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

### ENVIRONMENTAL ASSESSMENT

**NUMBER**: CO-110-2004-208-EA

CASEFILE/PROJECT NUMBER (optional): COC67978

**PROJECT NAME**: Access Road to the Calamity Ridge Unit Wells

**LEGAL DESCRIPTION**: Sixth Principal Meridian, Colorado

T. 1 N., R. 100 W., Sec. 9, lot 8, 9; Sec. 10, lot 12-14; Sec. 14, lot 7, 8; Sec. 15, lot 2, 3, 7, 9, 10.

APPLICANT: EnCana Oil & Gas (USA), Inc.

**ISSUES AND CONCERNS** (optional):

#### **DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:**

**Background/Introduction**: An application has been received for an access road to five wells on private within the Calamity Ridge Unit.

**Proposed Action**: The proposed action is for the use of an existing road which will need to be upgraded in order to provide for access to five wells that are on private property but located within the Calamity Ridge Unit. The road is approximately 10,296 feet long, (1.95 miles) to the private property boundary. The right-of-way will be 10,296 feet in length with a width of 40 feet (14-16 feet traveling surface with a 40 foot disturbed width) encompassing 9.45 acres, more or less. The access road will be traveled by trucks hauling drilling equipment, water haulers, and rig hands to the drilling site on private property. There will be three culverts installed across small drainages in order to promote proper water flow. The road will be crowned and ditched in accordance with acceptable best management practices.

The term will be for 30 years. This action will be authorized under Title V of the Federal Land Policy and Management Act of 1976.

**No Action Alternative:** Under the no action alternative the application would be denied and a different route would have to be found.

#### **ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:**

**NEED FOR THE ACTION**: An application has been received for an access road to five wells on private within the Calamity Ridge Unit.

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

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

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-49 thru 2-52

<u>Decision Language</u>: "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

# <u>AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:</u>

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

#### **CRITICAL ELEMENTS**

#### **AIR QUALITY**

Affected Environment: The entire White River RA has been designated as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II.

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

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

*Mitigation*: Require dust abatement measures in the authorizing document.

#### **CULTURAL RESOURCES**

Affected Environment: The proposed access road route has been inventoried at the Class III (100% pedestrian) level (Conner 2004, Compliance Dated 7/20/2004) with no new cultural resources identified in the area inventoried.

*Environmental Consequences of the Proposed Action:* The proposed access road will not impact any known cultural resources.

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

*Mitigation*: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

#### **INVASIVE, NON-NATIVE SPECIES**

Affected Environment: No noxious weeds have been identified on the project area. Cheatgrass is found in the area and readily invades disturbed sites. Also of concern are the knapweed species which are often transported by construction equipment and support vehicles.

Environmental Consequences of the Proposed Action: With proper reclamation of disturbed areas and control of noxious weeds there are not expected to be any adverse impacts. The seed mix 4, contains non-native species which were chosen because they are highly adapted to growth in the project area, will quickly stabilize soils and has not been found to move offsite or to hybridize with species found in the adjacent plant community.

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

*Mitigation*: From the White River ROD/RMP of 1997, Appendix B: Application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

Reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions shall be initiated within six months of the termination of operations unless otherwise approved in writing by the Authorized Officer.

Use seed the recommended seed mix #4 (identified in Vegetation section below) that is certified and free of noxious weeds. Seed certification tags must be submitted to the Area Manager.

#### **MIGRATORY BIRDS**

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

Environmental Consequences of the Proposed Action: Although the road upgrade would represent an incremental and longer term reduction in the extent of sagebrush and pinyon-juniper habitat available for migratory bird breeding functions, implementation of this project would have no measurable influence on the abundance or distribution of breeding migratory birds even at the smallest landscape scale. A longer term disturbance associated with increased traffic on the upgraded road as well as the noise associated with commercial gas wells would occur.

Environmental Consequences of the No Action Alternative: Incremental reductions of sagebrush, pinyon-juniper and mountain shrub rangelands would not occur at this time or place.

Mitigation: None.

#### WASTES, HAZARDOUS OR SOLID

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

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

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

*Mitigation*: The operator shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

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

Affected Environment: The access road is primarily in the Fletcher Gulch watershed which is tributary to the White River. Water quality data is not available for this drainage. This segment of stream is considered to be an ephemeral drainage which flow in direct response to winter snow melt and late summer/fall rainstorms. Water quality of precipitation is considered to be of good quality, but can be high is sediment depending on the magnitude and duration of storm events. This stream is identified in segment 13a, which are all tributaries to the White River including all wetlands, lakes and reservoirs from a point immediately above the confluence with Piceance Creek to a point immediately above the confluence with Douglas Creek except for the specific listings in Segments 13b through 20.

A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was one to see if any water quality concerns have been identified. The State has classified this segment as a "Use Protected" reach. Its designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for three parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0 and Fecal Coliform = 2000/100ml and 630/100 ml E. coli. In addition standards for inorganic and metals have also been listed and can be found in the table of stream classifications and water quality standards.

Environmental Consequences of the Proposed Action: Impacts to water quality from upgrading the road and permitting its use as an access route would be similar to any surface disturbing activity. Roads are a large contributor of suspended sediment discharge from water running off of them. If BMPs were implemented and maintained such as but not limited to, water spreaders, water bars, crowning and ditching these impacts would be manageable.

*Environmental Consequences of the No Action Alternative:* The same impacts are not expected from the no-action alternative.

*Mitigation*: Use the following Condition of Approval from Appendix B of the White River ROD/RMP for Road Construction and Maintenance to help control suspended sediment discharge and erosion that is associated with roads.

Sloping the road base to the outside edge for surface drainage is normally recommended for local spurs or minor collector roads where low volume traffic and lower traffic speeds are anticipated. This is also recommended in situations where long intervals between maintenance will occur and where minimum excavation is wanted. Outsloping is not recommended on gradients greater than eight to 10 percent.

Surface roads if they will be subject to traffic during wet weather. The depth and gradation of surfacing will be determined by traffic type, frequency, weight, maintenance objectives, and the stability and strength of the road foundation and surface materials.

Eliminate undesirable berms that retard normal surface runoff.

When seasonal activity is completed and road closure is not necessary, the road surface should be crowned, outsloped, insloped, or water-barred.

Maintenance should be performed to conserve existing surface material, retain the original crowned or outsloped self-draining cross section, prevent or remove rutting berms (except those designed for slope protection) and other irregularities that retard normal surface runoff. Avoid wasting loose ditch or surface material over the shoulder where it can cause stream sedimentation or weaken slump-prone areas. Avoid undercutting backslopes.

Promptly remove slide material when it is obstructing road surface and ditchline drainage. Save all soil or material useable for reclamation and stockpile for future reclamation needs. Use remaining slide material for needed road improvement or place in a stable waste area. Avoid sidecasting of slide material where it can damage, overload, saturate embankments, or flow into downslope drainage courses. Reestablish vegetation in areas where more than 50 percent of vegetation has been destroyed due to sidecasting.

Culverts should be designed and constructed according to the standards provided in BLM Manual 9112. The design, review and evaluation must be accomplished under the direct supervision of a registered professional engineer.

Locate culverts or drainage dips in such a manner as to avoid discharge onto unstable terrain such as headwalls or slumps. Provide adequate spacing to avoid accumulation of water in ditches or road surfaces.

The operator will monitor culvert installations to ensure adequate armoring of inlet and outlet and no erosion of design. Patrol areas susceptible to road or watershed damage during periods of high runoff.

Keep road inlet and outlet ditches, catchbasins, and culverts free of obstructions, particularly before and during spring runoff. Routine machine-cleaning of ditches should be kept to a minimum during wet weather.

Finding on the Public Land Health Standard for water quality: Water Quality in the project area currently meets the Standard and would be expected to continue to meet the Standard in the future with implementation of the proposed action.

#### CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, Wilderness, or Wild and Scenic Rivers, riparian, Threatened, Endangered or sensitive plants and animals exist within the area affected by the proposed action. For riparian, threatened, endangered and sensitive plant or animal species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

#### **NON-CRITICAL ELEMENTS**

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

**SOILS** (includes a finding on Standard 1)

Affected Environment: Baseline soils data have been collected for Rio Blanco County by the Natural Resource Conservation Service (NRCS) and are published in an order III Soil Survey. This survey is available for review from the White River Field Office. The table below identifies soil characteristics for the soils encountered from the proposed action

Soil Number	Soil Name	Slope	Range site	Salinity	Run Off	Erosion Potential	Bedrock
13	Bulkley channery silty clay loam	5- 30%	Pinyon-Juniper woodlands	<2	Rapid	High	40-60
48	Kobar silty clay cloam	3-8%	Deep Clay Loam	<2	Medium to rapid	Moderate	>60

Environmental Consequences of the Proposed Action: Impacts to Soils Resources from upgrading the road and permitting its use as an access route would be similar to any surface disturbing activity. Roads are a large contributor of suspended sediment discharge from water running off of them. If BMPs were implemented and maintained such as but not limited to, water spreaders, water bars, crowning and ditching these impacts would be manageable. It is important to keep water off of the road surface with water spreaders and possible check dams.

*Environmental Consequences of the No Action Alternative*: Impacts are not anticipated if the proposed action were not permitted.

Mitigation: Mitigation in the Water Quality section applies to Soils Resources as well.

Finding on the Public Land Health Standard for upland soils: Soils in the project area meet the Standard and would be expected to continue to meet the Standard in the future with implementation of proposed mitigation in the Water Quality section.

#### **VEGETATION** (includes a finding on Standard 3)

Affected Environment: Project area is in a middle-aged pinyon/juniper woodland. Primary species are pinyon, Utah juniper and mountain mahogany.

Environmental Consequences of the Proposed Action: No impacts are expected to the pinyon/juniper woodlands. Reclamation proposed in the invasive species section in addition to the Standard Seed Mix #4 found in the White River ROD/RMP would function to stabilize soils which overtime would be invaded by pinyon/juniper.

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

*Mitigation*: Use Standard Seed Mix #4 from the White River ROD/RMP, Table B1. The table below identifies the seed mix to be used in reclamation.

Seed Mix #	Species (Variety)	Lbs PLS/ Acre	Range sites
4	Western wheatgrass (Rosanna)	2	Gravelly 10"-14",
	Pubescent wheatgrass (Luna)	3	Pinyon/Juniper Woodland,
	Crested wheatgrass (Nordan)	2	Stony Foothills, 147 (Mountain
	Orchardgrass (Paiute)	1	Mahogany)
	Indian ricegrass (Nezpar)	1	
	Fourwing saltbush (Wytana)	1	

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The plant communities of the project area meet the standards for Public Land Health.

#### **WILDLIFE, AQUATIC** (includes a finding on Standard 3)

Affected Environment: No aquatic wildlife is known to occupy or derive important benefit from Evacuation Creek within the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): No aquatic wildlife is known to occupy or derive important benefit from Evacuation Creek within the project area. Therefore this standard is not applicable.

#### **WILDLIFE, TERRESTRIAL** (includes a finding on Standard 3)

Affected Environment: The 1.95 of road traverses pinyon-juniper woodlands on the northwest portion transitioning into sagebrush along the southeast portion. No evidence of recent use by raptors was observed during a field visit. The road is located in Severe Winter Range for elk as designated in the White River Resource Management Plan and Record of Decision (RMP).

Environmental Consequences of the Proposed Action: The construction of this project will result in a long-term increase of road traffic associated with commercial oil/gas related activities. The development of commercial oil/gas facilities results in incremental reductions of severe winter range habitat for elk through both direct loss and disturbance associated with increased traffic and construction of pads.

Environmental Consequences of the No Action Alternative: Failure to improve this road would reduce short-term construction activity levels in this area as well as longer term activity associated with increased road traffic related to commercial oil/gas development. No net direct or indirect loss of severe winter range habitat would occur at this time or place.

*Mitigation*: This road falls within designated Severe Winter Range for elk. As a condition of approval, the BLM may preclude development activities for up to 60 days from December 1 through April 30. Local weather conditions will dictate whether this condition is in effect or not. It is the responsibility of EnCana to contact the BLM to determine whether this condition is in effect prior to initiating surface disturbing activities.

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

**OTHER NON-CRITICAL ELEMENTS:** For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management		X	
Forest Management		X	
Geology and Minerals		X	
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise	X		
Paleontology			X
Rangeland Management		X	
Realty Authorizations		X	
Recreation	X		
Socio-Economics		X	
Visual Resources	X		
Wild Horses	X		

#### ACCESS AND TRANSPORTATION

*Affected Environment*: Rio Blanco County Road 122 and BLM road 1100 will be affected by the proposed action.

Environmental Consequences of the Proposed Action: An increase of traffic would be expected to occur along these routes. Proposed action provides no additional public access to public lands.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

#### **PALEONTOLOGY**

Affected Environment: The proposed access road route is in an area mapped as the Wasatch, which the BLM has classified as a Category I formation, and the Douglas Creek member of the Green River formation, which is currently classified as a Category II formation. Category I formations such as the Wasatch are known to produce scientifically important fossils

while the Condition II formations that are not well under stood, in terms of fossil resources, in this area.

Environmental Consequences of the Proposed Action: If it should become necessary to excavate into the underlying bedrock to construct the road there is a high potential to impact scientifically important fossil resources, especially in the Wasatch formation.

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

*Mitigation*: All exposed rock outcrops along the proposed access road must be examined by an approved paleontological consultant with a report detailing the results of the examination and any recommended mitigation, as appropriate, must be submitted to the BLM prior to the initiation of construction.

**CUMULATIVE IMPACTS SUMMARY**: This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of oil and gas activities are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

#### REFERENCES CITED

Conner, Carl E.

2004 Class III Cultural Resources Inventory of the Proposed CRU Surface Water Pipeline Route (1.8 mile) in Rio Blanco County, Colorado. Grand River Institute, Grand Junction, Colorado.

Tweto, Ogden

1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

#### PERSONS / AGENCIES CONSULTED:

## **INTERDISCIPLINARY REVIEW:**

Name	Title	Area of Responsibility		
Carol Hollowed	P & EC	Air Quality		
Tamara Meagley	NRS	Areas of Critical Environmental Concern		
Tamara Meagley	NRS	Threatened and Endangered Plant Species		
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources		
Robert Fowler	Forester	Invasive, Non-Native Species		
Glenn Klingler	Wildlife Biologist	Migratory Birds		
Glenn Klingler	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife		
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid		
Carol Hollowed	P & EC	Water Quality, Surface and Ground Hydrology and Water Rights		
Glenn Klingler	Wildlife Biologist	Wetlands and Riparian Zones		
Chris Ham	ORP	Wilderness		
Carol Hollowed	P & EC	Soils		
Robert Fowler	Forester	Vegetation		
Glenn Klingler	Wildlife Biologist	Wildlife Terrestrial and Aquatic		
Chris Ham	ORP	Access and Transportation		
Ken Holsinger	NRS	Fire Management		
Robert Fowler	Forester	Forest Management		
Paul Daggett	Mining Engineer	Geology and Minerals		
Robert Fowler	Forester	Rangeland Management		
Penny Brown	Realty Specialist	Realty Authorizations		
Chris Ham	ORP	Recreation		
Chris Ham	ORP	Visual Resources		
Valerie Dobrich NRS		Wild Horses		

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

#### CO-110-2004-208-EA

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

**<u>DECISION/RATIONALE</u>**: It is my decision to approve the proposed action with the mitigation measures listed below.

#### **MITIGATION MEASURES**:

- 1. Require dust abatement measures in the authorizing document.
- 2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
  - whether the materials appear eligible for the National Register of Historic Places
  - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
  - a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items,

sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

- 4. From the White River ROD/RMP of 1997, Appendix B: Application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.
- 5. Reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions shall be initiated within six months of the termination of operations unless otherwise approved in writing by the Authorized Officer.
- 6. Use seed the recommended seed mix #4 (identified in Vegetation section below) that is certified and free of noxious weeds. Seed certification tags must be submitted to the Area Manager.
- 7. Use Standard Seed Mix #4 from the White River ROD/RMP, Table B1. The table below identifies the seed mix to be used in reclamation.

Seed Mix #	Species (Variety)	Lbs PLS/ Acre	Range sites
4	Western wheatgrass (Rosanna)	2	Gravelly 10"-14",
	Pubescent wheatgrass (Luna)	3	Pinyon/Juniper Woodland,
	Crested wheatgrass (Nordan)	2	Stony Foothills, 147 (Mountain
	Orchardgrass (Paiute)	1	Mahogany)
	Indian ricegrass (Nezpar)	1	
	Fourwing saltbush (Wytana)	1	

- 8. The operator shall be required to collect and properly dispose of any solid wastes generated by the proposed action.
- 9. Use the following Condition of Approval from Appendix B of the White River ROD/RMP for Road Construction and Maintenance to help control suspended sediment discharge and erosion that is associated with roads.
- 10. Sloping the road base to the outside edge for surface drainage is normally recommended for local spurs or minor collector roads where low volume traffic and lower traffic speeds are anticipated. This is also recommended in situations where long intervals between maintenance will occur and where minimum excavation is wanted. Outsloping is not recommended on gradients greater than eight to 10 percent.
- 11. Surface roads if they will be subject to traffic during wet weather. The depth and gradation of surfacing will be determined by traffic type, frequency, weight, maintenance objectives, and the stability and strength of the road foundation and surface materials.
- 12. Eliminate undesirable berms that retard normal surface runoff.

- 13. When seasonal activity is completed and road closure is not necessary, the road surface should be crowned, outsloped, insloped, or water-barred.
- 14. Maintenance should be performed to conserve existing surface material, retain the original crowned or outsloped self-draining cross section, prevent or remove rutting berms (except those designed for slope protection) and other irregularities that retard normal surface runoff. Avoid wasting loose ditch or surface material over the shoulder where it can cause stream sedimentation or weaken slump-prone areas. Avoid undercutting backslopes.
- 15. Promptly remove slide material when it is obstructing road surface and ditchline drainage. Save all soil or material useable for reclamation and stockpile for future reclamation needs. Use remaining slide material for needed road improvement or place in a stable waste area. Avoid sidecasting of slide material where it can damage, overload, saturate embankments, or flow into downslope drainage courses. Reestablish vegetation in areas where more than 50 percent of vegetation has been destroyed due to sidecasting.
- 16. Culverts should be designed and constructed according to the standards provided in BLM Manual 9112. The design, review and evaluation must be accomplished under the direct supervision of a registered professional engineer.
- 17. Locate culverts or drainage dips in such a manner as to avoid discharge onto unstable terrain such as headwalls or slumps. Provide adequate spacing to avoid accumulation of water in ditches or road surfaces.
- 18. The operator will monitor culvert installations to ensure adequate armoring of inlet and outlet and no erosion of design. Patrol areas susceptible to road or watershed damage during periods of high runoff.
- 19. Keep road inlet and outlet ditches, catchbasins, and culverts free of obstructions, particularly before and during spring runoff. Routine machine-cleaning of ditches should be kept to a minimum during wet weather.
- 20. This road falls within designated Severe Winter Range for elk. As a condition of approval, the BLM may preclude development activities for up to 60 days from December 1 through April 30. Local weather conditions will dictate whether this condition is in effect or not. It is the responsibility of EnCana to contact the BLM to determine whether this condition is in effect prior to initiating surface disturbing activities.
- 21. All exposed rock outcrops along the proposed access road must be examined by an approved paleontological consultant with a report detailing the results of the examination and any recommended mitigation, as appropriate, must be submitted to the BLM prior to the initiation of construction.

<u>COMPLIANCE/MONITORING</u>: Compliance will be conducted every five years by the realty staff.

#### **NAME OF PREPARER**:

NAME OF ENVIRONMENTAL COORDINATOR: Caroline & Lal swed 10/25

SIGNATURE OF AUTHORIZED OFFICIAL:

Field Manager

DATE SIGNED: 10/25/04

ATTACHMENTS: Location map of the proposed action.

CO-110-2004-208-EA

