

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:

400261895

Date Received:

03/19/2012

PluggingBond SuretyID

20100017

APPLICATION FOR PERMIT TO:

1. ☒ Drill, ☐ Deepen, ☐ Re-enter, ☐ Recomplete and Operate

2. TYPE OF WELL

OIL ☐ GAS ☐ COALBED ☐ OTHER ☐ OIL & GAS ☐
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: COSTIGAN Well Number: 0-8-20

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

9. Proposed Total Measured Depth: 8729

WELL LOCATION INFORMATION

10. QtrQtr: NWSW Sec: 20 Twp: 1N Rng: 68W Meridian: 6

Latitude: 40.033580 Longitude: -105.033550

Footage at Surface: 1571 feet FSL 996 feet FWL

11. Field Name: WATTENBERG Field Number: 90750

12. Ground Elevation: 5088 13. County: WELD

14. GPS Data:

Date of Measurement: 02/01/2010 PDOP Reading: 2.2 Instrument Operator's Name: CRAIG BURKE

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
50 FSL 50 FWL 50 FSL 50 FWL
Sec: 20 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: 609 ft

18. Distance to nearest property line: 254 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 802 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		160	GWA
J SAND	JSND		160	GWA
NIOBRARA	NBRR		160	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):

S2SW SEC. 20-T1N-R68W

25. Distance to Nearest Mineral Lease Line: 50 ft

26. Total Acres in Lease: 80

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
SURF	12+1/4	8+5/8	24	0	900	390	900	0
1ST	7+7/8	4+1/2	11.6	0	8,729	300	8,729	7,564

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

33. Comments No conductor casing will be used. Proposed spacing unit is SWSW Sec 20, SESE Sec 19, NENE Sec 30, NWNW Sec 29. The wells have not yet been drilled (so the pad has not been constructed). Everything on the current form 2A is relevant, and will not change.

34. Location ID: 335767

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: 3/19/2012 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: 5/2/2012

API NUMBER

05 123 31522 00

Permit Number: _____ Expiration Date: 5/1/2014

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) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.
- 2) Comply with Rule 317.i and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log.
- 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. 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.

1. Operator shall utilize pitless (closed loop) drilling.
2. Flowback and stimulation fluids shall be managed in tanks.
3. Operator shall utilize green completion practices as described in Rule 805.b.(3).

Attachment Check List

Att Doc Num	Name
400261895	FORM 2 SUBMITTED
400262554	PROPOSED SPACING UNIT
400262555	DEVIATED DRILLING PLAN
400262556	WELL LOCATION PLAT
400262557	MINERAL LEASE MAP
400262558	TOPO MAP
400262559	SURFACE AGRMT/SURETY
400262562	30 DAY NOTICE LETTER
400262563	DIRECTIONAL DATA

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. LGD comment addressed (see COA's added); no public comment received.	5/2/2012 11:38:16 AM
Permit	ON HOLD: w/o for the operator and COGCC to address the LGD comments. Removed spacing order numbers as wells are under Rule 318A GWA.	4/27/2012 3:04:24 PM
Agency	message to operator re: pitless & BMPs. conversation with Erie LGD re: area of authority, process of refile, BMPs	4/10/2012 3:59:47 PM
Permit	ON HOLD: w/o for the operator and COGCC to address the LGD comments.	4/9/2012 3:30:29 PM
LGD	<p>1. Operator shall utilize pitless, entirely closed loop systems for drilling, completion and re-completion operations.</p> <p>2. Operator shall utilize high-low pressure vessels (HLP's) for separating produced gases and liquids.</p> <p>3. Operator shall outfit all condensate tanks, crude oil tanks and produced water tanks that are capable of emitting volatile organic compounds with Vapor Recovery Units (VRU's) capable of achieving 100% control efficiency of VOC's.</p> <p>4. Operator shall utilize steel rimmed berms around tanks and separators. Steel berms shall be painted to match the adjacent tanks.</p> <p>5. Operator shall utilize light shielding/shrouding techniques to reduce light pollution impacts on adjacent residential areas.</p> <p>6. Operator shall utilize sound mitigation techniques to reduce sound pollution on adjacent residential areas.</p> <p>7. Operator shall obtain Right-of-Way Permit(s) and a Grading and Stormwater Permit(s) from the Town of Erie prior to commencement of site work.</p>	4/3/2012 10:42:39 AM
Permit	Okay to pass pending public comment 4/08/12.	3/26/2012 9:32:33 AM

Total: 6 comment(s)

BMP

<u>Type</u>	<u>Comment</u>

Total: 0 comment(s)