

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

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-053-EA

CASEFILE/PROJECT NUMBER (optional): COC-056873 (#2-7, #4-7), COC-010178 (#7-3)

PROJECT NAME: APD's #2-7, #4-7, & #7-3

LEGAL DESCRIPTION: T.1S, R.103W, SWSE sec. 7 (#2-7), SWSW sec.7 (#4-7), NWSE sec. 3 (#7-3), 6th P.M.

APPLICANT: Evergreen Operating Company

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The applicant proposes to develop three gas wells. This would include construction of access roads and well pads, drilling of wells, and installation of buried steel 4" pipelines for each well. The buried pipelines would parallel the routes of access roads, and the two associated right-of-ways would actually overlap. The associated surface disturbance for each well would be as follows: #2-7 (528' x 30'ROW access road-0.36 ac., 528' x 50'ROW pipeline-0.61 ac., well pad-1.5 ac.-total disturbance-**2.5 acres**), #4-7 (1584' x 30'ROW access road-1.1 ac., 1584' x 50'ROW pipeline-1.8 ac., well pad-1.5 ac.-total disturbance-**4.4 acres**), #7-3 (1584' x 30'ROW access road-1.1 ac., 1584' x 50'ROW pipeline-1.8 ac., well pad-1.4 ac.-total disturbance-**4.3 acres**). Total disturbance for the proposed action would be approximately **11.2 acres**. If wells are producers, areas not needed for production facilities would be contoured and seeded. If wells are non producers, wells would be plugged and surface areas would be contoured back to as near original contours as possible and seeded. Subsequent seeding may be required to establish sufficient vegetation for approval of final abandonment of location.

No Action Alternative: No gas wells would be developed. No access roads, well pads, or pipeline would be constructed.

NEED FOR THE ACTION: To address the proposed action of the 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: The entire White River RA has been designated as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II.

Environmental Consequences of the Proposed Action: The proposed action would result in short term, local impacts to air quality during construction, from fugitive dust being blown into the air.

Environmental Consequences of the No Action Alternative: Under the no action alternative, there would be no adverse affects on air quality.

Mitigation: Require dust abatement measures in the authorizing document.

CULTURAL RESOURCES

Affected Environment: 2-7-1S-103 well pad, access road and well tie pipeline: The proposed well pad and associated access road have been inventoried at the Class III (100%

pedestrian) level (MAC 2003, Compliance Dated 1/13/2004) with one historic artifact 5RB4717 located within the ten acre well block inventory area.

4-7-1S-103 well pad, access road and well tie pipeline: The proposed well pad and associated access road have been inventoried at the Class III (100% pedestrian) level (MAC 2003, Compliance Dated 1/13/2004) with no cultural resources identified along the access road route or well pad inventory blocks.

7-3-1S-103 well pad, access road and well tie pipeline: The proposed well pad and associated access road have been inventoried at the Class III (100% pedestrian) level (MAC 2003, Compliance Dated 1/13/2004) with no cultural resources identified along the access road route or well pad inventory blocks.

Environmental Consequences of the Proposed Action: 2-7-1S-103 well pad, access road and well tie pipeline: If all mitigation requirements are strictly adhered to there will be no new impacts to cultural resources from construction of this well pad and access road.

4-7-1S-103 well pad, access road and well tie pipeline: There will be no new impacts to known cultural resources from construction of this well pad and access road.

7-3-1S-103 well pad, access road and well tie pipeline: There will be no new impacts to known cultural resources from construction of this well pad and access road.

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

Mitigation: 2-7-1S-103 well pad, access and well tie pipeline: avoid Isolated Find 5RB 4717. All well pads, access roads and well tie pipelines: 1. 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.

2. 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/RECLAMATION: (This includes vegetation information related to Public Land Health Standard 3.)

Affected Environment: The proposed project is within the salt desert shrub and juniper woodland vegetation associations. The salt desert shrub soils are moderately deep and also derived from shale. This soil is saline which makes for difficult reclamation. The juniper woodland soils in this area are shallow and shale derived. Past reclamation efforts have included non-native species, which have performed well in soil stabilization.

The two noxious weeds found in this area are halogeaton and cheatgrass. Both of these species are found throughout the area. Halogeaton has the ability to rapidly colonize disturbed areas, but is easily controlled by successful revegetation. Cheatgrass is found throughout the area in all of the plant communities. This species can hinder reclamation because of its highly competitive nature. Non-native species have been shown to out-compete cheatgrass. Noxious weeds, such as knapweeds, transported on site by construction equipment and support vehicles would also be of concern.

Impact of Proposed Action: Using the proposed non-native seed mix would adequately stabilize soils. These species have not been shown to move off site or to interbreed with adjacent plant species.

With prompt control of any noxious weeds that occur on the project area there would not be any adverse impacts to the adjacent plant communities. Prompt reclamation would prevent cheatgrass and halogeaton from establishing.

Impact of No Action Alternative: There would be no impacts.

Mitigative Measures: Use Seed Mix #2 for reclamation. In accordance with Condition of Approval #179 from Appendix B of the White River ROD/RMP, application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

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: Although this action would represent an incremental and longer term reduction in the extent of sagebrush 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 rangelands would not occur at this time or place.

Mitigation: None.

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

Affected Environment: There are no threatened, endangered or sensitive animal species or habitat 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 Threatened & Endangered species: There are no threatened, endangered or sensitive animal species or habitat occurring within the project area. Thus, this standard is not applicable.

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

Affected Environment: There are no threatened, endangered or sensitive plant species 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 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. Thus there would be no effect on achieving the land health standard.

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: 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. Wells #2-7 and #4-7 are located in un-named tributaries to Cottonwood Creek and well #7-3 is in Shavetail Wash, all of which are tributary to the White River. These reaches are considered to be a Category 1, Priority 2, watershed (The Lower White) identified in the Unified Watershed Assessment report. In addition, the State has classified this reach as a "Use Protected" segment. Its designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated "use-protected". For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for three parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0 and Fecal Coliform = 2000/100ml.

Water quality data is not available for these upper reaches of Cottonwood Creek or Shavetail Wash. These segments of stream are considered to be ephemeral, which means they flow in direct response to winter snow melt and late summer/fall rainstorms. Water quality of precipitation is considered to be of good quality, but can be high is sediment depending on the magnitude and duration of the storm event.

Environmental Consequences of the Proposed Action: Fragile watersheds that have very high erosion potential (i.e. Cottonwood Creek) are frequently high in salts and can contribute to increased salinity loads to the White River and the Colorado River Basin. Annual runoff is dynamic and dependent on some aspects we control, such as the amount of vegetation retained for watershed protection and vegetation density. Depleting this vegetation cover needed to protect watersheds from raindrop impact and runoff could cause long-term erosion and water

quality problems for Cottonwood Creek and on downstream. Best management practices (BMPs) are needed to re-establish a protective vegetative cover and to collect sediment during runoff events.

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

Mitigation: Apply the following Conditions of Approval, (BMPs) listed in Appendix B, in the White River 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. For the interim, if the topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile. Once construction is completed, reclaim as much of the pad that is not needed for maintenance of the well facility.
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 on 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. Fill material associated with construction of this project shall not be deposited in ephemeral draws adjacent to two of these wells.

Finding on the Public Land Health Standard for water quality: Cottonwood Creek is well within the standards set by the State. The proposed action will not affect the standards.

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

Affected Environment: There are no wetlands or riparian zones within this 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: There are no wetlands or riparian zones within this project area and this standard is not applicable.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACECs, flood plains, prime and unique farmlands, wilderness areas, 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: Baseline soils data have been collected for Rio Blanco County by the NRCS and are published in an order III Soil Survey. This survey is available for review from the White River Field Office. The table below identifies soil characteristics for these soil types.

Proposed action	Soil Number	Soil Name	Slope	Range site	Salinity	RunOff	Erosion Potential	Bedrock
Eastern edge of Well #7-3	5	Badland	50-100%	None		Very rapid	Very high	0-10
Top west quarter of Well # 7-3	64	Piceance fine sandy loam	5-15%	Rolling Loam	<2	Medium	Moderate to high	20-40
Access road Well #7-3	70	Redcreek-Rentsac complex	5-30%	PJ woodlands/PJ woodlands	<2	Very high	Moderate to high	10-20
Well #4-7 and upper half of access road	74	Rentsac-Moyerson-Rock Outcrop complex	5-65%	PJ Woodlands/Clayey Slopes	<2	Medium	Moderate to very high	10-20
Well pad #2-7	75	Rentsac-Piceance complex	2-30%	PJ woodland/Rolling Loam	<2	Medium	Moderate to high	10-20

Typically, as much as 2% of the surface is covered with stones. The surface layer is a grayish brown channery loam about 5 inches thick. The next layer is a very channery loam about 4 inches thick. Sandstone is at a depth of 16 inches. The soils are calcareous throughout. Revegetation limitations for these soil types include an arid climate and droughty soil condition. Well #4-7 as well as the access road and well # 7-3 are on CSU-1, which indicates problems such as fragile soil, high salt concentrations, excessive erosion, or steep slopes. CSU-1 stipulation description states, surface-disturbing activities will be allowed only after the operator submits an engineered construction/ reclamation plan and approved by the Area Manager. The plan would address how soil productivity would be restored and how surface runoff would be treated to avoid accelerated erosion and mass wasting. Exceptions would be granted if after environmental analysis the proposed action did not fit the criteria identifying fragile soils on slopes greater than 35% or the disturbance would not result in any long-term decrease in site productivity or increased erosion.

Environmental Consequences of the Proposed Action: General impacts associated with oil and gas and road development include but are not limited to, loss of topsoil, soil compaction and possible increase in sediment loads to the White River. The primary surface-disturbing impact would be a potential increase in sediment transport from runoff events after the protective vegetative cover has been removed.

Because the road and well pads for #4-7 and #7-3 are located in an area that has been identified as CSU-1, it is important to recognize the increased erosion potential and design best management practices (BMPs), which will minimize this erosion. The proposed actions are not on slopes greater than 35%, but are on areas that are highly saline and based on the way they are designed it will make a difference to erosion potential. By submitting a copy of the Stormwater Discharge Plan, which is required by the State (Stormwater Discharge Permit) identifying how BMPs will be used to reduce stormwater discharge and erosion off of the roads, could be used to replace the required construction/reclamation plan.

BMPs used to slow runoff, trap sediment and prepare reclaimed areas for seeding would also help reduce soil loss. With an explanation of how these BMPs will be used and implementation of these BMPs, impacts are expected to be short in duration, during the construction phase and for a short time after construction until successful reclamation is achieved.

Environmental Consequences of the No Action Alternative: Impacts are not anticipated from not permitting the proposed action.

Mitigation: The applicant will submit a copy of the Stormwater Discharge Plan, which is required by the State (Stormwater Discharge Permit) identifying how BMPs will be used to reduce stormwater discharge and erosion off of the roads, to replace the required construction/reclamation plan. Use Standard Seed mix # 2 for the range sites identified. In addition, the following Condition of Approvals (COAs) from Appendix B, White River ROD/RMP should be applied.

96. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

97. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.

98. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff

Finding on the Public Land Health Standard for upland soils: The soils associated with the proposed action are and will continue to be within the criteria of standard 1 for Public Land Health Standards.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The project area is primarily salt desert shrub with junipers growing on ridgetops. These salt desert shrub vegetation associations are on sites with relatively clayey soils, high salt content and relatively low precipitation 10-12 inches. Junipers are found on shallow, rocky soils primarily ridge tops.

Environmental Consequences of the Proposed Action: Following reclamation these vegetation sites have relatively good success at establishment of perennial vegetation cover. The salt desert shrub type should be adequately reclaimed in 3-5 years with the native community dominating within 20 years. The juniper woodland would establish cover suitable for soil retention within 3-5 years and initial establishment of junipers in 15-20 years. Development of a late seral community would take 150-200 years.

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

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The above described plant communities meet the standards for plant health. This status will not change with the proposed action.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There is no aquatic wildlife within this 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 within this project area. Thus, this standard is not applicable.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: #2-7-1S-103: This well is located immediately adjacent to an existing road in vegetation consisting of sagebrush and shadscale. The terrain is level and rocky at an elevation of 5712 feet. No substrates exist to support raptor nests. This well is located in normal winter range for mule deer and extensive big game use was evident (signs of use/grazing).

#4-7-1S-103: This site involves the construction of 0.3 miles of road across a landscape dominated by sagebrush, prickly pear cactus, forbs and a small patch of yucca (15'x30'). The

road crosses an ephemeral draw before arriving at the pad located in sagebrush and young juniper at an elevation of 5668 feet. The location has a northern aspect and also showed signs of big game use. No raptor nests were observed in the nearby rimrock cliffs. This road and pad also is located within normal winter range for mule deer.

#7-3-1S-103: This location involves a ¼ mile of new road through young pinyon-juniper woodlands to a pad located in sagebrush with mixed young pinyon-juniper at an elevation of 6077 feet. A prominent, pinyon-juniper-filled canyon exists within 0.1 miles southeast of this location. No raptor nests were observed during a field examination, though nest potential in this area is high. Greater sage-grouse use has been documented approximately ½ mile south of this proposed location in 1987, though no recent use has been observed.

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 pinyon-juniper habitat of approximately 11.2 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, as well as an increase in the disturbance from additional road traffic. Additionally, it will result in an increased activity in an area (#7-3-1S-103) holding high potential for nesting by raptors.

Environmental Consequences of the No Action Alternative: Failure to construct this well package would reduce short-term construction activity levels in this area as well as longer term activity associated with increased road traffic related to commercial oil/gas development. No net loss of sagebrush and pinyon-juniper habitat would occur at this time or place.

Mitigation: While it's acknowledged that the existing terrain (flat terrain with sagebrush) is problematic in limiting motorized vehicle use, efforts to preclude this access through use of a locked gate shall be attempted in a geographically practical site for Wells #4-7-1S-103 and #7-3-1S-10 at the nearest practical point of origin of new road construction to avoid disturbance to big game. The #4-7-1S-103 site in particular has plans for a second spur road and well coming off this access road. Limiting access will thus apply to an additional road and well in the future. Additionally, the access road to this well, as flagged in the field, approaches, but avoids a small patch of yucca plants. The road shall be constructed to avoid damaging these plants.

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. This public land health standard will thus be met.

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
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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: All well pads, pipelines, and access roads will be within areas where motorized vehicle traffic is limited to existing roads from October 1 to April 30 each year. Off-road motorized vehicle travel is allowed May 1 to September 30 so long as no resource damage occurs as a result of cross-country travel.

Environmental Consequences of the Proposed Action: With the construction of new oil/gas access roads, the potential increases for recreational traffic in addition to normal oil/gas operation traffic. As with the increase in any recreational use, previously inaccessible areas will become accessible which may lead to an increase of motorized travel.

Environmental Consequences of the No Action Alternative: None.

Mitigation: See mitigation section for terrestrial wildlife.

FOREST MANAGEMENT:

Affected Environment: The access road for Well #7-3-1-103 is located in a stand of Utah junipers. This stand is relatively old but because of austere growing conditions are of short stature. These trees can be used for firewood and fence posts, but because of the difficulty in harvesting these trees, little use is made. The other wells are not within woodlands.

Impact of Proposed Action: Junipers would be removed during construction of the well pad and access road. Following reclamation, junipers would reestablish on the site over a period of thirty years and develop a climax stand in approximately 200 years.

Impact of No Action Alternative: There would be no impacts.

Mitigative Measures: As described in the APD.

GEOLOGY AND MINERALS

Affected Environment: The surface geologic formation of the well locations is Green River and Evergreen's targeted zone is in the Mancos. During drilling potential water, coal, oil and gas zones will be encountered from surface to the targeted zone. These wells are located on existing Federal Oil and Gas leases COC-10178 and COC-56873.

Environmental Consequences of the Proposed Action: Cementing procedure of the proposed actions isolates the formations and will prevent the migration of gas, water, and oil between formations. The coal zones located the Mesaverde will also be isolated during this procedure. 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: 2-7-1S-103 well pad, access road and well tie pipeline: The proposed well pad, access road and well tie pipeline appear to be located on the Lower Green River in the Douglas Creek Component (Tweto 1979). The Douglas Creek component has been classified by the BLM as a Category II formation meaning its fossil bearing potential is poorly understood in this area. However, recent monitoring in the area has resulted in the location of fish fossils that are not yet typed out (Bilby 2004) suggesting that more fossils may be present.

4-7-1S-103 well pad, access road and well tie pipeline: The proposed well pad, access road and well tie pipeline appear to be located on the Lower Green River in the Douglas Creek Component (Tweto 1979). The Douglas Creek component has been classified by the BLM as a Category II formation meaning its fossil bearing potential is poorly understood in this area. However, recent monitoring in the area has resulted in the location of fish fossils that are not yet typed out (Bilby 2004) suggesting that more fossils may be present.

7-3-1S-103 well pad, access road and well tie pipeline: This well pad, access road and well tie pipeline appear to be located in the Wasatch formation which the BLM has classified as a Category I formation meaning it is known to produce scientifically important fossil resources.

Environmental Consequences of the Proposed Action: 2-7-1S-103 well pad, access road and well tie pipeline: Because the fossil bearing potential for the Douglas Pass member of the lower Green River formation is poorly understood it is unknown if construction of the well pad

or excavation of the reserve/blooiie pit will impact scientifically important fossils or not. The potential for impacting fossils cannot be ruled out.

4-7-1S-103 well pad, access road and well tie pipeline: Because the fossil bearing potential for the Douglas Pass member of the lower Green River formation is poorly understood it is unknown if construction of the well pad or excavation of the reserve/blooiie pit will impact scientifically important fossils or not. The potential for impacting fossils cannot be ruled out.

7-3-1S-103 well pad, access road and well tie pipeline: Due to the known potential for the Wasatch formation to produce scientifically important fossil resources it is highly likely that important fossil resources could be impacted or destroyed during construction if the well pad, access road or excavation of the reserve/blooiie pit should excavation into the underlying bedrock be necessary.

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

Mitigation: 2-7-1S-103 well pad, access road and well tie pipeline: if it becomes necessary to excavate into the underlying bedrock formation to level the road, pad, bury the well tie pipeline or excavate the reserve blooiie pit a paleontologist shall be present to monitor the excavations for the presence of fossil resources in order to gain a better understanding of the formations fossil potential.

4-7-1S-103 well pad, access road and well tie pipeline: if it becomes necessary to excavate into the underlying bedrock formation to level the road, pad, bury the well tie pipeline or excavate the reserve blooiie pit a paleontologist shall be present to monitor the excavations for the presence of fossil resources in order to gain a better understanding of the formations fossil potential.

7-3-1S-103 well pad, access road and well tie pipeline: All exposed outcrops of the Wasatch in the access road and well pad area must be inventoried by an approve paleontologist and a report with the results of the inventory and recommended mitigation submitted to the BLM prior to the initiation of construction. All excavation into the underlying bedrock formation to level the pad or road, bury the well tie pipeline and excavate the reserve/blooiie pit shall be monitored by an approved paleontologist.

RANGE MANAGEMENT:

Affected Environment: The proposed project is within the Banta Flats allotment. This allotment is grazed by sheep during the winter and spring.

Impact of Proposed Action: The proposed project would remove one animal unit month (AUM) of important forage for livestock during the life of the project. Halogeaton was discussed in the noxious weed section. This weed is highly toxic to sheep. If disturbed soils are reclaimed promptly there would not be a problem with this weed. Using sheep wire on all pits would prevent access to livestock.

Impact of No Action Alternative: There would be no adverse impacts.

Mitigative Measures: The operator will install sheep wire fencing to prevent livestock from accessing all constructed pits. Also, in accordance with Condition of Approval #181 from Appendix B of the White River ROD/RMP, reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions shall be initiated within six months of the termination of operations unless otherwise approved in writing by the Authorized officer.

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 12 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: The proposed actions are located within a VRM class II (#2-7, #4-7) and class IV (#7-3) areas. The objective of the VRM II classification is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. The objective of the VRM IV classification is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Environmental Consequences of the Proposed Action: The proposed action for the locations of #2-7 & #4-7 is on an extensive bench between Cottonwood Creek and Gilsonite Draw. The route most frequently traveled by a casual observer would be on the road in Cottonwood Creek. Neither location would be visible from Cottonwood Creek and would not

attract attention. By painting all production equipment Juniper Green to mimic the surrounding vegetation in color and form, the level of change to the characteristic landscape would be low. The standards of the VRM II classification would be retained. The proposed action for #7-3 is on a finger of land off Banta Ridge in a stand of pinyon/juniper trees. The route most frequently traveled by a casual observer would be the road along Banta Ridge. The proposed well location would be in the stand of trees and not visible except when traveling the access road to the well pad. By painting all production equipment Juniper Green to mimic the surrounding vegetation in color and form, the level of change to the characteristic landscape would be low. The standards of the VRM IV classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no additional environmental consequences from the no action alternative.

Mitigation: Use low profile production facilities and paint all production equipment Juniper Green.

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
Caroline 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
Robert Fowler	Forester	Invasive, Non-Native Species
Glenn Klingler	Wildlife Biologist	Migratory Birds
Glenn Klingler	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Marty O'Mara	Petroleum Engineer	Wastes, Hazardous or Solid
Caroline Hollowed	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Glenn Klingler	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Caroline Hollowed	Hydrologist	Soils
Robert Fowler	Forester	Vegetation
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Robert Fowler	Forester	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

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

CO-110-2004-053-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 development of wells #2-7, #4-7, and #7-3 as described in the proposed action with mitigation measures listed below.

MITIGATION MEASURES:

1. Require dust abatement measures in the authorizing document.

2. #2-7-1S-103 well pad, access and well tie pipeline: avoid Isolated Find 5RB 4717. All well pads, access roads and well tie pipelines: 1. 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.

3. Use Seed Mix #2 for reclamation.

4. In accordance with Condition of Approval #179 from Appendix B of the White River ROD/RMP, application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

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

6. Apply the following Conditions of Approval, (BMPs) listed in Appendix B, in the White River RMP to help minimize surface disturbing impacts: When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation. For the interim, if the topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile. Once construction is completed, reclaim as much of the pad that is not needed for maintenance of the well facility.

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 on 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. Fill material associated with construction of this project shall not be deposited in ephemeral draws adjacent to two of these wells.

11. The applicant will submit a copy of the Stormwater Discharge Plan, which is required by the State (Stormwater Discharge Permit) identifying how BMPs will be used to reduce stormwater discharge and erosion off of the roads, to replace the required construction/reclamation plan. Use Standard Seed mix # 2 for the range sites identified. In addition, the following Condition of Approvals (COAs) from Appendix B, White River ROD/RMP should be applied.

12. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

13. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.
14. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff
15. While it's acknowledged that the existing terrain (flat terrain with sagebrush) is problematic in limiting motorized vehicle use, efforts to preclude this access through use of a locked gate shall be attempted in a geographically practical site for Wells #4-7-1S-103 and #7-3-1S-10 at the nearest practical point of origin of new road construction to avoid disturbance to big game.
16. #4-7-1S-103 site in particular has plans for a second spur road and well coming off this access road. Limiting access will thus apply to an additional road and well in the future. Additionally, the access road to this well, as flagged in the field, approaches, but avoids a small patch of yucca plants. The road shall be constructed to avoid damaging these plants.
17. #2-7-1S-103 well pad, access road and well tie pipeline: if it becomes necessary to excavate into the underlying bedrock formation to level the road, pad, bury the well tie pipeline or excavate the reserve blooie pit a paleontologist shall be present to monitor the excavations for the presence of fossil resources in order to gain a better understanding of the formations fossil potential.
18. #4-7-1S-103 well pad, access road and well tie pipeline: if it becomes necessary to excavate into the underlying bedrock formation to level the road, pad, bury the well tie pipeline or excavate the reserve blooie pit a paleontologist shall be present to monitor the excavations for the presence of fossil resources in order to gain a better understanding of the formations fossil potential.
19. #7-3-1S-103 well pad, access road and well tie pipeline: All exposed outcrops of the Wasatch in the access road and well pad area must be inventoried by an approved paleontologist and a report with the results of the inventory and recommended mitigation submitted to the BLM prior to the initiation of construction. All excavation into the underlying bedrock formation to level the pad or road, bury the well tie pipeline and excavate the reserve/blooie pit shall be monitored by an approved paleontologist.
20. The operator will install sheep wire fencing to prevent livestock from accessing all constructed pits. Also, in accordance with Condition of Approval #181 from Appendix B of the White River ROD/RMP, reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions shall be initiated within six months of the termination of operations unless otherwise approved in writing by the Authorized officer.
21. Use low profile production facilities and paint all production equipment Juniper Green.

