

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:

400514467

## APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER \_\_\_\_\_Refilling ☒

Date Received:

11/18/2013

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☐

Well Name: LONG RIDGE

Well Number: 12B M15 595

Name of Operator: BERRY PETROLEUM COMPANY

COGCC Operator Number: 10091

Address: 1999 BROADWAY STE 3700

City: DENVER State: CO Zip: 80202

Contact Name: HEIDI BANG

Phone: (303)999-4262

Fax: (303)999-4362

Email: HSB@BRY.COM

## RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20040105

## WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 15 Twp: 5S Rng: 95W Meridian: 6

Latitude: 39.610154

Longitude: -108.048218

Footage at Surface: 1309 feet FNL/FSL FSL 490 feet FEL/FWL FWL

Field Name: GRAND VALLEY

Field Number: 31290

Ground Elevation: 8347

County: GARFIELD

GPS Data:

Date of Measurement: 06/08/2010 PDOP Reading: 2.1 Instrument Operator's Name: IVAN MARTIN

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

 2099 FSL 242 FWL 2099 FSL 242 FWL  
 Sec: 15 Twp: 5S Rng: 95W Sec: 15 Twp: 5S Rng: 95W

## LOCATION SURFACE &amp; MINERALS &amp; RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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.)

PLEASE SEE LEASE MAP ATTACHED TO ORIGINAL APD

Total Acres in Described Lease: 25000 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: 1585 Feet

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 2650 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: 476 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary \_\_\_\_\_ 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.)
WILLIAMS FORK	WMFK	510-13		

## DRILLING PROGRAM

Proposed Total Measured Depth: 12360 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 476 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 609

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Methods: Land application

Cuttings Disposal: ONSITE Cuttings Disposal Method: Drilling pit

Other Disposal Description:

LAND SPREADING

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	30	20	55	0	90	100	90	0
SURF	16	9+5/8	36	0	2500	1000	2500	0
1ST	8+3/4	4+1/2	11.6	0	12360	600	12360	

☐ 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	NO CHANGES FROM PREVIOUS APD. The location does NOT require a variance from any of the rules listed in Rule 306.d. (1). (A). (ii). The location is NOT in a restricted surface occupancy area. The location is NOT a sensitive wildlife habitat area. The production casing Top of Cement will be a minimum of 200' above the Top of Gas. Berry Petroleum Company will be using closed loop operations. Berry Petroleum Company will be running up to 10% (by volume) diesel oil in our water based drilling mud as a shale stabilization additive.
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This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: 335865

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: HEIDI BANG

Title: REG COMPLIANCE ASST Date: 11/18/2013 Email: HSB@BRY.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: 12/30/2013

Expiration Date: 12/29/2015

**API NUMBER**

05 045 20106 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>(1) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED.</p> <p>(2) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE GARFIELD COUNTY RULISON-FIELD NOTICE TO OPERATORS IS REQUIRED.</p> <p>(3) COMPLY WITH ALL PROVISIONS OF THE JUNE 12, 2008 NOTICE TO OPERATORS DRILLING WELLS WITHIN ¾ MILE OF THE RIM OF THE ROAN PLATEAU IN GARFIELD COUNTY -- PIT DESIGN, CONSTRUCTION, AND MONITORING REQUIREMENTS. SEE ATTACHED NOTICE.</p> <p>(4) THE NEARBY HILLSIDE MUST BE MONITORED FOR ANY DAY-LIGHTING DRILLING FLUIDS THROUGHOUT THE DRILLING OF THE SURFACE-CASING INTERVAL.</p> <p>(5) CEMENT ON PRODUCTION CASING MUST BE A MINIMUM OF 200' ABOVE THE TOP OF THE MESA-VERDE FORMATION (OR 200' ABOVE THE OHIO CREEK FORMATION IF PRESENT). CEMENT TOP VERIFICATION BY CBL IS REQUIRED.</p>
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## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>

### Applicable Policies and Notices to Operators

Piceance Rulison Field - Notice to Operators.
NW Colorado Notification Policy.
Notice Concerning Operating Requirements for Wildlife Protection.
Pit Design, Construction and Monitoring Requirements Within 3/4 mile of the Rim of the Roan Plateau.

### Attachment Check List

Att Doc Num      Name

400514467	FORM 2 SUBMITTED
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Total Attach: 1 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed on this refile. No LGD comments.	12/30/2013 1:24:17 PM
LGD	pass, gdb	12/9/2013 10:52:08 AM
Engineer	THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1-MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1-MILE IS 00 FEET DEEP.	11/22/2013 12:05:16 PM
Permit	This form has passed completeness.	11/20/2013 12:22:59 PM
Permit	Returned to draft: 1) Field name incorrect.	11/19/2013 12:47:09 PM

Total: 5 comment(s)