U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641

Section 390
Categorical Exclusion for
Oil and Gas Development

NUMBER: DOI-BLM-CO-110-2010-0186-CX (390)

CASEFILE/PROJECT NUMBER: COC 066586

PROJECT NAME: APD on well pad 32-14-298: Federal RG 332-14-298

LEGAL DESCRIPTION: T1S R98 W Sec. 14 SWNE

APPLICANT: Williams Production RMT

DESCRIPTION OF PROPOSED ACTION:

The applicant proposes that the Bureau of Land Management (BLM) approve expansion of the existing Federal Ryan Gulch 32-14-298 well pad and permit drilling of fifteen additional wells, including this Federal RG 332-14-298 well. Well pad expansion would initially disturb a total of 9.42 acres

Three existing gas and water lines currently service the pad, but the applicant wishes to accommodate increased production by replacing the lines with one 16" gas line and two 6-8" water lines in the existing trench. An amendment to the existing BLM right of way (ROW) has been submitted.

Estimated fresh water volumes for drilling operations would be approximately 8,100 bbls, 7,000 bbls for dust control, and 35,000 bbls for well completions. Water would be transported by truck from one of the following sources: 1) the Mautz Ranch using Rio Blanco County (RBC) Roads 86 and 24, and BLM road, 2) surface water at the Mantle's Ranch using RBC Roads 85, 86, 24, and BLM road, or 3) surface water at Mantle's Ranch using RBC Roads 5 and 24, and BLM road.

No off-site construction materials would be needed for the well pad expansion; surface and subsurface materials at the location would be utilized. No construction materials would be taken from Federal lands without prior approval.

Cuttings would be contained in a lined (30 ml synthetic material) drill cuttings pit, where they would reside until being hauled offsite to the Meeker Landfill. The cuttings pit would be closed after removal of the liner. The reserve pit would be lined with two 30 ml reinforced synthetic liners and would be fenced on three sides during drilling and completion operations, with the fourth side being also fenced immediately upon removal of the drilling rig. Drill fluids and a smaller amount of fine cuttings and cement from the well would be contained and buried in the reserve pit. Drilling mud contained in the reserve pit would first be dewatered; fluids in the reserved pit would then be allowed to evaporate prior to burial. Produced fluids would be contained in test tanks on the location that would be removed from the location within six months. Produced fluids would be collected in the tank battery and then be either injected, recycled, or hauled off for disposal in an authorized salt water facility.

A small temporary living quarters would located on the site and consist of several trailers placed side by side, or tacked on top of each other. The operator provides plans for interim and final reclamation, which include salvaging 8-12 inches of topsoil to redistribute during reclamation. The location has been designed to prevent collection of surface runoff and the Surface Use plan also includes site specific conditions for stormwater management. Cut and fill slopes on the expanded pad would typically range from 3:1 to 5:1, but would be constructed no steeper than 1-1/2:1.

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

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

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5

Decision Language: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

REVIEW OF EXISTING NEPA DOCUMENTS:

List by name and date all existing NEPA documents that cover the Proposed Action.

Name of Document: CO-110-2007-043-EA

Date Approved: 1 February 2007

Name of Document: CO-110-2008-107-DNA

Date Approved: 15 July 2008

CATEGORICAL EXCLUSION REVIEW: The proposed action has been reviewed with the list of extraordinary circumstances described in 516 DM 2, Appendix 2. This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. None of the exceptions in 516 DM 2, Appendix 2, apply.

Additionally, the proposed action is categorically excluded from further documentation in accordance with statutory NEPA categorical exclusions (CX), as granted in Section 390 of the Energy Policy Act of 2005, for oil and gas exploration and development. The proposed action qualifies as a categorical exclusion under Section 390, based on the qualifying criteria Number (2) of the categories listed below.

Qualifying Criteria	YES	NO
1. Individual surface disturbances of less than five (5) acres so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed. **(a, b, and c below must be yes to have this CX apply)**		X
a. Will disturb less than 5 acres, if more than one action is proposed for a lease, each activity is counted separately and each may disturb up to five acres.		X
b. The current un-reclaimed surface disturbance readily visible on the entire leasehold is not greater than 150 acres, including the proposed action.		X
c. This categorical exclusion includes the requirement of a site-specific NEPA document. A site specific NEPA analysis can be either an exploration and/or development EA/EIS, an EA/EIS for a specific POD, a multi-well EA/EIS or an individual permit approval EA/EIS.		X
2. Drilling an oil and gas location or well pad at a site at which drilling has occurred within five (5) years prior to the date of spudding the well. A "location or well pad" is defined as a previously disturbed or constructed well pad used in support of drilling a well. "Drilling" in the context of, "Drilling has occurred within five (5) years"	X	
3. Drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed drilling as a reasonably foreseeable activity, so long as such plan		X

Qualifying Criteria	YES	NO
or document was approved within five (5) years prior to the date of spudding the well. **(a, b, and c below must be yes to have this CX apply)**		
a. The proposed APD is within a developed oil or gas field. A developed field is defined as any field in which a confirmation well has been completed.		X
b. There is an existing NEPA document (including that supporting a land use plan) that contains a reasonably foreseeable development scenario broad enough to encompass this action.		X
c. The NEPA document was finalized or supplemented within five years of spudding the well.		X
4. Placement of a pipeline in an approved right-of-way corridor, as long as the corridor was approved within five (5) years prior to the date of placement of the pipeline. (To avoid problems, the right-of-way must contain a term or condition that provides for the suspension of the authorization if placement does not begin before the last date that the CX is available, thus requiring the operator to obtain a new right-of-way.) **(a and b below must be yes to have this CX apply)**		X
a. The placement of a pipeline in an existing corridor of any type		X
b. Placement of the pipeline within five years of approval (or amendment) of the most recent date of a decision (NEPA or permit authorization) are the only two applicable factors for review pursuant to this statute and must both be satisfied to use this CX.		X
5. Maintenance of a minor activity, other than any construction or major renovation of a building or facility.		X

CX (1) and (3) reference previous NEPA documents, the same or better mitigating measures from the tiered NEPA document will be applied as well as BMPs to reduce impacts to any authorization issued.

CX (2) and (3) must state the date when the previous well was completed or the date the site had workover operations involving a drilling rig of any type or capability; this also includes completion of any plugging operations. Because the 5-year period is tied to the spudding of the pending well, the APD must contain a COA that if no well is spudded by the date the CX is no longer applicable, the APD will expire, thus requiring the operator to obtain a new APD.

CX (4) to avoid problems, the right-of-way must contain a term or condition that provides for the suspension of the authorization if placement does not begin before the last date that the CX is available, thus requiring the operator to obtain a new right-of-way.

For all CX a brief narrative must be included in the well file(s) stating the rationale for making the determination that the categorical exclusion applies. If more than one applies each shall be explained.

Documentation: A Categorical Exclusion 390 has been selected as the mechanism to analyze impacts associated with this new gas well (332-14-298) on the existing well pad (32-14-298). While pad expansion does result in additional surface disturbance beyond that which was originally approved in CO-110-2007-043-EA and CO-110-2008-107-DNA, impacts related to construction and development are not anticipated to be beyond those that have been previously disclosed and mitigated in the existing analyses.

Categorical Exclusion Criteria #2 allows that an exclusion to standard NEPA analysis be applied when drilling a new well is proposed at a location or well pad site at which drilling has occurred within five years prior to the date of spudding the well. Drilling occurred at this site 2 May 2009; the NEPA analysis is therefore valid until 2 May, 2014.

INTERDISCIPLINARY REVIEW:

The proposed action was presented to, and reviewed by the White River Field Office interdisciplinary team on 05/14/2010.
Date

A list of resource specialists who participated in this review is available upon request from the White River Field Office.

REMARKS:

Cultural Resources: The area of the proposed well pad expansion and additional wells has been inventoried at the Class III (100% pedestrian) level (Berg et al. 2007, Compliance Dated 6/26/2008, McDonald 2006, Compliance Dated 10/25/2006) with only one isolated find in the vicinity. As long as the well pad is not significantly expanded it is unlikely that significant surface remains will be impacted. (MRS 6/7/2010)

Native American Religious Concerns: No Native American Religious Concerns are known in the area, and none have been noted by Northern Ute tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken. (MRS 6/3/2010)

Paleontological Resources: The proposed well pad location is located in an area generally mapped as the Uinta Formation (Tweto 1979) which the BLM, WRFO has classified as a potential fossil yield classification (PFYC) 4/5 formation meaning it is known to produce scientifically important fossil resources (cf. Armstrong and Wolny 1989). If it becomes necessary to excavate new reserve/blooie/cuttings pits there is the potential to impact scientifically important fossil resources. (MRS 6/3/2010)

Threatened and Endangered Animal Species: No wildlife-related issues or concerns. WRFO staff contacted Colorado Division of Wildlife (Ed Winters) and verified via e-mail on 24 June 2010 that development at this location would have no substantive influence on ongoing big game research. (EH; 6/25/2010)

Special Status Plant Species: No known concerns. (JKS 6/11/10)

REFENRENCES CITED;

Armstrong, Harley J. and David G. Wolny
1989 Paleontological Resources of Northwest Colorado: a Regional Analysis. Museum of Western Colorado, Grand Junction, Colorado.

Berg, Caryn M., Michael J. Retter and Scott C. Phillips
2007 Class III Cultural Resource Inventory of the Proposed Duke Energy Land Acquisition, Williams Ryan Gulch Project, Rio Blanco County, Colorado. SWCA Environmental Consultants, Broomfield, Colorado. (08-127-04)

McDonald, Kae
2006 Five Windsor Energy Wells Pads and Associated Access Roads in the Vicinity of Ryan Gulch, A Class III cultural Resource Inventory in Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado. (06-54-19)

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

MITIGATION: All applicable COA's and mitigation associated with the existing NEPA document CO-110-2008-107-DNA will be carried forward and are listed below along with any new mitigation required.

I. SURFACE USE PLAN

Timing Limitations

1) The operator shall apply proper pre-planning and plan all activities and operations in a manner so as to avoid infringing on any timing limitations; without the need to apply for exceptions to the specified timing limitations.

2) It is recommended that development take place outside the breeding window for woodland raptors (15 March through 15 August).
3) If construction/development occurs between April 15 and November 15, the operator will be required to water or surface access roads from RBC Rd 85 east to all active locations to reduce airborne dust and damage to roadside vegetation communities.
4) If the well has not been spudded by 05/02/2014, this APD will expire, and the operator is to cease all operations related to preparing to drill the well thus requiring the operator to obtain a new APD and NEPA analysis.

Pre-Construction Activities and Notifications

5) The operator will be responsible for complying with all local, state, and federal regulations as well as providing documentation to the BLM that they have done so
6) The *designated Natural Resource Specialist* will be notified 24 hours prior to beginning all construction-related activities associated with this project that result in disturbance of surface soils via email or by phone. Construction-related activities may include, but are not limited to, pad and road construction, clearing pipeline corridors, trenching, etc. Notification of all construction-related activities, regardless of size, that result in disturbance of surface soils as a result of this project is required.
7) Mud blading will be prohibited and all activity shall cease when soils or road surfaces become saturated to a depth of three inches (on BLM administered lands) unless otherwise approved by the AO.
8) Land clearing, grading, earth moving or excavation activities will be suspended when wind speeds exceed a sustained velocity of 20 miles per hour.

Post-Construction Notifications

9) In an attempt to track interim and final reclamation of federal actions related to the development of federal mineral resources, the operator shall provide the *designated Natural Resource Specialist* with geospatial data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS). These data will be used to accurately locate and identify all geographic as-built (i.e., constructed) features associated with this project and included in the Application for Permit to Drill (APD) or Sundry Notice (SN), as appropriate. These data shall be submitted within 60 days of construction completion. If the operator is unable to submit the required information within the specified time period, the operator shall notify the *designated Natural Resource Specialist* via email or by phone, and provide justification supporting an extension of the required data submission time period. GIS polygon features may include, but are not limited to, constructed access roads, existing roads that were upgraded, pipeline corridors, and well pad footprints. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or, (3) AutoCAD .dwg or .dxf files. If possible, both (2) and (3) should be submitted for each as-build feature. Geospatial data must be submitted in UTM Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment; or (2) on a standard compact disk (CD) in compressed (WinZip only), or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the *Content Standards for Digital Geospatial Metadata* from the Federal Geographic Data Committee standards. Questions shall be directed to WRFO BLM GIS staff at (970) 878-3800.

If the operator is unable to send the data electronically, the operator shall submit the data on compact disk(s) to:

BLM, White River Field Office
Attn: Natural Resource Specialist
220 East Market Street
Meeker, Colorado 81641

Internal and external review of the reporting process and the adequacy of the associated information to meet established goals will be conducted on an on-going basis. New information or changes in the reporting process will be incorporated into the request, as appropriate. Subsequent permit application processing may be dependent upon successful execution of this request, as stated above.

10) If for any reason the location or orientation of the geographic feature associated with the **proposed action changes**, the operator shall submit updated GIS "As-Built" data to *designated Natural Resource Specialist* within 7 calendar days of the change. This information shall be **submitted via Sundry Notice**.
11) Williams shall provide written notification of the proposed activities to the owner(s) of any water monitoring wells within a 1,000 foot radius of each of the 4 proposed well pad locations. This notification must be submitted to the owner(s) prior to the commencement of surface disturbing activities on the lease, and a copy of the document(s) shall also be forwarded to the BLM White River Field Office in Meeker, Colorado.

Pre and Post-Drilling Notifications

12) The *designated Natural Resource Specialist* will be notified 24 hours prior to well spud (Breaking ground for drilling surface casing) via email or phone.
13) The *designated Natural Resource Specialist* will be notified 24 hours prior to commencing Completion operations via email or phone.

Resource-Specific Mitigation During Construction, Drilling, and Production:

Wildlife

14) The operator shall prevent use by migratory birds of reserve pits that store or are expected to store fluids which may pose a risk to such birds (e.g., migratory waterfowl, shorebirds, wading birds and raptors) during completion and after completion activities have ceased. Methods may include netting, the use of bird-balls, or other alternative methods that effectively prevent use and that meet BLM approval. It will be the responsibility of the operator to notify the BLM of the method that will be used to prevent use two weeks prior to when completion activities are expected to begin. The BLM approved method will be applied within 24 hours after completion activities have begun. All lethal and non-lethal events that involve migratory birds will be reported to the Petroleum Engineer Technician immediately.

Air Quality or OTHER Resources

15) To minimize production of fugitive particulate matter (fugitive dust) from associated access roads, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. In addition, the application of a BLM approved dust suppressant (e.g. water or chemical stabilization methods) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph.

Surfacing access roads with gravels will also help mitigate production of fugitive particulate matter.

Water Resources

16) Surface Water: All surface disturbing activities on BLM administered lands will strictly adhere to "Gold Book" (fourth edition) surface operating standards for oil and gas exploration and development (copies of the "Gold Book" can be obtained at the WRFO). Corrugated metal pipes (CMPs) and drainage dips shall be located in such a manner as to avoid discharge onto unstable terrain such as headwalls or slumps. CMPs are not recommended on roads that have gradients less than 10 percent. Based on the nature of the affected soils, drain dips will be utilized in place of CMPs in these locations. The use of drain dips on road gradients greater than 10 percent should be avoided. Energy dissipaters such as large gravels/small cobbles will be used at culvert and drainage dip inlets/outlets to minimize additional erosion. To mitigate water being channelized down the roadway, all activity will stop when soils or road surfaces become saturated to a depth of three inches.
17) Ground Water: Shallow aquifers shall be protected from hydrofracturing and the production of oil and gas by installation and cementing of surface and intermediate casing. Any groundwater produced from the Fort Union or Mesaverde Formations will be hauled off and disposed of due to poor water quality and therefore preventing adverse impacts to valuable surface and ground water resources. Environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of spill-guards (or equivalent spill prevention equipment) under and around pumping equipment will be required for all locations to intercept contaminants prior to contacting soils and infiltrating into groundwater. Furthermore, all pits shall be lined to protect shallow ground water from pit contents. All wastes associated with construction and drilling will be properly treated and disposed of.
18) To prove ownership of any aquifer contamination or influence, a fluorescent dye other than Rhodamin WT shall be added to all drilling fluids used through the Green River Formation. This requirement may be waived if written permission is obtained prior to the onset of drilling operations from the owner(s) of any water monitoring wells within a 1,000 foot radius of the proposed well pads. A copy of this written waiver from the water well owner(s) shall also be forwarded to the BLM White River Field Office in Meeker, Colorado.
19) The operator will consult with the State of Colorado Water Quality Control Division (contact Matt Czahor at: 303-692-3575 or matthew.czahor@state.co.us) regarding Stormwater Discharge Permits prior to commencing construction activities. All construction activities that disturb one acre or greater require a Stormwater Discharge Permit. Written documentation to the BLM Authorized Officer is required prior to surface disturbance to indicate that appropriate permits have been obtained. Written documentation may be a copy of the Stormwater Discharge Permit or an official verification letter from the State Water Quality Control Division to the operator that includes the Permit Certification Number. For further information contact, WRFO Hydrologist at 970-878-3800. Appropriate documents may be faxed (970-878-3805), or mailed to Nate Dieterich at the White River Field Office.
20) The operator will consult with the US Army Corps of Engineers to obtain approval prior to discharging fill material into waters of the US in accordance with Section 404 of the Clean Water Act. Waters of the US are defined in 33 CFR Section 328.3. Written documentation to the BLM Authorized Officer is required prior to construction activities to indicate that the US Army Corps of Engineers has been notified prior to construction or that 404 Permits have

been obtained or are not required by the permitting agency. Written documentation may be a copy of the Pre-Construction Notification (PCN) Form or an official verification letter from the US Army Corps of Engineers to the operator stating that a permit has been issued or is not required for the activities in question. For further information contact, WRFO Hydrologist at 970-878-3800. Appropriate documents may be faxed (970-878-3805), or mailed to the White River Field Office.

Wastes

21) Construction sites and roadways shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
22) Construction sites and roadways shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
23) A litter policing program shall be implemented by the holder, and approved of in writing by the authorized officer, which covers all roads and sites associated with the drill pads and pipeline right-of-way.
24) The holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
25) The holder of Right-of-Way No. COC70845 agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C 9601, et.seq. or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
26) The holder shall submit its contingency plan with the following to the authorized officer prior to scheduled start up:
    a. Include provisions for oil or other pollutant spill control.
    b. The agencies responsible for contingency plans in Rio Blanco County, and BLM, shall be among the first to be notified in the event of any pipeline system failure resulting in spill of oil or other pollutant.
    c. Provide for restoration of the affected resource.

d. Provide that the authorized officer shall approve any materials or devices used for oil spill control and any disposal sites or techniques selected to handle oil, matter, or other pollutants.
e. Include separate and specific techniques and schedules for cleanup of spills of oil or other pollutants on land or waters.

27) If during any phase of the construction, operation, or termination of the pipeline or related facilities any oil or other pollutant should be discharged from the pipeline system, or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of holder to control, cleanup, or dispose of such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the authorized officer may take such measures as he deems necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the authorized officer shall not relieve the holder of any liability or responsibility.

28) A release of any chemical, oil, petroleum product, produced water, or sewage, etc, (regardless of quantity) must be reported to the Bureau of Land Management – WRFO Hazardous Materials Coordinator, Tom Johnson at (970) 878-3800 and the Colorado Department of Public Health and Environment (CDPHE) 24-hour spill reporting line at 1 (877) 518-5608.

29) All pits shall be lined to prevent contents from reserve pits from seeping into surrounding soils, contaminating local ground water, reducing soil productivity and compromising reclamation success.

Cultural and Paleontological Resources

30) 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.

31) 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.
32) 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 paleontological sites, or for collecting fossils. If fossil 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 to be of noteworthy scientific interest
    - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

    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.
33) If new excavations into the underlying bedrock are needed for the reserve/blooie,/cuttings pits a paleontological monitor shall be present for all such excavations.

Pipeline

34) The operator is responsible for conditioning the pipeline so as to prevent it from being used as a road (including ATV use). Methods may include fencing or other alternative methods that effectively prevent use and meet BLM approval.
35) Cleared woodland fuels should be placed back on the pipeline r-o-w immediately following construction and seeding. Those fuels should be evenly scattered along the r-o-w so as not to create fuel "jackpots" or exceed 20% total ground cover while also complying with the needs and requirements for wildlife and transportation. For cleared fuels on the well pads, those materials retained for interim reclamation should be stockpiled in small manageable piles away from combustible structures and materials that will be placed on the well pad during drilling.
36) The applicant will be billed for the forest materials removed as described by the proposed action.

Roads and Access

37) All roads shall be constructed and maintained by permittee per "Gold Book" standards.
38) General access should be restricted by means of a lockable gate (e.g., may require fence wings) placed along the proposed access at a point as close as possible to the point of its intersection with established access. The proponent would be responsible for constructing and maintaining the gate through the life of the project. The selected control point would be subject to the approval of the authorized officer with the objectives of effectively deterring unauthorized vehicle use of the well access (i.e., vehicle use not associated with natural gas

development and production) and preventing bypass of the control. The gate should be installed by the time initial well completion activities are complete and is to remain locked throughout the year (except during well work-over or high-traffic maintenance activities).

39) Mitigate soil loss from roadway and surrounding area by restricting road access to authorized personal only (e.g. restrict access to newly constructed roads). The operator will be responsible for segregating topsoil material and backfilling of topsoil in its respective original position (last out, first in) to assist in the reestablishment of soil health and productivity. Erosion and sediment control measures will be installed on all slopes exceeding five percent to mitigate soil loss. Erosion and sediment control measures will be maintained until upland areas are stabilized.

Pre-Reclamation Notification

40) The *designated Natural Resource Specialist* will be notified 24 hours prior to beginning all reclamation activities associated with this project via email or by phone. Reclamation activities may include, but are not limited to, seed bed preparation that requires disturbance of surface soils, seeding, constructing exclosures (e.g., fences) to exclude livestock from reclaimed areas.

Reclamation and Weed Management

41) The operator has several options for treatment of slash from this project. If the trees are cut and removed for firewood, posts, or other products then the branches and tops should be lopped and scattered to a depth of 24 inches or less. If the boles of the trees are left for collection by the general public, they should be stacked in small manageable piles along the roadside or pad to facilitate removal or utilized in interim reclamation on well pads.
42) All permanent (onsite for six [6] months or longer) structures, facilities and equipment placed onsite shall be painted Munsell Soil Color Chart Juniper Green or equivalent within six months of installation.
43) All seed tags will be submitted to the *designated Natural Resource Specialist* within 14 calendar days from the time the seeding activities have ended via Sundry Notice. The sundry will include the purpose of the seeding activity (i.e., seeding well pad cut and fill slopes, seeding pipeline corridor, etc.). In addition, the SN will include the well or well pad number associated with the seeding activity, if applicable, the name of the contractor that performed the work, his or her phone number, the method used to apply the seed (e.g., broadcast, hydro-seeded, drilled), whether the seeding activity represents interim or final reclamation, an estimate of the total acres seeded, an attached map that clearly identifies all disturbed areas that were seeded, and the date the seed was applied.
44) The operator will be required to monitor the project area for the life of the project and eradicate all noxious and invasive species which occur in the area of disturbance using materials and methods approved in advance by the Authorized Officer.
45) Disturbed areas will be restored to original contours, and revegetated with a BLM preferred seed mixture.
46) Following seeding, woody debris cleared from the ROW will be pulled back over the pipeline to increase effective ground cover and help retain soil moisture.
47) Promptly revegetate all disturbed areas not necessary for production on the access road, pipeline and location including roadside and pad cut and fill slopes with the following Native Seed mix #3. Revegetation will commence immediately after construction and will not be

delayed until the following fall. Debris will not be scattered on the pipeline until after seeding operations are completed.

48) Seed mixture rates are Pure Live Seed (PLS) pounds per acre. Drill seeding is the preferred method of application.

SPECIES (VARIETY)	LBS. PLS/ACRE
Western wheatgrass (Rosanna)	2
Bluebunch wheatgrass (Secar)	2
Thickspike wheatgrass (Critana)	2
Indian ricegrass (Nezpar)	1
Fourwing saltbush (Wytana)	1
Utah sweetvetch	1

49) To mitigate additional soil erosion at the well pad and potential increased sediment and salt loading to the Colorado River System, all disturbed areas affected by drilling or subsequent operations, except areas reasonably needed for production operations, shall be reclaimed as early and as nearly as practicable to their original condition and shall be maintained to control dust an minimize erosion. To allow optimal opportunity for interim reclamation of well pads, all tanks and production facilities will be situated on the access road side of the well pad (unless otherwise approved by the WRFO-BLM Field Manager). Reclamation efforts on all pipelines will be final. Interim reclamation of well pads and final reclamation of pipeline right of ways (ROW) on BLM administered surfaces will commence as follows:

- Debris and waste materials other than de minimus amounts, including, but not limited to, concrete, sack bentonite and other drilling mud additives, sand, plastic, pipe and cable, as well as equipment associated with the drilling, re-entry or completion operations shall be removed.
- Stockpiled topsoil and spoil piles will be separated and clearly labeled to prevent mixing during reclamation efforts.
- Stockpiled topsoil will be seeded with a BLM approved seed mixture. Topsoil stockpiles that will potentially remain in place for extended periods of time (e.g. multi-well locations) will be covered with biodegradable fabrics such as (but not limited to) jute netting or Curlex and seeded with the appropriated seed mixture.
- Stockpiled topsoil segregated from spoil piles will be replaced during reclamation in its respective original position (last out, first in) to minimize mixing of soil horizons.
- Stockpiled soils (spoil and topsoil) will be pulled back over all disturbed surfaces affected by pipeline/road construction, drilling or subsequent operations, except areas reasonably needed for production operations. Areas on *well pads* not needed for production operations shall be partially reshaped as early and as nearly as practicable to near pre-construction contours. Pipelines will be recontoured to pre-construction contours as soon as construction activities cease.
- The operator will ensure stockpiled topsoil is evenly distributed over the **top** of spoil used in recontouring/partial-reshaping efforts.
- Recontoured/partially-reshaped areas will be seeded with a BLM approved seed mixture, and all slopes exceeding 5 % will be covered with wildlife friendly biodegradable fabrics (such as but not limited to Jute blankets, Curlex…) to provide additional protection to topsoil, retain soil moisture, and help promote desired vegetative growth.

- Following seeding and placement of biodegradable fabrics, woody debris cleared during initial construction will be pulled back over the recontoured/partially-reshaped areas to act as flow deflectors and sediment traps. Available woody debris will be evenly distributed over the entire portion of the reclaimed area and will not account for more than 20% of total ground cover.
- The operator will be responsible for excluding livestock grazing from all reclaimed portions of *well pads*. To eliminate livestock utilization of reclaimed areas prior to successful reclamation, a 4-strand BLM Type-D barbed wire fence with braced wooden corners or net wire fence brought to the ground surface built to BLM specifications will be constructed around all reclaimed portions of the well pad including cut and fill slopes immediately after interim reclamation is concluded (within 2 weeks) unless otherwise instructed by the BLM. A BLM specified cattleguard will be placed at the time of fence construction where the well access road bisects the fenceline that surrounds the well pad's disturbance imprint. Once reclaimed plant species are fully established on disturbed sites as determined by the BLM (e.g. Desired Plant Community (DPC), Public Land Health Standards), the fence and cattle guard will be completely removed by the applicant after a minimum of two growing seasons. This will allow for reclaimed plant species to establish without grazing pressure from livestock.
- The operator will be responsible for achieving a reclamation success rate for interim reclamation and final abandonment (on all disturbed areas associated with well pads, pipelines, and access roads) of sufficient vegetative ground cover from reclaimed plant species within three growing seasons after the application of seed. Additional reclamation efforts will be undertaken at the operators expense if: after the first growing season there is no positive indicators of successful establishment of seeded species (e.g. germination); after the second year seeded species are not yet established (e.g. producing seed); and after the third growing season seeded vegetative communities lack persistence (e.g. reproductively capable of enduring drought conditions and sustaining the seeded community). Following the third growing season, ground cover of reclaimed seed species shall be at a Desired Plant Community (DPC) in relation to the seed mix as deemed appropriate by the BLM. Reclamation achievement will be evaluated using the Public Land Health Standards that include indicators of rangeland health. Rehabilitation efforts must be repeated if it is concluded that the success rate is below an acceptable level as determined by the BLM.

Information Sharing & Reclamation Monitoring

50) The Reclamation Status Report will be submitted electronically via email and as a hard-copy to WRFO Reclamation Coordinator, Brett Smithers (brett_smithers@blm.gov). Please submit the hardcopy to:

    BLM, White River Field Office
    220 East Market Street
    Meeker, Colorado 81641
    Attn: Brett Smithers

    The Reclamation Status Report will be submitted annually for all actions that require disturbance of surface soils on BLM-administered lands as a result of the proposed

action. Actions may include, but are not limited to, well pad and road construction, construction of ancillary facilities, or power line and pipeline construction. The Reclamation Status Report will be submitted by September 30th of each calendar year, and will include the well number, API number, legal description, UTM coordinates (using the NAD83 datum, Zone 13N coordinate system), project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., Phase I Interim, Phase II Interim, or Final), whether the well pad or pipeline has been re-vegetated and/or re-contoured, percent of the disturbed area that has been reclaimed, method used to estimate percent area reclaimed (e.g., qualitative or quantitative), technique used to estimate percent area reclaimed (e.g., ocular, line-intercept, etc.), date seeded, photos of the reclaimed site, estimate of acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person(s) responsible for developing the report. The report will be accompanied with maps and GIS data showing each discrete point (i.e., well pad), polygon (i.e., area where seed was applied for Phase I and/or Phase II interim reclamation or area reclaimed for final reclamation), or polyline (i.e., pipeline) feature that was included in the report. Geospatial data shall be submitted: for each completed activity electronically to the designated BLM staff person responsible for the initial request and in accordance with WRFO geospatial data submittal standards (available from WRFO GIS Staff, or on the WRFO website). Internal and external review of the WRFO Reclamation Status Report, and the process used to acquire the necessary information will be conducted annually, and new information or changes in the reporting process will be incorporated into the report.

51) The operator will be required to meet with the WRFO reclamation staff in March or April of each calendar year and present a comprehensive work plan. The purpose of the plan is to provide information pertaining to reclamation activities that are expected to occur during the current growing season. Operators shall also provide a map that shows all reclamation sites where some form of reclamation activity is expected to occur during the current growing season.

52) Final Reclamation: Upon final abandonment of the well pads, new access roads, and completion of pipelines, 100% of all disturbed surfaces will be restored to pre-construction contours, and revegetated with a BLM preferred seed mixture. Natural drainage patterns will be restored and stabilized with a combination of vegetative (seeding) and non-vegetative (straw bails, woody debris, straw waddles, biodegradable fabrics…) techniques. All available woody debris will be pulled back over recontoured areas (woody debris will not account for more that 20% of total surface cover) to help stabilize soils, trap moisture, and provide cover for vegetation. Monitoring and additional reclamation efforts will persist until reclamation is proven successful (as determined by the BLM).

II. NOTICES: Drilling Plan

1) All operations, unless a variance has been granted in writing by the Authorized Officer, must be conducted in accordance with 43 CFR PART 3160 - Onshore Oil and Gas Operations, Onshore Oil and Gas Order No.1; Approval of Operations on Onshore Federal and Indian Oil and Gas Leases; and Onshore Oil and Gas Order No. 2; Drilling

Operations. If air or mist drilling is used, operations must be in accordance with Onshore Oil and Gas Order No. 2; Drilling Operations, Part E; Special Drilling Operations.

2) The operator is responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations.
3) Major deviations from the drilling plan require prior approval from the Authorized Officer. The operator shall verbally notify either the petroleum engineer or petroleum engineering technician 24 hours prior to the following operations to provide notice of:
    a) Well spud (Breaking ground for drilling surface casing)
    b) Running and cementing of all casing strings
    c) Pressure testing of BOPE or any casing string
    d) Commencing completion operations

    A written sundry notice of the well spud must be submitted within five (5) working days.
4) All BOPE tests will be done by a tester and not by the rig pumps. The tests will include a low pressure test of 250 psi for five minutes prior to initiating the high pressure tests discussed in Onshore Order No. 2
5) No "new" hardband drill pipe abrasive to casing will be rotated inside the surface casing. Hardband drill pipe will be considered new until it has been run at least once.
6) Drilling muds with chlorides testing in excess of 3,000 ppm or those containing hydrocarbons shall not be used in drilling operations until after the surface casing has been set.
7) During surface cementing operations, should cement not be circulated to surface the WRFO shall be verbally notified as soon as reasonably possible. A log acceptable to the WRFO shall be run to determine the top of cement prior to commencing remedial cementing operations. If cement is circulated to surface and subsequently falls back, top job(s) will be performed until cement remains at surface.
8) Due to the extensive lost circulation problems that are being encountered in the Piceance Basin during drilling operations from surface to total depth (TD), and given that all usable water zones, potential productive zones, and lost circulation zones shall be protected and/or isolated per Onshore Order #2, the White River Field Office requires sufficient volumes of cement be pumped to meet these requirements. Cement tops behind intermediate and production casing will be verified by an acceptable log to ensure compliance with this Order. We require cement to be run a minimum of 200’ above the shoe of the previous casing string. Cement volumes as submitted on the APD are insufficient.
9) Chronologic drilling progress reports must be sent directly to the BLM White River Field Office on a daily basis, either electronically or by fax (970-878-3805) to the Petroleum Engineer and/or other designated petroleum engineering technicians until the well is drilled to total depth.
10) All drill cuttings shall be contained in a pit on the pad of the well being drilled, or hauled to an approved disposal site. All pits shall maintain a minimum of two feet of free board at all times.
11) For foam and ultralight cement jobs that are performed in cementing the intermediate or production strings, the operator will wait at least 36 hours for cement to harden before running a specialized log capable of reading pipe cement bond and verifying tops of

cement. The White River Field Office shall be verbally notified prior to running such specialized log with enough advance notice to allow a representative from this office to witness. Logs showing pipe cement bond and tops of cement for intermediate and production cement jobs will be forwarded to the BLM.

12) 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. The logs should be submitted in a digital format, on a CD. This completion report shall be filed within 30 days of completion of operations and submitted prior to, or along with the first production notice.

13) The WRFO requires the measurement of individual gas, oil (condensate) and water production streams at the wellhead, unless otherwise approved in advance by the BLM. The sales point for natural gas will be at the wellhead. All meters will be calibrated in place prior to any deliveries. The White River Field Office will be provided with a date and time for the initial meter calibration and all future meter proving and calibration schedules with enough advance notice, 24 hour minimum, to allow a representative from this office to witness. A copy of the meter proving and calibration reports will be submitted to the White River Field Office. Oil (condensate) will be sold from secured tanks on location, unless otherwise approved in advance by the BLM.

The Bureau of Land Management, White River Field Office address is:
220 E. Market St.
Meeker, CO 81641
(970) 878-3800

COMPLIANCE PLAN: On-going compliance inspections and monitoring of drilling, production and post-production activities will be conducted by White River Field Office staff during construction of well pads, access roads, and pipelines. Specific mitigation developed in the associated Categorical Exclusion and the lease terms and conditions will be followed. The Operator will be notified of compliance related issues in writing, and depending on the nature of the issue(s), will be provided 30 days to resolve such issues.

NAME OF PREPARER: Christina J. Barlow

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

DATE: 27 June 2010

ATTACHMENTS: None

DECISION AND RATIONALE: I have reviewed this CX and have decided to approve the proposed action.

This action is listed in the Instruction Memorandum Number 2005-247 as an action that may be categorically excluded under Section 390 of the Energy Policy Act of 2005. I have evaluated the action relative to the 5 qualifying criteria listed above and have determined that it does not represent an exception and is, therefore, categorically excluded from further environmental analysis.

SIGNATURE OF AUTHORIZED OFFICIAL: _____
Field Manager

DATE SIGNED: 07/02/10

Administrative Review or Appeal Opportunities

This decision is effective upon the date the decision or approval by the authorized officer. Under regulations addressed in 43 CFR Subpart 3165, any party adversely affected has the right to appeal this decision. An informal review of the technical or procedural aspects of the decision may be requested of this office before initiating a formal review request. You have the right to request a State Director review of this decision. You must request a State Director review prior to filing an appeal to the Interior Board of Land Appeals (IBLA) (43CFR 3165.4).

If you elect to request a State Director Review, the request must be received by the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215, no later than 20 business days after the date the decision was received or considered to have been received. The request must include all supporting documentation unless a request is made for an extension of the filing of supporting documentation. For good cause, such extensions may be granted. You also have the right to appeal the decision issued by the State Director to the IBLA.

Contact Person: For additional information concerning this decision, contact
Christina Barlow, Natural Resource Specialist, White River Field Office, 220 E Market Street, Meeker, CO 81641, Phone (970) 878-3815