SUPERIOR WELL SERVICES

GAMMA RAY CCL CEMENT BOND VDL

Company NOBLE ENERGY INC.
Well BOOTH N25-33D
Field WATTENBERG
County WELD
State COLORADO

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Location: API # : 0512331666
SHL: 2136' FSL & 206' FEL NESW
BHL: 1275' FSL & 100' FWL SWSW
SEC 26 TWP 5N RGE 67W

Other Services

Permanent Datum	GL	Elevation 4974	Elevation K.B. 4963 D.F. 4962 G.L. 4947
Log Measured From	KB		
Drilling Measured From	KB		

Date	FEBRUARY 15, 2011
Run Number	ONE
Depth Driller	7734
Depth Logger	7656
Bottom Logged Interval	5000-7663
Top Log Interval	2225-5000
Open Hole Size	7-7/8
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	247 DEG. F
Estimated Cement Top	2414
Time Well Ready	CRANE
Time Logger on Bottom	1-11/16 GO TOOL
Equipment Number	3342
Location	45
Recorded By	GREG NOLAN
Witnessed By	SCOTT ARMSTRONG

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	16	824.5
Prot. String				
Production String	4-1/2	11.6	16	7723.8
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 CHOOSING SUPERIOR WELL SERVICES!!!!
LOG CORRELATED TO HALLIBURTON SPECTRAL DENSITY, DUAL SPACED NEUTRON, ARRAY COMPENSATED, TRUE RESISTIVITY LOG DATED 09-FEB-11

Database File: cbl noble booth n25-33d.db
Dataset Pathname: pass3
Presentation Format: nuexbond
Dataset Creation: Tue Feb 15 14:54:11 2011 by Log Std Casedhole 10081
Charted by: Depth in Feet scaled 1:240

30	Gamma Ray (GAPI)	130	0	Amplified Amplitude (mV)	30	200 VDL 1200
20	CCL	-1	0	Amplitude (mV)	100	
340	TT3 (usec)	240				

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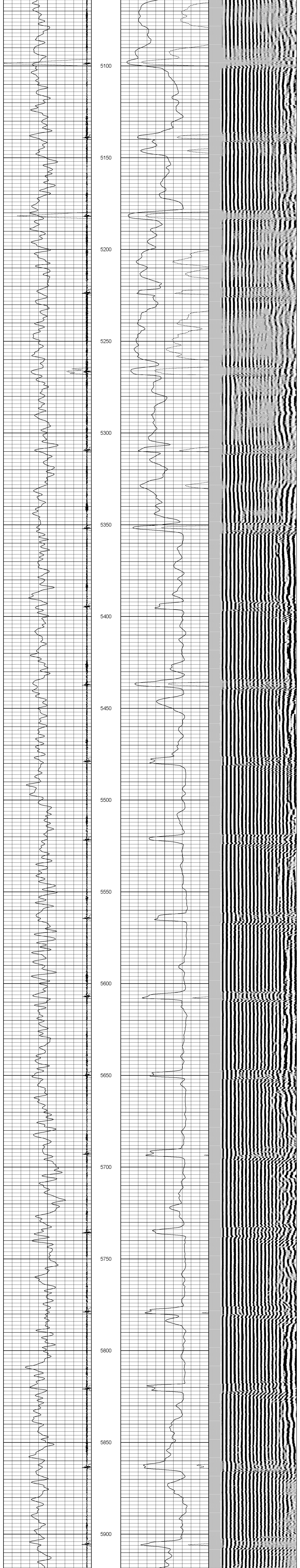
Database File: cbl noble booth n25-33d.db
Dataset Pathname: pass2
Presentation Format: nuexbond
Dataset Creation: Tue Feb 15 14:34:36 2011 by Log Std Casedhole 10081
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	200	0	Amplified Amplitude (mV)	30	200 VDL 1200
20	CCL	-1	0	Amplitude (mV)	100	
340	TT3 (usec)	240				



Calibration Report

Database File:	cbl noble booth n25-33d.db
Dataset Pathname:	pass2
Dataset Creation:	Tue Feb 15 14:34:36 2011 by Log Std Casedhole 10081

Gamma Ray Calibration Report

Serial Number:	tit/temp	
Tool Model:	temp/tit	
Performed:	Tue Sep 21 09:37:35 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 Feb 15 14:19:23 2011		
Depth:	1197.592	ft	
Casing Diameter:	4.500	in	

	3' Spacing	5' Spacing	
Signal Zero:	0.800	0.800	mV
Calibrated Amplitude:	81.196	81.196	mV
Reading at Signal Zero:	0.008	0.008	V
Reading in Free Pipe:	2.486	2.494	V
Gain:	32.445	32.339	
Offset:	0.525	0.532	