

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:

401489198

**(SUBMITTED)**

Date Received:

12/18/2017

## Oil and Gas Location Assessment

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

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:

Expiration Date:

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: 10071  
 Name: BARRETT CORPORATION\* BILL  
 Address: 1099 18TH ST STE 2300  
 City: DENVER      State: CO      Zip: 80202

### Contact Information

Name: Rachel Milne  
 Phone: (303) 3128115  
 Fax: ( )  
 email: rmilne@billbarrettcorp.com

### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20040060       Gas Facility Surety ID: \_\_\_\_\_  
 Waste Management Surety ID: \_\_\_\_\_

### LOCATION IDENTIFICATION

Name: Grinde      Number: 1-64-5\_4 NWSW  
 County: WELD  
 Quarter: NWSW    Section: 5    Township: 1N    Range: 64W    Meridian: 6    Ground Elevation: 5025

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: 1550 feet FSL from North or South section line  
290 feet FWL from East or West section line

Latitude: 40.077500      Longitude: -104.583220

PDOP Reading: 1.3      Date of Measurement: 11/02/2017

Instrument Operator's Name: Scott Estabrooks

## 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 #**

Well Site is served by Production Facilities

401485334

## FACILITIES

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

Wells	4	Oil Tanks*	_____	Condensate Tanks*	_____	Water Tanks*	_____	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	4	Separators*	_____	Injection Pumps*	_____	Cavity Pumps*	_____	Gas Compressors*	_____
Gas or Diesel Motors*	_____	Electric Motors	_____	Electric Generators*	_____	Fuel Tanks*	_____	LACT Unit*	_____
Dehydrator Units*	_____	Vapor Recovery Unit*	_____	VOC Combustor*	_____	Flare*	_____	Pigging Station*	_____

## OTHER FACILITIES\*

**Other Facility Type**

**Number**

Other Facility Type	Number

\*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:

- (1) 4" Flex Water Flowline
- (1) 6" Steel Gas Line
- (1) 4" Flex Oil Line
- (4) 2" Flex Gas Lines
- (4) 2" Steel Flow Lines
- (1) 2' Flex Swab

See pipeline and flowline counts above. When possible temporary water pipelines will carry water from storage tanks or water sources to well completion sites. Pipes will be made of flexible and rigid materials (plastic, aluminum and steel) generally 8" to 12" in diameter. The length will be determined by the distance to the well site to be serviced for the fracing operation. This will greatly minimize the number of truck trips required for the well completion.

This location will have up to 20-500 bbl frac tanks. Frac tanks located on this pad may service completion operations being conducted on an adjacent pad location. A sundry would be submitted in the event this situation occurs. Surface owner approval would be obtained where necessary. This location will also have up to 15-300 bbl temporary tanks for drilling operations

## CONSTRUCTION

Date planned to commence construction: 02/01/2018

Size of disturbed area during construction in acres: 4.30

Estimated date that interim reclamation will begin: 05/01/2018

Size of location after interim reclamation in acres: 0.80

Estimated post-construction ground elevation: 5029

## 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: Land application

Cutting Disposal: OFFSITE Cuttings Disposal Method: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 448950 or Document Number: \_\_\_\_\_

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: B&B Family Trust Phone: \_\_\_\_\_

Address: 5322 WCR 51 Fax: \_\_\_\_\_

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

City: Keenesburg State: CO Zip: 80643

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 10/31/2017

## 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:	399 Feet	_____ Feet
Building Unit:	675 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	277 Feet	_____ Feet
Above Ground Utility:	264 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	290 Feet	_____ 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.
- Large UMA Facility - 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: 11/13/2017

## 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.

## 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 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: 79—Weld loam, 1 to 3 percent slopes

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: \_\_\_\_\_

List individual species:

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: 738 Feet

water well: 564 Feet

Estimated depth to ground water at Oil and Gas Location 310 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to ground water is based on the static level of a nearby water well - permit number: 63076 - -  
Sensitive area determination based on distance to nearest down water surface water feature and static water level of permit.

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 No zone:

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 318A

## WILDLIFE

- This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on \_\_\_\_\_

### Operator Proposed Wildlife BMPs

No BMP

### DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area
- 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

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: \_\_\_\_\_ Date: 12/18/2017 Email: rmilne@billbarrettcorp.com

Print Name: Rachel Milne 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: \_\_\_\_\_

### 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

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### Best Management Practices

#### No BMP/COA Type

#### Description

1	Traffic control	COGCC Rule 604.c.(2)D.: Traffic Plan Prior to the commencement of operations, BBC will obtain access and ROW permits per Weld County Code and implement COAs or traffic control plans as required.
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2	Traffic control	COGCC Rule 604.c.(2)S.: Access Roads The proposed access road and all leasehold roads have/will be maintained to accommodate local emergency vehicle access requirements, and shall be maintained in a reasonable condition.
3	General Housekeeping	COGCC Rule 604.c.(2)P: Trash would be contained in a trash cage or dumpster and hauled away to an approved disposal facility.
4	Storm Water/Erosion Control	<p><b>MATERIAL HANDLING, STORMWATER MANAGEMENT AND SPILL CONTROL</b></p> <ul style="list-style-type: none"> <li>• Material handling and spill prevention procedures and practices will be followed to help prohibit discharges to surface waters.</li> <li>• Proper loading, and transportation procedures to be followed for all materials to and from locations.</li> <li>• Use drip pans, sumps, or liners where appropriate</li> <li>• Properly dispose of any wastes fluids and other materials at properly authorized offsite disposal or recycling facilities</li> <li>• Utilize berms and/or other forms of diversions around tanks, drums, chemicals, liquids, pits, impoundments, or well pads.</li> <li>• Limit the amount of land disturbed during construction of pad, access road, and facilities</li> <li>• Pad and access road to be designed to minimize erosion</li> <li>• Install appropriate erosion control devices where necessary to minimize and/or control erosion</li> <li>• Conduct routine inspections of sites and stormwater controls measures in accordance with the requirements of the CDPHE.</li> <li>• Complete repair, maintenance or installation of new stormwater control measures in accordance with the requirements of the CDPHE and as necessary to minimize and/or control erosion and transport of sediment off location.</li> <li>• Develop and implement a Spill Response, Control, and Countermeasure (SPCC) Plan in accordance with 40 CFR Part 112</li> <li>• Install secondary containment around tanks, drums, and storage areas to prohibit discharges to surface waters in accordance with 40 CFR Part 112. Alternatively general secondary containment may be provided around the entire perimeter of the location when containment structures are not feasible in immediate vicinity of storage vessels.</li> </ul> <p><b>SELF INSPECTION, MAINTENANCE, AND HOUSEKEEPING</b></p> <ul style="list-style-type: none"> <li>• All Bill Barrett Corporation employees are trained in spill response, good housekeeping, material management practices, and procedures for equipment and container washing annually</li> <li>• Conduct stormwater inspections per applicable stormwater regulations and Bill Barrett Corporation's Stormwater Management Plan (SWMP)</li> <li>• Conduct routine informal inspections of all tanks and storage facilities at least weekly</li> <li>• All containment areas are to be inspected weekly or following a heavy rain event.</li> <li>• Excessive precipitation accumulation within secondary containment that materially impacts storage capacity containment structure will be removed as appropriate and disposed of properly.</li> <li>• All structural berms, dikes, and containment will be inspected periodically to ensure they are functioning as designed.</li> </ul> <p><b>SPILL RESPONSE</b></p> <ul style="list-style-type: none"> <li>• Spill response procedures as per the applicable SPCC Plan and/or Bill Barrett Corporation Emergency Response Plan and Incident Reporting Policy.</li> </ul>
5	Material Handling and Spill Prevention	COGCC Rule 604.c.(2)N.: Control of Fire Hazards Materials not in use will be kept a minimum of 25' from wellhead and separator. All electrical installations will be done in accordance with current NEC and API RP 500.
6	Dust control	Dust suppression (water trucks) will be utilized as necessary.
7	Construction	COGCC Rule 604.c.(2)M.: Fencing Requirements - Fencing will be installed, as requested by surface owner
8	Noise mitigation	To reduce noise impacts associated with production of the wells, compression and associated production equipment has been purposely located off site at the Grinde 1-64-5_4 PF pad (Document Number: 401485334) to be outside of the 1000' buffer.
9	Odor mitigation	BBC does not anticipate any mitigation measures will be necessary for odors. Sealed tanks with pressure relief valves and emissions controls will be utilized.

10	Drilling/Completion Operations	<p>BBC GENERAL PRACTICES (Drilling/Completion Operations) NOTIFICATIONS</p> <ul style="list-style-type: none"> <li>• Proper notifications required by COGCC regulations or policy memos will be adhered to.</li> </ul> <p>TRENCHES/PITS/TEMPORARY FRAC TANKS</p> <ul style="list-style-type: none"> <li>• Unlined pits will not be constructed.</li> <li>• Drill cuttings will be put to beneficial reuse on location, hauled to an approved spread field for beneficial reuse, or hauled to a properly authorized 3rd party disposal facility. Disposal and beneficial reuse methods will comply with COGCC regulations, policy, and guidance.</li> <li>• Flowback and stimulation fluids from the wells being completed will be sent to tanks and/or filters to allow sand and sediment to settle out before the fluids are hauled to a state-approved disposal facility.</li> <li>• Temporary frac tanks installed on location will have proper secondary containment according to SPCC regulations such as either putting a perimeter berm around location or around the frac tanks.</li> </ul> <p>VEHICLE &amp; LOCATION PROCEDURES</p> <ul style="list-style-type: none"> <li>• Vehicles entering location shall be cleaned to the extent necessary to prevent deposit of chemicals, oil, noxious weeds, trash, and debris on location.</li> <li>• Location to be treated to kill weeds and regraded when necessary to maintain proper drainage.</li> </ul>
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Total: 10 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401489198	FORM 2A SUBMITTED
401489728	HYDROLOGY MAP
401489774	SURFACE AGRMT/SURETY
401489776	NRCS MAP UNIT DESC
401489781	LOCATION DRAWING
401489785	LOCATION PICTURES
401489796	ACCESS ROAD MAP
401489801	WASTE MANAGEMENT PLAN
401489806	MINERAL LEASE MAP
401489810	FACILITY LAYOUT DRAWING
401490035	MULTI-WELL PLAN
401491238	RULE 305A CERTIFICATION OF COMPLIANCE

Total Attach: 12 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

**Public Comments**

No public comments were received on this application during the comment period.

