

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:

400326930

Date Received:

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 ☐

PluggingBond SuretyID

20030009

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: SUSAN MILLER Phone: (303)228-4246 Fax: (303)228-4286

Email: smiller@nobleenergyinc.com

7. Well Name: THISTLE DOWN PC Well Number: F36-69HC

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

9. Proposed Total Measured Depth: 11410

WELL LOCATION INFORMATION

10. QtrQtr: SESE Sec: 25 Twp: 5N Rng: 65W Meridian: 6

Latitude: 40.365990 Longitude: -104.605110

Footage at Surface: 1136 feet FNL/FSL FSL 860 feet FEL/FWL FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4723 13. County: WELD

14. GPS Data:

Date of Measurement: 07/12/2012 PDOP Reading: 1.5 Instrument Operator's Name: Brian 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  
76 FNL 735 FEL 75 FNL 535 FWL  
Sec: 36 Twp: 5N Rng: 65W Sec: 36 Twp: 5N Rng: 65W

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: 293 ft

18. Distance to nearest property line: 159 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 137 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           | 407-66                  | 320                           | GWA                                  |

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: 81/6053-S

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):

T5N-R65W Section 36: All. Both State and fee lands are in the spacing unit. All surface facilities are on the fee lands but the wellbore itself is running laterally through the State lands.

25. Distance to Nearest Mineral Lease Line: 75 ft

26. Total Acres in Lease: 640

### 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           | 6         | 100     | 0       |
| SURF        | 13+3/4       | 9+5/8          | 36    | 0             | 600           | 290       | 600     | 0       |
| 1ST         | 8+3/4        | 7              | 26    | 0             | 7,403         | 500       | 7,403   | 0       |
| 1ST LINER   | 6+1/8        | 4+1/2          | 11.6  | 7253          | 11,410        | 0         | 0       | 0       |

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

33. Comments First string top of cement will be 200' above the Niobrara formation. The production liner will be hung off inside of the 7" casing. This is a single, horizontal well with facilities to be located off site. See 2A doc. no. 400326948 for well location and 2A doc. no. 400327760 for Facilities. Nearest well permitted/completed in same formation is Thistle Down B31-30D (API No. 05-123-29317) with actual productive interval located 137' north of the well being permitted. Unit Configuration: Sec. 25: S/2S/2; Sec. 36: N/2N/2. Please see attached Surface Use Agreement, Item 1., Section D., Page 2 of 4, for waiver of COGCC rules 318A.c. (twinning) and 318A.a. (out of window).

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: SUSAN MILLER

Title: Regulatory Analyst III

Date: \_\_\_\_\_

Email: smiller@nobleenergyinc.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: \_\_\_\_\_

Director of COGCC

Date: \_\_\_\_\_

API NUMBER

05

Permit Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

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.

### **Attachment Check List**

| Att Doc Num | Name                   |
|-------------|------------------------|
| 400326947   | 30 DAY NOTICE LETTER   |
| 400333308   | WELL LOCATION PLAT     |
| 400333309   | DEVIATED DRILLING PLAN |
| 400333311   | DIRECTIONAL DATA       |
| 400343574   | PROPOSED SPACING UNIT  |
| 400343575   | PROPOSED SPACING UNIT  |
| 400343576   | SURFACE AGRMT/SURETY   |
| 400343613   | OTHER                  |
| 400343614   | PROPOSED SPACING UNIT  |

Total Attach: 9 Files

### **General Comments**

| <b><u>User Group</u></b> | <b><u>Comment</u></b> | <b><u>Comment Date</u></b> |
|--------------------------|-----------------------|----------------------------|
|                          |                       |                            |

Total: 0 comment(s)

## BMP

| <u>Type</u>                            | <u>Comment</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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) and 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Drilling/Completion Operations         | <p>Anti-collision:<br/>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:<br/>Noble Energy Inc. will comply with the COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated 5/29/12.</p> |
| General Housekeeping                   | General 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 pick up trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.                                     |

Total: 4 comment(s)