

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:

400511410

#### 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:

11/12/2013

Well Name: State of CO

Well Number: 1S-66-36-6457CH

Name of Operator: BARRETT CORPORATION\* BILL

COGCC Operator Number: 10071

Address: 1099 18TH ST STE 2300

City: DENVER State: CO Zip: 80202

Contact Name: Venessa Langmacher

Phone: (303)312-8172

Fax: (303)291-0420

Email: vlangmacher@billbarrettcorp.com

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20040060

#### WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 36 Twp: 1S Rng: 66W Meridian: 6

Latitude: 39.916917

Longitude: -104.732459

Footage at Surface: 936 feet FNL/FSL FSL 295 feet FEL/FWL FWL

Field Name: THIRD CREEK

Field Number: 81800

Ground Elevation: 5227

County: ADAMS

GPS Data:

Date of Measurement: 09/18/2013 PDOP Reading: 6.0 Instrument Operator's Name: Jim Kalmon

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

Footage at Top of Prod Zone: FNL/FSL FSL 500 FSL 500 FSL 500 FEL/FWL FEL 500 FEL 500 FEL 500  
Sec: 36 Twp: 1S Rng: 66W Sec: 36 Twp: 1S Rng: 66W

#### 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.)

T1S-R66W Section 36: All

Total Acres in Described Lease: 640 Described Mineral Lease is: ☐ Fee ☒ State ☐ Federal ☐ Indian

Federal or State Lease # 68-5600S

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 500 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1017 Feet

Building Unit: 1228 Feet

High Occupancy Building Unit: 4241 Feet

Designated Outside Activity Area: 5094 Feet

Public Road: 272 Feet

Above Ground Utility: 254 Feet

Railroad: 5280 Feet

Property Line: 295 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: 285 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 500 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	407-800	640	All

## DRILLING PROGRAM

Proposed Total Measured Depth: 12268 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 157 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: Other

Other Disposal Description:

Mud and Cuttings will be hauled to Krier Spreadfield (430225).

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 430225 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+0/0	16	65	0	60	50	60	0
SURF	13+1/2	9+5/8	36	0	1550	430	1550	0
1ST	8+3/4	7	26	0	8000	670	8000	600
1ST LINER	6+1/8	4+1/2	11.6	7300	12268			

☐ 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 is an exception location to Rule 318Am; please see waiver attached.

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

Location ID: \_\_\_\_\_

Is this application being submitted with an Oil and Gas Location Assessment application? \_\_\_\_\_ No

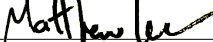
I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: Venessa Langmacher

Title: Sr Permit Analyst Date: 11/12/2013 Email: vlangmacher@billbarrettcorp.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 and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 12/20/2013

Expiration Date: 12/19/2015

**API NUMBER**

05 001 09795 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**

	1) Note surface casing setting depth change from 800' to 1550'. Increase cement coverage accordingly. 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 3) Comply with Rule 317.i and provide cement coverage from end of 7" casing to a minimum of 200' above Niobrara. Verify coverage with cement bond log. 4) Run and submit Directional Survey from TD to base of surface casing. The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.
	Operator acknowledges the proximity of the non-operated BOX ELDER FARMS 41-1 #3 (API #001-06885) well. Operator assures that this offset will be remediated per the DJ Basin Horizontal Offset Policy (option 3) or operator will address this well with mitigation option 4. Operator will submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.
	Operator acknowledges the proximity of the (STATE A #1 API# 001-06757; STATE A #3 API # 001-06805; STATE A #4 API # 001-06810; STATE A #5 API # 001-06824; STATE A #6 API # 001-06834; CARLSON #1 API #001-06792 )wells. Operator agrees to: provide mitigation option 1 or 2 (per the DJ Basin Horizontal Offset Policy) to mitigate the situation, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 ("OTHER – AS SPECIFIED BY PERMIT CONDITION") stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of this well.

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Drilling/Completion Operations	Anti-collision Mitigation: 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. Commission engineering staff shall review and approve the collision risk analysis prior to issuing an approved permit to drill, subject to the operator's right to appeal to the Director or the Commission. 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: 1 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**

<b>Att Doc Num</b>	<b>Name</b>
400511410	FORM 2 SUBMITTED
400511469	OffsetWellEvaluations Data
400511477	DIRECTIONAL DATA
400511478	DEVIATED DRILLING PLAN
400511479	WELL LOCATION PLAT
400511481	VARIANCE REQUEST
400511482	EXCEPTION LOC REQUEST
400511484	EXCEPTION LOC WAIVERS
400511485	MINERAL LEASE MAP

Total Attach: 9 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Verified State Surface Restoration Bond. Final review complete.	12/19/2013 10:37:50 AM
Engineer	LOCATION: SW1/4 OF SW1/4 OF SEC. 36, T.1s., R.66W. (1041 SSL, 295 WSL)  Ground Elevation: 5227 Number of Acres: 160  ELEVATION DEPTH TO ANNUAL ----- NET ----- APPROP STATUS AQUIFER BOT. TOP SAND BOT. TOP A-F ----- UPPER DAWSON ---- - LOWER DAWSON ---- - DENVER 4915 5098 110.8 312 129 30.14 NNT UPPER ARAPAHOE 4661 4887 108.5 566 340 29.52 NT LOWER ARAPAHOE 4360 4586 94.7 867 641 25.75 NT LARAMIE-FOX HILLS 3733 3971 181.3 1494 1256 43.51 NT	12/5/2013 6:19:31 PM
Permit	Corrected distances to nearest wellbore as per opr. Ready to pass.	12/2/2013 11:29:27 AM
LGD	The access plan as submitted is acceptable to Adams County. Adams County requires that a Drilling Rig Move Permit be obtained when the drilling rig is moved both into and out of this location. A Gas and Oil Well Production Permit will be required when these facilities are constructed. Please contact Mr. Mark Russell at 720-523-6821 for information regarding these permits.	11/14/2013 7:37:24 AM
Permit	This form has passed completeness.	11/13/2013 9:50:59 AM

Total: 5 comment(s)