

**APPLICATION FOR PERMIT TO:**

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

TYPE OF WELL    OIL <input type="checkbox"/> GAS <input type="checkbox"/> COALBED <input checked="" type="checkbox"/> OTHER _____ ZONE TYPE       SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Refilling <input checked="" type="checkbox"/> Sidetrack <input type="checkbox"/>
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Date Received: 02/05/2015

Well Name: Parry E      Well Number: 4

Name of Operator: BP AMERICA PRODUCTION COMPANY      COGCC Operator Number: 10000

Address: 501 WESTLAKE PARK BLVD  
 City: HOUSTON      State: TX      Zip: 77079

Contact Name: Patti Campbell      Phone: (970)335-3828      Fax: (970)375-7529  
 Email: patricia.campbell@bp.com

**RECLAMATION FINANCIAL ASSURANCE**  
 Plugging and Abandonment Bond Surety ID: 20010158

**WELL LOCATION INFORMATION**

QtrQtr: SWNE      Sec: 27      Twp: 33N      Rng: 7W      Meridian: N  
 Latitude: 37.077325      Longitude: -107.595301

Footage at Surface:      1810 feet      FNL/FSL      FNL      2362 feet      FEL/FWL      FEL

Field Name: IGNACIO BLANCO      Field Number: 38300

Ground Elevation: 6638      County: LA PLATA

GPS Data:  
 Date of Measurement: 01/09/2015      PDOP Reading: 1.6      Instrument Operator's Name: Brian Boniface

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>964</u>	<u>FNL</u>	<u>1337</u>	<u>964</u>	<u>FNL</u>	<u>1337</u>
	<u>FEL</u>			<u>FEL</u>	
Sec: <u>27</u>	Twp: <u>33N</u>	Rng: <u>7W</u>	Sec: <u>27</u>	Twp: <u>33N</u>	Rng: <u>7W</u>

**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.)

NW/4 NE/4 Sec. 27, T33N, R7W N.M.P.M.

Total Acres in Described Lease: 40 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: 11 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 1170 Feet

Building Unit: 1170 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 251 Feet

Above Ground Utility: 1851 Feet

Railroad: 5280 Feet

Property Line: 268 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: 1780 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 964 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	E/2

**DRILLING PROGRAM**

Proposed Total Measured Depth: 3414 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1160 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 608

### DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

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
SURF	12+1/4	8+5/8	24	0	443	260	443	0
1ST	7+7/8	5+1/2	15.5	0	3414	287	3414	0

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 is a re-file of the Parry GU #4 well approved in 2011. The BHL location has changed. The surface location remains the same. The APD number and location ID assigned in 2011 are included in this re-file.

Please note that the waiver to the 30 dy 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 DPW notification is covered in 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: 426072

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: 2/5/2015 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: 3/27/2015

Expiration Date: 03/26/2017

**API NUMBER**

05 067 09870 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>
	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.
	<p>1) Provide 48 hour notice of spud via form 42</p> <p>2) Sample and test two closest water wells within a 1/2 mile of that portion of the wellbore pathway that cuts through only the Fruitland Coal (Horizontal dimension – Top to bottom of pay) (see Cause 112 Order 180-181) (see Policy-Ignacio Blanco Field – Notice to Operators 7/10/2009 and revised on 2/17/2011).</p> <p>3) 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 (Cause 112 Order 180-181)</p> <p>4) Borehole problems encountered while drilling that require an unplanned sidetrack: Contact, discuss &amp; receive approval within 24 hrs of occurrence from COGCC Regional Engineer – Mark Weems</p> <p>970-259-4587 off 970-749-0624 cell mark.weems@state.co.us</p> <p>5) Contact COGCC Regional Engineer – Mark Weems when encountering a well control issue, unexpected water flows, and unexpected Hydrogen Sulfide.</p>

## Best Management Practices

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

## Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1857539	SELECTED ITEMS REPORT
400761598	FORM 2 SUBMITTED
400786165	TOPO MAP
400786171	DEVIATED DRILLING PLAN
400786172	SURFACE AGRMT/SURETY
400786186	DIRECTIONAL DATA
400787088	OTHER
400787148	WELL LOCATION PLAT

Total Attach: 8 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Permit	Final review completed; no LGD or public comment received.	3/24/2015 11:36:14 AM
Permit	Surface owner is not the mineral owner, per operator conversation 3/2/2015. Box has been unchecked.  Rule 502.b Variance Request unselected, as this request was unnecessary.	3/2/2015 9:33:28 AM
Engineer	A plat map was prepared depicting the planned S-shape directional wellbore in relation to other gas wells. A 1320' envelope was drawn around the trajectory of directional well bore relative to the top & bottom of pay. A survey of the adjacent gas wells falling within the boundaries of the 1320' envelopes was conducted. The cement tops on the production casings in regards to the offsetting wells are deemed adequate for fracture stimulations in the proposed gas well (see attached SELECTED ITEMS REPORT).  No PA wells were found to exist within the 1320' envelope	2/17/2015 12:16:01 PM
Engineer	<b>Bedrock Aquifers</b> 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.  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 443' (includes a 50' margin of additional protection). The operator proposed a depth of 351' which is less than the minimal requirement by a depth of 92'. The surface casing on the proposed APD will be deepend to 443' and 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).	2/17/2015 11:57:08 AM
Permit	Passed completeness.	2/6/2015 8:21:45 AM

Total: 5 comment(s)