

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.)

NE4 Sec 21 6S 96W, 160 acres. PLEASE SEE UPDATED MINERAL LEASE MAP ATTACHED.

Total Acres in Described Lease: 4350 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: 642 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5035 Feet

Building Unit: 5035 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 4570 Feet

Above Ground Utility: 4500 Feet

Railroad: 5280 Feet

Property Line: 2382 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: 282 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1422 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

UNIT CONFIGURATION APPLIES TO SECTION 21, NOT HTE ENTIRE NORTH PARACHUTE RANCH SPACING UNIT.

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	510-53	11510	L6-7, E2NW, NE, N2SE

DRILLING PROGRAM

Proposed Total Measured Depth: 9985 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: 1440 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? 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: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

PLEASE SEE BMP CUTTINGS MANAGEMENT

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	100	100	100	0
SURF	16	9+5/8	36	0	2500	1000	2500	0
1ST	7+7/8	4+1/2	11.6	0	9985	600	9985	

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 Pad has been built. Conductors have been set. No rig onsite.
The refile will not require any expansion/additional surface disturbance of pad.
The location does not require a variance from any of the rules listed in Rule 306.d (1) (A) (ii).
The location is not a restricted surface occupancy area. The location is not in a sensitive wildlife habitat area.

This application is in a Comprehensive Drilling Plan No 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: ANDREA GURR

Title: Regulatory Specialist 2 Date: 1/29/2018 Email: AGURR@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: 4/5/2018

Expiration Date: 04/04/2020

API NUMBER
05 045 20309 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>
	Operator shall comply with Notice to Operators: Interim Reclamation Procedures for Delayed Operations (dated January 5, 2017).
	<p>1) Operator shall comply with the most current revision of the Northwest Notification Policy.</p> <p>2) Operator shall comply with the most current revision of the Garfield County Rulison Field Notice to Operators, with the following exception: All field notice requirements specified in that Notice to Operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see Condition of Approval #1).</p> <p>3) Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesaverde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.</p> <p>4) Comply with all provisions of the June 12, 2008 Notice to Operators Drilling Wells within 3/4 Mile of the Rim of the Roan Plateau in Garfield County - Pit Design, Construction and Monitoring Requirements.</p> <p>5) The nearby hillside(s) must be monitored for any daylighting drilling fluids throughout the drilling of the surface casing interval. COGCC engineering staff must be notified as soon as practicable if daylighting is observed.</p> <p>6) The Operator shall monitor the bradenhead pressure of the proposed well and all offset wells under Operator's control which penetrate the stimulated formation and have a treated interval separation of 300 feet or less. Monitoring shall occur from 24 hours prior to stimulation and shall continue until 24 hours after stimulation is complete. Recording shall be at a frequency of at least once per 24 hours with the capability of recording the maximum pressure observed during each 24 hour period. Operator shall notify COGCC Engineering staff if bradenhead pressures increase by more than 200 psig.</p>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	Cuttings Management: During drilling, Berry Petroleum Company, LLC. will keep the drill cuttings segregated on the well pad. Cuttings will not be in contact with the fill material or topsoil on location. After drilling and completion operations have completed, soil amendments such as phosphorus and nitrogen will be utilized to expedite the amendment process (if necessary). Berry will be utilizing closed-loop drilling. Amended cuttings that meet the table 910-1 levels will be covered with 3' of clean material during reclamation activities.
2	Drilling/Completion Operations	In compliance with rule 317.p, Berry Petroleum Company, LLC. conducted an open-hole Resistivity Log on the first operationally feasible well on the A21 696 pad (Well: OM01A A21 696, API # 05-045-14955) located in the NE/NE qtr, Sec 21, 6S 96W, July 15, 2015. The B21 6S 96W pad is also located in the NE/NE, thus meets the criteria for rule 317.p. All wells on the B21 696 pad will have a cement bond log with cased hole gamma ray run on the production casing. The Form 5 completion Report will list all the logs run in on the subject well and identify the OM01A 696 well that was logged with the open-hole Resistivity Log. Please see attached map confirming open-hole logs near section 21.

Total: 2 comment(s)

Applicable Policies and Notices to Operators

Piceance Rulison Field - Notice to Operators.

<http://cogcc.state.co.us/documents/reg/Policies/NoticeToOp-20060623-2.pdf>

NW Colorado Notification Policy.

http://cogcc.state.co.us/documents/reg/Policies/nw_notification_procedures.pdf

Notice Concerning Operating Requirements for Wildlife Protection.

http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401523875	FORM 2 SUBMITTED
401526271	MINERAL LEASE MAP
401529190	REFERENCE AREA MAP

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	04/05/2018
Permit	Corrected the distance to the lease line from 1420' to 642' with operator concurrence. Corrected the distance to the unit boundary from 1080' to 1422', and adjusted unit configuration so that all sections show, with operator concurrence. Corrected spacing order from 510-13, 53 to 510-53 with operator concurrence. Preliminary review complete.	03/08/2018
Engineer	Offset Well Evaluation: Existing offset oil and gas wells within 1,500 feet of this wellbore meet standards. No mitigation required. Offset water well check: There are no permitted water wells within one mile of this proposed surface hole location. Operator has provided financial assurance for the preset conductors on this pad (sundry document # 401484125). Removed operator's comment that the production casing top of cement will be at least 200' above the top of gas. See condition of approval #3 for cement top requirement. Operator to adjust cement quantity as needed. Per operator, changed distance to wellbore belonging to another operator.	02/14/2018
Permit	Passed Completeness.	02/06/2018

Total: 4 comment(s)