

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-028-EA

CASEFILE/PROJECT NUMBER (optional): COC 59393 well #4-1, COC 59394 well #34-1

PROJECT NAME: APD

LEGAL DESCRIPTION: T.1S, R. 98W, sec.4 (well 4-1), T.1N, R98W, sec.34 (well 34-1)

APPLICANT: Bass Enterprises

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction:

Proposed Action: The applicant is proposing to drill two gas wells. For well #4-1 the applicant will construct an access road of approx. 2414' x 35' (1.93 ac.), and well pad (1.62 ac.). Total surface disturbance would be approx. 3.55 acres. If the well is a producer, areas not needed for production will be contoured and seeded. If the well is a non-producer, all disturbed areas will be contoured and seeded.

For well #34-1 the applicant will construct an access road of approx. 4409' x 35' (3.54 ac.), and well pad (1.62 ac.). Total surface disturbance would be approx. 5.16 acres. If the well is a producer, areas not needed for production will be contoured and seeded. If the well is a non-producer, all disturbed areas will be contoured and seeded.

No Action Alternative: No well would be developed. No construction would occur.

NEED FOR THE ACTION: To respond to the request by applicant to exercise Federal mineral lease rights and develop hydrocarbon reserves.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5

Decision Language: “Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.”

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

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action. During periods of low precipitation, air quality in the area of the proposed action is often diminished by dust caused by human disturbance.

Environmental Consequences of the Proposed Action: The proposed action would result in short term, local impacts to air quality during and after construction, due to dust being blown into the air. After adequate vegetation is reestablished, blowing dust should return to pre-construction levels.

Environmental Consequences of the No Action Alternative: No increase in dust will occur.

Mitigation: Operator will spread water on the road surfaces to control fugitive dust as needed.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: The proposed Yellow creek # 4-1 well and access road occurs at an elevation between 6300 to 6400 feet within the Duck Creek Area of Critical Environmental Concern (ACEC). This ACEC was established to protect threatened plant species. Surface

geology in the study consists primarily of the Uintah formation with exposures of the Green River formation along valley slopes. In the Piceance basin, these elevations are occupied by pinyon-juniper woodlands and intermingled with sagebrush parks and sagebrush dominated valley bottoms. In the Duck Creek ACEC there is an exposure of the thirteen mile tongue of the Green River formation. Two threatened plants, the Dudley Bluffs bladderpod (*Lequerella congesta*) and the Piceance twinpod (*Physaria obcordata*), are known to occur on this formation. A biologist from Westwater Engineering performed an inventory of BLM special status species (SSS) plants for the proposed Yellow Creek Federal 4#1 well location and access road on July 10, 2003. This botanical inventory was conducted for the purpose of documenting the presence or absence of any SSS plants that could potentially be present within the Duck Creek ACEC. This inventory found occurrences of the Dudley Bluffs bladderpod located within one-half mile of the Yellow Creek Well #4-1, but found none within the area affected by the proposed action. No ACEC would be affected by the proposed action for Well #34-1.

Environmental Consequences of the Proposed Action: None

Environmental Consequences of the No Action Alternative: None

Mitigation: None

CULTURAL RESOURCES

Affected Environment:

Yellow Creek 4-1 well, access road and well tie pipeline: the proposed access road, well tie pipeline and well pad have been inventoried at the Class III (100% pedestrian) level (Montgomery 2003, Compliance Dated 9/5/2003) with no new cultural resources identified.

Yellow Creek 34-1 well pad, access and well tie: the proposed access road, well tie pipeline and well pad have been inventoried at the Class III (100% pedestrian) level (Montgomery 2003, Compliance Dated 9/5/2003) with no new cultural resources identified.

Environmental Consequences of the Proposed Action: The proposed action would not impact any known cultural resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation:

The operator is responsible for informing all persons who are associated with the project 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 uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and

immediately contact the authorized officer (AO). 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 site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

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 cost. 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.

Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, 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.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: There are no known noxious weeds at or near the proposed locations, 4-1 and 34-1. The invasive alien cheatgrass is present on disturbed non-revegetated sites in the project area.

Environmental Consequences of the Proposed Action: The proposed action will create significant earthen disturbance providing safe sites for the invasion and proliferation of noxious weeds and *Bromus tectorum* (cheatgrass). Without application of proper mitigation there will be a long term negative impact on the environment.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Promptly recontour and revegetate all earthen disturbance including access road cut and fill slopes with Native Seed mix #3. The operator will be responsible for monitoring the well locations and for the eradication of all noxious and invasive species on both the proposed locations and access roads using materials and methods approved by the authorized officer.

MIGRATORY BIRDS

Affected Environment: Non-game populations associated with these ranges are widespread and common throughout sagebrush and juniper habitats in this Resource Area (e.g., green-tailed and spotted towhee, vesper and lark sparrows). There are no specialized or narrowly endemic species known to occupy the project area.

Environmental Consequences of the Proposed Action: Approximately 8.7 acres of sagebrush, rabbit brush, a few young to mature pinyon-juniper trees, and forbs will be removed as a result of constructing these two wells. Although this action represents an incremental and longer term reduction in the extent of sagebrush and pinyon-juniper habitat available for migratory bird breeding functions, implementation of this project would have no measurable influence on the abundance or distribution of breeding migratory birds even at the smallest landscape scale.

Environmental Consequences of the No Action Alternative: Incremental reductions of sagebrush, as forage and cover for non-game wildlife, as well as pinyon-juniper woodlands, would not occur at this time or place.

Mitigation: None.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: No threatened or endangered animals are present in, or in the vicinity of, the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive animal species. Thus there would be no effect on achieving the land health standard.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: See the Areas of Critical Environmental Controls section.

Environmental Consequences of the Proposed Action: None

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species:
There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at this site.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no action alternative.

Mitigation Measures: The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The proposed action is in an un-named draw of Yellow Creek, which is tributary to the White River and falls within segment 13b of the Colorado Classification and Numeric Standards. This segment is described as the mainstem of Yellow Creek, including all tributaries from the source to the confluence with the White River. Colorado Division of Wildlife owns this segment of Yellow Creek that is directly below the proposed action; data is not available for this segment. Yellow Creek is an intermittent drainage meaning there are segments of perennial flow and segments where there is not any flow.

A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. All actions are within the White River watershed. The State has designated this segment as "Use Protected" and has classified the stream segment as Warm Aquatic Life 2, Recreation 2, and Agriculture. The state has further

defined water quality parameters with table values. These standards reflect the ambient water quality of Yellow Creek and define maximum allowable concentrations for the various water quality parameters. The anti-degradation rule does not apply to segments that are considered to be use protected. For these drainages, only the parameters listed in the table will apply.

Environmental Consequences of the Proposed Action: The area where the proposed action is located appears to not be a very well-defined drainage. One problem that could arise from the proposed action would be an increase in sediment transport. Annual runoff from this watershed is dynamic and dependent on some aspects we control, such as the amount of vegetation retained for watershed protection and vegetation density. Depleting the vegetation cover needed to protect watersheds from raindrop impact and runoff could cause short-term erosion problems and increased sedimentation to Yellow Creek and on down to the White River until successful BMPs have been implemented and prove to be successful. The magnitude of these impacts is dependent on the amount of surface disturbance and climatic conditions during the time the soils are exposed to the elements.

Environmental Consequences of the No Action Alternative: Impacts from the no-action alternative are not anticipated.

Mitigation: Efforts need to be made to keep sediment from leaving the site. Apply the following Conditions of Approval listed in Appendix B of the White River ROD/RMP to help minimize surface disturbing impacts:

4. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the drilling is completed. If well becomes a producing well, the pad will be graded and the topsoil pile will be distributed and seeded to reduce wind and water erosion.
6. All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.
8. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.
24. Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.
35. Eliminate undesirable berms that retard normal surface runoff.

Finding on the Public Land Health Standard for water quality: The proposed action will not affect water quality or achievement of the Land Health Standard.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: No wetland or riparian areas occur within the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for riparian systems: No wetland or riparian areas occur within the project area. The proposed action would not effect achievement of the land health standard.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, wilderness areas, wilderness, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The soils have been mapped in an order III soil survey by NRCS and are available from the office for review. Refer to the table below for the type of soils affected by the proposed action.

Soil Number	Soil Name	Soil pH	Permeability	Water Capacity	RunOff	Erosion Potential	Range site	Slope
73	Rentsac channery loam	6.6-8.4	2.0-6.0	0.12-0.16	Rapid	Moderate to very high	Pinyon-Juniper woodlands	5-50%

Environmental Consequences of the Proposed Action: Short-term impacts would be expected from any surface disturbing activity. Impacts from the proposed action would be loss of the protective vegetation cover, possible increase in salt and sedimentation during storm events and soil compaction from trenching equipment. These impacts could continue until successful re-vegetation has occurred.

Environmental Consequences of the No Action Alternative: In the no-action alternative, neither the surface disturbance nor the impacts to soils resources would occur.

Mitigation: Re-establish vegetation as soon as allowable for favorable control of erosion problems that may occur. Best management practices will need to be implemented if salts leaching from soils become a problem on the surface.

Finding on the Public Land Health Standard for upland soils: The proposed action will not affect the achievement of the Land Health Standard.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Proposed location #4-1 and its access road would be in a basin big sagebrush tributary of Duck Creek primarily on a Foothill Swale range site. Location #34-1 would be located on a sparsely covered pinyon-juniper site; its access road would traverse both rolling loam range sites and pinyon-juniper woodlands.

Environmental Consequences of the Proposed Action: The proposed action for #4-1 and #34-1 would cause disturbance to the existing plant communities but the site would eventually be reclaimed.

Environmental Consequences of the No Action Alternative: There will be no new disturbance.

Mitigation: Recontour and revegetate all disturbed areas, including cut and fill slopes with Native seed mix #3. The access roads for both 4-1 and 34-1 should be outsloped to minimize concentration of runoff in the roadbed.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The impacts would be localized, and the proposed action would have no effect on achieving the land health standard at the landscape scale.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There is no aquatic wildlife occurring within the project area

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): There is no aquatic wildlife occurring within the project area. The proposed action would have no effect on achieving the land health standard.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment:

Well #4-1 involves approximately 0.45 miles of new road construction traversing mature sagebrush and rabbit brush paralleling an ephemeral draw before crossing the draw once. The pad is flat to gently rolling at an elevation of 6400 feet consisting of sagebrush with some young juniper encroachment. One small ephemeral draw will be re-routed as a result of pad construction. Mature pinyon-juniper woodlands exist 0.2 miles to the west, which was examined in the field on 29 January 2004. No nest habitat for raptors exists on the proposed road or pad and no nests were observed in the mature woodlands to the west.

Well #34-1 involves approximately 0.3 miles of new road construction (from existing two-track) heading east that traverses mature pinyon-juniper woodlands. The pad likewise is composed of pinyon-juniper woodlands, some of which consists of old growth that sits on a ridge between two major ephemeral draws to the north and the south.

Environmental Consequences of the Proposed Action: The construction of this project may result in a long-term increase of road traffic associated with commercial oil/gas related activities. This traffic may disturb big game and prevent them from using the area. It will result in a net loss of sagebrush and mature pinyon-juniper habitat of approximately 8.7 acres. The development of oil/gas facilities in areas previously undisturbed by commercial oil/gas activities results in incremental reductions of normal winter range habitat for big game.

Environmental Consequences of the No Action Alternative: Failure to construct this well would reduce short-term construction activity levels in this area as well as longer term activity associated with increased road traffic. However, avoiding the disturbance associated with these wells would not be considered advantageous to wildlife resources since new locations, potentially involving greater surface disturbance and more involved access, would likely be proposed to offset the loss.

Mitigation:

Locked gates shall be placed to preclude unauthorized motorized use and subsequent disturbance to big game. For Well #4-1, the gate shall be placed at the junction of County Road 20 and the point of new road construction heading north-northwest towards the pad. For Well #34-1, the gate shall be placed at the junction of the existing two-track road and the point of new road construction heading east towards the pad, or the nearest practical location this junction to preclude motorized use.

The pad should be rounded as necessary for Well #34-1 to preclude deposition of fill material from road/pad construction into ephemeral draws (e.g., avoid deposition of fill material into ephemeral draws).

A current raptor survey must be obtained if construction of the project occurs between February 1 and August 15. It is the responsibility of Bass to contact the BLM to have this survey conducted.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): This project would not jeopardize the viability of any animal population. It would have no significant consequence on terrestrial habitat condition, utility, or function, nor have any discernible affect on animal abundance or distribution at any landscape scale. Thus, potential for meeting the land health standard would not be affected.

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
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management			X
Geology and Minerals			X
Hydrology/Water Rights	X		
Law Enforcement		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations		X	
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses			X

ACCESS AND TRANSPORTATION

Affected Environment:

Well 4-1: The proposed access road, which would connect to RBC 20, would partially be within the Duck Creek ACEC where motorized travel is restricted to designated roads and trails. The remainder of the access road and the well pad would be within an area where motorized travel is restricted to existing roads and trails year-round.

Well 34-1: The proposed action would be within a seasonally restricted area where motorized travel is restricted to existing roads and trails from October 1 to April 30. Off-road travel is authorized outside this period.

Environmental Consequences of the Proposed Action: There is potential that the proposed access roads for each of the wells could be used for recreational motorized travel, thus permanently increasing road density in the area, and increasing the impacts to other resources from the use of these roads. This would be minimized with the mitigation identified below.

Environmental Consequences of the No Action Alternative: No access roads would be built, and impacts associated with these roads would not occur.

Mitigation: See mitigation under Wildlife Terrestrial

FIRE MANAGEMENT

Affected Environment: Well #4-1 and associated road does not encounter significant fuel loading. Well #34-1 involves approximately 0.3 miles of new road construction (from existing two-track) heading east that traverses mature pinyon-juniper woodlands. The pad likewise is composed of pinyon-juniper woodlands, some of which consists of old growth that sits on a ridge between two major ephemeral draws to the north and the south.

The National Fire Plan calls for “firefighter and public safety” to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

Environmental Consequences of the Proposed Action: Due to the existing tree cover of pinion and juniper in the vicinity of proposed Well #34-1, there will be a need for the operator to clear some of these trees. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front. The road(s) associated with this project may be used by the general public for a variety of uses, including access for fire wood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Additionally there would be greater threat to the public, Bass personnel, and fire suppression personnel.

Environmental Consequences of the No Action Alternative: The increased fuel build up along a public access route would not occur under the no action alternative.

Mitigation: The operator has two options for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and would scatter the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad. The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be stacked in small manageable piles along the roadside or pad to facilitate removal.

FOREST MANAGEMENT

Affected Environment: Well #34-1 is within a sparse stand of sapling pinyon and juniper. These trees are not commercial and provide few values. Well #4-1 is within a sagebrush vegetation association.

Environmental Consequences of the Proposed Action: Removal of a few sapling pinyon and juniper trees is insignificant considering the extent of acreage in the Piceance Basin.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: None

GEOLOGY AND MINERALS

Affected Environment: Bass's wells # 4-1 and #34-1 are located 1 ½ to 3 miles, respectively, northwest of Natural Soda's Federal sodium lease COC-0118326 in the area identified in the RMP as available for multi mineral and sodium leasing. The surface geologic formation of the well locations is Uinta and Bass's targeted zone is not disclosed in the APD but is approximately 5,000 feet below the top of the Mesaverde and 8,500 feet below the oil shale and saline mineral zone. During drilling potential water, oil shale, sodium, and gas zones will be encountered from surface to the targeted zone. Aquifers that will be encountered during drilling are the Perched in the Uinta, the A-groove, B-groove and the Dissolution Surface in the Green River formation. This area is known for difficulties in drilling and cementing. Oil shale and sodium resources are also found in the Green River formation.

Environmental Consequences of the Proposed Action: Drilling and completion of this well may adversely affect the aquifers if there is loss of circulation or problems cementing the casing. However, the approved cementing and completion procedure of the proposed action isolates the formations and will prevent the migration of gas, water, and oil between formations. Development of these wells will deplete the hydrocarbon resources in the targeted formation.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

PALEONTOLOGY

Affected Environment: The proposed action would be located in the Uinta Formation which the BLM has classified as a Category I fossil bearing formation meaning it is known to produce scientifically important fossil resources.

Environmental Consequences of the Proposed Action: If it becomes necessary at any time to excavate into the underlying bedrock formation to level the pad, excavate the reserve/blooiie pit or bury the pipeline there is a potential to impact scientifically important fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation:

All exposed rock outcrops within the well pad, access road and well tie pipeline route shall be inventoried for fossil resources before the initiation of construction with mitigation recommendations for any fossils that might be present.

A paleontological monitor shall be present at all times should it become necessary to excavate into the underlying bedrock to level the pad, road, excavate the reserve/blooiie pit or bury the well tie pipeline.

If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

RANGELAND MANAGEMENT

Affected Environment: The proposed action is within the Barcus-Pinto unit of the Yellow Creek allotment (06030). The area is used annually from early May to mid- June and in November and December as part of Burke Brothers cattle operation.

Environmental Consequences of the Proposed Action: If construction and drilling *does not* occur during the winter then it is probable that the proposed operation will generate a significant amount of dust (water hauling for drilling operations). This could affect livestock operations.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: See Air Quality Section.

REALTY AUTHORIZATIONS

Affected Environment: A portion of the access road for Yellow Creek Federal #4-1 is off-lease. The Yellow Creek Federal 34#1 is all on lease.

Environmental Consequences of the Proposed Action: A right-of-way for access will be required for Yellow Creek Federal #4-1 from County Road 20 to the lease boundary. BLM will process this ROW simultaneous with the APD.

Environmental Consequences of the No Action Alternative: None

Mitigation: None.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

Environmental Consequences of the Proposed Action: The public will lose approximately nine acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists and will most likely result in complaints from hunters that have historically used this area.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: These wells will be in an area managed as VRM Class 3. As such development is permitted as long as it does not dominate the new landscape.

Environmental Consequences of the Proposed Action: With mitigation as listed below, this project will meet the guidelines for VRM Class 3.

Environmental Consequences of the No Action Alternative: None

Mitigation: Paint all above ground production equipment juniper green.

WILD HORSES

Affected Environment: The proposed action is within the Barcus-Pinto vicinity of the Piceance-east Douglas Wild Horse Herd Management Area (HMA). Wild horses use this portion of their HMA throughout the year.

Environmental Consequences of the Proposed Action: The proposed action would not impact wild horses.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the proposed action, has not exceeded the cumulative impacts from the foreseeable development analyzed in the PRMP/FEIS.

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Carol Hollowed	Hydrologist	Air Quality
Tamara Meagley	NRS	Areas of Critical Environmental Concern
Tamara Meagley	NRS	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Range Management Specialist	Invasive, Non-Native Species
Glenn Klingler	Wildlife Biologist	Migratory Birds
Glenn Klingler	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Marty O'Mara	Hazmat Collateral	Wastes, Hazardous or Solid
Carol Hollowed	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Glenn Klingler	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Recreation Planner	Wilderness
Carol Hollowed	Hydrologist	Soils
Mark Hafkenschiel	Range Management Specialist	Vegetation
Scott Pavey	Planning and Environmental Coordinator	Access and Transportation
Ken Holsinger	NRS	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Mark Hafkenschiel	Range Management Specialist	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Mark Hafkenschiel	Range Management Specialist	Recreation
Max McCoy	NRS	Visual Resources
Valerie Dobrich	NRS	Wild Horses

**Finding of No Significant Impact/Decision Record
(FONSI/DR)
CO-110-2004-028-EA**

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the development of Wells #4-1 and #34-4 as described in the proposed action with mitigation measures outlined below. This development, with mitigation, is consistent with the decisions in the White River ROD/RMP, and environmental impacts will be minimal.

MITIGATION MEASURES:

1. Operator will spread water on the road surfaces to control fugitive dust as needed.
2. The operator is responsible for informing all persons who are associated with the project 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 uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). 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 site can be used (assuming in situ preservation is not necessary)
 - a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

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 cost. 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.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, 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.

4. Promptly recontour and revegetate all earthen disturbance including access road cut and fill slopes with Native Seed mix #3. The operator will be responsible for monitoring the well locations and for the eradication of all noxious and invasive species on both the proposed locations and access roads using materials and methods approved by the authorized officer.

5. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

6. Efforts need to be made to keep sediment from leaving the site.

7. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the drilling is completed. If well becomes a producing well, the pad will be graded and the topsoil pile will be distributed and seeded to reduce wind and water erosion.

8. All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.

9. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.

10. Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.

11. Eliminate undesirable berms that retard normal surface

12. Re-establish vegetation as soon as allowable for favorable control of erosion problems that may occur. Best management practices will need to be implemented if salts leaching from soils become a problem on the surface.

13. The access roads for both 4-1 and 34-1 should be outsloped to minimize concentration of runoff in the roadbed.

14. Locked gates shall be placed to preclude unauthorized motorized use and subsequent disturbance to big game. For Well #4-1, the gate shall be placed at the junction of County Road 20 and the point of new road construction heading north-northwest towards the pad. For Well #34-1, the gate shall be placed at the junction of the existing two-track road and the point of new road construction heading east towards the pad, or the nearest practical location this junction to preclude motorized use.

16. The pad should be rounded as necessary for Well #34-1 to preclude deposition of fill material from road/pad construction into ephemeral draws (e.g., avoid deposition of fill material into ephemeral draws).

17. A current raptor survey must be obtained if construction of the project occurs between February 1 and August 15. It is the responsibility of Bass to contact the BLM to have this survey conducted.

18. The operator has two options for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and would scatter the debris thereby eliminating any hazardous fuel load adjacent to the new road and well pad. The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less. If the products are left for collection by the general public, they should be stacked in small manageable piles along the roadside or pad to facilitate removal.

19. All exposed rock outcrops within the well pad, access road and well tie pipeline route shall be inventoried for fossil resources before the initiation of construction with mitigation recommendations for any fossils that might be present.

20. A paleontological monitor shall be present at all times should it become necessary to excavate into the underlying bedrock to level the pad, road, excavate the reserve/blooiie pit or bury the well tie pipeline.

21. If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

22. Paint all above ground production equipment juniper green.

NAME OF PREPARER:

Samara Meadey

NAME OF ENVIRONMENTAL COORDINATOR:

Scott Perry

SIGNATURE OF AUTHORIZED OFFICIAL:

Debra Rhed

Field Manager

DATE SIGNED:

3/5/04

ATTACHMENTS:

Location of Proposed Action CO-110-2004-028-EA

