

FORM
2

Rev
12/05

State of Colorado
Oil and Gas Conservation Commission

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



Document Number:

400457903

Date Received:

07/26/2013

PluggingBond SuretyID

20090078

APPLICATION FOR PERMIT TO:

1. Drill, Deepen, Re-enter, Recomplete and Operate

2. TYPE OF WELL

OIL GAS COALBED OTHER _____
SINGLE ZONE MULTIPLE COMMINGLE

Refiling

Sidetrack

3. Name of Operator: PDC ENERGY INC 4. COGCC Operator Number: 69175

5. Address: 1775 SHERMAN STREET - STE 3000
City: DENVER State: CO Zip: 80203

6. Contact Name: Liz Lindow Phone: (303)831-3974 Fax: ()
Email: liz.lindow@pdce.com

7. Well Name: Thornton Well Number: 17T-421

8. Unit Name (if appl): _____ Unit Number: _____

9. Proposed Total Measured Depth: 11930

WELL LOCATION INFORMATION

10. QtrQtr: SESE Sec: 17 Twp: 7N Rng: 66W Meridian: 6
Latitude: 40.568740 Longitude: -104.797280

Footage at Surface: 390 feet FSL 1290 feet FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4951 13. County: WELD

14. GPS Data:

Date of Measurement: 06/06/2013 PDOP Reading: 2.5 Instrument Operator's Name: Brian Boniface

15. If well is Directional Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL _____ FEL/FWL _____ Bottom Hole: FNL/FSL _____ FEL/FWL _____
734 FSL 1079 FEL 500 FNL 1080 FEL
Sec: 17 Twp: 7N Rng: 66W Sec: 17 Twp: 7N Rng: 66W

16. Is location in a high density area? (Rule 603b)? Yes No

17. Distance to the nearest building, public road, above ground utility or railroad: 322 ft

18. Distance to nearest property line: 239 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 1817 ft

LEASE, SPACING AND POOLING INFORMATION

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL		320	GWA

21. Mineral Ownership: Fee State Federal Indian Lease #: _____

22. Surface Ownership: Fee State Federal Indian

23. Is the Surface Owner also the Mineral Owner? Yes No Surface Surety ID#:

23a. If 23 is Yes: Is the Surface Owner(s) signature on the lease? Yes No

23b. If 23 is No: Surface Owners Agreement Attached or \$25,000 Blanket Surface Bond \$2,000 Surface Bond \$5,000 Surface Bond

24. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):

See attached mineral lease map.

25. Distance to Nearest Mineral Lease Line: 65 ft

26. Total Acres in Lease: 258

DRILLING PLANS AND PROCEDURES

27. Is H2S anticipated? Yes No If Yes, attach contingency plan.

28. Will salt sections be encountered during drilling? Yes No

29. Will salt (>15,000 ppm TDS CL) or oil based muds be used during drilling? Yes No

30. If questions 28 or 29 are yes, is this location in a sensitive area (Rule 901.e)? Yes No

31. Mud disposal: Offsite Onsite

If 28, 29, or 30 are "Yes" a pit permit may be required.

Method: Land Farming Land Spreading Disposal Facility Other: _____

Note: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b). If air/gas drilling, notify local fire officials.

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	12+1/4	9+5/8	36	0	875	830	875	0
1ST	8+3/4	7	26	0	8041	650	8041	500
1ST LINER	6+1/8	4+1/2	11.6	7844	11930			

32. BOP Equipment Type: Annular Preventer Double Ram Rotating Head None

33. Comments 7" casing string will be cemented to at least 200' above Niobrara, around 500' from surface. CBL will only be run in the vertical section of the wellbore. Conductor casing will not be used. Operator requests an exception location per rule 318Aa and rule 318Ac: well will not be drilled in a legal drilling window or twinned with an existing well. Waivers attached. Per rule 318Ae, the Operator requests the proposed spacing unit consisting of 320 acres, W2 of Sec 17 T7N R66W. Proposed spacing unit map and 30-day certificate is attached. Distance to nearest well measured to the Jukes 1-17 via the Anti-Collision Report in the Deviated Drilling plan.

34. Location ID: _____

35. Is this application in a Comprehensive Drilling Plan ? Yes No

36. Is this application part of submitted Oil and Gas Location Assessment ? Yes No

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

Signed: _____ Print Name: Liz Lindow

Title: Regulatory Analyst Date: 7/26/2013 Email: liz.lindow@pdce.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 9/27/2013

API NUMBER **05 123 38180 00** Permit Number: _____ Expiration Date: 9/26/2015

CONDITIONS OF APPROVAL, IF ANY:

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

Description

Operator must meet water well testing requirements per Rule 318A.

- 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 2) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

Att Doc Num	Name
2114244	MINERAL LEASE MAP
400457903	FORM 2 SUBMITTED
400457922	OFFSET WELL EVALUATION
400457923	DEVIATED DRILLING PLAN
400457924	30 DAY NOTICE LETTER
400457926	EXCEPTION LOC WAIVERS
400457928	DIRECTIONAL DATA
400457934	PROPOSED SPACING UNIT
400457938	EXCEPTION LOC REQUEST
400458005	WELL LOCATION PLAT

Total Attach: 10 Files

General Comments

User Group	Comment	Comment Date
Engineer	offset well Jukes 1-17 123-10356 PA - adequate isolation	9/26/2013 4:05:04 PM
Permit	Operator confirmed closest well at 1817'. Mineral lease is 258 acres. Operator sent lease map with correct acreage. Made correction line 25. Ready to pass pending public comment.	8/19/2013 1:56:39 PM
Permit	Closest well is Thornton State PC II 16-05D at 1817'. Mineral lease appears to be greater than 194 acres.	8/19/2013 11:23:25 AM
Permit	Operator input surface and mineral information. This form has passed completeness.	7/30/2013 3:23:50 PM
Permit	Returned to draft. Requested surface and minerals information.	7/29/2013 2:51:18 PM

Total: 5 comment(s)

Best Management Practices

No	BMP/COA Type	Description