



U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RAWLINS FIELD OFFICE



APRIL 3, 2008

TIERED EA, FONSI, AND DR FORM

Tiered to & Referencing the Atlantic Rim Natural Gas Development Project Environmental Impact Statement

ENVIRONMENTAL ASSESSMENT

EA NUMBER: WY-030-08-EA-115

Lease Numbers: WYC-075344A, WYW-136729, WYW-137698, WYW-149299, WYW-149300, WYW-154169, WYW-155529, WYW-161911, WYW-163520

Proposed Action:

Catalina PODs C & D: Natural Gas Wells, Water ReInjection Wells, Access Roads, Pipeline/Utility Corridors, Central Delivery Points, and associated Infrastructure

Rawlins Field Office (RFO) Interdisciplinary Team (IDT)

| IDT Member | Title |
|-----------------------------------|---------------------------------|
| John Ahlbrandt (Travis Bargsten*) | Natural Resource Specialist |
| Andy Stone | Hydrologist |
| Patrick Lionberger | Fisheries Biologist |
| TJ Murry | Rangeland Management Specialist |
| Paul Rau | Recreation Planner |
| Frank Blomquist | Wildlife Biologist |
| Mary Read | Wildlife Biologist |
| Pam Murdock | Archaeologist |
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John Ahlbrandt, Natural Resource Specialist;
Pod ID Team Lead

4/3/08

Date

Location of Proposed Action

Catalina Unit POD C

| Well # | T | R | Sec | Aliquot |
|------------|-----|-----|-----|---------|
| 13-27 | 17N | 91W | 27 | NWSW |
| 24-27 | 17N | 91W | 27 | SESW |
| 33-27 | 17N | 91W | 27 | NWSE |
| 27I | 17N | 91W | 27 | NWSE |
| 44-27 | 17N | 91W | 27 | SESE |
| 11-31(fee) | 17N | 91W | 31 | NWNW |
| 22-31(fee) | 17N | 91W | 31 | SESW |
| 31-31(fee) | 17N | 91W | 31 | NWNE |
| 42-31 | 17N | 91W | 31 | SENE |
| 11-32 | 17N | 91W | 32 | NWNW |
| 22-32 | 17N | 91W | 32 | SESW |
| 31-32 | 17N | 91W | 32 | NWNE |
| 32I | 17N | 91W | 32 | NWNE |
| 33-32 | 17N | 91W | 32 | NWSE |
| 42-32 | 17N | 91W | 32 | SENE |
| 44-32 | 17N | 91W | 32 | SESE |
| 11-33 | 17N | 91W | 33 | NWNW |
| 13-33 | 17N | 91W | 33 | NESW |
| 33I | 17N | 91W | 33 | NESW |
| 22-33 | 17N | 91W | 33 | SESW |
| 24-33 | 17N | 91W | 33 | SESW |
| 31-33 | 17N | 91W | 33 | NWNE |
| 33-33 | 17N | 91W | 33 | NWSE |
| 42-33 | 17N | 91W | 33 | SENE |
| 44-33 | 17N | 91W | 33 | SESE |
| 11-34 | 17N | 91W | 34 | NWNW |
| 22-34 | 17N | 91W | 34 | SESW |

Catalina Unit POD D

| Well # | T | R | Sec | Aliquot |
|--------|-----|-----|-----|---------|
| 13-13 | 16N | 92W | 13 | NWSW |
| 24-13 | 16N | 92W | 13 | SESW |
| 33-13 | 16N | 92W | 13 | NWSE |
| 44-13 | 16N | 92W | 13 | SESE |
| 42-23 | 16N | 92W | 23 | SENE |
| 44-23 | 16N | 92W | 23 | SESE |
| 11-24 | 16N | 92W | 24 | NWNW |
| 13-24 | 16N | 92W | 24 | NWSW |
| 22-24 | 16N | 92W | 24 | SESW |
| 24-24 | 16N | 92W | 24 | SESW |
| 24I | 16N | 92W | 24 | SESW |
| 31-24 | 16N | 92W | 24 | NWNE |
| 31-24I | 16N | 92W | 24 | NWNE |
| 33-24 | 16N | 92W | 24 | NWSE |
| 42-24 | 16N | 92W | 24 | SENE |
| 44-24 | 16N | 92W | 24 | SESE |
| 44-24I | 16N | 92W | 24 | SESE |
| 11-25 | 16N | 92W | 25 | NWNW |
| 13-25 | 16N | 92W | 25 | NWSW |
| 22-25 | 16N | 92W | 25 | SESW |
| 24-25 | 16N | 92W | 25 | SESW |
| 31-25 | 16N | 92W | 25 | NWNE |
| 33-25 | 16N | 92W | 25 | NWSE |
| 42-25 | 16N | 92W | 25 | SENE |
| 44-25 | 16N | 92W | 25 | SESE |
| 25I | 16N | 92W | 25 | SESE |
| 42-26 | 16N | 92W | 26 | SENE |
| 44-26 | 16N | 92W | 26 | SESE |

"I" indicates an injection well, co-located with the preceding well listed in the table

(fee) indicates a well with private mineral ownership located on private surface. BLM has no jurisdiction over these wells or the private surface involved, and are therefore not being approved or denied herein. They are simply included here for reference, as they are within the Catalina (CBNG) Federal Unit, and are also subject to the overall Atlantic Rim disturbance cap, described in the "Remarks" section below.

Also see POD Master Surface Use Plan and project maps.

Applicant/Proponent: Double Eagle Petroleum Company (Double Eagle)

Conformance with Land Use Plan

This proposed action is in conformance with the Great Divide Resource Management Plan (RMP) that was approved on November 8, 1990. The RMP has been reviewed to determine if the proposed action conforms to the land use plan terms and conditions as required by 43 CFR 1610.5. Development of oil and gas reserves is in conformance with the RMP. On page 30, the RMP states "The entire planning area [Great Divide Resource Area] is open to oil and gas leasing".

The development of this project will not affect the achievement of the Wyoming Standards for Healthy

Rangelands (August 1997).

Remarks:

Upon receipt, all NOS or APD included in the proposed action were posted for 30 days (beginning May 5, 2005) in the Rawlins Field Office Information Access Center (Public Room) for review. Notification of preparation of this EA was also provided on the Wyoming BLM internet NEPA register (<http://www.wy.blm.gov/nepa/search>).

The Atlantic Rim Area Natural Gas Field Development Project Environmental Impact Statement (AREIS) was written to assess the potential foreseeable and cumulative effects of drilling operations and associated activities in the Project area. The Record of Decision (ROD) for this project was approved on March 23, 2007. The proposed action is in conformance with the AREIS.

The AREIS ROD provides for the drilling of natural gas wells and associated infrastructure, limiting total surface disturbance to 7,600 acres at any one time (not including surface disturbance that occurred prior to implementation of the Interim Drilling Policy). The ROD establishes a goal for per-well surface disturbance of 6.5 acres of short-term disturbance (less in "Category A" areas).

The surface disturbance cap is allocated to operators "...on a prorated mineral leasehold basis." (AR ROD, Page 2), and development is limited to no more than 8 well sites per 640-acre section. If in the event an Operator reaches the surface disturbance cap allocation, then "...further disturbance on federal minerals will not be permitted." (AR ROD, Page 3). The RFO will monitor and track disturbance areas for future proposals, in order to ascertain whether the disturbance cap would be exceeded by any future authorizations.

Note: Three fee minerals/fee surface wells in located in POD C are subject to the overall project disturbance cap, and are therefore included in the disturbance table within this document. However, as BLM has no jurisdiction over development of non-federal actions, these fee APDs are neither being approved or denied herein. Associated access to these fee wells across BLM administered surface is included within the analysis, and is included in the Decision Record for the project.

The APD's, Master Drilling Plan and Master Surface Use Plan with Water Management Plan and Conditions of Approval, contain a complete description of the proposed action. These components are considered an integral part of this Environmental Assessment and are incorporated by reference.

Modifications, or alternatives, to the original proposal received from the operator were identified as the result of the pre-approval onsite inspections. At the on-sites, all areas of proposed surface disturbance were inspected to ensure that potential impacts to resources would be reduced. In some cases, access roads were re-routed, and well locations, pipelines, and other water management control structures were moved, modified, or dropped from further consideration to alleviate or reduce environmental impacts. In addition, site specific mitigation and/or Conditions of Approval have been applied to alleviate or reduce environmental effects of the operator's proposal. Onsite changes, implementation of committed mitigation measures contained in the Master Surface Use Plan, Drilling Program and Water Management Plan, and site specific and Standard COAs are incorporated and analyzed in the Proposed Action Alternative.

All Catalina POD C and D wells are located entirely within the Catalina (CBNG) Federal Unit, and as result no additional rights-of-way are required as part of the proposed action.

Purpose and Need for Proposed Action

Domestic natural gas production is an integral part of U.S. energy development and conservation plans due to its availability and the presence of existing market delivery infrastructure. Domestic production reduces immediate dependence upon foreign sources of energy, and maintains an adequate and stable supply of fuel to maintain economic well-being, industrial production, and national security. The environmental advantages of burning natural gas are emphasized in the Clean Air Act amendments of 1990.

In addition, the proposed action would allow Double Eagle, as leaseholder, to exercise lease rights to explore and develop oil and gas resources within the project lease areas.

For these particular wells, the production is primarily natural gas and produced water from coal seams.

Development of Alternatives

In reviewing the proponent's submitted proposal (APDs, Master Surface Use Plan, Master Drilling Plan, Water Management Plan, etc.), the BLM conducted onsite reviews and considered known and potentially-occurring resources and conditions in the project area. As a result of this review, project components were moved, added, or eliminated in order to reduce potential environmental impacts, and in accordance with BLM policy and accepted Best Management Practices (BMPs). This resulted in the alteration of the proponent's submitted proposal to yield the Proposed Action, which incorporates the changes from the onsite inspections, BLM review, and mandated BLM mitigations (Conditions of Approval). The Proposed Action, then, differs from the original proposal submitted by the proponent. Since the proponent has agreed, by re-submission of the applications and POD plans, to the changes agreed upon as a result of the onsite inspections and BLM review, the Proposed Action represents a *de facto* alternative to the original submittal.

The AREIS considered several alternatives to development of the oil & gas resources in the project area (see DEIS, Pages S2-S3 and FEIS Page 1-20).

The BLM interdisciplinary team, in review of this Proposed Action (as modified during onsite inspections and subsequent review), identified no unresolved resource conflicts that would necessitate development of additional alternatives.

Description of Proposed Action Alternative

The proposed action includes the construction of access roads and well pads for the purpose of drilling 48 CBNG wells (24 in POD C and 24 in POD D) and 7 produced water re-injection wells (3 in POD C and 4 in POD D) for a total of 55 wells. Fifty-two of these are federal wells (APDs), while 3 are fee wells (located within POD C.) The proposed action also includes the construction, operation and reclamation of associated underground gas gathering/sales pipelines, produced water-gathering pipelines, underground power-lines and utility corridors. To minimize surface disturbance, the pipeline/utility corridors are located adjacent and parallel to the proposed or existing access roads and existing pipeline disturbances, except where not feasible or applicable.

A Central Delivery Point (CDP) facility is also proposed in each POD. These facilities would contain the centrally-located POD facilities to pump & reinject produced water, compress gas, and provide storage and measurement components within each POD. The maps and illustrations attached to the EA, APDs, and Master Surface Use Plan display the locations of all these components of the proposed action.

Any additional facilities later determined to be necessary would be proposed and applied for via a Sundry Notice.

Water for drilling would be obtained from the pond located in NWSE of Section 12 (T16N/R92W), which collects flow from coalbed wells in the area under an approved WDEQ WYPDES permit. Water would be hauled by truck to each drill site over existing and proposed roads within the POD. Any changes in the water source or method of transportation would first require written approval by the BLM. To protect any shallow, fresh water aquifers or sources, drilling of surface casing for each well would use either air drilling techniques, or use non-produced (fresh) water from a State permitted local source.

Onsite inspections of the POD wells, well pads, access roads and pipeline/utility corridors and CDPs were conducted on March 5-6, 2007 (POD C) and September 27-28, 2007 (POD D). Potential impacts to resources from the location of the well pads, access roads, utility corridors, and associated facilities were reviewed and assessed. As a result, numerous project components were relocated to reduce potential impacts to soils, vegetation, water, wildlife, cultural, and recreational resources.

The location of the proposed development is approximately 28 miles north/northeast of Baggs, Wyoming. Access to the area will be from Wyoming Highway 789, easterly on Carbon County Road 608.

A discussion of the actions generally associated with drilling a well, including (1) a plan of operations, (2) construction of the access road and drilling pad, and (3) pipeline installation, can be located in the following portions of the AREIS or ROD:

- Chapter 2, Proposed Action and Alternatives (AREIS)
- Chapter 4, Analysis of Environmental Consequences (AREIS)
- Appendix A, Project Reclamation Plan (ROD)
- Appendix C, Operator-Committed Practices (ROD)

Mitigation and reclamation measures are described in Chapter 4 and Appendix B of the ROD (Project Performance-Based Monitoring and Best Management Practices). The following narratives summarize elements specific to the proposed action for this EA.

Construction

Well access roads, drill pads and pipeline/utility corridors must be constructed and or re-constructed in order to drill, complete, and produce coal bed natural gas wells, and is considered a short-term disturbance. Upon completion of a well and placing it into production, portions of the well (drill) pad not needed for production operations will be reclaimed. The pipeline/utility corridors will be finally reclaimed upon construction/installation of the pipelines/utility lines. Upon the successful interim reclamation of the areas of the well pad and access/utility corridors not needed for production operations, the remaining surface disturbance in these areas is considered long-term. The entire well pad, access road and pipeline/utility corridor will be totally reclaimed (final reclamation) following well plugging and abandonment.

Overall short-term surface disturbance estimates for POD C and D, including the well pads and access road/utility/pipeline corridors and CDPs are presented in the following tables.

POD C Estimated Surface Disturbance (includes 3 fee/fee wells and access)

| Project Component | Number (quantity) | Average Disturbance | Cumulative Acreage |
|---|---|------------------------|--------------------|
| Single CBNG wellpad | 21 | 2.1 acres ¹ | 44.1 acres |
| CBNG wellpad co-located with an injection well | 3 (=6 individual wells, including injectors) | 3.2 acres ² | 9.6 acres |
| Central Delivery Point (CDP) | 1 | 5.5 acres ³ | 5.5 acres |
| Access Roads w/ adjacent utility lines (gas/water/elec) | 29,457 Linear ft. | 80 ft. width | 54.1 acres |
| Access Roads only | 16,030 Linear ft. | 50 ft. width | 18.4 acres |
| Utility Lines only | 17,424 Linear ft. | 30 ft. width | 12.0 acres |
| Total | N/A | N/A | 143.7 acres |

POD D Estimated Surface Disturbance

| Project Component | Number (quantity) | Average Disturbance | Cumulative Acreage |
|---|---|------------------------|--------------------|
| Single CBNG wellpad | 20 | 2.1 acres ¹ | 42.0 acres |
| CBNG wellpad co-located with an injection well | 4 (=8 individual wells, including injectors) | 3.2 acres ² | 12.8 acres |
| Central Delivery Point (CDP) | 1 | 4.6 acres ³ | 4.6 acres |
| Access Roads w/ adjacent utility lines (gas/water/elec) | 32,616 Linear ft. | 80 ft. width | 59.9 acres |
| Access Roads only | 523 Linear ft. | 50 ft. width | 0.6 acres |
| Utility Lines only | 11,616 Linear ft. | 30 ft. width | 8.0 acres |
| Total | N/A | N/A | 127.9 acres |

¹ Individual well pad disturbance areas are approximately equal to 300' x 300' (2.1 acres), including stockpiles and cut & fill slopes for all single-well locations.

² For wells co-located with an injection well, disturbance areas are approximately equal to 400' x 350' (3.2 acres), including stockpiles and cut & fill slopes.

³ The Central Delivery Point (CDP) overall disturbance area is approximately equal to 725' X 525' (8.7 acres) for POD C, and 650' X 525' (7.8 acres) for POD D. However, each CDP includes a single CBNG well pad and an injection well of approximately 3.2 acres (see ² above). Since that acreage is already accounted for, it is not included in the CDP disturbance figure.

The proposed action (for both POD C and Pod D) will result in approximately 271.6 acres of short-term disturbance, comprised of new or reconstructed access roads and adjacent & parallel pipelines, utilities, and infrastructure, as detailed above. The average overall per-well disturbance for POD C is 5.3 acres (143.7 acres/27wells), and similarly for POD D is 4.6 acres (127.9 acres/28 wells). The proposed action is located outside of "Category A" areas, and thus is subject to a "disturbance goal" of 6.5 acres per well. Both PODs, then, meet the disturbance goal provided in the AREIS ROD.

Access

The operator proposes to construct new access roads to the proposed well locations. The access roads will be constructed to meet BLM specifications for a "Resource Road", as specified in BLM Manual Section 9113. Proper drainage structures will be constructed/installed along the access roads. The width of the roadway (travel surface) will be a minimum of 14 feet within an average right-of-way width of 50 feet. To minimize surface disturbance, wherever possible, the access road right-of-way will be combined with the pipeline/utility right-of-way into a road/utility corridor that will be 80 feet or less in width. Some local connector or collector roads between multiple well locations, or where engineering design dictates, will be constructed to a minimum 16-20 feet wide travel width within the 80 feet wide corridor.

To minimize surface disturbance, the majority of pipeline/utility corridors are located adjacent and parallel to the proposed or existing access roads and existing pipeline disturbances, except where not feasible or applicable.

The access roads including utility corridors would be reclaimed during production operations to the maintenance width of approximately 30 to 40 feet. Utility corridors upon completion of pipeline/power-line installation along with any unneeded access road would be recontoured, ripped, seeded, and revegetated.

Well Sites

In order to drill and complete the coalbed natural gas (CBNG) wells, an approximate 300' by 300' (2.1 acre) drill pad will be constructed for each well location (including spoil and topsoil stockpiles and cut/fill slopes.) Some well locations will be co-located with an adjacent water injection well (indicated by an "I" at the end of the well number), and these locations will require a drill pad of approximately 400' by 350' (3.2 acres). In the event the wells become producers, cut and fill portions of the well site will be brought back to the approximate original contour and reclaimed along with any other unneeded portions of the well site. Soil stockpiles will be re-spread or stabilized, and reseeded with native vegetation. The well pad will be reduced to less than one-half acre for the duration of production operations. Unless otherwise authorized, and in conjunction with interim pad reclamation, the reserve pits will have been dried and backfilled within 180 days of well completion or plugging and abandonment. The entire well pad will be recontoured, ripped, seeded, and revegetated during final reclamation upon final plugging and abandonment.

Pipeline/Utility Corridors

The produced water and gas sales and gathering pipelines and power-lines would be buried upon completion of construction and installation, and the surface disturbed areas reclaimed soon thereafter. Upon well plugging and abandonment and or pipeline/power-line abandonment, the pipelines/power-lines would be properly abandoned in accordance with BLM procedures for abandonment and the right-of-ways and corridors appropriately reclaimed. Any major crossings of drainages have been engineered to insure design/construction adequacy and erosion protection. All channel crossings will comply with current BLM policies and mitigation measures appropriate to the crossings (see "Hydraulic Considerations for Pipelines Crossing Stream Channels," BLM Technical Note 423, April 2007).

Produced Water Disposal

Underground re-injection into the Deep Creek and/or Trout Creek Members of the Haystack Mountains Formation is the primary method of water disposal proposed in both POD C and D. Produced water from wells within each POD would be gathered and transported via buried pipelines to a Central Delivery Point (CDP) within the POD, and then piped to the water re-injection wells within the POD. Additional injection capacity will also be available at other permitted injection wells in adjacent PODs within the Unit, and would be used as needed. Should the underground re-injection system shut down, Double Eagle is currently allowed to

discharge untreated CBNG produced water from these and other PODs to an on-channel reservoir via an ephemeral drainage under WDEQ's Wyoming Pollutant Discharge Elimination System (WPDES) permit # WY0042145. Another WPDES permit (# WY0054038) has also been approved by WDEQ for discharge of treated CBNG water. In conjunction with BLM's approval of the project (EA# WY-030-EA07-244, DR 03/03/08), this would provide an additional method of produced water disposal for PODs C and D. Please note that the extent to which Double Eagle can utilize either of these permits will be limited by water volume and salt load restrictions imposed by WDEQ on both permits.

Produced water collection, transport and disposal, is addressed in further detail in the MSUP and Water Management Plan (WMP).

No Action Alternative

NEPA regulations require that alternative analyses in NEPA documents "include the alternative of no action" (40 CFR 1502.14(d)). For this analysis, "no action" means that the BLM would reject the proponent's proposal and "the proposed activity would not take place."

Potential Environmental Impacts of the "Proposed Action" Alternative

| Critical Element | Affected | | Critical Element | Affected | |
|----------------------------|----------|----|-----------------------------|----------|----|
| | Yes | No | | Yes | No |
| Air Quality | X | | T / E Species | | X |
| ACEC's | | X | Wastes, Hazardous/Solid | X | |
| Cultural Resources | X | | Water Quality | | X |
| Prime/Unique Farmlands | | X | Wetlands/Riparian Zones | | X |
| Floodplains | | X | Wild and Scenic Rivers | | X |
| Native Amer. Rel. Concerns | | X | Wilderness | | X |
| Environmental Justice | | X | Invasive, Nonnative Species | X | |

In addition to the critical elements referenced above, reviews of potential effects upon paleontological, visual and recreational, soil, vegetation, and wildlife resources were conducted.

The affected environment and analysis of environmental impacts are discussed in the AREIS to which this EA is tiered. Air quality impacts are also disclosed and analyzed in the AREIS.

Halogeton and other invasive and/or noxious weeds are a significant concern for this project area. COAs have been added to control the spread, establishment, and plant community changes associated with weed infestation.

Cultural Resources:

Class III cultural resources inventory were conducted for the project areas. Archaeological resources identified will be avoided or, as necessary, a monitor will review construction to ensure no cultural artifacts are disturbed. POD C has one well, and POD D has 7 wells and infrastructure located inside of the two-mile buffer of contributing segments of a historic trail ("Rawlins to Baggs Road"). As a result, SHPO consultation was necessary and a visibility analysis required on those well locations and related infrastructure. The AREIS also required a "Programmatic Agreement" or "Memorandum of Agreement" between the affected parties, i.e. landowner (BLM), operator and SHPO to address the necessary mitigation to minimize impact to the trail viewshed from these wells and associated disturbances. As a result, restrictions or stipulations in the form of COA were added to the MSUP APD authorizations as appropriate. These, and additional cultural stipulations are summarized below:

For all wells and associated infrastructure in PODs C and D:

- 1) *Standard cultural stipulation (under general permitting requirements)*
- 2) *All surface facilities will be painted a color compatible with the local environment.*
- 3) *The access road will be surfaced with material compatible with the local environment.*
- 4) *The Operator shall select and use a seed mix most applicable to each disturbed location, with the goal of restoring individual sites to closely resemble the pre-disturbance native plant communities, as provided in Appendix A of the ROD, "Project Reclamation Plan."*

5) A BLM-permitted archaeologist will monitor all surface disturbing activities and conduct open trench inspections.

Note: Pending the results of additional soil inventories at the proposed disturbance locations within the project area, the archaeological monitor stipulation and/or open trench inspection requirement may be removed on a project and/or site-specific basis. Such removal (retraction) of the stipulation would only be authorized in writing, after review by a BLM archaeologist.

Additional mitigation measures are stipulated for individual wells and/or infrastructure within two-miles of the Rawlins-Baggs Road which have viewshed or visibility concerns, which include:

POD C well: 44-27

POD D wells: 22-25, 24-25, 31-25, 33-25, 42-25, 44-25, and 25I,

These additional mitigation measures include:

- 1) Unless otherwise authorized, the pipelines/utilities will be plowed or ripped into the un-bladed surface (using technology that does not require trenching). If such techniques are infeasible due to terrain or geology, the surface will be brush-hogged and the utilities will be placed no farther than the outside edge of the ditch slope.
- 2) No blading will be allowed outside the staked well location for placement or removal of the topsoil stockpile.

The access and/or utility corridor for five wells within Pod D (42-25, 22-25, 33-25, 44-25 and 25I) is provided in part through the proposed Catalina POD E, which is unapproved at this time. Although these five wells (APDs) are being approved herein, actual construction of the well pads, access roads and/or pipelines to the wells may only begin upon approval of POD E, and/or those road portions in POD E providing access to wells in POD D.

Wildlife Resources: Summarized in the tables below are the seasonal wildlife timing stipulations which will be applied to the subject wells.

Catalina POD C Wildlife Stipulations

| Well # | Raptor ¹ | Grouse ² | WSG ³ | CWR ⁴ |
|------------|---------------------|---------------------|------------------|------------------|
| 13-27 | X | X | | |
| 24-27 | X | X | | |
| 33-27 | X | X | | |
| 27I | X | X | | |
| 44-27 | X | X | | |
| 11-31(fee) | X | X | | |
| 42-31 | X | X | | |
| 11-32 | X | X | X | |
| 22-32 | X | X | X | |
| 31-32 | | X | | |
| 32I | | X | | |
| 33-32 | X | X | X | |
| 42-32 | X | X | X | |
| 44-32 | X | X | X | |
| 11-33 | | X | | |
| 13-33 | X | X | X | |
| 33I | X | X | X | |
| 22-33 | X | X | X | |
| 24-33 | X | X | X | |
| 31-33 | X | X | X | |
| 33-33 | X | X | X | |
| 42-33 | X | X | X | |
| 44-33 | X | X | | |
| 11-34 | X | X | | |
| 22-34 | X | X | | |

Catalina POD D Wildlife Stipulations

| Well # | Raptor¹ | Grouse² | WSG³ | CWR⁴ |
|---------------|---------------------------|---------------------------|------------------------|------------------------|
| 13-13 | X | X | | X |
| 24-13 | | X | | X |
| 33-13 | X | X | | X |
| 44-13 | X | X | X | X |
| 42-23 | | X | | X |
| 44-23 | X | X | | X |
| 11-24 | | X | | X |
| 13-24 | X | X | | X |
| 22-24 | X | X | | X |
| 24-24 | X | X | | X |
| 24I | X | X | | X |
| 31-24 | X | X | X | X |
| 31-24I | X | X | X | X |
| 33-24 | X | X | | X |
| 42-24 | X | X | X | X |
| 44-24 | X | X | X | X |
| 44-24I | X | X | X | X |
| 11-25 | X | X | | X |
| 13-25 | X | X | | X |
| 22-25 | X | X | | X |
| 24-25 | X | X | | X |
| 31-25 | X | X | | X |
| 33-25 | X | X | | X |
| 42-25 | X | X | | X |
| 44-25 | X | X | | X |
| 25I | X | X | | X |
| 42-26 | X | X | | X |
| 44-26 | X | X | | X |

¹Construction, drilling, reclamation and other activities potentially disruptive to nesting raptors are prohibited during the period of February 1 to July 31 for the protection of raptor nesting areas.

²Construction, drilling, reclamation and other potentially disruptive activities are prohibited during the period of March 1 to July 15 for the protection of strutting and nesting sage-grouse.

³Construction, drilling, reclamation and other activities potentially disruptive to wintering sage-grouse are prohibited during the period of November 15 to March 14 for the protection of sage-grouse winter concentration areas.

⁴Construction, drilling and other activities potentially disruptive to wintering wildlife are prohibited during the period of November 15 to April 30 for the protection of big game crucial winter habitat.

In some instances, the proponent may request consideration of a temporary exception to wildlife seasonal restrictions. Such an exception may be granted if a determination is made that the wildlife resource will not be adversely impacted.

In accordance with the Rawlins RMP and the AR EIS, the wintering sage-grouse timing stipulation was applied to projects within areas identified as wintering sage grouse habitat. Several years data compiled by BLM and WGFD was used to identify wintering sage grouse locations and their associated wintering habitat. This information was then used to delineate the specific areas in which to apply the stipulation. Similarly, BLM also considered recently obtained data (including, *Sawyer, 2006. Progress Report for the Atlantic Rim Mule Deer Study*) regarding mule deer migration routes in the project area, which was incorporated into the wildlife review of the project.

Other site-specific findings by the interdisciplinary review team are provided on the attached review documents, and are incorporated into Conditions of Approval, as applicable.

Description of Impacts:

A discussion of the actions generally associated with drilling projects and their associated impacts may be found in the Atlantic Rim Environmental Impact Statement and Record of Decision.

Hazardous Materials

Double Eagle has indicated that some hazardous materials could be used during drilling, completion, and production of their proposed wells. The term "hazardous material" as used here means: 1) any substance, pollutant, or contaminant (regardless of quantity) listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA, 2) any hazardous waste as defined in the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, and 3) any nuclear or nuclear byproduct as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.

It is possible that wastes created or transported during implementation of the proposed action (i.e., waste motor oils, drilling/completion additives) could be accidentally released to the environment. The operator will be required to comply with the Hazardous Materials Management Plan provided in Appendix C of the AREIS. Numerous State and Federal rules and regulations also apply that govern the handling, storage, and disposal of hazardous substances.

Double Eagle or any contracted company working for Double Eagle will have Material Data Safety Sheets available for all chemicals, compounds, or substances which are used during the course of construction, drilling, completion, and production operations for this project. Additionally, all chemicals will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

Impacts to soils, surface and groundwater resources, wildlife, vegetation, and human health could result from the accidental exposure of hazardous materials. However, since the project operations will strictly comply with all applicable federal and state laws concerning hazardous materials, the Hazardous Materials Management Plan for this project, and the operator's Spill Prevention Control and Countermeasure Plan, no significant impacts are anticipated.

Reclamation

Interim reclamation is typically initiated and completed within 6 months of drilling completion. The drill pads will be reduced to a less than one-half acre production well site at each location. Total reclamation of all new disturbances will take place as the wells and facilities are no longer productive or needed and are plugged and abandoned. Appendix A of the ROD contains the reclamation success criteria by which the reclamation status will be evaluated. The approved Master Surface Use Plan and Conditions of Approval also contain reclamation measures pertaining to reclamation standards.

Description of Mitigation Measures and Residual Impacts:

Mitigation of potential effects is part of the proposed action, and specific mitigation details can be found in the Master Plan Elements including the Conditions of Approval. Residual impacts resulting from the proposed action would include permanent loss of oil and/or gas reserves should the wells become productive. In addition, the well pads, production equipment, and the access roads could remain in place for 30 years or more (until plugging and abandonment, and final reclamation).

Potential Environmental Impacts- No Action Alternative

Under the No-Action Alternative, the proposed action would not be authorized. The 52 federal wells would not be constructed or drilled, and gas production from the proponent's lease would not occur. Existing development would continue to occupy the project area, along with impacts associated from the existing development and development on nearby private (fee) and or state leases, including 3 fee wells in POD C.

Residual Impacts/Cumulative Impacts:

The potential residual and cumulative impacts are discussed in the AREIS, Chapter 5, and Cumulative Impacts Analysis. The proposed action entails the addition of 45 federal CBNG wells, 3 fee CBNG wells (not

under BLM's administrative authority), and 7 produced water re-injection wells, and associated facilities and infrastructure.

Standard mitigation guidelines are addressed in the ROD's Appendix A, Project Reclamation Plan. Additional mitigation measures are also provided in Appendix B, Performance-Based Monitoring and Best Management Practices, and Appendix C, Operator-Committed Practices. All needed mitigation, for that portion of the proposed action on public land, is part of the proposed action.

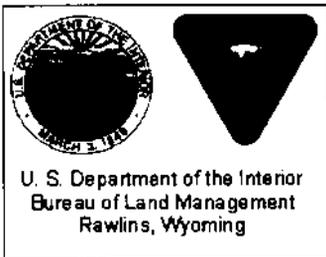
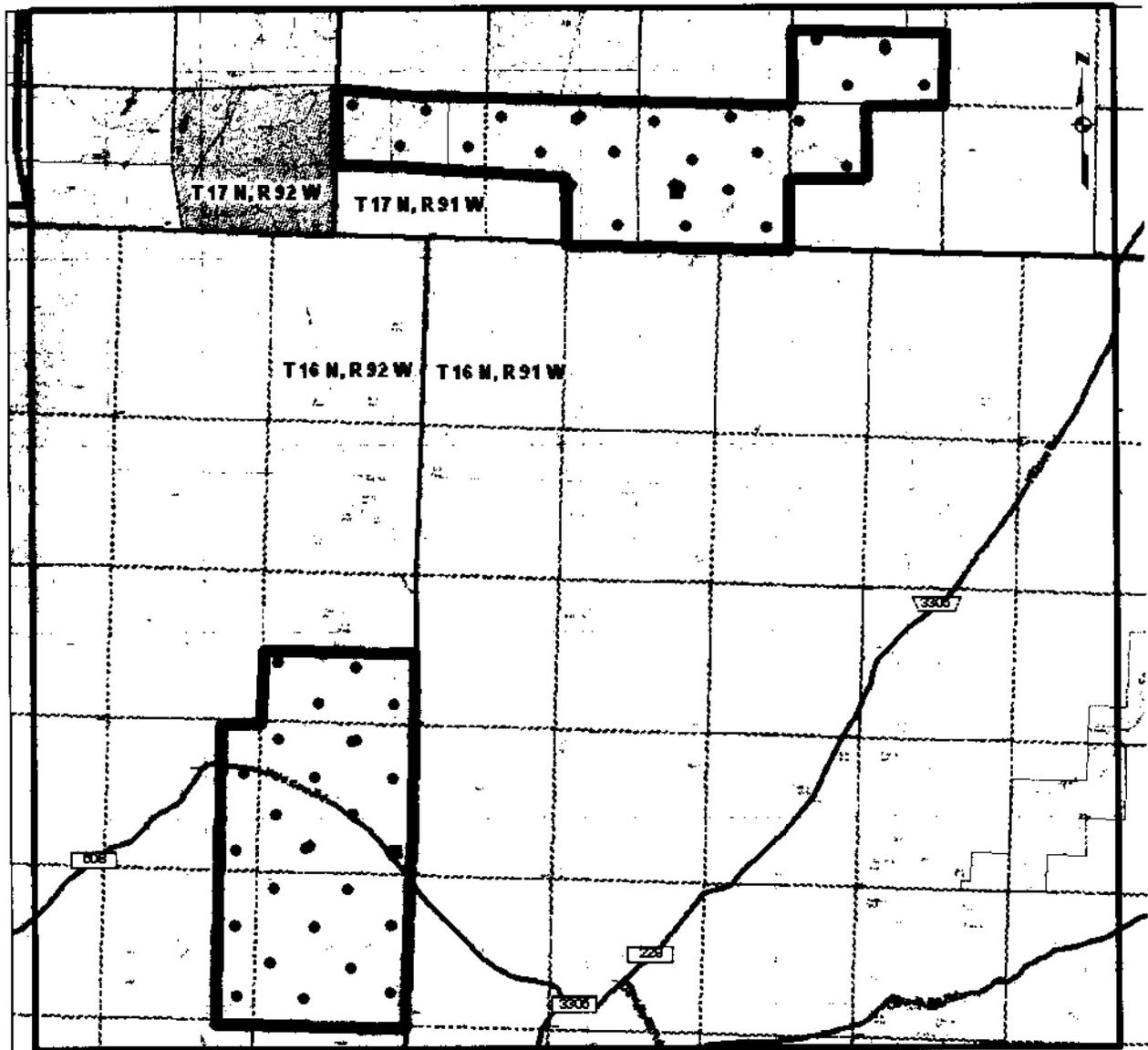
The access roads and well/production pads may remain visible for a period of approximately 20 to 30 years after they are abandoned and reclaimed. The oil and gas resource will be permanently lost. All needed mitigation is part of the proposed action.

Additional mitigation measures are addressed in the AREIS, under; Appendix A: Reclamation Plan; Appendix C Hazardous Materials, and; Appendix D Wildlife Protection Plan. All recommended mitigation for that portion of the proposed action on public land, is part of the proposed action and plan of operation found in the well POD MSUP with COA and APD.

Other Persons/Agencies Contacted and or Consulted:

| | | |
|----------------------|---|----------------------------|
| Steve Degenfelder | Vice President | Double Eagle Petroleum Co. |
| Steve Olsen | Draftsman | Siek Surveying Surface |
| Erik Norelius | Natural Resource Specialist | BLM, Rawlins Field Office |
| Skip Stonesifer | Reclamation Specialist | BLM, Rawlins Field Office |
| Laura Gianakos | Supervisory Natural Resource Specialist | BLM, Rawlins Field Office |
| Paula Guenther-Gloss | Supervisory Wildlife Biologist | BLM, Rawlins Field Office |

Project Area



1:55,595

No warranty is made by the Bureau of Land Management as to the accuracy, completeness, or reliability of the information presented.

Drafted By: E. Norelius 2/27/2008

Legend

Cat_C_D_walls

- Cat
- Cat/C-w
- Cat/D-w

Cat_C_D_Pod_Bound

- ▬ Cat/C
- ▬ Cat/D