

U.S. Department of the Interior  
Bureau of Land Management  
Little Snake Field Office  
455 Emerson Street  
Craig, CO 81625-1129

## ENVIRONMENTAL ASSESSMENT

**EA-NUMBER:** CO-100-2006-109 EA

**CASEFILE/PROJECT NUMBER/LEASE NUMBER:** COD038678A

**PROJECT NAME:** Carl Allen Well #25

**LEGAL DESCRIPTION:** NWSE Sec. 32, T12N, R97W, 6<sup>th</sup> PM, Moffat County, Colorado

**APPLICANT:** Wexpro Company

**PLAN CONFORMANCE REVIEW:** The proposed action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.

Remarks: The proposed gas well would be located within Management Unit 2 (Little Snake Resource Management Plan). The objectives of Management Unit 2 are to provide for the development of the oil and gas resource.

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

**NEED FOR PROPOSED ACTION:** To provide for the development of oil and gas resources and to supply energy resources to the American public.

**PUBLIC SCOPING PROCESS:** The Notices of Staking (NOSs) have been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning August 21, 2006 when the NOSs were received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:** The proposed action is to approve an Application for Permit to Drill (APD) submitted by Wexpro Company. Wexpro Company proposes to drill one gas well on BLM administered land located in NWSE Sec. 32,

T12N, R97W. The mineral estate of this location is administered by the BLM. The APD has been filed with the LSFO for this well, Carl Allen Well #25. The APD covers mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Wexpro Company in the drilling and surface use plans would be attached by the BLM as Conditions of Approval to the approved APD.

The proposed well is located approximately 65 miles northwest of Craig, Colorado; from Powderwash, travel westerly on Moffat County road #4 0.4 miles to an improved road on the right. Turn right through the Carl Allen Well #8 well pad to a lath sign marking the beginning of the proposed access road and travel 0.2 miles to the Carl Allen Well #25 location. The existing road is covered by lease COD0038678A. Wexpro Company proposes to construct approximately 817 feet of new access road. New road construction would conform to BLM "Resource Road Standards," with a single 16 foot sub-grade road with 18 inch culverts as needed. Total surface disturbance for the new access road would be 2.0 acres. The approximate date work would start would be 02/01/2007 and the estimated duration of construction and drilling is 25 days. In the event that the well is commercially productive, the existing access road and the new access road will be graded and surfaced with road base to an average minimum depth (after compaction) of four inches.

The proposed well pad would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 3.0 acres would be disturbed for construction of the well pad. This would include the 400' by 310' well pad, the topsoil and subsoil piles to be constructed at the well site. A reserve pit would be constructed on the well pad to hold drill mud and cuttings. If the gas well is a producer, cut portions of the well site would be backfilled and unused portions of the well site would be stabilized and re-vegetated. If the gas well proves unproductive, the well would be properly plugged and the entire well pad and new access road would be reclaimed.

Wexpro Company included plans for a 3-1/2 inch pipeline that would be constructed from the proposed well to tie into the existing Questar Gas Management right-of-way. The pipeline would follow the new access road and would be approximately 923 feet long. This pipeline would be on BLM land and within lease boundaries, so a right-of-way is not required. All of the proposed pipeline would be on Federal surface on Federal Lease COD0038678A. The proposed pipeline would be buried to a depth of 48 inches and a minimum of 6 inches of topsoil would be saved along the edge of the pipeline corridor. The trench would be 30 inches wide with 42 inches minimum cover. During rehabilitation, the topsoil would be evenly spread over the disturbed area. All cleared materials would be scattered over the disturbed portion of the corridor after seeding is completed.

**NO ACTION ALTERNATIVE:** The "no action" alternative is that the well would not be permitted and therefore no well would be drilled. Wexpro Company holds a valid and current oil and gas lease for the area where the proposed Carl Allen Well #25 would be located. Under leasing contracts, the BLM has an obligation to allow mineral development if the environmental consequences are not irreversible or too severe. The APD process is designed to overcome the

no action situation of not accepting the APD through the mitigation of predicted environmental consequences. Since the proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, rejecting the APD for the well was considered but will not be analyzed further in this EA.

## **AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES**

### **CRITICAL RESOURCES**

#### **AIR QUALITY**

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. Gas flaring reduces the health and safety risks in the vicinity of the well by burning combustible and poisonous gases like methane and hydrogen sulfide. The proposed action would not adversely affect the regional air quality.

Mitigative Measures: None

Name of specialist and date: Shawn Wiser 11/13/06

#### **AREA OF CRITICAL ENVIRONMENTAL CONCERN**

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 1/22/07

#### **CULTURAL RESOURCES:**

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, and *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2.

Environmental Consequences: The proposed project, Carl Allen No. 25 Well Pad and Access Road has undergone a Class III cultural resource survey:

David Darlington 2006 Class III Cultural Resource Inventory for the Wexpro Company Carl Allen No. 25 Well Pad and Access Road Moffat County, Colorado (06-WAS-686; BLM#12.2.07)

No cultural resources were identified during the survey

Mitigative Measures:

The following standard stipulations apply for this project:

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Name of specialist and date: Robyn Watkins Morris 11/28/06

## **ENVIRONMENTAL JUSTICE**

Affected Environment: The proposed action would not directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations. The area of the proposed action is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of the proposed action.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Mike Andrews 12/04/06

## **FLOOD PLAINS**

Affected Environment: Active floodplains and flood prone zones are avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property will result from the proposed action.

Mitigative Measures: None

Name of specialist and date: Shawn Wiser 11/13/06

## **INVASIVE, NONNATIVE SPECIES**

Affected Environment: Invasive species and noxious weeds occur within the affected area. Cheatgrass, halogeton and other invasive annual weeds are common along road disturbances and other areas which do not have adequate perennial plant communities to inhibit their annual establishment. Halogeton has become a very noticeable problem in the western portion of Moffat County. Canada thistle and other biennial thistles are fairly common and can be established in the affected area, especially in road ditches. Russian knapweed and hoary cress (whiteweed) are finding their way into the vicinity of the project and would also be capable of establishing in road ditches. Other species of noxious weeds are not known to be a problem in this area, but they can always be introduced by vehicle traffic, livestock and wildlife. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with constructing an access road, drilling and operating the well, installing a pipeline and other subsequent activities would create an environment and provide a mode of transport for invasive species and other noxious weeds to become established.

Construction equipment and any other vehicles and equipment brought onto the site can introduce these weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. The operator will be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well. All principles of Integrated Pest Management should be employed to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Ole Olsen 11/30/06

## **MIGRATORY BIRDS**

Affected Environment: Brewers sparrow and sage sparrow are likely to be present in the project area during late spring and early summer. Both of these species are listed on the United States Fish and Wildlife Service 2002 Birds of Conservation Concern List. Nesting activities for both species are likely to be completed by the end of July.

Environmental Consequences: There would be a moderate potential for take of these two species of birds to occur.

Recent studies have indicated that birds have entered heater treater facilities through open vents. Birds have been entrapped and have died in these facilities as a result of gasses held in the facilities.

Mitigative Measures: All open vent stack equipment such as heater treaters, separators, dehydration units, and flare stacks shall be designed and constructed to prevent birds and bats from entering or nesting in or on such units, and to the extent practical, to discourage birds from perching on the stacks.

Name of specialist and date: Timothy Novotny 12/01/06

## **NATIVE AMERICAN RELIGIOUS CONCERNS**

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Colorado Commission of Indian Affairs on January 21, 1999. The letter listed the projects that the BLM would notify them on and projects that would not require notification. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris 11/28/06

## **PRIME & UNIQUE FARMLANDS**

Affected Environment: None present

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Shawn Wiser 11/13/06

### **THREATENED AND ENDANGERED ANIMAL SPECIES**

Affected Environment: There are no threatened or endangered species or habitat for such species in or near the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 12/1/06

### **T&E SPECIES -PLANTS**

Affected Environment: There are no federally listed threatened or endangered plant species within or in the vicinity of the Proposed Action.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 12/1/06

### **T&E SPECIES - SENSITIVE PLANTS**

Affected Environment: There are no BLM sensitive plant species within or in the vicinity of the Proposed Action.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 12/1/06

### **WASTES, HAZARDOUS OR SOLID**

Affected Environment: If the release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there will be no environmental impact.

Environmental Consequences: Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Mitigative Measures: None

Name of specialist and date: Duane Johnson 12/4/06

### **GROUNDWATER HYDROLOGY/QUALITY**

Affected Environment: The lithologic formation at the surface is the Tertiary Cathedral Bluffs Tongue of the Wasatch Formation. The Wasatch Formation does not contain potable water. Any ground water encountered in the Tertiary Fort Union would be of poor quality.

Surface and near surface waters would be protected by the surface casing and the grouting of the casing. Any ground water encountered in the Tertiary Fort Union would be of poor quality.

Environmental Consequences: With the use of proper construction practices, drilling practices, and with best management practices no significant adverse impact to groundwater aquifers and quality would be anticipated to result from the proposed action. A geologic and engineering review was performed on the 8-point drilling plan to ensure that the cementing and casing programs adequately protect the downhole resources.

Mitigative Measures: None

Name of specialist and date: Jennifer Maiolo 12/04/06

### **WATER QUALITY/HYDROLOGY – SURFACE**

Affected Environment: The proposed Carl Allen Well #25 would be constructed near an unnamed ephemeral drainage. Any runoff from the well pads, pipelines, or access roads would drain towards the ephemeral drainage, which drains into Powder Wash. All stream segments near the well pad location are presently supporting classified beneficial uses. No impaired stream segments occur in the vicinity of the proposed action.

Environmental Consequences: Runoff water from the well site would drain towards Powder Wash, which is an ephemeral tributary to the Little Snake River. Increased sedimentation to Powder Wash during spring runoff or from high intensity rainstorms is the

most likely environmental consequence from the proposed action. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Surface Use Plan and the Conditions of Approval will reduce the potential impacts caused by surface runoff.

Mitigative Measures: None

Name of specialist and date: Shawn Wiser 12/07/06

#### **WETLANDS/RIPARIAN ZONES**

Affected Environment: There are no wetlands or riparian zones present in the project area.

Environmental Consequences: None

Mitigative Measures: None

Mitigative Measures: Timothy Novotny 12/01/06

#### **WILDERNESS, WSA, AND WILD & SCENIC RIVERS**

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 1/22/07

#### **NON-CRITICAL ELEMENTS**

##### **FLUID MINERALS**

Affected Environment: The proposed action is in favorability zone 4 (highest for oil and gas potential). The proposed well would penetrate the Tertiary Wasatch Formation and the Tertiary Fort Union Formation. The Allen Sands in the Fort Union Formation are the major objectives for gas.

No coal has been identified in the 8-point drilling plan; a few thin coal beds are present in the Fort Union Formation, but their thickness and depth make them uneconomical.

Environmental Consequences: The proposed top-to-bottom casing and cementing programs are adequate to protect and/or isolate the coal beds.

Mitigative Measures: None

Name of specialist and date: Jennifer Maiolo 12/04/06

## **PALEONTOLOGY**

The geologic formation at the surface is the Cathedral Bluffs Tongue of the Tertiary Wasatch Formation. This formation has been classified Class II for the potential for occurrence of scientifically significant fossils. Scientifically significant fossils are occasionally found within this formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils on this location is considered to be moderate. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. The proposed action could also constitute a beneficial impact to paleontological resources by increasing the chances for discovery of scientifically significant fossils.

Mitigative Measures: "Standard Discovery Stip," i.e., "If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed timeframe. Operations will resume only upon written notification by the Authorized Officer."

This impact is usually effectively mitigated by ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed.

### References

Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

Miller, A.E., 1977, Geology of Moffat County, Colorado, Colo. Geol. Surv. Map Series 3, 1:126,720.

Name of specialist and date: Jennifer Maiolo 12/04/06

## **SOILS**

Affected Environment: The proposed Carl Allen #25 well would be located within the Tresano-Hiatha-Kandaly association loam soil-mapping unit. These very deep soils are well drained and found on hills, toe slopes, and alluvial fans. Slopes within this unit

average 2 to 20 percent. These soils formed in alluvium derived from sandstone and shale. Runoff is rapid and the hazard of wind and water erosion is moderate to high.

**Environmental Consequences:** The construction and operation of Carl Allen Well #25 would affect soils within and immediately adjacent to the proposed area of disturbance. Increased soil erosion from wind and water would occur during construction of the well pad, pipeline, and access road. Erosion would continue throughout the operational life of the well. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur.

Vegetation and soil would be removed from approximately five acres of land. Soil productivity would decline due to reduced soil microbial activity, impaired water infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Soil erosion would be reduced to an acceptable level with the mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. This mitigation will reduce the potential to have excessive sediments and salts in runoff water from the well site.

**Mitigative Measures:** Additional mitigative measures will be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the road or well pad.

Name of specialist and date: Shawn Wiser 12/07/06

## **VEGETATION**

**Affected Environment:** The proposed well would be located in a saltbush plant community that is interspersed with sagebrush-grass. Dominant plants present include Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), basin big sagebrush (*A. tridentata tridentata*), Nuttall's saltbush (*Atriplex nuttallii*), green rabbitbrush (*Crysothamnus viscidiflorus*), prickly pear (*Opuntia* spp.), *Eriogonum* spp., *Allium* spp., winterfat (*Ceratoides lanata*), western wheatgrass (*Agropyron smithii*), Indian ricegrass (*Oryzopsis hymenoides*), squirreltail (*Sitanion hystrix*), and Sandberg bluegrass (*Poa sandbergii*). High levels of non-native halogeton (*Halogeton glomeratus*) are also present.

**Environmental Consequences:** The proposed well pad, access road, and pipeline would completely remove approximately 5.0 acres of native vegetation. While this removal would be relatively minor in the larger landscape, it would be in addition to numerous other plant community intrusions such as the dense road network, other wells, and Powder Wash Camp. If this well is a producer, the total disturbance would be minimized by shrinking of the well pad and subsequent reseeded with native species. If it is not a producer, this disturbance, including the access road, would be completely restored by seeding with native species and the proposed pipeline would not be built. This area is highly susceptible

to invasion by halogeton, even in adjacent undisturbed areas. Aggressive control efforts, as required, would greatly minimize the spread of this invasive plant.

Mitigative Measures: None

Name of specialist and date: Hunter Seim 12/1/06

**WILDLIFE, AQUATIC**

Affected Environment: There is no aquatic wildlife habitat present in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 12/1/06

**WILDLIFE, TERRESTRIAL**

Affected Environment: The proposed well would be located within marginal wildlife habitat for pronghorn antelope. Heavy natural gas development in the area surrounding this well makes the project area unlikely to be used pronghorn on a regular basis. Establishment of halogeton in this area further reduces habitat quality.

Environmental Consequences: It is unlikely that the disturbance associated with the development of the Carl Allen # 25 well would impact any terrestrial wildlife due to the degraded nature of the project site.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 12/1/06

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Fluid Minerals			JM 12/04/06
Forest Management	SW 12/01/06		
Hydrology/Ground		JM 12/04/06	
Hydrology/Surface		SW 12/01/06	
Paleontology			JM 12/04/06
Range Management		JHS 12/1/06	

Realty Authorizations	MAA 12/04/06		
Recreation/Transportation		RS 12/04/06	
Socio-Economics		MAA 12/04/06	
Solid Minerals		JM 12/04/06	
Visual Resources		JMc 11/30/06	
Wild Horse & Burro Mgmt	SW 12/01/06		

**CUMULATIVE IMPACTS SUMMARY:** Cumulative impacts may result from the development of the Carl Allen Well #25 when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the Powder Wash Field. Currently numerous producing wells exist within a one-mile radius of the proposed well. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

Cumulative impacts to the plant communities within the gas lease and adjacent areas include an incremental reduction of continuity in the plant communities in terms of acreages that remain undisturbed. Loss of continuity results in smaller and smaller areas of undisturbed native vegetation and the potential for loss of integrity within the larger plant community. Fragmented plant communities can lose resilience to natural and man-made disturbance due to isolation of areas from seed sources necessary for proper age class distribution of plants, and subsequently, a greater opportunity for stressors such as drought to have a more severe impact on the plant community as a whole. The increased disturbance also makes native plant communities more susceptible to invasion by annual weeds as vectors for increasing weeds. Even with weed control measures applied, the potential for weeds to move further into undisturbed remnant areas increases as these remnants become smaller and more isolated from larger undisturbed areas.

Cumulative impacts to the livestock grazing operations in the area are also increased through the Proposed Action. The growth in wells, roads, and human activity has reduced the availability of forage in this area far beyond direct impacts caused by construction. Halogeton which has increased among the new roads and well pads is toxic to sheep. The resulting impact to grazing activities permitted in the area is a loss of available Animal Unit Months (AUMs), i.e. a loss of the amount of livestock that the allotment can reasonably carry. Due to recent years of drought, the livestock operator has only lightly used this allotment, so direct impacts to grazing activities have not been fully felt.

Habitat fragmentation from well pad construction and the associated roads have likely decreased the nesting suitability for migratory birds in Powder Wash. Ingelfinger (2001) found that roads associated with oil and gas development have a negative impact on passerines bird species. Bird densities were reduced within 100m of each road. Due to the amount of new road construction and an increase in traffic on these roads, passerine populations in the area are likely decreasing.

Although big game species are able to adapt to disturbances better than other wildlife, increased development would still have impacts to antelope. Timing stipulations adequately protect big game species during critical times of the year; however, continued oil and gas development would lead to decreased use of the habitat due to increased human activity. A significant amount of vehicle traffic occurs with oil and gas development. Impacts to big game may be vehicle-animal collisions, as these are a major cause of mortality for big game species.

References:

Ingelfinger, F. 2001. The Effects of Natural Gas Development on Sagebrush Steppe Passerines in Sublette County, Wyoming. University of Wyoming, Laramie, WY.

**STANDARDS:**

**PLANT AND ANIMAL COMMUNITY (animal) STANDARD:** The proposed well would be located in a heavily disturbed area. The establishment of Halogeton at the well site further reduces habitat quality at the site. This location does not appear to be capable of supporting healthy populations of wildlife. The development of this well would not affect wildlife populations in the area. Control of noxious weeds associated with the well pad could benefit habitat in the project area potentially benefiting wildlife. This standard is currently not being met. Thorough reclamation of disturbed areas along with an intensive weed treatment program associated with the development of this well could improve habitat quality in the future and allow this standard to be met.

Name of specialist and date: Timothy Novotny 12/01/06

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD:** There are no threatened or endangered species or habitat for such species present in or near the proposed project area. This standard does not apply.

Name of specialist and date: Timothy Novotny 12/01/06

**PLANT AND ANIMAL COMMUNITY (plant) STANDARD:** The Proposed Action would completely remove native vegetation. As long as the COAs concerning revegetation and weed control are faithfully adhered to, the native plant community would eventually return and weeds such as halogeton would be kept in check, and thus meet this standard. The No Action Alternative would meet this standard as no disturbance would occur.

Name of specialist and date: Hunter Seim 12/1/06

**SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)**

**STANDARD:** There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the Proposed Action. This standard does not apply.

Name of specialist and date: Hunter Seim 12/1/06

**RIPARIAN SYSTEMS STANDARD:** There are no wetlands or riparian systems present in the project area; this standard does not apply.

Name of specialist and date: Timothy Novotny 12/01/06

**WATER QUALITY STANDARD:** The proposed action would meet the public land health standard for water quality. Reclamation of the pipeline corridors would be completed immediately after installation to minimize sheet and rill erosion from the corridor. Interim reclamation of the unused area on the well pad will be completed to minimize sheet and rill erosion from the well site. When the well pad is no longer needed for production operations, the disturbed well pad would be reclaimed to approximate original contours, topsoil would be redistributed, and adapted plant species would be reseeded. These Best Management Practices would help to reduce accelerated erosion of the site. No stream segments near this project are listed as impaired.

Name of specialist and date: Shawn Wisner 11/13/06

**UPLAND SOILS STANDARD:** The proposed action will not meet the upland soil standard for land health and it is not expected to while the well location, pipeline, and access road are used for operations. The well pad site, pipeline corridor, and access road will not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or are attached as mitigating measures that will reduce impacts to and conserve soil materials. Upland soil health will return to the well pad, pipeline corridor, and access road disturbances after reclamation practices and well abandonments have been successfully achieved.

Name of specialist and date: Shawn Wisner 11/13/06

**PERSONS/AGENCIES CONSULTED:** Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office, Wexpro Company.

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
**EA CO-100-2006-109**

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

**DECISION AND RATIONALE:** I have determined that approving this APD is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval. The project will be monitored as stated in the Compliance Plan outlined below.

**MITIGATION MEASURES:** The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD's 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well's case file labeled COD0038678A, Well #25.

### **COMPLIANCE PLAN(S):**

#### **Compliance Schedule**

Compliance would be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations would be conducted. File inspections would include a review of all required reports and the Monthly Report of Operations would be evaluated for accuracy.

#### **Monitoring Plan**

The well location and access road would be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

#### **Assignment of Responsibility**

Responsibility for implementation of the compliance schedule and monitoring plan would be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector would be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Legal Instruments Examiner will also be involved.

**SIGNATURE OF PREPARER:**

**DATE SIGNED:**

**SIGNATURE OF ENVIRONMENTAL REVIEWER:**

**DATE SIGNED:**

**SIGNATURE OF AUTHORIZED OFFICIAL:**

**DATE SIGNED:**