

FORM
2

Rev
12/05

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400309888

Date Received:

11/02/2012

PluggingBond SuretyID

20030009

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 ☐

3. Name of Operator: NOBLE ENERGY INC

4. COGCC Operator Number: 100322

5. Address: 1625 BROADWAY STE 2200

City: DENVER State: CO Zip: 80202

6. Contact Name: JAN KAJIWARA Phone: (303)228-4092 Fax: (303)228-4286

Email: jkajiwara@nobleenergyinc.com

7. Well Name: COUGAR B Well Number: 02-67-01HN

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

9. Proposed Total Measured Depth: 11080

WELL LOCATION INFORMATION

10. QtrQtr: NWNW Sec: 2 Twp: 5N Rng: 64W Meridian: 6

Latitude: 40.434070 Longitude: -104.524360

Footage at Surface: 566 feet FNL/FSL 680 feet FEL/FWL
FNL FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4641 13. County: WELD

14. GPS Data:

Date of Measurement: 05/23/2012 PDOP Reading: 1.7 Instrument Operator's Name: BRIAN T BRINKMAN

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
1643 FNL 730 FWL 1650 FNL 660 FEL
Sec: 2 Twp: 5N Rng: 64W Sec: 2 Twp: 5N Rng: 64W

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: 408 ft

18. Distance to nearest property line: 233 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 288 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	NBRR		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#:

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. 2-T5N-R64W: E/2NW/4

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 80

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
CONDUCTOR	18+1/2	16		0	100	16	100	0
SURF	13+3/4	9+5/8	36	0	590	270	590	0
1ST	8+3/4	7	26	0	7,191	490	7,191	0
1ST LINER	6+1/8	4+1/2	11.6	7041	11,080			

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

33. Comments 1ST STRING TOP OF CEMENT = 200' ABOVE NIOBRARA. WELL IS TO BE TWINNED WITH BAKER B2-4. FOUR WELL PAD: COUGAR B02-68-1HN, B02-69-1HN, B02-67-1HN. UNIT CONFIGURATION = N/2. Noble Energy will comply with the COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. NEAREST WELL IS FOE B2-7 AT 288'.

34. Location ID: 326875

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: JAN KAJIWARA

Title: REGULATORY ANALYST

Date: 11/2/2012

Email: jkajiwara@nobleenergyinc.com

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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: _____

Director of COGCC

Date: 12/14/2012

API NUMBER

05 123 36406 00

Permit Number: _____

Expiration Date: 12/13/2014

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.

1)Note surface casing setting depth change from 550' to 590'. Increase cement coverage accordingly and cement to surface.
2)Provide notice of MIRU via an electronic Form 42.
3)Comply with Rule 317.i and provide cement coverage from the 7" casing TD to a minimum of 200' above the Niobrara. Verify coverage with a cement bond log.

Operator must meet water well testing requirements per Rule 318A.

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.

Attachment Check List

Att Doc Num	Name
2481916	SURFACE CASING CHECK
400309888	FORM 2 SUBMITTED
400310469	30 DAY NOTICE LETTER
400326431	DIRECTIONAL DATA
400326432	DEVIATED DRILLING PLAN
400342058	PROPOSED SPACING UNIT
400342911	WELL LOCATION PLAT

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Per operator corrected surface and minerals information. Final Review Completed. No LGD or public comment received.	12/13/2012 8:00:59 AM
Engineer	Evaluated offset well for adequate cement coverage.	11/13/2012 12:59:45 PM
Permit	Per operator corrected distance to nearest building and corrected typo about number of wells on pad.	11/13/2012 12:46:11 PM
Permit	Horizontal well crosses lease lines within GWA horizontal wellbore unit; distance to lease line is 0'; distance to unit boundary is 660'.	11/8/2012 7:52:26 AM
Permit	Requested updated distance to nearest building and edit to operator comments. Initial review complete.	11/8/2012 7:52:25 AM
Permit	operator attached correct well location plat. This form passed completeness.	11/5/2012 11:43:19 AM
Permit	Return to draft: 1. well location plat does not match submitted information, references a different well.	11/2/2012 6:33:58 PM

Total: 7 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Material Handling and Spill Prevention	Spill prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
General Housekeeping	Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pickup trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
Drilling/Completion Operations	<p>Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed well. This anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, Operator may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision scan results indicate that there is not a risk for collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, an as-constructed gyro survey will be submitted to COGCC with the Form 5.</p> <p>During and Post stimulation: Noble Energy will comply with the COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.</p>
Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) General Permit No. COR-038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location, and will remain in place until the pad reaches final reclamation.

Total: 4 comment(s)