U.S. Department of the Interior
Bureau of Land Management
Glenwood Springs Field Office
50629 Highway 6 & 24
PO Box 1009
Glenwood Springs, CO 81602

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-140-2005-135 EA

CASEFILE NUMBER: C-2799

PROJECT NAME: Application for Permit to Drill; RWF 342-21, RWF 442-21

LEGAL DESCRIPTION:

RWF 342-21
Surface - 1531'FNl x 727'FEL, SENE Sec 21 T6S R94W.
Production Zone – 1945'FNL x 530'FEL, Sec 21 T6S R94W.

RWF 442-21
Surface - 1516' FNL x 727'FEL, SENE Sec21 T6S R94W.
Production Zone - 2402'FNL x 249'FEL, SENE Sec21 T6S R94W.

APPLICANT: Williams Production RMT.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Proposed Action:

Williams Production RMT proposes to directionally drill the above-described wells into Federal Lease C-2799. Both wells will be drilled on the existing RMV 139-21 (drilled May 2002). The surface is owned by Bill Clough.

Federal Lease C-2799 (dated 1955) carries no lease stipulations or lease notices.

Pad size is platted at 300' x 180'. Proposed disturbed area is 1.6 acres. Production facilities will be located on the existing pad. Pad size will not be enlarged from the area of disturbance associated with the original well drilling activity.

The pad is adjacent to a graveled road rising rapidly through open pinyon/juniper to gas wells on the mesa above. Bare rocky cliffs are directly north and across a drainage from the proposed pad.

The location is within the planning area of the Wheeler to Webster Geographic Area Plan.

No Action Alternative: The proposed action involves federal subsurface minerals that are encumbered with federal oil and gas leases, which grants the lessee a right to explore and develop the lease. The no action constitutes denial of the proposed action and could be used to prevent unnecessary and undue degradation. Absent a non-discretionary statutory prohibition against drilling, BLM cannot deny the right to drill and develop the leasehold. Only Congress can completely prohibit development activities (Western Colorado Congress, 130 IBLA 244, 248 (1994), citing Union Oil Co. of California v. Morton, 512 F.2d 743, 750-51 (9th Cir. 1975). For this reason, the No Action alternative has been considered but eliminated.

NEED FOR THE ACTION: The purpose and need is to authorize the Application for Permit to Drill (APD) to satisfy federal lease obligations that will in turn provide natural gas for commercial marketing to the public.

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: Glenwood Springs Resource Management Plan.

Date Approved: Amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; and amended in September 2002 – Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance.

Decision Number/Page: The proposed action is located on leases in area designated Open for oil and gas leasing in 1984 in the Glenwood Springs Resource Management Plan (page 14 and map 4).

Decision Language: The FSEIS described the environmental effects, including the cumulative effects, of oil and gas development, but did not authorize the construction of any individual well locations. This EA is more site-specific than the FSEIS and includes the results of the on-the-ground inventories for cultural resources and special status plant and animal species, if appropriate. This EA tiers to both the DSEIS and FSEIS and the information in the FSEIS is incorporated by reference. The EA will focus on specific issues and will not deal with the larger regional issues addressed in the FSEIS. The proposed action has been reviewed for and is in compliance with the FSEIS (43 CFR 1610.5, BLM 1617.3) - Page or Decision Number: Pages 1-5, Record of Decision dated March 24, 1999.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. The five 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.

The Glenwood Springs Field Office is in the ongoing process of completing Land Health Assessments on a landscape basis. The Rifle-West Land Health Assessment was completed on the lands affected by the actions addressed in this EA in 2004 and the Report and Determination Document were signed on August 31, 2005. The findings indicate that the area surrounding the proposed action was not meeting the Land Health Standard 3 for healthy plant and animal communities. The primary factor involved in the failure to achieve the standard is habitat loss and fragmentation due to activities and facilities associated with natural gas development. Based on the findings of the assessment, the authorized officer may take appropriate action to achieve conformance with the standards or implement mitigating measures to maintain or prevent a further decline in land health.

The impact analysis must address whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or further deteriorate land health conditions for that specific parameter. These analyses are located in specific elements listed below:

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The proposed action area (Garfield County) has been described as an attainment area under CAAQS and NAAQS (Colorado Ambient Air Quality Standards and National Ambient Air Quality Standards). An attainment area is an area where ambient air pollution amounts are determined to be below NAAQS standards. For further details, refer to the Draft Roan Plateau RMPA EIS, page 3_20-22.

Environmental Consequences/Mitigation: The Draft Roan Plateau EIS, pages 4_31-4_48, describes potential effects from oil and gas development. Analysis was completed with regard to greenhouse gas emissions, a near-field and far-field analysis for carbon monoxide, particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide, hazardous air pollutants including: benzene, ethylbenzene, formaldehyde, hydrogen sulfide, toluene, and xylenes. Sulfur and nitrogen deposition analysis, acid neutralizing capacity, and visibility screening-level analysis were also completed in the Draft EIS. Findings indicate that no adverse long term effects would be realized under the Draft Roan Plateau EIS plan. It is anticipated that the proposed action in this document would not likely produce adverse effects to air quality when compared to the Roan Plateau plan.

However, truck traffic during the initial rig-up, well completion, rig-move, and production activities would likely produce high levels of dust in dry conditions without dust abatement.

- Emissions of particulate matter will be reduced through control of dust during construction and completion, and production activities. The operator will water the road and/or use magnesium chloride for dust abatement or other approved surfactant by the authorized officer.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: There are no Areas of Critical Environmental Concern within the proposed action area.

CULTURAL RESOURCES

Affected Environment: One cultural resource inventory (GSFO# 1195-5) was conducted for the existing RMV 139-21 well location. One historic property was identified eligible for listing on the National Register of Historic Places. A field inspection of the proposed action and existing well location by the BLM archaeologist indicated that the site was still intact and is still eligible for listing on the NRHP. Construction activities from the existing well and access road avoided the site.

Environmental Consequences/Mitigation: The historic property identified during the RMV 139-21 well location was adequately avoided and construction for the two new wells will be within the existing footprint of the existing well and the site will again be avoided, no direct impacts are anticipated. Therefore, formal consultation was not initiated with the Colorado State Historic Preservation; and a determination of "No Historic Properties Affected" was made based upon results of the inventory, the BLM/SHPO National and Colorado Protocols (1997 and 1998) and National Historic Preservation Act (16 U.S.C. 470f). However, indirect long term cumulative impacts from increased access and personnel could result in a range of impacts to known and undiscovered cultural resources in the vicinity of the location, from illegal collection and excavation to vandalism.

The importance of the Education/Discovery Stipulation needs to be stressed to Williams and their subcontractors informing them of their responsibilities to protect and report any cultural resources encountered on public land during operations under this permit.

Mitigation: All construction activity and staging is restricted to the north side of the existing road.

A standard Education/Discovery Condition of Approval for Cultural Resource protection will be attached to the APDs.

ENVIRONMENTAL JUSTICE

Affected Environment: Review of 2001 data from US Census Bureau indicates the median annual income of Garfield County averages $43,560 and is neither an impoverished or wealthy

county. Median annual income of Eagle County averages $51,578 and is not impoverished but is considered a wealthy county. U.S. Census Bureau data from July, 2002 shows the minority population of Garfield and Eagle County comprises less than 3 % of the total population[1].

Garfield County		Eagle County	
Median Household Income		Median Household Income	
Estimate	90% Confidence Interval	Estimate	90% Confidence Interval
$43,560	$40,491 to $46,613	$51,578	$47,958 to $55,177

Environmental Consequences/Mitigation: The proposed action and alternatives are not expected to create a disproportionately high and adverse human health impact or environmental effect on minority or low-income populations within the area.

FARMLANDS, PRIME AND UNIQUE

Affected Environment: The proposed action does not involve any prime or unique farmlands.

FLOODPLAINS

Affected Environment: The proposed action is not in a flood plain

INVASIVE, NON-NATIVE SPECIES

Affected Environment: No noxious weed surveys have been conducted on the existing well pad since it was originally a fee-fee well location permitted by the Colorado Oil and Gas Conservation Commission. The noxious weed, cheatgrass, is known to occur in the vicinity, and may be a dominant component of the herbaceous vegetation.

Environmental Consequences: Surface-disturbing activities provide an opportunity for the invasion and establishment of noxious weeds, particularly when noxious weeds are already present in the vicinity. Since this well pad is on private land, the private landowner would ultimately determine the seed mix to be used for reclamation.

Mitigation: The APDs and COAs include a BLM recommended seed mix designed to stabilize the site, deter the invasion of noxious weeds, and provide big game winter habitat. In addition, a COA is attached requiring the operator to monitor for the presence of any Garfield County or State-listed noxious weeds at least once each year during the growing season for the life of the wells.

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[1] **Table CO-EST2002-ASRO-02-08-County Population Estimates by Race Alone and Hispanic or Latino Origin: July 1, 2002**
Source: Population Division, U.S. Census Bureau
Release Date: September 18, 2003
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Given that cheatgrass is already common within the project area, it may not be possible to totally eliminate this noxious weed upon revegetating the unused portion of the pad and road. The project proponent will be required to promptly treat and eradicate any noxious weeds that invade the disturbed areas. This will apply to all noxious weeds other than cheatgrass. In the case of cheatgrass, reclamation will be considered acceptable if cheatgrass and other undesirable vegetation is less than 5 percent of the cover if the adjacent vegetation is less than 50 percent undesirables and cheatgrass will be less than 50 percent if the adjacent vegetation is more than 50 percent undesirables (1999 DSEIS).

A Pesticide Use Proposal must be approved by BLM prior to commencing any herbicide spraying.

MIGRATORY BIRDS

Affected Environment: The existing well pad is surrounded by pinyon-juniper woodlands interspersed with some shrubs, grasses, and forbs. Rock cliffs are also located in the vicinity of the existing well pad. Given the diverse vegetation and habitat, the project area provides cover, forage, and nesting habitat for a variety of migratory bird species. A few species listed on the U. S. Fish and Wildlife Service's Birds of Conservation Concern list may be present. Within the pinyon-juniper woodlands, the gray vireo, black-throated gray warbler, and pinyon jay may reside. All of these birds are tree nesters. No raptors are known to nest directly near the existing well pad. A golden eagle nest is located within 2 miles of the pad. These and other raptors likely forage in the project area.

Environmental Consequences/Mitigation: The proposed action calls for the drilling of two directional wells from an existing private surface location into federal mineral estate. The pad will be reentered for new drilling but will not be enlarged from the area of initial disturbance so no additional habitat loss will result. Drilling and completion work will likely displace birds to adjacent habitats due to human presence and associated noise and commotion.

NATIVE AMERICAN RELIGIOUS CONCERNS

Affected Environment: At present, no Native American concerns are known by the GSFO within the project area and while one historic property was identified during the inventory it has been adequately avoided. The Ute Tribes claim the area as part of their ancestral homeland. If new data is disclosed by the Ute Tribes, new terms and conditions may have to be negotiated to accommodate their concerns.

Environmental Consequences/Mitigation: Same as Cultural Section.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes an analysis on Standard 4)

Affected Environment: According to the latest species list from the U. S. Fish and Wildlife Service, the following federally listed and candidate species may reside or be impacted by

actions occurring in Garfield County: bald eagle, Canada lynx, Mexican spotted owl, black-footed ferret, Uinta Basin hookless cactus, Parachute beardtongue, DeBeque phacelia, yellow-billed cuckoo, razorback sucker, Colorado pikeminnow, bonytail chub, and humpback chub.

Specific to the project location, no federal or state listed species, or federal proposed or candidate species or their habitat reside in the project area. The BLM Sensitive plants, DeBeque milkvetch (*Astragalus debequaeus*) and Roan Cliffs stickleaf (*Mentzelia rhizomata*) are known to occur within 1-1.5 miles of the project area.

DeBeque milkvetch
The DeBeque milkvetch is a Colorado endemic found in the Colorado River Valley between DeBeque and Rifle. The habitat consists of varicolored, fine textured, seleniferous, saline soils of the Wasatch Formation-Atwell Gulch Member. This species of milkvetch is found at elevations ranging from 5,100 to 6,400 feet.

Roan Cliffs stickleaf
The Roan Cliffs stickleaf is a recently described species found only in Garfield County on steep, eroding talus slopes of the Green River shale formation. The species is found at elevations between 5,800 to 9,000 feet.

Environmental Consequences/Mitigation: Due to the lack of occurrences or potential habitat, the proposed action should have **"**No Effect**"** to any listed species or their habitats.

Potential habitat for the DeBeque milkvetch is found in the project area, and it is possible this species occurs there. No surveys were done for the existing pad since the surface and minerals for the existing well are both privately owned. Since the proposed action does not involve any new surface disturbance, there should be no additional impacts to DeBeque milkvetch. The project area does not contain any Green River formation substrate, therefore, it does not provide suitable habitat for the Roan Cliffs milkvetch.

Analysis on the Public Land Health Standard for Threatened & Endangered species: Because no new habitat loss will result, the proposed action should not result in a failure of the area to meet Standard 4 and should not result in a trend away from meeting the standard.

WASTES, HAZARDOUS OR SOLID

Affected Environment: All wastes will be managed in accordance with the applicable Oil and Gas regulations and On-Shore Orders.

WATER QUALITY, SURFACE AND GROUND (includes an analysis on Standard 5)

Affected Environment: The proposed action would take place within the Colorado River Watershed, west of Rifle, Colorado. This section of the Colorado River is classified as aquatic life cold class 1, recreation class 1a, water supply and agriculture. The proposed action lies over one mile northwest of the Colorado River and approximately 0.87 miles southwest of an unnamed intermittent or ephemeral drainage the drains into the Colorado River to the south.

The state of Colorado has developed the 303(d) list which identifies impaired water bodies, waters not meeting water quality standards with technology based controls alone. No streams within the proposed action watershed area are known to be listed on the 303(d) list; suggesting water quality standards are currently being met.

Environmental Consequences/Mitigation: The proposed action would likely disturb soils and vegetation in a localized area. Sediment flow from the site during a thunderstorm or during runoff would not likely reach any natural drainage. Mitigation for water quality is not recommended or required, although reclamation of the site is necessary to protect soils following implementation of the proposed action (see vegetation section of this document and attached conditions of approval).

Analysis on the Public Land Health Standard for water quality: The proposed action would not likely prevent land health standards for water quality from being met.

WETLANDS & RIPARIAN ZONES (includes a analysis on Standard 2)

Affected Environment: The Proposed Action and alternatives are not located within wetlands or riparian zones.

WILD AND SCENIC RIVERS

Affected Environment: There are no un-studied rivers, rivers found to eligible or designated Wild and Scenic Rivers within the proposed project area.

WILDERNESS

Affected Environment: There are no designated Wilderness areas, Wilderness Study Areas or citizens proposed wilderness areas within the proposed project area.

NON-CRITICAL ELEMENTS

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

SOILS (includes a analysis on Standard 1)

Affected Environment: The proposed action covers one soil map unit. The description below is summarized from the Soil Survey of Rifle Area, Colorado (SCS 1977).

- Ildefonso-Lazear complex (6 to 65% slopes) is a highly variable complex with sloping to very steep soils on hillsides and mesa breaks. The Ildefonso portion is deep and well drained with medium surface runoff characteristics and moderate erosion hazards. The Lazear portion is described as a shallow soil that covers shale bedrock. The surface runoff is described

as rapid and erosion hazard is severe. These soils are used primarily for wildlife habitat and grazing.

Environmental Consequences/Mitigation: The proposed action, as described above, would disturb soils that have previously been subject to reclamation. Should localized thunderstorms occur during construction, Williams would be responsible to prevent undue soil erosion from occurring. The proposed action is less than 5 acres in size, and under current EPA rules, stormwater permits are not required. Refer to the vegetation section for reclamation seed mix details that would help stabilize soils following the proposed action.

Analysis on the Public Land Health Standard for upland soils: The proposed action would not likely prevent standards for soils from being met.

VEGETATION (includes an analysis on Standard 3)

Affected Environment: Vegetation at the proposed project area is sagebrush/salt desert shrub with scattered Utah juniper trees.

Environmental Consequences/Mitigation: The planned disturbed area would lie entirely within the previous surface disturbance of the original pad. The proposed action would result in a short-term loss of vegetation in the temporary disturbed areas and a long-term loss of vegetation on the portions of the pads needed for ongoing production activities.

Although the private surface landowner would ultimately determine the seed mix to be used for reclamation, the APDs and COAs include a BLM-recommended seed mix designed to stabilize the site, deter the invasion of noxious weeds, and provide big game winter habitat.

Mitigation: With implementation of reclamation practices, including reseeding the site with native perennial vegetation and promptly controlling noxious weeds, establishment of desirable herbaceous vegetation on the sites can be expected within 2-3 years following completion of drilling. Establishment or recruitment of shrub species may take from 2-10 years or more depending upon whether shrubs are included in the seed mix. Monitoring of the reclamation would occur as identified in COAs.

The pad will be fenced to exclude livestock grazing until the seeded species are established and firmly rooted and at least 50% of seeded species are reproducing. (This will require a minimum of two growing seasons but may take longer depending on site-specific conditions.)

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The lands included in the project were part of the Rifle West Land Health Assessment conducted in 2004. The Report and Determination Document, signed on August 31, 2005, indicate that portions of the landscape are not meeting standards due to dominance by cheatgrass, hedged and decadent sagebrush, encroachment of pinyon-juniper into sagebrush parks and fragmentation of the landscape due to oil and gas development.

The proposed action would result in no additional loss of vegetation and would not contribute to a further decline in land health. Proper and timely reclamation may actually create a slight trend toward meeting the standard on a localized scale.

WILDLIFE, AQUATIC (includes an analysis on Standard 3)

Affected Environment: The existing well pad is not located directly near any perennial water sources capable of harboring aquatic wildlife. The Colorado River is located approximately 1 mile to the southeast. The Colorado River in the vicinity of the proposed action contains a variety of fishes and aquatic insects.

Environmental Consequences/Mitigation: The existing pad will be redisturbed to accommodate new directional wells. The terrain is relatively flat and erosion and sedimentation potential should be minimal. Assuming adequate site reclamation, no impacts to aquatic wildlife are anticipated.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): A formal Land Health Assessment was completed for the area in 2004. The area was not specifically looked at with regard to Standard 3 for aquatic wildlife due to a lack of perennial water anywhere in the vicinity, and the surface being private. Regardless, the proposed action should have little bearing on the watersheds future ability to meet Standard 3 for aquatic wildlife.

WILDLIFE, TERRESTRIAL (includes an analysis on Standard 3)

Affected Environment: The existing well pad is located near pinyon-juniper woodlands with a grass and forb understory. Given the vegetation at the site, the project area provides habitat for a variety of big game, small game, and non-game mammals, birds, and reptiles. The area is mapped as crucial big game winter range.

Environmental Consequences/Mitigation: General impacts (short term, long term, and cumulative) to terrestrial wildlife were adequately addressed in the 1999 FSEIS. The proposed action will not result in any additional habitat loss as the access road and well pad already exist. Standard measures are incorporated into the APD along with other measures (i.e., automatic well reporting, and reclamation) to conform to the FSEIS that will help to mitigate some wildlife impacts. Public access and use of the new access road is not available due to the private surface ownership. This will reduce the amount of effective habitat loss. Although the area is mapped as crucial big game winter range, the federal lease contains no big game winter timing limitation. As such, any drilling that occurs during the winter will likely displace animals from preferred habitats, and increase stress and energy consumption by resident animals. This can impact over winter survival.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): A formal Land Health Assessment was completed for the area in 2004. Large portions of the watershed were not meeting or were trending downward with regard

to attainment of Standard 3 for terrestrial wildlife. The project area being private land was not specifically looked at with regard to Standard 3 for terrestrial wildlife. Regardless, the proposed action should have little bearing on the watersheds future ability to meet Standard 3 for terrestrial wildlife.

THRESHOLD ANALYSIS FOR WILDLIFE AND WILDLIFE HABITAT MITIGATION: In the FSEIS Record of Decision (March 1999) on page 14 it states that: "*Within high value or crucial big game winter range, the operator is required to implement specific measures to reduce impacts of oil and gas operations on wildlife and wildlife habitat.. .Measures to reduce impacts would generally be considered when well density exceeds four wells per 640 acres, or when road density exceeds three miles of road per 640 acres.*" Furthermore, Lease Notice GS-LN-05 states: "*Within high value or crucial big game winter range, the operator is required to implement specific measures to reduce impacts of oil and gas operations on wildlife and wildlife habitat.*"

The road and well density thresholds will not be exceeded via implementation of the proposed action, as no new habitat loss will occur. The well pad already exists and will be used to accommodate new directional wells. As such offsite or replacement mitigation measures to reduce impacts to wildlife are not currently being considered. The location was factored into the threshold analysis completed for the Wheeler to Webster Geographical Area Plan (GAP) and mitigation is being pursued under that GAP.

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
Travel/Access			x
Cadastral Survey	x		
Fire/Fuels Management	x		
Forest Management	x		
Geology and Minerals			x
Hydrology/Water Rights			x
Law Enforcement	x		
Paleontology			x
Noise			x
Range Management		x	
Realty Authorizations	x		
Recreation	x		
Socio-Economics		x	
Transportation			x
Visual Resources		x	

ACCESS AND TRANSPORTATION

Environmental Consequences/Mitigation: Existing road access to the pad is through privately owned lands with no legal public access. Truck traffic will be the heaviest during rig-up, completion activities,

and the rig-move to the next location. The proposed drilling and completion activities on the federal well is planned for 2006.

GEOLOGY AND MINERALS

Affected Environment/Environmental Consequences/Mitigation: The target gas zones for the proposed directional wells in this region are generally deep sands within the Williams Fork Formation. The shallower Wasatch G sands may contain some gas but are generally not an economic target at present. All of the coal zones are generally too deep for currently economic underground mining. The production casing should be cemented to the extent that it should isolate the formations and protect all potentially producible gas zones.

Groundwater

This action is not projected to have any noticeable impacts on groundwater resources within the project area. There are numerous water wells within the region. The wells generally range from 100’ to 300’ in depth. The aquifers are likely the alluvial gravel deposits overlying the Wasatch and the bedrock water zones in the lenticular sands in the Wasatch. However, no "regional" continuous bedrock aquifer is known to be present. Any shallow groundwater zones encountered during drilling of the proposed wells should be properly protected and the presence of these zones reported to the BLM and COGCC.

NOISE
Environmental Consequences/Mitigation: There will be increased levels of noise during the construction, drilling, and completion phases of the proposed action. The noise will be most noticeable along the roads used to haul equipment and at the well site. Drilling activities are subject to noise abatement procedures as defined in the Colorado Oil and Gas Conservation Commission Rules and Regulations (Aesthetic & Noise Control Regulations).

PALEONTOLOGY
Affected Environment: The proposed wells, pipeline and access road fall within a Condition I area for possible sites of paleontological or scientific value. However, the proposed wells will be drilled from the existing RMV 139-21 with no new surface disturbance planned. As a result a paleontological survey would not be required for those specific potentially fossiliferous areas prior to BLM project authorization. If scientifically important fossils are discovered during construction activities and cannot be avoided, mitigation may be necessary.

All persons associated with operations under this authorization should be informed that any objects or sites of paleontological value, such as vertebrate or scientifically important invertebrate fossils, should not be destroyed, damaged or removed.

Environmental Consequences/Mitigation: A standard Education/Discovery Condition of Approval for Paleontology Resource protection will be attached to the APDs.

CUMULATIVE IMPACTS SUMMARY:
The 2004 Draft Roan Plateau Resource Management Plan Amendment & Environmental Impact Statement released in November, 2004 (DEIS, 2004) analyzed 5 alternatives for oil and gas development

in the Roan Plateau planning area. These alternatives assessed impacts, including cumulative impacts, for oil and gas development scenarios ranging from 855 to 1582 new gas wells on public lands. The drilling of the wells addressed in this Environmental Assessment is well below the low range of development analyzed in the DEIS.

Since the completion of the 1999 Oil and Gas Leasing and Development FSEIS, the number of wells analyzed in subsequent NEPA documents has exceeded the 230 federal wells forecast in the RFD for lands outside the NOSR Production Area. However, drilling technology advancements has drastically reduced the expected surface disturbance of 3.4 acres per well or 1,020 acres from Federal wells analyzed in the 1999 FSEIS. The FSEIS analysis was based on a reasonably foreseeable development scenario, including the numbers of wells, well spacing, equipment necessary, and assumed emission rates. Since completion of the FSEIS, the majority of new wells have been drilled directionally and, in many instances, are being drilled from existing well pads, thereby reducing the overall anticipated surface impact addressed in the 1999 FSEIS.

The air quality analysis conducted in the 2004 DEIS does assess the impacts to the airshed from oil and gas development within and around the Roan Plateau Planning Area. The proposed action addressed in this document, which could include well pad and/or road construction, well drilling and well completion work typical for oil and gas development, would not represent a significant increase in emissions relative to the emissions assumed in the 2004 DEIS

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Bill Barter	Natural Resource Specialist	Team Leader
Cheryl Harrison	Archaeologist	Cultural Resources, Native American Religious Concerns
Tom Fresques	Wildlife Biologist	Terrestrial & Aquatic Wildlife, Special Status Wildlife Species
Carla Scheck	Ecologist	Special Status Plants, Vegetation, Noxious Weeds
Bruce Fowler	Geologist	Ground Water/Minerals
Jim Wilkinson	Geologist	Paleontology
Mike Kinser	Rangeland Management Specialist	Riparian
Mike McGuire	Rangeland Management Specialist	Rangeland Management Specialist
Marty O'Mara	Petroleum Engineer	Downhole Conditions of Approval
Kay Hopkins	Outdoor Recreation Planner	Visual Resources
Brian Hopkins	Transportation, Travel	Community Planner
Mark Wimmer	Rangeland Management Specialist	Soil, Water and Air

FONSI

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The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The proposed action with any approved mitigation measures result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION RECORD

DECISION: It is my decision to approve the Application for Permit to Drill the RWF 342-21 and RWF 442-21with the Conditions of Approval in order to provide for the orderly, economical and environmentally sound exploration and development of oil and gas resources on valid oil and gas leases.

RATIONALE:
1. Approval of the proposed action is validating the rights granted with the federal oil and gas leases to develop the leasehold to provide commercial commodities of oil and gas.
2. The environmental impacts have been mitigated with measures included in the Surface Use Plan and the attached Conditions of Approval.

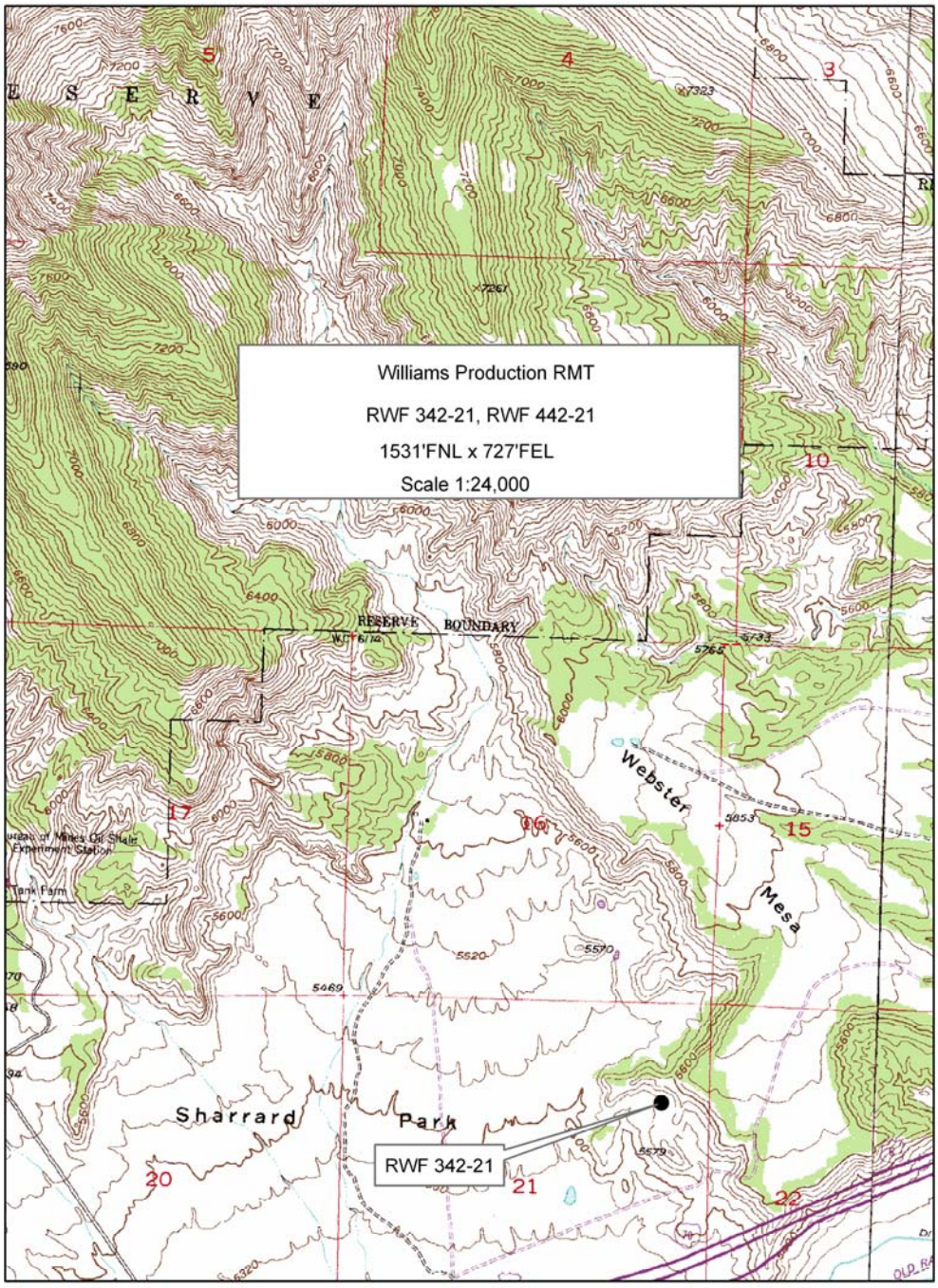
MITIGATION MEASURES: Mitigation measures are included in the Surface Use Plan and Conditions of Approval for both surface and drilling operations.

NAME OF PREPARER: Bill Barter, Natural Resource Specialist

SIGNATURE OF AUTHORIZED OFFICIAL: _____
Authorized Officer

DATE SIGNED: 10-21-05

ATTACHMENTS: map, Condition of Approval


Williams Production RMT
RWF 342-21, RWF 442-21
1531'FNL x 727'FEL
Scale 1:24,000
RESERVE BOUNDARY
Webster
Mesa
Sharrard
Park
RWF 342-21
Tank Farm

Conditions of Approval

COC 2799
Clough RWF 442-21
Clough RWF 342-21

1. At least forty-eight (48) hours prior to construction of access road and/or well pad, operator will notify BLM representative of construction startup plans.

2. The paint color to be use on all surface facilities, including metal containment rings is Desert Brown (10yr 6/3). The facilities should be placed against the cut side of the pad, where feasible.

3. The operator is responsible for applying dust abatement measures as needed or directed by the Authorized Officer. The level and type of treatment (watering or application of various dust agents, surfactants and road surfacing material) may be changed in intensity and must be approved by the Authorized Officer. Dust control is needed to prevent heavy plumes of dust from road use that create safety problems and disperses heavy amounts of particulate matter on adjacent vegetation.

4. Noxious weeds, which may be introduced due to soil disturbance associated with the proposed lease operations, will be treated by methods to be approved by the Authorized Officer. The operator shall monitor for the presence of Garfield County and State-listed noxious weeds at least once or twice each year during the growing season. A Pesticide Use Plan (PUP) approved by BLM is required prior to use of any herbicides.

5. Cultural Resource Education/Discovery

All construction activity and staging is restricted to the north side of the existing road.

All persons in the area who are associated with this project must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

Pursuant to 43CFR10.4(g), the BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43CFR10.4 (c) and (d), activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.

If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings (16 U.S.C. 470h-3, 36CFR800.112). Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer. Approval to proceed will be based upon evaluation of the resource.

Evaluation shall be by a qualified professional selected by the authorized officer from a federal agency insofar as practicable. When not practicable, the holder shall bear the cost of the services of a non-federal professional.

Within five working days the authorized officer will inform the holder as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the holder will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
- a time frame for the authorized officer to complete an expedited review under 36 CFR 800.11, or any agreements in lieu thereof, to confirm through the State Historic Preservation Officer that the findings of the authorized officer are correct and the mitigation is appropriate.

The proponent may relocate activities to avoid the expense of mitigation and/or the delays associated with this process, as long as the new area has been appropriately cleared of resources and the exposed materials are recorded and stabilized. Otherwise, the proponent will be responsible for mitigation costs. The authorized officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the authorized officer that the required mitigation has been completed, the proponent will then be allowed to resume construction.

Antiquities, historic, prehistoric ruins, or objects of scientific interest that are outside of the authorization boundaries but directly associated with the impacted resource will also be included in this evaluation and/or mitigation.

Antiquities, historic, prehistoric ruins, or objects of scientific interest, identified or unidentified, that are outside of the authorization and not associated with the resource within the authorization will also be protected. Impacts that occur to such resources, which are related to the authorizations activities, will be mitigated at the proponent's cost including Native American consultation cost.

6. Paleontological Resource Education/Discovery

All persons associated with operations under this authorization must be informed that any objects or sites of paleontological or scientific value, such as vertebrate or scientifically important invertebrate fossils, shall not be damaged, destroyed, removed, moved or disturbed. If in connection with operations under this authorization any of the above resources are encountered the proponent shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM authorized officer of the findings. The discovery must be protected until notified to proceed by the authorized officer.

As feasible, the proponent shall suspend ground-disturbing activities at the discovery site and immediately notify the BLM authorized officer of any finds. The BLM authorized officer will, as soon as feasible, have a BLM-permitted paleontologist check out the find and record and collect it if warranted. If ground-disturbing activities cannot be immediately suspended, the proponent shall work around or set the discovery aside in a safe place to be accessed by the BLM-permitted paleontologist.

7. Refer to Appendix I. Surface Reclamation of the 6/98 GSFO's Draft Supplemental EIS for Oil & Gas Leasing Development (pages I-1 through I-8) for specific reclamation goals, objectives, timelines, measures and monitoring methods. These guidelines will be followed in completing the reclamation of disturbed surfaces on well pads, access roads and pipelines

8. The 4 Reclamation Categories defined on Page I-8 of Appendix I (6/98 GSFO's Draft Supplemental EIS for Oil & Gas Leasing Development) will be used in gauging the progress of reclamation monitoring. In the case of cheatgrass, reclamation will be considered acceptable if cheatgrass and other undesirable vegetation is less than 5 percent of the cover if the adjacent vegetation is less than 50 percent undesirables and cheatgrass will be less than 50 percent if the adjacent vegetation is more than 50 percent undesirables (1999 DSEIS).

9. The seed mix used in reclamation of this location will the mix best suited to the landowners current pasture management and grazing system. If the landowner has no preference, the seed mix described below may be used.

Species of Seed	Variety	Application Rate (PLS/acre)
Four-wing saltbush		2.0
Gardner saltbush		1.0
Indian ricegrass	Paloma	2.0
Bottlebrush squirreltail		2.0
Western wheatgrass	Arriba	3.0
Bluebunch wheatgrass	Secar	3.0
Scarlet globemallow		0.25
Total		13.75

Prepare the seedbed by ripping the compacted surface to a depth of 18 inches in 2 foot centers. Disk surface as needed to provide good seed/soil contact. Drill seed ¼ to ½ inch deep following the contour. In areas that cannot be drilled, broadcast seed at 1½ times the application rate and cover ¼ to ½ deep with a harrow or drag bar. Fall seeding will be conducted after September 1 and prior to ground frost. Spring seeding will be done after the frost leaves the ground and no later than May 15th. If the seeding is unsuccessful, operator will be required to make subsequent seedings until the reclamation objectives identified in Appendix I. Surface Reclamation of the 6/98 GSFO's Draft Supplemental EIS for Oil & Gas Leasing Development are met.

Erosion Control Practices

The cut and fill slopes will be protected against rilling and erosion with measures such as water bars, lateral furrows, or other measures approved by the Authorized Officer. Weed free straw bales, straw "wattles", straw matting or a well-anchored fabric silt fence will be used on cuts and fill slopes to protect against soil erosion.

Topsoil Practices

During well pad, road and/or pipeline construction, topsoil will be stripped to a minimum depth of 6 inches. If topsoil is less than 6 inches, the top 6 inches of surface material will be stripped and piled.

Site Protection Practices
Reclaimed areas will be fenced to exclude livestock until at least 50% of the seeded species are producing seed. The Authorized Officer will approve the type of fencing. Fencing shall be to BLM standards

10. The operator will submit an annual reclamation report by December 31 to the Authorized Officer. The report will document compliance with all aspects of the reclamation objectives. The report will specify if the reclamation objectives are likely to be achieved and actions needed to meet these objectives.

11. A minimum of 2 feet of freeboard shall be maintained in the reserve pit. Freeboard is measured from the highest level of drilling fluids and cuttings in the reserve pit to the lowest surface elevation of ground at the reserve pit perimeter.