

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

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-023-EA

CASEFILE/PROJECT NUMBER (optional): COC 59394 well #33-1
COC 59393 well # 3-1

PROJECT NAME: APDs 33-1 and 3-1

LEGAL DESCRIPTION: T 1N, R98W, sec 33 (33-1)
T 1S, R98W, sec. 3 (3-1)

APPLICANT: Bass Enterprises

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction (optional):

Proposed Action: Bass is proposing to drill two gas wells. No pipelines were included with the proposal.

Well #33-1: Applicant will construct an access road off County Road 122 for approx. 6,851 feet by 35 feet wide (5.5 ac.) , construct well pad 285 feet X 240 feet (2.22 ac.) Total surface disturbance would be approx. (7.72 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.

Well #3-1: Applicant will construct an access road off County Road 20 for approx. 3215 feet by 35 feet wide (2.58 ac.) , construct well pad 285 feet X 240 feet (2.22 ac.) Total surface disturbance would be approx. (4.8 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 wells would be developed.

NEED FOR THE ACTION: To respond to the request by applicant to exercise 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: The operator will spread water on the road surfaces to control fugitive dust.

CULTURAL RESOURCES

Affected Environment:

3-1 well and access road: the proposed well pad and access road have been inventoried at the Class III (100% pedestrian) level (Montgomery 2003, Compliance Date 9/5/2003) with no new cultural resources identified in the inventoried area.

33-1 well and access road: The proposed well pad and access road have been inventoried at the Class III (100 % pedestrian) level (Montgomery 2003, Compliance Dated 9/5/2003) with one isolated find found at the extreme eastern boundary of the well pad inventory area.

Environmental Consequences of the Proposed Action:

3-1 well and access road: the proposed action, as currently designed, will not affect any known cultural resources.

33-1 well pad and access road: The isolated find is at the extreme margin of the ten acre area inventoried for the well pad and should not be impacted by any well pad construction or well operations.

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.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: There are no known noxious weeds at or near the proposed locations, 3-1 and 33-1. 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, golden-mantled ground squirrel). Since there are no woodlands associated with this project, the non-game community has little affinity for this area. There are no specialized or narrowly endemic species known to occupy the project area.

Environmental Consequences of the Proposed Action: Approximately 12.5 acres of sagebrush, rabbit brush, young to mature pinyon-juniper woodlands, 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.

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

Affected Environment: There are no Threatened, Endangered or Sensitive plant species occurring in the proposed areas.

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: 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: Both well pads and roads are in segment 13b, which is the main stem of Yellow Creek, including all tributaries from the source to the confluence with the White River. 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". They further classified this 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 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 apply.

Environmental Consequences of the Proposed Action: The area where the proposed action is located appears to not be a very defined drainage. Problems 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 best management practices have been implemented and proven 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 location is abandoned. If well becomes a producing well, the topsoil pile will need to be seeded to reduce wind and water erosion. When topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile.

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 have an effect on Yellow Creek, which is currently well within the standards set by the State, and thus meets the Public Land Health Standard.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No wetlands, riparian zones, wilderness areas, wilderness study areas, flood plains, prime and unique farmlands, 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.

Proposed action	Soil Number	Soil Name	Soil pH	Permeability	Water Capacity	RunOff	Erosion Potential	Range site	Slope
3-1 road	6	Barcus channery loamy sand	7.9-8.4	6.0-20	0.06-0.10	Slow	Moderate	Foothills Swale	2-8%
3-1 pad	64	Piceance fine sandy loam	7.4-8.4	2.0-6.0	0.13-0.15	Medium	Moderate to high	Rolling Loam	5-15%
3-1 road 33-1 pad	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%
3-1 road	91	Torriorthents-Rock Outcrop complex				Rapid	Very high	Stoney Foothills	15-90%
33-1 road	104	Yamac Loam	6.6-8.4	0.6-2.0	0.16-0.20	Medium	Slight to moderate	Rolling Loam	2-15%

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. Re-establishing vegetation as soon as allowable would be favorable to control any erosion problems that may occur.

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: If it becomes apparent that salts leaching from soils are becoming a problem on the surface (i.e. large salt deposits begin to appear), the operator will notify BLM. BLM will then coordinate with the operator to implement best management practices to mitigate the problem.

Finding on the Public Land Health Standard for upland soils: The proposed action will not affect the soil type's ability to meet the Land Health Standard.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Location 33-1 and its access is located in a chained mixed pinyon-juniper Wyoming big sagebrush site that was burned in 1998 for hazardous fuels reduction. Location 3-1 is located in Pinyon-juniper woodland, the access road traversing basin big sagebrush (Foothill Swale range site) and Stony foothills range site before entering the pinyon-juniper woodland

Environmental Consequences of the Proposed Action: The proposed action at location 3-1 will substantially alter the existing basin big sagebrush and pinyon-juniper woodland plant communities at that site. The proposed action at 33-1, because it occurs in a previously

disturbed area will not have a meaningful negative impact. The overall impact of 3-1 and its access road is fragmentation of the existing native plant communities and on a broader scale, the landscape.

Environmental Consequences of the No Action Alternative: There will be no disturbance on the site(s).

Mitigation: Promptly recontour and revegetate all disturbed areas including access road cut and fill slopes with native seed mix #3.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The proposed action would not affect the potential for the vegetative communities in the area to meet the land health standard.

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 affected by the proposed action, or occurring within the project area.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment:

3-1 involves about 0.6 miles of new road construction that crosses several ephemeral draws as well as a small portion of state land. Vegetation varies from mature sagebrush near the county road to mature juniper with smaller amounts of young pinyon along parts of the road and pad. The pad elevation is approximately 6340 with a slight northwest aspect. Mature pinyon-juniper woodlands occur adjacently to the west-northwest. These woodlands were examined for raptor nests on 28 January 2004 with no nests observed. Likewise, the pad did not reveal the presence of raptor nests. Both pads are located within normal winter range for elk and mule deer, though access routes via county roads traverse several miles of severe winter range. Little recent big game use was observed in the project area.

33-1: The access road crosses a previously chained and burned area at 6600 feet elevation. Vegetation consists of young sagebrush and pinyon-juniper both along the road and on the pad. The pad has a slight northwest aspect. Little big game use was observed within the project area.

Environmental Consequences of the Proposed Action: The construction of this project will result in a long-term increase of road traffic associated with commercial oil/gas related activities. It will result in a net loss of sagebrush and young pinyon-juniper habitat of approximately 12.5 acres. The occupation 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. Much of the road construction considered new, in fact already extensively follows existing two-track roads (for Well #33-1 only). Therefore, avoiding the disturbance associated with this well 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 at the beginning of new road construction for both sites to preclude motorized traffic that can adversely impact big game. For Well #33-1, the gate shall be placed where new construction is initiated heading northeast from the existing two-track. For Well #3-1, the gate shall be placed at the junction of County Road 20 and where new road construction is initiated heading west-northwest towards the pad. Deposition of fill material into ephemeral draws due to road/pad construction shall be avoided.

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		

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Law Enforcement		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations		X	
Recreation			X
Socio-Economics		X	
Visual Resources			X
Wild Horses			X

FIRE MANAGEMENT

Affected Environment:

3-1: This proposed well involves approximately 0.61 miles of road construction and about 2.22 acres of drill pad clearing for an approximate total of 4.8 acres of disturbance in pinyon/juniper and mixed shrubs.

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.

33-1: The proposed actions would not be located in or go through significant pinyon/juniper stands.

Environmental Consequences of the Proposed Action:

3-1: Due to the existing tree cover of pinion and juniper, 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, the operator, and fire suppression personnel.

33-1: Locations proposed by this action are not located in or go through significant pinion/juniper and therefore will not create a dead fuel accumulation.

Environmental Consequences of the No Action Alternative: There would be no tree removal or disturbance to cause significant dead fuel loading.

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 scatters 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 3-1 is within an old growth pinyon/juniper stand. Pinyon and juniper are valuable to the local population as a source of firewood and fence posts. This site is considered as "commercial," meaning that this site produces sufficient quantities of preferred wood on suitable terrain to allow harvest. These acreages are within the commercial woodland harvest levels for the Piceance Geographic Reference Area (GRA), which allows removal of 25 acres/year by clearcut and 75 acres/year by selective harvest. Woodland acreage removed by commercial operations is considered within the Piceance harvest level. There are no trees associated with Well 33-1

Environmental Consequences of the Proposed Action: Under this alternative approximately 1 acre of commercial woodland would be removed by road construction, and 2 acres would be removed by pad construction. Following reclamation the woodland community would reestablish over a period of 30 to 50 years and reach old growth characteristics in 200-300 years. The wood removed is considered in the allowable harvest level for the Piceance GRA. Removal is 12% of the yearly allowable harvest.

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

Mitigation: From the White River ROD/RMP, Appendix B: All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off.

c. Chipped and scattered.

GEOLOGY AND MINERALS

Affected Environment: Proposed Wells # 3-1 and 33-1 would be located 1 ½ to 2 ½ miles, respectively, northwest of Natural Soda's Federal sodium lease COC-0118326 in the area identified in the ROD/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. 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 well pads and access roads would be located in an area mapped as the Uinta Formation (Tweto 1979) which the BLM has classified as a Category I fossil bearing formation.

Environmental Consequences of the Proposed Action: If it becomes necessary to excavate into the underlying bedrock formation to construct the road, level the pad or excavate the reserve/blooiie pit there is the 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 Acton Alternative.

Mitigation:

1. All exposed rock outcrops in the well pad and access road area shall be inventoried by an approved paleontologist with a report identifying any fossil that may be present with recommended mitigation before the initiation of construction.
2. If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the road, level the well pad or excavate the reserve/blooiie pit a paleontological monitor shall be present at all times.
3. 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 would be 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 significant dust. Cattle could enter and use the waste pits. The access road for 3-1 would cross the allotment boundary fence.

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

Mitigation: Fence the waste pits to BLM specifications, including corners to prevent cattle entry and use. Water the access roads as directed by the authorized officer for dust control. For location 3-1, install a cattleguard that meets BLM specifications and a sixteen foot wire or swinging gate next to it where the access road intersects allotment boundary fence in SWSW Sec. 2, T 1S, R 98W.

REALTY AUTHORIZATIONS

Affected Environment: A portion of the access route for 3-1, in T. 1 S., R.98 W. Section 2 is not within the lease boundary.

Environmental Consequences of the Proposed Action: The off-lease portion of the access road for 3-1 will require a right-of-way

Environmental Consequences of the No Action Alternative: None

Mitigation: Standard right-of-way stipulations for roads will be applied from the BLM right-of-way manual and the Conditions of Approval for the associated APD, and will be made part of the right-of-way grant.

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 13 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 disperse 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: Avoid construction during hunting seasons if possible.

VISUAL RESOURCES

Affected Environment: These wells are in an area classified as VRM Class 3. VRM Class 3 management allows for development as long as the development does not dominate the new landscape.

Environmental Consequences of the Proposed Action: Drill pads will be new disturbance that will comply with the guidelines for VRM Class 3 with mitigation as listed below.

Environmental Consequences of the No Action Alternative: No impacts.

Mitigation: Production facilities shall be painted Desert Brown or Juniper Green (Munsell Color Chart 10 YR 6/3) or equivalent, to match the surroundings. Areas not needed for production shall be reclaimed in a timely manner.

WILD HORSES

Affected Environment: The proposed action is within the Barcus-Pinto vicinity of the Piceance-East Douglas Wild Horse Herd Management Area. Barcus-Pinto is used by wild horses throughout the year.

Environmental Consequences of the Proposed Action: Construction of this project will result in increased road traffic. It will result in approximately 12.5 acres of native range forage and cover and will result in reductions of range habitat for wild horses.

Mitigation: Locked gates shall be placed at the beginning of new road construction for both sites to preclude motorized traffic that can adversely impact big game. For Well #33-1, the gate shall be placed where new construction is initiated heading northeast from the existing two-track. For Well #3-1, the gate shall be placed at the junction of County Road 20 and where new road construction is initiated heading west-northwest towards the pad. Deposition of fill material into ephemeral draws due to road/pad construction shall be avoided.

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

Mitigation: Locked gates shall be placed at the beginning of the new road construction for both sites. Fill material associated with road and pad construction will not be placed in ephemeral draws, or in close proximity to draws if there is risk that the fill can slide or erode into a draw.

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 or foreseeable development analyzed in the PRMP/FEIS.

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Carol Hollowed	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Glenn Klingler	Wildlife Biologist	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Mark Hafkenschiel	Range Management Spec.	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 Spec.	Vegetation
Scott Pavey	Planning and Environmental Coordinator	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Mark Hafkenschiel	Range Management Spec.	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Recreation Planner	Recreation
Chris Ham	Recreation Planner	Transportation
Max McCoy	Natural Resource Spec.	Visual Resources
Valerie Dobrich	Wild Horse Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2004-023-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, listed below, 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 the two gas wells (3-1 and 33-1) as described in the proposed action, with the mitigation measures listed 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. The operator will spread water on the road surfaces to control fugitive dust.

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. 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.
4. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.
5. Efforts need to be made to keep sediment from leaving the site.
6. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the location is abandoned. If well becomes a producing well, the topsoil pile will need to be seeded to reduce wind and water erosion. When topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile.
7. 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.
9. 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.
10. Eliminate undesirable berms that retard normal surface runoff.
11. If it becomes apparent that salts leaching from soils are becoming a problem on the surface (i.e. large salt deposits begin to appear), the operator will notify BLM. BLM will then coordinate with the operator to implement best management practices to mitigate the problem.
12. Promptly recontour and revegetate all disturbed areas including access road cut and fill slopes with native seed mix #3.
13. Locked gates shall be placed at the beginning of new road construction for both sites to preclude motorized traffic that can adversely impact big game. For Well #33-1, the gate shall be placed where new construction is initiated heading northeast from the existing two-track. For Well #3-1, the gate shall be placed at the junction of County Road 20 and where new road construction is initiated heading west-northwest towards the pad. Deposition of fill material into ephemeral draws due to road/pad construction shall be avoided.
14. 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 scatters 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.

15. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off.

c. Chipped and scattered.

16. All exposed rock outcrops in the well pad and access road area shall be inventoried by an approved paleontologist with a report identifying any fossil that may be present with recommended mitigation before the initiation of construction.

17. If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the road, level the well pad or excavate the reserve/blooiie pit a paleontological monitor shall be present at all times.

18. 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.

19. For location 3-1, install a cattleguard that meets BLM specifications and a sixteen foot wire or swinging gate next to it where the access road intersects allotment boundary fence in SWSW Sec. 2, T 1S, R 98W. Fence the waste pits to BLM specifications, including corners to prevent cattle entry and use. Water the access roads as directed by the authorized officer for dust control.

20. Standard right-of-way stipulations for roads will be applied from the BLM right-of-way manual and the Conditions of Approval for the associated APD will be made part of the right-of-way grant.

21. Avoid construction during hunting seasons if possible

22. Production facilities shall be painted Desert Brown or Juniper Green (Munsell Color Chart 10 YR 6/3) or equivalent, to match the surroundings. Areas not needed for production shall be reclaimed in a timely manner.

NAME OF PREPARER: *Samara Meagley*

NAME OF ENVIRONMENTAL COORDINATOR: *Scott Panning*

SIGNATURE OF AUTHORIZED OFFICIAL: *[Signature]*
Field Manager

DATE SIGNED: *2/26/04*

ATTACHMENTS: Map of the Location of the Proposed Action.