

**APPLICATION FOR PERMIT TO:**

**Drill**       Deepen       Re-enter       Recomplete and Operate

TYPE OF WELL    OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refiling <input type="checkbox"/>
ZONE TYPE    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Date Received:  
03/28/2014

Well Name: Ruh      Well Number: 6-62-11-0560BH2

Name of Operator: BARRETT CORPORATION\* BILL      COGCC Operator Number: 10071

Address: 1099 18TH ST STE 2300

City: DENVER      State: CO      Zip: 80202

Contact Name: Mary Pobuda      Phone: (303)312-8511      Fax: (303)291-0420

Email: mpobuda@billbarrettcorp.com

**RECLAMATION FINANCIAL ASSURANCE**  
Plugging and Abandonment Bond Surety ID: 20040060

**WELL LOCATION INFORMATION**

QtrQtr: NWNE      Sec: 11      Twp: 6N      Rng: 62W      Meridian: 6

Latitude: 40.508178      Longitude: -104.286442

Footage at Surface:	<u>250</u>	feet	FNL/FSL	<u>1839</u>	feet	FEL/FWL
	<u>FNL</u>			<u>FEL</u>		

Field Name: WATTENBERG      Field Number: 90750

Ground Elevation: 4748      County: WELD

GPS Data:  
Date of Measurement: 01/16/2014    PDOP Reading: 1.4    Instrument Operator's Name: Dave Swanson

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
<u>500</u>	<u>FNL</u>	<u>2180</u>	<u>500</u>	<u>FSL</u>	<u>2180</u>
<u>FEL</u>			<u>FEL</u>		

Sec: 11    Twp: 6N    Rng: 62W      Sec: 14    Twp: 6N    Rng: 62W

**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.)

See attached lease map.

Total Acres in Described Lease: 800 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: 2008 Feet

Building Unit: 1856 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1833 Feet

Above Ground Utility: 1872 Feet

Railroad: 5280 Feet

Property Line: 250 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: 270 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

Docket #1403-SP-2023 was approved on 3/17/14 to establish 1,280-acre DSU for Sec. 11 & 14, T6N-62W & approve of 16 horizontal wells, for NBRR formation; & 4 horizontal wells, for CDLL formation.

## 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	407-943	1280	All sec. 11 & 14

## DRILLING PROGRAM

Proposed Total Measured Depth: 16090 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 270 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:

Cuttings from the vertical portion of the well(s) will be hauled to Krier Spread field. Cuttings from the lateral portion of the wellbore(s) will be hauled to a commercial disposal facility OR treated to meet table 910 standards then hauled to Krier.

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	16	65	0	60	50	60	0
SURF	13+1/2	9+5/8	36	0	800	430	800	0
1ST	8+3/4	7	26	0	6695	560	6695	600
1ST LINER	6+1/8	4+1/2	11.6	6000	16090			

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 EOG assigned all leasehold and agreements to BBC effective 4/1/2012. A copy of this assignment is available upon request.

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

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

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: Mary Pobuda

Title: Permit Analyst Date: 3/28/2014 Email: mpobuda@billbarrettcorp.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: 4/21/2014

Expiration Date: 04/20/2016

### API NUMBER

05 123 39315 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

	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) 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. 3) 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.

## Best Management Practices

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Drilling/Completion Operations	Cuttings from the vertical portion of the well(s) will be hauled to Krier Spread field. Cuttings from the lateral portion of the wellbore(s) will be hauled to a commercial disposal facility OR treated to meet table 910 standards then hauled to Krier.
2	Drilling/Completion Operations	Open hole resistivity log with gamma ray will be run on one of the wells on this pad to describe the stratigraphy of the vertical section of the wellbore and to adequately verify the setting depth of the surface casing and aquifer coverage. The Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.

Total: 2 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>
2114600	MINERAL LEASE MAP
2157589	SURFACE AGRMT/SURETY
400579280	FORM 2 SUBMITTED
400580486	OffsetWellEvaluations Data
400580494	DIRECTIONAL DATA
400580496	WELL LOCATION PLAT
400580497	DEVIATED DRILLING PLAN
400580499	EXCEPTION LOC REQUEST
400580503	EXCEPTION LOC WAIVERS

Total Attach: 9 Files

## General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Attached clarified lease map. Added Spacing Order number. Corrected Field Name to Wattenberg. Ready to pass.	4/18/2014 8:14:29 AM
Permit	Leases overlap on lease map. Asked operator to clarify. Well names have been changed from well names on Exception Location Waiver, but locations match. WO Spacing Order number.	4/7/2014 1:14:19 PM
Permit	Oper. submitted SUA and comment about EOG assignment.	3/31/2014 2:00:33 PM
Permit	This form has passed completeness.	3/31/2014 10:17:27 AM

Total: 4 comment(s)