

FORM  
2

Rev  
08/13

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:

400868166

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER \_\_\_\_\_

Refilling ☒

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Date Received:

09/01/2015

Well Name: Waste Connections

Well Number: 3G-29H-M168

Name of Operator: ENCANA OIL & GAS (USA) INC

COGCC Operator Number: 100185

Address: 370 17TH ST STE 1700

City: DENVER

State: CO

Zip: 80202-5632

Contact Name: Erin Lind

Phone: (720)876-5827

Fax: ( )

Email: erin.lind@encana.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100017

WELL LOCATION INFORMATION

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

Latitude: 40.018900

Longitude: -105.031730

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

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 5141

County: WELD

GPS Data:

Date of Measurement: 02/02/2013 PDOP Reading: 2.2 Instrument Operator's Name: John Rice

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

Footage at Top of Prod Zone: FNL/FSL FSL 1272 FSL 2240 FWL 1350 FNL 2300 FWL  
Sec: 29 Twp: 1N Rng: 68W Sec: 20 Twp: 1N Rng: 68W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: ☐ is the mineral owner beneath the location.

(check all that apply) ☐ is committed to an Oil and Gas Lease.

☐ has signed the Oil and Gas Lease.

☐ is the applicant.

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed by this Well: Yes

The right to construct the Oil and Gas Location is granted by: Bond

Surface damage assurance if no agreement is in place: Blanket

Surface Surety ID: 20090011

## LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

T1N, R68W: Section 29: SE/4NW/4 and other lands.

Total Acres in Described Lease: 320 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # \_\_\_\_\_

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1621 Feet  
Building Unit: 1621 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 1497 Feet  
Above Ground Utility: 3951 Feet  
Railroad: 9785 Feet  
Property Line: 228 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☐ Buffer Zone  
☐ Exception Zone  
☐ Urban Mitigation Area

- Buffer Zone – as described in Rule 604.a.(2), within 1,000' of a Building Unit
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: \_\_\_\_\_

## SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 115 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 929 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

## SPACING & FORMATIONS COMMENTS

Spacing Unit: T1N, R68W: Sec. 20: E/2W/2 & W/2E/2 Sec. 29: E/2W/2 & W/2E/2

## OBJECTIVE FORMATIONS

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

## DRILLING PROGRAM

Proposed Total Measured Depth: 16157 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 115 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? No

BOP Equipment Type: ☒ Annular Preventor ☒ Double Ram ☒ Rotating Head ☐ None

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Land application

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 431606 or Document Number:

## CASING PROGRAM

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	36	0	851		851	0
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

☐ Conductor Casing is NOT planned

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318A.a. Exception Location (GWA Windows).
- ☒ Rule 318A.c. Exception Location (GWA Twinning).

## RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number

## OTHER LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318.c. Exception Location from Rule or Spacing Order Number
- ☐ Rule 603.a.(2) Exception Location (Property Line Setback).

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

## OPERATOR COMMENTS AND SUBMITTAL

Comments

The pad has been built and there will be no additional surface disturbance required. The location does not require a variance from any of the rules listed in Rule 306.d.(1).(A).(ii). No Form 2A required. Town of Erie BMPs included. There have been no changes to the original permit and the original offset evaluation is still valid. There have been no changes to the location. I certify that there have been no changes on land use, or lease description.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 434375

Is this application being submitted with an Oil and Gas Location Assessment application? 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 Lind

Title: Regulatory Analyst Date: 9/1/2015 Email: erin.lind@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: 11/16/2015

Expiration Date: 11/15/2017

### API NUMBER

05 123 38126 00

## Conditions Of Approval

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.

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	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
2	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.
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 closed-loop systems for drilling and completion operations to minimize the need for earthen pits
5	Drilling/Completion Operations	Utilize steel-rim berms around tanks and separators instead of sand or soil berms
6	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 asconstructed gyro survey will be submitted to COGCC with the Form 5.
7	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.
8	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
9	Drilling/Completion Operations	One of the first wells drilled on the pad will be logged with Cased-hole Pulsed Neutron Log with Gamma Ray Log from TD into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run in that well and have those logs attached. The Form 5 for each well shall clearly state "No open-hole logs were run" and shall reference the Rule 317.p Exception granted for the well.

Total: 9 comment(s)

## **Applicable Policies and Notices to Operators**

Policy
Notice Concerning Operating Requirements for Wildlife Protection. <a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a>
Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area. <a href="http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf">http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf</a>

## **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400868166	FORM 2 SUBMITTED
400893508	WELL LOCATION PLAT
400893510	OPEN HOLE LOGGING EXCEPTION

Total Attach: 3 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Changed distance to nearest unit boundary from 460' to 929'. Final Review Completed.	11/13/2015 9:47:15 AM
Permit	Permitting Review Complete.	11/4/2015 12:28:27 PM
Permit	Operator requested Exception to Open Hole Logging Rule 317.p. See attached.	11/4/2015 12:28:26 PM
Permit	Pass completeness	9/10/2015 2:14:17 PM

Total: 4 comment(s)