NABORS COMPLETION & PRODUCTION SERVICES CO

GAMMA RAY / CCL
CEMENT BOND / VDL

Company NOBLE ENERGY, INC.
Well WATTENBERG 12-62
Field WATTENBERG
County WELD
State COLORADO

Location
API # 05-123-34541

Other Services
NONE

Permanent Datum MSL
Log Measured From KB 18 Ft. Above Perm. Datum
Drilling Measured From KB

	Elev.
K.B.	4644
D.F.	4626
G.L.	4618

	Size	Wgt.	From	To
Surface String	9 5/8	36	0	1010
Production String	4 1/2	11.6	0	7600

Type Fluid in Hole WBM
Density 9.2
Viscosity 47
Fluid Loss 8.4
Source of Sample PIT
R @ Meas. Temp. 0.07 @ 68
R @ Meas. Temp.
R @ Meas. Temp.
Source of R / R @ Meas. Temp. MEAS. / ESTIMATED
Rm @ Meas. Temp. 0.07 @ 68
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source of Rmf / Rmc MEAS. / ESTIMATED
Rm @ BHT 0.04 @ 150
Time Since Circ. 12 HOURS
Time Logger on Bottom 0600 12-FEB-2013
Maximum Recorded Temp. 150
Equipment Number 2
Location GREELEY, CO
Recorded By KELLY BISHOP
Witnessed By

Run Number ONE
Depth Driller 7600
Depth Logger 7600
Bottom Logged Interval 7600
Top Log Interval 0
Casing Driller 9.625 @ 1010
Casing Logger 1010
Bit Size 8.75
Type Fluid in Hole WBM
Density / Viscosity 9.2 / 47
PH / Fluid Loss 8.4
Source of Sample PIT
Rm @ Meas. Temp. 0.07 @ 68
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source of Rmf / Rmc MEAS. / ESTIMATED
Rm @ BHT 0.04 @ 150
Time Since Circ. 12 HOURS
Max. Rec. Temp. 150
Equipment Number 2
Location GREELEY, CO
Recorded By KELLY BISHOP
Witnessed By

<<< Field Data >>>

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
NOTE: LOG NOT CORROLATED!

Calibration Report

Database File: colcpwtcl-2.db
Dataset Pathname: pass3
Dataset Creation: Tue Nov 25 07:29:25 2014 by Log SICH 120430

Gamma Ray Calibration Report

Type / Serial: Pridol275dgl / 101010

Wed Feb 27 07:52:48 2013

SHOP CALIBRATION

	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

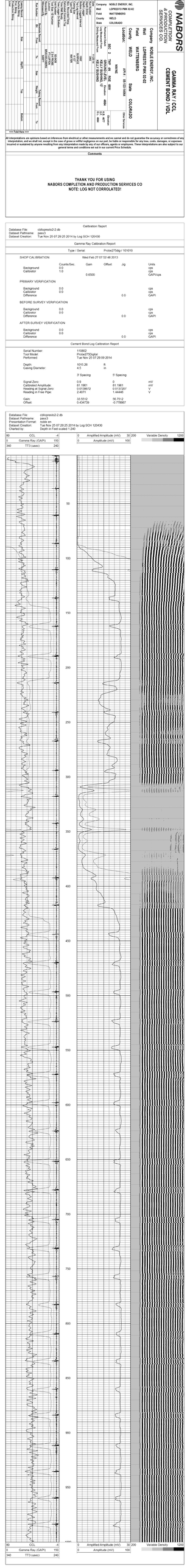
Cement Bond Log Calibration Report

Serial Number: 110602
Tool Model: Pridol27Digital
Performed: Tue Nov 25 07:29:09 2014

Depth:	1010.26	ft
Casing Diameter:	4.5	in
	3' Spacing	5' Spacing
Signal Zero:	0.9	0 mV
Calibrated Amplitude:	61.1961	61.1961 mV
Reading at Signal Zero:	0.613962	0.613187 V
Reading in Free Pipe:	2.4071	1.44445 V
Gain:	33.5512	56.7112
Offset:	0.434739	-0.778667

Database File: colcpresb2-2.db
Dataset Pathname: pass3
Presentation Format: cbl
Dataset Creation: Tue Nov 25 07:29:25 2014 by Log SICH 120430
Charted by: Depth in Feet scaled 1:240

80	CCL	-4	0 Amplified Amplitude (mV) 30 200	Variable Density 1200
0	Gamma Ray (GAPI)	150	0 Amplitude (mV) 100	
340	TT3 (usec)	240		



80 CCL -4
0 Gamma Ray (GAPI) 150
340 TT3 (usec) 240
0 Amplified Amplitude (mV) 30 200
0 Amplitude (mV) 100
Variable Density 1200