GAMMA RAY / CCL
CEMENT BOND / VDL

Casedhole Solutions

Company	NOBLE ENERGY, INC.
Well	BOLENDER 29-02
Field	WATTENBERG
County	WELD
State	COLORADO

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Well	BOLENDER 29-02		
Field	WATTENBERG		
County	WELD	State	COLORADO
Location:	API #: 05-123-13035 NW/NE	Other Services	
	SEC 29 TWP 4N RGE 65W		
Permanent Datum	GROUNDS LEVEL	Elevation 4857	Elevation
Log Measured From	KELLY BUSHING,11'		K.B. 4868
Drilling Measured From	KELLY BUSHING		D.F.
			G.L. 4857

Date	12-11-15
Run Number	ONE
Depth Driller	
Depth Logger	
Bottom Logged Interval	988
Top Log Interval	SURFACE
Casing Size	4 1/2"
Type Fluid	WATER
Max. Recorded Temp.	
Estimated Cement Top	
Time Well Ready	
Time Logger On Bottom	
Unit Number	92-0438
Tool Size / ID Number	2 3/4"PROBE
Location	FT.LUPTON
Recorded By	BRACKELSBERG
Witnessed By	MR.HAMACHER

Borehole Record			Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String				
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

Calibration Report

Database File: cblbohlander29-2.db
Dataset Pathname: pass6
Dataset Creation: Fri Dec 11 07:52:48 2015 by Log SCH 120430

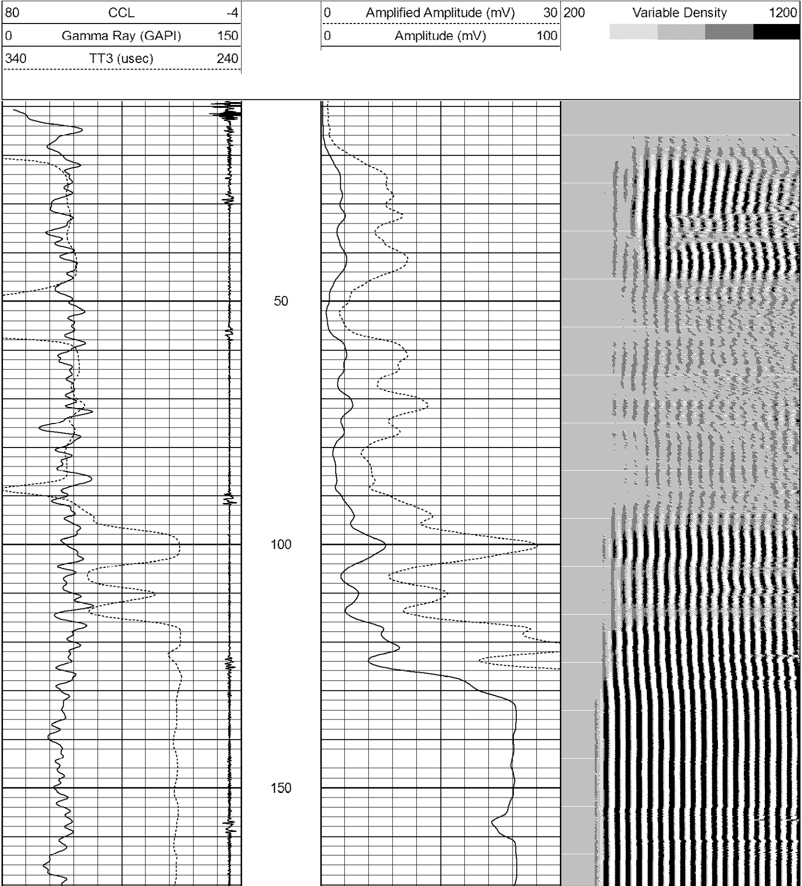
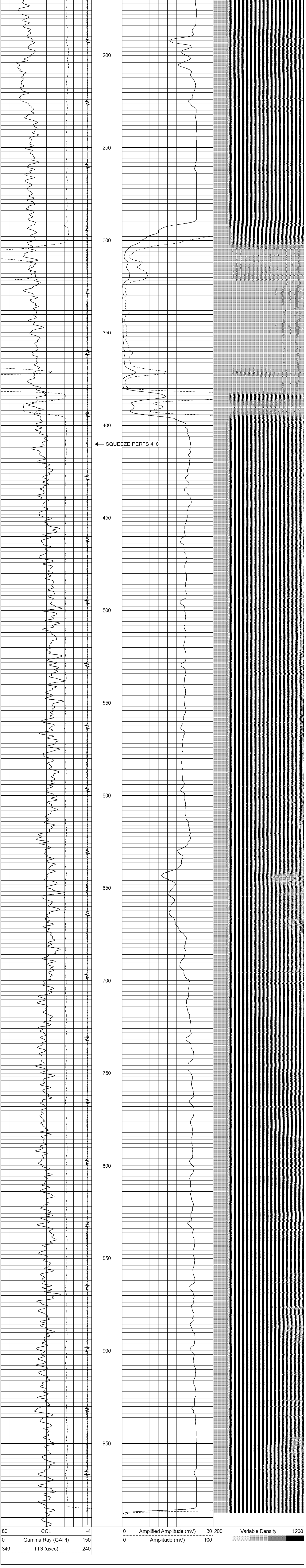
Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Wed Feb 27 07:52:48 2013				
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:	110802		
Tool Model:	Probe275Digital		
Performed:	Fri Dec 11 07:51:20 2015		
Depth:	861.858	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.9	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	-0.012085	-0.012207	V
Reading in Free Pipe:	2.47961	2.39841	V
Gain:	32.2254	33.6827	
Offset:	1.28944	0.411165	

Database File: cblbohlander29-2.db
Dataset Pathname: pass6
Presentation Format: noble en
Dataset Creation: Fri Dec 11 07:52:48 2015 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240