

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:

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Date Received:

08/16/2012

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: 1E-2H

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

9. Proposed Total Measured Depth: 12184

WELL LOCATION INFORMATION

10. QtrQtr: NWNE Sec: 2 Twp: 2N Rng: 66W Meridian: 6Latitude: 40.173440 Longitude: -104.739740

Footage at Surface: 419 feet FNL 1327 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
595 FNL 617 FEL 460 FSL 650 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: 1155 ft18. Distance to nearest property line: 419 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 24 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.)
CODELL	CODL		640	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, NW/4

25. Distance to Nearest Mineral Lease Line: 460 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	7,967	978	7,967	616
2ND	6+1/8	4+1/2	13.5	0	12,184	372	12,184	7,667

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

33. Comments ENCANA REQUESTS THE APPROVAL OF A RULE 318A(l).a.1 AND 318A(l).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. ENCANA ALSO REQUESTS THE APPROVAL OF A RULE 318A.m. EXCEPTION LOCATION AS THERE ARE EXISTING WELLS THAT FALL WITHIN 150' OF THE PROPOSED LATERAL - REQUEST LETTER ATTACHED, NO WAIVER REQUIRED AS THE EXISTING WELLS ARE OPERATED BY ENCANA. PROPOSED SPACING UNIT IS T2N-R66W-SEC.2: ALL. ENCANA PLANS TO DRILL 13 HORIZONTAL WELLS SPACED ACROSS SECTION 2 AND BELIEVE THIS CONFIGURATION WILL EFFECTIVELY DRAIN THE 640 ACRE SPACING UNIT. ENCANA WILL COMPLY WITH COGCC POLICY FOR BRADENHEAD MONITORING DURING HYDRAULIC FRACTURING TREATMENTS IN THE GREATER WATTENBERG 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: 8/16/2012 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: 9/21/2012

API NUMBER

05 123 36109 00

Permit Number: _____ Expiration Date: 9/20/2014

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.

- 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.

Operator must meet water well testing requirements per Rule 318A.

Attachment Check List

Att Doc Num	Name
2171254	AQUIFER DEPTH VERIFICATION
2481785	SURFACE CASING CHECK
400311641	FORM 2 SUBMITTED
400316763	DEVIATED DRILLING PLAN
400316764	DIRECTIONAL DATA
400316765	WELL LOCATION PLAT
400316768	EXCEPTION LOC REQUEST
400316769	PROPOSED SPACING UNIT
400316770	VARIANCE REQUEST
400316771	EXCEPTION LOC WAIVERS
400316773	30 DAY NOTICE LETTER
400316774	OTHER
400316775	MINERAL LEASE MAP
400316777	TOPO MAP

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	9/14/2012 4:03:30 PM
Engineer	Evaluated offset wells for adequate cement coverage.	8/28/2012 4:57:17 PM
Permit	Changed Objective formation from NIOBRARA to CODELL per operator. ok to pass.	8/28/2012 3:34:40 PM
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.	8/27/2012 1:49:07 PM
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.	8/27/2012 1:49:07 PM
Permit	Reviewed and Approved Operator's request for omission of open hole logs.	8/27/2012 1:49:05 PM
Permit	Added Bradenhead Monitoring & Anti-collision BMP's per operator.	8/27/2012 1:49:04 PM

Total: 7 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	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.
Drilling/Completion Operations	Operator will comply with COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012. (attached)

Total: 2 comment(s)