

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:

400419517

Date Received:

07/24/2013

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: Justin Garrett Phone: (303)228-4449 Fax: (303)228-4286

Email: JDGarrett@nobleenergyinc.com

7. Well Name: Mackinaw Well Number: A19-79HNA

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

9. Proposed Total Measured Depth: 10974

## WELL LOCATION INFORMATION

10. QtrQtr: NENE Sec: 24 Twp: 6N Rng: 65W Meridian: 6

Latitude: 40.477820 Longitude: -104.605740

Footage at Surface: 330 feet FNL/FSL 1077 feet FEL/FWL  
 FNL FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4684 13. County: WELD

## 14. GPS Data:

Date of Measurement: 12/18/2012 PDOP Reading: 2.0 Instrument Operator's Name: David C. Holmes

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  
 960 FNL 75 FWL 535 FSL 75 FWL  
 Sec: 19 Twp: 6 Rng: 64 Sec: 19 Twp: 6 Rng: 64

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: 306 ft

18. Distance to nearest property line: 266 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 156 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		297	GWA

21. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease #: \_\_\_\_\_22. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian23. 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 ☐ No23b. 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):

T6N-R65W Sec 24: NE/4. Wellbore will produce from multiple leases. Horizontal well crosses lease line within GWA horizontal wellbore unit; distance to lease line is 0 feet; distance to nearest unit boundary is 535 feet.

25. Distance to Nearest Mineral Lease Line: 0 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 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	0	100	6	100	0
SURF	13+3/4	9+5/8	36	0	700	330	700	0
1ST	8+3/4	7	26	0	7155	490	7155	
1ST LINER	6+1/8	4+1/2	11.6	7005	10974			

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

33. Comments First String top of cement will be 200' above Niobrara formation. The production liner will be hung off inside 7" casing. Well is part of an eleven-well pad consisting of the proposed Mackinaw A19-79HNA (Doc #400419517), Mackinaw A19-79HNC (Doc #400419518), Storis E24-72-1HC (Doc #400419519), Storis E24-72-1HN (Doc #400419520), Storis E24-73-1HNA (Doc #400419521), Storis E24-73-1HNC (Doc #400419522), Storis E24-73HC (Doc #400419523), Storis E24-73HN (Doc #400419524), Storis E24-75-1HC (Doc #400419525), Storis E24-75-1HN (Doc #400419526), and Storis E24-75HN (Doc #400419527). The production facilities for the proposed pad will be located 3000' SW of the pad site (Doc #400419529). Noble Energy Inc. requests approval of Rule 318A.a Surface location outside window; 318A.c Twinning location exception, request letter attached. Waiver language is included in attached SUA. Question 19 nearest well is the proposed Mackinaw A19-79HNC, which is 156' from wellbore vertically. Unit Configuration = T6N-R64W Sec 19: W/2W/2, T6N-R65W Sec 24: E/2E/2.

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: Justin Garrett

Title: Regulatory Analyst Date: 7/24/2013 Email: JGarrett@nobleenergyinc.co

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: Matthew Lee Director of COGCC Date: 9/27/2013

API NUMBER

05 123 38147 00

Permit Number: \_\_\_\_\_ Expiration Date: 9/26/2015

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.

#### Description

- 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 2) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

Operator must meet water well testing requirements per Rule 318A

Operator acknowledges the proximity of the WPF III API #05-123-13197, Weber #4-19 API #05-123-12757, Roth A #19-12 API #05-123-17321, Roth A #19-13, API #05-123-17320, Roth #4-30 API #05-123-13135, JR #1 API #05-123-12840, Jessie 2 API #05-123-13699, Anderson E #24-11 API #05-123-16566, Anderson E #24-14 API #05-123-16470, Courtney BCE #24-08 API #05-123-14293, Courtney BCE #24-01 API #05-123-14292, Courtney E24-2 API #05-123-13228, Courtney E24-7 API #05-123-13229 Miller #33-24, API #05-123-14085 Miller #34-24, API #05-123-14125, Ole #21-24 API #05-123-23634, Little Will 10 API #05-123-11741, Little Will 4 API #05-123-11607 wells; Operator agrees to: provide mitigation option 1, 2 or 3 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.

#### 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

<u>Att Doc Num</u>	<u>Name</u>
400419517	FORM 2 SUBMITTED
400451875	30 DAY NOTICE LETTER
400451887	DIRECTIONAL DATA
400451889	DEVIATED DRILLING PLAN
400451890	PLAT
400451892	OFFSET WELL EVALUATION
400451893	SURFACE AGRMT/SURETY
400451894	EXCEPTION LOC REQUEST
400451895	PROPOSED SPACING UNIT
400455532	DIRECTIONAL DATA

Total Attach: 10 Files

#### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Changed field name to Wattenberg and field number to 90750. Ready to pass pending public comment.	3/6/2013 3:38:19 PM
Permit	Returned to draft: distance to another well says 0' can't be true. The A bench and the c bench are separated by some distance. Directional tool not filled in.	7/25/2013 5:08:51 AM
Permit	Returned to draft: distance to another well says 0' can't be true.	7/24/2013 4:34:52 PM

Total: 3 comment(s)

## Best Management Practices

No	BMP/COA Type	Description
1	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.
2	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.
3	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.
4	Drilling/Completion Operations	<p>Anti-collision: 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 5/29/12</p>

Total: 4 comment(s)