

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:

400418673

Date Received:

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 ☐

PluggingBond SuretyID

20090078

3. Name of Operator: PDC ENERGY INC4. COGCC Operator Number: 691755. Address: 1775 SHERMAN STREET - STE 3000City: DENVER State: CO Zip: 802036. Contact Name: Liz Lindow Phone: (303)831-3974 Fax: ()Email: liz.lindow@pdce.com7. Well Name: Thornton Well Number: 28K-223

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

9. Proposed Total Measured Depth: 12332

WELL LOCATION INFORMATION

10. QtrQtr: SWNW Sec: 28 Twp: 7N Rng: 66W Meridian: 6Latitude: 40.546490 Longitude: -104.790330

Footage at Surface: 2422 feet FNL/FSL 727 feet FEL/FWL FWL

11. Field Name: Wattenberg Field Number: 9075012. Ground Elevation: 4895 13. County: WELD

14. GPS Data:

Date of Measurement: 04/26/2013 PDOP Reading: 1.8 Instrument Operator's Name: Tom Carlson15. If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL 2410 FSL 1700 FWL 2140 FNL 1877 FWL 2140 FNL 1877 FWL 2140
 Sec: 28 Twp: 7N Rng: 66W Sec: 33 Twp: 7N Rng: 66W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No17. Distance to the nearest building, public road, above ground utility or railroad: 339 ft18. Distance to nearest property line: 697 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 181 ft

20. 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.)
NIOBRARA	NBRR		320	GWA

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: _____22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian23. 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 ☐ No23b. 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. Horizontal wellbore crosses multiple leases lines within drilling and spacing unit. Distance to mineral lease line is 0'. Distance to unit boundary is 551'.

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 167

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	7,809	650	7,809	500
1ST LINER	6+1/8	4+1/2	11.6	6596	12,332			

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, SW and S2NW of Sec 28, and E2NE of Sec 33 T7N R66W. Proposed spacing unit map and 30-day certificate is attached. Distance to nearest well measured to 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: _____ Email: liz.lindow@pdce.com

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: _____ Director of COGCC Date: _____

API NUMBER

05

Permit Number: _____ Expiration Date: _____

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.

Data retrieval failed for the subreport 'IntPolicy_NTO' located at: W:\Inetpub\NetReports\policy_nto.rdl. Please check th

Attachment Check List

Att Doc Num	Name
400418848	WELL LOCATION PLAT
400431393	MINERAL LEASE MAP
400431394	30 DAY NOTICE LETTER
400431395	EXCEPTION LOC WAIVERS
400431396	DIRECTIONAL DATA
400449193	OFFSET WELL EVALUATION
400449194	EXCEPTION LOC REQUEST
400449196	PROPOSED SPACING UNIT
400449197	DEVIATED DRILLING PLAN

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. The Colorado Oil and Gas Conservation Commission (COGCC) has established this Policy Regarding Bradenhead Monitoring During Hydraulic Fracturing Treatments ("Treatment") in the Greater Wattenberg Area ("GWA") pursuant to COGCC 207.a. ("Policy"). This Policy applies to oil and gas operations in the GWA as defined by the COGCC Rules of Practice and Procedure.

Total: 1 comment(s)