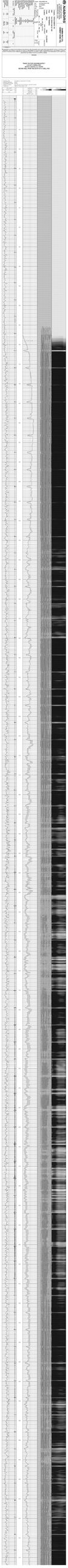

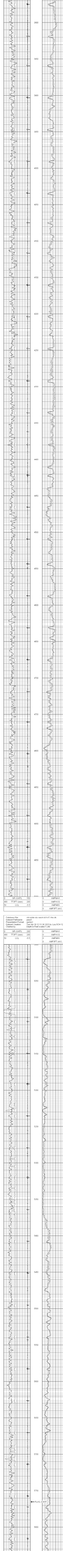

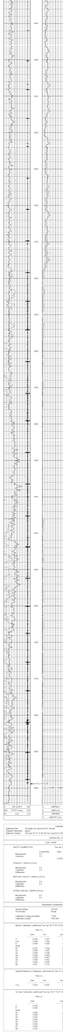

NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company	NOBLE ENERGY INC.
Well	SLW RANCH B01-67-1HN
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY INC.
Well SLW RANCH B01-67-1HN
Field WATTENBERG
County WELD State COLORADO

Location: API #: 0512336321
BHL: 1650' FNL & 535' FWL
SE/NE
SEC 1 TWP 5N RGE 64W

Other Services

Permanent Datum	GL	Elevation 4612	Elevation
Log Measured From	KB		K.B. 4636
Drilling Measured From	KB		D.F.
			G.L. 4612

Date	APRIL 30, 2013
Run Number	ONE
Depth Driller	11155
Depth Logger	6900
Bottom Logged Interval	6900
Top Log Interval	SURFACE
Open Hole Size	8-3/4
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	217°F
Estimated Cement Top	1144
Time Well Ready	PORTABLE MAST
Time Logger on Bottom	2-3/4 PROBE 101020
Equipment Number	4838
Location	45
Recorded By	GERG NOLAN
Witnessed By	BILL MASNSFIELD

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9-5/8	36# J-55	24	660
Prot. String				
Production String	7	26# P-110	24	716
Liner	4-1/2	11.6# P-110	6891.3	11155

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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 NCPS!!!!
LOG NOT CORRELATED
WCR 61 & WCR 62, S.3, W INTO
SECOND WELL FROM THE SOUTH OF A 4 WELL PAD

Database File:	cbl noble slw ranch b01-67-1hn.db
Dataset Pathname:	pass6
Presentation Format:	sector2
Dataset Creation:	Tue Apr 30 12:32:13 2013 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

Database File: cbl noble slw ranch b01-67-1hn.db
Dataset Pathname: pass5
Presentation Format: sector2
Dataset Creation: Tue Apr 30 12:11:36 2013 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cbl noble slw ranch b01-67-1hn.db
Dataset Pathname: pass5
Dataset Creation: Tue Apr 30 12:11:36 2013 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

SHOP CALIBRATION Tue Apr 30 07:49:20 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.4700			GAPI/cps

PRIMARY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number:	101020	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	1060.883	ft

Master Calibration, performed Tue Apr 30 11:55:14 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.008	1.001	1.500	62.165	61.053	1.031
CAL	0.008	1.268				
5'	0.008	1.095	1.500	62.165	55.770	1.070
SUM						
S1	0.007	1.104	0.000	62.165	56.713	-0.420
S2	0.008	1.095	0.000	62.165	57.150	-0.441
S3	0.008	1.046	0.000	62.165	59.860	-0.453
S4	0.008	0.954	0.000	62.165	65.696	-0.510
S5	0.008	0.863	0.000	62.165	72.680	-0.552
S6	0.008	0.852	0.000	62.165	73.643	-0.561
S7	0.008	0.956	0.000	62.165	65.578	-0.506
S8	0.007	1.076	0.000	62.165	58.187	-0.433

Internal Reference Calibration, performed Fri Jan 13 14:30:16 2012:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.008	1.268	1.000	0.000

Air Zero Calibration, performed Tue Apr 30 07:31:07 2013:

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