

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:

400360332

Date Received:

12/20/2012

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

Email: erin.hochstetler@encana.com

7. Well Name: State Well Number: 1H-16H

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

9. Proposed Total Measured Depth: 11676

WELL LOCATION INFORMATION

10. QtrQtr: SENE Sec: 16 Twp: 3N Rng: 68W Meridian: 6

Latitude: 40.228760 Longitude: -105.000250

Footage at Surface: 1623 feet FNL 466 feet FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 5016 13. County: WELD

14. GPS Data:

Date of Measurement: 12/01/2012 PDOP Reading: 1.7 Instrument Operator's Name: RICE

15. If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: 2556 FNL 750 FEL 2500 FNL 460 FEL
Sec: 16 Twp: 3N Rng: 68W Sec: 16 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: 451 ft

18. Distance to nearest property line: 424 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 380 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 #: 1392

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):

N2 Sec. 16 T3N, R68W.

25. Distance to Nearest Mineral Lease Line: 147 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	100	800	0
1ST	8+3/4	7	26	0	7,645	433	7,645	500
2ND	6+1/8	4+1/2	13.5	0	11,676	166	11,676	7,345

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

33. Comments Encana requests the approval of a 318A(I).a.(1) exception location as the well head is to be located outside of a GWA drilling window. Request letter and waivers attached. Encana also requests the approval of the omission of open hole logs, request letter attached. Proposed spacing unit is S/2N/2 & N/2S/2 Sec. 16 T3N, R68W.

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: 12/20/2012 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: Matthew Lee Director of COGCC Date: 2/22/2013

API NUMBER

05 123 36854 00

Permit Number: _____ Expiration Date: 2/21/2015

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.

- 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.

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

Att Doc Num	Name
1695426	EXCEPTION LOC WAIVERS
1695427	PROPOSED SPACING UNIT
1695508	CORRESPONDENCE
1772242	SURFACE CASING CHECK
400360332	FORM 2 SUBMITTED
400360825	30 DAY NOTICE LETTER
400360826	DEVIATED DRILLING PLAN
400360827	DIRECTIONAL DATA
400361088	EXCEPTION LOC REQUEST
400361092	OTHER
400361093	MINERAL LEASE MAP
400364359	WELL LOCATION PLAT

Total Attach: 12 Files

General Comments

User Group	Comment	Comment Date
Permit	Removed comment stating that the wellbores cross any lease lines. Changed distance to nearest lease line from 0' to 147' per operator. ok to pass.	2/22/2013 8:30:23 AM
Permit	Final Review Completed. Public comment addressed (see form 2A doc 400361026); no LGD comment received.	2/19/2013 8:47:32 AM
Permit	The comment period was extended to January 22 per request of Weld County LGD. Related correspondence from the Town of Mead is attached. Surface Restoration Bond on file with SLB; per Tim Kelly. ok to pass.	2/5/2013 2:28:27 PM
Public	<p>We are the adjacent land owners to the proposed State 1A-H - 16 wells and State 23-16 well and our property is currently being annexed and zoned with the Town of Mead. Notification as required to owners within 500 was not provided by the Operator. Our understanding of the proposed COGCC new rules will require a 500 no build setback from the well heads and production facilities locations. This 500 setback will encroach into our property, which we consider to be a takings of our property and property rights, and a violation of our No Surface Occupancy Agreement with the mineral owner. We request a consultation with the Operator prior to application approval, any drilling, or installation of facilities so we can verify the location will not impact the development of our property. Additionally, no BMPs were listed on the application. Since our property will be platted for attached and detached single-family residential we request the COGCC add requirements that the Operator install appropriate BMPs around the well heads</p> <p>and facilities locations to mitigate visual and noise nuisances to future adjacent homeowners.</p>	1/21/2013 2:22:54 PM
Permit	Received and attached signed Exception Loc Waiver & Proposed Spacing Unit map. Added State Mineral lease number 1392. Form 2A doc #400361026 State SENE 1D-16H-3-68 has been submitted.	1/15/2013 2:08:12 PM
Engineer	asking for omission of open hole logs and there are none in the quarter section - one well needs to run logs	1/14/2013 10:08:08 AM
Permit	ON HOLD: Requesting signed Exception Loc Waiver, Proposed Spacing Unit map, State Mineral lease number & form 2A. Emailed Tim Kelly and Sherry Lee at SLB for verification of Surface Restoration Bond.	1/9/2013 3:13:48 PM
Permit	Horizontal wellbore crosses lease line within drilling and spacing unit; distance to lease line is 0'; distance to unit boundary is 460'.	1/9/2013 3:13:47 PM
Permit	Operator's request for omission of open hole logs.	1/9/2013 3:13:46 PM
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.	1/9/2013 3:13:44 PM
Permit	operator removed PZL from plat. This form passed completeness.	1/3/2013 10:35:31 PM
Permit	Return to draft: 1. question #15, submitted PZL, does not match plat PZL (2500'FNL/460'FEL).	12/22/2012 12:18:13 AM

Total: 12 comment(s)

BMP

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

Total: 2 comment(s)