CEMENT BOND
GAMMA RAY
COLLAR CORRELATION LOG

J-W WIRELINE COMPANY

Company NOBLE ENERGY INC.
Well BASHOR PC AA 09-08
Field WATTENBERG
County WELD
State COLORADO

Company	NOBLE ENERGY INC.
Well	BASHOR PC AA 09-08
Field	WATTENBERG
County	WELD State COLORADO
Location:	API #: 05-123-32624-00 2080' FNL & 620' FEL SE NE SEC. 9 TWP. 6N RGE. 63W
Other Services	NONE
SEC	TWP	RGE

Permanent Datum	GROUND LEVEL	Elevation 4693	Elevation K.B. 4707 D.F. 4706 G.L. 4693
Log Measured From	KELLY BUSHING		
Drilling Measured From	KELLY BUSHING		

Date	28-FEBUARY-2011
Run Number	ONE
Depth Driller	6955
Depth Logger	6847
Bottom Logged Interval	6840
Top Log Interval	1130
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	--
Max. Recorded Temp.	235
Estimated Cement Top	1280
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	2405/YELLOW
Location	BRIGHTON
Recorded By	HAYES
Witnessed By	MR.MITCH TRIMBLE

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	557
Prot. String				
Production String	4.5	11.6#	SURFACE	6942
Liner				

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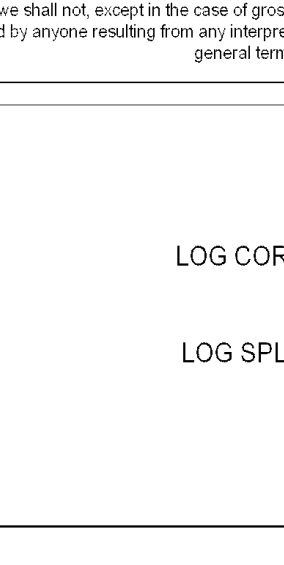
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 SD, DSN, AC, TR LOG
DATED 17-FEBUARY-2011

LOG SPLIT FOR CORRELATION PURPOSES



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CENT-A (1)	3.00	1.69	10.00
CCL	13.46	CCL-TEKCO (TEK101)	1.81	2.75	10.00
GR	11.49	GR-s_t001 (t001)	2.52	1.69	30.00
WVF5 WVF3	7.34 6.34	CBL-3_5 (001)	7.23	2.44	127.00
		CENT-B (2)	3.00	1.69	10.00

Dataset: bashor pc aa 09-08.db: field/well/run1/pass2
Total Length: 17.56 ft
Total Weight: 187.00 lb
O.D. 2.75 in

Database File: bashor pc aa 09-08.db
Dataset Pathname: pass2
Presentation Format: cblx
Dataset Creation: Mon Feb 28 14:40:09 2011 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

Database File: bashor pc aa 09-08.db
Dataset Pathname: pass1
Presentation Format: cblx
Dataset Creation: Mon Feb 28 14:18:12 2011 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: bashor pc aa 09-08.db
Dataset Pathname: pass2
Dataset Creation: Mon Feb 28 14:40:09 2011 by Log Std Casedhole 10121

Cement Bond Log Calibration Report

Serial Number:	001		
Tool Model:	3_5		
Performed:	Mon Feb 28 10:03:46 2011		
Depth:	1157.93	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	2.04138	V
Gain:	31.2784	38.3055	
Offset:	3	3	

Gamma Ray Calibration Report

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