

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:

401199592

Date Received:

02/01/2017

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 444840

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:

444840

Expiration Date:

07/13/2020

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: Matt Barber
Phone: (303) 312-8188
Fax: (303) 291-0420
email: mbarber@billbarrettcorp.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: Anschutz Equus Farms Number: 4-62-28 NWNW
County: WELD
Quarter: NWNW Section: 28 Township: 4N Range: 62W Meridian: 6 Ground Elevation: 4574

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: 770 feet FNL from North or South section line
286 feet FWL from East or West section line

Latitude: 40.287881 Longitude: -104.337456

PDOP Reading: 1.2 Date of Measurement: 01/18/2017

Instrument Operator's Name: Chad Meiers

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 #**
 Production Facilities Location serves Well(s) 444757 _____

FACILITIES

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

| | | | | | | | | | |
|-----------------------|----------|----------------------|-----------|----------------------|----------|------------------|----------|-------------------------------|----------|
| Wells | <u>9</u> | Oil Tanks* | <u>16</u> | Condensate Tanks* | _____ | Water Tanks* | <u>4</u> | Buried Produced Water Vaults* | _____ |
| Drilling Pits | _____ | Production Pits* | _____ | Special Purpose Pits | _____ | Multi-Well Pits* | _____ | Modular Large Volume Tanks | _____ |
| Pump Jacks | <u>9</u> | Separators* | <u>19</u> | Injection Pumps* | _____ | Cavity Pumps* | _____ | Gas Compressors* | <u>2</u> |
| Gas or Diesel Motors* | _____ | Electric Motors | _____ | Electric Generators* | _____ | Fuel Tanks* | _____ | LACT Unit* | <u>3</u> |
| Dehydrator Units* | _____ | Vapor Recovery Unit* | <u>6</u> | VOC Combustor* | <u>8</u> | Flare* | <u>3</u> | Pigging Station* | _____ |

OTHER FACILITIES*

| | |
|-----------------------------------|----------------------|
| <u>Other Facility Type</u> | <u>Number</u> |
|-----------------------------------|----------------------|

| | |
|-----------------------------------|----------------------|
| <u>Other Facility Type</u> | <u>Number</u> |
| 2" & 4" Oil Flowline | 3 |
| Horizontal Treater | 3 |
| 4", 8", & 12" Gas Gathering Line | 3 |
| Gas Generators | 3 |
| 4" Gas Injection Line | 1 |
| Sumps | 5 |
| Glycol heater | 2 |
| 2" Flowline (on pad) | 10 |
| 4" Water Flowline | 2 |
| Electric Air Compressor | 1 |
| 2" Swab Line | 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:

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: 12/01/2017 Size of disturbed area during construction in acres: 14.16
Estimated date that interim reclamation will begin: 11/01/2018 Size of location after interim reclamation in acres: 5.88
Estimated post-construction ground elevation: 4572

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: Beneficial reuse

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 441079 or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Equus Farms Inc

Phone: _____

Address: 555 17th Street, Suite 2400

Fax: _____

Address: _____

Email: _____

City: Denver State: CO Zip: 80202

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: oil and gas lease

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: | 5280 Feet | 5280 Feet |
| Building Unit: | 5280 Feet | 5280 Feet |
| High Occupancy Building Unit: | 5280 Feet | 5280 Feet |
| Designated Outside Activity Area: | 5280 Feet | 5280 Feet |
| Public Road: | 4527 Feet | 3746 Feet |
| Above Ground Utility: | 255 Feet | 75 Feet |
| Railroad: | 5280 Feet | 5280 Feet |
| Property Line: | 286 Feet | 23 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

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: _____

- 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.

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 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: Osgood sand, 0 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: 01/18/2017

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: 5280 Feet

water well: 1008 Feet

Estimated depth to ground water at Oil and Gas Location 33 Feet

Basis for depth to groundwater and sensitive area determination:

Static water level of nearby water well (permit #843)
Location lies within the Lost Creek Designated Basin

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 _____

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 This amended 2A is being submitted for a proposed location expansion to accommodate production from proposed wells located on this pad and also from proposed wells located on the offset Anschutz Equus Farms 4-62-28 NWSW pad (Location ID 444757). In addition, planned compressors and equipment have been added to this location. In addition, approved surface well hole locations have been moved and will be sundried once this 2A has been approved.

Equipment details have been attached for the proposed production and compressor areas on this location.

Reference photos are scheduled to be completed during the 2017 growing season and will be submitted by sundry notice.

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

Signed: _____ Date: 02/01/2017 Email: mbarber@billbarrettcorp.com

Print Name: Matt Barber Title: Sr. 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: 7/14/2017

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

| <u>COA Type</u> | <u>Description</u> |
|------------------------|---------------------------|
| | |

Best Management Practices

| No | BMP/COA Type | Description |
|----|-----------------------------|---|
| 1 | Storm Water/Erosion Control | <p>MATERIAL HANDLING, STORMWATER MANAGEMENT AND SPILL CONTROL</p> <ul style="list-style-type: none"> • 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. • Use drip pans, sumps, or liners where appropriate • Properly dispose of any wastes fluids and other materials at properly authorized offsite disposal or recycling facilities • Utilize berms and/or other forms of diversions around tanks, drums, chemicals, liquids, pits, impoundments, or well pads. • Limit the amount of land disturbed during construction of pad, access road, and facilities • Pad and access road to be designed to minimize erosion • Install appropriate erosion control devices where necessary to minimize and/or control erosion • Conduct routine inspections of sites and stormwater controls measures in accordance with the requirements of the CDPHE. • 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. • Develop and implement a Spill Response, Control, and Countermeasure (SPCC) Plan in accordance with 40 CFR Part 112 • Intall 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. <p>SELF INSPECTION, MAINTENANCE, AND HOUSEKEEPING</p> <ul style="list-style-type: none"> • All Bill Barrett Corporation employees are trained in spill response, good housekeeping, material management practices, and procedures for equipment and container washing annually • Conduct stormwater inspections per applicable stormwater regulations and Bill Barrett Corporation's Stormwater Management Plan (SWMP) • 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. • Excessive precipitation accumulation within secondary containment that materially impacts storage capacity containment structure will be removed as appropriate and disposed of properly. • All structural berms, dikes, and containment will be inspected periodically to ensure they are functioning as designed. <p>SPILL RESPONSE</p> <ul style="list-style-type: none"> • Spill response procedures as per the applicable SPCC Plan and/or Bill Barrett Corporation Emergency Response Plan and Incident Reporting Policy. |

| | | |
|---|--------------------------------|--|
| 2 | Drilling/Completion Operations | <p>BBC GENERAL PRACTICES (Drilling/Completion Operations)</p> <p>NOTIFICATIONS</p> <ul style="list-style-type: none"> • Proper notifications required by COGCC regulations or policy memos will be adhered to. <p>TRENCHES/PITS/TEMPORARY FRAC TANKS</p> <ul style="list-style-type: none"> • Unlined pits will not be constructed. • 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. • 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. • 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. <p>VEHICLE & LOCATION PROCEDURES</p> <ul style="list-style-type: none"> • Vehicles entering location shall be cleaned to the extent necessary to prevent deposit of chemicals, oil, noxious weeds, trash, and debris on location. • Location to be treated to kill weeds and regraded when necessary to maintain proper drainage. |
|---|--------------------------------|--|

Total: 2 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-----------------------|
| 1010196 | NRCS MAP UNIT DESC |
| 1010197 | WASTE MANAGEMENT PLAN |
| 1010237 | LOCATION DRAWING |
| 1010238 | MULTI-WELL PLAN |
| 401199592 | FORM 2A SUBMITTED |
| 401200028 | HYDROLOGY MAP |
| 401200032 | LOCATION PICTURES |
| 401200046 | REFERENCE AREA MAP |
| 401200047 | ACCESS ROAD MAP |

Total Attach: 9 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|---------------------|
| Permit | Final Review Completed. | 07/13/2017 |
| OGLA | Sundries to amend the surface and bottom hole locations were submitted on 07/06/2017. Sundry to abandon well (API 123-43691) submitted and approved. New Location Drawing and Multiwell Plan submitted 07/13/2017. - Per Operator request, uploaded new Location Drawing and Multiwell Plan. | 07/13/2017 |
| Permit | Per operator the corrected distance to the property line for the well is 286' and 23' for the production area. Permitting Review Complete. | 07/12/2017 |
| OGLA | - Awaiting Sundried APDs for potential corrections to Cultural Distances from the well and production to the nearest Property Line. - Modified distances received and corrected - 07/12/2017 - Waste Management Plan needs to be updated. Removed Waste Management Plan. - Received 03/30/2017 - Changed Soils List to "Osgood sand, 0 to 3 percent slopes" based on the Soil Survey for Southern Weld County. - Uploaded the corrected NRCS Map Unit Description. | 03/30/2017 |
| OGLA | The surface hole locations for the wells on this Location have changed. The Form 2 APDs related to this Location are Approved APDs aligned in a north/south orientation. Per the Location Drawing attached to this Form 2A, the wells will now be aligned in an east/west orientation. Per engineering, Sundries to change the alignment of the wells have not been submitted. Form 2A can not be passed until Sundries for each APD have been submitted and passed. - 04/03/2017 Pending Sundries for APDs - 04/21/2017 Pending Sundries for APDs - 05/01/2017 Pending Sundries for APDs - 05/10/2017 Sundries for APDs Received and In Process - Rescinded by Operator 06/08/2017 - 07/13/2017, Changed the number of wells to 9 and the number of pump jacks to 9. | 03/30/2017 |
| LGD | This proposed oil and gas facility is located in unincorporated Weld County. The COGCC Form 2A for this location was submitted on or before February 1, 2017, therefore, the proposed location is considered a Use by Right in the Agricultural Zoned District with no Weld Oil and Gas Location Assessment (WOGLA) required. A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of a right-of-way requires a Right-Of-Way Permit from the Department of Public Works. Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579. | 02/10/2017 |
| Permit | Passed completeness. | 02/08/2017 |

Total: 7 comment(s)