

FORM 2A Rev 04/01

State of Colorado Oil and Gas Conservation Commission 1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



Table with 4 columns: DE, ET, OE, ES

Document Number: 400148727

Oil and Gas Location Assessment

[X] New Location [] Amend Existing Location Location#: _____

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations...

Location ID: 423309 Expiration Date: 05/19/2014

[X] This location assessment is included as part of a permit application.

1. CONSULTATION

- [] This location is included in a Comprehensive Drilling Plan. CDP # _____
[X] 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.

2. Operator

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

3. Contact Information

Name: Valerie Walker Phone: (303) 312-8531 Fax: (303) 291-0420 email: vwalker@billbarrettcorp.com

4. Location Identification:

Name: Kaufman Pad 3 Number: 11A-30-691 County: GARFIELD Quarter: LOT 2 Section: 30 Township: 6S Range: 91W Meridian: 6 Ground Elevation: 5832 Define a single point as a location reference for the facility location... Footage at surface: 1576 feet FNL, from North or South section line, and 931 feet FWL, from East or West section line. Latitude: 39.501367 Longitude: -107.602767 PDOP Reading: 6.0 Date of Measurement: 12/07/2010 Instrument Operator's Name: James A. Kalmon

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: [] Drilling Pits: [1] Wells: [12] Production Pits: [] Dehydrator Units: [] Condensate Tanks: [] Water Tanks: [] Separators: [] Electric Motors: [] Multi-Well Pits: [] Gas or Diesel Motors: [] Cavity Pumps: [] LACT Unit: [] Pump Jacks: [] Pigging Station: [] Electric Generators: [] Gas Pipeline: [] Oil Pipeline: [] Water Pipeline: [] Flare: [] Gas Compressors: [] VOC Combustor: [] Oil Tanks: [] Fuel Tanks: []

Other: Production via 12 3-phase flowlines to the Kaufman Production Pad #4 located to the north. Drill pit = 206X102 foot lined completion pit; cuttings trench located in external buffer zone

6. Construction:

Date planned to commence construction: 05/15/2011 Size of disturbed area during construction in acres: 3.92
Estimated date that interim reclamation will begin: 05/01/2012 Size of location after interim reclamation in acres: 1.04
Estimated post-construction ground elevation: 5835 Will a closed loop system be used for drilling fluids: Yes
Will salt sections be encountered during drilling: Yes No Is H2S anticipated? Yes No
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes No
Mud disposal: Offsite Onsite Method: Land Farming Land Spreading Disposal Facility
Other: Evap & bury

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: _____
Surface Owner: Fee State Federal Indian
Mineral Owner: Fee State Federal Indian
The surface owner is: the mineral owner committed to an oil and gas lease
 is the executer of the oil and gas lease the applicant
The right to construct the location is granted by: oil and gas lease Surface Use Agreement Right of Way
 applicant is owner
Surface damage assurance if no agreement is in place: \$2000 \$5000 Blanket Surety ID _____

8. Reclamation Financial Assurance:

Well Surety ID: 20040060 Gas Facility Surety ID: _____ Waste Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes No
Distance, in feet, to nearest building: 722, public road: 226, above ground utilit: 310
, railroad: 5280, property line: 308

10. 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

11. 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

12. Soils:

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.

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.gov/> 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: 51. Olney loam, 6 to 12 percent slopes

NRCS Map Unit Name: 55. Potts loam, 3 to 6 percent slopes

NRCS Map Unit Name: 66. Torriorthents-Camborthids-Rock outcrop complex, steep

13. 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): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: No Yes Was a Rule 901.e. Sensitive Areas Determination performed: No Yes

Distance (in feet) to nearest surface water: 375, water well: 572, depth to ground water: 15

Is the location in a riparian area: No Yes Was an Army Corps of Engineers Section 404 permit filed No Yes

Is the location within a Rule 317B Surface Water Supply Area buffer zone:

No 0-300 ft. zone 301-500 ft. zone 501-2640 ft. 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: No Yes

15. Comments:

Distance to surface water and water well measured from closest edge of pad. North portion of well pad in 317B Intermediate buffer (24% of pad). Majority of pad including cuttings trench and completion pit are located in the in 317B External buffer zone (76% of pad). Distance to Railroad greater than 1 mile. Rule 305/306 waived in SUA (second Whereas). Completion pit to be lined.

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

Signed: _____ Date: 04/07/2011 Email: vwalker@billbarrettcorp.com

Print Name: Valerie A. Walker Title: Permit Analyst

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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: _____

David S. Nesline

Director of COGCC

Date: 5/20/2011

CONDITIONS OF APPROVAL, IF ANY:

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.

COMPLETION COAs:

Operator will implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.

The completion/flowback fluids pit must be double-lined. The pit will also require a leak detection system (Rule 904.e).

The completion/flowback fluids pit must be fenced. If the completion/flowback pit is not closed (either drained and/or backfilled) immediately after well completion, then operator must appropriately net the completion/flowback pit, in a timely manner, and maintain the fencing and netting until the pit is closed in accordance with Rule 905. Closure of Pits, and Buried or Partially Buried Produced Water Vessels.

Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material (per Rule 604.a.(4)).

Operator will submit a secondary and tertiary containment plan to be implemented during fracing operations via sundry notice Form 4 to the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) for review and approval.

Notify COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to start of fracing operations.

PRODUCTION COAs:

Interim reclamation shall begin during the first appropriate planting season following completion/testing of the last well; unless a determination is made that subsequent wells will be permitted and drilled. Reclamation practices will be subject to approval by the surface owner.

Final reclamation shall begin during the first appropriate planting season following plugging, using practices approved by surface owner.

DRILLING COAs:

The moisture content of any drill 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 meet the applicable standards of Table 910-1.

The nearby downgradient hillside to east-southeast towards Gibson Gulch must be monitored for any day-lighting of drilling fluids throughout the drilling of the surface casing interval.

A spill response trailer will be on location 24 hours a day, 7 days a week during construction, drilling, and completion operations to facilitate a timely response to any spills that may occur.

Appropriate heavy equipment (e.g., a backhoe) will be staged at the location during all drilling and completion operations so that any emergency diversions or pits to contain spills can be built immediately upon discovery.

An emergency spill response program that includes employee training, safety and maintenance provisions and current contact information for downstream Public Water System(s) located within fifteen (15) stream miles of the DCPS Operation, as well as the ability to notify any such downstream Public Water System(s) with an intake(s) within fifteen (15) stream miles downstream of the DCPS operations will be implemented during construction, drilling, and completion activities.

In the event of a spill or release, the operator shall immediately implement the emergency response procedures in the above described emergency response program.

All personnel working at the location during all drilling and completion operations will receive training on spill response and reporting. Documentation of this training will be maintained in BBC's Silt office.

At a minimum, weekly spill prevention meetings will be held identifying staff responsibilities in order to provide a quick and effective response to a spill. Appropriate documentation will be maintained in BBC's Silt office.

Operator will conduct daily inspections of equipment for leaks and equipment problems with appropriate documentation retained in BBC's Silt office. All equipment deficiencies shall be corrected. Daily monitoring should end approximately 30 days after well completion and/or after production has been stabilized; however, timely inspections should continue during the production phase.

Operator will use adequately sized containment devices for all chemicals and/or hazardous materials stored or used on location.

Operator will provide an increased testing frequency (at least every thirty (14) days) of blowout prevention equipment (BOPE) during drilling operations.

CONSTRUCTION COAs:

Notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to start of construction.

Operator will collect baseline and follow-up surface water samples as follows: Prior to drilling and when sufficient water is present in the stream, operator will collect baseline surface water data from immediately down gradient of the oil and gas location. Sampling will occur quarterly at low elevations and biannually at higher elevations. Follow-up surface water data will be collected by sampling the same location beginning in the 2011 calendar year, and to continue for 5 years. COGCC recommends that the water samples be analyzed for the following parameters: pH; alkalinity; specific conductance; major cations/anions (chloride, fluoride, sulfate, sodium); total dissolved solids (TDS); BTEX/DRO; TPH; PAH's (including benzo[a]pyrene); and metals (arsenic, barium, calcium, chromium, iron, magnesium, selenium).

No portion of any pit that will be used to hold liquids shall be constructed within the 317B Internal (0 to 300 feet) or Intermediate (301 to 500 feet) Buffer Zones. No portion of any pit constructed to hold liquids within the External (501 to 2620 feet), shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the Director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.

No portion of any cuttings trench shall be constructed on fill material, nor within the 317B Internal Buffer Zone

The access road will be constructed to prevent sediment migration from the access road to nearby surface water or any drainages leading to other nearby surface waters. Strategically apply fugitive dust control measures, including enforcing established speed limits, to reduce fugitive dust and coating of vegetation and deposition in water sources.

Well pad and access road to the well pad will be gravel surfaced. Operator must install adequately sized culverts that cross any drainages leading to the stream. Operator must ensure 110 percent secondary containment for any potential volume of fluids that may be released from the pad/access road in the vicinity of all stream, intermittent stream, ditch, and drainage crossings.

The location is in an area of high run-off/run-on potential from the proposed pad area to the west-southwest; therefore the pad shall be constructed as quickly as possible and appropriate BMPs need to be in place both during and after well pad construction, as well as during all drilling and well completion operations. Standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater run-off. Slopes with potential for runoff should be stabilized immediately following pad construction. Operator shall construct a diversion ditch at the base of the fill slopes on the west, south, and east sides of the well pad, with this diversion ditch being sloped so that all water enters one or more detention basins.

Because of proximity of the well pad to both nearby surface water and steep slopes to the west-southwest, operator will grade the well pad surface to slope away from the stream towards a central collection point on the well pad.

WATER RESOURCE (SURFACE WATER AND GROUNDWATER) PROTECTION COAs:

Location is in a sensitive area because of its proximity to surface water; therefore, operator must ensure 110 percent 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 (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), and maintained in good condition.

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines.

Location is in a sensitive area because of the potential for shallow groundwater; therefore either a lined drilling pit or closed loop system (which operator has already indicated on the Form 2A) must be implemented.

Location is in a sensitive area because of the potential for shallow groundwater; therefore completion/production pits must be lined.

Attachment Check List

Att Doc Num	Name
2033707	CORRESPONDENCE
400148727	FORM 2A SUBMITTED
400148798	NRCS MAP UNIT DESC
400148800	NRCS MAP UNIT DESC
400148801	NRCS MAP UNIT DESC
400148806	HYDROLOGY MAP
400148809	ACCESS ROAD MAP
400148812	MULTI-WELL PLAN
400148817	SURFACE AGRMT/SURETY
400148831	LOCATION PICTURES
400148833	REFERENCE AREA PICTURES
400148837	REFERENCE AREA MAP
400150867	PROPOSED BMPs
400150868	PROPOSED BMPs
400150872	CONST. LAYOUT DRAWINGS
400150877	LOCATION DRAWING
400150878	LOCATION DRAWING
400150977	317B NOTIFICATION
400150978	317B NOTIFICATION

Total Attach: 19 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
DOW	The BMPs as submitted by the operator are equivalent to what is required in Rule. The BMPs are applicable to the site. by Michael Warren on Friday, May 20, 2011 at 11:15 A.M.	5/20/2011 11:17:21 AM
OGLA	Initiated/Completed OGLA Form 2A review on 04-18-11 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, monitoring hillside, closed loop, no pit in fill, flowback to tanks, tank berming, cuttings low moisture content, and 317B COAs from operator on 04-18-11; received acknowledgement of COAs from operator on 04-19-11; passed by CDOW on 05-20-11 with operator submitted BMPs (with permit application) acceptable; passed OGLA Form 2A review on 05-20-11 by Dave Kubeczko; fluid containment, spill/release BMPs, monitoring hillside, closed loop, no pit in fill, flowback to tanks, tank berming, cuttings low moisture content, and 317B COAs.	4/18/2011 8:42:34 AM
Permit	Received BMP's in BMP tab. plg.	4/11/2011 1:07:31 PM
Permit	Back to draft for BMP's to be included in BMP tab. sf	4/8/2011 8:31:06 AM

Total: 4 comment(s)

BMP

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

Storm Water/Erosion Control

**STORM WATER BEST MANAGEMENT PRACTICES
BILL BARRETT CORPORATION**

GENERAL BMPs

- Utilize diking and other forms of containment and diversions around tanks, drums, chemicals, liquids, pits, and impoundments
- 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 for all facilities
- Dispose properly offsite any wastes fluids and other materials

MATERIAL HANDLING, ACTIVITIES, PRACTICES AND STORM WATER DIVERSION

- 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
- Material handling and spill prevention procedures and practices will be followed to prohibit discharges to surface waters
- Proper loading, and transportation procedures to be followed for all materials to and from locations

EROSION CONTROL

- 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

SELF INSPECTION, MAINTANENCE, AND HOUSEKEEPING

- All employees are trained in spill response, good housekeeping, material management practices, and procedures for equipment and container washing at least once per year
- Conduct internal storm water inspections at least semi-annually and within 24 hours of a heavy rain event
- Conduct routine 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 and disposed of properly
- All structural berms, dikes, and containment will be inspected periodically to ensure they are operating correctly
- Minimum of an annual storm water BMP inspection and outcome report documenting status, including repairs

SPILL RESPONSE

- Follow spill response procedures
- If spill occurs:
 - o Safely stop the source of the spill immediately
 - o Contain the spill until clean-up is complete
 - o Cover spill with appropriate absorbent material
 - o Keep the area well ventilated
 - o Dispose of clean-up materials properly
 - o Do not use emulsifier or dispersant

VEHICLE & LOCATION PROCEDURES

- 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

Bill Barrett Corp. – CDPHE Stormwater Permit Number: CPR-039752

Total: 2 comment(s)