



**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.)

NE/4 Sec. 8, T32N, R6W N.M.P.M.  
NW/4 Sec. 9, T32N, R6W N.M.P.M.

Total Acres in Described Lease: 320 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: 773 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 940 Feet  
 Building Unit: 940 Feet  
 High Occupancy Building Unit: 5280 Feet  
 Designated Outside Activity Area: 5280 Feet  
 Public Road: 689 Feet  
 Above Ground Utility: 743 Feet  
 Railroad: 5280 Feet  
 Property Line: 184 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: 01/02/2015

**SPACING and UNIT INFORMATION**

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 1165 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 773 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.)
FRUITLAND COAL	FRLDC	112-190	320	N/2

**DRILLING PROGRAM**

Proposed Total Measured Depth: 3672 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1165 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)



Comments

Please note the waiver to the 30 day notice (Rule 305) and waiver to the consultation (Rule 306) can be found in the Surface Use Agreement.

A separate DPW letter has not been sent, the DPS notification is covered by the BP San Juan Basin Colorado Wildlife Mitigation Plan (WMP) dated March 2011.

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: Patti Campbell

Title: Regulatory Analyst Date: 2/18/2015 Email: patricia.campbell@bp.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: *Matthew Lee* Director of COGCC Date: 3/30/2015

Expiration Date: 03/29/2017

**API NUMBER**

05 067 09927 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 Buffer Zone Move-In, Rig-Up Notice Rule 305.h (effective 9/30/2014).
	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) Provide 48 hour notice of spud to COGCC via form 42 2) Set at least 678' of surface casing per Rule 317 (f) cement to surface 3) Provide cement coverage of production casing from TD to surface. Verify cement coverage with Cement Bond Log. 4) Run and submit Directional Survey from TD to kick-off point 5) The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the well bore complies with setback requirements in Commission orders and/or rules prior to producing the well. 6) Sample and test two closest water wells within 1/4 mile swath of the directional wellbore. 7) Operators are required to obtain a bottom hole pressure utilizing a bottom hole gauge after a minimum 48 hour shut-in period following completion and prior to sales 8) Comply with all applicable provisions of Order 112-190 9) Borehole problems encountered while drilling that require an unplanned sidetrack: Contact, discuss & receive prior approval from COGCC Regional Engineer – Mark Weems 970-259-4587 off 970-749-0624 cell mark.weems@state.co.us

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	BP has performed an anti-collision evaluation of all active (producing, shut in, temporarily abandoned) offset wellbores that have the potential of being within 150' of this proposed well.

Total: 1 comment(s)

## Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
1857551	SELECTED ITEMS REPORT
2519702	EQUIPMENT LIST
400791819	FORM 2 SUBMITTED
400792917	WELL LOCATION PLAT
400792934	DIRECTIONAL DATA
400793255	OTHER
400793259	DEVIATED DRILLING PLAN
400793261	SURFACE AGRMT/SURETY
400793310	TOPO MAP

Total Attach: 9 Files

### General Comments

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Permit	Final Review Completed. No LGD or public comment received.	3/30/2015 7:48:55 AM
Engineer	<p>The proposed gas well is located within an area where unconfined fresh water aquifers are mostly developed in bedrock formations consisting mainly of shale with intermittent sandstone stringers with limited areal extent or having pockets of isolated water reservoirs. Water wells found in these locations can vary in depth from 100' to 650'. These aquifers are commonly identified as the Animas formation.</p> <p>Respective to the proposed gas well, a one (1) mile radius of investigation of all offsetting fresh water wells has determined that the deepest surface casing required to protect the aquifers is a depth of 678' (includes a 50' margin of additional protection). The operator proposed a depth of 667' which does not meet the minimal requirement by a depth of 11'. The depth of the surface casing was increased to 678'. The surface casing on the proposed well will be cemented from total depth to surface. The production casing on the proposed gas well will also be cemented from total depth to surface. This will serve two purposes (1) it will isolate and confine all hydrocarbon and brackish waters to their respective zones and (2) it will provide double protection for the fresh water aquifers which includes two concentric (2) steel casing strings and two concentric external (2) cement sheaths extending from total depth to surface (see attached SELECTED ITEMS REPORT).</p> <p>A plat map was prepared depicting the planned directional wellbore in relation to other gas wells. A 1320' envelope was drawn around the trajectory of an S-Shape directional well bore relative to the top &amp; bottom of pay. A survey of the adjacent gas wells falling within the boundaries of the 1320' envelopes was conducted. There is a gas well found within the envelope and it is a CBM well drilled in 2004 and the cement on both strings of casing come up to surface and has demonstrated it is adequate. (See attached SELECTED ITEMS REPORT).</p>	3/10/2015 12:36:26 PM
Permit	Distance to another well changed slightly from 1204' to 1165'.	3/4/2015 7:37:23 AM
Permit	Operator requested a variance for blowout preventer equipment Rule 604.c.(2).H. Diana Burn (COGCC engineering supr.) stated that a variance is not needed for this request. Diana Burn requested the variance letter be removed from permit. Operator is seeking permission to allow a BOP stack that includes an annular preventer and a blind ram. See attached diagram. The proposed stack meets API Standard 53 Class 2 requirements and the pressure ratings exceed all of the anticipated surface pressures for their wells. Operator wants to remove pipe rams from the stack. They say the stack height would be too tall resulting in insufficient working space and would eliminate their ability to close on a wide range of tubulars and joints.	2/23/2015 9:05:18 AM
Permit	Passed completeness.	2/19/2015 3:14:12 PM

Total: 5 comment(s)