J-W WIRELINE COMPANY

CEMENT BOND GAMMA RAY COLLAR CORRELATION LOG

Company	NOBLE ENERGY INC.
Well	BOOTH USX EE25-03D
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY INC.
Well BOOTH USX EE25-03D
Field WATTENBERG
County WELD State COLORADO

Location: API # :
SHL: 2323' FNL & 1085' FWL SWNW
BHL: 728' FNL & 2006' FWL NENW
SEC. 25, TWP. 7N, RGE. 65W
SEC TWP RGE

Other Services
NONE

Permanent Datum	GROUND LEVEL	Elevation	4820
Log Measured From	KELLY BUSHING		
Drilling Measured From	KELLY BUSHING		

Elevation
K.B. 4833
D.F. 4833
G.L. 4820

Date	08-DEC-2011
Run Number	ONE
Depth Driller	7635
Depth Logger	7523
Bottom Logged Interval	7515
Top Log Interval	1160
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	---
Max. Recorded Temp.	255
Estimated Cement Top	1336
Time Well Ready	---
Time Logger on Bottom	---
Equipment Number	2405/RED
Location	BRIGHTON
Recorded By	HAYES/KRAL
Witnessed By	MITCH TRIMBLE

Borehole Record

Run Number	Bit	From	To

Tubing Record

Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8	24#	SURFACE	700
Prot. String				
Production String	4.5	11.6#	SURFACE	7625
Liner				

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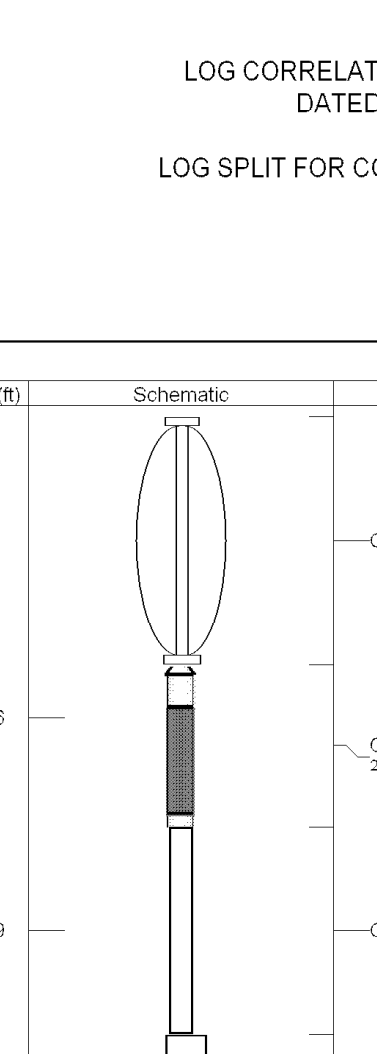
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

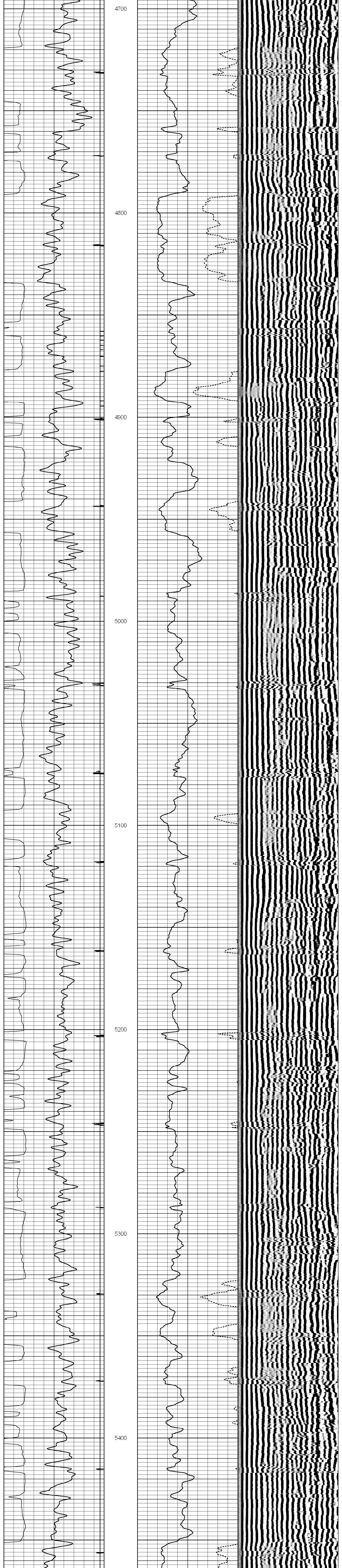
LOG CORRELATED TO CD, CN, ML LOG
DATED 16-NOV-2011

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 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:	booth usx ee25-03d.db: field/well/run1/pass2
Total Length:	17.71 ft
Total Weight:	197.00 lb
O.D.	2.75 in

Database File:	booth usx ee25-03d.db
Dataset Pathname:	pass2
Presentation Format:	cblx
Dataset Creation:	Thu Dec 08 07:57:43 2011 by Log Std Casedhole 10121
Charted by:	Depth in Feet scaled 1:240



30	Gamma Ray (GAPI)	130
25	CCL	-1
300	TT3 (usec)	200

0	3' Amplitude (mV)	100
0	Amplified Amplitude (mV)	30

200	Variable Density	1200

Database File: booth usx ee25-03d.db
Dataset Pathname: pass1
Presentation Format: cblx
Dataset Creation: Thu Dec 08 07:20:38 2011 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	200
25	CCL	-1
300	TT3 (usec)	200

0	3' Amplitude (mV)	100
0	Amplified Amplitude (mV)	30

200	Variable Density	1200

0	Gamma Ray (GAPI)	200
25	CCL	-1
300	TT3 (usec)	200

0	3' Amplitude (mV)	100
0	Amplified Amplitude (mV)	30

200	Variable Density	1200

Calibration Report

Database File: booth usx ee25-03d.db
Dataset Pathname: pass2
Dataset Creation: Thu Dec 08 07:57:43 2011 by Log Std Casedhole 10121

Cement Bond Log Calibration Report

Serial Number: 001
Tool Model: 3_5
Performed: Thu Dec 08 07:03:29 2011

Depth:	1409.82	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:	2.43689	0.0243408	V
Gain:	32.7607	3212.55	
Offset:	1.36197	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