C&J ENERGY SERVICES

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

Company PDC Energy
Well Harold 6Y-214
Field Wattenberg
County Weld State CO

Location: API #: 05-123-45754
502' FSL & 436' FEL
SE / SE
SEC 6 TWP 4N RGE 64W

Other Services

Permanent Datum Elevation 4804'
Log Measured From
Drilling Measured From

Elevation
K.B.
D.F.
G.L. 4804'

Company	PDC Energy
Well	Harold 6Y-214
Field	Wattenberg
County	Weld
State	CO

Date	February 25, 2019
Run Number	1
Depth Driller	11,857'
Depth Logger	7000'
Bottom Logged Interval	7000'-0'
Top Log Interval	
Casing Size	
Type Fluid	Water
Max. Recorded Temp.	240°
Estimated Cement Top	
Time Well Ready	
Time Logger On Bottom	
Unit Number	
Tool Size / ID Number	Probe 2-3/4" Radii
Location	WCRts48+49,E9/10,N
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				

<<< Fold Here >>>

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.

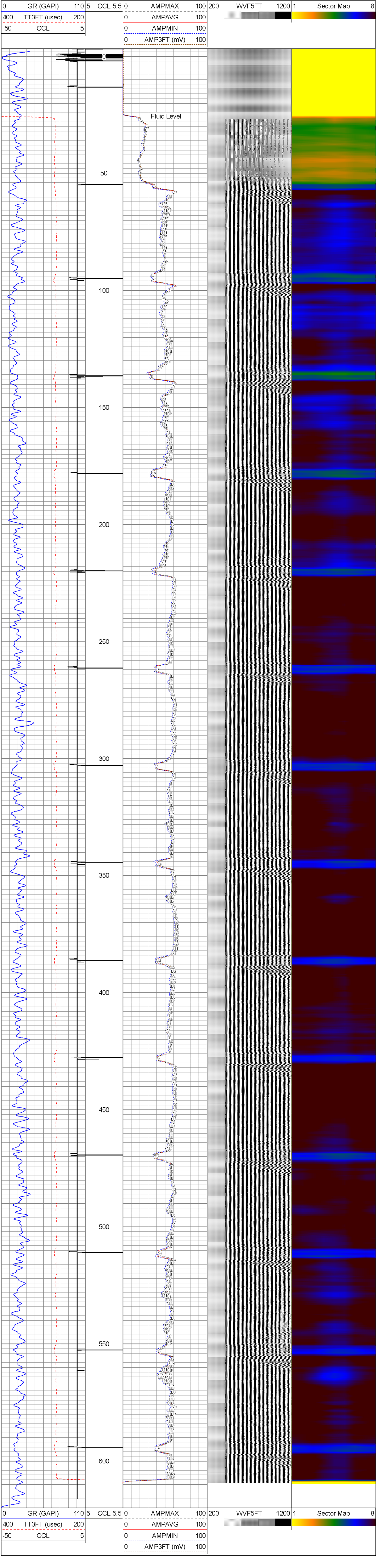
Comments

Harold 11 Well Pad

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

X = Harold 6Y-214

Database File: pdch6y214.db
Dataset Pathname: pass2
Presentation Format: sector2
Dataset Creation: Mon Feb 25 10:33:02 2019 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240



Database File: pdch6y214.db
Dataset Pathname: pass1
Presentation Format: sector2
Dataset Creation: Mon Feb 25 09:34:28 2019 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

3700
3750
3800
3850
3900
3950
4000
4050
4100
4150
4200
4250
4300
4350
4400
4450
4500
4550
4600
4650
4700
4750
4800
4850
4900
4950
5000
5050
5100
5150
5200
5250
5300
5350
5400
5450
5500
5550
5600
5650
5700
5750
5800
5850
5900
5950
6000
6050
6100
6150
6200
6250
6300
6350
6400
6450
6500
6550
6600
6650
6700
6750
6800
6850
6900
6950
7000
0 GR (GAPI) 110
400 TT3FT (usec) 200
-50 CCL 5
5 CCL 5.5
0 AMPMAX 100
0 AMPAVG 100
0 AMPMIN 100
0 AMP3FT (mV) 100
200 WVF5FT 1200
1 Sector Map 8