

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-100-2008-110EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER: COC1666

PROJECT NAME: Big Hole Federal Well #31-27

LEGAL DESCRIPTION: NWNE Sec. 27, T10N, R94W, 6th P. M.

APPLICANT: J-W Operating 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 Big Hole Federal Well #31-27 would be located within Management Unit 2 (Little Snake Resource Management Plan). One of the objectives of Management Unit 2 is to provide for the development of the oil and gas resource. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas, and forest resources.

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 Notice of Staking (NOS) has been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning September 25, 2008 when the NOS was 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: The proposed action is to approve one Application for Permit to Drill (APD) submitted by J-W Operating Company. J-W Operating Company proposes to drill one gas well on BLM administered land located near Great Divide, CO in the NWNE Sec. 27, T10N, R94W. An APD has been filed with the LSFO for the Big Hole Well #31-27. The APD include drilling and surface use plans that cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by J-W Operating Company in the drilling and surface use plans would be attached by the BLM as Conditions of Approval to an approved APD.

The proposed well would be located approximately 6.5 miles north of Great Divide, Colorado. Construction work is planned to start during the fall of 2008 and the estimated duration of construction and drilling of the well is 21 days. 7,406 feet of access road would be improved and 560 feet of new access road would be constructed for the well. 7,966 feet of access road would be constructed resulting in new surface disturbance of 5.5 acres. All road construction would be on lease and on BLM surface and would not require a federal Right-of-Way.

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 1.8 acres would be disturbed for construction of the well pad. This would include the 245' by 314' well pad, the topsoil, and subsoil piles. A reserve pit would be constructed on the well pad to hold drill mud and cuttings. If a 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 a gas well proves unproductive, it would be properly plugged and the entire well pad and access road would be reclaimed.

J-W Operating Company did include plans for a gas sales pipeline with the APD. Approximately 2,229 feet of new pipeline would be installed and connected to existing gas pipeline in Sec. 27, T10N, R94W to service the well once production is established. Total surface disturbance associated with pipeline construction would be 2.6 acres. All pipeline construction would be on lease and on BLM surface.

Total surface disturbance for the proposed action would be 9.9 acres.

NO ACTION ALTERNATIVE: The “no action” alternative is that the well would not be permitted and therefore no well would be drilled. J-W Operating Company holds a valid and current oil and gas lease for the area where the proposed Big Hole Federal Well #31-27 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 APDs through the mitigation of predicted environmental consequences. The proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, the no action alternative 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 10/31/08

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 10/31/08

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, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project(s), J-W Operating Company's Big Hole Federal 31-27, has undergone a Class III cultural resource survey:

Larson Thomas K.

2008 Results of a Class III Cultural Resource Inventory for the J-W Operating Company's Big Hole Federal 31-27 Well, Moffat County, Colorado (BLM# 53.1.09)

The survey identified no eligible to the National Register of Historic Places cultural resources. The proposed project may proceed as described with the following mitigative measures in place.

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 11/11/08

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action would be located in an area of isolated dwellings. Oil & Gas development, ranching, and farming are the primary economic activities.

Environmental Consequences: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. Neither alternative would directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations.

Mitigative Measures: None.

Name of specialist and date: Louise McMinn 11/07/08

FLOOD PLAINS

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

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

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 10/31/08

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Downy brome (cheatgrass), yellow alyssum, blue mustard and other annual weeds are common along roadsides and on other disturbed areas. Canada thistle and several species of biennial thistles are known to occur in this area. Halogeton, Russian knapweed, dalmation toadflax and hoary cress (whiteweed) are present in the vicinity of this proposed project. 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 drilling the well, constructing the access road, installing the 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 weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. The annual invasive weed species (yellow alyssum, blue mustard and other annual weeds) occur on adjacent rangelands and would occupy the disturbed areas; the bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and can affect the establishment of seeded plant species. Halogeton is a noxious annual weed that would also occupy the disturbed areas, but this weed species would likely require intensive

control with herbicides to prevent it from moving into adjacent rangelands. Establishment of perennial grasses and other seeded plants is expected to provide the necessary control of invasive annual weeds within 2 or 3 years. Additional seeding treatments of the disturbed areas may be required in subsequent years if initial seeding efforts have failed.

The perennial and biennial noxious weeds in the area are less frequently established on the uplands but some potential exists for their establishment in draws and swales or areas along the road that would collect additional water. The largest concern in the project area would be for these species to become established and not be detected, providing seed which can be moved onto adjacent rangelands. The operator would be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well.

Mitigation attached as Conditions of Approval to minimize disturbance and obtain successful reclamation of the disturbed areas, as well as weed control utilizing integrated practices, including herbicide applications would help to control the noxious weed species. All principles of Integrated Pest Management should be employed to control noxious and invasive weeds on public lands.

Mitigative Measures: None.

Name of specialist and date: Ole Olsen 11/18/08

MIGRATORY BIRDS

Affected Environment: The proposed project area contained productive habitat for Brewer's sparrow and sage sparrow. Both species are listed on the USFWS 2002 Birds of Conservation Concern List. A large wildland fire burned through the project area during the summer of 2008. This removed all potential nesting habitat for both species.

Environmental Consequences: Potential nesting habitat for Brewer's sparrow and sage-sparrow was lost to the wildland fire in 2008. It is not likely that either species would use the project area for many years. The Proposed Action would not impact either species. There is no chance for take to occur.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny 11/06/08

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 5, 2008. The letter listed the FY08 and FY09 projects that the BLM would notify them on and projects that would not require notification. A follow up phone call was performed on June 16, 2008. 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 11/11/08

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 10/31/08

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered species or habitats for such species within the proposed project area. The proposed location for the Big Hole Federal Well #31-27 would be within greater sage-grouse breeding and nesting habitat. Greater sage-grouse are a BLM special status species. There are five greater sage-grouse leks located within two miles of the proposed well site. One of the lek sites is considered a historic lek site, meaning that it has not been used by greater sage-grouse within the last five years. Two of the remaining four lek sites are inactive at this time. The remaining two lek sites are active and have had birds using the site in recent years. One of these active leks is located just over ¼ mile from the proposed well pad. The other lek site is located approximately 1 ¼ miles from the proposed well pad. During the summer of 2008, a large wildland fire burned through the project area and approximately 25,000 acres of nesting habitat was lost as a result of this fire. It is not clear at this time what impact this fire might have on breeding and nesting habitat for greater sage-grouse. The Big Hole Federal Well #31-27 was originally staked within an unburned patch of sage-brush. At the BLM's request, J-W Operating moved the proposed well pad from the unburned location to its currently proposed location which was burned by the wildland fire.

Environmental Consequences: There would be no impact to threatened or endangered species as a result of this project.

As a result of the wildland fire, the BLM requested J-W Operating move the proposed well location to an area that had burned by the fire in order to prevent losing more sagebrush as a result of the well development. J-W Operating moved the proposed well site to its currently proposed location. This brought the well closer to an active lek site. The sage-grouse lek in question is within a moderately developed area and has shown some resilience to disturbance. While there is some risk moving a well pad closer to an active lek site, the BLM wildlife biologist felt it was more important to protect the remaining

sagebrush. Losing any more sagebrush in this area would make it difficult for greater sage-grouse using the lek site to successfully nest.

Mitigative Measures: CO-30 No surface disturbing activities between March 1 and June 30 in order to protect breeding and nesting sage-grouse.

Name of specialist and date: Timothy Novotny 11/6/08

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the proposed well.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim 11/10/08

WASTES, HAZARDOUS OR SOLID

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

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: Shawn Wiser 10/31/08

WATER QUALITY – GROUND

Affected Environment: Surface rock consists of upper Wasatch Formation Eocene sedimentary rocks, overlain by Quaternary alluvium unless otherwise exposed.

Environmental Consequences: The drill hole in the surface rock formation would be behind casing, and thus prevent any communication or potential loss of water. Water flows are most likely to occur in sandstone beds of the Wasatch Formation. The operator's drilling program commits to isolate and protect all fresh to moderately saline water (TDS < 10,000 PPM).

Mitigative Measures: None.

Name of specialist and date: Marilyn D. Wegweiser 11/06/08

WATER QUALITY – SURFACE

Affected Environment: The project area would be located on rolling hills near Great Divide, CO. Runoff water from the affected area would drain towards Big Hole Gulch, an intermittent tributary of the Little Snake River. This segment of the Little Snake River must have water quality sufficient to support Aquatic Life Cold 1, Recreation 1a, Water Supply and Agriculture. All stream segments within the affected environment are presently supporting their classified uses.

Environmental Consequences: Existing improved roads have been surveyed and designed appropriately to adequately handle the surface water drainage that would be intercepted and channeled down road ditches. The well pad location would require construction of short access road of about 560 feet. Construction of the road, well pad, pipeline corridor, and installation of the specific drainage features would follow the recommendations provided in the Surface Operating Standards for Oil and Gas Development, 4th Edition. Increased sedimentation to the Little Snake River during spring runoff or from high intensity summer/fall rainstorms would be the greatest potential impact to water quality. Although some sediment may be transported off site and eventually reach perennial waters, mitigation provided in the Surface Use Plan for the proposed action, as well as the surface mitigation contained in the Conditions of Approval, would reduce the potential to have excessive sediments and salts in runoff water from the site.

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

Name of specialist and date: Shawn Wiser 10/31/08

WETLANDS/RIPARIAN ZONES

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

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny 11/06/08

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 10/31/08

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 10/31/08

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment: Drilling would pass downhole successively through Tertiary and Mesozoic rock formations anticipated by the operator to contain gas and water. Upon reaching total depth (TD), the operator would be producing a hydrocarbon resource from the proposed zone of interest.

Environmental Consequences: The proposed action consists of depletion and removal of hydrocarbons permanently removing the resource and draining a non-renewable resource from the proposed target zone. This course of action falls within the RMP for the target area.

Mitigative Measures: Operator committed mitigation measures comply with all Onshore Orders. No additional Mitigative measures are needed.

Name of specialist and date: Marilyn D. Wegweiser 11/06/08

RANGE MANAGEMENT

Affected Environment: The proposed well would be located within the Greasewood grazing allotment. This allotment is permitted for cattle grazing from May through February and sheep from November through June. Portions of the allotment will be rested from livestock grazing for up to two growing seasons due to the Mayberry Fire.

Environmental Consequences: The proposed gas well and associated road construction and pipeline would remove 9.9 acres of vegetation which consists of native and non-native species. If well is a producing well, the long term loss of vegetation and associated disturbance from vehicle traffic, noise and human presence may cause the cattle to alter their distribution pattern. This may result in over utilization of the vegetative resources in other parts of the grazing allotment. Gates leading into the allotment could be left open by the drilling crew and other personnel, which could lead to possible livestock trespass situations. The presence of livestock may hinder reclamation efforts.

Mitigative Measures: Installation of a cattle guard at gate locations would prevent livestock from leaving the allotment through an open gate. Fencing of the well pad during reclamation efforts may help vegetation establishment.

Name of specialist and date: Kathy McKinstry 11/04/08

SOILS

Affected Environment: The proposed well would be found within the Maysprings-Gretdivid complex soil-mapping unit. Slopes within this unit average 10 to 20 percent. The soils are Residuum deposits derived from sandstone. Generally, these soils well drained to somewhat excessively drained. Runoff class is medium.

Environmental Consequences: The construction and operation of the proposed well 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, and access roads. 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 9.9 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 would reduce the potential to have excessive sediments and salts in runoff water from the well site.

Mitigative Measures: Additional mitigative measures would 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 access road and well pad.

Name of specialist and date: Shawn Wiser 10/31/08

UPLAND VEGETATION

Affected Environment: The proposed well site occurs within a sandyland range site. This range site typically supports Wyoming big sagebrush, antelope bitterbrush, needleandthread grass, Indian ricegrass, western wheatgrass, bottlebrush squirreltail, prairie junegrass and streambank wheatgrass. However, it appeared that this area had been converted to a crested wheatgrass seeding in the 1960's. Additionally, this area was impacted by the Mayberry Fire, which burned approximately 25,000 acres in late August of 2008.

Environmental Consequences: Although the vegetation was burned by the Mayberry Fire, the fire severity was low in the area of the proposed well site; consequently, many of the perennial grasses burned in the fire were not killed and would be expected to regenerate from surviving root crowns. All or part of the area disturbed could be reclaimed in the short term if the well fails to produce. If the well produces, a portion of the total disturbance would be reclaimed as the drilling pad would be shrunk down after well completion. The developed access road would remain if the well is a producing well. In the long term, after the life of the producing well has ended, all disturbances would be reseeded to native vegetation per the drilling and surface use plans. It would be imperative that all COAs regarding weed control and revegetation are followed to avoid increasing cheatgrass (*Bromus tectorum*) presence on and in areas surrounding the proposed action. As long as weeds are controlled and all disturbed areas are reseeded to prescribed mixes of native plant species and establishment is ensured as required, the negative impacts to the native plant communities would be effectively mitigated.

Mitigative Measures: Adherence to the COAs.

Name of specialist and date: Kathy McKinstry 11/03/08

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area has been productive habitat for pronghorn antelope, mule deer and elk. A large wildland fire burned through the project area during the summer of 2008. It is unclear what impact this fire might have on big game species at this time. It is likely that mule deer will be impacted significantly by the fire and may avoid the area for many years. Pronghorn antelope and elk will likely use the project area in similar manner as they did prior to the wildland fire.

Environmental Consequences: The proposed development of one well would not likely have a significant impact on big game animals. It is more likely that the wildland fire will have a larger impact. It should be expected that construction activities associated with the development of the well and drilling of the well would displace most big game animals. It is likely the pronghorn antelope and elk would continue to use the project area once construction is complete. The fire may have an impact on use by mule deer. It should be expected that mule deer will avoid the burned area for many years. This does not mean

that the development of this well has had a negative impact on mule deer populations within the project area.

Mitigative Measures: None

Name of specialist and date: Timothy Novotny 11/06/08

OTHER NON-CRITICAL ELEMENTS:

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Forest Management	SW 10/31/08		
Hydrology/Ground		MDW 11/06/08	
Hydrology/Surface		SW 10/31/08	
Paleontology		MDW 11/08/08	
Range Management			KLM 11/04/08
Realty Authorizations		LM 11/07/08	
Recreation/Transportation	GR 11/04/08		
Socio-Economics		LM 11/07/08	
Solid Minerals		JAM 11/07/08	
Visual Resources	GR 11/04/08		
Wild Horse & Burro Mgmt	SW 10/31/08		
Wildlife, Aquatic	TN 11/06/08		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the Big Hole Federal Well #31-27 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 Great Divide area. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities. During the summer of 2008, a large wildland fire burned 25,000 acres surrounding the proposed well pad. It is unclear at this time what impact this will have on ecosystems in the project area.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well site, access road, and future pipeline routes, but should return once construction is completed. 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.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and the BLM required mitigation in the Conditions of Approval for the APD. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas wells in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The proposed project area has been productive habitat for a variety of wildlife species. During the summer of 2008, a large wildland fire burned 25,000 acres surrounding the proposed well pad. It is unclear at this time what impact this will have on wildlife in the project area. It can be expected that some wildlife will no longer use the proposed well location. This does not mean that the well has had a negative impact on wildlife. Some wildlife will not be impacted as a result of the fire. Species that choose to use the area despite the impacts from the fire would be displaced during construction and drilling activities. They would likely return once construction and drilling is complete. This standard has been met in the past. The wildland fire is likely to alter uses by wildlife species for many years. The development of this well would not prevent this standard from being met in the future.

Name of specialist and date: Timothy Novotny 11/06/08

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: There are no threatened or endangered species or habitat for such species within the proposed project area. The Proposed well pad would be located within greater sage-grouse breeding and nesting habitat. Greater sage-grouse are a BLM special status species. During the summer of 2008, a large wildland fire burned 25,000 acres surrounding the proposed well pad. The well pad was originally staked within an unburned patch of sagebrush. At the BLM's request, J-W Operating moved the well pad from the unburned location to its currently proposed location which was burned by the wildland fire. The movement was recommended in order to protect remaining nesting habitat for greater sage-grouse. The project area has met this standard in the past. The large wildfire may have made the proposed well pad and surrounding area unsuitable for greater sage-grouse. The development of one well is not likely to prevent this standard from being met. It is more likely that the wildfire would prevent sage-grouse from using the project area.

Name of specialist and date: Timothy Novotny 11/06/08

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would completely remove 9.9 acres of vegetation that has begun to recover from the 2008 Mayberry

Fire. 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.

Name of specialist and date: Kathy McKinstry 11/04/08

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 well. This standard does not apply.

Name of specialist and date: Hunter Seim 11/10/08

RIPARIAN SYSTEMS STANDARD: There are no wetlands or riparian systems within the proposed project boundary. This standard does not apply.

Name of specialist and date: Timothy Novotny 11/06/08

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 pads would be completed to minimize sheet and rill erosion from the well sites. When the well pads are no longer needed for production operations, the disturbed well pads and access roads 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 sites. No stream segments near this project are listed as impaired.

Name of specialist and date: Shawn Wiser 10/31/08

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health, but it is not expected to while the well locations, pipelines, and access roads are used for operations. The well pad sites, pipeline corridors, and access roads would 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 would reduce impacts to and conserve soil materials. Upland soil health would 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 Wiser 10/31/08

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

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
EA CO-100-2008-110

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.

MITIGATION MEASURES: The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well case file labeled COC1666, Well #31-27.

COMPLIANCE PLAN(S):

Compliance Schedule

Compliance will 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 will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

Monitoring Plan

The well location and access road will 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 will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Land Law Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: