

FORM
2

Rev
12/05

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE	ET	OE	ES
----	----	----	----

APPLICATION FOR PERMIT TO:

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

2. TYPE OF WELL

OIL ☐ GAS ☒ COALBED ☐ OTHER _____
SINGLE ZONE ☐ MULTIPLE ZONE ☒ COMMINGLE ZONE ☐

Refiling ☐
Sidetrack ☐

Document Number:

400071408

Plugging Bond Surety

20090078

3. Name of Operator: PETROLEUM DEVELOPMENT CORPORATION

4. COGCC Operator Number: 69175

5. Address: 1775 SHERMAN STREET - STE 3000

City: DENVER State: CO Zip: 80203

6. Contact Name: Kelly Huffman Phone: (303)831-3974 Fax: (303)860-5838

Email: khuffman@petd.com

7. Well Name: Ryland Well Number: 20XD

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

9. Proposed Total Measured Depth: 7778

WELL LOCATION INFORMATION

10. QtrQtr: NESW Sec: 21 Twp: 4N Rng: 67W Meridian: 6

Latitude: 40.295330 Longitude: -104.899610

Footage at Surface: 1526 FNL/FSL FSL 1634 FEL/FWL FWL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4940 13. County: WELD

14. GPS Data:

Date of Measurement: 03/10/2010 PDOP Reading: 6.0 Instrument Operator's Name: Thomas G. Carlson

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

Footage at Top of Prod Zone: FNL/FSL 1316 FSL 50 FEL 50 FEL 50 FEL 50
Bottom Hole: FNL/FSL 1316 FSL 50 FEL 50 FEL 50
Sec: 20 Twp: 4N Rng: 67W Sec: 20 Twp: 4N Rng: 67W

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: 1119 ft

18. Distance to nearest property line: 90 ft 19. Distance to nearest well permitted/completed in the same formation: 821 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 Codell	NB-CD	407-87	160	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#: 19990086

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):
 Township 4 North, Range 67 West, 6th P.M. Section 21: W/2 (and lands in other sections); Township 4 North, Range 67 West, 6th P.M. Section 20: E/2 (and lands in other sections)

25. Distance to Nearest Mineral Lease Line: 50 ft 26. Total Acres in Lease: 787

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 27 or 28 are yes, is this location in a sensitive area (Rule 903)? ☐ Yes ☐ No If 28, 29, or 30 are "Yes" a pit permit may be required.

31. Mud disposal: ☒ Offsite ☐ Onsite

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	Weight Per Foot	Setting Depth	Sacks Cement	Cement Bottom	Cement Top
SURF	12+1/4	8+5/8	24	650	390	650	0
1ST	7+7/8	4+1/2	10.5	7,778	239	7,778	6,378
S.C. 1.1	7+7/8	4+1/2	10.5	7,778	239	7,778	6,378

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

33. Comments Conductor casing will not be used. The Ryland 20XD will be drilled from the same pad as the Walters 23-21DU, 21-ODU, 21QDU, 24-21DU, 21LDU, Ryland 20YD, Wedco 13-21DU and 14-21DU. The well will be tied into an existing tank battery facility located at the Bunyan 1 well. Proposed GWA Spacing Unit: SEC 20: E2SE & SEC 21: W2SW. Petroleum Development Corporation requests approval of a Rule 318Ac exception location: Wellhead is to be located more than 50' from an existing well location. Petroleum Development Corporation requests approval of a Rule 603.a.(2) exception location: Wellhead is to be located less than 150' from a property line.

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: Kelly Huffman

Title: Contract Land Tech Date: 7/1/2010 Email: khuffman@petd.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: David S. Neslin Director of COGCC Date: 8/6/2010

Permit Number: _____ Expiration Date: 8/5/2012

API NUMBER

05 123 31967 00

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.

- 1) Provide 24 hour notice of MIRU to Bo Brown at 970-397-4124 or e-mail at bo.brown@state.co.us.
- 2) Comply with Rule 317.i and provide cement coverage from TD 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.

Attachment Check List

Att Doc Num	Name	Doc Description
1770467	SURFACE CASING CHECK	LF@2513994 1770467
400071408	FORM 2 SUBMITTED	LF@2500808 400071408
400071434	EXCEPTION LOC WAIVERS	LF@2500809 400071434
400071435	EXCEPTION LOC WAIVERS	LF@2500810 400071435
400071436	30 DAY NOTICE LETTER	LF@2500811 400071436
400071437	EXCEPTION LOC REQUEST	LF@2500812 400071437
400071438	EXCEPTION LOC REQUEST	LF@2500813 400071438
400071439	PLAT	LF@2500814 400071439
400071440	TOPO MAP	LF@2500815 400071440
400071443	DEVIATED DRILLING PLAN	LF@2500816 400071443
400073269	PROPOSED SPACING UNIT	LF@2500817 400073269
400073272	PROPOSED SPACING UNIT	LF@2500818 400073272

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	PERMITTING PASSED . PVG	8/6/2010 4:56:36 PM

Total: 1 comment(s)