

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:
400817776

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
04/30/2015

TYPE OF WELL OIL GAS COALBED OTHER Pilot _____
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Well Name: Seibel A Well Number: 2
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: ()
Email: patricia.campbell@bp.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010158

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 8 Twp: 32N Rng: 5W Meridian: N
Latitude: 37.027318 Longitude: -107.409487

Footage at Surface: 701 feet FNL/FSL FEL/FWL
FSL 912 feet FEL

Field Name: IGNACIO BLANCO Field Number: 38300
Ground Elevation: 6159 County: ARCHULETA

GPS Data:
Date of Measurement: 11/26/2014 PDOP Reading: 2.3 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
795 FSL 1196 FEL 795 FSL 1196 FEL
Sec: 8 Twp: 32N Rng: 5W Sec: 8 Twp: 32N Rng: 5W

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: 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.)

Se/4 Section 8.

Total Acres in Described Lease: 160 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: 795 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 670 Feet

Building Unit: 670 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1710 Feet

Above Ground Utility: 1510 Feet

Railroad: 5280 Feet

Property Line: 230 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: 03/17/2015

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 341 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 795 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 | 112-215 | 320 | S/2 |

DRILLING PROGRAM

Proposed Total Measured Depth: 2965 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 341 Feet (Including plugged wells)

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 608

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE 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 | 400 | 170 | 400 | 0 |
| 1ST | 7+7/8 | 5+1/2 | 15.5 | 0 | 2965 | 295 | 2965 | 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

Buffer zone setback notifications were sent 3/17/15. The BMPs for the Buffer Zone can be found on the associated Form 2A.

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 attached to the associated Form 2A.

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

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 320857

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: 4/30/2015 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: 7/21/2015

Expiration Date: 07/20/2017

API NUMBER

05 007 06317 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> |
|-----------------|--|
| | <p>1) Provide 48 hrs Notice of Spud and 24 hrs Notice to Run and Cement Casing via COGCC eform 42</p> <p>2) Sample and test two closest water wells within a 1/4 mile of that portion of the wellbore pathway that cuts through the Fruitland Coal (Horizontal dimension – Top to bottom of pay) (Rule 608) (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 (Rule 608)</p> <p>4) Borehole problems encountered while drilling that require an unplanned sidetrack: Contact, discuss & 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</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | Drilling/Completion Operations | <p>317.p BMP</p> <p>One of the first wells drilled on the pad will be logged with an open-hole resistivity log with gamma-ray from TD to into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on the production casing (or intermediate casing if production liner is run). All wells on the pad will have the horizontal portion of the wellbore logged with a measured-while-drilling log with gamma-ray. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state “No open-hole logs were run.” The Form 5 for a well without open-hole logs shall clearly identify (by API#, well name & number) the well in which open-hole logs were run.</p> |

Total: 1 comment(s)

Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|------------------------|
| 1857590 | SELECTED ITEMS REPORT |
| 400817776 | FORM 2 SUBMITTED |
| 400833234 | WELL LOCATION PLAT |
| 400833235 | DEVIATED DRILLING PLAN |
| 400833237 | DIRECTIONAL DATA |
| 400833246 | OTHER |

Total Attach: 6 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|--------------------------|
| Permit | <p>This well is the pilot well of a pilot-lateral drilling plan and will be drilled first, therefore the API designation of -00 has been applied to this Form 2.</p> <p>Final Review Completed. No LGD or public comment received.</p> | 7/21/2015 9:05:08 AM |
| OGLA | Corrected distance from WELL to PUBLIC ROAD per operator (from 1960' to 1710') based on closer public road identified on COGCC's Online GIS Map. | 7/21/2015 7:54:38 AM |
| Engineer | No PA wells were found to exist within ¼ mile of the well bore penetrating the Fruitland coal. | 5/26/2015 11:33:49 AM |
| Engineer | A plat map was prepared depicting the planned S-shaped directional wellbore in relation to other gas wells. A 1500' 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 1500' 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). | 5/26/2015 11:28:25 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 357' (includes a 50' margin of additional protection). The operator proposed a depth of 400' which is 63 ' deeper than the minimal requirement. 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>No logs run shallow enough in offset gas wells within a mile radius to assist in determining the deepest fresh water aquifers.</p> | 5/26/2015 11:17:11 AM |
| Permit | <p>Made the following changes per phone conversation with operator, 5/21/15:</p> <p>Corrected distance to nearest lease line from 341' to 795'.</p> <p>Corrected lease description and lease acreage.</p> <p>Checked "Surface owner has signed O&G lease."</p> <p>Exception 604.b.(2) was unchecked.</p> | 5/21/2015 9:52:08 AM |
| Permit | Passed Completeness | 5/6/2015 10:37:51 AM |

Total: 7 comment(s)