J-W WIRELINE COMPANY

CEMENT BOND
GAMMA RAY
COLLAR CORRELATION LOG

Company	NOBLE ENERGY INC.
Well	WELLS RANCH A F 07-03
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY INC.
Well WELLS RANCH A F 07-03
Field WATTENBERG
County WELD State COLORADO
Location: API #: 05-123-31624-00
841' FNL & 1945' FWL
NE NW
SEC. 7 TWP. 5N RGE. 62W
SEC TWP RGE
Other Services: NONE
Permanent Datum GROUND LEVEL Elevation 4653
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING
Elevation K.B. 4669 D.F. 4668 G.L. 4653

Date	02-NOVEMBER-2010
Run Number	ONE
Depth Driller	6720
Depth Logger	6609
Bottom Logged Interval	6602
Top Log Interval	2050
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	--
Max. Recorded Temp.	230
Estimated Cement Top	2170
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	3011/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	561
Prot. String				
Production String	4.5	11.6 #	SURFACE	TOTAL DEPTH
Liner				

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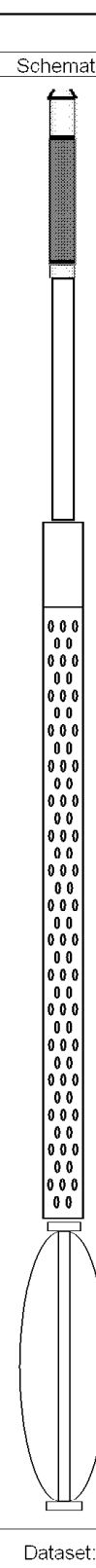
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 22-OCTOBER-2010

LOG SPLIT FOR CORRELATION PURPOSES

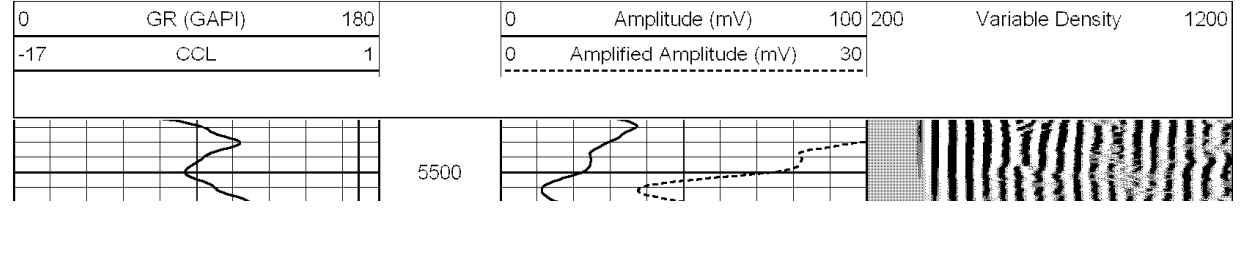


Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
CCL	14.06	CCL-275tekco (2.75TEKCO) 2 3/4 TEK CCL Earth Mag	1.96	2.75	20.00
GR	11.49	GR-s_t001 (t001)	2.52	1.69	30.00
WVF5 WVF3	7.34 6.34	CBL-3_5 (001)	7.23	2.44	127.00
		CENT-B (2)	3.00	1.69	10.00

Dataset: wells ranch 07-03.db: field/well/run1/pass3
Total Length: 14.71 ft
Total Weight: 187.00 lb
O.D. 2.75 in

Database File: wells ranch 07-03.db
Dataset Pathname: pass3
Presentation Format: cblx
Dataset Creation: Tue Nov 02 12:57:06 2010 by Log Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

Database File: wells ranch 07-03.db
Dataset Pathname: pass2
Presentation Format: cblx
Dataset Creation: Tue Nov 02 12:40:55 2010 by Log Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240



Calibration Report

Database File: wells ranch 07-03.db
Dataset Pathname: pass3
Dataset Creation: Tue Nov 02 12:57:06 2010 by Log Std Casedhole 08121

Cement Bond Log Calibration Report

Serial Number:	001		
Tool Model:	3_5		
Performed:	Tue Nov 02 12:22:23 2010		
Depth:	1324.25	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:	0.05	0	V
Reading in Free Pipe:	2.5	2.20869	V
Gain:	31.9168	35.4038	
Offset:	1.40416	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