

SURFACE USE PLAN

BILL BARRETT CORPORATION

MDP Pad #11

Garfield County, CO

<u>GGU Federal 41A-29-691</u> NENE, 1236' FNL, 1279' FEL, Sec. 29, T6S-R91W (surface hole) NENE, 1146' FNL, 664' FEL, Sec. 29, T6S-R91W (bottom hole)	<u>GGU Federal 42D-29-691</u> NENE, 1246' FNL, 1282' FEL, Sec. 29, T6S-R91W (surface hole) SENE, 1473' FNL, 664' FEL, Sec. 29, T6S-R91W (bottom hole)
<u>GGU Federal 41C-29-691</u> NENE, 1230' FNL, 1293' FEL, Sec. 29, T6S-R91W (surface hole) NENE, 492' FNL, 664' FEL, Sec. 29, T6S-R91W (bottom hole)	<u>GGU Federal 41B-29-691</u> NENE, 1240' FNL, 1367' FEL, Sec. 29, T6S-R91W (surface hole) NENE, 819' FNL, 664' FEL, Sec. 29, T6S-R91W (bottom hole)
<u>GGU Federal 41D-29-691</u> NENE, 1224' FNL, 1308' FEL, Sec. 29, T6S-R91W (surface hole) NENE, 165' FNL, 664' FEL, Sec. 29, T6S-R91W (bottom hole)	<u>GGU Federal 42C-29-691</u> NENE, 1234' FNL, 1312' FEL, Sec. 29, T6S-R91W (surface hole) SENE, 1800' FNL, 664' FEL, Sec. 29, T6S-R91W (bottom hole)
<u>GGU Jolley 44B-20-691</u> NENE, 1218' FNL, 1323' FEL, Sec. 29, T6S-R91W (surface hole) SESE, 460' FSL, 666' FEL, Sec. 20, T6S-R91W (bottom hole)	<u>GGU Swanson 32C-29-691</u> NENE, 1227' FNL, 1327' FEL, Sec. 29, T6S-R91W (surface hole) SWNE, 1800' FNL, 1990' FEL, Sec. 29, T6S-R91W (bottom hole)
<u>GGU Federal 34A-20-691</u> NWNE, 1212' FNL, 1338' FEL, Sec. 29, T6S-R91W (surface hole) SWSE, 165' FSL, 1990' FEL, Sec. 20, T6S-R91W (bottom hole)	<u>GGU Swanson 32D-29-691</u> NWNE, 1221' FNL, 1342' FEL, Sec. 29, T6S-R91W (surface hole) SWNE, 1473' FNL, 1990' FEL, Sec. 29, T6S-R91W (bottom hole)
<u>GGU Federal 31D-29-691</u> NWNE, 1206' FNL, 1353' FEL, Sec. 29, T6S-R91W (surface hole) NWNE, 165' FNL, 1990' FEL, Sec. 29, T6S-R91W (bottom hole)	<u>GGU Federal 31A-29-691</u> NWNE, 1215' FNL, 1356' FEL, Sec. 29, T6S-R91W (surface hole) NWNE, 1146' FNL, 1990' FEL, Sec. 29, T6S-R91W (bottom hole)
<u>GGU Federal 31C-29-691</u> NWNE, 1200' FNL, 1367' FEL, Sec. 29, T6S-R91W (surface hole) NWNE, 492' FNL, 1990' FEL, Sec. 29, T6S-R91W (bottom hole)	<u>GGU Federal 31B-29-691</u> NWNE, 1209' FNL, 1371' FEL, Sec. 29, T6S-R91W (surface hole) NWNE, 819' FNL, 1990' FEL, Sec. 29, T6S-R91W (bottom hole)

The final onsite for this well pad occurred on October 1, 2008. The proposed well pad is located on federal surface under the management of the BLM – Colorado River Valley Field Office with a total of fourteen (14) proposed directional wells. Three (3) of the wells are proposed within private leases (Swanson and Jolley) and one (1) proposed within COC-50126 (federal) and ten (10) proposed within COC-46972 (federal)

This is a new pad with all fourteen (14) wells to be drilled in mid 2010.

The excavation contractor would be provided with a copy of the approved Surface Use Plan before initiating construction.

1. Existing Roads:

- A. The proposed well pad is located approximately 23 miles southeast of Rifle, CO. Maps and an access road description to the proposed well pad are included (see Topographic Maps A, B, and Access Road Description sheet).
- B. The use of roads under State and County Road Department maintenance are necessary to access the well pad. However, an encroachment permit is not anticipated as there are no upgrades to these road systems proposed at this time.
- C. No topsoil stripping would occur as there are no improvements proposed to existing State or County access roads.

- D. From the County Road surface, existing previously approved Gibson Gulch Unit access roads under the maintenance of BBC would be utilized to the pad.
- E. All existing roads would be maintained and kept in good repair during all phases of operation. BBC would coordinate with the necessary owners/agencies to ensure maintenance of the access roads.
- F. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Additional signs may be posted, as necessary, to warn the public of project related traffic. Travel would be limited to the existing access roads and proposed access road.

2. Planned Access Road:

- A. From the existing BBC maintained access road in the NW/4 NE/4 of Sec. 29, T6S, R91W, 6th P.M. an access road upgrade is proposed traversing 454' (0.09 miles) east across federal surface to a point where new access will begin. The new access road is proposed traversing 368' (0.07 miles) east across federal surface from the access road upgrade to the proposed well site (see attached Topographic Map "B"). The proposed road upgrade and new access road are both on lease and within the federal unit.
- B. The upgrade and new road segments would be constructed and maintained to accommodate drilling and completion equipment access in a safe manner. ROW width requested for all proposed road would be 32 feet, with a typical running surface varying between 22 – 24 feet. A maximum grade of 10% would be maintained and any additional drainage structures, where necessary, would be incorporated to prevent soil erosion and accommodate all-weather traffic. Following completion of all wells on the pad, the temporary disturbance area would be reclaimed according to BLM or private landowner specifications.
- C. Access road construction would typically require a D6 or larger crawler tractor, a D12 or larger motor grader, a Class 12R or larger track hoe, a mid-sized backhoe, two to four 10-yard dump trucks, and possibly a Class 988 loader. Road construction/improvement would include clearing and grubbing of brush and trees, windrowing of topsoil, construction of reinforced rolling dips and grade dips where feasible, installation of culverts in ditched sections and side drainages to provide ditch relief and sediment control, construction of retaining structures on steep slopes (as approved by the BLM), placement of slash and topsoil on cut and fill slopes, placement of erosion and sediment controls on cut and fill slopes as approved by the BLM, seeding of all disturbed areas outside of the travel way, and installation of cattle guards and road closure gates where needed. Topsoil would be stripped and stockpiled during road construction and re-spread to the greatest degree practical on cut slopes, fill slopes, and borrow ditches prior to seeding.
- D. No surfacing material would come from Indian lands or off-lease Federal lands. BBC requests that any excess rock from construction of the pad be used for surfacing of the proposed access road, if necessary. Any additional materials needed would be purchased from a private source and be properly permitted with the State of Colorado.
- E. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.

- F. All access roads and surface disturbing activities would conform to the appropriate standard, no higher than necessary, to accommodate their intended function adequately as outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, Fourth Edition – Revised 2007.
- G. The access roads would be inspected by the BLM and, if necessary, maintained by BBC on an as needed or quarterly basis (at a minimum).

3. Location of Existing Wells:

- A. Following is a list of existing wells within a one-mile radius of the proposed well (see enclosed One-Mile Radius Map):

i.	water wells	8
ii.	injection wells	none
iii.	disposal wells	none
iv.	drilling wells	none
v.	temp shut-in wells	none
vi.	producing wells	75
vii.	abandoned wells	6
viii.	wells drilled; w/o completion	none

4. Location of Production Facilities:

- A. Facilities for this pad (see Sheet 7) may be shared by individual wells drilled from this pad. Surface facilities would consist of wellheads, separation units, gas metering units, fugitive emission combusters, radio antennas, solar panel brackets, chemical storage containers less than 500 gallons in capacity and above-ground condensate and produced water tanks with approximately 300 to 500-barrel capacities each. Telemetry equipment may be used where feasible to remotely monitor well conditions. The facilities will include 6 condensate tanks, 6 water tanks, 4 separators and a VOC combustor.
- B. An off-site facility pad is not proposed with this application. Tank batteries would be placed on the pad within secondary containment to prevent the off-site migration of accidentally-spilled condensate or produced water. Secondary containment would consist of corrugated steel containment rings. Construction of the containment rings surrounding the tank batteries would be constructed to prevent lateral movement of fluids through an impermeable barrier attached to the rings and laid under the tanks. Secondary containment would be sized to contain a minimum of 110 percent of the storage capacity of the single largest tank within the barrier. All loading lines would be placed inside the containment barrier or would have secondary containment vessels. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- C. All permanent above-ground structures would be painted a flat, non-reflective Olive Black color to match the standard environment and would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

- D. Site security guidelines identified in 43 CFR 3163.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to.
 - E. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
 - F. A tank battery will be constructed on this lease. It will be surrounded by a dike of sufficient capacity to contain 1.5 times the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery or will have a secondary containment vessel. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil. BBC requests permission to install the necessary production/operation facilities with this application
 - G. Any necessary pits would be properly fenced to prevent any wildlife and livestock entry.
 - H. The pad area and access road would require periodic maintenance to ensure that drainages are kept open and free of debris, ice and snow, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.
 - I. Bill Barrett Corporation (BBC) proposes to construct a new pipeline corridor containing up to three buried pipelines; 1) one (up to 12-inch diameter) steel low-pressure natural gas gathering pipeline, 2) one (up to 10-inch diameter) HDPE (SDR 17) produced water gathering pipeline, and 3) one (up to 6-inch diameter) steel industrial water pipeline and associated infrastructure and an adjacent gas pipeline next to an existing gas corridor containing the same infrastructure (i.e., up to three buried pipelines).
 - J. The 822' (0.15 mile) of new pipeline corridor across federal surface would traverse from the well pad west to an existing pipeline. The 245' (0.05 mile) of new pipeline adjacent to an existing pipeline corridor would traverse northwesterly across federal surface to a tie-in location on fee surface within the NW/4 NE/4 of Sec. 29, T6S, R91W, 6th P.M.. The 50' wide corridor will parallel the proposed and existing access corridors and consist of 1.2 acres of disturbance. (see attached Topographic Map "D").
5. Location and Type of Water Supply:
- A. Bill Barrett Corporation would utilize water from private landowners. If an alternate source is located, a Sundry Notice would be filed indicating the new source of water.
6. Source of Construction Material:
- A. The use of materials would conform to 43 CFR 3610.2-3.
 - B. No construction materials would be removed from BLM.
 - C. If any gravel is used, it would be obtained from a State approved gravel pit.

7. Methods of Handling Waste Disposal:

- A. All wastes associated with this application would be contained and disposed according to regulatory requirement and at state-approved facilities.
- B. Drill cuttings from the wellbore (mainly shale, sand, and miscellaneous rock minerals) would be directed to a reserve pit or a closed-loop system, and eventually buried on location. The reserve pit would adhere to BLM and Colorado Oil and Gas Conservation Commission (COGCC) guidelines.
- C. The reserve pit is located inboard of the location along the north side of the pad and would be constructed so as not to leak, break or allow any discharge.
- D. Pit walls would be sloped no greater than 2:1 and the depth of the reserve pit is approximately 12 feet. A minimum 2 foot freeboard would be maintained in the pit at all times during the drilling and completion operations.
- F. The reserve pit has been located in cut material. Three sides of the reserve pit would be fenced before drilling starts. The fourth side would be fenced as soon as drilling is completed and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production would be rehabilitated.
- G. Any necessary pits would be properly fenced to prevent any wildlife and livestock entry.
- H. All "frac" flowback water would be contained in temporary tanks or lined frac pit (if frac pit constructed, methods would be consistent with D. and F. above) during completion operations and would be recycled for re-use, or piped off site to approved disposal facilities. Flowback water would be recycled for use in drilling and completion operations, properly disposed of, or treated and recycled or discharged. Prior to any discharges, all required permits from the State of Colorado, as well as approval from the BLM (if discharges are proposed on BLM lands) would be acquired. If necessary, the frac pit will be permitted as needed through proper regulatory agencies.
- I. After first production, produced wastewater would be confined to a pit or storage tank for a period not to exceed ninety (90) days. Thereafter, produced water would be used in further drilling and completion activities, evaporated in the pit, piped or hauled to a State approved disposal facility.
- J. Any spills of oil, gas, salt water or other produced fluids would be cleaned up and removed.
- K. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- L. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) in quantities over 10,000 pounds that may be used, produced, stored, transported or disposed of annually in association with the drilling, testing or completion of each well include diesel fuel, hydrochloric acid and silica sand. This material would be consumed in the drilling and completion process. No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the well.

- M. Trash would be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations. The contents of the trash container would be hauled off periodically to an approved landfill.
- N. Sanitary facilities would be on site at all times during operations. Sewage would be placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to an approved facility/landfill.
- O. A flare pit may be constructed a minimum of 110' from the wellheads and may be used during completion work. In the event a flare pit proves to be unworkable in this situation, a flare stack would be installed. BBC would flow back as much fluid and gas as possible into vessels, separating the fluid from the gas. The fluid would then be either returned to the reserve pit or placed into a tank. Gas would be then directed into the flare pit or the flare stack with a constant source of ignition. Natural gas would be directed to the pipeline as soon as pipeline gas quality standards are met.
- P. Hydrocarbons would be removed from the reserve pit according to regulatory guidelines. In the event immediate removal is not practical, the reserve pit would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

8. Ancillary Facilities:

- A. Garbage containers and portable toilets are the only ancillary facilities proposed in this application

9. Well Site Layout:

- A. Each well would be properly identified in accordance with 43 CFR 3162.6.
- B. The rig layout (see Sheet 6), cross sections of the well pad and cuts and fills, and production facilities (see Sheets 4 & 5) are attached.
- C. This well pad disturbance lies entirely on federal surface managed by the BLM – White River Energy Office.
- D. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.
- E. All cut and fill slopes would be constructed so that stability can be maintained for the life of the activity.
- F. Diversion ditches would be constructed, if necessary, around to prevent surface waters from entering the well site area.
- G. The site surface would be graded to drain away from the pit to avoid pit spillage during large storm events.
- H. Pits would remain fenced until site cleanup.

- I. If air drilling occurs, the blooie line would be located at least 100 feet from the individual wellhead and would run from each wellhead directly to the pit. .
- J. Water application may be implemented if necessary to minimize the amount of fugitive dust.

10. Plan for Restoration of the Surface:

Producing Wells

- A. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location.
- B. The reserve pit would be closed as soon as reasonably practical, but no later than 90 days from completion of the last well on the pad, provided favorable weather conditions and that there are no plans to re-use the pit within one year. An extension may be given at the discretion of the BLM Authorized Officer. The following are requirements for pit closures:
 - Squeezing of pit fluids and cuttings is prohibited;
 - Pits must be dry of fluids or they must be removed via vac-truck or other environmentally acceptable method prior to backfilling, re-contouring and replacement of topsoil;
 - Mud and cuttings left in pit must be buried at least 3-feet below re-co-contoured grad;
 - The polyethylene nylon reinforced liner shall be torn and perforated before backfilling;
 - The operator would be responsible for re-contouring any subsidence areas that develop from closing a pit before it is sufficiently dry;
 - The operator shall contact the BLM Authorized Officer at least 48-hours prior to the filling and reclamation of pits and the start of any reclamation such as re-contouring and reseeding.
- C. Reclamation requirements: Prior to reseeding the site, all disturbed areas, including the access road, would be scarified and left with a rough surface. The site would then be seeded and/or planted as prescribed by the BLM. The BLM recommended seed mix would be detailed within their surface use agreement.
- D. The operator would control noxious weeds along access road use authorizations, pipeline route authorizations, well sites or other applicable facilities by spraying or mechanical removal. A list of noxious weeds may be obtained from the BLM or the appropriate county extension office.

Dry Hole

- A. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc., would be expediently reclaimed and reseeded in accordance with the reclamation plan and any pertinent site specific COAs.

11. Surface and Mineral Ownership:

- A. Surface ownership – Federal under the management of the Bureau of Land Management
- B. Mineral ownership – Federal under the management of the Bureau of Land Management

12. Other Information:

- a. Grand River Institute (GRI) has previously conducted a Class III archeological survey on the federal lands associated with the project. A copy of the report has been submitted under separate cover to the appropriate agencies by GRI as Report No. 2010-16.
- b. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24” to 48” wide and is approximately 10’ tall. Combustor placement would be on existing disturbance and would not be closer than 100’ to any tank or wellheads.

OPERATOR CERTIFICATION

Certification:

I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application and that bond coverage is provided. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

The operator must make a good faith effort to provide a copy of their Surface Use Plan of Operations to the surface owner. After the APD is approved the operator must make a good faith effort to provide a copy of the Conditions of Approval to the surface owner. The APD approval is not contingent upon delivery of a copy of the Conditions of Approval to the surface owner.

Executed this 6 day of July 2010
Name: Elaine Winick
Position Title: Senior Regulatory Analyst
Address: 1099 18th Street, Suite 2300, Denver, CO 80202
Telephone: 303-312-8168
Field Representative Monty Shed
Address: 112 Red Feather Trail, Silt, CO 81652
Telephone: 970-876-1959
E-mail: mshed@billbarrettcorp.com

Elaine Winick
Elaine Winick – Senior Regulatory Analyst