WCR 59 & HWY 392, S.4, E INTO

Database File:	cbl noble peppleer 24-32.db
Dataset Pathname:	pass3
Presentation Format:	noble en
Dataset Creation:	Fri Sep 13 12:57:56 2013 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

70	CCL	-7.7	0	Amplified Amplitude (mV)	30	200	Variable Density	1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100			
400	TT3 (usec)	0						

Calibration Report

Database File: cbl noble peppleer 24-32.db
Dataset Pathname: pass3
Dataset Creation: Fri Sep 13 12:57:56 2013 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Fri Sep 13 12:43:10 2013				
Background	0.0				cps
Calibrator	1.0				cps
		0.5000			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 Sep 13 12:46:03 2013		
Depth:	375.458	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.7	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	-0.00356445	-0.0036377	V
Reading in Free Pipe:	2.49385	2.38154	V
Gain:	32.2318	34.0419	
Offset:	0.814889	0.123834	