



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



AUGUST 13, 2007

TIERED EA, FONSI, AND DR FORM

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

ENVIRONMENTAL ASSESSMENT

EA NUMBER: WY-030-07-EA-222

Lease Numbers: WYW-116679, WYW-126439, WYW-131778, WYW-141280, WYW-141281, WYW-147856, WYW-148482, ST-99-357 (State Wells on Federal Surface)

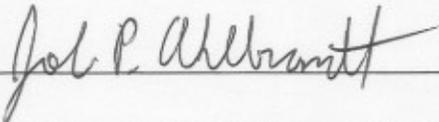
Proposed Action:

Sun Dog A & B PODs: Natural Gas Wells, Water ReInjection Wells, Access Roads, Pipeline/Utility Corridors, Water Transfer Station, and associated Infrastructure

Rawlins Field Office (RFO) Interdisciplinary Team (IDT)

IDT Member	Title
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Prepared By:



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08/15/07

Date

Location of Proposed Action (BLM-administered public lands):

Sun Dog Unit POD A

Well # *	T	R	Sec	Aliquot
2-8	16N	91W	8	NWNE
4-8	16N	91W	8	NWNW
6-8	16N	91W	8	SEW
8-8	16N	91W	8	SENE
4-9	16N	91W	9	NWNW
12-9	16N	91W	9	NWSW
14-9	16N	91W	9	SESW
4-17	16N	91W	17	NWNW
12-17	16N	91W	17	NWSW
12-17I	16N	91W	17	NWSW
2-19	16N	91W	19	NWNE
8-19	16N	91W	19	SENE
2-20	16N	91W	20	NWNE
14-18	16N	91W	18	SESW
4-19	16N	91W	19	NWNW
6-19	16N	91W	19	SEW
10-19	16N	91W	19	NWSE
12-19	16N	91W	19	NWSW
4-20	16N	91W	20	NWNW
6-20	16N	91W	20	SEW
14-20	16N	91W	20	SESW
14-20I	16N	91W	20	SESW
4-21	16N	91W	21	NWNW
12-18	16N	91W	18	NWSW
10-18	16N	91W	18	NWSE
16-18	16N	91W	18	SESE
(ST)6-16	16N	91W	16	SEW
(ST)14-16	16N	91W	16	SESW

Sun Dog Unit POD B

Well # *	T	R	Sec	Aliquot
12-4	16N	91W	4	NWSW
12-4I	16N	91W	4	NWSW
14-4	16N	91W	4	SESW
10-5	16N	91W	5	NWSE
14-5	16N	91W	5	SESW
16-5	16N	91W	5	SESE
2-9	16N	91W	9	NWNE
6-9	16N	91W	9	SENE
10-9	16N	91W	9	NWSE
16-9	16N	91W	9	SESE
8-20	16N	91W	20	SENE
10-20	16N	91W	20	NWSE
10-4	16N	91W	4	NWSE
12-5	16N	91W	5	NWSW
12-20	16N	91W	20	NWSW
2-21	16N	91W	21	NWNE
6-21	16N	91W	21	SEW
8-21	16N	91W	21	SENE
12-21	16N	91W	21	NWSW
(ST)2-16	16N	91W	16	NWNE
(ST)8-16	16N	91W	16	SENE
(ST)10-16	16N	91W	16	NWSE
(ST)16-16	16N	91W	16	SESE

* Wells are organized by Lease #

(ST) indicates a State well (State minerals) underlying Federal (BLM) Surface. However, these wells are within the Sun Dog Federal Unit, and therefore will be authorized with this POD package, and not as separate Right(s)-of-Way.

Also see POD Master Surface Use Plan and project maps.

Applicant/Proponent: Anadarko E & P Company (Anadarko)

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:

The NOSs or APDs for the proposed action were posted for 30 days in the Rawlins Field Office Information Access Center (Public Room) for review. Notification of preparation of this EA was 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." (ROD at Page 2), and development is limited to no more than 8 well sites per 640-acre section. If, in the event an Operator reaches its surface disturbance cap allocation, than "...further disturbance on federal minerals will not be permitted." (ROD at 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 future authorizations.

The APDs/Master Surface Use Plan/Master Drilling Plan/Water Management Plan (Master Plan Elements), with Conditions of Approval, contain a complete description of the proposed action. The Master Plan Elements, with Conditions of Approval, are considered an integral part of this Environmental Assessment and are incorporated by reference.

The project (both PODs A & B) is located entirely within a Federal Oil & Gas Unit. No additional rights-of-way are necessary for 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 Anadarko, as leaseholder, to exercise lease rights to explore and develop oil & gas resources within the project lease areas.

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

Description of Proposed Action Alternative

The proposed action entails the construction and/or reconstruction of access roads and well pads for the purpose of drilling 48 CBNG wells (26 in POD A, 22 in POD B) and 3 produced water re-injection wells (2 in POD A, and 1 in POD B). In addition, the proposed action provides for the construction, use, and reclamation of appurtenant gas & water-gathering pipelines and utility corridors, including such corridors to 6 proposed State wells underlying federal (BLM administered) surface in Section 16 (T16N/R91W). Where feasible and appropriate (and in most cases), the pipeline/utility corridors were located adjacent and parallel to the proposed or existing access roads and existing pipeline disturbances. The maps and illustrations attached to the EA, APDs, and Master Surface Use Plan display the locations of the proposed wells, access roads, gas & water-gathering pipelines, and utility (primarily electrical) corridors.

The CDP (compressor) for POD A and Pod B wells is already constructed and in use, built during exploratory activities (2001). Likewise, no new water transfer facilities are proposed for these pods at this time. If additional water transfer stations are later determined to be necessary, they would be proposed and applied for via a Sundry Notice.

Water for drilling each well would be obtained from existing wells completed in the coal seams of the Mesa Verde Group within the Sun Dog Unit. 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 (Baggs Pond.)

Onsite inspections of the PODs were conducted on October 11-13 and December 15, 2006. Potential impacts to resources were considered and alternate locations considered. As a result of this field inspection, several project components were moved to reduce potential impacts to soils, water resources, vegetation, and wildlife resources.

The location of the proposed development is approximately 28 miles northeast of Baggs, Wyoming, west of Highway 789. Access to the area will be from existing access roads off of 789. New roads will be constructed or reconstructed to access most well locations.

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

Disturbance estimates include the well pad and access road/utility/pipeline corridors for 6 State of Wyoming estate wells located in Section 36 (T17N/R92W) which are located on federal (BLM administered) surface. Portions of the pads unnecessary for production operations will be reclaimed after the production facilities are constructed. The well sites and access roads will be entirely reclaimed after the wells are plugged and abandoned. For the purpose of assessing potential cumulative effects, oil and gas development may be considered long-term as transitory in nature.

POD A					
Well #	Well Pad-Acres*	Road-L. Feet	Road-Acres**	Corridor-Acres***	SUM-Acres
2-8	2.2	2383	1.6	4.4	6.6
4-8	2.2	2948	2.0	5.4	7.6
6-8	2.2	151	0.1	0.3	2.5
8-8	2.2	1823	1.3	3.4	5.6
4-9	2.2	853	0.6	1.6	3.8
12-9	2.2	418	0.3	0.8	3.0
14-9	2.2	1270	0.9	2.3	4.5
4-17	2.2	2488	1.7	4.6	6.8
12-17	2.2	1502	1.0	2.8	5.0
12-17I	0.0	0	0.0	0.0	0.0
2-19	2.2	56	0.0	0.1	2.3
8-19	2.2	0	0.0	0.0	0.0
2-20	2.2	395	0.3	0.7	2.9
14-18	2.2	994	0.7	1.8	4.0
4-19	2.2	1878	1.3	3.5	5.7
6-19	2.2	279	0.2	0.5	2.7
10-19	2.2	3882	2.7	7.1	9.3
12-19	2.2	4138	2.8	7.6	9.8
4-20	2.2	1324	0.9	2.4	4.6
6-20	2.2	178	0.1	0.3	2.5

14-20	2.2	742	0.5	1.4	3.6
14-20I	0.0	0	0.0	0.0	0.0
4-21	2.2	1691	1.2	3.1	5.3
12-18	2.2	3371	2.3	6.2	8.4
10-18	2.2	1650	1.1	3.0	5.2
16-18	2.2	401	0.3	0.7	2.9
(ST) 6-16	2.2	273	0.2	0.5	2.7
(ST) 14-16	2.2	1060	0.7	2.0	4.2
Total:	52.0	36,148	24.8	66.5	118.5

*Average well pad disturbance areas are approximately equal to 300' x 320' (2.2 acres), including stockpiles and cut & fill slopes for all single-well locations. No additional disturbance is associated with injection wells, since they are co-located on the same pad with the respective producing well(s).

**Assumes 30' roadway disturbance.

***Assumes 80' overall corridor disturbance (road plus utilities) for all wells.

POD B					
Well #	Well Pad-Acres*	Road-L. Feet	Road-Acres**	Corridor-Acres***	SUM-Acres
12-4	2.2	542	0.4	1.0	3.2
12-4I	0.0	0.0	0.0	0.0	0.0
14-4	2.2	1051	0.7	1.9	4.1
10-5	2.2	3928	2.7	7.2	9.4
14-5	2.2	2273	1.6	4.1	6.3
16-5	2.2	174	0.1	0.3	2.5
2-9	2.2	467	0.3	0.9	3.1
6-9	2.2	1744	1.2	3.2	5.4
10-9	2.2	676	0.5	1.2	3.4
16-9	2.2	663	0.5	1.2	3.4
8-20	2.2	1922	1.3	3.5	5.7
10-20	2.2	1418	1.0	2.6	4.8
10-4	2.2	4829	3.3	8.9	11.1
12-5	2.2	603	0.4	1.1	3.3
12-20	2.2	764	0.5	1.4	3.6
2-21	2.2	858	0.6	1.6	3.8
6-21	2.2	1973	1.4	3.6	5.8
8-21	2.2	19	0.0	0.0	2.2
12-21	2.2	1417	1.0	2.6	4.8
(ST) 2-16	2.2	148	0.1	0.3	2.5
(ST) 8-16	2.2	1839	1.3	3.4	5.6
(ST) 10-16	2.2	219	0.2	0.4	2.6
(ST) 16-16	2.2	697	0.5	1.3	3.5
Total:	48.4	28,224	19.6	51.7	100.1

*Average well pad disturbance areas are approximately equal to 300' x 320' (2.2 acres), including stockpiles and cut & fill slopes for all single-well locations. No additional disturbance is associated with injection wells, since they are co-located on the same pad with the respective producing well(s).

**Assumes 30' roadway disturbance.

***Assumes 80' overall corridor disturbance (road plus utilities) for all wells.

The proposed action (for both POD A and Pod B) will result in approximately 218.6 acres of short-term disturbance, comprised of new or reconstructed access roads and adjacent & parallel pipelines and utilities, as detailed above.

The average per-well disturbance for POD A is 4.2 acres (118.5 acres/28 CBM wells), and similarly, for POD B is 4.4 acres (100.1 acres/23 CBM wells). The proposed action is located outside of "Category A" area, 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 access the well locations. The new roads will be constructed to BLM specifications for a "Resource Road", as specified in BLM Manual Section 9113. Adequate drainage structures will be constructed or installed. The travelway will be at least 14 feet wide and will have an average right-of-way width of 50 feet (80 feet, including adjacent & parallel pipeline/utility corridors). The access roads would be reclaimed during production operations to the maintenance width, or to approximately 30 feet in width. Upon completion of the project, unnecessary access roads would be recontoured, ripped, seeded, and revegetated.

Well Site

Should the wells become productive, cut portions of the well site will be backfilled and the unused portions of the well site and soil stockpile sites will be stabilized and reseeded with native vegetation. The well size will be reduced to less than one-half acre for the duration of production operations. Reserve pits will be dried within 180 days. Upon completion of the project, the well pads would be recontoured, ripped, seeded, and revegetated.

Pipeline/Utility Corridors

The pipelines would be buried after construction and the disturbed area reclaimed as soon after construction as reasonable. Upon completion of the project, the pipelines would be evacuated and abandoned in-place.

Produced Water Disposal

The only means of produced water disposal considered in this action would be by re-injection using disposal wells permitted by the BLM and State of Wyoming, and would be disposed of into the Haystack Mountain Formation of the Mesaverde Group.

Produced water from the proposed action would be gathered to existing and/or new water injection facilities within the unitized area.

At new injection facilities, it is anticipated that subsurface water sumps will be constructed in lieu of above ground storage tanks. Any modifications to this proposal will be submitted via a Sundry Notice for review prior to approval.

Monitoring wells

As described and detailed in Appendix B of the Atlantic Rim ROD and the Sun Dog Water Management Plan, the Unit Operator shall be responsible for drilling, completing, and equipping one set of three shallow groundwater-monitoring wells completed in water-bearing sandstone units stratigraphically above the principle producing coal beds in the upper Mesaverde Group prior to production of any of the wells in the two PODs.

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- 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 & 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-, recreational-, soil-, vegetation-, visual-, 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 disclosed and analyzed in the AREIS.

Halogeton and other 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:

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. Both PODs have 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 view-shed 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. Those stipulations are summarized below:

For all wells and associated infrastructure in POD A and B:

- 1) *Standard cultural stip (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."*

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 A wells: 2-8; 4-8; 4-9; 14-9; 14-16; 4-17; 16-18; 6-19; 8-19; 10-19; 12-19; 2-20; 4-20; 6-20; 14-20; 14-20I; 4-21
- POD B wells: 10-4; 12-4; 12-4I; 16-5; 6-9; 10-9; 16-9; 2-16; 8-16; 10-16; 16-16; 8-20; 10-20; 12-20; 2-21; 6-21; 8-21; 12-21.

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.*

Other, site-specific Conditions of Approval (such as archaeological monitor, barrier fencing, etc.), are also applied, as applicable.

Wildlife:

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

Sun Dog Unit POD A Wildlife Stipulations

Well #	Raptor ¹	Grouse ²	Mt. Plover ³	CWR ⁴
2-8	X	X		
4-8	X	X		
6-8	X	X		
8-8	X	X	X	
4-9	X	X	X	
12-9		X	X	
14-9		X	X	
4-17	X			

12-17	X	X		
12-17I	X	X		
2-19*	X	X		
8-19	X	X		
2-20		X		
14-18	X	X		
4-19	X	X		
6-19	X	X		
10-19	X	X		
12-19	X	X		X
4-20	X	X	X	
6-20	X	X		
14-20	X	X		
14-20I	X	X		
4-21		X		
12-18	X	X		
10-18	X	X	X	
16-18	X	X		
6-16*		X	X	
14-16		X		

Sun Dog Unit POD B Wildlife Stipulations

Well #	Raptor ¹	Grouse ²	Mt. Plover ³	CWR ⁴
12-4	X	X		
12-4I	X	X		
14-4	X	X		
10-5	X	X		
14-5	X	X		
16-5	X	X		
2-9		X		
6-9		X	X	
10-9		X	X	
16-9		X	X	
8-20		X		
10-20	X	X	X	
10-4	X	X		
12-5	X	X		
12-20	X	X	X	
2-21	X	X	X	
6-21		X		
8-21	X	X		
12-21		X	X	
2-16		X	X	
8-16*	X	X	X	
10-16	X	X		
16-16	X	X	X	

* Black-footed ferret surveys were conducted for these locations and/or access roads.

¹Construction, drilling 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 sage grouse.

³Construction, drilling, and other activities are prohibited during the reproductive period of April 10 to July 10 for the protection of nesting plover.

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.

Black-footed ferret surveys were conducted for the 2-19, 6-16, and 8-16 locations and/or access roads. These individual sites fell within areas where white-tailed prairie dog towns (within the Dad BFF non-block cleared area) could not be avoided. The results of the BFF surveys were negative, and the USFWS has subsequently concurred with our "may affect, not likely to adversely affect" determination, thereby allowing the project to proceed as proposed.

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

Anadarko 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.

Anadarko or any contracted company working for Anadarko 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

Reclamation typically commences within 6 months of drilling completion. The drill pads will be reduced to a less than 1/2-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 judged. 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, final reclamation).

Potential Environmental Impacts- No Action Alternative

Under the No-Action Alternative, the proposed action would not be authorized. The 51 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.

Residual Impacts/Cumulative Impacts:

The potential residual and cumulative impacts are discussed in the AREIS, Chapter 5, *Cumulative Impacts Analysis*. The proposed action entails the addition of 51 CBNG wells (including 3 injection wells, and 6 State CBNG wells on Federal Surface) and appurtenant facilities.

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.