



State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109



FOR OGCC USE ONLY

MECHANICAL INTEGRITY TEST

Fill out Part II of this form if well tested is a permitted or pending injection well. Send original plus one copy.

1. Duration of the pressure test must be a minimum of 15 minutes.
2. A pressure chart must accompany this report if this test was not witnessed by a OGCC representative.
3. For production wells, test pressures must be at a minimum of 300 psig.
4. For injection wells, test pressures must be at 300 psig or minimum injection pressure, whichever is greater.
5. A minimum 300 psi differential pressure must be maintained between the tubing and tubing/casing annulus pressure.
6. Do not use this form if submitting under provisions of Rule 320.a. (1) B. or C.
7. OGCC notification must be provided prior to the test.
8. Packers or bridge plugs, etc., must be set within 250 feet of the perforated interval to be considered a valid test.

OGCC Operator Number: 69175

Name of Operator: PDC Energy Inc.

Address: 3801 Carson Ave.

City: Evans

State: CO

Zip: 80620

Contact Name and Telephone

Travis Yenne

No: 970-506-9272

Fax: 970-506-9276

API Number: 05-123-20753

Field Name: Wattenberg

Field Number: 90750

Well Name: STATE 81

Number: 41-16

Location (Qtr, Sec, Twp, Rng, Meridian): NE/NE Sec. 16 T6N R64W

Complete the Attachment Checklist

	Operator	OGCC
Pressure Chart		
Cement Bond Log		
Tracer Survey		
Temperature Survey		

☒ SHUT-IN PRODUCTION WELL

☐ INJECTION WELL

Facility No.: _____

Part I Pressure Test

☐ 5-Year UIC Test

☒ Test to Maintain SI/TA Status

☐ Reset Packer

☐ Verification of Repairs

☐ Tubing/Packer Leak

☐ Casing Leak

☐ Other (Describe) _____

Describe Repairs: _____

NA - Not Applicable

Wellbore Data at Time Test

Injection/Producing Zone(s)

Codell

Perforated Interval:

☐ NA

Open Hole Interval:

☒ NA

7022' - 7032'

Casing Test

☐ NA

Use when perforations or open hole is isolated by bridge plug or cement plug
Bridge Plug or Cement Plug Depth

RBP 6975.60'

Tubing Casing/Annulus Test

☐ NA

Tubing Size:

2 3/8"

Tubing Depth:

6944.10'

Top Packer Depth:

Multiple Packers?

☐ YES

☒ NO

Test Data

Test Date

10-14-15

Well Status During Test

SI

Date of Last Approved MIT

NOT Available

Casing Pressure Before Test

0

Initial Tubing Pressure

0

Final Tubing Pressure

0

Starting Casing Test Pressure

523

Casing Pressure - 5 Min.

522

Casing Pressure - 10 Min.

522

Final Casing Test Pressure

522

Pressure Loss or Gain During Test

lost 1 psi

Test Witnessed by State Representative?

☐ YES

☒ NO

OGCC Field Representative: _____

Part II Wellbore Channel Test

Complete only if well is or will be an injection well.

Indicate method used for cement integrity test, attach appropriate records, charts, or logs unless previously submitted.

☐ Tracer Survey

Run Date: _____

☐ CBL or Equivalent

Run Date: _____

☐ Temperature Survey

Run Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Bud Holman

Signed: Bud Holman

Title: _____

Date: 10-14-15

OGCC Approval: _____

Title: _____

Date: _____

Conditions of Approval, if any: _____

Pick Testers
Sterling,CO 80751

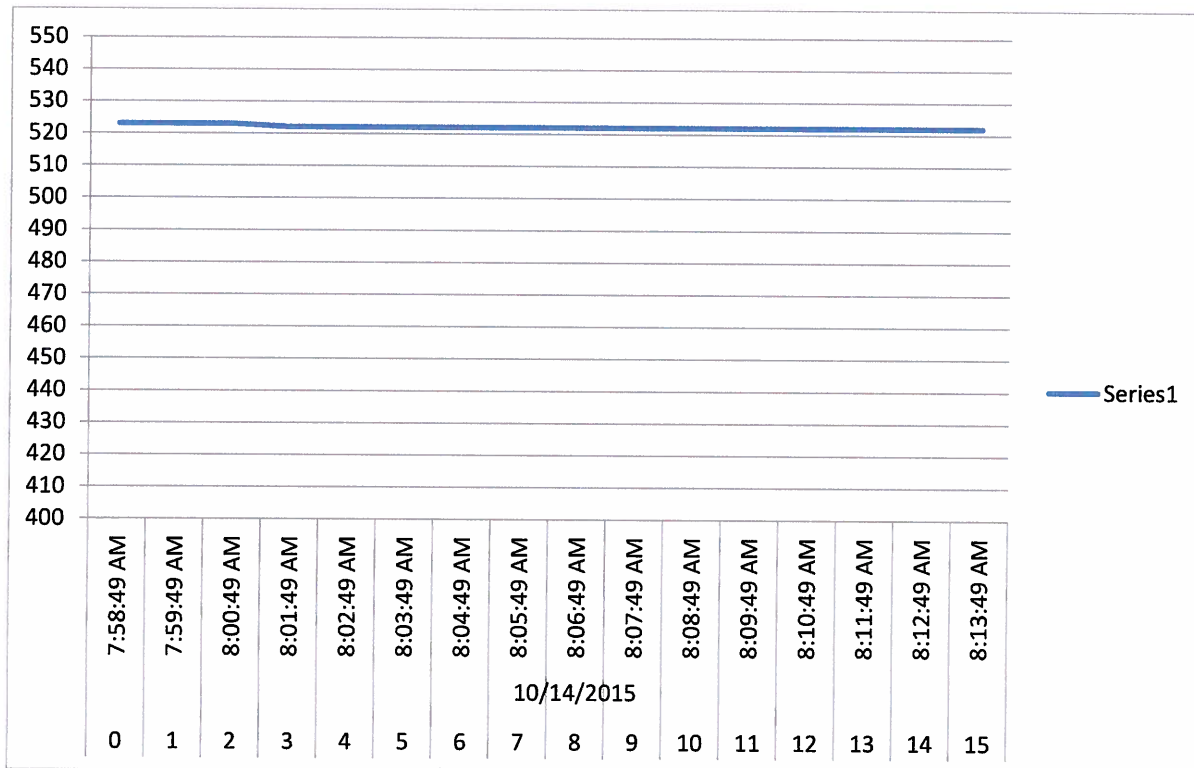
Aaron Pickering
970-520-0279

PDC Energy
 State 81 41-16
 API 05-123-20753
 LOC NENE SEC16 6N 64W

Bud Holman
 MIT

Interval: 60 Seconds

DataPoint	LogDate	LogTime	1-P PSI
0		7:58:49 AM	523
1		7:59:49 AM	523
2		8:00:49 AM	523
3		8:01:49 AM	522
4		8:02:49 AM	522
5		8:03:49 AM	522
6		8:04:49 AM	522
7		8:05:49 AM	522
8	10/14/2015	8:06:49 AM	522
9		8:07:49 AM	522
10		8:08:49 AM	522
11		8:09:49 AM	522
12		8:10:49 AM	522
13		8:11:49 AM	522
14		8:12:49 AM	522
15		8:13:49 AM	522





Well History

Well Name: State 81 41-16

API 05123207530000	Surface Legal Location NENE 16 6N 64W			Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,822.00	Original KB Elevation (ft) 4,832.00	KB Ground Distance (ft) 10.00	Spud Date 1/26/2002 00:00	Rig Release Date 1/31/2002 00:00	On Production Date 3/22/2002	

Job

Drilling - original, 1/26/2002 00:00

Job Category Drilling	Primary Job Type Drilling - original	Start Date 1/26/2002	End Date 1/31/2002	Objective Codell a Codell Well
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Daily Operations

Start Date	Summary	End Date
1/26/2002	Caza Rig #1: MIRU. Drill rat and mouse holes and spud 12 1/4" hole at 4:45 PM.	
1/27/2002	Caza Rig #1: TD 12 1/4" hole at 861' at 4:30 AM. Last survey: 1 degree at 861'. Short trip and condition hole. Trip out and ran 19 joints of new, 24#, J-55, 8 5/8" casing to 841'. Set at 851'. Rigged up Cementer's Well Service at 10:30 AM and pumped 615 sacks of Neat cement + 3% CaCl + 1/4# flake per sack. Plug down at 11:30 AM with good returns. Waited on cement and tested BOP's and tripped in hole with 7 7/8" bit. Began drilling 7 7/8" hole at 8 PM.	
1/28/2002	Caza Rig #1: At 2211' and drilling 7 7/8" hole. Last survey: 1/2 degree at 1623'.	
1/29/2002	Caza Rig #1: At 4960' and drilling 7 7/8" hole. Last survey: 1/2 degree at 4618'.	
1/30/2002	Caza Rig #1: TD 7 7/8" hole at 7234' at 5:30 PM. Survey at TD: 3/4 degree at 7234'. Short trip, condition hole and circulate. Started laying down drill string at 8 PM.	
1/30/2002	Caza Rig #1: At 6736' and drilling 7 7/8" hole. Last survey: 1 degree at 5989'.	
1/31/2002	Caza Rig #1: TD 7 7/8" hole @ 7238' KB. MIRU PSI and ran Comp Density/Comp Neutron/Dual Induction Log. LTD @ 7237' KB. RU casing crew. Ran Topco Auto Fill Guide Shoe, 14' shoe joint, 167 joints of 10.5, M-65, 4 1/2" casing. Latch down insert @ 7210' KB. RU BJ Services. Pumped 10 bbl pre flush, 10 bbl mud flush, 5.5 bbl Class G (20 sx), 177 bbl Premium Lite + additives (250 sx) and 41 bbl Class G + additives (150 sx). Released wiper plug and displaced with 114.6 bbl treated water. Plug down OK @ 12:45 pm. ECT @ 3300' KB. Released rig @ 2:00 pm.	

Swab, 4/30/2002 00:00

Job Category Completion/Workover	Primary Job Type Swab	Start Date 4/30/2002	End Date 5/8/2002	Objective
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Daily Operations

Start Date	Summary	End Date
4/30/2002	MIRU completion rig. Kill well with 2% KCL fluid. NU BOPs & RIH with 2 3/8" tubing. Tag sand fill @ 6990. Circ & clean out 62', roll hole clean. SDFN.	
5/1/2002	Finish cleaning out sand from 6996 to 7196. (Codell 7022-32) Roll hole clean for 1 1/2 hours. Pull 7 jts & land tubing with 215 jts + 14' of subs @ 7013 KB depth. ND BOPs & RDMO completion rig.	
5/2/2002	MIRU swab rig after running tubing. IFL 1000'. LR 80 bbls. FFL 3500. Blow on tubing & casing. SIWFN.	
5/6/2002	Swab well all day, IFL 1100'. LR 357. FFL 2100. FCP 0 and FTP 0. TLR 557. TLTR 1321. SIWFN.	
5/7/2002	Swab well all day, LR 363. IFL 2000'. FFL 2700. Blow on casing & tubing. TLR 920. TLTR 958. SIWFN.	
5/8/2002	Swab well all day, LR 260. IFL 2300'. FFL 2000. Blow on casing & tubing. TLR 1180. TLTR 698.	

Initial Completion, 2/13/2003 00:00

Job Category Completion/Workover	Primary Job Type Initial Completion	Start Date 2/13/2003	End Date 2/18/2002	Objective Complete a Codell Well
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Daily Operations

Start Date	Summary	End Date
2/13/2002	MIRU Nuex Wireline. Ran GR/VDL/CBL finding PBTD @ 7196' KB and CT @ 3350' KB. Perforated the Codell from 7022' to 7032' KB with 30, .34 diameter holes, 3 spf, 120 deg phasing. RDMO.	
2/14/2002	MIRU BJ Services. Frac'd the Codell with 2869 bbl Vistar 20/18# fluid system, 217860# 20/40 mesh white sand and 8000# 20/40 mesh Tempered DC sand. Break down @ 2771 psig; MTP - 4520 psig; ATP - 3664 psig; AIR - 16.1 bpm; 4 ppa sand; ISIP - 3678 psig; Flushed with 111 bbl. Open well to tank on 12/64 choke. RDMO.	
2/18/2002	Flowed well to tank thru 12/64 choke to clean up. FL casing pressure 150#. LR 60. TLR 1369. Cutting 90% oil, SI well	

Swab, 6/14/2004 00:00

Job Category Completion/Workover	Primary Job Type Swab	Start Date 6/14/2004	End Date 6/14/2004	Objective
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Daily Operations

Start Date	Summary	End Date
6/14/2004	DJR Well Service Rig #4. Check well: 320#TP/110#CP. Install 18/64" choke & blow well down in 30 minutes. Run in with Swab - IFL @ 1800'. Make 4 runs & well flowing. Install 12/64" choke & flow for 30 minutes. SI well for hook up by Roustabout crew. Open well & flow 15 minutes & died. RU Swab & made 1 run - FL @ 5800'. Wait for well to blow down to continue swab. Made 16 runs & recovered 63 bbls fluid (15% oil). SI well. Ending TP - Blow, CP=250#. SDFN.	

Mechanical Integrity Test, 10/12/2015 08:00

Job Category Completion/Workover	Primary Job Type Mechanical Integrity Test	Start Date 10/12/2015	End Date	Objective Test tbng and casing. Perform MIT
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Well History

Well Name: State 81 41-16

API 05123207530000	Surface Legal Location NENE 16 6N 64W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
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			On Production Date 3/22/2002	

Daily Operations

Start Date	Summary	End Date
10/12/2015	MIRU Ensign Rig 313, Held safety meeting. ITP: 850 ICP: 950 Surface casing: 0, Rig up pump and lines. Tested lines to 2000 psi. Blew well down to rig tank. Controlled well with 60 bbls Claytreat/Biocide water. ND wellhead. Stripped off tbng head and replaced with 3K mandrel style wellhead. Function tested and NU BOPs. Tested BOPs to 1500 psi. PU 4 jnts of 2-3/8" tbng (126') and RIH without tagging fill. TOOH with 1-4' x 2-3/8" pup jnt, 1-10' x 2-3/8" pup jnt, 215 jnts of 2-3/8" 4.7# J-55 8rd eue tbng, SN/NC. Tbg was landed at 6979.20' kb. MIRU Pick Testers. PU 3-7/8" blade bit, STS 4-1/2" casing scraper dressed for 10.5# and 215 jnts of 2-3/8" 4.7# J-55 8rd eue tbng testing to 6000 psi. All tbng tested good. RDMO hydrotester. Rolled gas and oil out of hole. SB 15 stands. Secured well. SDFD	10/12/2015
10/13/2015	Held safety meeting. TP: 0 CP: 0 SCP: 0. POOH with bit and scraper. PU STS WLTC 4-1/2" 10.5# RBP and RIH with 216 jnts of 2-3/8" tbng. Set RBP at 6975.6' kb. LD 1 jnt. Rolled hole clean. Tested casing to 520 psi with rig pump for 15 minutes. Held good. Bled off pressure. Rolled hole for 1 hour. Secured well. SDFD	10/13/2015
10/14/2015	TP 0 psi, CP 0 psi, SCP 0 psi, held safety meeting, open well to rig tank, MIRU Pick Testers, pressured casing to 523 psi, held and charted pressure for 15 mins, 1 psi pressure loss, good test, RDMO hydrotester. State Representative was not location to witness test. Released pressure, Released RBP, TOOH standing back to derrick, LD tools, PU NC/SN, TIH with production tubing, ND BOP, land tbg in WH 7,007.70' KB (14.30' above the Codell) w/216 jts plus 1-10' sub, NU WH, Did not drop new PCS full port standing valve. Broached to seat nipple w/1.901" broach, RU swab equipment. Swabbed well. ITP-0 psi ICP-0 psi IFL- 1200' FFL-5400' Swabed back 60 bbls water FTP-0 FCP-0 Secured well, drained lines and pump, racked pump and tank, SDFD Tbg detail: 10' KB 10.0' 1-10' x 2 3/8" 4.7# J-55 8rd eue sub 10.00' 20.00' 216 jnts 2-3/8" 4.7# J-55 8rd eue tbng 6986.10' 7006.10' Seat Nipple/Notched collar 1.6' 7007.70' KB 1 joint added to string from rigs tag joints that will be replaced by WB Supply	10/14/2015