Company	Noble Energy Inc.
Well	WELLS RANCH AF 06-05
Field	Wattenberg
County	Weld
State	Colo

SUPERIOR WELL SERVICES

CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company	Noble Energy Inc.		
Well	WELLS RANCH AF 06-05		
Field	Wattenberg		
County	Weld	State	Colo

Location: API # : 051233016800

1826' FNL & 540' FWL
SW NW

SEC 6 TWP 5N RGE 62W

Other Services
Perforate

Permanent Datum	GL	Elevation	4692
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4705
D.F. 4704
G.L. 4692

Date	June 10, 2009	
Run Number	One	
Depth Driller	6774	
Depth Logger	6727	
Bottom Logged Interval	6726	
Top Log Interval	540	
Casing Size	4 1/2"	11.6#
Type Fluid	Water	Full
Density / Viscosity	Not Recorded	
Max. Recorded Temp.	220 Deg F	
Estimated Cement Top	690	
Time Well Ready	Portable Mast	
Time Logger on Bottom	AM	
Equipment Number	T5 (3344)	2.75 Tool 2 (BLK)
Location	Platteville	
Recorded By	K. Monaghan	
Witnessed By	C. Hohnstein	

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"	24.0#	Surface	500
Prot. String				
Production String	4 1/2"	11.6#	Surface	6765
Liner				

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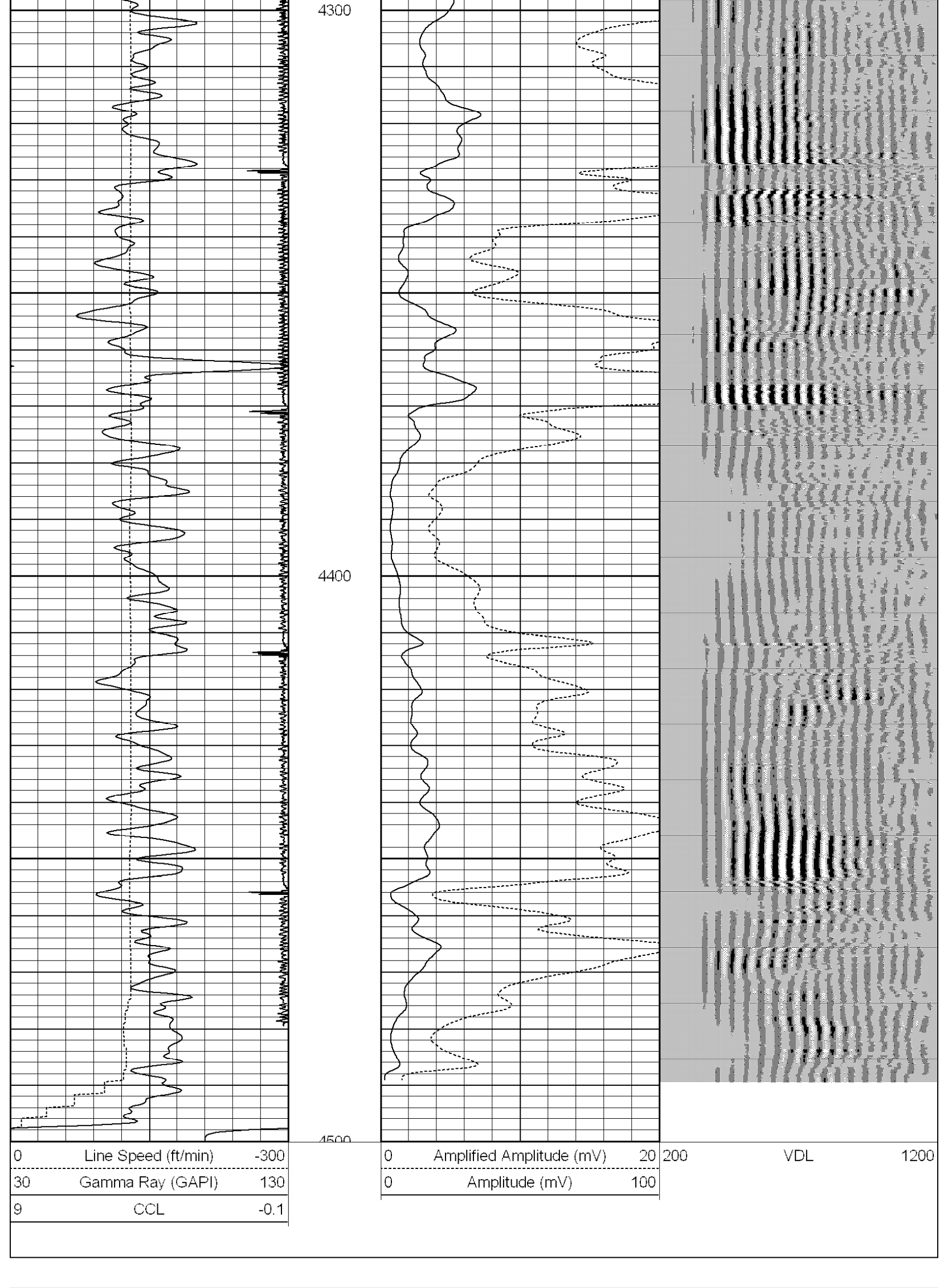
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

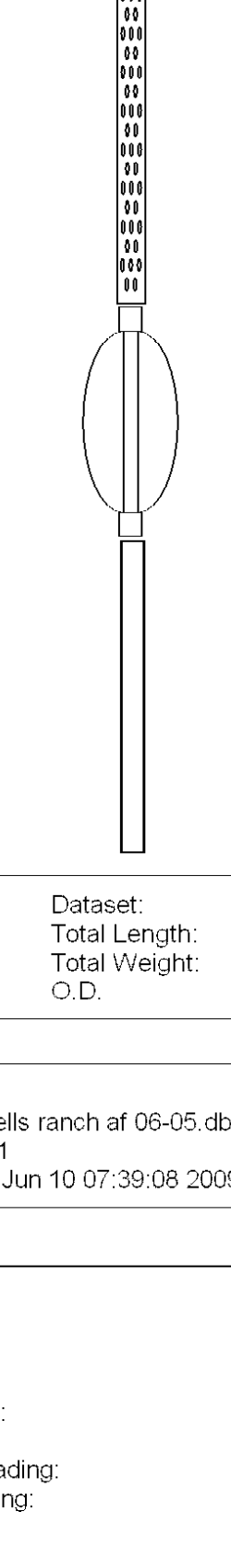
Thank You For Choosing Superior Well Services!!
API# 05-123-30168-00
Correlated to Phoenix Survey Inc's
Compensated Density / Compensated Neutron
Gamma Ray Microlog
Dated: May 28, 2009
Directions: WCR 68&69, E 2/10, S 1.75MI, E 2.75MI, SOUTH 1.5MI, SW INTO LOCATION

Database File:	cblwells ranch af 06-05.db
Dataset Pathname:	pass3
Presentation Format:	nuexbond
Dataset Creation:	Wed Jun 10 08:17:15 2009 by Log Std Casedhole 08121
Charted by:	Depth in Feet scaled 1:240

0	Line Speed (ft/min)	-300	0	Amplified Amplitude (mV)	20	200	VDL	1200
30	Gamma Ray (GAPI)	130	0	Amplitude (mV)	100			
9	CCL	-0.1						



Database File: cblwells ranch af 06-05.db
Dataset Pathname: pass2
Presentation Format: nuevbond
Dataset Creation: Wed Jun 10 07:57:45 2009 by Log Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CHD-STNDRD (1) Standard Cable Head	1.00	1.69	5.00
CCL	18.92		CCL-tekco (234CCL-169) 2 3/4" TEKCO Collar Locator	1.83	2.75	10.00
			CENT-2750-CENT (2750-CENT-LONG) Electric Line Technologies Centrailzer 2.75"	2.75	2.75	10.00
WVF3FT	11.25		SCBL-TEKCO (234B35C-8013) tekco 2 3/4" SCBL tool	9.06	2.75	102.00
WVF5FT	9.25					
WVFCAL	6.42					
			CENT-2750-CENT (2750-CENT-LONG) Electric Line Technologies Centrailzer 2.75"	2.75	2.75	10.00
			GR-TekcoGR (234GR-328) 2 3/4" TEKCO Gamma Ray	3.67	2.75	20.00
GR	1.04					

Dataset: cblwells ranch af 06-05.db: field/well/run1/pass3
Total Length: 21.06 ft
Total Weight: 157.00 lb
O.D. 2.75 in

Calibration Report

Database File: cblwells ranch af 06-05.db
Dataset Pathname: pass1
Dataset Creation: Wed Jun 10 07:39:08 2009 by Log Std Casedhole 08121

Gamma Ray Calibration Report

Serial Number:	234GR-328	
Tool Model:	TekcoGR	
Performed:	Thu Aug 02 12:04:45 2007	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.8000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	234B35C-8013	
Tool Model:	TEKCO	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	37.875	ft

Master Calibration, performed Wed Jun 10 07:38:44 2009:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.004	2.500	1.400	81.196	31.868	1.526
CAL	0.068	0.067				
5'	0.065	0.064	1.400	81.196	-1089482.929	70341.674
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.068	0.067	1.000	0.000

Air Zero Calibration, performed Wed Jun 10 07:35:34 2009:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1			
S2			
S3			
S4			
S5			
S6			
S7			
S8			