U.S. Department of the Interior
Bureau of Land Management
Glenwood Springs Field Office
50629 Highway 6 & 24
Glenwood Springs, CO 81601

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-140-2005-081 EA

CASEFILE NUMBER: Lease # COC-65513

PROJECT NAME: Proposal to Drill 1 Exploratory Well from proposed BLM Well Pad on Center Mountain (Benefiting program, Fluid Minerals 1310)

LEGAL DESCRIPTION:

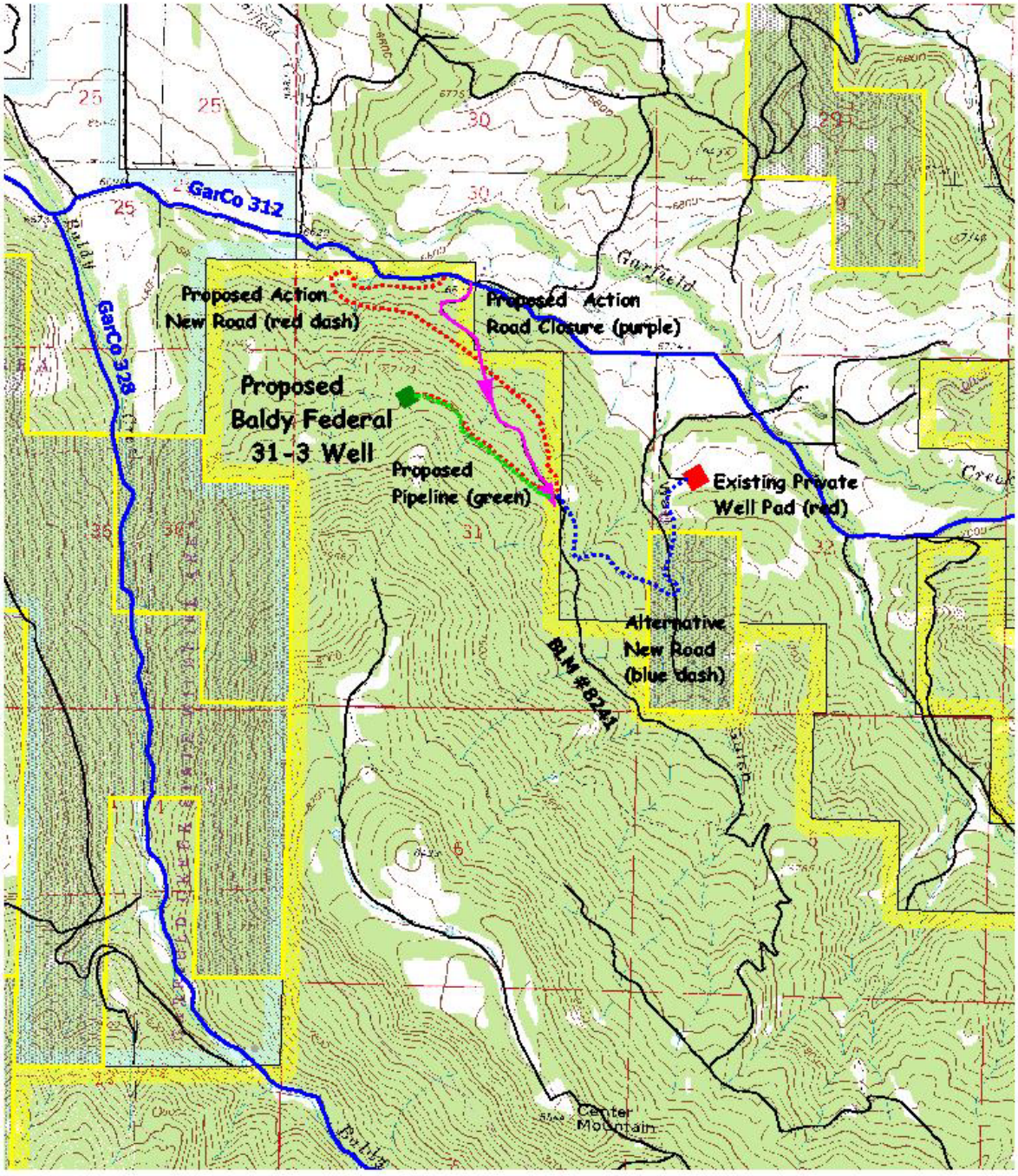
Baldy Federal 31-3	Surface location: T6S, R90W, Sec 31, N½NW¼, 6th P.M.
	Bottom Hole:
	Surface Owner: BLM
	Federal Lease: COC-65513

APPLICANT: Laramie Energy LLC

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The proposed action would allow the operator to directionally drill and develop one federal natural gas well from a proposed BLM well pad as listed above and shown on Project Map. The well pad, with a surface disturbance of 4.0 acres, would be situated on a knob midslope along the north-facing aspect of Center Mountain. A new access road (approximate length of 9700 feet) would be constructed, entirely on public land, from County Road 312 (Garfield Creek Road) to the pad. The new route would be constructed with maximum grade of 8%, 18 foot travel width with turnouts and culverts or water dips installed for adequate road drainage. A cattleguard with bypass gate would be installed across access road at BLM allotment fence near road junction with CR312. Sideslopes along the entire proposed road average 25-30% with 500 foot road segment approaching 40%. Straw matting with applied seed would be placed along this steeper road segment to help stabilize the excavated slopes. The flowline alignment for the well would be buried parallel to proposed access road from well pad east to junction with BLM Road #8241.

The exploratory well qualifies as a GAP waiver as defined in Appendix B of the 1999 SEIS.



Laramie Energy's Baldy Federal 31-3 well

T6S, R90W, Sec 31 NE¼NW¼ 6th PM
Garfield County, CO

Surface Owner: BLM & Trisch/Lashley

Scale 1 : 24,000

8/17/05

The proposed action includes drilling and completion operations, installation of production facilities (pipeline, separator/dehydrator, water tank, etc.), production of natural gas, and intermediate and final reclamation measures. The Application for Permit to Drill (APD) includes a drilling program and a multi-point surface use and operations plan that describe details of well pad construction and reclamation. The proposed action will be implemented consistent with the oil and gas lease (listed above), federal regulations (43 CFR 3100), the Record of Decision and Resource Management Plan Amendment March 1999, and the operational measures included in the APD as well as the Conditions of Approval (COA) attached to the APD.

The well pad and access road are located on the north-facing slopes of Center Mountain about 10 miles south of New Castle, Colorado. The road and pad are located within dense mountain brush vegetation (serviceberry and oakbrush) with an understory of native grasses and forbs. The noxious weed, hoary cress or whitetop, was found during onsite visit growing along existing BLM Road #8241 and CR 312 in vicinity of proposed action.

BLM's Center Mountain Road #8241 presently provides public motorized access to the area, although the present standard typically serves 4x4 vehicles with difficult traveling during wet, muddy road conditions. Segments of Road #8241 exceed 25% grade and cross onto adjacent private lands. By constructing the proposed pad access road, the existing BLM Road #8241 would not be necessary from its inception at CR312 to the point where the proposed road deviates from BLM Road #8241 just south of the NE1/16th corner of Section 31. The operator would be required to close and reclaim the initial 3/4 mile of Road #8241 segment by ripping, seeding and waterbarring the unneeded road segment.

Estimated total disturbed area tied to this proposed action would be 16.2 acres with the well pad accounting for 4.0 acres, new access road and flowline (50 foot average width) disturbing 11.1 acres, and road closure ripping another 1.1 acres.

Private Access Alternative: After hiring a landscape architect and conducting visual analysis of the Proposed Action primarily focusing on the road construction conflicts with the Class II VRM objective, the operator made the determination that alternative access (within Class II and IV VRM area) from the adjacent Trisch/Lashley property would provide a more suitable alternative for access to Baldy Federal 31-3 well. With this proposal, operator would construct new road from existing fee well pad in SW¼NW¼ of Section 32 crossing south and west on private land and tying in with proposed new road on BLM (see Project Map) near the switchback planned at CN1/16th corner of Section 31. The flowline alignment for the well would be buried parallel to proposed access road from well pad east to junction with BLM Road #8241.

Construction standards would be similar as described in Proposed Action. Road length would be reduced with approximately 0.9 miles of new construction on private and 0.6 miles on BLM. Total surface disturbance associated with this alternative would amount to 13.1 acres (4.0 acres for well pad and 9.1 acres for road construction and pipeline installation based on 50 foot average width for road and gathering).

The existing BLM Road #8241 would provide continued public motorized access to BLM's Center Mountain. Under this alternative, Road #8241 would remain in its present alignment and condition; no road improvements would be planned on this route. Road #8241 would continue to remain open for year-round motorized use by public, but steep grades and "slick conditions when wet" would continue to limit Road #8241 use to dry, favorable weather conditions. No road closure segments along BLM Road #8241 would be planned under this alternative. To control the motorized traveling public and grazing livestock, a suitable gate would be installed by operator at or near the BLM/private boundary

across the access road. Furthermore, a steel frame gate would be installed by operator along the new access road segment between BLM Road #8241 and the 31-3 well pad to control public motorized traffic onto the 31-3 pad. Provisions to lock the pad access gate would be allowed by the operator.

The private access alternative includes drilling and completion operations, installation of production facilities (pipeline, separator/dehydrator, water tank, etc.), production of natural gas, and intermediate and final reclamation measures. The Application for Permit to Drill (APD) includes a drilling program and a multi-point surface use and operations plan that describe details of well pad construction and reclamation. The private access alternative will be implemented consistent with the oil and gas lease (listed above), federal regulations (43 CFR 3100), the Record of Decision and Resource Management Plan Amendment March 1999, and the operational measures included in the APD as well as the Conditions of Approval (COA) attached to the APD.

Description of Lease Stipulations that apply to Proposed Action and/or Alternative:

COC65513: CSU to protect Visual Resource Mgmt Class II Area
CSU to protect Riparian and Wetland Zones
TL to protect Big Game Winter Habitat from 12/1 thru 4/30

No Action Alternative: The proposed action and private access alternative involve 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 Glenwood Springs Field Office is in the ongoing process of completing Land Health Assessments on a landscape basis. At this time the landscape addressed in this EA has not had a formal Land Health Assessment completed. As such, no formal determination on conformance with the Standards will be made until a formal Land Health Assessment and Determination Document is completed. The tentative schedule for Land Health Assessment on this landscape is 2010. At the time this landscape is scheduled, a Land Health Assessment will be completed addressing all of the Land Health Standards. Based on the findings of these assessments, the authorized officer may take appropriate action to achieve conformance with the standards or implement further mitigating measures on future actions to maintain or prevent a further decline in 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. Because a standard exists for these five categories, the impact analysis must address whether the proposed action or any alternatives being analyzed would result in impacts that would maintain, improve, or 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 and proposed alternative 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.

Environmental Consequences: 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.

Mitigation: 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, WILD AND SCENIC RIVERS and WILDERNESS

Affected Environment: There are no Wilderness Areas or Wilderness Study Areas, citizen proposed wilderness areas, ACECs, or Wild and Scenic Rivers within the proposed project area.

CULTURAL RESOURCES

Proposed Alternative

Affected Environment: Cultural resource inventory (GSFO# 1105-11) has been conducted for the pad locations and access roads. No historic properties were identified that are eligible for listing on the National Register of Historic Places. Formal consultation was not initiated with the Colorado State Historic Preservation Officer for these well locations and a determination of **"No Historic Properties Affected"** was made based upon results of the inventories, the BLM/SHPO National and Colorado Protocols (1997 and 1998) and National Historic Preservation Act (16 U.S.C. 470f).

Private Access Alternative:

Affected Environment: Cultural resource inventory (GSFO# 1105-11A) has been conducted for the pad locations and access roads. No historic properties were identified that are eligible for listing on the National Register of Historic Places. Formal consultation was not initiated with the Colorado State Historic Preservation Officer for these well locations and a determination of **"No Historic Properties Affected"** was made based upon results of the inventories, the BLM/SHPO National and Colorado Protocols (1997 and 1998) and National Historic Preservation Act (16 U.S.C. 470f).

Both Alternatives

Environmental Consequences: 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 Laramie 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: 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

[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

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, WETLANDS, RIPARIAN ZONES

Affected Environment: There would be no impacts to floodplains, riparian vegetation, or wetlands since these resources are not present within the area of proposed action or alternatives.

Analysis on the Public Land Health Standard for riparian systems: Not Applicable

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The pad lies in a mixed mountain brush community with herbaceous cover comprised mainly of native grasses and forbs. The noxious weed, hoary cress or whitetop, was found along lower portions of BLM Road #8241 and GarCo #312 during field review of proposed action.

Environmental Consequences/Mitigation:

Proposed Action:

The risk of noxious weeds becoming dominant on the site following disturbance is high, since noxious weeds are already present in the vicinity. The APD and Conditions of Approval include measures to re-vegetate the well site with native perennial grasses, shrubs and/or forbs. The project proponent will adhere to the specified seed mix and will continue with reclamation activities, including reseeding if necessary, until BLM's interim reclamation objectives are achieved. In addition, a standard Condition of Approval is attached requiring the project proponent to promptly treat and control any Garfield County or Colorado State A-List noxious weeds. The operator shall monitor for the presence of noxious weeds annually during the growing season (or as frequently as the Authorized Officer determine) throughout the life of the wells. A Pesticide Use Proposal must be approved by BLM prior to commencing any herbicide spraying.

Private Access Alternative:

Since no new surface disturbance would occur along the lower portion of BLM Road #8241, the risk of noxious weeds becoming established in the project area would be slightly reduced from the Proposed Action alternative. However, given the proximity of weeds along Co Rd 312 and the potential for weeds to exist on the private property, the potential for weed expansion with implementation of the Private Access alternative is still high. Mitigation measures and Conditions of Approval would be the same as for the Proposed Action alternative.

MIGRATORY BIRDS

Affected Environment: The proposed road and well pad are located entirely within mixed mountain shrubland habitat comprised of tall dense thickets of serviceberry, snowberry, and oakbrush with smaller

amounts of sagebrush. Portions of the road are within an old burn while the well pad is in mature mixed shrub habitat. The understory is very productive with several grasses and an abundance of forbs. Given this mix of vegetation, the project areas provide both foraging and nesting habitat for a variety of migratory birds. One species listed on the U.S. Fish and Wildlife Service's Birds of Conservation Concern list may be present. Within the mixed mountain shrublands and oakbrush, Virginia's warbler may occur. This species is a ground nester that requires dense shrub cover such as that found in the project area.

No raptor nests occur in the immediate vicinity of the proposed access road or surface well pad. However, red-tailed hawks, goshawks, and great horned owls nest in the nearby area. It is likely that these and other raptors forage on and near the proposed access road and well pad.

Environmental Consequences/Mitigation:

Proposed Action:

The proposed action will result in the loss of approximately 16.2 acres of upland (mountain brush) habitat to accommodate the new access road and proposed well pad. This will result in losses of nesting and foraging habitat for migratory birds. If vegetation is cleared during the spring nesting season, it is possible that Virginia's warbler nests and eggs will be destroyed. This would reduce nesting success and productivity. Impacts would likely be confined to individual birds and should not result in quantifiable impacts at the population or species level. Although small portions of the new well pad, new and old access roads will be reclaimed, habitat will cease to function in its current capacity as larger shrubs are replaced by grasses and forbs on reclaimed areas. The access road and well pad will also result in fragmentation of habitats and will reduce habitat connectivity and habitat patch size in the area. It is also likely that during road and well pad construction and drilling and completion activities, individual birds will be displaced to adjacent habitats due to noise, commotion, and human presence. Displacement and effective habitat loss will be a long-term (<20 years) effect of road use in the area associated with increased natural gas activity in the area. Raptors should be minimally affected as upland foraging habitat is plentiful in the area.

Private Access Alternative:

Impacts to migratory birds would essentially be the same under this alternative as the proposed action except that a reduction in habitat loss would result (13.1 vs. 16.2 acres). In addition slightly less habitat fragmentation would result due to the shorter amount of road construction. Private access would restrict use of the new road segment on private which would minimize indirect impacts associated with road use.

NATIVE AMERICAN RELIGIOUS CONCERNS

Both Alternatives

Affected Environment: At present, no Native American concerns are known by the GSFO within the project area and none were identified during the inventory. 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: Indirect impacts from increased access and personnel could result in a range of impacts to unknown cultural resources from illegal collection to vandalism. The importance of the Education/Discovery Stipulation needs to be stressed to Laramie and their subcontractors. A standard Education/Discovery Condition of Approval for Cultural Resource protection will be attached to the APD.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes 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, boreal toad, yellow-billed cuckoo, razorback sucker, Colorado pikeminnow, bonytail chub, and humpback chub.

Specific to the project location, no federal or state listed species, federal proposed or candidate species, or their habitat occur directly at the project site. In addition the area of the proposed action is not considered to provide potential habitat for any BLM Sensitive plant or animal species.

Environmental Consequences/Mitigation:

Proposed Action:

Based on the lack of potential habitat or occurrence records for any federally listed or BLM Sensitive species, the proposed action should have "**No Effect"** on any listed or BLM Sensitive species or their habitats. In addition, no indirect or offsite impacts are anticipated.

Private Access Alternative:

Impacts (or the lack thereof) would be the same as for the proposed action.

Analysis on the Public Land Health Standard for Threatened & Endangered species: Since there is no potential habitat for special status species in the project area and no known occurrences within the vicinity, the proposed action should have no effect on any special status species. The proposed action and alternative should not result in a failure of the area to achieve Standard 4 for threatened, endangered, or other special status species.

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 analysis on Standard 5)

Affected Environment:

Surface Water: All proposed access roads and associated well pad lie on the northern slopes of Center Mountain. Ephemeral or intermittent drainages in the area drain into Garfield Creek to the north. Garfield Creek flows into the Colorado River above Rifle, Colorado. This stretch of the Colorado River is classified Aquatic Life Cold Class 1, Recreation 1a, and for water supply, and agriculture. The potentially affected drainages are subject to flow events from short duration, high intensity thunderstorms during summer months. Winter and spring runoff also plays a role in this watershed depending on snowfall and spring rain events.

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.

Ground Water: Numerous water wells are found nearby at the ranches along Garfield Creek. The water wells are generally completed in alluvial deposits, including alluvial terrace gravels. Some of the wells may penetrate water zones in the lenticular sandstones of the Wasatch Formation. No "regional" bedrock aquifer is known to be present.

Environmental Consequences/Mitigation:

Surface Water: Access road and pad construction would result in the removal of vegetation and disturbance of soils that would increase sediment and salinity in surface water in the area. There is some risk that the impact to surface waters would be greater then anticipated should a high intensity thunder storm hit immediately following the surface disturbing activity and before mitigating measures are in place. With measures to control runoff water in place, reestablishment of vegetation, and proper engineering of roads, the increase in the amount of sediment in surface waters would be minimized. Culverts in road crossings of drainages would be required to pass a 25 year 6 hour storm event and would be installed during no flow or low flow conditions. Water produced during drilling activity would be contained in an engineered pit on the pad site and evaporated or hauled to a disposal facility.

Negative impacts to surface waters would be expected to be minor and last for the most part for 3 years following the initial disturbance. Mitigating activity should be initiated as quickly as possible following construction to avoid unnecessary degradation of surface water quality. There would be some minor long term negative impacts to surface water quality from an increase in sediment coming from working surfaces that would not be rehabilitated until the wells are no longer producing and facilities are removed and the area rehabilitated.

In order to mitigate the effects of these actions and to ensure protection of water resources the following mitigation is recommended.

- All roads associated with the proposed action will be crowned, ditched, and drained with culverts and/or water dips. When rutting within the traveled way becomes greater then 6 inches, gravel will be applied as approved by the Authorized Officer

- The size of the culvert must be large enough to pass a 10-year flood without development of static head at the entrance. Balance the cumulative roadway grade and culvert size to avoid serious head and velocity damage for a 25-year flood (BLM Manual Section 9113, H-a. Drainage Elements). Culverts should be inspected annually to ensure they are functioning properly and promptly maintained (e.g. remove any debris causing blockage) or replaced when necessary.

Since either the proposed action or the proposed alternative would disturb >5 acres each, stormwater permitting is required through the State of Colorado's Water Quality Control Commission. Also, the proposed access road crosses two drainages that may be defined as "waters of the U.S." and may be subject to 404 permitting through the U.S. Army Corps of Engineers. Therefore, the following mitigation will be required as a condition of approval.

- Laramie Energy LLC will consult with the Army Corps of Engineers (for 404 permits) and from the State of Colorado Water Quality Control Division (for stormwater permits) prior to commencing construction activities related with said permit within the proposed action area. Written documentation to the Authorized Officer is required to indicate that appropriate permits have been obtained or are not required by the permitting agencies.

Ground Water: The operator will set and cement surface casing to 1000 feet, and cement the production casing back to the base of the surface casing, which will protect all potentially usable water zones.

Analysis on the Public Land Health Standard for water quality: The proposed action with associated mitigation would not likely prevent standard 5 for water quality from being met.

NON-CRITICAL ELEMENTS

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

SOILS (includes analysis on Standard 1)

Affected Environment: The proposed action would include the construction of new access road and well and closure of portion of BLM Road #8241 creating a total surface disturbance not to exceed 16.2 acres. The proposed alternative would result in approximately 13 acres of disturbance. The Soil Survey of Rifle Area, Colorado indicates that the proposed action is located on 2 soil map units with the proposed alternative located only on the Cochetopa-Jerry Complex, as described below.

In the general vicinity of Center Mountain, there are visible slumps and land slides. BLM road # 8241 is known to be hazardous when saturated.

- The Cochetopa-Jerry complex, (25-50% slopes) is a moderately steep soil map unit found on mountainsides. The complex is approximately 50% Cochetopa soils and 40% Jerry soils with Lamphier, Buckon, and Inchau on the steeper slopes making up the remaining 10% of the unit. The Cochetopa and Jerry soils are described as having slow runoff characteristics and moderate erosion hazard. High clay content present in this map unit, combined with low strength, require road construction and similar activities to be designed with drainage control elements to prevent deep soil saturation. This soil map unit is limited to the northern portions of the road that parallel the county road. As the road turns south, the following map unit covers the remainder of the proposed action area.

- The Morval-Tridell complex (6 to 25% slopes) is a moderately sloping to hilly unit found on alluvial fans and on the sides of mesas. The Morval and Tridel soils are described as having medium surface runoff characteristics with a moderate erosion hazard. Both soils are described as deep and well drained. High clay content present in this map unit, combined with low strength, require road construction and similar activities to be designed with drainage control elements to prevent deep soil saturation. This unit is primarily used for grazing and wildlife habitat.

Environmental Consequences/Mitigation: There would be some loss of soil, some loss of soil productivity, and an increase in sedimentation resulting from construction of the well pads. The extent of these impacts on soils would not be great and would be expected to last for a relatively short period of time with the associated mitigation outlined in the water quality section of this document. The proposed action includes measures to prevent direct placement of fill material in drainages, limits reclaimed slopes to 3:1, and to re-vegetate disturbed areas. Reclamation measures such as contouring disturbed areas, roughing the soil surface, re-vegetating, road construction features and controlling runoff would help to limit soil erosion. The loss of soil and increased sedimentation would occur after the construction phase for a short term of from 1 to 3 years until re-vegetation occurs. There would be some minor permanent loss of soil.

- Due to the erosion potential inherent in both soils found in the proposed action and the proposed alternative areas, road construction must include features to keep roads from becoming deeply saturated. Mitigation proposed in the water quality section of this document is mandatory and will be included as conditions of approval in order to protect soil and water resources in the area.

Analysis on the Public Land Health Standard for upland soils: The proposed action would not likely prevent health standard 1 from being met.

VEGETATION (includes analysis on Standard 3)

Affected Environment: The proposed pad would be constructed within mountain brush habitat comprised mostly of dense oakbrush, serviceberry, and snowberry. Native grasses and forbs are present in the understory. Noxious weeds are also present in the project area. No destruction or removal of live pinyon trees would be necessary during the pad or road construction so the Ips beetle problem would not be exacerbated by this action.

Environmental Consequences:

Proposed Action:

The planned disturbed area would remove vegetation on an estimated 16.2 acres. The portions of the pad and road not needed for ongoing production activities (approximately 3-4 acres) would be reclaimed and seeded following drilling and desirable vegetation should re-establish within 2-3 years. If the well is a producer, the driving surface of the access road and the portion of the pad needed for production activities would remain unvegetated for the life of the well (30-40 years). With implementation of reclamation practices identified in the COAs, establishment of desirable herbaceous vegetation on the sites can be expected. Monitoring of the reclamation would occur as identified in COAs.

Mitigation: Straw matting applied over broadcasted seed mix or hydromulching of seed mix would be required along the steeper segments of the rerouted BLM Road #2841 to help stabilize the excavated slopes and aid in revegetation.
The pad will be fenced to exclude livestock grazing for the first two growing seasons or until the seeded species become firmly established, whichever is longer. The seeded species will be considered firmly established when 50% of the seeded species are producing seed.

Private Access Alternative:

Under this alternative, the planned disturbed area would remove vegetation on an estimated 13.1 acres. The overall loss of vegetation under this alternative would be somewhat less (3.1 acres less) than under the Proposed Action alternative. Mitigation and COAs would be applied as under the Proposed Action and impacts would be similar to the Proposed Action.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): A formal Land Health Assessment is not planned for completion in the project area until 2010. Assuming proper, timely reclamation of the well pad and cut and fill slopes associated with the new access road, as well as timely and aggressive weed control, the proposed action would not likely prevent Standard 3 for healthy plant communities from being met.

WILDLIFE, AQUATIC (includes analysis on Standard 3)

Affected Environment: There are no perennial aquatic systems located directly near the proposed access road or well pad. However, the access road and well pad are located less than ½ mile south of Garfield Creek. This stream in the vicinity of the proposed action contains no aquatic wildlife as it is dry much of the year. This perennial drainage drains directly into the Colorado River, which contains a variety of fishes and aquatic insects.

Environmental Consequences/Mitigation:

Proposed Action:
It is likely that site-specific erosion potential will be increased due to clearing of vegetation to accommodate the new access road and well pad. Road cut and fill amounts will be large due to steep side slopes that average 25-30% with some areas approaching 40%. The cut and fill amounts on the well pad will be high as well given the steep terrain. The proposed action calls for the placement of straw and seed on raw cut slopes to help to retain and stabilize soils and initiate revegetation. This will help to minimize erosion and sedimentation concerns. Increased sediment can reduce aquatic insect productivity as streams become silted and clean gravels and cobbles are covered. Sediment that ultimately reaches the Colorado River will have no impacts to fisheries as sediment levels are projected to be well within the background levels for the Colorado River and minor potential increases in sediment would be undetectable.

Private Access Alternative:
Impacts associated with this alternative would essentially be the same as under the proposed action, except that a slight reduction in the total amount of ground disturbance would result.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): A formal Land Health Assessment is not planned for completion in the project area until 2010. Although a determination has not been formalized, assuming proper, timely well pad reclamation, the proposed action and private access alternative should result in minimal effects to aquatic wildlife and will have no negative effects on the ability to maintain or meet Standard 3 for aquatic wildlife.

WILDLIFE, TERRESTRIAL (includes analysis on Standard 3)
Affected Environment: The proposed access road and well pad are located in mapped big game winter range that has been identified as High Value habitat; the Big Game Winter Habitat Timing Limitation (TL-1) is mapped for the area and is described on the oil and gas lease. In addition to big game, a variety of small game and non-game wildlife, birds, reptiles, and amphibians are found in the vicinity of the proposed access road and well pad. The area is prime foraging habitat for black bears. Habitat in the area is very high quality and is relatively undisturbed other than for seasonally used two-track roads. General impacts (short term, long term, and cumulative) to terrestrial wildlife were adequately addressed in the 1999 FSEIS.

Environmental Consequences/Mitigation:
Proposed Action:
The proposed action will result in the loss of approximately 16.2 acres of upland vegetation/habitat. This will result in losses of forage, and cover for many wildlife species. In addition, the action will result in habitat fragmentation and will reduce habitat patch size and connectivity. This can benefit some generalist species while impacting other specialized species. Creation of edge habitat can be good, but the human intrusion component related to road use for construction, drilling, completion and potential production activities will displace some wildlife species away from the preferred habitats in the area. 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 available to most portions of Center Mountain including the proposed well pad. This will contribute to the expected habitat loss.

Mitigation: To minimize impacts to wintering big game the winter timing limitation on the lease will be invoked which will allow no road or pad construction, drilling, or completion activities from December 1 to April 30.

Private Access Alternative:
Impacts associated with this alternative would essentially be the same as under the proposed action, except that a slight reduction in the total amount of ground disturbance would result. In addition, slightly less habitat fragmentation would result and some indirect effects associated with vehicular traffic would be slightly reduced due to controlled access on the private land.

Mitigation: To minimize impacts to wintering big game the winter timing limitation on the lease will be invoked which will allow no road or pad construction, drilling, or completion activities from December 1 to April 30.

Analysis on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): A formal land health assessment is planned for completion in 2010. The proposed action and private access alternative will result in a downward trend regarding Standard 3 for should result in no further deterioration of the ability of the landscape to maintain or meet Standard 3 for terrestrial wildlife species.

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 or private access alternative. As such offsite or replacement mitigation measures to reduce impacts to wildlife are not currently being considered. However, if this exploratory well is productive, and future activity increases in the area, a Geographical Area Plan (GAP) will likely be initiated. At that time, it is possible that mitigation will be sought to offset habitat loss and fragmentation. Cumulative impacts will be addressed in greater detail in the GAP document and mitigation opportunities will be identified and pursued.

OTHER NON-CRITICAL ELEMENTS:

ACCESS AND TRANSPORTATION

Environmental Consequences/Mitigation: Existing BLM Road #8241 provides public motorized access to Center Mountain, although 2 segments of the road cross private land with no formal right-of-way or easement. The proposed new road access would change the type, frequency and amount of motorized use on Center Mountain since the road standard would be upgraded significantly from the jeep trail that presently exists. However, by gating the new access road at the juncture where it deviates from the existing jeep road, the length of improved access road would be less than 1 mile. The present travel designation for the northern portion of Center Mountain is "Open" to travel on and off road.

Truck traffic related to lease development will be the heaviest during rig-up, completion activities, and the rig-move to the pad location. The proposed drilling and completion activities on the federal wells will likely commence in summer 2005.

GEOLOGY AND MINERALS

Affected Environment/Environmental Consequences/Mitigation:

The target gas zones for the proposed directional well are sands within the middle and lower part of the Williams Fork Formation, and possibly sands within the underlying Iles Formation. The shallower Wasatch G sands may contain gas, but are not an economic target at present. The wells will reach total depth near the base of the Corcoran Sandstone (Iles Formation). All coal zones are too deep for underground mining. The operator proposes to cement the production casing from TD back to the base of the surface casing, which would isolate the formations and protect all potentially producible gas zones.

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: These proposed well falls within a Condition I area for possible sites of paleontological or scientific value. However, dense soil and vegetation cover rock outcrops and 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.

RANGE MANAGMENT:
Affected Environment: The proposed Baldy Federal 31-3 well pad would be located on public land within the Upper Garfield Common Allotment # 08222. The table below summarizes the permitted grazing use on the allotment.

Allotment	**Permittee**	**Livestock Kind & NO.**	**Season of Use**	**% PL**	**AUMs**
Upper Garfield Common # 08222	Eric Porter	Cattle 163	06/01-10/10	100	707
	Marla Porter	Cattle 17			74

Environmental Consequences: With the estimated 13-16.2 acres of surface disturbance related to the access road and proposed pad, construction activities would result in minimal loss (< 1 AUM) of forage available to livestock. Rehabilitation of vegetation on the location would result in reestablishment of forage which usually takes about 3 years. Livestock may also be minimally disturbed by the increase in human activity during pad and pipeline construction and maintenance of the gas facilities. It is not anticipated that the level of impacts from implementation of the proposed action would require adjustment of the livestock stocking rate.

Mitigation: Fencing of the well pad will be required to deter grazing impacts to the reclaimed pad area.

VISUAL RESOURCES

Affected Environment:

Proposed Action:

A portion of the new access road (northern 5500 feet) would fall within an area classified as VRM Class II in the 1984 Glenwood Springs Resource Management Plan. The objective of Class II areas is to retain the existing characteristic landscape. The level of change in any of the basic landscape elements (form, line, color, texture) due to management activities should be low and not evident. The federal lease has a stipulation attached for VRM Class II (CSU 5). This stipulation states that "within VRM class II areas, relocation of operations by more than 200 meters may be required to protect visual values…" (Glenwood Springs Resource Area, Oil and Gas Leasing and Development, Record of Decision and Resource Management Plan Amendment, page 12, March, 1999).

Key observation points (KOP's) were selected along County Road 312 and were used for this analysis (see Attachment 1).

The proposed 31-3 well pad and southern portion of the proposed action access road would be located within an area classified as VRM Class IV in the 1984 Glenwood Springs Resource Management Plan. The objective of this class is to provide for management activities which require major modifications 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.

The entire Garfield Creek Valley and lower adjacent slopes was designated as VRM Class II in the GSRA RMP in 1984. The existing landscape has high scenic qualities best described as a long irrigated valley bounded scenic views of adjacent mountains. The proposed action takes place on the northern and northeastern slopes of Center Mountain in dense mountain scrub vegetation and mature gamble oak. The proposed action is within the viewshed of County Road 312 and can be seen from various locations while traveling both east and westbound. (KOPs A-E) The northern portion of the proposed access road would be directly adjacent to the county road and would be viewed immediately in the foreground (KOP's B, C, D). The existing BLM #8241 road is relatively hard to discern except from the far eastern end of the County Road.

Private Access Alternative:

The private alternative access would be located within VRM Class II and IV areas on adjacent private property, portions on split estate, and within a VRM Class IV on BLM public lands. The vegetation is the same as described above. Short sections of this access would be visible from limited viewing points on county road 312 (Trisch/Lashley driveway west of point E) due to the location in a drainage and to screening provided by adjacent terrain.

Visual resource management objectives do not apply to non-BLM lands, but visual concerns may be addressed on split estate where federal minerals occur. VRM Classes shown or discussed for non-public lands are an indication of the visual values for those lands, and those values are only protected by landowner discretion. The protection of VRM classes, landscape character and scenic quality on private lands and split estate is discussed on pages 3-41 through 3-45 of the FSEIS. The impacts of development are also discussed on pages 4-49 through 4-54 of the FSEIS. The proposed action will not affect any of the key viewing areas or viewsheds described in the FSEIS. In particular, the proposed action will not be seen from the key viewing areas of the 1-70 corridor or the towns of New Castle or Silt.

Environmental Consequences/Mitigation:

Proposed Action:

The northern lower portion of the proposed access road would result in cuts and fills that would create long term visual modifications from KOP's A thru E because of the loss of vegetation along the road corridor within foreground distance zones to County Road 312. The proposed roadway traverses through dense mountain brush vegetation typified by 15 foot high serviceberry and oakbrush that would create a high degree of contrasts that would be evident due to the introduction of new color, lines, forms and textures into the existing landscape. .

A Landscape Architect was hired to conduct an analysis on whether or not the proposed action would meet VRM class II objectives. Mitigation was developed to show what was needed in order to meet long term VRM Class II objectives. See Attachment 1. However, due to timing constraints, soil concerns, associated expenditures for mitigation and timing for drill rigs, the private access alternative route was proposed. Final mitigation was never agreed upon by the proponent that would bring the proposed action access road into compliance with VRM Class II objectives and the attached lease stipulation.

The proposed reclamation of existing road #8241 would create short term impacts that may exceed both VRM Class II and IV objectives. However, the northern section of road #8241(Class II) is not currently visible from County Road 312. The road does become visible for short durations within the middleground and background views to westbound travelers on the county road within the VRM Class IV section (from KOP E). Long term objectives for both classes would be met after successful reclamation and 3-4 growing seasons.

The proposed pad and the southern portion of the access road (Class IV) would lie within mountain brush vegetation and would create contrast in color, line, shape and texture. Cuts and fills also create contrast by introducing new colors, shapes and forms into the existing landscape. Interim reclamation of the well pad and access road with seeded shrub and grass species would reduce the contrast after two to three growing seasons. However, after completion and reclamation, long term impacts from the access road are expected and would be visible from KOP due to the removal of the vegetation. The pad should not be visible from any KOP or County Road 312 after reclamation. VRM Class IV objectives allow for major modification of the landscape and therefore the proposed pad will meet those objectives.

Mitigation:

Mitigation was developed by landscape architect but never finalized which would have brought the proposed access road into compliance with VRM Class II. Refer to Attachment 1

The production facilities planned for placement on the pad in support of the proposed well will be painted conforming environmental color as specified in the COAs or lease terms. The facilities should be placed against the cut side of the pad, where feasible.

For the Southern portion (Class IV) of the access road and for the pad, efforts should be made to preserve vegetative features as much as possible to screen the excavated disturbance. To reduce long term impacts from the access road (introduction of new color, line, and texture), large amounts of spoil should not be broadcast downslope.

Private Access Alternative:

Environmental Consequences/Mitigation:

The easternmost portion of the access road (VRM Class II) would result in long term disturbances due the introduction of lines, color and textures into the existing landscape. However, only 2 short sections of the road would be visible from the county road 312 for short duration at a limited viewing point west of KOP E at the Trisch/Lashley driveway. Both of these sections of road take place on private surface and were located with landowner's approval. The remaining sections of the road would occur within VRM Class IV. The upper portions of the road to the pad would only be visible from KOP E mostly to westbound travelers. Long term impacts due to the removal of vegetation are expected due to the introduction of a new line and color. While VRM Class IV objectives allows for this type of modification, the following mitigation efforts should be made to reduce long term impacts.

Mitigation
Efforts should be made to preserve vegetative features as much as possible to screen the excavated disturbance. To reduce long term impacts from the access road (introduction of new color, lines, and textures), large amounts of spoil should not be broadcast downslope.

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

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

PERSONS / AGENCIES CONSULTED:
Ken Lies, Land Manager, Laramie Energy LLC
Jim Grabowski, Surveyor, Geosurv
Dan McWilliams, Project Surveys, Cordilleran Compliance Services
John McCarty, OTAK

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Jim Byers	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
Marty O'Mara	Petroleum Engineer	Downhole Conditions of Approval
Kay Hopkins	Outdoor Recreation Planner	Visual Resources
Brain Hopkins	Community Planner	Transportation, Recreation
Mark Wimmer	Rangeland Management Specialist	Soil, Water and Air, Range

FONSI
CO-140-2005-081 EA

Laramie Energy LLC
Proposal to Drill 1 Exploratory Well from proposed BLM Well Pad on Center Mountain
Baldy Federal 31-3

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

DECISION RECORD

DECISION: It is my decision to approve the Private Access Alternative as outlined in the Environmental Assessment for the Application for Permit to Drill a single exploratory well [Baldy Federal 31-3] with 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 Private Access Alternative 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: Jim Byers, Natural Resource Specialist

SIGNATURE OF AUTHORIZED OFFICIAL: _____
Authorized Officer

DATE SIGNED: 8-18-05

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator**: Laramie Energy**

Well Name	**Well No.**	**API No.**	**Surface & Bottom Hole Location**	**Lease**
Baldy Creek Fed	31-3		NENW Sec 31 T06S, 90W	COC-65513

NOTIFICATION REQUIREMENTS

Location Construction	-	at least forty-eight (48) hours prior to construction of location and access roads.
Spud Notice	-	at least twenty-four (24) hours prior to spudding the well.
Casing String and Cementing	-	at least twenty-four (24) hours prior to running casing and cementing all casing strings.
BOP and Related Equipment Tests	-	at least twenty-four (24) hours prior to initiating pressure tests.
First Production-Notice		within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days.
Reclamation	-	At least (24) hours prior to re-shaping the well pad.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

Please contact Marty O'Mara (970) 947-2825 of the Glenwood Springs field office at least 24 hours prior to spud.

Please contact Carol Snyder (970) 244-3033, or Ed Fancher (970) 244-3039 of the Grand Junction field office at least 24 hours prior to running the surface and production casing and conducting the BOP test.

DOWNHOLE CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

1. The TOC for the production casing needs to be to the base of the surface casing either during the primary cement job or through remedial cementing. The TOC for the well must be a minimum depth of:

	Minimum TOC	
Well No.	**MD**	**TVD**
31-3	1000'	1000'

2. A cement bond log (CBL) will be run from the production casing shoe to **TOC** and shall be utilized to determine the bond quality for the production casing.

3. Any usable water zones encountered below the surface casing shall be isolated and or protected by cementing across the zone. The minimum requirement is to cement from 50 feet above to 50 feet below each usable water zone encountered. Contact BLM upon encountering any usable water zones.

4. In addition to the Onshore Order No. 2 BOP testing requirements, for safety concerns, please test BOP to 250 psi for 5 minutes.

5. Open- hole logs shall be run from TD to the base of the surface casing.

REGULATORY REMINDERS

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

All drilling operations, unless otherwise specifically approved in the APD, must be conducted in accordance with Onshore Oil and Gas Order No. 2.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors.

A copy of the approved application for permit to drill (APD), including the conditions of approval and accompanying surface use plan will be furnished to the field representative by the operator to insure compliance and will be available to authorized personnel at the drillsite whenever active construction or drilling operations are underway.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to $10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

In the event after-hours approval or notification is necessary, please contact one of the following individuals:

Marty O'Mara	C: 970.319.5837	W: 970.947.2825
Petroleum Engineer	BLM Fax: 970.947.2829	
Carol Snyder	H: 970.255.9339	W: 970.244.3033
Petroleum Engineering Tech.	C: 970.216.6146	
Ed Fancher	H: 970.201.6792	W: 970.244.3039
Petroleum Engineering Tech.	C: 970.201.6792	

BLM Fax: 970.244.3083

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids

- Gas plant cooling tower cleaning wastes

- Painting wastes

- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids

- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes

- Liquid and solid wastes generated by crude oil and tank bottom reclaimers

- Used equipment lubrication oils

- Waste compressor oil, filters, and blowdown

- Used hydraulic fluids

- Waste solvents

- Waste in transportation pipeline-related pits

- Caustic or acid cleaners

- Boiler cleaning wastes

- Boiler refractory bricks

- Incinerator ash

- Laboratory wastes

- Sanitary wastes

- Pesticide wastes

- Radioactive tracer wastes

- Drums, insulation and miscellaneous solids.

SURFACE USE CONDITIONS OF APPROVAL

Notification

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.

Road Construction

2. The operator will be required to adhere to the pink-flagged centerline road alignment marked on-the-ground and construct the Baldy Federal 31-3 access road with an estimated maximum grade of 12% (average grade would be 8-9%). Sidecasting of material will not be allowed on sideslopes exceeding 40%. Culvert placement will be determined and located in field (minimum 18" diameter pipes placed every 200-300 feet). The inlet and outlet sides of the culvert will be riprapped with a well-graded mixture of rock sizes to prevent erosion or headcutting.

The size of the culvert must be large enough to pass a 10-year flood without development of static head at the entrance. Balance the cumulative roadway grade and culvert size to avoid serious head and velocity damage for a 25-year flood (BLM Manual Section 9113, H-a. Drainage Elements). Culverts should be inspected annually to ensure they are functioning properly and promptly maintained (e.g. remove any debris causing blockage) or replaced when necessary.

The road will be crowned, ditched, and drained with culverts and/or water dips. When rutting within the traveled way becomes greater then 6 inches, gravel will be applied as approved by the Authorized Officer.

Laramie Energy LLC will consult with the Army Corps of Engineers (for 404 permits) and from the State of Colorado Water Quality Control Division (for stormwater permits) prior to commencing construction activities related with said permit within the proposed action area. Written documentation to the Authorized Officer is required to indicate that appropriate permits have been obtained or are not required by the permitting agencies.

3. Provisions to control rolling boulders and rock during construction will be implemented. Large excavated rocks will bedded into the subgrade and fill so as to prevent movement downslope during road pioneering and after construction completion. Biodegradable straw matting will be placed over specified seed mix applied by hydromulching to establish desirable vegetation and protect against soil erosion.

4. Any existing range fence damaged from construction work or rolling material would be replaced and or repaired to the satisfaction of the Authorized Officer.

Trees within the construction limits would be removed and placed at the toe of fillslope in a windrow to help catch excavated material. Such woody material will be placed perpendicular to the slope (or placed cross-slope) to help retain soil, reduce soil erosion and reduce visual contrast of the cuts and fills. Clearing and grubbing debris shall not be placed or buried under any embankment sections except as described above. Any trees damaged outside the construction limits from rolling material or other construction activities would be removed or limbed, depending on the extent of damage.

5. A traffic and livestock control gate will be installed across the Baldy Federal 31-3 access road by Laramie Energy, and remain closed and locked at all times except when vehicles are passing, at a location at or near the BLM/Trisch-Laschley property line to be established along the eastern end of the new road alignment. Provisions to minimize vehicle traffic noise and potential vehicle and livestock trespass should be factored into the final gate location.

Furthermore, a steel frame gate would be installed by operator along the new access road segment between BLM Road #8241 and the 31-3 well pad to control public motorized traffic onto the 31-3 pad. Provisions to lock the pad access gate would be allowed by the operator.

Special Seeding Applications

6. Straw matting applied over broadcasted seed mix or hydromulch application of seed mix would be required along the steeper cutslope/fillslopes (exceeding 25%) of the Baldy Federal 31-3 access road to help stabilize the excavated slopes and aid in revegetation.

Road Maintenance and Dust Control

7. Laramie Energy will be responsible for providing timely year-round road maintenance and cleanup on the access road. A regular schedule for maintenance will include, but not be limited to, blading, ditch and culvert cleaning, road surface replacement and dust abatement.

8. 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.

9. 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.

Surface Facility Operations

10. The paint color to be used on all surface facilities including the metal containment rings surrounding the tank batteries is Shale Green (5Y 4/2).

11. Remote monitoring will be conducted during the winter months to minimize site visits to pad locations and reduce traffic impacts to wintering big game wildlife. In addition, scheduled winter visits (those other than for emergency purposes), should be scheduled between 10 a.m. and 3 p.m. to further minimize disturbance to wintering big game wildlife.

Cultural Resource Education/Discovery

12. 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.

Paleontological Resource Education/Discovery

13. 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.

Reclamation Plan

14. 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

Some effective practices that will be implemented during reclamation include, but are not limited to: proper siting of the well pad to minimize impacts, the immediate seeding of disturbed areas after construction, proper storage and redistribution of topsoil, reshaping cut and fill slopes, seeding with specified seed mix within the first available growing season after disturbance, deep ripping (>18 inches on 2 foot centers), fencing reclaimed areas to protect from livestock use, and the use of riprap, slash or other erosion control structures to help control sediment loss.

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.

Seed Mix Application Practices

A specified seed mix designed to meet interim reclamation standards while providing forage and browse for wintering elk and deer using a mixture of shrub, grass and forb species shall be applied. The following seed mix and rates will be used on all disturbed surfaces, including pipelines unless otherwise noted in the specific APD:

Species of Seed	Variety	Application Rate (lbs/acre)
Mountain Brome		**4.0**
Western wheatgrass	**Arriba**	**3.0**
Bluebunch wheatgrass	**P7**	**3.0**
Bottlebrush squirreltail		**2.0**
American vetch		**1.0**
Total:		**13.0 lbs. PLS/acre Total**

The above rate of application is listed in pounds of pure live seed (PLS)/acre. The seed will be certified and there will be no primary or secondary noxious weeds in the seed mixture. The operator shall notify the Authorized Officer 24 hours prior to seeding and shall provide seed tags and evidence of certification of the seed mix to the Authorized Officer within 30 days of completion of the seed application.

Upon completion of backfilling, leveling, ripping to minimum 18 inch depth on 2 foot centers, and recontouring, the stockpiled topsoil will be evenly spread over the reclaimed areas(s). Prior to reseeding, all disturbed surfaces will be scarified and left with a rough surface. No depressions will be left that would trap water and form ponds.

The prepared seedbed will be seeded within 24 hours after completing dirt work unless a change is requested by the operator and approved by the Authorized Officer. Prepare the seedbed by contour cultivating 4-6 inches deep. **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 and segregated from other subsurface material piles, ie. excess material from reserve pit construction. 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 seeded species have established. The Authorized Officer will approve the type of fencing. Fencing shall be to BLM standards

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.

ATTACHMENT 1

Baldy Creek Well Site 31-3 Access Road
Visual Assessment and Mitigation Report

OTAK, Inc.
36 North 4th Street
Carbondale, CO 81623

Summer, 2005