NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company	PDC ENERGY INC.
Well	GURLEY 11-31
Field	WATTENBERG
County	WELD
State	COLORADO

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Well GURLEY 11-31
Field WATTENBERG
County WELD State COLORADO

Location: API #: 0512314313
NW/NW
SEC 31 TWP 4N RGE 66W

Other Services

Permanent Datum	GL	Elevation 4760	Elevation
Log Measured From	KB		K.B.
Drilling Measured From	KB		D.F.
			G.L. 4760

Date	AUGUST 14, 2014
Run Number	ONE
Depth Driller	7370
Depth Logger	7281
Bottom Logged Interval	7280
Top Log Interval	SURFACE
Open Hole Size	7-7/8
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	251°F
Estimated Cement Top	1871
Time Well Ready	BAYOU RIG
Time Logger on Bottom	1-11/16 RED TOOL
Equipment Number	4838
Location	45
Recorded By	GREG NOLAN
Witnessed By	BERNIE CHAVEZ

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8-5/8		0	230
Prot. String				
Production String	305		0	7365
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

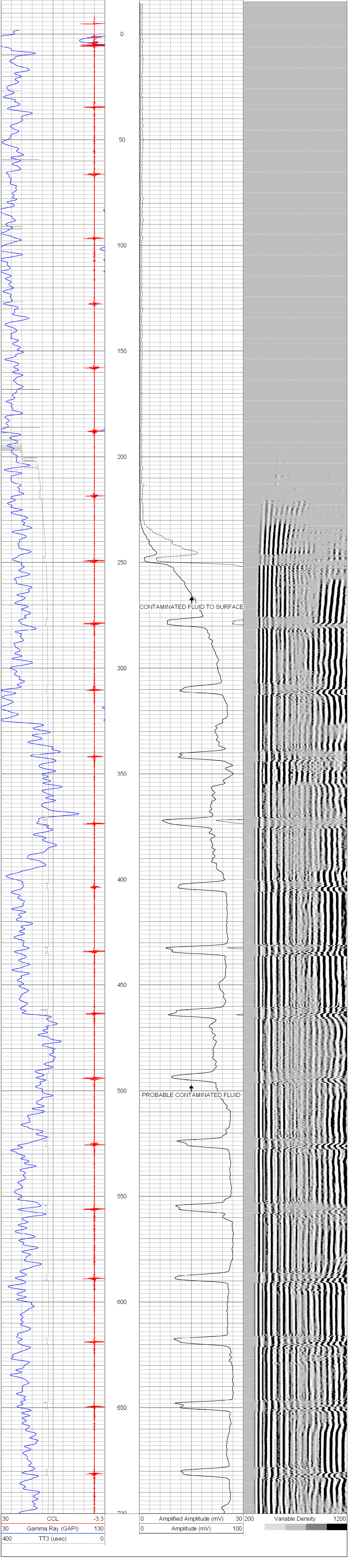
THANK YOU FOR CHOOSING NCPS!!!!
LOG NOT CORRELATED
WCR 25.5, & WCR 40, W.2, S.2, W INTO

Database File:	cbl pdc gurley 11-31.db
Dataset Pathname:	pass5
Presentation Format:	nuexcbl
Dataset Creation:	Thu Aug 14 17:45:33 2014 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

30 CCL -3.3
30 Gamma Ray (GAPI) 130
400 TT3 (usec) 0

0 Amplified Amplitude (mV) 30
0 Amplitude (mV) 100

200 Variable Density 1200

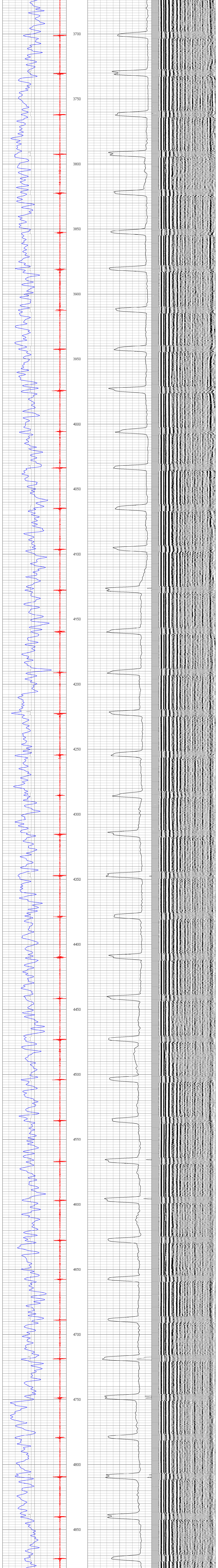


Database File:	cbl pdc gurley 11-31.db
Dataset Pathname:	pass4
Presentation Format:	nuexcbl
Dataset Creation:	Thu Aug 14 16:37:12 2014 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

30 CCL -3.3
30 Gamma Ray (GAPI) 130
400 TT3 (usec) 0

0 Amplified Amplitude (mV) 30
0 Amplitude (mV) 100

200 Variable Density 1200



Database File: cbl pdc gurley 11-31.db
Dataset Pathname: pass3
Presentation Format: nuexcbl
Dataset Creation: Thu Aug 14 16:11:18 2014 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cbl pdc gurley 11-31.db
Dataset Pathname: pass3
Dataset Creation: Thu Aug 14 16:11:18 2014 by Log SCH 120430

Gamma Ray Calibration Report

Serial Number:	tit/temp	
Tool Model:	temp/tit	
Performed:	Wed Oct 09 07:50:28 2013	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7000	GAPI/cps

Cement Bond Log Calibration Report

Serial Number:	TEKCO-01		
Tool Model:	TEKCO-1x2		
Performed:	Thu Aug 14 15:54:41 2014		
Depth:	1734.28	ft	
Casing Diameter:	3.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	1.5	0	mV
Calibrated Amplitude:	94.5169	94.5169	mV
Reading at Signal Zero:	-0.00588379	-0.00615234	V
Reading in Free Pipe:	2.49231	2.49878	V
Gain:	37.2337	37.7323	
Offset:	1.71908	0.232142	