

FORM
2

Rev
12/05

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE	ET	OE	ES
Document Number: 400233722			
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: IONE Well Number: 4B-10H
8. Unit Name (if appl): _____ Unit Number: _____
9. Proposed Total Measured Depth: 11930

WELL LOCATION INFORMATION

10. QtrQtr: SWSE Sec: 10 Twp: 2N Rng: 66W Meridian: 6
Latitude: 40.146240 Longitude: -104.760220

Footage at Surface: 300 feet FNL/FSL 1791 feet FEL/FWL FEL

11. Field Name: WATTENBERG Field Number: 90750
12. Ground Elevation: 4995 13. County: WELD

14. GPS Data:

Date of Measurement: 12/08/2011 PDOP Reading: 2.5 Instrument Operator's Name: BURKE

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

Footage at Top of Prod Zone: FNL/FSL 542 FSL 2109 FEL 460 FEL/FWL 1436 FEL 66W
Sec: 10 Twp: 2N Rng: 66W Sec: 10 Twp: 2N Rng: 66W

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: 297 ft

18. Distance to nearest property line: 300 ft 19. Distance to nearest well permitted/completed in the same formation(BHL): 66 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	407	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):

SEE ATTACHED MAP

25. Distance to Nearest Mineral Lease Line: 460 ft

26. Total Acres in Lease: 1437

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	860	198	860	0
1ST	8+3/4	7	26	0	7,590	927	7,590	500
2ND	6+1/8	4+1/2	13.5	0	11,930	382	11,930	7,290

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

33. Comments CONDUCTOR CASING WILL BE UTILIZED. ENCANA REQUESTS THE APPROVAL OF THE OMISSION OF OPEN HOLE LOGS - REQUEST LETTER ATTACHED. ENCANA ALSO REQUESTS THE APPROVAL OF AN EXCEPTION LOCATION TO RULE 318A(l).c.(1) AND RULE 318A(l).a.(1) AS THE WELL HEAD IS TO BE LOCATED FURTHER THAN 50 FEET FROM AN EXISTING WELL AND OUTSIDE OF THE DRILLING WINDOW. WAIVERS AND REQUEST LETTER ATTACHED. PROPOSED SPACING UNIT IS THE E/2-SEC.10-T2N-R66W.

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: 12/20/2011 Email: JENNIFER.LIND@ENCANA.

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: David S. Nesline

Director of COGCC Date: 1/15/2012

API NUMBER

05 123 34948 00

Permit Number: _____ Expiration Date: 1/14/2014

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.

Water sampling required, need anti-collision and frac monitoring BMPs. Opr notified.

- 1)Note surface casing setting depth change from 800' to 860'. Increase cement coverage accordingly and cement to surface.
- 2)Provide 24 hour notice of MIRU to Mike Hickey via e-mail at mike.hickey@state.co.us.
- 3)Comply with Rule 317.i and provide cement coverage from the end of the production casing to a minimum of 200' above the Niobrara and from 200' below Sussex to 200' above Sussex. Verify coverage with a cement bond log.
- 4)Comply with Rule 321. Run and submit Directional Survey from the end of production casing 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
2481358	SURFACE CASING CHECK
400233722	APD APPROVED
400234544	TOPO MAP
400234545	WELL LOCATION PLAT
400234546	EXCEPTION LOC REQUEST
400234547	OTHER
400234548	MINERAL LEASE MAP
400234550	30 DAY NOTICE LETTER
400234551	DEVIATED DRILLING PLAN
400234556	EXCEPTION LOC WAIVERS
400234605	PROPOSED SPACING UNIT
400241129	FORM 2 SUBMITTED

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	1/13/2012 8:15:28 AM
Permit	Added BMP's as directed by opr. Ready to pass pending public comment 1/11/12.	12/28/2011 8:24:10 AM
Permit	Operator corrected #16. This form has passed completeness.	12/21/2011 10:23:33 AM
Permit	Returned to draft. Missing #16. Operator corrected spacing unit.	12/21/2011 8:12:42 AM
Permit	Returned to draft. Missing #16. Operator comments has spacing unit in W/2 well is in E/2 of sect 10.	12/21/2011 7:22:43 AM

Total: 5 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Drilling/Completion Operations	<p>Best Management Practice for a Horizontal Wellbore Fracturing Stimulation</p> <ol style="list-style-type: none">1. At least seven (7) days prior to fracture stimulation, the operator is to notify all operators of non-operated wells within 300 feet of the wellbore to be fracture stimulated of the anticipated date stimulation date and the recommended best management practice to shut-in all wells within 300' of the stimulated wellbore completed in the same formation.2. The operator will monitor the bradenhead pressure of all wells within 300 feet of the well to be fracture stimulated.3. Bradenhead pressure gauges are to be installed 24 hours prior to stimulation. The gauges are to read at least once during every 24-hour period until 24-hours after stimulation is completed (post flowback). The gauges are to be of the type able to read current pressure and record the maximum encountered pressure in a 24-hour period. The gauge is to be reset between each 24-hour period. The pressures are to be recorded and saved.4. If at any time during stimulation or the 24-hour post-stimulation period, the bradenhead annulus pressure of the treatment well or offset wells increases more than 200 psig, as per Rule 341, the operator of the well being stimulated shall verbally notify the Director as soon as practicable, but no later than twenty-four (24) hours following the incident. Within fifteen (15) days after the occurrence, the operator shall submit a Sundry Notice, Form 4, giving all details, including corrective actions taken.
Drilling/Completion Operations	<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: 2 comment(s)