Casedhole Solutions

Gamma Ray / CCL
Cement Bond / VDL

Company	Noble Energy Inc.
Well	Wells Ranch BB 12-02
Field	Wattenberg
County	Weld
State	Colorado

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Well	**Wells Ranch BB 12-02**		
Field	**Wattenberg**		
County	**Weld**	**State**	**Colorado**

Location: API #: 05-123-30130
681' FNL & 2086' FEL
NW / NE

SEC 12 TWP 5N RGE 63W

Other Services

Permanent Datum	GL	Elevation	4648'
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4660'
D.F. 4659'
G.L. 4648'

Date	October 25, 2017
Run Number	One
Depth Driller	6767'
Depth Logger	3000'
Bottom Logged Interval	3000'
Top Log Interval	Surface
Casing Size	4 1/2
Type Fluid	Water
Max. Recorded Temp.	NA
Estimated Cement Top	---
Time Well Ready	10:30am
Time Logger On Bottom	10:45am
Unit Number	92-3376
Tool Size / ID Number	2 3/4 Tecko
Location	Sterling
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#	Surface	562'
Prot. String				
Production String	4 1/2	11.6#	Surface	6762'
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 using Casedhole Solutions!!
Log Correlated to J-W Cement Bond Log dated 30-June-2009

Database File: wells ranch bb 12-2.db
Dataset Pathname: pass3
Presentation Format: nuexbond
Dataset Creation: Wed Oct 25 11:25:24 2017 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: wells ranch bb 12-2.db
Dataset Pathname: pass3
Dataset Creation: Wed Oct 25 11:25:24 2017 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	234GR-328	
Tool Model:	TekcoGR	
Performed:	Mon Apr 18 13:05:02 2011	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.8000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	234B35C-8013	
Tool Model:	TEKCO	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	894.450	ft

Master Calibration, performed Wed Oct 25 11:16:56 2017:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.007	2.467	1.500	81.196	32.387	1.282
CAL	0.007	0.761				
5'	0.006	2.429	1.500	81.196	32.895	1.298
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

Internal Reference Calibration, performed Wed Aug 03 12:27:14 2011:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.007	0.761	1.000	0.000

Air Zero Calibration, performed Wed Aug 03 12:21:32 2011:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1			
S2			
S3			
S4			
S5			
S6			
S7			
S8			