

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-100-2008-023EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER:

COC63307: Sombrero Unit Federal #24-18D

56-127: Sombrero Unit Beta State #33-16D

52-252: Sombrero Unit Gamma State #14-15D

PROJECT NAME: Sombrero Unit

LEGAL DESCRIPTION: All wells in Moffat County, Colorado

Sombrero Unit Federal #24-18D: Sec. 18, T7N, R92W, 6th PM

Sombrero Unit Beta State #33-16D: Sec. 16, T7N, R93W, 6th PM

Sombrero Unit Gamma State #14-15D: Sec. 15, T7N, R93W, 6th PM

APPLICANT: Pioneer Natural Resources USA, Inc.

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 wells would be located within Management Unit 1 (Little Snake Resource Management Plan). The objectives of Management Unit 1 are to provide for the development of coal, oil, and gas 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 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 December 26, 2007 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 three Applications for Permit to Drill (APDs) submitted by Pioneer Natural Resources USA, Inc. Pioneer Natural Resources proposes to drill three coal bed methane wells on private and federal land located in Section 18, T7N, R92W and Sections 15 and 16, T7N, R93W. APDs have been filed with the LSFO for the wells. The APDs include drilling and surface use plans that cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Pioneer Natural Resources in the drilling and surface use plans would be attached by the BLM as Conditions of Approval to the approved APDs.

The proposed wells are located approximately 20 miles northwest of Craig, Colorado. Construction work is planned to start in the fall of 2008 and the estimated duration of construction and drilling is 20 days for each well. Access to the wells is off Moffat County road 15. 5,280 feet of newly constructed road would be used to access the wells. The roads would be constructed on both private and federal surface. Total surface disturbance for new road construction would be approximately 3.6 acres.

19,270 feet of new pipeline would also be constructed. 12,000 feet of new pipeline would parallel new and existing roads and would be constructed within the road rights-of-way. 7,270 feet of new pipeline would be constructed outside of the road rights-of-way. Total surface disturbance for new pipeline construction would be 6.7 acres.

The proposed well pads would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 8 acres would be disturbed for construction of the well pads. This would include the 200' by 250' well pads, the topsoil, and subsoil piles. A reserve pit would be constructed on the well pads to hold drill mud and cuttings. If the 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 well proves unproductive, it would be properly plugged and the entire well pad and access road would be reclaimed.

All construction of the well pads, and roads would be on private and federal surface. Total surface disturbance for the proposed action would be 18.3 acres.

NO ACTION ALTERNATIVE: The No Action Alternative is that the wells would not be permitted and therefore the wells would not be drilled. Pioneer Natural Resources USA, Inc. is

the holder of a valid and current oil and gas leases for the area where the proposed wells are located. Once an oil and gas lease is issued, the lessee/operator has already been given the right to drill on that oil and gas lease, subject to the conditions of the lease. Since the proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, rejecting the APD for the wells is not a reasonable alternative and 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: Roy McKinstry 07/16/08

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 07/16/08

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, Pioneer Sombrero Gamma State #14-15D, Sombrero Unit Beta State #33-16D, Sombrero Unit Federal #24-18D, has undergone a Class III cultural resource survey:

Curtis Martin

2008 Class III Cultural Resources Inventory for the proposed Beta State #33-16D, Gamma State #14D, and Sombrero Unit Fed. #24-18 Well Locations and Linear Routes in Moffat County, Colorado for Pioneer Natural Resources USA, INC. (11.8.08)

The survey identified no eligible to the National Register of Historic Places cultural resources. The proposed project may proceed as described in this EA 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 08/04/08

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action is located in an area of isolated dwellings. Ranching, farming and oil and gas development 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 the proposed action. The proposed action would not 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: Mike Andrews 07/25/08

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: Roy Mc Kinstry 07/16/08

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 (whitetop) are present in the vicinity of this 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 these three wells, constructing the access roads, installing the pipelines 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 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 08/04/08

MIGRATORY BIRDS

Affected Environment: The proposed well pads and their associated access roads are located in areas not capable of supporting any migratory bird listed on the USFWS 2002 Birds of Conservation Concern List.

Environmental Consequences: There is no chance for take to occur as result of the Proposed Action.

Mitigative Measures: None.

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

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 followup 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 08/04/08

PRIME & UNIQUE FARMLANDS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 07/16/08

T&E SPECIES – ANIMALS

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

Environmental Consequences: None.

Mitigative Measures: None.

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

T&E SPECIES – PLANTS

Affected environment: There are no federally listed threatened or endangered plant species within or in the vicinity of any of the three proposed wells.

Environmental consequences: None.

Mitigative measures: None.

Name of specialist and date: Hunter Seim 8/5/08

T&E SPECIES - SENSITIVE PLANTS

Affected environment: There are no BLM sensitive plant species within or in the vicinity of any of the three proposed wells.

Environmental consequences: None.

Mitigative measures: None.

Name of specialist and date: Hunter Seim 8/5/08

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: Roy McKinstry 07/16/08

WATER QUALITY/HYDROLOGY – GROUND

Affected Environment: The presence of fresh water is expected in the Mesa Verde, Williams Fork, and Trout Creek Formations. The commingling of the water would be

prevented by the casing and cementing of the collar and remainder of the hole. The lithologic formation at the surface of this project is the Cretaceous Lance; the top 500 ft. of the well casing and cement and the production casing to TD in the Trout Creek and Isles formations would prevent any contamination of the ground water.

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 is anticipated to result from the proposed action. A geologic and engineering review was performed to ensure that the cementing and casing programs adequately protect the down-hole resources.

Mitigative Measures: Operator committed drilling techniques would prevent communication between any aquifers.

Name of specialist and date: Marilyn D. Wegweiser 07/28/08

WATER QUALITY/HYDROLOGY – SURFACE

Affected Environment: The project area is located on hillslopes north of Big Gulch, a tributary of Lay Creek. Runoff water from the project area would flow in a southerly direction through several unnamed drainages and Big Gulch, tributaries of Lay Creek, which drains into the Yampa River. All stream segments within the affected environment are presently supporting their classified uses.

Environmental Consequences: Impacts from construction would be greatest shortly after project initiation and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Increased sedimentation to the Yampa 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, the mitigation provided in the Surface Use Plan and the Conditions of Approval would reduce the potential impacts caused by surface runoff to an acceptable level.

Mitigative Measures: Pipelines would transport produced water from the proposed well location to the state permitted Walker water disposal and treatment facility and holding ponds located on private land in the center NE Sec. 12, T7N, R93W.

Name of specialist and date: Roy McKinstry 07/16/08

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no wetlands or riparian zones on public lands within the project area.

Environmental Consequences: None.

Mitigative Measures: None.

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

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 07/16/08

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 07/16/08

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment/Surface: Brown's Park Formation sediments covered by Quaternary Alluvium

Environmental Consequences: None.

Mitigative Measures: Operator committed drilling techniques would prevent communication between any aquifers.

Name of specialist and date: Marilyn D. Wegweiser 07/28/08

PALEONTOLOGY

Affected Environment: Paleontological resources are Brown's Park Fm overlain by Quaternary alluvium and exposed in outcrop.

Environmental Consequences: PYFC: Class 3b – Unknown Potential. The surficial units exhibit geologic features and preservational conditions that suggest significant fossils could be present, but little information about the paleontological resources of the unit or the area is known. The unit or area is poorly studied, and field surveys may uncover significant finds. It is the intent that the units in this Class will eventually be placed in another Class when sufficient survey and research is performed. The unknown potential of the units in this Class should be carefully considered when developing any mitigation or management approaches.

Mitigative Measures: None.

Specialist: Marilyn D. Wegweiser 07/28/08

RANGE MANAGEMENT

Affected Environment: The proposed wells are located within the grazing allotments as listed below.

Well	Allotment	Permittee	Season of Use	Livestock
#24-18D	#4059 N. Fork Big Gulch	7-11 Ranch Corporation	5/1 – 6/15	Horse
			5/1 – 11/07	Cattle
			9/1 – 12/10	Horse
#33-16D	#4057 Lower Bord Gulch Sec. 15	Rodney Culverwell	3/1 – 12/30	Sheep
#14-15D			3/1 – 12/30	Cattle

Environmental Consequences: Some loss of forage is expected due to removal of vegetation however this loss does not warrant a reduction in permitted use. During road, pipeline, and well pad construction season of use and presence of livestock should be considered and coordination with permittee should occur as needed.

Mitigative Measures: None.

Name of specialist and date: Christina Rhyne 08/01/08

SOILS

Affected Environment: The proposed well sites are found within the Rock River sandy loam soil-mapping unit. Slopes within this unit average 3 to 12 percent. These soils are very deep, well drained, and formed in eolian deposits and residuum derived from sandstone. They are found on alluvial fans, benches, and hillslopes. Runoff is rated as medium and the hazard of water erosion is moderate. The hazard of soil blowing is moderate

Environmental Consequences: 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 wells. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur.

Erosion control measures would be utilized along the well pad embankments near the ephemeral drainages adjacent to the well pad. Soil erosion would be reduced by mitigation described in the Surface Use Plan and Conditions of Approval in the approved APDs.

Mitigative Measures: Construction or other surface-disturbing activities would not be allowed when the soils are saturated to a depth of more than 3 inches. Vehicle use would be limited to existing roads. Before reserve pits, production pits, or emergency pits can be reclaimed all residue would be removed and trucked off site to an approved disposal site.

Name of specialist and date: Roy McKinstry 07/16/08

SOLID MINERALS

Affected Environment: Coal beds within the Williams Fork, Fat Boy Coal, Trout Creek, and Isles would be penetrated by the wells. Cementing and casing of the drill hole should protect the solid minerals encountered.

Environmental Consequences: None.

Mitigative Measures: Casing and cementing of the entire drill hole.

Name of specialist and date: Jennifer Maiolo 07/21/08

VEGETATION

Affected environment: All three sites included in the proposed action are located within a sagebrush-grass plant community. Dominant plants include big sagebrush, green rabbitbrush, prickly pear cactus, needle and thread, Junegrass, Sandberg bluegrass, western wheatgrass, bottlebrush squirreltail, cheatgrass, lupine, yellow allysum, Indian paintbrush,

buckwheat, false dandelion, hoods phlox, wild onion, death camas, and clover. The level of cactus on the Sombrero Unit Federal #24-18D site was fairly high and there was evidence of heavier utilization in this pasture. All three sites exhibited healthy, diverse vegetation communities in good condition.

Environmental consequences: The proposed action would completely remove vegetation from approximately 18.3 acres. This removal would be minimal in the larger landscape and would be reduced upon interim reclamation during production or complete reclamation if the wells do not produce. Following reclamation and establishment of the recommended seed mix, this proposed action and associated surface disturbance would not adversely affect the surrounding plant community. The susceptibility of these sites to cheatgrass invasion combined with livestock and wildlife utilization would make it imperative to follow all COAs regarding weed control and revegetation to avoid increasing cheat grass presence on and in areas surrounding the proposed action.

Mitigative measures: None.

Name of specialist and date: Christina Rhyne 08/01/08

VISUAL RESOURCES

Affected Environment: Visual Resource Management (VRM) classifications for the proposed project area include: Class II (low levels of landscape change are allowed which should not attract the attention of casual observers. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant features of the landscape).

Environmental Consequences: The proposed action would impact existing VRM classifications.

Mitigative Measures: In addition to standard stipulations, low profile tanks to reduce the visual profile would provide sufficient mitigation.

Name of specialist and date: Roy McKinstry 07/16/08

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area provides productive year round habitat for pronghorn antelope, mule deer and elk including severe winter range for mule deer and elk. A variety of small mammals, song birds and reptiles may also be found in the project area at various times of the year.

Environmental Consequences: Disturbances associated with construction of well pads and access roads for these three wells as well as activities associated with drilling of the wells have the potential to displace wildlife from the project area. Surrounding habitats are sufficient to support displaced wildlife from the project area. If construction or drilling activities were permitted during winter months (December 1 April 30), they would likely result in increased stress on mule deer and elk and would likely have negative impacts on these individuals. Forcing these animals off of severe winter range could result in decreased fitness of these individuals and indirectly lead to increased mortality of wintering mule deer and elk. The development of these wells would result in a long term loss of approximately 18.3 acres of habitat for big game animals. Once completed, the project area would still be capable of supporting big game animals; however, productivity of this area is likely to decrease as a result of this project.

Most small mammals, birds and reptiles using the project area would be capable of avoiding construction equipment and should not be directly harmed by these activities. Some burrowing animals may be killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

Mitigative Measures: CO-9, No surface disturbing activities between December 1 and April 30 in order to protect wintering mule deer and elk.

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

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		MDW 07/28/08	
Forest Management	RM 07/16/08		
Hydrology/Ground		MDW 07/28/08	
Hydrology/Surface			RM 07/16/08
Paleontology		MDW 07/28/08	
Range Management			CR 08/01/08
Realty Authorizations		MAA 07/25/2008	
Recreation/Transportation	RM 08/06/08		
Socio-Economics		MAA	

		07/25/08	
Solid Minerals			JAM 07/21/08
Visual Resources			RM 07/16/08
Wild Horse & Burro Mgmt	RM 07/16/08		
Wildlife, Aquatic	TN 08/06/08		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the wells 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 Lay, CO area. Currently 30 producing wells exist within the area of the proposed wells. Other past or existing actions near the project area that have influence on the landscape are wildfire, hunting, grazing, and ranching activities.

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 sites, access roads, powerlines, 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 provides quality habitat for a variety of big game, small mammals, song birds and reptilian wildlife. Mule deer and elk use the area for severe winter range. Construction and drilling activities during winter months would have a negative impact on mule deer and elk. The development of this many wells in addition to development that has already occurred would decrease this areas production potential. This standard is currently being met. While some decreased level of production is expected, this area would still be capable of supporting wildlife species once this project is completed. This standard would continue to be met.

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

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: The proposed project would result in a loss of approximately 18.3 acres of habitat. This standard is currently being met. The proposed action may prevent this standard from being met in the future.

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

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The plant communities impacted by the proposed action are currently meeting this standard. Plant diversity, vigor, abundance and reproductive capability are currently at levels that ensure resilience in the plant community to human activity. Weeds must be addressed and all principles of invasive weed control and desirable revegetation should be employed. Given this mitigation measure, the proposed action would meet this standard.

Name of specialist and date: Christina Rhyne 08/01/08

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 any of the three proposed wells. This standard does not apply.

Name of specialist and date: Hunter Seim 08/05/08

RIPARIAN SYSTEMS STANDARD: There are no wetlands or riparian zones present on BLM lands within this project area. This standard does not apply.

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

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Reclamation of the utility trenches would occur shortly after utility line installation to minimize sheet and rill erosion from the corridors. Interim reclamation of the unused area on the well pads would be completed shortly after drilling to minimize sheet and rill erosion from the well sites. When the well pads are no longer needed for production operations, the disturbed areas 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: Roy McKinstry 07/16/08

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health, and it is not expected to while these well locations and access roads are used for operations. The drilling and production sites, pipelines, and access roads would not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or would be attached as mitigating measures that would reduce impacts to and conserve soil materials. The pipeline corridors would exhibit unhealthy upland soil characteristics initially, but within one to two years following reclamation the soil health would be moving toward the upland soil standard. Upland soil health would return to the well pad and access road disturbances after well abandonment and reclamation practices have been successfully achieved.

Name of specialist and date: Roy McKinstry 07/16/08

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-100-2008-023

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 the Sombrero Unit Federal #24-18D, Sombrero Unit Beta State #33-16D, and Sombrero Unit Gamma State #14-15D, 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 12-point surface use plan, well location map, and the Conditions of Approval are found in the well case file labeled Sombrero Unit COC63307.

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 Legal Instruments Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: