BWWC
Black Warrior Wireline Corporation

CEMENT BOND LOD
GR-VDL-CCL

Company	NOBLE ENERGY INC.
Well	BATTLEMENT MESA 35-12
Field	RULISON
County	GARFIELD
State	CO

Company NOBLE ENERGY INC.
Well BATTLEMENT MESA 35-12
Field RULISON
County GARFIELD State CO

Location: API # : 05045104120000
0722' FNL & 2125' FWL
SEC 35 TWP 7S RGE 95W

Other Services
NONE

Permanent Datum	GROUND LEVEL	Elevation 9236'	K.B. 9256'
Log Measured From	KELLY BUSHING		D.F. 9257'
Drilling Measured From	KELLY BUSHING		G.L. 9236'

Date	17 NOV 2007
Run Number	ONE
Depth Driller	10100'
Depth Logger	7500'
Bottom Logged Interval	7500'
Top Log Interval	4250'
Open Hole Size	8.75"
Type Fluid	H2O
Density / Viscosity	8.34
Max. Recorded Temp.	161 F
Estimated Cement Top	4550'
Time Well Ready	15:00
Time Logger on Bottom	16:00
Equipment Number	4516
Location	GND JCT
Recorded By	K.KEENER
Witnessed By	T.EATON

Borehole Record				Tubing Record		
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.625"	32#	SURFACE	2500'
Prot. String	7"	23#	SURFACE	7005'
Production String	4.5"	11.6#	SURFACE	9926'
Liner				

<<< Fold Here >>>

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

CORRELATED TO H.E.S. CENENT BOND LOG DATED 11-13-2006

CCL-GR-CBL RUN IN COMBINATION

THANK YOU FOR USING WARRIOR ENERGY SERVICES

YOUR CREW TODAY : T.BEAL, R.WILLE

BWWC
Black Warrior Wireline Corporation

MAIN LOG PASS

Database File: 45160060.db
Dataset Pathname: pass5
Presentation Format: 2scbtvdl
Dataset Creation: Sat Nov 17 16:04:07 2007 by Log Std Casedhole 06040
Charted by: Depth in Feet scaled 1:240

300	Travel Time (usec)	200
9	Collar Locator	-1
0	Gamma Ray (GAPI)	200

0	AMPX5 (mV)	20
0	Amplitude (mV)	100

200 VDL 1200

300	Travel Time (usec)	200
9	Collar Locator	-1
0	Gamma Ray (GAPI)	200

0	AMPX5 (mV)	20
0	Amplitude (mV)	100

200 VDL 1200

BWWC
Black Warrior Wireline Corporation

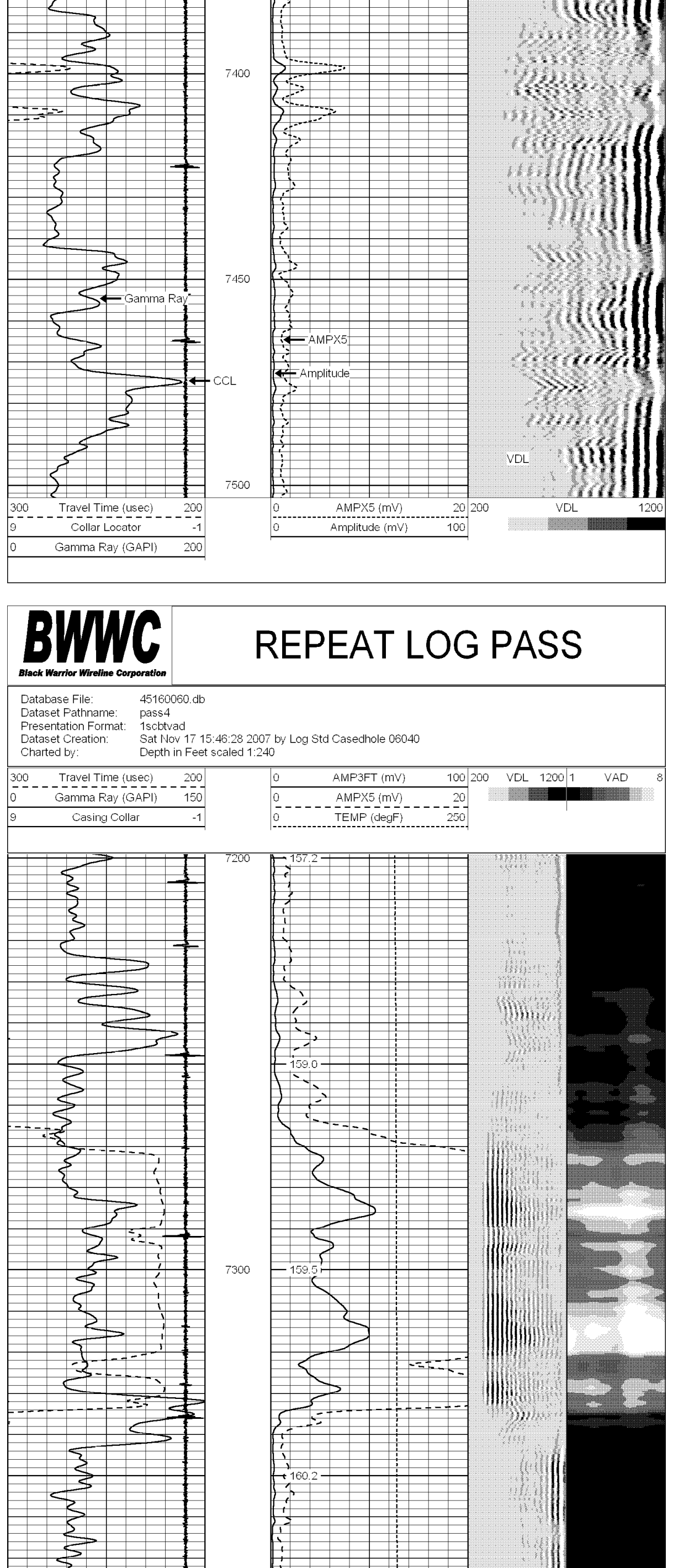
REPEAT LOG PASS

Database File: 45160060.db
Dataset Pathname: pass4
Presentation Format: 1scbtvad
Dataset Creation: Sat Nov 17 15:46:28 2007 by Log Std Casedhole 06040
Charted by: Depth in Feet scaled 1:240

300	Travel Time (usec)	200
0	Gamma Ray (GAPI)	150
9	Casing Collar	-1

0	AMP3FT (mV)	100
0	AMPX5 (mV)	20
0	TEMP (degF)	250

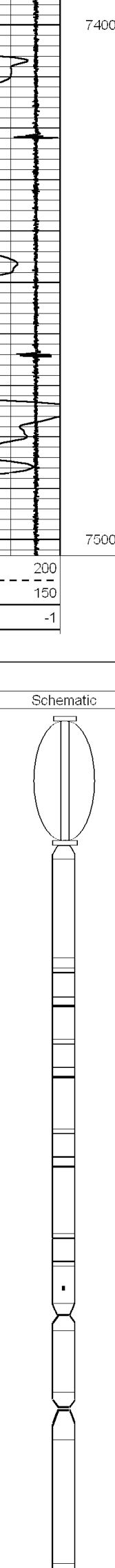
200 VDL 1200 1 VAD 8

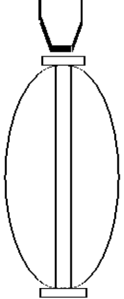


300	Travel Time (usec)	200
0	Gamma Ray (GAPI)	150
9	Casing Collar	-1

0	AMP3FT (mV)	100
0	AMPX5 (mV)	20
0	TEMP (degF)	250

200 VDL 1200 1 VAD 8

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			APD1.44	2.50	1.44	5.00
TEMP	14.35					
WVFS1	13.06					
WVFS2	13.06		SCBL100T-Tekco100T (100T-002)	9.13	0.00	
WVFS3	13.06					
WVFS4	13.06					
WVFS5	13.06					
WVFS6	13.06					
WVFS7	13.06					
WVFS8	13.06					
WVF3FT	12.31					
WVFCAL	12.31					
WVF5FT	11.31					
WVFTEMP	7.97					
WVFSYNC	7.97					
CCL	6.79		CCL-Tekco105 (105-003)	1.81	2.75	15.00
			GR-Tekco110 (110-004)	3.66	2.75	25.00
GR	3.50					

			APD1.44	2.50	1.44	5.00

Dataset: 45160060.db: field/well/run1/pass5
Total Length: 19.60 ft
Total Weight: 50.00 lb
O.D. 2.75 in