

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:

400311642

Date Received:

09/04/2012

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) INC4. COGCC Operator Number: 1001855. Address: 370 17TH ST STE 1700City: DENVER State: CO Zip: 80202-56326. Contact Name: JENNIFER LIND Phone: (720)876-5890 Fax: (720)876-6890Email: JENNIFER.LIND@ENCANA.COM7. Well Name: IONE Well Number: 1F-2H

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

9. Proposed Total Measured Depth: 11978

WELL LOCATION INFORMATION

10. QtrQtr: NWNE Sec: 2 Twp: 2N Rng: 66W Meridian: 6Latitude: 40.173440 Longitude: -104.739710

Footage at Surface: 419 feet FNL 1317 feet FEL
 FNL/FSL FEL/FWL

11. Field Name: WATTENBERG Field Number: 9075012. Ground Elevation: 5078 13. County: WELD

14. GPS Data:

Date of Measurement: 07/27/2012 PDOP Reading: 1.9 Instrument Operator's Name: RICE15. 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
583 FNL 165 FEL 460 FSL 200 FEL
 Sec: 2 Twp: 2N Rng: 66W Sec: 2 Twp: 2N Rng: 66W

16. Is location in a high density area? (Rule 603b)? ☐ Yes ☒ No17. Distance to the nearest building, public road, above ground utility or railroad: 1145 ft18. Distance to nearest property line: 419 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 97 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 ☐ 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):

T2N-R66W-SEC.2: ALL; SEC.4: S/2; SEC.8: NE/4, SW/4; SEC.10: E/2, N/2NW/4

25. Distance to Nearest Mineral Lease Line: 200 ft

26. Total Acres in Lease: 1760

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	916	249	916	0
1ST	8+3/4	7	26	0	7,752	950	7,752	616
2ND	6+1/8	4+1/2	13.5	0	11,978	373	11,978	7,452

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 WELL HEAD WILL BE LOCATED OUTSIDE A GWA DRILLING WINDOW AND FURTHER THAN 50' FROM AN EXISTING WELL - REQUEST LETTER AND WAIVERS ATTACHED. ENCANA ALSO REQUESTS THE OMISSION OF OPEN HOLE LOGS - REQUEST LETTER ATTACHED. PROPOSED SPACING UNIT IS T2N-R66W-SEC.1: W/2W/2 AND SEC.2: E/2E/2. ENCANA WILL COMPLY WITH COGCC POLICY FOR BRADENHEAD MONITORING DURING HYDRAULIC FRACTURING TREATMENT IN THE GWA AREA DATED MAY 29, 2012.

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: 9/4/2012 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: Matthew Lee Director of COGCC Date: 10/1/2012

API NUMBER

05 123 36135 00

Permit Number: _____ Expiration Date: 9/30/2014

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 testing requirements per Rule 318A.

Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. (attached)

1)Provide notice of MIRU via an electronic Form 42.
2)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.

Attachment Check List

Att Doc Num	Name
400311642	FORM 2 SUBMITTED
400323287	WELL LOCATION PLAT
400323290	TOPO MAP
400323291	30 DAY NOTICE LETTER
400323294	EXCEPTION LOC WAIVERS
400323295	OTHER
400323305	EXCEPTION LOC REQUEST
400323308	PROPOSED SPACING UNIT
400323310	VARIANCE REQUEST
400323311	DEVIATED DRILLING PLAN
400323313	DIRECTIONAL DATA
400325101	MINERAL LEASE MAP

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	10/1/2012 8:40:46 AM
Permit	Added Bradenhead Monitoring COA for wells within 300'. ok to pass.	9/19/2012 9:14:21 AM
Permit	Reviewed and Approved Operator's request for omission of open hole logs.	9/19/2012 9:14:05 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.	9/19/2012 9:14:04 AM
Permit	Operator requests approval of a Rule 318Am exception location: Wellbore is to be located less than 150' from an existing wellbore. Request and waivers attached.	9/19/2012 9:07:51 AM
Engineer	Evaluated offset wells for adequate cement coverage. Corrected target formation after speaking with operator.	9/17/2012 11:05:45 AM
Permit	Operator corrected mineral lease map attachment and production zone/BHL values match plat.	9/10/2012 2:54:48 PM
Permit	Return to Draft: 1. Mineral lease map is inconsistent with question no. 23. (Question No. 23 requires mineral lease description for proposed wellsite location only; and Mineral lease description for entire lease is inconsistent with attached mineral lease map for entire lease). 2. Footage at production zone is inconsistent with well location plat.	9/5/2012 2:32:54 PM

Total: 8 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	Anti-collision BMP: 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.

Total: 1 comment(s)