

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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Document Number:

400200161

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: Abbey State Well Number: V16-77HN

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

9. Proposed Total Measured Depth: 11838

WELL LOCATION INFORMATION

10. QtrQtr: SESW Sec: 16 Twp: 2N Rng: 67W Meridian: 6

Latitude: 40.131870 Longitude: -104.898240

Footage at Surface: 252 feet FNL/FSL 1965 feet FEL/FWL  
FSL FWL

11. Field Name: Spindle Field Number: 77900

12. Ground Elevation: 4990 13. County: WELD

14. GPS Data:

Date of Measurement: 05/06/2011 PDOP Reading: 1.9 Instrument Operator's Name: Robert Daley

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  
729 FSL 1363 FWL 535 FNL 1320 FWL  
Sec: 16 Twp: 2N Rng: 67W Sec: 16 Twp: 2N Rng: 67W

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: 245 ft

18. Distance to nearest property line: 222 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 2002 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	407-87	320	W/2

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):

Noble Energy Inc. certifies that the lease(s) shall be committed to the unit. W/2, Sec 16, T2N-R67W.

25. Distance to Nearest Mineral Lease Line: 252 ft

26. Total Acres in Lease: 320

### 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	16+0/0	15+0/0		0	100	6	100	0
SURF	13+3/4	9+5/8	36	0	650	400	650	0
1ST	8+3/4	7	26	0	7,850	910	7,850	
1ST LINER	6+1/8	4+1/2	11.6	7700	11,838			

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 a two-well pad consisting of the proposed Abbey State V16-77HN (Doc #400200161) and Aspen State V16-75HN (Doc #400200160), multi-well plan attached. The production facilities will be within the pad disturbance and dedicated to the pad being permitted. Unit Configuration = W/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 Specialist Date: 10/5/2011 Email: JDGarrett@nobleenergyinc.

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. Nashin

Director of COGCC Date: 10/28/2011

#### API NUMBER

05 123 34631 00

Permit Number: \_\_\_\_\_ Expiration Date: 10/27/2013

#### 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 Jim Precup at 303-469-1902 or e-mail at james.precup@state.co.us
- 2) Comply with Rule 317.i and provide cement coverage from end of 7" production 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.

### **Attachment Check List**

Att Doc Num	Name
400200161	FORM 2 SUBMITTED
400210523	30 DAY NOTICE LETTER
400210524	PLAT
400210525	DEVIATED DRILLING PLAN
400210526	EXCEPTION LOC WAIVERS
400210527	EXCEPTION LOC REQUEST
400210528	PROPOSED SPACING UNIT

Total Attach: 7 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final Review Completed. No LGD or public comment received.	10/28/2011 11:16:27 AM
Permit	Operator requests approval of a Rule 318Aa and Rule 318Ac exception location: Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location. Request and waivers attached.	10/28/2011 10:46:55 AM
Permit	Ok to pass pending public comment period 10/26/11.	10/11/2011 2:15:40 PM

Total: 3 comment(s)

### **BMP**

<b><u>Type</u></b>	<b><u>Comment</u></b>
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.
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.
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.

Total: 3 comment(s)