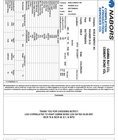

NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL
CEMENT BOND VDL

Company	NOBLE ENERGY INC.
Well	WAGNER 30-33
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY INC.
Well WAGNER 30-33
Field WATTENBERG
County WELD State COLORADO

Location: API #: 0512324917
SW/SW
SEC 30 TWP 7N RGE 64W

Other Services

				Elevation
Permanent Datum	GL	Elevation	4848	K.B. 4860
Log Measured From	KB			D.F. 4859
Drilling Measured From	KB			G.L. 4848

Date	FEBRUARY 19, 2015
Run Number	ONE
Depth Driller	7300
Depth Logger	3300
Bottom Logged Interval	3300
Top Log Interval	SURFACE
Open Hole Size	7-7/8
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	3172
Time Well Ready	LEED RIG
Time Logger on Bottom	2-3/4 PROBE
Equipment Number	4838
Location	45
Recorded By	GREG NOLAN
Witnessed By	KEVIN MONAGHAN

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#	SURFACE	647
Prot. String				
Production String	4-1/2	11.6#	SURFACE	TD
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 CHOOSING NCPS!!!!
LOG CORRELATED TO ASAP CEMEN BOND LOG DATED 04-26-2007
WCR 76 & WCR 49, E.1, N INTO

Database File:	cbl noble wagner 30-33.db
Dataset Pathname:	pass3
Presentation Format:	noble en
Dataset Creation:	Thu Feb 19 11:05:46 2015 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

50 CCL -5.5
0 Gamma Ray (GAPI) 150
400 TT3 (usec) 0
0 Amplified Amplitude (mV) 30
0 Amplitude (mV) 100
200 Variable Density 1200

50 CCL -5.5
0 Gamma Ray (GAPI) 150
400 TT3 (usec) 0
0 Amplified Amplitude (mV) 30
0 Amplitude (mV) 100
200 Variable Density 1200

Calibration Report

Database File:	cbl noble wagner 30-33.db
Dataset Pathname:	pass3
Dataset Creation:	Thu Feb 19 11:05:46 2015 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

SHOP CALIBRATION	Fri Nov 08 09:38:30 2013				
	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.4400			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:	Thu Feb 19 11:00:49 2015		
Depth:	1867.28	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:	-0.00544434	-0.00554199	V
Reading in Free Pipe:	2.49822	2.35259	V
Gain:	32.1513	34.4324	
Offset:	0.875043	0.190824	