Company	NOBLE ENERGY INC
Well	LITTLE BILL LS8
Field	WATTENBERG
County	WELD
State	COLORADO
Permanent Datum	GROUND LEVEL
Elevation	4,906 ft
Log Measured From	KELLY BUSHING
Drilling Measured From	KELLY BUSHING
Elevation	4,921 ft
Elevation	4,906 ft
API Number	05-123-37400
Run Number	ONE
Date	29-Jul-2014
Depth Driller	7,100 ft
Depth Logger	7,100 ft
Bottom Logged Interval	7,100 ft
Top Logged Interval	0 ft
Casing Driller	9.625 in @ 0 ft
Casing Logger	9.625 in @ 0 ft
Bit Size	8.75 in
Type Fluid in Hole	WBM
Density	9.2 lbm/gal
Viscosity	40 s
PH	9
Fluid Loss	6 cc
Source of Sample	FLOWLINE
Rm @ Measured Temp	0.2 @ 70 °F
Rmf @ Measured Temp	0.15 @ 70 °F
Rmc @ Measured Temp	0.3 @ 70 °F
Source of Rmf and Rmc	CALCULATED
Rm @ BHT	0.1 @ 200 °F
Time Since Circulation	12 hr
Time on Bottom	29-Jul-2014 08:00
Max Recorded Temperature	200 °F
Equipment Number	8
Location	SEC 36 T5N R67W
Recorded By	J. HOLLOWAY
Witnessed By	J. MCCLAIN

NABORS DRILLING TECHNOLOGIES USA

GAMMA RAY / CCL
CEMENT BOND VDL

Field Print Info

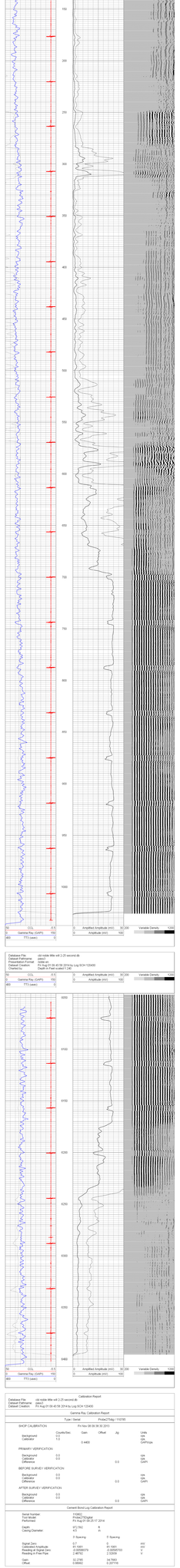
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

Contents

THANK YOU FOR CHOOSING NCPS!!!!
LOG NOT CORRELATED
WCR 48 & WCR 64, 18 S, 9-2, 2 WTO

Database File: ob noble little will 2-25 second db
Dataset Pathname: pass1
Dataset Presented: Fri Aug 01 10:00:39 2014 by Log SCH 123400
Dataset Creation: Fri Aug 01 08:45:58 2014 by Log SCH 123400
Charted by: Depth in Feet scaled 1:240

50	CCL	0	Amplitude (mV) 30,000 Variable Density
0	Gamma Ray (GAPI) 150	0	Amplitude (mV) 100
400	TT1 (usec) 0		



Database File: ob noble little will 2-25 second db
Dataset Pathname: pass1
Dataset Presented: Fri Aug 01 08:45:58 2014 by Log SCH 123400
Dataset Creation: Fri Aug 01 08:45:58 2014 by Log SCH 123400
Charted by: Depth in Feet scaled 1:240

50	CCL -0.5	0	Amplitude (mV) 30,000 Variable Density
0	Gamma Ray (GAPI) 150	0	Amplitude (mV) 100
400	TT1 (usec) 0		

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Gamma Ray Calibration Report

Type Local Probe2/Sdg / 10760

SHOP CALIBRATION

Fri Nov 08 09:36:30 2013

	Counts/Sec	Gain	Offset	Ag	Units
Background	0.0				GAPI
Calibrator	1.0				GAPI
		0.4400			GAPI/cps

PRIMARY VERIFICATION

Background	0.0		GAPI
Calibrator	1.0		GAPI
Difference		0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0		GAPI
Calibrator	1.0		GAPI
Difference		0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0		GAPI
Calibrator	0.0		GAPI
Difference		0.0	GAPI

Cement Bond Log Calibration Report

Serial Number	10760
Tool Model	Probe2/Sdgbhc
Calibrated	Fri Aug 01 20:15:13 2014
Depth	ft
Casing Diameter	in
	0 Spacing

Signal Zero	0.7	0	mV
Calibrated Amplitude	64.1061	60.1061	mV
Reading at Signal Zero	-0.00508379	-0.00508703	V
Reading at Free Pipe	0.48782	0.48782	V
Gain	32.2795	34.7983	
Offset	-0.0163	-0.017703	