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RADIAL SECTOR BOND LOG WITH GAMMA RAY

Company ANADARKO PETROLEUM CORP.
Well SPOTTED 29N-23HZ
Field WATTENBERG
County WELD State CO

Company **ANADARKO PETROLEUM CORP.**
Well **SPOTTED 29N-23HZ**
Field **WATTENBERG**
County **WELD** State **CO**

Location: API # : 05123394290000
1' FNL & 1105' FWL
SEC 23 TWP 2N RGE 67W
Other Services
NONE

Permanent Datum GL Elevation 4966'
Log Measured From KB 25'
Drilling Measured From KB
Elevation
K.B. 4991'
D.F. 4992'
G.L. 4966'

Date of Service	7-12-14
Run Number	ONE
Depth Driller or PBTD	12536'
Depth Logger	6778'
Bottom Log Interval	6778'
Top Log Interval	SURFACE
Open Hole Size	8 7/8"
Type Fluid	WATER
Fluid Level	SURFACE
Fluid Density	NA
Max. Recorded Temperature	NA
Max. Wellhead Pressure	2500 PSI
Wellhead Connection	10K 7 1/16" FLANGE
Estimated Cement Top	SURFACE
Unit Number	59
Wireline Size	9/32"
Location	FORT MORGAN
Recorded By	JOHN HOLLIS
Witnessed By	Mr. Donnie Frederick

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing				
Production Casing	7"	26#	SURFACE	7785'
Liner Record	4.5'	11.6#	6718'	12521'

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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

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
S.O.# 2-260078

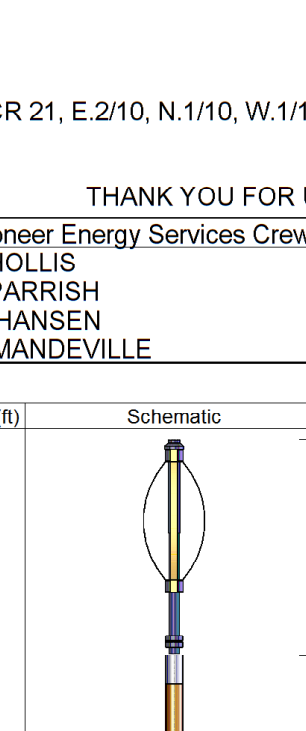
CORRELATED TO TOP OF LINER AT 6718'

N
W O O X E
S

WCR 18 & WCR 21, E.2/10, N.1/10, W.1/10 INTO

THANK YOU FOR USING PIONEER Energy SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: J. HOLLIS Operator: J. PARRISH Operator: M. HANSEN Operator: S. MANDEVILLE		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.83	2.75	
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 10.63		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
			PTS275	2.83	2.75	
CCL GR	3.63 2.30		GR_CCL-Probe (111211) Probe Gamma CCL	4.54	2.75	100.00

Dataset: spotted_29n_23hz_rbl.db: field/well/run1/pass4
Total Length: 19.13 ft
Total Weight: 190.00 lb
O.D. 2.75 in

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Main Pass

Database File: spotted_29n_23hz_rbl.db
Dataset Pathname: pass4
Presentation Format: scbl02
Dataset Creation: Sat Jul 12 08:59:05 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: spotted_29n_23hz_rbl.db
Dataset Pathname: pass4
Dataset Creation: Sat Jul 12 08:59:05 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	111211	
Tool Model:	Probe	
Performed:	Sun Jun 01 16:54:18 2014	
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:	7.000	in
Calibration Depth:	499.608	ft

Master Calibration, performed Sat Jul 12 08:22:08 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.006	0.708	2.000	62.165	84.286	2.487
CAL	0.000	1.056				
5'	-0.004	0.602	2.000	62.165	99.287	2.438
SUM						
S1	0.005	0.646	0.000	95.000	148.191	-0.675
S2	-0.005	0.675	0.000	95.000	139.682	0.725
S3	-0.005	0.716	0.000	95.000	131.896	0.617
S4	-0.003	0.749	0.000	95.000	126.243	0.418
S5	-0.002	0.743	0.000	95.000	127.562	0.263
S6	-0.005	0.720	0.000	95.000	131.087	0.606
S7	-0.004	0.681	0.000	95.000	138.852	0.498
S8	-0.004	0.650	0.000	95.000	145.213	0.604

Internal Reference Calibration, performed Wed Aug 21 11:08:58 2013:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	1.056	1.000	0.000

Air Zero Calibration, performed Thu May 08 15:48:13 2014:

	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

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Field	WATTENBERG
County	WELD
State	CO