

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

Document Number:
400245509

PluggingBond SuretyID
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: Liz Lindow Phone: (303)831-3974 Fax: ()
Email: llindow@petd.com

7. Well Name: Thornton Well Number: 19X-404

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

9. Proposed Total Measured Depth: 12091

WELL LOCATION INFORMATION

10. QtrQtr: NESE Sec: 19 Twp: 7N Rng: 66W Meridian: 6
Latitude: 40.556580 Longitude: -104.812910

Footage at Surface: _____ feet FNL/FSL _____ feet FEL/FWL _____ feet
1340 FSL 230 FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4961 13. County: WELD

14. GPS Data:
Date of Measurement: 12/01/2011 PDOP Reading: 2.5 Instrument Operator's Name: Adam Kelly

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
1320 FSL 800 FEL 1320 FSL 500 FWL
Sec: 19 Twp: 7N Rng: 66W Sec: 19 Twp: 7N Rng: 66W

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: 216 ft

18. Distance to nearest property line: 230 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 647 ft

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.)
Codell	CODL		320	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):

Sec 19 T7N R66W 6th PM: Lot 3, Lot 4, E2SW, SE and a portion of Section 25 T7N R66W 6th PM

25. Distance to Nearest Mineral Lease Line: 500 ft 26. Total Acres in Lease: 671

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: closed loop

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	730	875	0
1ST	8+3/4	7	26	0	7,899	650	7,899	600
1ST LINER	6+1/8	4+1/2	11.6	6684	12,091			

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

33. Comments 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. Waviers attached. Per rule 318Ae, the Operator requests the proposed spacing unit consisting of 320 acres, S2 Sec 19 T7N R66W. Proposed spacing unit map and 30-day certificate is attached.

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: Permit Representative Date: 1/25/2012 Email: llindow@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. Nesline Director of COGCC Date: 2/26/2012

API NUMBER
05 123 35168 00

Permit Number: _____ Expiration Date: 2/25/2014

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.

Requires water sampling according to Rule 318A.e.(4).

1) Provide 48 hour notice of MIRU to Jim Precup via e-mail at james.precup@state.co.us.

2) Comply with Rule 317.i and provide cement coverage from the end of the production casing to a minimum of 200' above the Niobrara. Verify coverage with a cement bond log.

3) Comply with Rule 321. Run and submit Directional Survey from the end of production casing 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
2481404	SURFACE CASING CHECK
400245509	FORM 2 SUBMITTED
400245527	30 DAY NOTICE LETTER
400245529	DEVIATED DRILLING PLAN
400245530	EXCEPTION LOC WAIVERS
400245531	TOPO MAP
400245532	WELL LOCATION PLAT
400245535	EXCEPTION LOC REQUEST
400245539	PROPOSED SPACING UNIT

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	2/21/2012 7:57:35 AM

Total: 1 comment(s)

BMP

<u>Type</u>	<u>Comment</u>

Total: 0 comment(s)