NABORS COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL
CEMENT BOND VDL

Company	NOBLE ENERGY INC.
Well	WCR 43 -6 -13
Field	WATTENBERG
County	WELD
State	COLORADO

Company: NOBLE ENERGY INC.
Well: WCR 43 -6 -13
Field: WATTENBERG
County: WELD
State: COLORADO
Location: API # 05123517810 Sec 6 Twp 3N Rge 65W
Permanent Datum: GROUND LEVEL Elevation 4939 ft
Log Measured From: KELLY BUSHING 25 ft above Permanent Datum
Drilling Measured From: KELLY BUSHING

	Run No.	Date	Depth Driller	Depth Logger	Bottom Logged Interval	Top Logged Interval	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	pH	Fluid Loss	Source of Sample	Rm @ Meas. Temp	Rmf @ Meas. Temp	Rmc @ Meas. Temp	Source of Rmf / Rmc	Rm @ BHT	Time Since Circulation	Time Since Circulation	Max Rec. Temp.	Equip. Location	Recorded By	Witnessed By
Primary Survey	1	10-Jul-14	8135 ft	8135 ft	8135 ft	6800 ft	8 5/8 in @ 1131 ft		7 7/8 in	WBM	9.4 lb/gal	40 s	9.5	6.4 cc	MUD PIT	0.2 @ 70 degF			MEASURED	0.1 @ 180 degF	4 hr		180 degF	5		
Repeat Section	1	10-Jul-14	8135 ft	8135 ft	8135 ft	6800 ft	8 5/8 in @ 1131 ft		7 7/8 in	WBM	9.4 lb/gal	40 s	9.5	6.4 cc	MUD PIT	0.2 @ 70 degF			MEASURED	0.1 @ 180 degF	4 hr		180 degF	5		
Cement Bond Log	1	10-Jul-14	8135 ft	8135 ft	8135 ft	6800 ft	8 5/8 in @ 1131 ft		7 7/8 in	WBM	9.4 lb/gal	40 s	9.5	6.4 cc	MUD PIT	0.2 @ 70 degF			MEASURED	0.1 @ 180 degF	4 hr		180 degF	5		

Other Services

*** Field Print ***

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 43 -6 WCR 30, E1, N-3, W INTO

Database File: cbl noble demeules 9-22.db
Dataset Pathname: pass2
Presentation Format: noble am
Dataset Creation: Mon Aug 25 09:15:39 2014 by Log SCH 120400
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)	30,000	Variable Density
0	Amplitude (mV)	100	

50 CCL -5.5
0 Gamma Ray (GAPI) 150
400 TT3 (usec) 0
0 Amplified Amplitude (mV) 30,000 Variable Density
0 Amplitude (mV) 100

Calibration Report

Database File: cbl noble demeules 9-22.db
Dataset Pathname: pass2
Dataset Creation: Mon Aug 25 09:15:39 2014 by Log SCH 120400

Gamma Ray Calibration Report

Type / Serial: Probe2TSdg / 110765

Fri Nov 08 09:38:30 2013

SHOP CALIBRATION

	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:	110682			
Tool Model:	Probe2TCBgtat			
Performed:	Mon Aug 25 09:18:25 2014			
Depth:	1071.45	ft		
Casing Diameter:	4.5	in		
	3' Spacing		5' Spacing	
Signal Zero:	0.7		0	mV
Calibrated Amplitude:	81.1901		81.1901	mV
Reading at Signal Zero:	-0.00581055		-0.00585938	V
Reading in Free Pipe:	2.4859		2.24575	V
Gain:	32.1764		36.6613	
Offset:	0.866563		0.211297	