

FORM  
2A

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:

400893936

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Date Received:

09/11/2015

Oil and Gas Location Assessment

☒ New Location ☐ Refile ☐ Amend Existing Location Location#: \_\_\_\_\_

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**443658**

Expiration Date:

**10/20/2018**

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # \_\_\_\_\_
- ☒ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 10000

Name: BP AMERICA PRODUCTION COMPANY

Address: 501 WESTLAKE PARK BLVD

City: HOUSTON State: TX Zip: 77079

Contact Information

Name: Patti Campbell

Phone: (970) 335-3828

Fax: ( )

email: patricia.campbell@bp.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20010158 ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Ford H Number: 1,2 & 3

County: LA PLATA

QuarterQuarter: SEnw Section: 10 Township: 33N Range: 8W Meridian: N Ground Elevation: 6702

Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1678 feet FNL from North or South section line

1704 feet FWL from East or West section line

Latitude: 37.121273 Longitude: -107.707933

PDOP Reading: 1.8 Date of Measurement: 07/27/2015

Instrument Operator's Name: Brian Boniface

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	3	Oil Tanks*		Condensate Tanks*		Water Tanks*	1	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks	3	Separators*	3	Injection Pumps*		Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*	3	Electric Motors		Electric Generators*		Fuel Tanks*		LACT Unit*	
Dehydrator Units*		Vapor Recovery Unit*		VOC Combustor*		Flare*		Pigging Station*	

## OTHER FACILITIES\*

Other Facility Type

Number

Electric Control Box

1

\*Those facilities indicated by an asterisk (\*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Per well, up to 2 steel flowlines a maximum of 4" in diameter from each wellhead to the separator skid.  
A 3" diameter steel line from the below grade tank to the main water gathering line.  
A 4" diameter steel line from the separator to the main gas gathering line.

## CONSTRUCTION

Date planned to commence construction: 11/06/2015 Size of disturbed area during construction in acres: 1.61  
Estimated date that interim reclamation will begin: 05/06/2016 Size of location after interim reclamation in acres: 1.35  
Estimated post-construction ground elevation: 6702

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? \_\_\_\_\_

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

Centralized E&P Waste Management Facility ID, if applicable: \_\_\_\_\_

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Stephen P Marquez

Phone: (505) 330-2923

Address: 3713 Coronado Ave

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Farmington State: NM Zip: 87401

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ 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 from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation \_\_\_\_\_

## CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☒ Timber ☐ Recreational ☐ Other (describe): \_\_\_\_\_

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☒ Timber ☐ Recreational ☐ Other (describe): \_\_\_\_\_

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

## CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	875 Feet	910 Feet
Building Unit:	981 Feet	1000 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	2467 Feet	2525 Feet
Above Ground Utility:	974 Feet	826 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	313 Feet	355 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- 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.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## 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: 08/19/2015

## FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- ☒ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- ☒ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

This is a multi-well expansion of an existing WPX site selected to reduce additional disturbance per La Plata County directives. The equipment was placed on this location avoid affecting the producing WPX operating area to the north and west of BP's wells. The 3 well expansion drives the size of the pad and the placement of the equipment on the southwest corner of the pad ~1000 feet from an unoccupied cabin on the surface owner's property. When feasible, BP's preferred safety practice is to locate the production equipment as close to the access road as possible to allow safe access to all wells and equipment for both routine and emergency purposes. The low impact, equipment (up to three separators and a below ground water tank) will not be a significant source of noise or emissions, or create significant visual disturbance or safety issues for the nearby building units owners.

## SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 63 - Sili clay loam, 3 to 6 percent

NRCS Map Unit Name: \_\_\_\_\_

NRCS Map Unit Name: \_\_\_\_\_

## PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☐ NRCS or, ☒ field observation Date of observation: 08/04/2015

List individual species: Smooth Brome, Pinon pine, Juniper, Sagebrush

Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)  
☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)  
☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)  
☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)  
☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)  
☒ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)  
☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)  
☐ Alpine (above timberline)  
☐ Other (describe):

## WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 430 Feet

water well: 864 Feet

Estimated depth to ground water at Oil and Gas Location 45 Feet

Basis for depth to groundwater and sensitive area determination:

Proximity to downgradient intermittent stream.

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer zone: No

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified:

Is the Location within a Floodplain? ☒ No ☐ Yes Floodplain Data Sources Reviewed (check all that apply)

☒ Federal (FEMA)

☐ State

☐ County

☐ Local

☐ Other

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 608

## 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)

### **RULE 502.b VARIANCE REQUEST**

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

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	<p>DPW consultation is via the BP San Juan Colorado Wildlife Mitigation Plan (WMP) dated March 2011.</p> <p>The attached SUA contains the waiver to the 30 day notice (Rule 305) and consultation (Rule 306).</p> <p>Construction fill material to be used on this site has been purchased from the landowner per the landowner agreement. This area will be included in the interim reclamation.</p> <p>Reference area photos will be submitted via a sundry.</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: \_\_\_\_\_ Date: 09/11/2015 Email: patricia.campbell@bp.com

Print Name: Patti Campbell Title: Regulatory Analyst

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: 10/21/2015

### **Conditions Of Approval**

**All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.**

COA Type	Description
	<p>Notify the COGCC 48 hours prior to start of pad reconstruction/regrading, rig mobilization, spud, start of hydraulic stimulation operations, start of flowback operations (if different than start of hydraulic stimulation operations), and pipeline testing using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations (as shown on the Proposed BMPs and Facility Layout Drawing attachments); including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days per CDPHE requirements and after significant precipitation events), and maintained in good condition.</p> <p>The access road will be maintained as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.</p> <p>Strategically apply fugitive dust control measures, including encouraging established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner or equivalent protection) to contain any spilled or released material around permanent produced water storage tanks.</p>
	<p>The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p> <p>Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved and a Form 15 Earthen Pit Permitted has been submitted/approved) located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p>
	<p>Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network.</p>

## **Best Management Practices**

<b>No</b>	<b><u>BMP/COA Type</u></b>	<b><u>Description</u></b>
1	Community Outreach and Notification	Buffer Zone notification sent to building owners 8/12/15 with an offer to meet with BP (attached). No meeting was requested. Notification of the 2A submittal and comment period will be sent upon successful completion check.
2	General Housekeeping	Fencing requirements (604.c.(2).M). If requested by the Surface Owner or to address a public safety concern, the production facility will be adequately fenced to restrict access by unauthorized persons.
3	General Housekeeping	Control of fire hazards (604.c.(2).N). Any material not in use that might constitute a fire hazard will be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area will comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado.
4	Storm Water/Erosion Control	Covered in the Field Wide Storm Water Management Plan. Site specific SWMPs have been developed for this location including sediment control logs and rock rundowns. Please see attached Construction SWMP and Facility Layout drawings for details.
5	Material Handling and Spill Prevention	Leak Detection Plan (604.c.(2).F). The Production Facilities are covered by BP's operation-wide monitoring and integrity management programs.
6	Dust control	Graveled access roads and locations; speed limit traffic control communications; fresh water used to mitigate dust as needed.
7	Noise mitigation	For ongoing operations, noise levels will be monitored by the operator and will meet COGCC standards. In order to meet the COGCC standards, BP will implement measures such as mufflers or sound walls, if necessary.
8	Emissions mitigation	Green Completions – Emission Control Systems (604.c.(2).C). Since these are coal wells, there will not be a typical "flowback" period. Instead, the subject wells will be swabbed into tanks and connected to the production facility. Venting and/or flaring would only occur in an upset condition.
9	Drilling/Completion Operations	Noise: Equipment will be placed on location to mitigate noise; hospital grade mufflers will be used as necessary.  Light: Light plants facing away from residences and facing the ground.
10	Interim Reclamation	Reseeding will be done as soon as possible following reclamation of the pad with weed free straw mulch including the construction material adjacent to the pad provided by the landowner per the landowner agreement.  Noxious weeds are controlled by an ongoing weed control plan.

Total: 10 comment(s)



### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
2107655	OPERATOR CORRESPONDENCE
2107662	RULE 306.e. CERTIFICATION
400893936	FORM 2A SUBMITTED
400897602	LOCATION PICTURES
400897603	LOCATION PICTURES
400897608	LOCATION PICTURES
400897611	HYDROLOGY MAP
400897613	ACCESS ROAD MAP
400897614	NRCS MAP UNIT DESC
400897615	LOCATION DRAWING
400897616	MULTI-WELL PLAN
400897617	REFERENCE AREA MAP
400897618	CONST. LAYOUT DRAWINGS
400897623	CORRESPONDENCE
400897624	FACILITY LAYOUT DRAWING
400897627	PROPOSED BMPS
400897634	WASTE MANAGEMENT PLAN
400897684	SURFACE AGRMT/SURETY

Total Attach: 18 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	10/20/2015 4:08:54 PM
OGLA	Initiated/Completed OGLA Form 2A review on 10-01-15 by Dave Kubeczko, requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, notification, tank berming, odor control, and pipeline testing COAs from operator on 10-01-15; received acknowledgement of COAs from operator on 10-13-15; passed by CPW on 09-29-15 with WMP acceptable; passed OGLA Form 2A review on 10-20-15 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks only, sediment control access road, cuttings low moisture content, notification, tank berming, odor control, and pipeline testing COAs.	10/1/2015 4:22:22 PM
DOW	The Operator has agreed to incorporate this well into BPs existing San Juan Basin Colorado Wildlife Mitigation Plan (dated March 2011). The well will be subject to the BMPs specified in the Plan, including pre-construction biological surveys, compliance with raptor nest guidelines, and screening of planned day rig activity for conflicts with known eagle nests and roosts prior to commencing rig work. In addition, any new surface disturbance associated with this well pad, access road, and gathering pipeline will be incorporated into Tables 1 and 2 of the Plan and mitigated off-site per the standards identified in the plan.	9/29/2015 2:58:55 PM
OGLA	Passed Buffer Zone completeness review. During technical review - provide explanation about recycle/reuse plans for drilling fluids. Provide Waste Management Plan for locations in Buffer Zones in accordance with 303.b(3)J. Additional BMPs for this proposed location in a Designated Setback Location may be required	9/24/2015 4:02:56 PM
Permit	Return to draft. Did not pass buffer zone review.	9/22/2015 8:02:38 AM
Permit	Attached certification of buffer zone Rule 306.e compliance, per operator request.	9/17/2015 7:26:21 AM
Permit	Referred to OGLA for buffer zone review.	9/14/2015 7:42:45 AM

Total: 7 comment(s)