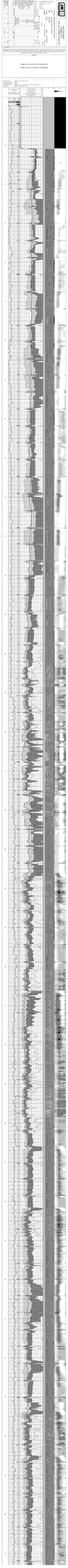

J-W WIRELINE COMPANY

SECTOR BOND
GAMMA RAY
COLLAR CORRELATION LOG

Company	NOBLE ENERGY PRODUCTION INC.
Well	GALLEGOS PC GJ 13-99 HZ
Field	GROVER
County	WELD
State	COLORADO

Company NOBLE ENERGY PRODUCTION INC.

Well GALLEGOS PC GJ 13-99 HZ

Field GROVER

County WELD State COLORADO

Location: API #: 05-123-31644-00

NW/NW

SEC 13 TWP 11N RGE 62W

Other Services

NONE

Permanent Datum GROUND LEVEL Elevation 5168

Log Measured From KELLY BUSHING

Drilling Measured From KELLY BUSHING

Elevation

K.B. 5192

D.F. ---

G.L. 5168

Date	21-JUL-2010
Run Number	ONE
Depth Driller	11440
Depth Logger	6193
Bottom Logged Interval	6193
Top Log Interval	SURFACE
Open Hole Size	12 1/4
Type Fluid	WATER
Density / Viscosity	--
Max. Recorded Temp.	179
Estimated Cement Top	162
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	2337/CR29/19-266
Location	BRIGHTON
Recorded By	GREG JACKSON
Witnessed By	MR. BILL MANSFIELD

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	7	32	SURFACE	NA
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

PRIMARY LOG FOR VERTICAL WELLBORE

THANK YOU FOR CHOOSING J-W WIRELINE

Database File: gallegos pc gj 13-99hz_cbl.db
Dataset Pathname: pass2
Presentation Format: scbl01
Dataset Creation: Wed Jul 21 10:10:27 2010 by Log Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: gallegos pc gj 13-99hz_cbl.db
Dataset Pathname: pass2
Dataset Creation: Wed Jul 21 10:10:27 2010 by Log Std Casedhole 08121

Gamma Ray Calibration Report

Serial Number:	101sgr	
Tool Model:	TEKCO	
Performed:	Sun Jun 13 14:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	1234	
Tool Model:	275RIB	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	119.683	ft

Master Calibration, performed Wed Jul 21 09:42:40 2010:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.030	1.548	3.000	62.165	38.972	1.831
CAL	0.000	2.500				
5'	0.030	2.500	3.000	62.165	23.953	2.281
SUM						
S1	0.030	2.500	0.000	100.000	40.486	-1.215
S2	0.030	2.500	0.000	100.000	40.486	-1.215
S3	0.030	2.500	0.000	100.000	40.486	-1.215
S4	0.030	2.040	0.000	100.000	49.745	-1.492
S5	0.030	1.187	0.000	100.000	86.445	-2.593
S6	0.030	0.779	0.000	100.000	133.548	-4.006
S7	0.030	1.047	0.000	100.000	98.287	-2.949
S8	0.030	1.957	0.000	100.000	51.905	-1.557

Internal Reference Calibration, performed Wed Dec 31 18:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	2.500	1.000	0.000

Air Zero Calibration, performed Mon Sep 11 13:40:00 2006:

	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

Temperature Calibration Report

Serial Number:	1234	
Tool Model:	275RIB	
Performed:	Fri Jun 25 13:11:59 2010	
	Reference	Reading
Low Reference:	75.00 degF	0.00 usec
High Reference:	400.00 degF	1282.00usec
Gain:	0.25	
Offset:	10.00	
Delta Spacing	1	