

## ENVIRONMENTAL ASSESSMENT RECORD

1. **NUMBER** CO-110-2004-003
2. **CASEFILE/PROJECT NUMBER:** C-07805 (#7365), C-56836 (#8401), C-63733 (#9152)
3. **PROJECT NAME:** APDs
4. **LEGAL DESCRIPTION:** T4S, R101W, SESE sec.18 (#7365), T5S, R98W, SWNE sec.11 (#8401), T2S, R103W, NWNE se.18 (#9152)
5. **APPLICANT:** ENCANA OIL & GAS (USA) INC.
6. **NEED FOR PROPOSED ACTION:** To respond to applicant's request to exercise lease rights and develop hydrocarbon reserves.

### 7. **DESCRIPTION OF PROPOSED ACTION:**

**a. Proposed Action:** The applicant proposes to construct access roads; well pads and install buried steel pipelines for three well locations. The associated surface disturbance for each proposed location is as follows: #7365 access road (0.0 ac.), pipeline (12 ac.), well pad (1.14 ac), total disturbance approximately 13.14 ac.; #8401 access road (2.3 ac), pipeline (20 ac), well pad (3.0 ac.), total disturbance approx. 25.3 ac.; #9152 access road (0.24 ac.), pipeline (0.55 ac.), well pad (3.38 ac.), total disturbance approx. 4.17 ac. Total disturbance for the proposed action would be approximately 42.61 acres. For the access road to well pad #8401, the applicant proposes to move approximately one mile of an existing fence to the west side of the access road to eliminate two additional cattleguard crossings in sections 34 and 3 as indicated on map Topo B of the APD. If a well is a producer, areas not needed for production will be contoured and seeded. If a well is not a producer, the well will be plugged and all surface disturbance will be contoured to as near original contours as possible and seeded. Subsequent seedings will be applied if necessary until adequate vegetation is established.

**b. No Action Alternative:** No wells would be developed and no construction would occur.

### 8. **PLAN CONFORMANCE REVIEW:**

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

**b. Date Approved:** July 1, 1997

**c. Page/Decision:** Page 2-5: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

d. The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3) The action conforms to the decisions/pages of the plan listed above.

**9. RELATIONSHIP TO OTHER NEPA DOCUMENTS:** This environmental assessment is tiered to, and incorporates by reference the White River Resource Area Resource Management Plan (PRMP) and Final Environmental Impact Statement (FEIS) approved May 29, 1996.

**10. AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS/MITIGATION MEASURES:**

**CRITICAL ELEMENTS**

An X in the “Not Affected” column in the table below indicates that the critical element has been analyzed and will not be affected by the proposed action or the no action alternative. Affected elements are addressed in the paragraphs following the table.

<b>Not Affected</b>	<b>Critical Element</b>	<b>Specialist Signature</b>	<b>Date</b>
	Air Quality		
	Cultural Resources		
<b>X</b>	Floodplains, Wetlands, Riparian Zones, and Alluvial Valleys	Glenn Klingler	11-13-03
<b>X</b>	Native American Concerns	K. Whitaker	10/23/03
<b>X</b>	Prime and Unique Farmlands	K. Whitaker	10/23/03
<b>X</b>	Threatened and Endangered Animals	Glenn Klingler	11-13-03
<b>X</b>	Threatened and Endangered Plants	T. Meagley	10-15-03
	Wastes, Hazardous or Solid		
	Water quality, Surface or Ground		
<b>X</b>	Wilderness Area, Wild and Scenic Rivers	Chris Ham	11/12/03
<b>X</b>	Areas of Critical Environmental Concern	T. Meagley	10-15-03
<b>X</b>	Environmental Justice	K. Whitaker	10/23/03
	Invasive, Non-Native Species/Reclamation		
	Noxious Weeds		

## AIR QUALITY:

***Affected Environment:*** There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action

***Impact of Proposed Action:*** The proposed action would result in short term, local impacts to air quality during and after construction, due to dust being blown into the air. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis. Following successful seeding of the sites, airborne particulate matter should return to near pre-construction levels

***Impact of No Action Alternative:*** None

***Mitigative Measures:*** None

***Signature of specialist:*** CHollowed 11/07/03

## CULTURAL RESOURCES:

### ***Affected Environment:***

#7365 well pad, access road and well tie pipeline: The proposed well pad location, access road route and well tie pipeline has been inventoried at the Class III (100% pedestrian) level (Montgomery 2003, Compliance Dated 10/03/2003) with no new cultural resources identified in the in area inventoried.

#8401 Well pad, access road and well tie pipeline: The proposed well pad location, access road route and well tie pipeline has been inventoried at the Class III (100% pedestrian) level (Metcalf 2003, Compliance Dated 10/08/2003 and 11/14/2003) with no new cultural resources identified in the area inventoried.

#9152 well pad, access road and well tie pipeline: The proposed well pad access road and well tie pipeline have been inventoried at the Class III (100% pedestrian) level (Montgomery 2003, Compliance Dated 10/08/2003) with one previously recorded site revisited and two new isolated finds recorded in the project area.

### ***Impact of Proposed Action:***

#7365 and #8401 well pads, access roads and well tie pipelines: The proposed well pads, access roads and well tie pipelines will not have any impacts on any known cultural resources.

#9152 well pad, access road and well tie pipeline: If all mitigation measures requiring avoidance and monitoring are strictly adhered to there should be no impacts cultural resources.

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

***Mitigative Measures:***

#7365 and #8401 Well pads, access roads and well tie pipelines:

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

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

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

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

#9152 Well pad, access road and well tie pipeline: Site 5RB 3883 shall be avoided by all construction activity. Furthermore, all construction activity near the site shall be monitored at all times to ensure that the site is avoided. Discovery of cultural resources shall require the immediate suspension of all construction activity for the well pad, access and well tie pipeline until such time as written permission to resume has been received by the Field Manager. 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.

*Signature of specialist:* Michael Selle 11/14/2003

#### **WASTES, HAZARDOUS OR SOLID:**

*Affected Environment:* There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at this site.

*Impact of 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.

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

*Mitigative Measures:* The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

*Signature of specialist:* Marty O'Mara 11/12/03

#### **WATER QUALITY, SURFACE OR GROUND:** (This includes all information related to Public Land Health Standard 5.)

*Affected Environment:* BLM conducted 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 to see if any water quality concerns have been identified.

Well #7365 is in Red Rock Canyon, which is tributary to West Douglas Creek, Douglas Creek and the White River. This ephemeral drainage is in a Category 1, Priority 2, watershed (The Lower White) identified in the Unified Watershed Assessment report. The state has reasons to believe this watershed has water quality problems (sediment and salinity

loads) that may impair the watershed. Its designated beneficial uses are: Aquatic Life Cold 1, Recreation 1a, Water Supply and Agriculture. The state has further defined water quality parameters with table values. These standards reflect the ambient water quality and define maximum allowable concentrations for the various water quality parameters. The anti-degradation rule applies to this segment meaning no further water quality degradation is allowable that would interfere with or become harmful to the designated uses.

Well #8401 is in Tom Creek, which is tributary to Clear Creek, Roan Creek and the Colorado River. The State has classified this stream segment as "Use Protected". Designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegradation review requirements in the Antidegradation Rule, are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for three parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli.

Well #9152 is located in Park Canyon, which is tributary to Evacuation Creek and the White River in Utah. As required by the Clean Water Act, the state of Utah has designated the White River from the Colorado-Utah state line to its confluence with the Green River as fully supporting of all of its beneficial use classifications. This stream reaches' beneficial use classifications are: Recreation and Aesthetics, 2B; and Aquatic Life Use Support, 3C. Four parameters have been listed on the Numeric Criteria for this reach. These are: dissolved oxygen, 5.5 mg/l; pH, 6.5-9.0; maximum Fecal Coliform, 2000/100mL; and maximum Total Coliform, 5000/100mL. For these parameters, a fully supporting rating indicated the criterion was not exceeded in more than 10% of the samples collected. While the highest level of water quality protection does not apply to these waters, they are protected for their existing uses and from further degradation as a result of non-point source (sediment) pollution.

Water quality data is not available for the reaches described above. These segments of stream are considered to be ephemeral drainages 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 the storm event. In compliance with the Stormwater Discharge permitting process, efforts need to be made to keep sediment from leaving the site.

***Impact of Proposed Action:*** Impacts to water quality from development of these wells, roads and pipelines would be similar to other surface disturbing activities. Some of the impacts would be exposure of soil surface to wind and water erosion, reduced water quality due to erosion of sediment and salt, off roads, drill pads, and pipeline rights of ways, and piping or rill erosion where well pads and roads are exposed to climatic elements. These impacts would be short term until re-vegetation has occurred. If any of the proposed wells turn out to be dry holes, reclamation especially on the road should be started immediately by re-contouring and seeding the right of way.

***Impact of No Action Alternative:*** There would not be any impacts as a result of not permitting the proposed action.

**Mitigative Measures:** Oil and Gas operations are considered to be a light industrial activity by the Colorado Department of Public Health and Environment. If an action disturbs more than 5 acres they are classified as industrial dischargers. This requires operators/owners to obtain permits authorizing the discharge of storm water from these sites. These wells will need to have a permit from the state, which requires a stormwater management plan be developed showing how best management practices will be used to control runoff and sediment transport.

#7365: Keep bottom of slope fill 50 feet from drainage on the well pad.

In addition, for all wells, apply the following Conditions of Approval from Appendix B, in the White River ROD/RMP to help minimize surface disturbing impacts:

4. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation for use, once the drilling is completed.
6. All sediment control structures or disposal pits will be designed to contain a 100-year, 6-hour storm event. Storage volumes within these structures will have a design life of 25 years.
8. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.
24. Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.
35. Eliminate undesirable berms that retard normal surface runoff.

**Signature of specialist:** CHollowed 11/07/03

**NOXIOUS WEEDS , INVASIVE, NON-NATIVE SPECIES/RECLAMATION:** (This includes vegetation information related to Public Land Health Standard 3.)

***Affected Environment:***

Well #8401: The noxious weed houndstongue occurs in the Puddin Ridge project area. This species readily establishes upon disturbed areas that are not revegetated with adapted, competitive species.

Well 7365: This well will be located in the bottom of Red Rock Canyon in a big sagebrush/western wheatgrass vegetation type. The noxious weed houndstongue has been a problem in the area.

Well 9152: This well is located on Rabbit Mountain no noxious weed issues have been identified.

**Impact of Proposed Action:** The extensive earthen disturbance associated with the proposed action on Puddin Ridge, #8401, and Red Rock well #7365, will provide numerous safe sites for the invasion and proliferation of houndstongue. There is also the opportunity for noxious weed species to be transported on site by construction equipment and support vehicles. If these infestations are not eradicated, there will be a long-term negative impact to the native plant communities and their users in this area.

**Impact of No Action Alternative:** None.

**Mitigation Measures:** Promptly revegetate well #8401 with Standard Seed mix #8. Promptly seed wells 7365 and 9152 with Standard Seed mix #4. Eradicate all noxious weeds using materials and methods approved by the Authorized Officer.

**Signature of specialist:** Mark Hafkenschiel 10/20/03 R. Fowler 11-14-03

## NON-CRITICAL ELEMENTS

An X in the “Not Affected” column in the table below indicates that the non-critical element has been analyzed and will not be affected by the proposed action or the no action alternative. Affected elements are addressed in the paragraphs following the table.

Not Affected	Non-Critical Element	Specialist Signature	Date
	Access and Transportation		
	Forest Management		
	Geology and Minerals		
X	Hydrology and Water Rights	CHollowed	11/07/03
	Land Status/Realty Authorizations		
X	Fire Management	K. Holsinger	10/28/03
	Paleontology		
	Recreation		
	Soils		
	Visual Resources		
X	Wildlife Aquatic	Glenn Klingler	11-13-03

Not Affected	Non-Critical Element	Specialist Signature	Date
	Wildlife Terrestrial		
X	Wild Horses	Valerie Dobrich	11-14-2003

**ACCESS AND TRANSPORTATION:**

**Affected Environment:** All well pads, pipelines, and access roads will be within areas where motorized vehicle traffic is limited to existing roads from October 1 to April 30 each year. Off-road motorized vehicle travel is allowed outside of this window.

**Impact of Proposed Action:**

Well #7365: The applicant plans to reroute the existing road around the pad. Public vehicle traffic may be blocked temporarily during reroute construction.

Well #8401: No Impact.

Well #9152: No Impact.

**Impact of No Action Alternative:** None.

**Mitigative Measures:** None.

**Signature of specialist:** Scott Pavey 11/12/03

**FOREST MANAGEMENT:**

**Affected Environment:** Woodland vegetation is found only on the Rabbit Mountain well #9152. This well is located in a mature stand of pinyon/juniper. These woodlands are used locally as a source of firewood and fence posts. These woodlands are also classified as being of commercial quality and quantity, and would be considered within the allowable harvest level for the Douglas/Cathedral area.

**Impact of Proposed Action:** The proposed action would remove approximately four acres of pinyon/juniper (P/J) woodland. Following reclamation of the well this site would revert back to a P/J site, with invasion occurring within thirty years and full development of the community in 200-300 years. Removal of these commercial woodlands would be considered as commercial harvest and considered as part of the decadal harvest limit.

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

**Mitigative Measures:** Apply the following Condition of Approval from the White River ROD/RMP, Appendix B: 7. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

- a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.
- b. Purchased trees may be removed from federal land for resale or private use, limbs may be scattered off the area of disturbance but not dozed off.
- c. Chipped and scattered.
- d. On pipelines, those trees to be brought back onto the pipeline to deter vehicular use, may be dozed off the right-of-way (rootball and tops) and then following reclamation dragged back onto the right-of-way.

**Signature of specialist:** Robert Fowler      11-14-03

#### **GEOLOGY AND MINERALS:**

**Affected Environment:** The surface geologic formation of well location # 7365 is Mesaverde and Encana's targeted zone is in the Mancos. Well # 9152 surface formation is the Green River and the targeted formation is the Morrison. Well #8401 surface formation is Green River and targeted formation is in the Mesaverde. During drilling potential water, coal, oil and gas zones will be encountered from surface to the targeted zone.

**Impact of Proposed Action:** The cementing procedure of the proposed actions isolates the formations and will prevent the migration of gas, water, and oil between formations. The coal zones located in the Mesaverde will also be isolated during this procedure. Development of these wells will deplete the hydrocarbon resources in the targeted formation.

**Impact of No Action Alternative:** None

**Mitigative Measures:** None

**Signature of specialist:** Paul Daggett 11 /03/2003

#### **LAND STATUS/REALTY AUTHORIZATIONS:**

**Affected Environment:** Wells 7365 and 8401 will require rights-of-way for the off-lease portion of the access roads and pipelines.

**Impact of Proposed Action:** The access road into the 7365 well, will be an amendment to Encana's existing right-of-way, COC54679. There are two other pipelines in the vicinity which are held by Canyon Gas Resources and the installation of a new pipeline will cross or parallel these existing pipelines.

For the 8401 well, both the off-lease portions of the access road and pipeline will require a right-of-way. There are no known pipeline facilities in the area.

**Impact of No Action Alternative:** None

**Mitigative Measures:** The Colorado One Call procedure will have to be activated before trenching for the pipeline's can take place.

**Signature of specialist:** Penny Brown 10/20/03

## **PALEONTOLOGY:**

### ***Affected Environment:***

#7365 well pad, access road and well tie pipeline: the proposed well pad, access road and well tie pipeline are located in an area mapped as the Mesa Verde Formation (Tweto 1979) which the BLM has classified as a Category I formation meaning it is a known producer of scientifically important fossils. However, since the well pad, access road and well tie pipeline are located in the alluvial bottom of a drainage it is unlikely that fossils will be encountered.

#8401 well pad, access road and well tie pipeline: the proposed well pad, access road and well tie pipeline are located in an area mapped as the Uinta Formation (Tweto 1979) which the BLM classified as a Category I formation meaning it is a known producer of scientifically important fossils.

#9152 well pad, access road and well tie pipeline: the proposed well pad location, access road and well tie pipeline is located in an area mapped as the Lower Green River Formation, Garden Gulch/Douglas Creek formation which the BLM has classified as a Category 2 formation meaning the fossil bearing potential of the formation is not well defined in this area.

### ***Impact of Proposed Action:***

#7365 well pad, access road and well tie pipeline: It is unlikely that this proposed action will impact scientifically significant fossil resources.

#8401 well pad, access road and well tie pipeline: There is a potential for this proposed action to impact scientifically important fossil resources.

#9152 well pad, access road and well tie pipeline: The proposed action has an unknown potential to impact scientifically important fossil resources.

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

***Mitigative Measures:***

#7365 well pad, access road and well tie pipeline: If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

#8401 well pad, access road and well tie pipeline: all exposed rock outcrops in the project area must be inventoried for fossils prior to the initiation of construction with an report and recommended mitigation, as appropriate, submitted to the BLM. If at any time it becomes necessary to excavate into the underlying bedrock formation to level the well pad, excavate the reserve/blooiie pit or bury the pipeline a paleontological monitor shall be required. The monitor shall be present prior the initiation of construction into the rock.

#9152 well pad, access road and well tie pipeline: If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

***Signature of specialist:*** Michael Selle 11/17/2003

**RANGELAND MANAGEMENT:**

***Affected Environment:*** Well #8401 will affect the Fawn Creek and Piceance Mountain grazing allotments. Wells #9152 and #7367, will be located on the Twin Buttes grazing allotment. Well 9152 is within the Cottonwood pasture which is used by cattle during the winter and early spring. Well 7367 is located in the Red Rock pasture which is used during the summer and early fall. BLM has proposed the bottom of Red Rock canyon for a prescribed fire to remove the sagebrush and increase the grass forage component.

***Impact of Proposed Action:***

Well #8401: EnCana's proposal to build a new fence is both unnecessary and unacceptable. The existing fence is the allotment boundary between the Fawn Creek and the Piceance Mountain Allotments. This fence has served very effectively as a boundary between the two allotments for over 60 years. Changing the fence location would require changing the

Allotment range line agreement between permittees and there is no real need to do so. The proposed access road will cross the allotment boundary fence at four locations.

Well #9152 would have no impact on the livestock operation as this vegetation type provides no forage, and is not stocked by the permittee.

Well #7365 would impact the use of this bottom by decreasing the forage availability by approximately 1 AUM. When this bottom is burned the increase in forage production would compensate for the well pad.

***Impact of No Action Alternative:*** There would be no change from the existing situation.

***Mitigation Measures:***

Well #8401: The existing fence will *not* be relocated. EnCana needs to install four cattleguards, one at each point where the access road crosses the allotment boundary fence. All cattleguards and their installation shall meet BLM specifications. At the second and fourth cattleguard, a gate needs to be installed next to the cattleguard. The fence should be braced and stretched to meet BLM specifications at all places.

Well #7365: EnCana needs to prepare their facilities for the eventuality of the prescribed burn.

***Signature of specialist:*** Mark Hafkenschiel R. Fowler 11-14-03

**RECREATION:**

***Affected Environment:*** The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

***Impact of Proposed Action:*** The public will lose approximately 43 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. Additionally, as #8401 is situated in an area that is very difficult for the public to access and more than likely those users have traveled to this remote area to seek solitude. The introduction of this well and associated structures/activities will likely negatively affect those recreationists.

***Impact of No Action Alternative:*** No loss of dispersed recreation potential and no impact to hunting recreationists.

***Mitigative Measures:*** None.

***Signature of specialist:*** Chris Ham 11/12/03

**SOILS:**

**Affected Environment:** Soils have been mapped in an order III soil survey by the NRCS. A copy of these surveys is available for review in the White River Field Office.

Soil Characteristics of Soil Mapping Units

Proposed Project	Soil Number	Soil Name	Slope	Range site	Salinity	RunOff	Erosion Potential	Bedrock
Well #7365 & Well #9152	74	Rentsac-Moyerson-Rock Outcrop complex	5-65%	PJ Woodlands/Clayey Slopes	<2	Medium	Moderate to very high	10-20
Well #8401	55	Parachute-Irigul complex	5-30%	Mountain Loam / Loamy Slopes		Medium Rapid	Moderate to Severe	25 / 13

**Impact of Proposed Action:** General impacts associated with oil and gas and road development include but are not limited to, loss of topsoil, soil compaction and possible increase in sediment loads to the White River. The primary surface-disturbing impact would be a potential increase in sediment transport from runoff events after the protective vegetative cover has been removed. After field visits, additional site-specific comments/impacts are listed below.

Best management practices (BMPs), used to slow runoff, trap sediment and prepare reclaimed areas for seeding will help reduce soil loss from disturbed areas. With the use of BMPs, impacts are expected to be short in duration, during the construction phase and for a short time after construction until successful reclamation is achieved.

**Impact of No Action Alternative:** Additional impacts from not permitting the proposed action are not anticipated.

**Mitigative Measures:** Apply the following COAs from Appendix B, White River ROD/RMP:

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

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

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

**Signature of specialist:** CHollowed 11/07/03

## VISUAL RESOURCES:

***Affected Environment:*** The proposed actions for #7365 and #9152 lie within a VRM Class II Area. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

The proposed action for #8401 lies within a VRM Class III Area. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

***Impact of Proposed Action:*** The proposed action for #7365 is located in the bottom of Red Canyon adjacent to an existing two track road that dead ends in the canyon less than a mile past the proposed well pad. At the proposed location Red Canyon is narrow with steep ridges on both sides of the proposed action. The proposed location would be completely out of view by a casual observer traveling the nearest public access route which would be state highway 139. The proposed action for #9152 is located on the top of Rabbit Mountain surrounded by a dense stand of pinyon/juniper. The proposed access road would end at the well pad. A casual observer traveling the county road across Rabbit Mountain would not be able to view the proposed action unless the final destination was the well pad of the proposed action. The proposed actions for #7365 and #9152 would not attract the attention of the casual observer and the management objectives of the VRM II classification would be retained.

The proposed action for #8401 is located on a knob on Puddin Ridge in a stand of sagebrush/serviceberry. Access to this area is very limited, due to the private ownership of surrounding lands. Casual observers would be present primarily during big game hunting seasons, due to the primitive roads that could be used by the public. Currently there is only one route in/out for the public. The proposed action would attract attention of a casual observer, but should not dominate the view, since there are steep canyons with pockets of Aspen with potential for deer/elk that the casual observer would be more interested in, than a well pad with low profile production equipment on it. The proposed action for #8401 would attract the attention of the casual observer but would not dominate the view; therefore the management objectives of the VRM II classification would be retained.

***Impact of No Action Alternative:*** There would be no environmental impacts from the no action alternative.

**Mitigative Measures:** On all locations use low profile production equipment, paint all production equipment Juniper Green, and leave a buffer of pinyon/juniper trees around #9152 (except where access road enters).

**Signature of specialist:** K. Whitaker 10/23/03

## **WILDLIFE TERRESTRIAL:**

### ***Affected Environment:***

#8401: This pad location is located in vegetation consisting of sagebrush, rabbit brush and serviceberry at an elevation of 8438 feet. An aspen stand is located 200 meters to the northeast of the pad. This pad is located in designated sage grouse habitat. An active sage grouse lek exists within ¾-mile from the designated access road. No raptor nests were observed within the aspen stand.

#7365: This pad consists of overmature sagebrush and cheat grass. The elevation is 6900 feet and the surrounding uplands are steep slopes dominated by large, contiguous blocks of pinyon-juniper and Douglas-fir forests. The area was examined for woodland-nesting raptors. No nests were found despite observing a Cooper's hawk in the vicinity. This location is located within Severe Winter Range for elk as designated by the White River Resource Management Plan (RMP).

#9152: This area is located on top of Rabbit Mountain in mature pinyon-juniper woodlands at 7426 feet elevation. No nests were observed during a field visit, though this area has high potential for woodland-nesting raptors.

**Impact of Proposed Action:** Well #8401 is in designated greater sage-grouse habitat (overall range, winter range, and production area). Removal of sagebrush over time can negatively impact sage grouse, which is a species being considered for listing as threatened/endangered by the U.S. Fish and Wildlife Service.

Well # 7365 is located in severe winter range for elk.

**Impact of No Action Alternative:** Failure to construct these wells would reduce short-term construction activity levels in this area. Longer-term activity associated with well maintenance and production would remain relatively constant since these locations are within an active field of development.

**Mitigative Measures:** For wells #9152 and #7365, current raptor surveys must be conducted if these locations are not constructed, drilled and completed prior to February 1. It is the responsibility of EnCana to contact the BLM to ensure these surveys are conducted.

Well #7365 is located in Severe Winter Range for elk. The BLM may prohibit surface disturbing activities for up to 60 days between the dates of December 1 and April 30. This

condition of approval is at the discretion of the BLM Field Manager, and is dependent upon local weather conditions. EnCana must contact the BLM prior to initiating surface disturbing activities during this time period to determine if this condition is in effect.

*Signature of specialist:* Glenn Klingler 11-13-03

#### **WILD HORSES:**

*Affected Environment:* Rabbit Mountain well 9152 is on the edge of the West Douglas Herd Area. No horses are in this area. The West Douglas Herd Area is currently being re-analyzed under an RMP amendment to determine the feasibility of managing wild horses in this area. This amendment is slated for completion in the fall of 2004.

*Impact of Proposed Action:* There would be no impacts.

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

*Mitigation Measures:* None

*Signature of specialist:* R. Fowler 11-14-03

**CUMULATIVE IMPACTS:** No cumulative impacts were identified. The White River PRMP/FEIS analyzed cumulative impacts of resource-area-wide oil and gas development.

*Signature of specialist:* Scott Pavey 11/17/03

## FINDING OF NO SIGNIFICANT IMPACT (FONSI)/DECISION RECORD

**FONSI:** The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. The approved mitigation measures (see attached Conditions of Approval) 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 AND RATIONALE:** It is my decision to approve the development of Wells #7365, #8401, and #9152 as described in the proposed action, with mitigation listed in the attached Conditions of Approval, except that for Well #8401, the grazing allotment fence will not be moved. The applicant will install cattle guards as described in the Conditions of Approval at all fence crossings.

**MITIGATION MEASURES:** See attached Conditions of Approval

**SIGNATURE OF PREPARER:** *Kevin W. Dittler*

**DATE SIGNED:** 11/18/03

**SIGNATURE OF ENVIRONMENTAL COORDINATOR:** *Scott P. ...*

**DATE SIGNED:** 11/18/03

**SIGNATURE OF AUTHORIZED OFFICIAL:** *Deanna Rhall*

**DATE SIGNED:** 11/20/03

### ATTACHMENTS:

- 1) Conditions of Approval
- 2) Map of the Location of the Proposed Action



2. All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.
3. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the location is abandoned. When topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile.
4. All sediment control structures or disposal pits, will be designed to contain a 100-year, 6- hour storm event. Storage volumes within these structures will have a design life of 25 years.
5. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.
6. Eliminate undesirable berms that retard normal surface runoff.
7. Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.
8. Disturbed areas shall be restored as nearly as possible to its original contour.
9. All disturbed sites shall be promptly reclaimed to the satisfaction of the Field Office Manager.
10. Seed all disturbed surfaces with the following seed mixture:

SPECIES (VARIETY)	LBS. PLS/ACRE
Smooth brome (Manchar)	3
Pubescent wheatgrass (Luna)	3
Crested wheatgrass (Nordan)	2
Cicer milkvetch (Monarch)	1
11. Distribute topsoil evenly over the location and prepare a seedbed by disking or ripping. Drill seed on contour at a depth no greater than 1/2 inch. In areas that cannot be drilled, broadcast at double the seeding rate and harrow seed into the soil.
12. Use seed that is certified and free of noxious weeds. Seed certification tags must be submitted to the Field Office Manager.
13. Eradicate all noxious weeds using materials and methods approved by the Authorized Officer. 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.

14. Well #8401: The existing fence shall not be relocated. EnCana needs to install four cattleguards, one at each point where the access road crosses the allotment boundary fence. All cattleguards and their installation shall meet BLM specifications. At the second and fourth cattleguard, a gate needs to be installed next to the cattleguard. The fence should be braced and stretched to meet BLM specifications at all places.
15. #8401 well pad, access road and well tie pipeline: all exposed rock outcrops in the project area must be inventoried for fossils prior to the initiation of construction with an report and recommended mitigation, as appropriate, submitted to the BLM. If at any time it becomes necessary to excavate into the underlying bedrock formation to level the well pad, excavate the reserve/blooiie pit or bury the pipeline a paleontological monitor shall be required. The monitor shall be present prior the initiation of construction into the rock.
16. No load lines shall extend outside the tank dike.
17. The reserve pit shall have a minimum of two feet of freeboard at all times. Freeboard shall be measured from the top of the pit liner to the surface of the water in the reserve pit.
18. All produced fluids including dehydrator vent/condensate line effluent must be contained. All production pits must be fenced with woven wire.
19. The concentration of hazardous substances in the reserve pit at the time of pit backfilling must not exceed the standards set forth in CERCLA.
20. All open-vent exhaust stacks associated with heater-treater, separator and dehydrator units shall be installed to prevent birds and bats from entering the exhaust stacks and to the extent practical to discourage perching and nesting.
21. 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.
22. The goal for rehabilitation of any disturbed area shall be the permanent restoration of original site conditions and productive capability.
23. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

24. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.
25. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.
26. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.
27. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:
  - a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.
  - b. Purchased trees may be removed from federal land for resale or private use, limbs may be scattered off the area of disturbance but not dozed off.
  - c. Chipped and scattered.
  - d. On pipelines, those trees to be brought back onto the pipeline to deter vehicular use, may be dozed off the right-of-way (rootball and tops) and then following reclamation dragged back onto the right-of-way.
28. The Colorado One Call procedure will have to be activated before trenching for the pipelines can take place.

## Conditions of Approval

### II. NOTICES

#### A. DRILLING PLAN

1. All operations, unless otherwise specifically approved in the APD, must be conducted in accordance with Onshore Oil and Gas Order No. 2; Drilling Operations.
2. One copy of all charted BOPE tests, logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed with the completion report, Form 3160-4. This completion report shall be filed within 30 days of completion of operations and submitted prior to or along with the first production notice.
3. The United States of America considers the development of groundwater resources to be necessary and frequently indispensable to effective land management. Therefore, any groundwater intercepted by the party conducting mineral exploration shall be reported to the District Manager immediately including approximate quantities and a sample in a sealed quart container. The United States shall have the first opportunity to file state water right for the intercepted groundwater. The undersigned may file for water right only with a written waiver from the District Manager.
4. To protect the water and energy resources in the formation that are penetrated, the production casing shall be cemented to the surface casing.
5. Surface casing shall be tested from surface to TD (float collar) at 1,500 psi surface pressure (prior to drilling out the float collar).

#### B. SURFACE USE PLAN OF OPERATIONS

1. In accordance with Onshore Order #1, III.E and ARPA 1979 as amended (AL, 96-95), the operator is responsible for informing all persons in the area who are associated with this project 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 construction, the operator is to immediately stop work that might further

## Conditions of Approval

disturb such materials, and 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); and,
- 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 authorized officer, 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.



2. All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.
3. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the location is abandoned. When topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile.
4. All sediment control structures or disposal pits, will be designed to contain a 100-year, 6- hour storm event. Storage volumes within these structures will have a design life of 25 years.
5. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.
6. Eliminate undesirable berms that retard normal surface runoff.
7. Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.
8. Disturbed areas shall be restored as nearly as possible to its original contour.
9. All disturbed sites shall be promptly reclaimed to the satisfaction of the Field Office Manager.
10. Seed all disturbed surfaces with the following seed mixture:

SPECIES (VARIETY)	LBS. PLS/ACRE
Western wheatgrass (Rosanna)	2
Pubescent wheatgrass (Luna)	3
Crested wheatgrass (Nordan)	2
Orchardgrass (Paiute)	1
Indian ricegrass (Nezpar)	1
Fourwing saltbush (Wytana)	1
11. Distribute topsoil evenly over the location and prepare a seedbed by disking or ripping. Drill seed on contour at a depth no greater than 1/2 inch. In areas that cannot be drilled, broadcast at double the seeding rate and harrow seed into the soil.
12. Use seed that is certified and free of noxious weeds. Seed certification tags must be submitted to the Field Office Manager.
13. Eradicate all noxious weeds using materials and methods approved by the Authorized Officer. 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.

14. Well #7365 is located in Severe Winter Range for elk. The BLM may prohibit surface disturbing activities for up to 60 days between the dates of December 1 and April 30. This condition of approval is at the discretion of the BLM Field Manager, and is dependent upon local weather conditions. EnCana must contact the BLM prior to initiating surface disturbing activities during this time period to determine if this condition is in effect.
15. Well #7365: EnCana needs to prepare their facilities for the eventuality of the prescribed burn.
16. #7365 well pad, access road and well tie pipeline: If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.
17. No load lines shall extend outside the tank dike.
18. The reserve pit shall have a minimum of two feet of freeboard at all times. Freeboard shall be measured from the top of the pit liner to the surface of the water in the reserve pit.
19. All produced fluids including dehydrator vent/condensate line effluent must be contained. All production pits must be fenced with woven wire.
20. The concentration of hazardous substances in the reserve pit at the time of pit backfilling must not exceed the standards set forth in CERCLA.
21. All open-vent exhaust stacks associated with heater-treater, separator and dehydrator units shall be installed to prevent birds and bats from entering the exhaust stacks and to the extent practical to discourage perching and nesting.
22. 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.
23. The goal for rehabilitation of any disturbed area shall be the permanent restoration of original site conditions and productive capability.
24. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

25. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.
26. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.
27. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.
28. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:
  - a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.
  - b. Purchased trees may be removed from federal land for resale or private use, limbs may be scattered off the area of disturbance but not dozed off.
  - c. Chipped and scattered.
  - d. On pipelines, those trees to be brought back onto the pipeline to deter vehicular use, may be dozed off the right-of-way (rootball and tops) and then following reclamation dragged back onto the right-of-way.
29. The Colorado One Call procedure will have to be activated before trenching for the pipelines can take place.
30. #7365: Keep bottom of slope fill 50 feet from drainage on the well pad.
31. For wells #9152 and #7365, current raptor surveys must be conducted if these locations are not constructed, drilled and completed prior to February 1. It is the responsibility of EnCana to contact the BLM to ensure these surveys are conducted.

## Conditions of Approval

### II. NOTICES

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3. The United States of America considers the development of groundwater resources to be necessary and frequently indispensable to effective land management. Therefore, any groundwater intercepted by the party conducting mineral exploration shall be reported to the District Manager immediately including approximate quantities and a sample in a sealed quart container. The United States shall have the first opportunity to file state water right for the intercepted groundwater. The undersigned may file for water right only with a written waiver from the District Manager.
4. To protect the water and energy resources in the formation that are penetrated, the production casing shall be cemented to the surface casing.

#### B. SURFACE USE PLAN OF OPERATIONS

1. In accordance with Onshore Order #1, III.E and ARPA 1979 as amended (AL, 96-95), the operator is responsible for informing all persons in the area who are associated with this project 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 construction, the operator is to immediately stop work that might further

## Conditions of Approval

disturb such materials, and 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); and,
- 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 authorized officer, 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.



2. All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be low profile and painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.
3. When preparing the site, all suitable topsoil should be stripped from the surface of the location and stockpiled for reclamation once the location is abandoned. When topsoil is stockpiled on slopes exceeding five percent, construct a berm or trench below the stockpile.
4. All sediment control structures or disposal pits, will be designed to contain a 100-year, 6- hour storm event. Storage volumes within these structures will have a design life of 25 years.
5. All activity shall cease when soils or road surfaces become saturated to a depth of three inches unless otherwise approved by the Authorized Officer.
6. Eliminate undesirable berms that retard normal surface runoff.
7. Provide vegetative or artificial stabilization of cut and fill slopes in the design process. Avoid establishment of vegetation where it inhibits drainage from the road surface or where it restricts safety or maintenance.
8. Disturbed areas shall be restored as nearly as possible to its original contour.
9. All disturbed sites shall be promptly reclaimed to the satisfaction of the Field Office Manager.
10. Seed all disturbed surfaces with the following seed mixture:

SPECIES (VARIETY)	LBS. PLS/ACRE
Western wheatgrass (Rosanna)	2
Pubescent wheatgrass (Luna)	3
Crested wheatgrass (Nordan)	2
Orchardgrass (Paiute)	1
Indian ricegrass (Nezpar)	1
Fourwing saltbush (Wytana)	1
11. Distribute topsoil evenly over the location and prepare a seedbed by disking or ripping. Drill seed on contour at a depth no greater than 1/2 inch. In areas that cannot be drilled, broadcast at double the seeding rate and harrow seed into the soil.
12. Use seed that is certified and free of noxious weeds. Seed certification tags must be submitted to the Field Office Manager.
13. Eradicate all noxious weeds using materials and methods approved by the Authorized Officer. 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.

14. For wells #9152 and #7365, current raptor surveys must be conducted if these locations are not constructed, drilled and completed prior to February 1. It is the responsibility of EnCana to contact the BLM to ensure these surveys are conducted.
15. Leave a buffer of pinyon/juniper trees around well pad #9152 (except where access road enters well pad).
16. #9152 well pad, access road and well tie pipeline: If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.
17. No load lines shall extend outside the tank dike.
18. The reserve pit shall have a minimum of two feet of freeboard at all times. Freeboard shall be measured from the top of the pit liner to the surface of the water in the reserve pit.
19. All produced fluids including dehydrator vent/condensate line effluent must be contained. All production pits must be fenced with woven wire.
20. The concentration of hazardous substances in the reserve pit at the time of pit backfilling must not exceed the standards set forth in CERCLA.
21. All open-vent exhaust stacks associated with heater-treater, separator and dehydrator units shall be installed to prevent birds and bats from entering the exhaust stacks and to the extent practical to discourage perching and nesting.
22. 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.
23. The goal for rehabilitation of any disturbed area shall be the permanent restoration of original site conditions and productive capability.
24. The operator shall be required to collect and properly dispose of any solid wastes generated by this project.
25. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full

width of the disturbed area, as directed by the authorized officer.

26. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.
27. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff.
28. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:
  - a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.
  - b. Purchased trees may be removed from federal land for resale or private use, limbs may be scattered off the area of disturbance but not dozed off.
  - c. Chipped and scattered.
  - d. On pipelines, those trees to be brought back onto the pipeline to deter vehicular use, may be dozed off the right-of-way (rootball and tops) and then following reclamation dragged back onto the right-of-way.
29. The Colorado One Call procedure will have to be activated before trenching for the pipelines can take place.
30. #9152 Well pad, access road and well tie pipeline: Site 5RB 3883 shall be avoided by all construction activity. Furthermore, all construction activity near the site shall be monitored at all times to ensure that the site is avoided. Discovery of cultural resources shall require the immediate suspension of all construction activity for the well pad, access and well tie pipeline until such time as written permission to resume has been received by the Field Manager.

## Conditions of Approval

### II. NOTICES

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4. To protect the water and energy resources in the formation that are penetrated, the production casing shall be cemented to the surface casing.

#### B. SURFACE USE PLAN OF OPERATIONS

1. In accordance with Onshore Order #1, III.E and ARPA 1979 as amended (AL, 96-95), the operator is responsible for informing all persons in the area who are associated with this project 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 construction, the operator is to immediately stop work that might further

## Conditions of Approval

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- 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 authorized officer, 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.

# Location of Proposed Action CO-WRFO-2004-003-EA

