

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:

400425861

Date Received:

06/28/2013

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: Erin Hochstetler Phone: (720)876-5827 Fax: ()

Email: erin.hochstetler@encana.com

7. Well Name: Lochbuie Well Number: 2D-31H D165

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

9. Proposed Total Measured Depth: 12079

WELL LOCATION INFORMATION

10. QtrQtr: NWNW Sec: 31 Twp: 1N Rng: 65W Meridian: 6

Latitude: 40.014080 Longitude: -104.712090

Footage at Surface: 350 feet FNL/FSL 1136 feet FEL/FWL
 FNL FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 5007 13. County: WELD

14. GPS Data:

Date of Measurement: 04/18/2013 PDOP Reading: 2.0 Instrument Operator's Name: JOHN RICE

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
 603 FNL 1304 FWL 460 FSL 1300 FWL
 Sec: 31 Twp: 1N Rng: 65W Sec: 31 Twp: 1N Rng: 65W

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: 305 ft

18. Distance to nearest property line: 350 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.)
CODELL	CODL		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):

See attached lease map.

25. Distance to Nearest Mineral Lease Line: 0 ft

26. Total Acres in Lease: 58

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
1ST	8+3/4	7	26	0	7854	445	7854	1020
2ND	6+1/8	4+1/2	13.5	0	12078	173	12078	7554
CONDUCTOR	22	16	30	0	80	80	80	0
SURF	12+1/4	9+5/8	40	0	1320	165	1320	0

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

33. Comments Encana requests the approval of a 318A(l).a.(1) and 318A(l).c(1) exception location as the well head is to be located outside of a GWA drilling window and further than 50' from an existing well. Request letter and waivers attached. Encana also requests the approval of the omission of open hole logs, request letter attached. Proposed spacing unit is W/2 Section 31. Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is greater than 460'. The distance to nearest well permitted/completed in the same formation (BHL) was measured from the Lochbuie 2B-31H D165, which has not yet been drilled.

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: Erin Hochstetler

Title: Permitting Technician

Date: 6/28/2013

Email: erin.hochstetler@encana.com

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: 8/7/2013

API NUMBER

05 123 37786 00

Permit Number: _____

Expiration Date: 8/6/2015

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.

COA Type	Description
	Operator must meet water well testing requirements per Rule 318A.
	1)Provide notice of MIRU via an electronic Form 42. 2)Comply with Rule 317.i and provide cement coverage to a minimum of 200' above the Niobrara. Verify cement coverage with a cement bond log per 317.o.
	Operator acknowledges the proximity of the Lutz #1-A (API# 123-09422) well. 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>
2114171	MINERAL LEASE MAP
2482458	SURFACE AGRMT/SURETY
400425861	FORM 2 SUBMITTED
400433244	DEVIATED DRILLING PLAN
400433246	WELL LOCATION PLAT
400433678	30 DAY NOTICE LETTER
400433753	PROPOSED SPACING UNIT
400433754	EXCEPTION LOC WAIVERS
400433758	OTHER
400433759	EXCEPTION LOC REQUEST
400439576	OFFSET WELL EVALUATION
400441661	DIRECTIONAL DATA

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Operator sent revised lease map showing one 58 acre lease below the surface location. Corrected acreage in lease to 58. Ready to pass pending public comment.	7/15/2013 1:33:35 PM
Permit	Lease description does not match map.	7/11/2013 1:04:59 PM
Engineer	Evaluated offset wells for adequate isolation.	7/3/2013 10:11:17 AM
Permit	This form has passed completeness.	7/2/2013 10:07:47 AM
Permit	Back to draft. Dir. Data Template doesn't match Survey.	7/1/2013 9:25:52 AM

Total: 5 comment(s)

Best Management Practices

No	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Encana will comply with the "COGCC Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area", dated May 29, 2012.
2	Drilling/Completion Operations	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: 2 comment(s)