

State of Colorado
Oil and Gas Conservation Commission

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Document Number:

400328255

Date Received:

09/20/2012

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) INC 4. COGCC Operator Number: 100185
5. Address: 370 17TH ST STE 1700
- City: DENVER State: CO Zip: 80202-5632
6. Contact Name: JENNIFER LIND Phone: (720)876-5890 Fax: (720)876-6890
- Email: JENNIFER.LIND@ENCANA.COM
7. Well Name: LIBERTY Well Number: 2D-21H
8. Unit Name (if appl): Unit Number:
9. Proposed Total Measured Depth: 11624

WELL LOCATION INFORMATION

10. QtrQtr: NENW Sec: 21 Twp: 3N Rng: 68W Meridian: 6
Latitude: 40.215200 Longitude: -105.008780

			FNL/FSL		FEL/FWL
Footage at Surface:	1235	feet	FNL	2381	feet
					FWL

11. Field Name: WATTENBERG Field Number: 90750
12. Ground Elevation: 5023 13. County: WELD

- #### 14. GPS Data:

Date of Measurement: 07/23/2012 PDOP Reading: 1.4 Instrument Operator's Name: 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				
<u>1489</u>		<u>FNL</u>		<u>1758</u>		<u>FWL</u>		<u>1450</u>		<u>FNL</u>		<u>2191</u>		<u>FEL</u>	
Sec:	21	Twp:	3N	Rng:	68W	Sec:	20	Twp:	3N	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: 240 ft

18. Distance to nearest property line: 259 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 142 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 ☐ 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):

T3N-R68W-SEC.20: NE/4; SEC.21: NW/4

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	0
SURF	12+1/4	9+5/8	40	0	800	218	800	0
1ST	8+3/4	7	26	0	7,575	927	7,575	500
2ND	6+1/8	4+1/2	13.5	0	11,624	359	11,624	7,275

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

33. Comments ENCANA REQUESTS THE APPROVAL OF A RULE 318A(l).a.(1) EXCEPTION LOCATION AS THE WELL WILL BE LOCATED OUTSIDE OF A GWA DRILLING WINDOW, REQUEST LETTER AND WAIVER ATTACHED. ENCANA WILL COMPLY WITH COGCC POLICY FOR BRADENHEAD MONITORING DURING HYDRAULIC FRACTURING TREATMENTS IN THE GREATER WATTENBERG AREA DATED MAY 29, 2012. PROPOSED SPACING UNIT IS T3N-R68W-SEC.20: NE/4; SEC.21: NW/4.

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: 9/20/2012 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:  Director of COGCC Date: 10/26/2012

API NUMBER

05 123 36204 00

Permit Number: _____ Expiration Date: 10/25/2014

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

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

- 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.

Attachment Check List

Att Doc Num	Name
400328255	FORM 2 SUBMITTED
400329031	PROPOSED SPACING UNIT
400329032	30 DAY NOTICE LETTER
400329033	EXCEPTION LOC REQUEST
400329034	EXCEPTION LOC WAIVERS
400329035	VARIANCE REQUEST
400329036	MINERAL LEASE MAP
400329037	TOPO MAP
400329038	WELL LOCATION PLAT
400329039	DEVIATED DRILLING PLAN
400329040	DIRECTIONAL DATA

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	10/26/2012 11:36:15 AM
Permit	Horizontal wellbore crosses lease lines within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 467'. ok to pass.	10/1/2012 9:57:52 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.	10/1/2012 9:57:51 AM
Permit	Operator requests approval of a Rule 318Aa exception location: Wellhead is to be located outside of a GWA drilling window. Request and Waiver attached.	10/1/2012 9:57:51 AM
Permit	This form has passed completeness.	9/23/2012 5:18:10 PM

Total: 5 comment(s)

BMP

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

Total: 1 comment(s)