

DECISION NOTICE
AND
FINDING OF NO SIGNIFICANT IMPACT

***Big Porcupine
Coal Bed Methane
Project***

Townships 41- 42 North
Ranges 70-71 West
Campbell County, Wyoming

Douglas Ranger District
Medicine Bow-Routt National Forests and
Thunder Basin National Grassland

Introduction

This Decision Notice (DN) documents my decision regarding the Big Porcupine Coal Bed Methane (CBM) Project. An Environmental Assessment (EA) was prepared and was made available to the public for comment. The EA disclosed the environmental effects of Bill Barrett Corporation's proposal that would occur on National Forest System lands located within oil and gas leases held by the Corporation and other companies or individuals giving production rights to the operator. The Environmental Assessment addresses two alternatives, the Proposed Alternative and the No Action Alternative. Other alternatives were considered but eliminated from detailed study for reasons outlined in this decision.

An interdisciplinary team of resource specialists and a third party contractor conducted the environmental analysis and documented results in the EA. In accordance with the National Forest Management Act (NFMA) and the National Environmental Policy Act (NEPA), the team considered the affected area, solicited externally and internally for issues and concerns, formulated alternatives that responded to issues, determined the likely environmental consequences based on both the Oil and Gas on the Thunder Basin National Grassland ROD, 1994 (1994 ROD), and the Thunder Basin National Grassland Land and Resource Management Plan Revision (Grassland Plan) management goals and objectives, management area direction, standards and guidelines, and proposed mitigation measures in response to potential effects.

My Decision

I have reviewed the EA and the project file, including the public comments and responses for Bill Barrett Corporation's proposed one hundred fifty six (156) CBM wells, titled **Big Porcupine Coalbed Methane Project**. This project is located on approximately 18,000 acres in Campbell County, Wyoming. The legal description for the area is: Townships 41 & 42 North, Range 70 West, Townships 41 & 42 North, Range 71 West, 6th Principle Meridian. Additional detail for legal descriptions and well sites can be found in Appendix A of this Decision.

I have selected Alternative B, the Proposed Action, as the preferred alternative, which authorizes the following:

First, I am approving the Surface Use Plan of Operation (SUPO) for the extraction of CBM gas from under National Forest System lands in the Big Porcupine Creek project area, on the Federal Leases identified in Appendix A of this document. I am authorizing the Bureau of Land Management (BLM) to approve the Applications to Drill (APDs) based on the SUPO and to issue subsequent Permits to Drill for the wells listed in this document. I have determined that some wells should not be drilled for the protection of natural resources or senior rights of the nearby coal company. Some wells that I am recommending to be drilled only under special Conditions of Approval (COAs) are identified in Appendix B. Also those wells which I am recommending not be drilled are identified in the final pages of Appendix B. All facilities identified below would be authorized on National Forest System lands under this Decision, the terms of the lease, and within the authority of the BLM's Permit to Drill.

By implementing Alternative B, I am approving the SUPO for up to one hundred fifty six (156) CBM wells on NFS lands. All wells authorized by this Decision are located on USFS

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administered surface lands on both 40 acre and 80 acre spacing as required by the State of Wyoming Oil and Gas Conservation Commission. With this Decision I am also approving the roads, pipelines, compressor stations, and ancillary facilities associated with this project as discussed below:

Roads

A total of 78 miles of road located on NFS lands will be utilized by this project for access to the individual well sites, compressor stations, water disposal sites, for the construction and installation of pipelines and power lines, and for the general operation and maintenance of all facilities:

- 54 miles of existing access into and within the project area
- 23 miles of new road construction as two-track unless otherwise needed to maintain safety or resource protection
- 1 mile of existing road to be upgraded

Pipelines

Four types of pipelines would be constructed and installed below ground within shared utility corridors and amounting to a total 275.99 acres for pipeline corridors on NFS lands:

- Low-pressure gas lines
- Produced water lines
- High pressure gas collector lines
- High pressure gas sales lines

Where feasible, water lines and gas flow lines will be co-located adjacent to project roads as analyzed in the Project Environmental Analysis. Table 2-3 of the EA identifies the type of lines, length and width of the rights-of-way for these lines and acreage by surface ownership.

Water Disposal

Six (6) discharge points have been analyzed on NFS lands and are authorized for disposal of the produced water from the wells. The water would be transported through buried gathering lines from each well to the discharge points. The discharged water would first flow into stock watering tanks for range cattle and wildlife. From the stock tanks, the produced water will flow into tributaries of Porcupine Creek or to Porcupine Creek directly, (Water Management Plan, December 2002). All of the flow from these areas will ultimately be collected into a large reservoir, designated here as the Mine Collection Reservoir, in NWSE of Section 36, T42N R70W. From this point, North Antelope Rochelle Corporation (NARC) (coal mine) has established pipelines to pump water successively (west to east) to the Boss Draw, North Corder Creek, and New Payne flood control reservoirs. All water disposal issues have been identified in the Project Water Management Plan and again in the Project EA, at Section 3.3.4.1.

Compressor Stations

This Decision includes the authorization of five compressor stations ranging from first to third stage compression capability. The stations are identified in Figure 2-1 of the EA. Three of the five compressor stations would be constructed only in accordance with the timing limitations assigned to them and identified in Appendix B, COAs.

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Second, I am authorizing Special Use Permits required to implement the project and to operate and maintain the producing wells and other facilities, as depicted on EXHIBIT 1 Map and Figure 2-1 of the EA. The following individual facilities will require a special use permit and are authorized by this decision:

Utility Lines and Meter Points

The power supply for this CBM project will be provided by Powder River Energy Corporation (service company), located in Gillette, WY. The project will require a series of power lines, both overhead and buried, to accommodate the 156 wells, 5 compressor stations, and ancillary facilities. During the project proposal stage, the Operator coordinated with the service company to determine power needs, location and installation of the lines. Those lines and their locations were fully identified and analyzed in the EA (EA, Chapter 2, Sections 2.1.1.8 and 2.1.1.9, also Chapter 3, Sections 3.6, 3.8 and 3.11). Approximately 19.8 miles of overhead line would be mounted on single wood poles and 47 miles of buried line would be trenched into common utility corridors.

The service company has asked that the Operator enter into a contract for installation of the lines. The Operator has declined to enter into that contract until a decision is rendered for this project, therefore only three applications have been submitted to the USFS and they amount to approximately 1.3 miles of line, for less than 33 kV of power. These power lines will be buried within the shared corridors with the gas and water lines and the roads. These applications are part of the Project Record available at the Medicine Bow-Routt National Forests Supervisor's Office, Laramie, WY.

When the remaining applications are submitted to complete the power needs for the project, they will be reviewed to see if they are compliant with the Grassland Plan, and if they meet the analysis written for this EA. Only applications that meet these two criteria will be approved.

Formal consultation has been initiated with US Fish and Wildlife Service (USFWS) concerning a 'likely to adversely affect' determination for the Bald eagle due to potential electrocution of birds on overhead power lines. This determination is preliminary, and is pending concurrence in the form of a Biological Opinion (BO) from the USFWS. Given the status of our informal and formal consultation with the USFWS at the time of this decision, I will authorize a Special Use Permit for the installation of buried lines. I will also authorize the overhead utility lines; however, the Operator is only allowed to install power poles until such time as the USFWS formally concurs with our ESA affects determination and reasonable and prudent measures. As noted in a later section of this decision document, this decision is not an irreversible or irretrievable commitment of resources as discussed in ESA Section 7 (d). When the USFS receives a BO and concurrence from USFWS, the lines may be strung and the project fully implemented.

Thirty (30) meter points have been analyzed in the Project EA (Chapter 2, Section 2.1.1.9) and may be installed to facilitate the project. The meter points will be mounted on poles throughout the project area to measure power usage.

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Note: the number of wells, miles of road, miles of utility corridors, and electrical drop-points actually installed may be less than stated here due to the loss of gas potential that is occurring in the field. In no cases shall the numbers be greater than stated in this Decision.

Mitigation Measures and Monitoring

Mitigation measures and associated monitoring are integral components of this decision. All mitigation in Appendices B&C and in the Environmental Assessment will be implemented as part of this decision. All mitigation measures that are not already required by the APD and standard lease terms and conditions will be implemented by their inclusion in a Monitoring and Reclamation Plan to be developed by the Operator to the satisfaction of the USFS prior to commencement of any activity.

The Company, in cooperation with the USFS, will develop a specific monitoring program to:

- Verify implementation of mitigation measures adopted in EA, Mitigations, COAs and site-specific stipulations.
- Measure the success of implemented mitigation measures.
- Modify measures as needed based on observed performance.
- Provide feedback to resource specialists and line officers.

The plan will allow for amendments to modify tasks and obligations as conditions change in the project area, and as determined by the authorized officer where it is warranted. Any amendments or changes to the proposal would be in conformance with the analysis written and the conclusions and decisions made.

Geology and Minerals

- Methane gas migration shall be mitigated by utilizing appropriate well control, casing, ventilation, and plugging procedures.

Hazardous Waste Management

- Hazardous substances, as defined by Comprehensive Environmental Response Liability Act (CERCLA), will not be used in the construction or drilling operations associated with these wells. Commercial preparations, which may contain hazardous substances, may be used in production operations and will be transported within the project area. Any materials containing hazardous substances will be handled in an appropriate manner to minimize the potential for leaks and spills to the environment. Resource Conservation and Recycling Act (RCRA) hazardous wastes will not be generated by well-drilling operations. Exempt working pit contents will be buried onsite.
- Spills of oil, gas or any other potentially hazardous substance will be reported immediately to the Forest Service, BLM and other responsible parties, and will be mitigated immediately, as appropriate, through cleanup or removal to an approved disposal site.

Surface Water

Mitigation measures in the form of a Water Management Plan have been developed for this project and shall be applied at the time the Permit to Drill is issued. This implementation shall include the agencies with jurisdiction. The agencies include FS, BLM, US Army Corps of Engineers, Wyoming State Engineer's Office, Wyoming Oil and Gas Conservation Commission, and/or Wyoming Department of Environmental Quality, in consultation with the involved local land managers and soil conservation districts. The cooperative effort of all stakeholders was necessary in developing the water management plans that identify mitigating measures for areas or drainages where high CBM generated flows are or could be impacting existing uses. Measures that shall be applied at each site include:

- During construction, put vehicle service and fuel areas, chemical storage and use areas, and waste dumps on level sites. Mix, load and clean all vehicles and containers on gentle upland sites. Dispose of chemicals and containers in State-certified disposal areas. (FSH 2509.25)
- Produced water shall be discharged into stock tanks for utilization by cattle and will then be discharged into existing stream channels and reservoirs in a manner that shall not cause increased or accelerated erosion. Energy dissipation shall be achieved through the use of rock, placement of concrete control structures and/or the establishment of hydrophytic vegetation, as stated in the Water Management Plan.
- Discharges shall be limited to amounts less than or equal to the naturally occurring mean annual peak flow (which is roughly equivalent to a peak generated by a 2-year, 24-hour storm) and which can be handled by the natural channel under anticipated conditions.
- Channel discharge points shall be located in stable channel locations away from any significant downstream head cuts or to other major erosional features, outfall design may include discharge aprons and downstream stabilization of channel side slopes to prevent erosion and provide energy dissipation. Monitoring the outfalls will be conducted, and if erosion occurs, remediation will be done. Discharge points are more fully articulated in the Water Management Plan, p.6, along with mitigation developed for each.
- Discharge facilities shall be designed site-specifically using best management practices, to accommodate livestock access to water, to control erosion, and to limit sedimentation. If any down cutting or head cutting is occurring due to CBM flows, the landowner will be informed of the problem. If agreeable to the landowner, erosion control measures for advancing head cuts will include sloping of the head cut and lining the channel with erosion control geotextile matting. Repair and erosion control measures for down cut channels will include backfill of the eroded area with topsoil, seeding with native grasses, and construction of water bars at least every 50 feet over the affected area.
- Downstream impoundments located within the coal mine lease may need new or redesigned outlet works in order to handle the steady inflow provided by CBM discharge

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water. Authorization for changes to impoundment structures will be made by the coal company under the coal lease.

- If necessary, additional low water crossings and culverts shall be installed at downstream locations as well as possible erosion control measures as stated in the Water Management Plan, p. 34, and the EA at 2.1.1.7.
- Timely re-contouring and revegetation of disturbed areas shall be required to limit runoff that could cause sediment concentrations in surface waters to rise over present levels.
- Water volume and quality parameters shall be monitored by the Operator at discharge points consistent with State of Wyoming Department of Environmental Quality requirements for effluent limitations, monitoring requirements contained in any applicable permits, and FS monitoring requirements contained in any applicable monitoring plans.

Air Quality

- As needed or required by the USFS, the operator shall water roads during the construction phase in order to minimize fugitive dust emissions.

Soils

- Accelerated soil loss shall be minimized by limiting the following: the removal of vegetation; the leveling of work areas; and the location of wells on slopes that require cuts-and-fills for well pad construction.
- Timely initiation of reclamation and revegetation efforts shall be required to effectively and immediately control accelerated soil loss due to either wind or water erosion.
- Road construction that requires cuts-and-fills shall be minimized. Pipeline construction also shall avoid steeper slopes. Where necessary, erosion control features, such as water bars or other means of diverting flows off sloping pipeline rights-of-way, shall be constructed to control increased runoff and erosion.
- Areas of highly erosive soils shall be avoided when drill sites, two-track routes, and pipeline routes are surveyed and staked, in order to substantially reduce the amount of soil loss.
- A Reclamation and Monitoring Plan will be required of the operator as stated in Appendix B, COAs
- The extent of surface disturbance and the length of time that the area shall remain disturbed before interim or final reclamation activities commence shall be minimized. Interim and final reclamation of all disturbed areas shall proceed in a timely manner.

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Reclamation activities shall be conducted during time frames established by the Forest Service and in relationship to the resource affected.

- Reclamation must produce a natural appearance and must be consistent with site conditions, area management standards, and projected uses, as agreed upon by the Operator, the FS, and other Federal agencies.
- Reclamation shall include, as appropriate, re-contouring, establishment of desirable, perennial vegetation, stabilization and erosion control of all disturbed areas. Additional measures, such as topsoil conservation, temporary fencing, mulching, or weed control shall be used, as appropriate, to ensure long-term vegetative stabilization of all disturbed areas.

Vegetation Resources

- Reclamation and final closure of the proposed operations shall re-establish vegetation suitable for forage and wildlife habitat in the disturbance areas.
- The Operator shall implement actions that will enhance restoration of vegetation by desirable species including the following site preparation and reclamation techniques: mechanical loosening or roughening of the soil where compacted (disking and ripping); fertilization or soil amendment; seeding to proper depth with desirable species; mulching to retain soil moisture; transplanting containerized plants to speed the establishment of slow-growing species; control of noxious weeds; or temporary fencing to exclude livestock until vegetation is re-established successfully. These vegetation restoration techniques shall be used, as appropriate.
- Mitigation activities most effective in reducing the potential for decreased vegetation production include timely and well-planned reclamation and effective noxious weed management, avoidance of disturbance within playas, and avoidance of discharge within closed basins, playas, and areas with soils that would be difficult to re-vegetate. These impact avoidance and mitigation measures shall be used, as appropriate.
- Noxious weed monitoring and weed control measures shall be conducted by the Operator annually for the 4-7 year life of the project.

Wildlife Resources

- To reduce the risk of nest failure, construction activities (drilling, testing, new construction, workovers) shall not be conducted within the line-of-sight (up to 0.5 mile), of known raptor nests as defined in the Conditions of Approval, Appendix B.
- Roads shall be constructed to the minimum standard needed to accomplish the purpose and need for the project while minimizing disturbance to soil and vegetation, as well as the potential for wildlife-vehicle collisions.

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- Any trees within the project area shall be left undisturbed.

Cultural Resources

- In the event that cultural resources are uncovered and identified during project construction, construction shall be halted and a FS or FS-approved archaeologist will evaluate the site including site excavation as needed for the purpose of gathering available significant information.

Land Use and Transportation

- As required by the USFS, roads to plugged and abandoned wells shall be reclaimed.
- Where feasible, each access road shall be constructed in a transportation corridor that would also include gas and water pipelines, and electrical cables.

Visual Resources

- Gathering lines, water lines, high pressure lines and underground electrical cables shall be located along road rights-of-way whenever feasible.
- All proposed wells and facilities shall be consistent with FS Visual Quality Objectives for the Thunder Basin National Grassland. Adverse visual impacts shall be minimized through careful location of facilities, minimal disturbance of affected sites, and design of facilities so that they harmonize with the surrounding landscape.
- Construction debris shall be removed immediately, as it creates undesirable textured contrasts with the landscape.
- Resource protection measures proposed for erosion control, road construction, rehabilitation and revegetation, and wildlife protection shall be implemented during the approval of APDs and Sundry Notices. Those measures also shall mitigate impacts to visual quality.

Monitoring information will be shared with the BLM in an effort to comply with the November 1991 Interagency Agreement between the USDA Forest Service and the USDI Bureau of Land Management for Oil and Gas Operations.

Surface Reclamation

The issue of reclamation bonding was raised during the public comment period on the EA (EA, Appendix O, Comment Response Report). It is within the Forest Service authority to require a surface reclamation bond if the Nation-wide lease bond posted with the BLM is determined to be inadequate to cover the cost of surface reclamation should the operator default on this project. (FSM6561.4, FSH6509.11, Ch.80, 36CFR228.109) I have decided to require a surface reclamation bond, separate from the BLM Nation-wide bond, to ensure that National Forest System lands will be reclaimed (Conditions of Approval, Appendix B, of this document).

Rationale for My Decision

Based in large part on the issues identified and analyzed as documented in the EA, and the possible beneficial and adverse effects to the resources, I have decided to implement Alternative B, the proposed action. Alternative B allows the Operator to develop the leases, which is an existing right. Alternative B also best responds to the public issues identified during the scoping process and listed in Chapter 2 of the EA, Ch. 1, 1.9, and again in the Comment Response Report, Appendix O of the EA. It has also been shown to be consistent and in compliance with Grassland Land Plan Management Direction for Management Area 8.4 Mineral Production and Development, and other applicable laws, regulations and policies.

My Decision meets the requirements of the National Environmental Policy Act (NEPA) by responding to the Purpose and Need, responding to the issues identified in the analysis process, and responding to the public comments received during the EA comment period provided.

I have summarized the key points of my rationale below:

Mineral Lease Rights and Regulatory Authority

Mineral leasing decisions made by the BLM result in a contractual commitment from the United States to allow for development by the Company in accordance with stipulations and restrictions incorporated within the lease. The BLM operates in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA), which mandates that the BLM consider multiple uses for the lands it administers. FLPMA specifies that the BLM consider the land's inherent natural resources as well as its mineral resources when making land management decisions. Pursuant to FLPMA, the BLM has the authority to protect the environmental resources associated with federal oil and gas leases; therefore, environmental protections may be imposed as lease conditions based upon USFS directives and recommendations.

The lessee's right to drill and develop the leasehold cannot be denied; however, the BLM has the authority to deny individual APDs and the USFS has the authority to deny Special Use Permits necessary to secure rights-of-way. Agency-imposed COAs that would render a proposed operation economically or technically unfeasible are not consistent with the lessee's rights and cannot be required (BLM Instruction Memorandum 92-67 1991).

The leaseholder has the right to construct roads and ancillary facilities on the surface needed to develop the oil and gas resources, subject to the lease stipulations. Other similar operations for mineral exploration have been approved, constructed, and then reclaimed in various portions of the Thunder Basin National Grassland. These areas have been successfully reclaimed, and returned to acceptable uses over time. This action meets the goals of the Mining and Minerals Policy Act of 1970. The implementation of Alternative B will allow the Bill Barrett Corp. to exercise their right to explore and develop their Porcupine Creek leases.

Resource Analysis and Protection Measures

Alternative B provides for protection of the potentially affected resources before, during and after the planned construction, drilling, testing, production, and reclamation activities associated with these development activities.

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The effects on the quality of the human environment are primarily of local concern and, with the implementation of standard permit stipulations and Conditions of Approval that have been made a part of this decision and that will be required, any adverse impacts that could occur as a result of this action will be insignificant and of relatively short duration. The effects will not adversely impact public safety and do not involve any unique or unknown risks. The project will not result in a violation of any Federal, State or local law or requirements imposed for the protection of the environment.

Water Disposal: The Draft EA (print version pg. 24) and its associated Water Management Plan, p.6, and EA Appendix A, discuss the amounts and timing of water releases and anticipated volumes arriving at the NARC coal mine. Produced water would pass through the mine's settlement ponds and/or be consumed in industrial operations. Volumes and quality of water released from the mine to Porcupine Creek would be consistent with the mine's NPDES permit. Development of the Project's CBM wells would facilitate the coal mining operation by dewatering the coal seam ahead of the mining operation.

Air Quality: Consultation with the Environmental Protection Agency has resulted in some changes being made to the Final EA, (Section 4.4 and Table 4.6) and a determination that significant effects to air quality due to this project are not likely.

Watersheds, Soil, and Vegetation: The effects on the watersheds, soil and vegetation will be minimal and can be mitigated, as determined in the EA, Section 3.3, 3.5, 3.65, and again in Chapter 4.

Wildlife, T&E and Special Status Species: The potential adverse impacts to most endangered, threatened, sensitive and rare plant and animal species or their habitats can be minimal if mitigated as proposed. (Biological Assessment/Biological Evaluation/MIS report, A. Allen, (February 2004).

Formal consultation has been initiated with US Fish and Wildlife Service (USFWS) concerning a 'likely to adversely affect' determination for the Bald eagle due to potential electrocution of birds on overhead power lines. This determination is preliminary, and is pending concurrence in the form of a Biological Opinion (BO) from the USFWS. Special Use Permits will be issued to the power/utility company to install the power poles for overhead lines associated with this project when applications are received and determined to meet project analysis. No power lines will be strung until concurrence has been obtained from the USFWS, pursuant to the guidelines set forth in the Endangered Species Act (ESA) of 1973, Section 7, Interagency Cooperation. I have determined that there would be no irretrievable commitment of resources with this Decision, as described in ESA, Section 7(d), by deferring a portion of the utility company action until USFWS concurrence has been met.

Cultural and Paleontological Resources: Cultural Resource sites and paleontological resources occur in the project area. No ground disturbing activity will occur at any known heritage or fossiliferous resource location. All sites eligible for listing in the National Register of Historic Places will be avoided by the Proposed Action. To ensure that cultural resource sites were

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identified, the Company has conducted Class I and Class III inventories of the Project Area to determine the location of cultural sites of potential significance

Land Use: Utility lines require a separate Special Use Permit. All other land uses identified in this project would be accomplished by the operator within the lease boundary, under the authority of the oil and gas lease.

The only other substantial use occurring in the immediate area of this project is the coal mining operation, which holds a lease overlying part of the Operator's oil and gas lease area. This project EA analyzed a 4-7 year life span before all gas is depleted to a non-producing level. The mine anticipates that future development will overtake portions of this project area within the next 5-15 years. Only two wells will be dropped from this project due to a conflict with existing mining operations (Appendix B, COAs) and another four wells will be approved when negotiations and resolution with the mine are satisfactory. Impacts to these other land uses are within an acceptable range.

Visual Resources: The area is managed for solid mineral production, 8.4 Mineral Production and Development, Chapter 3, TBNG Plan Revision 2001. Mineral operations of all types are emphasized and include CBM development, oil and conventional gas development, heavy-haul trains, coal mines, and associated facilities to accommodate these uses. Roads, buried pipelines, compressor stations, and overhead and buried power lines are an acceptable intrusion into the landscape and may be constructed under this Decision, following the appropriate permitting process.

All facilities will be removed after gas has been exhausted from the project, however some surface area will not be fully reclaimed because of the advance of the coal mine. Within the next 5-15 years some the NFS lands within the project area will be mined out and the visual landscape as we know it will be severely altered. All surface disturbance not impacted by the advance of the coal mining operations will be reclaimed to the satisfaction of the USFS, therefore, I have determined that impacts associated with this project are acceptable. A Reclamation Plan will be submitted to the USFS prior to commencement of any activity pursuant to this project.

The project will not result in a violation of any Federal, State or local law or requirements imposed for the protection of the environment.

After reviewing the EA, the public comments received throughout the analysis process, and the project analysis file, I have determined that this CBM well development project serves the public interest. The resource values present in the project area that will be preserved and protected, and the Grassland Plan management objectives that can be accomplished for Management Area 8.4, will be at a level that serves that interest and need.

Environmental Documents Considered in Making the Decision

This decision was made only after carefully considering the contents of the project EA, public comments, agency response to comments, and the supporting project record. The 1994 Oil and Gas Leasing EIS and the Thunder Basin National Grassland Plan, 2001 Revision were reviewed and the analysis incorporated into the mitigation measures as appropriate for site specific

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conditions. In addition, I considered the 1999 Wyodak Coal Bed Methane Project Final Environmental Impact Statement and Record of Decision (referred to as the Wyodak FEIS) as supplemented by the 2001 Wyodak Drainage Coal Bed Methane Environmental Assessment and Decision Record (referred to as the Drainage EA); the 2003 Powder River Basin Oil and Gas Project FEIS; and other applicable laws and regulations. Information from all of these documents was used to formulate site-specific project analysis when considering the possible cumulative effects that could occur by the drilling and development of these 156 coal bed methane wells on NFS lands. The Mitigations Table Appendix C identifies more specific measures that were built into the project proposal at the start of the analysis.

Regulatory Environment: The Proponent and the NARC mine have negotiated an agreement and plan to cooperatively manage produced CBM water as indicated in the Projects Water Management Plan. The mine will use the water for industrial and reclamation operations. Produced water will not be discharged to stream channels which would cause impacts to the North Rochelle Mine storage reservoirs.

All necessary and applicable permits involving storage reservoirs and other well field development permits must be obtained by the Operator from the Wyoming State Engineer and the Wyoming Department of Environmental Quality prior to implementing this project (NPDES and Storm-water Drainage permits), or any other Federal, State or local entity having such requirements.

The area analyzed for the project also includes private and State parcels that are located within the Porcupine leases. Other wells were proposed within the project area and were analyzed as part of this NEPA document but the Permits to Drill will be issued by the Bureau of Land Management as a separate action. (BLM Finding of No Significant Impact and Decision Record, January 15, 2004). It was BLM's determination to withdraw these wells located on non-NFS lands from this NEPA document and authorize them independently of this decision.

After reviewing the EA, the public comments received throughout the analysis process, and the project analysis file, I have determined that this CBM well development project serves the public interest. The resource values present in the project area that will be preserved and protected, and the Grassland Plan management objectives that can be accomplished for Management Area 8.4, and will be at a level that serves that interest and need.

Project Initiation and NEPA Process

This project was initiated in December 2001, when Independent Production Company submitted APDs to the Buffalo Field Office of the Bureau of Land Management (BLM), to produce coal bed methane gas in the Big Porcupine Creek area of Thunder Basin National Grassland.¹ Following submittal of those APDs, the BLM forwarded a copy of the package to the Douglas District Office. In January 2002, the Douglas District Ranger responded to the BLM with

¹ Oil and gas leases under which the operator has made application were offered for sale by the Bureau of Land Management between the years of 1957 and 1999, Appendix A.

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acceptance of the project, a discussion of the requirements of the NEPA process, and the anticipated time schedule for completing the project. In June 2002, an amended packet of APDs was submitted by the applicant to the BLM and forwarded to this office. In February 2003, a Project Description was completed by the applicant and submitted to the Medicine Bow-Routt National Forests and Thunder Basin National Grassland Supervisor's Office. This Project Description and proposed activity plan initiated the NEPA analysis process. In April 2003, the leases and/or operating rights were sold from Independent Production Company to the Bill Barrett Corporation, therefore Bill Barrett Corp. is the current Applicant of Record. The preliminary package of APDs was submitted prior to the Thunder Basin National Grassland Plan Revision, however the Applicant agreed to comply with all Standards and Guidelines articulated in that Plan.

Independent Production Company originally submitted APDs for 465 CBM wells. The location of many of the original wells was determined not to have potential for profitable gas extraction, resulting in the change in total well numbers between 2002 and 2003. This is in part due to the advancing coal mine operations and the drainage from the mine headwall as explained earlier in this Decision and in the Final EA, page sections 1.6 and 2.1. In addition, many proposed facilities were determined to have potentially adverse effects on important wildlife species that occur in the project area. The locations of these wells and their connected facilities was either changed or the wells were dropped to better address issues related to the protection of wildlife habitat. The locations also comply with Thunder Basin National Grassland Plan Management Direction and Objectives.

The Purpose and Need for the Action

The purpose of this project is to implement previous Forest Service and Bureau of Land Management decisions that provide for developing the mineral resources in the project area. This development had previously been determined to be in the public interest. The Operator will develop methane gas from coalbeds pursuant to rights of the Company under existing oil and gas leases granted by the BLM. Implementation of the Proposed Action would accomplish three objectives:

1. Development of the Project's CBM wells would contribute to the maintenance of an available natural gas supply for the national market;
2. Development of the Project's CBM wells would prevent additional drainage of the federally owned gas resource to adjacent, nonfederal wells; and the coal mine high-walls nearby
3. Development of the Project's CBM wells would facilitate the extraction of coal in adjacent areas by dewatering the coal seam in advance of the mine operations .

Natural gas is an integral part of the U.S. energy future due to its ready availability from domestic sources, the presence of an existing market delivery infrastructure, and the environmental advantages associated with this clean-burning fuel. Developing the abundant domestic reserves of natural gas helps to reduce national dependence on potentially unstable foreign suppliers and ensures an adequate, stable supply. Production of domestic natural gas ensures that the nation will maintain its economic well-being and promotes national security.

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The environmental advantages of natural gas combustion versus other conventional fuels are emphasized in the 1990 Clean Air Act amendments (42 USC 7671 *et seq.*).

The increasing fraction of natural gas production represented by CBM is an important part of national efforts to maintain a stable domestic supply. In 1999, CBM represented approximately 6.7 percent of total U.S. dry gas production. At the end of 2002, national CBM production reached nearly 4 billion cubic feet (BCF) daily, approximately 20 percent of which was supplied by Powder River Basin wells. The proportion of CBM comprising total national dry gas production rose to approximately 7.4 percent at that time. CBM development constituted 57 percent of U.S. natural gas production growth during the 1990's. (Energy Information Administration, 2002 online data). CBM natural gas represents an increasingly important contribution to U.S. energy security.

Development of the Project Area CBM wells would also prevent drainage of federal gas from loss to non-federal wells in the surrounding area and from loss through the highwalls of adjacent, active surface coal mines in the area. Loss of natural gas to adjacent developed leases represents a loss of revenue to the United States, as analyzed in the Wyoming Drainage EA (BLM, 2000 pg. 1-12). Development of the Action is also important in facilitating the adjacent coal mining. Surface mining of coal requires dewatering of the mined section prior to excavation. Reinjection into the target coal seam of produced water would also result in an inability to produce CBM, thus running counter to the purpose and need of the Project, since such an operation would counter the effects of coal seam dewatering necessary to lower formation pressure and allow movement of the gas to the surface, (EA Section 1.4). Completion of the Proposed Action would assist in advancing the development of existing coal mines and thus contributing to another important factor in national energy security.

The need for the project is to allow the Operator to develop their Federal oil and gas lease(s) that the company has acquired from the Federal government in the Porcupine Creek area.

My decision considered the Management Area Direction as outlined in the *Revised Land and Resource Management Plan for the Thunder Basin National Grassland* for Management Area 8.4, which encourages the extraction of mineral resources and allows for disturbance and impacts to the human environment in order to accommodate those uses.

Effects of My Decision

Many potential impacts described as Issues (EA, Section 1.9) were reduced by careful design of the proposed action (EA, page 1-32, hard copy) and as described in Section 2.3 of the EA. Other potential impacts will be completely mitigated or reduced to a low level by the application of the Conditions of Approval, displayed in Appendix B of this document, and the Stipulations identified in Appendix C, along with all other aspects of the proposal outlined in the EA.

A key issue considered in the analysis was the discharge of water containing potentially high volumes of dissolved selenium. As discussed in the EA at Section 3.3, analysis of the coal-water obtained from the coal seams in the immediate area indicate values of dissolved selenium less than 10% of EPA Drinking Water Standard, maximum allowable dissolved selenium. The

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analysis does not predict beneficial or adverse effects to surface water quality, wildlife, soils or other resources that could come in contact with produced water, EA 3.3.4.1.

Another key issue determined from the scoping process and again from the comment process on the EA was impacts to air quality including the cumulative effects that could result from this project in addition to other current and future activity in the area. It was determined, through thorough analysis, that although CBM development and coal mining operations in the Powder River Basin will impact current air quality, air quality in the basin would remain within the limits sufficient to protect human health and the environment. This is reflected in the Wyoming Ambient Air Quality Standards and the National Ambient Air Quality Standards, (EA 3.3.4.1 and 4.4, also see <http://www.wy.blm.gov/srrmp/feis/13app3.pdf>)

Some resource impacts were not completely mitigated and will occur from implementation of my decision during the 4-7 year life of the project. Some impacts will continue beyond the end of this project until final site reclamation occurs. I have considered these impacts and have found that none of them will be significant in either context or intensity.

These impacts may include:

1. For well sites, construction of new spur roads that will disturb and remove vegetation from approximately 34 acres of National Grassland, resulting in loss of approximately 6 animal unit months of grazing capacity. This loss is an inconsequential fraction of the permitted animal unit months in the respective allotments (EA, Section 3.5.2.1).
2. The removal of vegetation for the drill pad sites will result in about 83 acres of short-term loss and 21 acres of long-term disturbance. The compressor sites would amount to about 10 acres of long-term disturbance. (Section 2.1.4, Table 2-7).
3. Possible displacement of wildlife due to the high volume of activity associated with this project. It is expected that activity will lessen as more wells come on line. At the end of the 4-7 year life span of the wells, it is expected that wildlife activity would resume when final reclamation is completed.

Benefits will also occur from implementation of my Decision. Revegetation of disturbed areas after the project is reclaimed could result in a temporary increase of wildlife and livestock forage, due to temporary conversion of disturbed surface to viable grasses and forbs.

Public Involvement

Scoping for Issues and Concerns

A public scoping statement describing the Proposed Action was mailed in February 2002 to organizations, agencies and individuals identified as parties potentially interested in similar activities on the Thunder Basin National Grassland, and parties that may be affected by the proposed activity. The solicitation also included adjacent landowners, tribal governments, the County Commissioners, State of Wyoming-Office of Federal Land Policy, which coordinates review and input from all state agencies, and the Wyoming Congressional Delegation and was

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published in the Laramie Boomerang. Twelve comment letters were received as a result of that scoping effort (Tables 1-4 and 2-9 and Chapter 5 of the EA). In addition, telephone calls were received and those are also identified below. The respondents included:

State of Wyoming – Office of Federal Land Policy
Wyoming Office of State Lands and Investments
Wendell Funk, Palmyra, Illinois
Triton Coal Company, LLC
Wyoming Department of State Parks & Cultural Resources
Wyoming Game and Fish Department
Wyoming Business Council
Wyoming Outdoor Council, Biodiversity Associates, National Wildlife Federation, Sierra Club
US Dept. of Interior, Fish and Wildlife Service
Niobrara County Commissioners
South Dakota, Dept. of Environmental and Natural Resources
U.S. Environmental Protection Agency
Jerry Wilkerson – telephone call
Donna Ruffing – Niobrara County Commissioner – telephone call

Using the comments from these respondents along with those from the interdisciplinary team, a list of issues and concerns was developed. In reviewing that list the USFS considered:

1. Those that drive alternative development.
2. Those that would be analyzed in the Environmental Effects and/or Consequences.
3. Those already decided by law, regulation, Forest Plan, or other higher level decision.
4. Those outside the scope of the Proposed Action.

Potential mitigation measures described in the EA were modified in response to public comment, and these modifications appear in the Conditions of Approval and the stipulations imposed for the project.

I recognize that some commenters do not support oil and gas activities in this area. The Federal oil and gas leases in the project area were authorized between the years of 1957 and 1999, (Appendix A). The mineral leasing decisions made by the both the Forest Service and the BLM result in a contractual commitment from the United States to allow for development by the Lessee in accordance with stipulations and restrictions incorporated within the lease. As a mineral-related activity, oil and gas exploration is a recognized use of National Grasslands, and considering these activities is part of the Forest Service mission.

The lessee's right to drill and develop the leasehold cannot be denied; however, the BLM has the authority to deny individual APDs and the USFS has the authority to deny the Surface Use Plan of Operation or Special Use Permits necessary to secure rights-of-way. I feel that the Conditions of Approval along with the mitigations built into the proposed action render this activity within an acceptable level of impact and will not significantly impair resources on the Thunder Basin National Grassland.

Public Comment on Environmental Assessment

On December 26th, 2003 the Environmental Assessment was made available for public comment. The mailing list used for the scoping effort was utilized for this effort along with several

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additional names and addresses as a result of the scoping. Public notices were published in the Laramie Daily Boomerang on December 26th and again on January 13th, 2004. Six agencies, groups or individuals commented on the EA. A list of the comments received and the response to those comments is in Appendix O of the EA. The following responded to the EA:

U.S. Environmental Protection Agency
Wendell Funk, Palmyra, Illinois
Powder River Basin Resource Council
Biodiversity Conservation Alliance
US Dept. of Interior, Fish and Wildlife Service
Triton Coal Company, LLC

Appendix O summarizes those comments received and responses developed by the Interdisciplinary Team Specialists and other agency and non-agency specialists. Appendix O contains information from specialist reports including additional disclosure of cumulative effects on air quality, water quality and water discharge management. Appendix O is available and will be provided to all parties that commented on the Environmental Assessment along with a final EA, a copy of this Decision and all attachments.

Changes Between the Draft and Final Environmental Analysis:

The agency response to comments, Appendix O of the EA provides a disclosure to correct inaccuracies noted in the EA during the public review process. Appendix O also clarifies information where analysis may have been deficient, or was not noted in the record. Those clarifications have been made in the EA as the Final document and appropriate citations made within Appendix O.

Some commenters believe that an Environmental Impact Statement should have been written citing resource impacts, notably impacts to water and air resources; the size of the draft document; potential cumulative impacts; the adequacy of the (Powder River Basin EIS and the TBNG LRMP Revision); potential impacts to public safety; the existence of unknown risks; the potential for large-scale gas development to occur, and other reasons. I carefully considered the written comments expressing these concerns. I conclude that the environmental analysis performed and the environmental assessment written adequately studied the potential consequences of the proposed actions and the alternatives. I conclude that no significant impacts would occur as the result of my decision. I conclude that preparation of an EIS is not warranted for this decision.

Summary of Alternatives

Alternative A, No Action

Under the No Action Alternative, the BLM or USFS would deny the proposal as currently described in the Proposed Action on Federal surface or minerals in the Project Area. The ability of a decision-maker to select the No Action Alternative is severely constrained by the contractual rights of the Company to develop its mineral leases as granted by the United States. A No Action Alternative provides a benchmark that enables the decision-maker to compare the magnitude of

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environmental effects among alternatives to existing management conditions and consideration of the No Action Alternative is required by NEPA (40 CFR 1502.14 (d)).

Denial of the current proposal is not a denial of natural gas development in the Project Area. Although the BLM can deny approval of a particular APD, it cannot deny, in general, occupancy of the surface for the exploration and development of federal minerals that have been leased, unless they were leased with a no surface occupancy stipulation. An oil and gas lease grants the lessee the "right to drill for, extract, remove, and dispose of all oil and gas deposits" from the leased lands, subject to the terms and conditions of the respective leases (BLM Form 3100-11). The denial of the right to develop a valid lease would violate the lessee's contractual rights, as well as result in the loss of federal royalties. Authority for denial can be granted only by Congress (United States Constitution, Article IV, Section 3, Clause 2). The BLM, therefore, can only suspend the lease pursuant to Section 39 of the Mineral Leasing Act pending consultation with Congress for a grant of authority to preclude drilling and provide required compensation to the lessee.

A decision for the No Action Alternative would be considered under the following circumstances:

- If there were no acceptable means of mitigating significant adverse impacts to stipulated surface resource values, such that approval would result in a violation of protective environmental laws; or
- If the USFWS were to conclude that the Proposed Action would likely jeopardize the continued existence of any threatened, endangered, or proposed species in which case the leasing permit application may be denied in whole or in part.

The selection of the No Action Alternative would not allow existing leases to be developed. Its selection would indicate that project development would significantly adversely effect surface resource values, including the possibility of extinction of a protected species.

Selection of the No Action Alternative would allow existing land uses to continue in their present state. Existing surface management activities, such as surface coal mining, livestock grazing, and wildlife habitat would continue as they are currently implemented. Implementation of the No Action Alternative, as presented in this hypothetical analysis, would preclude all drilling, construction, production, and reclamation activities as planned by the Proposed Action. CBM development would continue in the general area of the Project on federal, state, and private lands.

Alternative B, Proposed Action

The Company proposes to drill, complete, operate, and reclaim 156 CBM wells from the Fort Union Wyodak Coal reservoir in the Project Area and located on Forest Service System lands. As discussed in Chapter 1 of the Final EA, the Proposed Action at the time of this decision is a smaller project than that discussed in the Scoping Statement. The Project Area comprises approximately 17,940 acres in Townships 41 and 42 North, Ranges 70 and 71 West, Campbell County, Wyoming. Under the Proposed Action, approximately 91 wells would be spaced at one well per 80 acres. Spacing of approximately 65 wells near the existing coal mines would be one well per 40 acres. Productive well life is estimated to range from 4 to 7 years. Average approximate depth of these wells would be 400 to 500 feet.

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The Proposed Action was designed as a unity and, because of its size, overlaps lands of the USFS, State of Wyoming, and private surface jurisdictions. The 44 wells discussed in the EA are outside of Federal jurisdiction and are termed "associated" wells.

The Company would also construct ancillary facilities needed to support these wells. These facilities include access roads, small diameter pipelines for collecting gas and produced water, electrical utilities, facilities for compressing gas, facilities for discharging produced water, and larger diameter pipelines for delivering gas to a higher-pressure gas collection system and ultimately to a transmission pipeline. This transmission pipeline would deliver the gas to market.

Implementation of the Proposed Action would occur in three primary phases:

1. Drilling and construction of facilities,
2. Production and maintenance, and
3. Decommissioning and reclamation.

Since the leases granting the Operator authority to develop the minerals on these lands were purchased between the years of 1957 and 1999, USDA Forest Service and the BLM had already authorized surface occupancy with requirements that predated the 2002 Grassland Plan Record of Decision. The proposal was modified during the analysis process to implement the Standards and Guidelines in the Thunder Basin National Grassland Record of Decision.

Alternatives Considered but Not Analyzed in Detail

Alternatives are required to be technically and economically feasible and to provide the opportunity to achieve the Proposed Project. Other alternatives were considered but not analyzed in detail because they would either not meet the Purpose and Need of the Proposal, would be in violation of the Onshore Orders, or would not be within the scope of this environmental process.

Some of the issues determined during the scoping process suggested potential alternatives to the Proposed Action. These issues were examined and a determination was made that:

- The suggested alternative is not viable for reasons indicated, or
- Applicant-committed mitigation measures will eliminate or mitigate the concern.

Issues raised during the internal and external public scoping process and resolutions to those issues were incorporated into the proposal, as identified in Appendices B&C or were included in the Surface Use Plan of Operations. Others were entertained but not analyzed in detail because there either is not the technology available to accomplish the task, the analysis did not bear out significant impacts that required mitigation, or mitigation already applied through the Conditions of Approval or site-specific stipulations would adequately relieve the impact. Table 2-9 of the EA describes in better detail those issues, and why they were or were not incorporated into mitigations, site specific stipulations, COAs or made a part of the proposed action.

Findings Required By Laws

National Forest Management Act of 1976 (NFMA)

The statutes and regulations governing management of the NFS provide that all actions allowing the use and occupancy of forest lands must be consistent with the land and resource management plan for that Forest or Grassland. 16 U.S.C. § 1604(i); 36 C.F.R. § 219.10(e). The Big Porcupine Coal Bed Methane Project would be located upon lands managed under the Thunder Basin National Grassland, Revised Plan, 2001.

Lease developing site-specific project activities on the Thunder Basin National Grassland (TBNG) are subject to opportunities granted, and limitations imposed, by the Grassland Plan and the FEIS for Oil and Gas Leasing on the TBNG. In April of 1994, the FS completed a Final Environmental Impact Statement (FEIS) and issued a Record of Decision (ROD) that authorized the oil and gas leasing action on the TBNG. In that ROD, which made a decision about leasing (36 CFR 228), the Regional Forester also provided surface use guidance for developing oil and gas resources on TBNG.

On July 31, 2002, Rick Cables, the Rocky Mountain Regional Forester, signed a Decision implementing Alternative 3, in the Northern Great Plains Environmental Impact Statement (EIS), which resulted in the Thunder Basin National Grassland Management Plan Revision. The Plan provides for land-use activities relating to public safety, health and welfare, public service improvements, and activities contributing to increased economic activity associated with NFS resources, such as oil, gas, and minerals. I referred to and relied heavily upon the information contained in that EIS and the NEPA project file in making my decision for this CBM project. This project proposal integrated all Standards and Guidelines contained in the Plan, where they are relevant to project activities. A Plan Consistency table is included as part of the Project Record for this Decision, documenting where activities are either compliant with Plan Standards and Guidelines or where Conditions of Approval (COAs) or mitigations have been attached to make activities compliant.

Endangered Species Act of December 28, 1973 (87 Stat. 884) P.L. 93-205, as amended.

Section 7 of the Endangered Species Act (ESA) requires all Federal agencies to consult with the U.S. Fish & Wildlife Service (USFWS) to ensure that any action it undertakes will not jeopardize the continued existence of a threatened or endangered species or its critical habitat. 16 U.S.C. § 1536(a)(2). The Forest Service prepared a Biological Assessment/Biological Evaluation (BA/BE/MIS) as an analysis of the potential impacts to listed species that would result from the Project (the BA/BE is available for review in the Project Record). Formal consultation was initiated and the Forest Service is waiting for concurrence from USFWS. The USFS has met the requirements as outlined in EAS, Section 7.

National Historic Preservation Act

National Historic Preservation Act of October 15, 1966 (80 Stat. 915) P.L. 89-665, as amended, & Archeological Resources Protection Act of October 31, 1979 (93 Stat. 721) P.L. 96-95, as amended. Section 106 of the National Historic Preservation Act requires all Federal agencies to consider the impacts of their undertakings on historic properties and provide the Advisory Council on Historic Preservation with a reasonable opportunity to comment on such

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undertakings. Consequently, prior to proceeding with any Federal undertaking, the Federal agency must analyze the potential impacts to historic properties and determine what means might be necessary to avoid or minimize any such impacts.

A Heritage resource inventory and report have been completed for the Federal lands in the project area. The Wyoming State Historic Preservation Officer has concurred with the Forest Service determination that the project will have no effects on cultural resources.

Executive Order 11990 - Protection of Wetland 42 FR 26961 (signed May 25, 1977), and Executive Order 11988 - Floodplain Management 42 FR 26951, (signed May 25, 1977).

The Forest Service has evaluated the planned action in accordance with these Executive Orders and the decided action has been found to be in compliance with those orders. No wetlands or floodplains occur in the project area.

Compliance with Other Laws and Conditions

I ensured that my decision was also consistent with all other relevant laws, regulations, and policies including but not limited to:

- Organic Administrative Act of 1897
- Multiple Use-Sustained Yield Act of 1960
- Forest and Rangeland Renewable Resources Planning Act of 1974
- Clean Air Act of 1955, as amended in 1990
- Protection of Wetlands Executive Order 11990
- Clean Water Act (Federal Water Pollution Control Act) of June 30, 1948, as amended in 1972
- Mineral Leasing Act of February 25, 1920
- Federal Onshore Oil and Gas Leasing Reform Act of 1987
- Federal Land Policy and Management Act of 1976

Finding of No Significant Impact (FONSI)

I have considered both the beneficial and potential adverse effects of Alternative B, the Action Alternative, along with the modifications identified in this Decision and the mitigation measures. Based on my experience with other CBM projects in the same vicinity and the results of the site-specific environmental analysis, and after a review of the EA and the project analysis file, I have determined that the effect(s) of implementing this alternative will be limited in scope and intensity.

The Management Area Direction for the project area, 8.4 Mineral Production and Development, Chapter 3, TBNG Plan Revision 2001, states “these areas are managed for solid mineral operations. Mineral operations of all types are emphasized to effectively and efficiently remove available commercial mineral resources, concurrent with other ongoing resource uses and activities...Visitors can experience frequent encounters with people, heavy equipment and noise”. The area immediately east of the project is heavily impacted by the coal mining operations, as stated in the EA 3.2.1.2. The two closest coal mines to the Project Area are the North Rochelle Mine to the east and the North Antelope/Rochelle Mine complex to the south. The Antelope Coal Mine produced 22,971,230 short tons of coal in 2000 (EIA, 2003, online data). North Antelope Coal Mine opened in 1983. In 2000, Campbell County coal mines produced around 88.4 percent of Wyoming’s overall coal production; a total of 299,650,294 tons

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of coal (CCEDC, 2003, online data). CBM drilling immediately ahead of the coal operation serves to extract the available gas before it dissipates out of the mine high-walls. The mine advances an average of one-half (½) mile per year, therefore the life of this project and the potential that the proposed wells will still be viable within the next five years is dependent for the most part on the coal mining operations. Within the next 5-15 years, the NFS lands in question will be mined and the resources as we know them will be severely altered. The EA for this CBM project fully analyzed the impacts to resources by the specific project activity, however the long-term impacts that will be sustained by previous decisions made for the coal mining operations partially negate protections given the resources for this project.

Therefore, it is my Decision that any effects that may occur will be within an acceptable range, and will, in and of themselves, or by using the appropriate mitigation measures contained in this decision, result in no significant adverse environmental impact(s), either individually or cumulatively, to the physical or biological components of the environment, as defined in 40 CFR 1508.27.

Based on my review of the Environmental Assessment, including appendices and supporting documents contained in the NEPA process file, it is my conclusion that Alternative B is not a major Federal action that would significantly effect the quality of the human environment as defined at 40 CFR 1508.27. Therefore, an environmental impact statement will not be prepared. This finding is based on the following factors:

1. Both beneficial and adverse effects have been considered, and this action will not have a significant adverse impact on the quality of the human environment. The context of this project local to the Powder River Basin, the Thunder Basin National Grassland and Campbell County, Wyoming with environmental implications for the immediate/local area, only.
2. Public health and safety have been considered in formulating the proposed action for this project. Industry is obligated by numerous laws and regulations governing implementation of a drilling program. The oversight for meeting industry regulations is met by other Federal, State and local agencies and is not under direct authority of the Forest Service. No public health and safety issues have been raised in regards to this decision.
3. This project area does not involve any characteristics or circumstances in the geographic area that are unique, such as proximity to heritage resources, park lands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas.
4. This CBM well development project is similar to other CBM projects that have occurred elsewhere on the Thunder Basin National Grassland. While CBM projects are controversial with some public and environmental groups, there are no scientific disputes among Forest Service professionals and trained resource management specialists over the likely effects of this project on the quality of the physical, biological and human environments.

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5. This action does not involve any *unique* or *unknown risks* to the human environment. It is similar to past actions that have occurred on the Thunder Basin National Grassland. The probable effects and risks are well understood.
6. Neither the actions planned, nor this decision, establish a precedent for future actions with significant effects. I have concluded that they do not represent a decision in principle about any future action as every proposed coal bed methane well development project must be considered and evaluated on its individual merits.
7. There are no known significant local cumulative effects between this project and other projects implemented or planned on areas separated from the affected area of this project. This action, as related to past, other present and foreseeable future actions addressed in the Cumulative Effects section of the EA (Chapter 4), will not individually or cumulatively result in significant adverse impacts to the human environment.
8. The action will not adversely effect any historic sites now listed or eligible for listing on the National Register of Historic Places, nor will it cause the loss or destruction of any other significant scientific, cultural, heritage, historic, or prehistoric or paleontological resource. This finding is based upon the results of site-specific cultural and paleontological resource surveys conducted in the Porcupine Creek project area as part of the project Plan of Development, and consultation with the Wyoming State Historic Preservation Officer. (EA at 3.9.4)
9. The Big Porcupine CBM project will have "No Effect" on the black-footed ferret and Ute Ladie's tresses. The project " May Affect, Likely to Adversely Affect" the Bald eagle due to potential electrocution on the overhead power lines. Consultation with USFWS has been initiated and this determination is preliminary until we receive concurrence in the form of a Biological Opinion from the USFWS. Installation of the overhead power lines will be deferred until the consultation process has been completed. This will result in no irreversible or irretrievable commitment of resources under ESA Section 7(d).

The Project will have "No impact" on the following R2 sensitive species: finescale dace, fringed myotis, Townsend's big-eared bat, long-billed curlew, yellow-billed cuckoo, peregrine falcon, American bittern, black tern, purple martin, flammulated owl, Lewis' woodpecker, olive-sided flycatcher, prairie moonwort, foxtail sedge, and squashberry. The Project may have a "Beneficial Impact" on the northern leopard frog.

The Project "May adversely impact individuals, but is not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing" for the following species: plains minnow, swift fox, black-tailed prairie dog, ferruginous hawk, loggerhead shrike, western burrowing owl, Brewer's sparrow, greater sage grouse, mountain plover, sage sparrow, northern harrier, grasshopper sparrow, McCown's longspur, chestnut-collared longspur.

10. This action does not constitute, nor will it lead to any violation of any Federal, State or local law, ordinance or requirement imposed for the protection of the environment.

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Implementation and Appeal Provisions

Pursuant to 36 CFR 215.13, this decision is subject to appeal by those persons who provided comments or otherwise expressed an interest in the analysis of this proposal and commented on the EA prior to the close of the public comment period. Any written notice of the appeal of this decision must be fully consistent with 36 CFR 215.1, "Content of an Appeal", including the reasons for the appeal, and must be filed no later than 45 days following the date of publication of the Legal Notice in the *Laramie Daily Boomerang*, that this decision is available,

An appeal must be filed with the United States Department of Agriculture, Forest Service, Region 2 – Rocky Mountain Region, P.O. Box 25127, Lakewood, Colorado 80225-0127, ATTN: Appeal Deciding Officer. If no appeals are received, this project may be implemented on, but not before, five business days after the close of the appeal period. If an appeal is filed, implementation of this decision will not occur until 15 days after the day following the date of appeal disposition.

Contact Person(s)

The record of the environmental effects analysis process and project file are available for public review at the Medicine Bow-Routt Supervisor's Office, 2468 Jackson Street, Laramie, Wyoming. For further information about this decision and the analysis process that preceded it, contact Liz Moncrief, Project Manager, at (307) 745-2456, email: emoncrief@fs.fed.us.

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Responsible Official:

/s/ Mary H. Peterson

Mary H. Peterson
Forest Supervisor

Date: 04/23/2004

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington DC 20250-9410 or call (202) 720-5964 (Voice or TTD). USDA is an equal provider and employer."

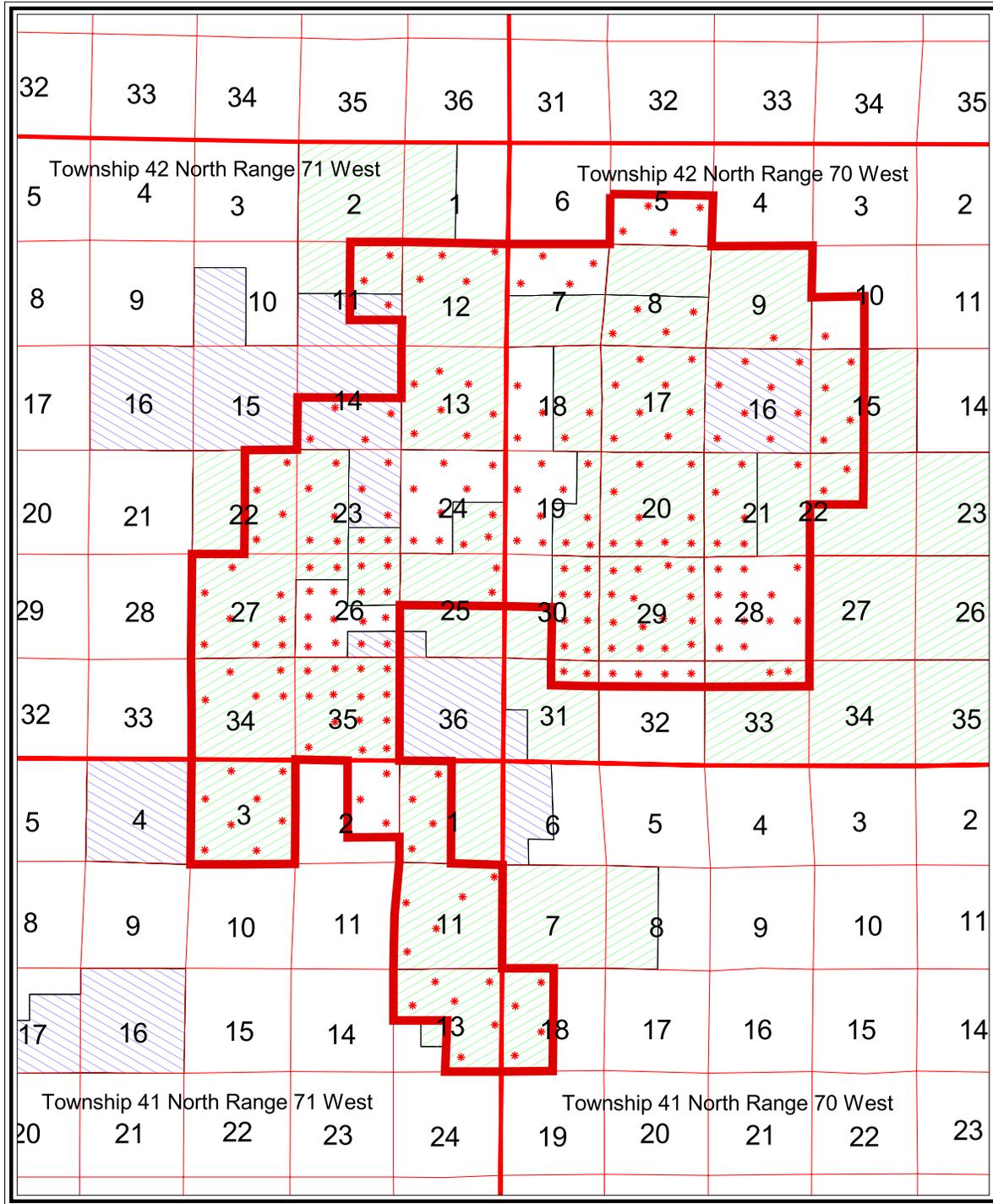
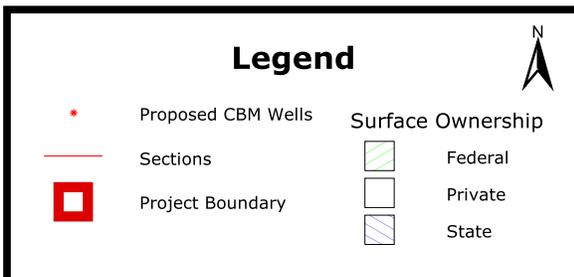


Figure 1-2
Surface Ownership



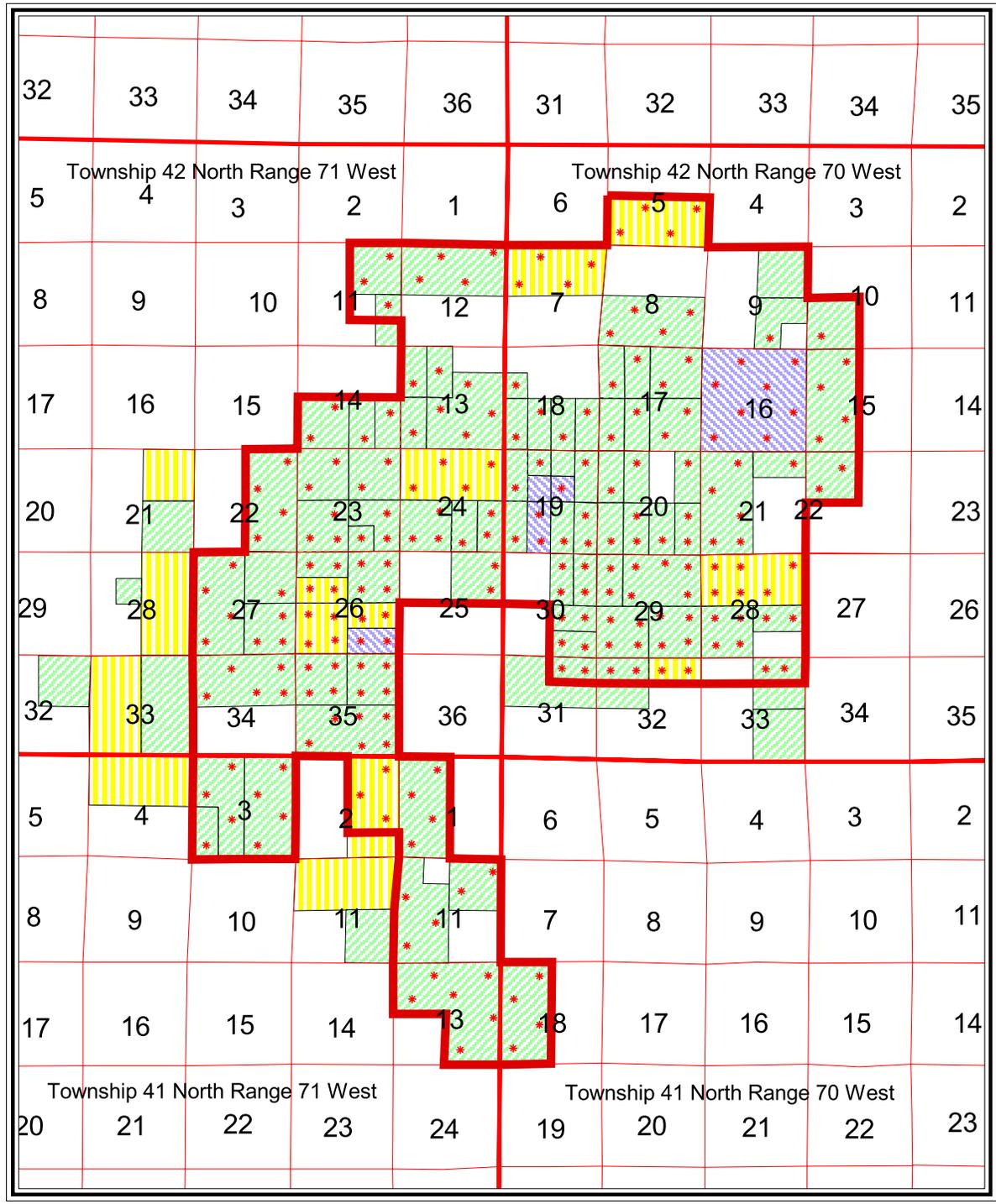
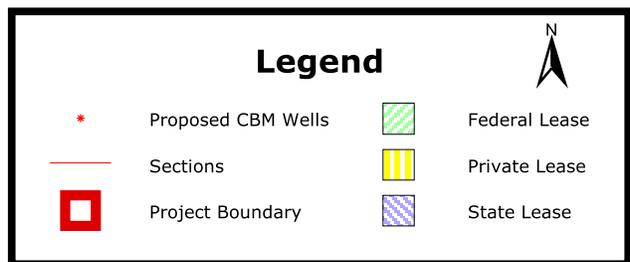


Figure 1-3
Mineral Ownership



Appendix A

Summary of Federal Leases, Project Area

Appendix A
Summary of Federal Leases, Project Area

TWP	RNG	SECT	FED LSE NO	WELLS	ACRES	LEASE DATE
42N	70W	29	WYW-0100872	9	412.15	06 / 1960
42N	70W	29, 30	WYW-0100872-A	4	156.13	06 / 1960
42N	71W	26, 35	WYW-0185974-B	8	323.86	09 / 1967
42N	71W	14	WYW-0185974-C	2	162.16	09 / 1967
42N	71W	23	WYW-0258354-A	3	162.88	08 / 1963
42N	70W	17, 20	WYW-042736	4	246.43	11 / 1957
42N	70W	20	WYW-042736-B	2	162.27	11 / 1957
42N	70W	8,9,17,21	WYW-042736-C	13	1,014.56	11 / 1957
42N	71W	13,14,18,19,20,24	WYW-093721	11	780.72	03 / 1960
42N	71W	11,13,18,19,20,24	WYW-093721-A	10	788.94	03 / 1960
42N	70W	19	WYW-093721-C	3	111.87	03 / 1960
42N	71W	23,24	WYW-095594	5	284.58	05 / 1960
42N	71W	23	WYW-095594-A	1	40.56	05 / 1960
42N	71W	23	WYW-095594-B	2	162.11	05 / 1960
42N	70W	28	WYW-127399	4	164.62	09 / 1982
41N	71W	1	WYW-136875	4	322.29	07 / 1995
42N	70W	28	WYW-143496	2	82.79	12 / 1997
41N	70W	18	WYW-144681	4	320.68	04 / 1998
42N	71W	13	WYW-145841	4	324.61	03 / 1999
42N	71W	22,26,27,35	WYW-147135	13	689.02	10 / 1992
42N	70W	10,15,21,22	WYW-27703	8	904.36	04 / 1971
41N	71W	3	WYW-43650	1	245.10	03 / 1974
42N	71W	23,25	WYW-43652	4	325.79	03 / 1974
41N	71W	11,12,13	WYW-48385	11	1,133.11	01 / 1975
42N	70W	29,31,32	WYW-49833	6	366.69	05 / 1975
42N	70W	32,33	WYW-49834	2	655.07	05 / 1975
41N	71W	3	WYW-55069	3	1,782.18	07 / 1976
42N	70W	17	WYW-56923-A	2	166.34	12 / 1976
41N	71W	3	WYW-64254	4	326.47	08 / 1978
42N	71W	11	WYW-64782	3	163.40	10 / 1978
42N	70W	30, 32	WYW-67022	4	320.83	04 / 1979
42N	71W	27	WYW-67034	4	326.02	04 / 1979
42N	71W	12	WYW-67220-B	4	328.64	01 / 1980
42N	71W	27,34,35	WYW-67220-C	12	162.76	04 / 1979
42N	70W	30	WYW-75680	2	73.90	08 / 1981
42N	70W	30	WYW-89160	2	73.88	10 / 1984
42N	70W	17	WYW-9353	2	160.00	11 / 1967
Totals				182	14,227.77	

Appendix B

Conditions of Approval

Conditions of Approval for Specified Wells

Definition of Terms: NSO, TL, and CSU are used to make the nature of the condition of approval (COA) readily apparent. No new lease stipulations are being proposed.

No Surface Occupancy (NSO): Use or occupancy of the land surface for fluid mineral exploration or development is prohibited to protect identified resource values.

Timing Limitation (TL) (Seasonal Restriction): Prohibits surface use during specified time periods to protect identified resource values. This stipulation does not apply to the operation and maintenance of production facilities unless the findings of analysis demonstrate the continued need for such mitigation and that less stringent, project specific mitigation measures would be insufficient.

Controlled Surface Use (CSU): Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for NSO or Timing Stipulation.

Pork S Fed 21-18-41-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

Pork S Fed 12-1-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork S Fed 14-18-41-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork S Fed 23-1-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork S Fed 14-1-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests...*Appendix H - Conditions of Approval for Specified Wells*

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Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork S Fed 12-3-41-71:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork S Fed 34-3-41-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

Pork S Fed 23-3-41-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

Pork S Fed 14-3-41-71:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 15 through July 31 within .25 miles of the burrowing owl nest.

Pork S Fed 43-3-41-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

Pork S Fed 21-3-41-71:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork S Fed 12-12-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork S Fed 32-12-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests...*Appendix H - Conditions of Approval for Specified Wells*

H-3

Pork S Fed 14-12-41-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Pipeline route between 14-12-41-71 and 21-13-41-71 will need water bars on slopes to prevent erosion and water from running down the pipeline.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork S Fed 23-12-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork S Fed 41-12-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork S Fed 12-13-41-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

TL, (Utility corridor between 12-13 and 21-13-41-71) surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Pork S Fed 21-13-41-71:

Pipeline route between 14-12-41-71 and 21-13-41-71 will need water bars on slopes to prevent erosion and water from running down the pipeline.

Pork S Fed 34-13-41-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork S Fed 32-13-41-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 43-8-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests. *Appendix H - Conditions of Approval for Specified Wells*

H-4

Pork NE Fed 14-8-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 23-8-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 34-8-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NE Fed 12-15-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Burrowing Owl nests.

Pork NE Fed 23-15-42-70:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Burrowing Owl nests.

Pork NE Fed 14-15-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NE Fed 32-17-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 43-17-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests. *Appendix H - Conditions of Approval for Specified Wells*
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Pork NE Fed 41-17-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 21-17-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 43-19-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

Pork NE Fed 34-19-42-70:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

Pork NE Fed 41-19-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NE Fed 43-20-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NE Fed 34-20-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 44-20-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground...*Appendix H - Conditions of Approval for Specified Wells*

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TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 24-20-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 41-21-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NE Fed 21-21-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NE Fed 12-21-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NE Fed 24-21-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NE Fed 23-21-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground...*Appendix H - Conditions of Approval for Specified Wells*

H-7

Pork NE Fed 14-21-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NE Fed 21-22-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 12-22-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 31-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 12-29-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests...*Appendix H - Conditions of Approval for Specified Wells*

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Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NE Fed 11-29-42-70:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 21-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 44-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

Pork NE Fed 42-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 41-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground. *Appendix H - Conditions of Approval for Specified Wells*

H-9

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NE Fed 43-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 34-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Pork NE Fed 22-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 33-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Appendix H - Conditions of

Approval for Specified Wells

H-10

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NE Fed 24-29-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NE Fed 31-30-42-70:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NE Fed 32-30-42-70:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

Pork NE Fed 31-33-42-70:

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NW Fed 32-12-42-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

Pork NW Fed 41-12-42-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Swainson's Hawk nests.

Pork NW Fed 32-13-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests. *Appendix H - Conditions of Approval for Specified Wells*

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Pork NW Fed 12-13-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NW Fed 23-13-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NW Fed 32-22-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Limit brush mowing to no more than 50' from the wellhead.

Pork NW Fed 43-22-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NW Fed 34-22-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Pork NW Fed 44-22-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests...*Appendix H - Conditions of Approval for Specified Wells*

H-12

Pork NW Fed 34-24-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NW Fed 44-24-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

Pork NW Fed 43-24-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Pork NW Fed 41-25-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

Pork NW Fed 42-25-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

Pork NW Fed 21-27-42-71:

TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NW Fed 43-27-42-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Burrowing Owl nests...*Appendix H - Conditions of Approval for Specified Wells*

H-13

Pork NW Fed 41-27-42-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Burrowing Owl nests.

Pork NW Fed 32-27-42-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Burrowing Owl nests.

Pork NW Fed 42-35-42-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NW Fed 31-35-42-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NW Fed 32-35-42-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Pork NW Fed 21-35-42-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground...*Appendix H - Conditions of Approval for Specified Wells*

Approval for Specified Wells

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Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NW Fed 11-35-42-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

JWS Fed 34-35-42-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

JWS Fed 44-35-42-71:

TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Red-tailed Hawk nests.

JWS Fed 43-35-42-71:

TL, surface use is prohibited from March 15 through July 31 within .25 miles (line of sight) of a Mountain Plover nests or nest aggregation areas.

TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at

The following wells may be approved after satisfactory negotiations with Triton Coal Company have been met. The Operator will confirm satisfactory negotiations by submitting a request to the USFS upon which a 'Notice to Proceed' will be issued, prior to drilling these wells:

14-5-42-70

34-5-42-70

43-5-42-70

23-15-42-70

Well location will not be approved: Wildlife protection issues

Pork NE Fed 32-29-42-70:

NSO, No surface occupancy is allowed within 0.25 mile (line-of-sight) of Ferruginous Hawk nests.

NSO, No surface occupancy is allowed within 0.25 mile (line-of-sight) of Ferruginous Hawk nests.

Pork NW Fed 32-25-42-71:

NSO, No surface occupancy is allowed within 0.25 mile (line-of-sight) of Ferruginous Hawk nests.

Decision Notice and Finding of No Significant Impact
Big Porcupine Coal Bed Methane Development Project

Pork NW Fed 31-25-42-71:

NSO, No surface occupancy is allowed within 0.25 mile (line-of-sight) of Ferruginous Hawk nests.

H-15

Well location will not be approved: Conflict with other users

Pork Fed 41-9-42-70

Pork Fed 43-9-42-70

Conditions of Approval for Compressor Sites

Compressor 12-41-71 SWSW:

- TL, surface use is prohibited from February 1 through July 31 within 0.50 miles (line of sight) of Golden Eagle nests.

Compressor 17-42-70 NWSE:

- TL, surface use is prohibited from March 1 through July 31 within 0.50 miles (line of sight) of Ferruginous Hawk nests.

Compressor 29-42-70 SWNW:

- TL, surface use is prohibited from March 1 through June 15 within two miles (line of sight) of a Sage Grouse display ground, and noise from production facilities must not exceed 49 decibels (10 dBA above background noise) at the display ground.

Special Use Permits for Overhead Power Lines

All power lines installed by the utility company will require a separate Special Use Permit (SUP), as described in the Decision. The utility company will be allowed to install wood poles for the overhead lines, once applications are received and the Permits are issued, however no lines will be strung until USFS receives concurrence from USFWS in the form of a Biological Opinion.

Reclamation Bond

The Forest Service will require a bond to cover the costs of surface reclamation of roads, pipelines, power and utility lines, drill pads, compressor stations and any other surface disturbance within the project area or as a result of project activity, in accordance with FSH 6509.11 Ch. 80, 36 CFR 228.109. This requirement is separate from the BLM Nationwide or statewide bond and shall be used for reclamation of Forest Service surface only. It will not be used for down-hole reclamation, well plugging, well abandonment or payment of royalty due the Federal Treasury. Reclamation performance bonds will be secured with cash, corporate surety, deposited securities, an irrevocable letter of credit, or assignment of savings account or certificate of deposit. Individual sureties are unacceptable. The penal sum of the bond must at least equal the estimated reclamation cost pursuant to FSM 6561.4.

A surface reclamation bond shall be submitted to the USFS prior to commencement of activity. The Forest Supervisor will determine the bond amount however, the operator submitted a reclamation cost estimate of \$660,205, that figure was adjusted to \$320,200 to account only for surface reclamation and no down-hole plugging, and the Forest Service would attach a minimum

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of 10% administrative overhead. The bond may be decreased as wells are exhausted and surface disturbance is reclaimed to the satisfaction of the Forest Service. The operator will be obligated to making the request for bond decrease and shall not be made more than once per year. The bond shall be kept current, at the rate described above, until final surface reclamation is made to the satisfaction of the Forest Service.

Monitoring and Reclamation Plan

A **Monitoring and Reclamation Plan** will is required and will be developed by the Operator and must be approved by the USFS prior to the commencement of activity on this project. All mitigation measures as outlined in the Decision and attached appendices and the Environmental Assessment will be included in the Plan, however other resource protection measures can be added-to, deleted, or revised at any time during the life of the Plan, so long as it does not restrict the operator from enjoying the rights outlined in the lease.

Appendix C

Design Features and Mitigation Measures for Protection of Resources

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Mitigation Measures Incorporated Within the Proposed Action

Federal Requirements	
Drilling and Construction	
General Mitigation Measures	Authority
The disposal of trash, sewage, and other waste materials would be mitigated through defined procedures.	Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4(b)(7); Forest Service Manual (FSM) 2100 Environmental Management and FSM 2800 Minerals and Geology
No waste material will be deposited below high water lines in riparian areas, floodplains, or in natural drainageways. The lower edge of soil or other material stockpiles will be located outside the active floodplain.	Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases III. F.; ESA 16 USC 1531 <i>et seq.</i>
The Company has consulted with the USFWS, as required by Section 7 of the Endangered Species Act (ESA), the USFS regarding forest-sensitive species, and WGF Department regarding location of sage grouse leks.	Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases III. F.; ESA 16 USC 1531 <i>et seq.</i>
Noise and odor would be minimized by the use of effective muffling of equipment engines and regular engine maintenance.	Noise Control Act of 1972 (42 USC 4901 <i>et seq.</i> , as amended)
Impacts to cultural resources would be mitigated. A Class I inventory and Class III block survey have been conducted by USFS-permitted archeologists in portions of the Project Area not previously surveyed by surface coal mine operators or other agencies.	36 CFR 800 and procedures recommended by the Wyoming State Historic Preservation Officer (SHPO); National Historic Preservation Act, (16 USC 431 <i>et seq.</i>); Executive Order 11593
Should the Company uncover previously undiscovered cultural resources, the Company would notify the USFS or BLM, as appropriate, and cease operations at the site pending agency evaluation.	Archeological Resources Protection Act of 1979 (16 USC 470), FSM 2361.2.
The Company would instruct its employees and contractors in procedures to be followed in the event of discovery of human remains as required by applicable regulations.	Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001, 43 CFR 10)
Roads Mitigation Measures	Authority
Most new roads to well sites would be roughed in as two-track roads to minimize disturbance.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(b)(2); BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
If the well were completed, the access road would be maintained as necessary to prevent soil erosion and accommodate year-round use.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore Oil and Gas Order No. 1 - Approval of

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	Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(b)(2); BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
The Company would prohibit off-road travel by its employees or contractors except in emergency situations.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(b)(2); BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
No road construction is expected to occur on slopes greater than 8 percent and no surface disturbance or occupancy would occur on slopes in excess of 25 percent.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(b)(2); BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Gravel or scoria may be applied to soft, rut-prone areas. Travel on two-track roads would be rescheduled or postponed during infrequent periods of wet weather when vehicular traffic could cause rutting.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(b)(2); BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Stream crossings and instream structures will be constructed to allow passage of flow, sediment, expected flood flows, and to allow free movement of aquatic life.	Final Environmental Impact Statement and Land and Resource Management Plan Revision, Thunder Basin National Grassland, 2002.
<i>Drilling and Completion Mitigation Measures</i>	<i>Authority</i>
Surface casing would be installed to protect fresh water aquifers.	Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(a)(2); Onshore Order No. 2 Drilling III.B.
When a well is completed, all disturbed areas that are not needed for production facilities would be restored as soon as practical and typically within six months.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
<i>Well Site Mitigation Measures</i>	<i>Authority</i>
Construction activities at well sites would be kept to a minimum to limit disturbance of vegetation and underlying soils, significant wildlife habitat, recreational value, wetlands, or riparian areas. Surface disturbance within 100 feet of ephemeral drainages would be avoided.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology; Executive Order 11990
The Company would employ the following mitigative measures in relation to wetlands:	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology

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<ul style="list-style-type: none"> • Wetland and flood-prone areas would be crossed only during dry conditions. Winter construction activities would occur only when soils are not frozen. • As soon as possible following construction, wetland or drainage channels would be reclaimed as closely as feasible to pre-construction conditions. Where impermeable soils contributed to wetland formation, soil compaction would be used to reduce permeability. • Streams and ephemeral drainages would be crossed perpendicular to flow direction, wherever practical. • Wetland topsoil would be selectively handled. • Recontouring and UFSF-approved native species would be used for revegetation and soil stabilization. 	
<i>Pipeline Mitigation Measures</i>	<i>Authority</i>
Gas and produced water gathering pipelines would be placed together in the same trench/ditch wherever possible to minimize surface disturbance.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
All pipelines would be installed in ROWs way along access roads or in utility corridors wherever possible to minimize disturbance	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Stream crossings and instream structures will be constructed to allow passage of flow, sediment, expected flood flows, and to allow free movement of aquatic life.	Final Environmental Impact Statement and Land and Resource Management Plan Revision, Thunder Basin National Grassland, 2002, Standard B4.
Pipeline construction will be conducted in such a way as to maintain, to the degree feasible, stream geometry and habitats.	Final Environmental Impact Statement and Land and Resource Management Plan Revision, Thunder Basin National Grassland, 2002, Standard B5.
Mowing of grasslands will be delayed until after July 15 to protect nesting birds and their broods.	Final Environmental Impact Statement and Land and Resource Management Plan Revision, Thunder Basin National Grassland, 2002, Guideline F6.
<i>Produced Water Mitigation Measures</i>	<i>Authority</i>
Produced water outfall points would be stabilized with concrete, rock, or other appropriate materials to reduce discharge velocities and minimize splash and erosion between the outfalls and the channels.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore No. 7 Disposal of Produced Water III.G.
<i>Electrical Power Utilities Mitigation Measures</i>	<i>Authority</i>
Meter points would generally be located along access roads.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM

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	2100 Environmental Management and FSM 2800 Minerals and Geology
Secondary electric power lines would usually be co-located in common trenches with gathering and produced water pipelines, eliminating additional surface disturbance.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Construction Resource Requirements Mitigation Measures	Authority
Construction water would be obtained from approved local sources, typically from a nearby producing CBM well.	Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(b)(2)
Production and Maintenance Operations	
Roads Mitigation Measures	Authority
The maintenance program would be consistent with standard maintenance operations in the area and would include postponing travel on two-track roads during and immediately after wet weather when rutting could occur.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.G.4.(b)(2); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Noxious weeds along roads would be subject to annual control measures.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology; Executive Order 13112-Invasive Species
Herbicides would not be stored within 500 feet of any special status plant species.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology; Executive Order 13112-Invasive Species
Pesticide application in areas of known habitat of sensitive butterfly species would be applied in such a way as to reduce butterfly mortality and avoid damage to nectar and larvae host species.	Final Environmental Impact Statement and Land and Resource Management Plan Revision, Thunder Basin National Grassland, 2002, Guideline F42..
Wells Mitigation Measures	Authority
A field-wide SPCCP Plan would be developed to mitigate unplanned spills.	40 CFR 112.1(b), 112.1(d), 112.1(f), 112.3(a) through 112.3(c), 112.3(f), and 112.4
Automated well telemetry equipment would remotely monitor Project wells, eliminating the need for daily routine inspections by lease operators and reducing the amount of field traffic.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology; Forest Service Handbook 7709.55 – Transportation Handbook
Decommissioning and Reclamation	
General Mitigation Measures	Authority
The Company would follow agency procedures or surface owner specifications designed to reclaim disturbed areas as close to pre-	43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.C., V.; FSM 2100

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development conditions as feasible.	Environmental Management and FSM 2800 Minerals and Geology
Where an existing dry dam on federal surface is removed to allow produced water discharge, the channel will be restored to a natural configuration, fill location will be approved by the Authorized Officer, and reconstructed areas will be stabilized and reseeded prior to upstream discharge of produced water.	Final Environmental Impact Statement and Land and Resource Management Plan Revision, Thunder Basin National Grassland, 2002, Standard B13..
Roads Mitigation Measures	Authority
Reclaimed roads on federal lands would be reseeded with a seed mixture approved by the appropriate agency.	43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.C., V.; BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Pipelines and Electric Utilities Mitigation Measures	Authority
Underground pipelines would be cleaned, disconnected, and abandoned to avoid unnecessary surface disturbance.	43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.C., V.; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Underground electric lines would be disconnected and abandoned in place to avoid unnecessary surface disturbance.	43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.C., V.; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Gas Compression Mitigation Measures	Authority
Reclaimed compressor stations on federal lands would be reseeded with a seed mixture approved by the appropriate agency.	43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.C., V.; BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
State Requirements	
General Mitigation Measures	Authority
The Company would adhere to applicable national ambient air quality standards (NAAQS) and Wyoming ambient air quality standards (WAAQS) as required by WDEQ.	WDEQ, Air Quality, Chapter 3, Section 2(f)); Clean Air Act, 42 USC 7401 <i>et seq.</i>
Noise and odor would be minimized by the use of effective muffling of equipment engines and regular engine maintenance.	WDEQ, Air Quality, Chapter 2, Section 11(a)(ii) Ambient Standards
Drilling and Construction	
Well Site Mitigation Measures	Authority
Drilling mud pits will be located outside of riparian areas, floodplains, and wetlands where	WOGCC Rules, Chapter 1, Section 2(jj)/

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practical.	
<i>Pipeline Mitigation Measures</i>	<i>Authority</i>
Pipelines would cross streams according to the requirements of permitting under Section 404 of the Clean Water Act.	WDEQ, Water Quality, Chapter II, Sections 1 and 2(a); Clean Water Act, 33 USC 1251 <i>et seq.</i>
At least 30 days prior to construction, the Company would prepare a Stormwater Pollution Prevention Plan and file a Notice of Intent with the WDEQ.	WDEQ, Water Quality, Chapter II, Sections 9(c), 10(a)(6), and 12(b) through (d); Clean Water Act, 33 USC 1251 <i>et seq.</i>
<i>Produced Water Mitigation Measures</i>	<i>Authority</i>
The produced water outfall points would be discharged on the surface for beneficial use.	WDEQ, Water Quality, Chapter II, Section 3(a)(1) and (2); Clean Water Act, 33 USC 1251 <i>et seq.</i>
The quality of discharged produced water would be monitored according to specifications of a National Pollutant Discharge Elimination System (NPDES) permit.	Federal Water Pollution Control Act, Section 402, 33 USC 1251-1387.
Applicant-Committed Mitigation Measures	
Drilling and Construction	
<i>General Mitigation Measures</i>	<i>Authority</i>
Onsite inspections of USFS portions of the Proposed Action have been conducted by representatives of the USFS, BLM, and the Company, and resultant mitigation measures have been incorporated into this EA.	NEPA, 42 USC 4321 <i>et seq.</i> 40 CFR Parts 1500-1508; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; Onshore Oil and Gas Order No. 1 - Approval of Operations on Onshore Federal and Indian Oil and Gas Leases, III.C., III.G.5.
The Company would require staff and contractors to safely operate motor vehicles to minimize the risk of collisions with wildlife, would acquaint staff and contractors with applicable wildlife laws, and would discipline workers violating such policies and laws.	Occupational Safety and Health Act, OSHA, 20 USC 651 <i>et seq.</i>
The Company would prohibit staff and contractors from illegal collection or destruction of cultural resources and would discipline workers violating such policies and laws.	Company policy
Firearms and dogs would not be allowed within the Project Area and Company drug, alcohol, and firearms policies would be rigorously enforced.	Company policy
The Company would implement hiring policies that would encourage the employment of area residents and, to the extent feasible, would purchase equipment and materials from local area merchants.	Company policy
<i>Paleontological Resources Mitigation Measures</i>	<i>Authority</i>
The Company has conducted a pedestrian	30 USC Section 226(g), Mineral Leasing Act of

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paleontological survey of portions of the Project Area with high potential for discovery of vertebrate fossils and has prepared a monitoring and mitigation plan.	1920; 43 CFR 3162.3-1(f); 43 CFR 3162.5-1; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
<i>Roads Mitigation Measures</i>	<i>Authority</i>
The company has submitted a proposed Transportation Plan to the USFS which provides detailed information allowing the USFS to complete a Roads Analysis procedure for efficient transportation management.	Forest Service Handbook 7709.55 – Transportation Handbook; 30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); Onshore Order No. 1, III.G.4.(b)(2); BLM Gold Book; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
<i>Production Facilities Mitigation Measures</i>	<i>Authority</i>
A metal fence or rail may be placed around well houses and electrical panels to protect them from livestock or big game animals.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases 48 FR 48916 (1983). VII.; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Well houses would be painted in a color specified by the USFS and/or BLM to minimize visual impact.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
<i>Pipeline Mitigation Measures</i>	<i>Authority</i>
The Company would prohibit construction or routine maintenance activities during periods when soil is too wet to adequately support construction equipment. Pipe would be buried and open trenches closed as soon as practical.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
If pipelines are constructed across flowing streams, trench fill will be covered with geofabric material to avoid potential erosion.	Final Environmental Impact Statement and Land and Resource Management Plan Revision, Thunder Basin National Grassland, 2002, Guideline B4.
Construction of pipelines would be planned to minimize impact to public use of existing roads and trails, or inhibit wildlife or livestock movement.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Trees would be avoided during construction. Disturbance to areas of heavy sagebrush cover would be avoided as planned in on-site inspections. Soils would be left undisturbed over most of the construction work area.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f)
Reclamation would begin immediately after the pipeline is buried, weather permitting.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases 48 FR 48916 (1983). VII.; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology

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<i>Produced Water Mitigation Measures</i>	<i>Authority</i>
The water would be beneficially used for stock and livestock watering and for dust suppression, washdown and reclamation efforts by the adjacent surface coal mine.	WDEQ, Water Quality, Chapter II, Section 3(a)(1) and (2); WDEQ, Water Quality, Chapter II, Section 3(a)(1) and (2); Clean Water Act, 33 USC 1251 <i>et seq.</i> ; 43 CFR 3162.3-1(f); WDEQ, Air Quality, Chapter 3, Section 2(f)); Clean Air Act, 42 USC 7401 <i>et seq.</i>
A Project Water Management Plan was developed to anticipate produced water volumes and effectively manage its disposition.	Final Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project; 43 CFR 3162.3-1(f); Forest Service Manual (FSM) 2100 Environmental Management and FSM 2800 Minerals and Geology
The Company would contact all potentially affected landowners and offer a water well agreement for protection of municipal, domestic, and stock wells.	Final Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project
At the request of local landowners, the Company would upgrade existing stock reservoirs located within some of the drainages receiving produced water.	Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases 48 FR 48916 (1983). VII
<i>Electric Power Utilities Mitigation Measures</i>	<i>Authority</i>
All construction would be designed according to the Avian Power Line Interaction Committee's 1996 guidelines for minimizing the possibility of raptor electrocution.	Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases III. F.; ESA 16 USC 1531 <i>et seq.</i>
Construction would begin following receipt of a Special Use Permit from the USFS and would comply with USFS environmental resource protection stipulations.	FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Holes for the poles would be located to avoid disturbance of existing sensitive vegetation.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f)
Whenever possible, screw type anchors would be used on guyed structures to minimize ground disturbance.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Poles would be moved if topographic issues or impacts to cultural, vegetative, or wildlife resources were identified at the construction site.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Production and Maintenance Operations	
<i>General Mitigation Measures</i>	<i>Authority</i>
The Company would initiate suppression activities during times of unusual amounts of dust generation.	WDEQ, Air Quality, Chapter 3, Section 2(f)); Clean Air Act, 42 USC 7401 <i>et seq.</i>
Non-native invasive plant species and noxious weeds located along pipeline routes and roads would be controlled by personnel appropriately	Final Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project

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licensed and approved by the USFS using methods approved by the USFS and in coordination with the Campbell County Weed and Pest Control District.	
Decommissioning and Reclamation	
<i>General Mitigation Measures</i>	<i>Authority</i>
The Company would follow agency procedures or surface owner specifications designed to reclaim disturbed areas as close to pre-development conditions as possible.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
<i>Roads Mitigation Measures</i>	<i>Authority</i>
Unneeded constructed roads would be blocked, re-contoured, reclaimed, and revegetated consistent with the requirements of the BLM, USFS, and the State of Wyoming.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); Onshore Order No. 1, III.G.4.(b)(2); Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases 48 FR 48916 (1983); FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
Two-track roads scheduled for decommissioning would be reclaimed by ripping or plowing and drill seeding if deemed necessary by the surface owner or USFS.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); Onshore Order No. 1, III.G.4.(b)(2); Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases 48 FR 48916 (1983). VII.; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology
<i>Well Site Mitigation Measures</i>	<i>Authority</i>
Well sites would be re-contoured, plowed, and seeded consistent with the procedures described in the APD, Surface Use Program, or COAs at the request of the surface owner.	30 USC Section 226(g), Mineral Leasing Act of 1920; 43 CFR 3162.3-1(f); Onshore Oil and Gas Order No. 1 – Approval of Operations on Onshore Federal and Indian Oil and Gas Leases 48 FR 48916 (1983). VII.; FSM 2100 Environmental Management and FSM 2800 Minerals and Geology