CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company	Noble Energy INC.
Well	DILLARD USX AB 03-14P
Field	Wattenberg
County	Weld
State	Colorado

Company Noble Energy INC.
Well DILLARD USX AB 03-14P
Field Wattenberg
County Weld State Colorado

Location: API #: 051233107100
660' FSL & 1980' FWL
LAT: 40.596710 DEG
LONG: -104.537640 DEG
SEC 3 TWP 7N RGE 64W

Other Services

Permanent Datum	GL	Elevation	4847	Elevation	K.B. 4860 D.F. 4859 G.L. 4847
Log Measured From	KB 13'				
Drilling Measured From	KB				

Date	October 13, 2010
Run Number	One
Depth Driller	7176
Depth Logger	7094
Bottom Logged Interval	7093
Top Log Interval	1020
Casing Size	4 1/2"
Type Fluid	Water
Max. Recorded Temp.	225 deg F
Estimated Cement Top	2064
Time Well Ready	Mast Truck
Time Logger On Bottom	AM
Unit Number	3344
Tool Size / ID Number	2.75 Tool 1 BLK
Location	Platteville, CO
Recorded By	K. Monaghan
Witnessed By	C. Ruppel

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 lb/ft J-55	Surface	765.1
Prot. String				
Production String	4 1/2"	11.6 lb/ft M-80	Surface	7168.9
Liner				

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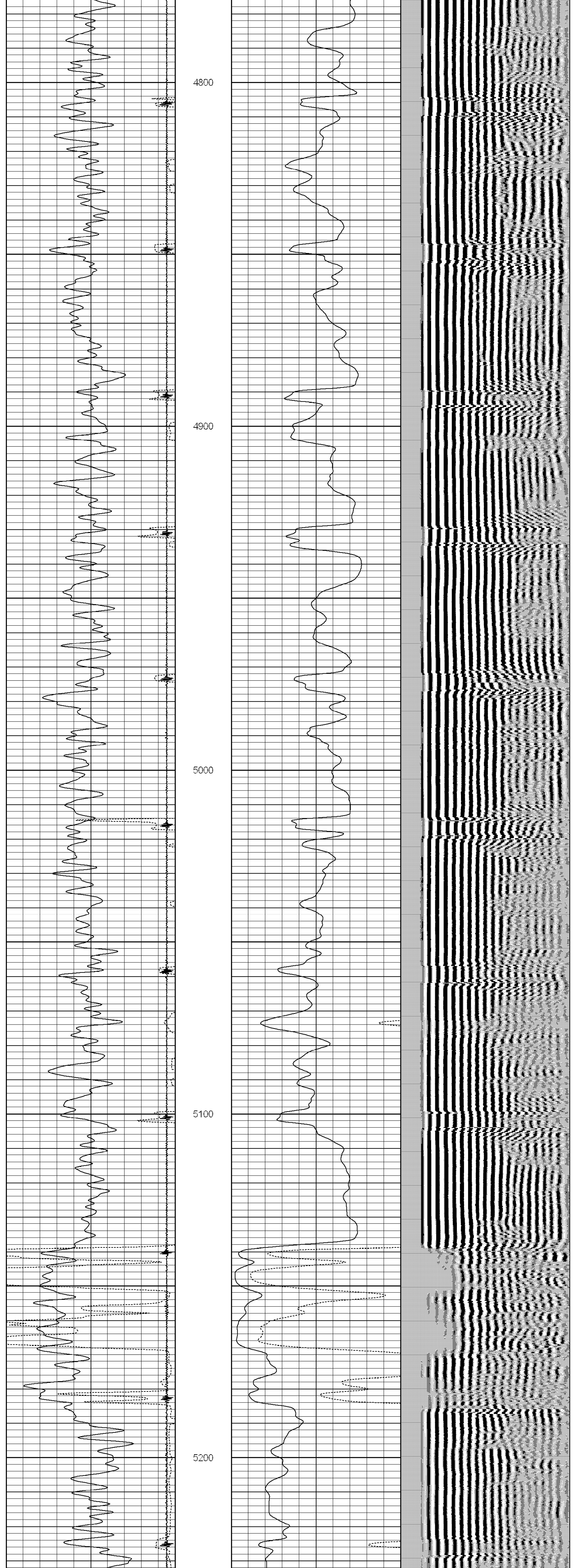
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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# 05-123-31071-00
Correlated to H.E.S.'s
Dual Speaced Neutron / Array Compensated / Spectral Density / True Resistivity / Gamma Ray
Dated: October 5, 2010
Directions: 88 & 59, S 1MI, W 1MI, S 1MI, W 6/10, N INTO

Database File:	cbldillard usx ab 03-14p.db
Dataset Pathname:	pass3
Presentation Format:	nuexbond
Dataset Creation:	Wed Oct 13 10:44:18 2010 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240



30	Gamma Ray (GAPI)	130
20	CCL	-1
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100

200 VDL 1200

Database File: cbldillard usx ab 03-14p.db
Dataset Pathname: pass2
Presentation Format: nuexbond
Dataset Creation: Wed Oct 13 10:26:55 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
20	CCL	-1
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100

200 VDL 1200

0	Gamma Ray (GAPI)	150
20	CCL	-1
340	TT3 (usec)	240

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100

200 VDL 1200

Calibration Report

Database File: cbldillard usx ab 03-14p.db
Dataset Pathname: pass3
Dataset Creation: Wed Oct 13 10:44:18 2010 by Log Std Casedhole 09061

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:	264.625	ft

Master Calibration, performed Wed Oct 13 10:07:38 2010:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.010	2.500	1.100	81.196	32.173	0.763
CAL	-0.009	2.251				
5'	-0.012	2.500	1.100	81.196	31.882	1.490
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

Internal Reference Calibration, performed Wed Oct 13 10:04:10 2010:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.009	2.251	1.000	0.000

Air Zero Calibration, performed Wed Oct 13 10:02:38 2010:

	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			