

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



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Date Received:

07/25/2013

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 &amp; 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: Bonnie Lamond Phone: (720)876-5156 Fax: ()

Email: bonnie.lamond@encana.com

7. Well Name: Waste Connections Well Number: 3G-29H-M168

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

9. Proposed Total Measured Depth: 16157

## WELL LOCATION INFORMATION

10. QtrQtr: NESW Sec: 29 Twp: 1N Rng: 68W Meridian: 6

Latitude: 40.018900 Longitude: -105.031730

Footage at Surface: 1509 feet FNL/FSL 1451 feet FEL/FWL  
 FSL FWL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 5141 13. County: WELD

## 14. GPS Data:

Date of Measurement: 02/20/2013 PDOP Reading: 2.2 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  
 1271 FSL 2243 FWL 1350 FNL 2300 FWL  
 Sec: 29 Twp: 1N Rng: 68W Sec: 20 Twp: 1N Rng: 68W

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: 1497 ft

18. Distance to nearest property line: 228 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 115 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 ☐ Indian23. Is the Surface Owner also the Mineral Owner? ☐ Yes ☒ No Surface Surety ID#: 2009001123a. 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):

T1N, R68W: Section 29: SE/4NW/4, and other lands. Horizontal Wellbore crosses lease lines within drilling and spacing unit; distance to unit boundary is at least 460'

25. Distance to Nearest Mineral Lease Line: 0 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: \_\_\_\_\_

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	
SURF	12+1/4	9+5/8	40#	0	800	100	800	
1ST	8+3/4	7	26#	0	8206	466	8206	500
2ND	6+1/8	4+1/2	13.5#	0	16156	313	16156	7906

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

33. Comments Encana Oil & Gas (USA) Inc. requests the approval of a 318A(I).c(1) exception location as the well head is to be located further than 50' from an existing well. Request letter and waiver attached. This well is closer than 150' to the nearest permitted or producing BHL. A 318A.m. variance request letter and waivers are attached. Encana Oil & Gas (USA) Inc. also requests the approval of the omission of open hole logs, request letter attached. Proposed unit configuration is T1N, R68W: Section 20: E/2W/2, W/2E/2 Section 29: E/2W/2, W/2E/2. Before any operations commence, a town permit will be submitted to the Town of Erie. Erie BMPs attached.

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: Bonnie Lamond

Title: Permitting Analyst Date: 7/25/2013 Email: bonnie.lamond@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: Matthew Lee Director of COGCC Date: 9/25/2013

#### API NUMBER

05 123 38126 00

Permit Number: \_\_\_\_\_ Expiration Date: 9/24/2015

#### 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.

**Description**

Operator acknowledges the proximity of the Costigan H Unit 1 (API# 123-12414) and the Pratt 'F' Unit 1, (API NO 123-17769) wells. Operator agrees to: provide mitigation option 1 or 2 (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.

- 1) Note surface casing setting depth change from 803' to 850'. Increase cement coverage accordingly.
- 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 3) Comply with Rule 317.i and provide cement coverage from the bottom of the 7" casing shoe to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 4) Run and submit Directional Survey from TD to base of surface casing. The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.

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

**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**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400428090	FORM 2 SUBMITTED
400447806	MINERAL LEASE MAP
400447807	EXCEPTION LOC REQUEST
400447808	OTHER
400447809	WELL LOCATION PLAT
400447810	EXCEPTION LOC WAIVERS
400447815	DIRECTIONAL DATA
400447825	DEVIATED DRILLING PLAN
400449633	VARIANCE REQUEST
400449634	PROPOSED SPACING UNIT
400449636	30 DAY NOTICE LETTER
400453408	PROPOSED BMPs
400453410	OFFSET WELL EVALUATION

Total Attach: 13 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	9/24/2013 12:12:37 PM
Permit	ok to pass.	8/15/2013 4:09:57 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.	8/15/2013 4:09:56 PM
Permit	Operator requests approval of a Rule 318Ac exception location: Wellhead is to be located more than 50' from an existing well location. Request and waiver attached.	8/15/2013 4:09:55 PM
Permit	Operator's request for omission of open hole logs.	8/15/2013 4:09:54 PM
Permit	Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 460'.	8/15/2013 4:09:53 PM
LGD	The Town of Erie concurs with the EnCana Oil Gas (USA) Inc. request that the Erie BMP's identified on Form 2 and attached thereto, be conditions of approval of the issuance of this permit.	8/13/2013 11:21:17 AM

Total: 7 comment(s)

## Best Management Practices

No	BMP/COA Type	Description
1	Community Outreach and Notification	Prior to commencement of any new drilling or completion operations, provide notification to landowners within one-half (1/2) mile of the well-site.
2	Community Outreach and Notification	Prior to commencement of any new drilling or completion operations, provide to an Erie designated staff member the following for the well-site for informational purposes only, which Encana may revise from time to time during operations: a) A summary of planned operations, including identified access points and operational timeline, for posting to a local community information web-page b) A site plan for site preparation, mobilization and demobilization c) A plan for interim reclamation and vegetation of the site and final reclamation of the site d) A plan for noise, light and dust mitigation, to the extent feasible e) A traffic management plan f) Updates of this information if any change during operations
3	Construction	Maximize equipment and wellhead setbacks from occupied buildings and residences to the extent feasible and practicable, as determined by Encana.
4	Drilling/Completion Operations	Utilize a high-low pressure vessel (HLP) and vapor recovery unit (VRU) for new wells drilled. Encana may remove the VRU system at such time Encana determines that the VRU system is no longer necessary due to reduced emission recoveries and/or efficiencies, but no earlier than one (1) year after the new well is drilled
5	Drilling/Completion Operations	Utilize steel-rim berms around tanks and separators instead of sand or soil berms
6	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.
7	Drilling/Completion Operations	Utilize closed-loop systems for drilling and completion operations to minimize the need for earthen pits
8	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 well path 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: 8 comment(s)