

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:

400281994

Date Received:

05/08/2012

PluggingBond SuretyID

20100017

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: ENCANA OIL & GAS (USA) INC

4. COGCC Operator Number: 100185

5. Address: 370 17TH ST STE 1700

City: DENVER State: CO Zip: 80202-5632

6. Contact Name: JENNIFER LIND Phone: (720)876-5890 Fax: (720)876-6890

Email: JENNIFER.LIND@ENCANA.COM

7. Well Name: FLANIGAN Well Number: 2B-6H

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

9. Proposed Total Measured Depth: 11542

WELL LOCATION INFORMATION

10. QtrQtr: NWNW Sec: 6 Twp: 1N Rng: 64W Meridian: 6

Latitude: 40.086740 Longitude: -104.599360

Footage at Surface: 266 feet FNL 927 feet FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 4936 13. County: WELD

14. GPS Data:

Date of Measurement: 04/03/2012 PDOP Reading: 2.2 Instrument Operator's Name: RICE

15. If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: 582 FNL 1503 FWL 460 FSL 1500 FWL  
Sec: 6 Twp: 1N Rng: 64W Sec: 6 Twp: 1N 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: 782 ft

18. Distance to nearest property line: 266 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 700 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		640	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):

SEE ATTACHED MAP

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 432

### 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: \_\_\_\_\_

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	22	16	30	0	80	80	80	0
SURF	12+1/4	9+5/8	40	0	1,020	198	1,020	0
1ST	8+3/4	7	26	0	7,396	903	7,396	500
2ND	6+1/8	4+1/2	13.5	0	11,542	366	11,542	7,096

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

33. Comments ENCANA REQUESTS THE APPROVAL OF A RULE 318A.I.a(1) AND 318A.I.c(1) EXCEPTION LOCATION AS THE WELLS WILL BE LOCATED OUTSIDE A GWA DRILLING WINDOW AND WILL BE LOCATED FURTHER THAN 50' FROM AN EXISTING WELL. REQUEST LETTER AND WAIVERS ARE ATTACHED. ENCANA BELIEVES THAT THE 6 PROPOSED WELLBORES SPACED THROUGHOUT SEC.6-T1N-R64W WILL EFFECTIVELY DRAIN ALL 640 ACRES AND REQUESTS THAT THE SPACING UNIT BE APPROVED AS PROPOSED (ALL OF SEC.6-T1N-R64W).

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: JENNIFER LIND

Title: REGULATORY ANALYST

Date: 5/8/2012

Email: JENNIFER.LIND@ENCANA.C

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: 5/31/2012

API NUMBER

05 123 35691 00

Permit Number: \_\_\_\_\_

Expiration Date: 5/30/2014

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.

Operator must meet water well sampling requirements as per Rule 318A.

- 1)Note surface casing setting depth change from 800' to 1020'. Increase cement coverage accordingly and cement to surface.
- 2)Provide 48 hour notice of MIRU via an electronic Form 42.
- 3)Comply with Rule 317.i and provide cement coverage from the end of the production casing to a minimum of 200' above the Niobrara. Verify coverage with a cement bond log.
- 4)Comply with Rule 321. Run and submit Directional Survey from the TD to surface. 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
2481617	SURFACE CASING CHECK
400281994	FORM 2 SUBMITTED
400282142	30 DAY NOTICE LETTER
400282143	TOPO MAP
400282144	WELL LOCATION PLAT
400282145	DEVIATED DRILLING PLAN
400282146	DIRECTIONAL DATA
400282148	EXCEPTION LOC WAIVERS
400282156	PROPOSED SPACING UNIT
400282172	EXCEPTION LOC REQUEST
400282176	MINERAL LEASE MAP

Total Attach: 11 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Corrected Unit Configuration from"SEC.6" to GWA.	5/31/2012 12:02:03 PM
Permit	Distance to lease line is 0 feet. Horizontal well crosses lease line.	5/31/2012 9:48:51 AM
Permit	No LGD or public comment received; final review completed.	5/31/2012 7:36:41 AM
Permit	This well APD is one of six proposed horizontal wells being drilled from three proposed well pads within the proposed 640 acre wellbore spacing unit intended to develop the Niobrara for the entire section.	5/9/2012 11:28:32 AM
Permit	Wellhead is to be located outside of a GWA drilling window and will be located more than 50' from an existing well location. Operator requests an exception location to 318Aa, 318Ac: Exception request and waiver attached.	5/9/2012 6:14:57 AM
Permit	Changed distance to another well completed in the same formation to 700 feet to reflect the distance to proposed lateral wellbores being drilled from the same pad.	5/9/2012 5:57:52 AM

Total: 6 comment(s)

## BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	<p>Anti-collision BMP:</p> <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>
Drilling/Completion Operations	<p>Best Management Practice for a Horizontal Wellbore Fracturing Stimulation</p> <ol style="list-style-type: none"><li>1. At least seven (7) days prior to fracture stimulation, the operator is to notify all operators of non-operated wells within 300 feet of the wellbore to be fracture stimulated of the anticipated date stimulation date and the recommended best management practice to shut-in all wells within 300' of the stimulated wellbore completed in the same formation.</li><li>2. The operator will monitor the bradenhead pressure of all wells within 300 feet of the well to be fracture stimulated.</li><li>3. Bradenhead pressure gauges are to be installed 24 hours prior to stimulation. The gauges are to read at least once during every 24-hour period until 24-hours after stimulation is completed (post flowback). The gauges are to be of the type able to read current pressure and record the maximum encountered pressure in a 24-hour period. The gauge is to be reset between each 24-hour period. The pressures are to be recorded and saved.</li><li>4. If at any time during stimulation or the 24-hour post-stimulation period, the bradenhead annulus pressure of the treatment well or offset wells increases more than 200 psig, as per Rule 341, the operator of the well being stimulated shall verbally notify the Director as soon as practicable, but no later than twenty-four (24) hours following the incident. Within fifteen (15) days after the occurrence, the operator shall submit a Sundry Notice, Form 4, giving all details, including corrective actions taken.</li></ol>

Total: 2 comment(s)