

FORM
2
Rev
08/16

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:
401478405

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
12/18/2017

TYPE OF WELL OIL GAS COALBED OTHER Lateral 1
ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Well Name: Glover Well Number: 4
Name of Operator: BP AMERICA PRODUCTION COMPANY COGCC Operator Number: 10000
Address: 380 AIRPORT RD
City: DURANGO State: CO Zip: 81303
Contact Name: Naomi Azulai Phone: (970)4223516 Fax: ()
Email: naomi.azulai@bp.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20010158

WELL LOCATION INFORMATION

QtrQtr: SESE Sec: 2 Twp: 32N Rng: 6W Meridian: N
Latitude: 37.039892 Longitude: -107.462231

Footage at Surface: 222 Feet FNL/FSL FSL 499 Feet FEL/FWL FEL

Field Name: IGNACIO BLANCO Field Number: 38300
Ground Elevation: 6380 County: ARCHULETA

GPS Data:
Date of Measurement: 12/08/2017 PDOP Reading: 1.5 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
698 FSL 1175 FEL 710 FNL 766 FEL
Sec: 2 Twp: 32N Rng: 6W Sec: 2 Twp: 32N Rng: 6W

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.)

See attached mineral lease map.

Total Acres in Described Lease: 360 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: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 933 Feet

Building Unit: 933 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 222 Feet

Above Ground Utility: 209 Feet

Railroad: 5280 Feet

Property Line: 232 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: 11/17/2017

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: 117 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 698 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 | E/2 |

DRILLING PROGRAM

Proposed Total Measured Depth: 7075 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: _____ 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? Yes

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 | 370 | 246 | 370 | 0 |
| 1ST | 7+7/8 | 5+1/2 | 15.5 | 0 | 3634 | 364 | 3634 | 0 |
| 1ST LINER | 4+3/4 | 2+7/8 | 6.5 | 3478 | 7075 | | | |

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 application is in a Comprehensive Drilling Plan No 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: Naomi Azulai

Title: Well Permitting Analyst Date: 12/18/2017 Email: naomi.azulai@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:  Director of COGCC Date: 1/31/2018

Expiration Date: 01/30/2020

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|--------------------------------------|
| API NUMBER 05 007 06329 01 |
|--------------------------------------|

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) If borehole problems occur while drilling and an unplanned sidetrack is required, the following shall apply:</p> <p>a.) Before proceeding, contact the COGCC Regional Engineer for SW Colorado for verbal approval and provide an explanation as to what happened to the original borehole and what the plan is for the sidetrack.</p> <p>Contact Information: Mark Weems – Regional Engineer-SW Colorado 970-259-4587 off 970-749-0624 cell mark.weems@state.co.us</p> <p>b.) Adhere to the instructions provided in the “UNPLANNED Sidetrack While Drilling: Approval and Reporting Process – Southwestern Colorado San Juan Basing ONLY” that can be found on the COGCC website at:</p> <p>Go to COGCC Web Site for more details if necessary Forms Form 2-Permit to Drill Instructions</p> <p>2) Contact COGCC Regional Engineer – Mark Weems when encountering kicks requiring a mud weight increase of 0.5 ppg to control the kick, unexpected water flows, and unexpected Hydrogen Sulfide.</p> <p>3) The two closest water wells within 1/4 mile radius of the proposed lateral shall be sampled & analyzed (Cause 112 Orders 156-157 and rule 608) if not done previously.</p> |

Best Management Practices

| <u>No</u> | <u>BMP/COA Type</u> | <u>Description</u> |
|-----------|--------------------------------|--|
| 1 | Drilling/Completion Operations | Laterals will be logged with gamma ray only. |

Total: 1 comment(s)

Applicable Policies and Notices to Operators

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| Policy |
| 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> |
|--------------------|------------------------|
| 401478405 | FORM 2 SUBMITTED |
| 401485458 | WELL LOCATION PLAT |
| 401485459 | SURFACE AGRMT/SURETY |
| 401485461 | OTHER |
| 401485463 | DEVIATED DRILLING PLAN |
| 401485464 | MINERAL LEASE MAP |

401485467

DIRECTIONAL DATA

Total Attach: 7 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|---|----------------------------|
| Permit | Final Review Completed. No LGD or public comment received. | 01/31/2018 |
| Engineer | <p>General</p> <p>This APD pertains just to a Coal Bed Methane (CBM) lateral well. Both the surface and production casings were previously assessed and approved in the pilot well (Doc #401478404) and have been carried forward with this permit for reference purposes. Initial drilling on all laterals will commence at a depth near the bottom end of the production casing depicted in the pilot well. The casing in this lateral will be a slotted liner and will not be cemented in place. These laterals will be completed naturally and will not be fracture stimulated. The Statewide HZ Offset Well Policy does not apply to horizontal wells not being fracture stimulated in the pay zone.</p> | 01/30/2018 |
| Engineer | <p>SPACING AND FORMATIONS TAB</p> <p>Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted completed in the same formation was changed from 0 ft to 117 ft (BP GLOVER #1 API #007-06083).</p> <p>DRILLING AND WASTE PLANS TAB</p> <p>There is no other lateral well bore within 1500' of this lateral well bore that is operated by another company.</p> | 01/30/2018 |
| Permit | <p>Passed Completeness.</p> <p>Review "Related Forms" tab during technical review.</p> | 12/26/2017 |

Total: 4 comment(s)