

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 ☐

Refilling ☒

Sidetrack ☐

Document Number:

1904912

Plugging Bond Surety

20010102

3. Name of Operator: PETRO-CANADA RESOURCES (USA) INC

4. COGCC Operator Number: 72085

5. Address: 999 18TH ST STE 600

City: DENVER State: CO Zip: 80202-2499

6. Contact Name: SUSAN MILLER Phone: (303)297-2100 Fax: (303)297-7708

Email: SUSAN.MILLER@PETRO-CANADA.COM

7. Well Name: HAYTHORN Well Number: 4-21

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

9. Proposed Total Measured Depth: 7525

WELL LOCATION INFORMATION

10. QtrQtr: NENW Sec: 4 Twp: 6N Rng: 66W Meridian: 6

Latitude: 40.522010 Longitude: -104.786960

Footage at Surface: 686 FNL/FSL 1914 FEL/FWL FWL

11. Field Name: EATON Field Number: 19350

12. Ground Elevation: 4861 13. County: WELD

14. GPS Data:

Date of Measurement: 03/27/2008 PDOP Reading: 2.5 Instrument Operator's Name: RON EDWARDS

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: 401 ft

18. Distance to nearest property line: 686 ft 19. Distance to nearest well permitted/completed in the same formation: 1045 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	80	E2NW4

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 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):
6-66 SEC. 4: NW/4

25. Distance to Nearest Mineral Lease Line: 686 ft 26. Total Acres in Lease: 160

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	26	860	617	860	0
1ST	7+7/8	4+1/2	11.6	7,525	1,070	7,525	860

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

33. Comments CONDUCTOR CASING WILL NOT BE UTILIZED. NO CHANGES TO LOCATION SINCE ORIGINAL SUBMITTAL.

34. Location ID: 310768

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: Y Print Name: SUSAN MILLER

Title: REGULATORY ANALYST Date: 6/15/2009 Email: SUSAN.MILLER@PETRO-CA

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: 10/21/2009

API NUMBER

05 123 26948 00

Permit Number: 20092705 Expiration Date: 10/20/2011

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 Ed Binkley at 970-506-9834 or e-mail at ed.binkley@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.

Sensitive Area – Closed Loop system or lined drill pit required

Attachment Check List

Att Doc Num	Name	Doc Description
1904913	WELL LOCATION PLAT	LF@2085785 1904913
1904914	SURFACE AGRMT/SURETY	LF@2085786 1904914
400012747	APD ORIGINAL	LF@2085784 400012747

Total Attach: 3 Files