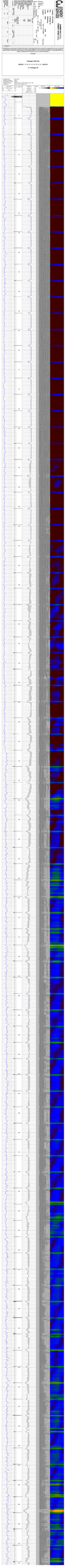

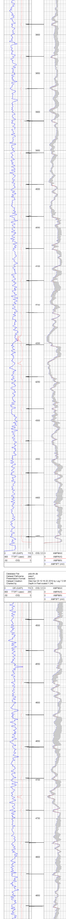

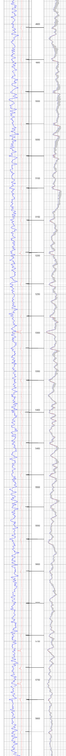

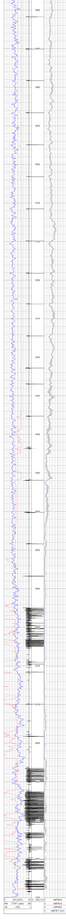

C&J ENERGY SERVICES

GAMMA RAY C.C.L.
CEMENT BOND V.D.L.

Company	PDC Energy
Well	Challenger 4N
Field	Wattenberg
County	Weld
State	CO

Company PDC Energy
Well Challenger 4N
Field Wattenberg
County Weld **State** CO

Location: API # : 05-123-45896

1373' FNL & 2431' FWL
SE / NW

SEC 8 TWP 4N RGE 64W

Other Services

Permanent Datum Elevation 4775'
Log Measured From
Drilling Measured From

Elevation
K.B.
D.F.
G.L. 4775'

Date	April 3, 2019		
Run Number	1		
Depth Driller	14,133'		
Depth Logger	7000'		
Bottom Logged Interval	7000'-0'		
Top Log Interval			
Casing Size			
Type Fluid	Water		
Max. Recorded Temp.	236°		
Estimated Cement Top			
Time Well Ready			
Time Logger On Bottom			
Unit Number			
Tool Size / ID Number	Probe 2-3/4" Radii		
Location	WCRs48+51,e1/2,s		
Recorded By	Meisner		
Witnessed By	Gardella		

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	5.5"			
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

Challenger 9 Well Pad

<NORTH> O O O X O O O O O <SOUTH>

X = Challenger 4N

Database File:	pdcc4n.db
Dataset Pathname:	pass2
Presentation Format:	sector2
Dataset Creation:	Wed Apr 03 10:44:06 2019 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

0 GR (GAPI) 110	5 CCL 5.5	0 AMPMAX 100	200 WVF5FT 1200	1 Sector Map 8
400 TT3FT (usec) 200		0 AMPAVG 100		
-50 CCL 5		0 AMPMIN 100		
		0 AMP3FT (mV) 100		

Database File: pdcc4n.db
Dataset Pathname: pass1
Presentation Format: sector2
Dataset Creation: Wed Apr 03 10:18:20 2019 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

0 GR (GAPI) 110	5 CCL 5.5	0 AMPMAX 100	200 WVF5FT 1200	1 Sector Map 8
400 TT3FT (usec) 200		0 AMPAVG 100		
-50 CCL 5		0 AMPMIN 100		
		0 AMP3FT (mV) 100		

0 GR (GAPI) 110	5 CCL 5.5	0 AMPMAX 100	200 WVF5FT 1200	1 Sector Map 8
400 TT3FT (usec) 200		0 AMPAVG 100		
-50 CCL 5		0 AMPMIN 100		
		0 AMP3FT (mV) 100		