

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
----	----	----	----

Document Number:

400045904

Plugging Bond Surety

20090078

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 ☐

3. Name of Operator: PETROLEUM DEVELOPMENT CORPORATION

4. COGCC Operator Number: 69175

5. Address: 1775 SHERMAN STREET - STE 3000

City: DENVER State: CO Zip: 80207

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

7. Well Name: Brown Well Number: 20MD

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

9. Proposed Total Measured Depth: 7756

WELL LOCATION INFORMATION

10. QtrQtr: SENW Sec: 20 Twp: 4N Rng: 67W Meridian: 6

Latitude: 40.301860 Longitude: -104.915320

Footage at Surface: 1434 FNL/FSL FNL 2147 FEL/FWL FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4900 13. County: WELD

14. GPS Data:

Date of Measurement: 12/21/2009 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 50 FNL 2371 FWL FWL Bottom Hole: FNL/FSL 50 FNL 2371 FWL FWL
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: 560 ft

18. Distance to nearest property line: 274 ft 19. Distance to nearest well permitted/completed in the same formation: 730 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):
NW/4 Sec. 20, T4N, R67W (+additional acreage in other sections)

25. Distance to Nearest Mineral Lease Line: 274 ft 26. Total Acres in Lease: 317

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	490	270	490	0
S.C. 1.1	7+7/8	4+1/2	10.5	7,756	230	7,756	6,500

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

33. Comments Conductor casing will not be used. Well will be on the same pad as the following: Ryland 31-20D, Ryland 32-20D, Brown 20ND, Brown 20AD, and Brown 20OD. Location is outside the drilling window and is more than 50 feet from an existing well. Proposed spacing unit SWSE, SESW SEC 17; NWNE, NENW SEC 20

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: 3/29/2010 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: 5/9/2010

API NUMBER

05 123 31553 00

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

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) Note surface casing setting depth change from 450' to 490'. Increase cement coverage accordingly and cement to surface. 2) Provide 24 hour notice of MIRU to Bo Brown at 970-330-6085 or e-mail at bo.brown@state.co.us 3) 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. 4) 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.

Exception location granted, waivers attached.

Attachment Check List

Att Doc Num	Name	Doc Description
1760910	EXCEPTION LOC WAIVERS	LF@2464377 1760910
1760918	EXCEPTION LOC REQUEST	LF@2464394 1760918
400045922	WELL LOCATION PLAT	LF@2446779 400045922
400045923	TOPO MAP	LF@2446780 400045923
400045924	DEVIATED DRILLING PLAN	LF@2446781 400045924
400045925	EXCEPTION LOC REQUEST	LF@2446782 400045925
400045926	PROPOSED SPACING UNIT	LF@2446783 400045926
400050731	EXCEPTION LOC WAIVERS	LF@2446784 400050731
400050733	PROPOSED SPACING UNIT	LF@2446785 400050733
400050741	30 DAY NOTICE LETTER	LF@2446786 400050741
400051256	FORM 2 SUBMITTED	LF@2446787 400051256

Total Attach: 11 Files