

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:

400658194

Date Received:

08/08/2014

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:

438823

Expiration Date:

09/08/2017

☒ 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: Mary Pobuda

Phone: (303) 312-8511

Fax: (303) 291-0420

email: mpobuda@billbarrettcorp.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20040060 ☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: CB Rudd Number: 6-61-18_19 SW7

County: WELD

QuarterQuarter: LOT 4 Section: 7 Township: 6N Range: 61W Meridian: 6 Ground Elevation: 4721

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: 250 feet FSL from North or South section line

770 feet FWL from East or West section line

Latitude: 40.495781 Longitude: -104.258514

PDOP Reading: 1.6 Date of Measurement: 03/12/2014

Instrument Operator's Name: Greg Wiemer

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	<u>1</u>	Oil Tanks	<u>4</u>	Condensate Tanks	<u> </u>	Water Tanks	<u>2</u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u> </u>	Production Pits	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits	<u> </u>	Temporary Large Volume Above Ground Tanks	<u>2</u>
Pump Jacks	<u>1</u>	Separators	<u>1</u>	Injection Pumps	<u>2</u>	Cavity Pumps	<u> </u>		
Gas or Diesel Motors	<u> </u>	Electric Motors	<u>1</u>	Electric Generators	<u>1</u>	Fuel Tanks	<u> </u>	Gas Compressors	<u>1</u>
Dehydrator Units	<u> </u>	Vapor Recovery Unit	<u>1</u>	VOC Combustor	<u>2</u>	Flare	<u>1</u>	LACT Unit	<u>1</u>
								Pigging Station	<u>1</u>

OTHER FACILITIES

Other Facility Type

Number

Gas Pipeline, 2" steel	<u>1</u>
Injection Pipeline, 4" steel	<u>1</u>
VAPOR RECOVERY TOWER	<u>1</u>
Oil Pipeline, 3" steel	<u>1</u>
Water Pipeline, 3" steel	<u>1</u>

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

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 2 temporary LVST's and 10-500 bbl frac tanks OR up to 110-500 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: 10/01/2014 Size of disturbed area during construction in acres: 10.60

Estimated date that interim reclamation will begin: 05/01/2015 Size of location after interim reclamation in acres: 2.60

Estimated post-construction ground elevation: 4720

DRILLING PROGRAM

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

Is H₂S 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: Other

Other Disposal Description:

Cuttings from the vertical portion of the well(s) will be hauled to Krier Spread field. Cuttings from the lateral portion of the wellbore(s) will be hauled to a commercial disposal facility OR hauled to Krier.

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 430225 or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Circle B Land Co LLC

Phone: _____

Address: 1099 18th Street Suite 2300

Fax: _____

Address: _____

Email: _____

City: Denver State: CO Zip: 80018

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: No

The right to construct this Oil and Gas Location is granted by: applicant is owner

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

Distance to nearest:

Building: 558 Feet
Building Unit: 593 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 241 Feet
Above Ground Utility: 464 Feet
Railroad: 5280 Feet
Property Line: 250 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.

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: 08/14/2014

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: 47—Olney fine sandy 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: 03/12/2014

List individual species: Grama, Bluestem, Fescue, Oatgrass, Brome

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: 3750 Feet

water well: 253 Feet

Estimated depth to ground water at Oil and Gas Location 66 Feet

Basis for depth to groundwater and sensitive area determination:

static water level of nearby water well, permit #69938

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: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

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

Updated reference photos taken during the grow season shall be submitted within 12 months. This location is located approximately 593' from a building unit. However, the building unit is owned by BBC; please see exception request attached. No tenants reside in the building and BBC is moving forward with the use by special review process with the county to allow for the building unit to be utilized as office space as necessary.

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

Signed: _____ Date: 08/08/2014 Email: mpobuda@billbarrettcorp.com

Print Name: Mary Pobuda Title: Permit 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: 9/9/2014

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

	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42.
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Best Management Practices

No BMP/COA Type

Description

1	Planning	Multiwell Pads. BBC is the building unit owner; no concerns or mitigation necessary. This is also a single well pad. Development from existing well pads BBC is the building unit owner; no concerns.
2	Planning	Pit level indicators. No pits are planned for this location.
3	Planning	Site-specific measures. BBC is the building unit owner; no concerns or additional mitigation to provide.
4	Traffic control	Traffic Plan. Access road is existing, Weld county doesn't require an encroachment permit for this location. BBC is the building unit owner; no concerns or mitigation necessary.
5	General Housekeeping	Control of fire hazards. Fire hazards not in use to be a minimum of 25' from wellhead, tanks and separator.
6	General Housekeeping	Removal of surface trash. Trash would be contained in a trash cage and hauled away to an approved disposal.

7	Storm Water/Erosion Control	<p>STORM WATER AND SPILL CONTROL PRACTICES</p> <p>GENERAL</p> <ul style="list-style-type: none"> Utilize diking and other forms of containment and diversions around tanks, drums, chemicals, liquids, pits, impoundments, or well pads. Alternatively secondary containment may be provided around the entire perimeter of the location when containment structures are not feasible in immediate vicinity of storage vessels. Use drip pans, sumps, or liners where appropriate Limit the amount of land disturbed during construction of pad, access road, and facilities Employ spill response plan (SPCC) for all facilities Dispose properly offsite any wastes fluids and other materials <p>MATERIAL HANDLING, ACTIVITIES, PRACTICES AND STORM WATER DIVERSION</p> <ul style="list-style-type: none"> Secondary containment of tanks, drums, and storage areas is mandatory to prohibit discharges to surface waters. A minimum of 110% capacity required of largest storage tank within a containment area Material handling and spill prevention procedures and practices will be followed to help prohibit discharges to surface waters Proper loading, and transportation procedures to be followed for all materials to and from locations <p>EROSION CONTROL</p> <ul style="list-style-type: none"> Pad and access road to be designed to minimize erosion Pad and access road to implement appropriate erosion control devices where necessary to minimize erosion Routine inspections of sites and controls to be implemented with additions, repairs, and optimization to occur as necessary to minimize erosion <p>SELF INSPECTION, MAINTENANCE, AND HOUSEKEEPING</p> <ul style="list-style-type: none"> All employees are trained in spill response, good housekeeping, material management practices, and procedures for equipment and container washing annually Conduct internal storm water inspections per applicable stormwater regulations Conduct routine informal inspections of all tanks and storage facilities at least weekly All containment areas are to be inspected weekly or following a heavy rain event. Any excessive precipitation accumulation within containment should be removed as appropriate and disposed of properly All structural berms, dikes, and containment will be inspected periodically to ensure they are operating correctly <p>SPILL RESPONSE Spill response procedures as per the BBC field SPCC Plan</p> <p>VEHICLE & LOCATION PROCEDURES</p> <ul style="list-style-type: none"> Vehicles entering location are to be free of chemical, oil, mud, weeds, trash, and debris Location to be treated to kill weeds and bladed when necessary
8	Material Handling and Spill Prevention	<p>Leak Detection Plan. Conduct routine informal inspections of all tanks and storage facilities at least weekly.</p> <p>-Tank batteries would be placed within secondary containment consisting of corrugated steel containment rings and sized to provide containment for 150% of the largest single tank.</p>
9	Construction	Berm construction. Berms to be constructed as per rule requirements.
10	Construction	Fencing requirements. BBC is the building unit owner, no fencing proposed.

11	Construction	Loadlines. Loadlines to be bullplugged or capped. Guy line anchors. Anchors to be identified as required by 604c(2)(Q)
12	Construction	Tank specifications. Tanks will meet NFPA standards.
13	Noise mitigation	BBC is the building unit owner; no concerns or mitigation necessary.
14	Emissions mitigation	Green Completions – Emission Control Systems. BBC is the building unit owner; during flowback operations BBC will follow this general procedure: -Wells will flowback to open top tanks during drillout until sufficient gas pressure is present to allow proper operation of a 3-phase flowback separator -Fluid from flowback separators will dump water/oil to a PT tank; water will dump to closed top frac tanks equipped with a vapor combustor (vapor combustor will have auxiliary fuel to maintain pilot) -PT tank will dump oil to BBC production equipment -Flash vapors off of PT tank will be combusted in flow back flare which will also be equipped with auxiliary fuel -Once gas rate exceeds 200 mcf/d off of any Well all flow will be diverted to BBC production equipment and ultimately into a gas gathering system
15	Drilling/Completion Operations	BBC GENERAL PRACTICES NOTIFICATIONS <ul style="list-style-type: none"> Proper notifications required by COGCC regulations or policy memos will be adhered to TRENCHES/PITS/TEMPORARY FRAC TANKS <ul style="list-style-type: none"> Unlined pits will not be constructed. Drill cuttings will either be hauled to an approved spread field or waste disposal facility or will be treated and disposed of onsite. Disposal methods will comply with COGCC regulations. Flowback and stimulation fluids from the wells being completed will be sent to tanks and/or filters to allow the sand to settle out before the fluids are hauled to a state approved disposal facility. 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.
16	Drilling/Completion Operations	Large Volume Above Ground Storage Tanks: BBC will be utilizing two 40,000 bbls tanks provided by Well Water Solutions. The tanks are approximately 156 feet in diameter and 12 feet tall. Well Water Solution's tanks are manufactured in accordance with designs and specifications that have been reviewed and certified by a Professional Engineer. The tanks will be erected by Well Water Solutions or a contractor authorized by Well Water Solutions to set up their tanks. The tanks will be filled with fresh water obtained from local fresh water sources. The tanks will be placed within the perimeter berm that will be constructed around the entire pad.
17	Drilling/Completion Operations	BBC certifies that the MLVTs will be designed and implemented consistent with the MLVT Policy dated 6/13/14.
18	Drilling/Completion Operations	Closed Loop Drilling Systems – Pit Restrictions. A closed loop drilling system will be utilized
19	Drilling/Completion Operations	Blowout preventer equipment ("BOPE"). BBC is the building unit owner and the building is unoccupied. BOP equipment will be utilized as per requirements. BOPE testing for drilling operations. BBC is the building unit owner and the building is unoccupied, and is not anticipated to be occupied during drilling operations. Adequate equipment will be utilized as per rule requirements. BOPE for well servicing operations. BBC is the building unit owner and the building is unoccupied, and is not anticipated to be occupied during well servicing operations. Adequate equipment will be utilized as per rule requirements.
20	Drilling/Completion Operations	Drill stem tests. Not planned.
21	Interim Reclamation	Well site cleared. BBC to follow Rule 1004a which requires all equipment to be removed within 90 days of plugging a well.

22	Final Reclamation	Identification of plugged and abandoned wells. BBC to follow Rule 319a(5), requiring identification of P&Ad wells with a permanent monument.
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Total: 22 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668502	CORRESPONDENCE
400658194	FORM 2A SUBMITTED
400659628	NRCS MAP UNIT DESC
400659632	OTHER
400659634	WASTE MANAGEMENT PLAN
400659635	OTHER
400659638	LOCATION PICTURES
400659639	REFERENCE AREA MAP
400659865	LOCATION DRAWING
400659866	ACCESS ROAD MAP
400659867	HYDROLOGY MAP
400664466	RULE 306.E. WAIVER
400664468	FACILITY LAYOUT DRAWING
400664477	FORM 2A SUBMITTED

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Passed final review. No Public or LGD comments. Only passing 2A, and not Form 2's since waiting on September hearings.	9/9/2014 2:17:26 PM
Permit	Waiting on September Hearings. Docket #1409-SP-2134	9/9/2014 9:40:40 AM
OGLA	No Public Comments. OGLA task passed.	9/4/2014 9:06:57 AM
OGLA	IN PROCESS - Operator provided Rule 604.c.(2) mitigation measure BMPs and has indicated there is no tenant residing in the nearest BU. OGLA review complete. Waiting on Public Comment period.	9/2/2014 10:18:55 AM
OGLA	Operator has provided a waiver for the Designated Setback Rule 305 notifications and Rule 306 meeting requirements. Requested Rule 604.c.(2) mitigation measure BMPs - these cannot be left off the 2A. Is there a tenant residing in the nearest BU that is owned by the Operator? Change Sensitive Area designation to YES due to nearby Domestic water well. Due by 9/25/14.	8/25/2014 10:54:34 AM
OGLA	ON HOLD - Left message with Operator to discuss required Designated Setback notifications and missing mitigation measure BMPs.	8/22/2014 1:12:44 PM
Permit	Passed Completeness	8/14/2014 12:48:05 PM
Permit	Returned to draft	8/14/2014 12:18:01 PM
OGLA	Buffer Zone completeness review - 305.a.(2) notification date missing, facility layout drawing missing, 604.c.(2) mitigation measures not addressed	8/14/2014 9:37:45 AM

Total: 9 comment(s)