

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:

400725556

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Date Received:

11/19/2014

Oil and Gas Location Assessment

☐ New Location ☒ Refile ☐ Amend Existing Location Location#: 426854

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:

**426854**

Expiration Date:

**01/14/2018**

☐ 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: (303) 2910420  
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: Kaufman #5 Pad Number: 42A-24-692  
County: GARFIELD  
QuarterQuarter: NWSE Section: 24 Township: 6S Range: 92W Meridian: 6 Ground Elevation: 5864  
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: 2203 feet FSL from North or South section line  
1659 feet FEL from East or West section line  
Latitude: 39.511626 Longitude: -107.612067  
PDOP Reading: 6.0 Date of Measurement: 11/08/2010  
Instrument Operator's Name: JAMES KALMON

## 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	10	Oil Tanks*		Condensate Tanks*	4	Water Tanks*	4	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks		Separators*	4	Injection Pumps*		Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*		Electric Motors		Electric Generators*		Fuel Tanks*		LACT Unit*	
Dehydrator Units*		Vapor Recovery Unit*		VOC Combustor*	1	Flare*		Pigging Station*	

## OTHER FACILITIES\*

### Other Facility Type

### Number

frac sand storage area	1
gas pipeline (steel)	1
Completion pit	1
2" flowline per well (steel)	10
Cuttings Containment	1
waterline (poly)	1
waterline (steel)	1
500 bbl temp completion/frac tanks	8

\*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) and are 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.

## CONSTRUCTION

Date planned to commence construction: 08/01/2016 Size of disturbed area during construction in acres: 4.13

Estimated date that interim reclamation will begin: 05/01/2017 Size of location after interim reclamation in acres: 0.79

Estimated post-construction ground elevation: 5861

## DRILLING PROGRAM

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

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE

Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: ONSITE

Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Beneficial reuse or land application plan submitted?           

Reuse Facility ID:                      or Document Number:                     

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: William & Janette Kaufman

Phone:                                     

Address: 925 Bennett Avenue

Fax:                                     

Address:                                     

Email:                                     

City: Glenwood State: CO Zip: 81601  
Springs

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ is committed to an oil and Gas Lease

☐ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place:                                      Surface Surety ID:                                     

Date of Rule 306 surface owner consultation 09/23/2014

## 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:	788 Feet	986 Feet
Building Unit:	788 Feet	986 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	919 Feet	592 Feet
Above Ground Utility:	258 Feet	230 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	342 Feet	536 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☒ Buffer Zone  
☐ Exception Zone  
☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

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: 09/23/2014

## 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.

This pad is located on fee surface and was permitted in 2011, prior to the 2012 setback rulemaking. The pad and associated production facilities were placed in consultation with the surface owner and based on best topography and avoidance of 317B intermediate or internal buffer zones. The production facilities in particular were placed as far to the west as possible with 317B in mind and to maximize interim reclamation potential

## 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: 66 Torriorthents-Camborthids-Rock outcrop complex, steep

NRCS Map Unit Name: 30 Heldt clay loam, 6 to 12 percent slopes

NRCS Map Unit Name: 56 Potts loam, 6 to 12 percent slopes

## 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: 11/08/2010

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: 514 Feet

water well: 514 Feet

Estimated depth to ground water at Oil and Gas Location 80 Feet

Basis for depth to groundwater and sensitive area determination:

Based on static water level of nearby water well Permit # 119556- -A. Closest water well did not have static water level available. Number is taken from closest well with static water level reported.

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 501-2640 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: Yes

## 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

This is a refile for a location on FEE surface with FEE minerals. There are no changes from the original, approved permit and the Form 2 Refiles do not expire until 3/9/2016. Operator will give Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners when Operator receives COGCC notification that the APD has passed Completeness and is in In Process status. BBC will adhere to the COGCC Policy for Bradenhead Monitoring effective 5/29/12. Please note that the distances to nearest have been updated from originally approved 2A. Please note Facility Layout and Location Drawings have been updated.

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

Signed: \_\_\_\_\_ Date: 11/19/2014 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:  \_\_\_\_\_ Director of COGCC Date: 1/15/2015

## 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>COA Type</b>	<b>Description</b>
	<p>The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.</p> <p>If the well(s) is(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>Completion pit, if constructed, must be lined.</p>
	Operator must ensure secondary containment for any volume of fluids contained at tank site during 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 after precipitation events), and maintained in good condition.
	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).

### **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	This pad is located on fee surface and was permitted in 2011, prior to the 2012 setback rulemaking. The pad and associated production facilities were placed in consultation with the surface owner and based on best topography and avoidance of 317B intermediate or internal buffer zones. The access road ties into an existing pad and proceeds to the existing Six Lazy K Road. Notify the COGCC 48 hours prior to start of pad construction
2	Pre-Construction	Limit the amount of land disturbed during construction of pad, access road, and facilities.
3	Traffic control	Site specific traffic control plans were not required by the county or BLM. Install approved MUTCD traffic control/warning devices before work begins and through the duration of drilling and completion. Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multifunction contractors, where practicable. Pipelines are proposed and include a gas line and two water lines. Water line infrastructure will assist to reduce traffic.
4	General Housekeeping	All employees are trained in spill response, good housekeeping, material management practices, and procedures for equipment and container washing annually. Trash would be contained in a trash cage and hauled away to an approved disposal after the completion of drilling operations. All facilities to be painted Shadow Gray (or appropriate/BLM recommended color) to blend into the natural vertical elements. Downcasting lights will be installed on permanent facilities
5	Wildlife	Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multifunction contractors, where practicable. Install exclusionary device to prevent bird and other wildlife access to equipment stacks, vents and openings.

6	Wildlife	<p>BBC WILDLIFE BEST MANAGEMENT PRACTICES</p> <p>GENERAL WILDLIFE AND ENVIRONMENTAL PROTECTION MEASURES</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>INFRASTRUCTURE LAYOUT WILDLIFE PROTECTION MEASURES</p> <ul style="list-style-type: none"> <li>• Implementing fugitive dust control measures</li> <li>• Limit parking to disturbed areas as much as possible</li> </ul> <p>DRILLING AND PRODUCTION OPERATION WILDLIFE PROTECTION MEASURES</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, where practicable.</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>FLUID PIT/POND WILDLIFE PROTECTION MEASURES</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 pits and freshwater ponds with free liquids. In addition, BBC will install bird netting over "inactive" pits with free liquids after 30 days of inactivity.</li> </ul> <p>INVASIVE/NON-NATIVE VEGETATION CONTROL</p> <ul style="list-style-type: none"> <li>• Educate employees and contractors about noxious and invasive weed issues.</li> </ul> <p>RESTORATION, RECLAMATION AND ABANDONMENT</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>
7	Storm Water/Erosion Control	<p>Limit the amount of land disturbed during construction of pad, access road, and facilities. The well pad and access road were designed to minimize erosion. Routine inspections and controls to be implemented as necessary. Conduct internal storm water inspections per applicable stormwater regulations. Any excessive precipitation accumulation within containment should be removed as appropriate and disposed of properly.</p>



8	Storm Water/Erosion Control	<p><b>BBC STORM WATER AND SPILL CONTROL PRACTICES</b></p> <p><b>GENERAL</b></p> <ul style="list-style-type: none"> <li>• Utilize diking and other forms of containment and diversions around tanks, drums, chemicals, liquids, pits, impoundments, or well pads</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 (SPCC) 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 tank within a containment area</li> <li>• Material handling and spill prevention procedures and practices will be followed to help prohibit discharges to surface waters</li> <li>• Proper loading, and transportation procedures to be followed for all materials to and from locations</li> </ul> <p><b>EROSION CONTROL</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>SELF INSPECTION, MAINTENANCE, 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 annually</li> <li>• Conduct internal storm water inspections per applicable stormwater regulations</li> <li>• Conduct routine informal inspections of all tanks and storage facilities at least weekly</li> <li>• All containment areas are to be inspected weekly or following a heavy rain event.</li> <li>• Any excessive precipitation accumulation within containment should be removed as appropriate and disposed of properly</li> <li>• All structural berms, dikes, and containment will be inspected periodically to ensure they are operating correctly</li> </ul> <p><b>SPILL RESPONSE</b></p> <ul style="list-style-type: none"> <li>• Spill response procedures as per the BBC field SPCC Plan</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: COR-039752</p>
9	Material Handling and Spill Prevention	<p>Employ a spill response plan (SPCC) for all facilities. Conduct routine informal inspections of all tanks and storage facilities at least weekly. 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. Use drip pans, sumps, or liners where appropriate. Dispose properly offsite any wastes fluids and other materials. Operator must implement best management practices to contain any unintentional release of fluids along all portions of the temporary surface pipeline route where temporary pumps and other necessary equipment are located. Operator must routinely inspect the entire length of the temporary surface pipeline to ensure integrity. Operator shall conduct daily inspections of surface pipeline routes for leaks during active transfer of fluids. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. The operator shall maintain records of inspections, findings and repairs, if necessary, for the life of the pits. Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the temporary surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.</p>
10	Dust control	<p>During construction and operation, operator shall implement dust abatement measures as needed to prevent fugitive dust from vehicular traffic, equipment operations, or wind events.</p>

11	Construction	All topsoil shall be stripped and segregated following removal of vegetation during construction of the well pad, access and pipelines. Roads shall be crowned, ditched, surfaced, drained with culverts and/or water dips, and constructed to BLM Gold Book standards. Initial gravel application shall be a minimum of 6 inches. BBC shall provide timely year-round road maintenance and cleanup on the access roads. A regular schedule for maintenance shall include, but not be limited to, blading, ditch and culvert cleaning, road surface replacement, and dust abatement.
12	Noise mitigation	Mufflers on the rig will be oriented north-east to minimize engine noise. Plumb dump lines into tanks to muffle sound. Rubber cushions in lubricators are used to muffle sound for plunger lift.
13	Emissions mitigation	A combustor will be installed for control of associated condensate and produced water tank emissions with 95% control efficiency. Green completion practices to be utilized
14	Drilling/Completion Operations	Lights will be positioned downcast during drilling/completion activities. A closed loop drilling system would be employed. Drill cuttings from the wellbore will be directed into a lined and bermed surface containments. Any free liquids accumulated in the containment would be removed as soon as practicable. If the well(s) is(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. Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.
15	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 containments. 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>
16	Interim Reclamation	Facilities were located to maximize interim reclamation success. A seed mix consistent with BLM standards will be utilized and contain no noxious, prohibited or restricted weed seeds. Pad shall be fenced to BLM standards to exclude livestock grazing for the first two growing seasons. Adhere to BLM annual monitoring plan and regulatory monitor and control noxious weeds. Interim reclamation is not expected to occur until after the timing limitations end for big game.

17	Final Reclamation	Remove all equipment upon plugging and abandonment and conduct final reclamation activities so that seeding occurs in the optimal growing season. Reclamation is not expected to occur until after the timing limitations end for big game.
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Total: 17 comment(s)

### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
2107271	WASTE MANAGEMENT PLAN
2107272	RULE 306.e. CERTIFICATION LETTER
400725556	FORM 2A SUBMITTED
400727584	FACILITY LAYOUT DRAWING
400730464	LOCATION DRAWING
400736789	30 DAY NOTICE LETTER

Total Attach: 6 Files

### **General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
#Error	Final review complete.	1/15/2015 10:29:13 AM
#Error	Requires 306.e request letter. Ready to pass when letter is received and OGLA is ready to pass.	12/30/2014 9:39:31 AM
#Error	Pass KHW: Please note any location with greater than 5,000 barrels of total storage capacity (pits/tanks) would require a Garfield County land use change permit.	12/11/2014 3:42:31 PM
#Error	Initiated/Completed Form 2A review on 12-10-14 by Dave Kubeczko; previously submitted Form 2A#400212708 and approved (12-15-11); 317B External buffer zone Rules apply; COGCC added notification, flowback to tanks, fluid containment/spill release BMPs, lined pit, and cuttings management; passed by CPW on 11-24-14 with operator submitted wildlife BMPs acceptable; passed OGLA Form 2A review on 01-14-15 by Dave Kubeczko; notification, flowback to tanks, fluid containment/spill release BMPs, lined pit, 317B, and cuttings management COAs.	12/10/2014 12:55:20 PM
#Error	The BMPs submitted by the operator along with the proposed timing to minimize impacts on wintering big-game are adequate to address wildlife and habitat concerns at this location.  By: Taylor Elm, 12/02/2014, 12:18 pm	12/2/2014 12:17:53 PM
#Error	Passed Completeness	11/25/2014 8:31:20 AM
#Error	Passed Buffer Zone completeness review	11/24/2014 3:50:11 PM
#Error	Within buffer zone, sent to OGLA for further review.	11/20/2014 7:25:40 AM

Total: 8 comment(s)