

FORM

2

Rev
08/19

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:

402146447

APPLICATION FOR PERMIT TO:

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

Date Received:

11/07/2019

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER: _____Refilling ☐ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: RUSH 4-65 29-30

Well Number: 4AH

Name of Operator: BURLINGTON RESOURCES OIL & GAS LP

COGCC Operator Number: 26580

Address: 925 N ELDRIDGE PARKWAY

City: HOUSTON

State: TX

Zip: 77079

Contact Name: Maxwell Blair

Phone: (303)268-3711

Fax: (918)6628057

Email: maxwell.o.blair@CONOCOPHILLIPS.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 19920030

WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 28 Twp: 4S Rng: 65W Meridian: 6

Latitude: 39.670998

Longitude: -104.677119

Footage at Surface: 1306 Feet FNL/FSL FSL 422 Feet FEL/FWL FWL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 5703

County: ARAPAHOE

GPS Data:

Date of Measurement: 04/20/2018

PDOP Reading: 1.3

Instrument Operator's Name: CHAD MEIERS

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

1217

FSL

460

FEL

1217

FSL

325

FWL

Sec: 29

Twp: 4S

Rng: 65W

Sec: 30

Twp: 4S

Rng: 65W

LOCAL GOVERNMENT INFORMATION

County: ARAPAHOE

Municipality: Aurora

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: Municipality

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below.

☒ Yes ☐ NoIf yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location. ☒

The local government siting permit type is: Oil and Gas Permit

The local government siting permit was filed on: 10/10/2018

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

Approved November 1, 2019. Case Number: 2017-6005-04

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: No

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.)

Section 29 (all), T4S, R65W

Total Acres in Described Lease: 640 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: 2719 Feet

Building Unit: 2890 Feet

High Occupancy Building Unit: 3892 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 3646 Feet

Above Ground Utility: 2978 Feet

Railroad: 5280 Feet

Property Line: 278 Feet

School Facility: 3910 Feet

School Property Line: 1287 Feet

Child Care Center: 5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – 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 proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 315 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

6 section DSU described below contains T4S-R65W-S. 17,18,19,20,29,30 and has been approved.

If this Form 2 is associated with a Drilling and Spacing Unit application, provide docket number: _____

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	535-1167	3840	S. 17,18,19,20,29,30

DRILLING PROGRAM

Proposed Total Measured Depth: 18060 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: _____ Feet ☒ No well belonging to another operator within 1,500 feet

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? Yes

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 609

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Commercial Disposal facility for freshwater used to drill surface section. Oil Based Mud used for remainder of lateral drilled will be reused from pad to pad.

Beneficial reuse or land application plan submitted? _____

Reuse Facility ID: _____ 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	24	16	65	0	100		100	0
SURF	13+1/2	9+5/8	36	0	2216	710	2216	0
1ST	8+1/2	5+1/2	23	0	18060	2450	18060	

☐ 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

This well has a bottom-hole location beyond the unit boundary setback. The bottom of the completed interval will be within the unit boundary setback at 1217' FSL and 460' FWL of Section 30. The wellbore beyond the unit boundary setback will be physically isolated and will not be completed.

This well will be an addition to an existing location, location ID 449806.

"Other" attached to outline extent of approved 6-section DSU.

The nearest well in the formation is the Rush 4-65 29-30 3DH (Doc #402145822). The distance of 315' was measured in 2D.

This application is in a Comprehensive Drilling Plan No CDP #: _____

Location ID: 449806

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

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Larry Smith

Title: REGULATORY COORDINATOR Date: 11/7/2019 Email: larry.r.smith@conocophillips.co

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, applicable orders, and SB 19-181 and is hereby approved.

COGCC Approved: _____

Director of COGCC

Date: 1/23/2020

Expiration Date: 01/22/2022

API NUMBER

05 005 07457 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

Drilling/Completion Operations	Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed.
Drilling/Completion Operations	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU (spud notice) for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad. 2) Comply with Rule 317.j. and provide cement coverage from TD to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 3) Oil-based drilling fluid is to be used only after all fresh water aquifers are covered.
Drilling/Completion Operations	Per COGCC Order 1-232, Bradenhead tests shall be performed according to the following schedule and Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release, prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 2) If a delayed completion, 6 months after rig release and prior to stimulation. If any pressure greater than 200 psi, must contact COGCC engineer prior to stimulation. 3) A post-production test within 60 days after first sales, as reported on the Form 10, Certificate of Clearance.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Surface casing setting depth planned a minimum of 200' below the base of the Fox Hills formation.
2	Drilling/Completion Operations	Alternative Logging Program - One of the first wells drilled on the pad will be logged with Open Hole Resistivity Log and Gamma Ray Log from the kick-off point to 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 and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "Alternative Logging Program - No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run."
3	Drilling/Completion Operations	If a skid is performed for the subject well, then the only required BOPE tests will be for any broken BOPE connections, as long as a full BOPE test was performed at the beginning of the pad, and as long as all necessary BOPE tests are completed at least every 21 days during the pad operations.

Total: 3 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.
http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Policy for Bradenhead Monitoring During Hydraulic Fracturing Treatments in the Greater Wattenberg Area.
<http://cogcc.state.co.us/documents/reg/Policies/PolicyGwaBradenheadMonitoringFinal.pdf>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
402146447	FORM 2 RESUBMITTED
402233569	FORM 2 REJECTED
402234150	DIRECTIONAL DATA
402234151	SURFACE AGRMT/SURETY
402234153	DEVIATED DRILLING PLAN
402234156	OTHER
402234158	WELL LOCATION PLAT
402234160	DEVIATED DRILLING PLAN
402234162	OffsetWellEvaluations Data
402293482	OFFSET WELL EVALUATION

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	01/09/2020
Permit	Added case number to local government final disposition with Operator concurrence. Permit review complete.	01/07/2020
Permit	COGCC staff reviewed and considered public comments received for this Form 2 in its review of the related Form 2A (Doc# 402147964).	01/07/2020
Permit	The Objective Criteria Review Memo (Doc# 1347745) is attached to the Form 2A associated with this APD. Following additional analysis arising out of the Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181	01/02/2020
Permit	-Received consent from the operator to add/ change the following: 1. Updated the open hole logging BMP 2. Added the drilling beyond the setback COA -Added the document number for the 2A on the related forms tab	11/13/2019
Permit	-Waiting on the operator's response about the following: 1. Updating the open hole logging BMP 2. Adding the drilling beyond the setback COA	11/12/2019
Permit	Passed Completeness	11/08/2019
Permit (Rejected)	REJECTION: This APD has been rejected per the COGCC Rejection Process (updated May 21, 2019). The cross section & well plan view diagram for the directional survey is missing and the latitude and longitude for the surface location are incorrect on this APD and on 6 other APDs on the pad. This entire form was reviewed by permitting staff.	11/07/2019
Engineer	Offset Wells Evaluated.	10/30/2019
Permit	Uploaded the redact version of the SUA from the operator	10/17/2019
Permit	Passed completeness.	10/10/2019
Permit	Attachment mislabeled as "wellbore diagram." Return to draft.	10/07/2019

Total: 12 comment(s)