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Colorado State Office

Colorado River Valley Field Office

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Proposed Action
Gibson Gulch II Master Development Plan for
Natural Gas Exploration and Development

Bill Barrett Corporation



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1. INTRODUCTION

Bill Barrett Corporation (BBC) is proposing a 5-year development program for oil and gas exploration and development on approximately 2,400 acres of Federal lands located in the southern Piceance Basin, Township 6 South, Range 91 West, Sections 19, 20, 29, and 32-34, approximately 3.5 miles southeast of the town of Silt, Garfield County, Colorado. This proposal, referred to as the Gibson Gulch II Master Development Plan (GGIIMDP), arises from the implementation of drilling that successfully demonstrated the potential of the area for economically viable reserves of natural gas.

The total project area is underlain by Federal mineral estate. If approved as proposed, implementation of the GGIIMDP would result in drilling up to 88 new wells in Federal leases COC46972, COC50126, COC51440, and COC66718. The wells would be drilled from a total of six new locations on Federal surface. One new private or “Fee” well would also be directionally drilled from the MDP 22 location.

Permanent surface facilities needed at each pad to support oil and gas development would include the wellheads, separation/dehydration units, gas metering units, combustors, radio antennas, solar panels, and above-ground tanks for storage of condensate and produced water. Each pad would also have a “cuttings pit” for the disposal of drill cuttings. Produced water from the wells would be transported by buried pipeline, or by truck when necessary, to BBC’s water collection facilities. Small natural gas compressor units may be necessary to power gas lifts at the wells.

Surface disturbance associated with the proposed GGIIMDP would include the development of new well pads and associated roads and pipeline rights-of-way (ROWs), along with the expansion and upgrade of existing infrastructure. In total, six new well pads and approximately 3.2 miles of new roads would be constructed if approved as proposed.

Following completion activities at a pad, areas not needed during production would be revegetated using reclamation methods, standards, and plant species specified by BLM. When all of the wells at a pad are no longer producing economic quantities of gas, the wells would be closed and abandoned, and the pad would undergo final reclamation.

2. PURPOSE AND NEED

The purpose of this proposal is to develop natural gas resources on Federal leases COC46972, COC50126, COC51440, and COC66718 consistent with existing lease rights. The action is needed to increase the development of natural gas resources for commercial marketing to the public.

Instead of structuring the development of these leases as a series of individual actions, the Colorado River Valley Field Office land use plan (BLM 1984, revised 1988), amendments to the plan for oil and gas exploration and development (BLM 1991, 1999), and BLM regulations specify the use of multi-well development plans to more effectively manage the development of Federal fluid mineral resources.

Specifically, the purpose is to drill wells to explore for, test, and develop natural gas resources in a variety of geologic settings, differing stratigraphic targets, and various structural settings assuming it is commercially viable in this area.

The need for the proposed project is for BBC to fulfill its obligations and responsibilities under its Federal oil and gas lease requirements to explore, develop, and test hydrocarbon reserves by drilling for commercial quantities of natural gas or oil resources. In addition, if the proposed wells are productive, the proposed project would also:

- generate Federal, State, and County royalty revenues and/or taxes

- support local economies by providing and maintaining employment opportunities and expanding the local tax base
- contribute to available natural gas or oil supply for the national market
- reduce dependence on potentially unstable foreign sources of energy
- contribute to the available supply of a clean-burning fuel for the New Energy Economy

The BLM's approval of exploration and production from Federal oil and gas leases is an integral part of BLM's oil and gas program under authority of the Mineral Leasing Act of 1920 (MLA) (30 United States Code [U.S.C.] § 181 et seq.), as amended by the Federal Land Policy and Management Act of 1976 (FLPMA) and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. The intent of the MLA and its regulations is to allow and encourage lessees to explore for oil and gas underlying public lands. FLPMA mandates that BLM manage public lands on the basis of multiple use (43 U.S.C. 1701(a)(7)). Minerals are identified as one of the principal uses of public lands under Section 103 of FLPMA (43 U.S.C. 1702(c)).

The BLM oil and gas-leasing program encourages development of domestic oil and gas reserves and the reduction of U.S. dependence on foreign energy sources. BLM would consider approval of the Proposed Action in a manner that avoids undue or unnecessary degradation of public lands, as required under FLPMA, and that is consistent with the Comprehensive National Energy Strategy announced by the U.S. Department of Energy (DOE) in April 1998 (DOE 1998), the Energy Policy and Conservation Act (42 U.S.C. 6201), and the Energy Policy Act of 2005 (Public Law 109-58).

3. PROPOSED ACTION

The total number of wells drilled, and wells drilled per year, would depend largely on factors out of BBC's control, such as availability of drill rigs, geologic success, engineering technology, economic factors (e.g., the price of natural gas and the cost of services), availability of commodity markets, and lease stipulations and notices.

The proposed development area in Sections 19 and 33 would consist of six well pads encompassing approximately 32 acres of short-term disturbance, including Federal surface and mineral ownership, and one well that would be drilled from Federal surface into Fee (private) minerals (Figure 1). Associated with these developments would be the construction of up to approximately 3.2 miles of new access roads and pipelines (Table 1).

3.1 Construction

3.1.1 Well Pads

The locations of proposed well pads reflect the results of onsite inspections by representatives of the BLM, BBC and its contractors, and private landowners, as applicable. The primary purpose of the onsite inspections was to assess potential resource impacts associated with various construction, drilling, and production activities. Each onsite inspection included assessment of proposed pad and pit layout, cuts and fills, topsoil stockpiling, erosion control, access, pipeline routes, and reclamation potential of each activity. In some cases, multiple revisions to individual proposed well locations, pipelines, and access routes were made to minimize potential impacts identified by BLM or to accommodate a landowner's requests. Surface use agreements currently exist between BBC and any private landowners for road and pipeline construction.

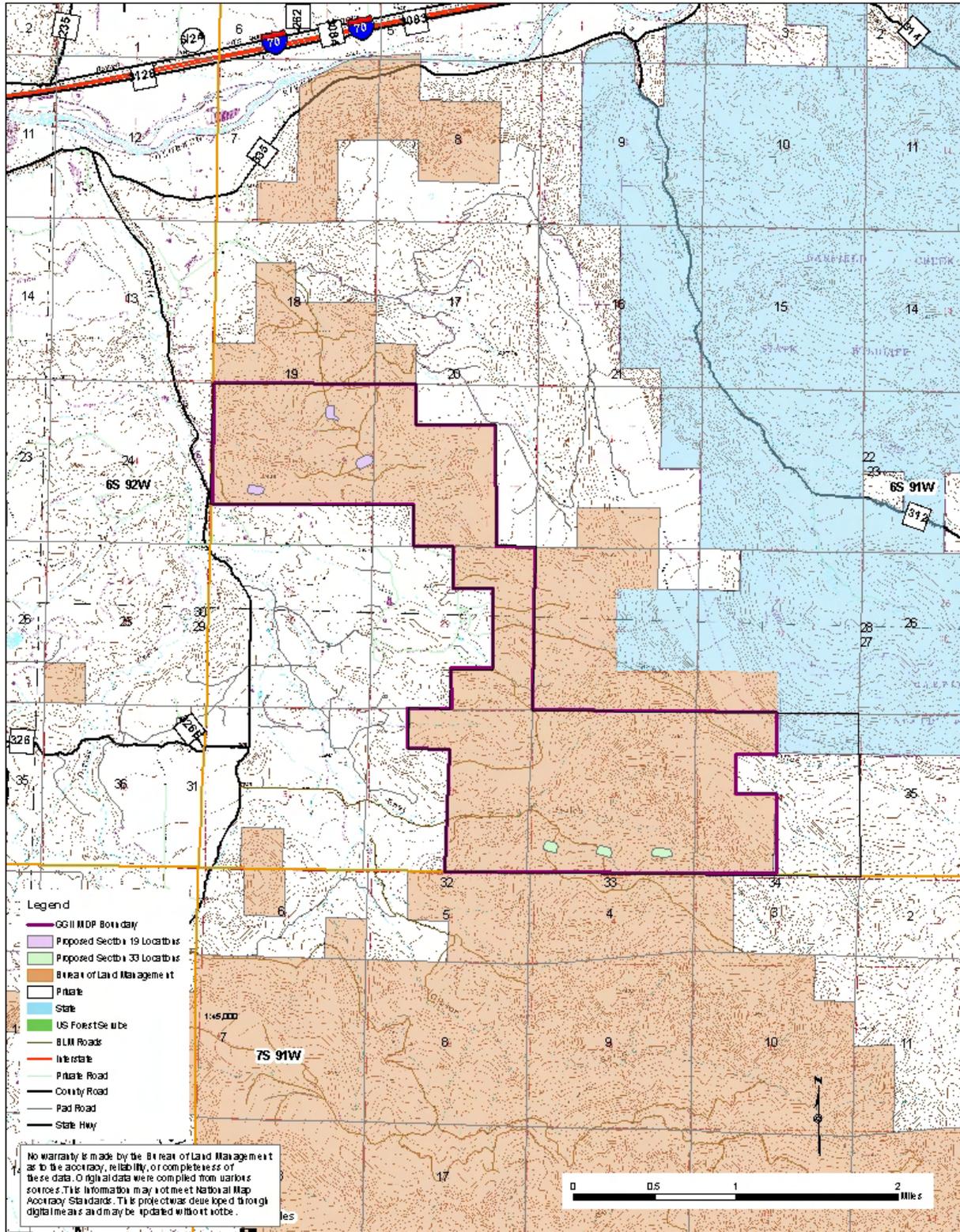


Figure 1. Gibson Gulch II MDP Project Area

Table 1. Location and Disturbance Acres of Proposed Project Components

Proposed New Well Pads							
<i>Pads</i>	<i>Lease</i>	<i>Surface Location T6S, R 91W</i>	<i>Surface Owner</i>	<i>Disturbance (acres)</i>		<i>Interim Reclamation (acres)</i>	
				<i>Initial</i>	<i>Long-term</i>		
MDP 21	COC50126	NWSW, NESW Sec. 19	Federal	4.37	0.96	3.41	
MDP 22	COC50126, Fee	SENE, NESE Sec. 19, SWNW Sec. 20	Federal	5.01	1.96	3.05	
MDP 23	COC50126	NWNE, NENE Sec. 19	Federal	4.14	1.45	2.96	
MDP 24	COC46972, COC51440	SWSW Sec. 33	Federal	5.03	1.28	3.75	
MDP 25	COC51440	SESW Sec. 33	Federal	5.22	1.23	3.99	
MDP 26	COC51440 COC66718	SWSE, SESE Sec. 33	Federal	8.23	1.69	6.54	
TOTAL				32.00	8.57	23.70	
Proposed New Roads and Two-Track Upgrades							
<i>Well Pad Accessed</i>	<i>Length</i>		<i>Surface Location T6S, R 91W</i>	<i>Surface Owner</i>	<i>Disturbance (acres)</i>		<i>Interim Reclamation (acres)</i>
	<i>miles</i>	<i>feet</i>			<i>Initial</i>	<i>Long-term</i>	
MDP 21		565		Federal	0.65	0.39	0.26
MDP 21		1,022		Fee	1.17	0.7	0.47
MDP 22		3,408		Federal	3.91	1.60	2.31
MDP 23		2,081		Federal	2.39	0.86	1.53
MDP 24		7,056		Federal	8.10	4.86	3.24
MDP 25		1,109		Federal	1.27	0.76	0.51
MDP 26		1,531		Federal	1.76	1.05	0.71
Subtotal BLM	2.96	15,750			18.08	9.52	8.56
Subtotal Private	0.19	1,022			1.17	0.7	0.47
TOTAL	3.15	16,772			19.25	10.22	9.03
Proposed New Pipelines							
<i>Well Pad Accessed</i>	<i>Length</i>		<i>Surface Owner</i>	<i>Disturbance (acres)</i>		<i>Interim Reclamation (acres)</i>	
	<i>miles</i>	<i>feet</i>		<i>Initial</i>	<i>Long-term</i>		
MDP 21		611		Federal	0.7	0	MDP 21
MDP 21		1,020		Fee	1.17	0	MDP 21
MDP 22		3,379		Federal	3.88	0	MDP 22
MDP 23		2,081		Federal	2.46	0	MDP 23
MDP 24		645		Federal	0.74	0	MDP 24
MDP 25		5,518		Federal	6.33	0	MDP 25
MDP 25 to MDP 6		254		Fee	0.29		MDP 25 to MDP 6
MDP 26		1,579		Federal		1.81	0
Subtotal BLM	2.96	15,152			14.92	0	
Subtotal Private	0.24	1,274			1.46	0	
TOTAL	3.2	16,426			16.38	0	TOTAL

The proposed well pads would be constructed from native soil and rock materials using appropriate heavy equipment. The pads would be constructed by clearing all vegetation, stripping and stockpiling topsoil along the edge of the well pad for use during reclamation, and leveling the pad area using cut-and-fill techniques. Juniper trees removed during construction would be placed at the toe of the fill slopes to help contain the fill, as well as act as a sediment control and filtration system for stormwater management. Pinyon trees would be chipped, or logged and removed from the site. Any other woody vegetation would be mulched or used in reclamation, and/or placed at the toe of the fill slopes. Cut slopes associated with pad construction would be left rough to provide a seed catchment surface, and may require "step cutting" when heights exceed 15 feet. Cut slopes for pad construction would not be steeper than 1.5 to 1 (horizontal to vertical), except when approved by the BLM. The tops of cut banks and pad corners may be rounded to improve their appearance and reduce the volume of cut and fill material.

A cuttings trench would be constructed during the course of pad construction to store cuttings generated from drilling. Depending upon space requirements, cuttings may also be stacked on location prior to site reclamation. The cuttings trench or reserve pit would be fenced as appropriate and in accordance with BLM and COGCC guidelines. The well pad itself would not be fenced.

Initially, the size of the newly constructed pads would range from about 4.1 to 8.2 acres (Table 1). Interim reclamation activities would begin after all wells are drilled, completed, and production facilities installed. Cuts and fills would be recontoured and revegetated to blend in with adjacent natural slopes as much as possible, and seeded to reestablish vegetation cover. These interim reclamation techniques would result in a significant reduction of remaining surface disturbance that would remain over the long-term life of the project (i.e., 20 to 30 years). Table 1 presents the size of the pads during drilling and completion activities (initial disturbance) and after interim reclamation (long-term disturbance).

The sides of the well pads would be bermed, if appropriate, to prevent stormwater from flowing off the pad and into nearby drainages. Stormwater may be directed to an opening in the berm that leads off the pad to a sediment trap or other control as appropriate. BBC's stormwater management efforts may include additional engineering measures, such as the installation of culverts to divert water flow away from surface locations as needed, and other runoff controls and barriers.

On average, five personnel, mostly equipment operators, would work on the construction of an individual well pad. Construction of an individual well pad could take from 1 to 3 weeks depending on the features of each particular site.

Prior to individual well pad construction, BBC would obtain approval of an Application for Permit to Drill (APD) by the BLM and the COGCC. Each APD would contain site-specific COAs that apply to construction and well operations.

3.1.2 Access Roads

Implementation of the Proposed Action would require construction and improvements of access roads on the BLM and Fee surface. The primary light vehicle access route to the Gibson Gulch area are as follows: After exiting I-70, proceed to the frontage road (River Frontage Road) at the south end of the Silt/I-70 interchange; proceed in a general easterly direction along this River Frontage Road 0.4 miles to the intersection with County Road 311 (CR 311); turn right and follow CR 311 in a general southerly direction crossing the Colorado River and continue 0.6 mile to the intersection with CR 331; turn left and follow CR 311 in a general easterly direction for 1.4 miles to the intersection with CR 335. Turn right at the intersection of CR 311 and CR 335, and follow CR 311 in a general southeasterly direction along Divide Creek approximately 2.7 miles to an existing private gravel road on the left. To reach MDP 21, 22, and 23, proceed left for approximately 2.5 miles traveling over private surface to the project area

(Figure 2); to reach MDP 24, 25, and 26 pads, proceed left for approximately 5.6 miles in a general southeasterly direction over private surface to the project area (Figure 3). There is currently a proposal between Antero Resources Piceance Corporation (“Antero”) and BBC to share a segment of road that was analyzed in the Antero North Castle Springs Master Development Plan. This portion of road would eliminate approximately 0.5 mile of additional road disturbance in Section 33.

The primary heavy vehicle access route would be defined by Garfield County heavy haul vehicle routes. The current (June 2011) heavy haul route to the project area is as follows: Exit I-70 at the Rifle Municipal Airport Exit (Exit 94). After exiting I-70, proceed to the frontage road (CR 346) at the south end of the Airport/I-70 interchange. Proceed in a general easterly direction along CR 346 for 3 miles to the intersection with CR 331/Dry Hollow Rd. Turn right and follow CR 331 for 6.75 miles in a general southerly direction to the intersection with CR 324. Turn left onto CR 324 (Maxfield Road) and follow CR 324 in a general easterly direction for 2.4 miles to the intersection with CR 311. Turn left at the intersection of CR311 and CR 324 and follow CR 311 in a general northerly direction for approximately 3.3 miles to the intersection with a gravel road that enters the project area on the right (Figure 1).

The majority of proposed and existing two-track access roads requiring upgrades would be paralleled by pipelines (i.e., collocated roads and pipelines). Where new pipelines are proposed adjacent to access roads, a 100-foot-wide ROW would initially be needed (50 feet for the road plus 50 feet for the pipelines). To the extent possible, BBC would attempt to limit the overall disturbance from road and pipeline construction. Various segments of these access roads are outside of the Gibson Gulch Unit boundary. In order to gain access for the use of existing roads and the construction and use of proposed roads, BBC intends to apply for a ROW authorization that would grant access across those BLM administered lands outside of the unit boundary.

Roads would be designed and maintained to an appropriate standard no higher than necessary to accommodate their intended functions, as described in the *Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development, Fourth Edition* (USDI and USDA 2007)(the “Gold Book”) and BLM Handbook 9113 (*Roads Manual*).

Aggregate for road surfacing would be obtained from private or Federal lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust. Following interim reclamation, the running surface width could vary from 22 to 24 feet but would typically be 22 feet wide throughout the project area with safety, site distance, grade, topography, anticipated traffic flow, and visual resource management concerns being factors in actual width determination.

Road construction 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 controls on cut and fill slopes as approved by the BLM, seeding of all disturbed areas outside of the running surface, and installation of cattle guards and road closure gates as necessary.

Revegetation of road ditches and cut and fill slopes would help stabilize exposed soil and reduce sediment loss, reduce the growth of noxious weeds, reduce maintenance costs, maintain scenic quality and forage, and protect habitat. To ensure successful growth of vegetation, 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.

The average grade would be 10 percent or less, wherever possible. The 10-percent grade would be exceeded only where the terrain or unusual circumstances require it. Minimum horizontal curve radii would be 100 feet. Where terrain would not allow a 100-foot curve radius, the curve would be widened. Road construction would result in approximately 11 acres of short-term ground disturbance. Following interim reclamation, the long-term disturbance would be approximately 7 acres. Road maintenance would be performed as needed to ensure safe travel and control dust.

Workforce would include an average of five personnel per day to operate the equipment.

3.1.3 Gas Gathering and Water Pipelines

A network of gas gathering and water pipelines is necessary to both gather and deliver natural gas offsite to existing main gathering lines and to transport water to facilities within and outside the project area. Figure 2 shows the proposed pipelines associated with the MDP 21-23 pads. Figure 3 shows the proposed routes for the pipelines associated with the MDP 24-26 pads as described below.

Various segments of the proposed pipelines are outside of the Gibson Gulch Unit boundary. BBC intends to apply ROW authorizations for these segments outside of the unit boundary. The ROW area applied for the proposed pipelines would be 50 feet wide (short-term disturbance) and reclaimed to a 30-foot wide permanent ROW.

Gas gathering pipelines would be constructed of steel with a maximum allowable working pressure of 740 pounds per square inch and a diameter up to 12 inches. Those gathering lines that parallel new road construction would be installed in the uphill or cut side of the road, in the shoulder where possible, prior to final grading and aggregate application. Water lines would be 6 to 8 inches in diameter and would be constructed of steel or poly pipe. They would be installed in a common trench with the gas gathering lines to minimize surface disturbance. These pipelines would be operated and maintained by BBC through the life of the project.

Use of the proposed well pads and access roads would facilitate the staging for the pipeline construction. The pipeline trench would be excavated mechanically primarily in the uphill, or cut side of the road corridor, with an excavator (trackhoe) and would be approximately 3 to 7 feet wide and at least 4 feet deep. Gas pipeline segments would be welded together and lowered in the trench. The water line would then be placed into the ditch and separated from the gas line by sandbags. Both lines would be covered with excavated material, and then each pipeline would be tested with fresh water, nitrogen gas, or compressed air to locate any leaks. Fresh water and nitrogen used for testing would be obtained offsite and transported to the testing location by truck. After testing, the water would be disposed of at an existing offsite facility. Nitrogen or air would be vented to the atmosphere.

3.1.4 Mitigation Common to All Construction Operations

Trees removed from the pad locations and access roads would be placed at the toe of the fill slopes to act as a sediment control and filtration system for stormwater management, and /or placed back on the reclaimed surfaces. Cut pinyon pine trees would be chipped, buried, or logged and removed from the site to prevent the spread of the *Ips* beetle. If trees cannot be placed at the toe of fill slopes, the trees would be cut to a maximum stump height of 6 inches and placed back onto the cut and/or fill slopes with the slash height not to exceed 24 inches. Root balls would be buried or placed at the toe of the fill slopes. Trees and other vegetation may be dozed on pipeline routes and then pulled back onto the ROW as part of final reclamation. Other vegetation, such as sagebrush and other shrubs, may be scattered offsite or placed on well pads and road fills to help visually screen the slopes. On pads where boulder fields exist, reclamation would include the replacement of boulders in order to reconstruct a more natural appearance.

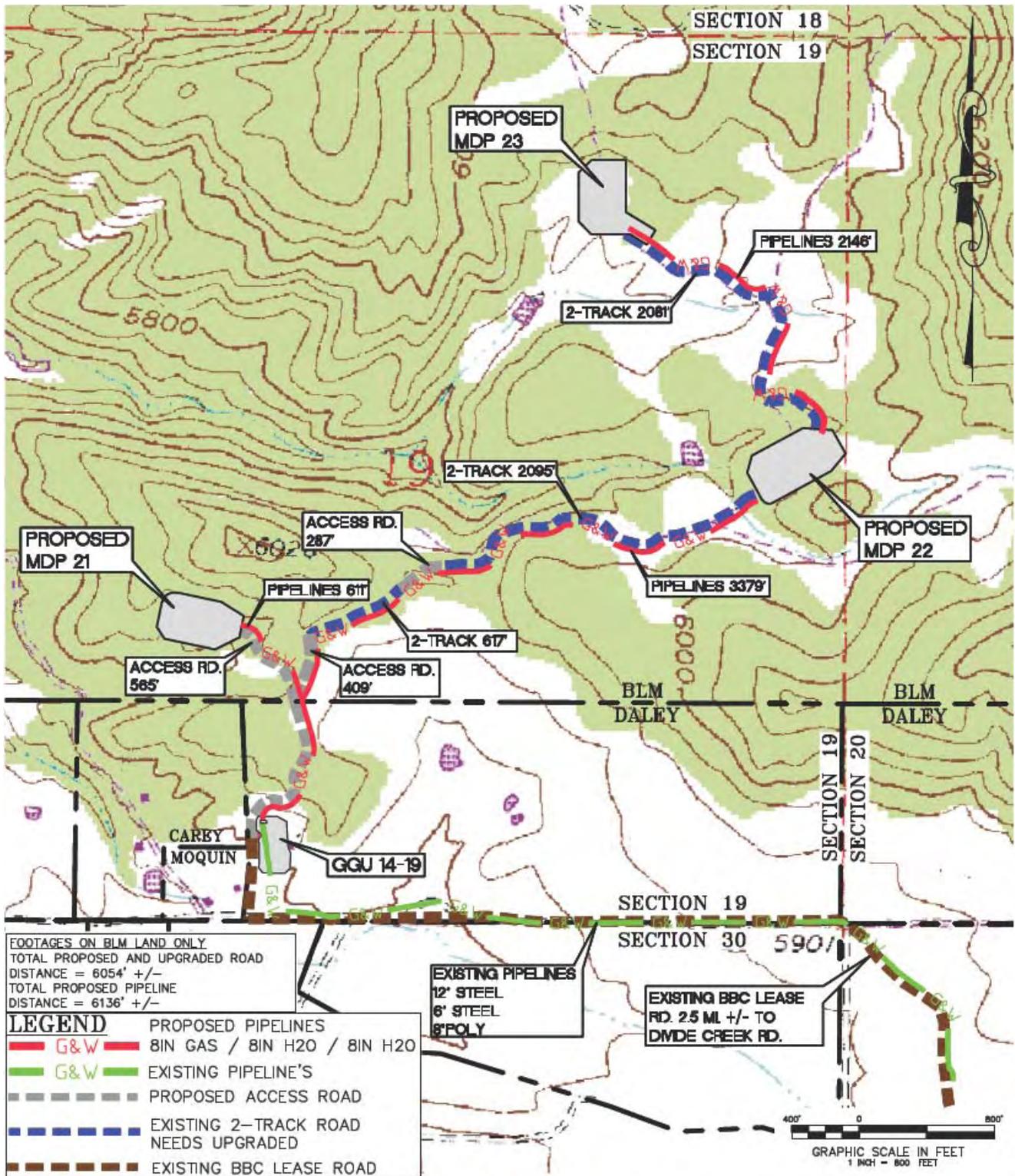


Figure 2. Proposed Road and Pipeline Alignments for MDP 21-23 Pads

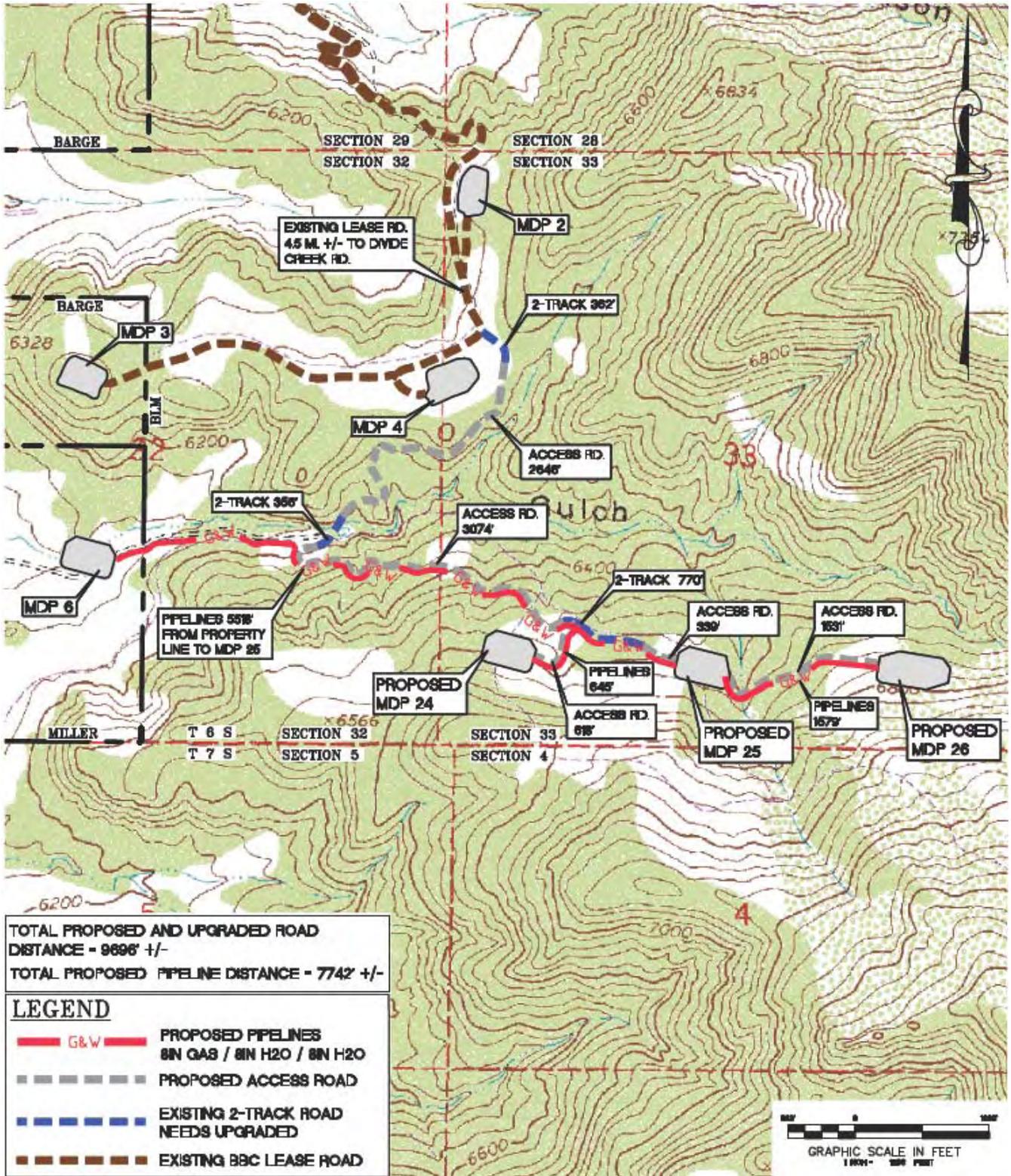


Figure 3. Proposed Road and Pipeline Alignments for MDP 24-26 Pads

3.2 Drilling Operations

Up to 88 wells would be drilled as part of the Proposed Action. Table 2 lists the surface location of the wells, as well as the footages from section lines for the bottom-hole locations. BBC’s drilling operations would be conducted in compliance with all Federal Onshore Oil and Gas Orders, all applicable rules and regulations, and Notices to Lessees. Drilling rigs in the project area would be targeting natural gas-producing horizons in the Mesaverde and Iles formations at depths of 4,500 to 8,500 feet.

Table 2. List of Wells and Bottomhole Locations

<i>MDP 21</i>	<i>Sec.</i>	<i>T</i>	<i>R</i>	<i>FOOTAGES</i>	<i>MINERALS</i>
GGU Federal 13A-19-691	19	6S	91W	1495 feet FSL; 660 feet FWL	Federal
GGU Federal 13B-19-691	19	6S	91W	1818 feet FSL; 660 feet FWL	Federal
GGU Federal 13C-19-691	19	6S	91W	2141 feet FSL; 660 feet FWL	Federal
GGU Federal 13D-19-691	19	6S	91W	2464 feet FSL; 660 feet FWL	Federal
GGU Federal 23A-19-691	19	6S	91W	1495 feet FSL; 1980 feet FWL	Federal
GGU Federal 23B-19-691	19	6S	91W	1818 feet FSL; 1980 feet FWL	Federal
GGU Federal 23C-19-691	19	6S	91W	2141 feet FSL; 1980 feet FWL	Federal
GGU Federal 23D-19-691	19	6S	91W	2464 feet FSL; 1980 feet FWL	Federal
GGU Federal 22A-19-691	19	6S	91W	2485 feet FNL; 1980 feet FWL	Federal
GGU Federal 22B-19-691	19	6S	91W	2145 feet FNL; 1980 feet FWL	Federal
GGU Federal 22C-19-691	19	6S	91W	1805 feet FNL; 1980 FWL	Federal
GGU Federal 22D-19-691	19	6S	91W	1465 feet FNL; 1980 feet FWL	Federal
GGU Federal 33A-19-691	19	6S	91W	1495 feet FSL; 1980 feet FEL	Federal
GGU Federal 33B-19-691	19	6S	91W	1818 feet FSL; 1980 feet FEL	Federal
GGU Federal 33C-19-691	19	6S	91W	2141 feet FSL; 1980 feet FEL	Federal
<i>MDP 22</i>	<i>Sec.</i>	<i>T</i>	<i>R</i>	<i>FOOTAGES</i>	<i>MINERALS</i>
GGU Federal 33D-19-691	19	6S	91W	2464 feet FSL; 1980 feet FEL	Federal
GGU Federal 32A-19-691	19	6S	91W	2485 feet FNL; 1980 feet FEL	Federal
GGU Federal 32B-19-691	19	6S	91W	2145 feet FNL; 1980 feet FEL	Federal
GGU Federal 32C-19-691	19	6S	91W	1805 feet FNL; 1980 feet FEL	Federal
GGU Federal 32D-19-691	19	6S	91W	1465 feet FNL; 1980 feet FEL	Federal
GGU Federal 43A-19-691	19	6S	91W	1495 feet FSL; 660 feet FEL	Federal
GGU Federal 43B-19-691	19	6S	91W	1818 feet FSL; 660 feet FEL	Federal
GGU Federal 43C-19-691	19	6S	91W	2141 feet FSL; 660 feet FEL	Federal
GGU Federal 43D-19-691	19	6S	91W	2464 feet FSL; 660 feet FEL	Federal
GGU 44D-19-691	19	6S	91W	1135 feet FSL; 660 FEL	Private
GGU Federal 13A-20-691	20	6S	91W	1500 feet FSL; 660 feet FWL	Federal
GGU Federal 13C-20-691	20	6S	91W	2141 feet FSL; 660 feet FWL	Federal
GGU Federal 13D-20-691	20	6S	91W	2464 feet FSL; 660 feet FWL	Federal
<i>MDP 23</i>	<i>Sec.</i>	<i>T</i>	<i>R</i>	<i>FOOTAGES</i>	<i>MINERALS</i>
Federal 21A-19-691	19	6S	91W	1125 feet FNL; 1980 feet FWL	Federal
Federal 21B-19-691	19	6S	91W	785 feet FNL; 1980 feet FWL	Federal
Federal 21C-19-691	19	6S	91W	445 feet FNL; 1980 feet FWL	Federal

Table 2. List of Wells and Bottomhole Locations

Federal 21D-19-691	19	6S	91W	105 feet FNL; 1980 feet FWL	Federal
Federal 31A-19-691	19	6S	91W	1125 feet FNL; 1980 feet FEL	Federal
Federal 31B-19-691	19	6S	91W	785 feet FNL; 1980 feet FEL	Federal
Federal 31C-19-691	19	6S	91W	445 feet FNL; 1980 feet FEL	Federal
Federal 31D-19-691	19	6S	91W	105 feet FNL; 1980 feet FEL	Federal
Federal 41A-19-691	19	6S	91W	1125 feet FNL; 660 feet FEL	Federal
Federal 41B-19-691	19	6S	91W	785 feet FNL; 660 feet FEL	Federal
Federal 41C-19-691	19	6S	91W	445 feet FNL; 660 feet FEL	Federal
Federal 41D-19-691	19	6S	91W	105 feet FNL; 660 feet FEL	Federal
Federal 42A-19-691	19	6S	91W	2485 feet FNL; 660 feet FEL	Federal
Federal 42B-19-691	19	6S	91W	2145 feet FNL; 660 feet FEL	Federal
Federal 42C-19-691	19	6S	91W	1805 feet FNL; 660 feet FEL	Federal
Federal 42D-19-691	19	6S	91W	1465 feet FNL; 660 feet FEL	Federal
MDP 24	Sec.	T	R	FOOTAGES	MINERALS
Federal 44A-32-691	32	6S	91W	165 feet FSL; 665 feet FEL	Federal
Federal 44B-32-691	32	6S	91W	476 feet FSL; 665 feet FEL	Federal
Federal 44C-32-691	32	6S	91W	788 feet FSL; 665 feet FEL	Federal
Federal 44D-32-691	32	6S	91W	1100 feet FSL; 665 feet FEL	Federal
Federal 14A-33-691	33	6S	91W	165 feet FSL; 665 feet FWL	Federal
Federal 14B-33-691	33	6S	91W	489 feet FSL; 665 feet FWL	Federal
Federal 14C-33-691	33	6S	91W	813 feet FSL; 665 feet FWL	Federal
Federal 14D-33-691	33	6S	91W	1137 feet FSL; 665 feet FWL	Federal
Federal 13A-33-691	33	6S	91W	1461 feet FSL; 665 feet FWL	Federal
Federal 13B-33-691	33	6S	91W	1786 feet FSL; 665 feet FWL	Federal
Federal 13C-33-691	33	6S	91W	2110 feet FSL; 665 feet FWL	Federal
Federal 13D-33-691	33	6S	91W	2434 feet FSL; 665 feet FWL	Federal
MDP 25	Sec.	T	R	FOOTAGES	MINERALS
Federal 34A-33-691	33	6S	91w	165 feet FSL; 2023 feet FEL	Federal
Federal 34B-33-691	33	6S	91w	498 feet FSL; 2023 feet FEL	Federal
Federal 34C-33-691	33	6S	91w	831 feet FSL; 2023 feet FEL	Federal
Federal 34D-33-691	33	6S	91w	1163 feet FSL; 2023 feet FEL	Federal
Federal 33A-33-691	33	6S	91w	1496 feet FSL; 2023 feet FEL	Federal
Federal 33B-33-691	33	6S	91w	1829 feet FSL; 2023 feet FEL	Federal
Federal 33C-33-691	33	6S	91w	2162 feet FSL; 2023 feet FEL	Federal
Federal 33D-33-691	33	6S	91w	2495 feet FSL; 2023 feet FEL	Federal
Federal 24A-33-691	33	6S	91w	165 feet FSL; 2023 feet FWL	Federal
Federal 24B-33-691	33	6S	91w	498 feet FSL; 2023 feet FWL	Federal
Federal 24C-33-691	33	6S	91w	831 feet FSL; 2023 feet FWL	Federal
Federal 24D-33-691	33	6S	91w	1163 feet FSL; 2023 feet FWL	Federal
Federal 23A-33-691	33	6S	91w	1496 feet FSL; 2023 feet FWL	Federal
Federal 23B-33-691	33	6S	91w	1829 feet FSL; 2023 feet FWL	Federal

Table 2. List of Wells and Bottomhole Locations

Federal 23C-33-691	33	6S	91w	2162 feet FSL; 2023 feet FWL	Federal
Federal 23D-33-691	33	6S	91w	2495 feet FSL; 2023 feet FWL	Federal
MDP 26	Sec.	T	R	FOOTAGES	MINERALS
Federal 14A-34-691	34	6S	91W	165 feet FSL; 665 feet FWL	Federal
Federal 14B-34-691	34	6S	91W	502 feet FSL; 665 feet FWL	Federal
Federal 14C-34-691	34	6S	91W	839 feet FSL; 665 feet FWL	Federal
Federal 14D-34-691	34	6S	91W	1176 feet FSL; 665 feet FWL	Federal
Federal 13A-34-691	34	6S	91W	1513 feet FSL; 665 feet FWL	Federal
Federal 13B-34-691	34	6S	91W	1850 feet FSL; 665 feet FWL	Federal
Federal 13C-34-691	34	6S	91W	2187 feet FSL; 665 feet FWL	Federal
Federal 13D-34-691	34	6S	91W	2524 feet FSL; 665 feet FWL	Federal
Federal 44A-33-691	33	6S	91W	165 feet FSL; 665 feet FEL	Federal
Federal 44B-33-691	33	6S	91W	502 feet FSL; 665 feet FEL	Federal
Federal 44C-33-691	33	6S	91W	839 feet FSL; 665 feet FEL	Federal
Federal 44D-33-691	33	6S	91W	1176 feet FSL; 665 feet FEL	Federal
Federal 43A-33-691	33	6S	91W	1513 feet FSL; 665 feet FEL	Federal
Federal 43B-33-691	33	6S	91W	1850 feet FSL; 665 feet FEL	Federal
Federal 43C-33-691	33	6S	91W	2187 feet FSL; 665 feet FEL	Federal
Federal 43D-33-691	33	6S	91W	2524 feet FSL; 665 feet FEL	Federal

Drilling activities would typically occur 24 hours per day with approximately 12 workers for a period of 5 to 7 days per well. Completion activities would also typically occur 24 hours per day with approximately 15 workers for a period of 2 to 3 days per well. Pads with multiple wells would be occupied for an extended period of time, depending on the number of wells drilled. Completion of wells is generally done on a zone basis with the same zone for all wells on a pad being stimulated at the same time and then progressing upward through each zone in each group of wells, so the total completion time for any given well may extend beyond the 2 to 3 days that would be required for completing a single well. Production results for wells drilled during the first year would be used to plan and design the drilling program for subsequent years.

BBC intends initially to drill and complete 8 to 16 wells on a pad, possibly causing drilling operations to be conducted in more than one phase. For example, BBC currently plans to drill eight wells on the MDP 26 pad and evaluate the gas production from those wells prior to drilling the remaining wells from that pad. Development would be highly sensitive to price of gas and cost of services. The BLM would be notified in a timely manner of any scheduling changes. If all wells on the pad are not drilled in a continuous operation, BBC may request approval for the pad to remain unreclaimed until the following drilling season. Temporary (pre-interim) reclamation would be conducted in accordance with BLM and COGCC requirements as described in a subsequent section of this Proposed Action. Because of geologic and market uncertainties, BBC may drill fewer wells than those described in this Proposed Action.

Current plans call for use of mud rotary platform rigs with capability matched to the depth requirements of the proposed well. Drilling would be accomplished with either a closed-loop system or a conventional or semi-closed loop system. Descriptions of drilling procedures for each proposed well would be included in the well-specific APDs to be submitted to BLM by BBC. Drill cuttings would be contained in a cuttings trench and ultimately stacked, spread, or buried onsite as part of approved pit closure or

cuttings disposal procedures. Some drill cuttings may also be incorporated as part of the reclamation of well pads, in accordance with COGCC rules.

BBC would use a small truck-mounted drilling rig to drill the conductor pipe and rat holes. Once the conductor pipe is set and cemented in place, another drilling rig would move on location to preset surface casing. Lastly, the conventional drilling rig would be moved in and rigged up to spud (begin drilling) the production holes to total depth. Prior to drilling below the surface casing, well control equipment (Blowout Preventer and Choke Manifold) would be installed on the surface casing and both the well control equipment and surface casing would be tested to ensure adequate well control. The well control equipment would meet the minimum standards of Onshore Oil and Gas Order No. 2 (Drilling Operations), and the BLM would be notified in advance of all pressure tests in order to be present and witness the tests, if so desired. Charts of the tests are kept on location and are available to the BLM for inspection at any time.

A downhole motor directionally drills the well and increases penetration rate. The motor is powered by drilling fluids that are used to drive the motor, cool the bit, and carry drill cuttings to the surface. Conventional water-based drilling mud/fluids would be utilized in the drilling of the wells. In order to maintain borehole stability, minimize possible damage to the formation, provide adequate carrying viscosity (thickness) to carry the drill cuttings out of the wellbore, and reduce downhole fluid losses, non-toxic materials may be added to the mud system.

For the directional wells, an S-shaped directional design would be used to reach the targeted downhole well locations. In general, a target radius of 50 feet would be used. Specific directional plans for each well would be included with the APDs. Downhole operations would be done with directional tools to facilitate proper direction and path of the well. The actual bottom-hole locations would be horizontally separated from the surface pad positions up to 2,500 feet.

Drill cuttings from the wellbore (mainly shale, sand, and miscellaneous rock minerals) would be directed to a cuttings trench and eventually stacked, spread, or buried on location or incorporated into the reclamation of the pad.

After drilling the bore to its total depth, logging tools would be run into the well to evaluate the potential hydrocarbon resource. If the evaluation indicates adequate hydrocarbon resources are present and recoverable, steel production casing would be run and cemented in place in accordance with the well design, as approved by the BLM and any applicable COAs. The proposed casing and cementing program would be designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. BLM approval is necessary prior to the use of any isolating medium other than cement.

Drilling rig engines would be muffled in accordance with Federal and State laws to minimize noise. Generator-driven lights would be installed on the rig substructure and mast to light each well pad for night drilling and safety of workers. To the extent possible, all lights would be oriented inward and downward to minimize impact to offsite locations.

Once a well has been drilled and cased, completion operations would begin. Well completion consists of running a cement bond log to evaluate the cement integrity and to correlate the cased hole logs to the open hole logs, perforating the casing across the hydrocarbon producing zones, and stimulating the formation to enhance the production of oil and gas. The typical method used for stimulation consists of hydraulic fracture treatment of the reservoir, in which sand and fluids are pumped into the producing formation with sufficient hydraulic pressure to fracture the rock formation. The sand serves as a proppant to keep the fractures open, allowing reservoir fluids to move more efficiently into the wellbore.

The next phase would be to flow and test the wells to determine rates of production. A completion pit may be constructed on each pad, or centrally located, to store water for frac operations and as a repository for flowback fluids. The need for and construction details of completion pits would be addressed in the APDs submitted to BLM and COGCC. Completion pits would be designed to maintain at least 2 feet of freeboard and would be constructed and operated in accordance with BLM and COGCC requirements. Spoil from the pits would be stockpiled within a drainage control berm along the edge of each pit and adjacent to the edge of each well pad. Flow tests would continue at each well until such time as ultimate well productivity and production characteristics can be determined. Testing would require the installation of a wellhead, test meter, separator, and tank battery at each well.

BBC would implement green completion practices in order to minimize or eliminate flaring during completion work. BBC would employ sand traps, surge vessels, separators, and tanks as soon as practicable during flowback and cleanout operations to safely maximize resource recovery and minimize releases to the environment.

Well effluent during flowback and cleanout operations prior to encountering hydrocarbon gas of salable quality or significant volumes of condensate would be directed to tanks such that oil or condensate volumes shall not be allowed to accumulate in excess of 20 barrels (bbls) and would be removed within 24 hours. The gaseous phase of non-flammable effluent may be directed to a flare pit or vented from tanks for safety purposes until flammable gas is encountered. Well effluent containing more than 10 bbls per day of condensate or within 2 hours after first encountering hydrocarbon gas of salable quality would be directed to a combination of sand traps, separators, surge vessels, and tanks or other equipment as needed to ensure safe separation of sand, hydrocarbon liquids, water, and gas and to ensure salable products are efficiently recovered for sale or conserved and that non-salable products are disposed of in a safe and environmentally responsible manner.

If technically feasible and safe, closed-top tanks would utilize backpressure systems that exert a minimum of 4 ounces of backpressure and a maximum that does not exceed the pressure rating of the tank to facilitate gathering and combustion of tank vapors. Vent/backpressure values, the combustor, lines to the combustor, and knock-outs would be sized and maintained so as to safely accommodate any surges the system may encounter.

All salable quality natural gas would be directed to the sales line as soon as practicable or shut in and conserved. Temporary flaring or venting would be conducted as a safety measure during upset conditions and in accordance with all other applicable laws, rules, and regulations.

A flare pit would be constructed a minimum of 110 feet from each wellhead and would be used, as necessary, during completion work. In the event a flare pit proves to be unworkable for a specific well, a flare stack would be installed. The fluid would then either be returned to the pit or placed in a tank. Natural gas would be directed into the flare pit or flare stack with a constant source of ignition until either shut-in or flowlines and pipelines are constructed, and natural gas is directed into the gathering system. Flare lines would be directed as required by regulations and to avoid environmental damage. A deflector and/or directional orifice would be used to safeguard both personnel and the adjacent environment.

Approximately 2,500 to 3,000 bbls of fresh water would be used during the drilling of each well, with approximately 600 bbls recovered and reused for subsequent drilling or cementing operations. Well completion would require approximately 8,000 bbls of water per stage, with an average of 9.5 stages per well. During flowback and production, approximately 60 percent of the water used for well completion would be recovered and would be reused for subsequent completions. BBC has developed a comprehensive water management system that allows the efficient recycling and reuse of water and

transportation of water to each well pad via pipelines. This system significantly reduces truck traffic associated with hauling water and results in all recycled water being used for well completions.

3.3 Well Completion and Production

3.3.1 Surface Facilities

Surface facilities at each pad location would consist of wellheads, separation units, gas metering units, fugitive emission combustors, 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-bbl capacities each. Telemetry equipment may be used where feasible to remotely monitor well conditions. If conditions dictate their use, it is possible that plunger lift, gas lift, or other artificial lift systems would be installed. Multi-well locations would share production equipment, whenever feasible, to minimize surface occupancy and disturbance. All facilities would be located on the well pad or spaced appropriately in accordance with BLM recommendations. All production equipment located on, or associated with the development of Federal leases would be painted to match the surrounding terrain and located to reasonably minimize visual impact. BLM would select the color for these facilities, including containment barriers, at each site. The production equipment would be fenced to prevent contact with wildlife/livestock. Telemetry equipment would be used where feasible to remotely monitor well conditions. The use of telemetry equipment would minimize traffic to and from the well locations.

Tank batteries would be placed within secondary containment to prevent the offsite 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 conducted to prevent lateral movement of fluids through an impermeable liner 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 site security guidelines would be followed as identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3. All permanent structures would be painted a flat, non-reflective standard environmental color as determined by the AO. Facilities would be painted within 6 months of being located onsite. As required by the Occupational Safety and Health Administration (OSHA), some equipment would not be painted for safety considerations (i.e., some parts of equipment would retain its safety coloration such that it does not blend with the surroundings).

3.3.2 Gas and Water Gathering

Several new gas and water gathering pipelines would be added to the existing pipeline network. The new pipelines would generally be buried adjacent to the new access roads but in limited situations, cross-country pipelines may be constructed. If excessive rock is encountered during construction, blasting may be necessary for pipeline installation. Construction of the pipelines would follow construction of the new roads in a planned sequence. To the extent possible, all vehicles and trenching equipment would use the road as part of the construction ROW. The pipeline alignment would first be cleared of vegetation remaining after road construction. The pipeline trench would be excavated mechanically to a depth that would allow approximately 4 to 5 feet of earth to be placed on top of the pipeline. Pipe segments would then be welded together, lowered into the trench, tested, and covered with excavated material.

After construction, pipelines would be tested with freshwater, nitrogen gas, and/or compressed air to locate any leaks. Freshwater or nitrogen used for testing would be obtained offsite. After testing, the water would be disposed of or discharged with the appropriate BLM and State of Colorado approvals

and/or permits. If nitrogen or air is used, it would be released to the atmosphere. Generally, 1 mile of pipeline would be constructed in approximately 6-8 weeks and take approximately 15 workers.

3.3.3 Fluid Management

Completion Phase

All “frac” flowback water would be contained in temporary tanks or lined completion pits during completion operations and would be recycled for re-use, or piped or trucked offsite to approved disposal facilities. Flowback water would be recycled for use in drilling and completion operations, properly disposed of, or treated and recycled.

Production Phase

Multiple 300- to 500-bbl steel tanks would be installed on the well pad or offsite facilities to capture produced water. These tanks would be onsite for the life of the wells. Produced water may be recycled for use in drilling and completion operations, or piped or trucked offsite to approved disposal facilities. Typically, a well pad with 16 wells would require 8 to 10 tanks for storage of fluids. Two to three of these tanks would store produced water, with the remainder storing condensate. Although BBC would install water pipelines to each well pad to transport water, onsite tanks are still required for storage for those instances when pipeline/storage constraints, pipeline maintenance or other conditions limit the ability to transport water via these pipelines. Condensate would be collected at the well site in steel storage tank(s) and transported to market by tanker trucks.

3.3.4 Interim Reclamation

After well completion activities are finalized, BBC would reduce the size of the well pad to the minimum surface area needed for production facilities and future workovers, while providing for reshaping and stabilization of cut and fill slopes. In brief, interim reclamation would be accomplished by grading, leveling, and seeding, as recommended by the BLM or landowner. Interim reclamation would reduce the disturbed area at each pad to approximately 1.9 acres or less after well development.

The following is a summary of interim reclamation activities BBC would implement after all wells have been completed on a location:

- The well location and surrounding areas(s) would be cleared of all debris, materials, and trash not required for production. Waste materials would be disposed of at an appropriate disposal facility.
- All pits, cellars, rat holes and other bore holes at drilling locations unnecessary for further lease operations would be back filled to conform to surrounding terrain after the drilling rig is released.
- All drill cuttings would be buried in the onsite pit, buried in an onsite cuttings trench, and/or incorporated into reclamation activities in accordance with COGCC rules.
- Areas not necessary for production and future workovers would be reshaped to resemble the original landscape contour. Stockpiled topsoil would be redistributed and disked on the area to be reclaimed and re-seeded according to BLM recommendations.

Interim reclamation of that portion of the well pads and access roads not needed for production facilities/operations would be reclaimed within 6 months from the date of well completion, weather permitting. In the event that subsequent drilling operations would be commenced on a location within 12

months, temporary (pre-interim) reclamation would be performed to stabilize the location and minimize dust and erosion to the extent practicable. Interim revegetation/reseeding would take place at the first growing season available from the date of well completion. Dry/non-producing well locations would be plugged, abandoned and reclaimed within 6 months of well completion, weather permitting.

Some locations would require the use of special reclamation practices. These practices could include hydro-mulching, straw mat application on steeper slopes, fertilizing, seedbed preparation, contour furrowing, watering, terracing, water barring, and the replacement of topsoil. All reclamation efforts would employ seed mixes as approved by the BLM or by the landowner.

3.3.5 Workovers and Recompletions

Periodically, the workover or recompletion of a well may be required to ensure that efficient production is maintained. Workovers can include repairs to the well bore equipment (casing, tubing, rods, or pump), the wellhead, or the production facilities. These repairs would usually be completed during daylight hours. The frequency of this type of work cannot be accurately projected because workovers vary from well to well. In the case of multi-well pads, space for equipment would usually be limited to the “in-use” (i.e., disturbed) area of the surface location, although it is possible that interim reclamation could be delayed by work-over operations. In the case of a well recompletion, a water completion pit may have to be constructed.

3.4 Final Abandonment and Reclamation

3.4.1 Well and Pipeline Plugging and Abandonment

Upon abandonment, each well would be plugged with cement and its related surface equipment would be removed. Subsurface pipelines would be plugged at specific intervals and site contouring would be accomplished using appropriate heavy equipment. All disturbed surface soil would be reseeded with native vegetation. The seed mix used would conform to the typical vegetation surrounding the specific well site and would be approved by the BLM or private landowner.

A Sundry Notice would be submitted by BBC to the BLM describing the technical or environmental aspects of final plugging and abandonment. This notice would describe final reclamation procedures and any mitigation measures associated with the final reclamation performed by the operator. The BLM and COGCC standards for plugging would be followed. A configuration diagram, a summary of plugging procedures, and a job summary with techniques used to plug the well bore (e.g., cementation) would be included in the Sundry Notice.

3.4.2 Final Reclamation

All surface disturbances would be recontoured and revegetated according to an approved reclamation plan. Final well site reclamation would be performed and monitored in accordance with the 1998 GSRA reclamation policy, including control of noxious weeds. Further information on reclamation standards is available in Appendix I of the 1999 Oil and Gas Leasing and Development EIS. One of the basic goals of the policy is to “establish desirable (seeded and native) vegetation to set the stage for the natural process to restore the site.” Consequently, one of the goals in this proposal is to accomplish as much reclamation on each well pad during the life of the well as possible, even on those pads with a large final reclamation or “in -use” area. Unreclaimed areas or reclaimed areas that do not meet the objective of three-to-four years of sustained reclamation (known as “operator complete”) would undergo the reclamation re-treatment measures described in the Surface Use Plan of Operations, submitted as part of the GGIIMDP,

and referenced with each APD. BBC would also meet the BLM bonding requirements for abandonment and reclamation.

BBC would restore the well locations and access roads to approximately their original contours. During reclamation of these sites, fill material would be pushed into cuts and up over the back slope. No large depressions would be left that would trap water or form ponds. Upon completion of backfilling, leveling and recontouring, the stockpiled topsoil would be evenly spread over the reclaimed areas(s). All disturbed surfaces would be re-seeded with a seed mixture recommended by the BLM or private landowner. The seedbed would then be prepared by disking and roller packing following the natural contours. Seed would be drilled on contours at a depth no greater than 0.5 inch. In areas that cannot be drilled, seed would be broadcast at double the seeding rate and harrowed into the soil. Certified weed-free seed would be used, per BLM policy. If the seeding is unsuccessful, BBC may be required to make subsequent seedings.

3.5 Road Maintenance

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) to include such items as:

- road surface grading and graveling
- relief ditch, culvert and cattle guard cleaning
- erosion control measures for cut-and-fill slopes and other disturbed areas
- road closures in periods of excessive soil moisture to prevent excessive rutting caused by vehicular traffic
- road and slope stabilization measures as required until final abandonment and reclamation
- weed control
- dust abatement techniques and frequency as approved by the BLM

3.6 Timing Limitations and Wildlife Mitigation

Table 3 outlines the stipulations attached to each lease, consisting of Timing Limitations (TLs), or seasonal restrictions, intended to protect seasonally sensitive wildlife uses, including use by deer and elk of winter range and nesting by raptors (birds of prey).

BBC anticipates requesting year-round drilling operations to allow more efficient and less protracted development the project. In order for this to occur, BBC would be required to seek, and receive, the granting of TL exceptions by the BLM. The annual requests for winter TL exceptions would be evaluated by the BLM, in collaboration with the Colorado Division of Wildlife (CDOW), on the basis of four principal criteria:

- an overall benefit to wintering big from allowing winter drilling in conjunction with habitat treatments and other measures proposed by BBC
- a lack of significant adverse impacts on wintering wildlife
- the degree to which BBC has fulfilled its mitigation commitments
- BBC's stated need for year-round drilling in the ensuing winter season

Table 3. Summary of Lease Stipulations within the GGIIMDP Area

<i>Lease</i>	<i>Description of Lands</i>	<i>Pad</i>	<i>Lease Stipulations</i>
COC46972 Year: 1988	T6S, R91W, 6 th P.M., Garfield County, CO Section 29: E2E2, NWNE, SWSE Section 32: E2, NENW	MDP 24	Timing Limitation: No surface use is allowed during the following time period: January 16 through April 29. This stipulation does not apply to operation and maintenance of production facilities. For the purpose of protecting important seasonal wildlife habitat.
COC50126 Year: 1989	T6S, R91W, 6 th P.M., Garfield County, CO Section 19: N2, N2S2, Section 20: NWNW, S2NW, N2SW, SESW, W2SE, SWNE Section 21: W2NW	MDP 21 MDP 22 MDP 23	Timing Limitation: No surface use is allowed during the following time period: January 16 through April 29. This stipulation does not apply to operation and maintenance of production facilities. For the purpose of protecting critical deer and elk winter ranges.
COC50126 Year: 1989	T6S, R91W, 6 th P.M., Garfield County, CO Section 19: N2, N2S2 Section 20: NWNW, S2NW, N2SW, SESW, W2SE, SWNE Section 21: W2NW	MDP 21 MDP 22 MDP 23	Timing Limitation: No surface use is allowed during the following time period: April 2 through August 30. This stipulation does not apply to operation and maintenance of production facilities. For the purpose of protecting raptor nesting areas.
COC51440 Year: 1990	T6S, R91W, 6 th P.M., Garfield County, CO Section 33: N2NW, SWNW	MDP 24	Timing Limitation: No surface use is allowed during the following time period: January 16 through April 29. This stipulation does not apply to operation and maintenance of production facilities. For the purpose of protecting critical deer and elk winter ranges.
COC66718 Year: 2003	All lands in the lease	MDP 26	Timing Limitation: No surface use is allowed during the following time period: December 1 through April 30. This stipulation does not apply to operation and maintenance of production facilities. For the purpose of protecting critical deer and elk winter ranges.

Absent the granting by the BLM of an exception for any given winter season, the TL stipulation would prohibit construction, drilling, and completion activities during the specified period, requiring BBC to suspend these activities until after the end of the TL period.

To minimize impacts to nesting raptors, BBC would be required to conduct a raptor nesting survey to search for active or other nests within 0.25 mile of a pad or other surface facility. If a nest is found, a TL would be applied to prohibit the initiation of construction, drilling, or completion activities during a 60-day COA period selected based on the particular raptor species. For the MDP 21, 22, and 23 well pads, a 5-month TL stipulation is attached to the lease, indicating that nest sites had already been identified in the area as of the date of leasing. Regardless of whether the raptor nesting TL is applied to individual components as a 60-day COA or a 5-month stipulation, provisions exist for the annual granting of exceptions if the nest is not active or no longer exists or the location of the project relative to the nest is unlikely to result in adverse impacts. An exception may also be granted if project activities planned within the 0.25-mile buffer for a nest are initiated outside the nesting season and continue into the nesting season at the same location and approximate intensity.

4. LAND USE PLAN CONFORMANCE REVIEW

The Proposed Action is subject to and have been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: The current land use plan is the *Glenwood Springs Resource Management Plan (RMP)*, approved in 1984 and revised in 1988 (BLM 1984). Relevant amendments to the plan include the *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) and the *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999).

Decision Language: The 1991 plan amendment (BLM 1991) included the following at page 3:

“[A total of] 697,720 acres of BLM-administered mineral estate within the Glenwood Springs Resource Area [is] open to oil and gas leasing and development, subject to lease terms and (as applicable) lease stipulations.” This decision was carried forward unchanged in the 1999 plan amendment at page 15 (BLM 1999).

“In areas being actively developed, the operator must submit a Geographic Area Proposal (GAP) [currently referred to as a Master Development Plan, MDP] that describes a minimum of two to three years activity for operator controlled leases within a reasonable geographic area” (BLM 1999).

Discussion: The Proposed Action is in conformance with the 1991 and 1999 RMP amendments cited above because the Federal mineral estate proposed for development was open to oil and gas leasing and development at the time the leases were issued, because the stipulations specified in the respective plan amendments are attached to the leases and incorporated into this project, and because the development is being analyzed and planned through a project-specific MDP.

5. REFERENCES

Bureau of Land Management (BLM). 1984. *Glenwood Springs Resource Area Resource Management Plan*. Revised 1988. U.S. Department of Interior. Grand Junction District Office, Colorado.

_____. 1991. *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan*. U.S. Department of the Interior. Grand Junction District Office, Colorado.

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