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Radial Cement Bond Log With Gamma Ray / CCL / VDL And Cement Map

Company Anadarko Petroleum Corporation
Well Badding 14N-2HZ
Field Wattenberg
County Weld State CO

Location: API # : 05-123-38286
SHL: 2411'FSL & 1411'FWL
SEC 35 TWP T2N RGE 66W

Other Services
JBGR
Caliper

Permanent Datum	Ground Level	Elevation 5103'	Elevation
Log Measured From	Kelly Bushing	13' A.P.D.	K.B. 5116'
Drilling Measured From	Kelly Bushing		D.F. 5115' G.L. 5103'

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Date	29-Jan-2014
Run Number	Three
Depth Driller	15,274'
Depth Logger	7486'
Bottom Logged Interval	7484'
Top Log Interval	Surface
Open Hole Size	8.75"
Type Fluid	Water
Density / Viscosity	8.34
Max. Recorded Temp.	225 Deg. Fht.
Estimated Cement Top	780'
Time Well Ready	11:30
Time Logger on Bottom	12:00
Equipment Number	59
Location	Fort Morgan
Recorded By	Bruce Miller
Witnessed By	Mr. Edgar Chavez

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9.625"	36	Surface	1177'
Prot. String				
Production String	7	26	Surface	7804'
Liner	4.5"	11.6	6,886'	15,262'
See Remarks				

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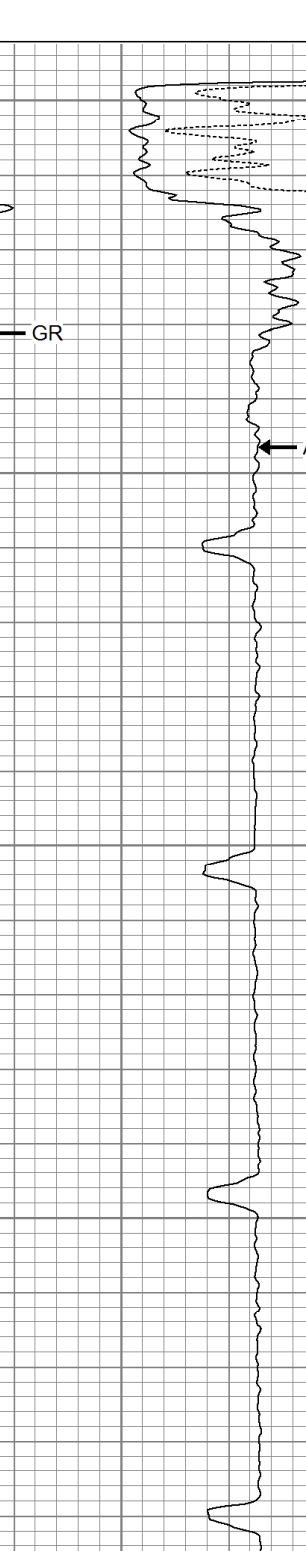
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

Liner Top Was Found At 6822' On Log.

Log Is Correlated To Pioneer Energy Services Radial Cement Bond Log Dated 29-Jan-2014

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	3.63					
GR	2.30		GR_CCL-Probe (111211) Probe Gamma CCL	4.54	2.75	100.00

Dataset: anadarko_badding_14n-2hz_logs.db: field/well/run3/pass3
Total Length: 19.13 ft
Total Weight: 190.00 lb
O.D. 2.75 in

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Main Pass

Logged With 2200# PSI Applied At Surface

Database File: anadarko_badding_14n-2hz_logs.db
Dataset Pathname: run3/pass3
Presentation Format: scbl02
Dataset Creation: Wed Jan 29 12:44:38 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
6900
7000
7100
7200
7300
7" 26# Casing
Liner Top
DEPTH
7400
4.5" 11.6# Casing
CCL
GR
AMPx5
AMPMAX
AMPMIN
AMPAVG
AMP
VDL
SECTOR MAP
9 CCL -1
0 GR (GAPI) 200
0 AMP (mV) 100
0 AMPx5 (mV) 20
0 AMPAVG 150
0 AMPMAX 150
0 AMPMIN 150
200 VDL 1200
1 SECTOR MAP 8
20
95

Calibration Report

Database File: anadarko_badding_14n-2hz_logs.db
Dataset Pathname: run3/pass3
Dataset Creation: Wed Jan 29 12:44:38 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	111211	
Tool Model:	Probe	
Performed:	Fri Nov 08 12:58:35 2013	
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:	711.933	ft

Master Calibration, performed Wed Jan 29 12:56:06 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.014	0.640	2.000	62.165	92.038	3.297
CAL	1.000	0.911				
5'	0.164	0.654	2.000	62.165	122.948	-18.210
SUM						
S1	-0.068	0.545	0.000	95.000	155.022	10.472
S2	-0.077	0.568	0.000	95.000	147.313	11.277
S3	-0.042	0.644	0.000	95.000	138.587	5.817
S4	-0.030	0.720	0.000	95.000	126.621	3.775
S5	-0.043	0.741	0.000	95.000	121.131	5.236
S6	-0.047	0.703	0.000	95.000	126.733	5.908
S7	-0.030	0.624	0.000	95.000	145.239	4.328
S8	-0.077	0.572	0.000	95.000	146.250	11.303

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	1.000	0.911	1.000	0.000

Air Zero Calibration, performed Sat Nov 09 07:23:33 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

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Field	Wattenberg
County	Weld
State	CO