Company	Kerr McGee
Well	Norgren Donald E #1
Field	Wattenberg
County	Weld
State	Colorado
Country	USA

PIONEER
Pioneer Energy Services

GAMMA RAY CCL
CEMENT BOND VDL

Company	Kerr McGee	
Well	Norgren Donald E #1	
Field	Wattenberg	
County	Weld	
State	Colorado	Country USA

API #: 05123084650000

Location: 1450' FNL & 630' FEL
SWNE

SEC 1 TWP 2N RGE 67W

Other Services

Permanent Datum	GL	Elevation	4829
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4839
D.F.
G.L. 4829

Date	October 16, 2013
Run Number	1
Depth Driller	7883
Depth Logger	7500
Bottom Logged Interval	7500
Top Log Interval	0
Open Hole Size	7-7/8"
Type Fluid	Water
Density / Viscosity	NA
Max. Recorded Temp.	NA
Estimated Cement Top	500'
Time Well Ready	0930
Time Logger on Bottom	1030
Equipment Number	50
Location	Brighton, CO
Recorded By	Kelly Keever
Witnessed By	Dave Donoho

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	4.5"	11.6 lbs	0	7883
Liner				

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

Thank You for using Pioneer Energy Services

Database File:	13354.db
Dataset Pathname:	final
Presentation Format:	cblk
Dataset Creation:	Wed Oct 16 11:49:49 2013
Charted by:	Depth in Feet scaled 1:240

Calibration Report

Database File:	13354.db
Dataset Pathname:	pass5
Dataset Creation:	Wed Oct 16 10:31:05 2013 by Log 0

Gamma Ray Calibration Report

Serial Number:	111205	
Tool Model:	probe 2.75	
Performed:	Sun Jun 13 13:33:21 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:	Base	
Tool Model:	Probe	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	696.861	ft

Master Calibration, performed Wed Oct 16 10:07:55 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.012	1.011	0.000	81.196	51.345	0.000
CAL	0.012	1.372				
5'	0.012	0.913	0.000	81.196	90.112	-1.107
SUM						
S1	0.012	0.019	0.500	100.000	15066.617	-182.131
S2	0.012	0.013	0.500	100.000	76896.604	-915.651
S3	0.012	0.014	0.500	100.000	63186.357	-758.477
S4	0.012	0.013	0.500	100.000	97036.190	-1168.625
S5	0.012	0.013	0.500	100.000	84031.340	-993.474
S6	0.012	0.012	0.500	100.000	156750.769	-1828.769
S7	0.012	0.012	0.500	100.000	8151040.000	-98206.000
S8	0.012	0.012	0.500	100.000	-2037760.000	24776.000

Internal Reference Calibration, performed Tue Nov 21 12:42:07 2006:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.012	1.372	1.000	0.000

Air Zero Calibration, performed Thu Apr 24 09:23:40 2008:

	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