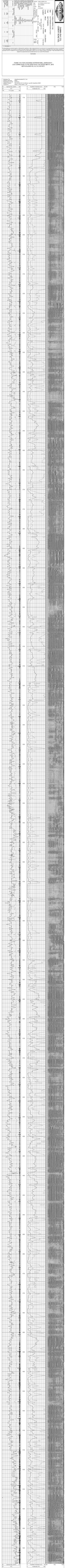

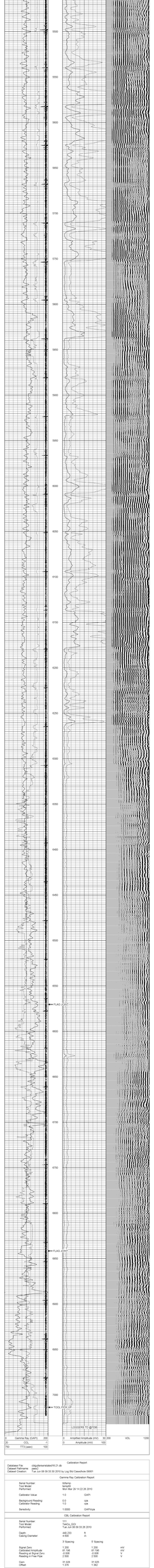

SUPERIOR WELL SERVICES

GAMMA RAY CCL
CEMENT BOND VDL

Company NOBLE ENERGY INC.
Well GUTTERSEN STATE D 16-21
Field WATTENBERG
County WELD State COLORADO

Location:
API #: 0512330848
2608' FSL & 2600' FEL
NW SE
SEC 16 TWP 3N RGE 64W

Permanent Datum	GL	Elevation 4766	Elevation K.B. 4781 D.F. 4780 G.L. 4766
Log Measured From	KB		
Drilling Measured From	KB		

Other Services

Company	NOBLE ENERGY INC.
Well	GUTTERSEN STATE D 16-21
Field	WATTENBERG
County	WELD
State	COLORADO

Date	JUNE, 8, 2010
Run Number	ONE
Depth Driller	7132
Depth Logger	7036
Bottom Logged Interval	7035
Top Log Interval	1691
Open Hole Size	7-7/8
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	238 DEG. F
Estimated Cement Top	1857
Time Well Ready	PORTABLE MAST
Time Logger on Bottom	1-11/16 GO TOOL
Equipment Number	3342
Location	45
Recorded By	GREG NOLAN
Witnessed By	JEREMIE SCHNEIDER

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	15	646.1
Prot. String				
Production String	4-1/2	11.6	15	7117.5
Liner				

<<< Fold Here >>>

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 SUPERIOR WELL SERVICES!!!!
LOG CORRELATED TO PSI OPEN HOLE LOG DATED MAY31, 2010
WCR 34 & WCR 53, E.4, S.4, SE INTO

Database File:	cblguttersenstated16-21.db
Dataset Pathname:	pass9
Presentation Format:	nuexbond
Dataset Creation:	Tue Jun 08 10:57:10 2010 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240

750 TT3 (usec) 100

Database File: cblguttersenstated16-21.db
Dataset Pathname: pass8
Presentation Format: nuexbond
Dataset Creation: Tue Jun 08 10:31:22 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cblguttersenstated16-21.db
Dataset Pathname: pass2
Dataset Creation: Tue Jun 08 09:33:30 2010 by Log Std Casedhole 09061

Gamma Ray Calibration Report

Serial Number:	tit/temp	
Tool Model:	temp/tit	
Performed:	Mon Mar 29 14:22:26 2010	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

CBL Calibration Report

Serial Number:	111		
Tool Model:	TekCo_GOI		
Performed:	Tue Jun 08 09:33:26 2010		
Depth:	440.233	ft	
Casing Diameter:	4.500	in	
	3' Spacing	5' Spacing	
Signal Zero:	1.200	1.200	mV
Calibrated Amplitude:	81.196	81.196	mV
Reading at Signal Zero:	-0.006	-0.006	V
Reading in Free Pipe:	2.500	2.500	V
Gain:	31.928	31.925	
Offset:	1.376	1.382	