

FORM
2
Rev
08/16

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:
401213114

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

TYPE OF WELL OIL GAS COALBED OTHER _____
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Date Received:
02/17/2017

Well Name: B&D Land 4-64 4-5 Well Number: 4BH
Name of Operator: BURLINGTON RESOURCES OIL & GAS LP COGCC Operator Number: 26580
Address: PO BOX 4289
City: FARMINGTON State: NM Zip: 87499
Contact Name: Jennifer Dixon Phone: (701)264-4041 Fax: ()
Email: jennifer.a.dixon@cop.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 19920030

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 4 Twp: 4S Rng: 64W Meridian: 6
Latitude: 39.726694 Longitude: -104.547081

Footage at Surface: 810 Feet FNL/FSL FSL 350 Feet FEL/FWL FEL

Field Name: WILDCAT Field Number: 99999

Ground Elevation: 5618 County: ARAPAHOE

GPS Data:
Date of Measurement: 05/29/2014 PDOP Reading: 1.7 Instrument Operator's Name: Loren Shanks

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
900 FSL 923 FEL 900 FSL 2140 FWL
Sec: 4 Twp: 4S Rng: 64W Sec: 5 Twp: 4S Rng: 64W

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: oil and gas lease

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.)

See attached map

Total Acres in Described Lease: 35 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: 840 Feet

Building Unit: 944 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 797 Feet

Above Ground Utility: 325 Feet

Railroad: 5280 Feet

Property Line: 350 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 proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 317 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 900 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

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	535-709	1280	Sec 4 - 5 ALL

DRILLING PROGRAM

Proposed Total Measured Depth: 15325 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:

Drilling cuttings will be taken by a certified transport company and disposed of at a certified facility.

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	50	100	0
SURF	12+1/4	9+5/8	36	0	1938	540	1938	0
1ST	8+3/4	5+1/2	23	1938	15325	1920	15325	

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 is a refile. The top and bottom production interval and bottom hole location has moved. See attached well location plat. The treated interval will not encroach with 460' of the unit boundary.

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

Location ID: 442643

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: Jennifer Dixon

Title: Regulatory Coordinator Date: 2/17/2017 Email: jennifer.a.dixon@cop.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: 5/25/2017

Expiration Date: 05/24/2019

API NUMBER
05 005 07245 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.

<u>COA Type</u>	<u>Description</u>
	This Permit to Drill is approved subject to all the BMPs and COAs on the most recently approved Form 2A and any subsequently approved Form 4 for the Oil and Gas Location (Location ID #442643). The most recently approved Form 2A and any subsequent Form 4s containing applicable COAs for this location shall be posted onsite during construction, drilling, and completions operations.
	Bradenhead tests shall be performed according to the following schedule and the Form 17 submitted within 10 days of each test: 1) Within 60 days of rig release and prior to stimulation and 2) If a delayed completion, 6 months after rig release and prior to stimulation. 3) Within 30 days after first production, as reported on Form 5A.
	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.
	If location is not built by 2A expiration 7/26/2018, Operator must Refile Form 2A for approval prior to location construction.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Dust control	Dust/Traffic - Speed restrictions will be posted, magnesium chloride will be applied to the access road, and silica dust controls will be in place when handling sand used in hydraulic fracturing operations.
2	Noise mitigation	Noise - 32' sound walls will be placed on three sides of location during drilling operations.
3	Odor mitigation	Odors - ConocoPhillips will use a closed loop system during drilling operations and drilling mud and all waste will be hauled off for disposal. The completions flowback is designed to be 100% closed loop to capture all flowback vapors. During production operations, a VRU will be used to help capture VOC emissions.
4	Drilling/Completion Operations	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 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 "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run.
5	Drilling/Completion Operations	Lighting - Lighting shall be directed downward and inward and shielded so as to avoid glare on public roads and Building Units. 32' sound walls placed on three sides of location during drilling operations will further abate light pollution.
6	Drilling/Completion Operations	Prior to drilling operations, Operator will perform a risk analysis of the potential for subsurface collision with existing offset wells within close proximity of the proposed well, taking into consideration the possibility of well path drift for both the existing and proposed wells. Where inclination, MWD or gyro surveys of the offset wells are available, or can be reasonably obtained by the operator, such surveys shall be incorporated in the risk analysis, taking into account survey instrument margin of error. For the proposed well, upon conclusion of drilling operations, an as-constructed final directional survey will be submitted to the COGCC with the Form 5.

Total: 6 comment(s)

Applicable Policies and Notices to Operators

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

Attachment Check List

Att Doc Num	Name
2473101	MINERAL LEASE MAP
401213114	FORM 2 SUBMITTED
401213245	DIRECTIONAL DATA
401213249	WELL LOCATION PLAT
401213254	DEVIATED DRILLING PLAN
401219148	OTHER

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete. No LGD or public comment received.	05/24/2017
Permit	Per Operator request, updated contact and submitter's information.	05/23/2017
OGLA	<p>Per Operator request, added the following BMPs:</p> <p>Dust/Traffic - Speed restrictions will be posted, magnesium chloride will be applied to the access road, and silica dust controls will be in place when handling sand used in hydraulic fracturing operations.</p> <p>Lighting - Lighting shall be directed downward and inward and shielded so as to avoid glare on public roads and Building Units. 32' sound walls placed on three sides of location during drilling operations will further abate light pollution.</p> <p>Noise - 32' sound walls will be placed on three sides of location during drilling operations.</p> <p>Odors - ConocoPhillips will use a closed loop system during drilling operations and drilling mud and all waste will be hauled off for disposal. The completions flowback is designed to be 100% closed loop to capture all flowback vapors. During production operations, a VRU will be used to help capture VOC emissions.</p>	05/17/2017
Permit	<p>Status Active - made corrections with Operator agreement:</p> <ul style="list-style-type: none"> - changed BHL township from 5S to 4S. - added distance to nearest lease line (0'). - added Mineral Lease Map attachment. - revised open hole logging BMP. <p>Form passes initial permitting review.</p>	05/04/2017
Permit	A new task has been created for OGLA to review this permit as it is in a buffer zone.	04/26/2017
Permit	<p>Status Pending - contacted Operator for corrections:</p> <ul style="list-style-type: none"> - BHL township is incorrect, should be 4S. - Surface tab says "see attached map", but no map is attached describing mineral lease. - Missing distance to nearest lease line. 	04/11/2017
Permit	Operator corrected comments to remove comment that surface hole location has moved; it has not moved.	03/02/2017
Permit	<p>Passes completeness.</p> <p>Operator corrected 317.p BMP and attached waiver from building unit owner for buffer zone notifications.</p>	02/27/2017
Permit	<p>Returned to draft:</p> <ul style="list-style-type: none"> --correct 317.p BMP --enter date of buffer zone notification or submit an exception location request letter and check appropriate exception box. 	02/26/2017

Total: 9 comment(s)