



## Well History

Well Name: Wells Ranch 44-10

API 05123209340000	Surface Legal Location SESE 10 5N 63W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,670.00	Original KB Elevation (ft) 4,680.00	KB Ground Distance (ft) 10.00	Spud Date 9/18/2002 11:15	Rig Release Date 9/23/2002 20:00
			On Production Date 4/7/2003	

### Job

#### Drilling - original, 9/18/2002 11:15

Job Category Drilling	Primary Job Type Drilling - original	Start Date 9/18/2002	End Date 11/13/2002	Objective Drill and complete new J-Sand well
--------------------------	---	-------------------------	------------------------	---

### Daily Operations

Start Date	Summary	End Date
9/18/2002	Caza Rig #32: MIRU. Spud 12 1/4" hole at 11:15 AM. TD 12 1/4" hole at 3 PM at 425'. Condition mud, circulate, and trip out at 4 PM. Ran 9 joints of new, 24#, J-55, 8 5/8" casing to 390'. Set at 400'. Rig up Cementer's Well Service and pumped 280 sacks of Neat cement + 3% CaCl <sub>2</sub> + 1/4# flake. Plug down at 5 PM. Circulated 5 bbls of cement to the pit. Wait on cement and nipple up BOP from 9 PM to 11 PM and began tripping in hole with 7 7/8" bit.	9/18/2002
9/18/2002	Caza Rig #32: Began drilling plug at 1 AM and at 7 AM at 1510' and drilling 7 7/8" hole. Last survey: 1/2 degree at 1511'.	9/19/2002
9/19/2002	Caza Rig #32: At 5055' and drilling 7 7/8" hole. Last survey: 1/2 degree at 4991'.	9/20/2002
9/20/2002	Caza Rig #32: At 6885' and drilling 7 7/8" hole. Last survey: 1/2 degree at 6296'. TD 7 7/8" hole at 5:30 PM at 7330'. Condition mud, circulate and short trip 17 stands. Survey at 7330' was 3/4 degree. Began tripping out and laying down drill string at 9:15 PM.	9/21/2002
9/21/2002	Caza Rig #32: Out of the hole and drill string laid down at 3 AM. Rig up Phoenix and attempt to log hole - logging tools became stuck at 7056'. Phoenix parted the log line above the tool and wait on fishing tools until 9:30 AM. Pick up overshot and trip in the hole with 220 joints of drill pipe. Fish until 5:45 PM and trip out wet.	9/22/2002
9/22/2002	Caza Rig #32: Out with the fish at 12:15 AM. Break down logging tool and overshot and trip back in hole. Wash to bottom from 7023' to 7325' at 5:45 AM. Presently conditioning mud and circulating hole at 7325'.  Caza Rig #32: Circulate hole until 7:15 AM, trip out, and lay down drill string. MIRU PSI and ran GR/Comp Density/Comp Neutron/Dual Induction Log. LTD @ 7329' KB. RU casing crew. Ran Topco Auto Fill Guide Shoe, 14' shoe joint, 169 joints of 10.5 #/ft, M-65, 4 1/2" casing and 1 joint of 11.6 #/ft, N-80 on top of casing string to 7292'. Casing set @ 7302'. Latch down insert @ 7288' KB. RU Halliburton and pumped 10 bbl mud flush, 10 bbl spacer, 6 bbl (20 sx) Premium G, 180 bbl (250 sx) HLC + additives and 65 bbl (220 sx) Premium G + additives. Released wiper plug and displaced with 116 bbl treated water. Plug down OK @ 6:05 pm. ECT @ 3000' KB. Released rig @ 7:30 pm. Release rig and rig down.	9/23/2002
10/7/2002	MIRU Nuex Wireline. Ran GR/VDL/CBL finding a PBTD @ 7139' KB and cement top @ 3148' KB. Perforated the J Sand from 7072'-76' and 7082'-86' with 2 spf, 120 deg phasing. RDMO	10/7/2002
10/16/2002	MIRU BJ Services. Frac'd the J Sand with 1937 bbl Vistar 20# fluid system, 166280# of 20/40 mesh white sand and 10000# of 20/40 mesh Super HT as a tail-in. Breakdown @ 2950 psig; MTP - 2957 psig; ATP - 1104 psig; AIR - 15 bpm; 4 ppa sand; ISIP - 1327 psig; Flushed with 111 bbl. Open well to tank on 12/64 choke. Flowed well to tank after frac thru 12/64 choke to clean up. ISIP 1200#. Open well @ 11:15 AM. Well quit flowing @ 3:00 PM. LR 49 bbls. TLTR 1937. MIRU comp rig. NU BOPs & RIH with 88 jts of 2 3/8 tubing. SIWFN.	10/16/2002
10/17/2002	Finish running 2 3/8 tubing, tag sand fill @ 7075'. Circulate & clean out to 7180. Roll hole clean, pull 7 jts and SIWFN.	10/17/2002
10/18/2002	Landed 2 3/8" tubing with 212 jts + 18' subs @ 7063 KB. ND BOPs & NU wellhead. RIH with broach & broach tubing string to btm. Swab well, IFL 1200'. FFL 2000'. LR 188 bbls. SIWFN.	10/18/2002
10/19/2002	Gauged well SI pressures, ICP 10 and ITP 10. Swab well, IFL 1700'. LR 196 bbls. FFL 2400. FCP blow and FTP on vacuum. TLR 384. SIWFWF.	10/19/2002
10/21/2002	Gauged well SI pressures, ICP blow and ITP 10. Swab well, IFL 1900. LR 68 bbls. RDMO comp rig. MIRU swab rig & swab well. LR 70 bbls. FFL 2200. FCP vacuum. FTP vacuum. SIWFN.	10/21/2002
10/22/2002	Gauged well SI pressures, ICP vacuum and ITP vacuum. Swab well, IFL 2200. LR 152. FFL 2600. FCP vacuum & FTP vacuum. SIWFN.	10/22/2002
10/23/2002	Gauged well SI pressures, ICP vacuum and ITP slight blow. Swab well, IFL 2600. LR 185 bbls. FFL 3000. FCP vacuum and FTP vacuum. SIWFN.	10/23/2002
10/24/2002	Gauged well SI pressures, ICP vacuum & ITP blow. Swab well, IFL 3000'. LR 135 bbls. FFL 3000'. FCP vacuum and FTP vacuum. (Trace of frac sand.) SIWFN.	10/24/2002
10/25/2002	Gauged well SI pressures, ICP vacuum with slight blow on tubing. IFL 3000. Swab well, LR 53 bbls. FFL 3000. FCP vacuum and FTP vacuum. SIWFWF.	10/25/2002
10/28/2002	Service Rig #99: Rig Gauged well SI pressures, ICP strong blow and ITP blow. Swab well, IFL 2400. LR 179 bbls. FCP and FTP vacuum. FFL 3100. SIWFN.	10/28/2002
10/29/2002	Service Rig #99: Gauged well SI pressures, ICP 20 with blow on tubing string. Swab well, IFL 2600. LR 140 bbls. FFL 3,000'. FCP vacuum and FTP vacuum. SIWFN.	10/29/2002
10/30/2002	Service Rig #99: Gauged well SI pressures, ICP 20# with blow on tubing. Swab well, IFL 2600. LR 170 bbls. FFL 3,100'. FCP vacuum and FTP vacuum. SIWFN.	10/30/2002
10/31/2002	Service Rig #99: Gauged SI well pressures, ICP 50 with blow on tubing string. Swab well, IFL 2800. LR 65 bbls. FFL 2900. FCP vacuum with blow on tubing. Sandline parted during swabbing operation. Left swab tool & approx. 250' of line in tubing. RDMO swab rig.	10/31/2002
11/1/2002	Service Rig #99: MIRU comp rig, pulled 60 stands of 2 3/8" tubing & SDFN.	11/1/2002
11/2/2002	Service Rig #99: Finish pulling tubing string, retrieve swab tool and RIH with 2 3/8" tubing. Landed with 212 jts + 18' of subs @ 7063 KB. NU wellhead, broach tubing to btm. SI well. RDMO comp rig.	11/2/2002



## Well History

**Well Name: Wells Ranch 44-10**

API 05123209340000	Surface Legal Location SESE 10 5N 63W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,670.00	Original KB Elevation (ft) 4,680.00	KB-Ground Distance (ft) 10.00	Spud Date 9/18/2002 11:15	Rig Release Date 9/23/2002 20:00
			On Production Date 4/7/2003	

### Daily Operations

Start Date	Summary	End Date
8/25/2005	KEY SWAB RIG #6: MIRU. Checked well pressure, blew well down, RIH with swab, dropped plunger. Plunger came up, SDFN.  ITP - 120                  FTP - 250 ICP - 800                  FCP - 1400 IFL -                          FFL - TOTAL BBLS -	8/25/2005
8/26/2005	KEY SWAB RIG #6: Check well pressure, RIH with swab. Fluid level at 2100' (100% oil). Trip plunger and shut in well. RDMO  ITP - 700                  FTP - 260 ICP - 520                  FCP - 450 IFL - 2100' (100% oil) FFL - 2600' TOTAL BBLS -23	8/26/2005

### Workover, 9/13/2005 07:00

Job Category Completion/Workover	Primary Job Type Workover	Start Date 9/13/2005	End Date 9/13/2005	Objective install plunger lift tool
-------------------------------------	------------------------------	-------------------------	-----------------------	--

### Daily Operations

Start Date	Summary	End Date
9/13/2005	Installed 2-Stage Plunger lift tool: Fish BS @ 6597': TD @ 6788: Set 2 Stage @ 3944'.	9/13/2005

### Workover, 6/4/2008 07:00

Job Category Completion/Workover	Primary Job Type Workover	Start Date 6/4/2008	End Date 6/5/2008	Objective LOE work
-------------------------------------	------------------------------	------------------------	----------------------	-----------------------

### Daily Operations

Start Date	Summary	End Date
6/5/2008	STP 150#s, SCP 250#s, MIRU L&L Rig #5, pump & tank. ND production equipment, RU pump lines to WH & blow well down to RT, kill W/50 Bbls down back side, NU BOP, PU 125.09' of tag Jts & didn't tag any fill @ 6730.50' (114.50' + of RH), lay down tag Jts, RU Hole Seekers, TOO H tallying & testing 2 3/8" J-55 4.7# EUE 8rd production tubing to 6K PSI, pulled 20' of tubing subs, 198 Jts-6580.81' & NC/SN 1,60', tubing was landed @6610.41' KB, all tubing tested good, didn't find two stage tool in the tubing, bottom two stage plunger was @ the SN. PU NC/SN & TIH out of derrick. land tubing W/ NC/SN-1.60', 198 Jts-6580.81', 10' tubing sub & 8.00' KB @6600.41' ( landed 9.59' above Codell), ND BOP, pack tubing head off, drop 2 3/8" PCS standing valve & chase to SN W/ 1.910" broach, seat standing valve in seat nipple, tubing broached good. Assemble flow line, SI well, RD Rig, pump & tank, move away from WH, SDFN,FINAL REPORT.  Daily Cost\$ 6508.30	6/5/2008

### Swab, 3/13/2012 00:00

Job Category LOE	Primary Job Type Swab	Start Date 3/13/2012	End Date	Objective
---------------------	--------------------------	-------------------------	----------	-----------

### Daily Operations

Start Date	Summary	End Date
3/13/2012	MIRU Clark Swabbing, RIH w/swab, STP 600 psi, SCP 925 psi, SFL 2800 , recovered 15 bbls, FFL flow , ETP 600 , ECP 600 , isolate well, SDFD.	3/13/2012
4/12/2012	MIRU Clark Swabbing, RIH w/swab, STP 1000 psi, SCP 950 psi, SFL 1800 , recovered 15 bbls, FFL Flowed, ETP 600 ECP 550 , isolate well, SDFD	4/12/2012
5/2/2012	MIRU Clark Swabbing, RIH w/swab, STP 300 psi, SCP 850 psi, SFL 2400 , recovered 15 bbls, FFL flow , ETP 460, ECP 500 , isolate well, SDFD.	5/2/2012

### Mechanical Integrity Test, 7/23/2015 06:00

Job Category Completion/Workover	Primary Job Type Mechanical Integrity Test	Start Date 7/23/2015	End Date	Objective MIT
-------------------------------------	---	-------------------------	----------	------------------

### Daily Operations

Start Date	Summary	End Date
7/23/2015	STP 1500 psi, SCP 1200 psi, not on blow down through production equipment, SSCP 0 psi, MIRU Ensugn 313, held safety meeting, RU rig and all equipment, pressure tested hard lines, blew well down to rig tank, control well w/60 bbls Claytreat/Biocide water, function tested BOP's, ND WH, NU BOP, unlanded tubing, PU tag jts, TIH w/ 6 jts, no tag @ 6,784.87', LD tag jts, POOH w/production tbg to derrick w/ 198 jts 2 3/8" J-55 EUE 8rd tbg, 1-10' subs, sn/nc, tbg was landed at 6,590.47' KB, held safety meeting, RU Pick Testers, PU STS bit and scraper dressed for 4 1/2" 10.5# casing, TIH w/production tbg testing to 6000 psi, all jts tested good, RD tester, RD circulation equipment, rolled hole clean, no communication up surface casing, no signs of holes, TOO H standing back w/ 30 jts tubing to derrick, leaving 174 jts in hole @ 5637.60', SI and isolate well, shut and locked pipe rams on BOP's, drained lines and pump, prepared for next day operations, SDFN	7/23/2015



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 326 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: 05-123-20934

Field Name: Wattenberg

Field Number:

Well Name: Wells Ranch

Number: 44-10

Location (Qtr, Sec, Twp, Rng, Meridian): SESE

5N-63W-10

Complete the  
Attachment Checklist

	OGCC	Operator
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

6610'-6616'

Casing Test

☐ NA

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

6569.37'

Tubing Casing/Annulus Test

☐ NA

Tubing Size:

2 3/8"

Tubing Depth:

6560'

Top Packer Depth:

N/A

Multiple Packers?

☐ YES

☒ NO

Test Data

Test Date

7/27/15

Well Status During Test

Shut In

Date of Last Approved MIT

Casing Pressure Before Test

0 psi

Initial Tubing Pressure

0 psi

Final Tubing Pressure

0 psi

Starting Casing Test Pressure

525 psi

Casing Pressure - 5 Min.

524 psi

Casing Pressure - 10 Min.

523 psi

Final Casing Test Pressure

523 psi

Pressure Loss or Gain During Test

2 psi loss

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: Chad Sailors

Signed:

Title: Workover Rig Supervisor

Date: 7/27/15

OGCC Approval:

Title:

Date:

Conditions of Approval, if any:

**Pick Testers**  
**Sterling, CO 80751**

**Guy Dove**  
**970-520-2769**

Wells Ranch 44-10  
M.I.T. casing test

Chad Sailors  
PDC

API#05-123-20934

SESE 5N-63W-10

Interval: 60 Seconds

DataPoint	LogDate	LogTime	2-P PSI
0		8:11:17 AM	525
1		8:12:17 AM	526
2		8:13:17 AM	525
3		8:14:17 AM	525
4		8:15:17 AM	524
5		8:16:17 AM	524
6		8:17:17 AM	523
7		8:18:17 AM	523
8	7/27/2015	8:19:17 AM	523
9		8:20:17 AM	523
10		8:21:17 AM	523
11		8:22:17 AM	523
12		8:23:17 AM	523
13		8:24:17 AM	523
14		8:25:17 AM	523
15		8:26:17 AM	523

