

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:

400873937

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:

07/30/2015

Well Name: Pratt

Well Number: 4D-29H-P168

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: SESE Sec: 29 Twp: 1N Rng: 68W Meridian: 6

Latitude: 40.016602

Longitude: -105.022463

Footage at Surface: 677 feet FNL/FSL FSL 1211 feet FEL/FWL FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 5176

County: WELD

GPS Data:

Date of Measurement: 02/20/2013 PDOP Reading: 1.9 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 764 FSL 1574 FEL FEL 1050 FNL 1550 FEL
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: Surface Use Agreement

Surface damage assurance if no agreement is in place: Surface Surety ID:

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 20: N/2.

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: 774 Feet
Building Unit: 774 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1201 Feet
Above Ground Utility: 4653 Feet
Railroad: 5280 Feet
Property Line: 677 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: 129 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

T1N, R68W: Sec. 20: E/2 Sec. 29: E/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: 16657 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 129 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S 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: 431609 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	950	111	950	0
1ST	8+3/4	7	26	0	7937	450	7937	589
2ND	6+1/8	4+1/2	13.5	0	16657	342	16657	7637

☐ 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

I certify that there have been no changes on land use or lease description. There have been no changes to the wellbore. The offset evaluation spreadsheet on file is still accurate. No Form 2A required. Town of Erie BMPs included. The existing Pratt 29-3 well has sufficient logging data, see exception letter attached. There have been no changes to the location.

The wellbore integrity contact is Megan Molholm, 303-774-3980.

Per operator added comment on summit tab for Rule 317.r & s. Attached Exception Location Request letter for exception to Designated setback location Rule 604.a. Permit Review Complete.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 434526

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: 7/30/2015 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: 10/5/2015

Expiration Date: 10/04/2017

API NUMBER

05 123 38226 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.

COA Type

Description

	<p>Operator acknowledges the proximity of the listed non-operated wells. Operator agrees to provide mitigation Option 1 or 2 (per the DJ Basin Horizontal Offset Policy), ensure all applicable documentation is submitted, and submit Form 42(s) ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API Number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>Carr 1 (API NO 123-10017) Pezoldt 1-32 (API NO 123-15040)</p>
	<p>Operator acknowledges the proximity of the listed wells. Operator agrees to provide mitigation Option 1 or 2 (per the DJ Basin Horizontal Offset Policy), ensure all applicable documentation is submitted, and submit a Form 42(s) ("OFFSET MITIGATION COMPLETED") for the remediated wells, referencing the API Number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.</p> <p>William H Peltier 2 (API NO 123-12614)</p>
	<p>1) Note surface casing depth change from 889' to 950'. Increase cement volumes accordingly. 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 3) Comply with Rule 317.j and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 4) 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.</p>

Best Management Practices

No BMP/COA Type

Description

1	Planning	Maximize equipment and wellhead setbacks from occupied buildings and residences to the extent feasible and practicable, as determined by Encana.
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	Community Outreach and Notification	<p>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:</p> <p>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</p>
4	Material Handling and Spill Prevention	Utilize steel-rim berms around tanks and separators instead of sand or soil berms
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.

6	Drilling/Completion Operations	Prior to drilling operations, Encana 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, the 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.
7	Drilling/Completion Operations	No drill stem tests will be performed.
8	Drilling/Completion Operations	Backup stabbing valves shall be required on well servicing operations during reverse circulation. Valves shall be pressure tested before each well servicing operation using both low-pressure air and high-pressure fluid.
9	Drilling/Completion Operations	Adequate blowout prevention equipment will be used on all well servicing operations.
10	Drilling/Completion Operations	Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections will be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results will be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable.
11	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
12	Drilling/Completion Operations	Utilize closed-loop systems for drilling and completion operations to minimize the need for earthen pits
13	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: 13 comment(s)

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
400873937	FORM 2 SUBMITTED
400876712	WELL LOCATION PLAT
400883044	OPEN HOLE LOGGING EXCEPTION

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	10/1/2015 3:09:27 PM
OGLA	Additional BMPs attached to location file under Correspondence doc no. 1668828.	10/1/2015 1:59:24 PM
Engineer	Offset wells evaluated.	9/21/2015 5:39:34 PM
Permit	Per operator added comment on summit tab for Rule 317.r & s. Attached Exception Location Request letter for exception to Designated setback location Rule 604.a. Permit Review Complete.	9/18/2015 3:54:57 PM
Permit	ON HOLD: Requesting operator comment on Rule 317.r & s and Exception Location Request letter for exception to Designated setback location Rule 604.a. Requesting Deviated drilling plan and Directional data since TOZ has changed.	9/17/2015 11:30:52 AM
Permit	Operator requested Exception to Open Hole Logging Rule 317.p. See attached.	9/17/2015 11:30:51 AM
Permit	A task has been opened for an Oil & Gas Location Specialist to review the documents.	8/17/2015 1:03:10 PM
Permit	Passed completeness.	8/14/2015 9:28:21 AM
Permit	Returned to draft. 1.) The Offset Wells Evaluation attachment and data is missing. 2.) Operator's Wellbore Integrity Contact email is blank.	8/12/2015 8:38:49 AM
Permit	Returned to draft. 1.) Open Hole Logging BMP does not follow the guidelines.	8/11/2015 1:33:45 PM
Permit	Returned to draft. 1.) 317.p BMP is missing, if adequate logging is available please use the appropriate BMP and include the Open Hole Logging Exception attachment. 2.) Please include the 2 required statements for a Refile Form 2 that has an unexpired Form 2A. 3.) Top of Production Zone footages do not match the Well Location Plat.	3/5/2015 3:20:14 PM

Total: 11 comment(s)