

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:

400042490

Plugging Bond Surety

20090078

3. Name of Operator: PETROLEUM DEVELOPMENT CORPORATION

4. COGCC Operator Number: 69175

5. Address: PO BOX 26

City: BRIDGEPORT State: WV Zip: 26330

6. Contact Name: Tyson Johnston Phone: (303)860-5809 Fax: (303)860-5838
Email: tjohnston@petd.com

7. Well Name: Hardwick Well Number: 42-9

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

9. Proposed Total Measured Depth: 2240

WELL LOCATION INFORMATION

10. QtrQtr: SENE Sec: 9 Twp: 2S Rng: 44W Meridian: 6

Latitude: 39.898150 Longitude: -102.301020

Footage at Surface: 2445 FNL/FSL FNL 1055 FEL/FWL FEL

11. Field Name: Vernon Field Number: 86500

12. Ground Elevation: 3820 13. County: YUMA

14. GPS Data:

Date of Measurement: 11/15/2009 PDOP Reading: 2.3 Instrument Operator's Name: S. DeManche

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 _____

Sec: _____ Twp: _____ Rng: _____ Sec: _____ Twp: _____ Rng: _____

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: 2598 ft

18. Distance to nearest property line: 1055 ft 19. Distance to nearest well permitted/completed in the same formation: 845

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	Unspaced	320	N2

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):
All Section 9; W/2NW/4 Section 10; 2 Acre tract Section 31 Township 2 South, Range 44 West, 6th P.M. and SW/4 Section 14; W/2NW/4 Section 25 Township 2 South, Range 45 West, 6th P.M.

25. Distance to Nearest Mineral Lease Line: 2378 ft 26. Total Acres in Lease: 1120

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	9+5/8	7+0/0	17	350	175	350	0
1ST	6+1/4	4+1/2	10.5	2,040	150	2,040	1,040

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

33. Comments -Conductor casing will not be used -Conservation Easment Lifted (See attachment) -Re-file of permit expired 1/12/10 -Location falls in the Northern High Plains Designated Groundwater Basin

34. Location ID: 337753

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: Tyson Johnston

Title: Regional Landman Date: 3/17/2010 Email: tjohnston@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: 4/28/2010

API NUMBER

05 125 10559 00

Permit Number: _____ Expiration Date: 4/27/2012

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 hr notice of spud to Craig Quint at 719-767-8939 or e-mail at craig.quint@state.co.us. 2) Set surface casing at least 50' into Pierre Shale for aquifer coverage, (350' minimum - as proposed). Setting surface casing less than the approved depth is a permit violation unless prior written approval is obtained from the COGCC. 3) If completed, provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 4) If dry hole, set 35 sks cement 50' above Niobrara top, 35 sks cement ½ out, ½ in surface casing, 10 sks cement at top of surface casing, cut casing 4' below GL, weld on plate, 5 sks cement in rat hole & 5 sks cement in mouse hole.

Attachment Check List

Att Doc Num	Name	Doc Description
2110272	SURFACE CASING CHECK	LF@2451482 2110272
400047392	30 DAY NOTICE LETTER	LF@2439844 400047392
400047393	PLAT	LF@2439845 400047393
400047395	SURFACE AGRMT/SURETY	LF@2439846 400047395
400047397	OTHER	LF@2439847 400047397
400048098	FORM 2 SUBMITTED	LF@2439848 400048098

Total Attach: 6 Files