J-W WIRELINE COMPANY

CEMENT BOND
GAMMA RAY
COLLAR CORRELATION LOG

Company	NOBLE ENERGY INC.
Well	UPRC H 13-28D
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY INC.
Well UPRC H 13-28D
Field WATTENBERG
County WELD State COLORADO

Location: API # : 05-123- 34845-00
SHL: 805' FNL & 515' FWL NW NW
BHL: 99' FNL & 2206' FWL NE NE
SEC. 13 TWP. 3N RGE. 65W
SEC TWP RGE

Other Services
NONE

Permanent Datum GROUND LEVEL Elevation 4841
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 4855
D.F. 4855
G.L. 4841

Date	22-MAY-2012
Run Number	ONE
Depth Driller	8093
Depth Logger	7987
Bottom Logged Interval	7980
Top Log Interval	2250
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	--
Max. Recorded Temp.	265
Estimated Cement Top	2600
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	2405/RUST
Location	BRIGHTON
Recorded By	HAYES
Witnessed By	MR. TROY SETTLE

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	789
Prot. String				
Production String	4.5	11.6#	SURFACE	TOTAL DEPTH
Liner				

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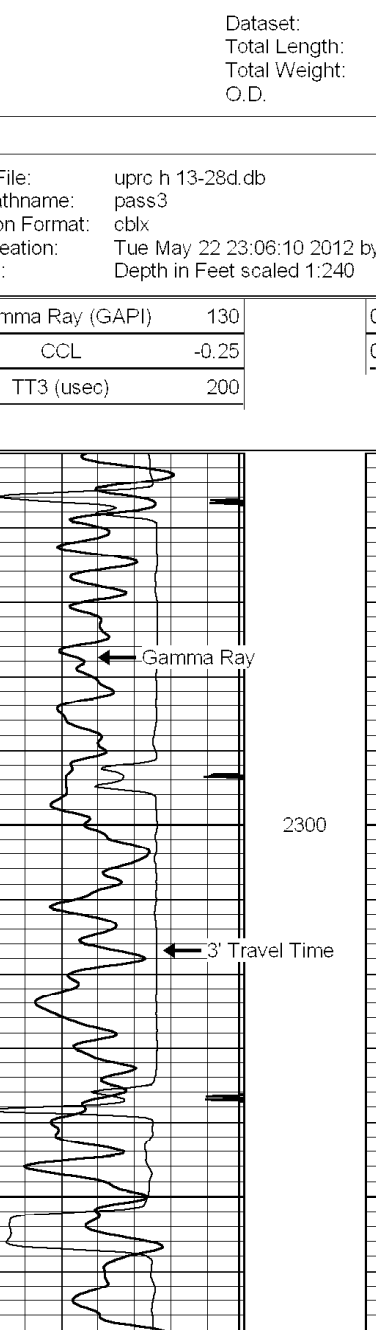
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

LOG CORRELATED TO CD, CN, ML LOG
DATED 04-MAY-2012

LOG SPLIT FOR CORRELATION PURPOSES

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT-A (1)	3.00	1.69	10.00
CCL	14.06		CCL-275tekco (2.75TEKCO) 2 3/4 TEK CCL Earth Mag	1.96	2.75	20.00
GR	11.49		GR-s_t001 (t001)	2.52	1.69	30.00
WVF5	7.34					
WVF3	6.34		CBL-3_5 (001)	7.23	2.44	127.00
			CENT-B (2)	3.00	1.69	10.00

Dataset: uprc h 13-28d.db: field/well/run1/pass3
Total Length: 17.71 ft
Total Weight: 197.00 lb
O.D. 2.75 in

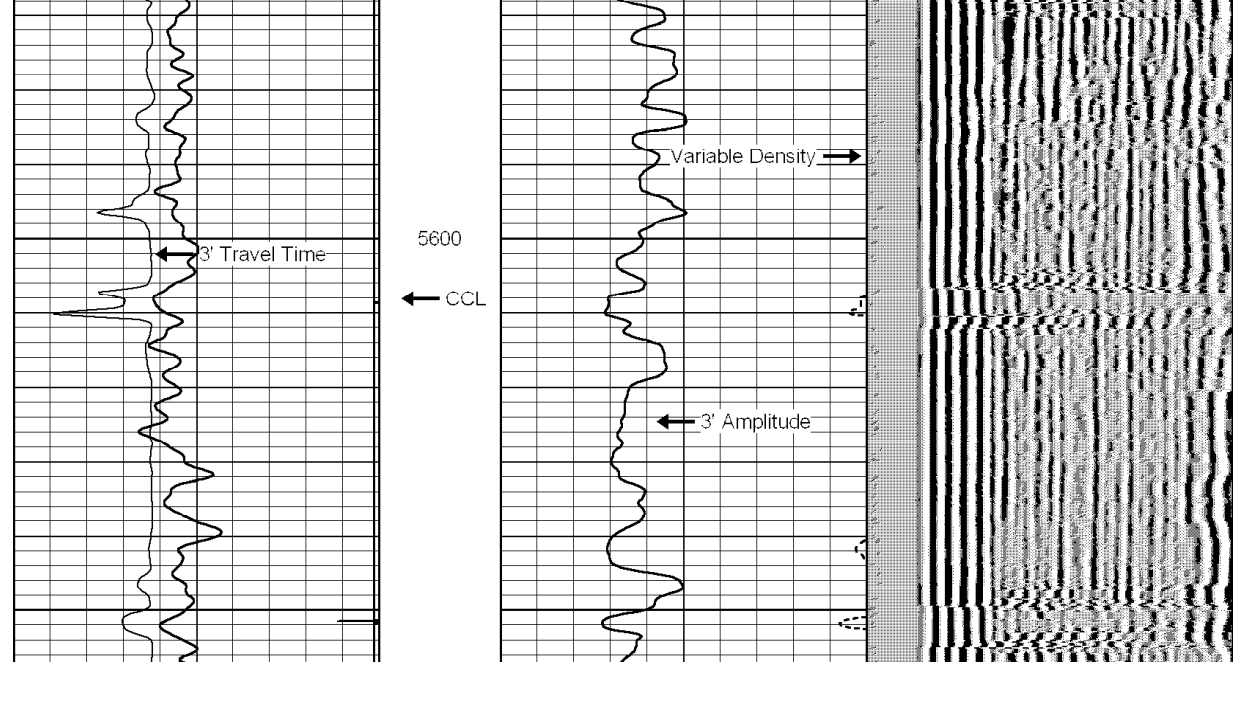
Database File: uprc h 13-28d.db
Dataset Pathname: pass3
Presentation Format: cblx
Dataset Creation: Tue May 22 23:06:10 2012 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

30	Gamma Ray (GAPI)	130		0	3' Amplitude (mV)	100	200	Variable Density	1200
20	CCL	-0.25		0	Amplified Amplitude (mV)	30			
300	TT3 (usec)	200							

30	Gamma Ray (GAPI)	130		0	3' Amplitude (mV)	100	200	Variable Density	1200
20	CCL	-0.25		0	Amplified Amplitude (mV)	30			
300	TT3 (usec)	200							

Database File: uprc h 13-28d.db
Dataset Pathname: pass2
Presentation Format: cblx
Dataset Creation: Tue May 22 22:24:43 2012 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	200		0	3' Amplitude (mV)	100	200	Variable Density	1200
20	CCL	-0.25		0	Amplified Amplitude (mV)	30			
300	TT3 (usec)	200							



Calibration Report

Database File:	uprc h 13-28d.db
Dataset Pathname:	pass3
Dataset Creation:	Tue May 22 23:06:10 2012 by Log Std Casedhole 10121

Cement Bond Log Calibration Report

Serial Number:	001		
Tool Model:	3_5		
Performed:	Tue May 22 19:58:09 2012		
Depth:	1580.88	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	3	3	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0	0	V
Reading in Free Pipe:	2.5	2.36123	V
Gain:	31.2784	33.1167	
Offset:	3	3	

Gamma Ray Calibration Report

Serial Number:	t001	
Tool Model:	s_t001	
Performed:	Sun Jun 13 14:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps