

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:

400615076

Date Received:

06/16/2014

Oil and Gas Location Assessment

New Location  Refile  Amend Existing Location Location#: 424213

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:

**424213**

Expiration Date:

**07/30/2017**

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: BRADY RILEY  
 Phone: (303) 3128115  
 Fax: ( )  
 email: BRILEY@BILLBARRETTCORP.COM

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: Miller Pad #9 Number: 13A-6-791  
 County: GARFIELD  
 Quarter: LOT 4 Section: 6 Township: 7S Range: 91W Meridian: 6 Ground Elevation: 6093

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: 564 feet FNL from North or South section line  
 369 feet FWL from East or West section line

Latitude: 39.475263 Longitude: -107.604575

PDOP Reading: 6.0 Date of Measurement: 07/08/2010

Instrument Operator's Name: JAMES KALMON



## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Method: Evaporation

Cutting Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

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

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: MILLER LAND AND CATTLE CO Phone: \_\_\_\_\_

Address: 7121 COUNTRY RD 311 Fax: \_\_\_\_\_

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

City: NEW CASTLE State: CO Zip: 81647

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

Distance to nearest:

Building: 925 Feet  
Building Unit: 925 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 264 Feet  
Above Ground Utility: 411 Feet  
Railroad: 5280 Feet  
Property Line: 1139 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: 05/22/2014

## 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 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: 41. Kim Loam, 6 to 12 percent slopes  
NRCS Map Unit Name: 66. Torriothents-Camborthids-Rock outcrop complex, steep  
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: 07/08/2010  
List individual species: shrub and brush land

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: 1420 Feet

water well: 900 Feet

Estimated depth to ground water at Oil and Gas Location 115 Feet

Basis for depth to groundwater and sensitive area determination:

Depth to water = depth of water well. Water level unknown in that well. Distance to nearest surface water measured from surface location well # 13A-6-791. Intermittent stream on Hydrology map = irrigation ditch on location drawing and construction diagram.

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 609

## 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

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 06/16/2014 Email: BRILEY@BILLBARRETTCORP.COM

Print Name: BRADY RILEY 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: Matthew Lee Director of COGCC Date: 7/31/2014

### **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.**

<b><u>COA Type</u></b>	<b><u>Description</u></b>
	<p>Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations; 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 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), and maintained in good condition.</p> <p>The access road will be constructed and 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 enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.</p>
	<p>Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p>
	<p>The moisture content of any cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, the drill cuttings must also meet the applicable standards of table 910-1.</p> <p>If the wells are to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel 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>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 (if installed) and following any reconfiguration of the pipeline network.</p>

### **Best Management Practices**

No	BMP/COA Type	Description
1	Wildlife	<p><b>WILDLIFE BEST MANAGEMENT PRACTICES</b></p> <p><b>GENERAL WILDLIFE AND ENVIRONMENTAL PROTECTION MEASURES:</b></p> <ul style="list-style-type: none"> <li>– Establish policies to protect wildlife (e.g., no poaching, no firearms, no dogs on location, no feeding of wildlife, etc.)</li> <li>– Promptly report spills that affect wildlife to the Water Quality Control Division of CDPHE and CDOW</li> <li>– Avoid location staging, refueling, and storage areas within 300 feet, of any reservoir, lake, wetland, or natural perennial or seasonal flowing stream or river.</li> </ul> <p><b>INFRASTRUCTURE LAYOUT WILDLIFE PROTECTION MEASURES:</b></p> <ul style="list-style-type: none"> <li>– Implementing fugitive dust control measures</li> <li>– limit parking to disturber areas</li> </ul> <p><b>DRILLING AND PRODUCTION OPERATION WILDLIFE PROTECTION MEASURES:</b></p> <ul style="list-style-type: none"> <li>– Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multifunction contractors.</li> <li>– Install exclusionary device to prevent bird and other wildlife access to equipment stacks, vents and openings.</li> <li>– Establish company guidelines to minimize wildlife mortality from vehicle collision on roads.</li> </ul> <p><b>FLUID PIT/POND WILDLIFE PROTECTION MEASURES:</b></p> <ul style="list-style-type: none"> <li>– Install and maintain adequate measures to exclude all types of wildlife (e.g., big game and birds) from all fluid pits/ponds with fencing, flagging and other appropriate exclusion measures). BBC currently installs 6' wildlife proof fences on all freshwater ponds.</li> </ul> <p><b>INVASIVE/NON-NATIVE VEGETATION CONTROL:</b></p> <ul style="list-style-type: none"> <li>– Educate employees and contractors about noxious and invasive weed issues.</li> <li>–</li> </ul> <p><b>RESTORATION, RECLAMATION AND ABANDONMENT:</b></p> <ul style="list-style-type: none"> <li>– Avoid aggressive non-native grasses and shrubs in mule deer and elk habitat restorations.</li> <li>– Revegetate with seed mixtures that are of the surface owner's preference that are compatible with both livestock and wildlife.</li> </ul>

2	Storm Water/Erosion Control	<p><b>STORM WATER BEST MANAGEMENT PRACTICES</b>  <b>BILL BARRETT CORPORATION</b>  <b>GENERAL BMPs</b></p> <ul style="list-style-type: none"> <li>• Utilize diking and other forms of containment and diversions around tanks, drums, chemicals, liquids, pits, and impoundments</li> <li>• Use drip pans, sumps, or liners where appropriate</li> <li>• Limit the amount of land disturbed during construction of pad, access road, and facilities</li> <li>• Employ spill response plan for all facilities</li> <li>• Dispose properly offsite any wastes fluids and other materials</li> </ul> <p><b>MATERIAL HANDLING, ACTIVITIES, PRACTICES AND STORM WATER DIVERSION</b></p> <ul style="list-style-type: none"> <li>• 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 within containment area</li> <li>• Material handling and spill prevention procedures and practices will be followed to prohibit discharges to surface waters</li> <li>• Proper loading, and transportation procedures to be followed for all materials to and from locations</li> </ul> <p><b>EROSION CONTROL GENERAL</b></p> <ul style="list-style-type: none"> <li>• Pad and access road to be designed to minimize erosion</li> <li>• Pad and access road to implement appropriate erosion control devices where necessary to minimize erosion</li> <li>• Routine inspections of sites and controls to be implemented with additions, repairs, and optimization to occur as necessary to minimize erosion</li> </ul> <p><b>EROSION CONTROL SPECIFIC TO PROTECT NEARBY IRRIGATION DITCH</b></p> <ul style="list-style-type: none"> <li>• Seed and install erosion control blankets on all fill slopes. Erosion control blankets must be designed for installation and sediment on 1 1/2: 1 or steeper slopes;</li> <li>• Install a 3' compacted, earthen perimeter berm on the pad surface at the top of all fill slopes. This perimeter berm should tie into the cut slopes and provide 360° containment of the pad; and</li> <li>• install a diversion ditch and sediment basins at the toe of all fill slopes to collect any sediment and redirect stormwater away from the irrigation ditches.</li> </ul> <p><b>SELF INSPECTION, MAINTANENCE, AND HOUSEKEEPING</b></p> <ul style="list-style-type: none"> <li>• All employees are trained in spill response, good housekeeping, material management practices, and procedures for equipment and container washing at least once per year</li> <li>• Conduct internal storm water inspections at least semi-annually and within 24 hours of a heavy rain event</li> <li>• Conduct routine 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>• Any excessive precipitation accumulation within containment should be removed and disposed of properly</li> <li>• All structural berms, dikes, and containment will be inspected periodically to ensure they are operating correctly</li> <li>• Minimum of an annual storm water BMP inspection and outcome report documenting status, including repairs</li> </ul> <p><b>SPILL RESPONSE</b></p> <ul style="list-style-type: none"> <li>• Follow spill response procedures</li> <li>• If spill occurs: <ul style="list-style-type: none"> <li>o Safely stop the source of the spill immediately</li> <li>o Contain the spill until clean-up is complete</li> <li>o Cover spill with appropriate absorbent material</li> <li>o Keep the area well ventilated</li> <li>o Dispose of clean-up materials properly</li> <li>o Do not use emulsifier or dispersant</li> </ul> </li> </ul> <p><b>VEHICLE &amp; LOCATION PROCEDURES</b></p> <ul style="list-style-type: none"> <li>• Vehicles entering location are to be free of chemical, oil, mud, weeds, trash, and debris</li> <li>• Location to be treated to kill weeds and bladed when necessary</li> </ul> <p>Bill Barrett Corp. – CDPHE Stormwater Permit Number: CPR-039752</p>
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3	Drilling/Completion Operations	<p>BBC GENERAL PRACTICES 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 on fill material.</li> <li>• Drill cuttings from the wellbore will be directed into a lined and bermed surface containment. Any free liquids accumulated in the containment would be removed as soon as practicable.</li> <li>• Drilling pits utilized for completion operations will be permitted (if applicable) and lined, operated in accordance with COGCC regulations, specifically Rule 903 and Rule 904. All permitted pits (Form 15) will be closed per Rule 905 and non-permitted drilling pits would be closed in accordance with Rule 1003.</li> <li>• Drilling pits used for completion will be fenced with appropriate wildlife mesh on the bottom portion. Appropriate netting will be installed within 30 days of the pit becoming inactive.</li> <li>• 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 placed into the pit for reuse or disposal at a BBC SWD facility.</li> <li>• All flowback water will be confined to the lined completion pit or storage tanks for a period not to exceed ninety days and will be recycled for re-use, piped or trucked offsite to one of the approved disposal facilities below. Flowback sands stored on location will be remediated and buried on location or hauled to a state approved disposal facility. <ul style="list-style-type: none"> <li>o Circle B Land 33A-35-692SWD, API# 05-045-18493, UIC# 159277</li> <li>o GGU Rodreick #21B-31-691 SWD, API# 05-045-13803, UIC# 159176</li> <li>o Specialty #13A-28-692 SWD, API# 05-045-14054, UIC# 159212</li> <li>o Scott 41D-36-692 SWD, API# 05-045-11169, UIC# 159159</li> </ul> </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>
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Total: 3 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1638235	SURFACE AGRMT/SURETY
2107068	CORRESPONDENCE
400615076	FORM 2A SUBMITTED

Total Attach: 3 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Operator requesting Rule 604.b.(2) exception: SUA signed in 2008 expressly governs site of this location. Building Unit at 925' is the surface owner's home. Attached complete SUA document. Per operator: checked "is the mineral owner" and "is committed to a lease" for the Surface Owner; corrected right-to-construct to "oil and gas lease". Off Hold. No LGD or Public Comments.	7/30/2014 3:55:30 PM
Permit	ON HOLD - asked operator to clarify: mineral and surface owner for right to construct, details of surface use agreement used for Exception per Rule 604.b.(2)	7/29/2014 3:57:32 PM
OGLA	Initiated/Completed OGLA Form 2A review on 07-16-14 by Dave Kubeczko, placed notification, fluid containment, sediment control access road, dust control, spill/release BMPs, flowback to tanks, cuttings low moisture content, and pipeline testing COAs; sent email indicating COAs to operator on 07-16-14; passed by CPW on 06-27-14 with operator previously submitted BMPs acceptable; passed OGLA Form 2A review on 07-23-14 by Dave Kubeczko; notification, fluid containment, sediment control access road, dust control, spill/release BMPs, flowback to tanks, cuttings low moisture content, and pipeline testing COAs.	7/16/2014 8:56:52 AM
DOW	The Bill Barrett Miller Pad #9 13A-6-791 is a refile. The BMPs as approved for the original permit of 7-12-11 (Doc # 400151738) are still appropriate and applicable for the pad site and the refile.  Michael Warren, Friday, June 27, 2014 at 10:00 AM.	6/27/2014 10:57:22 AM
LGD	pass, khw	6/25/2014 9:32:28 AM
Permit	Passed completeness. Distance to building unit updated and is now within a buffer zone.	6/17/2014 4:08:26 PM
Permit	Return to draft: Marked as in a buffer zone but distance to building unit is listed as 5280 ft.	6/17/2014 3:48:46 PM

Total: 7 comment(s)