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Pioneer Energy Services

RADIAL SECTOR BOND LOG WITH GAMMA RAY

Company	EnCana Oil & Gas (USA) Inc.
Well	Edith Ann-Duckworth 4H-21H-O268
Field	Wattenberg
County	Weld
State	Colorado
Location:	API #: 05123380850000 SHL: 283' FSL & 1296' FEL SESE SEC 21 TWP 2N RGE 67W
Other Services	None

Permanent Datum	GL	Elevation 4926	Elevation K.B. 4954.5 D.F. 4954.5 G.L. 4926
Log Measured From	KB		
Drilling Measured From	KB		

Company EnCana Oil & Gas (USA) Inc.
Well Edith Ann-Duckworth 4H-21H-O268
Field Wattenberg
County Weld State Colorado

Date of Service	May 23, 2014
Run Number	1
Depth Driller or PBTD	15000
Depth Logger	8025
Bottom Log Interval	8021
Top Log Interval	Surface
Open Hole Size	8-3/4"
Type Fluid	OBM
Fluid Level	Surface
Fluid Density	10.8 / 67
Max. Recorded Temperature	NA
Max. Wellhead Pressure	0
Wellhead Connection	Packoff to 7" in BOP
Estimated Cement Top	931
Unit Number	49
Wireline Size	7/16"
Location	Ft. Morgan, CO
Recorded By	Schuman
Witnessed By	Mr. Chris Clemens

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9-5/8"	40	Surface	962
Production Casing	7"	26 lbs	0	8102
Liner Record	4.5"	13.5	NA	NA

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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.
Log Correlated to 7" Casing Tally

Patterson UTI Drilling Rig 272

SO# 2-013559

THANK YOU FOR USING PIONEER Energy SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: Shaun	Sector CBL	1301-33 / R1
Operator: Geno		
Operator: Igor		
Operator:		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT #2 -A (1)	2.83	2.75	20.00
IntTemp	14.66					
WVF3FT	11.41		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	11.41					
WVFS1	11.41					
WVFS2	11.41					
WVFS3	11.41					
WVFS4	11.41					
WVFS5	11.41					
WVFS6	11.41					
WVFS7	11.41					
WVFS8	11.41					
WVF5FT	10.41					
			CENT-A (1)	2.83	2.75	20.00
CCL	3.92					
			GR-probe 2.75 (111205) proble Digital CCL Gamma	4.33	2.75	100.00
GR	1.13					

Dataset: 13559.db: field/well/run1/pass3
Total Length: 18.91 ft
Total Weight: 230.00 lb
O.D. 2.75 in

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MAIN PASS

Logged with 0 PSI applied at wellfead

Database File: 13559.db
Dataset Pathname: pass2.2
Presentation Format: scbl02
Dataset Creation: Fri May 23 10:49:47 2014 by Calc 0
Charted by: Depth in Feet scaled 1:240

-9 CCL 1	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR (GAPI) 200	0 AMPx5 (mV) 20	0 AMPMAX 150		10 60
		0 AMPMIN 150		

3500
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
7400

Calibration Report

Database File:	13559.db
Dataset Pathname:	pass1
Dataset Creation:	Fri May 23 08:32:47 2014 by Log 0

Gamma Ray Calibration Report

Serial Number:	111205	
Tool Model:	probe 2.75	
Performed:	Sat May 03 17:02:46 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:	4.500	in
Calibration Depth:	239.842	ft

Master Calibration, performed Wed May 21 00:49:19 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.012	0.861	0.000	62.200	71.805	-0.250
CAL	0.012	1.015				
5'	0.012	0.934	0.000	62.200	66.973	-0.759
SUM						
S1	0.005	0.969	0.000	100.000	83.161	-0.988
S2	0.012	0.953	0.000	100.000	81.295	-0.465
S3	0.012	0.843	0.000	100.000	81.382	-1.175
S4	0.012	0.764	0.000	100.000	84.277	-1.277
S5	0.012	0.747	0.000	100.000	80.191	-0.917
S6	0.012	0.760	0.000	100.000	81.766	-1.208
S7	0.012	0.821	0.000	100.000	84.946	-1.372
S8	0.012	0.887	0.000	100.000	87.302	-1.276

Internal Reference Calibration, performed Wed Apr 2 08:59:47 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.012	1.015	1.000	0.000

Air Zero Calibration, performed Wed Apr 2 08:16:58 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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