

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



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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:  
400055056  
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: Sarah Garrett Phone: (303)860-5803 Fax: (303)860-5838  
Email: sgarrett@petd.com

7. Well Name: Ryland Well Number: 20SD

8. Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

9. Proposed Total Measured Depth: 7914

WELL LOCATION INFORMATION

10. QtrQtr: NWNW Sec: 21 Twp: 4N Rng: 67W Meridian: 6  
Latitude: 40.302460 Longitude: -104.904620

Footage at Surface: 1151 FNL/FSL FNL 276 FEL/FWL FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4922 13. County: WELD

14. GPS Data:

Date of Measurement: 01/27/2010 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 \_\_\_\_\_ FEL/FWL \_\_\_\_\_ Bottom Hole: FNL/FSL \_\_\_\_\_ FEL/FWL \_\_\_\_\_  
2578 FSL 1221 FEL 2578 FSL 1221 FEL  
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: 251 ft

18. Distance to nearest property line: 220 ft 19. Distance to nearest well permitted/completed in the same formation: 2407 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
Sussex Shannon	SX-SN	N/A	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#: \_\_\_\_\_

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 Bon  \$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):  
 BHL: Section 20: E/2; Township 4 North, Range 67 West; SHL: Section 21: W/2, Township 4 North, Range 67 West

25. Distance to Nearest Mineral Lease Line: 1221 ft 26. Total Acres in Lease: 320

### 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
S.C. 1.1	7+7/8	4+1/2	10.5	7,914	260	7,914	6,350

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

33. Comments Conductor casing will not be used. PDC purchased the surface property on 4/30/10. Well is part of a 15 well pad consisting of the following: Ryland 41-20D, Ryland 20RD, Ryland 20UD, Ryland 20CD, Ryland 20VD, Ryland 42-20D, Ryland 20SD, EEE 11-21DU, EEE 21-21DU, EEE 21ADU, Centennial 21GDU, Centennial 12-21DU, Centennial 21KDU, Centennial 22-21DU, EEE 21NDU. All 15 wells will be tied into a common tank battery on-site. Proposed GWA Spacing Unit: Sec 20: S2NE & N2SE Surface Owner is the Applicant. Petroleum Development Corporation requests approval of a Rule 318Aa and Rule 318Ac exception location: Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location. Petroleum Development Corporation (PDC) requests approval of a Rule 603.e.(2) exception location: Wellhead lies within a high density area and are to be located less than 350' from a building unit. PDC owns the encroached building unit. Request letter is attached. 7-14-10 PVG ;

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: Sarah Garrett

Title: Landman Date: 5/2/2010 Email: sgarrett@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: 7/14/2010

**API NUMBER**

05 123 31872 00

Permit Number: \_\_\_\_\_

Expiration Date: 7/13/2012**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 970-330-6085 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 and from 200' below Shannon to 200' above Sussex. 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
1770350	SURFACE CASING CHECK	LF@2481324 1770350
2621686	EXCEPTION LOC REQUEST	LF@2507071 2621686
400055056	FORM 2 SUBMITTED	LF@2461959 400055056
400055111	30 DAY NOTICE LETTER	LF@2461960 400055111
400055113	PLAT	LF@2461961 400055113
400055114	TOPO MAP	LF@2462338 400055114
400055115	DEVIATED DRILLING PLAN	LF@2462340 400055115
400058996	PROPOSED SPACING UNIT	LF@2462342 400058996
400058997	EXCEPTION LOC WAIVERS	LF@2461965 400058997
400058998	EXCEPTION LOC REQUEST	LF@2461966 400058998
400058999	PROPOSED SPACING UNIT	LF@2461967 400058999

Total Attach: 11 Files